Dissolved Oxygen Analysis Log Sheet

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Niskin ID	Niskin int. V	Niskin int. S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-01	1			1	3084	100	8.0	2.278		1				
Event:	1	2			2	3010	75	7.8	3.919	- Funny end of curve. Please check.	2				
Station:	S1	3			3	2084	50	7.7	5.084		3				
Event Date (Local):	02 April 2014	4			4	2035	40	7.7	5.227		4				
Analysis Date (Local):	02 April 2014	5			5	2069	30	7.6	5.142		5	396	7.7	5.153	
Analyst:	KS	6			6	3032	20	7.7	5.017	- Incorrect flask ID → requires recalc (3033)	6				
Stdization Date (Local):	02 April 2014	7			7	3022	10	7.6	5.092		7				
KIO_3 N:	0.0098302	8			8	552	5	7.8	5.674		8				
Standard Titer:	0.6997	9			9	3020	0	8.9	9.058	- Noisy. Many particles/plankton in sample.	9				
Blank Titer:	0.0020	10									10				
THIO N:	0.002	11									11				
Sample Flask Water Seal?	(Yes) / No	12									12				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	13									13				
		14									14				
		15									15				
		16									16				
		17									17				
		18									18				
Notes:		19									19				
		20									20				
		21									21				
		22									22				
		23									23				
		24									24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Blue

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information	
Cruise Number:	2014-01
Event:	3
Station:	59
Event Date (Local):	April 2, 2014
Analysis Date (Local):	April 2, 2014
Analyst:	KS
Stdization Date (Local):	April 2, 2014
KIO_3 N:	0.009830 2
Standard Titer:	0.6997
Blank Titer:	0.0020
THIO N:	0.14130
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	~~$MnCl_2$~~ / ~~NaI/NaOH~~ / ~~H_2SO_4~~ / ~~KIO_3~~ / ~~THIO~~
Notes:	Day watch.

Niskin ID	Niskin Int V	Niskin Int S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			10	3190	227	8.3	5.208	
2			11	631	200	8.4	5.215	
3			12	3142	175	8.4	5.282	
4			13	2090	150	8.5	5.280	
5			14	510	125	8.5	5.285	
6			15	3209	100	8.6	5.283	
7			16	715	75	8.8	5.293	
8			17	2014	50	9.0	5.300	
9			18	611	40	10.8	5.294	- Endpoint may be early.
10			19	2033	30	7.9	5.303	
11			20	1053	20	7.9	5.319	
12			21	3111	10	7.9	5.501	- Not a good curve. Wack stir bar
13			22	712	5	7.9	5.329	OT = 0.03. DO = 0.152
14			23	3038	0	7.9	5.316	Funny curve. Plankton in sample.
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				spigot open but not leaking prior to sampling
2				
3				
4	468	8.5	5.282	
5				
6				
7				
8				
9				
10	2049	7.9	5.300	
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

GREEN

Cruise and Analysis Information	
Cruise Number:	2014-06
Event:	0007
Station:	102
Event Date (Local):	April 3, 2014
Analysis Date (Local):	April 3, 2014
Analyst:	KS
Stdization Date (Local):	April 2, 2014
KIO_3 N:	0.0098302
Standard Titer:	0.6997
Blank Titer:	0.0020
THIO N:	0.14130
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	($MnCl_2$) / NaI/NaOH / (H_2SO_4) / (KIO_3) / THIO
Notes:	Night watch. T in box = 15.9°C

Niskin ID	Niskin int. V	Niskin int. S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1	✓	✓	24	3084	250	~~8.5~~	2.085	7.4
2	✓	✓	25	3010	200	~~8.4~~	2.425	7.5
3	✓	✓	26	2084	175	~~8.3~~	2.480	7.6
4	/	/	27	2035	150	8.0	3.235	→
5	/	/	28	396	125	8.2	3.620	
6	/	/	29	3032	100	8.2	4.299	
7	/	/	30	3022	75	8.4	6.323	
8	/	/	31	552	50	8.5	7.724	
9	/	/	32	3007	40	8.8	8.873	→
10	/	/	33	708	30	9.5	10.054	
11	/	/	34	3034	20	10.0	11.176	
12	/	/	35	3014	10	10.3	10.480	← Zooplankton in sample
13	/	/	36	2059	5	10.4	?	← " " " " - Ended abruptly
14	/	/	37	3023	0	10.5	10.709	FT= 1.868 OT= 0.081 (0.378mL/L) (10.385) Is a good curve.
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4	2069	7.9	3.238	
5				
6				
7				
8				
9	3104	8.6	8.684	- very poor
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Yellow box

Last Updated: March 2014

Cruise and Analysis information	
Cruise Number:	1406
Event:	~~78~~ 10
Station:	75
Event Date (Local):	3 April 2014
Analysis Date (Local):	3 April 2014
Analyst:	KS
Stdization Date (Local):	2 April 2014
KIO_3 N:	0.0098302
Standard Titer:	0.6997
Blank Titer:	0.0020
THIO N:	0.14130
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	Night watch #14-7 Day watch #6-1

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			38	3121	222	7.9	2.488	- opened before DO sampled
2			39	1223	200	7.9	2.511	- opened before DO sampled
3			40	647	175	7.9	2.633	→ opened before DO sample
4			41	2043	150	8.0	3.115	
5			42	3070	125	8.2	3.481	
6			43	1054	100	8.4	4.446	
7			44	690	75	8.5	4.684	
8			45	2040	50	8.6	5.033	
9			46	620	40	8.7	5.361	
10			~~47~~	196	30	~~8.0~~	6.136	→ 8.9 - Very large bubble under stopper
11			48	745	20	9.2	6.283	
12			49	3029	10	10.1	7.006	- large bubble under stopper
13			50	3040	5	10.3	7.076	- Particles in sample
14			51	3076	surf	10.7	7.064	- Not the best, but ok
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Computer problems / Colourimeter shutdown led to crash. Sample was stirring for a few minutes.

Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				1st try - dosed 0.04mL.
2				2nd try - titration ok.
3	2020	7.9	2.632	Valve is off
4				
5				
6				
7				
8				
9				
10		1019	9.0	- Titration ended abruptly
11				
12				
13				FT=1.07 (6.003) OT=0.072. (0.382mL/L)
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Blue

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis information	
Cruise Number:	2014-06
Event:	13
Station:	72
Event Date (Local):	April 3, 2014
Analysis Date (Local):	April 3, 2014
Analyst:	KS
Stdization Date (Local):	April 2, 2014
KIO_3 N:	0.0098302
Standard Titer:	0.6997
Blank Titer:	0.0020
THIO N:	0.14130
Sample Flask Water Seal?	Yes / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO — No Δ
Notes:	Day watch Tin box = 17.8°C

Niskin ID	Niskin inc. V	Niskin inc. S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			52	3190	193	8.3	2.799	
2			53	631	175	8.4	2.795	
3			54	3142	150	8.4	2.821	
4			55	2090	125	8.5	3.328	
5			56	468	100	8.8	4.016 →	
6			57	3209	75	8.9	4.611	
7			58	715	50	8.9	4.820	
8			59	2014	40	8.9	4.934	
9			60	611	30	9.0	5.252 →	
10			61	2049	20	9.1	5.533	
11			62	1053	10	9.4	6.202	
12			63	3111	5	9.5	6.556	– Funny curve. Must check E.P.
13			64	712	sfc	9.8	6.897	
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4				
5	510	8.8	4.007	missing spigot collar
6				
7				
8				
9	2033	9.0	5.247	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Yellow FTDI setup. PRIOR setup

Cruise and Analysis Information		
Cruise Number:	2014-06	
Event:	16	
Station:	69	
Event Date (Local):	April 3, 2014	
Analysis Date (Local):	April 3, 2014	
Analyst:	KS	
Stdization Date (Local):	April 2, 2014	
KIO_3 N:	0.0098302	
Standard Titer:	0.6997	
Blank Titer:	0.0020	
THIO N:	0.14130	
Sample Flask Water Seal?	(Yes) / No	
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	

Notes: Laptop/USB to serial adapter test

column OXY 1 = Win 7 HP w FTDI

column OXY 2 = WinXP Dell w ~~FTDI~~ prior version

T in box = 18.1°C

Niskin ID	Niskin Integrity V	Niskin Integrity S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1			65	3121	174	8.1	3.021		1	1223	8.0	3.027	
2			66	647	150	~~8.2~~	3.029	8.0 temp	2	2020	8.0	3.030	
3			67	2043	125	8.2	3.815		3	3070	8.2	3.812	
4			68	1054	100	8.2	4.407		4	690	8.3	4.393	
5			69	2040	75	8.4	4.770		5	620	8.4	4.763	
6			70	196	50	8.4	5.075		6	1019	8.5	5.073	
7			71	745	40	8.5	5.251	- Funky curve. Needs checking	7	3029	8.5	5.219	??
8			72	3040	30	8.6	5.387		8	3076	8.7	5.387	
9			73	1050	20	9.0	6.152	- zooplankton swirling in sample	9	639	9.1	6.149	
10			74	569	10	9.5	6.869	- " Titration" ok. "	10	2055	9.6	6.861	
11			75	3098	5	9.9	6.890		11	657	10	6.896	
12			76	2063	stc	10.2	6.932		12	2065	10.2	6.929	
13									13				
14									14				
15									15				
16									16				
17									17				
18									18				
19									19				
20									20				
21									21				
22									22				
23									23				
24									24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

* Copied standardization info. from laptop (HP) to laptop (Dell). The only changes made to system are the laptop + serial to USB adapters

Dissolved Oxygen Analysis Log Sheet

Green

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis information		
Cruise Number:	2014-06	
Event:	19	
Station:	ADCP	
Event Date (Local):	3 Apr 2014	
Analysis Date (Local):	3 Apr 2014	
Analyst:	KS	
Stdization Date (Local):	2 Apr 2014	
KIO_3 N:	0.0098302	
Standard Titer:	0.6997	
Blank Titer:	0.0020	
THIO N:	0.14130	
Sample Flask Water Seal?	(Yes) / No	
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	
Notes:	Day watch. T in box = 21.3°C	

Niskin ID	Niskin Int. V	Niskin Int. S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			77	3084	115	8.2	4.292	
2			78	3010	100	8.3	5.242	
3			79	2084	75	8.4	6.189	
4			80	2035	50	8.5	6.632	
5			81	2069	40	8.5	6.544	
6			82	369	30	8.5	6.711	
7			83	3022	20	8.6	6.805	
8			84	552	10	8.0	7.962	
9			85	3007	5	9.0	8.176	> plankton floating around in sample
10			86	3104	0	9.0	8.622	
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4				
5				
6	3032	8.6	6.690	
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Blue Station 62

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis information	
Cruise Number:	2014-06
Event:	26
Station:	62
Event Date (Local):	April 4, 2014
Analysis Date (Local):	April 4, 2014
Analyst:	KS
Stdization Date (Local):	April 4, 2014
KIO_3 N:	0.0098302
Standard Titer:	0.6995
Blank Titer:	0.0030
THIO N:	0.14154
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$, (NaI/NaOH) → see log book, H_2SO_4, KIO_3, THIO
Notes:	Night watch. T inside box = 22.4°C

Niskin ID	Niskin Int V	Niskin Int S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			97	3190	145	8.1	4.924	
2			98	631	125	8.3	5.118	
3			99	3142	100	8.2	5.197	
4			100	2090	75	8.2	5.361	→ Plankton in sample
5			101	510	50	8.2	5.491	
6			102	3209	40	8.3	5.487	
7			103	715	30	8.4	5.504	
8			104	2014	20	8.4	5.520	
9			105	611	10	8.3	5.559	→
10			106	2049	5	8.6	5.571	
11			107	1053	surf	8.4	5.584	
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4	468	8.3	5.368	
5				
6				
7				
8				
9	2033	8.4	5.563	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

GREEN

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis information															
	Niskin ID	Niskin test V	Niskin test S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Niskin ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number: 201406	1		X	108	3084	228	10.4	5.494	Spigot was pushed in	1				
Event: 32	2			109	3010	200	10.1	5.501		2				
Station: 56	3			110	2084	175	9.8	5.504		3				
Event Date (Local): 4 Apr 2014	4			111	2035	150	9.7	5.505		4				
Analysis Date (Local): April 4, 2014	5			112	2069	125	9.5	5.509		5				
Analyst: KS	6			113	396	100	9.3	5.506		6				
Stdization Date (Local): April 4, 2014	7			114	3032	75	9.2	5.504	→	7	3022	9.2	5.518	
KIO_3 N: 0.0098302	8			115	552	50	9.2	5.561		8				
Standard Titer: 0.6995	9			116	3007	40	9.5	5.625		9				
Blank Titer: 0.0030	10			117	3104	30	9.8	5.621		10				
THIO N: 0.14154	11			118	708	20	10.5	5.638		11				
Sample Flask Water Seal? (Yes) / No	12			119	3034	10	10.6	5.644	→ Check E.P. May be late.	12	3014	10.4	5.631	
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK: $MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	13			120	2059	5	11.0	5.648		13				
	14			121	3023	surf	11.5	5.632		14				
	15									15				
	16									16				
	17									17				
	18									18				
	19									19				
	20									20				
	21									21				
	22									22				
	23									23				
	24									24				

Notes: Night watch.

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Yellow

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis information		Nisk. Int.		Sample		Depth	Drow	OXY 1		Nisk.		Drow	OXY 2	
	ID	V	S	ID	Flask 1	(m)	T 1 (°C)	(mL/L)	Comments	ID	Flask 2	T 2 (°C)	(mL/L)	Comments
Cruise Number: 2014-06	1			122	3121	173	9.5	5.413		1				
Event: 39	2			123	2065	150	9.3	5.436	add end of curve. Check E.P.	2				
Station: 46	3			124	647	125	9.5	5.456		3				
Event Date (Local): Apr 4/14	4			125	2020	100	9.7	5.481	→	4	2043	9.5	5.488	
Analysis Date (Local): April 4, 2014	5			126	3070	75	9.4	5.560		5				
Analyst: KS	6			127	1054	50	9.0	5.421		6				
Stdization Date (Local): April 4, 2014	7			128	690	40	9.1	5.492		7				
KIO_3 N: 0.0098302	8			129	2040	30	9.2	5.460		8				
Standard Titer: 0.6995	9			130	620	20	9.2	5.586	→	9	1046	9.3	5.577	
Blank Titer: 0.0030	10			131	1019	10	9.4	5.838		10				
THIO N: 0.14154	11			132	745	5	9.6	6.213		11				
Sample Flask Water Seal? (Yes) No	12			133	3029	0	10.0	6.267		12				
	13									13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK: $MnCl_2$, NaI/NaOH, H_2SO_4, KIO_3, THIO	14									14				
	15									15				
	16									16				
	17									17				
	18									18				
Notes: Day Watch	19									19				
	20									20				
T inside box = 22.9°C	21									21				
	22									22				
	23									23				
	24									24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Blue

Institute of Ocean Sciences
Water Properties Group

Last Updated: March 2014

Cruise and Analysis Information	
Cruise Number:	2014-06
Event:	~~43~~ 43
Station:	42
Event Date (Local):	April 4, 2014
Analysis Date (Local):	April 4, 2014
Analyst:	KS
Stdization Date (Local):	April 4, 2014
KIO_3 N:	0.0098302
Standard Titer:	0.6995
Blank Titer:	0.0030
THIO N:	0.14154
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	Day watch

T inside box = 17.7°C

Rosette ID	Niskin test V	Niskin test S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			134	3190	315	8.2	3.714	
2			135	631	300	8.2	3.712	
3			136	3142	250	8.1	3.925	
4			137	2090	200	8.1	4.219	
5			138	468	175	8.1	4.260 →	
6			139	3209	150	8.2	4.424	
7			140	715	125	8.2	4.621	
8			141	2014	100	8.3	4.837	
9			142	611	75	8.3	4.743	
10			143	2033	50	8.3	5.038	
11			144	2049	40	8.3	5.459 →	
12			145	3111	30	8.5	5.622	
13			146	712	20	8.6	5.837	
14			147	3038	10	8.7	6.522	Noisy. Check E.P. Copepods in sample.
15			148	621	5	9.3	7.979	Many particles (phyto) in sample. Curve a bit noisy
16		x	149	1094	0	9.6	8.444	Curve very noisy. lots of phyto
17								
18								
19								
20								
21								
22								
23								
24								

Rosette ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4				
5	510	8.2	4.265	
6				
7				
8				
9				
10				
11	1053	8.3	5.467	
12				
13				spigot drip
14				~~spigot drip~~ okay
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

Last Updated: March 2014

Institute of Ocean Sciences
Water Properties Group

Temp Depth Green

Cruise and Analysis Information		
Cruise Number:	2014-06	
Event:	47	
Station:	39	
Event Date (Local):	5 Apr 2014	
Analysis Date (Local):	April 5, 2014	
Analyst:	KS	
Stdization Date (Local):	April 4, 2014	
KIO_3 N:	0.0098302	
Standard Titer:	0.6995	
Blank Titer:	0.0030	
THIO N:	0.14154	
Sample Flask Water Seal?	(Yes) / No	
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	

Notes: Night watch
T = 15.7°C

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1			150	3084	8.5	375	3.437	
2			151	3010	8.5	350	3.584	
3			152	2084	8.3	300	3.981	
4			153	2035	8.3	250	4.211	
5			154	2069	8.3	200	4.435 →	
6			155	3032	8.3	175	4.414	
7			156	3022	8.4	150	4.581	
8			157	552	8.6	125	4.400	
9			158	3007	8.5	100	4.444	- Black particle in sample. Titration ok
10			159	3104	8.7	75	4.523	
11			160	208	8.6	50	4.644	
12			161	3034	8.6	40	4.903 →	
13			162	2059	8.7	30	5.614	
14			163	3023	8.6	20	5.803	
15			164	3020	8.9	10	6.552	- Noisy. Many particles/phyto in sample.
16			165	2056	9.2	5	7.782	
17			166	3021	9.2	Surf	7.875	
18								
19								
20								
21								
22								
23								
24								

Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3				
4				
5	396	8.3	4.439	
6				
7				
8				
9				
10				
11				
12	3014	8.6	4.900	
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot by opening the vent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

Dissolved Oxygen Analysis Log Sheet

BLUE

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	☐☐	167	3190	363	8.2	3.476		1				
Event:	53	2	☐☐	168	631	250	8.2	3.753		2				
Station:	Stn 27	3	☐☐	169	3142	250	8.2	3.797		3				
Event Date (Local):	5 Apr 2014	4	☐☐	170	2090	200	8.2	3.744	→	4	468	8.2	3.745	
Analysis Date (Local):	Apr. 15, 2014	5	☐☐	171	510	175	8.0	4.205		5				
Analyst:	KS	6	☐☐	172	3209	150	7.9	4.430		6				
Stdization Date (Local):	Apr. 14, 2014	7	☐☐	173	715	125	8.0	4.367		7				
KIO_3 N:	0.0098302	8	☐☐	174	2014	100	8.2	4.187		8				
Standard Titer:	0.6995	9	☐☐	175	611	75	8.2	4.067		9				
Blank Titer:	0.0030	10	☐☐	176	2033	50	8.1	4.318		10				
THIO N:	0.14154	11	☐☐	177	2049	40	8.0	4.752	→	11	1053	8.1	4.761	
Sample Flask Water Seal?	(Yes) / No	12	☐☐	178	3111	30	8.0	5.298		12				
		13	☐☐	179	712	20	8.2	5.646		13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	14	☐☐	180	3038	10	8.5	7.177	- Noisy. Lots of phyto in sample.	14				
		15	☐☐	181	621	5	8.4	9.375		15				
		16	☐☐	182	1094	Surf	9.0	9.496		16				
		17	☐☐	~~183~~						17				
		18	☐☐							18				
Notes: Night Watch. T = 16.4°C		19	☐☐							19				
		20	☐☐							20				
		21	☐☐							21				
		22	☐☐							22				
		23	☐☐							23				
		24	☐☐							24				

Dissolved Oxygen Analysis Log Sheet

YELLOW

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	□□	183	3121	278	8.9	3.226		1				
Event:	57	2	□□	184	2065	250	8.8	3.442		2				
Station:	2	3	□□	185	647	200	8.7	3.804	→	3	2020	8.7	3.802	
Event Date (Local):	April 5, 2014	4	□□	186	2043	175	8.7	3.919		4				
Analysis Date (Local):	April 5, 2014	5	□□	187	3070	150	8.8	4.001		5				
Analyst:	KS	6	□□	188	1054	125	8.7	3.977		6				
Stdization Date (Local):	April 4, 2014	7	□□	189	690	100	8.6	4.292		7				
KIO_3 N:	0.007830 2	8	□□	190	2040	75	8.6	4.493		8				
Standard Titer:	0.6995	9	□□	191	620	50	8.6	5.346		9				
Blank Titer:	0.0030	10	□□	192	196	40	8.7	5.577	→	10	1019	8.7	5.573	
THIO N:	0.1415 4	11	□□	193	745	30	8.8	5.762		11				
Sample Flask Water Seal?	(Yes) / No	12	□□	194	3029	20	8.6	6.120		12				
		13	□□	195	3040	10	9.0	7.182	→ Noisy, lots of phyto and lots	13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	14	□□	196	3076	5	9.4	8.209		14				
		15	□□	197	1050	Surf	9.7	8.950		15				
		16	□□							16				
		17	□□							17				
		18	□□							18				
Notes:	Night Watch.	19	□□							19				
		20	□□							20				
		21	□□							21				
		22	□□							22				
		23	□□							23				
		24	□□							24				

Dissolved Oxygen Analysis Log Sheet

Green.

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	□□	214	3084	55	9.0	5.245		1				
Event:	63	2	□□	215	3010	50	9.0	5.251	- Endpoint may be late. An odd step in the curve	2				
Station:	BS17	3	□□	216	~~2084~~	40	9.1	5.310		3				
Event Date (Local):	April 5, 2014	4	□□	217	2035	30	9.1	5.284		4	2069	9.1	5.274	
Analysis Date (Local):	April 5, 2014	5	□□	218	396	20	9.2	5.590		5				
Analyst:	KS	6	□□	219	3032	10	9.3	6.303		6				
Stdization Date (Local):	April 4, 2014	7	□□	220	3022	5	9.5	7.186	- Noisy. Phyto in sample.	7				
KIO_3 N:	0.0098302	8	□□	221	552	stc	9.7	7.321		8				
Standard Titer:	0.6995	9	□□							9				
Blank Titer:	0.0030	10	□□							10				
THIO N:	0.14154	11	□□							11				
Sample Flask Water Seal?	(Yes) / No	12	□□							12				
		13	□□							13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$	14	□□							14				
	NaI/NaOH	15	□□							15				
	H_2SO_4	16	□□							16				
	KIO_3	17	□□							17				
	THIO	18	□□							18				
Notes:	Day watch. T = 17.5°C	19	□□							19				
		20	□□							20				
		21	□□							21				
		22	□□							22				
		23	□□							23				
		24	□□							24				

Dissolved Oxygen Analysis Log Sheet

Yellow

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	□□	222	3121	186	8.4	3.888		1				
Event:	67	2	□□	223	2065	175	8.3	4.233		2				
Station:	6	3	□□	224	647	150	8.5	3.947		3				
Event Date (Local):	April 5, 2014	4	□□	225	2020	125	8.5	3.692		4				
Analysis Date (Local):	April 5, 2014	5	□□	226	2043	100	8.4	4.329 →		5	3070	8.4	4.328	
Analyst:	KS	6	□□	227	1054	75	8.3	4.658	- Stopper was a little loose	6				
Stdization Date (Local):	April 4, 2014	7	□□	228	690	50	8.3	5.377		7				according to Kenny "really windy"
KIO_3 N:	0.0098302	8	□□	229	2040	40	8.3	5.751		8				
Standard Titer:	0.6995	9	□□	230	620	30	8.4	6.466		9				
Blank Titer:	0.0030	10	□□	231	196	20	8.7	6.786 →	Noisy curve but E.P. may be ok.	10	1019	8.7	7.000	- Also quite noisy.
THIO N:	0.14154	11	□□	232	745	10	8.8	7.179	↳ lots of phyto	11				
Sample Flask Water Seal?	(Yes) / No	12	□□	233	3029	5	8.9	7.387		12				
		13	□□	234	3040	0	9.1	7.369		13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	14	□□							14				
		15	□□							15				
		16	□□							16				
		17	□□							17				
		18	□□							18				
Notes: Day Watch T=19.9°C		19	□□							19				
		20	□□							20				
		21	□□							21				
		22	□□							22				
		23	□□							23				
		24	□□							24				

Dissolved Oxygen Analysis Log Sheet

Green

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Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	☐☐	247	3084	351	8.3	3.196		1				
Event:	73	2	☐☐	248	3010	306	8.2	3.598		2				
Station:	12	3	☐☐	249	2084	250	8.2	3.305		3				
Event Date (Local):	April 5, 2014	4	☐☐	250	2035	200	8.3	3.819	- Much reagent residue above flask stopper.	4				
Analysis Date (Local):	April 6, 2014	5	☐☐	251	2069	175	8.3	3.795	→	5	396	8.3	3.803	
Analyst:	KS	6	☐☐	252	3032	150	8.3	3.690		6				
Stdization Date (Local):	April 6, 2014	7	☐☐	253	3022	125	8.4	3.610		7				
KIO_3 N:	0.0098302	8	☐☐	254	552	100	8.5	3.871		8				
Standard Titer:	0.6990	9	☐☐	255	3007	75	8.5	4.232		9				
Blank Titer:	0.0030	10	☐☐	256	3104	50	8.4	5.777		10				
THIO N:	0.14164	11	☐☐	257	708	40	8.7	6.587		11				
Sample Flask Water Seal?	(Yes) / No	12	☐☐	258	3034	30	8.8	6.663		12				
		13	☐☐	259	3014	20	8.9	6.843	→	13	2059	9.0	6.853	spigot open
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	14	☐☐	260	3023	10	9.0	6.957		14				
		15	☐☐	261	3020	5	9.1	7.056		15				
		16	☐☐	262	2056	0	10.2	7.324	- large black particle swirling in sample.	16				
		17	☐☐							17				
		18	☐☐							18				
Notes: Day Watch. T = 15.5°C		19	☐☐							19				
		20	☐☐							20				
		21	☐☐							21				
		22	☐☐							22				
		23	☐☐							23				
		24	☐☐							24				

Dissolved Oxygen Analysis Log Sheet

BLUE

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	☐☐	263	3190	309	8.2	3.448		1				
Event:	76	2	☐☐	264	631	250	8.3	3.602		2				
Station:	14	3	☐☐	265	3142	200	8.2	3.689		3				
Event Date (Local):	6 Mar 2014	4	☐☐	266	2090	175	8.4	3.455	⇒	4	468	8.3	3.457	
Analysis Date (Local):	April 6, 2014	5	☐☐	267	510	150	8.3	4.232		5				
Analyst:	KS	6	☐☐	268	3209	125	8.4	3.861		6				
Stdization Date (Local):	April 6, 2014	7	☐☐	269	715	100	8.4	4.232		7				
KIO_3 N:	~~0.6990~~ 0.003302	8	☐☐	270	2014	75	8.5	4.730		8				
Standard Titer:	~~0.6990~~ 0.6990	9	☐☐	271	611	50	8.6	5.435		9				
Blank Titer:	00030	10	☐☐	272	2033	40	8.6	5.533		10				
THIO N:	0.14164	11	☐☐	273	2049	30	8.5	5.921		11				
Sample Flask Water Seal?	(Yes) / No	12	☐☐	274	1053	20	8.5	6.183	⇒	12	3111	8.6	6.170	
		13	☐☐	275	712	10	8.8	6.834		13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	14	☐☐	276	3038	5	8.9	7.001		14				
		15	☐☐	277	621	Surf	9.0	7.197		15				
		16	☐☐							16				
		17	☐☐							17				
		18	☐☐							18				
Notes: File name 7376 by mistake should be 76.		19	☐☐							19				
		20	☐☐							20				
		21	☐☐							21				
		22	☐☐							22				
		23	☐☐							23				
		24	☐☐							24				

Dissolved Oxygen Analysis Log Sheet

GREY

Last Updated: December 2011

Institute of Ocean Sciences
Water Properties Group

Cruise and Analysis Information		Nisk ID	Nisk Int	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-06	1	☐☐	278	1023	144	8.4	3.520		1				
Event:	78	2	☐☐	279	2068	125	8.4	3.477		2				
Station:	16	3	☐☐	280	3000	100	8.5	3.579		3				
Event Date (Local):	6 Apr 2014	4	☐☐	281	3030	75	8.5	4.062	→	4	3164	8.6	4.060	
Analysis Date (Local):	April 6, 2014	5	☐☐	282	557	50	8.5	4.836		5				
Analyst:	KS	6	☐☐	283	623	40	8.5	5.100		6				
Stdization Date (Local):	April 6, 2014	7	☐☐	284	2092	30	8.5	5.105		7				
KIO_3 N:	0.0098302	8	☐☐	285	471	20	8.5	5.384	→	8	3043	8.7	5.604	
Standard Titer:	0.6990	9	☐☐	286	528	108	8.8	5.729		9				
Blank Titer:	0.0030	10	☐☐	287	3047	95	9.1	6.149		10				
THIO N:	0.14164	11	☐☐	288	3009	907	9.7	6.166		11				
Sample Flask Water Seal?	(Yes) / No	12	☐☐							12				
		13	☐☐							13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$	14	☐☐							14				
	NaI/NaOH	15	☐☐							15				
	H_2SO_4	16	☐☐							16				
	KIO_3	17	☐☐							17				
	THIO	18	☐☐							18				
Notes:		19	☐☐							19				
		20	☐☐							20				
		21	☐☐							21				
		22	☐☐							22				
		23	☐☐							23				
		24	☐☐							24				