

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: March 2014

Cruise and Analysis Information		Nisk ID	Nisk Int V S	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:	2014-18	1	✓ ✓	1	3084	229	8.8	2.994		1				
Event:	1/2	2	✓ ✓	2	3010	200	8.4	3.094		2				
Station:	HARD 59	3	✓ ✓	3	2035	175	8.5	3.132		3				
Event Date (Local):	8 JUN 2014	4	✓ ✓	4	2069	150	8.4	3.125	Flushed bubble in this tip after run	4				
Analysis Date (Local):	10 JUN 2014	5	✓ ✓	5	396	125	8.5	1.343	problem with titration, over titration?	5	3032		1.947	problem with titration over titration?
Analyst:	MBS	6	✓ ✓	6	3033	100	8.7	3.494	Started new cruise here + sample set!	6				
Stdization Date (Local):	9 JUN 2014	7	✓ ✓	7	3022	80	8.9	3.697		7				
KIO ₃ N:	0.0099396	8	✓ ✓	8	552	60	9.1	3.946		8				
Standard Titer:	0.7052	9	✓ ✓	9	3007	50	9.2	4.072		9				
Blank Titer:	0.0018	10	✓ ✓	10	3104	40	9.4	4.190		10				
THIO N:	0.14144	11	✓ ✓	11	708	30	9.5	4.363		11				
Sample Flask	Yes	12	✓ ✓	12	3034	20	10.3	4.934		12				
Water Seal?	No	13	✓ ✓	13	3014	10	11.3	5.497		13				
Reagent Change?	MnCl ₂	14	✓ ✓	14	2059	5	12.0	5.996		14	3023		5.990	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15	✓ ✓	15	3020	0	13.0	6.860		15				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16								16				
	KIO ₃	17								17				
	THIO	18								18				
Notes: Green Box		19								19				
Run Sample 1-5 as a sample set with 2014-21 cruise.		20								20				
Started new cruise 2014-18 and new sample set at sample 6.		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.

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Cruise Number:	2014-18	1	✓	✓	38	3111	177	7.0	1.742					
Event:	5	2	✓	✓	39	3190	150	7.0	1.765					
Station:	JF2	3	✓	✓	40	3142	125	7.0	1.793					
Event Date (Local):	9 JUN 2014	4	✓	✓	41	2014	100	7.1	1.788					
Analysis Date (Local):	10 JUN 2014	5	✓	✓	42	621	80	7.5	2.201		2049	7.6	2.222	
Analyst:	MB	6	X	✓	43	3209	60	8.0	2.960					
Stdization Date (Local):	9 JUN 14	7	✓	✓	44	1053	50	8.2	3.235					
KIO ₃ N:	0.0099396	8	✓	✓	45	712	40	8.6	3.539					
Standard Titer:	0.7052	9	✓	✓	46	2090	30	9.0	4.063					
Blank Titer:	0.0018	10	✓	✓	47	3118	20	9.8	4.809					
THIO N:	0.1444	11	✓	✓	48	510	10	10.6	6.2064					
Sample Flask Water Seal?	(Yes) No	12	✓	✓	49	2098	5	10.6	5.636					
Reagent Change?	MnCl ₂	13	✓	✓	50	2061	0	10.6	5.659					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14												
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15												
	KIO ₃	16												
	THIO	17												
Notes:	BLUE BOX	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.

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Cruise Number:	2014-18	1	✓	✓	61	3021	102	7.7	2.100		1	3028	7.7	2.089	bubble when dispensing acid
Event:	9	2	✓	✓	62	3037	30	9.1	4.409		2				
Station:	P1	3	✓	✓	63	3018	5	11.8	7.842	Check endpoint	3				
Event Date (Local):	9 JUN 2014	4									4				
Analysis Date (Local):	10 JUN 2014	5									5				
Analyst:	MB	6									6				
Stdization Date (Local):	9 JUN 2014	7									7				
KIO ₃ N:	0.0099396	8									8				
Standard Titer:	0.7052	9									9				
Blank Titer:	0.0018	10									10				
THIO N:	0.14144	11									11				
Sample Flask Water Seal?	Yes	12									12				
	No	13									13				
Reagent Change?	MnCl ₂	14									14				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15									15				
	H ₂ SO ₄	16									16				
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17									17				
	THIO	18									18				
Notes:	GREEN BOX LAST	19									19				
	ROW AFTER HARD 59	20									20				
		21									21				
		22									22				
		23									23				
		24									24				

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Cruise Number:	2014-18	1	✓	✓	90	611	108	6.9	1.656		1	3067	6.9	1.642	
Event:	12	2	✓	✓	91	468	100	7.1	1.878		2				
Station:	P2	3	✓	✓	92	1094	75	7.4	3.312		3				
Event Date (Local):	9 JUN 2014	4	✓	✓	93	631	75	7.4	3.304		4				
Analysis Date (Local):	11	5	✓	✓	94	715	50	8.0	5.605		5				
Analyst:	MB	6	✓	✓	95	3038	25	10.8	16.580	Therm jumping	6				
Stdization Date (Local):	11 JUN 2014	7	✓	✓	96	2033	10	12.2	17.763	"	7				
KIO ₃ N:	0.0099396	8	✓	✓	97	505	5	12.5	18.153	"	8				
Standard Titer:	0.7052	9									9				
Blank Titer:	0.0018	10									10				
THIO N:	0.14144	11									11				
Sample Flask Water Seal?	Yes	12									12				
	No	13									13				
Reagent Change?	MnCl ₂	14									14				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15									15				
	H ₂ SO ₄	16									16				
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17									17				
	THIO	18									18				
Notes:	BLUE BOX	19									19				
	AFTER JP2 CAST	20									20				
		21									21				
		22									22				
		23									23				
		24									24				

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Cruise Number:	2014-18	1	✓ ✓	152	1175	1322	4.0	0.495		1				
Event:	18	2	✓ ✓	153	1119	1250	5.2	0.414		2				
Station:	P4	3	✓ ✓	154	1138	1250	4.7	0.417		3	1136	4.7	0.397	
Event Date (Local):	10 JUN 14	4	✓ ✓	155	1124	1000	5.2	0.260		4				
Analysis Date (Local):	11 JUN 14	5	✓ ✓	156	1127	800	5.6	0.231		5				
Analyst:	mc	6	X ✓	157	1106	600	6.0	0.519		6				
Stdization Date (Local):	11 JUN 14	7	✓ ✓	158	1153	400	6.5	1.108		7				
KIO ₃ N:	0.00993	8	✓ ✓	159	1114	300	6.9	1.508		8				
Standard Titr:	0.7052	9	✓ ✓	160	1130	250	7.3	1.839		9				
Blank Titr:	0.0018	10	✓ ✓	161	1177	200	7.7	2.156		10				
THIO N:	0.14144	11	✓ ✓	162	1192	175	7.8	2.286		11				
Sample Flask Water Seal?	(Yes) No	12	✓ ✓	163	1123	150	8.0	2.764		12				
Reagent Change?	MnCl ₂	13	✓ ✓	164	1144	125	8.2	3.035		13				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14	✓ ✓	165	1189	100	7.8	4.564	redraw 7.9 °C	14				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15	X ✓	166	1142	75	8.1	5.917		15	1180	8.2	5.913	
	KIO ₃	16	✓ ✓	167	1146	50	9.1	6.421		16				
	THIO	17	✓ ✓	168	1128	25	10.3	6.738		17				
Notes:		18	✓ ✓	169	1126	10	10.8	8.335		18				
		19	✓ ✓	170	1134	5	10.9	8.336	check endpoint	19				
		20								20				
		21								21				
		22								22				
		23								23				
		24								24				

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Cruise Number: 2014-18		1	X ✓	253A	1401	2000	3.8	1.408	leak on vent (slight)	1	253B	4.0	1.423	1404
Event: Z6		2	✓ ✓	254	1426	1500	4.2	0.681		2				
Station: P8		3	X ✓	255	1418	1250	4.6	0.381	leaky vent	3				
Event Date (Local): 11 Jun 14		4	✓ ✓	256	1416	1000	5.3	0.222		4				
Analysis Date (Local): 11 Jun 14		5	✓ ✓	257	1409	800	5.8	0.268		5				
Analyst: MB		6	✓ ✓	258	1446	600	6.1	0.481		6				
Stdization Date (Local): 11 Jun 14		7	✓ ✓	259	1427	400	6.7	1.279		7				
KIO ₃ N: 0.0099396		8	✓ ✓	260	1443	300	7.1	2.357		8				
Standard Titer: 0.7052		9	✓ ✓	261A	1422	250	7.5	2.385		9	261B	7.7	2.399	1434
Blank Titer: 0.0018		10	✓ ✓	262	1411	200	8.2	2.272	check endpoint	10				
THIO N: 0.14144		11	✓ ✓	263	1407	175	8.3	2.403		11				
Sample Flask Water Seal? Yes		12	✓ ✓	264	1402	150	8.5	2.671		12				school color
Reagent Change? MnCl ₂		13	✓ ✓	265	1417	125	8.5	3.434	Zeroed colorimeter (except up)	13				
(Please circle reagent that was changed prior to sampling and standardization)		14	✓ ✓	266	1428	100	8.1	5.164	check endpoint	14				
NOTE NEW BATCH IN LOG BOOK		15	✓ ✓	267	1408	75	8.8	5.693		15				
		16	✓ ✓	268	1430	50	9.5	6.506	check endpoint	16				
		17	✓ ✓	269A	1440	25	12.9	6.403		17	269B	12.9	6.400	1443
		18	✓ ✓	270	1442	10	13.2	6.452		18				
Notes:		19	✓ ✓	271	1413	5	13.4	6.432		19				
METAL BOX #3		20								20				
		21								21				
		22								22				
		23								23				
		24								24				

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Cruise Number:	2014-18	1	✓✓	288	1401	32.75	3.8	2.364	check endpoint	1				
Event:	31	2	✓✓	289	1404	3000	3.1	2.274		2				
Station:	P12	3	✓✓	290	1426	3000	3.1	2.269		3	1418		2.255	
Event Date (Local):	11 Jun 2014	4	✓✓	291	1416	2500	3.3	1.895		4				
Analysis Date (Local):	14 JUN 2014	5	✓✓	292	1409	2000	3.5	1.356		5				
Analyst:	MS	6	✓✓	293	1446	1500	4.0	0.647		6				
Stdization Date (Local):	14 JUN 2014	7	✓✓	294	1427	1250	4.5	0.399		7				
KIO ₃ N:	0.0099396	8	✓✓	295	1443	1000	4.8	0.266		8	1422		0.276	
Standard Titer:	0.7060	9	✓✓	296	1434	800	5.4	0.251		9				
Blank Titer:	0.0018	10	✓✓	297	1411	600	5.9	0.407		10				
THIO N:	0.14128	11	✓✓	298	1407	400	6.5	1.308	Delay between next sample End point @ 85% Transmittance,? Rezeroed Transmittometer	11				
Sample Flask Water Seal?	(Yes) No	12	✓✓	299	1402	300	6.8	2.274		12				
Reagent Change?	MnCl ₂	13	✓✓	300	1417	250	7.3	2.423		13				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14	✓✓	301	1428	200	7.6	3.150		14				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15	✓✓	302	1408	175	7.9	3.223		15				
	KIO ₃	16	✓✓	303	1430	150	8.1	3.298		16	1440		3.287	
	THIO	17	✓✓	304	1433	125	8.0	4.209		17				
Notes:		18	✓✓	305	1442	100	7.7	5.762		18				
		19	✓✓	306	1413	75	8.7	6.280		19				
		20	✓✓	307	505	50	9.8	6.549		20	2033		6.556	
		21	✓✓	308	715	25	12.7	6.612		21				
		22	✓✓	309	3038	10	13.1	6.511		22				
		23	✓✓	310	1094	5	13.3	6.470		23				
		24								24				

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Cruise Number: 204-18		1	✓✓	428	1174	3685	3.1	2.736		1				
Event: 45		2	✓✓	429	1134	3500	3.0	2.713		2				
Station: P16		3	✓✓	430	1142	3500	2.8	2.719		3				
Event Date (Local): 13/6/14		4	✓✓	431	1177	3000	3.0	2.442		4				
Analysis Date (Local): 16 Jun 2014		5	✓✓	432	1127	2500	3.1	1.948		5				
Analyst: MB		6	✓✓	433A	1175	2000	3.3	1.330		6	1150	3.5	1.320	433B
Stdization Date (Local): 16 Jun 14		7	✓✓	434	1188	1500	3.8	0.594		7				
KIO ₃ N: 0.0099896		8	✓✓	435	1180	1250	4.0	0.342		8				
Standard Titer: 0.7058		9	✓	436	1192	1000	4.4	0.529	slow spigot leak Endpoint before 85% Transmissibility	9				
Blank Titer: 0.0018		10	✓✓	437	1106	800	5.1	0.398	recalibrated transmissometer	10				
THIO N: 0.14132		11	✓✓	438	1119	600	5.3	0.651		11				
Sample Flask Water Seal? Yes		12	✓✓	439	1141	400	5.7	1.541		12				
Reagent Change? MnCl ₂		13	✓✓	440A	1158	300	5.9	2.308		13	1146	5.9	2.302	440B
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14	✓✓	441	1123	250	6.1	3.064		14				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15	✓✓	442	1153	200	6.5	3.698		15				
	KIO ₃	16	✓✓	443A	1138	175	6.8	4.231		16	1105	6.9	4.54	443B Check Endpoint (sharp jump in titration)
	THIO	17	✓✓	444	1110	150	6.9	4.844		17				
		18	✓✓	445A	1128	125	7.1	5.960		18				
Notes:		19	✓✓	446	1144	100	7.6	6.357		19				
		20	✓✓	447A	1114	75	9.0	6.666		20	1136	9.0	6.576	447B
		21	✓✓	448	1182	50	9.8	6.660		21				
		22	✓	449	1178	25	11.9	6.542	leaky vent	22				
		23	✓✓	450	1126	10	12.0	6.526		23				
		24	✓✓	451	1189	5	12.0	6.521		24				

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Cruise Number:	2014-18	1	✓ ✓	480	11401	4023	3.0	3.003		1				
Event:	53	2		481	1404	3500	2.8	2.865		2				
Station:	P20	3		482A	1426	3500	3.1	2.871		3	1418	2.8	2.866	482B 2.
Event Date (Local):	15	4		483	1416	3000	2.8	2.496		4				
Analysis Date (Local):	17 JUN 2014	5		484	1409	2500	3.1	1.943		5				
Analyst:	MB	6		485	1446	2000	3.2	1.264	Leaky vent	6				
Stdization Date (Local):	16 JUN 2014	7		486	1427	1500	3.7	0.551		7				
KIO ₃ N:	0.0099296	8		487A	1443	1250	3.9	0.369		8	1422	4.0	0.371	487B
Standard Titer:	0.7058	9		488	1434	1000	4.2	0.447		9				
Blank Titer:	0.0018	10		489	1411	800	4.7	0.522		10				
THIO N:	0.14132	11		490	1407	600	5.3	0.812		11				
Sample Flask Water Seal?	(Yes) No	12		491	1402	400	5.4	1.445		12				
Reagent Change?	MnCl ₂	13		492A	1417	300	5.7	2.367		13	1428	5.7	2.366	492B
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14		493	1408	250	5.9	2.985		14				
	H ₂ SO ₄	15		494	1430	200	6.3	3.652		15				
NOTE NEW BATCH IN LOG BOOK	KIO ₃	16		495	1440	175	6.7	3.944		16				
	THIO	17		496	1433	150	7.0	4.435		17				
Notes:		18		497	1442	125	7.1	5.192		18				
		19		498	1413	100	7.1	6.088	leaky vent (slight) recal transducer	19				
		20		499	505	75	8.8	6.372	Recal transducer	20	715	8.8	6.527	499B (sharp jump to plateau? check end point)
		21		500	3038	50	9.6	6.648	Check endpoint got error message trans not changing?	21				
		22		501	1094	25	11.3	6.504		22				
		23		502	2033	10	11.4	6.497		23				
		24		503	631	5	11.4	6.491		24				

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Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int S	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:	2014-18	1	✓	✓	600	1174	437	2.7	3.195		1				
Event:	72	2	✓	✓	601	1134	4000	2.6	3.150		2	1142	3.150	3.150	
Station:	P26	3	✓	✓	602	1177	3500	2.7	2.938	leaky vent	3				
Event Date (Local):	17 JUN 2014	4	✓	✓	603	1127	3000	2.6	2.511		4				
Analysis Date (Local):	20 JUN 2014	5	✓	✓	604	1175	2500	3.0	1.990		5				
Analyst:	MB	6	✓	✓	605	1150	2000	3.1	1.241		6				
Stdization Date (Local):	20 JUN 2014	7	✓	✓	606	1188	1500	3.5	0.611		7				
KIO ₃ N:	0.0099396	8	✓	✓	607	1180	1250	3.6	0.536		8	1192	3.8	0.504	
Standard Titer:	0.7067	9	✓	✓	608	1106	1000	4.1	0.524	leaky vent	9				
Blank Titer:	0.0018	10	✓	✓	609	1119	800	4.5	0.541		10				
THIO N:	0.14114	11	✓	✓	610	1141	600	4.8	0.595		11				
Sample Flask Water Seal?	Yes	12	✓	✓	611	1158	400	5.2	1.171		12				
	No	13	✓	✓	612	1146	300	5.2	1.904		13				
Reagent Change?	MnCl ₂	14	✓	✓	613	1123	250	5.3	2.463		14	1153	5.4	2.465	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15	✓	✓	614	1138	200	5.7	3.183		15				
	H ₂ SO ₄	16	✓	✓	615	1105	175	5.9	3.661		16				
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17	✓	✓	616	1110	150	6.1	4.264		17				
	THIO	18	✓	✓	617	1128	125	6.0	5.403		18	1144	6.1	5.421	
Notes:		19	✓	✓	618	1114	100	6.5	6.172		19				
		20	✓	✓	619	1136	75	7.3	6.456		20				
		21	✓	✓	620	1182	50	8.5	6.787		21				
		22	✓	✓	621	1178	25	10.1	6.580		22				
		23	✓	✓	622	1126	10	10.3	6.604		23				
		24	✓	✓	623	1189	5	10.2	6.583		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.