

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Bender



Last Updated: December 2019

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1		1	2089	8.7	2.044								1					
Event: 1	2		2	371	8.6	4.126								2					
Station: S1	3		3A	3009	8.8	5.608								3	3B	3100	8.7	5.609	
Event Date (Local): 04 April 2021	4		4	2043	8.9	5.660								4					
Analysis Date (Local):	5		5	2019	9.1	5.640								5					
Analyst: KS	6		6	3000	9.3	5.593								6					
Stdization Date (Local): 04 April 2021	7		7	2027	9.6	6.012								7					
KIO ₃ N: 0.0118246	8		8A	3032	10.7	8.745	- Changed time to PDT after this							8	8B	2047	10.1	8.813	
Standard Titer: 0.49083	9		9	3072	10.40	10.40	sample + 1hr							9					
Blank Titer: 0.00039	10						> 1 mL titrant. Piston reset mid-tit.							10					
THIO N: 0.24135	11		1	2	3A	3B	4	5	6	7	8A	8B	9						
Sample Flask Water Seal? Yes	12		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY						
No	13		SI	SI	SI	SI	SI	SI	SI	SI	SI	SI	SI						
Reagent Change? MnCl ₂	14		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020						
(Please circle reagent that was changed prior to sampling and standardization)	15		100 m	75 m	50 m	50 m	40 m	30 m	20 m	10 m	5 m	5 m	0 m						
NOTE NEW BATCH IN LOG BOOK	16		bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 8	bot 9						
	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.

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Lochness



Last Updated: December 2019

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number:	2021-020						1		10	456	7.5	3.487		1						
Event:	2						2		11	2098	7.5	3.536		2						
Station:	62						3		12	611	7.7	3.823		3						
Event Date (Local):	April 5, 2021						4		13	3029	7.8	4.741		4						
Analysis Date (Local):	5 April 2021						5		14	2007	8.1	5.376		5						
Analyst:	KS						6		15A	3041	8.3	5.384	screw cap was loose on bottle, bottle	6	15B	3155	8.3	5.387	B sample drawn before A	
Stdization Date (Local):	4 April 2021						7		16	3120	8.3	5.393		7						
KIO ₃ N:	0.0118246						8		17A	622	8.4	5.410		8	17B	3044	8.2	5.410	-late EP. OT	
Standard Titer:	0.49083						9		18	3101	8.7	5.528		9						
Blank Titer:	0.00039						10		19	3078	9.4	5.576		10						
THIO N:	0.24135						11		20	3048	10.8	5.599		11						
Sample Flask Water Seal?	Yes						12							12						
Reagent Change?	MnCl ₂						13		10	11	12	13	14	15A	15B	16	17A	17B	18	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH						14		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄						15		62	62	62	62	62	62	62	62	62	62	62	
	KIO ₃						16		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	
	THIO						17		Bot-5 m	125 m	100 m	75 m	50 m	40 m	40 m	30 m	20 m	20 m	10 m	
							18		bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7	bot 8	bot 8	bot 9	
Notes:							19		19	20				19						
							20		OXY	OXY				20						
							21		62	62				21						
							22		2021-020	2021-020				22						
							23		5 m	0 m				23						
							24		bot 10	bot 11				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 and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number:	7021-020						1		25	2016	8.5	3.016		1						
Event:	6						2		26	2015	8.3	3.645		2						
Station:	65						3		27	3090	8.5	4.232		3						
Event Date (Local):	5 April 2021						4		28	3116	8.5	4.584		4						
Analysis Date (Local):	5 April 2021						5		29	3173	8.7	4.936		5						
Analyst:	KS						6		30	3036	8.9	5.153		6						
Stdization Date (Local):	4 April 2021						7		31	2025	9.1	5.854	5.416	7						
KIO ₃ N:	0.0118246						8		32	3054	9.4	5.947	5.854	8						
Standard Titer:	0.49083						9		33	2094	10.0	5.917		9						
Blank Titer:	0.00039						10		34A	1416	11.9	6.042		10	34B	712	10.7	6.033		
THIO N:	0.24135						11							11						
Sample Flask Water Seal?	Yes						12		25	26	27	28	29	30	31	32	33	34A	34B	
	No						13		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
Reagent Change?	MnCl ₂						14		65	65	65	65	65	65	65	65	65	65	65	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH						15		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄						16		Bot-5 m	100 m	75 m	50 m	40 m	30 m	20 m	10 m	5 m	0 m	0 m	
	KIO ₃						17		bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 10	
	THIO						18													
Notes:							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 and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number:	2021-020						1		35	2089	10.1	2.634		1						
Event:	10						2		36	371	10.2	2.695		2						
Station:	ADCP						3		37	3009	10.3	3.890		3						
Event Date (Local):	5 April 2021						4		38	3100	10.3	4.326		4						
Analysis Date (Local):	5 April 2021						5		39	2043	10.5	4.450		5						
Analyst:	KS						6		40	2019	10.7	4.863		6						
Stdization Date (Local):	4 April 2021						7		41	3000	10.9	5.404		7						
KIO ₃ N:	0.0118246						8		42	2027	11.7	5.870		8						
Standard Titer:	0.49083						9		43	3032	12.2	5.927		9						
Blank Titer:	0.00039						10		44A	2047	-99	5.970	not reading high	10	44B	3072	-99	5.975		
THIO N:	0.24135						11							11						
Sample Flask Water Seal?	Yes						12		35	36				12						
	No						13		OXY	OXY				13						
Reagent Change?	MnCl ₂						14		ADCP	ADCP				14						
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH						15		2021-020	2021-020				15						
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄						16		Bot-5 m	100 m				16						
	KIO ₃						17		bot 1	bot 2				17						
	THIO						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.

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Water Properties Group

Loch Ness



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Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2021-020	1		45	456	8.3	7.059		1					
Event:	13	2		46	2098	8.4	2.163		2					
Station:	69	3		47	611	8.9	2.134		3					
Event Date (Local):	05 APR 2021	4		48	3029	8.9	7.444		4					
Analysis Date (Local):	05 April 2021	5		49	2007	8.9	7.943		5					
Analyst:	KS	6		50A	3041	8.8	3.705		6	50B	3155	8.9	3.703	
Stdization Date (Local):	04 April 2021	7		51	3120	9.1	3.824		7					
KIO ₃ N:	0.0118246	8		52A	622	9.4	4.505		8	52B	3044	9.1	4.507	
Standard Titer:	0.49083	9		53	3101	9.7	4.912		9					
Blank Titer:	0.00039	10		54	3078	10.4	5.296		10					
THIO N:	0.24135	11		55	3048	10.9	5.713		11					
Sample Flask Water Seal?	Yes	12		56	3131	11.7	5.884		12					
	No	13							13					
Reagent Change?	MnCl ₂	14		45	46	47	48		14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		OXY	OXY	OXY	OXY		15					
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		69	69	69	69		16					
	KIO ₃	17		2021-020	2021-020	2021-020	2021-020		17					
	THIO	18		Bot-5 m	150 m	125 m	100 m		18					
		19		bot 1	bot 2	bot 3	bot 4		19					
Notes:		20		55	56				20					
		21		OXY	OXY				21					
		22		69	69				22					
		23		2021-020	2021-020				23					
		24		5 m	0 m				24					
				bot 11	bot 12									

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 and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number: 2021-020	1		57	456	7.3	1.765		1						
Event: 23	2		58	2098	7.3	1.755		2						
Station: 102	3		59	611	7.5	1.871		3						
Event Date (Local): 6 April 2021	4		60A	3021	7.6	1.991		4	60B	2097	7.6	2.053	- such! Titration ok. Probably a sampling issue.	
Analysis Date (Local): 7 April 2021	5		61	3041	7.9	2.362		5						
Analyst: KS	6		62	3155	7.9	2.395		6						
Stdization Date (Local): 7 April 2021	7		63	3120	7.9	2.786	3120	7						
KIO ₃ N: 0.0120494	8		64	622	8.0	3.072	622	8						
Standard Titer: 0.49957	9		65A	3044	8.0	3.714	3041 3044	9	65B	3101	8.0	3.555	???	
Blank Titer: 0.00022	10		66	3078	8.1	3.854	3078	10						
THIO N: 0.24153	11		67	3048	8.3	4.416	3048	11						
Sample Flask Water Seal? ☒ Yes	12		68	3131	8.4	4.680	3131	12						
	13		69	3078	8.6	5.727	3079	13						
Reagent Change? MnCl ₂	14		70	3114	8.9	6.029	3142	14						
(Please circle reagent that was changed prior to sampling and standardization)	15		71	3112	9.6	6.030	2065	15						
H ₂ SO ₄	16		57	58	59	60A	60B	61	62	63	64	65A	65B	66
NOTE NEW BATCH IN LOG BOOK	17		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
THIO	18		102	102	102	102	102	102	102	102	102	102	102	102
Notes:	19		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020
	20		Bot-5 m	250 m	200 m	175 m	175 m	150 m	125 m	100 m	75 m	50 m	50 m	40 m
	21		bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 9	bot 10
	22		67	68	69	70	71		22					
	23		OXY	OXY	OXY	OXY	OXY		23					
	24		102	102	102	102	102		24					

Bottle integrity: First test the top vent (V) by opening the appropriate column if either fails the integrity check and explain this in the comments column.

2021-020	2021-020	2021-020	2021-020	2021-020
30 m	20 m	10 m	5 m	0 m
bot 11	bot 12	bot 13	bot 14	bot 15

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Shark



Last Updated: December 2019

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments						
Cruise Number:	2021-020	1		72	2016	7.3	1.906							1											
Event:	26	2		73	2015	7.3	1.908							2											
Station:	75	3		74	3090	7.4	1.904							3											
Event Date (Local):	6 April 2021	4		75A	3116	7.3	1.921							4	75B	3113	7.3	1.920							
Analysis Date (Local):	7 April 2021	5		76	3036	7.4	2.110							5											
Analyst:	KS	6		77	2025	7.6	2.957							6											
Stdization Date (Local):	07 April '21	7		78	3054	7.6	3.472							7											
KIO ₃ N:	0.0120494	8		79	2094	7.6	4.304							8											
Standard Titer:	0.49957	9		80	1416	7.7	4.461							9											
Blank Titer:	0.00022	10		81	712	7.7	4.876							10											
THIO N:	0.24153	11		82	1422	7.8	5.181							11											
Sample Flask Water Seal?	Yes	12		83A	1408	8.0	5.644							12	83B	3010	8.0	5.644							
	No	13		84	458	8.1	5.660							13											
Reagent Change?	MnCl ₂	14		85	1442	8.1	5.671							14											
(Please circle reagent that was changed prior to sampling and standardization)	NaCl/NaOH	15		72		73		74		75B		75A		76		77		78		79		80		81	
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY	
	KIO ₃	17		75		75		75		75		75		75		75		75		75		75		75	
	THIO	18		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020		2021-020	
Notes:		19		Bot-5 m		200 m		175 m		150 m		150 m		125 m		100 m		75 m		50 m		40 m		30 m	
		20		bot 1		bot 2		bot 3		bot 4		bot 4		bot 5		bot 6		bot 7		bot 8		bot 9		bot 10	
		21		82		83A								83B		84		85							
		22		OXY		OXY								OXY		OXY		OXY							
		23		75		75								75		75		75							
		24		2021-020		2021-020								2021-020		2021-020		2021-020							

Bottle integrity: First test the top vent (V) by o 20 m 10 m test the spigot by opening the vent. Mark 'x' in the app 10 m 5 m 0 m and explain this in the comments column.

bot 11 bot 12 bot 13 bot 14

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Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1	86	87	2089	7.1	1.951		1						1					
Event: 32	2	87	88	371	7.1	1.953		2						2					
Station: 72	3	88	89	3009	7.2	1.962		3						3					
Event Date (Local): 7 April 2021	4	89	90	3100	7.3	1.972		4						4					
Analysis Date (Local): 7 April 2021	5	90	91	2043	7.4	2.245		5						5					
Analyst: KS	6	91	92	2019	7.5	2.945		6						6					
Stdization Date (Local): 7 April 2021	7	92	93	3000	7.5	3.550		7						7					
KIO ₃ N: 0.0120494	8	93	94	2029	7.6	4.033		8						8					
Standard Titer: 0.49957	9	94	95	3032	7.7	4.753		9						9					
Blank Titer: 0.00022	10	95	96A	2047	7.7	5.531		10	95B	3072	7.7	5.536	small bubble from reagents	10	95B	3072	7.7	5.536	small bubble from reagents
THIO N: 0.24153	11	96	97	3030	7.7	5.567	3030	11						11					
Sample Flask Water Seal? ☒ Yes ☐ No	12	97	98A	3109	8.3	5.868		12	97B	505	8.3	5.867		12	97B	505	8.3	5.867	
	13		98	3049	9.7	5.875		13						13					
Reagent Change? ☒ MnCl ₂ ☐ NaI/NaOH ☐ H ₂ SO ₄ ☐ KIO ₃ ☐ THIO	14	86	87	88	89	90	91	92	93	94	95A	95B		14					
(Please circle reagent that was changed prior to sampling and standardization)	15	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		15					
NOTE NEW BATCH IN LOG BOOK	16	72	72	72	72	72	72	72	72	72	72	72		16					
	17	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020		17					
	18	Bot-5 m	175 m	150 m	125 m	100 m	75 m	50 m	40 m	30 m	20 m	20 m		18					
	19	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 10		19					
Notes:	20													20					
	21	96	97A	97B	98									21					
	22	OXY	OXY	OXY	OXY									22					
	23	72	72	72	72									23					
	24	2021-020	2021-020	2021-020	2021-020									24					

Bottle integrity: First test the top vent (V) by op

bot 11

bot 12

bot 12

bot 13

t. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.

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Bender



Form containing cruise and analysis information, sample data tables (OXY-1, OXY-2), and a notes section.

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

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Loch Ness



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Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number: 2021-020	1		115	3142	8.3	4.144		1	1					
Event: 39	2		116	3079	8.1	4.147		2						
Station: 56	3		117	3131	8.1	4.161		3						
Event Date (Local): 8 April 2021	4		118	3048	8.1	4.202		4						
Analysis Date (Local): 8 April 2021	5		119	3078	8.2	4.506		5						
Analyst: KS	6		120	3101	8.3	4.767	small bubble from MnCl ₂	6						
Stdization Date (Local): 7 April 2021	7		121	3044	8.3	4.898		7						
KIO ₃ N: 0.0120494	8		122	622	8.3	5.249	8.3	8						
Standard Titer: 0.49957	9		123	3120	8.4	5.674		9						
Blank Titer: 0.00022	10		124A	3155	8.6	5.778	=>	10	124B	3041	8.4	5.750		
THIO N: 0.24135	11		125	2007	8.7	5.836		11						
Sample Flask Water Seal? ☒ Yes	12		126	3029	8.7	5.716		12						
	13		127	611	8.9	5.742		13						
Reagent Change? MnCl ₂	14		128A	2098	9.7	5.958	=>	14	128B	456	9.1	5.955		
(Please circle reagent that was changed prior to sampling and standardization)	15		128B	128A	127	126	125	124B	124A	123	122	121	120	119
NOTE NEW BATCH IN LOG BOOK	16		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	17		56	56	56	56	56	56	56	56	56	56	56	56
	18		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020
Notes:	19		0 m	0 m	5 m	10 m	20 m	30 m	30 m	40 m	50 m	75 m	100 m	125 m
	20		bot 14	bot 14	bot 13	bot 12	bot 11	bot 10	bot 10	bot 9	bot 8	bot 7	bot 6	bot 5
	21		118	117	116	115			21					
	22		OXY	OXY	OXY	OXY			22					
	23		56	56	56	56			23					
	24		2021-020	2021-020	2021-020	2021-020			24					

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

150 m	175 m	200 m	Bot-5 m
bot 4	bot 3	bot 2	bot 1

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: December 2019

Shark



Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2021-020	12	1	140	2016	8.7	8.213		1					
Event:	46	11	2	139	2015	8.7	8.368		2					
Station:	46	10	3	138	3090	8.5	8.003	-Copepods in sample causing	3	137B	3173	8.3	6.762	
Event Date (Local):	8 April 2021	9	4	137A	3116	8.3	6.757	⇒ a "slightly noisy" curve.	4					
Analysis Date (Local):	8 April 2021	8	5	136	3036	8.2	6.026		5					
Analyst:	KS	7	6	135	2025	8.2	5.678		6					
Stdization Date (Local):	7 April 2021	6	7	134	3054	8.1	5.640		7					
KIO ₃ N:	0.0120494	5	8	133A	2094	8.1	5.404	⇒	8	133B	1416	8.2	5.401	
Standard Titer:	0.49757	4	9	132	712	8.1	5.503		9					
Blank Titer:	0.00022	3	10	131	1422	8.1	5.433		10					
THIO N:	0.21135	2	11	130	1408	8.1	5.385		11					
Sample Flask Water Seal?	Yes	1	12	129	3010	8.2	5.283		12					
	No		13						13					
Reagent Change?	MnCl ₂		14	140	139		138		14	137A	137B	136	135	134
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH		15	OXY	OXY		OXY		15	OXY	OXY	OXY	OXY	OXY
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄		16	46	46		46		16	46	46	46	46	46
	KIO ₃		17	2021-020	2021-020		2021-020		17	2021-020	2021-020	2021-020	2021-020	2021-020
	THIO		18	0 m	5 m		10 m		18	20 m	20 m	30 m	40 m	50 m
			19	bot 12	bot 11		bot 10		19	bot 9	bot 9	bot 8	bot 7	bot 6
Notes:			20	130	129				20					
			21	OXY	OXY				21					
			22	46	46				22					
			23	2021-020	2021-020				23					
			24	150 m	Bot-5 m				24					
				bot 2	bot 1									

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.

**Institute of Ocean Sciences
Water Properties Group**

BENDER



Cruise and Analysis Information							OXY-1 Comments							OXY-2 Comments						
Nisk ID	Int V	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)		Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)		OXY-2 Comments							
Cruise Number: 2021-020	1		141	2089	8.7	2.556		1												
Event: 50	2		142	371	8.8	2.711		2												
Station: 42	3		143	3009	8.7	3.197		3												
Event Date (Local): 8 April 2021	4		144A	3100	8.5	3.785		4	144B	2043	8.5	3.782								
Analysis Date (Local): 9 April 2021	5		145	2019	8.4	4.103		5												
Analyst: KS	6		146	3000	8.2	4.609		6												
Stdization Date (Local): 9 April 2021	7		147	2037	8.1	5.101		7												
KIO ₃ N: 0.0120494	8		148	3032	8.1	5.330		8												
Standard Titer: 0.49954	9		149	2047	8.1	5.188		9												
Blank Titer: -0.00003	10		150	3072	8.2	5.462		10												
THIO N: 0.24149	11		151A	3050	8.2	6.558		11	151B	3109	8.2	6.550								
Sample Flask Water Seal? Yes	12		152	505	8.2	6.902		12												
No	13		153	3049	8.3	6.985		13												
Reagent Change? MnCl ₂	14		154	3057	8.5	7.305		14												
(Please circle reagent that was changed prior to sampling and standardization)	15		155	1429	8.5	7.516		15												
H ₂ SO ₄	16		156	930	8.6			16												
NOTE NEW BATCH IN LOG BOOK	17	141	142	143	144A	144B	145	146	147	148	149	150								
THIO	18	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY								
Notes:	19	42	42	42	42	42	42	42	42	42	42	42								
	20	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020								
	21	Bot-5 m	300 m	250 m	200 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m								
	22	bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10								
	23	151A	151B	152	153	154	155	156												
	24	OXY	OXY	OXY	OXY	OXY	OXY	OXY												
		42	42	42	42	42	42	42	r fails the integrity check and explain this in the comments column.											
		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020												
	40 m	40 m	30 m	20 m	10 m	5 m	0 m													
	bot 11	bot 11	bot 12	bot 13	bot 14	bot 15	bot 16													

Dissolved Oxygen Analysis Log Sheet
Institute of Ocean Sciences
Water Properties Group

SHARK



Last Updated: December 2019

Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1		158	3116	8.6	7.724	6.342	1					
Event: 52	2		159	2015	8.7	6.583		2	159B	3090	8.7	6.586	
Station: VAN 7	3		160	2016	8.9	7.724		3					
Event Date (Local): 09 APR 2021	4							4					
Analysis Date (Local): 09 April 2021	5							5					
Analyst: KS	6							6					
Stdization Date (Local): 09 April 2021	7		160		159A		159B	7					
KIO ₃ N: 0.0120494	8		OXY		OXY		OXY	8					
Standard Titer: 0.49954	9		VAN7		VAN7		VAN7	9					
Blank Titer: -0.00003	10		2021-020		2021-020		2021-020	10					
THIO N: 0.24149	11		0 m		5 m		5 m	11					
Sample Flask Water Seal? (Yes) No	12		bot 3		bot 2		bot 2	12					
	13						bot 1	13					
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	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

Institute of Ocean Sciences
Water Properties Group



Last Updated: December 2019

SHARK

Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments		
Cruise Number: 2021-020	1		162	3162	8.2	3.842		1							
Event: SW	2		163A	1442	8.2	4.341 =>		2	163B	3038	8.2	4.340			
Station: IND2	3		164	458	8.1	5.022		3							
Event Date (Local): 9 April 2021	4		165	3010	8.1	4.319 - OT. Late EP. Run-on filtration		4							
Analysis Date (Local): 9 April 2021	5		166	1408	8.2	5.176		5							
Analyst: KS	6		167	1422	8.3	5.455		6							
Stdization Date (Local): 9 April 2021	7		168A	1416	8.3	5.626 =>		7	168B	712	8.3	5.626			
KIO ₃ N: 0.0120494	8		169	2094	8.3	5.589		8							
Standard Titer: 0.49954	9		170	3054	8.5	4.944		9							
Blank Titer: -0.00003	10		171	2025	8.6	6.688		10							
THIO N: 0.24149	11		172	3036	9.1	9.230		11							
Sample Flask Water Seal? Yes No	12		172	171	170	169	168A	168B	167	166	165	164	163A	163B	162
	13		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
Reagent Change? MnCl₂ NaI/NaOH H₂SO₄ KIO₃ THIO (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	14		IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2	IND2
	15		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020
	16		0 m	5 m	10 m	20 m	30 m	30 m	40 m	50 m	75 m	100 m	125 m	125 m	Bot-5 m
	17		bot 11	bot 10	bot 9	bot 8	bot 7	bot 7	bot 6	bot 5	bot 4	bot 3	bot 2	bot 2	bot 1
	18														
Notes:	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

Loch Ness



Last Updated: December 2019

Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1		174	3155	8.9	1.804		1					
Event: 56	2		175	3041	9.0	1.858		2					
Station: IND8	3		176A	3029	9.0	2.110 =>		3	176B	2007	9.0	2.101	
Event Date (Local): 9 April 2021	4		177	611	9.0	2.831	-1 st stir bar had no magnetism.	4					
Analysis Date (Local): 9 April 2021	5		178	2098	9.2	5.733	Attempted to recover unsuccessfully.	5	- Used a second and seemed to stir ok				
Analyst: KS	6		179	456	9.8	8.091	small bubble fr. reagent	6	L> A few minutes passed before titration				
Stdization Date (Local): 9 April 2021	7							7					
KIO ₃ N: 0.0120494	8							8					
Standard Titer: 0.499564	9							9					
Blank Titer: -0.00003	10							10					
THIO N: 0.24149	11		179	178	177	176A	176B	175	174				
Sample Flask Water Seal? <u>Yes</u>	12		OXY	OXY	OXY	OXY	OXY	OXY	OXY				
	13		IND8	IND8	IND8	IND8	IND8	IND8	IND8				
Reagent Change? MnCl ₂	14		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020				
(Please circle reagent that was changed prior to sampling and standardization)	15		0 m	5 m	10 m	20 m	20 m	30 m	Bot-5 m				
NOTE NEW BATCH IN LOG BOOK	16		bot 6	bot 5	bot 4	bot 3	bot 3	bot 2	bot 1				
	17												
	18												
Notes:	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

Loch Ness



Last Updated: December 2019

Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1		181	2065	8.6	2.066		1					
Event: 58	2		182	3142	8.8	1.942		2					
Station: IND7	3		183	3079	8.9	1.844		3					
Event Date (Local): 9 April 2021	4		184	3131	8.9	2.318		4					
Analysis Date (Local): 9 April 2021	5		185	3048	8.9	2.389		5					
Analyst: KS	6		186	3078	9.1	2.521		6					
Stdization Date (Local): 9 April 2021	7		187A	3044	9.1	4.502 =>		7	187B	3101	9.1	4.525	Poor reps!
KIO ₃ N: 0.0120494	8		188	622	9.4	8.262		8					
Standard Titer: 0.49954	9							9					
Blank Titer: - 0.00003	10		188	187A	187B	186	185	184	183	182	181		
THIO N: 0.24149	11		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		
Sample Flask Water Seal? ☒ Yes ☐ No	12		IND7	IND7	IND7	IND7	IND7	IND7	IND7	IND7	IND7		
	13		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020		
	14		0 m	5 m	5 m	10 m	20 m	30 m	40 m	50 m	Bot-5 m		
Reagent Change? MnCl ₂	15		bot 8	bot 7	bot 7	bot 6	bot 5	bot 4	bot 3	bot 2	bot 1		
(Please circle reagent that was changed prior to sampling and standardization)	16												
NOTE NEW BATCH IN LOG BOOK	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

Swordfish



Last Updated: December 2019

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2021-020	1		190	3068	8.0	3.788		1										
Event:	60	2		191	2056	8.0	3.609		2										
Station:	IND4	3		192	3225	8.2	3.186		3										
Event Date (Local):	9 April 2021	4		193	1402	8.3	2.387		4										
Analysis Date (Local):	9 April 2021	5		194A	1472	8.2	3.239		5	194B	3118	8.2	3.243						
Analyst:	KS	6		195	3176	8.1	3.991		6										
Stdization Date (Local):	9 April 2021	7		196	3040	8.1	3.447		7										
KIO ₃ N:	0.0120494	8		197	931	8.1	4.197		8										
Standard Titer:	0.49954	9		198	1035	8.1	4.337		9										
Blank Titer:	-0.00003	10		199	3051	8.1	5.234		10										
THIO N:	0.24149	11		200	058	8.2	5.151		11	200B	730	8.2	5.144						
Sample Flask Water Seal?	Yes	12		201	339	8.6	4.165		12										
	No	13		202	557	8.9	6.703	- Very late EP. Sample OT'd.	13										
Reagent Change?	MnCl ₂	14		203	2014	8.7	8.211		14										
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15	203	202	201	200A	200B	199	198	197	196	195	194A	194B					
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY					
	KIO ₃	17	IND4	IND4	IND4	IND4	IND4	IND4	IND4	IND4	IND4	IND4	IND4	IND4					
	THIO	18	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	2021-020					
Notes:		19	0 m	5 m	10 m	20 m	20 m	30 m	40 m	50 m	75 m	100 m	125 m	125 m					
		20	bot 14	bot 13	bot 12	bot 11	bot 11	bot 10	bot 9	bot 8	bot 7	bot 6	bot 5	bot 5					
		21	193	192	191	190													
		22	OXY	OXY	OXY	OXY													
		23	IND4	IND4	IND4	IND4													
		24	2021-020	2021-020	2021-020	2021-020													

Bottle integrity: First test the top vent (V) by or

150 m

175 m

200 m

Bot-5 m

bot 4

bot 3

bot 2

bot 1

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

Bender



Last Updated: December 2019

Cruise and Analysis Information	Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2021-020	1		205A	204B	8.6	6.270		1	205B	2049	8.6	6.270	
Event: 63	2		206	3100	8.6	6.310		2					
Station: IND 8	3		207	3009	8.6	6.436		3					
Event Date (Local): 9 April 2021	4		208	371	8.7	6.725		4					
Analysis Date (Local): 10 April 2021	5		209	2099	8.7	7.621		5					
Analyst: KS	6							6					
Stdization Date (Local): 09 April 2021	7		209	208	207	206	205A	205B	7				
KIO ₃ N: 0.0120494	8		OXY	OXY	OXY	OXY	OXY	OXY	8				
Standard Titer: 0.49954	9		IND0	IND0	IND0	IND0	IND0	IND0	9				
Blank Titer: - 0.00003	10		2021-020	2021-020	2021-020	2021-020	2021-020	2021-020	10				
THIO N: 0.24149	11		0 m	5 m	10 m	20 m	Bot-5 m	Bot-5 m	11				
Sample Flask Water Seal? ☒ Yes ☐ No	12		bot 5	bot 4	bot 3	bot 2	bot 1	bot 1	12				
Reagent Change? MnCl ₂	13								13				
(Please circle reagent that was changed prior to sampling and standardization)	14								14				
NOTE NEW BATCH IN LOG BOOK	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.