

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1		17	1316	9.8	Ø	gain ≥ 2.4V error (anoxic)	1					
Event:	27	2		18	974	9.6	Ø	gain ≥ 2.4V error (anoxic)	2					
Station:	SI	3		19	2015	9.3		200 in flask but curve OK but late	3					
Event Date (Local):	2023-06-26	4		20	3072	9.0	1.524		4					
Analysis Date (Local):	2023-06-27	5		21	994	9.1	1.524		5					
Analyst:	ER	6		22	970	9.2	3.057		6					
Stdization Date (Local):	2023-06-26	7		23A	140	9.8	-99	200 in flask caused Vjumps - LOST	7	23B	131	9.7	4.439	
KIO ₃ N:	0.011825	8		24	1330	9.8	4.796		8					
Standard Titer:	0.4940237	9		25	908	10.2	5.241		9					
Blank Titer:	0.0003312	10		26A	105	10.5	4.894		10	26B	932	10.5		wrong flask in file
THIO N:	0.239563	11		27	173	11.0			11					
Sample Flask Water Seal?	Yes	12		28	1485	11.7			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:		19							19					
02701.1st +		20							20					
02702.1st.		21							21					
Moose.xlsx		22							22					
Comments on reverse		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.

17
OXY
SI
2023-025
Bot-5 m
bot 1

<blank,
sample anoxic.
Ran a couple times
+ did OT.
gave ≈ 2.4 V error

18
OXY
SI
2023-025
150 m
bot 2

OT... doesn't look right
Sample anoxic < blank
gave ≈ 2.4 V error
before I tried to OT.

19
OXY
SI
2023-025
125 m
bot 3

Zooplankton
in flask
late endpoint, OT
will need to adjust EP
1st curve OK, 2nd too noisy

raw titer = 0.03568 mL
230627 020302 02CHECK

20
OXY
SI
2023-025
100 m
bot 4

21
OXY
SI
2023-025
75 m
bot 5

will need to go in
and get titer
volume.
Sorry! Accidentally did OT
and aborted.
raw titer = 0.129605 mL
230627 021820 02CHECK.

22
OXY
SI
2023-025
50 m
bot 6

23A
OXY
SI
2023-025
40 m
bot 7

Zooplankton in
flask
V jumped from 1.6 $\rightarrow$ 2.4,
OT, but no improvement.
SAMPLE LOST

23B
OXY
SI
2023-025
40 m
bot 7

24
OXY
SI
2023-025
30 m
bot 8

25
OXY
SI
2023-025
20 m
bot 9

26A
OXY
SI
2023-025
10 m
bot 10

Accidentally didced normal finish instead of 'go'! 02702 (cast 2)
continued on.

26B
OXY
SI
2023-025
10 m
bot 10

and SN
Has wrong flask in
file, adjust volume
with correct volume
in processing
Changed sample # in FLST to match Sample ID.

27
OXY
SI
2023-025
5 m
bot 11

28
OXY
SI
2023-025
0 m
bot 12

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1	✓	33	130	7.2	1.566	had sample under tip of NaOH	1					
Event:	33	2	✓	34	923	7.2	1.641		2					
Station:	102	3	✓	35A	3032	7.2	1.486		3	35B	913	7.3	1.475	
Event Date (Local):	2023-06-27	4	✓	36	126	7.3	1.443		4					
Analysis Date (Local):	27 June 2023	5	✓	37A	1402	7.4	1.661		5	37B	3096	7.5	1.661	
Analyst:	KS	6	✓	38	3109	7.7	1.994		6					
Stdization Date (Local):	26 June 2023	7	✓	39	151	7.8	2.035	had to re-sample due to spill	7					
KIO ₃ N:	0.0112250	8	✓	40	154	8.0	2.364		8					
Standard Titer:	0.47462	9	✓	41	129	8.5	2.750		9					
Blank Titer:	0.00033	10		42	575	—	—	} CTD failure due to wire snap	10					
THIO N:	0.23956	11		43	171	—	—		11					
Sample Flask Water Seal?	Yes	12		44	903	—	—		12					
	No	13		45	20	—	—		13					
Reagent Change?	MnCl ₂	14		46	1192	—	—		14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		47	114	—	—		15					
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		33	34	35A	35B	36	37A	37B	38	39	40	41
	KIO ₃	17		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	THIO	18		102	102	102	102	102	102	102	102	102	102	102
Notes:		19		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
Sample 42 → 47; Flag 1		20		Bot-5 m	250 m	200 m	200 m	175 m	150 m	150 m	125 m	100 m	75 m	50 m
Snail.xlsx		21		bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 5	bot 6	bot 7	bot 8	bot 9
		22		42	43	44	45	46	47	48	49	50	51	52
		23		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
		24		102	102	102	102	102	102	102	102	102	102	102

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

2023-025 40 m bot 10
2023-025 30 m bot 11
2023-025 20 m bot 12
2023-025 10 m bot 13
2023-025 5 m bot 14
2023-025 0 m bot 15

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1		49	1316	7.9	1.680	Bunaway. Sample over-titrated ✓	1						
Event:	34	2		50	974	7.7	1.682		2						
Station:	72	3		51	2015	7.8	1.676		3						
Event Date (Local):	2023-06-27	4		52	3072	7.6	1.683		4						
Analysis Date (Local):	27 June 2023	5		53A	994	8.1	2.182	Bump up @ inflection point.	5	53B	970	8.2	2.177		
Analyst:	KS	6		54	140	8.5	2.690	Sample over-titrated ✓	6						
Stdization Date (Local):	26 June 2023	7		55A	131	9.0	3.130		7	55B	1330	9.0	3.128		
KIO ₃ N:	0.0118250	8		56	908	9.0	3.215		8						
Standard Titer:	0.49402	9		57	105	9.0	3.279		9						
Blank Titer:	0.00033	10		58	932	9.2	3.516		10						
THIO N:	0.23956	11		59	173	9.9	4.551		11						
Sample Flask Water Seal?	Yes	12		60	1485	10.1	4.636		12						
	No	13		61	1424	10.4	4.636		13						
Reagent Change?	MnCl ₂	14		49	50	51	52	53B	53A	54	55A	55B	56	57	58
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		72	72	72	72	72	72	72	72	72	72	72	72
	KIO ₃	17		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
	THIO	18		Bot-5 m	175 m	150 m	125 m	100 m	100 m	75 m	50 m	50 m	40 m	30 m	20 m
Notes:		19		bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10
		20		59	60	61									
Moose.xlsx		21		OXY	OXY	OXY									
		22		72	72	72									
		23		2023-025	2023-025	2023-025									
		24		10 m	5 m	0 m									

Bottle integrity: First test the top vent (V) 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

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:	2023-025						1		63	1316	8.0	1.972		1																
Event:	36						2		64	974	8.0	2.081		2																
Station:	adcp						3		65	2015	8.3	2.344		3																
Event Date (Local):	2023-06-27						4		66	3072	9.3	3.352		4																
Analysis Date (Local):	27 June 2023						5		67	994	9.5	3.597		5																
Analyst:	KS						6		68	970	9.8	3.807		6																
Stdization Date (Local):	26 June 2023						7		69A	140	10.6	4.698	Noisy curve. Sample over-	7	69B	131	10.6	4.705												
KIO ₃ N:	0.0118250						8		70	1330	10.9	5.105	titrated as a result.	8																
Standard Titer:	0.49402						9		71	908	11.0	5.075		9																
Blank Titer:	0.00033						10		72	105	11.5	5.153		10																
THIO N:	0.23956						11		63		64		65		66		67		68		69A		69B		70		71		72	
Sample Flask	Yes						12		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY		OXY	
Water Seal?	No						13		adcp		adcp		adcp		adcp		adcp		adcp		adcp		adcp		adcp		adcp		adcp	
Reagent Change?	MnCl ₂						14		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025		2023-025	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH						15		Bot-5 m		100 m		75 m		50 m		40 m		30 m		20 m		20 m		10 m		5 m		0 m	
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄						16		bot 1		bot 2		bot 3		bot 4		bot 5		bot 6		bot 7		bot 7		bot 8		bot 9		bot 10	
	KIO ₃						17																							
	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.

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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: 2023-025	1		78	2098	8.4	2.275		1					
Event: 39	2		79	3114	8.4	2.308		2					
Station: 62	3		80	904	8.5	2.466		3					
Event Date (Local): 2023-06-27	4		81A	973	9.3	3.309		4	81B	196	9.4	3.302	
Analysis Date (Local): 27 June '23	5		82A	1346	9.3	3.979		5	82B	3005	10.0	3.975	
Analyst: KS	6		83	118	10.2	4.360		6					
Stdization Date (Local): 26 June 2023	7		84	169	10.3	4.494		7					
KIO ₃ N: 0.0118250	8		85	3050	10.5	4.743		8					
Standard Titer: 0.49402	9		86	3044	10.6	4.760		9					
Blank Titer: 0.00033	10		87	941	11.4	5.940		10					
THIO N: 0.23956	11		88	111	11.6	5.976		11					
Sample Flask Water Seal? ☒ Yes	12		78	79	80	81A	81B	82A	82B	83	84	85	86
No	13		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
Reagent Change? MnCl ₂	14		62	62	62	62	62	62	62	62	62	62	62
(Please circle reagent that was changed prior to sampling and standardization)	15		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
NOTE NEW BATCH IN LOG BOOK	16		Bot-5 m	125 m	100 m	75 m	75 m	50 m	50 m	40 m	30 m	20 m	10 m
	17		bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 5	bot 6	bot 7	bot 8	bot 9
	18												
Notes:	19		87	88									
	20		OXY	OXY									
	21		62	62									
Chicken & Egg.xlsx	22		2023-025	2023-025									
	23		5 m	0 m									
	24		bot 10	bot 11									

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

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:	2023-025						1		89	130	2.7	2.635	slow leak on spigot check	1						
Event:	42						2		90	923	2.7	2.636		2						
Station:	59						3		91	3032	2.7	2.671		3						
Event Date (Local):	2023-06-27						4		92	913	2.8	2.809		4						
Analysis Date (Local):	28 June 2023						5		93A	126	2.9	2.899		5	93B	1402	2.9	2.895		
Analyst:	KS						6		94	3096	9.3	3.361		6						
Stdization Date (Local):	28 June 2023						7		95A	3109	9.7	3.683		7	95B	151	9.7	3.681		
KIO ₃ N:	0.0118250						8		96	154	10.1	4.235		8						
Standard Titer:	0.49330						9		97	129	10.4	4.494		9						
Blank Titer:	0.00021						10		98	575	10.6	4.776		10						
THIO N:	0.23977						11		99	171	10.4	4.859		11						
Sample Flask Water Seal?	Yes						12		100	903	10.5	5.172		12						
	No						13		101	20	11.0	5.390		13						
Reagent Change?	MnCl ₂ 2122MY						14		102	1192	11.7	5.566		14						
(Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	NaI/NaOH						15		89	90	91	92	93A	93B	94	95A	95B	96	97	98
	H ₂ SO ₄ 2201						16		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	KIO ₃						17		59	59	59	59	59	59	59	59	59	59	59	59
	THIO						18		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
Notes: started sampling deep first							19		Bot-5 m	200 m	175 m	150 m	125 m	125 m	100 m	75 m	75 m	50 m	40 m	30 m
							20		bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10
Snail.xlsx							21		99	100	101	102			21					
							22		OXY	OXY	OXY	OXY			22					
							23		59	59	59	59			23					
							24		2023-025	2023-025	2023-025	2023-025			24					
									20 m	10 m	5 m	0 m	ent. Mark 'x' in the appropriate column if either fails the integrity check and explain this in the comments column.							
									bot 11	bot 12	bot 13	bot 14								

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1		104	2098	9.3	3.001		1						
Event:	44	2		105	3114	9.3	3.022		2						
Station:	56	3		106	904	9.3	3.105		3						
Event Date (Local):	2023-06-28	4		107	973	9.3	3.132		4						
Analysis Date (Local):	28 June 2023	5		108	196	9.5	3.331		5						
Analyst:	KS	6		109	1346	9.7	3.645		6						
Stdization Date (Local):	28 June 2023	7		110A	3005	9.8	3.737		7	110B	118	9.8	3.737		
KIO ₃ N:	0.0118250	8		111	169	10.2	4.145		8						
Standard Titer:	0.00021	9		112	3050	10.4	4.464		9						
Blank Titer:	0.239775	10		113	3044	10.7	4.711		10						
THIO N:	0.493302	11		114	941	11.2	5.277	plankton in sample.	11						
Sample Flask Water Seal?	Yes	12		115A	111	11.3	5.297	Bump in curve near endpoint.	12	115B	953	11.2	5.299		
	No	13		116	976	11.3	5.309	Sample over-titrated. ✓	13						
Reagent Change?	MnCl ₂	14		117	547	-9.9	5.440	temp not recorded	14						
(Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	NaI/NaOH	15		104	105	106	107	108	109	110A	110B	111	112	113	114
	H ₂ SO ₄	16		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	KIO ₃	17		56	56	56	56	56	56	56	56	56	56	56	56
	THIO	18		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
Notes:		19		Bot-5 m	200 m	175 m	150 m	125 m	100 m	75 m	75 m	50 m	40 m	30 m	20 m
		20		bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10	bot 11
		21		115B	115A	116	117								
Chicken & Egg.xlsx		22		OXY	OXY	OXY	OXY								
		23		56	56	56	56								
		24		2023-025	2023-025	2023-025	2023-025								
				10 m	10 m	5 m	0 m								
				bot 12	bot 12	bot 13	bot 14								

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

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: 2023-025	1		165	1416	3.2	3.811		1					
Event: 50	2		166	971	9.1	4.019		2					
Station: 27	3							3					
Event Date (Local): 2023-06-28	4		167A	658	9.1	3.966		4	167B	168	9.2	3.963	
Analysis Date (Local): 28 June '23	5		168	943	9.1	4.181		5					
Analyst: KS	6							6					
Stdization Date (Local): 28 June 2023	7							7					
KIO ₃ N: 0.0118250	8		165	166	167A	167B	168	8					
Standard Titer: 0.49330	9		OXY	OXY	OXY	OXY	OXY	9					
Blank Titer: 0.08021	10		27	27	27	27	27	10					
THIO N: 0.23977	11		2023-025	2023-025	2023-025	2023-025	2023-025	11					
Sample Flask Water Seal? Yes	12		Bot-5 m	300 m	250 m	250 m	200 m	12					
	13		bot 1	bot 2	bot 14	bot 14	bot 15	13					
Reagent Change? MnCl ₂	14							14					
(Please circle reagent that was changed prior to sampling and standardization)	15							15					
NOTE NEW BATCH IN LOG BOOK	16							16					
	17							17					
	18							18					
Notes:	19							19					
	20							20					
Chicken & Egg.xlsx	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

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:	2023-025	1		119	1316	10.0	3.554		1						
Event:	46	2		120	974	10.1	3.742		2						
Station:	46	3		121	2015	10.4	4.136		3						
Event Date (Local):	2023-06-28	4		122	3072	10.4	4.239	lost some precip. at top	4						
Analysis Date (Local):	28 June 2023	5		123	994	10.3	4.318		5						
Analyst:	KS	6		124	970	10.2	4.517		6						
Stdization Date (Local):	28 June 2023	7		125A	140	10.4	4.581		7	125B	131	10.4	4.582		
KIO ₃ N:	0.0118250	8		126	1330	10.7	4.726		8						
Standard Titer:	0.49330	9		127	908	11.1	4.904		9						
Blank Titer:	0.00021	10		128A	105	11.3	5.404		10	128B	932	11.3	5.400		
THIO N:	0.23977	11		129	173	12.3	6.067		11						
Sample Flask Water Seal?	Yes	12		130	1485	15.2	7.924		12						
	No	13		119	120	121	122	123	124	125A	125B	126	127	128A	128B
Reagent Change?	MnCl ₂	14		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		46	46	46	46	46	46	46	46	46	46	46	46
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
	KIO ₃	17		Bot-5 m	150 m	125 m	100 m	75 m	50 m	40 m	40 m	30 m	20 m	10 m	10 m
	THIO	18		bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10	bot 10
Notes:		19		129	130					19					
		20		OXY	OXY					20					
		21		46	46					21					
Moose.xlsx		22		2023-025	2023-025					22					
		23		5 m	0 m					23					
		24		bot 11	bot 12					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

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:	2023-025	1		131	164	9.9	3.895		1						
Event:	48	2		132	435	9.6	3.856		2						
Station:	42	3		133	1338	9.5	4.032		3						
Event Date (Local):	2023-06-28	4		134	3117	9.4	4.128		4						
Analysis Date (Local):	22 June 2023	5		135	968	9.4	4.320		5						
Analyst:	KS	6		136A	157	9.3	4.421		6	136B	963	9.5	4.425		
Stdization Date (Local):	28 June 2023	7		137	1465	9.5	4.420		7						
KIO ₃ N:	0.0118250	8		138A	905	9.4	4.541		8	138B	3180	9.5	4.539		
Standard Titer:	0.49330	9		139	1326	9.6	4.548		9						
Blank Titer:	0.00021	10		140	146	9.7	4.528		10						
THIO N:	0.23977	11		141	3108	10.0	4.526		11						
Sample Flask Water Seal?	Yes	12		142	942	10.4	4.712		12						
	No	13		143	3127	11.0	4.775		13						
Reagent Change?	MnCl ₂	14		144	3095	12.0	5.117		14						
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		145	150	16.4	6.883		15						
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		146	1035	18.0	7.243		16						
	KIO ₃	17		131	132	133	134	135	136A	136B	137	138A	138B	139	140
	THIO	18		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
Notes:	42	19		42	42	42	42	42	42	42	42	42	42	42	42
	2023-025	20		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
	Bot-5 m	21		300 m	250 m	200 m	175 m	150 m	150 m	125 m	100 m	100 m	75 m	50 m	
Mermaid.xlsx	bot 1	22		bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7	bot 8	bot 8	bot 9	bot 10	
	141	23		142	143	144	145	146							
	OXY	24		OXY	OXY	OXY	OXY	OXY							
	42			42	42	42	42	42							
	2023-025			2023-025	2023-025	2023-025	2023-025	2023-025							
	40 m			30 m	20 m	10 m	5 m	0 m							
	bot 11			bot 12	bot 13	bot 14	bot 15	bot 16							

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

ite column if either fails the integrity check and explain this in the comments column.

DIC notes: may have
fraser plume floats

138C & 138D

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1		148A	1314	10.2	3.868		1	148B	3034	10.4	3.877	158 OXY
Event:	49	2		149	912	9.9	3.867	3.869	2					159 OXY
Station:	39	3		150	3074	10.0	3.906		3					160 OXY
Event Date (Local):	2023-06-28	4		151	1429	9.8	4.034		4					2023-025
Analysis Date (Local):	2023 June 28	5		152	1487	9.8	4.135		5					50 m
Analyst:	KS	6		153	3133	9.8	4.231		6					bot 11
Stdization Date (Local):	28 June 2023	7		154	178	10.1	4.394		7					161 OXY
KIO ₃ N:	0.0118250	8		155	557	9.6	4.498	bottle 557, redraw due to BOOP!	8	155	557	10.1		162 OXY
Standard Titer:	0.49330	9		156	1491	10.4	4.518		9					39
Blank Titer:	0.00021	10		157A	921	7.8	4.425		10	157B	3116	10.0	4.426	2023-025
THIO N:	0.23977	11		158	3126	10.2	4.564		11					20 m
Sample Flask Water Seal?	Yes	12		159	185	10.3	4.406		12					bot 14
	No	13		160	3148	10.6	4.483		13					bot 15
Reagent Change?	MnCl ₂	14		161	122	10.9	4.723		14					bot 16
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		162	915	12.1	5.272		15					164 OXY
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		163	569	16.1	7.461		16					39
	KIO ₃	17		164	1425	18.3	7.693		17					2023-025
	THIO	18												0 m
Notes:		19		148A	148B	149	150	151	152	153	154	155	156	bot 17
		20		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
		21		39	39	39	39	39	39	39	39	39	39	
		22		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	
		23		Bot-5 m	Bot-5 m	350 m	300 m	250 m	200 m	175 m	150 m	100 m	125 m	
		24		bot 1	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 9	bot 8	

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

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: 2023-025	1		182	2098	9.8	3.467		1							
Event: 51	2		183	3114	9.6	3.501		2							
Station: 2	3		184	904	9.6	3.724		3							
Event Date (Local): 2023-06-28	4		185	973	9.5	3.889		4							
Analysis Date (Local): 28 June 2023	5		186	196	9.6	4.009		5							
Analyst: KS	6		187	1346	9.8	4.111		6							
Stdization Date (Local): 28 June 2023	7		188	3005	9.5	4.203		7							
KIO ₃ N: 0.0118250	8		189	118	9.6	4.315		8							
Standard Titer: 0.49330	9		190	169	10.0	4.005		9							
Blank Titer: 0.00021	10		191	3050	10.1	4.149		10							
THIO N: 0.23977	11		192	3044	10.4	4.296		11							
Sample Flask Water Seal? ☒ Yes	12		193	941	11.2	4.876		12							
☐ No	13		194A	111	12.7	5.714		13	194B	953	12.9	5.792			
Reagent Change? MnCl ₂	14		195	976	15.0	7.129		14							
(Please circle reagent that was changed prior to sampling and standardization)	15		196A	547	17.8	7.015		15	196B	3040	17.8	7.012			
NOTE NEW BATCH IN LOG BOOK	16		182	183	184	185	186	187	188	189	190	191	192	193	194A
	17		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	18		2	2	2	2	2	2	2	2	2	2	2	2	2
	19		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
	20		Bot-5 m	250 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m	40 m	30 m	20 m	10 m
	21		bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 13
	22		194B	195	196A	196B									
	23		OXY	OXY	OXY	OXY									
	24		2	2	2	2									
	25		2023-025	2023-025	2023-025	2023-025									
	26		10 m	5 m	0 m	0 m									
	27		bot 13	bot 14	bot 15	bot 15									

Bottle integrity: First test the top vent (V) by opening the bottle and measuring the oxygen content. 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

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:	2023-025	1		198	1316	9.6	3.826			1						
Event:	52	2		199	974	9.4	3.890			2						
Station:	6	3		200A	2015	9.3	3.988			3	200B	3072	9.4	3.988		
Event Date (Local):	2023-06-28	4		201	994	9.3	4.172			4						
Analysis Date (Local):	28 June 2023	5		202	970	9.3	4.283			5						
Analyst:	KS	6		203	140	9.6	3.814			6						
Stdization Date (Local):	28 June 2023	7		204	131	10.3	4.199			7						
KIO ₃ N:	0.0118280	8		205	1330	10.4	4.385			8						
Standard Titer:	0.49380	9		206	908	10.7	4.631			9						
Blank Titer:	0.00021	10		207A	105	11.4	5.252			10	207B	932	11.4	5.259		
THIO N:	0.23977	11		208	173	13.0	6.353			11						
Sample Flask Water Seal?	(Yes)	12		209	1485	17.8	7.621			12						
	No	13		210	1424	18.7	6.663			13						
Reagent Change?	MnCl ₂	14		198	199	200A	200B	201	202	203	204	205	206	207A	207B	
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		6	6	6	6	6	6	6	6	6	6	6	6	
	KIO ₃	17		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	
	THIO	18		Bot-5 m	175 m	150 m	150 m	125 m	100 m	75 m	50 m	40 m	30 m	20 m	20 m	
		19		bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 10	
Notes:		20		208	209	210				20						
		21		OXY	OXY	OXY				21						
Moose.xlsx		22		6	6	6				22						
		23		2023-025	2023-025	2023-025				23						
		24		10 m	5 m	0 m				24						

Bottle integrity: First test the top vent (V) by o bot 11 or SI bot 12 est bot 13 pening 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**



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: 2023-025	1		211	1314	9.3	3.599		1					
Event: 53	2		212	3034	9.6	3.794		2					
Station: 12	3		213	912	9.6	3.855		3					
Event Date (Local): 2023-06-28	4		214A	3074	9.7	3.880	B sampled before A	4	214B	1429	9.4	3.880	
Analysis Date (Local): 28 June 2023	5		215A	1487	9.4	3.960		5	215B	3133	9.6	3.968	
Analyst: KS	6		216	178	9.3	3.989		6					
Stdization Date (Local): 28 June 2023	7		217	981	9.3	4.048	- leaky Niskin. Suspect vent	7					
KIO ₃ N: 0.0118250	8		218	1491	9.4	3.973	was a bit base.	8					
Standard Titer: 0.49330	9		219	921	9.6	3.912		9					
Blank Titer: 0.00021	10		220	3116	9.9	4.040		10					
THIO N: 0.23977	11		221	3126	10.3	4.160		11					
Sample Flask Water Seal? Yes	12		222	185	10.4	4.350		12					
No	13		223	3148	11.1	4.645		13					
Reagent Change? MnCl ₂	14		224	122	14.3	6.697		14					
(Please circle reagent that was changed prior to sampling and standardization)	15		225	915	16.6	7.176		15					
NOTE NEW BATCH IN LOG BOOK	16		226	569	20.0	6.381		16					
H ₂ SO ₄	17	211	212	213	214A	214B	215A	215B	216	217	218	219	220
KIO ₃	18	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
THIO	19	12	12	12	12	12	12	12	12	12	12	12	12
Notes:	20	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025	2023-025
Humming Bird.xlsx	21	Bot-5 m	300 m	250 m	200 m	200 m	175 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 5	bot 6	bot 7	bot 8	bot 9	bot 10
	23	221	222	223	224	225	226	23					
	24	OXY	OXY	OXY	OXY	OXY	OXY	24					
		12	12	12	12	12	12						
Bottle integrity: First test the top vent (V) by opening the bottle and testing the water sample. If the bottle fails the integrity check, do not use the sample. If the bottle passes the integrity check, do not use the sample. If the bottle fails the integrity check and explain this in the comments column.		2023-025	2023-025	2023-025	2023-025	2023-025	2023-025						
		40 m	30 m	20 m	10 m	5 m	0 m						
		bot 11	bot 12	bot 13	bot 14	bot 15	bot 16						

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



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:	2023-025	1		228A	1314	9.3	3.804	⇒ sample was open for ~5 min while trouble shooting burette function. had to redo run due to burette not dispensing	1	228B	3034	9.5	3.810	
Event:	56	2							2					
Station:	14	3							3					
Event Date (Local):	2023-06-28	4							4					
Analysis Date (Local):	29 June 2023	5							5					
Analyst:	CI	6							6					
Stdization Date (Local):	28 June 2023	7							7					
KIO ₃ N:	0.0118280	8		235	912	9.3	4	sample open for ~10 min while setting up over-titrate, OT x2 due to high endpoints	8					
Standard Titer:	0.49330	9							9					
Blank Titer:	0.00021	10		237	3074	10.3	4.265		10					
THIO N:	0.23977	11							11					
Sample Flask Water Seal?	Yes	12		239	1429	11.4	9.009		12					
	No	13		240	1487	11.8	5.027	titrated in air, restarted → some floaters in sample	13					
Reagent Change?	MnCl ₂	14		241A	3133	13.1	5.732	⇒ bubbles, OT particles → messy curve	14	241B	178	13.2		late end point ∴ OT x2
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		242	981	15.8		late end point, OT, cleared lenses, OT	15					
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		243	1491	18.6	6.660		16					
	KIO ₃	17							17					
	THIO	18							18					
Notes: see reverse for comments on curves		19							19					
		20							20					
Humming Bird.xlsx		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.

228A
OXY
14
2023-025
Bot-5 m
bot 1

good

228B
OXY
14
2023-025
Bot-5 m
bot 1

241B
OXY
14
2023-025
10 m
bot 14

late end point on 1st curve :
OT x 2 but curves noisy
& late end points. use 1st
curve

→ 1st curve : raw titer = kenny to look
23029 023002

235
OXY
14
2023-025
100 m
bot 8

late end point on 1st curve : OT x 2 but curves noisy on OT's → use first curve
1st curve: raw titer = 0.39041 mL 230629 014117

237
OXY
14
2023-025
50 m
bot 10

good

239
OXY
14
2023-025
30 m
bot 12

242
OXY
14
2023-025
5 m
bot 15

OT x 2 due to noisy curve, late endpoints noisy + late.
will need to pick best curve
and adjust endpoint in OZ check.
use 1st curve (least messy).

→ 23029 023838
23029 024418
23029 024801 } all messy

240
OXY
14
2023-025
20 m
bot 13

zoops in sample
↳ caused messy curve
but endpoint okay!

243
OXY
14
2023-025
0 m
bot 16

good :)

241A
OXY
14
2023-025
10 m
bot 14

zoops in sample
↳ messy curve