

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: July 2018

Sperm Whale

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number: 2019-069	1		2	1416	10.5	0.614								1						
Event: 11	2		3	3010	10.4	0.711								2						
Station: EFF03	3		4	3114	10.4	0.993								3						
Event Date (Local): 01 Aug 19	4		5	435	10.4	1.102								4						
Analysis Date (Local): 01 Aug 19	5		6	3047	11.1	2.733								5						
Analyst: TF	6		7A	2025	11.5	4.423								6	7B	1422	11.6	4.427		
Stdization Date (Local): 01 Aug 19	7		8	3180	12.4	6.654								7						
KIO ₃ N: 0.0117854	8		9	3173	20.3	7.475								8						
Standard Titer: 0.489066	9													9						
Blank Titer: 0.0005516	10												In case in wrong order	10						
THIO N: 0.241081	11													11						
Sample Flask Water Seal? ☒ Yes	12													12						
	13													13						
Reagent Change? MnCl ₂	14													14						
(Please circle reagent that was changed prior to sampling and standardization)	15													15						
	16													16						
NOTE NEW BATCH IN LOG BOOK	17													17						
None	18													18						
Notes:	19																			
	20		2	3	4	5	6	7 A	7 B	8	9									
	21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY									
	22		EFF03	EFF03	EFF03	EFF03	EFF03	EFF03	EFF03	EFF03	EFF03									
	23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069									
	24		Bot 1	Bot 2	Bot 3	Bot 4	Bot 5	Bot 6	Bot 6	Bot 7	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



Sperm whale

Last Updated: July 2018

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1		10A	3106	10.1	1.406			1	10B	3036	10.1	1.409					
Event:	13	2		11	3088	10.0	1.618	10.3	changed MnCl ₂ dispenser	2									
Station:	EFF05	3		12	3089	10.3	1.315			3	BB								
Event Date (Local):	01 Aug 19	4		BA	3090	10.3	1.267			4	BB	2094	10.3	1.273					
Analysis Date (Local):	01 Aug 19	5		14	1442	10.7	1.599			5									
Analyst:	TF	6		15	3000	11.2	3.577			6									
Stdization Date (Local):	01 Aug 19	7		16	3098	11.9	5.195			7									
KIO ₃ N:	0.0117854	8		17	3079	13.1	7.120			8									
Standard Titer:	0.489066	9		18	3095		6.831	forgot to record draw T-used 19.4		9									
Blank Titer:	0.0005516	10								10									
THIO N:	0.241081	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:		19								19									
		20	10 A	10 B	11	12	13 A	13 B	14	15	16	17	18						
		21	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY						
		22	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05	EFF05						
		23	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069						
		24	Bot 1	Bot 1	Bot 2	Bot 3	Bot 4	Bot 4	Bot 5	Bot 6	Bot 7	Bot 8	Bot 9						

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: July 2018

Turtle

Cruise and Analysis Information							OXY-1					OXY-2					
Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments					
1		19	3135	10.2	1.500		1										
2		20	3083	10.1	1.380		2										
3		21A	3121	10.1	1.392	10.2 redrawn	3	21B	3116	10.2	1.393	😊					
4		22	3091	10.6	1.897		4										
5		23	932	11.6	4.422		5										
6		24A	3155	12.1	5.520		6	24B	3044	12.1	5.532	v. small bubble in sample B					
7		25	1311	14.2	8.269		7										
8		26	3111	19.4	7.370		8										
9							9										
10							10										
11							11										
12							12										
13							13										
14							14										
15							15										
16							16										
17							17										
18							18										
Notes: Sample Flask Water Seal? ☒ Yes Reagent Change? MnCl ₂ (Please circle reagent that was changed prior to sampling and standardization) H ₂ SO ₄ none NOTE NEW BATCH IN LOG BOOK KIO ₃ THIO							19	19	20	21 A	21 B	22	23	24 A	24 B	25	26
							20	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
							21	EFF07	EFF07	EFF07	EFF07	EFF07	EFF07	EFF07	EFF07	EFF07	EFF07
							22	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069
							23	Bot 1	Bot 2	Bot 3	Bot 3	Bot 4	Bot 5	Bot 6	Bot 6	Bot 7	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



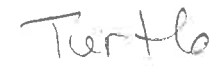
Last Updated: July 2018

Turtle

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069	1		27	3143	11.1	3.101								1					
Event: 17	2		28	620	11.3	4.330								2					
Station: EFF09	3		29A	622	12.0	5.416								3	29B	30B	12.1	5.555	2
Event Date (Local): 01 Aug 19	4		30	3048	13.8	8.261								4					
Analysis Date (Local): 02 Aug 19	5		31	3120	18.7	7.297								5					
Analyst: TF	6													6					
Stdization Date (Local): 01 Aug 19	7													7					
KIO ₃ N: 0.0117854	8													8					
Standard Titer: 0.489066	9													9					
Blank Titer: 0.0005516	10													10					
THIO N: 0.241081	11													11					
Sample Flask Water Seal? (Yes) No	12													12					
	13													13					
Reagent Change? MnCl ₂	14													14					
(Please circle reagent that was changed prior to sampling and standardization)	15													15					
	16													16					
NOTE NEW BATCH IN LOG BOOK	17													17					
THIO	18													18					
Notes:	19													19					
	20	27	28	29 A	29 B	30	31							20					
	21	OXY	OXY	OXY	OXY	OXY	OXY							21					
	22	EFF09	EFF09	EFF09	EFF09	EFF09	EFF09							22					
	23	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069							23					
	24	Bot 1	Bot 2	Bot 3	Bot 3	Bot 4	Bot 5							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.

**Institute of Ocean Sciences
Water Properties Group**



Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments				Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments			
Cruise Number: 2019-069							1		32	3110	10.1	1.264					1								
Event: 19							2		33A	3078	10.6	2.227					2	33B	3131	10.7	2.241	5'			
Station: EFF11							3		34	3029	11.6	4.131					3								
Event Date (Local): 01 Aug 19							4		35	2085	12.1	5.148					4								
Analysis Date (Local): 02 Aug 19							5		36	1459	13.7	8.177					5								
Analyst: TF							6		37	2099	17.7	7.776					6								
Stdization Date (Local): 01 Aug 19							7										7								
KIO ₃ N: 0.0117854							8										8								
Standard Titer: 0.489066							9										9								
Blank Titer: 0.0005516							10										10								
THIO N: 0.241081							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)							15										15								
NaI/NaOH							16										16								
H ₂ SO ₄							17										17								
NOTE NEW BATCH IN LOG BOOK							18										18								
KIO ₃																									
THIO																									
Notes:							19																		
							20		32	33A	33B	34	35	36	37										
							21		OXY	OXY	OXY	OXY	OXY	OXY	OXY										
							22		EFF11	EFF11	EFF11	EFF11	EFF11	EFF11	EFF11										
							23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069										
							24		Bot 1	Bot 2	Bot 2	Bot 3	Bot 4	Bot 5	Bot 6										

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.

Whale (of a tail)

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: July 2018

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1		38	3074	5.4	1.479	sample on stirrer for ~5min before started	1	titration	(setting up box files)								
Event:	30	2		39					2										
Station:	C108	3		40	930	5.7	0.640		3										
Event Date (Local):	02 Aug 19	4		41	3133	5.9	0.388		4										
Analysis Date (Local):	03 Aug 19	5		42	3103	6.2	0.239		5										
Analyst:	TF	6		43A	3080	6.6	0.280	⇒	6	43B	3101	6.7	0.274						
Stdization Date (Local):	03 Aug 19	7		44	3098	7.1	0.701	*big crack in bottom of flask x	7										
KIO ₃ N:	0.0117854	8		45	3079	7.2	1.222		8										
Standard Titer:	0.4889/22	9		46	3095	7.7	1.668		9										
Blank Titer:	0.000605	10		47	3142	8.1	2.286		10										
THIO N:	0.241203	11		48	3084	8.5	2.923		11										
Sample Flask Water Seal?	(Yes) No	12		49A	3086	8.9	3.419	⇒	12	49B	3088	9.0	3.412						
Reagent Change?	(MnCl ₂)	13		50	3089	9.6	4.137		13										
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14		51	3090	10.3	4.893		14										
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15		52	2094	10.7	6.375		15										
	KIO ₃	16		53					16										
	THIO	17		54	1442	13.1	6.861		17										
		18		55	3000	15.7	6.433		18										
Notes:		19		56	1422	17.8	5.863		19										
		20		57	3180	17.8	5.881		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.

cleaned 1801 MIX
H₂SO₄ 26 June 19
btl top disp 11
starting here again

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: July 2018

TURTLE

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number:	2019-069	1					1							1						NO OXY
Event:	35	2		61	2099	7.9	1.604							2						
Station:	SCOTTS2	3		62	2049	8.1	1.757							3						
Event Date (Local):	03 Aug 19	4		63	3037	8.4	2.354							4						
Analysis Date (Local):	04 Aug 19	5		64	3076	8.9	3.102							5						
Analyst:	TF	6		65	3014	9.3	4.150							6	65B	3081	9.3	4.154		
Stdization Date (Local):	04 Aug 19	7		66	3110	10.2	4.836							7						
KIO ₃ N:	0.0117854	8												8						NO OXY
Standard Titer:	0.489328	9		68	2078	10.9	5.057							9						
Blank Titer:	0.0006732	10		69	3131	13.1	5.744							10						
THIO N:	0.241077	11		70	3029	15.3	6.227							11						
Sample Flask Water Seal?	☒ Yes ☐ No	12		71	2085	17.3	6.100							12	71B	1459	17.3	6.117	one funny point - over titrated	
Reagent Change?	MnCl ₂	13		72	6820	17.6	6.041							13						
(Please circle reagent that was changed prior to sampling and standardization)	☒ NaI/NaOH	14												14						NO OXY
H ₂ SO ₄		15												15						
NOTE NEW BATCH IN LOG BOOK		16												16						
KIO ₃		17												17						
THIO		18												18						
Notes:		19																		
		20		61	62	63	64	A 65	B 65	66	68	SCOTTS2	70	A 71	B 71					
		21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY				
		22		SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2	SCOTTS2				
		23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069				
		24		Bot 2	Bot 3	Bot 4	Bot 5	Bot 6	Bot 6	Bot 7	Bot 9	Bot 10	Bot 11	Bot 12	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 comment.

72
OXY
SCOTTS2
2019-069
Bot 13

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Turtle

Last Updated: July 2018

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069	1						1							1					NO OXY
Event: 38	2						2							2					
Station: HAK1	3						3							3					
Event Date (Local): 03 Aug 19	4						4							4					
Analysis Date (Local): 04 Aug 19	5						5							5					
Analyst: TF	6						6							6					
Stdization Date (Local): 04 Aug 19	7						7							7					NO OXY
KIO ₃ N: 0.0117854	8						8							8	82B	3044	14.5	5.835	did 1st first
Standard Titer: 0.489328	9						9							9					
Blank Titer: 0.0006732	10						10							10					
THIO N: 0.241077	11						11							11					NO OXY
Sample Flask Water Seal? ☒ Yes ☐ No	12						12							12					
Reagent Change? MnCl ₂	13						13							13					NO OXY
(Please circle reagent that was changed prior to sampling and standardization)	14						14							14					
NaI/NaOH	15						15							15					
H ₂ SO ₄	16						16							16					
NOTE NEW BATCH IN LOG BOOK	17						17							17					
KIO ₃ none	18						18							18					
THIO	19						19							19					
Notes:	20						20							20					
	21						21							21					
	22						22							22					
	23						23							23					
	24						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

SWIMOSAURUS



Last Updated: July 2018

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1		no oxygen				→	1					
Event:	41	2		89	3046	8.5	1.564		2					
Station:	HS02	3		90	2089	8.5	1.719		3					
Event Date (Local):	03 Aug 19	4		91	371	9.0	2.163		4					
Analysis Date (Local):	04 Aug 19	5		92A	2055	9.6	2.886	⇒	5	92B	1094	9.7	2.883	
Analyst:	TF	6		93	396	10.2	4.042		6					
Stdization Date (Local):	04 Aug 19	7		no oxygen				→	7					
KIO ₃ N:	0.0117854	8		95	471	11.3	4.884		8					
Standard Titer:	0.489328	9		96	3137	13.3	5.463		9					
Blank Titer:	0.0006732	10		97	3049	16.5	6.449		10					
THIO N:	0.241077	11		no oxygen				→	11					
Sample Flask Water Seal?	(Yes) No	12		99	1055	17.6	6.415		12					
Reagent Change?	MnCl ₂	13							13					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	14							14					
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	15							15					
	KIO ₃ none	16							16					
	THIO	17							17					
		18							18					
Notes:		19												
		20		89	90	91	92 A	92 B	93	95	96	97	99	
		21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
		22		MS1	MS1	MS1	MS1	MS1	MS1	MS1	MS1	MS1	MS1	
		23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	
		24		Bot 2	Bot 3	Bot 4	Bot 5	Bot 5	Bot 6	Bot 8	Bot 9	Bot 10	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.

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: July 2018

Whale

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069		1		X					1					
Event: 46		2		102	3074	7.6	1.405		2					
Station: M54		3		103	930	7.7	1.446		3					
Event Date (Local): 04 Aug 19		4		104	3133	7.9	1.678		4					
Analysis Date (Local):		5		105	3103	8.3	1.999		5					
Analyst: TF		6		106	3080	8.5	2.874	Redraw	6	106B	3101	8.6	2.875	😊😊
Stdization Date (Local): 03 Aug 19		7		107	3079	9.0	2.809		7					
KIO ₃ N: 0.0117854		8		108	3095	9.2	2.845		8	108B	3142	9.2	2.842	😊
Standard Titer: 0.489328		9		109					9					
Blank Titer: 0.0006732		10		110	3084	9.5	3.417		10	110B	3086	9.5	3.441	😞
THIO N: 0.241077 Nisk #17		11		111	3088	9.8	4.872		11					
Sample Flask Water Seal? ☒ Yes ☐ No		12		112	3089	14.3	5.883		12					
		13		113	3090	16.7	6.160		13					
Reagent Change? MnCl ₂		14		114	2094	17.1	6.049		14					
(Please circle reagent that was changed prior to sampling and standardization)		15							15					
NOTE NEW BATCH IN LOG BOOK		16							16					
		17		111	3088	10.7			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.

12

In case out of sample number order
2 stir bars - retrieved 1 of them

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: January 2017



Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1								1					
Event:	51	2			118	456		1.384	no temp recorded so used 5.7	2					NO OXY
Station:	MS08B	3			119	3093	5.7	0.588		3					← bubbles in flask
Event Date (Local):	04 Aug 19	4			120	3148	6.2	0.251		4					
Analysis Date (Local):	04 Aug 19	5			121A	570	6.7	0.255		5					
Analyst:	TF	6			122	3126	7.0	0.658		6					
Stdization Date (Local):	03 Aug 19	7			123	510	7.3	1.075	redraws 7.3°	7					
KIO ₃ N:	0.0117854	8			124	745	7.4	1.814		8					
Standard Titer:	0.489328	9			125	612	7.7	2.229		9					
Blank Titer:	0.0006732	10			126	3146	8.2	2.532		10					
THIO N:	0.241077	11			127	708	8.6	3.219		11					
Sample Flask	Yes	12			128	611	9.0	4.057		12					
Water Seal?	No	13			129	3165	9.5	4.763		13					
Reagent Change?	MnCl ₂	14			130	3175	10.2	5.228		14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15								15					NO OXY
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16			132	3002	11.3	5.750		16					
	KIO ₃	17			133	3190	14.4	6.248		17					
	THIO	18			134A	3099	17.8	5.902		18					small bubble in flask
Notes:		19								19					NO OXY
		20			136	3053	18.2	5.882		20					
		21								21					NO OXY
		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

Nessie



Last Updated: July 2018

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1						no oxy sample	1					
Event:	56	2		159	3046	7.3	1.147		2					
Station:	MT08B	3		160	2089	7.3	1.179		3					
Event Date (Local):	04 Aug 19	4		161	371	7.4	1.304		4					
Analysis Date (Local):	05 Aug 19	5		162A	2055	7.7	1.603	→	5	162B	1094	7.8	1.607	
Analyst:	TF	6		163	396	8.1	1.991		6					
Stdization Date (Local):	03 Aug 19	7		164	471	8.8	2.645		7					
KIO ₃ N:	0.0117854	8		165	5137	9.3	3.435		8					
Standard Titer:	0.489328	9		166	3049	9.5	3.734		9					
Blank Titer:	0.0006732	10		167A	1055	10.5	4.505	→	10	167B	1406	10.5	4.504	😊😊
THIO N:	0.241077	11		168				no oxy sample	11					
Sample Flask Water Seal?	Yes	12		169	2060	15.1	6.103		12					
	No	13		170	2068	16.1	6.326		13					
Reagent Change?	MnCl ₂	14		171	3059	16.2	6.367		14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		172	3073	16.3	6.386		15					
	H ₂ SO ₄	16						no oxy sample	16					
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17						no oxy sample	17					
	THIO	18							18					

Notes:	159	160	161	162 A	162 B	163	164	165	166	167 A	167 B	169	170	171
	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B	MT08B
	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069
	Bot 2	Bot 3	Bot 4	Bot 5	Bot 5	Bot 6	Bot 7	Bot 8	Bot 9	Bot 10	Bot 10	Bot 11	Bot 13	Bot 14

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.

172
OXY
MT08B
2019-069
Bot 15

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: July 2018

whale

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069	1						1							1					No OXY
Event: 62	2		176	3074	9.3	2.705	2							2					
Station: Juan2-1	3		177	930	9.3	2.746	3							3					
Event Date (Local): Aug 5/19	4		178	3133	9.5	2.979	4							4					
Analysis Date (Local): 6 Aug 19	5		179	3183	10.2	3.646	A	5	179	3080	10.2	3.656	B	5	179	3080	10.2	3.656	B
Analyst: TF	6		180	3101	11.0	4.252	11.0	6						6					
Stdization Date (Local): 6 Aug 19	7							7						7					No OXY
KIO ₃ N: 0.0117854	8		182	3079	11.8	4.810		8						8					
Standard Titer: 0.4894892	9							9						9					No OXY
Blank Titer: 0.0006988	10		184	3095	12.6	5.189	A 12.3C	10	184	3142	12.3	5.185	B	10	184	3142	12.3	5.185	B
THIO N: 0.241005	11		185	3084	12.6	5.549	small bubble in flask	11						11					
Sample Flask Water Seal? ☒ Yes ☐ No	12		186	3086	13.5	6.604		12						12					
Reagent Change? MnCl ₂	13							13						13					No OXY
(Please circle reagent that was changed prior to sampling and standardization)	14		188	1442	14.9	7.822		14						14					
NOTE NEW BATCH IN LOG BOOK	15							15						15					No OXY
	16						start at bottle 14	16						16					
	17						NISKI	17						17					
	18							18						18					
Notes:	19							19						19					
	20		176	177	178	179 A	179 B	180	182	184 A	184 B	185	186	188					
	21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY					
	22		JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2	JUAN2					
	23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069					
	24		Bot 2	Bot 3	Bot 4	Bot 5	Bot 5	Bot 6	Bot 8	Bot 10	Bot 10	Bot 11	Bot 12	Bot 14					

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: July 2018

whole

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1							1					NO OXY
Event:	64	2		191	3090	9.9	2.871	tiny bubble in flask	2					
Station:	JPS1	3		192	2094	10.3	3.312		3					
Event Date (Local):	5 Aug 19	4		193	3088	11.1	4.129	small bubbles in flask	4					
Analysis Date (Local):	6 Aug 19	5							5					NO OXY
Analyst:	TF	6		195	3000	12.6	5.757	A	6	195	1422	12.6	5.772	B
Stdization Date (Local):	6 Aug 19	7		196	3180	12.8	6.016		7					
KIO ₃ N:	0.0117854	8		197	3173	12.9	6.187		8					
Standard Titer:	0.4894892	9		198	458	13.2	6.473		9					
Blank Titer:	0.0006988	10		199	3106	13.5	6.668		10					
THIO N:	0.241005	11							11					NO OXY
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 none	16							16					
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17							17					
	THIO	18							18					
Notes:		19												
		20		191	192	193	195 A	195 B	196	197	198	199		
		21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		
		22		JPS1	JPS1	JPS1	JPS1	JPS1	JPS1	JPS1	JPS1	JPS1		
		23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069		
		24		Bot 2	Bot 3	Bot 4	Bot 6	Bot 6	Bot 7	Bot 8	Bot 9	Bot 10		

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



Bender

Last Updated: July 2018

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069		1							1					
Event: 70		2		203	456	9.8	2.800	small bubble in flask	2					
Station: JPS7		3		204	3093	9.9	3.588		3					
Event Date (Local): 5 Aug 19		4		205	2148	12.0	4.961		4					
Analysis Date (Local): 6 Aug 19		5							5					
Analyst: TF		6		206	570	13.7		A	6	206	3138	13.7		B
Stdization Date (Local): 6 Aug 19		7		207	3126	14.0	13.7	A 5.912	7	207	3138	13.7	5.921	
KIO ₃ N: 0.0117854		8		208	510	14.0	14.0	6.248	8					
Standard Titer: 0.4894892		9		209	612	16.6	15.1	small bubbles in flask 7.378	9					
Blank Titer: 0.0006988		10							10					
THIO N: 0.241005		11							11					
Sample Flask Water Seal? ☒ Yes		12		210	612	16.6	7.85	small bubble in flask +	12					
☐ No		13						curve looked funny so overtitrated	13					
Reagent Change? MnCl ₂		14							14					
(Please circle reagent that was changed prior to sampling and standardization)		15							15					
H ₂ SO ₄ none		16							16					
NOTE NEW BATCH IN LOG BOOK		17							17					
KIO ₃		18							18					
THIO		19							19					
Notes:		20		203	204	205	207	207	208	209	210			
		21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY			
		22		JPS7	JPS7	JPS7	JPS7	JPS7	JPS7	JPS7	JPS7			
		23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069			
		24		Bot 2	Bot 3	Bot 4	Bot 6	Bot 6	Bot 7	Bot 8	Bot 9			

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



Toitle

Last Updated: July 2018

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number: 2019-069		1		213				no oxy sample	1					
Event: 71		2		214	2099	7.7	1.338		2					
Station: MT05		3		215	2049	7.7	1.551		3					
Event Date (Local): 5 Aug 19		4		216	3037	8.1	1.931		4					
Analysis Date (Local): 6 Aug 19		5		217A	3076	9.0	2.852	→	5	217B	3014	9.1	2.852	☺ ☺ ☺
Analyst: TF		6		218	3081	9.5	3.873		6					
Stdization Date (Local): 6 Aug 19		7		219				no oxy sample	7					
KIO ₃ N: 0.0117854		8		220	3110	10.0	4.585		8					
Standard Titer: 0.4894892		9		221	3078	11.6	5.526		9					
Blank Titer: 0.0006988		10		222A	3131	15.5	6.092	→	10	222B	3029	15.6	6.093	☺ ☺
THIO N: 0.241005		11		223	2085	17.0	6.138		11					
Sample Flask Water Seal? ☒ Yes		12		224	1459	17.1	6.137		12					
	No	13		225				no oxy sample	13					
Reagent Change? MnCl ₂		14		226				no oxy sample	14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15							15					
	H ₂ SO ₄ none	16							16					
NOTE NEW BATCH IN LOG BOOK	KIO ₃	17							17					
	THIO	18							18					

Notes:		214	215	216	217 A	217 B	218	220	221	222 A	222 B	223	224
		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
		MT05	MT05	MT05	MT05	MT05	MT05	MT05	MT05	MT05	MT05	MT05	MT05
		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069
		Bot 2	Bot 3	Bot 4	Bot 5	Bot 5	Bot 6	Bot 8	Bot 9	Bot 10	Bot 10	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.

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Bender

Last Updated: July 2018

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1							1					
Event:	89	2		241	456	9.0	1.575	A	2	241	3093	9.1	1.582	B no oxy
Station:	HECS4	3		242	3148	9.3	2.062		3					
Event Date (Local):	6 Aug 19	4		243	570	10.3	3.493		4					
Analysis Date (Local):	7 Aug 19	5							5					no oxy
Analyst:	TF	6		245	3138	11.7	4.240	A	6	245	3126	11.7	4.246	B
Stdization Date (Local):	6 Aug 19	7		246	510	12.8	4.728		7					
KIO ₃ N:	0.0117854	8		247	612	13.9	5.893		8					
Standard Titer:	0.4894892	9		248	575	14.2	6.028		9					
Blank Titer:	0.0006988	10		249	746	14.3	6.050		10					
THIO N:	0.241005	11							11					no oxy
Sample Flask Water Seal?	Yes	12							12					
	No	13							13					
Reagent Change?	MnCl ₂	14						Bottle 11 = slight dump	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					
		20		241 A	241 B	242	243		20					
		21		OXY	OXY	OXY	OXY	245 A	21					
		22		HECS4	HECS4	HECS4	HECS4	245 B	22					
		23		2019-069	2019-069	2019-069	2019-069	246	23					
		24		Bot 2	Bot 2	Bot 3	Bot 4	247	24					
								248						
								249						
								250						
								251						
								252						
								253						
								254						
								255						
								256						
								257						
								258						
								259						
								260						
								261						
								262						
								263						
								264						
								265						
								266						
								267						
								268						
								269						
								270						
								271						
								272						
								273						
								274						
								275						
								276						
								277						
								278						
								279						
								280						
								281						
								282						
								283						
								284						
								285						
								286						
								287						
								288						
								289						
								290						
								291						
								292						
								293						
								294						
								295						
								296						
								297						
								298						
								299						
								300						

Bottle integrity: First test the top vent (V) by opening the lower spigot (S) then test the spigot

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



(TIME) → BENDER

Last Updated: July 2018

Cruise and Analysis Information							Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number:	2019-069						1								1					No OXY
Event:	92						2		253	3146	8.7	2.455	A	2	253	708	8.7	2.455	B	☺ ☺ ☺
Station:	HECS7						3		254	611	9.3	3.110		3						
Event Date (Local):	#Aug 19						4		255	3165	12.3	4.975		4						
Analysis Date (Local):	7 Aug 19						5							5					No OXY	
Analyst:	TF						6		257	3175	12.7	5.171	A	6	257	3002	12.7	5.172	B	☺ ☺
Stdization Date (Local):	6 Aug 19						7		258	3190	13.4	5.489		7						
KIO ₃ N:	0.0117854						8		259	3129	14.7	6.847		8						
Standard Titer:	0.4894892						9		260	3162	14.7	7.079		9						
Blank Titer:	0.0006988						10		261	3053	14.8	7.063		10						
THIO N:	0.241005						11	/	/	/	/	/	/	11	/	/	/	/	/	No OXY
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						
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄ none						16							16						
	KIO ₃						17							17						
	THIO						18							18						
Notes:	changed to "new" cleaned MnCl ₂ bottle (#10) dispenser - no suck back noticed!						19													
							20		253 A	253 B	254	255	257 A	257 B	258	259	260	261		
							21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		
							22		HECS7	HECS7	HECS7	HECS7	HECS7	HECS7	HECS7	HECS7	HECS7	HECS7		
							23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069		
							24		Bot 2	Bot 2	Bot 3	Bot 4	Bot 6	Bot 6	Bot 7	Bot 8	Bot 9	Bot 10		

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: January 2017



Whale

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2019-069	1						no oxy	1					
Event:	93	2		265	3074	8.5	2.386		2					
Station:	HECS8	3		266	930	8.6	2.660		3					
Event Date (Local):	7 Aug 19	4		267	3133	10.4	3.800		4					
Analysis Date (Local):	7 Aug 19	5						no oxy	5					
Analyst:	IF	6		269	3103	11.7	4.787		6					
Stdization Date (Local):	6 Aug 19	7		270	3080	12.2	5.003		7					
KIO ₃ N:	0.0117854	8		271A	3101	13.8	6.159	→	8	271B	3079	13.8	6.158	☺☺
Standard Titer:	0.4894892	9		272	3095	14.2	6.618		9					
Blank Titer:	0.0006988	10		273	3142	14.3	6.404		10					
THIO N:	0.241005	11						no oxy	11					
Sample Flask Water Seal?	Yes	12						no oxy	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												
		20		265	266	267	269	270	271A	271B	272	273		
		21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		
		22		HECS8	HECS8	HECS8	HECS8	HECS8	HECS8	HECS8	HECS8	HECS8		
		23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069		
		24		Bot 2	Bot 3	Bot 4	Bot 6	Bot 7	Bot 8	Bot 8	Bot 9	Bot 10		

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: January 2017



Cruise and Analysis Information							Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments		
Cruise Number:	2019-069						1									1						
Event:	104						2	✓		370	3074	8.5	2.498			2					no oxy	
Station:	Chat 3						3			371	320	8.5	2.695			3						
Event Date (Local):	07 Aug 19						4			372	3133	8.7	2.885			4						
Analysis Date (Local):	9 Aug 19						5									5					no oxy	
Analyst:	TF						6			374	3103	9.7	3.410		5							
Stdization Date (Local):	8 Aug 19						7			375	3080	11.7	4.516	A 11.7 C		7	375	3101	11.8	4.522	B	
KIO ₃ N:	0.0118243						8			376	3079	13.1	5.103			8						
Standard Titer:	0.4898749						9			377	3095	13.7	5.592	376) correct flask numbers 377 but "wrong" sample numbers?		9						
Blank Titer:	0.0007081						10			378	3142	14.6	6.890	A		10	378	3084	14.7	6.886	B	
THIO N:	0.241582						11			379	3086	16.7	7.484			11					no oxy	
Sample Flask	Yes						12									12					no oxy	
Water Seal?	No						13									13					no oxy	
Reagent Change?	MnCl ₂						14									14						
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH						15									15						
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄						16									16						
	KIO ₃						17									17						
	THIO						18									18						
Notes:							19									19						
							20			370	371	372	374	375 A		20			376	378 A	378 B	379
							21			OXY	OXY	OXY	OXY	OXY		21			OXY	OXY	OXY	OXY
							22			CHAT3	CHAT3	CHAT3	CHAT3	CHAT3		22			CHAT3	CHAT3	CHAT3	CHAT3
							23			2019-069	2019-069	2019-069	2019-069	2019-069		23			2019-069	2019-069	2019-069	2019-069
							24			Bot 2	Bot 3	Bot 4	Bot 6	Bot 7		24			Bot 8	Bot 10	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: January 2017



Cruise and Analysis Information							Cruise and Analysis Information						
Nisk ID	Nisk Int V	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
1							1						
2		414	3090	7.6	2.581		2					NO OXY	
3		415	2094	7.6	2.537		3						
4		416	3088	7.9	2.674		4						
5		417	3000	8.7	3.105		5						
6							6					NO OXY	
7		419	1432	9.5	3.702		7						
8		420	3180	10.4	4.249	A	8	420	3173	10.5	4.245	B	
9		421	458	11.2	4.713		9						
10		422	3106	12.5	5.268		10						
11		423	3036	13.8	6.438		11						
12		424	4116	14.8	7.610		12						
13							13					NO OXY	
14							14						
15							15						
16							16						
17							17						
18							18						
19							19						
20		414	415	416	417	419	420 A	420 B	421	422	423	424	
21		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
22		CH16	CH16	CH16	CH16	CH16	CH16	CH16	CH16	CH16	CH16	CH16	
23		2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	
24		Bot 2	Bot 3	Bot 4	Bot 5	Bot 7	Bot 8	Bot 8	Bot 9	Bot 10	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.

TURTLE



Cruise and Analysis Information	Nisk ID	Sample V	Sample S	Flask 1 ID	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments	
Cruise Number: 2019-069	1							1						
Event: 123	2			475	2699	8.6	2.733	2						
Station: Chat1	3							3						
Event Date (Local): 08 Aug 19	4			477	2409	8.8	2.778	4						
Analysis Date (Local): 09 Aug 19	5							5						
Analyst: TF	6			479	3037	9.5	3.361	6						
Stdization Date (Local): 08 Aug 19	7							7						
KIO ₃ N: 0.0118243	8			481	3076	10.3	3.971 A	8	481	3014	10.7	3.972 B	did B first ☺☺	
Standard Titer: 0.4898749	9							9						
Blank Titer: 0.0007081	10			483	3081	11.0	4.402	10						
THIO N: 0.241582	11							11						
Sample Flask Water Seal? Yes	12			485	3110	12.3	5.043	12						
No	13							13						
Reagent Change? MnCl ₂	14			487	3078	13.1	5.630 A	14	487	3131	13.1	5.630 B	☺☺☺	
(Please circle reagent that was changed prior to sampling and standardization)	15							15						
H ₂ SO ₄	16			489	3029	13.2	5.532	16						
NOTE NEW BATCH IN LOG BOOK	17							17						
THIO	18							18						
Notes:	19							19						
	20						sampler bottle 16 up ↑	20						
	21							21						
	22	475		477		479	481 A	481 B	483		485	487 A	487 B	489
	23	OXY		OXY		OXY	OXY	OXY	OXY		OXY	OXY	OXY	
	24	CHAT1		CHAT1		CHAT1	CHAT1	CHAT1	CHAT1		CHAT1	CHAT1	CHAT1	

Bottle integrity: First test the top vent (V) by opening the bottle and testing the top vent (V) by blowing down it.	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	2019-069	his in the comments column.
	Bot 2	Bot 4	Bot 6	Bot 8	Bot 8	Bot 10	Bot 12	Bot 14	Bot 14	Bot 16	

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2019-069 Station: CPF2

Event #: 169

Ship: Tully

UTC Date (dd mmm yyyy): 11 Aug 2019

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials																Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4			
1		636	B-5	✓	323		X														
2		637	200	✓			X														
3		638	100	✓			X														
4		639	75	✓			X														
5		640	50	✓			XX														
6		641	40	✓			X														
7		642	30	✓			X														
8		643	20	✓			X		X												
9		644	10	✓			XX		XX												
10		645	5	✓			X														
11		646	0	✓			X		X	XX	X										
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): SR
 Bottom Depth: 328 m
 Transmisso Cleaned: Y/N
 Time UTC Local
 Start 2248 1548
 Bottom 2256
 End 2313
 Positional Information
 Lat: 49 ° 28.080 N
 Lon: 124 ° 30.190 W
 Lat: 49 ° 28.080 N
 Lon: 124 ° 30.210 W
 Lat: 49 ° 28.070 N
 Lon: 124 ° 30.220 W
 Extra comments: