Dissolved Oxygen Analysis Log Sheet

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int 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:	2020-005	1			1	2089	11.1	4.449		1					
Event:	01	2			2	371	11.4	4.736		2					
Station:	LB01	3			3A	3009	12.3	6.334	→	3	3B	3100	12.2	6.367	- High gradient?
Event Date (Local):	22 June 2020	4			4	2043	13.6	9.869		4					
Analysis Date (Local):	22 June 2020	5								5					
Analyst:	KS	6			1	2	3A	3B	4	6					
Stdization Date (Local):	21 June 2020	7			OXY	OXY	OXY	OXY	OXY	7					
KIO_3 N:	0.0120864	8			LB01	LB01	LB01	LB01	LB01	8					
Standard Titer:	0.49782	9			2020-005	2020-005	2020-005	2020-005	2020-005	9					
Blank Titer:	0.00092	10			Bot-5 m	20 m	10 m	10 m	5 m	10					
THIO N:	0.24576	11			bot 1	bot 2	bot 3	bot 3	bot 4	11					
Sample Flask Water Seal?	(Yes) / No	12								12					
		13								13					
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	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

Bender

Institute of Ocean Sciences
Water Properties Group

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	02
Station:	LB02
Event Date (Local):	22 June 2020
Analysis Date (Local):	22 June 2020
Analyst:	KS
Stdization Date (Local):	21 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49282
Blank Titer:	0.00092
THIO N:	0.24576
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			5	3000	10.6	3.819	
2			6	2027	10.9	4.156	
3			7A	3032	11.3	4.465	→
4			8	3072	12.5	6.907	- EP late, OT ok
5			9	3030	13.0	7983	
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	7B	2047	11.3	4.468	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

5	6	7A	7B	8	9
OXY	OXY	OXY	OXY	OXY	OXY
LB02	LB02	LB02	LB02	LB02	LB02
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	30 m	20 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5

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

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	04
Station:	LB04
Event Date (Local):	22 June 2020
Analysis Date (Local):	22 June 2020
Analyst:	KS
Stdization Date (Local):	21 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49282
Blank Titer:	0.00092
THIO N:	0.24576
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int 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
1			11	505	8.6	1.831		1					
2			12	3049	8.9	2.144		2					
3			13	3057	9.5	3.057		3					
4			14	1429	10.3	3.571		4					
5			15	930	10.5	3.803		5					
6			16A	1409	11.6	5.013	→ sample over-titrated. Messy curve.	6	16B	2032	11.6	5.007	Reverse order sampled.
7			17	3127	12.6	6.153		7					
8								8					
9								9					
10								10					
11								11					
12								12					
13								13					
14								14					
15								15					
16								16					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

11	12	13	14	15	16A	16B	17
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB04	LB04	LB04	LB04	LB04	LB04	LB04	LB04
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	75 m	50 m	30 m	20 m	10 m	10 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7

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

Octopus.

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	08
Station:	LB06
Event Date (Local):	22 June 2020
Analysis Date (Local):	22 June 2020
Analyst:	KS
Stdization Date (Local):	21 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49282
Blank Titer:	0.00092
THIO N:	0.24576
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int 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
1			19	3134	8.6	1.621		1					
2			20	1059	8.6	1.637		2					
3			21A	1054	9.1	2.078 →		3	21B	3021	9.1	2.076	- Stair step near end of curve. Late E.P. OT ✓
4			22	3104	9.8	2.996		4					
5			23	3170	~~28~~	3.776		5					
6			24	3150	11.9	5.432		6					
7			25	639	12.4	6.227		7					
8			26	3056	13.7	6.684		8					
9								9					
16								16					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

19	20	21B	21A	22	23	24	25	26
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB06	LB06	LB06	LB06	LB06	LB06	LB06	LB06	LB06
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	100 m	75 m	75 m	50 m	30 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	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.

Octopus / Starts @ position 11

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	23
Station:	LB08
Event Date (Local):	22 June 2020
Analysis Date (Local):	23 June 2020
Analyst:	KS MG
Stdization Date (Local):	22 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	Yes
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	New batch of $MnCl_2$

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			28	2084	8.8	1.686	
2			29A	1002	9.2	1.581 →	
3			30	647	9.8	2.033	
4			31	3061	10.1	2.980	
5			32	673	10.7	3.689	
6			33	2063	10.7	3.896	
7			34	3028	11.1	3.940	
8			35	631	11.3	4.205	
9			36	3125	14.7	6.622	
10			37	657	16.1	7.177	
11							
12			28	29B	29A	30	31	32	33	34	35	36	37
13			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
14			LB08	LB08	LB08	LB08	LB08	LB08	LB08	LB08	LB08	LB08	LB08
15			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
16			Bot-10 m	125 m	125 m	100 m	100 m	75 m	50 m	30 m	20 m	10 m	5 m
17			bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10
18													
19													
20													
21													
22													
23													
24													

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	29B	3035	9.2	1.571	
3					
4					
5					
6					
7					
8					
9					
10					
11					
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.

No water seal

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	24
Station:	LB09
Event Date (Local):	23.06.09
Analysis Date (Local):	23 June 2020
Analyst:	KS
Stdization Date (Local):	22 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00891
THIO N:	0.24567
Sample Flask Water Seal?	No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	No water seals.

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			38	3134	8.3	1.796	← selected OT button by accident.
2			39	1059	8.5	1.717	Went ahead with OT.
3			40	1054	9.5	2.698	
4			41	3021	9.7	4.740	
5			42	3104	10.8	3.883	
6			43	3170	11.0	4.176	
7			44	3150	12.9	6.301	
8			45A	639	15.7	6.737	→
9			46	3034	16.5	6.737	
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5					
6					
7					
8	45B	3056	10.7	6.739	
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

38	39	40	41	42	43	44	45A	45B	46
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB09	LB09	LB09	LB09	LB09	LB09	LB09	LB09	LB09	LB09
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m	10 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020 005
Event:	27
Station:	LB11
Event Date (Local):	23.06.20
Analysis Date (Local):	23 June 2020
Analyst:	KS
Stdization Date (Local):	22 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	BENDER

Nisk ID	Nisk Int V	Nisk Int 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
1			48	2089	8.9	7.201		1					
2			49	371	9.3	2.284		2					
3			50A	3009	9.5	3.509	→	3	50B	3100	9.6	3.512	
4			51	2043	9.5	4.210		4					
5			52	2019	9.6	6.026		5					
6			53	3000	10.3	6.002		6					
7			54A	2027	12.0	6.277	→	7	54B	3032	12.1	6.304	- small bubbles under stopper
8			55	2047	13.9	~~6.304~~	6.514	8					
9			56	3072	15.3	6.281		9					
10			57	3030	16.0	6.216		10					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

48	49	50A	50B	51	52	53	54A	54B	55	56	57
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB11	LB11	LB11	LB11	LB11	LB11	LB11	LB11	LB11	LB11	LB11	LB11
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	175 m	125 m	125 m	100 m	75 m	50 m	30 m	30 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	28
Station:	LB12
Event Date (Local):	23.06.20
Analysis Date (Local):	23 June 2020
Analyst:	KS
Stdization Date (Local):	22 June 20
KIO_3 N:	0.0120864
Standard Titer:	0.40282
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	BENDER

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			58	3109	7.9	0.783	
2			59A	505	7.9	0.990	→
3			~~60~~	~~3057~~	-99	-99	
4			61	1429	8.1	1.561	
5			62	936	8.5	1.974	
6			63	409	8.7	2.075	
7			64	2032	9.3	2.294	- runaway titration. Over-titrated ✓
8			65A	3127	9.3	2.985	→
9			66	2092	9.3	3.640	
10			67	3074	9.5	4.271	
11			68	471	10.0	6.374	
12			69	3046	11.4	5.770	
13			70A	3073	13.3	6.485	→
14			71	2068	14.9	6.382	
15			72	~~3108~~	15.9	6.258	3180
16			73	3200	16.1	6.207	- in octopus case

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	59B	3049	8.0	0.984	
3					MISTRIP EXTRA 250 ANYWAY
4					
5					
6					
7					
8	65B	3145	9.4	2.981	
9					
10					
11					
12					
13	70B	1055	13.3	6.488	
14					
15					
16					

58	59A	59B	61	62	63	64	65A	65B	66	67	68	69
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12	LB12
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	400 m	400 m	~~200~~ 300 m	250 m	200 m	175 m	150 m	150 m	125 m	100 m	75 m	50 m
bot 1	bot 2	bot 2	bot 4	bot 5	bot 6	bot 7	bot 8	bot 8	bot 9	bot 10	bot 11	bot 12

70A	70B	71	72	73
OXY	OXY	OXY	OXY	OXY
LB12	LB12	LB12	LB12	LB12
2020-005	2020-005	2020-005	2020-005	2020-005
30 m	30 m	20 m	10 m	5 m
bot 13	bot 13	bot 14	bot 15	bot 16

Bottle integrity: First test the top vent (V 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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020 005
Event:	~~LB 14~~ 32
Station:	LB 14
Event Date (Local):	23 JUNE 2020
Analysis Date (Local):	23 June 2020
Analyst:	KS
Stdization Date (Local):	22 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			75	2016	6.7	0.407	
2			76	3173	6.8	0.261	
3			77A	3116	7.1	0.265	→
4			78	2015	7.7	0.651	
5			79	3036	7.9	1.086	
6			80	1422	8.3	1.764	
7			81	712	8.7	2.220	
8			82	1416	8.9	2.615	
9			83A	2094	9.0	2.929	→
10			84	2025	9.3	3.063	
11			85	1408	9.3	3.579	
12			86	3010	9.4	4.486	
13			87A	458	9.9	5.166	→
14			88	3038	11.1	5.922	
15			89	3162	13.1	6.584	
16			90	3094	14.3	6.504	
17			91	3143	15.9	6.211	
18			92	3175	16.4	6.198	

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	77B	3090	7.2	0.263	
4					
5					
6					
7					
8					
9	83B	3054	9.1	2.926	
10					
11					
12					
13	87B	1442	9.9	5.165	
14					
15					
16					
17					
18					

75	76	77A	77B	78	79	80	81	82	83A	83B	84	85	86	87A	87B	88
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14	LB14
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	1000 m	750 m	750 m	500 m	400 m	300 m	250 m	200 m	175 m	175 m	150 m	125 m	100 m	75 m	75 m	50 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 9	bot 10	bot 11	bot 12	bot 13	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.

89	90	91	92
OXY	OXY	OXY	OXY
LB14	LB14	LB14	LB14
2020-005	2020-005	2020-005	2020-005
30 m	20 m	10 m	5 m
bot 15	bot 16	bot 17	bot 18

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020 005
Event:	43
Station:	LC11
Event Date (Local):	24 · 06 · 20
Analysis Date (Local):	24 June 20
Analyst:	KS
Stdization Date (Local):	21 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	OCTOPUS

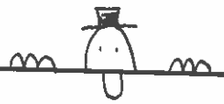
Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			98	3134	7.6	0.639	
2			99	1059	7.3	0.379	
3			100	1054	7.6	0.268	
4			101A	~~3021~~	7.7	0.265	
5			102	3170	8.1	0.815	
6			103	3150	8.1	1.342	
7			104	639	8.8	1.909	
8			105A	3056	8.9	2.392	→
9			106	2084	9.2	2.670	
10			107	3035	9.3	~~3.251~~	2.741
11			108	1002	9.5	~~3.548~~	3.251
12			109	647	9.6	~~5.118~~	3.5~~8~~48
13			110	3061	9.7	~~6.327~~	5.118
14			111	673	9.8	~~6.582~~	6.327
15			112A	2063	11.3	6.582	→
16			113	631	13.3	6.599	
17			114	3125	14.3	6.495	- Another stair-step curve.
18			115	657	15.7	6.213	
19			116	638	16.3	6.205	

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4	101B	3104	7.9	0.259	
5					
6					
7					
8	105B	3034	9.0	2.392	OT. Stair-step @ end of titration
9					
10					
11					
12					
13					
14					
15	112B	3028	11.5	6.582	
16					
17					
18	DOLIOLIDS?		THEY WERE IN BONGO		
19					

98	99	100	101A	101B	102	103	104	105A	105B	106	107	108	109	110	111	112A	112B	
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	LC11	
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	
Bot-10 m	1250 m	1000 m	750 m	750 m	500 m	400 m	300 m	250 m	250 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m	50 m	
bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6	bot 7	bot 8	bot 8	bot 9	bot 10	bot 11	bot 12	bot 13	bot 14	bot 15	bot 15	

113	114	115	116		
OXY	OXY	OXY	OXY		
LC11	LC11	LC11	LC11		
2020-005	2020-005	2020-005	2020-005		
30 m	20 m	10 m	5 m		
bot 16	bot 17	bot 18	bot 19		

Bender



Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	46
Station:	LC09
Event Date (Local):	24 June 2020
Analysis Date (Local):	24 June 2020
Analyst:	KS
Stdization Date (Local):	21 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49288
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			117	2089	7.1	0.347	- 2 stir bars. Retrived with
2			118A	371	7.4	0.707	→ forceps ∴ Sample compromised
3			119	3100	7.7	1.106	
4			120	2043	8.1	1.668	- Messy curve. OT ✓
5			121	2019	8.3	2.018	
6			122	3000	8.6	2.579	
7			123	2027	8.9	2.808	
8			124	3052	9.1	3.041	
9			125	2047	9.1	3.505	
10			126	3072	9.5	4.425	
11			127	3030	9.7	6.060	
12			128	3109	11.0	6.176	
13			129	505	14.3	6.852	- Noisy curve. OT ✓
14			130	3049	15.7	6.268	
15			131	3057	15.9	6.219	
16			132A	1424	16.0	6.221	→ B sampled first
17							
18							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	118B	3009	7.5	0.709	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16	132B	930	15.9	6.215	
17					
18					

117	118A	118B	119	120	121	122	123	124	125	126	127	128	129	130	131
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09	LC09
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	500 m	500 m	400 m	300 m	250 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m
bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 13	bot 14	bot 15

132A	132B
OXY	OXY
LC09	LC09
2020-005	2020-005
5 m	5 m
bot 16	bot 16

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

Shark.

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int 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:	2020-005	1			134	2016	8.3	2.095		1					
Event:	50	2			135	3173	8.6	2.315		2					
Station:	LC08	3			136	3116	9.0	3.023		3					
Event Date (Local):	24 June 2020	4			137	3090	9.1	3.227		4					
Analysis Date (Local):	25 June 2020	5			138	2015	9.1	3.558		5					
Analyst:	MG	6			139A	3036	9.5	3.877 →		6	139B	1422	9.5	3.868	+ Reitherrd.
Stdization Date (Local):	25 June 2020	7			140	712	9.6	6.596		7					
KIO_3 N:	0.0120864	8			141	1416	12.2	6.512		8					
Standard Titer:	0.493~~87~~	9			142	2094	14.0	6.488		9					
Blank Titer:	0.00091	10			143	3054	15.9	6.303		10					
THIO N:	0.2456~~3~~	11			144	2025	16.1	6.288		11					
Sample Flask Water Seal?	(Yes) / No	12	134		135	136	137	138	139A	139B	140	141	142	143	144
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	MnCl / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	13	OXY		OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
		14	LC08		LC08	LC08	LC08	LC08	LC08	LC08	LC08	LC08	LC08	LC08	LC08
		15	2020-005		2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
		16	Bot-10 m		175 m	150 m	125 m	100 m	75 m	75 m	50 m	30 m	20 m	10 m	5 m
		17	bot 1		bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11
		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

Shark

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	53
Station:	LC06
Event Date (Local):	24 June '20
Analysis Date (Local):	24 Jun '20
Analyst:	MG
Stdization Date (Local):	25 June '20
KIO_3 N:	0.0120864
Standard Titer:	0.49[illegible]65
Blank Titer:	0.00091
THIO N:	0.24565
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int 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
1			145A	3010	9.2	2.116	→	1	145B	458	9.3	2.115	
2			146	1442	9.3	2.101		2					
3			147	3038	9.6	4.320		3					
4			148	3162	10.9	—	SOMETHING BLOCKING? TRIED OVER TITR	4					
5			149	3094	13.4	6.548	BUT ENDED WITH 22.151 ? OOPS	5					
6			150	3143	16.2	6.570		6					
7			151	3175	16.6	6.612		7					
8								8					
9			145A	145B	146	147	148	149	150	151			
10			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY			
11			LC06	LC06	LC06	LC06	LC06	LC06	LC06	LC06			
12			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005			
13			Bot-10 m	Bot-10 m	75 m	50 m	30 m	20 m	10 m	5 m			
14			bot 1	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7			
15								15					
16								16					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

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

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Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020 005
Event:	56
Station:	LC04
Event Date (Local):	24 June 2020
Analysis Date (Local):	MG 25 06 2020
Analyst:	
Stdization Date (Local):	25 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.4933065
Blank Titer:	0.00091
THIO N:	0.24567
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			152	3134	9.7	2.145	
2			153	1059	9.7	2.183	OVERTITRATE STEPPED CURVE
3			154A	1054	9.8	2.461	→
4			155	3104	9.9	2.714	
5			156	3170	10.1	3.105	
6			157	3150	10.1	3.487	
7			158	639	11.1	4.302	
8			159	3056	11.5	4.633	
9			160	3034	13.9	7.678	
10			161	2084	15.5	9.486	
11			152	153	154A	154B	155	156	157	158	159	160	161
12			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
13			LC04	LC04	LC04	LC04	LC04	LC04	LC04	LC04	LC04	LC04	LC04
14			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
15			Bot-10 m	150 m	125 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m	5 m
16			bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10
17													
18													
19													
20													
21													
22													
23													
24													

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	1548	3021	9.9	2.457	
4					
5					
6					
7					
8					
9					
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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	58
Station:	LC02
Event Date (Local):	24 June 2020
Analysis Date (Local):	25 · 06 · 20
Analyst:	MG
Stdization Date (Local):	25 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.4930865
Blank Titer:	0.00091
THIO N:	0.24967
Sample Flask Water Seal?	Yes / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			162	3035	9.9	2.387	
2			163	647	10.3	3.025	
3			164A	3061	10.9	3.634	→ ROSETT CAP SLOW DRIP
4			165	2063	11.2	4.351	
5			166	3028	11.9	4.860	
6			167	631	13.7	6.874	
7			168	3125	16.3	7.278	
8			162	163	164A	164B	165	166
9			OXY	OXY	OXY	OXY	OXY	OXY
10			LC02	LC02	LC02	LC02	LC02	LC02
11			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
12			Bot-10 m	75 m	50 m	50 m	30 m	20 m
13			bot 1	bot 2	bot 3	bot 3	bot 4	bot 5
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	1643	673	10.9	3.603	FORGOT THE STIR MAGNET!
4					
5					
6					
7					
8	167	168			
9	OXY	OXY			
10	LC02	LC02			
11	2020-005	2020-005			
12	10 m	5 m			
13	bot 6	bot 7			
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	59
Station:	LC01
Event Date (Local):	25.06.20
Analysis Date (Local):	25.06.20
Analyst:	MC
Stdization Date (Local):	25.06.20
KIO_3 N:	0.0120864
Standard Titer:	6.493065
Blank Titer:	0.0009087
THIO N:	6.24565
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$, NaI/NaOH, H_2SO_4, KIO_3, THIO
Notes:	occupy

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			170	638	9.8	2.411	
2			171	1312	10.6	2.534	
3			172A	462	10.3	3.268	→
4			173	2095	11.3	4.227	
5			174	3042	11.7	4.709	
6			175	1050	13.4	6.273	
7			176	547	15.8	7.309	
8			170	171	172A	172B	173	174	175	176
9			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
10			LC01	LC01	LC01	LC01	LC01	LC01	LC01	LC01
11			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
12			Bot-10 m	75 m	50 m	50 m	30 m	20 m	10 m	5 m
13			bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	172B	2097	10.4	3.266	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	072
Station:	P12
Event Date (Local):	26 June 2020
Analysis Date (Local):	26 June 2020
Analyst:	KS
Stdization Date (Local):	23 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49307
Blank Titer:	0.00091
THIO N:	0.24565
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			184	3134	5.9	2.294	
2			185A	1059	5.7	2.258	→
3			186	3021	5.7	1.858	
4			187	3104	5.8	1.289	
5			188	3170	6.1	0.630	
6			189A	3150	6.1	0.347	→
7			190	3056	6.4	~~0.328~~	0.301
8			191	3034	6.5	0.328	
9			192	2084	6.9	0.517	
10			193	1002	7.2	1.440	
11			194	3035	7.6	2.358	
12			195A	647	7.8	2.945	→
13			196	673	8.1	3.521	
14			197	2063	8.2	4.204	
15			F18	3028	8.8	5.684	
16			199	631	9.1	6.743	
17			200	3125	9.5	6.802	
18			201A	657	10.3	6.823	→
19			202	1312	10.8	6.868	
20			203	462	12.6	6.944	
21			204	2097	13.5	6.759	
22			205	2095	14.3	6.696	
23			206	3042	14.5	6.677	
24			207	1050	14.8	6.670	

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	185B	1054	5.9	2.256	
3					
4					
5					
6	189B	639	6.3	0.346	
7					
8					
9					
10					
11					
12	195B	3061	7.9	2.943	
13					
14					
15					
16					
17					
18	201B	638	10.3	6.825	
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.

Event 72

184	185A	185B	186	187	188	189A	189B	190	191	192	193	194	195A	195B	196
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	3000 m	3000 m	2500 m	2000 m	1500 m	1250 m	1250 m	1000 m	800 m	600 m	400 m	300 m	250 m	250 m	200 m
bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 12	bot 13

197	198	199	200	201B	201A	202	203	204	205	206	207
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12	P12
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
150 m	100 m	75 m	60 m	50 m	50 m	40 m	30 m	25 m	15 m	10 m	5 m
bot 14	bot 15	bot 16	bot 17	bot 18	bot 18	bot 19	bot 20	bot 21	bot 22	bot 23	bot 24

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	75
Station:	P8
Event Date (Local):	26 June 2020
Analysis Date (Local):	2 June 2020
Analyst:	
Stdization Date (Local):	23 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49307
Blank Titer:	0.00091
THIO N:	0.24565
Sample Flask Water Seal?	Yes (circled) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$, NaI/NaOH, H_2SO_4, KIO_3, THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			209	2089	5.9	1.378	
2			210	371	6.1	0.943	WAS GOING TO OVER BUT HIT FINISH, OOPS!
3			211A	3009	6.3	0.396 →	
4			212	2043	6.5	0.246	
5			213	2019	6.8	0.230	
6			214	3000	7.0	0.422	
7			215	2027	7.5	1.497	
8			216A	3032	7.9	2.686 →	
9			217	3072	8.3	2.992	
10			218	3030	8.6	3.357	
11			219	3109	8.9	3.544	
12			220	505	9.1	3838	
13			221	3049	9.0	5.034	
14			222	3057	9.3	6471	
15			223A	1429	9.7	6.739 →	
16			224	1409	10.3	6.850	
17			225	2032	11.3	6.997	
18			226	3127	12.0	6.957	
19			227	3145	14.3	6480	
20			228	2092	15.1	6.301	
21			229A	3074	15.5	6.258 →	
22			230	3046	15.6	6.252	
23			231	3073	15.5	6.253	
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)
1				
2				
3	211B	3100	6.4	0.395
4				
5				
6				
7				
8	216B	2047	7.9	2.683
9				
10				
11				
12				
13				
14				
15	223B	930	9.6	6.740
16				
17				
18				
19				
20				
21	229B	471	15.5	6.259
22				
23				

209 OXY P8 2020-005 2000 m bot 1

210 OXY P8 2020-005 1500 m bot 2

211A OXY P8 2020-005 1250 m bot 3

211B OXY P8 2020-005 1250 m bot 3

212 OXY P8 2020-005 1000 m bot 4

213 OXY P8 2020-005 800 m bot 5

214 OXY P8 2020-005 600 m bot 6

215 OXY P8 2020-005 400 m bot 7

216A OXY P8 2020-005 300 m bot 8

216B OXY P8 2020-005 300 m bot 8

217 OXY P8 2020-005 250 m bot 9

218 OXY P8 2020-005 200 m bot 10

219 OXY P8 2020-005 175 m

220 OXY P8 2020-005 150 m bot 12

221 OXY P8 2020-005 125 m

222 OXY P8 2020-005 100 m bot 14

223A OXY P8 2020-005 75 m bot 15

223B OXY P8 2020-005 75 m

224 OXY P8 2020-005 60 m

225 OXY P8 2020-005 50 m bot 17

226 OXY P8 2020-005 40 m bot 18

227 OXY P8 2020-005 30 m bot 19

228 OXY P8 2020-005 25 m bot 20

229A OXY P8 2020-005 15 m bot 21

229B OXY P8 2020-005 15 m bot 21

230 OXY P8 2020-005 10 m bot 22

231 OXY P8 2020-005 5 m bot 23

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	8J
Station:	P4
Event Date (Local):	27 June 2020
Analysis Date (Local):	27 June 2020
Analyst:	KS
Stdization Date (Local):	23 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49307
Blank Titer:	0.00091
THIO N:	0.24565
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Notes:

Shark

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			241	2016	6.4	0.469	
2			242	3173	6.3	0.412	
3			243A	3116	6.8	0.336	→
4			244	8015	7.1	0.242	
5			245	3036	7.4	0.494	
6			246	1422	7.8	1.311	
7			247	712	8.3	1.936	
8			248A	1416	8.5	2.413	→
9			249	3054	9.0	2.889	
10			250	2025	9.2	3.111	
11			251	1408	9.3	3.134	
12			252	3010	9.4	3.611	
13			253	458	9.7	4.428	
14			254	1442	9.6	6.159	
15			255A	3038	9.9	6.538	→
16			256	3094	10.1	6.677	
17			257	3143	10.8	6.879	
18			258	3175	11.6	6.839	
19			259	570	12.5	6.771	
20			260	3144	14.8	6.354	
21			261A	8121	15.2	6.269	→
22			262	3083	15.5	6.269	
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OX
1					
2					
3	243B	3090	6.9	0.232	
4					
5					
6					
7					
8	248B	2094	8.7	2.409	
9					
10					
11					
12					
13					
14					
15	255B	3162	9.9	6.535	
16					
17					
18					
19					
20					
21	261B	3192	15.2	6.270	
22					
23					
24					

262
OXY
P4
2020-005
5 m
bot 22

261B OXY P4 2020-005 10 m bot 21
261A OXY P4 2020-005 10 m bot 21
260 OXY P4 2020-005 15 m bot 20
259 OXY P4 2020-005 25 m bot 19
258 OXY P4 2020-005 30 m bot 18
257 OXY P4 2020-005 40 m bot 17
256 OXY P4 2020-005 50 m bot 16
255B OXY P4 2020-005 60 m

241 OXY P4 2020-005 Bot-10 m bot 1
242 OXY P4 2020-005 1250 m bot 2
243A OXY P4 2020-005 1000 m bot 3
243B OXY P4 2020-005 1000 m
244 OXY P4 2020-005 800 m
245 OXY P4 2020-005 600 m
246 OXY P4 2020-005 400 m
247 OXY P4 2020-005 300 m
248A OXY P4 2020-005 250 m
248B OXY P4 2020-005 250 m
249 OXY P4 2020-005 200 m
250 OXY P4 2020-005 175 m
251 OXY P4 2020-005 150 m
252 OXY P4 2020-005 125 m
253 OXY P4 2020-005 100 m
254 OXY P4 2020-005 75 m
255A OXY P4 2020-005 60 m

Event skipped due to poor conditions

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int 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:	2020-005	1			264	2089				1					
Event:		2			265A	371			→	2	265B	3009			
Station:	LD11	3			266	3100				3					
Event Date (Local):	27 June 2020	4			267	2043				4					
Analysis Date (Local):		5			268	2019				5					
Analyst:		6			269A	2027			→	6	269B	3000			
Stdization Date (Local):		7			270	3032				7					
KIO_3 N:		8			271	2047				8					
Standard Titer:		9			272	3072				9					
Blank Titer:		10			273	3030				10					
THIO N:		11			274A	3109			→	11	274B	505			
Sample Flask Water Seal?	Yes	12			275	3049				12					
	No	13			276	3057				13					
Reagent Change?	$MnCl_2$	14			277	1429				14					
(Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	NaI/NaOH	15			278A	930			→	15	278B	1409			
	H_2SO_4	16			279	2032				16					
	KIO_3	17			280	3127				17					
	THIO	18			281	3145				18					
Notes:		19			282	2092				19					
		20			283A	3074			→	20	283B	471			
		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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	88
Station:	LD02
Event Date (Local):	28·06·20
Analysis Date (Local):	28.06.20
Analyst:	MC
Stdization Date (Local):	22·06·20
KIO_3 N:	0.012 0804
Standard Titer:	0.493065
Blank Titer:	0.009087
THIO N:	0.24565
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	BENDER

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			301	2089	10.2	2.852	
2			302A	371	10.2	2.843	→
3			303	3100	10.9	4.003	
4			304	2043	11.0	4.081	
5			305	2019	11.1	4.086	
6			301	302A	302B	303	304	305
7			OXY	OXY	OXY	OXY	OXY	OXY
8			LD02	LD02	LD02	LD02	LD02	LD02
9			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
10			Bot-10 m	30 m	30 m	20 m	10 m	5 m
11			bot 1	bot 2	bot 2	bot 3	bot 4	bot 5
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	302B	3009	10.2	2.837	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	92
Station:	LD06
Event Date (Local):	28 · 06 · 20
Analysis Date (Local):	29 June 2020
Analyst:	KS
Stdization Date (Local):	29 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49265
Blank Titer:	0.00113
THIO N:	0.24575
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / (H_2SO_4) #1819 MIX2 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			306	2089	8.8	1.946	
2			307	3211	9.2	2.627	
3			308	3009	9.6	3.502	
4			309	3100	9.9	4.189	
5			310A	2043	12.0	4.693	
6			311	2027	14.5	6.020	
7			312	3000	15.1	6.174	
8			313	3032	15.0	6.185	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	308B	3072			
4					
5	310B	2019	11.9	4.688	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

306	307	308	309	310A	310B	311	312	313
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LD06	LD06	LD06	LD06	LD06	LD06	LD06	LD06	LD06
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	100 m	75 m	50 m	30 m	30 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	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

SHARK

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	95
Station:	WD04
Event Date (Local):	28.06.20
Analysis Date (Local):	29 June 2020
Analyst:	KS
Stdization Date (Local):	29 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49765
Blank Titer:	0.00113
THIO N:	0.24575
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Notes:

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			314A	2016	10.0	2.773	→
2			315	3116	10.6	3.642	
3			316	3090	11.9	5.147	
4			317	205	12.1	5.552	
5			318	3036	12.3	5.651	
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1	314B	3173	10.0	2.771	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

314A	314B	315	316	317	318
OXY	OXY	OXY	OXY	OXY	OXY
LD04	LD04	LD04	LD04	LD04	LD04
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	Bot-10 m	30 m	20 m	10 m	5 m
bot 1	bot 1	bot 2	bot 3	bot 4	bot 5

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.

Event skipped due to poor shark conditions

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information		Nisk ID	Nisk Int V	Nisk Int 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:	2020-005	1			319	712				1					
Event:	96	2			320	1416				2					
Station:	LG01	3			321	2094				3					
Event Date (Local):	28 June 2020	4			322	3054				4					
Analysis Date (Local):	29 June 2020	5			323A	2085			→	5	323B	1408			
Analyst:	KS	6								6					
Stdization Date (Local):	29 June 2020	7								7					
KIO_3 N:	0.0120864	8								8					
Standard Titer:	0.49265	9								9					
Blank Titer:	0.00113	10								10					
THIO N:	0.24575	11								11					
Sample Flask Water Seal?	Yes / No	12								12					
		13								13					
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO	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.

Bender

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	96
Station:	LG02
Event Date (Local):	28 June 2020
Analysis Date (Local):	29 June 2020
Analyst:	KS
Stdization Date (Local):	29 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49265
Blank Titer:	0.00113
THIO N:	0.24575
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			324	3072	9.0	1.892	
2			325	3030	9.1	1.845	
3			326	3109	9.4	4.959	
4			327A	505	10.8	4.928	→
5			328	3057	12.0	5.744	
6			329	1429	13.3	6.285	
7			330	930	13.3	6.289	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4	327B	3049	10.4	4.925	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

324	325	326	327A	327B	328	329	330
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LG02	LG02	LG02	LG02	LG02	LG02	LG02	LG02
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	75 m	50 m	30 m	30 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6	bot 7

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 20

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	~~123~~ 124
Station:	LBP7
Event Date (Local):	30 June 2020
Analysis Date (Local):	01 July 2020
Analyst:	MolQA
Stdization Date (Local):	29 June 2020
KIO_3 N:	0.0120864
Standard Titer:	~~0.49350~~
Blank Titer:	0.49265
THIO N:	0.00113
	0.24575
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			337	3134	5.7	1.467	
2			338	1059	5.9	0.673	
3			339	1054	6.2	0.355	
4			340A	3021	6.5	0.249	⇒
5			341	3170	7.1	0.252	Strange dispense of $MgCl_2$?
6			342	3150	7.1	0.629	
7			343	639	7.4	1.096	
8			344	3056	7.8	1.828	
9			345A	3034	8.1	2.308	⇒
10			346	1002	8.5	2.788	
11			347	3035	8.5	3.649	
12			348	647	8.6	3.747	
13			349	3061	8.8	3.885	
14			350A	673	8.9	5.161	⇒
15			351	3028	9.1	6.780	
16			352	631	10.0	6.833	Top cup not seated
17			353	3125	13.5	6.551	
18			354	657	14.2	6.450	
19			355A	638	14.3	6.445	⇒
20			356	462	14.4	6.450	

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4	340B	3104	6.5	0.252	
5					
6					
7					
8					
9	345B	2084	8.1	2.310	
10					
11					
12					
13					
14	350B	2063	8.9	~~1.58~~ 5.158	
15					
16					
17					
18					
19	355B	1312	14.3	6.443	
20					

356 OXY LBP7 2020-005 5 m bot 20

355B OXY LBP7 2020-005 10 m bot 19

355A OXY LBP7 2020-005 10 m bot 18

354 OXY LBP7 2020-005 20 m bot 16

353 OXY LBP7 2020-005 30 m bot 17

352 OXY LBP7 2020-005 50 m bot 15

351 OXY LBP7 2020-005 75 m bot 15

337 OXY LBP7 2020-005 2000 m bot 1

338 OXY LBP7 2020-005 1500 m bot 2

339 OXY LBP7 2020-005 1250 m bot 3

340A OXY LBP7 2020-005 1000 m bot 4

340B OXY LBP7 2020-005 1000 m bot 4

341 OXY LBP7 2020-005 750 m bot 5

342 OXY LBP7 2020-005 500 m bot 6

343 OXY LBP7 2020-005 400 m bot 7

344 OXY LBP7 2020-005 300 m bot 8

345A OXY LBP7 2020-005 250 m bot 9

345B OXY LBP7 2020-005 250 m bot 9

346 OXY LBP7 2020-005 200 m bot 10

347 OXY LBP7 2020-005 175 m bot 11

348 OXY LBP7 2020-005 150 m bot 12

349 OXY LBP7 2020-005 125 m bot 13

350A OXY LBP7 2020-005 100 m bot 14

350B OXY LBP7 2020-005 100 m bot 14

SHARK

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	~~125~~ 127
Station:	LBP5
Event Date (Local):	30 June 2020
Analysis Date (Local):	6th July 2020
Analyst:	MOIRA
Stdization Date (Local):	29 June 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49265
Blank Titer:	0.0043
THIO N:	0.24575
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Notes:

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			357	2016	6.3	0.444	
2			358A	3173	6.3	0.432 ⇒	
3			359	3090	6.5	0.308	
4			360	2015	6.9	0.309	
5			361	3036	7.2	0.705	
6			362A	1422	7.9	1.021 ⇒	
7			363	1416	7.7	1.344	
8			364	2094	7.8	1.549	
9			365	3054	8.0	2.078	
10			366	2025	8.2	2.426	
11			367	1408	8.4	2.317	WEIRD END RATE OVERTITRATE
12			368A	3010	8.7	2.719 ⇒	
13			369	1442	8.7	3.380	
14			370	3038	8.7	4.1666	
15			371	3162	9.6	5.331	
16			372	3094	11.1	5.774	
17			373	3143	12.1	6.022	
18			374A	3175	14.3	6.454 ⇒	
19			375	3144	14.7	6.450	OVERTITRATE FLAKEY CURVE SOMETHING BLACK

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	358B	3116	6.4	0.427	
3					
4					
5					
6	362B	712	~~7.5~~ 7.5	1.017	
7					
8					
9					
10					
11					
12	368B	458	8.7	2.712	
13					
14					
15					
16					
17					
18	374B	570	14.3	6.455	
19					

357	358A	358B	359	360	361	362A	362B	363	364	365	366	367	368A	368B	369	370	371	372	373	374A	374B	375
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5	LBP5
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	1250 m	1250 m	1000 m	750 m	500 m	400 m	400 m	300 m	250 m	200 m	175 m	150 m	125 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m	10 m	5 m
bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 12	bot 13	bot 14	bot 15	bot 16	bot 17	bot 18	bot 19	bot 20

Bender

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	144
Station:	LG06
Event Date (Local):	03.07.20
Analysis Date (Local):	03 July 2020
Analyst:	KS
Stdization Date (Local):	03 July 2020
KIO_3 N:	0.49274
Standard Titer:	~~0.05120~~ 0.49274
Blank Titer:	0.00120
THIO N:	0.24593
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			381	2088	7.0	0.236	
2			382A	371	7.1	0.271	→
3			383	3100	7.6	0.709	
4			384	2043	7.8	1.083	
5			385	2019	8.2	2.005	
6			386	2027	8.5	2.333	→
7			387A	3000	8.9	2.977	→ temperature variable step up near end causing late EP. Sample over-titrated ✓
8			388	2047	9.1	3.150	
9			389	3072	9.1	3.298	
10			390	3030	9.2	3.611	
11			391	3109	9.1	4.299	
12			392A	505	9.5	5.180	→
13			393	3057	9.7	6.608	
14			394	1429	11.6	6.165	
15			395	930	12.0	6.237	
16			396	1409	12.6	6.435	- bit of a runaway causing late EP.
17			397	2032	14.0	6.569	Sample over-titrated ✓
18							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	382B	3009	7.3	0.263	
3					
4					
5					
6					
7	387B	3032	9.0	2.969	← entered as sample 388 by mistake temperature variable.
8					
9					
10					
11					
12	392B	3049	9.5	5.177	
13					
14					
15					
16					
17					
18					

381	382B	382A	383	384	385	386	387A	387B	388	389	390	391	392A	392B	393	394
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06	LG06
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
3ot-10 m	750 m	750 m	500 m	400 m	300 m	250 m	200 m	200 m	175 m	150 m	125 m	100 m	75 m	75 m	50 m	30 m
bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 12	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.

395	396	397
OXY	OXY	OXY
LG06	LG06	LG06
2020-005	2020-005	2020-005
20 m	10 m	5 m
bot 15	bot 16	bot 17

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	147
Station:	LG04
Event Date (Local):	03-07-20
Analysis Date (Local):	03 July 2020
Analyst:	KS
Stdization Date (Local):	03 July 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49274
Blank Titer:	0.00120
THIO N:	0.24593
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	MAKO

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			398	2016	~~8.6~~	2.077	8.6°C
2			399A	3173	8.9	2.426	→ EP late. Sample over-titrated ✓
3			400	3096	9.1	3.234	
4			401	2015	9.2	3.200	
5			402	3038	9.7	4.415	
6			403	1422	11.3	5.568	
7			404	712	12.7	6.655	
8			405	1416	12.9	7.008	
9			406	2094	13.0	7.056	
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2	399B	3116	8.9	2.422	Another messy curve causing a late EP. OT ✓
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

398	399A	399B	400	401	402	403	404	405	406	
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	
LG04	LG04	LG04	LG04	LG04	LG04	LG04	LG04	LG04	LG04	
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	
Bot-10 m	125 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m	5 m	
bot 1	bot 2	bot 2	bot 3	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

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	150
Station:	LG02
Event Date (Local):	03.07.20
Analysis Date (Local):	03 July 2020
Analyst:	KS
Stdization Date (Local):	03 July 2020
KIO_3 N:	0.0120864
Standard Titer:	0.49235
Blank Titer:	0.00047
THIO N:	0.24578
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ #1902 / NaI/NaOH #1801 / H_2SO_4 / KIO_3 / THIO
Notes:	TIGER

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			407	2025	9.3	1.974	
2			408	1408	9.5	2.450	
3			409	3010	10.1	2.694	
4			410A	458	10.3	3.260	
5			411	3038	10.7	4.098	
6			412	3162	12.2	7.229	
7			413	3094	12.4	7.494	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4	410B	1442	10.3	3.260	10.3°C - runaway curve.
5					sample over-titrated.
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

407	408	409	410A	410B	411	412	413
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
LG02	LG02	LG02	LG02	LG02	LG02	LG02	LG02
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	75 m	50 m	30 m	30 m	20 m	10 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6	bot 7

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

Shark

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: December 2019

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	151
Station:	LG01
Event Date (Local):	03 July 2020
Analysis Date (Local):	03 July 2020
Analyst:	KS
Stdization Date (Local):	03 July 2020
KIO_3 N:	0.020864
Standard Titer:	0.49235
Blank Titer:	0.00047
THIO N:	0.24578
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	($MnCl_2$) #1902 / (NaI/NaOH) #1801 / H_2SO_4 / ~~KIO_3~~ / ~~THIO~~
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			414	3175	10.5	2.964	
2			415	570	10.7	3.333	
3			416	3144	11.5	5.230	
4			417	3121	12.3	7.034	
5			418A	3192	12.5	7.189	⇒ FP late. Overt. Isated
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5	418B	3083	12.4	7.191	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

414	415	416	417	418A	418B
OXY	OXY	OXY	OXY	OXY	OXY
LG01	LG01	LG01	LG01	LG01	LG01
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	30 m	20 m	10 m	5 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 5

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	
Cruise Number:	2020005
Event:	177
Station:	CS00
Event Date (Local):	05-07-20
Analysis Date (Local):	05 July 2020
Analyst:	KS
Stdization Date (Local):	05 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48475
Blank Titer:	0.00069
THIO N:	0.24583
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	~~$MnCl_2$~~ / ~~NaI/NaOH~~ / ~~H_2SO_4~~ / (KIO_3) #1906 / ~~THIO~~
Notes:	TURTLE

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			428A	3050	6.4	1.281	→
2			429	1407	6.6	0.653	
3			430	3047	6.9	0.337	
4			431	3194	7.1	0.247	
5			432	3114	7.4	0.279	
6			433	621	7.7	0.873	
7			434A	620	7.8	1.363	→ runaway titration. Sample OT ✓
8			435	3096	7.9	2.165	→ Another runaway. Sample OT ✓
9			436	3089	8.3	2.532	
10			437	3066	8.5	3.146	
11			438	3146	8.7	3.423	
12			439	3140	8.8	3.818	
13			440	3147	8.8	4.327	
14			441	3065	8.7	4.754	
15			442	3093	9.3	5.562	
16			443	745	10.5	4.788	
17			444	435	11.6	5.597	
18			445	3084	13.5	~~6.525~~	6.252
19			446A	3209	14.1	6.758	→
20			447	3023	14.5	6.813	

Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1	428B	3091	6.7	1.281	
2					
3					
4					
5					
6					
7	434B	3106	7.8	1.354	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19	446B	1223	14.1	6.748	
20					

428A	428B	429	430	431	432	433	434A	434B	435	436	437	438	439	440	441
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
2000 m	2000 m	1500 m	1250 m	1000 m	750 m	500 m	400 m	400 m	300 m	250 m	200 m	175 m	150 m	125 m	100 m
bot 1	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12	bot 13	bot 14

442	443	444	445	446A	446B	447
OXY	OXY	OXY	OXY	OXY	OXY	OXY
CS00	CS00	CS00	CS00	CS00	CS00	CS00
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
75 m	50 m	30 m	20 m	10 m	10 m	5 m
bot 15	bot 16	bot 17	bot 18	bot 19	bot 19	bot 20

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	~~181~~ 182
Station:	CS02
Event Date (Local):	05 July 2020
Analysis Date (Local):	05 July 2020
Analyst:	KS
Stdization Date (Local):	05 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48475
Blank Titer:	0.00069
THIO N:	0.24583
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / (KIO_3) #1906 / THIO

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			448	3134	6.2	1.233	
2			449	1059	6.4	0.625	
3			450	1054	6.7	0.355	
4			451	3021	6.9	0.236	
5			452A	3104	7.3	0.266	⇒ EP was slightly late, OT ✓
6			453	3150	7.5	0.618	
7			454	639	79	1.115	
8			455	3056	8.2	1.810	
9			456	3034	85	2.342	
10			457	2084	8.7	2.745	
11			458A	1002	8.8	2.797	⇒
12			459	647	9.1	2.892	
13			460	3061	9.1	3.525	
14			461	673	9.1	4.185	
15			462	2063	9.9	3.737	
16			463	3028	11.1	4.822	
17			464A	631	12.1	5.582	⇒
18			465	657	13.9	6.369	
19			466	638	14.7	6.527	
20			467	1312	-99	6.528	- Forgot to record draw T.

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5	452B	3170	7.4	0.266	
6					
7					
8					
9					
10					
11	458B	3035	9.0	2.793	HR
12					
13					
14					
15					HR
16					HR
17	464B	3125	12.1	5.575	HR
18					HR
19					HR
20					HR

448	449	450	451	452A	452B	453	454	455	456	457	458A	458B	459	460	461
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02	CS02
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	1500 m	1250 m	1000 m	750 m	750 m	500 m	400 m	300 m	250 m	200 m	175 m	175 m	150 m	125 m	100 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 11	bot 12	bot 13	bot 14

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

462	463	464B	464A	465	466	467
OXY	OXY	OXY	OXY	OXY	OXY	OXY
CS02	CS02	CS02	CS02	CS02	CS02	CS02
2020-005	2020-005	020-005	020-005	020-005	020-005	320-005
75 m	50 m	30 m	30 m	20 m	10 m	5 m
bot 15	bot 16	bot 17	bot 17	bot 18	bot 19	bot 20

Dissolved Oxygen Analysis Log Sheet

Sea Turtle

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	186
Station:	CS04
Event Date (Local):	05 July 2020
Analysis Date (Local):	05 July 2020
Analyst:	KS
Stdization Date (Local):	05 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48475
Blank Titer:	0.00069
THIO N:	0.24583
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	472B OXY CS04 2020-005 20 m bot 5

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			468	3050	9.8	3.364	
2			469	3091	10.4	4.281	
3			470A	1467	11.8	5.270 →	
4			471	3047	12.1	5.633	
5			472B	3194	13.7	6.485	
6			473	621	14.3	6.855	
7			474	620	14.7	6.929	
8							
9			468 OXY CS04 2020-005 Bot-10 m bot 1	469 OXY CS04 2020-005 75 m bot 2	470 OXY CS04 2020-005 50 m bot 3	470B OXY CS04 2020-005 50m bot3	471 OXY CS04 2020-005 30 m bot 4 – 472A OXY CS04 2020-005 20 m bot 5 – 473 OXY CS04 2020-005 10 m bot 6 – 474 OXY CS04 2020-005 5 m bot 7
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	470B	3096	11.7	5.269	
4					
5	472B	3114	13.7		*Not used. Strange discordance with Alkalinity.
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

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:	2020 - 005	1			475	2089	10.3	3.999		1					
Event:	194	2			476A	371	10.5	4.287	⇒ samples stop for a while forgot to put in log	2	476B	3009	10.6	4.289	
Station:	CS06	3			477	3100	12.7	6.144		3					
Event Date (Local):	06.07.2020	4			478	2043	12.9	6.208		4					
Analysis Date (Local):	06.07.2020	5	~~4~~	~~480~~	2019	13.5	6.697		sample 479	5					
Analyst:	Hayleigh	6			480	2027	13.8	6.869		6					
Stdization Date (Local):	0607. 2020	7								7					
KIO_3 N:	0.0119007	8								8					
Standard Titer:	0.48468	9								9					
Blank Titer:	0.00081	10	475	476A	476B	477	478	479	480	10					
THIO N:	0.24597	11	OXY	OXY	OXY	OXY	OXY	OXY	OXY	11					
Sample Flask Water Seal?	(Yes) / No	12	CS06	CS06	CS06	CS06	CS06	CS06	CS06	12					
		13	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	13					
Reagent Change?	$MnCl_2$	14	Bot-10 m	50 m	50 m	30 m	20 m	10 m	5 m	14					
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15	bot 1	bot 2	bot 2	bot 3	bot 4	bot 5	bot 6	15					
NOTE NEW BATCH IN LOG BOOK	H_2SO_4	16								16					
	KIO_3	17								17					
	THIO	18								18					
Notes: (06 JULY)		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

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	200
Station:	CS09
Event Date (Local):	06.07.20
Analysis Date (Local):	06.07.20
Analyst:	KS
Stdization Date (Local):	06.07.20
KIO_3 N:	0.0119007
Standard Titer:	0.48468
Blank Titer:	0.00081
THIO N:	0.24597
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	~~$MnCl_2$~~ / NaI/NaOH / ~~H_2SO_4~~ / ~~KIO_3~~ / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			481	3032	8.7	1.976	
2			482	2047	8.7	1.973	
3			483	3072	8.7	1.978	
4			484	3030	8.9	2.225	
5			485	3109	9.4	3.079	
6			486	505	10.2	4.100	
7			487	3049	11.0	4.685	
8			488	3057	12.0	5.430	
9			489	1429	14.2	6.268	
10			490	930	16.1	6.538	
11			491A	1409	16.7	6.487	→
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	491B	2032	16.6	6.486	
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

481	482	483	484	485	486	487	488	489	490	491A	491B
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
CS09	CS09	CS09	CS09	CS09	CS09	CS09	CS09	CS09	CS09	CS09	CS09
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	175 m	150 m	125 m	100 m	75 m	50 m	30 m	20 m	10 m	5 m	5 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	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

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	225
Station:	JS
Event Date (Local):	08·08·20
Analysis Date (Local):	08·08·20
Analyst:	MOIRA
Stdization Date (Local):	06·07·20
KIO_3 N:	0.0119007
Standard Titer:	0.4846782
Blank Titer:	0.0008083
THIO N:	0.24597
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	octopus

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			501	3134	10.8	4.078	
2			502	1059	10.8	4.221	
3			503	1054	10.8	4.878	
4			504	3021	10.8	4.355	
5			505A	3104	10.9	4.458	→ SLIGHT HICCUP WITH NaOH - NOT SMOOTH
6			506	3150	11.0	4.532	
7			507	639	11.0	4.544	
8			508	3056	11.0	4.607	
9			509	3034	11.1	4.631	
10			510	2084	11.1	4.670	
11			511	1002	11.3	4.759	
12			512	3085	11.3	4.821	
13			513	647	11.5	4.974	
14			514	3061	11.6	5.101	

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5	505B	3170	10.9	4.469	
6					
7					
8					
9					
10					
11					
12					
13					
14					

15	501	502	503	504	505A	505B	506	507	508	509	510	511	512
16	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
17	JS	JS	JS	JS	JS	JS	JS	JS	JS	JS	JS	JS	JS
18	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
19	Bot-10 m	300 m	250 m	200 m	175 m	175 m	150 m	125 m	100 m	75 m	50 m	30 m	20 m
20	bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12
21	513	514											
22	OXY	OXY											
23	JS	JS											
24	2020-005	2020-005											
	10 m	5 m											
	bot 13	bot 14											

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

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	229
Station:	14
Event Date (Local):	8JUL2020
Analysis Date (Local):	08 July 2020
Analyst:	KS
Stdization Date (Local):	06 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48468
Blank Titer:	0.00081
THIO N:	0.24597
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Notes: Samples #s 501 - 514 were duplicated b/w event 225 and 229. Added 9 prefix to this cast on duplicated IDs. Sample 515 was not duplicated

Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1		9501	3134	10.6	3.296	
2		9502	1059	10.5	3.387	
3		9503A	1054	10.4	3.468	→
4		9504	3104	10.4	3.525	
5		9505	3170	10.4	3.548	
6		9506	3150	10.3	3.557	
7		9507	639	10.4	3.528	
8		9508	3056	10.7	3.446	
9		9509	3034	11.0	3.564	
10		9510	2084	11.5	3.856	- EP. late. Shoulder OT, Must check and adjust later.
11		9511	1002	12.1	4.304	
12		9512	3035	13.1	4.782	
13		9513	647	14.9	5.763	
14		9514A	3061	16.8	6.514	→ LEAK VENT
15		9515	2063	17.9	~~17.9~~	Topcap leak. 6.767 mL/L

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	9503B	3021	10.5	3.482	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13			16.8		
14	9514B	673	16.8	6.505	
15					

9501	9502	9503A	9503B	9504	9505	9506	9507	9508	9509	9510	9511	9512
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
14	14	14	14	14	14	14	14	14	14	14	14	14
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	250 m	200 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m	40 m	30 m	20 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12

9513	9514A	9514B	515
OXY	OXY	OXY	OXY
14	14	14	14
2020-005	2020-005	2020-005	2020-005
10 m	5 m	5 m	0 m
bot 13	bot 14	bot 14	bot 15

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

Dissolved Oxygen Analysis Log Sheet

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	234
Station:	JI1
Event Date (Local):	09 July 2020
Analysis Date (Local):	09 July 2020
Analyst:	KS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	~~$MnCl_2$~~ / ~~NaI/NaOH~~ / ~~H_2SO_4~~ / ~~KIO_3~~ / (THIO) #1901

Notes: 521 OXY JI1 2020-005 250 m **bot 2** — No Niskin bottle.

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			520	7089	11.1	2.867	
2			521	371	-99	-99	NO BOTTLE 250M
3			522A	3009	10.9	3.500	⇒
4			523	2048	11.6	4.006	
5			524	2019	12.5	4.175	
6			525	2027	17.2	5.734	
7			526	3000	18.8	6.907	
8			527	3032	18.9	6.992	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	522B	3100	11.1	3.506	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

520 OXY JI1 2020-005 Bot-5 m **bot 1**

522A OXY JI1 2020-005 100 m **bot 3**

522B OXY JI1 2020-005 100 m **bot 3**

523 OXY JI1 2020-005 50 m **bot 4**

524 OXY JI1 2020-005 25 m **bot 5**

525 OXY JI1 2020-005 10 m **bot 6**

526 OXY JI1 2020-005 5 m **bot 7**

527 OXY JI1 2020-005 0 m **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

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020 - 005
Event:	235
Station:	JI3
Event Date (Local):	09 July 2020
Analysis Date (Local):	09 July 2020
Analyst:	KS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24729
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			528	3072	11.2	2.677	
2			529	3030	11.1	2.800	
3			530	3109	11.0	3.157	
4			531	505	11.5	3.872	
5			532	3049	12.7	4.193	
6			533	3057	16.2	5.323	
7			534A	1429	18.7	6.468	⇒
8			535	M09	19.1	6.842	
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5					
6					
7	534B	936	18.7	6.468	
8					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

528	529	530	531	532	533	534A	534B	535
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
JI3	JI3	JI3	JI3	JI3	JI3	JI3	JI3	JI3
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	250 m	100 m	50 m	25 m	10 m	5 m	5 m	0 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	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

BENDER

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	237
Station:	J15
Event Date (Local):	09.07.20
Analysis Date (Local):	09 July 2020
Analyst:	KS/HS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			536	3127	11.8	1.875	
2			537	3145	11.6	2.311	
3			538	2092	11.2	3.040	
4			539	3074	16.5	3.831	
5			540A	471	12.4	4.129	
6			541	3073	16.6	5.515	
7			542	1055	18.8	6.494	
8			543	2068	19.4	6.832	forgot to put in thio arm - mixing a little longer
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5	540B	3046	12.3	4125	small debris in flask
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

536	537	538	539	540A	540B	541	542	543
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
JI5	JI5	JI5	JI5	JI5	JI5	JI5	JI5	JI5
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	250 m	100 m	50 m	25 m	25 m	10 m	5 m	0 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 5	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

OCTOPUS

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	239
Station:	JI7
Event Date (Local):	09.07.20
Analysis Date (Local):	09 July 2020
Analyst:	Hayleigh
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

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
1			544A	3134	11.7	1.852	→	1	544B	1059	11.7	1.846	
2			545	1054	11.5	2.174		2					
3			546	3021	11.2	3.082		3					
4			547	3104	11.7	3.872		4					
5			548	3170	12.5	4.018		5					
6			549	3150	15.7	5.163		6					
7			550	1259	19.0	6.643		7					
8			551	3056	19.4	6.787		8					
9								9					
10			544A	544B	545	546	547	548	549	550	551		
11			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY		
12			JI7	JI7	JI7	JI7	JI7	JI7	JI7	JI7	JI7		
13			2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005		
14			Bot-5 m	Bot-5 m	250 m	100 m	50 m	25 m	10 m	5 m	0 m		
15			bot 1	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8		
16													
17													
18													
19													
20													
21													
22													
23													
24													

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

OCTOPEE

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	240
Station:	J16
Event Date (Local):	09-07-20
Analysis Date (Local):	09 July 2020
Analyst:	HAY
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			552A	2094	11.6	2.138	
2			553	3035	11.5	2.246	
3			554	6047	11.2	2.727	
4			555	3061	11.6	3.843	
5			556	673	12.3	4.104	
6			557	2063	16.6	5.555	
7			558	3028	18.5	6.326	
8			559	631	19.0	6.691	
9							
10			552A	552 B	553	554	555	556	557	558	559
11			OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
12			J16	J16	J16	J16	J16	J16	J16	J16	J16
13			2020005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
14			Bot-54	Bot-5 m	250 m	100 m	50 m	25 m	10 m	5 m	0 m
15			Bot 1	bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8
16											
17											
18											
19											
20											
21											
22											
23											
24											

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1	552B	1002	11.7	2.139	
2					
3					
4					
5					
6					
7					
8					
9					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

occupy

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	241
Station:	JI4
Event Date (Local):	09-07-20
Analysis Date (Local):	09 July 2020
Analyst:	HS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			560	657	11.6	1.985	
2			561	638	11.4	2.594	
3			562A	1312	11.2	3.139	→
4			563	2097	11.5	3.855	over titrate. found endpoint.
5			564	2095	12.6	4.182	
6			565	3042	16.1	5.311	
7			566	1050	19.1	6.600	
8			567	547	19.5	6.804	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	562B	462	11.2	3.141	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

560	561	562A	562B	563	564	565	566	567
OXY	OXY	OXY	JI4	OXY	OXY	OXY	OXY	OXY
JI4	JI4	JI4	2020-005	JI4	JI4	JI4	JI4	JI4
2020-005	2020-005	2020-005	100 m	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	250 m	100 m	bot 3	50 m	25 m	10 m	5 m	0 m
bot 1	bot 2	bot 3		bot 4	bot 5	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 GLACIC TORTOISE

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	~~243~~
Station:	JI2
Event Date (Local):	09·07·20
Analysis Date (Local):	09 July 2020
Analyst:	KS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119067
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

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
1			568	3050	11.2	2.781		1					
2			569	3091	11.0	2.665		2					
3			570A	1407	11.0	3.080	⟹	3	570B	3047	11.0	3.082	
4			571	3194	11.3	3.839		4					
5			572	3114	12.5	4.052		5					
6			573	621	15.9	5.249		6					
7			574	620	18.5	6.391		7					
8			575	3106	18.9	6.838		8					
9								9					
16								16					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

568	569	570A	570B	571	572	573	574	575
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
JI2	JI2	JI2	JI2	JI2	JI2	JI2	JI2	JI2
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	250 m	100 m	100 m	50 m	25 m	10 m	5 m	0 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	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

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	266
Station:	VAN4
Event Date (Local):	10-07-2020
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	09 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			608	2089	12.3	~~0.232~~	- ??? Only partially dosed as if
2			609	371	12.4	4.187	This Dosimat did not reset. Do
3			610	3009	12.3	4.202	not know what volume was
4			611	3100	12.4	4.213	added. Value lost.
5			612	2043	12.6	4.283	
6			613A	209	13.8	4.966	→
7			614	3000	15.6	5.424	
8			615	3052	15.1	5.631	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5					
6	613B	2027	13.7	4.966	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

608	609	610	611	612	613A	613B	614	615
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
VAN4	VAN4	VAN4	VAN4	VAN4	VAN4	VAN4	VAN4	VAN4
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	50 m	40 m	30 m	20 m	10 m	10 m	5 m	0 m
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

BENDER

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	267
Station:	VAN 5
Event Date (Local):	10·07·20
Analysis Date (Local):	10 Jul 2020
Analyst:	KS
Stdization Date (Local):	09 Jul 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			616	3072	12.7	4.306	
2			617	3030	12.6	4.273	
3			618	3109	12.7	4.352	
4			619	505	13.7	4.913	
5			620	3057	14.7	5.519	
6			621A	1429	15.0	5.734	→
7							
8							
9							DID NOT LABEL 3049
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4					
5					
6	621B	930	14.9	5.735	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

616	617	618	619	620	621A	621B
OXY	OXY	OXY	OXY	OXY	OXY	OXY
VAN5	VAN5	VAN5	VAN5	VAN5	VAN5	VAN5
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	30 m	20 m	10 m	5 m	0 m	0 m
bot 1	bot 2	bot 3	bot 4	bot 5	bot 6	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.

Dissolved Oxygen Analysis Log Sheet

Bender

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	269
Station:	VAN6
Event Date (Local):	10.07.20
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	Yes / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			622	2032	13.4	4.660	
2			623	3127	13.4	4.670	
3			624A	3145	13.6	4.754	→
4			625	3074	13.9	4.959	
5			626	471	14.2	5.089	
6			627	3046	14.5	5.298	
7			628	3073	15.3	6.072	
8			629	1055	16.1	6.719	
9							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	624B	2092	13.6	4.752	
4					
5					
6					
7					
8					
9					
16					
17					
18					
19					
20					
21					
22					
23					
24					

622	623	624A	624B	625	626	627	628	629
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
VAN6	VAN6	VAN6	VAN6	VAN6	VAN6	VAN6	VAN6	VAN6
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	50 m	40 m	40 m	30 m	20 m	10 m	5 m	0 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	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

TURTLE

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	270
Station:	INDO
Event Date (Local):	10.07.20
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			630A	3050	14.1	4.857	→
2			631	1407	14.0	4.859	
3			632	3047	14.2	5.022	
4			633	3194	14.3	5.101	
5			634	3114	15.1	5.614	
6			635	621	16.3	6.742	
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1	630B	3091	14.1	4.866	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

630A	630B	631	632	633	634	635
OXY	OXY	OXY	OXY	OXY	OXY	OXY
IND0	IND0	IND0	IND0	IND0	IND0	IND0
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	Bot-5 m	30 m	20 m	10 m	5 m	0 m
bot 1	bot 1	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.

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

TURTLE

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	273
Station:	IND 2
Event Date (Local):	10·07·20
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			636	3106	10.2	2.576	
2			637	3096	10.1	2.571	
3			638A	3089	10.1	2.632	→
4			639	3146	10.1	2.673	
5			640	3110	10.3	2.861	
6			641	3147	10.7	3.816	
7			642A	3065	11.7	4.486	→
8			643	745	12.8	4.533	
9			644	435	13.6	4.766	
10			645	3084	14.2	4.968	
11			646	3209	15.0	5.384	
12			647	1223	17.1	7.408	

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	638B	3066	10.1	2.627	
4					
5					
6					
7	642B	3093	11.8	4.485	
8					
9					
10					
11					
12					

636	637	638A	638B	639	640	641
OXY	OXY	OXY	OXY	OXY	OXY	OXY
IND2	IND2	IND2	IND2	IND2	IND2	IND2
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	150 m	125 m	125 m	100 m	75 m	50 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6

642A	642B	643	644	645
OXY	OXY	OXY	OXY	OXY
IND2	IND2	IND2	IND2	IND2
2020-005	2020-005	2020-005	2020-005	2020-005
40 m	40 m	30 m	20 m	10 m
bot 7	bot 7	bot 8	bot 9	bot 10

646	647
OXY	OXY
IND2	IND2
2020-005	2020-005
5 m	0 m
bot 11	bot 12

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
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

Octopus

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020--005
Event:	275
Station:	IND4
Event Date (Local):	10 July 2020
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Niskin ID	Niskin Int V	Niskin Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			648	3134	10.3	2.457	
2			649	1059	10.3	2.461	
3			650	1054	10.3	2.518	
4			651A	3021	10.2	2.590	⇒
5			652	3170	10.3	2.596	
6			653	3150	10.3	2.543	
7			654	639	10.5	2.858	
8			655	3056	11.0	4.373	
9			656	3034	11.9	4.697	
10			657A	2084	12.7	4.584	⇒
11			658	3035	13.7	4.746	
12			659	647	14.3	5.010	
13			660	3061	15.4	5.804	
14			661	673	16.9	7.689	vent leak on Niskin.

Niskin ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3					
4	651B	3104	10.3	2.588	
5					
6					
7					
8					
9					
10	657B	1002	12.7	4.578	
11					
12					
13					
14					

648	649	650	651A	651B	652	653
OXY	OXY	OXY	OXY	OXY	OXY	OXY
IND4	IND4	IND4	IND4	IND4	IND4	IND4
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	200 m	175 m	150 m	150 m	125 m	100 m
bot 1	bot 2	bot 3	bot 4	bot 4	bot 5	bot 6

654	655	656	657A	657B
OXY	OXY	OXY	OXY	OXY
IND4	IND4	IND4	IND4	IND4
2020-005	2020-005	2020-005	2020-005	2020-005
75 m	50 m	40 m	30 m	30 m
bot 7	bot 8	bot 9	bot 10	bot 10

658	659	660	661
OXY	OXY	OXY	OXY
IND4	IND4	IND4	IND4
2020-005	2020-005	2020-005	2020-005
20 m	10 m	5 m	0 m
bot 11	bot 12	bot 13	bot 14

Bottle integrity: First test the top vent (V) l [illegible] 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

Octopus

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	278
Station:	IND7
Event Date (Local):	10 July 2020
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO

Notes:
Thousands of Jelly Fish

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
1			662	3028	10.9	3.311		1					
2			663	631	11.2	4.535		2					
3			664	3125	12.0	4.961		3					
4			665	657	13.0	4.518		4					
5			666	638	13.7	4.625		5					
6			667	1312	14.2	4.784		6					
7			668A	462	15.1	5.177 ⇒		7	668B	2097	14.9	5.178	
8			669	2095	17.5	8.236		8					
9								9					
10								10					
11								11					
12								12					
13								13					
14								14					
15								15					
16								16					
17								17					
18								18					
19								19					
20								20					
21								21					
22								22					
23								23					
24								24					

662	663 - 664	665	666 - 667 - 668A	668B	669		
OXY	OXY - OXY	OXY	OXY - OXY - OXY	OXY	OXY		
IND7	IND7 - IND7	IND7	IND7 - IND7 - IND7	IND7	IND7		
2020-005	2020-005 - 2020-005	2020-005	2020-005 - 2020-005 - 2020-005	2020-005	2020-005		
Bot-5 m	50 m - 40 m	30 m	20 m - 10 m - 5 m	5 m	0 m		
bot 1	bot 2 - bot 3	bot 4	bot 5 - bot 6 - bot 7	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

Octopus

Institute of Ocean Sciences
Water Properties Group

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020-005
Event:	279
Station:	VAN7
Event Date (Local):	10 July 2020
Analysis Date (Local):	10 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			670	1050	14.5	4.942	
2			671	547	15.4	5.358	
3			672	3200	17.5	7.251	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
	670 - OXY - VAN7 - 2020-005 - Bot-5 m - bot 1	671 - OXY - VAN7 - 2020-005 - 5 m - bot 2		672 - OXY - VAN7 - 2020-005 - 0 m - bot 3	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

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

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

TURTLE

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020 005
Event:	282
Station:	VAN 1
Event Date (Local):	11 07 20
Analysis Date (Local):	11 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.00045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			673	3050	11.5	3.661	
2			674	3091	11.4	3.674	
3			675A	1407	11.2	3.785	→
4			676	3194	11.3	3.945	
5			677	3114	11.5	3.988	
6			678	621	11.7	3.968	
7			679	620	11.8	4.019	
8			680	3106	12.5	4.247	
9			681	3096	15.9	6.062	
10			682	3089	18.1	7.099	
17							
18							
19							
20							
21							
22							
23							
24							

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1					
2					
3	6788	3047	11.3	3.786	
4					
5					
6					
7					
8					
9					
10					
17					
18					
19					
20					
21					
22					
23					
24					

673	674	675A	675B	676	677	678	679	680	681	682
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
VAN1	VAN1	VAN1	VAN1	VAN1	VAN1	VAN1	VAN1	VAN1	VAN1	VAN1
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-5 m	100 m	75 m	75 m	50 m	40 m	30 m	20 m	10 m	5 m	0 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	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

Sea-Turt

IOS

Last Updated: July 2018

Cruise and Analysis Information	
Cruise Number:	2020005
Event:	288
Station:	42
Event Date (Local):	11.07.20
Analysis Date (Local):	11 July 2020
Analyst:	KS
Stdization Date (Local):	9 July 2020
KIO_3 N:	0.0119007
Standard Titer:	0.48175
Blank Titer:	0.0045
THIO N:	0.24725
Sample Flask Water Seal?	(Yes) / No
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK	$MnCl_2$ / NaI/NaOH / H_2SO_4 / KIO_3 / THIO
Notes:	

Nisk ID	Nisk Int V	Nisk Int S	Sample ID	Flask 1	Draw T 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments
1			687	~~3146~~	~~11.7~~		→ Redraw bubi NaI/NaOH
2			688	3110	10.7	3.411	
3			689A	3147	10.8	3.534	→
4			690	3093	10.7	3.648	
5			691	745	~~10.7~~	3.693	
6			692	435	10.7	3.764	
7			693	3084	10.9	3.783	
8			694	~~3209~~	~~11.1~~		redraw 3132
9			695	1223	11.2		~~Redraw 3132~~ → 1223 11.2 3.789
10			696	3023	11.5	4.053	
11			697	3199	11.9	4.065	
12			698	3062	12.0	4.180	
13			699	3117	13.1	4.496	
14			700	3018	13.8	4.722	
15			701	3161	17.1	6.803	- low O2V (1.95V) - Fraser sediments

Nisk ID	Sample ID	Flask 2	Draw T 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
1	~~686~~	3066	10.9	3.389	
2					
3	689B	3065	10.7	3.534	
4					
5					
6					
7					
8	694	↘	↘	↘	
9		3132	11.3	3.800	
10					
11					
12					
13					
14	700B	3053	13.7	4.725	
15					
22					
23					
24					

687	688	689A	689B	690	691	692	693	694	695	696	697	698
OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY	OXY
42	42	42	42	42	42	42	42	42	42	42	42	42
2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005	2020-005
Bot-10 m	300 m	250 m	250 m	200 m	175 m	150 m	125 m	100 m	75 m	50 m	30 m	20 m
bot 1	bot 2	bot 3	bot 3	bot 4	bot 5	bot 6	bot 7	bot 8	bot 9	bot 10	bot 11	bot 12

699	700A	700B	701
OXY	OXY	OXY	OXY
42	42	42	42
2020-005	2020-005	2020-005	2020-005
10 m	5 m	5 m	0 m
bot 13	bot 14	bot 14	bot 15

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