

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group



Last Updated: December 2019

Cruise and Analysis Information		Nisk ID	Nisk Int V S	Sample ID	Flask 1	Draw Temp 1 (°C)	OXY-1 (mL/L)	OXY-1 Comments	Nisk ID	Sample ID	Flask 2	Draw Temp 2 (°C)	OXY-2 (mL/L)	OXY-2 Comments
Cruise Number:	2022-010	1		1	970	11.7	6.398	5 July 2022 stn 11170 ev 1	1					
Event:	001 - Arbitrary	2		2A	971	11.9	7.522	11 July 2022 stn 11299 ev 6	2	2B	972	11.9	7.540	11 July 2022 stn 11295 ev 6
Station:	—	3						Dispenser may have introduced air →	3					out of water for resample
Event Date (Local):	—	4		3A	973	12.4	8.591	11 July 2022 stn 11289 ev 10 →	4	3B	974	12.4	8.584	
Analysis Date (Local):	04 Aug 2022	5						^ Better! Purged dispenser w/ H ₂ O	5					got better tube connection → There best to use for 11 July 2022
Analyst:	ER	6		6A	975	15.5	7.658	12 July 2022 stn 11034 ev 22 →	6	6B	976	15.4	6.662	12 July stn 11034 ev 22
Standardization Date (Local):	04 Aug 2022	7		9	977	14.7	5.675	13 July 2022 stn 5937 ev 34	7					
KIO ₃ N:	0.0118990	8		11A	978	14.6	6.043	14 July 2022 stn 5687 ev 42 →	8	11B	979	14.6	6.039	14 July 2022 stn 5687 ev 42
Standard Titer:	0.4974981	9		14	980	17.3	6.243	15 July 2022 stn 5062 ev 53	9					
Blank Titer:	0.0006768	10		18A	981	17.6	6.284	16 July 2022 stn 4314 ev 69 →	10	18B	982	17.6	6.284	16 July 2022 stn 4314 ev 69
THIO N:	0.23956	11		20	983	17.1	6.954	17 July 2022 stn 3578 ev 77	11					
Sample Flask Water Seal?	Yes	12		23A	984	14.6	9.393	18 July 2022 stn 3589 ev 89 →	12	23B	985	14.6	9.388	18 July 2022 stn 3589 ev 89
	No	13							13					
Reagent Change?	MnCl ₂	14		1				11a	14	18B				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	15		oxy				oxy	15	oxy				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	16		11170				oxy	16	oxy				
	KIO ₃	17		2022-010				oxy	17	oxy				
	THIO	18		5m				oxy	18	oxy				
Notes:		19						oxy	19	oxy				
		20						oxy	20	oxy				
		21						oxy	21	oxy				
		22						oxy	22	oxy				
		23						oxy	23	oxy				
		24						oxy	24	oxy				

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.

Samples with comments on reverse.
Samples from multiple events/stations, all in same box.
all titration curves a bit rounded / not sharp.

2A
OXY
11295
2022-010
5m

precipitate was very
fluffy and there was
a lot of it.

2B
OXY
11295
2022-010
5m

less precipitate than
usual.

3A
OXY
11289
2022-010
5m

a little less precipitate
→ than usual

3B
OXY
11289
2022-010
5m

6A
OXY
11034
2022-010
5m

a little less precipitate
than usual.

6B
OXY
11034
2022-010
5m

much less precipitate
than usual.

23A
OXY
3589
2022-010
5m

over titrated.

both curves have ambiguous endpoint
that look like a set of stairs.

some floaties in bottom of flask,
(crud)

23B
OXY
3589
2022-010
5m

some floaties/crud in bottom of flask.

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Cruise Number: 2022-010		1		25	101	15.6	8.261	20 July '22	stn 10774 ev 97	1					
Event: 002 - Arbitrary		2		27	102	14.9	7.303	21 July '22	stn 9906 ev 105	2					
Station: /		3		30	103	15.7	6.817	22 July '22	stn 8909 ev 117	3					
Event Date (Local): /		4		33	104	15.1	6.696	23 July '22	stn 8539 ev 128	4					
Analysis Date (Local): 04 Aug 2022		5		35a	105	15.1	6.790	24 July '22	stn 7051 ev 137	5	35b	106	15.1	6.715	24 July '22 stn 7051 ev 137
Analyst: ER		6		38	107	14.1	7.311	25 July '22	stn 2705 ev 149	6					
Stdization Date (Local): 04 Aug 2022		7		39a	108	16.5	12.355	26 July '22	stn 2710 ev 155	7	39b	109	16.5	12.355	26 July '22 stn 2710 ev 155
KIO ₃ N: 0.0118990		8		42	110	14.0	7.656	27 July '22	stn 3713 ev 167	8					
Standard Titer: 0.4974981		9		44	111	16.7	6.941	28 July '22	stn 3820 ev 175	9					
Blank Titer: 0.0006768		10		47	112	13.8	8.554	29 July '22	stn 2354 ev 187	10					
THIO N: 0.23956		11		50a	113	13.5	8.891	30 July '22	stn 2465 ev 199	11	50b	114	13.5	8.886	30 July '22 stn 2465 ev 199
Sample Flask Water Seal? ☒ Yes ☐ No		12		53	115	14.4	9.333	31 July '22	stn 2847 ev 211	12					
Reagent Change? MnCl ₂		13								13					
(Please circle reagent that was changed prior to sampling and standardization)		14		25	30	33	35b	39a	42	14					
NOTE NEW BATCH IN LOG BOOK		15		Oxy	Oxy	Oxy	Oxy	Oxy	Oxy	15					
		16		10774	8909	8539	7051	2710	3713	16					
		17		2022-010	2022-010	2022-010	2022-010	2022-010	2022-010	17					
		18		5m	5m	5m	5m	5m	5m	18					
Notes:		19		44	50a	50b				19					
		20		Oxy	Oxy	Oxy				20					
		21		3820	2465	2465				21					
		22		2022-010	2022-010	2022-010				22					
		23		5m	5m	5m				23					
		24		ml						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.

Samples with comments on back of sheet.

27 over titrated.
Oxy initial titration curve ambiguous,
9906 OT curve still ambiguous.
2022-010 few floaties/curd in flask.
5m

35a
Oxy
7051
2022-010
5m
put 2 stir bars in! took a
minute to retrieve extra one
floaties in flask.
bubbles! let settle then overtitrated.
reasonable agreement w/ 35B.

38
Oxy
2705
2022-010
5m
initial titration curve really ugly -
ambiguous/weird inflection point.
no bubbles/gunk visible.
overtitrated. curve still not great.
overtitrated second time.
sample looks pretty clear.

39b
Oxy
2710
2022-010
5m
small bubble in flask before
opening.
late endpoint on overtitration.
first curve really noisy/ambiguous.

47
Oxy
2334
2022-010
5m
lateish endpoint.
a few chunkies in bottle.

53
Oxy
2847
2022-010
5m
endpoint a little late
but smooth curve!