

Dissolved Oxygen Analysis Log Sheet

Institute of Ocean Sciences
Water Properties Group

Note many blank IDs. invalid when running samples, replaced with one's that worked indicated in comment section with box around them ex. 3061

Cruise and Analysis Information				Nisk ID				Nisk Int S				Sample ID				Flask 1				Depth (m)				Draw T 1 (°C)				OXY 1 (mL/L)				Comments				Nisk ID				Flask 2				Draw T 2 (°C)				OXY 2 (mL/L)				Comments							
Cruise Number: 2014-19				1				X				1				612				225				11.5				2783				510m drip				1																							
Event: 3				2				✓				2				3124				200				11.1				2752								2																							
Station: 1420 59				3				✓				3				2087				175				10.8				2735				invalid plate changed to 3124				3																							
Event Date (Local): 20 Aug 2014				4				✓				4				3061				150				10.6				2792								4																							
Analysis Date (Local): 22 Aug 2014				5				✓				5A				1057				125				11.3				2961				invalid plate changed to 3061				5				2089				11.3				3017				invalid plate changed to 3061							
Analyst: MARK SECTON				6				✓				6				1002				100				11.7				3673				Zeroed colorimetric bottle in flask (invalid) changed to 3061				6																							
Standardization Date (Local): 22 Aug 2014				7				✓				7				94				80				11.6				3259				Very stiff spigot				7																							
KIO ₃ N: 0.0099396				8				✓				8				2095				60				11.9				3348				3061				8																							
Standard Titer: 0.7055				9				✓				9				1055				50				12.4				3539				3061				9																							
Blank Titer: 0.0023				10				✓				10				2091				40				12.3				3869				bottle in flask				10																							
THIO N: 0.14148				11				✓				11				3016				30				12.4				3760								11																							
Sample Flask				12				✓				12				650				20				12.3				3756								12																							
Water Seal?				13				✓				13				2047				10				12.9				4268								13																							
Reagent Change?				14				✓				14A				1035				5				13.1				4420				3061				14				3116				13.1				4445											
(Please circle reagent that was changed prior to sampling and standardization)				15				✓				15				1015				0				13.2				4605				3061				15																							
NOTE NEW BATCH IN LOG BOOK				16																																				16																			
KIO ₃				17																																				17																			
THIO				18																																				18																			
Notes:				19																																				19																			
White Box				20																																				20																			
48 36 78				21																																				21																			
123 14 83				22																																				22																			
1658				23																																				23																			
20 Aug 2014				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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Institute of Ocean Sciences
Water Properties Group

M + M

Numbers in boxes are flask numbers changed to 2 vial number

Cruise and Analysis Information				Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number: 2014-19				1	✓	16	3084	175	10.6	1.818		1				
Event: 7				2	x	17	2056	150	9.6	1.784		2				
Station: JFZ				3	✓	18	2035	125	9.4	1.806		3				
Event Date (Local): 20Aug2014				4	✓	19	2009	100	9.1	1.843		4				
Analysis Date (Local): 22Aug2014				5	✓	20	3024	80	9.5	2.185	(2069)	5	3032	9.3	2.230	(2069)
Analyst: MBS				6	✓	21	3033	60	9.6	2.446		6				
Standardization Date (Local): 22Aug2014				7	✓	22	3022	50	9.9	2.494	(2069)	7				
KIO ₃ N: 0.0099396				8	✓	23	332	40	10.1	2.589		8				
Standard Titer: 6.7055				9	✓	24	3007	30	10.8	3.502		9				
Blank Titer: 0.0023				10	✓	25	3104	20	11.2	3.914		10				
THIO N: 0.14148				11	✓	26	708	10	11.8	4.600	Check Endpoint - noticed. Based on graph.	11				
Sample Flask Water Seal? Yes				12	✓	27	3034	5	12.2	4.554		12				
				13	✓	28	3014	0	13.2	4.609	(2069)	13				
Reagent Change? MnCl ₂				14								14				
(Please circle reagent that was changed prior to sampling and standardization)				15								15				
NOTE NEW BATCH IN LOG BOOK				16								16				
				17								17				
				18								18				
Notes:				19								19				
				20								20				
GREEN BOX				21								21				
048 17 97				22								22				
124 0 00				23								23				
2352 20Aug-2014				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

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Water Properties Group

Boxed numbers in comment section are invalid flasks used to replace invalid numbers

Cruise and Analysis Information				Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number: 2014-19				1	✓	29	3010	10.9	9.2	1.6411	top vent wasn't high	1	2059	9.2	3023	1.630
Event: 10				2		30	3020	20.5	10.7	4.289		2				
Station: P1				3		31	3023	30.0	12.7	8.031	bubbles in flask	3				
Event Date (Local): 21 AUG 14				4								4				
Analysis Date (Local): 22 AUG 14				5								5				
Analyst: MAB				6								6				
Stdization Date (Local): 22 AUG 14				7								7				
KIO ₃ N: 0.60993916				8								8				
Standard Titer: 0.7055				9								9				
Blank Titer: 0.0023				10								10				
THIO N: 6.14148				11								11				
Sample Flask Water Seal? ☒ Yes				12								12				
Reagent Change? ☐ No				13								13				
Reagent Change? ☐ No				14								14				
(Please circle reagent that was changed prior to sampling and standardization)				15								15				
NOTE NEW BATCH IN LOG BOOK				16								16				
KIO ₃				17								17				
THIO				18								18				
Notes: Green Box Bot 115				19								19				
				20								20				
				21								21				
048 34 53				22								22				
125 29 98				23								23				
0653				24								24				
21 AUG 2014																

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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Boxed numbers in comments section are valid flasks used to replace invalid numbers

Cruise and Analysis Information				Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number: 2014-19				1	☒	32	1023	108	9.5	1.696		1	2068	9.2	1.678	check end point bottle on plot
Event: 12				2	☒	33	3005	100	9.0	1.678	2068	2				
Station: P2				3	☒	34	3030	75	8.9	4.241	bottle in flask 2068	3				
Event Date (local): 24Aug14				4	☒	35	3164	75	8.8	4.447	check end point	4				
Analysis Date (local): 22Aug14				5	☒	36	557	50	9.4	5.725	small bubbles in flask	5				
Analyst: MJS				6	☒	37	622	25	10.8	5.440		6				
Standardization Date (local): 22Aug14				7	☒	38	2082	10	11.1	5.417	bottle 8	7				Bot 7 was tripped by accidentant @ 17 m
KIO ₃ N: 0.0094396				8	☒	39	471	5	13.6	9.166	bottle 9 / top cap (licking endpoint messy)	8				so the sample #'s shifted up one ie 7 became 8
Standard Titer: 0.7055				9								9				
Blank Titer: 0.0023				10								10				
THIO N: 6.14148				11								11				
Sample Flask Water Seal? Yes				12								12				
Reagent Change? No				13								13				
Reagent Change? (Please circle reagent that was changed prior to sampling and standardization)				14								14				
NaI/NaOH				15								15				
H ₂ SO ₄				16								16				
NOTE NEW BATCH IN LOG BOOK				17								17				
KIO ₃				18								18				
THIO				19								19				
Notes:				20								20				
Silver Box				21								21				
048 35 95				22								22				
126 00 05				23								23				
0925 24Aug2014				24								24				

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Cruise and Analysis Information				Nisk ID	Nisk Int S	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments	
Cruise Number: 2014-19				1	✓	116	311	1325	6.9	0.458	(2069)	1					
Event: 25				2	✓	117	3142	1236	6.2	0.410	check endpoint	2					
Station: P4				3	✓	118A	621	1250	5.9	0.405		3	3190	6.1	0.394	check endpoint	
Event Date (Local): 21 08 14				4	✓	119	2014	1000	6.2	0.215		4					
Analysis Date (Local): 22 AUG 14				5	✓	120	2049	866	6.7	0.215		5					
Analyst: MB				6	✓	121	1653	600	7.1	0.486	(2069)	6					
Standardization Date (Local): 22 AUG 2014				7	✓	122	2090	406	8.0	1.137		7					
KIO ₃ N: 0.0099316				8	✓	123	510	300	8.5	1.690		8					
Standard Titer: 0.7055				9	✓	124	2097	250	8.7	2.410		9					
Blank Titer: 0.0023				10	✓	125	2061	200	9.2	2.606		10					
THIO N: 0.14148				11	✓	126	3067	175	9.4	2.819		11					
Sample Flask Water Seal? ☒ Yes				12	✓	127	3118	156	9.5	3.324		12					
Reagent Change? ☐ No				13	✓	128	2098	125	9.5	3.930	(2069)	13					
(Please circle reagent that was changed prior to sampling and standardization) NOTE NEW BATCH IN LOG BOOK				14	✓	129	3209	106	9.2	4.932		14					
				15	✓	130A	712	75	9.2	5.593		15	611	9.4	5.554		
				16	✓	131	468	50	10.0	6.168		16					
				17	✓	132	631	25	12.1	5.944		17					
THIO				18	✓	133	505	10	14.5	6.371		18					
Notes: depth 1324				19	✓	134	715	5	15.1	6.397		19					
048 38 98 ~				20								20					
126 39 96 W				21								21					
0116				22								22					
22 AUG 2014				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.

Number with boxes in comments section are valid. Flaster replacing invalid numbers not in the file.

Cruise and Analysis Information					Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number:	2014-19	3			1	✓	218 ^A	612	2000	7.3	1.269		1	83124	6.7	1.264	
Event:	39	4			2	✓	219	3084	1500	7.0	0.608	Check endpoint, last point dropped down	2				
Station:	P8	5			3	✓	220	3061	1250	7.1	0.346		3				
Event Date (local):	22Aug14	6			4	✓	221	2056	1000	7.3	0.235	Check endpoint	4				
Analysis Date (local):	24Aug14	7			5	✓	222	2069	800	7.6	0.312		5				
Analyst:	MB	8			6	✓	223	94	600	8.2	0.680		6				
Standardization Date (local):	24Aug14	9			7	✓	224	2035	400	8.7	1.322		7				
KIO ₃ N:	0.0099396	10			8	✓	225	3033	300	9.2	2.050		8				
Standard Titer:	0.7052	11			9	✓	226 ^A	552	250	10.1	2.182		9	8091	10.1	2.191	
Blank Titer:	0.6023	12			10	✓	227	3016	200	10.2	2.442		10				
THIO N:	0.14154	13			11	✓	228	650	175	10.5	2.729	recheck new sample set here 18-2	11				
Sample Flask Water Seal?	(Yes) No	14			12	✓	229	2047	150	10.1	3.808		12				
Reagent Change?	MnCl ₂	15			13	✓	230	3007	125	10.0	4.602		13				
(Please circle reagent that was changed prior to sampling and standardization)	NaI/NaOH	16			14	✓	231	3116	100	10.2	5.632		14				
NOTE NEW BATCH IN LOG BOOK	H ₂ SO ₄	17			15	✓	232	3104	75	11.5	6.239		15				
	KIO ₃	18			16	✓	233	708	50	13.7	6.753		16				
	THIO	19			17	✓	234 ^A	3034	25	17.4	5.606		17	82039	17.6	5.656	
Notes:	Mishra 142	20			18	✓	235	2086	10	17.9	5.757	3034	18				
	@ Surface	21			19	✓	236	2082	5	17.9	5.535		19				
	0561	22			20								20				
	48 48 99	23			21								21				
	23Aug2014	24			22								22				
	2014-250				23								23				
	128 39 99				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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Cruise and Analysis Information				Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/l)	Comments	Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/l)	Comments
Cruise Number: 2014-19				1	✓	285	1124	3214	8.4	2314		1				
Event: 49				2	✓	286	1130	3000	7.6	2284		2				
Station: P12				3	✓	287	1189	3000	7.3	2319		3				
Event Date (local): 23AUG-14				4	✓	288	1126	2500	7.7	1846		4	1178	7.2	1826	Check end point - noisy
Analysis Date (local): 25AUG-14				5	✓	289	1182	2000	7.4	1272		5				
Analyst: MJS				6	✓	290	1136	1500	7.4	0.649	20000 colorimetric, check end point noisy	6				
Stratization Date (local): 24AUG-14				7	✓	291	1114	1250	8.0	0.399		7				
KIO ₃ N: 0.0099396				8	✓	292	1144	1000	8.1	0.231		8	1128	8.3	0.227	
Standard Titer: 0.7052				9	✓	293	1110	800	8.8	0.231		9				
Blank Titer: 0.0023				10	✓	294	1105	600	9.0	0.562		10				
THIO N: 0.14154				11	✓	295	1138	400	9.5	1.255		11				
Sample Flask Water Seal? ☒ Yes				12	✓	296	1153	300	9.8	2.516		12				
Reagent Change? ☐ No				13	✓	297	1123	250	10.2	2.858		13	1146	10.6	2.845	
Reagent Change? ☐ No				14	✓	298	1158	200	10.6	3.606		14				
(Please circle reagent that was changed prior to sampling and standardization)				15	✓	299	1141	175	10.9	4.081		15				
H ₂ SO ₄				16	✓	300	1119	150	10.9	4.385		16				
NOTE NEW BATCH IN LOG BOOK				17	✓	301	1166	125	11.0	5.215		17				
KIO ₃				18	✓	302	1192	100	11.1	5.630		18				
THIO				19	✓	303	1180	75	11.6	5.951		19	1188	12.0	5.949	
Notes: METAL Box 1				20	✓	304	1150	50	13.5	6.300		20				
2132 DPH 3230				21	✓	305	1175	25	16.9	6.114		21				
23AUG-2014				22	✓	306	1127	10	18.7	5.542		22				
48 58 26				23	✓	307	1171	5	19.1	5.537		23				
130 39 94				24		308						24				

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

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Cruise and Analysis Information				Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T1 (°C)	OXY 1 (mL/L)	Comments	Nisk ID	Flask 2	Draw T2 (°C)	OXY 2 (mL/L)	Comments
Cruise Number: 2014-19				1	✓	385	3688	1404	7.6	2.711		1				
Event: 64				2	✓	386	3500	1401	6.8	2.652	small bubbles in flask	2				
Station: P16				3	✓	387	3500	1426	6.7	2.670	bubbles in flask	3				
Event Date (local): 25 AUG 2014				4	✓	388	3000	1418	6.5	2.379		4				
Analysis Date (local): 26 AUG 2014				5	✓	389	2500	1416	6.5	1.865		5				
Analyst: MG				6	✓	390	2000	1409	6.7	1.286	checked point bubbles in water	6	81446	7.1	1.233	bubbles in water
Standardization Date (local): 26 AUG 2014				7	✓	391	1500	1427	7.0	0.549		7				
KIO3 N: 0.0099396				8	✓	392	1250	1443	7.0	0.305		8				
Standard Titer: 0.7057				9	✓	393	1000	1422	7.2	0.279		9				
Blank Titer: 0.0023				10	✓	394	800	1434	7.6	0.246	most endpoint	10				
THIO N: 0.14144				11	✓	395	600	1411	8.0	0.557		11				
Sample Flask Water Seal? ☒ Yes				12	✓	396	400	1407	8.1	1.368		12				
Reagent Change? ☐ No				13	✓	397	300	1402	8.4	2.357		13	81417	8.6	2.387	
(Please circle reagent that was changed prior to sampling and standardization)				14	✓	398	250	1428	8.4	2.914		14				
NOTE NEW BATCH IN LOG BOOK				15	✓	399	200	1408	7.3	3.868		15				
NaI/NaOH				16	✓	400	175	1430	9.6		Flask broken when sampling?	16	81440	9.9	4.228	
H2SO4				17	✓	401	150	1433	10.5	4.861		17				
KIO3				18	✓	402	125	1442	10.2	5.617		18				
THIO				19	✓	403	100	1413	10.6	6.013		19				
Notes: METAL BOX 3				20	✓	404	75	1470	11.4	6.350		20	81472	11.7	6.334	
0734 25 AUG 14				21	✓	405	50	1460	12.5	6.381		21				
49 16 99				22	✓	406	25	1465	16.5	6.046		22				
134 40 03				23	✓	407	10	1457	17.7	5.684		23				
Depth 3625				24	✓	408	5	1459	17.9	5.791		24				

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

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Water Properties Group

Last Updated: March 2014

Cruise and Analysis Information			
Cruise Number:	2014 - 19		
Event:	79		
Station:	P20		
Event Date (Local):	26 AUG 2014		
Analysis Date (Local):	27 AUG 2014		
Analyst:	MJS		
Standardization Date (Local):	26 AUG 2014		
KIO ₃ N:	0.0099396		
Standard Titer:	0.71057		
Blank Titer:	0.0023		
THIO N:	0.14144		
Sample Flask Water Seal?	(Yes) No		
Reagent Change?	MnCl ₂	NaI/NaOH	H ₂ SO ₄
(Please circle reagent that was changed prior to sampling and standardization)			
NOTE NEW BATCH IN LOG BOOK	KIO ₃		THIO
Notes:	METAL BOX #1 Depth 3145 1537 49 3396 138 3999		

Nisk ID	Nisk Int V	Sample ID	Flask 1	Depth (m)	Draw T 1 (°C)	OXY 1 (mL/L)	Comments
1	✓	470	1124	4027	7.5	2949	check endpoint bubbles in surface
2	✓	471	1130	3500	6.7	2796	
3	✓	472	1189	3500	6.6	2801	bubbles in flask check endpoint water
4	✓	473	1178	3000	6.7	2439	messy endpoint
5	✓	474	1182	2500	6.7	1868	messy endpoint
6	✓	475	1136	2000	6.6	1267	
7	✓	476	1114	1500	6.8	0479	
8	✓	477	1144	1250	7.4	0401	
9	✓	478	1110	1000	7.5	0364	
10	✓	479	1105	800	7.8	0493	
11	✓	480	1138	600	8.0	0686	Take sample outside to cool down
12	✓	481	1153	400	8.3	1335	
13	✓	482	1123	300	8.3	1933	
14	✓	483	1158	200	8.4	2676	recheck
15	✓	484	1141	200	8.9	3449	recheck 7.2°C
16	✓	485	1119	175	8.9	3925	
17	✓	486	1106	150	9.4	4349	
18	✓	487	1192	125	9.2	5266	
19	✓	488	1180	100	9.8	6002	
20	✓	489	1188	75	10.4	6218	recheck 10.5°C
21	✓	490	1175	50	11.7	6486	
22	✓	491	1127	25	16.2	5821	
23	✓	492	1171	10	16.9	5739	
24	✓	493	1142	5	17.1	5734	

Nisk ID	Flask 2	Draw T 2 (°C)	OXY 2 (mL/L)	Comments
1				
2				
3	1126	6.5	2796	messy endpoint sample dissolving
4				
5				
6				
7				
8	1128	7.5	0420	
9				
10				
11				
12				
13	1146	8.2	1936	
14				
15				
16				
17				
18				
19				
20	1150	10.4	6057	titration error 25mL, due to bubble on probe removed bubble + ran again titration need to add volume of 211.15L titration + 2nd to 1st endpoint
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: March 2014

Cruise and Analysis Information				Nisk ID				Nisk Int S				Sample ID				Flask 1				Depth (m)				Draw T 1 (°C)				OXY 1 (mL/l)				Comments			
Cruise Number: 2014-19				1				✓				695				1404				4317				6.4				3.219							
Event: 164				2				✓				646				1401				4000				5.7				3.154							
Station: P26				3				✓				647				1418				3500				5.4				2.905							
Event Date (local): 28 08 14				4				✓				648				1410				3000				5.3				2.498							
Analysis Date (local): 30 AUG 2014				5				✓				649				1409				2500				5.6				1.888							
Analyst: MG				6				✓				650				1416				2000				5.7				1.211				redox < 0.95 / Trace bubble on plastic cover body of			
Standardization Date (local): 30 AUG 2014				7				✓				651				1427				1500				6.0				0.555							
KIO ₃ N: 0.0095396				8				✓				652				1443				1250				6.2				0.457							
Standard Titer: 0.7048				9				✓				653				1434				1000				6.6				0.487							
Blank Titer: 0.0023				10				✓				654				1411				800				6.8				0.457							
THIO N: 0.014162				11				✓				655				1407				600				7.1				0.523							
Sample Flask				12				✓				656				1402				400				7.2				1.092							
Water Seal? No				13				✓				657				1417				300				7.2				1.585							
Reagent Change? MnCl ₂				14				✓				658				1428				250				7.3				2.120							
(Please circle reagent that was changed prior to sampling and standardization)				15				✓				659				1440				200				7.6				2.960							
NOTE NEW BATCH IN LOG BOOK				16				✓				660				1443				175				8.0				3.347							
H ₂ SO ₄				17				✓				661				1442				150				7.9				4.190							
KIO ₃				18				✓				662				1413				125				8.1				5.271							
THIO				19				✓				663				1472				100				9.1				6.025							
Notes: 28th 4229				20				✓				664				1460				75				10.3				6.585							
METAL BOX 3				21				✓				665				1465				50				11.0				6.757							
1955				22				✓				666				1457				25				14.6				6.091							
28 AUG 2014				23				✓				667				1459				10				15.1				6.150							
50 0 64				24				✓				668				3073				5				15.1				6.110							
144 59 92																																			

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.