

EQA round: ABR2/23 - Acid-base Status and Electrolytes

Deadline: 28.7.2023

Setup: all data

RoM = robust average

SD = standard deviation

CV = coefficient of variation

N_{tot} = total number of the resultsN_{out} = number of the results removed before calculation

AV = assigned value

CVP = consensus of all participants

U_{AV} = expanded uncertainty of the assigned value (k = 2)D_{max} = acceptable difference

LL = lower limit

UL = upper limit

N_{eva} = number of the results assessedN_{suc} = number of successful resultsS_{rel} = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
(135) Potassium cation (ISE)	[mmol/L]				70							70	70	100
Sample A												70	70	100
All results		4,06	0,058	1,4	70	0	CVP	4,06	0,017	8%	3,73	4,39	70	
Sample B												70	70	100
All results		3,27	0,053	1,6	70	0	CVP	3,27	0,015	8%	3	3,54	70	
(139) Glucose	[mmol/L]				60							60	60	100
Sample A												60	60	100
All results		8,84	0,33	3,7	60	0	CVP	8,84	0,1	15%	7,51	10,2	60	
Sample B												60	60	100
All results		12,2	0,42	3,4	60	0	CVP	12,2	0,13	15%	10,3	14,1	60	
(136) Chloride anion (ISE)	[mmol/L]				68							68	68	100
Sample A												68	68	100
All results		103	2	1,9	68	0	CVP	103	0,59	7%	95,7	111	68	
Sample B												68	68	100
All results		93,7	1,9	2	68	0	CVP	93,7	0,56	7%	87,1	101	68	
(169) Lactate	[mmol/L]				61							61	60	98
Sample A												61	60	98
All results		2,81	0,14	5,1	61	0	CVP	2,81	0,045	18%	2,3	3,32	61	
Sample B												61	60	98
All results		4,08	0,17	4,2	61	0	CVP	4,08	0,054	18%	3,34	4,82	61	
(132) pCO₂	[kPa]				92							92	92	100
Sample A												92	92	100
All results		5,32	0,19	3,5	92	0	CVP	5,32	0,047	12%	4,68	5,96	92	
Sample B												92	92	100
All results		6,33	0,22	3,4	92	0	CVP	6,33	0,055	12%	5,57	7,09	92	
(131) pH	[-]				92							92	92	100
Sample A												92	92	100
All results		7,41	0,009	0,12	92	0	CVP	7,41	0,002	0,8%	7,35	7,47	92	
Sample B												92	92	100
All results		7,34	0,008	0,11	92	0	CVP	7,34	0,002	0,8%	7,28	7,4	92	
(133) pO₂	[kPa]				92							92	89	97
Sample A												92	91	99
All results		17,3	0,98	5,7	92	0	CVP	17,3	0,25	12%	15,2	19,4	92	
Sample B												92	90	98
All results		15,4	1,1	7	92	0	CVP	15,4	0,28	17%	12,7	18,1	92	
(134) Sodium cation (ISE)	[mmol/L]				69							69	68	99
Sample A												69	68	99
All results		143	2,4	1,7	69	0	CVP	143	0,7	5%	135	151	69	
Sample B												69	68	99
All results		134	1,9	1,4	69	0	CVP	134	0,57	5%	127	141	69	
(137) Calcium cation (ISE)	[mmol/L]				80							80	80	100
Sample A												80	80	100
All results		0,957	0,029	3,1	80	0	CVP	0,957	0,008	±0,1	0,857	1,06	80	
Sample B												80	80	100
All results		1,18	0,028	2,3	80	0	CVP	1,18	0,008	10%	1,06	1,3	80	