

IFA-Proficiency Testing Scheme for Water Analysis

Round N167
Major Ions

Sample Dispatch: 22 May 2023

In accordance with the procedure: AVKPS.01

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and Life Sciences, Vienna**
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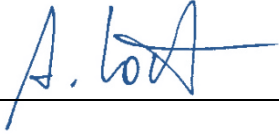
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Report: 1st edition, created on 28 June 2023 by Ing. Uta Kachelmeier
155 pages

This report summarises the results of round N167 (major ions) within the IFA-Proficiency Testing Scheme for Water Analysis. The samples N167A and N167B were distributed to 48 participants on Monday, 22 May 2023. Each participant received two samples of 1000 mL, each filled into two 500 mL PET bottles.

Closing date for reporting results to the IFA-Tulln was Friday, 23 June 2023. All participants submitted results. To make the participants anonymous, each laboratory obtained a letter code by random.

Samples

The samples consisted of artificial ground water. For sample preparation, ultrapure water was spiked with solutions of salts and standards in order to simulate the ionic composition of natural Austrian ground water. The following substances were added to the samples: CaCO_3 , CaCl_2 , $\text{Ca}(\text{NO}_3)_2$, MgSO_4 , $\text{Mg}(\text{NO}_3)_2$, NaCl , NaHCO_3 , Na_2SO_4 , K_2SO_4 , KHCO_3 , diethyl ethylphosphonate ($\text{C}_6\text{H}_{15}\text{PO}_3$, for total-P), potassium hydrogen phthalate (for DOC), sodium salicylate (for KMnO_4 -Index) and certified standard solutions of NaNO_2 , Na_2SiO_3 , NH_4Cl , KH_2PO_4 and H_3BO_3 . Both samples, N167A and N167B, contained free CO_2 , which was used for dissolution of CaCO_3 and neutralisation of Na_2SiO_3 (substance for matrix). No other substances (e.g. preservatives) were added. The samples were stabilised by sterile filtration and low temperature.

Homogeneity, accuracy and stability tests at the IFA-Tulln

The samples were checked for homogeneity and accuracy at the IFA-Tulln before dispatch. The results of the measurements are listed in the result tables and the parameter oriented part of the report ("IFA result").

To verify stability, the parameters DOC, NH_4^+ , NO_2^- , o-PO_4^{3-} and KMnO_4 -Index of samples N167A and N167B were determined in several samples four weeks after shipment. The results are listed in the result tables ("Stability test") and the parameter oriented part of the report ("IFA result"). Stability tests for all other parameters will be carried out together with the accuracy tests of the following round (N168).

According to our experience, the samples remain stable up to 18 months for the parameters conductivity, total hardness, alkalinity, Ca^{2+} , Mg^{2+} , Na^+ , K^+ , NO_3^- , Cl^- , SO_4^{2-} , boron and HCO_3^- when stored at 4°C in the dark. For the parameters NH_4^+ , NO_2^- , o-PO_4^{3-} , total-P, DOC and KMnO_4 -Index the samples remain stable several weeks, whereas the first changes normally are observed for NH_4^+ .

Results

Data evaluation was based on target concentrations that were calculated from the weights of the substances and standards used to produce the samples. Their uncertainty intervals correspond to the expanded uncertainty (coverage factor $k = 2$) as described in the EURACHEM/CITAC Guide "Quantifying Uncertainty in Analytical Measurement, 3rd Edition (2012)".

The target value of the electrical conductivity was set to the laboratory mean (conventional value). When calculated from more than 20 results with a standard deviation between the laboratories of about 1 %, the conventional value has a confidence interval that is smaller than the uncertainty of our estimate calculated from the target concentrations by Debye-Hückel's theory: 2.4 % ($p = 95$ %). However, the calculated electrical conductivity was $534 \mu\text{S}/\text{cm}$ in sample N167A and $444 \mu\text{S}/\text{cm}$ in sample N167B.

For the pH no target values can be assigned. The results can be compared on the tables. In this kind of samples containing CO_2 , the pH tends to increase slowly over time.

Total phosphorus after digestion had to be determined according to DIN EN ISO 6878. Diethyl ethylphosphonate (C₆H₁₅PO₃), which can be determined as phosphate only after oxidative digestion and potassium dihydrogen phosphate (KH₂PO₄) were used for preparation. The target values of total-P were calculated from the weights of the two substances. The results were given in mg/L PO₄³⁻.

The concentrations of sodium salicylate, which was used as standard substance for the KMnO₄-Index, were 2.68 mg/L in sample N167A and 4.43 mg/L in sample N167B. Assuming complete oxidation to carbon dioxide, nitrate and water (considering nitrite), the theoretical values were 3.76 mg/L O₂ (N167A) and 6.20 mg/L O₂ (N167B). However, the laboratory mean values were taken as reference values in this report: 3.51 mg/L O₂ for N167A and 5.64 mg/L O₂ for N167B.

No phosphorus substances were added to sample N167A and Ammonium was not added to sample N167B in order to check the analytical blank values. The target concentrations were set to <0.01 mg/L NH₄⁺, <0.009 mg/L o-PO₄³⁻ and <0.009 mg/L total-P (as PO₄³⁻), which meets the minimum quantifiable values defined by the Austrian ground and river water monitoring program and the quantification limits of the analytical methods applied in the IFA.

Recoveries for individual laboratory results and overall mean values are related to the target concentrations. The results were tested for outliers by application of the Hampel outlier test (level of significance 99 %).

The recoveries of the target concentrations, calculated from outlier-corrected data mean values ranged between 96.2 % (total-P (as PO₄) in sample N167B) and 107.6 % (DOC in sample N167A).

The between laboratory CVs covered the range between 0.8 % (conductivity in sample N167B) and 9.7 % (ammonium in sample N167A).

All confidence intervals of the outlier-corrected laboratory mean values except for DOC in sample N167A (107.6 % ± 3.8 %) encompass the corresponding target values with their uncertainties. For all other parameters, statistically, no difference could be detected between theoretical target concentrations and outlier corrected laboratory means.

z-scores

The most common approach is to form the z-score given by

$$z = \frac{x_i - X}{\sigma_{PT}}$$

z	z-score
x_i	result of laboratory
X	target value or mean value („consensus value“)
σ_{PT}	standard deviation for proficiency assessment

Thus, the z-score is the ratio of the estimated bias (difference between result and target value) and a standard deviation. The standard deviations for proficiency assessment were determined from the results of all interlaboratory comparisons that have been organised by the IFA-Tulln from 2012 to 2022. They represent average performance data of all former participating laboratories.

This approach was chosen, because standard deviations of the outlier-corrected measurements substantially vary between individual proficiency test rounds. Averaging standard deviations from proficiency testing rounds of several years can provide standard deviations for proficiency assessment on a broad data basis. It is therefore more suitable than a standard deviation taken directly from the interlaboratory comparison (EN ISO/IEC 17043:2010, B.3.1.3). Another advantage of previously determined standard deviations is that the participants can foresee which z-scores can be expected by their routine analysis methods before participation.

Calculation example:

A laboratory found 7.00 mg/L for the parameter DOC (recovery of 116 %). The target value for the DOC was 6.02 mg/L (100 %). The relative standard deviation for proficiency assessment is given in the table below (as well as in the annual program www.ifatest.eu) by 5.4 %, which is 0.33 mg/L DOC, when based on the target value.

$$z = \frac{x_i - X}{\sigma_{pt}} = \frac{7.00 \text{ mg/L} - 6.02 \text{ mg/L}}{0.33 \text{ mg/L}} \approx 3.0 \quad \text{or} \quad \frac{116\% - 100\%}{5.4\%} \approx 3.0$$

z	z-score
x_i	7.00 mg/L equivalent to 116 % (value of the laboratory)
X	6.02 mg/L equivalent to 100 % (target value)
σ_{pt}	0.33 mg/L equivalent to 3.0 % (standard deviation for proficiency assessment, see table below)

In the case of recalculation, deviations in the last digits may occur due to the fact that rounded values are given in the report for clarity.

The following table lists the z-score criteria as relative standard deviation and their limits of applicability. Z-scores were only calculated, if the target values were higher than these limits.

Parameter	standard deviation for proficiency assessment	Lower limit
Alkalinity $K_{S4.3}$	1.9 %	0.2 mmol/L
Ammonium	11 %	0.01 mg/L
Boron	7.3 %	0.012 mg/L
Calcium	3.2 %	9 mg/L
Chloride	2.9 %	2 mg/L
el. Conductivity	1.2 %	50 μ S/cm
DOC	5.4 %	1 mg/L
Hydrogen carbonate	2.4 %	20 mg/L
KMnO ₄ -Index	10 %	1 mg/L
Magnesium	3.5 %	1 mg/L
Nitrate	3.1 %	2 mg/L
Nitrite	5.4 %	0.01 mg/L
Orthophosphate	9.5 %	0.015 mg/L
Potassium	4.3 %	0.5 mg/L
Sodium	3.2 %	1 mg/L
Sulphate	3.1 %	3 mg/L
Total hardness	2.8 %	0.1 mmol/L
Total-P (as PO ₄ ³⁻)	9.4 %	0.015 mg/L

Normally, a classification based on z-scores is made this way:

z-Score	Classification
≤ 2	satisfactory
$2 < z < 3$	questionable
≥ 3	unsatisfactory

The z-scores are listed in the parameter-oriented evaluation in the tables next to the recoveries. Additionally, each laboratory receives a sheet on which the obtained z-scores are summarized and graphically presented. The standard deviations for proficiency assessment are given in concentration units there.

An overview table of all z-scores can be found after the result tables in the parameter-oriented part.

Illustration of results

An explanation to the illustration of the results is given on the following page.

The **laboratory oriented part** contains the measurement results and reported uncertainties of each individual laboratory for all parameters together with the achieved recoveries in graphical and tabular form. This part of the report also lists tables with the results originally reported by the laboratories.

In the **parameter oriented part** the reported results and corresponding uncertainties are illustrated together with recoveries of the target values and the z-scores for each parameter and all laboratories. This information is presented in graphical and tabular form.

Results, which were identified as outliers by the Hampel test are marked with an asterisk (*). These values were not considered for the calculation of statistical parameters (mean values, standard deviations and confidence intervals). Moreover, the parameter oriented part contains the uncertainties of the target values. The uncertainty intervals correspond to the expanded uncertainty (coverage factor $k = 2$) as described in the EURACHEM / CITAC Guide "Quantifying Uncertainty in Analytical Measurement", 3rd Edition (2012)". The uncertainty interval of the reference concentration is illustrated in the graphs as a grey band around the 100 % recovery line.

Results, for which no recoveries could be calculated, are illustrated by one of the following symbols: **FN** (false negative), **FP** (false positive) or • - symbol.

- "FN": A result is considered false negative when the "< result" reported is lower than the corresponding target value or the measured value was given as "0" when the substance was added.
- "FP": False positive results can only be obtained for compounds that were evaluated on the basis of a "< target value". A result is termed FP if it does not include (strike) the "< target" with its measurement uncertainty.
- "•": All other results for which no recoveries can be calculated are illustrated by this symbol

Tulln, 28 June 2023

Sample M106A

Parameter Copper

Target value ± U (k=2) 4,79 µg/l ± 0,13 µg/l

IFA result ± U (k=2) 4,79 µg/l ± 0,38 µg/l

Stability test ± U (k=2) 4,69 µg/l ± 0,38 µg/l

Obtained from sample preparation, U=uncertainty
Determined at IFA prior to shipment of samples
Determined at IFA 3 weeks after sample dispatch

Lab Code	Result	±	Unit	Recovery	z-Score
A	5.16	0.4128	µg/l	108%	0.90
B	4.22	0.42	µg/l	88%	-1.38
C	4.45	0.13	µg/l	93%	-0.83
D			µg/l		
E			µg/l		
F	4.10	0.08	µg/l	86%	-1.68
G			µg/l		
H			µg/l		
I	4.75	0.74	µg/l	99%	-0.10
J	<5		µg/l	.	.
K	4.76		µg/l	99%	-0.07
L	<10		µg/l	.	.
M	4.8	0.5	µg/l	100%	0.02
N	3.7	0.4	µg/l	77%	-2.65
O	4.47	0.447	µg/l	93%	-0.78
P	6.0		µg/l	125%	2.94
Q	4.17	0.2	µg/l	87%	-1.51
R	4.6	0.8	µg/l	96%	-0.46
S	4.44	0.67	µg/l	93%	-0.85
T			µg/l		
U	4.675	0.935	µg/l	98%	-0.28
V	5.0	0.50	µg/l	104%	0.51
W	3.54	0.3	µg/l	74%	-3.03
X	7.108 *	0.749	µg/l	148%	5.63
Y	<10		µg/l	.	.
Z			µg/l		
AA	<3.0		µg/l	FN	
AB	3.775	0.107	µg/l	79%	-2.46
AC	<10.0		µg/l	.	.

Recovery of target value in percent

z-Score of the laboratory

An asterik indicates a result detected as outlier by Hampel test

Interval expected to encompass target value as stated by participant

	All results	Outliers excl.	Unit
Mean ± CI(99%)	4,65 ± 0,57	4,51 ± 0,42	µg/l
Recov. ± CI(99%)	97,1 ± 12,0	94,1 ± 8,8	%
SD between labs	0,84	0,59	µg/l
RSD between labs	18,1	13,2	%
n for calculation	18	17	

Between laboratory standard deviation

Laboratory mean and recovery of target value with corresponding confidence intervals (p=99%)

Number of results used for calculation of statistic parameters

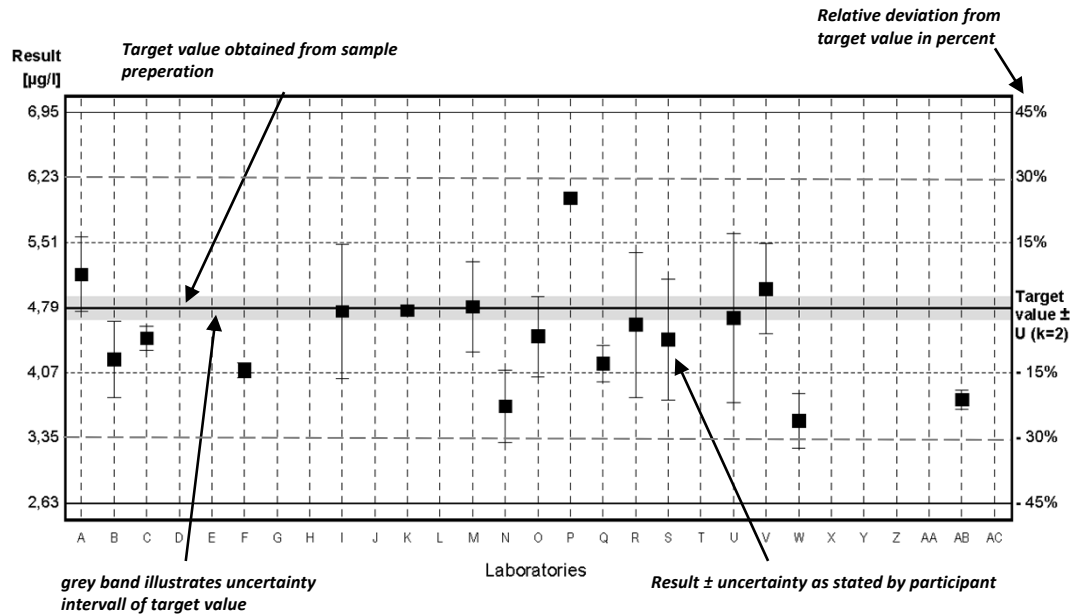
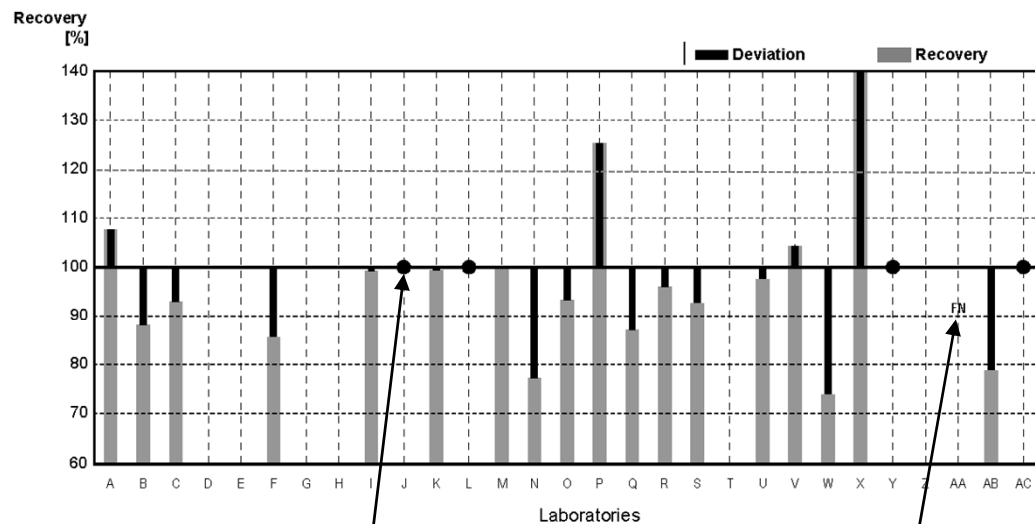


Diagram 1: Measurement results and their uncertainties



Result neither possible to calculate recovery nor false positive or false negative

False negative: reported „<-result“ is lower than target value

Diagram 2: Recoveries and deviations from target values

EXPLANATION

Illustration of Results Tables and Parameter Oriented Part

Round N167
Major Ions

Sample Dispatch: 22 May 2023

Results Sample N167A

	pH	Cond.	total-Hardn.	K _{S 4.3}	HCO ₃ ⁻	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁺	NO ₃ ⁻
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		544	1.94	2.36	140.9	60.1	10.79	24.9	8.81	37.2
IFA result	6.50	543	2.04	2.30	137	64	11.1	25.6	8.9	36.4
Stability test										
A	6.6	548	1.90	2.434	145	58.098	11.025	25.223	8.922	37.33
B	6.77	524.3	1.93	2.343		61.06	9.81			36.7
C	6.4	541	1.94	2.30	137	60.0	10.7	24.7	9.00	37.9
D	6.73	545	1.87	2.31	141	56.3	11.3	25.8	8.48	36.3
E	6.47	545	1.81	2.38	145	57.6	9.88	24.6	7.61	36.5
F	6.55	544	1.97	2.33	139	61.9	10.3	25.6	9.10	36.3
G	6.34	525	1.95	2.20	134	58.3	10.0	22.4	8.37	46.0
H	6.6	543	2.04	2.31	138	64.3	10.7	24.3	9.1	39.2
I	6.74	549	1.93	2.37	140.3	59.21	10.69	24.44	8.69	35.45
J	6.55	534	1.97	2.33	142	61	11.0	24.9	9.2	36.8
K	6.80	546	1.91	2.36	141	59.4	10.5	24.5	8.67	35.3
L	6.7	552	1.85	2.30	142.8	57	10.6	23.5	8.8	39.5
M	6.39	538	1.809	2.30	140.3	55.5	10.3	23.3	8.17	35.4
N	6.55	556	1.90	2.39	146	58.8	10.5	24.3	8.81	36.9
O	6.4	545	1.94	2.29	139.7	58.9	11.3	25.5	8.90	36.4
P	6.5	543	10.7	2.334	139	59.2	10.42	23.74	8.388	36.4
Q	6.82	528	1.94	2.40	143.5	58.9	11.4	25.0	8.88	36.2
R	6.9									21.36
S	6.5	545		2.31	141					36.9
T	6.8	548	1.97			61.1	10.8	25.2	8.73	36.7
U	6.427	552	3.88	2.25	137	59.8	10.9	24.2	8.5	36.2
V	6.5	484		2.27						36.8
W	6.43	538	1.952	2.34		60.40	10.81	26.84	8.92	35.35
X										35.41
Y										>30
Z	6.43	544	1.99	2.27	135.44	61.93	10.84	25.78	9.24	35.12
AA	6.7	546	1.92	2.28	139.1	59.58	10.62	24.66	8.69	36.7
AB	6.34	546		2.37	141					35.6
AC						58	10.9	24.3	8.5	
AD										
AE	6.43	540	1.96	2.36	144	60.3	11.2	24.9	8.65	36.703
AF	6.37	540	1.92	2.31	137.81	59.55	10.64	24.47	8.83	36.51
AG	6.4	543	1.93	2.30	140.3	59.6	10.7	24.3	8.8	38.3
AH	6.43	544	1.92	2.32	138	59.3	10.6	24.8	8.78	36.1
AI	6.57	539	2.00	2.31	138	61.7	11.4	26.0	8.7	35.5
AJ	6.43	535	1.95	2.29	140	60	11.2	25.6	6.8	37.0
AK	6.35	541	1.96	2.42		58.7	10.6	24.7	8.7	36.6
AL	6.80	531.0	1.92	2.40	146.44	59.88	10.5	25.0	8.41	32.5
AM		545.7	10.8	2.396	143.1	58.9	11.0	24.8	9.2	37.1
AN						59.06	10.51	24.18	8.37	
AO	6.39	540	1.93	2.31	141	60.1	10.5	23.9	8.95	35.6
AP	6.7	546	1.89	2.34	143	61	10.8	26.4	9.1	38.7
AQ	6.3	544	1.94	2.30		59.0	11.3	25.6	8.88	36.6
AR	6.38	544	2.006	2.64	161	61.37	11.44	25.76	8.93	37.50
AS	6.48	541	1.95	2.31	138	60.3	10.7	24.4	8.68	36.7
AT	6.53	545	1.98	2.28	139	60.15	10.59	24.39	8.98	36.4
AU	6.7	548	2.04	2.33	142	63	11.3	25.6	9.0	35.9
AV						59.5	11.0	24.9	8.85	

Measurement Uncertainties Sample N167A

	pH ±	Cond. ±	total- Hardn. ±	K _{S 4.3} ±	HCO ₃ ⁻ ±	Ca ²⁺ ±	Mg ²⁺ ±	Na ⁺ ±	K ⁺ ±	NO ₃ ⁻ ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		2	0.02	0.03	1.7	0.9	0.14	0.3	0.06	0.7
IFA result	0.20	7	0.08	0.09	6	3	0.6	1.3	0.4	2.0
Stability test										
A	0.19	30.5	0.19	0.14	11.6	5.80	1.10	2.52	0.89	1.87
B	0.05	0.275	0.06	0.06		0.82	1.53			0.482
C	0.3	22	0.1	0.1	6	5	1.3	4	1.2	3
D	0.67	55	0.37	0.23	14	11	2.25	5.2	1.7	5.4
E	0.36	18.5	0.14	0.10	8.57	4.38	0.67	2.21	0.56	2.96
F	0.0655	0.427	0.0412	0.0957	2.79	0.745	0.896	0.235	0.346	0.455
G	0.13	13	0.25	0.05	3	7.6	1.2	2.7	1.1	1.7
H	0.66	32.58	0.153	0.22	13.1	3.86	1.28	1.58	0.91	4.12
I	0.25	14	0.02	0.01	2.8	0.59	0.11	0.49	0.51	1.77
J	0.06	12	0.16	0.10	6.4	3.1	0.69	1.9	0.32	1.8
K	0.272	21.8	0.344	0.094	5.64	10.7	1.89	4.41	1.56	3.18
L	0.083	18	0.15	0.069	4.3	4.7	0.75	1.7	0.41	1.9
M										
N	0.2	56	0.19	0.24	15	5.9	1.0	2.4	0.88	3.7
O	0.1	10	0.19	2.3	13.97	12	2.3	3.8	1.8	3.6
P	0.2	15		0.156		4.1	0.9	2.3	0.8	3.8
Q		11	0.16	0.22	12.9	5.9	1.5	1.25	0.44	1.1
R	0.02									0.17
S	0.1	15.3		0.05	2.96					1.6
T	0.34	27.4	0.300			9.17	1.08	3.78	1.31	3.67
U	0.212	16.0		0.1125		8.97	1.635	3.63	1.275	5.43
V	0.1									0.828
W	0.02	30	0.05	0.02		0.6	0.6	0.3	0.06	0.5
X										0.5
Y										
Z	0.1	4.51		0.22		6.1	1.0	2.5	0.9	3.5
AA	0.2	54.6		0.342	20.87	5.958	1.062	2.466	0.869	1.47
AB	0.0085	3.87		0.067	2.04					2.44
AC										
AD										
AE	0.006	0.577	0.025	0.006	0.36	0.9	0.176	0.252	0.161	0.1
AF	0.25	11.9	0.08	0.05	2.89	2.32	0.50	1.17	0.57	2.45
AG	0.2	22	0.10	0.15	8.8	2.8	0.7	1.2	0.4	3.7
AH	0.30	16	0.16	0.09	6	3.0	0.7	1.0	0.70	2.2
AI	0.20	53.9	0.20	0.23	7	3.1	0.6	2.6	0.9	2.4
AJ	0.05	12	0.16	0.11	7	3	0.5	1.1	0.3	1.4
AK	0.091	27.1	0.10	0.12		1.76	0.36	0.32	0.26	0.94
AL	0.2	25	0.2	0.25	15	5.0	1.0	2.5	0.8	3
AM										
AN						2.06	0.88	1.51	0.29	
AO	0.19	16	0.29	0.18	11	9.0	1.3	3.1	1.3	3.6
AP	0.2	30	0.19	0.25		6.1	1.1	2.6	0.9	3.9
AQ	0.1	10	0.39	0.23		12	2.3	3.8	1.8	3.7
AR										
AS										
AT	0.32	17.2	0.30	0.77	47.2	5.02	0.852	1.85	0.908	3.91
AU	0.2	11	0.14	0.12	11	5	0.9	3.1	1.0	2.9
AV						4.85	1.23	1.18	0.806	

Results Sample N167A

	NO ₂ ⁻	NH ₄ ⁺	Cl ⁻	SO ₄ ²⁻	o-PO ₄ ³⁻	Boron	DOC	total-P (as PO ₄ ³⁻)	KMnO ₄ - index
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0404	0.070	54.8	34.7	<0.009	0.1265	1.89	<0.009	3.51
IFA result	0.0396	0.070	54.1	34.8	<0.009	0.115	1.92	<0.009	3.66
Stability test	0.0401	0.069			<0.009		2.04		3.41
A	0.0420	0.0700	55.37	34.96	<0.01	0.120	2.05	<0.01	3.43
B			56.6	35.0					3.856
C	0.0420	0.068	56.5	35.5	<0.01		2.04	<0.013	
D	0.0388	0.070	51.0	35.3	<0.1	0.118	2.33	<31	
E	0.0400	0.0658	54.7	34.6	<0.02	0.1177	2.63	<0.02	3.49
F	0.0422	0.0792	54.5	34.2	<0.0150	0.128	1.91	<0.0150	3.80
G	0.0493	0.734	52.3	31.7	<0.061		2.17	<0.061	3.49
H	0.0377	0.0776	59.2	33.9	<0.060	0.120	1.90	<0.060	
I	0.0400	0.0590	50.62	34.16	<0.009		3.518	<0.009	3.445
J	0.057	0.0380	56	34.7	<0.01		2.81	<0.01	3.88
K	0.0394	0.0751	52.4	32.7	<0.01	0.121	2.10	<0.05	3.84
L	0.0390	0.070	59	36.7	<0.02		1.71	<0.15	3.77
M	0.0390	0.0720	53.2	33.8	0.124	0.125	2.25		2.76
N	0.0410	0.0598	54.0	34.4	<0.008	0.114	2.21	<0.015	3.62
O	0.0401	0.0655	54.2	34.1	<0.015	0.123	2.01	<0.015	
P	0.0406	0.087	54.0	34.5		0.130	1.92	<0.03	
Q	0.0410	0.075	53.6	34.2	<0.040	0.1445	1.93	<0.03	3.46
R	0.80	0.068	44.90	31.02	0.311				
S	0.0400	0.059	54.3	34.7			2.06		
T	0.0360	0.072	54.6	34.2	<0.046	0.125	2.06	<0.015	
U	0.0413	0.0588	54.3	34.4	<0.03	0.114	2.156	<0.03	
V	0.0415	0.074	54.3	35.3	<0.01			0.0195	
W	0.0314	0.0735	56.40	35.04			2.20		
X			52.6						
Y		0.0626			<0.019			<0.02	
Z	0.0410	0.064	51.80	31.48	<0.001	0.130	2.03	<0.003	
AA	0.0390	0.068	55.07	35.86	0.0060	0.138	2.00	<0.006	3.40
AB	0.0411	0.080	55		<0.006			<0.006	
AC		0.0675			<0.0100	0.123	2.03		3.46
AD									3.30
AE	0.0384	0.0613	54.223	34.555	<0.020	0.112	1.76	<0.020	3.31
AF	0.0403	0.0618	54.41	34.00			1.955		3.46
AG	0.0412	0.0755	57.0	36.1	<0.010	0.126	1.98	<0.010	
AH	0.0421	0.071	55.2	35.4	<0.006	0.119	1.88	<0.006	
AI	0.0411	0.074	54.0	35.7	<0.006	0.123	1.93	<0.005	3.67
AJ	0.0396	0.060	56	35.9	<0.01		2.04	<0.01	3.55
AK	0.0401	0.081	53.9	34.4	<0.003	0.109		<0.003	
AL	0.036	0.068	53.0	32.8	<0.04	0.130	2.0	<0.04	3.05
AM	0.0420	0.070	56.6	35.4	<0.03	0.125	2.10	<0.015	4.20
AN		0.065			<0.010			<0.02	
AO	0.0392	0.0692	56.0	33.6	<0.015	0.132	2.22	<0.015	3.63
AP	0.0370	0.072	55	32.3					3.58
AQ	0.0404	0.0668	54.5	34.3		0.122			3.37
AR	0.080	0.080	55.49	35.22	0.0133	0.1207	1.94		3.76
AS	0.0412	0.075	53.2	35.8	<0.01	0.126	1.919	<0.03	2.99
AT	0.0410	0.094	53.5	34.0	<0.02	0.123	2.39	<0.02	1.70
AU	0.0420	0.073	54	33.9	<0.009		1.90	<0.009	3.30
AV									

Measurement Uncertainties Sample N167A

	NO ₂ ⁻ ±	NH ₄ ⁺ ±	Cl ⁻ ±	SO ₄ ²⁻ ±	o-PO ₄ ³⁻ ±	Boron ±	DOC ±	total-P (as PO ₄ ³⁻) ±	KMnO ₄ - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0009	0.004	1.2	0.4		0.0012	0.04		0.12
IFA result	0.0020	0.002	2.0	0.9		0.009	0.09		0.54
Stability test	0.0020	0.002					0.09		0.51
A	0.004	0.007	2.77	1.75		0.01	0.41		0.545
B			1.074	7.4					0.588
C	0.003	0.007	4	3			0.3		
D	0.0058	0.02	7.7	5.3		0.024	0.70		
E	0.0019	0.0045	1.75	1.56		0.0108	0.40		0.49
F	0.00088	0.00125	1.29	0.534		0.00183	0.0836		
G	0.0017	0.039	2.6	1.5	0.005		0.13	0.005	0.35
H	0.00377	0.00776	5.33	3.05		0.0168	0.114		
I	0.0040	0.0035	3.04	1.02			0.528		0.413
J	0.0084	0.0028	4.4	2.1			0.47		0.24
K	0.004	0.007	4.72	2.94		0.022	0.189		0.346
L	0.0010	0.004	2.8	1.9			0.37		0.38
M									
N	0.0041	0.0060	5.4	3.4		0.011	0.22		0.72
O	0.0074	0.0106	5.4	3.4		0.031	0.20		
P	0.0088	0.035	7.6	3.3		0.014	0.36		
Q	0.004	0.011	1.6	1.0		0.01445	0.39		0.35
R	0.10	0.012	1.80	1.04	0.070				
S	0.003	0.006	3.96	0.97			0.016		
T	0.0018	0.0072	5.46	3.42		0.0063	0.412		
U	0.0083	0.0059	8.145	5.16		0.04	0.5395		
V	0.002	0.002	1.41						
W	0.015	0.080	0.25	3.0			0.03		
X			0.6						
Y		0.00150							
Z	0.004	0.006	5.2	3.1		0.0130	0.2		
AA	0.0059	0.0068	2.754	1.79	0.00090	0.0166	0.160		0.544
AB	0.0041	0.012	0.55		0			0	
AC		0.00635			0.00281		0.508		0.799
AD									
AE	0.001	0.001	2.165	0.089		0.003	0.015		0.040
AF	0.003	0.010	2.56	1.70			0.34		0.73
AG	0.0049	0.0133	4.4	2.9		0.012	0.47		
AH	0.0035	0.007	2.8	2.2		0.012	0.17		
AI	0.0062	0.013	2.7	1.8		0.012	0.19		0.55
AJ	0.0029	0.008	3	1.4			0.26		0.48
AK	0.0019	0.016	1.58	0.95		0.0116			
AL	0.004	0.007	5	3		0.013	0.2		0.3
AM									
AN		0.003			0.0001			0.0066	
AO	0.0043	0.0055	5.6	5.4		0.017	0.44		0.54
AP	0.004	0.007	5.5	3.2					0.40
AQ	0.010	0.018	5.45	3.4		0.031			0.85
AR									
AS									
AT	0.006	0.014	3.05	3.13		0.0123	0.115		0.40
AU	0.005	0.019	4	2.0			0.48		0.2
AV									

Results Sample N167B

	pH	Cond.	total-Hardn.	K _{S 4.3}	HCO ₃ ⁻	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁺	NO ₃ ⁻
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		444	1.321	1.294	75.9	39.6	8.07	30.8	6.98	51.3
IFA result	6.36	443	1.40	1.27	74	42.0	8.5	32.3	7.2	50
Stability test										
A	6.58	446	1.29	1.315	77.2	38.120	8.243	30.982	7.062	50.88
B	6.68	427.6	1.32	1.286		40.03	7.65			50.5
C	6.3	443	1.31	1.263	74.0	39.3	8.0	30.7	7.11	52.4
D	6.53	446	1.28	1.28	78.2	37.3	8.40	31.5	6.78	48.8
E	6.43	444	1.21	1.32	80.2	37.7	7.25	30.5	6.21	50.3
F	6.48	446	1.32	1.28	75.1	40.3	7.71	31.4	7.20	50.6
G	6.23	425	1.33	1.25	76.3	38.4	7.66	28.3	6.67	67.5
H	6.4	440	1.38	1.28	74.8	42.4	7.9	30.6	6.8	53.8
I	6.67	449	1.31	1.32	77.2	39.04	8.12	30.79	6.92	48.18
J	6.79	427	1.34	1.35	82	40.1	8.2	31.0	7.1	51
K	6.64	445	1.29	1.32	77.2	38.5	7.91	29.9	6.88	49.1
L	6.7	451	1.25	1.29	78.7	36.8	8.0	29.2	7.0	51
M	6.29	444	1.223	1.32	80.5	36.3	7.70	29.3	7.20	49.6
N	6.49	456	1.36	1.32	80.7	40.8	8.22	30.2	6.96	50.5
O	6.3	446	1.33	1.27	74.4	39.3	8.53	31.6	7.05	50.8
P	6.4	444	7.1	1.285	75.4	38.0	7.80	29.74	6.813	50.3
Q	6.67	431	1.31	1.35	78.99	39.5	8.0	30.9	7.05	49.8
R	7.5									19.31
S	6.5	445		1.27	77.2					50.5
T	6.8	446	1.35			40.4	8.22	30.8	6.88	50.7
U	6.314	452	2.64	1.22	74.4	39.4	8.2	30.0	6.8	49.7
V	6.5	402		1.32						50.4
W	6.32	437	1.325	1.29		39.71	8.13	33.19	7.07	48.19
X										49.3
Y										>30
Z	6.39	444	1.29	1.33	78.09	38.84	7.73	30.72	6.95	49.14
AA	6.6	446	1.31	1.25	76.3	39.17	7.97	30.47	6.90	50.381
AB	6.24	447		1.30	76					48.7
AC						38.9	8.1	29.9	6.6	
AD										
AE	6.39	442	1.32	1.31	80.1	38.8	8.52	31.5	7.03	50.230
AF	6.33	441	1.29	1.28	75.01	38.61	7.91	30.26	6.95	50.06
AG	6.3	444	1.28	1.26	77.0	37.7	8.1	30.2	7.0	53.3
AH	6.59	445	1.29	1.28	75.0	38.7	7.94	30.7	6.94	50.0
AI	6.31	437	1.40	1.28	75	40.2	8.6	32.6	6.7	49.3
AJ	6.32	436	1.32	1.250	76.3	39.6	8.0	32.1	6.0	51
AK	6.27	442	1.34	1.33		38.6	8.0	30.9	6.9	50.4
AL	6.62	433.0	1.30	1.30	78.1	39.22	8.0	30.5	6.75	46.5
AM		446.4	7.2	1.336	78.5	38.4	8.1	30.8	7.20	40.8
AN						39.88	7.90	30.02	6.67	
AO	6.32	442	1.31	1.29	78.7	39.4	7.89	28.9	6.94	49.7
AP	6.6	444	1.29	1.25	76	38.8	7.9	32.1	7.1	53
AQ	6.2	446	1.32	1.28		38.7	8.56	31.5	7.06	51.3
AR	6.30	445	1.346	1.61	98	39.87	8.49	31.54	7.01	51.79
AS	6.35	444	1.38	1.27	74	41.7	8.35	32.1	7.11	50.6
AT	6.42	444	1.33	1.25	76	39.82	7.97	29.99	7.01	50.2
AU	6.5	447	1.37	1.30	79	41.1	8.5	32.0	7.2	51
AV						39.4	8.26	32.3	7.84	

Measurement Uncertainties Sample N167B

	pH ±	Cond. ±	total- Hardn.±	K _{S 4.3} ±	HCO ₃ ⁻ ±	Ca ²⁺ ±	Mg ²⁺ ±	Na ⁺ ±	K ⁺ ±	NO ₃ ⁻ ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		1	0.015	0.018	1.1	0.6	0.10	0.2	0.04	1.2
IFA result	0.20	6	0.06	0.05	3	1.9	0.5	1.5	0.4	3
Stability test										
A	0.19	24.8	0.13	0.076	6.18	3.81	0.82	3.1	0.71	2.54
B	0.05	0.275	0.06	0.06		0.06	0.06			0.06
C	0.3	18	0.1	0.1	3	4	1	5	1	4
D	0.65	45	0.26	0.13	7.8	7.5	1.7	6.3	1.4	7.3
E	0.36	15.1	0.096	0.10	4.73	2.86	0.49	2.74	0.46	4.07
F	0.0648	0.197	0.0178	0.0746	1.50	0.704	0.0672	0.237	0.351	0.894
G	0.12	11	0.17	0.05	3	5.0	0.92	3.4	0.87	2.5
H	0.64	26.40	0.104	0.12	7.102	2.54	0.95	1.99	0.68	5.65
I	0.25	11	0.01	0.01	1.5	0.39	0.08	0.62	0.41	2.41
J	0.07	9.2	0.11	0.06	3.7	2.1	0.52	2.4	0.25	2.5
K	0.265	17.8	0.232	0.053	3.09	6.93	1.42	5.38	1.24	4.42
L	0.083	14	0.10	0.039	2.4	3.0	0.56	2.1	0.32	2.4
M										
N	0.2	46	0.14	0.13	8.1	4.1	0.82	3.0	0.70	5.0
O	0.1	10	0.13	0.13	7.4	7.9	1.7	4.8	1.4	5.1
P	0.2	12		0.086		2.6	0.7	2.8	0.7	5.2
Q		9	0.11	0.12	7.11	4.0	1.0	1.55	0.35	1.5
R	0.03									0.20
S	0.1	12.5		0.03	1.6					2.2
T	0.34	22.3	0.203			6.06	0.822	4.62	1.03	5.07
U	0.208	13.1		0.061		5.91	1.23	4.5	1.02	7.455
V	0.1									1.13
W	0.02	30	0.05	0.02		0.6	0.6	0.3	0.06	0.5
X										0.5
Y										
Z	0.1	4.51		0.13		3.8	0.8	3.1	0.7	4.9
AA	0.2	44.6		0.188	11.4	3.917	0.797	3.047	0.690	2.0153
AB	0.0084	3.17		0.037	1.10					3.34
AC										
AD										
AE	0.010	1	0.017	0.006	0.153	0.872	0.134	0.351	0.115	0.766
AF	0.25	9.7	0.03	0.03	1.58	1.51	0.37	1.45	0.44	3.35
AG	0.2	18	0.068	0.09	5.7	1.8	0.5	1.5	0.3	5.1
AH	0.30	13	0.11	0.06	3.0	2.0	0.48	1.2	0.56	3.0
AI	0.20	43.7	0.14	0.13	4	2.0	0.4	3.3	0.7	3.3
AJ	0.05	10	0.11	0.055	3.4	1.8	0.3	1.4	0.3	2
AK	0.090	22.1	0.07	0.07		1.16	0.27	0.40	0.21	1.30
AL	0.2	20	0.13	0.13	8.0	4.0	0.8	3	0.6	4
AM										
AN						1.65	0.58	1.81	0.22	
AO	0.19	13	0.20	0.10	6.3	5.9	0.95	3.8	1.0	5.0
AP	0.2	22	0.13	0.13		3.9	0.8	3.2	0.7	5.3
AQ	0.1	10	0.27	0.13		7.9	1.7	4.8	1.4	5.1
AR										
AS										
AT	0.31	14.0	0.20	0.42	25.8	3.32	0.642	2.27	0.708	5.35
AU	0.2	9	0.09	0.07	6	3.3	0.7	1.9	0.8	4
AV						3.21	0.927	1.53	0.714	

Results Sample N167B

	NO ₂ ⁻	NH ₄ ⁺	Cl ⁻	SO ₄ ²⁻	o-PO ₄ ³⁻	Boron	DOC	total-P (as PO ₄ ³⁻)	KMnO ₄ - index
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0203	<0.01	28.6	58.9	0.061	0.0544	4.88	0.187	5.64
IFA result	0.0195	<0.01	28.1	58.8	0.062	0.051	4.73	0.209	5.73
Stability test	0.0203	<0.01			0.061		5.06		5.62
A	0.0220	<0.01	28.98	59.73	0.0590	0.0534	4.77	0.189	5.63
B			30.3	63					5.814
C	0.0210	<0.013	29.2	60.5	0.061		5.03	0.185	
D	0.0203	<0.01	28.3	53.8	<0.1	0.0473	5.53	179	
E	<0.03	<0.04	28.4	58.9	0.0642	0.0597	5.11	0.0632	5.45
F	0.0212	[0.0015]	28.1	59.1	0.0624	0.0537	4.84	0.187	6.00
G	<0.0328	<0.0515	27.9	56.1	<0.061		5.67	0.172	5.69
H	0.0180	<0.04	30.4	59.1	0.063	0.0456	4.89	<0.060	
I	0.0200	<0.01	26.50	57.12	0.067		6.570	0.175	5.827
J	0.0300	<0.01	28.3	59	0.068		5.9	0.117	6.7
K	0.0213	<0.01	27.1	56.3	0.0651	0.053	4.93	0.187	6.27
L	0.0190	<0.01	28.1	59	0.060		4.58	<0.15	6.03
M	0.0200	<0.01	27.9	58.3	0.0630	0.0633	5.18		3.49
N	0.0220	<0.01	29.2	57.4	0.0660	0.0500	5.15	0.185	5.97
O	0.0205	<0.0100	27.5	58.9	0.0611	0.0543	5.07	0.1845	
P	0.0207	<0.05	27.3	59.0		0.057	4.98	0.196	
Q	0.0210	<0.040	28.0	57.4	0.058	0.062	4.90	0.210	5.55
R	0.423	0.061	16.25	56.28	0.69				
S	0.0210	<0.047	28.5	58.3					
T	0.0160	<0.01	28.4	58.1	0.055	0.055	4.93	0.212	
U	0.0207	<0.01	28.2	58.25	0.052	0.051	5.327	0.183	
V	0.0215	<0.01	28.1	60.9	0.0272			0.072	
W	0.0160	<0.03	29.48	59.78			5.00		
X			27.59						
Y		<0.01			0.059			0.171	
Z	0.0210	<0.007	27.50	55.61	0.058	0.052	4.96	0.164	
AA	0.0200	<0.0052	28.71	59.55	0.058	0.060	5.20	0.178	5.50
AB	0.0216	0.0220	28.7		0.058			0.184	
AC		<0.0500			0.0600	0.0485	4.90		5.77
AD									5.55
AE	0.0180	<0.015	27.875	58.325	0.0610	0.0526	4.78	0.170	5.43
AF	0.0201	<0.003	28.45	57.69			5.014		5.38
AG	0.0213	<0.010	34.0	61.4	0.061	0.0548	5.1	0.178	
AH	0.0208	<0.008	28.8	59.1	0.061	0.052	4.71	0.188	
AI	0.0213	<0.01	27.6	60.0	0.063	0.053	4.77	0.184	6.1
AJ	0.0200	<0.02	28.9	61	0.058		5.0	0.178	5.8
AK	0.0203	<0.012	28.4	58.4	0.061	0.0476		0.181	
AL	0.017	<0.04	26.5	54.0	0.056	0.057	4.6	0.162	5.43
AM	0.0220	<0.03	28.9	60.1	0.052	0.054	5.1	0.184	6.10
AN		<0.040			0.0210			0.1333	
AO	0.0186	<0.01	29.6	60.0	0.0595	0.0566	5.19	0.184	5.64
AP	0.0172	<0.01	28.7	60					5.45
AQ	0.0204	<0.010	27.8	59.9		0.0543			5.34
AR	0.060	0.0100	28.43	59.85	0.057	0.0496	4.89		4.96
AS	0.0205	<0.01	28.8	60.4	0.058	0.056	5.067	0.178	4.71
AT	0.0220	0.0270	28.2	57.5	0.128	0.0548	5.15	0.183	2.23
AU	0.0210	<0.02	27.7	59	0.060		4.75	0.169	5.7
AV									

Measurement Uncertainties Sample N167B

	NO ₂ ⁻ ±	NH ₄ ⁺ ±	Cl ⁻ ±	SO ₄ ²⁻ ±	o-PO ₄ ³⁻ ±	Boron ±	DOC ±	total-P (as PO ₄ ³⁻) ±	KMnO ₄ - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Target value	0.0018		0.4	0.4	0.001	0.0004	0.05	0.003	0.15
IFA result	0.0010		1.1	1.4	0.001	0.004	0.09	0.024	0.85
Stability test	0.0010				0.001		0.10		0.84
A	0.002		1.45	2.99	0.006	0.005	0.954	0.019	0.89
B			1.074	7.4					0.588
C	0.002		2	4	0.008		0.8	0.02	
D	0.0031		4.2	8.1		0.0095	1.66	36	
E			0.91	2.65	0.0038	0.0055	0.77	0.0078	0.764
F	0.00090		0.651	1.05	0.00150	0.00172	0.0844	0.00140	
G	0.0011	0.003	1.3	2.6	0.005		0.34	0.014	0.57
H	0.00180		2.74	5.32	0.0063	0.00639	0.29		
I	0.0020		1.59	1.71	0.008		0.986	0.011	0.699
J	0.0044		2.2	3.6	0.0058		0.99	0.015	0.42
K	0.002		2.44	5.07	0.006	0.010	0.444	0.007	0.564
L	0.0010		1.3	3.1	0.003		0.98		0.60
M									
N	0.0022		2.9	5.7	0.0066	0.0050	0.52	0.037	1.19
O	0.0038		2.8	5.9	0.0127		0.51	0.0384	
P	0.0045		3.8	5.6		0.006	0.92	0.020	
Q	0.002		0.8	1.7	0.006	0.0062	0.98	0.0315	0.56
R	0.011	0.013	1.87	1.61	0.05				
S	0.0014		2.08	1.6					
T	0.0008		2.84	5.81	0.0083	0.0028	0.986	0.042	
U	0.0041		4.23	8.738	0.006	0.02	1.332	0.022	
V	0.001		0.73					0.003	
W	0.015	0.080	0.25	3.0			0.03		
X			0.3						
Y					0.00120			0.0128	
Z	0.002		2.8	5.6	0.006	0.0052	0.5	0.016	
AA	0.00300		1.436	2.978	0.0087	0.0072	0.420	0.0267	0.880
AB	0.0022	0.0033	0.29		0.007			0.024	
AC		0.00470			0.0169		1.23		1.33
AD									
AE	0.001		0.128	0.215	0.002	0.001	0.053	0.001	0.075
AF	0.001	0.000	1.34	2.88			0.87		1.14
AG	0.0033		2.7	4.8	0.009	0.0058	1.0	0.018	
AH	0.0020		1.5	3.6	0.004	0.005	0.42	0.013	
AI	0.0064		1.4	3.0	0.009	0.011	0.48	0.020	0.92
AJ	0.0015		1.1	3	0.005		0.7	0.038	0.8
AK	0.0010		0.83	1.61	0.005	0.0051		0.009	
AL	0.002		2.5	5	0.006	0.006	0.5	0.016	0.5
AM									
AN		0.003			0.0001			0.0066	
AO	0.0020		3.0	9.6	0.0048	0.0074	1.0	0.015	0.85
AP			2.9	6.0					0.55
AQ	0.010		2.8	6.0		0.014			1.34
AR									
AS									
AT	0.003	0.004	1.61	5.28	0.026	0.00548	0.231	0.038	0.53
AU	0.003		2.2	4	0.005		1.19	0.015	0.4
AV									

z- Scores Sample N167A

	Cond.	total-Hardn.	K _S 4.3	HCO ₃ ⁻	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁺	NO ₃ ⁻
A	0.61	-0.74	1.65	1.21	-1.04	0.62	0.41	0.30	0.11
B	-3.02	-0.18	-0.38		0.50	-2.59			-0.43
C	-0.46	0.00	-1.34	-1.15	-0.05	-0.24	-0.25	0.50	0.61
D	0.15	-1.29	-1.12	0.03	-1.98	1.35	1.13	-0.87	-0.78
E	0.15	-2.39	0.45	1.21	-1.30	-2.41	-0.38	-3.17	-0.61
F	0.00	0.55	-0.67	-0.56	0.94	-1.30	0.88	0.77	-0.78
G	-2.91	0.18	-3.57	-2.04	-0.94	-2.09	-3.14	-1.16	7.63
H	-0.15	1.84	-1.12	-0.86	2.18	-0.24	-0.75	0.77	1.73
I	0.77	-0.18	0.22	-0.18	-0.46	-0.26	-0.58	-0.32	-1.52
J	-1.53	0.55	-0.67	0.33	0.47	0.56	0.00	1.03	-0.35
K	0.31	-0.55	0.00	0.03	-0.36	-0.77	-0.50	-0.37	-1.65
L	1.23	-1.66	-1.34	0.56	-1.61	-0.50	-1.76	-0.03	1.99
M	-0.92	-2.41	-1.34	-0.18	-2.39	-1.30	-2.01	-1.69	-1.56
N	1.84	-0.74	0.67	1.51	-0.68	-0.77	-0.75	0.00	-0.26
O	0.15	0.00	-1.56	-0.35	-0.62	1.35	0.75	0.24	-0.69
P	-0.15	161.27	-0.58	-0.56	-0.47	-0.98	-1.46	-1.11	-0.69
Q	-2.45	0.00	0.89	0.77	-0.62	1.62	0.13	0.18	-0.87
R									-13.74
S	0.15		-1.12	0.03					-0.26
T	0.61	0.55			0.52	0.03	0.38	-0.21	-0.43
U	1.23	35.71	-2.45	-1.15	-0.16	0.29	-0.88	-0.82	-0.87
V	-9.19		-2.01						-0.35
W	-0.92	0.22	-0.45		0.16	0.05	2.43	0.29	-1.60
X									-1.55
Y									
Z	0.00	0.92	-2.01	-1.61	0.95	0.13	1.10	1.14	-1.80
AA	0.31	-0.37	-1.78	-0.53	-0.27	-0.45	-0.30	-0.32	-0.43
AB	0.31		0.22	0.03					-1.39
AC					-1.09	0.29	-0.75	-0.82	
AD									
AE	-0.61	0.37	0.00	0.92	0.10	1.09	0.00	-0.42	-0.43
AF	-0.61	-0.37	-1.12	-0.91	-0.29	-0.40	-0.54	0.05	-0.60
AG	-0.15	-0.18	-1.34	-0.18	-0.26	-0.24	-0.75	-0.03	0.95
AH	0.00	-0.37	-0.89	-0.86	-0.42	-0.50	-0.13	-0.08	-0.95
AI	-0.77	1.10	-1.12	-0.86	0.83	1.62	1.38	-0.29	-1.47
AJ	-1.38	0.18	-1.56	-0.27	-0.05	1.09	0.88	-5.31	-0.17
AK	-0.46	0.37	1.34		-0.73	-0.50	-0.25	-0.29	-0.52
AL	-1.99	-0.37	0.89	1.64	-0.11	-0.77	0.13	-1.06	-4.08
AM	0.26	163.11	0.80	0.65	-0.62	0.56	-0.13	1.03	-0.09
AN					-0.54	-0.74	-0.90	-1.16	
AO	-0.61	-0.18	-1.12	0.03	0.00	-0.77	-1.26	0.37	-1.39
AP	0.31	-0.92	-0.45	0.62	0.47	0.03	1.88	0.77	1.30
AQ	0.00	0.00	-1.34		-0.57	1.35	0.88	0.18	-0.52
AR	0.00	1.22	6.24	5.94	0.66	1.72	1.08	0.32	0.26
AS	-0.46	0.18	-1.12	-0.86	0.10	-0.24	-0.63	-0.34	-0.43
AT	0.15	0.74	-1.78	-0.56	0.03	-0.53	-0.64	0.45	-0.69
AU	0.61	1.84	-0.67	0.33	1.51	1.35	0.88	0.50	-1.13
AV					-0.31	0.56	0.00	0.11	

z-Scores Sample N167A

	NO ₂ ⁻	NH ₄ ⁺	Cl ⁻	SO ₄ ²⁻	o-PO ₄ ³⁻	Boron	DOC	total-P (as PO ₄ ³⁻)	KMnO ₄ - index
A	0.73	0.00	0.36	0.24		-0.70	1.57		-0.23
B			1.13	0.28					0.99
C	0.73	-0.26	1.07	0.74			1.47		
D	-0.73	0.00	-2.39	0.56		-0.92	4.31		
E	-0.18	-0.55	-0.06	-0.09		-0.95	7.25		-0.06
F	0.83	1.19	-0.19	-0.46		0.16	0.20		0.83
G	4.08	86.23	-1.57	-2.79			2.74		-0.06
H	-1.24	0.99	2.77	-0.74		-0.70	0.10		
I	-0.18	-1.43	-2.63	-0.50			15.95		-0.19
J	7.61	-4.16	0.76	0.00			9.01		1.05
K	-0.46	0.66	-1.51	-1.86		-0.60	2.06		0.94
L	-0.64	0.00	2.64	1.86			-1.76		0.74
M	-0.64	0.26	-1.01	-0.84		-0.16	3.53		-2.14
N	0.28	-1.32	-0.50	-0.28		-1.35	3.14		0.31
O	-0.14	-0.58	-0.38	-0.56		-0.38	1.18		
P	0.09	2.21	-0.50	-0.19		0.38	0.29		
Q	0.28	0.65	-0.76	-0.46		1.95	0.39		-0.14
R	348.18	-0.26	-6.23	-3.42					
S	-0.18	-1.43	-0.31	0.00			1.67		
T	-2.02	0.26	-0.13	-0.46		-0.16	1.67		
U	0.41	-1.45	-0.31	-0.28		-1.35	2.61		
V	0.50	0.52	-0.31	0.56					
W	-4.13	0.45	1.01	0.32			3.04		
X			-1.38						
Y		-0.96							
Z	0.28	-0.78	-1.89	-2.99		0.38	1.37		
AA	-0.64	-0.26	0.17	1.08		1.25	1.08		-0.31
AB	0.32	1.30	0.13						
AC		-0.32				-0.38	1.37		-0.14
AD									-0.60
AE	-0.92	-1.13	-0.36	-0.13		-1.57	-1.27		-0.57
AF	-0.05	-1.06	-0.25	-0.65			0.64		-0.14
AG	0.37	0.71	1.38	1.30		-0.05	0.88		
AH	0.78	0.13	0.25	0.65		-0.81	-0.10		
AI	0.32	0.52	-0.50	0.93		-0.38	0.39		0.46
AJ	-0.37	-1.30	0.76	1.12			1.47		0.11
AK	-0.14	1.43	-0.57	-0.28		-1.90			
AL	-2.02	-0.26	-1.13	-1.77		0.38	1.08		-1.31
AM	0.73	0.00	1.13	0.65		-0.16	2.06		1.97
AN		-0.65							
AO	-0.55	-0.10	0.76	-1.02		0.60	3.23		0.34
AP	-1.56	0.26	0.13	-2.23					0.20
AQ	0.00	-0.42	-0.19	-0.37		-0.49			-0.40
AR	18.15	1.30	0.43	0.48		-0.63	0.49		0.71
AS	0.37	0.65	-1.01	1.02		-0.05	0.28		-1.48
AT	0.28	3.12	-0.82	-0.65		-0.38	4.90		-5.16
AU	0.73	0.39	-0.50	-0.74			0.10		-0.60
AV									

z-Scores Sample N167B

	Cond.	total-Hardn.	K _{S 4.3}	HCO ₃ ⁻	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁺	NO ₃ ⁻
A	0.38	-0.84	0.85	0.71	-1.17	0.61	0.18	0.27	-0.26
B	-3.08	-0.03	-0.33		0.34	-1.49			-0.50
C	-0.19	-0.30	-1.26	-1.04	-0.24	-0.25	-0.10	0.43	0.69
D	0.38	-1.11	-0.57	1.26	-1.82	1.17	0.71	-0.67	-1.57
E	0.00	-3.00	1.06	2.36	-1.50	-2.90	-0.30	-2.57	-0.63
F	0.38	-0.03	-0.57	-0.44	0.55	-1.27	0.61	0.73	-0.44
G	-3.57	0.24	-1.79	0.22	-0.95	-1.45	-2.54	-1.03	10.19
H	-0.75	1.60	-0.57	-0.60	2.21	-0.60	-0.20	-0.60	1.57
I	0.94	-0.30	1.06	0.71	-0.44	0.18	-0.01	-0.20	-1.96
J	-3.19	0.51	2.28	3.35	0.39	0.46	0.20	0.40	-0.19
K	0.19	-0.84	1.06	0.71	-0.87	-0.57	-0.91	-0.33	-1.38
L	1.31	-1.92	-0.16	1.54	-2.21	-0.25	-1.62	0.07	-0.19
M	0.00	-2.65	1.06	2.53	-2.60	-1.31	-1.52	0.73	-1.07
N	2.25	1.05	1.06	2.64	0.95	0.53	-0.61	-0.07	-0.50
O	0.38	0.24	-0.98	-0.82	-0.24	1.63	0.81	0.23	-0.31
P	0.00	156.24	-0.37	-0.27	-1.26	-0.96	-1.08	-0.56	-0.63
Q	-2.44	-0.30	2.28	1.70	-0.08	-0.25	0.10	0.23	-0.94
R									-20.12
S	0.19		-0.98	0.71					-0.50
T	0.38	0.78			0.63	0.53	0.00	-0.33	-0.38
U	1.50	35.66	-3.01	-0.82	-0.16	0.46	-0.81	-0.60	-1.01
V	-7.88		1.06						-0.57
W	-1.31	0.11	-0.16		0.09	0.21	2.42	0.30	-1.96
X									-1.26
Y									
Z	0.00	-0.84	1.46	1.20	-0.60	-1.20	-0.08	-0.10	-1.36
AA	0.38	-0.30	-1.79	0.22	-0.34	-0.35	-0.33	-0.27	-0.58
AB	0.56		0.24	0.05					-1.63
AC					-0.55	0.11	-0.91	-1.27	
AD									
AE	-0.38	-0.03	0.65	2.31	-0.63	1.59	0.71	0.17	-0.67
AF	-0.56	-0.84	-0.57	-0.49	-0.78	-0.57	-0.55	-0.10	-0.78
AG	0.00	-1.11	-1.38	0.60	-1.50	0.11	-0.61	0.07	1.26
AH	0.19	-0.84	-0.57	-0.49	-0.71	-0.46	-0.10	-0.13	-0.82
AI	-1.31	2.14	-0.57	-0.49	0.47	1.88	1.83	-0.93	-1.26
AJ	-1.50	-0.03	-1.79	0.22	0.00	-0.25	1.32	-3.27	-0.19
AK	-0.38	0.51	1.46		-0.79	-0.25	0.10	-0.27	-0.57
AL	-2.06	-0.57	0.24	1.21	-0.30	-0.25	-0.30	-0.77	-3.02
AM	0.45	158.94	1.71	1.43	-0.95	0.11	0.00	0.73	-6.60
AN					0.22	-0.60	-0.79	-1.03	
AO	-0.38	-0.30	-0.16	1.54	-0.16	-0.64	-1.93	-0.13	-1.01
AP	0.00	-0.84	-1.79	0.05	-0.63	-0.60	1.32	0.40	1.07
AQ	0.38	-0.03	-0.57		-0.71	1.73	0.71	0.27	0.00
AR	0.19	0.68	12.85	12.13	0.21	1.49	0.75	0.10	0.31
AS	0.00	1.60	-0.98	-1.04	1.66	0.99	1.32	0.43	-0.44
AT	0.00	0.24	-1.79	0.05	0.17	-0.35	-0.82	0.10	-0.69
AU	0.56	1.32	0.24	1.70	1.18	1.52	1.22	0.73	-0.19
AV					-0.16	0.67	1.52	2.87	

z-Scores Sample N167B

	NO ₂ ⁻	NH ₄ ⁺	Cl ⁻	SO ₄ ²⁻	o-PO ₄ ³⁻	Boron	DOC	total-P (as PO ₄ ³⁻)	KMnO ₄ - index
A	1.55		0.46	0.45	-0.35	-0.25	-0.42	0.11	-0.02
B			2.05	2.25					0.31
C	0.64		0.72	0.88	0.00		0.57	-0.11	
D	0.00		-0.36	-2.79		-1.79	2.47	10172.55	
E			-0.24	0.00	0.55	1.33	0.87	-7.04	-0.34
F	0.82		-0.60	0.11	0.24	-0.18	-0.15	0.00	0.64
G			-0.84	-1.53			3.00	-0.85	0.09
H	-2.10		2.17	0.11	0.35	-2.22	0.04		
I	-0.27		-2.53	-0.97	1.04		6.41	-0.68	0.33
J	8.85		-0.36	0.05	1.21		3.87	-3.98	1.88
K	0.91		-1.81	-1.42	0.71	-0.35	0.19	0.00	1.12
L	-1.19		-0.60	0.05	-0.17		-1.14		0.69
M	-0.27		-0.84	-0.33	0.35	2.24	1.14		-3.81
N	1.55		0.72	-0.82	0.86	-1.11	1.02	-0.11	0.59
O	0.18		-1.33	0.00	0.02	-0.03	0.72	-0.14	
P	0.36		-1.57	0.05		0.65	0.38	0.51	
Q	0.64		-0.72	-0.82	-0.52	1.91	0.08	1.31	-0.16
R	367.36		-14.89	-1.43	108.54				
S	0.64		-0.12	-0.33					
T	-3.92		-0.24	-0.44	-1.04	0.15	0.19	1.42	
U	0.36		-0.48	-0.36	-1.55	-0.86	1.70	-0.23	
V	1.09		-0.60	1.10	-5.83			-6.54	
W	-3.92		1.06	0.48			0.46		
X			-1.22						
Y					-0.35			-0.91	
Z	0.64		-1.33	-1.80	-0.52	-0.60	0.30	-1.31	
AA	-0.27		0.13	0.36	-0.52	1.41	1.21	-0.51	-0.25
AB	1.19		0.12		-0.52			-0.17	
AC					-0.17	-1.49	0.08		0.23
AD									-0.16
AE	-2.10		-0.87	-0.31	0.00	-0.45	-0.38	-0.97	-0.37
AF	-0.18		-0.18	-0.66			0.51		-0.46
AG	0.91		6.51	1.37	0.00	0.10	0.83	-0.51	
AH	0.46		0.24	0.11	0.00	-0.60	-0.65	0.06	
AI	0.91		-1.21	0.60	0.35	-0.35	-0.42	-0.17	0.82
AJ	-0.27		0.36	1.15	-0.52		0.46	-0.51	0.28
AK	0.00		-0.24	-0.27	0.00	-1.71		-0.34	
AL	-3.01		-2.53	-2.68	-0.86	0.65	-1.06	-1.42	-0.37
AM	1.55		0.36	0.66	-1.55	-0.10	0.83	-0.17	0.82
AN					-6.90			-3.05	
AO	-1.55		1.21	0.60	-0.26	0.55	1.18	-0.17	0.00
AP	-2.83		0.12	0.60					-0.34
AQ	0.09		-0.96	0.55		-0.03			-0.53
AR	36.22		-0.20	0.52	-0.69	-1.21	0.04		-1.21
AS	0.18		0.24	0.82	-0.52	0.40	0.71	-0.51	-1.65
AT	1.55		-0.48	-0.77	11.56	0.10	1.02	-0.23	-6.05
AU	0.64		-1.09	0.05	-0.17		-0.49	-1.02	0.11
AV									

Sample N167A

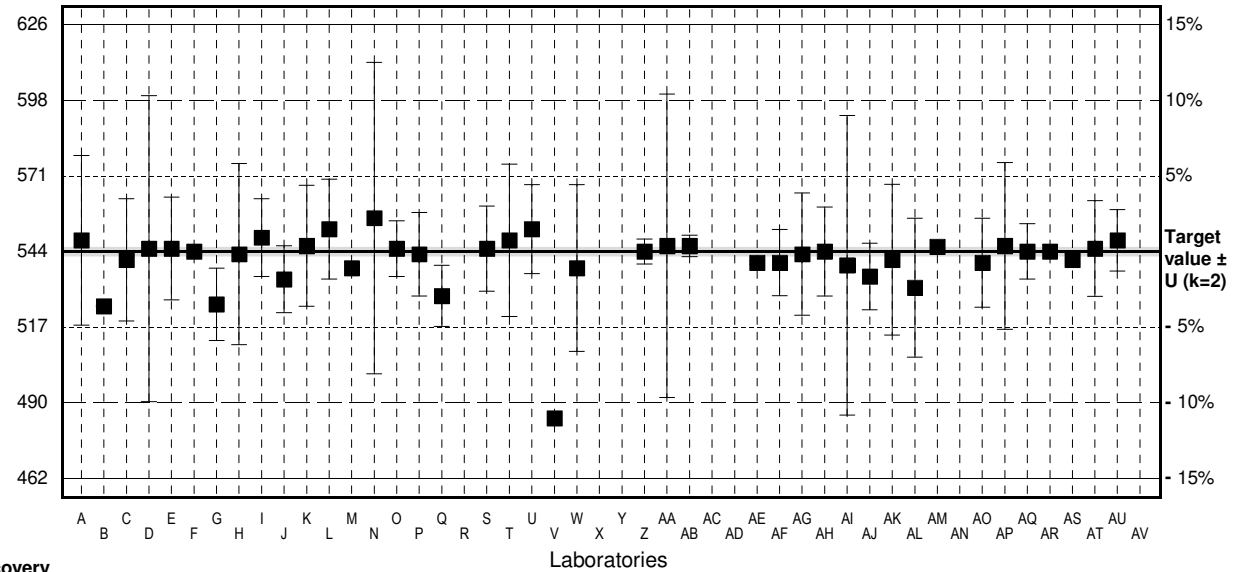
Parameter Conductivity

Target value $\pm U$ (k=2) 544 $\mu\text{S/cm}$ \pm 2 $\mu\text{S/cm}$
 IFA result $\pm U$ (k=2) 543 $\mu\text{S/cm}$ \pm 7 $\mu\text{S/cm}$
 Stability test $\mu\text{S/cm}$

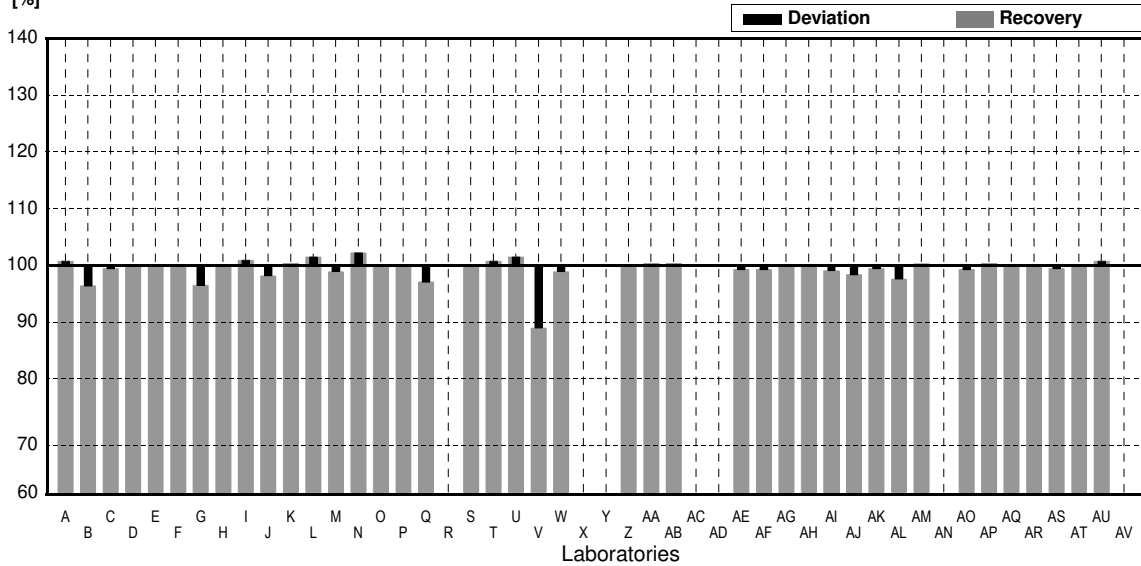
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	548	30.5	$\mu\text{S/cm}$	101%	0.61
B	524.3 *	0.275	$\mu\text{S/cm}$	96%	-3.02
C	541	22	$\mu\text{S/cm}$	99%	-0.46
D	545	55	$\mu\text{S/cm}$	100%	0.15
E	545	18.5	$\mu\text{S/cm}$	100%	0.15
F	544	0.427	$\mu\text{S/cm}$	100%	0.00
G	525 *	13	$\mu\text{S/cm}$	97%	-2.91
H	543	32.58	$\mu\text{S/cm}$	100%	-0.15
I	549	14	$\mu\text{S/cm}$	101%	0.77
J	534	12	$\mu\text{S/cm}$	98%	-1.53
K	546	21.8	$\mu\text{S/cm}$	100%	0.31
L	552	18	$\mu\text{S/cm}$	101%	1.23
M	538		$\mu\text{S/cm}$	99%	-0.92
N	556	56	$\mu\text{S/cm}$	102%	1.84
O	545	10	$\mu\text{S/cm}$	100%	0.15
P	543	15	$\mu\text{S/cm}$	100%	-0.15
Q	528 *	11	$\mu\text{S/cm}$	97%	-2.45
R			$\mu\text{S/cm}$		
S	545	15.3	$\mu\text{S/cm}$	100%	0.15
T	548	27.4	$\mu\text{S/cm}$	101%	0.61
U	552	16.0	$\mu\text{S/cm}$	101%	1.23
V	484 *		$\mu\text{S/cm}$	89%	-9.19
W	538	30	$\mu\text{S/cm}$	99%	-0.92
X			$\mu\text{S/cm}$		
Y			$\mu\text{S/cm}$		
Z	544	4.51	$\mu\text{S/cm}$	100%	0.00
AA	546	54.6	$\mu\text{S/cm}$	100%	0.31
AB	546	3.87	$\mu\text{S/cm}$	100%	0.31
AC			$\mu\text{S/cm}$		
AD			$\mu\text{S/cm}$		
AE	540	0.577	$\mu\text{S/cm}$	99%	-0.61
AF	540	11.9	$\mu\text{S/cm}$	99%	-0.61
AG	543	22	$\mu\text{S/cm}$	100%	-0.15
AH	544	16	$\mu\text{S/cm}$	100%	0.00
AI	539	53.9	$\mu\text{S/cm}$	99%	-0.77
AJ	535	12	$\mu\text{S/cm}$	98%	-1.38
AK	541	27.1	$\mu\text{S/cm}$	99%	-0.46
AL	531.0	25	$\mu\text{S/cm}$	98%	-1.99
AM	545.7		$\mu\text{S/cm}$	100%	0.26
AN			$\mu\text{S/cm}$		
AO	540	16	$\mu\text{S/cm}$	99%	-0.61
AP	546	30	$\mu\text{S/cm}$	100%	0.31
AQ	544	10	$\mu\text{S/cm}$	100%	0.00
AR	544		$\mu\text{S/cm}$	100%	0.00
AS	541		$\mu\text{S/cm}$	99%	-0.46
AT	545	17.2	$\mu\text{S/cm}$	100%	0.15
AU	548	11	$\mu\text{S/cm}$	101%	0.61
AV			$\mu\text{S/cm}$		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	541 \pm 5	544 \pm 2	$\mu\text{S/cm}$
Recov. \pm CI(99%)	99,4 \pm 0,9	99,9 \pm 0,4	%
SD between labs	11	5	$\mu\text{S/cm}$
RSD between labs	2,1	0,9	%
n for calculation	41	37	

Result
[$\mu\text{S/cm}$]



Recovery
[%]



Sample N167B

Parameter Conductivity

Target value ± U (k=2) 444 µS/cm ± 1 µS/cm

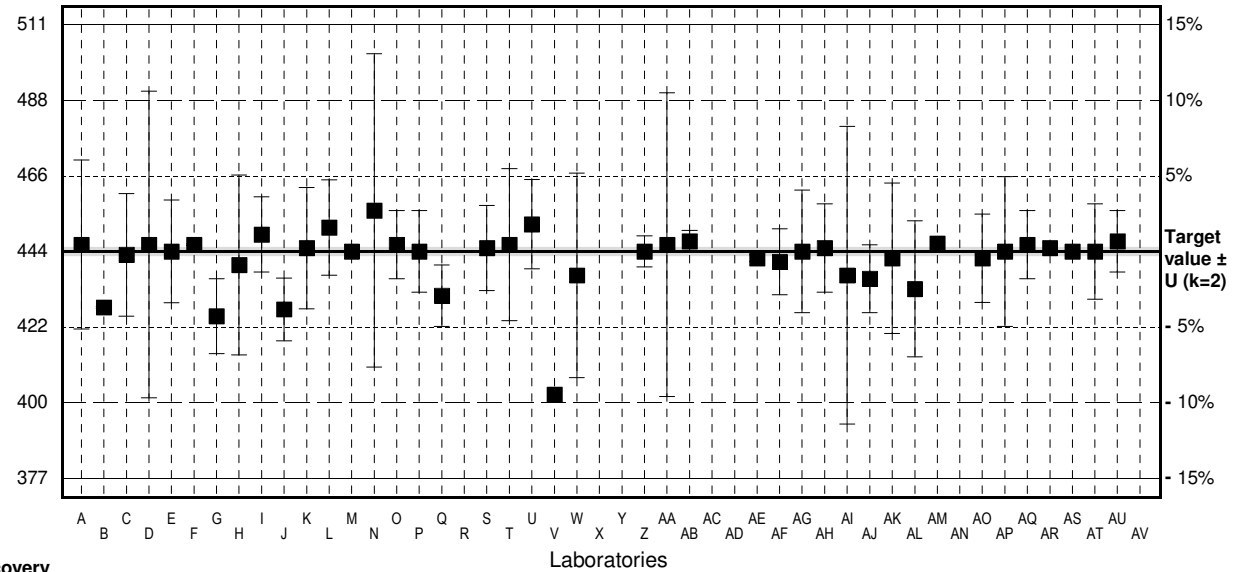
IFA result ± U (k=2) 443 µS/cm ± 6 µS/cm

Stability test µS/cm

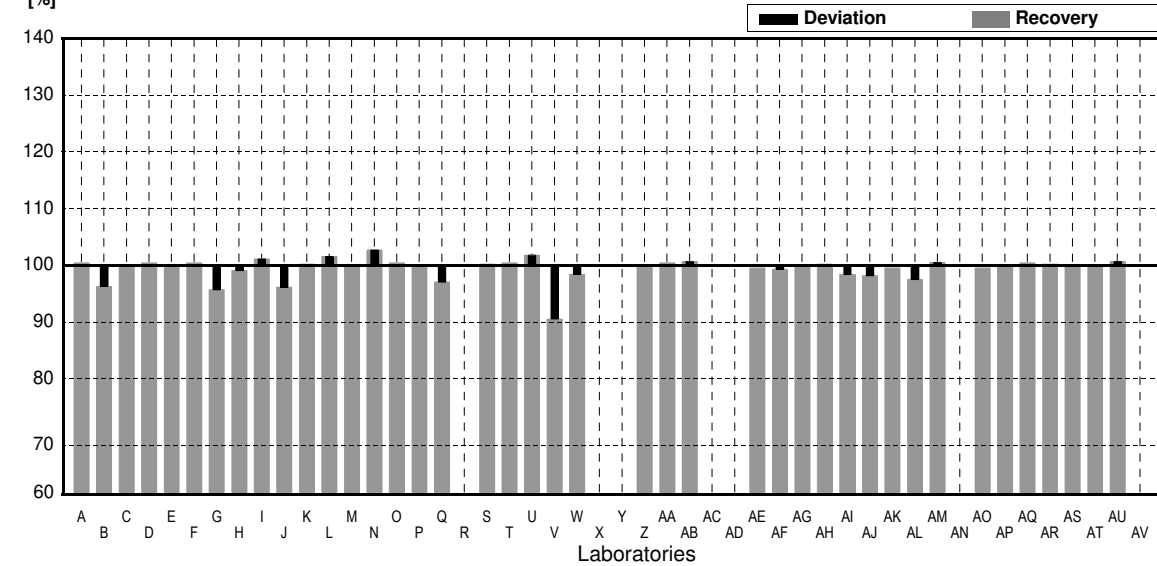
Lab Code	Result	±	Unit	Recovery	z-Score
A	446	24.8	µS/cm	100%	0.38
B	427.6 *	0.275	µS/cm	96%	-3.08
C	443	18	µS/cm	100%	-0.19
D	446	45	µS/cm	100%	0.38
E	444	15.1	µS/cm	100%	0.00
F	446	0.197	µS/cm	100%	0.38
G	425 *	11	µS/cm	96%	-3.57
H	440	26.40	µS/cm	99%	-0.75
I	449	11	µS/cm	101%	0.94
J	427 *	9.2	µS/cm	96%	-3.19
K	445	17.8	µS/cm	100%	0.19
L	451	14	µS/cm	102%	1.31
M	444		µS/cm	100%	0.00
N	456 *	46	µS/cm	103%	2.25
O	446	10	µS/cm	100%	0.38
P	444	12	µS/cm	100%	0.00
Q	431 *	9	µS/cm	97%	-2.44
R			µS/cm		
S	445	12.5	µS/cm	100%	0.19
T	446	22.3	µS/cm	100%	0.38
U	452	13.1	µS/cm	102%	1.50
V	402 *		µS/cm	91%	-7.88
W	437	30	µS/cm	98%	-1.31
X			µS/cm		
Y			µS/cm		
Z	444	4.51	µS/cm	100%	0.00
AA	446	44.6	µS/cm	100%	0.38
AB	447	3.17	µS/cm	101%	0.56
AC			µS/cm		
AD			µS/cm		
AE	442	1	µS/cm	100%	-0.38
AF	441	9.7	µS/cm	99%	-0.56
AG	444	18	µS/cm	100%	0.00
AH	445	13	µS/cm	100%	0.19
AI	437	43.7	µS/cm	98%	-1.31
AJ	436	10	µS/cm	98%	-1.50
AK	442	22.1	µS/cm	100%	-0.38
AL	433.0 *	20	µS/cm	98%	-2.06
AM	446.4		µS/cm	101%	0.45
AN			µS/cm		
AO	442	13	µS/cm	100%	-0.38
AP	444	22	µS/cm	100%	0.00
AQ	446	10	µS/cm	100%	0.38
AR	445		µS/cm	100%	0.19
AS	444		µS/cm	100%	0.00
AT	444	14.0	µS/cm	100%	0.00
AU	447	9	µS/cm	101%	0.56
AV			µS/cm		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	442 ± 4	444 ± 2	µS/cm
Recov. ± CI(99%)	99,5 ± 0,9	100,1 ± 0,4	%
SD between labs	9	3	µS/cm
RSD between labs	2,1	0,8	%
n for calculation	41	34	

Result
[µS/cm]



Recovery
[%]



Sample N167A

Parameter Total hardness

Target value ± U (k=2) 1,94 mmol/l ± 0,02 mmol/l

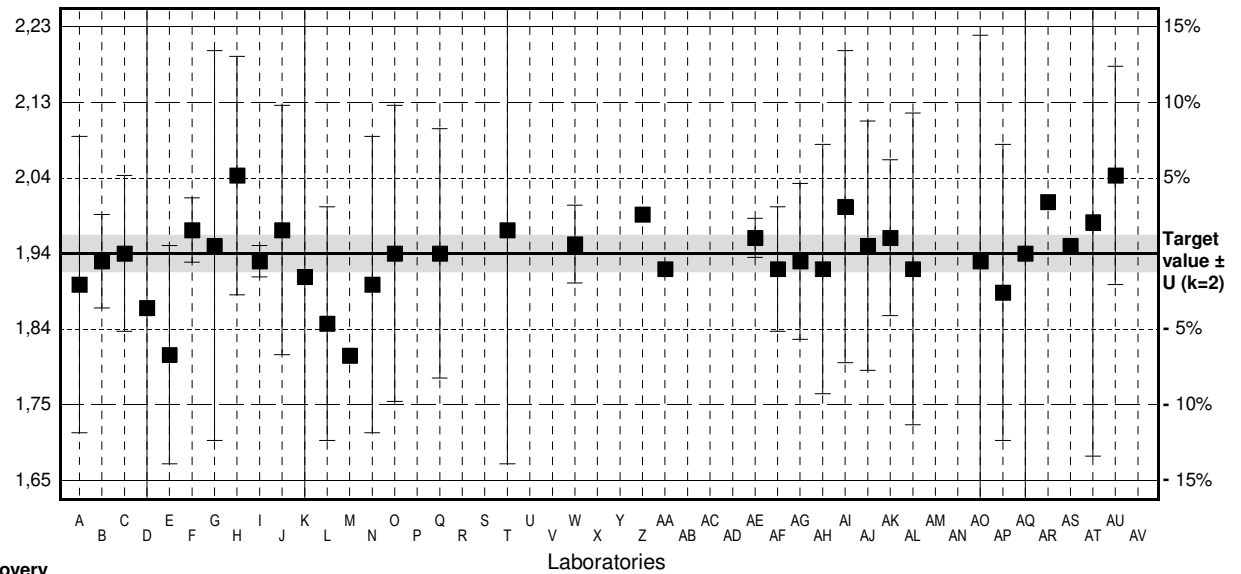
IFA result ± U (k=2) 2,04 mmol/l ± 0,08 mmol/l

Stability test mmol/l

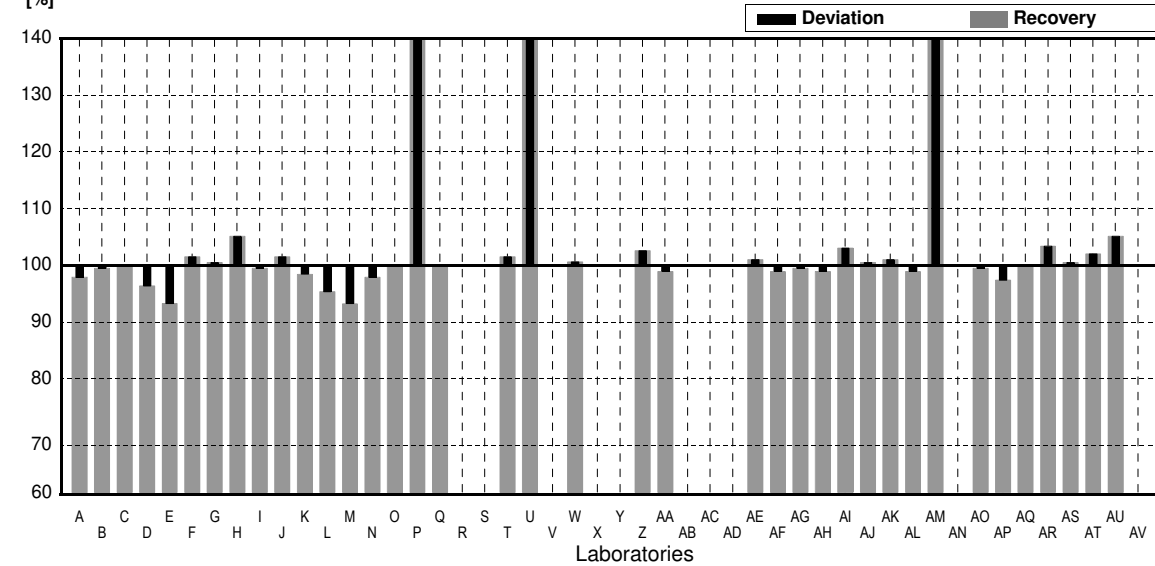
Lab Code	Result	±	Unit	Recovery	z-Score
A	1.90	0.19	mmol/l	98%	-0.74
B	1.93	0.06	mmol/l	99%	-0.18
C	1.94	0.1	mmol/l	100%	0.00
D	1.87	0.37	mmol/l	96%	-1.29
E	1.81	0.14	mmol/l	93%	-2.39
F	1.97	0.0412	mmol/l	102%	0.55
G	1.95	0.25	mmol/l	101%	0.18
H	2.04	0.153	mmol/l	105%	1.84
I	1.93	0.02	mmol/l	99%	-0.18
J	1.97	0.16	mmol/l	102%	0.55
K	1.91	0.344	mmol/l	98%	-0.55
L	1.85	0.15	mmol/l	95%	-1.66
M	1.809		mmol/l	93%	-2.41
N	1.90	0.19	mmol/l	98%	-0.74
O	1.94	0.19	mmol/l	100%	0.00
P	10.7 *		mmol/l	552%	161.27
Q	1.94	0.16	mmol/l	100%	0.00
R			mmol/l		
S			mmol/l		
T	1.97	0.300	mmol/l	102%	0.55
U	3.88 *		mmol/l	200%	35.71
V			mmol/l		
W	1.952	0.05	mmol/l	101%	0.22
X			mmol/l		
Y			mmol/l		
Z	1.99		mmol/l	103%	0.92
AA	1.92		mmol/l	99%	-0.37
AB			mmol/l		
AC			mmol/l		
AD			mmol/l		
AE	1.96	0.025	mmol/l	101%	0.37
AF	1.92	0.08	mmol/l	99%	-0.37
AG	1.93	0.10	mmol/l	99%	-0.18
AH	1.92	0.16	mmol/l	99%	-0.37
AI	2.00	0.20	mmol/l	103%	1.10
AJ	1.95	0.16	mmol/l	101%	0.18
AK	1.96	0.10	mmol/l	101%	0.37
AL	1.92	0.2	mmol/l	99%	-0.37
AM	10.8 *		mmol/l	557%	163.11
AN			mmol/l		
AO	1.93	0.29	mmol/l	99%	-0.18
AP	1.89	0.19	mmol/l	97%	-0.92
AQ	1.94	0.39	mmol/l	100%	0.00
AR	2.006		mmol/l	103%	1.22
AS	1.95		mmol/l	101%	0.18
AT	1.98	0.30	mmol/l	102%	0.74
AU	2.04	0.14	mmol/l	105%	1.84
AV			mmol/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,45 ± 0,89	1,94 ± 0,02	mmol/l
Recov. ± CI(99%)	126,4 ± 45,7	99,8 ± 1,2	%
SD between labs	2,01	0,05	mmol/l
RSD between labs	81,9	2,7	%
n for calculation	38	35	

Result [mmol/l]



Recovery [%]



Sample N167B

Parameter Total hardness

Target value ± U (k=2) 1,321 mmol/l ± 0,015 mmol/l

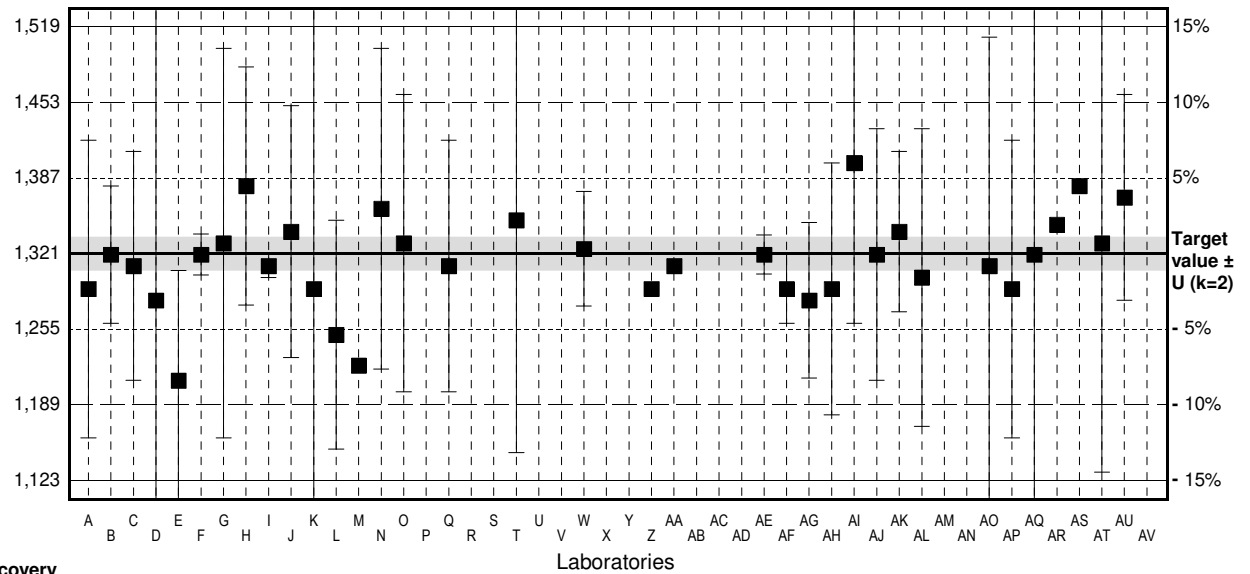
IFA result ± U (k=2) 1,40 mmol/l ± 0,06 mmol/l

Stability test mmol/l

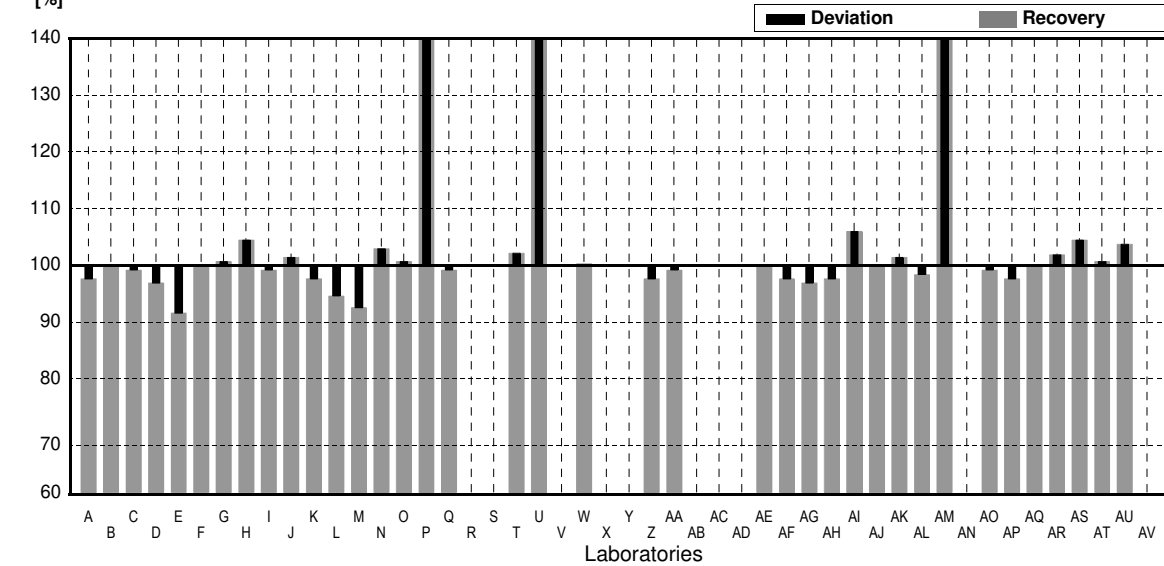
Lab Code	Result	±	Unit	Recovery	z-Score
A	1,29	0,13	mmol/l	98%	-0,84
B	1,32	0,06	mmol/l	100%	-0,03
C	1,31	0,1	mmol/l	99%	-0,30
D	1,28	0,26	mmol/l	97%	-1,11
E	1,21	0,096	mmol/l	92%	-3,00
F	1,32	0,0178	mmol/l	100%	-0,03
G	1,33	0,17	mmol/l	101%	0,24
H	1,38	0,104	mmol/l	104%	1,60
I	1,31	0,01	mmol/l	99%	-0,30
J	1,34	0,11	mmol/l	101%	0,51
K	1,29	0,232	mmol/l	98%	-0,84
L	1,25	0,10	mmol/l	95%	-1,92
M	1,223		mmol/l	93%	-2,65
N	1,36	0,14	mmol/l	103%	1,05
O	1,33	0,13	mmol/l	101%	0,24
P	7,1 *		mmol/l	537%	156,24
Q	1,31	0,11	mmol/l	99%	-0,30
R			mmol/l		
S			mmol/l		
T	1,35	0,203	mmol/l	102%	0,78
U	2,64 *		mmol/l	200%	35,66
V			mmol/l		
W	1,325	0,05	mmol/l	100%	0,11
X			mmol/l		
Y			mmol/l		
Z	1,29		mmol/l	98%	-0,84
AA	1,31		mmol/l	99%	-0,30
AB			mmol/l		
AC			mmol/l		
AD			mmol/l		
AE	1,32	0,017	mmol/l	100%	-0,03
AF	1,29	0,03	mmol/l	98%	-0,84
AG	1,28	0,068	mmol/l	97%	-1,11
AH	1,29	0,11	mmol/l	98%	-0,84
AI	1,40	0,14	mmol/l	106%	2,14
AJ	1,32	0,11	mmol/l	100%	-0,03
AK	1,34	0,07	mmol/l	101%	0,51
AL	1,30	0,13	mmol/l	98%	-0,57
AM	7,2 *		mmol/l	545%	158,94
AN			mmol/l		
AO	1,31	0,20	mmol/l	99%	-0,30
AP	1,29	0,13	mmol/l	98%	-0,84
AQ	1,32	0,27	mmol/l	100%	-0,03
AR	1,346		mmol/l	102%	0,68
AS	1,38		mmol/l	104%	1,60
AT	1,33	0,20	mmol/l	101%	0,24
AU	1,37	0,09	mmol/l	104%	1,32
AV			mmol/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,657 ± 0,587	1,315 ± 0,019	mmol/l
Recov. ± CI(99%)	125,4 ± 44,4	99,5 ± 1,4	%
SD between labs	1,330	0,040	mmol/l
RSD between labs	80,3	3,1	%
n for calculation	38	35	

Result [mmol/l]



Recovery [%]



Sample N167A

Parameter Alkalinity

Target value ± U (k=2) 2,36 mmol/l ± 0,03 mmol/l

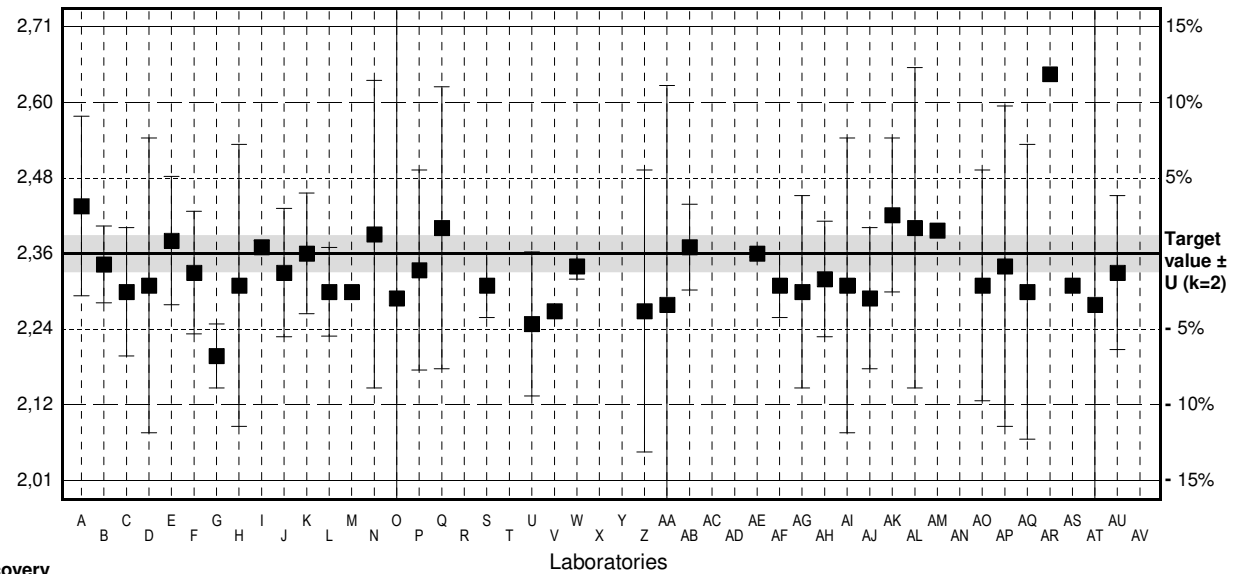
IFA result ± U (k=2) 2,30 mmol/l ± 0,09 mmol/l

Stability test mmol/l

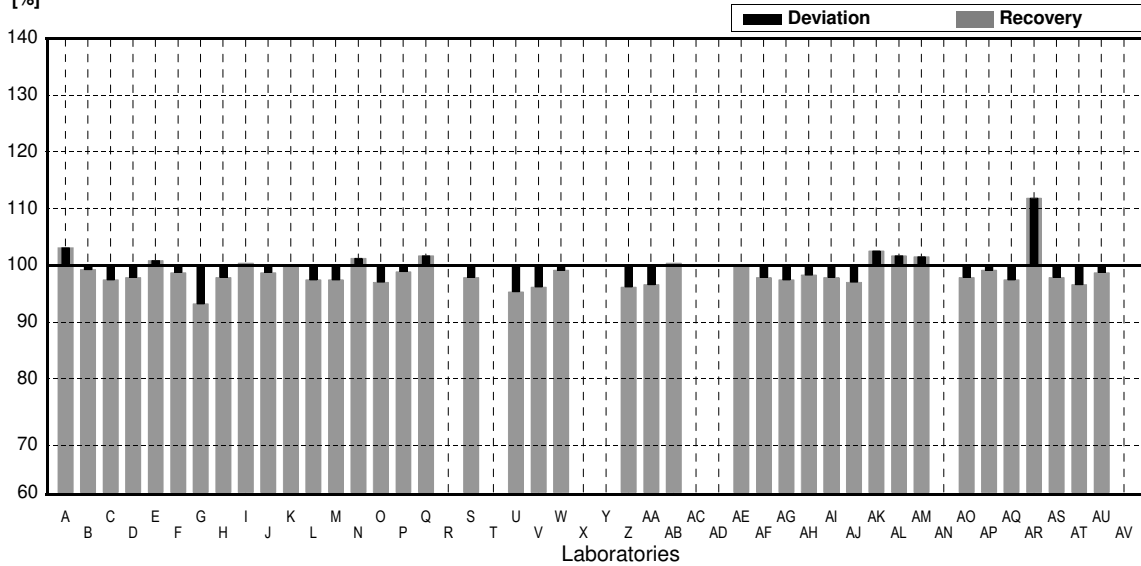
Lab Code	Result	±	Unit	Recovery	z-Score
A	2,434 *	0,14	mmol/l	103%	1,65
B	2,343	0,06	mmol/l	99%	-0,38
C	2,30	0,1	mmol/l	97%	-1,34
D	2,31	0,23	mmol/l	98%	-1,12
E	2,38	0,10	mmol/l	101%	0,45
F	2,33	0,0957	mmol/l	99%	-0,67
G	2,20 *	0,05	mmol/l	93%	-3,57
H	2,31	0,22	mmol/l	98%	-1,12
I	2,37	0,01	mmol/l	100%	0,22
J	2,33	0,10	mmol/l	99%	-0,67
K	2,36	0,094	mmol/l	100%	0,00
L	2,30	0,069	mmol/l	97%	-1,34
M	2,30		mmol/l	97%	-1,34
N	2,39	0,24	mmol/l	101%	0,67
O	2,29	2,3	mmol/l	97%	-1,56
P	2,334	0,156	mmol/l	99%	-0,58
Q	2,40	0,22	mmol/l	102%	0,89
R			mmol/l		
S	2,31	0,05	mmol/l	98%	-1,12
T			mmol/l		
U	2,25	0,1125	mmol/l	95%	-2,45
V	2,27		mmol/l	96%	-2,01
W	2,34	0,02	mmol/l	99%	-0,45
X			mmol/l		
Y			mmol/l		
Z	2,27	0,22	mmol/l	96%	-2,01
AA	2,28	0,342	mmol/l	97%	-1,78
AB	2,37	0,067	mmol/l	100%	0,22
AC			mmol/l		
AD			mmol/l		
AE	2,36	0,006	mmol/l	100%	0,00
AF	2,31	0,05	mmol/l	98%	-1,12
AG	2,30	0,15	mmol/l	97%	-1,34
AH	2,32	0,09	mmol/l	98%	-0,89
AI	2,31	0,23	mmol/l	98%	-1,12
AJ	2,29	0,11	mmol/l	97%	-1,56
AK	2,42	0,12	mmol/l	103%	1,34
AL	2,40	0,25	mmol/l	102%	0,89
AM	2,396		mmol/l	102%	0,80
AN			mmol/l		
AO	2,31	0,18	mmol/l	98%	-1,12
AP	2,34	0,25	mmol/l	99%	-0,45
AQ	2,30	0,23	mmol/l	97%	-1,34
AR	2,64 *		mmol/l	112%	6,24
AS	2,31		mmol/l	98%	-1,12
AT	2,28	0,77	mmol/l	97%	-1,78
AU	2,33	0,12	mmol/l	99%	-0,67
AV			mmol/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,33 ± 0,03	2,33 ± 0,02	mmol/l
Recov. ± CI(99%)	98,9 ± 1,3	98,6 ± 0,8	%
SD between labs	0,07	0,04	mmol/l
RSD between labs	3,0	1,8	%
n for calculation	40	37	

Result [mmol/l]



Recovery [%]



Sample N167B

Parameter Alkalinity

Target value ± U (k=2) 1,294 mmol/l ± 0,018 mmol/l

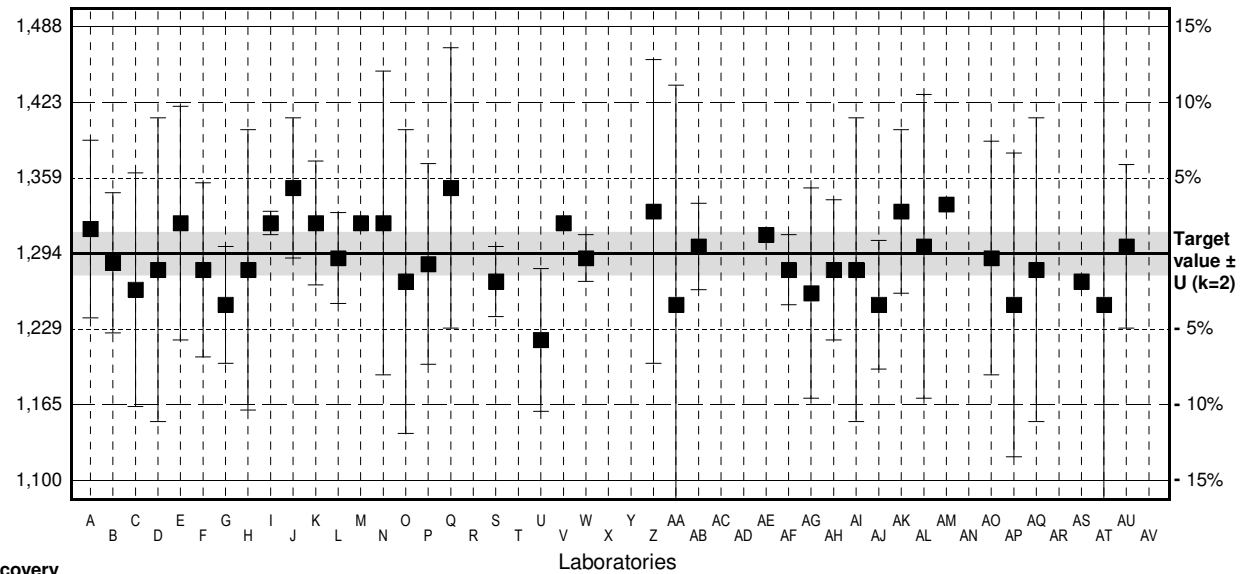
IFA result ± U (k=2) 1,27 mmol/l ± 0,05 mmol/l

Stability test mmol/l

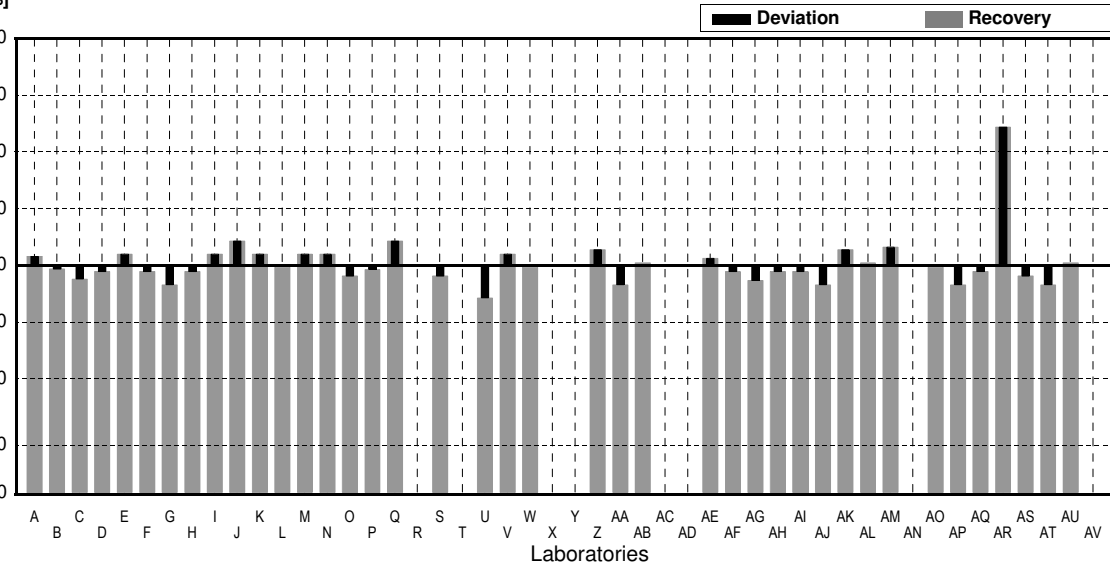
Lab Code	Result	±	Unit	Recovery	z-Score
A	1,315	0,076	mmol/l	102%	0,85
B	1,286	0,06	mmol/l	99%	-0,33
C	1,263	0,1	mmol/l	98%	-1,26
D	1,28	0,13	mmol/l	99%	-0,57
E	1,32	0,10	mmol/l	102%	1,06
F	1,28	0,0746	mmol/l	99%	-0,57
G	1,25	0,05	mmol/l	97%	-1,79
H	1,28	0,12	mmol/l	99%	-0,57
I	1,32	0,01	mmol/l	102%	1,06
J	1,35	0,06	mmol/l	104%	2,28
K	1,32	0,053	mmol/l	102%	1,06
L	1,29	0,039	mmol/l	100%	-0,16
M	1,32		mmol/l	102%	1,06
N	1,32	0,13	mmol/l	102%	1,06
O	1,27	0,13	mmol/l	98%	-0,98
P	1,285	0,086	mmol/l	99%	-0,37
Q	1,35	0,12	mmol/l	104%	2,28
R			mmol/l		
S	1,27	0,03	mmol/l	98%	-0,98
T			mmol/l		
U	1,22	0,061	mmol/l	94%	-3,01
V	1,32		mmol/l	102%	1,06
W	1,29	0,02	mmol/l	100%	-0,16
X			mmol/l		
Y			mmol/l		
Z	1,33	0,13	mmol/l	103%	1,46
AA	1,25	0,188	mmol/l	97%	-1,79
AB	1,30	0,037	mmol/l	100%	0,24
AC			mmol/l		
AD			mmol/l		
AE	1,31	0,006	mmol/l	101%	0,65
AF	1,28	0,03	mmol/l	99%	-0,57
AG	1,26	0,09	mmol/l	97%	-1,38
AH	1,28	0,06	mmol/l	99%	-0,57
AI	1,28	0,13	mmol/l	99%	-0,57
AJ	1,250	0,055	mmol/l	97%	-1,79
AK	1,33	0,07	mmol/l	103%	1,46
AL	1,30	0,13	mmol/l	100%	0,24
AM	1,336		mmol/l	103%	1,71
AN			mmol/l		
AO	1,29	0,10	mmol/l	100%	-0,16
AP	1,25	0,13	mmol/l	97%	-1,79
AQ	1,28	0,13	mmol/l	99%	-0,57
AR	1,61	*	mmol/l	124%	12,85
AS	1,27		mmol/l	98%	-0,98
AT	1,25	0,42	mmol/l	97%	-1,79
AU	1,30	0,07	mmol/l	100%	0,24
AV			mmol/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,299 ± 0,025	1,291 ± 0,013	mmol/l
Recov. ± CI(99%)	100,4 ± 1,9	99,8 ± 1,0	%
SD between labs	0,059	0,031	mmol/l
RSD between labs	4,5	2,4	%
n for calculation	40	39	

Result [mmol/l]



Recovery [%]



Sample N167A

Parameter Hydrogen carbonate

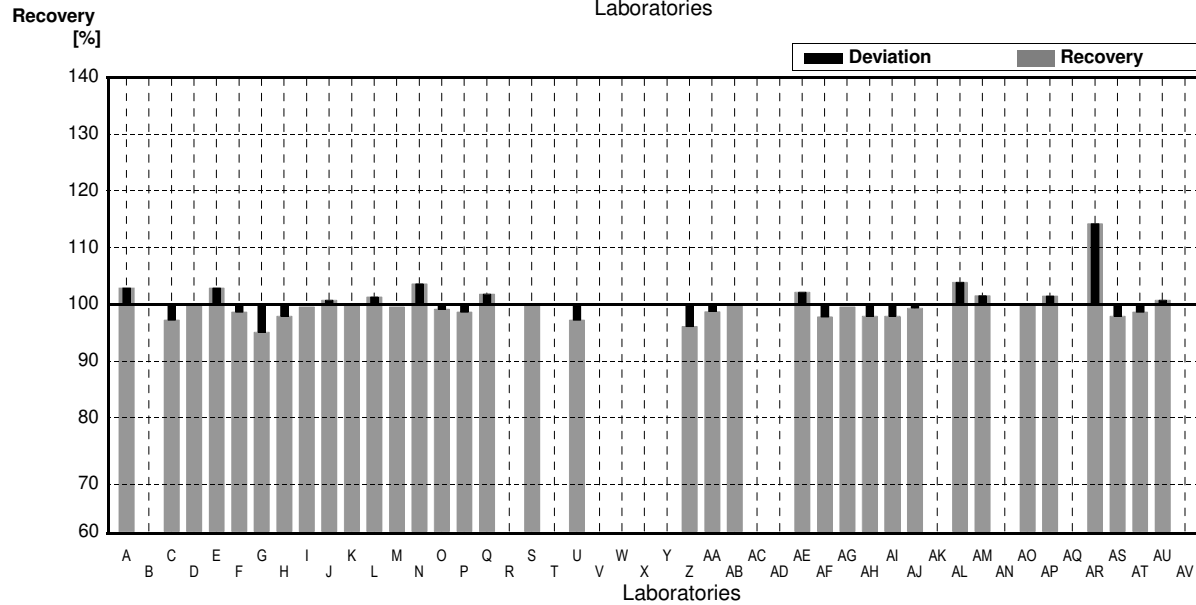
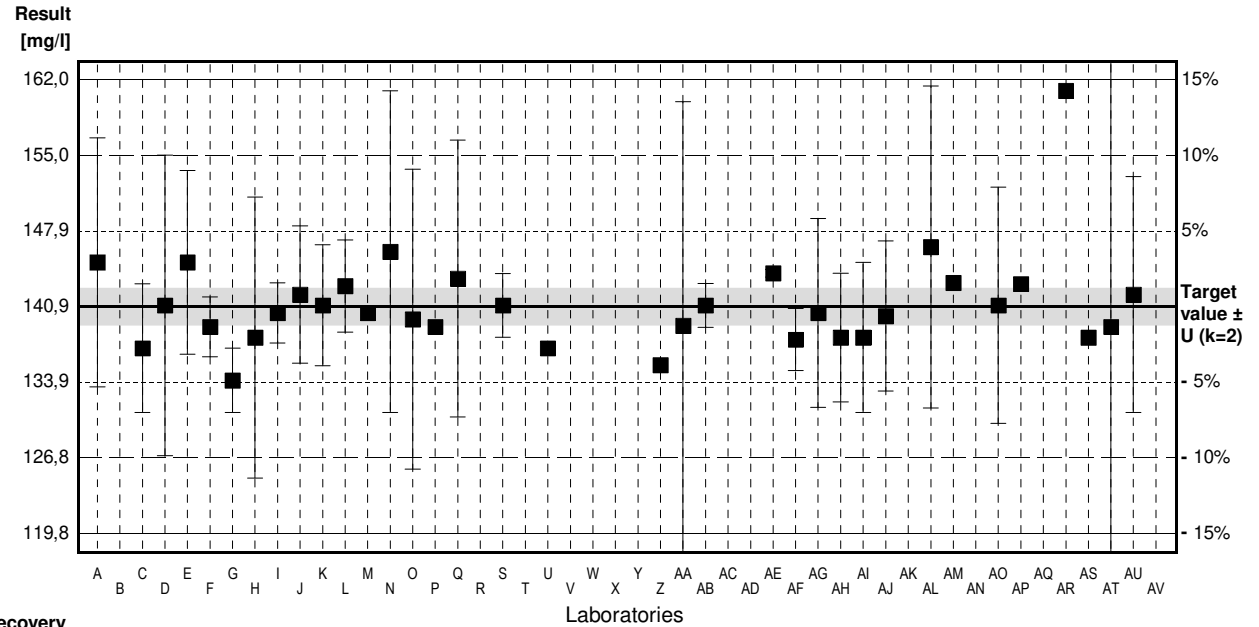
Target value ± U (k=2) 140,9 mg/l ± 1,7 mg/l

IFA result ± U (k=2) 137 mg/l ± 6 mg/l

Stability test mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	145	11,6	mg/l	103%	1,21
B			mg/l		
C	137	6	mg/l	97%	-1,15
D	141	14	mg/l	100%	0,03
E	145	8,57	mg/l	103%	1,21
F	139	2,79	mg/l	99%	-0,56
G	134	3	mg/l	95%	-2,04
H	138	13,1	mg/l	98%	-0,86
I	140,3	2,8	mg/l	100%	-0,18
J	142	6,4	mg/l	101%	0,33
K	141	5,64	mg/l	100%	0,03
L	142,8	4,3	mg/l	101%	0,56
M	140,3		mg/l	100%	-0,18
N	146	15	mg/l	104%	1,51
O	139,7	13,97	mg/l	99%	-0,35
P	139		mg/l	99%	-0,56
Q	143,5	12,9	mg/l	102%	0,77
R			mg/l		
S	141	2,96	mg/l	100%	0,03
T			mg/l		
U	137		mg/l	97%	-1,15
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	135,44		mg/l	96%	-1,61
AA	139,1	20,87	mg/l	99%	-0,53
AB	141	2,04	mg/l	100%	0,03
AC			mg/l		
AD			mg/l		
AE	144	0,36	mg/l	102%	0,92
AF	137,81	2,89	mg/l	98%	-0,91
AG	140,3	8,8	mg/l	100%	-0,18
AH	138	6	mg/l	98%	-0,86
AI	138	7	mg/l	98%	-0,86
AJ	140	7	mg/l	99%	-0,27
AK			mg/l		
AL	146,44	15	mg/l	104%	1,64
AM	143,1		mg/l	102%	0,65
AN			mg/l		
AO	141	11	mg/l	100%	0,03
AP	143		mg/l	101%	0,62
AQ			mg/l		
AR	161	*	mg/l	114%	5,94
AS	138		mg/l	98%	-0,86
AT	139	47,2	mg/l	99%	-0,56
AU	142	11	mg/l	101%	0,33
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	141,1 ± 2,1	140,5 ± 1,4	mg/l
Recov. ± CI(99%)	100,1 ± 1,5	99,7 ± 1,0	%
SD between labs	4,5	2,9	mg/l
RSD between labs	3,2	2,1	%
n for calculation	35	34	



Sample N167B

Parameter Hydrogen carbonate

Target value ± U (k=2) 75,9 mg/l ± 1,1 mg/l

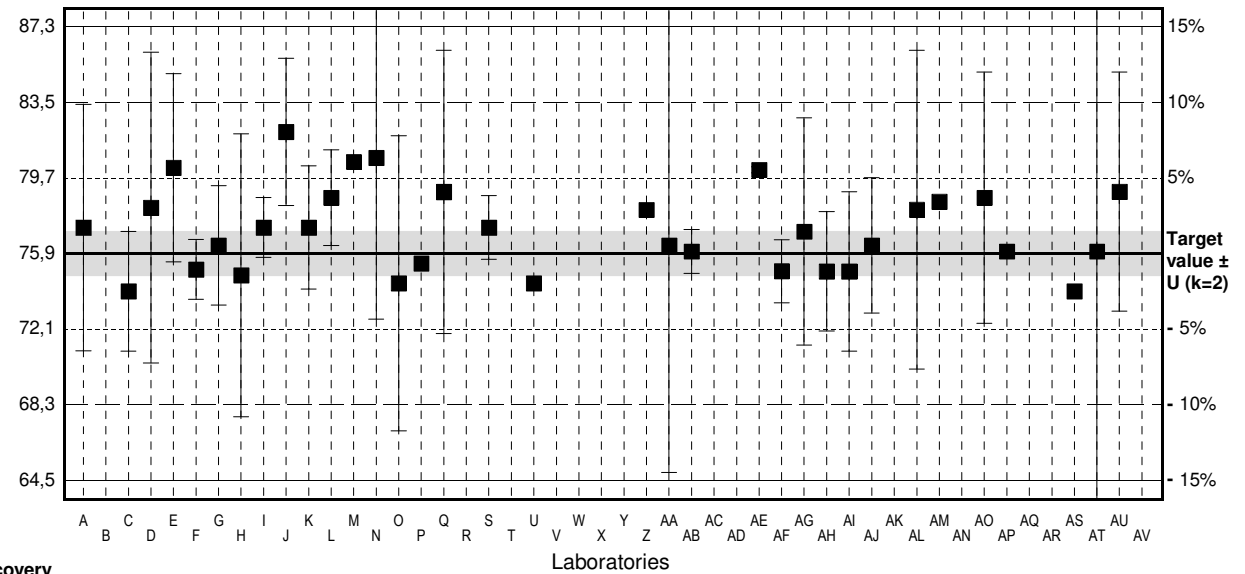
IFA result ± U (k=2) 74 mg/l ± 3 mg/l

Stability test mg/l

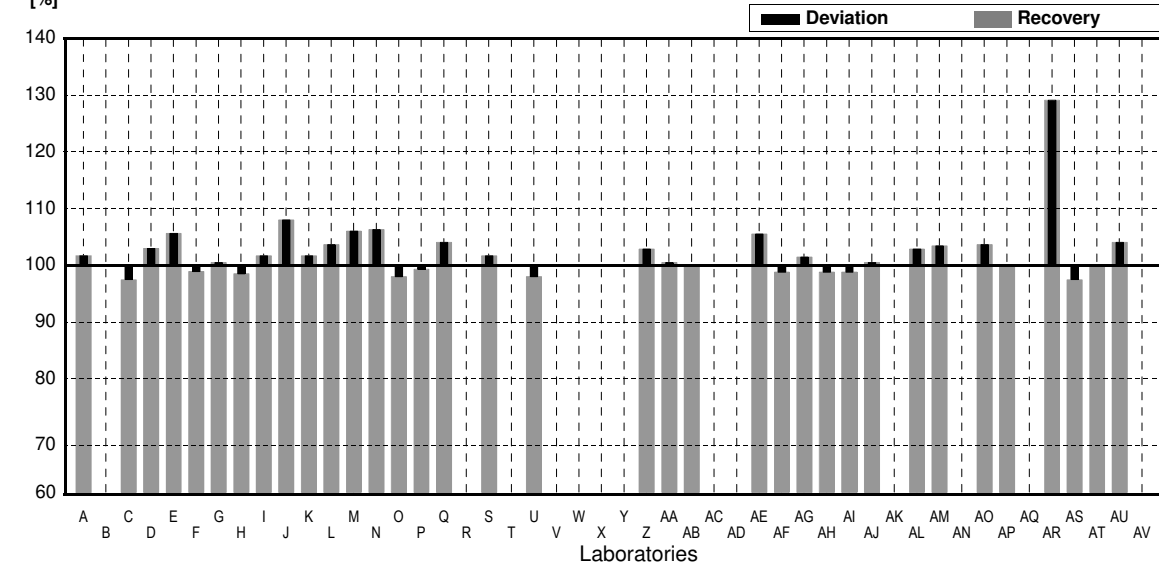
Lab Code	Result	±	Unit	Recovery	z-Score
A	77.2	6.18	mg/l	102%	0.71
B			mg/l		
C	74.0	3	mg/l	97%	-1.04
D	78.2	7.8	mg/l	103%	1.26
E	80.2	4.73	mg/l	106%	2.36
F	75.1	1.50	mg/l	99%	-0.44
G	76.3	3	mg/l	101%	0.22
H	74.8	7.102	mg/l	99%	-0.60
I	77.2	1.5	mg/l	102%	0.71
J	82	3.7	mg/l	108%	3.35
K	77.2	3.09	mg/l	102%	0.71
L	78.7	2.4	mg/l	104%	1.54
M	80.5		mg/l	106%	2.53
N	80.7	8.1	mg/l	106%	2.64
O	74.4	7.4	mg/l	98%	-0.82
P	75.4		mg/l	99%	-0.27
Q	78.99	7.11	mg/l	104%	1.70
R			mg/l		
S	77.2	1.6	mg/l	102%	0.71
T			mg/l		
U	74.4		mg/l	98%	-0.82
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	78.09		mg/l	103%	1.20
AA	76.3	11.4	mg/l	101%	0.22
AB	76	1.10	mg/l	100%	0.05
AC			mg/l		
AD			mg/l		
AE	80.1	0.153	mg/l	106%	2.31
AF	75.01	1.58	mg/l	99%	-0.49
AG	77.0	5.7	mg/l	101%	0.60
AH	75.0	3.0	mg/l	99%	-0.49
AI	75	4	mg/l	99%	-0.49
AJ	76.3	3.4	mg/l	101%	0.22
AK			mg/l		
AL	78.1	8.0	mg/l	103%	1.21
AM	78.5		mg/l	103%	1.43
AN			mg/l		
AO	78.7	6.3	mg/l	104%	1.54
AP	76		mg/l	100%	0.05
AQ			mg/l		
AR	98	*	mg/l	129%	12.13
AS	74		mg/l	97%	-1.04
AT	76	25.8	mg/l	100%	0.05
AU	79	6	mg/l	104%	1.70
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	77,7 ± 1,9	77,1 ± 1,0	mg/l
Recov. ± CI(99%)	102,4 ± 2,5	101,6 ± 1,3	%
SD between labs	4,1	2,1	mg/l
RSD between labs	5,3	2,8	%
n for calculation	35	34	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Calcium

Target value ± U (k=2) 60,1 mg/l ± 0,9 mg/l

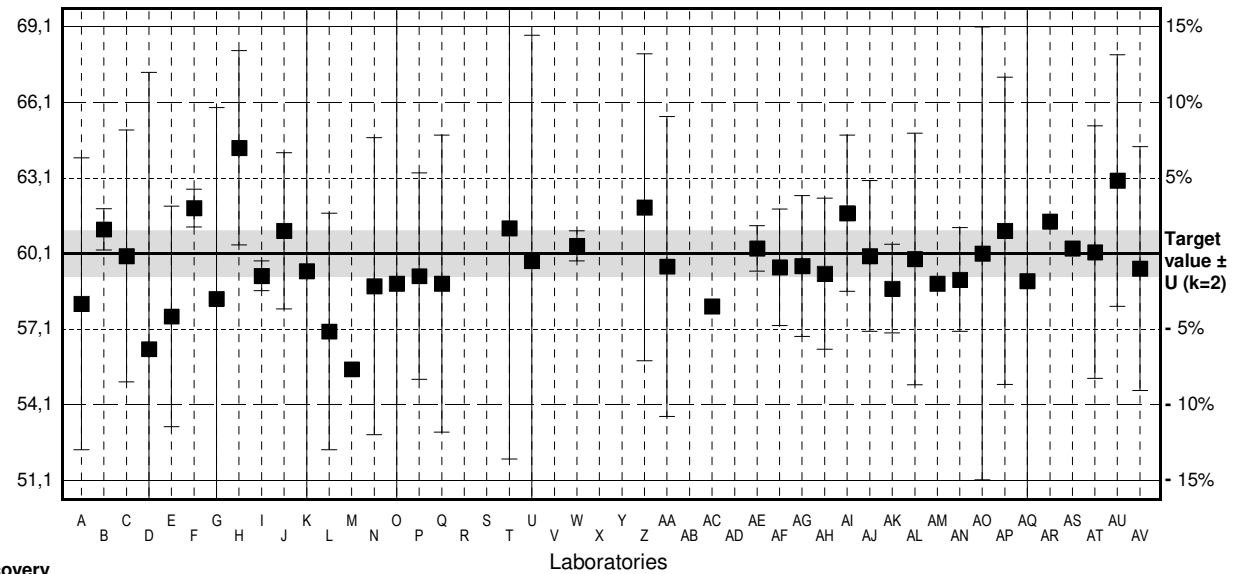
IFA result ± U (k=2) 64 mg/l ± 3 mg/l

Stability test mg/l

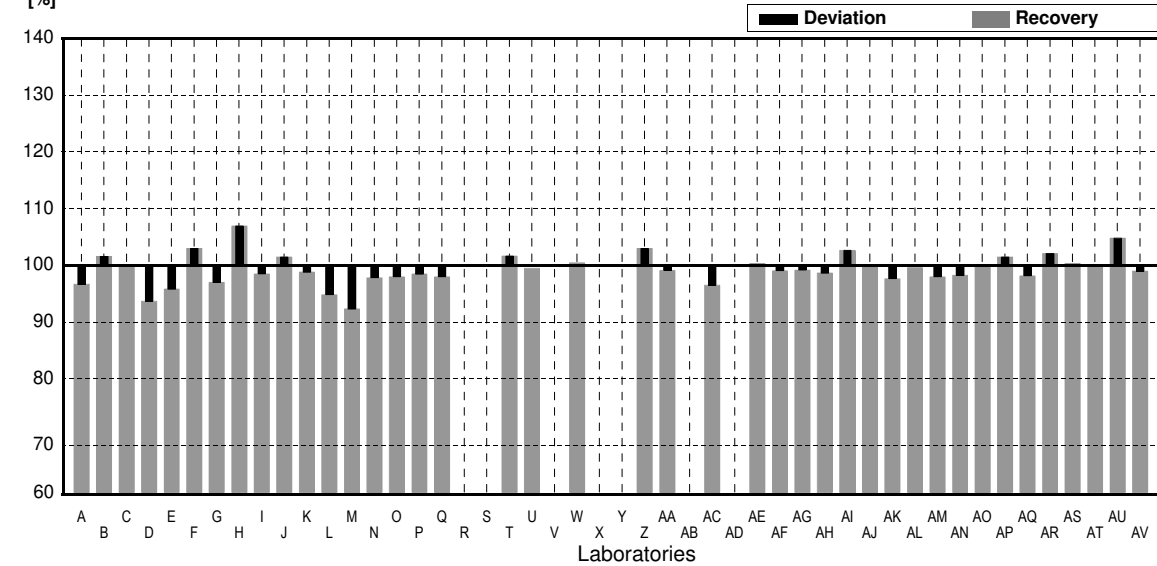
Lab Code	Result	±	Unit	Recovery	z-Score
A	58,098	5,80	mg/l	97%	-1,04
B	61,06	0,82	mg/l	102%	0,50
C	60,0	5	mg/l	100%	-0,05
D	56,3 *	11	mg/l	94%	-1,98
E	57,6	4,38	mg/l	96%	-1,30
F	61,9	0,745	mg/l	103%	0,94
G	58,3	7,6	mg/l	97%	-0,94
H	64,3 *	3,86	mg/l	107%	2,18
I	59,21	0,59	mg/l	99%	-0,46
J	61	3,1	mg/l	101%	0,47
K	59,4	10,7	mg/l	99%	-0,36
L	57	4,7	mg/l	95%	-1,61
M	55,5 *		mg/l	92%	-2,39
N	58,8	5,9	mg/l	98%	-0,68
O	58,9	12	mg/l	98%	-0,62
P	59,2	4,1	mg/l	99%	-0,47
Q	58,9	5,9	mg/l	98%	-0,62
R			mg/l		
S			mg/l		
T	61,1	9,17	mg/l	102%	0,52
U	59,8	8,97	mg/l	100%	-0,16
V			mg/l		
W	60,40	0,6	mg/l	100%	0,16
X			mg/l		
Y			mg/l		
Z	61,93	6,1	mg/l	103%	0,95
AA	59,58	5,958	mg/l	99%	-0,27
AB			mg/l		
AC	58		mg/l	97%	-1,09
AD			mg/l		
AE	60,3	0,9	mg/l	100%	0,10
AF	59,55	2,32	mg/l	99%	-0,29
AG	59,6	2,8	mg/l	99%	-0,26
AH	59,3	3,0	mg/l	99%	-0,42
AI	61,7	3,1	mg/l	103%	0,83
AJ	60	3	mg/l	100%	-0,05
AK	58,7	1,76	mg/l	98%	-0,73
AL	59,88	5,0	mg/l	100%	-0,11
AM	58,9		mg/l	98%	-0,62
AN	59,06	2,06	mg/l	98%	-0,54
AO	60,1	9,0	mg/l	100%	0,00
AP	61	6,1	mg/l	101%	0,47
AQ	59,0	12	mg/l	98%	-0,57
AR	61,37		mg/l	102%	0,66
AS	60,3		mg/l	100%	0,10
AT	60,15	5,02	mg/l	100%	0,03
AU	63 *	5	mg/l	105%	1,51
AV	59,5	4,85	mg/l	99%	-0,31

	All results	Outliers excl.	Unit
Mean ± CI(99%)	59,7 ± 0,7	59,7 ± 0,5	mg/l
Recov. ± CI(99%)	99,3 ± 1,2	99,3 ± 0,9	%
SD between labs	1,7	1,2	mg/l
RSD between labs	2,8	2,0	%
n for calculation	41	37	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Calcium

Target value ± U (k=2) 39,6 mg/l ± 0,6 mg/l

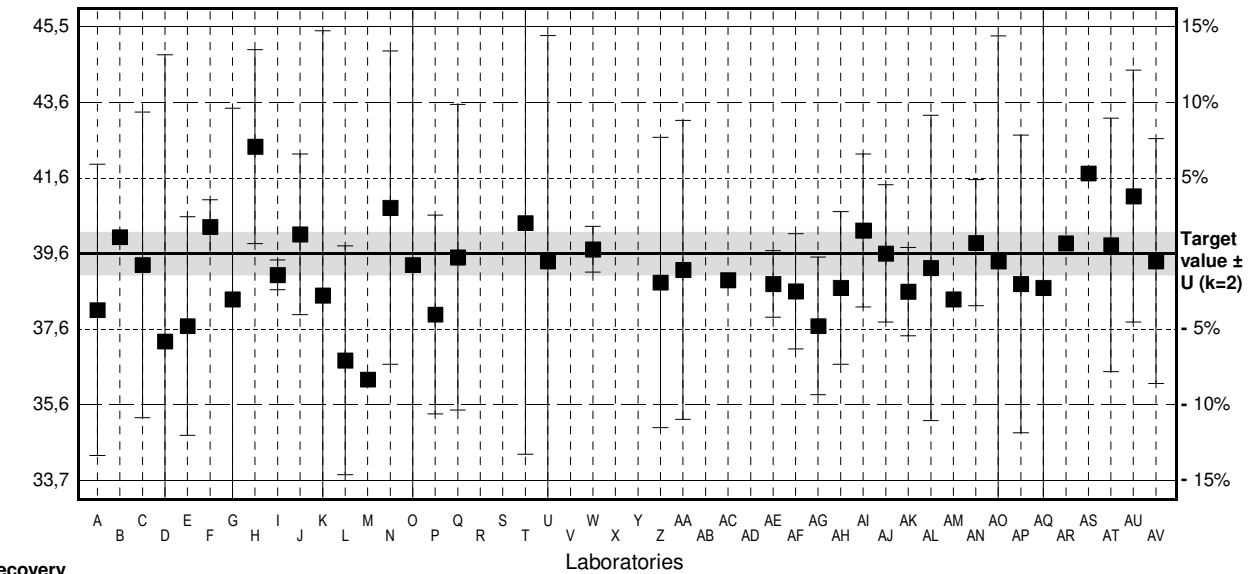
IFA result ± U (k=2) 42,0 mg/l ± 1,9 mg/l

Stability test mg/l

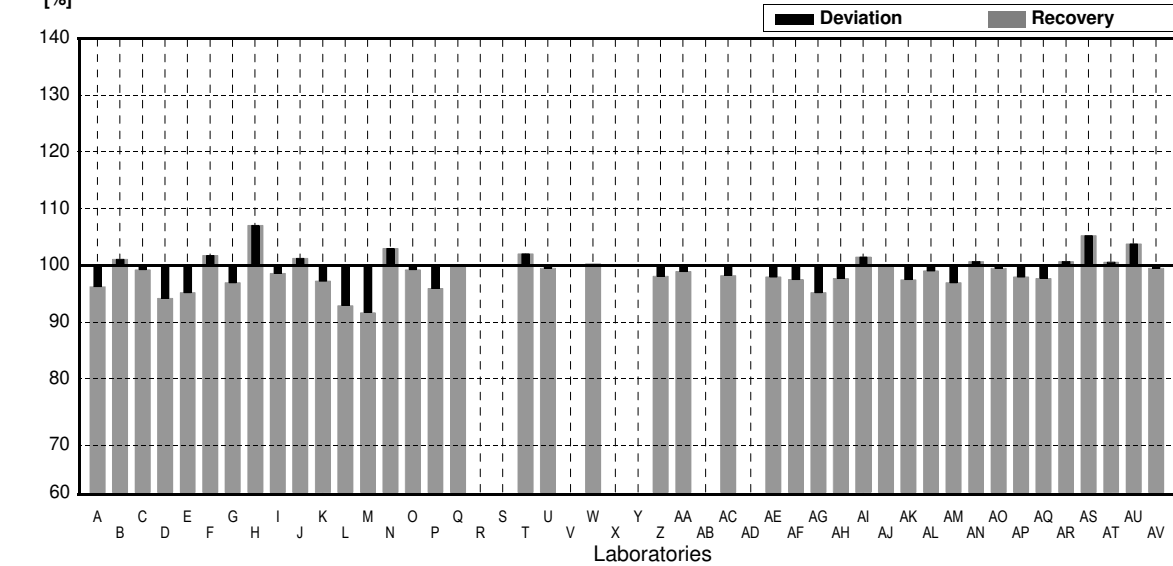
Lab Code	Result	±	Unit	Recovery	z-Score
A	38,120	3,81	mg/l	96%	-1,17
B	40,03	0,06	mg/l	101%	0,34
C	39,3	4	mg/l	99%	-0,24
D	37,3	7,5	mg/l	94%	-1,82
E	37,7	2,86	mg/l	95%	-1,50
F	40,3	0,704	mg/l	102%	0,55
G	38,4	5,0	mg/l	97%	-0,95
H	42,4	2,54	mg/l	107%	2,21
I	39,04	0,39	mg/l	99%	-0,44
J	40,1	2,1	mg/l	101%	0,39
K	38,5	6,93	mg/l	97%	-0,87
L	36,8	3,0	mg/l	93%	-2,21
M	36,3		mg/l	92%	-2,60
N	40,8	4,1	mg/l	103%	0,95
O	39,3	7,9	mg/l	99%	-0,24
P	38,0	2,6	mg/l	96%	-1,26
Q	39,5	4,0	mg/l	100%	-0,08
R			mg/l		
S			mg/l		
T	40,4	6,06	mg/l	102%	0,63
U	39,4	5,91	mg/l	99%	-0,16
V			mg/l		
W	39,71	0,6	mg/l	100%	0,09
X			mg/l		
Y			mg/l		
Z	38,84	3,8	mg/l	98%	-0,60
AA	39,17	3,917	mg/l	99%	-0,34
AB			mg/l		
AC	38,9		mg/l	98%	-0,55
AD			mg/l		
AE	38,8	0,872	mg/l	98%	-0,63
AF	38,61	1,51	mg/l	98%	-0,78
AG	37,7	1,8	mg/l	95%	-1,50
AH	38,7	2,0	mg/l	98%	-0,71
AI	40,2	2,0	mg/l	102%	0,47
AJ	39,6	1,8	mg/l	100%	0,00
AK	38,6	1,16	mg/l	97%	-0,79
AL	39,22	4,0	mg/l	99%	-0,30
AM	38,4		mg/l	97%	-0,95
AN	39,88	1,65	mg/l	101%	0,22
AO	39,4	5,9	mg/l	99%	-0,16
AP	38,8	3,9	mg/l	98%	-0,63
AQ	38,7	7,9	mg/l	98%	-0,71
AR	39,87		mg/l	101%	0,21
AS	41,7		mg/l	105%	1,66
AT	39,82	3,32	mg/l	101%	0,17
AU	41,1	3,3	mg/l	104%	1,18
AV	39,4	3,21	mg/l	99%	-0,16

	All results	Outliers excl.	Unit
Mean ± CI(99%)	39,2 ± 0,5	39,1 ± 0,5	mg/l
Recov. ± CI(99%)	99,0 ± 1,3	98,8 ± 1,2	%
SD between labs	1,2	1,1	mg/l
RSD between labs	3,1	2,8	%
n for calculation	41	40	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Magnesium

Target value ± U (k=2) 10,79 mg/l ± 0,14 mg/l

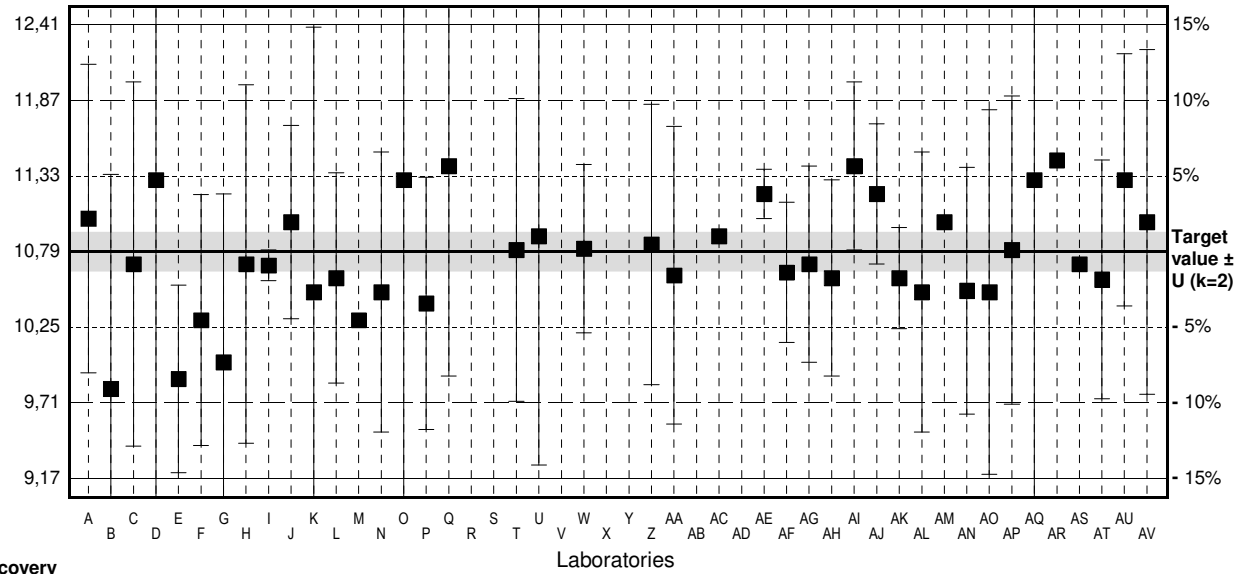
IFA result ± U (k=2) 11,1 mg/l ± 0,6 mg/l

Stability test mg/l

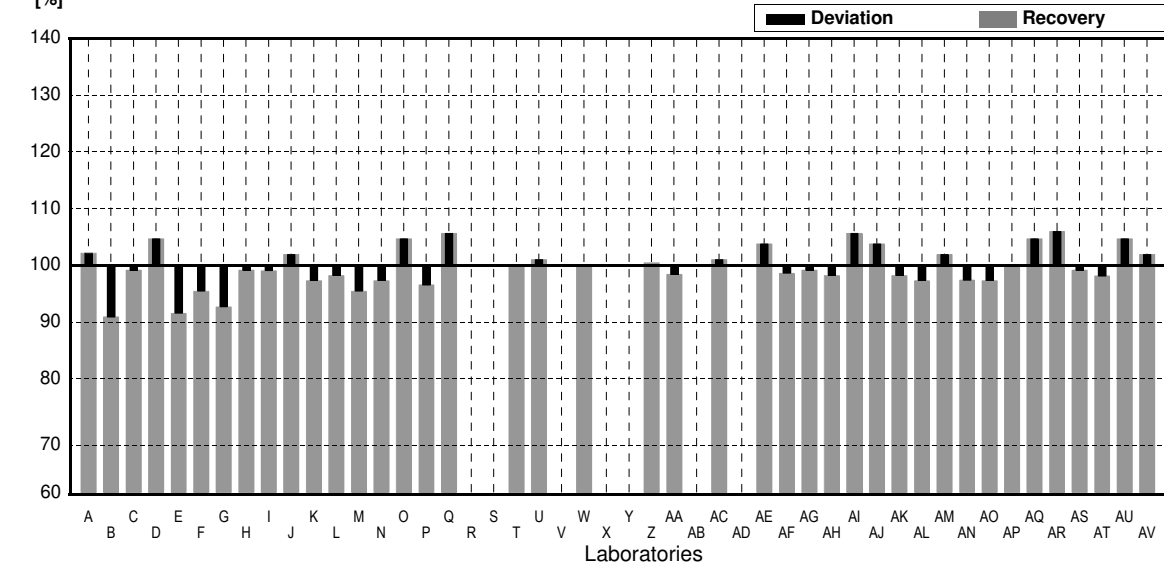
Lab Code	Result	±	Unit	Recovery	z-Score
A	11,025	1,10	mg/l	102%	0,62
B	9,81	1,53	mg/l	91%	-2,59
C	10,7	1,3	mg/l	99%	-0,24
D	11,3	2,25	mg/l	105%	1,35
E	9,88	0,67	mg/l	92%	-2,41
F	10,3	0,896	mg/l	95%	-1,30
G	10,0	1,2	mg/l	93%	-2,09
H	10,7	1,28	mg/l	99%	-0,24
I	10,69	0,11	mg/l	99%	-0,26
J	11,0	0,69	mg/l	102%	0,56
K	10,5	1,89	mg/l	97%	-0,77
L	10,6	0,75	mg/l	98%	-0,50
M	10,3		mg/l	95%	-1,30
N	10,5	1,0	mg/l	97%	-0,77
O	11,3	2,3	mg/l	105%	1,35
P	10,42	0,9	mg/l	97%	-0,98
Q	11,4	1,5	mg/l	106%	1,62
R			mg/l		
S			mg/l		
T	10,8	1,08	mg/l	100%	0,03
U	10,9	1,635	mg/l	101%	0,29
V			mg/l		
W	10,81	0,6	mg/l	100%	0,05
X			mg/l		
Y			mg/l		
Z	10,84	1,0	mg/l	100%	0,13
AA	10,62	1,062	mg/l	98%	-0,45
AB			mg/l		
AC	10,9		mg/l	101%	0,29
AD			mg/l		
AE	11,2	0,176	mg/l	104%	1,09
AF	10,64	0,50	mg/l	99%	-0,40
AG	10,7	0,7	mg/l	99%	-0,24
AH	10,6	0,7	mg/l	98%	-0,50
AI	11,4	0,6	mg/l	106%	1,62
AJ	11,2	0,5	mg/l	104%	1,09
AK	10,6	0,36	mg/l	98%	-0,50
AL	10,5	1,0	mg/l	97%	-0,77
AM	11,0		mg/l	102%	0,56
AN	10,51	0,88	mg/l	97%	-0,74
AO	10,5	1,3	mg/l	97%	-0,77
AP	10,8	1,1	mg/l	100%	0,03
AQ	11,3	2,3	mg/l	105%	1,35
AR	11,44		mg/l	106%	1,72
AS	10,7		mg/l	99%	-0,24
AT	10,59	0,852	mg/l	98%	-0,53
AU	11,3	0,9	mg/l	105%	1,35
AV	11,0	1,23	mg/l	102%	0,56

	All results	Outliers excl.	Unit
Mean ± CI(99%)	10,76 ± 0,17	10,76 ± 0,17	mg/l
Recov. ± CI(99%)	99,7 ± 1,6	99,7 ± 1,6	%
SD between labs	0,40	0,40	mg/l
RSD between labs	3,7	3,7	%
n for calculation	41	41	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Magnesium

Target value ± U (k=2) 8,07 mg/l ± 0,10 mg/l

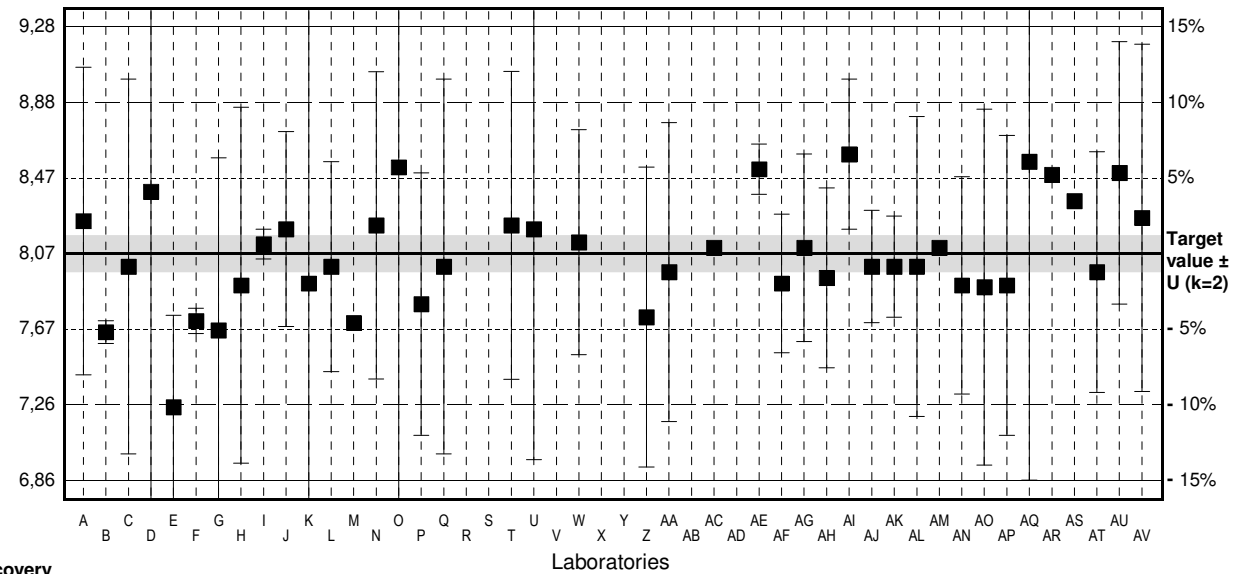
IFA result ± U (k=2) 8,5 mg/l ± 0,5 mg/l

Stability test mg/l

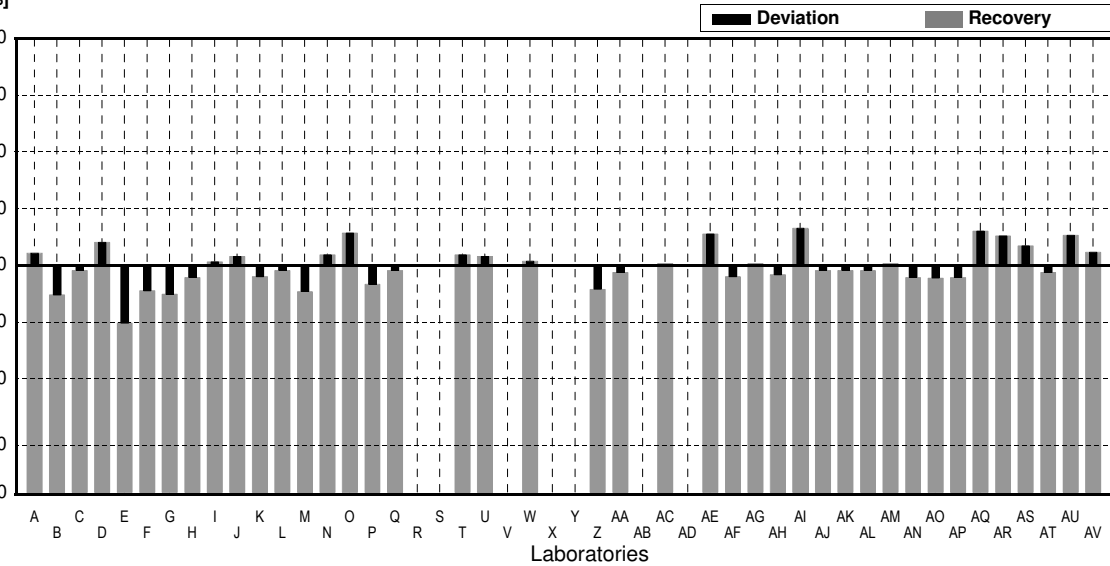
Lab Code	Result	±	Unit	Recovery	z-Score
A	8,243	0,82	mg/l	102%	0,61
B	7,65	0,06	mg/l	95%	-1,49
C	8,0	1	mg/l	99%	-0,25
D	8,40	1,7	mg/l	104%	1,17
E	7,25	0,49	mg/l	90%	-2,90
F	7,71	0,0672	mg/l	96%	-1,27
G	7,66	0,92	mg/l	95%	-1,45
H	7,9	0,95	mg/l	98%	-0,60
I	8,12	0,08	mg/l	101%	0,18
J	8,2	0,52	mg/l	102%	0,46
K	7,91	1,42	mg/l	98%	-0,57
L	8,0	0,56	mg/l	99%	-0,25
M	7,70		mg/l		
N	8,22	0,82	mg/l	102%	0,53
O	8,53	1,7	mg/l	108%	1,63
P	7,80	0,7	mg/l	97%	-0,96
Q	8,0	1,0	mg/l	99%	-0,25
R			mg/l		
S			mg/l		
T	8,22	0,822	mg/l	102%	0,53
U	8,2	1,23	mg/l	102%	0,46
V			mg/l		
W	8,13	0,6	mg/l	101%	0,21
X			mg/l		
Y			mg/l		
Z	7,73	0,8	mg/l	96%	-1,20
AA	7,97	0,797	mg/l	99%	-0,35
AB			mg/l		
AC	8,1		mg/l	100%	0,11
AD			mg/l		
AE	8,52	0,134	mg/l	106%	1,59
AF	7,91	0,37	mg/l	98%	-0,57
AG	8,1	0,5	mg/l	100%	0,11
AH	7,94	0,48	mg/l	98%	-0,46
AI	8,6	0,4	mg/l	107%	1,88
AJ	8,0	0,3	mg/l	99%	-0,25
AK	8,0	0,27	mg/l	99%	-0,25
AL	8,0	0,8	mg/l	99%	-0,25
AM	8,1		mg/l	100%	0,11
AN	7,90	0,58	mg/l	98%	-0,60
AO	7,89	0,95	mg/l	98%	-0,64
AP	7,9	0,8	mg/l	98%	-0,60
AQ	8,56	1,7	mg/l	106%	1,73
AR	8,49		mg/l	105%	1,49
AS	8,35		mg/l	103%	0,99
AT	7,97	0,642	mg/l	99%	-0,35
AU	8,5	0,7	mg/l	105%	1,52
AV	8,26	0,927	mg/l	102%	0,67

	All results	Outliers excl.	Unit
Mean ± CI(99%)	8,06 ± 0,12	8,06 ± 0,12	mg/l
Recov. ± CI(99%)	99,9 ± 1,5	99,9 ± 1,5	%
SD between labs	0,29	0,29	mg/l
RSD between labs	3,6	3,6	%
n for calculation	41	41	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Sodium

Target value ± U (k=2) 24,9 mg/l ± 0,3 mg/l

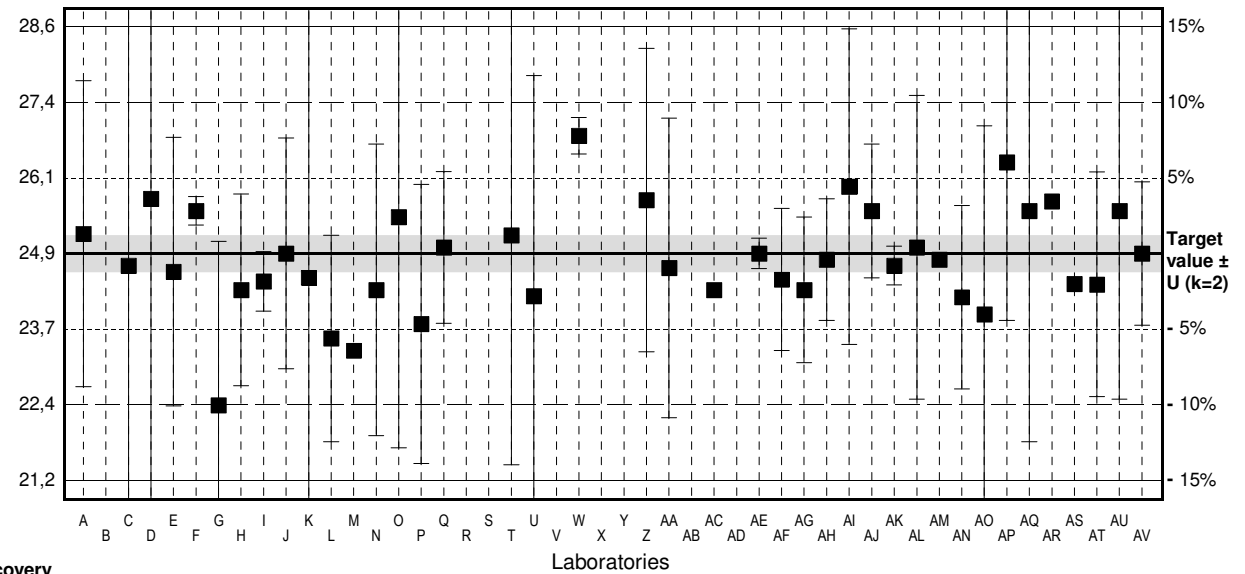
IFA result ± U (k=2) 25,6 mg/l ± 1,3 mg/l

Stability test mg/l

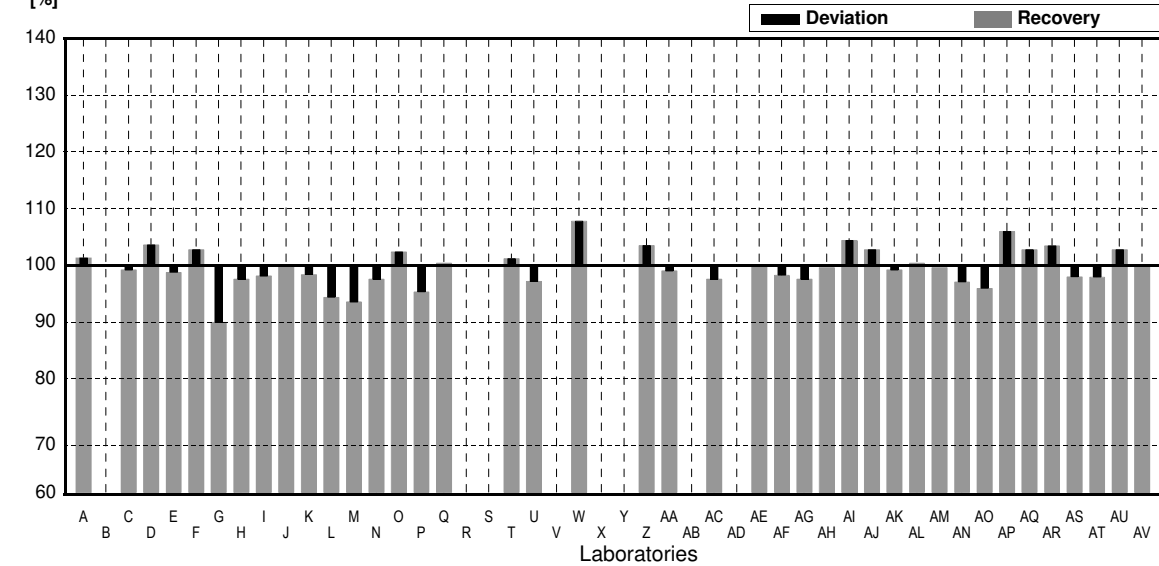
Lab Code	Result	±	Unit	Recovery	z-Score
A	25,223	2,52	mg/l	101%	0,41
B			mg/l		
C	24,7	4	mg/l	99%	-0,25
D	25,8	5,2	mg/l	104%	1,13
E	24,6	2,21	mg/l	99%	-0,38
F	25,6	0,235	mg/l	103%	0,88
G	22,4 *	2,7	mg/l	90%	-3,14
H	24,3	1,58	mg/l	98%	-0,75
I	24,44	0,49	mg/l	98%	-0,58
J	24,9	1,9	mg/l	100%	0,00
K	24,5	4,41	mg/l	98%	-0,50
L	23,5	1,7	mg/l	94%	-1,76
M	23,3		mg/l	94%	-2,01
N	24,3	2,4	mg/l	98%	-0,75
O	25,5	3,8	mg/l	102%	0,75
P	23,74	2,3	mg/l	95%	-1,46
Q	25,0	1,25	mg/l	100%	0,13
R			mg/l		
S			mg/l		
T	25,2	3,78	mg/l	101%	0,38
U	24,2	3,63	mg/l	97%	-0,88
V			mg/l		
W	26,84 *	0,3	mg/l	108%	2,43
X			mg/l		
Y			mg/l		
Z	25,78	2,5	mg/l	104%	1,10
AA	24,66	2,466	mg/l	99%	-0,30
AB			mg/l		
AC	24,3		mg/l	98%	-0,75
AD			mg/l		
AE	24,9	0,252	mg/l	100%	0,00
AF	24,47	1,17	mg/l	98%	-0,54
AG	24,3	1,2	mg/l	98%	-0,75
AH	24,8	1,0	mg/l	100%	-0,13
AI	26,0	2,6	mg/l	104%	1,38
AJ	25,6	1,1	mg/l	103%	0,88
AK	24,7	0,32	mg/l	99%	-0,25
AL	25,0	2,5	mg/l	100%	0,13
AM	24,8		mg/l	100%	-0,13
AN	24,18	1,51	mg/l	97%	-0,90
AO	23,9	3,1	mg/l	96%	-1,26
AP	26,4	2,6	mg/l	106%	1,88
AQ	25,6	3,8	mg/l	103%	0,88
AR	25,76		mg/l	103%	1,08
AS	24,4		mg/l	98%	-0,63
AT	24,39	1,85	mg/l	98%	-0,64
AU	25,6	3,1	mg/l	103%	0,88
AV	24,9	1,18	mg/l	100%	0,00

	All results	Outliers excl.	Unit
Mean ± CI(99%)	24,8 ± 0,4	24,8 ± 0,3	mg/l
Recov. ± CI(99%)	99,6 ± 1,5	99,7 ± 1,3	%
SD between labs	0,9	0,7	mg/l
RSD between labs	3,5	2,9	%
n for calculation	40	38	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Sodium

Target value $\pm U$ (k=2) 30,8 mg/l \pm 0,2 mg/l

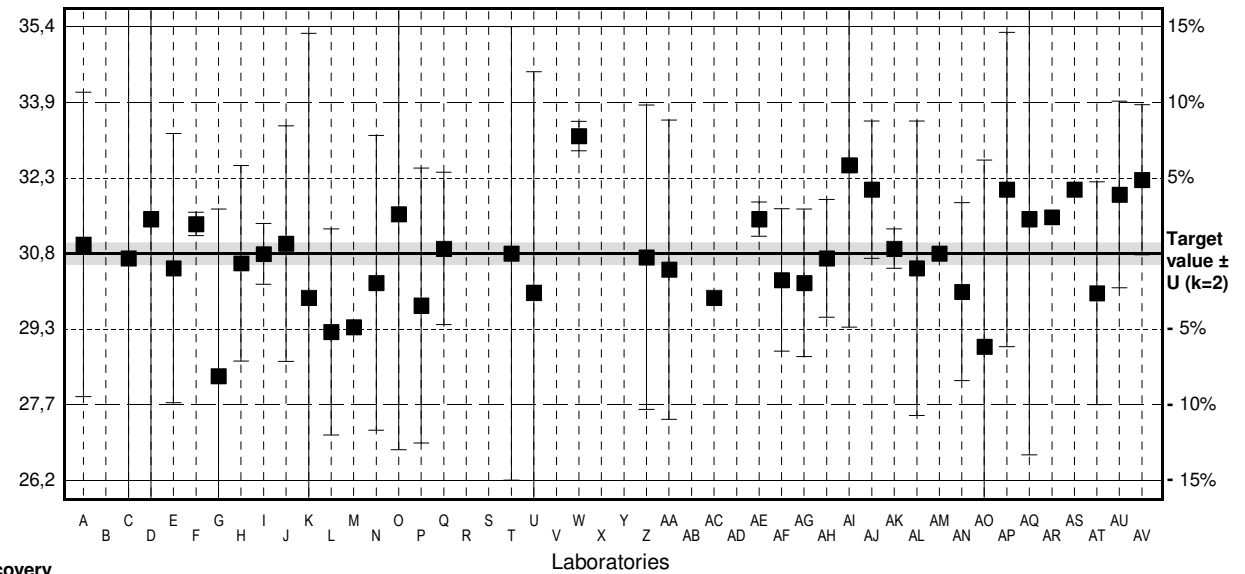
IFA result $\pm U$ (k=2) 32,3 mg/l \pm 1,5 mg/l

Stability test mg/l

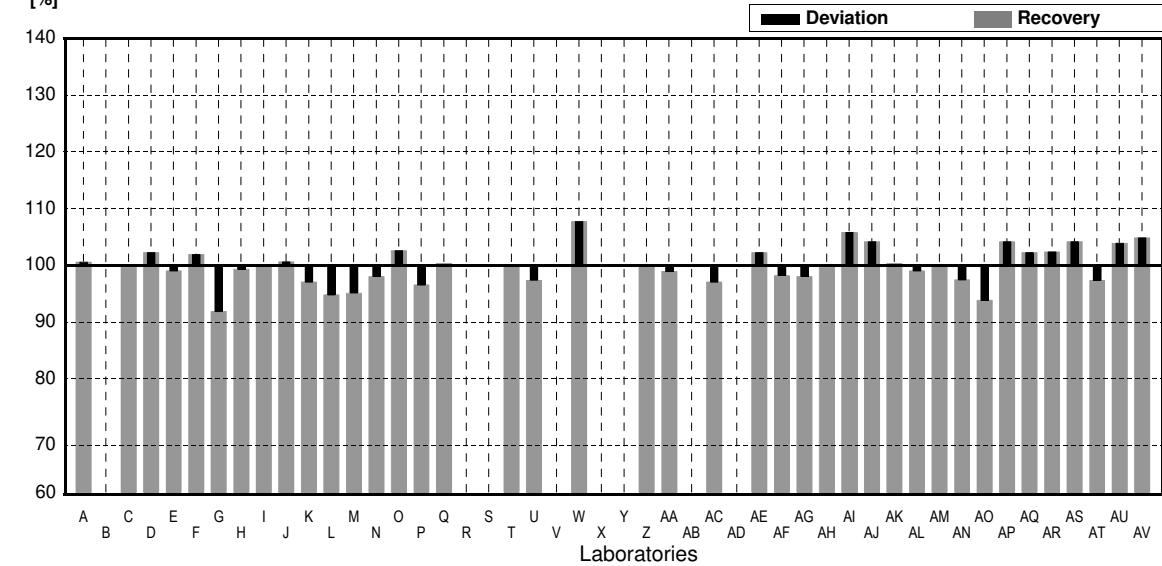
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	30,982	3.1	mg/l	101%	0.18
B			mg/l		
C	30.7	5	mg/l	100%	-0.10
D	31.5	6.3	mg/l	102%	0.71
E	30.5	2.74	mg/l	99%	-0.30
F	31.4	0,237	mg/l	102%	0.61
G	28.3	3.4	mg/l	92%	-2.54
H	30.6	1.99	mg/l	99%	-0.20
I	30.79	0.62	mg/l	100%	-0.01
J	31.0	2.4	mg/l	101%	0.20
K	29.9	5,38	mg/l	97%	-0.91
L	29.2	2.1	mg/l	95%	-1.62
M	29.3		mg/l	95%	-1.52
N	30.2	3.0	mg/l	98%	-0.61
O	31.6	4.8	mg/l	103%	0.81
P	29.74	2.8	mg/l	97%	-1.08
Q	30.9	1.55	mg/l	100%	0.10
R			mg/l		
S			mg/l		
T	30.8	4,62	mg/l	100%	0.00
U	30.0	4.5	mg/l	97%	-0.81
V			mg/l		
W	33.19	0.3	mg/l	108%	2.42
X			mg/l		
Y			mg/l		
Z	30.72	3.1	mg/l	100%	-0.08
AA	30.47	3,047	mg/l	99%	-0.33
AB			mg/l		
AC	29.9		mg/l	97%	-0.91
AD			mg/l		
AE	31.5	0.351	mg/l	102%	0.71
AF	30.26	1.45	mg/l	98%	-0.55
AG	30.2	1.5	mg/l	98%	-0.61
AH	30.7	1.2	mg/l	100%	-0.10
AI	32.6	3.3	mg/l	106%	1.83
AJ	32.1	1.4	mg/l	104%	1.32
AK	30.9	0.40	mg/l	100%	0.10
AL	30.5	3	mg/l	99%	-0.30
AM	30.8		mg/l	100%	0.00
AN	30.02	1.81	mg/l	97%	-0.79
AO	28.9	3.8	mg/l	94%	-1.93
AP	32.1	3.2	mg/l	104%	1.32
AQ	31.5	4.8	mg/l	102%	0.71
AR	31.54		mg/l	102%	0.75
AS	32.1		mg/l	104%	1.32
AT	29.99	2,27	mg/l	97%	-0.82
AU	32.0	1.9	mg/l	104%	1.22
AV	32.3	1.53	mg/l	105%	1.52

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	30,8 \pm 0,4	30,8 \pm 0,4	mg/l
Recov. \pm CI(99%)	100,0 \pm 1,4	100,0 \pm 1,4	%
SD between labs	1,0	1,0	mg/l
RSD between labs	3,4	3,4	%
n for calculation	40	40	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Potassium

Target value ± U (k=2) 8,81 mg/l ± 0,06 mg/l

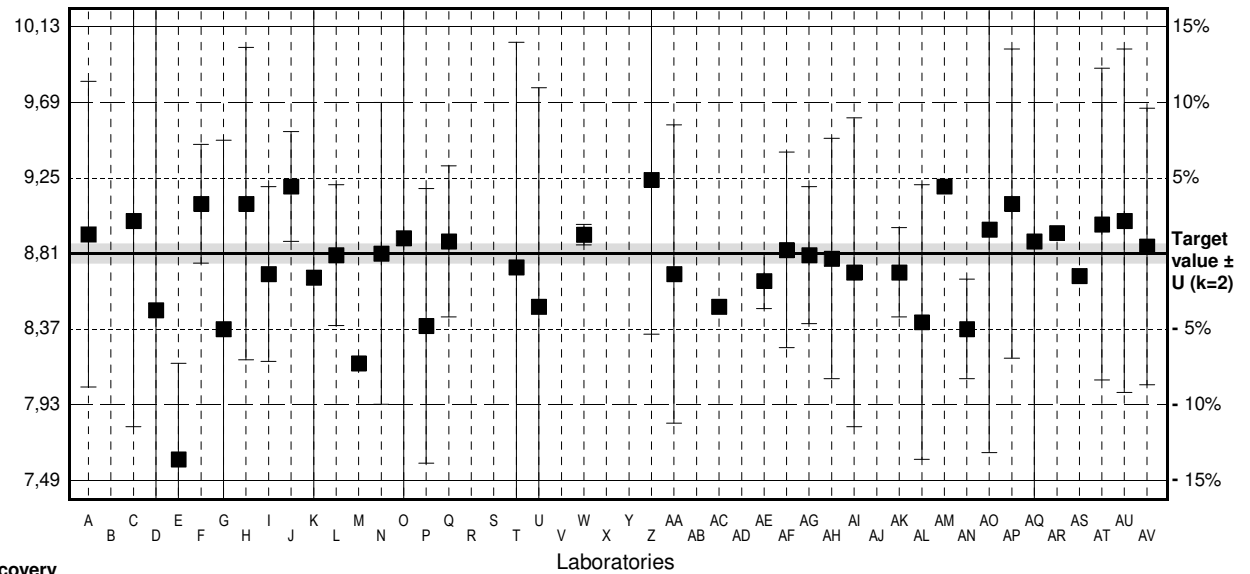
IFA result ± U (k=2) 8,9 mg/l ± 0,4 mg/l

Stability test mg/l

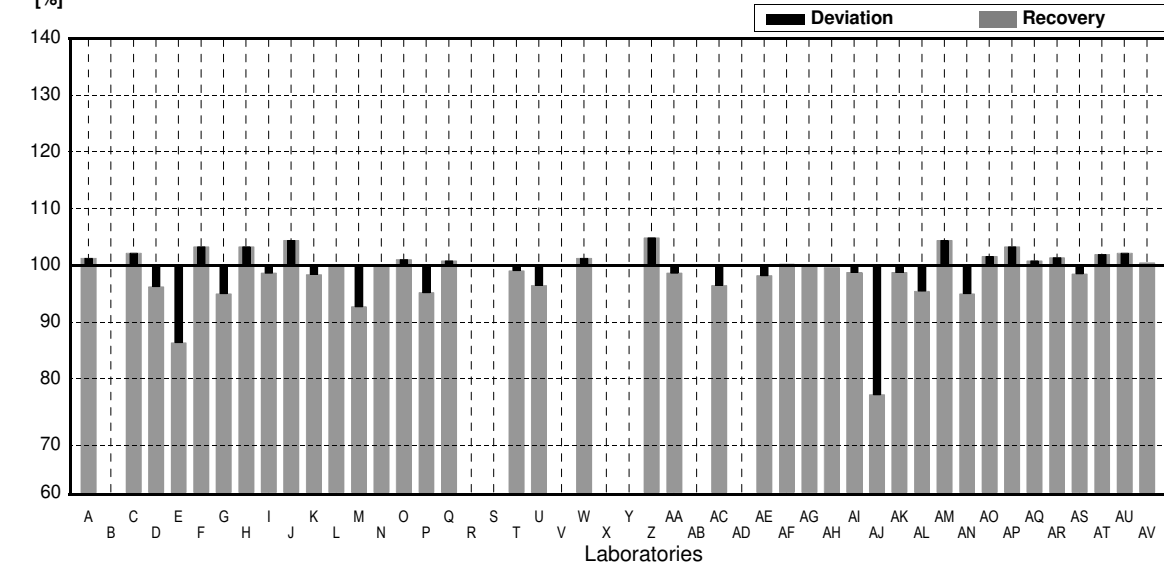
Lab Code	Result	±	Unit	Recovery	z-Score
A	8.922	0.89	mg/l	101%	0.30
B			mg/l		
C	9.00	1.2	mg/l	102%	0.50
D	8.48	1.7	mg/l	96%	-0.87
E	7.61	0.56	mg/l	86%	-3.17
F	9.10	0.346	mg/l	103%	0.77
G	8.37	1.1	mg/l	95%	-1.16
H	9.1	0.91	mg/l	103%	0.77
I	8.69	0.51	mg/l	99%	-0.32
J	9.2	0.32	mg/l	104%	1.03
K	8.67	1.56	mg/l	98%	-0.37
L	8.8	0.41	mg/l	100%	-0.03
M	8.17		mg/l	93%	-1.69
N	8.81	0.88	mg/l	100%	0.00
O	8.90	1.8	mg/l	101%	0.24
P	8.388	0.8	mg/l	95%	-1.11
Q	8.88	0.44	mg/l	101%	0.18
R			mg/l		
S			mg/l		
T	8.73	1.31	mg/l	99%	-0.21
U	8.5	1.275	mg/l	96%	-0.82
V			mg/l		
W	8.92	0.06	mg/l	101%	0.29
X			mg/l		
Y			mg/l		
Z	9.24	0.9	mg/l	105%	1.14
AA	8.69	0.869	mg/l	99%	-0.32
AB			mg/l		
AC	8.5		mg/l	96%	-0.82
AD			mg/l		
AE	8.65	0.161	mg/l	98%	-0.42
AF	8.83	0.57	mg/l	100%	0.05
AG	8.8	0.4	mg/l	100%	-0.03
AH	8.78	0.70	mg/l	100%	-0.08
AI	8.7	0.9	mg/l	99%	-0.29
AJ	6.8	0.3	mg/l	77%	-5.31
AK	8.7	0.26	mg/l	99%	-0.29
AL	8.41	0.8	mg/l	95%	-1.06
AM	9.2		mg/l	104%	1.03
AN	8.37	0.29	mg/l	95%	-1.16
AO	8.95	1.3	mg/l	102%	0.37
AP	9.1	0.9	mg/l	103%	0.77
AQ	8.88	1.8	mg/l	101%	0.18
AR	8.93		mg/l	101%	0.32
AS	8.68		mg/l	99%	-0.34
AT	8.98	0.908	mg/l	102%	0.45
AU	9.0	1.0	mg/l	102%	0.50
AV	8.85	0.806	mg/l	100%	0.11

	All results	Outliers excl.	Unit
Mean ± CI(99%)	8,71 ± 0,19	8,79 ± 0,11	mg/l
Recov. ± CI(99%)	98,8 ± 2,1	99,7 ± 1,3	%
SD between labs	0,44	0,26	mg/l
RSD between labs	5,0	2,9	%
n for calculation	40	38	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Potassium

Target value ± U (k=2) 6,98 mg/l ± 0,04 mg/l

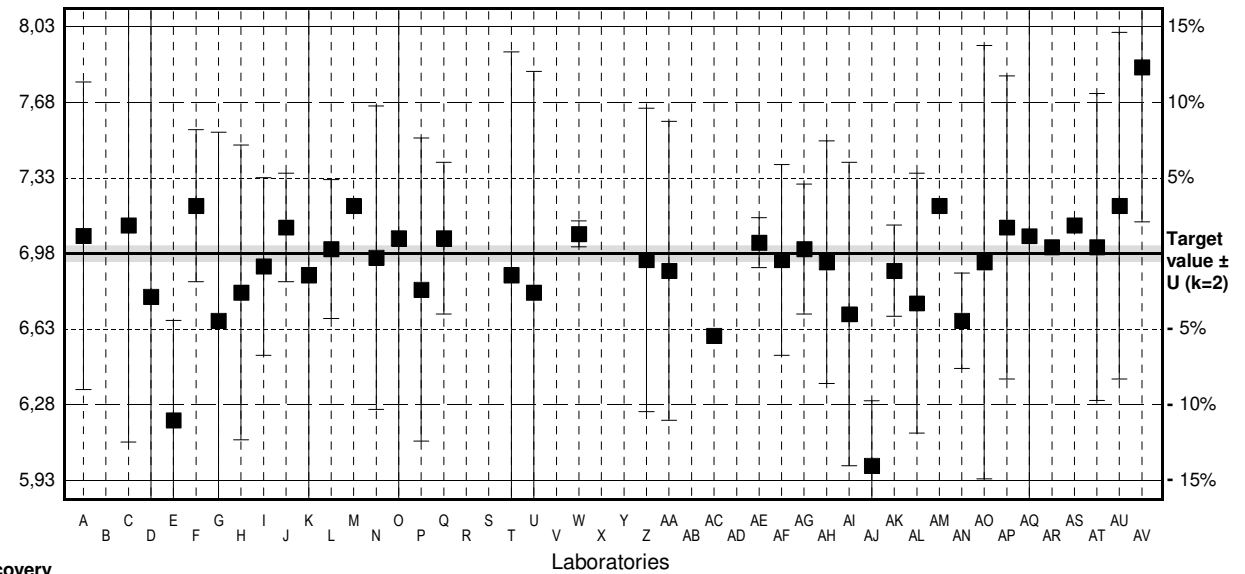
IFA result ± U (k=2) 7,2 mg/l ± 0,4 mg/l

Stability test mg/l

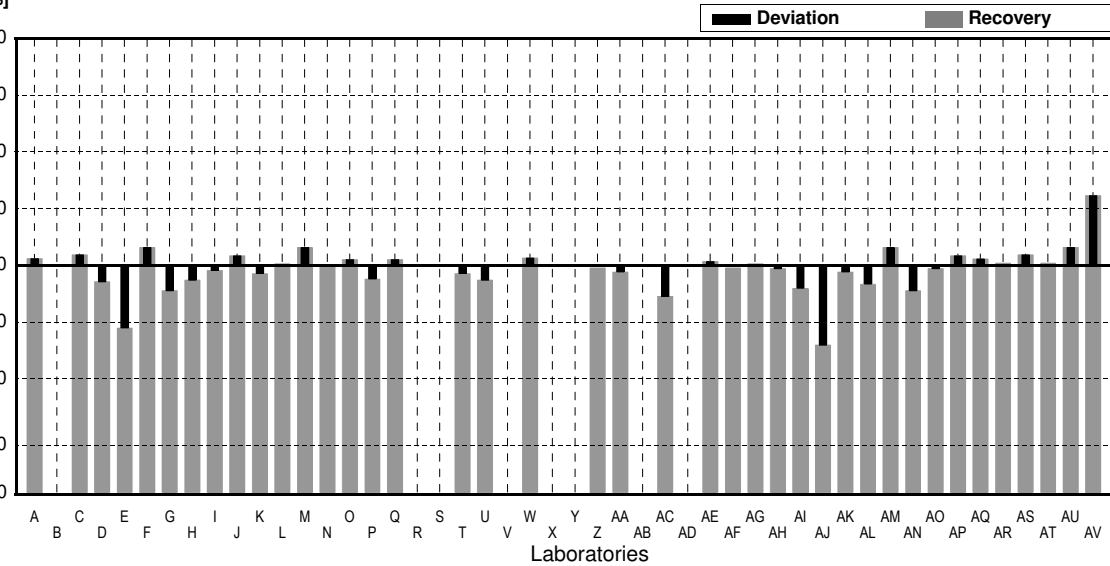
Lab Code	Result	±	Unit	Recovery	z-Score
A	7.062	0.71	mg/l	101%	0.27
B			mg/l		
C	7.11	1	mg/l	102%	0.43
D	6.78	1.4	mg/l	97%	-0.67
E	6.21	0.46	mg/l	89%	-2.57
F	7.20	0.351	mg/l	103%	0.73
G	6.67	0.87	mg/l	96%	-1.03
H	6.8	0.68	mg/l	97%	-0.60
I	6.92	0.41	mg/l	99%	-0.20
J	7.1	0.25	mg/l	102%	0.40
K	6.88	1.24	mg/l	99%	-0.33
L	7.0	0.32	mg/l	100%	0.07
M	7.20		mg/l	103%	0.73
N	6.96	0.70	mg/l	100%	-0.07
O	7.05	1.4	mg/l	101%	0.23
P	6.813	0.7	mg/l	98%	-0.56
Q	7.05	0.35	mg/l	101%	0.23
R			mg/l		
S			mg/l		
T	6.88	1.03	mg/l	99%	-0.33
U	6.8	1.02	mg/l	97%	-0.60
V			mg/l		
W	7.07	0.06	mg/l	101%	0.30
X			mg/l		
Y			mg/l		
Z	6.95	0.7	mg/l	100%	-0.10
AA	6.90	0.690	mg/l	99%	-0.27
AB			mg/l		
AC	6.6		mg/l	95%	-1.27
AD			mg/l		
AE	7.03	0.115	mg/l	101%	0.17
AF	6.95	0.44	mg/l	100%	-0.10
AG	7.0	0.3	mg/l	100%	0.07
AH	6.94	0.56	mg/l	99%	-0.13
AI	6.7	0.7	mg/l	96%	-0.93
AJ	6.0	0.3	mg/l	86%	-3.27
AK	6.9	0.21	mg/l	99%	-0.27
AL	6.75	0.6	mg/l	97%	-0.77
AM	7.20		mg/l	103%	0.73
AN	6.67	0.22	mg/l	96%	-1.03
AO	6.94	1.0	mg/l	99%	-0.13
AP	7.1	0.7	mg/l	102%	0.40
AQ	7.06	1.4	mg/l	101%	0.27
AR	7.01		mg/l	100%	0.10
AS	7.11		mg/l	102%	0.43
AT	7.01	0.708	mg/l	100%	0.10
AU	7.2	0.8	mg/l	103%	0.73
AV	7.84	0.714	mg/l	112%	2.87

	All results	Outliers excl.	Unit
Mean ± CI(99%)	6,94 ± 0,12	6,96 ± 0,07	mg/l
Recov. ± CI(99%)	99,4 ± 1,7	99,7 ± 1,0	%
SD between labs	0,28	0,16	mg/l
RSD between labs	4,1	2,3	%
n for calculation	40	37	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Nitrate

Target value ± U (k=2) 37,2 mg/l ± 0,7 mg/l

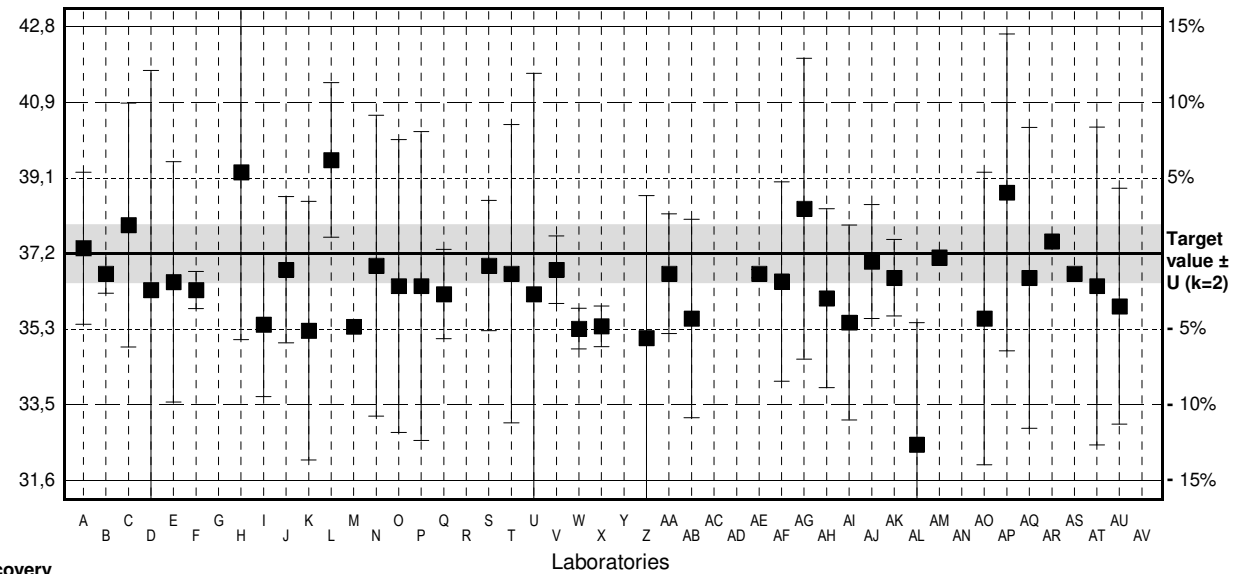
IFA result ± U (k=2) 36,4 mg/l ± 2,0 mg/l

Stability test mg/l

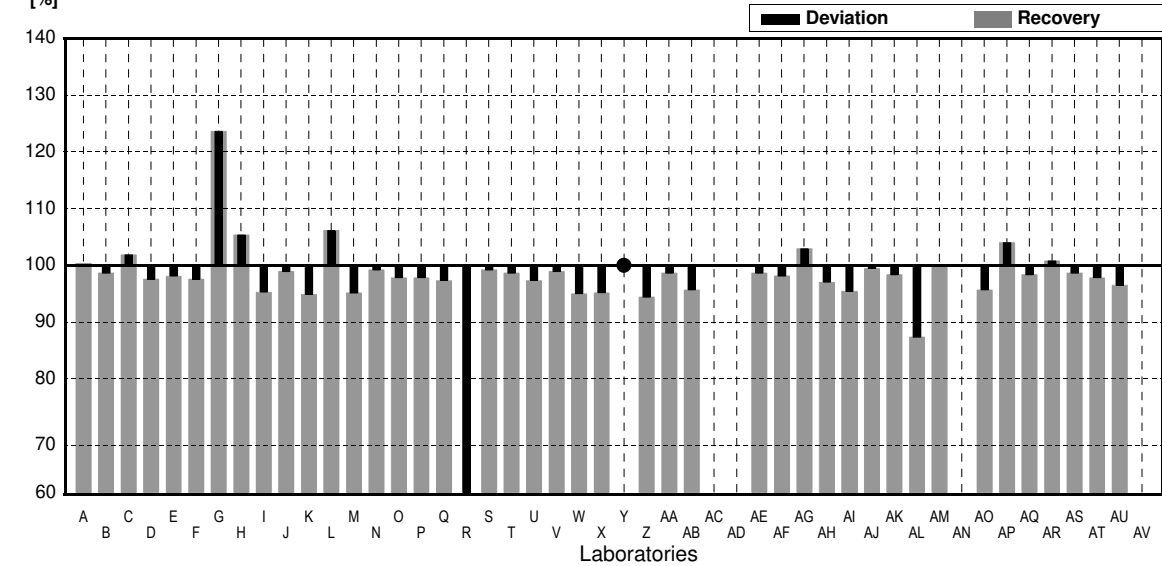
Lab Code	Result	±	Unit	Recovery	z-Score
A	37.33	1.87	mg/l	100%	0.11
B	36.7	0.482	mg/l	99%	-0.43
C	37.9	3	mg/l	102%	0.61
D	36.3	5.4	mg/l	98%	-0.78
E	36.5	2.96	mg/l	98%	-0.61
F	36.3	0.455	mg/l	98%	-0.78
G	46.0 *	1.7	mg/l	124%	7.63
H	39.2 *	4.12	mg/l	105%	1.73
I	35.45	1.77	mg/l	95%	-1.52
J	36.8	1.8	mg/l	99%	-0.35
K	35.3	3.18	mg/l	95%	-1.65
L	39.5 *	1.9	mg/l	106%	1.99
M	35.4		mg/l	95%	-1.56
N	36.9	3.7	mg/l	99%	-0.26
O	36.4	3.6	mg/l	98%	-0.69
P	36.4	3.8	mg/l	98%	-0.69
Q	36.2	1.1	mg/l	97%	-0.87
R	21.36 *	0.17	mg/l	57%	-13.74
S	36.9	1.6	mg/l	99%	-0.26
T	36.7	3.67	mg/l	99%	-0.43
U	36.2	5.43	mg/l	97%	-0.87
V	36.8	0.828	mg/l	99%	-0.35
W	35.35	0.5	mg/l	95%	-1.60
X	35.41	0.5	mg/l	95%	-1.55
Y	>30		mg/l	*	
Z	35.12	3.5	mg/l	94%	-1.80
AA	36.7	1.47	mg/l	99%	-0.43
AB	35.6	2.44	mg/l	96%	-1.39
AC			mg/l		
AD			mg/l		
AE	36.703	0.1	mg/l	99%	-0.43
AF	36.51	2.45	mg/l	98%	-0.60
AG	38.3	3.7	mg/l	103%	0.95
AH	36.1	2.2	mg/l	97%	-0.95
AI	35.5	2.4	mg/l	95%	-1.47
AJ	37.0	1.4	mg/l	99%	-0.17
AK	36.6	0.94	mg/l	98%	-0.52
AL	32.5 *	3	mg/l	87%	-4.08
AM	37.1		mg/l	100%	-0.09
AN			mg/l		
AO	35.6	3.6	mg/l	96%	-1.39
AP	38.7	3.9	mg/l	104%	1.30
AQ	36.6	3.7	mg/l	98%	-0.52
AR	37.50		mg/l	101%	0.26
AS	36.7		mg/l	99%	-0.43
AT	36.4	3.91	mg/l	98%	-0.69
AU	35.9	2.9	mg/l	97%	-1.13
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	36,4 ± 1,2	36,5 ± 0,4	mg/l
Recov. ± CI(99%)	97,8 ± 3,3	98,0 ± 1,0	%
SD between labs	3,0	0,8	mg/l
RSD between labs	8,2	2,2	%
n for calculation	43	38	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Nitrate

Target value ± U (k=2) 51,3 mg/l ± 1,2 mg/l

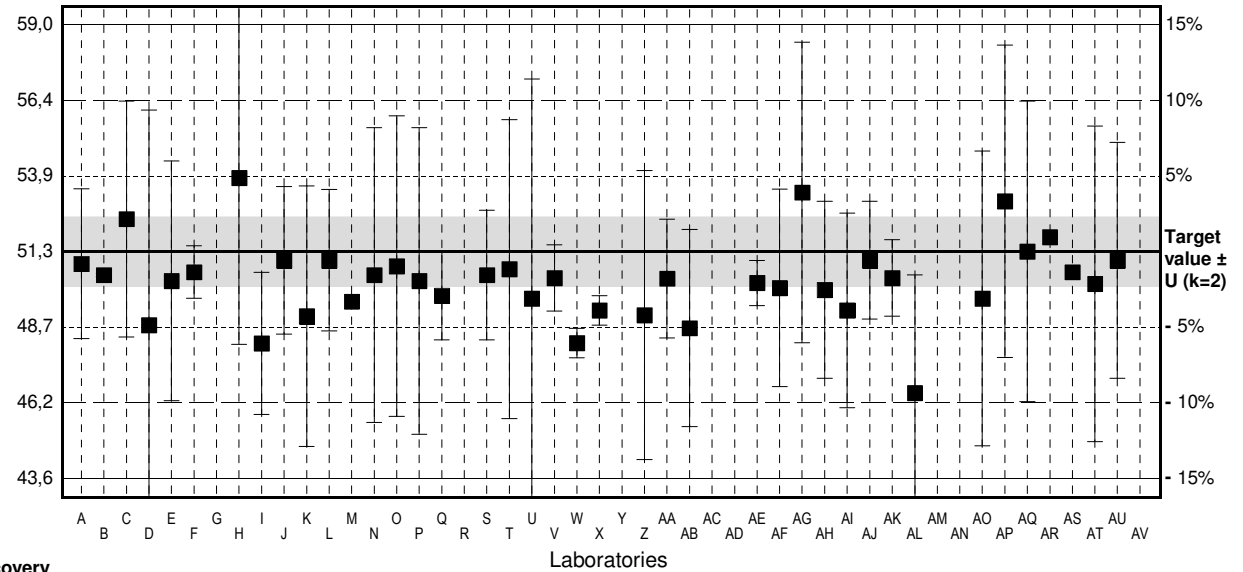
IFA result ± U (k=2) 50 mg/l ± 3 mg/l

Stability test mg/l

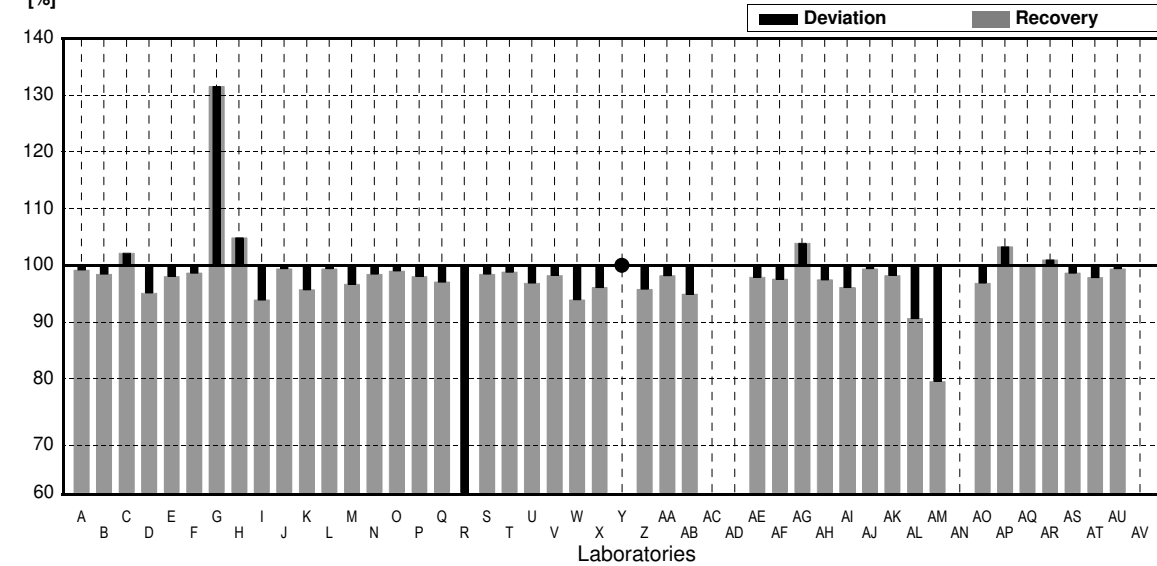
Lab Code	Result	±	Unit	Recovery	z-Score
A	50.88	2.54	mg/l	99%	-0.26
B	50.5	0.06	mg/l	98%	-0.50
C	52.4	4	mg/l	102%	0.69
D	48.8	7.3	mg/l	95%	-1.57
E	50.3	4.07	mg/l	98%	-0.63
F	50.6	0.894	mg/l	99%	-0.44
G	67.5 *	2.5	mg/l	132%	10.19
H	53.8 *	5.65	mg/l	105%	1.57
I	48.18	2.41	mg/l	94%	-1.96
J	51	2.5	mg/l	99%	-0.19
K	49.1	4.42	mg/l	96%	-1.38
L	51	2.4	mg/l	99%	-0.19
M	49.6	5.0	mg/l	97%	-1.07
N	50.5	5.1	mg/l	99%	-0.31
O	50.8	5.2	mg/l	98%	-0.63
P	49.8	1.5	mg/l	97%	-0.94
R	19.31 *	0.20	mg/l	38%	-20.12
S	50.5	2.2	mg/l	98%	-0.50
T	50.7	5.07	mg/l	99%	-0.38
U	49.7	7.455	mg/l	97%	-1.01
V	50.4	1.13	mg/l	98%	-0.57
W	48.19	0.5	mg/l	94%	-1.96
X	49.3	0.5	mg/l	96%	-1.26
Y	>30		mg/l	*	
Z	49.14	4.9	mg/l	96%	-1.36
AA	50.381	2.0153	mg/l	98%	-0.58
AB	48.7	3.34	mg/l	95%	-1.63
AC			mg/l		
AD			mg/l		
AE	50.230	0.766	mg/l	98%	-0.67
AF	50.06	3.35	mg/l	98%	-0.78
AG	53.3 *	5.1	mg/l	104%	1.26
AH	50.0	3.0	mg/l	97%	-0.82
AI	49.3	3.3	mg/l	96%	-1.26
AJ	51	2	mg/l	99%	-0.19
AK	50.4	1.30	mg/l	98%	-0.57
AL	46.5 *	4	mg/l	91%	-3.02
AM	40.8 *		mg/l	80%	-6.60
AN			mg/l		
AO	49.7	5.0	mg/l	97%	-1.01
AP	53	5.3	mg/l	103%	1.07
AQ	51.3	5.1	mg/l	100%	0.00
AR	51.79		mg/l	101%	0.31
AS	50.6		mg/l	99%	-0.44
AT	50.2	5.35	mg/l	98%	-0.69
AU	51	4	mg/l	99%	-0.19
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	49,8 ± 2,4	50,3 ± 0,5	mg/l
Recov. ± CI(99%)	97,0 ± 4,6	98,0 ± 0,9	%
SD between labs	5,8	1,0	mg/l
RSD between labs	11,6	2,0	%
n for calculation	43	37	

Result [mg/l]



Recovery [%]



Sample N167A

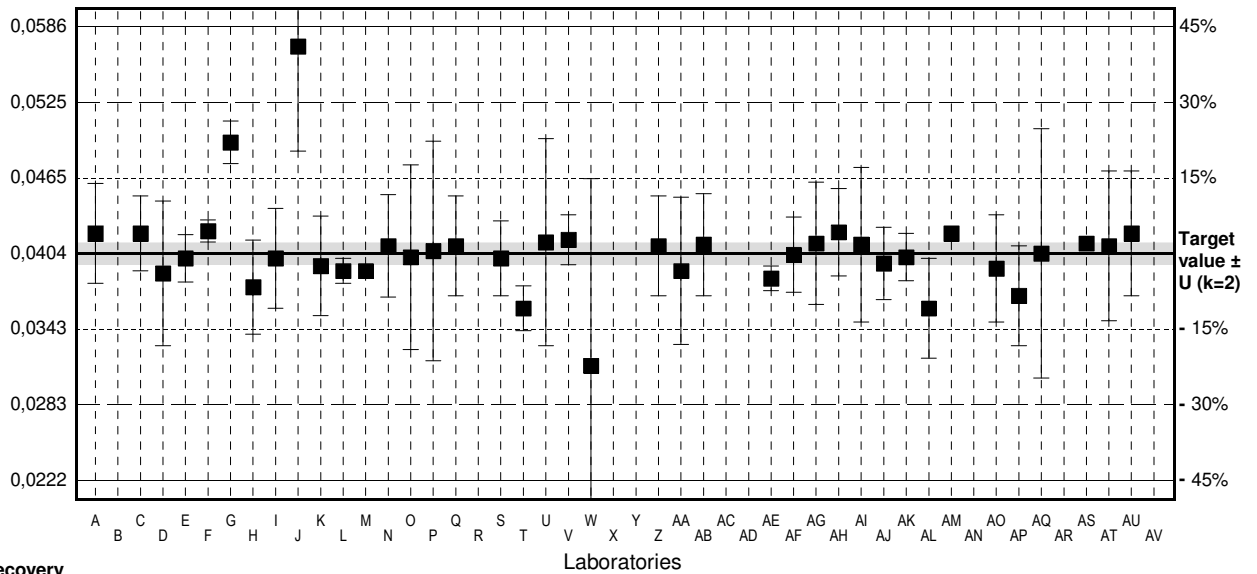
Parameter Nitrite

Target value ± U (k=2) 0,0404 mg/l ± 0,0009 mg/l
 IFA result ± U (k=2) 0,0396 mg/l ± 0,0020 mg/l
 Stability test ± U (k=2) 0,0401 mg/l ± 0,0020 mg/l

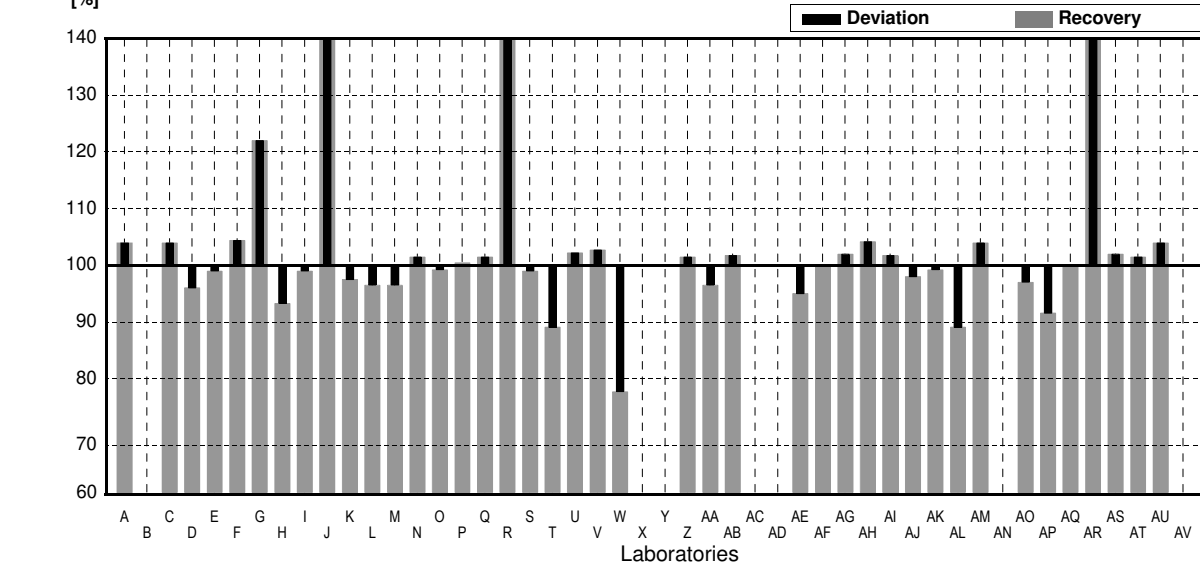
Lab Code	Result	±	Unit	Recovery	z-Score
A	0.0420	0.004	mg/l	104%	0.73
B			mg/l		
C	0.0420	0.003	mg/l	104%	0.73
D	0.0388	0.0058	mg/l	96%	-0.73
E	0.0400	0.0019	mg/l	99%	-0.18
F	0.0422	0.00088	mg/l	104%	0.83
G	0.0493 *	0.0017	mg/l	122%	4.08
H	0.0377	0.00377	mg/l	93%	-1.24
I	0.0400	0.0040	mg/l	99%	-0.18
J	0.057 *	0.0084	mg/l	141%	7.61
K	0.0394	0.004	mg/l	98%	-0.46
L	0.0390	0.0010	mg/l	97%	-0.64
M	0.0390		mg/l	97%	-0.64
N	0.0410	0.0041	mg/l	101%	0.28
O	0.0401	0.0074	mg/l	99%	-0.14
P	0.0406	0.0088	mg/l	100%	0.09
Q	0.0410	0.004	mg/l	101%	0.28
R	0.80 *	0.10	mg/l	1980%	348.18
S	0.0400	0.003	mg/l	99%	-0.18
T	0.0360	0.0018	mg/l	89%	-2.02
U	0.0413	0.0083	mg/l	102%	0.41
V	0.0415	0.002	mg/l	103%	0.50
W	0.0314 *	0.015	mg/l	78%	-4.13
X			mg/l		
Y			mg/l		
Z	0.0410	0.004	mg/l	101%	0.28
AA	0.0390	0.0059	mg/l	97%	-0.64
AB	0.0411	0.0041	mg/l	102%	0.32
AC			mg/l		
AD			mg/l		
AE	0.0384	0.001	mg/l	95%	-0.92
AF	0.0403	0.003	mg/l	100%	-0.05
AG	0.0412	0.0049	mg/l	102%	0.37
AH	0.0421	0.0035	mg/l	104%	0.78
AI	0.0411	0.0062	mg/l	102%	0.32
AJ	0.0396	0.0029	mg/l	98%	-0.37
AK	0.0401	0.0019	mg/l	99%	-0.14
AL	0.036	0.004	mg/l	89%	-2.02
AM	0.0420		mg/l	104%	0.73
AN			mg/l		
AO	0.0392	0.0043	mg/l	97%	-0.55
AP	0.0370	0.004	mg/l	92%	-1.56
AQ	0.0404	0.010	mg/l	100%	0.00
AR	0.080 *		mg/l	198%	18.15
AS	0.0412		mg/l	102%	0.37
AT	0.0410	0.006	mg/l	101%	0.28
AU	0.0420	0.005	mg/l	104%	0.73
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0600 ± 0,050	0,0401 ± 0,000	mg/l
Recov. ± CI(99%)	148,6 ± 123,9	99,3 ± 1,8	%
SD between labs	0,1187	0,0016	mg/l
RSD between labs	197,6	4,1	%
n for calculation	41	36	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Nitrite

Target value ± U (k=2) 0,0203 mg/l ± 0,0018 mg/l

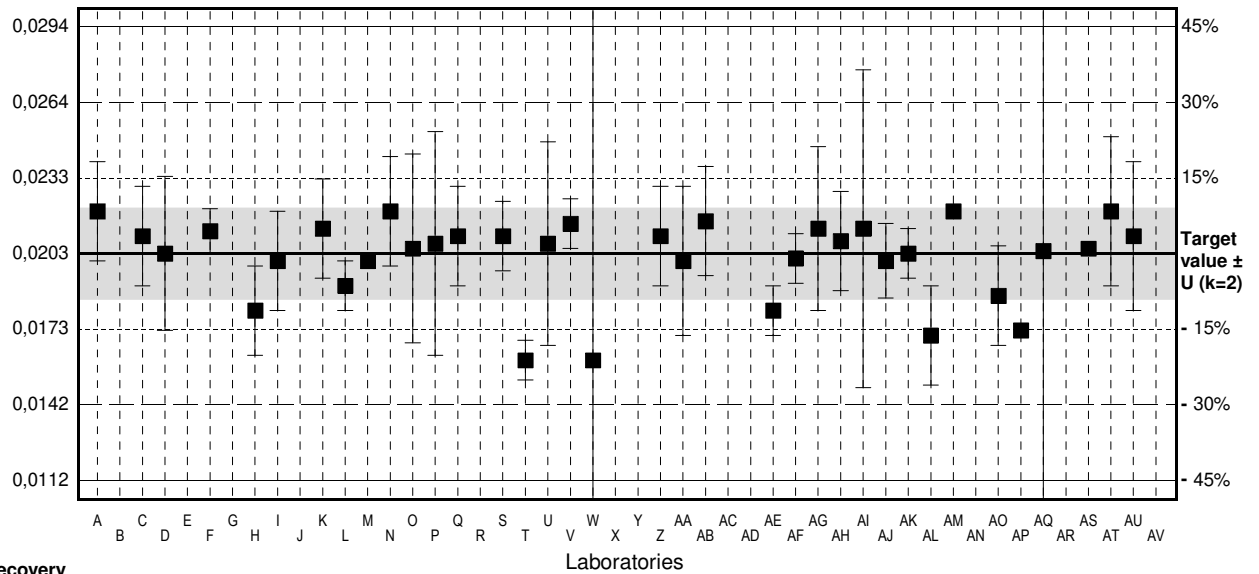
IFA result ± U (k=2) 0,0195 mg/l ± 0,0010 mg/l

Stability test ± U (k=2) 0,0203 mg/l ± 0,0010 mg/l

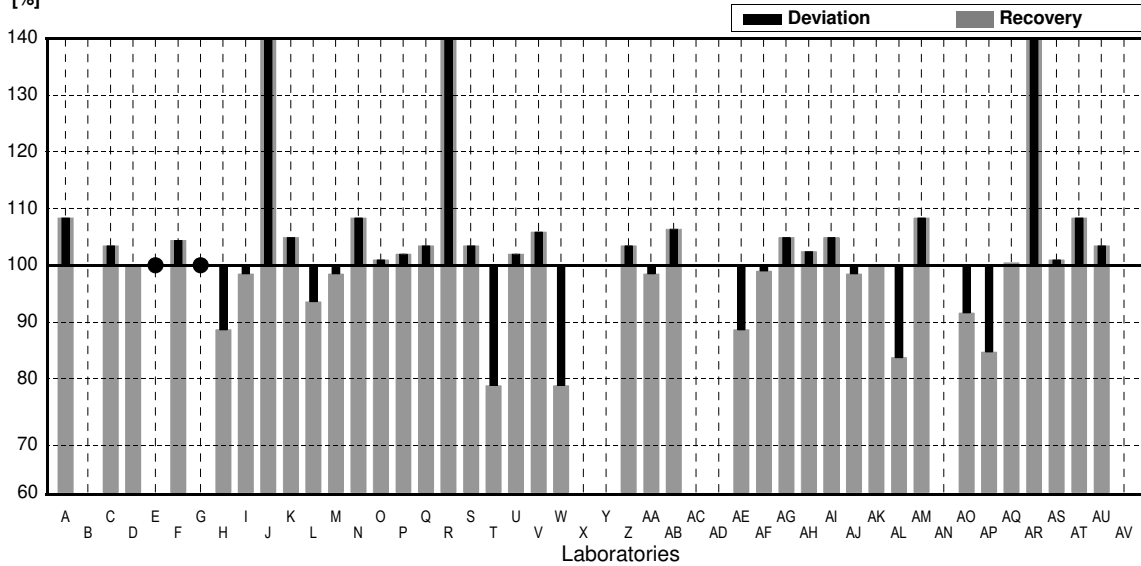
Lab Code	Result	±	Unit	Recovery	z-Score
A	0.0220	0.002	mg/l	108%	1.55
B			mg/l		
C	0.0210	0.002	mg/l	103%	0.64
D	0.0203	0.0031	mg/l	100%	0.00
E	<0.03		mg/l	*	
F	0.0212	0.00090	mg/l	104%	0.82
G	<0.0328	0.0011	mg/l	*	
H	0.0180	0.00180	mg/l	89%	-2.10
I	0.0200	0.0020	mg/l	99%	-0.27
J	0.0300 *	0.0044	mg/l	148%	8.85
K	0.0213	0.002	mg/l	105%	0.91
L	0.0190	0.0010	mg/l	94%	-1.19
M	0.0200		mg/l	99%	-0.27
N	0.0220	0.0022	mg/l	108%	1.55
O	0.0205	0.0038	mg/l	101%	0.18
P	0.0207	0.0045	mg/l	102%	0.36
Q	0.0210	0.002	mg/l	103%	0.64
R	0.423 *	0.011	mg/l	2084%	367.36
S	0.0210	0.0014	mg/l	103%	0.64
T	0.0160 *	0.0008	mg/l	79%	-3.92
U	0.0207	0.0041	mg/l	102%	0.36
V	0.0215	0.001	mg/l	106%	1.09
W	0.0160 *	0.015	mg/l	79%	-3.92
X			mg/l		
Y			mg/l		
Z	0.0210	0.002	mg/l	103%	0.64
AA	0.0200	0.00300	mg/l	99%	-0.27
AB	0.0216	0.0022	mg/l	106%	1.19
AC			mg/l		
AD			mg/l		
AE	0.0180	0.001	mg/l	89%	-2.10
AF	0.0201	0.001	mg/l	99%	-0.18
AG	0.0213	0.0033	mg/l	105%	0.91
AH	0.0208	0.0020	mg/l	102%	0.46
AI	0.0213	0.0064	mg/l	105%	0.91
AJ	0.0200	0.0015	mg/l	99%	-0.27
AK	0.0203	0.0010	mg/l	100%	0.00
AL	0.017 *	0.002	mg/l	84%	-3.01
AM	0.0220		mg/l	108%	1.55
AN			mg/l		
AO	0.0186	0.0020	mg/l	92%	-1.55
AP	0.0172 *		mg/l	85%	-2.83
AQ	0.0204	0.010	mg/l	100%	0.09
AR	0.060 *		mg/l	296%	36.22
AS	0.0205		mg/l	101%	0.18
AT	0.0220	0.003	mg/l	108%	1.55
AU	0.0210	0.003	mg/l	103%	0.64
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0318 ± 0,028	0,0206 ± 0,000	mg/l
Recov. ± CI(99%)	156,4 ± 138,2	101,5 ± 2,5	%
SD between labs	0,0646	0,0011	mg/l
RSD between labs	203,6	5,1	%
n for calculation	39	32	

Result [mg/l]



Recovery [%]



Sample N167A

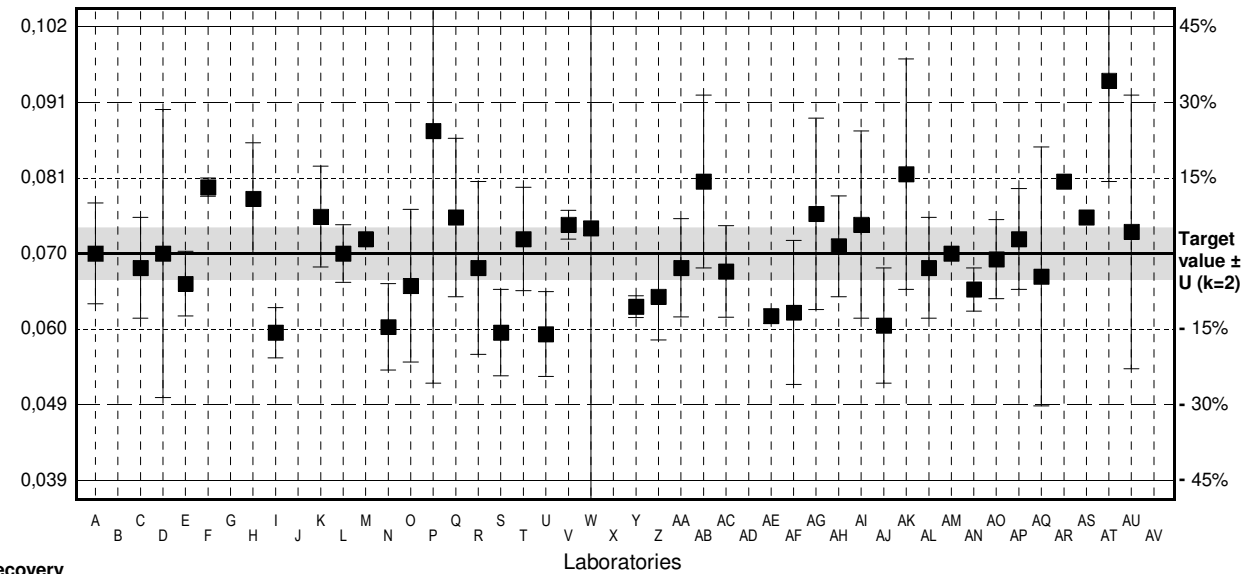
Parameter Ammonium

Target value $\pm U$ (k=2) 0,070 mg/l \pm 0,004 mg/l
 IFA result $\pm U$ (k=2) 0,070 mg/l \pm 0,002 mg/l
 Stability test $\pm U$ (k=2) 0,069 mg/l \pm 0,002 mg/l

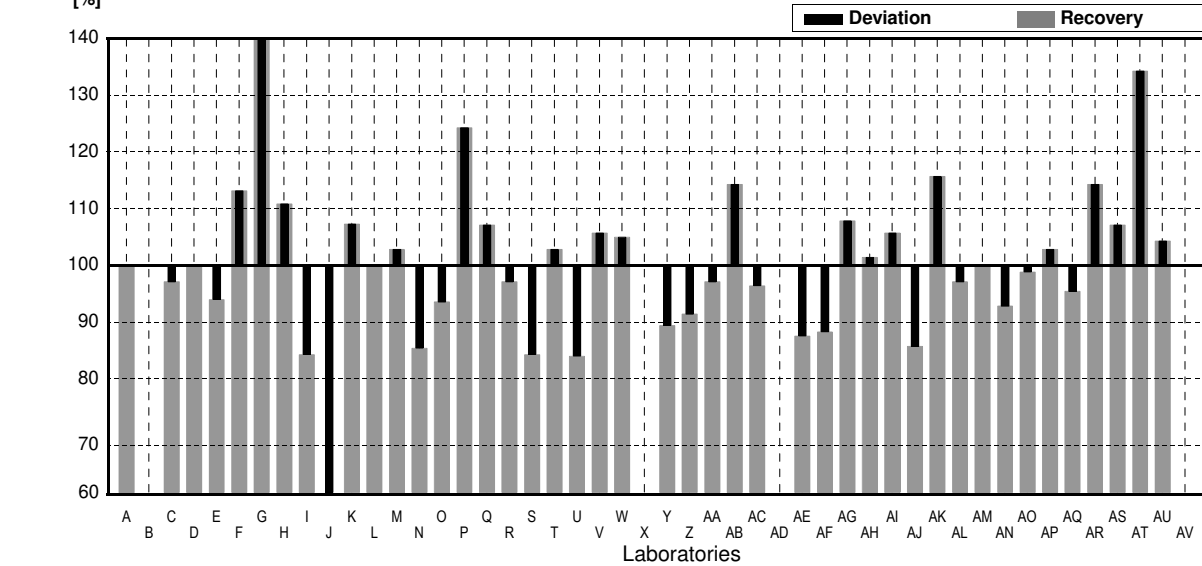
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	0.0700	0.007	mg/l	100%	0.00
B			mg/l		
C	0.068	0.007	mg/l	97%	-0.26
D	0.070	0.02	mg/l	100%	0.00
E	0.0658	0.0045	mg/l	94%	-0.55
F	0.0792	0.00125	mg/l	113%	1.19
G	0.734 *	0.039	mg/l	1049%	86.23
H	0.0776	0.00776	mg/l	111%	0.99
I	0.0590	0.0035	mg/l	84%	-1.43
J	0.0380 *	0.0028	mg/l	54%	-4.16
K	0.0751	0.007	mg/l	107%	0.66
L	0.070	0.004	mg/l	100%	0.00
M	0.0720		mg/l	103%	0.26
N	0.0598	0.0060	mg/l	85%	-1.32
O	0.0655	0.0106	mg/l	94%	-0.58
P	0.087	0.035	mg/l	124%	2.21
Q	0.075	0.011	mg/l	107%	0.65
R	0.068	0.012	mg/l	97%	-0.26
S	0.059	0.006	mg/l	84%	-1.43
T	0.072	0.0072	mg/l	103%	0.26
U	0.0588	0.0059	mg/l	84%	-1.45
V	0.074	0.002	mg/l	106%	0.52
W	0.0735	0.080	mg/l	105%	0.45
X			mg/l		
Y	0.0626	0.00150	mg/l	89%	-0.96
Z	0.064	0.006	mg/l	91%	-0.78
AA	0.068	0.0068	mg/l	97%	-0.26
AB	0.080	0.012	mg/l	114%	1.30
AC	0.0675	0.00635	mg/l	96%	-0.32
AD			mg/l		
AE	0.0613	0.001	mg/l	88%	-1.13
AF	0.0618	0.010	mg/l	88%	-1.06
AG	0.0755	0.0133	mg/l	108%	0.71
AH	0.071	0.007	mg/l	101%	0.13
AI	0.074	0.013	mg/l	106%	0.52
AJ	0.060	0.008	mg/l	86%	-1.30
AK	0.081	0.016	mg/l	116%	1.43
AL	0.068	0.007	mg/l	97%	-0.26
AM	0.070		mg/l	100%	0.00
AN	0.065	0.003	mg/l	93%	-0.65
AO	0.0692	0.0055	mg/l	99%	-0.10
AP	0.072	0.007	mg/l	103%	0.26
AQ	0.0668	0.018	mg/l	95%	-0.42
AR	0.080		mg/l	114%	1.30
AS	0.075		mg/l	107%	0.65
AT	0.094 *	0.014	mg/l	134%	3.12
AU	0.073	0.019	mg/l	104%	0.39
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	0,085 \pm 0,041	0,070 \pm 0,003	mg/l
Recov. \pm CI(99%)	121,1 \pm 58,2	99,8 \pm 4,1	%
SD between labs	0,101	0,007	mg/l
RSD between labs	118,6	9,7	%
n for calculation	44	41	

Result [mg/l]



Recovery [%]



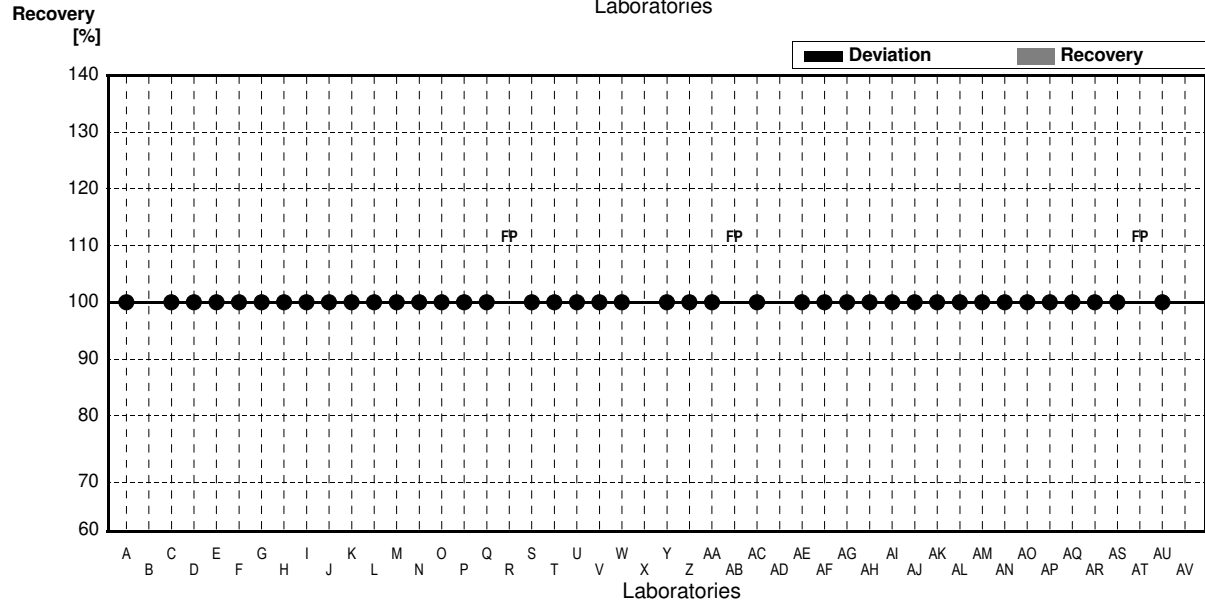
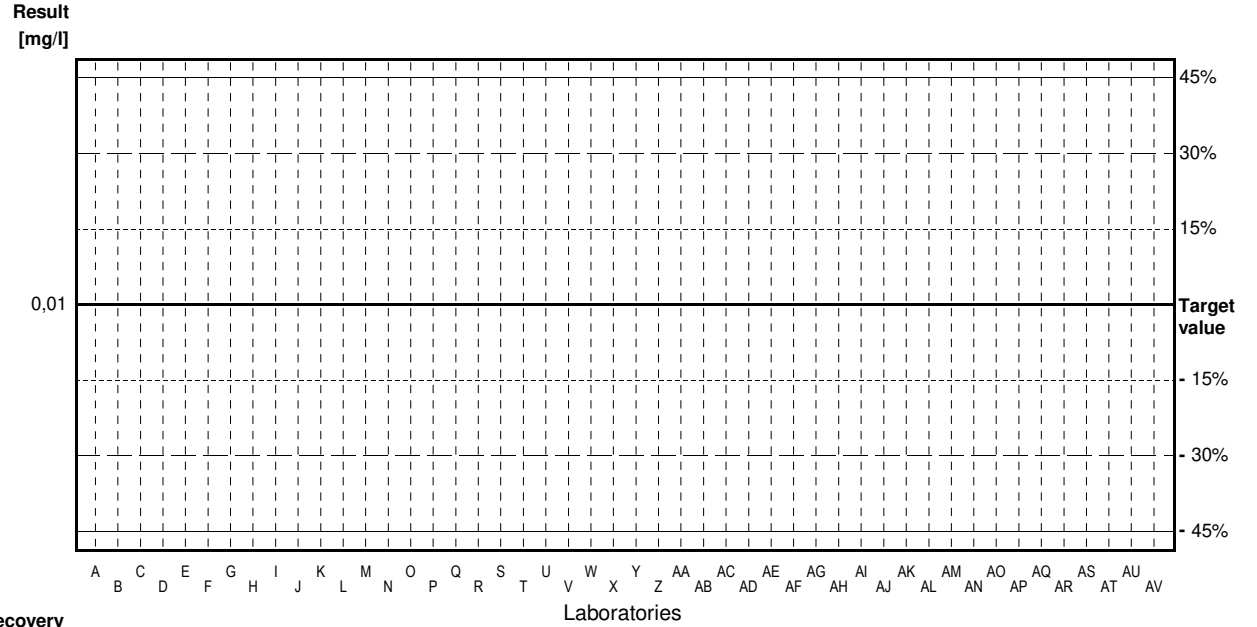
Sample N167B

Parameter Ammonium

Target value <0,01 mg/l
 IFA result <0,01 mg/l
 Stability test <0,01 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0.01		mg/l	•	
B			mg/l	•	
C	<0.013		mg/l	•	
D	<0.01		mg/l	•	
E	<0.04		mg/l	•	
F	[0.0015]		mg/l	•	
G	<0.0515	0.003	mg/l	•	
H	<0.04		mg/l	•	
I	<0.01		mg/l	•	
J	<0.01		mg/l	•	
K	<0.01		mg/l	•	
L	<0.01		mg/l	•	
M	<0.01		mg/l	•	
N	<0.01		mg/l	•	
O	<0.100		mg/l	•	
P	<0.05		mg/l	•	
Q	<0.040		mg/l	•	
R	0.061	0.013	mg/l	FP	
S	<0.047		mg/l	•	
T	<0.01		mg/l	•	
U	<0.01		mg/l	•	
V	<0.01		mg/l	•	
W	<0.03	0.080	mg/l	•	
X			mg/l	•	
Y	<0.01		mg/l	•	
Z	<0.007		mg/l	•	
AA	<0.0052		mg/l	•	
AB	0.0220	0.0033	mg/l	FP	
AC	<0.0500	0.00470	mg/l	•	
AD			mg/l	•	
AE	<0.015		mg/l	•	
AF	<0.003	0.000	mg/l	•	
AG	<0.010		mg/l	•	
AH	<0.008		mg/l	•	
AI	<0.01		mg/l	•	
AJ	<0.02		mg/l	•	
AK	<0.012		mg/l	•	
AL	<0.04		mg/l	•	
AM	<0.03		mg/l	•	
AN	<0.040	0.003	mg/l	•	
AO	<0.01		mg/l	•	
AP	<0.01		mg/l	•	
AQ	<0.010		mg/l	•	
AR	0.0100		mg/l	•	
AS	<0.01		mg/l	•	
AT	0.0270	0.004	mg/l	FP	
AU	<0.02		mg/l	•	
AV			mg/l	•	

	All results	Outliers excl.	Unit
Mean ± CI(99%)			mg/l
Recov. ± CI(99%)			%
SD between labs			mg/l
RSD between labs			%
n for calculation			



Sample N167A

Parameter Chloride

Target value ± U (k=2) 54,8 mg/l ± 1,2 mg/l

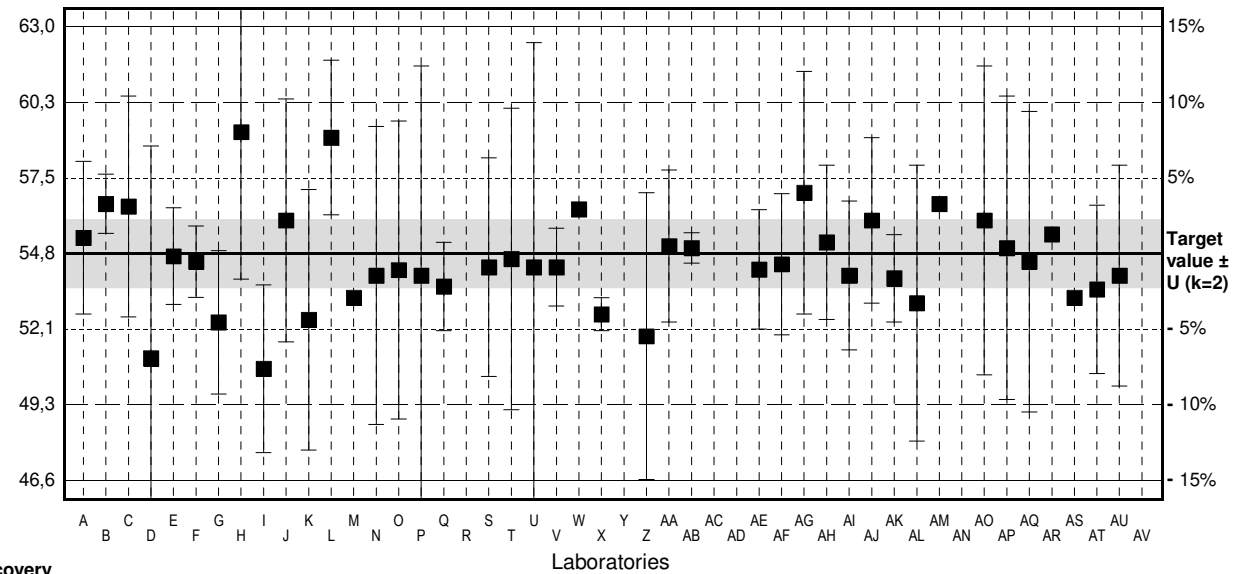
IFA result ± U (k=2) 54,1 mg/l ± 2,0 mg/l

Stability test mg/l

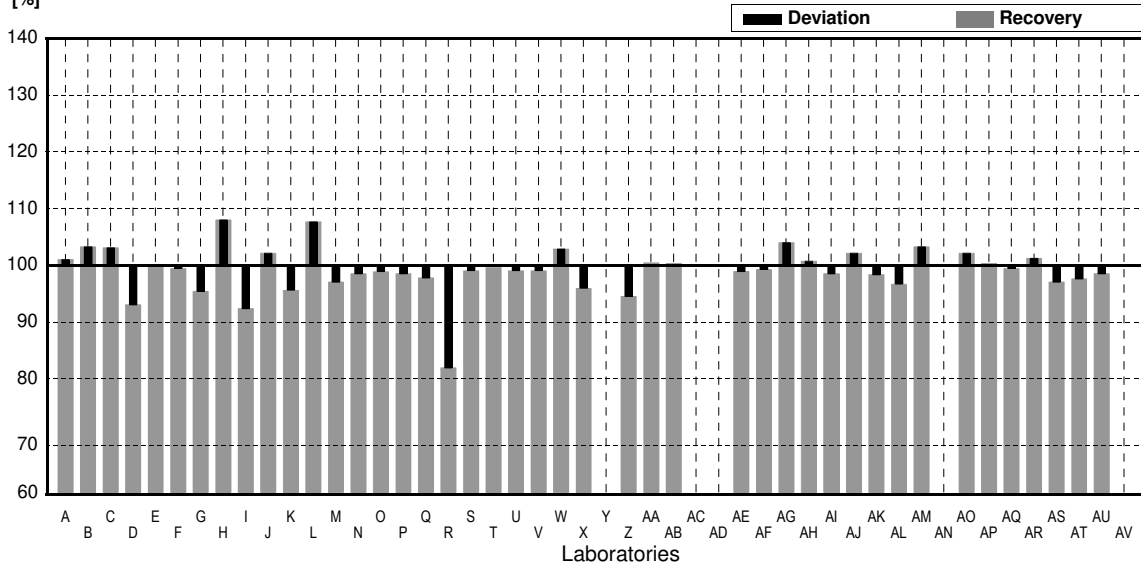
Lab Code	Result	±	Unit	Recovery	z-Score
A	55.37	2.77	mg/l	101%	0.36
B	56.6	1.074	mg/l	103%	1.13
C	56.5	4	mg/l	103%	1.07
D	51.0	7.7	mg/l	93%	-2.39
E	54.7	1.75	mg/l	100%	-0.06
F	54.5	1.29	mg/l	99%	-0.19
G	52.3	2.6	mg/l	95%	-1.57
H	59.2	5.33	mg/l	108%	2.77
I	50.62	3.04	mg/l	92%	-2.63
J	56	4.4	mg/l	102%	0.76
K	52.4	4.72	mg/l	96%	-1.51
L	59	2.8	mg/l	108%	2.64
M	53.2	5.4	mg/l	97%	-1.01
N	54.0	5.4	mg/l	99%	-0.50
O	54.2	5.4	mg/l	99%	-0.38
P	54.0	7.6	mg/l	99%	-0.50
Q	53.6	1.6	mg/l	98%	-0.76
R	44.90	1.80	mg/l	82%	-6.23
S	54.3	3.96	mg/l	99%	-0.31
T	54.6	5.46	mg/l	100%	-0.13
U	54.3	8.145	mg/l	99%	-0.31
V	54.3	1.41	mg/l	99%	-0.31
W	56.40	0.25	mg/l	103%	1.01
X	52.6	0.6	mg/l	96%	-1.38
Y			mg/l		
Z	51.80	5.2	mg/l	95%	-1.89
AA	55.07	2.754	mg/l	100%	0.17
AB	55	0.55	mg/l	100%	0.13
AC			mg/l		
AD			mg/l		
AE	54.223	2.165	mg/l	99%	-0.36
AF	54.41	2.56	mg/l	99%	-0.25
AG	57.0	4.4	mg/l	104%	1.38
AH	55.2	2.8	mg/l	101%	0.25
AI	54.0	2.7	mg/l	99%	-0.50
AJ	56	3	mg/l	102%	0.76
AK	53.9	1.58	mg/l	98%	-0.57
AL	53.0	5	mg/l	97%	-1.13
AM	56.6		mg/l	103%	1.13
AN			mg/l		
AO	56.0	5.6	mg/l	102%	0.76
AP	55	5.5	mg/l	100%	0.13
AQ	54.5	5.45	mg/l	99%	-0.19
AR	55.49		mg/l	101%	0.43
AS	53.2		mg/l	97%	-1.01
AT	53.5	3.05	mg/l	98%	-0.82
AU	54	4	mg/l	99%	-0.50
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	54,3 ± 0,9	54,4 ± 0,7	mg/l
Recov. ± CI(99%)	99,2 ± 1,7	99,4 ± 1,3	%
SD between labs	2,3	1,7	mg/l
RSD between labs	4,2	3,0	%
n for calculation	43	41	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Chloride

Target value ± U (k=2) 28,6 mg/l ± 0,4 mg/l

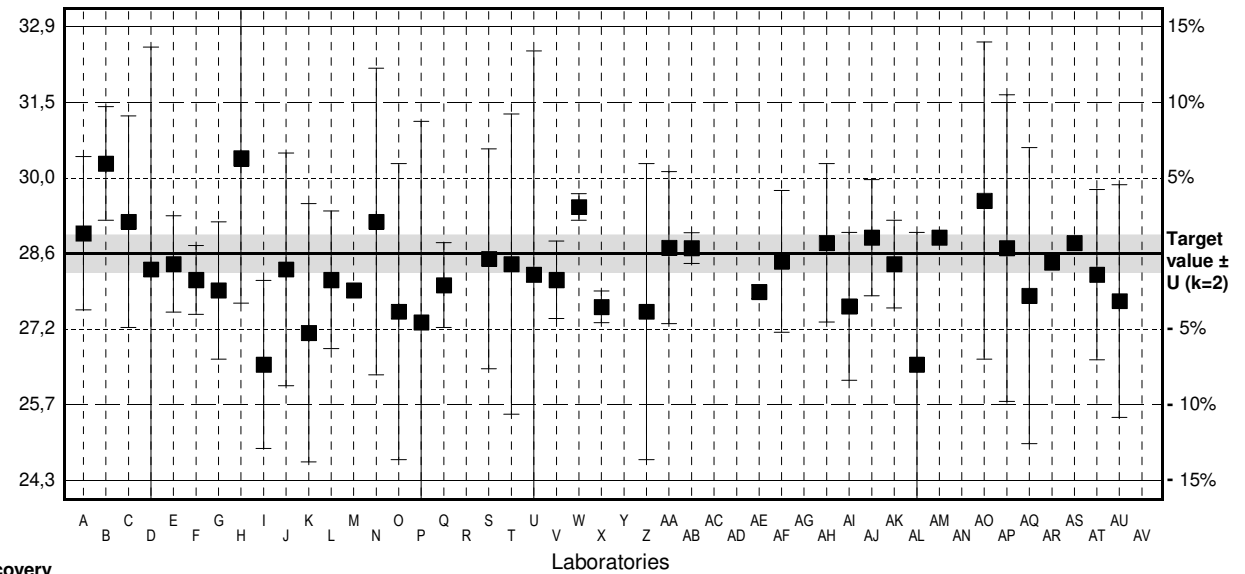
IFA result ± U (k=2) 28,1 mg/l ± 1,1 mg/l

Stability test mg/l

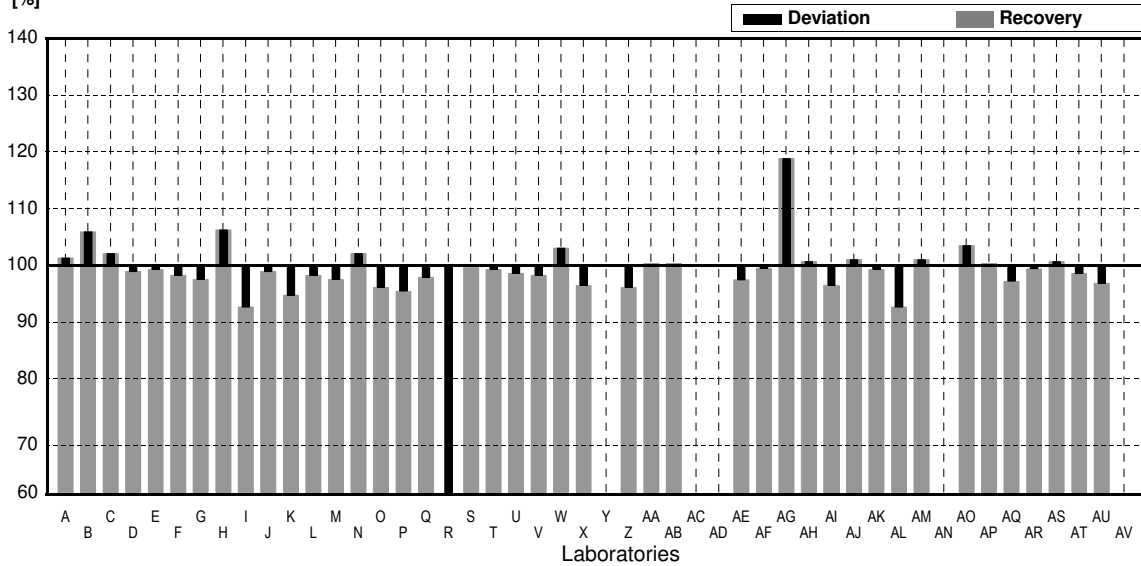
Lab Code	Result	±	Unit	Recovery	z-Score
A	28,98	1,45	mg/l	101%	0,46
B	30,3	1,074	mg/l	106%	2,05
C	29,2	2	mg/l	102%	0,72
D	28,3	4,2	mg/l	99%	-0,36
E	28,4	0,91	mg/l	99%	-0,24
F	28,1	0,651	mg/l	98%	-0,60
G	27,9	1,3	mg/l	98%	-0,84
H	30,4	2,74	mg/l	106%	2,17
I	26,50	1,59	mg/l	93%	-2,53
J	28,3	2,2	mg/l	99%	-0,36
K	27,1	2,44	mg/l	95%	-1,81
L	28,1	1,3	mg/l	98%	-0,60
M	27,9	1,87	mg/l	98%	-0,84
N	29,2	2,9	mg/l	102%	0,72
O	27,5	2,8	mg/l	96%	-1,33
P	27,3	3,8	mg/l	95%	-1,57
Q	28,0	0,8	mg/l	98%	-0,72
R	16,25 *	1,87	mg/l	57%	-14,89
S	28,5	2,08	mg/l	100%	-0,12
T	28,4	2,84	mg/l	99%	-0,24
U	28,2	4,23	mg/l	99%	-0,48
V	28,1	0,73	mg/l	98%	-0,60
W	29,48	0,25	mg/l	103%	1,06
X	27,59	0,3	mg/l	96%	-1,22
Y			mg/l		
Z	27,50	2,8	mg/l	96%	-1,33
AA	28,71	1,436	mg/l	100%	0,13
AB	28,7	0,29	mg/l	100%	0,12
AC			mg/l		
AD			mg/l		
AE	27,875	0,128	mg/l	97%	-0,87
AF	28,45	1,34	mg/l	99%	-0,18
AG	34,0 *	2,7	mg/l	119%	6,51
AH	28,8	1,5	mg/l	101%	0,24
AI	27,6	1,4	mg/l	97%	-1,21
AJ	28,9	1,1	mg/l	101%	0,36
AK	28,4	0,83	mg/l	99%	-0,24
AL	26,5	2,5	mg/l	93%	-2,53
AM	28,9		mg/l	101%	0,36
AN			mg/l		
AO	29,6	3,0	mg/l	103%	1,21
AP	28,7	2,9	mg/l	100%	0,12
AQ	27,8	2,8	mg/l	97%	-0,96
AR	28,43		mg/l	99%	-0,20
AS	28,8		mg/l	101%	0,24
AT	28,2	1,61	mg/l	99%	-0,48
AU	27,7	2,2	mg/l	97%	-1,09
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	28,2 ± 0,9	28,3 ± 0,4	mg/l
Recov. ± CI(99%)	98,5 ± 3,2	99,0 ± 1,2	%
SD between labs	2,2	0,8	mg/l
RSD between labs	7,8	2,9	%
n for calculation	43	41	

Result [mg/l]



Recovery [%]



Sample N167A

Parameter Sulphate

Target value $\pm U$ (k=2) 34,7 mg/l \pm 0,4 mg/l

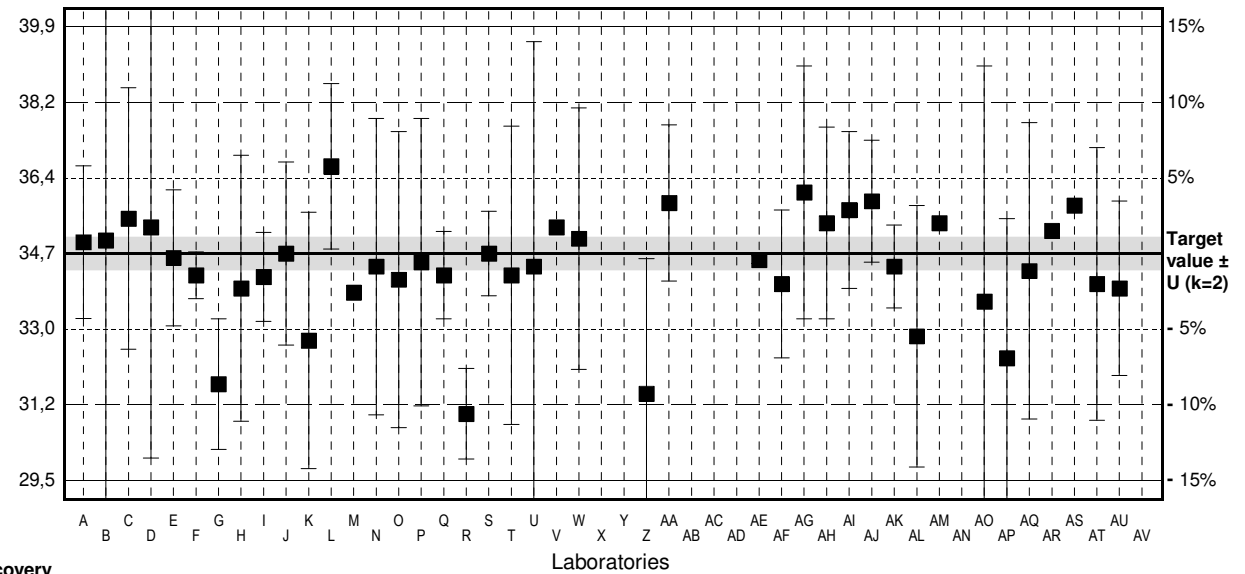
IFA result $\pm U$ (k=2) 34,8 mg/l \pm 0,9 mg/l

Stability test mg/l

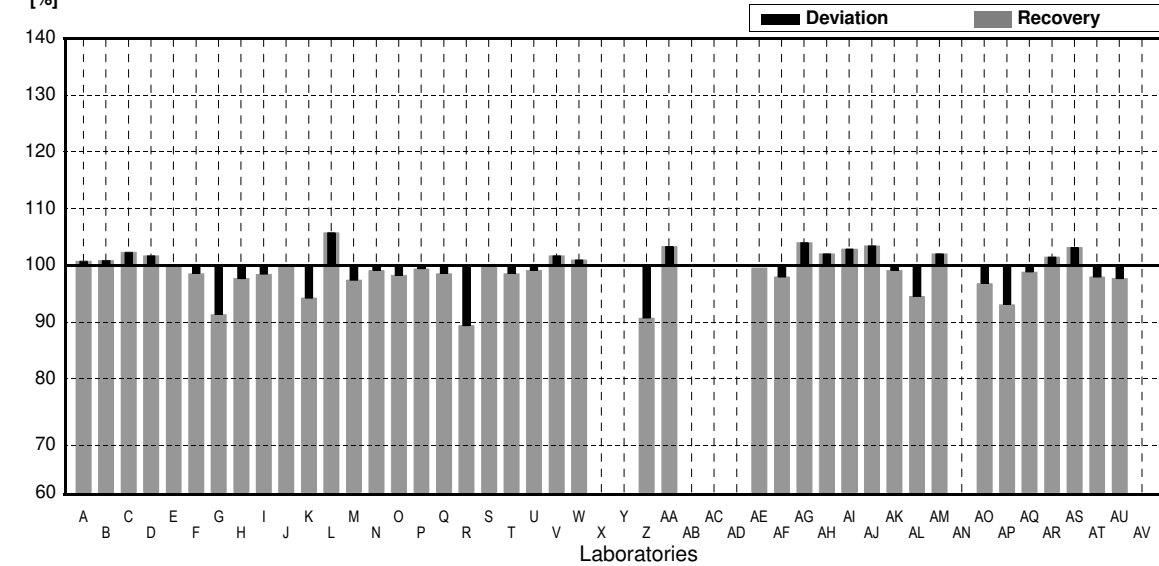
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	34.96	1,75	mg/l	101%	0.24
B	35.0	7.4	mg/l	101%	0.28
C	35.5	3	mg/l	102%	0.74
D	35.3	5.3	mg/l	102%	0.56
E	34.6	1.56	mg/l	100%	-0.09
F	34.2	0.534	mg/l	99%	-0.46
G	31.7	1.5	mg/l	91%	-2.79
H	33.9	3.05	mg/l	98%	-0.74
I	34.16	1.02	mg/l	98%	-0.50
J	34.7	2.1	mg/l	100%	0.00
K	32.7	2.94	mg/l	94%	-1.86
L	36.7	1.9	mg/l	106%	1.86
M	33.8	3.4	mg/l	97%	-0.84
N	34.4	3.4	mg/l	99%	-0.28
O	34.1	3.4	mg/l	98%	-0.56
P	34.5	3.3	mg/l	99%	-0.19
Q	34.2	1.0	mg/l	99%	-0.46
R	31.02 *	1.04	mg/l	89%	-3.42
S	34.7	0.97	mg/l	100%	0.00
T	34.2	3.42	mg/l	99%	-0.46
U	34.4	5.16	mg/l	99%	-0.28
V	35.3		mg/l	102%	0.56
W	35.04	3.0	mg/l	101%	0.32
X			mg/l		
Y			mg/l		
Z	31.48 *	3.1	mg/l	91%	-2.99
AA	35.86	1.79	mg/l	103%	1.08
AB			mg/l		
AC			mg/l		
AD			mg/l		
AE	34.555	0.089	mg/l	100%	-0.13
AF	34.00	1.70	mg/l	98%	-0.65
AG	36.1	2.9	mg/l	104%	1.30
AH	35.4	2.2	mg/l	102%	0.65
AI	35.7	1.8	mg/l	103%	0.93
AJ	35.9	1.4	mg/l	103%	1.12
AK	34.4	0.95	mg/l	99%	-0.28
AL	32.8	3	mg/l	95%	-1.77
AM	35.4		mg/l	102%	0.65
AN			mg/l		
AO	33.6	5.4	mg/l	97%	-1.02
AP	32.3	3.2	mg/l	93%	-2.23
AQ	34.3	3.4	mg/l	99%	-0.37
AR	35.22		mg/l	101%	0.48
AS	35.8		mg/l	103%	1.02
AT	34.0	3.13	mg/l	98%	-0.65
AU	33.9	2.0	mg/l	98%	-0.74
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	34,4 \pm 0,5	34,5 \pm 0,5	mg/l
Recov. \pm CI(99%)	99,1 \pm 1,5	99,6 \pm 1,3	%
SD between labs	1,2	1,0	mg/l
RSD between labs	3,6	3,0	%
n for calculation	41	39	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Sulphate

Target value $\pm U$ (k=2) 58,9 mg/l \pm 0,4 mg/l

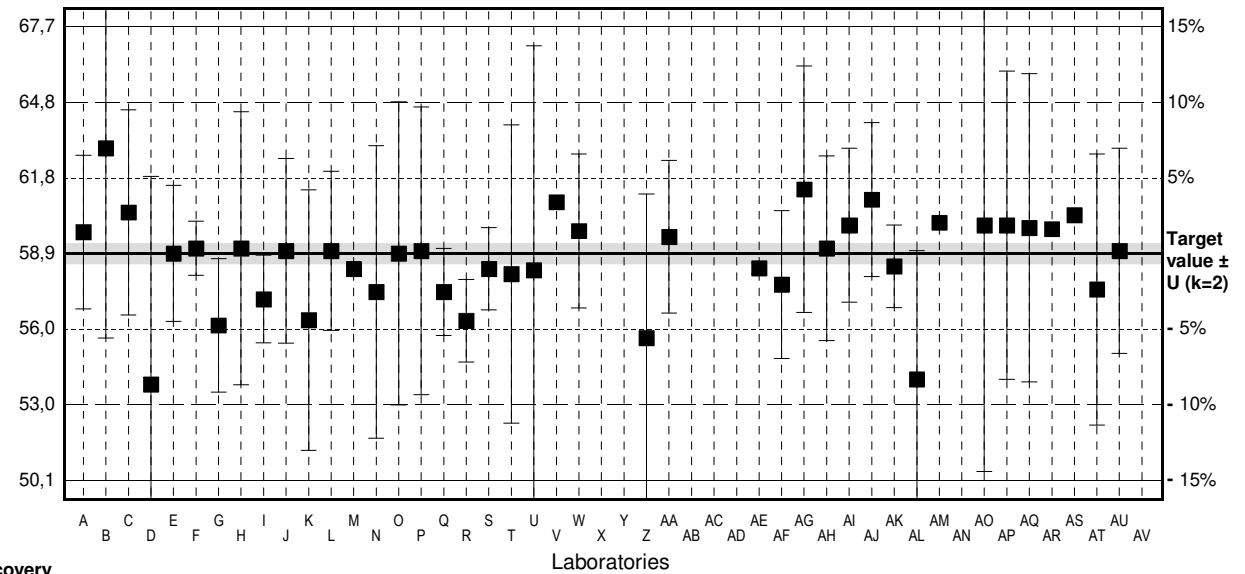
IFA result $\pm U$ (k=2) 58,8 mg/l \pm 1,4 mg/l

Stability test mg/l

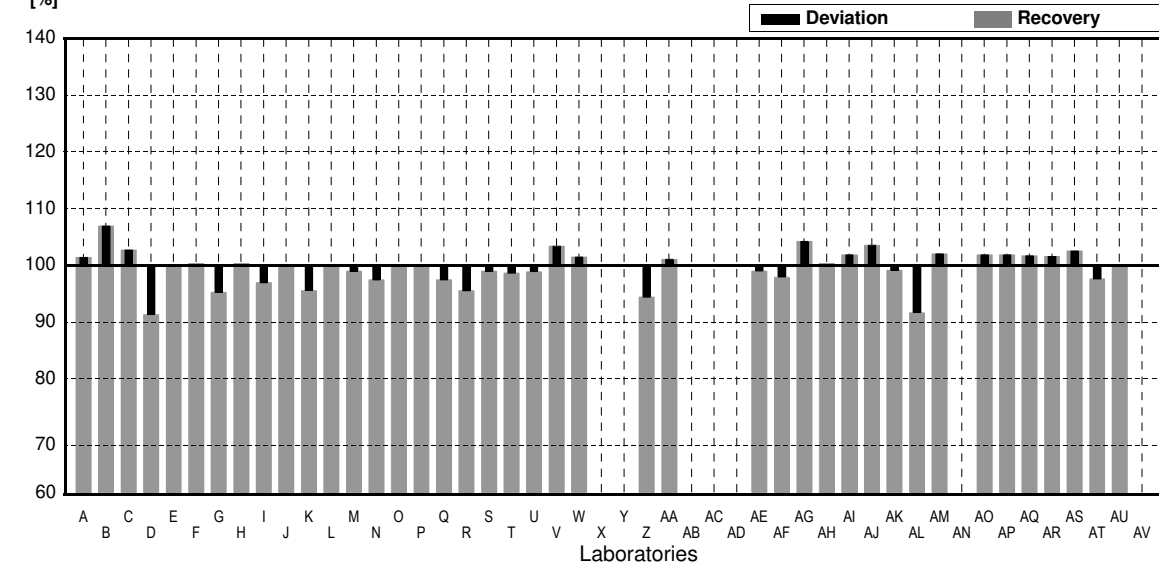
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	59.73	2,99	mg/l	101%	0.45
B	63	7.4	mg/l	107%	2.25
C	60.5	4	mg/l	103%	0.88
D	53.8 *	8.1	mg/l	91%	-2.79
E	58.9	2,65	mg/l	100%	0.00
F	59.1	1,05	mg/l	100%	0.11
G	56.1	2.6	mg/l	95%	-1.53
H	59.1	5.32	mg/l	100%	0.11
I	57.12	1.71	mg/l	97%	-0.97
J	59	3.6	mg/l	100%	0.05
K	56.3	5,07	mg/l	96%	-1.42
L	59	3.1	mg/l	100%	0.05
M	58.3		mg/l	99%	-0.33
N	57.4	5.7	mg/l	97%	-0.82
O	58.9	5.9	mg/l	100%	0.00
P	59.0	5.6	mg/l	100%	0.05
Q	57.4	1.7	mg/l	97%	-0.82
R	56.28	1.61	mg/l	96%	-1.43
S	58.3	1.6	mg/l	99%	-0.33
T	58.1	5.81	mg/l	99%	-0.44
U	58.25	8.738	mg/l	99%	-0.36
V	60.9		mg/l	103%	1.10
W	59.78	3.0	mg/l	101%	0.48
X			mg/l		
Y			mg/l		
Z	55.61	5.6	mg/l	94%	-1.80
AA	59.55	2.978	mg/l	101%	0.36
AB			mg/l		
AC			mg/l		
AD			mg/l		
AE	58.325	0.215	mg/l	99%	-0.31
AF	57.69	2.88	mg/l	98%	-0.66
AG	61.4	4.8	mg/l	104%	1.37
AH	59.1	3.6	mg/l	100%	0.11
AI	60.0	3.0	mg/l	102%	0.60
AJ	61	3	mg/l	104%	1.15
AK	58.4	1.61	mg/l	99%	-0.27
AL	54.0 *	5	mg/l	92%	-2.68
AM	60.1		mg/l	102%	0.66
AN			mg/l		
AO	60.0	9.6	mg/l	102%	0.60
AP	60	6.0	mg/l	102%	0.60
AQ	59.9	6.0	mg/l	102%	0.55
AR	59.85		mg/l	102%	0.52
AS	60.4		mg/l	103%	0.82
AT	57.5	5.28	mg/l	98%	-0.77
AU	59	4	mg/l	100%	0.05
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	58,7 \pm 0,8	58,9 \pm 0,7	mg/l
Recov. \pm CI(99%)	99,6 \pm 1,3	100,1 \pm 1,1	%
SD between labs	1,9	1,5	mg/l
RSD between labs	3,2	2,6	%
n for calculation	41	39	

Result [mg/l]



Recovery [%]



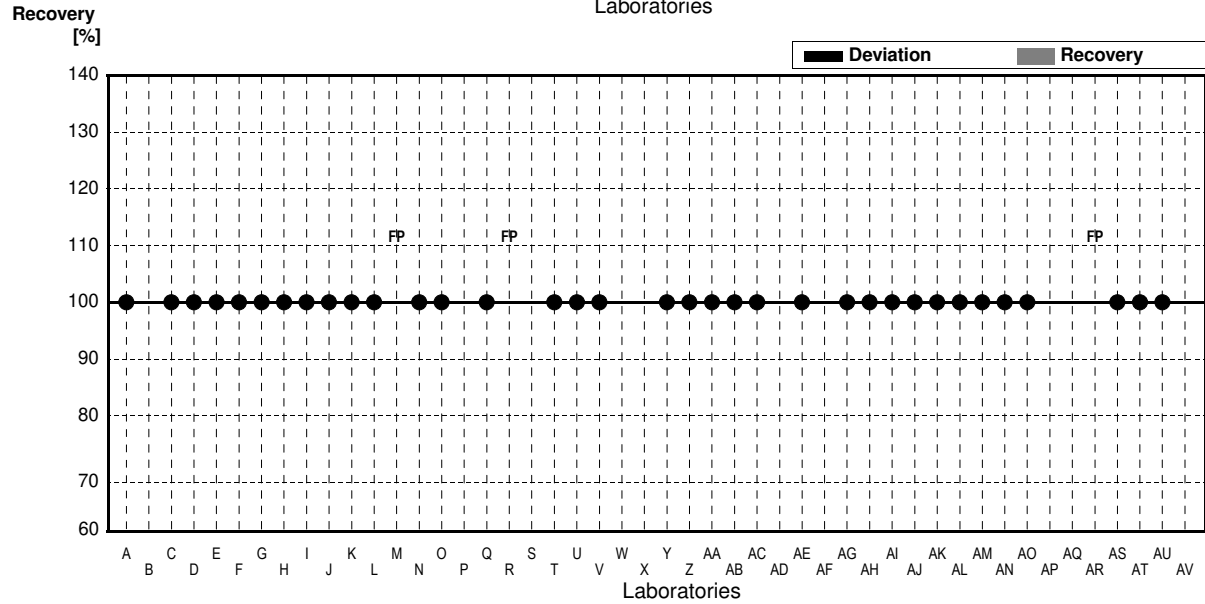
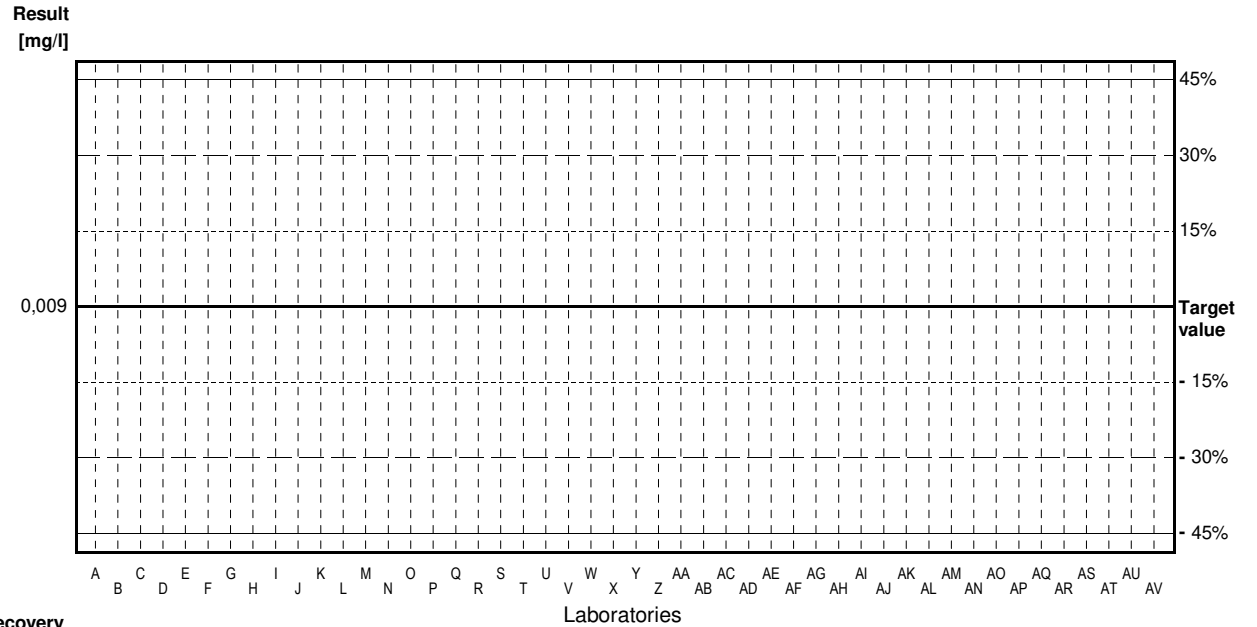
Sample N167A

Parameter Orthophosphate

Target value <0,009 mg/l
 IFA result <0,009 mg/l
 Stability test <0,009 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0.01		mg/l	•	
B			mg/l		
C	<0.01		mg/l	•	
D	<0.1		mg/l	•	
E	<0.02		mg/l	•	
F	<0.0150		mg/l	•	
G	<0.061	0.005	mg/l	•	
H	<0.060		mg/l	•	
I	<0.009		mg/l	•	
J	<0.01		mg/l	•	
K	<0.01		mg/l	•	
L	<0.02		mg/l	•	
M	0.124		mg/l	FP	
N	<0.008		mg/l	•	
O	<0.015		mg/l	•	
P			mg/l		
Q	<0.040		mg/l	•	
R	0.311	0.070	mg/l	FP	
S			mg/l		
T	<0.046		mg/l	•	
U	<0.03		mg/l	•	
V	<0.01		mg/l	•	
W			mg/l		
X			mg/l		
Y	<0.019		mg/l	•	
Z	<0.001		mg/l	•	
AA	0.0060	0.00090	mg/l	•	
AB	<0.006	0	mg/l	•	
AC	<0.0100	0.00281	mg/l	•	
AD			mg/l		
AE	<0.020		mg/l	•	
AF			mg/l		
AG	<0.010		mg/l	•	
AH	<0.006		mg/l	•	
AI	<0.006		mg/l	•	
AJ	<0.01		mg/l	•	
AK	<0.003		mg/l	•	
AL	<0.04		mg/l	•	
AM	<0.03		mg/l	•	
AN	<0.010	0.0001	mg/l	•	
AO	<0.015		mg/l	•	
AP			mg/l		
AQ			mg/l		
AR	0.0133		mg/l	FP	
AS	<0.01		mg/l	•	
AT	<0.02		mg/l	•	
AU	<0.009		mg/l	•	
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)			mg/l
Recov. ± CI(99%)			%
SD between labs			mg/l
RSD between labs			%
n for calculation			



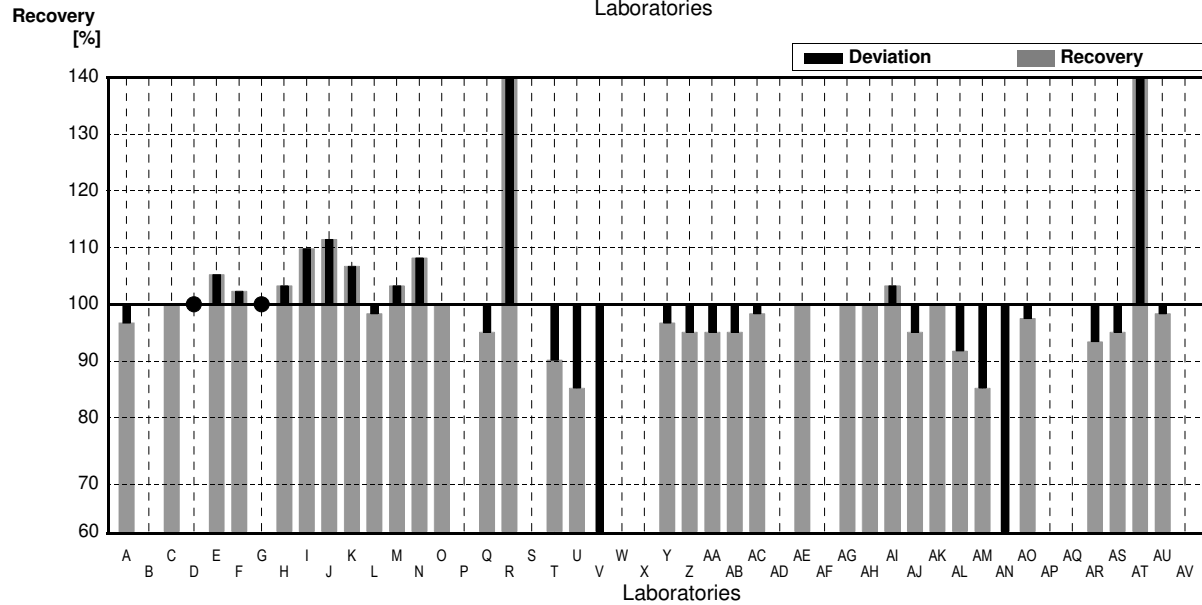
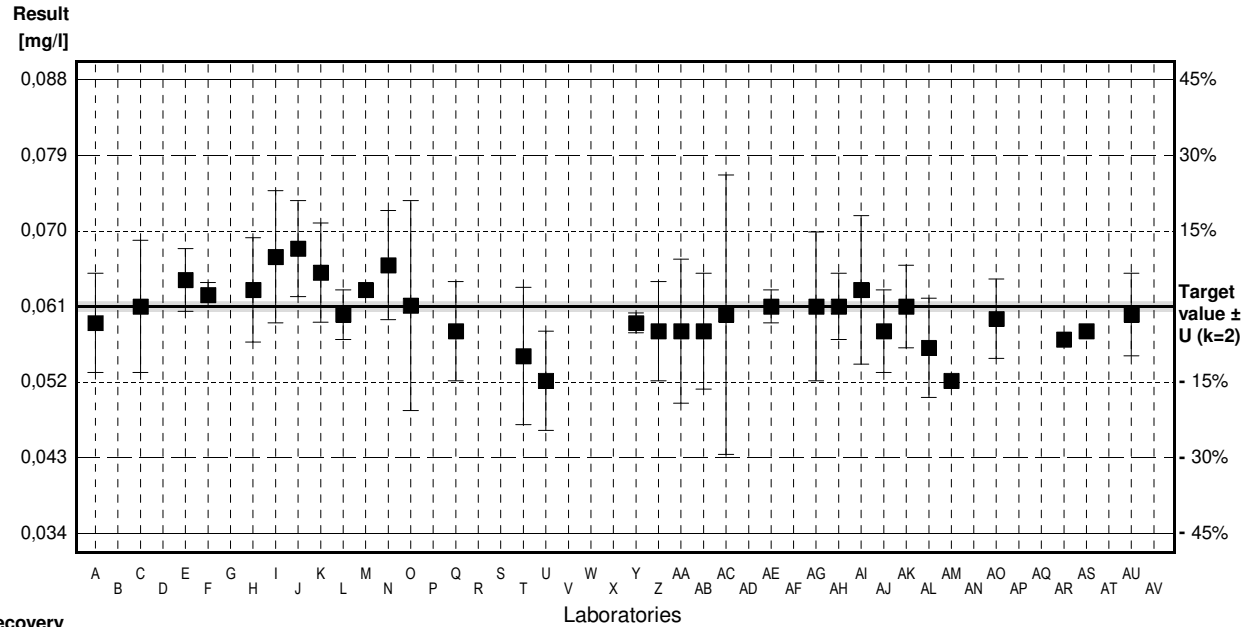
Sample N167B

Parameter Orthophosphate

Target value ± U (k=2) 0,061 mg/l ± 0,001 mg/l
 IFA result ± U (k=2) 0,062 mg/l ± 0,001 mg/l
 Stability test ± U (k=2) 0,061 mg/l ± 0,001 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0.0590	0.006	mg/l	97%	-0.35
B			mg/l		
C	0.061	0.008	mg/l	100%	0.00
D	<0.1		mg/l	*	
E	0.0642	0.0038	mg/l	105%	0.55
F	0.0624	0.00150	mg/l	102%	0.24
G	<0.061	0.005	mg/l	*	
H	0.063	0.0063	mg/l	103%	0.35
I	0.067	0.008	mg/l	110%	1.04
J	0.068	0.0058	mg/l	111%	1.21
K	0.0651	0.006	mg/l	107%	0.71
L	0.060	0.003	mg/l	98%	-0.17
M	0.0630		mg/l	103%	0.35
N	0.0660	0.0066	mg/l	108%	0.86
O	0.0611	0.0127	mg/l	100%	0.02
P			mg/l		
Q	0.058	0.006	mg/l	95%	-0.52
R	0.69 *	0.05	mg/l	1131%	108.54
S			mg/l		
T	0.055	0.0083	mg/l	90%	-1.04
U	0.052	0.006	mg/l	85%	-1.55
V	0.0272 *		mg/l	45%	-5.83
W			mg/l		
X			mg/l		
Y	0.059	0.00120	mg/l	97%	-0.35
Z	0.058	0.006	mg/l	95%	-0.52
AA	0.058	0.0087	mg/l	95%	-0.52
AB	0.058	0.007	mg/l	95%	-0.52
AC	0.0600	0.0169	mg/l	98%	-0.17
AD			mg/l		
AE	0.0610	0.002	mg/l	100%	0.00
AF			mg/l		
AG	0.061	0.009	mg/l	100%	0.00
AH	0.061	0.004	mg/l	100%	0.00
AI	0.063	0.009	mg/l	103%	0.35
AJ	0.058	0.005	mg/l	95%	-0.52
AK	0.061	0.005	mg/l	100%	0.00
AL	0.056	0.006	mg/l	92%	-0.86
AM	0.052		mg/l	85%	-1.55
AN	0.0210 *	0.0001	mg/l	34%	-6.90
AO	0.0595	0.0048	mg/l	98%	-0.26
AP			mg/l		
AQ			mg/l		
AR	0.057		mg/l	93%	-0.69
AS	0.058		mg/l	95%	-0.52
AT	0.128 *	0.026	mg/l	210%	11.56
AU	0.060	0.005	mg/l	98%	-0.17
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,078 ± 0,048	0,060 ± 0,002	mg/l
Recov. ± CI(99%)	127,1 ± 79,1	98,6 ± 3,0	%
SD between labs	0,106	0,004	mg/l
RSD between labs	136,7	6,2	%
n for calculation	36	32	



Sample N167A

Parameter Boron

Target value ± U (k=2) 0,1265 mg/l ± 0,0012 mg/l

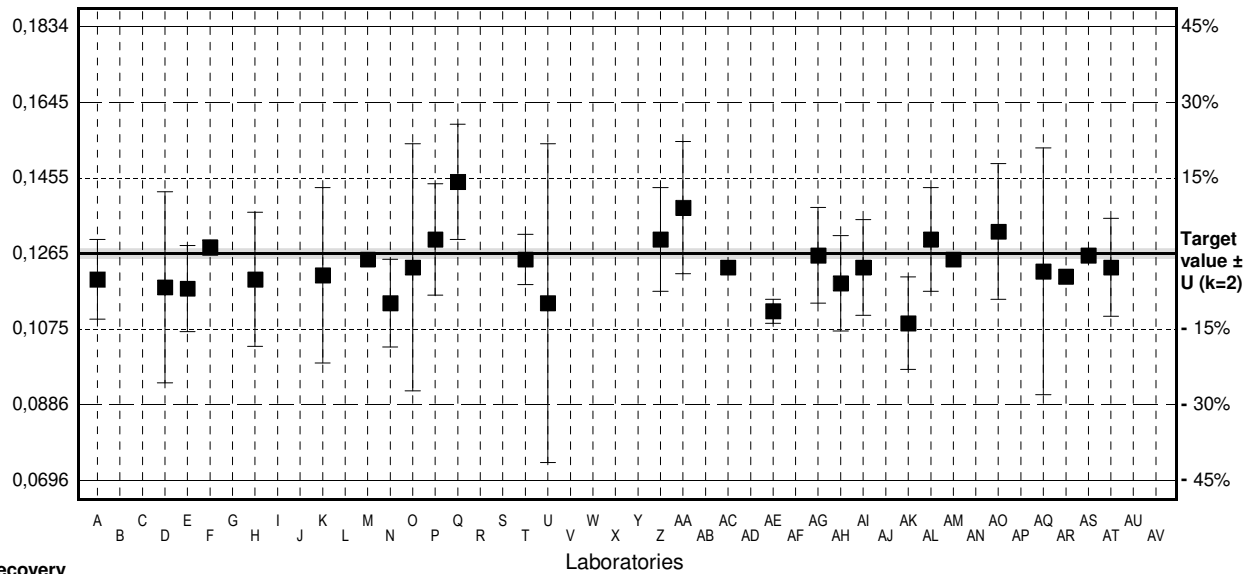
IFA result ± U (k=2) 0,115 mg/l ± 0,009 mg/l

Stability test mg/l

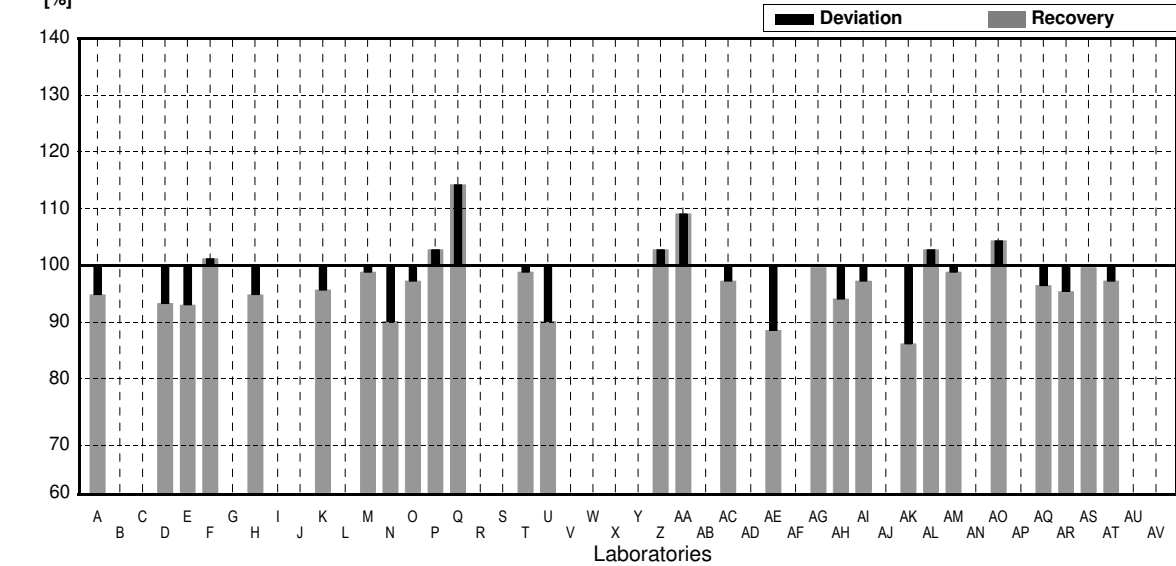
Lab Code	Result	±	Unit	Recovery	z-Score
A	0.120	0.01	mg/l	95%	-0.70
B			mg/l		
C			mg/l		
D	0.118	0.024	mg/l	93%	-0.92
E	0.1177	0.0108	mg/l	93%	-0.95
F	0.128	0.00183	mg/l	101%	0.16
G			mg/l		
H	0.120	0.0168	mg/l	95%	-0.70
I			mg/l		
J			mg/l		
K	0.121	0.022	mg/l	96%	-0.60
L			mg/l		
M	0.125		mg/l	99%	-0.16
N	0.114	0.011	mg/l	90%	-1.35
O	0.123	0.031	mg/l	97%	-0.38
P	0.130	0.014	mg/l	103%	0.38
Q	0.1445 *	0.01445	mg/l	114%	1.95
R			mg/l		
S			mg/l		
T	0.125	0.0063	mg/l	99%	-0.16
U	0.114	0.04	mg/l	90%	-1.35
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	0.130	0.0130	mg/l	103%	0.38
AA	0.138	0.0166	mg/l	109%	1.25
AB			mg/l		
AC	0.123		mg/l	97%	-0.38
AD			mg/l		
AE	0.112	0.003	mg/l	89%	-1.57
AF			mg/l		
AG	0.126	0.012	mg/l	100%	-0.05
AH	0.119	0.012	mg/l	94%	-0.81
AI	0.123	0.012	mg/l	97%	-0.38
AJ			mg/l		
AK	0.109	0.0116	mg/l	86%	-1.90
AL	0.130	0.013	mg/l	103%	0.38
AM	0.125		mg/l	99%	-0.16
AN			mg/l		
AO	0.132	0.017	mg/l	104%	0.60
AP			mg/l		
AQ	0.122	0.031	mg/l	96%	-0.49
AR	0.1207		mg/l	95%	-0.63
AS	0.126		mg/l	100%	-0.05
AT	0.123	0.0123	mg/l	97%	-0.38
AU			mg/l		
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,1235 ± 0,004	0,1228 ± 0,003	mg/l
Recov. ± CI(99%)	97,7 ± 3,1	97,0 ± 2,7	%
SD between labs	0,0075	0,0065	mg/l
RSD between labs	6,1	5,3	%
n for calculation	28	27	

Result [mg/l]



Recovery [%]



Sample N167B

Parameter Boron

Target value ± U (k=2) 0,0544 mg/l ± 0,0004 mg/l

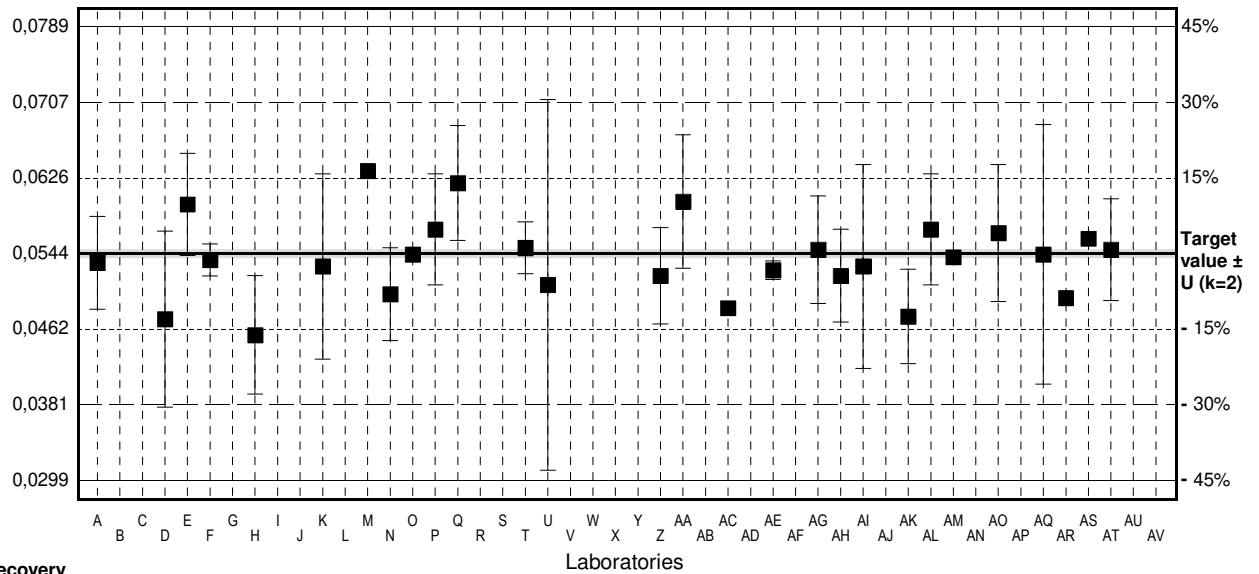
IFA result ± U (k=2) 0,051 mg/l ± 0,004 mg/l

Stability test mg/l

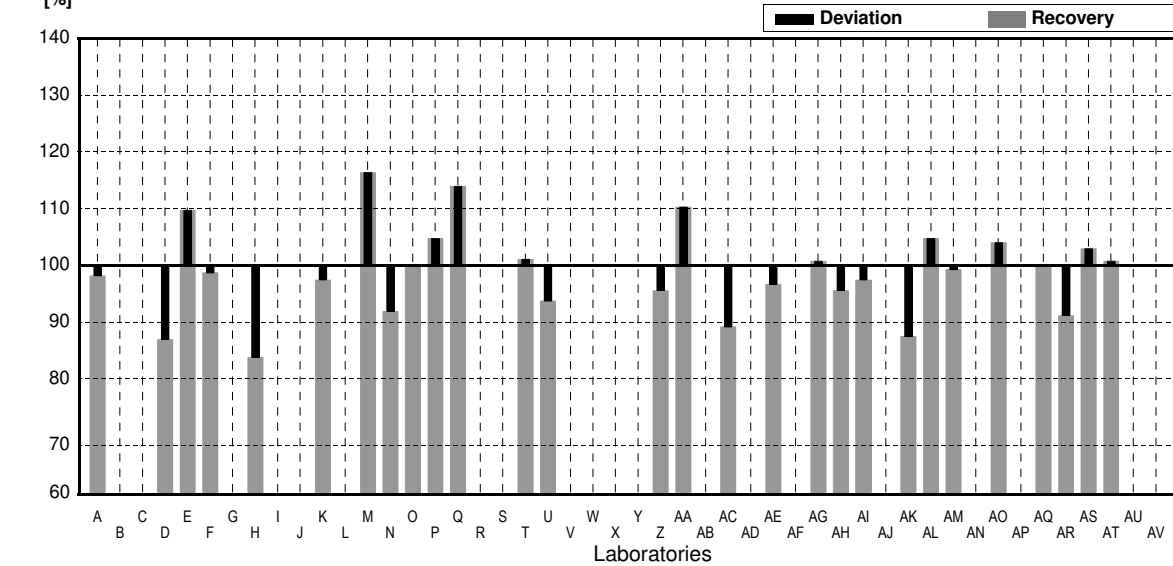
Lab Code	Result	±	Unit	Recovery	z-Score
A	0.0534	0.005	mg/l	98%	-0.25
B			mg/l		
C			mg/l		
D	0.0473	0.0095	mg/l	87%	-1.79
E	0.0597	0.0055	mg/l	110%	1.33
F	0.0537	0.00172	mg/l	99%	-0.18
G			mg/l		
H	0.0456	0.00639	mg/l	84%	-2.22
I			mg/l		
J			mg/l		
K	0.053	0.010	mg/l	97%	-0.35
L			mg/l		
M	0.0633		mg/l	116%	2.24
N	0.0500	0.0050	mg/l	92%	-1.11
O	0.0543		mg/l	100%	-0.03
P	0.057	0.006	mg/l	105%	0.65
Q	0.062	0.0062	mg/l	114%	1.91
R			mg/l		
S			mg/l		
T	0.055	0.0028	mg/l	101%	0.15
U	0.051	0.02	mg/l	94%	-0.86
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	0.052	0.0052	mg/l	96%	-0.60
AA	0.060	0.0072	mg/l	110%	1.41
AB			mg/l		
AC	0.0485		mg/l	89%	-1.49
AD			mg/l		
AE	0.0526	0.001	mg/l	97%	-0.45
AF			mg/l		
AG	0.0548	0.0058	mg/l	101%	0.10
AH	0.052	0.005	mg/l	96%	-0.60
AI	0.053	0.011	mg/l	97%	-0.35
AJ			mg/l		
AK	0.0476	0.0051	mg/l	88%	-1.71
AL	0.057	0.006	mg/l	105%	0.65
AM	0.054		mg/l	99%	-0.10
AN			mg/l		
AO	0.0566	0.0074	mg/l	104%	0.55
AP			mg/l		
AQ	0.0543	0.014	mg/l	100%	-0.03
AR	0.0496		mg/l	91%	-1.21
AS	0.056		mg/l	103%	0.40
AT	0.0548	0.00548	mg/l	101%	0.10
AU			mg/l		
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0539 ± 0,002	0,0539 ± 0,002	mg/l
Recov. ± CI(99%)	99,0 ± 4,1	99,0 ± 4,1	%
SD between labs	0,0043	0,0043	mg/l
RSD between labs	7,9	7,9	%
n for calculation	28	28	

Result [mg/l]



Recovery [%]



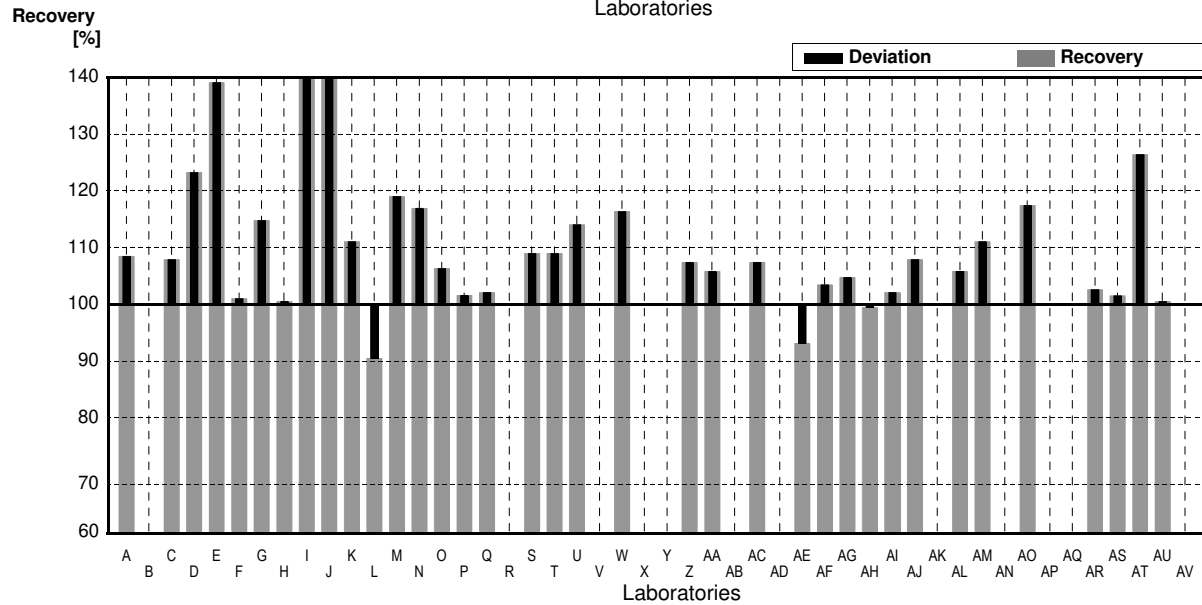
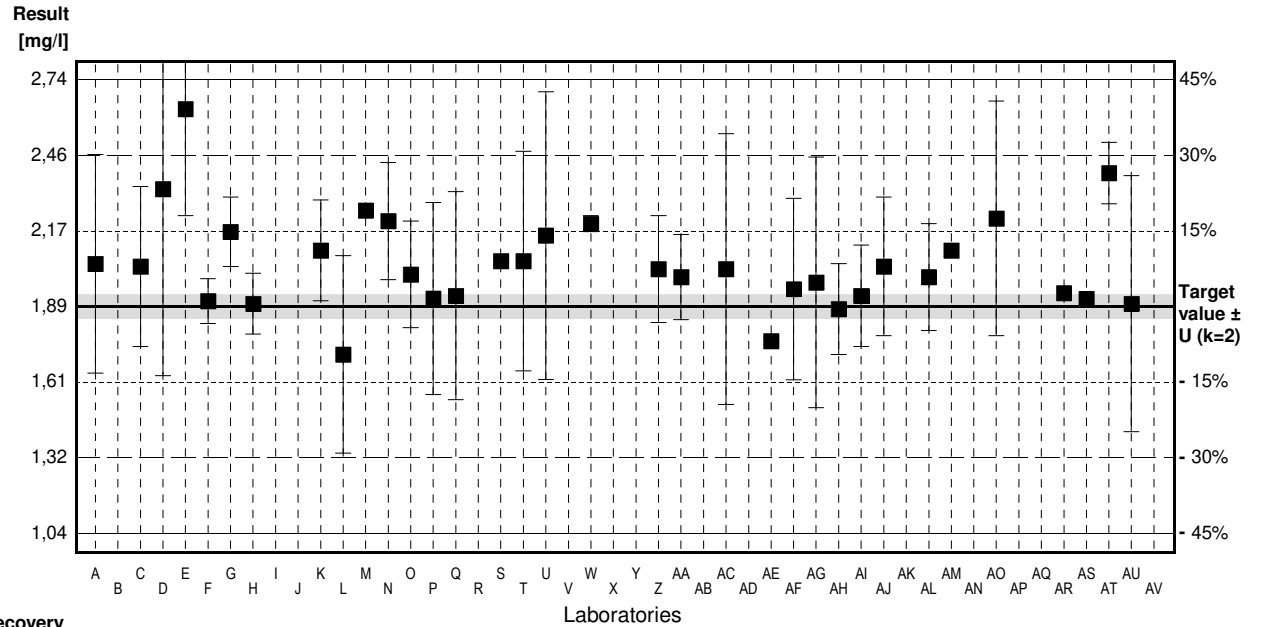
Sample N167A

Parameter DOC

Target value ± U (k=2) 1,89 mg/l ± 0,04 mg/l
 IFA result ± U (k=2) 1,92 mg/l ± 0,09 mg/l
 Stability test ± U (k=2) 2,04 mg/l ± 0,09 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	2.05	0.41	mg/l	108%	1.57
B			mg/l		
C	2.04	0.3	mg/l	108%	1.47
D	2.33	0.70	mg/l	123%	4.31
E	2.63	0.40	mg/l	139%	7.25
F	1.91	0.0836	mg/l	101%	0.20
G	2.17	0.13	mg/l	115%	2.74
H	1.90	0.114	mg/l	101%	0.10
I	3.518	0.528	mg/l	186%	15.95
J	2.81	0.47	mg/l	149%	9.01
K	2.10	0.189	mg/l	111%	2.06
L	1.71	0.37	mg/l	90%	-1.76
M	2.25		mg/l	119%	3.53
N	2.21	0.22	mg/l	117%	3.14
O	2.01	0.20	mg/l	106%	1.18
P	1.92	0.36	mg/l	102%	0.29
Q	1.93	0.39	mg/l	102%	0.39
R			mg/l		
S	2.06	0.016	mg/l	109%	1.67
T	2.06	0.412	mg/l	109%	1.67
U	2.156	0.5395	mg/l	114%	2.61
V			mg/l		
W	2.20	0.03	mg/l	116%	3.04
X			mg/l		
Y			mg/l		
Z	2.03	0.2	mg/l	107%	1.37
AA	2.00	0.160	mg/l	106%	1.08
AB			mg/l		
AC	2.03	0.508	mg/l	107%	1.37
AD			mg/l		
AE	1.76	0.015	mg/l	93%	-1.27
AF	1.955	0.34	mg/l	103%	0.64
AG	1.98	0.47	mg/l	105%	0.88
AH	1.88	0.17	mg/l	99%	-0.10
AI	1.93	0.19	mg/l	102%	0.39
AJ	2.04	0.26	mg/l	108%	1.47
AK			mg/l		
AL	2.0	0.2	mg/l	106%	1.08
AM	2.10		mg/l	111%	2.06
AN			mg/l		
AO	2.22	0.44	mg/l	117%	3.23
AP			mg/l		
AQ			mg/l		
AR	1.94		mg/l	103%	0.49
AS	1.919		mg/l	102%	0.28
AT	2.39	0.115	mg/l	126%	4.90
AU	1.90	0.48	mg/l	101%	0.10
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,11 ± 0,15	2,03 ± 0,07	mg/l
Recov. ± CI(99%)	111,8 ± 7,8	107,6 ± 3,8	%
SD between labs	0,32	0,15	mg/l
RSD between labs	15,3	7,4	%
n for calculation	36	33	



Sample N167B

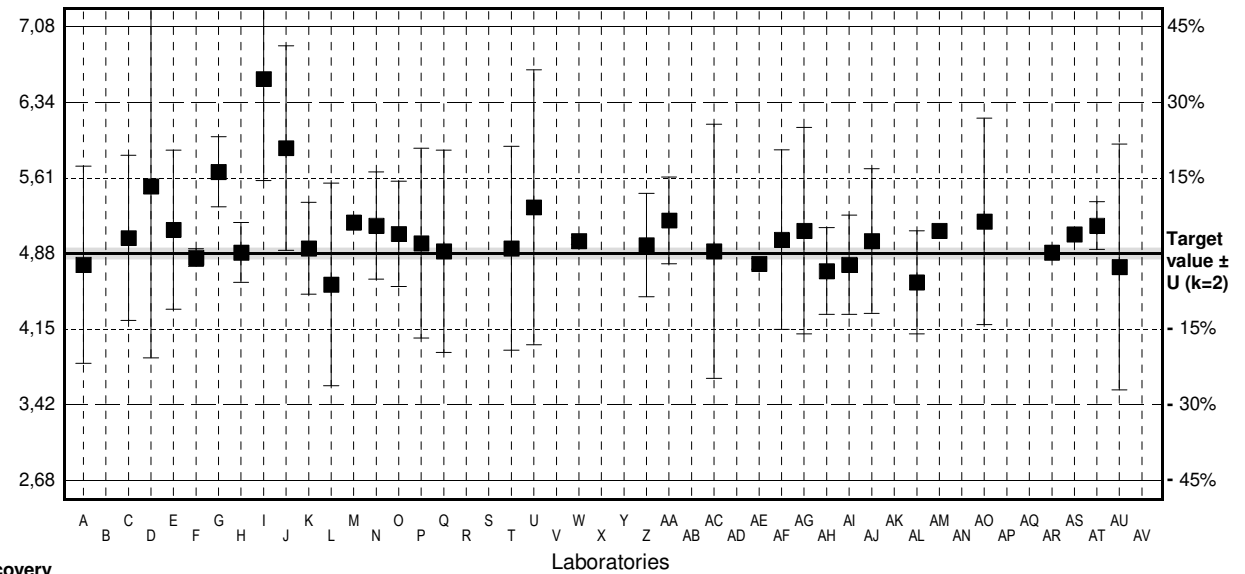
Parameter DOC

Target value $\pm U$ (k=2) 4,88 mg/l \pm 0,05 mg/l
 IFA result $\pm U$ (k=2) 4,73 mg/l \pm 0,09 mg/l
 Stability test $\pm U$ (k=2) 5,06 mg/l \pm 0,10 mg/l

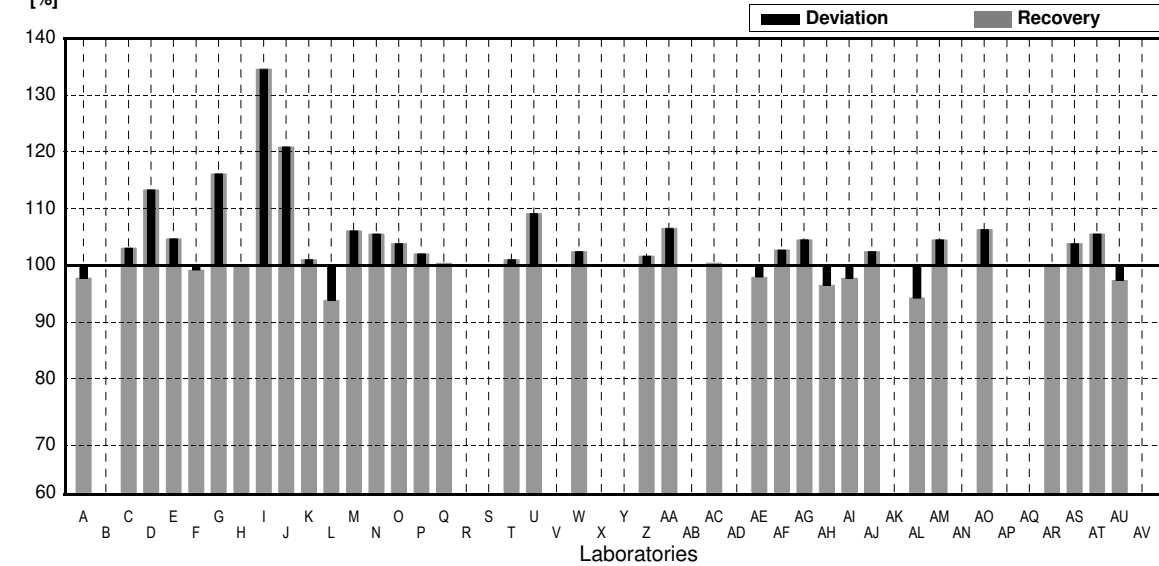
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	4,77	0,954	mg/l	98%	-0,42
B			mg/l		
C	5,03	0,8	mg/l	103%	0,57
D	5,53	1,66	mg/l	113%	2,47
E	5,11	0,77	mg/l	105%	0,87
F	4,84	0,0844	mg/l	99%	-0,15
G	5,67	0,34	mg/l	116%	3,00
H	4,89	0,29	mg/l	100%	0,04
I	6,570 *	0,986	mg/l	135%	6,41
J	5,9 *	0,99	mg/l	121%	3,87
K	4,93	0,444	mg/l	101%	0,19
L	4,58	0,98	mg/l	94%	-1,14
M	5,18		mg/l	106%	1,14
N	5,15	0,52	mg/l	106%	1,02
O	5,07	0,51	mg/l	104%	0,72
P	4,98	0,92	mg/l	102%	0,38
Q	4,90	0,98	mg/l	100%	0,08
R			mg/l		
S			mg/l		
T	4,93	0,986	mg/l	101%	0,19
U	5,327	1,332	mg/l	109%	1,70
V			mg/l		
W	5,00	0,03	mg/l	102%	0,46
X			mg/l		
Y			mg/l		
Z	4,96	0,5	mg/l	102%	0,30
AA	5,20	0,420	mg/l	107%	1,21
AB			mg/l		
AC	4,90	1,23	mg/l	100%	0,08
AD			mg/l		
AE	4,78	0,053	mg/l	98%	-0,38
AF	5,014	0,87	mg/l	103%	0,51
AG	5,1	1,0	mg/l	105%	0,83
AH	4,71	0,42	mg/l	97%	-0,65
AI	4,77	0,48	mg/l	98%	-0,42
AJ	5,0	0,7	mg/l	102%	0,46
AK			mg/l		
AL	4,6	0,5	mg/l	94%	-1,06
AM	5,1		mg/l	105%	0,83
AN			mg/l		
AO	5,19	1,0	mg/l	106%	1,18
AP			mg/l		
AQ			mg/l		
AR	4,89		mg/l	100%	0,04
AS	5,067		mg/l	104%	0,71
AT	5,15	0,231	mg/l	106%	1,02
AU	4,75	1,19	mg/l	97%	-0,49
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	5,07 \pm 0,17	5,00 \pm 0,11	mg/l
Recov. \pm CI(99%)	103,9 \pm 3,6	102,5 \pm 2,3	%
SD between labs	0,38	0,23	mg/l
RSD between labs	7,4	4,7	%
n for calculation	35	33	

Result [mg/l]



Recovery [%]



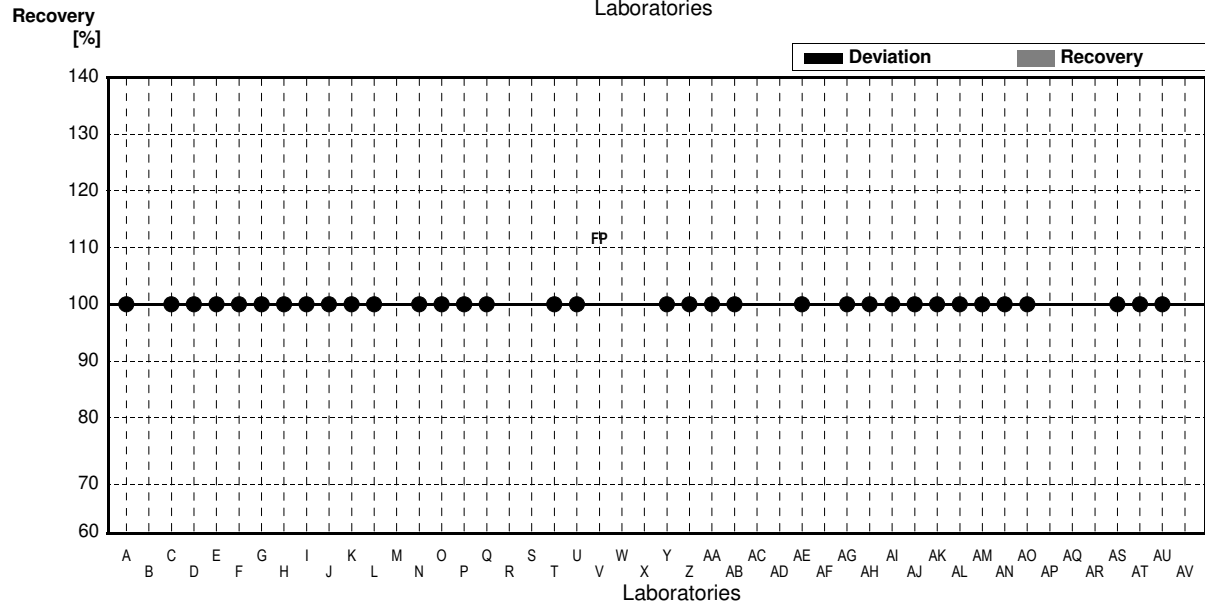
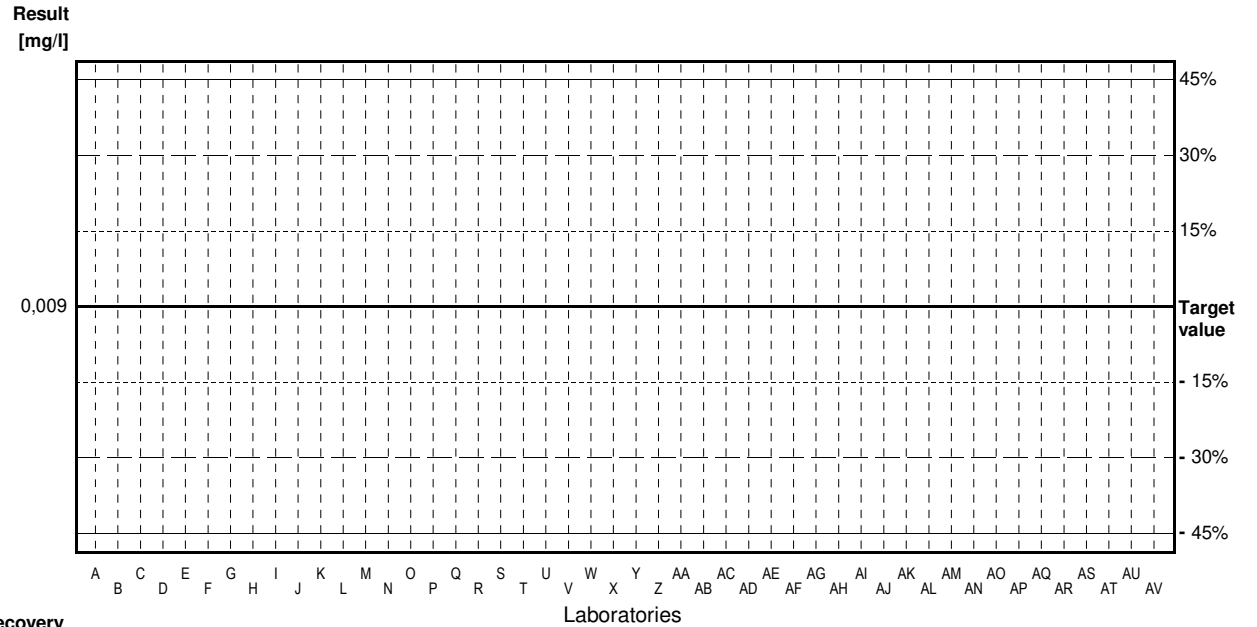
Sample N167A

Parameter Total P (as PO4)

Target value <0,009 mg/l
 IFA result <0,009 mg/l
 Stability test mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0.01		mg/l	•	
B			mg/l		
C	<0.013		mg/l	•	
D	<31		mg/l	•	
E	<0.02		mg/l	•	
F	<0.0150		mg/l	•	
G	<0.061	0.005	mg/l	•	
H	<0.060		mg/l	•	
I	<0.009		mg/l	•	
J	<0.01		mg/l	•	
K	<0.05		mg/l	•	
L	<0.15		mg/l	•	
M			mg/l		
N	<0.015		mg/l	•	
O	<0.015		mg/l	•	
P	<0.03		mg/l	•	
Q	<0.03		mg/l	•	
R			mg/l		
S			mg/l		
T	<0.015		mg/l	•	
U	<0.03		mg/l	•	
V	0.0195		mg/l	FP	
W			mg/l		
X			mg/l		
Y	<0.02		mg/l	•	
Z	<0.003		mg/l	•	
AA	<0.006		mg/l	•	
AB	<0.006	0	mg/l	•	
AC			mg/l		
AD			mg/l		
AE	<0.020		mg/l	•	
AF			mg/l		
AG	<0.010		mg/l	•	
AH	<0.006		mg/l	•	
AI	<0.005		mg/l	•	
AJ	<0.01		mg/l	•	
AK	<0.003		mg/l	•	
AL	<0.04		mg/l	•	
AM	<0.015		mg/l	•	
AN	<0.02	0.0066	mg/l	•	
AO	<0.015		mg/l	•	
AP			mg/l		
AQ			mg/l		
AR			mg/l		
AS	<0.03		mg/l	•	
AT	<0.02		mg/l	•	
AU	<0.009		mg/l	•	
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)			mg/l
Recov. ± CI(99%)			%
SD between labs			mg/l
RSD between labs			%
n for calculation			



Sample N167B

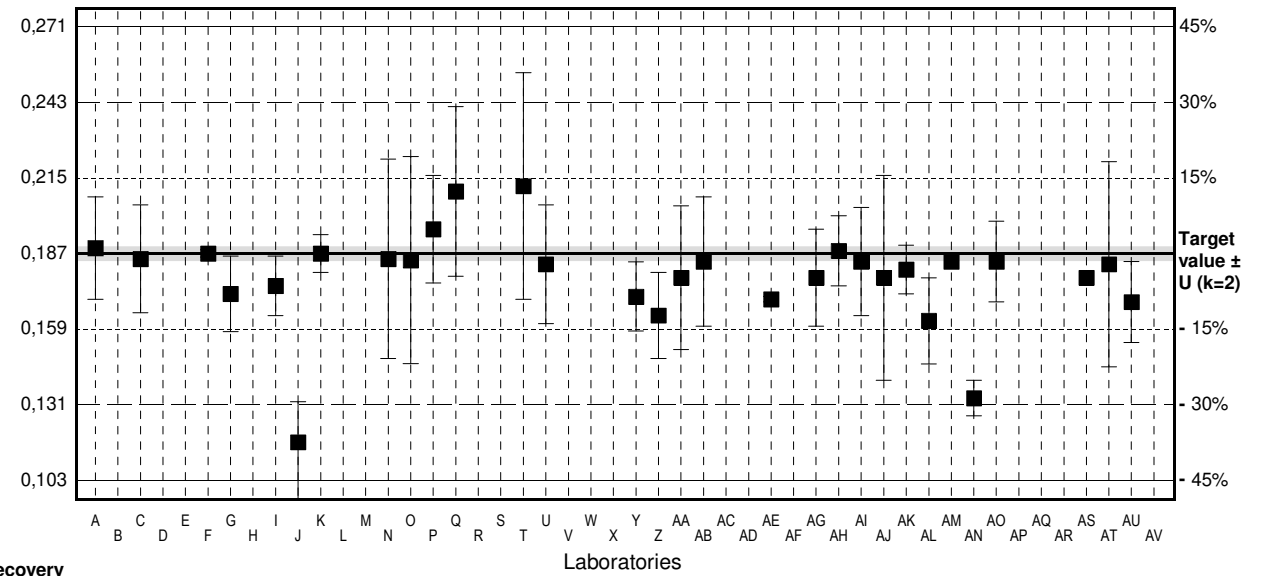
Parameter Total P (as PO4)

Target value ± U (k=2) 0,187 mg/l ± 0,003 mg/l
 IFA result ± U (k=2) 0,209 mg/l ± 0,024 mg/l
 Stability test mg/l

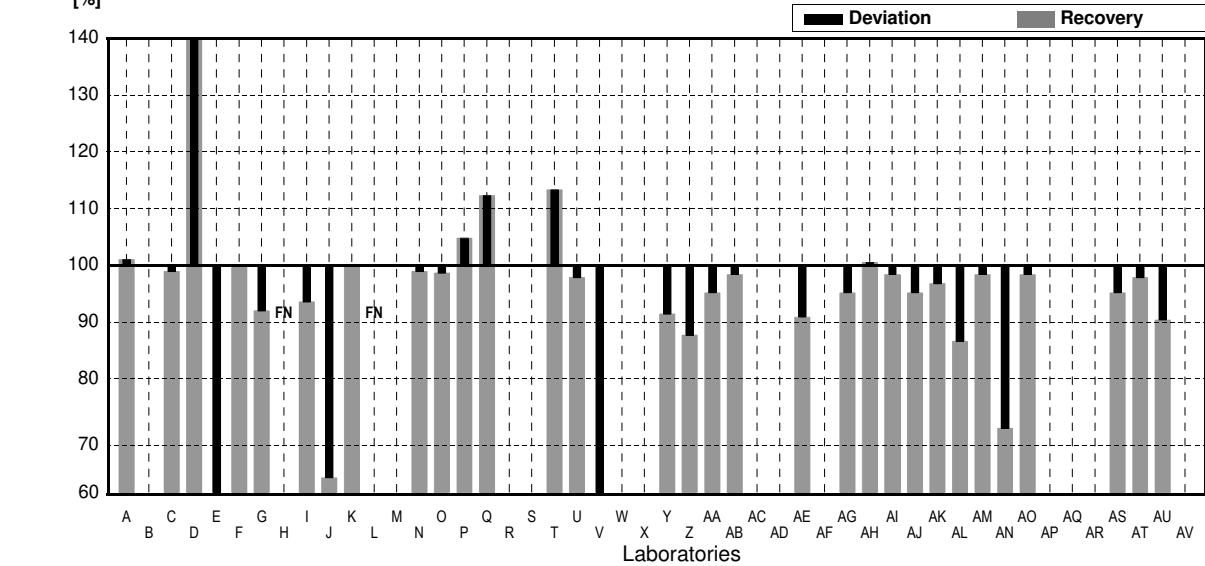
Lab Code	Result	±	Unit	Recovery	z-Score
A	0.189	0.019	mg/l	101%	0.11
B			mg/l		
C	0.185	0.02	mg/l	99%	-0.11
D	179 *	36	mg/l	95722%	10172.55
E	0.0632 *	0.0078	mg/l	34%	-7.04
F	0.187	0.00140	mg/l	100%	0.00
G	0.172	0.014	mg/l	92%	-0.85
H	<0.060		mg/l	FN	
I	0.175	0.011	mg/l	94%	-0.68
J	0.117 *	0.015	mg/l	63%	-3.98
K	0.187	0.007	mg/l	100%	0.00
L	<0.15		mg/l	FN	
M			mg/l		
N	0.185	0.037	mg/l	99%	-0.11
O	0.1845	0.0384	mg/l	99%	-0.14
P	0.196	0.020	mg/l	105%	0.51
Q	0.210 *	0.0315	mg/l	112%	1.31
R			mg/l		
S			mg/l		
T	0.212 *	0.042	mg/l	113%	1.42
U	0.183	0.022	mg/l	98%	-0.23
V	0.072 *	0.003	mg/l	39%	-6.54
W			mg/l		
X			mg/l		
Y	0.171	0.0128	mg/l	91%	-0.91
Z	0.164	0.016	mg/l	88%	-1.31
AA	0.178	0.0267	mg/l	95%	-0.51
AB	0.184	0.024	mg/l	98%	-0.17
AC			mg/l		
AD			mg/l		
AE	0.170	0.001	mg/l	91%	-0.97
AF			mg/l		
AG	0.178	0.018	mg/l	95%	-0.51
AH	0.188	0.013	mg/l	101%	0.06
AI	0.184	0.020	mg/l	98%	-0.17
AJ	0.178	0.038	mg/l	95%	-0.51
AK	0.181	0.009	mg/l	97%	-0.34
AL	0.162	0.016	mg/l	87%	-1.42
AM	0.184	0.015	mg/l	98%	-0.17
AN	0.1333 *	0.0066	mg/l	71%	-3.05
AO	0.184	0.015	mg/l	98%	-0.17
AP			mg/l		
AQ			mg/l		
AR			mg/l		
AS	0.178		mg/l	95%	-0.51
AT	0.183	0.038	mg/l	98%	-0.23
AU	0.169	0.015	mg/l	90%	-1.02
AV			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	5,591 ± 14,84	0,180 ± 0,004	mg/l
Recov. ± CI(99%)	2989,6 ± 7940,	96,2 ± 2,4	%
SD between labs	31,130	0,008	mg/l
RSD between labs	556.8	4.5	%
n for calculation	33	26	

Result [mg/l]



Recovery [%]



Sample N167A

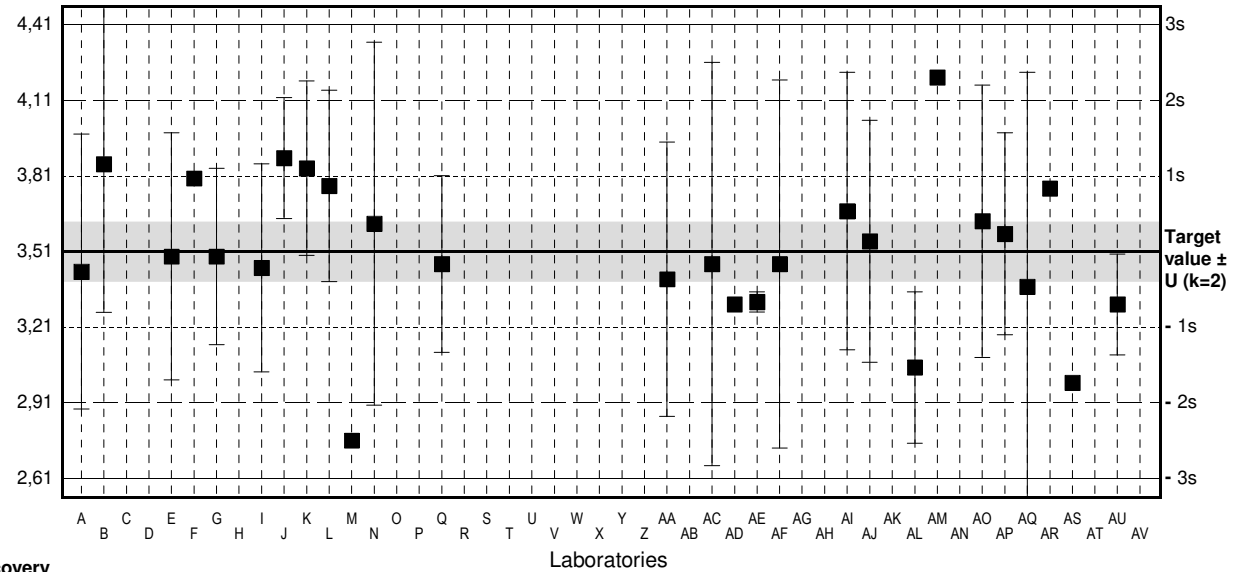
Parameter KMnO4-Index

Target value $\pm U$ (k=2) 3,51 mg/l \pm 0,12 mg/l
 IFA result $\pm U$ (k=2) 3,66 mg/l \pm 0,54 mg/l
 Stability test $\pm U$ (k=2) 3,41 mg/l \pm 0,51 mg/l

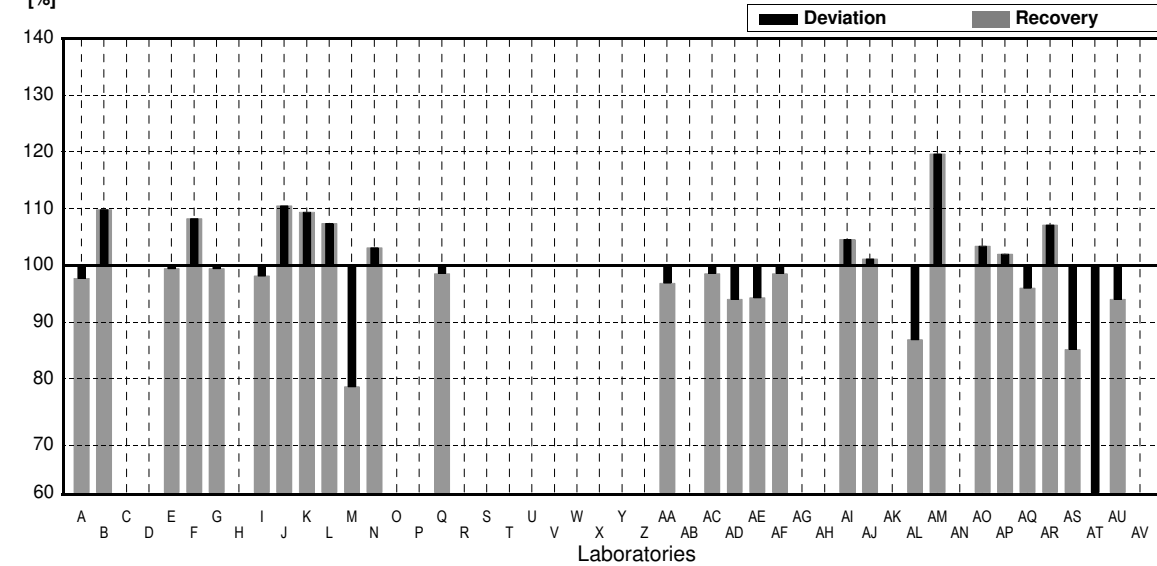
Lab Code	Result	\pm	Unit	Recovery	z-Score
A	3.43	0.545	mg/l	98%	-0.23
B	3.856	0.588	mg/l	110%	0.99
C			mg/l		
D			mg/l		
E	3.49	0.49	mg/l	99%	-0.06
F	3.80		mg/l	108%	0.83
G	3.49	0.35	mg/l	99%	-0.06
H			mg/l		
I	3.445	0.413	mg/l	98%	-0.19
J	3.88	0.24	mg/l	111%	1.05
K	3.84	0.346	mg/l	109%	0.94
L	3.77	0.38	mg/l	107%	0.74
M	2.76		mg/l	79%	-2.14
N	3.62	0.72	mg/l	103%	0.31
O			mg/l		
P			mg/l		
Q	3.46	0.35	mg/l	99%	-0.14
R			mg/l		
S			mg/l		
T			mg/l		
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z			mg/l		
AA	3.40	0.544	mg/l	97%	-0.31
AB			mg/l		
AC	3.46	0.799	mg/l	99%	-0.14
AD	3.30		mg/l	94%	-0.60
AE	3.31	0.040	mg/l	94%	-0.57
AF	3.46	0.73	mg/l	99%	-0.14
AG			mg/l		
AH			mg/l		
AI	3.67	0.55	mg/l	105%	0.46
AJ	3.55	0.48	mg/l	101%	0.11
AK			mg/l		
AL	3.05	0.3	mg/l	87%	-1.31
AM	4.20		mg/l	120%	1.97
AN			mg/l		
AO	3.63	0.54	mg/l	103%	0.34
AP	3.58	0.40	mg/l	102%	0.20
AQ	3.37	0.85	mg/l	96%	-0.40
AR	3.76		mg/l	107%	0.71
AS	2.99		mg/l	85%	-1.48
AT	1.70	0.40	mg/l	48%	-5.16
AU	3.30	0.2	mg/l	94%	-0.60
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	3,45 \pm 0,24	3,51 \pm 0,16	mg/l
Recov. \pm CI(99%)	98,3 \pm 6,7	100,1 \pm 4,6	%
SD between labs	0,45	0,30	mg/l
RSD between labs	13,1	8,5	%
n for calculation	28	27	

Result [mg/l]



Recovery [%]



Sample N167B

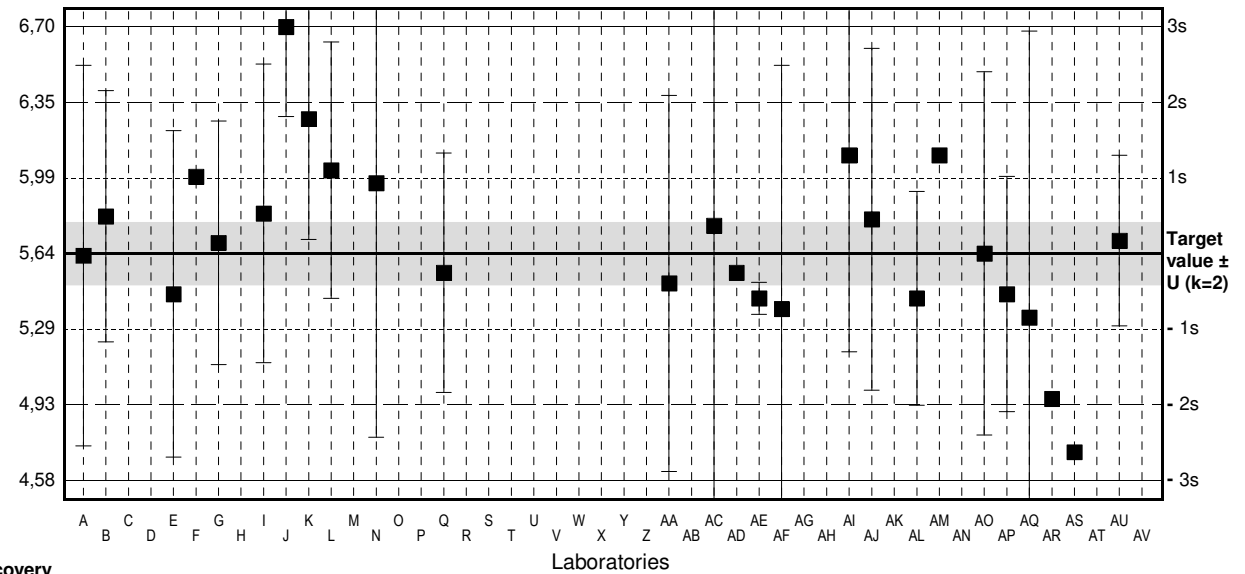
Parameter KMnO4-Index

Target value $\pm U$ (k=2) 5,64 mg/l \pm 0,15 mg/l
 IFA result $\pm U$ (k=2) 5,73 mg/l \pm 0,85 mg/l
 Stability test $\pm U$ (k=2) 5,62 mg/l \pm 0,84 mg/l

Lab Code	Result	\pm	Unit	Recovery	z-Score
A	5.63	0.89	mg/l	100%	-0.02
B	5.814	0.588	mg/l	103%	0.31
C			mg/l		
D			mg/l		
E	5.45	0.764	mg/l	97%	-0.34
F	6.00		mg/l	106%	0.64
G	5.69	0.57	mg/l	101%	0.09
H			mg/l		
I	5.827	0.699	mg/l	103%	0.33
J	6.7	0.42	mg/l	119%	1.88
K	6.27	0.564	mg/l	111%	1.12
L	6.03	0.60	mg/l	107%	0.69
M	3.49	*	mg/l	62%	-3.81
N	5.97	1.19	mg/l	106%	0.59
O			mg/l		
P			mg/l		
Q	5.55	0.56	mg/l	98%	-0.16
R			mg/l		
S			mg/l		
T			mg/l		
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z			mg/l		
AA	5.50	0.880	mg/l	98%	-0.25
AB			mg/l		
AC	5.77	1.33	mg/l	102%	0.23
AD	5.55		mg/l	98%	-0.16
AE	5.43	0.075	mg/l	96%	-0.37
AF	5.38	1.14	mg/l	95%	-0.46
AG			mg/l		
AH			mg/l		
AI	6.1	0.92	mg/l	108%	0.82
AJ	5.8	0.8	mg/l	103%	0.28
AK			mg/l		
AL	5.43	0.5	mg/l	96%	-0.37
AM	6.10		mg/l	108%	0.82
AN			mg/l		
AO	5.64	0.85	mg/l	100%	0.00
AP	5.45	0.55	mg/l	97%	-0.34
AQ	5.34	1.34	mg/l	95%	-0.53
AR	4.96		mg/l	88%	-1.21
AS	4.71		mg/l	84%	-1.65
AT	2.23	* 0.53	mg/l	40%	-6.05
AU	5.7	0.4	mg/l	101%	0.11
AV			mg/l		

	All results	Outliers excl.	Unit
Mean \pm CI(99%)	5,48 \pm 0,45	5,64 \pm 0,20	mg/l
Recov. \pm CI(99%)	97,2 \pm 7,9	100,1 \pm 3,5	%
SD between labs	0,85	0,35	mg/l
RSD between labs	15,6	6,3	%
n for calculation	28	25	

Result [mg/l]



Recovery [%]

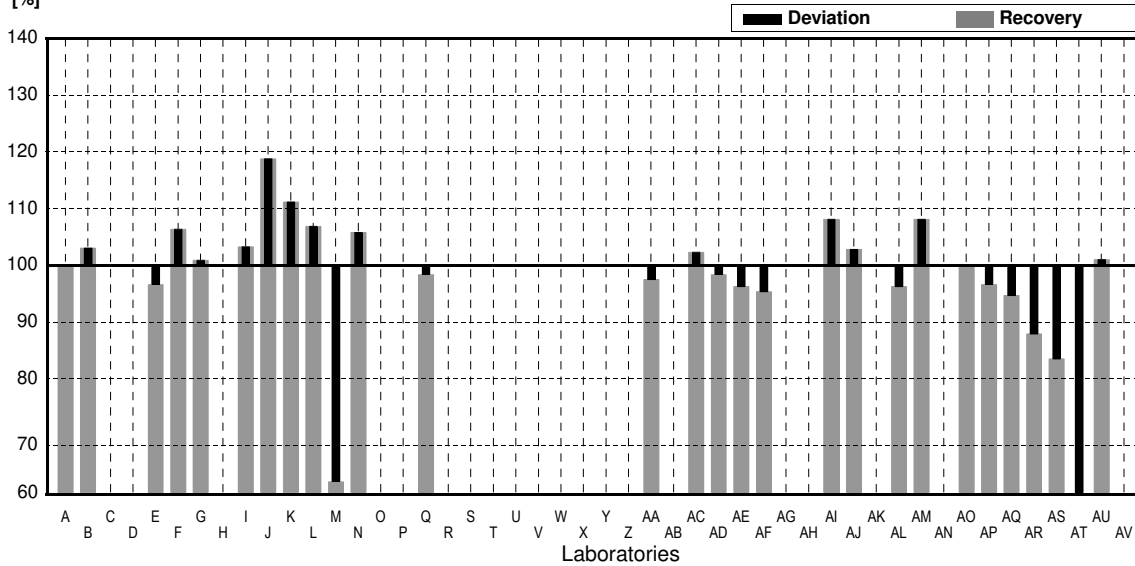


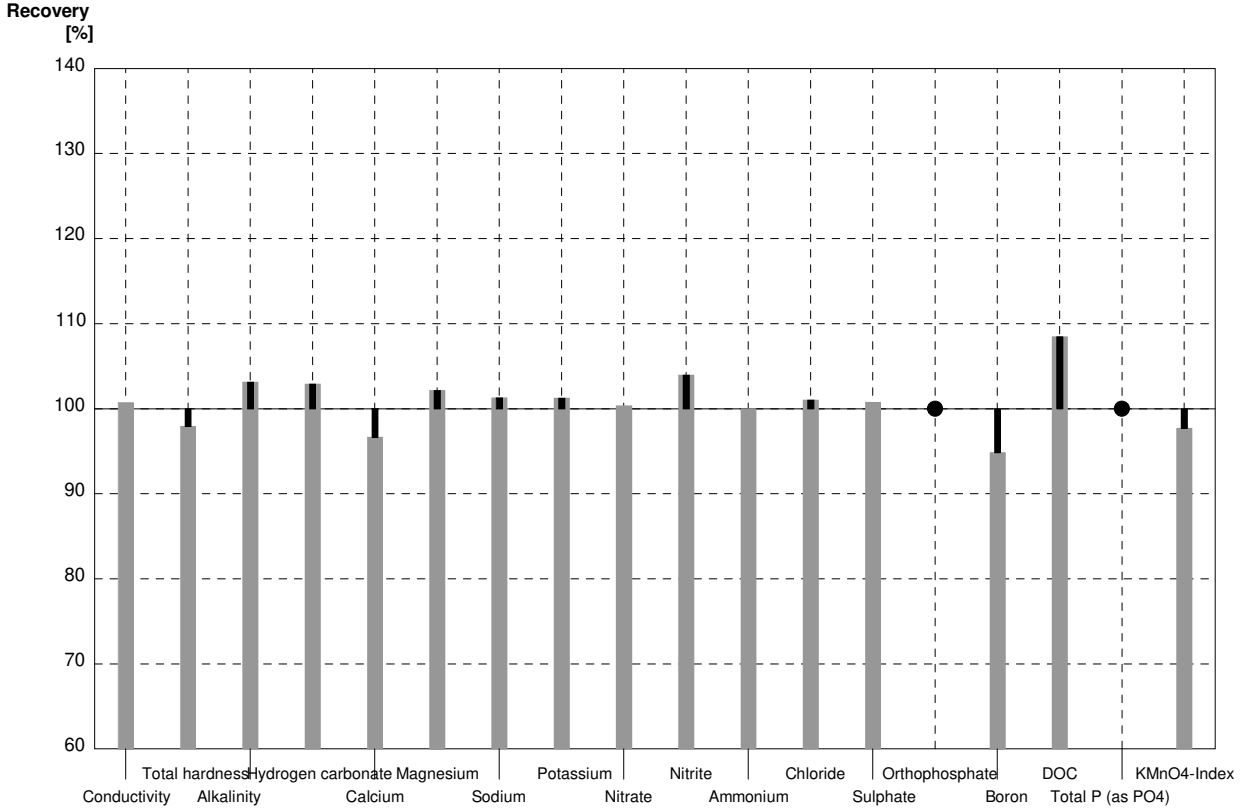
Illustration of Results Laboratory Oriented Part

Round N167
Major Ions

Sample Dispatch: 22 May 2023

Sample N167A
Laboratory A

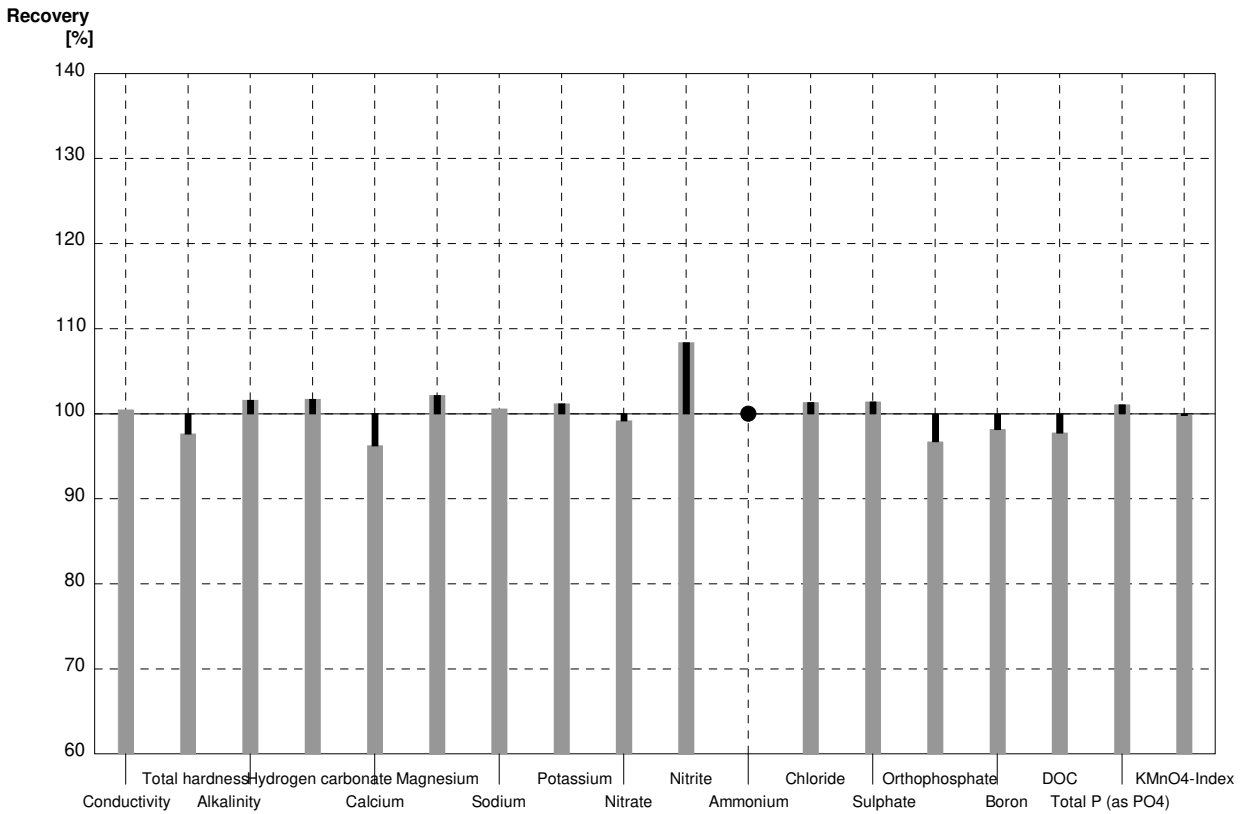
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	548	30,5	µS/cm	101%
Total hardness	1,94	0,02	1,90	0,19	mmol/l	98%
Alkalinity	2,36	0,03	2,434	0,14	mmol/l	103%
Hydrogen carbonate	140,9	1,7	145	11,6	mg/l	103%
Calcium	60,1	0,9	58,098	5,80	mg/l	97%
Magnesium	10,79	0,14	11,025	1,10	mg/l	102%
Sodium	24,9	0,3	25,223	2,52	mg/l	101%
Potassium	8,81	0,06	8,922	0,89	mg/l	101%
Nitrate	37,2	0,7	37,33	1,87	mg/l	100%
Nitrite	0,0404	0,0009	0,0420	0,004	mg/l	104%
Ammonium	0,070	0,004	0,0700	0,007	mg/l	100%
Chloride	54,8	1,2	55,37	2,77	mg/l	101%
Sulphate	34,7	0,4	34,96	1,75	mg/l	101%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012	0,120	0,01	mg/l	95%
DOC	1,89	0,04	2,05	0,41	mg/l	108%
Total P (as PO4)	<0,009		<0,01		mg/l	•
KMnO4-Index	3,51	0,12	3,43	0,545	mg/l	98%



Sample N167B
Laboratory A

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	24,8	µS/cm	100%
Total hardness	1,321	0,015	1,29	0,13	mmol/l	98%
Alkalinity	1,294	0,018	1,315	0,076	mmol/l	102%
Hydrogen carbonate	75,9	1,1	77,2	6,18	mg/l	102%
Calcium	39,6	0,6	38,120	3,81	mg/l	96%
Magnesium	8,07	0,10	8,243	0,82	mg/l	102%
Sodium	30,8	0,2	30,982	3,1	mg/l	101%
Potassium	6,98	0,04	7,062	0,71	mg/l	101%
Nitrate	51,3	1,2	50,88	2,54	mg/l	99%
Nitrite	0,0203	0,0018	0,0220	0,002	mg/l	108%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,98	1,45	mg/l	101%
Sulphate	58,9	0,4	59,73	2,99	mg/l	101%
Orthophosphate	0,061	0,001	0,0590	0,006	mg/l	97%
Boron	0,0544	0,0004	0,0534	0,005	mg/l	98%
DOC	4,88	0,05	4,77	0,954	mg/l	98%
Total P (as PO4)	0,187	0,003	0,189	0,019	mg/l	101%
KMnO4-Index	5,64	0,15	5,63	0,89	mg/l	100%

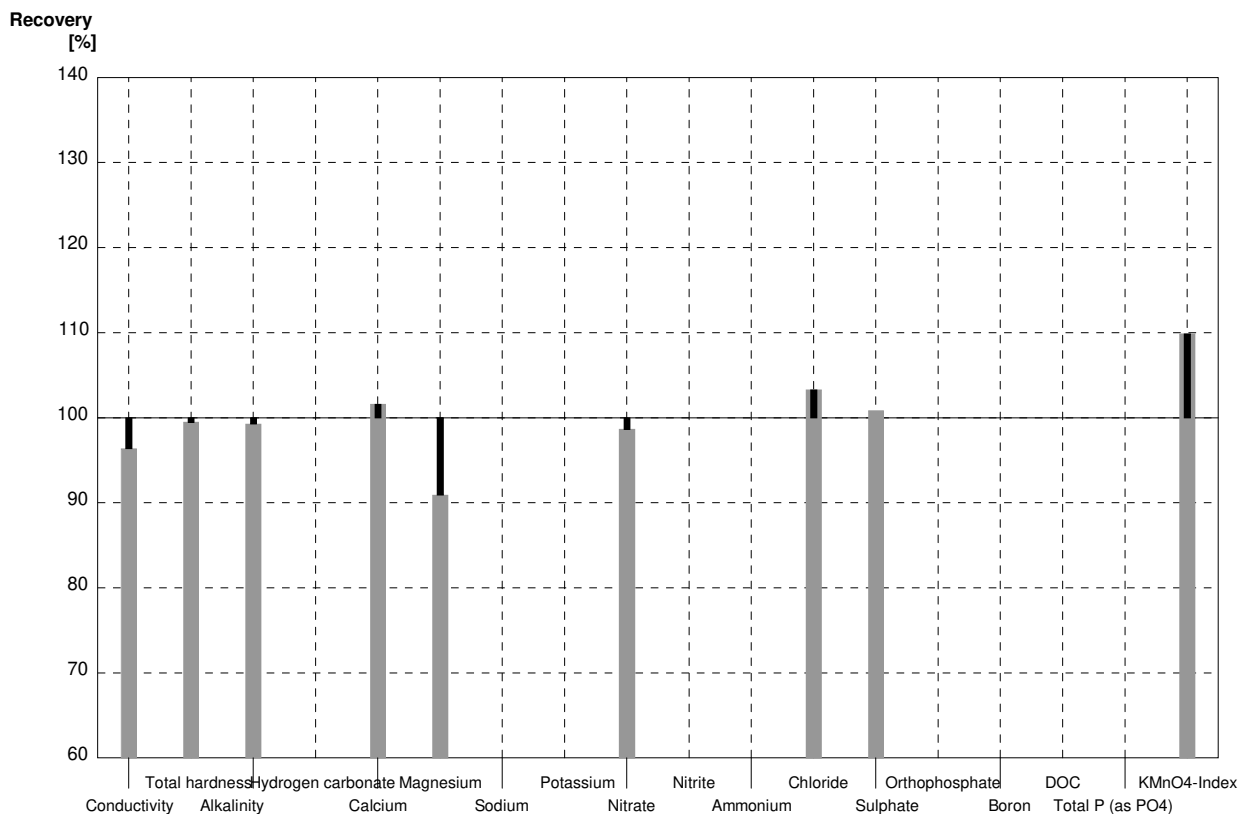
■ Deviation ■ Recovery



Sample N167A
Laboratory B

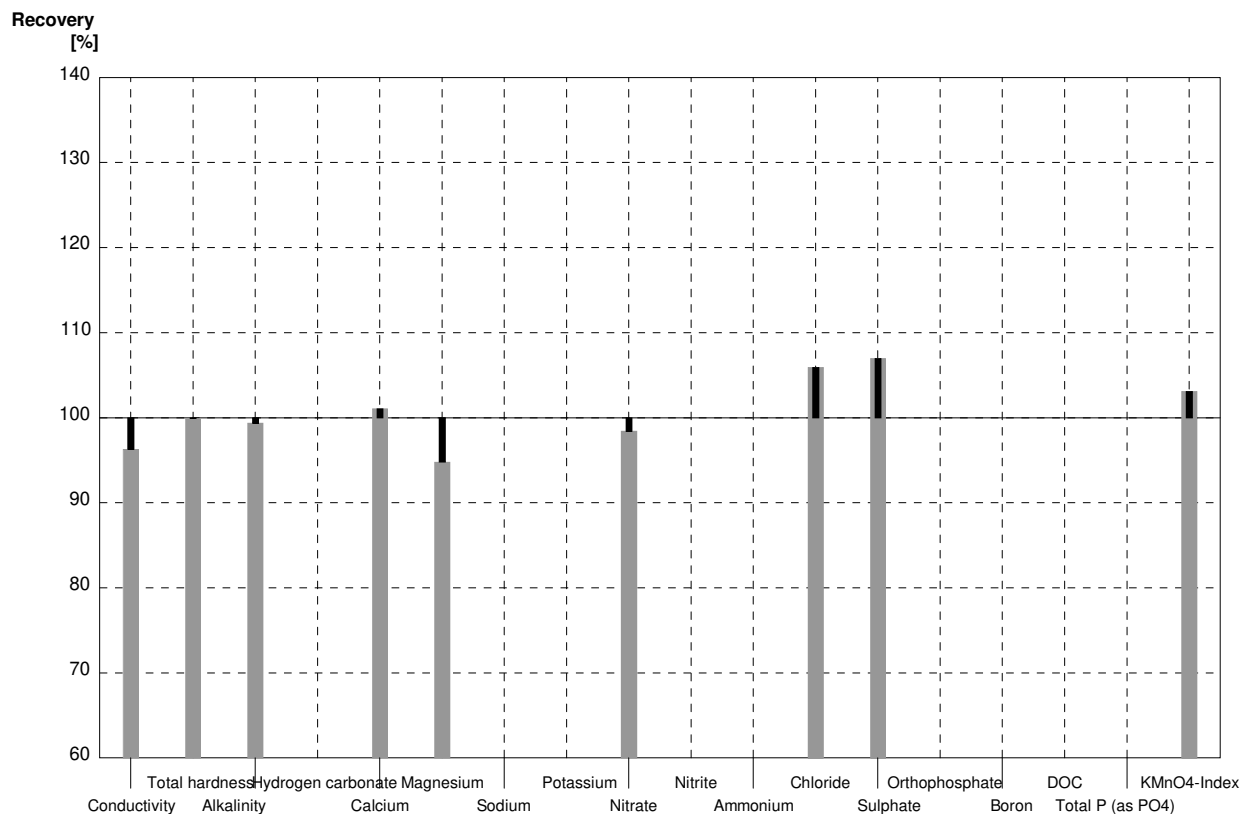
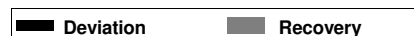
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	524,3	0,275	µS/cm	96%
Total hardness	1,94	0,02	1,93	0,06	mmol/l	99%
Alkalinity	2,36	0,03	2,343	0,06	mmol/l	99%
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	61,06	0,82	mg/l	102%
Magnesium	10,79	0,14	9,81	1,53	mg/l	91%
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	36,7	0,482	mg/l	99%
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004			mg/l	
Chloride	54,8	1,2	56,6	1,074	mg/l	103%
Sulphate	34,7	0,4	35,0	7,4	mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,856	0,588	mg/l	110%

■ Deviation ■ Recovery



Sample N167B
Laboratory B

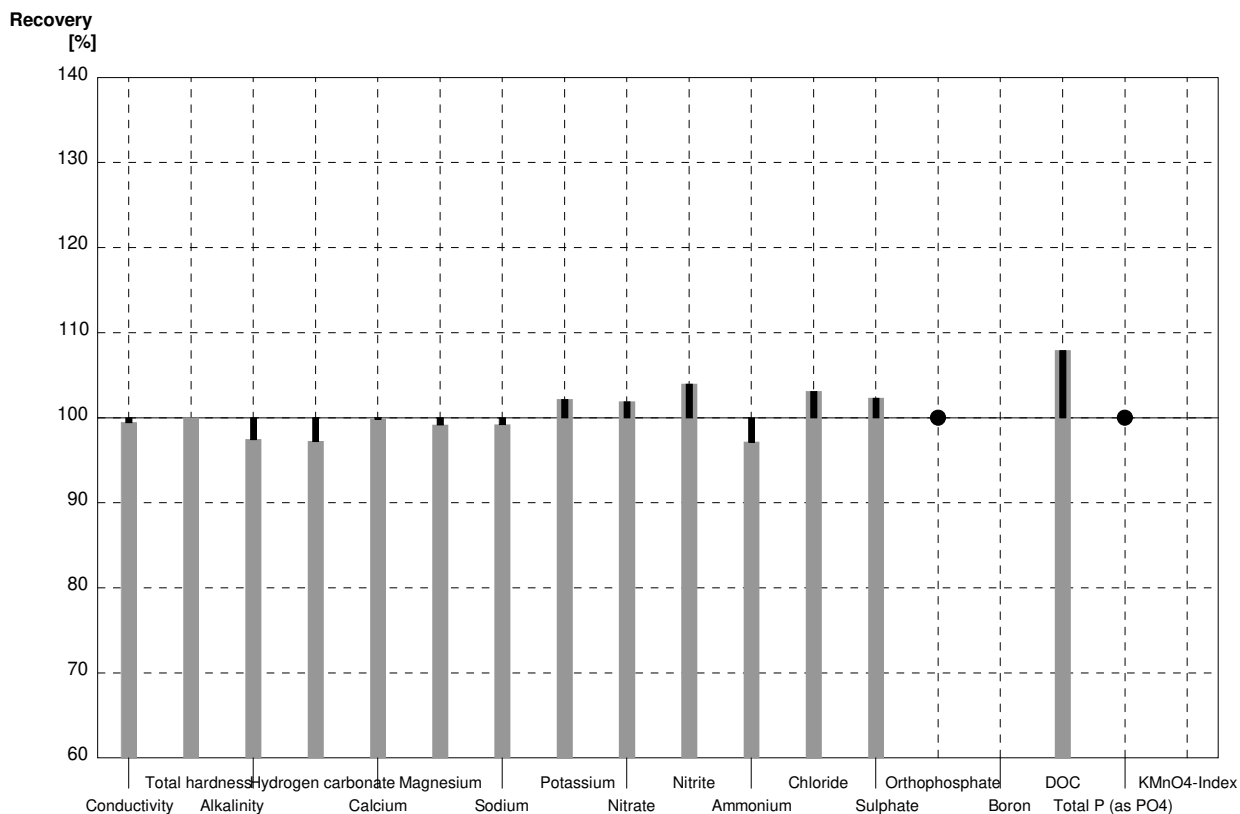
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	427,6	0,275	µS/cm	96%
Total hardness	1,321	0,015	1,32	0,06	mmol/l	100%
Alkalinity	1,294	0,018	1,286	0,06	mmol/l	99%
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	40,03	0,06	mg/l	101%
Magnesium	8,07	0,10	7,65	0,06	mg/l	95%
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	50,5	0,06	mg/l	98%
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01				mg/l	
Chloride	28,6	0,4	30,3	1,074	mg/l	106%
Sulphate	58,9	0,4	63	7,4	mg/l	107%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,814	0,588	mg/l	103%



Sample N167A
Laboratory C

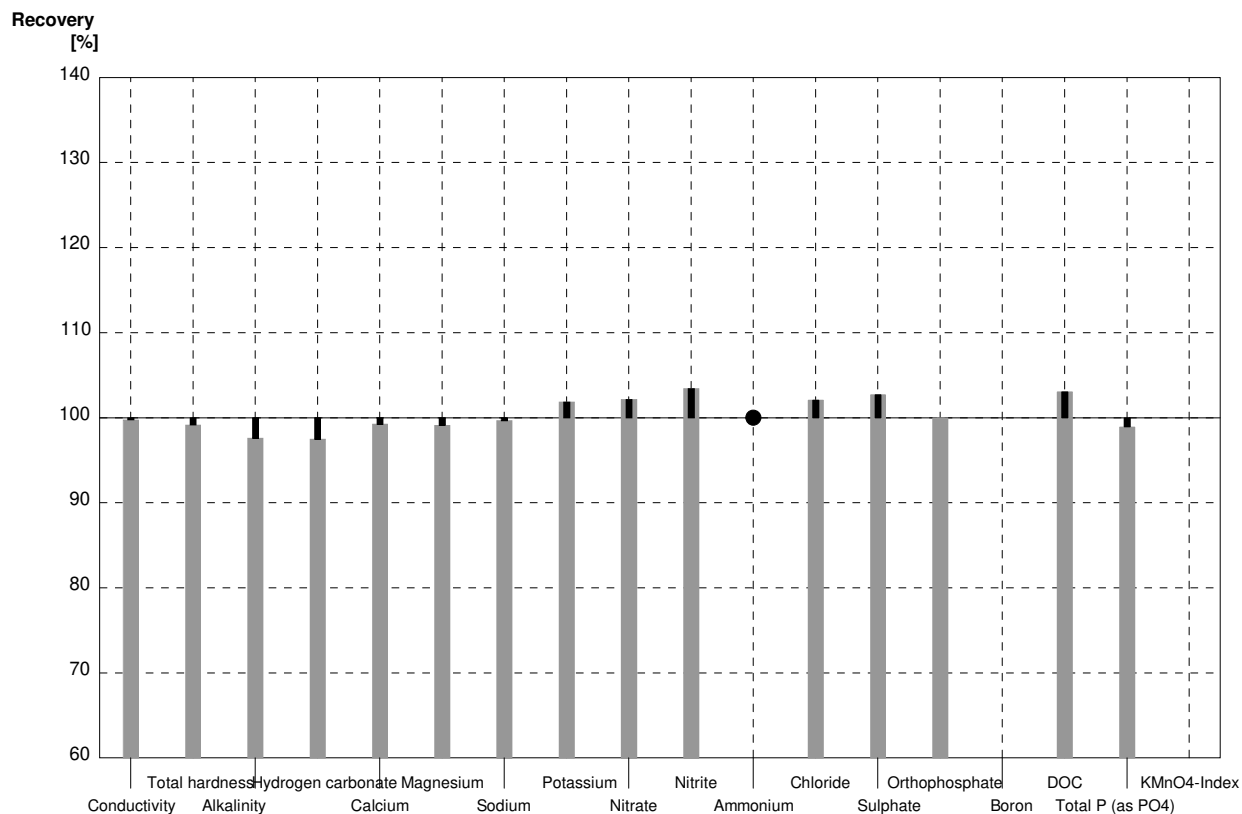
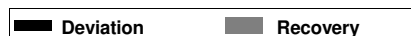
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	541	22	µS/cm	99%
Total hardness	1,94	0,02	1,94	0,1	mmol/l	100%
Alkalinity	2,36	0,03	2,30	0,1	mmol/l	97%
Hydrogen carbonate	140,9	1,7	137	6	mg/l	97%
Calcium	60,1	0,9	60,0	5	mg/l	100%
Magnesium	10,79	0,14	10,7	1,3	mg/l	99%
Sodium	24,9	0,3	24,7	4	mg/l	99%
Potassium	8,81	0,06	9,00	1,2	mg/l	102%
Nitrate	37,2	0,7	37,9	3	mg/l	102%
Nitrite	0,0404	0,0009	0,0420	0,003	mg/l	104%
Ammonium	0,070	0,004	0,068	0,007	mg/l	97%
Chloride	54,8	1,2	56,5	4	mg/l	103%
Sulphate	34,7	0,4	35,5	3	mg/l	102%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,04	0,3	mg/l	108%
Total P (as PO4)	<0,009		<0,013		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



Sample N167B
Laboratory C

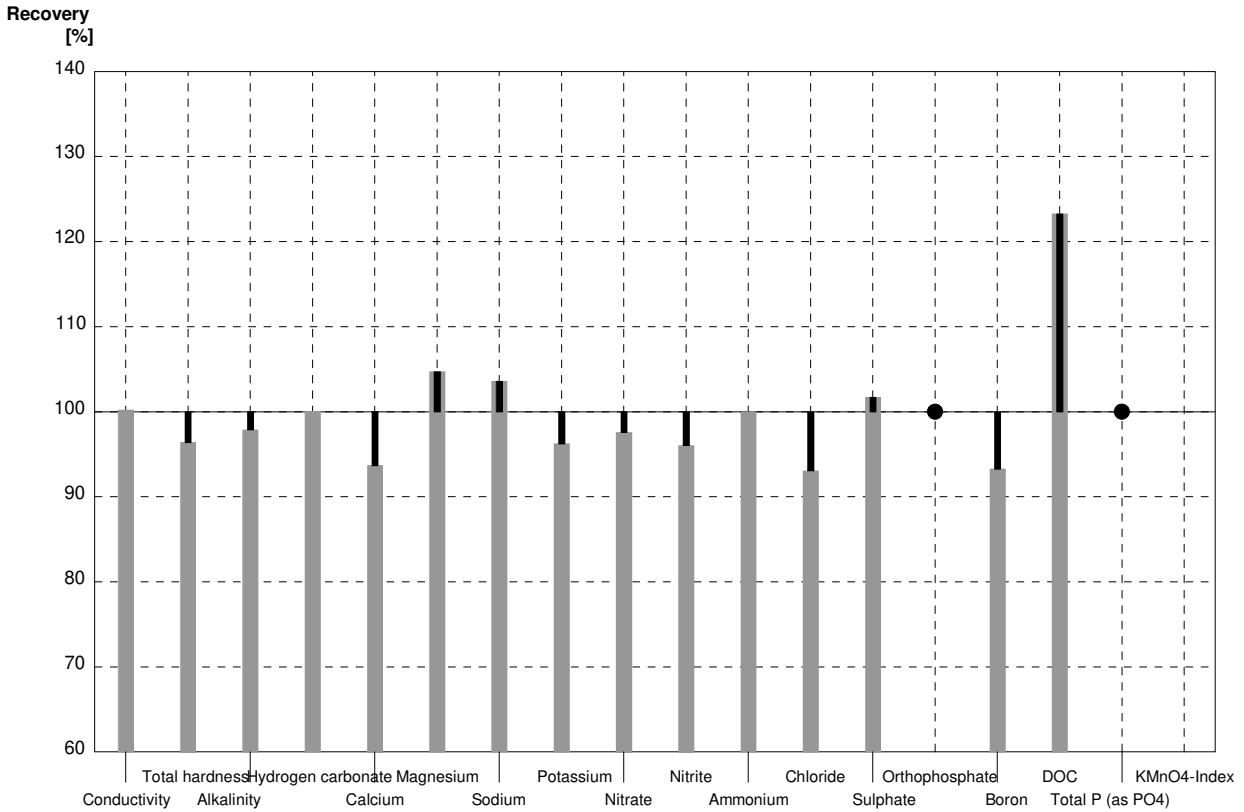
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	443	18	µS/cm	100%
Total hardness	1,321	0,015	1,31	0,1	mmol/l	99%
Alkalinity	1,294	0,018	1,263	0,1	mmol/l	98%
Hydrogen carbonate	75,9	1,1	74,0	3	mg/l	97%
Calcium	39,6	0,6	39,3	4	mg/l	99%
Magnesium	8,07	0,10	8,0	1	mg/l	99%
Sodium	30,8	0,2	30,7	5	mg/l	100%
Potassium	6,98	0,04	7,11	1	mg/l	102%
Nitrate	51,3	1,2	52,4	4	mg/l	102%
Nitrite	0,0203	0,0018	0,0210	0,002	mg/l	103%
Ammonium	<0,01		<0,013		mg/l	•
Chloride	28,6	0,4	29,2	2	mg/l	102%
Sulphate	58,9	0,4	60,5	4	mg/l	103%
Orthophosphate	0,061	0,001	0,061	0,008	mg/l	100%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,03	0,8	mg/l	103%
Total P (as PO4)	0,187	0,003	0,185	0,02	mg/l	99%
KMnO4-Index	5,64	0,15			mg/l	



Sample N167A
Laboratory D

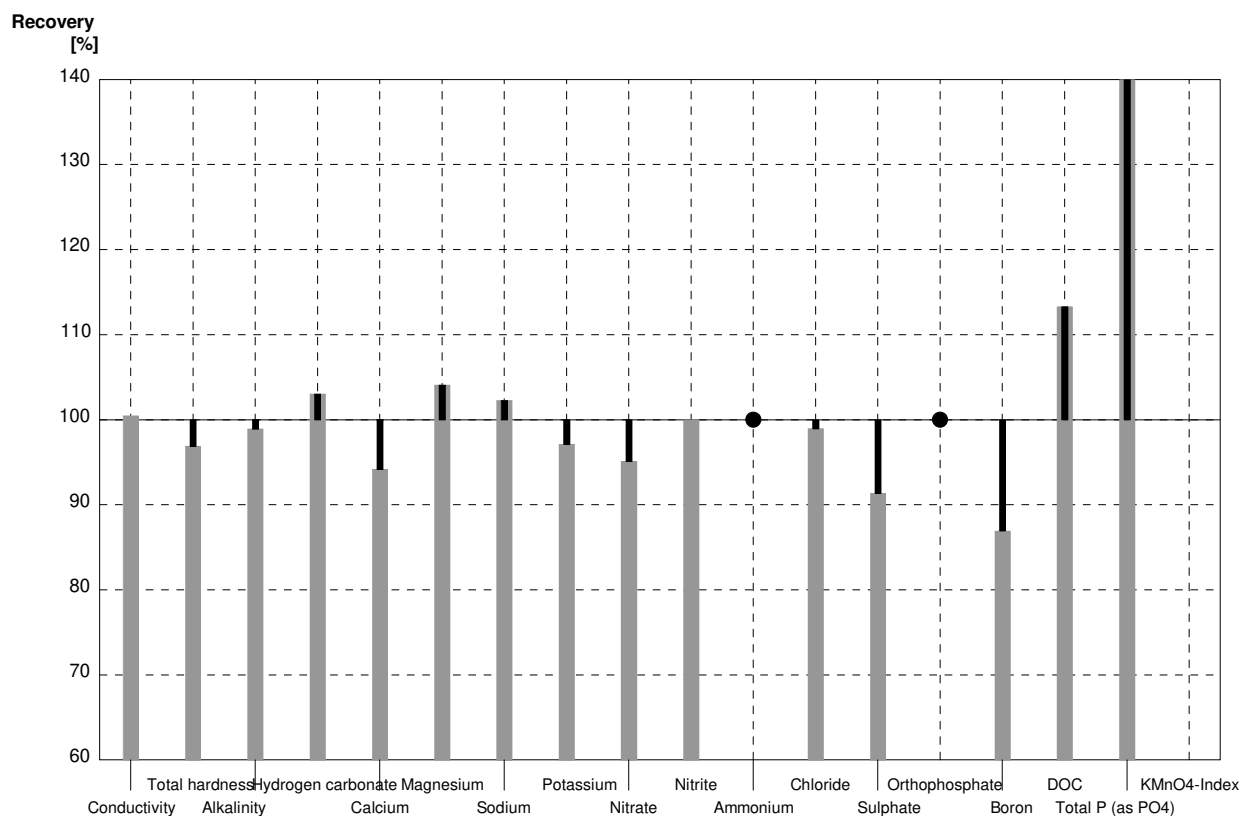
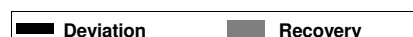
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545	55	µS/cm	100%
Total hardness	1,94	0,02	1,87	0,37	mmol/l	96%
Alkalinity	2,36	0,03	2,31	0,23	mmol/l	98%
Hydrogen carbonate	140,9	1,7	141	14	mg/l	100%
Calcium	60,1	0,9	56,3	11	mg/l	94%
Magnesium	10,79	0,14	11,3	2,25	mg/l	105%
Sodium	24,9	0,3	25,8	5,2	mg/l	104%
Potassium	8,81	0,06	8,48	1,7	mg/l	96%
Nitrate	37,2	0,7	36,3	5,4	mg/l	98%
Nitrite	0,0404	0,0009	0,0388	0,0058	mg/l	96%
Ammonium	0,070	0,004	0,070	0,02	mg/l	100%
Chloride	54,8	1,2	51,0	7,7	mg/l	93%
Sulphate	34,7	0,4	35,3	5,3	mg/l	102%
Orthophosphate	<0,009		<0,1		mg/l	•
Boron	0,1265	0,0012	0,118	0,024	mg/l	93%
DOC	1,89	0,04	2,33	0,70	mg/l	123%
Total P (as PO4)	<0,009		<31		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



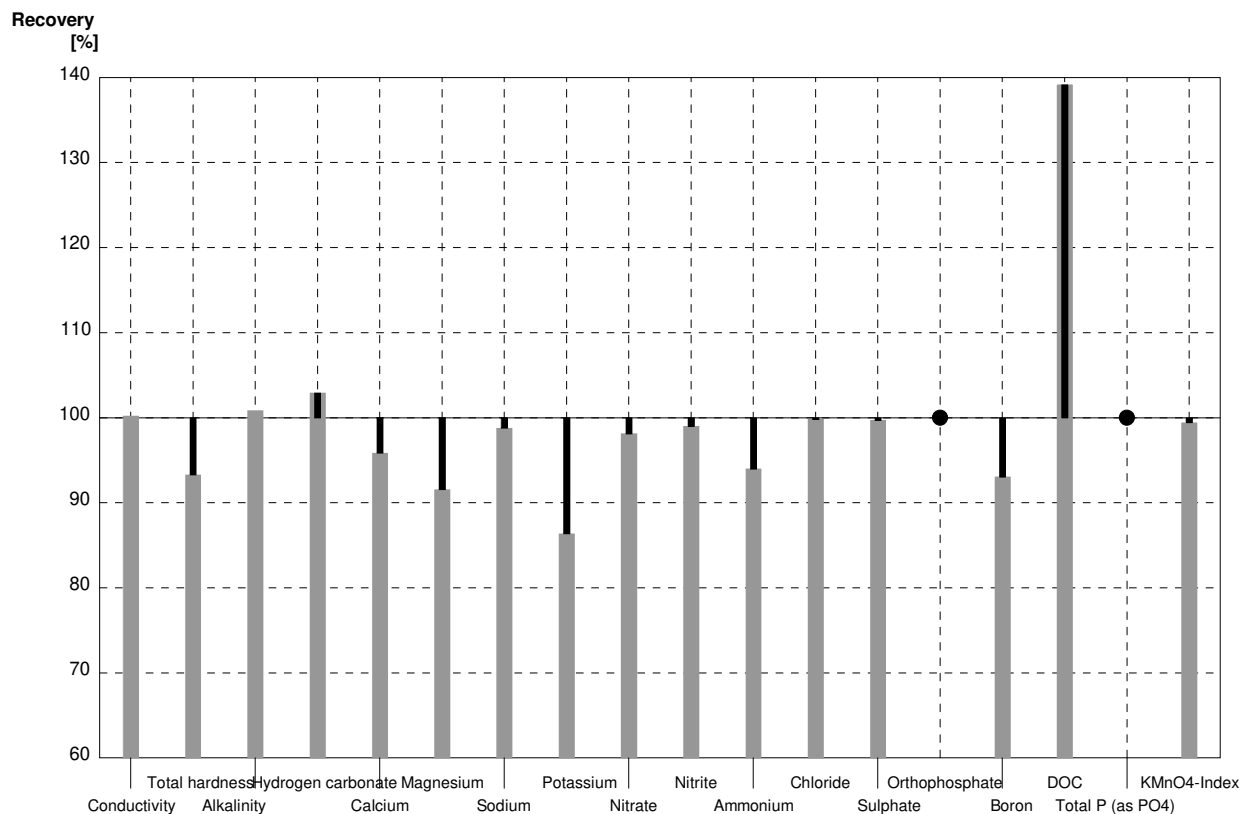
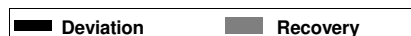
Sample N167B
Laboratory D

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	45	µS/cm	100%
Total hardness	1,321	0,015	1,28	0,26	mmol/l	97%
Alkalinity	1,294	0,018	1,28	0,13	mmol/l	99%
Hydrogen carbonate	75,9	1,1	78,2	7,8	mg/l	103%
Calcium	39,6	0,6	37,3	7,5	mg/l	94%
Magnesium	8,07	0,10	8,40	1,7	mg/l	104%
Sodium	30,8	0,2	31,5	6,3	mg/l	102%
Potassium	6,98	0,04	6,78	1,4	mg/l	97%
Nitrate	51,3	1,2	48,8	7,3	mg/l	95%
Nitrite	0,0203	0,0018	0,0203	0,0031	mg/l	100%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,3	4,2	mg/l	99%
Sulphate	58,9	0,4	53,8	8,1	mg/l	91%
Orthophosphate	0,061	0,001	<0,1		mg/l	•
Boron	0,0544	0,0004	0,0473	0,0095	mg/l	87%
DOC	4,88	0,05	5,53	1,66	mg/l	113%
Total P (as PO4)	0,187	0,003	179	36	mg/l	95722%
KMnO4-Index	5,64	0,15			mg/l	



Sample N167A
Laboratory E

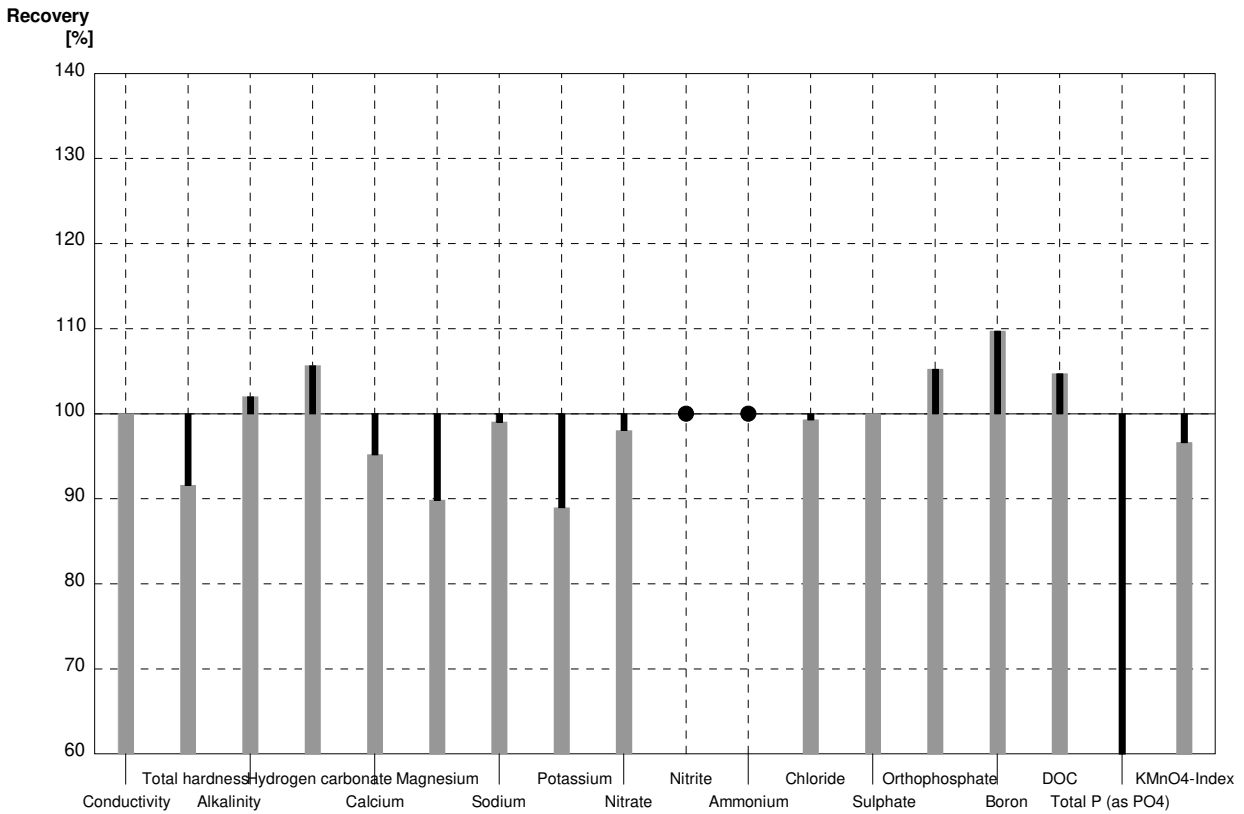
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545	18,5	µS/cm	100%
Total hardness	1,94	0,02	1,81	0,14	mmol/l	93%
Alkalinity	2,36	0,03	2,38	0,10	mmol/l	101%
Hydrogen carbonate	140,9	1,7	145	8,57	mg/l	103%
Calcium	60,1	0,9	57,6	4,38	mg/l	96%
Magnesium	10,79	0,14	9,88	0,67	mg/l	92%
Sodium	24,9	0,3	24,6	2,21	mg/l	99%
Potassium	8,81	0,06	7,61	0,56	mg/l	86%
Nitrate	37,2	0,7	36,5	2,96	mg/l	98%
Nitrite	0,0404	0,0009	0,0400	0,0019	mg/l	99%
Ammonium	0,070	0,004	0,0658	0,0045	mg/l	94%
Chloride	54,8	1,2	54,7	1,75	mg/l	100%
Sulphate	34,7	0,4	34,6	1,56	mg/l	100%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,1265	0,0012	0,1177	0,0108	mg/l	93%
DOC	1,89	0,04	2,63	0,40	mg/l	139%
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,51	0,12	3,49	0,49	mg/l	99%



Sample N167B
Laboratory E

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	15,1	µS/cm	100%
Total hardness	1,321	0,015	1,21	0,096	mmol/l	92%
Alkalinity	1,294	0,018	1,32	0,10	mmol/l	102%
Hydrogen carbonate	75,9	1,1	80,2	4,73	mg/l	106%
Calcium	39,6	0,6	37,7	2,86	mg/l	95%
Magnesium	8,07	0,10	7,25	0,49	mg/l	90%
Sodium	30,8	0,2	30,5	2,74	mg/l	99%
Potassium	6,98	0,04	6,21	0,46	mg/l	89%
Nitrate	51,3	1,2	50,3	4,07	mg/l	98%
Nitrite	0,0203	0,0018	<0,03		mg/l	•
Ammonium	<0,01		<0,04		mg/l	•
Chloride	28,6	0,4	28,4	0,91	mg/l	99%
Sulphate	58,9	0,4	58,9	2,65	mg/l	100%
Orthophosphate	0,061	0,001	0,0642	0,0038	mg/l	105%
Boron	0,0544	0,0004	0,0597	0,0055	mg/l	110%
DOC	4,88	0,05	5,11	0,77	mg/l	105%
Total P (as PO4)	0,187	0,003	0,0632	0,0078	mg/l	34%
KMnO4-Index	5,64	0,15	5,45	0,764	mg/l	97%

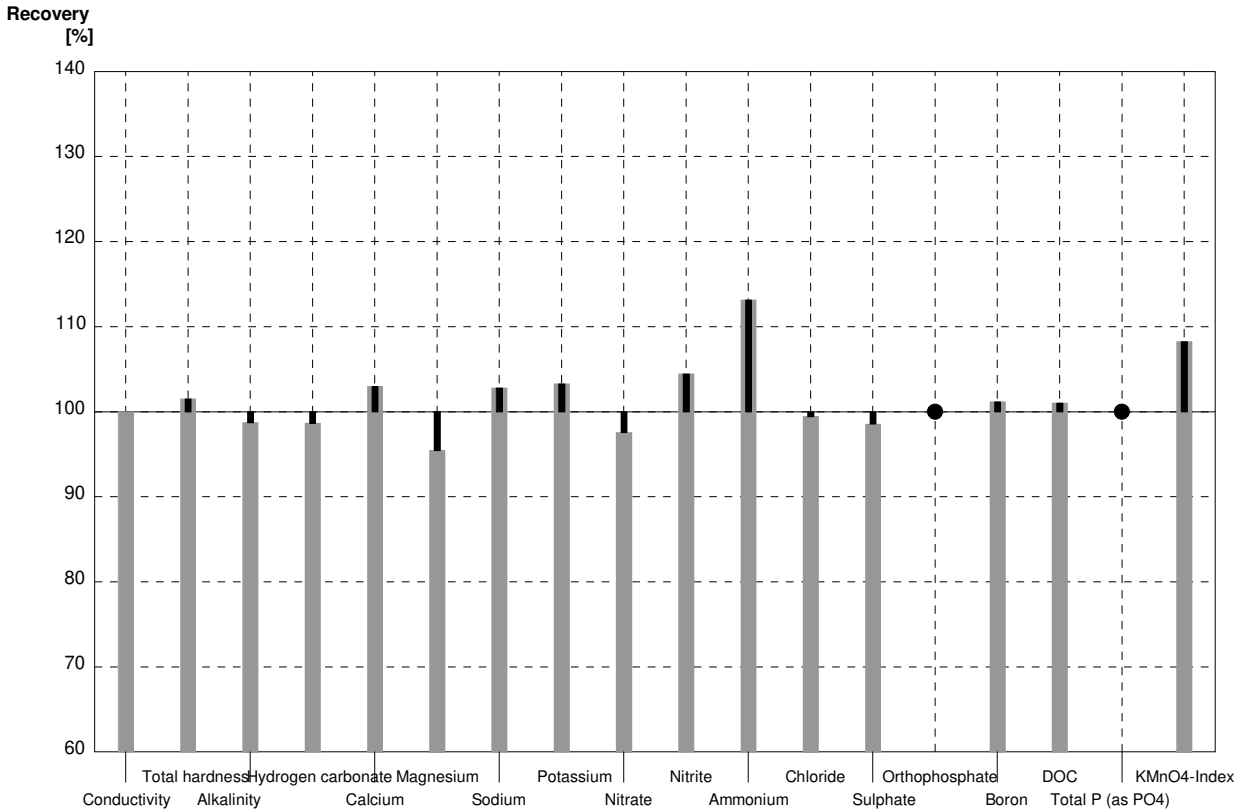
■ Deviation ■ Recovery



Sample N167A
Laboratory F

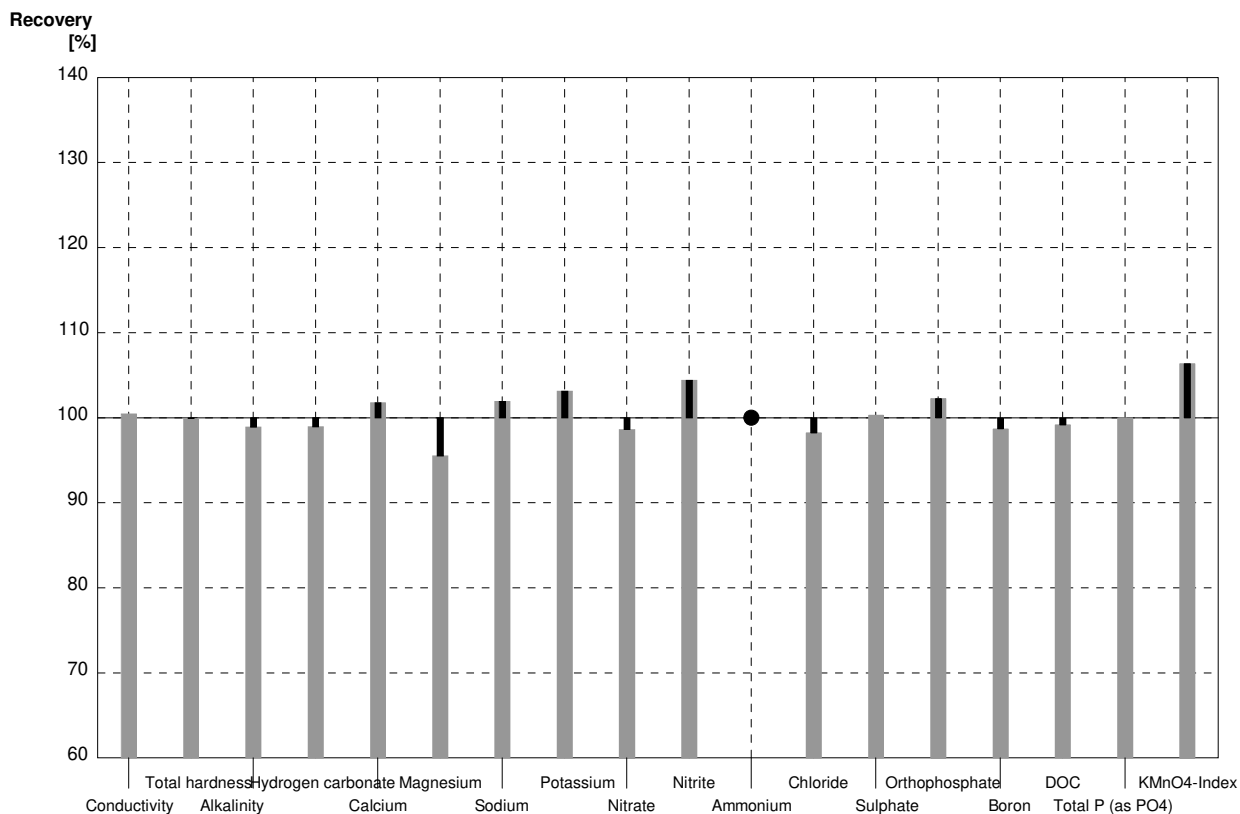
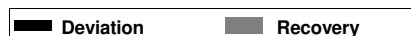
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	544	0,427	µS/cm	100%
Total hardness	1,94	0,02	1,97	0,0412	mmol/l	102%
Alkalinity	2,36	0,03	2,33	0,0957	mmol/l	99%
Hydrogen carbonate	140,9	1,7	139	2,79	mg/l	99%
Calcium	60,1	0,9	61,9	0,745	mg/l	103%
Magnesium	10,79	0,14	10,3	0,896	mg/l	95%
Sodium	24,9	0,3	25,6	0,235	mg/l	103%
Potassium	8,81	0,06	9,10	0,346	mg/l	103%
Nitrate	37,2	0,7	36,3	0,455	mg/l	98%
Nitrite	0,0404	0,0009	0,0422	0,00088	mg/l	104%
Ammonium	0,070	0,004	0,0792	0,00125	mg/l	113%
Chloride	54,8	1,2	54,5	1,29	mg/l	99%
Sulphate	34,7	0,4	34,2	0,534	mg/l	99%
Orthophosphate	<0,009		<0,0150		mg/l	•
Boron	0,1265	0,0012	0,128	0,00183	mg/l	101%
DOC	1,89	0,04	1,91	0,0836	mg/l	101%
Total P (as PO4)	<0,009		<0,0150		mg/l	•
KMnO4-Index	3,51	0,12	3,80		mg/l	108%

■ Deviation ■ Recovery



Sample N167B
Laboratory F

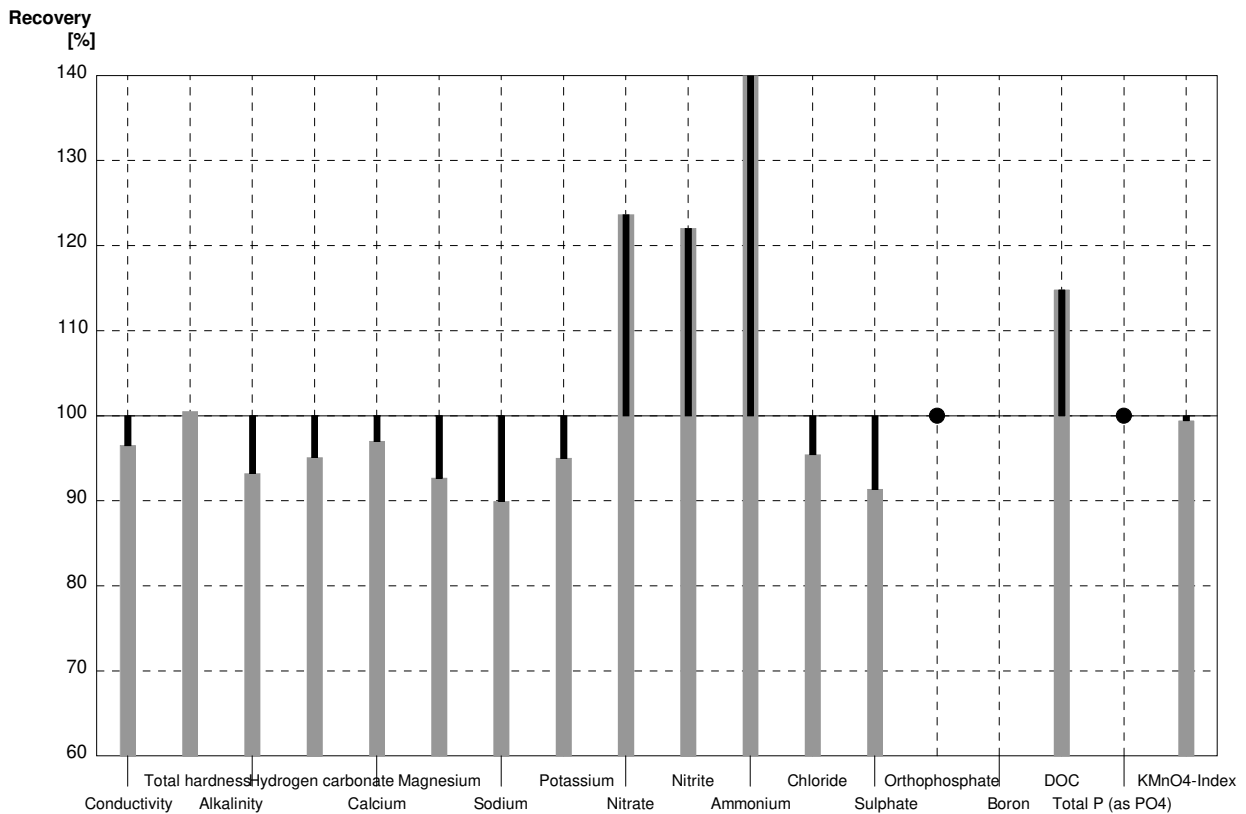
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	0,197	µS/cm	100%
Total hardness	1,321	0,015	1,32	0,0178	mmol/l	100%
Alkalinity	1,294	0,018	1,28	0,0746	mmol/l	99%
Hydrogen carbonate	75,9	1,1	75,1	1,50	mg/l	99%
Calcium	39,6	0,6	40,3	0,704	mg/l	102%
Magnesium	8,07	0,10	7,71	0,0672	mg/l	96%
Sodium	30,8	0,2	31,4	0,237	mg/l	102%
Potassium	6,98	0,04	7,20	0,351	mg/l	103%
Nitrate	51,3	1,2	50,6	0,894	mg/l	99%
Nitrite	0,0203	0,0018	0,0212	0,00090	mg/l	104%
Ammonium	<0,01		[0,0015]		mg/l	•
Chloride	28,6	0,4	28,1	0,651	mg/l	98%
Sulphate	58,9	0,4	59,1	1,05	mg/l	100%
Orthophosphate	0,061	0,001	0,0624	0,00150	mg/l	102%
Boron	0,0544	0,0004	0,0537	0,00172	mg/l	99%
DOC	4,88	0,05	4,84	0,0844	mg/l	99%
Total P (as PO4)	0,187	0,003	0,187	0,00140	mg/l	100%
KMnO4-Index	5,64	0,15	6,00		mg/l	106%



Sample N167A
Laboratory G

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	525	13	µS/cm	97%
Total hardness	1,94	0,02	1,95	0,25	mmol/l	101%
Alkalinity	2,36	0,03	2,20	0,05	mmol/l	93%
Hydrogen carbonate	140,9	1,7	134	3	mg/l	95%
Calcium	60,1	0,9	58,3	7,6	mg/l	97%
Magnesium	10,79	0,14	10,0	1,2	mg/l	93%
Sodium	24,9	0,3	22,4	2,7	mg/l	90%
Potassium	8,81	0,06	8,37	1,1	mg/l	95%
Nitrate	37,2	0,7	46,0	1,7	mg/l	124%
Nitrite	0,0404	0,0009	0,0493	0,0017	mg/l	122%
Ammonium	0,070	0,004	0,734	0,039	mg/l	1049%
Chloride	54,8	1,2	52,3	2,6	mg/l	95%
Sulphate	34,7	0,4	31,7	1,5	mg/l	91%
Orthophosphate	<0,009		<0,061	0,005	mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,17	0,13	mg/l	115%
Total P (as PO4)	<0,009		<0,061	0,005	mg/l	•
KMnO4-Index	3,51	0,12	3,49	0,35	mg/l	99%

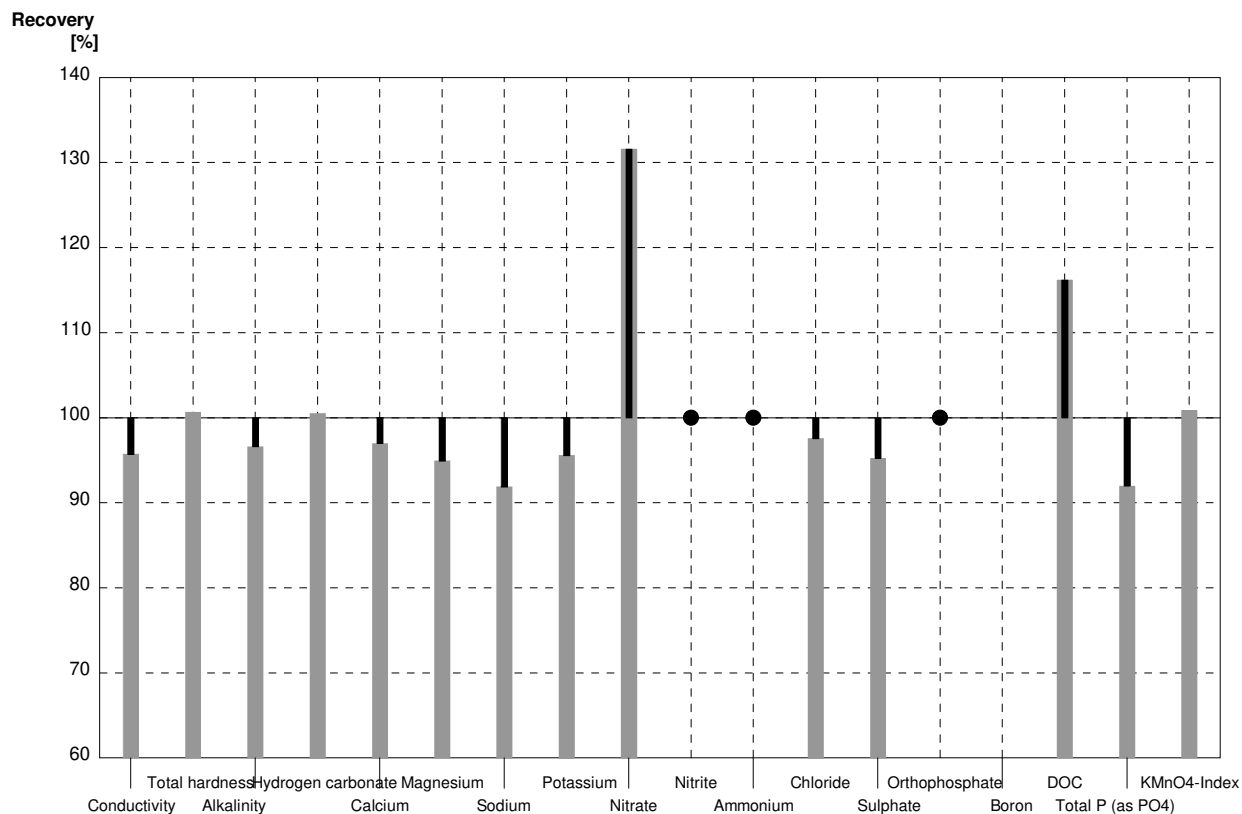
■ Deviation ■ Recovery



Sample N167B
Laboratory G

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	425	11	µS/cm	96%
Total hardness	1,321	0,015	1,33	0,17	mmol/l	101%
Alkalinity	1,294	0,018	1,25	0,05	mmol/l	97%
Hydrogen carbonate	75,9	1,1	76,3	3	mg/l	101%
Calcium	39,6	0,6	38,4	5,0	mg/l	97%
Magnesium	8,07	0,10	7,66	0,92	mg/l	95%
Sodium	30,8	0,2	28,3	3,4	mg/l	92%
Potassium	6,98	0,04	6,67	0,87	mg/l	96%
Nitrate	51,3	1,2	67,5	2,5	mg/l	132%
Nitrite	0,0203	0,0018	<0,0328	0,0011	mg/l	•
Ammonium	<0,01		<0,0515	0,003	mg/l	•
Chloride	28,6	0,4	27,9	1,3	mg/l	98%
Sulphate	58,9	0,4	56,1	2,6	mg/l	95%
Orthophosphate	0,061	0,001	<0,061	0,005	mg/l	•
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,67	0,34	mg/l	116%
Total P (as PO4)	0,187	0,003	0,172	0,014	mg/l	92%
KMnO4-Index	5,64	0,15	5,69	0,57	mg/l	101%

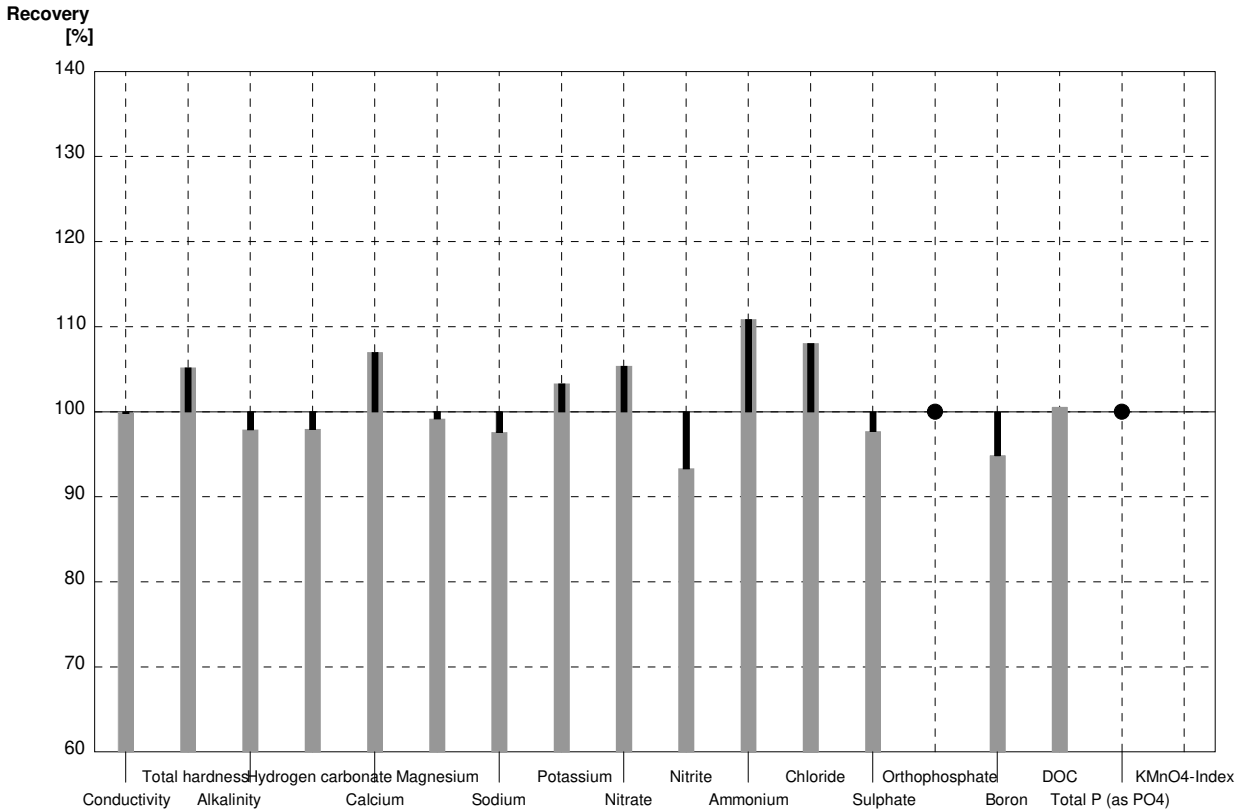
■ Deviation ■ Recovery



Sample N167A
Laboratory H

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	543	32,58	µS/cm	100%
Total hardness	1,94	0,02	2,04	0,153	mmol/l	105%
Alkalinity	2,36	0,03	2,31	0,22	mmol/l	98%
Hydrogen carbonate	140,9	1,7	138	13,1	mg/l	98%
Calcium	60,1	0,9	64,3	3,86	mg/l	107%
Magnesium	10,79	0,14	10,7	1,28	mg/l	99%
Sodium	24,9	0,3	24,3	1,58	mg/l	98%
Potassium	8,81	0,06	9,1	0,91	mg/l	103%
Nitrate	37,2	0,7	39,2	4,12	mg/l	105%
Nitrite	0,0404	0,0009	0,0377	0,00377	mg/l	93%
Ammonium	0,070	0,004	0,0776	0,00776	mg/l	111%
Chloride	54,8	1,2	59,2	5,33	mg/l	108%
Sulphate	34,7	0,4	33,9	3,05	mg/l	98%
Orthophosphate	<0,009		<0,060		mg/l	•
Boron	0,1265	0,0012	0,120	0,0168	mg/l	95%
DOC	1,89	0,04	1,90	0,114	mg/l	101%
Total P (as PO4)	<0,009		<0,060		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

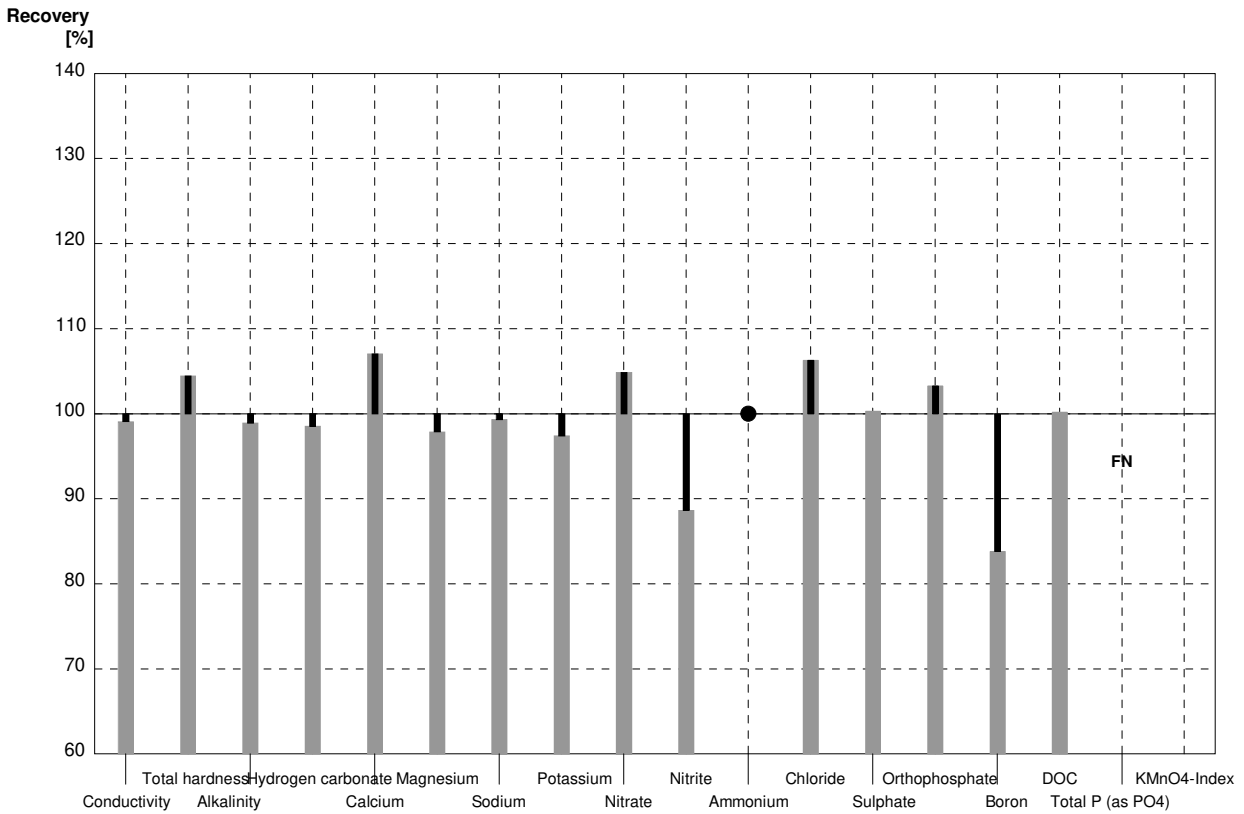
■ Deviation ■ Recovery



Sample N167B
Laboratory H

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	440	26,40	µS/cm	99%
Total hardness	1,321	0,015	1,38	0,104	mmol/l	104%
Alkalinity	1,294	0,018	1,28	0,12	mmol/l	99%
Hydrogen carbonate	75,9	1,1	74,8	7,102	mg/l	99%
Calcium	39,6	0,6	42,4	2,54	mg/l	107%
Magnesium	8,07	0,10	7,9	0,95	mg/l	98%
Sodium	30,8	0,2	30,6	1,99	mg/l	99%
Potassium	6,98	0,04	6,8	0,68	mg/l	97%
Nitrate	51,3	1,2	53,8	5,65	mg/l	105%
Nitrite	0,0203	0,0018	0,0180	0,00180	mg/l	89%
Ammonium	<0,01		<0,04		mg/l	•
Chloride	28,6	0,4	30,4	2,74	mg/l	106%
Sulphate	58,9	0,4	59,1	5,32	mg/l	100%
Orthophosphate	0,061	0,001	0,063	0,0063	mg/l	103%
Boron	0,0544	0,0004	0,0456	0,00639	mg/l	84%
DOC	4,88	0,05	4,89	0,29	mg/l	100%
Total P (as PO4)	0,187	0,003	<0,060		mg/l	FN
KMnO4-Index	5,64	0,15			mg/l	

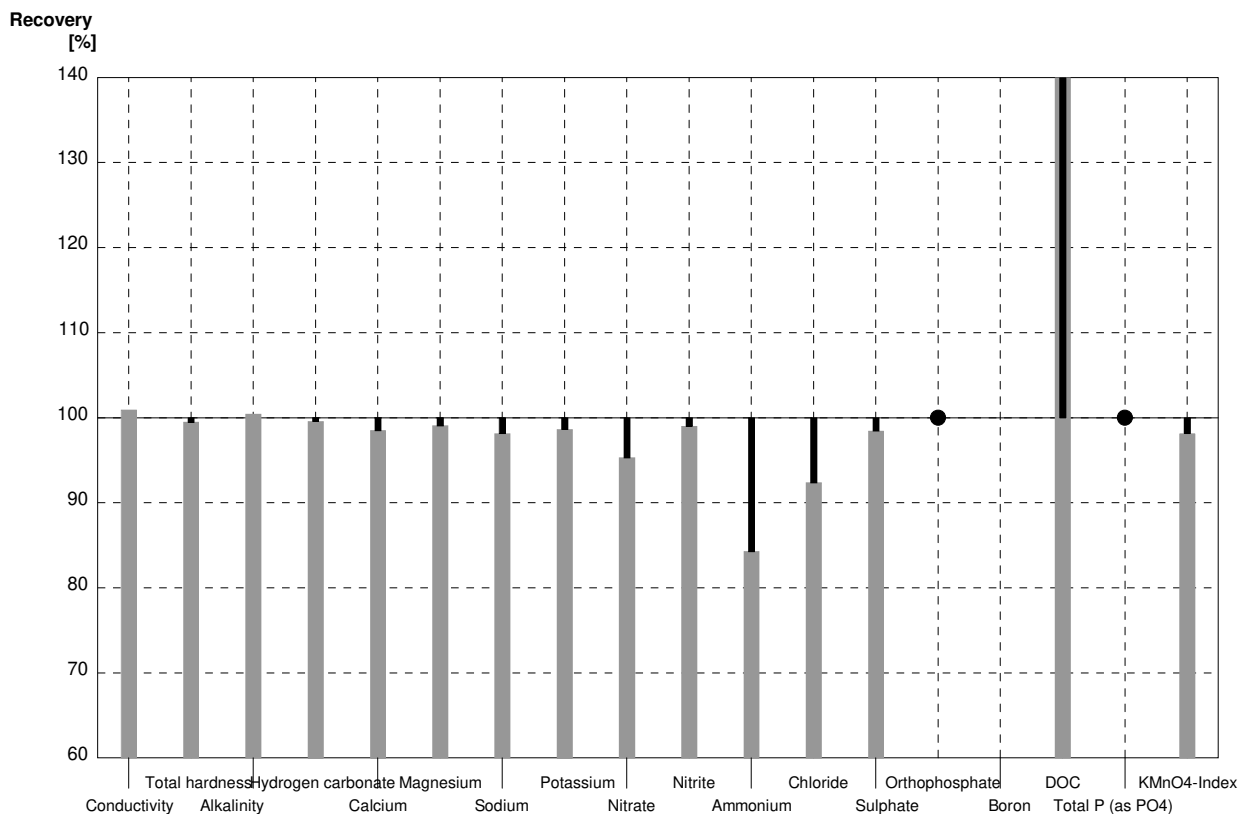
■ Deviation ■ Recovery



Sample N167A
Laboratory I

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	549	14	µS/cm	101%
Total hardness	1,94	0,02	1,93	0,02	mmol/l	99%
Alkalinity	2,36	0,03	2,37	0,01	mmol/l	100%
Hydrogen carbonate	140,9	1,7	140,3	2,8	mg/l	100%
Calcium	60,1	0,9	59,21	0,59	mg/l	99%
Magnesium	10,79	0,14	10,69	0,11	mg/l	99%
Sodium	24,9	0,3	24,44	0,49	mg/l	98%
Potassium	8,81	0,06	8,69	0,51	mg/l	99%
Nitrate	37,2	0,7	35,45	1,77	mg/l	95%
Nitrite	0,0404	0,0009	0,0400	0,0040	mg/l	99%
Ammonium	0,070	0,004	0,0590	0,0035	mg/l	84%
Chloride	54,8	1,2	50,62	3,04	mg/l	92%
Sulphate	34,7	0,4	34,16	1,02	mg/l	98%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	3,518	0,528	mg/l	186%
Total P (as PO4)	<0,009		<0,009		mg/l	•
KMnO4-Index	3,51	0,12	3,445	0,413	mg/l	98%

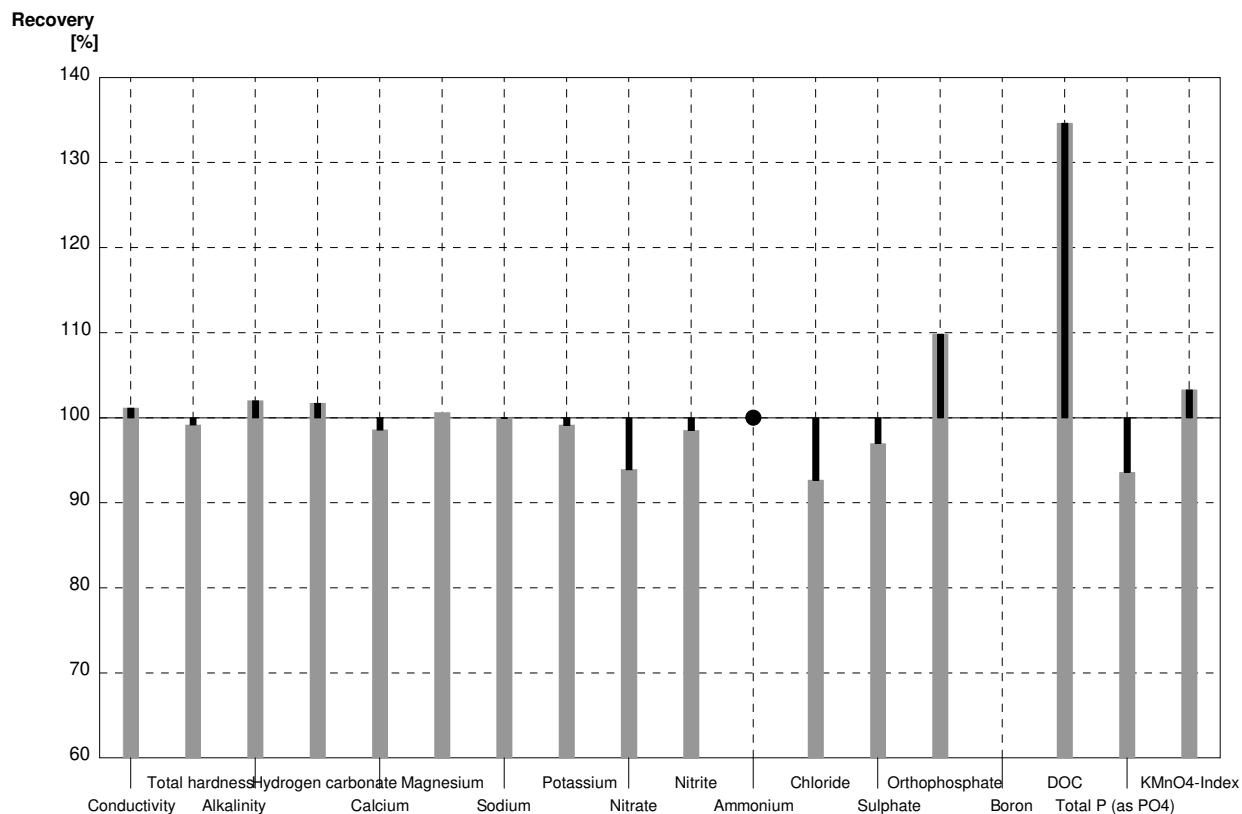
■ Deviation ■ Recovery



Sample N167B
Laboratory I

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	449	11	µS/cm	101%
Total hardness	1,321	0,015	1,31	0,01	mmol/l	99%
Alkalinity	1,294	0,018	1,32	0,01	mmol/l	102%
Hydrogen carbonate	75,9	1,1	77,2	1,5	mg/l	102%
Calcium	39,6	0,6	39,04	0,39	mg/l	99%
Magnesium	8,07	0,10	8,12	0,08	mg/l	101%
Sodium	30,8	0,2	30,79	0,62	mg/l	100%
Potassium	6,98	0,04	6,92	0,41	mg/l	99%
Nitrate	51,3	1,2	48,18	2,41	mg/l	94%
Nitrite	0,0203	0,0018	0,0200	0,0020	mg/l	99%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	26,50	1,59	mg/l	93%
Sulphate	58,9	0,4	57,12	1,71	mg/l	97%
Orthophosphate	0,061	0,001	0,067	0,008	mg/l	110%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	6,570	0,986	mg/l	135%
Total P (as PO4)	0,187	0,003	0,175	0,011	mg/l	94%
KMnO4-Index	5,64	0,15	5,827	0,699	mg/l	103%

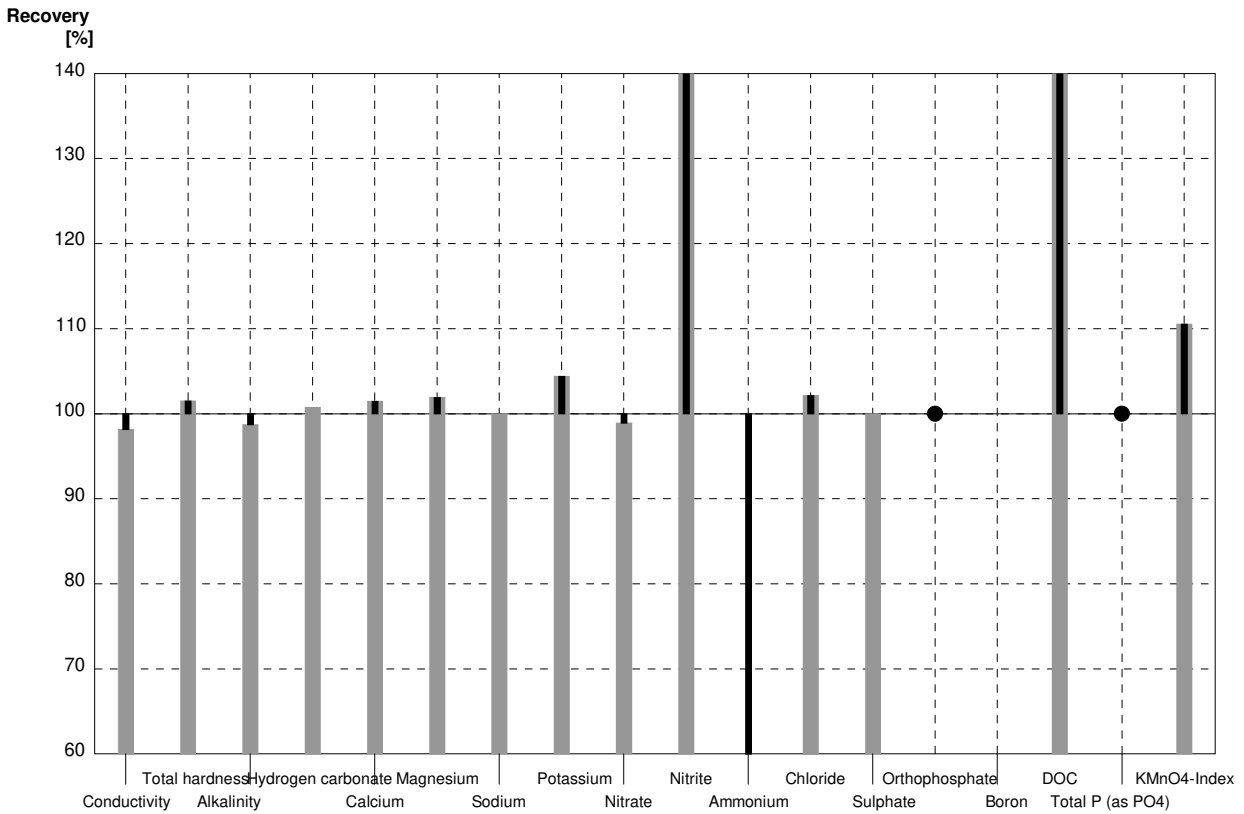
■ Deviation ■ Recovery



Sample N167A
Laboratory J

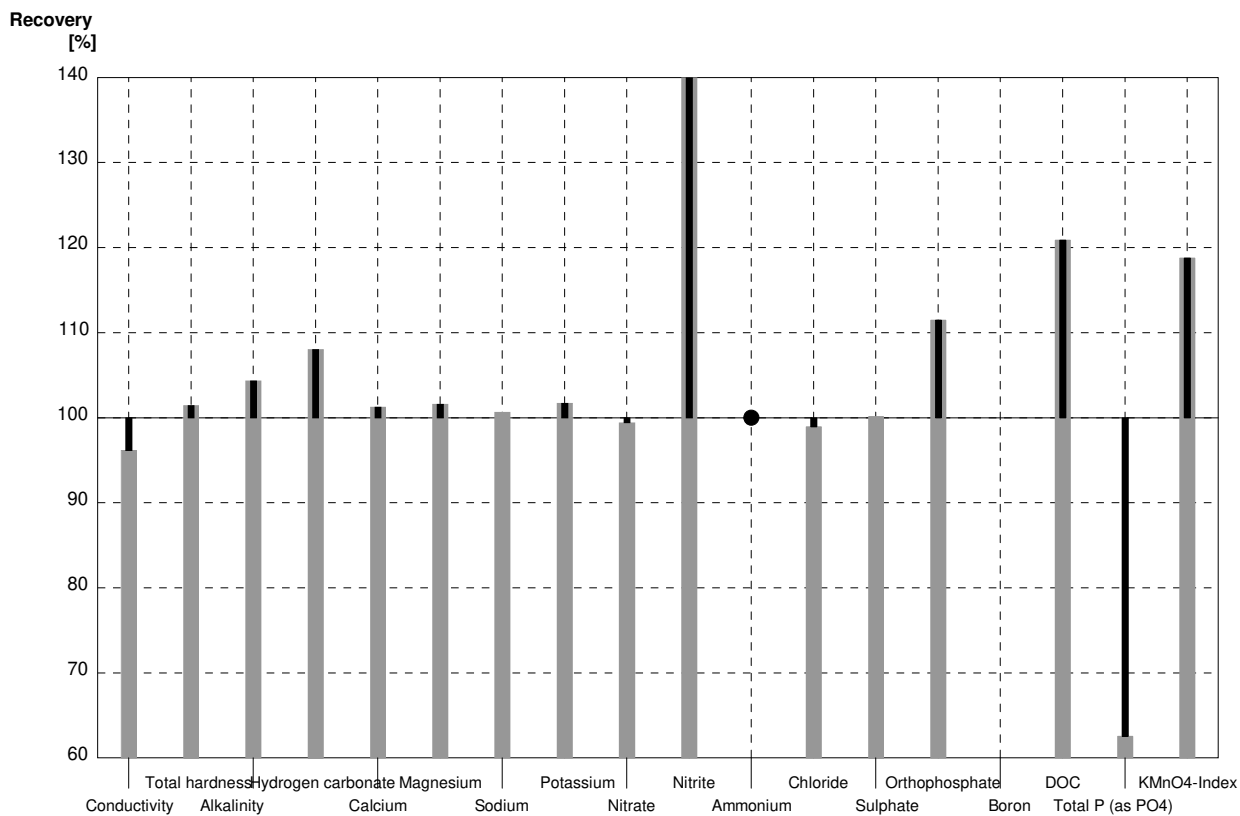
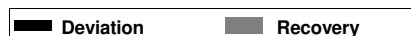
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	534	12	µS/cm	98%
Total hardness	1,94	0,02	1,97	0,16	mmol/l	102%
Alkalinity	2,36	0,03	2,33	0,10	mmol/l	99%
Hydrogen carbonate	140,9	1,7	142	6,4	mg/l	101%
Calcium	60,1	0,9	61	3,1	mg/l	101%
Magnesium	10,79	0,14	11,0	0,69	mg/l	102%
Sodium	24,9	0,3	24,9	1,9	mg/l	100%
Potassium	8,81	0,06	9,2	0,32	mg/l	104%
Nitrate	37,2	0,7	36,8	1,8	mg/l	99%
Nitrite	0,0404	0,0009	0,057	0,0084	mg/l	141%
Ammonium	0,070	0,004	0,0380	0,0028	mg/l	54%
Chloride	54,8	1,2	56	4,4	mg/l	102%
Sulphate	34,7	0,4	34,7	2,1	mg/l	100%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,81	0,47	mg/l	149%
Total P (as PO4)	<0,009		<0,01		mg/l	•
KMnO4-Index	3,51	0,12	3,88	0,24	mg/l	111%

■ Deviation ■ Recovery



Sample N167B
Laboratory J

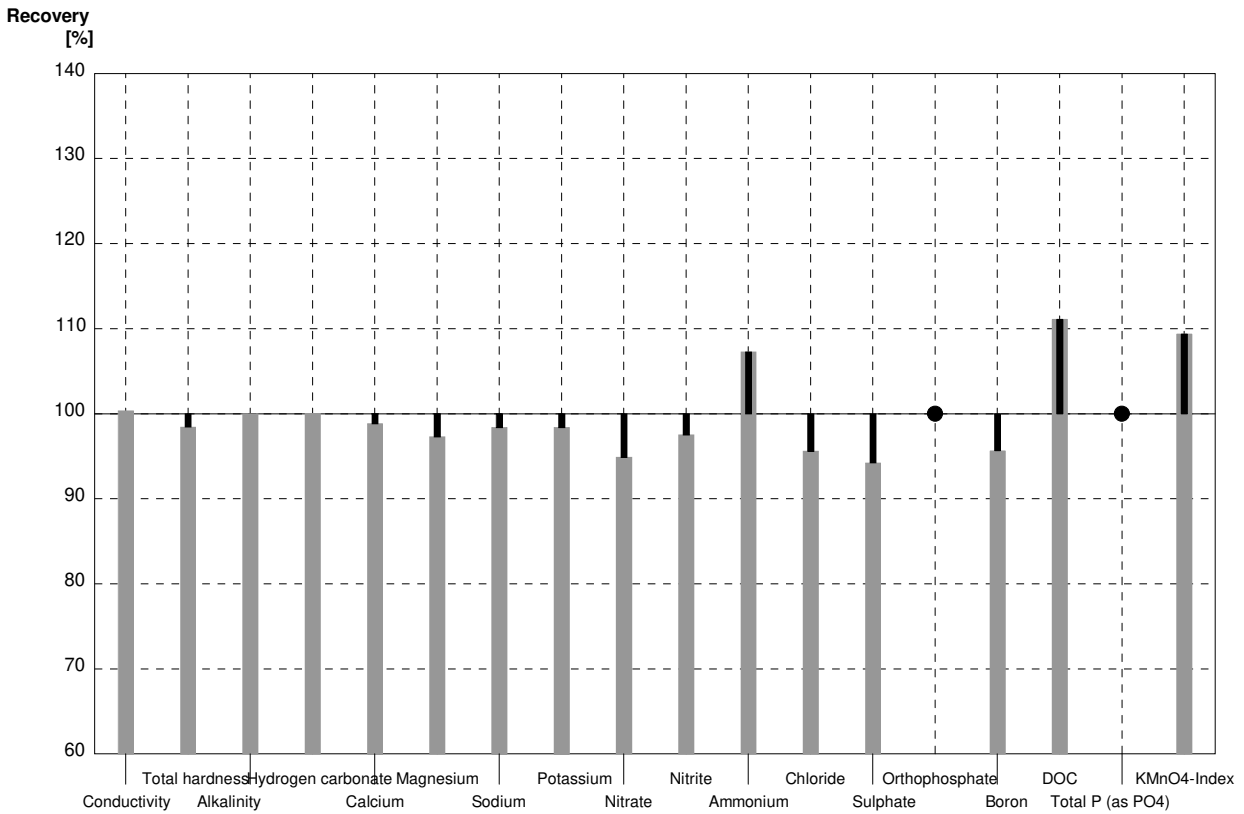
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	427	9,2	µS/cm	96%
Total hardness	1,321	0,015	1,34	0,11	mmol/l	101%
Alkalinity	1,294	0,018	1,35	0,06	mmol/l	104%
Hydrogen carbonate	75,9	1,1	82	3,7	mg/l	108%
Calcium	39,6	0,6	40,1	2,1	mg/l	101%
Magnesium	8,07	0,10	8,2	0,52	mg/l	102%
Sodium	30,8	0,2	31,0	2,4	mg/l	101%
Potassium	6,98	0,04	7,1	0,25	mg/l	102%
Nitrate	51,3	1,2	51	2,5	mg/l	99%
Nitrite	0,0203	0,0018	0,0300	0,0044	mg/l	148%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,3	2,2	mg/l	99%
Sulphate	58,9	0,4	59	3,6	mg/l	100%
Orthophosphate	0,061	0,001	0,068	0,0058	mg/l	111%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,9	0,99	mg/l	121%
Total P (as PO4)	0,187	0,003	0,117	0,015	mg/l	63%
KMnO4-Index	5,64	0,15	6,7	0,42	mg/l	119%



Sample N167A
Laboratory K

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	546	21,8	µS/cm	100%
Total hardness	1,94	0,02	1,91	0,344	mmol/l	98%
Alkalinity	2,36	0,03	2,36	0,094	mmol/l	100%
Hydrogen carbonate	140,9	1,7	141	5,64	mg/l	100%
Calcium	60,1	0,9	59,4	10,7	mg/l	99%
Magnesium	10,79	0,14	10,5	1,89	mg/l	97%
Sodium	24,9	0,3	24,5	4,41	mg/l	98%
Potassium	8,81	0,06	8,67	1,56	mg/l	98%
Nitrate	37,2	0,7	35,3	3,18	mg/l	95%
Nitrite	0,0404	0,0009	0,0394	0,004	mg/l	98%
Ammonium	0,070	0,004	0,0751	0,007	mg/l	107%
Chloride	54,8	1,2	52,4	4,72	mg/l	96%
Sulphate	34,7	0,4	32,7	2,94	mg/l	94%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012	0,121	0,022	mg/l	96%
DOC	1,89	0,04	2,10	0,189	mg/l	111%
Total P (as PO4)	<0,009		<0,05		mg/l	•
KMnO4-Index	3,51	0,12	3,84	0,346	mg/l	109%

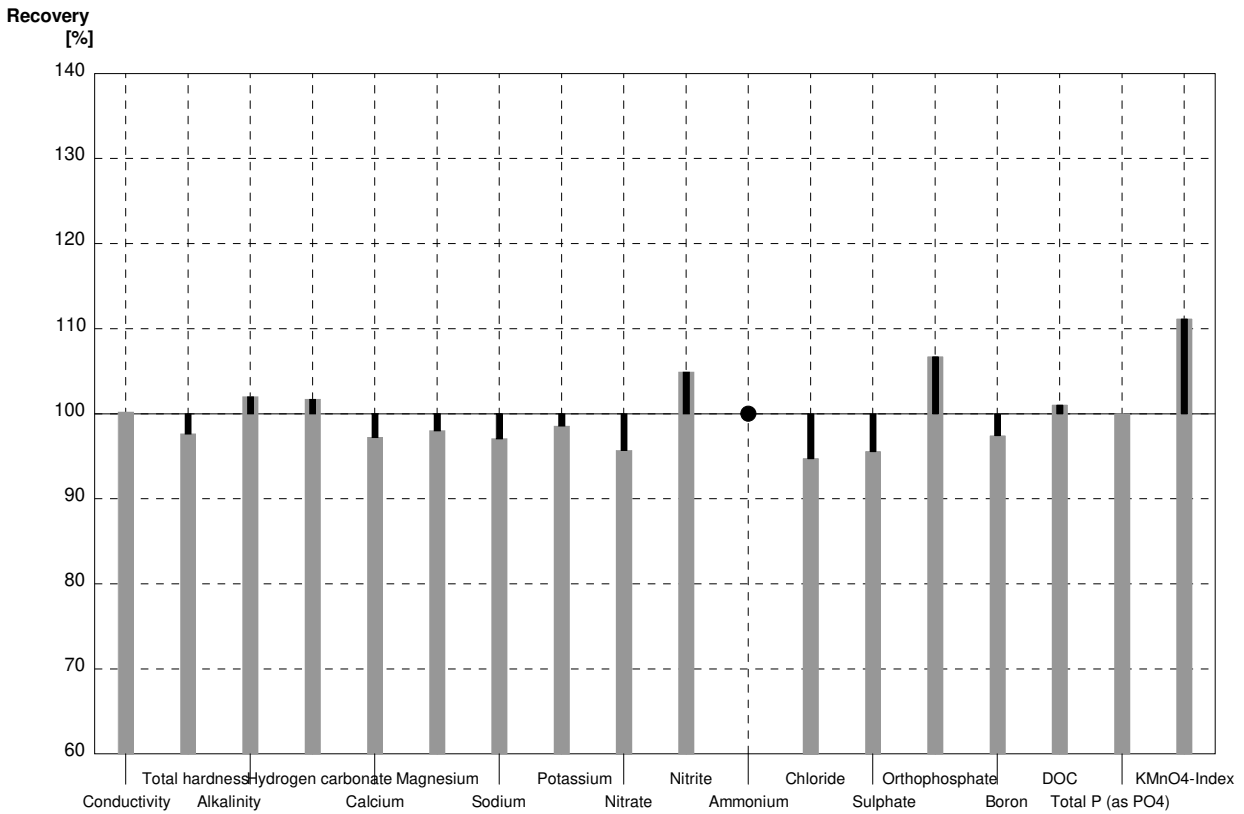
■ Deviation ■ Recovery



Sample N167B
Laboratory K

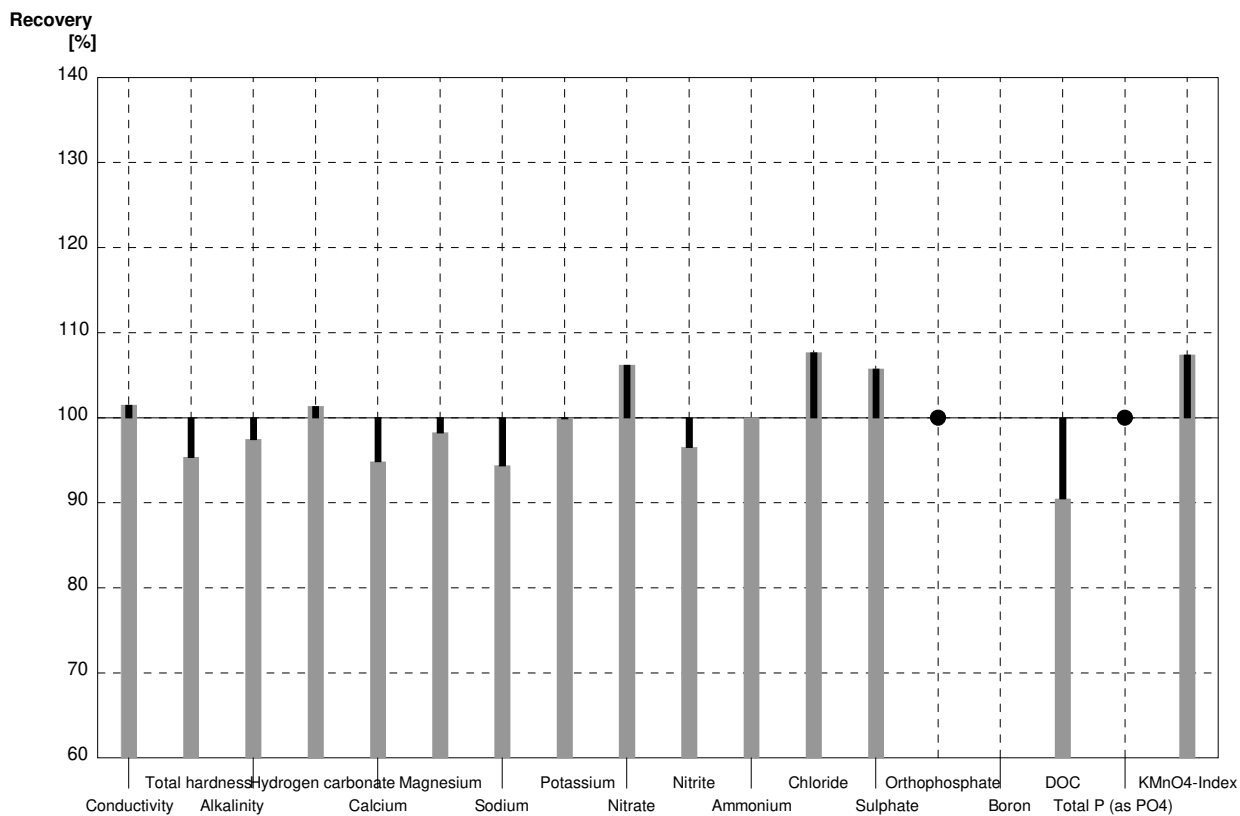
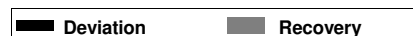
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	445	17,8	µS/cm	100%
Total hardness	1,321	0,015	1,29	0,232	mmol/l	98%
Alkalinity	1,294	0,018	1,32	0,053	mmol/l	102%
Hydrogen carbonate	75,9	1,1	77,2	3,09	mg/l	102%
Calcium	39,6	0,6	38,5	6,93	mg/l	97%
Magnesium	8,07	0,10	7,91	1,42	mg/l	98%
Sodium	30,8	0,2	29,9	5,38	mg/l	97%
Potassium	6,98	0,04	6,88	1,24	mg/l	99%
Nitrate	51,3	1,2	49,1	4,42	mg/l	96%
Nitrite	0,0203	0,0018	0,0213	0,002	mg/l	105%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	27,1	2,44	mg/l	95%
Sulphate	58,9	0,4	56,3	5,07	mg/l	96%
Orthophosphate	0,061	0,001	0,0651	0,006	mg/l	107%
Boron	0,0544	0,0004	0,053	0,010	mg/l	97%
DOC	4,88	0,05	4,93	0,444	mg/l	101%
Total P (as PO4)	0,187	0,003	0,187	0,007	mg/l	100%
KMnO4-Index	5,64	0,15	6,27	0,564	mg/l	111%

■ Deviation ■ Recovery



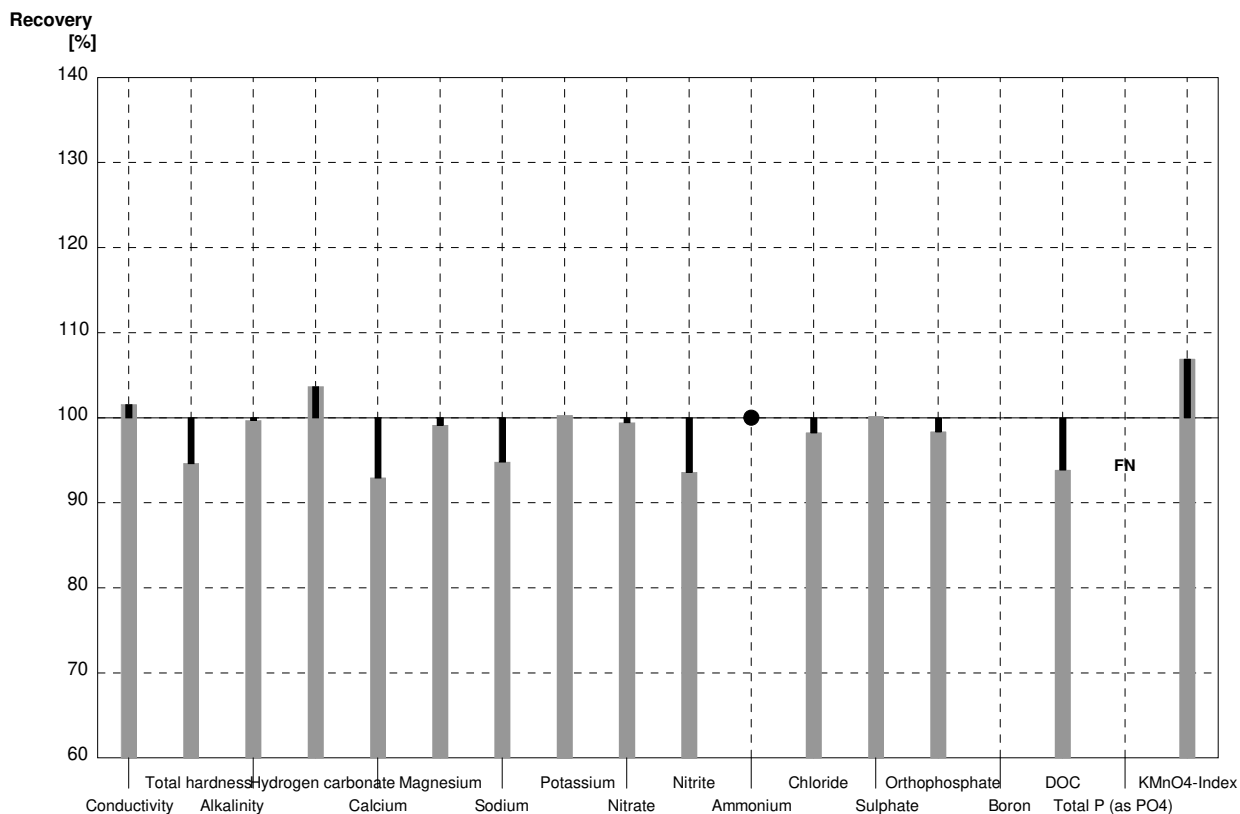
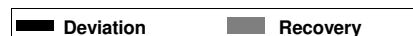
Sample N167A
Laboratory L

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	552	18	µS/cm	101%
Total hardness	1,94	0,02	1,85	0,15	mmol/l	95%
Alkalinity	2,36	0,03	2,30	0,069	mmol/l	97%
Hydrogen carbonate	140,9	1,7	142,8	4,3	mg/l	101%
Calcium	60,1	0,9	57	4,7	mg/l	95%
Magnesium	10,79	0,14	10,6	0,75	mg/l	98%
Sodium	24,9	0,3	23,5	1,7	mg/l	94%
Potassium	8,81	0,06	8,8	0,41	mg/l	100%
Nitrate	37,2	0,7	39,5	1,9	mg/l	106%
Nitrite	0,0404	0,0009	0,0390	0,0010	mg/l	97%
Ammonium	0,070	0,004	0,070	0,004	mg/l	100%
Chloride	54,8	1,2	59	2,8	mg/l	108%
Sulphate	34,7	0,4	36,7	1,9	mg/l	106%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	1,71	0,37	mg/l	90%
Total P (as PO4)	<0,009		<0,15		mg/l	•
KMnO4-Index	3,51	0,12	3,77	0,38	mg/l	107%



Sample N167B
Laboratory L

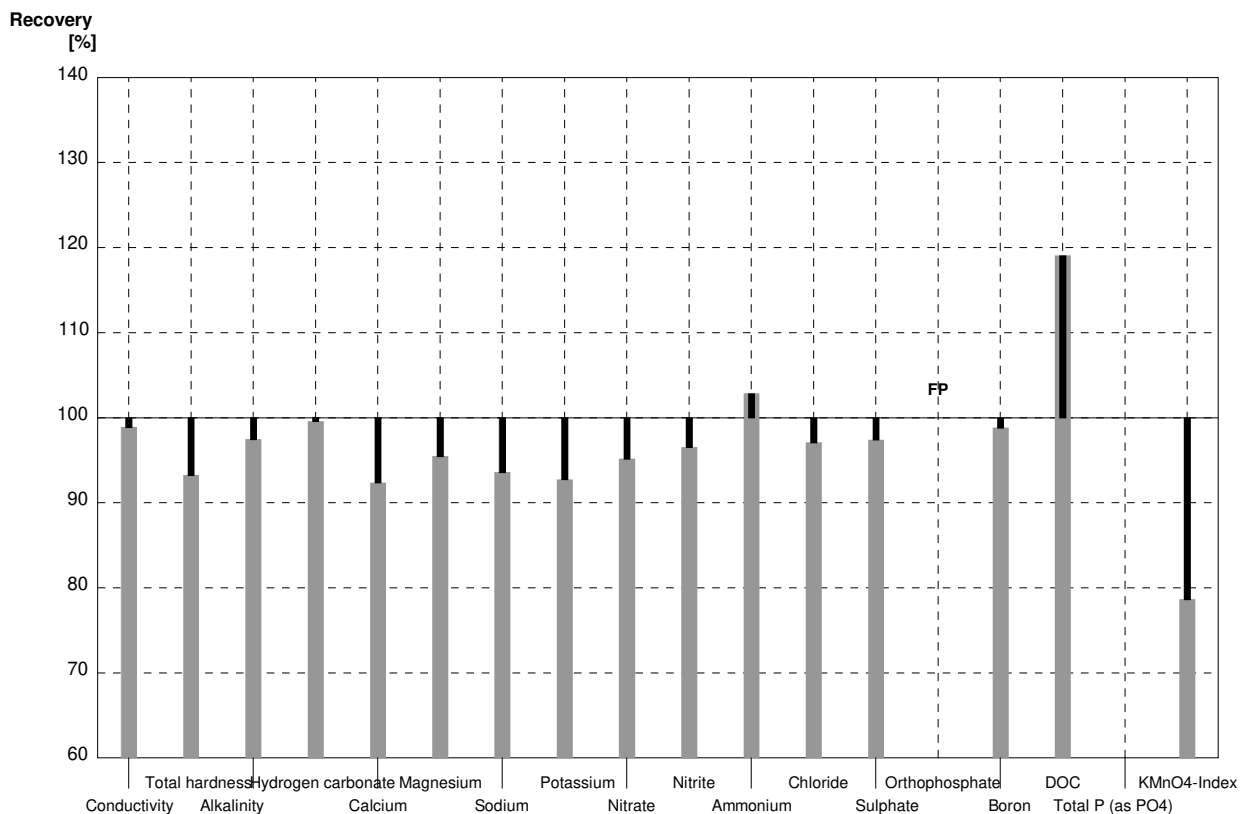
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	451	14	µS/cm	102%
Total hardness	1,321	0,015	1,25	0,10	mmol/l	95%
Alkalinity	1,294	0,018	1,29	0,039	mmol/l	100%
Hydrogen carbonate	75,9	1,1	78,7	2,4	mg/l	104%
Calcium	39,6	0,6	36,8	3,0	mg/l	93%
Magnesium	8,07	0,10	8,0	0,56	mg/l	99%
Sodium	30,8	0,2	29,2	2,1	mg/l	95%
Potassium	6,98	0,04	7,0	0,32	mg/l	100%
Nitrate	51,3	1,2	51	2,4	mg/l	99%
Nitrite	0,0203	0,0018	0,0190	0,0010	mg/l	94%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,1	1,3	mg/l	98%
Sulphate	58,9	0,4	59	3,1	mg/l	100%
Orthophosphate	0,061	0,001	0,060	0,003	mg/l	98%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	4,58	0,98	mg/l	94%
Total P (as PO4)	0,187	0,003	<0,15		mg/l	FN
KMnO4-Index	5,64	0,15	6,03	0,60	mg/l	107%



Sample N167A
Laboratory M

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	538		µS/cm	99%
Total hardness	1,94	0,02	1,809		mmol/l	93%
Alkalinity	2,36	0,03	2,30		mmol/l	97%
Hydrogen carbonate	140,9	1,7	140,3		mg/l	100%
Calcium	60,1	0,9	55,5		mg/l	92%
Magnesium	10,79	0,14	10,3		mg/l	95%
Sodium	24,9	0,3	23,3		mg/l	94%
Potassium	8,81	0,06	8,17		mg/l	93%
Nitrate	37,2	0,7	35,4		mg/l	95%
Nitrite	0,0404	0,0009	0,0390		mg/l	97%
Ammonium	0,070	0,004	0,0720		mg/l	103%
Chloride	54,8	1,2	53,2		mg/l	97%
Sulphate	34,7	0,4	33,8		mg/l	97%
Orthophosphate	<0,009		0,124		mg/l	FP
Boron	0,1265	0,0012	0,125		mg/l	99%
DOC	1,89	0,04	2,25		mg/l	119%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	2,76		mg/l	79%

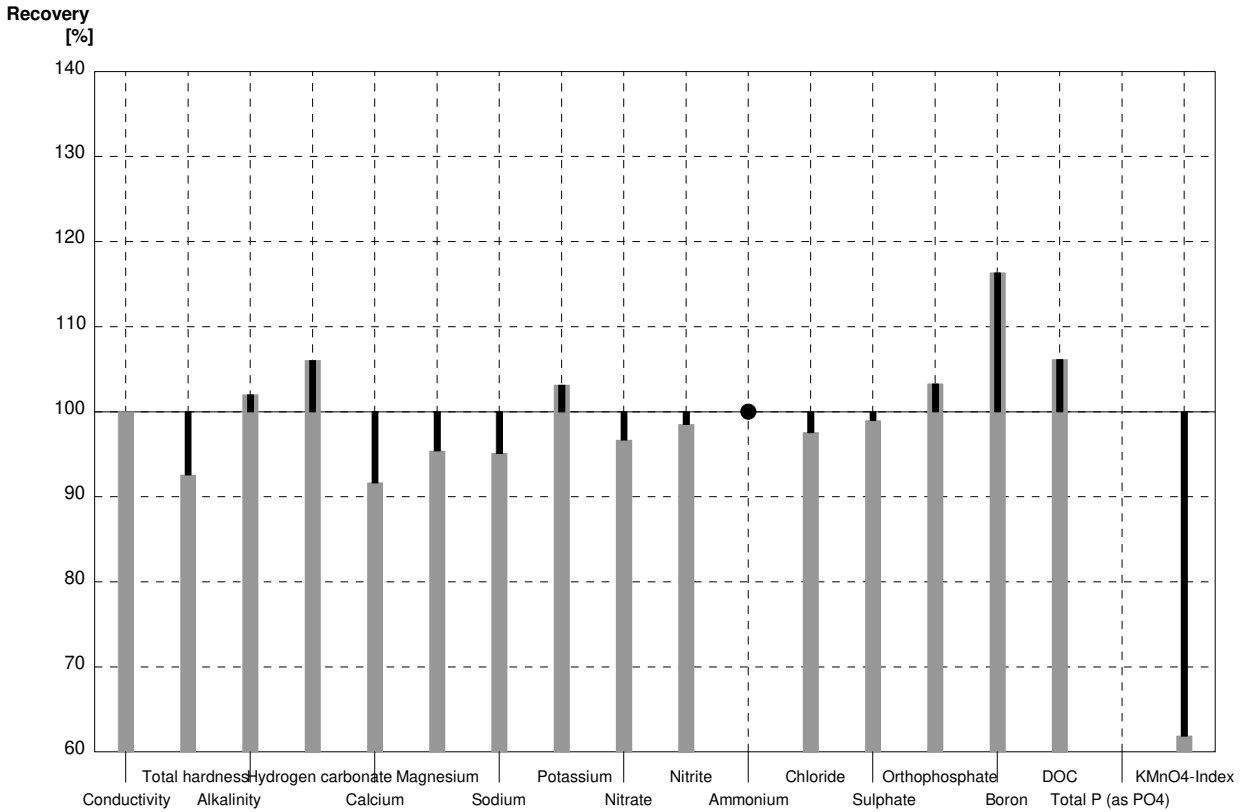
■ Deviation ■ Recovery



Sample N167B
Laboratory M

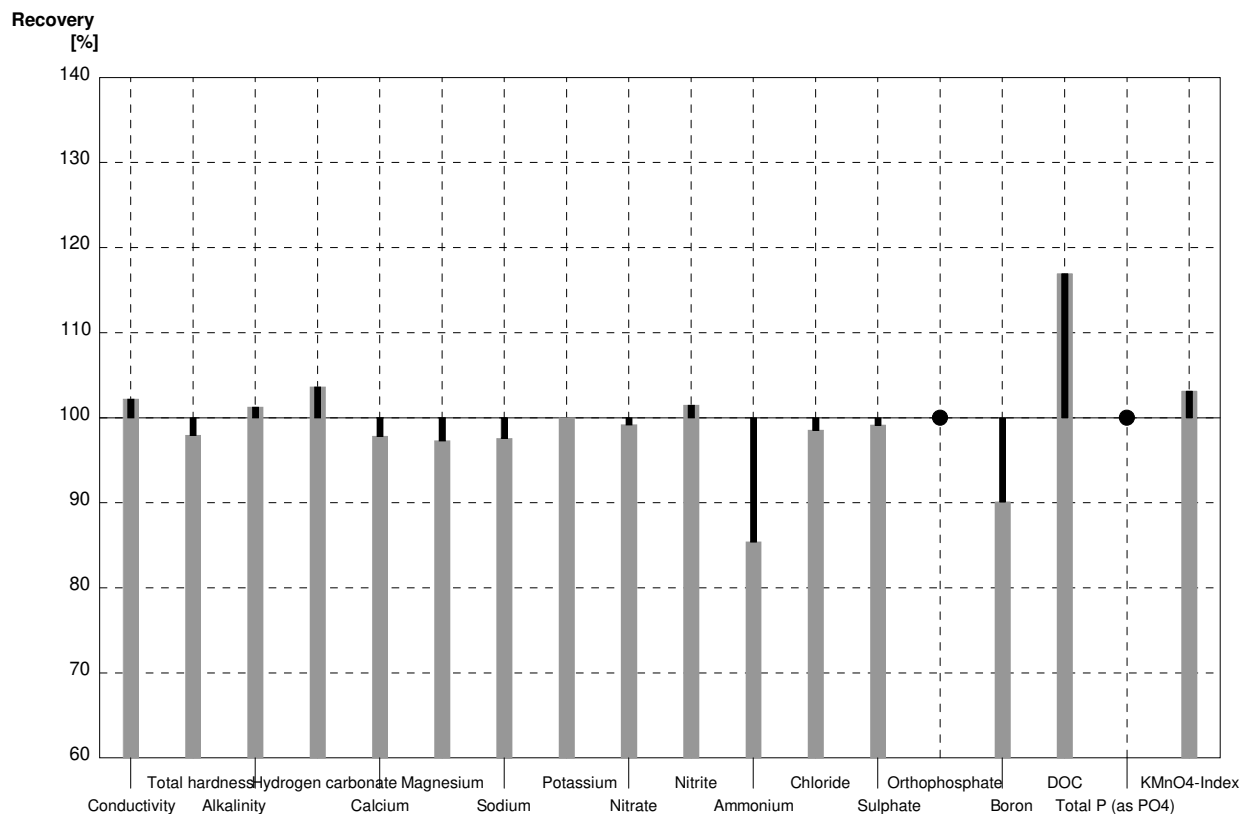
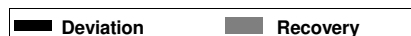
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444		µS/cm	100%
Total hardness	1,321	0,015	1,223		mmol/l	93%
Alkalinity	1,294	0,018	1,32		mmol/l	102%
Hydrogen carbonate	75,9	1,1	80,5		mg/l	106%
Calcium	39,6	0,6	36,3		mg/l	92%
Magnesium	8,07	0,10	7,70		mg/l	95%
Sodium	30,8	0,2	29,3		mg/l	95%
Potassium	6,98	0,04	7,20		mg/l	103%
Nitrate	51,3	1,2	49,6		mg/l	97%
Nitrite	0,0203	0,0018	0,0200		mg/l	99%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	27,9		mg/l	98%
Sulphate	58,9	0,4	58,3		mg/l	99%
Orthophosphate	0,061	0,001	0,0630		mg/l	103%
Boron	0,0544	0,0004	0,0633		mg/l	116%
DOC	4,88	0,05	5,18		mg/l	106%
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	3,49		mg/l	62%

■ Deviation ■ Recovery



Sample N167A
Laboratory N

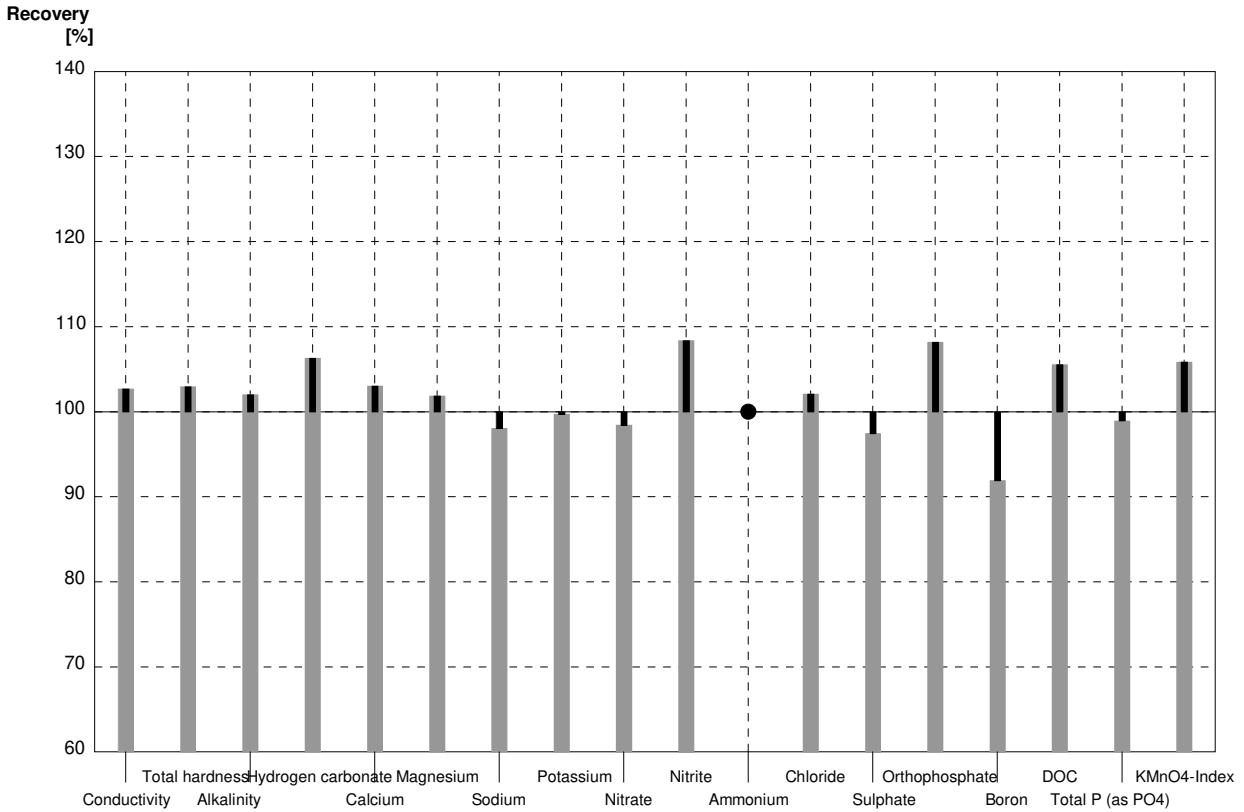
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	556	56	µS/cm	102%
Total hardness	1,94	0,02	1,90	0,19	mmol/l	98%
Alkalinity	2,36	0,03	2,39	0,24	mmol/l	101%
Hydrogen carbonate	140,9	1,7	146	15	mg/l	104%
Calcium	60,1	0,9	58,8	5,9	mg/l	98%
Magnesium	10,79	0,14	10,5	1,0	mg/l	97%
Sodium	24,9	0,3	24,3	2,4	mg/l	98%
Potassium	8,81	0,06	8,81	0,88	mg/l	100%
Nitrate	37,2	0,7	36,9	3,7	mg/l	99%
Nitrite	0,0404	0,0009	0,0410	0,0041	mg/l	101%
Ammonium	0,070	0,004	0,0598	0,0060	mg/l	85%
Chloride	54,8	1,2	54,0	5,4	mg/l	99%
Sulphate	34,7	0,4	34,4	3,4	mg/l	99%
Orthophosphate	<0,009		<0,008		mg/l	•
Boron	0,1265	0,0012	0,114	0,011	mg/l	90%
DOC	1,89	0,04	2,21	0,22	mg/l	117%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,51	0,12	3,62	0,72	mg/l	103%



Sample N167B
Laboratory N

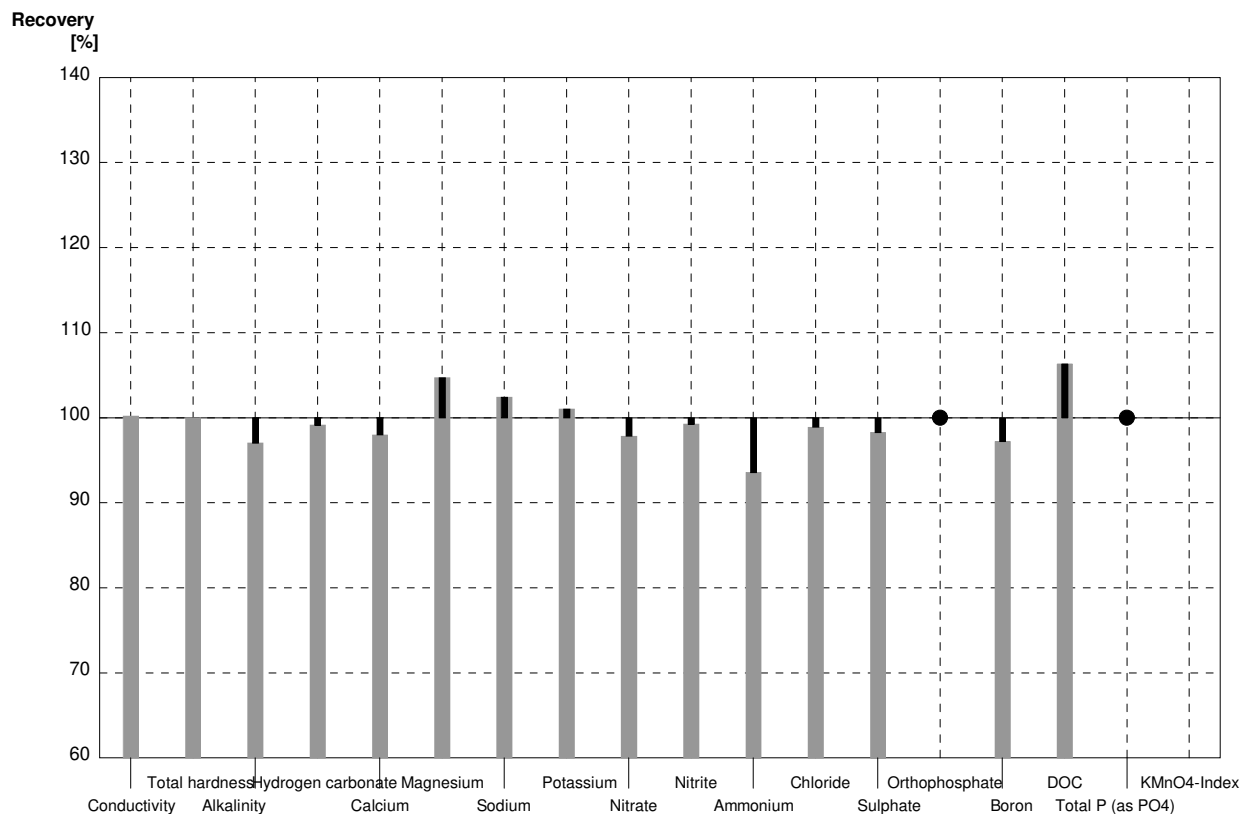
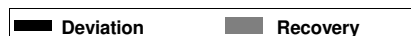
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	456	46	µS/cm	103%
Total hardness	1,321	0,015	1,36	0,14	mmol/l	103%
Alkalinity	1,294	0,018	1,32	0,13	mmol/l	102%
Hydrogen carbonate	75,9	1,1	80,7	8,1	mg/l	106%
Calcium	39,6	0,6	40,8	4,1	mg/l	103%
Magnesium	8,07	0,10	8,22	0,82	mg/l	102%
Sodium	30,8	0,2	30,2	3,0	mg/l	98%
Potassium	6,98	0,04	6,96	0,70	mg/l	100%
Nitrate	51,3	1,2	50,5	5,0	mg/l	98%
Nitrite	0,0203	0,0018	0,0220	0,0022	mg/l	108%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	29,2	2,9	mg/l	102%
Sulphate	58,9	0,4	57,4	5,7	mg/l	97%
Orthophosphate	0,061	0,001	0,0660	0,0066	mg/l	108%
Boron	0,0544	0,0004	0,0500	0,0050	mg/l	92%
DOC	4,88	0,05	5,15	0,52	mg/l	106%
Total P (as PO4)	0,187	0,003	0,185	0,037	mg/l	99%
KMnO4-Index	5,64	0,15	5,97	1,19	mg/l	106%

■ Deviation ■ Recovery



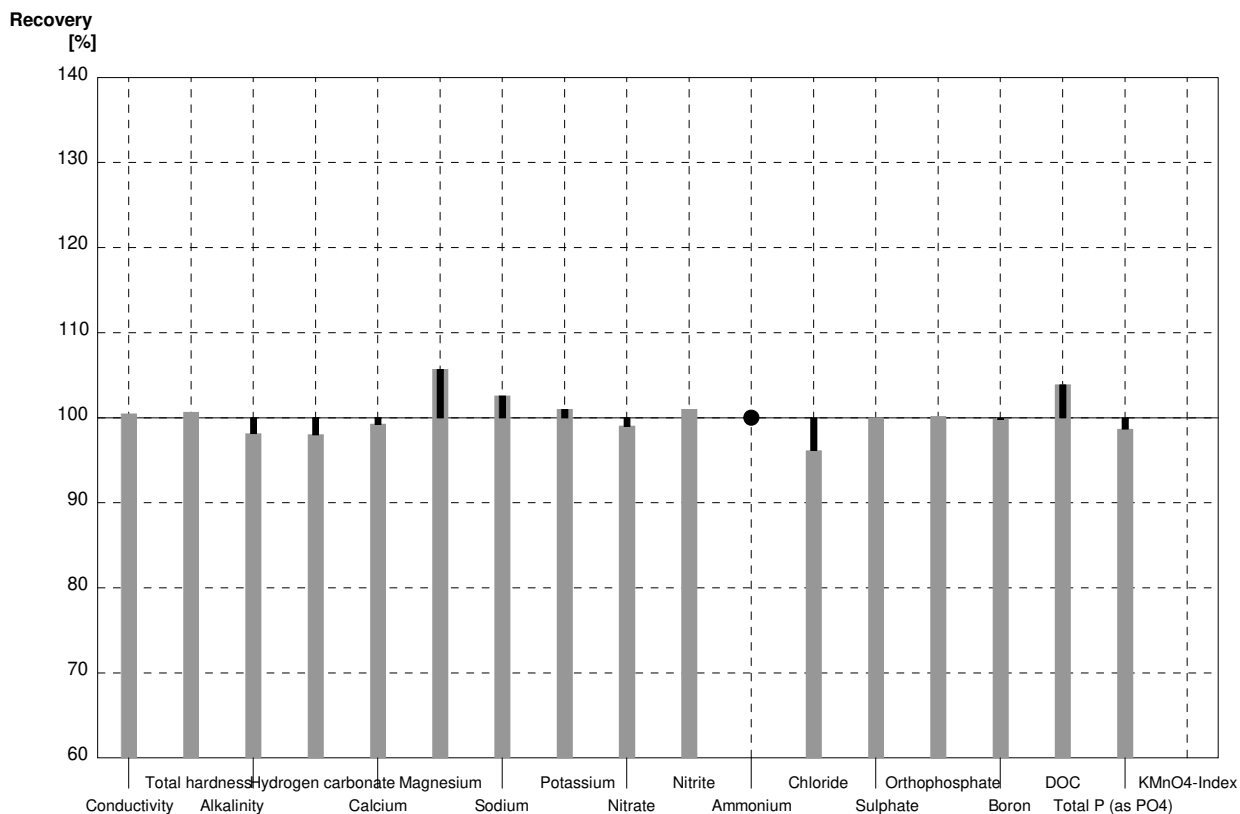
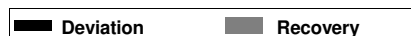
Sample N167A
Laboratory O

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545	10	µS/cm	100%
Total hardness	1,94	0,02	1,94	0,19	mmol/l	100%
Alkalinity	2,36	0,03	2,29	2,3	mmol/l	97%
Hydrogen carbonate	140,9	1,7	139,7	13,97	mg/l	99%
Calcium	60,1	0,9	58,9	12	mg/l	98%
Magnesium	10,79	0,14	11,3	2,3	mg/l	105%
Sodium	24,9	0,3	25,5	3,8	mg/l	102%
Potassium	8,81	0,06	8,90	1,8	mg/l	101%
Nitrate	37,2	0,7	36,4	3,6	mg/l	98%
Nitrite	0,0404	0,0009	0,0401	0,0074	mg/l	99%
Ammonium	0,070	0,004	0,0655	0,0106	mg/l	94%
Chloride	54,8	1,2	54,2	5,4	mg/l	99%
Sulphate	34,7	0,4	34,1	3,4	mg/l	98%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,1265	0,0012	0,123	0,031	mg/l	97%
DOC	1,89	0,04	2,01	0,20	mg/l	106%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	



Sample N167B
Laboratory O

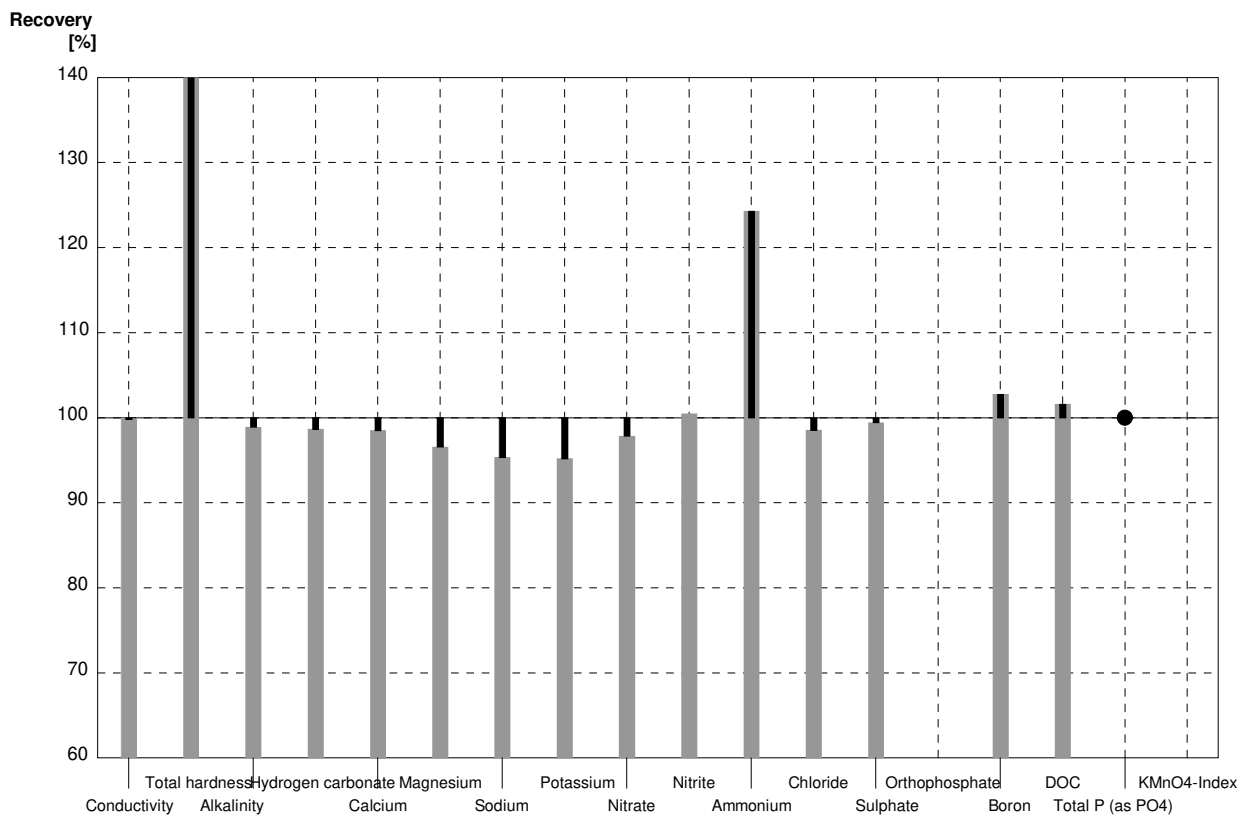
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	10	µS/cm	100%
Total hardness	1,321	0,015	1,33	0,13	mmol/l	101%
Alkalinity	1,294	0,018	1,27	0,13	mmol/l	98%
Hydrogen carbonate	75,9	1,1	74,4	7,4	mg/l	98%
Calcium	39,6	0,6	39,3	7,9	mg/l	99%
Magnesium	8,07	0,10	8,53	1,7	mg/l	106%
Sodium	30,8	0,2	31,6	4,8	mg/l	103%
Potassium	6,98	0,04	7,05	1,4	mg/l	101%
Nitrate	51,3	1,2	50,8	5,1	mg/l	99%
Nitrite	0,0203	0,0018	0,0205	0,0038	mg/l	101%
Ammonium	<0,01		<0,0100		mg/l	•
Chloride	28,6	0,4	27,5	2,8	mg/l	96%
Sulphate	58,9	0,4	58,9	5,9	mg/l	100%
Orthophosphate	0,061	0,001	0,0611	0,0127	mg/l	100%
Boron	0,0544	0,0004	0,0543		mg/l	100%
DOC	4,88	0,05	5,07	0,51	mg/l	104%
Total P (as PO4)	0,187	0,003	0,1845	0,0384	mg/l	99%
KMnO4-Index	5,64	0,15			mg/l	



Sample N167A
Laboratory P

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	543	15	µS/cm	100%
Total hardness	1,94	0,02	10,7		mmol/l	552%
Alkalinity	2,36	0,03	2,334	0,156	mmol/l	99%
Hydrogen carbonate	140,9	1,7	139		mg/l	99%
Calcium	60,1	0,9	59,2	4,1	mg/l	99%
Magnesium	10,79	0,14	10,42	0,9	mg/l	97%
Sodium	24,9	0,3	23,74	2,3	mg/l	95%
Potassium	8,81	0,06	8,388	0,8	mg/l	95%
Nitrate	37,2	0,7	36,4	3,8	mg/l	98%
Nitrite	0,0404	0,0009	0,0406	0,0088	mg/l	100%
Ammonium	0,070	0,004	0,087	0,035	mg/l	124%
Chloride	54,8	1,2	54,0	7,6	mg/l	99%
Sulphate	34,7	0,4	34,5	3,3	mg/l	99%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012	0,130	0,014	mg/l	103%
DOC	1,89	0,04	1,92	0,36	mg/l	102%
Total P (as PO4)	<0,009		<0,03		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

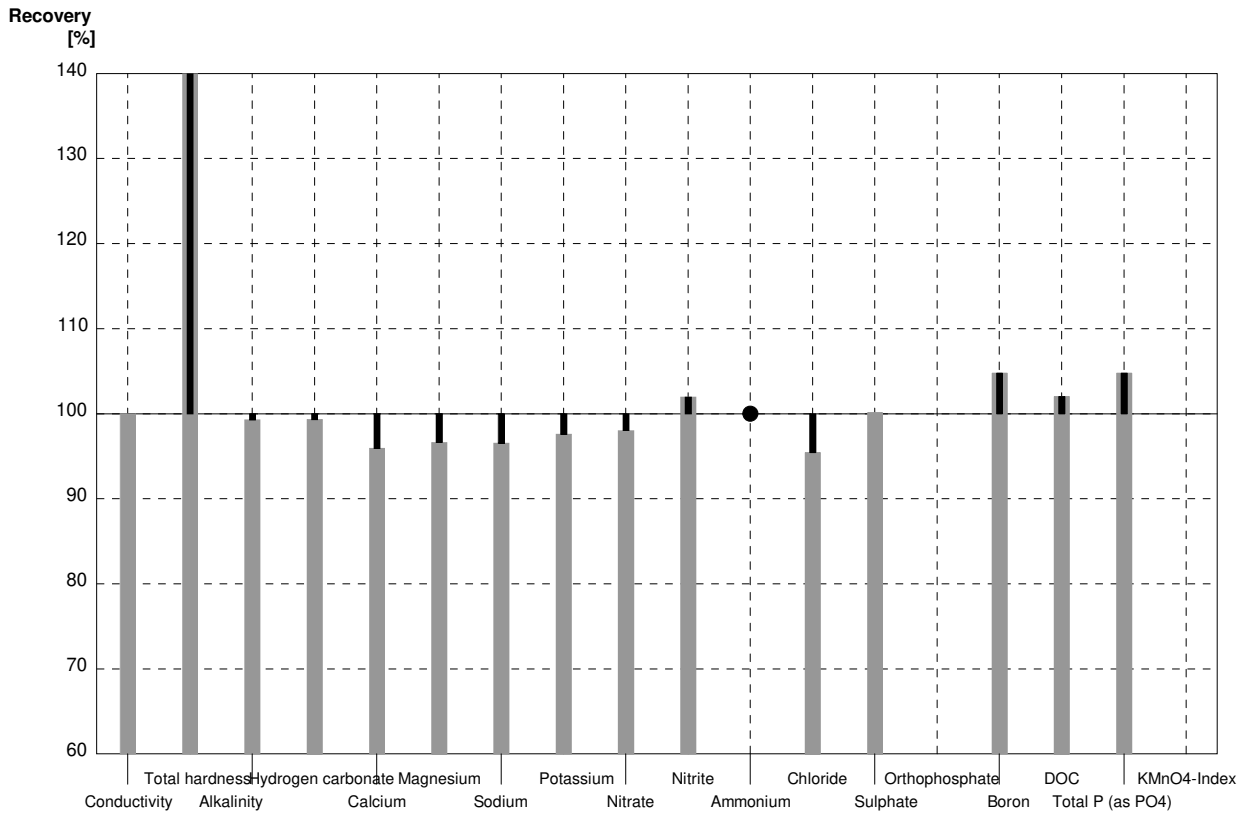
■ Deviation ■ Recovery



Sample N167B
Laboratory P

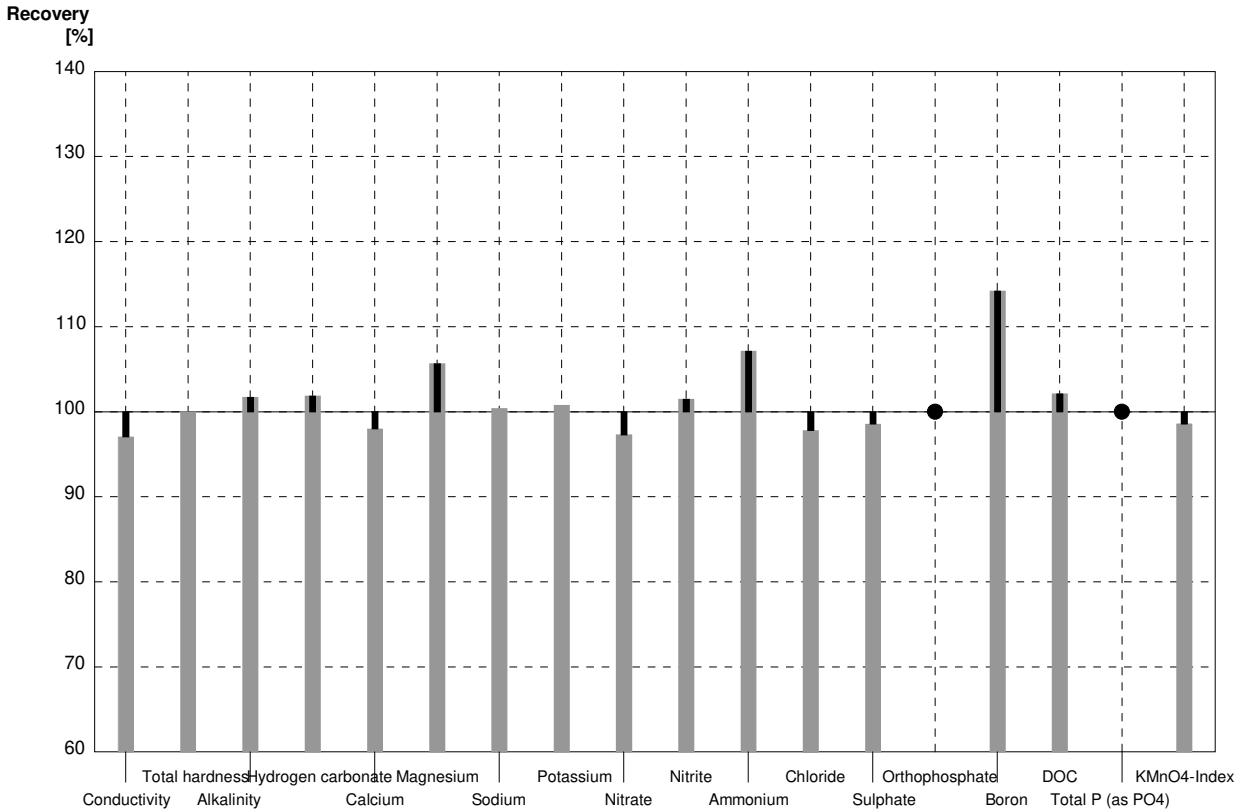
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	12	µS/cm	100%
Total hardness	1,321	0,015	7,1		mmol/l	537%
Alkalinity	1,294	0,018	1,285	0,086	mmol/l	99%
Hydrogen carbonate	75,9	1,1	75,4		mg/l	99%
Calcium	39,6	0,6	38,0	2,6	mg/l	96%
Magnesium	8,07	0,10	7,80	0,7	mg/l	97%
Sodium	30,8	0,2	29,74	2,8	mg/l	97%
Potassium	6,98	0,04	6,813	0,7	mg/l	98%
Nitrate	51,3	1,2	50,3	5,2	mg/l	98%
Nitrite	0,0203	0,0018	0,0207	0,0045	mg/l	102%
Ammonium	<0,01		<0,05		mg/l	•
Chloride	28,6	0,4	27,3	3,8	mg/l	95%
Sulphate	58,9	0,4	59,0	5,6	mg/l	100%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004	0,057	0,006	mg/l	105%
DOC	4,88	0,05	4,98	0,92	mg/l	102%
Total P (as PO4)	0,187	0,003	0,196	0,020	mg/l	105%
KMnO4-Index	5,64	0,15			mg/l	

■ Deviation ■ Recovery



Sample N167A
Laboratory Q

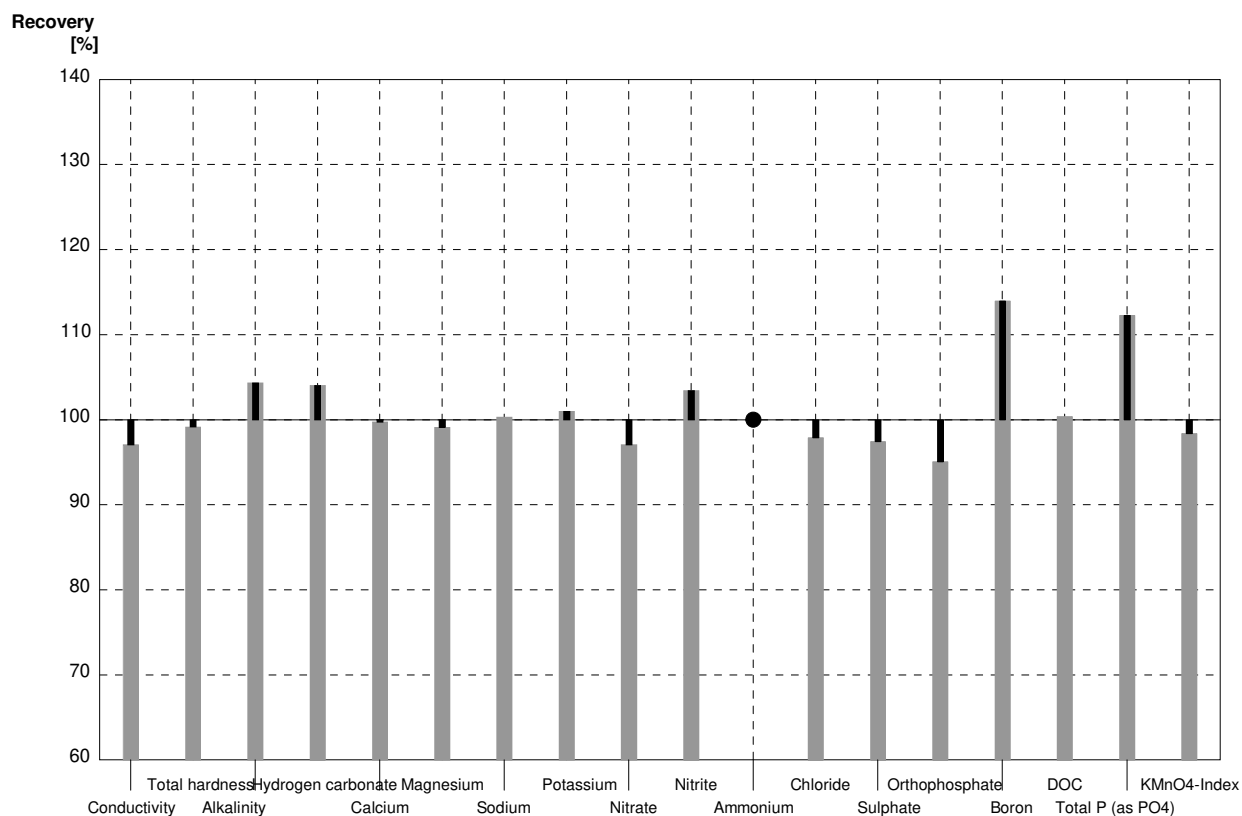
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	528	11	µS/cm	97%
Total hardness	1,94	0,02	1,94	0,16	mmol/l	100%
Alkalinity	2,36	0,03	2,40	0,22	mmol/l	102%
Hydrogen carbonate	140,9	1,7	143,5	12,9	mg/l	102%
Calcium	60,1	0,9	58,9	5,9	mg/l	98%
Magnesium	10,79	0,14	11,4	1,5	mg/l	106%
Sodium	24,9	0,3	25,0	1,25	mg/l	100%
Potassium	8,81	0,06	8,88	0,44	mg/l	101%
Nitrate	37,2	0,7	36,2	1,1	mg/l	97%
Nitrite	0,0404	0,0009	0,0410	0,004	mg/l	101%
Ammonium	0,070	0,004	0,075	0,011	mg/l	107%
Chloride	54,8	1,2	53,6	1,6	mg/l	98%
Sulphate	34,7	0,4	34,2	1,0	mg/l	99%
Orthophosphate	<0,009		<0,040		mg/l	•
Boron	0,1265	0,0012	0,1445	0,01445	mg/l	114%
DOC	1,89	0,04	1,93	0,39	mg/l	102%
Total P (as PO4)	<0,009		<0,03		mg/l	•
KMnO4-Index	3,51	0,12	3,46	0,35	mg/l	99%



Sample N167B
Laboratory Q

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	431	9	µS/cm	97%
Total hardness	1,321	0,015	1,31	0,11	mmol/l	99%
Alkalinity	1,294	0,018	1,35	0,12	mmol/l	104%
Hydrogen carbonate	75,9	1,1	78,99	7,11	mg/l	104%
Calcium	39,6	0,6	39,5	4,0	mg/l	100%
Magnesium	8,07	0,10	8,0	1,0	mg/l	99%
Sodium	30,8	0,2	30,9	1,55	mg/l	100%
Potassium	6,98	0,04	7,05	0,35	mg/l	101%
Nitrate	51,3	1,2	49,8	1,5	mg/l	97%
Nitrite	0,0203	0,0018	0,0210	0,002	mg/l	103%
Ammonium	<0,01		<0,040		mg/l	•
Chloride	28,6	0,4	28,0	0,8	mg/l	98%
Sulphate	58,9	0,4	57,4	1,7	mg/l	97%
Orthophosphate	0,061	0,001	0,058	0,006	mg/l	95%
Boron	0,0544	0,0004	0,062	0,0062	mg/l	114%
DOC	4,88	0,05	4,90	0,98	mg/l	100%
Total P (as PO4)	0,187	0,003	0,210	0,0315	mg/l	112%
KMnO4-Index	5,64	0,15	5,55	0,56	mg/l	98%

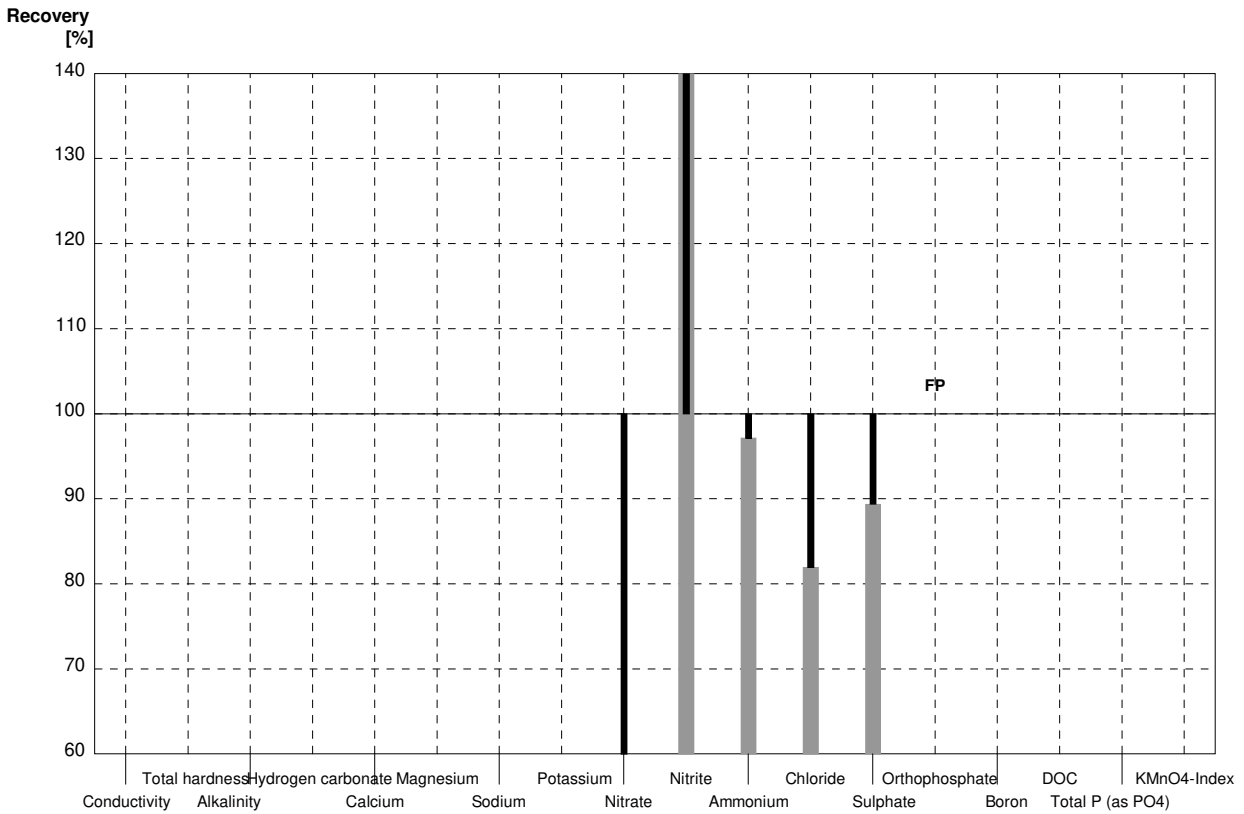
■ Deviation ■ Recovery



Sample N167A
Laboratory R

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	21,36	0,17	mg/l	57%
Nitrite	0,0404	0,0009	0,80	0,10	mg/l	1980%
Ammonium	0,070	0,004	0,068	0,012	mg/l	97%
Chloride	54,8	1,2	44,90	1,80	mg/l	82%
Sulphate	34,7	0,4	31,02	1,04	mg/l	89%
Orthophosphate	<0,009		0,311	0,070	mg/l	FP
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12			mg/l	

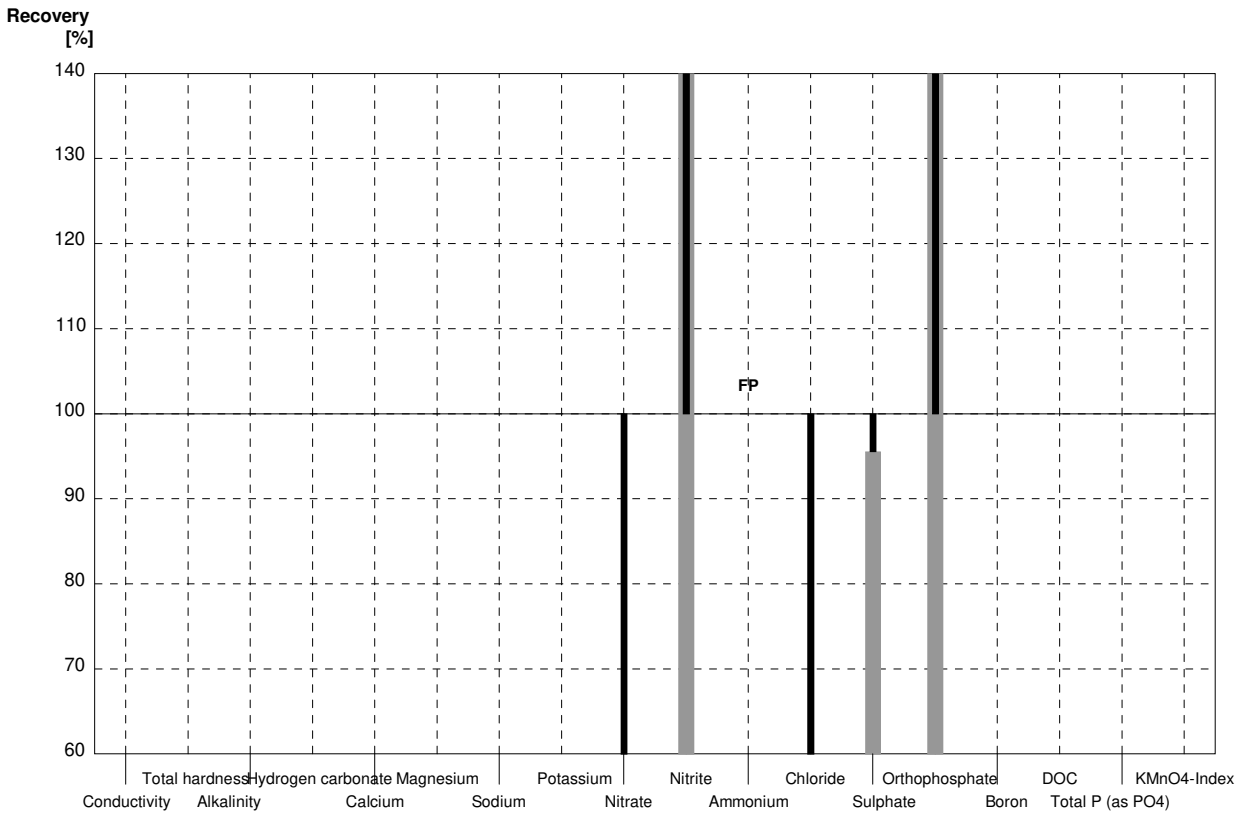
■ Deviation ■ Recovery



Sample N167B
Laboratory R

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	19,31	0,20	mg/l	38%
Nitrite	0,0203	0,0018	0,423	0,011	mg/l	2084%
Ammonium	<0,01		0,061	0,013	mg/l	FP
Chloride	28,6	0,4	16,25	1,87	mg/l	57%
Sulphate	58,9	0,4	56,28	1,61	mg/l	96%
Orthophosphate	0,061	0,001	0,69	0,05	mg/l	1131%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15			mg/l	

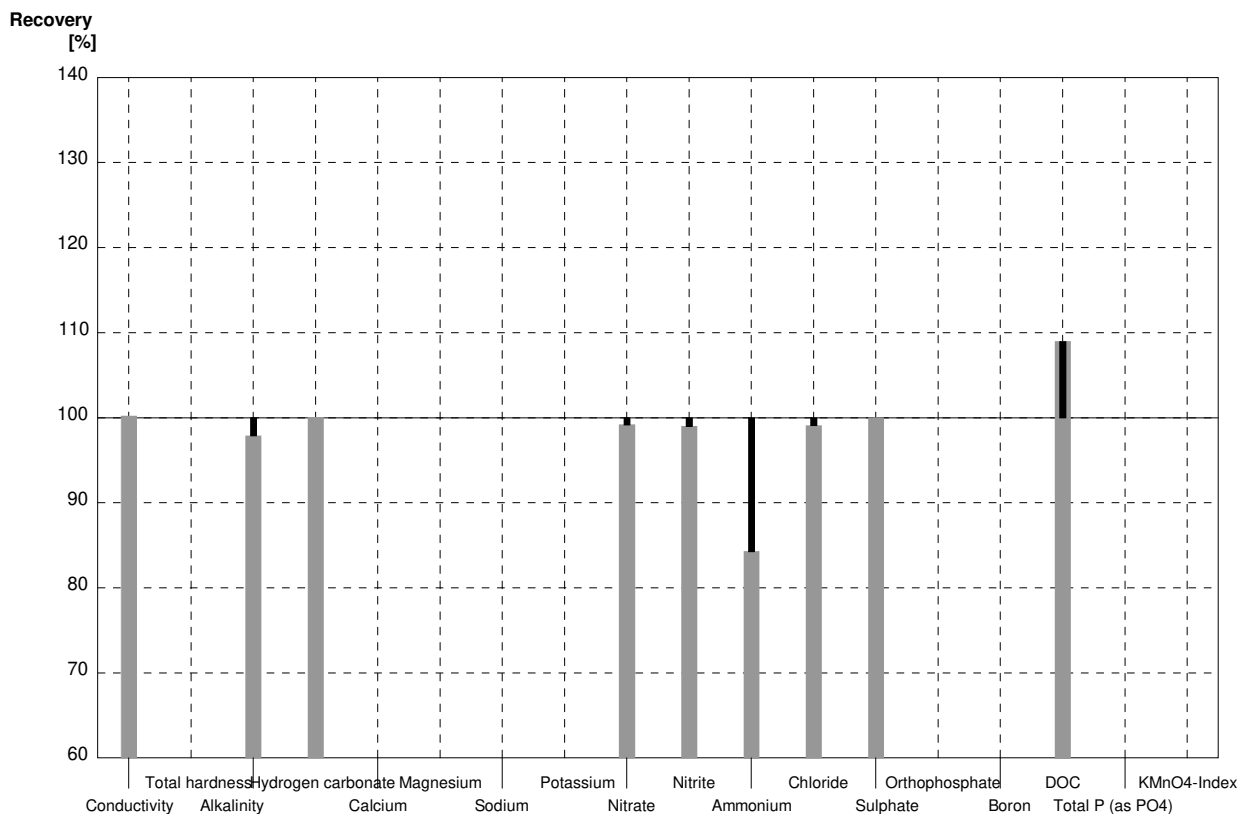
■ Deviation ■ Recovery



Sample N167A
Laboratory S

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545	15,3	µS/cm	100%
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03	2,31	0,05	mmol/l	98%
Hydrogen carbonate	140,9	1,7	141	2,96	mg/l	100%
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	36,9	1,6	mg/l	99%
Nitrite	0,0404	0,0009	0,0400	0,003	mg/l	99%
Ammonium	0,070	0,004	0,059	0,006	mg/l	84%
Chloride	54,8	1,2	54,3	3,96	mg/l	99%
Sulphate	34,7	0,4	34,7	0,97	mg/l	100%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,06	0,016	mg/l	109%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12			mg/l	

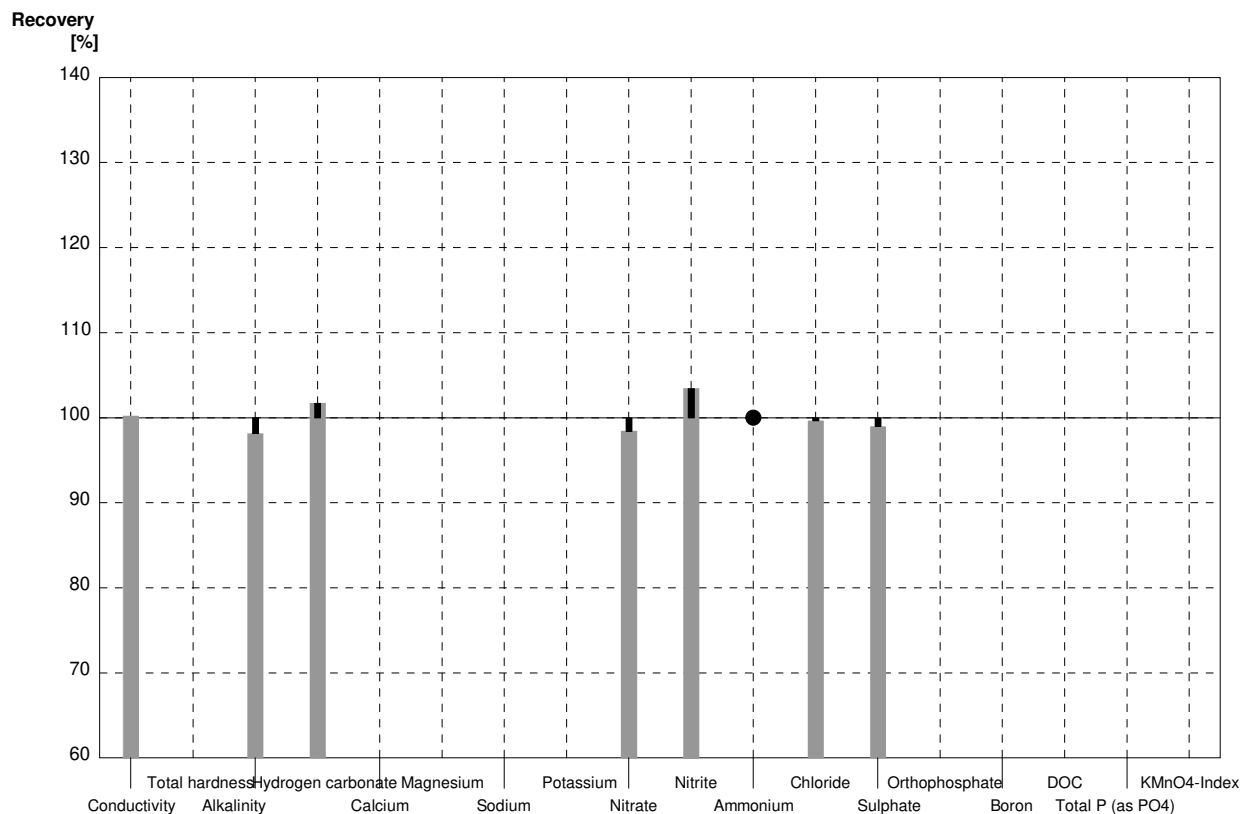
■ Deviation ■ Recovery



Sample N167B
Laboratory S

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	445	12,5	µS/cm	100%
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018	1,27	0,03	mmol/l	98%
Hydrogen carbonate	75,9	1,1	77,2	1,6	mg/l	102%
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	50,5	2,2	mg/l	98%
Nitrite	0,0203	0,0018	0,0210	0,0014	mg/l	103%
Ammonium	<0,01		<0,047		mg/l	•
Chloride	28,6	0,4	28,5	2,08	mg/l	100%
Sulphate	58,9	0,4	58,3	1,6	mg/l	99%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15			mg/l	

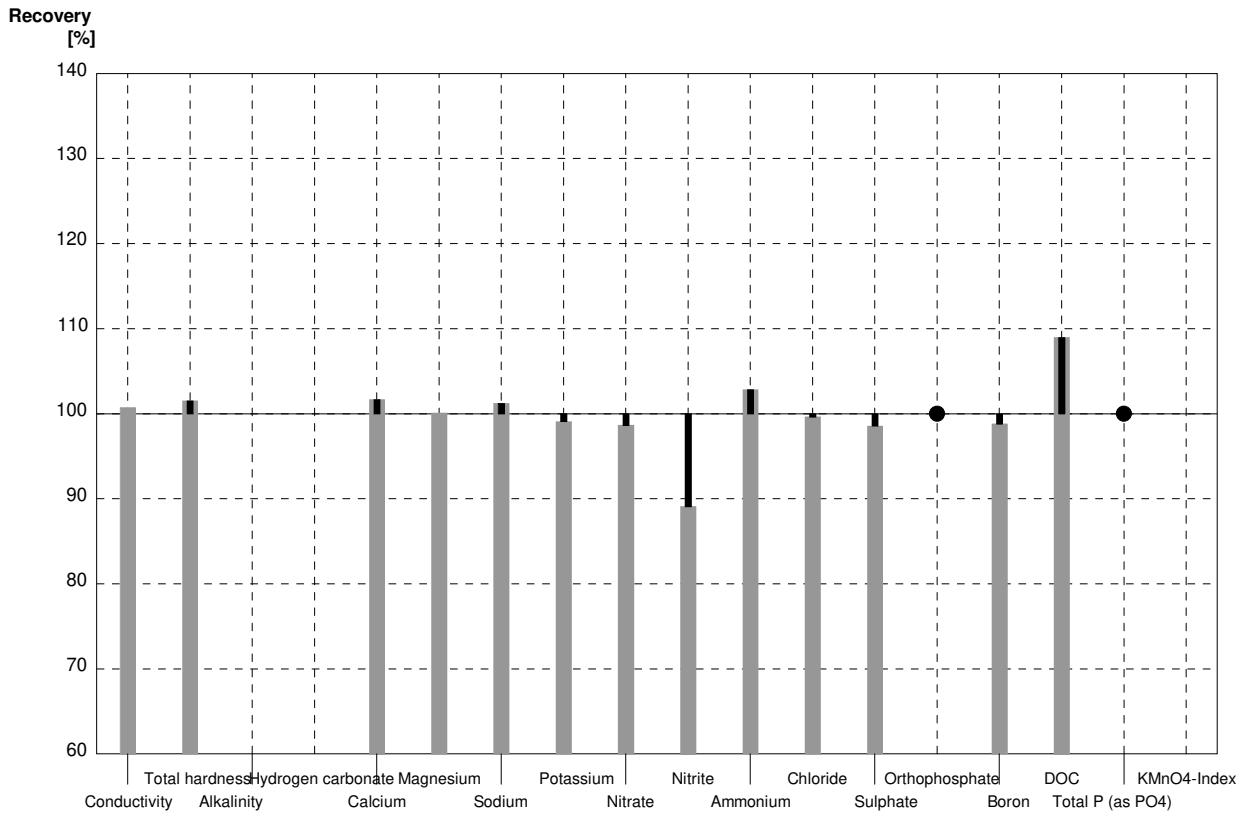
■ Deviation ■ Recovery



Sample N167A
Laboratory T

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	548	27,4	µS/cm	101%
Total hardness	1,94	0,02	1,97	0,300	mmol/l	102%
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	61,1	9,17	mg/l	102%
Magnesium	10,79	0,14	10,8	1,08	mg/l	100%
Sodium	24,9	0,3	25,2	3,78	mg/l	101%
Potassium	8,81	0,06	8,73	1,31	mg/l	99%
Nitrate	37,2	0,7	36,7	3,67	mg/l	99%
Nitrite	0,0404	0,0009	0,0360	0,0018	mg/l	89%
Ammonium	0,070	0,004	0,072	0,0072	mg/l	103%
Chloride	54,8	1,2	54,6	5,46	mg/l	100%
Sulphate	34,7	0,4	34,2	3,42	mg/l	99%
Orthophosphate	<0,009		<0,046		mg/l	•
Boron	0,1265	0,0012	0,125	0,0063	mg/l	99%
DOC	1,89	0,04	2,06	0,412	mg/l	109%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

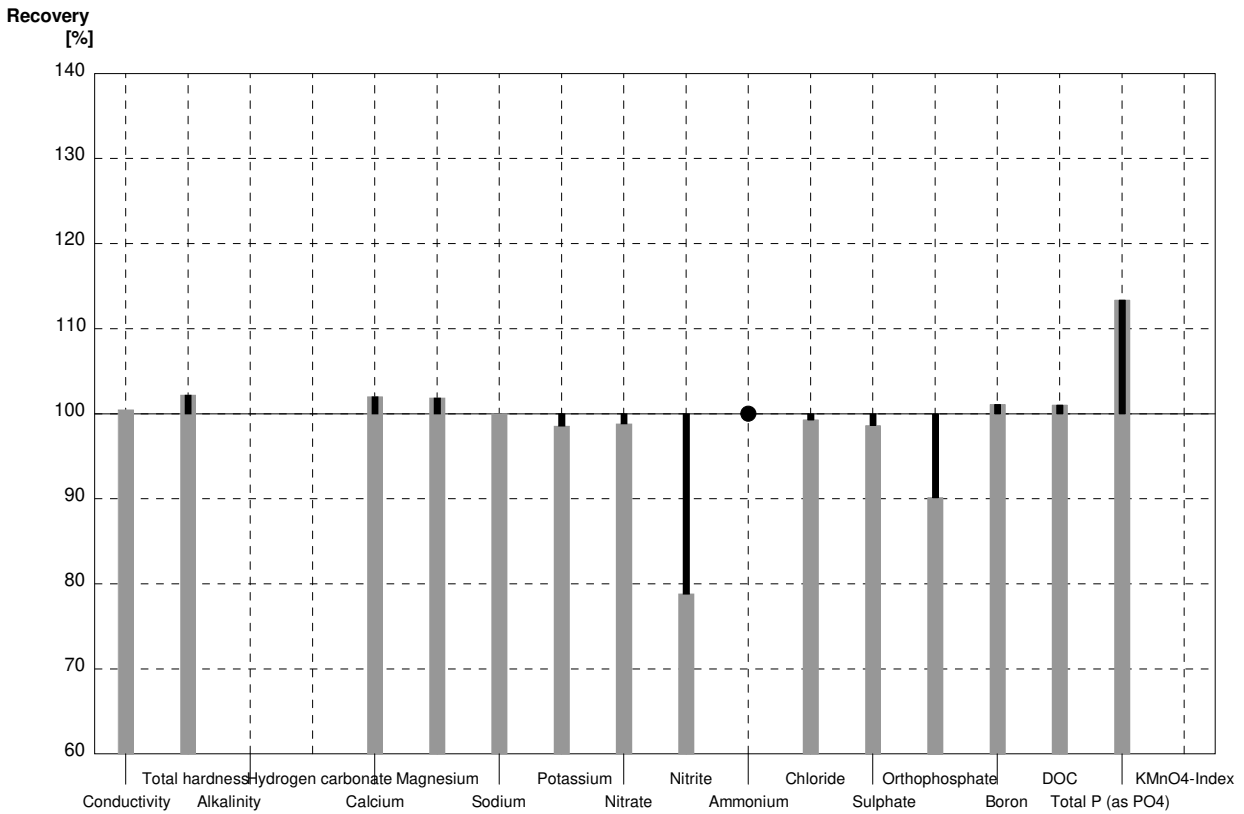
■ Deviation ■ Recovery



Sample N167B
Laboratory T

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	22,3	µS/cm	100%
Total hardness	1,321	0,015	1,35	0,203	mmol/l	102%
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	40,4	6,06	mg/l	102%
Magnesium	8,07	0,10	8,22	0,822	mg/l	102%
Sodium	30,8	0,2	30,8	4,62	mg/l	100%
Potassium	6,98	0,04	6,88	1,03	mg/l	99%
Nitrate	51,3	1,2	50,7	5,07	mg/l	99%
Nitrite	0,0203	0,0018	0,0160	0,0008	mg/l	79%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,4	2,84	mg/l	99%
Sulphate	58,9	0,4	58,1	5,81	mg/l	99%
Orthophosphate	0,061	0,001	0,055	0,0083	mg/l	90%
Boron	0,0544	0,0004	0,055	0,0028	mg/l	101%
DOC	4,88	0,05	4,93	0,986	mg/l	101%
Total P (as PO4)	0,187	0,003	0,212	0,042	mg/l	113%
KMnO4-Index	5,64	0,15			mg/l	

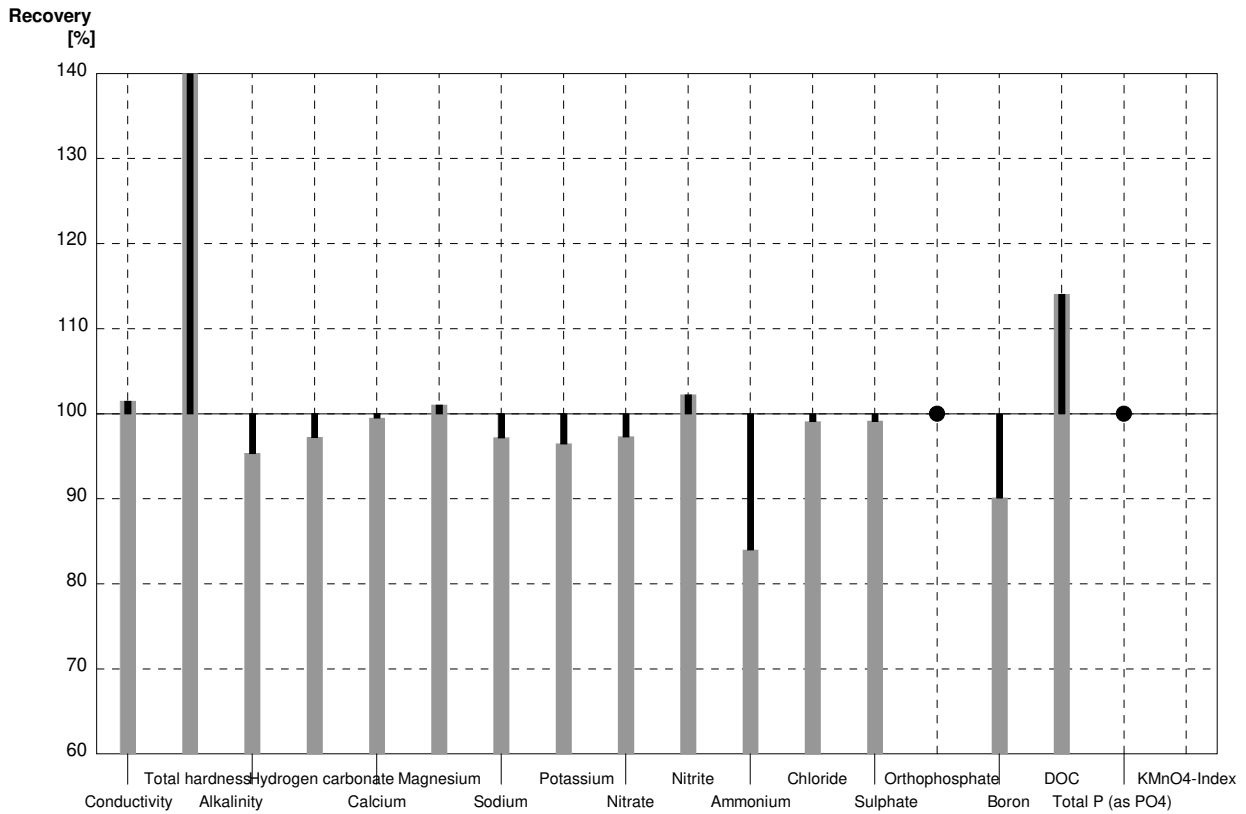
■ Deviation ■ Recovery



Sample N167A
Laboratory U

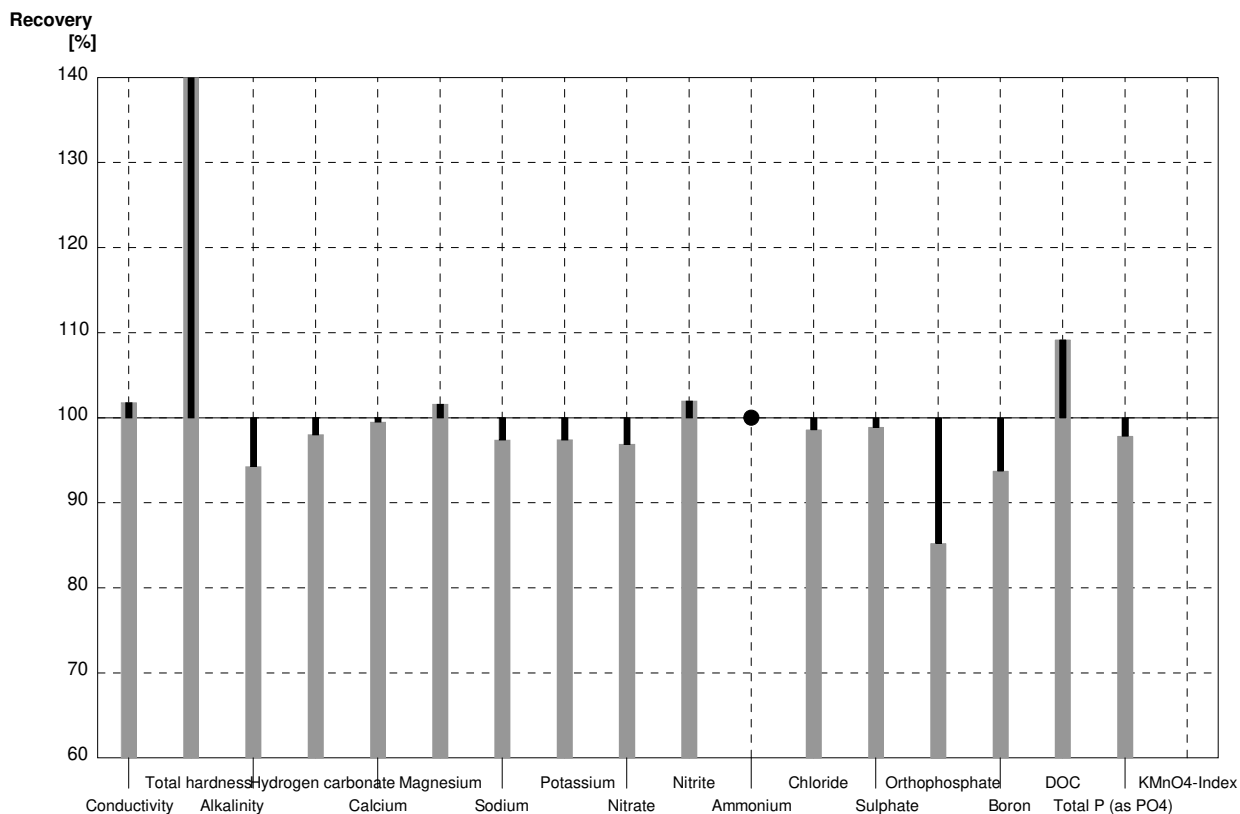
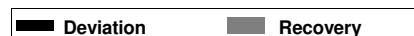
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	552	16,0	µS/cm	101%
Total hardness	1,94	0,02	3,88		mmol/l	200%
Alkalinity	2,36	0,03	2,25	0,1125	mmol/l	95%
Hydrogen carbonate	140,9	1,7	137		mg/l	97%
Calcium	60,1	0,9	59,8	8,97	mg/l	100%
Magnesium	10,79	0,14	10,9	1,635	mg/l	101%
Sodium	24,9	0,3	24,2	3,63	mg/l	97%
Potassium	8,81	0,06	8,5	1,275	mg/l	96%
Nitrate	37,2	0,7	36,2	5,43	mg/l	97%
Nitrite	0,0404	0,0009	0,0413	0,0083	mg/l	102%
Ammonium	0,070	0,004	0,0588	0,0059	mg/l	84%
Chloride	54,8	1,2	54,3	8,145	mg/l	99%
Sulphate	34,7	0,4	34,4	5,16	mg/l	99%
Orthophosphate	<0,009		<0,03		mg/l	•
Boron	0,1265	0,0012	0,114	0,04	mg/l	90%
DOC	1,89	0,04	2,156	0,5395	mg/l	114%
Total P (as PO4)	<0,009		<0,03		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



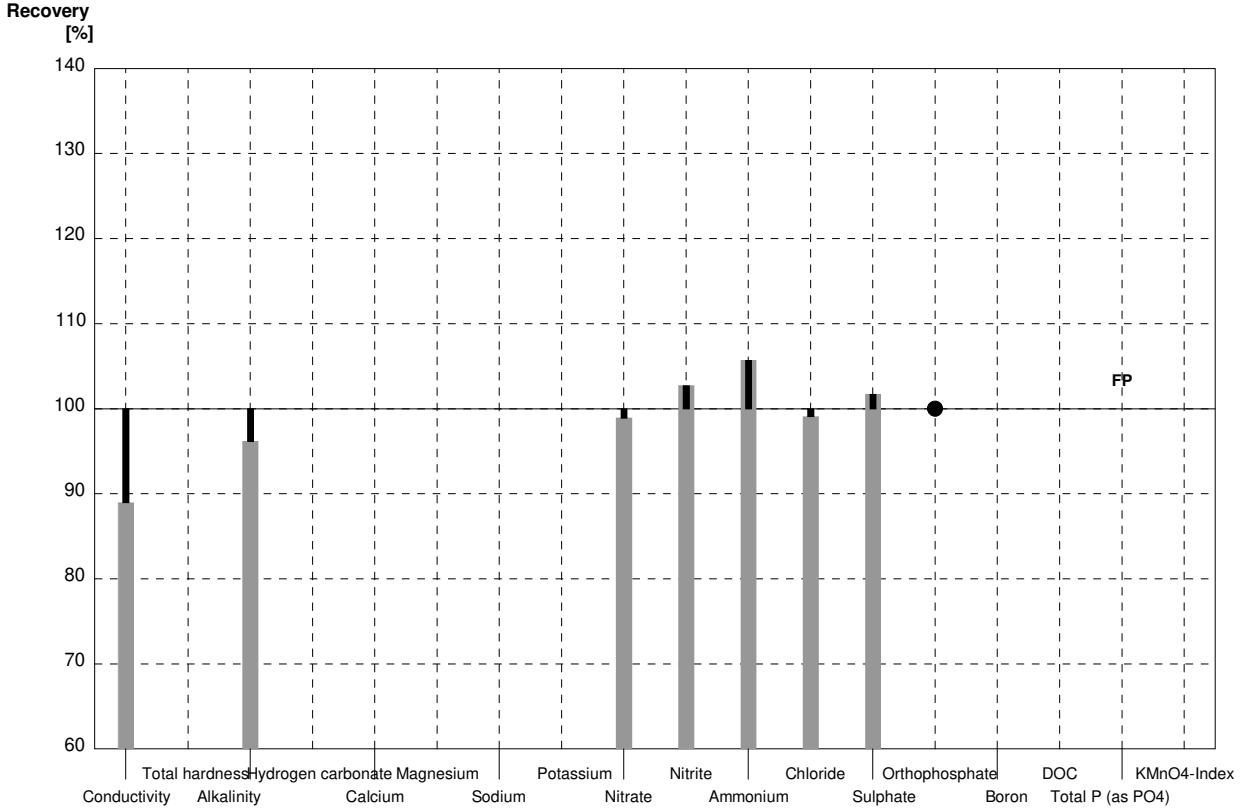
Sample N167B
Laboratory U

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	452	13,1	µS/cm	102%
Total hardness	1,321	0,015	2,64		mmol/l	200%
Alkalinity	1,294	0,018	1,22	0,061	mmol/l	94%
Hydrogen carbonate	75,9	1,1	74,4		mg/l	98%
Calcium	39,6	0,6	39,4	5,91	mg/l	99%
Magnesium	8,07	0,10	8,2	1,23	mg/l	102%
Sodium	30,8	0,2	30,0	4,5	mg/l	97%
Potassium	6,98	0,04	6,8	1,02	mg/l	97%
Nitrate	51,3	1,2	49,7	7,455	mg/l	97%
Nitrite	0,0203	0,0018	0,0207	0,0041	mg/l	102%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,2	4,23	mg/l	99%
Sulphate	58,9	0,4	58,25	8,738	mg/l	99%
Orthophosphate	0,061	0,001	0,052	0,006	mg/l	85%
Boron	0,0544	0,0004	0,051	0,02	mg/l	94%
DOC	4,88	0,05	5,327	1,332	mg/l	109%
Total P (as PO4)	0,187	0,003	0,183	0,022	mg/l	98%
KMnO4-Index	5,64	0,15			mg/l	



Sample N167A
Laboratory V

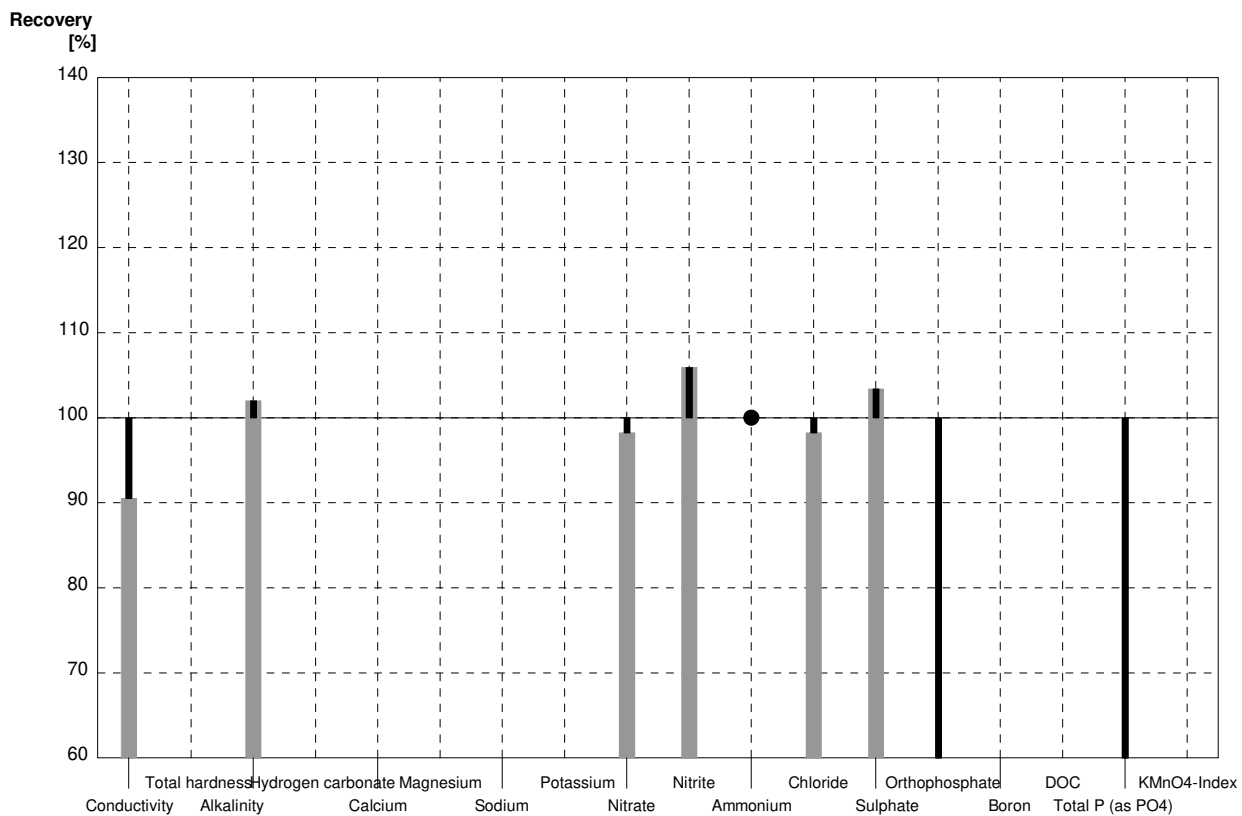
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	484		µS/cm	89%
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03	2,27		mmol/l	96%
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	36,8	0,828	mg/l	99%
Nitrite	0,0404	0,0009	0,0415	0,002	mg/l	103%
Ammonium	0,070	0,004	0,074	0,002	mg/l	106%
Chloride	54,8	1,2	54,3	1,41	mg/l	99%
Sulphate	34,7	0,4	35,3		mg/l	102%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009		0,0195		mg/l	FP
KMnO4-Index	3,51	0,12			mg/l	



Sample N167B
Laboratory V

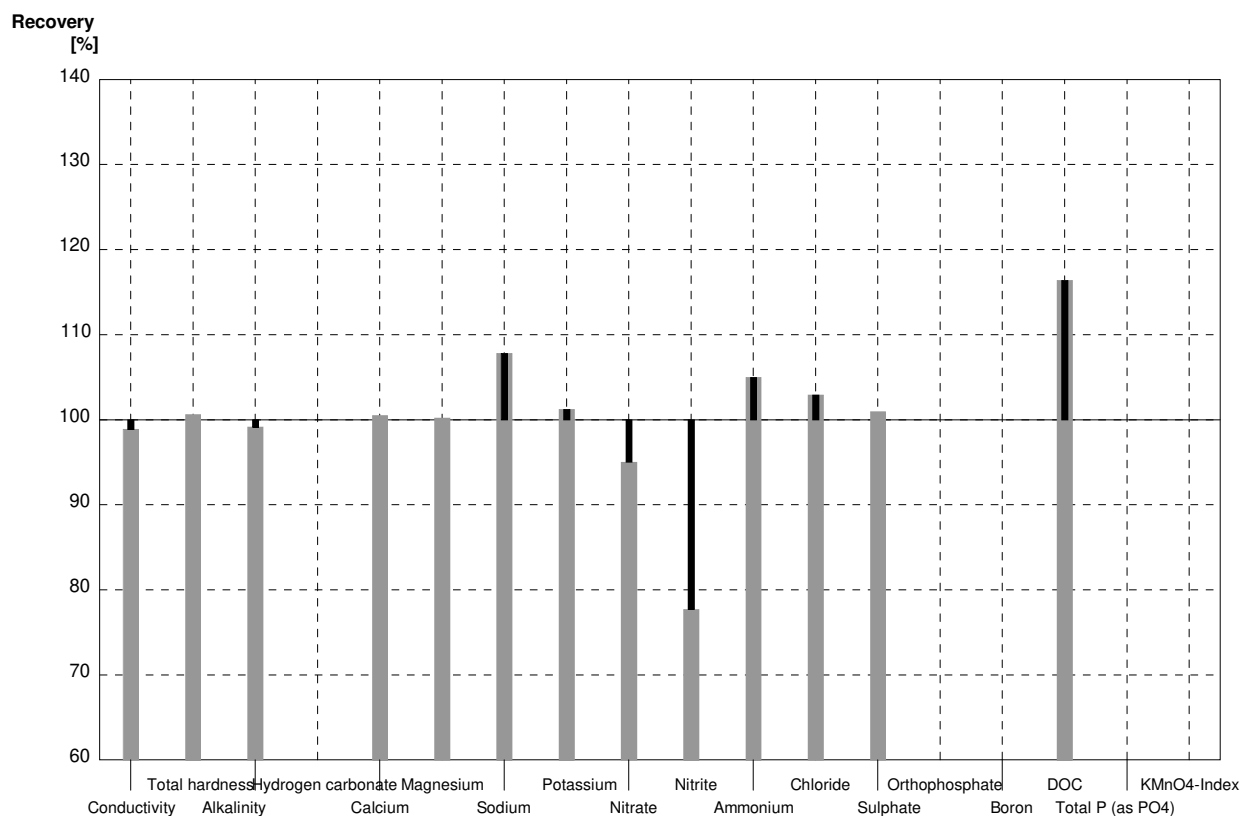
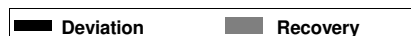
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	402		µS/cm	91%
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018	1,32		mmol/l	102%
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	50,4	1,13	mg/l	98%
Nitrite	0,0203	0,0018	0,0215	0,001	mg/l	106%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,1	0,73	mg/l	98%
Sulphate	58,9	0,4	60,9		mg/l	103%
Orthophosphate	0,061	0,001	0,0272		mg/l	45%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003	0,072	0,003	mg/l	39%
KMnO4-Index	5,64	0,15			mg/l	

■ Deviation ■ Recovery



Sample N167A
Laboratory W

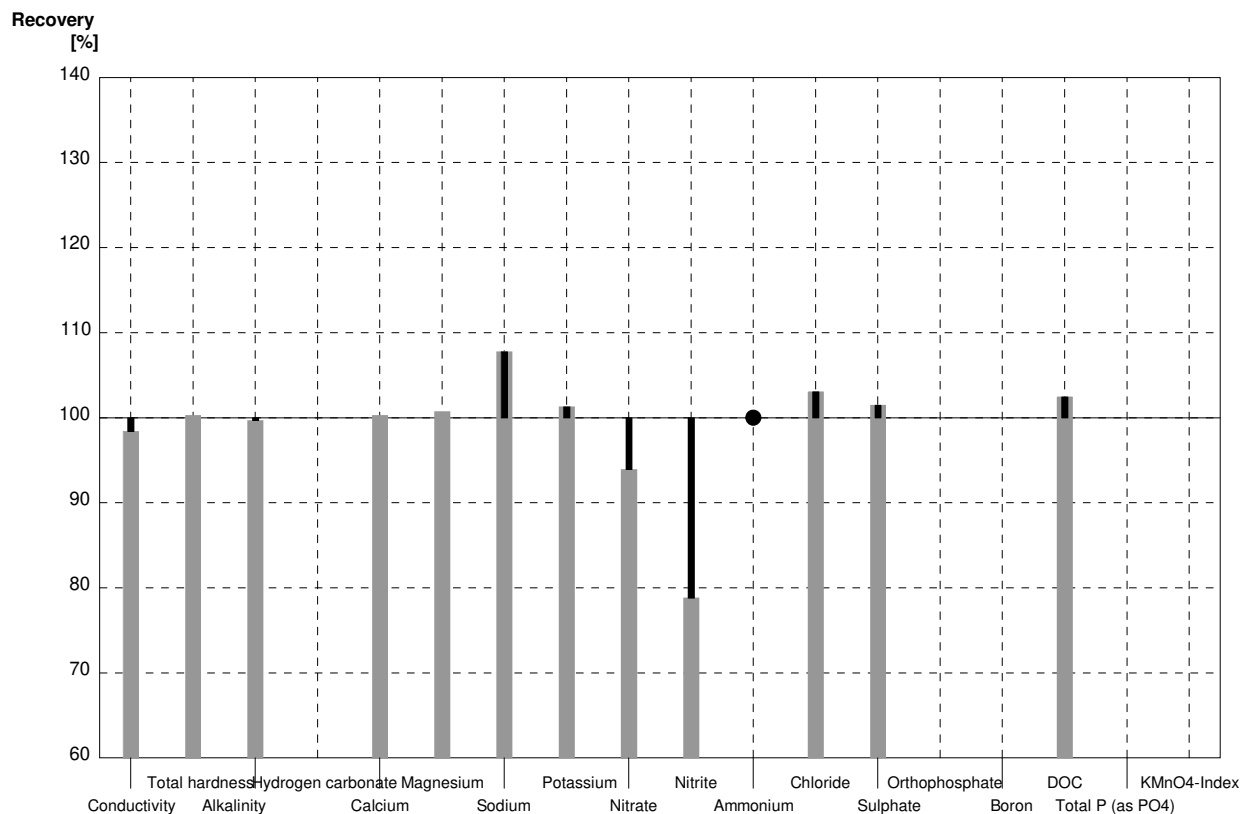
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	538	30	µS/cm	99%
Total hardness	1,94	0,02	1,952	0,05	mmol/l	101%
Alkalinity	2,36	0,03	2,34	0,02	mmol/l	99%
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	60,40	0,6	mg/l	100%
Magnesium	10,79	0,14	10,81	0,6	mg/l	100%
Sodium	24,9	0,3	26,84	0,3	mg/l	108%
Potassium	8,81	0,06	8,92	0,06	mg/l	101%
Nitrate	37,2	0,7	35,35	0,5	mg/l	95%
Nitrite	0,0404	0,0009	0,0314	0,015	mg/l	78%
Ammonium	0,070	0,004	0,0735	0,080	mg/l	105%
Chloride	54,8	1,2	56,40	0,25	mg/l	103%
Sulphate	34,7	0,4	35,04	3,0	mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,20	0,03	mg/l	116%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12			mg/l	



Sample N167B
Laboratory W

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	437	30	µS/cm	98%
Total hardness	1,321	0,015	1,325	0,05	mmol/l	100%
Alkalinity	1,294	0,018	1,29	0,02	mmol/l	100%
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	39,71	0,6	mg/l	100%
Magnesium	8,07	0,10	8,13	0,6	mg/l	101%
Sodium	30,8	0,2	33,19	0,3	mg/l	108%
Potassium	6,98	0,04	7,07	0,06	mg/l	101%
Nitrate	51,3	1,2	48,19	0,5	mg/l	94%
Nitrite	0,0203	0,0018	0,0160	0,015	mg/l	79%
Ammonium	<0,01		<0,03	0,080	mg/l	•
Chloride	28,6	0,4	29,48	0,25	mg/l	103%
Sulphate	58,9	0,4	59,78	3,0	mg/l	101%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,00	0,03	mg/l	102%
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15			mg/l	

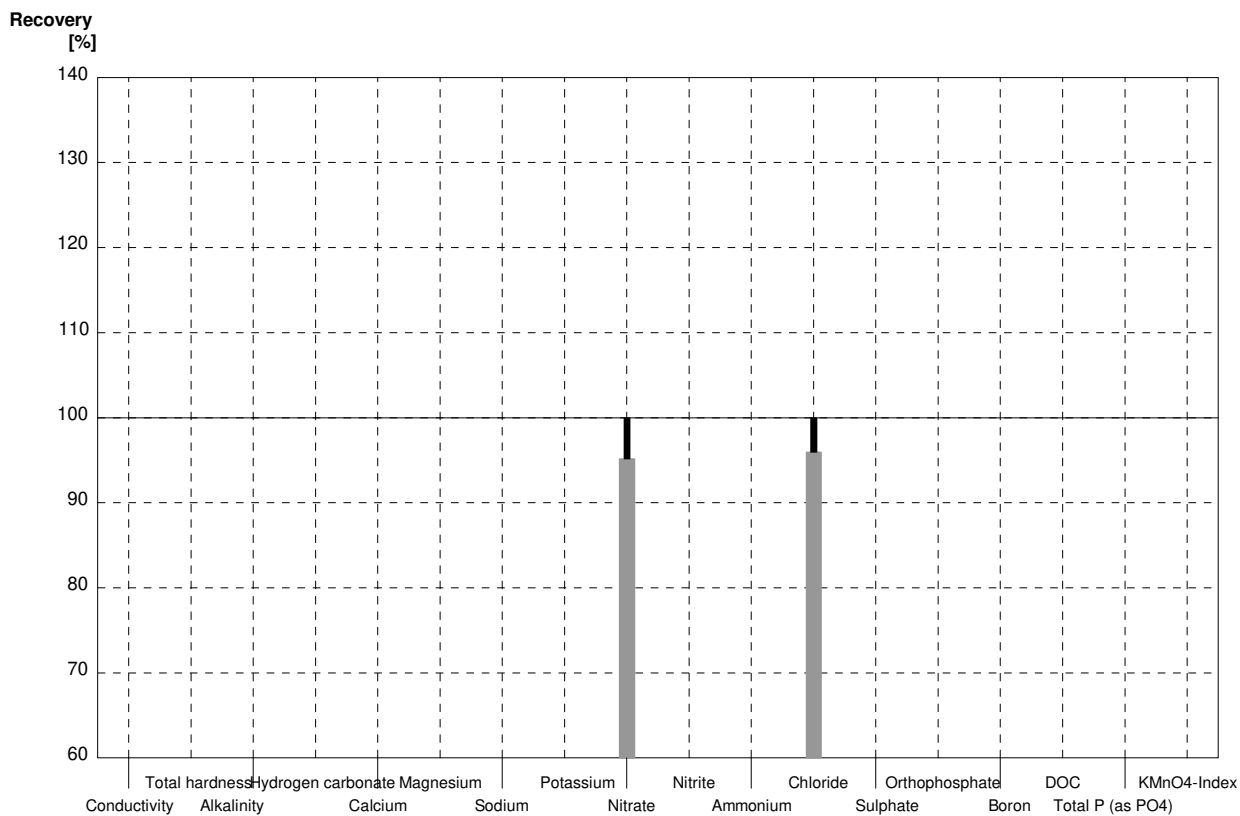
■ Deviation ■ Recovery



Sample N167A
Laboratory X

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	35,41	0,5	mg/l	95%
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004			mg/l	
Chloride	54,8	1,2	52,6	0,6	mg/l	96%
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12			mg/l	

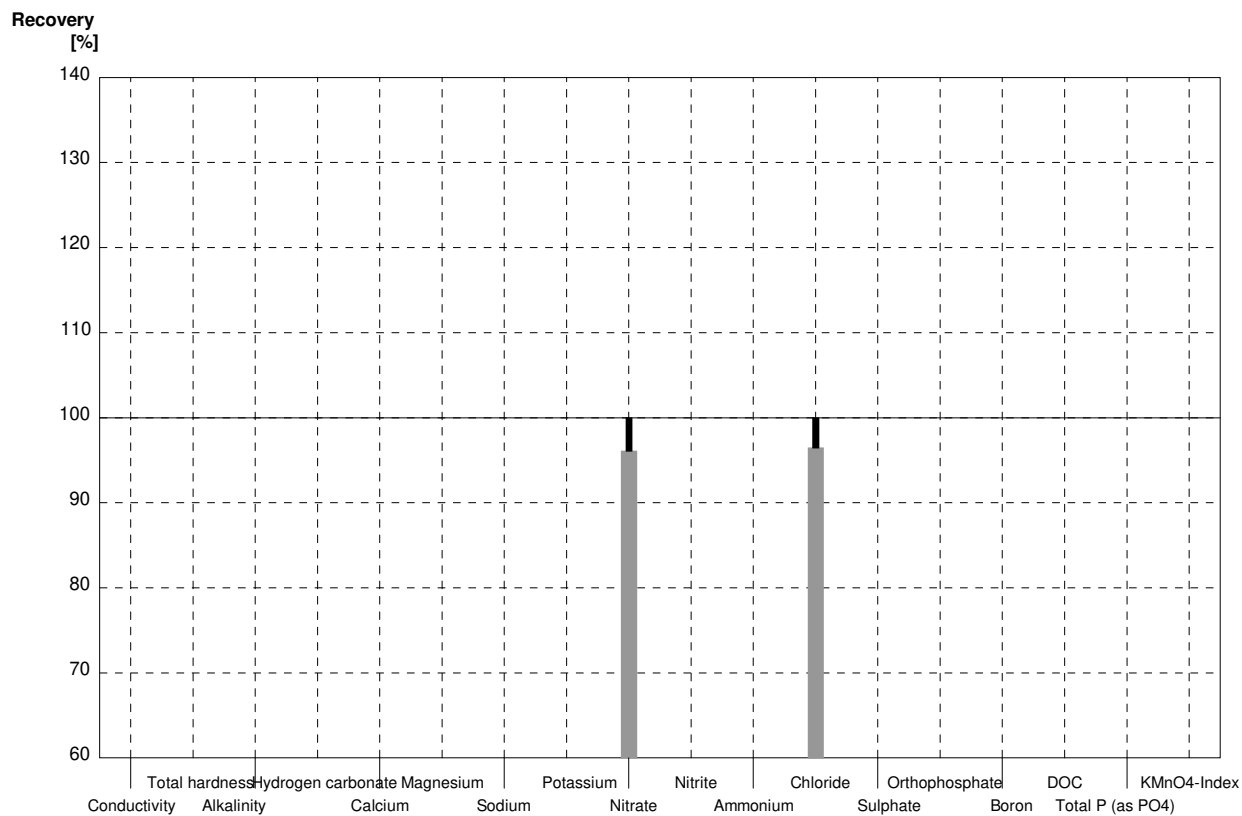
■ Deviation ■ Recovery



Sample N167B
Laboratory X

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	49,3	0,5	mg/l	96%
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01				mg/l	
Chloride	28,6	0,4	27,59	0,3	mg/l	96%
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15			mg/l	

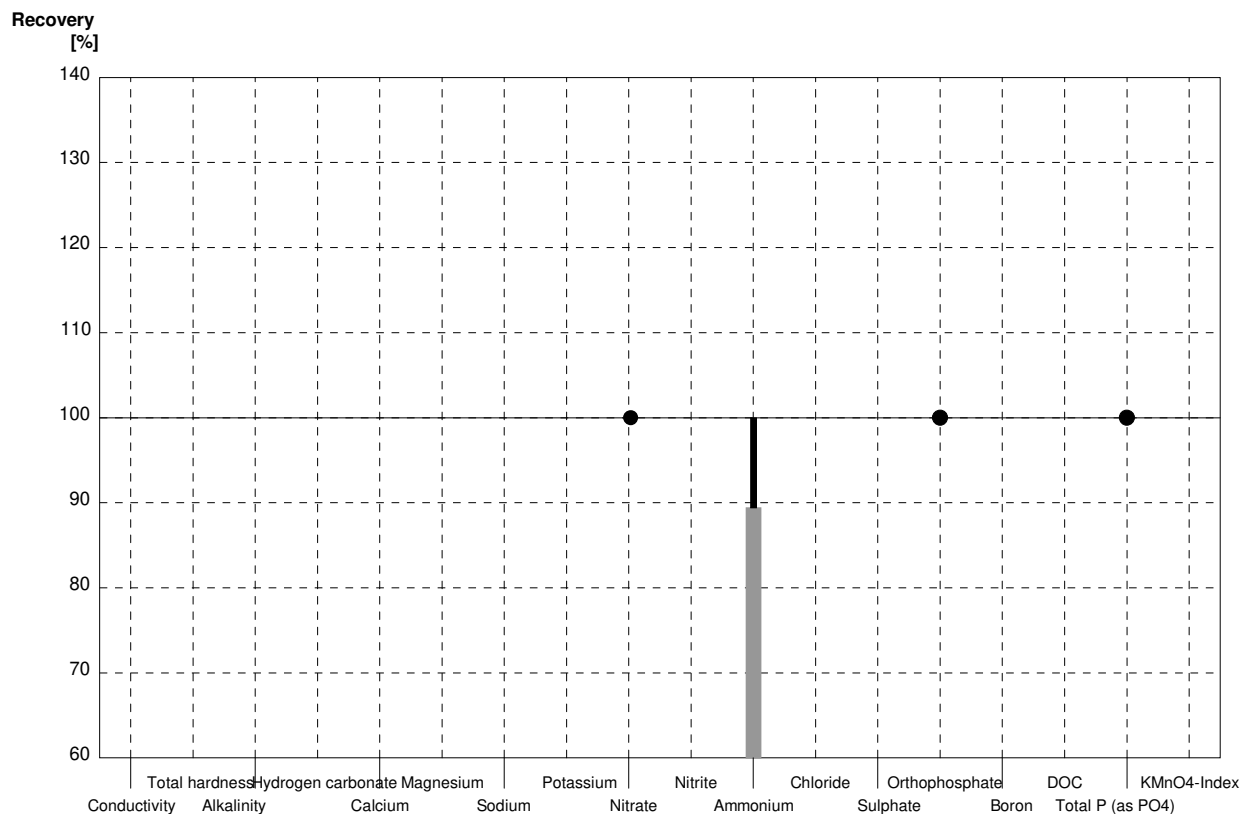
■ Deviation ■ Recovery



Sample N167A
Laboratory Y

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	>30		mg/l	•
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004	0,0626	0,00150	mg/l	89%
Chloride	54,8	1,2			mg/l	
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009		<0,019		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

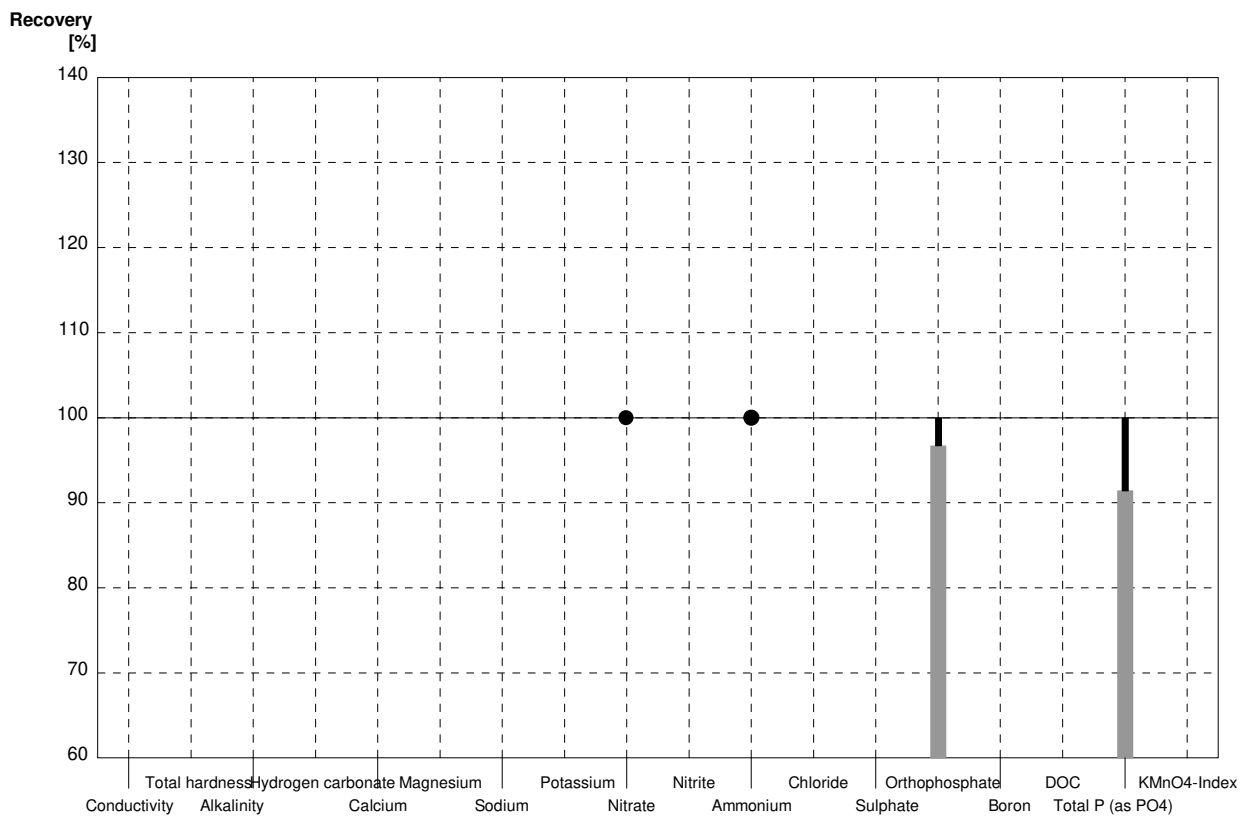
■ Deviation ■ Recovery



Sample N167B
Laboratory Y

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	>30		mg/l	•
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4			mg/l	
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001	0,059	0,00120	mg/l	97%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003	0,171	0,0128	mg/l	91%
KMnO4-Index	5,64	0,15			mg/l	

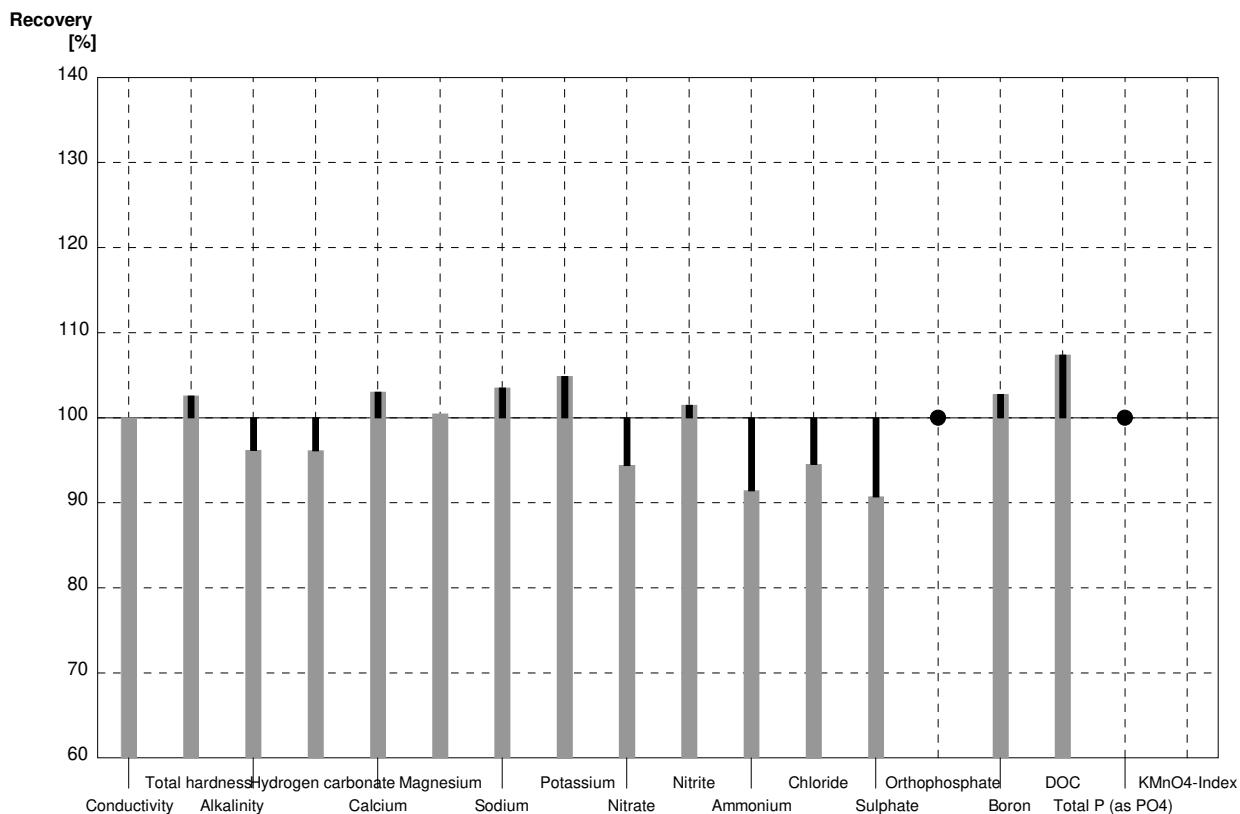
■ Deviation ■ Recovery



Sample N167A
Laboratory Z

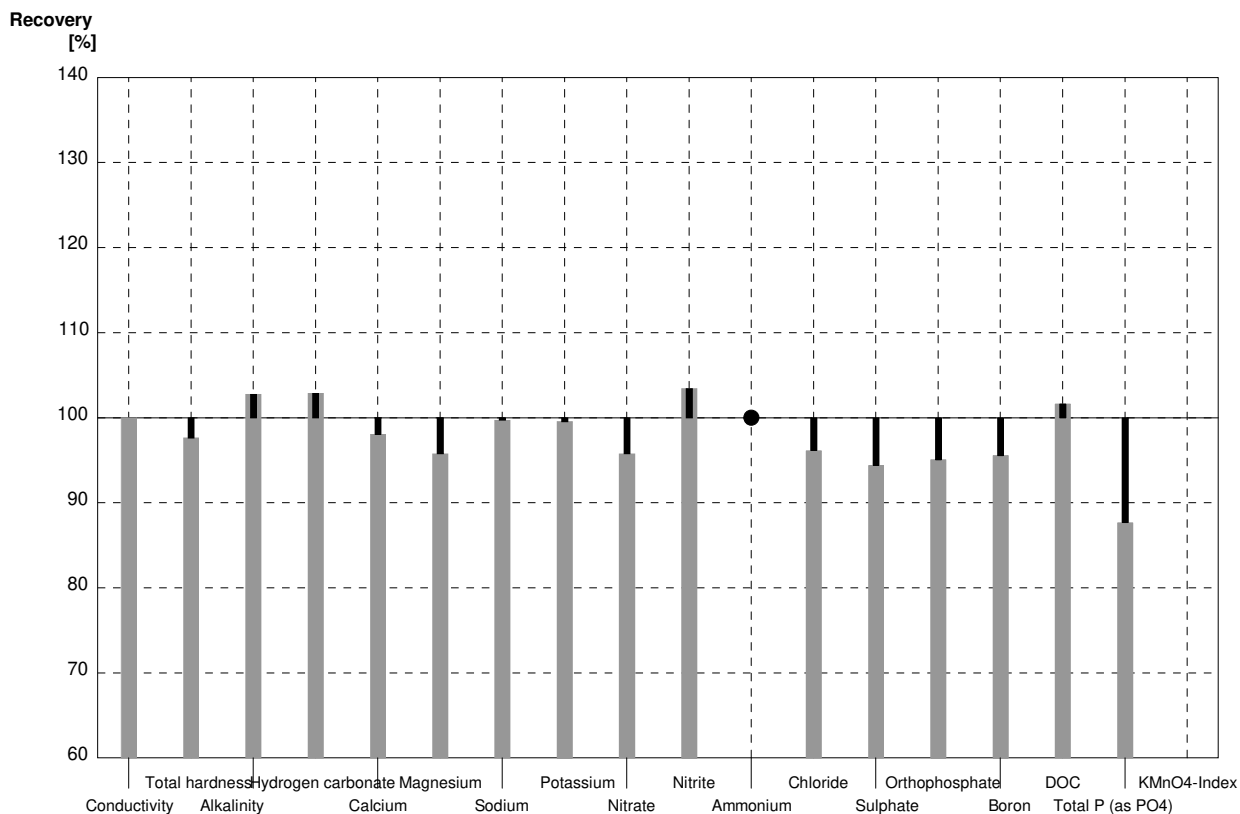
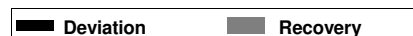
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	544	4,51	µS/cm	100%
Total hardness	1,94	0,02	1,99		mmol/l	103%
Alkalinity	2,36	0,03	2,27	0,22	mmol/l	96%
Hydrogen carbonate	140,9	1,7	135,44		mg/l	96%
Calcium	60,1	0,9	61,93	6,1	mg/l	103%
Magnesium	10,79	0,14	10,84	1,0	mg/l	100%
Sodium	24,9	0,3	25,78	2,5	mg/l	104%
Potassium	8,81	0,06	9,24	0,9	mg/l	105%
Nitrate	37,2	0,7	35,12	3,5	mg/l	94%
Nitrite	0,0404	0,0009	0,0410	0,004	mg/l	101%
Ammonium	0,070	0,004	0,064	0,006	mg/l	91%
Chloride	54,8	1,2	51,80	5,2	mg/l	95%
Sulphate	34,7	0,4	31,48	3,1	mg/l	91%
Orthophosphate	<0,009		<0,001		mg/l	•
Boron	0,1265	0,0012	0,130	0,0130	mg/l	103%
DOC	1,89	0,04	2,03	0,2	mg/l	107%
Total P (as PO4)	<0,009		<0,003		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



Sample N167B
Laboratory Z

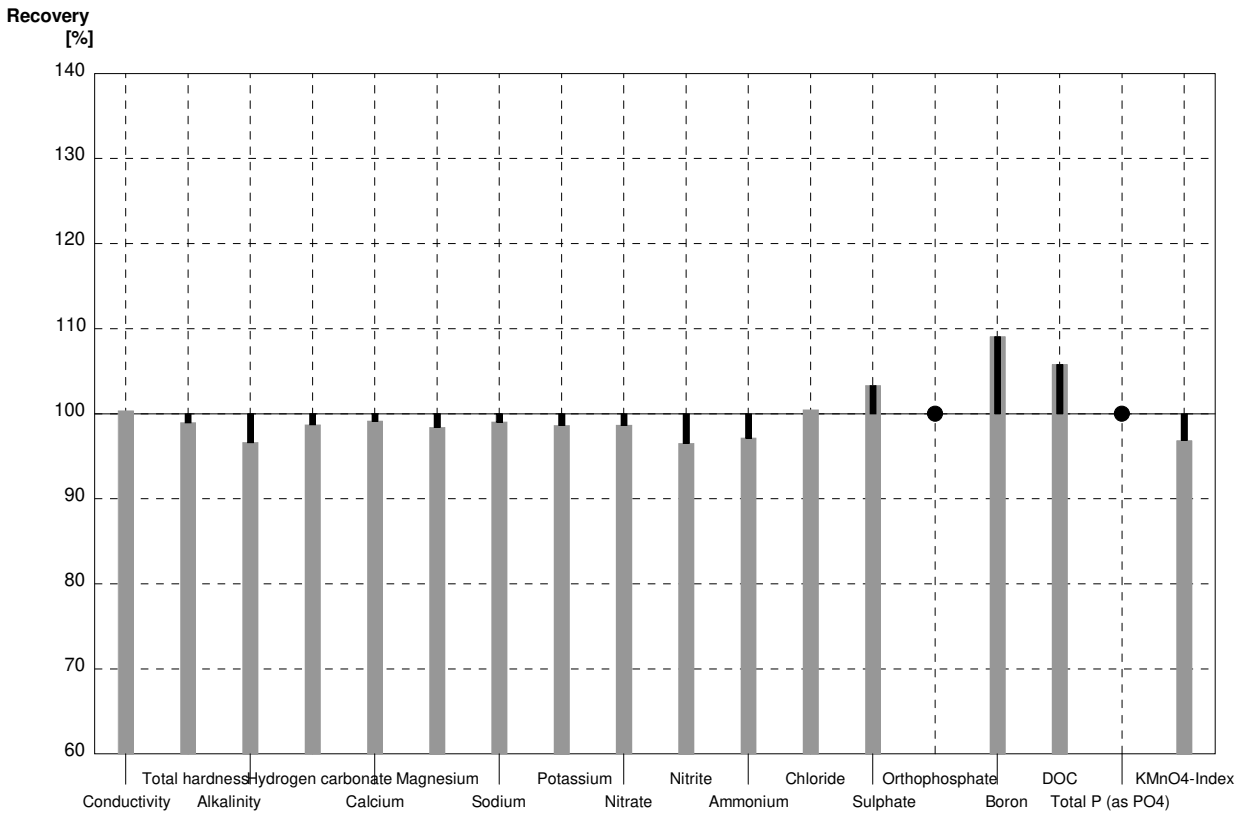
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	4,51	µS/cm	100%
Total hardness	1,321	0,015	1,29		mmol/l	98%
Alkalinity	1,294	0,018	1,33	0,13	mmol/l	103%
Hydrogen carbonate	75,9	1,1	78,09		mg/l	103%
Calcium	39,6	0,6	38,84	3,8	mg/l	98%
Magnesium	8,07	0,10	7,73	0,8	mg/l	96%
Sodium	30,8	0,2	30,72	3,1	mg/l	100%
Potassium	6,98	0,04	6,95	0,7	mg/l	100%
Nitrate	51,3	1,2	49,14	4,9	mg/l	96%
Nitrite	0,0203	0,0018	0,0210	0,002	mg/l	103%
Ammonium	<0,01		<0,007		mg/l	•
Chloride	28,6	0,4	27,50	2,8	mg/l	96%
Sulphate	58,9	0,4	55,61	5,6	mg/l	94%
Orthophosphate	0,061	0,001	0,058	0,006	mg/l	95%
Boron	0,0544	0,0004	0,052	0,0052	mg/l	96%
DOC	4,88	0,05	4,96	0,5	mg/l	102%
Total P (as PO4)	0,187	0,003	0,164	0,016	mg/l	88%
KMnO4-Index	5,64	0,15			mg/l	



Sample N167A
Laboratory AA

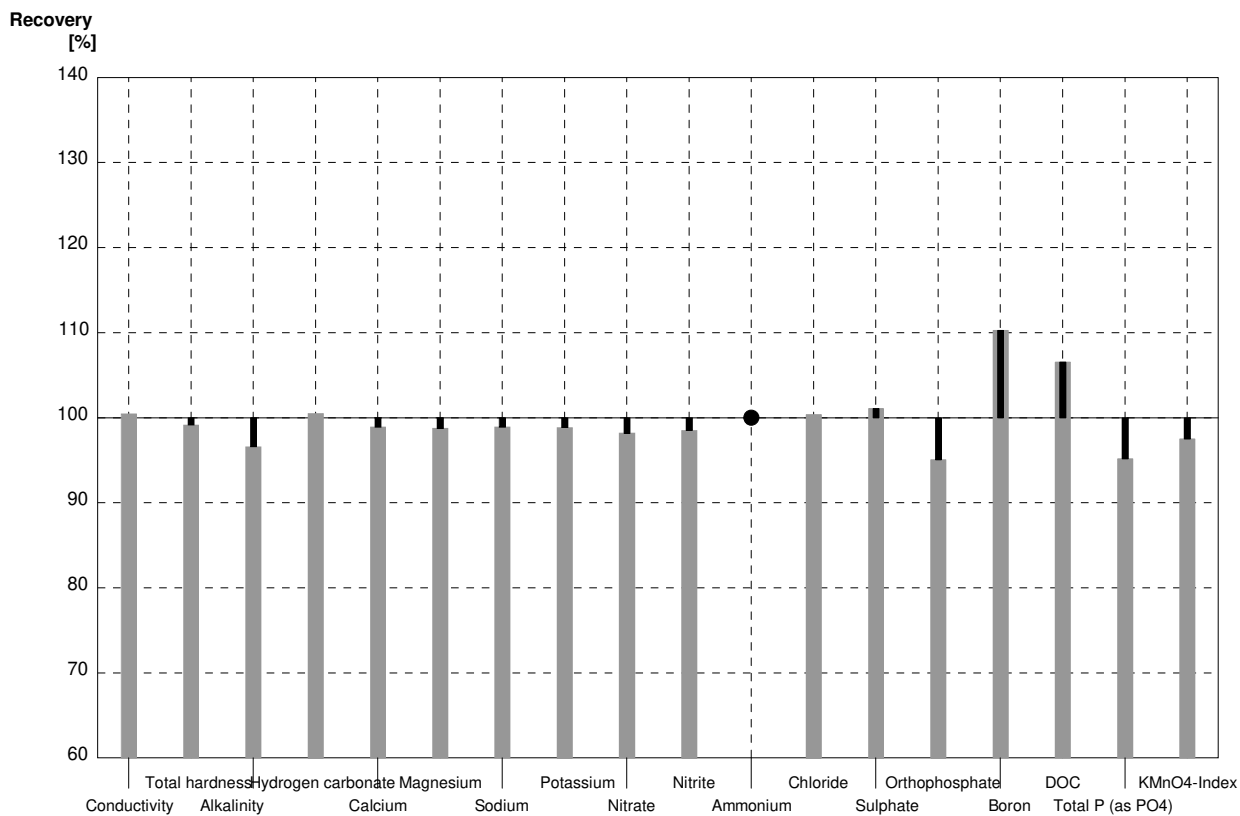
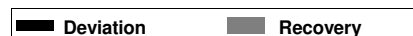
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	546	54,6	µS/cm	100%
Total hardness	1,94	0,02	1,92		mmol/l	99%
Alkalinity	2,36	0,03	2,28	0,342	mmol/l	97%
Hydrogen carbonate	140,9	1,7	139,1	20,87	mg/l	99%
Calcium	60,1	0,9	59,58	5,958	mg/l	99%
Magnesium	10,79	0,14	10,62	1,062	mg/l	98%
Sodium	24,9	0,3	24,66	2,466	mg/l	99%
Potassium	8,81	0,06	8,69	0,869	mg/l	99%
Nitrate	37,2	0,7	36,7	1,47	mg/l	99%
Nitrite	0,0404	0,0009	0,0390	0,0059	mg/l	97%
Ammonium	0,070	0,004	0,068	0,0068	mg/l	97%
Chloride	54,8	1,2	55,07	2,754	mg/l	100%
Sulphate	34,7	0,4	35,86	1,79	mg/l	103%
Orthophosphate	<0,009		0,0060	0,00090	mg/l	•
Boron	0,1265	0,0012	0,138	0,0166	mg/l	109%
DOC	1,89	0,04	2,00	0,160	mg/l	106%
Total P (as PO4)	<0,009		<0,006		mg/l	•
KMnO4-Index	3,51	0,12	3,40	0,544	mg/l	97%

■ Deviation ■ Recovery



Sample N167B
Laboratory AA

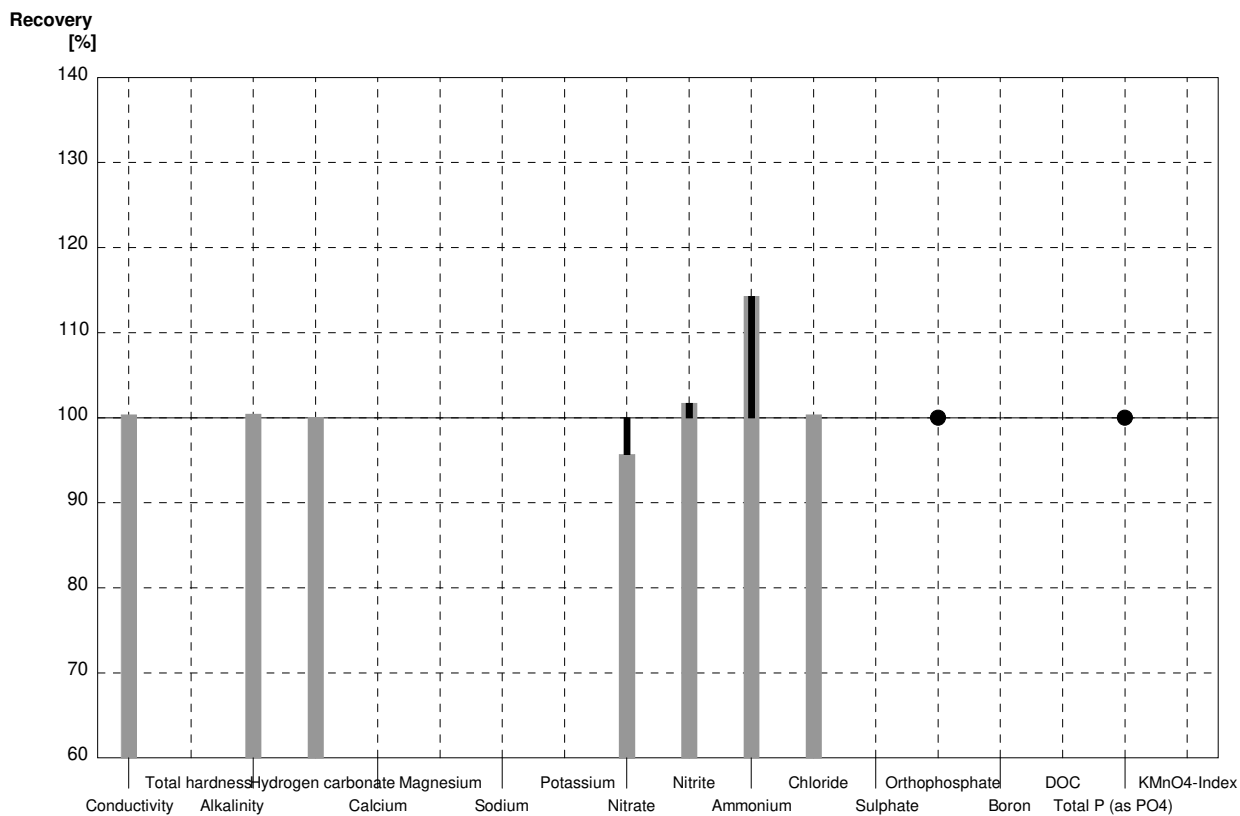
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	44,6	µS/cm	100%
Total hardness	1,321	0,015	1,31		mmol/l	99%
Alkalinity	1,294	0,018	1,25	0,188	mmol/l	97%
Hydrogen carbonate	75,9	1,1	76,3	11,4	mg/l	101%
Calcium	39,6	0,6	39,17	3,917	mg/l	99%
Magnesium	8,07	0,10	7,97	0,797	mg/l	99%
Sodium	30,8	0,2	30,47	3,047	mg/l	99%
Potassium	6,98	0,04	6,90	0,690	mg/l	99%
Nitrate	51,3	1,2	50,381	2,0153	mg/l	98%
Nitrite	0,0203	0,0018	0,0200	0,00300	mg/l	99%
Ammonium	<0,01		<0,0052		mg/l	•
Chloride	28,6	0,4	28,71	1,436	mg/l	100%
Sulphate	58,9	0,4	59,55	2,978	mg/l	101%
Orthophosphate	0,061	0,001	0,058	0,0087	mg/l	95%
Boron	0,0544	0,0004	0,060	0,0072	mg/l	110%
DOC	4,88	0,05	5,20	0,420	mg/l	107%
Total P (as PO4)	0,187	0,003	0,178	0,0267	mg/l	95%
KMnO4-Index	5,64	0,15	5,50	0,880	mg/l	98%



Sample N167A
Laboratory AB

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	546	3,87	µS/cm	100%
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03	2,37	0,067	mmol/l	100%
Hydrogen carbonate	140,9	1,7	141	2,04	mg/l	100%
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7	35,6	2,44	mg/l	96%
Nitrite	0,0404	0,0009	0,0411	0,0041	mg/l	102%
Ammonium	0,070	0,004	0,080	0,012	mg/l	114%
Chloride	54,8	1,2	55	0,55	mg/l	100%
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009		<0,006	0	mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009		<0,006	0	mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

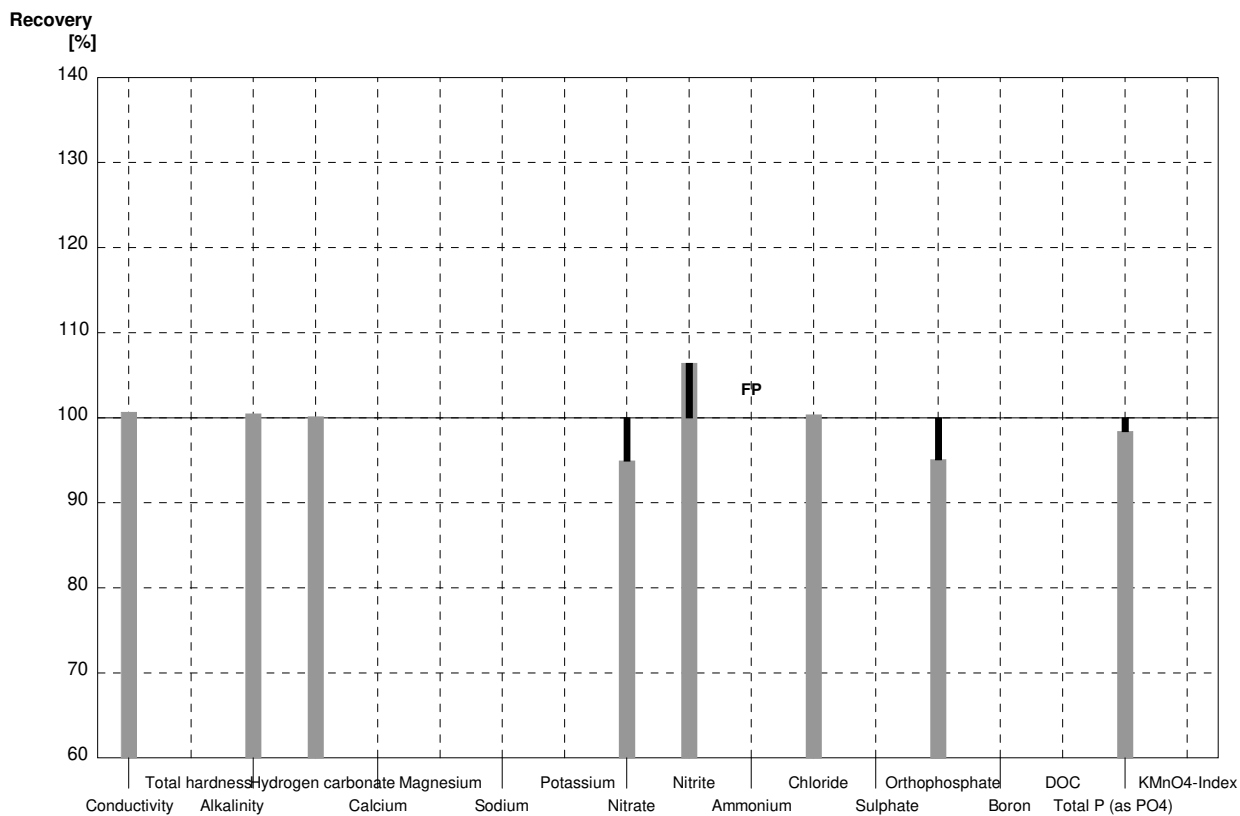
■ Deviation ■ Recovery



Sample N167B
Laboratory AB

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	447	3,17	µS/cm	101%
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018	1,30	0,037	mmol/l	100%
Hydrogen carbonate	75,9	1,1	76	1,10	mg/l	100%
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2	48,7	3,34	mg/l	95%
Nitrite	0,0203	0,0018	0,0216	0,0022	mg/l	106%
Ammonium	<0,01		0,0220	0,0033	mg/l	FP
Chloride	28,6	0,4	28,7	0,29	mg/l	100%
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001	0,058	0,007	mg/l	95%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003	0,184	0,024	mg/l	98%
KMnO4-Index	5,64	0,15			mg/l	

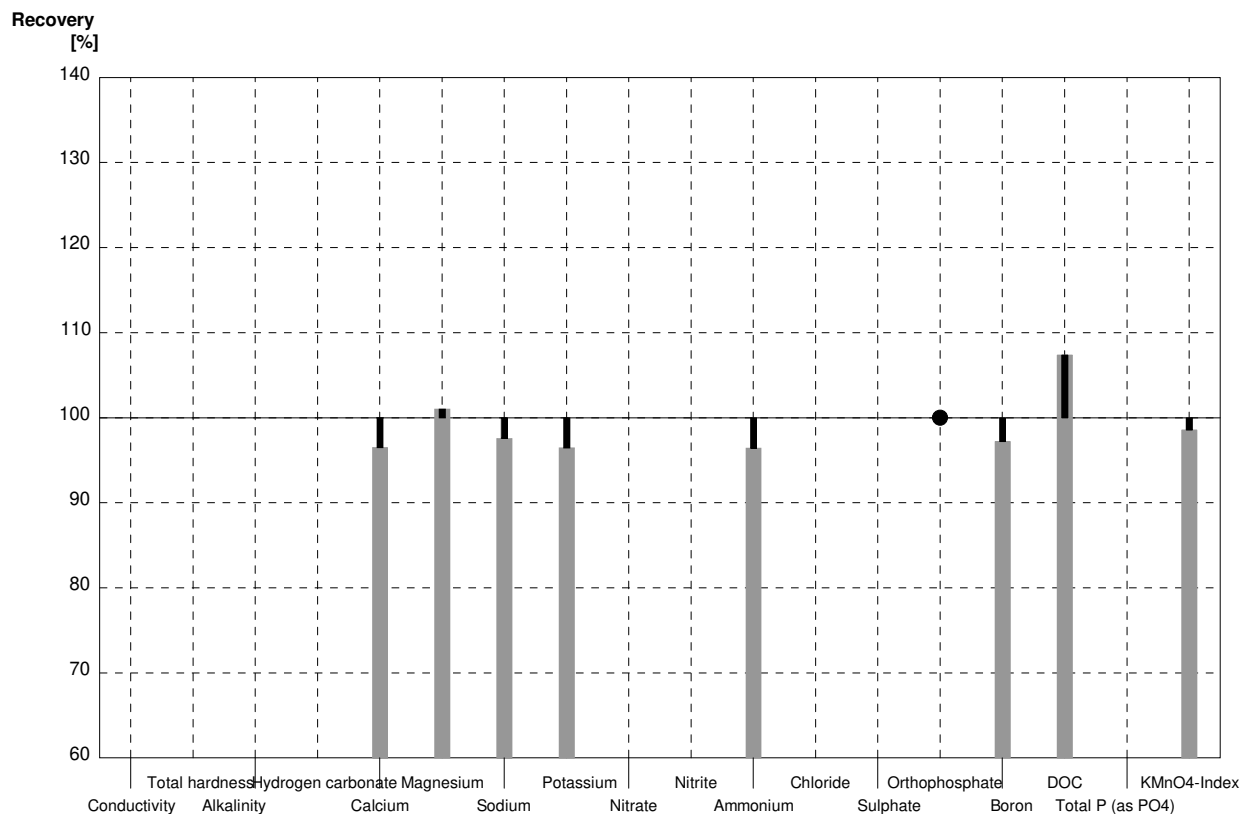
■ Deviation ■ Recovery



Sample N167A
Laboratory AC

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	58		mg/l	97%
Magnesium	10,79	0,14	10,9		mg/l	101%
Sodium	24,9	0,3	24,3		mg/l	98%
Potassium	8,81	0,06	8,5		mg/l	96%
Nitrate	37,2	0,7			mg/l	
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004	0,0675	0,00635	mg/l	96%
Chloride	54,8	1,2			mg/l	
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009		<0,0100	0,00281	mg/l	•
Boron	0,1265	0,0012	0,123		mg/l	97%
DOC	1,89	0,04	2,03	0,508	mg/l	107%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,46	0,799	mg/l	99%

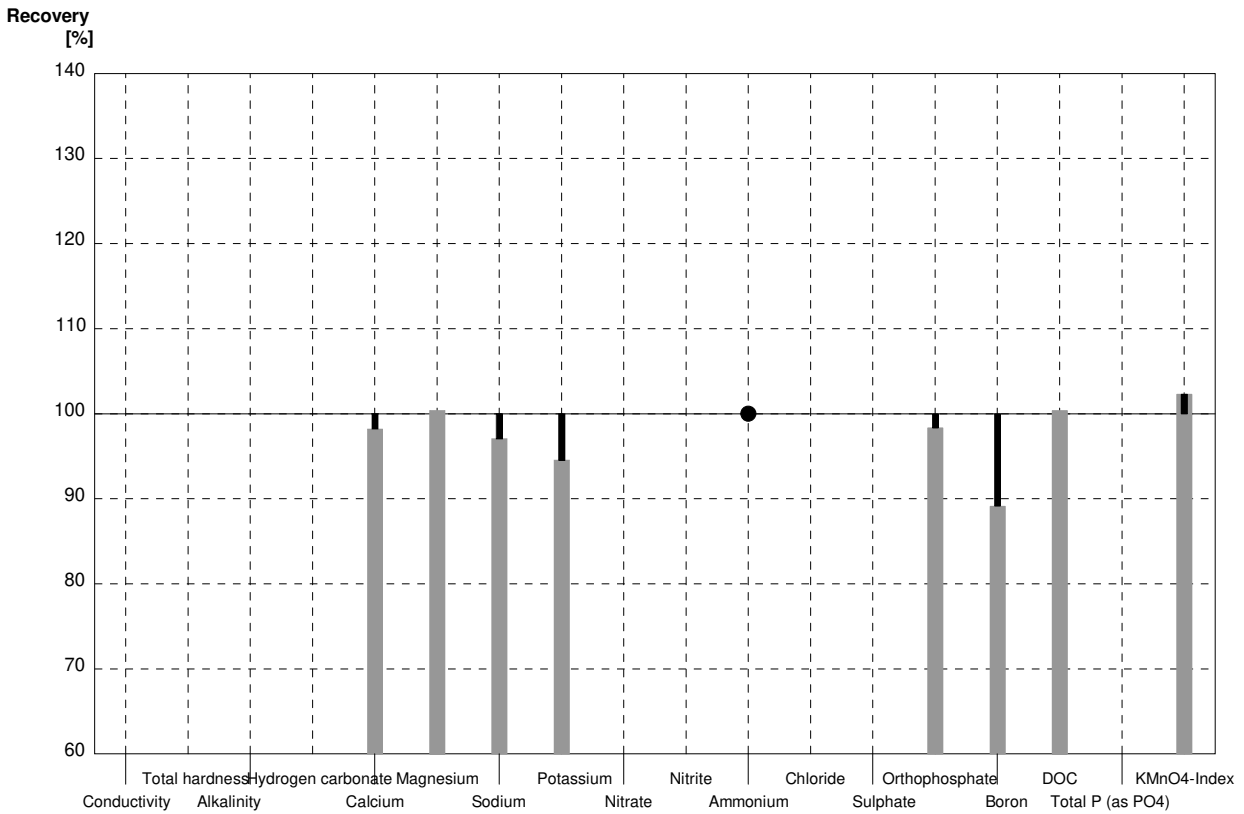
■ Deviation ■ Recovery



Sample N167B
Laboratory AC

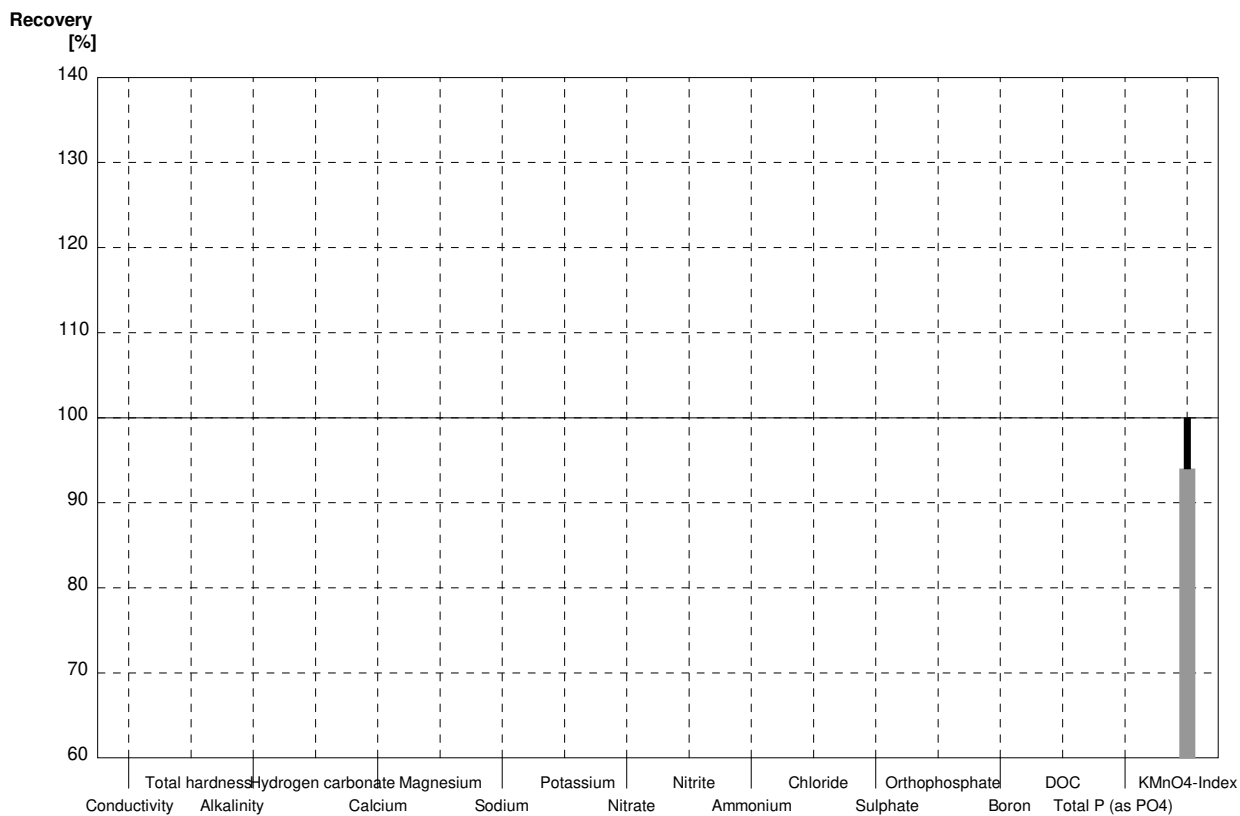
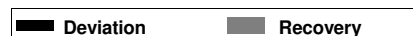
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	38,9		mg/l	98%
Magnesium	8,07	0,10	8,1		mg/l	100%
Sodium	30,8	0,2	29,9		mg/l	97%
Potassium	6,98	0,04	6,6		mg/l	95%
Nitrate	51,3	1,2			mg/l	
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01		<0,0500	0,00470	mg/l	•
Chloride	28,6	0,4			mg/l	
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001	0,0600	0,0169	mg/l	98%
Boron	0,0544	0,0004	0,0485		mg/l	89%
DOC	4,88	0,05	4,90	1,23	mg/l	100%
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,77	1,33	mg/l	102%

■ Deviation ■ Recovery



Sample N167A
Laboratory AD

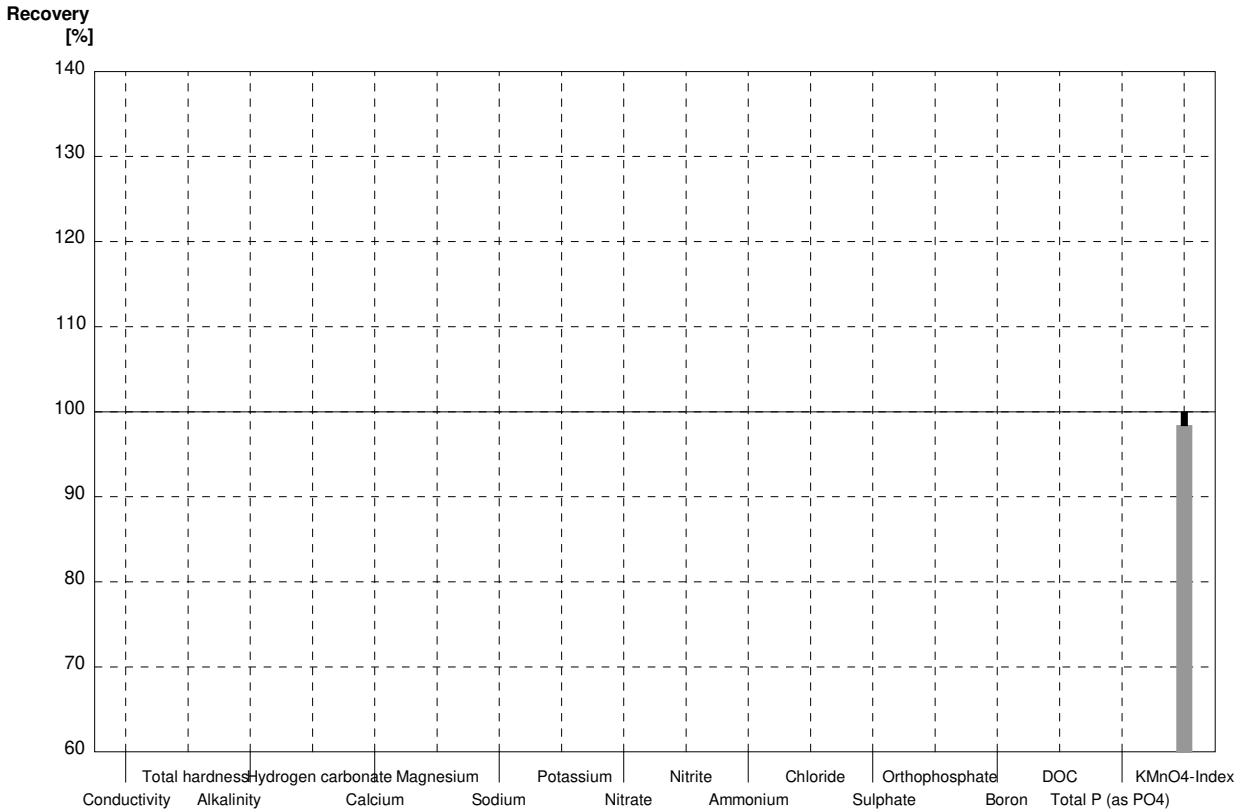
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9			mg/l	
Magnesium	10,79	0,14			mg/l	
Sodium	24,9	0,3			mg/l	
Potassium	8,81	0,06			mg/l	
Nitrate	37,2	0,7			mg/l	
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004			mg/l	
Chloride	54,8	1,2			mg/l	
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,30		mg/l	94%



Sample N167B
Laboratory AD

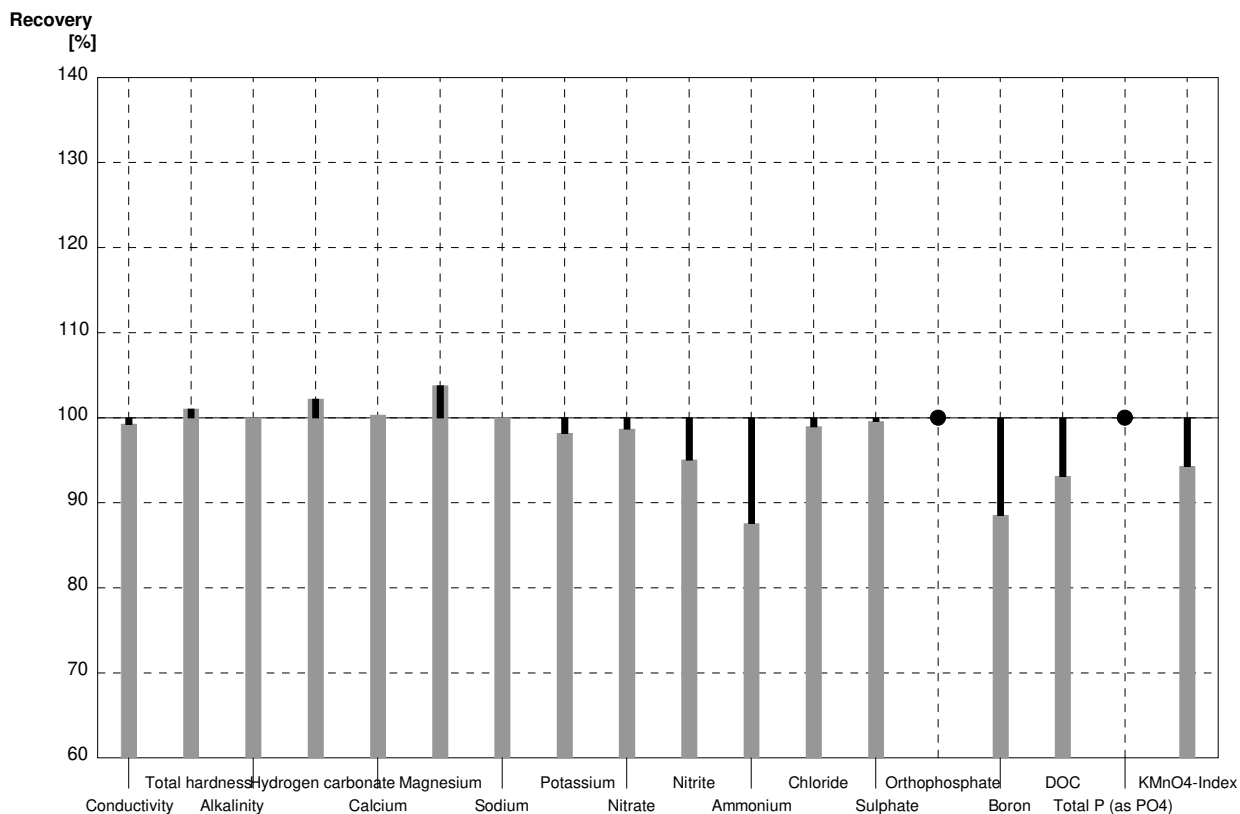
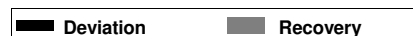
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6			mg/l	
Magnesium	8,07	0,10			mg/l	
Sodium	30,8	0,2			mg/l	
Potassium	6,98	0,04			mg/l	
Nitrate	51,3	1,2			mg/l	
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01				mg/l	
Chloride	28,6	0,4			mg/l	
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,55		mg/l	98%

■ Deviation ■ Recovery



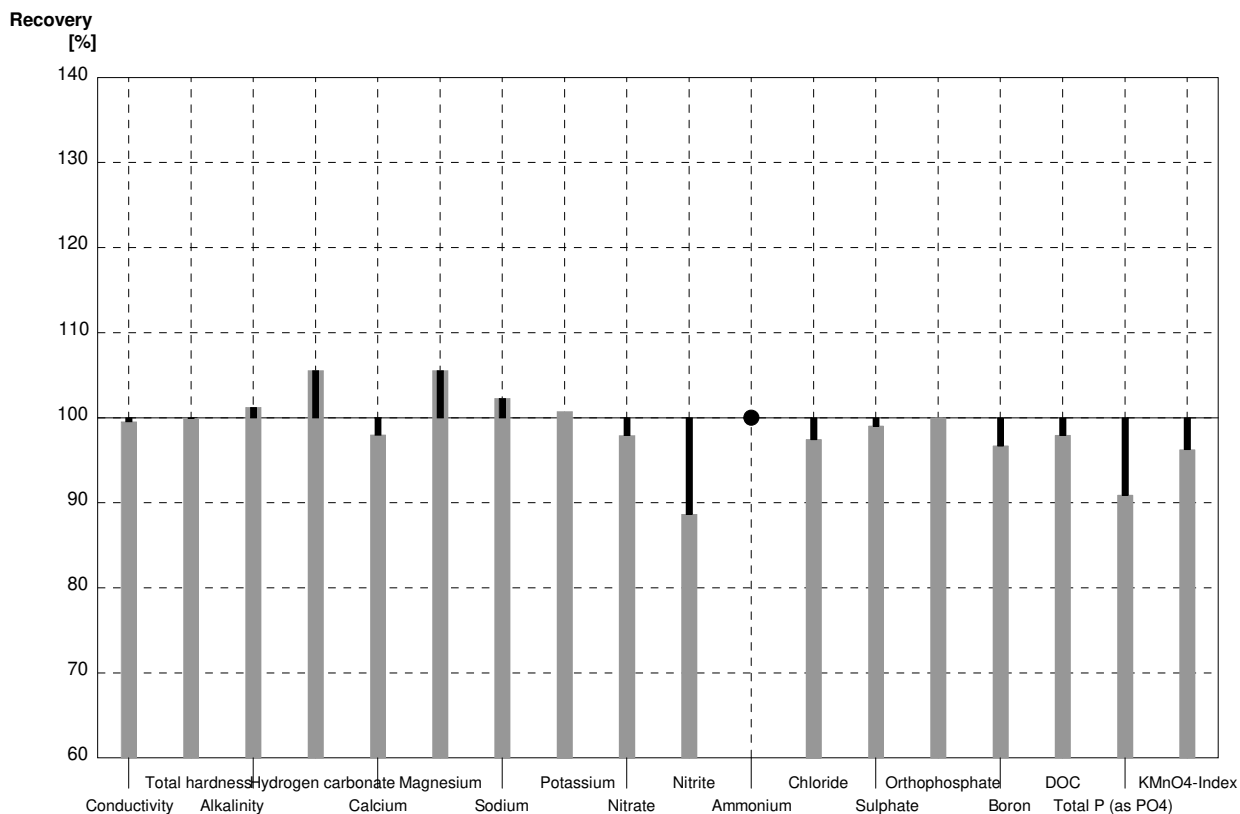
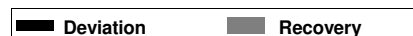
Sample N167A
Laboratory AE

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	540	0,577	µS/cm	99%
Total hardness	1,94	0,02	1,96	0,025	mmol/l	101%
Alkalinity	2,36	0,03	2,36	0,006	mmol/l	100%
Hydrogen carbonate	140,9	1,7	144	0,36	mg/l	102%
Calcium	60,1	0,9	60,3	0,9	mg/l	100%
Magnesium	10,79	0,14	11,2	0,176	mg/l	104%
Sodium	24,9	0,3	24,9	0,252	mg/l	100%
Potassium	8,81	0,06	8,65	0,161	mg/l	98%
Nitrate	37,2	0,7	36,703	0,1	mg/l	99%
Nitrite	0,0404	0,0009	0,0384	0,001	mg/l	95%
Ammonium	0,070	0,004	0,0613	0,001	mg/l	88%
Chloride	54,8	1,2	54,223	2,165	mg/l	99%
Sulphate	34,7	0,4	34,555	0,089	mg/l	100%
Orthophosphate	<0,009		<0,020		mg/l	•
Boron	0,1265	0,0012	0,112	0,003	mg/l	89%
DOC	1,89	0,04	1,76	0,015	mg/l	93%
Total P (as PO4)	<0,009		<0,020		mg/l	•
KMnO4-Index	3,51	0,12	3,31	0,040	mg/l	94%



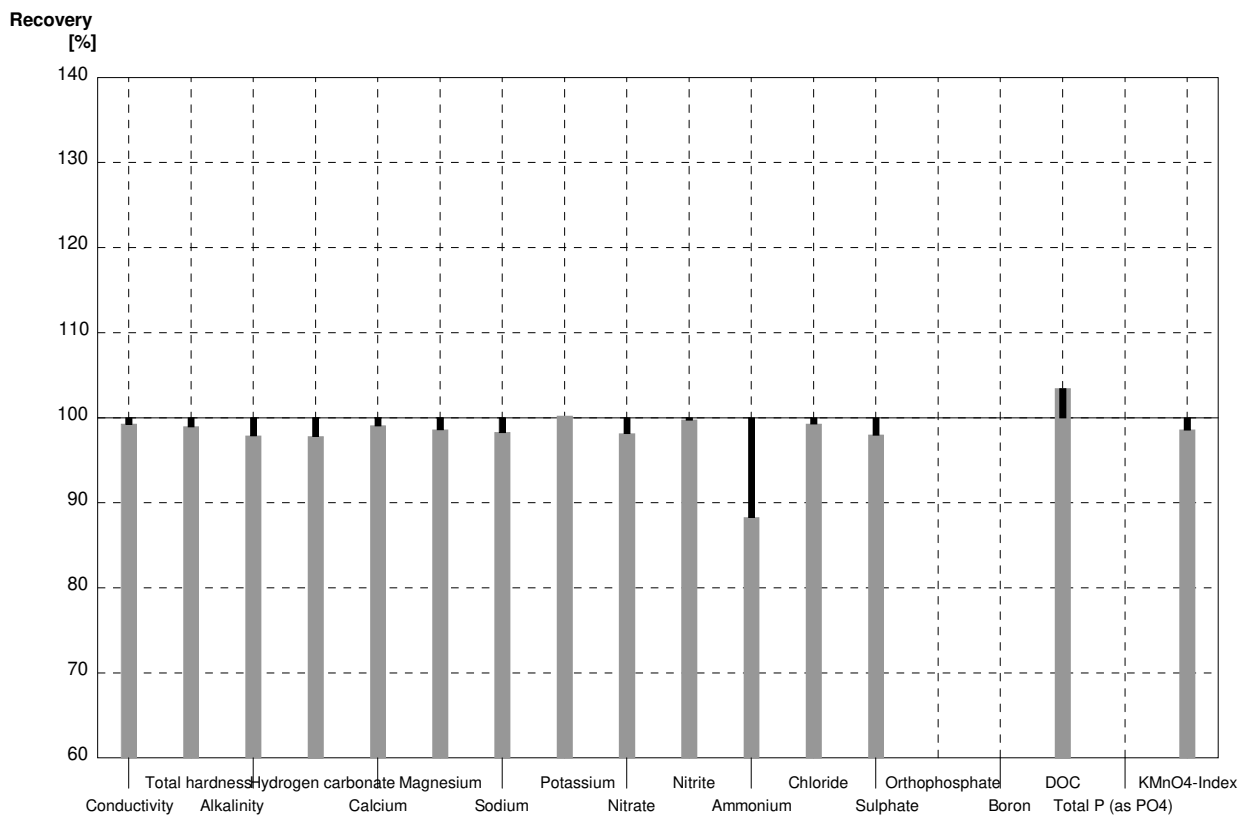
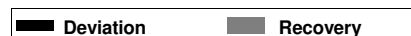
Sample N167B
Laboratory AE

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	442	1	µS/cm	100%
Total hardness	1,321	0,015	1,32	0,017	mmol/l	100%
Alkalinity	1,294	0,018	1,31	0,006	mmol/l	101%
Hydrogen carbonate	75,9	1,1	80,1	0,153	mg/l	106%
Calcium	39,6	0,6	38,8	0,872	mg/l	98%
Magnesium	8,07	0,10	8,52	0,134	mg/l	106%
Sodium	30,8	0,2	31,5	0,351	mg/l	102%
Potassium	6,98	0,04	7,03	0,115	mg/l	101%
Nitrate	51,3	1,2	50,230	0,766	mg/l	98%
Nitrite	0,0203	0,0018	0,0180	0,001	mg/l	89%
Ammonium	<0,01		<0,015		mg/l	•
Chloride	28,6	0,4	27,875	0,128	mg/l	97%
Sulphate	58,9	0,4	58,325	0,215	mg/l	99%
Orthophosphate	0,061	0,001	0,0610	0,002	mg/l	100%
Boron	0,0544	0,0004	0,0526	0,001	mg/l	97%
DOC	4,88	0,05	4,78	0,053	mg/l	98%
Total P (as PO4)	0,187	0,003	0,170	0,001	mg/l	91%
KMnO4-Index	5,64	0,15	5,43	0,075	mg/l	96%



Sample N167A
Laboratory AF

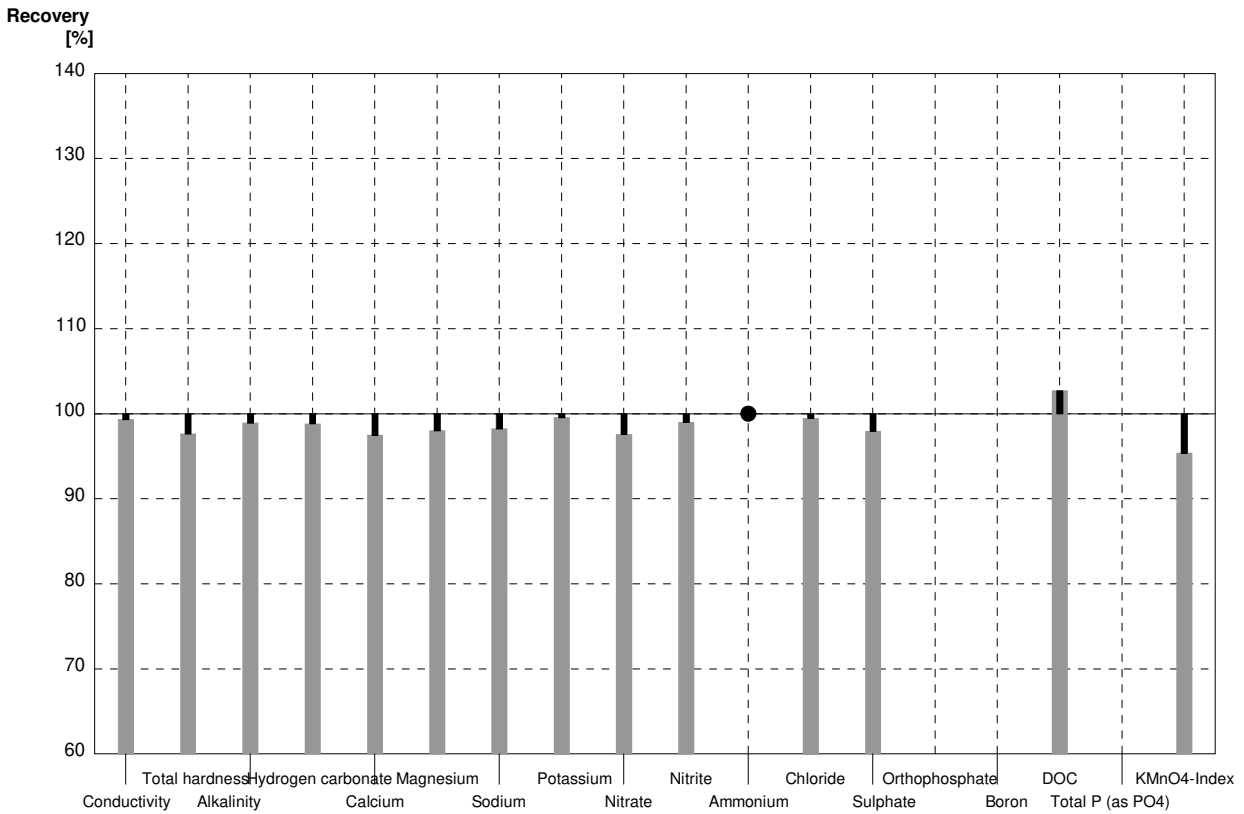
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	540	11,9	µS/cm	99%
Total hardness	1,94	0,02	1,92	0,08	mmol/l	99%
Alkalinity	2,36	0,03	2,31	0,05	mmol/l	98%
Hydrogen carbonate	140,9	1,7	137,81	2,89	mg/l	98%
Calcium	60,1	0,9	59,55	2,32	mg/l	99%
Magnesium	10,79	0,14	10,64	0,50	mg/l	99%
Sodium	24,9	0,3	24,47	1,17	mg/l	98%
Potassium	8,81	0,06	8,83	0,57	mg/l	100%
Nitrate	37,2	0,7	36,51	2,45	mg/l	98%
Nitrite	0,0404	0,0009	0,0403	0,003	mg/l	100%
Ammonium	0,070	0,004	0,0618	0,010	mg/l	88%
Chloride	54,8	1,2	54,41	2,56	mg/l	99%
Sulphate	34,7	0,4	34,00	1,70	mg/l	98%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	1,955	0,34	mg/l	103%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,46	0,73	mg/l	99%



Sample N167B
Laboratory AF

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	441	9,7	µS/cm	99%
Total hardness	1,321	0,015	1,29	0,03	mmol/l	98%
Alkalinity	1,294	0,018	1,28	0,03	mmol/l	99%
Hydrogen carbonate	75,9	1,1	75,01	1,58	mg/l	99%
Calcium	39,6	0,6	38,61	1,51	mg/l	98%
Magnesium	8,07	0,10	7,91	0,37	mg/l	98%
Sodium	30,8	0,2	30,26	1,45	mg/l	98%
Potassium	6,98	0,04	6,95	0,44	mg/l	100%
Nitrate	51,3	1,2	50,06	3,35	mg/l	98%
Nitrite	0,0203	0,0018	0,0201	0,001	mg/l	99%
Ammonium	<0,01		<0,003	0,000	mg/l	•
Chloride	28,6	0,4	28,45	1,34	mg/l	99%
Sulphate	58,9	0,4	57,69	2,88	mg/l	98%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,014	0,87	mg/l	103%
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,38	1,14	mg/l	95%

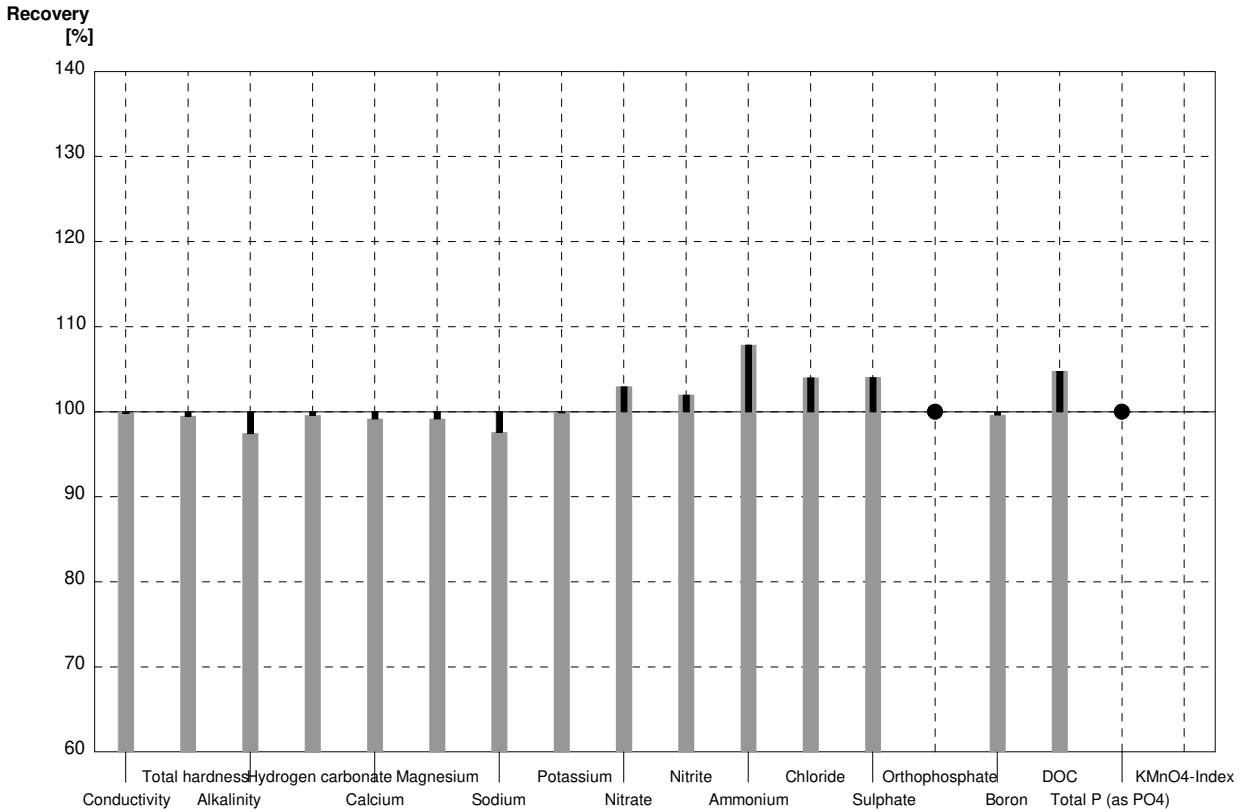
■ Deviation ■ Recovery



Sample N167A
Laboratory AG

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	543	22	µS/cm	100%
Total hardness	1,94	0,02	1,93	0,10	mmol/l	99%
Alkalinity	2,36	0,03	2,30	0,15	mmol/l	97%
Hydrogen carbonate	140,9	1,7	140,3	8,8	mg/l	100%
Calcium	60,1	0,9	59,6	2,8	mg/l	99%
Magnesium	10,79	0,14	10,7	0,7	mg/l	99%
Sodium	24,9	0,3	24,3	1,2	mg/l	98%
Potassium	8,81	0,06	8,8	0,4	mg/l	100%
Nitrate	37,2	0,7	38,3	3,7	mg/l	103%
Nitrite	0,0404	0,0009	0,0412	0,0049	mg/l	102%
Ammonium	0,070	0,004	0,0755	0,0133	mg/l	108%
Chloride	54,8	1,2	57,0	4,4	mg/l	104%
Sulphate	34,7	0,4	36,1	2,9	mg/l	104%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,1265	0,0012	0,126	0,012	mg/l	100%
DOC	1,89	0,04	1,98	0,47	mg/l	105%
Total P (as PO4)	<0,009		<0,010		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

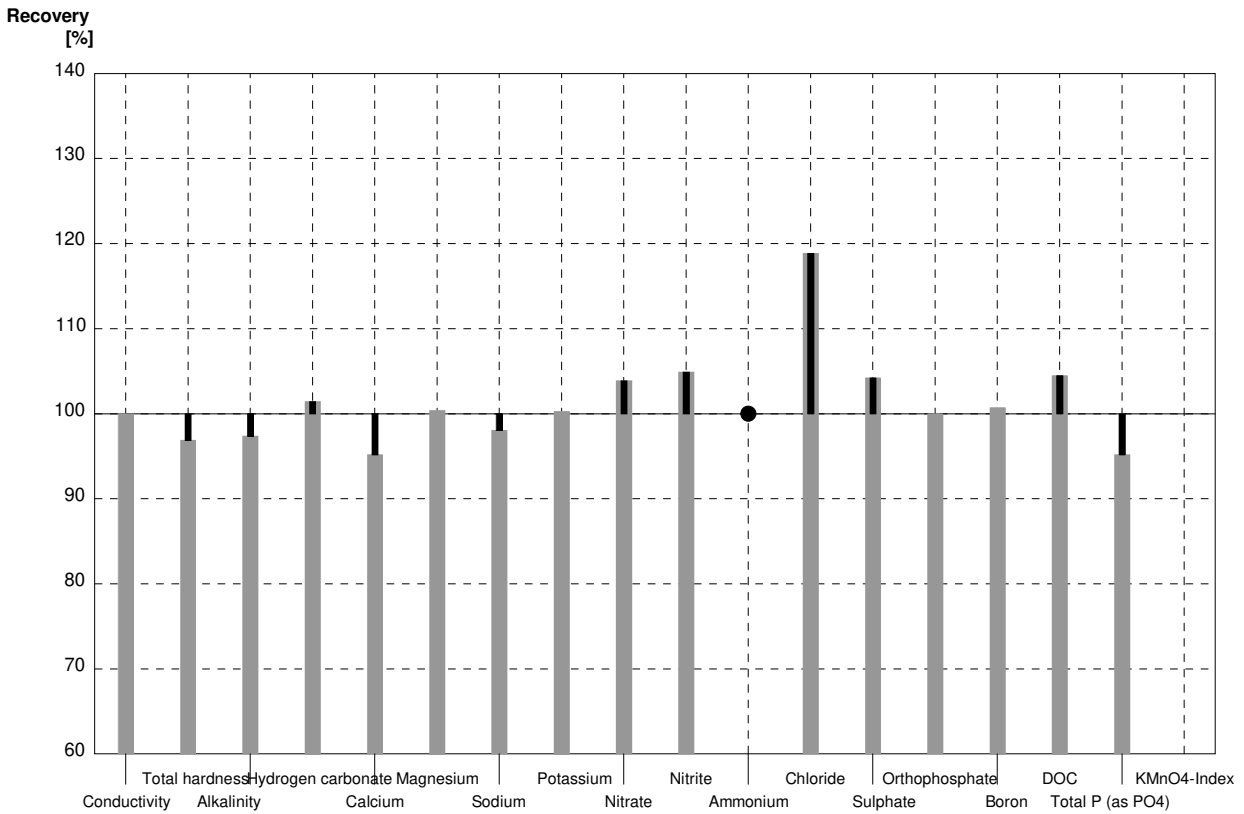
■ Deviation ■ Recovery



Sample N167B
Laboratory AG

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	18	µS/cm	100%
Total hardness	1,321	0,015	1,28	0,068	mmol/l	97%
Alkalinity	1,294	0,018	1,26	0,09	mmol/l	97%
Hydrogen carbonate	75,9	1,1	77,0	5,7	mg/l	101%
Calcium	39,6	0,6	37,7	1,8	mg/l	95%
Magnesium	8,07	0,10	8,1	0,5	mg/l	100%
Sodium	30,8	0,2	30,2	1,5	mg/l	98%
Potassium	6,98	0,04	7,0	0,3	mg/l	100%
Nitrate	51,3	1,2	53,3	5,1	mg/l	104%
Nitrite	0,0203	0,0018	0,0213	0,0033	mg/l	105%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	28,6	0,4	34,0	2,7	mg/l	119%
Sulphate	58,9	0,4	61,4	4,8	mg/l	104%
Orthophosphate	0,061	0,001	0,061	0,009	mg/l	100%
Boron	0,0544	0,0004	0,0548	0,0058	mg/l	101%
DOC	4,88	0,05	5,1	1,0	mg/l	105%
Total P (as PO4)	0,187	0,003	0,178	0,018	mg/l	95%
KMnO4-Index	5,64	0,15			mg/l	

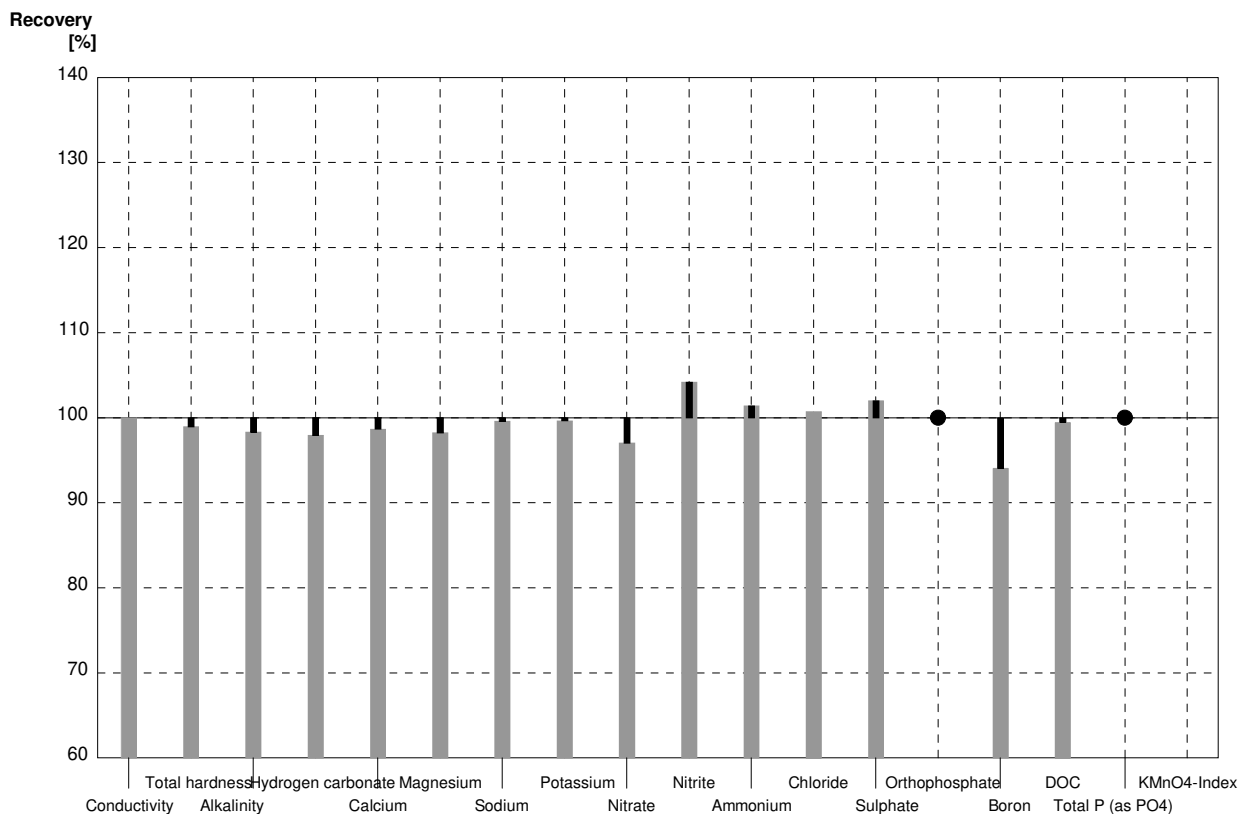
■ Deviation ■ Recovery



Sample N167A
Laboratory AH

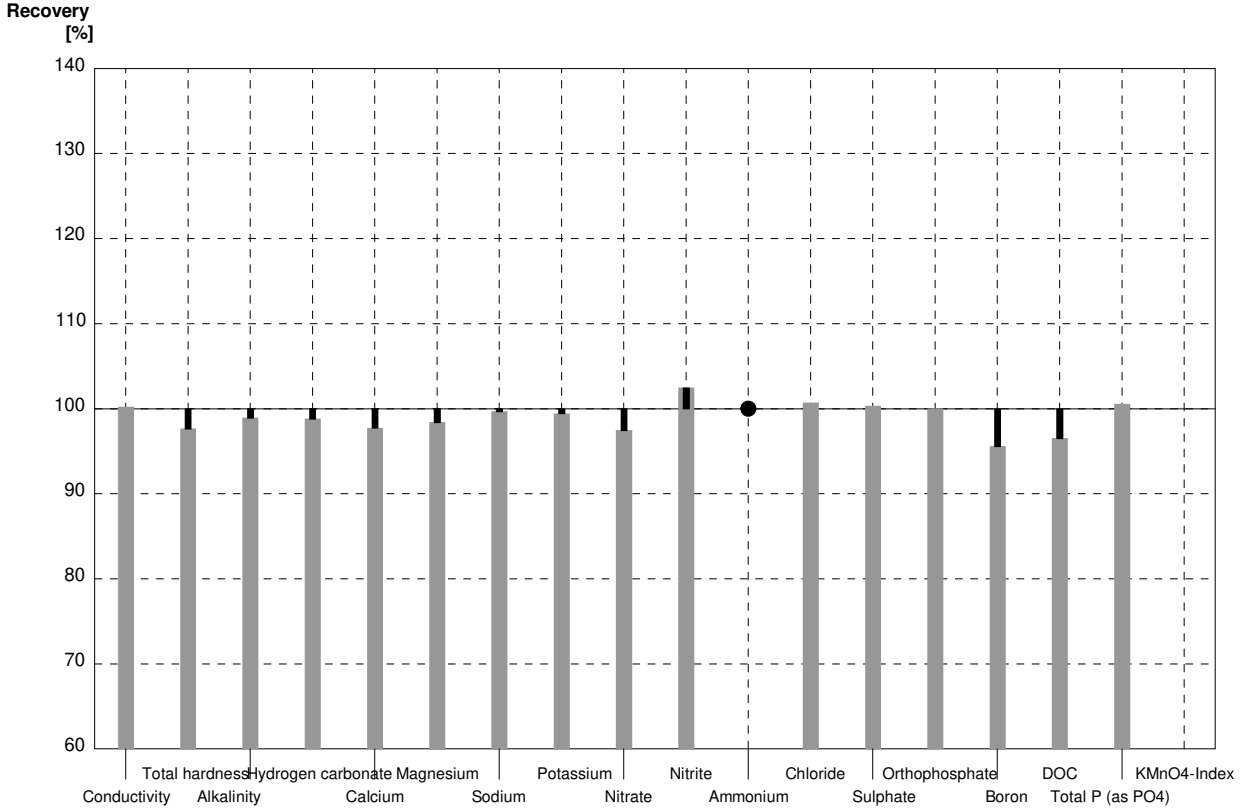
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	544	16	µS/cm	100%
Total hardness	1,94	0,02	1,92	0,16	mmol/l	99%
Alkalinity	2,36	0,03	2,32	0,09	mmol/l	98%
Hydrogen carbonate	140,9	1,7	138	6	mg/l	98%
Calcium	60,1	0,9	59,3	3,0	mg/l	99%
Magnesium	10,79	0,14	10,6	0,7	mg/l	98%
Sodium	24,9	0,3	24,8	1,0	mg/l	100%
Potassium	8,81	0,06	8,78	0,70	mg/l	100%
Nitrate	37,2	0,7	36,1	2,2	mg/l	97%
Nitrite	0,0404	0,0009	0,0421	0,0035	mg/l	104%
Ammonium	0,070	0,004	0,071	0,007	mg/l	101%
Chloride	54,8	1,2	55,2	2,8	mg/l	101%
Sulphate	34,7	0,4	35,4	2,2	mg/l	102%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,1265	0,0012	0,119	0,012	mg/l	94%
DOC	1,89	0,04	1,88	0,17	mg/l	99%
Total P (as PO4)	<0,009		<0,006		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



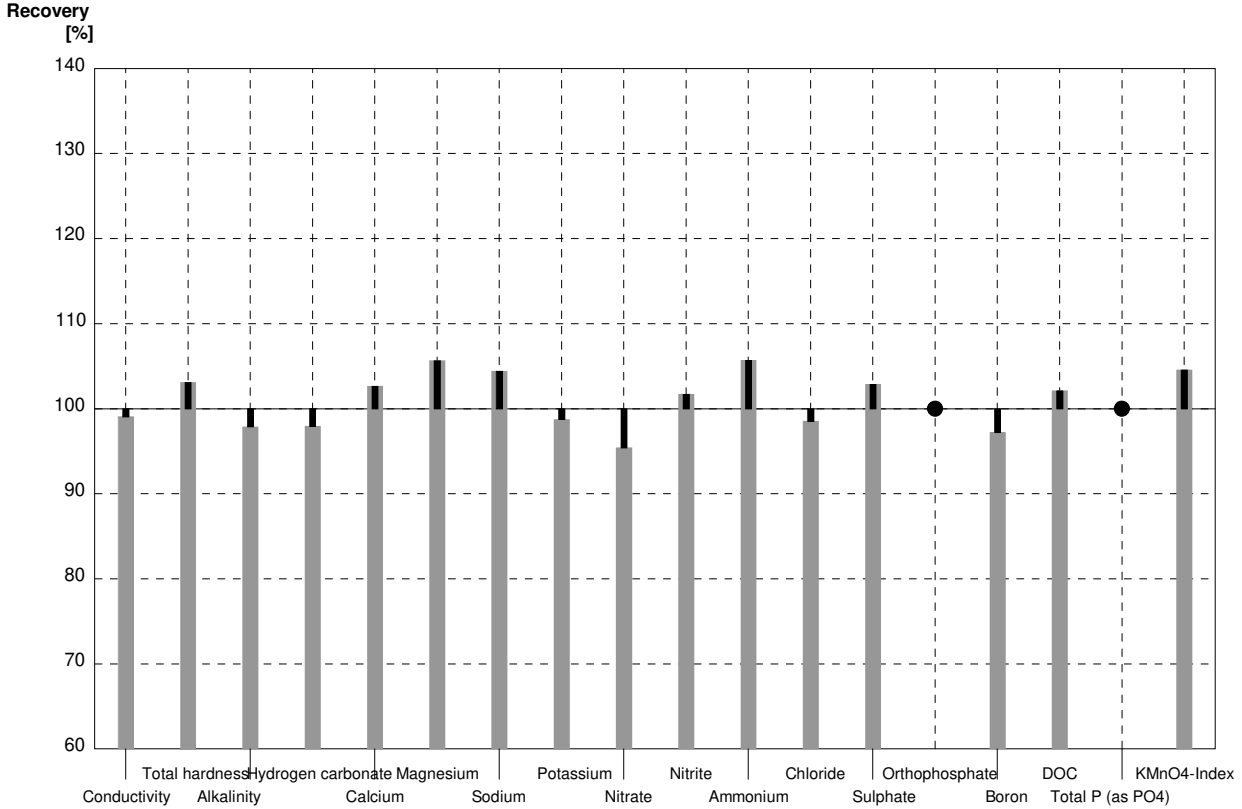
Sample N167B
Laboratory AH

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	445	13	µS/cm	100%
Total hardness	1,321	0,015	1,29	0,11	mmol/l	98%
Alkalinity	1,294	0,018	1,28	0,06	mmol/l	99%
Hydrogen carbonate	75,9	1,1	75,0	3,0	mg/l	99%
Calcium	39,6	0,6	38,7	2,0	mg/l	98%
Magnesium	8,07	0,10	7,94	0,48	mg/l	98%
Sodium	30,8	0,2	30,7	1,2	mg/l	100%
Potassium	6,98	0,04	6,94	0,56	mg/l	99%
Nitrate	51,3	1,2	50,0	3,0	mg/l	97%
Nitrite	0,0203	0,0018	0,0208	0,0020	mg/l	102%
Ammonium	<0,01		<0,008		mg/l	•
Chloride	28,6	0,4	28,8	1,5	mg/l	101%
Sulphate	58,9	0,4	59,1	3,6	mg/l	100%
Orthophosphate	0,061	0,001	0,061	0,004	mg/l	100%
Boron	0,0544	0,0004	0,052	0,005	mg/l	96%
DOC	4,88	0,05	4,71	0,42	mg/l	97%
Total P (as PO4)	0,187	0,003	0,188	0,013	mg/l	101%
KMnO4-Index	5,64	0,15			mg/l	



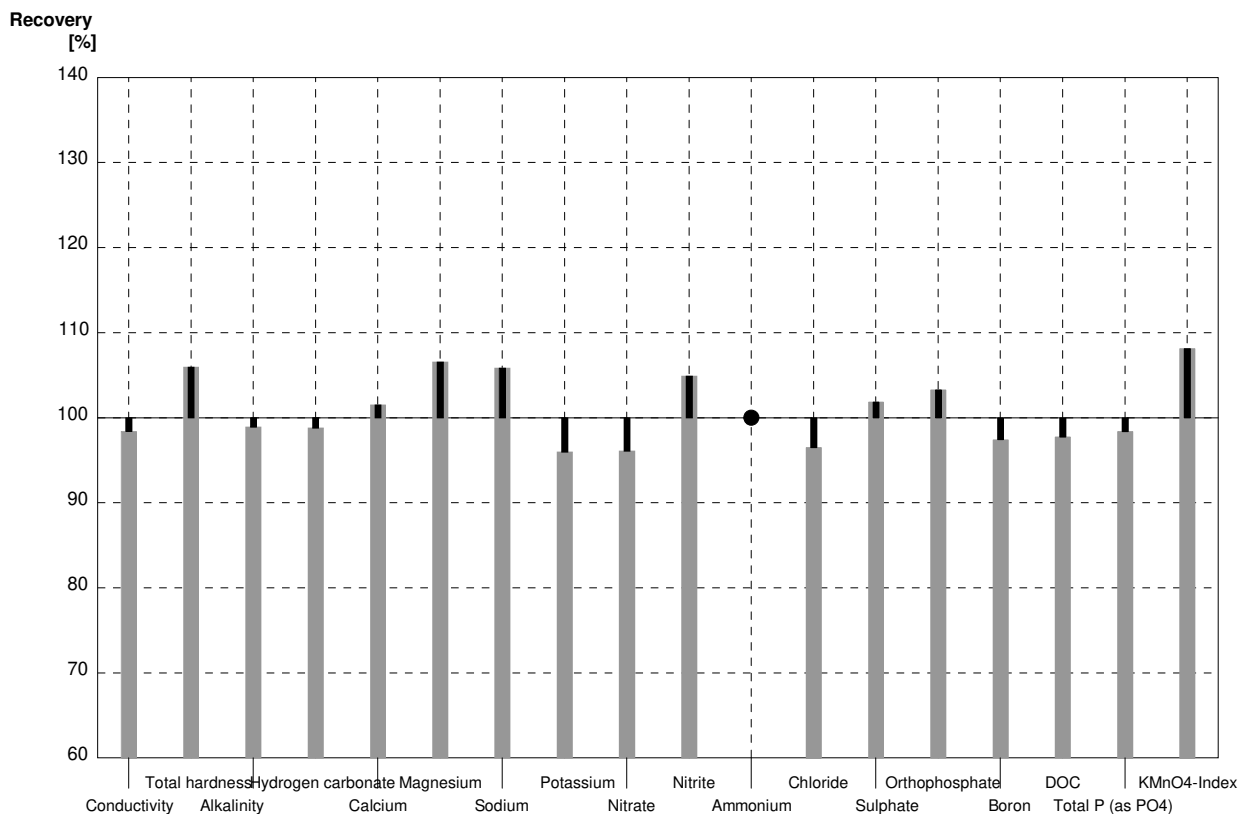
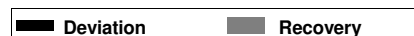
Sample N167A
Laboratory AI

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	539	53,9	µS/cm	99%
Total hardness	1,94	0,02	2,00	0,20	mmol/l	103%
Alkalinity	2,36	0,03	2,31	0,23	mmol/l	98%
Hydrogen carbonate	140,9	1,7	138	7	mg/l	98%
Calcium	60,1	0,9	61,7	3,1	mg/l	103%
Magnesium	10,79	0,14	11,4	0,6	mg/l	106%
Sodium	24,9	0,3	26,0	2,6	mg/l	104%
Potassium	8,81	0,06	8,7	0,9	mg/l	99%
Nitrate	37,2	0,7	35,5	2,4	mg/l	95%
Nitrite	0,0404	0,0009	0,0411	0,0062	mg/l	102%
Ammonium	0,070	0,004	0,074	0,013	mg/l	106%
Chloride	54,8	1,2	54,0	2,7	mg/l	99%
Sulphate	34,7	0,4	35,7	1,8	mg/l	103%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,1265	0,0012	0,123	0,012	mg/l	97%
DOC	1,89	0,04	1,93	0,19	mg/l	102%
Total P (as PO4)	<0,009		<0,005		mg/l	•
KMnO4-Index	3,51	0,12	3,67	0,55	mg/l	105%



Sample N167B
Laboratory AI

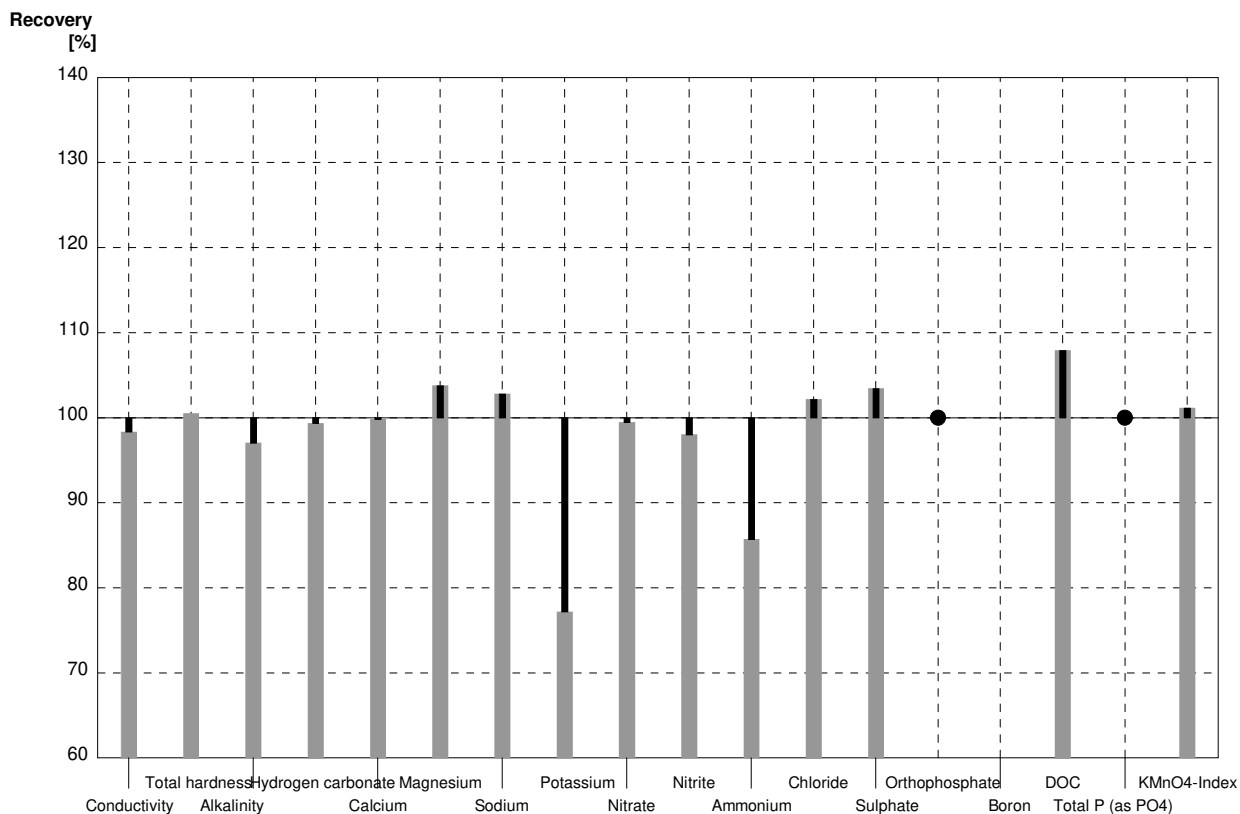
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	437	43,7	µS/cm	98%
Total hardness	1,321	0,015	1,40	0,14	mmol/l	106%
Alkalinity	1,294	0,018	1,28	0,13	mmol/l	99%
Hydrogen carbonate	75,9	1,1	75	4	mg/l	99%
Calcium	39,6	0,6	40,2	2,0	mg/l	102%
Magnesium	8,07	0,10	8,6	0,4	mg/l	107%
Sodium	30,8	0,2	32,6	3,3	mg/l	106%
Potassium	6,98	0,04	6,7	0,7	mg/l	96%
Nitrate	51,3	1,2	49,3	3,3	mg/l	96%
Nitrite	0,0203	0,0018	0,0213	0,0064	mg/l	105%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	27,6	1,4	mg/l	97%
Sulphate	58,9	0,4	60,0	3,0	mg/l	102%
Orthophosphate	0,061	0,001	0,063	0,009	mg/l	103%
Boron	0,0544	0,0004	0,053	0,011	mg/l	97%
DOC	4,88	0,05	4,77	0,48	mg/l	98%
Total P (as PO4)	0,187	0,003	0,184	0,020	mg/l	98%
KMnO4-Index	5,64	0,15	6,1	0,92	mg/l	108%



Sample N167A
Laboratory AJ

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	535	12	µS/cm	98%
Total hardness	1,94	0,02	1,95	0,16	mmol/l	101%
Alkalinity	2,36	0,03	2,29	0,11	mmol/l	97%
Hydrogen carbonate	140,9	1,7	140	7	mg/l	99%
Calcium	60,1	0,9	60	3	mg/l	100%
Magnesium	10,79	0,14	11,2	0,5	mg/l	104%
Sodium	24,9	0,3	25,6	1,1	mg/l	103%
Potassium	8,81	0,06	6,8	0,3	mg/l	77%
Nitrate	37,2	0,7	37,0	1,4	mg/l	99%
Nitrite	0,0404	0,0009	0,0396	0,0029	mg/l	98%
Ammonium	0,070	0,004	0,060	0,008	mg/l	86%
Chloride	54,8	1,2	56	3	mg/l	102%
Sulphate	34,7	0,4	35,9	1,4	mg/l	103%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	2,04	0,26	mg/l	108%
Total P (as PO4)	<0,009		<0,01		mg/l	•
KMnO4-Index	3,51	0,12	3,55	0,48	mg/l	101%

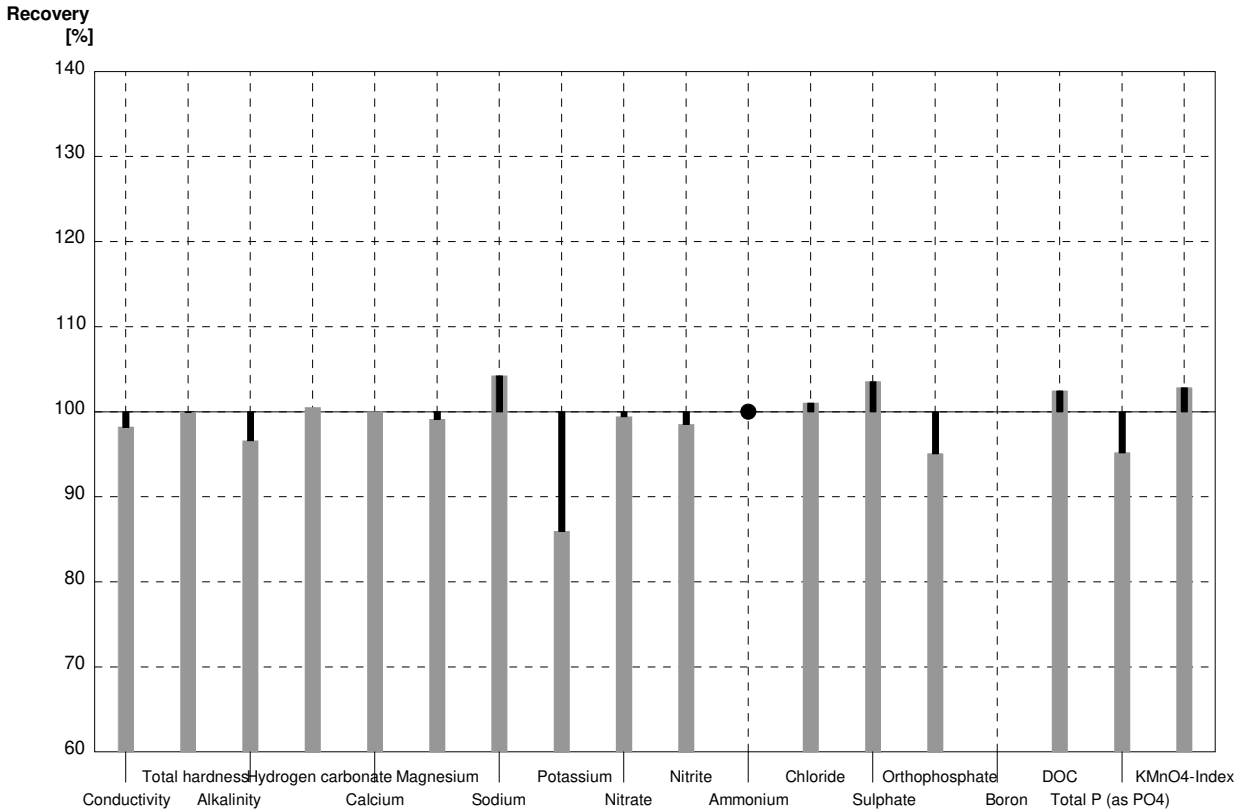
■ Deviation ■ Recovery



Sample N167B
Laboratory AJ

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	436	10	µS/cm	98%
Total hardness	1,321	0,015	1,32	0,11	mmol/l	100%
Alkalinity	1,294	0,018	1,250	0,055	mmol/l	97%
Hydrogen carbonate	75,9	1,1	76,3	3,4	mg/l	101%
Calcium	39,6	0,6	39,6	1,8	mg/l	100%
Magnesium	8,07	0,10	8,0	0,3	mg/l	99%
Sodium	30,8	0,2	32,1	1,4	mg/l	104%
Potassium	6,98	0,04	6,0	0,3	mg/l	86%
Nitrate	51,3	1,2	51	2	mg/l	99%
Nitrite	0,0203	0,0018	0,0200	0,0015	mg/l	99%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	28,6	0,4	28,9	1,1	mg/l	101%
Sulphate	58,9	0,4	61	3	mg/l	104%
Orthophosphate	0,061	0,001	0,058	0,005	mg/l	95%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	5,0	0,7	mg/l	102%
Total P (as PO4)	0,187	0,003	0,178	0,038	mg/l	95%
KMnO4-Index	5,64	0,15	5,8	0,8	mg/l	103%

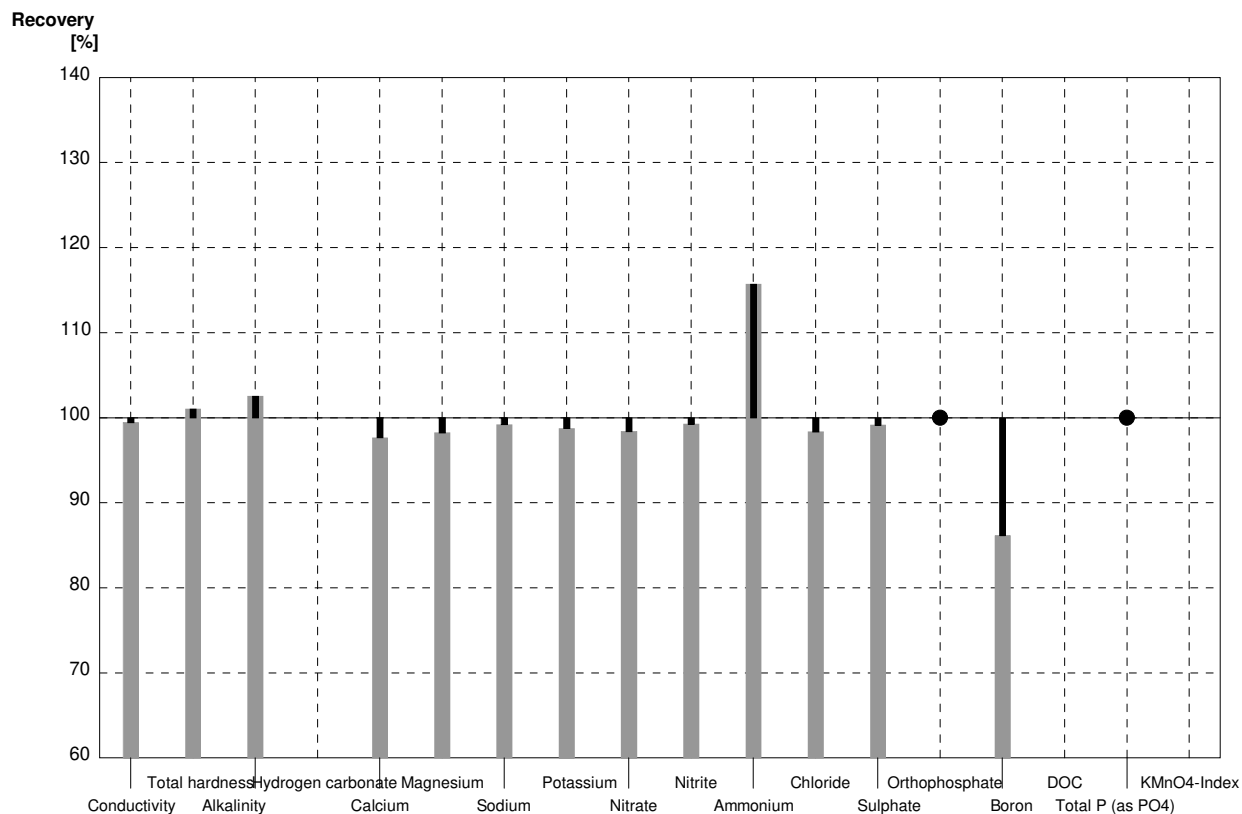
■ Deviation ■ Recovery



Sample N167A
Laboratory AK

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	541	27,1	µS/cm	99%
Total hardness	1,94	0,02	1,96	0,10	mmol/l	101%
Alkalinity	2,36	0,03	2,42	0,12	mmol/l	103%
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	58,7	1,76	mg/l	98%
Magnesium	10,79	0,14	10,6	0,36	mg/l	98%
Sodium	24,9	0,3	24,7	0,32	mg/l	99%
Potassium	8,81	0,06	8,7	0,26	mg/l	99%
Nitrate	37,2	0,7	36,6	0,94	mg/l	98%
Nitrite	0,0404	0,0009	0,0401	0,0019	mg/l	99%
Ammonium	0,070	0,004	0,081	0,016	mg/l	116%
Chloride	54,8	1,2	53,9	1,58	mg/l	98%
Sulphate	34,7	0,4	34,4	0,95	mg/l	99%
Orthophosphate	<0,009		<0,003		mg/l	•
Boron	0,1265	0,0012	0,109	0,0116	mg/l	86%
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009		<0,003		mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

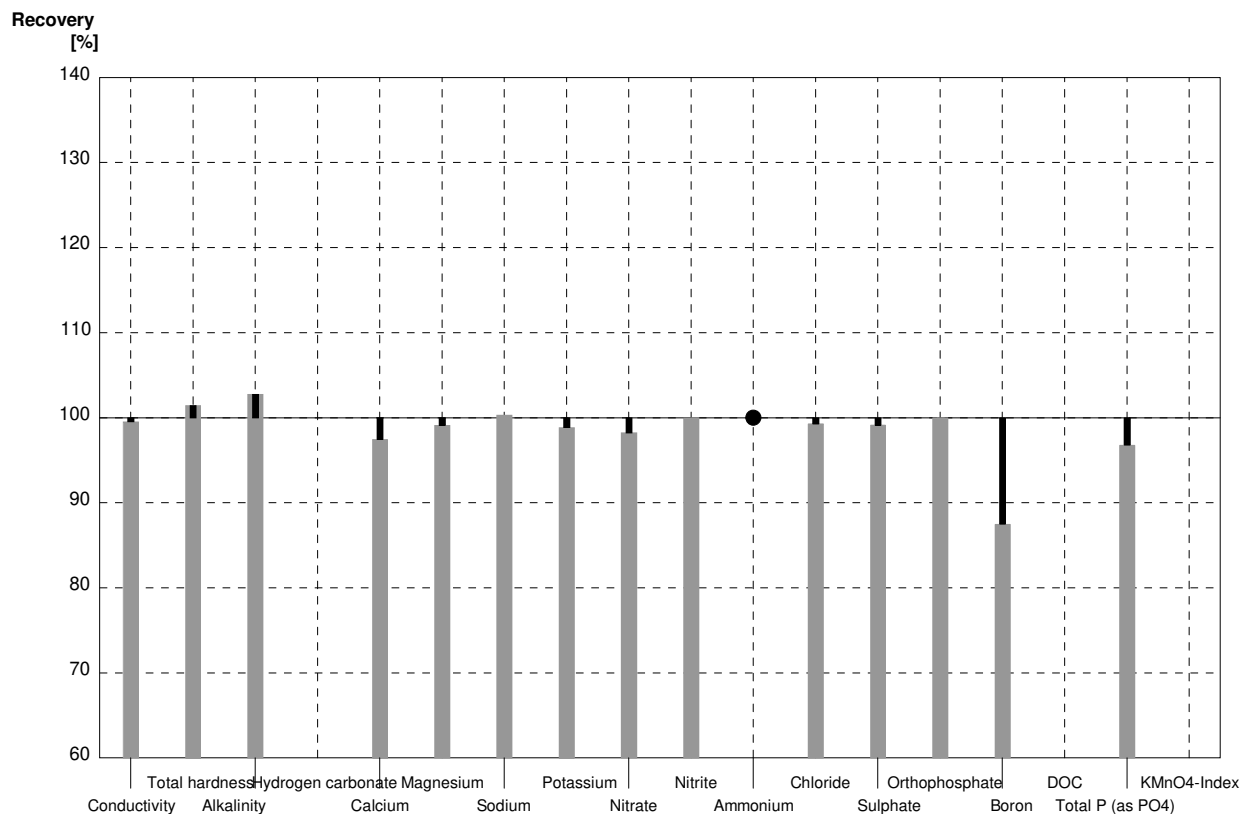
■ Deviation ■ Recovery



Sample N167B
Laboratory AK

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	442	22,1	µS/cm	100%
Total hardness	1,321	0,015	1,34	0,07	mmol/l	101%
Alkalinity	1,294	0,018	1,33	0,07	mmol/l	103%
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	38,6	1,16	mg/l	97%
Magnesium	8,07	0,10	8,0	0,27	mg/l	99%
Sodium	30,8	0,2	30,9	0,40	mg/l	100%
Potassium	6,98	0,04	6,9	0,21	mg/l	99%
Nitrate	51,3	1,2	50,4	1,30	mg/l	98%
Nitrite	0,0203	0,0018	0,0203	0,0010	mg/l	100%
Ammonium	<0,01		<0,012		mg/l	•
Chloride	28,6	0,4	28,4	0,83	mg/l	99%
Sulphate	58,9	0,4	58,4	1,61	mg/l	99%
Orthophosphate	0,061	0,001	0,061	0,005	mg/l	100%
Boron	0,0544	0,0004	0,0476	0,0051	mg/l	88%
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003	0,181	0,009	mg/l	97%
KMnO4-Index	5,64	0,15			mg/l	

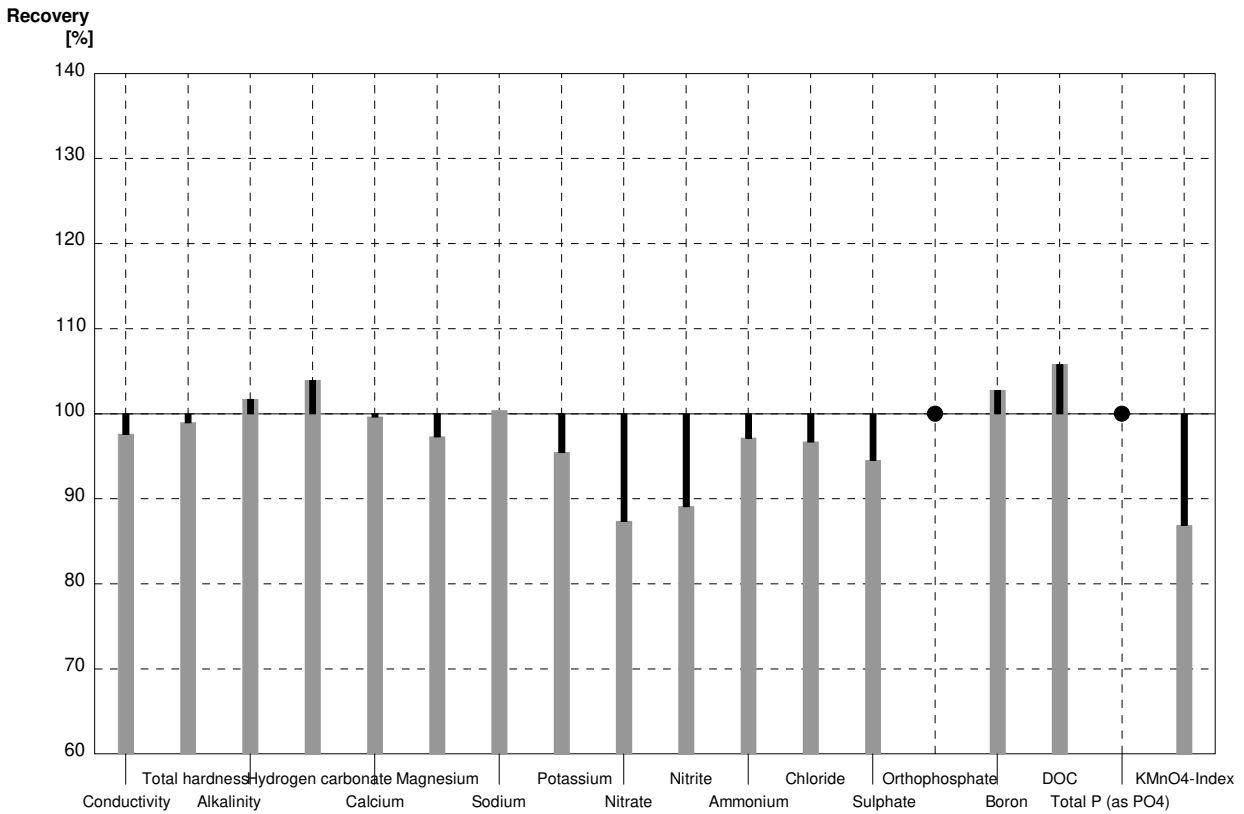
■ Deviation ■ Recovery



Sample N167A
Laboratory AL

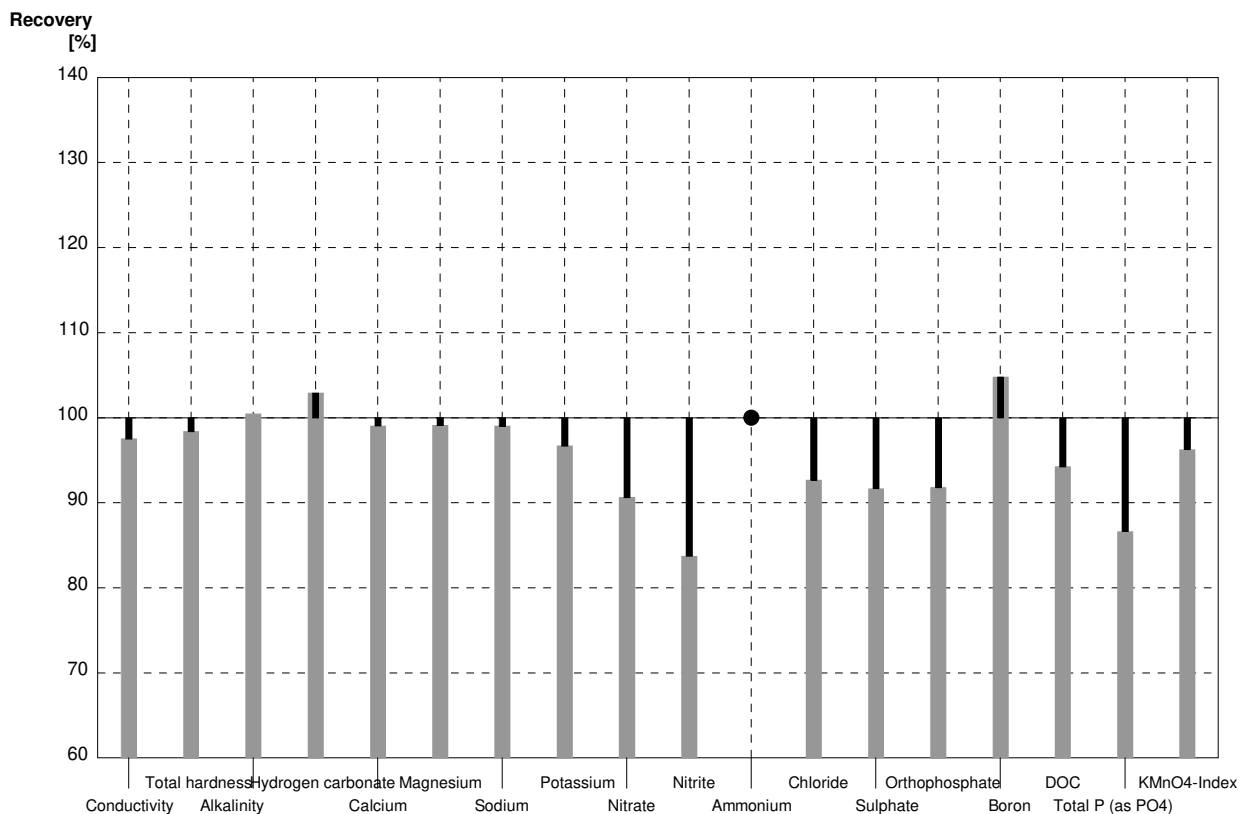
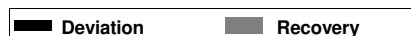
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	531,0	25	µS/cm	98%
Total hardness	1,94	0,02	1,92	0,2	mmol/l	99%
Alkalinity	2,36	0,03	2,40	0,25	mmol/l	102%
Hydrogen carbonate	140,9	1,7	146,44	15	mg/l	104%
Calcium	60,1	0,9	59,88	5,0	mg/l	100%
Magnesium	10,79	0,14	10,5	1,0	mg/l	97%
Sodium	24,9	0,3	25,0	2,5	mg/l	100%
Potassium	8,81	0,06	8,41	0,8	mg/l	95%
Nitrate	37,2	0,7	32,5	3	mg/l	87%
Nitrite	0,0404	0,0009	0,036	0,004	mg/l	89%
Ammonium	0,070	0,004	0,068	0,007	mg/l	97%
Chloride	54,8	1,2	53,0	5	mg/l	97%
Sulphate	34,7	0,4	32,8	3	mg/l	95%
Orthophosphate	<0,009		<0,04		mg/l	•
Boron	0,1265	0,0012	0,130	0,013	mg/l	103%
DOC	1,89	0,04	2,0	0,2	mg/l	106%
Total P (as PO4)	<0,009		<0,04		mg/l	•
KMnO4-Index	3,51	0,12	3,05	0,3	mg/l	87%

■ Deviation ■ Recovery



Sample N167B
Laboratory AL

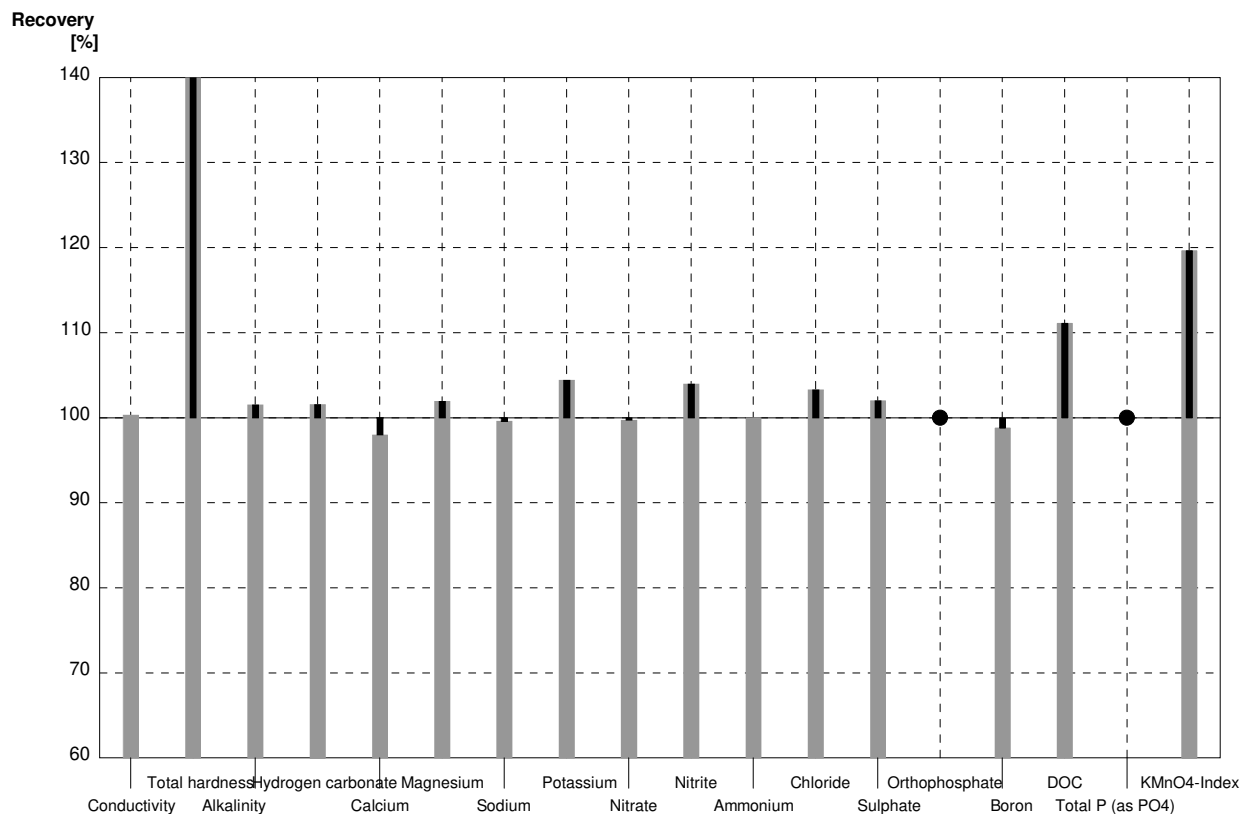
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	433,0	20	µS/cm	98%
Total hardness	1,321	0,015	1,30	0,13	mmol/l	98%
Alkalinity	1,294	0,018	1,30	0,13	mmol/l	100%
Hydrogen carbonate	75,9	1,1	78,1	8,0	mg/l	103%
Calcium	39,6	0,6	39,22	4,0	mg/l	99%
Magnesium	8,07	0,10	8,0	0,8	mg/l	99%
Sodium	30,8	0,2	30,5	3	mg/l	99%
Potassium	6,98	0,04	6,75	0,6	mg/l	97%
Nitrate	51,3	1,2	46,5	4	mg/l	91%
Nitrite	0,0203	0,0018	0,017	0,002	mg/l	84%
Ammonium	<0,01		<0,04		mg/l	•
Chloride	28,6	0,4	26,5	2,5	mg/l	93%
Sulphate	58,9	0,4	54,0	5	mg/l	92%
Orthophosphate	0,061	0,001	0,056	0,006	mg/l	92%
Boron	0,0544	0,0004	0,057	0,006	mg/l	105%
DOC	4,88	0,05	4,6	0,5	mg/l	94%
Total P (as PO4)	0,187	0,003	0,162	0,016	mg/l	87%
KMnO4-Index	5,64	0,15	5,43	0,5	mg/l	96%



Sample N167A
Laboratory AM

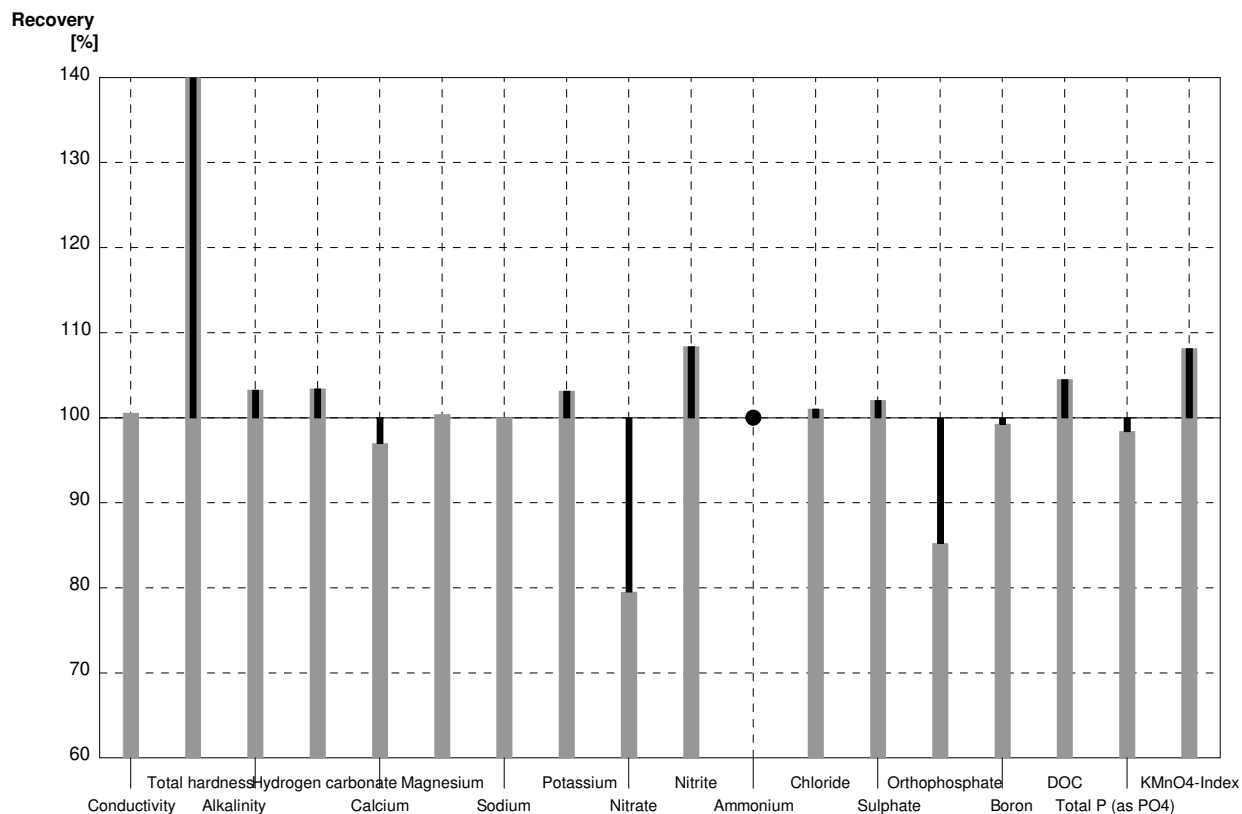
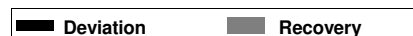
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545,7		µS/cm	100%
Total hardness	1,94	0,02	10,8		mmol/l	557%
Alkalinity	2,36	0,03	2,396		mmol/l	102%
Hydrogen carbonate	140,9	1,7	143,1		mg/l	102%
Calcium	60,1	0,9	58,9		mg/l	98%
Magnesium	10,79	0,14	11,0		mg/l	102%
Sodium	24,9	0,3	24,8		mg/l	100%
Potassium	8,81	0,06	9,2		mg/l	104%
Nitrate	37,2	0,7	37,1		mg/l	100%
Nitrite	0,0404	0,0009	0,0420		mg/l	104%
Ammonium	0,070	0,004	0,070		mg/l	100%
Chloride	54,8	1,2	56,6		mg/l	103%
Sulphate	34,7	0,4	35,4		mg/l	102%
Orthophosphate	<0,009		<0,03		mg/l	•
Boron	0,1265	0,0012	0,125		mg/l	99%
DOC	1,89	0,04	2,10		mg/l	111%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,51	0,12	4,20		mg/l	120%

■ Deviation ■ Recovery



Sample N167B
Laboratory AM

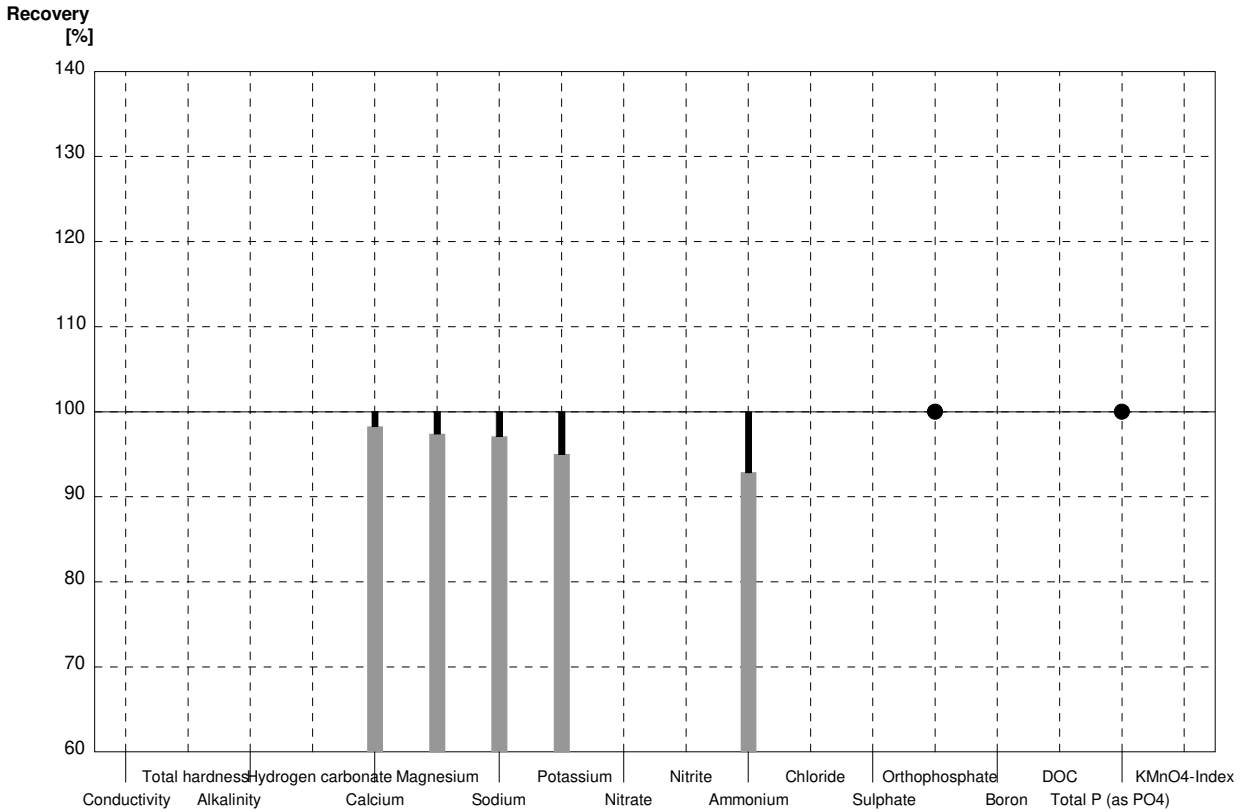
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446,4		µS/cm	101%
Total hardness	1,321	0,015	7,2		mmol/l	545%
Alkalinity	1,294	0,018	1,336		mmol/l	103%
Hydrogen carbonate	75,9	1,1	78,5		mg/l	103%
Calcium	39,6	0,6	38,4		mg/l	97%
Magnesium	8,07	0,10	8,1		mg/l	100%
Sodium	30,8	0,2	30,8		mg/l	100%
Potassium	6,98	0,04	7,20		mg/l	103%
Nitrate	51,3	1,2	40,8		mg/l	80%
Nitrite	0,0203	0,0018	0,0220		mg/l	108%
Ammonium	<0,01		<0,03		mg/l	•
Chloride	28,6	0,4	28,9		mg/l	101%
Sulphate	58,9	0,4	60,1		mg/l	102%
Orthophosphate	0,061	0,001	0,052		mg/l	85%
Boron	0,0544	0,0004	0,054		mg/l	99%
DOC	4,88	0,05	5,1		mg/l	105%
Total P (as PO4)	0,187	0,003	0,184		mg/l	98%
KMnO4-Index	5,64	0,15	6,10		mg/l	108%



Sample N167A
Laboratory AN

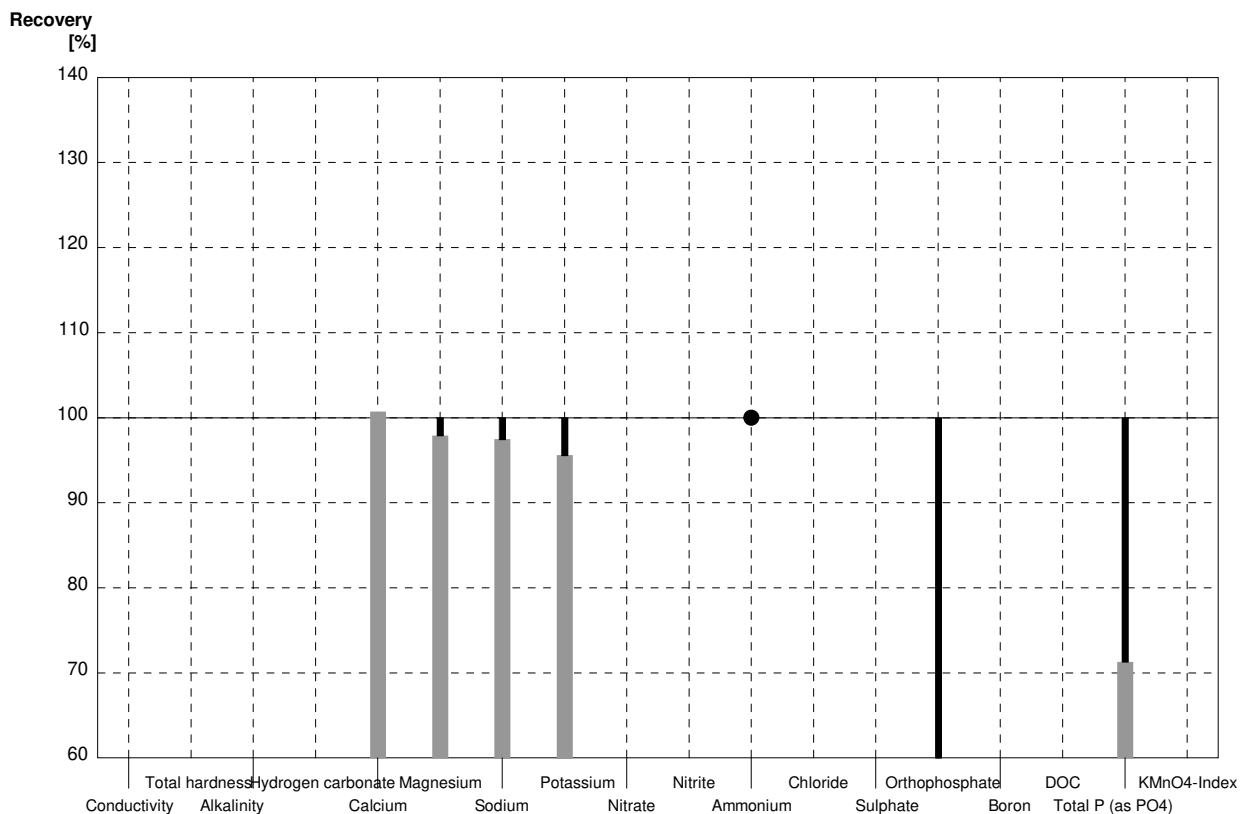
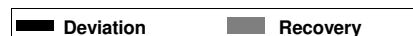
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	59,06	2,06	mg/l	98%
Magnesium	10,79	0,14	10,51	0,88	mg/l	97%
Sodium	24,9	0,3	24,18	1,51	mg/l	97%
Potassium	8,81	0,06	8,37	0,29	mg/l	95%
Nitrate	37,2	0,7			mg/l	
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004	0,065	0,003	mg/l	93%
Chloride	54,8	1,2			mg/l	
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009		<0,010	0,0001	mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009		<0,02	0,0066	mg/l	•
KMnO4-Index	3,51	0,12			mg/l	

■ Deviation ■ Recovery



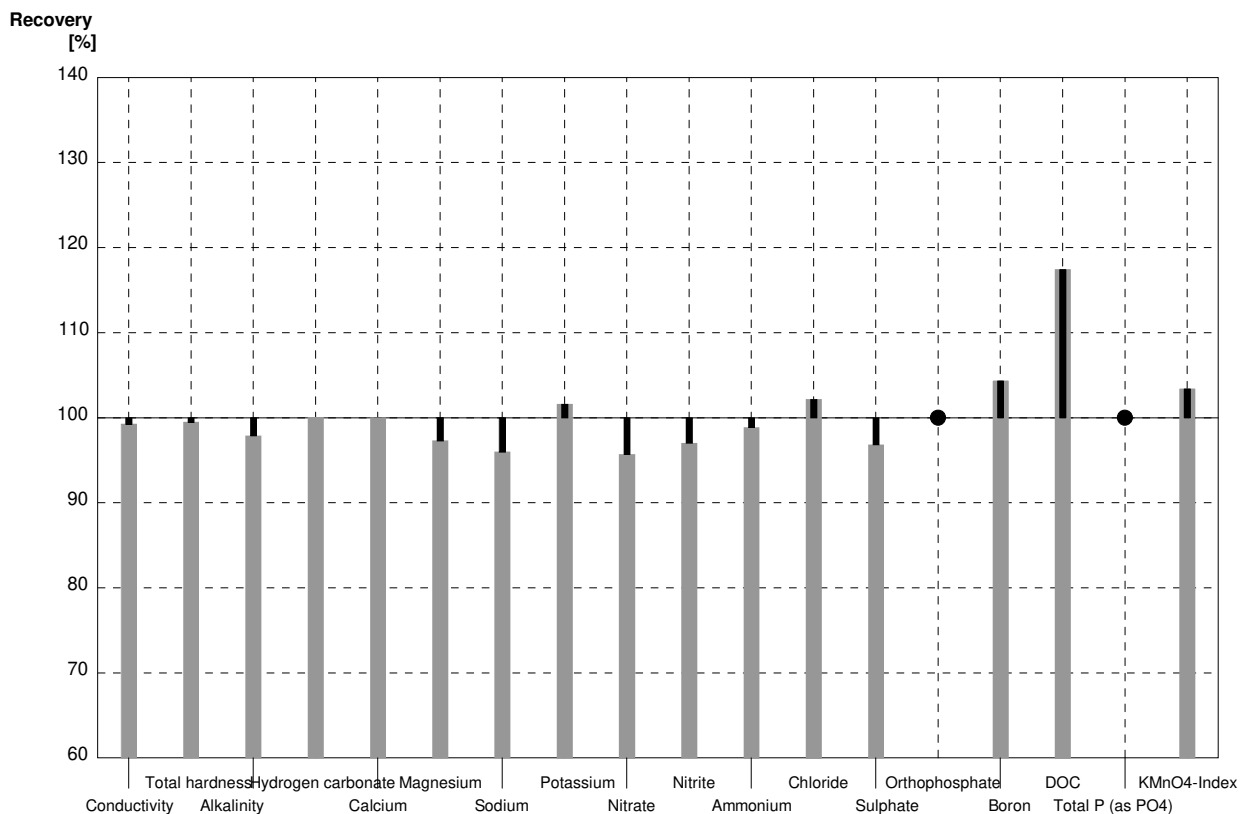
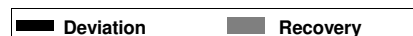
Sample N167B
Laboratory AN

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	39,88	1,65	mg/l	101%
Magnesium	8,07	0,10	7,90	0,58	mg/l	98%
Sodium	30,8	0,2	30,02	1,81	mg/l	97%
Potassium	6,98	0,04	6,67	0,22	mg/l	96%
Nitrate	51,3	1,2			mg/l	
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01		<0,040	0,003	mg/l	•
Chloride	28,6	0,4			mg/l	
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001	0,0210	0,0001	mg/l	34%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003	0,1333	0,0066	mg/l	71%
KMnO4-Index	5,64	0,15			mg/l	



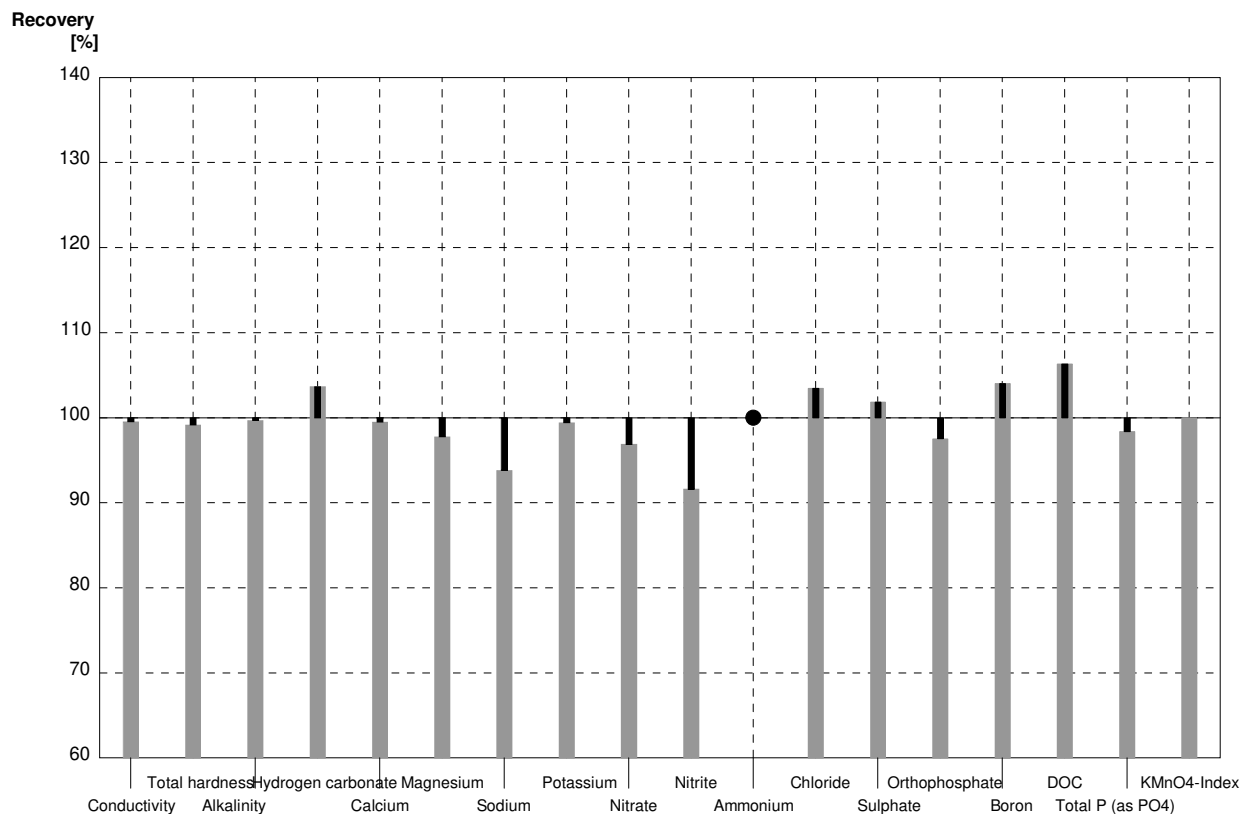
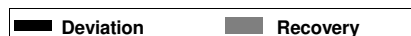
Sample N167A
Laboratory AO

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	540	16	µS/cm	99%
Total hardness	1,94	0,02	1,93	0,29	mmol/l	99%
Alkalinity	2,36	0,03	2,31	0,18	mmol/l	98%
Hydrogen carbonate	140,9	1,7	141	11	mg/l	100%
Calcium	60,1	0,9	60,1	9,0	mg/l	100%
Magnesium	10,79	0,14	10,5	1,3	mg/l	97%
Sodium	24,9	0,3	23,9	3,1	mg/l	96%
Potassium	8,81	0,06	8,95	1,3	mg/l	102%
Nitrate	37,2	0,7	35,6	3,6	mg/l	96%
Nitrite	0,0404	0,0009	0,0392	0,0043	mg/l	97%
Ammonium	0,070	0,004	0,0692	0,0055	mg/l	99%
Chloride	54,8	1,2	56,0	5,6	mg/l	102%
Sulphate	34,7	0,4	33,6	5,4	mg/l	97%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,1265	0,0012	0,132	0,017	mg/l	104%
DOC	1,89	0,04	2,22	0,44	mg/l	117%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,51	0,12	3,63	0,54	mg/l	103%



Sample N167B
Laboratory AO

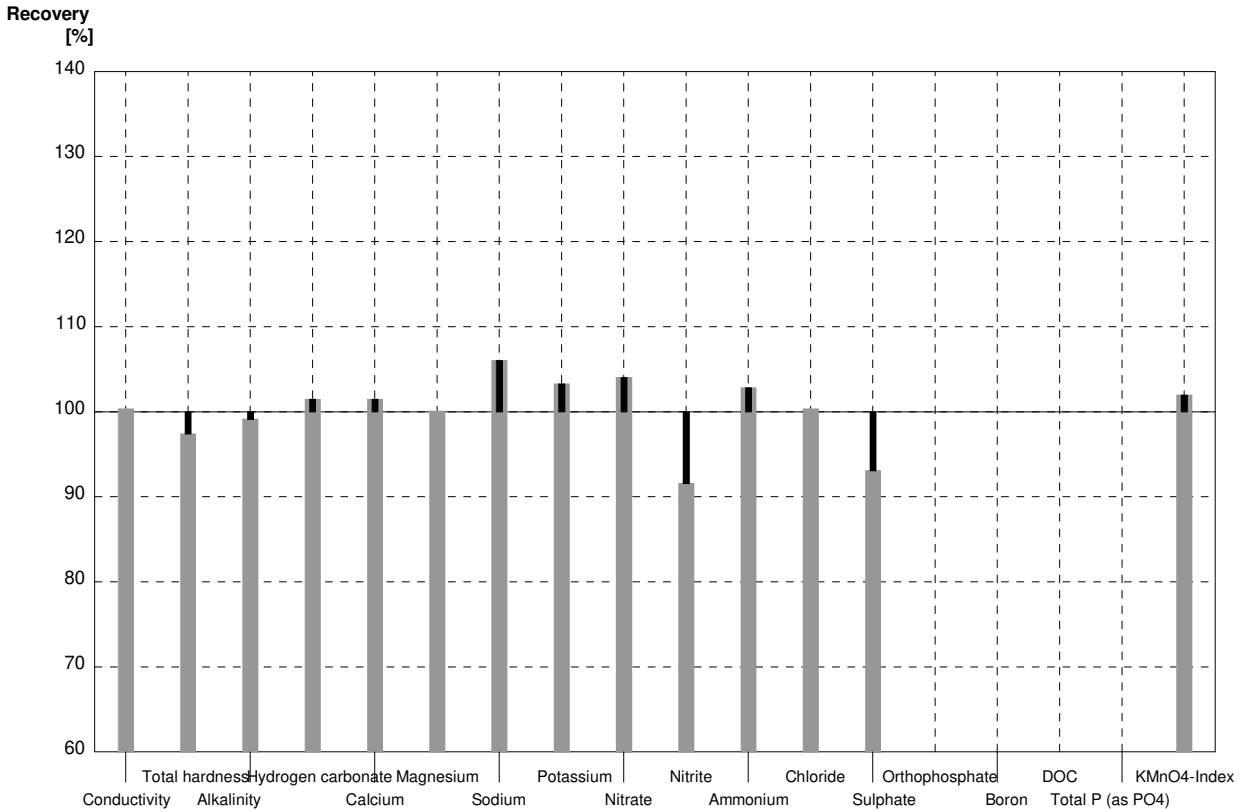
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	442	13	µS/cm	100%
Total hardness	1,321	0,015	1,31	0,20	mmol/l	99%
Alkalinity	1,294	0,018	1,29	0,10	mmol/l	100%
Hydrogen carbonate	75,9	1,1	78,7	6,3	mg/l	104%
Calcium	39,6	0,6	39,4	5,9	mg/l	99%
Magnesium	8,07	0,10	7,89	0,95	mg/l	98%
Sodium	30,8	0,2	28,9	3,8	mg/l	94%
Potassium	6,98	0,04	6,94	1,0	mg/l	99%
Nitrate	51,3	1,2	49,7	5,0	mg/l	97%
Nitrite	0,0203	0,0018	0,0186	0,0020	mg/l	92%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	29,6	3,0	mg/l	103%
Sulphate	58,9	0,4	60,0	9,6	mg/l	102%
Orthophosphate	0,061	0,001	0,0595	0,0048	mg/l	98%
Boron	0,0544	0,0004	0,0566	0,0074	mg/l	104%
DOC	4,88	0,05	5,19	1,0	mg/l	106%
Total P (as PO4)	0,187	0,003	0,184	0,015	mg/l	98%
KMnO4-Index	5,64	0,15	5,64	0,85	mg/l	100%



Sample N167A
Laboratory AP

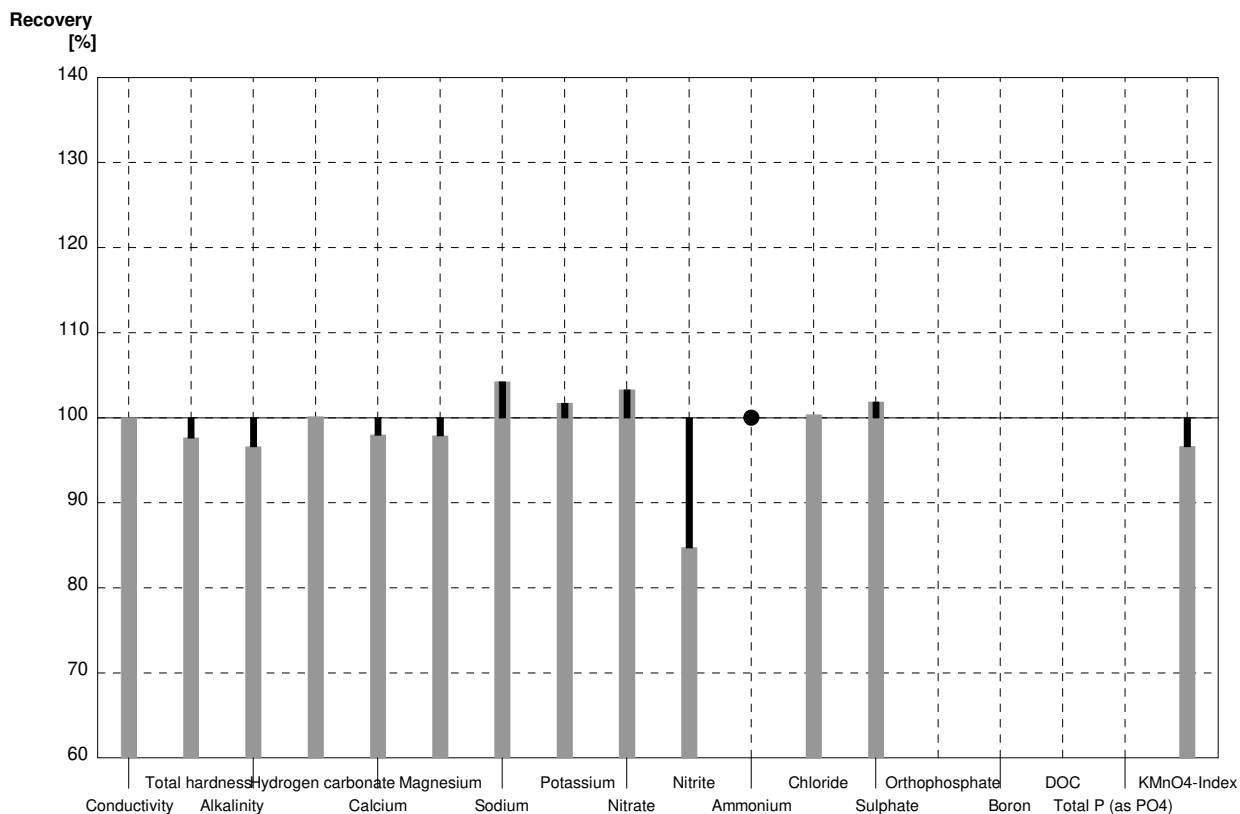
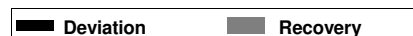
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	546	30	µS/cm	100%
Total hardness	1,94	0,02	1,89	0,19	mmol/l	97%
Alkalinity	2,36	0,03	2,34	0,25	mmol/l	99%
Hydrogen carbonate	140,9	1,7	143		mg/l	101%
Calcium	60,1	0,9	61	6,1	mg/l	101%
Magnesium	10,79	0,14	10,8	1,1	mg/l	100%
Sodium	24,9	0,3	26,4	2,6	mg/l	106%
Potassium	8,81	0,06	9,1	0,9	mg/l	103%
Nitrate	37,2	0,7	38,7	3,9	mg/l	104%
Nitrite	0,0404	0,0009	0,0370	0,004	mg/l	92%
Ammonium	0,070	0,004	0,072	0,007	mg/l	103%
Chloride	54,8	1,2	55	5,5	mg/l	100%
Sulphate	34,7	0,4	32,3	3,2	mg/l	93%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,58	0,40	mg/l	102%

■ Deviation ■ Recovery



Sample N167B
Laboratory AP

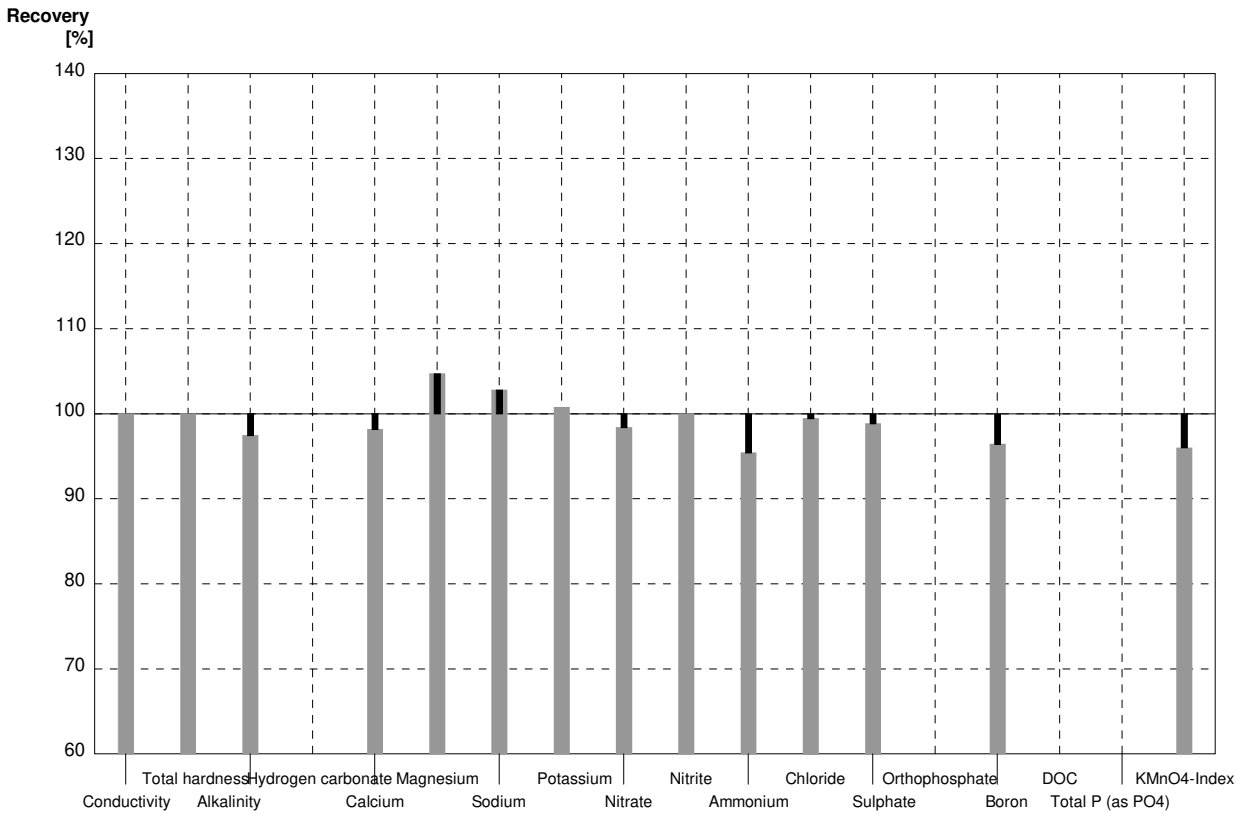
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	22	µS/cm	100%
Total hardness	1,321	0,015	1,29	0,13	mmol/l	98%
Alkalinity	1,294	0,018	1,25	0,13	mmol/l	97%
Hydrogen carbonate	75,9	1,1	76		mg/l	100%
Calcium	39,6	0,6	38,8	3,9	mg/l	98%
Magnesium	8,07	0,10	7,9	0,8	mg/l	98%
Sodium	30,8	0,2	32,1	3,2	mg/l	104%
Potassium	6,98	0,04	7,1	0,7	mg/l	102%
Nitrate	51,3	1,2	53	5,3	mg/l	103%
Nitrite	0,0203	0,0018	0,0172		mg/l	85%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,7	2,9	mg/l	100%
Sulphate	58,9	0,4	60	6,0	mg/l	102%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,45	0,55	mg/l	97%



Sample N167A
Laboratory AQ

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	544	10	µS/cm	100%
Total hardness	1,94	0,02	1,94	0,39	mmol/l	100%
Alkalinity	2,36	0,03	2,30	0,23	mmol/l	97%
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	59,0	12	mg/l	98%
Magnesium	10,79	0,14	11,3	2,3	mg/l	105%
Sodium	24,9	0,3	25,6	3,8	mg/l	103%
Potassium	8,81	0,06	8,88	1,8	mg/l	101%
Nitrate	37,2	0,7	36,6	3,7	mg/l	98%
Nitrite	0,0404	0,0009	0,0404	0,010	mg/l	100%
Ammonium	0,070	0,004	0,0668	0,018	mg/l	95%
Chloride	54,8	1,2	54,5	5,45	mg/l	99%
Sulphate	34,7	0,4	34,3	3,4	mg/l	99%
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012	0,122	0,031	mg/l	96%
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,37	0,85	mg/l	96%

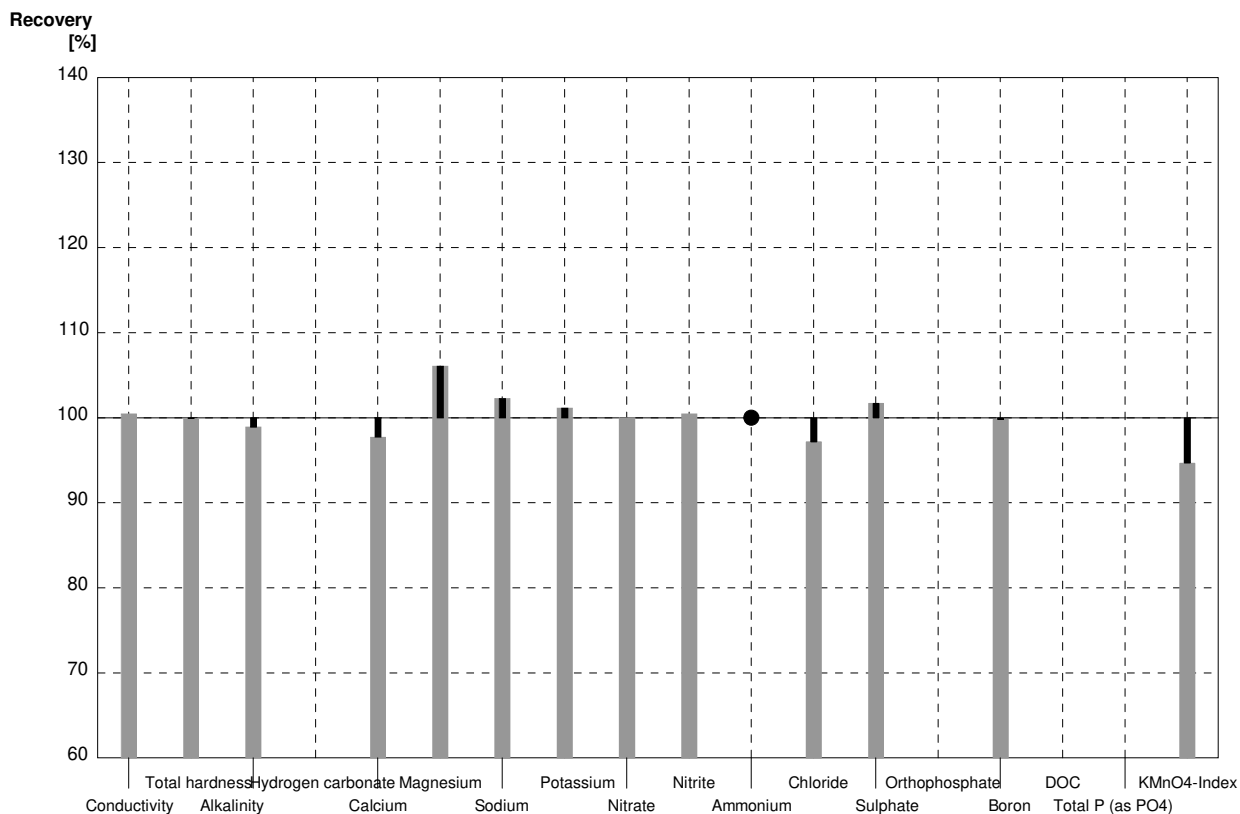
■ Deviation ■ Recovery



Sample N167B
Laboratory AQ

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	446	10	µS/cm	100%
Total hardness	1,321	0,015	1,32	0,27	mmol/l	100%
Alkalinity	1,294	0,018	1,28	0,13	mmol/l	99%
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	38,7	7,9	mg/l	98%
Magnesium	8,07	0,10	8,56	1,7	mg/l	106%
Sodium	30,8	0,2	31,5	4,8	mg/l	102%
Potassium	6,98	0,04	7,06	1,4	mg/l	101%
Nitrate	51,3	1,2	51,3	5,1	mg/l	100%
Nitrite	0,0203	0,0018	0,0204	0,010	mg/l	100%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	28,6	0,4	27,8	2,8	mg/l	97%
Sulphate	58,9	0,4	59,9	6,0	mg/l	102%
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004	0,0543	0,014	mg/l	100%
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	5,34	1,34	mg/l	95%

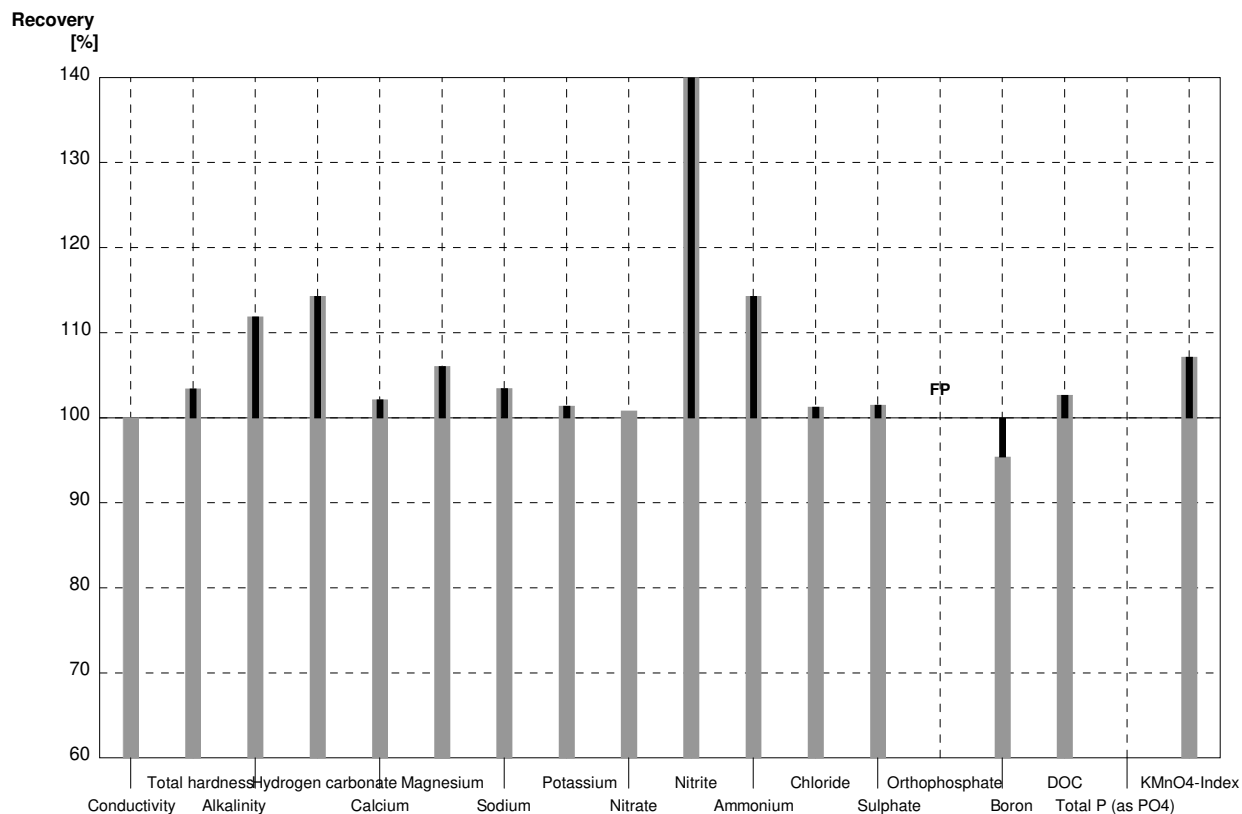
■ Deviation ■ Recovery



Sample N167A
Laboratory AR

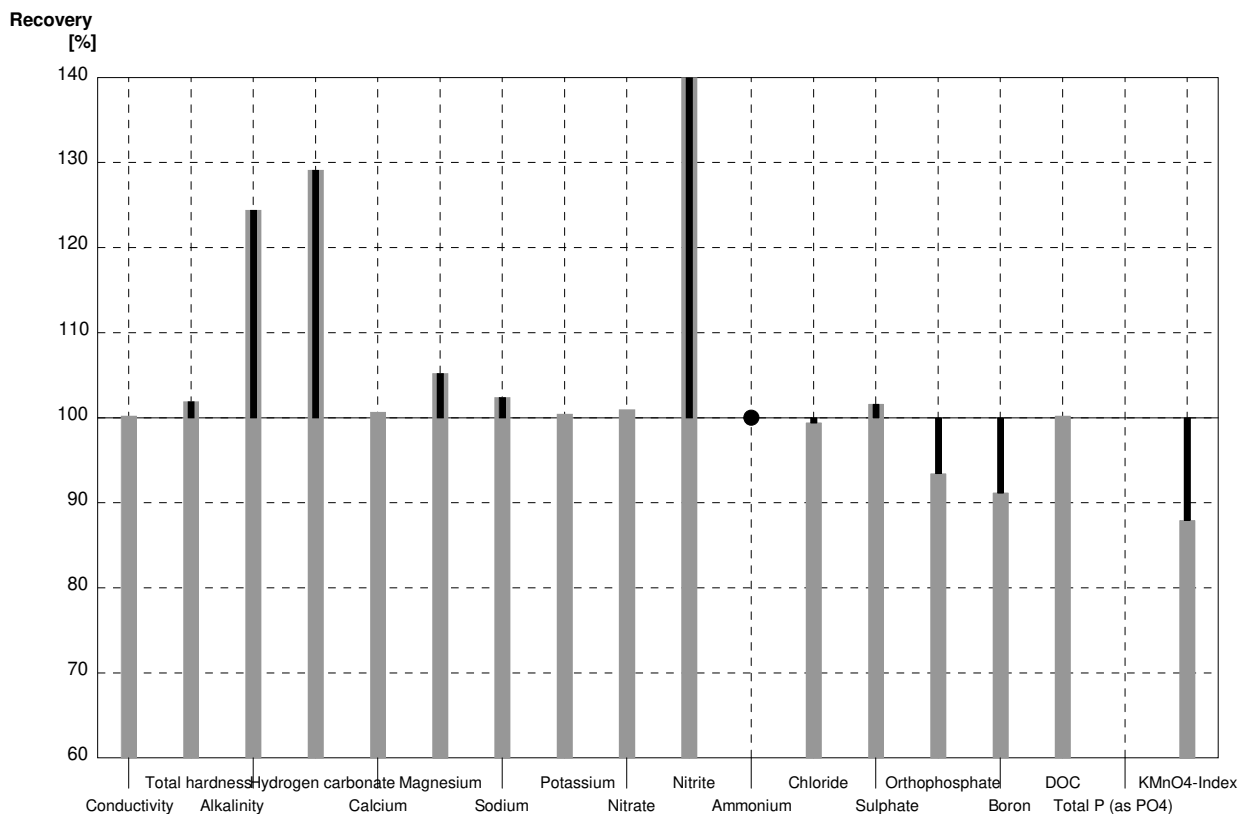
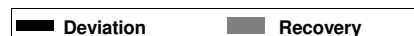
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	544		µS/cm	100%
Total hardness	1,94	0,02	2,006		mmol/l	103%
Alkalinity	2,36	0,03	2,64		mmol/l	112%
Hydrogen carbonate	140,9	1,7	161		mg/l	114%
Calcium	60,1	0,9	61,37		mg/l	102%
Magnesium	10,79	0,14	11,44		mg/l	106%
Sodium	24,9	0,3	25,76		mg/l	103%
Potassium	8,81	0,06	8,93		mg/l	101%
Nitrate	37,2	0,7	37,50		mg/l	101%
Nitrite	0,0404	0,0009	0,080		mg/l	198%
Ammonium	0,070	0,004	0,080		mg/l	114%
Chloride	54,8	1,2	55,49		mg/l	101%
Sulphate	34,7	0,4	35,22		mg/l	101%
Orthophosphate	<0,009		0,0133		mg/l	FP
Boron	0,1265	0,0012	0,1207		mg/l	95%
DOC	1,89	0,04	1,94		mg/l	103%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12	3,76		mg/l	107%

■ Deviation ■ Recovery



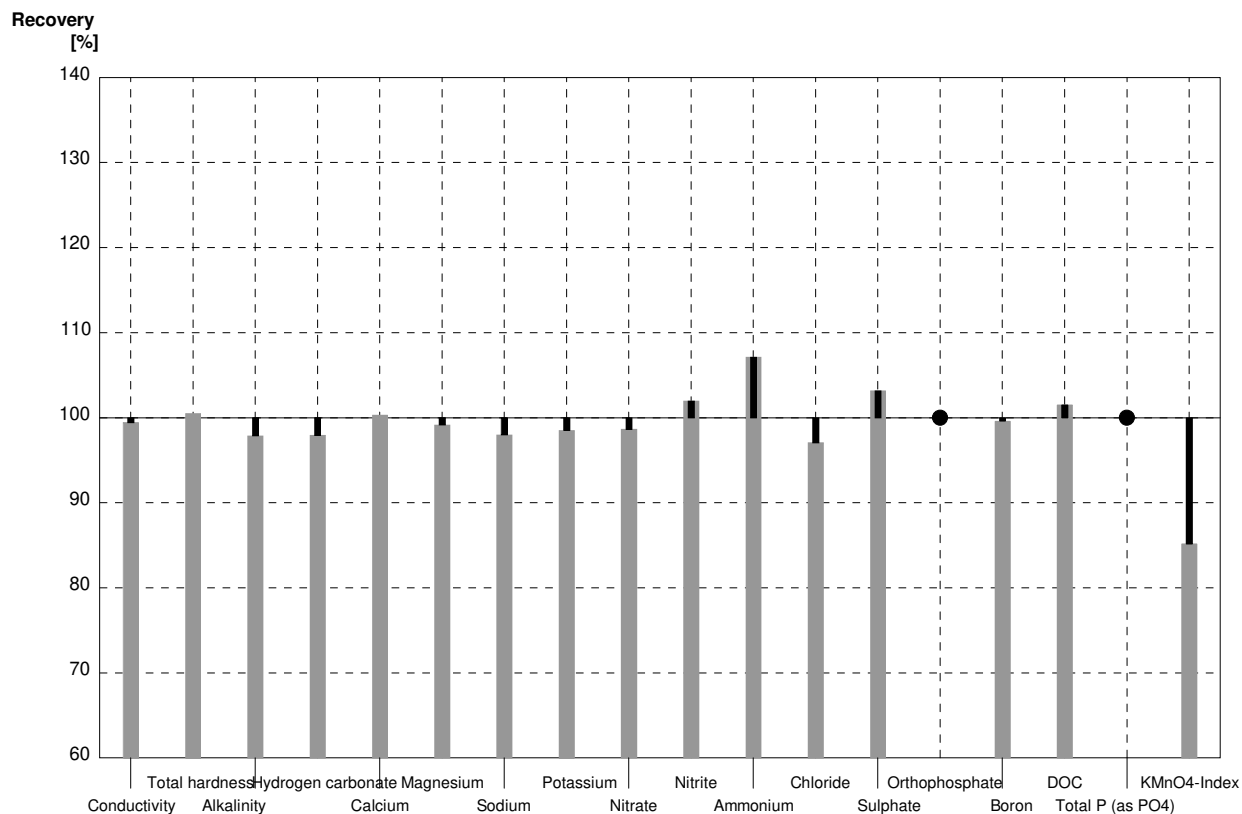
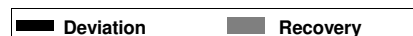
Sample N167B
Laboratory AR

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	445		µS/cm	100%
Total hardness	1,321	0,015	1,346		mmol/l	102%
Alkalinity	1,294	0,018	1,61		mmol/l	124%
Hydrogen carbonate	75,9	1,1	98		mg/l	129%
Calcium	39,6	0,6	39,87		mg/l	101%
Magnesium	8,07	0,10	8,49		mg/l	105%
Sodium	30,8	0,2	31,54		mg/l	102%
Potassium	6,98	0,04	7,01		mg/l	100%
Nitrate	51,3	1,2	51,79		mg/l	101%
Nitrite	0,0203	0,0018	0,060		mg/l	296%
Ammonium	<0,01		0,0100		mg/l	•
Chloride	28,6	0,4	28,43		mg/l	99%
Sulphate	58,9	0,4	59,85		mg/l	102%
Orthophosphate	0,061	0,001	0,057		mg/l	93%
Boron	0,0544	0,0004	0,0496		mg/l	91%
DOC	4,88	0,05	4,89		mg/l	100%
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15	4,96		mg/l	88%



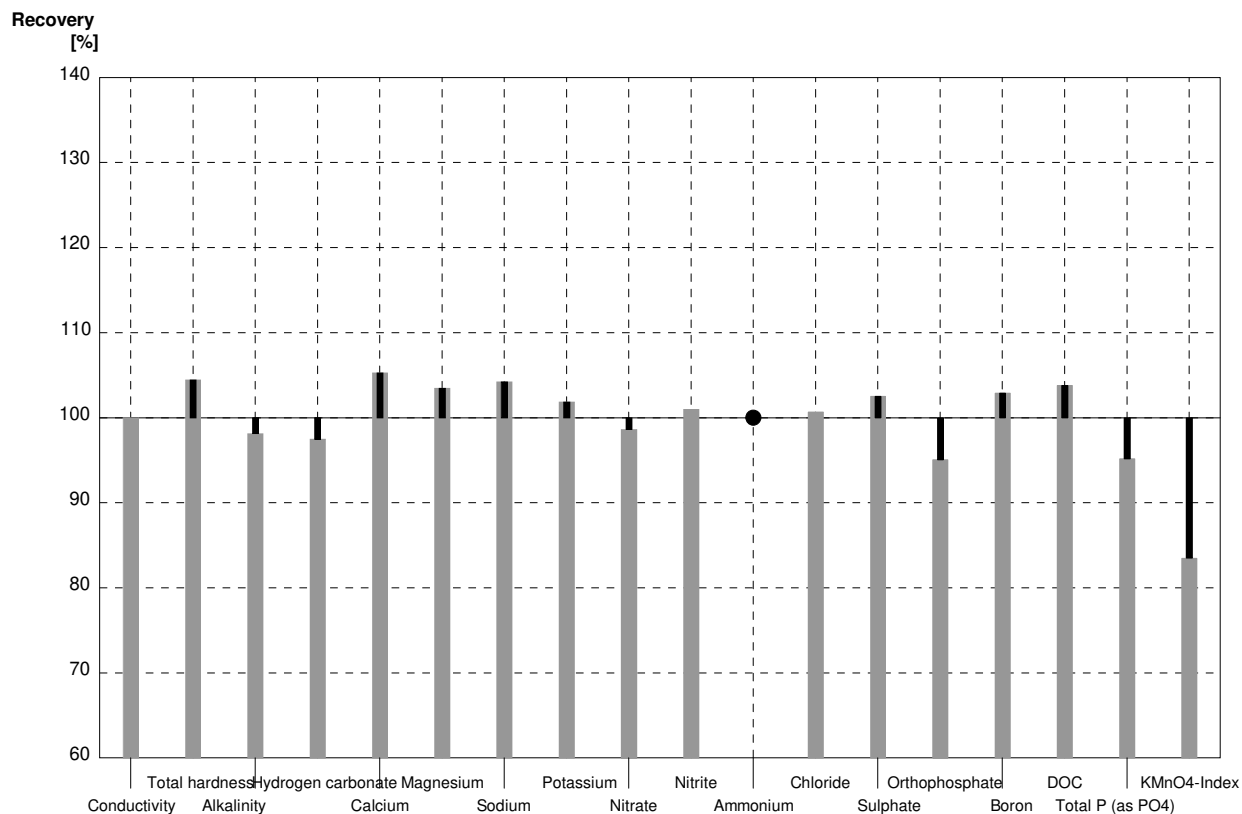
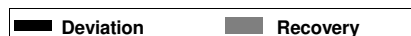
Sample N167A
Laboratory AS

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	541		µS/cm	99%
Total hardness	1,94	0,02	1,95		mmol/l	101%
Alkalinity	2,36	0,03	2,31		mmol/l	98%
Hydrogen carbonate	140,9	1,7	138		mg/l	98%
Calcium	60,1	0,9	60,3		mg/l	100%
Magnesium	10,79	0,14	10,7		mg/l	99%
Sodium	24,9	0,3	24,4		mg/l	98%
Potassium	8,81	0,06	8,68		mg/l	99%
Nitrate	37,2	0,7	36,7		mg/l	99%
Nitrite	0,0404	0,0009	0,0412		mg/l	102%
Ammonium	0,070	0,004	0,075		mg/l	107%
Chloride	54,8	1,2	53,2		mg/l	97%
Sulphate	34,7	0,4	35,8		mg/l	103%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,1265	0,0012	0,126		mg/l	100%
DOC	1,89	0,04	1,919		mg/l	102%
Total P (as PO4)	<0,009		<0,03		mg/l	•
KMnO4-Index	3,51	0,12	2,99		mg/l	85%



Sample N167B
Laboratory AS

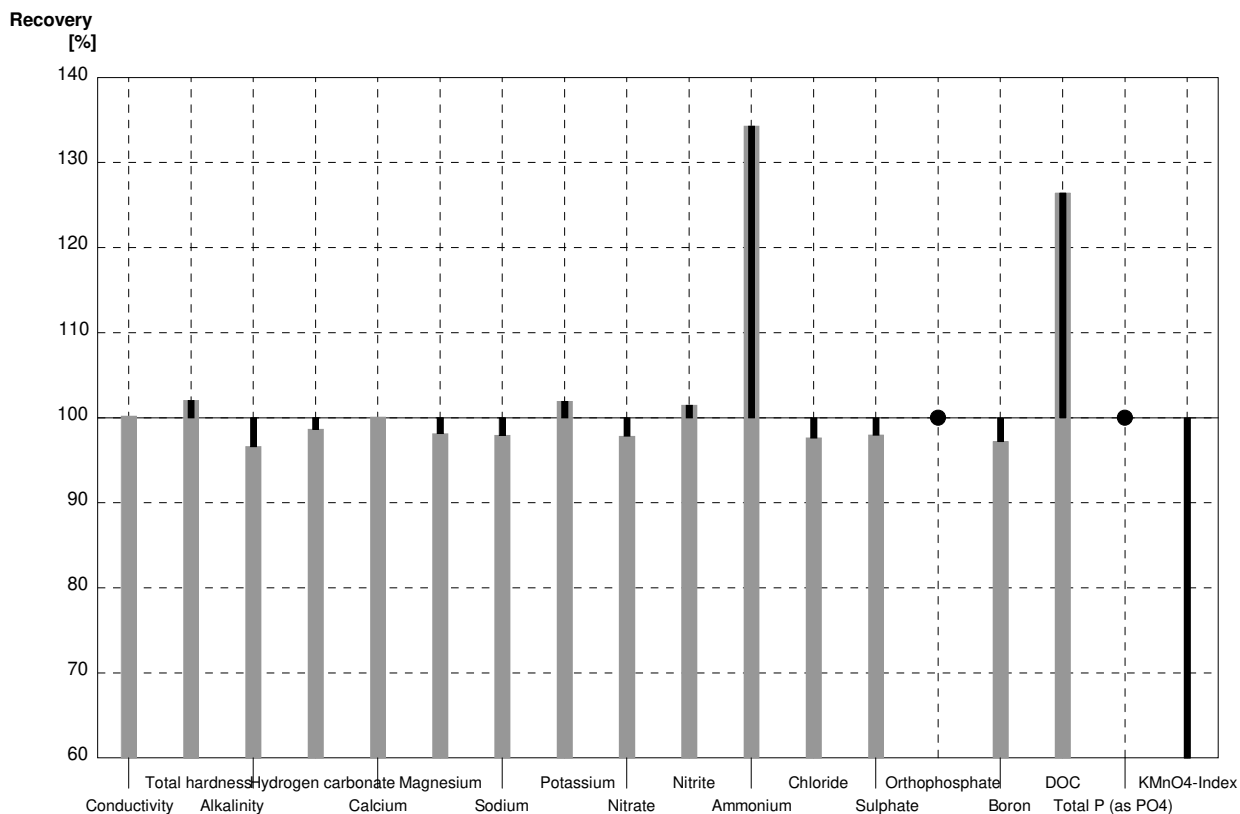
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444		µS/cm	100%
Total hardness	1,321	0,015	1,38		mmol/l	104%
Alkalinity	1,294	0,018	1,27		mmol/l	98%
Hydrogen carbonate	75,9	1,1	74		mg/l	97%
Calcium	39,6	0,6	41,7		mg/l	105%
Magnesium	8,07	0,10	8,35		mg/l	103%
Sodium	30,8	0,2	32,1		mg/l	104%
Potassium	6,98	0,04	7,11		mg/l	102%
Nitrate	51,3	1,2	50,6		mg/l	99%
Nitrite	0,0203	0,0018	0,0205		mg/l	101%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	28,6	0,4	28,8		mg/l	101%
Sulphate	58,9	0,4	60,4		mg/l	103%
Orthophosphate	0,061	0,001	0,058		mg/l	95%
Boron	0,0544	0,0004	0,056		mg/l	103%
DOC	4,88	0,05	5,067		mg/l	104%
Total P (as PO4)	0,187	0,003	0,178		mg/l	95%
KMnO4-Index	5,64	0,15	4,71		mg/l	84%



Sample N167A
Laboratory AT

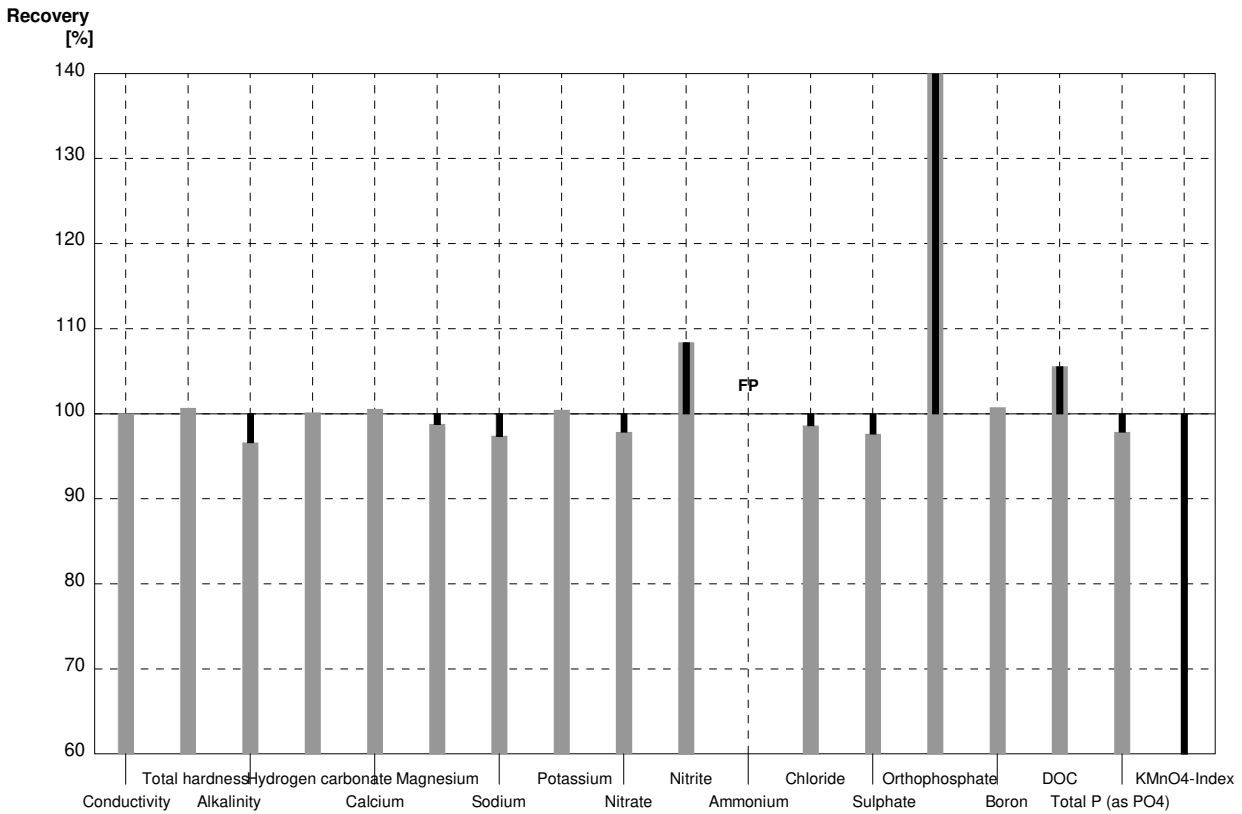
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	545	17,2	µS/cm	100%
Total hardness	1,94	0,02	1,98	0,30	mmol/l	102%
Alkalinity	2,36	0,03	2,28	0,77	mmol/l	97%
Hydrogen carbonate	140,9	1,7	139	47,2	mg/l	99%
Calcium	60,1	0,9	60,15	5,02	mg/l	100%
Magnesium	10,79	0,14	10,59	0,852	mg/l	98%
Sodium	24,9	0,3	24,39	1,85	mg/l	98%
Potassium	8,81	0,06	8,98	0,908	mg/l	102%
Nitrate	37,2	0,7	36,4	3,91	mg/l	98%
Nitrite	0,0404	0,0009	0,0410	0,006	mg/l	101%
Ammonium	0,070	0,004	0,094	0,014	mg/l	134%
Chloride	54,8	1,2	53,5	3,05	mg/l	98%
Sulphate	34,7	0,4	34,0	3,13	mg/l	98%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,1265	0,0012	0,123	0,0123	mg/l	97%
DOC	1,89	0,04	2,39	0,115	mg/l	126%
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,51	0,12	1,70	0,40	mg/l	48%

■ Deviation ■ Recovery



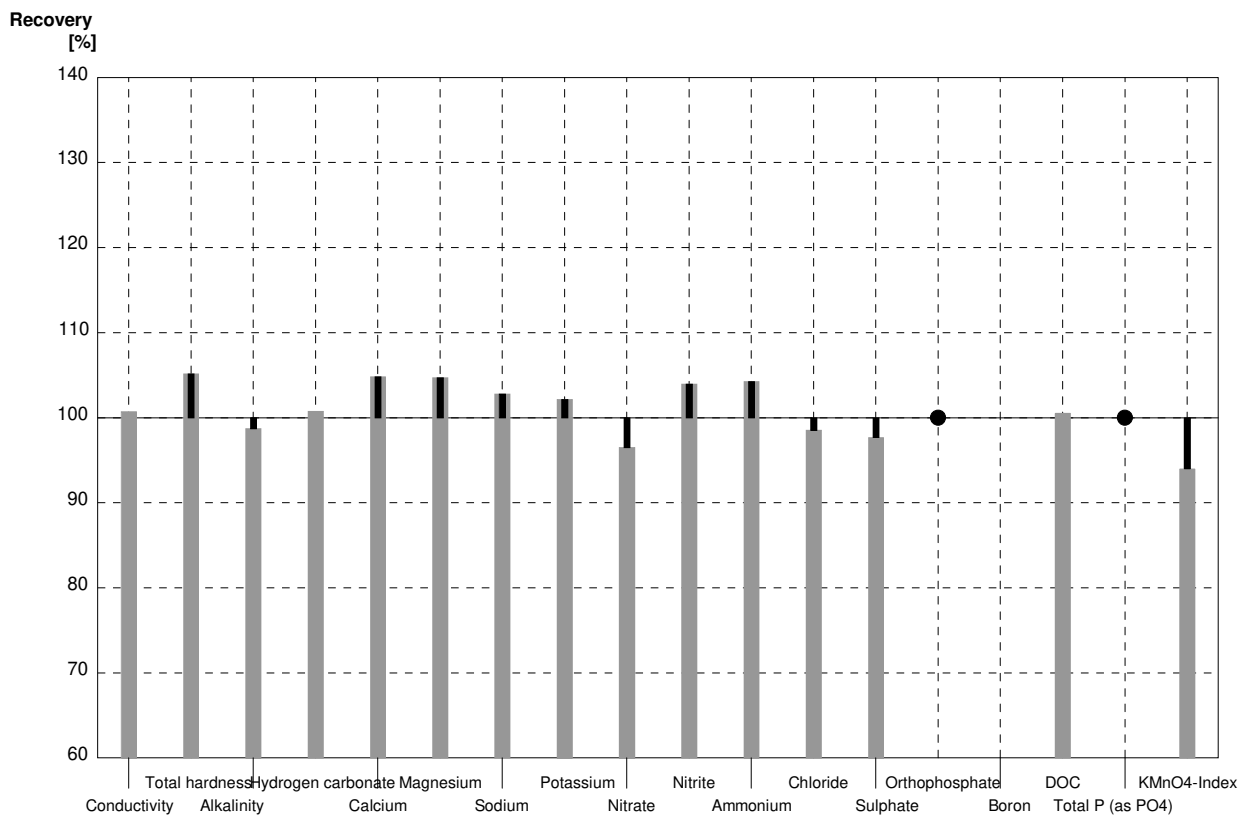
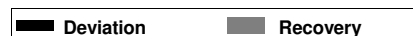
Sample N167B
Laboratory AT

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	444	14,0	µS/cm	100%
Total hardness	1,321	0,015	1,33	0,20	mmol/l	101%
Alkalinity	1,294	0,018	1,25	0,42	mmol/l	97%
Hydrogen carbonate	75,9	1,1	76	25,8	mg/l	100%
Calcium	39,6	0,6	39,82	3,32	mg/l	101%
Magnesium	8,07	0,10	7,97	0,642	mg/l	99%
Sodium	30,8	0,2	29,99	2,27	mg/l	97%
Potassium	6,98	0,04	7,01	0,708	mg/l	100%
Nitrate	51,3	1,2	50,2	5,35	mg/l	98%
Nitrite	0,0203	0,0018	0,0220	0,003	mg/l	108%
Ammonium	<0,01		0,0270	0,004	mg/l	FP
Chloride	28,6	0,4	28,2	1,61	mg/l	99%
Sulphate	58,9	0,4	57,5	5,28	mg/l	98%
Orthophosphate	0,061	0,001	0,128	0,026	mg/l	210%
Boron	0,0544	0,0004	0,0548	0,00548	mg/l	101%
DOC	4,88	0,05	5,15	0,231	mg/l	106%
Total P (as PO4)	0,187	0,003	0,183	0,038	mg/l	98%
KMnO4-Index	5,64	0,15	2,23	0,53	mg/l	40%



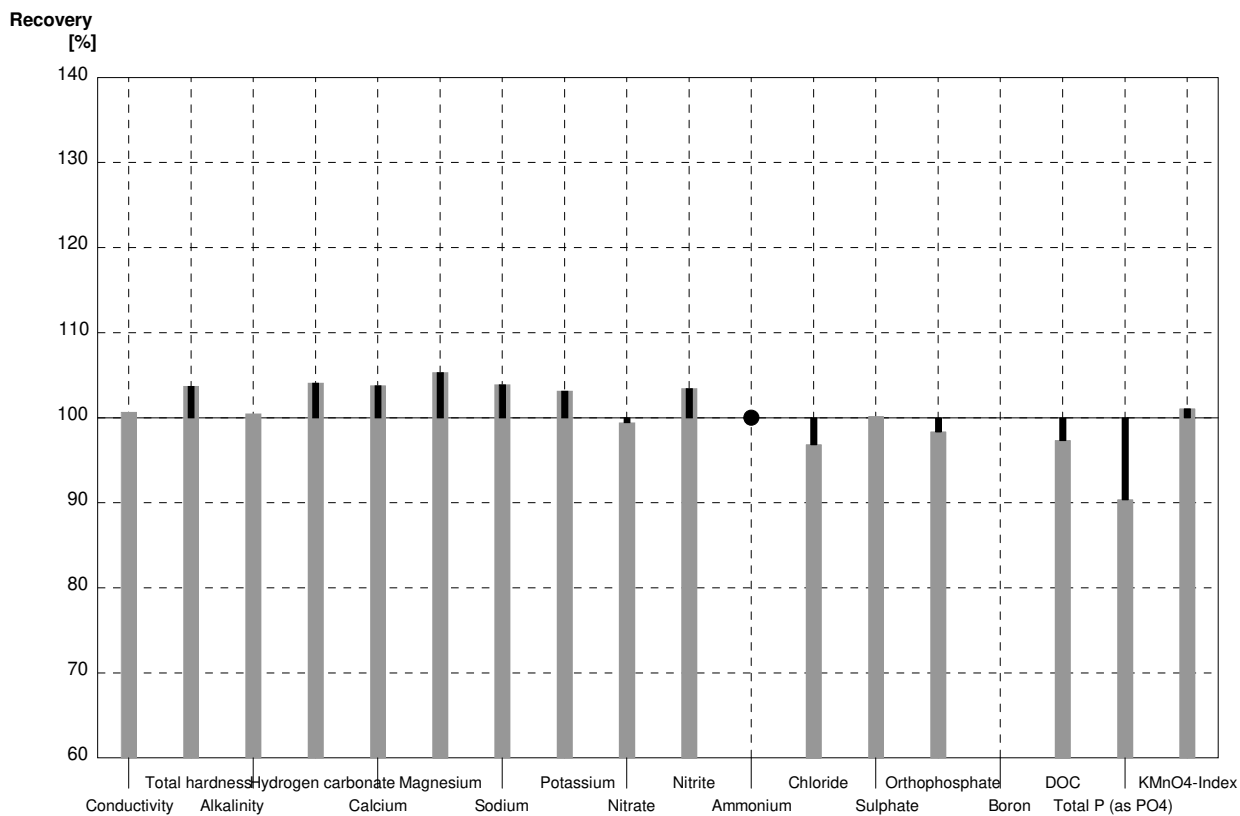
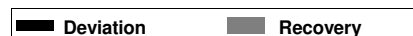
Sample N167A
Laboratory AU

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2	548	11	µS/cm	101%
Total hardness	1,94	0,02	2,04	0,14	mmol/l	105%
Alkalinity	2,36	0,03	2,33	0,12	mmol/l	99%
Hydrogen carbonate	140,9	1,7	142	11	mg/l	101%
Calcium	60,1	0,9	63	5	mg/l	105%
Magnesium	10,79	0,14	11,3	0,9	mg/l	105%
Sodium	24,9	0,3	25,6	3,1	mg/l	103%
Potassium	8,81	0,06	9,0	1,0	mg/l	102%
Nitrate	37,2	0,7	35,9	2,9	mg/l	97%
Nitrite	0,0404	0,0009	0,0420	0,005	mg/l	104%
Ammonium	0,070	0,004	0,073	0,019	mg/l	104%
Chloride	54,8	1,2	54	4	mg/l	99%
Sulphate	34,7	0,4	33,9	2,0	mg/l	98%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04	1,90	0,48	mg/l	101%
Total P (as PO4)	<0,009		<0,009		mg/l	•
KMnO4-Index	3,51	0,12	3,30	0,2	mg/l	94%



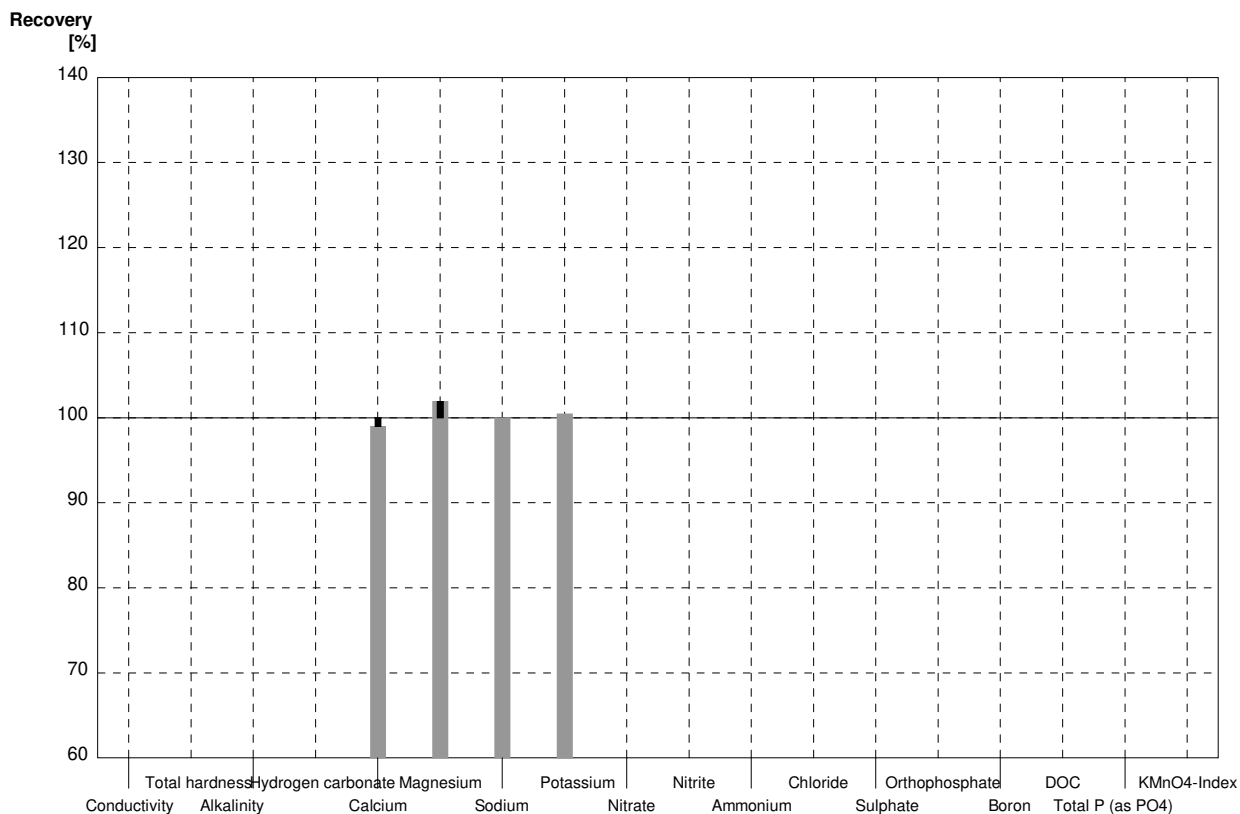
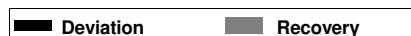
Sample N167B
Laboratory AU

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1	447	9	µS/cm	101%
Total hardness	1,321	0,015	1,37	0,09	mmol/l	104%
Alkalinity	1,294	0,018	1,30	0,07	mmol/l	100%
Hydrogen carbonate	75,9	1,1	79	6	mg/l	104%
Calcium	39,6	0,6	41,1	3,3	mg/l	104%
Magnesium	8,07	0,10	8,5	0,7	mg/l	105%
Sodium	30,8	0,2	32,0	1,9	mg/l	104%
Potassium	6,98	0,04	7,2	0,8	mg/l	103%
Nitrate	51,3	1,2	51	4	mg/l	99%
Nitrite	0,0203	0,0018	0,0210	0,003	mg/l	103%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	28,6	0,4	27,7	2,2	mg/l	97%
Sulphate	58,9	0,4	59	4	mg/l	100%
Orthophosphate	0,061	0,001	0,060	0,005	mg/l	98%
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05	4,75	1,19	mg/l	97%
Total P (as PO4)	0,187	0,003	0,169	0,015	mg/l	90%
KMnO4-Index	5,64	0,15	5,7	0,4	mg/l	101%



Sample N167A
Laboratory AV

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	544	2			µS/cm	
Total hardness	1,94	0,02			mmol/l	
Alkalinity	2,36	0,03			mmol/l	
Hydrogen carbonate	140,9	1,7			mg/l	
Calcium	60,1	0,9	59,5	4,85	mg/l	99%
Magnesium	10,79	0,14	11,0	1,23	mg/l	102%
Sodium	24,9	0,3	24,9	1,18	mg/l	100%
Potassium	8,81	0,06	8,85	0,806	mg/l	100%
Nitrate	37,2	0,7			mg/l	
Nitrite	0,0404	0,0009			mg/l	
Ammonium	0,070	0,004			mg/l	
Chloride	54,8	1,2			mg/l	
Sulphate	34,7	0,4			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,1265	0,0012			mg/l	
DOC	1,89	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,51	0,12			mg/l	



Sample N167B
Laboratory AV

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	444	1			µS/cm	
Total hardness	1,321	0,015			mmol/l	
Alkalinity	1,294	0,018			mmol/l	
Hydrogen carbonate	75,9	1,1			mg/l	
Calcium	39,6	0,6	39,4	3,21	mg/l	99%
Magnesium	8,07	0,10	8,26	0,927	mg/l	102%
Sodium	30,8	0,2	32,3	1,53	mg/l	105%
Potassium	6,98	0,04	7,84	0,714	mg/l	112%
Nitrate	51,3	1,2			mg/l	
Nitrite	0,0203	0,0018			mg/l	
Ammonium	<0,01				mg/l	
Chloride	28,6	0,4			mg/l	
Sulphate	58,9	0,4			mg/l	
Orthophosphate	0,061	0,001			mg/l	
Boron	0,0544	0,0004			mg/l	
DOC	4,88	0,05			mg/l	
Total P (as PO4)	0,187	0,003			mg/l	
KMnO4-Index	5,64	0,15			mg/l	

