

# IFA-Proficiency Testing Scheme for Water Analysis

Round N163  
Major Ions

Sample Dispatch: 5 September 2022

In accordance with the procedure: AVKPS.01



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Round: N163	Date / Signature:	05.10.2022 

Report: 1<sup>st</sup> edition, created on 5 October 2022 by Ing. Uta Kachelmeier  
173 pages

This report summarises the results of round N163 (major ions) within the IFA-Proficiency Testing Scheme for Water Analysis. The samples N163A and N163B were distributed to 51 participants on Monday, 5 September 2022. 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, 30 September 2022. 49 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<sub>3</sub>, CaCl<sub>2</sub>, Ca(NO<sub>3</sub>)<sub>2</sub>, MgSO<sub>4</sub>, Mg(NO<sub>3</sub>)<sub>2</sub>, NaCl, NaHCO<sub>3</sub>, Na<sub>2</sub>SO<sub>4</sub>, KHCO<sub>3</sub>, K<sub>2</sub>SO<sub>4</sub>, diethyl ethylphosphonate (CaH<sub>15</sub>PO<sub>3</sub>, for total-P), potassium hydrogen phthalate (for DOC) and certified standard solutions of NaNO<sub>2</sub>, Na<sub>2</sub>SiO<sub>3</sub>, NH<sub>4</sub>Cl, KH<sub>2</sub>PO<sub>4</sub>, H<sub>3</sub>BO<sub>3</sub> and Zn(CN)<sub>2</sub>/KCN. Both samples, N163A and N163B, contained free CO<sub>2</sub>, which was used for dissolution of CaCO<sub>3</sub> and neutralisation of Na<sub>2</sub>SiO<sub>3</sub>. 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<sub>4</sub><sup>+</sup>, NO<sub>2</sub><sup>-</sup>, o-PO<sub>4</sub><sup>3-</sup> and CN<sup>-</sup> of samples N163A and N163B 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 (N164).

According to our experience, the samples remain stable up to 18 months for the parameters conductivity, total hardness, alkalinity, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, K<sup>+</sup>, NO<sub>3</sub><sup>-</sup>, Cl<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, boron and HCO<sub>3</sub><sup>-</sup>, when stored at 4°C in the dark. For the parameters CN<sup>-</sup>, NH<sub>4</sub><sup>+</sup>, NO<sub>2</sub><sup>-</sup>, o-PO<sub>4</sub><sup>3-</sup>, total-P and DOC the samples remain stable several weeks, whereas the first changes normally are observed for NH<sub>4</sub><sup>+</sup> and CN<sup>-</sup>.

## 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, 3<sup>rd</sup> 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 892 µS/cm in sample N163A and 394 µS/cm in sample N163B.

For the pH no target values can be assigned. The results can be compared on the tables. In this kind of samples containing CO<sub>2</sub>, the pH tends to increase slowly over time.

**Total phosphorus after digestion** had to be determined according to DIN EN ISO 6878. Diethyl ethylphosphonate ( $C_6H_{15}PO_3$ ), which can be determined as phosphate only after oxidative digestion and potassium dihydrogen phosphate ( $KH_2PO_4$ ) 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  $\text{o-PO}_4^{3-}$ .

Cyanide (easily liberatable) had to be determined according to ISO 14403 - 2:2012 (ISO 6703 - 2:1984; DIN 38405 - D13). A certified potassium cyanide - zinc cyanide standard solution was used for preparation of the interlaboratory comparison samples. The major advantage of the zinc complex over free cyanide is its excellent stability behaviour at neutral pH. The results were given in mg/L  $\text{CN}^-$ .

Ammonium was not added to sample N163A and no phosphorus substances were added to sample N163B. In order to check the analytical blank values, target concentrations were set to <0.01 mg/L  $\text{NH}_4^+$ , <0.009 mg/L  $\text{o-PO}_4^{3-}$  and <0.009 mg/L total-P (as  $\text{PO}_4^{3-}$ ), 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 87.1 % (cyanide in sample N163A) and 102.5 % (nitrite and orthophosphate in sample N163A).

The between laboratory CVs covered the range between 0.7 % (conductivity in sample N163B) and 10.7 % (cyanide in sample N163B).

All confidence intervals of the outlier-corrected laboratory mean values except for alkalinity  $K_{S4.3}$  in sample N163A ( $98.0\% \pm 0.4\%$ ) and cyanide in sample N163A ( $87.1\% \pm 6.0\%$ ) 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  
xi     result of laboratory  
X      target value or mean value („consensus value“)  
 $\sigma_{PT}$  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 2011 to 2021. 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](http://www.ifatest.eu)) by 5.6 %, which is 0.34 mg/L DOC, when based on the target value.

$$z = \frac{x_i - X}{\sigma_{pt}} = \frac{7.00 \text{ mg/L} - 6.02 \text{ mg/L}}{0.34 \text{ mg/L}} \approx 2.9 \quad \text{or} \quad \frac{116\% - 100\%}{5.6\%} \approx 2.9$$

$z$  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)

$\sigma_{pt}$  0.34 mg/L equivalent to 5.6 % (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 <sub>S4.3</sub>	2.0 %	0.2 mmol/L
Ammonium	12 %	0.01 mg/L
Boron	7.5 %	0.012 mg/L
Calcium	3.3 %	9 mg/L
Chloride	2.9 %	2 mg/L
el. Conductivity	1.2 %	50 µS/cm
Cyanide	16 %	0.01 mg/L
DOC	5.6 %	1 mg/L
Hydrogen carbonate	2.4 %	20 mg/L
Magnesium	3.7 %	1 mg/L
Nitrate	3.2 %	2 mg/L
Nitrite	5.6 %	0.01 mg/L
Orthophosphate	10 %	0.015 mg/L
Potassium	4.4 %	0.5 mg/L
Sodium	3.2 %	1 mg/L
Sulphate	3.1 %	3 mg/L
Total hardness	2.9 %	0.1 mmol/L
Total-P (as PO <sub>4</sub> <sup>3-</sup> )	10 %	0.015 mg/L

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

z-Score	Classification
$\leq 2$	satisfactory
$2 <  z  < 3$	questionable
$\geq 3$	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", 3<sup>rd</sup> 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, 6 October 2022

## EXPLANATION

### Sample M106A

#### Parameter Copper

Target value  $\pm U$  ( $k=2$ )  $4,79 \mu\text{g/l} \pm 0,13 \mu\text{g/l}$

IFA result  $\pm U$  ( $k=2$ )  $4,79 \mu\text{g/l} \pm 0,38 \mu\text{g/l}$

Stability test  $\pm U$  ( $k=2$ )  $4,69 \mu\text{g/l} \pm 0,38 \mu\text{g/l}$

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

An asterisk 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 $\pm$ CI(99%)	$4,65 \pm 0,57$	$4,51 \pm 0,42$	$\mu\text{g/l}$
Recov. $\pm$ CI(99%)	$97,1 \pm 12,0$	$94,1 \pm 8,8$	%
SD between labs	0.84	0.59	$\mu\text{g/l}$
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

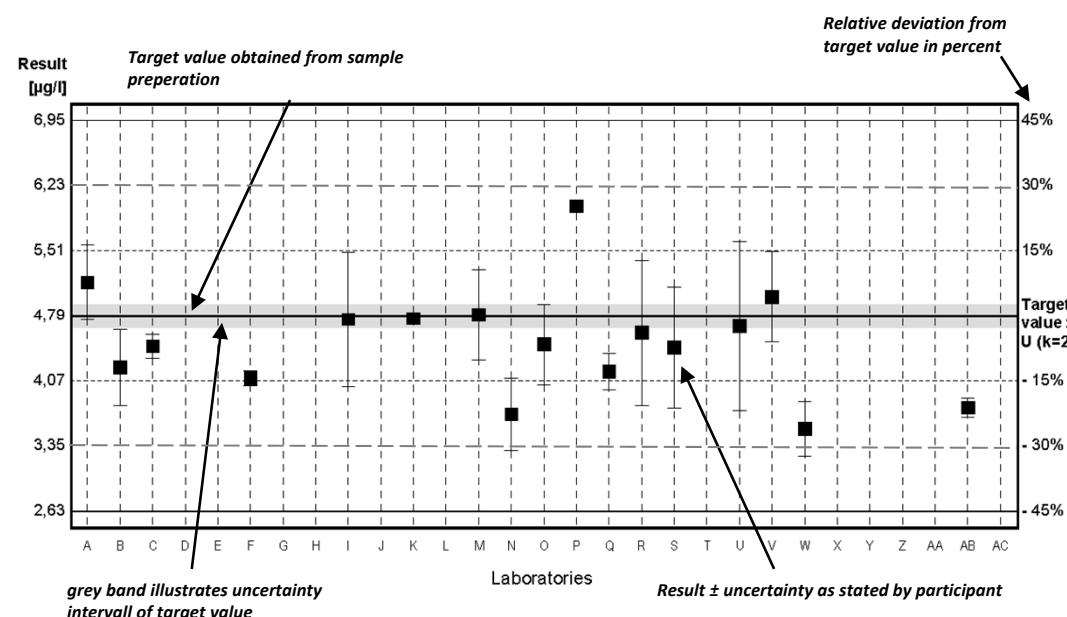


Diagram 1: Measurement results and their uncertainties

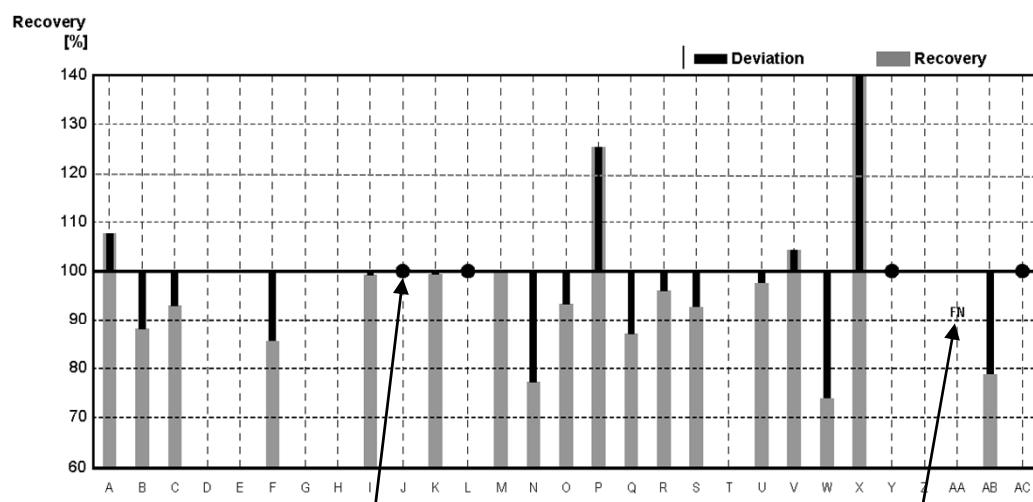


Diagram 2: Recoveries and deviations from target values



# **Illustration of Results Tables and Parameter Oriented Part**

Round N163  
Major Ions

Sample Dispatch: 5 September 2022

## Results Sample N163A

	pH	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		905	3.37	4.91	297	98.7	22.0	53.5	13.22	63.0
IFA result	6.45	903	3.53	4.84	292	105	21.9	53.4	13.1	62
Stability test										
A										
B	6.3	849		4.85	296					55.8
C	6.5	909	3.45	4.79	292	101	22.5	54	13.5	63
D	6.74	906	3.43	4.84	292	100	22.4	53.3	12.1	61.6
E	6.2	870	3.40	4.85	296	100	21.8	52	13.1	57
F	8.05	883	3.41	4.85	293	100	21.9	57	12.1	61
G										22.2
H	6.2	885	3.44	4.88	298	101	22.0	54.3	13.4	61.7
I										
J						102	21.5	52.0	13.2	61.5
K	6.44	894	2.91	4.82	290	86.4	18.5	45.7	11.2	62.3
L	6.53	910	3.37	4.84	292.23	99.02	21.93	53.34	13.00	60.74
M	6.39	893	3.20	4.76	287	96.9	19.5	52.6	13.0	61.4
N	6.5	910	3.38	4.80	293	99.1	22.0	54.8	13.3	64.0
O										
P		915				100.3	22.2	46.7	11.4	63.8
Q	6.26	910	3.38	4.65	284	98.9	22.1	53.3	13.2	66.7
R										
S	6.32	922	3.19	4.80	293	93.7	20.6	52.6	12.6	63.1
T	6.68	904	3.337	4.86	293.31	97.94	21.71	54.56	13.45	61.49
U	6.23	907	18.6	4.84	295	101	23.1	54.5	13.4	64
V										
W	6.4	915	3.46	4.85	296	103	21.5	51	13.3	65
X	6.2	908	3.34	4.83	292	98.0	21.7	53.1	13.1	63.5
Y	6.32	897	3.448	4.772	291	100.2	22.2	52.3	13.2	67.6
Z	6.30	905	3.30	4.83	295	96.8	21.6	54.0	13.2	75.1

### Measurement Uncertainties Sample N163A

	pH ±	Cond. ±	total- Hardn. ±	K <sub>S 4.3</sub> ±	HCO <sub>3</sub> <sup>-</sup> ±	Ca <sup>2+</sup> ±	Mg <sup>2+</sup> ±	Na <sup>+</sup> ±	K <sup>+</sup> ±	NO <sub>3</sub> <sup>-</sup> ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		3	0.04	0.06	4	1.4	0.3	0.4	0.08	1.3
IFA result	0.2	12	0.13	0.20	12	5	1.2	2.0	0.6	3
Stability test										
A										
B	0.04	1.7		0.002	0.002					2.4
C	0.2	18	0.23	0.25	23	8	0.9	3	1.5	5
D	0.30	27	0.27	0.19	12	5	1.4	2.1	1.0	3.7
E										
F	0.1	18	0.17	0.15	9	5	1.5	3	1	3
G										2.72
H	0.2	88	0.34			10.1	2.2	5.4	1.3	6.2
I										
J						2	0.3	0.4	0.1	0.5
K	0.021	3.00	0.21	0.040	0.58	1.2	0.40	3.4	0.79	0.297
L	0.1	4.51		0.48		9.9	2.1	5.3	1.3	6.1
M	0.19	89.3	0.32	0.476	14.4	4.85	0.975	5.26	1.30	3.07
N	0.1	15	0.28	0.13	8	5.7	1.3	6.2	0.5	2.9
O										
P		5				3.8	1.6	2.6	1.0	4.1
Q	0.10	91				7.9	1.77	0.93	1.45	8.0
R										
S	0.032	28	0.26	0.23	14	4.3	1.7	3.7	0.91	2.1
T	0.27	19.9	0.13	0.10	6.16	3.82	1.02	2.62	0.86	4.12
U	0.19	37	3	1	50	8	1.6	4.4	1.6	5.76
V										
W						8.27	1.81	3.02	1.29	
X	0.3	37	0.2	0.2	12	8	3	8	1.9	5
Y	0.04	14.0	0.025	0.025	10	2	0.4	1	0.2	1
Z	0.13	18	0.17	0.24	15	4.8	1.1	2.7	0.7	3.8

## Results Sample N163A

	pH	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		905	3.37	4.91	297	98.7	22.0	53.5	13.22	63.0
IFA result	6.45	903	3.53	4.84	292	105	21.9	53.4	13.1	62
Stability test										
AA		910	3.59	4.80	292.8	105.0	23.3	54.9	13.8	60.0
AB										
AC	6.20		20.4			106.1	23.9			
AD	6.5	907	3.31	4.762	287.4	97.8	21.0	52.2	13.0	62.2
AE	6.57	903	3.346	4.848	295.81	97.85	21.99	53.58	13.45	64.058
AF	6.7	900	3.36	5.0288	304	97.8	22.4	53.6	13.4	64.562
AG	6.26	912		4.77	289					59.1
AH				4.80						62.52
AI	6.2	906	3.39	4.70	286.8	99.33	22.10	53.35	13.34	62.564
AJ	6.21	891	3.35	4.78	292	99.0	21.4	53.5	13.1	62.8
AK	6.3	910	3.31	4.80	292.9	95.6	22.5	55.1	12.9	63.3
AL	6.35	907.5	3.30	4.99	301.42	96.57	21.67	51.58	12.89	64.3
AM	6.99	907	3.31	4.85	296	97.1	21.5	51.7	13.0	62.4
AN								53.080		63.453
AO	6.96	901	3.20	4.83	291	94.4	20.6	55.4	12.6	60.3
AP	6.16	894	3.44	5.00	305	102	21.8	53.0	13.2	63.3
AQ										
AR	6.36	890	3.37	4.82	291	101	20.9	55.0	13.7	62.7
AS	6.56	913	3.45	4.76	287	101	22.6	54.2	14.2	62.3
AT		904	18.79	4.83	295	98	22.1	53	13.1	62.27
AU	7.35	906.0	2.882	4.782	291.78	87.367	20.090	47.030	11.680	61.659
AV	6.25	903		4.83		95.93	21.36	52.58	12.71	61.80
AW	6.24	927.0	3.35	5.20	317.1	104.95	23.82	56.96	13.63	69.95
AX	6.34	906.3	3.21	4.39		103.88	14.59			37.07
AY			3.43			107	24.0	58.8	15.0	

### Measurement Uncertainties Sample N163A

	pH ±	Cond. ±	total- Hardn. ±	K <sub>S 4.3</sub> ±	HCO <sub>3</sub> ±	Ca <sup>2+</sup> ±	Mg <sup>2+</sup> ±	Na <sup>+</sup> ±	K <sup>+</sup> ±	NO <sub>3</sub> ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		3	0.04	0.06	4	1.4	0.3	0.4	0.08	1.3
IFA result	0.2	12	0.13	0.20	12	5	1.2	2.0	0.6	3
Stability test										
AA		5	0.104	0.106	7.03	3.465	0.699	1.757	0.607	1.38
AB										
AC	0.05		0.05			0.10	0.10			
AD	0.1	36	0.17	0.325	19.8	4.6	1.3	2.8	0.5	3.8
AE	0.1	26	0.2	0.48		5.19	1.76	3.70	0.78	3.33
AF	0.19	49.5	0.336	0.290	15.2	9.8	2.2	5.4	1.3	3.23
AG	0.0084	6.46		0.134	4.17					4.05
AH										
AI	0.37	36.2		0.705	43.02	9.933	2.210	5.335	1.334	2.5026
AJ	0.2	89	0.23			6.9	1.7	5.9	2.1	6.3
AK	0.05	10	0.33	0.5	29.3	19.1	4.5	8.3	2.6	6.3
AL	0.391	83.127	0.317	0.247	12.02	2.356	2.015	3.631	1.748	8.198
AM	0.28	18.2	0.43	0.73	44.4	12.7	1.43	7.49	1.38	3.39
AN								5.308		12.691
AO	0.28	36	0.58	0.19	12	17	3.71	10	2.27	5.43
AP	0.2	89	0.34	0.5	31	10	2.2	5.3	1.3	6.3
AQ										
AR	0.0636	0.216	0.0396	0.145	5.83	0.863	0.807	0.284	0.257	0.474
AS	0.12	41.1		0.33		15.8	2.4	4.7	1.3	8.8
AT		9.94	1.879	0.333	20.4	9.8	2.21	5.3	1.31	5.54
AU	0.1697	0.0	0.0357			1.1015	0.9307	1.1433	1.3946	1.072
AV	0.06	23		0.44		11.99	3.18	6.99	1.13	1.61
AW	0.19	64.0	0.697	0.296	18.075	11.22	2.55	7.12	2.19	4.83
AX										
AY										

## Results Sample N163A

	<b>NO<sub>2</sub><sup>-</sup></b>	<b>NH<sub>4</sub><sup>+</sup></b>	<b>Cl<sup>-</sup></b>	<b>SO<sub>4</sub><sup>2-</sup></b>	<b>o-PO<sub>4</sub><sup>3-</sup></b>	<b>Boron</b>	<b>DOC</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>)</b>	<b>CN<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0322	<0.01	60.6	84.2	0.091	0.1512	6.00	0.207	0.0533
IFA result	0.0321	<0.01	59	82.0	0.095	0.138	5.98	0.232	0.053
Stability test	0.0320	<0.01			0.094		6.09		0.053
A					0.066		5.49	0.209	0.053
B	0.0335	<0.003			0.086		6.4	0.194	
C	0.0330	<0.02	61	81	0.101	0.145	5.9	0.197	
D	0.0338	<0.008	60.2	79.1	0.093	0.153	6.11	0.208	0.0461
E	0.0303	<0.01	56	81	0.0739		5.88		
F	0.0331	<0.0082	56	87	0.0310		5.83	0.0100	
G					0.093			0.179	
H	0.0314	<0.04	61.3	83.2	<0.15			0.196	
I									
J			59.6	83.2					
K	0.0328	<0.010	60.7	82.9	0.0951	0.149	5.49	0.199	
L	0.0330	<0.009	60.07	80.81	0.091	0.146	5.98	0.196	
M	0.0333	<0.01	62.1	83.6	0.102	0.143	5.49	0.191	0.0450
N	0.0330	<0.010	62.7	85.7			6.15		
O	0.03725								0.0428
P			62.0	85.0	0.107		5.98		<0.03
Q	0.0310	<0.020	63.5	88.9	0.089	0.134	5.72	0.202	0.0440
R				85.0					
S	0.0365	<0.01	62.0	84.4	0.104	0.154	5.45	0.205	0.0492
T	0.0280	0.00300	60.06	84.08			5.97		
U	<0.030	<0.130	59.4	80.2	<0.040	0.130	8.37	0.094	0.0428
V		<0.03							0.050
W	0.0309	<0.04	63	85		0.121		0.242	
X	0.0330	<0.013	62.5	86.4	0.096		6.20	0.195	
Y	0.0430	0.0050	64.4	89.5				0.2700	
Z	0.0346	<0.05	60.1	87.2	0.184	0.154	5.81		

### Measurement Uncertainties Sample N163A

	<b>NO<sub>2</sub><sup>-</sup> ±</b>	<b>NH<sub>4</sub><sup>+</sup> ±</b>	<b>Cl<sup>-</sup> ±</b>	<b>SO<sub>4</sub><sup>2-</sup> ±</b>	<b>o-PO<sub>4</sub><sup>3-</sup> ±</b>	<b>Boron ±</b>	<b>DOC ±</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>) ±</b>	<b>CN<sup>-</sup> ±</b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0010		1.5	0.7	0.006	0.0013	0.06	0.002	0.0016
IFA result	0.0016		2	1.9	0.002	0.011	0.09	0.026	0.005
Stability test	0.0016				0.002		0.09		0.005
A					0.0075		0.43	0.025	0.021
B	0.001				0.001		0.04	0.004	
C	0.0030		5	5	0.009	0.025	0.7	0.018	
D	0.003		3.0	4.8	0.005	0.015	0.61	0.015	0.014
E									
F	0.01		3	5	0.005		0.29	0.005	
G					0.0142			0.0043	
H	0.006		6.1	8.3				0.020	
I									
J			0.2	0.3					
K	0.001		0.347	0.810	0.001	0.003	0.012	0.001	
L	0.003		6.0	8.0	0.009	0.022	0.6	0.02	
M	0.005		3.11	4.18	0.014	0.0143	0.55	0.021	0.0092
N	0.006		4.2	5.6			1.28		
O	0.00745								0.0084
P			2.2	3.6	0.010		0.30		
Q	0.0030		5.7	8.9	0.032	0.024	0.68	0.056	
R				3.4					
S	0.0037		4.2	2.8	0.0072	0.019	0.87	0.014	0.0074
T	0.002	0.000	2.82	4.20			1.04		
U			4.75	8.2		0.026	0.92	0.0085	0.009
V									0.004
W						0.0086		0.0076	
X	0.003		4	7	0.009		0.9	0.02	
Y	0.01	0.01	1	1.5				0.05	
Z	0.0035		3.0	4.4	0.018	0.008	0.58		

## Results Sample N163A

	<b>NO<sub>2</sub><sup>-</sup></b>	<b>NH<sub>4</sub><sup>+</sup></b>	<b>Cl<sup>-</sup></b>	<b>SO<sub>4</sub><sup>2-</sup></b>	<b>o-PO<sub>4</sub><sup>3-</sup></b>	<b>Boron</b>	<b>DOC</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>)</b>	<b>CN<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0322	<0.01	60.6	84.2	0.091	0.1512	6.00	0.207	0.0533
IFA result	0.0321	<0.01	59	82.0	0.095	0.138	5.98	0.232	0.053
Stability test	0.0320	<0.01			0.094		6.09		0.053
AA	0.0100	0.0100	60.2	83.8	0.1125	0.114	6.48	0.2070	
AB		0.0192							
AC			56.9						
AD	0.0333	<0.010	60.8	87.8	0.093	0.151	5.87	0.202	n.a
AE	0.0355	<0.013	61.4	82	0.0949	0.1473	5.979	0.210	0.0384
AF	0.0310	<0.01	59.73	84.171	0.0910	0.143	6.02	0.212	0.0410
AG	0.0338	0.0391	60.3		0.0932			0.2135	
AH	0.0322		60.654	83.2	0.121		6.178	0.2683	
AI	0.0300	<0.0052	61.07	88.44	0.077	0.176	6.1	0.208	46.58
AJ	0.0395	<0.04	60.8	83.9		0.144	5.9		0.0460
AK	0.0327	<0.010	59.3	85.5	0.0952	0.152	6.53	0.2064	
AL	0.0297	<0.01	62.8	85.8	0.091	0.145	5.71	0.205	0.0432
AM	0.0291	0.00488	60.8	83.6	0.0889	0.147	5.90	0.087	0.0470
AN			66.674	87.173					
AO	0.0345	<0.01	58.2	81.0	0.095	0.150	6.36	0.213	0.052
AP	0.0284	<0.01	61.2	85.1	0.0766	0.143	6.2	0.176	
AQ									
AR	0.0368	[0.001]	61.6	83.7	0.0991	0.153	5.89	0.222	
AS	0.0331	<0.01	60.9	86.9	0.091	0.144	6.20	0.180	
AT	0.0320	0.0110	61.44	85.45	<0.15	0.151	6.1	0.240	0.0533
AU	0.0361	'0.0125	57.621	82.543	0.149	0.150	6.350	0.208	0.0659
AV	0.0362	<0.02	59.14	83.43	0.0957	0.150	6.22	0.1985	0.0488
AW	<0.1	<0.04	75.696	<1	98.6				
AX	<0.05	<0.02	50.84	88.57	<0.050			0.178	
AY									

### Measurement Uncertainties Sample N163A

	<b>NO<sub>2</sub> ±</b>	<b>NH<sub>4</sub><sup>+</sup> ±</b>	<b>Cl<sup>-</sup> ±</b>	<b>SO<sub>4</sub><sup>2-</sup> ±</b>	<b>o-PO<sub>4</sub><sup>3-</sup> ±</b>	<b>Boron ±</b>	<b>DOC ±</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>) ±</b>	<b>CN<sup>-</sup> ±</b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0010		1.5	0.7	0.006	0.0013	0.06	0.002	0.0016
IFA result	0.0016		2	1.9	0.002	0.011	0.09	0.026	0.005
Stability test	0.0016				0.002		0.09		0.005
AA	0.0001	0.0012	1.50	2.01	0.0113	0.008	0.31	0.020	
AB									
AC			0.10						
AD	0.0043		4.8	8.0	0.012	0.014	1.09	0.031	
AE	0.0038		2.27	3.85	0.0248	0.0317	0.66	0.041	0.0115
AF	0.003		2.99	4.21	0.009	0.014	1.089	0.021	0.004
AG	0.0034	0.0059	0.611		0.0109			0.028	
AH									
AI	0.00240		3.054	4.422	0.0092	0.0211	0.49	0.031	4.658
AJ	0.006		6.1	11.7		0.023	0.6		
AK	0.0060		5.9	8.6	0.0198	0.038	0.65	0.0429	
AL	0.00141	0.00085	4.300	5.706	0.0078	0.011	0.343	0.0246	0.0093
AM	0.0017	0.00031	3.31	6.87	0.0102	0.006	1.05	0.006	0.0034
AN			10.001	17.435					
AO	0.003		5.24	7.29	0.009	0.03	0.57	0.009	0.005
AP	0.0028		6.1	8.5	0.0077	0.014	0.62	0.035	
AQ									
AR	0.00229		0.630	0.547	0.00300	0.00119	0.0331	0.00187	
AS	0.0038		8.7	7	0.009	0.003	0.75	0.001	
AT	0.00416	0.00097	2.95	3.93	0.0093	0.0302	0.671	0.0149	0.0085
AU	0.0091	0.0028	0.888	0.018	0.0508	0.011	0.339	0.0055	0.0048
AV	0.0029		2.60	3.25	0.006	0.017	0.62	0.009	0.004
AW			4.088		6.409				
AX									
AY									

## Results Sample N163B

	pH	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
Unit		μS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		395	1.403	1.246	73.0	37.4	11.43	18.15	3.17	21.4
IFA result	6.49	396	1.52	1.23	72	40.9	12.3	18.6	3.29	20.8
Stability test										
A										
B	6.3	366		1.23	75.3					18.0
C	6.7	396	1.47	1.25	76	39.3	11.8	18.6	3.20	21.3
D	6.48	395	1.39	1.23	72.0	37.0	11.3	18.0	2.97	20.9
E	6.4	358	1.40	1.24	76	37.4	11.6	17.7	2.99	17.6
F	8.14	381	1.41	1.25	73	38.4	11.01	18.9	3.14	20.3
G										21.4
H	6.3	395	1.47	1.30	79.5	39.7	11.7	18.7	3.20	21.1
I										
J						38.2	11.5	17.5	3.14	21.4
K	6.74	390	1.24	1.29	75.9	34.0	9.62	18.2	3.17	20.8
L	6.58	397	1.44	1.34	78.70	38.99	11.81	17.47	3.24	20.93
M	6.47	395	1.30	1.24	72.6	36.8	9.98	18.1	3.03	21.2
N	6.6	394	1.41	1.22	74	37.4	11.5	18.6	3.21	21.9
O										
P		397				38.2	11.6	15.5	2.66	21.1
Q	6.26	397	1.43	1.23	75	38.0	11.6	18.0	3.20	21.6
R										
S	6.36	397	1.34	1.25	76.3	35.5	11.0	18.7	2.98	21.4
T	6.35	394	1.385	1.25	73.18	36.81	11.34	17.97	3.19	20.95
U	6.28	395	7.75	1.23	75.1	38.4	12.3	17.7	3.13	21.6
V										
W	6.3	399	1.41	1.25	76	37.2	11.6	17.5	3.18	21.3
X	6.2	395	1.40	1.224	71.6	37.2	11.4	18.0	3.18	21.6
Y	6.45	392	1.492	1.225	75	38.2	12.2	18.1	3.05	22.6
Z	6.30	394	1.39	1.23	75.1	36.8	11.5	18.4	3.19	23.3

### Measurement Uncertainties Sample N163B

	pH ±	Cond. ±	total- Hardn.±	K <sub>S 4.3</sub> ±	HCO <sub>3</sub> ±	Ca <sup>2+</sup> ±	Mg <sup>2+</sup> ±	Na <sup>+</sup> ±	K <sup>+</sup> ±	NO <sub>3</sub> ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		1	0.014	0.014	0.8	0.5	0.14	0.08	0.03	0.5
IFA result	0.2	6	0.06	0.05	3	1.9	0.7	1.1	0.20	1.1
Stability test										
A										
B	0.02	0.5		0	0					0.5
C	0.2	8	0.10	0.07	6	3.1	0.9	2.2	0.45	1.7
D	0.30	12	0.12	0.06	2.9	1.9	0.7	0.8	0.25	1.3
E										
F	0.1	8	0.1	0.15	3	2	1	1	0.3	1.2
G										1.29
H	0.2	39	0.15			3.9	1.2	1.9	0.32	2.1
I										
J						0.2	0.1	0.2	0.06	0.3
K	0.021	1.16	0.10	0.010	0.058	0.51	0.269	1.2	0.21	0.095
L	0.1	4.51		0.13		3.9	1.2	1.7	3.2	2.1
M	0.19	39.5	0.13	0.124	3.63	1.84	1.0	1.81	0.303	1.06
N	0.1	6	0.12	0.03	2	2.1	0.7	2.1	0.12	1.0
O										
P		3				2.6	1.0	1.0	0.20	1.5
Q	0.10	40				3.0	0.92	1.44	0.35	2.6
R										
S	0.032	12	0.11	0.060	3.7	1.6	0.90	1.3	0.21	0.71
T	0.25	8.7	0.06	0.03	1.54	1.44	0.53	0.86	0.20	1.40
U	0.19	16	3	0.25	15	3.1	0.89	1.42	0.38	1.94
V										
W						2.08	0.92	1.07	0.31	
X	0.3	16	0.1	0.1	3	3	1.4	2.7	0.5	2
Y	0.04	14.0	0.025	0.025	10	2	0.4	1	0.2	1
Z	0.13	8	0.10	0.06	3.8	1.8	0.6	0.9	0.16	1.2

## Results Sample N163B

	pH	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		395	1.403	1.246	73.0	37.4	11.43	18.15	3.17	21.4
IFA result	6.49	396	1.52	1.23	72	40.9	12.3	18.6	3.29	20.8
Stability test										
AA		398	1.50	1.22	74.4	40.5	11.9	18.8	3.40	21.0
AB										
AC	6.30		8.60			41.0	12.6			
AD	6.7	398	1.41	1.214	71.0	37.7	11.3	17.8	3.28	21.2
AE	6.67	392	1.435	1.187	72.427	38.1	11.76	18.14	3.096	21.43
AF	6.76	390	1.41	1.310	76.9	37.03	11.9	18.5	3.324	20.11
AG	6.27	398		1.22	72					20.1
AH				1.25						21.28
AI	6.1	394	1.41	1.19	72.6	37.45	11.47	18.10	3.17	21.058
AJ	6.14	390	1.39	1.29	79	37.2	11.1	20.0	3.09	21.3
AK	6.3	396	1.40	1.24	72.6	36.3	12.0	19.0	3.28	20.9
AL	6.39	394	1.398	1.28	75.05	36.84	11.63	17.82	3.02	21.9
AM	6.97	395	1.40	1.21	73.7	37.4	11.4	18.1	3.02	21.0
AN								17.113		19.873
AO	6.99	368	1.36	1.26	73.5	36.4	11.1	19.1	3.08	19.8
AP	6.33	380	1.41	1.25	76.3	37.7	11.5	18.1	3.21	21.3
AQ										
AR	6.45	389	1.43	1.24	72.4	39.0	11.0	18.3	3.34	20.5
AS	6.48	398	1.44	1.20	70	38.6	11.6	18.2	3.13	21.8
AT		392	8.03	1.24	76	38.3	11.6	18.2	3.11	20.84
AU	7.645	394.5	1.285	1.345	82.07	35.233	10.833	16.411	2.870	21.025
AV	6.25	391		1.23		37.76	11.57	18.33	3.16	21.56
AW	6.39	409.5	1.38	1.40	85.3	39.65	12.41	19.09	3.26	21.77
AX	6.32	398.1	1.39	1.10		42.62	7.88			43.33
AY			1.45			38.8	12.3	19.5	3.32	

### Measurement Uncertainties Sample N163B

	pH ±	Cond. ±	total- Hardn.±	K <sub>S 4.3</sub> ±	HCO <sub>3</sub> ±	Ca <sup>2+</sup> ±	Mg <sup>2+</sup> ±	Na <sup>+</sup> ±	K <sup>+</sup> ±	NO <sub>3</sub> ±
Unit		µS/cm	mmol/L	mmol/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value		1	0.014	0.014	0.8	0.5	0.14	0.08	0.03	0.5
IFA result	0.2	6	0.06	0.05	3	1.9	0.7	1.1	0.20	1.1
Stability test										
AA		3	0.041	0.024	1.20	1.31	0.400	0.564	0.102	0.672
AB										
AC	0.05		0.05			0.10	0.10			
AD	0.2	16	0.08	0.103	6.3	1.8	0.7	0.9	0.16	1.3
AE	0.1	11	0.1	0.12		2.02	0.94	1.25	0.18	1.11
AF	0.19	21.45	0.141	0.0756	3.85	3.7	1.2	1.9	0.33	1.01
AG	0.0084	2.82		0.0344	1.03					1.377
AH										
AI	0.37	15.8		0.179	10.89	3.745	1.147	1.810	0.317	0.8423
AJ	0.2	39	0.10			2.6	0.9	2.2	0.49	2.1
AK	0.05	10	0.14	0.13	7.3	7.3	2.4	2.9	0.66	2.1
AL	0.394	36.090	0.134	0.0632	0.81	0.899	1.032	1.254	0.4095	2.792
AM	0.28	7.9	0.18	0.18	11.1	4.87	0.76	2.63	0.32	1.14
AN								1.7113		3.975
AO	0.28	15	0.24	0.05	2.94	6.55	2	3.44	0.55	1.78
AP	0.2	38	0.14	0.13	7.6	3.8	1.2	1.89	0.32	2.1
AQ										
AR	0.0645	0.284	0.0406	0.0737	1.45	0.784	0.865	0.581	0.0375	0.259
AS	0.11	17.9		0.09		6	1.2	1.6	0.3	3.1
AT		3.32	0.803	0.086	5.3	3.83	1.16	1.82	0.311	1.85
AU	0.184	4.242	0.0422			1.655	0.387	0.809	0.202	0.1457
AV	0.06	10		0.11		4.72	1.72	2.44	0.28	0.56
AW	0.19	28.3	0.287	0.0798	4.862	4.243	1.33	2.38	0.525	1.50
AX										
AY										

## Results Sample N163B

	<b>NO<sub>2</sub><sup>-</sup></b>	<b>NH<sub>4</sub><sup>+</sup></b>	<b>Cl<sup>-</sup></b>	<b>SO<sub>4</sub><sup>2-</sup></b>	<b>o-PO<sub>4</sub><sup>3-</sup></b>	<b>Boron</b>	<b>DOC</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>)</b>	<b>CN<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0708	0.076	41.5	45.2	<0.009	0.0406	2.39	<0.009	0.0354
IFA result	0.070	0.077	40.6	44.2	<0.009	0.0385	2.38	<0.009	0.0349
Stability test	0.071	0.077			<0.009		2.37		0.0347
A					<0.05		2.14	0.153	0.0355
B	0.073	0.080			<0.002		2.58	<0.006	
C	0.072	0.083	42.4	45.2	<0.009	0.0386	2.39	<0.009	
D	0.073	0.079	41.7	44.0	<0.006	0.0430	2.52	<0.006	0.0290
E	0.0665	0.0770	38.1	42.3	<0.01		2.47		
F	0.078	0.0799	39.0	43.0	<0.0023		2.58	<0.001	
G					<0.019			<0.02	
H	0.0703	0.084	41.9	45.0	<0.15			<0.15	
I									
J			42.0	44.4					
K	0.0745	0.0737	41.1	44.3	<0.015	0.0405	2.11	<0.015	0.0323
L	0.072	0.080	41.56	44.76	<0.005	0.0394	2.42	<0.001	
M	0.0751	0.0785	44.4	46.6	<0.006	0.0397	2.354	<0.005	0.0350
N	0.068	0.063	42.9	46.3			6.49		
O	0.0765								0.0291
P			41.9	46.1	<0.025		2.52		<0.03
Q	0.068	0.076	43.6	46.5	<0.030	0.0394	2.23	<0.015	0.0290
R				45.5					
S	0.0756	0.0675	42.4	45.2	<0.015	0.0398	2.12	<0.015	0.0352
T	0.0670	0.0820	41.24	44.89			2.40		
U	0.060	0.140	41.3	44.4	<0.040	<0.05	4.08	0.054	0.0282
V		0.076							0.0350
W	0.070	0.079	41.9	45.0		<0.02		<0.06	
X	0.072	0.077	41.8	45.6	<0.01		2.56	<0.013	
Y	0.0720	0.0400	44.3	47.3				0.0060	
Z	0.074	0.073	40.8	45.5	0.0218	0.0432	2.42		

### Measurement Uncertainties Sample N163B

	$\text{NO}_2^-$ ±	$\text{NH}_4^+$ ±	$\text{Cl}^-$ ±	$\text{SO}_4^{2-}$ ±	$\text{o-PO}_4^{3-}$ ±	Boron ±	DOC ±	total-P (as $\text{PO}_4^{3-}$ ) ±	$\text{CN}^-$ ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Target value	0.0008	0.003	0.7	0.5		0.0004	0.04		0.0016
IFA result	0.004	0.002	1.5	1.1		0.0030	0.09		0.0030
Stability test	0.004	0.002					0.09		0.0030
A					0.0003		0.168	0.018	0.014
B	0.001	0.001					0.12		
C	0.007	0.026	3.4	2.7		0.0066	0.29		
D	0.006	0.008	2.1	2.7		0.005	0.26		0.009
E									
F	0.01	0.013	2	3			0.29		
G									
H	0.014	0.017	4.2	4.5					
I									
J			0.2	0.3					
K	0.001	0.001	0.173	0.405		0.003	0.006		0.001
L	0.007	0.008	4.2	4.5		0.0059	2.4		
M	0.0113	0.0134	2.22	2.33		0.0079	0.24		0.007
N	0.012	0.015	2.9	3.0			0.52		
O	0.0153								0.0057
P			0.8	1.2			0.10		
Q	0.0010	0.022	3.9	4.7		0.0071	0.268		
R				1.8					
S	0.0076	0.0047	2.8	1.5		0.0049	0.34		0.0053
T	0.005	0.014	1.94	2.24			0.42		
U	0.005	0.011	3.3	4.4			0.45	0.005	0.006
V		0.008							0.003
W									
X	0.006	0.009	3	4			0.4		
Y	0.01	0.01	1	1.5				0.05	
Z	0.007	0.007	2.0	2.3	0.0022	0.0022	0.36		

## Results Sample N163B

	<b>NO<sub>2</sub><sup>-</sup></b>	<b>NH<sub>4</sub><sup>+</sup></b>	<b>Cl<sup>-</sup></b>	<b>SO<sub>4</sub><sup>2-</sup></b>	<b>o-PO<sub>4</sub><sup>3-</sup></b>	<b>Boron</b>	<b>DOC</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>)</b>	<b>CN<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0708	0.076	41.5	45.2	<0.009	0.0406	2.39	<0.009	0.0354
IFA result	0.070	0.077	40.6	44.2	<0.009	0.0385	2.38	<0.009	0.0349
Stability test	0.071	0.077			<0.009		2.37		0.0347
AA	0.098	0.058	41.3	45.9	0.0270	0.0120	3.26	0.0270	
AB		0.081							
AC			40.9						
AD	0.074	0.087	43.2	46.5	<0.010	0.0413	2.23	<0.010	
AE	0.073	0.078	41.75	43.86	<0.015	0.03919	2.376	<0.015	0.0286
AF	0.0700	0.076	39.33	44.589	<0.01	0.0406	2.341	<0.01	0.0270
AG	0.074	0.084	39.8		<0.006			<0.006	
AH	0.0748	0.0837	41.507	44.02	0.0107		2.619	0.0184	
AI	0.069	0.073	41.53	46.47	0.0090	0.0480	2.40	<0.015	33.53
AJ	0.076	0.092	41.3	44.4		0.0418	2.38		0.0310
AK	0.0711	0.0726	40.8	44.8	<0.009	0.0424	2.29	<0.009	
AL	0.0680	0.066	43.8	45.9	<0.005	0.0422	2.23	<0.01	0.0263
AM	0.0682	0.0812	41.5	44.6	0.0105	0.0395	2.40	0.00300	0.0330
AN			45.107	44.887					
AO	0.071	0.087	39.6	42.8	0.0124	0.0413	2.51	<0.05	0.0351
AP	0.0624	0.072	42.7	45.9	<0.008	0.0350	2.39	<0.015	
AQ									
AR	0.0768	0.0762	40.9	43.6	<0.0150	0.0412	2.34	<0.0150	
AS	0.0702	0.0795	43.6	46.1	<0.01	0.0398	2.453	<0.03	
AT	0.069	0.0767	41.27	44.84	<0.15	0.0473	2.39	<0.15	0.0343
AU	0.0737	0.0736	40.63	45.604	0.0494	0.0448	2.765	0.0831	0.0368
AV	0.0763	0.0674	42.40	46.48	<0.01	0.0456	2.63	<0.010	0.0296
AW	0.0471	<0.04	50.054	<1	50.037				
AX	0.057	0.086	36.49	45.68	<0.050			<0.150	
AY						0.0322			

### Measurement Uncertainties Sample N163B

	<b>NO<sub>2</sub><sup>-</sup> ±</b>	<b>NH<sub>4</sub><sup>+</sup> ±</b>	<b>Cl<sup>-</sup> ±</b>	<b>SO<sub>4</sub><sup>2-</sup> ±</b>	<b>o-PO<sub>4</sub><sup>3-</sup> ±</b>	<b>Boron ±</b>	<b>DOC ±</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>) ±</b>	<b>CN<sup>-</sup> ±</b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Target value	0.0008	0.003	0.7	0.5		0.0004	0.04		0.0016
IFA result	0.004	0.002	1.5	1.1		0.0030	0.09		0.0030
Stability test	0.004	0.002					0.09		0.0030
AA	0.005	0.005	1.03	0.918	0.002	0.0009	0.16	0.002	
AB									
AC			0.10						
AD	0.007	0.015	3.5	4.3		0.0046	0.51		
AE	0.0078	0.0208	1.545	2.06		0.00843	0.26		0.0086
AF	0.007	0.008	1.97	2.23		0.0041	0.424		0.003
AG	0.0074	0.0126	0.403		0			0	
AH									
AI	0.0055	0.0073	2.077	2.324	0.0011	0.0058	0.19		3.353
AJ	0.012	0.018	4.1	6.2		0.0067	0.24		
AK	0.0131	0.0118	4.1	4.5		0.011	0.23		
AL	0.00362	0.00562	2.996	3.052	0.00043	0.003	0.134	0	0.0056
AM	0.0039	0.0051	2.30	3.67	0.0012	0.0012	0.43	0.00021	0.0024
AN			6.77	8.977					
AO	0.006	0.008	3.56	3.85	0.001	0.007	0.23		0.003
AP	0.0062	0.007	4.3	4.6		0.0035	0.24		
AQ									
AR	0.00234	0.00084	0.354	0.283		0.00125	0.0285		
AS	0.008	0.012	6.2	3.7		0.002	0.29		
AT	0.00897	0.0067	1.98	2.06	0.0093	0.0095	0.263	0.0093	0.0055
AU	0.0	0.0017	0.624	0.199	0.0212	0.0093	0.099	0.0014	0.0191
AV	0.0061	0.0066	1.87	1.81		0.0052	0.26		0.002
AW	0.00617		2.702		3.252				
AX									
AY									

**z- Scores Sample N163A**

	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
A									
B	-5.16		-0.61	-0.14					-3.57
C	0.37	0.79	-1.22	-0.70	0.71	0.61	0.29	0.48	0.00
D	0.09	0.59	-0.71	-0.70	0.40	0.49	-0.12	-1.93	-0.69
E	-3.22	0.30	-0.61	-0.14	0.40	-0.25	-0.88	-0.21	-2.98
F	-2.03	0.40	-0.61	-0.56	0.40	-0.12	2.04	-1.93	-0.99
G									-20.24
H	-1.84	0.69	-0.31	0.14	0.71	0.00	0.47	0.31	-0.64
I									
J					1.01	-0.61	-0.88	-0.03	-0.74
K	-1.01	-4.55	-0.92	-0.98	-3.78	-4.30	-4.56	-3.47	-0.35
L	0.46	0.00	-0.71	-0.67	0.10	-0.09	-0.09	-0.38	-1.12
M	-1.10	-1.68	-1.53	-1.40	-0.55	-3.07	-0.53	-0.38	-0.79
N	0.46	0.10	-1.12	-0.56	0.12	0.00	0.76	0.14	0.50
O									
P	0.92				0.49	0.25	-3.97	-3.13	0.40
Q	0.46	0.10	-2.65	-1.82	0.06	0.12	-0.12	-0.03	1.84
R									
S	1.57	-1.78	-1.12	-0.56	-1.54	-1.72	-0.53	-1.07	0.05
T	-0.09	-0.33	-0.51	-0.52	-0.23	-0.36	0.62	0.40	-0.75
U	0.18	150.64	-0.71	-0.28	0.71	1.35	0.58	0.31	0.50
V									
W	0.92	0.89	-0.61	-0.14	1.32	-0.61	-1.46	0.14	0.99
X	0.28	-0.30	-0.81	-0.70	-0.21	-0.37	-0.23	-0.21	0.25
Y	-0.74	0.77	-1.41	-0.84	0.46	0.25	-0.70	-0.03	2.28
Z	0.00	-0.69	-0.81	-0.28	-0.58	-0.49	0.29	-0.03	6.00

**z- Scores Sample N163A**

	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
AA	0.46	2.18	-1.12	-0.59	1.93	1.60	0.82	1.00	-1.49
AB									
AC		168.45			2.27	2.33			
AD	0.18	-0.59	-1.51	-1.35	-0.28	-1.23	-0.76	-0.38	-0.40
AE	-0.18	-0.24	-0.63	-0.17	-0.26	-0.01	0.05	0.40	0.52
AF	-0.46	-0.10	1.21	0.98	-0.28	0.49	0.06	0.31	0.77
AG	0.64		-1.43	-1.12					-1.93
AH			-1.12						-0.24
AI	0.09	0.20	-2.14	-1.43	0.19	0.12	-0.09	0.21	-0.22
AJ	-1.29	-0.20	-1.32	-0.70	0.09	-0.74	0.00	-0.21	-0.10
AK	0.46	-0.59	-1.12	-0.58	-0.95	0.61	0.93	-0.55	0.15
AL	0.23	-0.69	0.81	0.62	-0.65	-0.41	-1.12	-0.57	0.64
AM	0.18	-0.59	-0.61	-0.14	-0.49	-0.61	-1.05	-0.38	-0.30
AN							-0.25		0.22
AO	-0.37	-1.68	-0.81	-0.84	-1.32	-1.72	1.11	-1.07	-1.34
AP	-1.01	0.69	0.92	1.12	1.01	-0.25	-0.29	-0.03	0.15
AQ									
AR	-1.38	0.00	-0.92	-0.84	0.71	-1.35	0.88	0.83	-0.15
AS	0.74	0.79	-1.53	-1.40	0.71	0.74	0.41	1.68	-0.35
AT	-0.09	152.52	-0.81	-0.28	-0.21	0.12	-0.29	-0.21	-0.36
AU	0.09	-4.83	-1.30	-0.73	-3.48	-2.35	-3.78	-2.65	-0.67
AV	-0.18		-0.81		-0.85	-0.79	-0.54	-0.88	-0.60
AW	2.03	-0.20	2.95	2.82	1.92	2.24	2.02	0.70	3.45
AX	0.12	-1.58	-5.30		1.59	-9.10			-12.86
AY		0.59			2.55	2.46	3.10	3.06	

**z-Scores Sample N163A**

	NO <sub>2</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	o-PO <sub>4</sub> <sup>3-</sup>	Boron	DOC	total-P (as PO <sub>4</sub> <sup>3-</sup> )	CN <sup>-</sup>
A					-2.75		-1.52	0.10	-0.04
B	0.72				-0.55		1.19	-0.63	
C	0.44		0.23	-1.23	1.10	-0.55	-0.30	-0.48	
D	0.89		-0.23	-1.95	0.22	0.16	0.33	0.05	-0.84
E	-1.05		-2.62	-1.23	-1.88		-0.36		
F	0.50		-2.62	1.07	-6.59		-0.51	-9.52	
G					0.22			-1.35	
H	-0.44		0.40	-0.38				-0.53	
I									
J			-0.57	-0.38					
K	0.33		0.06	-0.50	0.45	-0.19	-1.52	-0.39	
L	0.44		-0.30	-1.30	0.00	-0.46	-0.06	-0.53	
M	0.61		0.85	-0.23	1.21	-0.72	-1.52	-0.77	-0.97
N	0.44		1.19	0.57			0.45		
O	2.80								-1.23
P			0.80	0.31	1.76		-0.06		
Q	-0.67		1.65	1.80	-0.22	-1.52	-0.83	-0.24	-1.09
R				0.31					
S	2.38		0.80	0.08	1.43	0.25	-1.64	-0.10	-0.48
T	-2.33		-0.31	-0.05			-0.09		
U			-0.68	-1.53		-1.87	7.05	-5.46	-1.23
V									-0.39
W	-0.72		1.37	0.31		-2.66		1.69	
X	0.44		1.08	0.84	0.55		0.60	-0.58	
Y	5.99		2.16	2.03				3.04	
Z	1.33		-0.28	1.15	10.22	0.25	-0.57		

**z-Scores Sample N163A**

	NO <sub>2</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	o-PO <sub>4</sub> <sup>3-</sup>	Boron	DOC	total-P (as PO <sub>4</sub> <sup>3-</sup> )	CN <sup>-</sup>
AA	-12.31		-0.23	-0.15	2.36	-3.28	1.43	0.00	
AB									
AC			-2.11						
AD	0.61		0.11	1.38	0.22	-0.02	-0.39	-0.24	
AE	1.83		0.46	-0.84	0.43	-0.34	-0.06	0.14	-1.75
AF	-0.67		-0.50	-0.01	0.00	-0.72	0.06	0.24	-1.44
AG	0.89		-0.17		0.24			0.31	
AH	0.00		0.03	-0.38	3.30		0.53	2.96	
AI	-1.22		0.27	1.62	-1.54	2.19	0.30	0.05	5455.76
AJ	4.05		0.11	-0.11		-0.63	-0.30		-0.86
AK	0.28		-0.74	0.50	0.46	0.07	1.58	-0.03	
AL	-1.39		1.25	0.61	0.00	-0.55	-0.86	-0.10	-1.18
AM	-1.72		0.11	-0.23	-0.23	-0.37	-0.30	-5.80	-0.74
AN			3.46	1.14					
AO	1.28		-1.37	-1.23	0.44	-0.11	1.07	0.29	-0.15
AP	-2.11		0.34	0.34	-1.58	-0.72	0.60	-1.50	
AQ									
AR	2.55		0.57	-0.19	0.89	0.16	-0.33	0.72	
AS	0.50		0.17	1.03	0.00	-0.63	0.60	-1.30	
AT	-0.11		0.48	0.48		-0.02	0.30	1.59	0.00
AU	2.16		-1.70	-0.63	6.37	-0.11	1.04	0.05	1.48
AV	2.22		-0.83	-0.29	0.52	-0.11	0.65	-0.41	-0.53
AW			8.59		10825.16				
AX			-5.55	1.67				-1.40	
AY						-1.43			

**z-Scores Sample N163B**

	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
A									
B	-6.12		-0.64	1.31					-4.96
C	0.21	1.59	0.16	1.71	1.54	0.87	0.77	0.22	-0.15
D	0.00	-0.31	-0.64	-0.57	-0.32	-0.31	-0.26	-1.43	-0.73
E	-7.81	-0.07	-0.24	1.71	0.00	0.40	-0.77	-1.29	-5.55
F	-2.95	0.17	0.16	0.00	0.81	-0.99	1.29	-0.22	-1.61
G									0.00
H	0.00	1.59	2.17	3.71	1.86	0.64	0.95	0.22	-0.44
I									
J					0.65	0.17	-1.12	-0.22	0.00
K	-1.05	-3.87	1.77	1.66	-2.75	-4.28	0.09	0.00	-0.88
L	0.42	0.88	3.77	3.25	1.29	0.90	-1.17	0.50	-0.69
M	0.00	-2.45	-0.24	-0.23	-0.49	-3.43	-0.09	-1.00	-0.29
N	-0.21	0.17	-1.04	0.57	0.00	0.17	0.77	0.29	0.73
O									
P	0.42				0.65	0.40	-4.56	-3.66	-0.44
Q	0.42	0.64	-0.64	1.14	0.49	0.40	-0.26	0.22	0.29
R									
S	0.42	-1.50	0.16	1.88	-1.54	-1.02	0.95	-1.36	0.00
T	-0.21	-0.43	0.16	0.10	-0.48	-0.21	-0.31	0.14	-0.66
U	0.00	150.80	-0.64	1.20	0.81	2.06	-0.77	-0.29	0.29
V									
W	0.84	0.17	0.16	1.71	-0.16	0.40	-1.12	0.07	-0.15
X	0.00	-0.07	-0.88	-0.80	-0.16	-0.07	-0.26	0.07	0.29
Y	-0.63	2.11	-0.84	1.14	0.65	1.82	-0.09	-0.86	1.75
Z	-0.21	-0.31	-0.64	1.2	-0.49	0.17	0.43	0.14	2.77

**z-Scores Sample N163B**

	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
AA	0.63	2.30	-1.04	0.80	2.51	1.11	1.12	1.65	-0.58
AB									
AC		170.99			2.92	2.77			
AD	0.63	0.17	-1.28	-1.14	0.24	-0.31	-0.60	0.79	-0.29
AE	-0.63	0.76	-2.37	-0.33	0.57	0.78	-0.02	-0.53	0.04
AF	-1.05	0.17	2.57	2.23	-0.30	1.11	0.60	1.10	-1.88
AG	0.63		-1.04	-0.57					-1.90
AH			0.16						-0.18
AI	-0.21	0.17	-2.25	-0.23	0.04	0.09	-0.09	0.00	-0.50
AJ	-1.05	-0.31	1.77	3.42	-0.16	-0.78	3.19	-0.57	-0.15
AK	0.21	-0.07	-0.24	-0.23	-0.89	1.35	1.46	0.79	-0.73
AL	-0.21	-0.12	1.36	1.17	-0.45	0.47	-0.57	-1.08	0.73
AM	0.00	-0.07	-1.44	0.40	0.00	-0.07	-0.09	-1.08	-0.58
AN							-1.79		-2.23
AO	-5.70	-1.02	0.56	0.29	-0.81	-0.78	1.64	-0.65	-2.34
AP	-3.16	0.17	0.16	1.88	0.24	0.17	-0.09	0.29	-0.15
AQ									
AR	-1.27	0.64	-0.24	-0.34	1.30	-1.02	0.26	1.22	-1.31
AS	0.63	0.88	-1.85	-1.71	0.97	0.40	0.09	-0.29	0.58
AT	-0.63	157.45	-0.24	1.71	0.73	0.40	0.09	-0.43	-0.82
AU	-0.11	-2.80	3.97	5.18	-1.76	-1.41	-2.99	-2.15	-0.55
AV	-0.84		-0.64		0.29	0.33	0.31	-0.07	0.23
AW	3.06	-0.55	6.18	7.02	1.82	2.32	1.62	0.65	0.54
AX	0.65	-0.31	-5.86		4.23	-8.39			32.02
AY		1.12			1.13	2.06	2.32	1.08	

**z-Scores Sample N163B**

	NO <sub>2</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	o-PO <sub>4</sub> <sup>3-</sup>	Boron	DOC	total-P (as PO <sub>4</sub> <sup>3-</sup> )	CN <sup>-</sup>
A							-1.87		0.02
B	0.55	0.44					1.42		
C	0.30	0.77	0.75	0.00		-0.66	0.00		
D	0.55	0.33	0.17	-0.86		0.79	0.97		-1.13
E	-1.08	0.11	-2.83	-2.07			0.60		
F	1.82	0.43	-2.08	-1.57			1.42		
G									
H	-0.13	0.88	0.33	-0.14					
I									
J			0.42	-0.57					
K	0.93	-0.25	-0.33	-0.64		-0.03	-2.09		-0.55
L	0.30	0.44	0.05	-0.31		-0.39	0.22		
M	1.08	0.27	2.41	1.00		-0.30	-0.27		-0.07
N	-0.71	-1.43	1.16	0.79			30.63		
O	1.44								-1.11
P			0.33	0.64			0.97		
Q	-0.71	0.00	1.74	0.93		-0.39	-1.20		-1.13
R				0.21					
S	1.21	-0.93	0.75	0.00		-0.26	-2.02		-0.04
T	-0.96	0.66	-0.22	-0.22			0.07		
U	-2.72	7.02	-0.17	-0.57			12.63		-1.27
V		0.00							-0.07
W	-0.20	0.33	0.33	-0.14					
X	0.30	0.11	0.25	0.29			1.27		
Y	0.30	-3.95	2.33	1.50					
Z	0.81	-0.33	-0.58	0.21		0.85	0.22		

**z-Scores Sample N163B**

	<b>NO<sub>2</sub><sup>-</sup></b>	<b>NH<sub>4</sub><sup>+</sup></b>	<b>Cl<sup>-</sup></b>	<b>SO<sub>4</sub><sup>2-</sup></b>	<b>o-PO<sub>4</sub><sup>3-</sup></b>	<b>Boron</b>	<b>DOC</b>	<b>total-P (as PO<sub>4</sub><sup>3-</sup>)</b>	<b>CN<sup>-</sup></b>
AA	6.86	-1.97	-0.17	0.50		-9.39	6.50		
AB		0.55							
AC			-0.50						
AD	0.81	1.21	1.41	0.93		0.23	-1.20		
AE	0.55	0.22	0.21	-0.96		-0.46	-0.10		-1.20
AF	-0.20	0.00	-1.80	-0.44		0.00	-0.37		-1.48
AG	0.81	0.88	-1.41						
AH	1.01	0.84	0.01	-0.84			1.71		
AI	-0.45	-0.33	0.02	0.91		2.43	0.07		5913.59
AJ	1.31	1.75	-0.17	-0.57		0.39	-0.07		-0.78
AK	0.08	-0.37	-0.58	-0.29		0.59	-0.75		
AL	-0.71	-1.10	1.91	0.50		0.53	-1.20		-1.61
AM	-0.66	0.57	0.00	-0.43		-0.36	0.07		-0.42
AN			3.00	-0.22					
AO	0.05	1.21	-1.58	-1.71		0.23	0.90		-0.05
AP	-2.12	-0.44	1.00	0.50		-1.84	0.00		
AQ									
AR	1.51	0.02	-0.50	-1.14		0.20	-0.37		
AS	-0.15	0.38	1.74	0.64		-0.26	0.47		
AT	-0.45	0.08	-0.19	-0.26		2.20	0.00		-0.19
AU	0.73	-0.26	-0.72	0.29		1.38	2.80		0.25
AV	1.39	-0.94	0.75	0.91		1.64	1.79		-1.02
AW	-5.98		7.11						
AX	-3.48	1.10	-4.16	0.34					
AY						-2.76			

# Sample N163A

## Parameter Conductivity

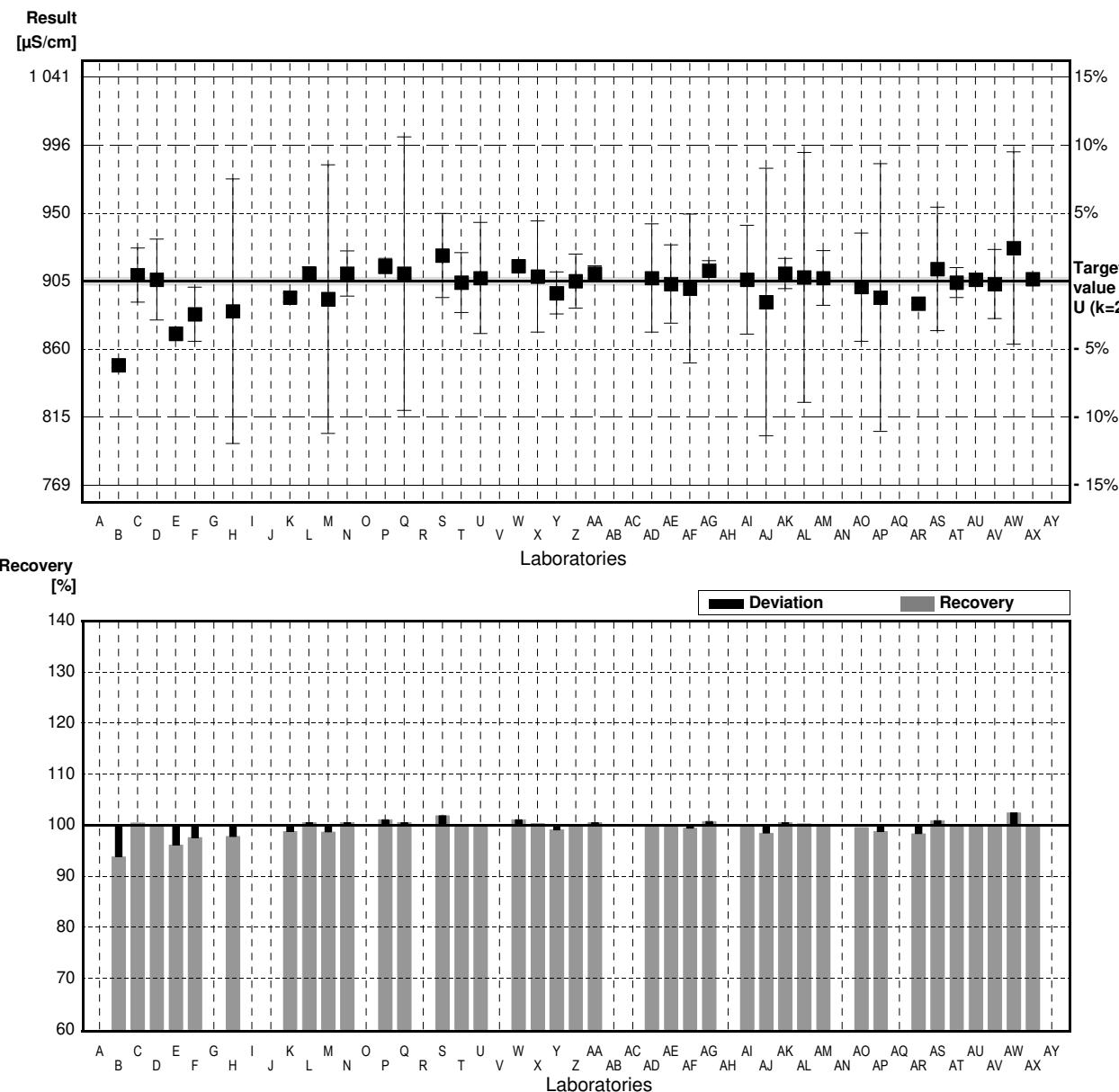
Target value  $\pm U (k=2)$  905  $\mu\text{S}/\text{cm} \pm 3 \mu\text{S}/\text{cm}$

IFA result  $\pm U (k=2)$  903  $\mu\text{S}/\text{cm} \pm 12 \mu\text{S}/\text{cm}$

Stability test  $\mu\text{S}/\text{cm}$

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			$\mu\text{S}/\text{cm}$		
B	849 *	1.7	$\mu\text{S}/\text{cm}$	94%	-5.16
C	909	18	$\mu\text{S}/\text{cm}$	100%	0.37
D	906	27	$\mu\text{S}/\text{cm}$	100%	0.09
E	870 *		$\mu\text{S}/\text{cm}$	96%	-3.22
F	883 *	18	$\mu\text{S}/\text{cm}$	98%	-2.03
G			$\mu\text{S}/\text{cm}$		
H	885 *	88	$\mu\text{S}/\text{cm}$	98%	-1.84
I			$\mu\text{S}/\text{cm}$		
J			$\mu\text{S}/\text{cm}$		
K	894	3.00	$\mu\text{S}/\text{cm}$	99%	-1.01
L	910	4.51	$\mu\text{S}/\text{cm}$	101%	0.46
M	893	89.3	$\mu\text{S}/\text{cm}$	99%	-1.10
N	910	15	$\mu\text{S}/\text{cm}$	101%	0.46
O			$\mu\text{S}/\text{cm}$		
P	915	5	$\mu\text{S}/\text{cm}$	101%	0.92
Q	910	91	$\mu\text{S}/\text{cm}$	101%	0.46
R			$\mu\text{S}/\text{cm}$		
S	922	28	$\mu\text{S}/\text{cm}$	102%	1.57
T	904	19.9	$\mu\text{S}/\text{cm}$	100%	-0.09
U	907	37	$\mu\text{S}/\text{cm}$	100%	0.18
V			$\mu\text{S}/\text{cm}$		
W	915		$\mu\text{S}/\text{cm}$	101%	0.92
X	908	37	$\mu\text{S}/\text{cm}$	100%	0.28
Y	897	14.0	$\mu\text{S}/\text{cm}$	99%	-0.74
Z	905	18	$\mu\text{S}/\text{cm}$	100%	0.00
AA	910	5	$\mu\text{S}/\text{cm}$	101%	0.46
AB			$\mu\text{S}/\text{cm}$		
AC			$\mu\text{S}/\text{cm}$		
AD	907	36	$\mu\text{S}/\text{cm}$	100%	0.18
AE	903	26	$\mu\text{S}/\text{cm}$	100%	-0.18
AF	900	49.5	$\mu\text{S}/\text{cm}$	99%	-0.46
AG	912	6.46	$\mu\text{S}/\text{cm}$	101%	0.64
AH			$\mu\text{S}/\text{cm}$		
AI	906	36.2	$\mu\text{S}/\text{cm}$	100%	0.09
AJ	891	89	$\mu\text{S}/\text{cm}$	98%	-1.29
AK	910	10	$\mu\text{S}/\text{cm}$	101%	0.46
AL	907.5	83.127	$\mu\text{S}/\text{cm}$	100%	0.23
AM	907	18.2	$\mu\text{S}/\text{cm}$	100%	0.18
AN			$\mu\text{S}/\text{cm}$		
AQ	901	36	$\mu\text{S}/\text{cm}$	100%	-0.37
AP	894	89	$\mu\text{S}/\text{cm}$	99%	-1.01
AQ			$\mu\text{S}/\text{cm}$		
AR	890	0.216	$\mu\text{S}/\text{cm}$	98%	-1.38
AS	913	41.1	$\mu\text{S}/\text{cm}$	101%	0.74
AT	904	9.94	$\mu\text{S}/\text{cm}$	100%	-0.09
AU	906.0	0.0	$\mu\text{S}/\text{cm}$	100%	0.09
AV	903	23	$\mu\text{S}/\text{cm}$	100%	-0.18
AW	927.0 *	64.0	$\mu\text{S}/\text{cm}$	102%	2.03
AX	906.3		$\mu\text{S}/\text{cm}$	100%	0.12
AY			$\mu\text{S}/\text{cm}$		

	All results	Outliers excl.	Unit
Mean $\pm \text{CI}(99\%)$	902 $\pm 6$	905 $\pm 3$	$\mu\text{S}/\text{cm}$
Recov. $\pm \text{CI}(99\%)$	99.7 $\pm 0.7$	100.0 $\pm 0.4$	%
SD between labs	14	7	$\mu\text{S}/\text{cm}$
RSD between labs	1.5	0.8	%
n for calculation	38	33	



## Sample N163B

### Parameter Conductivity

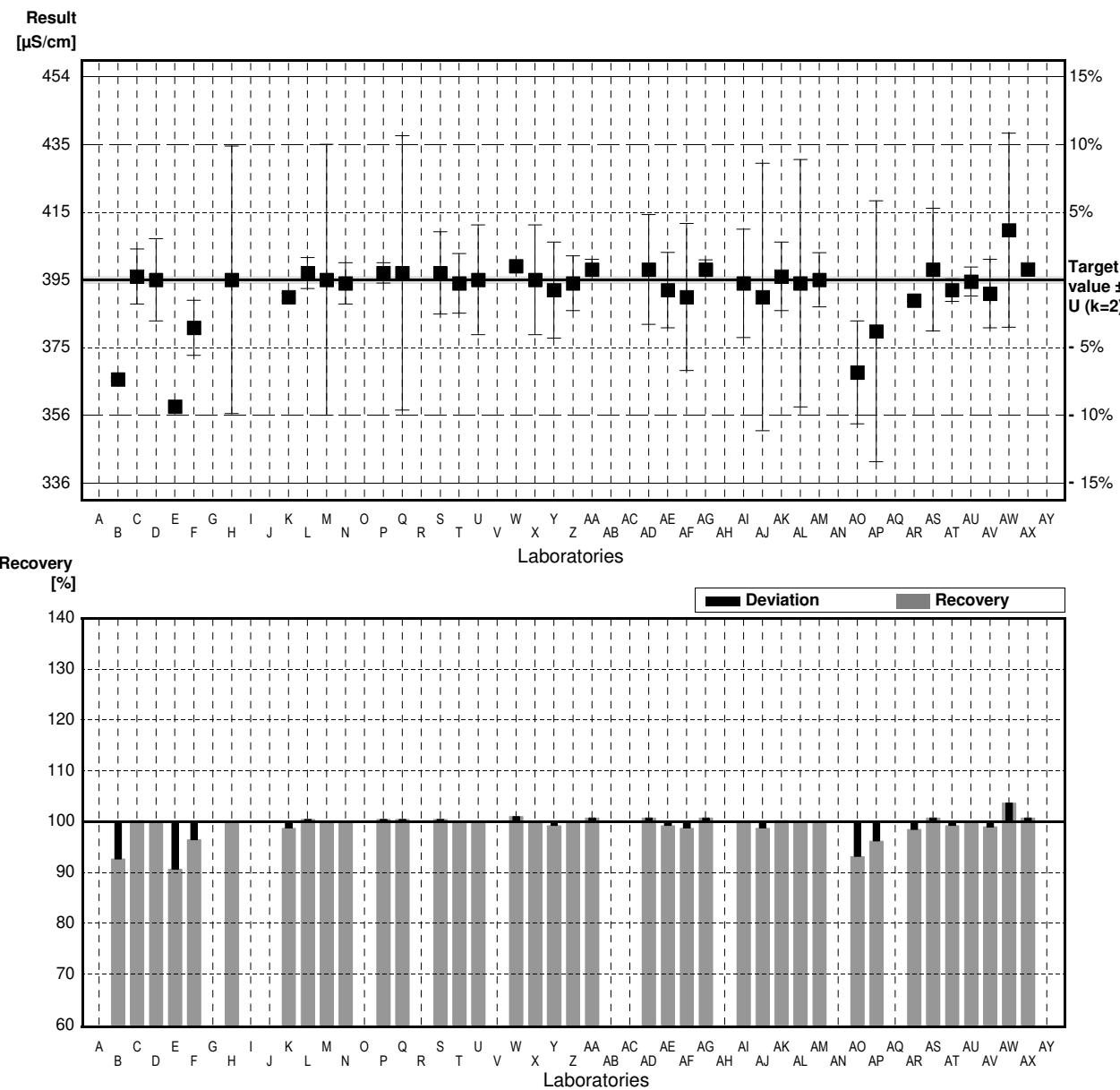
Target value  $\pm U (k=2)$  395  $\mu\text{S}/\text{cm} \pm 1 \mu\text{S}/\text{cm}$

IFA result  $\pm U (k=2)$  396  $\mu\text{S}/\text{cm} \pm 6 \mu\text{S}/\text{cm}$

Stability test  $\mu\text{S}/\text{cm}$

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			$\mu\text{S}/\text{cm}$		
B	366 *	0.5	$\mu\text{S}/\text{cm}$	93%	-6.12
C	396	8	$\mu\text{S}/\text{cm}$	100%	0.21
D	395	12	$\mu\text{S}/\text{cm}$	100%	0.00
E	358 *		$\mu\text{S}/\text{cm}$	91%	-7.81
F	381 *	8	$\mu\text{S}/\text{cm}$	96%	-2.95
G			$\mu\text{S}/\text{cm}$		
H	395	39	$\mu\text{S}/\text{cm}$	100%	0.00
I			$\mu\text{S}/\text{cm}$		
J			$\mu\text{S}/\text{cm}$		
K	390	1.16	$\mu\text{S}/\text{cm}$	99%	-1.05
L	397	4.51	$\mu\text{S}/\text{cm}$	101%	0.42
M	395	39.5	$\mu\text{S}/\text{cm}$	100%	0.00
N	394	6	$\mu\text{S}/\text{cm}$	100%	-0.21
O			$\mu\text{S}/\text{cm}$		
P	397	3	$\mu\text{S}/\text{cm}$	101%	0.42
Q	397	40	$\mu\text{S}/\text{cm}$	101%	0.42
R			$\mu\text{S}/\text{cm}$		
S	397	12	$\mu\text{S}/\text{cm}$	101%	0.42
T	394	8.7	$\mu\text{S}/\text{cm}$	100%	-0.21
U	395	16	$\mu\text{S}/\text{cm}$	100%	0.00
V			$\mu\text{S}/\text{cm}$		
W	399		$\mu\text{S}/\text{cm}$	101%	0.84
X	395	16	$\mu\text{S}/\text{cm}$	100%	0.00
Y	392	14.0	$\mu\text{S}/\text{cm}$	99%	-0.63
Z	394	8	$\mu\text{S}/\text{cm}$	100%	-0.21
AA	398	3	$\mu\text{S}/\text{cm}$	101%	0.63
AB			$\mu\text{S}/\text{cm}$		
AC			$\mu\text{S}/\text{cm}$		
AD	398	16	$\mu\text{S}/\text{cm}$	101%	0.63
AE	392	11	$\mu\text{S}/\text{cm}$	99%	-0.63
AF	390	21.45	$\mu\text{S}/\text{cm}$	99%	-1.05
AG	398	2.82	$\mu\text{S}/\text{cm}$	101%	0.63
AH			$\mu\text{S}/\text{cm}$		
AI	394	15.8	$\mu\text{S}/\text{cm}$	100%	-0.21
AJ	390	39	$\mu\text{S}/\text{cm}$	99%	-1.05
AK	396	10	$\mu\text{S}/\text{cm}$	100%	0.21
AL	394	36.090	$\mu\text{S}/\text{cm}$	100%	-0.21
AM	395	7.9	$\mu\text{S}/\text{cm}$	100%	0.00
AN			$\mu\text{S}/\text{cm}$		
AQ	368 *	15	$\mu\text{S}/\text{cm}$	93%	-5.70
AP	380 *	38	$\mu\text{S}/\text{cm}$	96%	-3.16
AQ			$\mu\text{S}/\text{cm}$		
AR	389	0.284	$\mu\text{S}/\text{cm}$	98%	-1.27
AS	398	17.9	$\mu\text{S}/\text{cm}$	101%	0.63
AT	392	3.32	$\mu\text{S}/\text{cm}$	99%	-0.63
AU	394.5	4.242	$\mu\text{S}/\text{cm}$	100%	-0.11
AV	391	10	$\mu\text{S}/\text{cm}$	99%	-0.84
AW	409.5 *	28.3	$\mu\text{S}/\text{cm}$	104%	3.06
AX	398.1		$\mu\text{S}/\text{cm}$	101%	0.65
AY			$\mu\text{S}/\text{cm}$		

	All results	Outliers excl.	Unit
Mean $\pm \text{CI}(99\%)$	392 $\pm 4$	395 $\pm 1$	$\mu\text{S}/\text{cm}$
Recov. $\pm \text{CI}(99\%)$	99.2 $\pm 1.1$	99.9 $\pm 0.3$	%
SD between labs	10	3	$\mu\text{S}/\text{cm}$
RSD between labs	2.5	0.7	%
n for calculation	38	32	



# Sample N163A

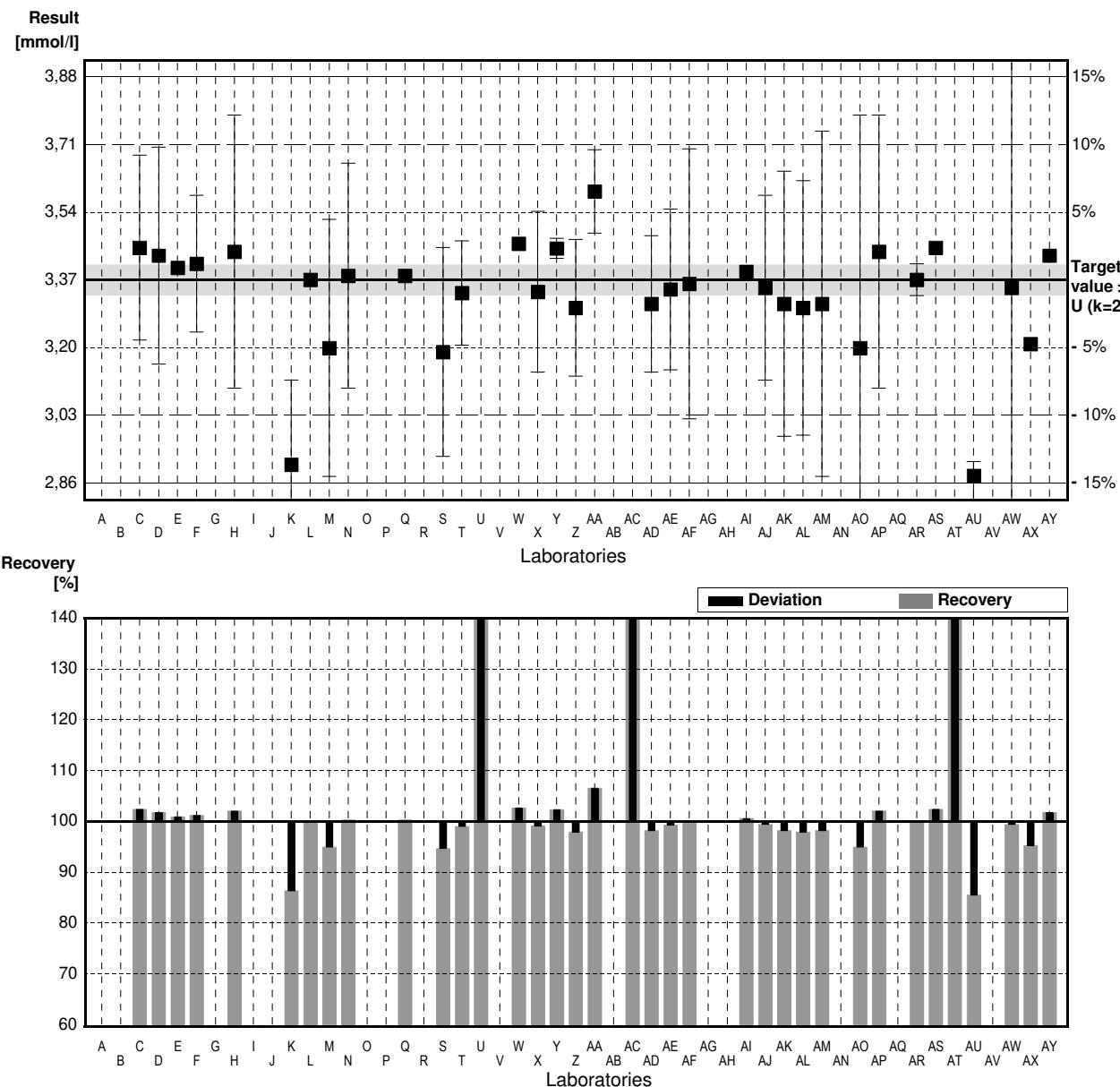
## Parameter Total hardness

Target value  $\pm U$  ( $k=2$ ) 3,37 mmol/l  $\pm$  0,04 mmol/l  
 IFA result  $\pm U$  ( $k=2$ ) 3,53 mmol/l  $\pm$  0,13 mmol/l

Stability test mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mmol/l		
B			mmol/l		
C	3.45	0.23	mmol/l	102%	0.79
D	3.43	0.27	mmol/l	102%	0.59
E	3.40		mmol/l	101%	0.30
F	3.41	0.17	mmol/l	101%	0.40
G			mmol/l		
H	3.44	0.34	mmol/l	102%	0.69
I			mmol/l		
J			mmol/l		
K	2.91 *	0.21	mmol/l	86%	-4.55
L	3.37		mmol/l	100%	0.00
M	3.20	0.32	mmol/l	95%	-1.68
N	3.38	0.28	mmol/l	100%	0.10
O			mmol/l		
P			mmol/l		
Q	3.38		mmol/l	100%	0.10
R			mmol/l		
S	3.19	0.26	mmol/l	95%	-1.78
T	3.337	0.13	mmol/l	99%	-0.33
U	18.6 *	3	mmol/l	552%	150.64
V			mmol/l		
W	3.46		mmol/l	103%	0.89
X	3.34	0.2	mmol/l	99%	-0.30
Y	3.448	0.025	mmol/l	102%	0.77
Z	3.30	0.17	mmol/l	98%	-0.69
AA	3.59	0.104	mmol/l	107%	2.18
AB			mmol/l		
AC	20.4 *	0.05	mmol/l	605%	168.45
AD	3.31	0.17	mmol/l	98%	-0.59
AE	3.346	0.2	mmol/l	99%	-0.24
AF	3.36	0.336	mmol/l	100%	-0.10
AG			mmol/l		
AH			mmol/l		
AI	3.39		mmol/l	101%	0.20
AJ	3.35	0.23	mmol/l	99%	-0.20
AK	3.31	0.33	mmol/l	98%	-0.59
AL	3.30	0.317	mmol/l	98%	-0.69
AM	3.31	0.43	mmol/l	98%	-0.59
AN			mmol/l		
AO	3.20	0.58	mmol/l	95%	-1.68
AP	3.44	0.34	mmol/l	102%	0.69
AQ			mmol/l		
AR	3.37	0.0396	mmol/l	100%	0.00
AS	3.45		mmol/l	102%	0.79
AT	18.79 *	1.879	mmol/l	558%	152.52
AU	2.882 *	0.0357	mmol/l	86%	-4.83
AV			mmol/l		
AW	3.35	0.697	mmol/l	99%	-0.20
AX	3.21		mmol/l	95%	-1.58
AY	3.43		mmol/l	102%	0.59

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,66 $\pm$ 2,04	3,36 $\pm$ 0,04	mmol/l
Recov. $\pm$ CI(99%)	138,3 $\pm$ 60,4	99,8 $\pm$ 1,3	%
SD between labs	4,47	0,09	mmol/l
RSD between labs	96,0	2,6	%
n for calculation	36	31	



# Sample N163B

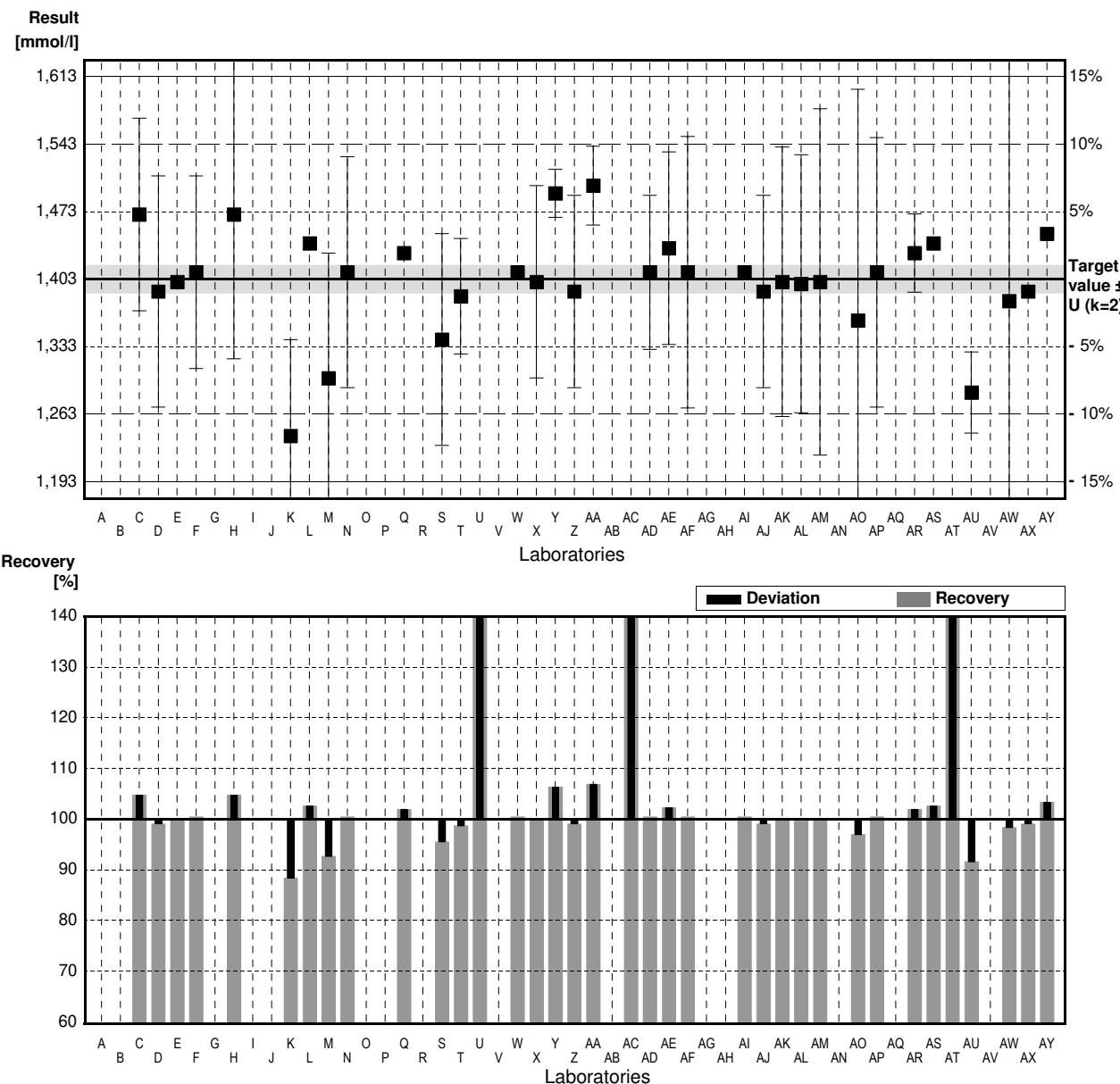
## Parameter Total hardness

Target value  $\pm U$  ( $k=2$ ) 1,403 mmol/l  $\pm$  0,014 mmol/l  
 IFA result  $\pm U$  ( $k=2$ ) 1,52 mmol/l  $\pm$  0,06 mmol/l

Stability test mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mmol/l		
B			mmol/l		
C	1.47	0.10	mmol/l	105%	1.59
D	1.39	0.12	mmol/l	99%	-0.31
E	1.40		mmol/l	100%	-0.07
F	1.41	0.1	mmol/l	100%	0.17
G			mmol/l		
H	1.47	0.15	mmol/l	105%	1.59
I			mmol/l		
J			mmol/l		
K	1.24 *	0.10	mmol/l	88%	-3.87
L	1.44		mmol/l	103%	0.88
M	1.30 *	0.13	mmol/l	93%	-2.45
N	1.41	0.12	mmol/l	100%	0.17
O			mmol/l		
P			mmol/l		
Q	1.43		mmol/l	102%	0.64
R			mmol/l		
S	1.34	0.11	mmol/l	96%	-1.50
T	1.385	0.06	mmol/l	99%	-0.43
U	7.75 *	3	mmol/l	552%	150.80
V			mmol/l		
W	1.41		mmol/l	100%	0.17
X	1.40	0.1	mmol/l	100%	-0.07
Y	1.492	0.025	mmol/l	106%	2.11
Z	1.39	0.10	mmol/l	99%	-0.31
AA	1.50	0.041	mmol/l	107%	2.30
AB			mmol/l		
AC	8.60 *	0.05	mmol/l	613%	170.99
AD	1.41	0.08	mmol/l	100%	0.17
AE	1.435	0.1	mmol/l	102%	0.76
AF	1.41	0.141	mmol/l	100%	0.17
AG			mmol/l		
AH			mmol/l		
AI	1.41		mmol/l	100%	0.17
AJ	1.39	0.10	mmol/l	99%	-0.31
AK	1.40	0.14	mmol/l	100%	-0.07
AL	1.398	0.134	mmol/l	100%	-0.12
AM	1.40	0.18	mmol/l	100%	-0.07
AN			mmol/l		
AQ	1.36	0.24	mmol/l	97%	-1.02
AP	1.41	0.14	mmol/l	100%	0.17
AQ			mmol/l		
AR	1.43	0.0406	mmol/l	102%	0.64
AS	1.44		mmol/l	103%	0.88
AT	8.03 *	0.803	mmol/l	572%	157.45
AU	1.285 *	0.0422	mmol/l	92%	-2.80
AV			mmol/l		
AW	1.38	0.287	mmol/l	98%	-0.55
AX	1.39		mmol/l	99%	-0.31
AY	1.45		mmol/l	103%	1.12

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	1,963 $\pm$ 0,859	1,415 $\pm$ 0,018	mmol/l
Recov. $\pm$ CI(99%)	139,9 $\pm$ 61,2	100,9 $\pm$ 1,3	%
SD between labs	1,888	0,036	mmol/l
RSD between labs	96,2	2,5	%
n for calculation	36	30	



Sample N163A

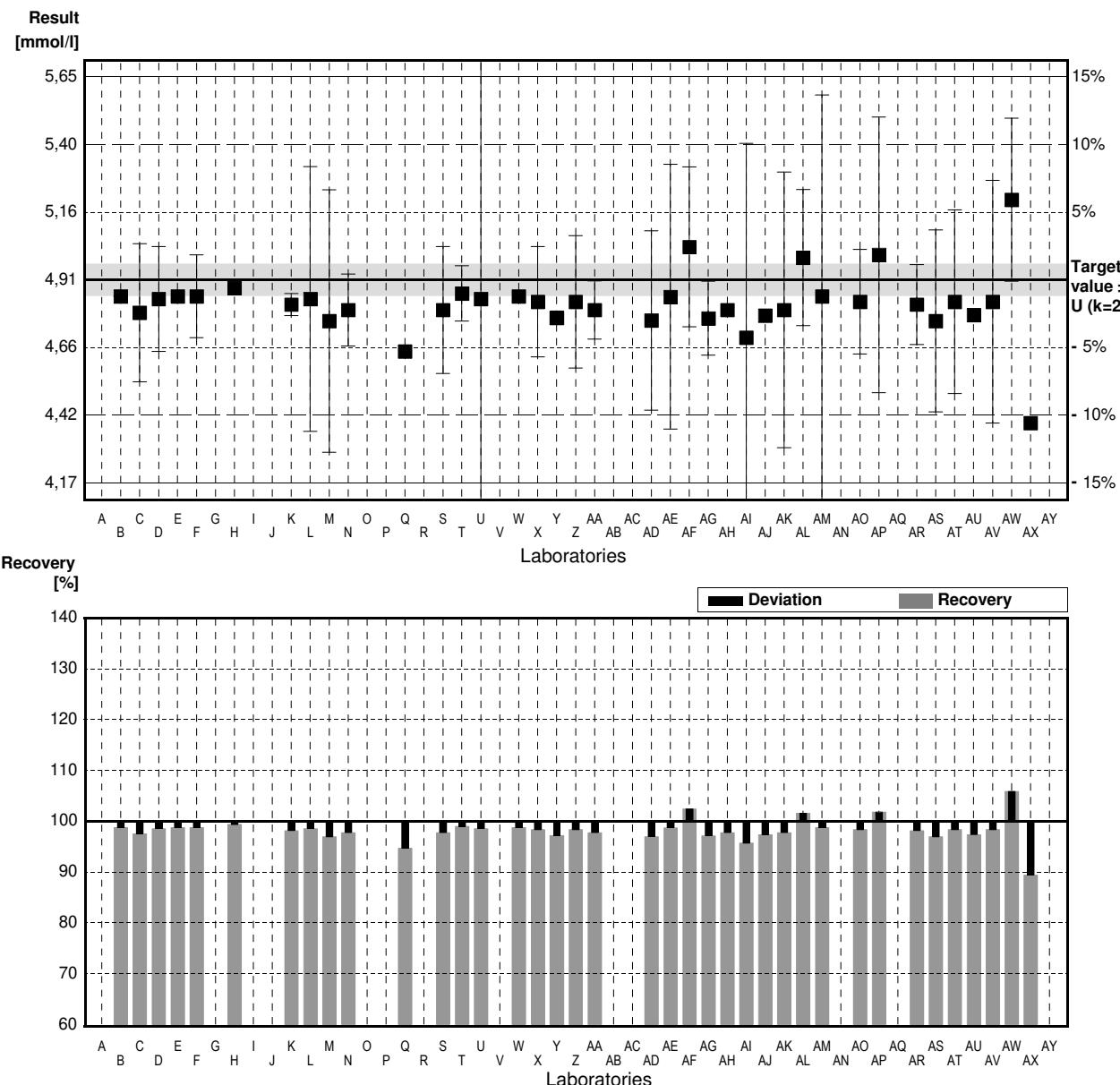
## Parameter Alkalinity

Target value  $\pm$  U (k=2)      4,91 mmol/l  $\pm$       0,06 mmol/l  
 IFA result  $\pm$  U (k=2)      4,84 mmol/l  $\pm$       0,20 mmol/l

## Stability test

Lab Code	Result	±	Unit	Recovery	z-Score
A			mmol/l		
B	4.85	0.002	mmol/l	99%	-0.61
C	4.79	0.25	mmol/l	99%	-1.22
D	4.84	0.19	mmol/l	99%	-0.71
E	4.85		mmol/l	99%	-0.61
F	4.85	0.15	mmol/l	99%	-0.61
G			mmol/l		
H	4.88		mmol/l	99%	-0.31
I			mmol/l		
J			mmol/l		
K	4.82	0.040	mmol/l	98%	-0.92
L	4.84	0.48	mmol/l	99%	-0.71
M	4.76	0.476	mmol/l	97%	-1.53
N	4.80	0.13	mmol/l	98%	-1.12
O			mmol/l		
P			mmol/l		
Q	4.65	*	mmol/l	95%	-2.65
R			mmol/l		
S	4.80	0.23	mmol/l	98%	-1.12
T	4.86	0.10	mmol/l	99%	-0.51
U	4.84	1	mmol/l	99%	-0.71
V			mmol/l		
W	4.85		mmol/l	99%	-0.61
X	4.83	0.2	mmol/l	98%	-0.81
Y	4.772	0.025	mmol/l	97%	-1.41
Z	4.83	0.24	mmol/l	98%	-0.81
AA	4.80	0.106	mmol/l	98%	-1.12
AB			mmol/l		
AC			mmol/l		
AD	4.762	0.325	mmol/l	97%	-1.51
AE	4.848	0.48	mmol/l	99%	-0.63
AF	5.0288	*	0.290	mmol/l	102%
AG	4.77	0.134	mmol/l	97%	-1.43
AH	4.80		mmol/l	98%	-1.12
AI	4.70	0.705	mmol/l	96%	-2.14
AJ	4.78		mmol/l	97%	-1.32
AK	4.80	0.5	mmol/l	98%	-1.12
AL	4.99	*	0.247	mmol/l	102%
AM	4.85	0.73	mmol/l	99%	-0.61
AN			mmol/l		
AO	4.83	0.19	mmol/l	98%	-0.81
AP	5.00	*	0.5	mmol/l	102%
AQ			mmol/l		
AR	4.82	0.145	mmol/l	98%	-0.92
AS	4.76	0.33	mmol/l	97%	-1.53
AT	4.83	0.333	mmol/l	98%	-0.81
AU	4.782		mmol/l	97%	-1.30
AV	4.83	0.44	mmol/l	98%	-0.81
AW	5.20	*	0.296	mmol/l	106%
AX	4.39	*		mmol/l	89%
AY			mmol/l		-5.30

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,82 $\pm$ 0,05	4,81 $\pm$ 0,02	mmol/l
Recov. $\pm$ CI(99%)	98,2 $\pm$ 1,1	98,0 $\pm$ 0,4	%
SD between labs	0,12	0,04	mmol/l
RSD between labs	2,4	0,8	%
n for calculation	38	32	



# Sample N163B

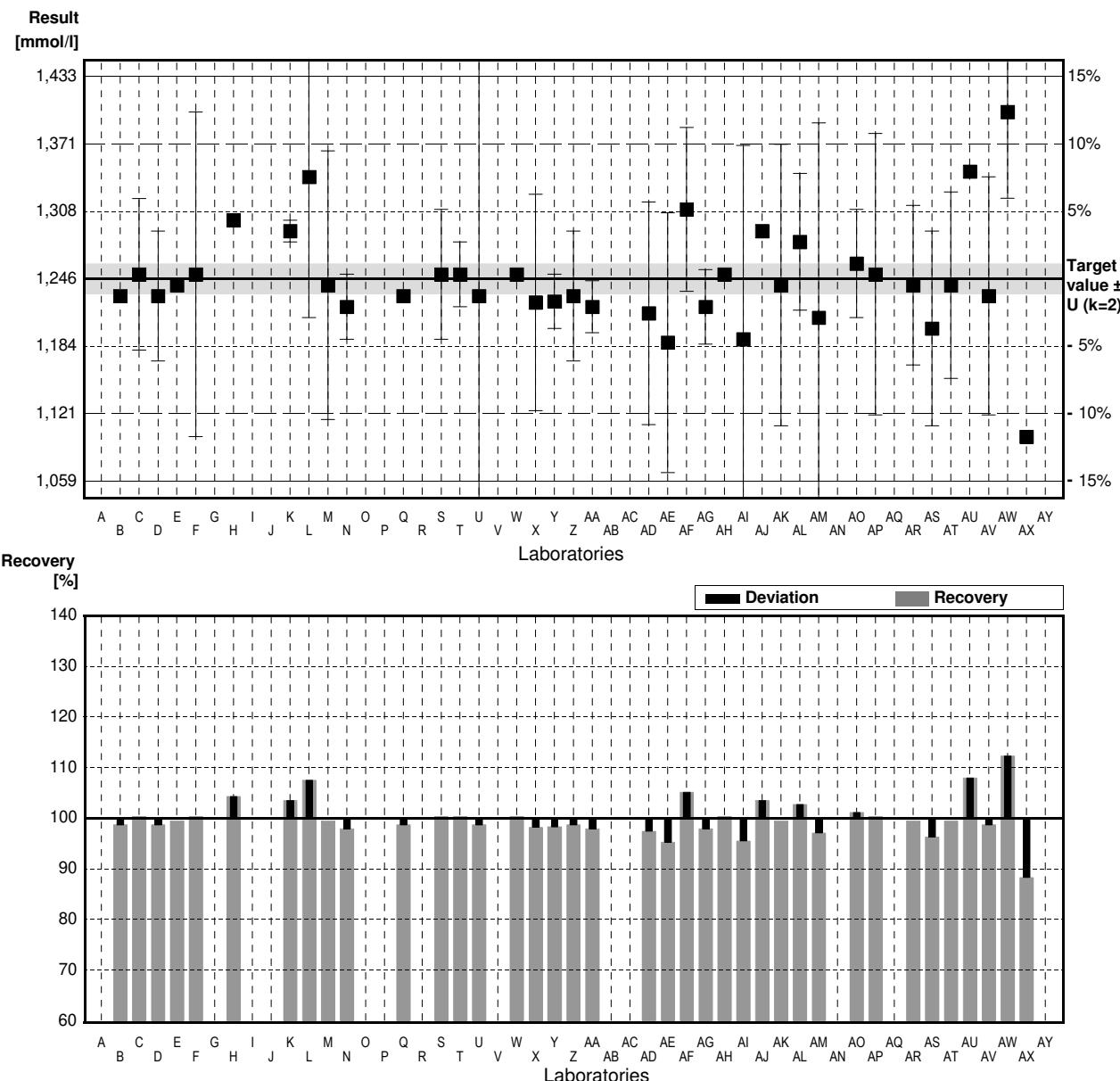
## Parameter Alkalinity

Target value  $\pm U$  ( $k=2$ ) 1,246 mmol/l  $\pm$  0,014 mmol/l  
 IFA result  $\pm U$  ( $k=2$ ) 1,23 mmol/l  $\pm$  0,05 mmol/l

Stability test mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mmol/l		
B	1.23	0	mmol/l	99%	-0.64
C	1.25	0.07	mmol/l	100%	0.16
D	1.23	0.06	mmol/l	99%	-0.64
E	1.24		mmol/l	100%	-0.24
F	1.25	0.15	mmol/l	100%	0.16
G			mmol/l		
H	1.30		mmol/l	104%	2.17
I			mmol/l		
J			mmol/l		
K	1.29	0.010	mmol/l	104%	1.77
L	1.34 *	0.13	mmol/l	108%	3.77
M	1.24	0.124	mmol/l	100%	-0.24
N	1.22	0.03	mmol/l	98%	-1.04
O			mmol/l		
P			mmol/l		
Q	1.23		mmol/l	99%	-0.64
R			mmol/l		
S	1.25	0.060	mmol/l	100%	0.16
T	1.25	0.03	mmol/l	100%	0.16
U	1.23	0.25	mmol/l	99%	-0.64
V			mmol/l		
W	1.25		mmol/l	100%	0.16
X	1.224	0.1	mmol/l	98%	-0.88
Y	1.225	0.025	mmol/l	98%	-0.84
Z	1.23	0.06	mmol/l	99%	-0.64
AA	1.22	0.024	mmol/l	98%	-1.04
AB			mmol/l		
AC			mmol/l		
AD	1.214	0.103	mmol/l	97%	-1.28
AE	1.187	0.12	mmol/l	95%	-2.37
AF	1.310	0.0756	mmol/l	105%	2.57
AG	1.22	0.0344	mmol/l	98%	-1.04
AH	1.25		mmol/l	100%	0.16
AI	1.19	0.179	mmol/l	96%	-2.25
AJ	1.29		mmol/l	104%	1.77
AK	1.24	0.13	mmol/l	100%	-0.24
AL	1.28	0.0632	mmol/l	103%	1.36
AM	1.21	0.18	mmol/l	97%	-1.44
AN			mmol/l		
AO	1.26	0.05	mmol/l	101%	0.56
AP	1.25	0.13	mmol/l	100%	0.16
AQ			mmol/l		
AR	1.24	0.0737	mmol/l	100%	-0.24
AS	1.20	0.09	mmol/l	96%	-1.85
AT	1.24		mmol/l	100%	-0.24
AU	1.345 *		mmol/l	108%	3.97
AV	1.23	0.11	mmol/l	99%	-0.64
AW	1.40 *	0.0798	mmol/l	112%	6.18
AX	1.10 *		mmol/l	88%	-5.86
AY			mmol/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	1,246 $\pm$ 0,022	1,240 $\pm$ 0,013	mmol/l
Recov. $\pm$ CI(99%)	100,0 $\pm$ 1,8	99,5 $\pm$ 1,1	%
SD between labs	0,050	0,029	mmol/l
RSD between labs	4,0	2,3	%
n for calculation	38	34	



# Sample N163A

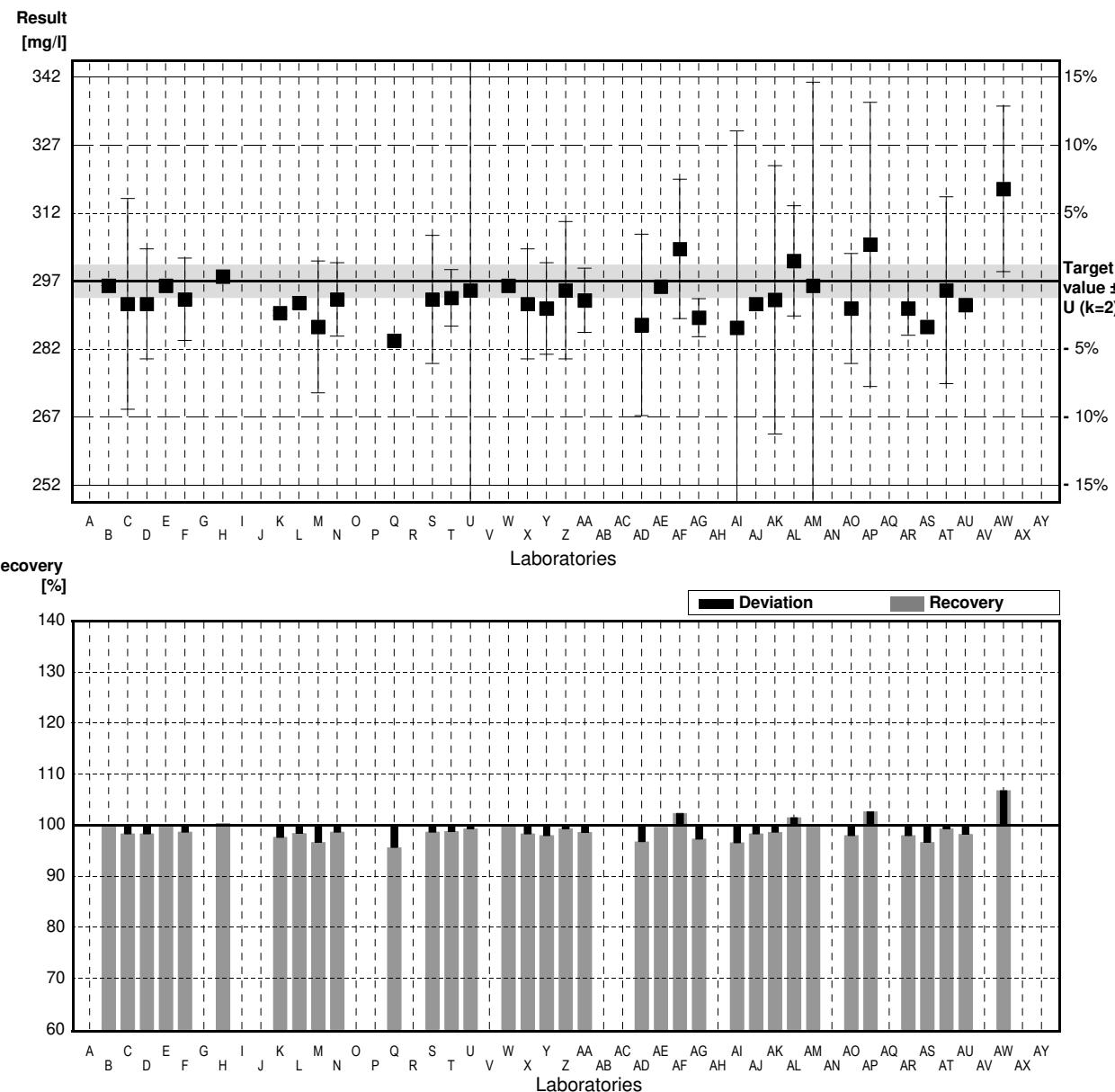
## Parameter Hydrogen carbonate

Target value  $\pm U$  ( $k=2$ ) 297 mg/l  $\pm$  4 mg/l  
 IFA result  $\pm U$  ( $k=2$ ) 292 mg/l  $\pm$  12 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	296	0.002	mg/l	100%	-0.14
C	292	23	mg/l	98%	-0.70
D	292	12	mg/l	98%	-0.70
E	296		mg/l	100%	-0.14
F	293	9	mg/l	99%	-0.56
G			mg/l		
H	298		mg/l	100%	0.14
I			mg/l		
J			mg/l		
K	290	0.58	mg/l	98%	-0.98
L	292.23		mg/l	98%	-0.67
M	287	14.4	mg/l	97%	-1.40
N	293	8	mg/l	99%	-0.56
O			mg/l		
P			mg/l		
Q	284		mg/l	96%	-1.82
R			mg/l		
S	293	14	mg/l	99%	-0.56
T	293.31	6.16	mg/l	99%	-0.52
U	295	50	mg/l	99%	-0.28
V			mg/l		
W	296		mg/l	100%	-0.14
X	292	12	mg/l	98%	-0.70
Y	291	10	mg/l	98%	-0.84
Z	295	15	mg/l	99%	-0.28
AA	292.8	7.03	mg/l	99%	-0.59
AB			mg/l		
AC			mg/l		
AD	287.4	19.8	mg/l	97%	-1.35
AE	295.81		mg/l	100%	-0.17
AF	304 *	15.2	mg/l	102%	0.98
AG	289	4.17	mg/l	97%	-1.12
AH			mg/l		
AI	286.8	43.02	mg/l	97%	-1.43
AJ	292		mg/l	98%	-0.70
AK	292.9	29.3	mg/l	99%	-0.58
AL	301.42	12.02	mg/l	101%	0.62
AM	296	44.4	mg/l	100%	-0.14
AN			mg/l		
AQ	291	12	mg/l	98%	-0.84
AP	305 *	31	mg/l	103%	1.12
AQ			mg/l		
AR	291	5.83	mg/l	98%	-0.84
AS	287		mg/l	97%	-1.40
AT	295	20.4	mg/l	99%	-0.28
AU	291.78		mg/l	98%	-0.73
AV			mg/l		
AW	317.1 *	18.075	mg/l	107%	2.82
AX			mg/l		
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	294 $\pm$ 3	292 $\pm$ 2	mg/l
Recov. $\pm$ CI(99%)	98.9 $\pm$ 0.9	98.5 $\pm$ 0.6	%
SD between labs	6	4	mg/l
RSD between labs	2.1	1.2	%
n for calculation	35	32	



Sample N163B

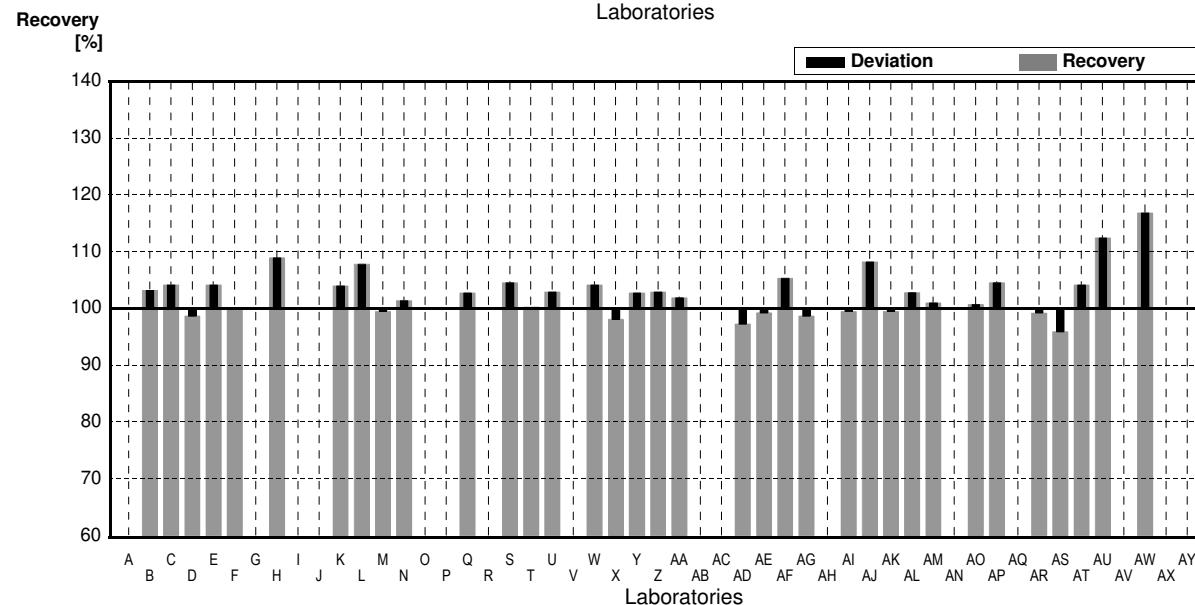
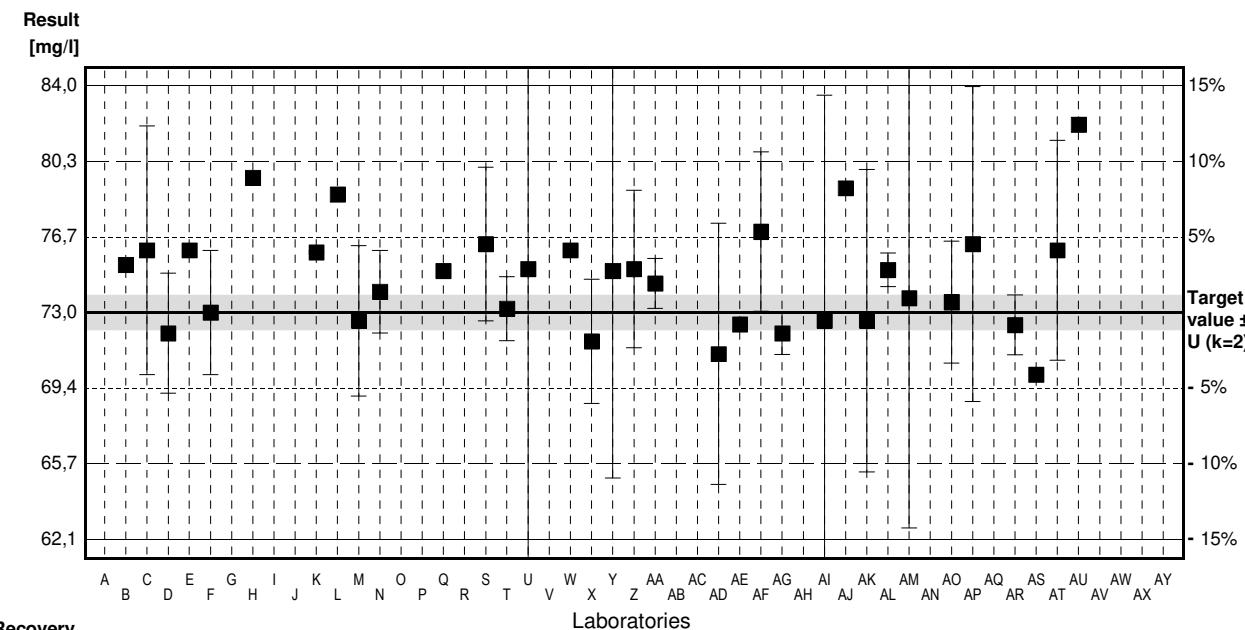
## Parameter Hydrogen carbonate

Target value  $\pm U$  ( $k=2$ )      73,0 mg/l       $\pm$       0,8 mg/l  
 IFA result  $\pm U$  ( $k=2$ )      72 mg/l       $\pm$       3 mg/l

## Stability test

Lab Code	Result	±	Unit	Recovery	z-Score
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Lab Code	Result	$\pm$	Unit	Recovery	Z-Score
A			µg/l		
B	75.3	0	µg/l	103%	1.31
C	76	6	µg/l	104%	1.71
D	72.0	2.9	µg/l	99%	-0.57
E	76		µg/l	104%	1.71
F	73	3	µg/l	100%	0.00
G			µg/l		
H	79.5		µg/l	109%	3.71
I			µg/l		
J			µg/l		
K	75.9	0.058	µg/l	104%	1.66
L	78.70		µg/l	108%	3.25
M	72.6	3.63	µg/l	99%	-0.23
N	74	2	µg/l	101%	0.57
O			µg/l		
P			µg/l		
Q	75		µg/l	103%	1.14
R			µg/l		
S	76.3	3.7	µg/l	105%	1.88
T	73.18	1.54	µg/l	100%	0.10
U	75.1	15	µg/l	103%	1.20
V			µg/l		
W	76		µg/l	104%	1.71
X	71.6	3	µg/l	98%	-0.80
Y	75	10	µg/l	103%	1.14
Z	75.1	3.8	µg/l	103%	1.20
AA	74.4	1.20	µg/l	102%	0.80
AB			µg/l		
AC			µg/l		
AD	71.0	6.3	µg/l	97%	-1.14
AE	72.427		µg/l	99%	-0.33
AF	76.9	3.85	µg/l	105%	2.23
AG	72	1.03	µg/l	99%	-0.57
AH			µg/l		
AI	72.6	10.89	µg/l	99%	-0.23
AJ	79		µg/l	108%	3.42
AK	72.6	7.3	µg/l	99%	-0.23
AL	75.05	0.81	µg/l	103%	1.17
AM	73.7	11.1	µg/l	101%	0.40
AN			µg/l		
AO	73.5	2.94	µg/l	101%	0.29
AP	76.3	7.6	µg/l	105%	1.88
AQ			µg/l		
AR	72.4	1.45	µg/l	99%	-0.34
AS	70		µg/l	96%	-1.71
AT	76	5.3	µg/l	104%	1.71
AU	82.07		µg/l	112%	5.18
AV			µg/l		
AW	85.3	*	4.862	µg/l	117%
AX			µg/l		
AY			µg/l		



	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	75,0 $\pm$ 1,4	74,7 $\pm$ 1,2	mg/l
Recov. $\pm$ CI(99%)	102,8 $\pm$ 2,0	102,3 $\pm$ 1,7	%
SD between labs	3,1	2,6	mg/l
RSD between labs	4,2	3,5	%
n for calculation	35	34	

# Sample N163A

## Parameter Calcium

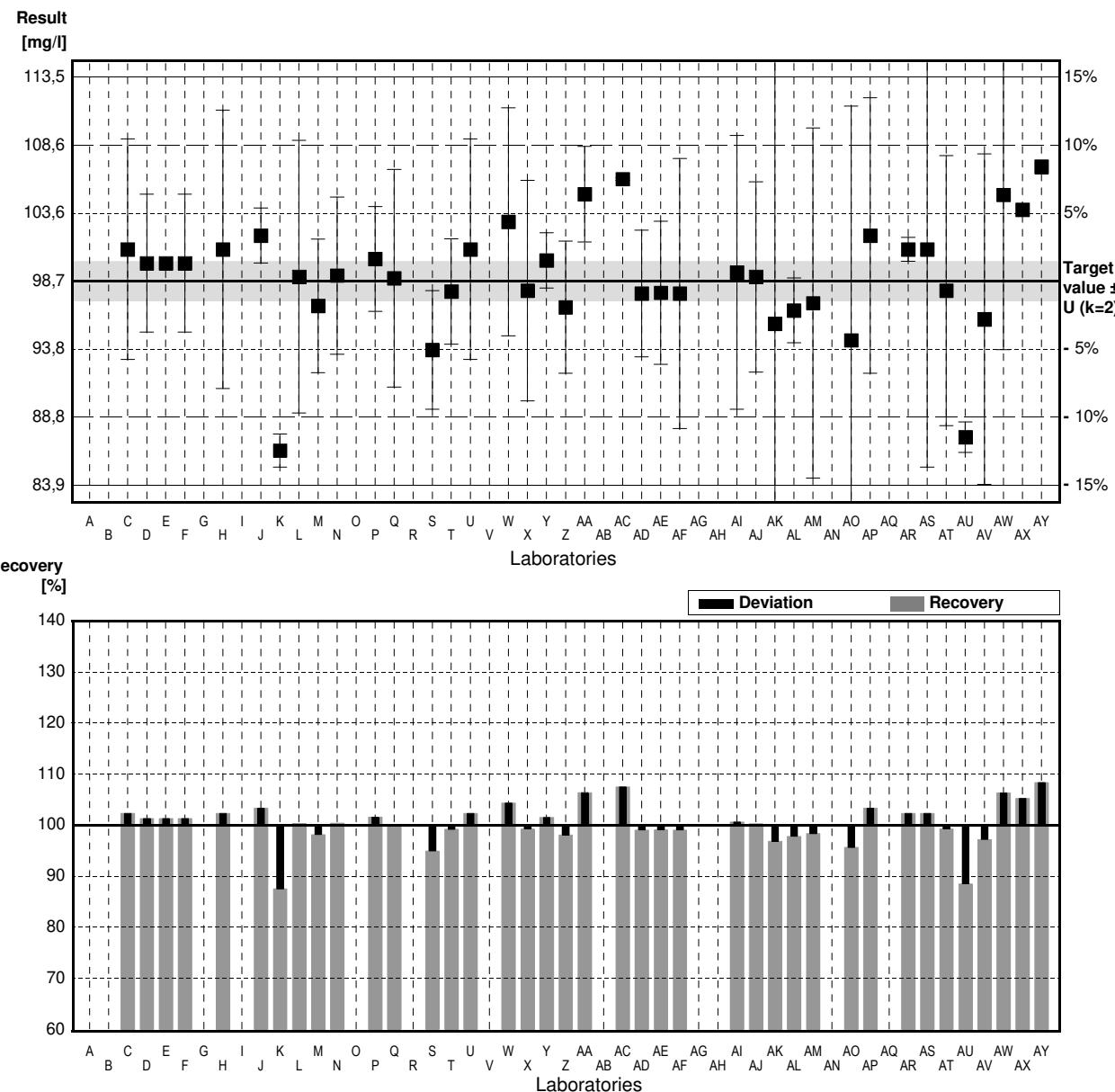
Target value  $\pm U$  ( $k=2$ ) 98,7 mg/l  $\pm$  1,4 mg/l  
 IFA result  $\pm U$  ( $k=2$ ) 105 mg/l  $\pm$  5 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	101	8	mg/l	102%	0.71
D	100	5	mg/l	101%	0.40
E	100		mg/l	101%	0.40
F	100	5	mg/l	101%	0.40
G			mg/l		
H	101	10,1	mg/l	102%	0.71
I			mg/l		
J	102	2	mg/l	103%	1.01
K	86,4 *	1,2	mg/l	88%	-3,78
L	99,02	9,9	mg/l	100%	0,10
M	96,9	4,85	mg/l	98%	-0,55
N	99,1	5,7	mg/l	100%	0,12
O			mg/l		
P	100,3	3,8	mg/l	102%	0,49
Q	98,9	7,9	mg/l	100%	0,06
R			mg/l		
S	93,7	4,3	mg/l	95%	-1,54
T	97,94	3,82	mg/l	99%	-0,23
U	101	8	mg/l	102%	0,71
V			mg/l		
W	103	8,27	mg/l	104%	1,32
X	98,0	8	mg/l	99%	-0,21
Y	100,2	2	mg/l	102%	0,46
Z	96,8	4,8	mg/l	98%	-0,58
AA	105,0	3,465	mg/l	106%	1,93
AB			mg/l		
AC	106,1	0,10	mg/l	107%	2,27
AD	97,8	4,6	mg/l	99%	-0,28
AE	97,85	5,19	mg/l	99%	-0,26
AF	97,8	9,8	mg/l	99%	-0,28
AG			mg/l		
AH			mg/l		
AI	99,33	9,933	mg/l	101%	0,19
AJ	99,0	6,9	mg/l	100%	0,09
AK	95,6	19,1	mg/l	97%	-0,95
AL	96,57	2,356	mg/l	98%	-0,65
AM	97,1	12,7	mg/l	98%	-0,49
AN			mg/l		
AQ	94,4	17	mg/l	96%	-1,32
AP	102	10	mg/l	103%	1,01
AO			mg/l		
AR	101	0,863	mg/l	102%	0,71
AS	101	15,8	mg/l	102%	0,71
AT	98	9,8	mg/l	99%	-0,21
AU	87,367 *	1,1015	mg/l	89%	-3,48
AV	95,93	11,99	mg/l	97%	-0,85
AW	104,95	11,22	mg/l	106%	1,92
AX	103,88		mg/l	105%	1,59
AY	107		mg/l	108%	2,55

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	99,0 $\pm$ 1,8	99,7 $\pm$ 1,4	mg/l
Recov. $\pm$ CI(99%)	100,4 $\pm$ 1,8	101,0 $\pm$ 1,4	%
SD between labs	4,2	3,1	mg/l
RSD between labs	4,2	3,1	%
n for calculation	39	37	



# Sample N163B

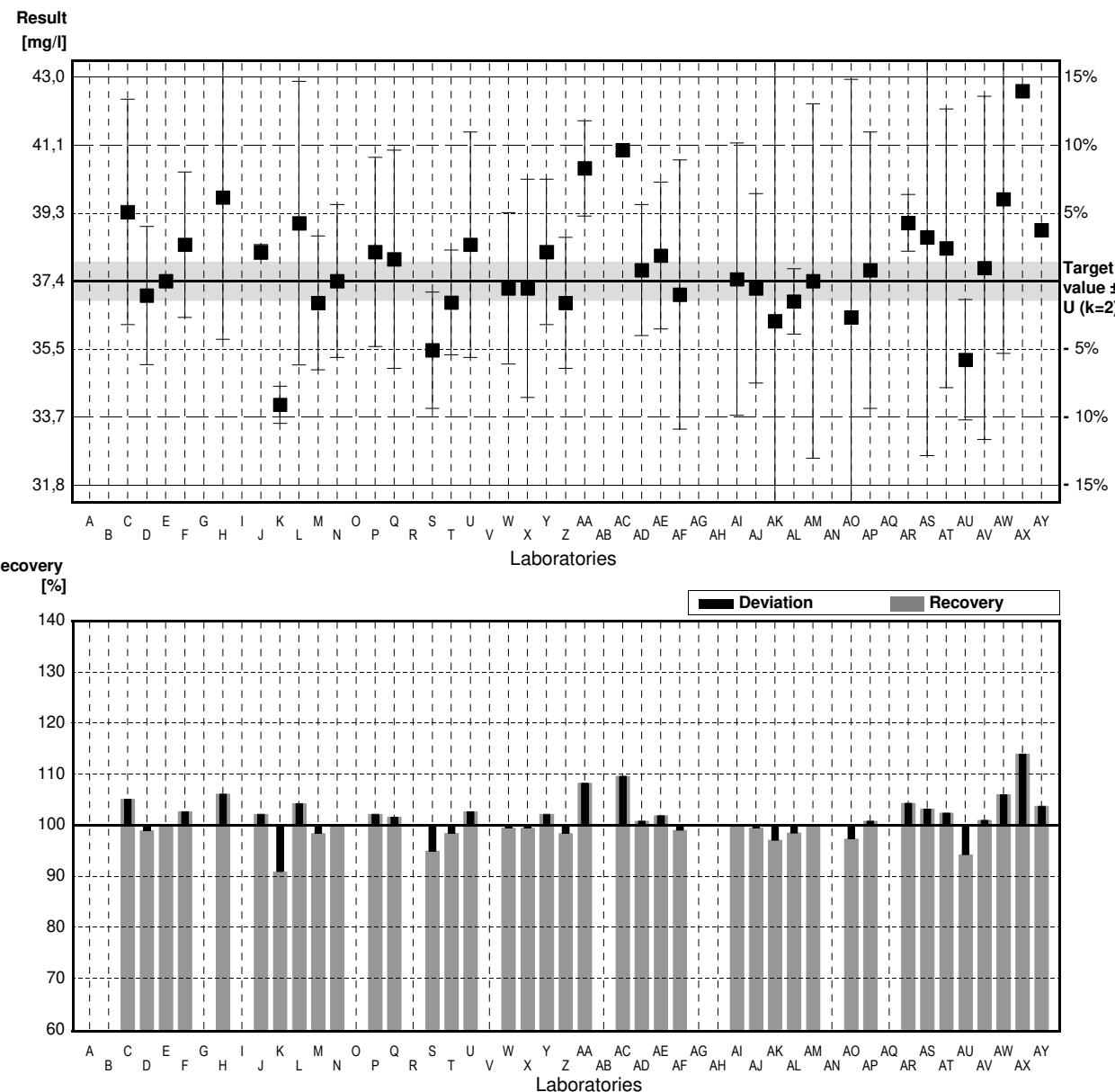
## Parameter Calcium

Target value  $\pm U (k=2)$  37,4 mg/l  $\pm$  0,5 mg/l  
 IFA result  $\pm U (k=2)$  40,9 mg/l  $\pm$  1,9 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score	
A			mg/l			
B			mg/l			
C	39,3	3,1	mg/l	105%	1,54	
D	37,0	1,9	mg/l	99%	-0,32	
E	37,4		mg/l	100%	0,00	
F	38,4	2	mg/l	103%	0,81	
G			mg/l			
H	39,7	3,9	mg/l	106%	1,86	
I			mg/l			
J	38,2	0,2	mg/l	102%	0,65	
K	34,0	*	0,51	91%	-2,75	
L	38,99	3,9	mg/l	104%	1,29	
M	36,8	1,84	mg/l	98%	-0,49	
N	37,4	2,1	mg/l	100%	0,00	
O			mg/l			
P	38,2	2,6	mg/l	102%	0,65	
Q	38,0	3,0	mg/l	102%	0,49	
R			mg/l			
S	35,5	1,6	mg/l	95%	-1,54	
T	36,81	1,44	mg/l	98%	-0,48	
U	38,4	3,1	mg/l	103%	0,81	
V			mg/l			
W	37,2	2,08	mg/l	99%	-0,16	
X	37,2	3	mg/l	99%	-0,16	
Y	38,2	2	mg/l	102%	0,65	
Z	36,8	1,8	mg/l	98%	-0,49	
AA	40,5	1,31	mg/l	108%	2,51	
AB			mg/l			
AC	41,0	*	0,10	mg/l	110%	2,92
AD	37,7	1,8	mg/l	101%	0,24	
AE	38,1	2,02	mg/l	102%	0,57	
AF	37,03	3,7	mg/l	99%	-0,30	
AG			mg/l			
AH			mg/l			
AI	37,45	3,745	mg/l	100%	0,04	
AJ	37,2	2,6	mg/l	99%	-0,16	
AK	36,3	7,3	mg/l	97%	-0,89	
AL	36,84	0,899	mg/l	99%	-0,45	
AM	37,4	4,87	mg/l	100%	0,00	
AN			mg/l			
AQ	36,4	6,55	mg/l	97%	-0,81	
AP	37,7	3,8	mg/l	101%	0,24	
AQ			mg/l			
AR	39,0	0,784	mg/l	104%	1,30	
AS	38,6	6	mg/l	103%	0,97	
AT	38,3	3,83	mg/l	102%	0,73	
AU	35,233	1,655	mg/l	94%	-1,76	
AV	37,76	4,72	mg/l	101%	0,29	
AW	39,65	4,243	mg/l	106%	1,82	
AX	42,62	*	4,23	mg/l	114%	4,23
AY	38,8		mg/l	104%	1,13	

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	37,9 $\pm$ 0,7	37,8 $\pm$ 0,5	mg/l
Recov. $\pm$ CI(99%)	101,3 $\pm$ 1,8	101,0 $\pm$ 1,4	%
SD between labs	1,6	1,1	mg/l
RSD between labs	4,1	3,0	%
n for calculation	39	36	



# Sample N163A

## Parameter Magnesium

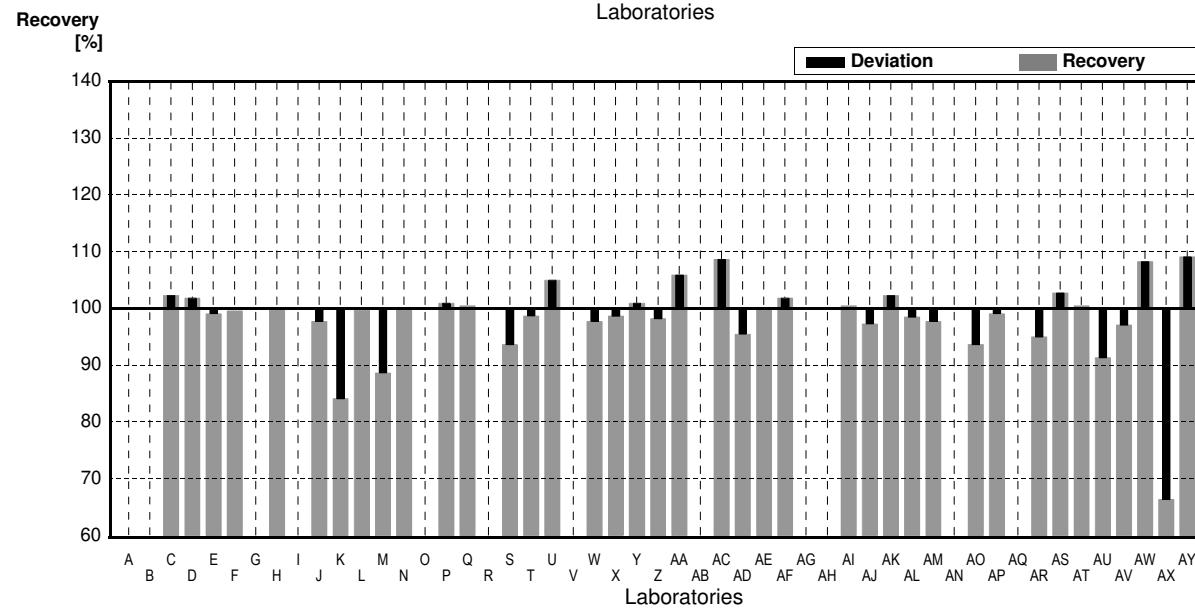
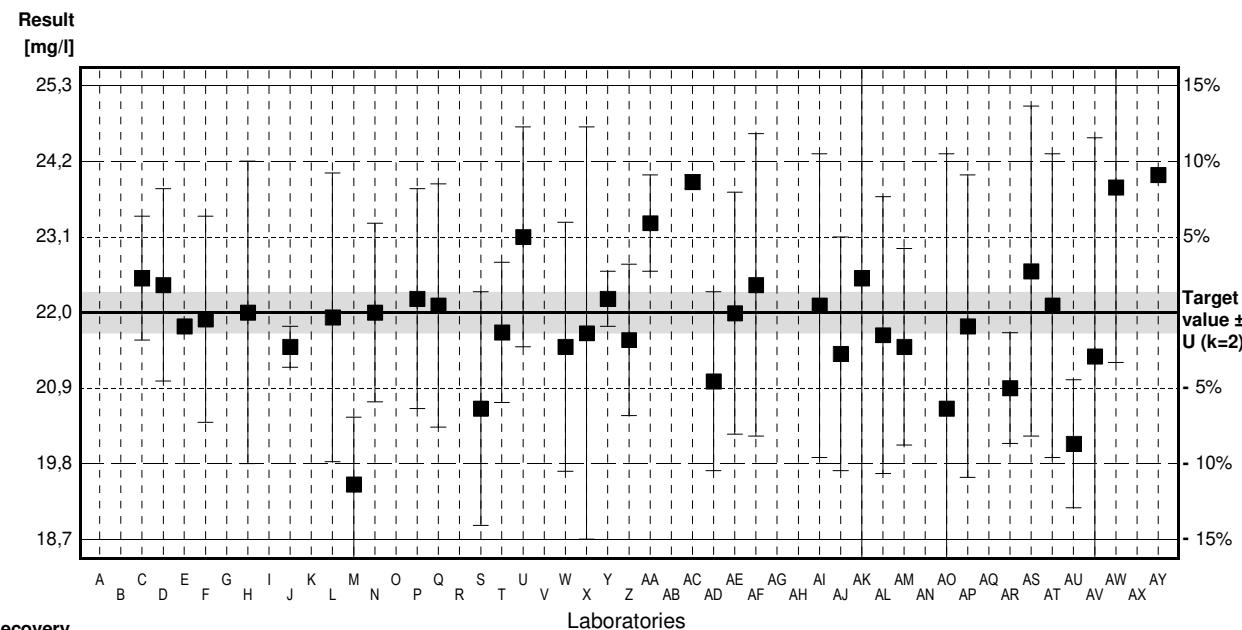
Target value  $\pm U (k=2)$  22,0 mg/l  $\pm$  0,3 mg/l  
 IFA result  $\pm U (k=2)$  21,9 mg/l  $\pm$  1,2 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	22,5	0,9	mg/l	102%	0,61
D	22,4	1,4	mg/l	102%	0,49
E	21,8		mg/l	99%	-0,25
F	21,9	1,5	mg/l	100%	-0,12
G			mg/l		
H	22,0	2,2	mg/l	100%	0,00
I			mg/l		
J	21,5	0,3	mg/l	98%	-0,61
K	18,5	*	mg/l	84%	-4,30
L	21,93	2,1	mg/l	100%	-0,09
M	19,5	*	mg/l	89%	-3,07
N	22,0	1,3	mg/l	100%	0,00
O			mg/l		
P	22,2	1,6	mg/l	101%	0,25
Q	22,1	1,77	mg/l	100%	0,12
R			mg/l		
S	20,6	1,7	mg/l	94%	-1,72
T	21,71	1,02	mg/l	99%	-0,36
U	23,1	1,6	mg/l	105%	1,35
V			mg/l		
W	21,5	1,81	mg/l	98%	-0,61
X	21,7	3	mg/l	99%	-0,37
Y	22,2	0,4	mg/l	101%	0,25
Z	21,6	1,1	mg/l	98%	-0,49
AA	23,3	0,699	mg/l	106%	1,60
AB			mg/l		
AC	23,9	0,10	mg/l	109%	2,33
AD	21,0	1,3	mg/l	95%	-1,23
AE	21,99	1,76	mg/l	100%	-0,01
AF	22,4	2,2	mg/l	102%	0,49
AG			mg/l		
AH			mg/l		
AI	22,10	2,210	mg/l	100%	0,12
AJ	21,4	1,7	mg/l	97%	-0,74
AK	22,5	4,5	mg/l	102%	0,61
AL	21,67	2,015	mg/l	99%	-0,41
AM	21,5	1,43	mg/l	98%	-0,61
AN			mg/l		
AQ	20,6	3,71	mg/l	94%	-1,72
AP	21,8	2,2	mg/l	99%	-0,25
AQ			mg/l		
AR	20,9	0,807	mg/l	95%	-1,35
AS	22,6	2,4	mg/l	103%	0,74
AT	22,1	2,21	mg/l	100%	0,12
AU	20,090	0,9307	mg/l	91%	-2,35
AV	21,36	3,18	mg/l	97%	-0,79
AW	23,82	2,55	mg/l	108%	2,24
AX	14,59	*	mg/l	66%	-9,10
AY	24,0		mg/l	109%	2,46

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	21,7 $\pm$ 0,7	22,0 $\pm$ 0,4	mg/l
Recov. $\pm$ CI(99%)	98,4 $\pm$ 3,1	100,0 $\pm$ 1,8	%
SD between labs	1,6	0,9	mg/l
RSD between labs	7,3	4,0	%
n for calculation	39	36	



# Sample N163B

## Parameter Magnesium

Target value  $\pm U (k=2)$  11,43 mg/l  $\pm$  0,14 mg/l

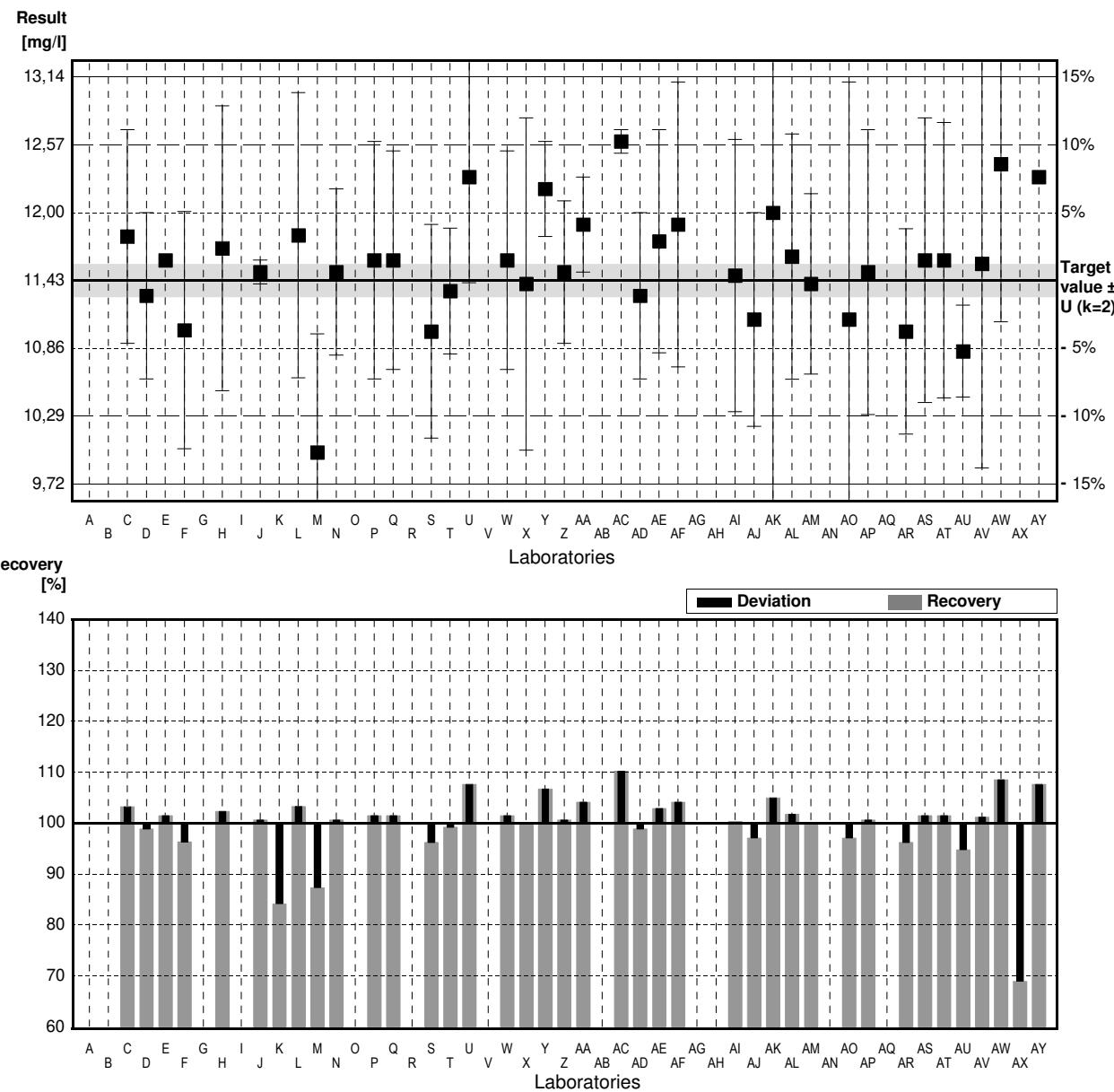
IFA result  $\pm U (k=2)$  12,3 mg/l  $\pm$  0,7 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	11.8	0.9	mg/l	103%	0.87
D	11.3	0.7	mg/l	99%	-0.31
E	11.6		mg/l	101%	0.40
F	11.01	1	mg/l	96%	-0.99
G			mg/l		
H	11.7	1.2	mg/l	102%	0.64
I			mg/l		
J	11.5	0.1	mg/l	101%	0.17
K	9.62 *	0.269	mg/l	84%	-4.28
L	11.81	1.2	mg/l	103%	0.90
M	9.98 *	1.0	mg/l	87%	-3.43
N	11.5	0.7	mg/l	101%	0.17
O			mg/l		
P	11.6	1.0	mg/l	101%	0.40
Q	11.6	0.92	mg/l	101%	0.40
R			mg/l		
S	11.0	0.90	mg/l	96%	-1.02
T	11.34	0.53	mg/l	99%	-0.21
U	12.3	0.89	mg/l	108%	2.06
V			mg/l		
W	11.6	0.92	mg/l	101%	0.40
X	11.4	1.4	mg/l	100%	-0.07
Y	12.2	0.4	mg/l	107%	1.82
Z	11.5	0.6	mg/l	101%	0.17
AA	11.9	0.400	mg/l	104%	1.11
AB			mg/l		
AC	12.6	0.10	mg/l	110%	2.77
AD	11.3	0.7	mg/l	99%	-0.31
AE	11.76	0.94	mg/l	103%	0.78
AF	11.9	1.2	mg/l	104%	1.11
AG			mg/l		
AH			mg/l		
AI	11,47	1,147	mg/l	100%	0.09
AJ	11,1	0,9	mg/l	97%	-0,78
AK	12,0	2,4	mg/l	105%	1,35
AL	11,63	1,032	mg/l	102%	0,47
AM	11,4	0,76	mg/l	100%	-0,07
AN			mg/l		
AQ	11,1	2	mg/l	97%	-0,78
AP	11,5	1,2	mg/l	101%	0,17
AQ			mg/l		
AR	11,0	0,865	mg/l	96%	-1,02
AS	11,6	1,2	mg/l	101%	0,40
AT	11,6	1,16	mg/l	101%	0,40
AU	10,833	0,387	mg/l	95%	-1,41
AV	11,57	1,72	mg/l	101%	0,33
AW	12,41	1,33	mg/l	109%	2,32
AX	7,88 *		mg/l	69%	-8,39
AY	12,3		mg/l	108%	2,06

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	11,42 $\pm$ 0,35	11,60 $\pm$ 0,19	mg/l
Recov. $\pm$ CI(99%)	99,9 $\pm$ 3,1	101,5 $\pm$ 1,6	%
SD between labs	0,81	0,41	mg/l
RSD between labs	7,1	3,6	%
n for calculation	39	36	



# Sample N163A

## Parameter Sodium

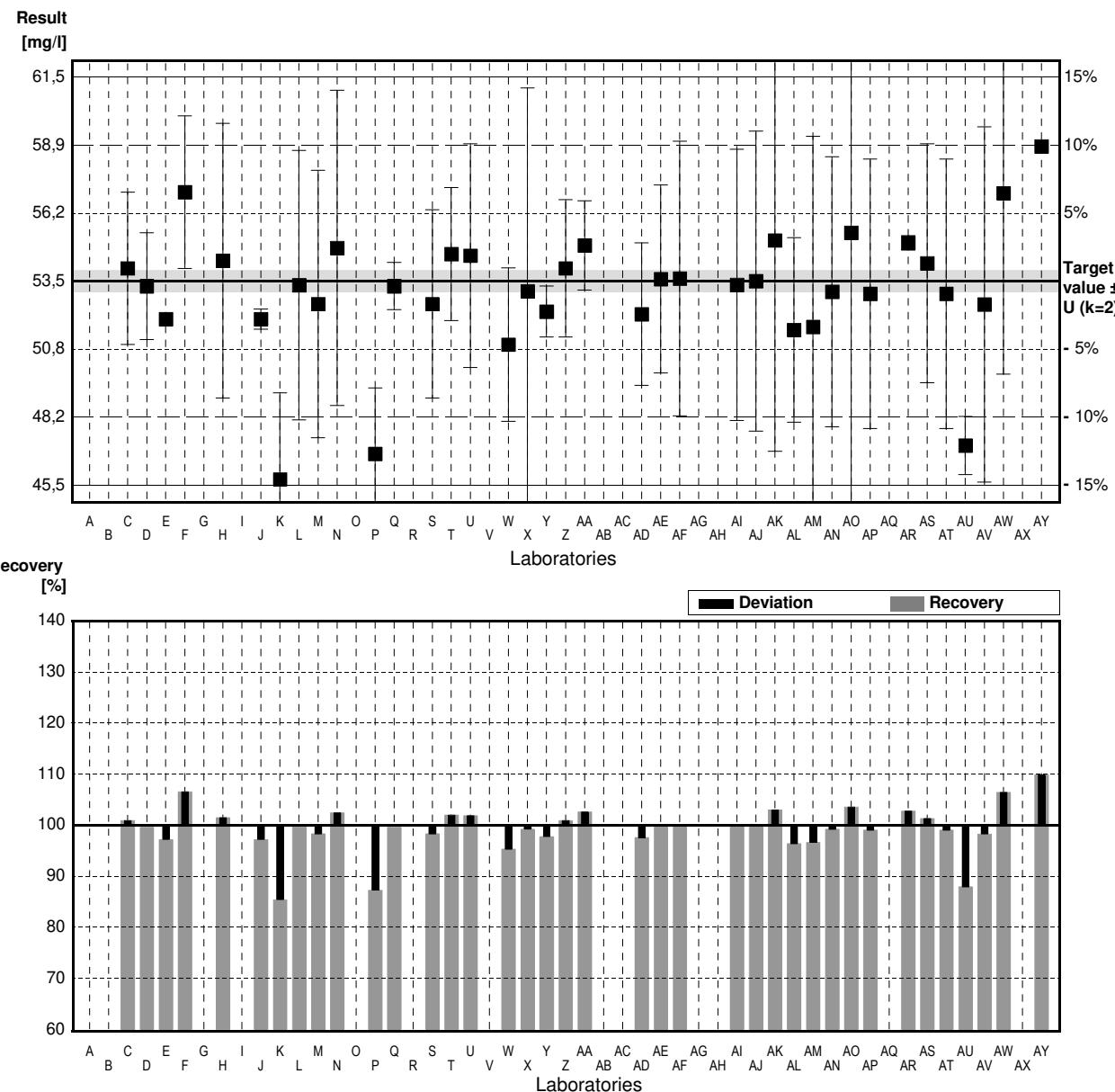
Target value  $\pm U (k=2)$  53,5 mg/l  $\pm$  0,4 mg/l  
 IFA result  $\pm U (k=2)$  53,4 mg/l  $\pm$  2,0 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	54	3	mg/l	101%	0,29
D	53,3	2,1	mg/l	100%	-0,12
E	52		mg/l	97%	-0,88
F	57	3	mg/l	107%	2,04
G			mg/l		
H	54,3	5,4	mg/l	101%	0,47
I			mg/l		
J	52,0	0,4	mg/l	97%	-0,88
K	45,7	*	mg/l	85%	-4,56
L	53,34	5,3	mg/l	100%	-0,09
M	52,6	5,26	mg/l	98%	-0,53
N	54,8	6,2	mg/l	102%	0,76
O			mg/l		
P	46,7	*	mg/l	87%	-3,97
Q	53,3	0,93	mg/l	100%	-0,12
R			mg/l		
S	52,6	3,7	mg/l	98%	-0,53
T	54,56	2,62	mg/l	102%	0,62
U	54,5	4,4	mg/l	102%	0,58
V			mg/l		
W	51	3,02	mg/l	95%	-1,46
X	53,1	8	mg/l	99%	-0,23
Y	52,3	1	mg/l	98%	-0,70
Z	54,0	2,7	mg/l	101%	0,29
AA	54,9	1,757	mg/l	103%	0,82
AB			mg/l		
AC			mg/l		
AD	52,2	2,8	mg/l	98%	-0,76
AE	53,58	3,70	mg/l	100%	0,05
AF	53,6	5,4	mg/l	100%	0,06
AG			mg/l		
AH			mg/l		
AI	53,35	5,335	mg/l	100%	-0,09
AJ	53,5	5,9	mg/l	100%	0,00
AK	55,1	8,3	mg/l	103%	0,93
AL	51,58	3,631	mg/l	96%	-1,12
AM	51,7	7,49	mg/l	97%	-1,05
AN	53,080	5,308	mg/l	99%	-0,25
AO	55,4	10	mg/l	104%	1,11
AP	53,0	5,3	mg/l	99%	-0,29
AQ			mg/l		
AR	55,0	0,284	mg/l	103%	0,88
AS	54,2	4,7	mg/l	101%	0,41
AT	53	5,3	mg/l	99%	-0,29
AU	47,030	*	1,1433	mg/l	88%
AV	52,58	6,99	mg/l	98%	-0,54
AW	56,96	7,12	mg/l	106%	2,02
AX			mg/l		
AY	58,8	*	mg/l	110%	3,10

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	53,1 $\pm$ 1,1	53,6 $\pm$ 0,7	mg/l
Recov. $\pm$ CI(99%)	99,3 $\pm$ 2,1	100,1 $\pm$ 1,2	%
SD between labs	2,5	1,4	mg/l
RSD between labs	4,8	2,6	%
n for calculation	38	34	



# Sample N163B

## Parameter Sodium

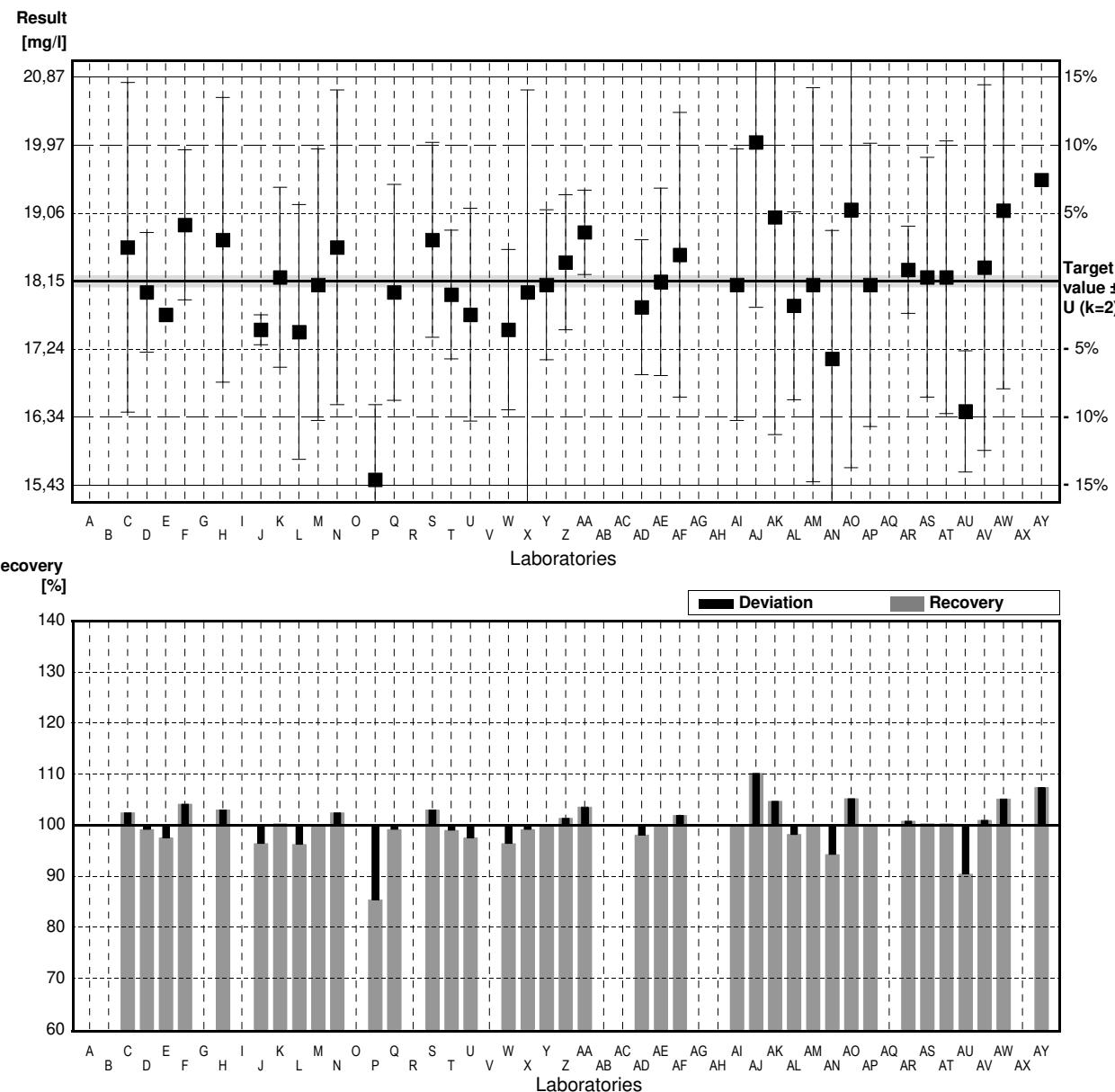
Target value  $\pm U (k=2)$  18,15 mg/l  $\pm$  0,08 mg/l  
 IFA result  $\pm U (k=2)$  18,6 mg/l  $\pm$  1,1 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	18,6	2,2	mg/l	102%	0,77
D	18,0	0,8	mg/l	99%	-0,26
E	17,7		mg/l	98%	-0,77
F	18,9	1	mg/l	104%	1,29
G			mg/l		
H	18,7	1,9	mg/l	103%	0,95
I			mg/l		
J	17,5	0,2	mg/l	96%	-1,12
K	18,2	1,2	mg/l	100%	0,09
L	17,47	1,7	mg/l	96%	-1,17
M	18,1	1,81	mg/l	100%	-0,09
N	18,6	2,1	mg/l	102%	0,77
O			mg/l		
P	15,5 *	1,0	mg/l	85%	-4,56
Q	18,0	1,44	mg/l	99%	-0,26
R			mg/l		
S	18,7	1,3	mg/l	103%	0,95
T	17,97	0,86	mg/l	99%	-0,31
U	17,7	1,42	mg/l	98%	-0,77
V			mg/l		
W	17,5	1,07	mg/l	96%	-1,12
X	18,0	2,7	mg/l	99%	-0,26
Y	18,1	1	mg/l	100%	-0,09
Z	18,4	0,9	mg/l	101%	0,43
AA	18,8	0,564	mg/l	104%	1,12
AB			mg/l		
AC			mg/l		
AD	17,8	0,9	mg/l	98%	-0,60
AE	18,14	1,25	mg/l	100%	-0,02
AF	18,5	1,9	mg/l	102%	0,60
AG			mg/l		
AH			mg/l		
AI	18,10	1,810	mg/l	100%	-0,09
AJ	20,0 *	2,2	mg/l	110%	3,19
AK	19,0	2,9	mg/l	105%	1,46
AL	17,82	1,254	mg/l	98%	-0,57
AM	18,1	2,63	mg/l	100%	-0,09
AN	17,113	1,7113	mg/l	94%	-1,79
AO	19,1	3,44	mg/l	105%	1,64
AP	18,1	1,89	mg/l	100%	-0,09
AQ			mg/l		
AR	18,3	0,581	mg/l	101%	0,26
AS	18,2	1,6	mg/l	100%	0,09
AT	18,2	1,82	mg/l	100%	0,09
AU	16,411	0,809	mg/l	90%	-2,99
AV	18,33	2,44	mg/l	101%	0,31
AW	19,09	2,38	mg/l	105%	1,62
AX			mg/l		
AY	19,5		mg/l	107%	2,32

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	18,16 $\pm$ 0,35	18,19 $\pm$ 0,27	mg/l
Recov. $\pm$ CI(99%)	100,1 $\pm$ 1,9	100,2 $\pm$ 1,5	%
SD between labs	0,79	0,60	mg/l
RSD between labs	4,4	3,3	%
n for calculation	38	36	



# Sample N163A

## Parameter Potassium

Target value  $\pm U (k=2)$  13,22 mg/l  $\pm$  0,08 mg/l

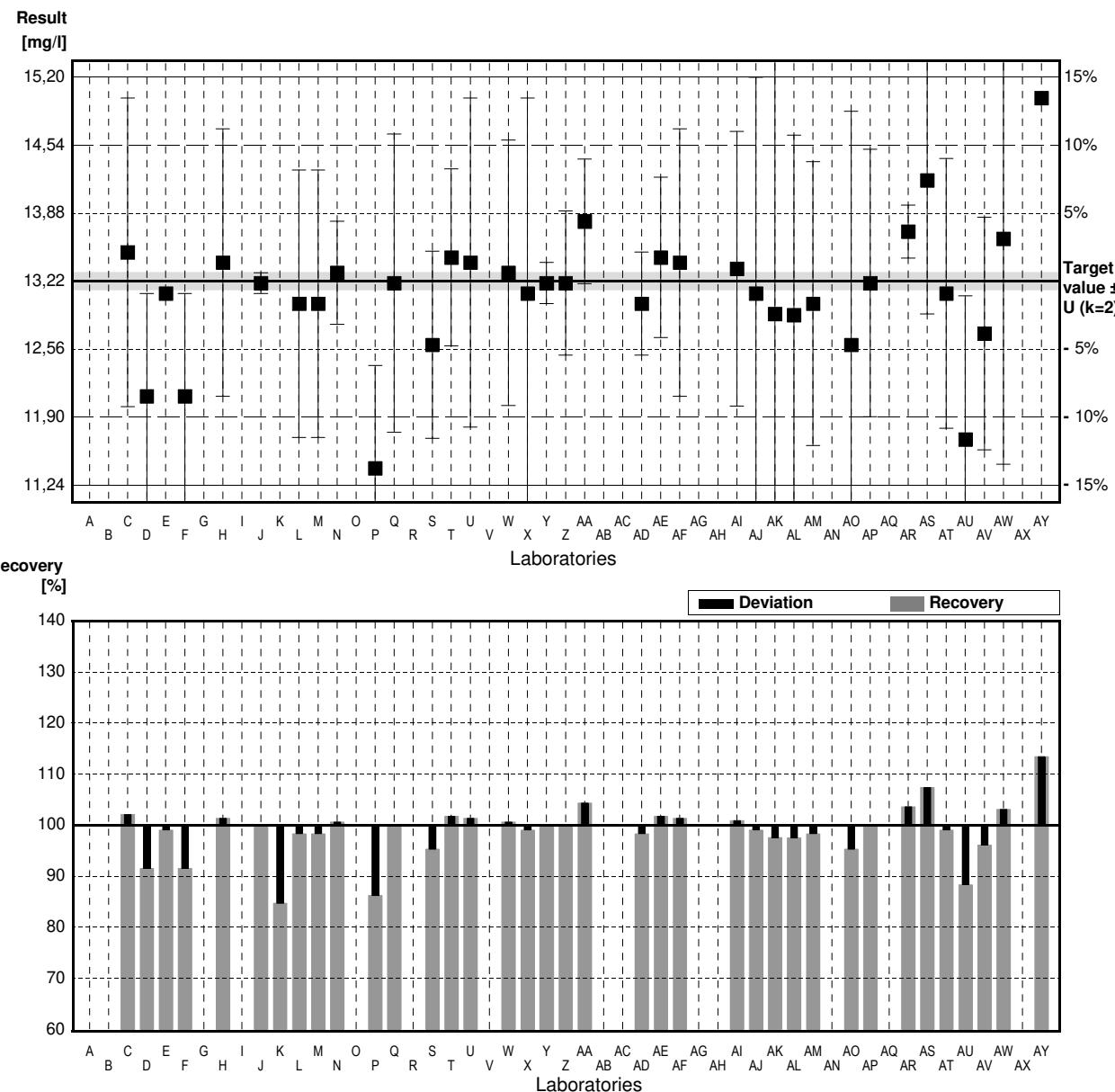
IFA result  $\pm U (k=2)$  13,1 mg/l  $\pm$  0,6 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	13,5	1,5	mg/l	102%	0,48
D	12,1 *	1,0	mg/l	92%	-1,93
E	13,1		mg/l	99%	-0,21
F	12,1 *	1	mg/l	92%	-1,93
G			mg/l		
H	13,4	1,3	mg/l	101%	0,31
I			mg/l		
J	13,2	0,1	mg/l	100%	-0,03
K	11,2 *	0,79	mg/l	85%	-3,47
L	13,00	1,3	mg/l	98%	-0,38
M	13,0	1,30	mg/l	98%	-0,38
N	13,3	0,5	mg/l	101%	0,14
O			mg/l		
P	11,4 *	1,0	mg/l	86%	-3,13
Q	13,2	1,45	mg/l	100%	-0,03
R			mg/l		
S	12,6	0,91	mg/l	95%	-1,07
T	13,45	0,86	mg/l	102%	0,40
U	13,4	1,6	mg/l	101%	0,31
V			mg/l		
W	13,3	1,29	mg/l	101%	0,14
X	13,1	1,9	mg/l	99%	-0,21
Y	13,2	0,2	mg/l	100%	-0,03
Z	13,2	0,7	mg/l	100%	-0,03
AA	13,8	0,607	mg/l	104%	1,00
AB			mg/l		
AC			mg/l		
AD	13,0	0,5	mg/l	98%	-0,38
AE	13,45	0,78	mg/l	102%	0,40
AF	13,4	1,3	mg/l	101%	0,31
AG			mg/l		
AH			mg/l		
AI	13,34	1,334	mg/l	101%	0,21
AJ	13,1	2,1	mg/l	99%	-0,21
AK	12,9	2,6	mg/l	98%	-0,55
AL	12,89	1,748	mg/l	98%	-0,57
AM	13,0	1,38	mg/l	98%	-0,38
AN			mg/l		
AQ	12,6	2,27	mg/l	95%	-1,07
AP	13,2	1,3	mg/l	100%	-0,03
AQ			mg/l		
AR	13,7	0,257	mg/l	104%	0,83
AS	14,2 *	1,3	mg/l	107%	1,68
AT	13,1	1,31	mg/l	99%	-0,21
AU	11,680 *	1,3946	mg/l	88%	-2,65
AV	12,71	1,13	mg/l	96%	-0,88
AW	13,63	2,19	mg/l	103%	0,70
AX			mg/l		
AY	15,0 *		mg/l	113%	3,06

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	13,07 $\pm$ 0,32	13,19 $\pm$ 0,15	mg/l
Recov. $\pm$ CI(99%)	98,8 $\pm$ 2,4	99,8 $\pm$ 1,1	%
SD between labs	0,71	0,29	mg/l
RSD between labs	5,4	2,2	%
n for calculation	37	30	



# Sample N163B

## Parameter Potassium

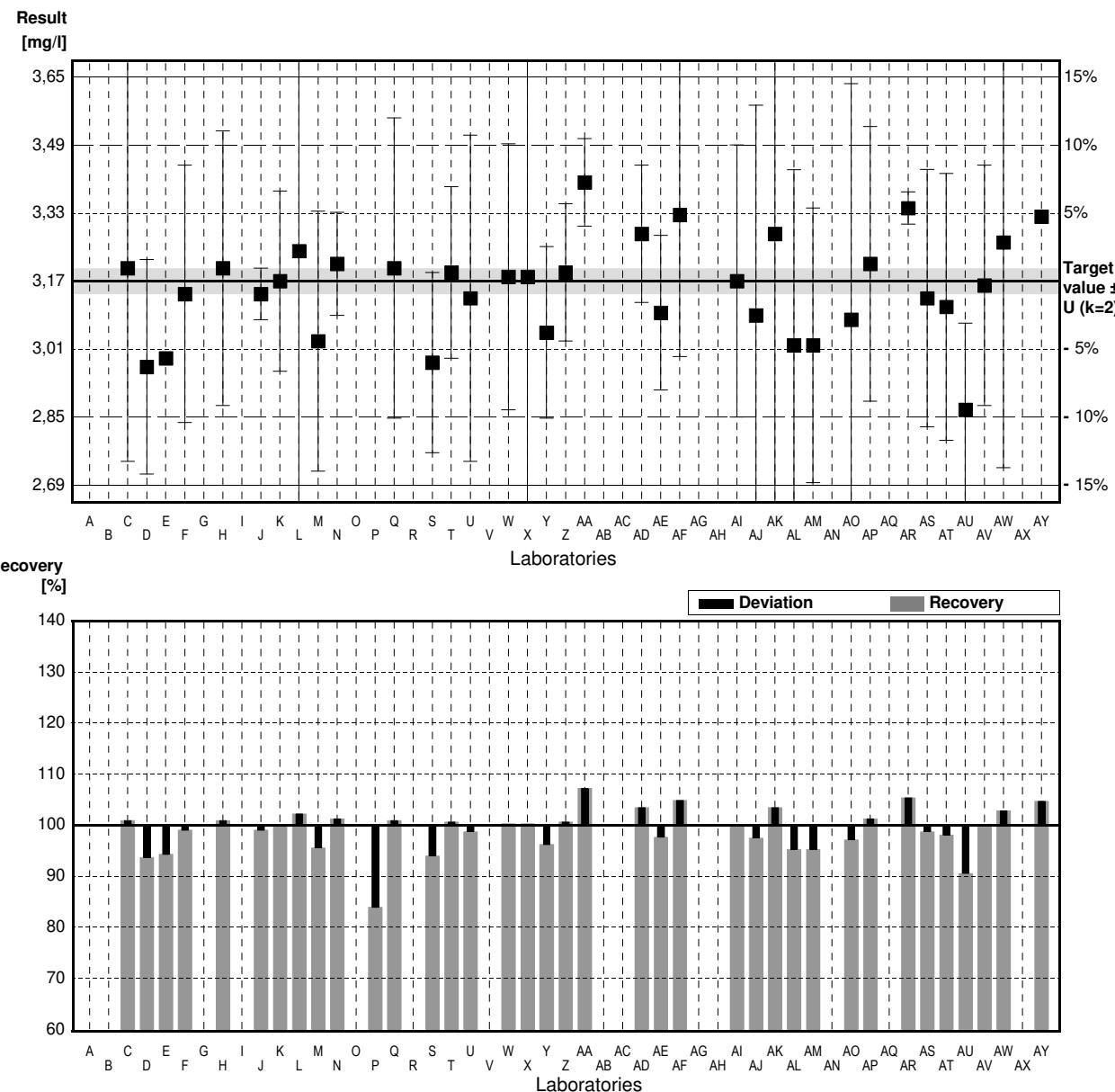
Target value  $\pm U (k=2)$  3,17 mg/l  $\pm$  0,03 mg/l  
 IFA result  $\pm U (k=2)$  3,29 mg/l  $\pm$  0,20 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	3.20	0.45	mg/l	101%	0.22
D	2.97	0.25	mg/l	94%	-1.43
E	2.99		mg/l	94%	-1.29
F	3.14	0.3	mg/l	99%	-0.22
G			mg/l		
H	3.20	0.32	mg/l	101%	0.22
I			mg/l		
J	3.14	0.06	mg/l	99%	-0.22
K	3.17	0.21	mg/l	100%	0.00
L	3.24	3.2	mg/l	102%	0.50
M	3.03	0.303	mg/l	96%	-1.00
N	3.21	0.12	mg/l	101%	0.29
O			mg/l		
P	2.66 *	0.20	mg/l	84%	-3.66
Q	3.20	0.35	mg/l	101%	0.22
R			mg/l		
S	2.98	0.21	mg/l	94%	-1.36
T	3.19	0.20	mg/l	101%	0.14
U	3.13	0.38	mg/l	99%	-0.29
V			mg/l		
W	3.18	0.31	mg/l	100%	0.07
X	3.18	0.5	mg/l	100%	0.07
Y	3.05	0.2	mg/l	96%	-0.86
Z	3.19	0.16	mg/l	101%	0.14
AA	3.40	0.102	mg/l	107%	1.65
AB			mg/l		
AC			mg/l		
AD	3.28	0.16	mg/l	103%	0.79
AE	3.096	0.18	mg/l	98%	-0.53
AF	3.324	0.33	mg/l	105%	1.10
AG			mg/l		
AH			mg/l		
AI	3.17	0.317	mg/l	100%	0.00
AJ	3.09	0.49	mg/l	97%	-0.57
AK	3.28	0.66	mg/l	103%	0.79
AL	3.02	0.4095	mg/l	95%	-1.08
AM	3.02	0.32	mg/l	95%	-1.08
AN			mg/l		
AO	3.08	0.55	mg/l	97%	-0.65
AP	3.21	0.32	mg/l	101%	0.29
AQ			mg/l		
AR	3.34	0.0375	mg/l	105%	1.22
AS	3.13	0.3	mg/l	99%	-0.29
AT	3.11	0.311	mg/l	98%	-0.43
AU	2.870	0.202	mg/l	91%	-2.15
AV	3.16	0.28	mg/l	100%	-0.07
AW	3.26	0.525	mg/l	103%	0.65
AX			mg/l		
AY	3.32		mg/l	105%	1.08

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	3,14 $\pm$ 0,06	3,15 $\pm$ 0,05	mg/l
Recov. $\pm$ CI(99%)	99,1 $\pm$ 2,0	99,5 $\pm$ 1,7	%
SD between labs	0,14	0,12	mg/l
RSD between labs	4,5	3,7	%
n for calculation	37	36	



# Sample N163A

## Parameter Nitrate

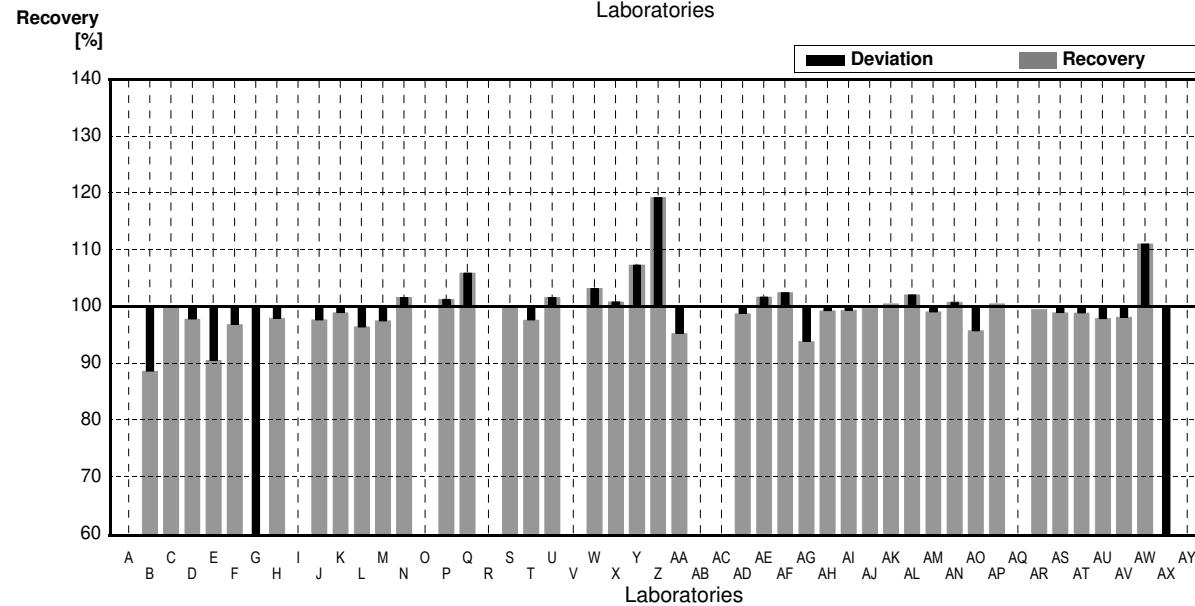
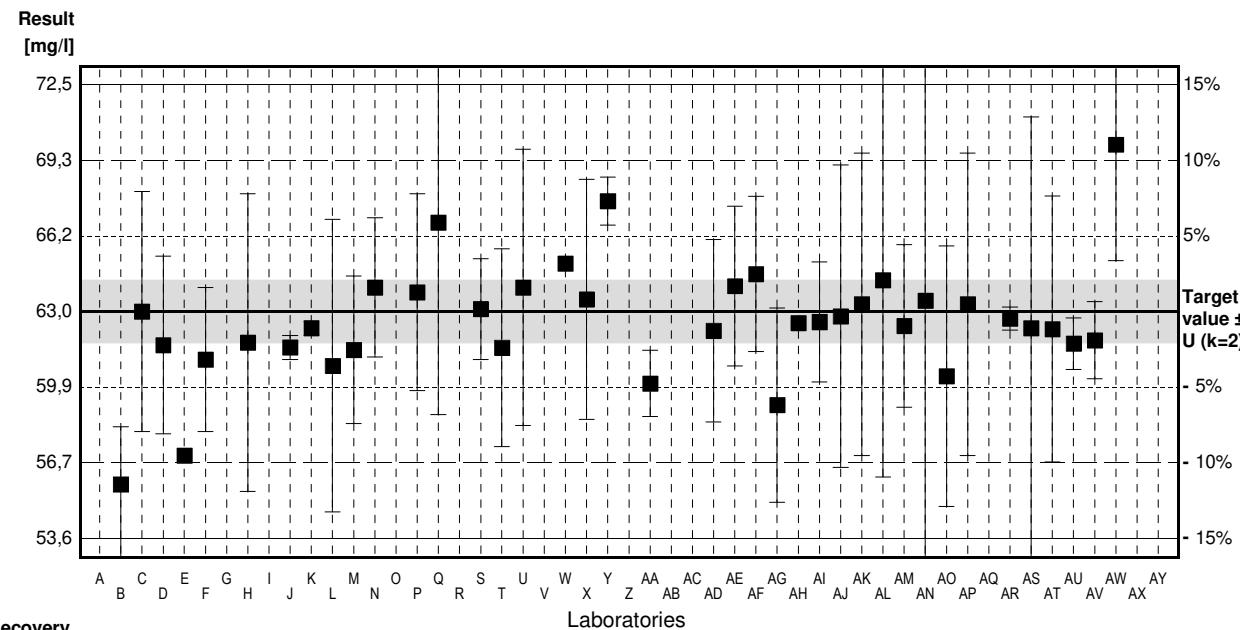
Target value  $\pm U (k=2)$  63,0 mg/l  $\pm$  1,3 mg/l  
 IFA result  $\pm U (k=2)$  62 mg/l  $\pm$  3 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	55,8 *	2,4	mg/l	89%	-3,57
C	63	5	mg/l	100%	0,00
D	61,6	3,7	mg/l	98%	-0,69
E	57 *		mg/l	90%	-2,98
F	61	3	mg/l	97%	-0,99
G	22,2 *	2,72	mg/l	35%	-20,24
H	61,7	6,2	mg/l	98%	-0,64
I			mg/l		
J	61,5	0,5	mg/l	98%	-0,74
K	62,3	0,297	mg/l	99%	-0,35
L	60,74	6,1	mg/l	96%	-1,12
M	61,4	3,07	mg/l	97%	-0,79
N	64,0	2,9	mg/l	102%	0,50
O			mg/l		
P	63,8	4,1	mg/l	101%	0,40
Q	66,7	8,0	mg/l	106%	1,84
R			mg/l		
S	63,1	2,1	mg/l	100%	0,05
T	61,49	4,12	mg/l	98%	-0,75
U	64	5,76	mg/l	102%	0,50
V			mg/l		
W	65		mg/l	103%	0,99
X	63,5	5	mg/l	101%	0,25
Y	67,6 *	1	mg/l	107%	2,28
Z	75,1 *	3,8	mg/l	119%	6,00
AA	60,0	1,38	mg/l	95%	-1,49
AB			mg/l		
AC			mg/l		
AD	62,2	3,8	mg/l	99%	-0,40
AE	64,058	3,33	mg/l	102%	0,52
AF	64,562	3,23	mg/l	102%	0,77
AG	59,1	4,05	mg/l	94%	-1,93
AH	62,52		mg/l	99%	-0,24
AI	62,564	2,5026	mg/l	99%	-0,22
AJ	62,8	6,3	mg/l	100%	-0,10
AK	63,3	6,3	mg/l	100%	0,15
AL	64,3	8,198	mg/l	102%	0,64
AM	62,4	3,39	mg/l	99%	-0,30
AN	63,453	12,691	mg/l	101%	0,22
AO	60,3	5,43	mg/l	96%	-1,34
AP	63,3	6,3	mg/l	100%	0,15
AQ			mg/l		
AR	62,7	0,474	mg/l	100%	-0,15
AS	62,3	8,8	mg/l	99%	-0,35
AT	62,27	5,54	mg/l	99%	-0,36
AU	61,659	1,072	mg/l	98%	-0,67
AV	61,80	1,61	mg/l	98%	-0,60
AW	69,95 *	4,83	mg/l	111%	3,45
AX	37,07 *		mg/l	59%	-12,86
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	61,3 $\pm$ 3,3	62,6 $\pm$ 0,7	mg/l
Recov. $\pm$ CI(99%)	97,3 $\pm$ 5,3	99,3 $\pm$ 1,1	%
SD between labs	8,0	1,5	mg/l
RSD between labs	13,0	2,4	%
n for calculation	42	35	



# Sample N163B

## Parameter Nitrate

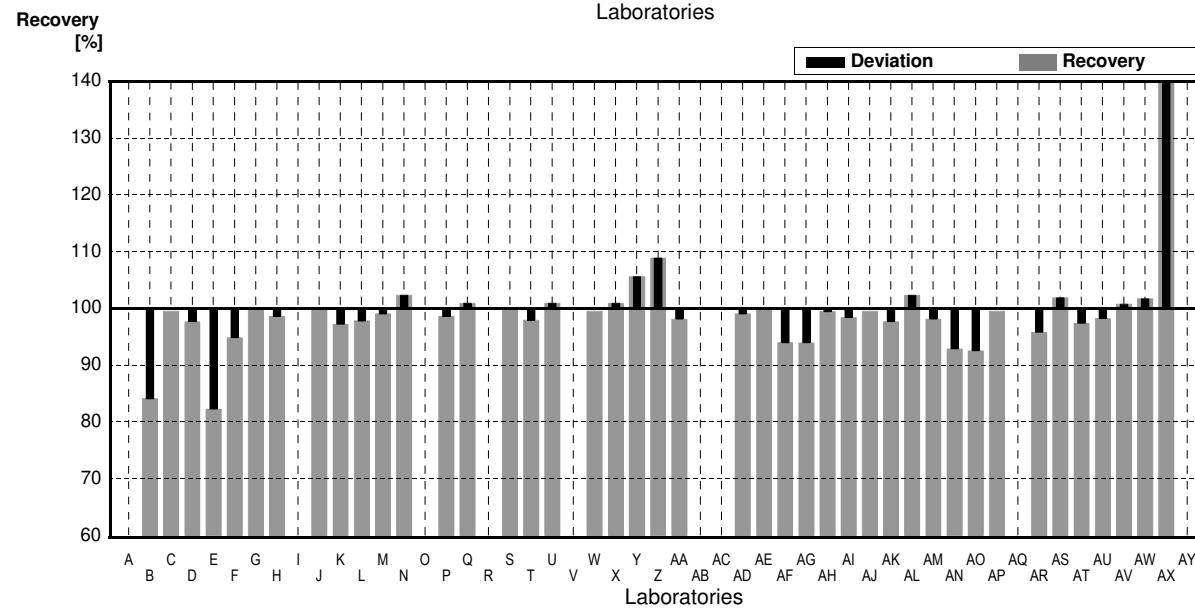
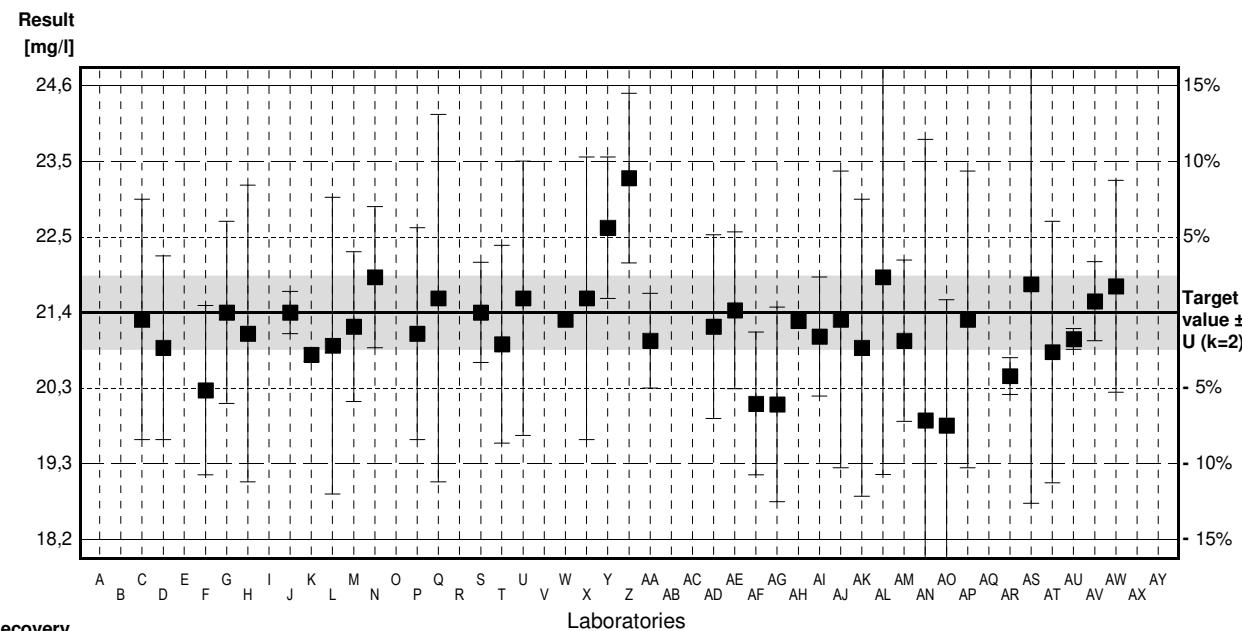
Target value  $\pm U (k=2)$  21,4 mg/l  $\pm$  0,5 mg/l  
 IFA result  $\pm U (k=2)$  20,8 mg/l  $\pm$  1,1 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	18,0 *	0,5	mg/l	84%	-4,96
C	21,3	1,7	mg/l	100%	-0,15
D	20,9	1,3	mg/l	98%	-0,73
E	17,6 *		mg/l	82%	-5,55
F	20,3	1,2	mg/l	95%	-1,61
G	21,4	1,29	mg/l	100%	0,00
H	21,1	2,1	mg/l	99%	-0,44
I			mg/l		
J	21,4	0,3	mg/l	100%	0,00
K	20,8	0,095	mg/l	97%	-0,68
L	20,93	2,1	mg/l	98%	-0,69
M	21,2	1,06	mg/l	99%	-0,29
N	21,9	1,0	mg/l	102%	0,73
O			mg/l		
P	21,1	1,5	mg/l	99%	-0,44
Q	21,6	2,6	mg/l	101%	0,29
R			mg/l		
S	21,4	0,71	mg/l	100%	0,00
T	20,95	1,40	mg/l	98%	-0,66
U	21,6	1,94	mg/l	101%	0,29
V			mg/l		
W	21,3		mg/l	100%	-0,15
X	21,6	2	mg/l	101%	0,29
Y	22,6	1	mg/l	106%	1,75
Z	23,3 *	1,2	mg/l	109%	2,77
AA	21,0	0,672	mg/l	98%	-0,58
AB			mg/l		
AC			mg/l		
AD	21,2	1,3	mg/l	99%	-0,29
AE	21,43	1,11	mg/l	100%	0,04
AF	20,11	1,01	mg/l	94%	-1,88
AG	20,1	1,377	mg/l	94%	-1,90
AH	21,28		mg/l	99%	-0,18
AI	21,058	0,8423	mg/l	98%	-0,50
AJ	21,3	2,1	mg/l	100%	-0,15
AK	20,9	2,1	mg/l	98%	-0,73
AL	21,9	2,792	mg/l	102%	0,73
AM	21,0	1,14	mg/l	98%	-0,58
AN	19,873	3,975	mg/l	93%	-2,23
AO	19,8	1,78	mg/l	93%	-2,34
AP	21,3	2,1	mg/l	100%	-0,15
AQ			mg/l		
AR	20,5	0,259	mg/l	96%	-1,31
AS	21,8	3,1	mg/l	102%	0,58
AT	20,84	1,85	mg/l	97%	-0,82
AU	21,025	0,1457	mg/l	98%	-0,55
AV	21,56	0,56	mg/l	101%	0,23
AW	21,77	1,50	mg/l	102%	0,54
AX	43,33 *		mg/l	202%	32,02
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	21,6 $\pm$ 1,5	21,1 $\pm$ 0,3	mg/l
Recov. $\pm$ CI(99%)	100,7 $\pm$ 7,0	98,8 $\pm$ 1,2	%
SD between labs	3,6	0,6	mg/l
RSD between labs	16,6	2,7	%
n for calculation	42	38	



# Sample N163A

## Parameter Nitrite

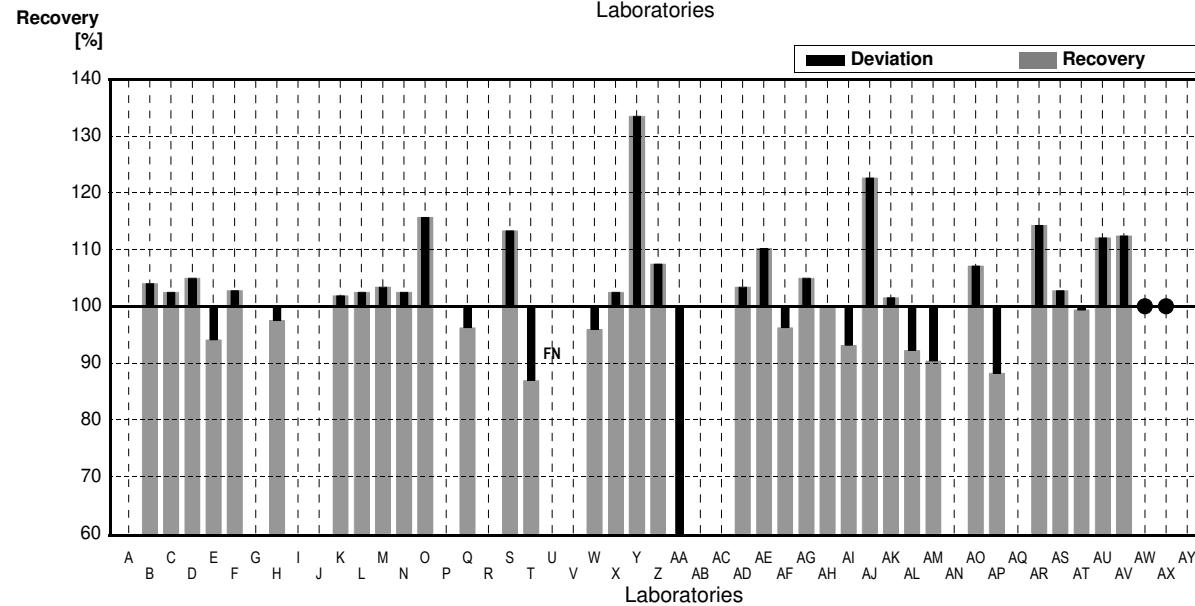
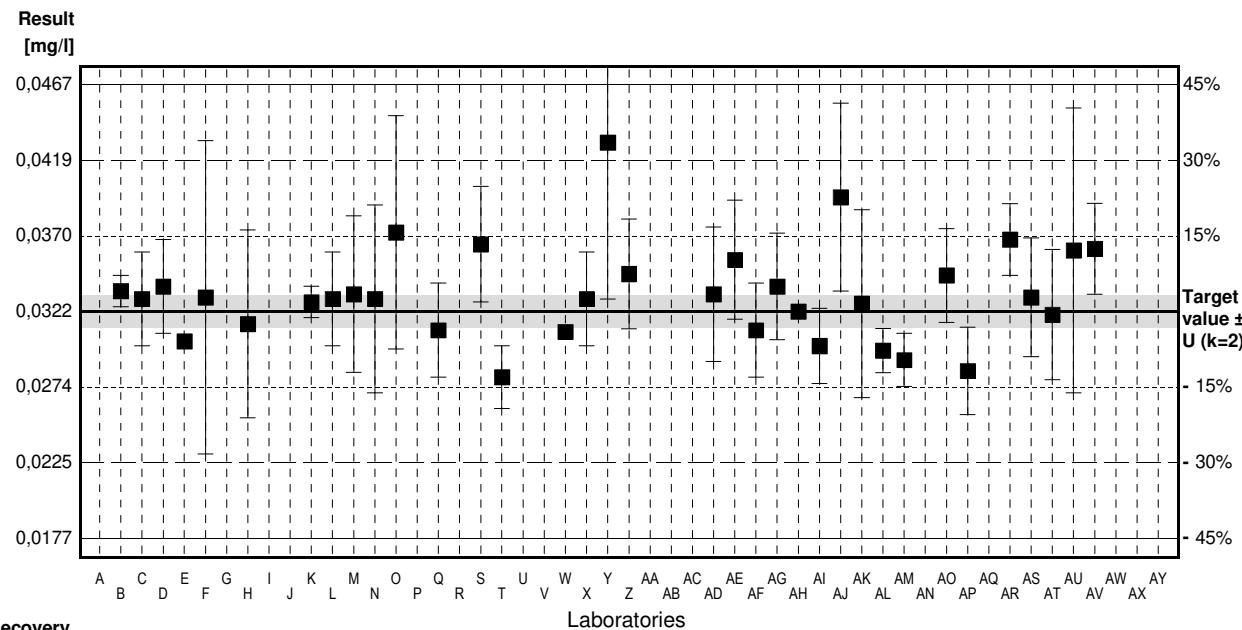
Target value  $\pm U (k=2)$  0,0322 mg/l  $\pm$  0,0010 mg/l

IFA result  $\pm U (k=2)$  0,0321 mg/l  $\pm$  0,0016 mg/l

Stability test  $\pm U (k=2)$  0,0320 mg/l  $\pm$  0,0016 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,0335	0,001	mg/l	104%	0,72
C	0,0330	0,0030	mg/l	102%	0,44
D	0,0338	0,003	mg/l	105%	0,89
E	0,0303		mg/l	94%	-1,05
F	0,0331	0,01	mg/l	103%	0,50
G			mg/l		
H	0,0314	0,006	mg/l	98%	-0,44
I			mg/l		
J			mg/l		
K	0,0328	0,001	mg/l	102%	0,33
L	0,0330	0,003	mg/l	102%	0,44
M	0,0333	0,005	mg/l	103%	0,61
N	0,0330	0,006	mg/l	102%	0,44
O	0,03725	0,00745	mg/l	116%	2,80
P			mg/l		
Q	0,0310	0,0030	mg/l	96%	-0,67
R			mg/l		
S	0,0365	0,0037	mg/l	113%	2,38
T	0,0280	0,002	mg/l	87%	-2,33
U	<0,30		mg/l	FN	
V			mg/l		
W	0,0309		mg/l	96%	-0,72
X	0,0330	0,003	mg/l	102%	0,44
Y	0,0430 *	0,01	mg/l	134%	5,99
Z	0,0346	0,0035	mg/l	107%	1,33
AA	0,0100 *	0,0001	mg/l	31%	-12,31
AB			mg/l		
AC			mg/l		
AD	0,0333	0,0043	mg/l	103%	0,61
AE	0,0355	0,0038	mg/l	110%	1,83
AF	0,0310	0,003	mg/l	96%	-0,67
AG	0,0338	0,0034	mg/l	105%	0,89
AH	0,0322		mg/l	100%	0,00
AI	0,0300	0,00240	mg/l	93%	-1,22
AJ	0,0395	0,006	mg/l	123%	4,05
AK	0,0327	0,0060	mg/l	102%	0,28
AL	0,0297	0,00141	mg/l	92%	-1,39
AM	0,0291	0,0017	mg/l	90%	-1,72
AN			mg/l		
AO	0,0345	0,003	mg/l	107%	1,28
AP	0,0284	0,0028	mg/l	88%	-2,11
AQ			mg/l		
AR	0,0368	0,00229	mg/l	114%	2,55
AS	0,0331	0,0038	mg/l	103%	0,50
AT	0,0320	0,00416	mg/l	99%	-0,11
AU	0,0361	0,0091	mg/l	112%	2,16
AV	0,0362	0,0029	mg/l	112%	2,22
AW	<0,1		mg/l	*	
AX	<0,05		mg/l	*	
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0326 $\pm$ 0,0022	0,0330 $\pm$ 0,0012	mg/l
Recov. $\pm$ CI(99%)	101,4 $\pm$ 7,0	102,5 $\pm$ 3,8	%
SD between labs	0,0049	0,0026	mg/l
RSD between labs	15,1	7,9	%
n for calculation	36	34	



# Sample N163B

## Parameter Nitrite

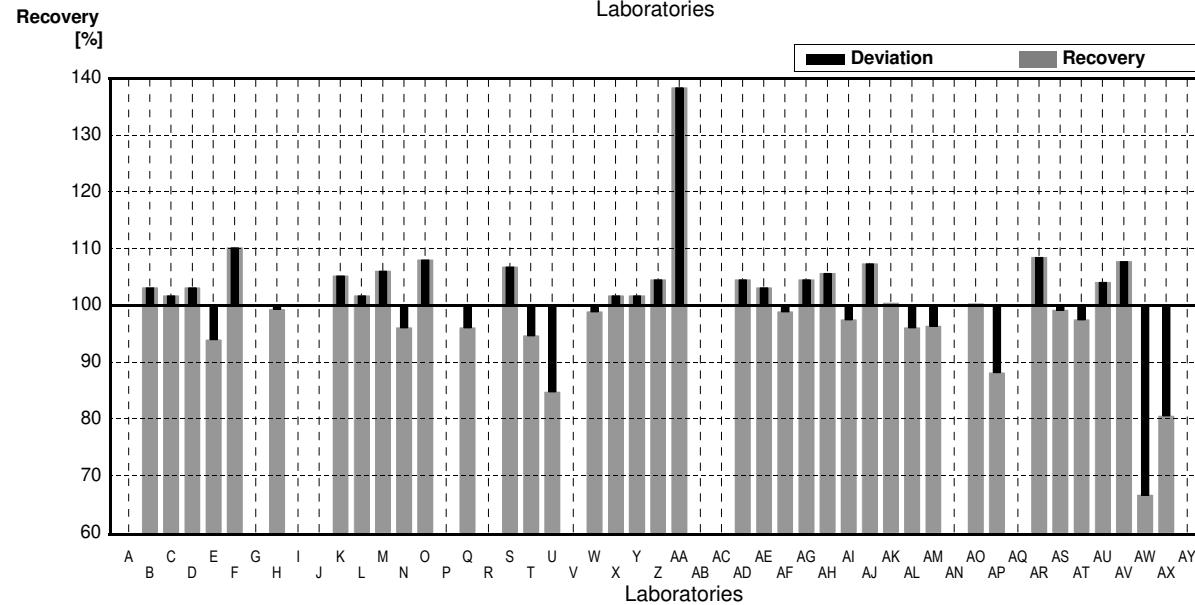
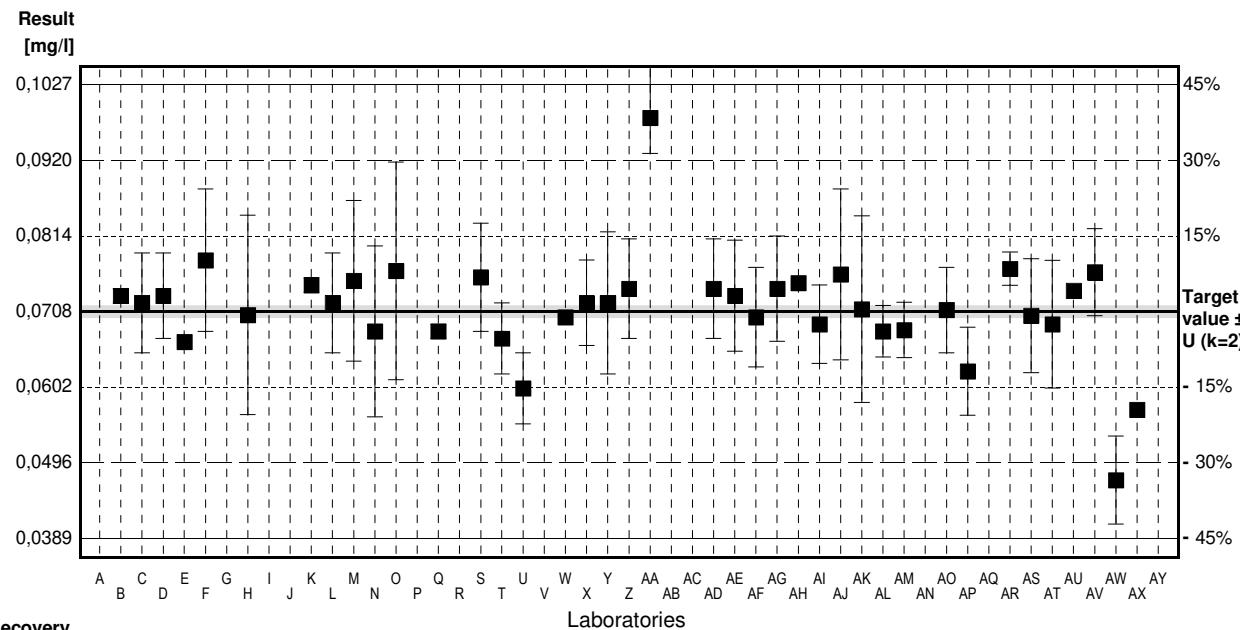
Target value  $\pm U$  ( $k=2$ ) 0,0708 mg/l  $\pm$  0,0008 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,070 mg/l  $\pm$  0,004 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,071 mg/l  $\pm$  0,004 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,073	0,001	mg/l	103%	0,55
C	0,072	0,007	mg/l	102%	0,30
D	0,073	0,006	mg/l	103%	0,55
E	0,0665		mg/l	94%	-1,08
F	0,078	0,01	mg/l	110%	1,82
G			mg/l		
H	0,0703	0,014	mg/l	99%	-0,13
I			mg/l		
J			mg/l		
K	0,0745	0,001	mg/l	105%	0,93
L	0,072	0,007	mg/l	102%	0,30
M	0,0751	0,0113	mg/l	106%	1,08
N	0,068	0,012	mg/l	96%	-0,71
O	0,0765	0,0153	mg/l	108%	1,44
P			mg/l		
Q	0,068	0,0010	mg/l	96%	-0,71
R			mg/l		
S	0,0756	0,0076	mg/l	107%	1,21
T	0,0670	0,005	mg/l	95%	-0,96
U	0,060	0,005	mg/l	85%	-2,72
V			mg/l		
W	0,070		mg/l	99%	-0,20
X	0,072	0,006	mg/l	102%	0,30
Y	0,0720	0,01	mg/l	102%	0,30
Z	0,074	0,007	mg/l	105%	0,81
AA	0,098 *	0,005	mg/l	138%	6,86
AB			mg/l		
AC			mg/l		
AD	0,074	0,007	mg/l	105%	0,81
AE	0,073	0,0078	mg/l	103%	0,55
AF	0,0700	0,007	mg/l	99%	-0,20
AG	0,074	0,0074	mg/l	105%	0,81
AH	0,0748		mg/l	106%	1,01
AI	0,069	0,0055	mg/l	97%	-0,45
AJ	0,076	0,012	mg/l	107%	1,31
AK	0,0711	0,0131	mg/l	100%	0,08
AL	0,0680	0,00362	mg/l	96%	-0,71
AM	0,0682	0,0039	mg/l	96%	-0,66
AN			mg/l		
AQ	0,071	0,006	mg/l	100%	0,05
AP	0,0624	0,0062	mg/l	88%	-2,12
AQ			mg/l		
AR	0,0768	0,00234	mg/l	108%	1,51
AS	0,0702	0,008	mg/l	99%	-0,15
AT	0,069	0,00897	mg/l	97%	-0,45
AU	0,0737	0,0	mg/l	104%	0,73
AV	0,0763	0,0061	mg/l	108%	1,39
AW	0,0471 *	0,00617	mg/l	67%	-5,98
AX	0,057 *		mg/l	81%	-3,48
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0712 $\pm$ 0,0032	0,0715 $\pm$ 0,0018	mg/l
Recov. $\pm$ CI(99%)	100,6 $\pm$ 4,5	101,0 $\pm$ 2,5	%
SD between labs	0,0073	0,0040	mg/l
RSD between labs	10,3	5,5	%
n for calculation	39	36	



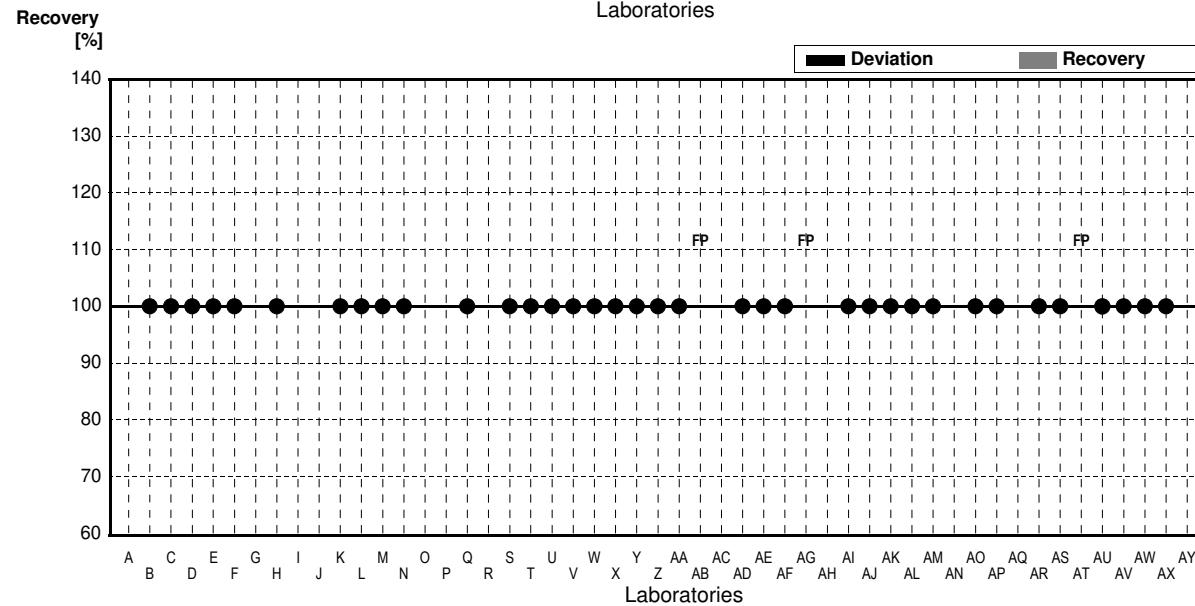
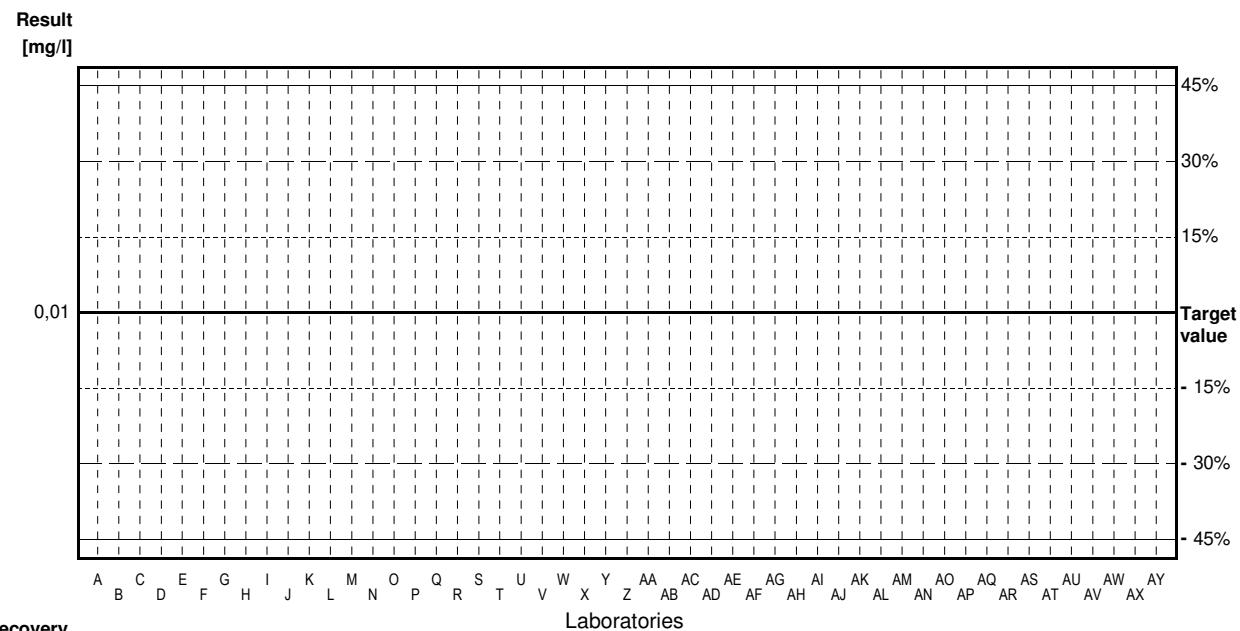
# Sample N163A

## Parameter Ammonium

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

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	<0,003		mg/l	•	
C	<0,02		mg/l	•	
D	<0,008		mg/l	•	
E	<0,01		mg/l	•	
F	<0,0082		mg/l	•	
G			mg/l		
H	<0,04		mg/l	•	
I			mg/l		
J			mg/l		
K	<0,010		mg/l	•	
L	<0,009		mg/l	•	
M	<0,01		mg/l	•	
N	<0,010		mg/l	•	
O			mg/l		
P			mg/l		
Q	<0,020		mg/l	•	
R			mg/l		
S	<0,01		mg/l	•	
T	0,00300	0,000	mg/l	•	
U	<0,130		mg/l	•	
V	<0,03		mg/l	•	
W	<0,04		mg/l	•	
X	<0,013		mg/l	•	
Y	0,0050	0,01	mg/l	•	
Z	<0,05		mg/l	•	
AA	0,0100	0,0012	mg/l	•	
AB	0,0192		mg/l	FP	
AC			mg/l		
AD	<0,010		mg/l	•	
AE	<0,013		mg/l	•	
AF	<0,01		mg/l	•	
AG	0,0391	0,0059	mg/l	FP	
AH			mg/l		
AI	<0,0052		mg/l	•	
AJ	<0,04		mg/l	•	
AK	<0,010		mg/l	•	
AL	<0,01	0,00085	mg/l	•	
AM	0,00488	0,00031	mg/l	•	
AN			mg/l		
AO	<0,01		mg/l	•	
AP	<0,01		mg/l	•	
AQ			mg/l		
AR	0,0011		mg/l	•	
AS	<0,01		mg/l	•	
AT	0,0110	0,00097	mg/l	FP	
AU	0,0125	0,0028	mg/l	•	
AV	<0,02		mg/l	•	
AW	<0,04		mg/l	•	
AX	<0,02		mg/l	•	
AY			mg/l		

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



## Sample N163B

### Parameter Ammonium

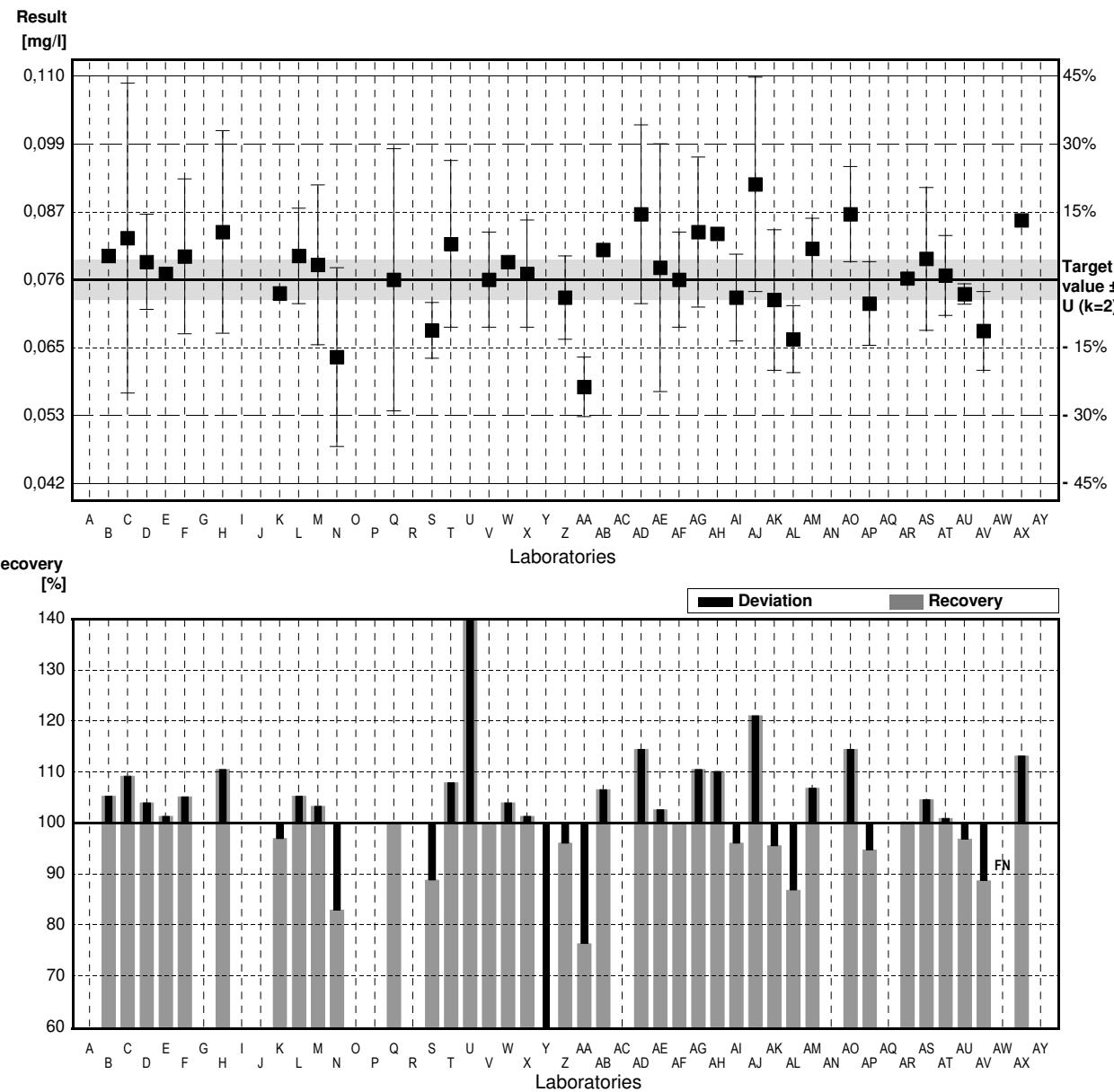
Target value  $\pm U$  ( $k=2$ ) 0,076 mg/l  $\pm$  0,003 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,077 mg/l  $\pm$  0,002 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,077 mg/l  $\pm$  0,002 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,080	0,001	mg/l	105%	0,44
C	0,083	0,026	mg/l	109%	0,77
D	0,079	0,008	mg/l	104%	0,33
E	0,0770		mg/l	101%	0,11
F	0,0799	0,013	mg/l	105%	0,43
G			mg/l		
H	0,084	0,017	mg/l	111%	0,88
I			mg/l		
J			mg/l		
K	0,0737	0,001	mg/l	97%	-0,25
L	0,080	0,008	mg/l	105%	0,44
M	0,0785	0,0134	mg/l	103%	0,27
N	0,063	0,015	mg/l	83%	-1,43
O			mg/l		
P			mg/l		
Q	0,076	0,022	mg/l	100%	0,00
R			mg/l		
S	0,0675	0,0047	mg/l	89%	-0,93
T	0,0820	0,014	mg/l	108%	0,66
U	0,140 *	0,011	mg/l	184%	7,02
V	0,076	0,008	mg/l	100%	0,00
W	0,079		mg/l	104%	0,33
X	0,077	0,009	mg/l	101%	0,11
Y	0,0400 *	0,01	mg/l	53%	-3,95
Z	0,073	0,007	mg/l	96%	-0,33
AA	0,058	0,005	mg/l	76%	-1,97
AB	0,081		mg/l	107%	0,55
AC			mg/l		
AD	0,087	0,015	mg/l	114%	1,21
AE	0,078	0,0208	mg/l	103%	0,22
AF	0,076	0,008	mg/l	100%	0,00
AG	0,084	0,0126	mg/l	111%	0,88
AH	0,0837		mg/l	110%	0,84
AI	0,073	0,0073	mg/l	96%	-0,33
AJ	0,092	0,018	mg/l	121%	1,75
AK	0,0726	0,0118	mg/l	96%	-0,37
AL	0,066	0,00562	mg/l	87%	-1,10
AM	0,0812	0,0051	mg/l	107%	0,57
AN			mg/l		
AO	0,087	0,008	mg/l	114%	1,21
AP	0,072	0,007	mg/l	95%	-0,44
AQ			mg/l		
AR	0,0762	0,00084	mg/l	100%	0,02
AS	0,0795	0,012	mg/l	105%	0,38
AT	0,0767	0,0067	mg/l	101%	0,08
AU	0,0736	0,0017	mg/l	97%	-0,26
AV	0,0674	0,0066	mg/l	89%	-0,94
AW	<0,04		mg/l	FN	
AX	0,086		mg/l	113%	1,10
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,078 $\pm$ 0,006	0,077 $\pm$ 0,003	mg/l
Recov. $\pm$ CI(99%)	102,5 $\pm$ 7,8	101,7 $\pm$ 4,1	%
SD between labs	0,014	0,007	mg/l
RSD between labs	17,5	9,0	%
n for calculation	39	37	



# Sample N163A

## Parameter Chloride

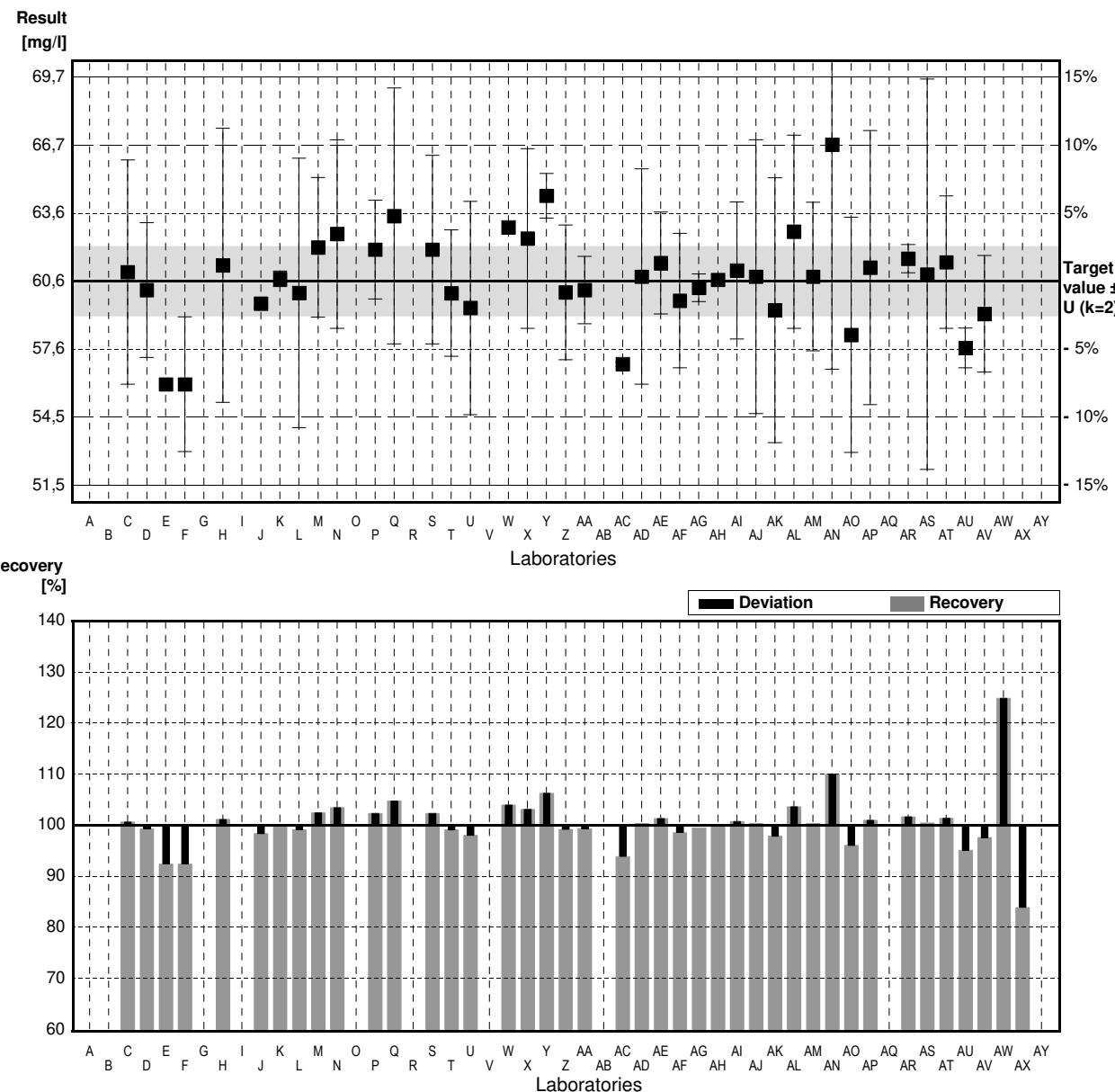
Target value  $\pm U (k=2)$  60,6 mg/l  $\pm$  1,5 mg/l  
 IFA result  $\pm U (k=2)$  59 mg/l  $\pm$  2 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	61	5	mg/l	101%	0.23
D	60,2	3,0	mg/l	99%	-0.23
E	56		mg/l	92%	-2,62
F	56	3	mg/l	92%	-2,62
G			mg/l		
H	61,3	6,1	mg/l	101%	0,40
I			mg/l		
J	59,6	0,2	mg/l	98%	-0,57
K	60,7	0,347	mg/l	100%	0,06
L	60,07	6,0	mg/l	99%	-0,30
M	62,1	3,11	mg/l	102%	0,85
N	62,7	4,2	mg/l	103%	1,19
O			mg/l		
P	62,0	2,2	mg/l	102%	0,80
Q	63,5	5,7	mg/l	105%	1,65
R			mg/l		
S	62,0	4,2	mg/l	102%	0,80
T	60,06	2,82	mg/l	99%	-0,31
U	59,4	4,75	mg/l	98%	-0,68
V			mg/l		
W	63		mg/l	104%	1,37
X	62,5	4	mg/l	103%	1,08
Y	64,4	1	mg/l	106%	2,16
Z	60,1	3,0	mg/l	99%	-0,28
AA	60,2	1,50	mg/l	99%	-0,23
AB			mg/l		
AC	56,9	0,10	mg/l	94%	-2,11
AD	60,8	4,8	mg/l	100%	0,11
AE	61,4	2,27	mg/l	101%	0,46
AF	59,73	2,99	mg/l	99%	-0,50
AG	60,3	0,611	mg/l	100%	-0,17
AH	60,654		mg/l	100%	0,03
AI	61,07	3,054	mg/l	101%	0,27
AJ	60,8	6,1	mg/l	100%	0,11
AK	59,3	5,9	mg/l	98%	-0,74
AL	62,8	4,300	mg/l	104%	1,25
AM	60,8	3,31	mg/l	100%	0,11
AN	66,674 *	10,001	mg/l	110%	3,46
AQ	58,2	5,24	mg/l	96%	-1,37
AP	61,2	6,1	mg/l	101%	0,34
AQ			mg/l		
AR	61,6	0,630	mg/l	102%	0,57
AS	60,9	8,7	mg/l	100%	0,17
AT	61,44	2,95	mg/l	101%	0,48
AU	57,621	0,888	mg/l	95%	-1,70
AV	59,14	2,60	mg/l	98%	-0,83
AW	75,696 *	4,088	mg/l	125%	8,59
AX	50,84 *		mg/l	84%	-5,55
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	60,8 $\pm$ 1,5	60,6 $\pm$ 0,8	mg/l
Recov. $\pm$ CI(99%)	100,4 $\pm$ 2,4	99,9 $\pm$ 1,4	%
SD between labs	3,5	1,9	mg/l
RSD between labs	5,7	3,1	%
n for calculation	41	38	



# Sample N163B

## Parameter Chloride

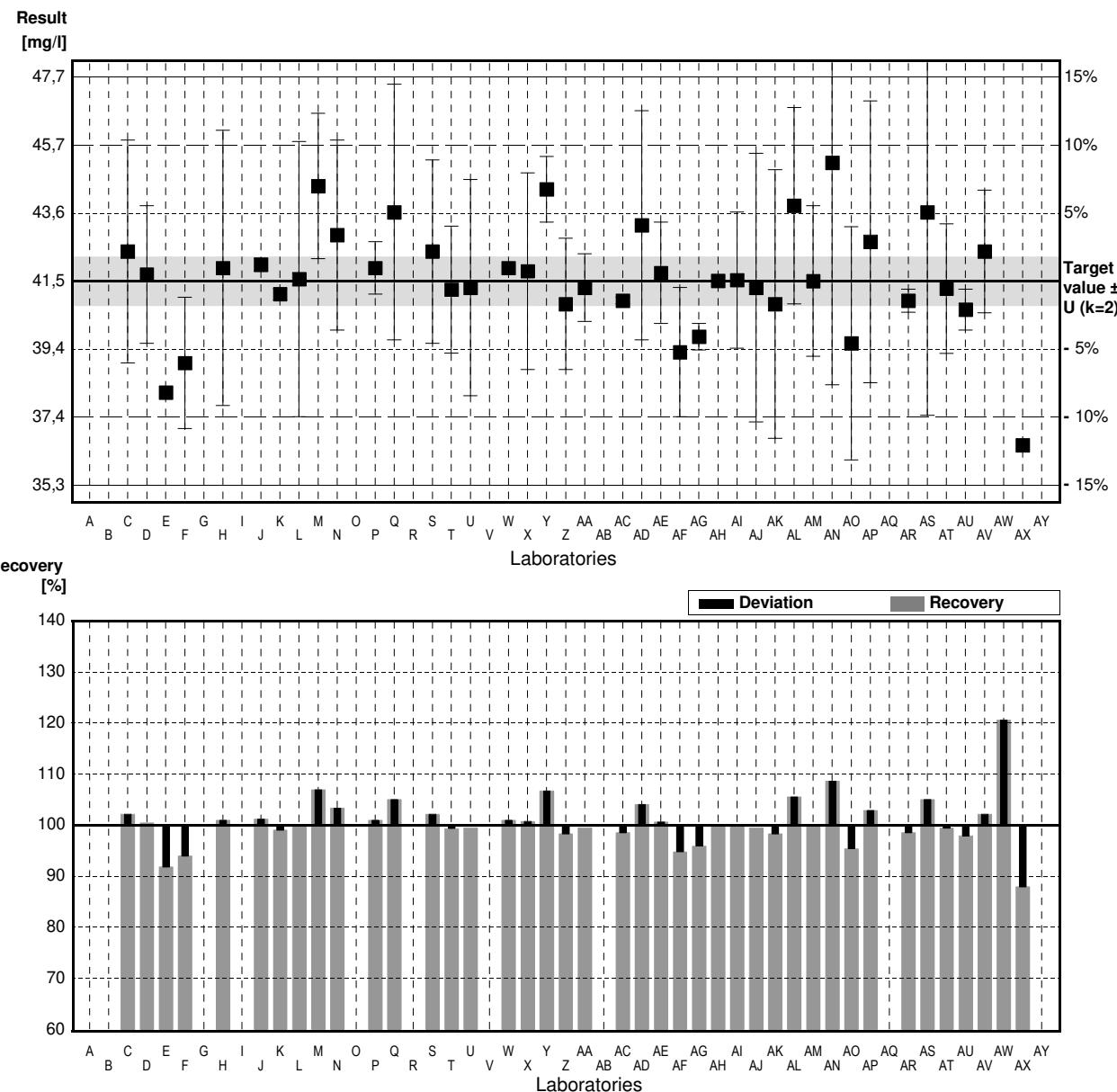
Target value  $\pm U (k=2)$  41,5 mg/l  $\pm$  0,7 mg/l  
 IFA result  $\pm U (k=2)$  40,6 mg/l  $\pm$  1,5 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	42,4	3,4	mg/l	102%	0,75
D	41,7	2,1	mg/l	100%	0,17
E	38,1 *		mg/l	92%	-2,83
F	39,0	2	mg/l	94%	-2,08
G			mg/l		
H	41,9	4,2	mg/l	101%	0,33
I			mg/l		
J	42,0	0,2	mg/l	101%	0,42
K	41,1	0,173	mg/l	99%	-0,33
L	41,56	4,2	mg/l	100%	0,05
M	44,4	2,22	mg/l	107%	2,41
N	42,9	2,9	mg/l	103%	1,16
O			mg/l		
P	41,9	0,8	mg/l	101%	0,33
Q	43,6	3,9	mg/l	105%	1,74
R			mg/l		
S	42,4	2,8	mg/l	102%	0,75
T	41,24	1,94	mg/l	99%	-0,22
U	41,3	3,3	mg/l	100%	-0,17
V			mg/l		
W	41,9		mg/l	101%	0,33
X	41,8	3	mg/l	101%	0,25
Y	44,3	1	mg/l	107%	2,33
Z	40,8	2,0	mg/l	98%	-0,58
AA	41,3	1,03	mg/l	100%	-0,17
AB			mg/l		
AC	40,9	0,10	mg/l	99%	-0,50
AD	43,2	3,5	mg/l	104%	1,41
AE	41,75	1,545	mg/l	101%	0,21
AF	39,33	1,97	mg/l	95%	-1,80
AG	39,8	0,403	mg/l	96%	-1,41
AH	41,507		mg/l	100%	0,01
AI	41,53	2,077	mg/l	100%	0,02
AJ	41,3	4,1	mg/l	100%	-0,17
AK	40,8	4,1	mg/l	98%	-0,58
AL	43,8	2,996	mg/l	106%	1,91
AM	41,5	2,30	mg/l	100%	0,00
AN	45,107 *	6,77	mg/l	109%	3,00
AO	39,6	3,56	mg/l	95%	-1,58
AP	42,7	4,3	mg/l	103%	1,00
AQ			mg/l		
AR	40,9	0,354	mg/l	99%	-0,50
AS	43,6	6,2	mg/l	105%	1,74
AT	41,27	1,98	mg/l	99%	-0,19
AU	40,63	0,624	mg/l	98%	-0,72
AV	42,40	1,87	mg/l	102%	0,75
AW	50,054 *	2,702	mg/l	121%	7,11
AX	36,49 *		mg/l	88%	-4,16
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm CI(99\%)$	41,8 $\pm$ 0,9	41,7 $\pm$ 0,6	mg/l
Recov. $\pm CI(99\%)$	100,7 $\pm$ 2,2	100,6 $\pm$ 1,4	%
SD between labs	2,1	1,3	mg/l
RSD between labs	5,1	3,1	%
n for calculation	41	37	



# Sample N163A

## Parameter Sulphate

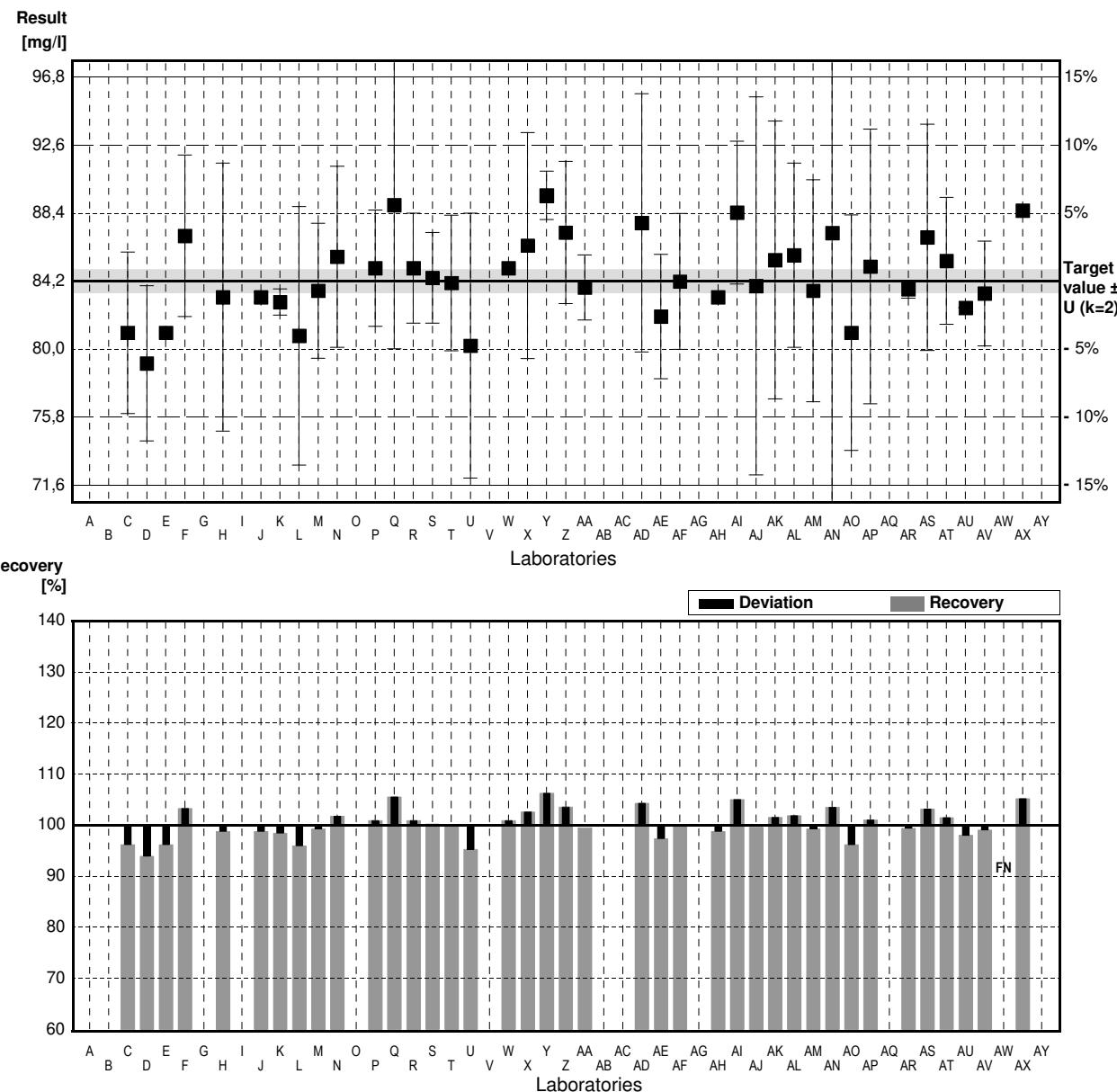
Target value  $\pm U (k=2)$  84,2 mg/l  $\pm$  0,7 mg/l  
 IFA result  $\pm U (k=2)$  82,0 mg/l  $\pm$  1,9 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	81	5	mg/l	96%	-1,23
D	79,1	4,8	mg/l	94%	-1,95
E	81		mg/l	96%	-1,23
F	87	5	mg/l	103%	1,07
G			mg/l		
H	83,2	8,3	mg/l	99%	-0,38
I			mg/l		
J	83,2	0,3	mg/l	99%	-0,38
K	82,9	0,810	mg/l	98%	-0,50
L	80,81	8,0	mg/l	96%	-1,30
M	83,6	4,18	mg/l	99%	-0,23
N	85,7	5,6	mg/l	102%	0,57
O			mg/l		
P	85,0	3,6	mg/l	101%	0,31
Q	88,9	8,9	mg/l	106%	1,80
R	85,0	3,4	mg/l	101%	0,31
S	84,4	2,8	mg/l	100%	0,08
T	84,08	4,20	mg/l	100%	-0,05
U	80,2	8,2	mg/l	95%	-1,53
V			mg/l		
W	85		mg/l	101%	0,31
X	86,4	7	mg/l	103%	0,84
Y	89,5	1,5	mg/l	106%	2,03
Z	87,2	4,4	mg/l	104%	1,15
AA	83,8	2,01	mg/l	100%	-0,15
AB			mg/l		
AC			mg/l		
AD	87,8	8,0	mg/l	104%	1,38
AE	82	3,85	mg/l	97%	-0,84
AF	84,171	4,21	mg/l	100%	-0,01
AG			mg/l		
AH	83,2		mg/l	99%	-0,38
AI	88,44	4,422	mg/l	105%	1,62
AJ	83,9	11,7	mg/l	100%	-0,11
AK	85,5	8,6	mg/l	102%	0,50
AL	85,8	5,706	mg/l	102%	0,61
AM	83,6	6,87	mg/l	99%	-0,23
AN	87,173	17,435	mg/l	104%	1,14
AO	81,0	7,29	mg/l	96%	-1,23
AP	85,1	8,5	mg/l	101%	0,34
AQ			mg/l		
AR	83,7	0,547	mg/l	99%	-0,19
AS	86,9	7	mg/l	103%	1,03
AT	85,45	3,93	mg/l	101%	0,48
AU	82,543	0,018	mg/l	98%	-0,63
AV	83,43	3,25	mg/l	99%	-0,29
AW	<1		mg/l	FN	
AX	88,57		mg/l	105%	1,67
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm CI(99\%)$	84,5 $\pm$ 1,1	84,5 $\pm$ 1,1	mg/l
Recov. $\pm CI(99\%)$	100,3 $\pm$ 1,3	100,3 $\pm$ 1,3	%
SD between labs	2,5	2,5	mg/l
RSD between labs	3,0	3,0	%
n for calculation	39	39	



# Sample N163B

## Parameter Sulphate

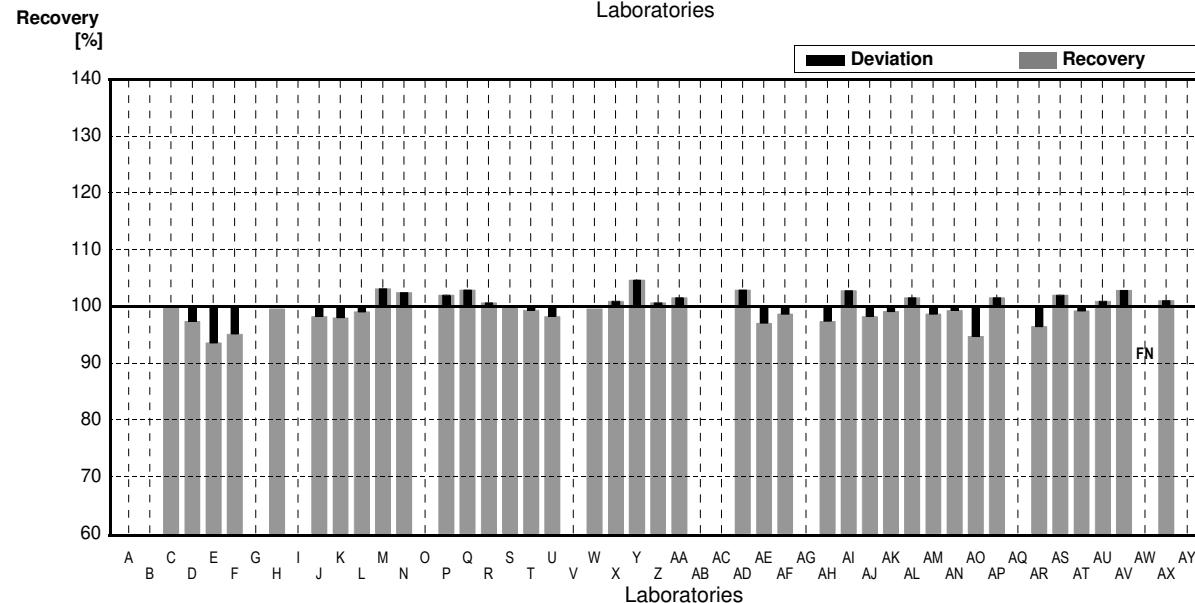
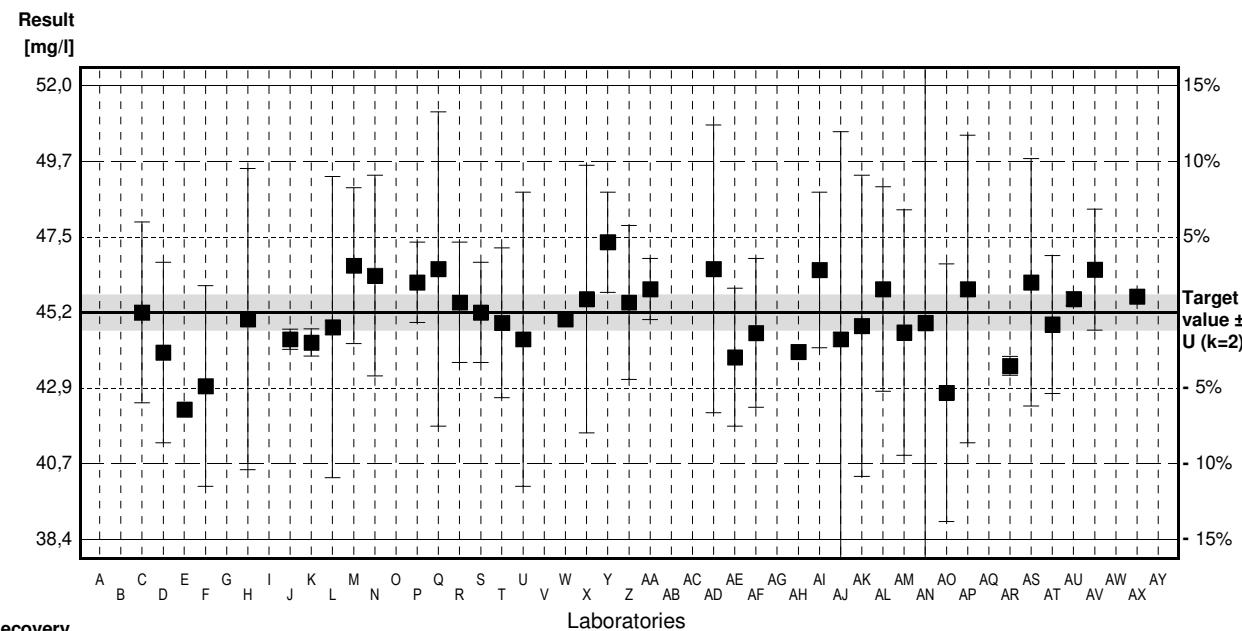
Target value  $\pm U (k=2)$  45,2 mg/l  $\pm$  0,5 mg/l  
 IFA result  $\pm U (k=2)$  44,2 mg/l  $\pm$  1,1 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	45,2	2,7	mg/l	100%	0,00
D	44,0	2,7	mg/l	97%	-0,86
E	42,3		mg/l	94%	-2,07
F	43,0	3	mg/l	95%	-1,57
G			mg/l		
H	45,0	4,5	mg/l	100%	-0,14
I			mg/l		
J	44,4	0,3	mg/l	98%	-0,57
K	44,3	0,405	mg/l	98%	-0,64
L	44,76	4,5	mg/l	99%	-0,31
M	46,6	2,33	mg/l	103%	1,00
N	46,3	3,0	mg/l	102%	0,79
O			mg/l		
P	46,1	1,2	mg/l	102%	0,64
Q	46,5	4,7	mg/l	103%	0,93
R	45,5	1,8	mg/l	101%	0,21
S	45,2	1,5	mg/l	100%	0,00
T	44,89	2,24	mg/l	99%	-0,22
U	44,4	4,4	mg/l	98%	-0,57
V			mg/l		
W	45,0		mg/l	100%	-0,14
X	45,6	4	mg/l	101%	0,29
Y	47,3	1,5	mg/l	105%	1,50
Z	45,5	2,3	mg/l	101%	0,21
AA	45,9	0,918	mg/l	102%	0,50
AB			mg/l		
AC			mg/l		
AD	46,5	4,3	mg/l	103%	0,93
AE	43,86	2,06	mg/l	97%	-0,96
AF	44,589	2,23	mg/l	99%	-0,44
AG			mg/l		
AH	44,02		mg/l	97%	-0,84
AI	46,47	2,324	mg/l	103%	0,91
AJ	44,4	6,2	mg/l	98%	-0,57
AK	44,8	4,5	mg/l	99%	-0,29
AL	45,9	3,052	mg/l	102%	0,50
AM	44,6	3,67	mg/l	99%	-0,43
AN	44,887	8,977	mg/l	99%	-0,22
AO	42,8	3,85	mg/l	95%	-1,71
AP	45,9	4,6	mg/l	102%	0,50
AQ			mg/l		
AR	43,6	0,283	mg/l	96%	-1,14
AS	46,1	3,7	mg/l	102%	0,64
AT	44,84	2,06	mg/l	99%	-0,26
AU	45,604	0,199	mg/l	101%	0,29
AV	46,48	1,81	mg/l	103%	0,91
AW	<1		mg/l		
AX	45,68		mg/l	101%	0,34
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	45,1 $\pm$ 0,5	45,1 $\pm$ 0,5	mg/l
Recov. $\pm$ CI(99%)	99,8 $\pm$ 1,1	99,8 $\pm$ 1,1	%
SD between labs	1,1	1,1	mg/l
RSD between labs	2,5	2,5	%
n for calculation	39	39	



## Sample N163A

### Parameter Orthophosphate

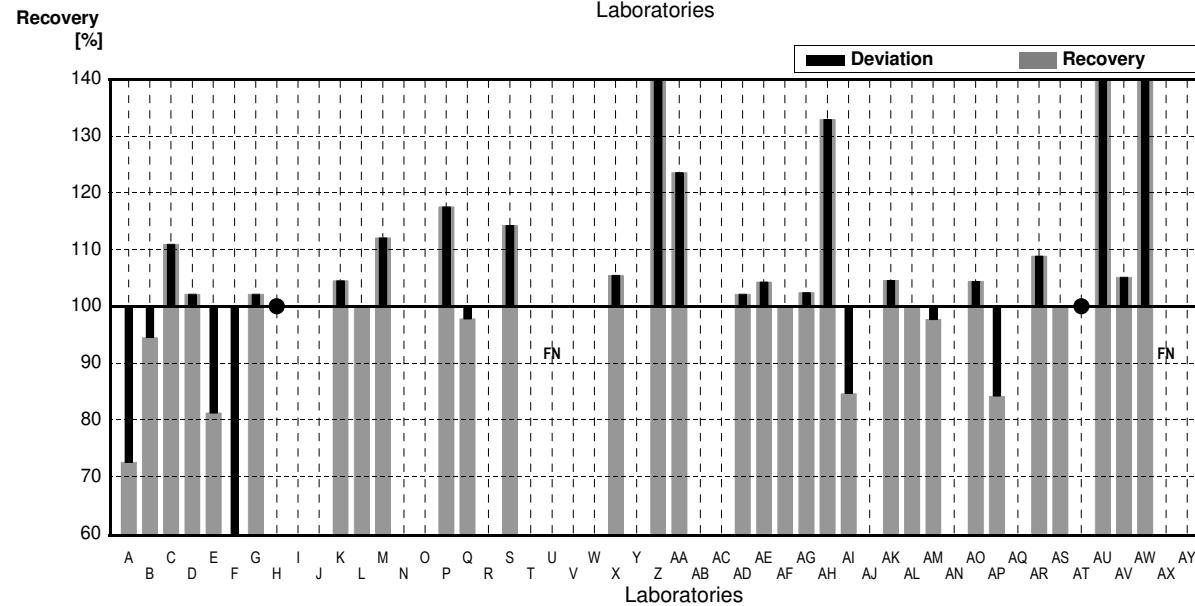
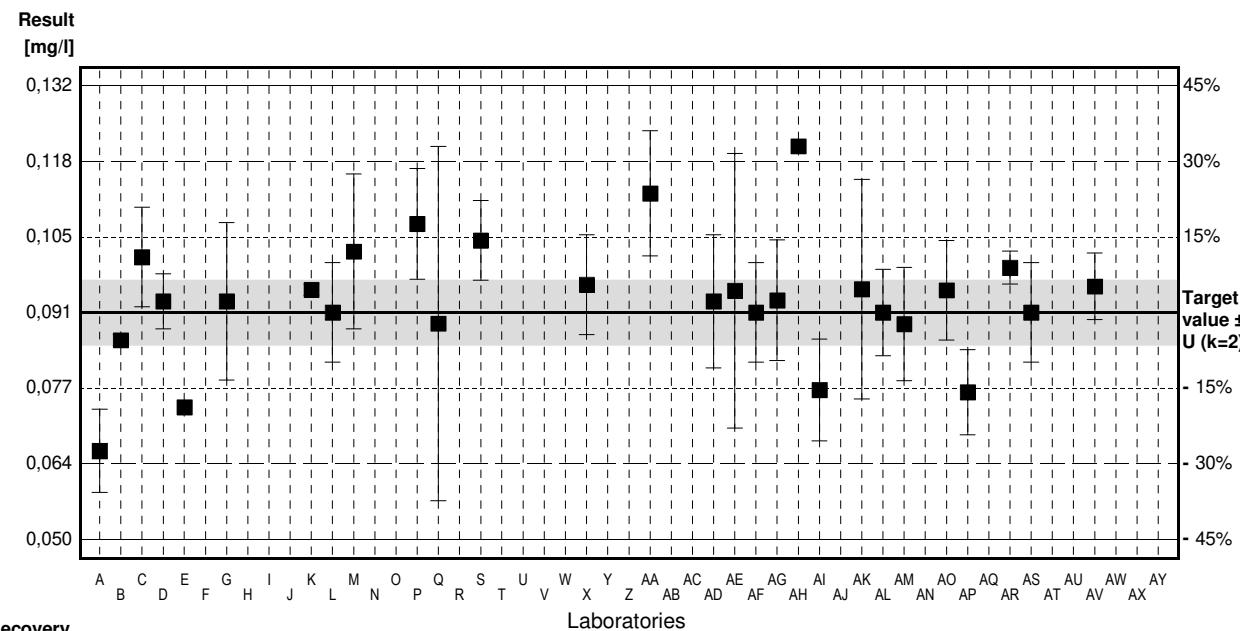
Target value  $\pm U$  ( $k=2$ ) 0,091 mg/l  $\pm$  0,006 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,095 mg/l  $\pm$  0,002 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,094 mg/l  $\pm$  0,002 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0,066 *	0,0075	mg/l	73%	-2,75
B	0,086	0,001	mg/l	95%	-0,55
C	0,101	0,009	mg/l	111%	1,10
D	0,093	0,005	mg/l	102%	0,22
E	0,0739		mg/l	81%	-1,88
F	0,0310 *	0,005	mg/l	34%	-6,59
G	0,093	0,0142	mg/l	102%	0,22
H	<0,15		mg/l	*	
I			mg/l		
J			mg/l		
K	0,0951	0,001	mg/l	105%	0,45
L	0,091	0,009	mg/l	100%	0,00
M	0,102	0,014	mg/l	112%	1,21
N			mg/l		
O			mg/l		
P	0,107	0,010	mg/l	118%	1,76
Q	0,089	0,032	mg/l	98%	-0,22
R			mg/l		
S	0,104	0,0072	mg/l	114%	1,43
T			mg/l		
U	<0,040		mg/l	FN	
V			mg/l		
W			mg/l		
X	0,096	0,009	mg/l	105%	0,55
Y			mg/l		
Z	0,184 *	0,018	mg/l	202%	10,22
AA	0,1125	0,0113	mg/l	124%	2,36
AB			mg/l		
AC			mg/l		
AD	0,093	0,012	mg/l	102%	0,22
AE	0,0949	0,0248	mg/l	104%	0,43
AF	0,0910	0,009	mg/l	100%	0,00
AG	0,0932	0,0109	mg/l	102%	0,24
AH	0,121 *		mg/l	133%	3,30
AI	0,077	0,0092	mg/l	85%	-1,54
AJ			mg/l		
AK	0,0952	0,0198	mg/l	105%	0,46
AL	0,091	0,0078	mg/l	100%	0,00
AM	0,0889	0,0102	mg/l	98%	-0,23
AN			mg/l		
AQ	0,095	0,009	mg/l	104%	0,44
AP	0,0766	0,0077	mg/l	84%	-1,58
AQ			mg/l		
AR	0,0991	0,00300	mg/l	109%	0,89
AS	0,091	0,009	mg/l	100%	0,00
AT	<0,15	0,0093	mg/l	*	
AU	0,149 *	0,0508	mg/l	164%	6,37
AV	0,0957	0,006	mg/l	105%	0,52
AW	98,6 *	6,409	mg/l	108352%	10825,16
AX	<0,050		mg/l	FN	
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	3,174 $\pm$ 8,465	0,093 $\pm$ 0,005	mg/l
Recov. $\pm$ CI(99%)	3488,2 $\pm$ 9302,4	102,5 $\pm$ 5,2	%
SD between labs	17,413	0,009	mg/l
RSD between labs	548,6	9,3	%
n for calculation	32	26	



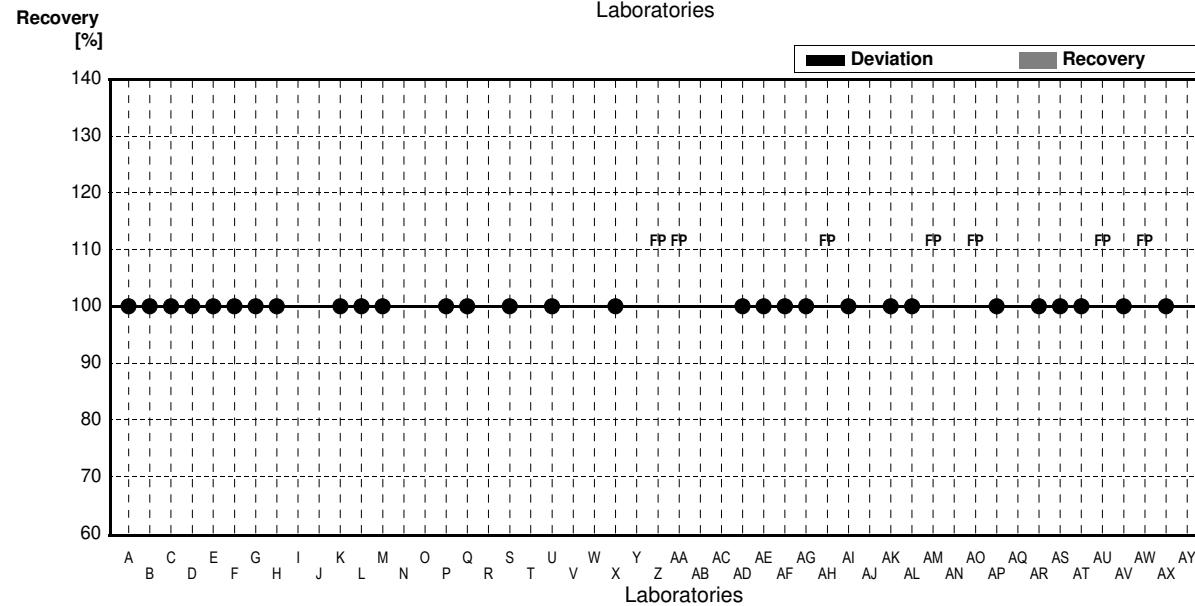
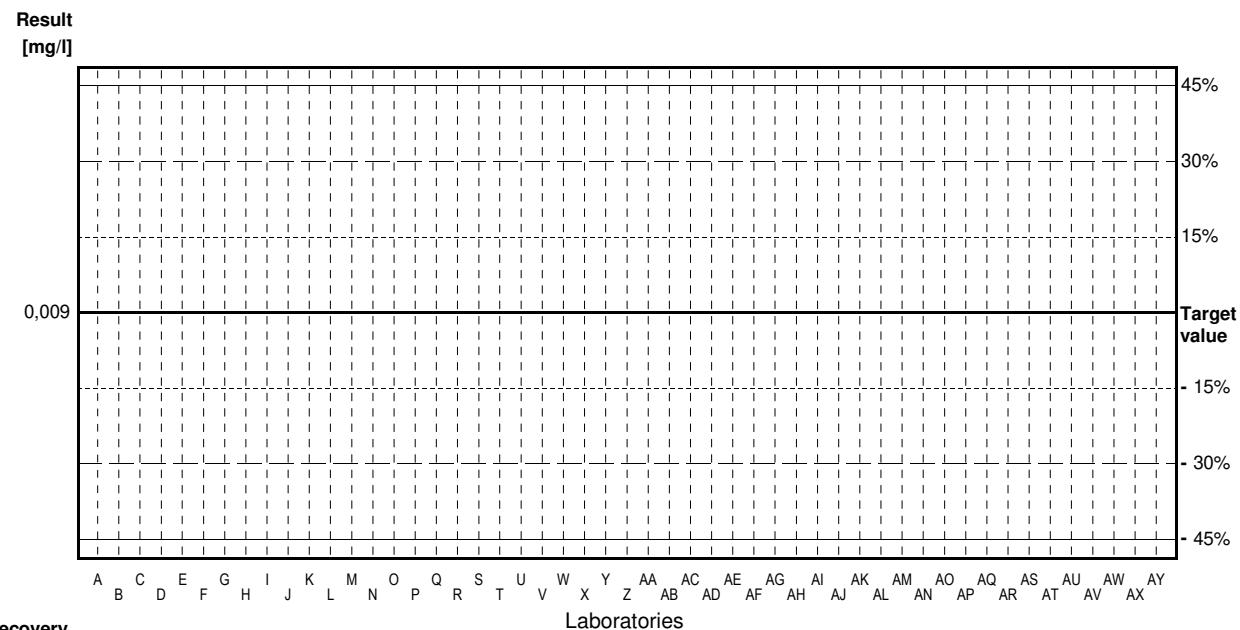
## Sample N163B

### Parameter Orthophosphate

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

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	<0.05	0.0003	mg/l	•	
B	<0.002		mg/l	•	
C	<0.009		mg/l	•	
D	<0.006		mg/l	•	
E	<0.01		mg/l	•	
F	<0.0023		mg/l	•	
G	<0.019		mg/l	•	
H	<0.15		mg/l	•	
I			mg/l		
J			mg/l		
K	<0.015		mg/l	•	
L	<0.005		mg/l	•	
M	<0.006		mg/l	•	
N			mg/l		
O			mg/l		
P	<0.025		mg/l	•	
Q	<0.030		mg/l	•	
R			mg/l		
S	<0.015		mg/l	•	
T			mg/l		
U	<0.040		mg/l	•	
V			mg/l		
W			mg/l		
X	<0.01		mg/l	•	
Y			mg/l		
Z	0.0218	0.0022	mg/l	FP	
AA	0.0270	0.002	mg/l	FP	
AB			mg/l		
AC			mg/l		
AD	<0.010		mg/l	•	
AE	<0.015		mg/l	•	
AF	<0.01		mg/l	•	
AG	<0.006	0	mg/l	•	
AH	0.0107		mg/l	FP	
AI	0.0090	0.0011	mg/l	•	
AJ			mg/l		
AK	<0.009		mg/l	•	
AL	<0.005	0.00043	mg/l	•	
AM	0.0105	0.0012	mg/l	FP	
AN			mg/l		
AO	0.0124	0.001	mg/l	FP	
AP	<0.008		mg/l	•	
AQ			mg/l		
AR	<0.0150		mg/l	•	
AS	<0.01		mg/l	•	
AT	<0.15	0.0093	mg/l	•	
AU	0.0494	0.0212	mg/l	FP	
AV	<0.01		mg/l	•	
AW	50.037	3.252	mg/l	FP	
AX	<0.050		mg/l	•	
AY			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 N163A

## Parameter Boron

Target value  $\pm U$  ( $k=2$ ) 0,1512 mg/l  $\pm$  0,0013 mg/l

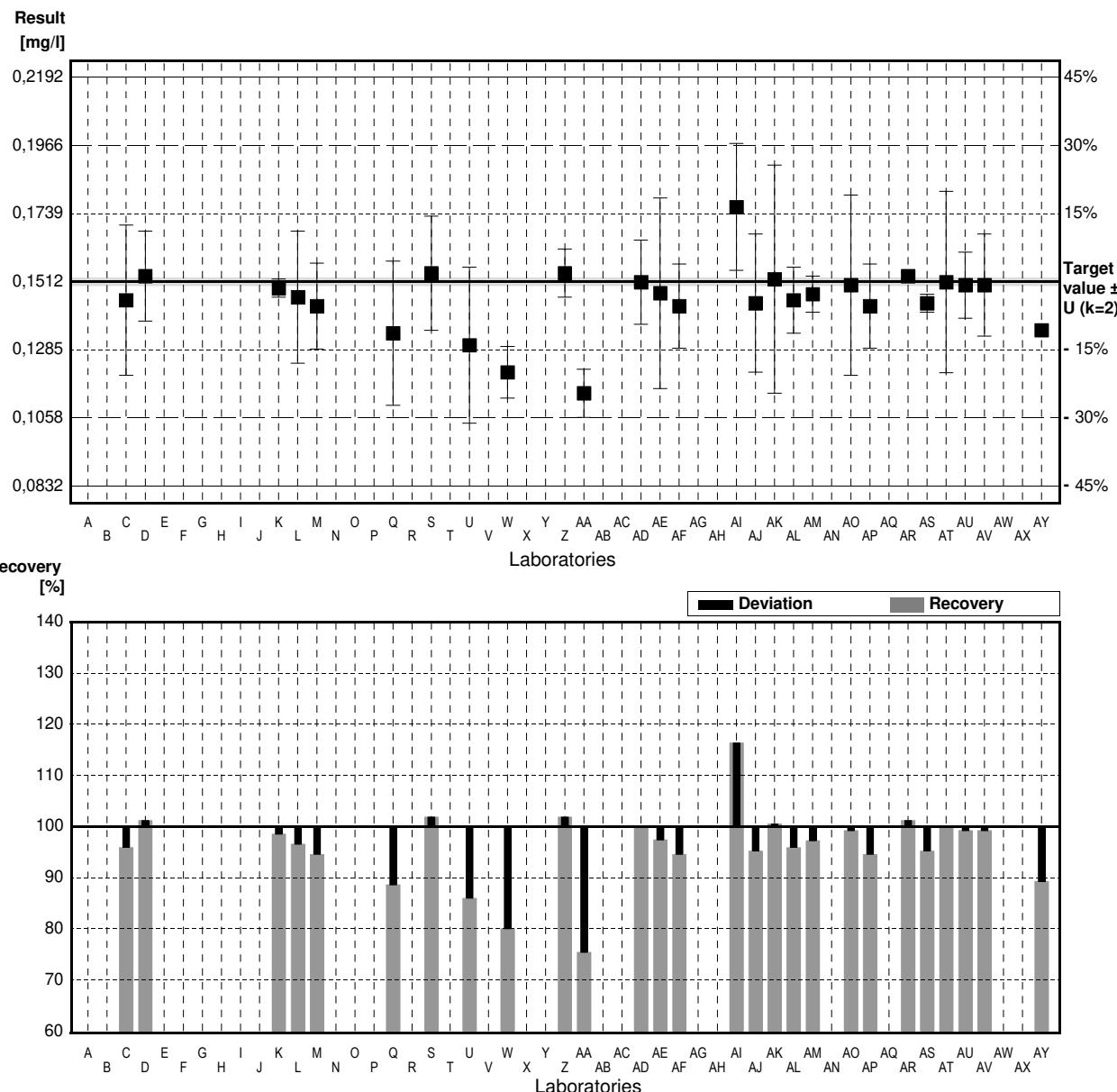
IFA result  $\pm U$  ( $k=2$ ) 0,138 mg/l  $\pm$  0,011 mg/l

### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	0,145	0,025	mg/l	96%	-0,55
D	0,153	0,015	mg/l	101%	0,16
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K	0,149	0,003	mg/l	99%	-0,19
L	0,146	0,022	mg/l	97%	-0,46
M	0,143	0,0143	mg/l	95%	-0,72
N			mg/l		
O			mg/l		
P			mg/l		
Q	0,134	0,024	mg/l	89%	-1,52
R			mg/l		
S	0,154	0,019	mg/l	102%	0,25
T			mg/l		
U	0,130	0,026	mg/l	86%	-1,87
V			mg/l		
W	0,121 *	0,0086	mg/l	80%	-2,66
X			mg/l		
Y			mg/l		
Z	0,154	0,008	mg/l	102%	0,25
AA	0,114 *	0,008	mg/l	75%	-3,28
AB			mg/l		
AC			mg/l		
AD	0,151	0,014	mg/l	100%	-0,02
AE	0,1473	0,0317	mg/l	97%	-0,34
AF	0,143	0,014	mg/l	95%	-0,72
AG			mg/l		
AH			mg/l		
AI	0,176 *	0,0211	mg/l	116%	2,19
AJ	0,144	0,023	mg/l	95%	-0,63
AK	0,152	0,038	mg/l	101%	0,07
AL	0,145	0,011	mg/l	96%	-0,55
AM	0,147	0,006	mg/l	97%	-0,37
AN			mg/l		
AO	0,150	0,03	mg/l	99%	-0,11
AP	0,143	0,014	mg/l	95%	-0,72
AQ			mg/l		
AR	0,153	0,00119	mg/l	101%	0,16
AS	0,144	0,003	mg/l	95%	-0,63
AT	0,151	0,0302	mg/l	100%	-0,02
AU	0,150	0,011	mg/l	99%	-0,11
AV	0,150	0,017	mg/l	99%	-0,11
AW			mg/l		
AX			mg/l		
AY	0,135		mg/l	89%	-1,43

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,1453 $\pm$ 0,0062	0,1464 $\pm$ 0,0036	mg/l
Recov. $\pm$ CI(99%)	96,1 $\pm$ 4,1	96,8 $\pm$ 2,4	%
SD between labs	0,0115	0,0063	mg/l
RSD between labs	7,9	4,3	%
n for calculation	27	24	



# Sample N163B

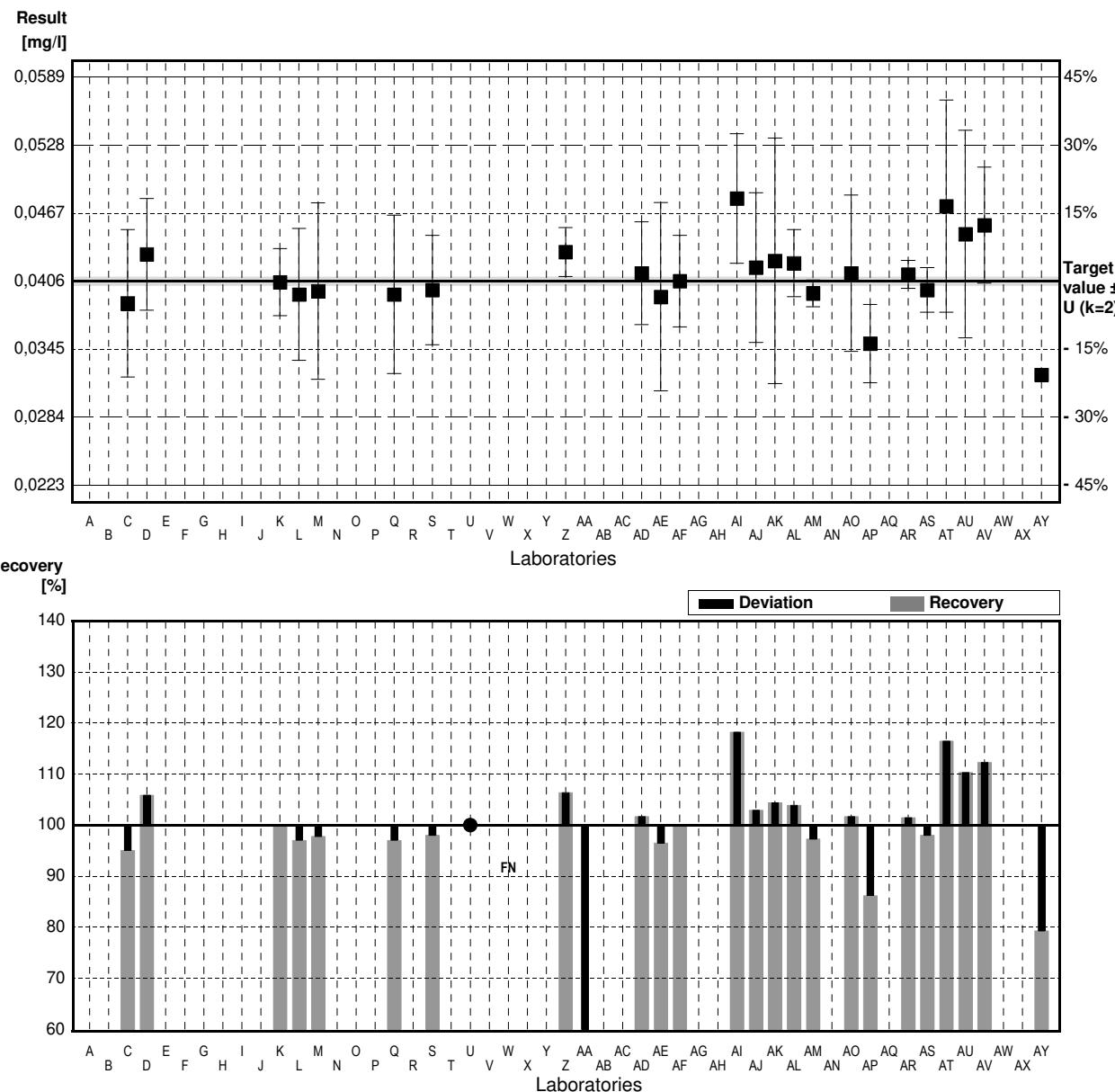
## Parameter Boron

Target value  $\pm U$  ( $k=2$ ) 0,0406 mg/l  $\pm$  0,0004 mg/l  
 IFA result  $\pm U$  ( $k=2$ ) 0,0385 mg/l  $\pm$  0,0030 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	0,0386	0,0066	mg/l	95%	-0,66
D	0,0430	0,005	mg/l	106%	0,79
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K	0,0405	0,003	mg/l	100%	-0,03
L	0,0394	0,0059	mg/l	97%	-0,39
M	0,0397	0,0079	mg/l	98%	-0,30
N			mg/l		
O			mg/l		
P			mg/l		
Q	0,0394	0,0071	mg/l	97%	-0,39
R			mg/l		
S	0,0398	0,0049	mg/l	98%	-0,26
T			mg/l		
U	<0,05		mg/l	*	
V			mg/l		
W	<0,02		mg/l	FN	
X			mg/l		
Y			mg/l		
Z	0,0432	0,0022	mg/l	106%	0,85
AA	0,0120 *	0,0009	mg/l	30%	-9,39
AB			mg/l		
AC			mg/l		
AD	0,0413	0,0046	mg/l	102%	0,23
AE	0,03919	0,00843	mg/l	97%	-0,46
AF	0,0406	0,0041	mg/l	100%	0,00
AG			mg/l		
AH			mg/l		
AI	0,0480 *	0,0058	mg/l	118%	2,43
AJ	0,0418	0,0067	mg/l	103%	0,39
AK	0,0424	0,011	mg/l	104%	0,59
AL	0,0422	0,003	mg/l	104%	0,53
AM	0,0395	0,0012	mg/l	97%	-0,36
AN			mg/l		
AQ	0,0413	0,007	mg/l	102%	0,23
AP	0,0350	0,0035	mg/l	86%	-1,84
AQ			mg/l		
AR	0,0412	0,00125	mg/l	101%	0,20
AS	0,0398	0,002	mg/l	98%	-0,26
AT	0,0473 *	0,0095	mg/l	117%	2,20
AU	0,0448	0,0093	mg/l	110%	1,38
AV	0,0456	0,0052	mg/l	112%	1,64
AW			mg/l		
AX			mg/l		
AY	0,0322 *		mg/l	79%	-2,76

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0399 $\pm$ 0,0038	0,0409 $\pm$ 0,0014	mg/l
Recov. $\pm$ CI(99%)	98,3 $\pm$ 9,3	100,7 $\pm$ 3,5	%
SD between labs	0,0067	0,0023	mg/l
RSD between labs	16,8	5,6	%
n for calculation	25	21	



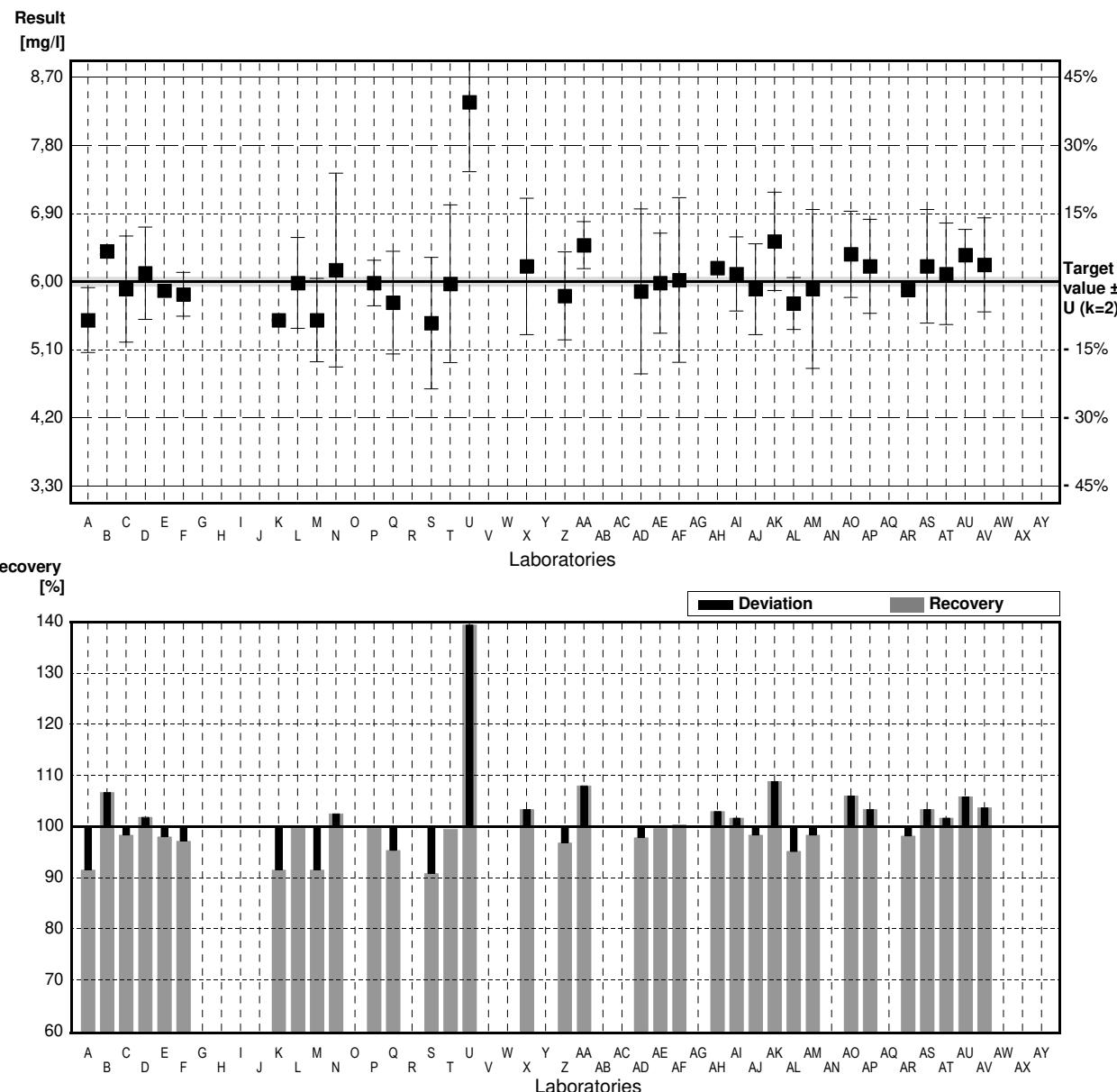
# Sample N163A

## Parameter DOC

Target value  $\pm U (k=2)$  6,00 mg/l  $\pm$  0,06 mg/l  
 IFA result  $\pm U (k=2)$  5,98 mg/l  $\pm$  0,09 mg/l  
 Stability test  $\pm U (k=2)$  6,09 mg/l  $\pm$  0,09 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	5,49	0,43	mg/l	92%	-1,52
B	6,4	0,04	mg/l	107%	1,19
C	5,9	0,7	mg/l	98%	-0,30
D	6,11	0,61	mg/l	102%	0,33
E	5,88		mg/l	98%	-0,36
F	5,83	0,29	mg/l	97%	-0,51
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K	5,49	0,012	mg/l	92%	-1,52
L	5,98	0,6	mg/l	100%	-0,06
M	5,49	0,55	mg/l	92%	-1,52
N	6,15	1,28	mg/l	103%	0,45
O			mg/l		
P	5,98	0,30	mg/l	100%	-0,06
Q	5,72	0,68	mg/l	95%	-0,83
R			mg/l		
S	5,45	0,87	mg/l	91%	-1,64
T	5,97	1,04	mg/l	100%	-0,09
U	8,37 *	0,92	mg/l	140%	7,05
V			mg/l		
W			mg/l		
X	6,20	0,9	mg/l	103%	0,60
Y			mg/l		
Z	5,81	0,58	mg/l	97%	-0,57
AA	6,48	0,31	mg/l	108%	1,43
AB			mg/l		
AC			mg/l		
AD	5,87	1,09	mg/l	98%	-0,39
AE	5,979	0,66	mg/l	100%	-0,06
AF	6,02	1,089	mg/l	100%	0,06
AG			mg/l		
AH	6,178		mg/l	103%	0,53
AI	6,1	0,49	mg/l	102%	0,30
AJ	5,9	0,6	mg/l	98%	-0,30
AK	6,53	0,65	mg/l	109%	1,58
AL	5,71	0,343	mg/l	95%	-0,86
AM	5,90	1,05	mg/l	98%	-0,30
AN			mg/l		
AO	6,36	0,57	mg/l	106%	1,07
AP	6,2	0,62	mg/l	103%	0,60
AQ			mg/l		
AR	5,89	0,0331	mg/l	98%	-0,33
AS	6,20	0,75	mg/l	103%	0,60
AT	6,1	0,671	mg/l	102%	0,30
AU	6,350	0,339	mg/l	106%	1,04
AV	6,22	0,62	mg/l	104%	0,65
AW			mg/l		
AX			mg/l		
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	6,06 $\pm$ 0,23	6,00 $\pm$ 0,14	mg/l
Recov. $\pm$ CI(99%)	101,1 $\pm$ 3,9	99,9 $\pm$ 2,3	%
SD between labs	0,49	0,28	mg/l
RSD between labs	8,1	4,7	%
n for calculation	34	33	



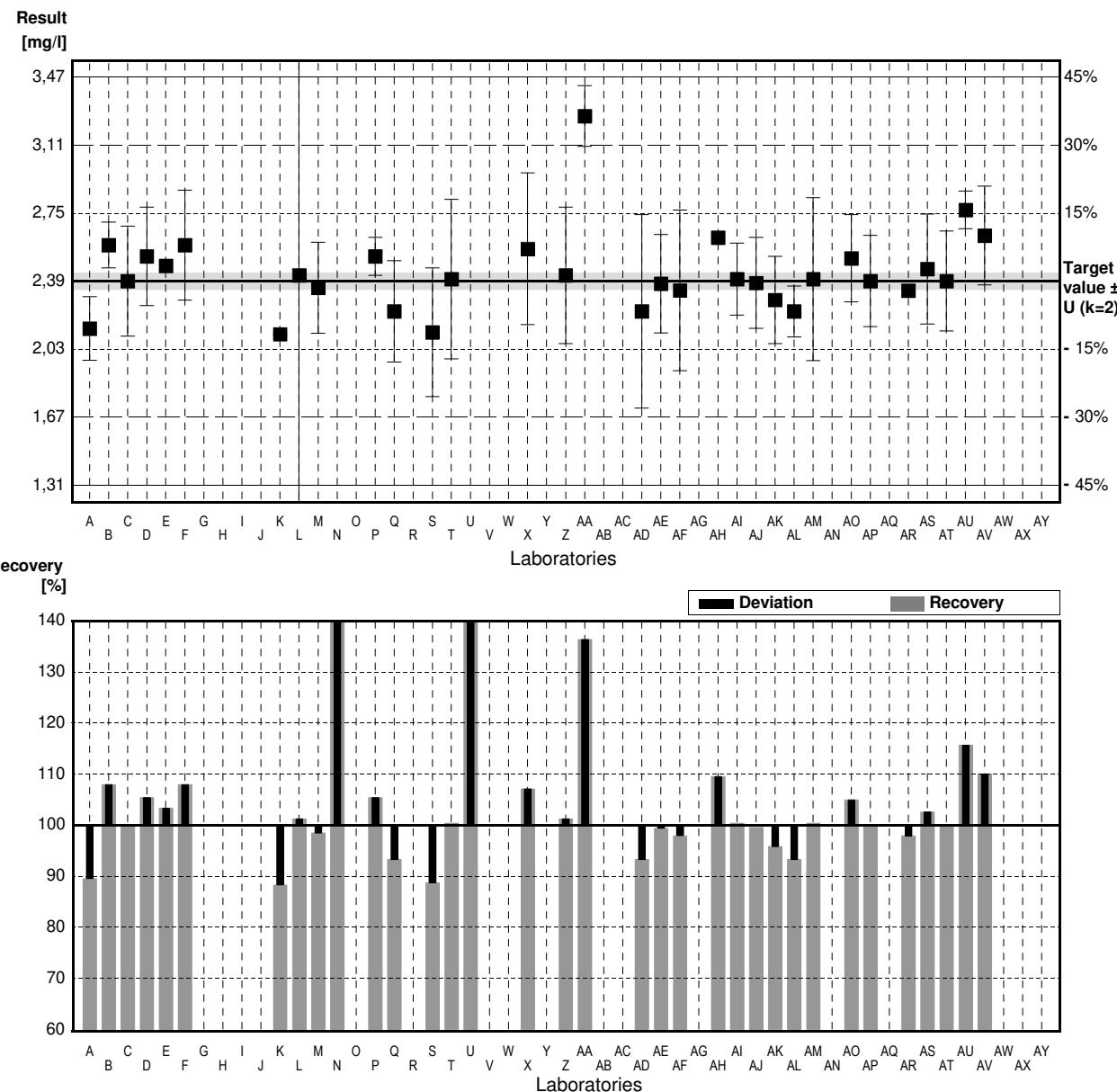
# Sample N163B

## Parameter DOC

Target value  $\pm U$  ( $k=2$ ) 2,39 mg/l  $\pm$  0,04 mg/l  
 IFA result  $\pm U$  ( $k=2$ ) 2,38 mg/l  $\pm$  0,09 mg/l  
 Stability test  $\pm U$  ( $k=2$ ) 2,37 mg/l  $\pm$  0,09 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	2.14	0.168	mg/l	90%	-1.87
B	2.58	0.12	mg/l	108%	1.42
C	2.39	0.29	mg/l	100%	0.00
D	2.52	0.26	mg/l	105%	0.97
E	2.47		mg/l	103%	0.60
F	2.58	0.29	mg/l	108%	1.42
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K	2.11	0.006	mg/l	88%	-2.09
L	2.42	2.4	mg/l	101%	0.22
M	2.354	0.24	mg/l	98%	-0.27
N	6.49 *	0.52	mg/l	272%	30.63
O			mg/l		
P	2.52	0.10	mg/l	105%	0.97
Q	2.23	0.268	mg/l	93%	-1.20
R			mg/l		
S	2.12	0.34	mg/l	89%	-2.02
T	2.40	0.42	mg/l	100%	0.07
U	4.08 *	0.45	mg/l	171%	12.63
V			mg/l		
W			mg/l		
X	2.56	0.4	mg/l	107%	1.27
Y			mg/l		
Z	2.42	0.36	mg/l	101%	0.22
AA	3.26 *	0.16	mg/l	136%	6.50
AB			mg/l		
AC			mg/l		
AD	2.23	0.51	mg/l	93%	-1.20
AE	2.376	0.26	mg/l	99%	-0.10
AF	2.341	0.424	mg/l	98%	-0.37
AG			mg/l		
AH	2.619		mg/l	110%	1.71
AI	2.40	0.19	mg/l	100%	0.07
AJ	2.38	0.24	mg/l	100%	-0.07
AK	2.29	0.23	mg/l	96%	-0.75
AL	2.23	0.134	mg/l	93%	-1.20
AM	2.40	0.43	mg/l	100%	0.07
AN			mg/l		
AO	2.51	0.23	mg/l	105%	0.90
AP	2.39	0.24	mg/l	100%	0.00
AQ			mg/l		
AR	2.34	0.0285	mg/l	98%	-0.37
AS	2.453	0.29	mg/l	103%	0.47
AT	2.39	0.263	mg/l	100%	0.00
AU	2.765	0.099	mg/l	116%	2.80
AV	2.63	0.26	mg/l	110%	1.79
AW			mg/l		
AX			mg/l		
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	2,60 $\pm$ 0,36	2,41 $\pm$ 0,08	mg/l
Recov. $\pm$ CI(99%)	108,8 $\pm$ 15,2	100,6 $\pm$ 3,2	%
SD between labs	0,77	0,15	mg/l
RSD between labs	29,7	6,4	%
n for calculation	34	31	



## Sample N163A

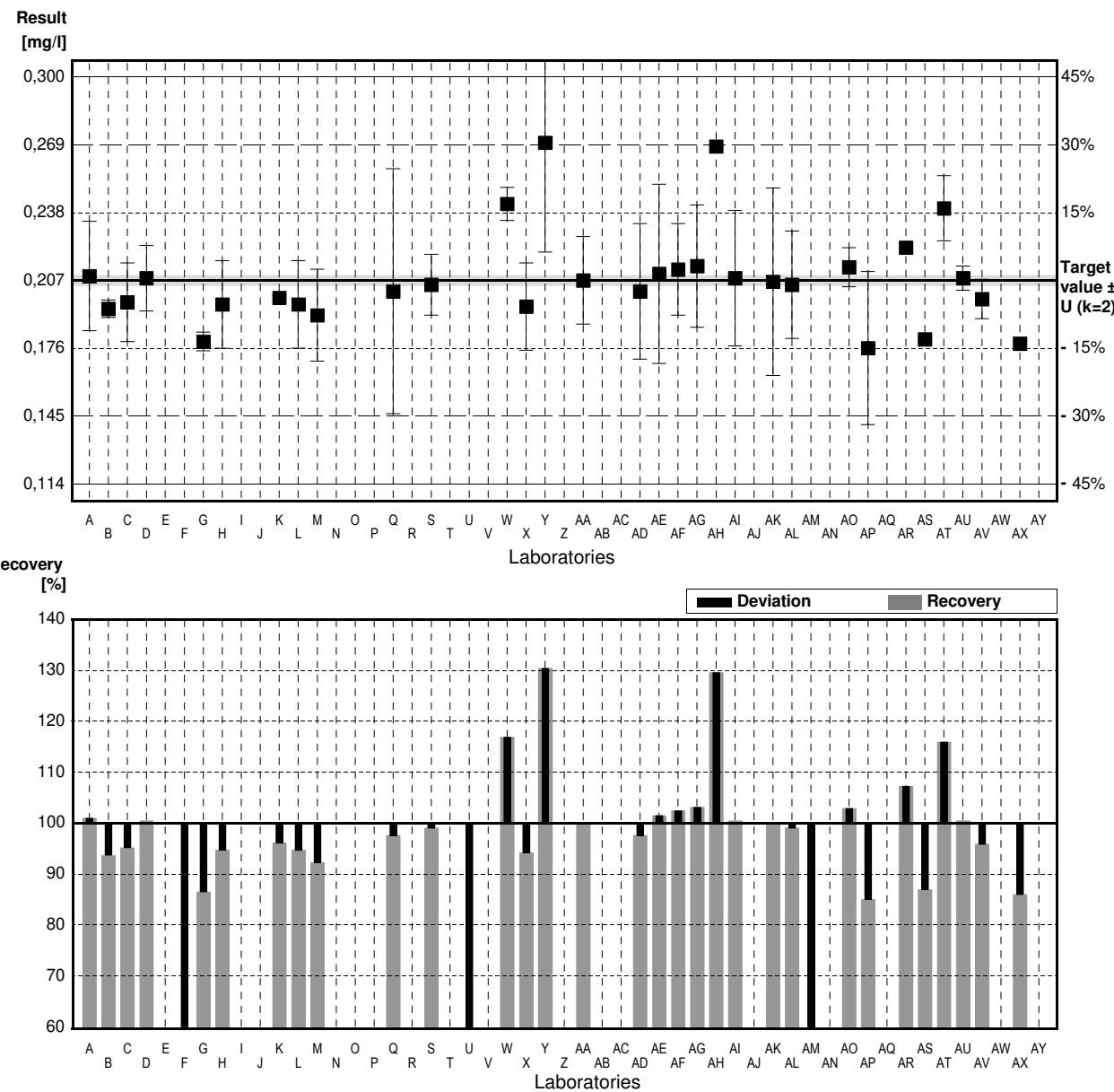
### Parameter Total P (as PO<sub>4</sub>)

Target value  $\pm U$  ( $k=2$ ) 0,207 mg/l  $\pm$  0,002 mg/l  
 IFA result  $\pm U$  ( $k=2$ ) 0,232 mg/l  $\pm$  0,026 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0,209	0,025	mg/l	101%	0,10
B	0,194	0,004	mg/l	94%	-0,63
C	0,197	0,018	mg/l	95%	-0,48
D	0,208	0,015	mg/l	100%	0,05
E			mg/l		
F	0,0100 *	0,005	mg/l	5%	-9,52
G	0,179	0,0043	mg/l	86%	-1,35
H	0,196	0,020	mg/l	95%	-0,53
I			mg/l		
J			mg/l		
K	0,199	0,001	mg/l	96%	-0,39
L	0,196	0,02	mg/l	95%	-0,53
M	0,191	0,021	mg/l	92%	-0,77
N			mg/l		
O			mg/l		
P			mg/l		
Q	0,202	0,056	mg/l	98%	-0,24
R			mg/l		
S	0,205	0,014	mg/l	99%	-0,10
T			mg/l		
U	0,094 *	0,0085	mg/l	45%	-5,46
V			mg/l		
W	0,242	0,0076	mg/l	117%	1,69
X	0,195	0,02	mg/l	94%	-0,58
Y	0,2700 *	0,05	mg/l	130%	3,04
Z			mg/l		
AA	0,2070	0,020	mg/l	100%	0,00
AB			mg/l		
AC			mg/l		
AD	0,202	0,031	mg/l	98%	-0,24
AE	0,210	0,041	mg/l	101%	0,14
AF	0,212	0,021	mg/l	102%	0,24
AG	0,2135	0,028	mg/l	103%	0,31
AH	0,2683 *		mg/l	130%	2,96
AI	0,208	0,031	mg/l	100%	0,05
AJ			mg/l		
AK	0,2064	0,0429	mg/l	100%	-0,03
AL	0,205	0,0246	mg/l	99%	-0,10
AM	0,087 *	0,006	mg/l	42%	-5,80
AN			mg/l		
AO	0,213	0,009	mg/l	103%	0,29
AP	0,176	0,035	mg/l	85%	-1,50
AQ			mg/l		
AR	0,222	0,00187	mg/l	107%	0,72
AS	0,180	0,001	mg/l	87%	-1,30
AT	0,240	0,0149	mg/l	116%	1,59
AU	0,208	0,0055	mg/l	100%	0,05
AV	0,1985	0,009	mg/l	96%	-0,41
AW			mg/l		
AX	0,178		mg/l	86%	-1,40
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,195 $\pm$ 0,023	0,203 $\pm$ 0,008	mg/l
Recov. $\pm$ CI(99%)	94,1 $\pm$ 10,9	98,2 $\pm$ 3,8	%
SD between labs	0,048	0,015	mg/l
RSD between labs	24,6	7,6	%
n for calculation	34	29	



## Sample N163B

### Parameter Total P (as PO<sub>4</sub>)

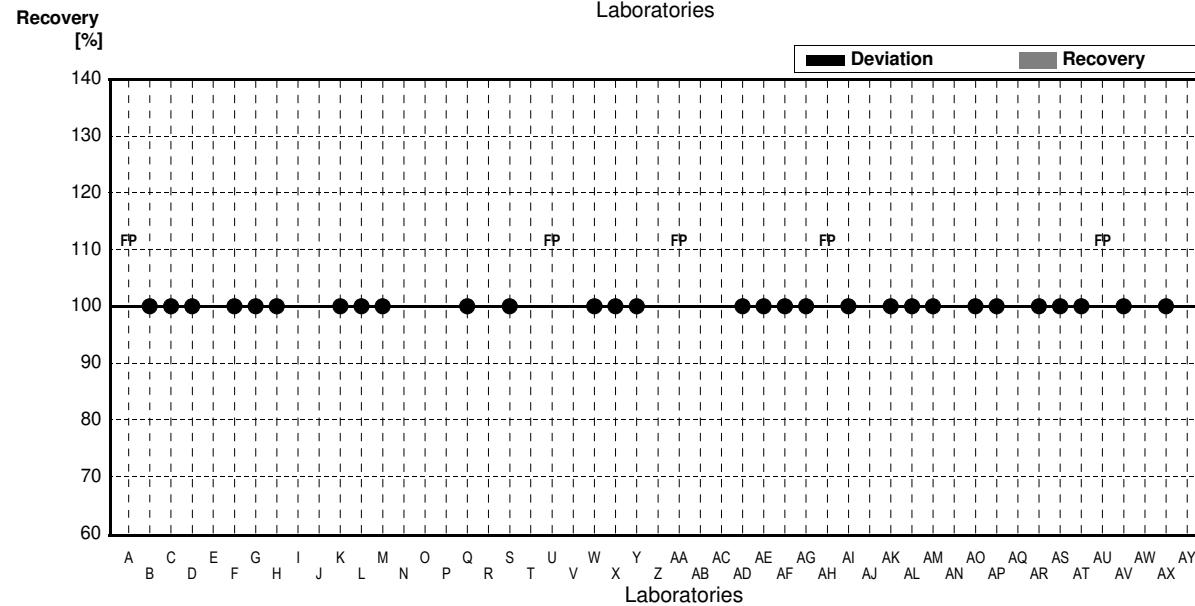
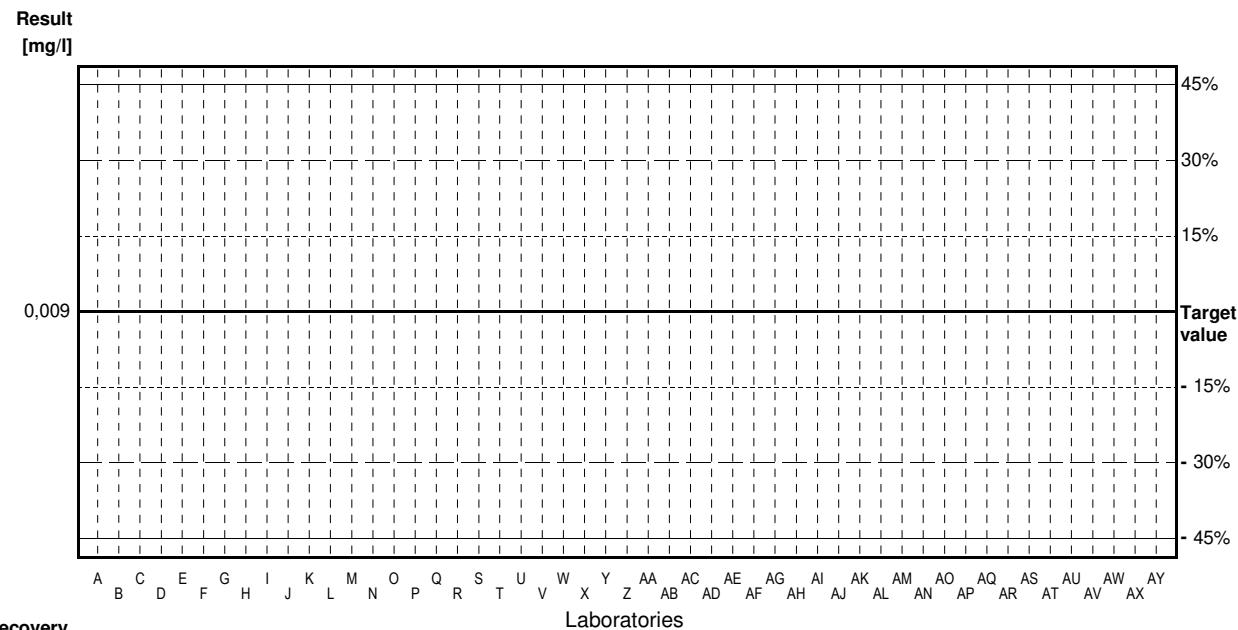
Target value <0,009 mg/l

IFA result <0,009 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0.153	0.018	mg/l	FP	
B	<0.006		mg/l	•	
C	<0.009		mg/l	•	
D	<0.006		mg/l	•	
E			mg/l		
F	<0.001		mg/l	•	
G	<0.02		mg/l	•	
H	<0.15		mg/l	•	
I			mg/l		
J			mg/l		
K	<0.015		mg/l	•	
L	<0.001		mg/l	•	
M	<0.005		mg/l	•	
N			mg/l		
O			mg/l		
P			mg/l		
Q	<0.015		mg/l	•	
R			mg/l		
S	<0.015		mg/l	•	
T			mg/l		
U	0.054	0.005	mg/l	FP	
V			mg/l		
W	<0.06		mg/l	•	
X	<0.013		mg/l	•	
Y	0.0060	0.05	mg/l	•	
Z			mg/l		
AA	0.0270	0.002	mg/l	FP	
AB			mg/l		
AC			mg/l		
AD	<0.010		mg/l	•	
AE	<0.015		mg/l	•	
AF	<0.01		mg/l	•	
AG	<0.006	0	mg/l	•	
AH	0.0184		mg/l	FP	
AI	<0.015		mg/l	•	
AJ			mg/l		
AK	<0.009		mg/l	•	
AL	<0.01	0	mg/l	•	
AM	0.00300	0.00021	mg/l	•	
AN			mg/l		
AO	<0.05		mg/l	•	
AP	<0.015		mg/l	•	
AQ			mg/l		
AR	<0.0150		mg/l	•	
AS	<0.03		mg/l	•	
AT	<0.15	0.0093	mg/l	•	
AU	0.0831	0.0014	mg/l	FP	
AV	<0.010		mg/l	•	
AW			mg/l		
AX	<0.150		mg/l	•	
AY			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			



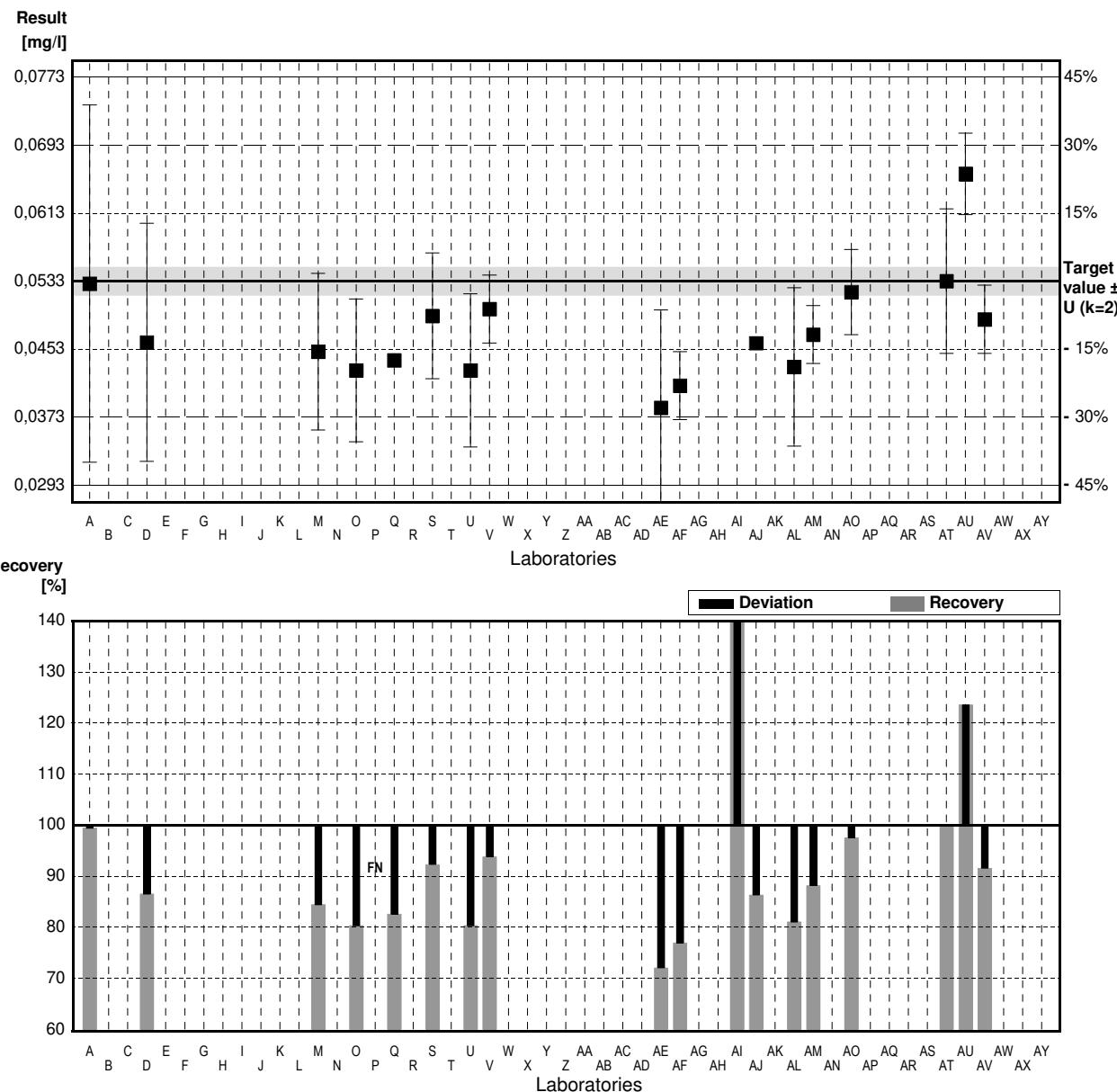
# Sample N163A

## Parameter Cyanide

Target value  $\pm U (k=2)$  0,0533 mg/l  $\pm$  0,0016 mg/l  
 IFA result  $\pm U (k=2)$  0,053 mg/l  $\pm$  0,005 mg/l  
 Stability test  $\pm U (k=2)$  0,053 mg/l  $\pm$  0,005 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0.053	0.021	mg/l	99%	-0.04
B			mg/l		
C			mg/l		
D	0.0461	0.014	mg/l	86%	-0.84
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K			mg/l		
L			mg/l		
M	0.0450	0.0092	mg/l	84%	-0.97
N			mg/l		
O	0.0428	0.0084	mg/l	80%	-1.23
P	<0.03		mg/l	FN	
Q	0.0440		mg/l	83%	-1.09
R			mg/l		
S	0.0492	0.0074	mg/l	92%	-0.48
T			mg/l		
U	0.0428	0.009	mg/l	80%	-1.23
V	0.050	0.004	mg/l	94%	-0.39
W			mg/l		
X			mg/l		
Y			mg/l		
Z			mg/l		
AA			mg/l		
AB			mg/l		
AC			mg/l		
AD	n.a.		mg/l		
AE	0.0384	0.0115	mg/l	72%	-1.75
AF	0.0410	0.004	mg/l	77%	-1.44
AG			mg/l		
AH			mg/l		
AI	46.58 *	4.658	mg/l	87392%	5455.76
AJ	0.0460		mg/l	86%	-0.86
AK			mg/l		
AL	0.0432	0.0093	mg/l	81%	-1.18
AM	0.0470	0.0034	mg/l	88%	-0.74
AN			mg/l		
AO	0.052	0.005	mg/l	98%	-0.15
AP			mg/l		
AQ			mg/l		
AR			mg/l		
AS			mg/l		
AT	0.0533	0.0085	mg/l	100%	0.00
AU	0.0659 *	0.0048	mg/l	124%	1.48
AV	0.0488	0.004	mg/l	92%	-0.53
AW			mg/l		
AX			mg/l		
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	2,6327 $\pm$ 7,4969	0,0464 $\pm$ 0,0032	mg/l
Recov. $\pm$ CI(99%)	4939,4 $\pm$ 14065,	87,1 $\pm$ 6,0	%
SD between labs	10,9678	0,0044	mg/l
RSD between labs	416,6	9,4	%
n for calculation	18	16	



# Sample N163B

## Parameter Cyanide

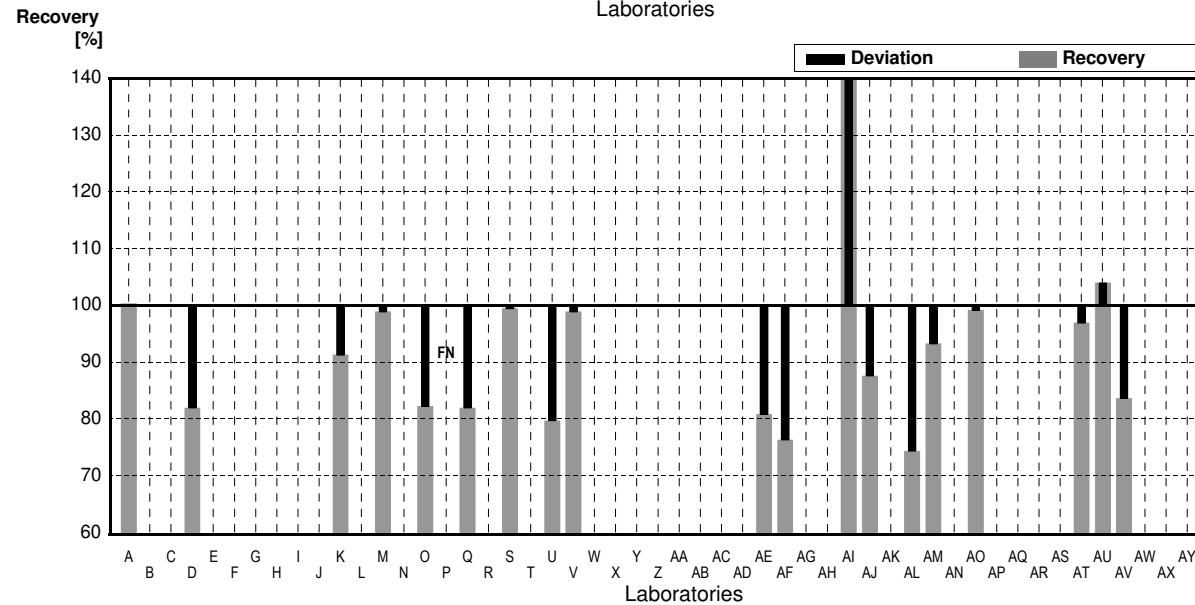
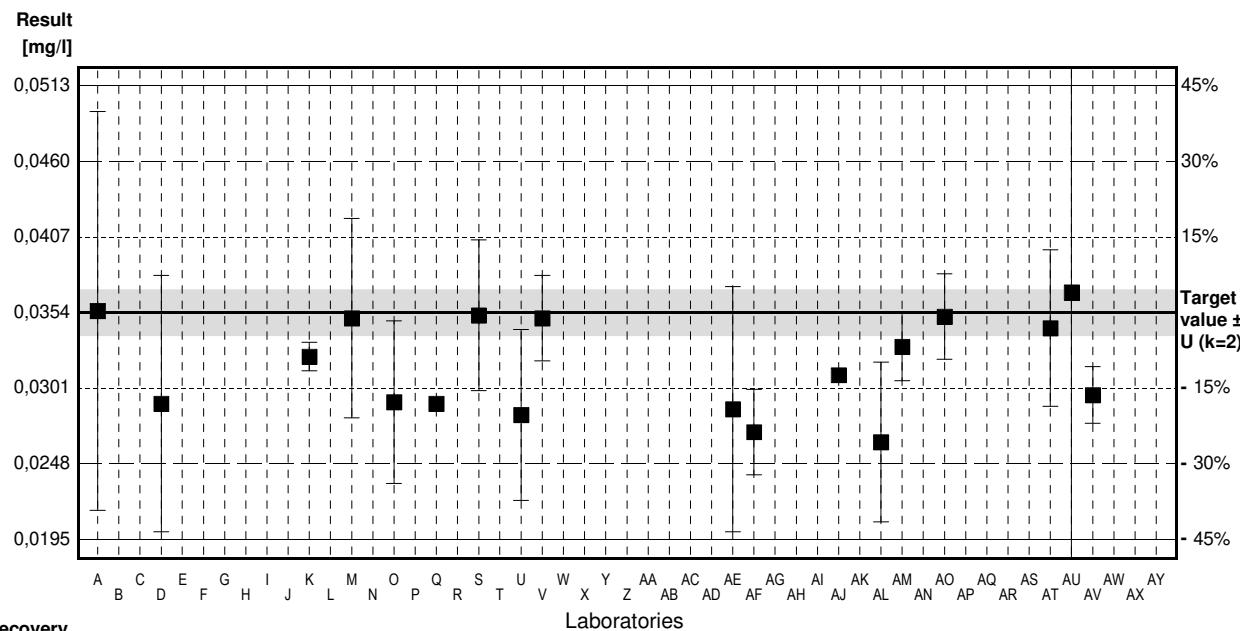
Target value  $\pm U (k=2)$  0,0354 mg/l  $\pm$  0,0016 mg/l

IFA result  $\pm U (k=2)$  0,0349 mg/l  $\pm$  0,0030 mg/l

Stability test  $\pm U (k=2)$  0,0347 mg/l  $\pm$  0,0030 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0,0355	0,014	mg/l	100%	0,02
B			mg/l		
C			mg/l		
D	0,0290	0,009	mg/l	82%	-1,13
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J			mg/l		
K	0,0323	0,001	mg/l	91%	-0,55
L			mg/l		
M	0,0350	0,007	mg/l	99%	-0,07
N			mg/l		
O	0,0291	0,0057	mg/l	82%	-1,11
P	<0,03		mg/l	FN	
Q	0,0290		mg/l	82%	-1,13
R			mg/l		
S	0,0352	0,0053	mg/l	99%	-0,04
T			mg/l		
U	0,0282	0,006	mg/l	80%	-1,27
V	0,0350	0,003	mg/l	99%	-0,07
W			mg/l		
X			mg/l		
Y			mg/l		
Z			mg/l		
AA			mg/l		
AB			mg/l		
AC			mg/l		
AD			mg/l		
AE	0,0286	0,0086	mg/l	81%	-1,20
AF	0,0270	0,003	mg/l	76%	-1,48
AG			mg/l		
AH			mg/l		
AI	33,53 *	3,353	mg/l	94718%	5913,59
AJ	0,0310		mg/l	88%	-0,78
AK			mg/l		
AL	0,0263	0,0056	mg/l	74%	-1,61
AM	0,0330	0,0024	mg/l	93%	-0,42
AN			mg/l		
AQ	0,0351	0,003	mg/l	99%	-0,05
AP			mg/l		
AQ			mg/l		
AR			mg/l		
AS			mg/l		
AT	0,0343	0,0055	mg/l	97%	-0,19
AU	0,0368	0,0191	mg/l	104%	0,25
AV	0,0296	0,002	mg/l	84%	-1,02
AW			mg/l		
AX			mg/l		
AY			mg/l		

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	1,7947 $\pm$ 5,0776	0,0317 $\pm$ 0,0023	mg/l
Recov. $\pm$ CI(99%)	5069,9 $\pm$ 14343,	89,5 $\pm$ 6,5	%
SD between labs	7,6850	0,0034	mg/l
RSD between labs	428,2	10,7	%
n for calculation	19	18	





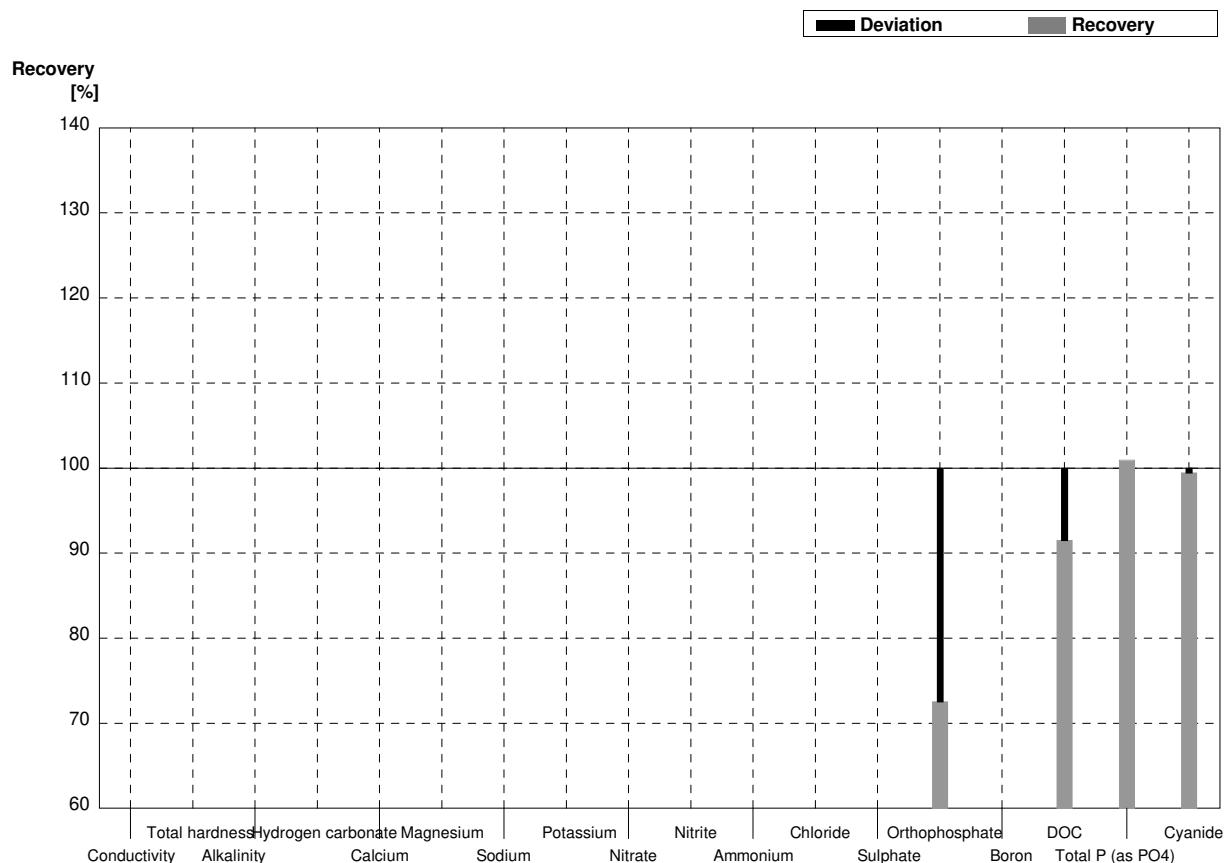
# **Illustration of Results Laboratory Oriented Part**

**Round N163  
Major Ions**

**Sample Dispatch: 5 September 2022**

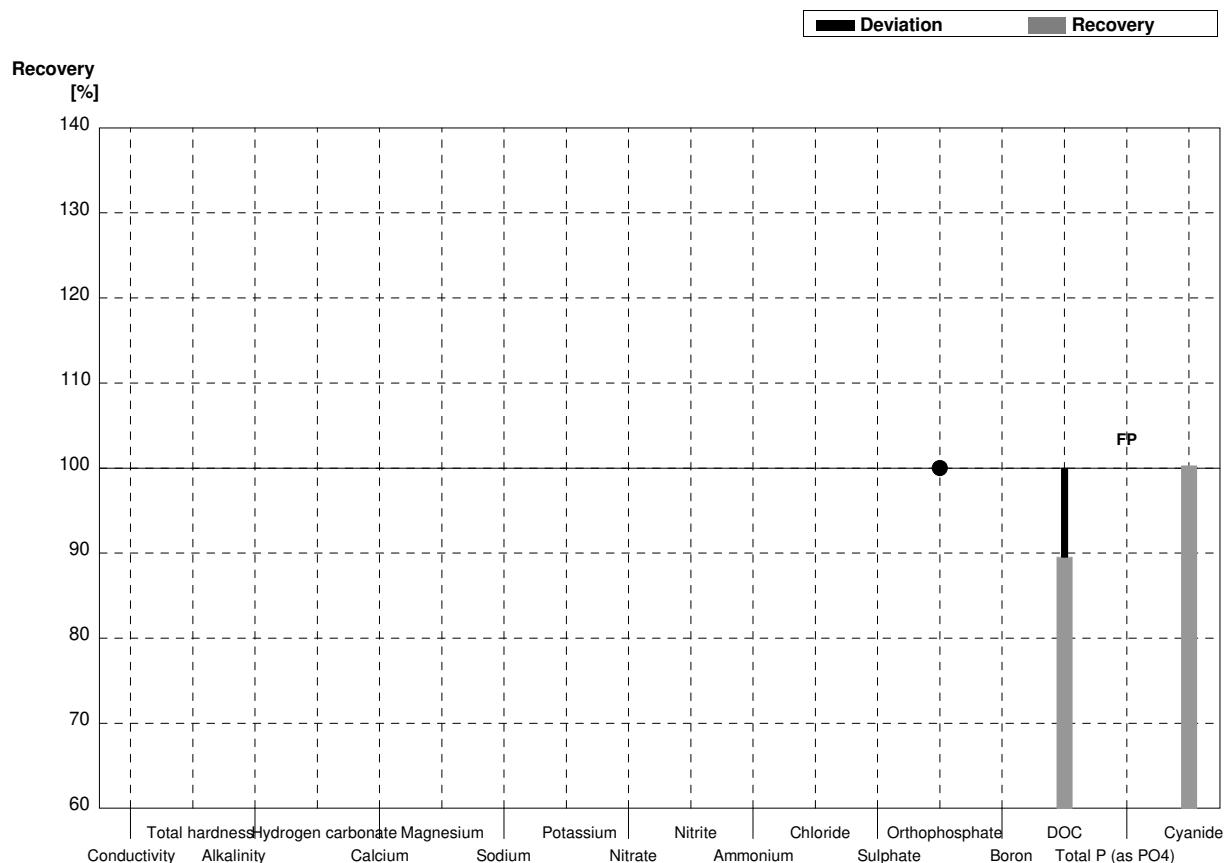
**Sample N163A****Laboratory A**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3			$\mu\text{S}/\text{cm}$	
Total hardness	3,37	0,04			$\text{mmol}/\text{l}$	
Alkalinity	4,91	0,06			$\text{mmol}/\text{l}$	
Hydrogen carbonate	297	4			$\text{mg}/\text{l}$	
Calcium	98,7	1,4			$\text{mg}/\text{l}$	
Magnesium	22,0	0,3			$\text{mg}/\text{l}$	
Sodium	53,5	0,4			$\text{mg}/\text{l}$	
Potassium	13,22	0,08			$\text{mg}/\text{l}$	
Nitrate	63,0	1,3			$\text{mg}/\text{l}$	
Nitrite	0,0322	0,0010			$\text{mg}/\text{l}$	
Ammonium	<0,01				$\text{mg}/\text{l}$	
Chloride	60,6	1,5			$\text{mg}/\text{l}$	
Sulphate	84,2	0,7			$\text{mg}/\text{l}$	
Orthophosphate	0,091	0,006	0,066	0,0075	$\text{mg}/\text{l}$	73%
Boron	0,1512	0,0013			$\text{mg}/\text{l}$	
DOC	6,00	0,06	5,49	0,43	$\text{mg}/\text{l}$	92%
Total P (as PO <sub>4</sub> )	0,207	0,002	0,209	0,025	$\text{mg}/\text{l}$	101%
Cyanide	0,0533	0,0016	0,053	0,021	$\text{mg}/\text{l}$	99%



**Sample N163B****Laboratory A**

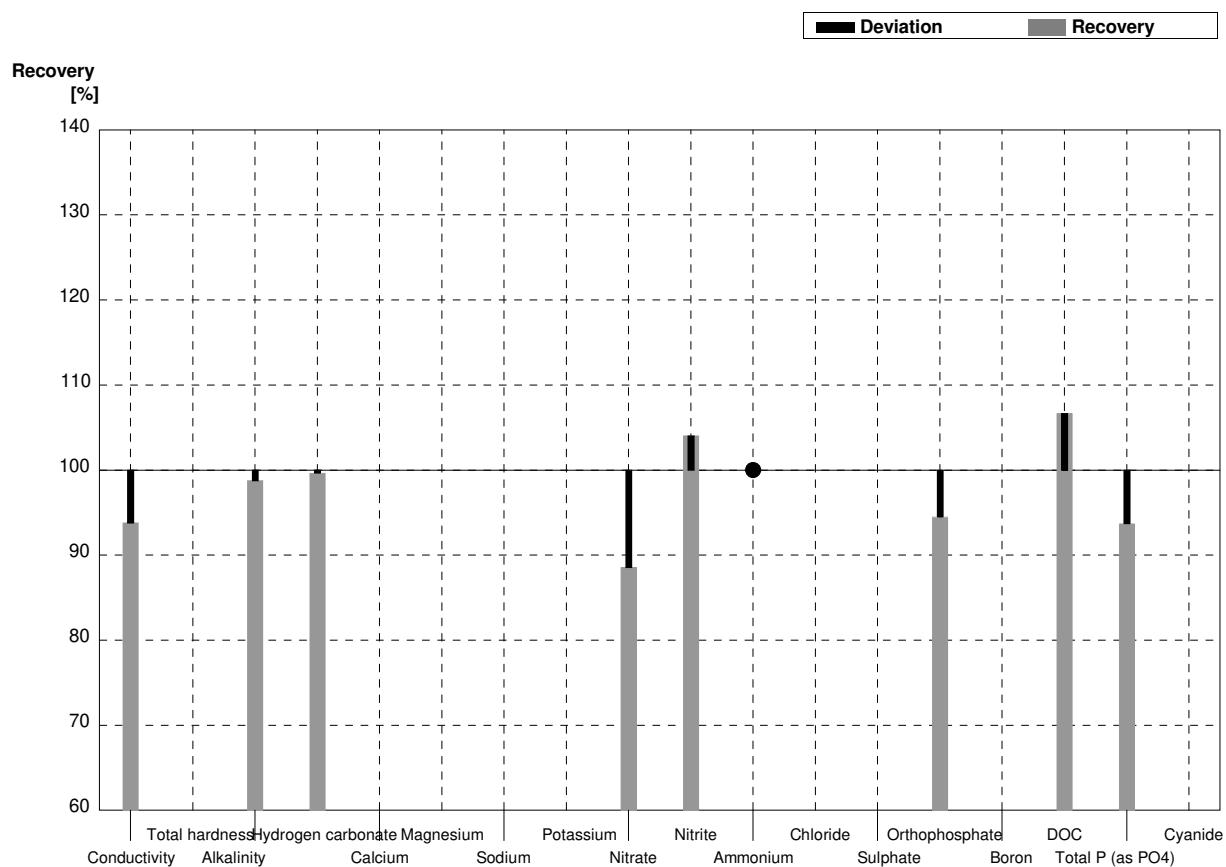
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	395	1			$\mu\text{S}/\text{cm}$	
Total hardness	1,403	0,014			$\text{mmol}/\text{l}$	
Alkalinity	1,246	0,014			$\text{mmol}/\text{l}$	
Hydrogen carbonate	73,0	0,8			$\text{mg}/\text{l}$	
Calcium	37,4	0,5			$\text{mg}/\text{l}$	
Magnesium	11,43	0,14			$\text{mg}/\text{l}$	
Sodium	18,15	0,08			$\text{mg}/\text{l}$	
Potassium	3,17	0,03			$\text{mg}/\text{l}$	
Nitrate	21,4	0,5			$\text{mg}/\text{l}$	
Nitrite	0,0708	0,0008			$\text{mg}/\text{l}$	
Ammonium	0,076	0,003			$\text{mg}/\text{l}$	
Chloride	41,5	0,7			$\text{mg}/\text{l}$	
Sulphate	45,2	0,5			$\text{mg}/\text{l}$	
Orthophosphate	<0,009		<0,05	0,0003	$\text{mg}/\text{l}$	•
Boron	0,0406	0,0004			$\text{mg}/\text{l}$	
DOC	2,39	0,04	2,14	0,168	$\text{mg}/\text{l}$	90%
Total P (as PO <sub>4</sub> )	<0,009		0,153	0,018	$\text{mg}/\text{l}$	FP
Cyanide	0,0354	0,0016	0,0355	0,014	$\text{mg}/\text{l}$	100%



**Sample N163A**

**Laboratory B**

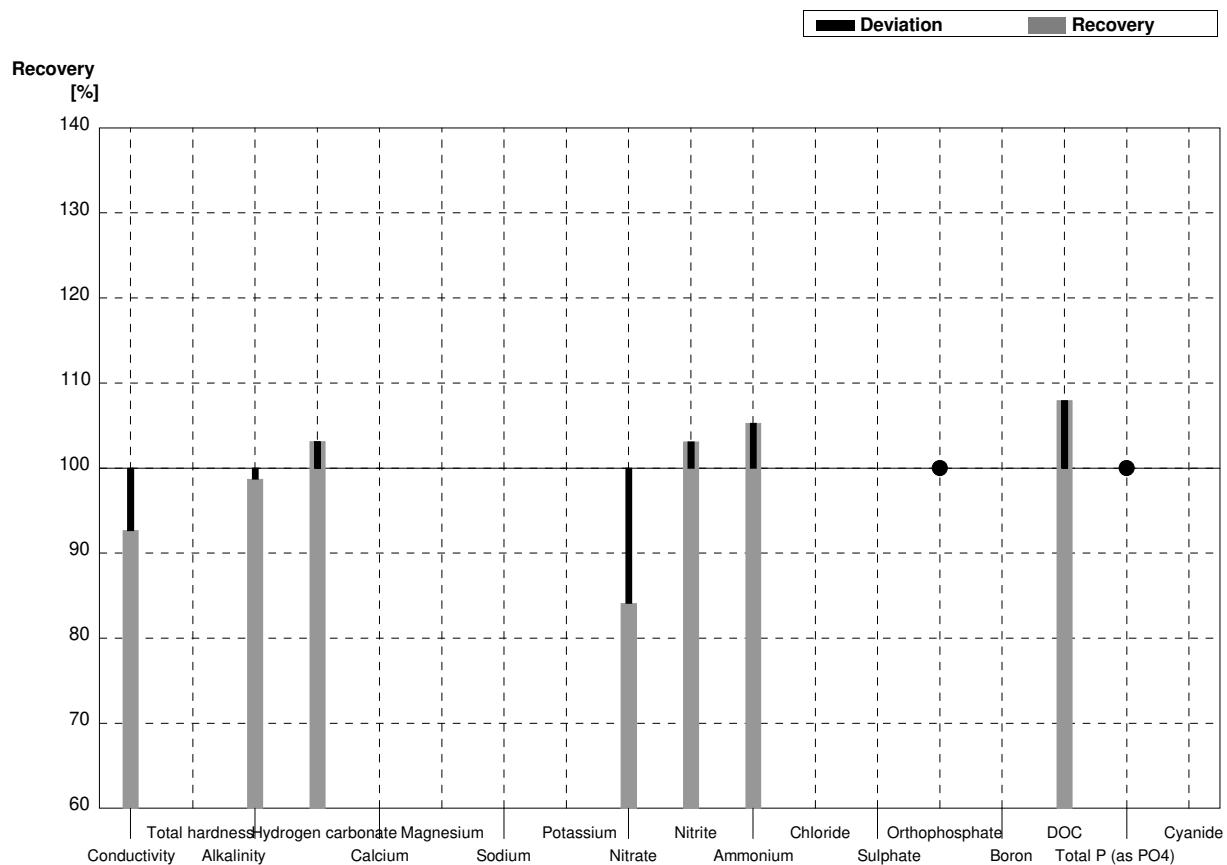
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	849	1,7	µS/cm	94%
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06	4,85	0,002	mmol/l	99%
Hydrogen carbonate	297	4	296	0,002	mg/l	100%
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	55,8	2,4	mg/l	89%
Nitrite	0,0322	0,0010	0,0335	0,001	mg/l	104%
Ammonium	<0,01		<0,003		mg/l	•
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006	0,086	0,001	mg/l	95%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	6,4	0,04	mg/l	107%
Total P (as PO4)	0,207	0,002	0,194	0,004	mg/l	94%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory B**

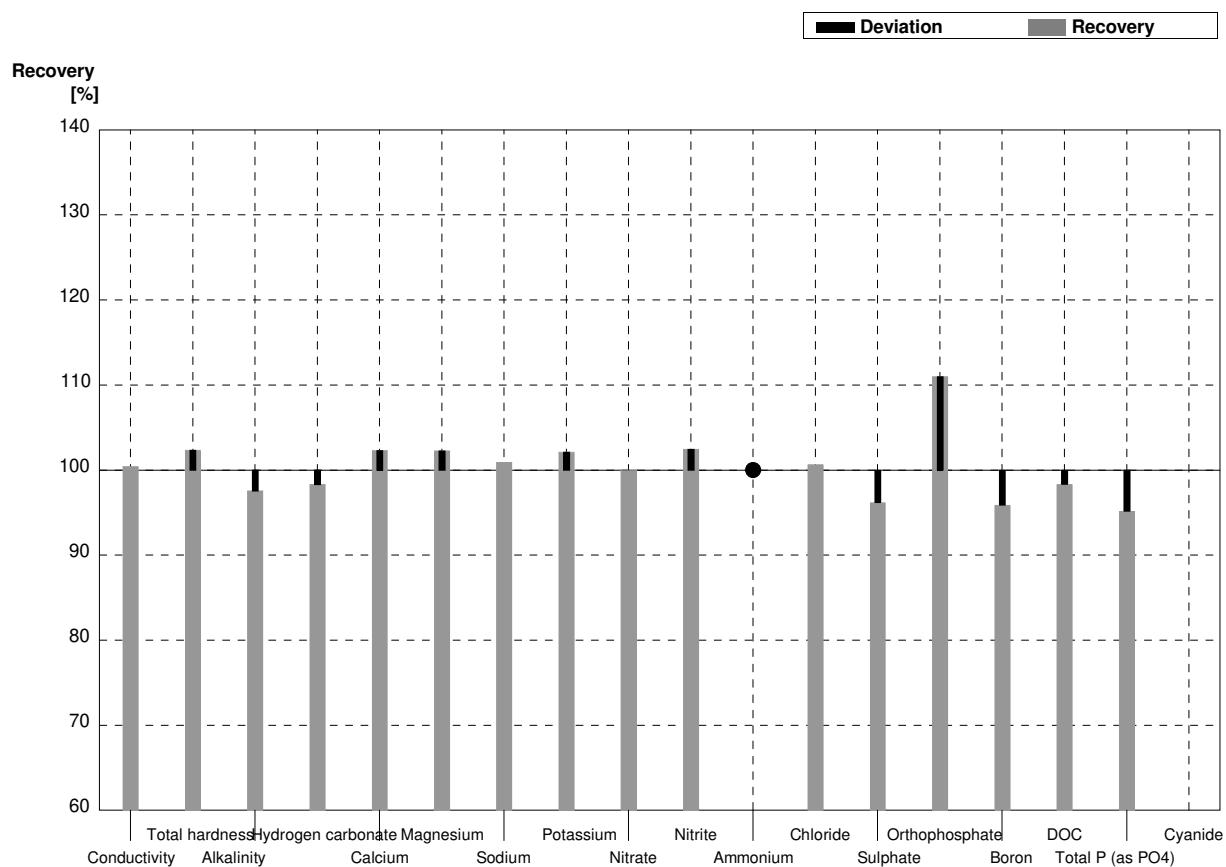
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	366	0,5	µS/cm	93%
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014	1,23	0	mmol/l	99%
Hydrogen carbonate	73,0	0,8	75,3	0	mg/l	103%
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	18,0	0,5	mg/l	84%
Nitrite	0,0708	0,0008	0,073	0,001	mg/l	103%
Ammonium	0,076	0,003	0,080	0,001	mg/l	105%
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009		<0,002		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,58	0,12	mg/l	108%
Total P (as PO4)	<0,009		<0,006		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory C**

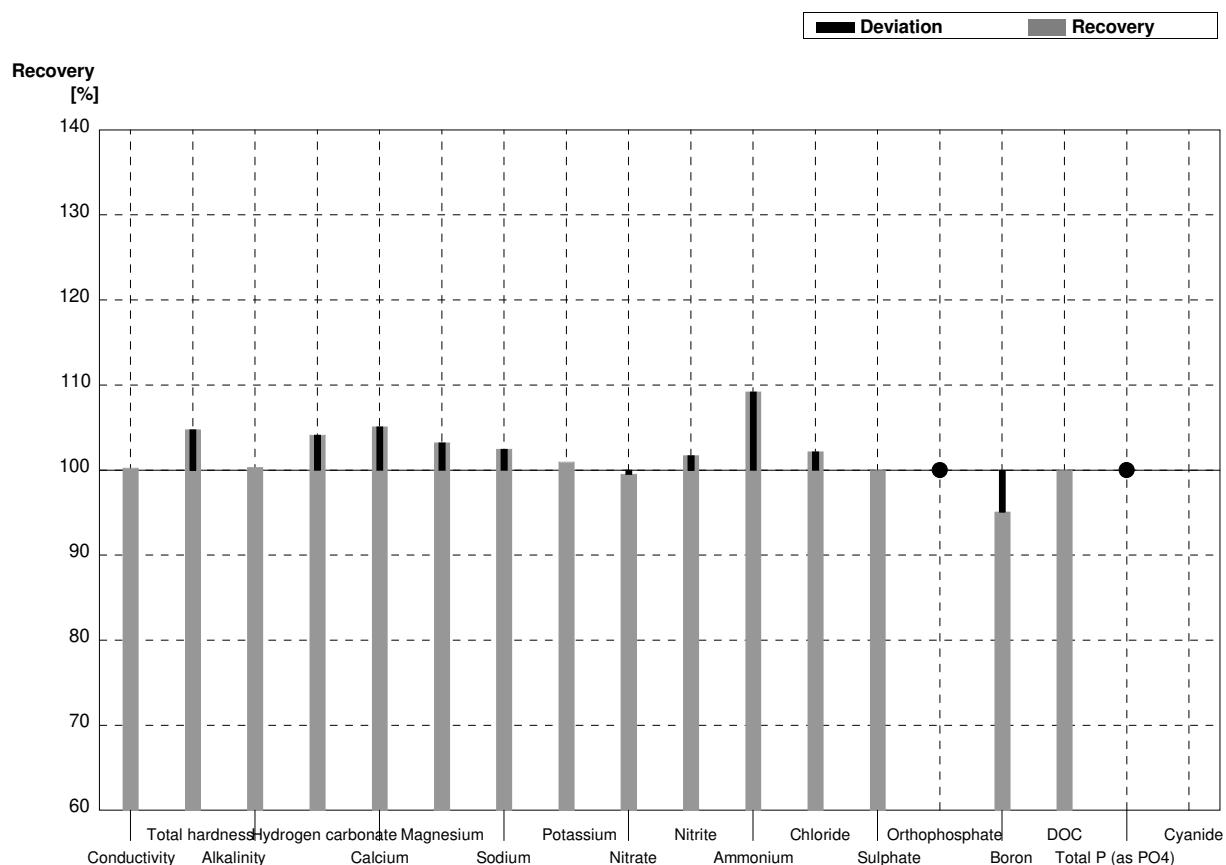
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	909	18	µS/cm	100%
Total hardness	3,37	0,04	3,45	0,23	mmol/l	102%
Alkalinity	4,91	0,06	4,79	0,25	mmol/l	98%
Hydrogen carbonate	297	4	292	23	mg/l	98%
Calcium	98,7	1,4	101	8	mg/l	102%
Magnesium	22,0	0,3	22,5	0,9	mg/l	102%
Sodium	53,5	0,4	54	3	mg/l	101%
Potassium	13,22	0,08	13,5	1,5	mg/l	102%
Nitrate	63,0	1,3	63	5	mg/l	100%
Nitrite	0,0322	0,0010	0,0330	0,0030	mg/l	102%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	60,6	1,5	61	5	mg/l	101%
Sulphate	84,2	0,7	81	5	mg/l	96%
Orthophosphate	0,091	0,006	0,101	0,009	mg/l	111%
Boron	0,1512	0,0013	0,145	0,025	mg/l	96%
DOC	6,00	0,06	5,9	0,7	mg/l	98%
Total P (as PO <sub>4</sub> )	0,207	0,002	0,197	0,018	mg/l	95%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory C**

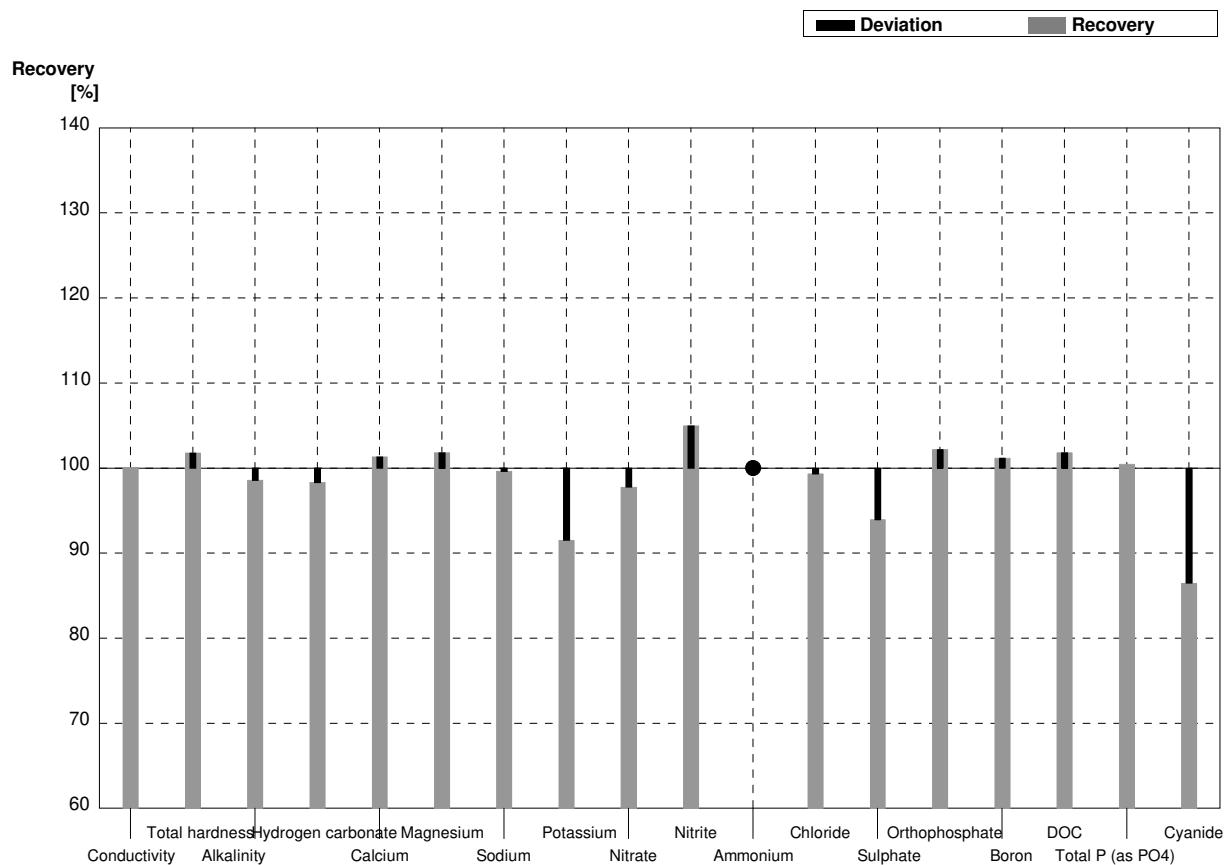
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	396	8	µS/cm	100%
Total hardness	1,403	0,014	1,47	0,10	mmol/l	105%
Alkalinity	1,246	0,014	1,25	0,07	mmol/l	100%
Hydrogen carbonate	73,0	0,8	76	6	mg/l	104%
Calcium	37,4	0,5	39,3	3,1	mg/l	105%
Magnesium	11,43	0,14	11,8	0,9	mg/l	103%
Sodium	18,15	0,08	18,6	2,2	mg/l	102%
Potassium	3,17	0,03	3,20	0,45	mg/l	101%
Nitrate	21,4	0,5	21,3	1,7	mg/l	100%
Nitrite	0,0708	0,0008	0,072	0,007	mg/l	102%
Ammonium	0,076	0,003	0,083	0,026	mg/l	109%
Chloride	41,5	0,7	42,4	3,4	mg/l	102%
Sulphate	45,2	0,5	45,2	2,7	mg/l	100%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,0406	0,0004	0,0386	0,0066	mg/l	95%
DOC	2,39	0,04	2,39	0,29	mg/l	100%
Total P (as PO4)	<0,009		<0,009		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

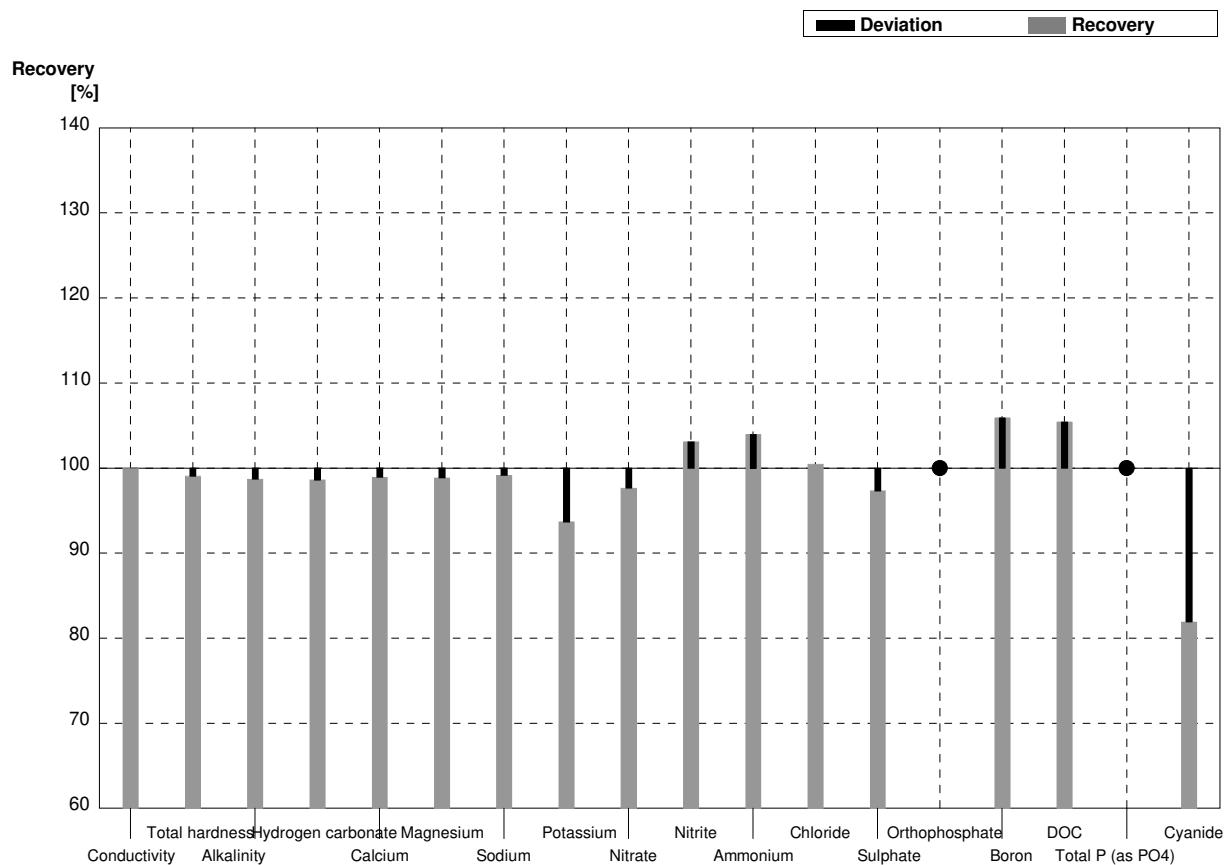
**Laboratory D**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	906	27	µS/cm	100%
Total hardness	3,37	0,04	3,43	0,27	mmol/l	102%
Alkalinity	4,91	0,06	4,84	0,19	mmol/l	99%
Hydrogen carbonate	297	4	292	12	mg/l	98%
Calcium	98,7	1,4	100	5	mg/l	101%
Magnesium	22,0	0,3	22,4	1,4	mg/l	102%
Sodium	53,5	0,4	53,3	2,1	mg/l	100%
Potassium	13,22	0,08	12,1	1,0	mg/l	92%
Nitrate	63,0	1,3	61,6	3,7	mg/l	98%
Nitrite	0,0322	0,0010	0,0338	0,003	mg/l	105%
Ammonium	<0,01		<0,008		mg/l	•
Chloride	60,6	1,5	60,2	3,0	mg/l	99%
Sulphate	84,2	0,7	79,1	4,8	mg/l	94%
Orthophosphate	0,091	0,006	0,093	0,005	mg/l	102%
Boron	0,1512	0,0013	0,153	0,015	mg/l	101%
DOC	6,00	0,06	6,11	0,61	mg/l	102%
Total P (as PO <sub>4</sub> )	0,207	0,002	0,208	0,015	mg/l	100%
Cyanide	0,0533	0,0016	0,0461	0,014	mg/l	86%



**Sample N163B****Laboratory D**

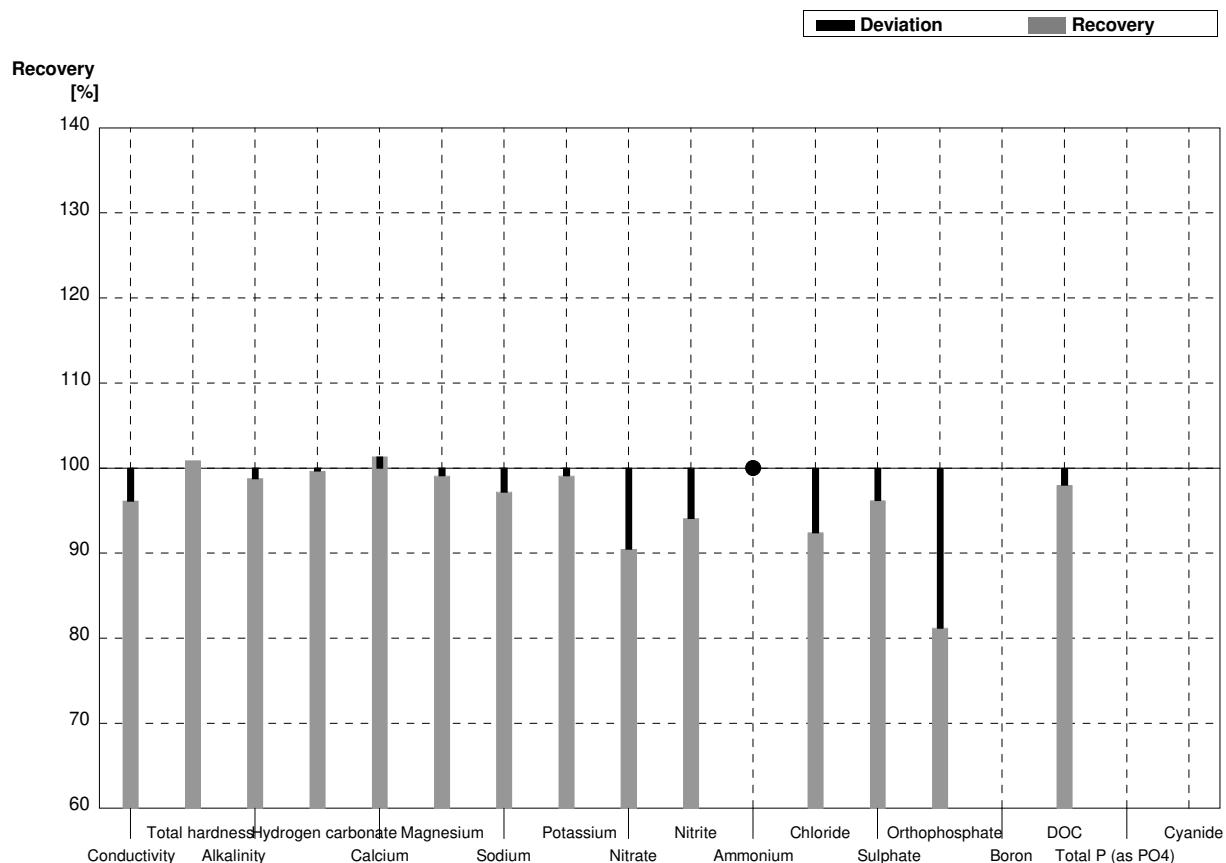
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	395	1	395	12	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,403	0,014	1,39	0,12	$\text{mmol}/\text{l}$	99%
Alkalinity	1,246	0,014	1,23	0,06	$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	73,0	0,8	72,0	2,9	$\text{mg}/\text{l}$	99%
Calcium	37,4	0,5	37,0	1,9	$\text{mg}/\text{l}$	99%
Magnesium	11,43	0,14	11,3	0,7	$\text{mg}/\text{l}$	99%
Sodium	18,15	0,08	18,0	0,8	$\text{mg}/\text{l}$	99%
Potassium	3,17	0,03	2,97	0,25	$\text{mg}/\text{l}$	94%
Nitrate	21,4	0,5	20,9	1,3	$\text{mg}/\text{l}$	98%
Nitrite	0,0708	0,0008	0,073	0,006	$\text{mg}/\text{l}$	103%
Ammonium	0,076	0,003	0,079	0,008	$\text{mg}/\text{l}$	104%
Chloride	41,5	0,7	41,7	2,1	$\text{mg}/\text{l}$	100%
Sulphate	45,2	0,5	44,0	2,7	$\text{mg}/\text{l}$	97%
Orthophosphate	<0,009		<0,006		$\text{mg}/\text{l}$	•
Boron	0,0406	0,0004	0,0430	0,005	$\text{mg}/\text{l}$	106%
DOC	2,39	0,04	2,52	0,26	$\text{mg}/\text{l}$	105%
Total P (as PO <sub>4</sub> )	<0,009		<0,006		$\text{mg}/\text{l}$	•
Cyanide	0,0354	0,0016	0,0290	0,009	$\text{mg}/\text{l}$	82%



**Sample N163A**

**Laboratory E**

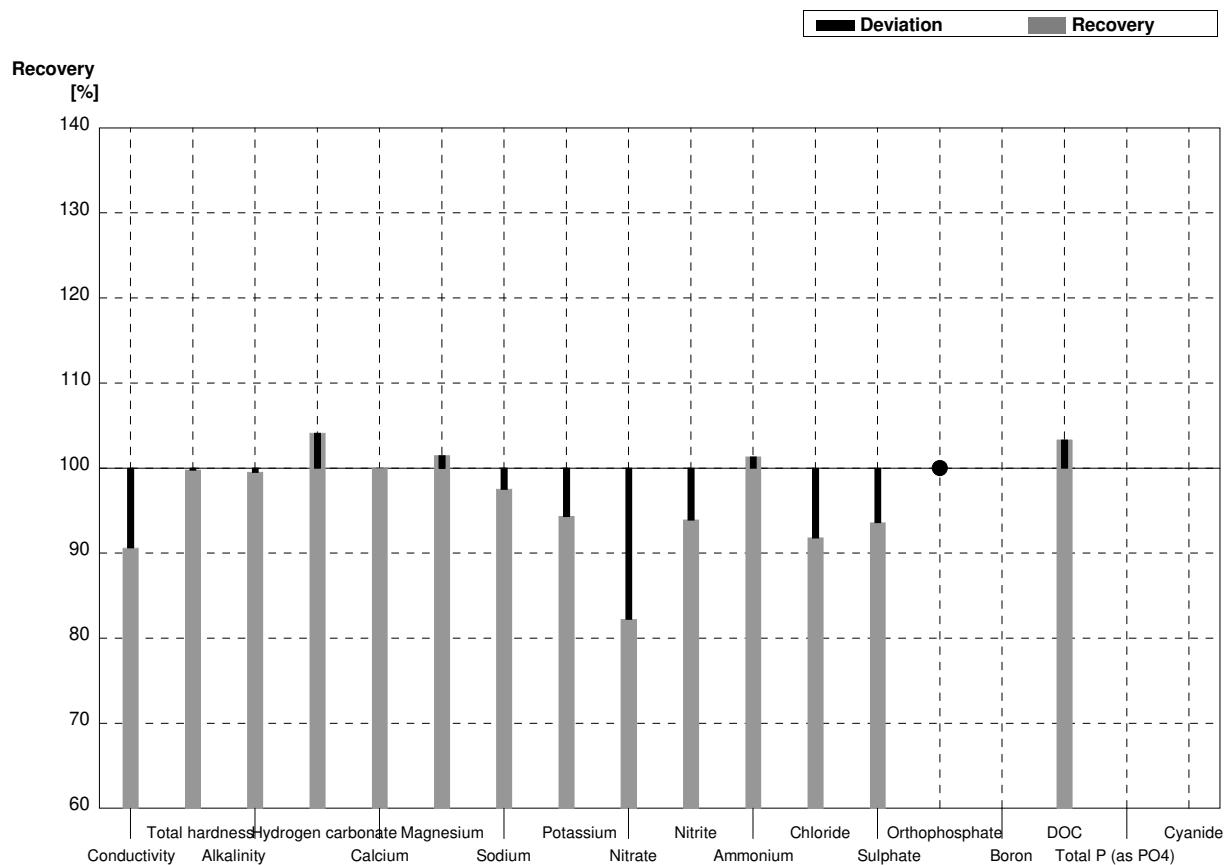
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	870		µS/cm	96%
Total hardness	3,37	0,04	3,40		mmol/l	101%
Alkalinity	4,91	0,06	4,85		mmol/l	99%
Hydrogen carbonate	297	4	296		mg/l	100%
Calcium	98,7	1,4	100		mg/l	101%
Magnesium	22,0	0,3	21,8		mg/l	99%
Sodium	53,5	0,4	52		mg/l	97%
Potassium	13,22	0,08	13,1		mg/l	99%
Nitrate	63,0	1,3	57		mg/l	90%
Nitrite	0,0322	0,0010	0,0303		mg/l	94%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	56		mg/l	92%
Sulphate	84,2	0,7	81		mg/l	96%
Orthophosphate	0,091	0,006	0,0739		mg/l	81%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	5,88		mg/l	98%
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

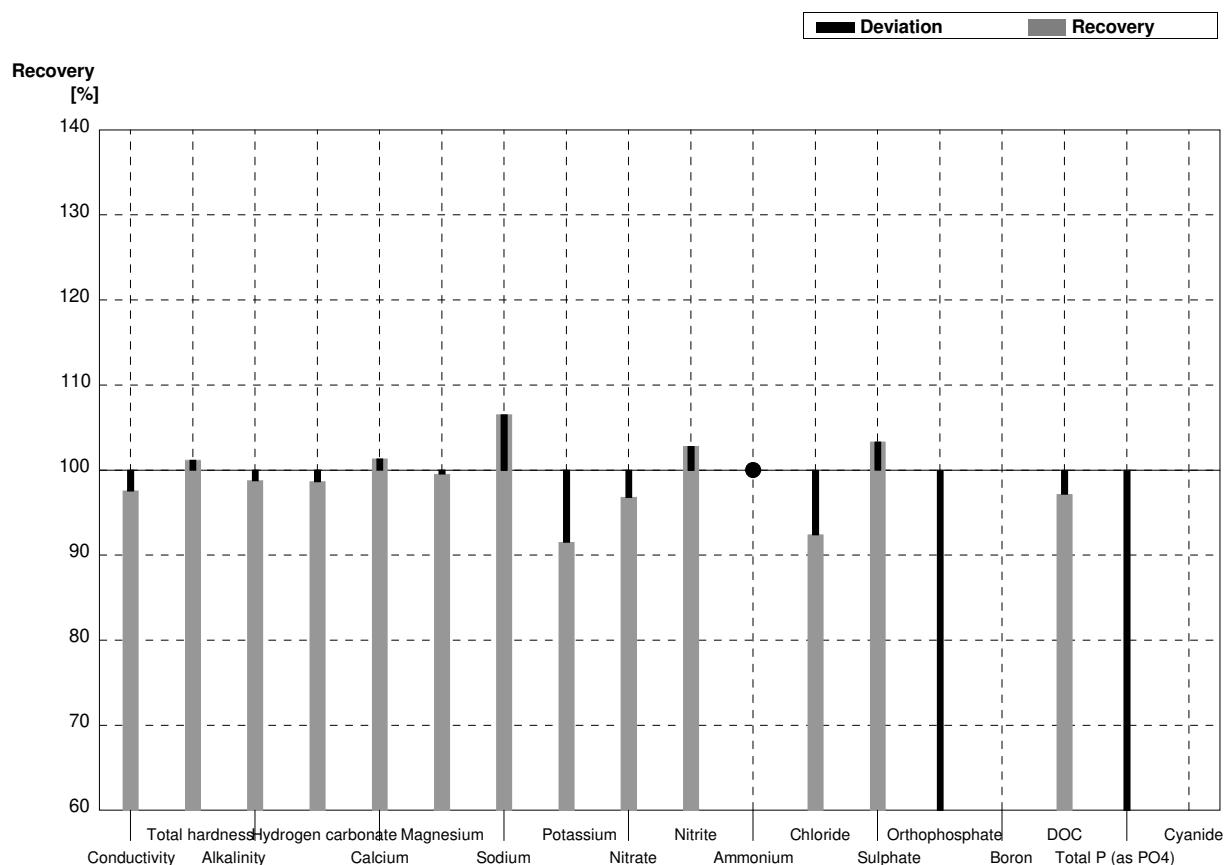
**Laboratory E**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	358		µS/cm	91%
Total hardness	1,403	0,014	1,40		mmol/l	100%
Alkalinity	1,246	0,014	1,24		mmol/l	100%
Hydrogen carbonate	73,0	0,8	76		mg/l	104%
Calcium	37,4	0,5	37,4		mg/l	100%
Magnesium	11,43	0,14	11,6		mg/l	101%
Sodium	18,15	0,08	17,7		mg/l	98%
Potassium	3,17	0,03	2,99		mg/l	94%
Nitrate	21,4	0,5	17,6		mg/l	82%
Nitrite	0,0708	0,0008	0,0665		mg/l	94%
Ammonium	0,076	0,003	0,0770		mg/l	101%
Chloride	41,5	0,7	38,1		mg/l	92%
Sulphate	45,2	0,5	42,3		mg/l	94%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,47		mg/l	103%
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



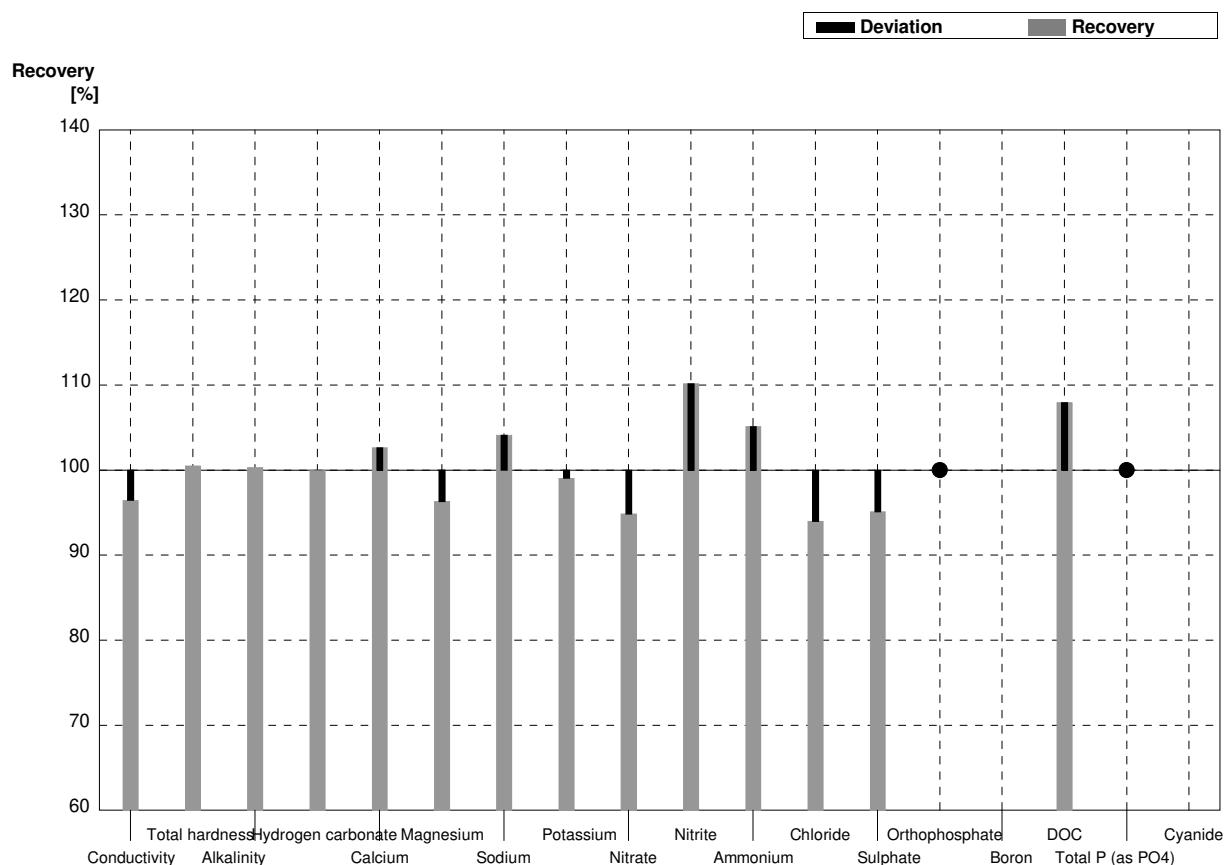
**Sample N163A****Laboratory F**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	883	18	$\mu\text{S}/\text{cm}$	98%
Total hardness	3,37	0,04	3,41	0,17	$\text{mmol}/\text{l}$	101%
Alkalinity	4,91	0,06	4,85	0,15	$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	297	4	293	9	$\text{mg}/\text{l}$	99%
Calcium	98,7	1,4	100	5	$\text{mg}/\text{l}$	101%
Magnesium	22,0	0,3	21,9	1,5	$\text{mg}/\text{l}$	100%
Sodium	53,5	0,4	57	3	$\text{mg}/\text{l}$	107%
Potassium	13,22	0,08	12,1	1	$\text{mg}/\text{l}$	92%
Nitrate	63,0	1,3	61	3	$\text{mg}/\text{l}$	97%
Nitrite	0,0322	0,0010	0,0331	0,01	$\text{mg}/\text{l}$	103%
Ammonium	<0,01		<0,0082		$\text{mg}/\text{l}$	•
Chloride	60,6	1,5	56	3	$\text{mg}/\text{l}$	92%
Sulphate	84,2	0,7	87	5	$\text{mg}/\text{l}$	103%
Orthophosphate	0,091	0,006	0,0310	0,005	$\text{mg}/\text{l}$	34%
Boron	0,1512	0,0013			$\text{mg}/\text{l}$	
DOC	6,00	0,06	5,83	0,29	$\text{mg}/\text{l}$	97%
Total P (as PO <sub>4</sub> )	0,207	0,002	0,0100	0,005	$\text{mg}/\text{l}$	5%
Cyanide	0,0533	0,0016			$\text{mg}/\text{l}$	



**Sample N163B****Laboratory F**

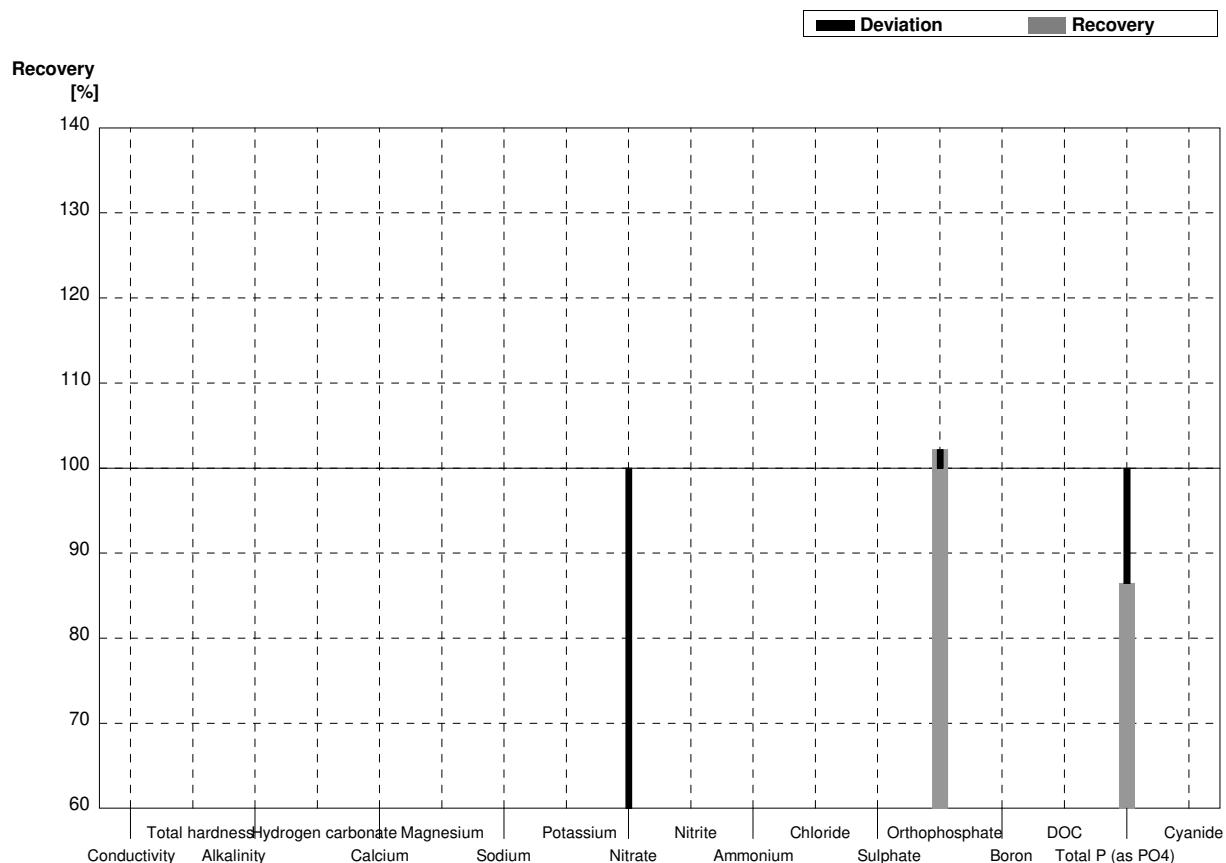
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	381	8	$\mu\text{S}/\text{cm}$	96%
Total hardness	1,403	0,014	1,41	0,1	mmol/l	100%
Alkalinity	1,246	0,014	1,25	0,15	mmol/l	100%
Hydrogen carbonate	73,0	0,8	73	3	mg/l	100%
Calcium	37,4	0,5	38,4	2	mg/l	103%
Magnesium	11,43	0,14	11,01	1	mg/l	96%
Sodium	18,15	0,08	18,9	1	mg/l	104%
Potassium	3,17	0,03	3,14	0,3	mg/l	99%
Nitrate	21,4	0,5	20,3	1,2	mg/l	95%
Nitrite	0,0708	0,0008	0,078	0,01	mg/l	110%
Ammonium	0,076	0,003	0,0799	0,013	mg/l	105%
Chloride	41,5	0,7	39,0	2	mg/l	94%
Sulphate	45,2	0,5	43,0	3	mg/l	95%
Orthophosphate	<0,009		<0,0023		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,58	0,29	mg/l	108%
Total P (as PO <sub>4</sub> )	<0,009		<0,001		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory G**

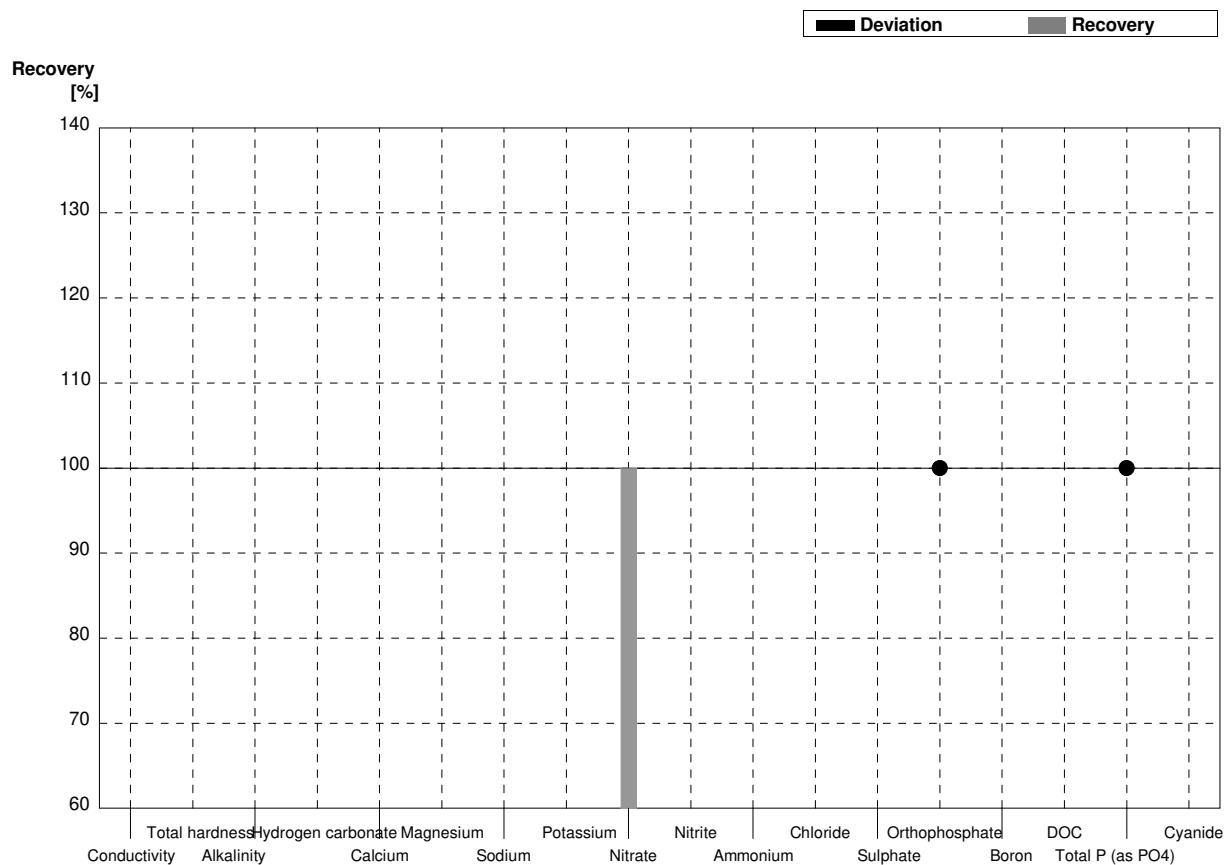
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	22,2	2,72	mg/l	35%
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006	0,093	0,0142	mg/l	102%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO <sub>4</sub> )	0,207	0,002	0,179	0,0043	mg/l	86%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory G**

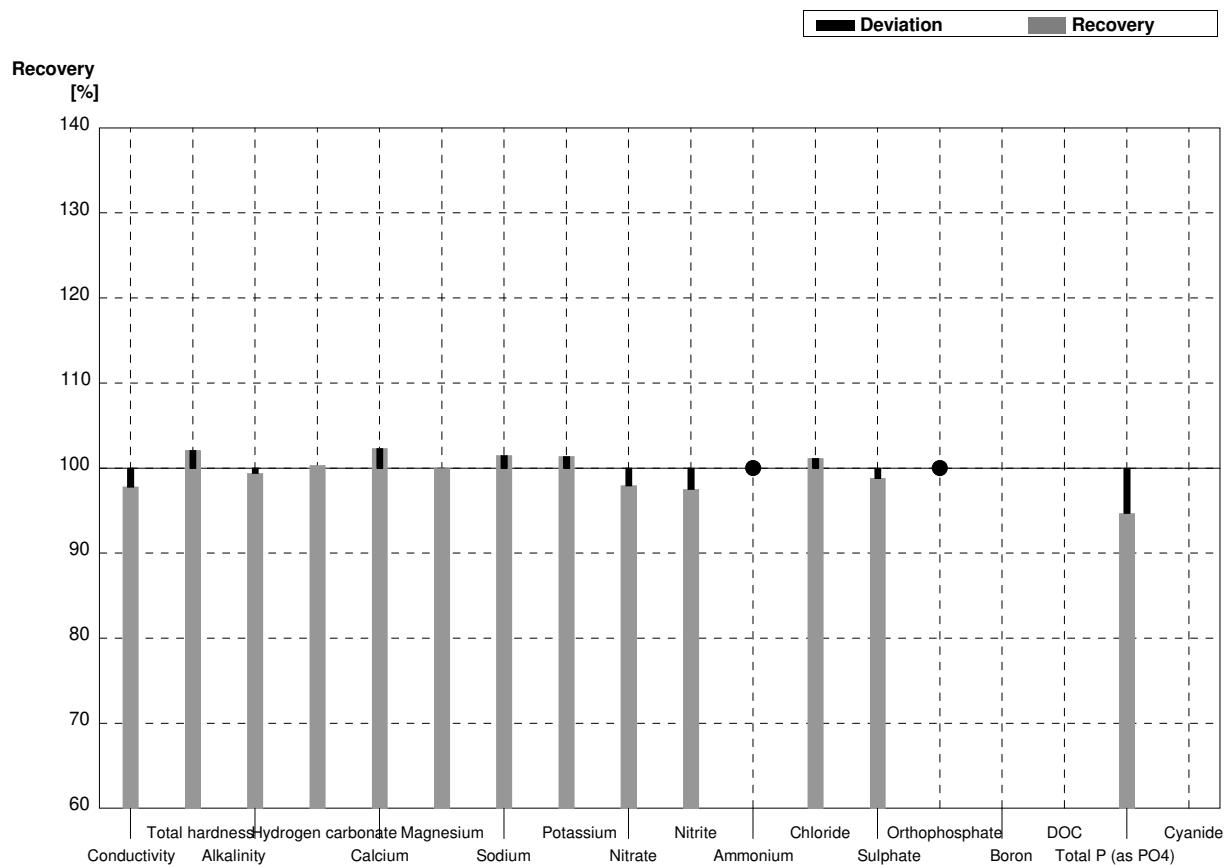
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	21,4	1,29	mg/l	100%
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009		<0,019		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO <sub>4</sub> )	<0,009		<0,02		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

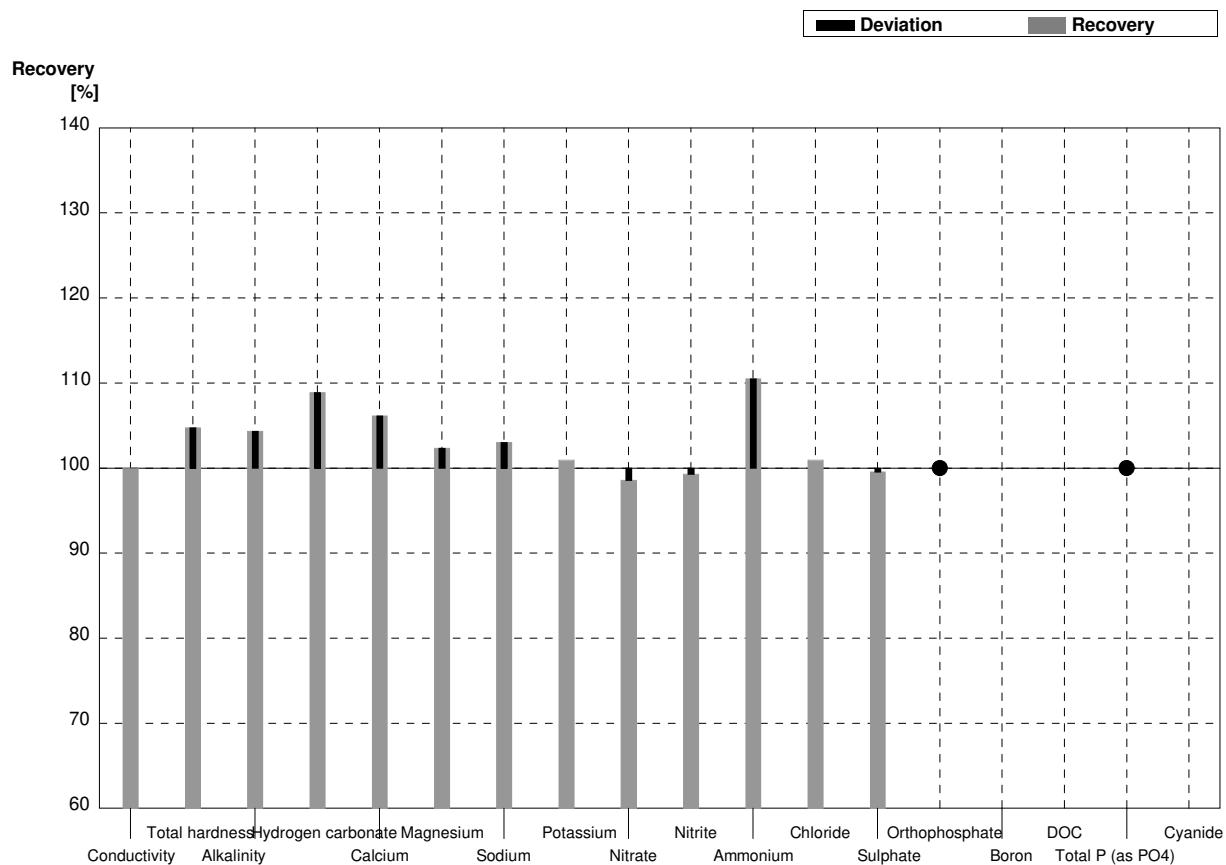
**Laboratory H**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	885	88	µS/cm	98%
Total hardness	3,37	0,04	3,44	0,34	mmol/l	102%
Alkalinity	4,91	0,06	4,88		mmol/l	99%
Hydrogen carbonate	297	4	298		mg/l	100%
Calcium	98,7	1,4	101	10,1	mg/l	102%
Magnesium	22,0	0,3	22,0	2,2	mg/l	100%
Sodium	53,5	0,4	54,3	5,4	mg/l	101%
Potassium	13,22	0,08	13,4	1,3	mg/l	101%
Nitrate	63,0	1,3	61,7	6,2	mg/l	98%
Nitrite	0,0322	0,0010	0,0314	0,006	mg/l	98%
Ammonium	<0,01		<0,04		mg/l	•
Chloride	60,6	1,5	61,3	6,1	mg/l	101%
Sulphate	84,2	0,7	83,2	8,3	mg/l	99%
Orthophosphate	0,091	0,006	<0,15		mg/l	•
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002	0,196	0,020	mg/l	95%
Cyanide	0,0533	0,0016			mg/l	



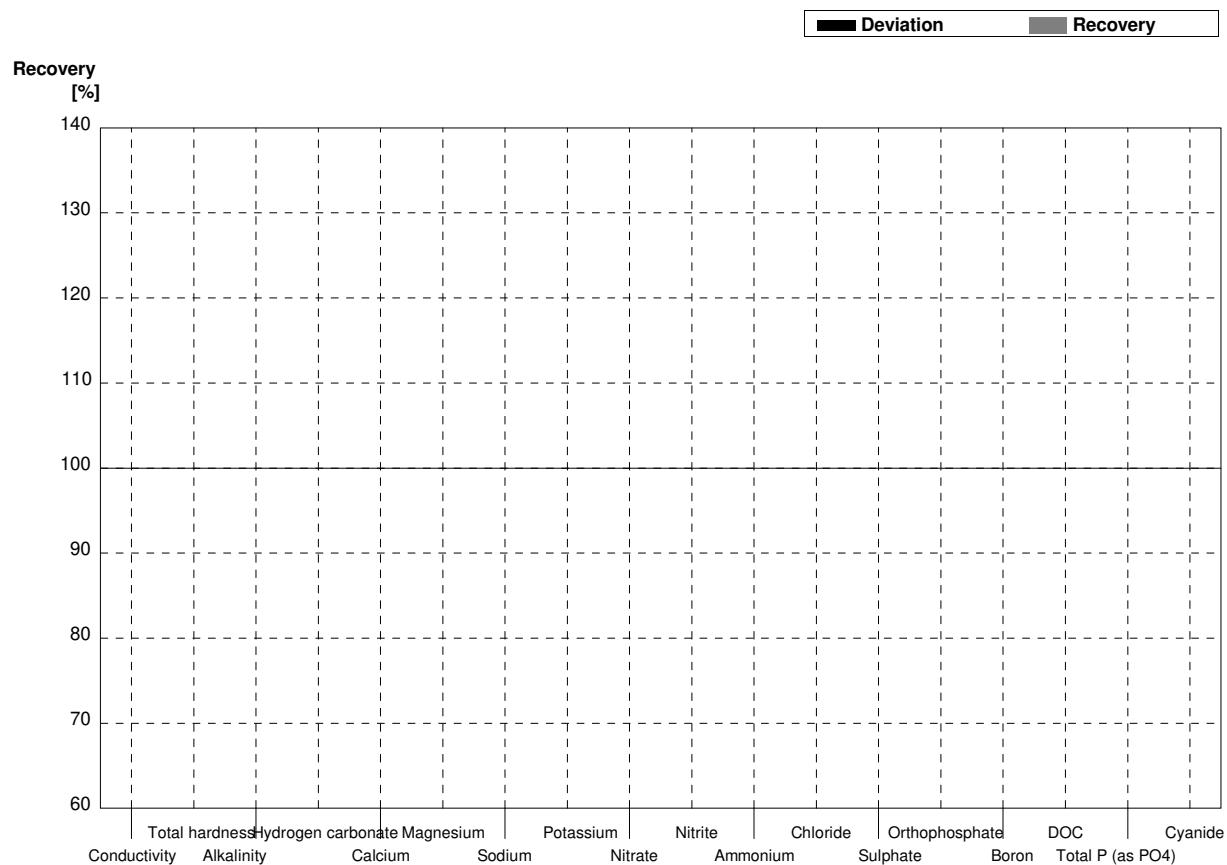
**Sample N163B****Laboratory H**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	395	39	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,403	0,014	1,47	0,15	$\text{mmol}/\text{l}$	105%
Alkalinity	1,246	0,014	1,30		$\text{mmol}/\text{l}$	104%
Hydrogen carbonate	73,0	0,8	79,5		$\text{mg}/\text{l}$	109%
Calcium	37,4	0,5	39,7	3,9	$\text{mg}/\text{l}$	106%
Magnesium	11,43	0,14	11,7	1,2	$\text{mg}/\text{l}$	102%
Sodium	18,15	0,08	18,7	1,9	$\text{mg}/\text{l}$	103%
Potassium	3,17	0,03	3,20	0,32	$\text{mg}/\text{l}$	101%
Nitrate	21,4	0,5	21,1	2,1	$\text{mg}/\text{l}$	99%
Nitrite	0,0708	0,0008	0,0703	0,014	$\text{mg}/\text{l}$	99%
Ammonium	0,076	0,003	0,084	0,017	$\text{mg}/\text{l}$	111%
Chloride	41,5	0,7	41,9	4,2	$\text{mg}/\text{l}$	101%
Sulphate	45,2	0,5	45,0	4,5	$\text{mg}/\text{l}$	100%
Orthophosphate	<0,009		<0,15		$\text{mg}/\text{l}$	•
Boron	0,0406	0,0004			$\text{mg}/\text{l}$	
DOC	2,39	0,04			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	<0,009		<0,15		$\text{mg}/\text{l}$	•
Cyanide	0,0354	0,0016			$\text{mg}/\text{l}$	



**Sample N163A****Laboratory I**

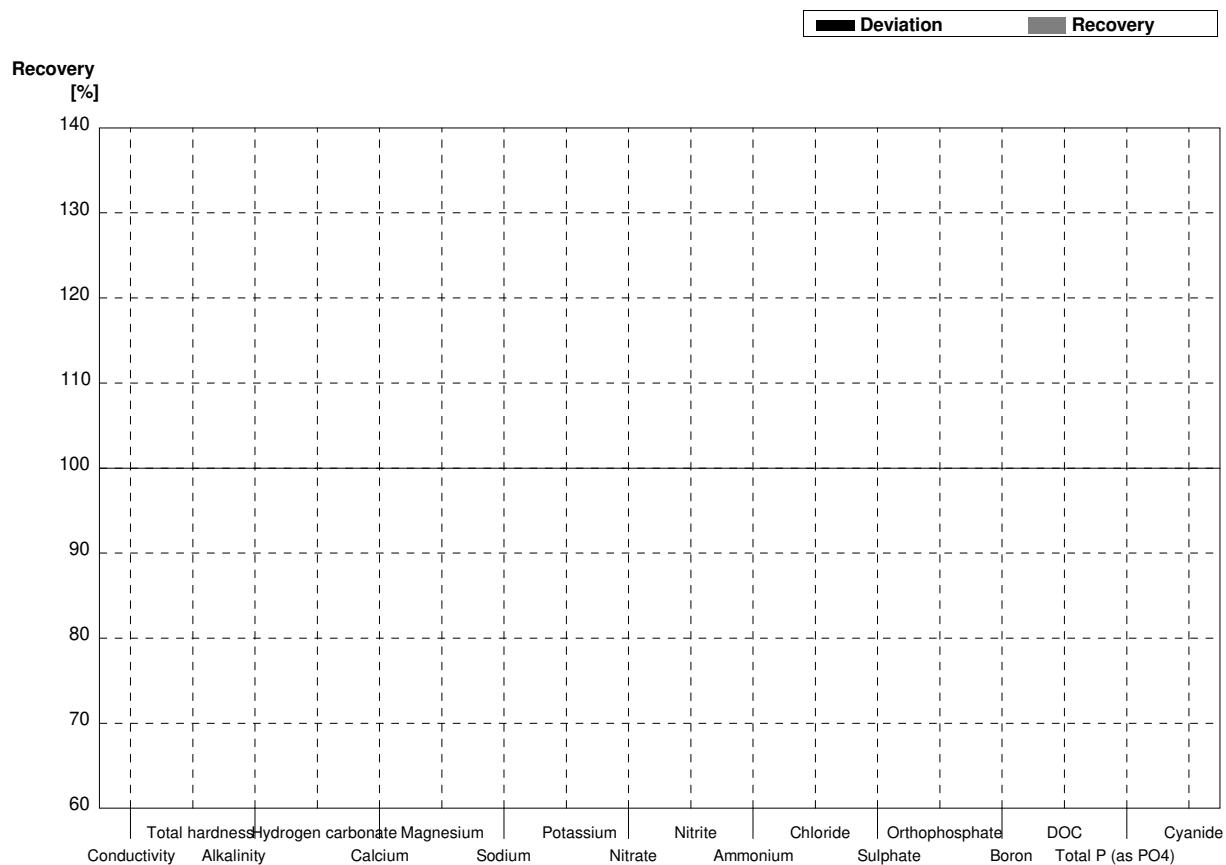
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3			$\mu\text{S}/\text{cm}$	
Total hardness	3,37	0,04			$\text{mmol}/\text{l}$	
Alkalinity	4,91	0,06			$\text{mmol}/\text{l}$	
Hydrogen carbonate	297	4			$\text{mg}/\text{l}$	
Calcium	98,7	1,4			$\text{mg}/\text{l}$	
Magnesium	22,0	0,3			$\text{mg}/\text{l}$	
Sodium	53,5	0,4			$\text{mg}/\text{l}$	
Potassium	13,22	0,08			$\text{mg}/\text{l}$	
Nitrate	63,0	1,3			$\text{mg}/\text{l}$	
Nitrite	0,0322	0,0010			$\text{mg}/\text{l}$	
Ammonium	<0,01				$\text{mg}/\text{l}$	
Chloride	60,6	1,5			$\text{mg}/\text{l}$	
Sulphate	84,2	0,7			$\text{mg}/\text{l}$	
Orthophosphate	0,091	0,006			$\text{mg}/\text{l}$	
Boron	0,1512	0,0013			$\text{mg}/\text{l}$	
DOC	6,00	0,06			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	0,207	0,002			$\text{mg}/\text{l}$	
Cyanide	0,0533	0,0016			$\text{mg}/\text{l}$	



Sample N163B

Laboratory I

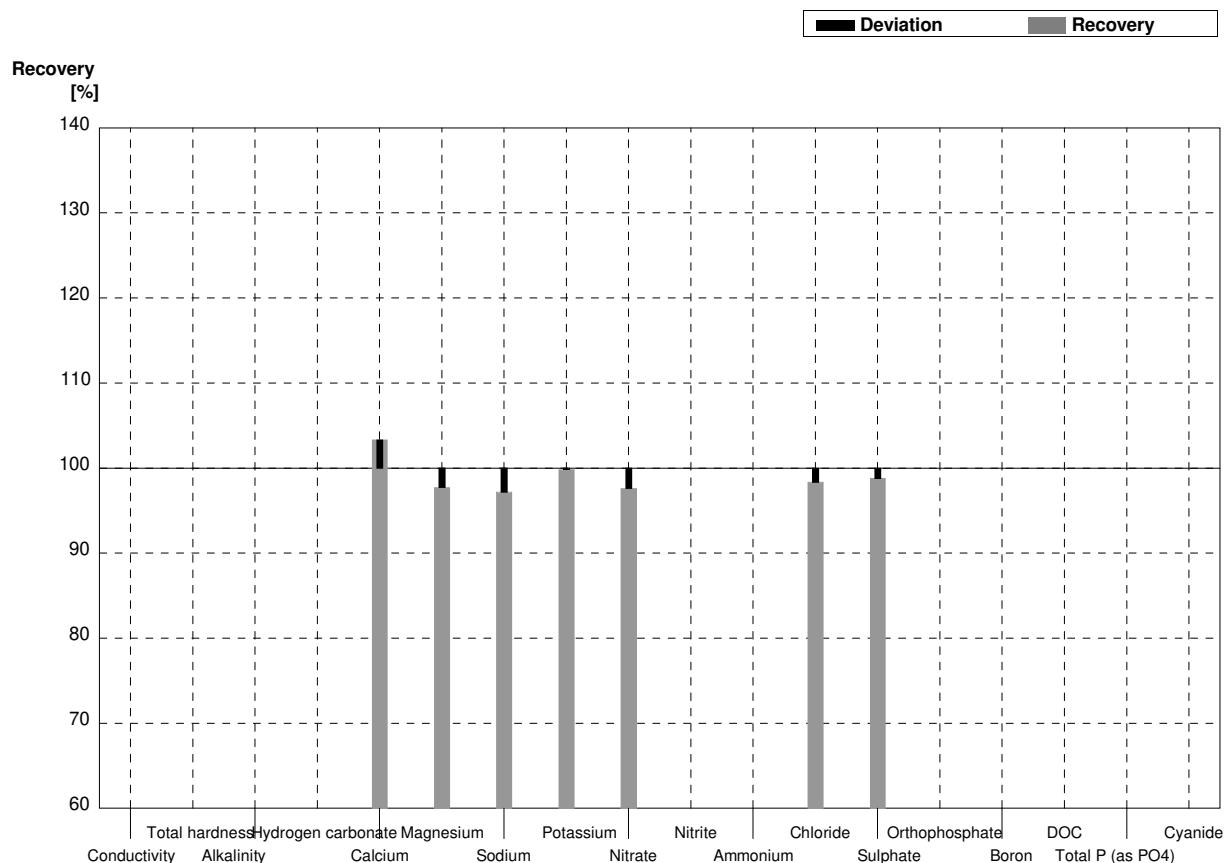
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO <sub>4</sub> )	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory J**

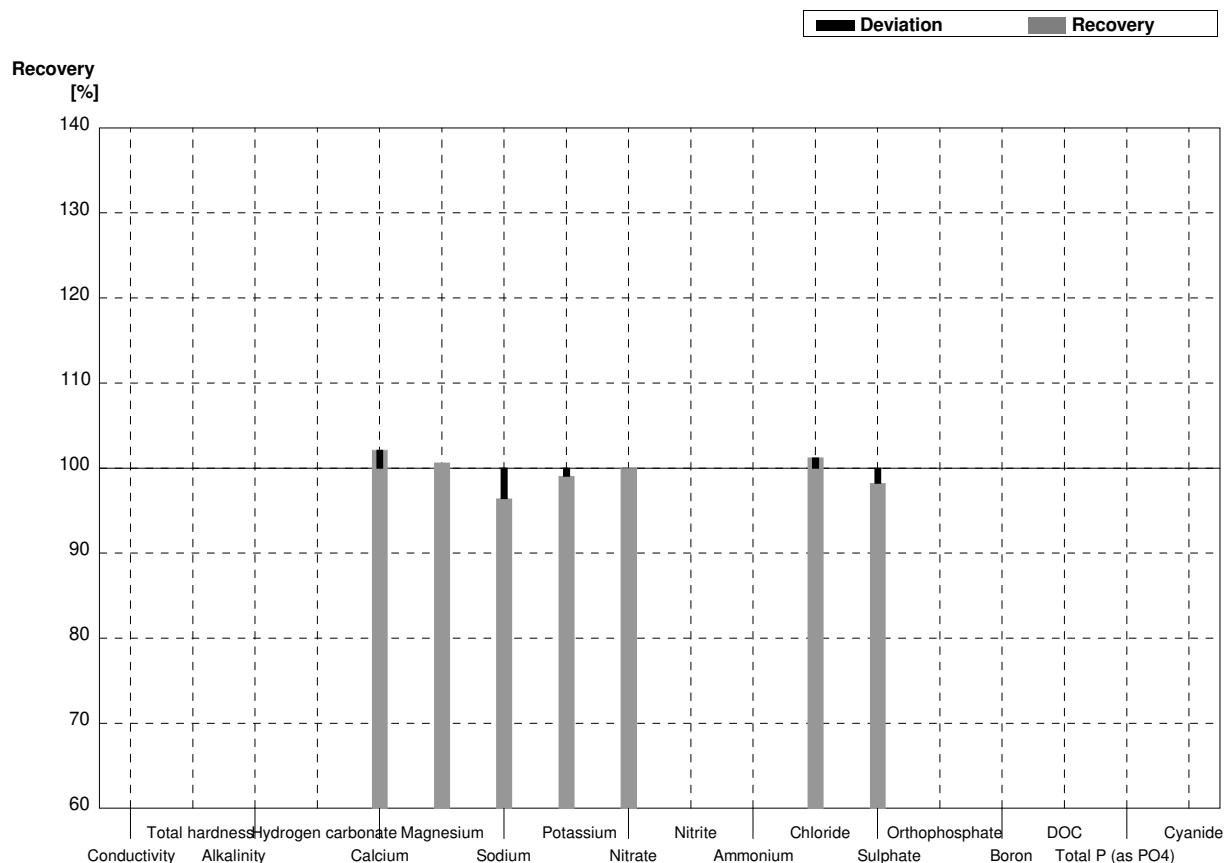
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	102	2	mg/l	103%
Magnesium	22,0	0,3	21,5	0,3	mg/l	98%
Sodium	53,5	0,4	52,0	0,4	mg/l	97%
Potassium	13,22	0,08	13,2	0,1	mg/l	100%
Nitrate	63,0	1,3	61,5	0,5	mg/l	98%
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5	59,6	0,2	mg/l	98%
Sulphate	84,2	0,7	83,2	0,3	mg/l	99%
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory J**

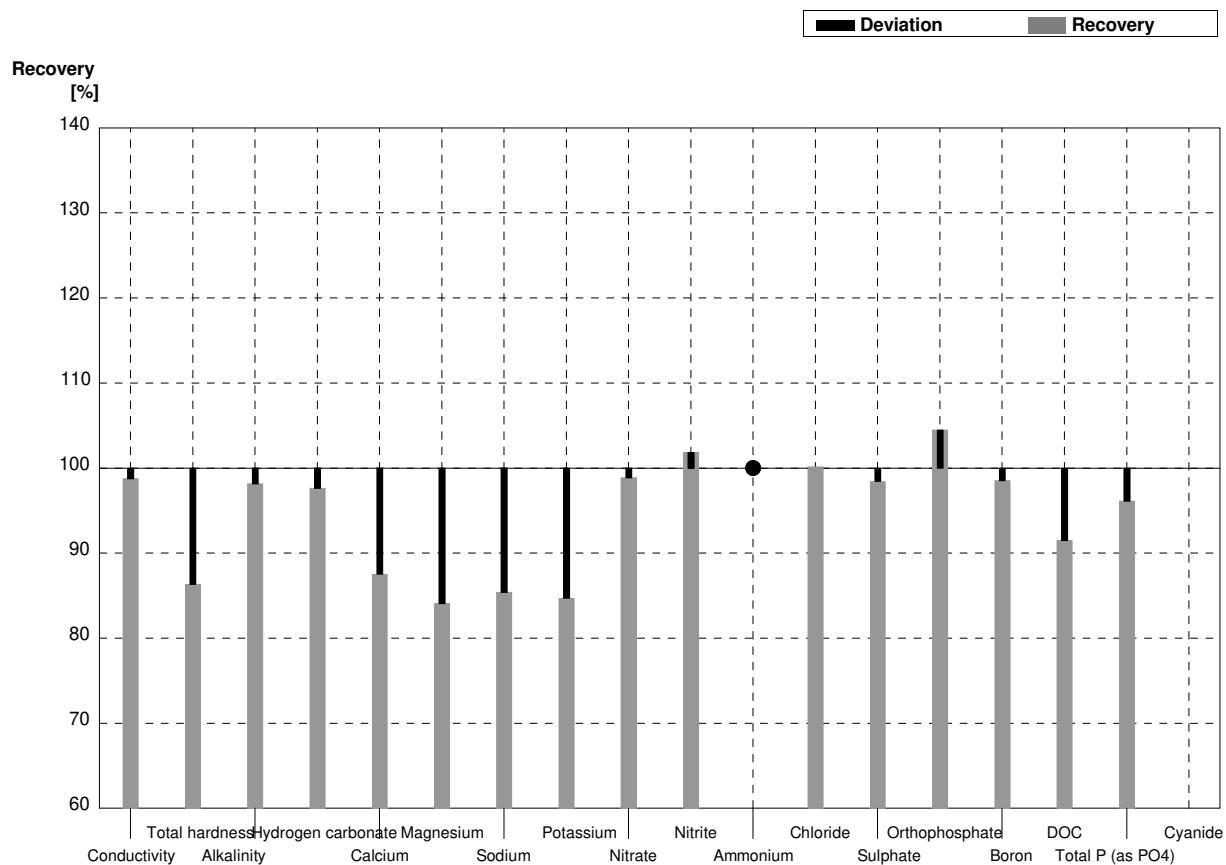
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	38,2	0,2	mg/l	102%
Magnesium	11,43	0,14	11,5	0,1	mg/l	101%
Sodium	18,15	0,08	17,5	0,2	mg/l	96%
Potassium	3,17	0,03	3,14	0,06	mg/l	99%
Nitrate	21,4	0,5	21,4	0,3	mg/l	100%
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7	42,0	0,2	mg/l	101%
Sulphate	45,2	0,5	44,4	0,3	mg/l	98%
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



Sample N163A

Laboratory K

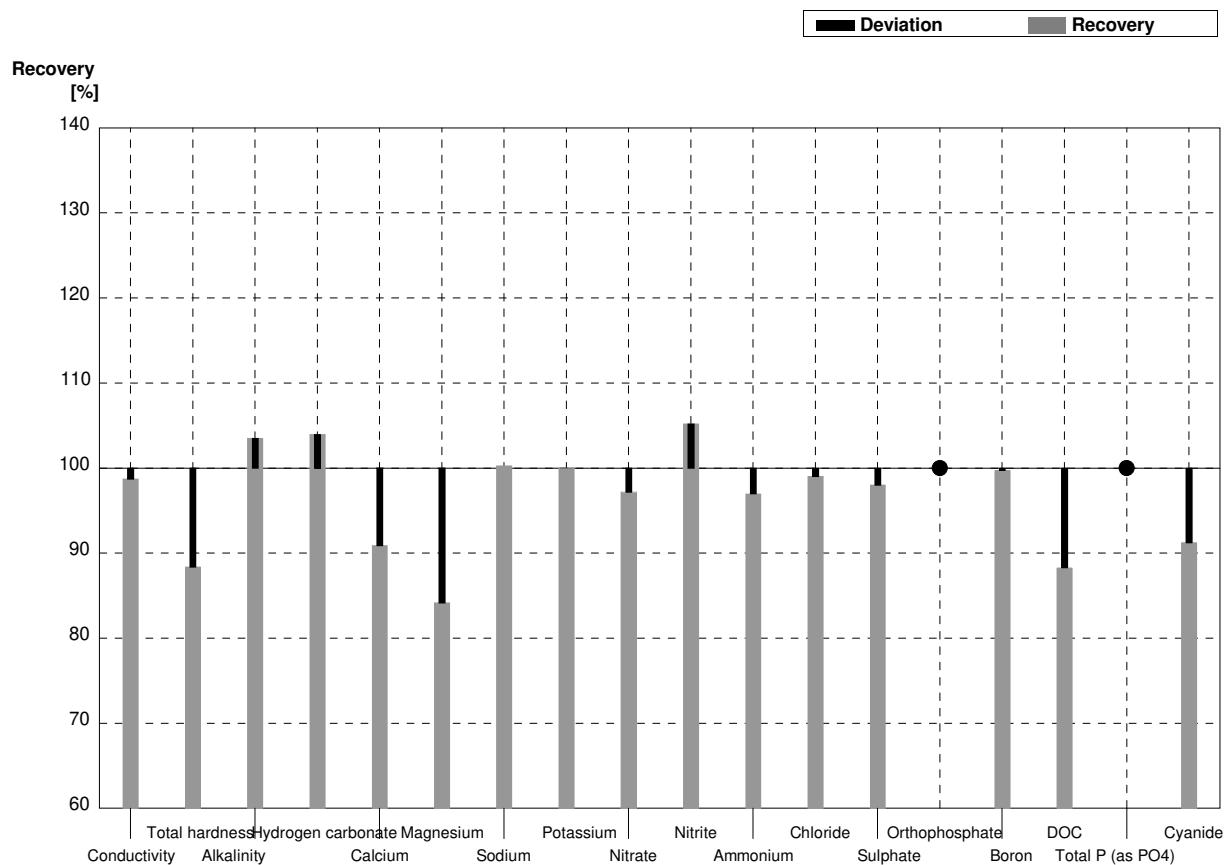
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	894	3,00	µS/cm	99%
Total hardness	3,37	0,04	2,91	0,21	mmol/l	86%
Alkalinity	4,91	0,06	4,82	0,040	mmol/l	98%
Hydrogen carbonate	297	4	290	0,58	mg/l	98%
Calcium	98,7	1,4	86,4	1,2	mg/l	88%
Magnesium	22,0	0,3	18,5	0,40	mg/l	84%
Sodium	53,5	0,4	45,7	3,4	mg/l	85%
Potassium	13,22	0,08	11,2	0,79	mg/l	85%
Nitrate	63,0	1,3	62,3	0,297	mg/l	99%
Nitrite	0,0322	0,0010	0,0328	0,001	mg/l	102%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	60,6	1,5	60,7	0,347	mg/l	100%
Sulphate	84,2	0,7	82,9	0,810	mg/l	98%
Orthophosphate	0,091	0,006	0,0951	0,001	mg/l	105%
Boron	0,1512	0,0013	0,149	0,003	mg/l	99%
DOC	6,00	0,06	5,49	0,012	mg/l	92%
Total P (as PO4)	0,207	0,002	0,199	0,001	mg/l	96%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory K**

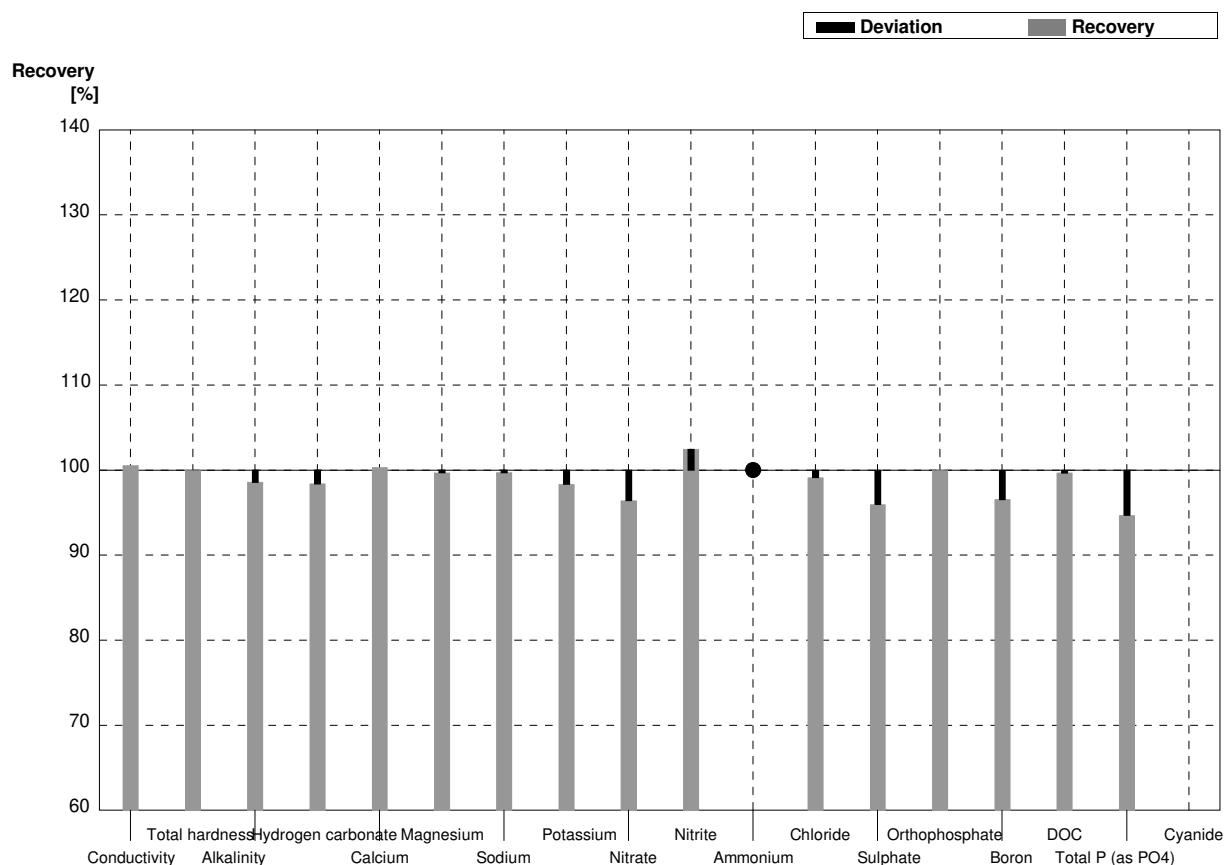
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	390	1,16	µS/cm	99%
Total hardness	1,403	0,014	1,24	0,10	mmol/l	88%
Alkalinity	1,246	0,014	1,29	0,010	mmol/l	104%
Hydrogen carbonate	73,0	0,8	75,9	0,058	mg/l	104%
Calcium	37,4	0,5	34,0	0,51	mg/l	91%
Magnesium	11,43	0,14	9,62	0,269	mg/l	84%
Sodium	18,15	0,08	18,2	1,2	mg/l	100%
Potassium	3,17	0,03	3,17	0,21	mg/l	100%
Nitrate	21,4	0,5	20,8	0,095	mg/l	97%
Nitrite	0,0708	0,0008	0,0745	0,001	mg/l	105%
Ammonium	0,076	0,003	0,0737	0,001	mg/l	97%
Chloride	41,5	0,7	41,1	0,173	mg/l	99%
Sulphate	45,2	0,5	44,3	0,405	mg/l	98%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0406	0,0004	0,0405	0,003	mg/l	100%
DOC	2,39	0,04	2,11	0,006	mg/l	88%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016	0,0323	0,001	mg/l	91%



**Sample N163A**

**Laboratory L**

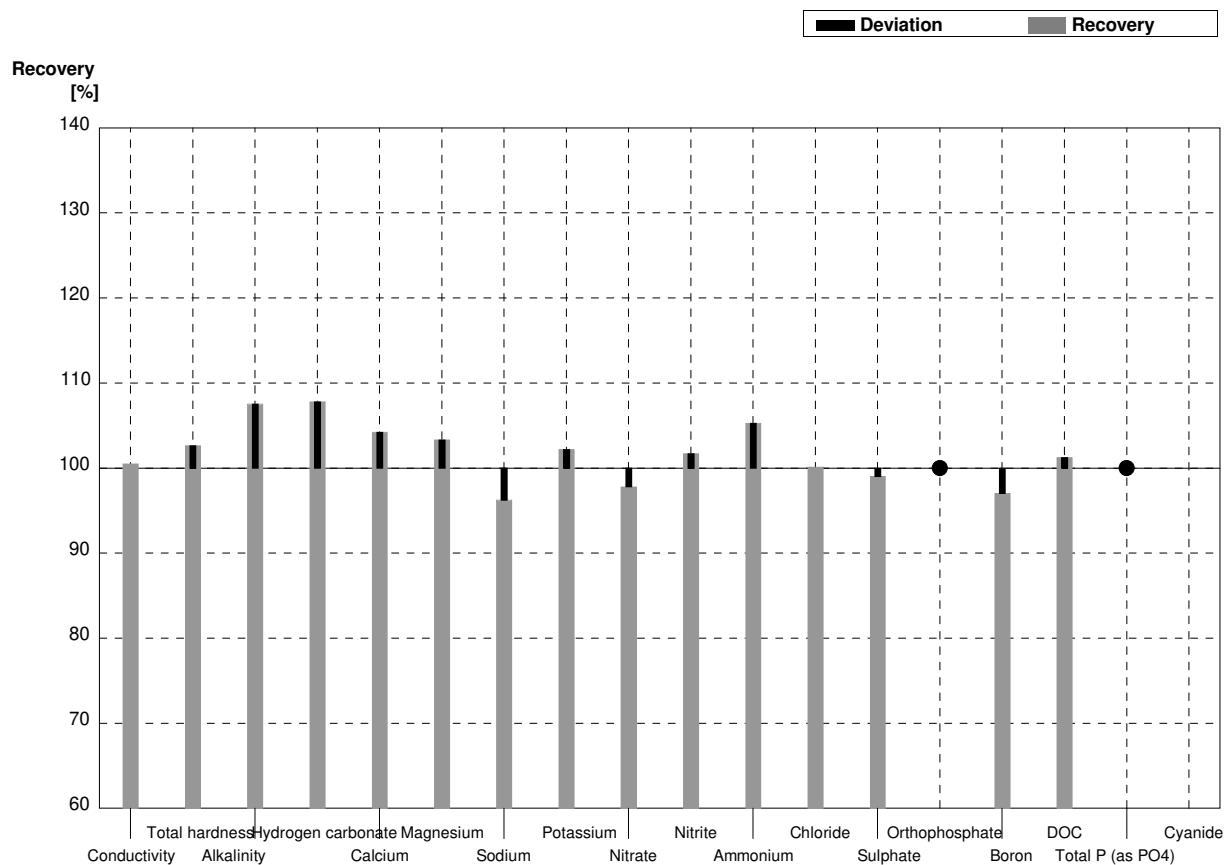
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	910	4,51	µS/cm	101%
Total hardness	3,37	0,04	3,37		mmol/l	100%
Alkalinity	4,91	0,06	4,84	0,48	mmol/l	99%
Hydrogen carbonate	297	4	292,23		mg/l	98%
Calcium	98,7	1,4	99,02	9,9	mg/l	100%
Magnesium	22,0	0,3	21,93	2,1	mg/l	100%
Sodium	53,5	0,4	53,34	5,3	mg/l	100%
Potassium	13,22	0,08	13,00	1,3	mg/l	98%
Nitrate	63,0	1,3	60,74	6,1	mg/l	96%
Nitrite	0,0322	0,0010	0,0330	0,003	mg/l	102%
Ammonium	<0,01		<0,009		mg/l	•
Chloride	60,6	1,5	60,07	6,0	mg/l	99%
Sulphate	84,2	0,7	80,81	8,0	mg/l	96%
Orthophosphate	0,091	0,006	0,091	0,009	mg/l	100%
Boron	0,1512	0,0013	0,146	0,022	mg/l	97%
DOC	6,00	0,06	5,98	0,6	mg/l	100%
Total P (as PO4)	0,207	0,002	0,196	0,02	mg/l	95%
Cyanide	0,0533	0,0016			mg/l	



Sample N163B

Laboratory L

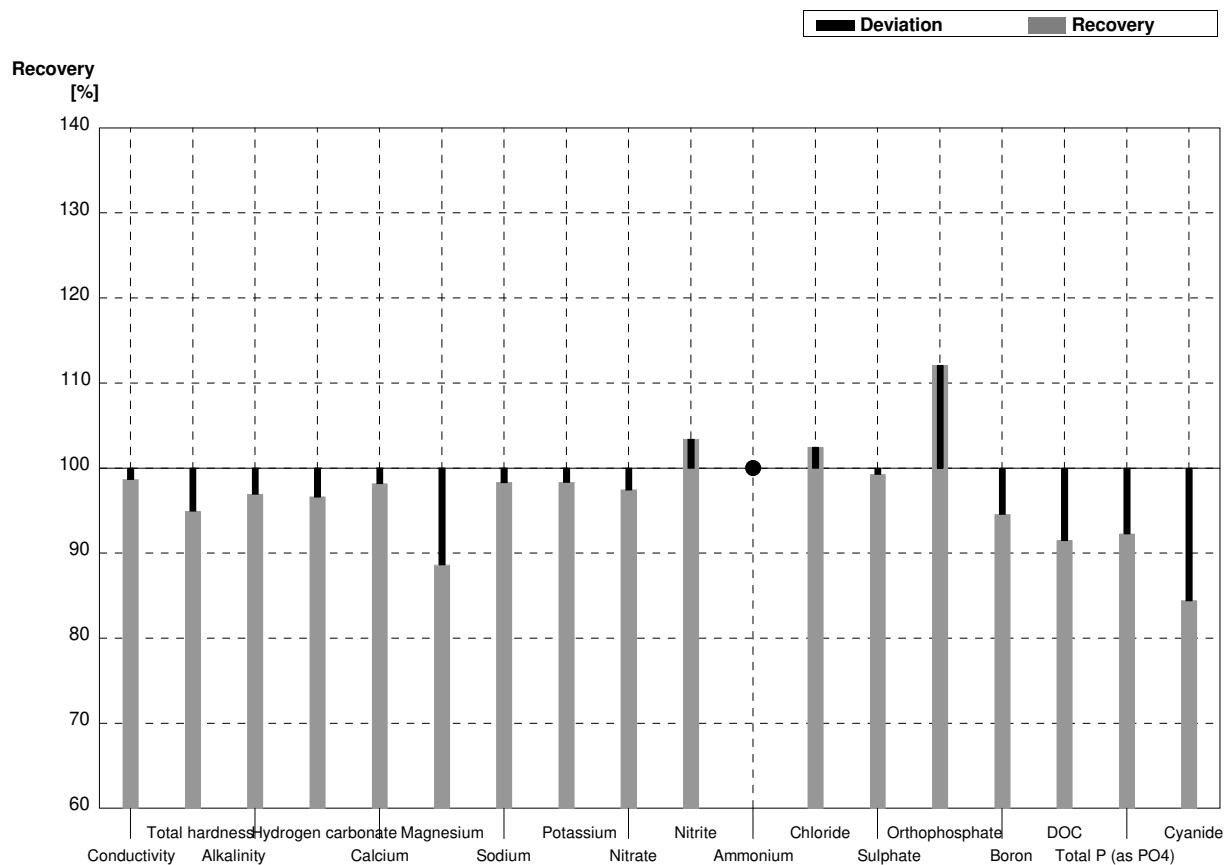
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	397	4,51	µS/cm	101%
Total hardness	1,403	0,014	1,44		mmol/l	103%
Alkalinity	1,246	0,014	1,34	0,13	mmol/l	108%
Hydrogen carbonate	73,0	0,8	78,70		mg/l	108%
Calcium	37,4	0,5	38,99	3,9	mg/l	104%
Magnesium	11,43	0,14	11,81	1,2	mg/l	103%
Sodium	18,15	0,08	17,47	1,7	mg/l	96%
Potassium	3,17	0,03	3,24	3,2	mg/l	102%
Nitrate	21,4	0,5	20,93	2,1	mg/l	98%
Nitrite	0,0708	0,0008	0,072	0,007	mg/l	102%
Ammonium	0,076	0,003	0,080	0,008	mg/l	105%
Chloride	41,5	0,7	41,56	4,2	mg/l	100%
Sulphate	45,2	0,5	44,76	4,5	mg/l	99%
Orthophosphate	<0,009		<0,005		mg/l	•
Boron	0,0406	0,0004	0,0394	0,0059	mg/l	97%
DOC	2,39	0,04	2,42	2,4	mg/l	101%
Total P (as PO4)	<0,009		<0,001		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory M**

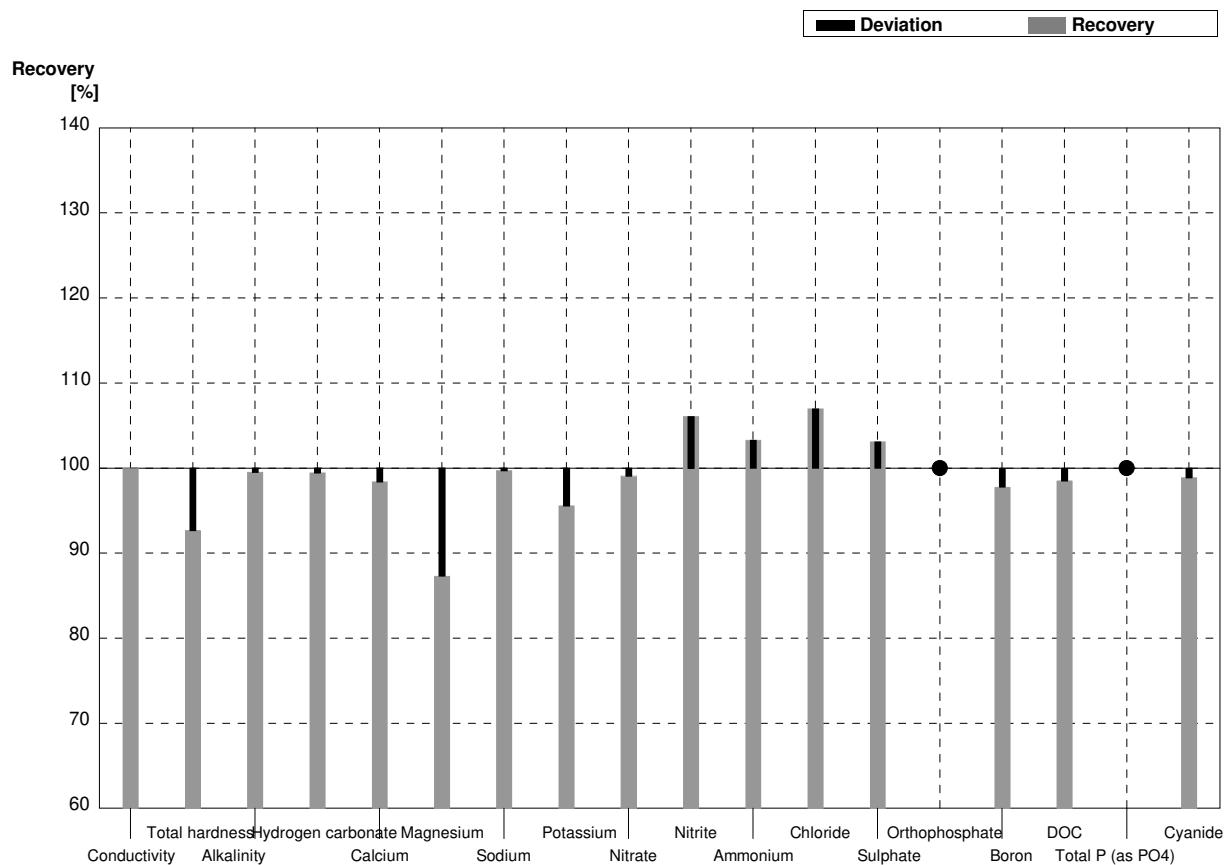
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	893	89,3	µS/cm	99%
Total hardness	3,37	0,04	3,20	0,32	mmol/l	95%
Alkalinity	4,91	0,06	4,76	0,476	mmol/l	97%
Hydrogen carbonate	297	4	287	14,4	mg/l	97%
Calcium	98,7	1,4	96,9	4,85	mg/l	98%
Magnesium	22,0	0,3	19,5	0,975	mg/l	89%
Sodium	53,5	0,4	52,6	5,26	mg/l	98%
Potassium	13,22	0,08	13,0	1,30	mg/l	98%
Nitrate	63,0	1,3	61,4	3,07	mg/l	97%
Nitrite	0,0322	0,0010	0,0333	0,005	mg/l	103%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	62,1	3,11	mg/l	102%
Sulphate	84,2	0,7	83,6	4,18	mg/l	99%
Orthophosphate	0,091	0,006	0,102	0,014	mg/l	112%
Boron	0,1512	0,0013	0,143	0,0143	mg/l	95%
DOC	6,00	0,06	5,49	0,55	mg/l	92%
Total P (as PO4)	0,207	0,002	0,191	0,021	mg/l	92%
Cyanide	0,0533	0,0016	0,0450	0,0092	mg/l	84%



**Sample N163B**

**Laboratory M**

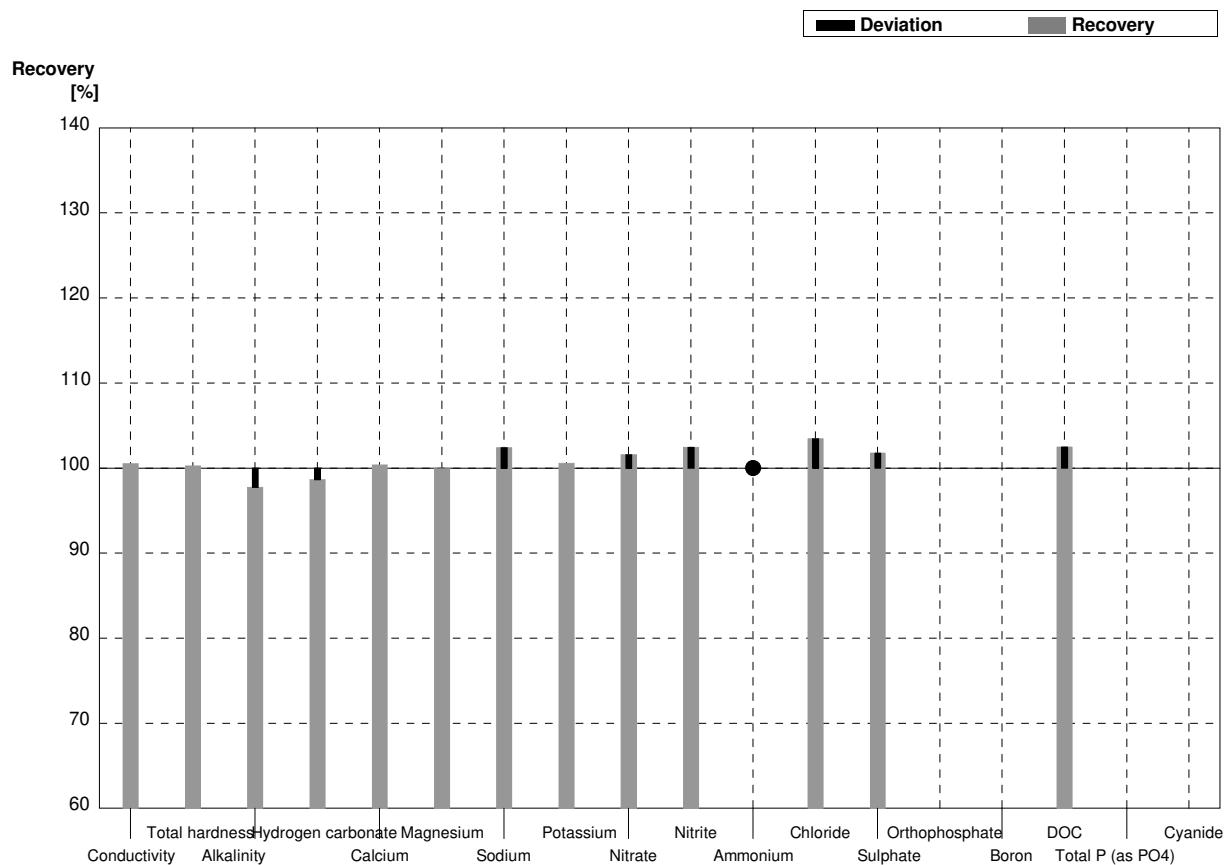
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	395	1	395	39,5	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,403	0,014	1,30	0,13	$\text{mmol}/\text{l}$	93%
Alkalinity	1,246	0,014	1,24	0,124	$\text{mmol}/\text{l}$	100%
Hydrogen carbonate	73,0	0,8	72,6	3,63	$\text{mg/l}$	99%
Calcium	37,4	0,5	36,8	1,84	$\text{mg/l}$	98%
Magnesium	11,43	0,14	9,98	1,0	$\text{mg/l}$	87%
Sodium	18,15	0,08	18,1	1,81	$\text{mg/l}$	100%
Potassium	3,17	0,03	3,03	0,303	$\text{mg/l}$	96%
Nitrate	21,4	0,5	21,2	1,06	$\text{mg/l}$	99%
Nitrite	0,0708	0,0008	0,0751	0,0113	$\text{mg/l}$	106%
Ammonium	0,076	0,003	0,0785	0,0134	$\text{mg/l}$	103%
Chloride	41,5	0,7	44,4	2,22	$\text{mg/l}$	107%
Sulphate	45,2	0,5	46,6	2,33	$\text{mg/l}$	103%
Orthophosphate	<0,009		<0,006		$\text{mg/l}$	•
Boron	0,0406	0,0004	0,0397	0,0079	$\text{mg/l}$	98%
DOC	2,39	0,04	2,354	0,24	$\text{mg/l}$	98%
Total P (as PO <sub>4</sub> )	<0,009		<0,005		$\text{mg/l}$	•
Cyanide	0,0354	0,0016	0,0350	0,007	$\text{mg/l}$	99%



**Sample N163A**

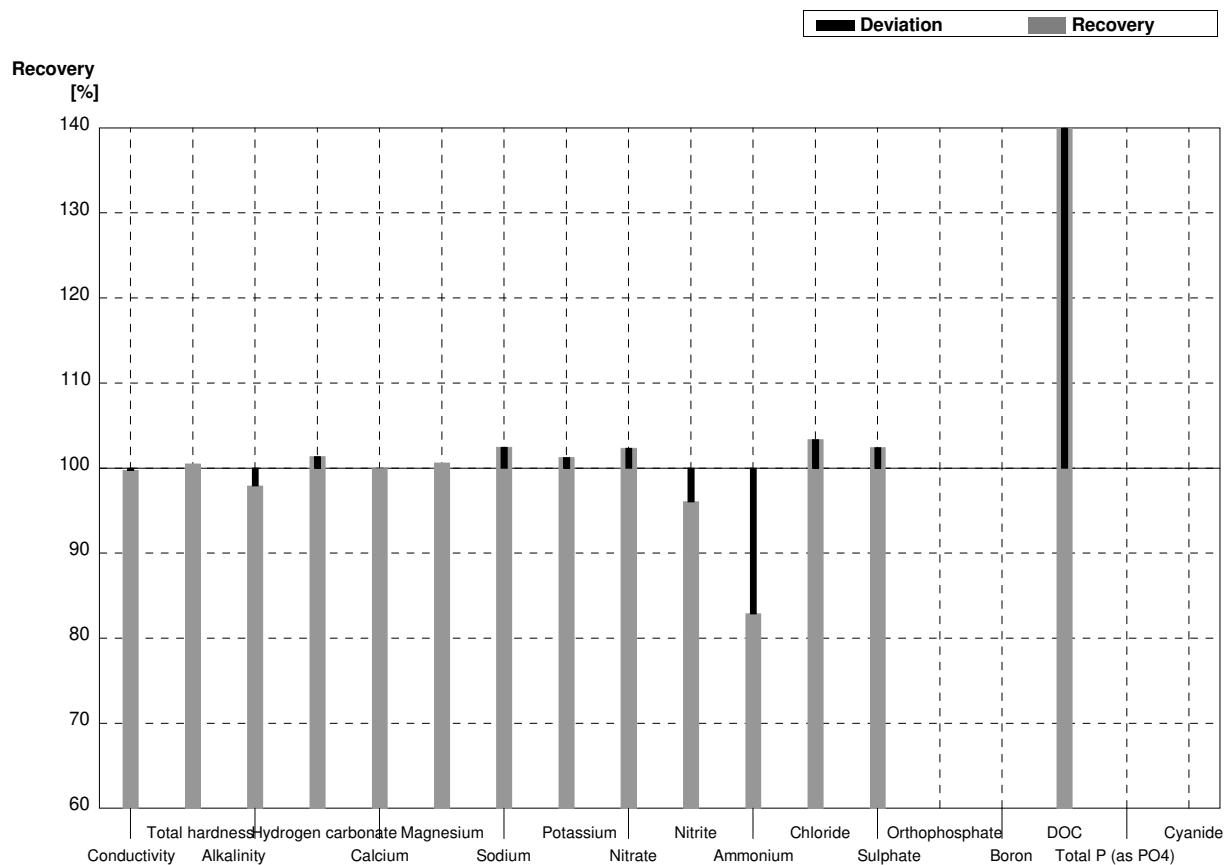
**Laboratory N**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	910	15	µS/cm	101%
Total hardness	3,37	0,04	3,38	0,28	mmol/l	100%
Alkalinity	4,91	0,06	4,80	0,13	mmol/l	98%
Hydrogen carbonate	297	4	293	8	mg/l	99%
Calcium	98,7	1,4	99,1	5,7	mg/l	100%
Magnesium	22,0	0,3	22,0	1,3	mg/l	100%
Sodium	53,5	0,4	54,8	6,2	mg/l	102%
Potassium	13,22	0,08	13,3	0,5	mg/l	101%
Nitrate	63,0	1,3	64,0	2,9	mg/l	102%
Nitrite	0,0322	0,0010	0,0330	0,006	mg/l	102%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	60,6	1,5	62,7	4,2	mg/l	103%
Sulphate	84,2	0,7	85,7	5,6	mg/l	102%
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	6,15	1,28	mg/l	103%
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B****Laboratory N**

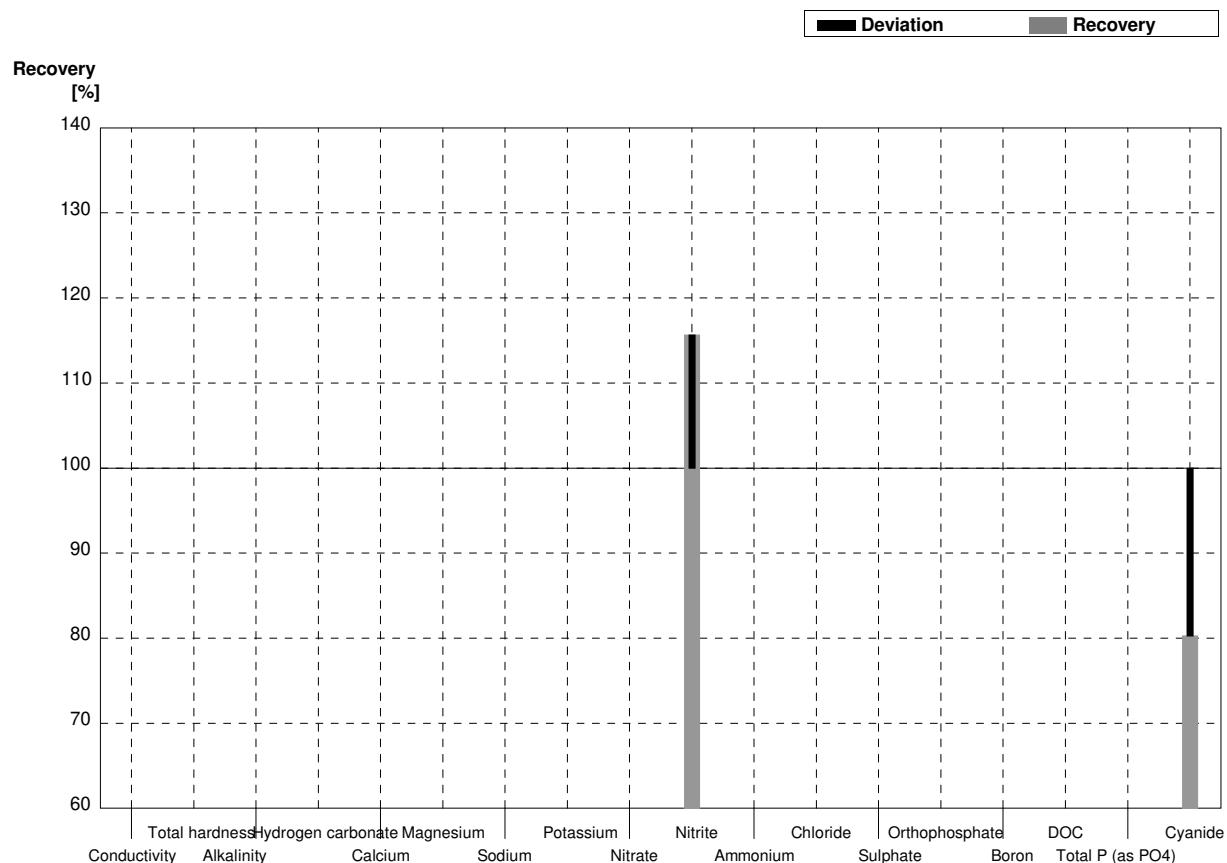
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	395	1	394	6	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,403	0,014	1,41	0,12	$\text{mmol}/\text{l}$	100%
Alkalinity	1,246	0,014	1,22	0,03	$\text{mmol}/\text{l}$	98%
Hydrogen carbonate	73,0	0,8	74	2	$\text{mg}/\text{l}$	101%
Calcium	37,4	0,5	37,4	2,1	$\text{mg}/\text{l}$	100%
Magnesium	11,43	0,14	11,5	0,7	$\text{mg}/\text{l}$	101%
Sodium	18,15	0,08	18,6	2,1	$\text{mg}/\text{l}$	102%
Potassium	3,17	0,03	3,21	0,12	$\text{mg}/\text{l}$	101%
Nitrate	21,4	0,5	21,9	1,0	$\text{mg}/\text{l}$	102%
Nitrite	0,0708	0,0008	0,068	0,012	$\text{mg}/\text{l}$	96%
Ammonium	0,076	0,003	0,063	0,015	$\text{mg}/\text{l}$	83%
Chloride	41,5	0,7	42,9	2,9	$\text{mg}/\text{l}$	103%
Sulphate	45,2	0,5	46,3	3,0	$\text{mg}/\text{l}$	102%
Orthophosphate	<0,009				$\text{mg}/\text{l}$	
Boron	0,0406	0,0004			$\text{mg}/\text{l}$	
DOC	2,39	0,04	6,49	0,52	$\text{mg}/\text{l}$	272%
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg}/\text{l}$	
Cyanide	0,0354	0,0016			$\text{mg}/\text{l}$	



**Sample N163A**

**Laboratory O**

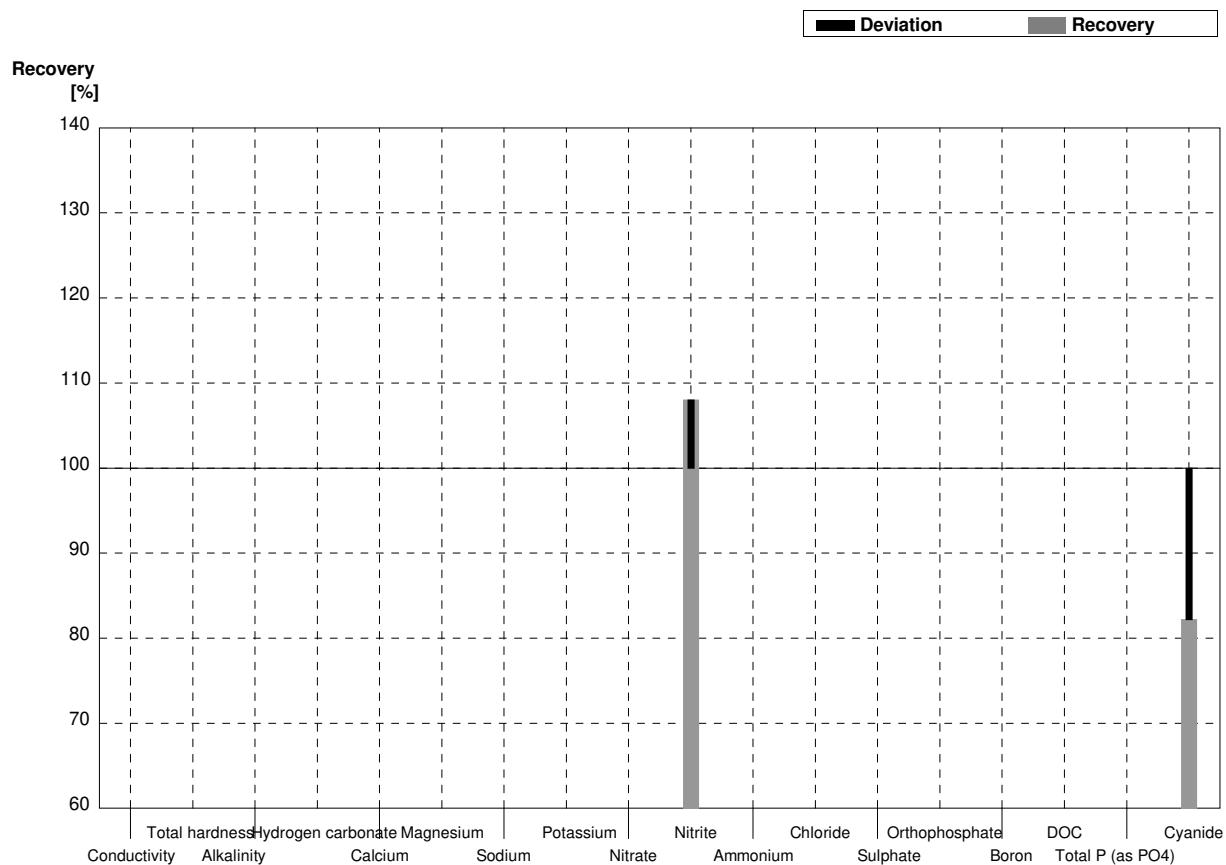
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010	0,03725	0,00745	mg/l	116%
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016	0,0428	0,0084	mg/l	80%



Sample N163B

Laboratory O

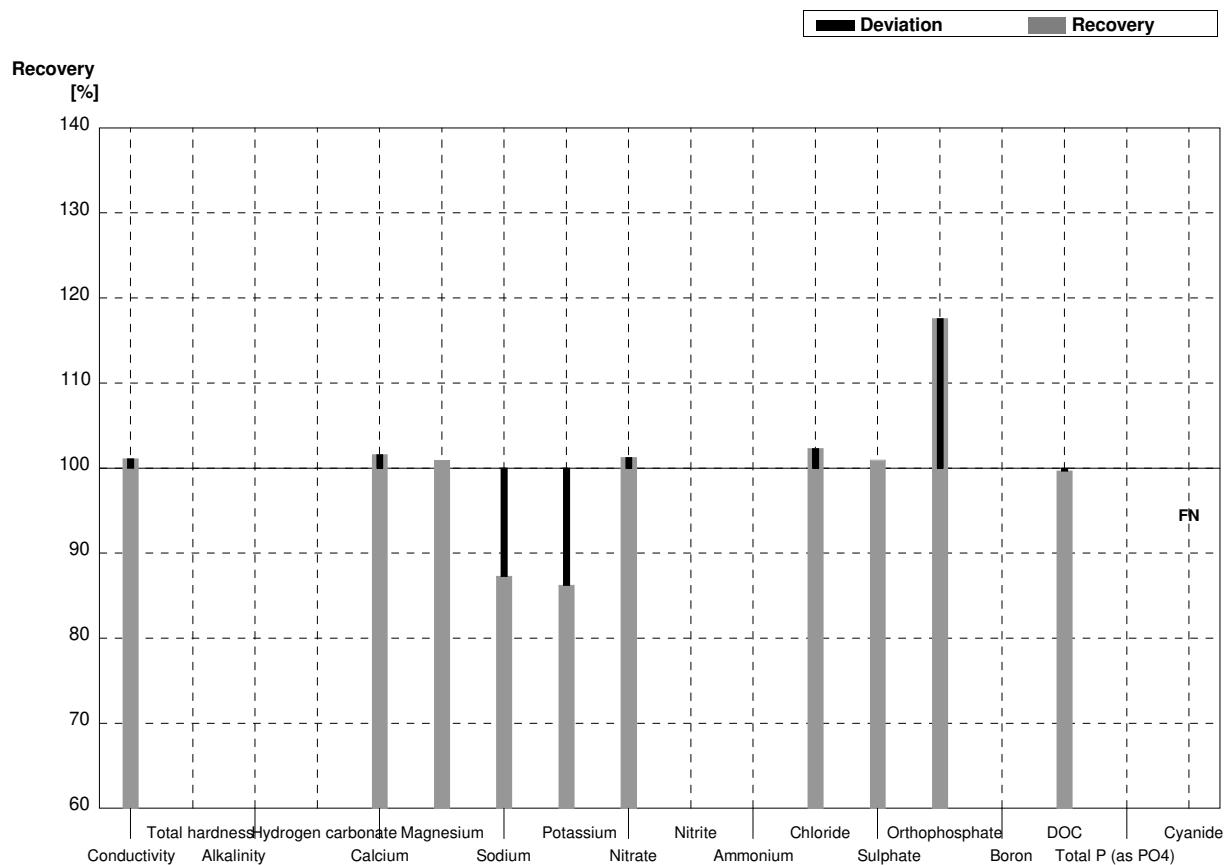
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008	0,0765	0,0153	mg/l	108%
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016	0,0291	0,0057	mg/l	82%



**Sample N163A**

**Laboratory P**

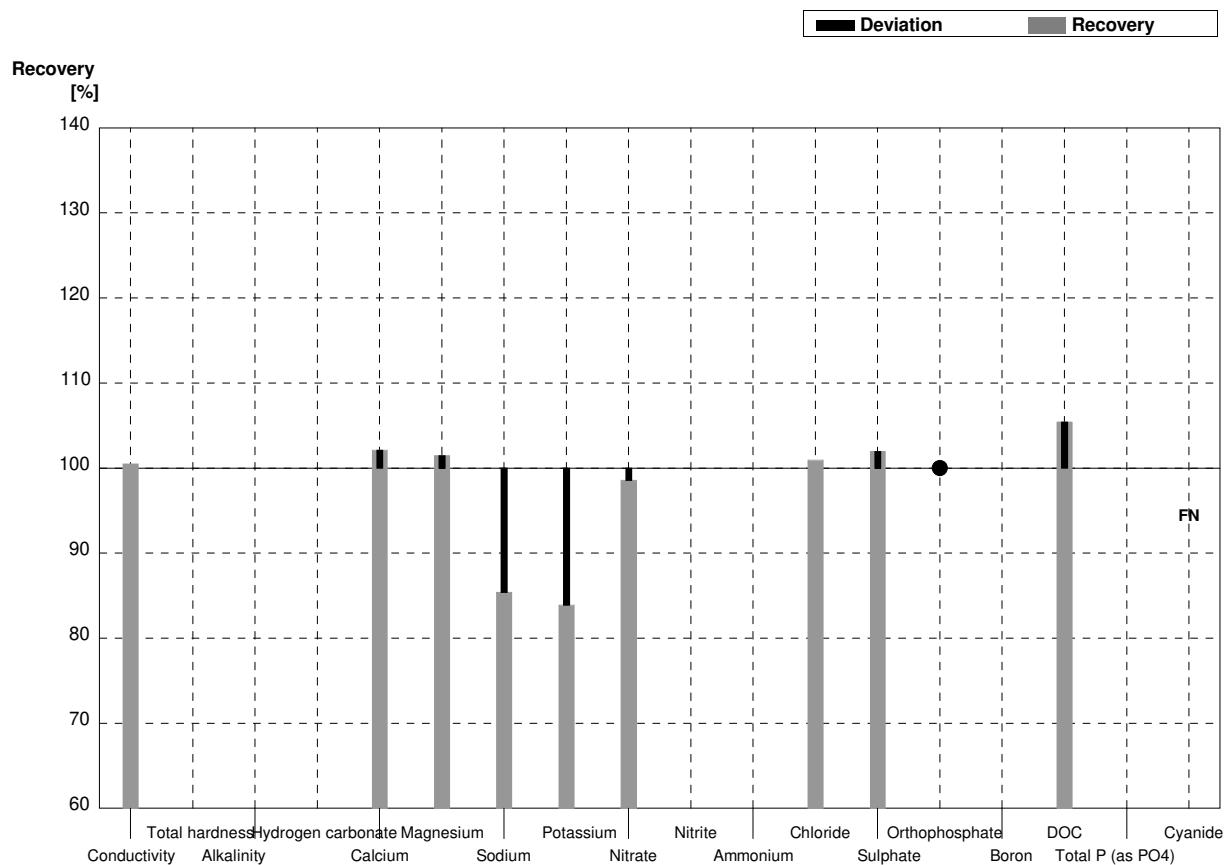
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	915	5	µS/cm	101%
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	100,3	3,8	mg/l	102%
Magnesium	22,0	0,3	22,2	1,6	mg/l	101%
Sodium	53,5	0,4	46,7	2,6	mg/l	87%
Potassium	13,22	0,08	11,4	1,0	mg/l	86%
Nitrate	63,0	1,3	63,8	4,1	mg/l	101%
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5	62,0	2,2	mg/l	102%
Sulphate	84,2	0,7	85,0	3,6	mg/l	101%
Orthophosphate	0,091	0,006	0,107	0,010	mg/l	118%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	5,98	0,30	mg/l	100%
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016	<0,03		mg/l	FN



Sample N163B

Laboratory P

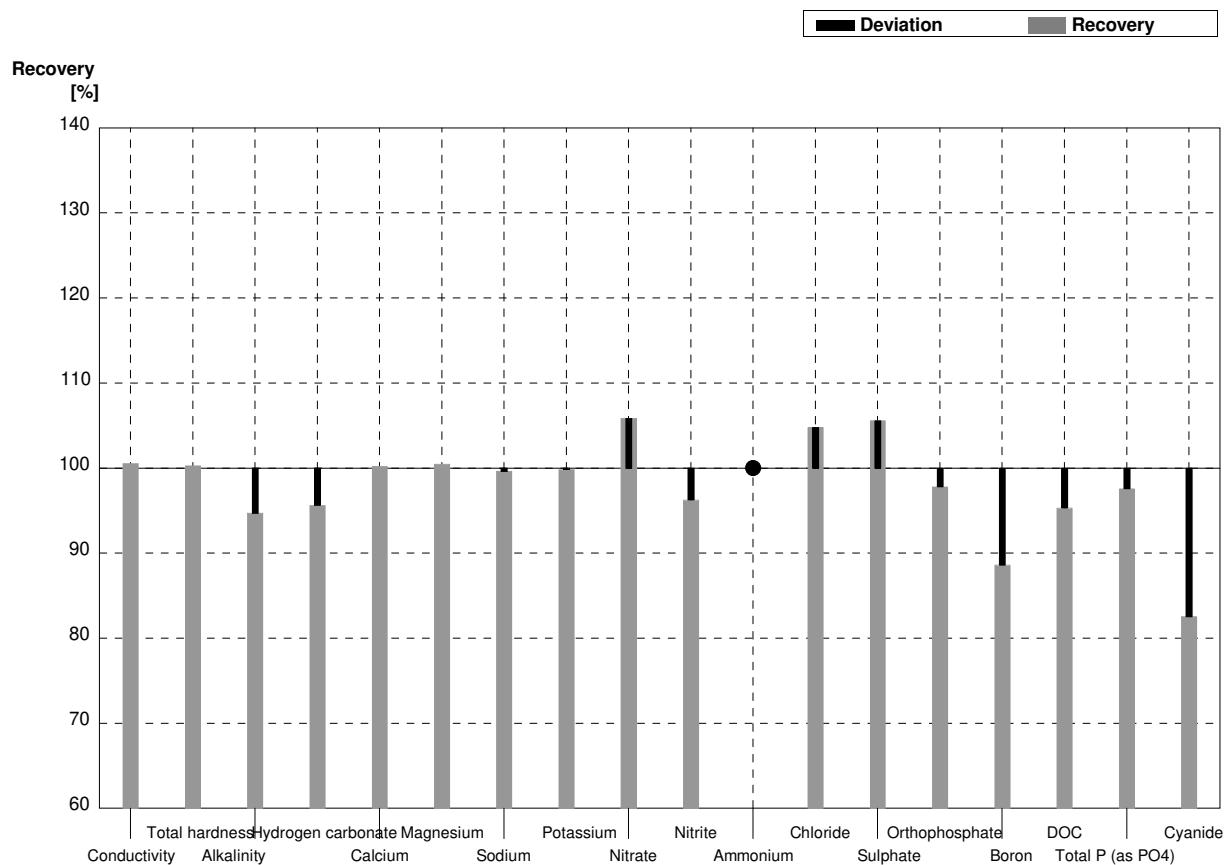
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	397	3	µS/cm	101%
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	38,2	2,6	mg/l	102%
Magnesium	11,43	0,14	11,6	1,0	mg/l	101%
Sodium	18,15	0,08	15,5	1,0	mg/l	85%
Potassium	3,17	0,03	2,66	0,20	mg/l	84%
Nitrate	21,4	0,5	21,1	1,5	mg/l	99%
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7	41,9	0,8	mg/l	101%
Sulphate	45,2	0,5	46,1	1,2	mg/l	102%
Orthophosphate	<0,009		<0,025		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,52	0,10	mg/l	105%
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016	<0,03		mg/l	FN



**Sample N163A**

**Laboratory Q**

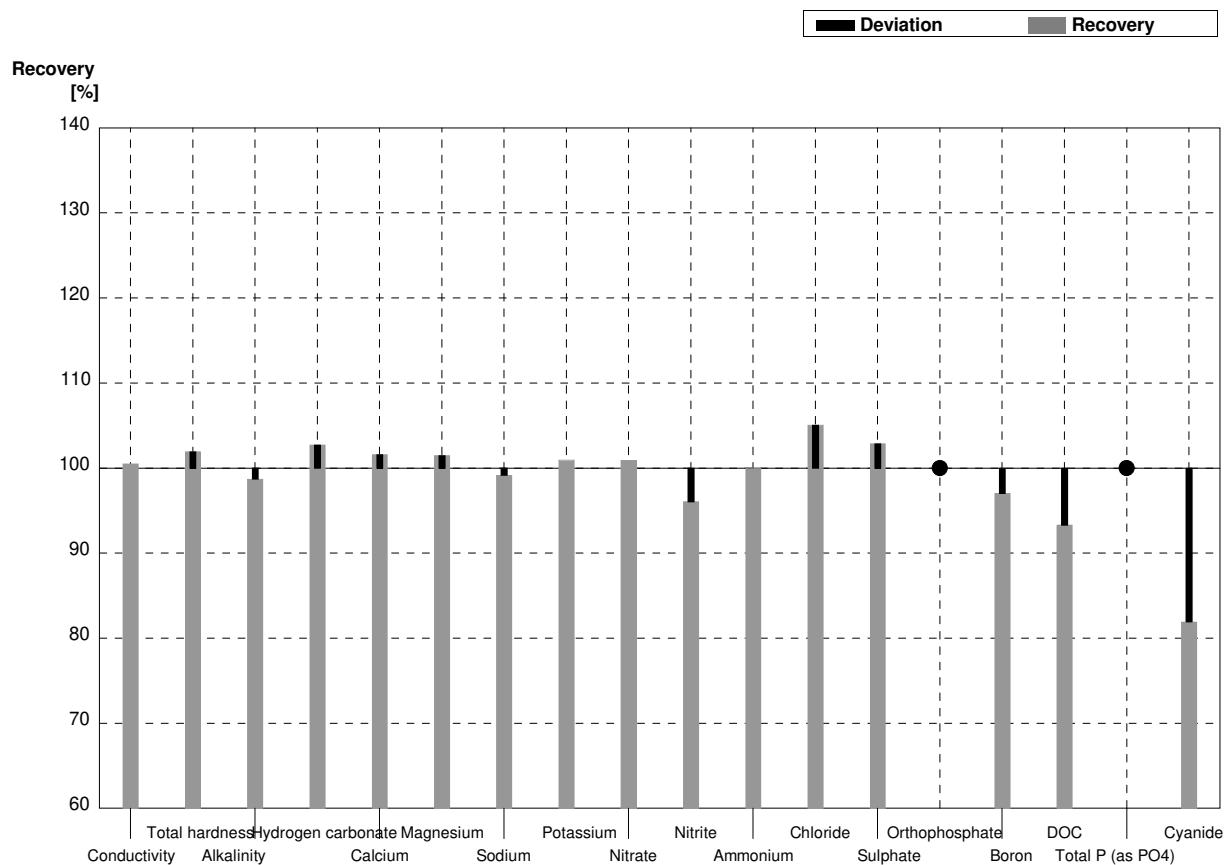
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	910	91	µS/cm	101%
Total hardness	3,37	0,04	3,38		mmol/l	100%
Alkalinity	4,91	0,06	4,65		mmol/l	95%
Hydrogen carbonate	297	4	284		mg/l	96%
Calcium	98,7	1,4	98,9	7,9	mg/l	100%
Magnesium	22,0	0,3	22,1	1,77	mg/l	100%
Sodium	53,5	0,4	53,3	0,93	mg/l	100%
Potassium	13,22	0,08	13,2	1,45	mg/l	100%
Nitrate	63,0	1,3	66,7	8,0	mg/l	106%
Nitrite	0,0322	0,0010	0,0310	0,0030	mg/l	96%
Ammonium	<0,01		<0,020		mg/l	•
Chloride	60,6	1,5	63,5	5,7	mg/l	105%
Sulphate	84,2	0,7	88,9	8,9	mg/l	106%
Orthophosphate	0,091	0,006	0,089	0,032	mg/l	98%
Boron	0,1512	0,0013	0,134	0,024	mg/l	89%
DOC	6,00	0,06	5,72	0,68	mg/l	95%
Total P (as PO4)	0,207	0,002	0,202	0,056	mg/l	98%
Cyanide	0,0533	0,0016	0,0440		mg/l	83%



**Sample N163B**

**Laboratory Q**

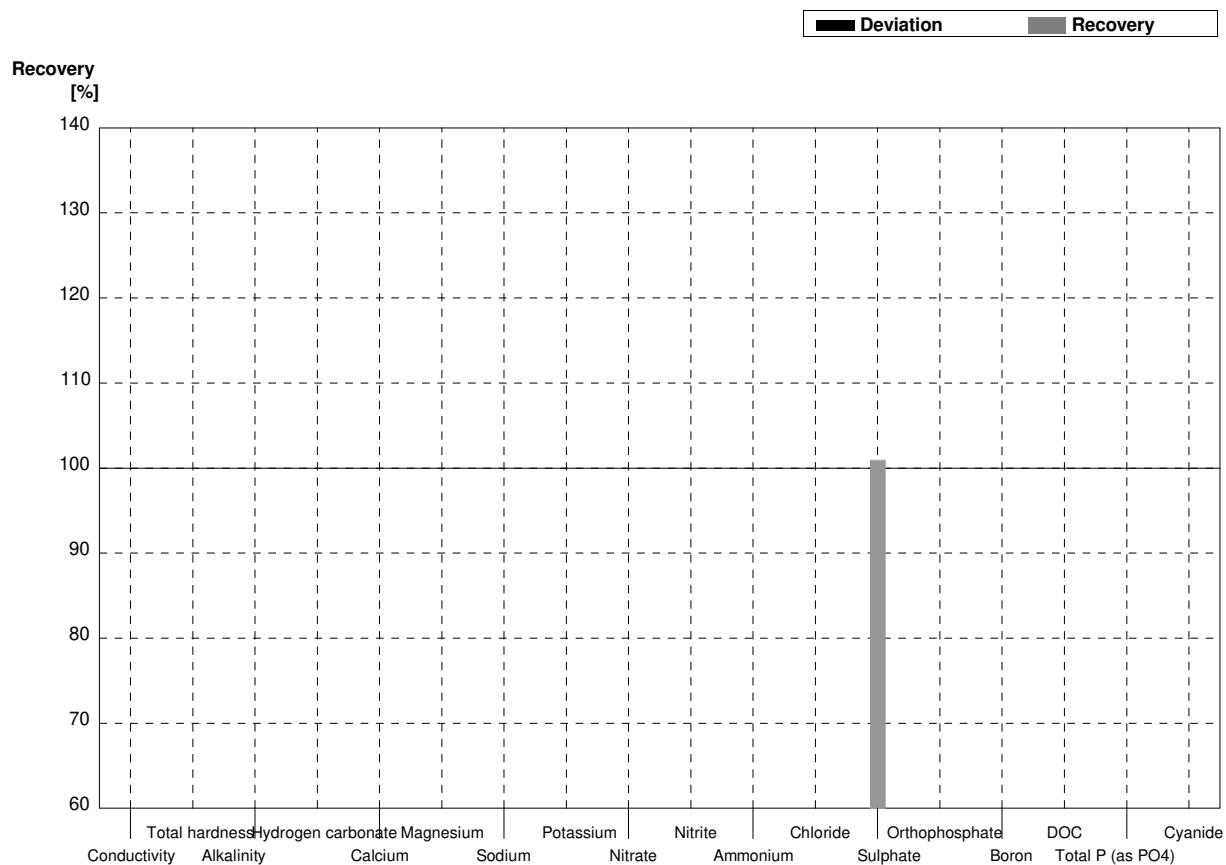
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	397	40	µS/cm	101%
Total hardness	1,403	0,014	1,43		mmol/l	102%
Alkalinity	1,246	0,014	1,23		mmol/l	99%
Hydrogen carbonate	73,0	0,8	75		mg/l	103%
Calcium	37,4	0,5	38,0	3,0	mg/l	102%
Magnesium	11,43	0,14	11,6	0,92	mg/l	101%
Sodium	18,15	0,08	18,0	1,44	mg/l	99%
Potassium	3,17	0,03	3,20	0,35	mg/l	101%
Nitrate	21,4	0,5	21,6	2,6	mg/l	101%
Nitrite	0,0708	0,0008	0,068	0,0010	mg/l	96%
Ammonium	0,076	0,003	0,076	0,022	mg/l	100%
Chloride	41,5	0,7	43,6	3,9	mg/l	105%
Sulphate	45,2	0,5	46,5	4,7	mg/l	103%
Orthophosphate	<0,009		<0,030		mg/l	•
Boron	0,0406	0,0004	0,0394	0,0071	mg/l	97%
DOC	2,39	0,04	2,23	0,268	mg/l	93%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016	0,0290		mg/l	82%



**Sample N163A**

**Laboratory R**

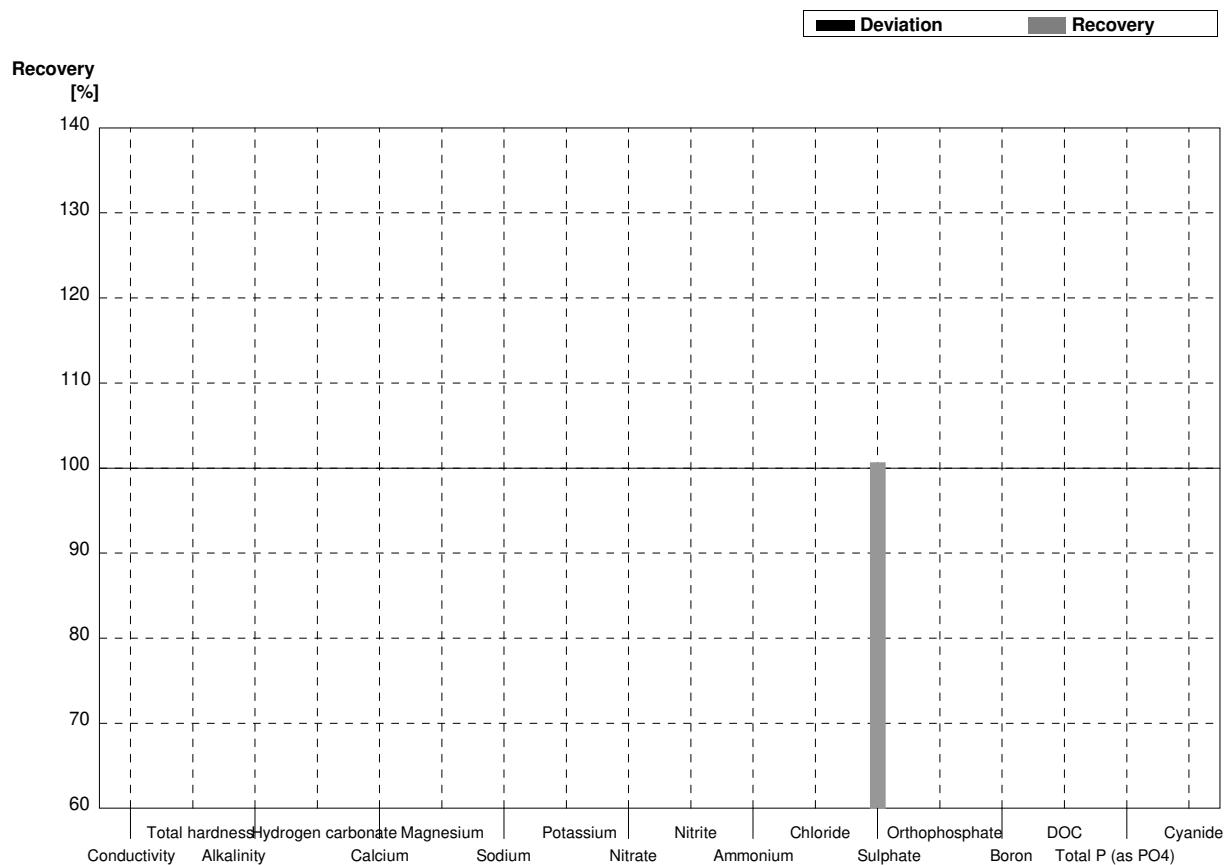
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7	85,0	3,4	mg/l	101%
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO <sub>4</sub> )	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory R**

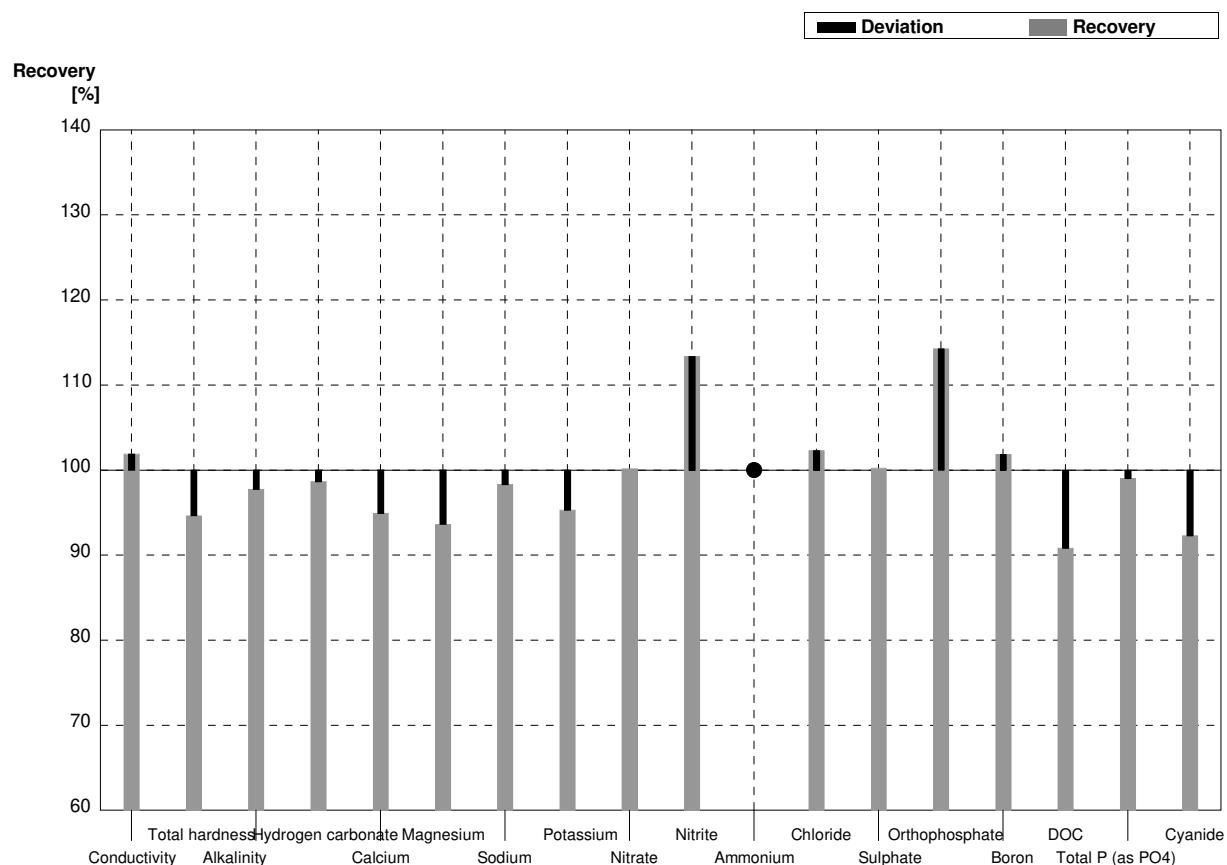
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5	45,5	1,8	mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory S**

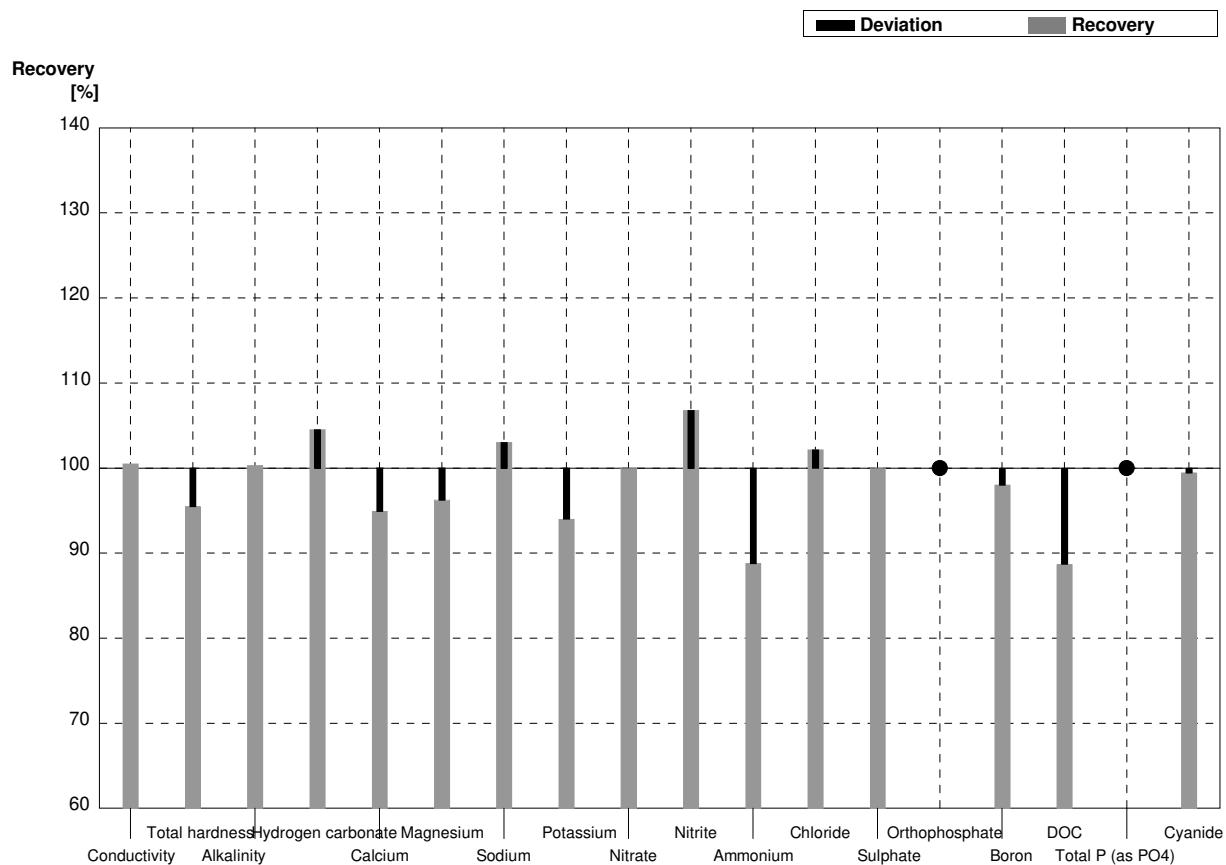
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	922	28	µS/cm	102%
Total hardness	3,37	0,04	3,19	0,26	mmol/l	95%
Alkalinity	4,91	0,06	4,80	0,23	mmol/l	98%
Hydrogen carbonate	297	4	293	14	mg/l	99%
Calcium	98,7	1,4	93,7	4,3	mg/l	95%
Magnesium	22,0	0,3	20,6	1,7	mg/l	94%
Sodium	53,5	0,4	52,6	3,7	mg/l	98%
Potassium	13,22	0,08	12,6	0,91	mg/l	95%
Nitrate	63,0	1,3	63,1	2,1	mg/l	100%
Nitrite	0,0322	0,0010	0,0365	0,0037	mg/l	113%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	62,0	4,2	mg/l	102%
Sulphate	84,2	0,7	84,4	2,8	mg/l	100%
Orthophosphate	0,091	0,006	0,104	0,0072	mg/l	114%
Boron	0,1512	0,0013	0,154	0,019	mg/l	102%
DOC	6,00	0,06	5,45	0,87	mg/l	91%
Total P (as PO4)	0,207	0,002	0,205	0,014	mg/l	99%
Cyanide	0,0533	0,0016	0,0492	0,0074	mg/l	92%



**Sample N163B**

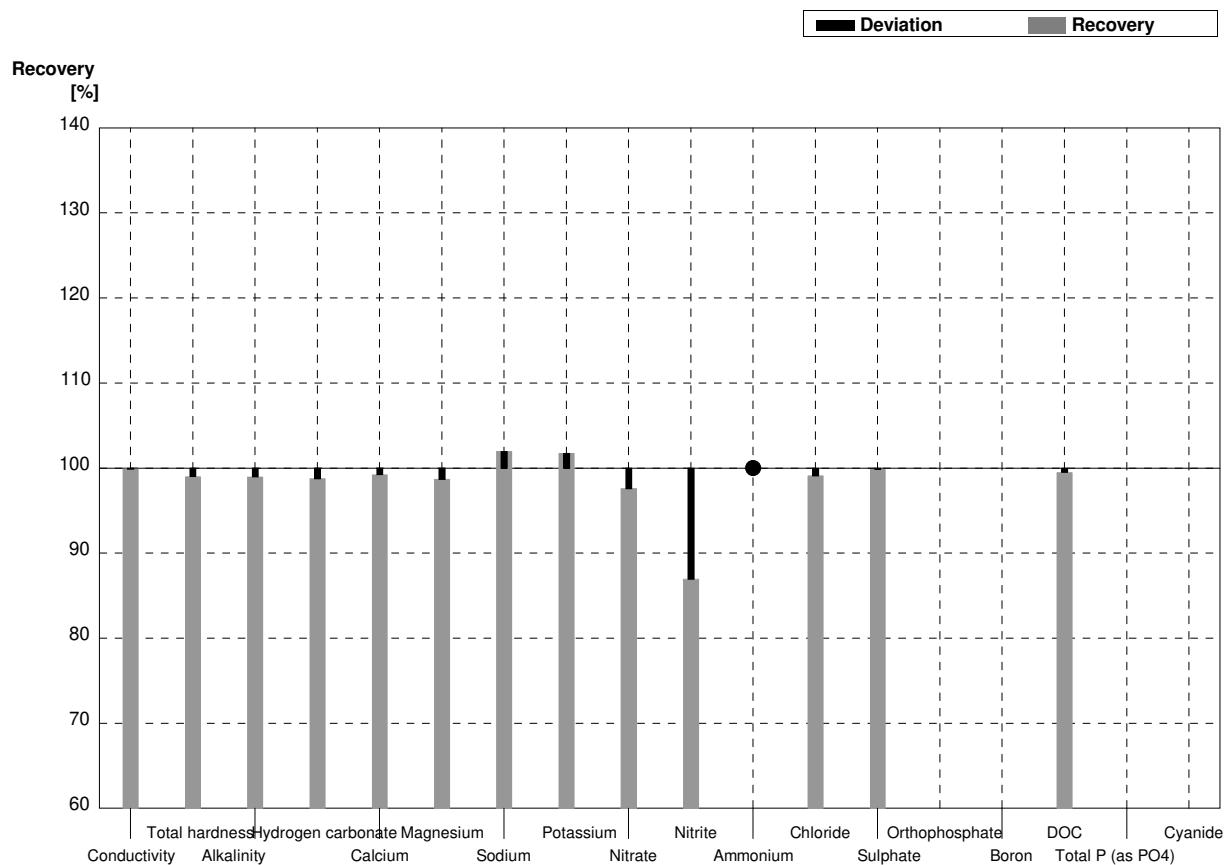
**Laboratory S**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	397	12	µS/cm	101%
Total hardness	1,403	0,014	1,34	0,11	mmol/l	96%
Alkalinity	1,246	0,014	1,25	0,060	mmol/l	100%
Hydrogen carbonate	73,0	0,8	76,3	3,7	mg/l	105%
Calcium	37,4	0,5	35,5	1,6	mg/l	95%
Magnesium	11,43	0,14	11,0	0,90	mg/l	96%
Sodium	18,15	0,08	18,7	1,3	mg/l	103%
Potassium	3,17	0,03	2,98	0,21	mg/l	94%
Nitrate	21,4	0,5	21,4	0,71	mg/l	100%
Nitrite	0,0708	0,0008	0,0756	0,0076	mg/l	107%
Ammonium	0,076	0,003	0,0675	0,0047	mg/l	89%
Chloride	41,5	0,7	42,4	2,8	mg/l	102%
Sulphate	45,2	0,5	45,2	1,5	mg/l	100%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0406	0,0004	0,0398	0,0049	mg/l	98%
DOC	2,39	0,04	2,12	0,34	mg/l	89%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016	0,0352	0,0053	mg/l	99%



**Sample N163A****Laboratory T**

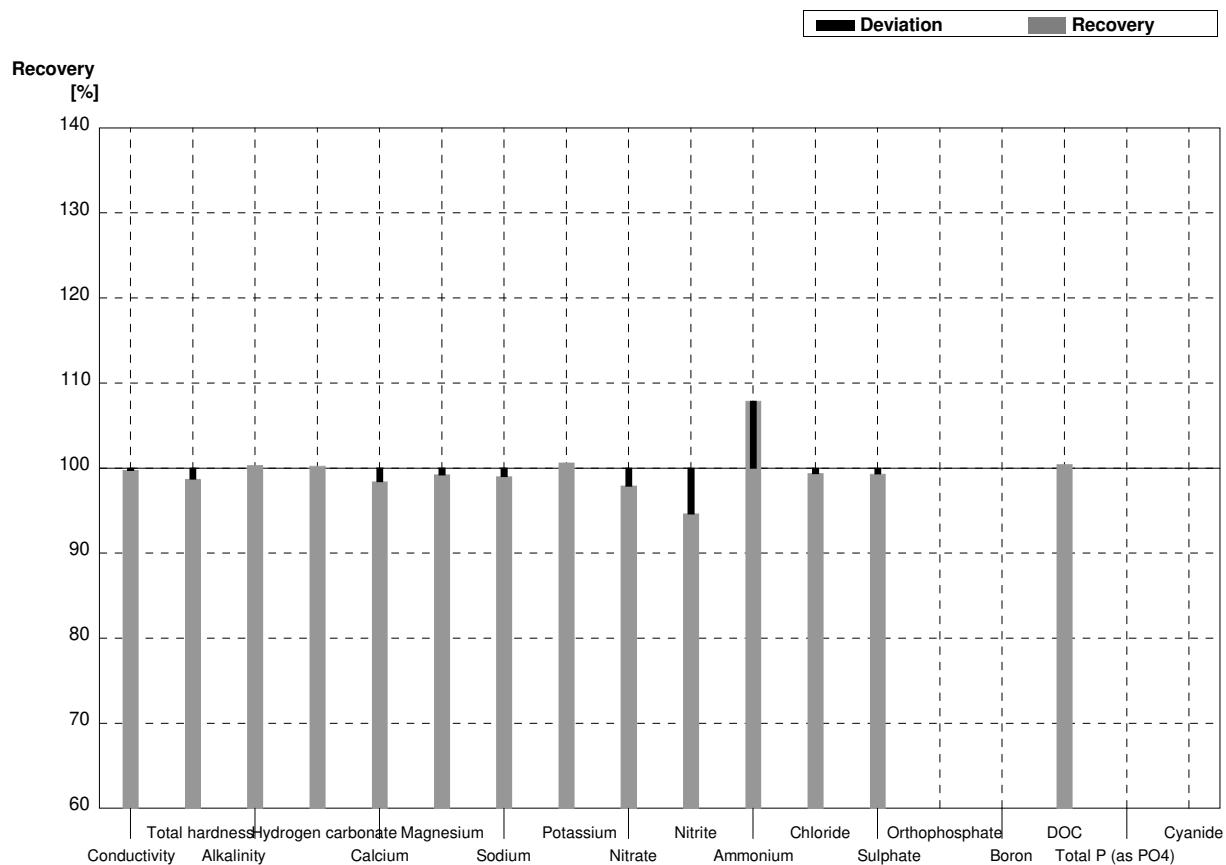
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	904	19,9	$\mu\text{S}/\text{cm}$	100%
Total hardness	3,37	0,04	3,337	0,13	$\text{mmol}/\text{l}$	99%
Alkalinity	4,91	0,06	4,86	0,10	$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	297	4	293,31	6,16	$\text{mg}/\text{l}$	99%
Calcium	98,7	1,4	97,94	3,82	$\text{mg}/\text{l}$	99%
Magnesium	22,0	0,3	21,71	1,02	$\text{mg}/\text{l}$	99%
Sodium	53,5	0,4	54,56	2,62	$\text{mg}/\text{l}$	102%
Potassium	13,22	0,08	13,45	0,86	$\text{mg}/\text{l}$	102%
Nitrate	63,0	1,3	61,49	4,12	$\text{mg}/\text{l}$	98%
Nitrite	0,0322	0,0010	0,0280	0,002	$\text{mg}/\text{l}$	87%
Ammonium	<0,01		0,00300	0,000	$\text{mg}/\text{l}$	•
Chloride	60,6	1,5	60,06	2,82	$\text{mg}/\text{l}$	99%
Sulphate	84,2	0,7	84,08	4,20	$\text{mg}/\text{l}$	100%
Orthophosphate	0,091	0,006			$\text{mg}/\text{l}$	
Boron	0,1512	0,0013			$\text{mg}/\text{l}$	
DOC	6,00	0,06	5,97	1,04	$\text{mg}/\text{l}$	100%
Total P (as PO <sub>4</sub> )	0,207	0,002			$\text{mg}/\text{l}$	
Cyanide	0,0533	0,0016			$\text{mg}/\text{l}$	



**Sample N163B**

**Laboratory T**

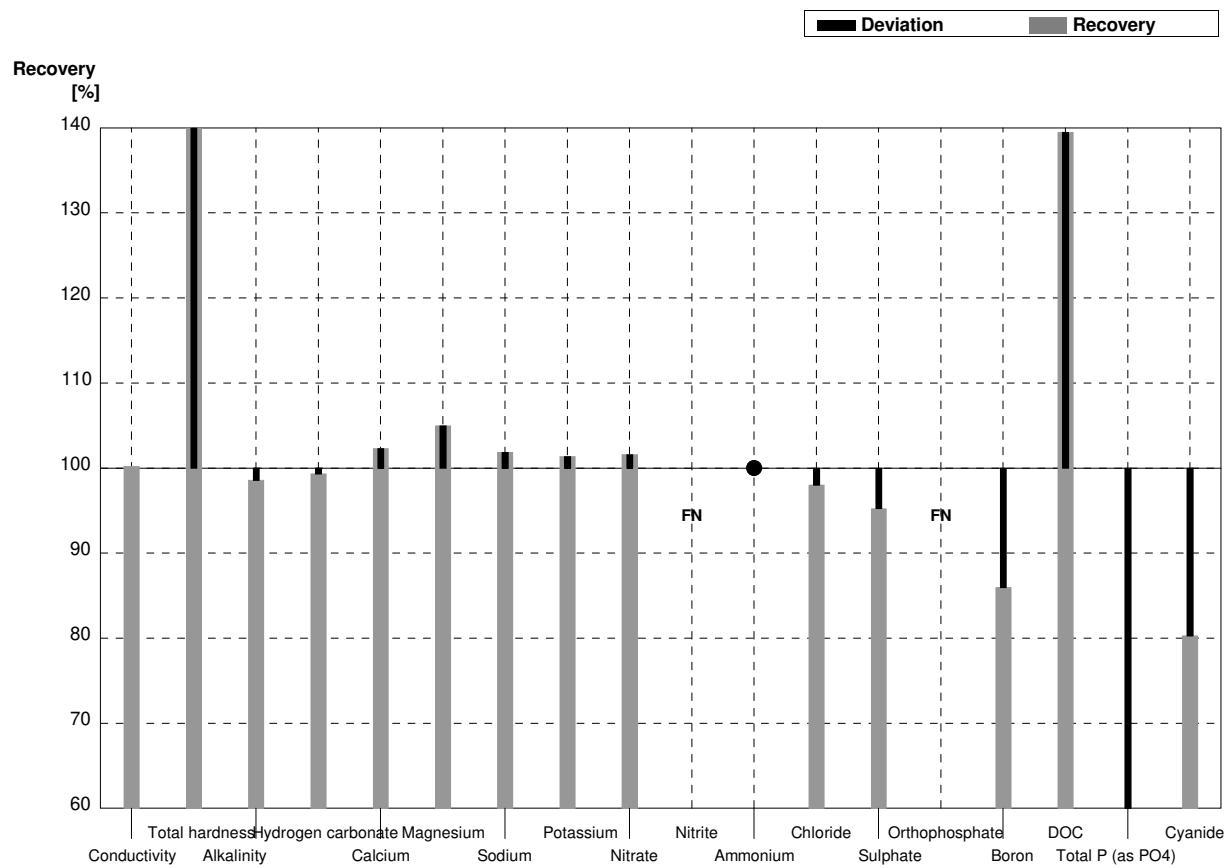
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	394	8,7	µS/cm	100%
Total hardness	1,403	0,014	1,385	0,06	mmol/l	99%
Alkalinity	1,246	0,014	1,25	0,03	mmol/l	100%
Hydrogen carbonate	73,0	0,8	73,18	1,54	mg/l	100%
Calcium	37,4	0,5	36,81	1,44	mg/l	98%
Magnesium	11,43	0,14	11,34	0,53	mg/l	99%
Sodium	18,15	0,08	17,97	0,86	mg/l	99%
Potassium	3,17	0,03	3,19	0,20	mg/l	101%
Nitrate	21,4	0,5	20,95	1,40	mg/l	98%
Nitrite	0,0708	0,0008	0,0670	0,005	mg/l	95%
Ammonium	0,076	0,003	0,0820	0,014	mg/l	108%
Chloride	41,5	0,7	41,24	1,94	mg/l	99%
Sulphate	45,2	0,5	44,89	2,24	mg/l	99%
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,40	0,42	mg/l	100%
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



Sample N163A

Laboratory U

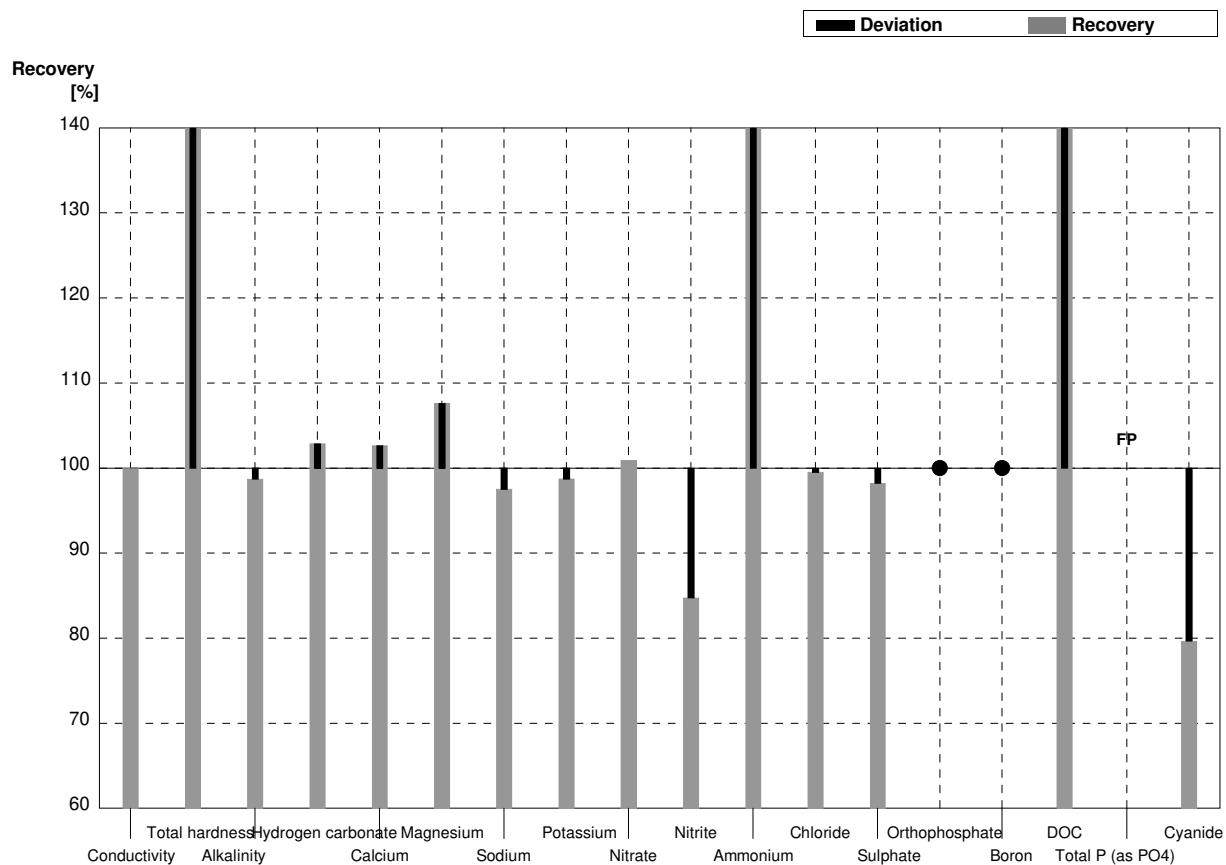
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	907	37	µS/cm	100%
Total hardness	3,37	0,04	18,6	3	mmol/l	552%
Alkalinity	4,91	0,06	4,84	1	mmol/l	99%
Hydrogen carbonate	297	4	295	50	mg/l	99%
Calcium	98,7	1,4	101	8	mg/l	102%
Magnesium	22,0	0,3	23,1	1,6	mg/l	105%
Sodium	53,5	0,4	54,5	4,4	mg/l	102%
Potassium	13,22	0,08	13,4	1,6	mg/l	101%
Nitrate	63,0	1,3	64	5,76	mg/l	102%
Nitrite	0,0322	0,0010	<0,030		mg/l	FN
Ammonium	<0,01		<0,130		mg/l	•
Chloride	60,6	1,5	59,4	4,75	mg/l	98%
Sulphate	84,2	0,7	80,2	8,2	mg/l	95%
Orthophosphate	0,091	0,006	<0,040		mg/l	FN
Boron	0,1512	0,0013	0,130	0,026	mg/l	86%
DOC	6,00	0,06	8,37	0,92	mg/l	140%
Total P (as PO4)	0,207	0,002	0,094	0,0085	mg/l	45%
Cyanide	0,0533	0,0016	0,0428	0,009	mg/l	80%



Sample N163B

Laboratory U

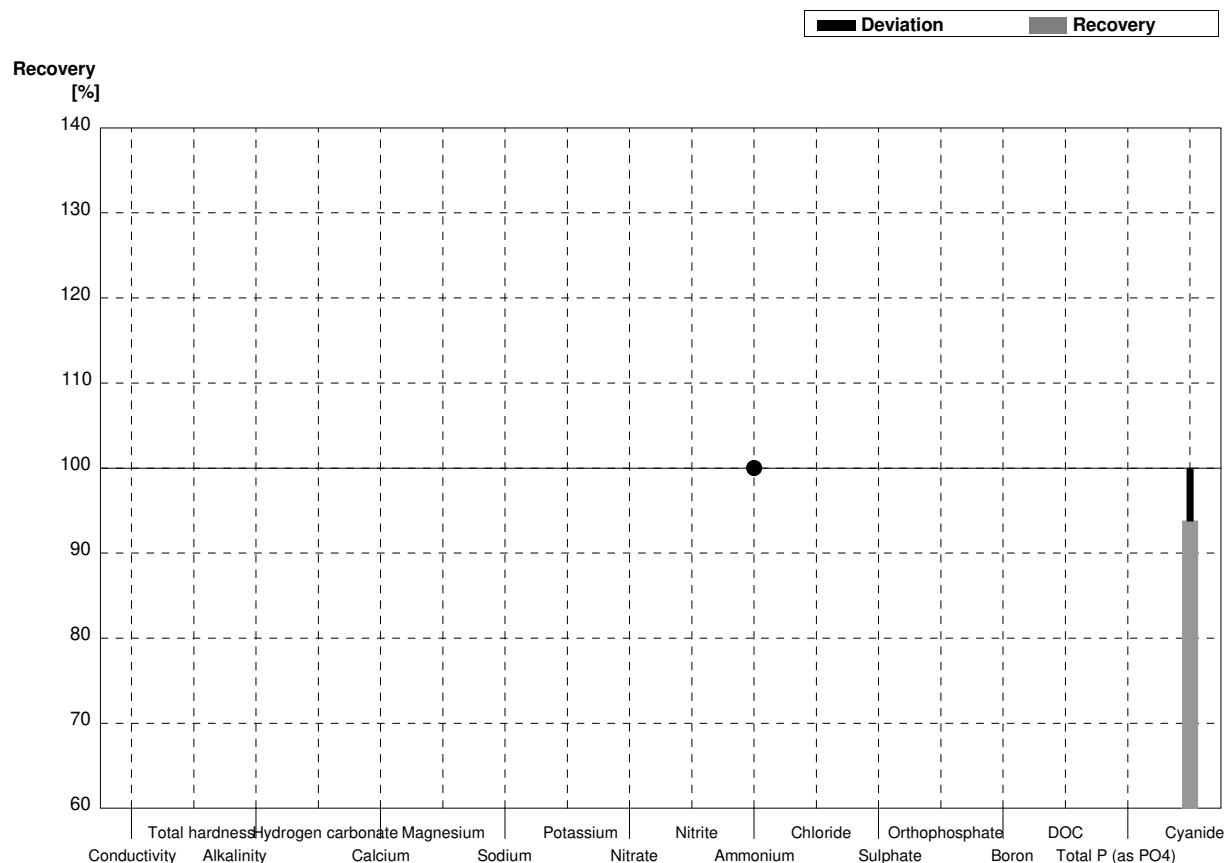
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	395	16	µS/cm	100%
Total hardness	1,403	0,014	7,75	3	mmol/l	552%
Alkalinity	1,246	0,014	1,23	0,25	mmol/l	99%
Hydrogen carbonate	73,0	0,8	75,1	15	mg/l	103%
Calcium	37,4	0,5	38,4	3,1	mg/l	103%
Magnesium	11,43	0,14	12,3	0,89	mg/l	108%
Sodium	18,15	0,08	17,7	1,42	mg/l	98%
Potassium	3,17	0,03	3,13	0,38	mg/l	99%
Nitrate	21,4	0,5	21,6	1,94	mg/l	101%
Nitrite	0,0708	0,0008	0,060	0,005	mg/l	85%
Ammonium	0,076	0,003	0,140	0,011	mg/l	184%
Chloride	41,5	0,7	41,3	3,3	mg/l	100%
Sulphate	45,2	0,5	44,4	4,4	mg/l	98%
Orthophosphate	<0,009		<0,040		mg/l	•
Boron	0,0406	0,0004	<0,05		mg/l	•
DOC	2,39	0,04	4,08	0,45	mg/l	171%
Total P (as PO4)	<0,009		0,054	0,005	mg/l	FP
Cyanide	0,0354	0,0016	0,0282	0,006	mg/l	80%



**Sample N163A**

**Laboratory V**

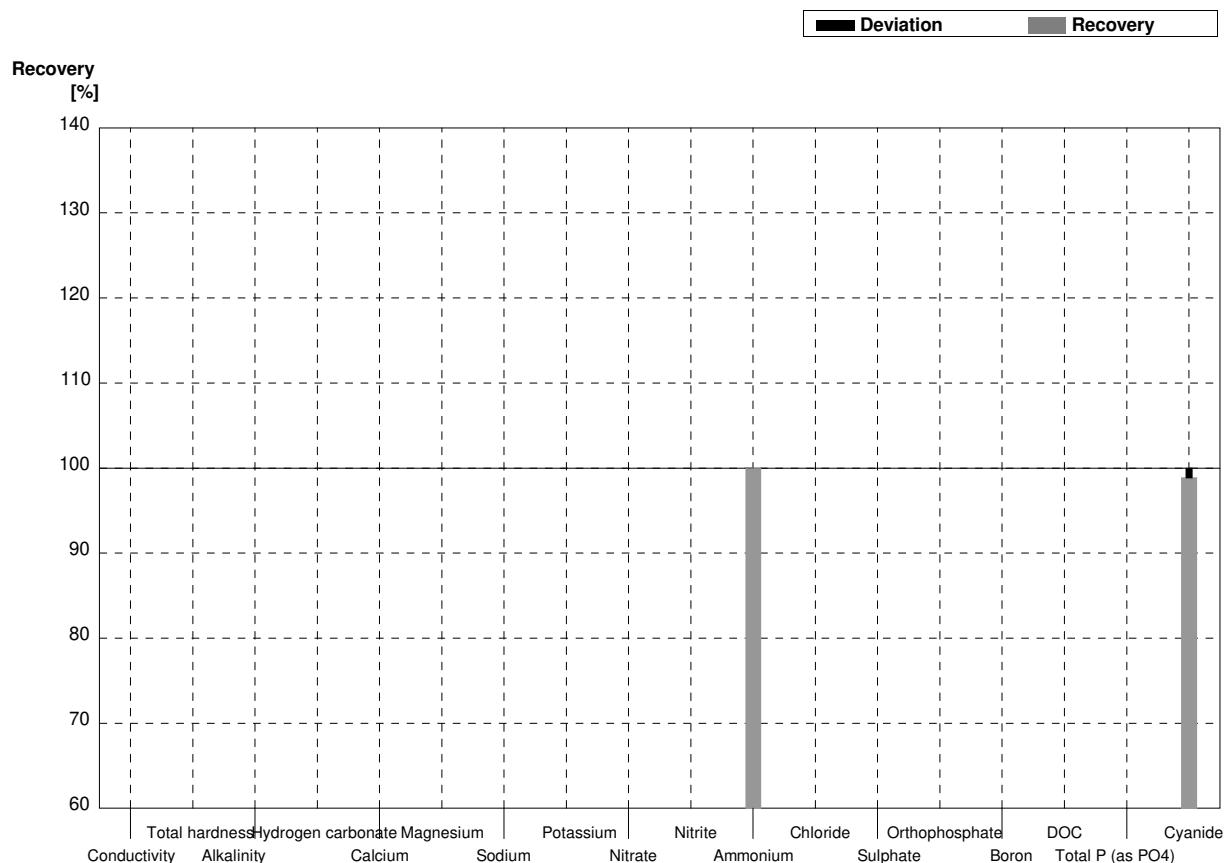
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01		<0,03		mg/l	•
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO <sub>4</sub> )	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016	0,050	0,004	mg/l	94%



**Sample N163B**

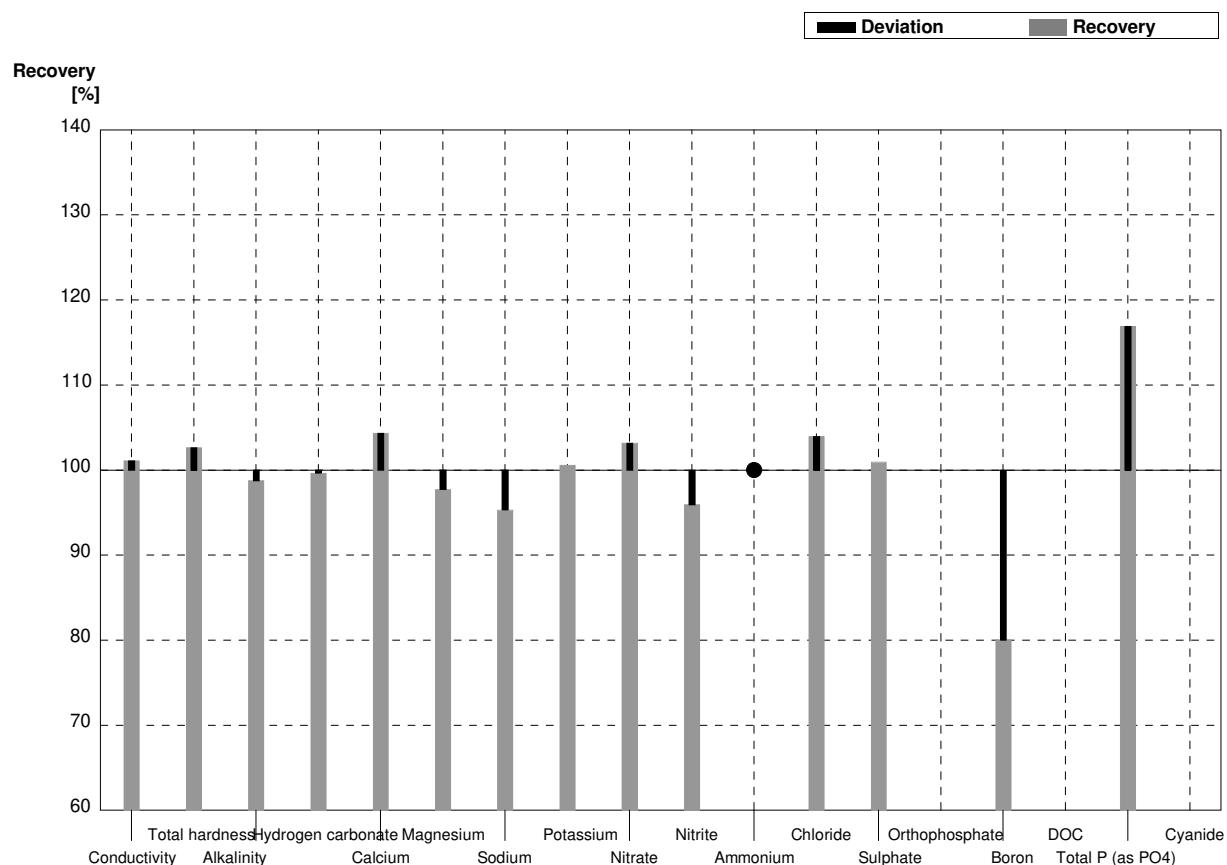
**Laboratory V**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003	0,076	0,008	mg/l	100%
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016	0,0350	0,003	mg/l	99%



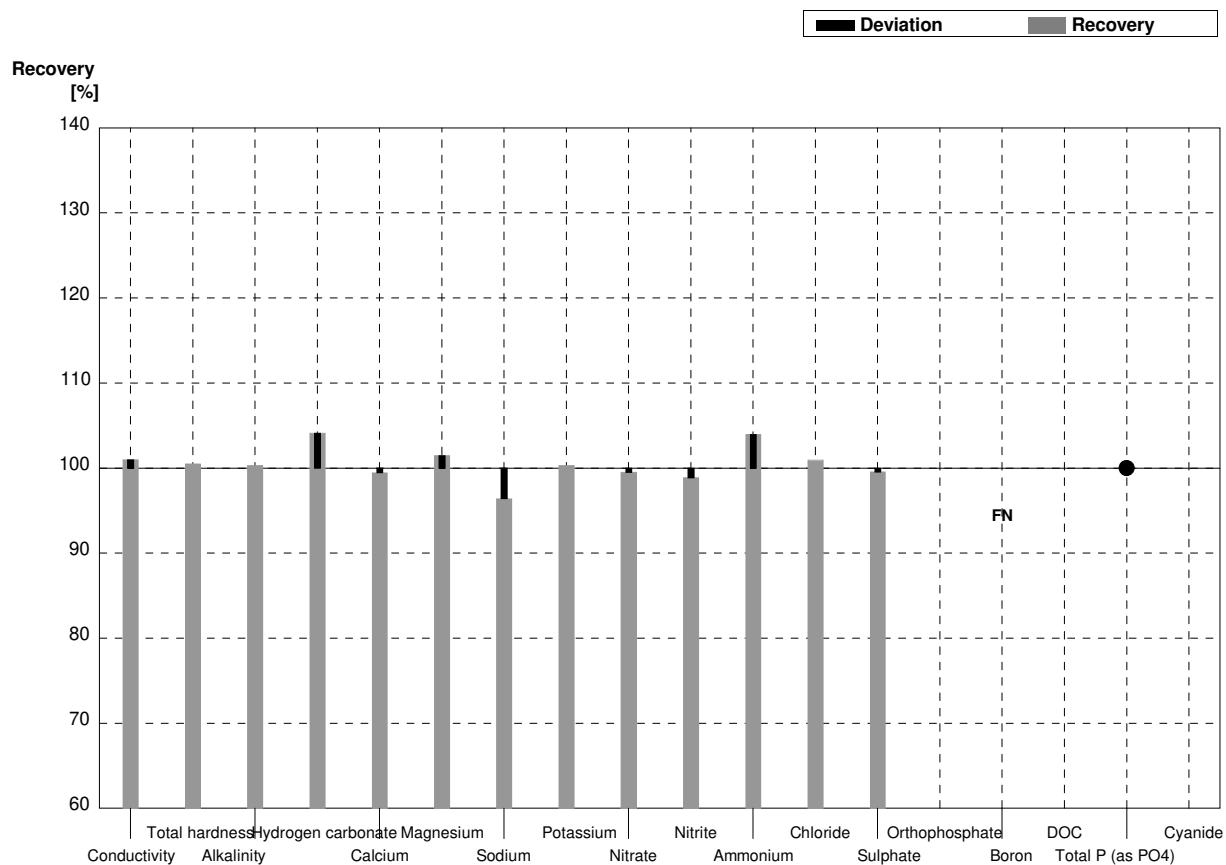
**Sample N163A****Laboratory W**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	915		$\mu\text{S}/\text{cm}$	101%
Total hardness	3,37	0,04	3,46		$\text{mmol}/\text{l}$	103%
Alkalinity	4,91	0,06	4,85		$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	297	4	296		$\text{mg}/\text{l}$	100%
Calcium	98,7	1,4	103	8,27	$\text{mg}/\text{l}$	104%
Magnesium	22,0	0,3	21,5	1,81	$\text{mg}/\text{l}$	98%
Sodium	53,5	0,4	51	3,02	$\text{mg}/\text{l}$	95%
Potassium	13,22	0,08	13,3	1,29	$\text{mg}/\text{l}$	101%
Nitrate	63,0	1,3	65		$\text{mg}/\text{l}$	103%
Nitrite	0,0322	0,0010	0,0309		$\text{mg}/\text{l}$	96%
Ammonium	<0,01		<0,04		$\text{mg}/\text{l}$	•
Chloride	60,6	1,5	63		$\text{mg}/\text{l}$	104%
Sulphate	84,2	0,7	85		$\text{mg}/\text{l}$	101%
Orthophosphate	0,091	0,006			$\text{mg}/\text{l}$	
Boron	0,1512	0,0013	0,121	0,0086	$\text{mg}/\text{l}$	80%
DOC	6,00	0,06			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	0,207	0,002	0,242	0,0076	$\text{mg}/\text{l}$	117%
Cyanide	0,0533	0,0016			$\text{mg}/\text{l}$	



**Sample N163B****Laboratory W**

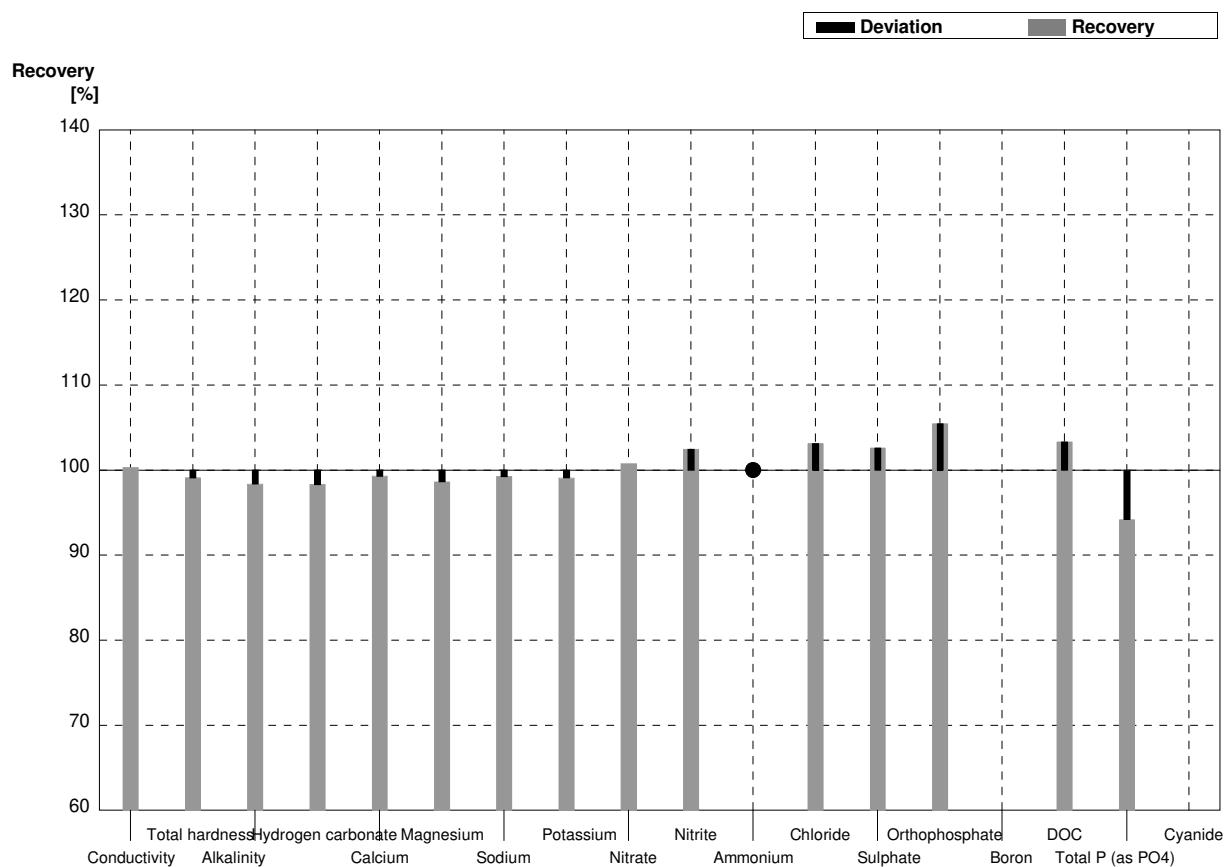
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	399		$\mu\text{S}/\text{cm}$	101%
Total hardness	1,403	0,014	1,41		$\text{mmol/l}$	100%
Alkalinity	1,246	0,014	1,25		$\text{mmol/l}$	100%
Hydrogen carbonate	73,0	0,8	76		$\text{mg/l}$	104%
Calcium	37,4	0,5	37,2	2,08	$\text{mg/l}$	99%
Magnesium	11,43	0,14	11,6	0,92	$\text{mg/l}$	101%
Sodium	18,15	0,08	17,5	1,07	$\text{mg/l}$	96%
Potassium	3,17	0,03	3,18	0,31	$\text{mg/l}$	100%
Nitrate	21,4	0,5	21,3		$\text{mg/l}$	100%
Nitrite	0,0708	0,0008	0,070		$\text{mg/l}$	99%
Ammonium	0,076	0,003	0,079		$\text{mg/l}$	104%
Chloride	41,5	0,7	41,9		$\text{mg/l}$	101%
Sulphate	45,2	0,5	45,0		$\text{mg/l}$	100%
Orthophosphate	<0,009				$\text{mg/l}$	
Boron	0,0406	0,0004	<0,02		$\text{mg/l}$	FN
DOC	2,39	0,04			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	<0,009		<0,06		$\text{mg/l}$	•
Cyanide	0,0354	0,0016			$\text{mg/l}$	



**Sample N163A**

**Laboratory X**

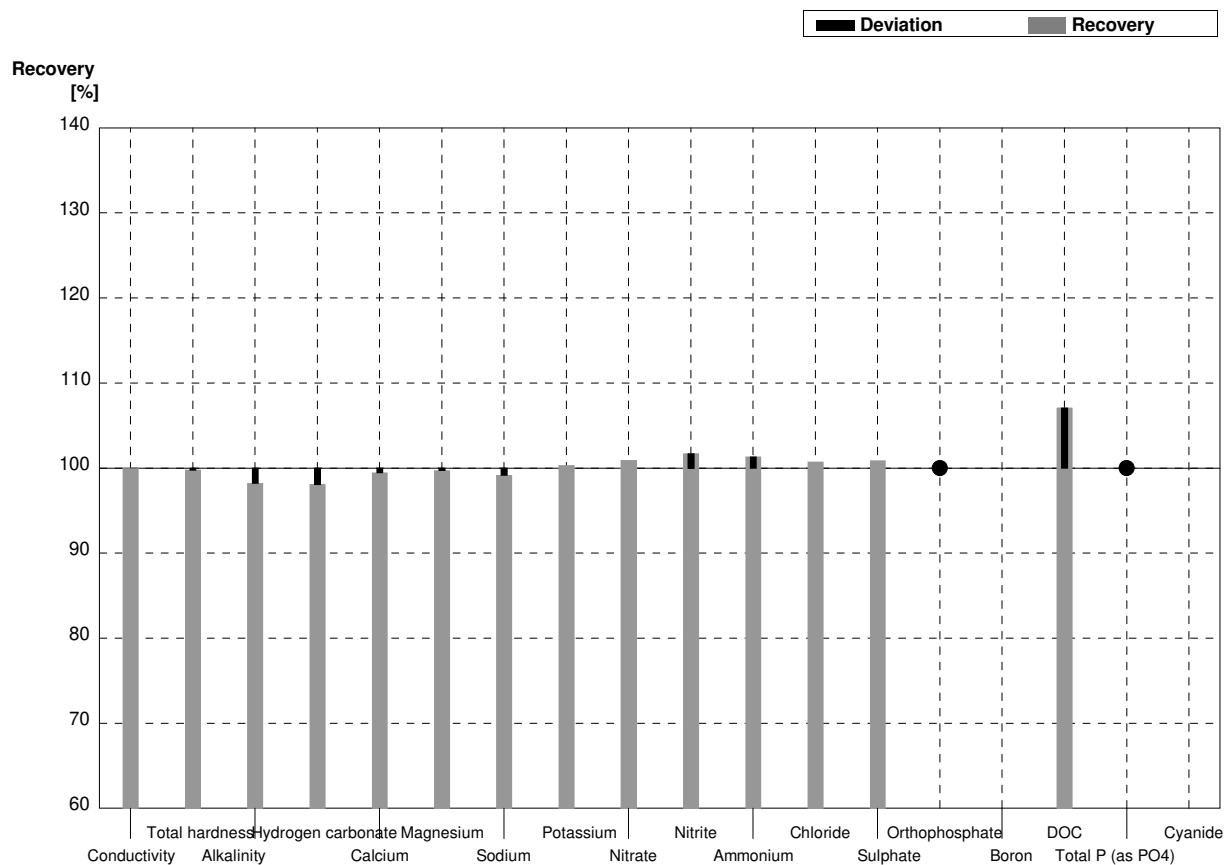
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	908	37	µS/cm	100%
Total hardness	3,37	0,04	3,34	0,2	mmol/l	99%
Alkalinity	4,91	0,06	4,83	0,2	mmol/l	98%
Hydrogen carbonate	297	4	292	12	mg/l	98%
Calcium	98,7	1,4	98,0	8	mg/l	99%
Magnesium	22,0	0,3	21,7	3	mg/l	99%
Sodium	53,5	0,4	53,1	8	mg/l	99%
Potassium	13,22	0,08	13,1	1,9	mg/l	99%
Nitrate	63,0	1,3	63,5	5	mg/l	101%
Nitrite	0,0322	0,0010	0,0330	0,003	mg/l	102%
Ammonium	<0,01		<0,013		mg/l	•
Chloride	60,6	1,5	62,5	4	mg/l	103%
Sulphate	84,2	0,7	86,4	7	mg/l	103%
Orthophosphate	0,091	0,006	0,096	0,009	mg/l	105%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	6,20	0,9	mg/l	103%
Total P (as PO4)	0,207	0,002	0,195	0,02	mg/l	94%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory X**

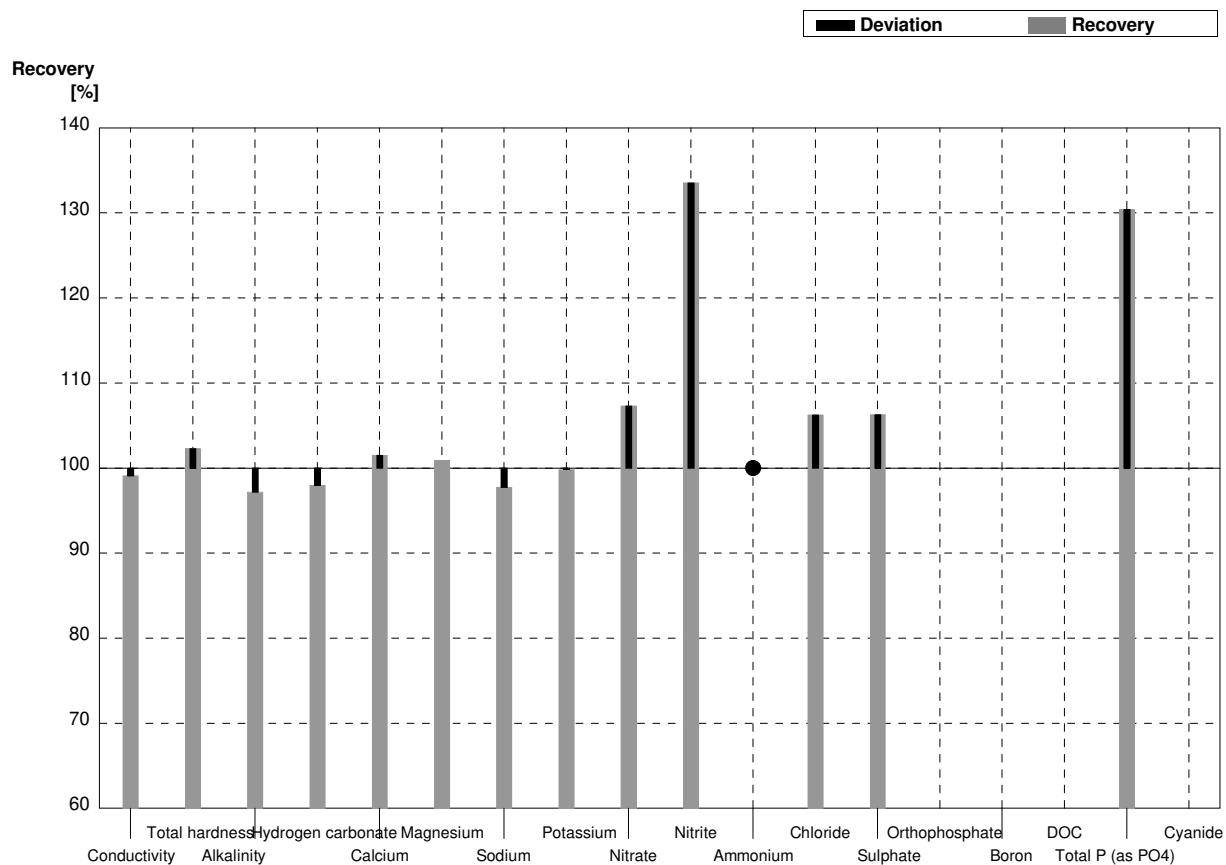
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	395	16	µS/cm	100%
Total hardness	1,403	0,014	1,40	0,1	mmol/l	100%
Alkalinity	1,246	0,014	1,224	0,1	mmol/l	98%
Hydrogen carbonate	73,0	0,8	71,6	3	mg/l	98%
Calcium	37,4	0,5	37,2	3	mg/l	99%
Magnesium	11,43	0,14	11,4	1,4	mg/l	100%
Sodium	18,15	0,08	18,0	2,7	mg/l	99%
Potassium	3,17	0,03	3,18	0,5	mg/l	100%
Nitrate	21,4	0,5	21,6	2	mg/l	101%
Nitrite	0,0708	0,0008	0,072	0,006	mg/l	102%
Ammonium	0,076	0,003	0,077	0,009	mg/l	101%
Chloride	41,5	0,7	41,8	3	mg/l	101%
Sulphate	45,2	0,5	45,6	4	mg/l	101%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,56	0,4	mg/l	107%
Total P (as PO <sub>4</sub> )	<0,009		<0,013		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

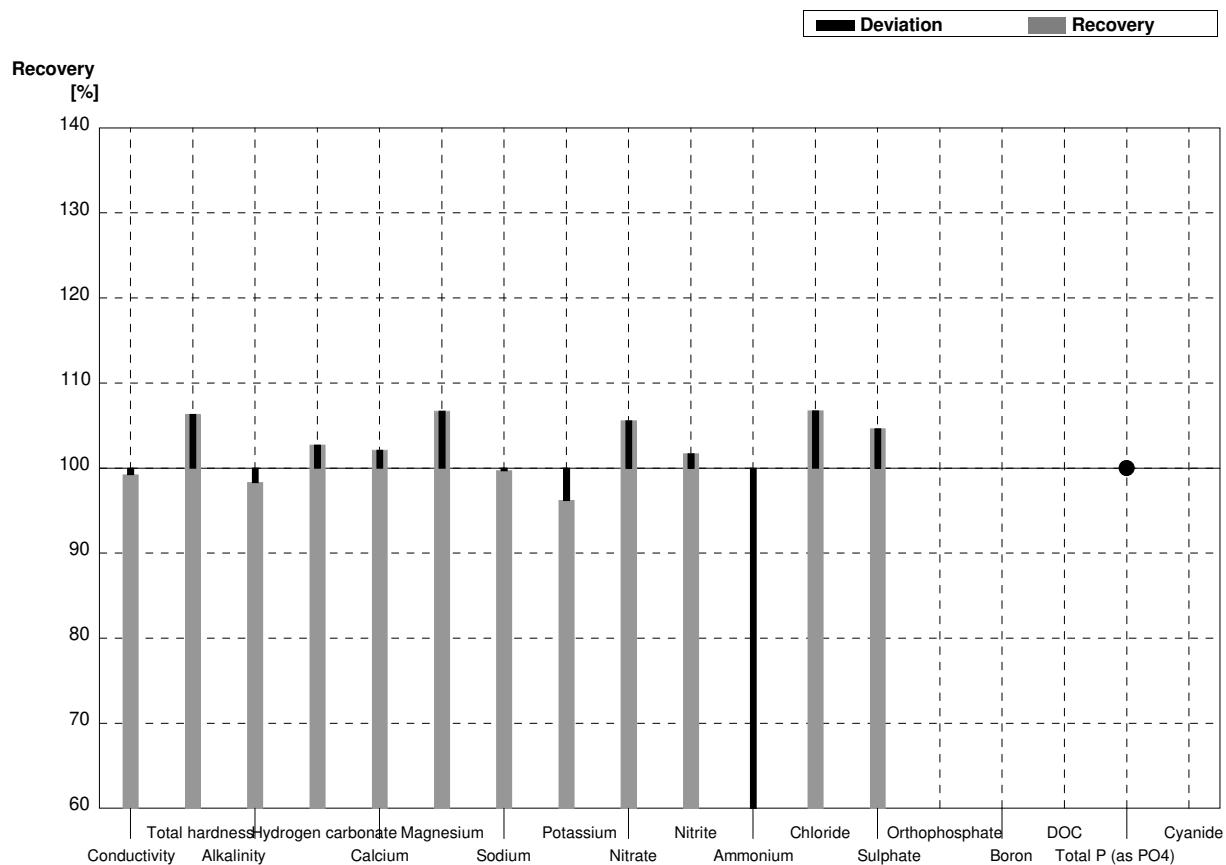
**Laboratory Y**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	897	14,0	µS/cm	99%
Total hardness	3,37	0,04	3,448	0,025	mmol/l	102%
Alkalinity	4,91	0,06	4,772	0,025	mmol/l	97%
Hydrogen carbonate	297	4	291	10	mg/l	98%
Calcium	98,7	1,4	100,2	2	mg/l	102%
Magnesium	22,0	0,3	22,2	0,4	mg/l	101%
Sodium	53,5	0,4	52,3	1	mg/l	98%
Potassium	13,22	0,08	13,2	0,2	mg/l	100%
Nitrate	63,0	1,3	67,6	1	mg/l	107%
Nitrite	0,0322	0,0010	0,0430	0,01	mg/l	134%
Ammonium	<0,01		0,0050	0,01	mg/l	•
Chloride	60,6	1,5	64,4	1	mg/l	106%
Sulphate	84,2	0,7	89,5	1,5	mg/l	106%
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002	0,2700	0,05	mg/l	130%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B****Laboratory Y**

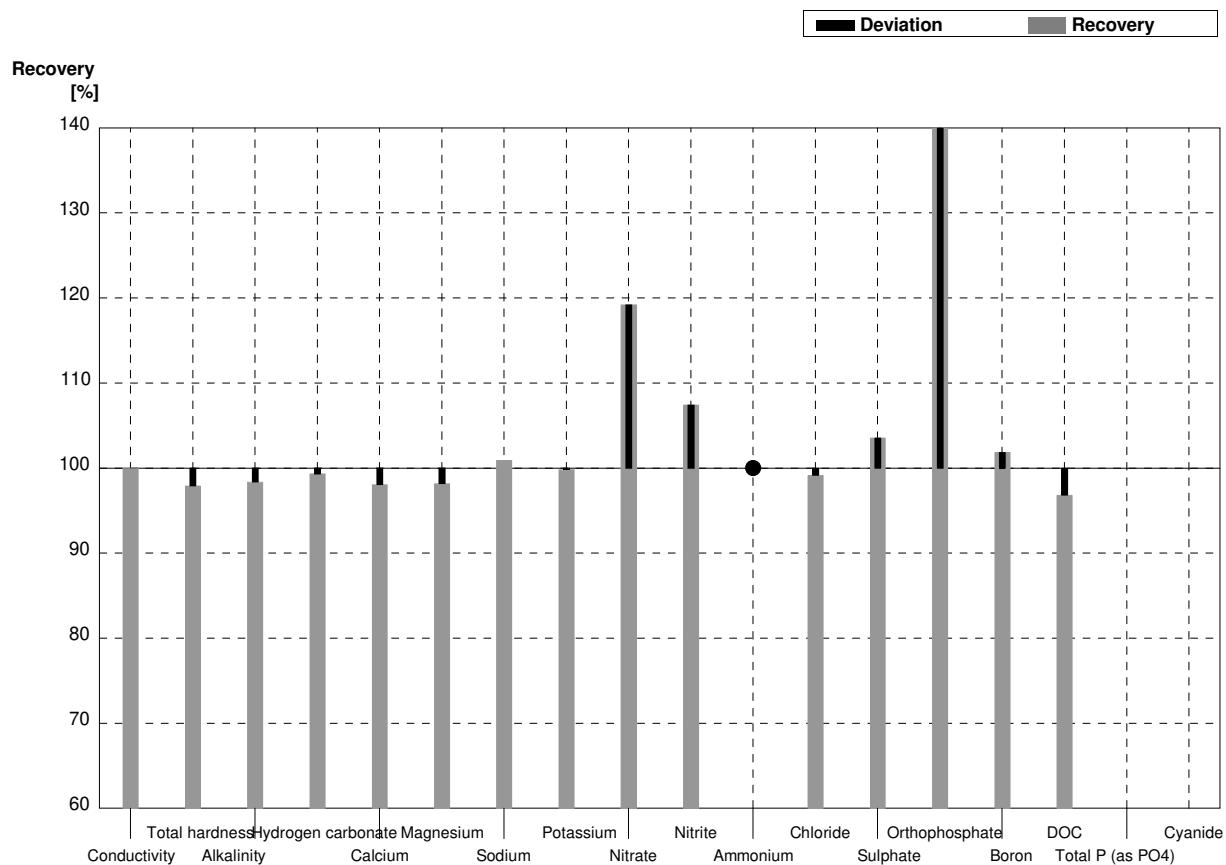
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	392	14,0	$\mu\text{S}/\text{cm}$	99%
Total hardness	1,403	0,014	1,492	0,025	$\text{mmol}/\text{l}$	106%
Alkalinity	1,246	0,014	1,225	0,025	$\text{mmol}/\text{l}$	98%
Hydrogen carbonate	73,0	0,8	75	10	$\text{mg}/\text{l}$	103%
Calcium	37,4	0,5	38,2	2	$\text{mg}/\text{l}$	102%
Magnesium	11,43	0,14	12,2	0,4	$\text{mg}/\text{l}$	107%
Sodium	18,15	0,08	18,1	1	$\text{mg}/\text{l}$	100%
Potassium	3,17	0,03	3,05	0,2	$\text{mg}/\text{l}$	96%
Nitrate	21,4	0,5	22,6	1	$\text{mg}/\text{l}$	106%
Nitrite	0,0708	0,0008	0,0720	0,01	$\text{mg}/\text{l}$	102%
Ammonium	0,076	0,003	0,0400	0,01	$\text{mg}/\text{l}$	53%
Chloride	41,5	0,7	44,3	1	$\text{mg}/\text{l}$	107%
Sulphate	45,2	0,5	47,3	1,5	$\text{mg}/\text{l}$	105%
Orthophosphate	<0,009				$\text{mg}/\text{l}$	
Boron	0,0406	0,0004			$\text{mg}/\text{l}$	
DOC	2,39	0,04			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	<0,009		0,0060	0,05	$\text{mg}/\text{l}$	•
Cyanide	0,0354	0,0016			$\text{mg}/\text{l}$	



**Sample N163A**

**Laboratory Z**

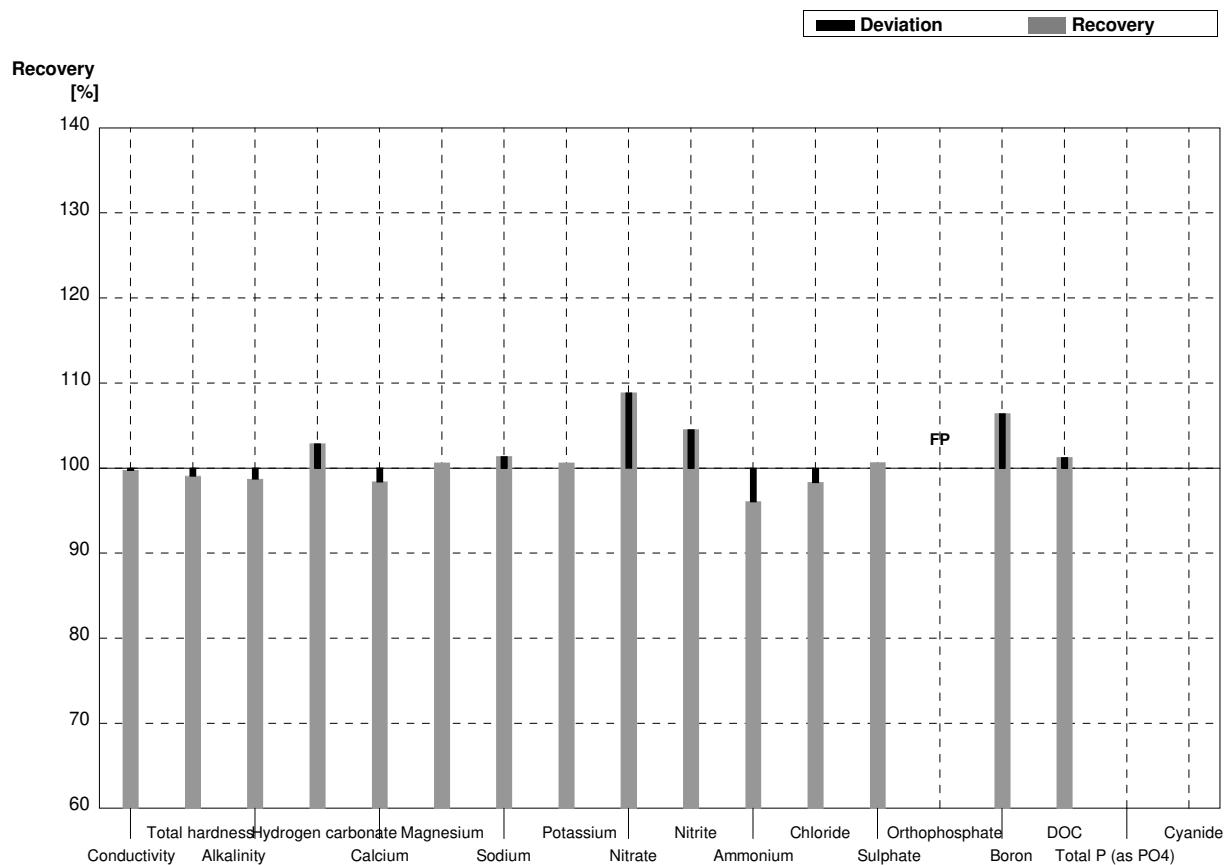
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	905	18	µS/cm	100%
Total hardness	3,37	0,04	3,30	0,17	mmol/l	98%
Alkalinity	4,91	0,06	4,83	0,24	mmol/l	98%
Hydrogen carbonate	297	4	295	15	mg/l	99%
Calcium	98,7	1,4	96,8	4,8	mg/l	98%
Magnesium	22,0	0,3	21,6	1,1	mg/l	98%
Sodium	53,5	0,4	54,0	2,7	mg/l	101%
Potassium	13,22	0,08	13,2	0,7	mg/l	100%
Nitrate	63,0	1,3	75,1	3,8	mg/l	119%
Nitrite	0,0322	0,0010	0,0346	0,0035	mg/l	107%
Ammonium	<0,01		<0,05		mg/l	•
Chloride	60,6	1,5	60,1	3,0	mg/l	99%
Sulphate	84,2	0,7	87,2	4,4	mg/l	104%
Orthophosphate	0,091	0,006	0,184	0,018	mg/l	202%
Boron	0,1512	0,0013	0,154	0,008	mg/l	102%
DOC	6,00	0,06	5,81	0,58	mg/l	97%
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory Z**

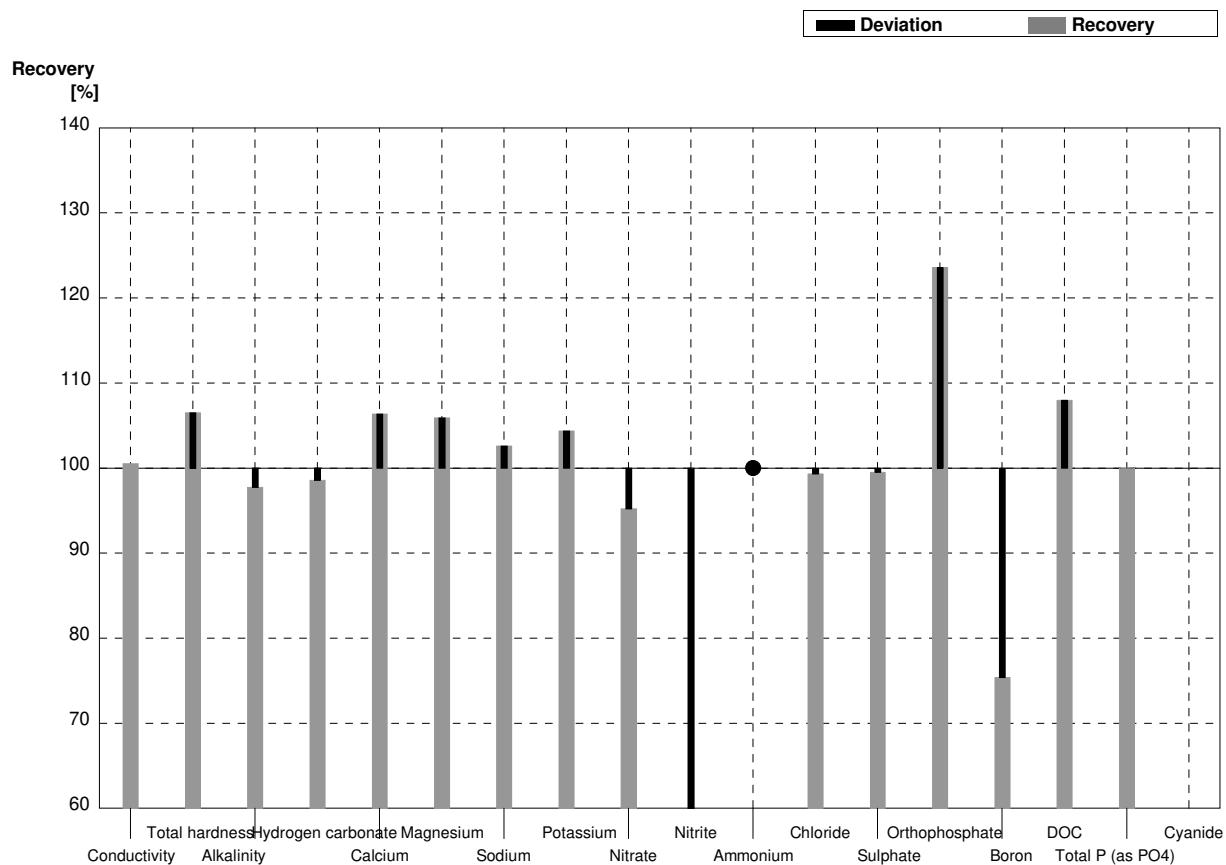
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	394	8	µS/cm	100%
Total hardness	1,403	0,014	1,39	0,10	mmol/l	99%
Alkalinity	1,246	0,014	1,23	0,06	mmol/l	99%
Hydrogen carbonate	73,0	0,8	75,1	3,8	mg/l	103%
Calcium	37,4	0,5	36,8	1,8	mg/l	98%
Magnesium	11,43	0,14	11,5	0,6	mg/l	101%
Sodium	18,15	0,08	18,4	0,9	mg/l	101%
Potassium	3,17	0,03	3,19	0,16	mg/l	101%
Nitrate	21,4	0,5	23,3	1,2	mg/l	109%
Nitrite	0,0708	0,0008	0,074	0,007	mg/l	105%
Ammonium	0,076	0,003	0,073	0,007	mg/l	96%
Chloride	41,5	0,7	40,8	2,0	mg/l	98%
Sulphate	45,2	0,5	45,5	2,3	mg/l	101%
Orthophosphate	<0,009		0,0218	0,0022	mg/l	FP
Boron	0,0406	0,0004	0,0432	0,0022	mg/l	106%
DOC	2,39	0,04	2,42	0,36	mg/l	101%
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AA**

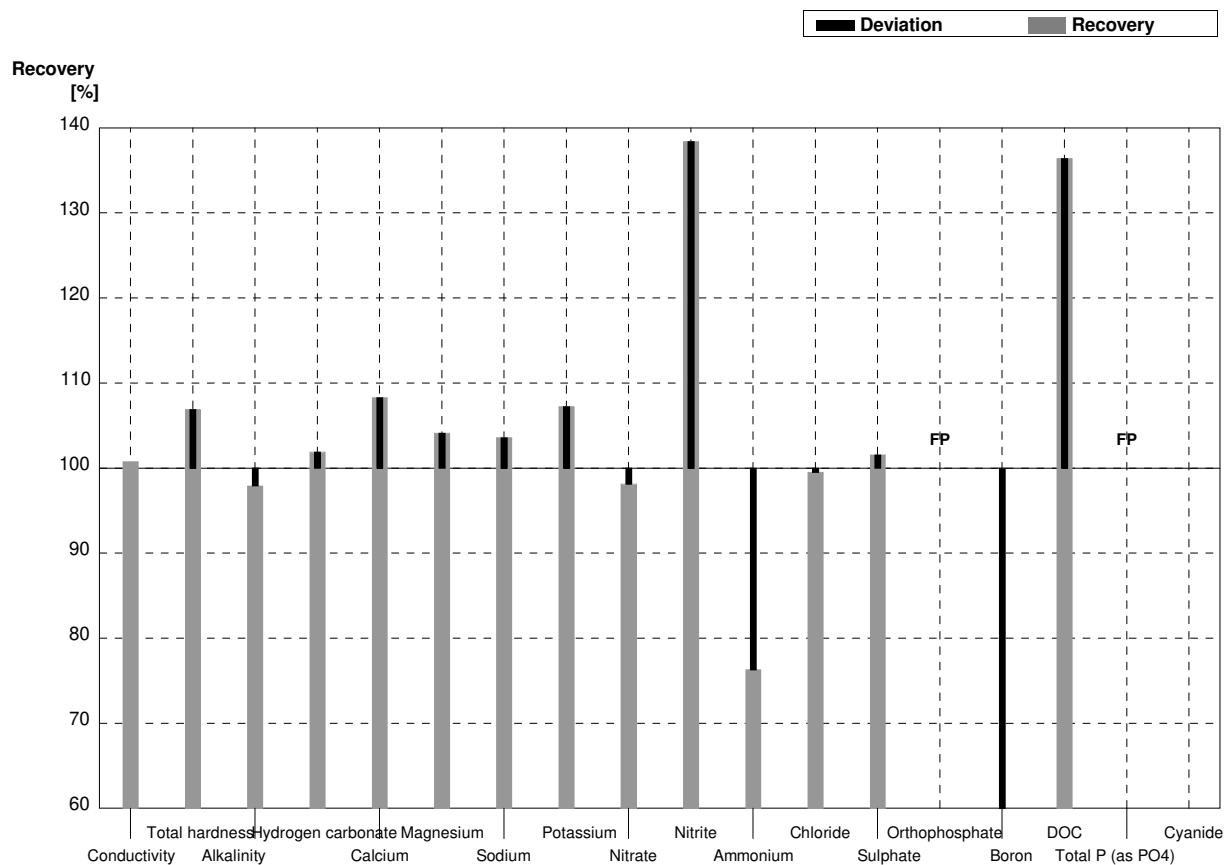
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	910	5	µS/cm	101%
Total hardness	3,37	0,04	3,59	0,104	mmol/l	107%
Alkalinity	4,91	0,06	4,80	0,106	mmol/l	98%
Hydrogen carbonate	297	4	292,8	7,03	mg/l	99%
Calcium	98,7	1,4	105,0	3,465	mg/l	106%
Magnesium	22,0	0,3	23,3	0,699	mg/l	106%
Sodium	53,5	0,4	54,9	1,757	mg/l	103%
Potassium	13,22	0,08	13,8	0,607	mg/l	104%
Nitrate	63,0	1,3	60,0	1,38	mg/l	95%
Nitrite	0,0322	0,0010	0,0100	0,0001	mg/l	31%
Ammonium	<0,01		0,0100	0,0012	mg/l	•
Chloride	60,6	1,5	60,2	1,50	mg/l	99%
Sulphate	84,2	0,7	83,8	2,01	mg/l	100%
Orthophosphate	0,091	0,006	0,1125	0,0113	mg/l	124%
Boron	0,1512	0,0013	0,114	0,008	mg/l	75%
DOC	6,00	0,06	6,48	0,31	mg/l	108%
Total P (as PO4)	0,207	0,002	0,2070	0,020	mg/l	100%
Cyanide	0,0533	0,0016			mg/l	



Sample N163B

Laboratory AA

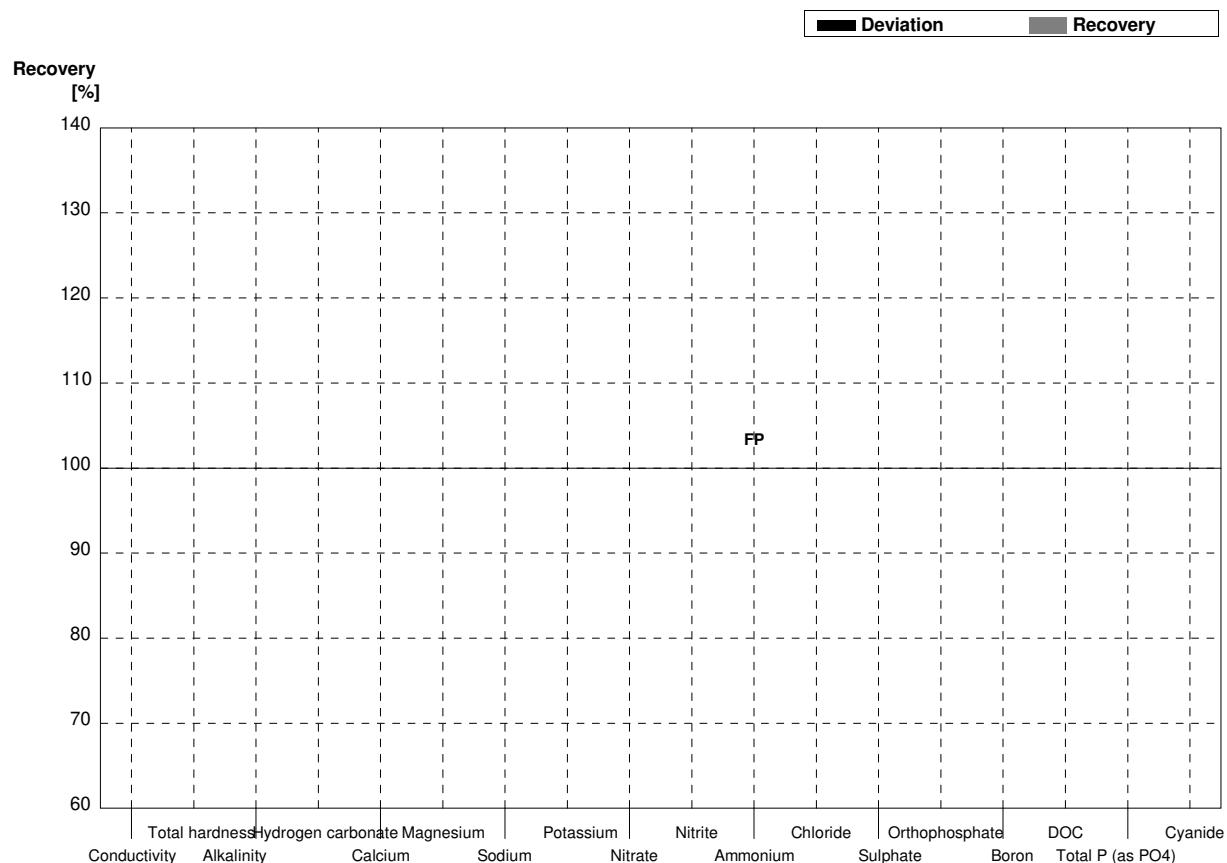
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	398	3	µS/cm	101%
Total hardness	1,403	0,014	1,50	0,041	mmol/l	107%
Alkalinity	1,246	0,014	1,22	0,024	mmol/l	98%
Hydrogen carbonate	73,0	0,8	74,4	1,20	mg/l	102%
Calcium	37,4	0,5	40,5	1,31	mg/l	108%
Magnesium	11,43	0,14	11,9	0,400	mg/l	104%
Sodium	18,15	0,08	18,8	0,564	mg/l	104%
Potassium	3,17	0,03	3,40	0,102	mg/l	107%
Nitrate	21,4	0,5	21,0	0,672	mg/l	98%
Nitrite	0,0708	0,0008	0,098	0,005	mg/l	138%
Ammonium	0,076	0,003	0,058	0,005	mg/l	76%
Chloride	41,5	0,7	41,3	1,03	mg/l	100%
Sulphate	45,2	0,5	45,9	0,918	mg/l	102%
Orthophosphate	<0,009		0,0270	0,002	mg/l	FP
Boron	0,0406	0,0004	0,0120	0,0009	mg/l	30%
DOC	2,39	0,04	3,26	0,16	mg/l	136%
Total P (as PO4)	<0,009		0,0270	0,002	mg/l	FP
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AB**

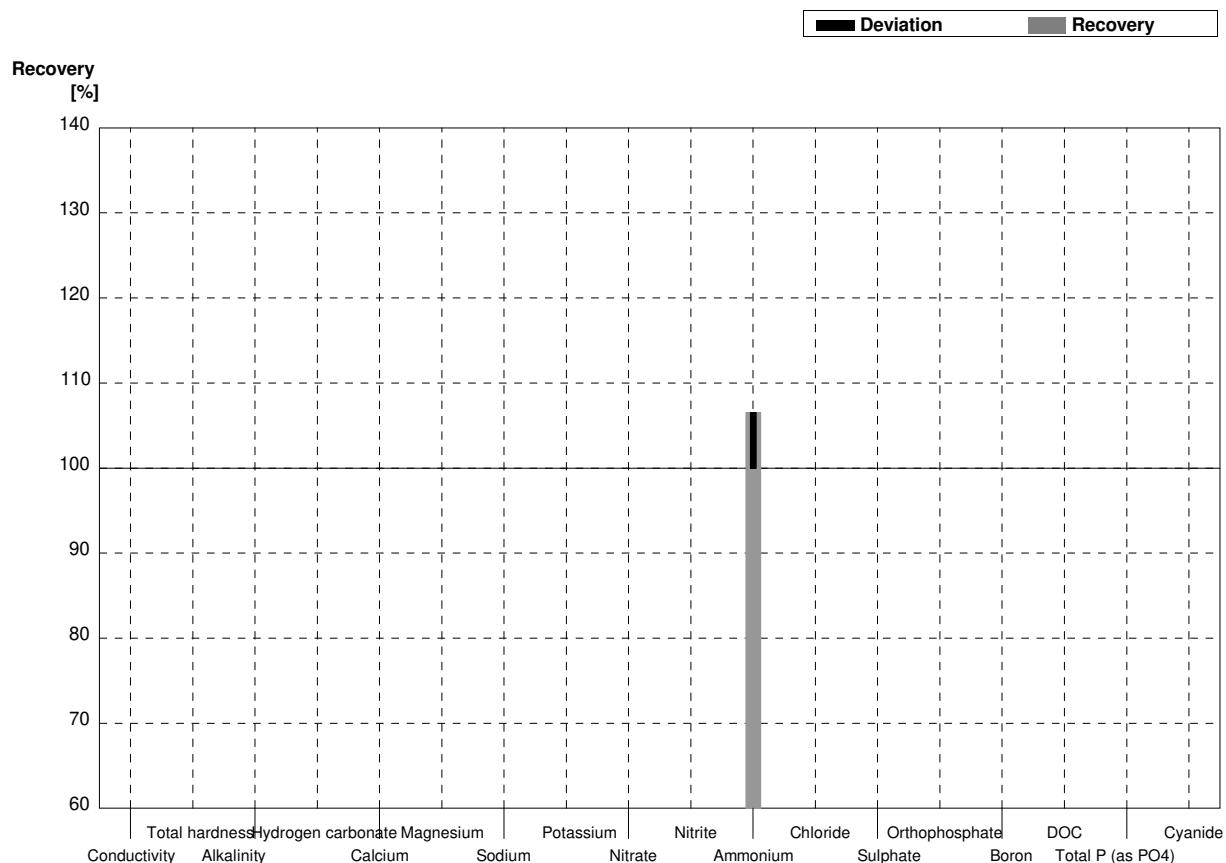
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01		0,0192		mg/l	FP
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AB**

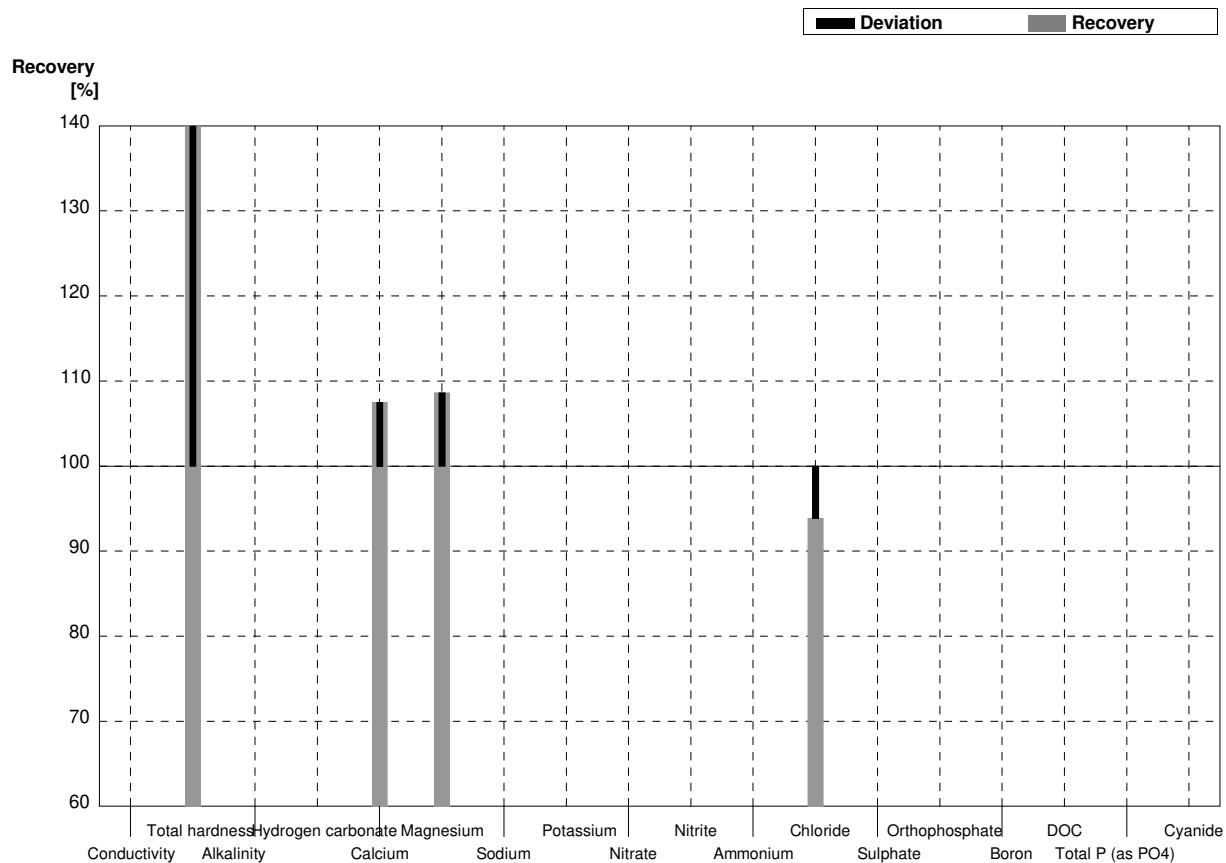
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003	0,081		mg/l	107%
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO <sub>4</sub> )	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AC**

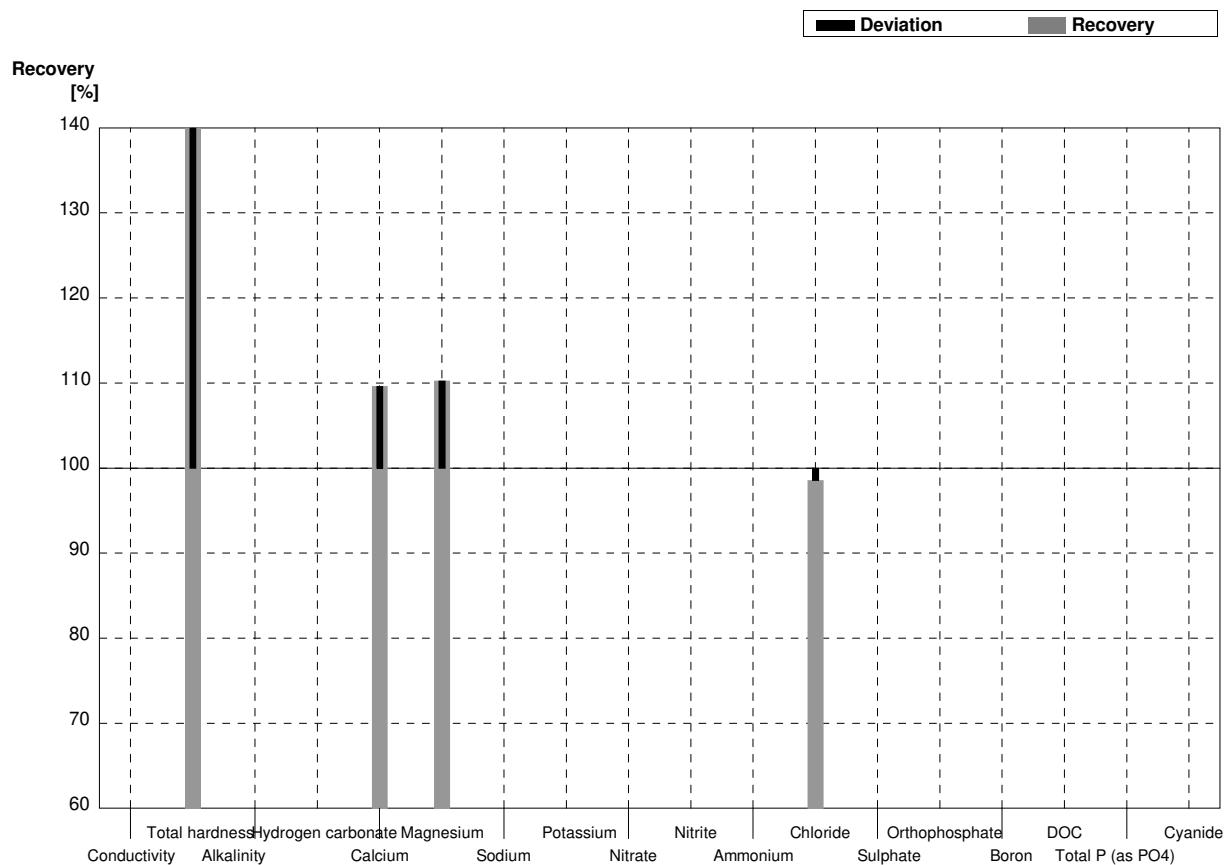
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04	20,4	0,05	mmol/l	605%
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	106,1	0,10	mg/l	107%
Magnesium	22,0	0,3	23,9	0,10	mg/l	109%
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5	56,9	0,10	mg/l	94%
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO <sub>4</sub> )	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AC**

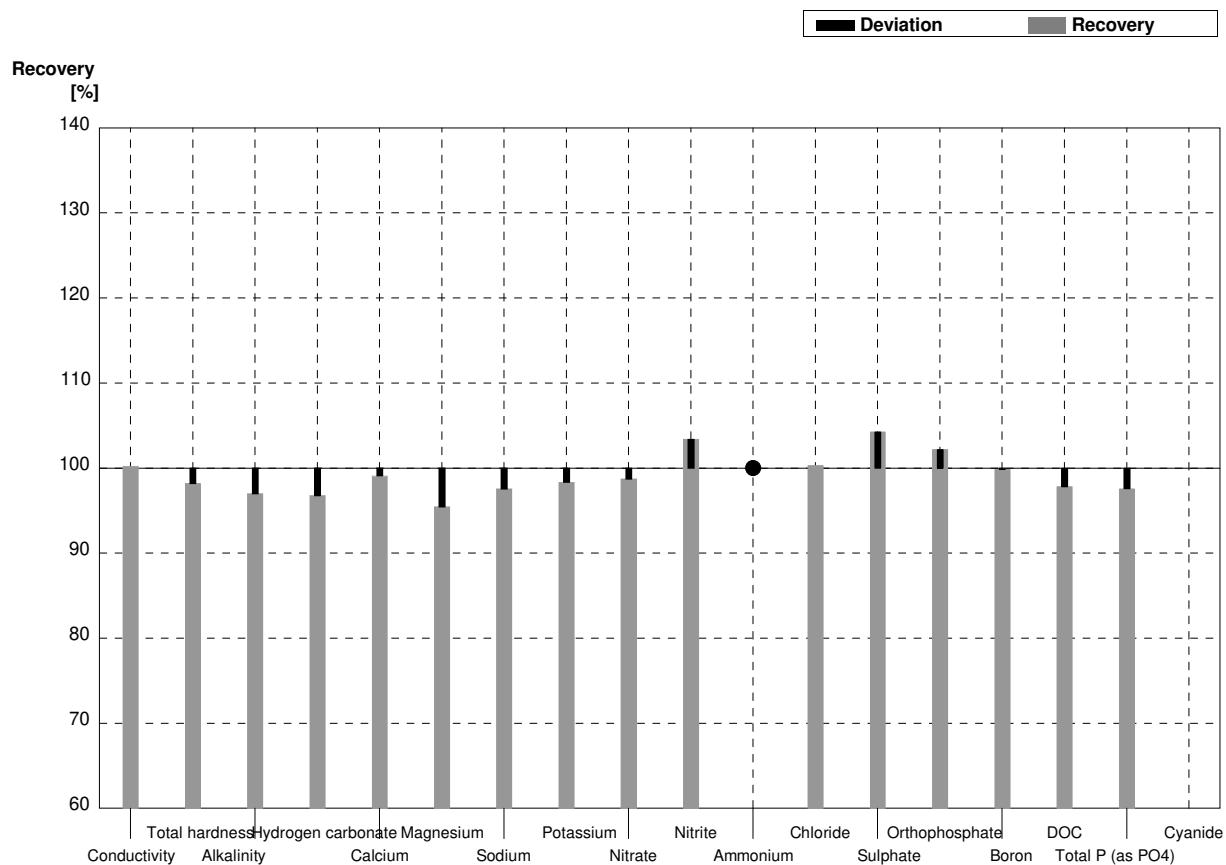
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014	8,60	0,05	mmol/l	613%
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	41,0	0,10	mg/l	110%
Magnesium	11,43	0,14	12,6	0,10	mg/l	110%
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7	40,9	0,10	mg/l	99%
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AD**

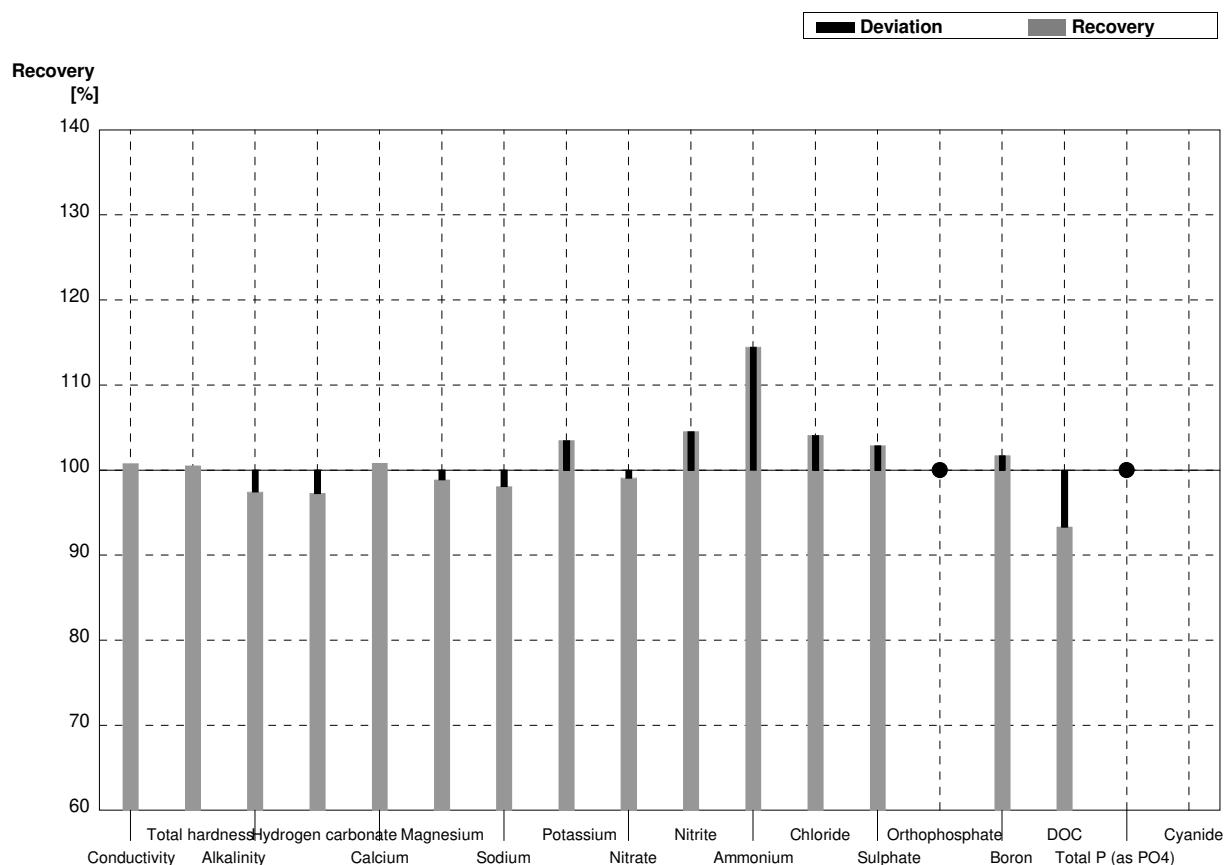
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	907	36	µS/cm	100%
Total hardness	3,37	0,04	3,31	0,17	mmol/l	98%
Alkalinity	4,91	0,06	4,762	0,325	mmol/l	97%
Hydrogen carbonate	297	4	287,4	19,8	mg/l	97%
Calcium	98,7	1,4	97,8	4,6	mg/l	99%
Magnesium	22,0	0,3	21,0	1,3	mg/l	95%
Sodium	53,5	0,4	52,2	2,8	mg/l	98%
Potassium	13,22	0,08	13,0	0,5	mg/l	98%
Nitrate	63,0	1,3	62,2	3,8	mg/l	99%
Nitrite	0,0322	0,0010	0,0333	0,0043	mg/l	103%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	60,6	1,5	60,8	4,8	mg/l	100%
Sulphate	84,2	0,7	87,8	8,0	mg/l	104%
Orthophosphate	0,091	0,006	0,093	0,012	mg/l	102%
Boron	0,1512	0,0013	0,151	0,014	mg/l	100%
DOC	6,00	0,06	5,87	1,09	mg/l	98%
Total P (as PO4)	0,207	0,002	0,202	0,031	mg/l	98%
Cyanide	0,0533	0,0016	n.a		mg/l	



**Sample N163B**

**Laboratory AD**

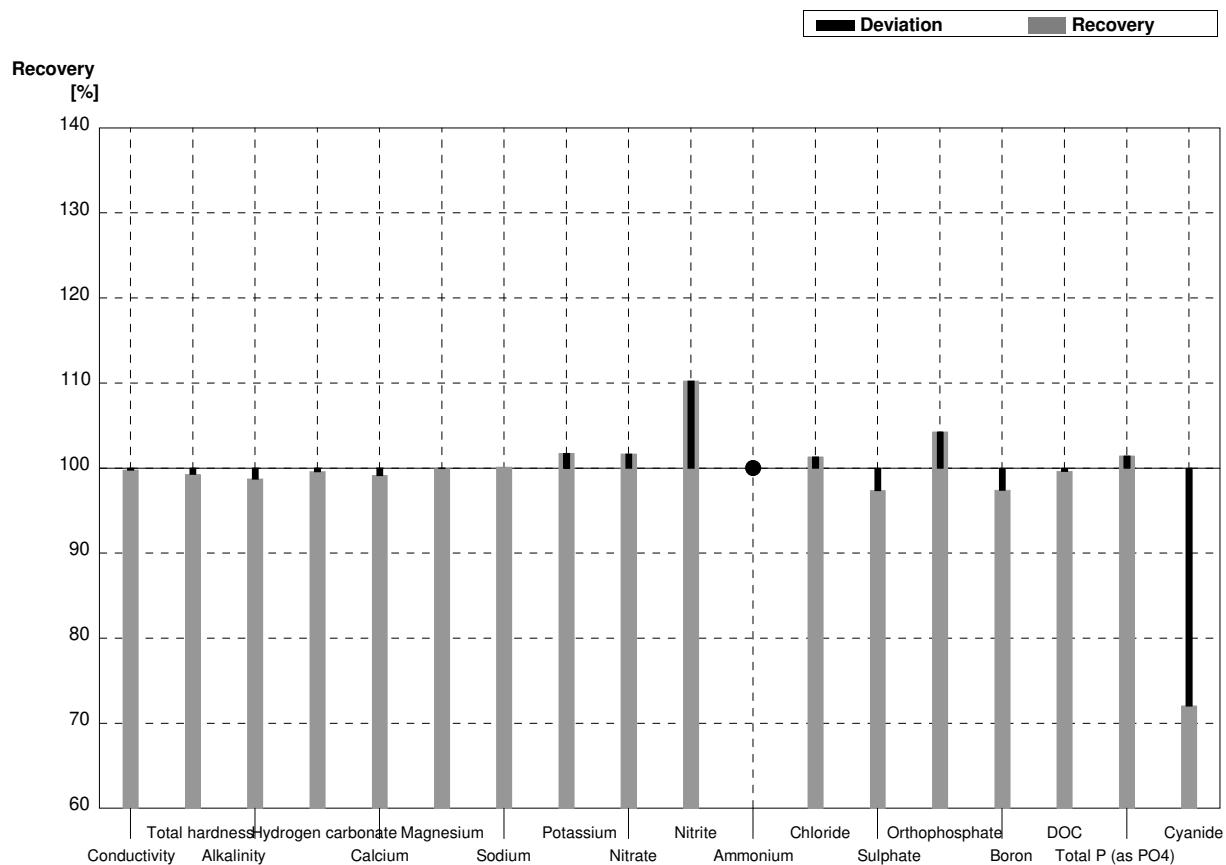
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	398	16	µS/cm	101%
Total hardness	1,403	0,014	1,41	0,08	mmol/l	100%
Alkalinity	1,246	0,014	1,214	0,103	mmol/l	97%
Hydrogen carbonate	73,0	0,8	71,0	6,3	mg/l	97%
Calcium	37,4	0,5	37,7	1,8	mg/l	101%
Magnesium	11,43	0,14	11,3	0,7	mg/l	99%
Sodium	18,15	0,08	17,8	0,9	mg/l	98%
Potassium	3,17	0,03	3,28	0,16	mg/l	103%
Nitrate	21,4	0,5	21,2	1,3	mg/l	99%
Nitrite	0,0708	0,0008	0,074	0,007	mg/l	105%
Ammonium	0,076	0,003	0,087	0,015	mg/l	114%
Chloride	41,5	0,7	43,2	3,5	mg/l	104%
Sulphate	45,2	0,5	46,5	4,3	mg/l	103%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,0406	0,0004	0,0413	0,0046	mg/l	102%
DOC	2,39	0,04	2,23	0,51	mg/l	93%
Total P (as PO4)	<0,009		<0,010		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AE**

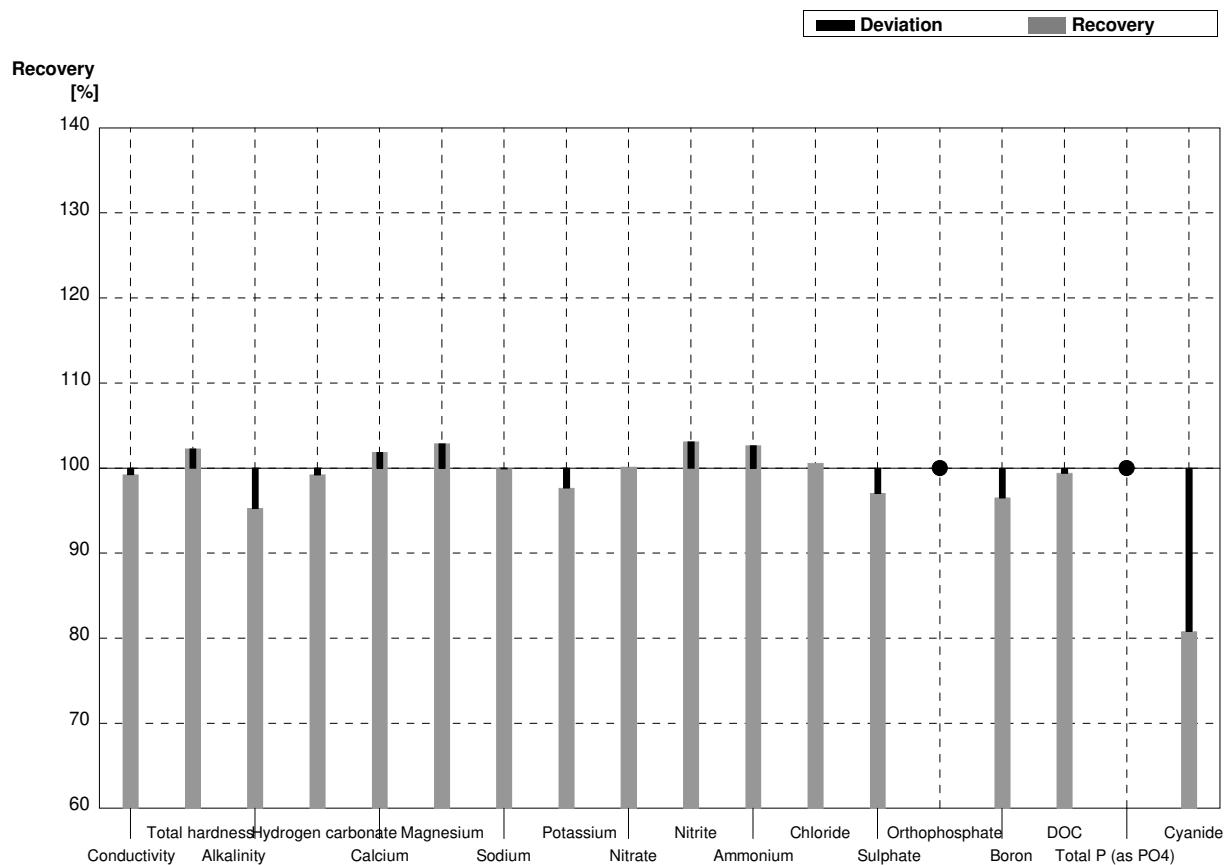
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	903	26	µS/cm	100%
Total hardness	3,37	0,04	3,346	0,2	mmol/l	99%
Alkalinity	4,91	0,06	4,848	0,48	mmol/l	99%
Hydrogen carbonate	297	4	295,81		mg/l	100%
Calcium	98,7	1,4	97,85	5,19	mg/l	99%
Magnesium	22,0	0,3	21,99	1,76	mg/l	100%
Sodium	53,5	0,4	53,58	3,70	mg/l	100%
Potassium	13,22	0,08	13,45	0,78	mg/l	102%
Nitrate	63,0	1,3	64,058	3,33	mg/l	102%
Nitrite	0,0322	0,0010	0,0355	0,0038	mg/l	110%
Ammonium	<0,01		<0,013		mg/l	•
Chloride	60,6	1,5	61,4	2,27	mg/l	101%
Sulphate	84,2	0,7	82	3,85	mg/l	97%
Orthophosphate	0,091	0,006	0,0949	0,0248	mg/l	104%
Boron	0,1512	0,0013	0,1473	0,0317	mg/l	97%
DOC	6,00	0,06	5,979	0,66	mg/l	100%
Total P (as PO4)	0,207	0,002	0,210	0,041	mg/l	101%
Cyanide	0,0533	0,0016	0,0384	0,0115	mg/l	72%



**Sample N163B**

**Laboratory AE**

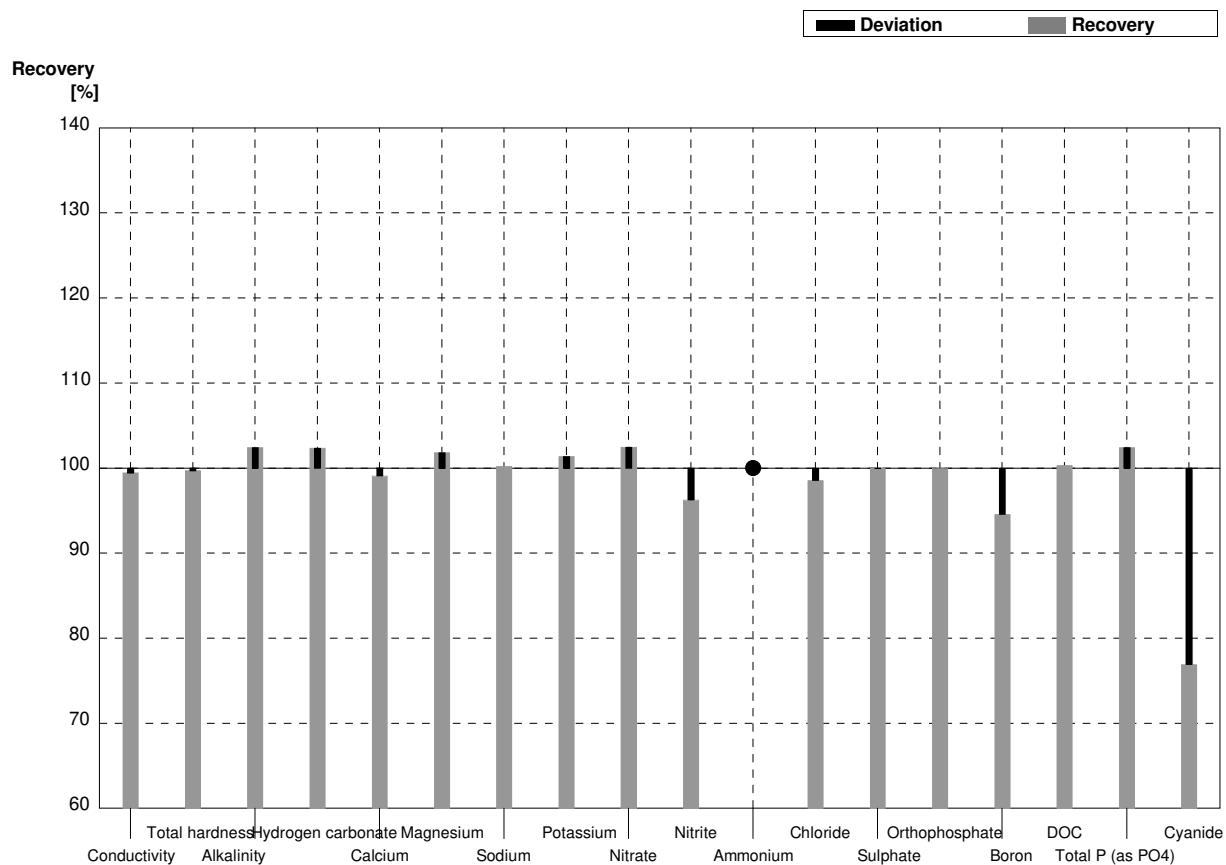
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	392	11	µS/cm	99%
Total hardness	1,403	0,014	1,435	0,1	mmol/l	102%
Alkalinity	1,246	0,014	1,187	0,12	mmol/l	95%
Hydrogen carbonate	73,0	0,8	72,427		mg/l	99%
Calcium	37,4	0,5	38,1	2,02	mg/l	102%
Magnesium	11,43	0,14	11,76	0,94	mg/l	103%
Sodium	18,15	0,08	18,14	1,25	mg/l	100%
Potassium	3,17	0,03	3,096	0,18	mg/l	98%
Nitrate	21,4	0,5	21,43	1,11	mg/l	100%
Nitrite	0,0708	0,0008	0,073	0,0078	mg/l	103%
Ammonium	0,076	0,003	0,078	0,0208	mg/l	103%
Chloride	41,5	0,7	41,75	1,545	mg/l	101%
Sulphate	45,2	0,5	43,86	2,06	mg/l	97%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0406	0,0004	0,03919	0,00843	mg/l	97%
DOC	2,39	0,04	2,376	0,26	mg/l	99%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016	0,0286	0,0086	mg/l	81%



**Sample N163A**

**Laboratory AF**

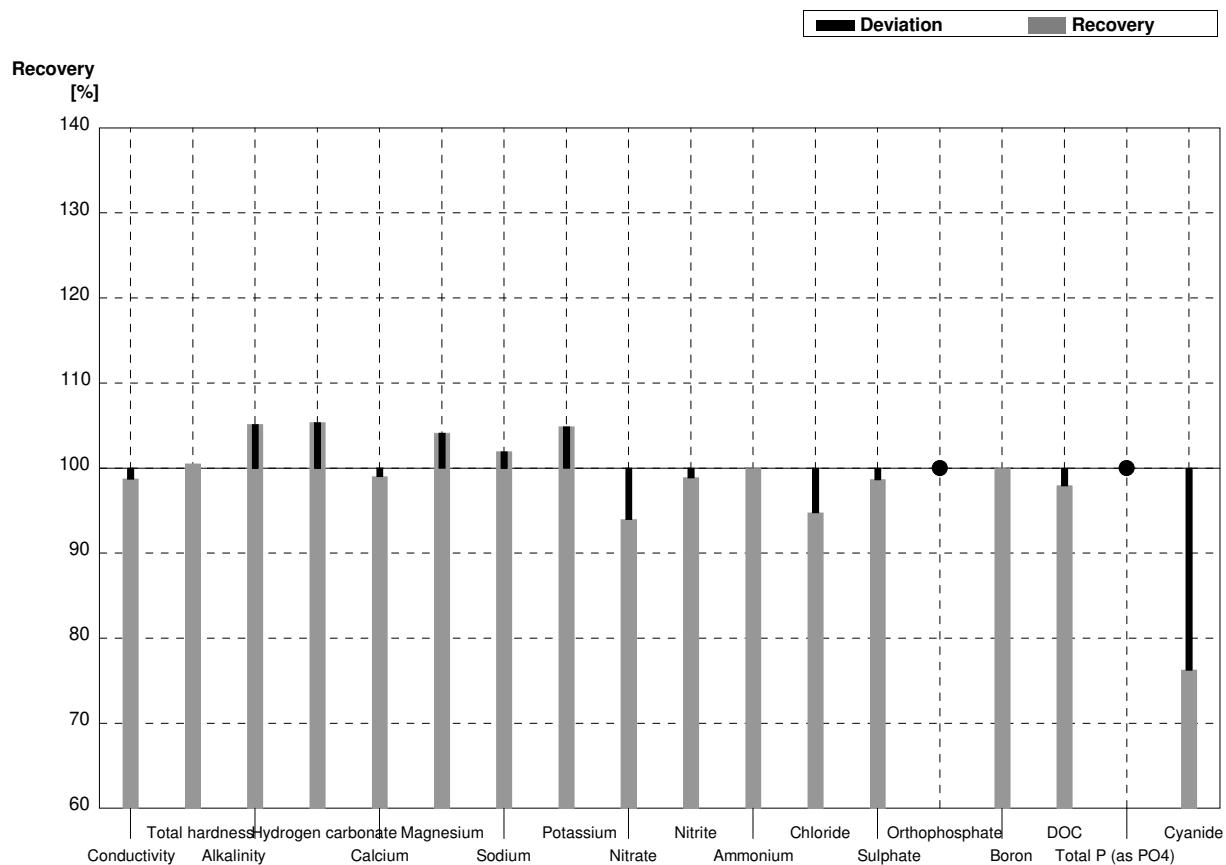
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	900	49,5	µS/cm	99%
Total hardness	3,37	0,04	3,36	0,336	mmol/l	100%
Alkalinity	4,91	0,06	5,0288	0,290	mmol/l	102%
Hydrogen carbonate	297	4	304	15,2	mg/l	102%
Calcium	98,7	1,4	97,8	9,8	mg/l	99%
Magnesium	22,0	0,3	22,4	2,2	mg/l	102%
Sodium	53,5	0,4	53,6	5,4	mg/l	100%
Potassium	13,22	0,08	13,4	1,3	mg/l	101%
Nitrate	63,0	1,3	64,562	3,23	mg/l	102%
Nitrite	0,0322	0,0010	0,0310	0,003	mg/l	96%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	59,73	2,99	mg/l	99%
Sulphate	84,2	0,7	84,171	4,21	mg/l	100%
Orthophosphate	0,091	0,006	0,0910	0,009	mg/l	100%
Boron	0,1512	0,0013	0,143	0,014	mg/l	95%
DOC	6,00	0,06	6,02	1,089	mg/l	100%
Total P (as PO4)	0,207	0,002	0,212	0,021	mg/l	102%
Cyanide	0,0533	0,0016	0,0410	0,004	mg/l	77%



**Sample N163B**

**Laboratory AF**

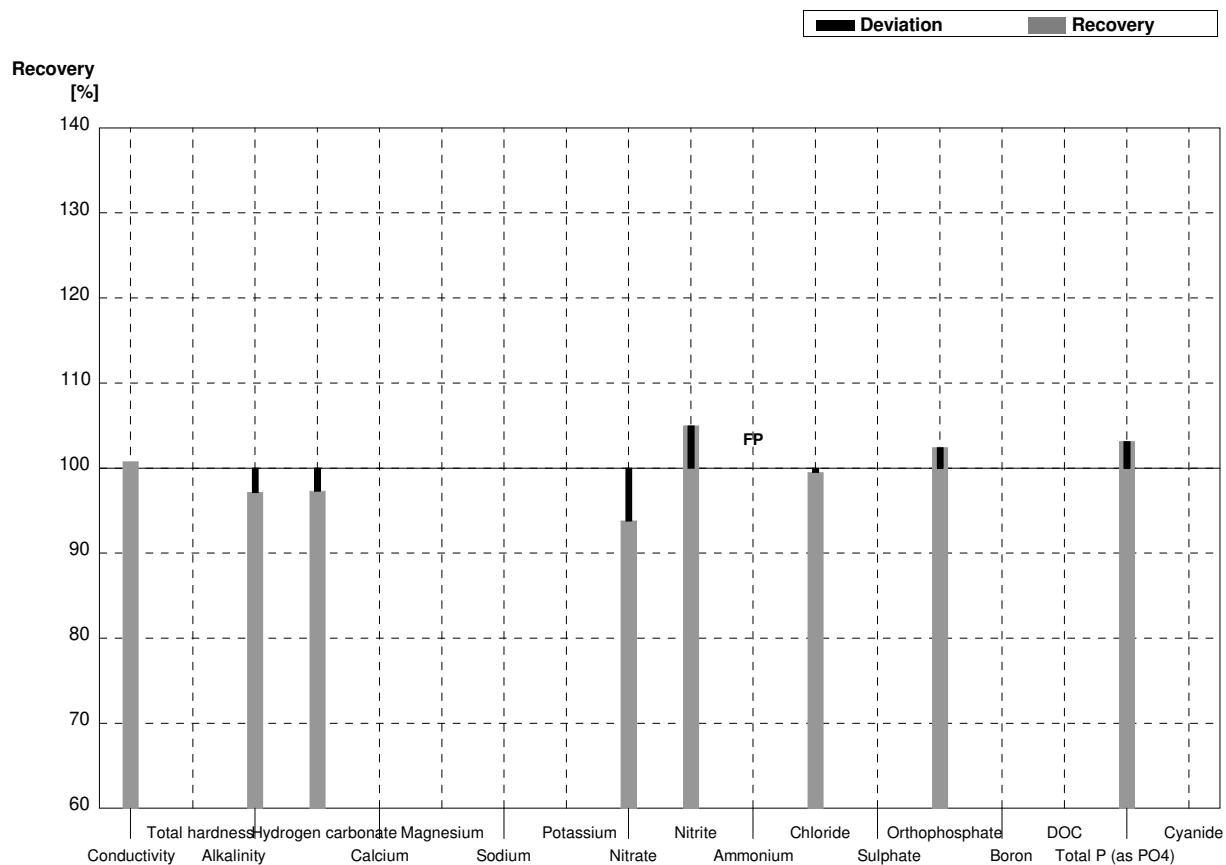
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	390	21,45	µS/cm	99%
Total hardness	1,403	0,014	1,41	0,141	mmol/l	100%
Alkalinity	1,246	0,014	1,310	0,0756	mmol/l	105%
Hydrogen carbonate	73,0	0,8	76,9	3,85	mg/l	105%
Calcium	37,4	0,5	37,03	3,7	mg/l	99%
Magnesium	11,43	0,14	11,9	1,2	mg/l	104%
Sodium	18,15	0,08	18,5	1,9	mg/l	102%
Potassium	3,17	0,03	3,324	0,33	mg/l	105%
Nitrate	21,4	0,5	20,11	1,01	mg/l	94%
Nitrite	0,0708	0,0008	0,0700	0,007	mg/l	99%
Ammonium	0,076	0,003	0,076	0,008	mg/l	100%
Chloride	41,5	0,7	39,33	1,97	mg/l	95%
Sulphate	45,2	0,5	44,589	2,23	mg/l	99%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0406	0,0004	0,0406	0,0041	mg/l	100%
DOC	2,39	0,04	2,341	0,424	mg/l	98%
Total P (as PO <sub>4</sub> )	<0,009		<0,01		mg/l	•
Cyanide	0,0354	0,0016	0,0270	0,003	mg/l	76%



**Sample N163A**

**Laboratory AG**

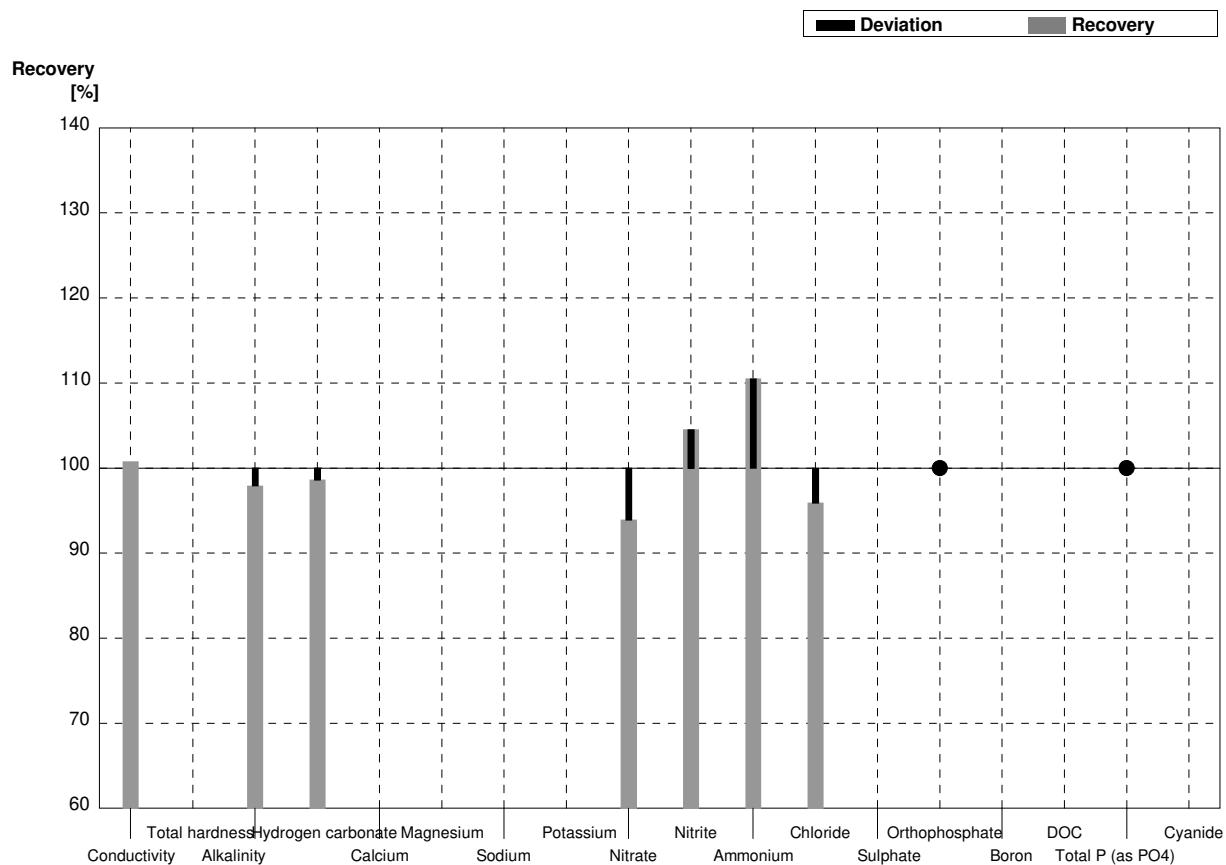
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	912	6,46	µS/cm	101%
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06	4,77	0,134	mmol/l	97%
Hydrogen carbonate	297	4	289	4,17	mg/l	97%
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	59,1	4,05	mg/l	94%
Nitrite	0,0322	0,0010	0,0338	0,0034	mg/l	105%
Ammonium	<0,01		0,0391	0,0059	mg/l	FP
Chloride	60,6	1,5	60,3	0,611	mg/l	100%
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006	0,0932	0,0109	mg/l	102%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002	0,2135	0,028	mg/l	103%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AG**

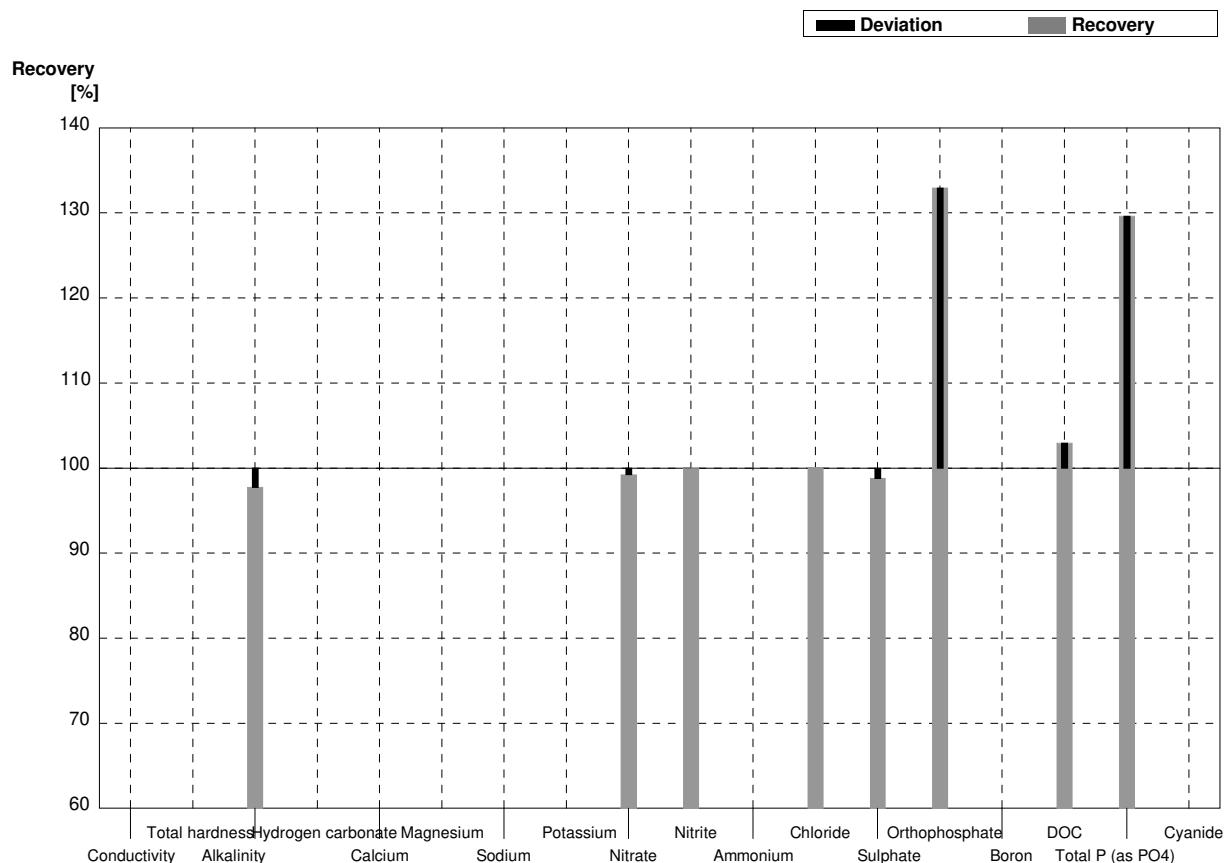
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	398	2,82	µS/cm	101%
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014	1,22	0,0344	mmol/l	98%
Hydrogen carbonate	73,0	0,8	72	1,03	mg/l	99%
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	20,1	1,377	mg/l	94%
Nitrite	0,0708	0,0008	0,074	0,0074	mg/l	105%
Ammonium	0,076	0,003	0,084	0,0126	mg/l	111%
Chloride	41,5	0,7	39,8	0,403	mg/l	96%
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009		<0,006	0	mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009		<0,006	0	mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AH**

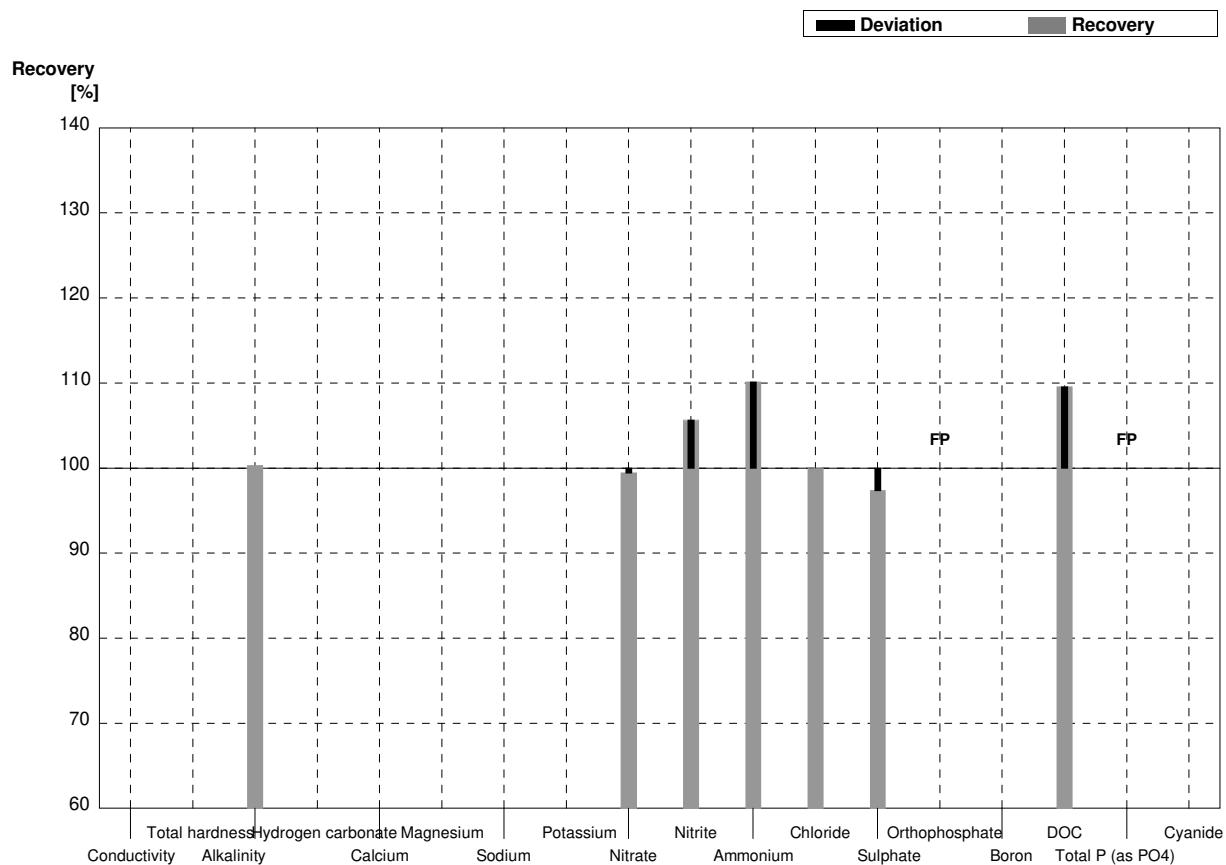
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06	4,80		mmol/l	98%
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	62,52		mg/l	99%
Nitrite	0,0322	0,0010	0,0322		mg/l	100%
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5	60,654		mg/l	100%
Sulphate	84,2	0,7	83,2		mg/l	99%
Orthophosphate	0,091	0,006	0,121		mg/l	133%
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06	6,178		mg/l	103%
Total P (as PO4)	0,207	0,002	0,2683		mg/l	130%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AH**

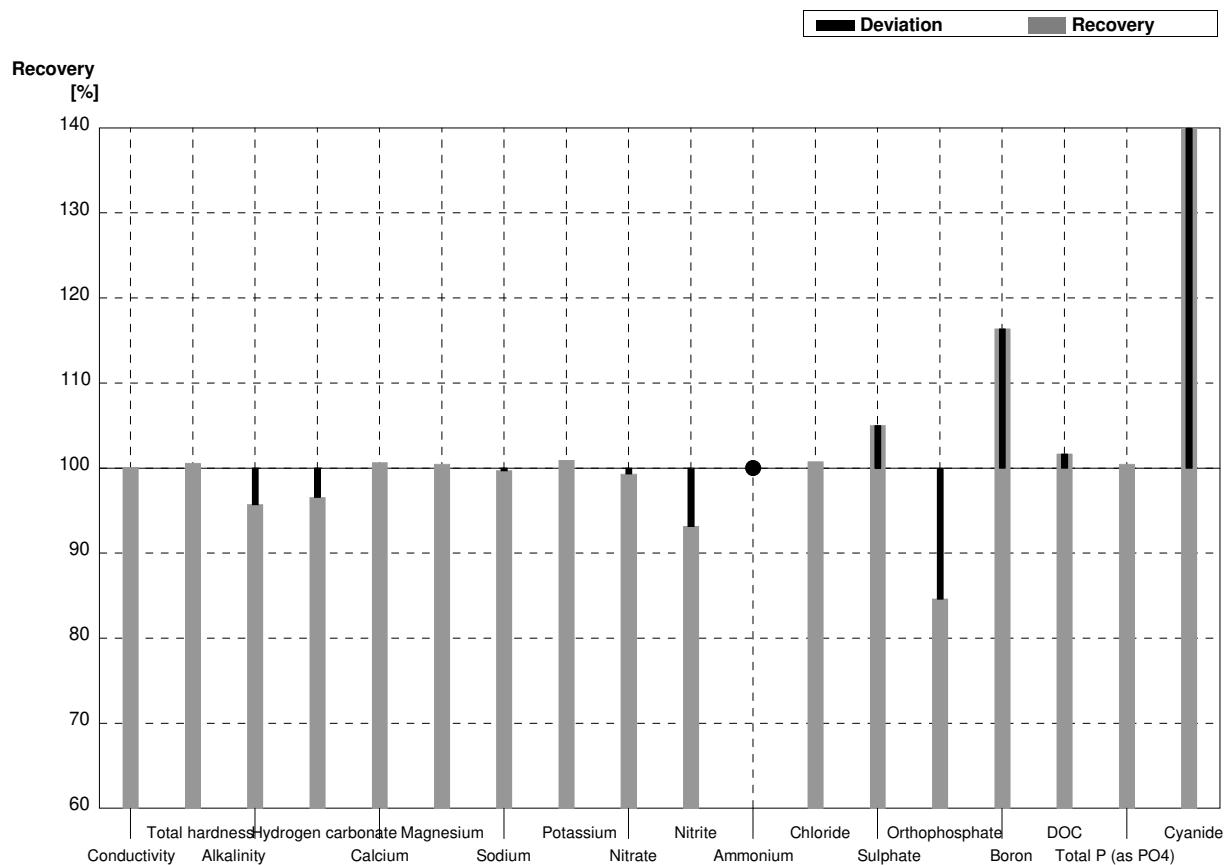
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014	1,25		mmol/l	100%
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	21,28		mg/l	99%
Nitrite	0,0708	0,0008	0,0748		mg/l	106%
Ammonium	0,076	0,003	0,0837		mg/l	110%
Chloride	41,5	0,7	41,507		mg/l	100%
Sulphate	45,2	0,5	44,02		mg/l	97%
Orthophosphate	<0,009		0,0107		mg/l	FP
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04	2,619		mg/l	110%
Total P (as PO4)	<0,009		0,0184		mg/l	FP
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AI**

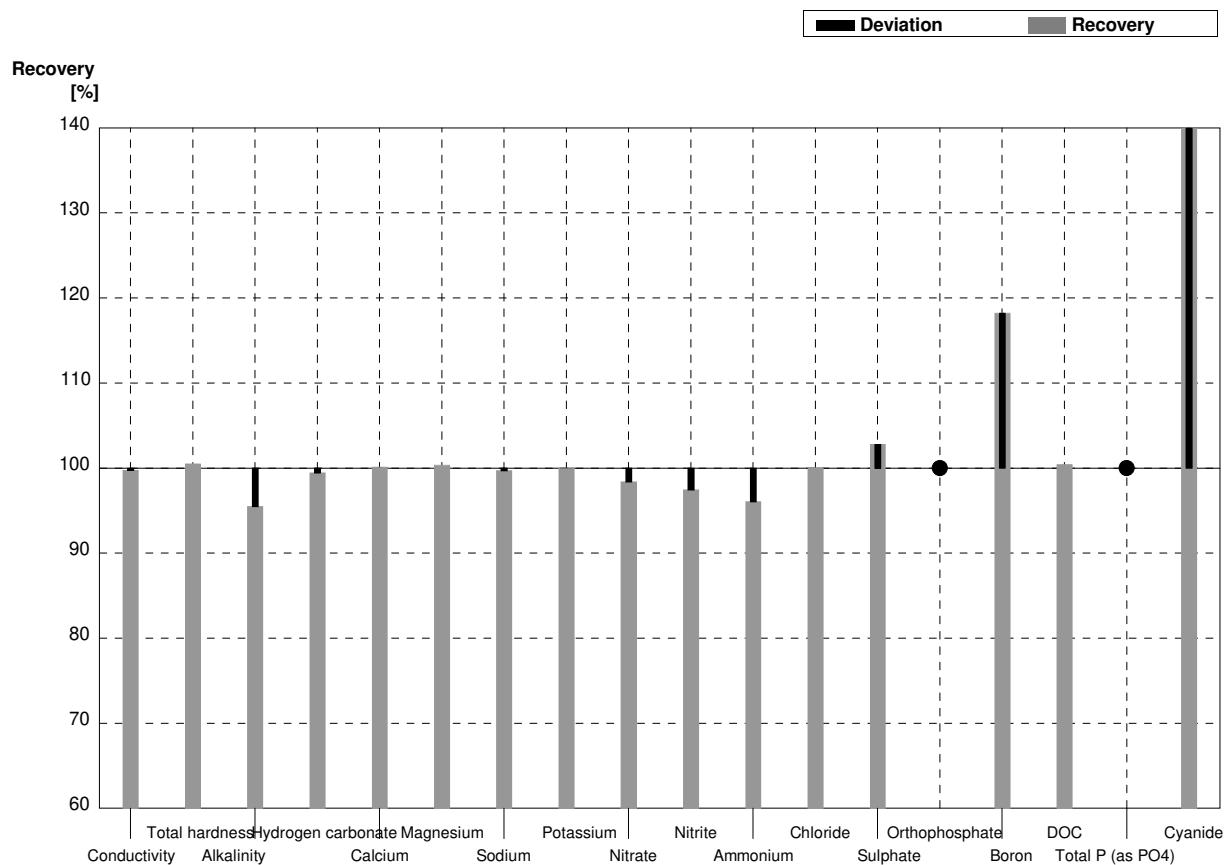
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	906	36,2	µS/cm	100%
Total hardness	3,37	0,04	3,39		mmol/l	101%
Alkalinity	4,91	0,06	4,70	0,705	mmol/l	96%
Hydrogen carbonate	297	4	286,8	43,02	mg/l	97%
Calcium	98,7	1,4	99,33	9,933	mg/l	101%
Magnesium	22,0	0,3	22,10	2,210	mg/l	100%
Sodium	53,5	0,4	53,35	5,335	mg/l	100%
Potassium	13,22	0,08	13,34	1,334	mg/l	101%
Nitrate	63,0	1,3	62,564	2,5026	mg/l	99%
Nitrite	0,0322	0,0010	0,0300	0,00240	mg/l	93%
Ammonium	<0,01		<0,0052		mg/l	•
Chloride	60,6	1,5	61,07	3,054	mg/l	101%
Sulphate	84,2	0,7	88,44	4,422	mg/l	105%
Orthophosphate	0,091	0,006	0,077	0,0092	mg/l	85%
Boron	0,1512	0,0013	0,176	0,0211	mg/l	116%
DOC	6,00	0,06	6,1	0,49	mg/l	102%
Total P (as PO4)	0,207	0,002	0,208	0,031	mg/l	100%
Cyanide	0,0533	0,0016	46,58	4,658	mg/l	87392%



**Sample N163B**

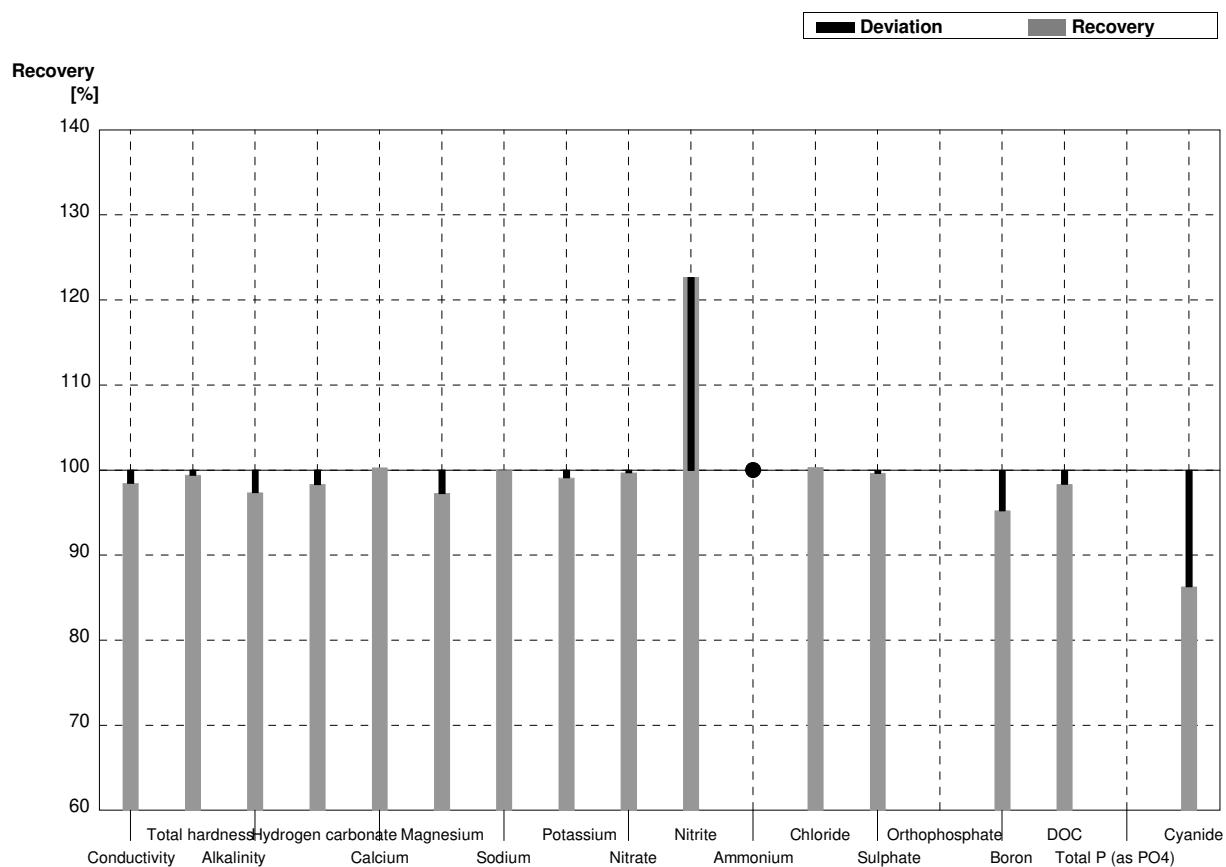
**Laboratory AI**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	394	15,8	µS/cm	100%
Total hardness	1,403	0,014	1,41		mmol/l	100%
Alkalinity	1,246	0,014	1,19	0,179	mmol/l	96%
Hydrogen carbonate	73,0	0,8	72,6	10,89	mg/l	99%
Calcium	37,4	0,5	37,45	3,745	mg/l	100%
Magnesium	11,43	0,14	11,47	1,147	mg/l	100%
Sodium	18,15	0,08	18,10	1,810	mg/l	100%
Potassium	3,17	0,03	3,17	0,317	mg/l	100%
Nitrate	21,4	0,5	21,058	0,8423	mg/l	98%
Nitrite	0,0708	0,0008	0,069	0,0055	mg/l	97%
Ammonium	0,076	0,003	0,073	0,0073	mg/l	96%
Chloride	41,5	0,7	41,53	2,077	mg/l	100%
Sulphate	45,2	0,5	46,47	2,324	mg/l	103%
Orthophosphate	<0,009		0,0090	0,0011	mg/l	•
Boron	0,0406	0,0004	0,0480	0,0058	mg/l	118%
DOC	2,39	0,04	2,40	0,19	mg/l	100%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016	33,53	3,353	mg/l	94718%



**Sample N163A****Laboratory AJ**

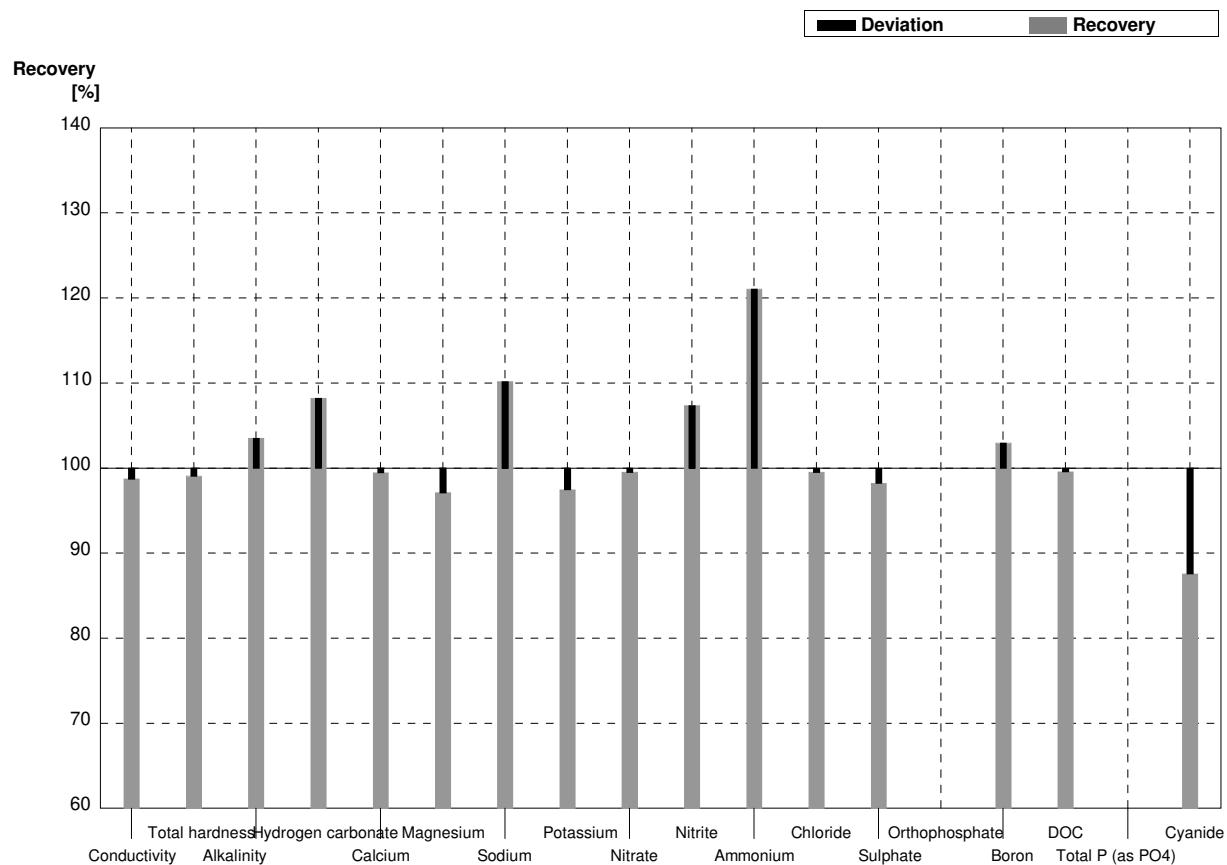
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	891	89	$\mu\text{S}/\text{cm}$	98%
Total hardness	3,37	0,04	3,35	0,23	$\text{mmol}/\text{l}$	99%
Alkalinity	4,91	0,06	4,78		$\text{mmol}/\text{l}$	97%
Hydrogen carbonate	297	4	292		$\text{mg}/\text{l}$	98%
Calcium	98,7	1,4	99,0	6,9	$\text{mg}/\text{l}$	100%
Magnesium	22,0	0,3	21,4	1,7	$\text{mg}/\text{l}$	97%
Sodium	53,5	0,4	53,5	5,9	$\text{mg}/\text{l}$	100%
Potassium	13,22	0,08	13,1	2,1	$\text{mg}/\text{l}$	99%
Nitrate	63,0	1,3	62,8	6,3	$\text{mg}/\text{l}$	100%
Nitrite	0,0322	0,0010	0,0395	0,006	$\text{mg}/\text{l}$	123%
Ammonium	<0,01		<0,04		$\text{mg}/\text{l}$	•
Chloride	60,6	1,5	60,8	6,1	$\text{mg}/\text{l}$	100%
Sulphate	84,2	0,7	83,9	11,7	$\text{mg}/\text{l}$	100%
Orthophosphate	0,091	0,006			$\text{mg}/\text{l}$	
Boron	0,1512	0,0013	0,144	0,023	$\text{mg}/\text{l}$	95%
DOC	6,00	0,06	5,9	0,6	$\text{mg}/\text{l}$	98%
Total P (as PO <sub>4</sub> )	0,207	0,002			$\text{mg}/\text{l}$	
Cyanide	0,0533	0,0016	0,0460		$\text{mg}/\text{l}$	86%



**Sample N163B**

**Laboratory AJ**

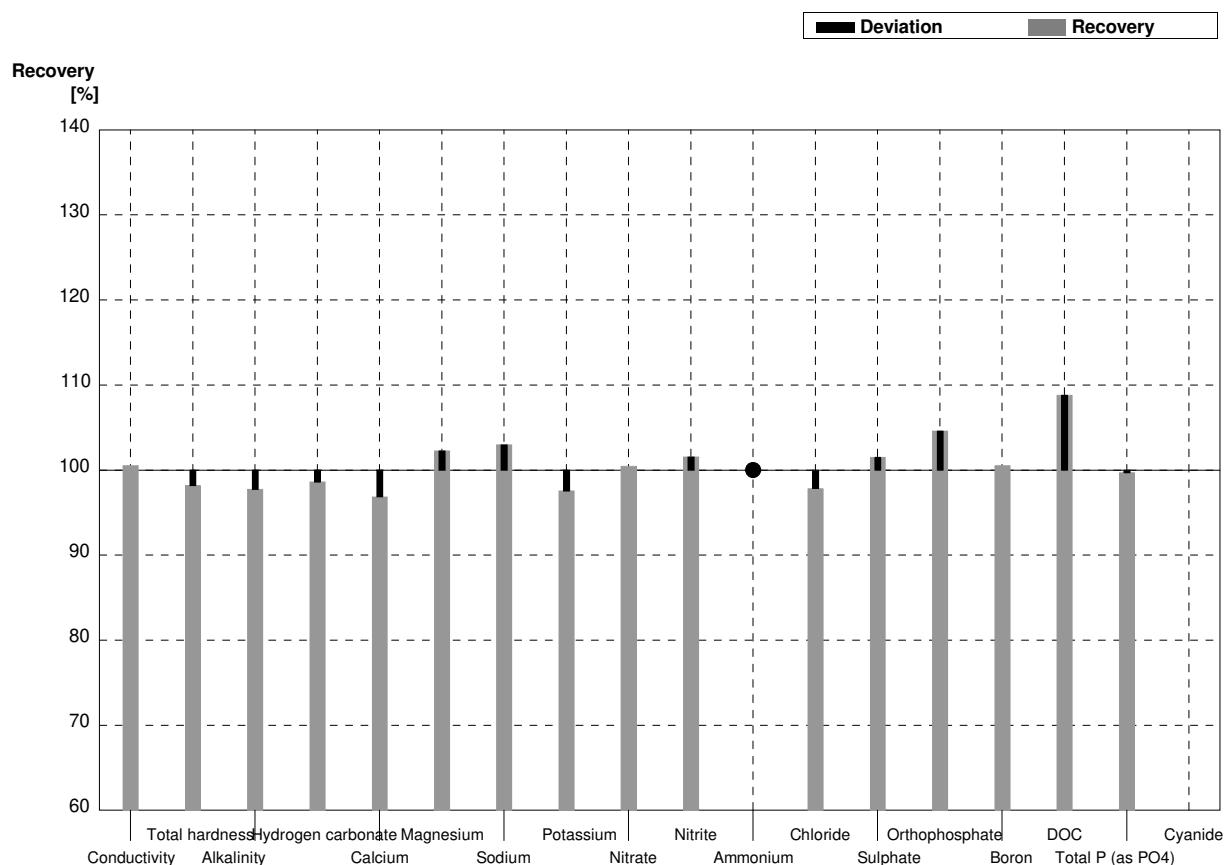
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	390	39	µS/cm	99%
Total hardness	1,403	0,014	1,39	0,10	mmol/l	99%
Alkalinity	1,246	0,014	1,29		mmol/l	104%
Hydrogen carbonate	73,0	0,8	79		mg/l	108%
Calcium	37,4	0,5	37,2	2,6	mg/l	99%
Magnesium	11,43	0,14	11,1	0,9	mg/l	97%
Sodium	18,15	0,08	20,0	2,2	mg/l	110%
Potassium	3,17	0,03	3,09	0,49	mg/l	97%
Nitrate	21,4	0,5	21,3	2,1	mg/l	100%
Nitrite	0,0708	0,0008	0,076	0,012	mg/l	107%
Ammonium	0,076	0,003	0,092	0,018	mg/l	121%
Chloride	41,5	0,7	41,3	4,1	mg/l	100%
Sulphate	45,2	0,5	44,4	6,2	mg/l	98%
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004	0,0418	0,0067	mg/l	103%
DOC	2,39	0,04	2,38	0,24	mg/l	100%
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016	0,0310		mg/l	88%



**Sample N163A**

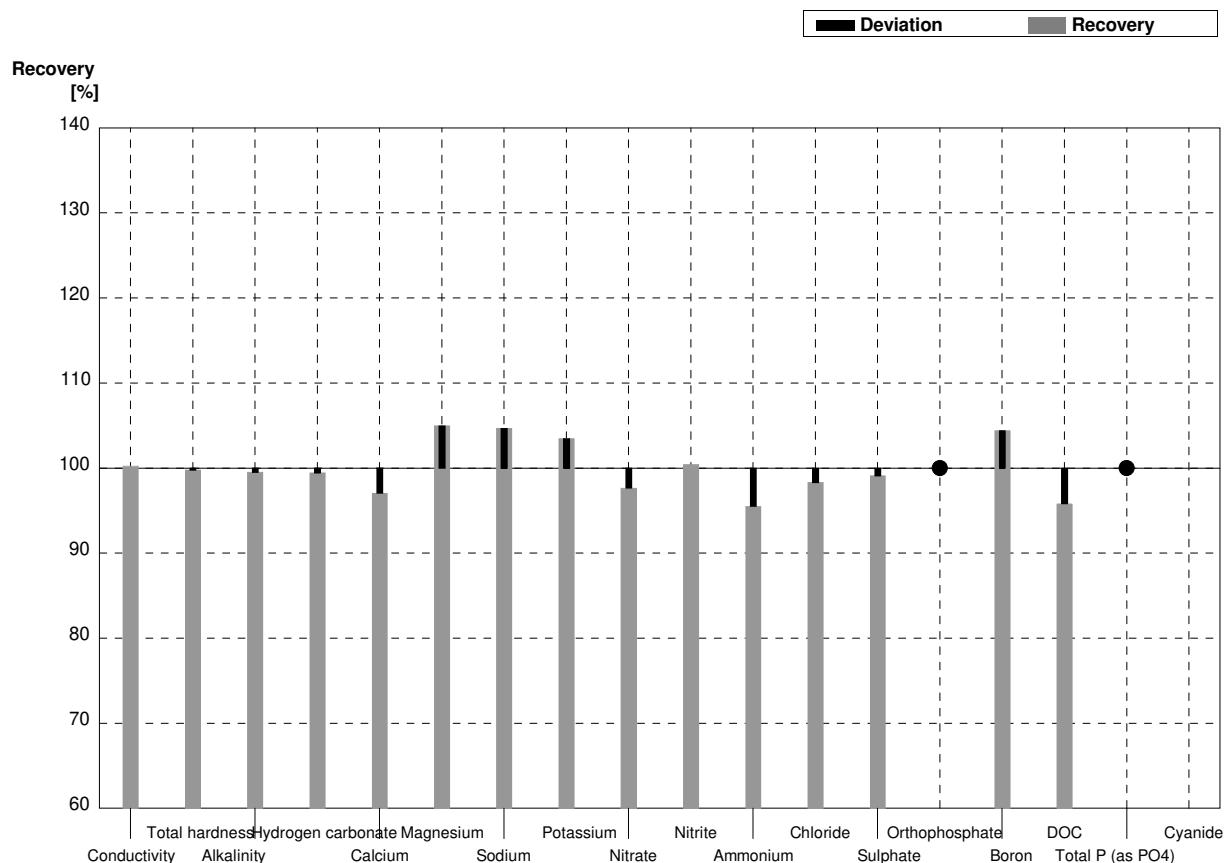
**Laboratory AK**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	910	10	µS/cm	101%
Total hardness	3,37	0,04	3,31	0,33	mmol/l	98%
Alkalinity	4,91	0,06	4,80	0,5	mmol/l	98%
Hydrogen carbonate	297	4	292,9	29,3	mg/l	99%
Calcium	98,7	1,4	95,6	19,1	mg/l	97%
Magnesium	22,0	0,3	22,5	4,5	mg/l	102%
Sodium	53,5	0,4	55,1	8,3	mg/l	103%
Potassium	13,22	0,08	12,9	2,6	mg/l	98%
Nitrate	63,0	1,3	63,3	6,3	mg/l	100%
Nitrite	0,0322	0,0010	0,0327	0,0060	mg/l	102%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	60,6	1,5	59,3	5,9	mg/l	98%
Sulphate	84,2	0,7	85,5	8,6	mg/l	102%
Orthophosphate	0,091	0,006	0,0952	0,0198	mg/l	105%
Boron	0,1512	0,0013	0,152	0,038	mg/l	101%
DOC	6,00	0,06	6,53	0,65	mg/l	109%
Total P (as PO4)	0,207	0,002	0,2064	0,0429	mg/l	100%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B****Laboratory AK**

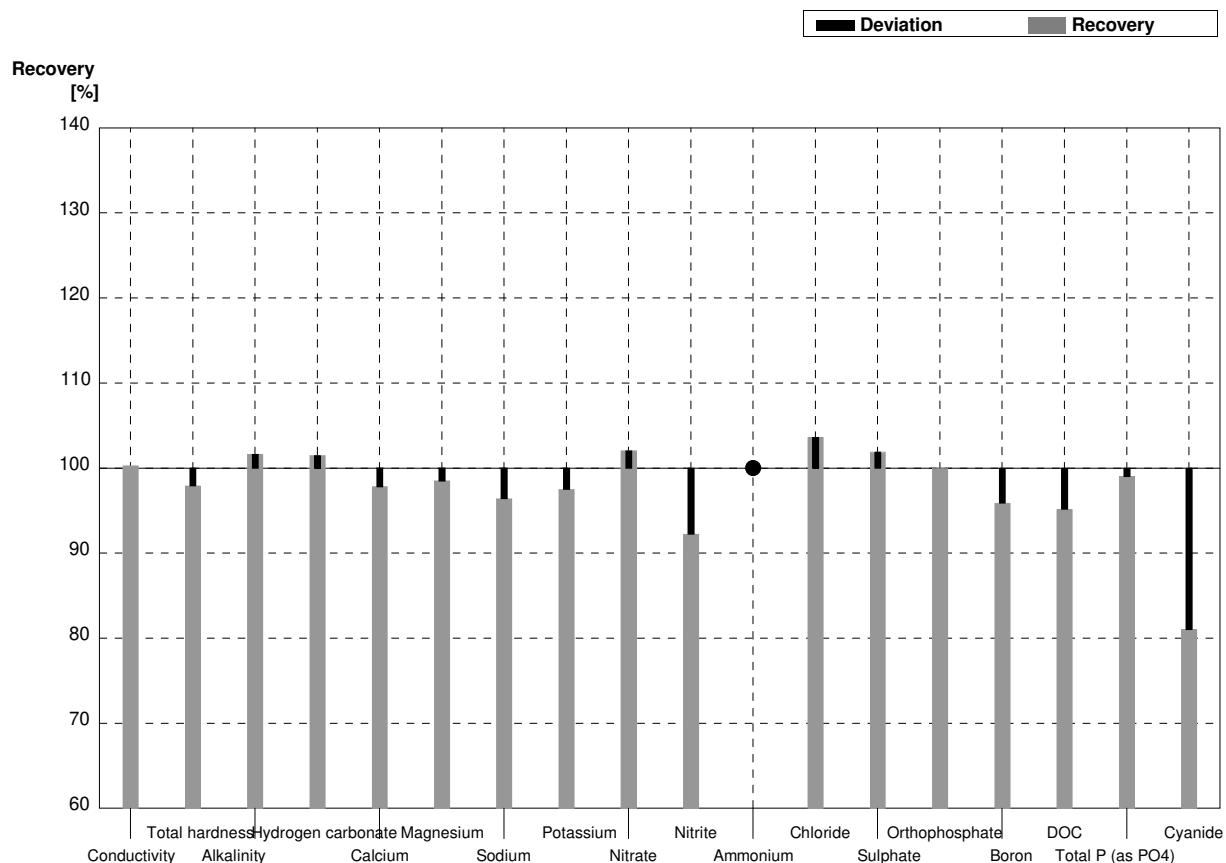
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	396	10	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,403	0,014	1,40	0,14	mmol/l	100%
Alkalinity	1,246	0,014	1,24	0,13	mmol/l	100%
Hydrogen carbonate	73,0	0,8	72,6	7,3	mg/l	99%
Calcium	37,4	0,5	36,3	7,3	mg/l	97%
Magnesium	11,43	0,14	12,0	2,4	mg/l	105%
Sodium	18,15	0,08	19,0	2,9	mg/l	105%
Potassium	3,17	0,03	3,28	0,66	mg/l	103%
Nitrate	21,4	0,5	20,9	2,1	mg/l	98%
Nitrite	0,0708	0,0008	0,0711	0,0131	mg/l	100%
Ammonium	0,076	0,003	0,0726	0,0118	mg/l	96%
Chloride	41,5	0,7	40,8	4,1	mg/l	98%
Sulphate	45,2	0,5	44,8	4,5	mg/l	99%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,0406	0,0004	0,0424	0,011	mg/l	104%
DOC	2,39	0,04	2,29	0,23	mg/l	96%
Total P (as PO <sub>4</sub> )	<0,009		<0,009		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



Sample N163A

Laboratory AL

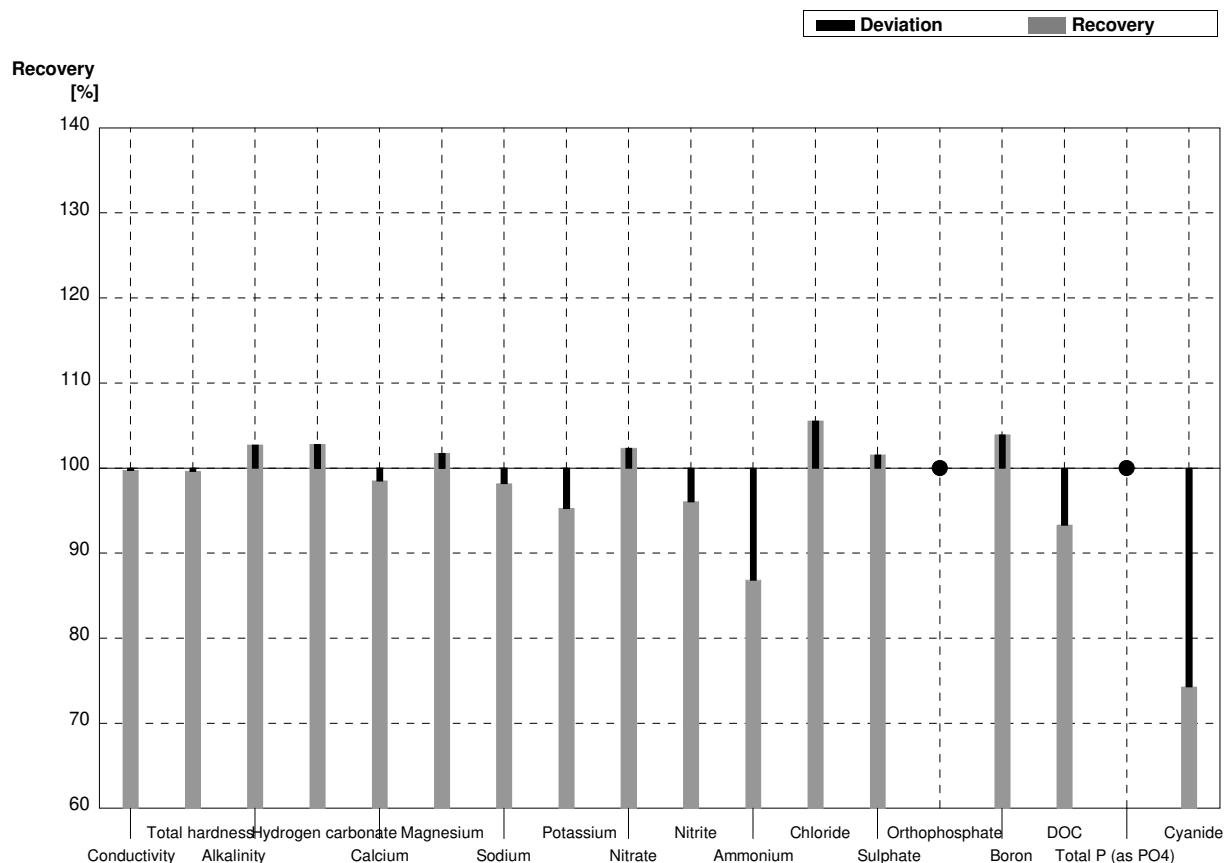
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	907,5	83,127	µS/cm	100%
Total hardness	3,37	0,04	3,30	0,317	mmol/l	98%
Alkalinity	4,91	0,06	4,99	0,247	mmol/l	102%
Hydrogen carbonate	297	4	301,42	12,02	mg/l	101%
Calcium	98,7	1,4	96,57	2,356	mg/l	98%
Magnesium	22,0	0,3	21,67	2,015	mg/l	99%
Sodium	53,5	0,4	51,58	3,631	mg/l	96%
Potassium	13,22	0,08	12,89	1,748	mg/l	98%
Nitrate	63,0	1,3	64,3	8,198	mg/l	102%
Nitrite	0,0322	0,0010	0,0297	0,00141	mg/l	92%
Ammonium	<0,01		<0,01	0,00085	mg/l	•
Chloride	60,6	1,5	62,8	4,300	mg/l	104%
Sulphate	84,2	0,7	85,8	5,706	mg/l	102%
Orthophosphate	0,091	0,006	0,091	0,0078	mg/l	100%
Boron	0,1512	0,0013	0,145	0,011	mg/l	96%
DOC	6,00	0,06	5,71	0,343	mg/l	95%
Total P (as PO4)	0,207	0,002	0,205	0,0246	mg/l	99%
Cyanide	0,0533	0,0016	0,0432	0,0093	mg/l	81%



Sample N163B

Laboratory AL

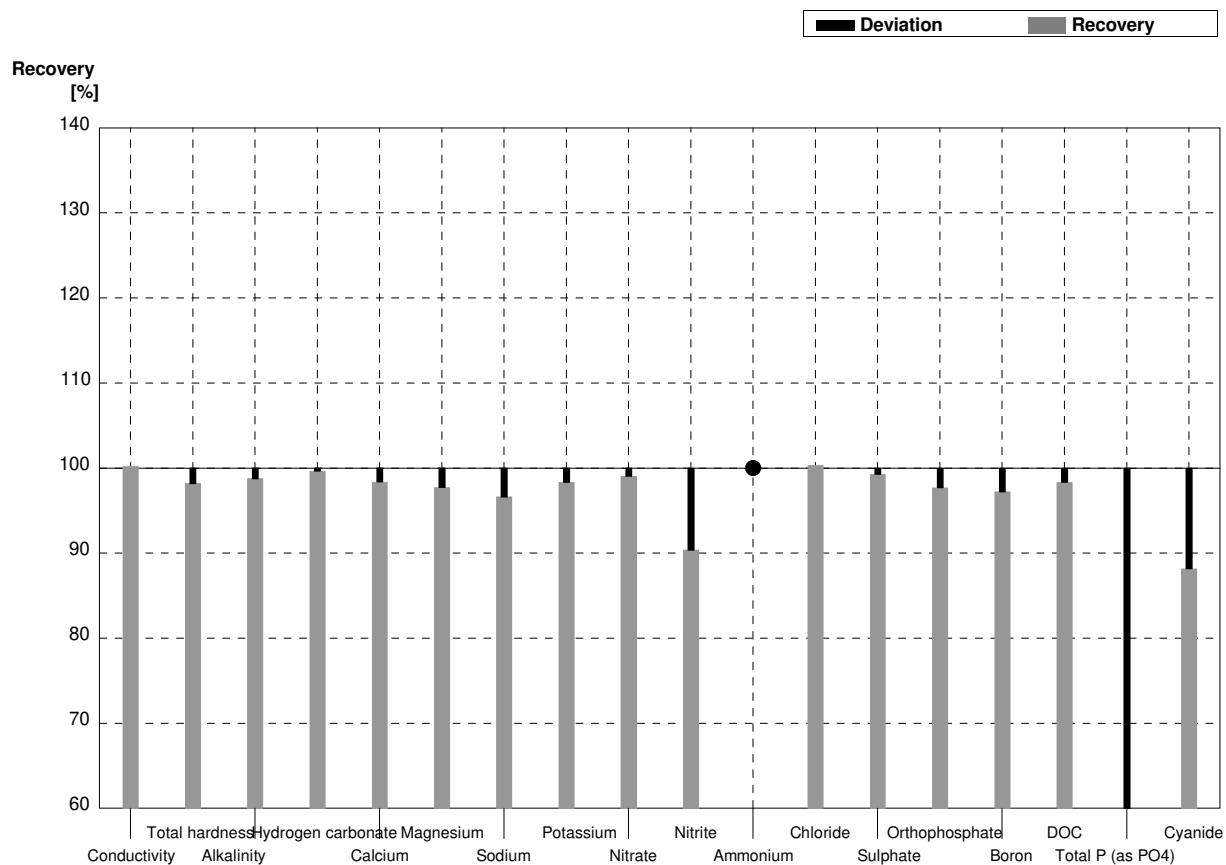
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	394	36,090	µS/cm	100%
Total hardness	1,403	0,014	1,398	0,134	mmol/l	100%
Alkalinity	1,246	0,014	1,28	0,0632	mmol/l	103%
Hydrogen carbonate	73,0	0,8	75,05	0,81	mg/l	103%
Calcium	37,4	0,5	36,84	0,899	mg/l	99%
Magnesium	11,43	0,14	11,63	1,032	mg/l	102%
Sodium	18,15	0,08	17,82	1,254	mg/l	98%
Potassium	3,17	0,03	3,02	0,4095	mg/l	95%
Nitrate	21,4	0,5	21,9	2,792	mg/l	102%
Nitrite	0,0708	0,0008	0,0680	0,00362	mg/l	96%
Ammonium	0,076	0,003	0,066	0,00562	mg/l	87%
Chloride	41,5	0,7	43,8	2,996	mg/l	106%
Sulphate	45,2	0,5	45,9	3,052	mg/l	102%
Orthophosphate	<0,009		<0,005	0,00043	mg/l	•
Boron	0,0406	0,0004	0,0422	0,003	mg/l	104%
DOC	2,39	0,04	2,23	0,134	mg/l	93%
Total P (as PO4)	<0,009		<0,01	0	mg/l	•
Cyanide	0,0354	0,0016	0,0263	0,0056	mg/l	74%



**Sample N163A**

**Laboratory AM**

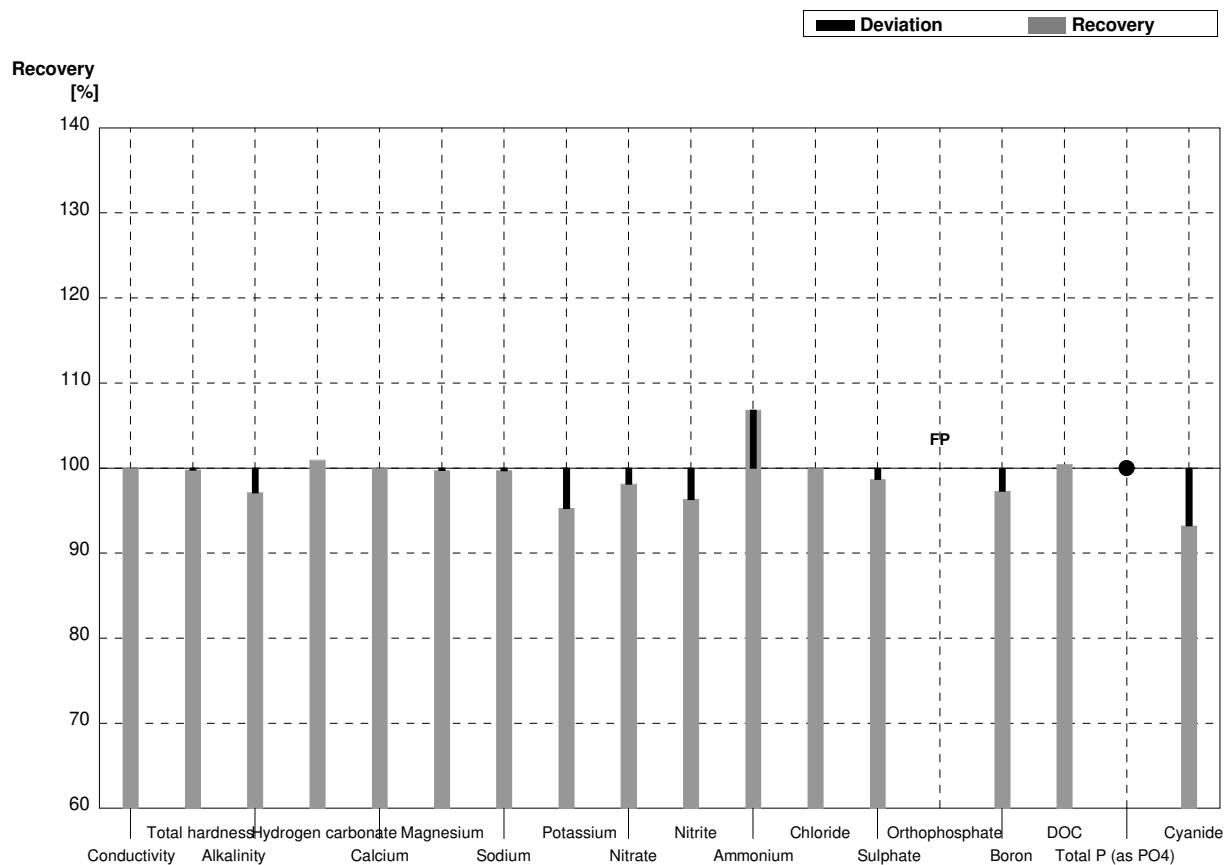
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	907	18,2	µS/cm	100%
Total hardness	3,37	0,04	3,31	0,43	mmol/l	98%
Alkalinity	4,91	0,06	4,85	0,73	mmol/l	99%
Hydrogen carbonate	297	4	296	44,4	mg/l	100%
Calcium	98,7	1,4	97,1	12,7	mg/l	98%
Magnesium	22,0	0,3	21,5	1,43	mg/l	98%
Sodium	53,5	0,4	51,7	7,49	mg/l	97%
Potassium	13,22	0,08	13,0	1,38	mg/l	98%
Nitrate	63,0	1,3	62,4	3,39	mg/l	99%
Nitrite	0,0322	0,0010	0,0291	0,0017	mg/l	90%
Ammonium	<0,01		0,00488	0,00031	mg/l	•
Chloride	60,6	1,5	60,8	3,31	mg/l	100%
Sulphate	84,2	0,7	83,6	6,87	mg/l	99%
Orthophosphate	0,091	0,006	0,0889	0,0102	mg/l	98%
Boron	0,1512	0,0013	0,147	0,006	mg/l	97%
DOC	6,00	0,06	5,90	1,05	mg/l	98%
Total P (as PO4)	0,207	0,002	0,087	0,006	mg/l	42%
Cyanide	0,0533	0,0016	0,0470	0,0034	mg/l	88%



Sample N163B

Laboratory AM

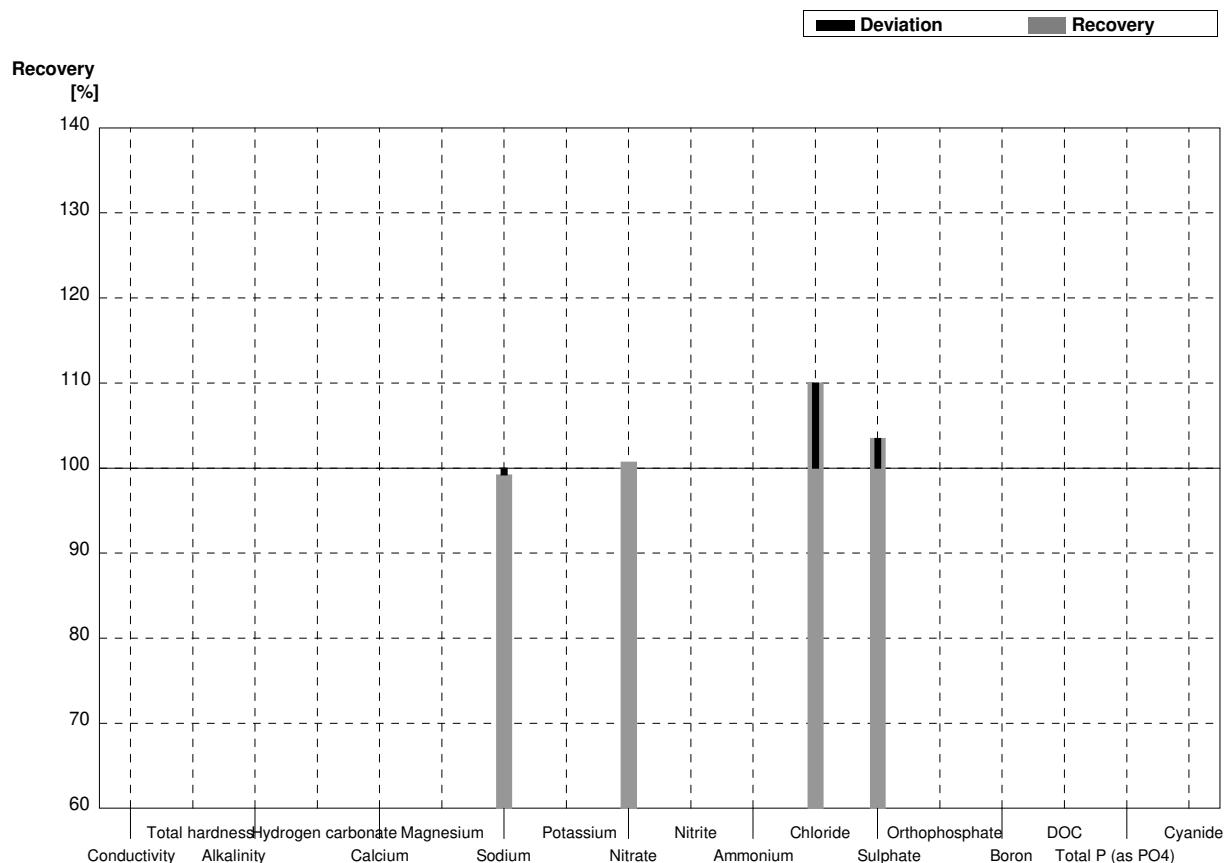
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	395	7,9	µS/cm	100%
Total hardness	1,403	0,014	1,40	0,18	mmol/l	100%
Alkalinity	1,246	0,014	1,21	0,18	mmol/l	97%
Hydrogen carbonate	73,0	0,8	73,7	11,1	mg/l	101%
Calcium	37,4	0,5	37,4	4,87	mg/l	100%
Magnesium	11,43	0,14	11,4	0,76	mg/l	100%
Sodium	18,15	0,08	18,1	2,63	mg/l	100%
Potassium	3,17	0,03	3,02	0,32	mg/l	95%
Nitrate	21,4	0,5	21,0	1,14	mg/l	98%
Nitrite	0,0708	0,0008	0,0682	0,0039	mg/l	96%
Ammonium	0,076	0,003	0,0812	0,0051	mg/l	107%
Chloride	41,5	0,7	41,5	2,30	mg/l	100%
Sulphate	45,2	0,5	44,6	3,67	mg/l	99%
Orthophosphate	<0,009		0,0105	0,0012	mg/l	FP
Boron	0,0406	0,0004	0,0395	0,0012	mg/l	97%
DOC	2,39	0,04	2,40	0,43	mg/l	100%
Total P (as PO4)	<0,009		0,00300	0,00021	mg/l	•
Cyanide	0,0354	0,0016	0,0330	0,0024	mg/l	93%



**Sample N163A**

**Laboratory AN**

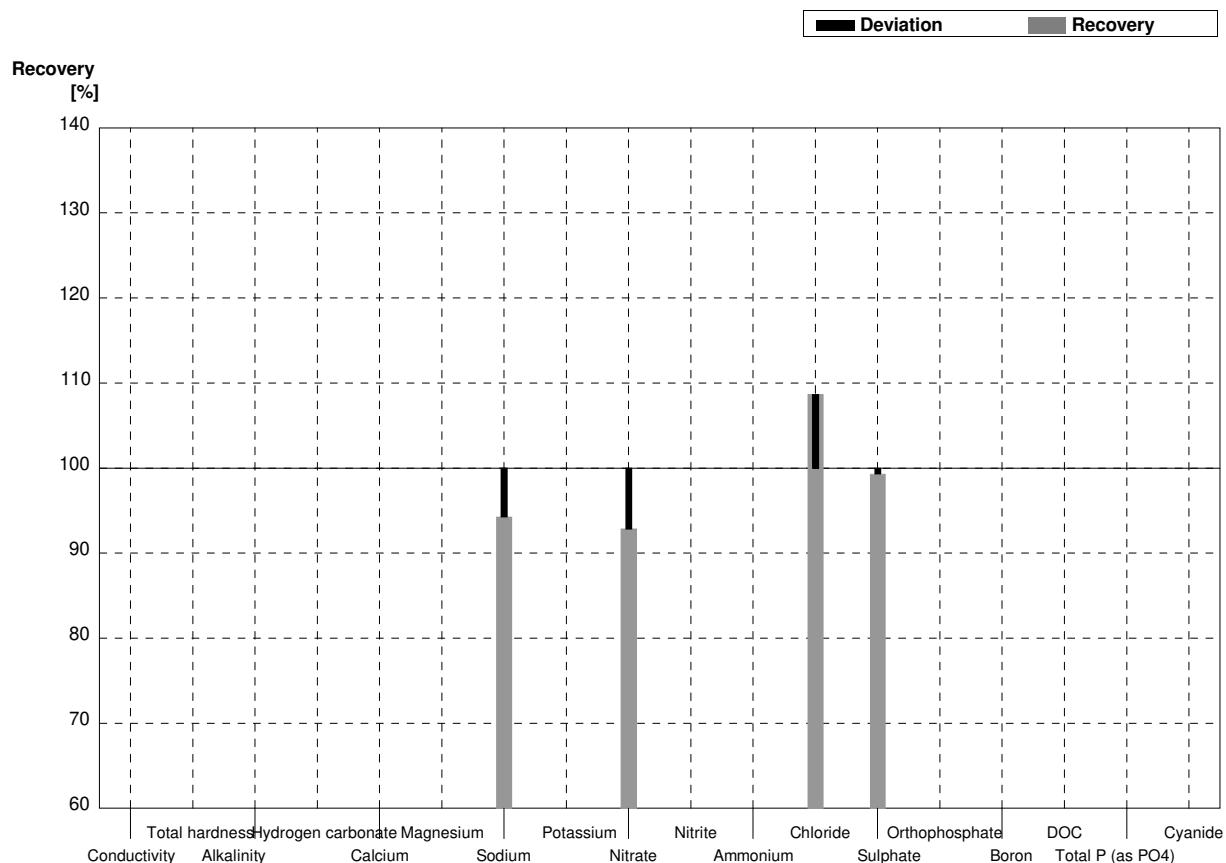
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4	53,080	5,308	mg/l	99%
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	63,453	12,691	mg/l	101%
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5	66,674	10,001	mg/l	110%
Sulphate	84,2	0,7	87,173	17,435	mg/l	104%
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AN**

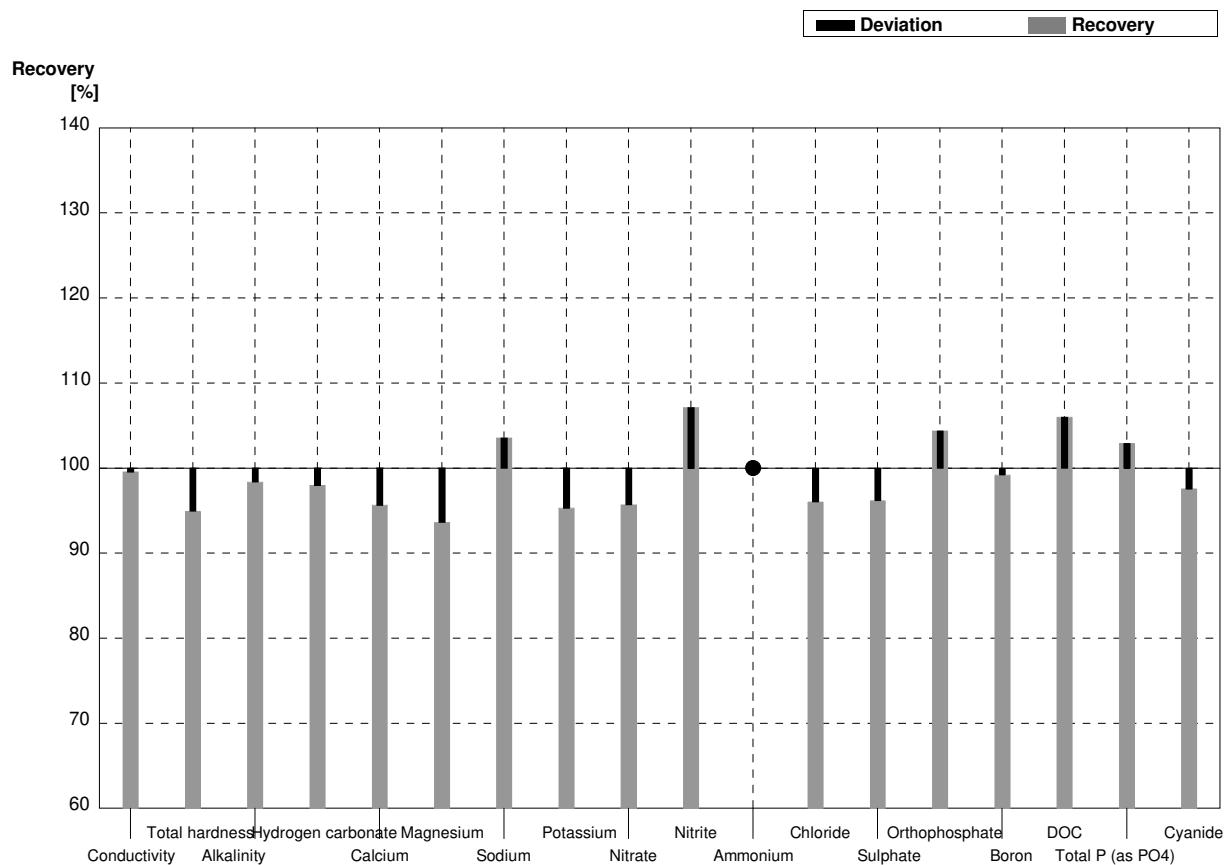
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08	17,113	1,7113	mg/l	94%
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	19,873	3,975	mg/l	93%
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7	45,107	6,77	mg/l	109%
Sulphate	45,2	0,5	44,887	8,977	mg/l	99%
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO <sub>4</sub> )	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AO**

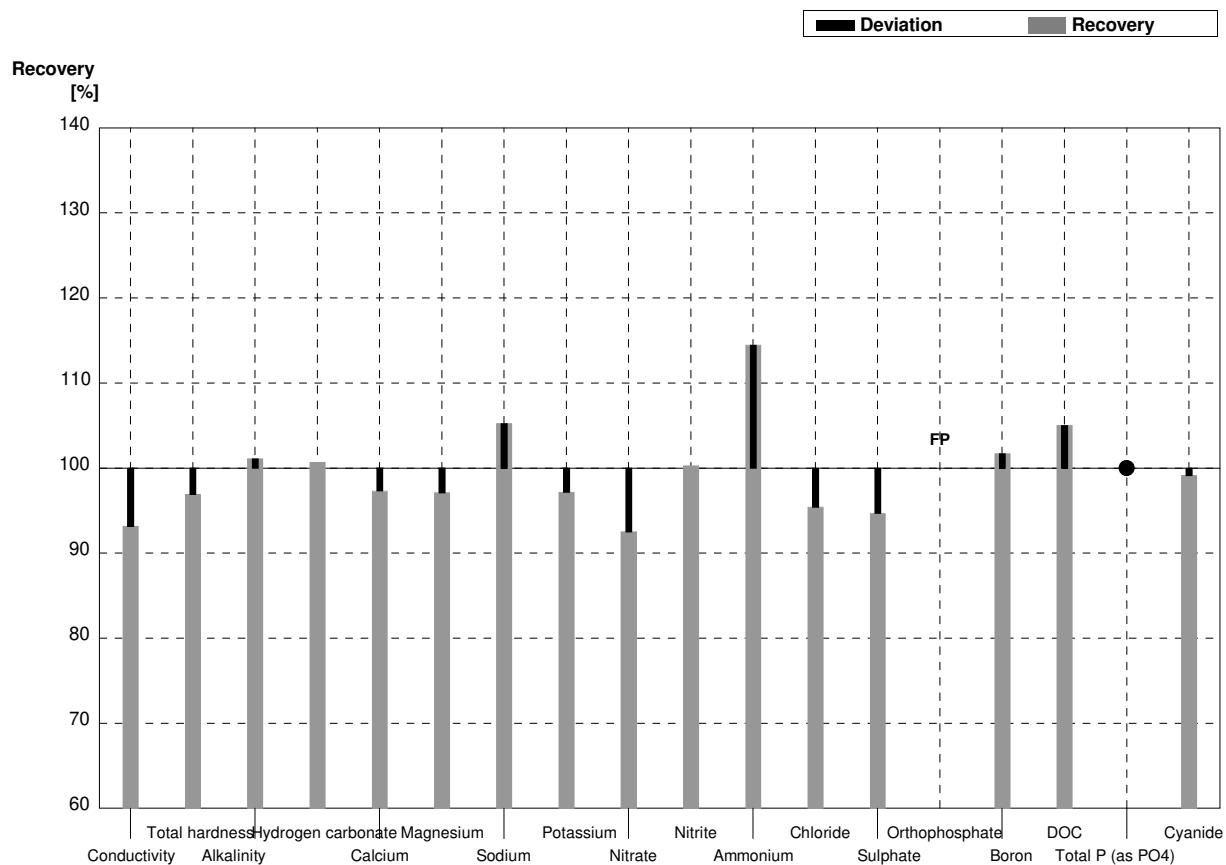
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	901	36	µS/cm	100%
Total hardness	3,37	0,04	3,20	0,58	mmol/l	95%
Alkalinity	4,91	0,06	4,83	0,19	mmol/l	98%
Hydrogen carbonate	297	4	291	12	mg/l	98%
Calcium	98,7	1,4	94,4	17	mg/l	96%
Magnesium	22,0	0,3	20,6	3,71	mg/l	94%
Sodium	53,5	0,4	55,4	10	mg/l	104%
Potassium	13,22	0,08	12,6	2,27	mg/l	95%
Nitrate	63,0	1,3	60,3	5,43	mg/l	96%
Nitrite	0,0322	0,0010	0,0345	0,003	mg/l	107%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	58,2	5,24	mg/l	96%
Sulphate	84,2	0,7	81,0	7,29	mg/l	96%
Orthophosphate	0,091	0,006	0,095	0,009	mg/l	104%
Boron	0,1512	0,0013	0,150	0,03	mg/l	99%
DOC	6,00	0,06	6,36	0,57	mg/l	106%
Total P (as PO4)	0,207	0,002	0,213	0,009	mg/l	103%
Cyanide	0,0533	0,0016	0,052	0,005	mg/l	98%



Sample N163B

Laboratory AO

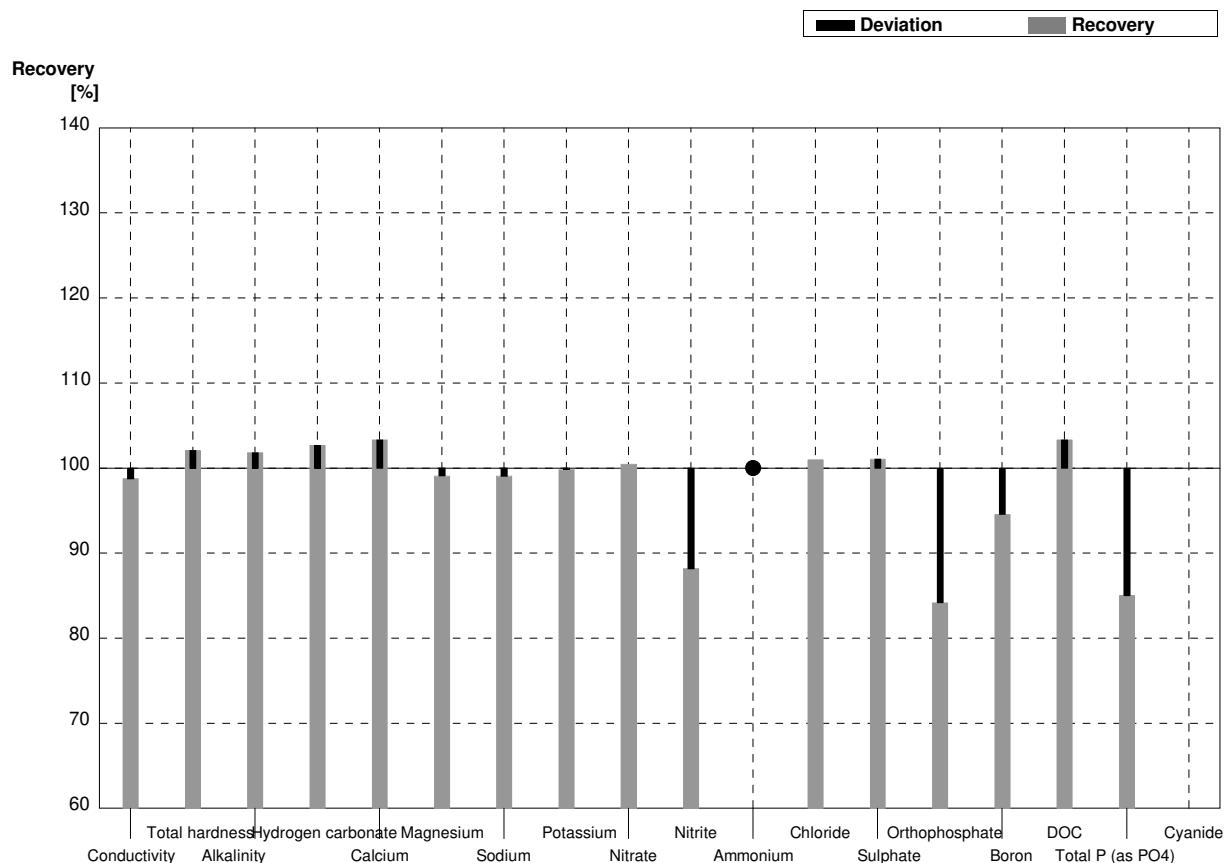
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	368	15	µS/cm	93%
Total hardness	1,403	0,014	1,36	0,24	mmol/l	97%
Alkalinity	1,246	0,014	1,26	0,05	mmol/l	101%
Hydrogen carbonate	73,0	0,8	73,5	2,94	mg/l	101%
Calcium	37,4	0,5	36,4	6,55	mg/l	97%
Magnesium	11,43	0,14	11,1	2	mg/l	97%
Sodium	18,15	0,08	19,1	3,44	mg/l	105%
Potassium	3,17	0,03	3,08	0,55	mg/l	97%
Nitrate	21,4	0,5	19,8	1,78	mg/l	93%
Nitrite	0,0708	0,0008	0,071	0,006	mg/l	100%
Ammonium	0,076	0,003	0,087	0,008	mg/l	114%
Chloride	41,5	0,7	39,6	3,56	mg/l	95%
Sulphate	45,2	0,5	42,8	3,85	mg/l	95%
Orthophosphate	<0,009		0,0124	0,001	mg/l	FP
Boron	0,0406	0,0004	0,0413	0,007	mg/l	102%
DOC	2,39	0,04	2,51	0,23	mg/l	105%
Total P (as PO4)	<0,009		<0,05		mg/l	•
Cyanide	0,0354	0,0016	0,0351	0,003	mg/l	99%



**Sample N163A**

**Laboratory AP**

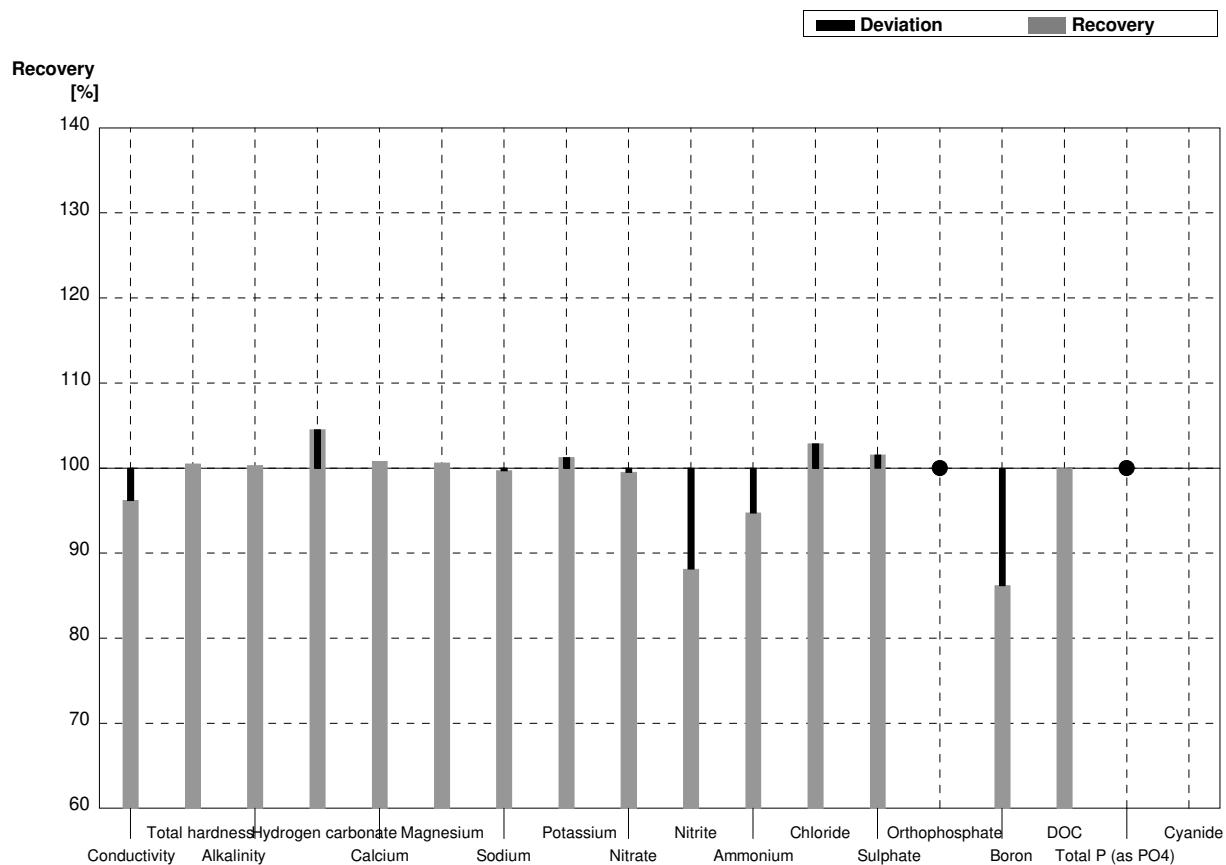
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	894	89	µS/cm	99%
Total hardness	3,37	0,04	3,44	0,34	mmol/l	102%
Alkalinity	4,91	0,06	5,00	0,5	mmol/l	102%
Hydrogen carbonate	297	4	305	31	mg/l	103%
Calcium	98,7	1,4	102	10	mg/l	103%
Magnesium	22,0	0,3	21,8	2,2	mg/l	99%
Sodium	53,5	0,4	53,0	5,3	mg/l	99%
Potassium	13,22	0,08	13,2	1,3	mg/l	100%
Nitrate	63,0	1,3	63,3	6,3	mg/l	100%
Nitrite	0,0322	0,0010	0,0284	0,0028	mg/l	88%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	61,2	6,1	mg/l	101%
Sulphate	84,2	0,7	85,1	8,5	mg/l	101%
Orthophosphate	0,091	0,006	0,0766	0,0077	mg/l	84%
Boron	0,1512	0,0013	0,143	0,014	mg/l	95%
DOC	6,00	0,06	6,2	0,62	mg/l	103%
Total P (as PO4)	0,207	0,002	0,176	0,035	mg/l	85%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AP**

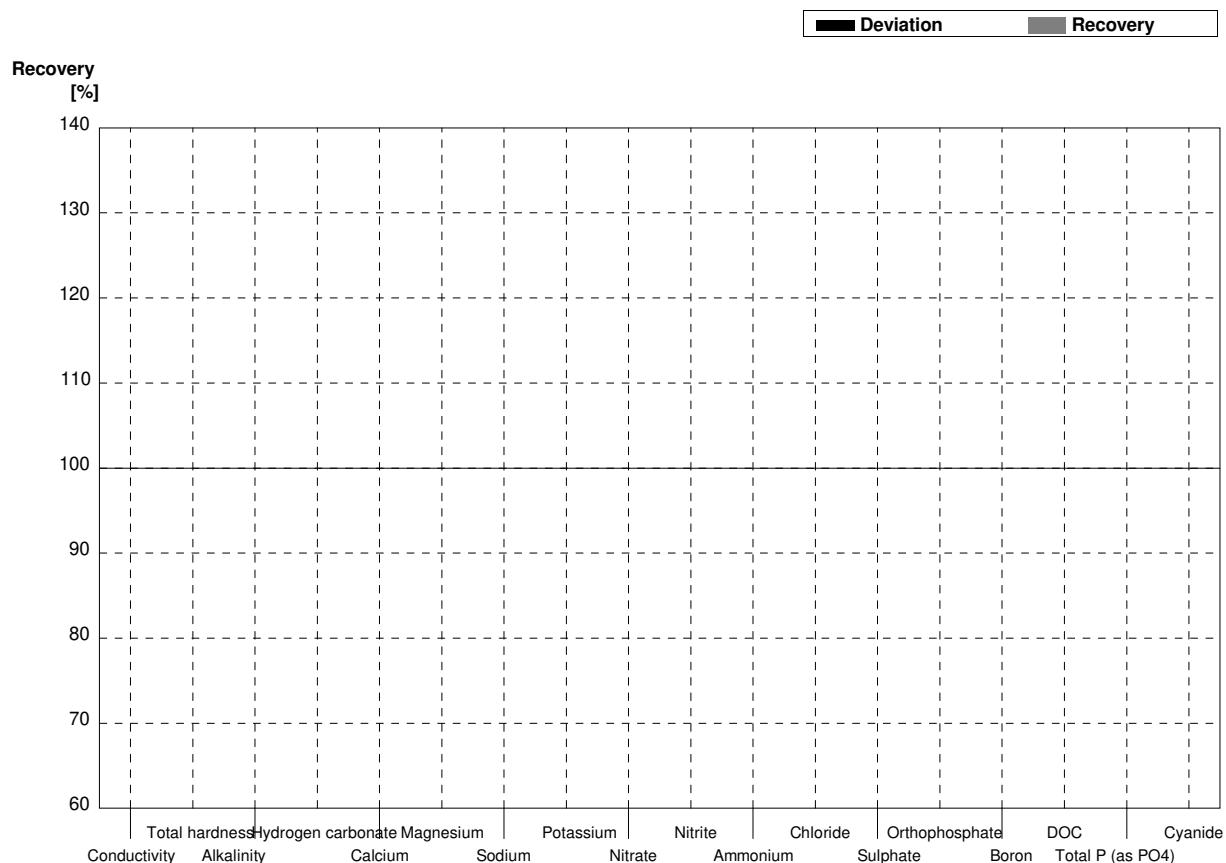
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	380	38	µS/cm	96%
Total hardness	1,403	0,014	1,41	0,14	mmol/l	100%
Alkalinity	1,246	0,014	1,25	0,13	mmol/l	100%
Hydrogen carbonate	73,0	0,8	76,3	7,6	mg/l	105%
Calcium	37,4	0,5	37,7	3,8	mg/l	101%
Magnesium	11,43	0,14	11,5	1,2	mg/l	101%
Sodium	18,15	0,08	18,1	1,89	mg/l	100%
Potassium	3,17	0,03	3,21	0,32	mg/l	101%
Nitrate	21,4	0,5	21,3	2,1	mg/l	100%
Nitrite	0,0708	0,0008	0,0624	0,0062	mg/l	88%
Ammonium	0,076	0,003	0,072	0,007	mg/l	95%
Chloride	41,5	0,7	42,7	4,3	mg/l	103%
Sulphate	45,2	0,5	45,9	4,6	mg/l	102%
Orthophosphate	<0,009		<0,008		mg/l	•
Boron	0,0406	0,0004	0,0350	0,0035	mg/l	86%
DOC	2,39	0,04	2,39	0,24	mg/l	100%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AQ**

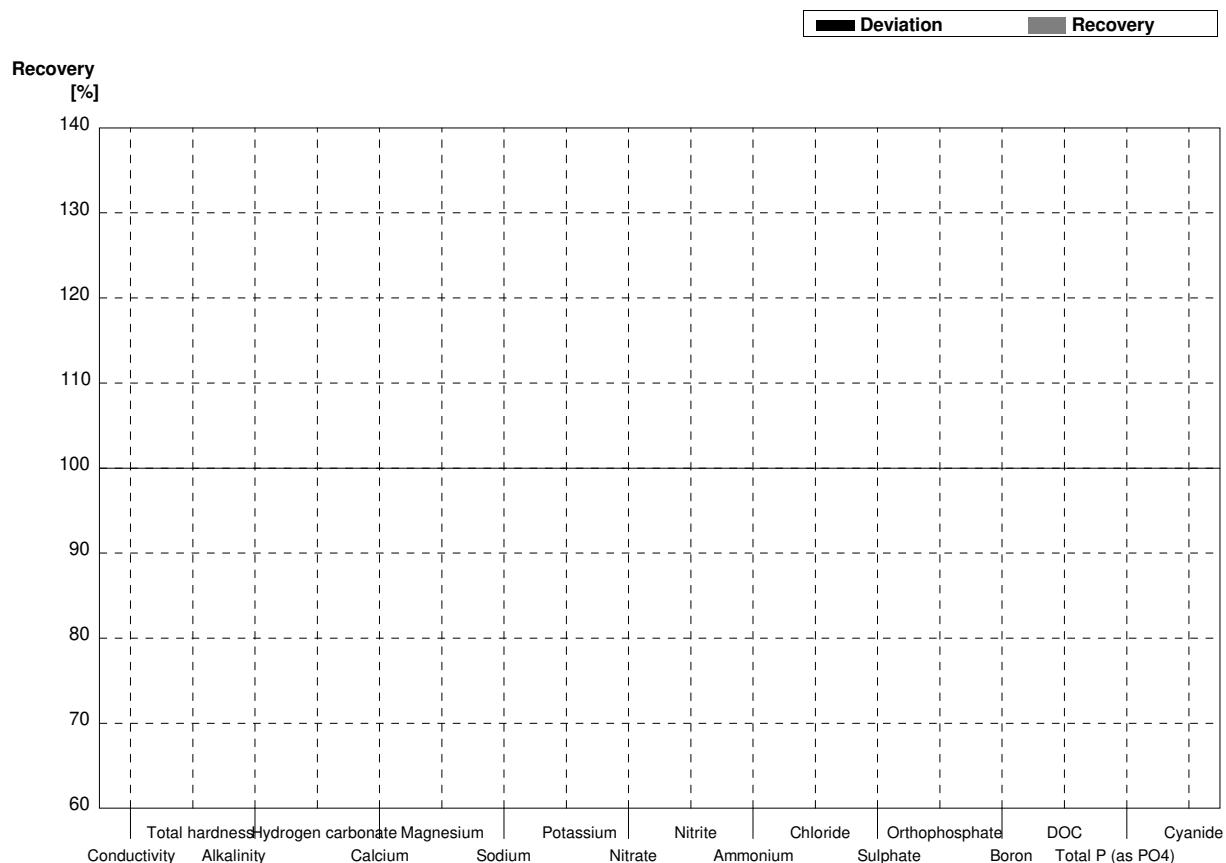
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4			mg/l	
Magnesium	22,0	0,3			mg/l	
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AQ**

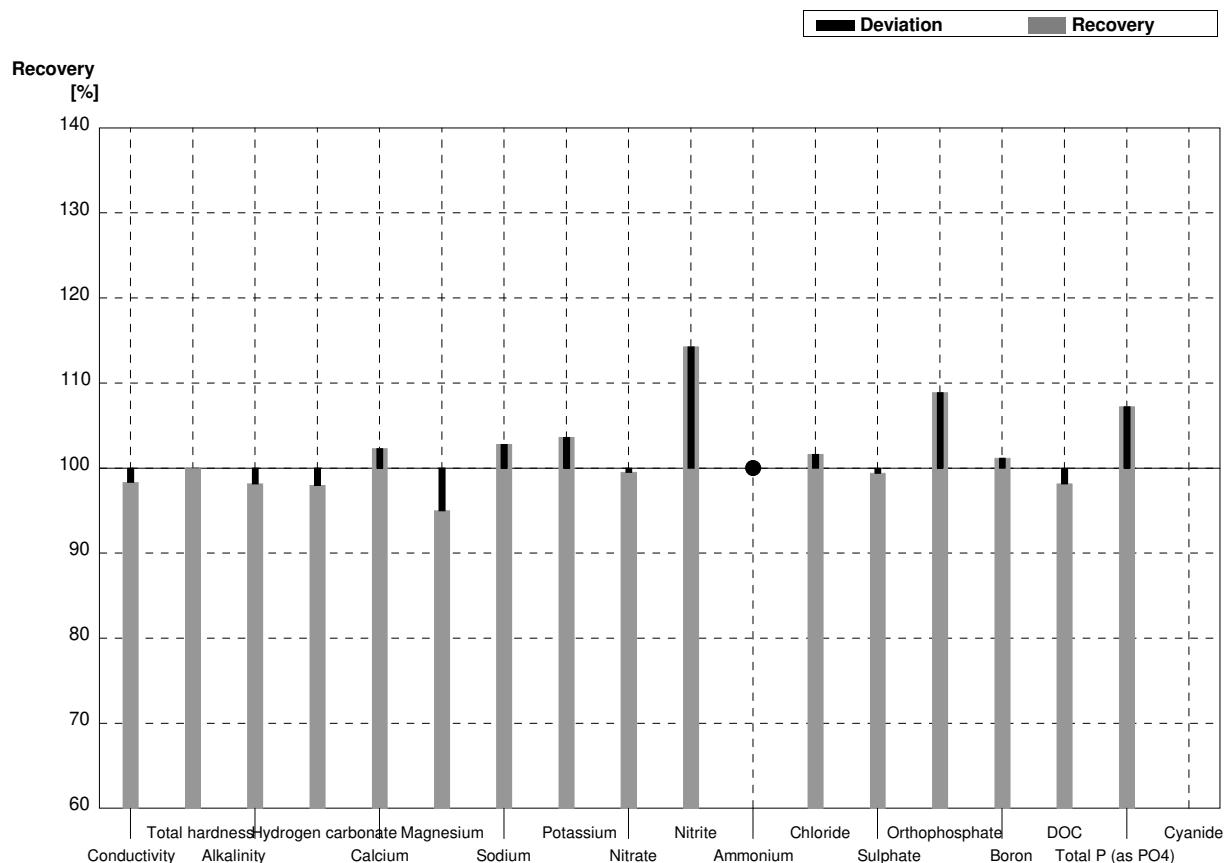
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5			mg/l	
Magnesium	11,43	0,14			mg/l	
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO <sub>4</sub> )	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AR**

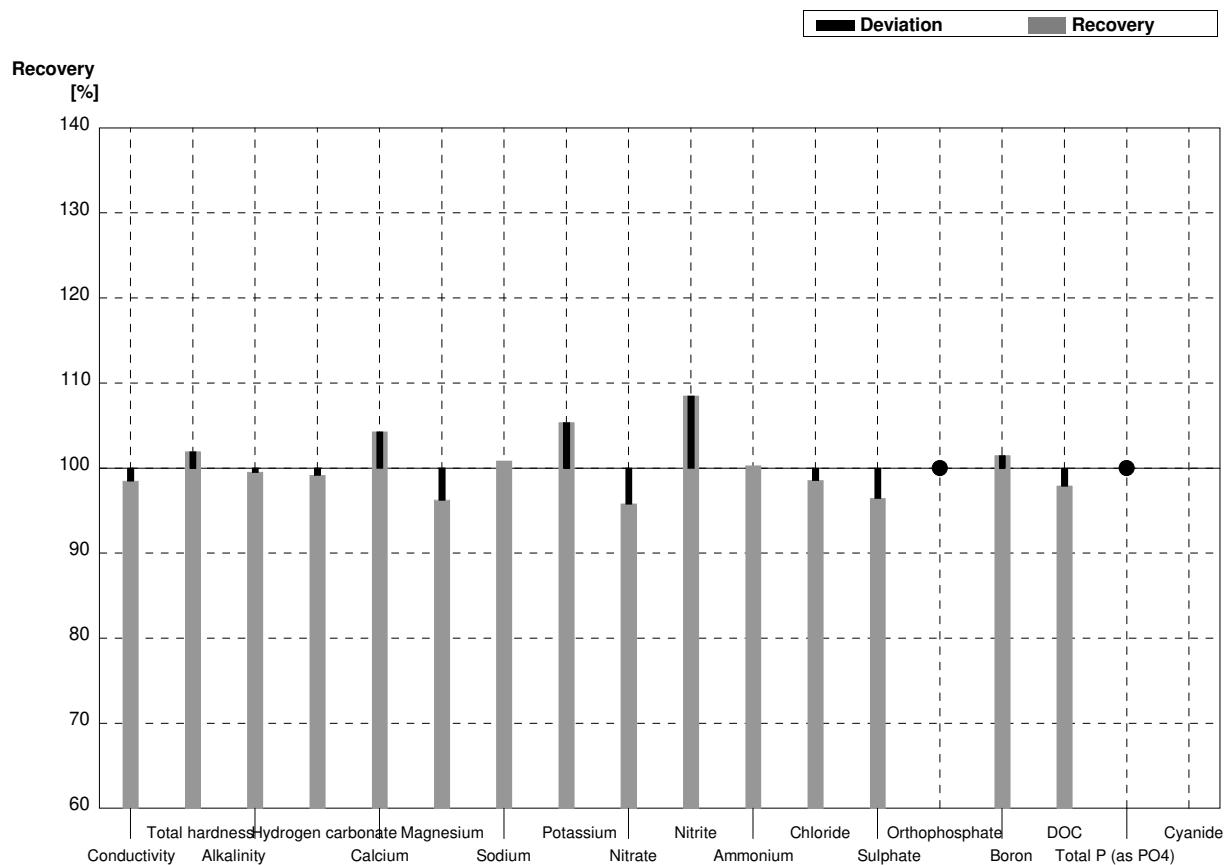
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	890	0,216	µS/cm	98%
Total hardness	3,37	0,04	3,37	0,0396	mmol/l	100%
Alkalinity	4,91	0,06	4,82	0,145	mmol/l	98%
Hydrogen carbonate	297	4	291	5,83	mg/l	98%
Calcium	98,7	1,4	101	0,863	mg/l	102%
Magnesium	22,0	0,3	20,9	0,807	mg/l	95%
Sodium	53,5	0,4	55,0	0,284	mg/l	103%
Potassium	13,22	0,08	13,7	0,257	mg/l	104%
Nitrate	63,0	1,3	62,7	0,474	mg/l	100%
Nitrite	0,0322	0,0010	0,0368	0,00229	mg/l	114%
Ammonium	<0,01		[0,001]		mg/l	•
Chloride	60,6	1,5	61,6	0,630	mg/l	102%
Sulphate	84,2	0,7	83,7	0,547	mg/l	99%
Orthophosphate	0,091	0,006	0,0991	0,00300	mg/l	109%
Boron	0,1512	0,0013	0,153	0,00119	mg/l	101%
DOC	6,00	0,06	5,89	0,0331	mg/l	98%
Total P (as PO4)	0,207	0,002	0,222	0,00187	mg/l	107%
Cyanide	0,0533	0,0016			mg/l	



Sample N163B

Laboratory AR

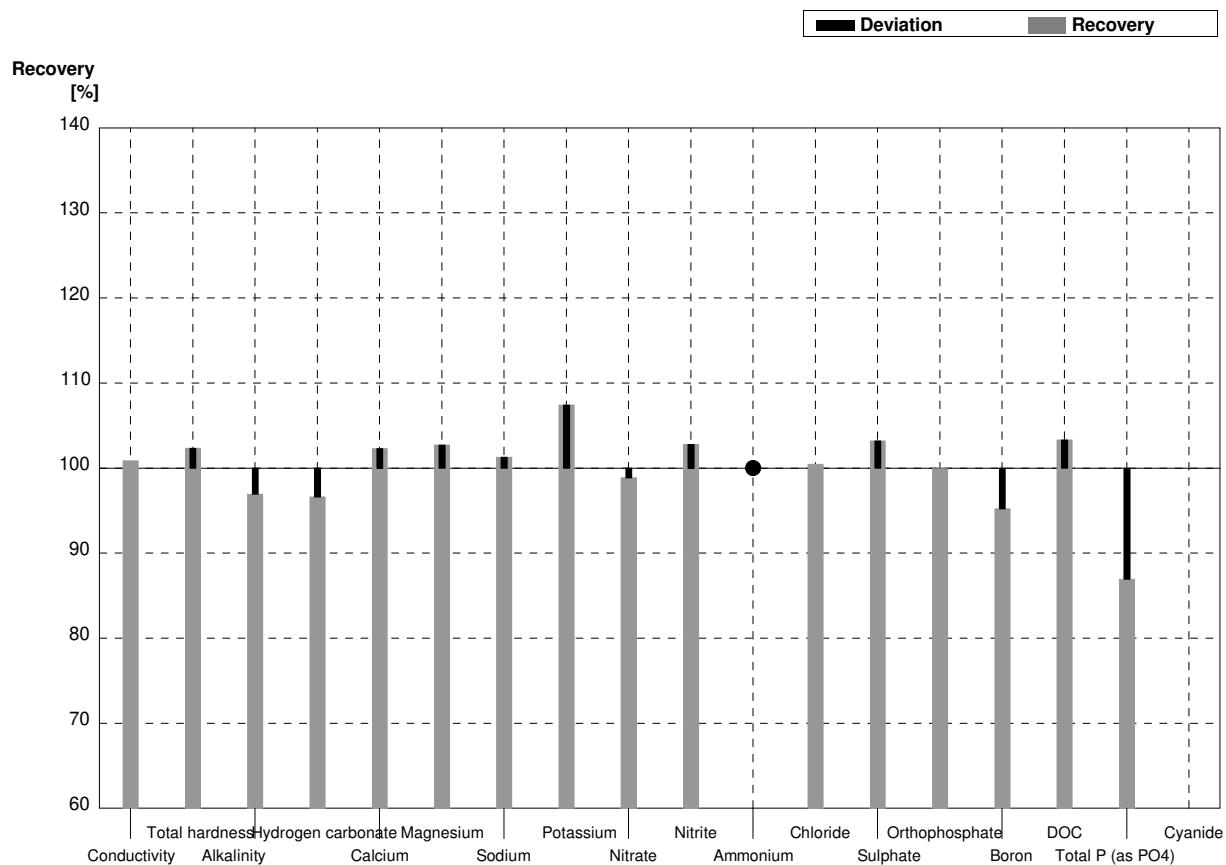
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	389	0,284	µS/cm	98%
Total hardness	1,403	0,014	1,43	0,0406	mmol/l	102%
Alkalinity	1,246	0,014	1,24	0,0737	mmol/l	100%
Hydrogen carbonate	73,0	0,8	72,4	1,45	mg/l	99%
Calcium	37,4	0,5	39,0	0,784	mg/l	104%
Magnesium	11,43	0,14	11,0	0,865	mg/l	96%
Sodium	18,15	0,08	18,3	0,581	mg/l	101%
Potassium	3,17	0,03	3,34	0,0375	mg/l	105%
Nitrate	21,4	0,5	20,5	0,259	mg/l	96%
Nitrite	0,0708	0,0008	0,0768	0,00234	mg/l	108%
Ammonium	0,076	0,003	0,0762	0,00084	mg/l	100%
Chloride	41,5	0,7	40,9	0,354	mg/l	99%
Sulphate	45,2	0,5	43,6	0,283	mg/l	96%
Orthophosphate	<0,009		<0,0150		mg/l	•
Boron	0,0406	0,0004	0,0412	0,00125	mg/l	101%
DOC	2,39	0,04	2,34	0,0285	mg/l	98%
Total P (as PO4)	<0,009		<0,0150		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



Sample N163A

Laboratory AS

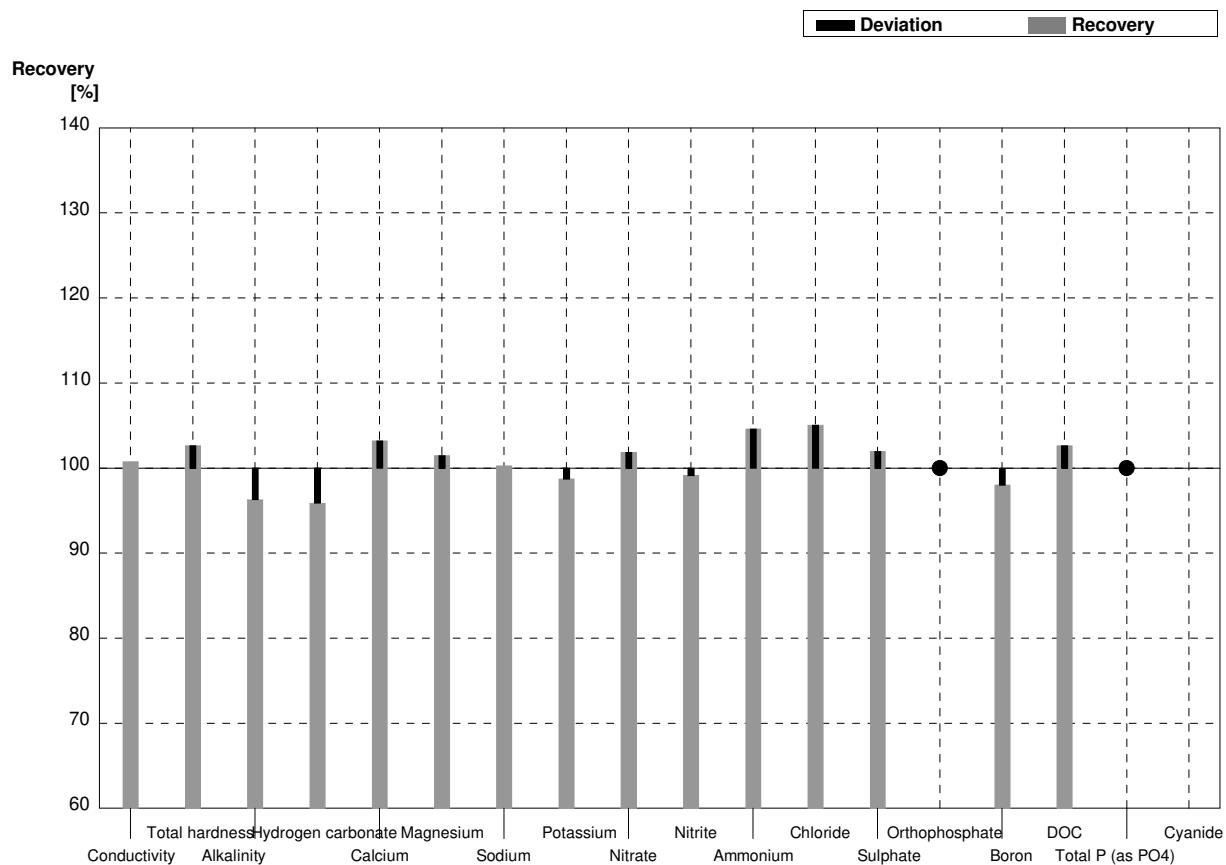
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	913	41,1	µS/cm	101%
Total hardness	3,37	0,04	3,45		mmol/l	102%
Alkalinity	4,91	0,06	4,76	0,33	mmol/l	97%
Hydrogen carbonate	297	4	287		mg/l	97%
Calcium	98,7	1,4	101	15,8	mg/l	102%
Magnesium	22,0	0,3	22,6	2,4	mg/l	103%
Sodium	53,5	0,4	54,2	4,7	mg/l	101%
Potassium	13,22	0,08	14,2	1,3	mg/l	107%
Nitrate	63,0	1,3	62,3	8,8	mg/l	99%
Nitrite	0,0322	0,0010	0,0331	0,0038	mg/l	103%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	60,6	1,5	60,9	8,7	mg/l	100%
Sulphate	84,2	0,7	86,9	7	mg/l	103%
Orthophosphate	0,091	0,006	0,091	0,009	mg/l	100%
Boron	0,1512	0,0013	0,144	0,003	mg/l	95%
DOC	6,00	0,06	6,20	0,75	mg/l	103%
Total P (as PO4)	0,207	0,002	0,180	0,001	mg/l	87%
Cyanide	0,0533	0,0016			mg/l	



Sample N163B

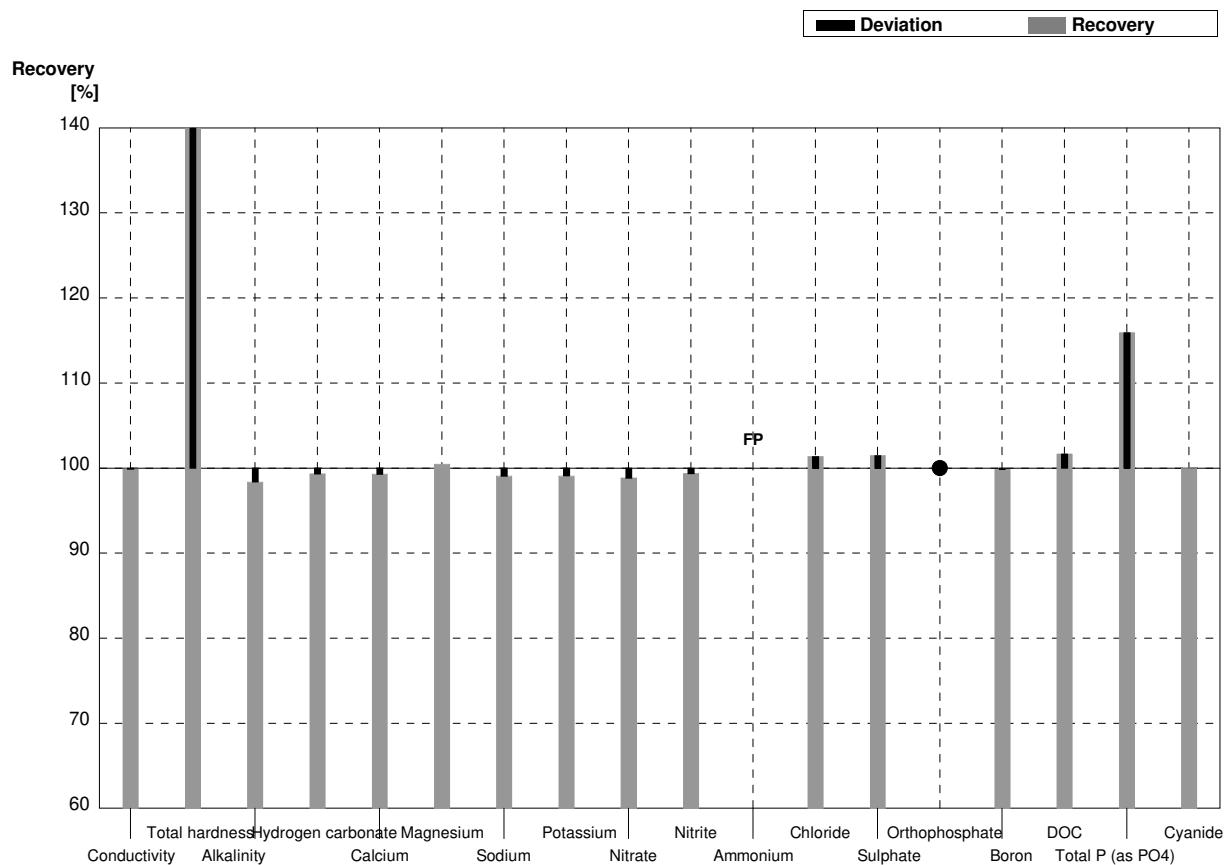
Laboratory AS

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	398	17,9	µS/cm	101%
Total hardness	1,403	0,014	1,44		mmol/l	103%
Alkalinity	1,246	0,014	1,20	0,09	mmol/l	96%
Hydrogen carbonate	73,0	0,8	70		mg/l	96%
Calcium	37,4	0,5	38,6	6	mg/l	103%
Magnesium	11,43	0,14	11,6	1,2	mg/l	101%
Sodium	18,15	0,08	18,2	1,6	mg/l	100%
Potassium	3,17	0,03	3,13	0,3	mg/l	99%
Nitrate	21,4	0,5	21,8	3,1	mg/l	102%
Nitrite	0,0708	0,0008	0,0702	0,008	mg/l	99%
Ammonium	0,076	0,003	0,0795	0,012	mg/l	105%
Chloride	41,5	0,7	43,6	6,2	mg/l	105%
Sulphate	45,2	0,5	46,1	3,7	mg/l	102%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0406	0,0004	0,0398	0,002	mg/l	98%
DOC	2,39	0,04	2,453	0,29	mg/l	103%
Total P (as PO4)	<0,009		<0,03		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A****Laboratory AT**

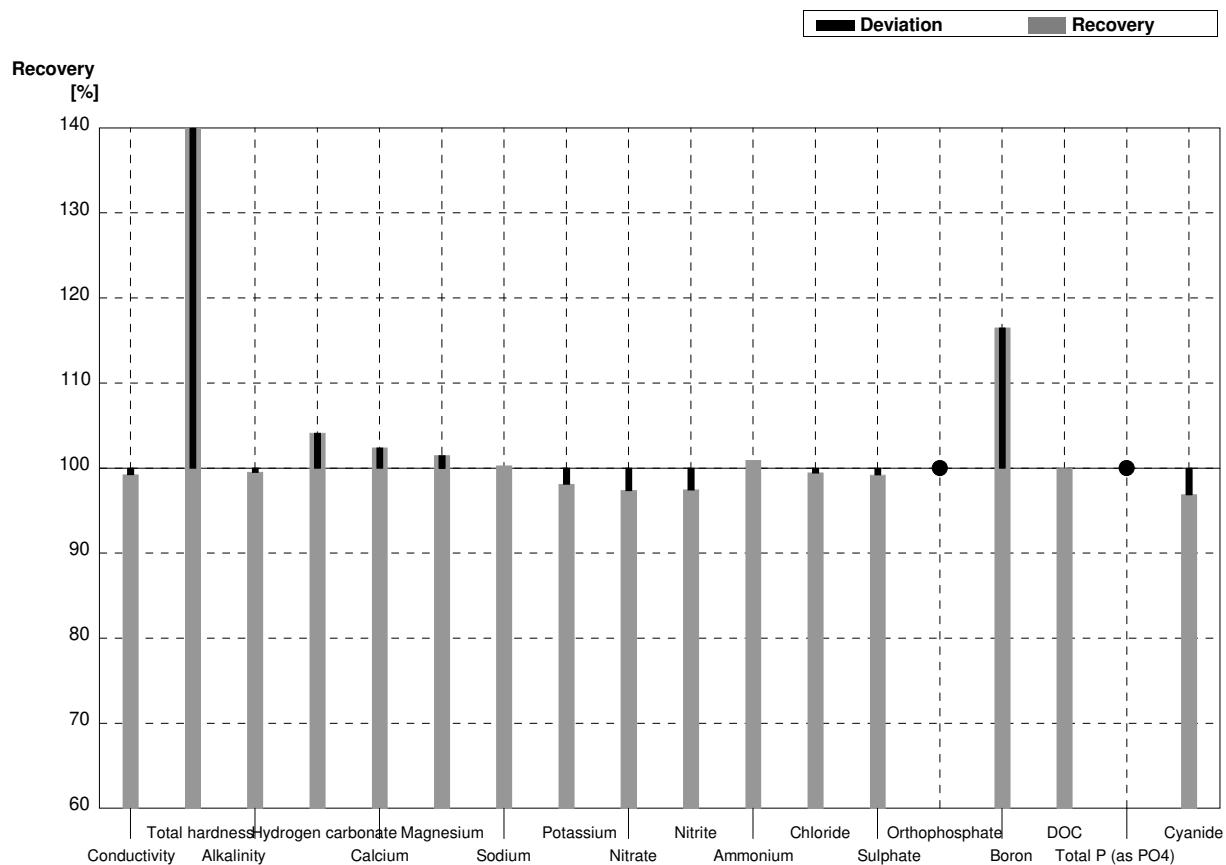
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	904	9,94	$\mu\text{S}/\text{cm}$	100%
Total hardness	3,37	0,04	18,79	1,879	$\text{mmol}/\text{l}$	558%
Alkalinity	4,91	0,06	4,83	0,333	$\text{mmol}/\text{l}$	98%
Hydrogen carbonate	297	4	295	20,4	$\text{mg}/\text{l}$	99%
Calcium	98,7	1,4	98	9,8	$\text{mg}/\text{l}$	99%
Magnesium	22,0	0,3	22,1	2,21	$\text{mg}/\text{l}$	100%
Sodium	53,5	0,4	53	5,3	$\text{mg}/\text{l}$	99%
Potassium	13,22	0,08	13,1	1,31	$\text{mg}/\text{l}$	99%
Nitrate	63,0	1,3	62,27	5,54	$\text{mg}/\text{l}$	99%
Nitrite	0,0322	0,0010	0,0320	0,00416	$\text{mg}/\text{l}$	99%
Ammonium	<0,01		0,0110	0,00097	$\text{mg}/\text{l}$	FP
Chloride	60,6	1,5	61,44	2,95	$\text{mg}/\text{l}$	101%
Sulphate	84,2	0,7	85,45	3,93	$\text{mg}/\text{l}$	101%
Orthophosphate	0,091	0,006	<0,15	0,0093	$\text{mg}/\text{l}$	•
Boron	0,1512	0,0013	0,151	0,0302	$\text{mg}/\text{l}$	100%
DOC	6,00	0,06	6,1	0,671	$\text{mg}/\text{l}$	102%
Total P (as PO <sub>4</sub> )	0,207	0,002	0,240	0,0149	$\text{mg}/\text{l}$	116%
Cyanide	0,0533	0,0016	0,0533	0,0085	$\text{mg}/\text{l}$	100%



**Sample N163B**

**Laboratory AT**

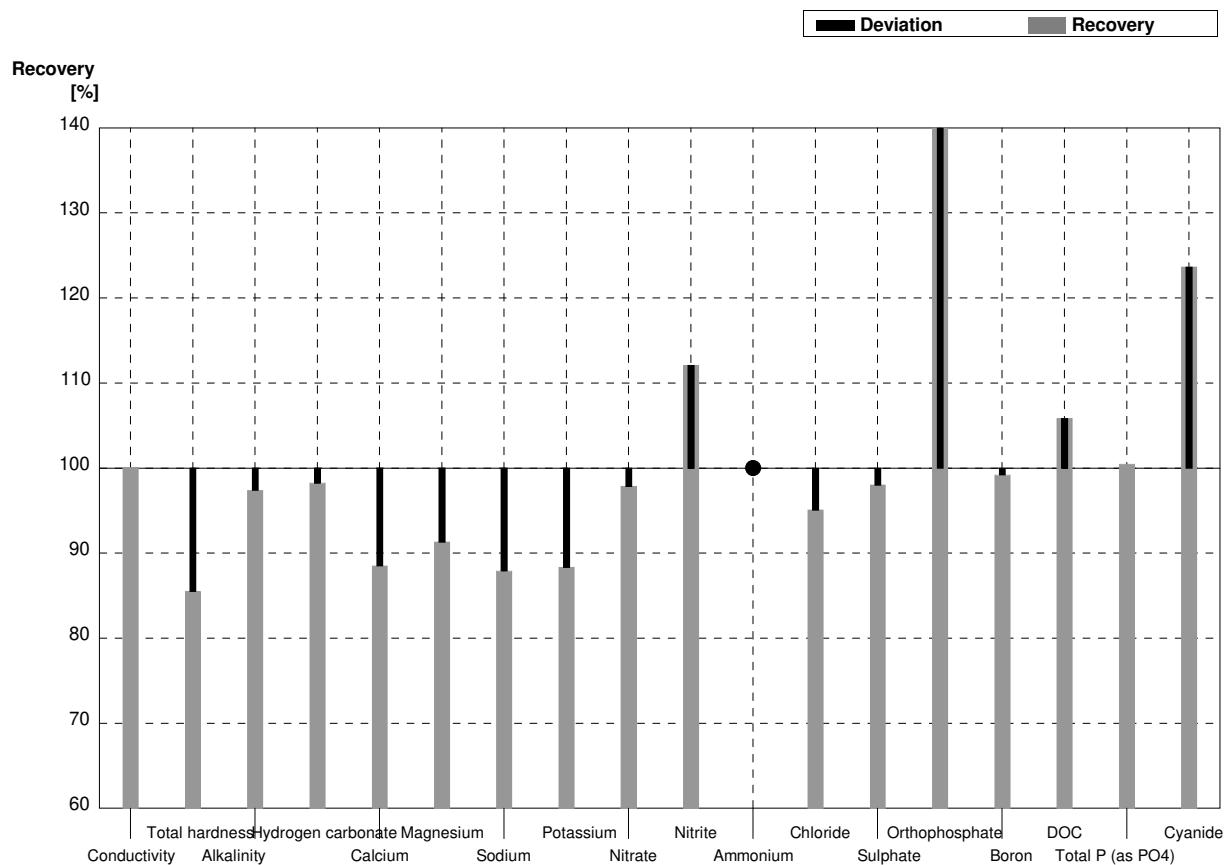
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	392	3,32	µS/cm	99%
Total hardness	1,403	0,014	8,03	0,803	mmol/l	572%
Alkalinity	1,246	0,014	1,24	0,086	mmol/l	100%
Hydrogen carbonate	73,0	0,8	76	5,3	mg/l	104%
Calcium	37,4	0,5	38,3	3,83	mg/l	102%
Magnesium	11,43	0,14	11,6	1,16	mg/l	101%
Sodium	18,15	0,08	18,2	1,82	mg/l	100%
Potassium	3,17	0,03	3,11	0,311	mg/l	98%
Nitrate	21,4	0,5	20,84	1,85	mg/l	97%
Nitrite	0,0708	0,0008	0,069	0,00897	mg/l	97%
Ammonium	0,076	0,003	0,0767	0,0067	mg/l	101%
Chloride	41,5	0,7	41,27	1,98	mg/l	99%
Sulphate	45,2	0,5	44,84	2,06	mg/l	99%
Orthophosphate	<0,009		<0,15	0,0093	mg/l	•
Boron	0,0406	0,0004	0,0473	0,0095	mg/l	117%
DOC	2,39	0,04	2,39	0,263	mg/l	100%
Total P (as PO4)	<0,009		<0,15	0,0093	mg/l	•
Cyanide	0,0354	0,0016	0,0343	0,0055	mg/l	97%



Sample N163A

Laboratory AU

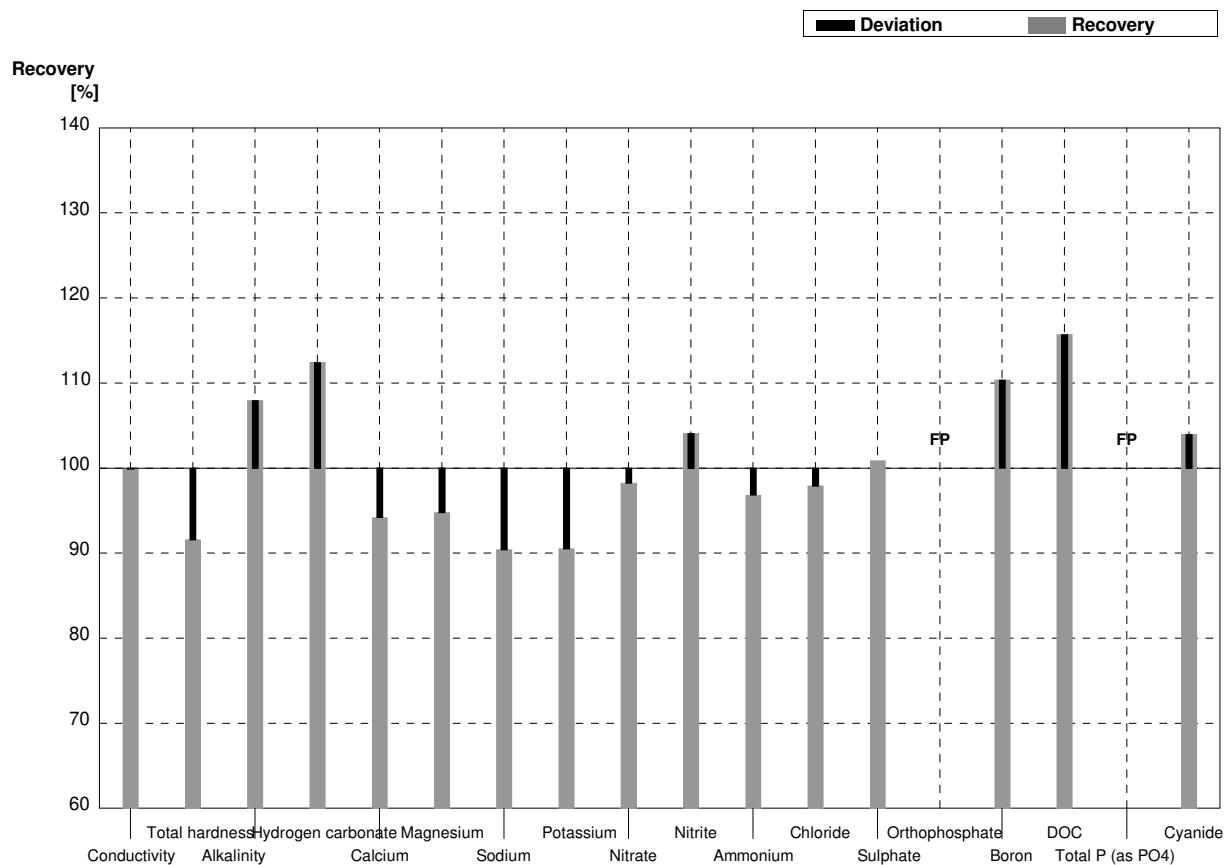
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	906,0	0,0	µS/cm	100%
Total hardness	3,37	0,04	2,882	0,0357	mmol/l	86%
Alkalinity	4,91	0,06	4,782		mmol/l	97%
Hydrogen carbonate	297	4	291,78		mg/l	98%
Calcium	98,7	1,4	87,367	1,1015	mg/l	89%
Magnesium	22,0	0,3	20,090	0,9307	mg/l	91%
Sodium	53,5	0,4	47,030	1,1433	mg/l	88%
Potassium	13,22	0,08	11,680	1,3946	mg/l	88%
Nitrate	63,0	1,3	61,659	1,072	mg/l	98%
Nitrite	0,0322	0,0010	0,0361	0,0091	mg/l	112%
Ammonium	<0,01		0,0125	0,0028	mg/l	•
Chloride	60,6	1,5	57,621	0,888	mg/l	95%
Sulphate	84,2	0,7	82,543	0,018	mg/l	98%
Orthophosphate	0,091	0,006	0,149	0,0508	mg/l	164%
Boron	0,1512	0,0013	0,150	0,011	mg/l	99%
DOC	6,00	0,06	6,350	0,339	mg/l	106%
Total P (as PO4)	0,207	0,002	0,208	0,0055	mg/l	100%
Cyanide	0,0533	0,0016	0,0659	0,0048	mg/l	124%



**Sample N163B**

**Laboratory AU**

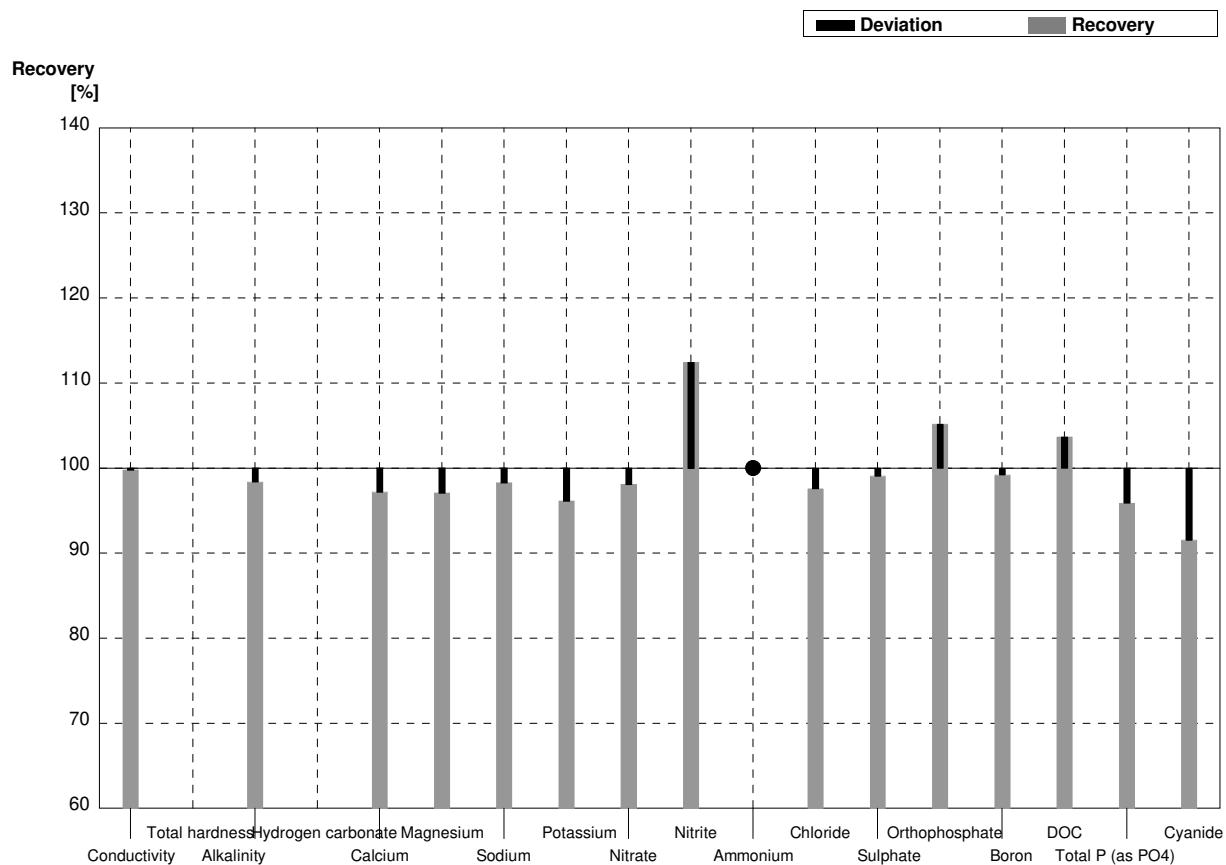
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	394,5	4,242	µS/cm	100%
Total hardness	1,403	0,014	1,285	0,0422	mmol/l	92%
Alkalinity	1,246	0,014	1,345		mmol/l	108%
Hydrogen carbonate	73,0	0,8	82,07		mg/l	112%
Calcium	37,4	0,5	35,233	1,655	mg/l	94%
Magnesium	11,43	0,14	10,833	0,387	mg/l	95%
Sodium	18,15	0,08	16,411	0,809	mg/l	90%
Potassium	3,17	0,03	2,870	0,202	mg/l	91%
Nitrate	21,4	0,5	21,025	0,1457	mg/l	98%
Nitrite	0,0708	0,0008	0,0737	0,0	mg/l	104%
Ammonium	0,076	0,003	0,0736	0,0017	mg/l	97%
Chloride	41,5	0,7	40,63	0,624	mg/l	98%
Sulphate	45,2	0,5	45,604	0,199	mg/l	101%
Orthophosphate	<0,009		0,0494	0,0212	mg/l	FP
Boron	0,0406	0,0004	0,0448	0,0093	mg/l	110%
DOC	2,39	0,04	2,765	0,099	mg/l	116%
Total P (as PO4)	<0,009		0,0831	0,0014	mg/l	FP
Cyanide	0,0354	0,0016	0,0368	0,0191	mg/l	104%



**Sample N163A**

**Laboratory AV**

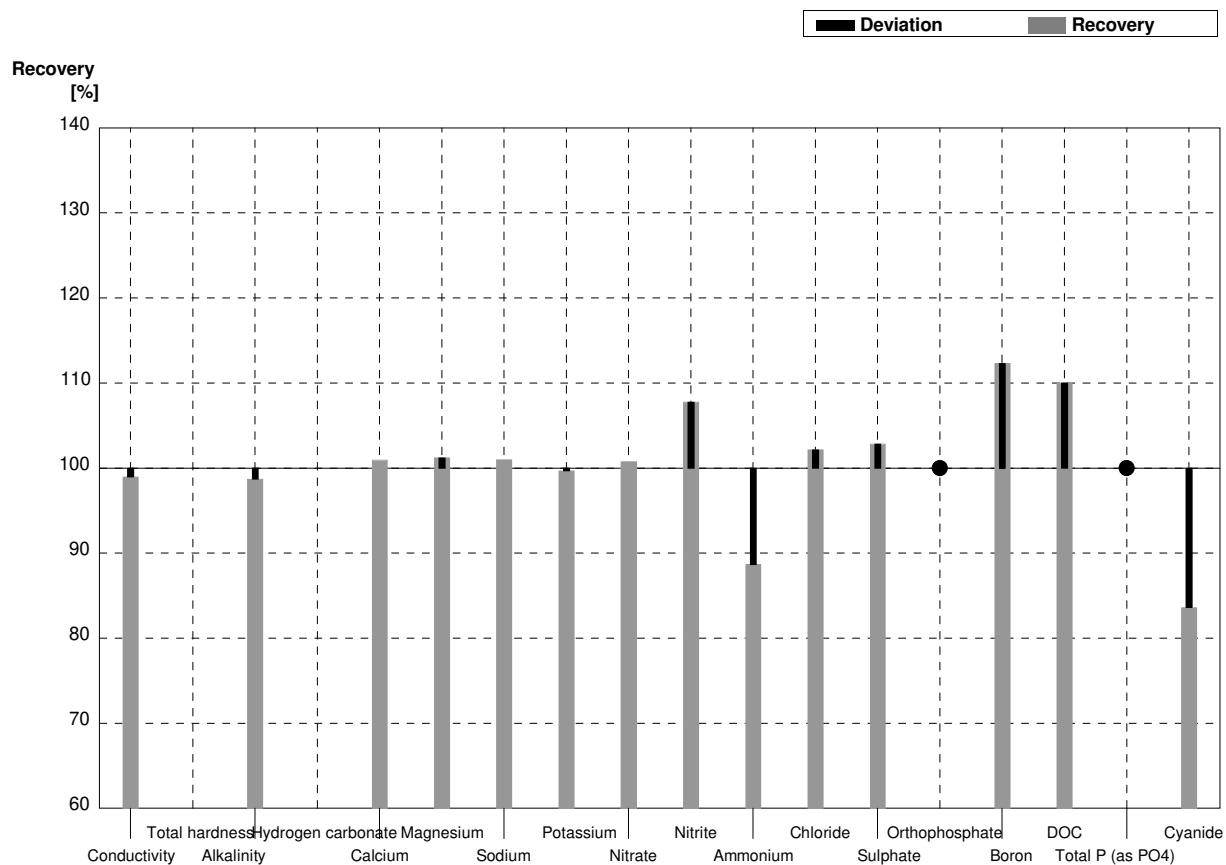
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	903	23	µS/cm	100%
Total hardness	3,37	0,04			mmol/l	
Alkalinity	4,91	0,06	4,83	0,44	mmol/l	98%
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	95,93	11,99	mg/l	97%
Magnesium	22,0	0,3	21,36	3,18	mg/l	97%
Sodium	53,5	0,4	52,58	6,99	mg/l	98%
Potassium	13,22	0,08	12,71	1,13	mg/l	96%
Nitrate	63,0	1,3	61,80	1,61	mg/l	98%
Nitrite	0,0322	0,0010	0,0362	0,0029	mg/l	112%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	60,6	1,5	59,14	2,60	mg/l	98%
Sulphate	84,2	0,7	83,43	3,25	mg/l	99%
Orthophosphate	0,091	0,006	0,0957	0,006	mg/l	105%
Boron	0,1512	0,0013	0,150	0,017	mg/l	99%
DOC	6,00	0,06	6,22	0,62	mg/l	104%
Total P (as PO4)	0,207	0,002	0,1985	0,009	mg/l	96%
Cyanide	0,0533	0,0016	0,0488	0,004	mg/l	92%



**Sample N163B**

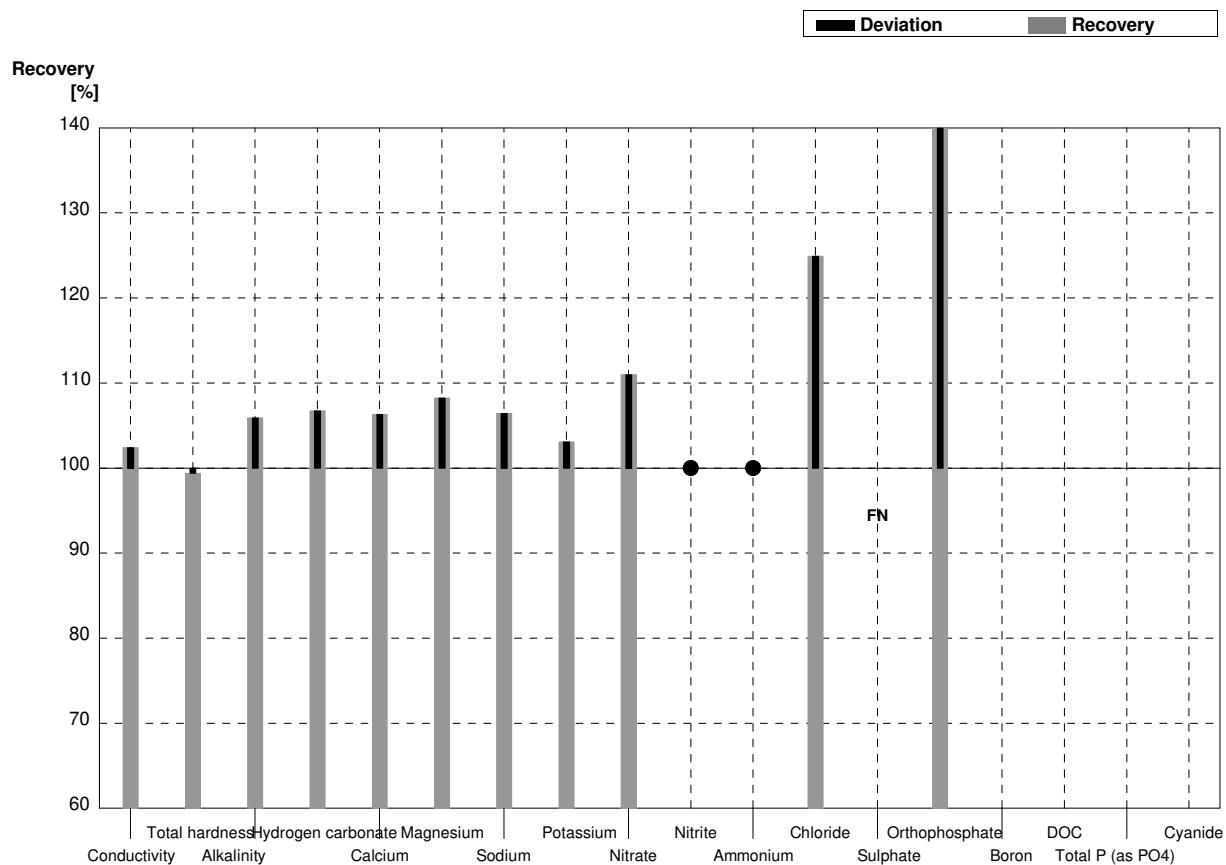
**Laboratory AV**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	391	10	µS/cm	99%
Total hardness	1,403	0,014			mmol/l	
Alkalinity	1,246	0,014	1,23	0,11	mmol/l	99%
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	37,76	4,72	mg/l	101%
Magnesium	11,43	0,14	11,57	1,72	mg/l	101%
Sodium	18,15	0,08	18,33	2,44	mg/l	101%
Potassium	3,17	0,03	3,16	0,28	mg/l	100%
Nitrate	21,4	0,5	21,56	0,56	mg/l	101%
Nitrite	0,0708	0,0008	0,0763	0,0061	mg/l	108%
Ammonium	0,076	0,003	0,0674	0,0066	mg/l	89%
Chloride	41,5	0,7	42,40	1,87	mg/l	102%
Sulphate	45,2	0,5	46,48	1,81	mg/l	103%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0406	0,0004	0,0456	0,0052	mg/l	112%
DOC	2,39	0,04	2,63	0,26	mg/l	110%
Total P (as PO4)	<0,009		<0,010		mg/l	•
Cyanide	0,0354	0,0016	0,0296	0,002	mg/l	84%



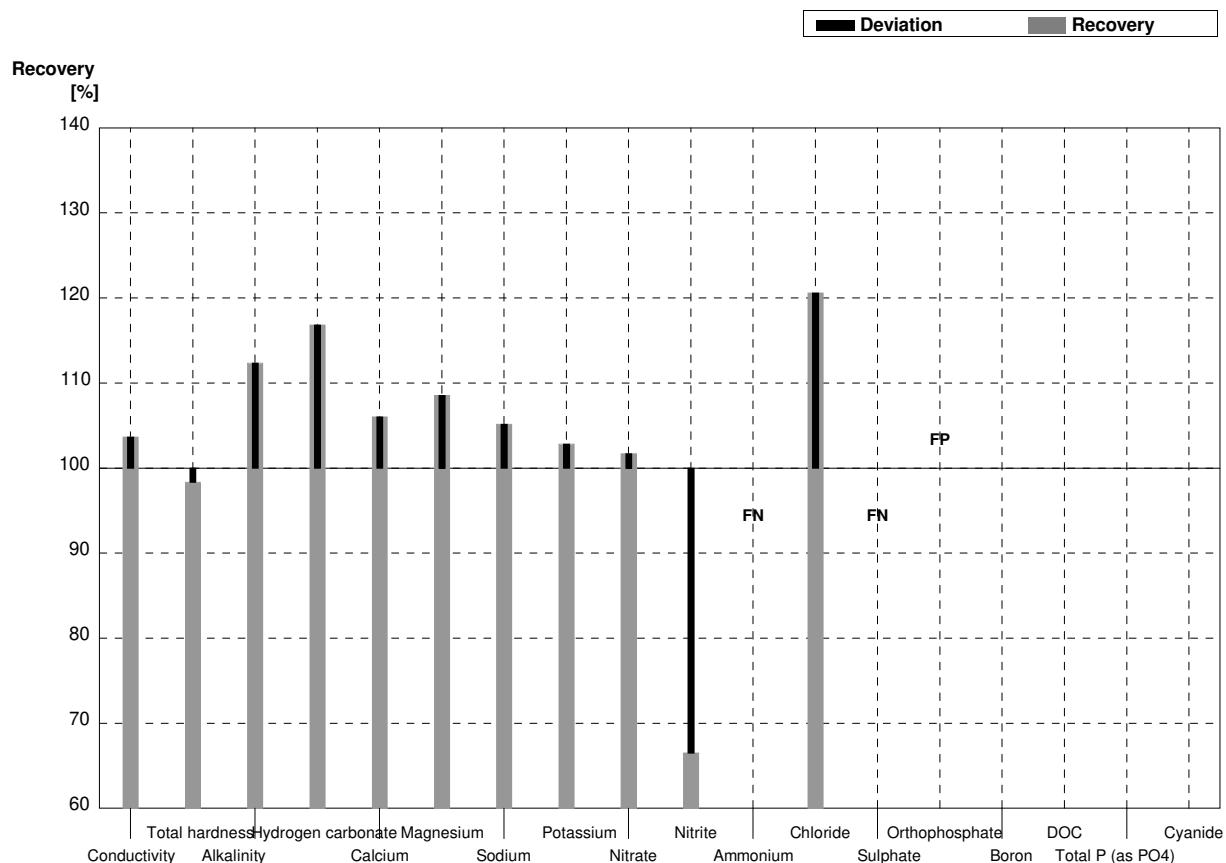
**Sample N163A****Laboratory AW**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	905	3	927,0	64,0	$\mu\text{S}/\text{cm}$	102%
Total hardness	3,37	0,04	3,35	0,697	$\text{mmol/l}$	99%
Alkalinity	4,91	0,06	5,20	0,296	$\text{mmol/l}$	106%
Hydrogen carbonate	297	4	317,1	18,075	$\text{mg/l}$	107%
Calcium	98,7	1,4	104,95	11,22	$\text{mg/l}$	106%
Magnesium	22,0	0,3	23,82	2,55	$\text{mg/l}$	108%
Sodium	53,5	0,4	56,96	7,12	$\text{mg/l}$	106%
Potassium	13,22	0,08	13,63	2,19	$\text{mg/l}$	103%
Nitrate	63,0	1,3	69,95	4,83	$\text{mg/l}$	111%
Nitrite	0,0322	0,0010	<0,1		$\text{mg/l}$	•
Ammonium	<0,01		<0,04		$\text{mg/l}$	•
Chloride	60,6	1,5	75,696	4,088	$\text{mg/l}$	125%
Sulphate	84,2	0,7	<1		$\text{mg/l}$	FN
Orthophosphate	0,091	0,006	98,6	6,409	$\text{mg/l}$	108352%
Boron	0,1512	0,0013			$\text{mg/l}$	
DOC	6,00	0,06			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	0,207	0,002			$\text{mg/l}$	
Cyanide	0,0533	0,0016			$\text{mg/l}$	



**Sample N163B****Laboratory AW**

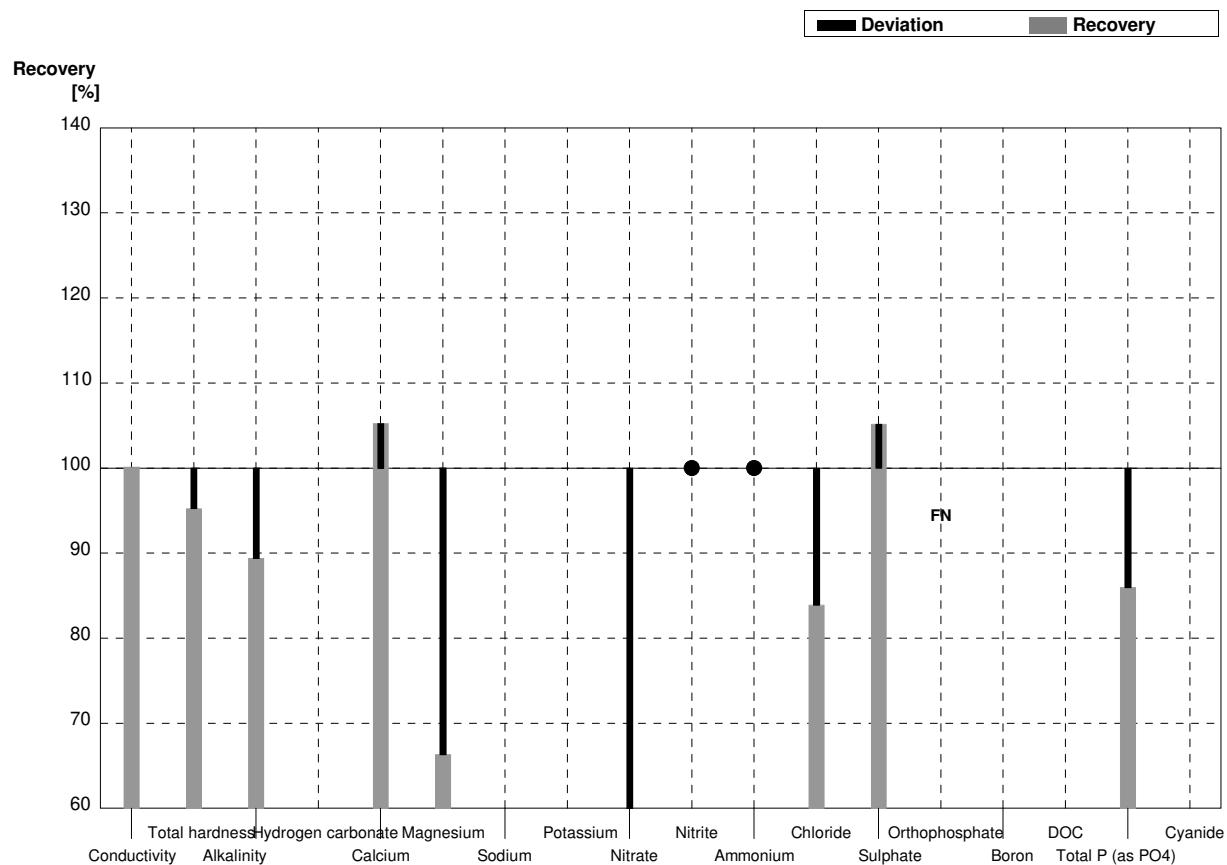
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	395	1	409,5	28,3	$\mu\text{S}/\text{cm}$	104%
Total hardness	1,403	0,014	1,38	0,287	$\text{mmol}/\text{l}$	98%
Alkalinity	1,246	0,014	1,40	0,0798	$\text{mmol}/\text{l}$	112%
Hydrogen carbonate	73,0	0,8	85,3	4,862	$\text{mg}/\text{l}$	117%
Calcium	37,4	0,5	39,65	4,243	$\text{mg}/\text{l}$	106%
Magnesium	11,43	0,14	12,41	1,33	$\text{mg}/\text{l}$	109%
Sodium	18,15	0,08	19,09	2,38	$\text{mg}/\text{l}$	105%
Potassium	3,17	0,03	3,26	0,525	$\text{mg}/\text{l}$	103%
Nitrate	21,4	0,5	21,77	1,50	$\text{mg}/\text{l}$	102%
Nitrite	0,0708	0,0008	0,0471	0,00617	$\text{mg}/\text{l}$	67%
Ammonium	0,076	0,003	<0,04		$\text{mg}/\text{l}$	FN
Chloride	41,5	0,7	50,054	2,702	$\text{mg}/\text{l}$	121%
Sulphate	45,2	0,5	<1		$\text{mg}/\text{l}$	FN
Orthophosphate	<0,009		50,037	3,252	$\text{mg}/\text{l}$	FP
Boron	0,0406	0,0004			$\text{mg}/\text{l}$	
DOC	2,39	0,04			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg}/\text{l}$	
Cyanide	0,0354	0,0016			$\text{mg}/\text{l}$	



Sample N163A

Laboratory AX

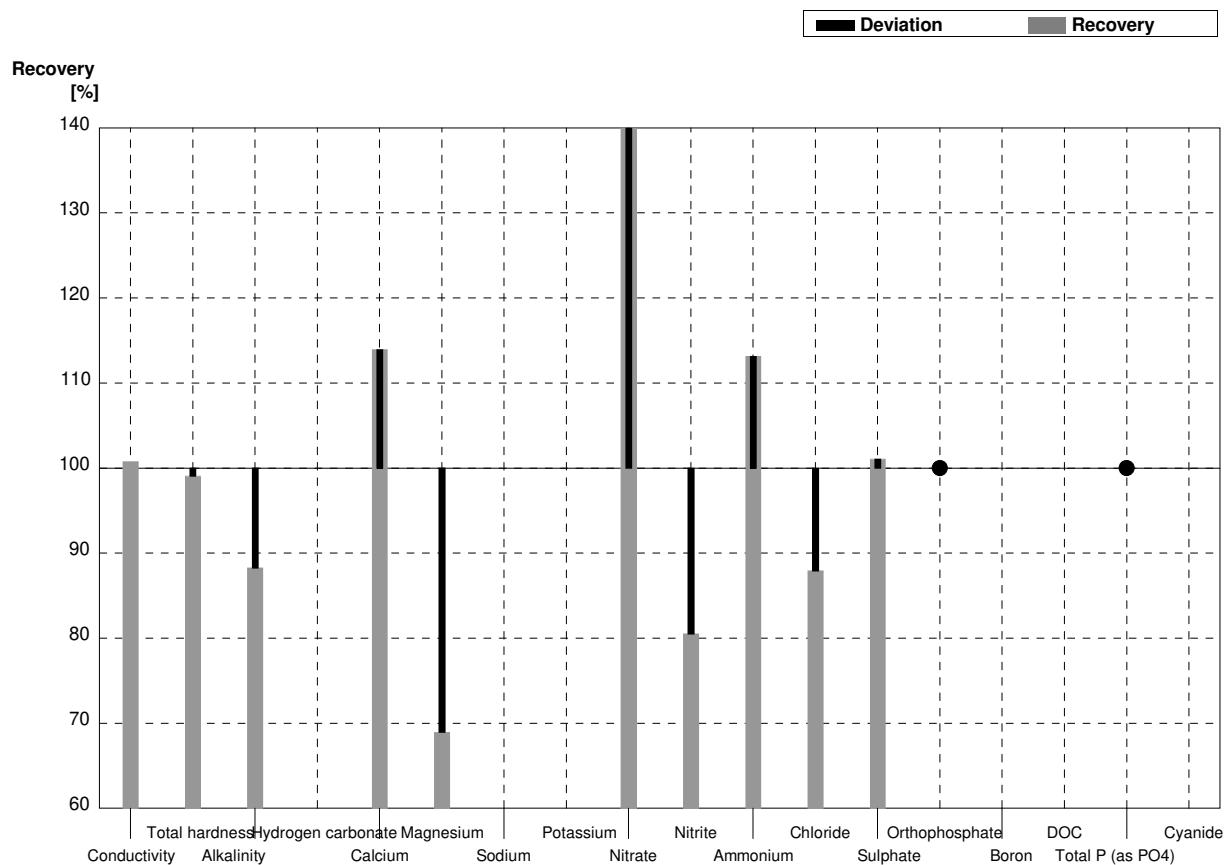
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3	906,3		µS/cm	100%
Total hardness	3,37	0,04	3,21		mmol/l	95%
Alkalinity	4,91	0,06	4,39		mmol/l	89%
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	103,88		mg/l	105%
Magnesium	22,0	0,3	14,59		mg/l	66%
Sodium	53,5	0,4			mg/l	
Potassium	13,22	0,08			mg/l	
Nitrate	63,0	1,3	37,07		mg/l	59%
Nitrite	0,0322	0,0010	<0,05		mg/l	•
Ammonium	<0,01		<0,02		mg/l	•
Chloride	60,6	1,5	50,84		mg/l	84%
Sulphate	84,2	0,7	88,57		mg/l	105%
Orthophosphate	0,091	0,006	<0,050		mg/l	FN
Boron	0,1512	0,0013			mg/l	
DOC	6,00	0,06			mg/l	
Total P (as PO4)	0,207	0,002	0,178		mg/l	86%
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AX**

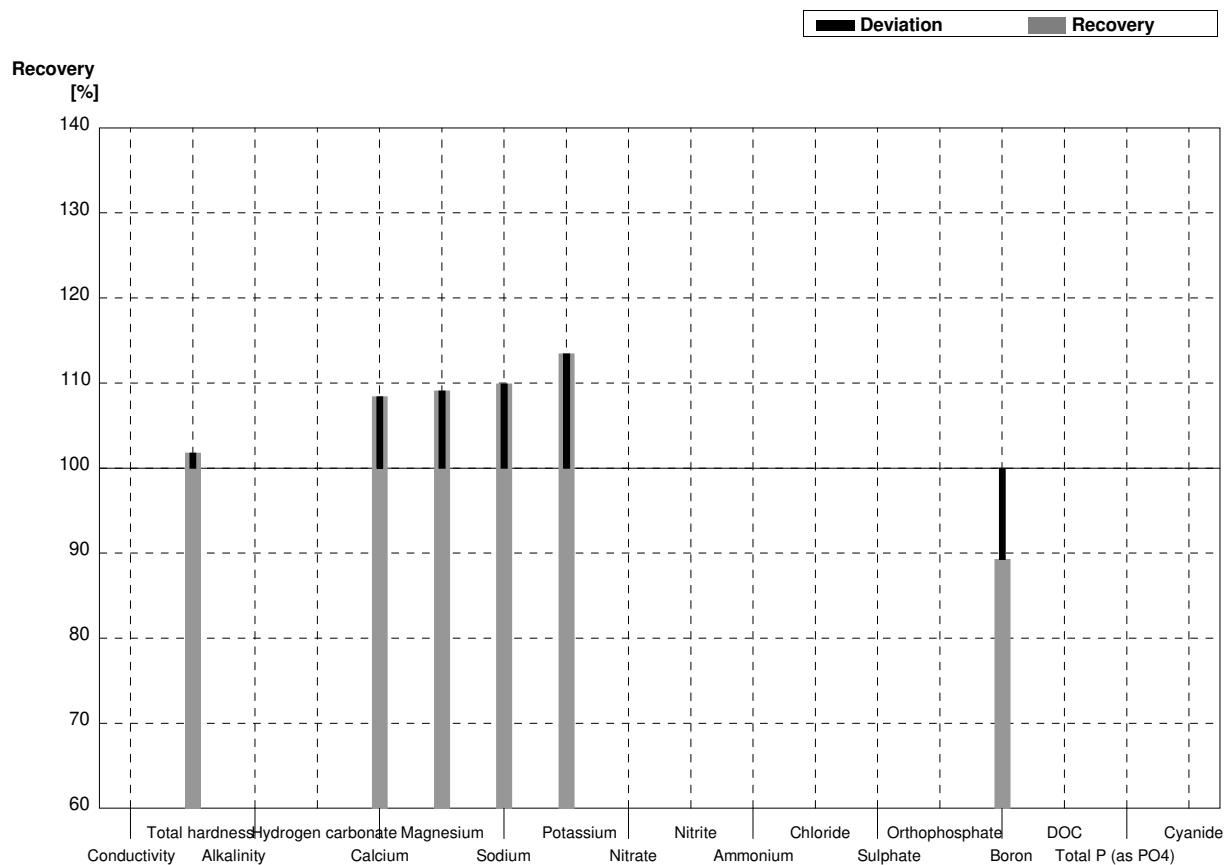
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1	398,1		µS/cm	101%
Total hardness	1,403	0,014	1,39		mmol/l	99%
Alkalinity	1,246	0,014	1,10		mmol/l	88%
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	42,62		mg/l	114%
Magnesium	11,43	0,14	7,88		mg/l	69%
Sodium	18,15	0,08			mg/l	
Potassium	3,17	0,03			mg/l	
Nitrate	21,4	0,5	43,33		mg/l	202%
Nitrite	0,0708	0,0008	0,057		mg/l	81%
Ammonium	0,076	0,003	0,086		mg/l	113%
Chloride	41,5	0,7	36,49		mg/l	88%
Sulphate	45,2	0,5	45,68		mg/l	101%
Orthophosphate	<0,009		<0,050		mg/l	•
Boron	0,0406	0,0004			mg/l	
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009		<0,150		mg/l	•
Cyanide	0,0354	0,0016			mg/l	



**Sample N163A**

**Laboratory AY**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	905	3			µS/cm	
Total hardness	3,37	0,04	3,43		mmol/l	102%
Alkalinity	4,91	0,06			mmol/l	
Hydrogen carbonate	297	4			mg/l	
Calcium	98,7	1,4	107		mg/l	108%
Magnesium	22,0	0,3	24,0		mg/l	109%
Sodium	53,5	0,4	58,8		mg/l	110%
Potassium	13,22	0,08	15,0		mg/l	113%
Nitrate	63,0	1,3			mg/l	
Nitrite	0,0322	0,0010			mg/l	
Ammonium	<0,01				mg/l	
Chloride	60,6	1,5			mg/l	
Sulphate	84,2	0,7			mg/l	
Orthophosphate	0,091	0,006			mg/l	
Boron	0,1512	0,0013	0,135		mg/l	89%
DOC	6,00	0,06			mg/l	
Total P (as PO <sub>4</sub> )	0,207	0,002			mg/l	
Cyanide	0,0533	0,0016			mg/l	



**Sample N163B**

**Laboratory AY**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	395	1			µS/cm	
Total hardness	1,403	0,014	1,45		mmol/l	103%
Alkalinity	1,246	0,014			mmol/l	
Hydrogen carbonate	73,0	0,8			mg/l	
Calcium	37,4	0,5	38,8		mg/l	104%
Magnesium	11,43	0,14	12,3		mg/l	108%
Sodium	18,15	0,08	19,5		mg/l	107%
Potassium	3,17	0,03	3,32		mg/l	105%
Nitrate	21,4	0,5			mg/l	
Nitrite	0,0708	0,0008			mg/l	
Ammonium	0,076	0,003			mg/l	
Chloride	41,5	0,7			mg/l	
Sulphate	45,2	0,5			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0406	0,0004	0,0322		mg/l	79%
DOC	2,39	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Cyanide	0,0354	0,0016			mg/l	

