

# IFA-Proficiency Testing Scheme for Water Analysis

Round N166  
Major Ions

Sample Dispatch: 6 March 2023

In accordance with the procedure: AVKPS.01



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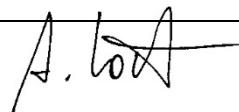
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155 pages

This report summarises the results of round N166 (major ions) within the IFA-Proficiency Testing Scheme for Water Analysis. The samples N166A and N166B were distributed to 47 participants on Monday, 6 March 2023. Each participant received two samples of 1000 mL, each filled into two 500 mL PET bottles.

Closing date for reporting results to the IFA-Tulln was Friday, 31 March 2023. All participants submitted results. To make the participants anonymous, each laboratory obtained a letter code by random.

## Samples

The samples consisted of artificial ground water. For sample preparation, ultrapure water was spiked with solutions of salts and standards in order to simulate the ionic composition of natural Austrian ground water. The following substances were added to the samples: CaCO<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>, KCl, KHCO<sub>3</sub>, K<sub>2</sub>SO<sub>4</sub>, diethyl ethylphosphonate (C<sub>6</sub>H<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 NaF. Both samples, N166A and N166B, 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

With exception of fluoride, the samples were checked for homogeneity and accuracy at the IFA-Tulln before dispatch. The analysis of fluoride was carried out a few days after delivery. 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> and o-PO<sub>4</sub><sup>3-</sup> of samples N166A and N166B 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 (N167).

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, HCO<sub>3</sub><sup>-</sup>, F<sup>-</sup> and Si when stored at 4°C in the dark. For the parameters 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>.

## 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 536 µS/cm in sample N166A and 632 µS/cm in sample N166B.

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 o- $PO_4^{3-}$ .

Ammonium was not added to sample N166A and no phosphorus substances were added to sample N166B in order to check the analytical blank values. The target concentrations were set to <0.01 mg/L  $NH_4^+$ , <0.009 mg/L o- $PO_4^{3-}$  and <0.009 mg/L total-P (as  $PO_4^{3-}$ ), 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 96.1 % (boron in sample N166B) and 105.3 % (DOC in sample N166B).

The between laboratory CVs covered the range between 0.7 % (conductivity in sample N166B) and 15.0 % (orthophosphate in sample N166A).

All confidence intervals of the outlier-corrected laboratory mean values except for alkalinity  $K_{64.3}$  in sample N166B ( $97.3\% \pm 0.5\%$ ) encompass the corresponding target values with their uncertainties. For all other parameters, statistically, no difference could be detected between theoretical target concentrations and outlier corrected laboratory means.

### **z-scores**

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

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

**z**      z-score  
 **$x_i$**     result of laboratory  
**X**      target value or mean value („consensus value“)  
 **$\sigma_{PT}$**    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 2012 to 2022. They represent average performance data of all former participating laboratories.

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

### Calculation example:

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

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

$z$  z-score

$x_i$  7.00 mg/L equivalent to 116 % (value of the laboratory)

$X$  6.02 mg/L equivalent to 100 % (target value)

$\sigma_{pt}$  0.33 mg/L equivalent to 3.0 % (standard deviation for proficiency assessment, see table below)

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

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

Parameter	standard deviation for proficiency assessment	Lower limit
Alkalinity K <sub>S4.3</sub>	1.9 %	0.2 mmol/L
Ammonium	11 %	0.01 mg/L
Boron	7.3 %	0.012 mg/L
Calcium	3.2 %	9 mg/L
Chloride	2.9 %	2 mg/L
el. Conductivity	1.2 %	50 µS/cm
DOC	5.4 %	1 mg/L
Fluoride	7.0 %	0.2 mg/L
Hydrogen carbonate	2.4 %	20 mg/L
Magnesium	3.5 %	1 mg/L
Nitrate	3.1 %	2 mg/L
Nitrite	5.4 %	0.01 mg/L
Orthophosphate	9.5 %	0.015 mg/L
Potassium	4.3 %	0.5 mg/L
Silicon	4.6 %	0.9 mg/L
Sodium	3.2 %	1 mg/L
Sulphate	3.1 %	3 mg/L
Total hardness	2.8 %	0.1 mmol/L
Total-P (as PO <sub>4</sub> <sup>3-</sup> )	9.4 %	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 April 2023

## 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

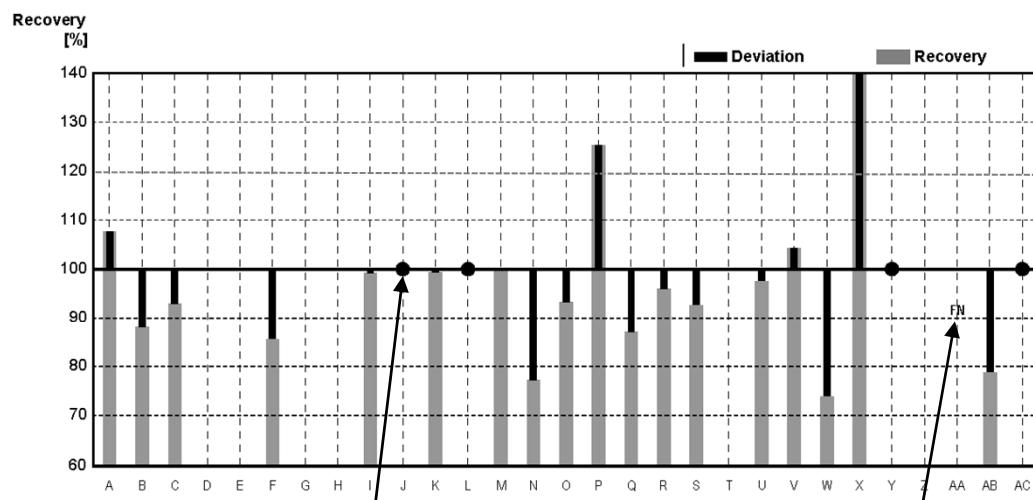


Diagram 2: Recoveries and deviations from target values



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

Round N166  
Major Ions

Sample Dispatch: 6 March 2023

## Results Sample N166A

	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		535	1.436	1.76	104.4	36.2	12.93	48.6	6.19	5.20
IFA result	6.24	534	1.45	1.72	102	36.7	13.1	48.7	6.4	5.3
Stability test										
A	6.25	534	1.412	1.71	101.23	35.59	12.74	47.61	6.13	4.98
B	6.3	532	1.44	1.75	103.7	36.3	12.9	43.0	6.2	5.2
C	6.42	538	1.564	1.76	104.32	38.914	14.415	56.875	6.367	5.232
D	6.15	537		1.81	107					5.01
E	6.09	534.50	1.462	1.71	104.00	36.96	13.13	48.94	6.53	5.31
F						37.2	13.0	46.7	6.03	4.90
G	6.9	538		1.68	102	46.1				5.20
H	6.55	536	1.44	1.75	107	36.4	12.9	50.9	6.44	5.1
I	6.21		1.393	1.730	102.5	36.35	11.8			5.322
J	6.30	52.4	1.35	1.73	103	34.7	11.7	46.8	5.83	4.50
K	6.12	535	1.42	1.73	102.5	35.3	13.1	48.0	6.25	5.21
L	6.32	521	1.46	1.71	104	36.8	13.2	47.0	6.74	5.00
M	6.38	537	1.39	1.73	103	35.9	12.0	48.1	6.18	5.12
N	6.52	547	1.47	1.63	99.6	37.1	13.2	48.4	6.2	4.86
O	6.20	525	1.40	1.69	100	36.3	13.1	48.6	5.98	5.07
P	6.31	541	1.41	1.70		35.8	12.6	48.2	6.26	4.43
Q	6.30	535	14.8	1.63	99.7	37.60	13.14	48.68	5.97	5.10
R			1.736			37.1	12.7	49.4	6.00	
S	6.41	531.5	1.40	1.75	103.7	34.76	12.89	48.06	6.022	5.162
T	6.15	535	1.43	1.69	99.9	36.2	12.8	48.4	6.17	5.32
U	6.498	535	1.451	1.746	103.4	37.2	13.47	47.73	6.333	5.28
V	6.42	522	1.41	1.77	105.1	36.2	12.3			4.95
W								53.48	6.37	4.93
X			1.48	1.787		38.3	12.7	46.8	5.87	5.03
Y	6.5	538	1.45	1.74	106	36.4	13.0	48.5	6.2	4.90
Z	6.5	535	1.41	1.677	99.2	34.97	12.96	47.37	6.22	5.108
AA	6.41	535.0	1.46	1.81	110.44	35.6	13.45	48.44	6.10	5.2
AB						36.7	13.0	48.3	6.3	
AC		533.09	1.431	1.74	103.3	35.98	12.96	50.27	6.30	5.21
AD	6.45	536	8.25	1.77	105	36.8	13.5	49.4	6.22	4.73
AE	6.27	538	1.43	1.75	103.5	36.40	12.58	48.47	6.06	5.17
AF	6.26	582.8		1.74	106	36.6	12.6	46.3	5.78	5.2
AG	6.41	537	1.40	1.72	102	35.2	12.6	48.2	5.72	4.83
AH	6.3	540	1.41	1.75	107	35.2	13.0	46.7	6.2	5.3
AI	6.4	538	1.42	1.69	103.1	35.83	12.84	48.82	6.26	5.24
AJ			1.71							
AK	6.3	540		1.73						5.1
AL	6.15	537		1.69		38.0	14.0	54.7	7.06	6.0
AM	6.36	534	1.39	1.706	101.0	34.6	12.9	46.9	6.2	4.73
AN										6.02
AO	6.36	523	1.45	1.79	109.4	36.8	12.8	49.0	6.2	5.1
AP	6.36	536	1.43	1.714	102	35.8	13.0	48.6	6.08	5.2
AQ	6.60	547	1.43			36.2	13.0	48.0	6.14	4.18
AR	6.2	531		1.70	104					
AS	6.27	540	1.44	1.80	110	36.2	13.2	50.3	6.23	5.0
AT	6.08	530	1.43	1.730	106	36.0	13.0	53	7.1	5.1
AU	6.86	529	1.45	1.77	106	34.4	13.1	47.0	6.13	5.41

### Measurement Uncertainties Sample N166A

	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		2	0.016	0.03	1.6	0.6	0.15	0.3	0.04	0.10
IFA result	0.2	7	0.06	0.07	4	1.7	0.7	1.9	0.3	0.3
Stability test										
A	0.25	11.7	0.06	0.04	2.13	1.39	0.60	2.29	0.39	0.33
B						3.1	12.9	43.0	6.2	5.2
C	0.1	4.51		0.18		3.8	1.4	5.6	0.6	0.5
D	0.0083	3.80		0.051	1.55					0.343
E	0.304	53.45	0.366	0.171	26.085	5.544	1.970	7.341	0.979	1.970
F						0.5	0.2	0.7	0.03	0.04
G				0.25		6.00				0.31
H	0.08	9	0.12	0.05	3	2.1	0.8	5.8	0.24	0.2
I	0.0621		0.1584	0.0467	11.66	1.872	1.342			0.248
J	0.10	5.2	0.14	0.09	5	3.5	1.2	4.7	0.58	0.45
K	0.1	10	0.15	0.18	10.3	7.1	2.6	7.2	1.3	0.52
L	0.19	16	0.22	0.14	8.3	5.5	1.6	6.1	1.0	0.50
M	0.0638	0.197	0.0182	0.0836	2.05	0.329	0.395	0.447	0.425	0.0737
N	0.2	54.7	0.12			3.0	1.1	3.9	0.7	0.58
O	0.22	13	0.14	0.08	5	2.3	1.03	3.9	0.48	0.34
P	0.06	16				5.4	1.9	9.6	0.94	0.31
Q	0.2	54	1.5			3.76	1.31	4.87	0.60	0.51
R										
S	0.12	5.63	0.010	0.15	8.84	3.51	0.782	3.77	0.429	0.449
T	0.3	22	0.1	0.1	4	3	1.6	8	0.9	0.4
U	0.1	9	0.15	0.15	10	2.2	1.8	2.5	0.8	0.7
V	0.1	20	0.03	0.10	3	2.0	1.0			0.3
W								5.348	0.637	0.986
X			0.148	0.178		3.8	1.27	4.68	0.587	0.50
Y	0.2	10	0.15	0.09	8	2.9	1.0	2.9	0.7	0.2
Z	0.2	29.8		0.097	7.74	1.92	0.454	1.66	0.22	0.255
AA	0.2	25	0.1	0.1	5	3	1	4	0.6	0.5
AB						3.67	1.30	4.83	0.63	
AC		26.65		0.09	5.2	2.16	0.78	3.02	0.38	0.52
AD	0.258	32.2	0.825	0.384	10	9.52	2.74	11.8	1.93	0.623
AE	0.20	11	0.19	0.16	9.3	3.64	1.01	4.36	0.55	0.47
AF	0.13	58.2		0.035	2.1	5.5	1.9	6.9	0.87	0.4
AG	0.25	16	0.12	0.07	5	1.8	0.8	1.9	0.46	0.34
AH						1.97	1.03	2.78	0.60	
AI	0.2	21.5		0.254	15.47	3.583	1.284	4.882	0.626	0.2095
AJ				0.086						
AK	0.100	11		0.0832						0.245
AL										
AM	0.15	21	0.08	0.134	8.2	1.7	0.8	2.6	0.3	0.31
AN										0.386
AO	0.2	52	0.12			2.6	1.0	5.4	1.0	0.4
AP	0.10	11	0.30	0.171	10	6.1	1.6	4.4	0.61	0.9
AQ	0.2	15	0.14			3.6	1.3	4.8	0.61	0.42
AR	0.2	15		0.1	5					
AS	0.13	11	0.07	0.09	5	1.8	0.7	2.5	0.31	0.3
AT	0.05	12	0.12	0.077	5	1.6	0.5	3	0.3	0.2
AU	0.040	1.528	0.021	0.012	1.155	0.503	0.208	1.012	0.015	0.036

## Results Sample N166A

	<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>Silicon</b>	<b>F<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0131	<0.01	51.6	87.7	0.0307	0.0334	4.03	0.0884	3.013	0.500
IFA result	0.0133	<0.01	51.3	88	0.0310	0.0331	3.90	0.097	3.04	0.503
Stability test	0.0125	<0.01			0.0307		4.03			
A	0.0190	<0.005	51.74	87.27			4.14			
B	0.0129	<0.01	48.0	88.2	0.0320	0.0337	4.129	0.088	3.22	0.64
C	0.0137	<0.0090	50.490	88.310	0.0314	0.0236	4.43	0.083		
D	0.0140	0.0061	56.8		0.0278			0.091		
E	0.0144	<0.10	47.19	81.70			4.11	0.0310		0.450
F			50.2	85.1						0.494
G	<0.003	<0.003	50.9	86.4			4.05	0.116		0.50
H	0.0140	<0.01	50.3	78.0			4.07			0.192
I			51.33	87.51						0.525
J	0.0158	0.0231	49.7	87.3	0.0359	0.0276	3.94	0.0840	2.77	0.386
K	0.0133	<0.010	51.12	88.44	0.0355	0.0329	3.91	0.0883		
L	0.0144	<0.01	51.4	90.0	0.0285	0.0387	4.11	0.0929	3.02	0.558
M	0.0122	<0.0100	51.5	88.2	0.0325	0.0326	4.01	0.106		0.511
N	0.0120	<0.020	53.2	90.3	0.0337	0.0315	3.96	0.098	2.839	0.487
O	0.0139	<0.01	50.6	87.4	0.420	0.0344	4.29	0.0854	3.00	0.470
P	0.060	<0.3	20.2		0.0340					0.443
Q	0.0127	0.0160	52.51	88.21	<0.15		4.12	<0.15		0.428
R	<0.05	<0.05					4.183			
S	0.0400	0.00200	50.19	85.13	0.0400	0.0319	4.39	0.0848	3.041	0.543
T	0.0130	<0.013	52.3	89.0	0.0310		3.86	0.085	3.11	
U	<0.01	<0.05	51.68	89.49	0.0412		9.803	0.0928	2.533	0.405
V	0.0133	<0.02	50.6	84.1	0.0300		3.87			0.395
W			52.15	83.06						
X	0.0129	<0.01	51.4	87.9	0.333		5.23	0.0946		
Y	0.0130	<0.02	53	88	0.0330	0.0325	3.82	0.077		0.53
Z	0.0130	<0.010	50.865	88.170	0.0310	0.0322	4.188	0.096	3.02	0.492
AA	<0.024	<0.04	52.23	89.19	<0.04	0.0320	9.50	0.112		0.430
AB					<0.050				3.22	
AC	0.0120	<0.02	51.54	87.18	0.0351			0.0778		
AD	0.0133	0.0103	51.7	88.3	0.0291	0.0295	3.85	0.0781	3.36	0.474
AE	0.0131	<0.010	52.09	87.10	0.0260	0.0306	4.13	0.085	3.00	0.500
AF	0.0135	<0.0129	51.84	84.7	0.0337	0.0310	4.32	0.0930	3.21	0.470
AG	0.0140	<0.008	51.6	86.7	0.0310	0.0321	3.92	0.091	2.70	0.509
AH	0.0117	<0.04	52	87		0.0413		0.078	2.96	0.53
AI	0.0130	<0.0052	51.83	88.62	0.0340	0.0370	4.10	0.0858	2.992	<0.500
AJ					0.0259					
AK	<0.0300	<0.0300	51.6	91.0	0.0320			0.0820		
AL			52.8	87.3			4.08	0.090		
AM	0.0125	<0.010	52.7	88.1	0.0211	0.0342	4.23	0.083		0.544
AN		<0.01			0.0204			0.103		
AO	0.0098	<0.04	51.5	84.8	0.0247	0.0319	4.18	0.097	2.82	0.53
AP	<0.020	<0.010	51.2	87.4	<0.040	0.0340	3.94	0.0400	3.08	0.52
AQ			52.5	90.0			3.54			0.468
AR	<0.005	0.0156			0.0289			0.085		
AS	<0.02	<0.03	51.5	88.0	0.0358	0.0355	4.68	0.073	3.11	0.50
AT	0.0128	<0.02	54	89	0.0300		4.46	0.080		<1
AU	0.0159	<0.015	52.6	89.8	0.0299	0.0310	3.78	0.0822	3.20	0.552

### Measurement Uncertainties Sample N166A

	$\text{NO}_2^-$ ±	$\text{NH}_4^+$ ±	$\text{Cl}^-$ ±	$\text{SO}_4^{2-}$ ±	$\text{o-PO}_4^{3-}$ ±	Boron ±	DOC ±	total-P (as $\text{PO}_4^{3-}$ ) ±	Silicon ±	F- ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0004			0.6	0.6	0.0023	0.0019	0.05	0.0013	0.017
IFA result	0.0007			1.9	2	0.0011	0.0026	0.09	0.017	0.20
Stability test	0.0006					0.0011		0.09		
A	0.001	0.000	2.43	4.36			0.72			
B	0.002		6.8	7.1	0.003	0.0024	0.49	0.008		0.1
C	0.0013		5.0	8.8	0.003	0.0023	0.4	0.008		
D	0.0014	0.00093	0.58		0.00326			0.0120		
E	0.0036		11.796	20.425			1.028	0.06		0.111
F			0.5	0.4						0.022
G			3.10	7.8			0.73	0.008		0.08
H	0.002		3.4	5.1			0.85			0.02
I			5.610	3.421						0.0432
J	0.0024	0.0035	5.0	8.7	0.0054	0.0055	0.71	0.0126	0.55	0.039
K	0.0024		5.2	8.9	0.0074	0.0082	0.39	0.0184		
L	0.0016		5.1	14	0.0023	0.0050	0.82	0.0074	0.30	0.056
M	0.00058		0.886	0.886	0.00229	0.00147	0.0889	0.00409		0.00542
N	0.002		4.8	9.0	0.0121	0.0088	0.47	0.011		0.083
O	0.0020		3.6	4.7	0.058	0.005	0.76	0.012	0.24	0.069
P	0.012		4.0		0.007					0.13
Q	0.002	0.0032	5.25	13.23						0.064
R										
S	0.0056	0.0003	6.04	8.03	0.0064	0.0014	0.6743	0.0182	0.4528	0.0843
T	0.001		4	6	0.004		0.6	0.007	0.3	
U	0.02	0.03	2.7	3.1	0.013		0.8	0.02	0.2	0.15
V	0.005	0.005	2.0	4.0	0.005		0.3			0.04
W			7.82	16.61						
X	0.0013		5.1	8.8	0.033		0.52	0.0095		
Y	0.002		4.2	5	0.003	0.0055	0.46	0.007		0.053
Z	0.001		2.544	4.409	0.003	0.0058	0.758	0.01	0.30	0.049
AA				8		0.003	0.95	0.01		0.04
AB						0.005			0.322	
AC	0.004		5.15	8.72	0.0053			0.0117		
AD	0.00172	0.00181	5.03	11.1	0.00057	0.00851	1.2	0.0144	2.08	0.0332
AE	0.0009		6.25	8.71	0.0039	0.0064	0.295	0.013	0.30	0.030
AF	0.0013	0.0032	1.56	12.7	0.0051	0.0046	1.08	0.014	0.48	0.12
AG	0.0025		2.6	5.2	0.0016	0.0032	0.35	0.006	0.27	0.076
AH						0.0027		0.0024	0.327	
AI	0.0011		2.592	4.431	0.0040	0.0044	0.330	0.0129	0.449	
AJ					0.0023					
AK			1.47	4.38	0.00278			0.00166		
AL										
AM	0.0029		4.2	8.2	0.0032	0.0040	0.827	0.015		0.116
AN					0.009			0.009		
AO	0.002		2.6	5.1		0.006	0.4		0.56	0.07
AP			5.1	14.0		0.003	0.43	0.01	0.25	0.09
AQ			5.3	9.0			0.53			0.07
AR		0.002			0.003			0.007		
AS			2.6	4.4	0.0054	0.0018	0.47	0.011	0.16	0.03
AT	0.0010		3	4	0.0026		0.56	0.017		
AU	0.001		0.352	0.545	0.001	0.001	0.044	0.001	0.021	0.013

## Results Sample N166B

	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		643	2.94	4.18	252	85.1	19.8	15.2	5.02	78.7
IFA result	6.17	642	3.01	4.08	246	87	20.2	15.4	5.3	79
Stability test										
A	6.25	641	2.899	4.03	242.70	83.88	19.61	15.01	5.00	77.82
B	6.8	636	2.85	4.09	246.5	81.5	19.8	14.0	5.0	79.3
C	6.26	647	3.364	4.13	248.92	97.340	22.732	18.060	5.988	74.978
D	6.15	645		4.05	244					76.6
E	6.12	639.80	3.025	4.02	245.00	36.96	20.42	15.63	5.18	72.55
F						88.1	19.7	15.2	4.93	76.3
G	6.9	645		4.08	249	46.25				77.8
H	6.55	644	2.98	4.08	249	86.6	20.0	16.3	5.29	78.0
I	6.19		2.854	4.09	246.5	84.6	18.0			79.59
J	6.30	61.7	2.79	3.99	240	81.6	18.1	14.5	4.40	77.1
K	6.15	643	2.89	4.04	246.5	82.4	20.2	15.3	5.15	79.95
L	6.31	617	2.97	4.07	248	85.8	20.1	15.5	4.96	80.9
M	6.37	644	2.93	4.09	247	86.9	18.5	15.0	4.99	78.5
N	6.45	650	2.97	3.87	236	85.8	21.0	15.2	5.0	81.4
O	6.15	626	2.90	3.94	237	84.1	19.9	15.2	4.87	78.0
P	6.29	650	2.83	4.10		82.1	19.1	14.8	4.91	71.3
Q	6.31	640	30.2	3.70	225.7	88.06	19.85	15.21	4.80	78.26
R				4.088		84.6	20.2	15.6	4.94	
S	6.37	639	2.86	4.11	250.8	81.96	19.75	15.32	4.96	77.09
T	6.16	644	2.91	3.99	241	84.3	19.6	15.1	4.96	81.2
U	6.525	644	2.915	4.084	246.04	82.97	20.55	15.15	5.06	81.9
V	6.52	612	2.84	4.16	251.0	82.1	19.1			76.1
W								16.02	5.10	77.47
X			3.30	4.562		100.6	19.2	14.9	4.75	78
Y	6.5	643	2.98	4.04	247	86	20.2	15.7	4.93	78
Z	6.4	637	2.85	3.914	236	81.52	19.91	15.28	4.964	75.82
AA	6.28	643.0	3.00	4.04	246.52	85.2	20.38	15.94	4.80	82.92
AB						84	19.7	15.4	5.1	
AC		640.50	2.966	4.12	248.1	85.55	20.21	15.13	4.99	79.37
AD	6.45	643	16.8	4.08	246	85.7	20.8	15.6	5.14	74.4
AE	6.18	647	2.99	4.09	246.6	86.81	19.94	15.56	5.21	79.87
AF	6.24	738.0		4.11	251	86.2	18.3	15.1	4.64	80.8
AG	6.25	644	3.07	4.07	245	90.3	19.7	15.2	3.98	77.7
AH	6.3	650	2.94	4.12	251	85	20.0	14.7	5.0	80
AI	6.3	647	2.93	4.00	244.1	84.62	19.82	15.32	5.05	78.620
AJ				4.06						
AK	6.2	650		4.08						76
AL	6.17	647		4.04		86.6	20.4	17.6	5.65	82.2
AM	6.29	644	2.90	4.034	243.0	83.7	19.7	15.0	5.1	83.2
AN										>30
AO	6.24	630	2.96	4.10	250.1	85.9	19.7	15.5	5.0	77.2
AP	6.35	642	2.91	4.037	243	85.0	19.2	15.0	4.95	78.4
AQ	6.61	640	2.94			85.1	19.9	15.4	5.00	83.4
AR	6.3	641		4.04	247					
AS	6.22	647	2.95	3.87	236	85.7	19.8	15.6	5.15	78.7
AT	6.10	638	2.89	4.11	251	84	19.7	15.7	4.81	80
AU	7.03	640	3.00	4.11	247	87.3	19.9	14.9	5.04	<0.10

### Measurement Uncertainties Sample N166B

	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		2	0.04	0.08	5	1.6	0.4	0.7	0.04	1.9
IFA result	0.20	9	0.11	0.17	10	4	1.1	1.1	0.3	4
Stability test										
A	0.25	14.1	0.12	0.08	5.10	3.27	0.92	0.72	0.32	5.21
B						6.9	2.1	1.2	0.5	11.3
C	0.1	4.51		0.41		9.7	2.2	1.8	0.6	7.4
D	0.0083	4.57		0.114	3.53					5.25
E	0.306	63.98	0.76	0.402	61.322	13.138	3.063	2.345	0.776	3.063
F						0.3	0.6	0.1	0.02	0.3
G				0.61		6.01				4.67
H	0.08	10	0.25	0.11	7	5	1.2	1.8	0.2	3.6
I	0.0619		0.3245	0.1104	28.03	4.357	2.047			3.709
J	0.10	6.2	0.28	0.20	12	8.2	1.8	1.5	0.44	7.7
K	0.1	10	0.29	0.41	24.7	16.5	4.1	2.3	1.1	8.0
L	0.19	19	0.45	0.33	20	13	2.4	2.0	0.74	8.1
M	0.0637	0.224	0.0168	0.131	4.93	0.330	0.356	0.379	0.434	0.724
N	0.2	65	0.24			6.9	1.7	1.2	0.6	9.8
O	0.22	16	0.29	0.18	12	5.4	1.57	1.2	0.39	5.3
P	0.06	20				12.3	2.2	3.0	0.74	5.0
Q	0.2	64	3.0			8.81	1.98	1.52	0.48	7.83
R										
S	0.12	6.8	0.20	0.35	21.4	6.96	1.20	1.20	0.35	1.81
T	0.3	26	0.1	0.2	10	7	2.4	2.3	0.7	6
U	0.1	9	0.18	0.18	10	3.1	1.9	1.3	0.6	2.8
V	0.1	30	0.06	0.20	10	3.0	1.5			3.0
W								1.602	0.51	15.49
X			0.33	0.46		10.0	1.92	1.49	0.475	7.8
Y	0.2	12	0.30	0.21	20	6.9	0.8	1.9	0.54	6
Z	0.2	35.4		0.226	18.41	4.484	0.7	0.535	0.174	3.791
AA	0.2	30	0.2	0.2	10	8	2	1	0.5	8
AB						8.4	1.97	1.54	0.51	
AC		32.03		0.21	12.4	5.13	1.21	0.91	0.30	7.94
AD	0.258	38.6	1.68	0.885	25.1	22.2	4.23	3.74	1.59	9.81
AE	0.20	13	0.39	0.37	22.2	8.68	1.59	1.40	0.47	7.19
AF	0.12	73.8		0.082	5.0	12.9	2.8	2.3	0.70	6.5
AG	0.25	19	0.25	0.16	10	4.5	1.2	0.7	0.32	4.7
AH						6.83	1.68	0.90	0.49	
AI	0.2	25.9		0.600	36.61	8.462	1.982	1.532	0.505	3.1448
AJ				0.203						
AK	0.100	13		0.196						3.66
AL										
AM	0.14	26	0.15	0.279	17.0	4.0	1.3	0.8	0.2	5.1
AN										
AO	0.2	63	0.24			6.0	1.6	1.7	0.8	5.4
AP	0.10	13	0.61	0.404	24	14.5	2.3	1.4	0.50	14.1
AQ	0.2	15	0.30			8.5	2.0	1.5	0.50	8.3
AR	0.2	15		0.1	5					
AS	0.12	13	0.21	0.19	12	4.3	1.0	0.8	0.26	3.9
AT	0.05	14	0.24	0.19	12	4	0.8	0.7	0.19	3
AU	0.066	2	0.032	0.006	1	1.528	0.379	0.173	0.118	

## Results Sample N166B

	<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>Silicon</b>	<b>F<sup>-</sup></b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.061	0.050	17.5	35.5	<0.009	0.085	1.97	<0.009	5.07	0.313
IFA result	0.061	0.0493	17.5	35.9	<0.009	0.085	1.97	<0.009	5.1	0.300
Stability test	0.061	0.050			<0.009		2.00			
A	0.067	0.0480	17.56	35.10			2.04			
B	0.0619	0.0516	17.5	36.9	<0.01	0.0833	2.012	<0.03	5.44	<0.5
C	0.0620	0.0558	17.209	38.608	<0.0055	0.0767	2.32	<0.0010		
D	0.063	0.051	25.9		<0.006			<0.006		
E	0.065	<0.10	15.88	32.47			1.75	<BG		0.290
F			18.0	35.3						0.423
G	0.59	0.052	17.3	34.8			2.25	0.052		0.312
H	0.058	0.0250	16.5	35.2			2.14			0.104
I			17.83	36.32						0.328
J	0.0198	0.0607	17.1	35.2	0.0199	0.0758	1.97	<0.015	4.64	0.227
K	0.0620	0.0468	16.68	34.69	<0.015	0.0818	2.04	<0.015		
L	0.0633	0.0471	18.0	35.3	<0.015	0.0919	1.99	<0.015	5.12	0.346
M	0.0585	0.0557	17.0	34.6	<0.0150	0.0834	1.96	<0.0150		0.321
N	0.059	0.051	16.9	35.4	<0.030	0.0752	2.00	0.0180	4.784	0.299
O	0.064	0.053	16.6	36.4	<0.02	0.084	2.26	<0.005	5.02	0.300
P	0.0140	0.0400	53.2		0.00400					0.279
Q	0.0607	0.059	17.81	36.28	<0.15		2.05	<0.15		0.280
R	0.062	0.067					2.230			
S	0.104	0.0490	17.32	34.18	0.0100	0.0805	2.28	0.00830	5.129	0.344
T	0.062	0.0470	17.9	35.9	<0.01		2.04	<0.013	5.13	
U	0.0564	0.1322	16.55	36.2	<0.03		14.92	<0.03	4.537	0.251
V	0.0580	0.0426	17.3	34.2	<0.030		1.89			0.240
W			16.65	32.62						
X	0.0612	0.0463	16.5	35.9	<0.061		3.69	<0.061		
Y	0.063	0.050	18.3	35.6	<0.009	0.082	1.97	<0.009		0.299
Z	0.0640	0.0520	17.529	35.717	<0.01	0.0802	2.296	<0.010	5.02	0.321
AA	0.055	0.0470	16.1	36.13	<0.04	0.0860	3.00	<0.05		0.370
AB						0.089			5.4	
AC	0.058	0.0480	17.99	35.42	<0.0153			<0.0307		
AD	0.0718	0.0442	17.7	36.2	0.00613	0.0811	1.184	0.0123	5.65	0.298
AE	0.0589	0.0501	17.55	34.36	<0.010	0.0811	2.09	<0.010	5.03	0.300
AF	0.0657	0.0489	17.45	35.0	<0.0153	0.080	2.23	<0.0153	5.37	0.320
AG	0.064	0.0488	17.2	35.1	<0.006	0.082	1.97	<0.006	4.55	0.358
AH	0.063	0.0483	18.7	35.4		0.095		<0.06	5.1	0.335
AI	0.059	0.0490	17.61	36.63	0.0120	0.098	2.10	<0.0153	5.002	<0.500
AJ				<0.009						
AK	0.0670	0.0540	17.1	39.3	<0.03			<0.015		
AL	0.061	0.0480	18.9	36.0			2.28			
AM	0.060	0.051	18.1	36.5	<0.010	0.0864	1.95	<0.010		0.349
AN		0.0450			<0.019			<0.02		
AO	0.059	0.0460	17.6	33.9	<0.015	0.0803	2.16	<0.015	4.64	0.340
AP	0.064	0.054	12.1	35.8	<0.040	0.084	2.00	<0.01	5.19	0.330
AQ	0.0543	0.0493	16.7	34.3			1.70			0.286
AR	0.061	0.057			<0.005			<0.005		
AS	0.059	0.0426	17.4	38.4	<0.02	0.086	2.41	<0.05	5.30	<0.5
AT	0.060	0.481	18.3	36.8	<0.01		3.18	<0.003		<1
AU	0.0646	0.0423	17.3	35.5	<0.020	0.0772	1.87	<0.020	5.49	0.334

### Measurement Uncertainties Sample N166B

	$\text{NO}_2^-$ ±	$\text{NH}_4^+$ ±	$\text{Cl}^-$ ±	$\text{SO}_4^{2-}$ ±	$\text{o-PO}_4^{3-}$ ±	Boron ±	DOC ±	total-P (as $\text{PO}_4^{3-}$ ) ±	Silicon ±	F- ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.002	0.005	0.4	0.4	0.0023	0.004	0.04	0.0013	0.03	0.008
IFA result	0.003	0.0021	0.7	0.9	0.0011	0.007	0.09	0.017	0.3	0.006
Stability test	0.003	0.002			0.0011		0.09			
A	0.005	0.008	0.83	1.76			0.35			
B	0.007	0.008	2.5	3.0		0.015	0.24			
C	0.0062	0.006	1.7	3.8		0.007	0.2			
D	0.0063	0.0077	0.26		0			0		
E	0.0162		3.969	8.118			0.493			0.073
F			0.2	0.2						0.019
G	0.03		1.04	3.13			0.41	0.004		0.047
H	0.009	0.006	1.1	2.3			0.45			0.01
I			1.949	1.420						0.0270
J	0.0030	0.0091	1.7	3.5	0.0030	0.0152	0.35		0.93	0.023
K	0.0114	0.0076	1.7	3.5		0.021	0.20			
L	0.0070	0.0038	1.8	5.6		0.012	0.40		0.51	0.035
M	0.00054	0.00131	0.509	0.377		0.00139	0.0897			0.00494
N	0.012	0.015	1.5	3.5		0.0135	0.46	0.002		0.051
O	0.009	0.009	1.2	2.0		0.012	0.40		0.41	0.044
P	0.003	0.018	10.6		0.0008					0.084
Q	0.0097	0.012	1.78	5.44						0.042
R										
S	0.015	0.0083	2.09	3.22	0.0016	0.0034	0.35	0.0018	0.764	0.053
T	0.005	0.005	1.1	3			0.3		0.5	
U	0.02	0.03	1.3	1.8	0.02		1.1	0.02	0.4	0.06
V	0.010	0.010	1.0	2.0	0.005		0.2			0.03
W			2.498	6.52						
X	0.0061	0.0046	1.7	3.6			0.37			
Y	0.008	0.013	1.5	2.1		0.014	0.49			0.030
Z	0.006	0.005	0.876	1.786		0.0144	0.4153		0.50	0.032
AA	0.006	0.005	1.5	3		0.008	0.4			0.04
AB						0.009			0.54	
AC	0.006	0.007	1.80	3.54						
AD	0.00929	0.00779	1.72	4.54	0.00012	0.0234	0.576	0.00227	3.5	0.0209
AE	0.0041	0.0070	2.11	3.44		0.0170	0.15		0.50	0.018
AF	0.0099	0.0122	0.52	5.3	0.0023	0.012	0.56	0.0023	0.80	0.08
AG	0.005	0.0044	0.9	2.1		0.008	0.18		0.46	0.071
AH						0.0068			0.56	
AI	0.0047	0.0049	0.881	1.832	0.0015	0.0118	0.170		0.7526	
AJ					0.0008					
AK	0.00322	0.00296	0.488	1.89						
AL										
AM	0.006	0.10	1.6	3.4		0.0087	0.460			0.078
AN		0.0076								
AO	0.01	0.01	0.9	2.0		0.016	0.2		0.93	0.05
AP	0.009	0.017	1.2	5.7		0.008	0.22		0.42	0.06
AQ	0.01	0.01	1.7	3.4			0.26			0.04
AR	0.005	0.008								
AS	0.006	0.0043	0.9	1.9		0.004	0.36		0.27	
AT	0.005	0.058	0.7	1.4			0.40			
AU	0.001	0.001	0.322	0.559		0.002	0.021		0.070	0.029

**z- Scores Sample N166A**

	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	-0.16	-0.60	-1.50	-1.27	-0.53	-0.42	-0.64	-0.23	-1.36
B	-0.47	0.10	-0.30	-0.28	0.09	-0.07	-3.60	0.04	0.00
C	0.47	3.18	0.00	-0.03	2.34	3.28	5.32	0.66	0.20
D	0.31		1.50	1.04					-1.18
E	-0.08	0.65	-1.50	-0.16	0.66	0.44	0.22	1.28	0.68
F					0.86	0.15	-1.22	-0.60	-1.86
G	0.47		-2.39	-0.96	8.55				0.00
H	0.16	0.10	-0.30	1.04	0.17	-0.07	1.48	0.94	-0.62
I		-1.07	-0.90	-0.76	0.13	-2.50			0.76
J	-75.17	-2.14	-0.90	-0.56	-1.29	-2.72	-1.16	-1.35	-4.34
K	0.00	-0.40	-0.90	-0.76	-0.78	0.38	-0.39	0.23	0.06
L	-2.18	0.60	-1.50	-0.16	0.52	0.60	-1.03	2.07	-1.24
M	0.31	-1.14	-0.90	-0.56	-0.26	-2.06	-0.32	-0.04	-0.50
N	1.87	0.85	-3.89	-1.92	0.78	0.60	-0.13	0.04	-2.11
O	-1.56	-0.90	-2.09	-1.76	0.09	0.38	0.00	-0.79	-0.81
P	0.93	-0.65	-1.79		-0.35	-0.73	-0.26	0.26	-4.78
Q	0.00	332.37	-3.89	-1.88	1.21	0.46	0.05	-0.83	-0.62
R			-0.72		0.78	-0.51	0.51	-0.71	
S	-0.55	-0.90	-0.30	-0.28	-1.24	-0.09	-0.35	-0.63	-0.24
T	0.00	-0.15	-2.09	-1.80	0.00	-0.29	-0.13	-0.08	0.74
U	0.00	0.37	-0.42	-0.40	0.86	1.19	-0.56	0.54	0.50
V	-2.02	-0.65	0.30	0.28	0.00	-1.39			-1.55
W							3.14	0.68	-1.67
X		1.09	0.81		1.81	-0.51	-1.16	-1.20	-1.05
Y	0.47	0.35	-0.60	0.64	0.17	0.15	-0.06	0.04	-1.86
Z	0.00	-0.65	-2.48	-2.08	-1.06	0.07	-0.79	0.11	-0.57
AA	0.00	0.60	1.50	2.41	-0.52	1.15	-0.10	-0.34	0.00
AB					0.43	0.15	-0.19	0.41	
AC	-0.30	-0.12	-0.60	-0.44	-0.19	0.07	1.07	0.41	0.06
AD	0.16	169.47	0.30	0.24	0.52	1.26	0.51	0.11	-2.92
AE	0.47	-0.15	-0.30	-0.36	0.17	-0.77	-0.08	-0.49	-0.19
AF	7.45		-0.60	0.64	0.35	-0.73	-1.48	-1.54	0.00
AG	0.31	-0.90	-1.20	-0.96	-0.86	-0.73	-0.26	-1.77	-2.30
AH	0.78	-0.65	-0.30	1.04	-0.86	0.15	-1.22	0.04	0.62
AI	0.47	-0.40	-2.09	-0.52	-0.32	-0.20	0.14	0.26	0.25
AJ			-1.50						
AK	0.78		-0.90						-0.62
AL	0.31		-2.09		1.55	2.36	3.92	3.27	4.96
AM	-0.16	-1.14	-1.61	-1.36	-1.38	-0.07	-1.09	0.04	-2.92
AN									5.09
AO	-1.87	0.35	0.90	2.00	0.52	-0.29	0.26	0.04	-0.62
AP	0.16	-0.15	-1.38	-0.96	-0.35	0.15	0.00	-0.41	0.00
AQ	1.87	-0.15			0.00	0.15	-0.39	-0.19	-6.33
AR	-0.62		-1.79	-0.16					
AS	0.78	0.10	1.20	2.23	0.00	0.60	1.09	0.15	-1.24
AT	-0.78	-0.15	-0.90	0.64	-0.17	0.15	2.83	3.42	-0.62
AU	-0.93	0.35	0.30	0.64	-1.55	0.38	-1.03	-0.23	1.30

**z-Scores Sample N166A**

	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> )	Silicon	F <sup>-</sup>
A	8.34		0.09	-0.16			0.51			
B	-0.28		-2.41	0.18	0.45	0.12	0.45	-0.05	1.49	4.00
C	0.85		-0.74	0.22	0.24	-4.02	1.84	-0.65		
D	1.27		3.48		-0.99			0.31		
E	1.84		-2.95	-2.21			0.37	-6.91		-1.43
F			-0.94	-0.96						-0.17
G			-0.47	-0.48			0.09	3.32		0.00
H	1.27		-0.87	-3.57			0.18			-8.80
I			-0.18	-0.07						0.71
J	3.82		-1.27	-0.15	1.78	-2.38	-0.41	-0.53	-1.75	-3.26
K	0.28		-0.32	0.27	1.65	-0.21	-0.55	-0.01		
L	1.84		-0.13	0.85	-0.75	2.17	0.37	0.54	0.05	1.66
M	-1.27		-0.07	0.18	0.62	-0.33	-0.09	2.12		0.31
N	-1.55		1.07	0.96	1.03	-0.78	-0.32	1.16	-1.26	-0.37
O	1.13		-0.67	-0.11	133.48	0.41	1.19	-0.36	-0.09	-0.86
P	66.30		-20.98		1.13					-1.63
Q	-0.57		0.61	0.19			0.41			-2.06
R							0.70			
S	38.03		-0.94	-0.95	3.19	-0.62	1.65	-0.43	0.20	1.23
T	-0.14		0.47	0.48	0.10		-0.78	-0.41	0.70	
U			0.05	0.66	3.60		26.53	0.53	-3.46	-2.71
V	0.28		-0.67	-1.32	-0.24		-0.74			-3.00
W			0.37	-1.71						
X	-0.28		-0.13	0.07	103.65		5.51	0.75		
Y	-0.14		0.94	0.11	0.79	-0.37	-0.96	-1.37		0.86
Z	-0.14		-0.49	0.17	0.10	-0.49	0.73	0.91	0.05	-0.23
AA			0.42	0.55		-0.57	25.14	2.84		-2.00
AB									1.49	
AC	-1.55		-0.04	-0.19	1.51			-1.28		
AD	0.28		0.07	0.22	-0.55	-1.60	-0.83	-1.24	2.50	-0.74
AE	0.00		0.33	-0.22	-1.61	-1.15	0.46	-0.41	-0.09	0.00
AF	0.57		0.16	-1.10	1.03	-0.98	1.33	0.55	1.42	-0.86
AG	1.27		0.00	-0.37	0.10	-0.53	-0.51	0.31	-2.26	0.26
AH	-1.98		0.27	-0.26		3.24		-1.25	-0.38	0.86
AI	-0.14		0.15	0.34	1.13	1.48	0.32	-0.31	-0.15	
AJ					-1.65					
AK			0.00	1.21	0.45			-0.77		
AL			0.80	-0.15			0.23	0.19		
AM	-0.85		0.74	0.15	-3.29	0.33	0.92	-0.65		1.26
AN					-3.53			1.76		
AO	-4.66		-0.07	-1.07	-2.06	-0.62	0.69	1.03	-1.39	0.86
AP			-0.27	-0.11		0.25	-0.41	-5.82	0.48	0.57
AQ			0.60	0.85			-2.25			-0.91
AR					-0.62			-0.41		
AS			-0.07	0.11	1.75	0.86	2.99	-1.85	0.70	0.00
AT	-0.42		1.60	0.48	-0.24		1.98	-1.01		
AU	3.96		0.67	0.77	-0.27	-0.98	-1.15	-0.75	1.35	1.49

**z-Scores Sample N166B**

	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	-0.26	-0.50	-1.89	-1.54	-0.45	-0.27	-0.39	-0.09	-0.36
B	-0.91	-1.09	-1.13	-0.91	-1.32	0.00	-2.47	-0.09	0.25
C	0.52	5.15	-0.63	-0.51	4.49	4.23	5.88	4.48	-1.53
D	0.26		-1.64	-1.32					-0.86
E	-0.41	1.03	-2.01	-1.16	-17.68	0.89	0.88	0.74	-2.52
F					1.10	-0.14	0.00	-0.42	-0.98
G	0.26		-1.26	-0.50	-14.27				-0.37
H	0.13	0.49	-1.26	-0.50	0.55	0.29	2.26	1.25	-0.29
I		-1.04	-1.13	-0.91	-0.18	-2.60			0.36
J	-75.34	-1.82	-2.39	-1.98	-1.29	-2.45	-1.44	-2.87	-0.66
K	0.00	-0.61	-1.76	-0.91	-0.99	0.58	0.21	0.60	0.51
L	-3.37	0.36	-1.39	-0.66	0.26	0.43	0.62	-0.28	0.90
M	0.13	-0.12	-1.13	-0.83	0.66	-1.88	-0.41	-0.14	-0.08
N	0.91	0.36	-3.90	-2.65	0.26	1.73	0.00	-0.09	1.11
O	-2.20	-0.49	-3.02	-2.48	-0.37	0.14	0.00	-0.69	-0.29
P	0.91	-1.34	-1.01		-1.10	-1.01	-0.82	-0.51	-3.03
Q	-0.39	331.15	-6.04	-4.35	1.09	0.07	0.02	-1.02	-0.18
R			-1.16		-0.18	0.58	0.82	-0.37	
S	-0.52	-0.97	-0.88	-0.20	-1.15	-0.07	0.25	-0.28	-0.66
T	0.13	-0.36	-2.39	-1.82	-0.29	-0.29	-0.21	-0.28	1.02
U	0.13	-0.30	-1.21	-0.99	-0.78	1.08	-0.10	0.19	1.31
V	-4.02	-1.21	-0.25	-0.17	-1.10	-1.01			-1.07
W							1.69	0.37	-0.50
X		4.37	4.81		5.69	-0.87	-0.62	-1.25	-0.29
Y	0.00	0.49	-1.76	-0.83	0.33	0.58	1.03	-0.42	-0.29
Z	-0.78	-1.09	-3.35	-2.65	-1.31	0.16	0.16	-0.26	-1.18
AA	0.00	0.73	-1.76	-0.91	0.04	0.84	1.52	-1.02	1.73
AB					-0.40	-0.14	0.41	0.37	
AC	-0.32	0.32	-0.76	-0.64	0.17	0.59	-0.14	-0.14	0.27
AD	0.00	168.37	-1.26	-0.99	0.22	1.44	0.82	0.56	-1.76
AE	0.52	0.61	-1.13	-0.89	0.63	0.20	0.74	0.88	0.48
AF	12.31		-0.88	-0.17	0.40	-2.16	-0.21	-1.76	0.86
AG	0.13	1.58	-1.39	-1.16	1.91	-0.14	0.00	-4.82	-0.41
AH	0.91	0.00	-0.76	-0.17	-0.04	0.29	-1.03	-0.09	0.53
AI	0.52	-0.12	-2.27	-1.31	-0.18	0.03	0.25	0.14	-0.03
AJ			-1.51						
AK	0.91		-1.26						-1.11
AL	0.52		-1.76		0.55	0.87	4.93	2.92	1.43
AM	0.13	-0.49	-1.84	-1.49	-0.51	-0.14	-0.41	0.37	1.84
AN									
AO	-1.68	0.24	-1.01	-0.31	0.29	-0.14	0.62	-0.09	-0.61
AP	-0.13	-0.36	-1.80	-1.49	-0.04	-0.87	-0.41	-0.32	-0.12
AQ	-0.39	0.00			0.00	0.14	0.41	-0.09	1.93
AR	-0.26		-1.76	-0.83					
AS	0.52	0.12	-3.90	-2.65	0.22	0.00	0.82	0.60	0.00
AT	-0.65	-0.61	-0.88	-0.17	-0.40	-0.14	1.03	-0.97	0.53
AU	-0.39	0.73	-0.88	-0.83	0.81	0.14	-0.62	0.09	

**z-Scores Sample N166B**

	<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>Silicon</b>	<b>F<sup>-</sup></b>
A	1.82	-0.36	0.12	-0.36			0.66			
B	0.27	0.29	0.00	1.27		-0.27	0.39		1.59	
C	0.30	1.05	-0.57	2.82		-1.34	3.29			
D	0.61	0.18	16.55							
E	1.21		-3.19	-2.75			-2.07			-1.05
F			0.99	-0.18						5.02
G	160.60	0.36	-0.39	-0.64			2.63			-0.05
H	-0.91	-4.55	-1.97	-0.27			1.60			-9.54
I			0.65	0.75						0.68
J	-12.51	1.95	-0.79	-0.27		-1.48	0.00		-1.84	-3.93
K	0.30	-0.58	-1.62	-0.74		-0.52	0.66			
L	0.70	-0.53	0.99	-0.18		1.11	0.19		0.21	1.51
M	-0.76	1.04	-0.99	-0.82		-0.26	-0.09			0.37
N	-0.61	0.18	-1.18	-0.09		-1.58	0.28		-1.23	-0.64
O	0.91	0.55	-1.77	0.82		-0.16	2.73		-0.21	-0.59
P	-14.27	-1.82	70.34							-1.55
Q	-0.09	1.64	0.61	0.71			0.75			-1.51
R	0.30	3.09					2.44			
S	13.05	-0.18	-0.35	-1.20		-0.73	2.91		0.25	1.41
T	0.30	-0.55	0.79	0.36			0.66		0.26	
U	-1.40	14.95	-1.87	0.64			121.73		-2.29	-2.83
V	-0.91	-1.35	-0.39	-1.18			-0.75			-3.33
W			-1.67	-2.62						
X	0.06	-0.67	-1.97	0.36			16.17			
Y	0.61	0.00	1.58	0.09		-0.48	0.00			-0.64
Z	0.91	0.36	0.06	0.20		-0.77	3.06		-0.21	0.37
AA	-1.82	-0.55	-2.76	0.57		0.16	9.68			2.60
AB						0.64			1.41	
AC	-0.91	-0.36	0.97	-0.07						
AD	3.28	-1.05	0.39	0.64		-0.63	-7.39		2.49	-0.68
AE	-0.64	0.02	0.10	-1.04		-0.63	1.13		-0.17	-0.59
AF	1.43	-0.20	-0.10	-0.45		-0.81	2.44		1.29	0.32
AG	0.91	-0.22	-0.59	-0.36		-0.48	0.00		-2.23	2.05
AH	0.61	-0.31	2.36	-0.09		1.61			0.13	1.00
AI	-0.61	-0.18	0.22	1.03		2.10	1.22		-0.29	
AJ										
AK	1.82	0.73	-0.79	3.45						
AL	0.00	-0.36	2.76	0.45			2.91			
AM	-0.30	0.18	1.18	0.91		0.23	-0.19			1.64
AN		-0.91								
AO	-0.61	-0.73	0.20	-1.45		-0.76	1.79		-1.84	1.23
AP	0.91	0.73	-10.64	0.27		-0.16	0.28		0.51	0.78
AQ	-2.03	-0.13	-1.58	-1.09			-2.54			-1.23
AR	0.00	1.27								
AS	-0.61	-1.35	-0.20	2.64		0.16	4.14		0.99	
AT	-0.30	78.36	1.58	1.18			11.37			
AU	1.09	-1.40	-0.39	0.00		-1.26	-0.94		1.80	0.96

# Sample N166A

## Parameter Conductivity

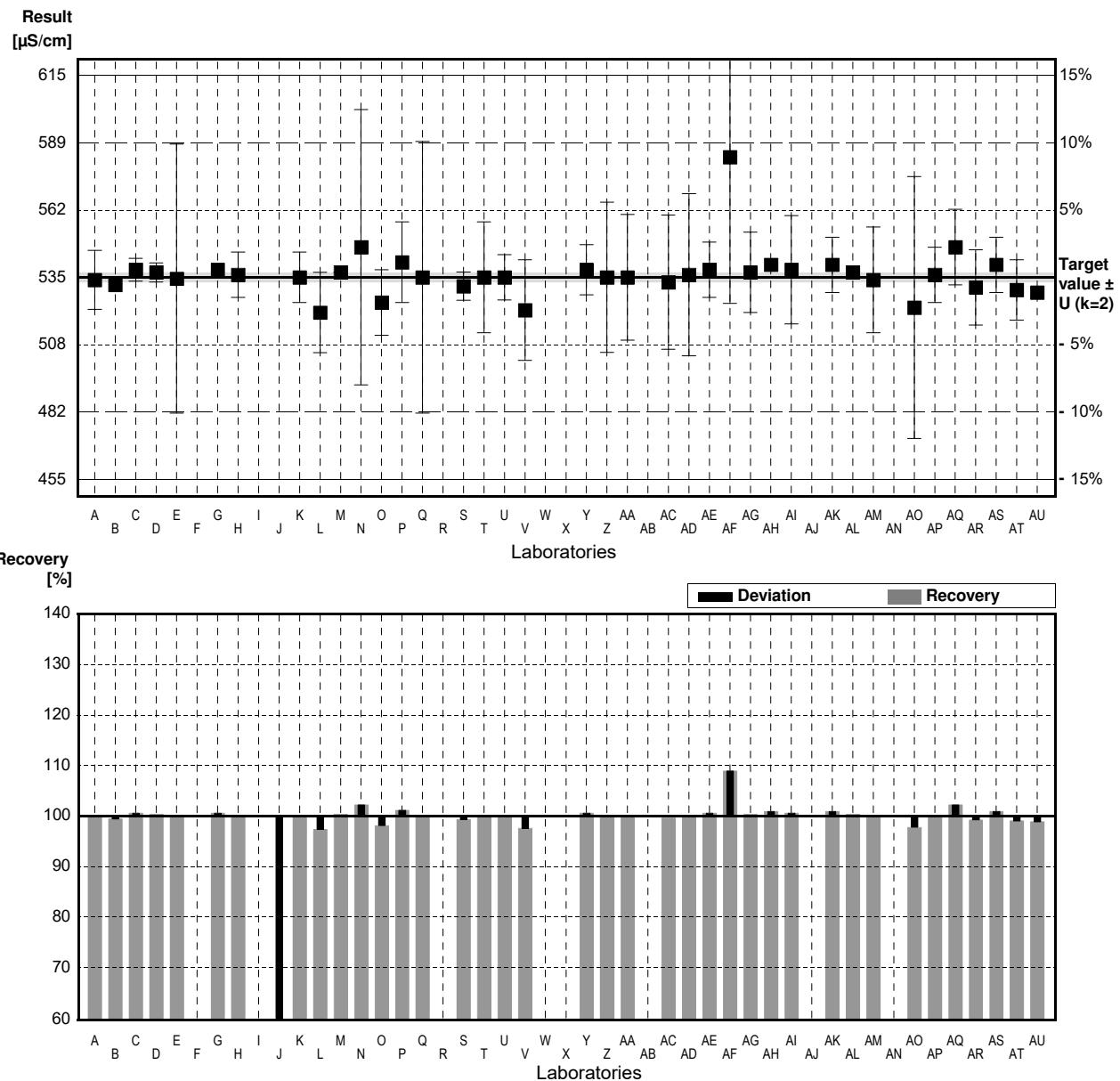
Target value  $\pm U$  ( $k=2$ ) 535  $\mu\text{S}/\text{cm}$   $\pm$  2  $\mu\text{S}/\text{cm}$

IFA result  $\pm U$  ( $k=2$ ) 534  $\mu\text{S}/\text{cm}$   $\pm$  7  $\mu\text{S}/\text{cm}$

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

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	534	11.7	$\mu\text{S}/\text{cm}$	100%	-0.16
B	532		$\mu\text{S}/\text{cm}$	99%	-0.47
C	538	4.51	$\mu\text{S}/\text{cm}$	101%	0.47
D	537	3.80	$\mu\text{S}/\text{cm}$	100%	0.31
E	534.50	53.45	$\mu\text{S}/\text{cm}$	100%	-0.08
F			$\mu\text{S}/\text{cm}$		
G	538		$\mu\text{S}/\text{cm}$	101%	0.47
H	536	9	$\mu\text{S}/\text{cm}$	100%	0.16
I			$\mu\text{S}/\text{cm}$		
J	52.4 *	5.2	$\mu\text{S}/\text{cm}$	10%	-75.17
K	535	10	$\mu\text{S}/\text{cm}$	100%	0.00
L	521 *	16	$\mu\text{S}/\text{cm}$	97%	-2.18
M	537	0.197	$\mu\text{S}/\text{cm}$	100%	0.31
N	547	54.7	$\mu\text{S}/\text{cm}$	102%	1.87
O	525	13	$\mu\text{S}/\text{cm}$	98%	-1.56
P	541	16	$\mu\text{S}/\text{cm}$	101%	0.93
Q	535	54	$\mu\text{S}/\text{cm}$	100%	0.00
R			$\mu\text{S}/\text{cm}$		
S	531.5	5.63	$\mu\text{S}/\text{cm}$	99%	-0.55
T	535	22	$\mu\text{S}/\text{cm}$	100%	0.00
U	535	9	$\mu\text{S}/\text{cm}$	100%	0.00
V	522	20	$\mu\text{S}/\text{cm}$	98%	-2.02
W			$\mu\text{S}/\text{cm}$		
X			$\mu\text{S}/\text{cm}$		
Y	538	10	$\mu\text{S}/\text{cm}$	101%	0.47
Z	535	29.8	$\mu\text{S}/\text{cm}$	100%	0.00
AA	535.0	25	$\mu\text{S}/\text{cm}$	100%	0.00
AB			$\mu\text{S}/\text{cm}$		
AC	533.09	26.65	$\mu\text{S}/\text{cm}$	100%	-0.30
AD	536	32.2	$\mu\text{S}/\text{cm}$	100%	0.16
AE	538	11	$\mu\text{S}/\text{cm}$	101%	0.47
AF	582.8 *	58.2	$\mu\text{S}/\text{cm}$	109%	7.45
AG	537	16	$\mu\text{S}/\text{cm}$	100%	0.31
AH	540		$\mu\text{S}/\text{cm}$	101%	0.78
AI	538	21.5	$\mu\text{S}/\text{cm}$	101%	0.47
AJ			$\mu\text{S}/\text{cm}$		
AK	540	11	$\mu\text{S}/\text{cm}$	101%	0.78
AL	537		$\mu\text{S}/\text{cm}$	100%	0.31
AM	534	21	$\mu\text{S}/\text{cm}$	100%	-0.16
AN			$\mu\text{S}/\text{cm}$		
AQ	523	52	$\mu\text{S}/\text{cm}$	98%	-1.87
AP	536	11	$\mu\text{S}/\text{cm}$	100%	0.16
AQ	547	15	$\mu\text{S}/\text{cm}$	102%	1.87
AR	531	15	$\mu\text{S}/\text{cm}$	99%	-0.62
AS	540	11	$\mu\text{S}/\text{cm}$	101%	0.78
AT	530	12	$\mu\text{S}/\text{cm}$	99%	-0.78
AU	529	1.528	$\mu\text{S}/\text{cm}$	99%	-0.93

	All results	Outliers excl.	Unit
Mean $\pm \text{CI}(99\%)$	524 $\pm$ 34	535 $\pm$ 2	$\mu\text{S}/\text{cm}$
Recov. $\pm \text{CI}(99\%)$	97,9 $\pm$ 6,3	100,1 $\pm$ 0,4	%
SD between labs	78	5	$\mu\text{S}/\text{cm}$
RSD between labs	14,9	1,0	%
n for calculation	39	36	



## Sample N166B

### Parameter Conductivity

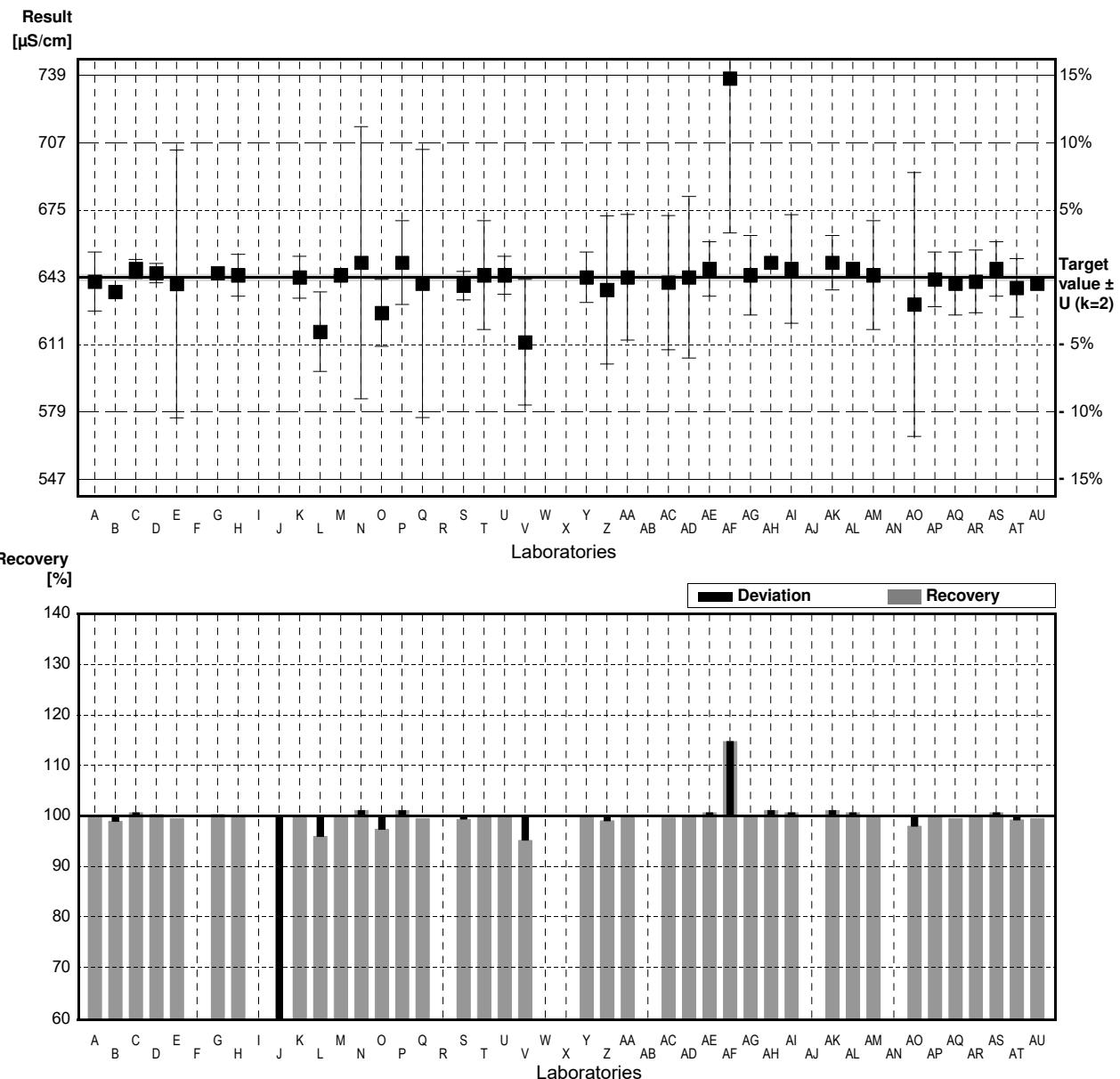
Target value  $\pm U$  ( $k=2$ ) 643  $\mu\text{S}/\text{cm}$   $\pm$  2  $\mu\text{S}/\text{cm}$

IFA result  $\pm U$  ( $k=2$ ) 642  $\mu\text{S}/\text{cm}$   $\pm$  9  $\mu\text{S}/\text{cm}$

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

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	641	14.1	$\mu\text{S}/\text{cm}$	100%	-0.26
B	636		$\mu\text{S}/\text{cm}$	99%	-0.91
C	647	4.51	$\mu\text{S}/\text{cm}$	101%	0.52
D	645	4.57	$\mu\text{S}/\text{cm}$	100%	0.26
E	639.80	63.98	$\mu\text{S}/\text{cm}$	100%	-0.41
F			$\mu\text{S}/\text{cm}$		
G	645		$\mu\text{S}/\text{cm}$	100%	0.26
H	644	10	$\mu\text{S}/\text{cm}$	100%	0.13
I			$\mu\text{S}/\text{cm}$		
J	61.7 *	6.2	$\mu\text{S}/\text{cm}$	10%	-75.34
K	643	10	$\mu\text{S}/\text{cm}$	100%	0.00
L	617 *	19	$\mu\text{S}/\text{cm}$	96%	-3.37
M	644	0.224	$\mu\text{S}/\text{cm}$	100%	0.13
N	650	65	$\mu\text{S}/\text{cm}$	101%	0.91
O	626 *	16	$\mu\text{S}/\text{cm}$	97%	-2.20
P	650	20	$\mu\text{S}/\text{cm}$	101%	0.91
Q	640	64	$\mu\text{S}/\text{cm}$	100%	-0.39
R			$\mu\text{S}/\text{cm}$		
S	639	6.8	$\mu\text{S}/\text{cm}$	99%	-0.52
T	644	26	$\mu\text{S}/\text{cm}$	100%	0.13
U	644	9	$\mu\text{S}/\text{cm}$	100%	0.13
V	612 *	30	$\mu\text{S}/\text{cm}$	95%	-4.02
W			$\mu\text{S}/\text{cm}$		
X			$\mu\text{S}/\text{cm}$		
Y	643	12	$\mu\text{S}/\text{cm}$	100%	0.00
Z	637	35.4	$\mu\text{S}/\text{cm}$	99%	-0.78
AA	643.0	30	$\mu\text{S}/\text{cm}$	100%	0.00
AB			$\mu\text{S}/\text{cm}$		
AC	640.50	32.03	$\mu\text{S}/\text{cm}$	100%	-0.32
AD	643	38.6	$\mu\text{S}/\text{cm}$	100%	0.00
AE	647	13	$\mu\text{S}/\text{cm}$	101%	0.52
AF	738.0 *	73.8	$\mu\text{S}/\text{cm}$	115%	12.31
AG	644	19	$\mu\text{S}/\text{cm}$	100%	0.13
AH	650		$\mu\text{S}/\text{cm}$	101%	0.91
AI	647	25.9	$\mu\text{S}/\text{cm}$	101%	0.52
AJ			$\mu\text{S}/\text{cm}$		
AK	650	13	$\mu\text{S}/\text{cm}$	101%	0.91
AL	647		$\mu\text{S}/\text{cm}$	101%	0.52
AM	644	26	$\mu\text{S}/\text{cm}$	100%	0.13
AN			$\mu\text{S}/\text{cm}$		
AQ	630	63	$\mu\text{S}/\text{cm}$	98%	-1.68
AP	642	13	$\mu\text{S}/\text{cm}$	100%	-0.13
AQ	640	15	$\mu\text{S}/\text{cm}$	100%	-0.39
AR	641	15	$\mu\text{S}/\text{cm}$	100%	-0.26
AS	647	13	$\mu\text{S}/\text{cm}$	101%	0.52
AT	638	14	$\mu\text{S}/\text{cm}$	99%	-0.65
AU	640	2	$\mu\text{S}/\text{cm}$	100%	-0.39

	All results	Outliers excl.	Unit
Mean $\pm \text{CI}(99\%)$	629 $\pm$ 41	643 $\pm$ 2	$\mu\text{S}/\text{cm}$
Recov. $\pm \text{CI}(99\%)$	97,8 $\pm$ 6,4	100,0 $\pm$ 0,3	%
SD between labs	95	4	$\mu\text{S}/\text{cm}$
RSD between labs	15,1	0,7	%
n for calculation	39	34	



## Sample N166A

### Parameter Total hardness

Target value  $\pm U$  ( $k=2$ ) 1,436 mmol/l  $\pm$  0,016 mmol/l

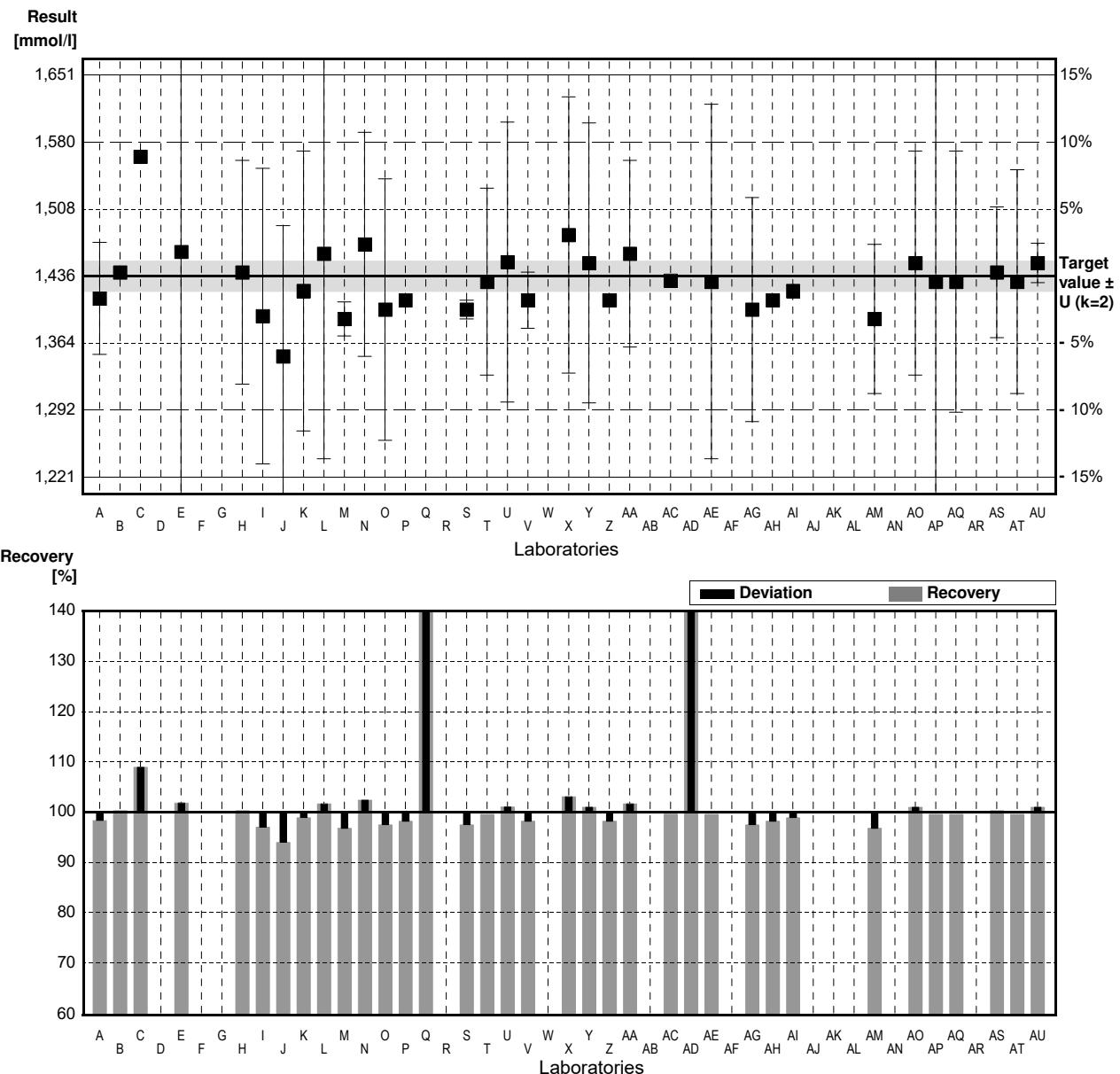
IFA result  $\pm U$  ( $k=2$ ) 1,45 mmol/l  $\pm$  0,06 mmol/l

#### Stability test

mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	1.412	0.06	mmol/l	98%	-0.60
B	1.44		mmol/l	100%	0.10
C	1.564 *		mmol/l	109%	3.18
D			mmol/l		
E	1.462	0.366	mmol/l	102%	0.65
F			mmol/l		
G			mmol/l		
H	1.44	0.12	mmol/l	100%	0.10
I	1.393	0.1584	mmol/l	97%	-1.07
J	1.35	0.14	mmol/l	94%	-2.14
K	1.42	0.15	mmol/l	99%	-0.40
L	1.46	0.22	mmol/l	102%	0.60
M	1.39	0.0182	mmol/l	97%	-1.14
N	1.47	0.12	mmol/l	102%	0.85
O	1.40	0.14	mmol/l	97%	-0.90
P	1.41		mmol/l	98%	-0.65
Q	14.8 *	1.5	mmol/l	1031%	332.37
R			mmol/l		
S	1.40	0.010	mmol/l	97%	-0.90
T	1.43	0.1	mmol/l	100%	-0.15
U	1.451	0.15	mmol/l	101%	0.37
V	1.41	0.03	mmol/l	98%	-0.65
W			mmol/l		
X	1.48	0.148	mmol/l	103%	1.09
Y	1.45	0.15	mmol/l	101%	0.35
Z	1.41		mmol/l	98%	-0.65
AA	1.46	0.1	mmol/l	102%	0.60
AB			mmol/l		
AC	1.431		mmol/l	100%	-0.12
AD	8.25 *	0.825	mmol/l	575%	169.47
AE	1.43	0.19	mmol/l	100%	-0.15
AF			mmol/l		
AG	1.40	0.12	mmol/l	97%	-0.90
AH	1.41		mmol/l	98%	-0.65
AI	1.42		mmol/l	99%	-0.40
AJ			mmol/l		
AK			mmol/l		
AL			mmol/l		
AM	1.39	0.08	mmol/l	97%	-1.14
AN			mmol/l		
AO	1.45	0.12	mmol/l	101%	0.35
AP	1.43	0.30	mmol/l	100%	-0.15
AQ	1.43	0.14	mmol/l	100%	-0.15
AR			mmol/l		
AS	1.44	0.07	mmol/l	100%	0.10
AT	1.43	0.12	mmol/l	100%	-0.15
AU	1.45	0.021	mmol/l	101%	0.35

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	2,008 $\pm$ 1,157	1,427 $\pm$ 0,014	mmol/l
Recov. $\pm$ CI(99%)	139,8 $\pm$ 80,6	99,3 $\pm$ 0,9	%
SD between labs	2,507	0,028	mmol/l
RSD between labs	124,9	2,0	%
n for calculation	35	32	



## Sample N166B

### Parameter Total hardness

Target value  $\pm U$  ( $k=2$ ) 2,94 mmol/l  $\pm$  0,04 mmol/l

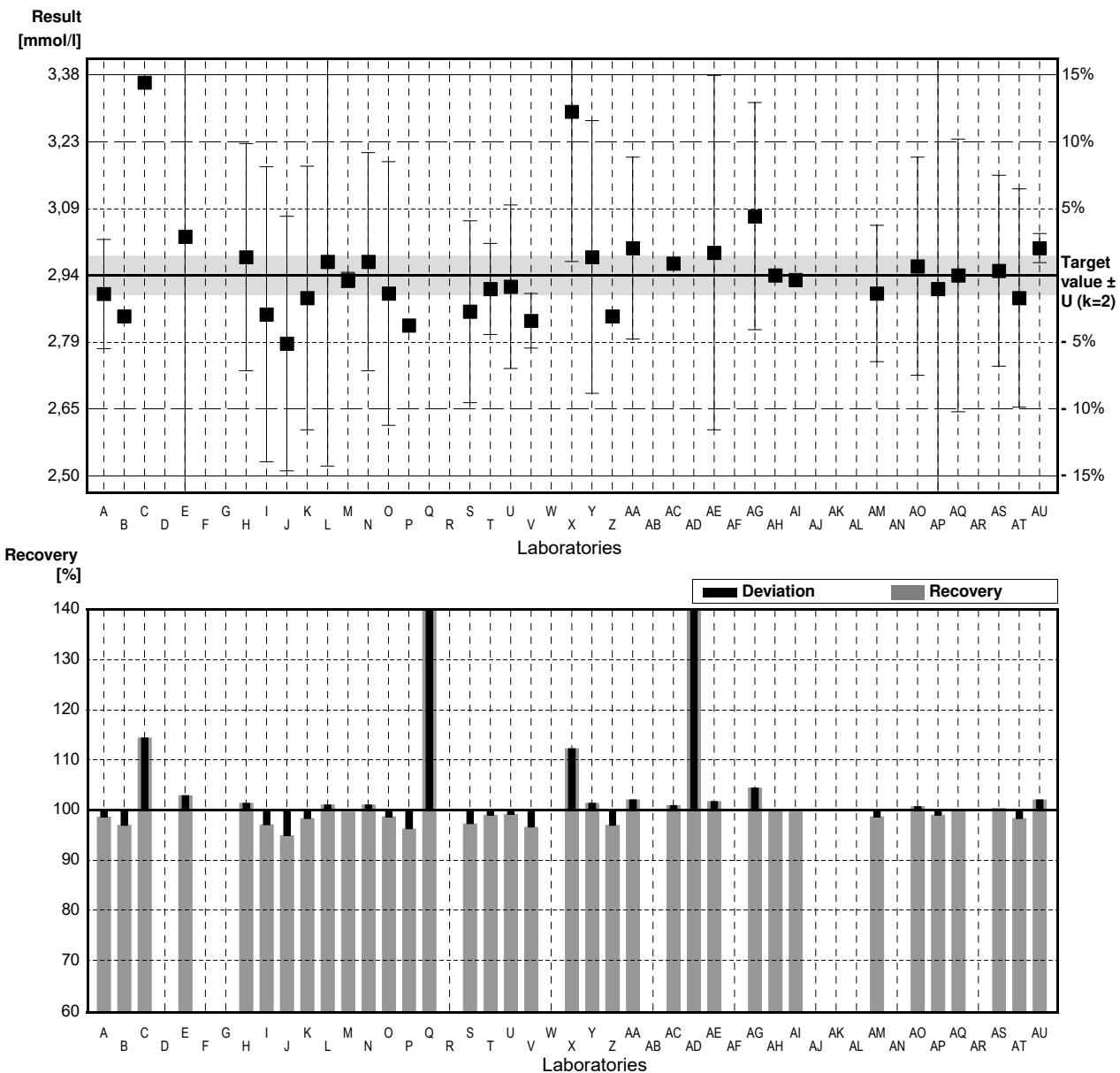
IFA result  $\pm U$  ( $k=2$ ) 3,01 mmol/l  $\pm$  0,11 mmol/l

#### Stability test

mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	2,899	0,12	mmol/l	99%	-0,50
B	2,85		mmol/l	97%	-1,09
C	3,364 *		mmol/l	114%	5,15
D			mmol/l		
E	3,025	0,76	mmol/l	103%	1,03
F			mmol/l		
G			mmol/l		
H	2,98	0,25	mmol/l	101%	0,49
I	2,854	0,3245	mmol/l	97%	-1,04
J	2,79	0,28	mmol/l	95%	-1,82
K	2,89	0,29	mmol/l	98%	-0,61
L	2,97	0,45	mmol/l	101%	0,36
M	2,93	0,0168	mmol/l	100%	-0,12
N	2,97	0,24	mmol/l	101%	0,36
O	2,90	0,29	mmol/l	99%	-0,49
P	2,83		mmol/l	96%	-1,34
Q	30,2 *	3,0	mmol/l	1027%	331,15
R			mmol/l		
S	2,86	0,20	mmol/l	97%	-0,97
T	2,91	0,1	mmol/l	99%	-0,36
U	2,915	0,18	mmol/l	99%	-0,30
V	2,84	0,06	mmol/l	97%	-1,21
W			mmol/l		
X	3,30 *	0,33	mmol/l	112%	4,37
Y	2,98	0,30	mmol/l	101%	0,49
Z	2,85		mmol/l	97%	-1,09
AA	3,00	0,2	mmol/l	102%	0,73
AB			mmol/l		
AC	2,966		mmol/l	101%	0,32
AD	16,8 *	1,68	mmol/l	571%	168,37
AE	2,99	0,39	mmol/l	102%	0,61
AF			mmol/l		
AG	3,07	0,25	mmol/l	104%	1,58
AH	2,94		mmol/l	100%	0,00
AI	2,93		mmol/l	100%	-0,12
AJ			mmol/l		
AK			mmol/l		
AL			mmol/l		
AM	2,90	0,15	mmol/l	99%	-0,49
AN			mmol/l		
AO	2,96	0,24	mmol/l	101%	0,24
AP	2,91	0,61	mmol/l	99%	-0,36
AQ	2,94	0,30	mmol/l	100%	0,00
AR			mmol/l		
AS	2,95	0,21	mmol/l	100%	0,12
AT	2,89	0,24	mmol/l	98%	-0,61
AU	3,00	0,032	mmol/l	102%	0,73

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,12 $\pm$ 2,36	2,93 $\pm$ 0,03	mmol/l
Recov. $\pm$ CI(99%)	140,3 $\pm$ 80,1	99,5 $\pm$ 1,1	%
SD between labs	5,11	0,06	mmol/l
RSD between labs	123,8	2,2	%
n for calculation	35	31	



## Sample N166A

### Parameter Alkalinity

Target value  $\pm U$  ( $k=2$ ) 1,76 mmol/l  $\pm$  0,03 mmol/l

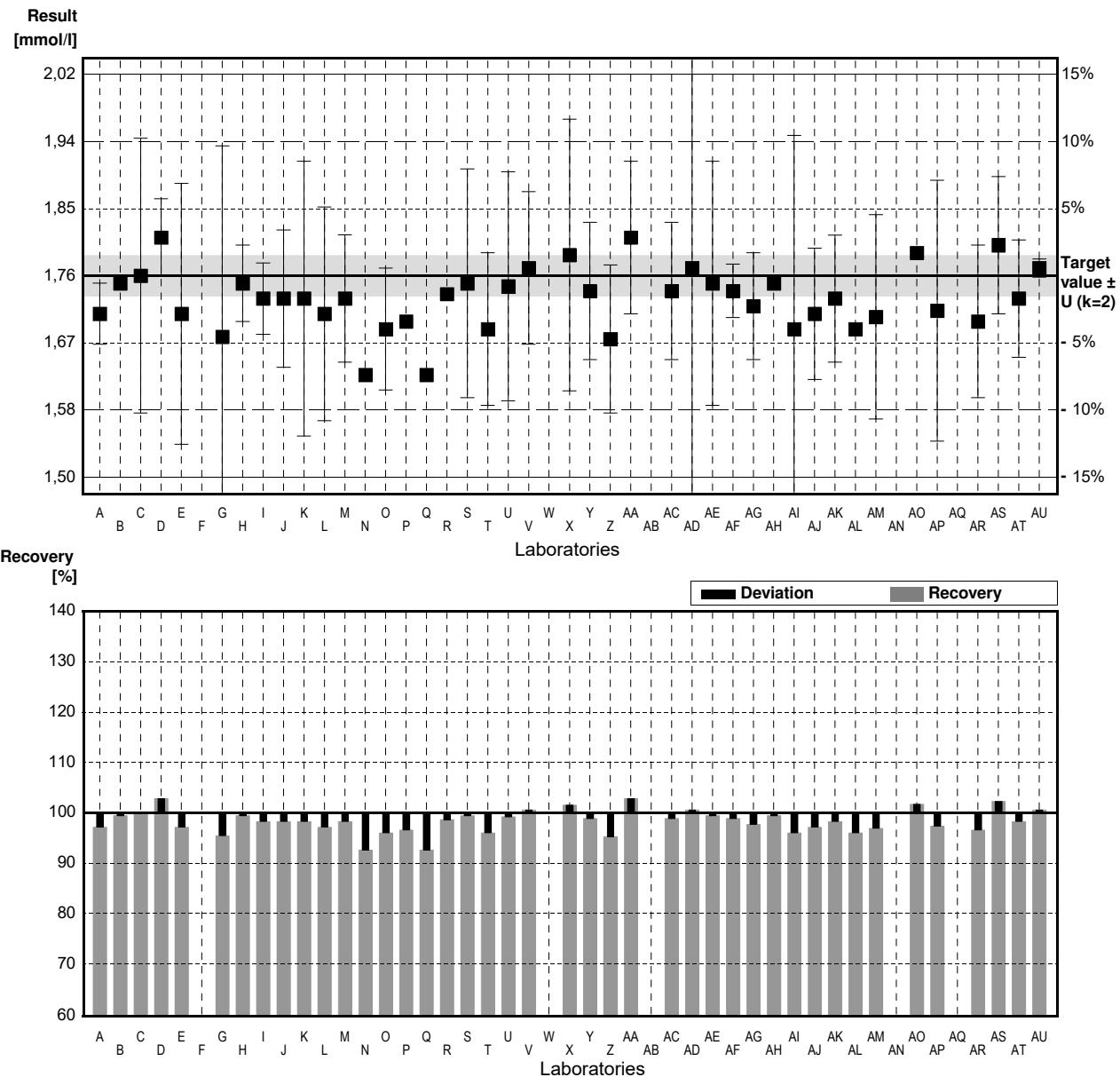
IFA result  $\pm U$  ( $k=2$ ) 1,72 mmol/l  $\pm$  0,07 mmol/l

#### Stability test

mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	1,71	0,04	mmol/l	97%	-1,50
B	1,75		mmol/l	99%	-0,30
C	1,76	0,18	mmol/l	100%	0,00
D	1,81	0,051	mmol/l	103%	1,50
E	1,71	0,171	mmol/l	97%	-1,50
F			mmol/l		
G	1,68	0,25	mmol/l	95%	-2,39
H	1,75	0,05	mmol/l	99%	-0,30
I	1,730	0,0467	mmol/l	98%	-0,90
J	1,73	0,09	mmol/l	98%	-0,90
K	1,73	0,18	mmol/l	98%	-0,90
L	1,71	0,14	mmol/l	97%	-1,50
M	1,73	0,0836	mmol/l	98%	-0,90
N	1,63 *		mmol/l	93%	-3,89
O	1,69	0,08	mmol/l	96%	-2,09
P	1,70		mmol/l	97%	-1,79
Q	1,63 *		mmol/l	93%	-3,89
R	1,736		mmol/l	99%	-0,72
S	1,75	0,15	mmol/l	99%	-0,30
T	1,69	0,1	mmol/l	96%	-2,09
U	1,746	0,15	mmol/l	99%	-0,42
V	1,77	0,10	mmol/l	101%	0,30
W			mmol/l		
X	1,787	0,178	mmol/l	102%	0,81
Y	1,74	0,09	mmol/l	99%	-0,60
Z	1,677	0,097	mmol/l	95%	-2,48
AA	1,81	0,1	mmol/l	103%	1,50
AB			mmol/l		
AC	1,74	0,09	mmol/l	99%	-0,60
AD	1,77	0,384	mmol/l	101%	0,30
AE	1,75	0,16	mmol/l	99%	-0,30
AF	1,74	0,035	mmol/l	99%	-0,60
AG	1,72	0,07	mmol/l	98%	-1,20
AH	1,75		mmol/l	99%	-0,30
AI	1,69	0,254	mmol/l	96%	-2,09
AJ	1,71	0,086	mmol/l	97%	-1,50
AK	1,73	0,0832	mmol/l	98%	-0,90
AL	1,69		mmol/l	96%	-2,09
AM	1,706	0,134	mmol/l	97%	-1,61
AN			mmol/l		
AO	1,79		mmol/l	102%	0,90
AP	1,714	0,171	mmol/l	97%	-1,38
AQ			mmol/l		
AR	1,70	0,1	mmol/l	97%	-1,79
AS	1,80	0,09	mmol/l	102%	1,20
AT	1,730	0,077	mmol/l	98%	-0,90
AU	1,77	0,012	mmol/l	101%	0,30

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	1,73 $\pm$ 0,02	1,73 $\pm$ 0,02	mmol/l
Recov. $\pm$ CI(99%)	98,3 $\pm$ 1,0	98,6 $\pm$ 0,9	%
SD between labs	0,04	0,04	mmol/l
RSD between labs	2,4	2,0	%
n for calculation	42	40	



## Sample N166B

### Parameter Alkalinity

Target value  $\pm U$  ( $k=2$ ) 4,18 mmol/l  $\pm$  0,08 mmol/l

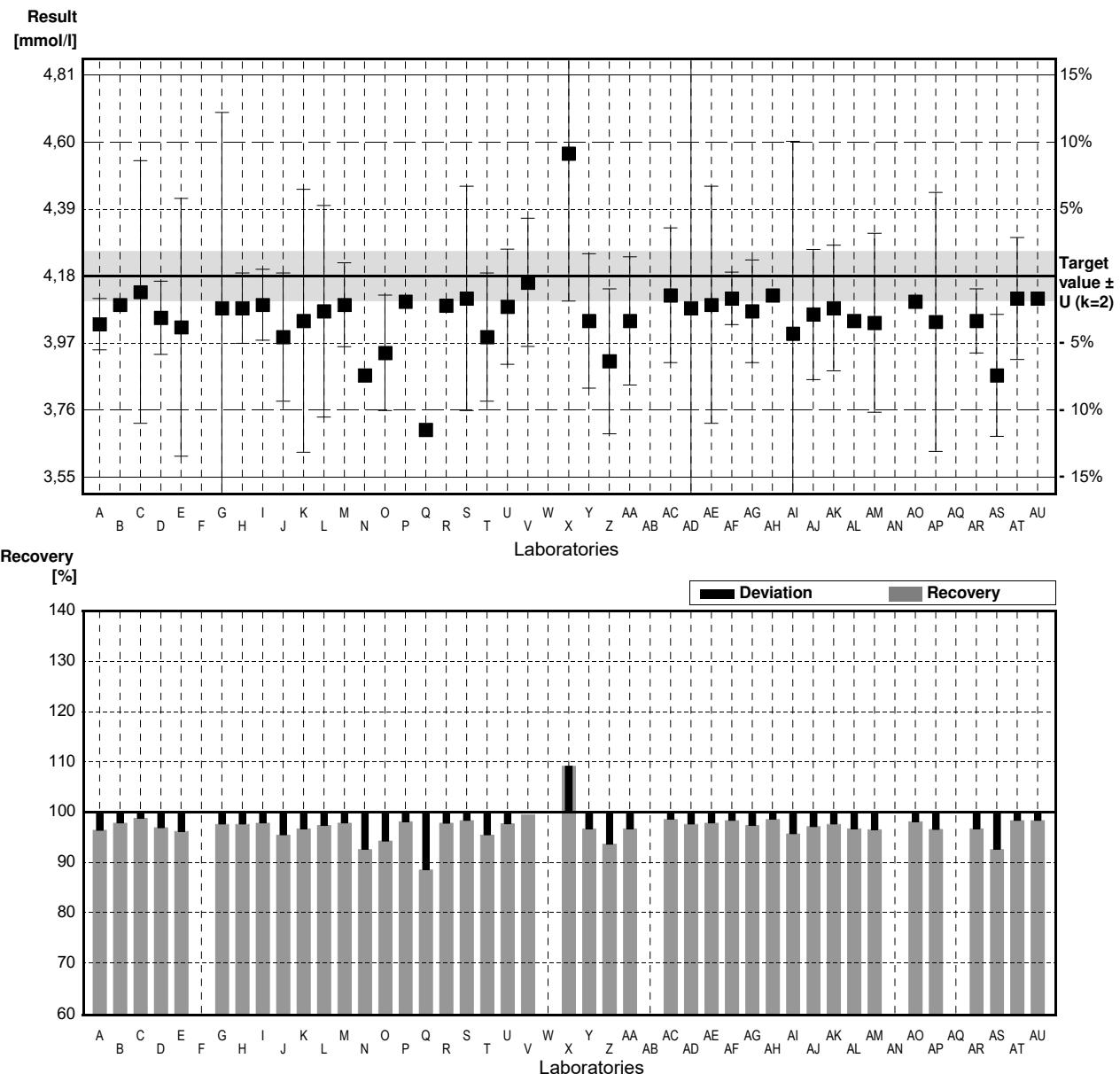
IFA result  $\pm U$  ( $k=2$ ) 4,08 mmol/l  $\pm$  0,17 mmol/l

#### Stability test

mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	4.03	0.08	mmol/l	96%	-1.89
B	4.09		mmol/l	98%	-1.13
C	4.13	0.41	mmol/l	99%	-0.63
D	4.05	0.114	mmol/l	97%	-1.64
E	4.02	0.402	mmol/l	96%	-2.01
F			mmol/l		
G	4.08	0.61	mmol/l	98%	-1.26
H	4.08	0.11	mmol/l	98%	-1.26
I	4.09	0.1104	mmol/l	98%	-1.13
J	3.99	0.20	mmol/l	95%	-2.39
K	4.04	0.41	mmol/l	97%	-1.76
L	4.07	0.33	mmol/l	97%	-1.39
M	4.09	0.131	mmol/l	98%	-1.13
N	3.87 *		mmol/l	93%	-3.90
O	3.94	0.18	mmol/l	94%	-3.02
P	4.10		mmol/l	98%	-1.01
Q	3.70 *		mmol/l	89%	-6.04
R	4.088		mmol/l	98%	-1.16
S	4.11	0.35	mmol/l	98%	-0.88
T	3.99	0.2	mmol/l	95%	-2.39
U	4.084	0.18	mmol/l	98%	-1.21
V	4.16	0.20	mmol/l	100%	-0.25
W			mmol/l		
X	4.562 *	0.46	mmol/l	109%	4.81
Y	4.04	0.21	mmol/l	97%	-1.76
Z	3.914 *	0.226	mmol/l	94%	-3.35
AA	4.04	0.2	mmol/l	97%	-1.76
AB			mmol/l		
AC	4.12	0.21	mmol/l	99%	-0.76
AD	4.08	0.885	mmol/l	98%	-1.26
AE	4.09	0.37	mmol/l	98%	-1.13
AF	4.11	0.082	mmol/l	98%	-0.88
AG	4.07	0.16	mmol/l	97%	-1.39
AH	4.12		mmol/l	99%	-0.76
AI	4.00	0.600	mmol/l	96%	-2.27
AJ	4.06	0.203	mmol/l	97%	-1.51
AK	4.08	0.196	mmol/l	98%	-1.26
AL	4.04		mmol/l	97%	-1.76
AM	4.034	0.279	mmol/l	97%	-1.84
AN			mmol/l		
AQ	4.10		mmol/l	98%	-1.01
AP	4.037	0.404	mmol/l	97%	-1.80
AQ			mmol/l		
AR	4.04	0.1	mmol/l	97%	-1.76
AS	3.87 *	0.19	mmol/l	93%	-3.90
AT	4.11	0.19	mmol/l	98%	-0.88
AU	4.11	0.006	mmol/l	98%	-0.88

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,06 $\pm$ 0,05	4,07 $\pm$ 0,02	mmol/l
Recov. $\pm$ CI(99%)	97,1 $\pm$ 1,2	97,3 $\pm$ 0,5	%
SD between labs	0,12	0,05	mmol/l
RSD between labs	2,9	1,1	%
n for calculation	42	37	



## Sample N166A

### Parameter Hydrogen carbonate

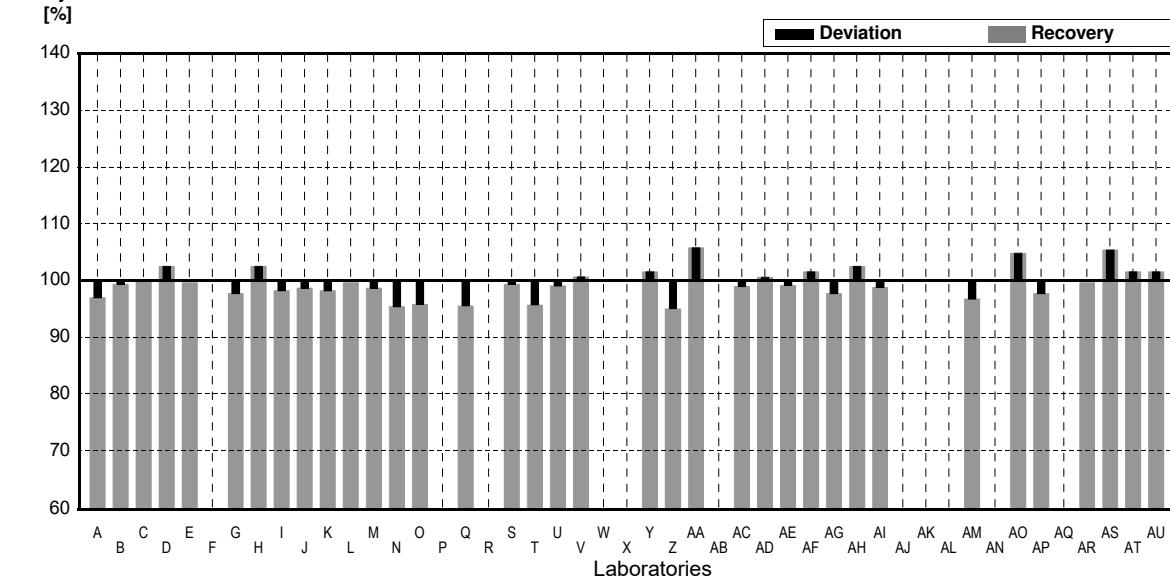
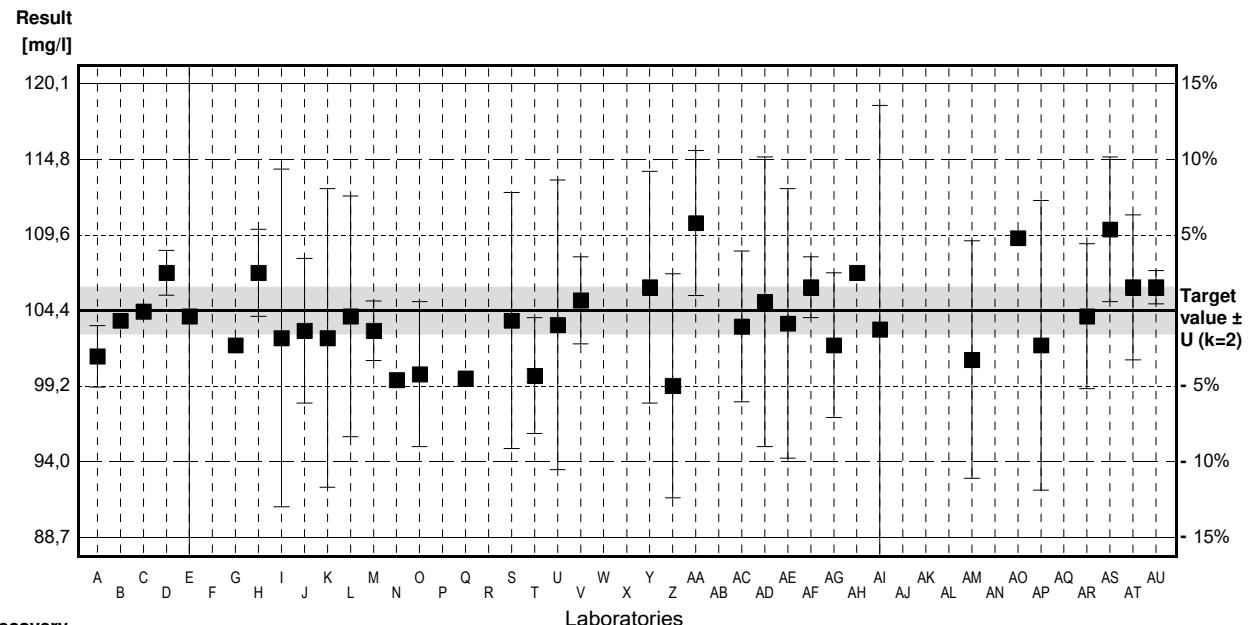
Target value  $\pm U$  ( $k=2$ ) 104,4 mg/l  $\pm$  1,6 mg/l

IFA result  $\pm U$  ( $k=2$ ) 102 mg/l  $\pm$  4 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	101.23	2.13	mg/l	97%	-1.27
B	103.7		mg/l	99%	-0.28
C	104.327		mg/l	100%	-0.03
D	107	1.55	mg/l	102%	1.04
E	104.00	26.085	mg/l	100%	-0.16
F			mg/l		
G	102		mg/l	98%	-0.96
H	107	3	mg/l	102%	1.04
I	102.5	11.66	mg/l	98%	-0.76
J	103	5	mg/l	99%	-0.56
K	102.5	10.3	mg/l	98%	-0.76
L	104	8.3	mg/l	100%	-0.16
M	103	2.05	mg/l	99%	-0.56
N	99.6		mg/l	95%	-1.92
O	100	5	mg/l	96%	-1.76
P			mg/l		
Q	99.7		mg/l	95%	-1.88
R			mg/l		
S	103.7	8.84	mg/l	99%	-0.28
T	99.9	4	mg/l	96%	-1.80
U	103.4	10	mg/l	99%	-0.40
V	105.1	3	mg/l	101%	0.28
W			mg/l		
X			mg/l		
Y	106	8	mg/l	102%	0.64
Z	99.2	7.74	mg/l	95%	-2.08
AA	110.44	5	mg/l	106%	2.41
AB			mg/l		
AC	103.3	5.2	mg/l	99%	-0.44
AD	105	10	mg/l	101%	0.24
AE	103.5	9.3	mg/l	99%	-0.36
AF	106	2.1	mg/l	102%	0.64
AG	102	5	mg/l	98%	-0.96
AH	107		mg/l	102%	1.04
AI	103.1	15.47	mg/l	99%	-0.52
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	101.0	8.2	mg/l	97%	-1.36
AN			mg/l		
AO	109.4		mg/l	105%	2.00
AP	102	10	mg/l	98%	-0.96
AQ			mg/l		
AR	104	5	mg/l	100%	-0.16
AS	110	5	mg/l	105%	2.23
AT	106	5	mg/l	102%	0.64
AU	106	1.155	mg/l	102%	0.64

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	103,9 $\pm$ 1,3	103,9 $\pm$ 1,3	mg/l
Recov. $\pm$ CI(99%)	99,5 $\pm$ 1,2	99,5 $\pm$ 1,2	%
SD between labs	2,8	2,8	mg/l
RSD between labs	2,7	2,7	%
n for calculation	36	36	



## Sample N166B

### Parameter Hydrogen carbonate

Target value  $\pm U$  ( $k=2$ ) 252 mg/l  $\pm$  5 mg/l

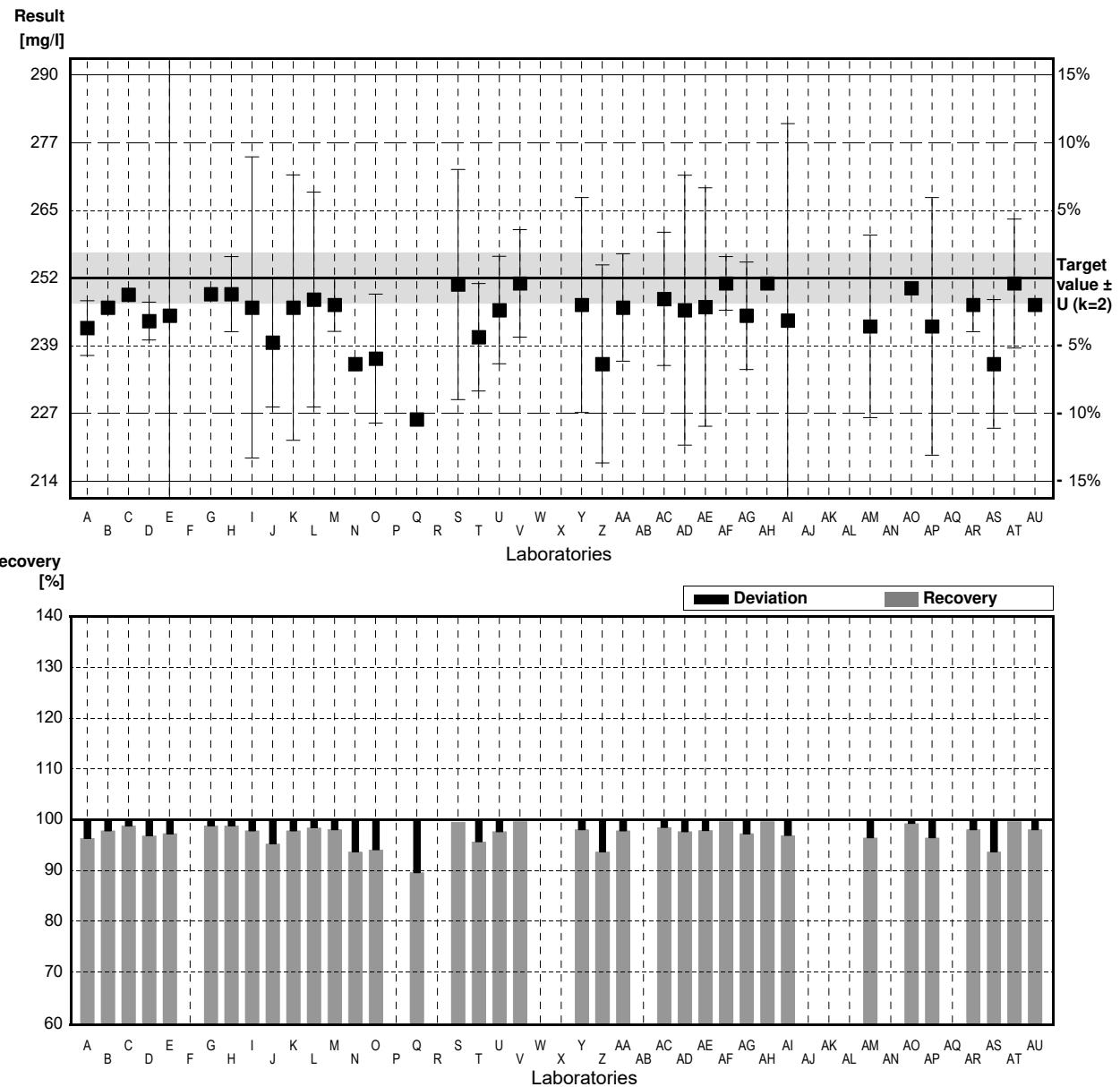
IFA result  $\pm U$  ( $k=2$ ) 246 mg/l  $\pm$  10 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	242.70	5.10	mg/l	96%	-1.54
B	246.5		mg/l	98%	-0.91
C	248.920		mg/l	99%	-0.51
D	244	3.53	mg/l	97%	-1.32
E	245.00	61.322	mg/l	97%	-1.16
F			mg/l		
G	249		mg/l	99%	-0.50
H	249	7	mg/l	99%	-0.50
I	246.5	28.03	mg/l	98%	-0.91
J	240	12	mg/l	95%	-1.98
K	246.5	24.7	mg/l	98%	-0.91
L	248	20	mg/l	98%	-0.66
M	247	4.93	mg/l	98%	-0.83
N	236		mg/l	94%	-2.65
O	237	12	mg/l	94%	-2.48
P			mg/l		
Q	225.7 *		mg/l	90%	-4.35
R			mg/l		
S	250.8	21.4	mg/l	100%	-0.20
T	241	10	mg/l	96%	-1.82
U	246.04	10	mg/l	98%	-0.99
V	251.0	10	mg/l	100%	-0.17
W			mg/l		
X			mg/l		
Y	247	20	mg/l	98%	-0.83
Z	236	18.41	mg/l	94%	-2.65
AA	246.52	10	mg/l	98%	-0.91
AB			mg/l		
AC	248.1	12.4	mg/l	98%	-0.64
AD	246	25.1	mg/l	98%	-0.99
AE	246.6	22.2	mg/l	98%	-0.89
AF	251	5.0	mg/l	100%	-0.17
AG	245	10	mg/l	97%	-1.16
AH	251		mg/l	100%	-0.17
AI	244.1	36.61	mg/l	97%	-1.31
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	243.0	17.0	mg/l	96%	-1.49
AN			mg/l		
AO	250.1		mg/l	99%	-0.31
AP	243	24	mg/l	96%	-1.49
AQ			mg/l		
AR	247	5	mg/l	98%	-0.83
AS	236	12	mg/l	94%	-2.65
AT	251	12	mg/l	100%	-0.17
AU	247	1	mg/l	98%	-0.83

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	245 $\pm$ 2	246 $\pm$ 2	mg/l
Recov. $\pm$ CI(99%)	97,2 $\pm$ 1,0	97,4 $\pm$ 0,8	%
SD between labs	5	4	mg/l
RSD between labs	2,2	1,8	%
n for calculation	36	35	



## Sample N166A

### Parameter Calcium

Target value  $\pm U$  ( $k=2$ ) 36,2 mg/l  $\pm$  0,6 mg/l

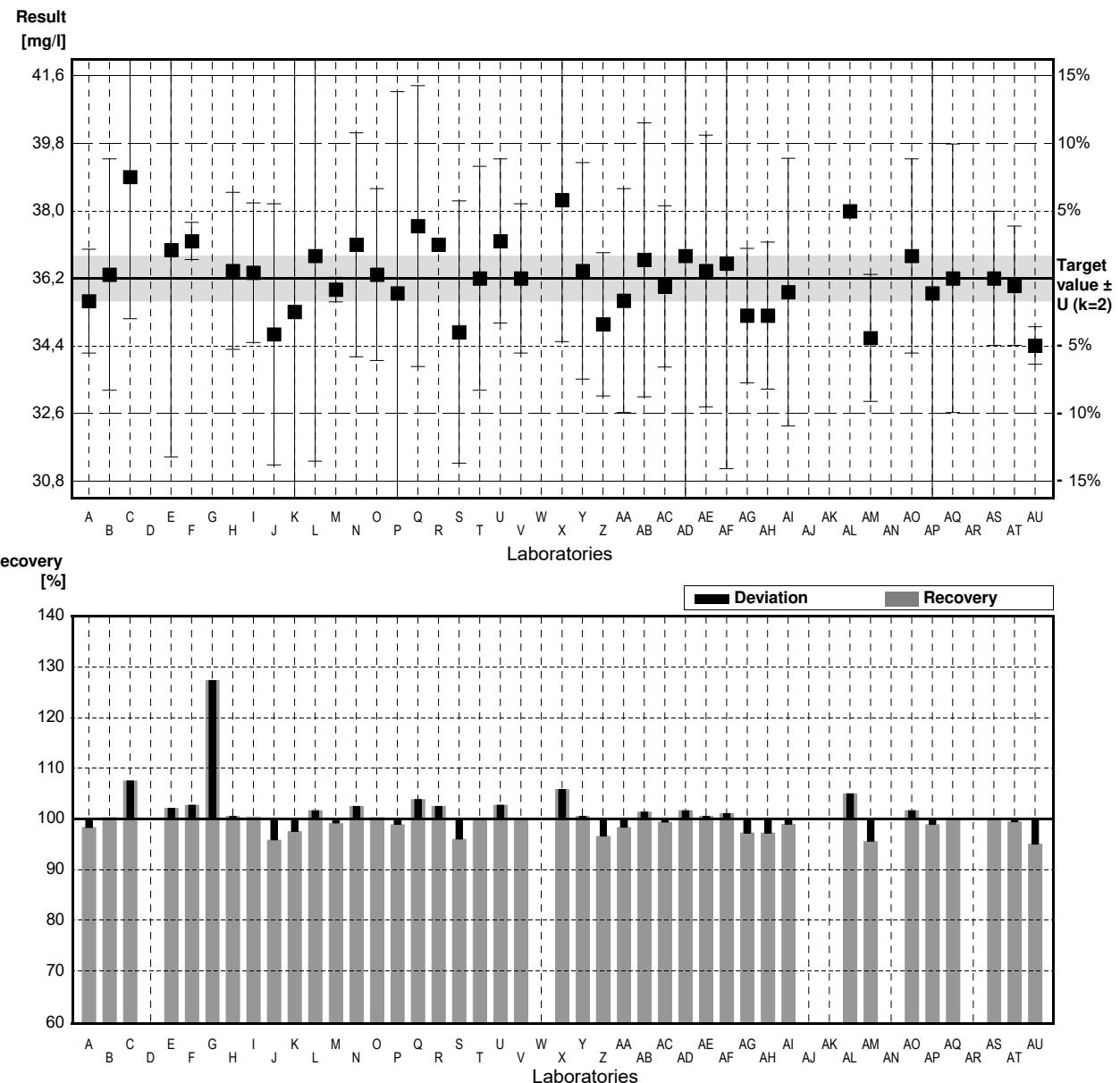
IFA result  $\pm U$  ( $k=2$ ) 36,7 mg/l  $\pm$  1,7 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	35,59	1,39	mg/l	98%	-0,53
B	36,3	3,1	mg/l	100%	0,09
C	38,914 *	3,8	mg/l	107%	2,34
D			mg/l		
E	36,96	5,544	mg/l	102%	0,66
F	37,2	0,5	mg/l	103%	0,86
G	46,1 *	6,00	mg/l	127%	8,55
H	36,4	2,1	mg/l	101%	0,17
I	36,35	1,872	mg/l	100%	0,13
J	34,7	3,5	mg/l	96%	-1,29
K	35,3	7,1	mg/l	98%	-0,78
L	36,8	5,5	mg/l	102%	0,52
M	35,9	0,329	mg/l	99%	-0,26
N	37,1	3,0	mg/l	102%	0,78
O	36,3	2,3	mg/l	100%	0,09
P	35,8	5,4	mg/l	99%	-0,35
Q	37,60	3,76	mg/l	104%	1,21
R	37,1		mg/l	102%	0,78
S	34,76	3,51	mg/l	96%	-1,24
T	36,2	3	mg/l	100%	0,00
U	37,2	2,2	mg/l	103%	0,86
V	36,2	2,0	mg/l	100%	0,00
W			mg/l		
X	38,3	3,8	mg/l	106%	1,81
Y	36,4	2,9	mg/l	101%	0,17
Z	34,97	1,92	mg/l	97%	-1,06
AA	35,6	3	mg/l	98%	-0,52
AB	36,7	3,67	mg/l	101%	0,43
AC	35,98	2,16	mg/l	99%	-0,19
AD	36,8	9,52	mg/l	102%	0,52
AE	36,40	3,64	mg/l	101%	0,17
AF	36,6	5,5	mg/l	101%	0,35
AG	35,2	1,8	mg/l	97%	-0,86
AH	35,2	1,97	mg/l	97%	-0,86
AI	35,83	3,583	mg/l	99%	-0,32
AJ			mg/l		
AK			mg/l		
AL	38,0		mg/l	105%	1,55
AM	34,6	1,7	mg/l	96%	-1,38
AN			mg/l		
AO	36,8	2,6	mg/l	102%	0,52
AP	35,8	6,1	mg/l	99%	-0,35
AQ	36,2	3,6	mg/l	100%	0,00
AR			mg/l		
AS	36,2	1,8	mg/l	100%	0,00
AT	36,0	1,6	mg/l	99%	-0,17
AU	34,4	0,503	mg/l	95%	-1,55

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	36,5 $\pm$ 0,8	36,2 $\pm$ 0,4	mg/l
Recov. $\pm$ CI(99%)	100,8 $\pm$ 2,1	100,0 $\pm$ 1,1	%
SD between labs	1,8	0,9	mg/l
RSD between labs	5,0	2,5	%
n for calculation	41	39	



## Sample N166B

### Parameter Calcium

Target value  $\pm U$  ( $k=2$ ) 85,1 mg/l  $\pm$  1,6 mg/l

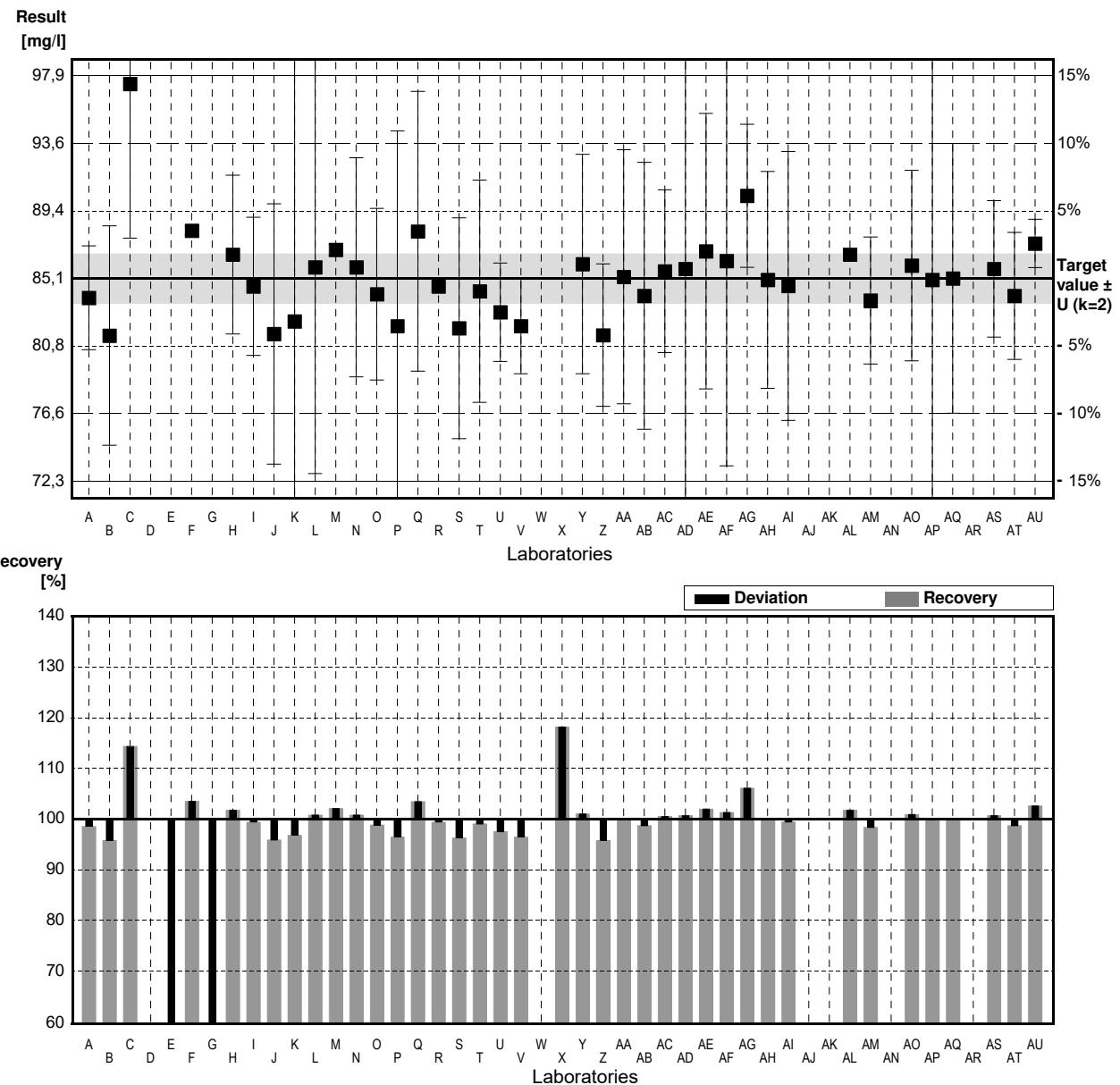
IFA result  $\pm U$  ( $k=2$ ) 87 mg/l  $\pm$  4 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	83,88	3,27	mg/l	99%	-0,45
B	81,5	6,9	mg/l	96%	-1,32
C	97,340 *	9,7	mg/l	114%	4,49
D			mg/l		
E	36,96 *	13,138	mg/l	43%	-17,68
F	88,1	0,3	mg/l	104%	1,10
G	46,25 *	6,01	mg/l	54%	-14,27
H	86,6	5	mg/l	102%	0,55
I	84,6	4,357	mg/l	99%	-0,18
J	81,6	8,2	mg/l	96%	-1,29
K	82,4	16,5	mg/l	97%	-0,99
L	85,8	13	mg/l	101%	0,26
M	86,9	0,330	mg/l	102%	0,66
N	85,8	6,9	mg/l	101%	0,26
O	84,1	5,4	mg/l	99%	-0,37
P	82,1	12,3	mg/l	96%	-1,10
Q	88,06	8,81	mg/l	103%	1,09
R	84,6		mg/l	99%	-0,18
S	81,96	6,96	mg/l	96%	-1,15
T	84,3	7	mg/l	99%	-0,29
U	82,97	3,1	mg/l	97%	-0,78
V	82,1	3,0	mg/l	96%	-1,10
W			mg/l		
X	100,6 *	10,0	mg/l	118%	5,69
Y	86	6,9	mg/l	101%	0,33
Z	81,52	4,484	mg/l	96%	-1,31
AA	85,2	8	mg/l	100%	0,04
AB	84	8,4	mg/l	99%	-0,40
AC	85,55	5,13	mg/l	101%	0,17
AD	85,7	22,2	mg/l	101%	0,22
AE	86,81	8,68	mg/l	102%	0,63
AF	86,2	12,9	mg/l	101%	0,40
AG	90,3	4,5	mg/l	106%	1,91
AH	85	6,83	mg/l	100%	-0,04
AI	84,62	8,462	mg/l	99%	-0,18
AJ			mg/l		
AK			mg/l		
AL	86,6		mg/l	102%	0,55
AM	83,7	4,0	mg/l	98%	-0,51
AN			mg/l		
AQ	85,9	6,0	mg/l	101%	0,29
AP	85,0	14,5	mg/l	100%	-0,04
AQ	85,1	8,5	mg/l	100%	0,00
AR			mg/l		
AS	85,7	4,3	mg/l	101%	0,22
AT	84	4	mg/l	99%	-0,40
AU	87,3	1,528	mg/l	103%	0,81

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	$83,5 \pm 4,4$	$84,9 \pm 0,9$	mg/l
Recov. $\pm$ CI(99%)	$98,1 \pm 5,1$	$99,8 \pm 1,1$	%
SD between labs	10,3	2,0	mg/l
RSD between labs	12,4	2,4	%
n for calculation	41	37	



## Sample N166A

### Parameter Magnesium

Target value  $\pm U$  ( $k=2$ ) 12,93 mg/l  $\pm$  0,15 mg/l

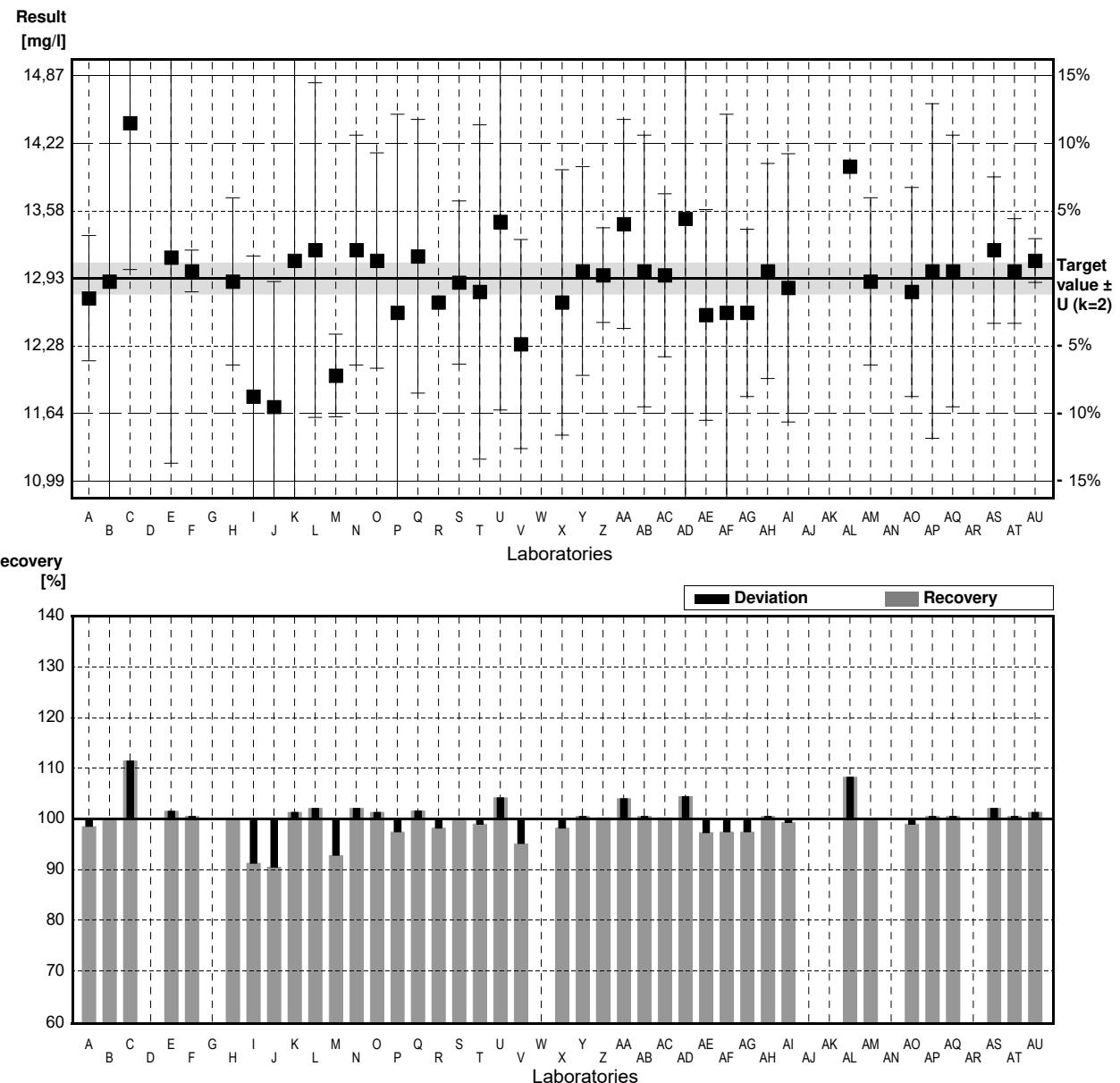
IFA result  $\pm U$  ( $k=2$ ) 13,1 mg/l  $\pm$  0,7 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	12.74	0.60	mg/l	99%	-0.42
B	12.9	12.9	mg/l	100%	-0.07
C	14.415 *	1.4	mg/l	111%	3.28
D			mg/l		
E	13.13	1.970	mg/l	102%	0.44
F	13.0	0.2	mg/l	101%	0.15
G			mg/l		
H	12.9	0.8	mg/l	100%	-0.07
I	11.8 *	1.342	mg/l	91%	-2.50
J	11.7 *	1.2	mg/l	90%	-2.72
K	13.1	2.6	mg/l	101%	0.38
L	13.2	1.6	mg/l	102%	0.60
M	12.0 *	0.395	mg/l	93%	-2.06
N	13.2	1.1	mg/l	102%	0.60
O	13.1	1.03	mg/l	101%	0.38
P	12.6	1.9	mg/l	97%	-0.73
Q	13.14	1.31	mg/l	102%	0.46
R	12.7		mg/l	98%	-0.51
S	12.89	0.782	mg/l	100%	-0.09
T	12.8	1.6	mg/l	99%	-0.29
U	13.47	1.8	mg/l	104%	1.19
V	12.3	1.0	mg/l	95%	-1.39
W			mg/l		
X	12.7	1.27	mg/l	98%	-0.51
Y	13.0	1.0	mg/l	101%	0.15
Z	12.96	0.454	mg/l	100%	0.07
AA	13.45	1	mg/l	104%	1.15
AB	13.0	1.30	mg/l	101%	0.15
AC	12.96	0.78	mg/l	100%	0.07
AD	13.5	2.74	mg/l	104%	1.26
AE	12.58	1.01	mg/l	97%	-0.77
AF	12.6	1.9	mg/l	97%	-0.73
AG	12.6	0.8	mg/l	97%	-0.73
AH	13.0	1.03	mg/l	101%	0.15
AI	12.84	1.284	mg/l	99%	-0.20
AJ			mg/l		
AK			mg/l		
AL	14.0 *		mg/l	108%	2.36
AM	12.9	0.8	mg/l	100%	-0.07
AN			mg/l		
AQ	12.8	1.0	mg/l	99%	-0.29
AP	13.0	1.6	mg/l	101%	0.15
AQ	13.0	1.3	mg/l	101%	0.15
AR			mg/l		
AS	13.2	0.7	mg/l	102%	0.60
AT	13.0	0.5	mg/l	101%	0.15
AU	13.1	0.208	mg/l	101%	0.38

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	12,93 $\pm$ 0,21	12,95 $\pm$ 0,12	mg/l
Recov. $\pm$ CI(99%)	100,0 $\pm$ 1,6	100,2 $\pm$ 0,9	%
SD between labs	0,49	0,26	mg/l
RSD between labs	3,8	2,0	%
n for calculation	40	35	



## Sample N166B

### Parameter Magnesium

Target value  $\pm U$  ( $k=2$ ) 19,8 mg/l  $\pm$  0,4 mg/l

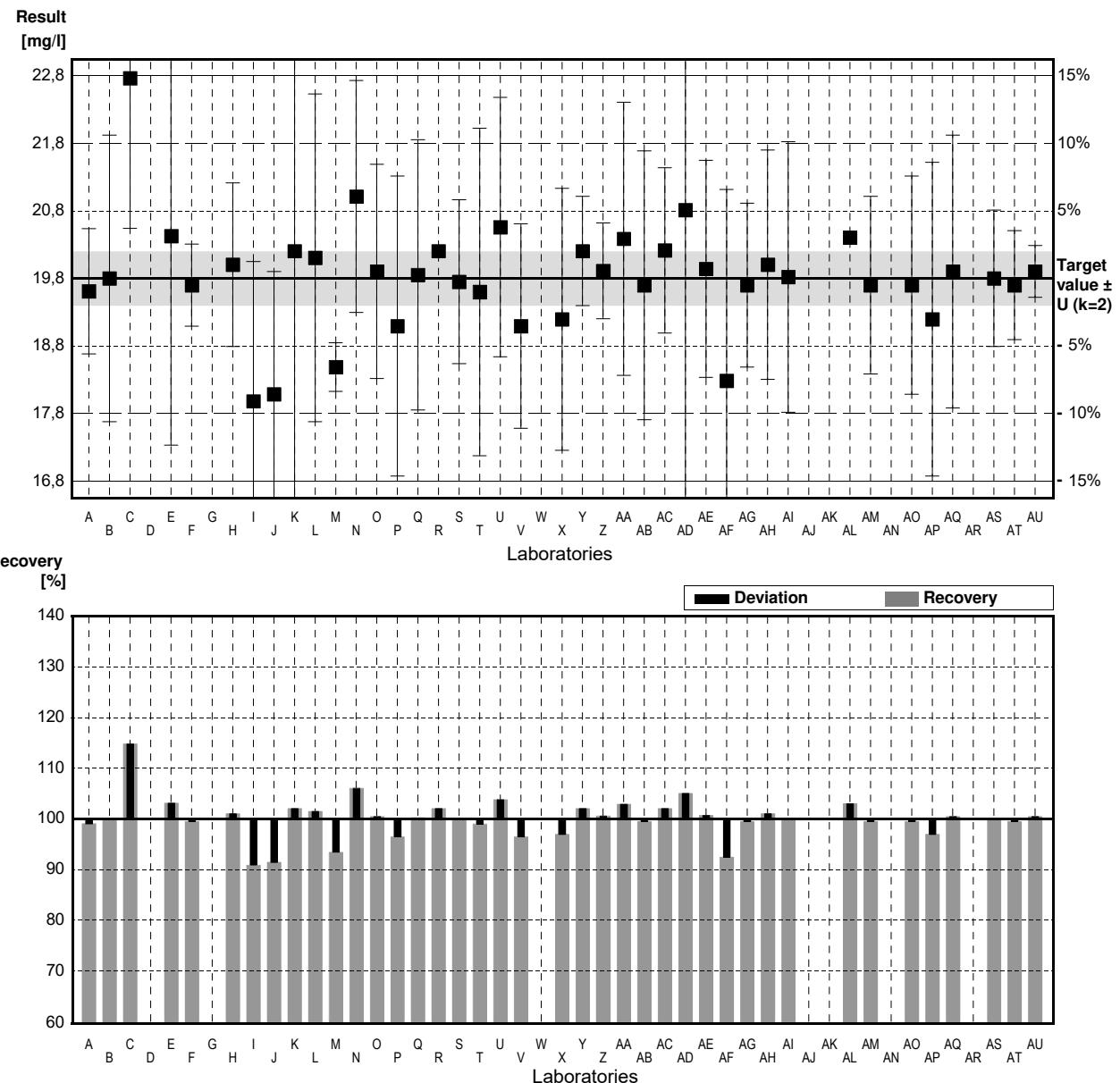
IFA result  $\pm U$  ( $k=2$ ) 20,2 mg/l  $\pm$  1,1 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	19,61	0,92	mg/l	99%	-0,27
B	19,8	2,1	mg/l	100%	0,00
C	22,732 *	2,2	mg/l	115%	4,23
D			mg/l		
E	20,42	3,063	mg/l	103%	0,89
F	19,7	0,6	mg/l	99%	-0,14
G			mg/l		
H	20,0	1,2	mg/l	101%	0,29
I	18,0 *	2,047	mg/l	91%	-2,60
J	18,1 *	1,8	mg/l	91%	-2,45
K	20,2	4,1	mg/l	102%	0,58
L	20,1	2,4	mg/l	102%	0,43
M	18,5 *	0,356	mg/l	93%	-1,88
N	21,0 *	1,7	mg/l	106%	1,73
O	19,9	1,57	mg/l	101%	0,14
P	19,1	2,2	mg/l	96%	-1,01
Q	19,85	1,98	mg/l	100%	0,07
R	20,2		mg/l	102%	0,58
S	19,75	1,20	mg/l	100%	-0,07
T	19,6	2,4	mg/l	99%	-0,29
U	20,55	1,9	mg/l	104%	1,08
V	19,1	1,5	mg/l	96%	-1,01
W			mg/l		
X	19,2	1,92	mg/l	97%	-0,87
Y	20,2	0,8	mg/l	102%	0,58
Z	19,91	0,7	mg/l	101%	0,16
AA	20,38	2	mg/l	103%	0,84
AB	19,7	1,97	mg/l	99%	-0,14
AC	20,21	1,21	mg/l	102%	0,59
AD	20,8	4,23	mg/l	105%	1,44
AE	19,94	1,59	mg/l	101%	0,20
AF	18,3 *	2,8	mg/l	92%	-2,16
AG	19,7	1,2	mg/l	99%	-0,14
AH	20,0	1,68	mg/l	101%	0,29
AI	19,82	1,982	mg/l	100%	0,03
AJ			mg/l		
AK			mg/l		
AL	20,4		mg/l	103%	0,87
AM	19,7	1,3	mg/l	99%	-0,14
AN			mg/l		
AQ	19,7	1,6	mg/l	99%	-0,14
AP	19,2	2,3	mg/l	97%	-0,87
AQ	19,9	2,0	mg/l	101%	0,14
AR			mg/l		
AS	19,8	1,0	mg/l	100%	0,00
AT	19,7	0,8	mg/l	99%	-0,14
AU	19,9	0,379	mg/l	101%	0,14

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	19,8 $\pm$ 0,3	19,9 $\pm$ 0,2	mg/l
Recov. $\pm$ CI(99%)	100,1 $\pm$ 1,7	100,4 $\pm$ 0,9	%
SD between labs	0,8	0,4	mg/l
RSD between labs	4,1	2,0	%
n for calculation	40	34	



# Sample N166A

## Parameter Sodium

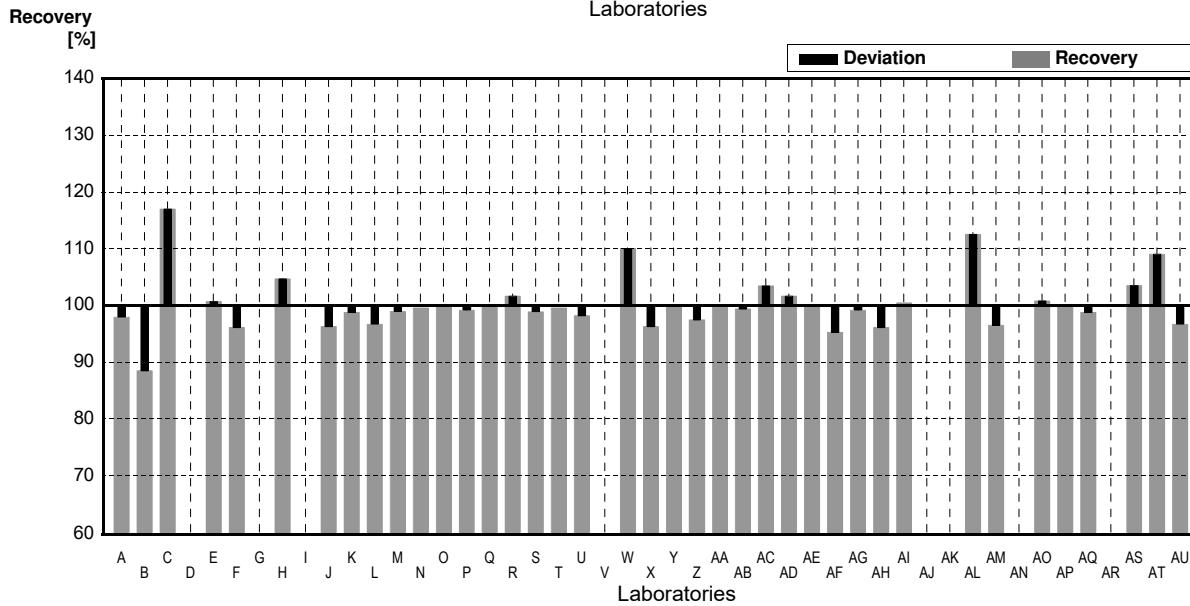
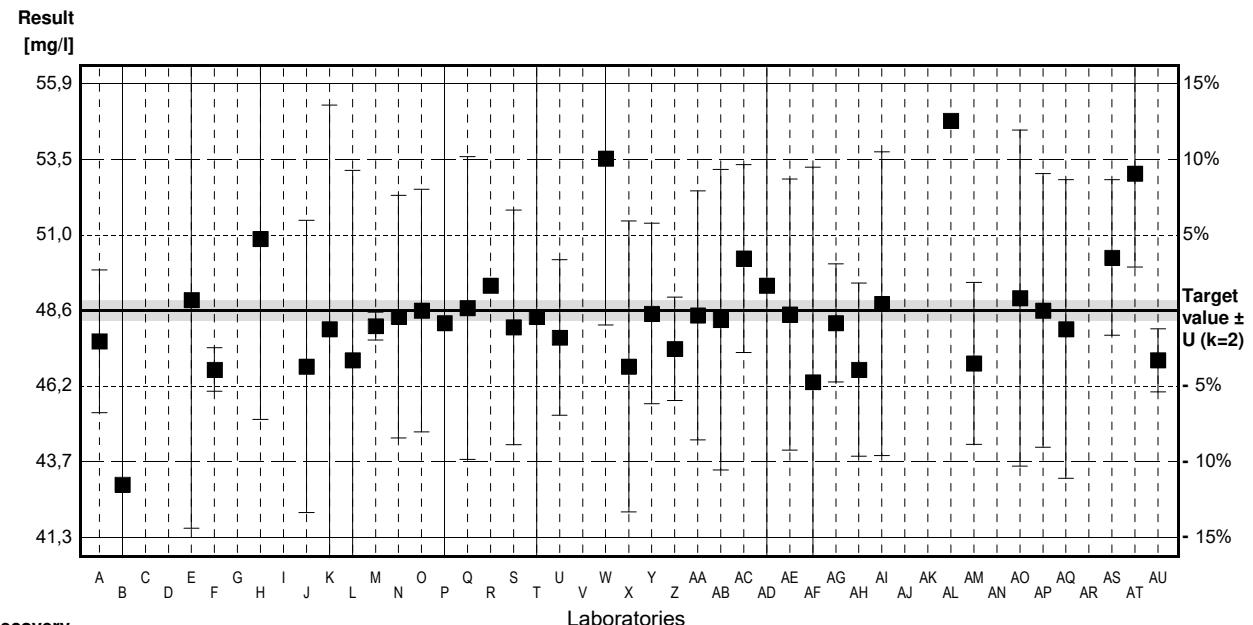
Target value  $\pm U$  ( $k=2$ ) 48,6 mg/l  $\pm$  0,3 mg/l

IFA result  $\pm U$  ( $k=2$ ) 48,7 mg/l  $\pm$  1,9 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	47.61	2,29	mg/l	98%	-0,64
B	43,0 *	43,0	mg/l	88%	-3,60
C	56,875 *	5,6	mg/l	117%	5,32
D			mg/l		
E	48,94	7,341	mg/l	101%	0,22
F	46,7	0,7	mg/l	96%	-1,22
G			mg/l		
H	50,9	5,8	mg/l	105%	1,48
I			mg/l		
J	46,8	4,7	mg/l	96%	-1,16
K	48,0	7,2	mg/l	99%	-0,39
L	47,0	6,1	mg/l	97%	-1,03
M	48,1	0,447	mg/l	99%	-0,32
N	48,4	3,9	mg/l	100%	-0,13
O	48,6	3,9	mg/l	100%	0,00
P	48,2	9,6	mg/l	99%	-0,26
Q	48,68	4,87	mg/l	100%	0,05
R	49,4		mg/l	102%	0,51
S	48,06	3,77	mg/l	99%	-0,35
T	48,4	8	mg/l	100%	-0,13
U	47,73	2,5	mg/l	98%	-0,56
V			mg/l		
W	53,48 *	5,348	mg/l	110%	3,14
X	46,8	4,68	mg/l	96%	-1,16
Y	48,5	2,9	mg/l	100%	-0,06
Z	47,37	1,66	mg/l	97%	-0,79
AA	48,44	4	mg/l	100%	-0,10
AB	48,3	4,83	mg/l	99%	-0,19
AC	50,27	3,02	mg/l	103%	1,07
AD	49,4	11,8	mg/l	102%	0,51
AE	48,47	4,36	mg/l	100%	-0,08
AF	46,3	6,9	mg/l	95%	-1,48
AG	48,2	1,9	mg/l	99%	-0,26
AH	46,7	2,78	mg/l	96%	-1,22
AI	48,82	4,882	mg/l	100%	0,14
AJ			mg/l		
AK			mg/l		
AL	54,7 *		mg/l	113%	3,92
AM	46,9	2,6	mg/l	97%	-1,09
AN			mg/l		
AQ	49,0	5,4	mg/l	101%	0,26
AP	48,6	4,4	mg/l	100%	0,00
AQ	48,0	4,8	mg/l	99%	-0,39
AR			mg/l		
AS	50,3	2,5	mg/l	103%	1,09
AT	53 *	3	mg/l	109%	2,83
AU	47,0	1,012	mg/l	97%	-1,03

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	48,7 $\pm$ 1,1	48,2 $\pm$ 0,5	mg/l
Recov. $\pm$ CI(99%)	100,2 $\pm$ 2,2	99,2 $\pm$ 1,1	%
SD between labs	2,4	1,1	mg/l
RSD between labs	5,0	2,3	%
n for calculation	39	34	



## Sample N166B

### Parameter Sodium

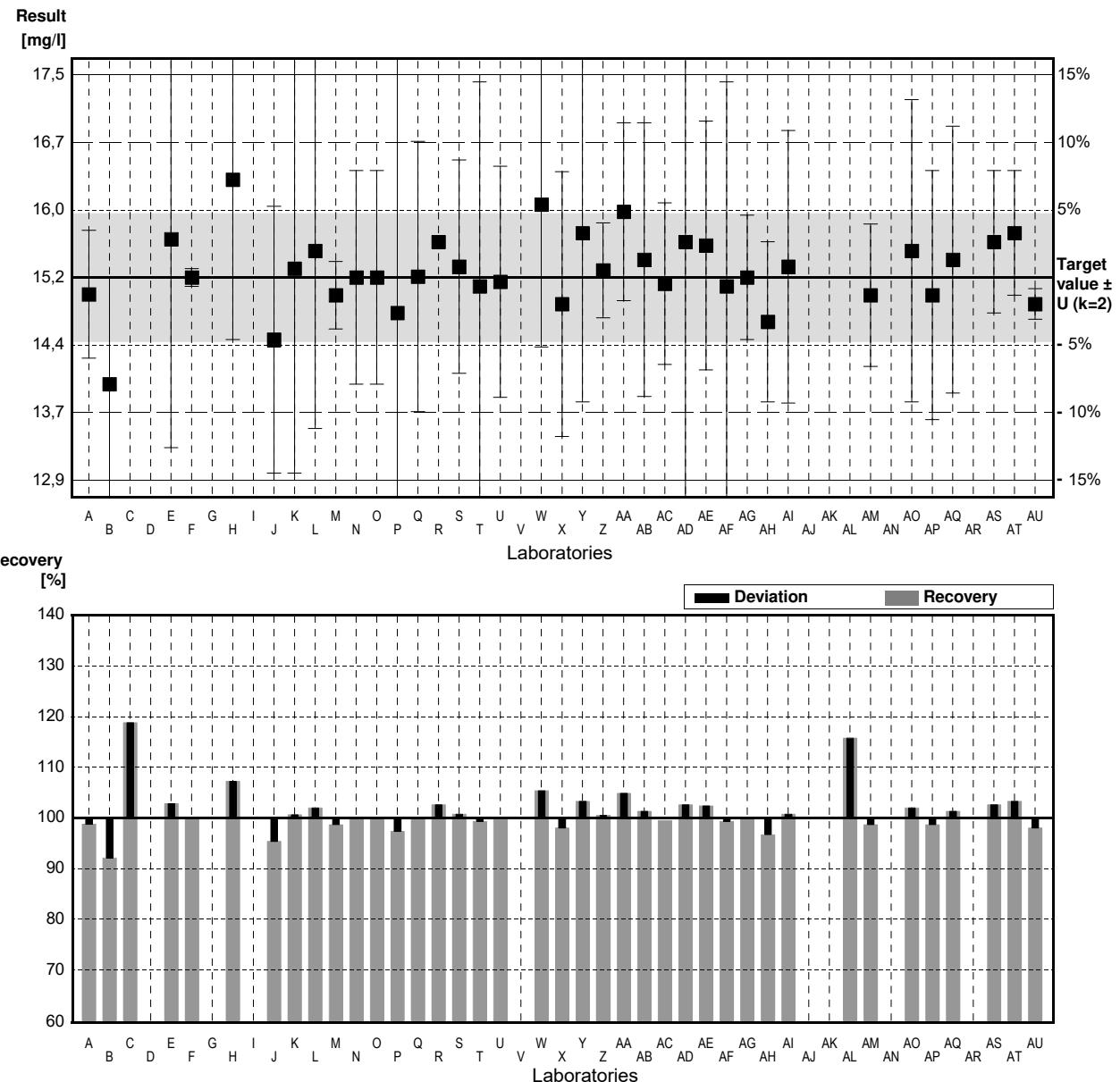
Target value  $\pm U(k=2)$  15,2 mg/l  $\pm$  0,7 mg/l

IFA result  $\pm U(k=2)$  15,4 mg/l  $\pm$  1,1 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	15.01	0.72	mg/l	99%	-0.39
B	14.0 *	1.2	mg/l	92%	-2.47
C	18.060 *	1.8	mg/l	119%	5.88
D			mg/l		
E	15.63	2,345	mg/l	103%	0.88
F	15.2	0.1	mg/l	100%	0.00
G			mg/l		
H	16.3	1.8	mg/l	107%	2.26
I			mg/l		
J	14.5	1.5	mg/l	95%	-1.44
K	15.3	2.3	mg/l	101%	0.21
L	15.5	2.0	mg/l	102%	0.62
M	15.0	0.379	mg/l	99%	-0.41
N	15.2	1.2	mg/l	100%	0.00
O	15.2	1.2	mg/l	100%	0.00
P	14.8	3.0	mg/l	97%	-0.82
Q	15.21	1.52	mg/l	100%	0.02
R	15.6		mg/l	103%	0.82
S	15.32	1.20	mg/l	101%	0.25
T	15.1	2.3	mg/l	99%	-0.21
U	15.15	1.3	mg/l	100%	-0.10
V			mg/l		
W	16.02	1.602	mg/l	105%	1.69
X	14.9	1.49	mg/l	98%	-0.62
Y	15.7	1.9	mg/l	103%	1.03
Z	15.28	0.535	mg/l	101%	0.16
AA	15.94	1	mg/l	105%	1.52
AB	15.4	1.54	mg/l	101%	0.41
AC	15.13	0.91	mg/l	100%	-0.14
AD	15.6	3.74	mg/l	103%	0.82
AE	15.56	1.40	mg/l	102%	0.74
AF	15.1	2.3	mg/l	99%	-0.21
AG	15.2	0.7	mg/l	100%	0.00
AH	14.7	0.90	mg/l	97%	-1.03
AI	15.32	1.532	mg/l	101%	0.25
AJ			mg/l		
AK			mg/l		
AL	17.6 *		mg/l	116%	4.93
AM	15.0	0.8	mg/l	99%	-0.41
AN			mg/l		
AO	15.5	1.7	mg/l	102%	0.62
AP	15.0	1.4	mg/l	99%	-0.41
AQ	15.4	1.5	mg/l	101%	0.41
AR			mg/l		
AS	15.6	0.8	mg/l	103%	0.82
AT	15.7	0.7	mg/l	103%	1.03
AU	14.9	0.173	mg/l	98%	-0.62

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	15,4 $\pm$ 0,3	15,3 $\pm$ 0,2	mg/l
Recov. $\pm$ CI(99%)	101,3 $\pm$ 2,0	100,7 $\pm$ 1,1	%
SD between labs	0,7	0,4	mg/l
RSD between labs	4,6	2,4	%
n for calculation	39	36	



# Sample N166A

## Parameter Potassium

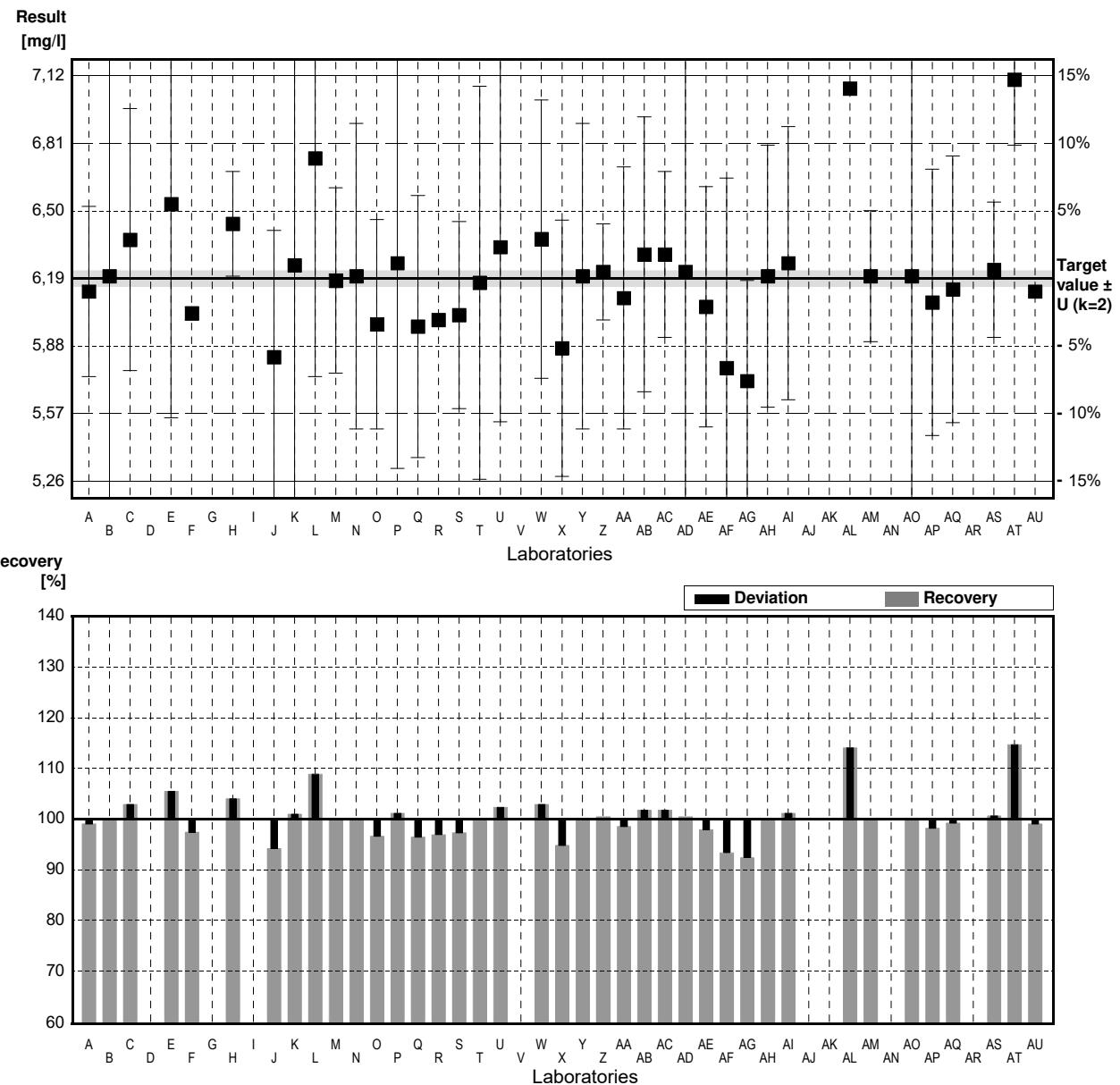
Target value  $\pm U$  ( $k=2$ ) 6,19 mg/l  $\pm$  0,04 mg/l

IFA result  $\pm U$  ( $k=2$ ) 6,4 mg/l  $\pm$  0,3 mg/l

### Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	6.13	0.39	mg/l	99%	-0.23
B	6.2	6.2	mg/l	100%	0.04
C	6.367	0.6	mg/l	103%	0.66
D			mg/l		
E	6.53	0.979	mg/l	105%	1.28
F	6.03	0.03	mg/l	97%	-0.60
G			mg/l		
H	6.44	0.24	mg/l	104%	0.94
I			mg/l		
J	5.83	0.58	mg/l	94%	-1.35
K	6.25	1.3	mg/l	101%	0.23
L	6.74 *	1.0	mg/l	109%	2.07
M	6.18	0.425	mg/l	100%	-0.04
N	6.2	0.7	mg/l	100%	0.04
O	5.98	0.48	mg/l	97%	-0.79
P	6.26	0.94	mg/l	101%	0.26
Q	5.97	0.60	mg/l	96%	-0.83
R	6.00		mg/l	97%	-0.71
S	6.022	0.429	mg/l	97%	-0.63
T	6.17	0.9	mg/l	100%	-0.08
U	6.333	0.8	mg/l	102%	0.54
V			mg/l		
W	6.37	0.637	mg/l	103%	0.68
X	5.87	0.587	mg/l	95%	-1.20
Y	6.2	0.7	mg/l	100%	0.04
Z	6.22	0.22	mg/l	100%	0.11
AA	6.10	0.6	mg/l	99%	-0.34
AB	6.3	0.63	mg/l	102%	0.41
AC	6.30	0.38	mg/l	102%	0.41
AD	6.22	1.93	mg/l	100%	0.11
AE	6.06	0.55	mg/l	98%	-0.49
AF	5.78	0.87	mg/l	93%	-1.54
AG	5.72 *	0.46	mg/l	92%	-1.77
AH	6.2	0.60	mg/l	100%	0.04
AI	6.26	0.626	mg/l	101%	0.26
AJ			mg/l		
AK			mg/l		
AL	7.06 *		mg/l	114%	3.27
AM	6.2	0.3	mg/l	100%	0.04
AN			mg/l		
AQ	6.2	1.0	mg/l	100%	0.04
AP	6.08	0.61	mg/l	98%	-0.41
AQ	6.14	0.61	mg/l	99%	-0.19
AR			mg/l		
AS	6.23	0.31	mg/l	101%	0.15
AT	7.1 *	0.3	mg/l	115%	3.42
AU	6.13	0.015	mg/l	99%	-0.23

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	6,21 $\pm$ 0,12	6,16 $\pm$ 0,08	mg/l
Recov. $\pm$ CI(99%)	100,4 $\pm$ 2,0	99,6 $\pm$ 1,2	%
SD between labs	0,28	0,16	mg/l
RSD between labs	4,5	2,7	%
n for calculation	39	35	



## Sample N166B

### Parameter Potassium

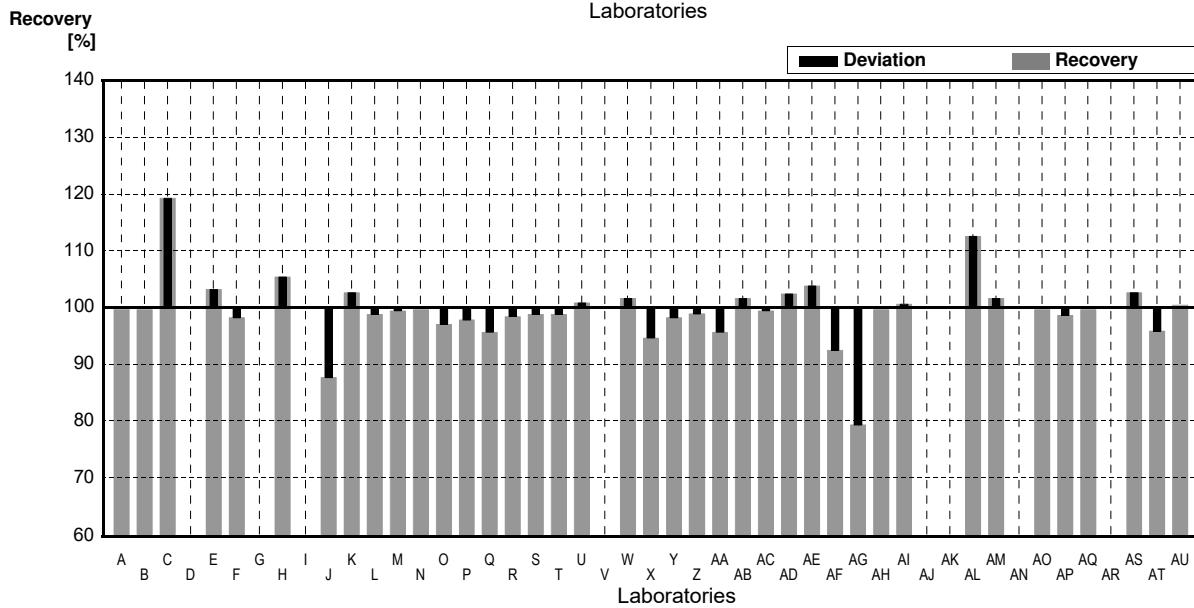
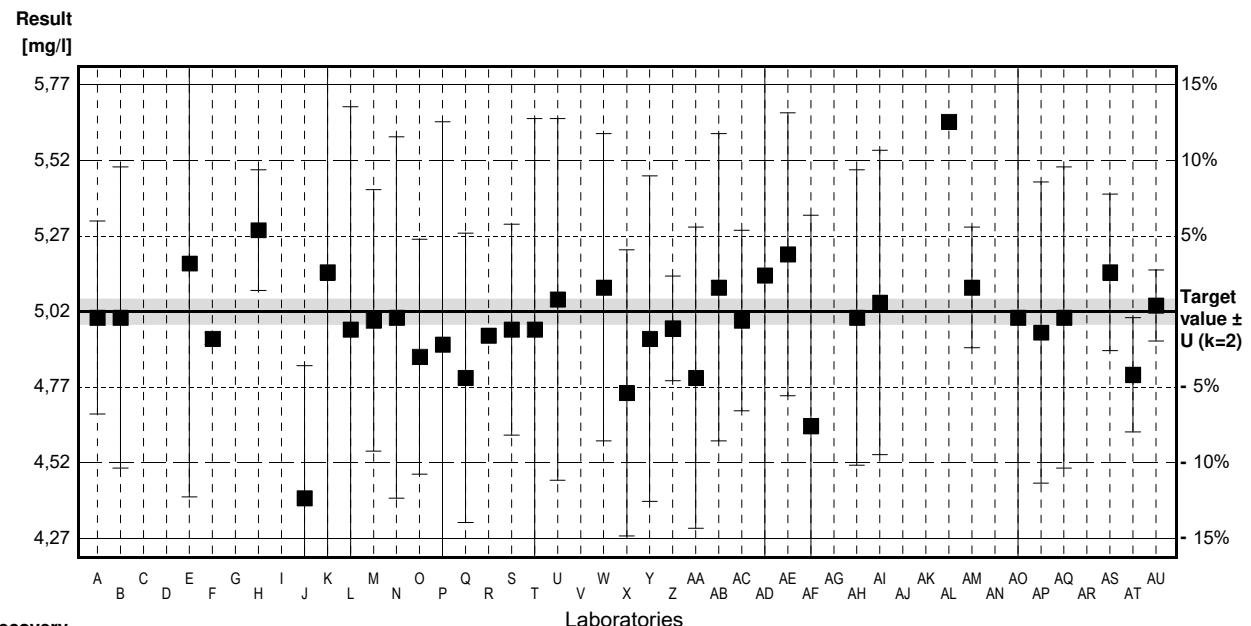
Target value  $\pm U$  ( $k=2$ ) 5,02 mg/l  $\pm$  0,04 mg/l

IFA result  $\pm U$  ( $k=2$ ) 5,3 mg/l  $\pm$  0,3 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	5.00	0.32	mg/l	100%	-0.09
B	5.0	0.5	mg/l	100%	-0.09
C	5.988 *	0.6	mg/l	119%	4.48
D			mg/l		
E	5.18	0.776	mg/l	103%	0.74
F	4.93	0.02	mg/l	98%	-0.42
G			mg/l		
H	5.29	0.2	mg/l	105%	1.25
I			mg/l		
J	4.40 *	0.44	mg/l	88%	-2.87
K	5.15	1.1	mg/l	103%	0.60
L	4.96	0.74	mg/l	99%	-0.28
M	4.99	0.434	mg/l	99%	-0.14
N	5.0	0.6	mg/l	100%	-0.09
O	4.87	0.39	mg/l	97%	-0.69
P	4.91	0.74	mg/l	98%	-0.51
Q	4.80	0.48	mg/l	96%	-1.02
R	4.94		mg/l	98%	-0.37
S	4.96	0.35	mg/l	99%	-0.28
T	4.96	0.7	mg/l	99%	-0.28
U	5.06	0.6	mg/l	101%	0.19
V			mg/l		
W	5.10	0.51	mg/l	102%	0.37
X	4.75	0.475	mg/l	95%	-1.25
Y	4.93	0.54	mg/l	98%	-0.42
Z	4.964	0.174	mg/l	99%	-0.26
AA	4.80	0.5	mg/l	96%	-1.02
AB	5.1	0.51	mg/l	102%	0.37
AC	4.99	0.30	mg/l	99%	-0.14
AD	5.14	1.59	mg/l	102%	0.56
AE	5.21	0.47	mg/l	104%	0.88
AF	4.64	0.70	mg/l	92%	-1.76
AG	3.98 *	0.32	mg/l	79%	-4.82
AH	5.0	0.49	mg/l	100%	-0.09
AI	5.05	0.505	mg/l	101%	0.14
AJ			mg/l		
AK			mg/l		
AL	5.65 *		mg/l	113%	2.92
AM	5.1	0.2	mg/l	102%	0.37
AN			mg/l		
AO	5.0	0.8	mg/l	100%	-0.09
AP	4.95	0.50	mg/l	99%	-0.32
AQ	5.00	0.50	mg/l	100%	-0.09
AR			mg/l		
AS	5.15	0.26	mg/l	103%	0.60
AT	4.81	0.19	mg/l	96%	-0.97
AU	5.04	0.118	mg/l	100%	0.09

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,99 $\pm$ 0,13	4,99 $\pm$ 0,06	mg/l
Recov. $\pm$ CI(99%)	99,5 $\pm$ 2,6	99,4 $\pm$ 1,2	%
SD between labs	0,30	0,13	mg/l
RSD between labs	6,0	2,7	%
n for calculation	39	35	



## Sample N166A

### Parameter Nitrate

Target value  $\pm U$  ( $k=2$ ) 5,20 mg/l  $\pm$  0,10 mg/l

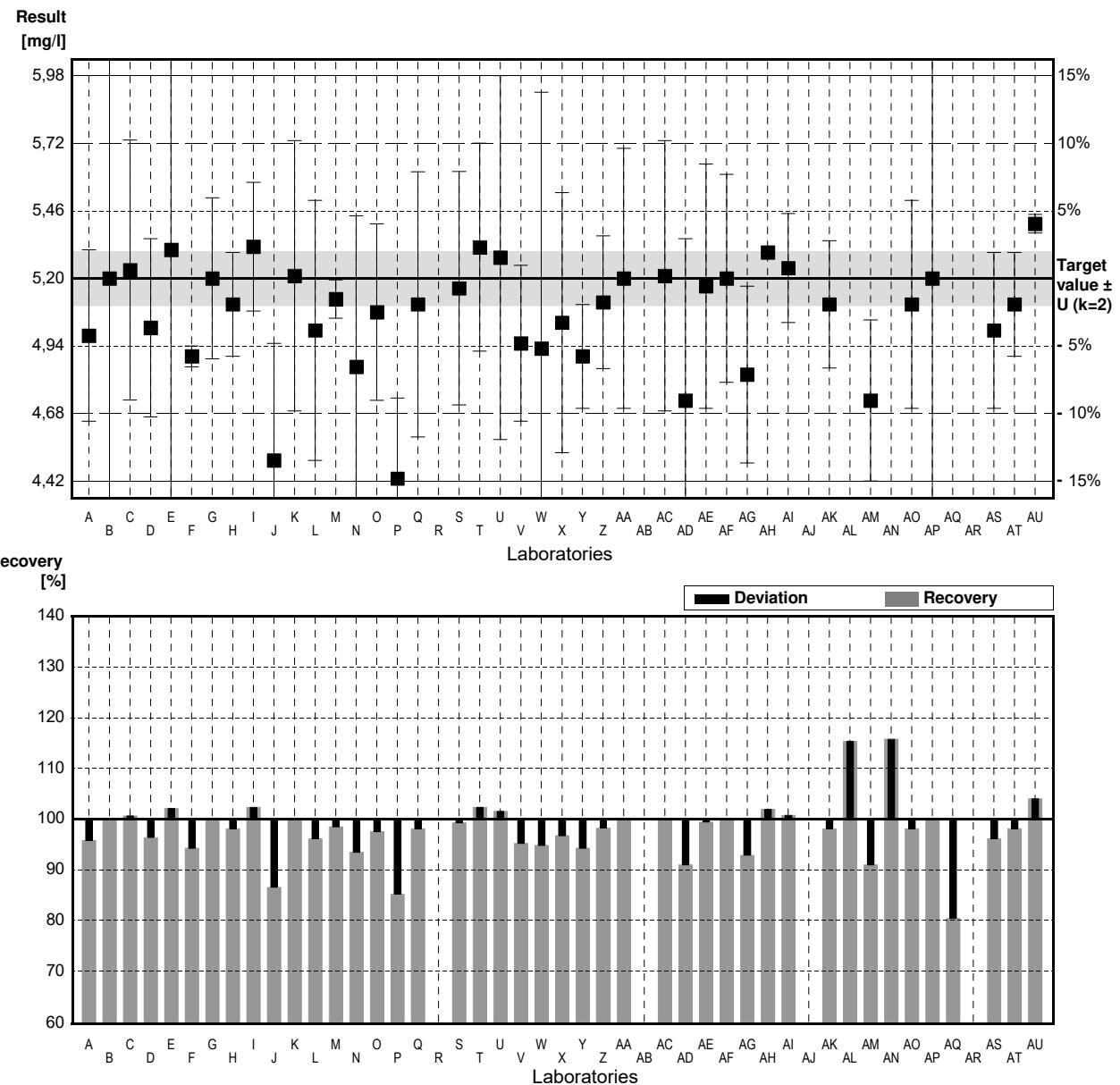
IFA result  $\pm U$  ( $k=2$ ) 5,3 mg/l  $\pm$  0,3 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	4.98	0.33	mg/l	96%	-1.36
B	5.2	5.2	mg/l	100%	0.00
C	5.232	0.5	mg/l	101%	0.20
D	5.01	0.343	mg/l	96%	-1.18
E	5.31	1.970	mg/l	102%	0.68
F	4.90	0.04	mg/l	94%	-1.86
G	5.20	0.31	mg/l	100%	0.00
H	5.1	0.2	mg/l	98%	-0.62
I	5.322	0.248	mg/l	102%	0.76
J	4.50 *	0.45	mg/l	87%	-4.34
K	5.21	0.52	mg/l	100%	0.06
L	5.00	0.50	mg/l	96%	-1.24
M	5.12	0.0737	mg/l	98%	-0.50
N	4.86	0.58	mg/l	93%	-2.11
O	5.07	0.34	mg/l	98%	-0.81
P	4.43 *	0.31	mg/l	85%	-4.78
Q	5.10	0.51	mg/l	98%	-0.62
R			mg/l		
S	5.162	0.449	mg/l	99%	-0.24
T	5.32	0.4	mg/l	102%	0.74
U	5.28	0.7	mg/l	102%	0.50
V	4.95	0.3	mg/l	95%	-1.55
W	4.93	0.986	mg/l	95%	-1.67
X	5.03	0.50	mg/l	97%	-1.05
Y	4.90	0.2	mg/l	94%	-1.86
Z	5.108	0.255	mg/l	98%	-0.57
AA	5.2	0.5	mg/l	100%	0.00
AB			mg/l		
AC	5.21	0.52	mg/l	100%	0.06
AD	4.73	0.623	mg/l	91%	-2.92
AE	5.17	0.47	mg/l	99%	-0.19
AF	5.2	0.4	mg/l	100%	0.00
AG	4.83	0.34	mg/l	93%	-2.30
AH	5.3		mg/l	102%	0.62
AI	5.24	0.2095	mg/l	101%	0.25
AJ			mg/l		
AK	5.1	0.245	mg/l	98%	-0.62
AL	6.0 *		mg/l	115%	4.96
AM	4.73	0.31	mg/l	91%	-2.92
AN	6.02 *	0.386	mg/l	116%	5.09
AQ	5.1	0.4	mg/l	98%	-0.62
AP	5.2	0.9	mg/l	100%	0.00
AQ	4.18 *	0.42	mg/l	80%	-6.33
AR			mg/l		
AS	5.0	0.3	mg/l	96%	-1.24
AT	5.1	0.2	mg/l	98%	-0.62
AU	5.41	0.036	mg/l	104%	1.30

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	5,09 $\pm$ 0,13	5,10 $\pm$ 0,07	mg/l
Recov. $\pm$ CI(99%)	97,9 $\pm$ 2,5	98,1 $\pm$ 1,4	%
SD between labs	0,32	0,17	mg/l
RSD between labs	6,3	3,2	%
n for calculation	43	38	



## Sample N166B

### Parameter Nitrate

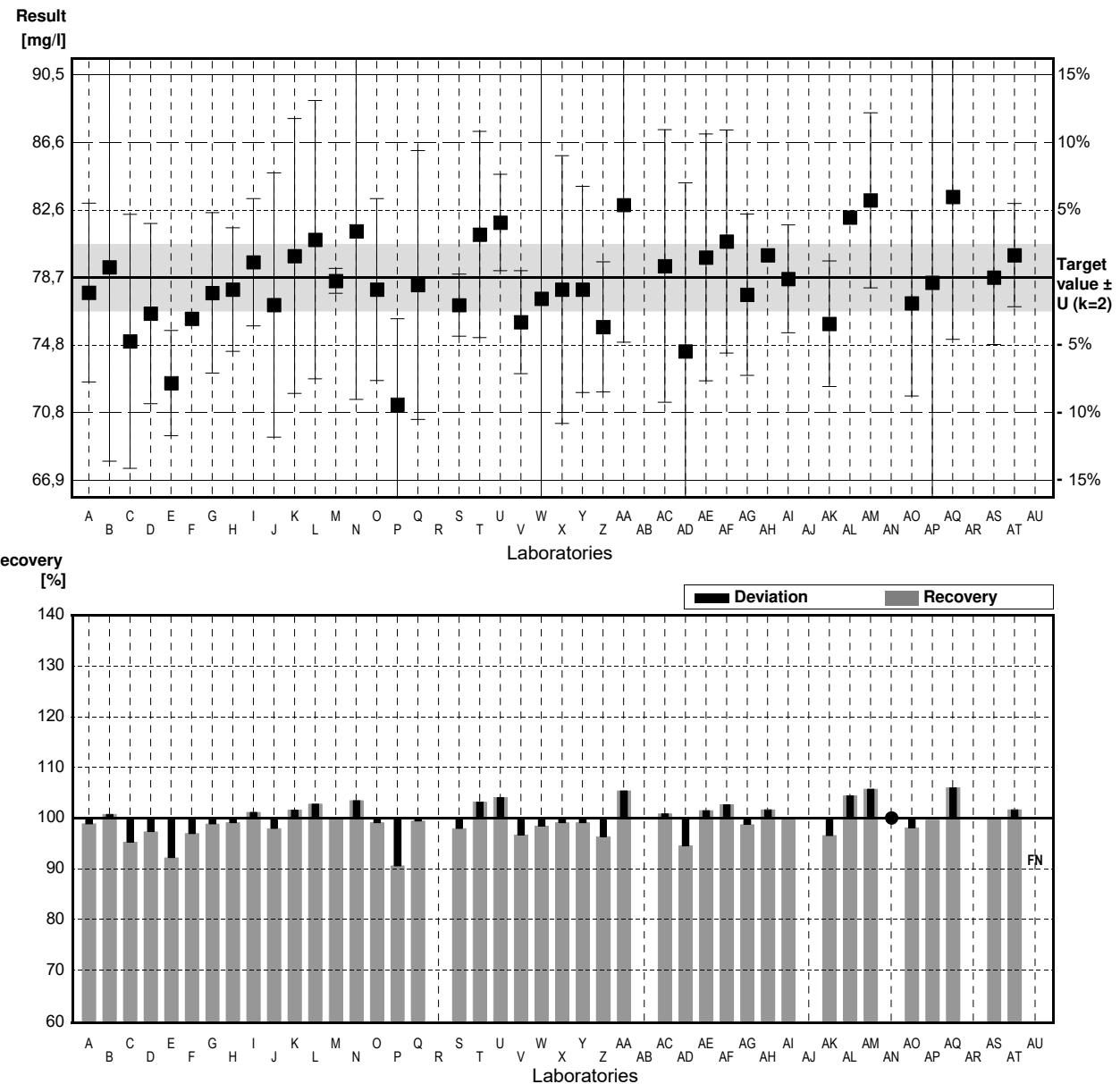
Target value  $\pm U$  ( $k=2$ ) 78,7 mg/l  $\pm$  1,9 mg/l

IFA result  $\pm U$  ( $k=2$ ) 79 mg/l  $\pm$  4 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	77.82	5.21	mg/l	99%	-0.36
B	79.3	11.3	mg/l	101%	0.25
C	74.978	7.4	mg/l	95%	-1.53
D	76.6	5.25	mg/l	97%	-0.86
E	72.55	3.063	mg/l	92%	-2.52
F	76.3	0.3	mg/l	97%	-0.98
G	77.8	4.67	mg/l	99%	-0.37
H	78.0	3.6	mg/l	99%	-0.29
I	79.59	3.709	mg/l	101%	0.36
J	77.1	7.7	mg/l	98%	-0.66
K	79.95	8.0	mg/l	102%	0.51
L	80.9	8.1	mg/l	103%	0.90
M	78.5	0.724	mg/l	100%	-0.08
N	81.4	9.8	mg/l	103%	1.11
O	78.0	5.3	mg/l	99%	-0.29
P	71.3	5.0	mg/l	91%	-3.03
Q	78.26	7.83	mg/l	99%	-0.18
R			mg/l		
S	77.09	1.81	mg/l	98%	-0.66
T	81.2	6	mg/l	103%	1.02
U	81.9	2.8	mg/l	104%	1.31
V	76.1	3.0	mg/l	97%	-1.07
W	77.47	15.49	mg/l	98%	-0.50
X	78	7.8	mg/l	99%	-0.29
Y	78	6	mg/l	99%	-0.29
Z	75.82	3.791	mg/l	96%	-1.18
AA	82.92	8	mg/l	105%	1.73
AB			mg/l		
AC	79.37	7.94	mg/l	101%	0.27
AD	74.4	9.81	mg/l	95%	-1.76
AE	79.87	7.19	mg/l	101%	0.48
AF	80.8	6.5	mg/l	103%	0.86
AG	77.7	4.7	mg/l	99%	-0.41
AH	80		mg/l	102%	0.53
AI	78.620	3.1448	mg/l	100%	-0.03
AJ			mg/l		
AK	76	3.66	mg/l	97%	-1.11
AL	82.2		mg/l	104%	1.43
AM	83.2	5.1	mg/l	106%	1.84
AN	>30		mg/l	*	
AO	77.2	5.4	mg/l	98%	-0.61
AP	78.4	14.1	mg/l	100%	-0.12
AQ	83.4	8.3	mg/l	106%	1.93
AR			mg/l		
AS	78.7	3.9	mg/l	100%	0.00
AT	80	3	mg/l	102%	0.53
AU	<0.10		mg/l	FN	

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	78,5 $\pm$ 1,1	78,5 $\pm$ 1,1	mg/l
Recov. $\pm$ CI(99%)	99,7 $\pm$ 1,4	99,7 $\pm$ 1,4	%
SD between labs	2,7	2,7	mg/l
RSD between labs	3,4	3,4	%
n for calculation	41	41	



# Sample N166A

## Parameter Nitrite

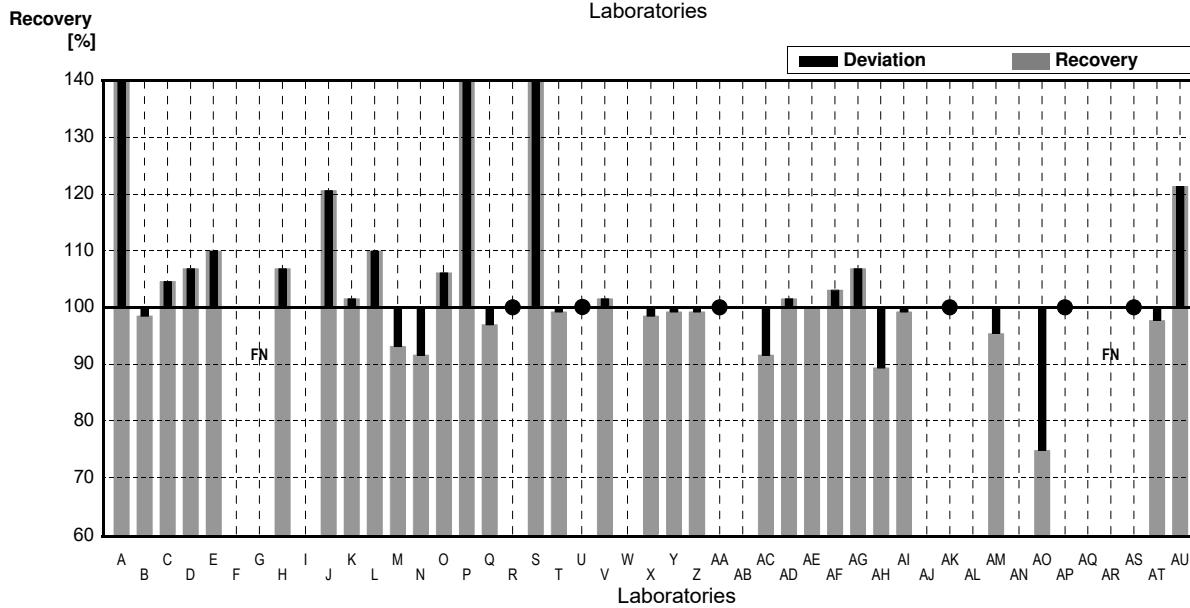
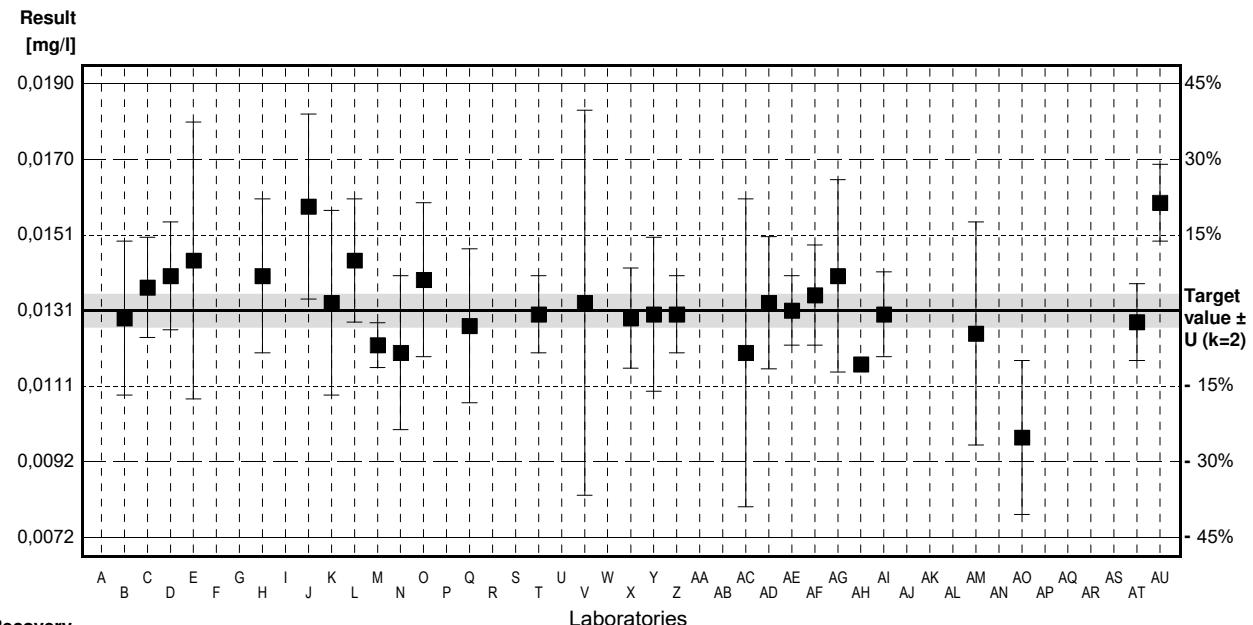
Target value  $\pm U$  ( $k=2$ ) 0,0131 mg/l  $\pm$  0,0004 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,0133 mg/l  $\pm$  0,0007 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,0125 mg/l  $\pm$  0,0006 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0,0190 *	0,001	mg/l	145%	8,34
B	0,0129	0,002	mg/l	98%	-0,28
C	0,0137	0,0013	mg/l	105%	0,85
D	0,0140	0,0014	mg/l	107%	1,27
E	0,0144	0,0036	mg/l	110%	1,84
F		mg/l			
G	<0,003		mg/l	FN	
H	0,0140	0,002	mg/l	107%	1,27
I		mg/l			
J	0,0158	0,0024	mg/l	121%	3,82
K	0,0133	0,0024	mg/l	102%	0,28
L	0,0144	0,0016	mg/l	110%	1,84
M	0,0122	0,00058	mg/l	93%	-1,27
N	0,0120	0,002	mg/l	92%	-1,55
O	0,0139	0,0020	mg/l	106%	1,13
P	0,060 *	0,012	mg/l	458%	66,30
Q	0,0127	0,002	mg/l	97%	-0,57
R	<0,05		mg/l	*	
S	0,0400 *	0,0056	mg/l	305%	38,03
T	0,0130	0,001	mg/l	99%	-0,14
U	<0,01	0,02	mg/l	*	
V	0,0133	0,005	mg/l	102%	0,28
W		mg/l			
X	0,0129	0,0013	mg/l	98%	-0,28
Y	0,0130	0,002	mg/l	99%	-0,14
Z	0,0130	0,001	mg/l	99%	-0,14
AA	<0,024		mg/l	*	
AB		mg/l			
AC	0,0120	0,004	mg/l	92%	-1,55
AD	0,0133	0,00172	mg/l	102%	0,28
AE	0,0131	0,0009	mg/l	100%	0,00
AF	0,0135	0,0013	mg/l	103%	0,57
AG	0,0140	0,0025	mg/l	107%	1,27
AH	0,0117		mg/l	89%	-1,98
AI	0,0130	0,0011	mg/l	99%	-0,14
AJ		mg/l			
AK	<0,0300		mg/l	*	
AL		mg/l			
AM	0,0125	0,0029	mg/l	95%	-0,85
AN		mg/l			
AO	0,0098 *	0,002	mg/l	75%	-4,66
AP	<0,020		mg/l	*	
AQ	<0,005		mg/l	FN	
AR	<0,02		mg/l	*	
AS	<0,02		mg/l	*	
AT	0,0128	0,0010	mg/l	98%	-0,42
AU	0,0159	0,001	mg/l	121%	3,96

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0158 $\pm$ 0,0048	0,0133 $\pm$ 0,0005	mg/l
Recov. $\pm$ CI(99%)	120,4 $\pm$ 36,3	101,9 $\pm$ 4,1	%
SD between labs	0,0096	0,0010	mg/l
RSD between labs	61,0	7,6	%
n for calculation	31	27	



## Sample N166B

### Parameter Nitrite

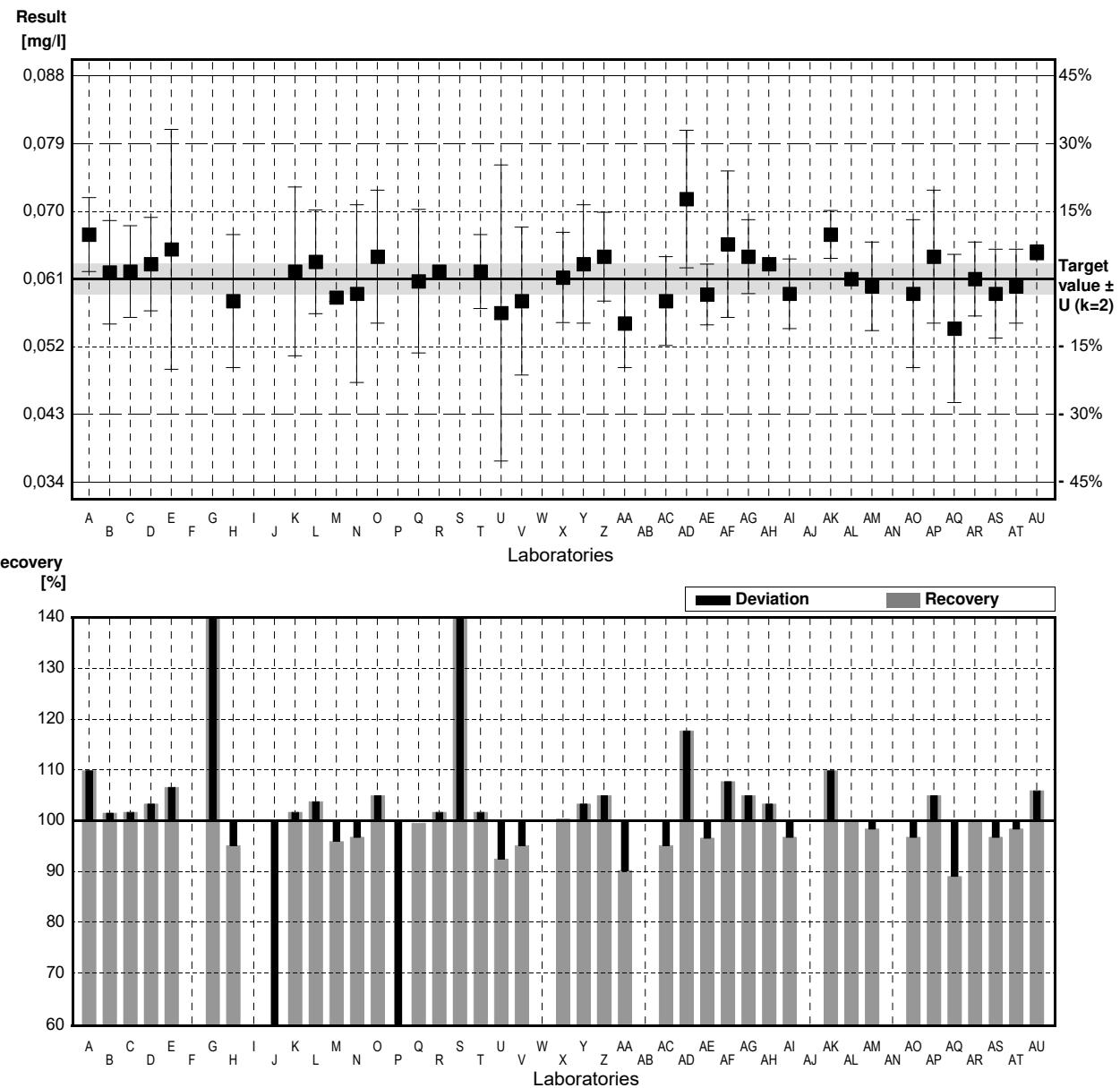
Target value  $\pm U$  ( $k=2$ ) 0,061 mg/l  $\pm$  0,002 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,061 mg/l  $\pm$  0,003 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,061 mg/l  $\pm$  0,003 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0.067	0.005	mg/l	110%	1.82
B	0.0619	0.007	mg/l	101%	0.27
C	0.0620	0.0062	mg/l	102%	0.30
D	0.063	0.0063	mg/l	103%	0.61
E	0.065	0.0162	mg/l	107%	1.21
F		mg/l			
G	0.59 *	0.03	mg/l	967%	160.60
H	0.058	0.009	mg/l	95%	-0.91
I		mg/l			
J	0.0198 *	0.0030	mg/l	32%	-12.51
K	0.0620	0.0114	mg/l	102%	0.30
L	0.0633	0.0070	mg/l	104%	0.70
M	0.0585	0.00054	mg/l	96%	-0.76
N	0.059	0.012	mg/l	97%	-0.61
O	0.064	0.009	mg/l	105%	0.91
P	0.0140 *	0.003	mg/l	23%	-14.27
Q	0.0607	0.0097	mg/l	100%	-0.09
R	0.062		mg/l	102%	0.30
S	0.104 *	0.015	mg/l	170%	13.05
T	0.062	0.005	mg/l	102%	0.30
U	0.0564	0.02	mg/l	92%	-1.40
V	0.0580	0.010	mg/l	95%	-0.91
W		mg/l			
X	0.0612	0.0061	mg/l	100%	0.06
Y	0.063	0.008	mg/l	103%	0.61
Z	0.0640	0.006	mg/l	105%	0.91
AA	0.055	0.006	mg/l	90%	-1.82
AB		mg/l			
AC	0.058	0.006	mg/l	95%	-0.91
AD	0.0718	0.00929	mg/l	118%	3.28
AE	0.0589	0.0041	mg/l	97%	-0.64
AF	0.0657	0.0099	mg/l	108%	1.43
AG	0.064	0.005	mg/l	105%	0.91
AH	0.063		mg/l	103%	0.61
AI	0.059	0.0047	mg/l	97%	-0.61
AJ		mg/l			
AK	0.0670	0.00322	mg/l	110%	1.82
AL	0.061		mg/l	100%	0.00
AM	0.060	0.006	mg/l	98%	-0.30
AN		mg/l			
AQ	0.059	0.01	mg/l	97%	-0.61
AP	0.064	0.009	mg/l	105%	0.91
AQ	0.0543	0.01	mg/l	89%	-2.03
AR	0.061	0.005	mg/l	100%	0.00
AS	0.059	0.006	mg/l	97%	-0.61
AT	0.060	0.005	mg/l	98%	-0.30
AU	0.0646	0.001	mg/l	106%	1.09

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,073 $\pm$ 0,035	0,062 $\pm$ 0,002	mg/l
Recov. $\pm$ CI(99%)	120,1 $\pm$ 57,8	100,9 $\pm$ 2,6	%
SD between labs	0,084	0,004	mg/l
RSD between labs	114,2	5,7	%
n for calculation	41	37	



# Sample N166A

## Parameter Ammonium

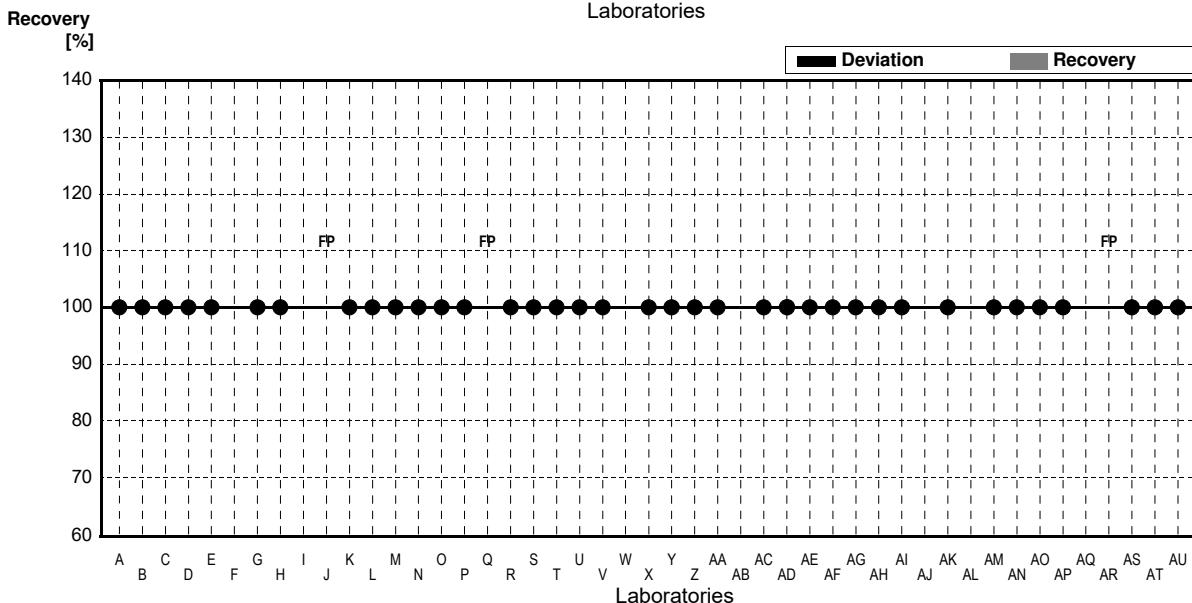
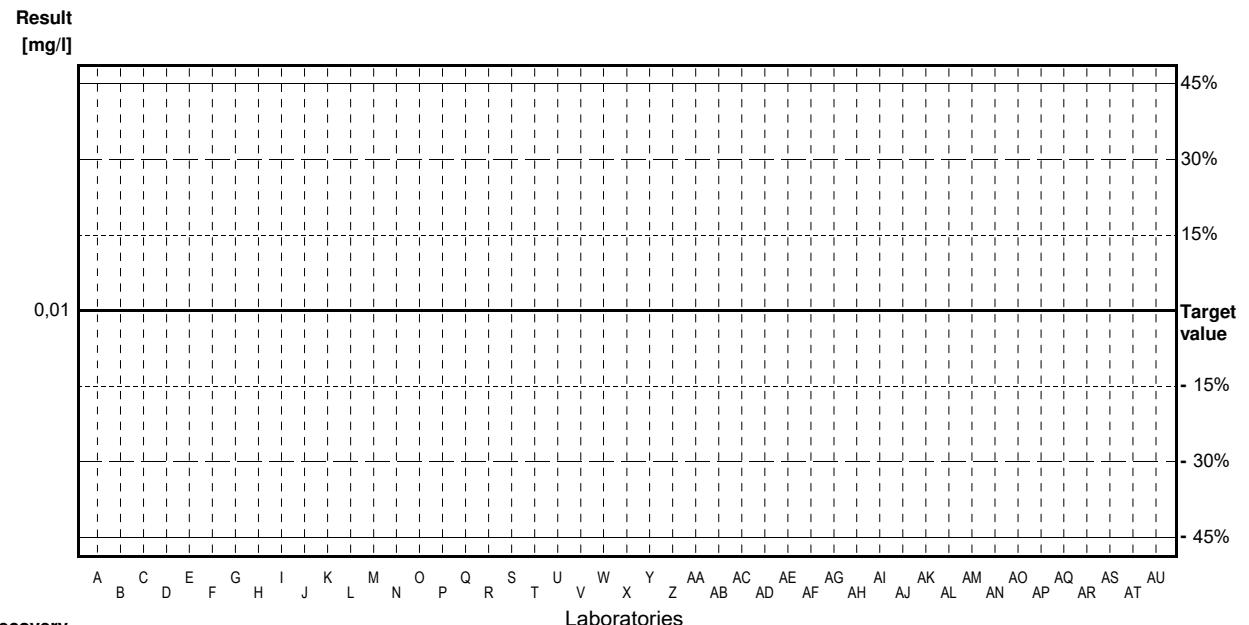
Target value <0,01 mg/l

IFA result <0,01 mg/l

Stability test <0,01 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	<0,005	0,000	mg/l	.	
B	<0,01		mg/l	.	
C	<0,0090		mg/l	.	
D	0,0061	0,00093	mg/l	.	
E	<0,10		mg/l	.	
F			mg/l		
G	<0,003		mg/l	.	
H	<0,01		mg/l	.	
I			mg/l		
J	0,0231	0,0035	mg/l	FP	
K	<0,010		mg/l	.	
L	<0,01		mg/l	.	
M	<0,0100		mg/l	.	
N	<0,020		mg/l	.	
O	<0,01		mg/l	.	
P	<0,3		mg/l	.	
Q	0,0160	0,0032	mg/l	FP	
R	<0,05		mg/l	.	
S	0,00200	0,0003	mg/l	.	
T	<0,013		mg/l	.	
U	<0,05	0,03	mg/l	.	
V	<0,02	0,005	mg/l	.	
W			mg/l		
X	<0,01		mg/l	.	
Y	<0,02		mg/l	.	
Z	<0,010		mg/l	.	
AA	<0,04		mg/l	.	
AB			mg/l		
AC	<0,02		mg/l	.	
AD	0,0103	0,00181	mg/l	.	
AE	<0,010		mg/l	.	
AF	<0,0129	0,0032	mg/l	.	
AG	<0,008		mg/l	.	
AH	<0,04		mg/l	.	
AI	<0,0052		mg/l	.	
AJ			mg/l		
AK	<0,0300		mg/l	.	
AL			mg/l		
AM	<0,010		mg/l	.	
AN	<0,01		mg/l	.	
AO	<0,04		mg/l	.	
AP	<0,010		mg/l	.	
AQ			mg/l		
AR	0,0156	0,002	mg/l	FP	
AS	<0,03		mg/l	.	
AT	<0,02		mg/l	.	
AU	<0,015		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 N166B

### Parameter Ammonium

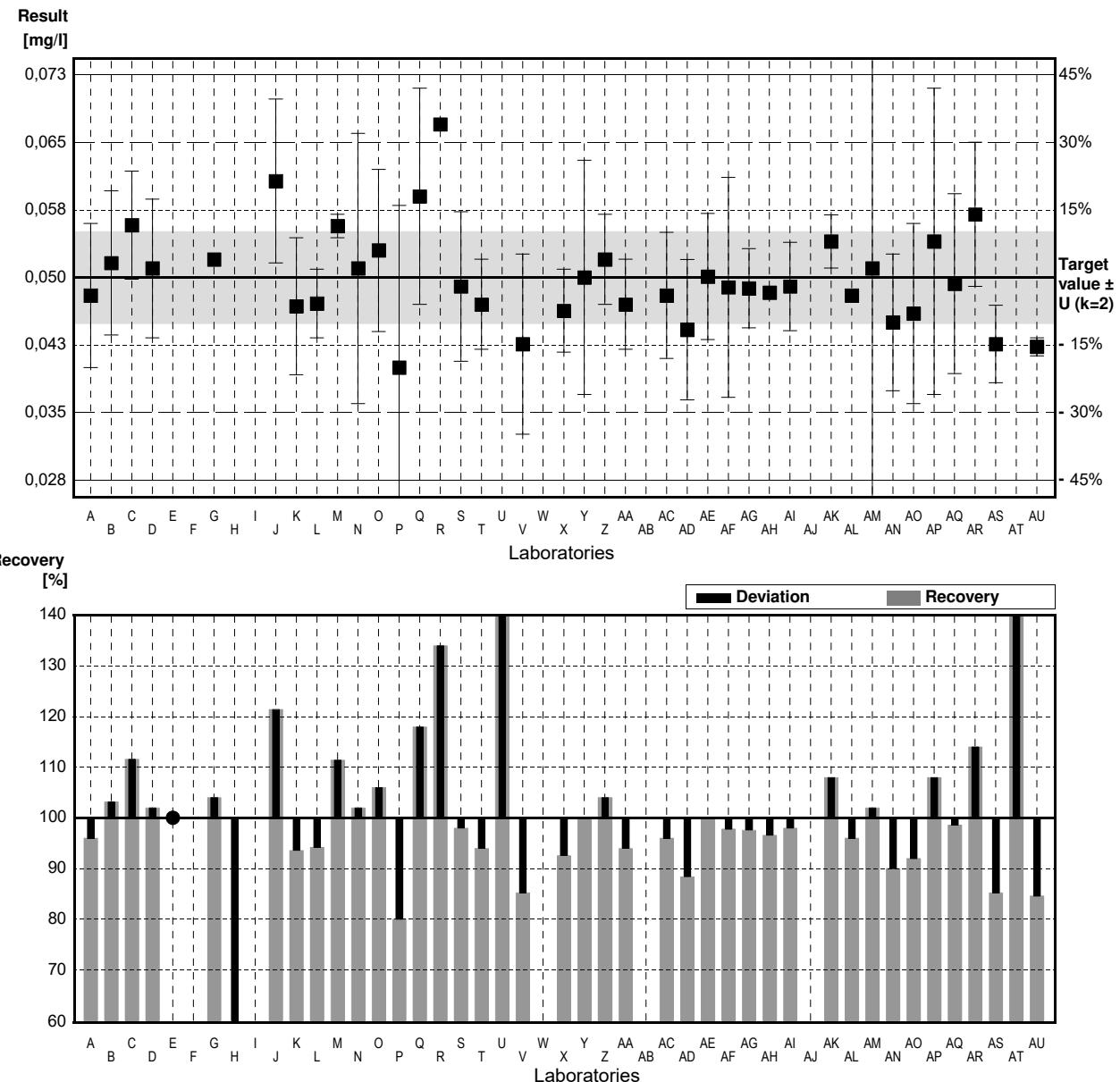
Target value  $\pm U$  ( $k=2$ ) 0,050 mg/l  $\pm$  0,005 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,0493 mg/l  $\pm$  0,0021 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,050 mg/l  $\pm$  0,002 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0.0480	0.008	mg/l	96%	-0.36
B	0.0516	0.008	mg/l	103%	0.29
C	0.0558	0.006	mg/l	112%	1.05
D	0.051	0.0077	mg/l	102%	0.18
E	<0,10		mg/l	*	
F			mg/l		
G	0.052		mg/l	104%	0.36
H	0.0250 *	0.006	mg/l	50%	-4.55
I			mg/l		
J	0.0607	0.0091	mg/l	121%	1.95
K	0.0468	0.0076	mg/l	94%	-0.58
L	0.0471	0.0038	mg/l	94%	-0.53
M	0.0557	0.00131	mg/l	111%	1.04
N	0.051	0.015	mg/l	102%	0.18
O	0.053	0.009	mg/l	106%	0.55
P	0.0400	0.018	mg/l	80%	-1.82
Q	0.059	0.012	mg/l	118%	1.64
R	0.067 *		mg/l	134%	3.09
S	0.0490	0.0083	mg/l	98%	-0.18
T	0.0470	0.005	mg/l	94%	-0.55
U	0.1322 *	0.03	mg/l	264%	14.95
V	0.0426	0.010	mg/l	85%	-1.35
W			mg/l		
X	0.0463	0.0046	mg/l	93%	-0.67
Y	0.050	0.013	mg/l	100%	0.00
Z	0.0520	0.005	mg/l	104%	0.36
AA	0.0470	0.005	mg/l	94%	-0.55
AB			mg/l		
AC	0.0480	0.007	mg/l	96%	-0.36
AD	0.0442	0.00779	mg/l	88%	-1.05
AE	0.0501	0.0070	mg/l	100%	0.02
AF	0.0489	0.0122	mg/l	98%	-0.20
AG	0.0488	0.0044	mg/l	98%	-0.22
AH	0.0483		mg/l	97%	-0.31
AI	0.0490	0.0049	mg/l	98%	-0.18
AJ			mg/l		
AK	0.0540	0.00296	mg/l	108%	0.73
AL	0.0480		mg/l	96%	-0.36
AM	0.051	0.10	mg/l	102%	0.18
AN	0.0450	0.0076	mg/l	90%	-0.91
AO	0.0460	0.01	mg/l	92%	-0.73
AP	0.054	0.017	mg/l	108%	0.73
AQ	0.0493	0.01	mg/l	99%	-0.13
AR	0.057	0.008	mg/l	114%	1.27
AS	0.0426	0.0043	mg/l	85%	-1.35
AT	0.481 *	0.058	mg/l	962%	78.36
AU	0.0423	0.001	mg/l	85%	-1.40

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,062 $\pm$ 0,029	0,050 $\pm$ 0,002	mg/l
Recov. $\pm$ CI(99%)	123,8 $\pm$ 57,9	99,0 $\pm$ 4,1	%
SD between labs	0,069	0,005	mg/l
RSD between labs	110,9	9,3	%
n for calculation	41	37	



# Sample N166A

## Parameter Chloride

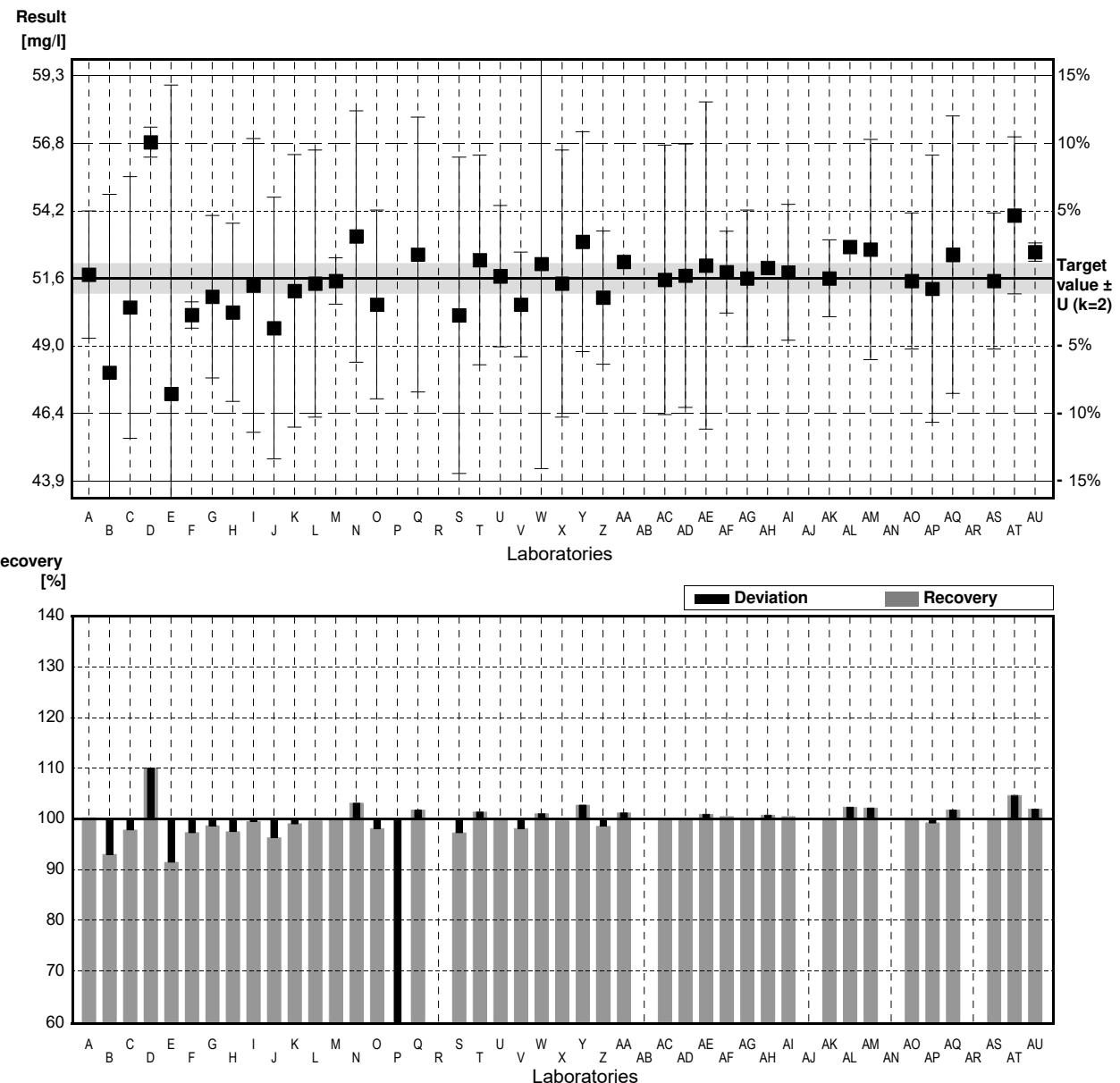
Target value  $\pm U$  ( $k=2$ ) 51,6 mg/l  $\pm$  0,6 mg/l

IFA result  $\pm U$  ( $k=2$ ) 51,3 mg/l  $\pm$  1,9 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	51.74	2.43	mg/l	100%	0.09
B	48,0 *	6.8	mg/l	93%	-2.41
C	50.490	5.0	mg/l	98%	-0.74
D	56,8 *	0.58	mg/l	110%	3.48
E	47,19 *	11.796	mg/l	91%	-2.95
F	50,2	0.5	mg/l	97%	-0.94
G	50,9	3.10	mg/l	99%	-0.47
H	50,3	3.4	mg/l	97%	-0.87
I	51,33	5.610	mg/l	99%	-0.18
J	49,7	5.0	mg/l	96%	-1.27
K	51,12	5.2	mg/l	99%	-0.32
L	51,4	5.1	mg/l	100%	-0.13
M	51,5	0.886	mg/l	100%	-0.07
N	53,2	4.8	mg/l	103%	1.07
O	50,6	3.6	mg/l	98%	-0.67
P	20,2 *	4.0	mg/l	39%	-20.98
Q	52,51	5.25	mg/l	102%	0.61
R			mg/l		
S	50,19	6,04	mg/l	97%	-0.94
T	52,3	4	mg/l	101%	0.47
U	51,68	2,7	mg/l	100%	0.05
V	50,6	2,0	mg/l	98%	-0.67
W	52,15	7,82	mg/l	101%	0.37
X	51,4	5,1	mg/l	100%	-0.13
Y	53	4,2	mg/l	103%	0.94
Z	50,865	2,544	mg/l	99%	-0.49
AA	52,23		mg/l	101%	0.42
AB			mg/l		
AC	51,54	5,15	mg/l	100%	-0.04
AD	51,7	5,03	mg/l	100%	0.07
AE	52,09	6,25	mg/l	101%	0.33
AF	51,84	1,56	mg/l	100%	0.16
AG	51,6	2,6	mg/l	100%	0.00
AH	52		mg/l	101%	0.27
AI	51,83	2,592	mg/l	100%	0.15
AJ			mg/l		
AK	51,6	1,47	mg/l	100%	0.00
AL	52,8		mg/l	102%	0.80
AM	52,7	4,2	mg/l	102%	0.74
AN			mg/l		
AO	51,5	2,6	mg/l	100%	-0.07
AP	51,2	5,1	mg/l	99%	-0.27
AQ	52,5	5,3	mg/l	102%	0.60
AR			mg/l		
AS	51,5	2,6	mg/l	100%	-0.07
AT	54	3	mg/l	105%	1.60
AU	52,6	0,352	mg/l	102%	0.67

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	50,8 $\pm$ 2,1	51,6 $\pm$ 0,4	mg/l
Recov. $\pm$ CI(99%)	98,5 $\pm$ 4,1	100,1 $\pm$ 0,8	%
SD between labs	5,1	0,9	mg/l
RSD between labs	10,0	1,8	%
n for calculation	42	38	



## Sample N166B

### Parameter Chloride

Target value  $\pm U$  ( $k=2$ ) 17,5 mg/l  $\pm$  0,4 mg/l

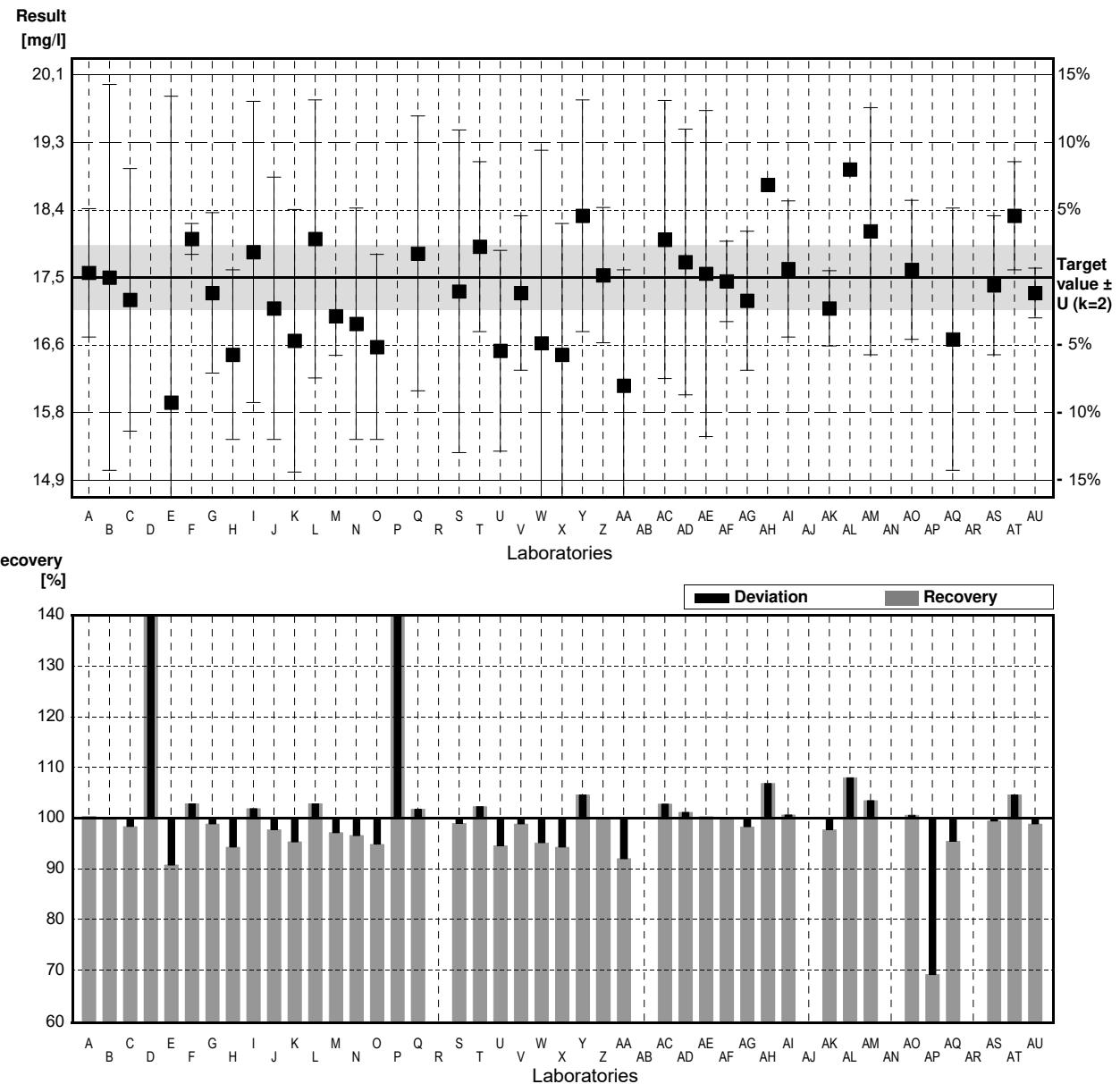
IFA result  $\pm U$  ( $k=2$ ) 17,5 mg/l  $\pm$  0,7 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	17.56	0.83	mg/l	100%	0.12
B	17.5	2.5	mg/l	100%	0.00
C	17.209	1.7	mg/l	98%	-0.57
D	25.9 *	0.26	mg/l	148%	16.55
E	15.88	3.969	mg/l	91%	-3.19
F	18.0	0.2	mg/l	103%	0.99
G	17.3	1.04	mg/l	99%	-0.39
H	16.5	1.1	mg/l	94%	-1.97
I	17.83	1.949	mg/l	102%	0.65
J	17.1	1.7	mg/l	98%	-0.79
K	16.68	1.7	mg/l	95%	-1.62
L	18.0	1.8	mg/l	103%	0.99
M	17.0	0.509	mg/l	97%	-0.99
N	16.9	1.5	mg/l	97%	-1.18
O	16.6	1.2	mg/l	95%	-1.77
P	53.2 *	10.6	mg/l	304%	70.34
Q	17.81	1.78	mg/l	102%	0.61
R			mg/l		
S	17.32	2.09	mg/l	99%	-0.35
T	17.9	1.1	mg/l	102%	0.79
U	16.55	1.3	mg/l	95%	-1.87
V	17.3	1.0	mg/l	99%	-0.39
W	16.65	2.498	mg/l	95%	-1.67
X	16.5	1.7	mg/l	94%	-1.97
Y	18.3	1.5	mg/l	105%	1.58
Z	17.529	0.876	mg/l	100%	0.06
AA	16.1	1.5	mg/l	92%	-2.76
AB			mg/l		
AC	17.99	1.80	mg/l	103%	0.97
AD	17.7	1.72	mg/l	101%	0.39
AE	17.55	2.11	mg/l	100%	0.10
AF	17.45	0.52	mg/l	100%	-0.10
AG	17.2	0.9	mg/l	98%	-0.59
AH	18.7		mg/l	107%	2.36
AI	17.61	0.881	mg/l	101%	0.22
AJ			mg/l		
AK	17.1	0.488	mg/l	98%	-0.79
AL	18.9		mg/l	108%	2.76
AM	18.1	1.6	mg/l	103%	1.18
AN			mg/l		
AQ	17.6	0.9	mg/l	101%	0.20
AP	12.1 *	1.2	mg/l	69%	-10.64
AQ	16.7	1.7	mg/l	95%	-1.58
AR			mg/l		
AS	17.4	0.9	mg/l	99%	-0.20
AT	18.3	0.7	mg/l	105%	1.58
AU	17.3	0.322	mg/l	99%	-0.39

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	18,3 $\pm$ 2,4	17,4 $\pm$ 0,3	mg/l
Recov. $\pm$ CI(99%)	104,6 $\pm$ 13,7	99,3 $\pm$ 1,7	%
SD between labs	5,8	0,7	mg/l
RSD between labs	31,5	3,9	%
n for calculation	42	39	



## Sample N166A

### Parameter Sulphate

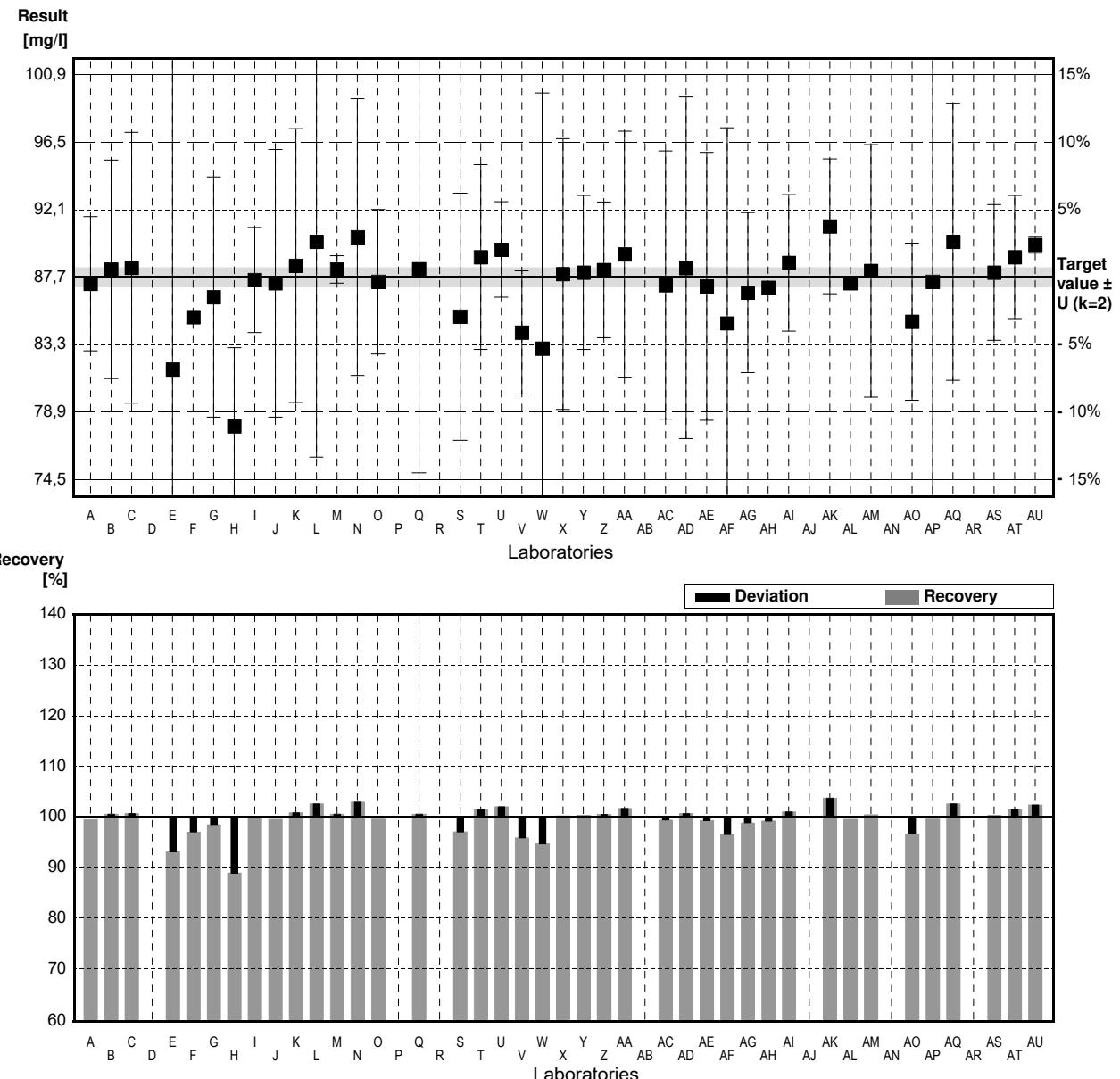
Target value  $\pm U$  ( $k=2$ ) 87,7 mg/l  $\pm$  0,6 mg/l

IFA result  $\pm U$  ( $k=2$ ) 88 mg/l  $\pm$  2 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	87,27	4,36	mg/l	100%	-0,16
B	88,2	7,1	mg/l	101%	0,18
C	88,310	8,8	mg/l	101%	0,22
D			mg/l		
E	81,70 *	20,425	mg/l	93%	-2,21
F	85,1	0,4	mg/l	97%	-0,96
G	86,4	7,8	mg/l	99%	-0,48
H	78,0 *	5,1	mg/l	89%	-3,57
I	87,51	3,421	mg/l	100%	-0,07
J	87,3	8,7	mg/l	100%	-0,15
K	88,44	8,9	mg/l	101%	0,27
L	90,0	14	mg/l	103%	0,85
M	88,2	0,886	mg/l	101%	0,18
N	90,3	9,0	mg/l	103%	0,96
O	87,4	4,7	mg/l	100%	-0,11
P			mg/l		
Q	88,21	13,23	mg/l	101%	0,19
R			mg/l		
S	85,13	8,03	mg/l	97%	-0,95
T	89,0	6	mg/l	101%	0,48
U	89,49	3,1	mg/l	102%	0,66
V	84,1	4,0	mg/l	96%	-1,32
W	83,06 *	16,61	mg/l	95%	-1,71
X	87,9	8,8	mg/l	100%	0,07
Y	88	5	mg/l	100%	0,11
Z	88,170	4,409	mg/l	101%	0,17
AA	89,19	8	mg/l	102%	0,55
AB			mg/l		
AC	87,18	8,72	mg/l	99%	-0,19
AD	88,3	11,1	mg/l	101%	0,22
AE	87,10	8,71	mg/l	99%	-0,22
AF	84,7	12,7	mg/l	97%	-1,10
AG	86,7	5,2	mg/l	99%	-0,37
AH	87		mg/l	99%	-0,26
AI	88,62	4,431	mg/l	101%	0,34
AJ			mg/l		
AK	91,0	4,38	mg/l	104%	1,21
AL	87,3		mg/l	100%	-0,15
AM	88,1	8,2	mg/l	100%	0,15
AN			mg/l		
AO	84,8	5,1	mg/l	97%	-1,07
AP	87,4	14,0	mg/l	100%	-0,11
AQ	90,0	9,0	mg/l	103%	0,85
AR			mg/l		
AS	88,0	4,4	mg/l	100%	0,11
AT	89	4	mg/l	101%	0,48
AU	89,8	0,545	mg/l	102%	0,77

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	87,3 $\pm$ 1,1	87,8 $\pm$ 0,7	mg/l
Recov. $\pm$ CI(99%)	99,5 $\pm$ 1,2	100,1 $\pm$ 0,8	%
SD between labs	2,5	1,6	mg/l
RSD between labs	2,8	1,8	%
n for calculation	40	37	



## Sample N166B

### Parameter Sulphate

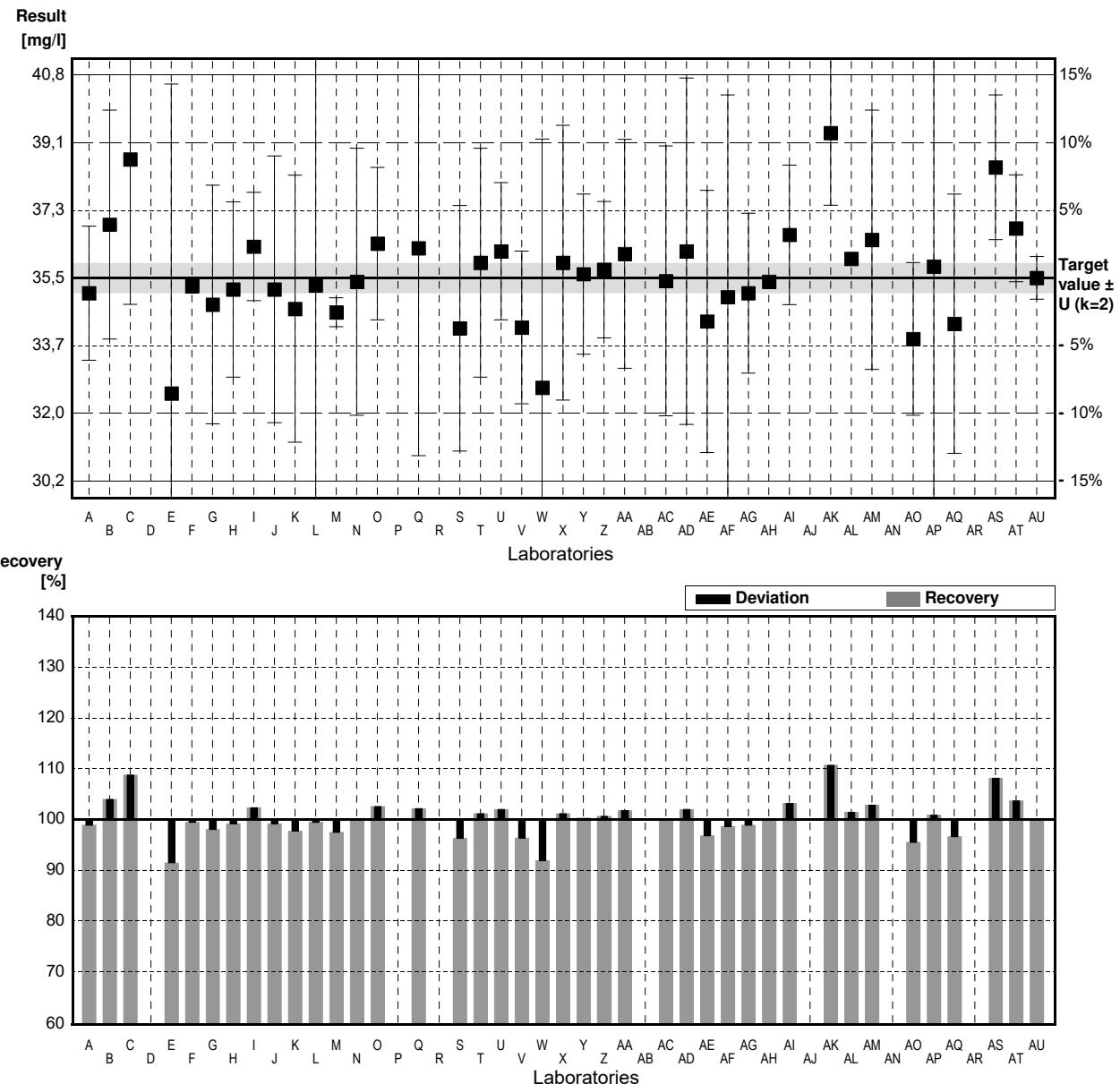
Target value  $\pm U$  ( $k=2$ ) 35,5 mg/l  $\pm$  0,4 mg/l

IFA result  $\pm U$  ( $k=2$ ) 35,9 mg/l  $\pm$  0,9 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	35.10	1.76	mg/l	99%	-0.36
B	36.9	3.0	mg/l	104%	1.27
C	38.608	3.8	mg/l	109%	2.82
D			mg/l		
E	32.47	8.118	mg/l	91%	-2.75
F	35.3	0.2	mg/l	99%	-0.18
G	34.8	3.13	mg/l	98%	-0.64
H	35.2	2.3	mg/l	99%	-0.27
I	36.32	1.420	mg/l	102%	0.75
J	35.2	3.5	mg/l	99%	-0.27
K	34.69	3.5	mg/l	98%	-0.74
L	35.3	5.6	mg/l	99%	-0.18
M	34.6	0.377	mg/l	97%	-0.82
N	35.4	3.5	mg/l	100%	-0.09
O	36.4	2.0	mg/l	103%	0.82
P			mg/l		
Q	36.28	5.44	mg/l	102%	0.71
R			mg/l		
S	34.18	3.22	mg/l	96%	-1.20
T	35.9	3	mg/l	101%	0.36
U	36.2	1.8	mg/l	102%	0.64
V	34.2	2.0	mg/l	96%	-1.18
W	32.62	6.52	mg/l	92%	-2.62
X	35.9	3.6	mg/l	101%	0.36
Y	35.6	2.1	mg/l	100%	0.09
Z	35.717	1.786	mg/l	101%	0.20
AA	36.13	3	mg/l	102%	0.57
AB			mg/l		
AC	35.42	3.54	mg/l	100%	-0.07
AD	36.2	4.54	mg/l	102%	0.64
AE	34.36	3.44	mg/l	97%	-1.04
AF	35.0	5.3	mg/l	99%	-0.45
AG	35.1	2.1	mg/l	99%	-0.36
AH	35.4		mg/l	100%	-0.09
AI	36.63	1.832	mg/l	103%	1.03
AJ			mg/l		
AK	39.3	*	mg/l	111%	3.45
AL	36.0		mg/l	101%	0.45
AM	36.5	3.4	mg/l	103%	0.91
AN			mg/l		
AO	33.9	2.0	mg/l	95%	-1.45
AP	35.8	5.7	mg/l	101%	0.27
AQ	34.3	3.4	mg/l	97%	-1.09
AR			mg/l		
AS	38.4	1.9	mg/l	108%	2.64
AT	36.8	1.4	mg/l	104%	1.18
AU	35.5	0.559	mg/l	100%	0.00

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	35,6 $\pm$ 0,6	35,5 $\pm$ 0,5	mg/l
Recov. $\pm$ CI(99%)	100,3 $\pm$ 1,6	100,0 $\pm$ 1,5	%
SD between labs	1,4	1,2	mg/l
RSD between labs	3,8	3,5	%
n for calculation	40	39	



## Sample N166A

### Parameter Orthophosphate

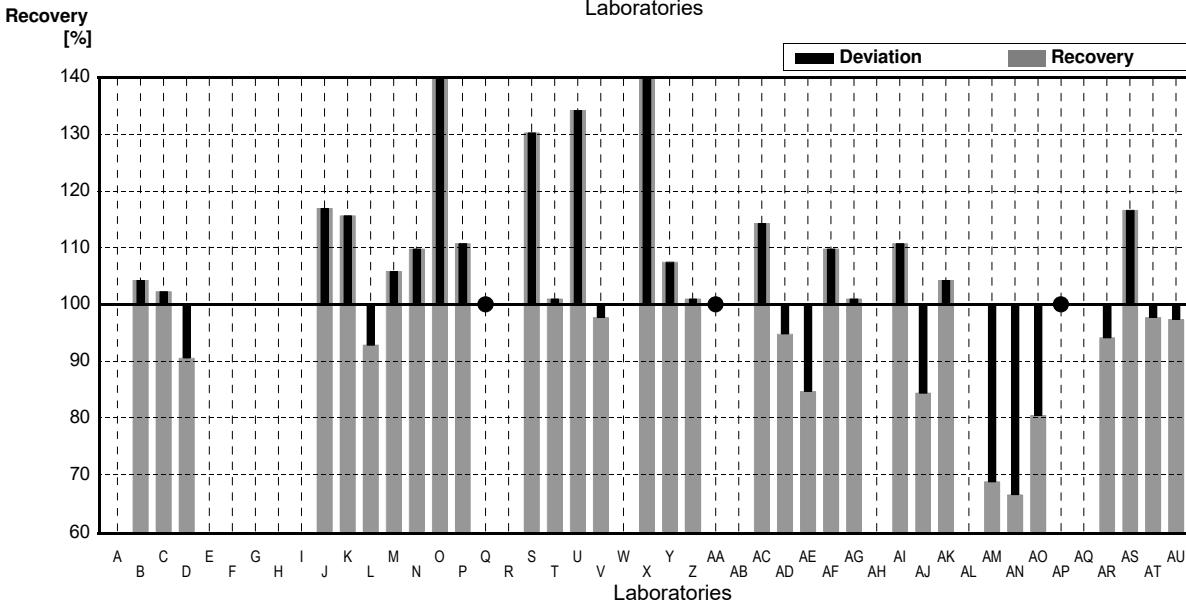
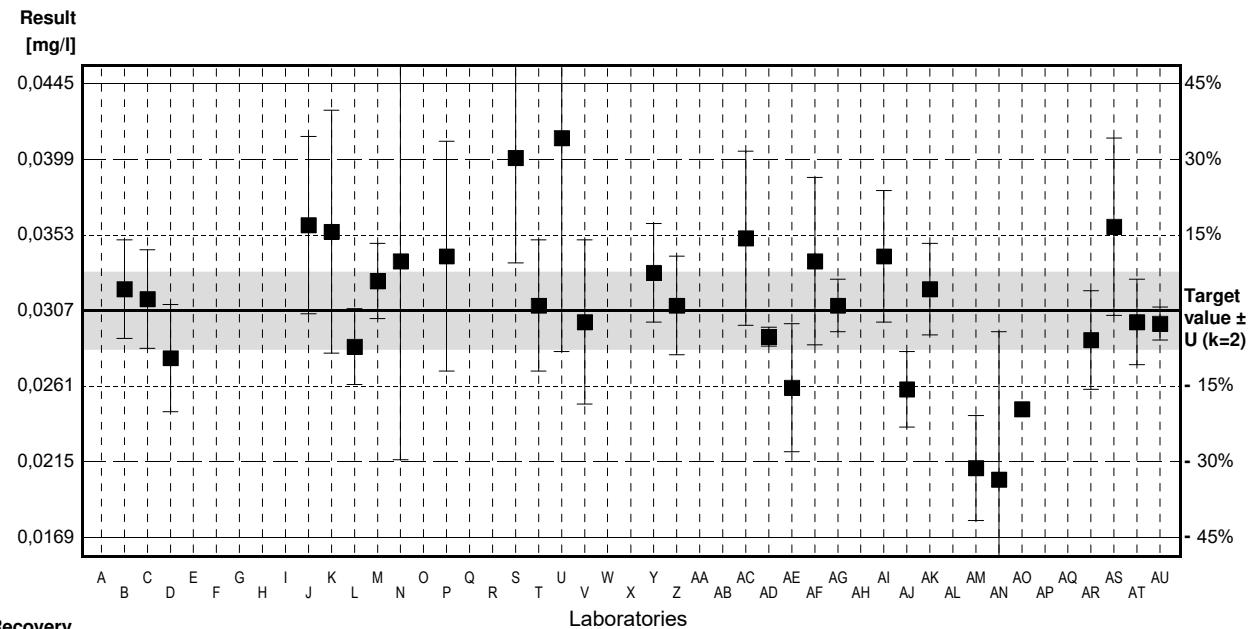
Target value  $\pm U$  ( $k=2$ ) 0,0307 mg/l  $\pm$  0,0023 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,0310 mg/l  $\pm$  0,0011 mg/l

Stability test  $\pm U$  ( $k=2$ ) 0,0307 mg/l  $\pm$  0,0011 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,0320	0,003	mg/l	104%	0,45
C	0,0314	0,003	mg/l	102%	0,24
D	0,0278	0,00326	mg/l	91%	-0,99
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	0,0359	0,0054	mg/l	117%	1,78
K	0,0355	0,0074	mg/l	116%	1,65
L	0,0285	0,0023	mg/l	93%	-0,75
M	0,0325	0,00229	mg/l	106%	0,62
N	0,0337	0,0121	mg/l	110%	1,03
O	0,420 *	0,058	mg/l	1368%	133,48
P	0,0340	0,007	mg/l	111%	1,13
Q	<0,15		mg/l	*	
R			mg/l		
S	0,0400	0,0064	mg/l	130%	3,19
T	0,0310	0,004	mg/l	101%	0,10
U	0,0412	0,013	mg/l	134%	3,60
V	0,0300	0,005	mg/l	98%	-0,24
W			mg/l		
X	0,333 *	0,033	mg/l	1085%	103,65
Y	0,0330	0,003	mg/l	107%	0,79
Z	0,0310	0,003	mg/l	101%	0,10
AA	<0,04		mg/l	*	
AB			mg/l		
AC	0,0351	0,0053	mg/l	114%	1,51
AD	0,0291	0,00057	mg/l	95%	-0,55
AE	0,0260	0,0039	mg/l	85%	-1,61
AF	0,0337	0,0051	mg/l	110%	1,03
AG	0,0310	0,0016	mg/l	101%	0,10
AH			mg/l		
AI	0,0340	0,0040	mg/l	111%	1,13
AJ	0,0259	0,0023	mg/l	84%	-1,65
AK	0,0320	0,00278	mg/l	104%	0,45
AL			mg/l		
AM	0,0211	0,0032	mg/l	69%	-3,29
AN	0,0204	0,009	mg/l	66%	-3,53
AO	0,0247		mg/l	80%	-2,06
AP	<0,040		mg/l	*	
AQ			mg/l		
AR	0,0289	0,003	mg/l	94%	-0,62
AS	0,0358	0,0054	mg/l	117%	1,75
AT	0,0300	0,0026	mg/l	98%	-0,24
AU	0,0299	0,001	mg/l	97%	-0,27

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0528 $\pm$ 0,0417	0,0312 $\pm$ 0,0024	mg/l
Recov. $\pm$ CI(99%)	171,8 $\pm$ 135,8	101,5 $\pm$ 7,7	%
SD between labs	0,0858	0,0047	mg/l
RSD between labs	162,6	15,0	%
n for calculation	32	30	

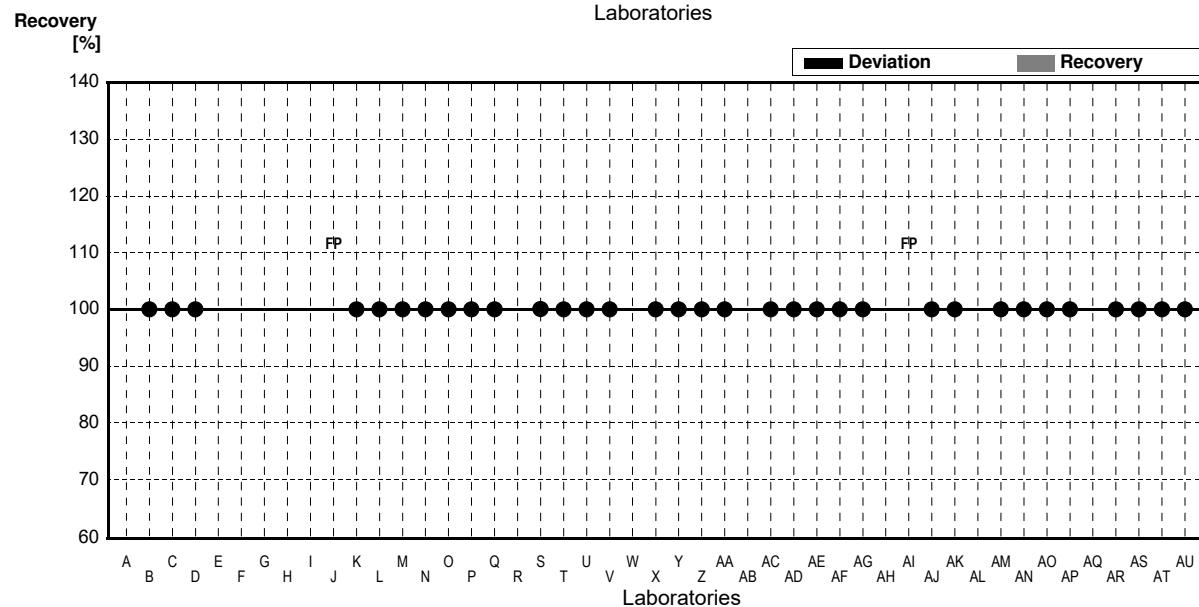
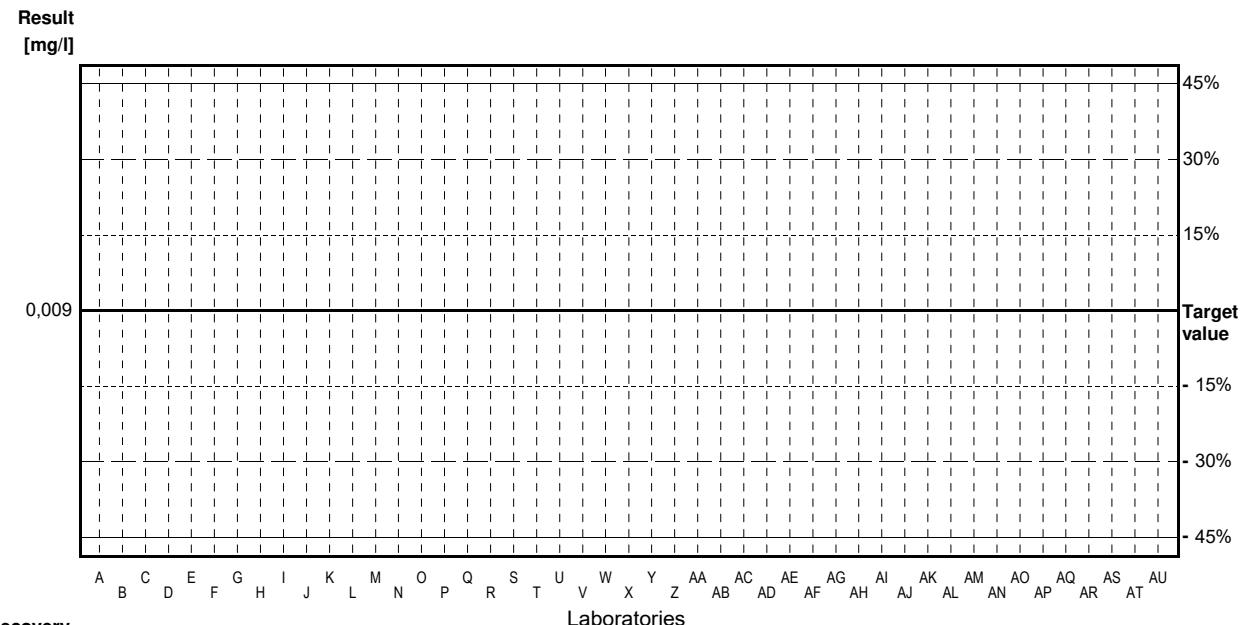


## Sample N166B

### 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			mg/l		
B	<0,01		mg/l	•	
C	<0,0055		mg/l	•	
D	<0,006	0	mg/l	•	
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	0,0199	0,0030	mg/l	FP	
K	<0,015		mg/l	•	
L	<0,015		mg/l	•	
M	<0,0150		mg/l	•	
N	<0,030		mg/l	•	
O	<0,02		mg/l	•	
P	0,00400	0,0008	mg/l	•	
Q	<0,15		mg/l	•	
R			mg/l		
S	0,0100	0,0016	mg/l	•	
T	<0,01		mg/l	•	
U	<0,03	0,02	mg/l	•	
V	<0,030	0,005	mg/l	•	
W			mg/l		
X	<0,061		mg/l	•	
Y	<0,009		mg/l	•	
Z	<0,01		mg/l	•	
AA	<0,04		mg/l	•	
AB			mg/l		
AC	<0,0153		mg/l	•	
AD	0,00613	0,00012	mg/l	•	
AE	<0,010		mg/l	•	
AF	<0,0153	0,0023	mg/l	•	
AG	<0,006		mg/l	•	
AH			mg/l		
AI	0,0120	0,0015	mg/l	FP	
AJ	<0,009	0,0008	mg/l	•	
AK	<0,03		mg/l	•	
AL			mg/l		
AM	<0,010		mg/l	•	
AN	<0,019		mg/l	•	
AO	<0,015		mg/l	•	
AP	<0,040		mg/l	•	
AQ			mg/l		
AR	<0,005		mg/l	•	
AS	<0,02		mg/l	•	
AT	<0,01		mg/l	•	
AU	<0,020		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 N166A

### Parameter Boron

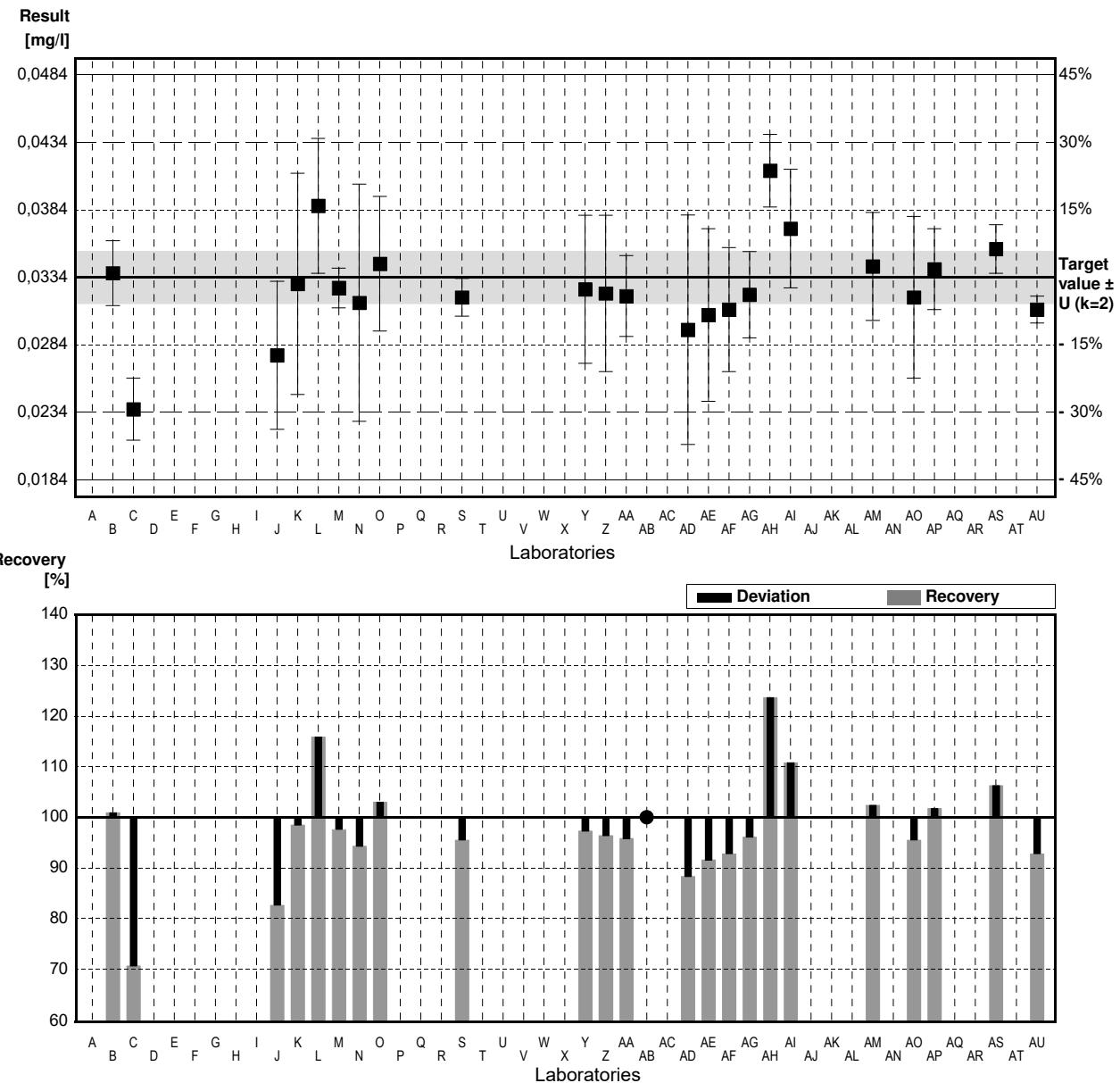
Target value  $\pm U$  ( $k=2$ ) 0,0334 mg/l  $\pm$  0,0019 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,0331 mg/l  $\pm$  0,0026 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,0337	0,0024	mg/l	101%	0,12
C	0,0236 *	0,0023	mg/l	71%	-4,02
D			mg/l		
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	0,0276	0,0055	mg/l	83%	-2,38
K	0,0329	0,0082	mg/l	99%	-0,21
L	0,0387	0,0050	mg/l	116%	2,17
M	0,0326	0,00147	mg/l	98%	-0,33
N	0,0315	0,0088	mg/l	94%	-0,78
O	0,0344	0,005	mg/l	103%	0,41
P			mg/l		
Q			mg/l		
R			mg/l		
S	0,0319	0,0014	mg/l	96%	-0,62
T			mg/l		
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y	0,0325	0,0055	mg/l	97%	-0,37
Z	0,0322	0,0058	mg/l	96%	-0,49
AA	0,0320	0,003	mg/l	96%	-0,57
AB	<0,050	0,005	mg/l	*	
AC			mg/l		
AD	0,0295	0,00851	mg/l	88%	-1,60
AE	0,0306	0,0064	mg/l	92%	-1,15
AF	0,0310	0,0046	mg/l	93%	-0,98
AG	0,0321	0,0032	mg/l	96%	-0,53
AH	0,0413 *	0,0027	mg/l	124%	3,24
AI	0,0370	0,0044	mg/l	111%	1,48
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,0342	0,0040	mg/l	102%	0,33
AN			mg/l		
AO	0,0319	0,006	mg/l	96%	-0,62
AP	0,0340	0,003	mg/l	102%	0,25
AQ			mg/l		
AR			mg/l		
AS	0,0355	0,0018	mg/l	106%	0,86
AT			mg/l		
AU	0,0310	0,001	mg/l	93%	-0,98

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0327 $\pm$ 0,0021	0,0327 $\pm$ 0,0015	mg/l
Recov. $\pm$ CI(99%)	97,9 $\pm$ 6,3	97,9 $\pm$ 4,6	%
SD between labs	0,0036	0,0025	mg/l
RSD between labs	10,9	7,5	%
n for calculation	23	21	



## Sample N166B

### Parameter Boron

Target value  $\pm U$  ( $k=2$ ) 0,085 mg/l  $\pm$  0,004 mg/l

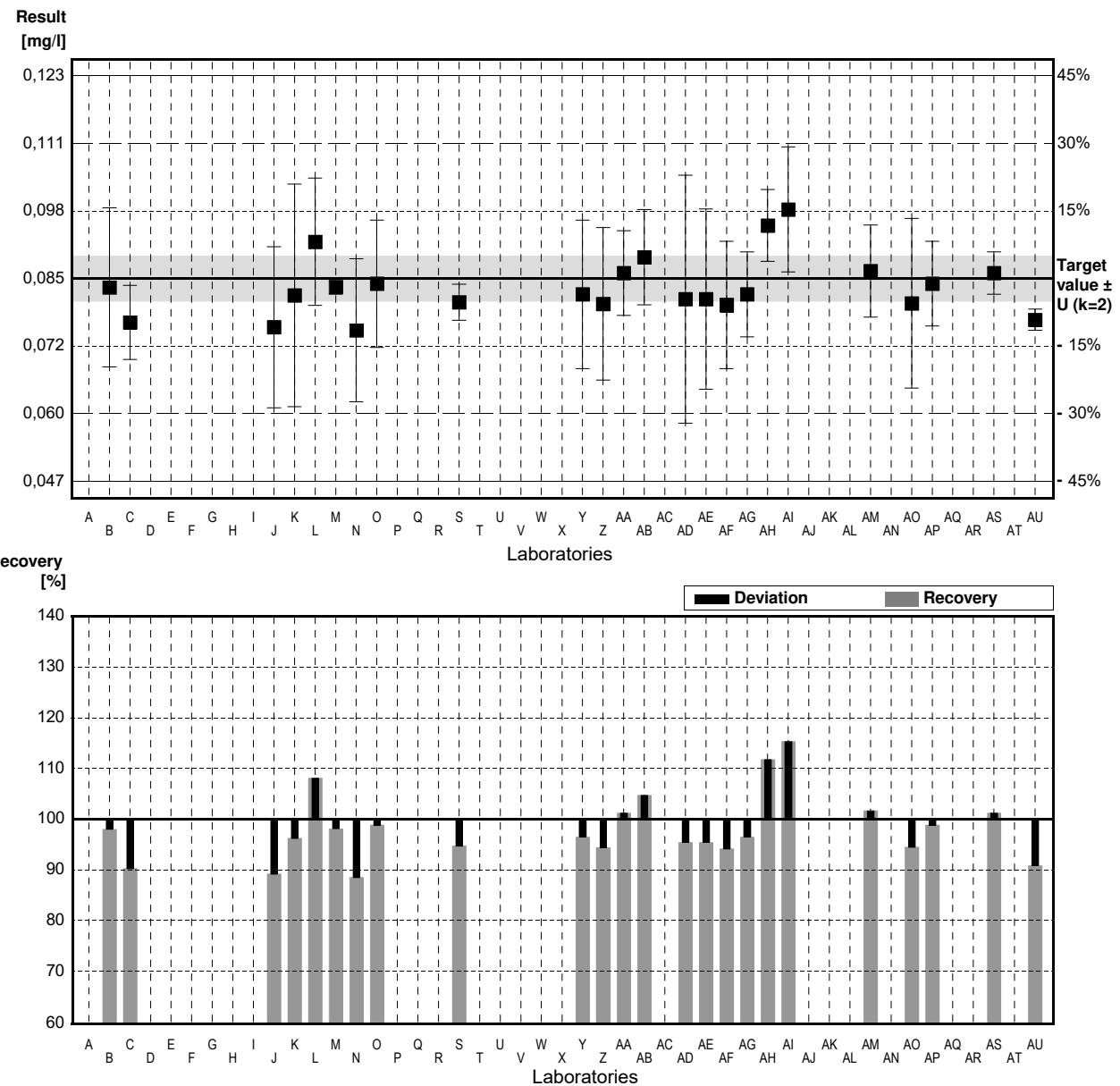
IFA result  $\pm U$  ( $k=2$ ) 0,085 mg/l  $\pm$  0,007 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,0833	0,015	mg/l	98%	-0,27
C	0,0767	0,007	mg/l	90%	-1,34
D			mg/l		
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	0,0758	0,0152	mg/l	89%	-1,48
K	0,0818	0,021	mg/l	96%	-0,52
L	0,0919 *	0,012	mg/l	108%	1,11
M	0,0834	0,00139	mg/l	98%	-0,26
N	0,0752	0,0135	mg/l	88%	-1,58
O	0,084	0,012	mg/l	99%	-0,16
P			mg/l		
Q			mg/l		
R			mg/l		
S	0,0805	0,0034	mg/l	95%	-0,73
T			mg/l		
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y	0,082	0,014	mg/l	96%	-0,48
Z	0,0802	0,0144	mg/l	94%	-0,77
AA	0,0860	0,008	mg/l	101%	0,16
AB	0,089	0,009	mg/l	105%	0,64
AC			mg/l		
AD	0,0811	0,0234	mg/l	95%	-0,63
AE	0,0811	0,0170	mg/l	95%	-0,63
AF	0,080	0,012	mg/l	94%	-0,81
AG	0,082	0,008	mg/l	96%	-0,48
AH	0,095 *	0,0068	mg/l	112%	1,61
AI	0,098 *	0,0118	mg/l	115%	2,10
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,0864	0,0087	mg/l	102%	0,23
AN			mg/l		
AO	0,0803	0,016	mg/l	94%	-0,76
AP	0,084	0,008	mg/l	99%	-0,16
AQ			mg/l		
AR			mg/l		
AS	0,086	0,004	mg/l	101%	0,16
AT			mg/l		
AU	0,0772	0,002	mg/l	91%	-1,26

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,083 $\pm$ 0,003	0,082 $\pm$ 0,002	mg/l
Recov. $\pm$ CI(99%)	98,1 $\pm$ 3,8	96,1 $\pm$ 2,6	%
SD between labs	0,006	0,004	mg/l
RSD between labs	6,8	4,4	%
n for calculation	24	21	



## Sample N166A

### Parameter DOC

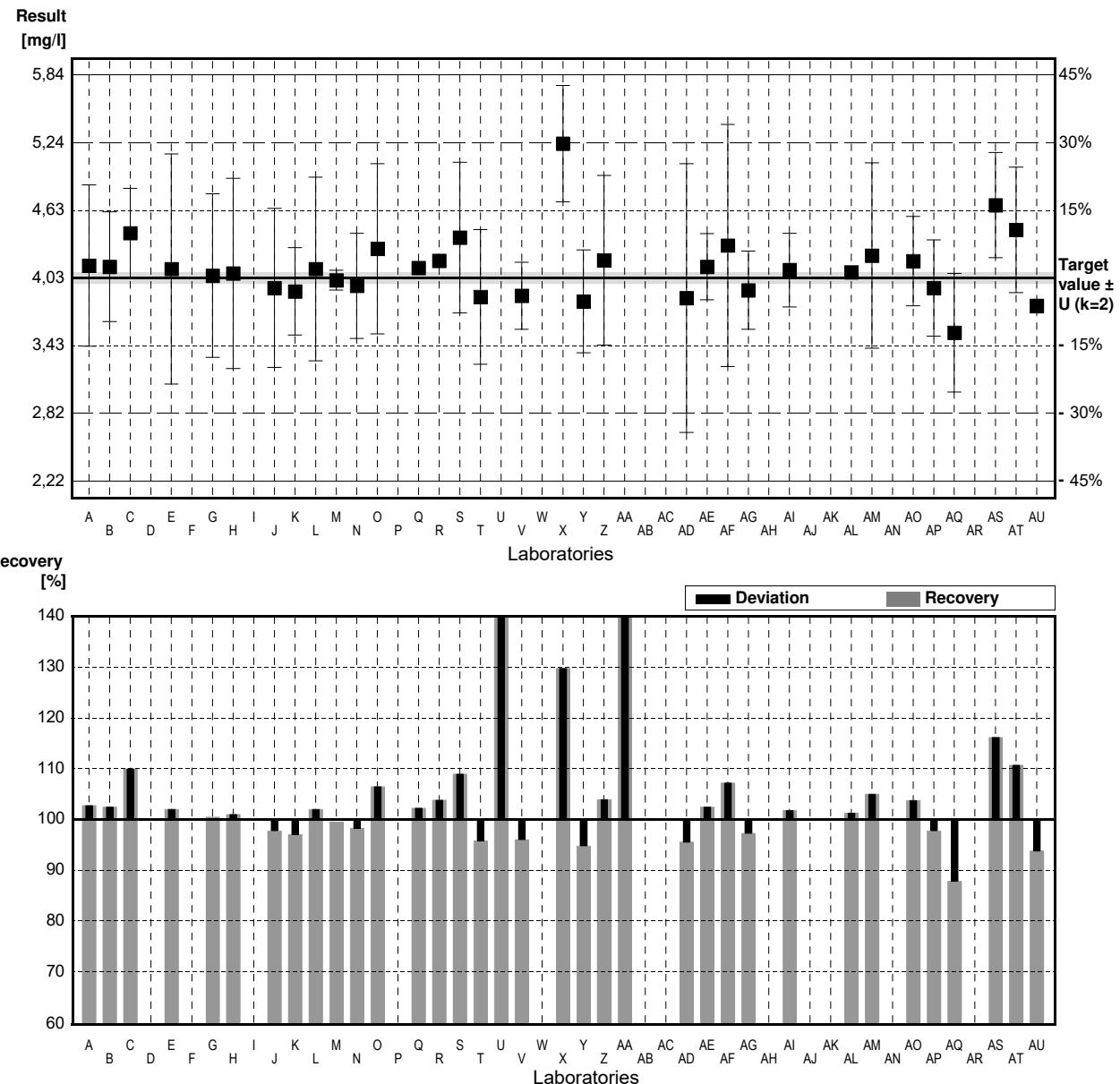
Target value  $\pm U$  ( $k=2$ ) 4,03 mg/l  $\pm$  0,05 mg/l

IFA result  $\pm U$  ( $k=2$ ) 3,90 mg/l  $\pm$  0,09 mg/l

Stability test  $\pm U$  ( $k=2$ ) 4,03 mg/l  $\pm$  0,09 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	4.14	0.72	mg/l	103%	0.51
B	4.129	0.49	mg/l	102%	0.45
C	4.43	0.4	mg/l	110%	1.84
D			mg/l		
E	4.11	1.028	mg/l	102%	0.37
F			mg/l		
G	4.05	0.73	mg/l	100%	0.09
H	4.07	0.85	mg/l	101%	0.18
I			mg/l		
J	3.94	0.71	mg/l	98%	-0.41
K	3.91	0.39	mg/l	97%	-0.55
L	4.11	0.82	mg/l	102%	0.37
M	4.01	0.0889	mg/l	100%	-0.09
N	3.96	0.47	mg/l	98%	-0.32
O	4.29	0.76	mg/l	106%	1.19
P			mg/l		
Q	4.12		mg/l	102%	0.41
R	4.183		mg/l	104%	0.70
S	4.39	0.6743	mg/l	109%	1.65
T	3.86	0.6	mg/l	96%	-0.78
U	9.803 *	0.8	mg/l	243%	26.53
V	3.87	0.3	mg/l	96%	-0.74
W			mg/l		
X	5.23 *	0.52	mg/l	130%	5.51
Y	3.82	0.46	mg/l	95%	-0.96
Z	4.188	0.758	mg/l	104%	0.73
AA	9.50 *	0.95	mg/l	236%	25.14
AB			mg/l		
AC			mg/l		
AD	3.85	1.2	mg/l	96%	-0.83
AE	4.13	0.295	mg/l	102%	0.46
AF	4.32	1.08	mg/l	107%	1.33
AG	3.92	0.35	mg/l	97%	-0.51
AH			mg/l		
AI	4.10	0.330	mg/l	102%	0.32
AJ			mg/l		
AK			mg/l		
AL	4.08		mg/l	101%	0.23
AM	4.23	0.827	mg/l	105%	0.92
AN			mg/l		
AO	4.18	0.4	mg/l	104%	0.69
AP	3.94	0.43	mg/l	98%	-0.41
AQ	3.54	0.53	mg/l	88%	-2.25
AR			mg/l		
AS	4.68	0.47	mg/l	116%	2.99
AT	4.46	0.56	mg/l	111%	1.98
AU	3.78	0.044	mg/l	94%	-1.15

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	4,44 $\pm$ 0,62	4,09 $\pm$ 0,11	mg/l
Recov. $\pm$ CI(99%)	110,1 $\pm$ 15,3	101,4 $\pm$ 2,7	%
SD between labs	1,33	0,23	mg/l
RSD between labs	30,1	5,6	%
n for calculation	35	32	



## Sample N166B

### Parameter DOC

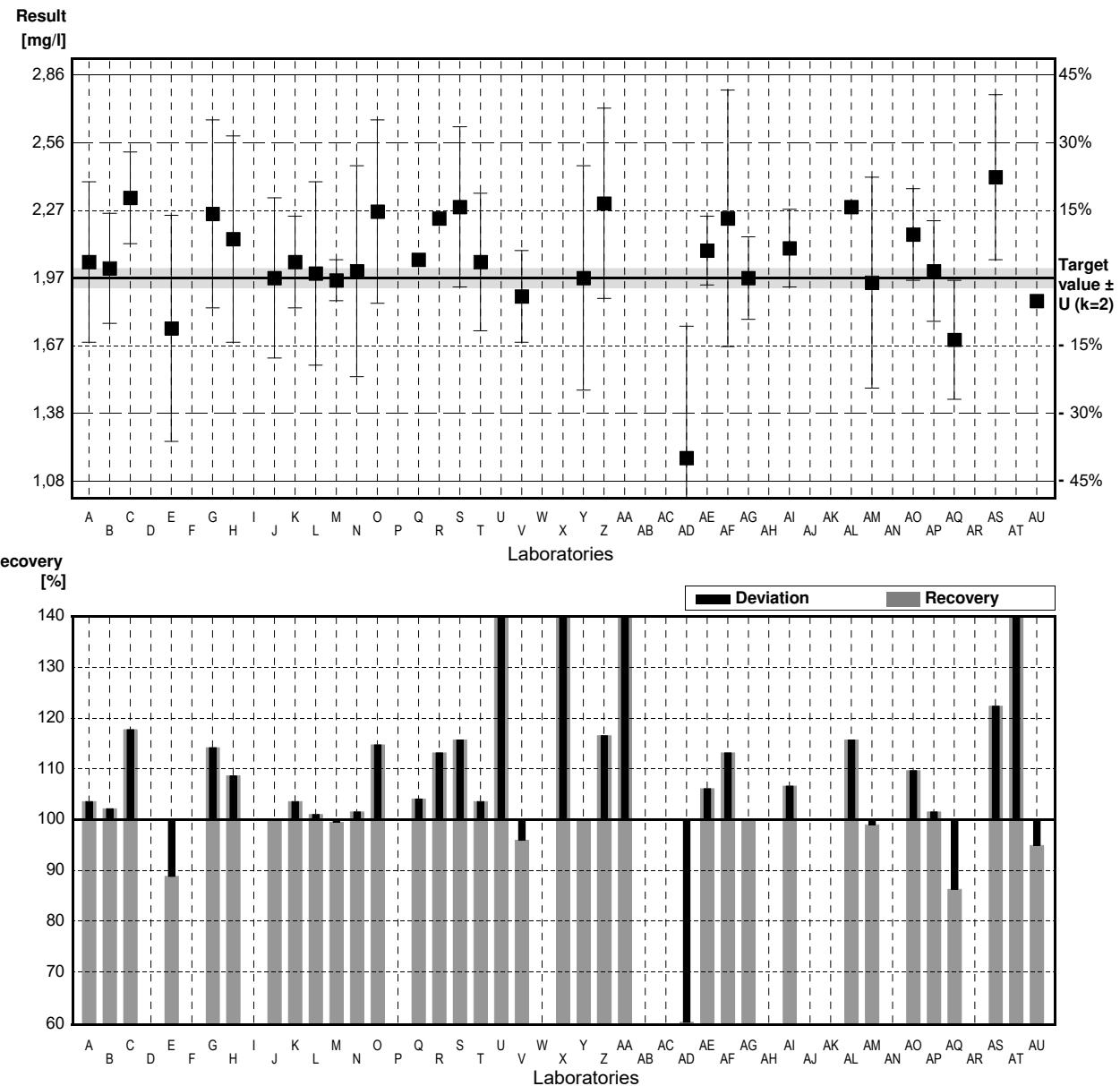
Target value  $\pm U$  ( $k=2$ ) 1,97 mg/l  $\pm$  0,04 mg/l

IFA result  $\pm U$  ( $k=2$ ) 1,97 mg/l  $\pm$  0,09 mg/l

Stability test  $\pm U$  ( $k=2$ ) 2,00 mg/l  $\pm$  0,09 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	2.04	0.35	mg/l	104%	0.66
B	2.012	0.24	mg/l	102%	0.39
C	2.32	0.2	mg/l	118%	3.29
D			mg/l		
E	1.75	0.493	mg/l	89%	-2.07
F			mg/l		
G	2.25	0.41	mg/l	114%	2.63
H	2.14	0.45	mg/l	109%	1.60
I			mg/l		
J	1.97	0.35	mg/l	100%	0.00
K	2.04	0.20	mg/l	104%	0.66
L	1.99	0.40	mg/l	101%	0.19
M	1.96	0.0897	mg/l	99%	-0.09
N	2.00	0.46	mg/l	102%	0.28
O	2.26	0.40	mg/l	115%	2.73
P			mg/l		
Q	2.05		mg/l	104%	0.75
R	2.230		mg/l	113%	2.44
S	2.28	0.35	mg/l	116%	2.91
T	2.04	0.3	mg/l	104%	0.66
U	14.92 *	1.1	mg/l	757%	121.73
V	1.89	0.2	mg/l	96%	-0.75
W			mg/l		
X	3.69 *	0.37	mg/l	187%	16.17
Y	1.97	0.49	mg/l	100%	0.00
Z	2.296	0.4153	mg/l	117%	3.06
AA	3.00 *	0.4	mg/l	152%	9.68
AB			mg/l		
AC			mg/l		
AD	1.184 *	0.576	mg/l	60%	-7.39
AE	2.09	0.15	mg/l	106%	1.13
AF	2.23	0.56	mg/l	113%	2.44
AG	1.97	0.18	mg/l	100%	0.00
AH			mg/l		
AI	2.10	0.170	mg/l	107%	1.22
AJ			mg/l		
AK			mg/l		
AL	2.28		mg/l	116%	2.91
AM	1.95	0.460	mg/l	99%	-0.19
AN			mg/l		
AQ	2.16	0.2	mg/l	110%	1.79
AP	2.00	0.22	mg/l	102%	0.28
AQ	1.70	0.26	mg/l	86%	-2.54
AR			mg/l		
AS	2.41	0.36	mg/l	122%	4.14
AT	3.18 *	0.40	mg/l	161%	11.37
AU	1.87	0.021	mg/l	95%	-0.94

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	2,52 $\pm$ 1,01	2,07 $\pm$ 0,09	mg/l
Recov. $\pm$ CI(99%)	128,0 $\pm$ 51,5	105,3 $\pm$ 4,4	%
SD between labs	2,20	0,17	mg/l
RSD between labs	87,2	8,2	%
n for calculation	35	30	



## Sample N166A

### Parameter Total P (as PO4)

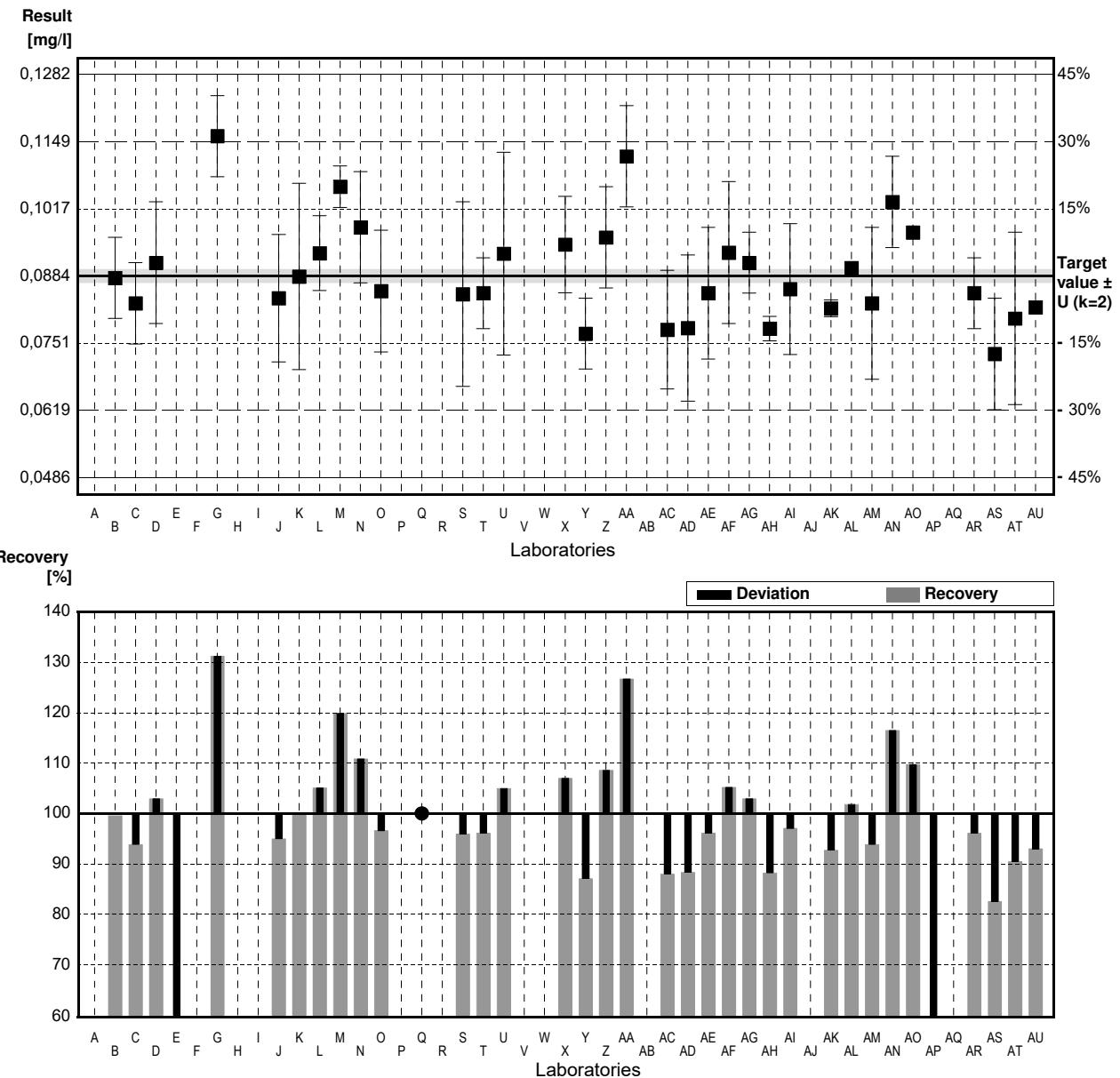
Target value  $\pm U$  ( $k=2$ ) 0,0884 mg/l  $\pm$  0,0013 mg/l

IFA result  $\pm U$  ( $k=2$ ) 0,097 mg/l  $\pm$  0,017 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,088	0,008	mg/l	100%	-0,05
C	0,083	0,008	mg/l	94%	-0,65
D	0,091	0,0120	mg/l	103%	0,31
E	0,0310 *	0,06	mg/l	35%	-6,91
F			mg/l		
G	0,116	0,008	mg/l	131%	3,32
H			mg/l		
I			mg/l		
J	0,0840	0,0126	mg/l	95%	-0,53
K	0,0883	0,0184	mg/l	100%	-0,01
L	0,0929	0,0074	mg/l	105%	0,54
M	0,106	0,00409	mg/l	120%	2,12
N	0,098	0,011	mg/l	111%	1,16
O	0,0854	0,012	mg/l	97%	-0,36
P			mg/l		
Q	<0,15		mg/l	*	
R			mg/l		
S	0,0848	0,0182	mg/l	96%	-0,43
T	0,085	0,007	mg/l	96%	-0,41
U	0,0928	0,02	mg/l	105%	0,53
V			mg/l		
W			mg/l		
X	0,0946	0,0095	mg/l	107%	0,75
Y	0,077	0,007	mg/l	87%	-1,37
Z	0,096	0,01	mg/l	109%	0,91
AA	0,112	0,01	mg/l	127%	2,84
AB			mg/l		
AC	0,0778	0,0117	mg/l	88%	-1,28
AD	0,0781	0,0144	mg/l	88%	-1,24
AE	0,085	0,013	mg/l	96%	-0,41
AF	0,0930	0,014	mg/l	105%	0,55
AG	0,091	0,006	mg/l	103%	0,31
AH	0,078	0,0024	mg/l	88%	-1,25
AI	0,0858	0,0129	mg/l	97%	-0,31
AJ			mg/l		
AK	0,0820	0,00166	mg/l	93%	-0,77
AL	0,090		mg/l	102%	0,19
AM	0,083	0,015	mg/l	94%	-0,65
AN	0,103	0,009	mg/l	117%	1,76
AQ	0,097		mg/l	110%	1,03
AP	0,0400 *	0,01	mg/l	45%	-5,82
AQ			mg/l		
AR	0,085	0,007	mg/l	96%	-0,41
AS	0,073	0,011	mg/l	83%	-1,85
AT	0,080	0,017	mg/l	90%	-1,01
AU	0,0822	0,001	mg/l	93%	-0,75

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,0860 $\pm$ 0,0073	0,0891 $\pm$ 0,0047	mg/l
Recov. $\pm$ CI(99%)	97,3 $\pm$ 8,3	100,7 $\pm$ 5,4	%
SD between labs	0,0159	0,0099	mg/l
RSD between labs	18,5	11,1	%
n for calculation	35	33	



## Sample N166B

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

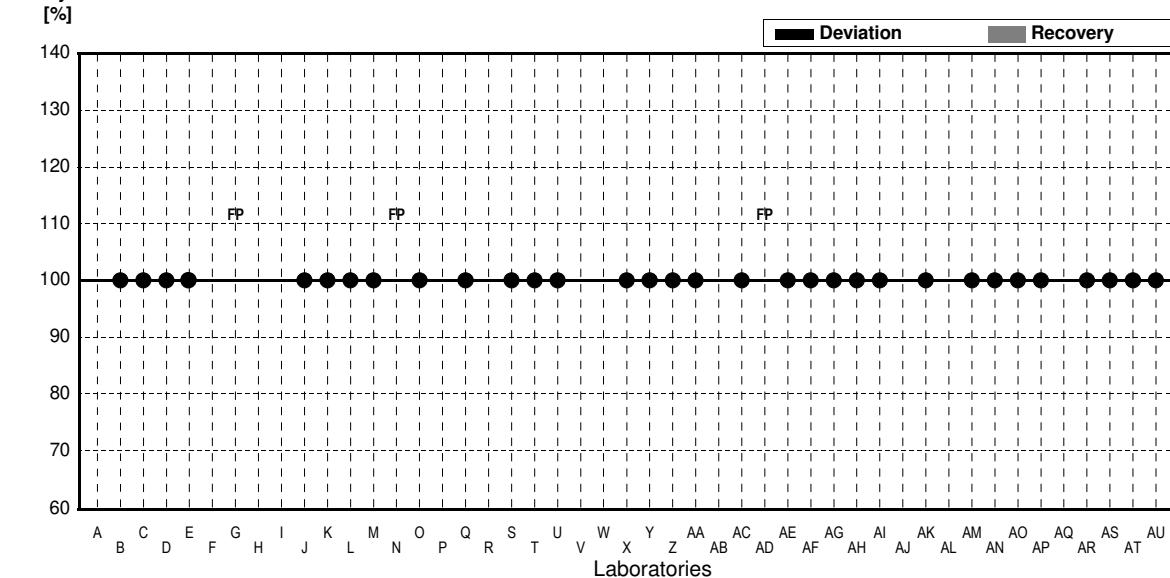
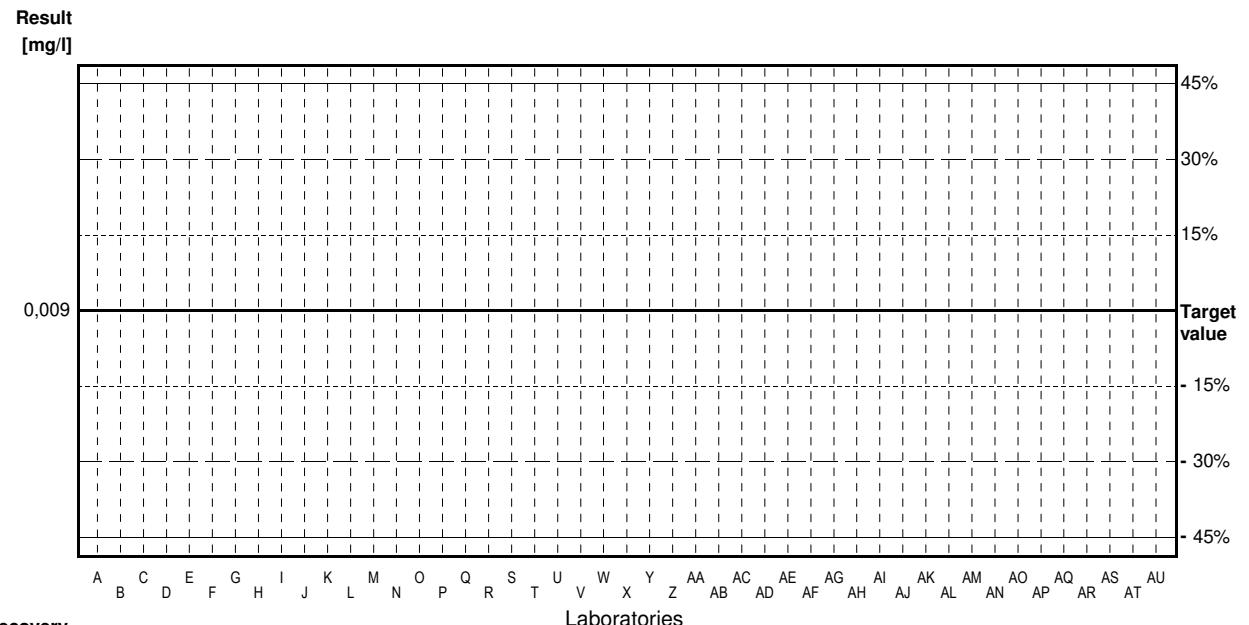
Target value <0,009 mg/l

IFA result <0,009 mg/l

Stability test mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A			mg/l		
B	<0,03		mg/l	•	
C	<0,0010		mg/l	•	
D	<0,006	0	mg/l	•	
E	<BG		mg/l	•	
F			mg/l		
G	0,052	0,004	mg/l	FP	
H			mg/l		
I			mg/l		
J	<0,015		mg/l	•	
K	<0,015		mg/l	•	
L	<0,015		mg/l	•	
M	<0,0150		mg/l	•	
N	0,0180	0,002	mg/l	FP	
O	<0,005		mg/l	•	
P			mg/l		
Q	<0,15		mg/l	•	
R			mg/l		
S	0,00830	0,0018	mg/l	•	
T	<0,013		mg/l	•	
U	<0,03	0,02	mg/l	•	
V			mg/l		
W			mg/l		
X	<0,061		mg/l	•	
Y	<0,009		mg/l	•	
Z	<0,010		mg/l	•	
AA	<0,05		mg/l	•	
AB			mg/l		
AC	<0,0307		mg/l	•	
AD	0,0123	0,00227	mg/l	FP	
AE	<0,010		mg/l	•	
AF	<0,0153	0,0023	mg/l	•	
AG	<0,006		mg/l	•	
AH	<0,06		mg/l	•	
AI	<0,0153		mg/l	•	
AJ			mg/l		
AK	<0,015		mg/l	•	
AL			mg/l		
AM	<0,010		mg/l	•	
AN	<0,02		mg/l	•	
AO	<0,015		mg/l	•	
AP	<0,01		mg/l	•	
AQ			mg/l		
AR	<0,005		mg/l	•	
AS	<0,05		mg/l	•	
AT	<0,003		mg/l	•	
AU	<0,020		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 N166A

### Parameter Silicon

Target value  $\pm U$  ( $k=2$ ) 3,013 mg/l  $\pm$  0,017 mg/l

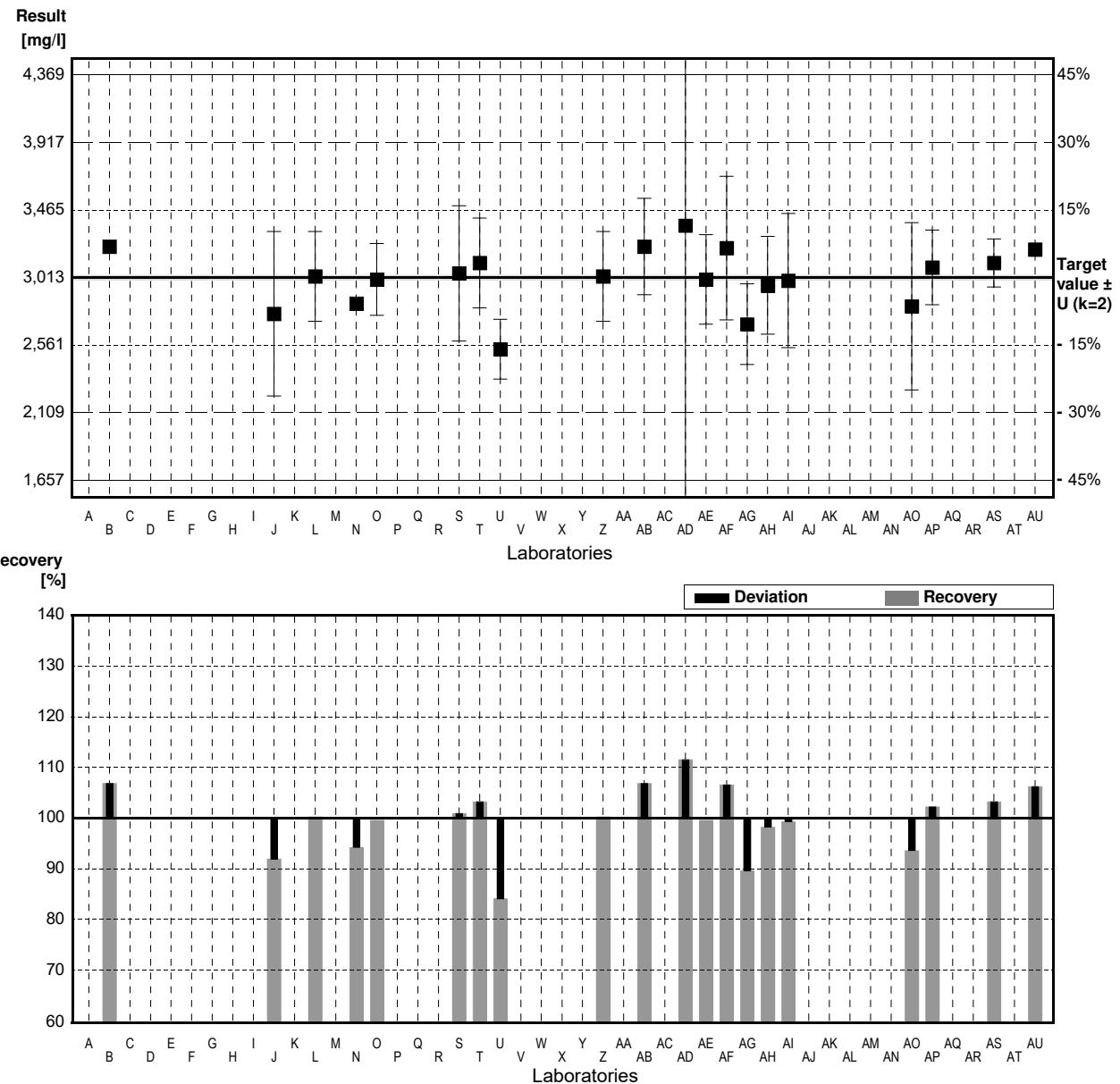
IFA result  $\pm U$  ( $k=2$ ) 3,04 mg/l  $\pm$  0,20 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	3.22		mg/l	107%	1.49
C			mg/l		
D			mg/l		
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	2.77	0.55	mg/l	92%	-1.75
K			mg/l		
L	3.02	0.30	mg/l	100%	0.05
M			mg/l		
N	2.839		mg/l	94%	-1.26
O	3.00	0.24	mg/l	100%	-0.09
P			mg/l		
Q			mg/l		
R			mg/l		
S	3.041	0.4528	mg/l	101%	0.20
T	3.11	0.3	mg/l	103%	0.70
U	2.533	0.2	mg/l	84%	-3.46
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	3.02	0.30	mg/l	100%	0.05
AA			mg/l		
AB	3.22	0.322	mg/l	107%	1.49
AC			mg/l		
AD	3.36	2.08	mg/l	112%	2.50
AE	3.00	0.30	mg/l	100%	-0.09
AF	3.21	0.48	mg/l	107%	1.42
AG	2.70	0.27	mg/l	90%	-2.26
AH	2.96	0.327	mg/l	98%	-0.38
AI	2.992	0.449	mg/l	99%	-0.15
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM			mg/l		
AN			mg/l		
AQ	2.82	0.56	mg/l	94%	-1.39
AP	3.08	0.25	mg/l	102%	0.48
AQ			mg/l		
AR			mg/l		
AS	3.11	0.16	mg/l	103%	0.70
AT			mg/l		
AU	3.20	0.021	mg/l	106%	1.35

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	3,010 $\pm$ 0,128	3,010 $\pm$ 0,128	mg/l
Recov. $\pm$ CI(99%)	99,9 $\pm$ 4,3	99,9 $\pm$ 4,3	%
SD between labs	0,200	0,200	mg/l
RSD between labs	6,7	6,7	%
n for calculation	20	20	



## Sample N166B

### Parameter Silicon

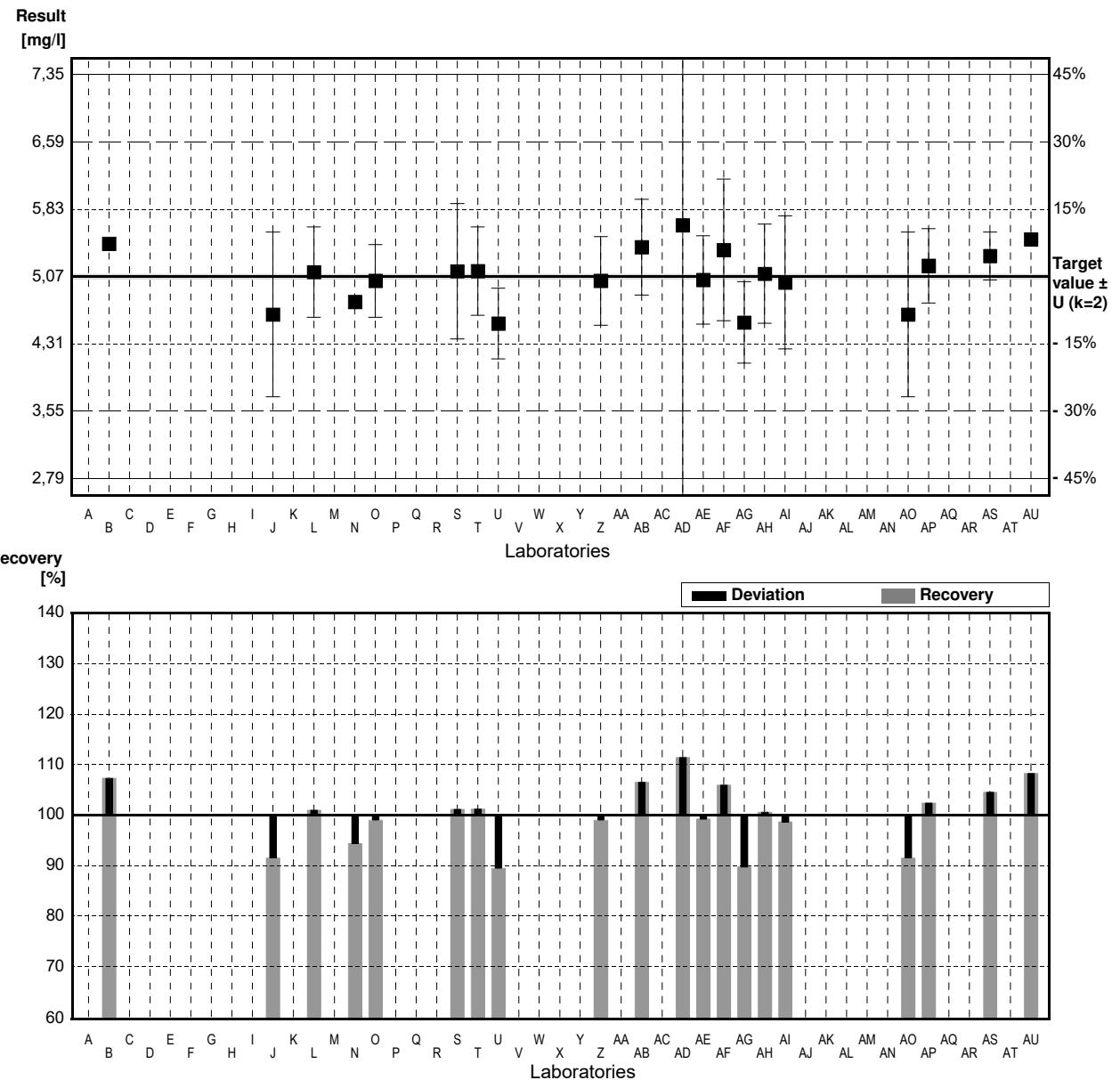
Target value  $\pm U$  ( $k=2$ ) 5,07 mg/l  $\pm$  0,03 mg/l

IFA result  $\pm U$  ( $k=2$ ) 5,1 mg/l  $\pm$  0,3 mg/l

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	5,44		mg/l	107%	1,59
C			mg/l		
D			mg/l		
E			mg/l		
F			mg/l		
G			mg/l		
H			mg/l		
I			mg/l		
J	4,64	0,93	mg/l	92%	-1,84
K			mg/l		
L	5,12	0,51	mg/l	101%	0,21
M			mg/l		
N	4,784		mg/l	94%	-1,23
O	5,02	0,41	mg/l	99%	-0,21
P			mg/l		
Q			mg/l		
R			mg/l		
S	5,129	0,764	mg/l	101%	0,25
T	5,13	0,5	mg/l	101%	0,26
U	4,537	0,4	mg/l	89%	-2,29
V			mg/l		
W			mg/l		
X			mg/l		
Y			mg/l		
Z	5,02	0,50	mg/l	99%	-0,21
AA			mg/l		
AB	5,4	0,54	mg/l	107%	1,41
AC			mg/l		
AD	5,65	3,5	mg/l	111%	2,49
AE	5,03	0,50	mg/l	99%	-0,17
AF	5,37	0,80	mg/l	106%	1,29
AG	4,55	0,46	mg/l	90%	-2,23
AH	5,1	0,56	mg/l	101%	0,13
AI	5,002	0,7526	mg/l	99%	-0,29
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM			mg/l		
AN			mg/l		
AO	4,64	0,93	mg/l	92%	-1,84
AP	5,19	0,42	mg/l	102%	0,51
AQ			mg/l		
AR			mg/l		
AS	5,30	0,27	mg/l	105%	0,99
AT			mg/l		
AU	5,49	0,070	mg/l	108%	1,80

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	5,08 $\pm$ 0,20	5,08 $\pm$ 0,20	mg/l
Recov. $\pm$ CI(99%)	100,1 $\pm$ 4,0	100,1 $\pm$ 4,0	%
SD between labs	0,32	0,32	mg/l
RSD between labs	6,3	6,3	%
n for calculation	20	20	



## Sample N166A

### Parameter Fluoride

Target value  $\pm U$  ( $k=2$ ) 0,500 mg/l  $\pm$  0,013 mg/l

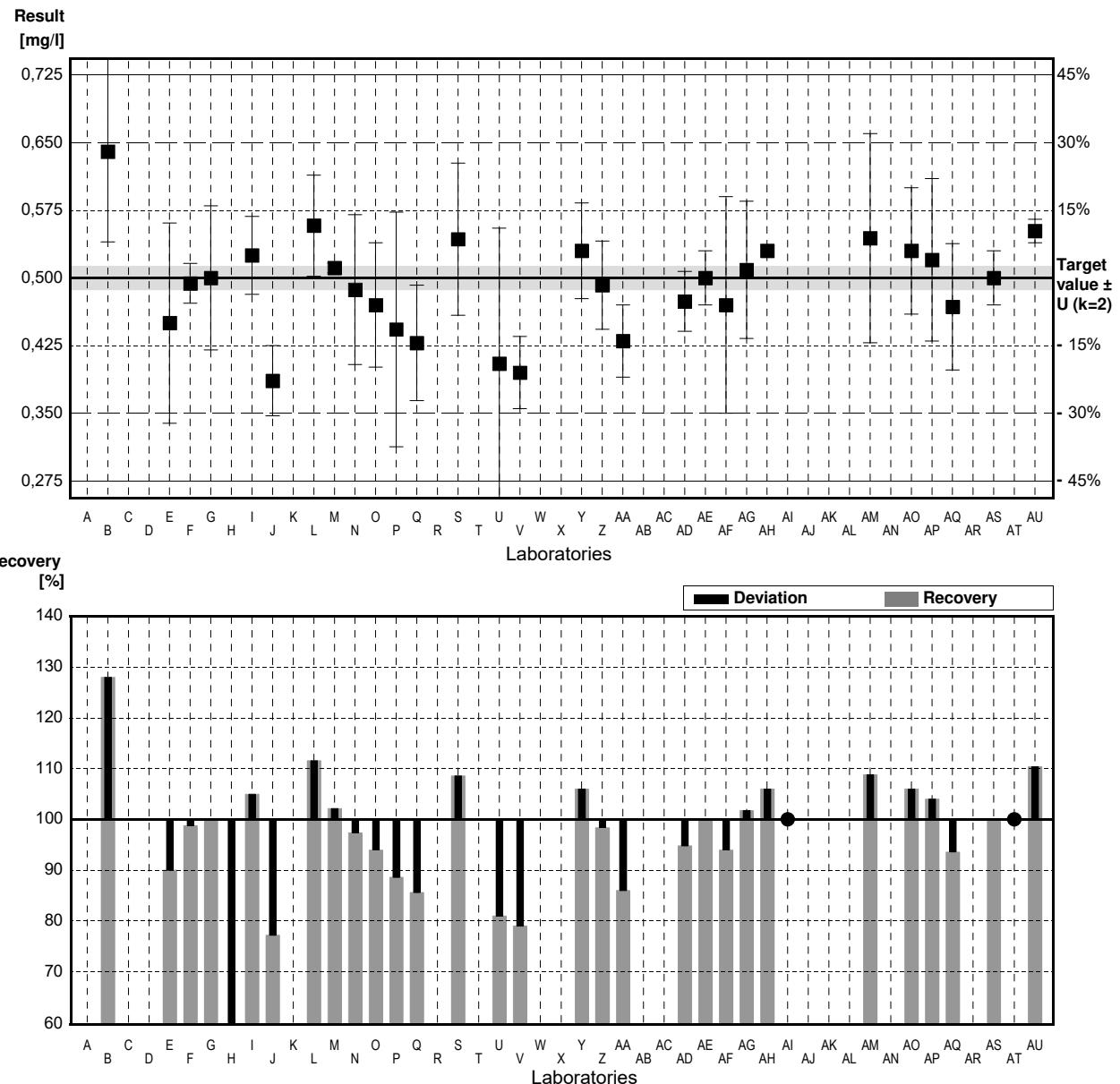
IFA result  $\pm U$  ( $k=2$ ) 0,503 mg/l  $\pm$  0,009 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	0,64	0,1	mg/l	128%	4,00
C			mg/l		
D			mg/l		
E	0,450	0,111	mg/l	90%	-1,43
F	0,494	0,022	mg/l	99%	-0,17
G	0,50	0,08	mg/l	100%	0,00
H	0,192 *	0,02	mg/l	38%	-8,80
I	0,525	0,0432	mg/l	105%	0,71
J	0,386	0,039	mg/l	77%	-3,26
K			mg/l		
L	0,558	0,056	mg/l	112%	1,66
M	0,511	0,00542	mg/l	102%	0,31
N	0,487	0,083	mg/l	97%	-0,37
O	0,470	0,069	mg/l	94%	-0,86
P	0,443	0,13	mg/l	89%	-1,63
Q	0,428	0,064	mg/l	86%	-2,06
R			mg/l		
S	0,543	0,0843	mg/l	109%	1,23
T			mg/l		
U	0,405	0,15	mg/l	81%	-2,71
V	0,395	0,04	mg/l	79%	-3,00
W			mg/l		
X			mg/l		
Y	0,53	0,053	mg/l	106%	0,86
Z	0,492	0,049	mg/l	98%	-0,23
AA	0,430	0,04	mg/l	86%	-2,00
AB			mg/l		
AC			mg/l		
AD	0,474	0,0332	mg/l	95%	-0,74
AE	0,500	0,030	mg/l	100%	0,00
AF	0,470	0,12	mg/l	94%	-0,86
AG	0,509	0,076	mg/l	102%	0,26
AH	0,53		mg/l	106%	0,86
AI	<0,500		mg/l	*	
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,544	0,116	mg/l	109%	1,26
AN			mg/l		
AQ	0,53	0,07	mg/l	106%	0,86
AP	0,52	0,09	mg/l	104%	0,57
AQ	0,468	0,07	mg/l	94%	-0,91
AR			mg/l		
AS	0,50	0,03	mg/l	100%	0,00
AT	<1		mg/l	*	
AU	0,552	0,013	mg/l	110%	1,49

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,483 $\pm$ 0,039	0,493 $\pm$ 0,028	mg/l
Recov. $\pm$ CI(99%)	96,5 $\pm$ 7,8	98,5 $\pm$ 5,6	%
SD between labs	0,077	0,055	mg/l
RSD between labs	15,9	11,1	%
n for calculation	30	29	



## Sample N166B

### Parameter Fluoride

Target value  $\pm U$  ( $k=2$ ) 0,313 mg/l  $\pm$  0,008 mg/l

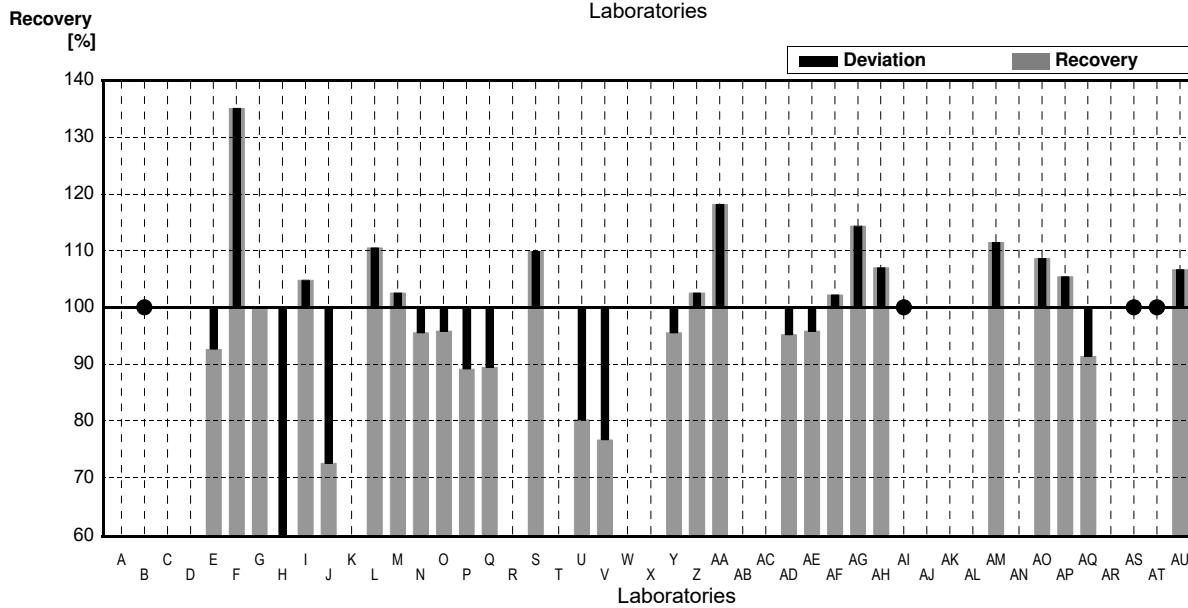
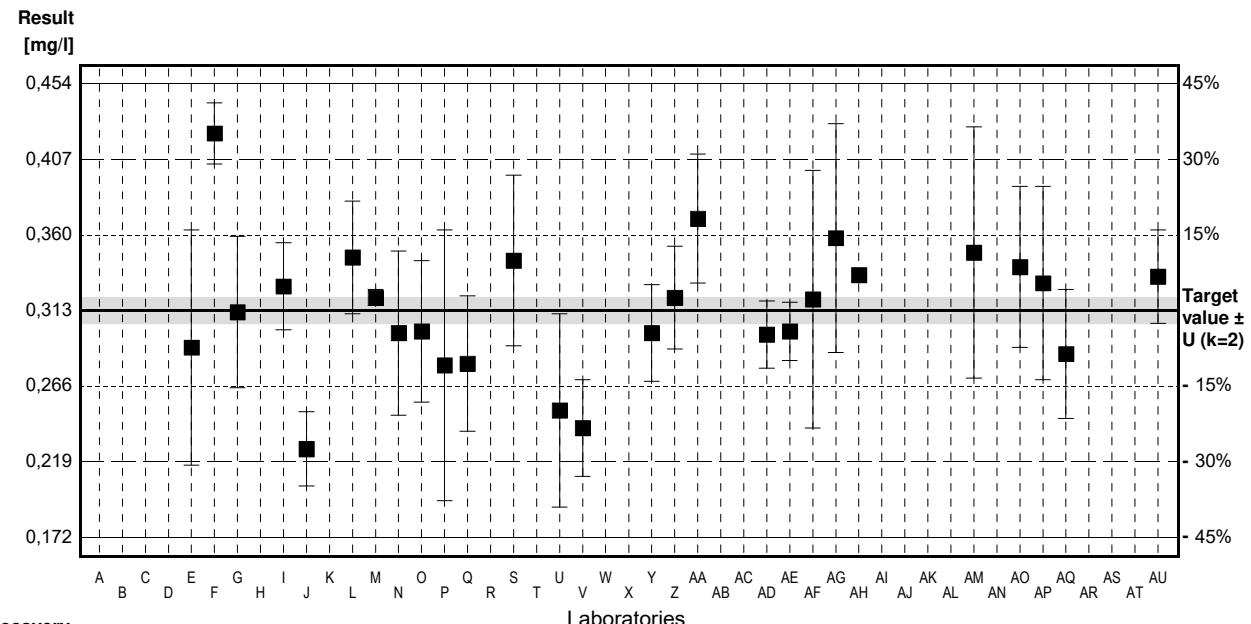
IFA result  $\pm U$  ( $k=2$ ) 0,300 mg/l  $\pm$  0,006 mg/l

#### Stability test

mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B	<0,5		mg/l	*	
C			mg/l		
D			mg/l		
E	0,290	0,073	mg/l	93%	-1,05
F	0,423	0,019	mg/l	135%	5,02
G	0,312	0,047	mg/l	100%	-0,05
H	0,104 *	0,01	mg/l	33%	-9,54
I	0,328	0,0270	mg/l	105%	0,68
J	0,227	0,023	mg/l	73%	-3,93
K			mg/l		
L	0,346	0,035	mg/l	111%	1,51
M	0,321	0,00494	mg/l	103%	0,37
N	0,299	0,051	mg/l	96%	-0,64
O	0,300	0,044	mg/l	96%	-0,59
P	0,279	0,084	mg/l	89%	-1,55
Q	0,280	0,042	mg/l	89%	-1,51
R			mg/l		
S	0,344	0,053	mg/l	110%	1,41
T			mg/l		
U	0,251	0,06	mg/l	80%	-2,83
V	0,240	0,03	mg/l	77%	-3,33
W			mg/l		
X			mg/l		
Y	0,299	0,030	mg/l	96%	-0,64
Z	0,321	0,032	mg/l	103%	0,37
AA	0,370	0,04	mg/l	118%	2,60
AB			mg/l		
AC			mg/l		
AD	0,298	0,0209	mg/l	95%	-0,68
AE	0,300	0,018	mg/l	96%	-0,59
AF	0,320	0,08	mg/l	102%	0,32
AG	0,358	0,071	mg/l	114%	2,05
AH	0,335		mg/l	107%	1,00
AI	<0,500		mg/l	*	
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,349	0,078	mg/l	112%	1,64
AN			mg/l		
AO	0,340	0,05	mg/l	109%	1,23
AP	0,330	0,06	mg/l	105%	0,78
AQ	0,286	0,04	mg/l	91%	-1,23
AR			mg/l		
AS	<0,5		mg/l	*	
AT	<1		mg/l	*	
AU	0,334	0,029	mg/l	107%	0,96

	All results	Outliers excl.	Unit
Mean $\pm$ CI(99%)	0,307 $\pm$ 0,030	0,314 $\pm$ 0,022	mg/l
Recov. $\pm$ CI(99%)	97,9 $\pm$ 9,5	100,3 $\pm$ 7,0	%
SD between labs	0,057	0,041	mg/l
RSD between labs	18,5	13,1	%
n for calculation	28	27	





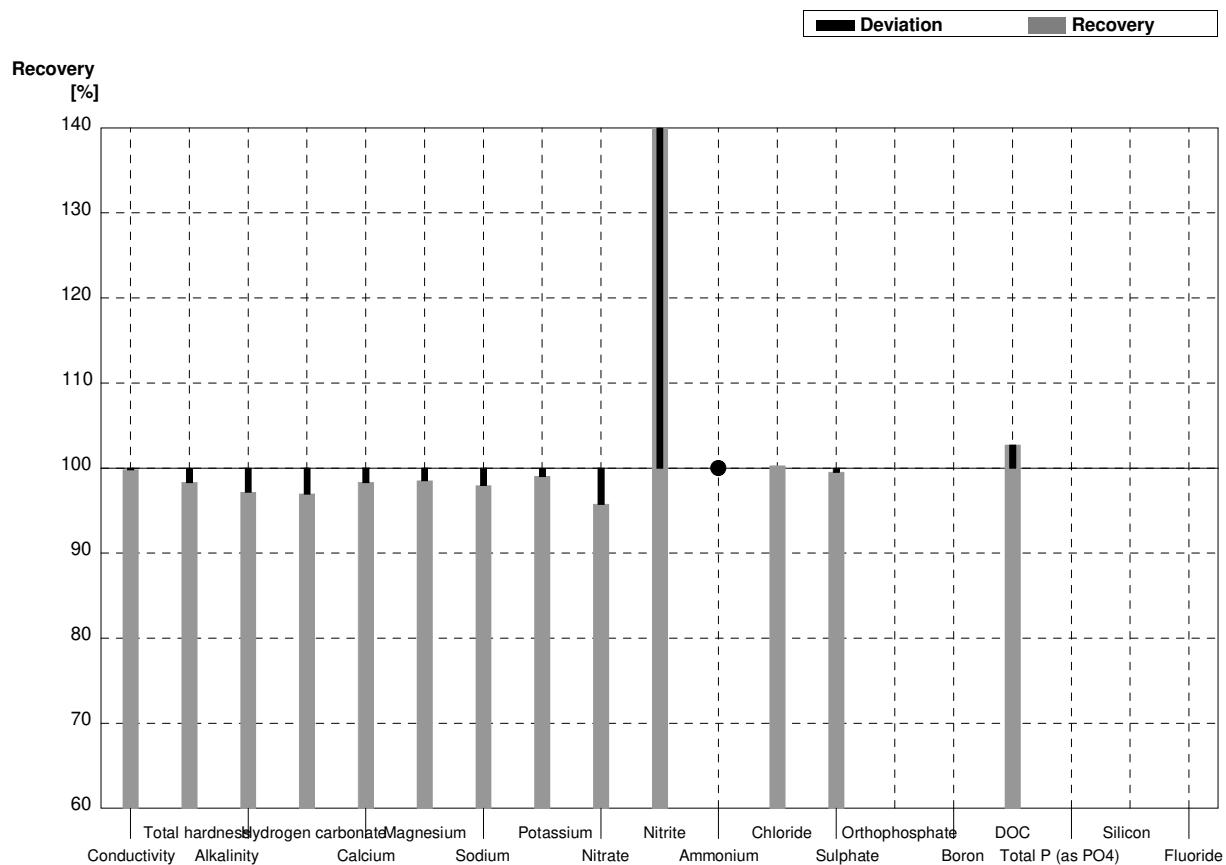
# **Illustration of Results Laboratory Oriented Part**

**Round N166  
Major Ions**

**Sample Dispatch: 6 March 2023**

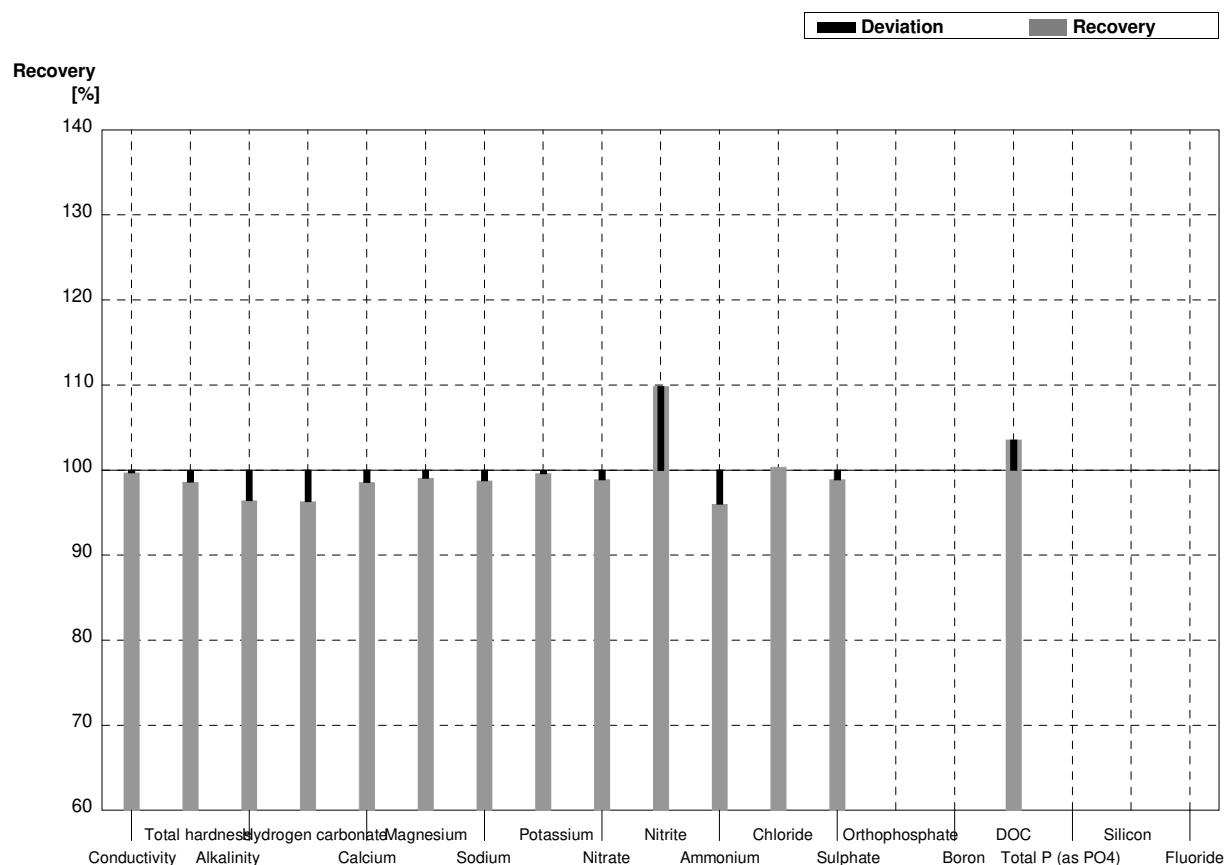
**Sample N166A****Laboratory A**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	534	11,7	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,412	0,06	$\text{mmol}/\text{l}$	98%
Alkalinity	1,76	0,03	1,71	0,04	$\text{mmol}/\text{l}$	97%
Hydrogen carbonate	104,4	1,6	101,23	2,13	$\text{mg/l}$	97%
Calcium	36,2	0,6	35,59	1,39	$\text{mg/l}$	98%
Magnesium	12,93	0,15	12,74	0,60	$\text{mg/l}$	99%
Sodium	48,6	0,3	47,61	2,29	$\text{mg/l}$	98%
Potassium	6,19	0,04	6,13	0,39	$\text{mg/l}$	99%
Nitrate	5,20	0,10	4,98	0,33	$\text{mg/l}$	96%
Nitrite	0,0131	0,0004	0,0190	0,001	$\text{mg/l}$	145%
Ammonium	<0,01		<0,005	0,000	$\text{mg/l}$	•
Chloride	51,6	0,6	51,74	2,43	$\text{mg/l}$	100%
Sulphate	87,7	0,6	87,27	4,36	$\text{mg/l}$	100%
Orthophosphate	0,0307	0,0023			$\text{mg/l}$	
Boron	0,0334	0,0019			$\text{mg/l}$	
DOC	4,03	0,05	4,14	0,72	$\text{mg/l}$	103%
Total P (as PO <sub>4</sub> )	0,0884	0,0013			$\text{mg/l}$	
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013			$\text{mg/l}$	



**Sample N166B****Laboratory A**

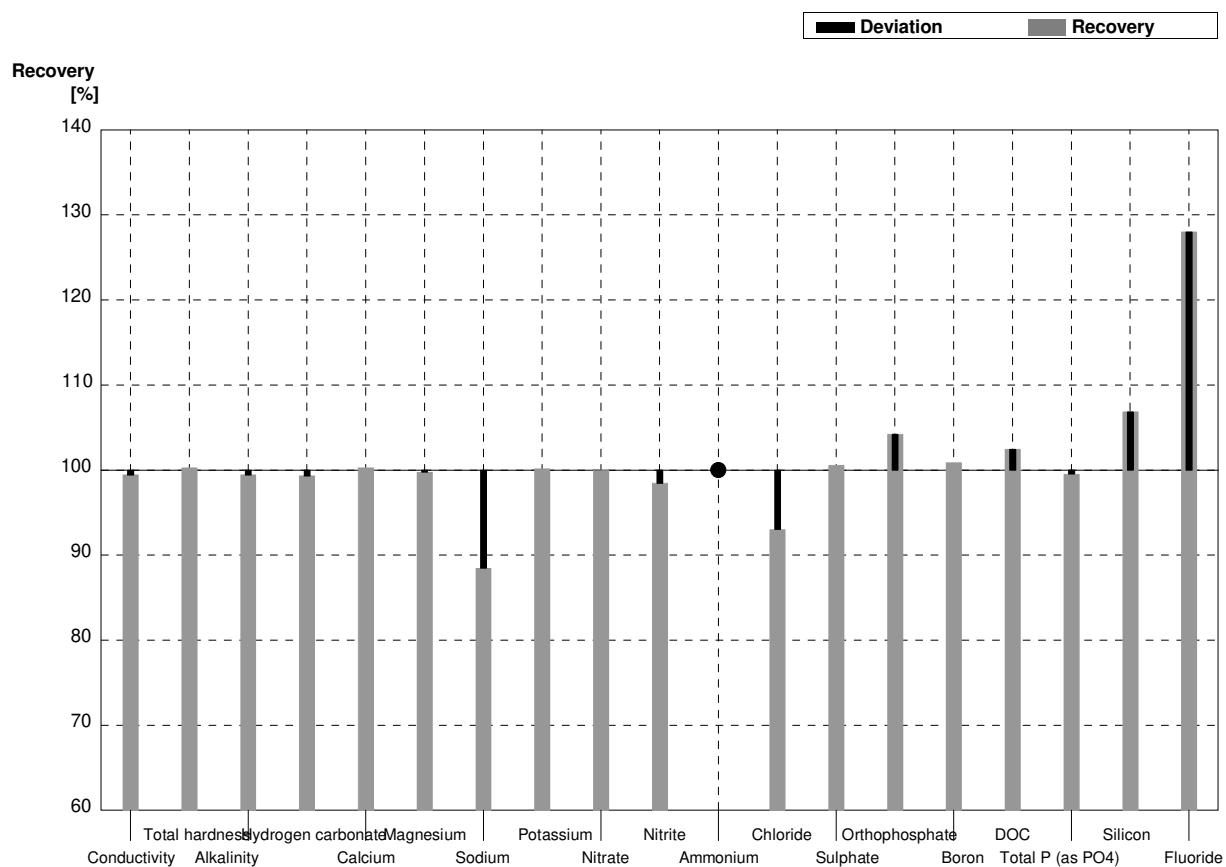
Parameter	Target value	$\pm$ U (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	641	14,1	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	2,899	0,12	$\text{mmol}/\text{l}$	99%
Alkalinity	4,18	0,08	4,03	0,08	$\text{mmol}/\text{l}$	96%
Hydrogen carbonate	252	5	242,70	5,10	$\text{mg}/\text{l}$	96%
Calcium	85,1	1,6	83,88	3,27	$\text{mg}/\text{l}$	99%
Magnesium	19,8	0,4	19,61	0,92	$\text{mg}/\text{l}$	99%
Sodium	15,2	0,7	15,01	0,72	$\text{mg}/\text{l}$	99%
Potassium	5,02	0,04	5,00	0,32	$\text{mg}/\text{l}$	100%
Nitrate	78,7	1,9	77,82	5,21	$\text{mg}/\text{l}$	99%
Nitrite	0,061	0,002	0,067	0,005	$\text{mg}/\text{l}$	110%
Ammonium	0,050	0,005	0,0480	0,008	$\text{mg}/\text{l}$	96%
Chloride	17,5	0,4	17,56	0,83	$\text{mg}/\text{l}$	100%
Sulphate	35,5	0,4	35,10	1,76	$\text{mg}/\text{l}$	99%
Orthophosphate	<0,009				$\text{mg}/\text{l}$	
Boron	0,085	0,004			$\text{mg}/\text{l}$	
DOC	1,97	0,04	2,04	0,35	$\text{mg}/\text{l}$	104%
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg}/\text{l}$	
Silicon	5,07	0,03			$\text{mg}/\text{l}$	
Fluoride	0,313	0,008			$\text{mg}/\text{l}$	



**Sample N166A**

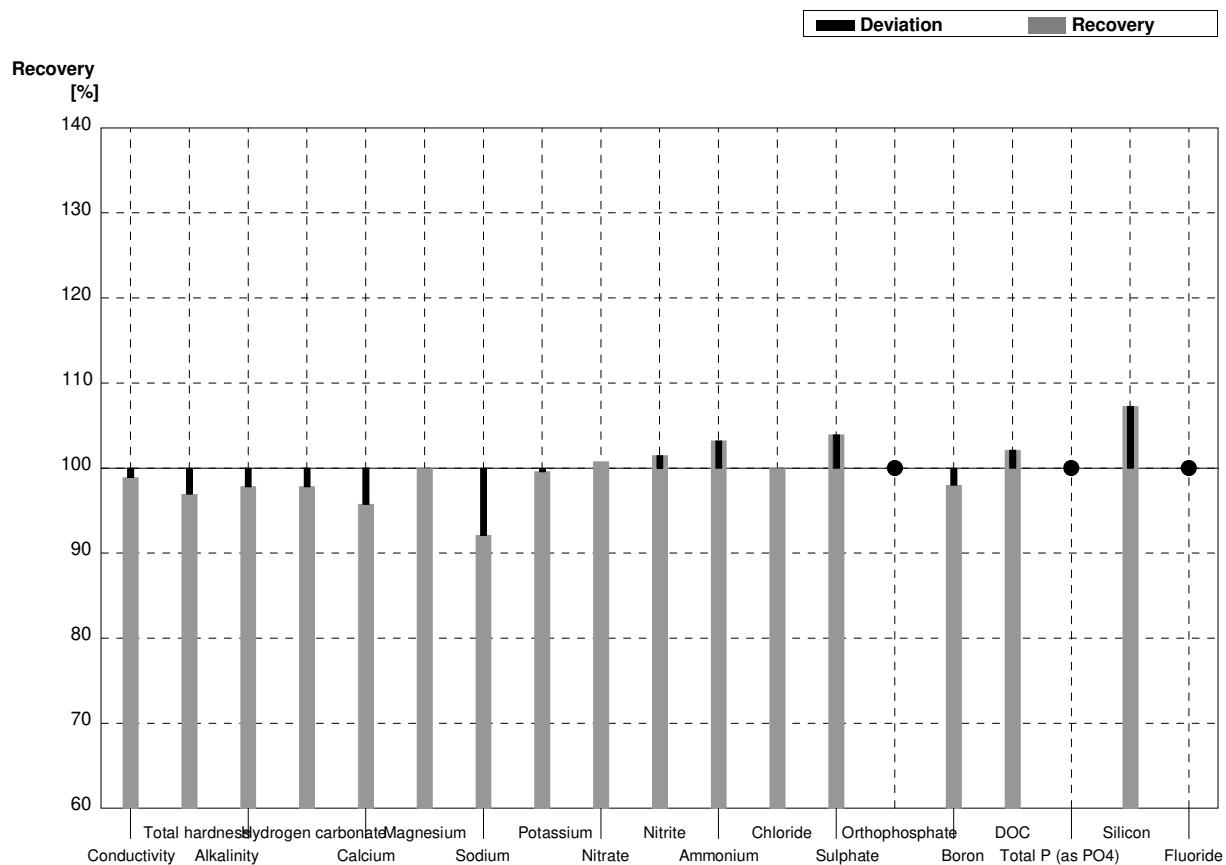
**Laboratory B**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	532		$\mu\text{S}/\text{cm}$	99%
Total hardness	1,436	0,016	1,44		$\text{mmol/l}$	100%
Alkalinity	1,76	0,03	1,75		$\text{mmol/l}$	99%
Hydrogen carbonate	104,4	1,6	103,7		$\text{mg/l}$	99%
Calcium	36,2	0,6	36,3	3,1	$\text{mg/l}$	100%
Magnesium	12,93	0,15	12,9	12,9	$\text{mg/l}$	100%
Sodium	48,6	0,3	43,0	43,0	$\text{mg/l}$	88%
Potassium	6,19	0,04	6,2	6,2	$\text{mg/l}$	100%
Nitrate	5,20	0,10	5,2	5,2	$\text{mg/l}$	100%
Nitrite	0,0131	0,0004	0,0129	0,002	$\text{mg/l}$	98%
Ammonium	<0,01		<0,01		$\text{mg/l}$	•
Chloride	51,6	0,6	48,0	6,8	$\text{mg/l}$	93%
Sulphate	87,7	0,6	88,2	7,1	$\text{mg/l}$	101%
Orthophosphate	0,0307	0,0023	0,0320	0,003	$\text{mg/l}$	104%
Boron	0,0334	0,0019	0,0337	0,0024	$\text{mg/l}$	101%
DOC	4,03	0,05	4,129	0,49	$\text{mg/l}$	102%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,088	0,008	$\text{mg/l}$	100%
Silicon	3,013	0,017	3,22		$\text{mg/l}$	107%
Fluoride	0,500	0,013	0,64	0,1	$\text{mg/l}$	128%



**Sample N166B****Laboratory B**

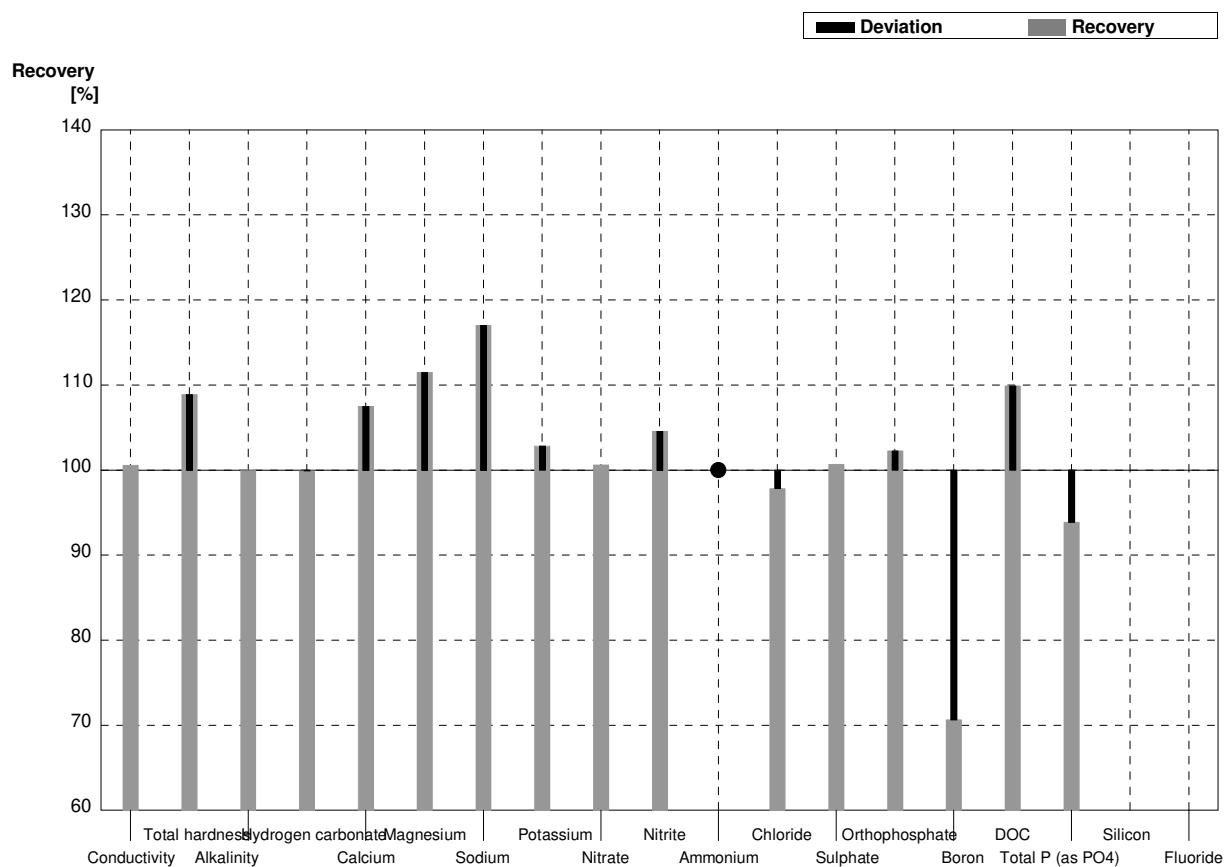
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	636		$\mu\text{S}/\text{cm}$	99%
Total hardness	2,94	0,04	2,85		$\text{mmol}/\text{l}$	97%
Alkalinity	4,18	0,08	4,09		$\text{mmol}/\text{l}$	98%
Hydrogen carbonate	252	5	246,5		$\text{mg}/\text{l}$	98%
Calcium	85,1	1,6	81,5	6,9	$\text{mg}/\text{l}$	96%
Magnesium	19,8	0,4	19,8	2,1	$\text{mg}/\text{l}$	100%
Sodium	15,2	0,7	14,0	1,2	$\text{mg}/\text{l}$	92%
Potassium	5,02	0,04	5,0	0,5	$\text{mg}/\text{l}$	100%
Nitrate	78,7	1,9	79,3	11,3	$\text{mg}/\text{l}$	101%
Nitrite	0,061	0,002	0,0619	0,007	$\text{mg}/\text{l}$	101%
Ammonium	0,050	0,005	0,0516	0,008	$\text{mg}/\text{l}$	103%
Chloride	17,5	0,4	17,5	2,5	$\text{mg}/\text{l}$	100%
Sulphate	35,5	0,4	36,9	3,0	$\text{mg}/\text{l}$	104%
Orthophosphate	<0,009		<0,01		$\text{mg}/\text{l}$	•
Boron	0,085	0,004	0,0833	0,015	$\text{mg}/\text{l}$	98%
DOC	1,97	0,04	2,012	0,24	$\text{mg}/\text{l}$	102%
Total P (as PO <sub>4</sub> )	<0,009		<0,03		$\text{mg}/\text{l}$	•
Silicon	5,07	0,03	5,44		$\text{mg}/\text{l}$	107%
Fluoride	0,313	0,008	<0,5		$\text{mg}/\text{l}$	•



**Sample N166A**

**Laboratory C**

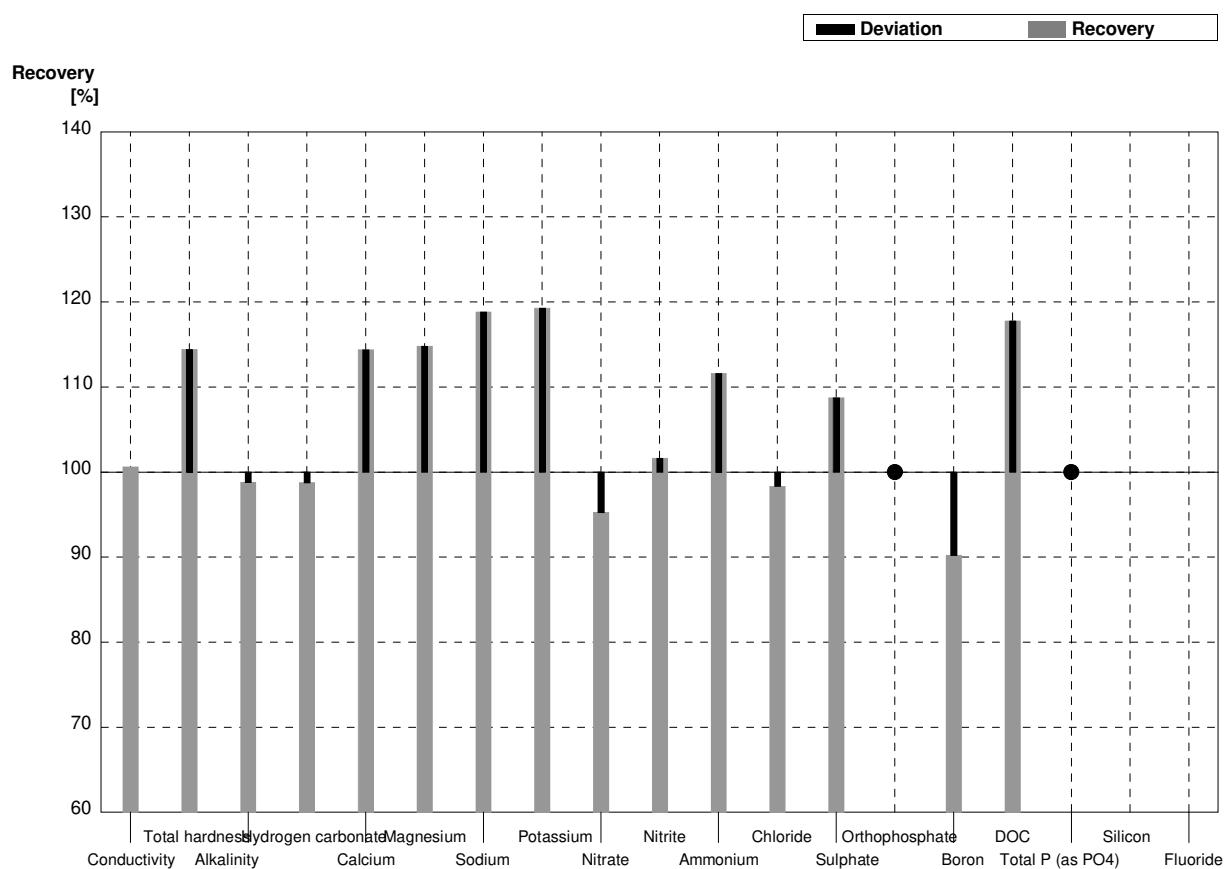
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	538	4,51	µS/cm	101%
Total hardness	1,436	0,016	1,564		mmol/l	109%
Alkalinity	1,76	0,03	1,76	0,18	mmol/l	100%
Hydrogen carbonate	104,4	1,6	104,327		mg/l	100%
Calcium	36,2	0,6	38,914	3,8	mg/l	107%
Magnesium	12,93	0,15	14,415	1,4	mg/l	111%
Sodium	48,6	0,3	56,875	5,6	mg/l	117%
Potassium	6,19	0,04	6,367	0,6	mg/l	103%
Nitrate	5,20	0,10	5,232	0,5	mg/l	101%
Nitrite	0,0131	0,0004	0,0137	0,0013	mg/l	105%
Ammonium	<0,01		<0,0090		mg/l	•
Chloride	51,6	0,6	50,490	5,0	mg/l	98%
Sulphate	87,7	0,6	88,310	8,8	mg/l	101%
Orthophosphate	0,0307	0,0023	0,0314	0,003	mg/l	102%
Boron	0,0334	0,0019	0,0236	0,0023	mg/l	71%
DOC	4,03	0,05	4,43	0,4	mg/l	110%
Total P (as PO4)	0,0884	0,0013	0,083	0,008	mg/l	94%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

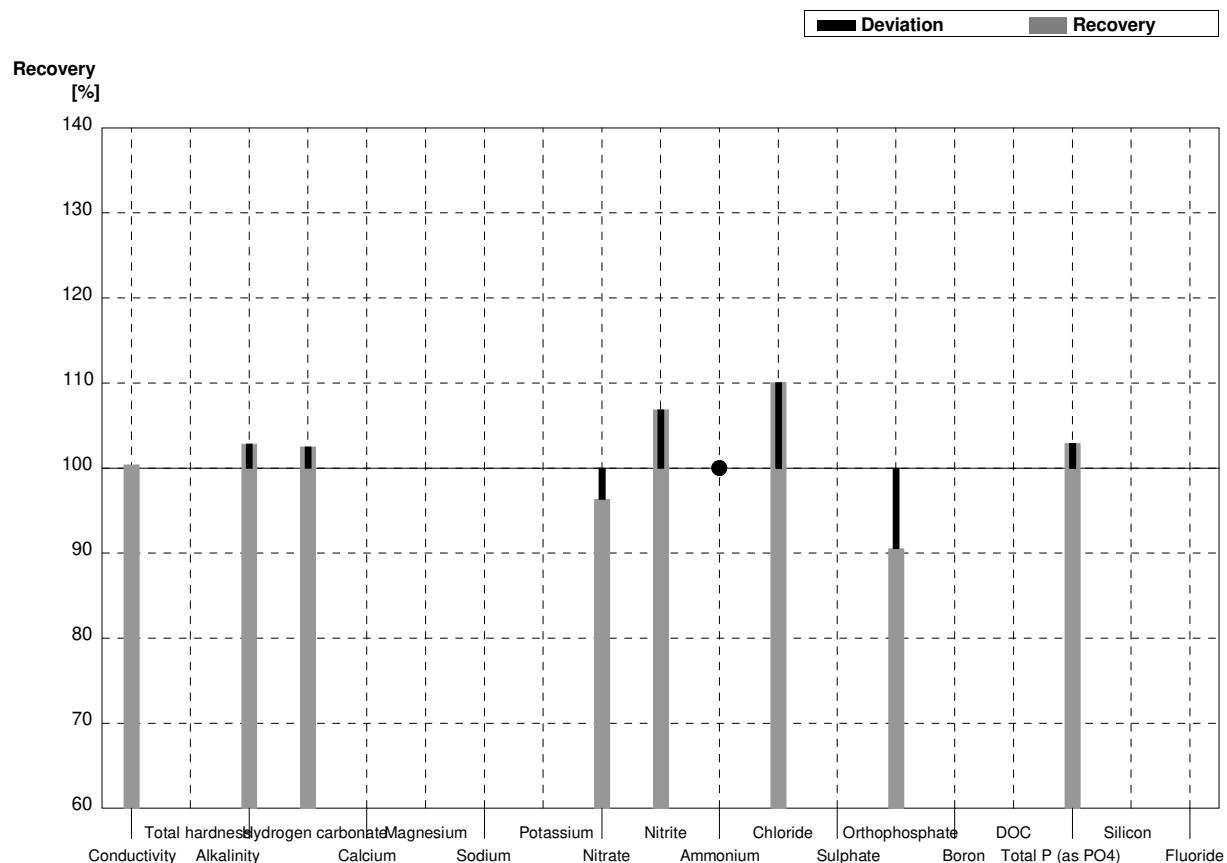
**Laboratory C**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	647	4,51	µS/cm	101%
Total hardness	2,94	0,04	3,364		mmol/l	114%
Alkalinity	4,18	0,08	4,13	0,41	mmol/l	99%
Hydrogen carbonate	252	5	248,920		mg/l	99%
Calcium	85,1	1,6	97,340	9,7	mg/l	114%
Magnesium	19,8	0,4	22,732	2,2	mg/l	115%
Sodium	15,2	0,7	18,060	1,8	mg/l	119%
Potassium	5,02	0,04	5,988	0,6	mg/l	119%
Nitrate	78,7	1,9	74,978	7,4	mg/l	95%
Nitrite	0,061	0,002	0,0620	0,0062	mg/l	102%
Ammonium	0,050	0,005	0,0558	0,006	mg/l	112%
Chloride	17,5	0,4	17,209	1,7	mg/l	98%
Sulphate	35,5	0,4	38,608	3,8	mg/l	109%
Orthophosphate	<0,009		<0,0055		mg/l	•
Boron	0,085	0,004	0,0767	0,007	mg/l	90%
DOC	1,97	0,04	2,32	0,2	mg/l	118%
Total P (as PO4)	<0,009		<0,0010		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



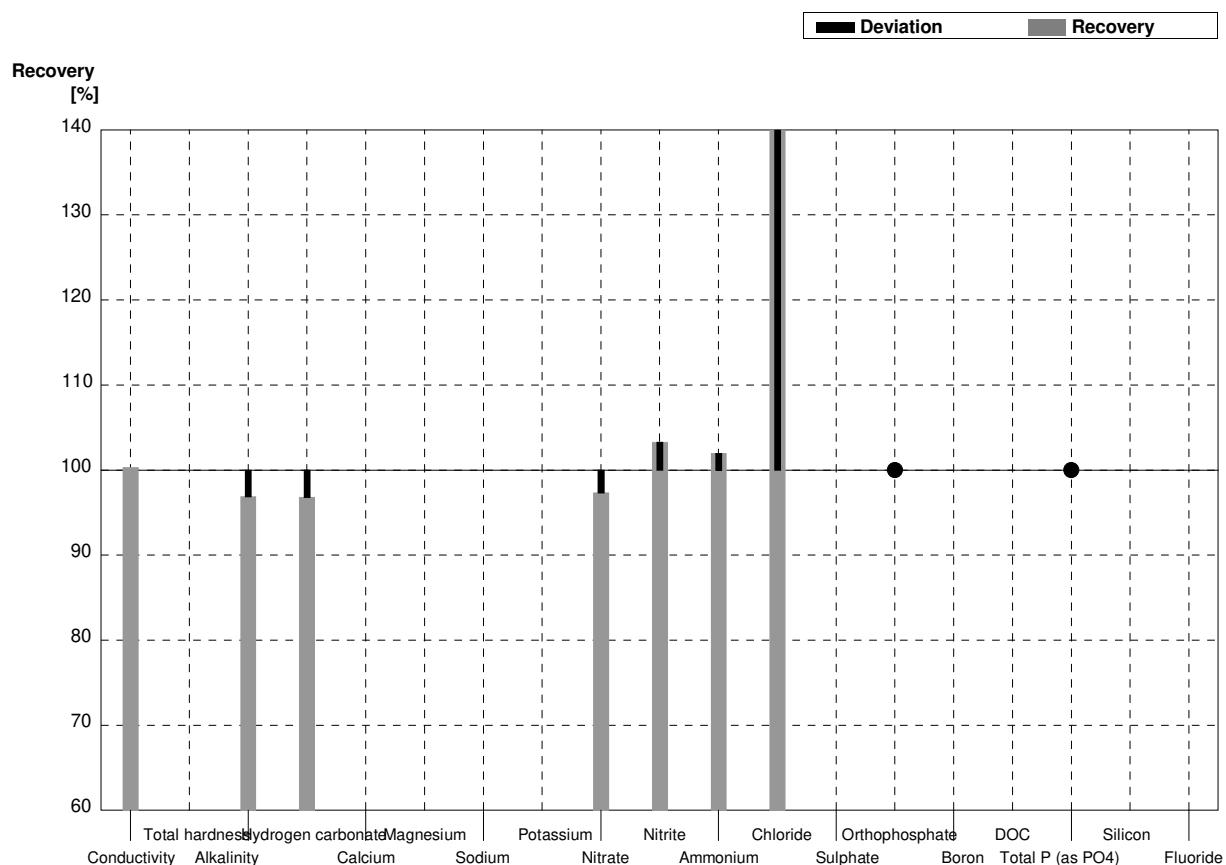
**Sample N166A****Laboratory D**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	537	3,80	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,81	0,051	mmol/l	103%
Hydrogen carbonate	104,4	1,6	107	1,55	mg/l	102%
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10	5,01	0,343	mg/l	96%
Nitrite	0,0131	0,0004	0,0140	0,0014	mg/l	107%
Ammonium	<0,01		0,0061	0,00093	mg/l	•
Chloride	51,6	0,6	56,8	0,58	mg/l	110%
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023	0,0278	0,00326	mg/l	91%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,091	0,0120	mg/l	103%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B****Laboratory D**

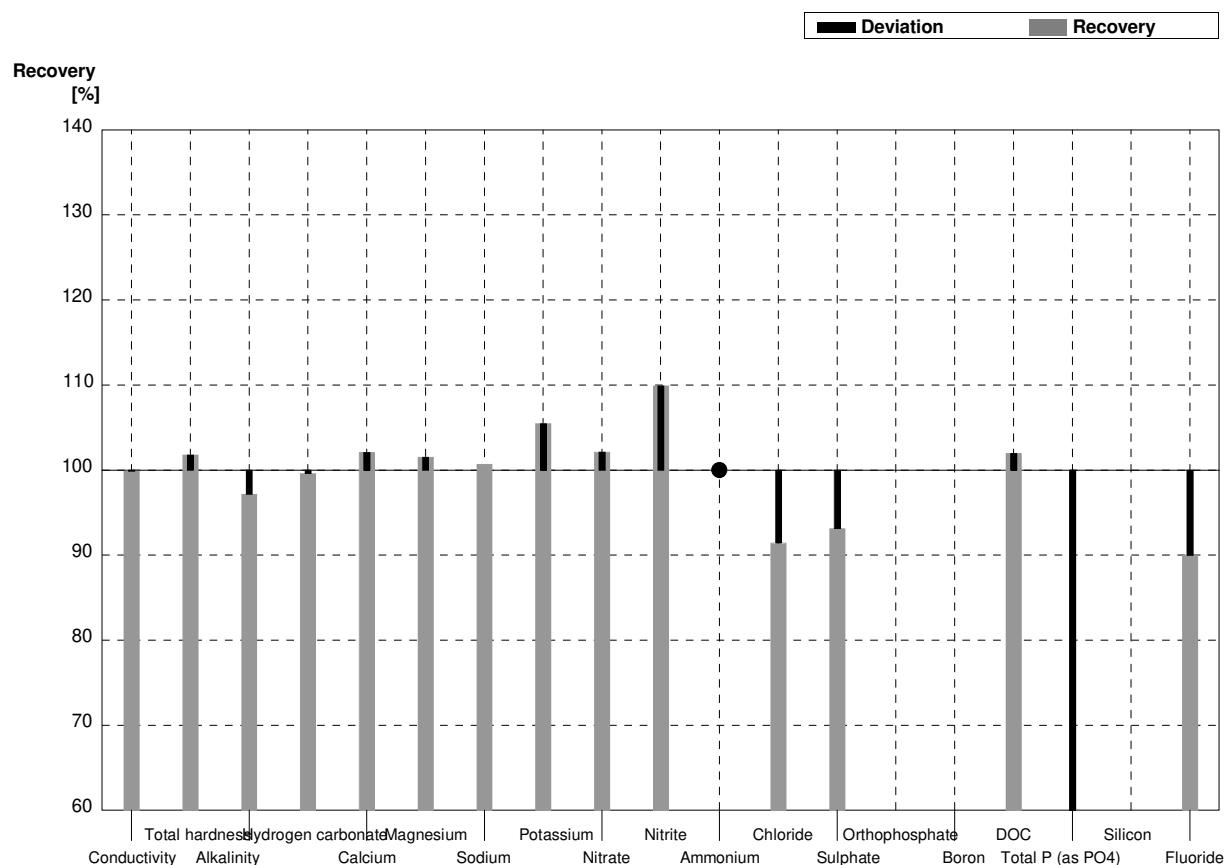
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	645	4,57	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04			$\text{mmol/l}$	
Alkalinity	4,18	0,08	4,05	0,114	$\text{mmol/l}$	97%
Hydrogen carbonate	252	5	244	3,53	$\text{mg/l}$	97%
Calcium	85,1	1,6			$\text{mg/l}$	
Magnesium	19,8	0,4			$\text{mg/l}$	
Sodium	15,2	0,7			$\text{mg/l}$	
Potassium	5,02	0,04			$\text{mg/l}$	
Nitrate	78,7	1,9	76,6	5,25	$\text{mg/l}$	97%
Nitrite	0,061	0,002	0,063	0,0063	$\text{mg/l}$	103%
Ammonium	0,050	0,005	0,051	0,0077	$\text{mg/l}$	102%
Chloride	17,5	0,4	25,9	0,26	$\text{mg/l}$	148%
Sulphate	35,5	0,4			$\text{mg/l}$	
Orthophosphate	<0,009		<0,006	0	$\text{mg/l}$	•
Boron	0,085	0,004			$\text{mg/l}$	
DOC	1,97	0,04			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	<0,009		<0,006	0	$\text{mg/l}$	•
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008			$\text{mg/l}$	



**Sample N166A**

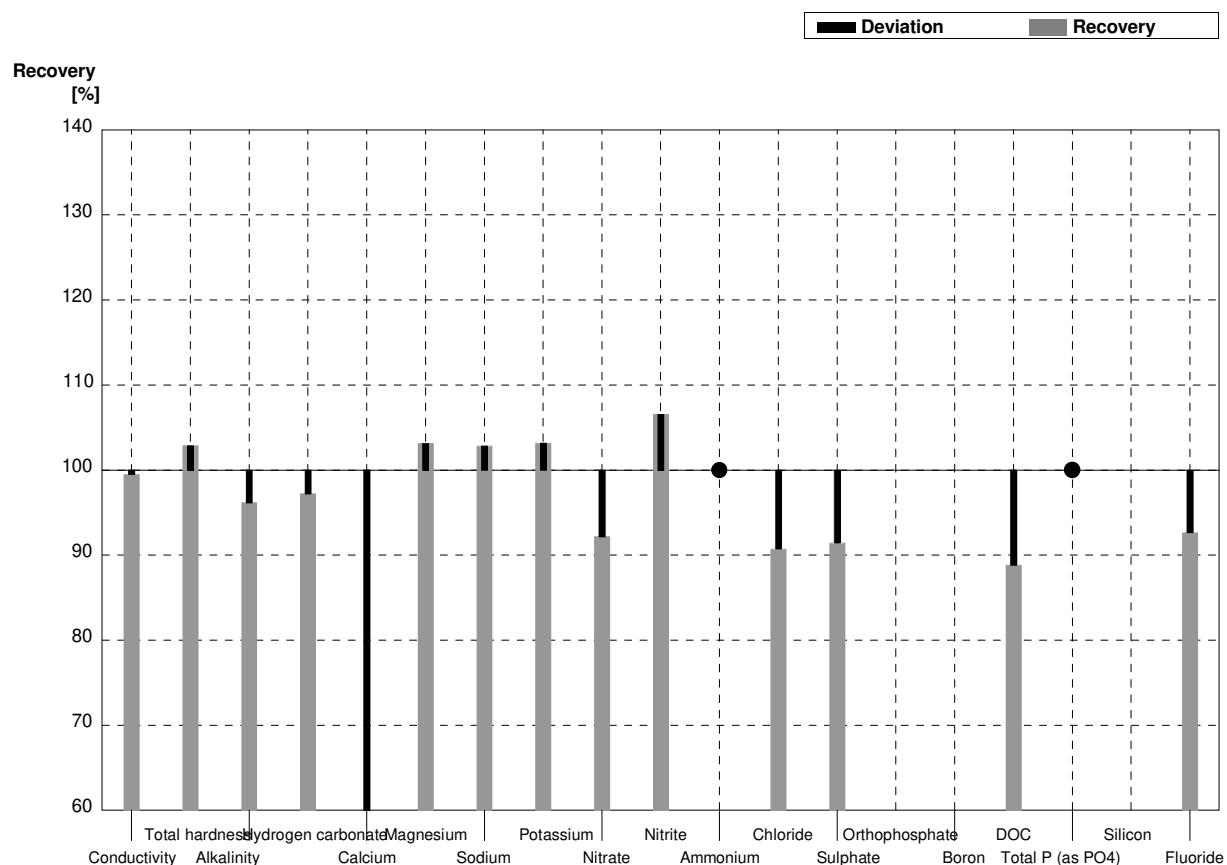
**Laboratory E**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	534,50	53,45	µS/cm	100%
Total hardness	1,436	0,016	1,462	0,366	mmol/l	102%
Alkalinity	1,76	0,03	1,71	0,171	mmol/l	97%
Hydrogen carbonate	104,4	1,6	104,00	26,085	mg/l	100%
Calcium	36,2	0,6	36,96	5,544	mg/l	102%
Magnesium	12,93	0,15	13,13	1,970	mg/l	102%
Sodium	48,6	0,3	48,94	7,341	mg/l	101%
Potassium	6,19	0,04	6,53	0,979	mg/l	105%
Nitrate	5,20	0,10	5,31	1,970	mg/l	102%
Nitrite	0,0131	0,0004	0,0144	0,0036	mg/l	110%
Ammonium	<0,01		<0,10		mg/l	•
Chloride	51,6	0,6	47,19	11,796	mg/l	91%
Sulphate	87,7	0,6	81,70	20,425	mg/l	93%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	4,11	1,028	mg/l	102%
Total P (as PO4)	0,0884	0,0013	0,0310	0,06	mg/l	35%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,450	0,111	mg/l	90%



**Sample N166B****Laboratory E**

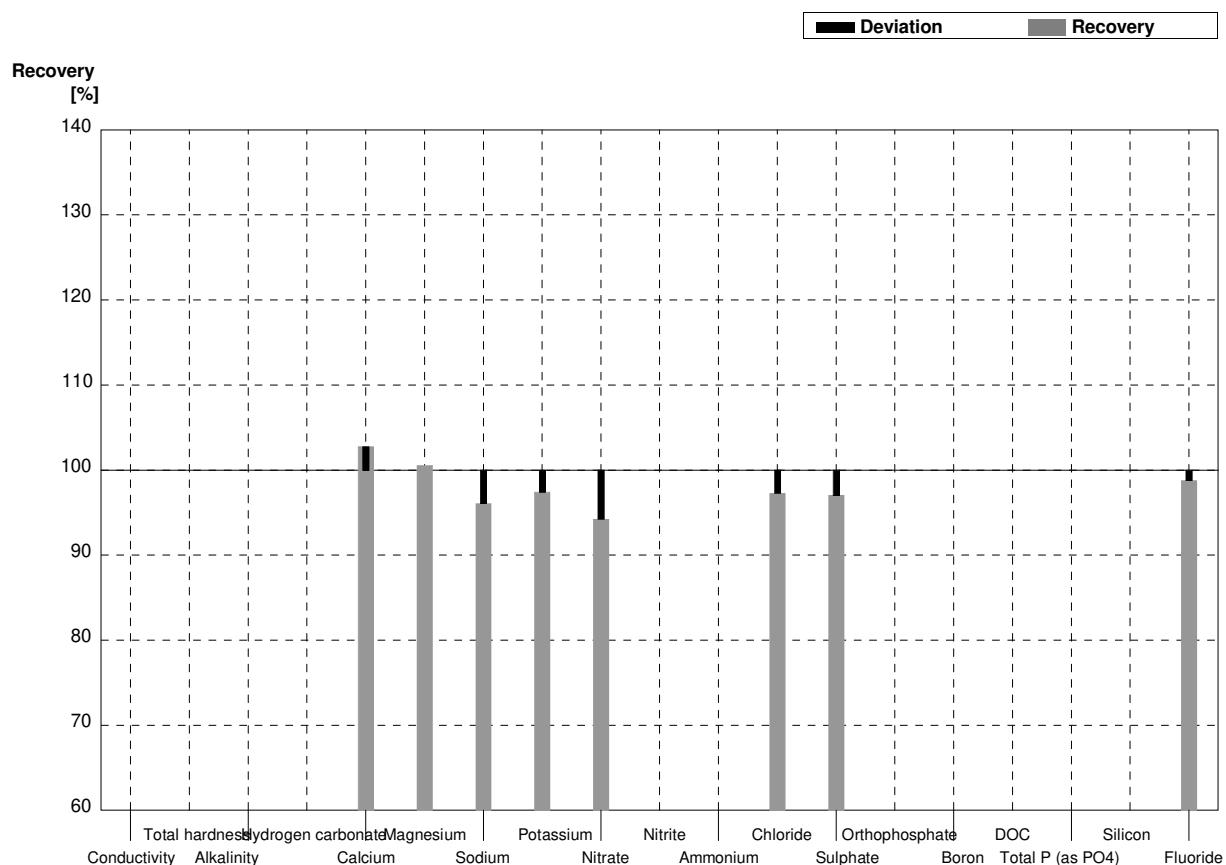
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	639,80	63,98	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	3,025	0,76	$\text{mmol/l}$	103%
Alkalinity	4,18	0,08	4,02	0,402	$\text{mmol/l}$	96%
Hydrogen carbonate	252	5	245,00	61,322	$\text{mg/l}$	97%
Calcium	85,1	1,6	36,96	13,138	$\text{mg/l}$	43%
Magnesium	19,8	0,4	20,42	3,063	$\text{mg/l}$	103%
Sodium	15,2	0,7	15,63	2,345	$\text{mg/l}$	103%
Potassium	5,02	0,04	5,18	0,776	$\text{mg/l}$	103%
Nitrate	78,7	1,9	72,55	3,063	$\text{mg/l}$	92%
Nitrite	0,061	0,002	0,065	0,0162	$\text{mg/l}$	107%
Ammonium	0,050	0,005	<0,10		$\text{mg/l}$	•
Chloride	17,5	0,4	15,88	3,969	$\text{mg/l}$	91%
Sulphate	35,5	0,4	32,47	8,118	$\text{mg/l}$	91%
Orthophosphate	<0,009				$\text{mg/l}$	
Boron	0,085	0,004			$\text{mg/l}$	
DOC	1,97	0,04	1,75	0,493	$\text{mg/l}$	89%
Total P (as PO <sub>4</sub> )	<0,009		<BG		$\text{mg/l}$	•
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008	0,290	0,073	$\text{mg/l}$	93%



**Sample N166A**

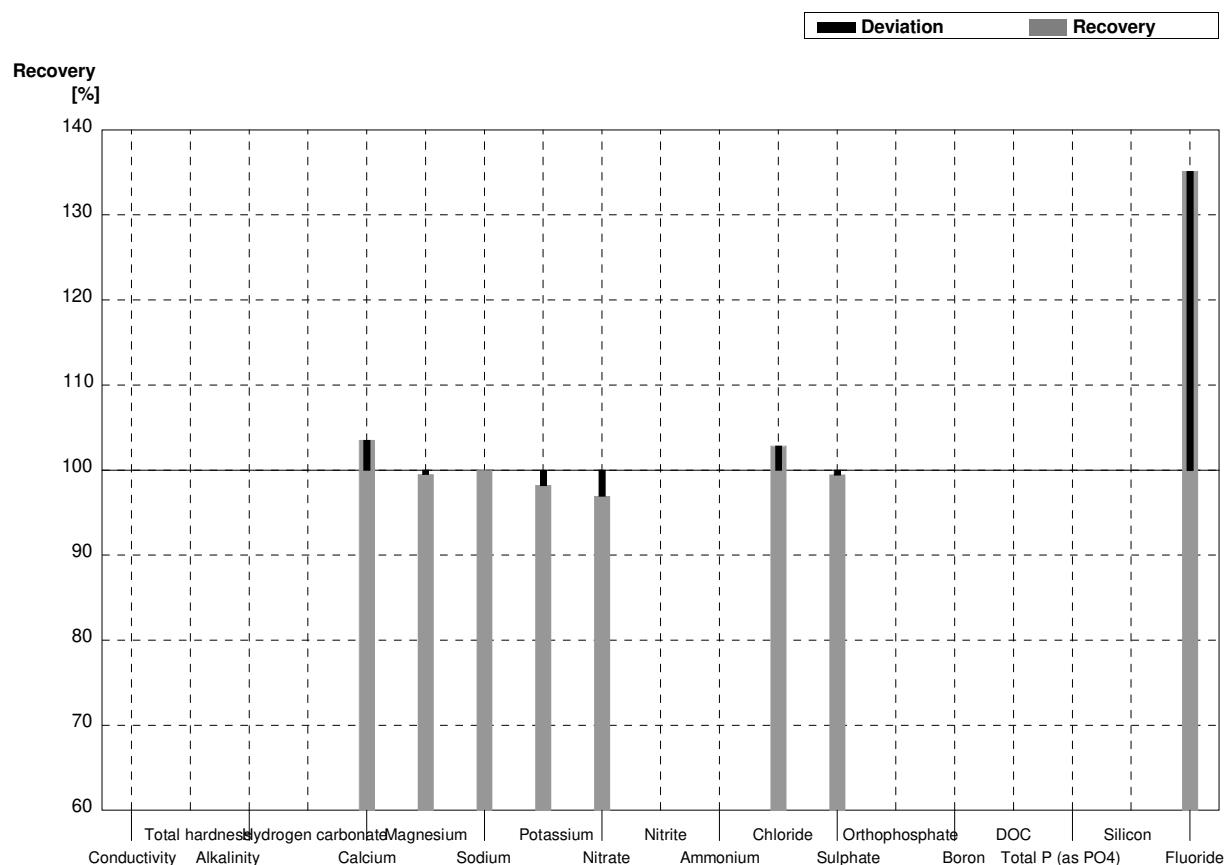
**Laboratory F**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2			$\mu\text{S}/\text{cm}$	
Total hardness	1,436	0,016			$\text{mmol/l}$	
Alkalinity	1,76	0,03			$\text{mmol/l}$	
Hydrogen carbonate	104,4	1,6			$\text{mg/l}$	
Calcium	36,2	0,6	37,2	0,5	$\text{mg/l}$	103%
Magnesium	12,93	0,15	13,0	0,2	$\text{mg/l}$	101%
Sodium	48,6	0,3	46,7	0,7	$\text{mg/l}$	96%
Potassium	6,19	0,04	6,03	0,03	$\text{mg/l}$	97%
Nitrate	5,20	0,10	4,90	0,04	$\text{mg/l}$	94%
Nitrite	0,0131	0,0004			$\text{mg/l}$	
Ammonium	<0,01				$\text{mg/l}$	
Chloride	51,6	0,6	50,2	0,5	$\text{mg/l}$	97%
Sulphate	87,7	0,6	85,1	0,4	$\text{mg/l}$	97%
Orthophosphate	0,0307	0,0023			$\text{mg/l}$	
Boron	0,0334	0,0019			$\text{mg/l}$	
DOC	4,03	0,05			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	0,0884	0,0013			$\text{mg/l}$	
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013	0,494	0,022	$\text{mg/l}$	99%



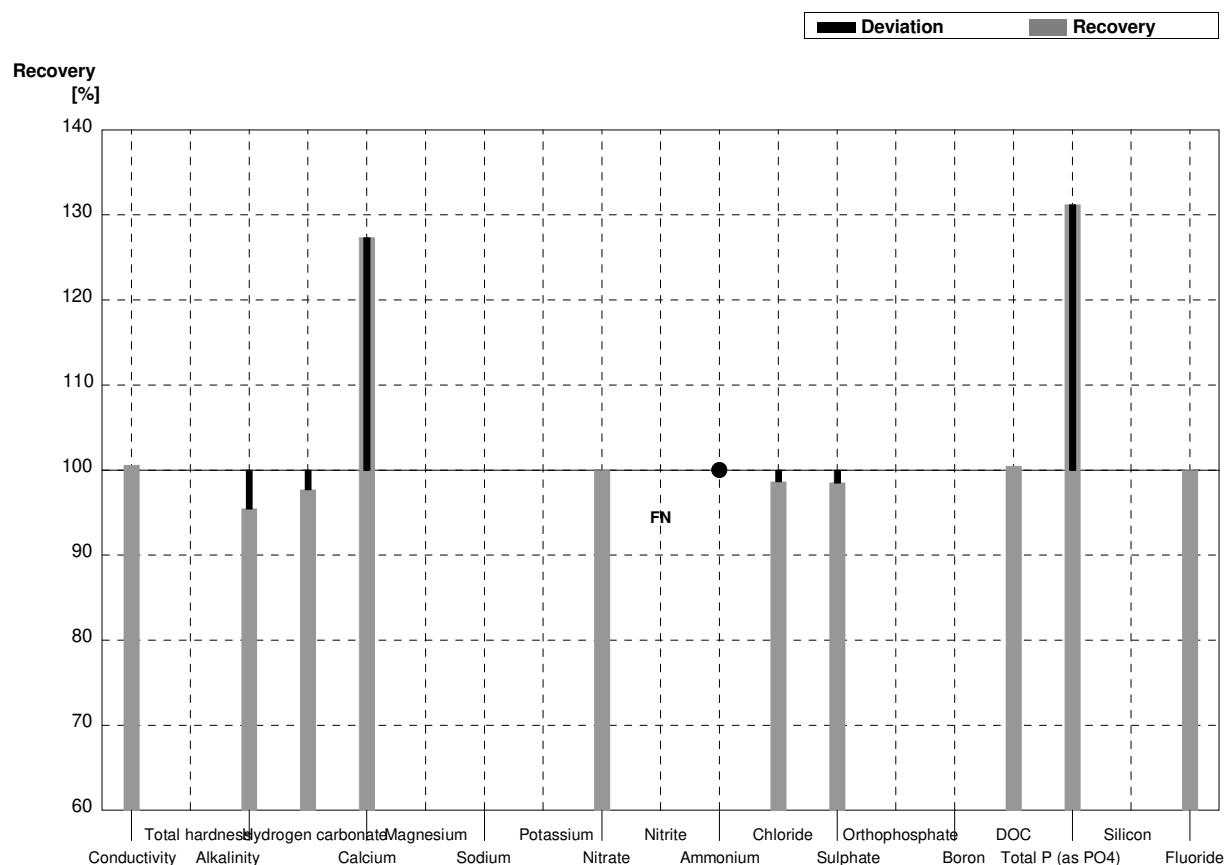
**Sample N166B****Laboratory F**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2			$\mu\text{S}/\text{cm}$	
Total hardness	2,94	0,04			$\text{mmol}/\text{l}$	
Alkalinity	4,18	0,08			$\text{mmol}/\text{l}$	
Hydrogen carbonate	252	5			$\text{mg}/\text{l}$	
Calcium	85,1	1,6	88,1	0,3	$\text{mg}/\text{l}$	104%
Magnesium	19,8	0,4	19,7	0,6	$\text{mg}/\text{l}$	99%
Sodium	15,2	0,7	15,2	0,1	$\text{mg}/\text{l}$	100%
Potassium	5,02	0,04	4,93	0,02	$\text{mg}/\text{l}$	98%
Nitrate	78,7	1,9	76,3	0,3	$\text{mg}/\text{l}$	97%
Nitrite	0,061	0,002			$\text{mg}/\text{l}$	
Ammonium	0,050	0,005			$\text{mg}/\text{l}$	
Chloride	17,5	0,4	18,0	0,2	$\text{mg}/\text{l}$	103%
Sulphate	35,5	0,4	35,3	0,2	$\text{mg}/\text{l}$	99%
Orthophosphate	<0,009				$\text{mg}/\text{l}$	
Boron	0,085	0,004			$\text{mg}/\text{l}$	
DOC	1,97	0,04			$\text{mg}/\text{l}$	
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg}/\text{l}$	
Silicon	5,07	0,03			$\text{mg}/\text{l}$	
Fluoride	0,313	0,008	0,423	0,019	$\text{mg}/\text{l}$	135%



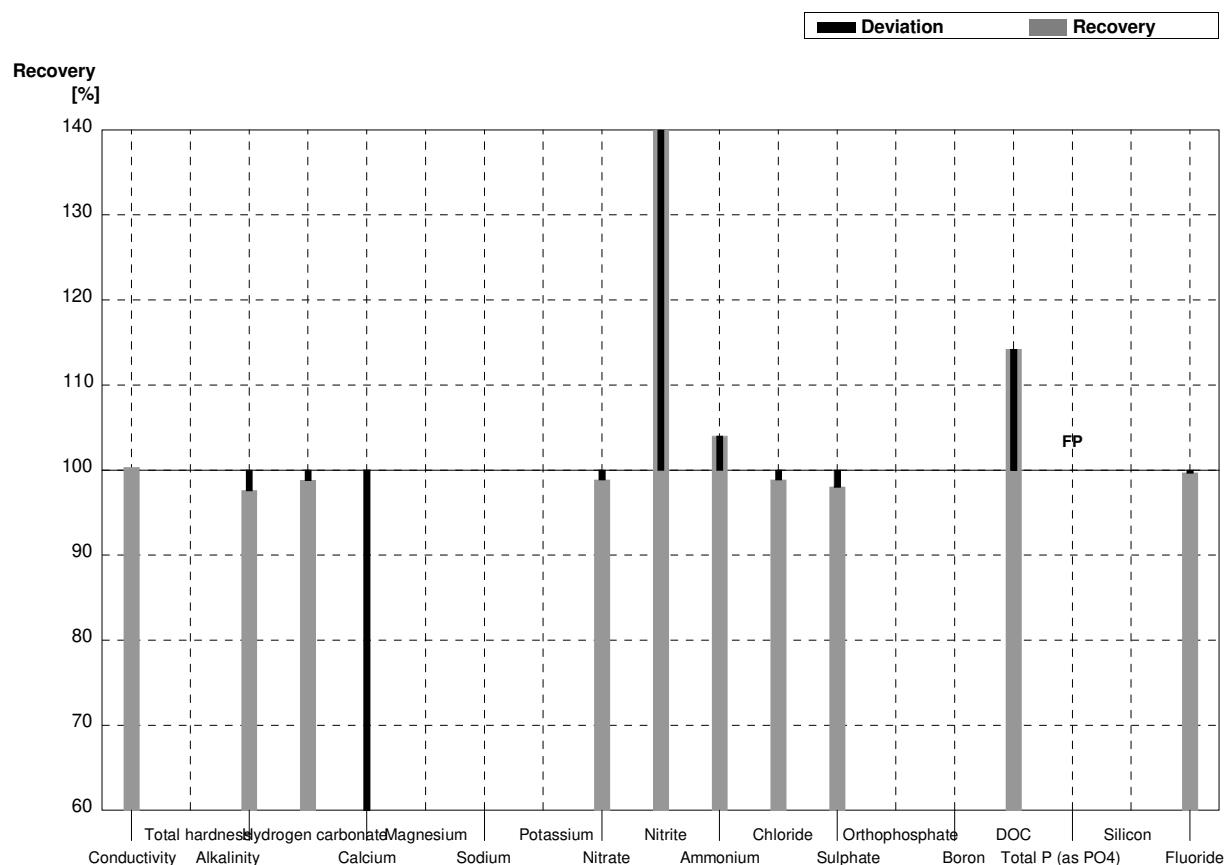
**Sample N166A****Laboratory G**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	538		$\mu\text{S}/\text{cm}$	101%
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,68	0,25	mmol/l	95%
Hydrogen carbonate	104,4	1,6	102		mg/l	98%
Calcium	36,2	0,6	46,1	6,00	mg/l	127%
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10	5,20	0,31	mg/l	100%
Nitrite	0,0131	0,0004	<0,003		mg/l	FN
Ammonium	<0,01		<0,003		mg/l	•
Chloride	51,6	0,6	50,9	3,10	mg/l	99%
Sulphate	87,7	0,6	86,4	7,8	mg/l	99%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	4,05	0,73	mg/l	100%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,116	0,008	mg/l	131%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,50	0,08	mg/l	100%



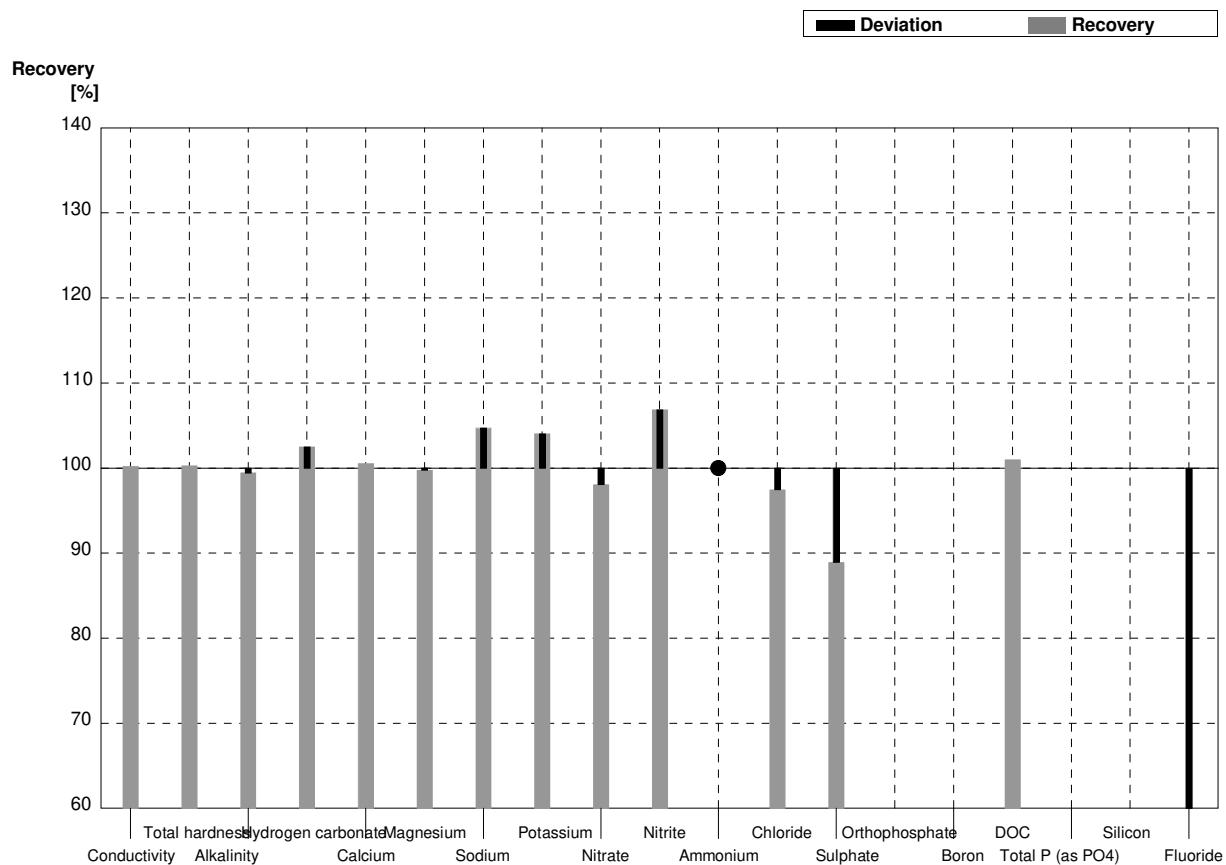
**Sample N166B****Laboratory G**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	645		$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,08	0,61	mmol/l	98%
Hydrogen carbonate	252	5	249		mg/l	99%
Calcium	85,1	1,6	46,25	6,01	mg/l	54%
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9	77,8	4,67	mg/l	99%
Nitrite	0,061	0,002	0,59	0,03	mg/l	967%
Ammonium	0,050	0,005	0,052		mg/l	104%
Chloride	17,5	0,4	17,3	1,04	mg/l	99%
Sulphate	35,5	0,4	34,8	3,13	mg/l	98%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	2,25	0,41	mg/l	114%
Total P (as PO <sub>4</sub> )	<0,009		0,052	0,004	mg/l	FP
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,312	0,047	mg/l	100%



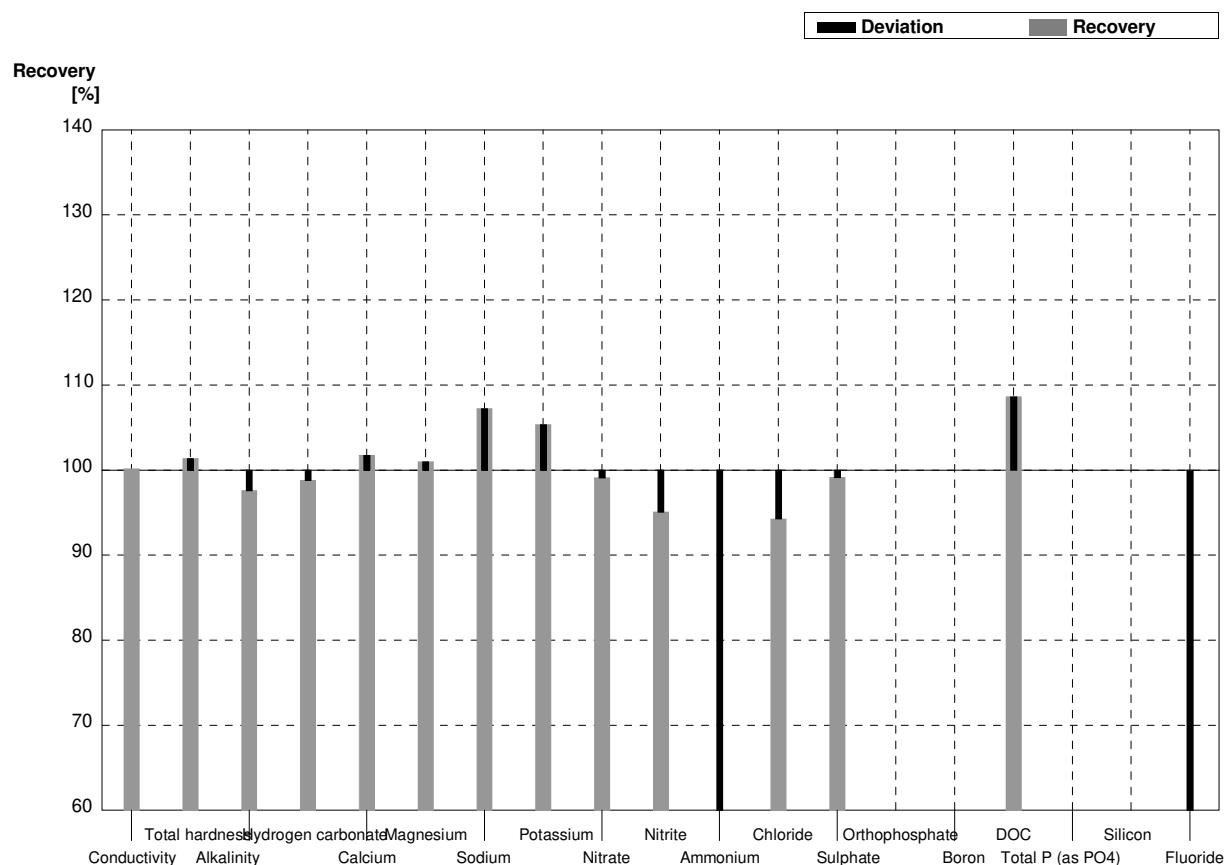
**Sample N166A****Laboratory H**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	536	9	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,44	0,12	$\text{mmol}/\text{l}$	100%
Alkalinity	1,76	0,03	1,75	0,05	$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	104,4	1,6	107	3	$\text{mg}/\text{l}$	102%
Calcium	36,2	0,6	36,4	2,1	$\text{mg}/\text{l}$	101%
Magnesium	12,93	0,15	12,9	0,8	$\text{mg}/\text{l}$	100%
Sodium	48,6	0,3	50,9	5,8	$\text{mg}/\text{l}$	105%
Potassium	6,19	0,04	6,44	0,24	$\text{mg}/\text{l}$	104%
Nitrate	5,20	0,10	5,1	0,2	$\text{mg}/\text{l}$	98%
Nitrite	0,0131	0,0004	0,0140	0,002	$\text{mg}/\text{l}$	107%
Ammonium	<0,01		<0,01		$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	50,3	3,4	$\text{mg}/\text{l}$	97%
Sulphate	87,7	0,6	78,0	5,1	$\text{mg}/\text{l}$	89%
Orthophosphate	0,0307	0,0023			$\text{mg}/\text{l}$	
Boron	0,0334	0,0019			$\text{mg}/\text{l}$	
DOC	4,03	0,05	4,07	0,85	$\text{mg}/\text{l}$	101%
Total P (as PO <sub>4</sub> )	0,0884	0,0013			$\text{mg}/\text{l}$	
Silicon	3,013	0,017			$\text{mg}/\text{l}$	
Fluoride	0,500	0,013	0,192	0,02	$\text{mg}/\text{l}$	38%



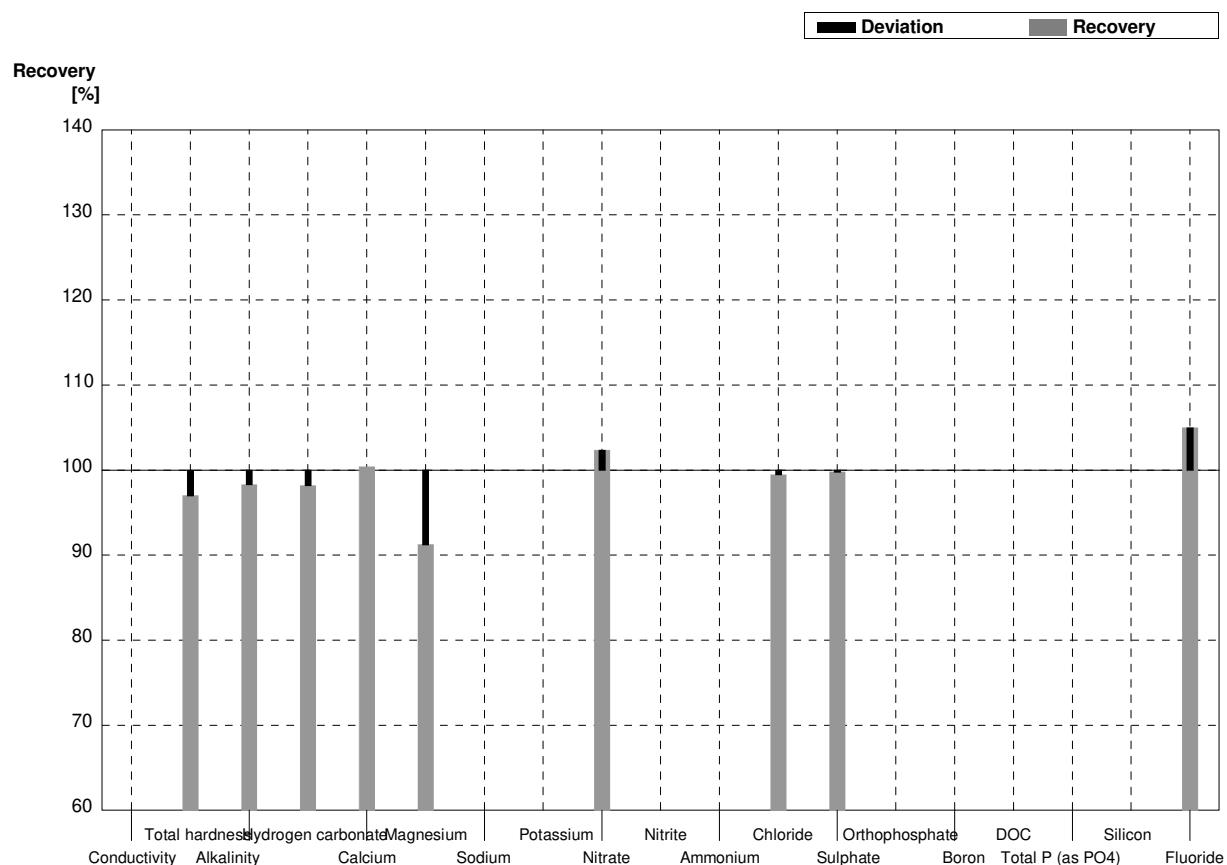
**Sample N166B****Laboratory H**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	644	10	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	2,98	0,25	$\text{mmol/l}$	101%
Alkalinity	4,18	0,08	4,08	0,11	$\text{mmol/l}$	98%
Hydrogen carbonate	252	5	249	7	$\text{mg/l}$	99%
Calcium	85,1	1,6	86,6	5	$\text{mg/l}$	102%
Magnesium	19,8	0,4	20,0	1,2	$\text{mg/l}$	101%
Sodium	15,2	0,7	16,3	1,8	$\text{mg/l}$	107%
Potassium	5,02	0,04	5,29	0,2	$\text{mg/l}$	105%
Nitrate	78,7	1,9	78,0	3,6	$\text{mg/l}$	99%
Nitrite	0,061	0,002	0,058	0,009	$\text{mg/l}$	95%
Ammonium	0,050	0,005	0,0250	0,006	$\text{mg/l}$	50%
Chloride	17,5	0,4	16,5	1,1	$\text{mg/l}$	94%
Sulphate	35,5	0,4	35,2	2,3	$\text{mg/l}$	99%
Orthophosphate	<0,009				$\text{mg/l}$	
Boron	0,085	0,004			$\text{mg/l}$	
DOC	1,97	0,04	2,14	0,45	$\text{mg/l}$	109%
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg/l}$	
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008	0,104	0,01	$\text{mg/l}$	33%



**Sample N166A****Laboratory I**

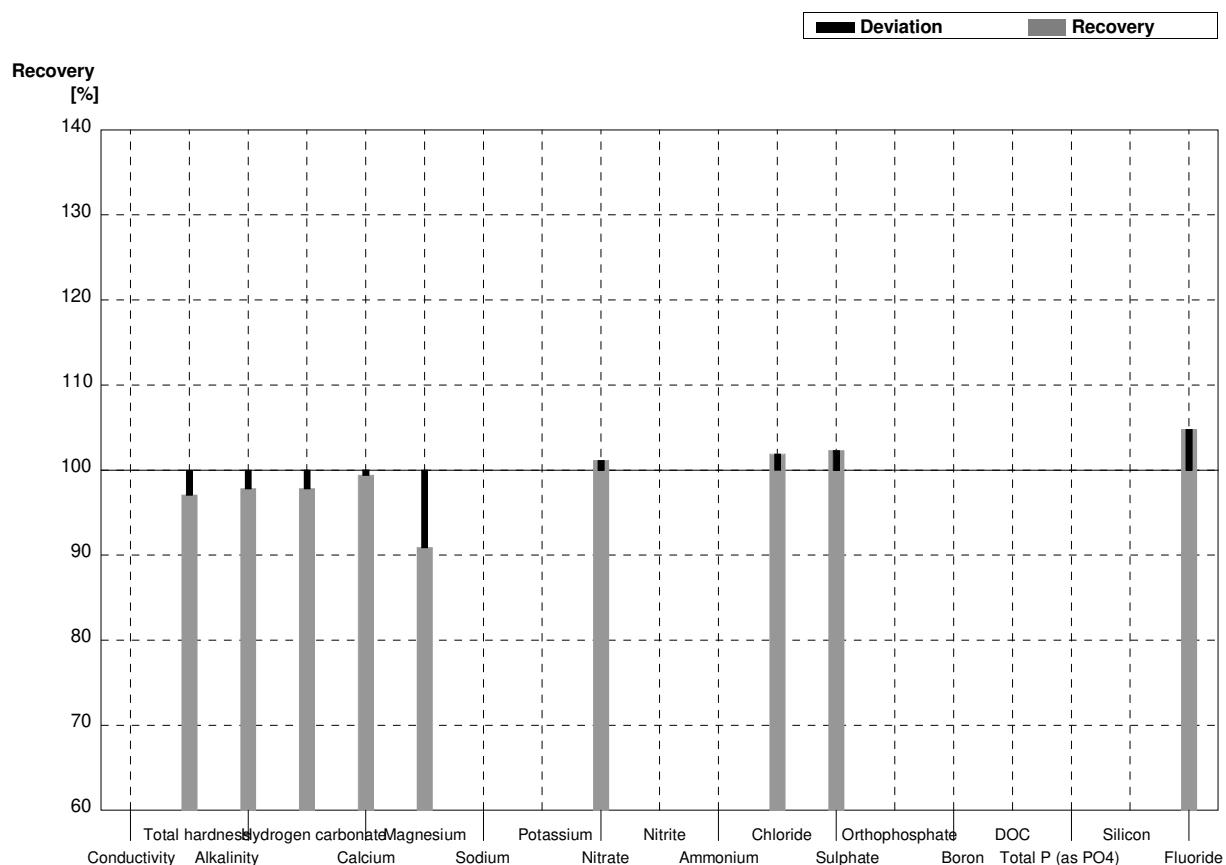
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2			$\mu\text{S}/\text{cm}$	
Total hardness	1,436	0,016	1,393	0,1584	mmol/l	97%
Alkalinity	1,76	0,03	1,730	0,0467	mmol/l	98%
Hydrogen carbonate	104,4	1,6	102,5	11,66	mg/l	98%
Calcium	36,2	0,6	36,35	1,872	mg/l	100%
Magnesium	12,93	0,15	11,8	1,342	mg/l	91%
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10	5,322	0,248	mg/l	102%
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6	51,33	5,610	mg/l	99%
Sulphate	87,7	0,6	87,51	3,421	mg/l	100%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO <sub>4</sub> )	0,0884	0,0013			mg/l	
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,525	0,0432	mg/l	105%



**Sample N166B**

**Laboratory I**

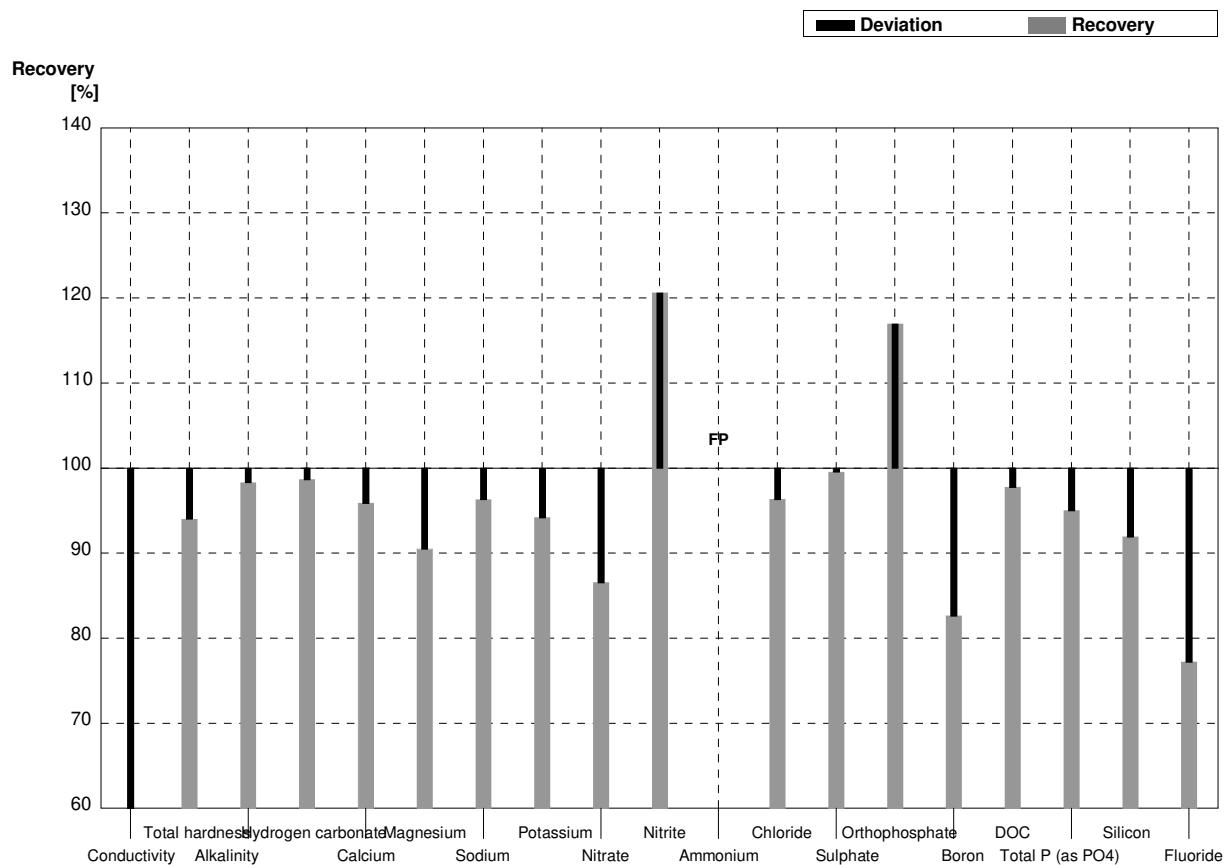
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04	2,854	0,3245	mmol/l	97%
Alkalinity	4,18	0,08	4,09	0,1104	mmol/l	98%
Hydrogen carbonate	252	5	246,5	28,03	mg/l	98%
Calcium	85,1	1,6	84,6	4,357	mg/l	99%
Magnesium	19,8	0,4	18,0	2,047	mg/l	91%
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9	79,59	3,709	mg/l	101%
Nitrite	0,061	0,002			mg/l	
Ammonium	0,050	0,005			mg/l	
Chloride	17,5	0,4	17,83	1,949	mg/l	102%
Sulphate	35,5	0,4	36,32	1,420	mg/l	102%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,328	0,0270	mg/l	105%



**Sample N166A**

**Laboratory J**

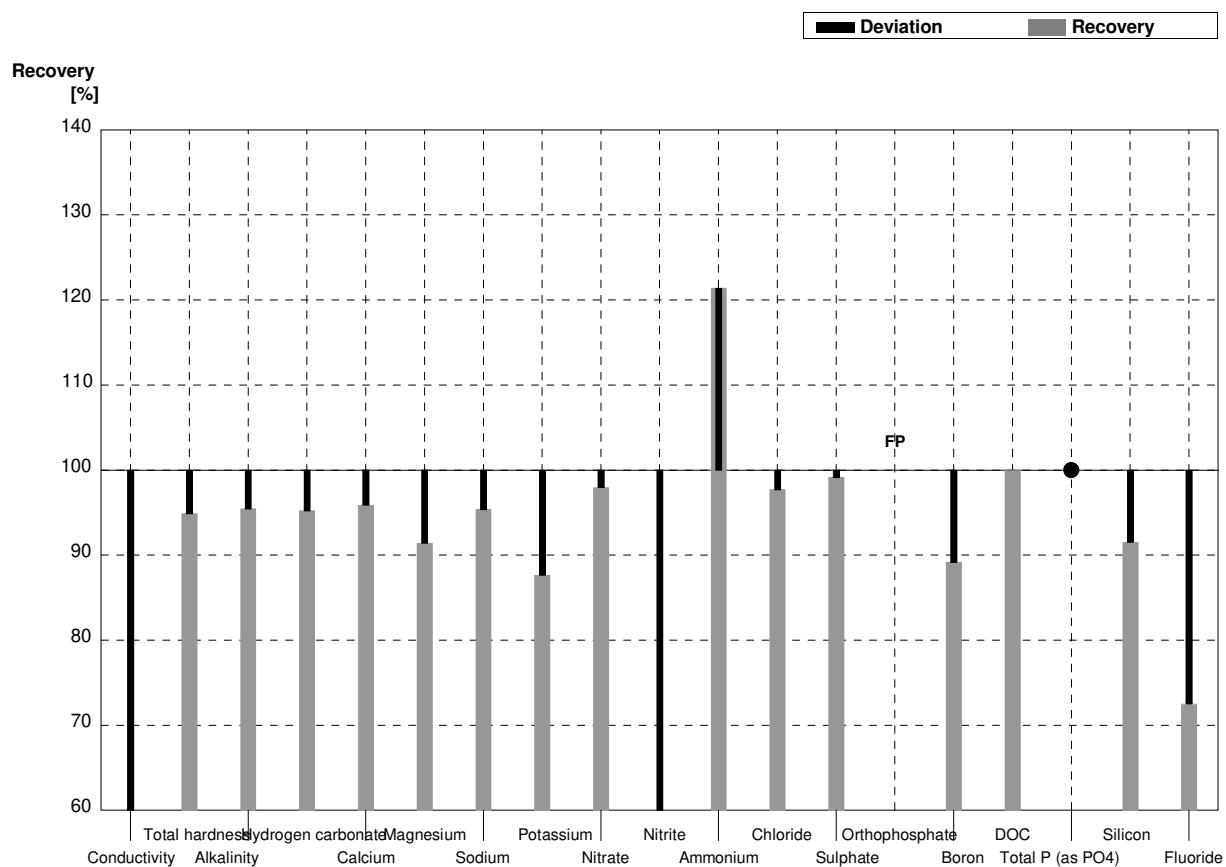
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	52,4	5,2	$\mu\text{S}/\text{cm}$	10%
Total hardness	1,436	0,016	1,35	0,14	$\text{mmol/l}$	94%
Alkalinity	1,76	0,03	1,73	0,09	$\text{mmol/l}$	98%
Hydrogen carbonate	104,4	1,6	103	5	$\text{mg/l}$	99%
Calcium	36,2	0,6	34,7	3,5	$\text{mg/l}$	96%
Magnesium	12,93	0,15	11,7	1,2	$\text{mg/l}$	90%
Sodium	48,6	0,3	46,8	4,7	$\text{mg/l}$	96%
Potassium	6,19	0,04	5,83	0,58	$\text{mg/l}$	94%
Nitrate	5,20	0,10	4,50	0,45	$\text{mg/l}$	87%
Nitrite	0,0131	0,0004	0,0158	0,0024	$\text{mg/l}$	121%
Ammonium	<0,01		0,0231	0,0035	$\text{mg/l}$	FP
Chloride	51,6	0,6	49,7	5,0	$\text{mg/l}$	96%
Sulphate	87,7	0,6	87,3	8,7	$\text{mg/l}$	100%
Orthophosphate	0,0307	0,0023	0,0359	0,0054	$\text{mg/l}$	117%
Boron	0,0334	0,0019	0,0276	0,0055	$\text{mg/l}$	83%
DOC	4,03	0,05	3,94	0,71	$\text{mg/l}$	98%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0840	0,0126	$\text{mg/l}$	95%
Silicon	3,013	0,017	2,77	0,55	$\text{mg/l}$	92%
Fluoride	0,500	0,013	0,386	0,039	$\text{mg/l}$	77%



**Sample N166B**

**Laboratory J**

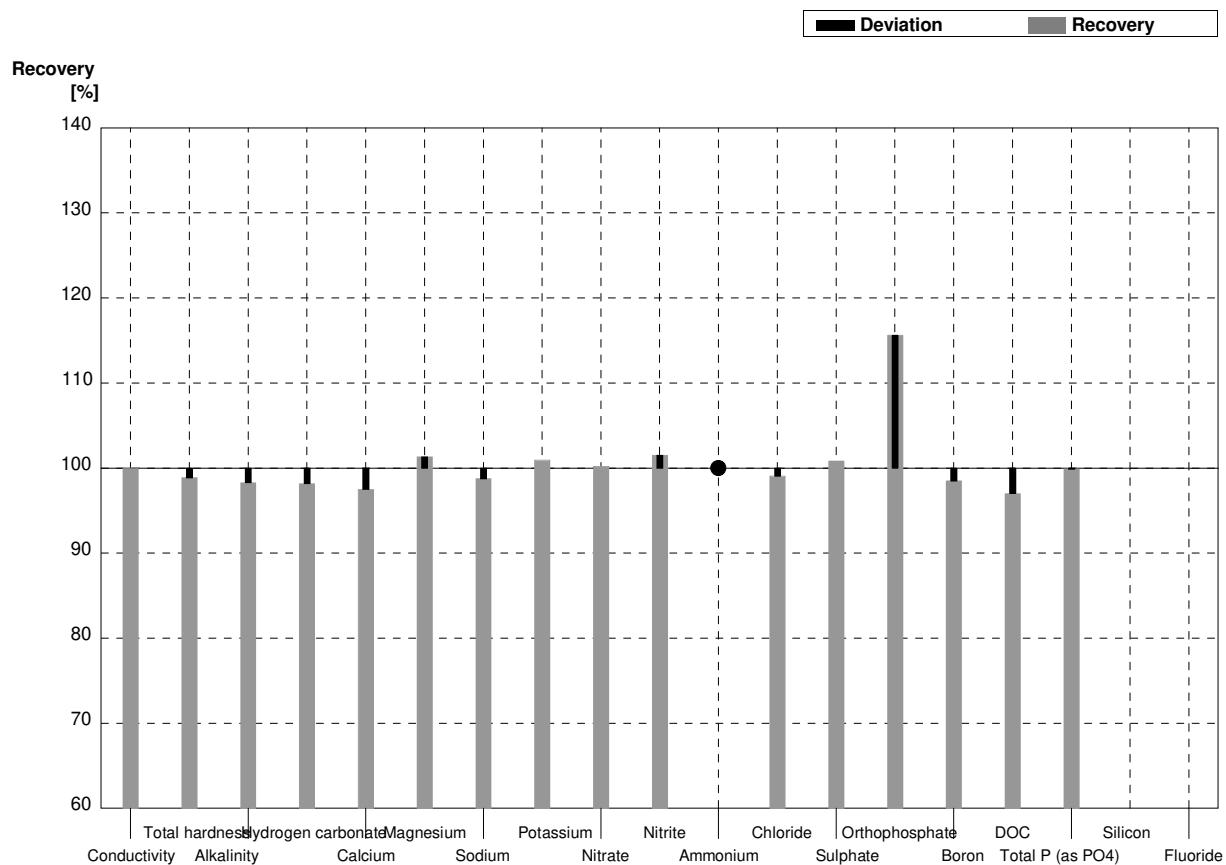
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	61,7	6,2	µS/cm	10%
Total hardness	2,94	0,04	2,79	0,28	mmol/l	95%
Alkalinity	4,18	0,08	3,99	0,20	mmol/l	95%
Hydrogen carbonate	252	5	240	12	mg/l	95%
Calcium	85,1	1,6	81,6	8,2	mg/l	96%
Magnesium	19,8	0,4	18,1	1,8	mg/l	91%
Sodium	15,2	0,7	14,5	1,5	mg/l	95%
Potassium	5,02	0,04	4,40	0,44	mg/l	88%
Nitrate	78,7	1,9	77,1	7,7	mg/l	98%
Nitrite	0,061	0,002	0,0198	0,0030	mg/l	32%
Ammonium	0,050	0,005	0,0607	0,0091	mg/l	121%
Chloride	17,5	0,4	17,1	1,7	mg/l	98%
Sulphate	35,5	0,4	35,2	3,5	mg/l	99%
Orthophosphate	<0,009		0,0199	0,0030	mg/l	FP
Boron	0,085	0,004	0,0758	0,0152	mg/l	89%
DOC	1,97	0,04	1,97	0,35	mg/l	100%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Silicon	5,07	0,03	4,64	0,93	mg/l	92%
Fluoride	0,313	0,008	0,227	0,023	mg/l	73%



**Sample N166A**

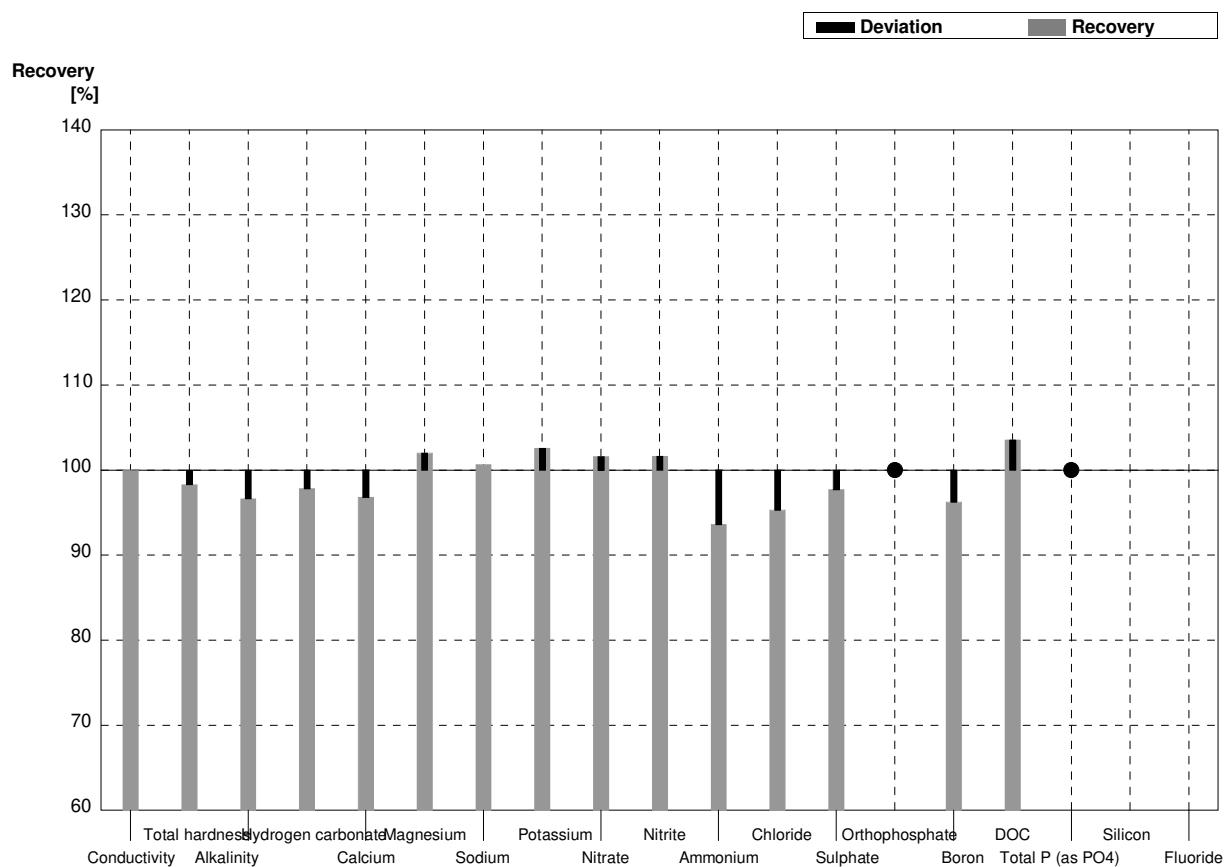
**Laboratory K**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	535	10	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,42	0,15	$\text{mmol/l}$	99%
Alkalinity	1,76	0,03	1,73	0,18	$\text{mmol/l}$	98%
Hydrogen carbonate	104,4	1,6	102,5	10,3	$\text{mg/l}$	98%
Calcium	36,2	0,6	35,3	7,1	$\text{mg/l}$	98%
Magnesium	12,93	0,15	13,1	2,6	$\text{mg/l}$	101%
Sodium	48,6	0,3	48,0	7,2	$\text{mg/l}$	99%
Potassium	6,19	0,04	6,25	1,3	$\text{mg/l}$	101%
Nitrate	5,20	0,10	5,21	0,52	$\text{mg/l}$	100%
Nitrite	0,0131	0,0004	0,0133	0,0024	$\text{mg/l}$	102%
Ammonium	<0,01		<0,010		$\text{mg/l}$	•
Chloride	51,6	0,6	51,12	5,2	$\text{mg/l}$	99%
Sulphate	87,7	0,6	88,44	8,9	$\text{mg/l}$	101%
Orthophosphate	0,0307	0,0023	0,0355	0,0074	$\text{mg/l}$	116%
Boron	0,0334	0,0019	0,0329	0,0082	$\text{mg/l}$	99%
DOC	4,03	0,05	3,91	0,39	$\text{mg/l}$	97%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0883	0,0184	$\text{mg/l}$	100%
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013			$\text{mg/l}$	



**Sample N166B****Laboratory K**

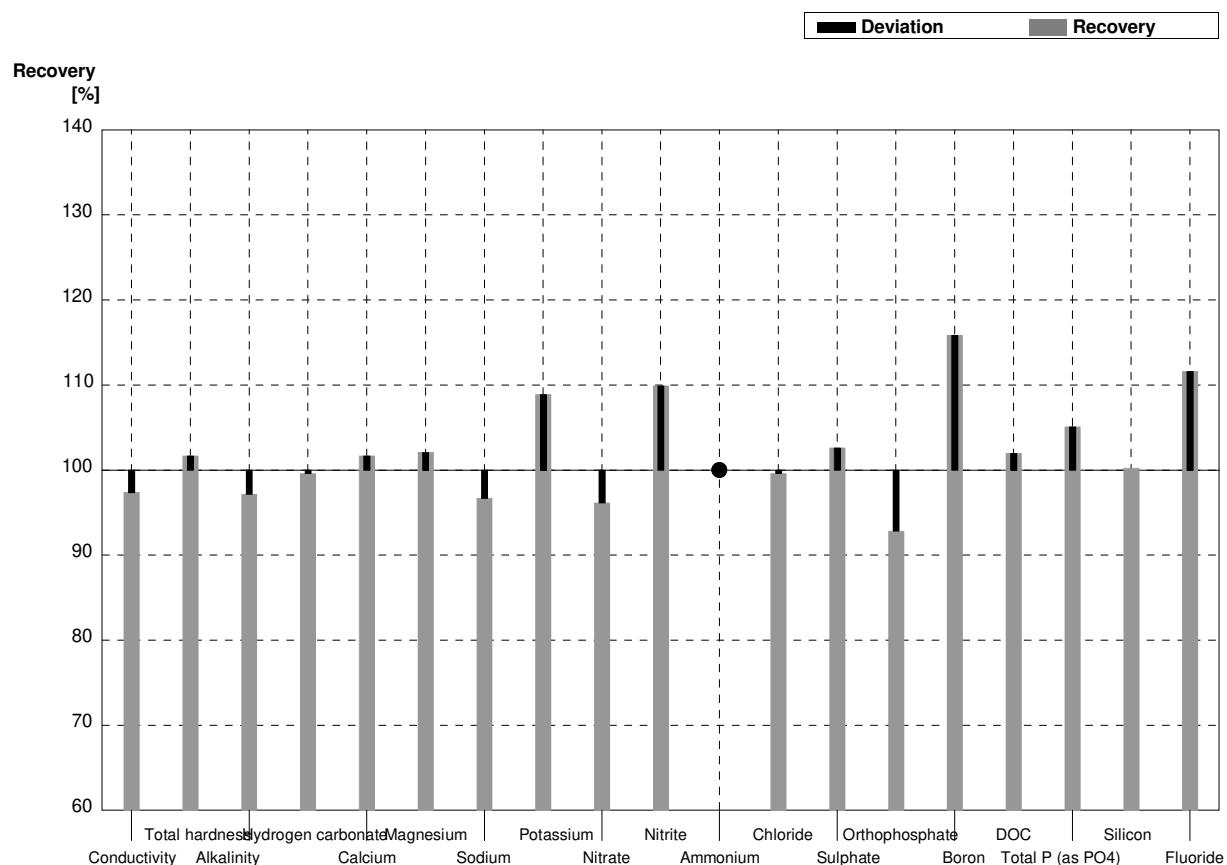
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	643	10	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	2,89	0,29	$\text{mmol/l}$	98%
Alkalinity	4,18	0,08	4,04	0,41	$\text{mmol/l}$	97%
Hydrogen carbonate	252	5	246,5	24,7	$\text{mg/l}$	98%
Calcium	85,1	1,6	82,4	16,5	$\text{mg/l}$	97%
Magnesium	19,8	0,4	20,2	4,1	$\text{mg/l}$	102%
Sodium	15,2	0,7	15,3	2,3	$\text{mg/l}$	101%
Potassium	5,02	0,04	5,15	1,1	$\text{mg/l}$	103%
Nitrate	78,7	1,9	79,95	8,0	$\text{mg/l}$	102%
Nitrite	0,061	0,002	0,0620	0,0114	$\text{mg/l}$	102%
Ammonium	0,050	0,005	0,0468	0,0076	$\text{mg/l}$	94%
Chloride	17,5	0,4	16,68	1,7	$\text{mg/l}$	95%
Sulphate	35,5	0,4	34,69	3,5	$\text{mg/l}$	98%
Orthophosphate	<0,009		<0,015		$\text{mg/l}$	•
Boron	0,085	0,004	0,0818	0,021	$\text{mg/l}$	96%
DOC	1,97	0,04	2,04	0,20	$\text{mg/l}$	104%
Total P (as PO <sub>4</sub> )	<0,009		<0,015		$\text{mg/l}$	•
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008			$\text{mg/l}$	



**Sample N166A**

**Laboratory L**

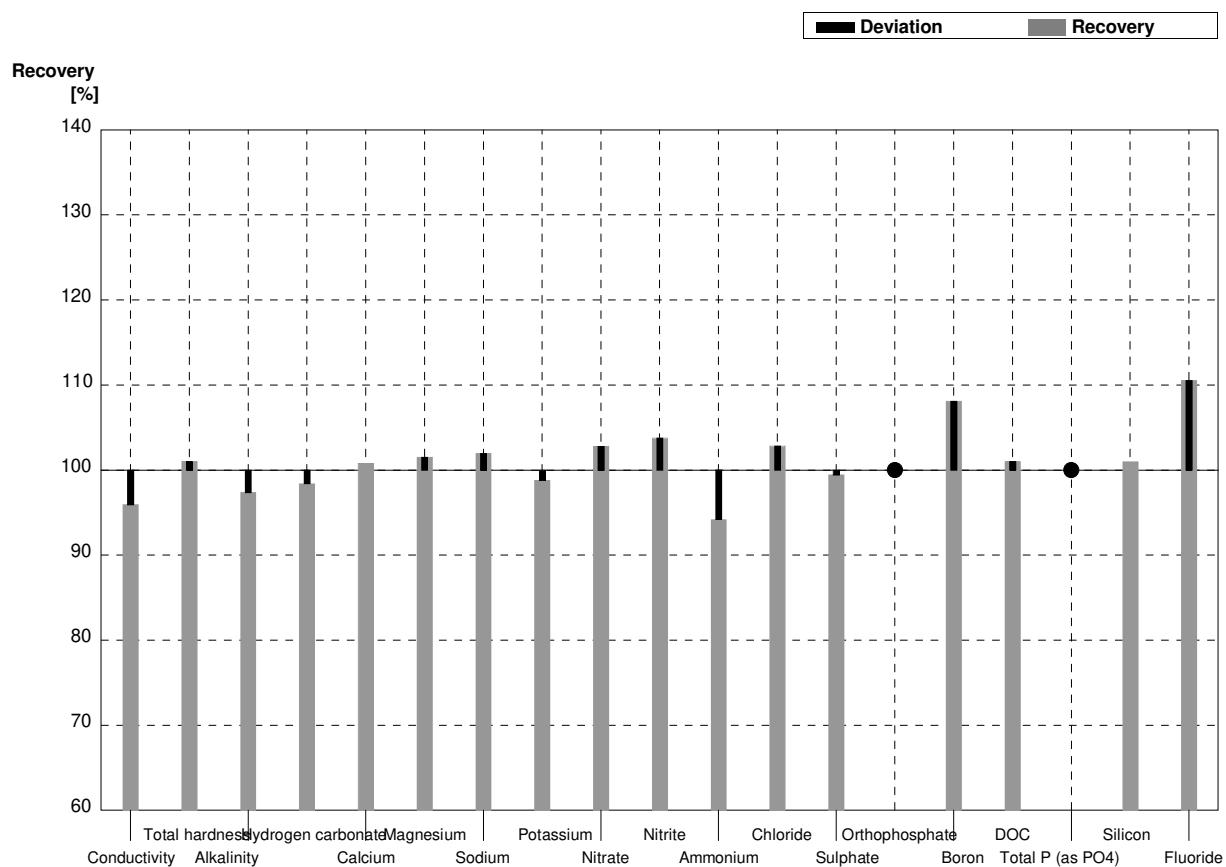
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	521	16	µS/cm	97%
Total hardness	1,436	0,016	1,46	0,22	mmol/l	102%
Alkalinity	1,76	0,03	1,71	0,14	mmol/l	97%
Hydrogen carbonate	104,4	1,6	104	8,3	mg/l	100%
Calcium	36,2	0,6	36,8	5,5	mg/l	102%
Magnesium	12,93	0,15	13,2	1,6	mg/l	102%
Sodium	48,6	0,3	47,0	6,1	mg/l	97%
Potassium	6,19	0,04	6,74	1,0	mg/l	109%
Nitrate	5,20	0,10	5,00	0,50	mg/l	96%
Nitrite	0,0131	0,0004	0,0144	0,0016	mg/l	110%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	51,6	0,6	51,4	5,1	mg/l	100%
Sulphate	87,7	0,6	90,0	14	mg/l	103%
Orthophosphate	0,0307	0,0023	0,0285	0,0023	mg/l	93%
Boron	0,0334	0,0019	0,0387	0,0050	mg/l	116%
DOC	4,03	0,05	4,11	0,82	mg/l	102%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0929	0,0074	mg/l	105%
Silicon	3,013	0,017	3,02	0,30	mg/l	100%
Fluoride	0,500	0,013	0,558	0,056	mg/l	112%



**Sample N166B**

**Laboratory L**

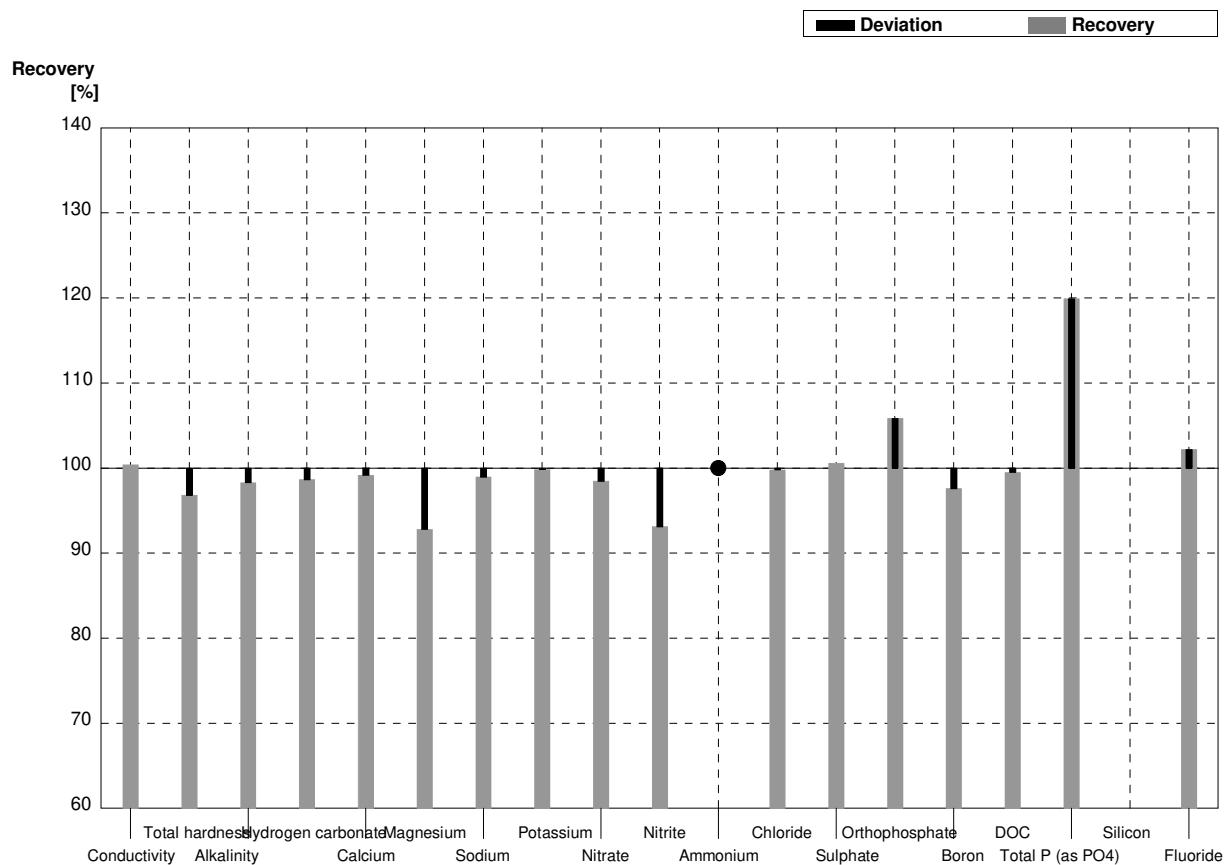
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	617	19	µS/cm	96%
Total hardness	2,94	0,04	2,97	0,45	mmol/l	101%
Alkalinity	4,18	0,08	4,07	0,33	mmol/l	97%
Hydrogen carbonate	252	5	248	20	mg/l	98%
Calcium	85,1	1,6	85,8	13	mg/l	101%
Magnesium	19,8	0,4	20,1	2,4	mg/l	102%
Sodium	15,2	0,7	15,5	2,0	mg/l	102%
Potassium	5,02	0,04	4,96	0,74	mg/l	99%
Nitrate	78,7	1,9	80,9	8,1	mg/l	103%
Nitrite	0,061	0,002	0,0633	0,0070	mg/l	104%
Ammonium	0,050	0,005	0,0471	0,0038	mg/l	94%
Chloride	17,5	0,4	18,0	1,8	mg/l	103%
Sulphate	35,5	0,4	35,3	5,6	mg/l	99%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,085	0,004	0,0919	0,012	mg/l	108%
DOC	1,97	0,04	1,99	0,40	mg/l	101%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Silicon	5,07	0,03	5,12	0,51	mg/l	101%
Fluoride	0,313	0,008	0,346	0,035	mg/l	111%



**Sample N166A**

**Laboratory M**

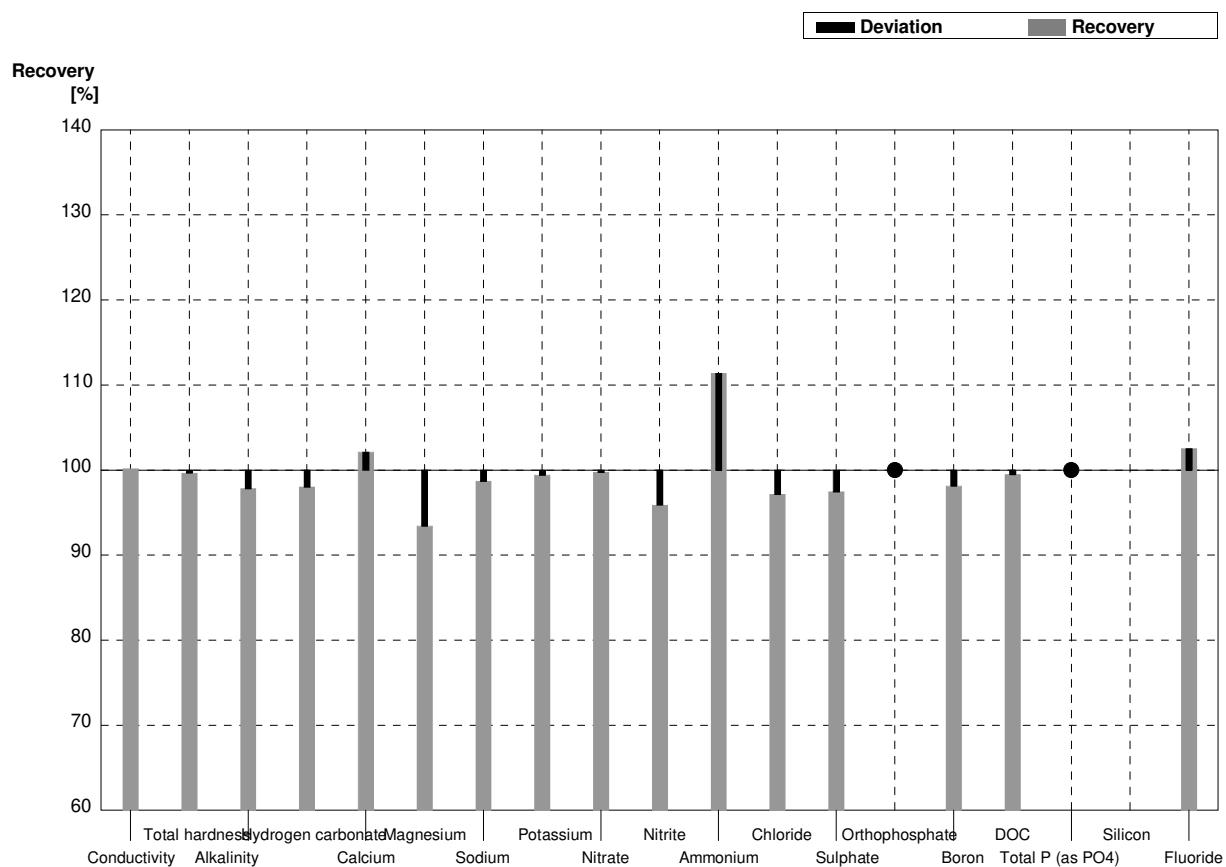
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	537	0,197	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,39	0,0182	$\text{mmol/l}$	97%
Alkalinity	1,76	0,03	1,73	0,0836	$\text{mmol/l}$	98%
Hydrogen carbonate	104,4	1,6	103	2,05	$\text{mg/l}$	99%
Calcium	36,2	0,6	35,9	0,329	$\text{mg/l}$	99%
Magnesium	12,93	0,15	12,0	0,395	$\text{mg/l}$	93%
Sodium	48,6	0,3	48,1	0,447	$\text{mg/l}$	99%
Potassium	6,19	0,04	6,18	0,425	$\text{mg/l}$	100%
Nitrate	5,20	0,10	5,12	0,0737	$\text{mg/l}$	98%
Nitrite	0,0131	0,0004	0,0122	0,00058	$\text{mg/l}$	93%
Ammonium	<0,01		<0,0100		$\text{mg/l}$	•
Chloride	51,6	0,6	51,5	0,886	$\text{mg/l}$	100%
Sulphate	87,7	0,6	88,2	0,886	$\text{mg/l}$	101%
Orthophosphate	0,0307	0,0023	0,0325	0,00229	$\text{mg/l}$	106%
Boron	0,0334	0,0019	0,0326	0,00147	$\text{mg/l}$	98%
DOC	4,03	0,05	4,01	0,0889	$\text{mg/l}$	100%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,106	0,00409	$\text{mg/l}$	120%
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013	0,511	0,00542	$\text{mg/l}$	102%



**Sample N166B**

**Laboratory M**

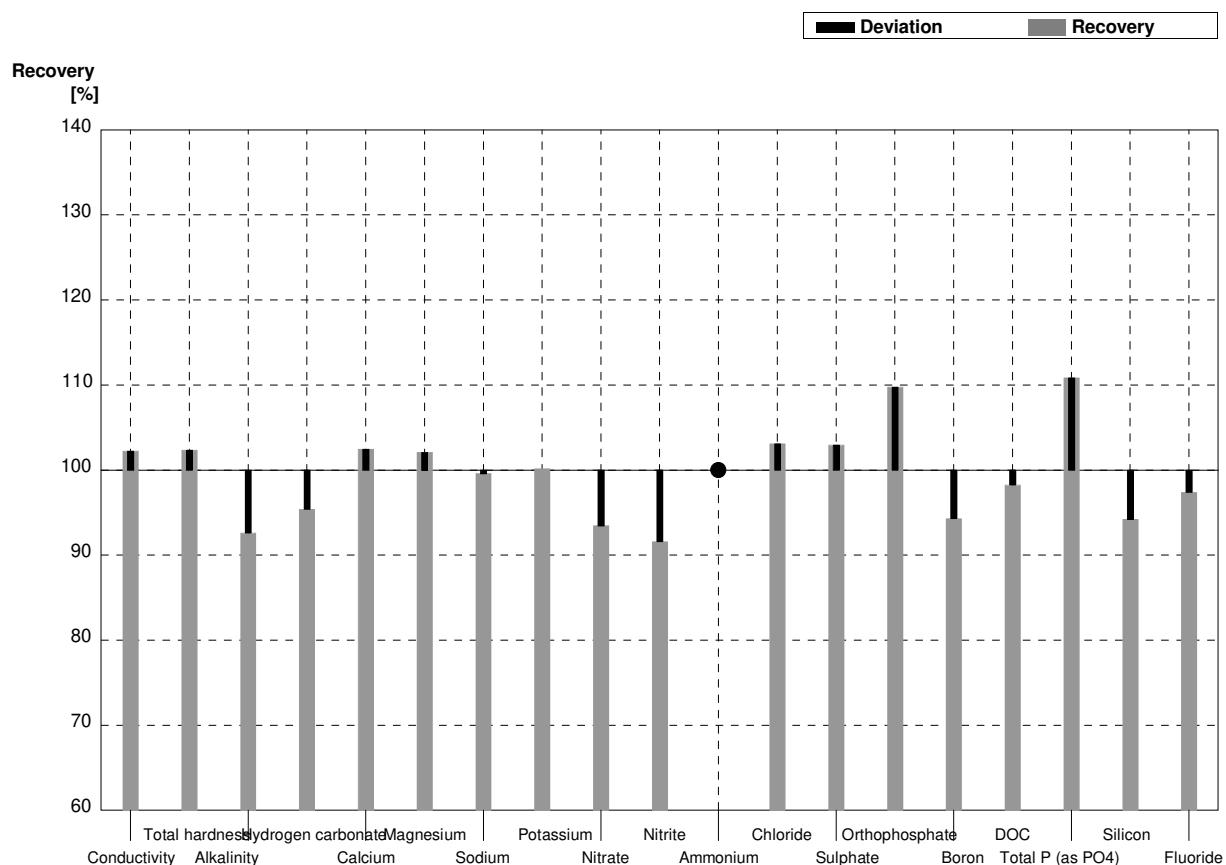
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	644	0,224	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	2,93	0,0168	$\text{mmol/l}$	100%
Alkalinity	4,18	0,08	4,09	0,131	$\text{mmol/l}$	98%
Hydrogen carbonate	252	5	247	4,93	$\text{mg/l}$	98%
Calcium	85,1	1,6	86,9	0,330	$\text{mg/l}$	102%
Magnesium	19,8	0,4	18,5	0,356	$\text{mg/l}$	93%
Sodium	15,2	0,7	15,0	0,379	$\text{mg/l}$	99%
Potassium	5,02	0,04	4,99	0,434	$\text{mg/l}$	99%
Nitrate	78,7	1,9	78,5	0,724	$\text{mg/l}$	100%
Nitrite	0,061	0,002	0,0585	0,00054	$\text{mg/l}$	96%
Ammonium	0,050	0,005	0,0557	0,00131	$\text{mg/l}$	111%
Chloride	17,5	0,4	17,0	0,509	$\text{mg/l}$	97%
Sulphate	35,5	0,4	34,6	0,377	$\text{mg/l}$	97%
Orthophosphate	<0,009		<0,0150		$\text{mg/l}$	•
Boron	0,085	0,004	0,0834	0,00139	$\text{mg/l}$	98%
DOC	1,97	0,04	1,96	0,0897	$\text{mg/l}$	99%
Total P (as PO <sub>4</sub> )	<0,009		<0,0150		$\text{mg/l}$	•
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008	0,321	0,00494	$\text{mg/l}$	103%



**Sample N166A**

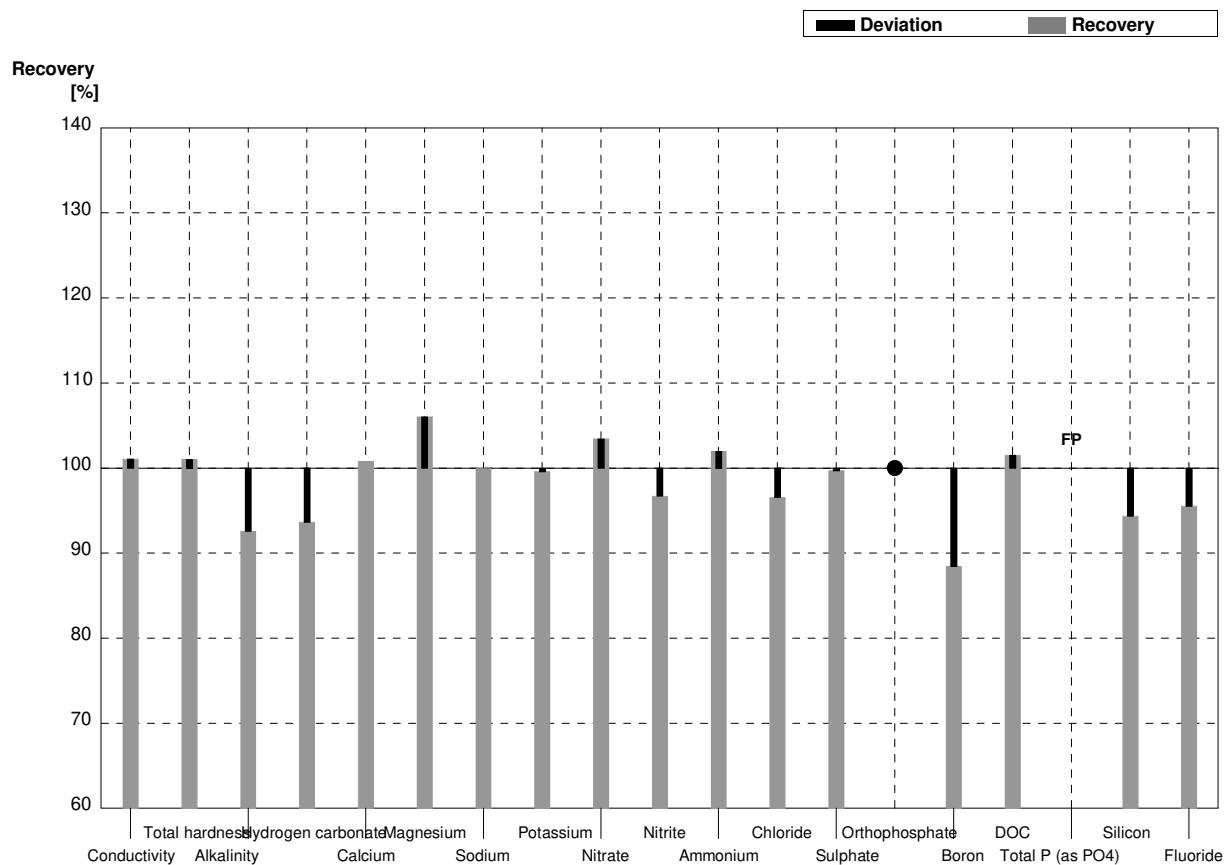
**Laboratory N**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	547	54,7	µS/cm	102%
Total hardness	1,436	0,016	1,47	0,12	mmol/l	102%
Alkalinity	1,76	0,03	1,63		mmol/l	93%
Hydrogen carbonate	104,4	1,6	99,6		mg/l	95%
Calcium	36,2	0,6	37,1	3,0	mg/l	102%
Magnesium	12,93	0,15	13,2	1,1	mg/l	102%
Sodium	48,6	0,3	48,4	3,9	mg/l	100%
Potassium	6,19	0,04	6,2	0,7	mg/l	100%
Nitrate	5,20	0,10	4,86	0,58	mg/l	93%
Nitrite	0,0131	0,0004	0,0120	0,002	mg/l	92%
Ammonium	<0,01		<0,020		mg/l	•
Chloride	51,6	0,6	53,2	4,8	mg/l	103%
Sulphate	87,7	0,6	90,3	9,0	mg/l	103%
Orthophosphate	0,0307	0,0023	0,0337	0,0121	mg/l	110%
Boron	0,0334	0,0019	0,0315	0,0088	mg/l	94%
DOC	4,03	0,05	3,96	0,47	mg/l	98%
Total P (as PO4)	0,0884	0,0013	0,098	0,011	mg/l	111%
Silicon	3,013	0,017	2,839		mg/l	94%
Fluoride	0,500	0,013	0,487	0,083	mg/l	97%



**Sample N166B****Laboratory N**

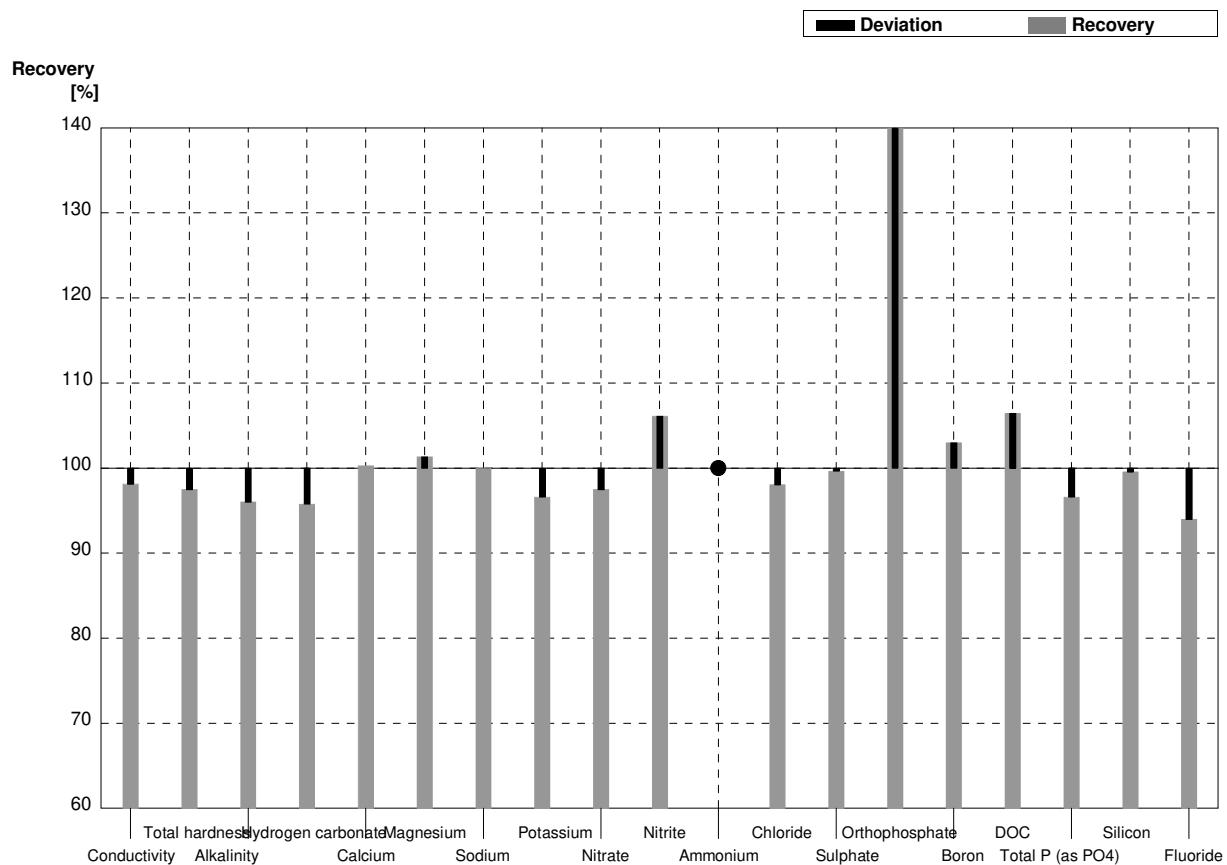
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	650	65	$\mu\text{S}/\text{cm}$	101%
Total hardness	2,94	0,04	2,97	0,24	$\text{mmol/l}$	101%
Alkalinity	4,18	0,08	3,87		$\text{mmol/l}$	93%
Hydrogen carbonate	252	5	236		$\text{mg/l}$	94%
Calcium	85,1	1,6	85,8	6,9	$\text{mg/l}$	101%
Magnesium	19,8	0,4	21,0	1,7	$\text{mg/l}$	106%
Sodium	15,2	0,7	15,2	1,2	$\text{mg/l}$	100%
Potassium	5,02	0,04	5,0	0,6	$\text{mg/l}$	100%
Nitrate	78,7	1,9	81,4	9,8	$\text{mg/l}$	103%
Nitrite	0,061	0,002	0,059	0,012	$\text{mg/l}$	97%
Ammonium	0,050	0,005	0,051	0,015	$\text{mg/l}$	102%
Chloride	17,5	0,4	16,9	1,5	$\text{mg/l}$	97%
Sulphate	35,5	0,4	35,4	3,5	$\text{mg/l}$	100%
Orthophosphate	<0,009		<0,030		$\text{mg/l}$	•
Boron	0,085	0,004	0,0752	0,0135	$\text{mg/l}$	88%
DOC	1,97	0,04	2,00	0,46	$\text{mg/l}$	102%
Total P (as PO <sub>4</sub> )	<0,009		0,0180	0,002	$\text{mg/l}$	FP
Silicon	5,07	0,03	4,784		$\text{mg/l}$	94%
Fluoride	0,313	0,008	0,299	0,051	$\text{mg/l}$	96%



**Sample N166A**

**Laboratory O**

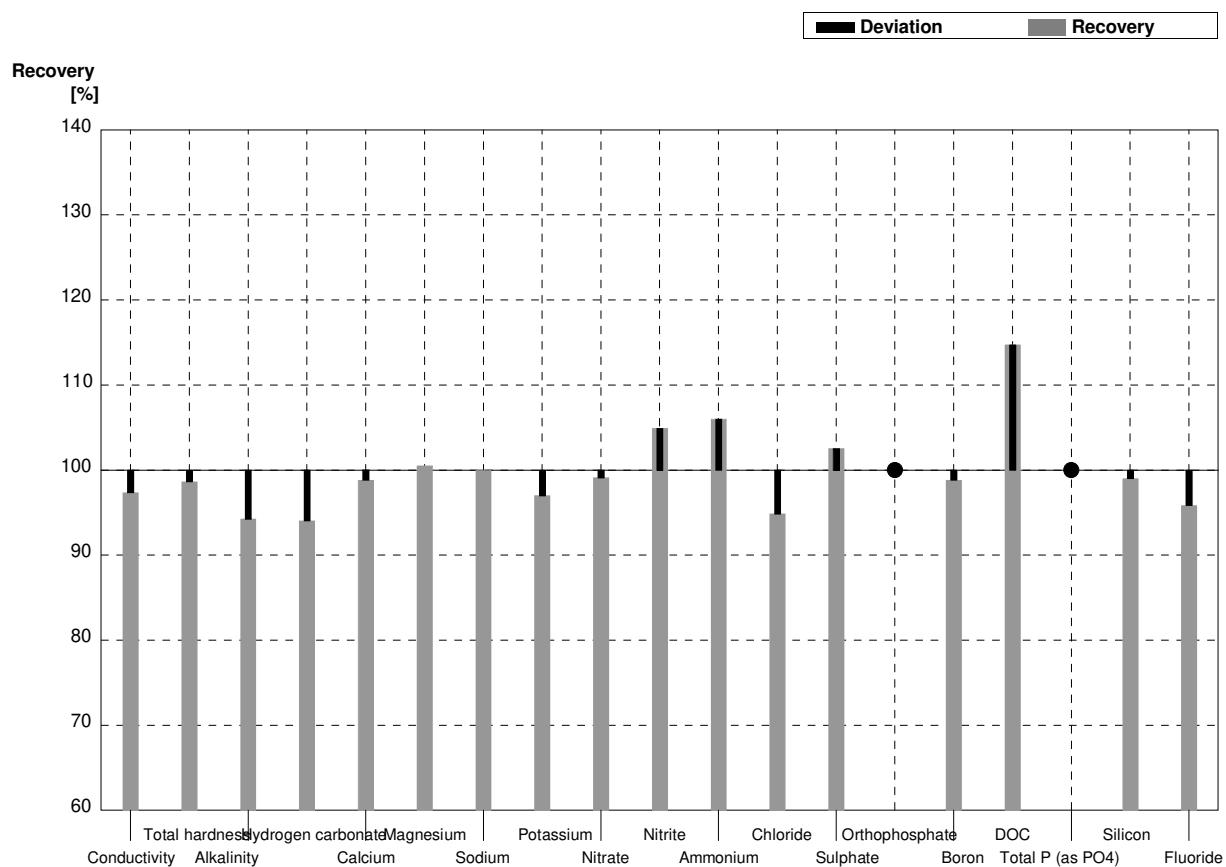
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	525	13	$\mu\text{S}/\text{cm}$	98%
Total hardness	1,436	0,016	1,40	0,14	$\text{mmol/l}$	97%
Alkalinity	1,76	0,03	1,69	0,08	$\text{mmol/l}$	96%
Hydrogen carbonate	104,4	1,6	100	5	$\text{mg/l}$	96%
Calcium	36,2	0,6	36,3	2,3	$\text{mg/l}$	100%
Magnesium	12,93	0,15	13,1	1,03	$\text{mg/l}$	101%
Sodium	48,6	0,3	48,6	3,9	$\text{mg/l}$	100%
Potassium	6,19	0,04	5,98	0,48	$\text{mg/l}$	97%
Nitrate	5,20	0,10	5,07	0,34	$\text{mg/l}$	98%
Nitrite	0,0131	0,0004	0,0139	0,0020	$\text{mg/l}$	106%
Ammonium	<0,01		<0,01		$\text{mg/l}$	•
Chloride	51,6	0,6	50,6	3,6	$\text{mg/l}$	98%
Sulphate	87,7	0,6	87,4	4,7	$\text{mg/l}$	100%
Orthophosphate	0,0307	0,0023	0,420	0,058	$\text{mg/l}$	1368%
Boron	0,0334	0,0019	0,0344	0,005	$\text{mg/l}$	103%
DOC	4,03	0,05	4,29	0,76	$\text{mg/l}$	106%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0854	0,012	$\text{mg/l}$	97%
Silicon	3,013	0,017	3,00	0,24	$\text{mg/l}$	100%
Fluoride	0,500	0,013	0,470	0,069	$\text{mg/l}$	94%



**Sample N166B**

**Laboratory O**

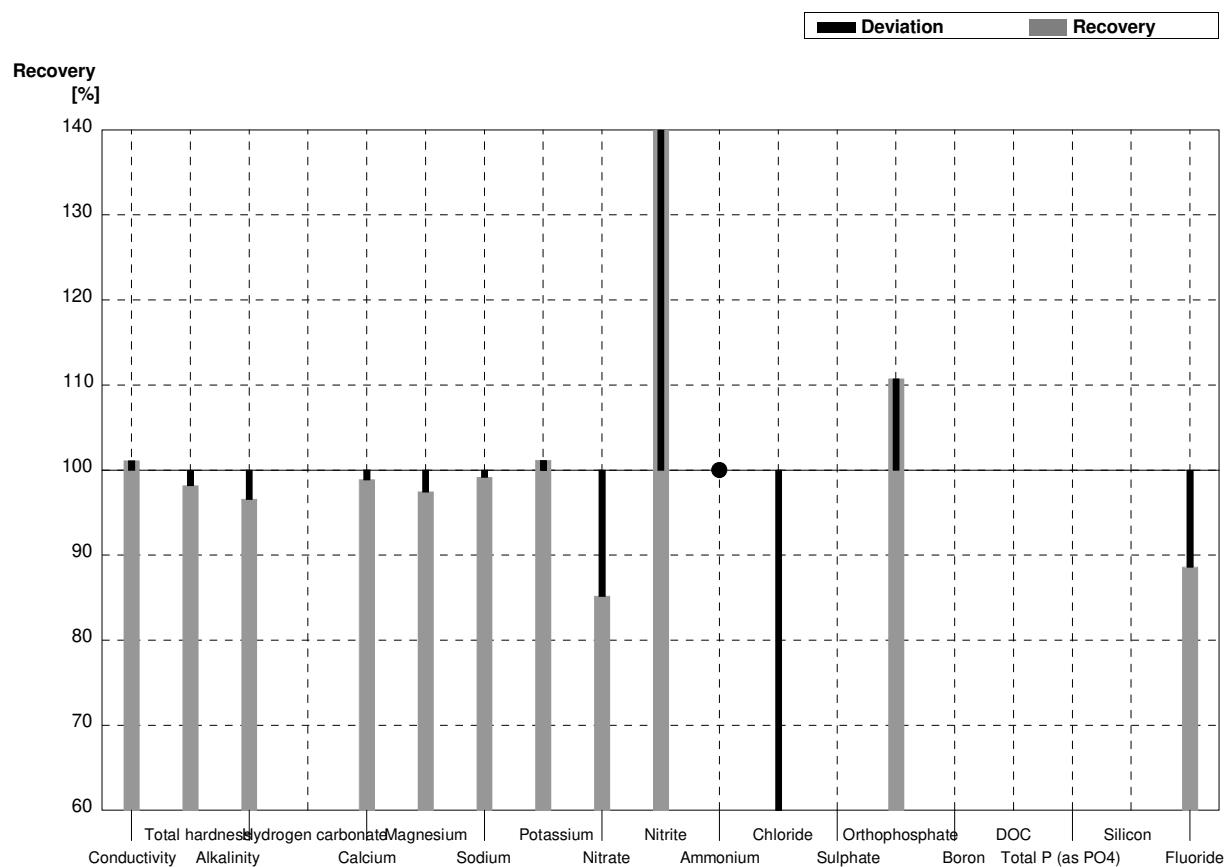
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	626	16	µS/cm	97%
Total hardness	2,94	0,04	2,90	0,29	mmol/l	99%
Alkalinity	4,18	0,08	3,94	0,18	mmol/l	94%
Hydrogen carbonate	252	5	237	12	mg/l	94%
Calcium	85,1	1,6	84,1	5,4	mg/l	99%
Magnesium	19,8	0,4	19,9	1,57	mg/l	101%
Sodium	15,2	0,7	15,2	1,2	mg/l	100%
Potassium	5,02	0,04	4,87	0,39	mg/l	97%
Nitrate	78,7	1,9	78,0	5,3	mg/l	99%
Nitrite	0,061	0,002	0,064	0,009	mg/l	105%
Ammonium	0,050	0,005	0,053	0,009	mg/l	106%
Chloride	17,5	0,4	16,6	1,2	mg/l	95%
Sulphate	35,5	0,4	36,4	2,0	mg/l	103%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,085	0,004	0,084	0,012	mg/l	99%
DOC	1,97	0,04	2,26	0,40	mg/l	115%
Total P (as PO4)	<0,009		<0,005		mg/l	•
Silicon	5,07	0,03	5,02	0,41	mg/l	99%
Fluoride	0,313	0,008	0,300	0,044	mg/l	96%



**Sample N166A**

**Laboratory P**

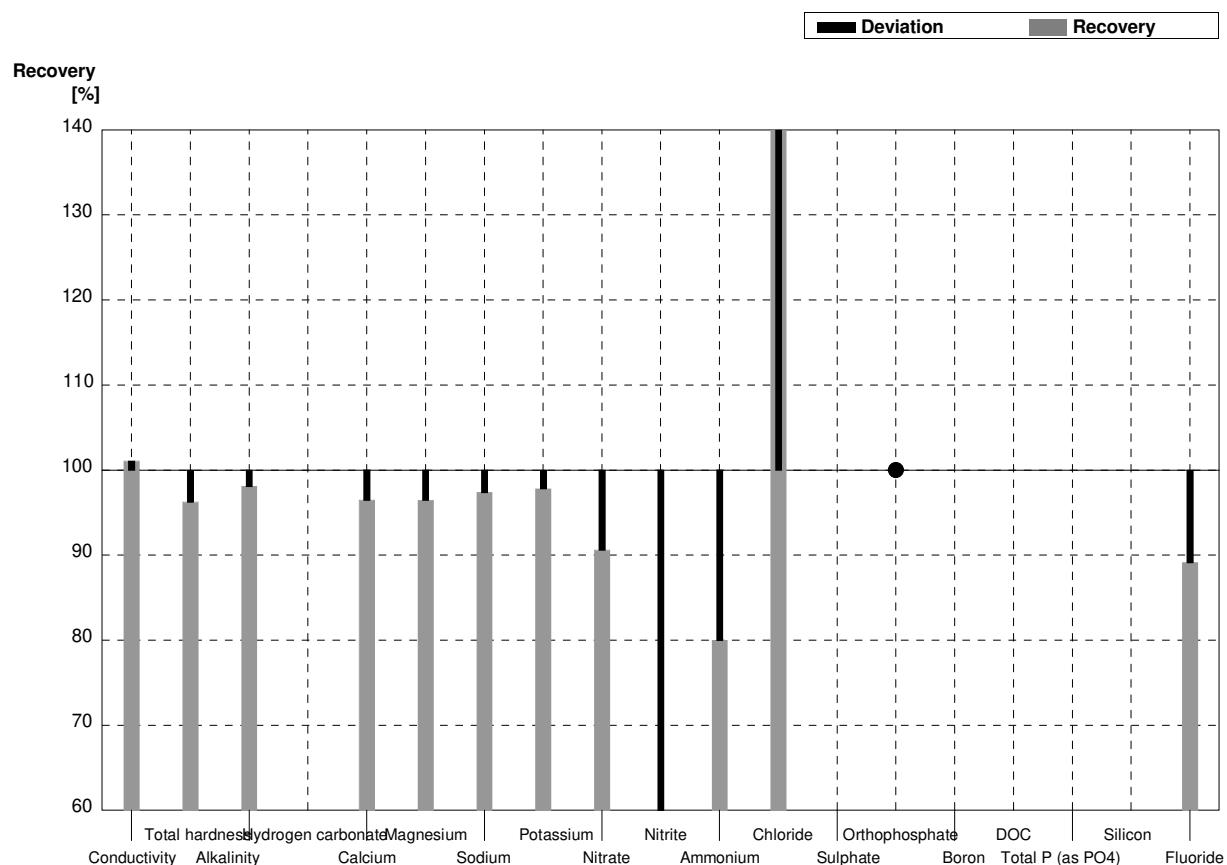
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	541	16	µS/cm	101%
Total hardness	1,436	0,016	1,41		mmol/l	98%
Alkalinity	1,76	0,03	1,70		mmol/l	97%
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6	35,8	5,4	mg/l	99%
Magnesium	12,93	0,15	12,6	1,9	mg/l	97%
Sodium	48,6	0,3	48,2	9,6	mg/l	99%
Potassium	6,19	0,04	6,26	0,94	mg/l	101%
Nitrate	5,20	0,10	4,43	0,31	mg/l	85%
Nitrite	0,0131	0,0004	0,060	0,012	mg/l	458%
Ammonium	<0,01		<0,3		mg/l	•
Chloride	51,6	0,6	20,2	4,0	mg/l	39%
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023	0,0340	0,007	mg/l	111%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO4)	0,0884	0,0013			mg/l	
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,443	0,13	mg/l	89%



**Sample N166B**

**Laboratory P**

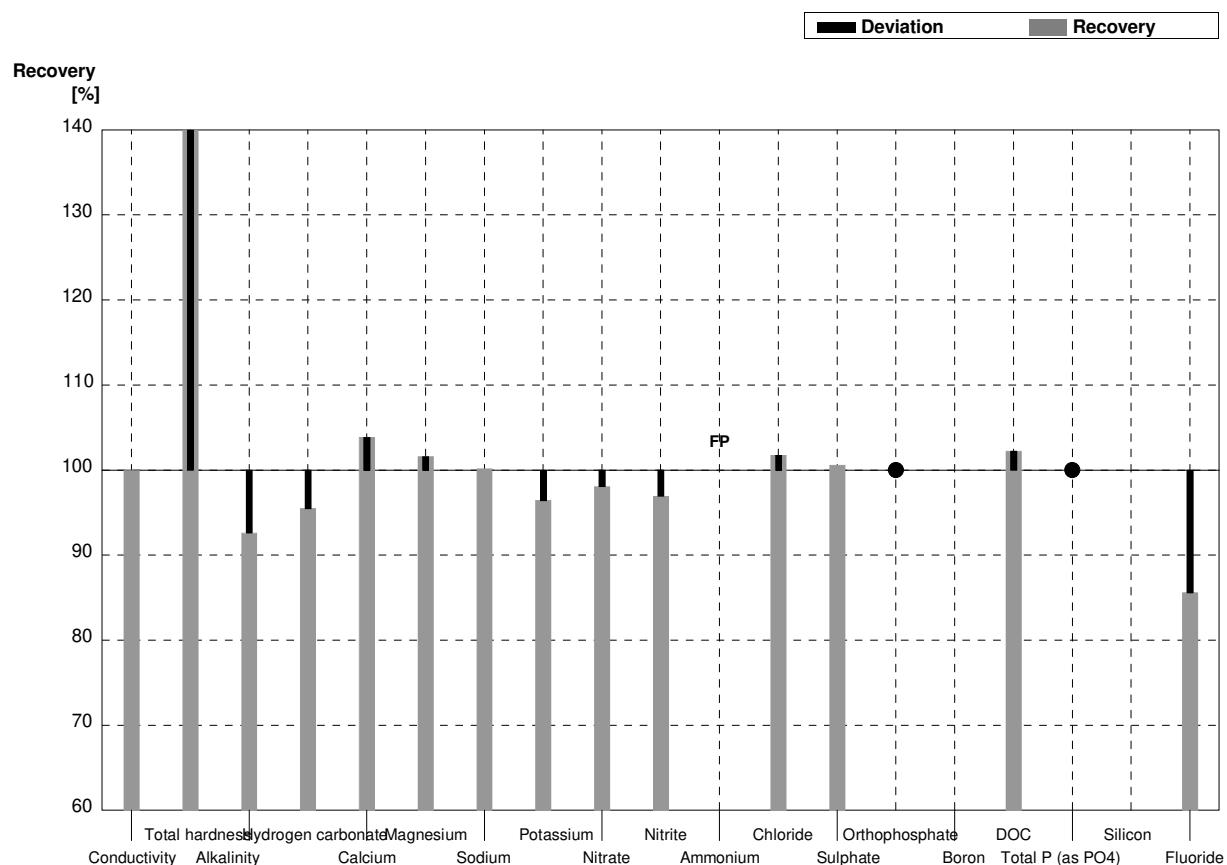
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	650	20	µS/cm	101%
Total hardness	2,94	0,04	2,83		mmol/l	96%
Alkalinity	4,18	0,08	4,10		mmol/l	98%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	82,1	12,3	mg/l	96%
Magnesium	19,8	0,4	19,1	2,2	mg/l	96%
Sodium	15,2	0,7	14,8	3,0	mg/l	97%
Potassium	5,02	0,04	4,91	0,74	mg/l	98%
Nitrate	78,7	1,9	71,3	5,0	mg/l	91%
Nitrite	0,061	0,002	0,0140	0,003	mg/l	23%
Ammonium	0,050	0,005	0,0400	0,018	mg/l	80%
Chloride	17,5	0,4	53,2	10,6	mg/l	304%
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009		0,00400	0,0008	mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,279	0,084	mg/l	89%



**Sample N166A**

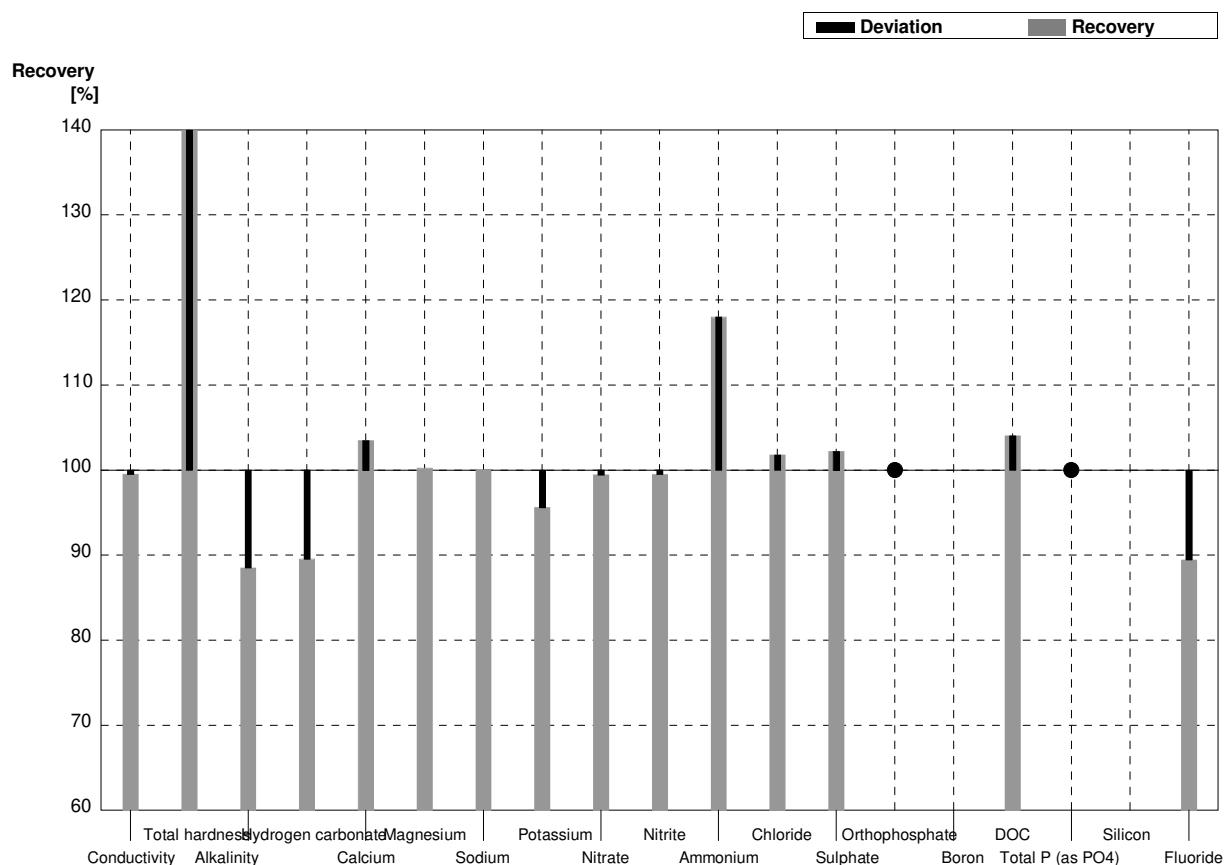
**Laboratory Q**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	535	54	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	14,8	1,5	mmol/l	1031%
Alkalinity	1,76	0,03	1,63		mmol/l	93%
Hydrogen carbonate	104,4	1,6	99,7		mg/l	95%
Calcium	36,2	0,6	37,60	3,76	mg/l	104%
Magnesium	12,93	0,15	13,14	1,31	mg/l	102%
Sodium	48,6	0,3	48,68	4,87	mg/l	100%
Potassium	6,19	0,04	5,97	0,60	mg/l	96%
Nitrate	5,20	0,10	5,10	0,51	mg/l	98%
Nitrite	0,0131	0,0004	0,0127	0,002	mg/l	97%
Ammonium	<0,01		0,0160	0,0032	mg/l	FP
Chloride	51,6	0,6	52,51	5,25	mg/l	102%
Sulphate	87,7	0,6	88,21	13,23	mg/l	101%
Orthophosphate	0,0307	0,0023	<0,15		mg/l	•
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	4,12		mg/l	102%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	<0,15		mg/l	•
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,428	0,064	mg/l	86%



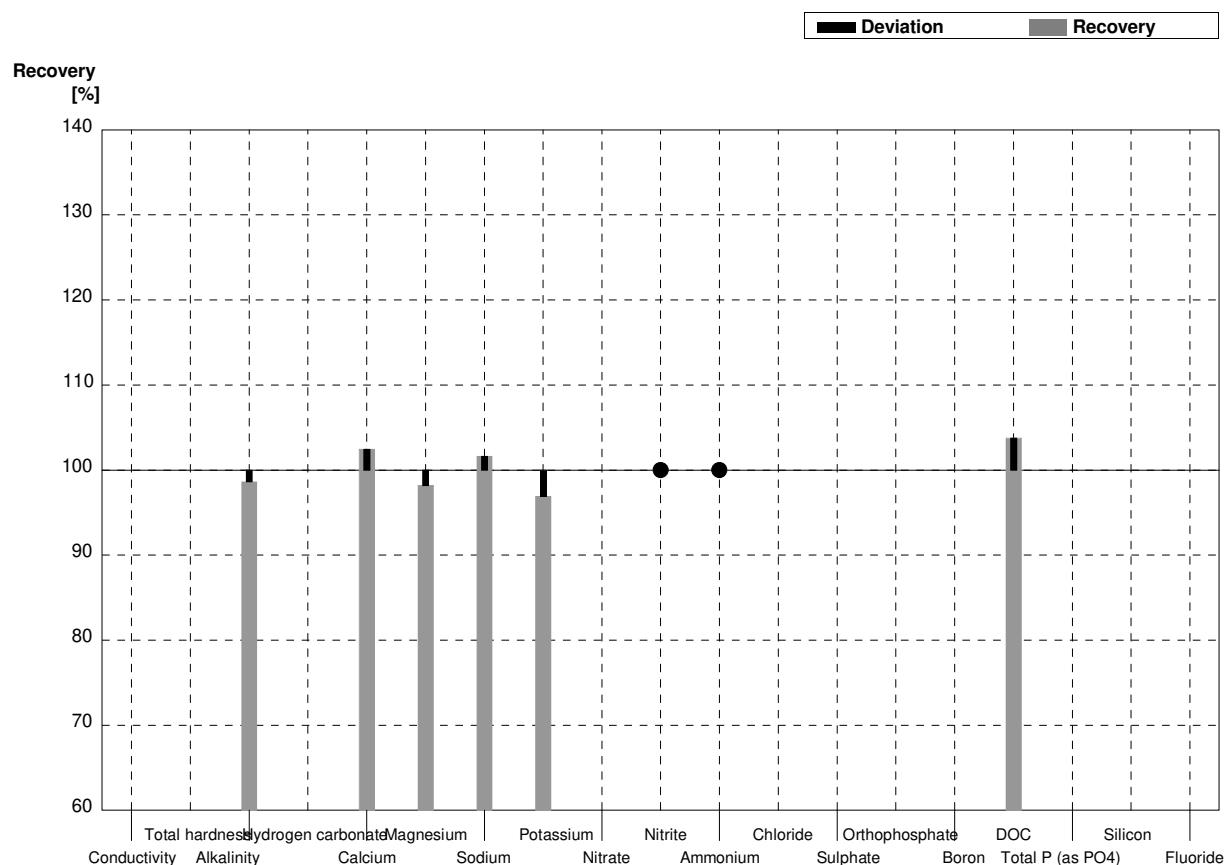
**Sample N166B****Laboratory Q**

Parameter	Target value	$\pm$ U (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	640	64	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	30,2	3,0	mmol/l	1027%
Alkalinity	4,18	0,08	3,70		mmol/l	89%
Hydrogen carbonate	252	5	225,7		mg/l	90%
Calcium	85,1	1,6	88,06	8,81	mg/l	103%
Magnesium	19,8	0,4	19,85	1,98	mg/l	100%
Sodium	15,2	0,7	15,21	1,52	mg/l	100%
Potassium	5,02	0,04	4,80	0,48	mg/l	96%
Nitrate	78,7	1,9	78,26	7,83	mg/l	99%
Nitrite	0,061	0,002	0,0607	0,0097	mg/l	100%
Ammonium	0,050	0,005	0,059	0,012	mg/l	118%
Chloride	17,5	0,4	17,81	1,78	mg/l	102%
Sulphate	35,5	0,4	36,28	5,44	mg/l	102%
Orthophosphate	<0,009		<0,15		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	2,05		mg/l	104%
Total P (as PO <sub>4</sub> )	<0,009		<0,15		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,280	0,042	mg/l	89%



**Sample N166A****Laboratory R**

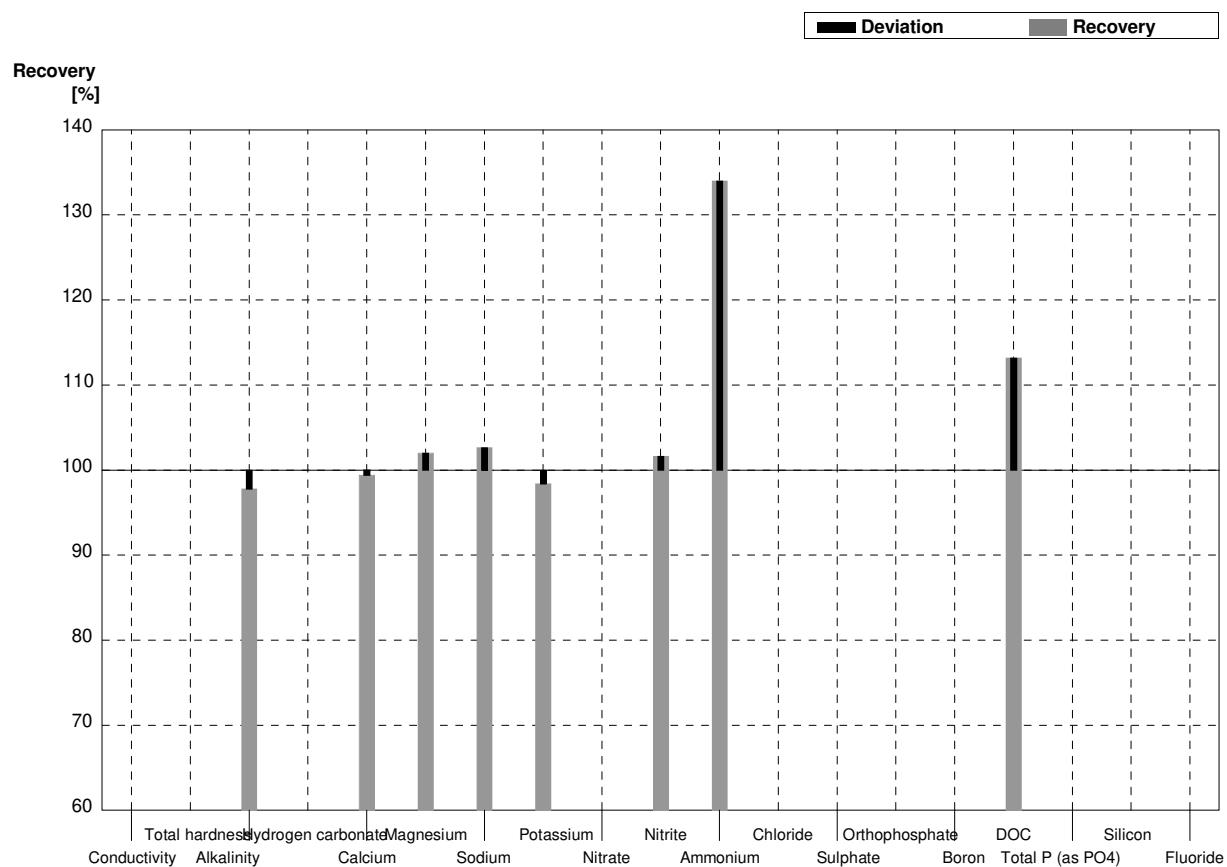
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2			$\mu\text{S}/\text{cm}$	
Total hardness	1,436	0,016			$\text{mmol}/\text{l}$	
Alkalinity	1,76	0,03	1,736		$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	104,4	1,6			$\text{mg}/\text{l}$	
Calcium	36,2	0,6	37,1		$\text{mg}/\text{l}$	102%
Magnesium	12,93	0,15	12,7		$\text{mg}/\text{l}$	98%
Sodium	48,6	0,3	49,4		$\text{mg}/\text{l}$	102%
Potassium	6,19	0,04	6,00		$\text{mg}/\text{l}$	97%
Nitrate	5,20	0,10			$\text{mg}/\text{l}$	
Nitrite	0,0131	0,0004	<0,05		$\text{mg}/\text{l}$	•
Ammonium	<0,01		<0,05		$\text{mg}/\text{l}$	•
Chloride	51,6	0,6			$\text{mg}/\text{l}$	
Sulphate	87,7	0,6			$\text{mg}/\text{l}$	
Orthophosphate	0,0307	0,0023			$\text{mg}/\text{l}$	
Boron	0,0334	0,0019			$\text{mg}/\text{l}$	
DOC	4,03	0,05	4,183		$\text{mg}/\text{l}$	104%
Total P (as PO <sub>4</sub> )	0,0884	0,0013			$\text{mg}/\text{l}$	
Silicon	3,013	0,017			$\text{mg}/\text{l}$	
Fluoride	0,500	0,013			$\text{mg}/\text{l}$	



**Sample N166B**

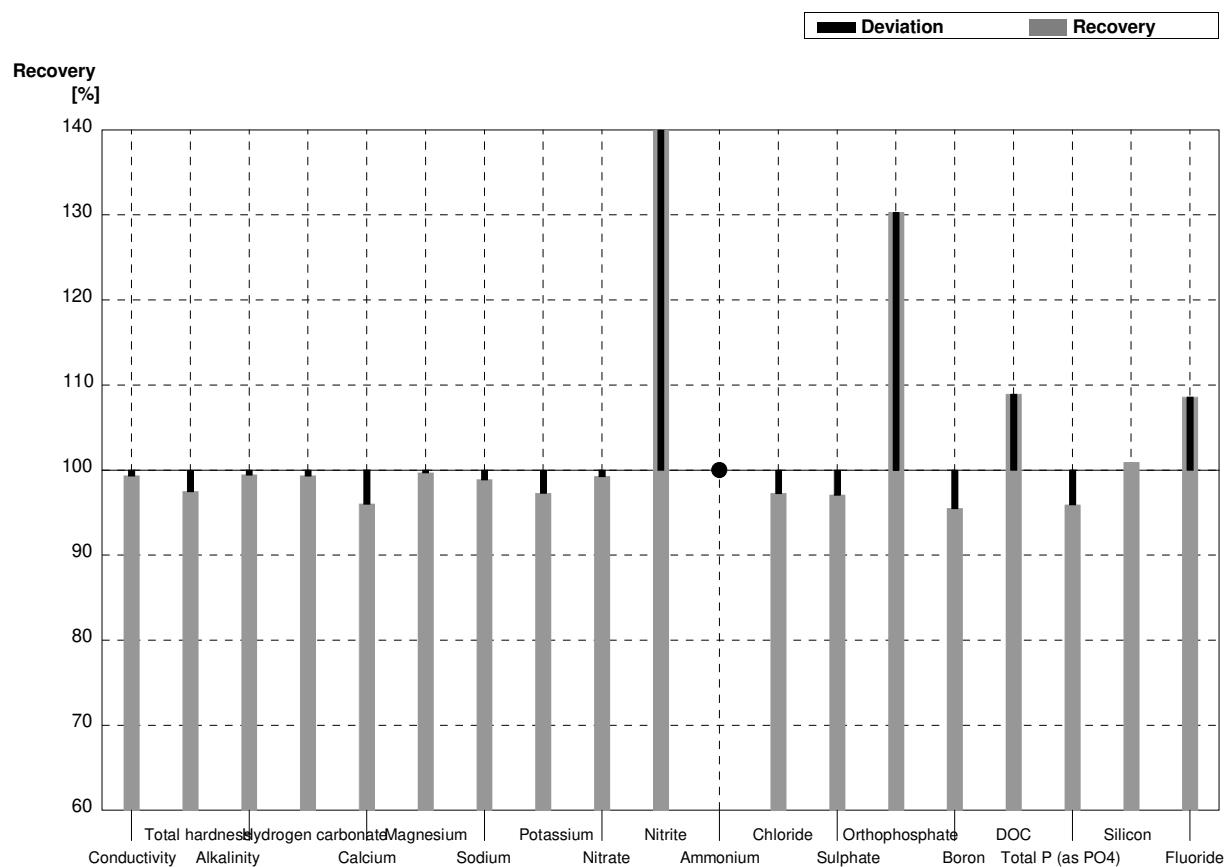
**Laboratory R**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,088		mmol/l	98%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	84,6		mg/l	99%
Magnesium	19,8	0,4	20,2		mg/l	102%
Sodium	15,2	0,7	15,6		mg/l	103%
Potassium	5,02	0,04	4,94		mg/l	98%
Nitrate	78,7	1,9			mg/l	
Nitrite	0,061	0,002	0,062		mg/l	102%
Ammonium	0,050	0,005	0,067		mg/l	134%
Chloride	17,5	0,4			mg/l	
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	2,230		mg/l	113%
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A****Laboratory S**

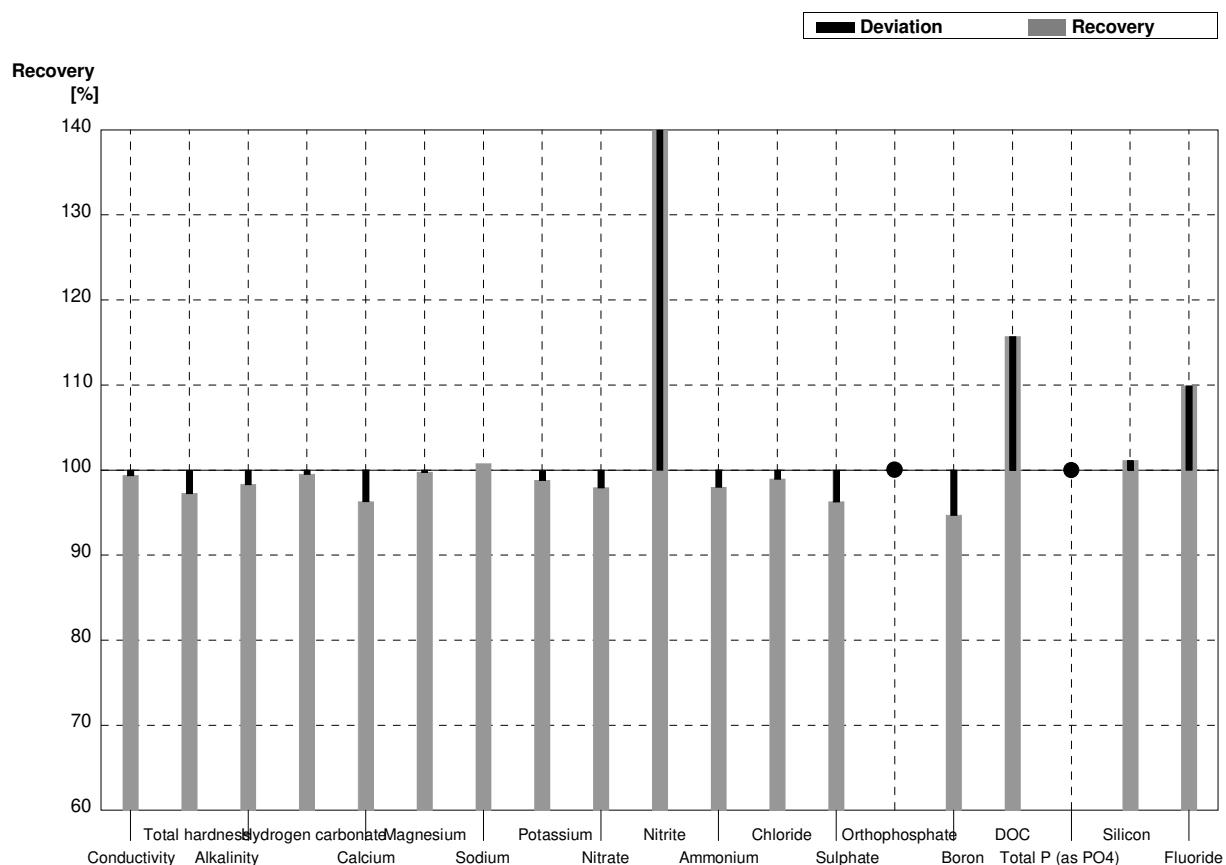
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	531,5	5,63	$\mu\text{S}/\text{cm}$	99%
Total hardness	1,436	0,016	1,40	0,010	$\text{mmol}/\text{l}$	97%
Alkalinity	1,76	0,03	1,75	0,15	$\text{mmol}/\text{l}$	99%
Hydrogen carbonate	104,4	1,6	103,7	8,84	$\text{mg}/\text{l}$	99%
Calcium	36,2	0,6	34,76	3,51	$\text{mg}/\text{l}$	96%
Magnesium	12,93	0,15	12,89	0,782	$\text{mg}/\text{l}$	100%
Sodium	48,6	0,3	48,06	3,77	$\text{mg}/\text{l}$	99%
Potassium	6,19	0,04	6,022	0,429	$\text{mg}/\text{l}$	97%
Nitrate	5,20	0,10	5,162	0,449	$\text{mg}/\text{l}$	99%
Nitrite	0,0131	0,0004	0,0400	0,0056	$\text{mg}/\text{l}$	305%
Ammonium	<0,01		0,00200	0,0003	$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	50,19	6,04	$\text{mg}/\text{l}$	97%
Sulphate	87,7	0,6	85,13	8,03	$\text{mg}/\text{l}$	97%
Orthophosphate	0,0307	0,0023	0,0400	0,0064	$\text{mg}/\text{l}$	130%
Boron	0,0334	0,0019	0,0319	0,0014	$\text{mg}/\text{l}$	96%
DOC	4,03	0,05	4,39	0,6743	$\text{mg}/\text{l}$	109%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0848	0,0182	$\text{mg}/\text{l}$	96%
Silicon	3,013	0,017	3,041	0,4528	$\text{mg}/\text{l}$	101%
Fluoride	0,500	0,013	0,543	0,0843	$\text{mg}/\text{l}$	109%



**Sample N166B**

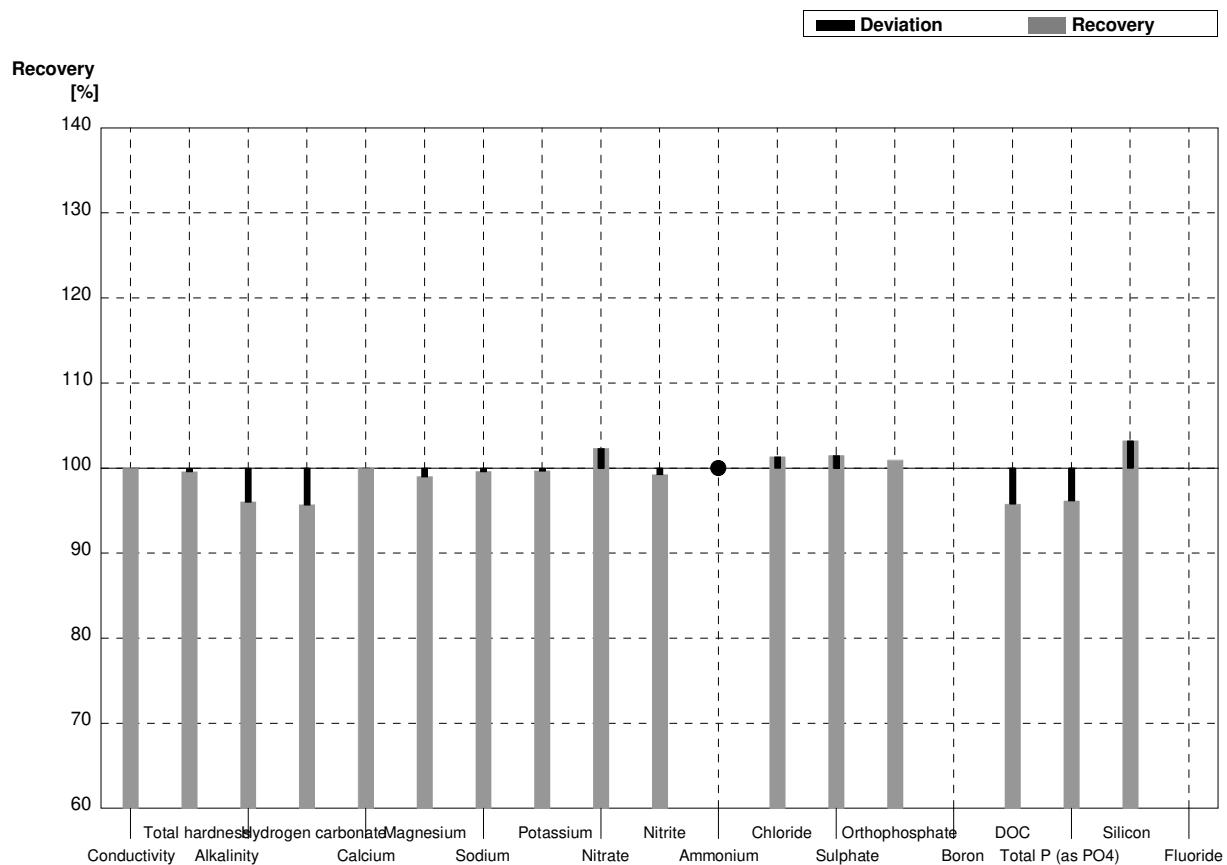
**Laboratory S**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	639	6,8	µS/cm	99%
Total hardness	2,94	0,04	2,86	0,20	mmol/l	97%
Alkalinity	4,18	0,08	4,11	0,35	mmol/l	98%
Hydrogen carbonate	252	5	250,8	21,4	mg/l	100%
Calcium	85,1	1,6	81,96	6,96	mg/l	96%
Magnesium	19,8	0,4	19,75	1,20	mg/l	100%
Sodium	15,2	0,7	15,32	1,20	mg/l	101%
Potassium	5,02	0,04	4,96	0,35	mg/l	99%
Nitrate	78,7	1,9	77,09	1,81	mg/l	98%
Nitrite	0,061	0,002	0,104	0,015	mg/l	170%
Ammonium	0,050	0,005	0,0490	0,0083	mg/l	98%
Chloride	17,5	0,4	17,32	2,09	mg/l	99%
Sulphate	35,5	0,4	34,18	3,22	mg/l	96%
Orthophosphate	<0,009		0,0100	0,0016	mg/l	•
Boron	0,085	0,004	0,0805	0,0034	mg/l	95%
DOC	1,97	0,04	2,28	0,35	mg/l	116%
Total P (as PO4)	<0,009		0,00830	0,0018	mg/l	•
Silicon	5,07	0,03	5,129	0,764	mg/l	101%
Fluoride	0,313	0,008	0,344	0,053	mg/l	110%



**Sample N166A****Laboratory T**

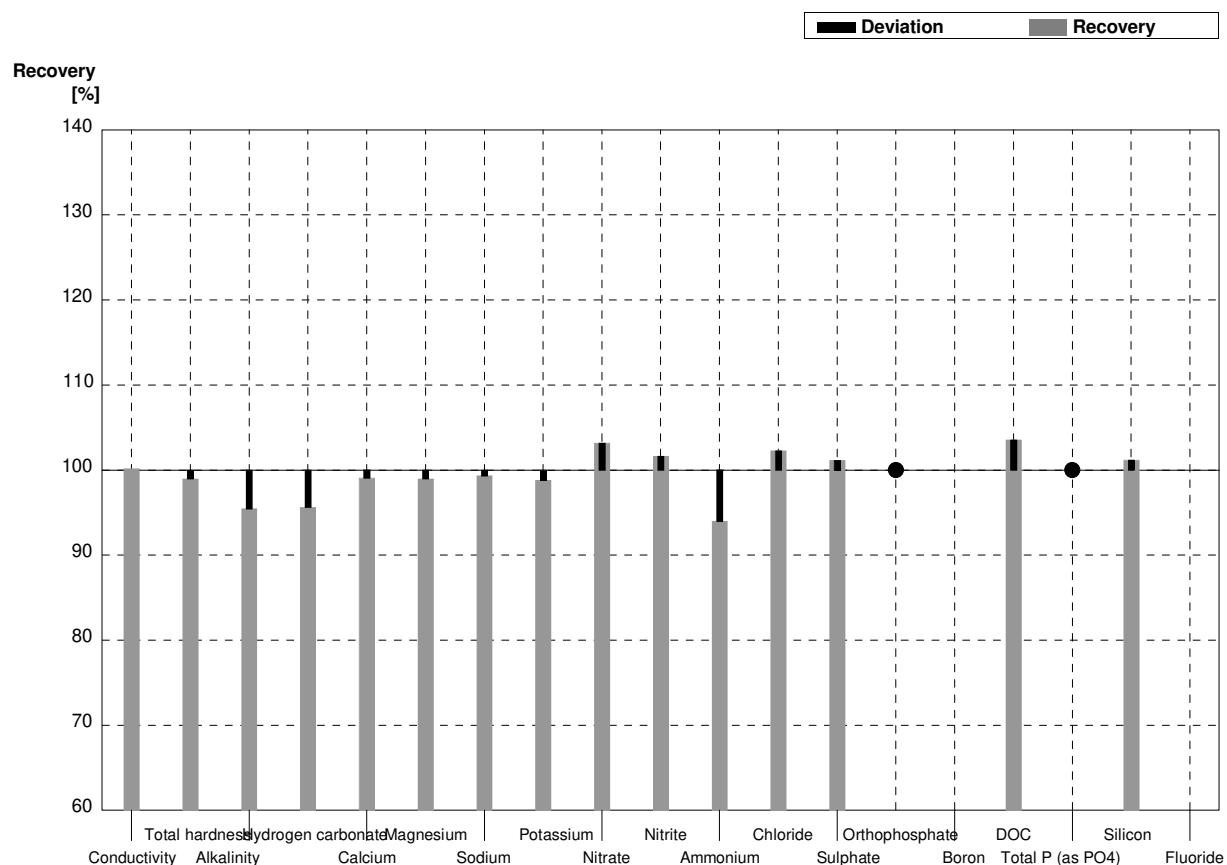
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	535	22	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,43	0,1	$\text{mmol}/\text{l}$	100%
Alkalinity	1,76	0,03	1,69	0,1	$\text{mmol}/\text{l}$	96%
Hydrogen carbonate	104,4	1,6	99,9	4	$\text{mg}/\text{l}$	96%
Calcium	36,2	0,6	36,2	3	$\text{mg}/\text{l}$	100%
Magnesium	12,93	0,15	12,8	1,6	$\text{mg}/\text{l}$	99%
Sodium	48,6	0,3	48,4	8	$\text{mg}/\text{l}$	100%
Potassium	6,19	0,04	6,17	0,9	$\text{mg}/\text{l}$	100%
Nitrate	5,20	0,10	5,32	0,4	$\text{mg}/\text{l}$	102%
Nitrite	0,0131	0,0004	0,0130	0,001	$\text{mg}/\text{l}$	99%
Ammonium	<0,01		<0,013		$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	52,3	4	$\text{mg}/\text{l}$	101%
Sulphate	87,7	0,6	89,0	6	$\text{mg}/\text{l}$	101%
Orthophosphate	0,0307	0,0023	0,0310	0,004	$\text{mg}/\text{l}$	101%
Boron	0,0334	0,0019			$\text{mg}/\text{l}$	
DOC	4,03	0,05	3,86	0,6	$\text{mg}/\text{l}$	96%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,085	0,007	$\text{mg}/\text{l}$	96%
Silicon	3,013	0,017	3,11	0,3	$\text{mg}/\text{l}$	103%
Fluoride	0,500	0,013			$\text{mg}/\text{l}$	



**Sample N166B**

**Laboratory T**

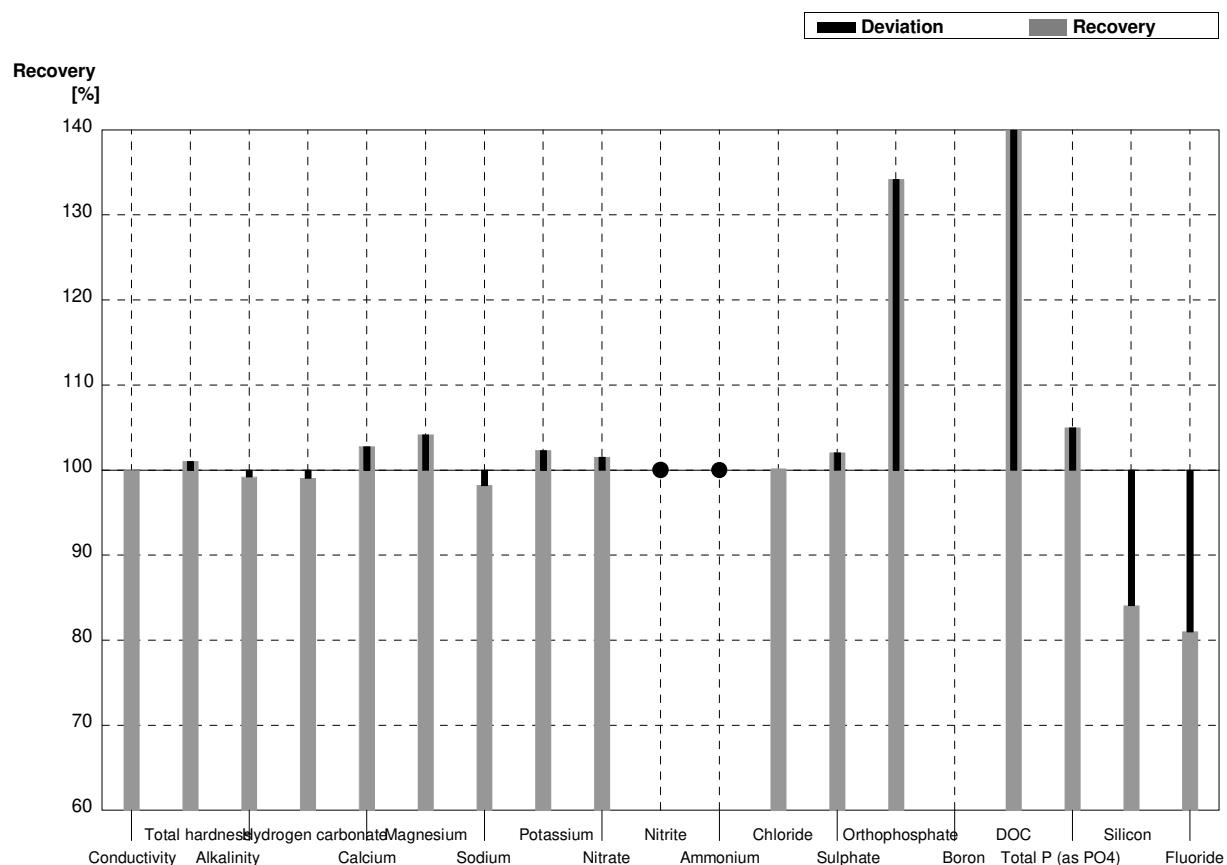
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	644	26	µS/cm	100%
Total hardness	2,94	0,04	2,91	0,1	mmol/l	99%
Alkalinity	4,18	0,08	3,99	0,2	mmol/l	95%
Hydrogen carbonate	252	5	241	10	mg/l	96%
Calcium	85,1	1,6	84,3	7	mg/l	99%
Magnesium	19,8	0,4	19,6	2,4	mg/l	99%
Sodium	15,2	0,7	15,1	2,3	mg/l	99%
Potassium	5,02	0,04	4,96	0,7	mg/l	99%
Nitrate	78,7	1,9	81,2	6	mg/l	103%
Nitrite	0,061	0,002	0,062	0,005	mg/l	102%
Ammonium	0,050	0,005	0,0470	0,005	mg/l	94%
Chloride	17,5	0,4	17,9	1,1	mg/l	102%
Sulphate	35,5	0,4	35,9	3	mg/l	101%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	2,04	0,3	mg/l	104%
Total P (as PO4)	<0,009		<0,013		mg/l	•
Silicon	5,07	0,03	5,13	0,5	mg/l	101%
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory U**

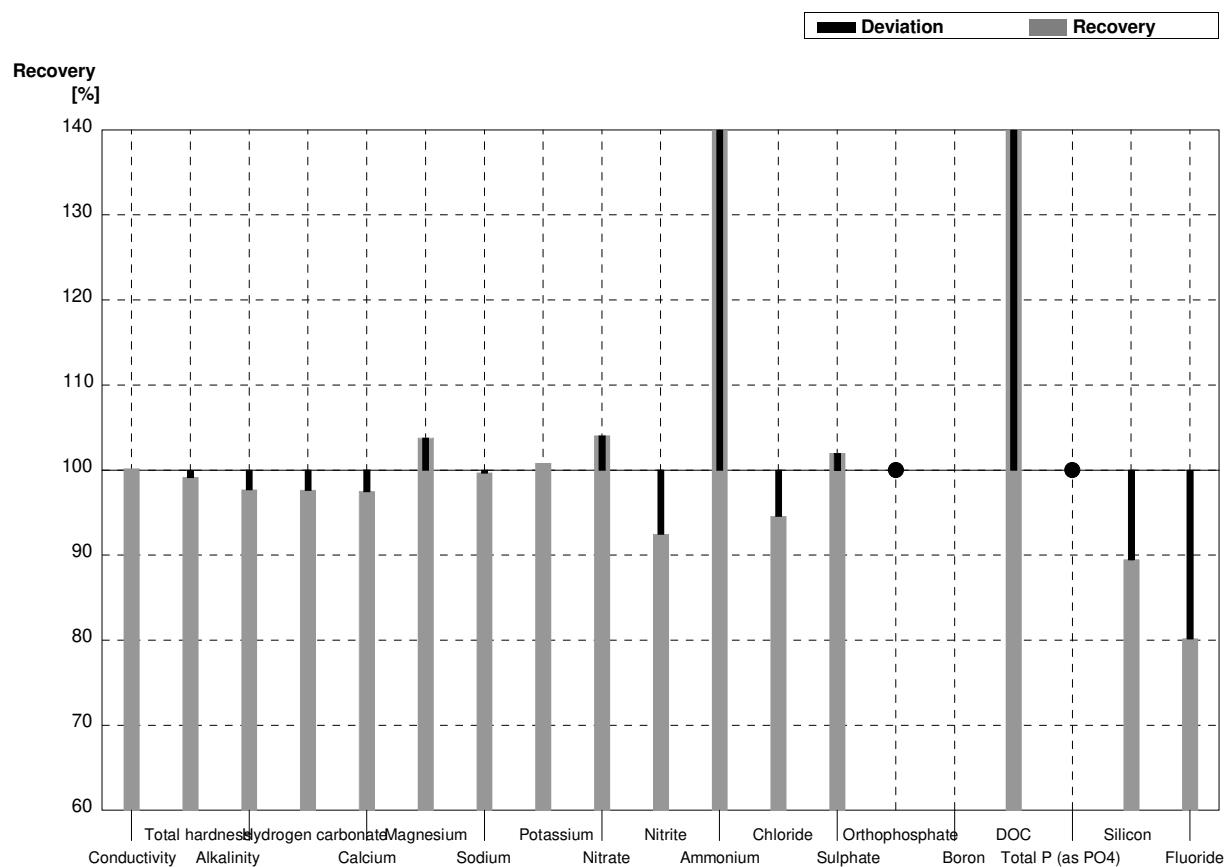
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	535	9	µS/cm	100%
Total hardness	1,436	0,016	1,451	0,15	mmol/l	101%
Alkalinity	1,76	0,03	1,746	0,15	mmol/l	99%
Hydrogen carbonate	104,4	1,6	103,4	10	mg/l	99%
Calcium	36,2	0,6	37,2	2,2	mg/l	103%
Magnesium	12,93	0,15	13,47	1,8	mg/l	104%
Sodium	48,6	0,3	47,73	2,5	mg/l	98%
Potassium	6,19	0,04	6,333	0,8	mg/l	102%
Nitrate	5,20	0,10	5,28	0,7	mg/l	102%
Nitrite	0,0131	0,0004	<0,01	0,02	mg/l	•
Ammonium	<0,01		<0,05	0,03	mg/l	•
Chloride	51,6	0,6	51,68	2,7	mg/l	100%
Sulphate	87,7	0,6	89,49	3,1	mg/l	102%
Orthophosphate	0,0307	0,0023	0,0412	0,013	mg/l	134%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	9,803	0,8	mg/l	243%
Total P (as PO4)	0,0884	0,0013	0,0928	0,02	mg/l	105%
Silicon	3,013	0,017	2,533	0,2	mg/l	84%
Fluoride	0,500	0,013	0,405	0,15	mg/l	81%



**Sample N166B**

**Laboratory U**

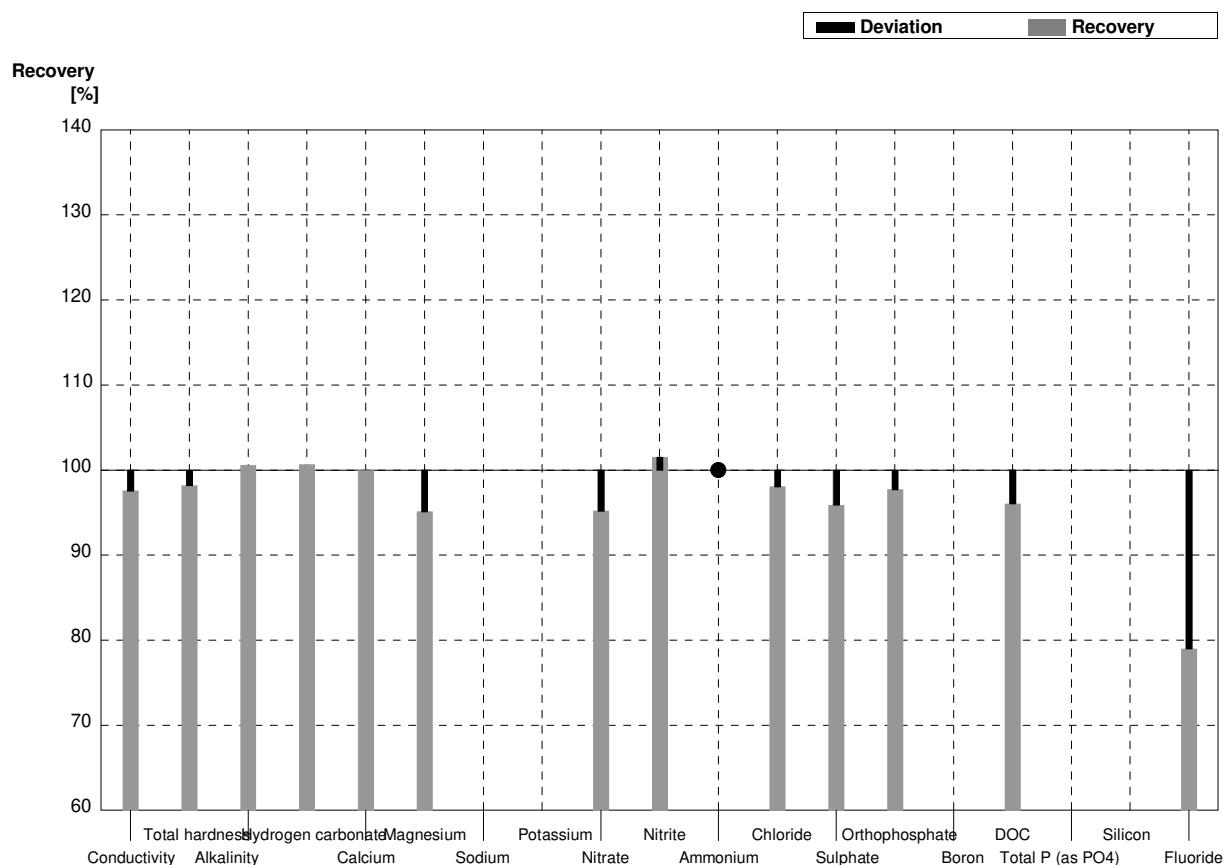
Parameter	Target value	$\pm$ U (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	644	9	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	2,915	0,18	$\text{mmol/l}$	99%
Alkalinity	4,18	0,08	4,084	0,18	$\text{mmol/l}$	98%
Hydrogen carbonate	252	5	246,04	10	$\text{mg/l}$	98%
Calcium	85,1	1,6	82,97	3,1	$\text{mg/l}$	97%
Magnesium	19,8	0,4	20,55	1,9	$\text{mg/l}$	104%
Sodium	15,2	0,7	15,15	1,3	$\text{mg/l}$	100%
Potassium	5,02	0,04	5,06	0,6	$\text{mg/l}$	101%
Nitrate	78,7	1,9	81,9	2,8	$\text{mg/l}$	104%
Nitrite	0,061	0,002	0,0564	0,02	$\text{mg/l}$	92%
Ammonium	0,050	0,005	0,1322	0,03	$\text{mg/l}$	264%
Chloride	17,5	0,4	16,55	1,3	$\text{mg/l}$	95%
Sulphate	35,5	0,4	36,2	1,8	$\text{mg/l}$	102%
Orthophosphate	<0,009		<0,03	0,02	$\text{mg/l}$	•
Boron	0,085	0,004			$\text{mg/l}$	
DOC	1,97	0,04	14,92	1,1	$\text{mg/l}$	757%
Total P (as PO <sub>4</sub> )	<0,009		<0,03	0,02	$\text{mg/l}$	•
Silicon	5,07	0,03	4,537	0,4	$\text{mg/l}$	89%
Fluoride	0,313	0,008	0,251	0,06	$\text{mg/l}$	80%



**Sample N166A**

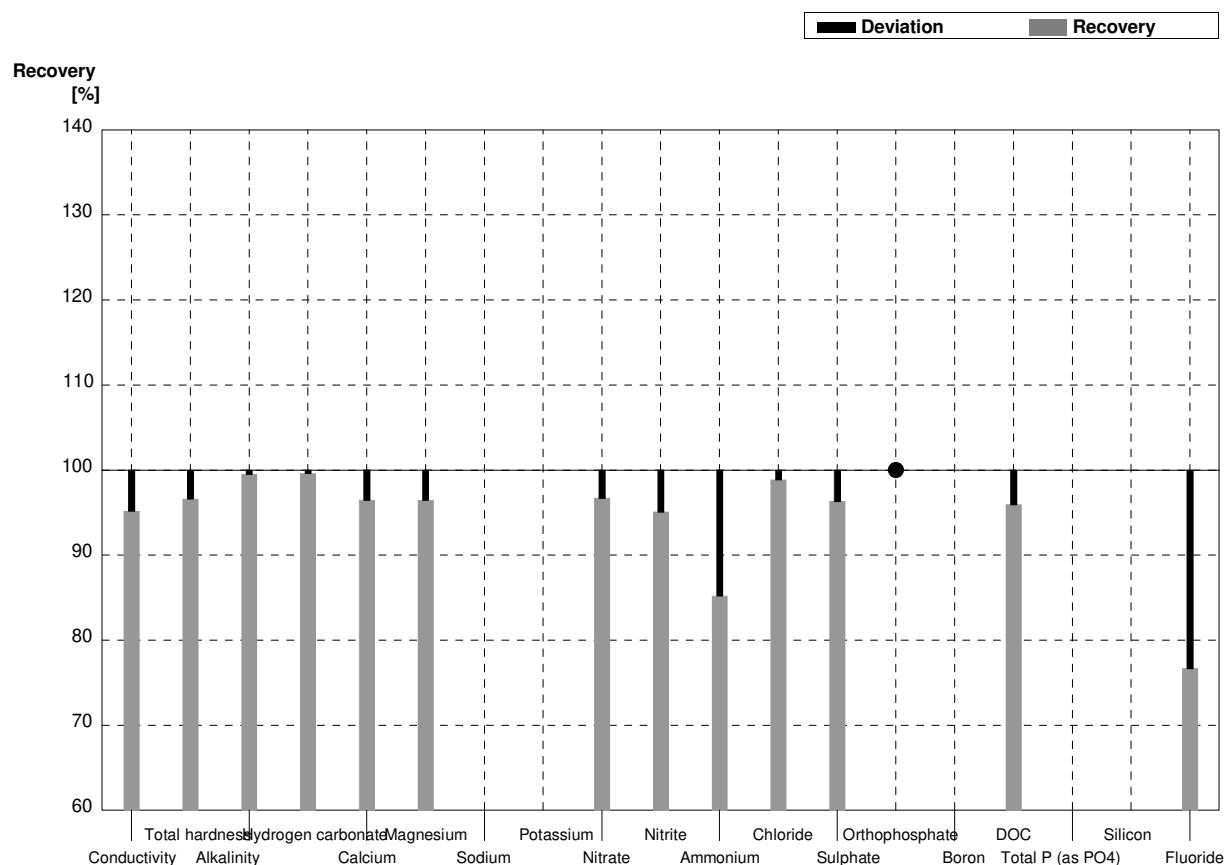
**Laboratory V**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	522	20	$\mu\text{S}/\text{cm}$	98%
Total hardness	1,436	0,016	1,41	0,03	$\text{mmol/l}$	98%
Alkalinity	1,76	0,03	1,77	0,10	$\text{mmol/l}$	101%
Hydrogen carbonate	104,4	1,6	105,1	3	$\text{mg/l}$	101%
Calcium	36,2	0,6	36,2	2,0	$\text{mg/l}$	100%
Magnesium	12,93	0,15	12,3	1,0	$\text{mg/l}$	95%
Sodium	48,6	0,3			$\text{mg/l}$	
Potassium	6,19	0,04			$\text{mg/l}$	
Nitrate	5,20	0,10	4,95	0,3	$\text{mg/l}$	95%
Nitrite	0,0131	0,0004	0,0133	0,005	$\text{mg/l}$	102%
Ammonium	<0,01		<0,02	0,005	$\text{mg/l}$	•
Chloride	51,6	0,6	50,6	2,0	$\text{mg/l}$	98%
Sulphate	87,7	0,6	84,1	4,0	$\text{mg/l}$	96%
Orthophosphate	0,0307	0,0023	0,0300	0,005	$\text{mg/l}$	98%
Boron	0,0334	0,0019			$\text{mg/l}$	
DOC	4,03	0,05	3,87	0,3	$\text{mg/l}$	96%
Total P (as PO <sub>4</sub> )	0,0884	0,0013			$\text{mg/l}$	
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013	0,395	0,04	$\text{mg/l}$	79%



**Sample N166B****Laboratory V**

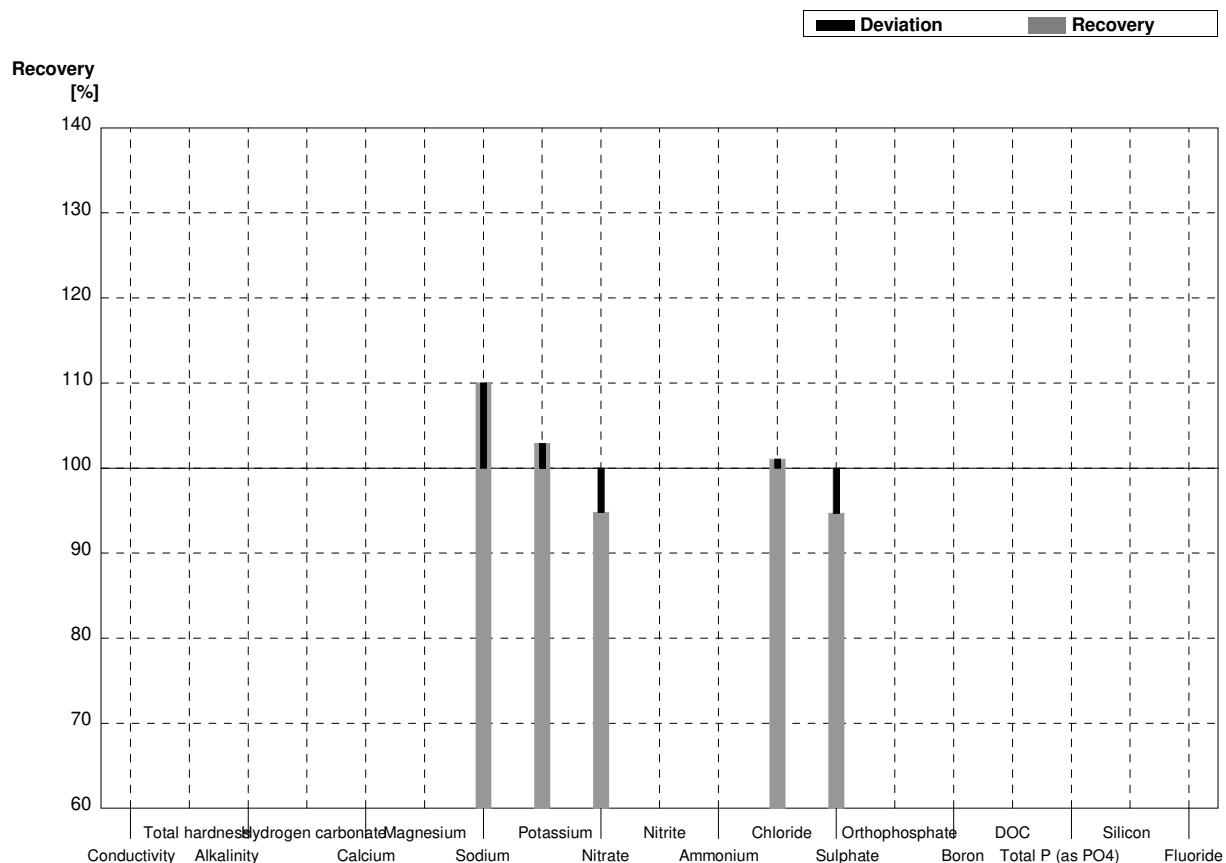
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	612	30	$\mu\text{S}/\text{cm}$	95%
Total hardness	2,94	0,04	2,84	0,06	$\text{mmol/l}$	97%
Alkalinity	4,18	0,08	4,16	0,20	$\text{mmol/l}$	100%
Hydrogen carbonate	252	5	251,0	10	$\text{mg/l}$	100%
Calcium	85,1	1,6	82,1	3,0	$\text{mg/l}$	96%
Magnesium	19,8	0,4	19,1	1,5	$\text{mg/l}$	96%
Sodium	15,2	0,7			$\text{mg/l}$	
Potassium	5,02	0,04			$\text{mg/l}$	
Nitrate	78,7	1,9	76,1	3,0	$\text{mg/l}$	97%
Nitrite	0,061	0,002	0,0580	0,010	$\text{mg/l}$	95%
Ammonium	0,050	0,005	0,0426	0,010	$\text{mg/l}$	85%
Chloride	17,5	0,4	17,3	1,0	$\text{mg/l}$	99%
Sulphate	35,5	0,4	34,2	2,0	$\text{mg/l}$	96%
Orthophosphate	<0,009		<0,030	0,005	$\text{mg/l}$	•
Boron	0,085	0,004			$\text{mg/l}$	
DOC	1,97	0,04	1,89	0,2	$\text{mg/l}$	96%
Total P (as PO <sub>4</sub> )	<0,009				$\text{mg/l}$	
Silicon	5,07	0,03			$\text{mg/l}$	
Fluoride	0,313	0,008	0,240	0,03	$\text{mg/l}$	77%



**Sample N166A**

**Laboratory W**

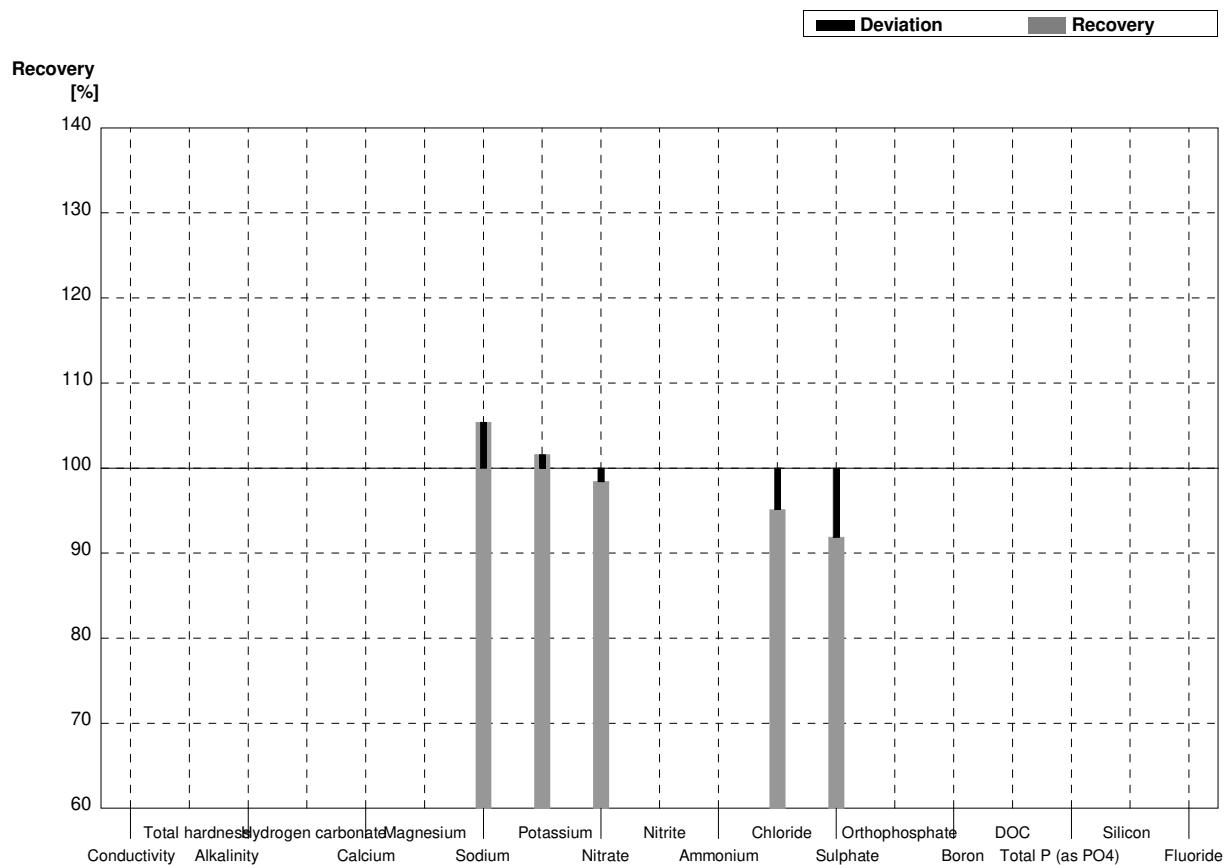
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2			µS/cm	
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03			mmol/l	
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3	53,48	5,348	mg/l	110%
Potassium	6,19	0,04	6,37	0,637	mg/l	103%
Nitrate	5,20	0,10	4,93	0,986	mg/l	95%
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6	52,15	7,82	mg/l	101%
Sulphate	87,7	0,6	83,06	16,61	mg/l	95%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO4)	0,0884	0,0013			mg/l	
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory W**

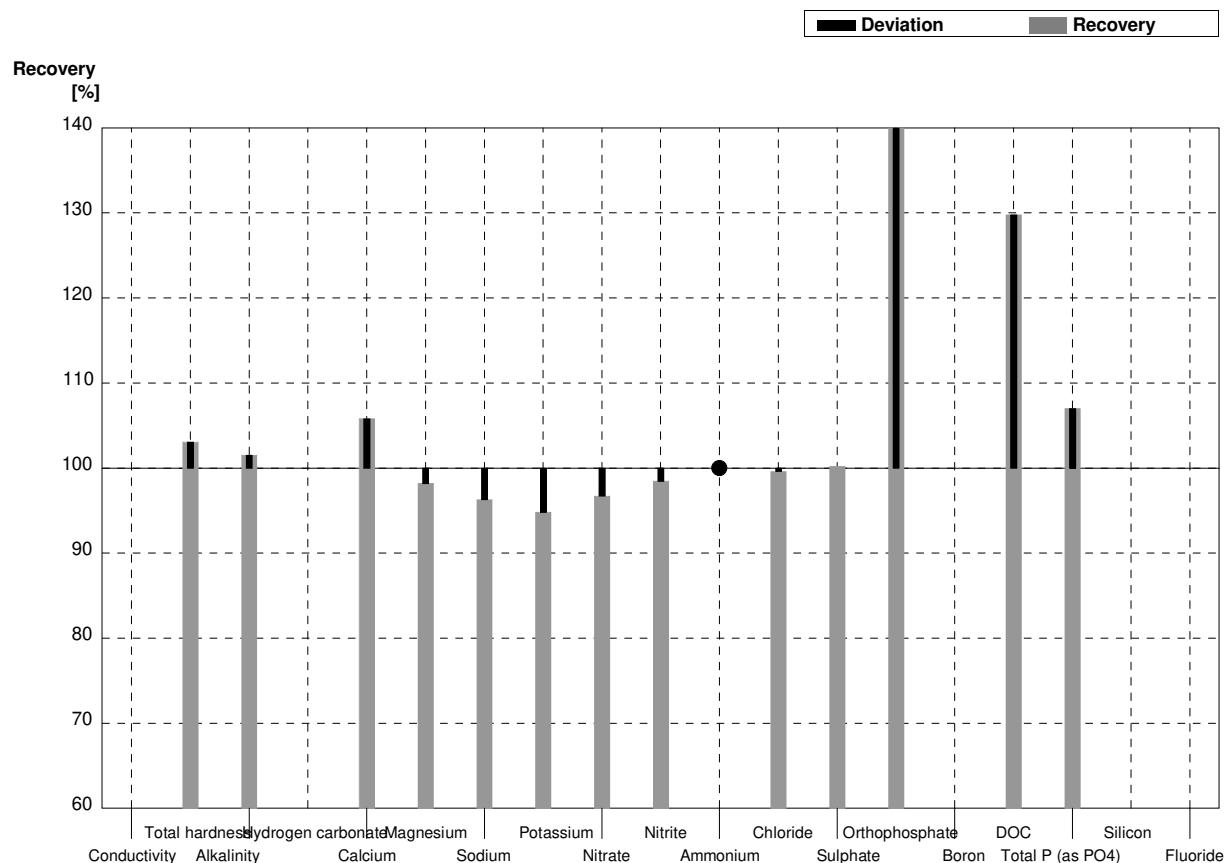
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08			mmol/l	
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6			mg/l	
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7	16,02	1,602	mg/l	105%
Potassium	5,02	0,04	5,10	0,51	mg/l	102%
Nitrate	78,7	1,9	77,47	15,49	mg/l	98%
Nitrite	0,061	0,002			mg/l	
Ammonium	0,050	0,005			mg/l	
Chloride	17,5	0,4	16,65	2,498	mg/l	95%
Sulphate	35,5	0,4	32,62	6,52	mg/l	92%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory X**

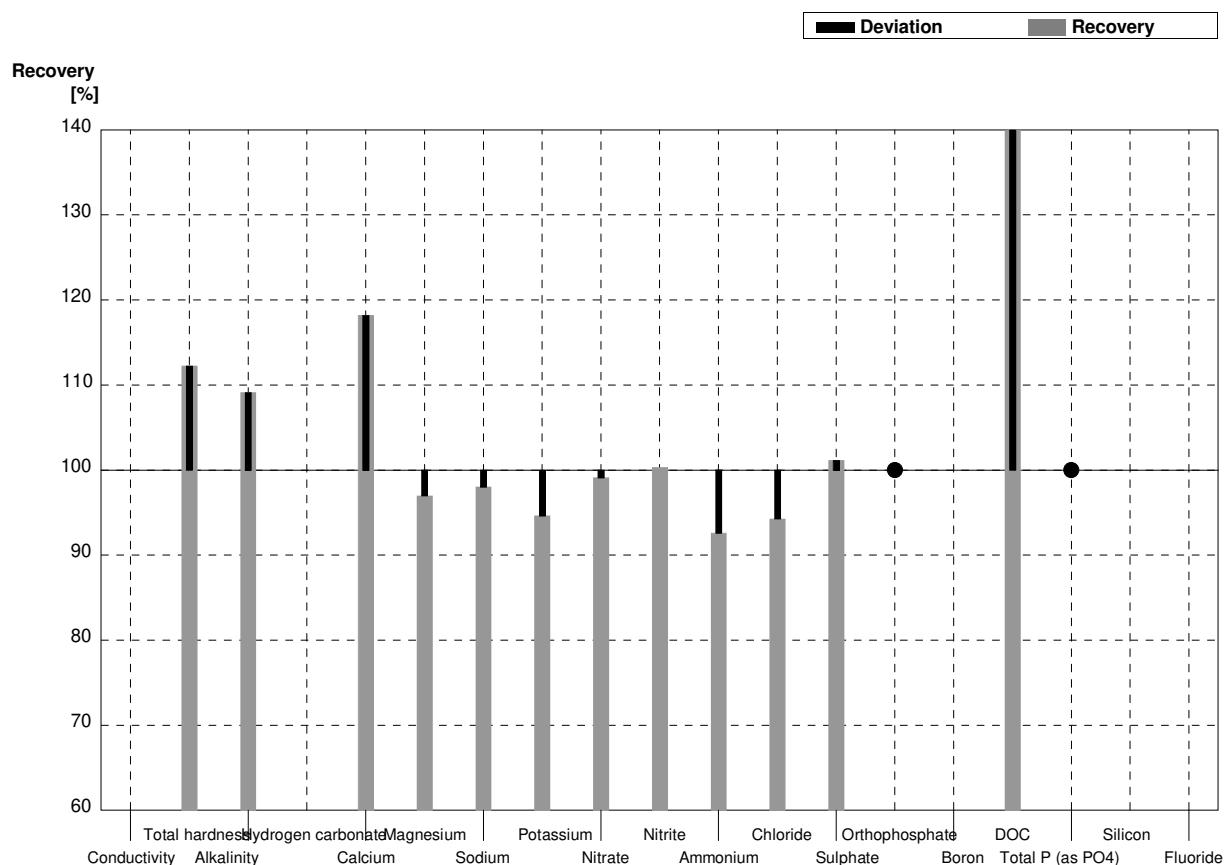
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2			$\mu\text{S}/\text{cm}$	
Total hardness	1,436	0,016	1,48	0,148	mmol/l	103%
Alkalinity	1,76	0,03	1,787	0,178	mmol/l	102%
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6	38,3	3,8	mg/l	106%
Magnesium	12,93	0,15	12,7	1,27	mg/l	98%
Sodium	48,6	0,3	46,8	4,68	mg/l	96%
Potassium	6,19	0,04	5,87	0,587	mg/l	95%
Nitrate	5,20	0,10	5,03	0,50	mg/l	97%
Nitrite	0,0131	0,0004	0,0129	0,0013	mg/l	98%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	51,6	0,6	51,4	5,1	mg/l	100%
Sulphate	87,7	0,6	87,9	8,8	mg/l	100%
Orthophosphate	0,0307	0,0023	0,333	0,033	mg/l	1085%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	5,23	0,52	mg/l	130%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0946	0,0095	mg/l	107%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory X**

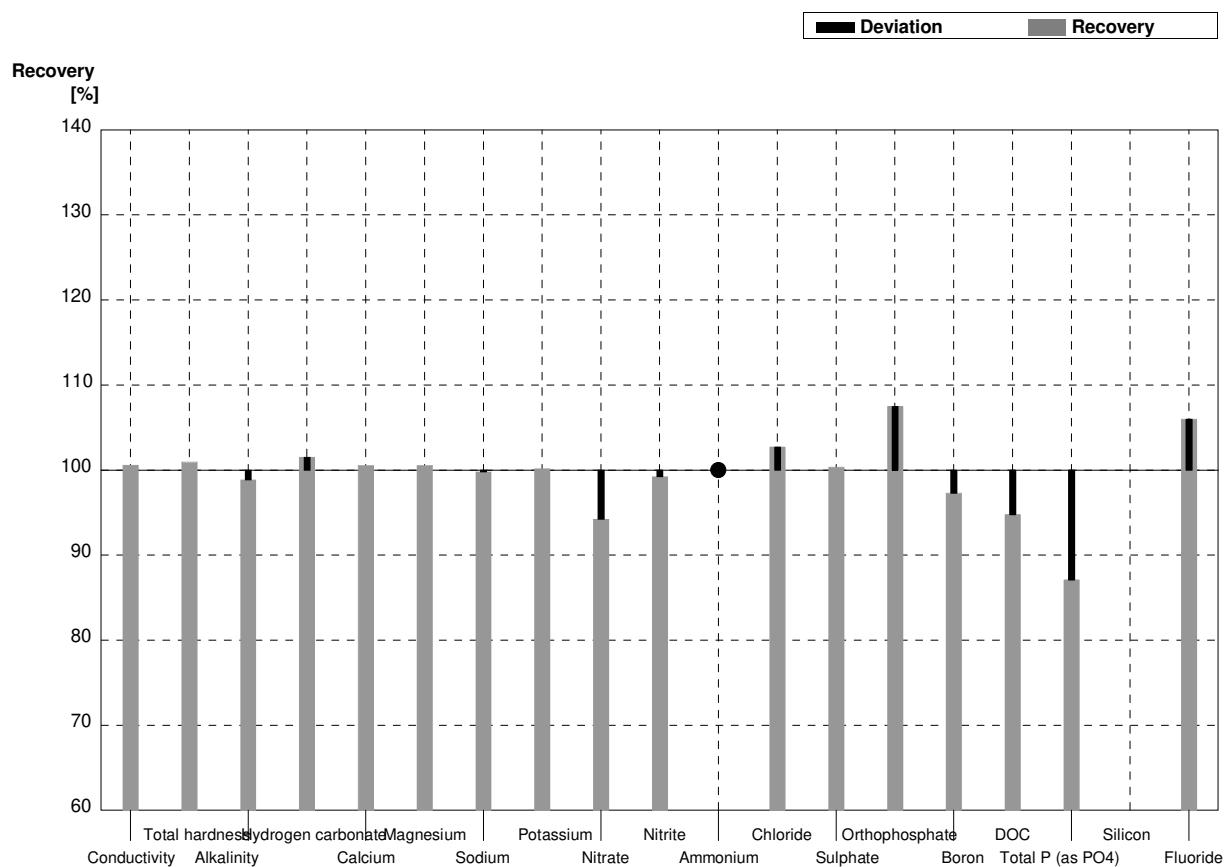
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04	3,30	0,33	mmol/l	112%
Alkalinity	4,18	0,08	4,562	0,46	mmol/l	109%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	100,6	10,0	mg/l	118%
Magnesium	19,8	0,4	19,2	1,92	mg/l	97%
Sodium	15,2	0,7	14,9	1,49	mg/l	98%
Potassium	5,02	0,04	4,75	0,475	mg/l	95%
Nitrate	78,7	1,9	78	7,8	mg/l	99%
Nitrite	0,061	0,002	0,0612	0,0061	mg/l	100%
Ammonium	0,050	0,005	0,0463	0,0046	mg/l	93%
Chloride	17,5	0,4	16,5	1,7	mg/l	94%
Sulphate	35,5	0,4	35,9	3,6	mg/l	101%
Orthophosphate	<0,009		<0,061		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	3,69	0,37	mg/l	187%
Total P (as PO4)	<0,009		<0,061		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory Y**

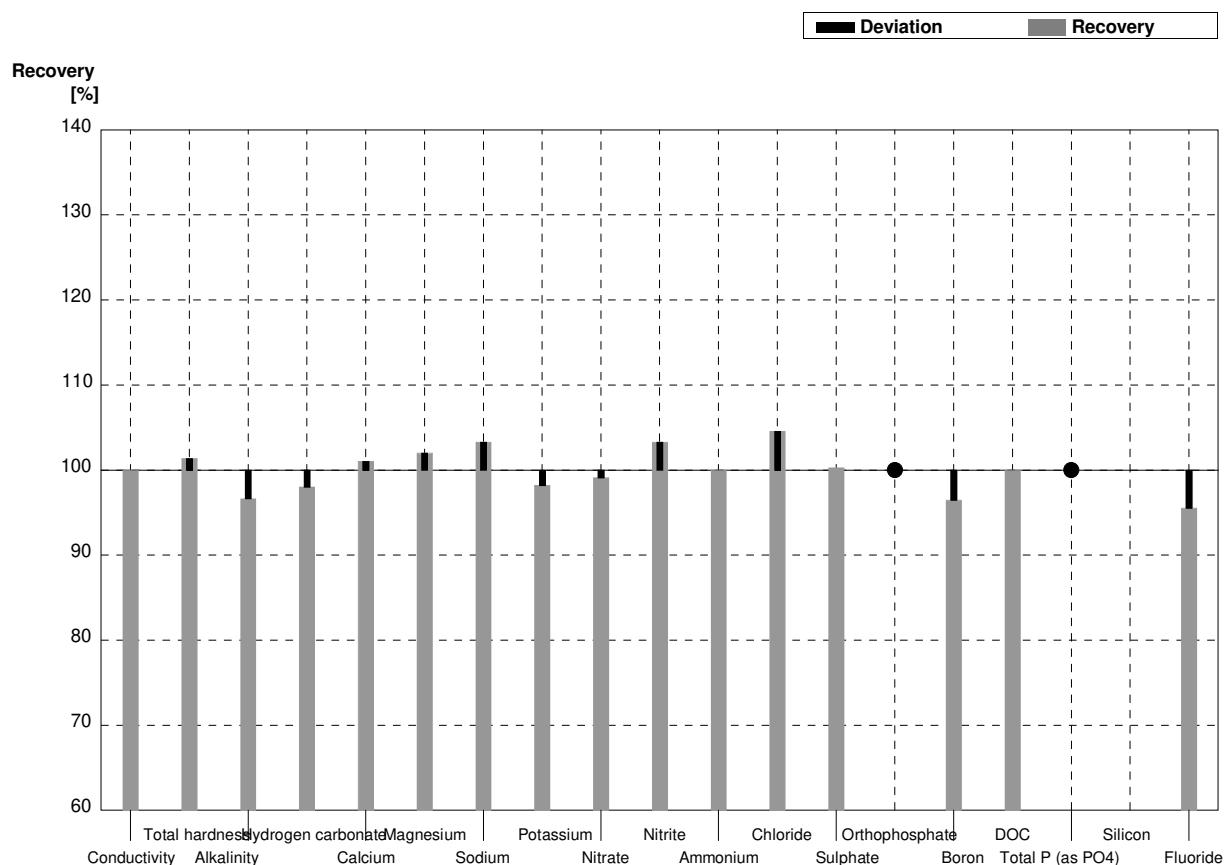
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	538	10	µS/cm	101%
Total hardness	1,436	0,016	1,45	0,15	mmol/l	101%
Alkalinity	1,76	0,03	1,74	0,09	mmol/l	99%
Hydrogen carbonate	104,4	1,6	106	8	mg/l	102%
Calcium	36,2	0,6	36,4	2,9	mg/l	101%
Magnesium	12,93	0,15	13,0	1,0	mg/l	101%
Sodium	48,6	0,3	48,5	2,9	mg/l	100%
Potassium	6,19	0,04	6,2	0,7	mg/l	100%
Nitrate	5,20	0,10	4,90	0,2	mg/l	94%
Nitrite	0,0131	0,0004	0,0130	0,002	mg/l	99%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	51,6	0,6	53	4,2	mg/l	103%
Sulphate	87,7	0,6	88	5	mg/l	100%
Orthophosphate	0,0307	0,0023	0,0330	0,003	mg/l	107%
Boron	0,0334	0,0019	0,0325	0,0055	mg/l	97%
DOC	4,03	0,05	3,82	0,46	mg/l	95%
Total P (as PO4)	0,0884	0,0013	0,077	0,007	mg/l	87%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,53	0,053	mg/l	106%



**Sample N166B**

**Laboratory Y**

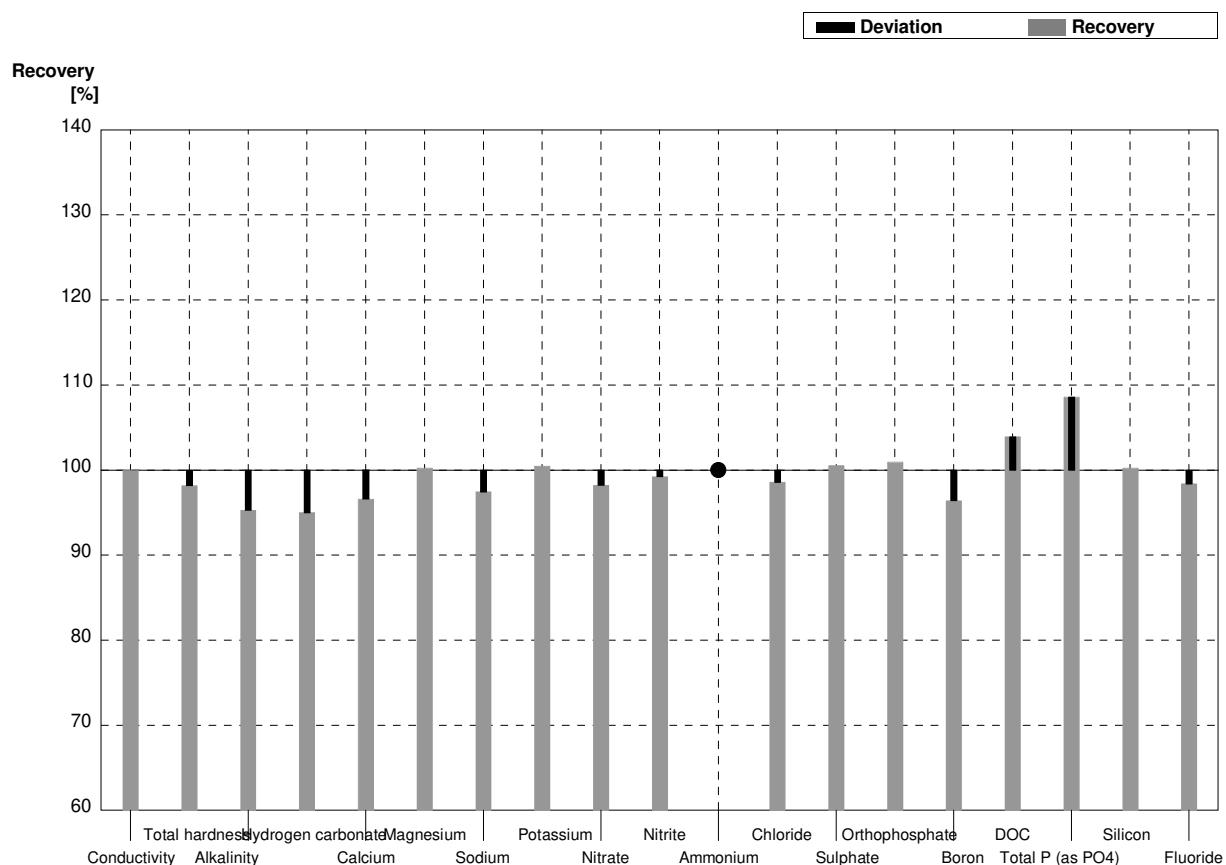
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	643	12	µS/cm	100%
Total hardness	2,94	0,04	2,98	0,30	mmol/l	101%
Alkalinity	4,18	0,08	4,04	0,21	mmol/l	97%
Hydrogen carbonate	252	5	247	20	mg/l	98%
Calcium	85,1	1,6	86	6,9	mg/l	101%
Magnesium	19,8	0,4	20,2	0,8	mg/l	102%
Sodium	15,2	0,7	15,7	1,9	mg/l	103%
Potassium	5,02	0,04	4,93	0,54	mg/l	98%
Nitrate	78,7	1,9	78	6	mg/l	99%
Nitrite	0,061	0,002	0,063	0,008	mg/l	103%
Ammonium	0,050	0,005	0,050	0,013	mg/l	100%
Chloride	17,5	0,4	18,3	1,5	mg/l	105%
Sulphate	35,5	0,4	35,6	2,1	mg/l	100%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,085	0,004	0,082	0,014	mg/l	96%
DOC	1,97	0,04	1,97	0,49	mg/l	100%
Total P (as PO4)	<0,009		<0,009		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,299	0,030	mg/l	96%



**Sample N166A**

**Laboratory Z**

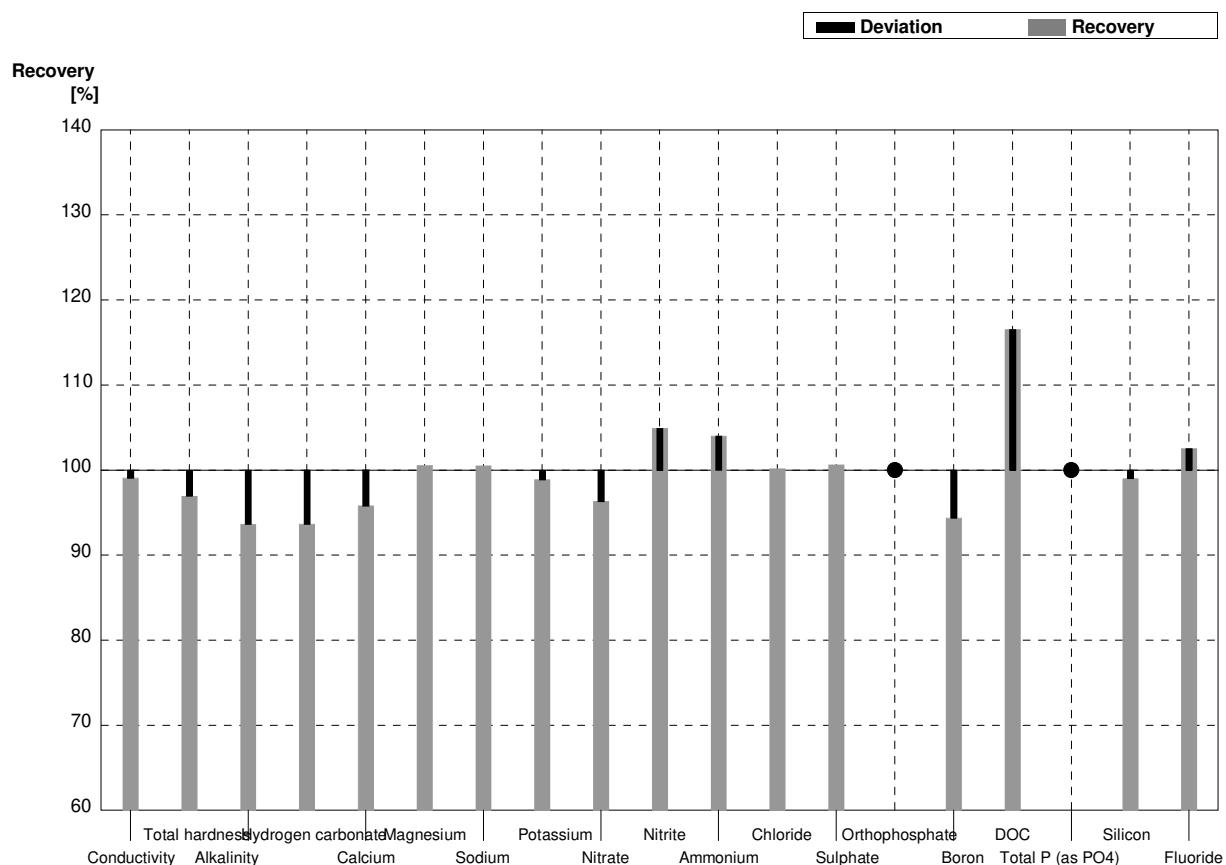
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	535	29,8	µS/cm	100%
Total hardness	1,436	0,016	1,41		mmol/l	98%
Alkalinity	1,76	0,03	1,677	0,097	mmol/l	95%
Hydrogen carbonate	104,4	1,6	99,2	7,74	mg/l	95%
Calcium	36,2	0,6	34,97	1,92	mg/l	97%
Magnesium	12,93	0,15	12,96	0,454	mg/l	100%
Sodium	48,6	0,3	47,37	1,66	mg/l	97%
Potassium	6,19	0,04	6,22	0,22	mg/l	100%
Nitrate	5,20	0,10	5,108	0,255	mg/l	98%
Nitrite	0,0131	0,0004	0,0130	0,001	mg/l	99%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	51,6	0,6	50,865	2,544	mg/l	99%
Sulphate	87,7	0,6	88,170	4,409	mg/l	101%
Orthophosphate	0,0307	0,0023	0,0310	0,003	mg/l	101%
Boron	0,0334	0,0019	0,0322	0,0058	mg/l	96%
DOC	4,03	0,05	4,188	0,758	mg/l	104%
Total P (as PO4)	0,0884	0,0013	0,096	0,01	mg/l	109%
Silicon	3,013	0,017	3,02	0,30	mg/l	100%
Fluoride	0,500	0,013	0,492	0,049	mg/l	98%



**Sample N166B**

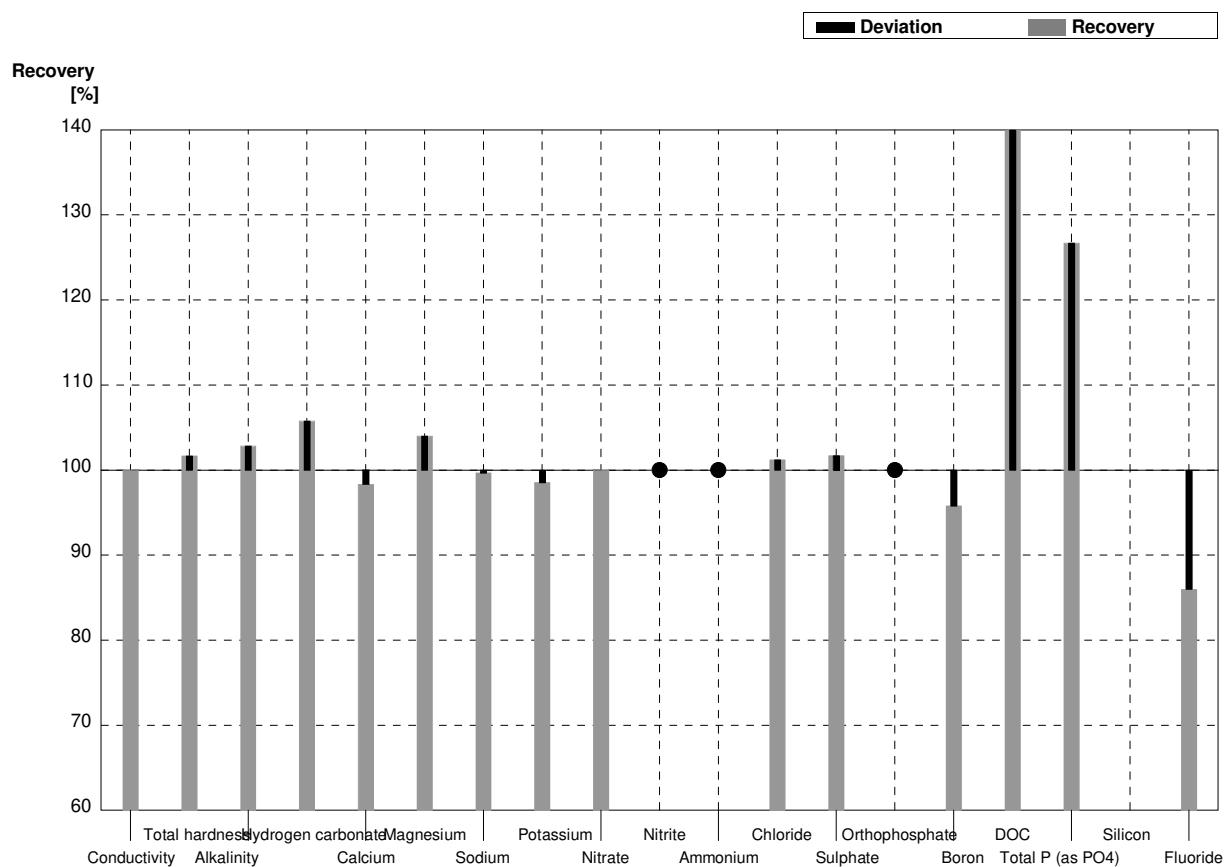
**Laboratory Z**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	637	35,4	µS/cm	99%
Total hardness	2,94	0,04	2,85		mmol/l	97%
Alkalinity	4,18	0,08	3,914	0,226	mmol/l	94%
Hydrogen carbonate	252	5	236	18,41	mg/l	94%
Calcium	85,1	1,6	81,52	4,484	mg/l	96%
Magnesium	19,8	0,4	19,91	0,7	mg/l	101%
Sodium	15,2	0,7	15,28	0,535	mg/l	101%
Potassium	5,02	0,04	4,964	0,174	mg/l	99%
Nitrate	78,7	1,9	75,82	3,791	mg/l	96%
Nitrite	0,061	0,002	0,0640	0,006	mg/l	105%
Ammonium	0,050	0,005	0,0520	0,005	mg/l	104%
Chloride	17,5	0,4	17,529	0,876	mg/l	100%
Sulphate	35,5	0,4	35,717	1,786	mg/l	101%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,085	0,004	0,0802	0,0144	mg/l	94%
DOC	1,97	0,04	2,296	0,4153	mg/l	117%
Total P (as PO4)	<0,009		<0,010		mg/l	•
Silicon	5,07	0,03	5,02	0,50	mg/l	99%
Fluoride	0,313	0,008	0,321	0,032	mg/l	103%



**Sample N166A****Laboratory AA**

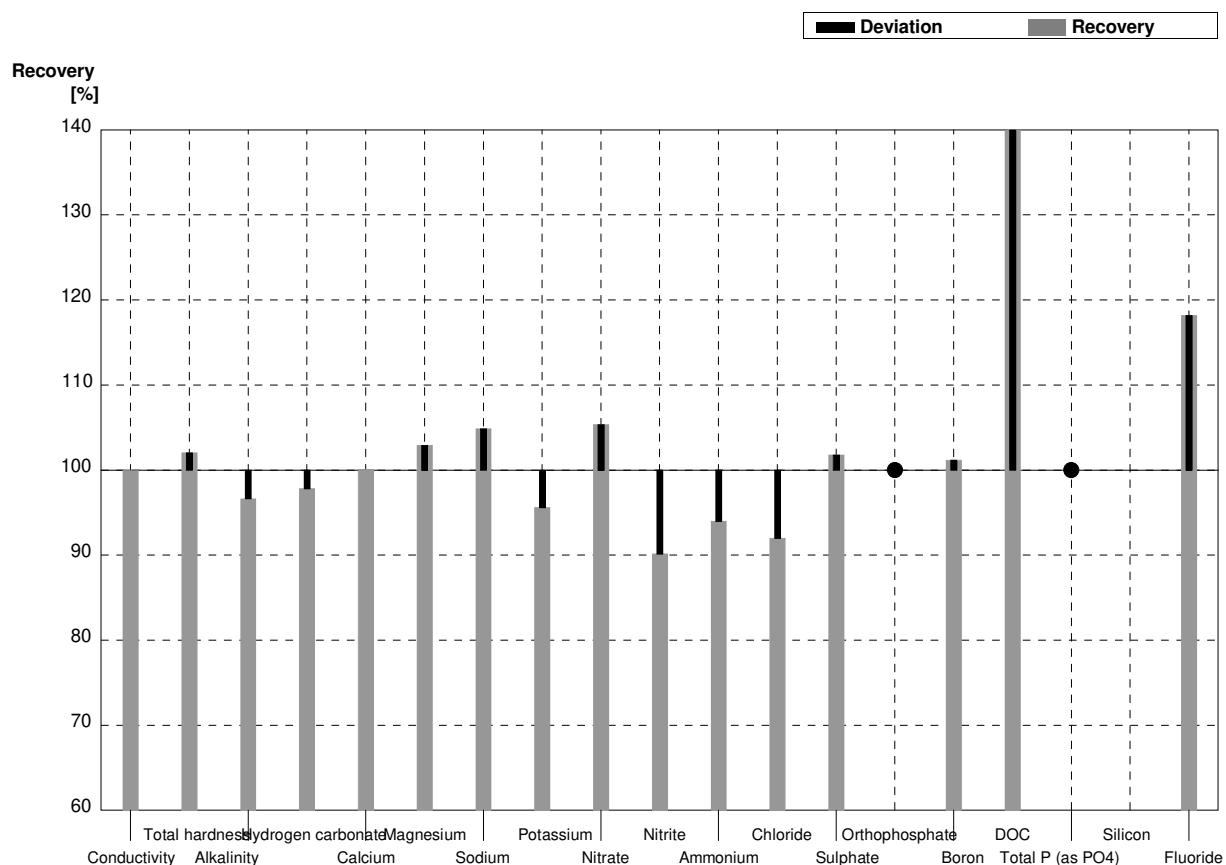
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	535,0	25	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,46	0,1	$\text{mmol}/\text{l}$	102%
Alkalinity	1,76	0,03	1,81	0,1	$\text{mmol}/\text{l}$	103%
Hydrogen carbonate	104,4	1,6	110,44	5	$\text{mg}/\text{l}$	106%
Calcium	36,2	0,6	35,6	3	$\text{mg}/\text{l}$	98%
Magnesium	12,93	0,15	13,45	1	$\text{mg}/\text{l}$	104%
Sodium	48,6	0,3	48,44	4	$\text{mg}/\text{l}$	100%
Potassium	6,19	0,04	6,10	0,6	$\text{mg}/\text{l}$	99%
Nitrate	5,20	0,10	5,2	0,5	$\text{mg}/\text{l}$	100%
Nitrite	0,0131	0,0004	<0,024		$\text{mg}/\text{l}$	•
Ammonium	<0,01		<0,04		$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	52,23		$\text{mg}/\text{l}$	101%
Sulphate	87,7	0,6	89,19	8	$\text{mg}/\text{l}$	102%
Orthophosphate	0,0307	0,0023	<0,04		$\text{mg}/\text{l}$	•
Boron	0,0334	0,0019	0,0320	0,003	$\text{mg}/\text{l}$	96%
DOC	4,03	0,05	9,50	0,95	$\text{mg}/\text{l}$	236%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,112	0,01	$\text{mg}/\text{l}$	127%
Silicon	3,013	0,017			$\text{mg}/\text{l}$	
Fluoride	0,500	0,013	0,430	0,04	$\text{mg}/\text{l}$	86%



**Sample N166B**

**Laboratory AA**

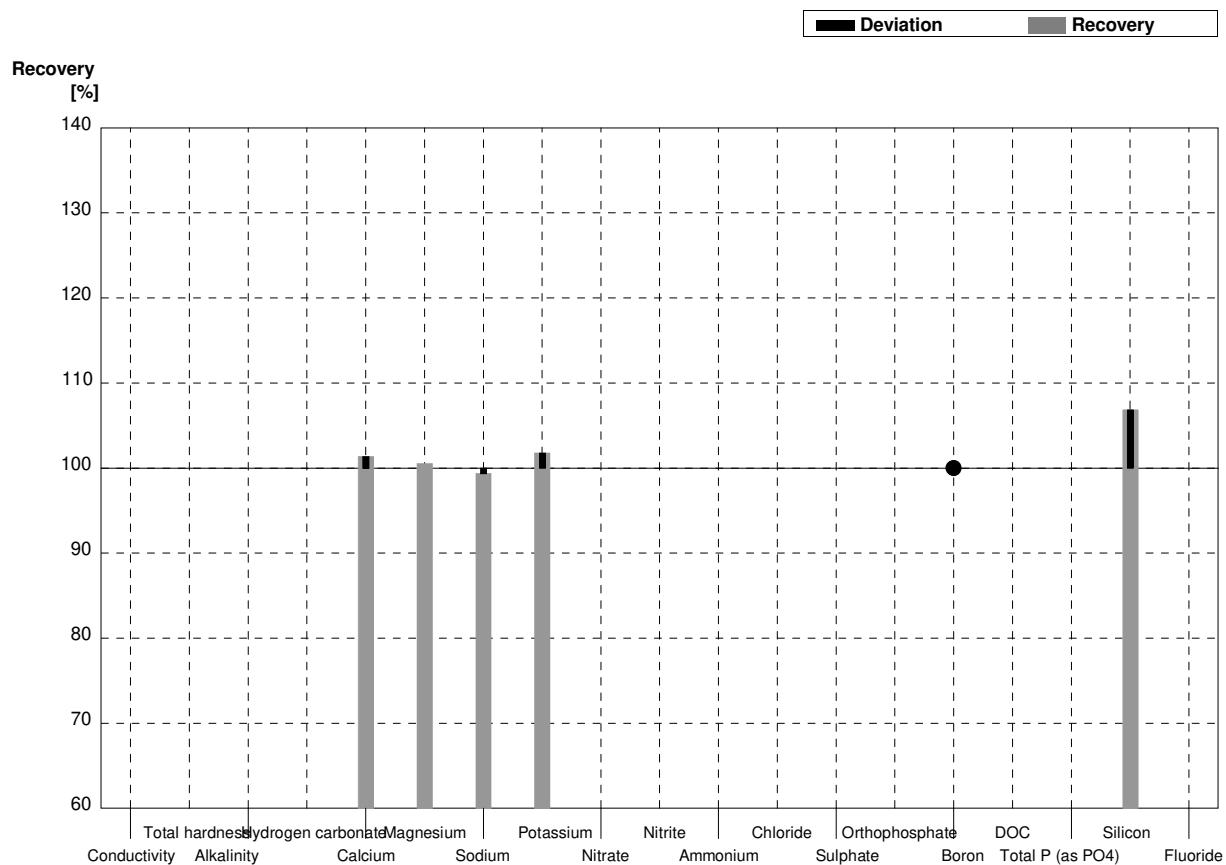
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	643,0	30	µS/cm	100%
Total hardness	2,94	0,04	3,00	0,2	mmol/l	102%
Alkalinity	4,18	0,08	4,04	0,2	mmol/l	97%
Hydrogen carbonate	252	5	246,52	10	mg/l	98%
Calcium	85,1	1,6	85,2	8	mg/l	100%
Magnesium	19,8	0,4	20,38	2	mg/l	103%
Sodium	15,2	0,7	15,94	1	mg/l	105%
Potassium	5,02	0,04	4,80	0,5	mg/l	96%
Nitrate	78,7	1,9	82,92	8	mg/l	105%
Nitrite	0,061	0,002	0,055	0,006	mg/l	90%
Ammonium	0,050	0,005	0,0470	0,005	mg/l	94%
Chloride	17,5	0,4	16,1	1,5	mg/l	92%
Sulphate	35,5	0,4	36,13	3	mg/l	102%
Orthophosphate	<0,009		<0,04		mg/l	•
Boron	0,085	0,004	0,0860	0,008	mg/l	101%
DOC	1,97	0,04	3,00	0,4	mg/l	152%
Total P (as PO4)	<0,009		<0,05		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,370	0,04	mg/l	118%



**Sample N166A**

**Laboratory AB**

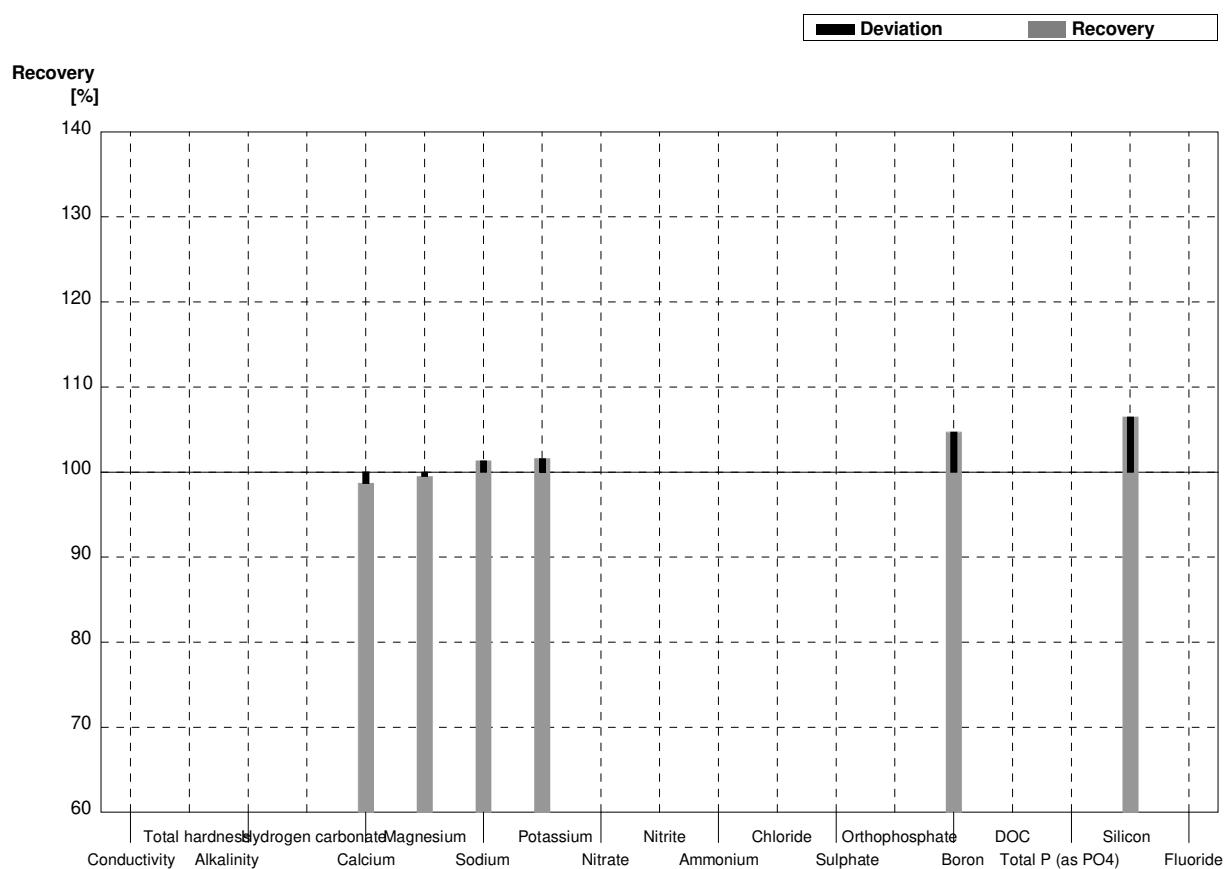
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2			µS/cm	
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03			mmol/l	
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6	36,7	3,67	mg/l	101%
Magnesium	12,93	0,15	13,0	1,30	mg/l	101%
Sodium	48,6	0,3	48,3	4,83	mg/l	99%
Potassium	6,19	0,04	6,3	0,63	mg/l	102%
Nitrate	5,20	0,10			mg/l	
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6			mg/l	
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019	<0,050	0,005	mg/l	•
DOC	4,03	0,05			mg/l	
Total P (as PO4)	0,0884	0,0013			mg/l	
Silicon	3,013	0,017	3,22	0,322	mg/l	107%
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

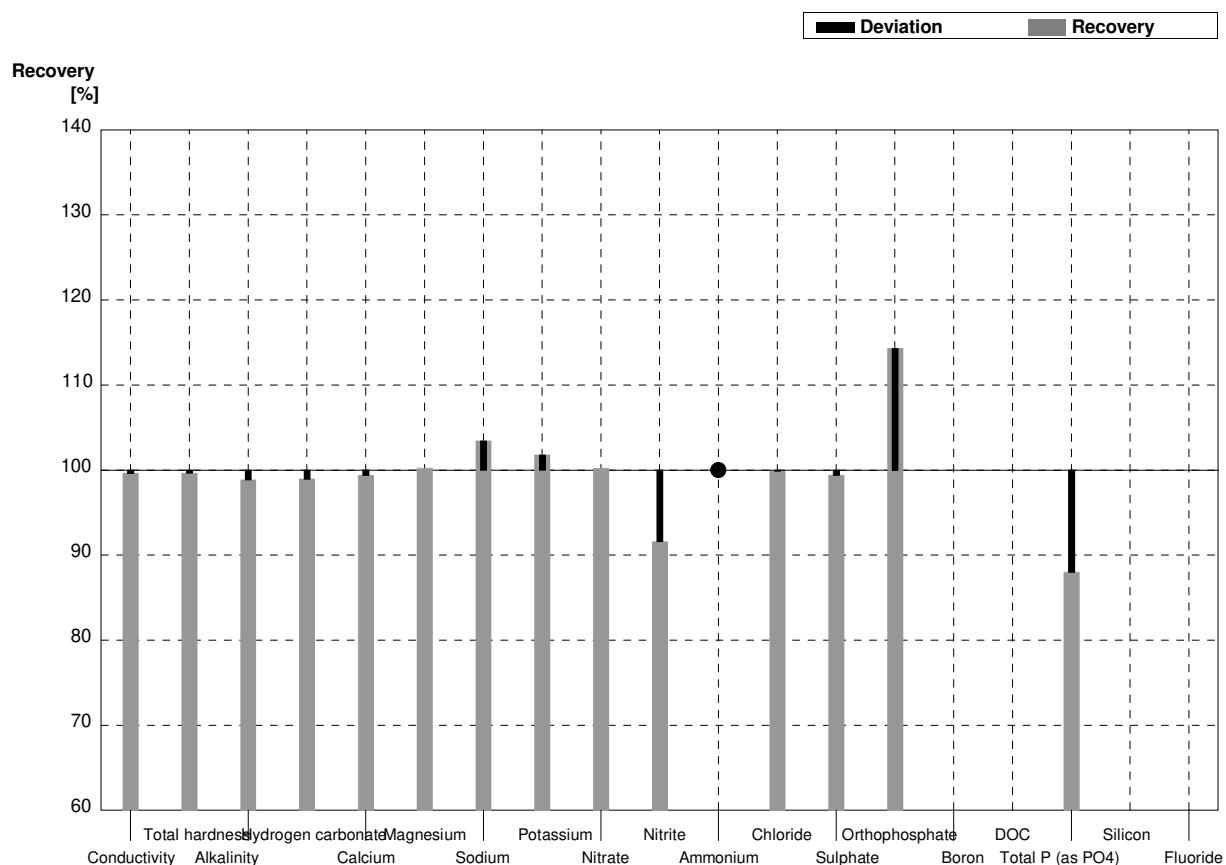
**Laboratory AB**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08			mmol/l	
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	84	8,4	mg/l	99%
Magnesium	19,8	0,4	19,7	1,97	mg/l	99%
Sodium	15,2	0,7	15,4	1,54	mg/l	101%
Potassium	5,02	0,04	5,1	0,51	mg/l	102%
Nitrate	78,7	1,9			mg/l	
Nitrite	0,061	0,002			mg/l	
Ammonium	0,050	0,005			mg/l	
Chloride	17,5	0,4			mg/l	
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004	0,089	0,009	mg/l	105%
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03	5,4	0,54	mg/l	107%
Fluoride	0,313	0,008			mg/l	



**Sample N166A****Laboratory AC**

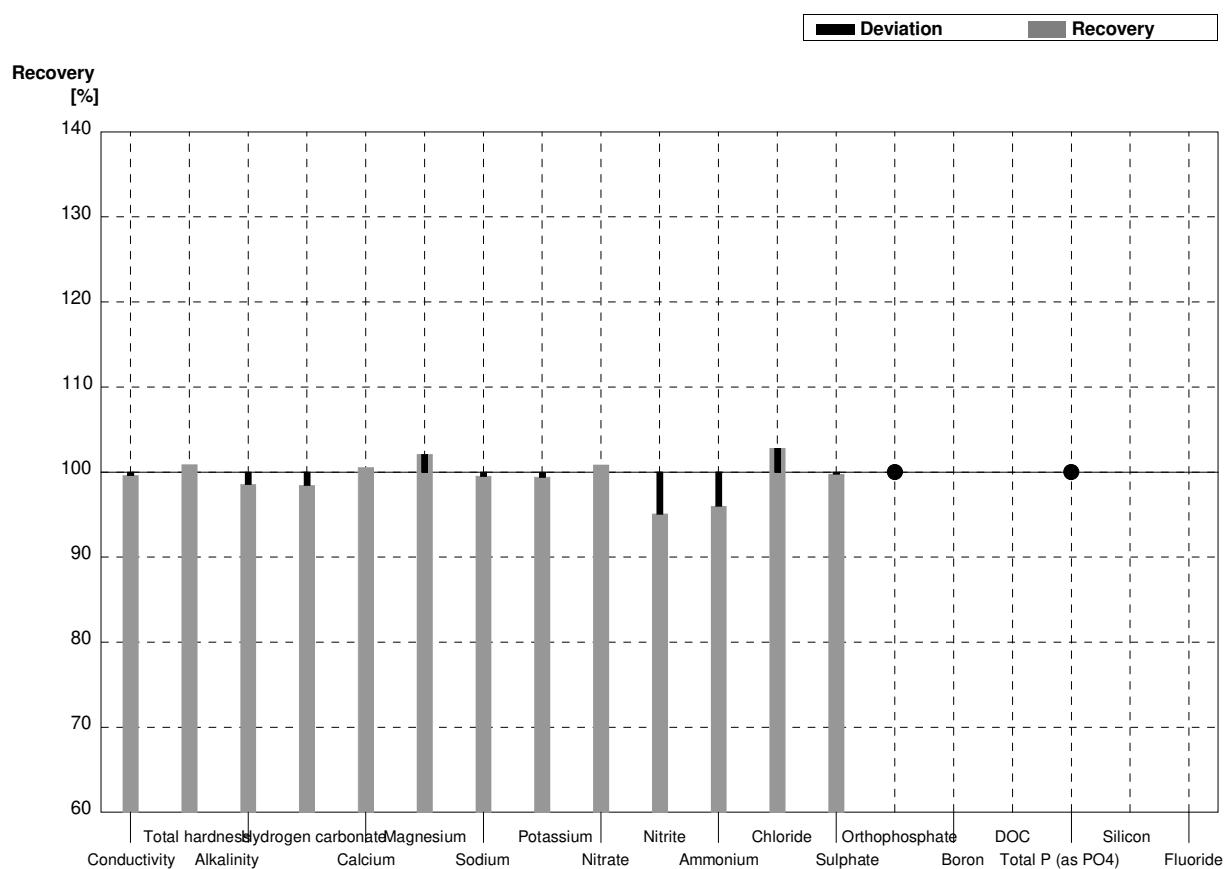
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	533,09	26,65	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,431		$\text{mmol/l}$	100%
Alkalinity	1,76	0,03	1,74	0,09	$\text{mmol/l}$	99%
Hydrogen carbonate	104,4	1,6	103,3	5,2	$\text{mg/l}$	99%
Calcium	36,2	0,6	35,98	2,16	$\text{mg/l}$	99%
Magnesium	12,93	0,15	12,96	0,78	$\text{mg/l}$	100%
Sodium	48,6	0,3	50,27	3,02	$\text{mg/l}$	103%
Potassium	6,19	0,04	6,30	0,38	$\text{mg/l}$	102%
Nitrate	5,20	0,10	5,21	0,52	$\text{mg/l}$	100%
Nitrite	0,0131	0,0004	0,0120	0,004	$\text{mg/l}$	92%
Ammonium	<0,01		<0,02		$\text{mg/l}$	•
Chloride	51,6	0,6	51,54	5,15	$\text{mg/l}$	100%
Sulphate	87,7	0,6	87,18	8,72	$\text{mg/l}$	99%
Orthophosphate	0,0307	0,0023	0,0351	0,0053	$\text{mg/l}$	114%
Boron	0,0334	0,0019			$\text{mg/l}$	
DOC	4,03	0,05			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0778	0,0117	$\text{mg/l}$	88%
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013			$\text{mg/l}$	



**Sample N166B**

**Laboratory AC**

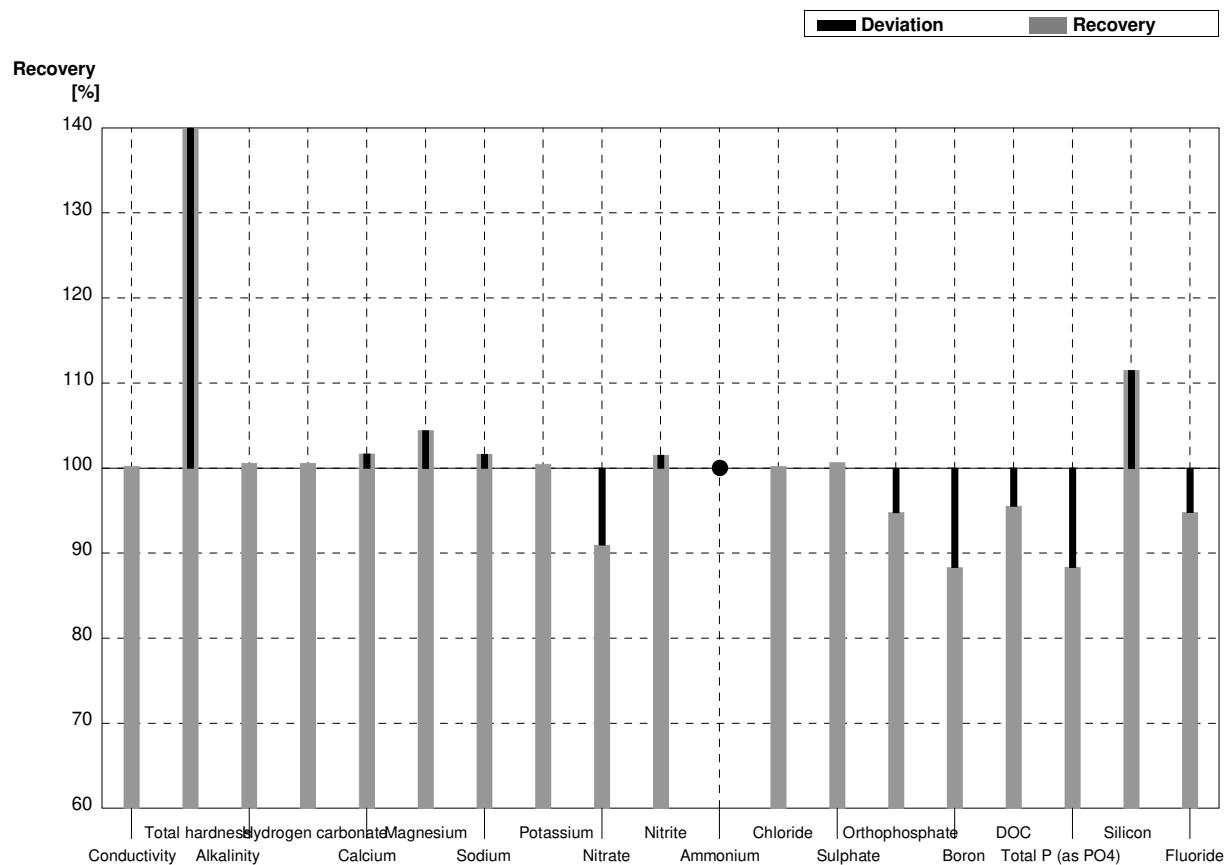
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	640,50	32,03	µS/cm	100%
Total hardness	2,94	0,04	2,966		mmol/l	101%
Alkalinity	4,18	0,08	4,12	0,21	mmol/l	99%
Hydrogen carbonate	252	5	248,1	12,4	mg/l	98%
Calcium	85,1	1,6	85,55	5,13	mg/l	101%
Magnesium	19,8	0,4	20,21	1,21	mg/l	102%
Sodium	15,2	0,7	15,13	0,91	mg/l	100%
Potassium	5,02	0,04	4,99	0,30	mg/l	99%
Nitrate	78,7	1,9	79,37	7,94	mg/l	101%
Nitrite	0,061	0,002	0,058	0,006	mg/l	95%
Ammonium	0,050	0,005	0,0480	0,007	mg/l	96%
Chloride	17,5	0,4	17,99	1,80	mg/l	103%
Sulphate	35,5	0,4	35,42	3,54	mg/l	100%
Orthophosphate	<0,009		<0,0153		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009		<0,0307		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory AD**

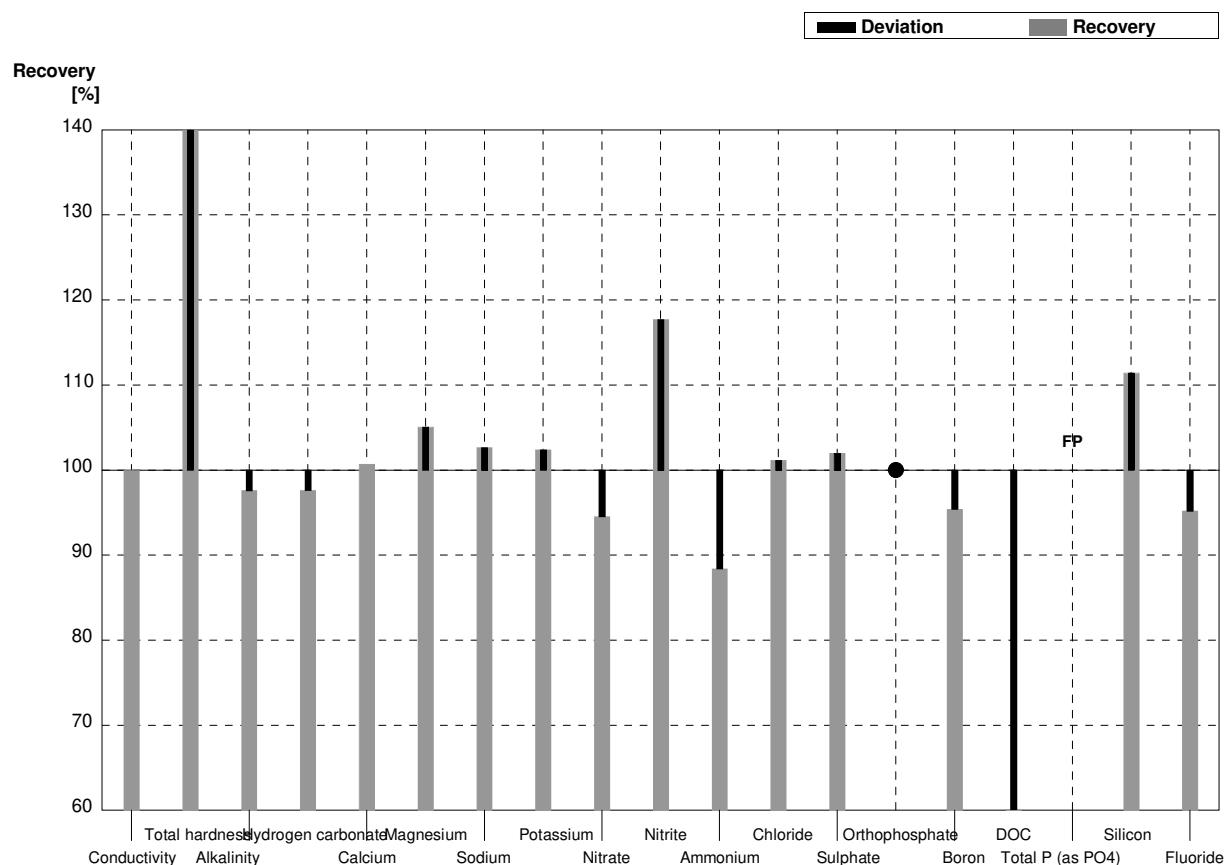
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	536	32,2	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	8,25	0,825	$\text{mmol}/\text{l}$	575%
Alkalinity	1,76	0,03	1,77	0,384	$\text{mmol}/\text{l}$	101%
Hydrogen carbonate	104,4	1,6	105	10	$\text{mg}/\text{l}$	101%
Calcium	36,2	0,6	36,8	9,52	$\text{mg}/\text{l}$	102%
Magnesium	12,93	0,15	13,5	2,74	$\text{mg}/\text{l}$	104%
Sodium	48,6	0,3	49,4	11,8	$\text{mg}/\text{l}$	102%
Potassium	6,19	0,04	6,22	1,93	$\text{mg}/\text{l}$	100%
Nitrate	5,20	0,10	4,73	0,623	$\text{mg}/\text{l}$	91%
Nitrite	0,0131	0,0004	0,0133	0,00172	$\text{mg}/\text{l}$	102%
Ammonium	<0,01		0,0103	0,00181	$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	51,7	5,03	$\text{mg}/\text{l}$	100%
Sulphate	87,7	0,6	88,3	11,1	$\text{mg}/\text{l}$	101%
Orthophosphate	0,0307	0,0023	0,0291	0,00057	$\text{mg}/\text{l}$	95%
Boron	0,0334	0,0019	0,0295	0,00851	$\text{mg}/\text{l}$	88%
DOC	4,03	0,05	3,85	1,2	$\text{mg}/\text{l}$	96%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0781	0,0144	$\text{mg}/\text{l}$	88%
Silicon	3,013	0,017	3,36	2,08	$\text{mg}/\text{l}$	112%
Fluoride	0,500	0,013	0,474	0,0332	$\text{mg}/\text{l}$	95%



**Sample N166B**

**Laboratory AD**

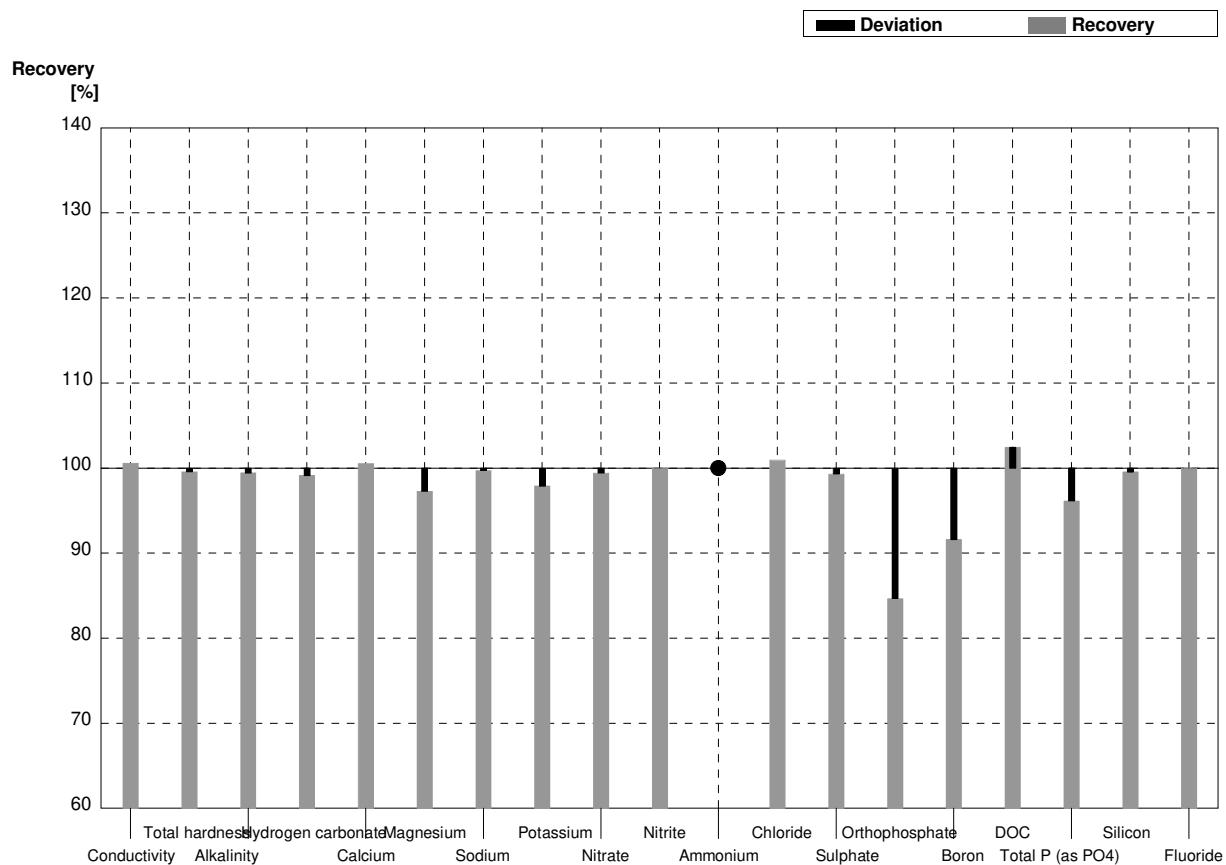
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	643	38,6	µS/cm	100%
Total hardness	2,94	0,04	16,8	1,68	mmol/l	571%
Alkalinity	4,18	0,08	4,08	0,885	mmol/l	98%
Hydrogen carbonate	252	5	246	25,1	mg/l	98%
Calcium	85,1	1,6	85,7	22,2	mg/l	101%
Magnesium	19,8	0,4	20,8	4,23	mg/l	105%
Sodium	15,2	0,7	15,6	3,74	mg/l	103%
Potassium	5,02	0,04	5,14	1,59	mg/l	102%
Nitrate	78,7	1,9	74,4	9,81	mg/l	95%
Nitrite	0,061	0,002	0,0718	0,00929	mg/l	118%
Ammonium	0,050	0,005	0,0442	0,00779	mg/l	88%
Chloride	17,5	0,4	17,7	1,72	mg/l	101%
Sulphate	35,5	0,4	36,2	4,54	mg/l	102%
Orthophosphate	<0,009		0,00613	0,00012	mg/l	•
Boron	0,085	0,004	0,0811	0,0234	mg/l	95%
DOC	1,97	0,04	1,184	0,576	mg/l	60%
Total P (as PO4)	<0,009		0,0123	0,00227	mg/l	FP
Silicon	5,07	0,03	5,65	3,5	mg/l	111%
Fluoride	0,313	0,008	0,298	0,0209	mg/l	95%



**Sample N166A**

**Laboratory AE**

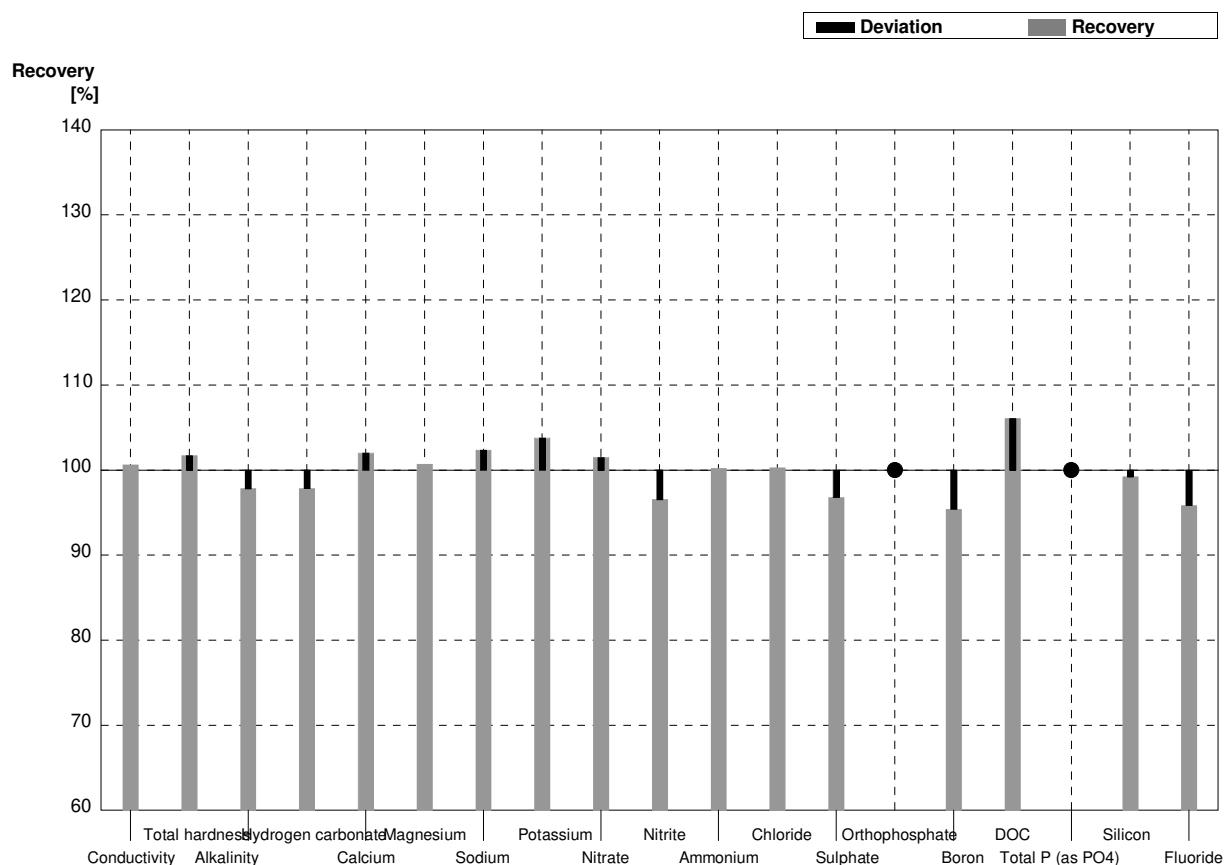
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	538	11	$\mu\text{S}/\text{cm}$	101%
Total hardness	1,436	0,016	1,43	0,19	$\text{mmol/l}$	100%
Alkalinity	1,76	0,03	1,75	0,16	$\text{mmol/l}$	99%
Hydrogen carbonate	104,4	1,6	103,5	9,3	$\text{mg/l}$	99%
Calcium	36,2	0,6	36,40	3,64	$\text{mg/l}$	101%
Magnesium	12,93	0,15	12,58	1,01	$\text{mg/l}$	97%
Sodium	48,6	0,3	48,47	4,36	$\text{mg/l}$	100%
Potassium	6,19	0,04	6,06	0,55	$\text{mg/l}$	98%
Nitrate	5,20	0,10	5,17	0,47	$\text{mg/l}$	99%
Nitrite	0,0131	0,0004	0,0131	0,0009	$\text{mg/l}$	100%
Ammonium	<0,01		<0,010		$\text{mg/l}$	•
Chloride	51,6	0,6	52,09	6,25	$\text{mg/l}$	101%
Sulphate	87,7	0,6	87,10	8,71	$\text{mg/l}$	99%
Orthophosphate	0,0307	0,0023	0,0260	0,0039	$\text{mg/l}$	85%
Boron	0,0334	0,0019	0,0306	0,0064	$\text{mg/l}$	92%
DOC	4,03	0,05	4,13	0,295	$\text{mg/l}$	102%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,085	0,013	$\text{mg/l}$	96%
Silicon	3,013	0,017	3,00	0,30	$\text{mg/l}$	100%
Fluoride	0,500	0,013	0,500	0,030	$\text{mg/l}$	100%



**Sample N166B**

**Laboratory AE**

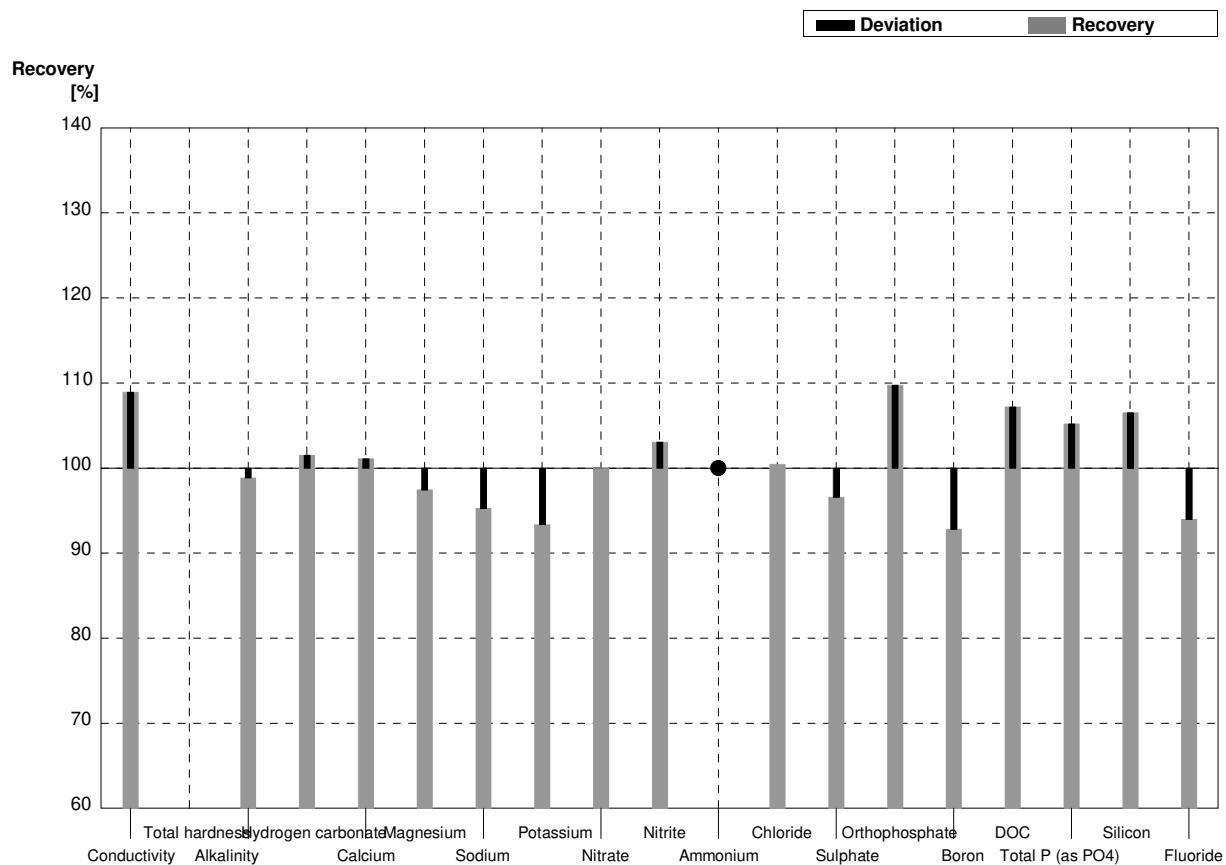
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	647	13	µS/cm	101%
Total hardness	2,94	0,04	2,99	0,39	mmol/l	102%
Alkalinity	4,18	0,08	4,09	0,37	mmol/l	98%
Hydrogen carbonate	252	5	246,6	22,2	mg/l	98%
Calcium	85,1	1,6	86,81	8,68	mg/l	102%
Magnesium	19,8	0,4	19,94	1,59	mg/l	101%
Sodium	15,2	0,7	15,56	1,40	mg/l	102%
Potassium	5,02	0,04	5,21	0,47	mg/l	104%
Nitrate	78,7	1,9	79,87	7,19	mg/l	101%
Nitrite	0,061	0,002	0,0589	0,0041	mg/l	97%
Ammonium	0,050	0,005	0,0501	0,0070	mg/l	100%
Chloride	17,5	0,4	17,55	2,11	mg/l	100%
Sulphate	35,5	0,4	34,36	3,44	mg/l	97%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,085	0,004	0,0811	0,0170	mg/l	95%
DOC	1,97	0,04	2,09	0,15	mg/l	106%
Total P (as PO4)	<0,009		<0,010		mg/l	•
Silicon	5,07	0,03	5,03	0,50	mg/l	99%
Fluoride	0,313	0,008	0,300	0,018	mg/l	96%



**Sample N166A**

**Laboratory AF**

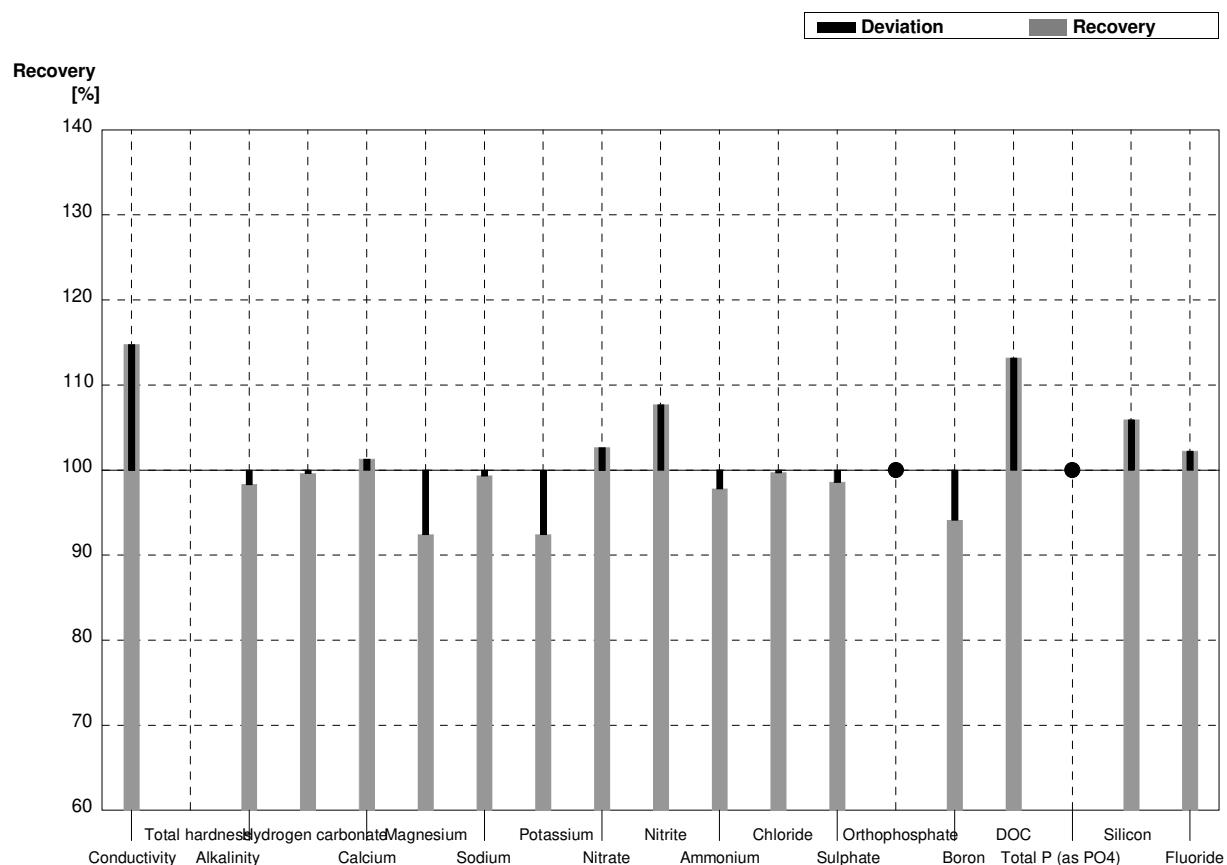
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	582,8	58,2	$\mu\text{S}/\text{cm}$	109%
Total hardness	1,436	0,016			$\text{mmol/l}$	
Alkalinity	1,76	0,03	1,74	0,035	$\text{mmol/l}$	99%
Hydrogen carbonate	104,4	1,6	106	2,1	$\text{mg/l}$	102%
Calcium	36,2	0,6	36,6	5,5	$\text{mg/l}$	101%
Magnesium	12,93	0,15	12,6	1,9	$\text{mg/l}$	97%
Sodium	48,6	0,3	46,3	6,9	$\text{mg/l}$	95%
Potassium	6,19	0,04	5,78	0,87	$\text{mg/l}$	93%
Nitrate	5,20	0,10	5,2	0,4	$\text{mg/l}$	100%
Nitrite	0,0131	0,0004	0,0135	0,0013	$\text{mg/l}$	103%
Ammonium	<0,01		<0,0129	0,0032	$\text{mg/l}$	•
Chloride	51,6	0,6	51,84	1,56	$\text{mg/l}$	100%
Sulphate	87,7	0,6	84,7	12,7	$\text{mg/l}$	97%
Orthophosphate	0,0307	0,0023	0,0337	0,0051	$\text{mg/l}$	110%
Boron	0,0334	0,0019	0,0310	0,0046	$\text{mg/l}$	93%
DOC	4,03	0,05	4,32	1,08	$\text{mg/l}$	107%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,0930	0,014	$\text{mg/l}$	105%
Silicon	3,013	0,017	3,21	0,48	$\text{mg/l}$	107%
Fluoride	0,500	0,013	0,470	0,12	$\text{mg/l}$	94%



**Sample N166B**

**Laboratory AF**

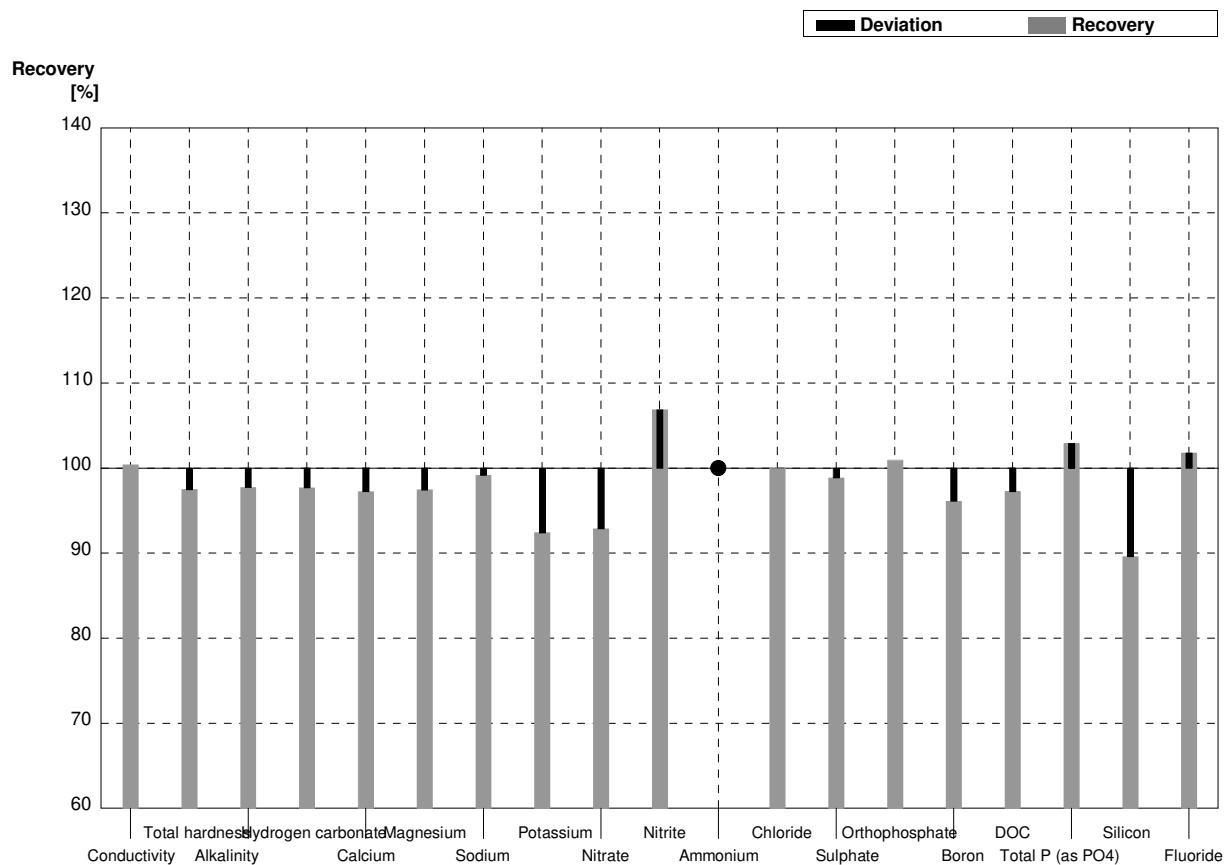
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	738,0	73,8	µS/cm	115%
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,11	0,082	mmol/l	98%
Hydrogen carbonate	252	5	251	5,0	mg/l	100%
Calcium	85,1	1,6	86,2	12,9	mg/l	101%
Magnesium	19,8	0,4	18,3	2,8	mg/l	92%
Sodium	15,2	0,7	15,1	2,3	mg/l	99%
Potassium	5,02	0,04	4,64	0,70	mg/l	92%
Nitrate	78,7	1,9	80,8	6,5	mg/l	103%
Nitrite	0,061	0,002	0,0657	0,0099	mg/l	108%
Ammonium	0,050	0,005	0,0489	0,0122	mg/l	98%
Chloride	17,5	0,4	17,45	0,52	mg/l	100%
Sulphate	35,5	0,4	35,0	5,3	mg/l	99%
Orthophosphate	<0,009		<0,0153	0,0023	mg/l	•
Boron	0,085	0,004	0,080	0,012	mg/l	94%
DOC	1,97	0,04	2,23	0,56	mg/l	113%
Total P (as PO4)	<0,009		<0,0153	0,0023	mg/l	•
Silicon	5,07	0,03	5,37	0,80	mg/l	106%
Fluoride	0,313	0,008	0,320	0,08	mg/l	102%



**Sample N166A**

**Laboratory AG**

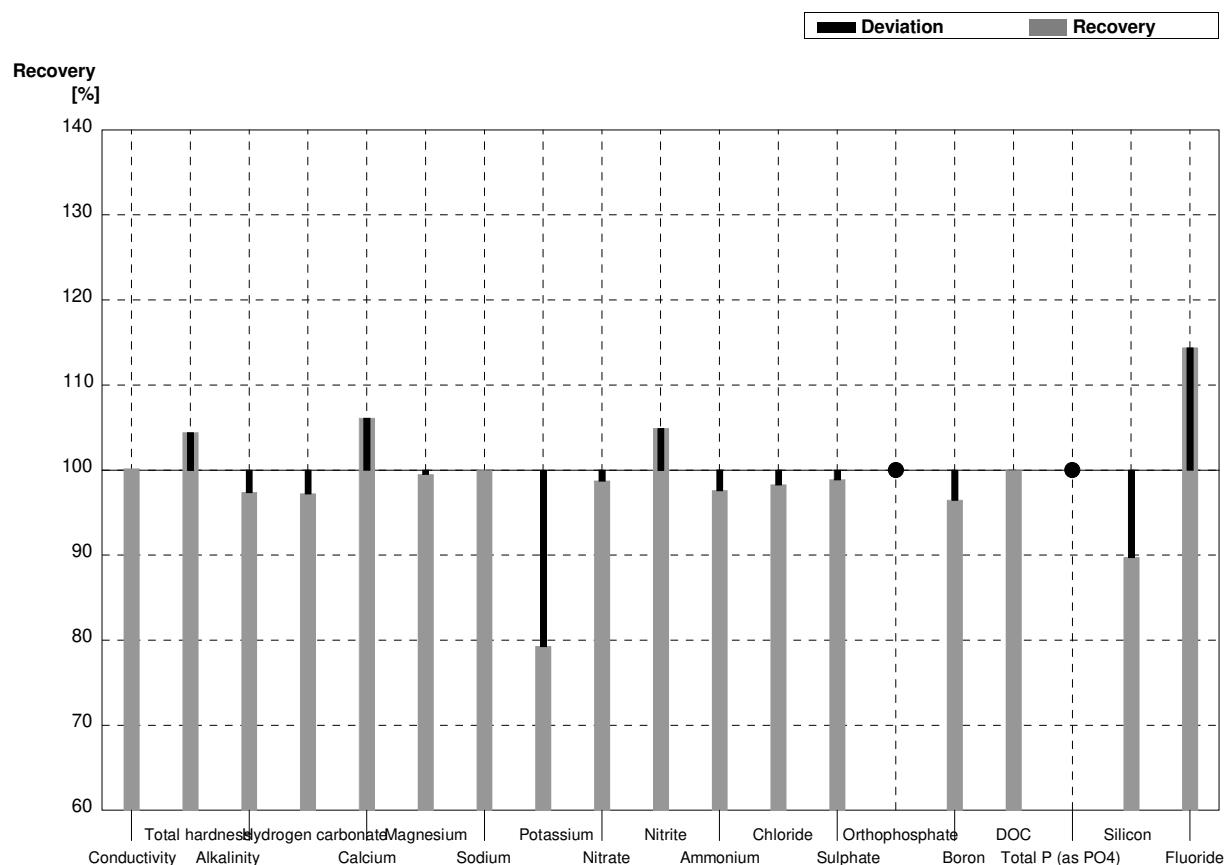
Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	537	16	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,40	0,12	$\text{mmol/l}$	97%
Alkalinity	1,76	0,03	1,72	0,07	$\text{mmol/l}$	98%
Hydrogen carbonate	104,4	1,6	102	5	$\text{mg/l}$	98%
Calcium	36,2	0,6	35,2	1,8	$\text{mg/l}$	97%
Magnesium	12,93	0,15	12,6	0,8	$\text{mg/l}$	97%
Sodium	48,6	0,3	48,2	1,9	$\text{mg/l}$	99%
Potassium	6,19	0,04	5,72	0,46	$\text{mg/l}$	92%
Nitrate	5,20	0,10	4,83	0,34	$\text{mg/l}$	93%
Nitrite	0,0131	0,0004	0,0140	0,0025	$\text{mg/l}$	107%
Ammonium	<0,01		<0,008		$\text{mg/l}$	•
Chloride	51,6	0,6	51,6	2,6	$\text{mg/l}$	100%
Sulphate	87,7	0,6	86,7	5,2	$\text{mg/l}$	99%
Orthophosphate	0,0307	0,0023	0,0310	0,0016	$\text{mg/l}$	101%
Boron	0,0334	0,0019	0,0321	0,0032	$\text{mg/l}$	96%
DOC	4,03	0,05	3,92	0,35	$\text{mg/l}$	97%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,091	0,006	$\text{mg/l}$	103%
Silicon	3,013	0,017	2,70	0,27	$\text{mg/l}$	90%
Fluoride	0,500	0,013	0,509	0,076	$\text{mg/l}$	102%



**Sample N166B**

**Laboratory AG**

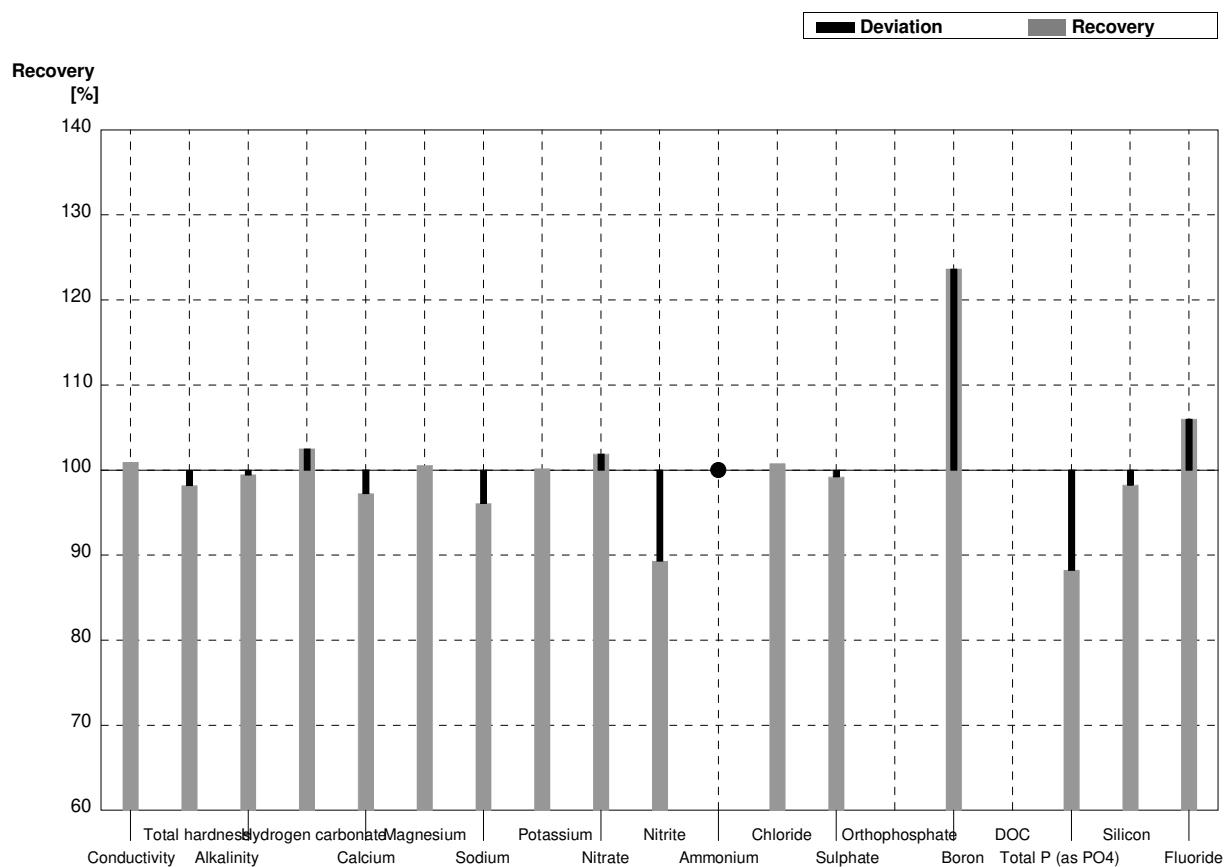
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	644	19	µS/cm	100%
Total hardness	2,94	0,04	3,07	0,25	mmol/l	104%
Alkalinity	4,18	0,08	4,07	0,16	mmol/l	97%
Hydrogen carbonate	252	5	245	10	mg/l	97%
Calcium	85,1	1,6	90,3	4,5	mg/l	106%
Magnesium	19,8	0,4	19,7	1,2	mg/l	99%
Sodium	15,2	0,7	15,2	0,7	mg/l	100%
Potassium	5,02	0,04	3,98	0,32	mg/l	79%
Nitrate	78,7	1,9	77,7	4,7	mg/l	99%
Nitrite	0,061	0,002	0,064	0,005	mg/l	105%
Ammonium	0,050	0,005	0,0488	0,0044	mg/l	98%
Chloride	17,5	0,4	17,2	0,9	mg/l	98%
Sulphate	35,5	0,4	35,1	2,1	mg/l	99%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,085	0,004	0,082	0,008	mg/l	96%
DOC	1,97	0,04	1,97	0,18	mg/l	100%
Total P (as PO4)	<0,009		<0,006		mg/l	•
Silicon	5,07	0,03	4,55	0,46	mg/l	90%
Fluoride	0,313	0,008	0,358	0,071	mg/l	114%



**Sample N166A**

**Laboratory AH**

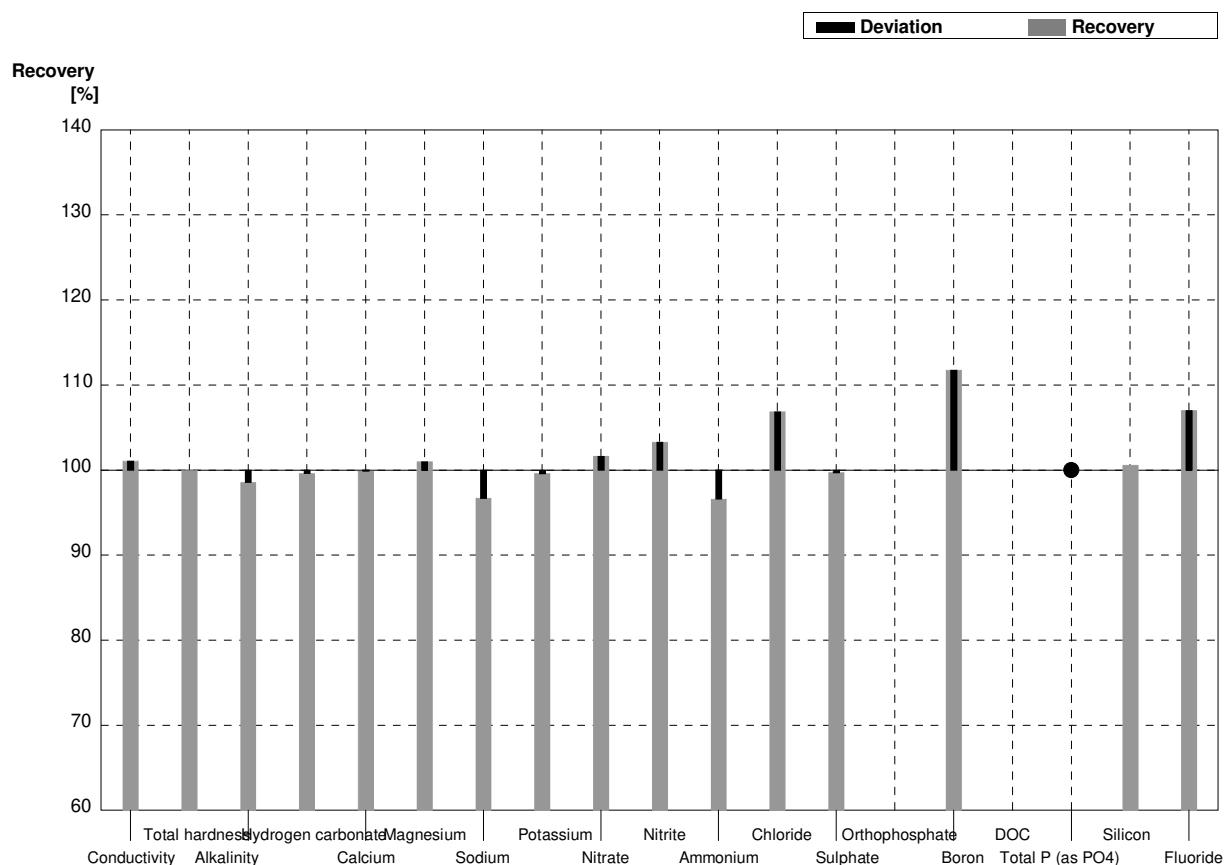
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	540		$\mu\text{S}/\text{cm}$	101%
Total hardness	1,436	0,016	1,41		$\text{mmol/l}$	98%
Alkalinity	1,76	0,03	1,75		$\text{mmol/l}$	99%
Hydrogen carbonate	104,4	1,6	107		$\text{mg/l}$	102%
Calcium	36,2	0,6	35,2	1,97	$\text{mg/l}$	97%
Magnesium	12,93	0,15	13,0	1,03	$\text{mg/l}$	101%
Sodium	48,6	0,3	46,7	2,78	$\text{mg/l}$	96%
Potassium	6,19	0,04	6,2	0,60	$\text{mg/l}$	100%
Nitrate	5,20	0,10	5,3		$\text{mg/l}$	102%
Nitrite	0,0131	0,0004	0,0117		$\text{mg/l}$	89%
Ammonium	<0,01		<0,04		$\text{mg/l}$	•
Chloride	51,6	0,6	52		$\text{mg/l}$	101%
Sulphate	87,7	0,6	87		$\text{mg/l}$	99%
Orthophosphate	0,0307	0,0023			$\text{mg/l}$	
Boron	0,0334	0,0019	0,0413	0,0027	$\text{mg/l}$	124%
DOC	4,03	0,05			$\text{mg/l}$	
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,078	0,0024	$\text{mg/l}$	88%
Silicon	3,013	0,017	2,96	0,327	$\text{mg/l}$	98%
Fluoride	0,500	0,013	0,53		$\text{mg/l}$	106%



**Sample N166B**

**Laboratory AH**

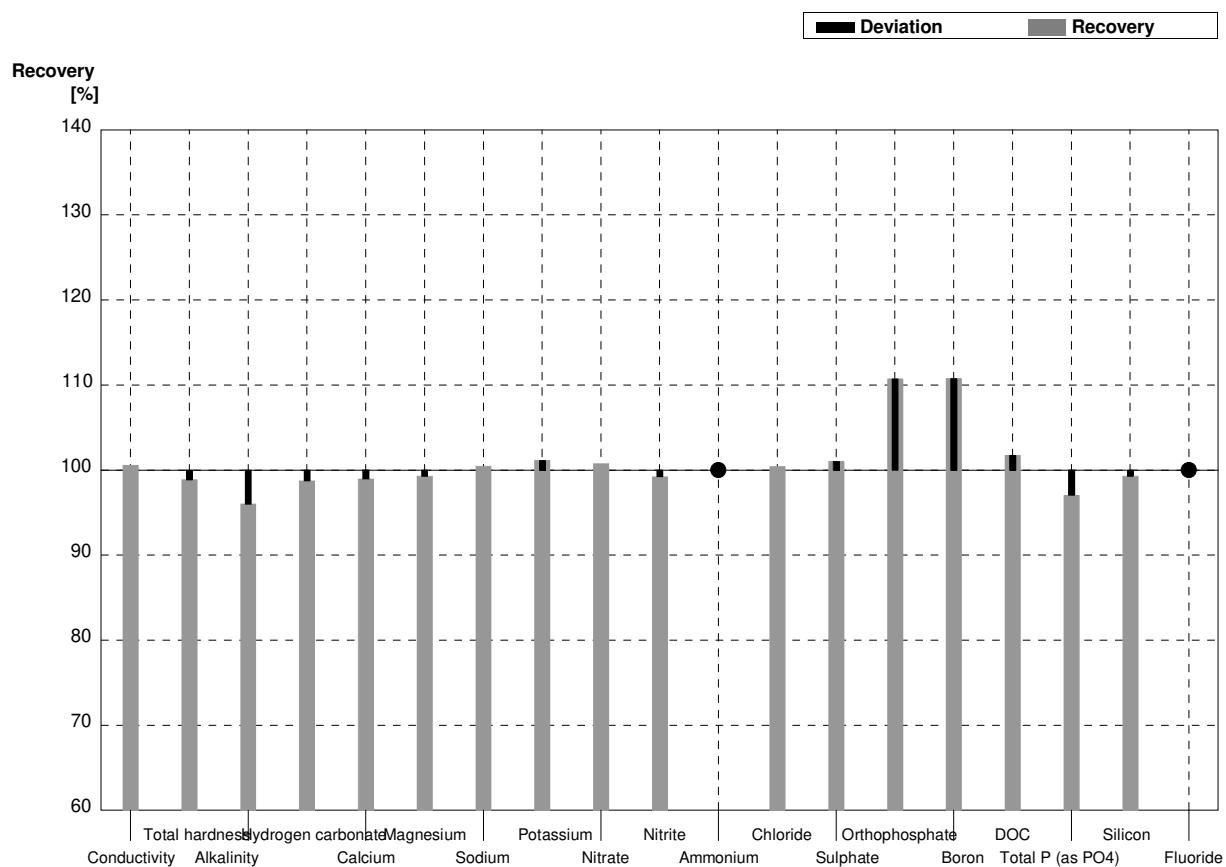
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	650		µS/cm	101%
Total hardness	2,94	0,04	2,94		mmol/l	100%
Alkalinity	4,18	0,08	4,12		mmol/l	99%
Hydrogen carbonate	252	5	251		mg/l	100%
Calcium	85,1	1,6	85	6,83	mg/l	100%
Magnesium	19,8	0,4	20,0	1,68	mg/l	101%
Sodium	15,2	0,7	14,7	0,90	mg/l	97%
Potassium	5,02	0,04	5,0	0,49	mg/l	100%
Nitrate	78,7	1,9	80		mg/l	102%
Nitrite	0,061	0,002	0,063		mg/l	103%
Ammonium	0,050	0,005	0,0483		mg/l	97%
Chloride	17,5	0,4	18,7		mg/l	107%
Sulphate	35,5	0,4	35,4		mg/l	100%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004	0,095	0,0068	mg/l	112%
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009		<0,06		mg/l	•
Silicon	5,07	0,03	5,1	0,56	mg/l	101%
Fluoride	0,313	0,008	0,335		mg/l	107%



**Sample N166A**

**Laboratory Al**

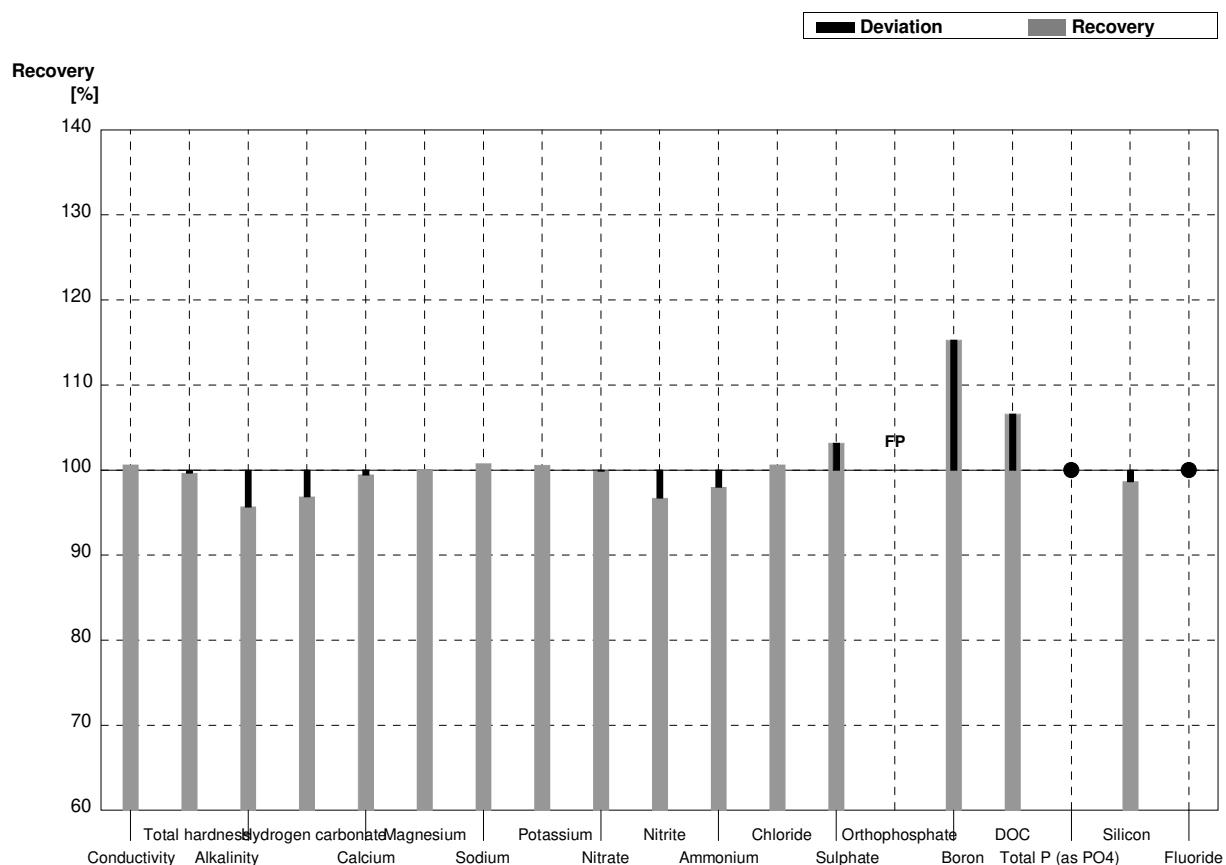
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	538	21,5	µS/cm	101%
Total hardness	1,436	0,016	1,42		mmol/l	99%
Alkalinity	1,76	0,03	1,69	0,254	mmol/l	96%
Hydrogen carbonate	104,4	1,6	103,1	15,47	mg/l	99%
Calcium	36,2	0,6	35,83	3,583	mg/l	99%
Magnesium	12,93	0,15	12,84	1,284	mg/l	99%
Sodium	48,6	0,3	48,82	4,882	mg/l	100%
Potassium	6,19	0,04	6,26	0,626	mg/l	101%
Nitrate	5,20	0,10	5,24	0,2095	mg/l	101%
Nitrite	0,0131	0,0004	0,0130	0,0011	mg/l	99%
Ammonium	<0,01		<0,0052		mg/l	•
Chloride	51,6	0,6	51,83	2,592	mg/l	100%
Sulphate	87,7	0,6	88,62	4,431	mg/l	101%
Orthophosphate	0,0307	0,0023	0,0340	0,0040	mg/l	111%
Boron	0,0334	0,0019	0,0370	0,0044	mg/l	111%
DOC	4,03	0,05	4,10	0,330	mg/l	102%
Total P (as PO4)	0,0884	0,0013	0,0858	0,0129	mg/l	97%
Silicon	3,013	0,017	2,992	0,449	mg/l	99%
Fluoride	0,500	0,013	<0,500		mg/l	•



**Sample N166B**

**Laboratory AI**

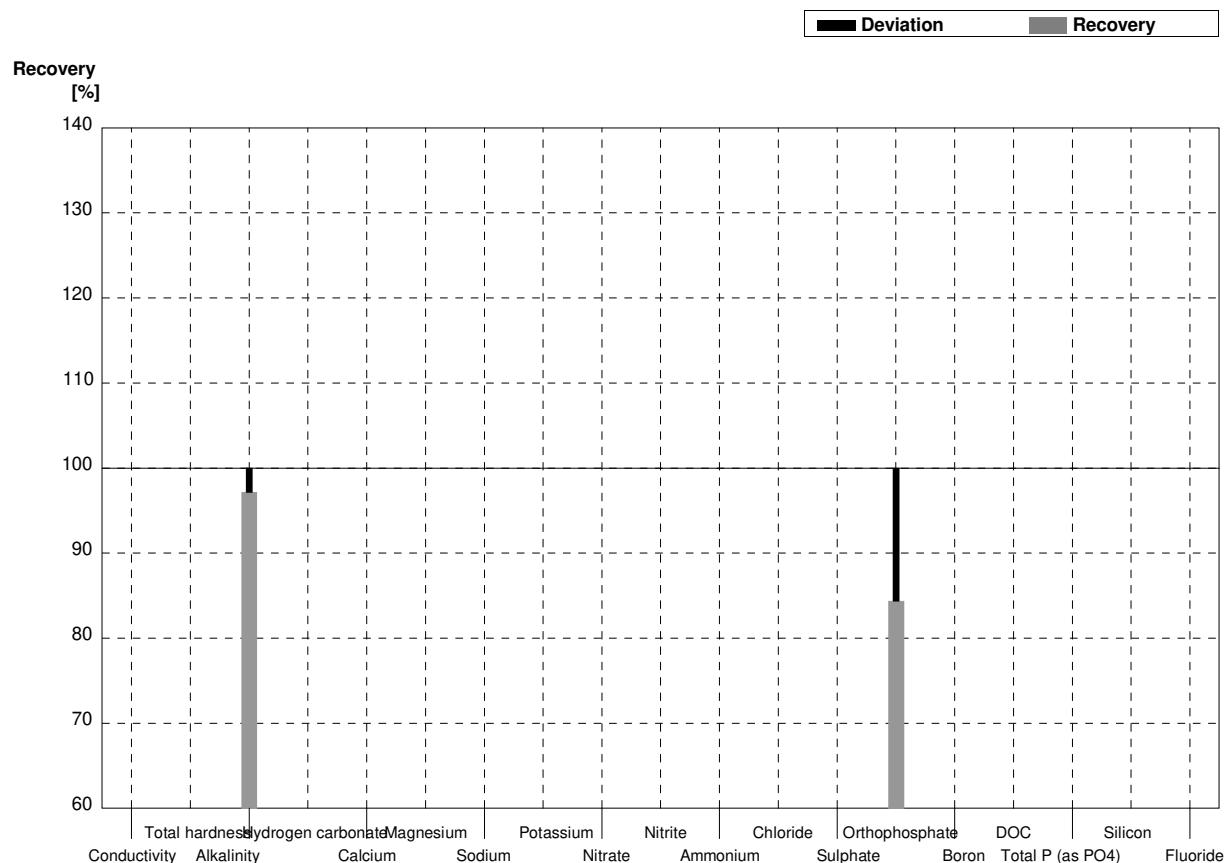
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	647	25,9	µS/cm	101%
Total hardness	2,94	0,04	2,93		mmol/l	100%
Alkalinity	4,18	0,08	4,00	0,600	mmol/l	96%
Hydrogen carbonate	252	5	244,1	36,61	mg/l	97%
Calcium	85,1	1,6	84,62	8,462	mg/l	99%
Magnesium	19,8	0,4	19,82	1,982	mg/l	100%
Sodium	15,2	0,7	15,32	1,532	mg/l	101%
Potassium	5,02	0,04	5,05	0,505	mg/l	101%
Nitrate	78,7	1,9	78,620	3,1448	mg/l	100%
Nitrite	0,061	0,002	0,059	0,0047	mg/l	97%
Ammonium	0,050	0,005	0,0490	0,0049	mg/l	98%
Chloride	17,5	0,4	17,61	0,881	mg/l	101%
Sulphate	35,5	0,4	36,63	1,832	mg/l	103%
Orthophosphate	<0,009		0,0120	0,0015	mg/l	FP
Boron	0,085	0,004	0,098	0,0118	mg/l	115%
DOC	1,97	0,04	2,10	0,170	mg/l	107%
Total P (as PO4)	<0,009		<0,0153		mg/l	•
Silicon	5,07	0,03	5,002	0,7526	mg/l	99%
Fluoride	0,313	0,008	<0,500		mg/l	•



**Sample N166A**

**Laboratory AJ**

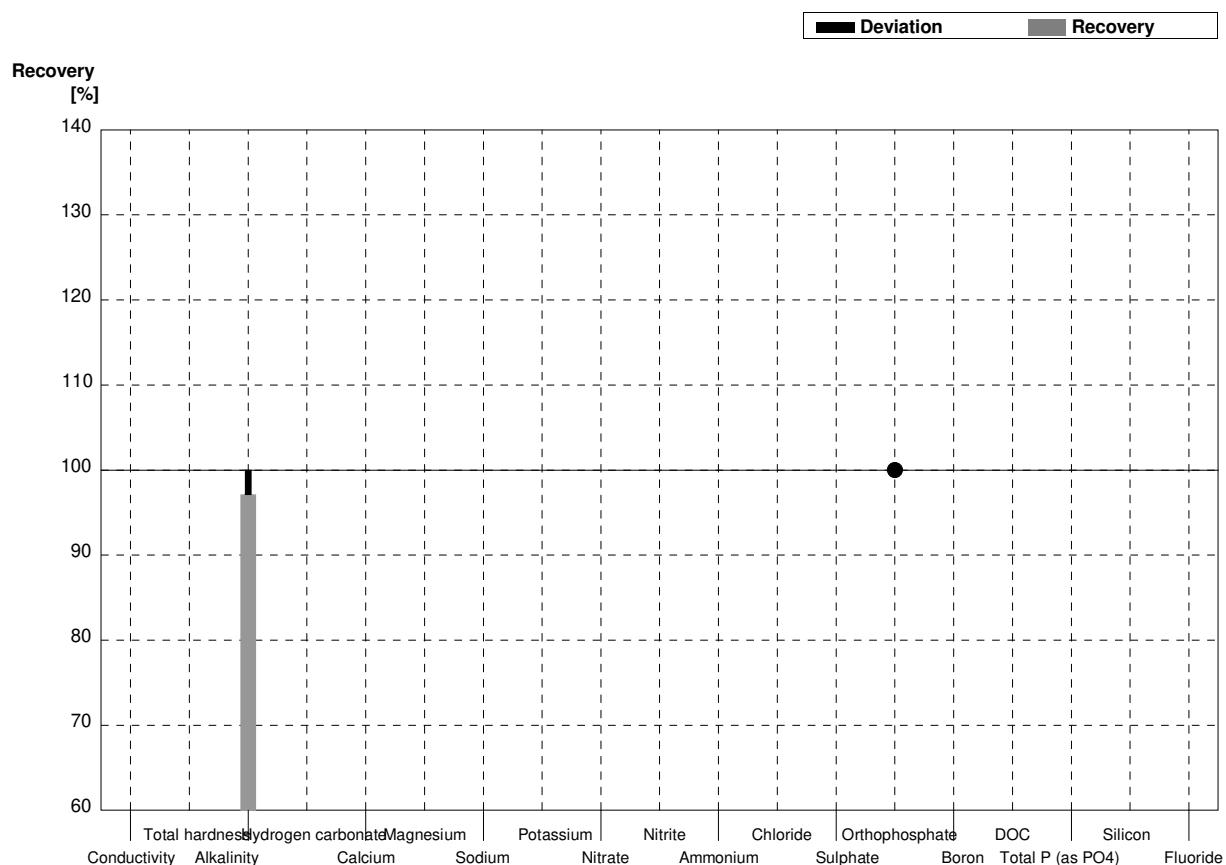
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2			µS/cm	
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,71	0,086	mmol/l	97%
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10			mg/l	
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6			mg/l	
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023	0,0259	0,0023	mg/l	84%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO <sub>4</sub> )	0,0884	0,0013			mg/l	
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory AJ**

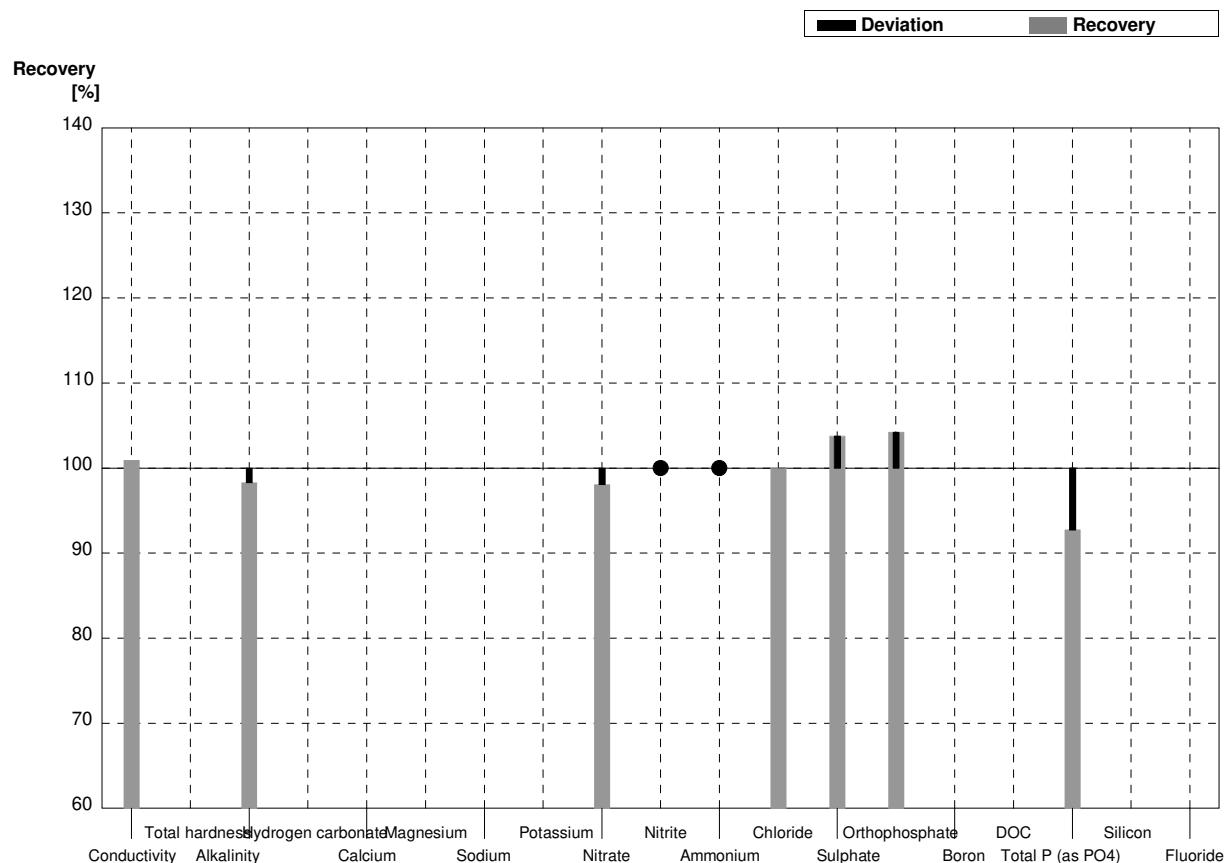
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,06	0,203	mmol/l	97%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6			mg/l	
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9			mg/l	
Nitrite	0,061	0,002			mg/l	
Ammonium	0,050	0,005			mg/l	
Chloride	17,5	0,4			mg/l	
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009		<0,009	0,0008	mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory AK**

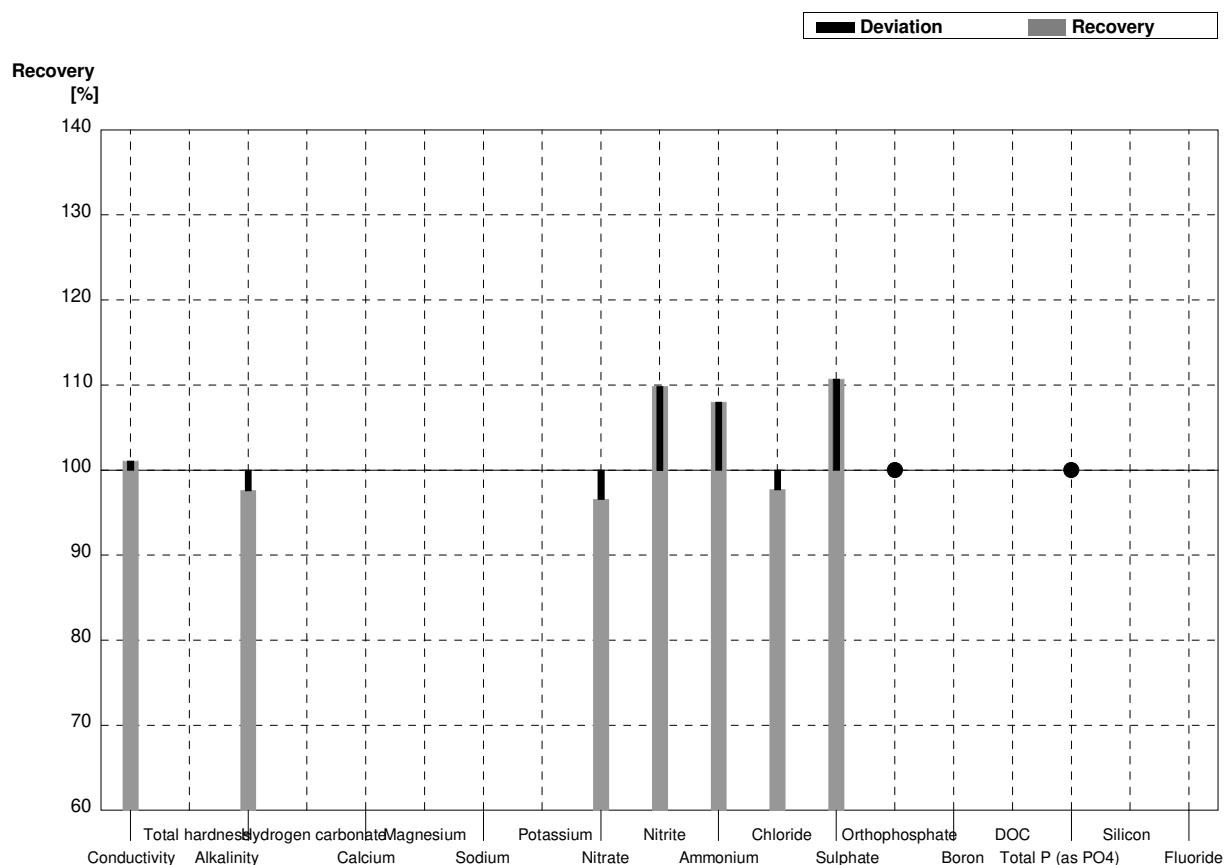
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	540	11	µS/cm	101%
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,73	0,0832	mmol/l	98%
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10	5,1	0,245	mg/l	98%
Nitrite	0,0131	0,0004	<0,0300		mg/l	•
Ammonium	<0,01		<0,0300		mg/l	•
Chloride	51,6	0,6	51,6	1,47	mg/l	100%
Sulphate	87,7	0,6	91,0	4,38	mg/l	104%
Orthophosphate	0,0307	0,0023	0,0320	0,00278	mg/l	104%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO4)	0,0884	0,0013	0,0820	0,00166	mg/l	93%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory AK**

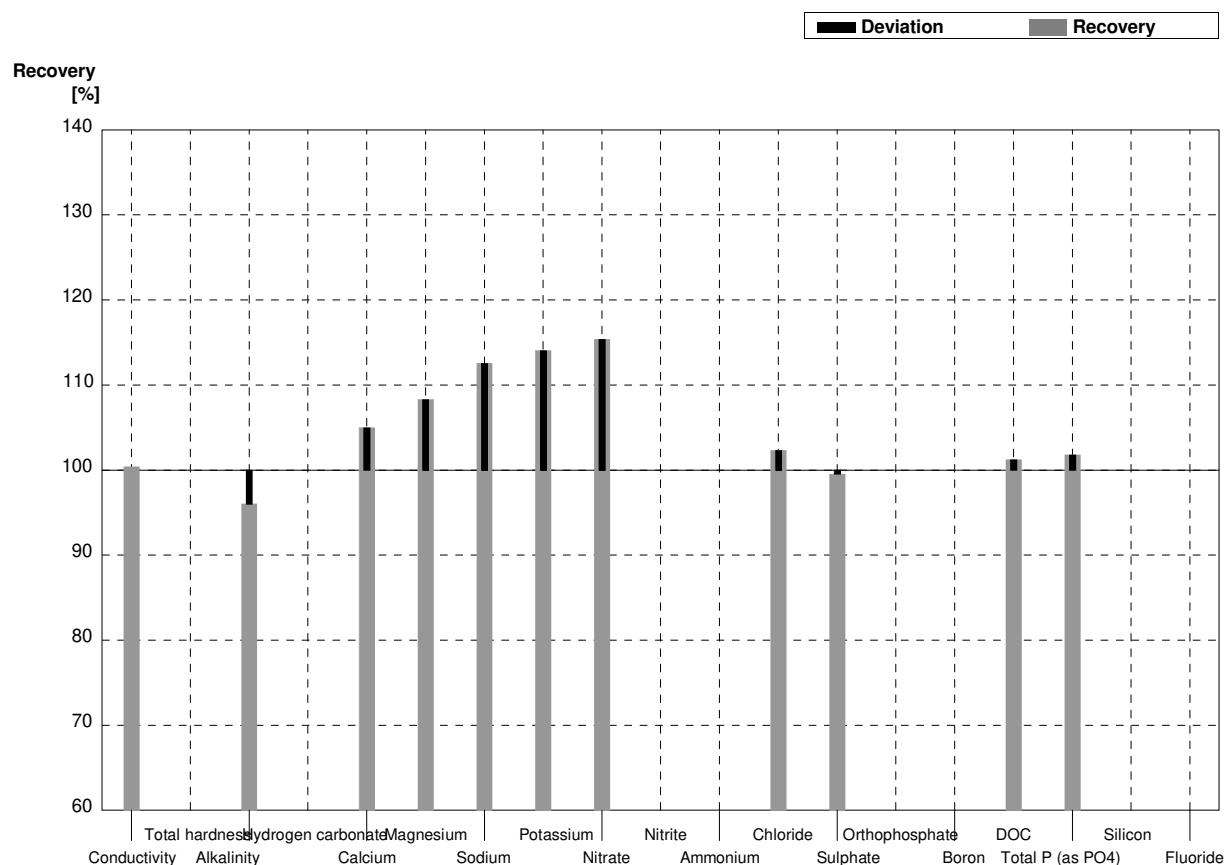
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	650	13	µS/cm	101%
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,08	0,196	mmol/l	98%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6			mg/l	
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9	76	3,66	mg/l	97%
Nitrite	0,061	0,002	0,0670	0,00322	mg/l	110%
Ammonium	0,050	0,005	0,0540	0,00296	mg/l	108%
Chloride	17,5	0,4	17,1	0,488	mg/l	98%
Sulphate	35,5	0,4	39,3	1,89	mg/l	111%
Orthophosphate	<0,009		<0,03		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009		<0,015		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory AL**

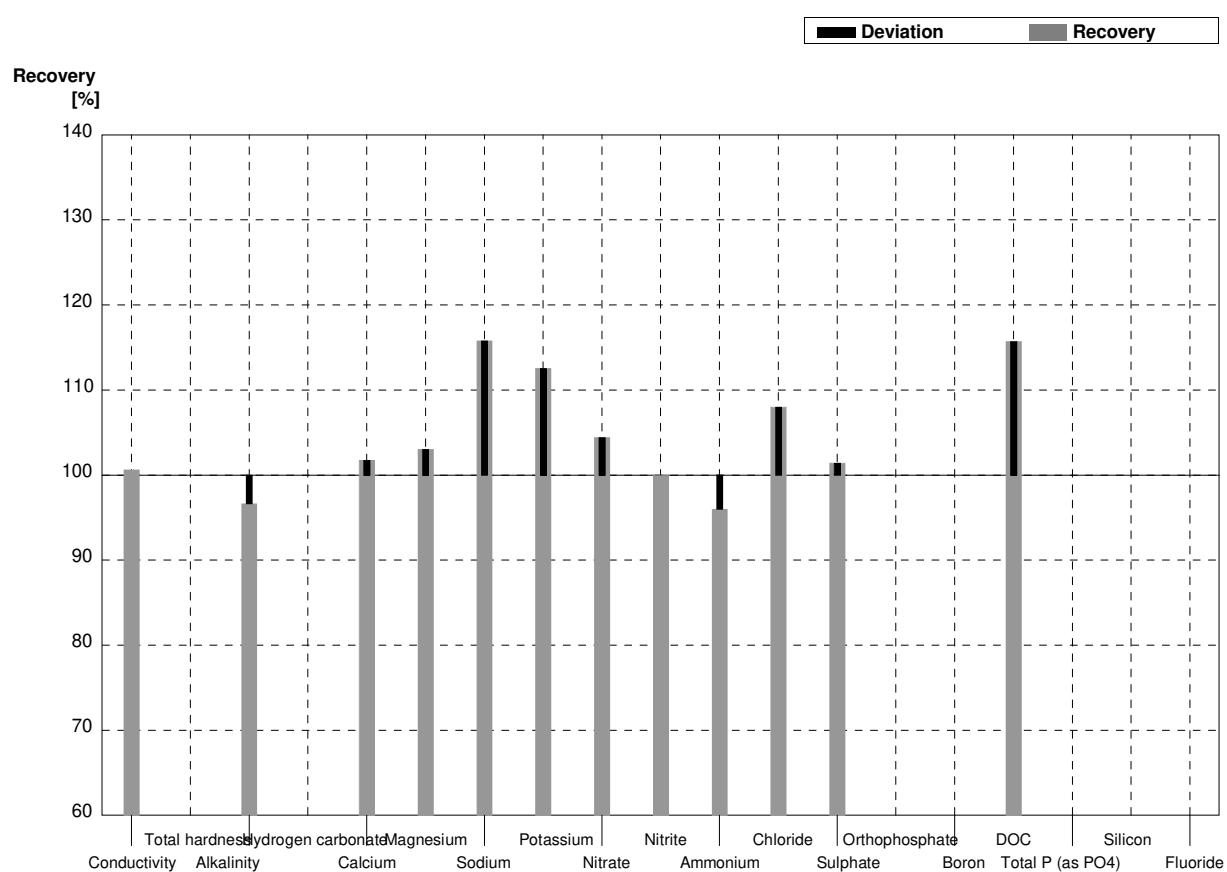
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	537		µS/cm	100%
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,69		mmol/l	96%
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6	38,0		mg/l	105%
Magnesium	12,93	0,15	14,0		mg/l	108%
Sodium	48,6	0,3	54,7		mg/l	113%
Potassium	6,19	0,04	7,06		mg/l	114%
Nitrate	5,20	0,10	6,0		mg/l	115%
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6	52,8		mg/l	102%
Sulphate	87,7	0,6	87,3		mg/l	100%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	4,08		mg/l	101%
Total P (as PO4)	0,0884	0,0013	0,090		mg/l	102%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory AL**

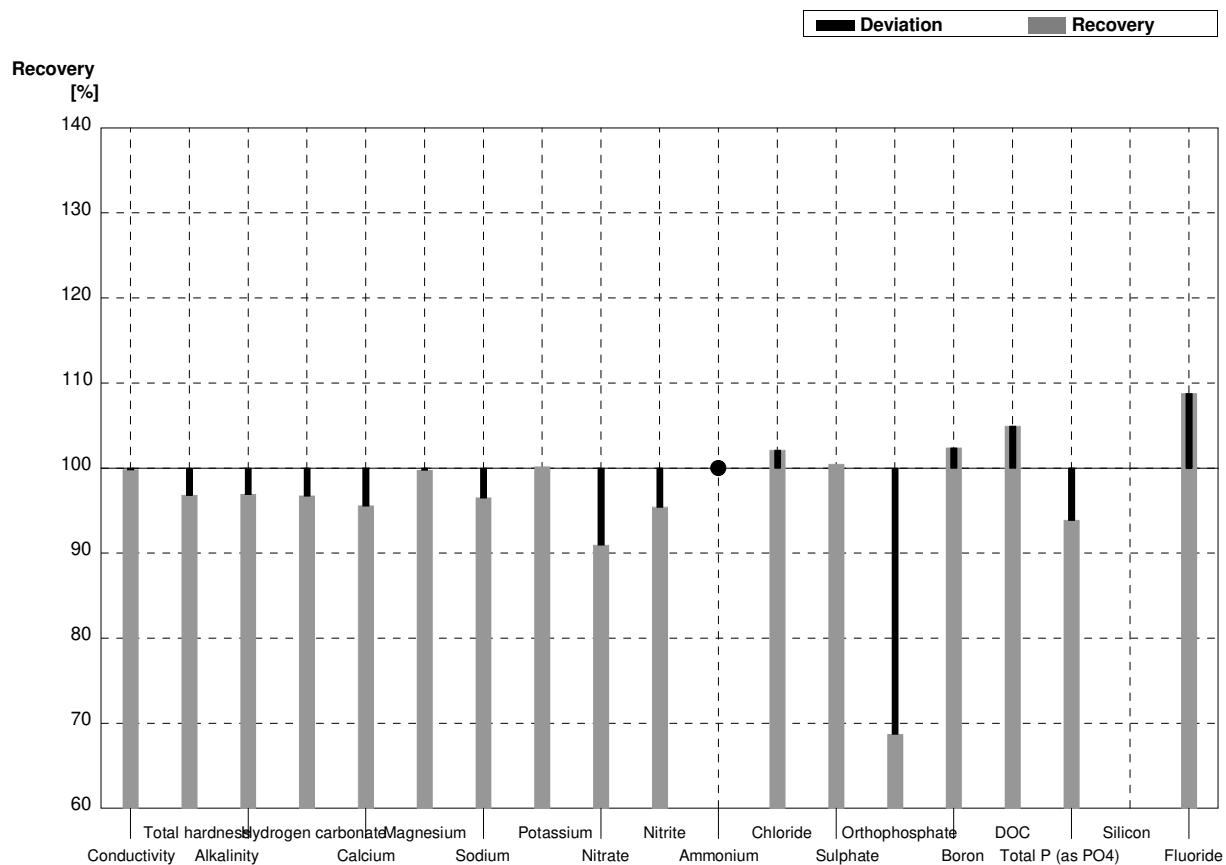
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	647		µS/cm	101%
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,04		mmol/l	97%
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	86,6		mg/l	102%
Magnesium	19,8	0,4	20,4		mg/l	103%
Sodium	15,2	0,7	17,6		mg/l	116%
Potassium	5,02	0,04	5,65		mg/l	113%
Nitrate	78,7	1,9	82,2		mg/l	104%
Nitrite	0,061	0,002	0,061		mg/l	100%
Ammonium	0,050	0,005	0,0480		mg/l	96%
Chloride	17,5	0,4	18,9		mg/l	108%
Sulphate	35,5	0,4	36,0		mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	2,28		mg/l	116%
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

**Laboratory AM**

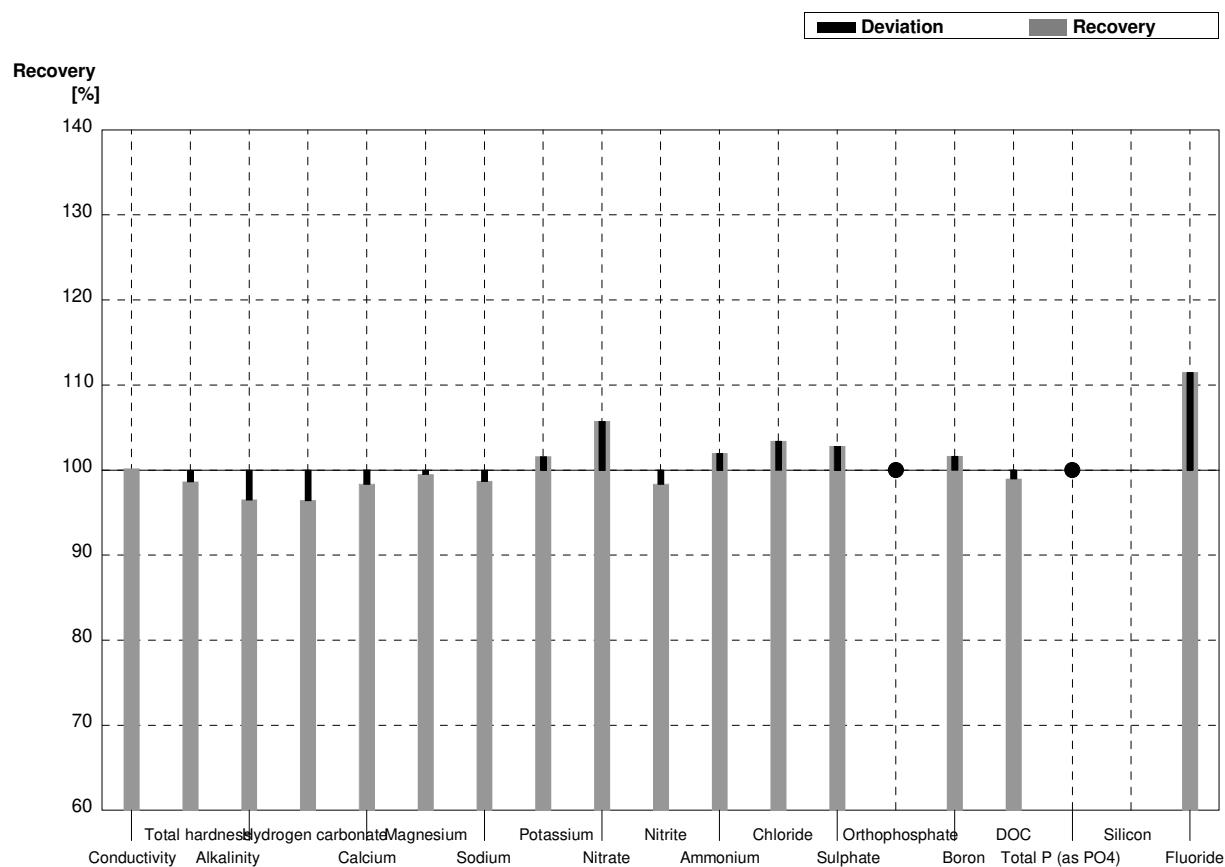
Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	534	21	$\mu\text{S}/\text{cm}$	100%
Total hardness	1,436	0,016	1,39	0,08	$\text{mmol/l}$	97%
Alkalinity	1,76	0,03	1,706	0,134	$\text{mmol/l}$	97%
Hydrogen carbonate	104,4	1,6	101,0	8,2	$\text{mg/l}$	97%
Calcium	36,2	0,6	34,6	1,7	$\text{mg/l}$	96%
Magnesium	12,93	0,15	12,9	0,8	$\text{mg/l}$	100%
Sodium	48,6	0,3	46,9	2,6	$\text{mg/l}$	97%
Potassium	6,19	0,04	6,2	0,3	$\text{mg/l}$	100%
Nitrate	5,20	0,10	4,73	0,31	$\text{mg/l}$	91%
Nitrite	0,0131	0,0004	0,0125	0,0029	$\text{mg/l}$	95%
Ammonium	<0,01		<0,010		$\text{mg/l}$	•
Chloride	51,6	0,6	52,7	4,2	$\text{mg/l}$	102%
Sulphate	87,7	0,6	88,1	8,2	$\text{mg/l}$	100%
Orthophosphate	0,0307	0,0023	0,0211	0,0032	$\text{mg/l}$	69%
Boron	0,0334	0,0019	0,0342	0,0040	$\text{mg/l}$	102%
DOC	4,03	0,05	4,23	0,827	$\text{mg/l}$	105%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,083	0,015	$\text{mg/l}$	94%
Silicon	3,013	0,017			$\text{mg/l}$	
Fluoride	0,500	0,013	0,544	0,116	$\text{mg/l}$	109%



**Sample N166B**

**Laboratory AM**

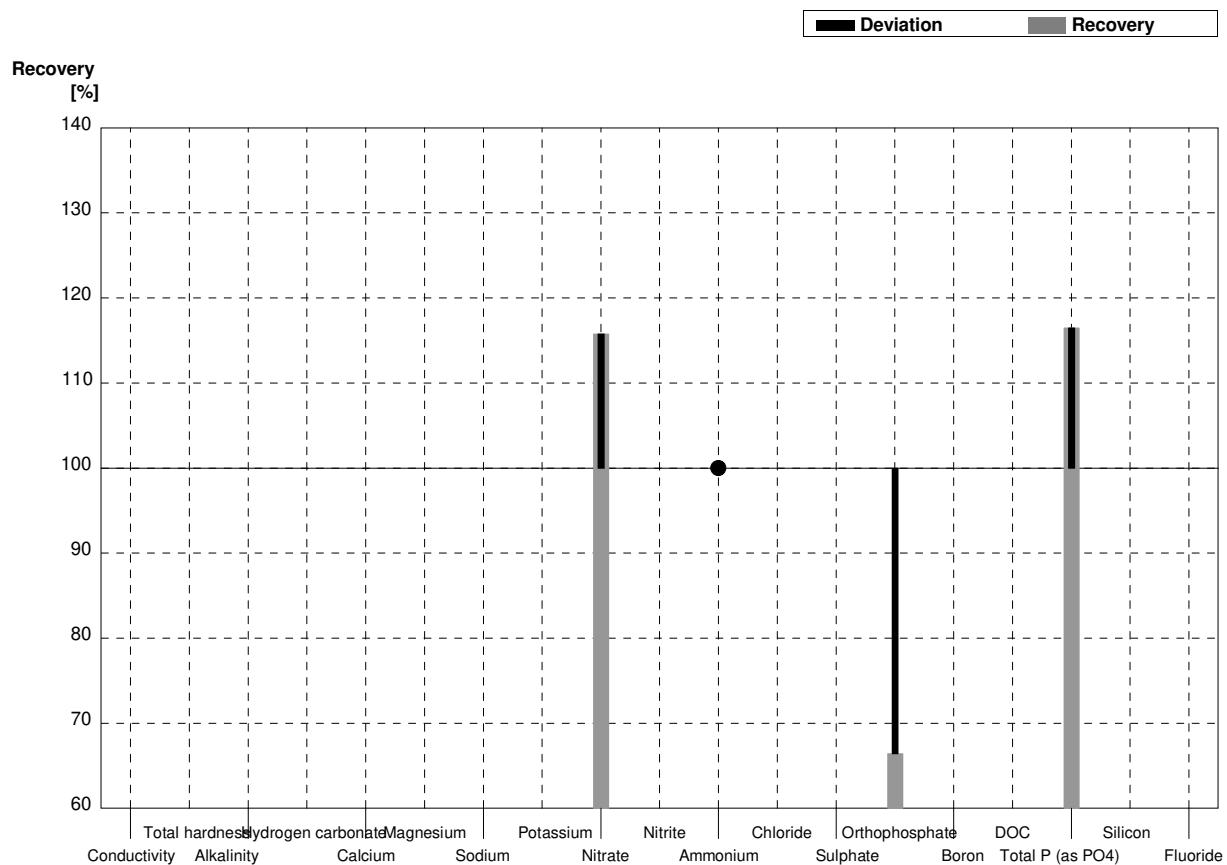
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	644	26	µS/cm	100%
Total hardness	2,94	0,04	2,90	0,15	mmol/l	99%
Alkalinity	4,18	0,08	4,034	0,279	mmol/l	97%
Hydrogen carbonate	252	5	243,0	17,0	mg/l	96%
Calcium	85,1	1,6	83,7	4,0	mg/l	98%
Magnesium	19,8	0,4	19,7	1,3	mg/l	99%
Sodium	15,2	0,7	15,0	0,8	mg/l	99%
Potassium	5,02	0,04	5,1	0,2	mg/l	102%
Nitrate	78,7	1,9	83,2	5,1	mg/l	106%
Nitrite	0,061	0,002	0,060	0,006	mg/l	98%
Ammonium	0,050	0,005	0,051	0,10	mg/l	102%
Chloride	17,5	0,4	18,1	1,6	mg/l	103%
Sulphate	35,5	0,4	36,5	3,4	mg/l	103%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,085	0,004	0,0864	0,0087	mg/l	102%
DOC	1,97	0,04	1,95	0,460	mg/l	99%
Total P (as PO4)	<0,009		<0,010		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,349	0,078	mg/l	112%



**Sample N166A**

**Laboratory AN**

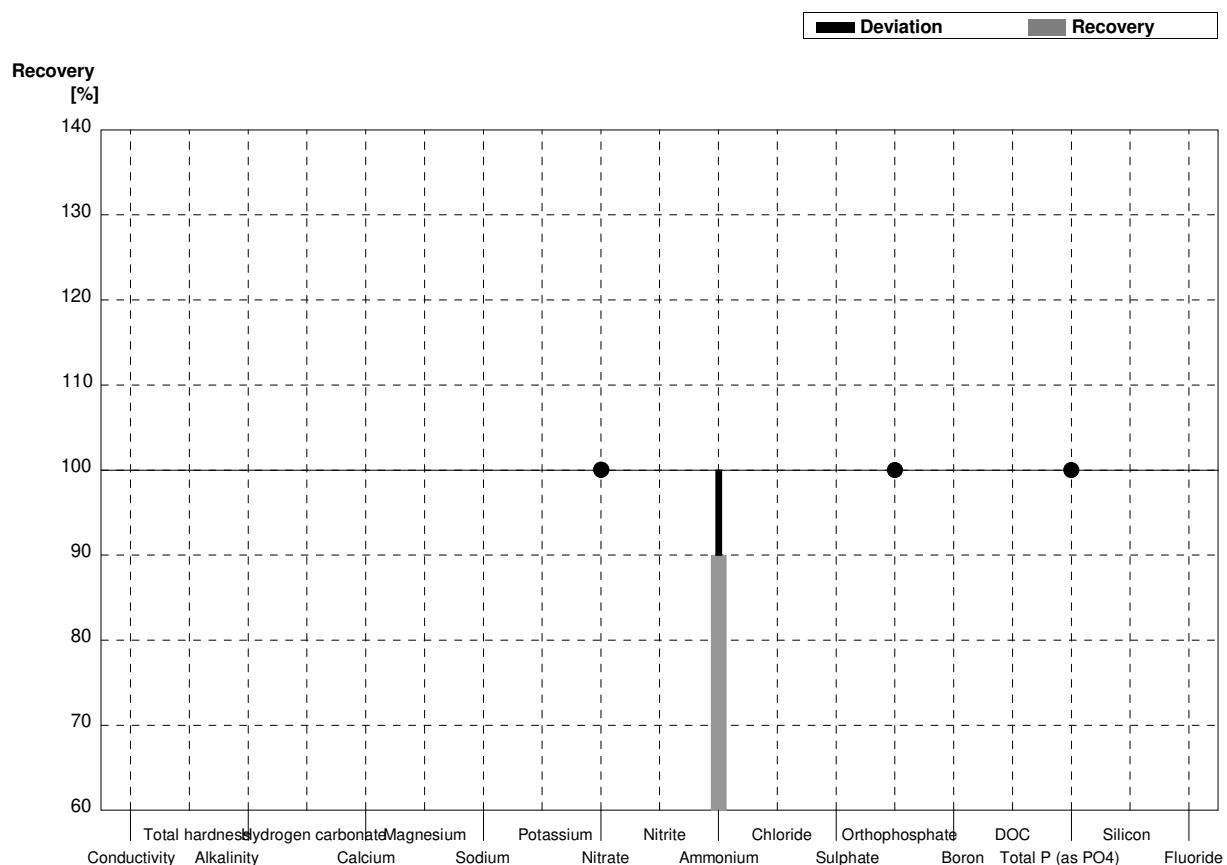
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2			µS/cm	
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03			mmol/l	
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10	6,02	0,386	mg/l	116%
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01		<0,01		mg/l	•
Chloride	51,6	0,6			mg/l	
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023	0,0204	0,009	mg/l	66%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,103	0,009	mg/l	117%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

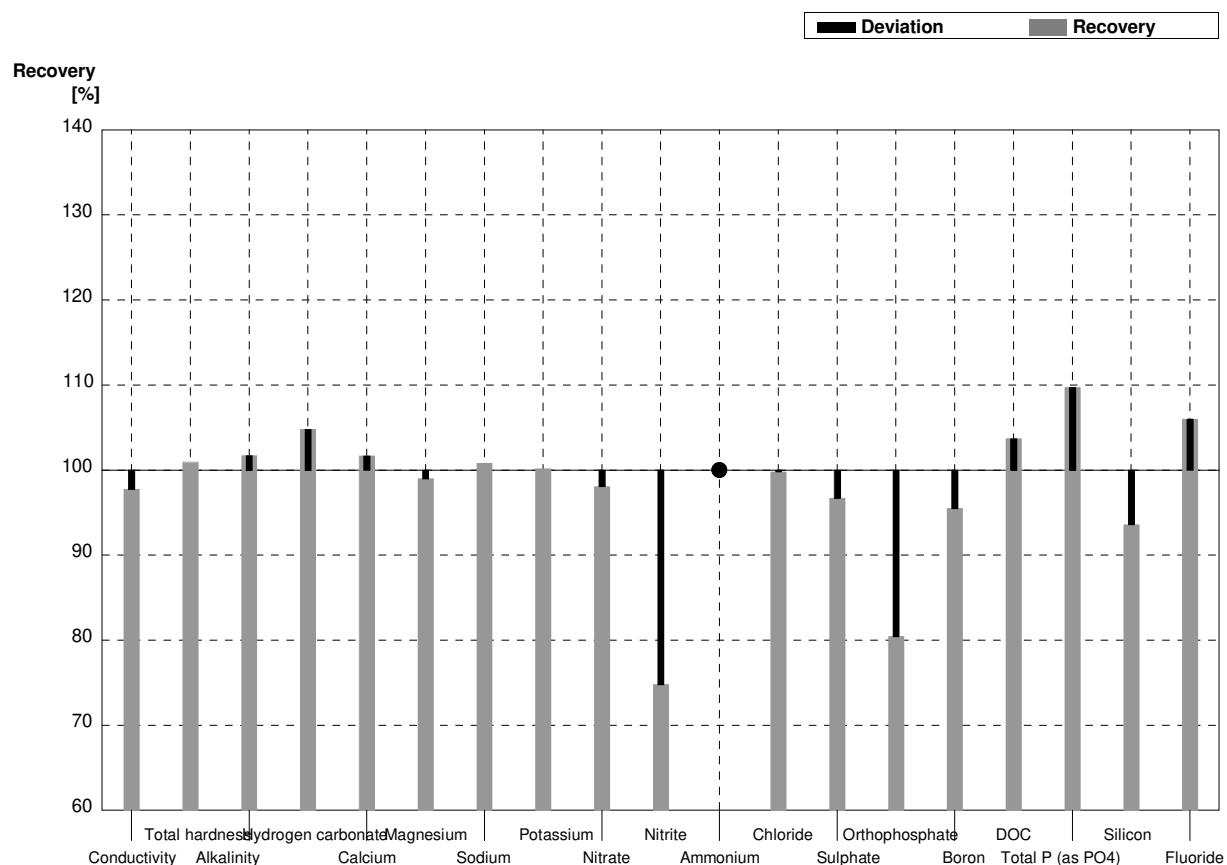
**Laboratory AN**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2			µS/cm	
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08			mmol/l	
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6			mg/l	
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9	>30		mg/l	•
Nitrite	0,061	0,002			mg/l	
Ammonium	0,050	0,005	0,0450	0,0076	mg/l	90%
Chloride	17,5	0,4			mg/l	
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009		<0,019		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009		<0,02		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A****Laboratory AO**

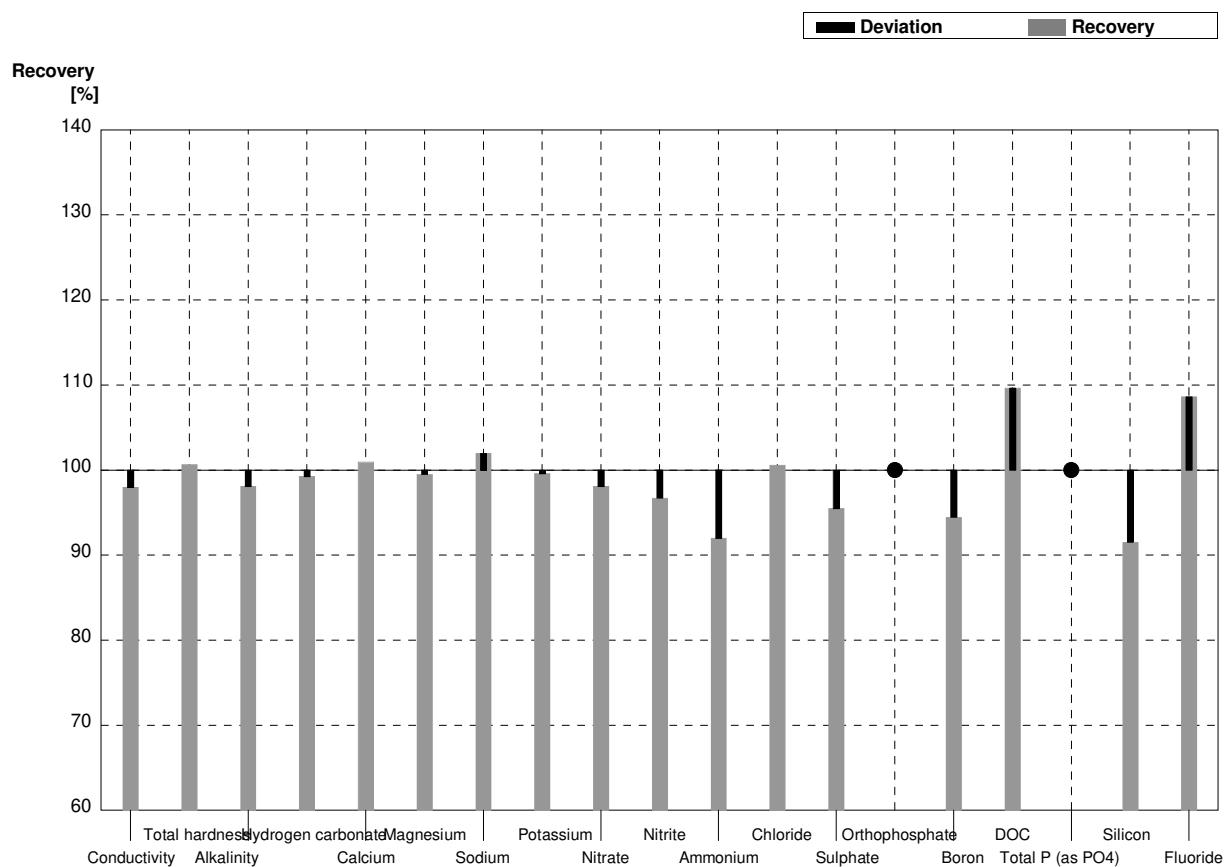
Parameter	Target value	$\pm$ U (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	535	2	523	52	$\mu\text{S}/\text{cm}$	98%
Total hardness	1,436	0,016	1,45	0,12	mmol/l	101%
Alkalinity	1,76	0,03	1,79		mmol/l	102%
Hydrogen carbonate	104,4	1,6	109,4		mg/l	105%
Calcium	36,2	0,6	36,8	2,6	mg/l	102%
Magnesium	12,93	0,15	12,8	1,0	mg/l	99%
Sodium	48,6	0,3	49,0	5,4	mg/l	101%
Potassium	6,19	0,04	6,2	1,0	mg/l	100%
Nitrate	5,20	0,10	5,1	0,4	mg/l	98%
Nitrite	0,0131	0,0004	0,0098	0,002	mg/l	75%
Ammonium	<0,01		<0,04		mg/l	•
Chloride	51,6	0,6	51,5	2,6	mg/l	100%
Sulphate	87,7	0,6	84,8	5,1	mg/l	97%
Orthophosphate	0,0307	0,0023	0,0247		mg/l	80%
Boron	0,0334	0,0019	0,0319	0,006	mg/l	96%
DOC	4,03	0,05	4,18	0,4	mg/l	104%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,097		mg/l	110%
Silicon	3,013	0,017	2,82	0,56	mg/l	94%
Fluoride	0,500	0,013	0,53	0,07	mg/l	106%



**Sample N166B**

**Laboratory AO**

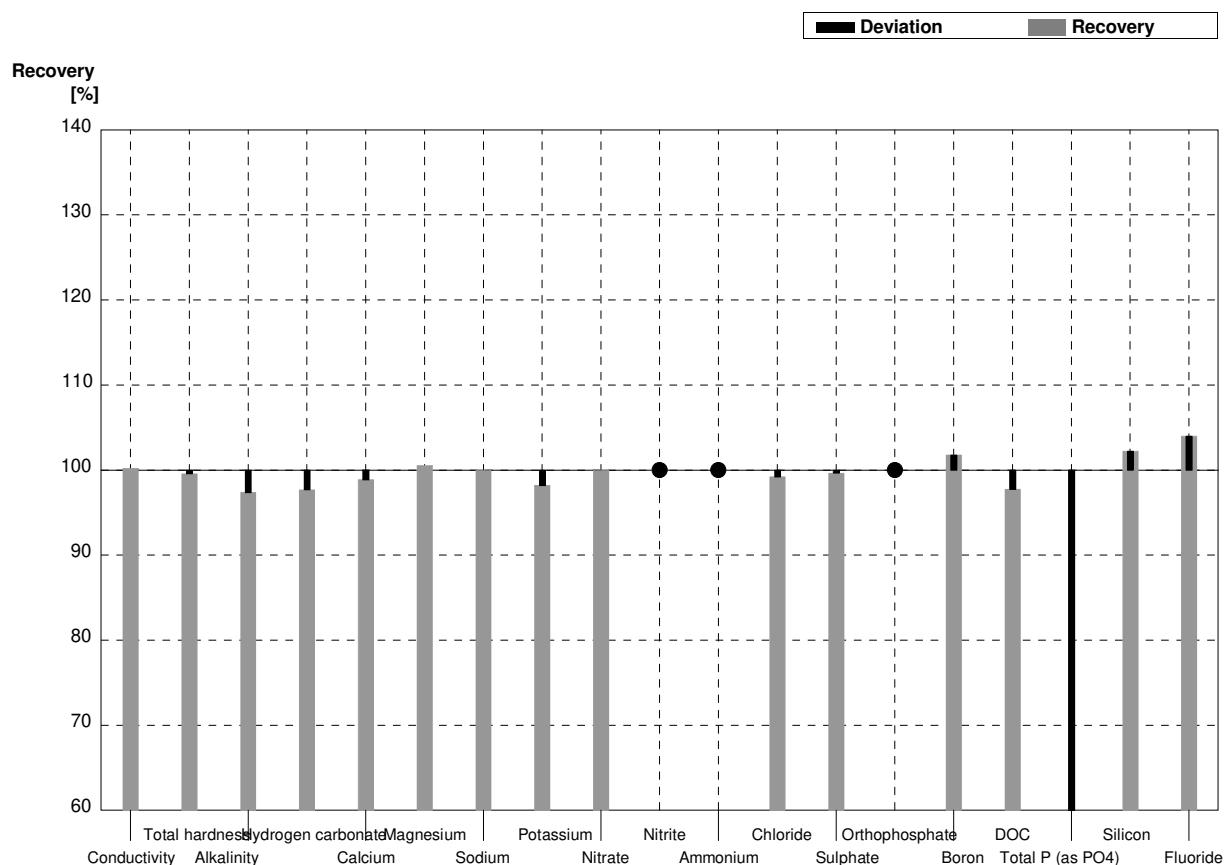
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	630	63	µS/cm	98%
Total hardness	2,94	0,04	2,96	0,24	mmol/l	101%
Alkalinity	4,18	0,08	4,10		mmol/l	98%
Hydrogen carbonate	252	5	250,1		mg/l	99%
Calcium	85,1	1,6	85,9	6,0	mg/l	101%
Magnesium	19,8	0,4	19,7	1,6	mg/l	99%
Sodium	15,2	0,7	15,5	1,7	mg/l	102%
Potassium	5,02	0,04	5,0	0,8	mg/l	100%
Nitrate	78,7	1,9	77,2	5,4	mg/l	98%
Nitrite	0,061	0,002	0,059	0,01	mg/l	97%
Ammonium	0,050	0,005	0,0460	0,01	mg/l	92%
Chloride	17,5	0,4	17,6	0,9	mg/l	101%
Sulphate	35,5	0,4	33,9	2,0	mg/l	95%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,085	0,004	0,0803	0,016	mg/l	94%
DOC	1,97	0,04	2,16	0,2	mg/l	110%
Total P (as PO4)	<0,009		<0,015		mg/l	•
Silicon	5,07	0,03	4,64	0,93	mg/l	92%
Fluoride	0,313	0,008	0,340	0,05	mg/l	109%



**Sample N166A**

**Laboratory AP**

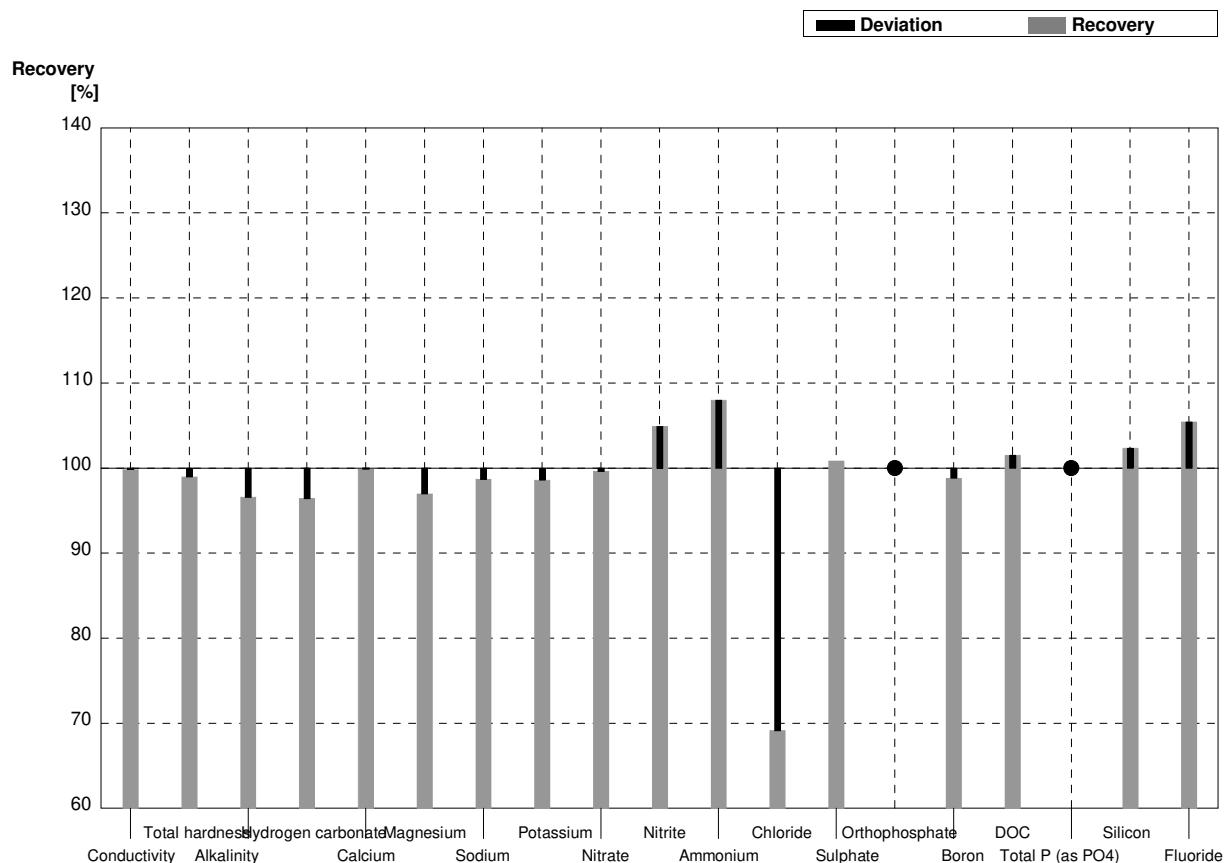
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	536	11	µS/cm	100%
Total hardness	1,436	0,016	1,43	0,30	mmol/l	100%
Alkalinity	1,76	0,03	1,714	0,171	mmol/l	97%
Hydrogen carbonate	104,4	1,6	102	10	mg/l	98%
Calcium	36,2	0,6	35,8	6,1	mg/l	99%
Magnesium	12,93	0,15	13,0	1,6	mg/l	101%
Sodium	48,6	0,3	48,6	4,4	mg/l	100%
Potassium	6,19	0,04	6,08	0,61	mg/l	98%
Nitrate	5,20	0,10	5,2	0,9	mg/l	100%
Nitrite	0,0131	0,0004	<0,020		mg/l	•
Ammonium	<0,01		<0,010		mg/l	•
Chloride	51,6	0,6	51,2	5,1	mg/l	99%
Sulphate	87,7	0,6	87,4	14,0	mg/l	100%
Orthophosphate	0,0307	0,0023	<0,040		mg/l	•
Boron	0,0334	0,0019	0,0340	0,003	mg/l	102%
DOC	4,03	0,05	3,94	0,43	mg/l	98%
Total P (as PO4)	0,0884	0,0013	0,0400	0,01	mg/l	45%
Silicon	3,013	0,017	3,08	0,25	mg/l	102%
Fluoride	0,500	0,013	0,52	0,09	mg/l	104%



**Sample N166B**

**Laboratory AP**

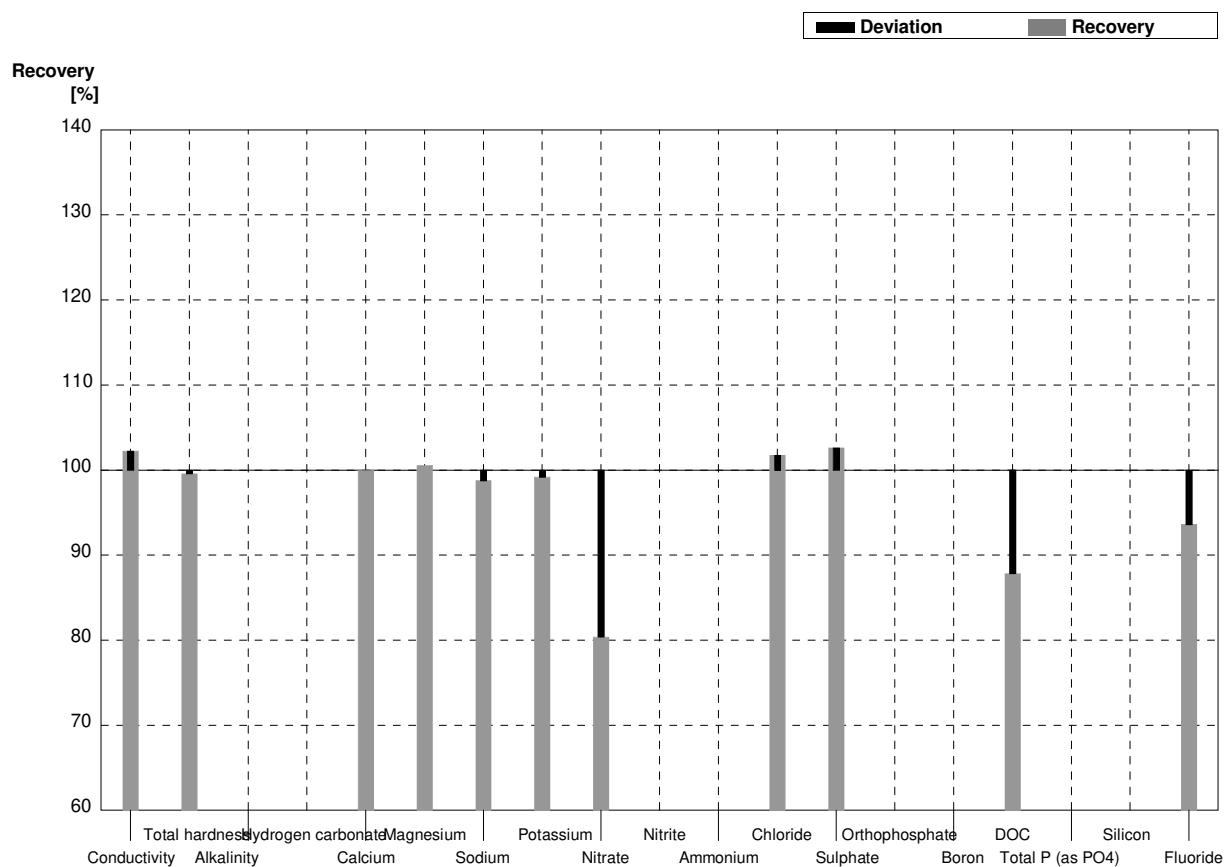
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	642	13	µS/cm	100%
Total hardness	2,94	0,04	2,91	0,61	mmol/l	99%
Alkalinity	4,18	0,08	4,037	0,404	mmol/l	97%
Hydrogen carbonate	252	5	243	24	mg/l	96%
Calcium	85,1	1,6	85,0	14,5	mg/l	100%
Magnesium	19,8	0,4	19,2	2,3	mg/l	97%
Sodium	15,2	0,7	15,0	1,4	mg/l	99%
Potassium	5,02	0,04	4,95	0,50	mg/l	99%
Nitrate	78,7	1,9	78,4	14,1	mg/l	100%
Nitrite	0,061	0,002	0,064	0,009	mg/l	105%
Ammonium	0,050	0,005	0,054	0,017	mg/l	108%
Chloride	17,5	0,4	12,1	1,2	mg/l	69%
Sulphate	35,5	0,4	35,8	5,7	mg/l	101%
Orthophosphate	<0,009		<0,040		mg/l	•
Boron	0,085	0,004	0,084	0,008	mg/l	99%
DOC	1,97	0,04	2,00	0,22	mg/l	102%
Total P (as PO4)	<0,009		<0,01		mg/l	•
Silicon	5,07	0,03	5,19	0,42	mg/l	102%
Fluoride	0,313	0,008	0,330	0,06	mg/l	105%



**Sample N166A**

**Laboratory AQ**

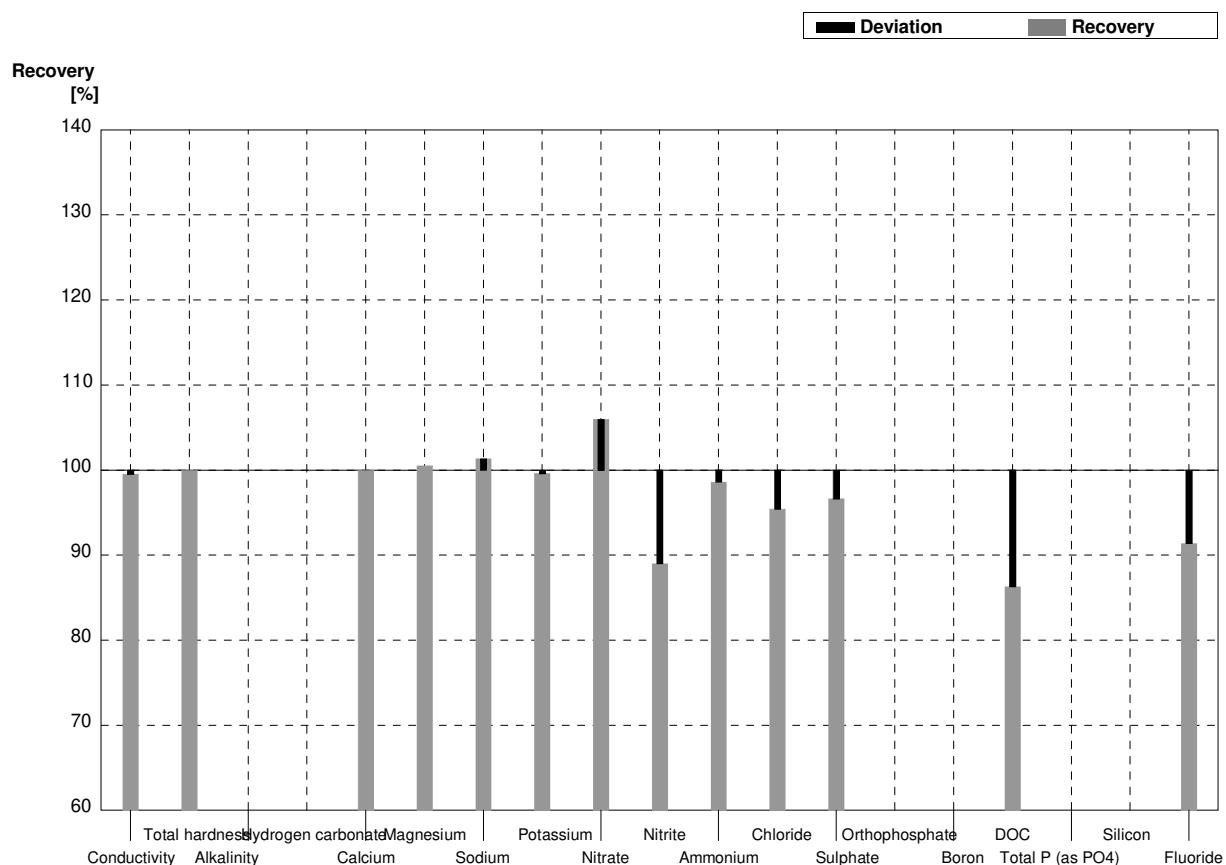
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	547	15	µS/cm	102%
Total hardness	1,436	0,016	1,43	0,14	mmol/l	100%
Alkalinity	1,76	0,03			mmol/l	
Hydrogen carbonate	104,4	1,6			mg/l	
Calcium	36,2	0,6	36,2	3,6	mg/l	100%
Magnesium	12,93	0,15	13,0	1,3	mg/l	101%
Sodium	48,6	0,3	48,0	4,8	mg/l	99%
Potassium	6,19	0,04	6,14	0,61	mg/l	99%
Nitrate	5,20	0,10	4,18	0,42	mg/l	80%
Nitrite	0,0131	0,0004			mg/l	
Ammonium	<0,01				mg/l	
Chloride	51,6	0,6	52,5	5,3	mg/l	102%
Sulphate	87,7	0,6	90,0	9,0	mg/l	103%
Orthophosphate	0,0307	0,0023			mg/l	
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05	3,54	0,53	mg/l	88%
Total P (as PO4)	0,0884	0,0013			mg/l	
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013	0,468	0,07	mg/l	94%



**Sample N166B**

**Laboratory AQ**

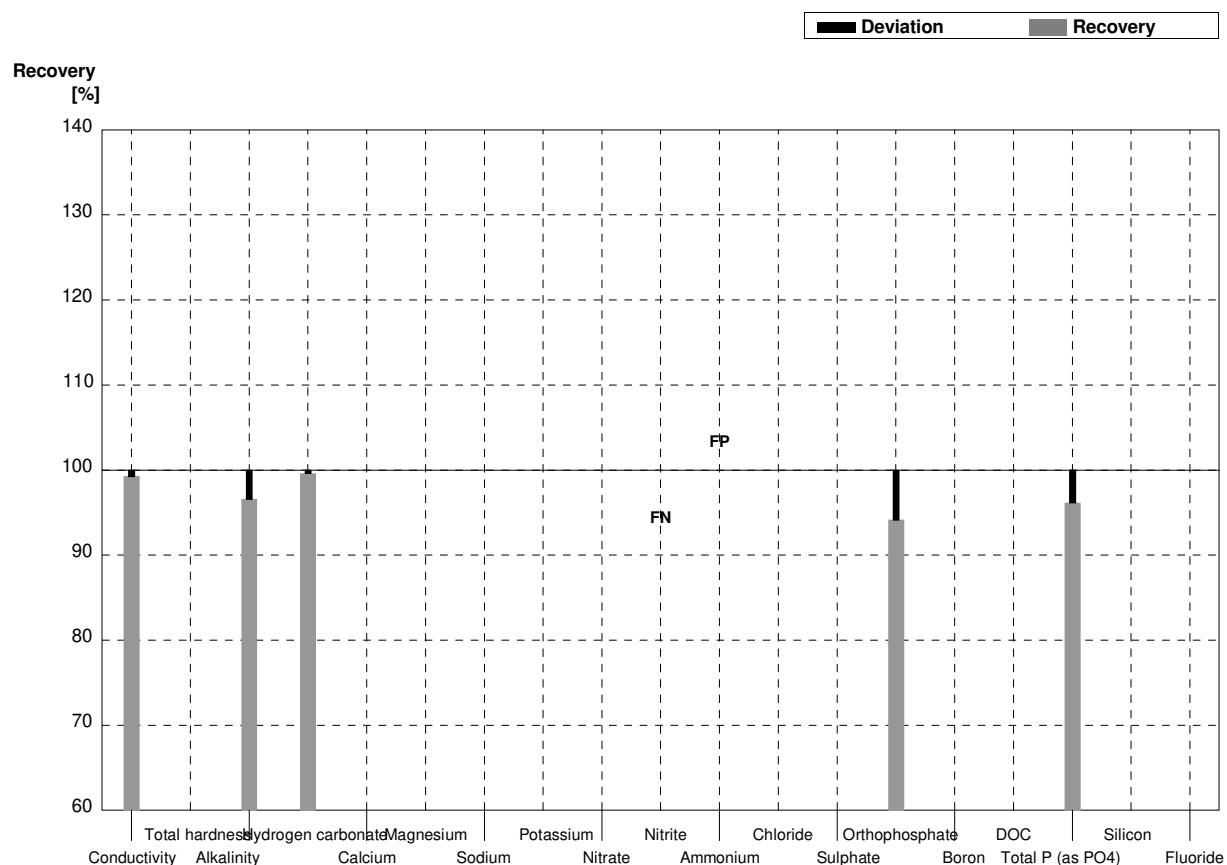
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	640	15	µS/cm	100%
Total hardness	2,94	0,04	2,94	0,30	mmol/l	100%
Alkalinity	4,18	0,08			mmol/l	
Hydrogen carbonate	252	5			mg/l	
Calcium	85,1	1,6	85,1	8,5	mg/l	100%
Magnesium	19,8	0,4	19,9	2,0	mg/l	101%
Sodium	15,2	0,7	15,4	1,5	mg/l	101%
Potassium	5,02	0,04	5,00	0,50	mg/l	100%
Nitrate	78,7	1,9	83,4	8,3	mg/l	106%
Nitrite	0,061	0,002	0,0543	0,01	mg/l	89%
Ammonium	0,050	0,005	0,0493	0,01	mg/l	99%
Chloride	17,5	0,4	16,7	1,7	mg/l	95%
Sulphate	35,5	0,4	34,3	3,4	mg/l	97%
Orthophosphate	<0,009				mg/l	
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	1,70	0,26	mg/l	86%
Total P (as PO4)	<0,009				mg/l	
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	0,286	0,04	mg/l	91%



Sample N166A

Laboratory AR

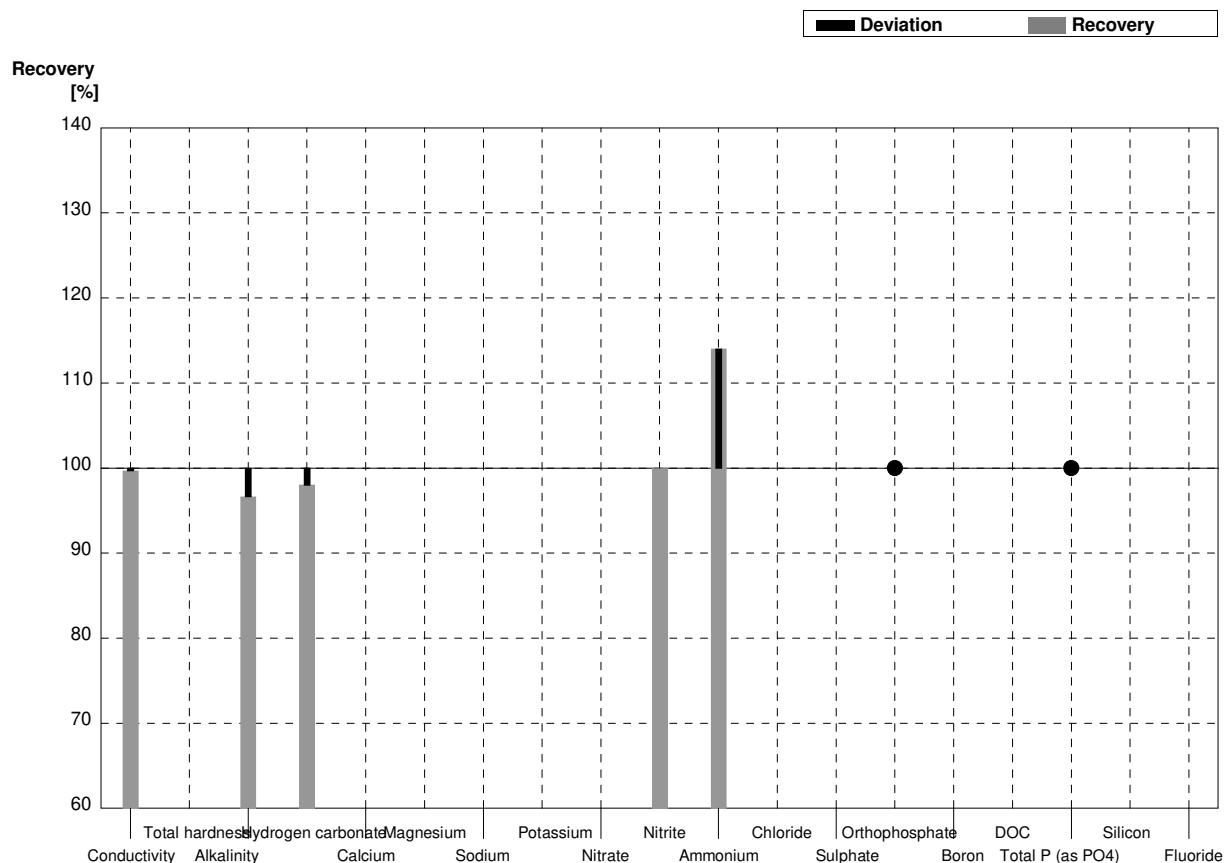
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	531	15	µS/cm	99%
Total hardness	1,436	0,016			mmol/l	
Alkalinity	1,76	0,03	1,70	0,1	mmol/l	97%
Hydrogen carbonate	104,4	1,6	104	5	mg/l	100%
Calcium	36,2	0,6			mg/l	
Magnesium	12,93	0,15			mg/l	
Sodium	48,6	0,3			mg/l	
Potassium	6,19	0,04			mg/l	
Nitrate	5,20	0,10			mg/l	
Nitrite	0,0131	0,0004	<0,005		mg/l	FN
Ammonium	<0,01		0,0156	0,002	mg/l	FP
Chloride	51,6	0,6			mg/l	
Sulphate	87,7	0,6			mg/l	
Orthophosphate	0,0307	0,0023	0,0289	0,003	mg/l	94%
Boron	0,0334	0,0019			mg/l	
DOC	4,03	0,05			mg/l	
Total P (as PO4)	0,0884	0,0013	0,085	0,007	mg/l	96%
Silicon	3,013	0,017			mg/l	
Fluoride	0,500	0,013			mg/l	



**Sample N166B**

**Laboratory AR**

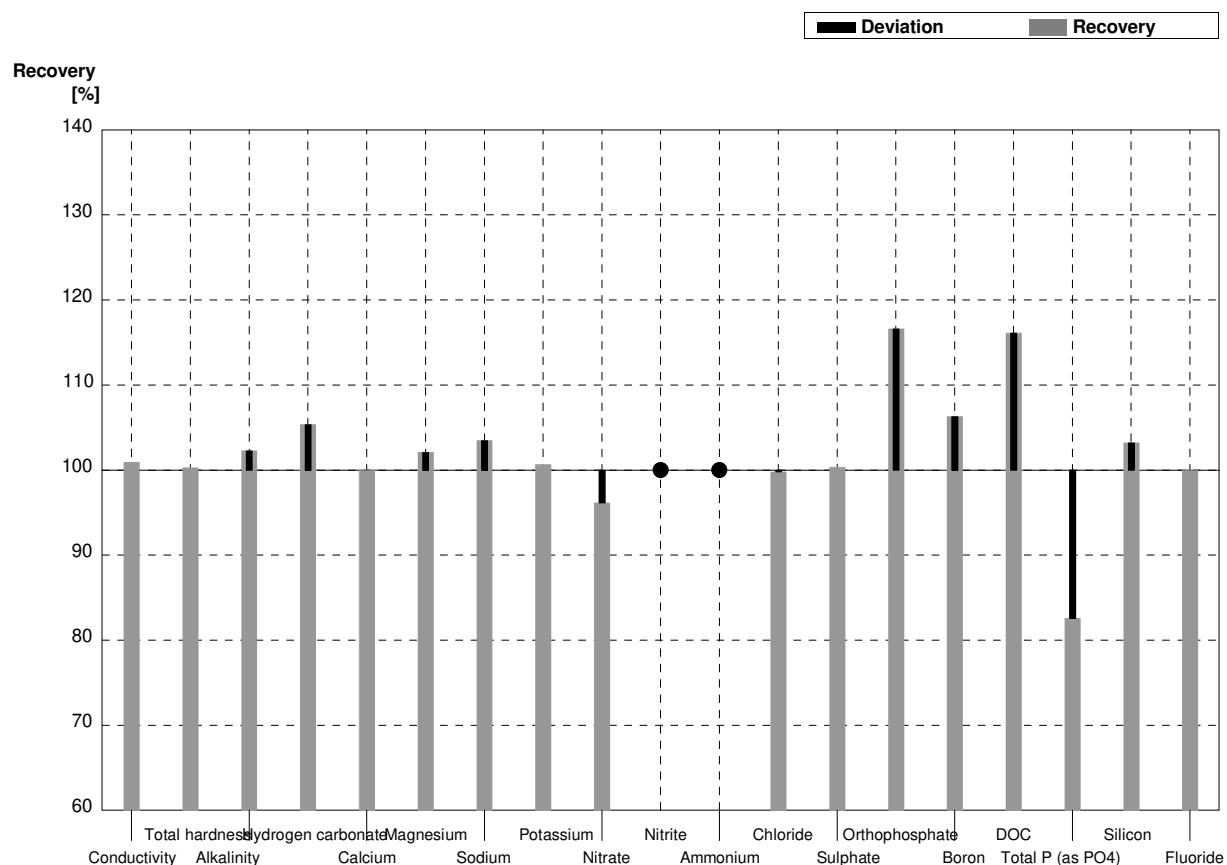
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	643	2	641	15	µS/cm	100%
Total hardness	2,94	0,04			mmol/l	
Alkalinity	4,18	0,08	4,04	0,1	mmol/l	97%
Hydrogen carbonate	252	5	247	5	mg/l	98%
Calcium	85,1	1,6			mg/l	
Magnesium	19,8	0,4			mg/l	
Sodium	15,2	0,7			mg/l	
Potassium	5,02	0,04			mg/l	
Nitrate	78,7	1,9			mg/l	
Nitrite	0,061	0,002	0,061	0,005	mg/l	100%
Ammonium	0,050	0,005	0,057	0,008	mg/l	114%
Chloride	17,5	0,4			mg/l	
Sulphate	35,5	0,4			mg/l	
Orthophosphate	<0,009		<0,005		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04			mg/l	
Total P (as PO4)	<0,009		<0,005		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008			mg/l	



**Sample N166A**

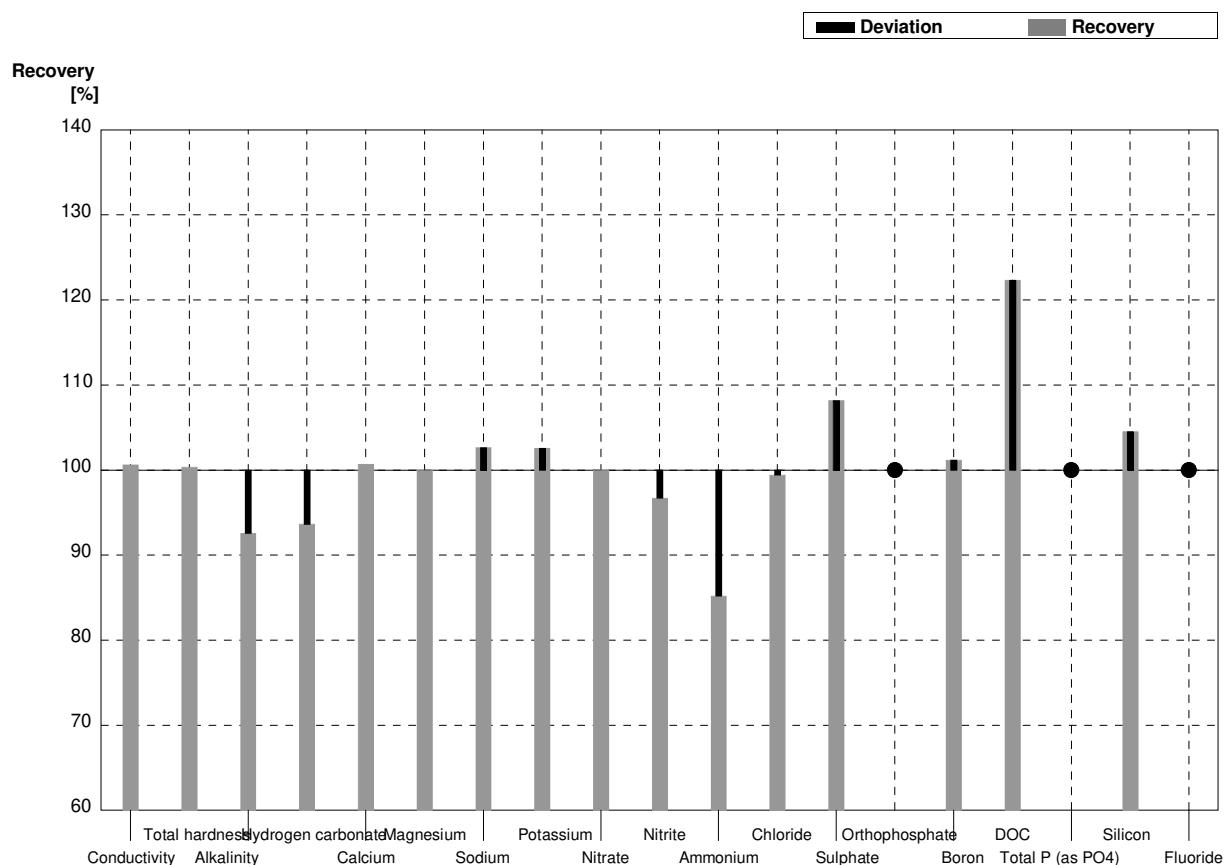
**Laboratory AS**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	540	11	µS/cm	101%
Total hardness	1,436	0,016	1,44	0,07	mmol/l	100%
Alkalinity	1,76	0,03	1,80	0,09	mmol/l	102%
Hydrogen carbonate	104,4	1,6	110	5	mg/l	105%
Calcium	36,2	0,6	36,2	1,8	mg/l	100%
Magnesium	12,93	0,15	13,2	0,7	mg/l	102%
Sodium	48,6	0,3	50,3	2,5	mg/l	103%
Potassium	6,19	0,04	6,23	0,31	mg/l	101%
Nitrate	5,20	0,10	5,0	0,3	mg/l	96%
Nitrite	0,0131	0,0004	<0,02		mg/l	•
Ammonium	<0,01		<0,03		mg/l	•
Chloride	51,6	0,6	51,5	2,6	mg/l	100%
Sulphate	87,7	0,6	88,0	4,4	mg/l	100%
Orthophosphate	0,0307	0,0023	0,0358	0,0054	mg/l	117%
Boron	0,0334	0,0019	0,0355	0,0018	mg/l	106%
DOC	4,03	0,05	4,68	0,47	mg/l	116%
Total P (as PO4)	0,0884	0,0013	0,073	0,011	mg/l	83%
Silicon	3,013	0,017	3,11	0,16	mg/l	103%
Fluoride	0,500	0,013	0,50	0,03	mg/l	100%



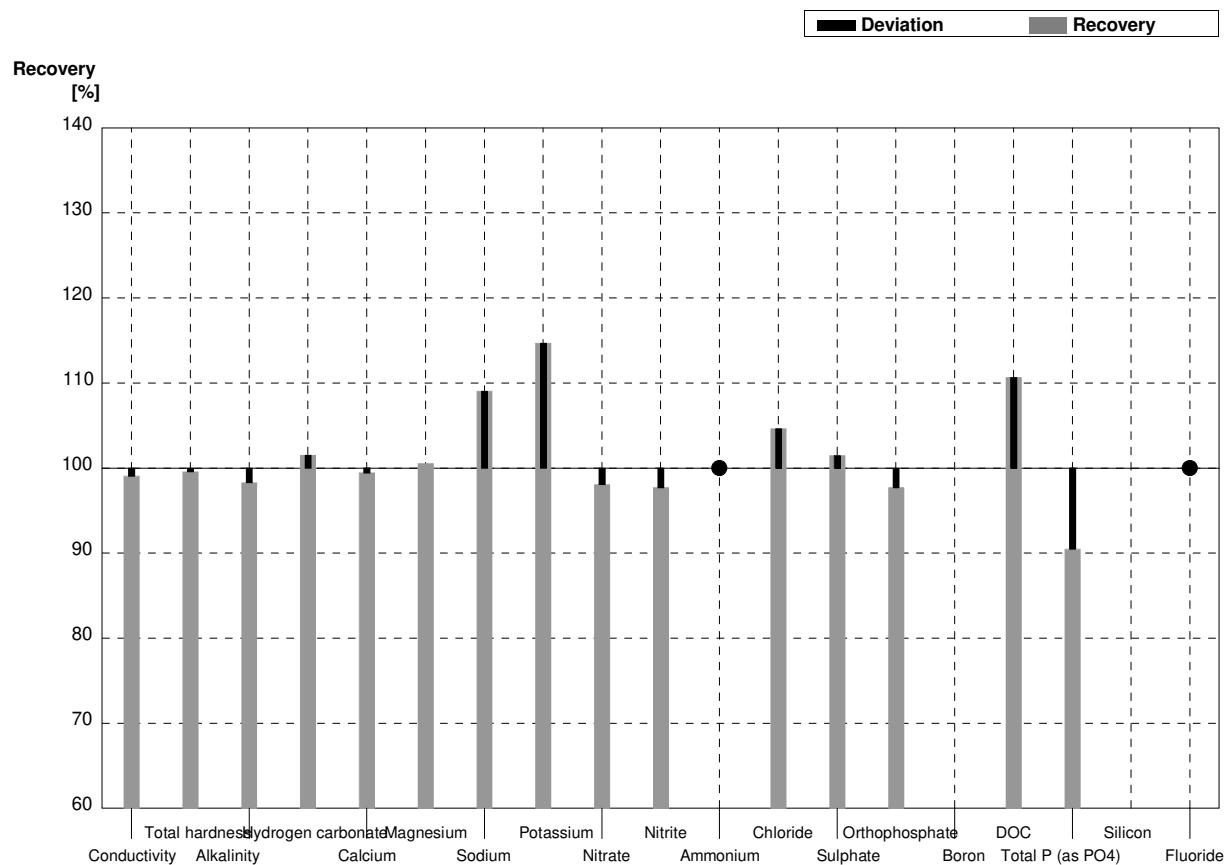
**Sample N166B****Laboratory AS**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	643	2	647	13	$\mu\text{S}/\text{cm}$	101%
Total hardness	2,94	0,04	2,95	0,21	$\text{mmol/l}$	100%
Alkalinity	4,18	0,08	3,87	0,19	$\text{mmol/l}$	93%
Hydrogen carbonate	252	5	236	12	$\text{mg/l}$	94%
Calcium	85,1	1,6	85,7	4,3	$\text{mg/l}$	101%
Magnesium	19,8	0,4	19,8	1,0	$\text{mg/l}$	100%
Sodium	15,2	0,7	15,6	0,8	$\text{mg/l}$	103%
Potassium	5,02	0,04	5,15	0,26	$\text{mg/l}$	103%
Nitrate	78,7	1,9	78,7	3,9	$\text{mg/l}$	100%
Nitrite	0,061	0,002	0,059	0,006	$\text{mg/l}$	97%
Ammonium	0,050	0,005	0,0426	0,0043	$\text{mg/l}$	85%
Chloride	17,5	0,4	17,4	0,9	$\text{mg/l}$	99%
Sulphate	35,5	0,4	38,4	1,9	$\text{mg/l}$	108%
Orthophosphate	<0,009		<0,02		$\text{mg/l}$	•
Boron	0,085	0,004	0,086	0,004	$\text{mg/l}$	101%
DOC	1,97	0,04	2,41	0,36	$\text{mg/l}$	122%
Total P (as PO <sub>4</sub> )	<0,009		<0,05		$\text{mg/l}$	•
Silicon	5,07	0,03	5,30	0,27	$\text{mg/l}$	105%
Fluoride	0,313	0,008	<0,5		$\text{mg/l}$	•



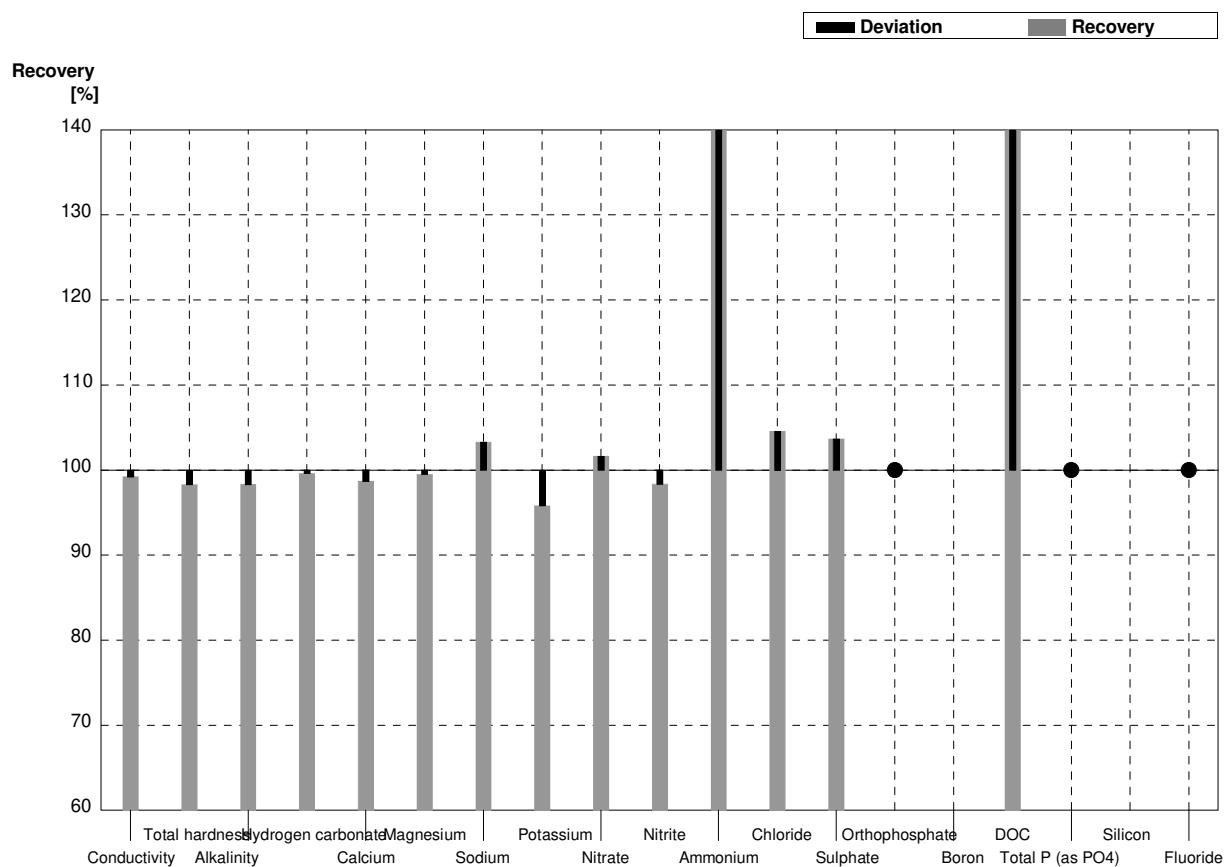
**Sample N166A****Laboratory AT**

Parameter	Target value	$\pm U$ ( $k=2$ )	Result	$\pm$	Unit	Recovery
Conductivity	535	2	530	12	$\mu\text{S}/\text{cm}$	99%
Total hardness	1,436	0,016	1,43	0,12	$\text{mmol}/\text{l}$	100%
Alkalinity	1,76	0,03	1,730	0,077	$\text{mmol}/\text{l}$	98%
Hydrogen carbonate	104,4	1,6	106	5	$\text{mg}/\text{l}$	102%
Calcium	36,2	0,6	36,0	1,6	$\text{mg}/\text{l}$	99%
Magnesium	12,93	0,15	13,0	0,5	$\text{mg}/\text{l}$	101%
Sodium	48,6	0,3	53	3	$\text{mg}/\text{l}$	109%
Potassium	6,19	0,04	7,1	0,3	$\text{mg}/\text{l}$	115%
Nitrate	5,20	0,10	5,1	0,2	$\text{mg}/\text{l}$	98%
Nitrite	0,0131	0,0004	0,0128	0,0010	$\text{mg}/\text{l}$	98%
Ammonium	<0,01		<0,02		$\text{mg}/\text{l}$	•
Chloride	51,6	0,6	54	3	$\text{mg}/\text{l}$	105%
Sulphate	87,7	0,6	89	4	$\text{mg}/\text{l}$	101%
Orthophosphate	0,0307	0,0023	0,0300	0,0026	$\text{mg}/\text{l}$	98%
Boron	0,0334	0,0019			$\text{mg}/\text{l}$	
DOC	4,03	0,05	4,46	0,56	$\text{mg}/\text{l}$	111%
Total P (as PO <sub>4</sub> )	0,0884	0,0013	0,080	0,017	$\text{mg}/\text{l}$	90%
Silicon	3,013	0,017			$\text{mg}/\text{l}$	
Fluoride	0,500	0,013	<1		$\text{mg}/\text{l}$	•



**Sample N166B****Laboratory AT**

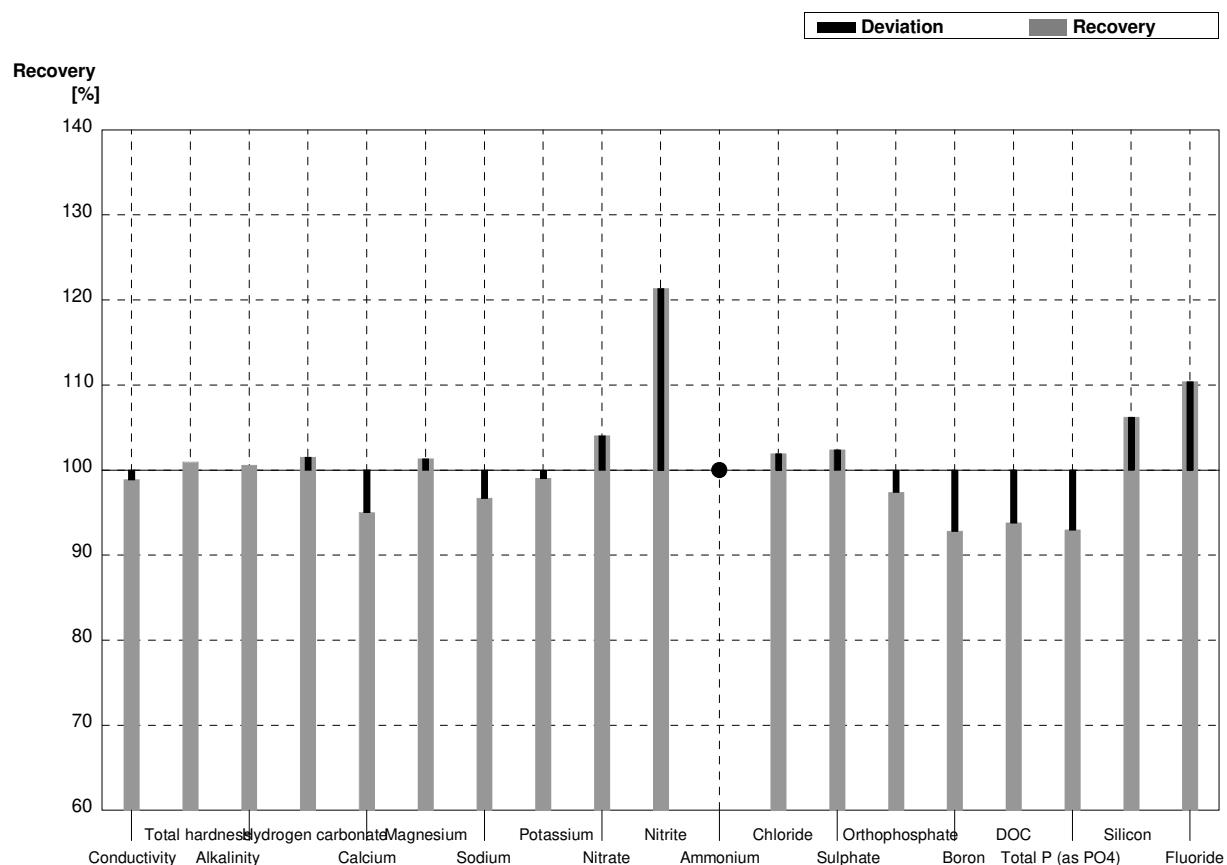
Parameter	Target value	$\pm$ U (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	638	14	$\mu\text{S}/\text{cm}$	99%
Total hardness	2,94	0,04	2,89	0,24	mmol/l	98%
Alkalinity	4,18	0,08	4,11	0,19	mmol/l	98%
Hydrogen carbonate	252	5	251	12	mg/l	100%
Calcium	85,1	1,6	84	4	mg/l	99%
Magnesium	19,8	0,4	19,7	0,8	mg/l	99%
Sodium	15,2	0,7	15,7	0,7	mg/l	103%
Potassium	5,02	0,04	4,81	0,19	mg/l	96%
Nitrate	78,7	1,9	80	3	mg/l	102%
Nitrite	0,061	0,002	0,060	0,005	mg/l	98%
Ammonium	0,050	0,005	0,481	0,058	mg/l	962%
Chloride	17,5	0,4	18,3	0,7	mg/l	105%
Sulphate	35,5	0,4	36,8	1,4	mg/l	104%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,085	0,004			mg/l	
DOC	1,97	0,04	3,18	0,40	mg/l	161%
Total P (as PO <sub>4</sub> )	<0,009		<0,003		mg/l	•
Silicon	5,07	0,03			mg/l	
Fluoride	0,313	0,008	<1		mg/l	•



**Sample N166A**

**Laboratory AU**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	535	2	529	1,528	µS/cm	99%
Total hardness	1,436	0,016	1,45	0,021	mmol/l	101%
Alkalinity	1,76	0,03	1,77	0,012	mmol/l	101%
Hydrogen carbonate	104,4	1,6	106	1,155	mg/l	102%
Calcium	36,2	0,6	34,4	0,503	mg/l	95%
Magnesium	12,93	0,15	13,1	0,208	mg/l	101%
Sodium	48,6	0,3	47,0	1,012	mg/l	97%
Potassium	6,19	0,04	6,13	0,015	mg/l	99%
Nitrate	5,20	0,10	5,41	0,036	mg/l	104%
Nitrite	0,0131	0,0004	0,0159	0,001	mg/l	121%
Ammonium	<0,01		<0,015		mg/l	•
Chloride	51,6	0,6	52,6	0,352	mg/l	102%
Sulphate	87,7	0,6	89,8	0,545	mg/l	102%
Orthophosphate	0,0307	0,0023	0,0299	0,001	mg/l	97%
Boron	0,0334	0,0019	0,0310	0,001	mg/l	93%
DOC	4,03	0,05	3,78	0,044	mg/l	94%
Total P (as PO4)	0,0884	0,0013	0,0822	0,001	mg/l	93%
Silicon	3,013	0,017	3,20	0,021	mg/l	106%
Fluoride	0,500	0,013	0,552	0,013	mg/l	110%



**Sample N166B**

**Laboratory AU**

Parameter	Target value	$\pm U$ (k=2)	Result	$\pm$	Unit	Recovery
Conductivity	643	2	640	2	$\mu\text{S}/\text{cm}$	100%
Total hardness	2,94	0,04	3,00	0,032	mmol/l	102%
Alkalinity	4,18	0,08	4,11	0,006	mmol/l	98%
Hydrogen carbonate	252	5	247	1	mg/l	98%
Calcium	85,1	1,6	87,3	1,528	mg/l	103%
Magnesium	19,8	0,4	19,9	0,379	mg/l	101%
Sodium	15,2	0,7	14,9	0,173	mg/l	98%
Potassium	5,02	0,04	5,04	0,118	mg/l	100%
Nitrate	78,7	1,9	<0,10		mg/l	FN
Nitrite	0,061	0,002	0,0646	0,001	mg/l	106%
Ammonium	0,050	0,005	0,0423	0,001	mg/l	85%
Chloride	17,5	0,4	17,3	0,322	mg/l	99%
Sulphate	35,5	0,4	35,5	0,559	mg/l	100%
Orthophosphate	<0,009		<0,020		mg/l	•
Boron	0,085	0,004	0,0772	0,002	mg/l	91%
DOC	1,97	0,04	1,87	0,021	mg/l	95%
Total P (as PO <sub>4</sub> )	<0,009		<0,020		mg/l	•
Silicon	5,07	0,03	5,49	0,070	mg/l	108%
Fluoride	0,313	0,008	0,334	0,029	mg/l	107%

