

# IFA-Proficiency Testing Scheme for Water Analysis

Round N169  
Major Ions

Sample Dispatch: 6 November 2023

In accordance with the procedure: AVKPS.01

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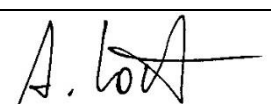
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Round: N169	Date / Signature:	07.12.2023 

Report: 1<sup>st</sup> edition, created on 4 October 2021 by Ing. Uta Kachelmeier  
221 pages

This report summarises the results of round N169 (major ions) within the IFA-Proficiency Testing Scheme for Water Analysis. The samples N169A and N169B were distributed to 57 participants on Monday, 6<sup>th</sup> November, 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, 1<sup>st</sup> December, 2023. 55 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>, MgCl<sub>2</sub>, sodium salicylate (for KMnO<sub>4</sub>-Index) NaHCO<sub>3</sub>, NaCl, KHCO<sub>3</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> and H<sub>3</sub>BO<sub>3</sub>. Both samples, N169A and N169B, contained free CO<sub>2</sub>, which was used for dissolution of CaCO<sub>3</sub> and neutralisation of Na<sub>2</sub>SiO<sub>3</sub>. No other substances (e.g. preservatives) were added. The samples were stabilised by sterile filtration and low temperature.

## Homogeneity, accuracy and stability tests at the IFA-Tulln

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

To verify stability, all parameters with the exception of KMnO<sub>4</sub> were determined again four weeks after shipment. The results are listed in the result tables ("Stability test") and the parameter oriented part of the report ("IFA result"). The stability test for KMnO<sub>4</sub> will be carried out together with the control analysis for round N172.

According to our experience, the samples remain stable up to 18 months for the parameters conductivity, total hardness, alkalinity, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, K<sup>+</sup>, NO<sub>3</sub><sup>-</sup>, Cl<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, boron and HCO<sub>3</sub><sup>-</sup> when stored at 4°C in the dark. For the parameters NH<sub>4</sub><sup>+</sup>, NO<sub>2</sub><sup>-</sup>, o-PO<sub>4</sub><sup>3-</sup>, total-P, DOC and KMnO<sub>4</sub>-Index 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 405 µS/cm in sample N169A and 504 µS/cm in sample N169B.

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<sub>6</sub>H<sub>15</sub>PO<sub>3</sub>), which can be determined as phosphate only after oxidative digestion and potassium dihydrogen phosphate (KH<sub>2</sub>PO<sub>4</sub>) 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 PO<sub>4</sub><sup>3-</sup>.

The concentrations of sodium salicylate, which was used as standard substance for the KMnO<sub>4</sub>-Index, were 3.48 mg/L in sample N169A and 2.62 mg/L in sample N169B. Assuming complete oxidation to carbon dioxide, nitrate and water (considering nitrite), the theoretical values were 4.89 mg/L O<sub>2</sub> (N169A) and 3.70 mg/L O<sub>2</sub> (N169B). However, the laboratory mean values were taken as reference values in this report: 4.46 mg/L O<sub>2</sub> for N169A and 3.58 mg/L O<sub>2</sub> for N169B.

Ammonium was not added to sample N169A. No phosphorus substances were added to sample N169B in order to check the analytical blank values. The target concentrations were set to <0.01 mg/L NH<sub>4</sub><sup>+</sup>, <0.009 mg/L o-PO<sub>4</sub><sup>3-</sup> and <0.009 mg/L total-P (as PO<sub>4</sub><sup>3-</sup>) in N169A and N169B, 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 N169B) and 104.5 % (DOC in sample N169A). The between laboratory CVs covered the range between 0.9 % (conductivity in sample N169A) and 14.5 % (ammonium in sample N169B).

All confidence intervals of the outlier-corrected laboratory mean values except those for DOC in sample N169A (104.5 % ± 2.3 %) 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 $K_{S4.3}$	1.9 %	0.2 mmol/L
Ammonium	11 %	0.01 mg/L
Boron	7.3 %	0.012 mg/L
Calcium	3.2 %	9 mg/L
Chloride	2.9 %	2 mg/L
el. Conductivity	1.2 %	50 $\mu$ S/cm
DOC	5.4 %	1 mg/L
Hydrogen carbonate	2.4 %	20 mg/L
$KMnO_4$ -Index	10 %	1 mg/L
Magnesium	3.5 %	1 mg/L
Nitrate	3.1 %	2 mg/L
Nitrite	5.4 %	0.01 mg/L
Orthophosphate	9.5 %	0.015 mg/L
Potassium	4.3 %	0.5 mg/L
Sodium	3.2 %	1 mg/L
Sulphate	3.1 %	3 mg/L
Total hardness	2.8 %	0.1 mmol/L
Total-P (as $PO_4^{3-}$ )	9.4 %	0.015 mg/L

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

z-Score	Classification
$\leq 2$	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, 11 December 2023

**Sample M106A**  
**Parameter Copper**

Target value ± U (k=2) 4,79 µg/l ± 0,13 µg/l  
 IFA result ± U (k=2) 4,79 µg/l ± 0,38 µg/l  
 Stability test ± U (k=2) 4,69 µg/l ± 0,38 µg/l

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

Lab Code	Result	±	Unit	Recovery	z-Score
A	5,16	0,4128	µg/l	108%	0,90
B	4,22	0,42	µg/l	88%	-1,38
C	4,45	0,13	µg/l	93%	-0,83
D			µg/l		
E			µg/l		
F	4,10	0,08	µg/l	86%	-1,68
G			µg/l		
H			µg/l		
I	4,75	0,74	µg/l	99%	-0,10
J	<5		µg/l	.	.
K	4,76		µg/l	99%	-0,07
L	<10		µg/l	.	.
M	4,8	0,5	µg/l	100%	0,02
N	3,7	0,4	µg/l	77%	-2,65
O	4,47	0,447	µg/l	93%	-0,78
P	6,0		µg/l	125%	2,94
Q	4,17	0,2	µg/l	87%	-1,51
R	4,6	0,8	µg/l	96%	-0,46
S	4,44	0,67	µg/l	93%	-0,85
T			µg/l		
U	4,675	0,935	µg/l	98%	-0,28
V	5,0	0,50	µg/l	104%	0,51
W	3,54	0,3	µg/l	74%	-3,03
X	7,108 *	0,749	µg/l	148%	5,63
Y	<10		µg/l	.	.
Z			µg/l		
AA	<3,0		µg/l	FN	
AB	3,775	0,107	µg/l	79%	-2,46
AC	<10,0		µg/l	.	.

Recovery of target value in percent

z-Score of the laboratory

An asterik indicates a result detected as outlier by Hampel test

Interval expected to encompass target value as stated by participant

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

Between laboratory standard deviation

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

Number of results used for calculation of statistic parameters

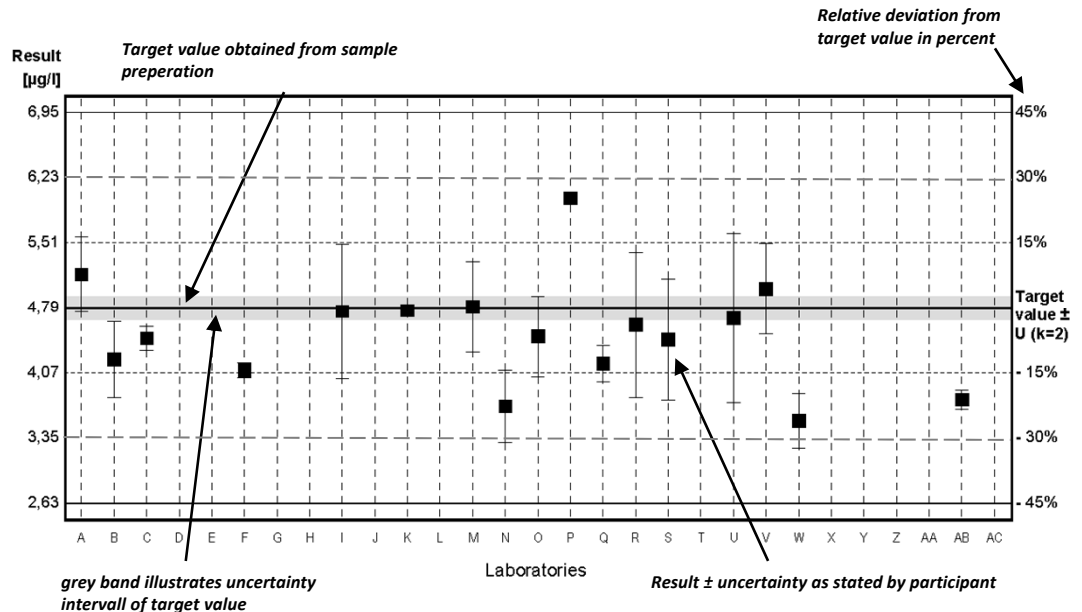


Diagram 1: Measurement results and their uncertainties

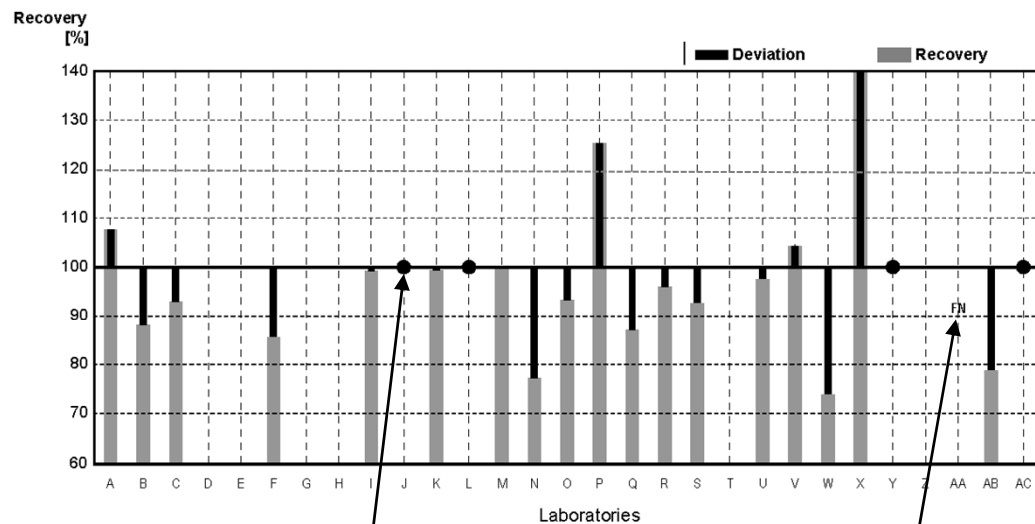


Diagram 2: Recoveries and deviations from target values

EXPLANATION





# Illustration of Results Tables and Parameter Oriented Part

Round N169  
Major Ions

Sample Dispatch: 6 November 2023

## Results Sample N169A

	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		416.2	1.103	1.371	80.6	30.3	8.40	35.4	2.05	17.0
IFA result	6.30	416	1.19	1.34	79	32.8	9.1	36.3	2.17	16.5
Stability test	6.39	415	1.19	1.33	78	32.9	9.0	36.3	2.16	16.5
A		418	1.12	1.36	82.8	30.5	8.6	35.0	1.96	16.5
B	6.09	426		1.28						16.4
C	6.36	413	1.09	1.79	106	30.1	8.21	35.8	1.82	16.1
D	6.55	417	1.13	1.38	84.2	30.1	8.29	34.9	2.00	16.8
E	6.39	418	1.16	1.39		30.8	9.58	34.8	1.94	17.9
F						29.5	8.04	34.8	1.83	17.1
G	7.31	405	1.15	1.48	90	31.7	8.8	35.9	2.21	16.8
H		425		1.36						
I	6.4	415	1.08	1.369	80.5	29.7	8.2	35.5	2.21	16.1
J	6.22	422								16.829
K	6.6	415	1.10	1.348	82.2	30.4	8.2	34.3	2.06	17.0
L	6.26	426		1.43	87.17					
M						26.9	8.5	9.1	2.25	20.0
N	6.54	420	1.14	1.36	79.9	31.9	8.41	36.7	2.18	16.2
O	6.48	421	1.139	1.33	81	31.08	8.79	36.48	2.25	16.735
P	6.34	419	1.10	1.37	83.6	29.65	8.805	35.18	2.065	15.6
Q						30.3	8.45	34.3	1.61	17.2
R	6.60	414	1.11	1.36	83.2	30.0	8.73	35.6	2.02	16.8
S		425.5		1.328		30.57	8.366	36.48	2.094	14.74
T	6.53	416	2.178	1.46	89.0	29.56	8.54	34.49	2.044	16.84
U	6.32	411.8	6.2	1.36		31.46	8.53	35.56	2.95	16.79
V	6.3	413	1.12	1.36	79.9	30.7	8.70	35.2	2.13	16.2
W	6.28	417		1.35	79					17.0
X	6.3	419	42.35	1.40	3.92	33.60	8.75	34.21	2.01	17.1
Y	6.3	416	1.05	1.35	82	28.9	8.0	32.6	2.20	16.5
Z										17.95

### Measurement Uncertainties Sample N169A

	pH ±	Cond. ±	total- Hardn. ±	K <sub>S</sub> 4.3 ±	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		1.2	0.019	0.013	0.8	0.7	0.13	0.2	0.02	0.5
IFA result	0.20	6	0.05	0.05	3	1.5	0.5	1.6	0.16	0.9
Stability test	0.20	6	0.05	0.05	3	1.5	0.5	1.6	0.16	0.9
A		8	0.1	0.1	6.6	2.4	0.5	1.4	0.16	1.2
B										2.2
C	0.10	21	0.22	0.09	5	6.0	0.82	3.6	0.18	1.6
D	0.05	2	0.1	0.1	6	1.0	0.2	0.2	0.1	0.4
E	0.189	22.8	0.503	0.141		2.16	1.41	1.39	0.0953	3.29
F						3.17	1.08	4.48	0.268	0.88
G	0.06	8.1	0.09	0.13	4.0	1.1	0.30	1.5	0.12	0.76
H										
I	0.2	11		0.092		2.0	0.7	3.4	0.2	1.7
J	0.62	21								0.746
K	0.2	17	0.6	0.097	5.9	1.5	0.6	1.7	0.12	1.7
L	0.131	21.0		0.096	5.91					
M						5.1	0.109	1.48	0.72	7.3
N	0.0654	0.319	0.0148	0.0762	1.60	0.507	0.186	0.319	0.0135	0.629
O										
P	0.04					1.19	0.528	2.81	0.186	1.56
Q										
R	0.014	0.1	0.007	0.006	0.2	0.64	0.04	0.27	0.006	0.1
S										
T	0.0822	30.95	0.436	0.1124	6.853	3.55	0.86	4.28	0.24	2.475
U										
V	0.1	10	0.12	0.14	8.0	6.2	1.7	5.3	0.43	1.6
W	0.008	3		0.038	1.2					1.17
X	0.2583	23.045	7.2842	0.126	0.2961	2.2848	0.4288	1.7105	0.3055	3.3858
Y	0.1	5	0.15	0.2	2	1.5	1	1.7	0.2	1.4
Z										0.311

## Results Sample N169A

	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		416.2	1.103	1.371	80.6	30.3	8.40	35.4	2.05	17.0
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Stability test	6.39	415	1.19	1.33	78	32.9	9.0	36.3	2.16	16.5
AA	6.75	423	1.10	1.41	86.0	30.5	8.21	35.4	2.33	16.5
AB	6.44	419	1.12	1.39	82.2	30.24	8.47	35.87	1.99	17.01
AC										
AD										
AE	6.41	414	1.10	1.38		<40	8.47	34.76	2.05	17.13
AF	6.29	414	6.3	1.40	82.3	30.89	8.48	35.51	2.02	18.11
AG	6.5	415	1.11	1.407	82.8	30.61	8.486	35.15	2.309	16.712
AH	6.56	416	1.12	1.37	80.2	30.4	8.27	35.1	1.96	17.2
AI	6.28	415	1.14	1.54	90.90	31.565	8.539	36.167	2.046	17.176
AJ	6.50	530	1.057	1.33	81.2	35.5	4.09			16.5
AK									1.59	
AL	7.26	410	1.09	1.31	79.8	30.5	8.10	34.3	2.05	15.6
AM	6.5	417	1.11	1.37	83.6	30.7	8.4	35.6	2.03	16.8
AN	6.3	420	1.10	1.36	79.9	30.8	8.74	37.4	2.02	16.7
AO	6.18	418		1.37						
AP	6.64	417	1.09	1.37	81	30.2	8.28	35.1	1.99	18.0
AQ	6.447	410								16.550
AR	6.5	415	1.08	1.35	79	30.0	8.2	34.7	1.96	18.1
AS	6.35	416	1.23	1.32	80.5	33.9	9.23	34.4	2.61	17.2
AT		415	1.37	1.40	85.4	49.2	21.5	36.3	2.18	14.46
AU	7.03	407	1.02	1.365	83.3	26.0	8.80	36.0	2.10	16.4
AV	6.14	420	1.10	1.32		30.65	8.21	35.81	2.08	16.35
AW										
AX						34.185	8.410	34.470	1.966	17.031
AY			1.244			34.81	9.12	39.54	2.10	17.167
AZ		416	6.2	1.312	80.03	29.6	8.23	33.9	1.99	17.0
BA	6.35		6.85			33.30	9.20			
BB	6.23	411		1.35		29.87	8.08	36.03	2.01	17.34
BC	6.36	416	1.066	1.37	83.57	29.3892	8.0937	34.0202	1.9324	16.435
BD										
BE	6.45	416	1.09	1.36	79.8	30.11	8.13	35.19	2.13	16.21

### Measurement Uncertainties Sample N169A

	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		1.2	0.019	0.013	0.8	0.7	0.13	0.2	0.02	0.5
IFA result	0.20	6	0.05	0.05	3	1.5	0.5	1.6	0.16	0.9
Stability test	0.20	6	0.05	0.05	3	1.5	0.5	1.6	0.16	0.9
AA	0.38	14.4	0.084	0.083	5.1	2.3	0.56	3.2	0.17	1.3
AB	0.25	10	0.01	0.01	1.6	0.48	0.16	0.72	0.12	0.85
AC										
AD										
AE	0.3	12	0.06	0.07			0.9	3.5	0.2	0.9
AF	0.32	20.7		0.35		3.09	0.85	3.56	0.20	1.81
AG	0.19	23.1	0.11	0.0704	4.14	3	0.85	3.5	0.23	2.173
AH	0.3	17	0.1	0.1	4	3	1.0	6	0.3	1.3
AI	0.1	4.51		0.15		3.2	0.85	3.6	0.20	1.71
AJ										
AK									0.159	
AL	0.20	12	0.11	0.08	4.8	4.3	1.22	4.1	0.31	1.6
AM	0.20	41.7		0.206	12.5	3.07	0.84	3.56	0.203	0.84
AN	0.2	11	0.11	0.06	3.6	2.8	0.69	3.0	0.16	1.1
AO	0.05	5		0.03						
AP				0.1		2.5	0.9	3.0	0.2	2.6
AQ	0.279	35.79								0.308
AR	0.325	29	0.162	0.135	5.2	1.67	0.61	2.54	0.117	3.89
AS	0.19	12	0.18	0.11	6.4	5.1	1.1	4.5	0.39	1.7
AT		21	0.14	0.14	8.54	4.9	2.15	3.6	0.2	1.78
AU	1.4	41	0.20	0.14	8.3	5.2	1.8	7.2	0.42	2.5
AV			0.08	0.04		1.20	0.48	2.26	0.10	0.87
AW										
AX						0.606	0.037	0.054	0.008	0.348
AY			0.06			1.8	0.5	2	0.16	0.9
AZ		10.4				1.78	0.75	2.79	0.18	3.51
BA	0.10		0.10			0.5	0.5			
BB	0.06	25		0.13		3.73	1.07	3.21	0.30	0.94
BC	0.076	34.90	0.1096	0.0311	1.8970	2.5920	0.9494	3.4156	0.3208	1.5909
BD										
BE	0.30	12	0.09	0.06	3.2	1.51	0.49	1.41	0.17	0.97

## Results Sample N169A

	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> )	KMnO <sub>4</sub> - Index
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0573	<0.01	65.0	15.5	0.0455	0.0402	3.72	0.1376	4.46
IFA result	0.057	<0.01	65	15.4	0.0463	0.0432	3.86	0.156	5.0
Stability test	0.057	<0.01	64	15.5	0.0467	0.0423	3.95	0.164	
A	0.058	<0.02	66	15.5	0.0390		3.75	0.137	
B	0.0546	<0.03	65.1	15.2	0.0461		3.94	0.145	
C	0.0644	<0.01	64.7	15.1	0.0481	0.0330	3.92	0.137	4.03
D	0.0573	<0.006	63.5	15.3	0.0464		3.77	0.131	
E	0.060		64.25	16.85	0.065	0.0330	2.83	0.152	
F	0.063	0.0090	85	17.5	0.080	0.0330		0.168	
G	0.052	<0.01	66	16.0	0.0320		3.73	0.102	4.65
H							4.00		
I	n.a	n.a	65.5	15.5		0.0409	3.86		
J	0.063	<0.012	65.951	15.943	0.0454		3.829	0.115	
K	0.055	<0.010	66.7	15.8	0.0419	0.0404	4.04	0.128	
L	0.058	0.012			0.046			0.133	4.43
M	<0.086		61	17.6	<0.461	0.0387			
N	0.0563	<0.0100	66.0	14.9	0.0462	0.0412	3.82	0.141	
O	0.060	0.0100	64.627	15.577	0.0450	0.0414	3.27		4.04
P	0.061	<0.010	62.0	14.3	0.0447	0.0399	7.124	0.132	
Q	0.067	0.0450	67.1	15.96					
R	0.0561	<0.010	64.2	15.5	0.0448	0.0420	3.77	0.125	4.41
S	0.05995		61.84	15.19		0.03835	3.375		
T	0.0632	0.0270	67.2	14.2	0.0692	0.0310	3.84	0.1576	4.701
U		<0.1	66.78	14.55					
V	0.0572	<0.010	63.3	15.1	0.0453	0.0387	3.76	0.1341	
W	0.057	<0.005	65.5		0.0424			0.132	
X	0.052	0.0250	67.18	15.49	0.054		3.88		
Y	0.057	<0.02	64	15.0		<0.05	4.02	<0.20	4.45
Z		<0.01			0.0567			0.132	

### Measurement Uncertainties Sample N169A

	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> ) ±	KMnO <sub>4</sub> - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0002		1.2	0.3	0.0032	0.0011	0.05	0.0016	0.11
IFA result	0.003		2	0.5	0.0012	0.0033	0.09	0.021	0.7
Stability test	0.003		2	0.5	0.0012	0.0032	0.09	0.022	
A	0.006		5	0.9	0.0060		0.53	0.025	
B	0.0093		7.7	2.1	0.0096			0.016	
C	0.010		6.5	1.5	0.0072	0.0066	0.71	0.020	0.60
D	0.002	0.003	0.2	2	0.002		0.2	0.005	
E	0.0157		21.1	5.999	0.0151	0.0020	1.01	0.0125	
F	0.005	0.001	10	1.5	0.008	0.0058		0.0073	
G	0.0030		2.1	0.50	0.0047		0.35	0.17	0.21
H									
I			9.2	1.5		0.005	0.71		
J	0.018		8.626	0.971	0.008		0.689	0.014	
K	0.006		5.1	1.4	0.007	0.0045	0.80	0.013	
L	0.006	0.002			0.013			0.017	1.134
M			3.88	5.9		0.00464			
N	0.00071		1.69	0.762	0.00144	0.00202	0.0244	0.00292	
O									
P		0.002	6.20	1.43	0.0045	0.0016	0.712	0.013	
Q									
R	0.001		0.21	0.12	0.0002	0.001	0.014	0.002	0.13
S									
T	0.00588	0.0034	7.8834	1.803	0.0104	0.004	0.3041	0.0237	0.9832
U									
V	0.0105		6.3	1.5	0.0094	0.01	0.38	0.0279	
W	0.0057	0	0.66		0.0050			0.0174	
X	0.00759	0.00985	4.23234	1.2392	0.0257		1.24936		
Y	0.01		3.2	1.2			0.5		0.66
Z					0.0043			0.0162	

**Results Sample N169A**

	<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>KMnO<sub>4</sub>- Index</b>
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0573	<0.01	65.0	15.5	0.0455	0.0402	3.72	0.1376	4.46
IFA result	0.057	<0.01	65	15.4	0.0463	0.0432	3.86	0.156	5.0
Stability test	0.057	<0.01	64	15.5	0.0467	0.0423	3.95	0.164	
AA	0.0555	<0.04	64.3	15.4	0.0450	0.0393	4.16	0.147	4.47
AB	0.054	<0.01	64.44	15.48	0.0490		3.62	0.132	4.844
AC					0.053		3.97		
AD									
AE	0.0564	<0.01	65.53	15.87	0.0414	0.0403			
AF	0.058	<0.01	64.62	16.92	0.060	0.0380	3.96	0.126	4.25
AG	0.059	<0.01	65.872	15.560	0.0500	0.0409	3.718	0.148	4.33
AH	0.059	<0.013	66.4	16.0	0.0480		3.99	0.132	
AI	0.058	<0.009	64.939	15.770	0.0460	0.0430	4.13	0.125	
AJ	0.0410	<0.02	64.8	<40	0.0160				
AK									
AL	0.0751	0.0110	64.4	15.5	<0.06			0.129	4.50
AM	0.056	<0.0052	65.9	16.8	0.052	0.0410	3.90	0.138	
AN	0.057	<0.003	66.0	14.0	0.052	0.0436	3.99	0.134	4.73
AO	0.0180	<0.02	65.3		0.0153			0.0450	4.44
AP	0.058	<0.01	63.4	15.9	0.0434	0.0406	3.928	0.124	4.19
AQ	0.0440	0.0200							
AR	0.064	<0.04	64	17.2	0.056	0.0344	3.58	0.0355	4.48
AS	0.0580	<0.01	65.7	15.6	0.0450	0.0434	3.80	0.130	4.51
AT	0.0270	0.0200	67.9	16.30	0.233			0.480	4.86
AU	0.056	<0.01	59.3	15.2	<0.1	0.0373	3.85	0.143	
AV	0.0592	<0.007	65.68	15.62	0.0462		3.87	0.1412	
AW							4.13	0.1392	
AX			65.163	16.310					
AY			64.91	16.53					4.16
AZ	0.051	0.0220	63.9	15.4	0.0455	0.0376	4.065	0.01285	
BA			49.40						
BB	0.059	<0.04	63.19	15.87	0.0486	0.0408	3.98	0.128	4.76
BC	0.059	<0.0095	63.914	14.824	0.0390	0.0368	4.389	0.1345	
BD									
BE	0.061	<0.008	64.34	15.59	0.0462	0.0379	3.73	0.141	



### Measurement Uncertainties Sample N169A

	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> ) ±	KMnO <sub>4</sub> - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0002		1.2	0.3	0.0032	0.0011	0.05	0.0016	0.11
IFA result	0.003		2	0.5	0.0012	0.0033	0.09	0.021	0.7
Stability test	0.003		2	0.5	0.0012	0.0032	0.09	0.022	
AA	0.0026		2.1	0.69	0.0026	0.0036	0.63	0.018	0.63
AB	0.005		3.87	0.46	0.0060		0.54	0.008	0.581
AC					0.0084		0.61		
AD									
AE	0.003		3.3	1.6	0.004	0.008			
AF	0.006		6.46	1.70	0.009	0.0038	0.79	0.0189	0.43
AG	0.006		4.61	1.556	0.005	0.0041	0.777	0.015	0.866
AH	0.005		4	1	0.006		0.6	0.02	
AI	0.006		6.5	1.58	0.005	0.004	0.4	0.013	
AJ									
AK									
AL	0.0090	0.0045	6.4	2.0				0.017	0.99
AM	0.0084		3.29	0.838	0.0078	0.00490	0.310	0.0208	
AN	0.008		4.7	0.8	0.007	0.006	0.70	0.020	0.75
AO	0.002		3		0.003			0.003	0.2
AP	0.010		9.0	1.3		0.0035		0.005	
AQ	0.001	0.004							
AR	0.0226	0.00106	8.4	2.77	0.0140	0.00337	0.162	0.0060	0.94
AS	0.0064		6.6	2.5	0.0036	0.0056	0.76	0.0104	0.68
AT	0.0012	0.0024	6.8	1.66	0.042			0.087	0.49
AU	0.008		8.9	2.3		0.008	1.2	0.029	
AV	0.0028		2.56	0.72	0.0021		0.38	0.0137	
AW							0.537	0.024	
AX			0.224	0.651					
AY			3	1					0.17
AZ			13.3	3.29		0.55			
BA			1.0						
BB	0.005	0.001	4.87	1.24	0.003	0.005	0.40	0.006	0.571
BC	0.00409	0.00101	5.2218	1.3697	0.00411	0.00455	0.4301	0.01492	
BD									
BE	0.005		3.21	0.94	0.0025	0.0040	0.34	0.010	

## Results Sample N169B

	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		505	2.36	3.28	197	70.2	14.9	9.2	4.29	36.4
IFA result	6.01	505	2.52	3.21	193	75	15.9	9.5	4.33	36.2
Stability test	6.08	506	2.53	3.15	189	75	16.0	9.3	4.26	35.8
A		506	2.36	3.16	192.9	70	15.2	9.5	4.36	36.6
B	5.76	507		3.11						35.2
C	6.10	498	2.39	3.70	223	70.9	15.1	9.30	3.86	35.7
D	6.21	504	2.38	3.23	197	68.3	14.6	8.98	4.13	36.7
E	6.03	506	2.53	3.31		73.8	16.8	8.95	3.96	36.6
F						70.2	14.4	9.04	4.18	35.0
G	7.02	498	2.43	3.43	209	72	15.4	9.1	4.29	35.0
H		510		3.18						
I	6.1	503	2.29	3.224	193.7	68.2	14.4	9.2	4.32	35.9
J	5.91	515								18.706
K	6.2	504	2.33	3.148	192.0	69.1	14.6	9.0	4.31	37.8
L	5.96	513		3.27	199.24					
M						66	15.2	27.3	4.07	35.2
N	6.32	510	2.48	3.23	194	74.7	15.0	9.42	4.34	35.4
O	6.14	503	2.417	3.18	194	70.87	15.67	9.43	4.78	36.368
P	6.04	509	2.35	3.26	198.6	68.09	15.83	9.465	4.331	34.01
Q						67.5	14.9	8.75	4.17	36.7
R	6.32	501	2.34	3.21	196	68.8	15.2	9.43	4.23	35.6
S		513.5		3.117		70.44	15.01	9.775	4.361	33.20
T	6.17	504	4.683	3.30	208	68.33	15.48	9.229	4.233	37.03
U	6.00	498.6	13.2	3.21		72.99	9.19	15.23	5.72	36.35
V	5.9	505	2.39	2.84	173.3	70.3	15.4	9.25	4.41	35.9
W	6.01	507		3.18	191					36.9
X	6.1	506	90.83	3.20	8.96	75.50	15.33	8.76	4.12	33.6
Y	6.0	504	2.23	3.20	195	66	14.3	8.4	4.01	35.9
Z										>30

### Measurement Uncertainties Sample N169B

	pH ±	Cond. ±	total- Hardn.±	K <sub>S</sub> 4.3 ±	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	0.03	0.06	3	1.2	0.3	0.6	0.03	0.9
IFA result	0.20	7	0.09	0.13	8	3	0.9	0.9	0.25	2.0
Stability test	0.20	7	0.09	0.13	8	3	0.9	0.9	0.24	1.9
A		10	0.2	0.2	15.4	5.6	0.9	0.3	0.35	2.6
B										4.7
C	0.10	25	0.48	0.19	11	14.2	1.5	0.93	0.39	3.6
D	0.05	2	0.1	0.1	6	1.0	0.2	0.2	0.1	0.4
E	0.178	27.6	1.097	0.336		5.18	2.47	0.356	0.194	6.72
F						7.55	1.93	1.16	0.612	1.8
G	0.05	10	0.20	0.14	9.4	2.6	0.53	0.39	0.24	1.3
H										
I	0.1	14		0.216		4.7	1.3	0.9	0.4	3.7
J	0.59	26								0.829
K	0.2	20	0.12	0.187	11.4	3.3	0.9	0.5	0.20	3.6
L	0.125	25.3		0.221	13.5					
M						5.0	0.117	1.48	0.72	7.1
N	0.0632	0.0436	0.0190	0.114	3.88	0.556	0.315	0.324	0.291	0.545
O										
P	0.04					2.72	0.95	0.757	0.390	3.40
Q										
R	0.026	0.58	0.007	0.006	0.58	0.64	0.42	0.13	0.012	0.29
S										
T	0.0777	37.50	0.937	0.2541	16.02	8.20	1.56	1.14	0.50	5.3125
U										
V	0.1	10	0.24	0.28	17	14.1	3.1	1.4	0.89	3.6
W	0.008	4		0.090	2.8					2.53
X	0.2501	27.83	15.6227	0.288	0.8064	5.134	0.7512	0.438	0.626	6.6528
Y	0.1	6	0.18	0.2	3	3	1	0.4	0.2	3
Z										

## Results Sample N169B

	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		505	2.36	3.28	197	70.2	14.9	9.2	4.29	36.4
IFA result	6.01	505	2.52	3.21	193	75	15.9	9.5	4.33	36.2
Stability test	6.08	506	2.53	3.15	189	75	16.0	9.3	4.26	35.8
AA	6.41	518	2.33	3.29	201	69.1	14.8	9.62	4.43	35.8
AB	6.17	514	2.37	3.31	202.5	70.01	15.23	9.41	4.30	36.64
AC										
AD										
AE	6.03	503	2.40	3.18		70.47	15.0	9.00	4.24	36.09
AF	5.91	499	13.5	3.26	195.7	71.29	15.23	9.30	4.29	35.46
AG	6.12	487	2.39	3.346	201	70.7	15.1	9.26	4.448	36.336
AH	6.22	505	2.39	3.23	194	69.8	14.9	9.20	4.21	37.2
AI	5.95	505	2.550	3.23	194.01	75.821	16.005	9.594	4.477	38.885
AJ	6.22	579	2.339	3.12	190.1	73.5	12.0			35.7
AK									3.45	
AL	6.20	501	2.32	3.11	189	69.4	14.4	9.10	4.01	34.7
AM	6.2	507	2.37	3.16	192.8	70.1	15.0	9.21	4.25	36.1
AN	6.2	504	2.40	3.21	193	70.7	15.5	9.40	4.26	36.5
AO	5.90	508		3.22						
AP	6.44	511	2.43	3.28	197	72.4	15.1	9.08	4.27	37.0
AQ	6.203	500								37.550
AR	6.2	505	2.34	3.17	190	69	15.2	9.53	4.20	39.2
AS	6.05	503	2.69	3.10	189	79.6	17.1	10.6	4.93	37.1
AT		502	2.20	3.26	198.9	131.2	21.7	9.3	4.27	37.04
AU	6.28	500	2.17	3.160	193	62.0	15.0	9.50	4.50	35.3
AV	5.90	509	2.34	3.20		69.91	14.49	9.28	4.45	34.65
AW										
AX						74.658	15.024	9.132	4.277	37.010
AY			2.602			77.98	15.95	10.03	4.48	34.920
AZ		499	12.9	3.122	190.5	67.8	14.8	9.02	4.21	36.3
BA	5.90		14.35			75.75	16.30			
BB	5.95	499		3.23		70.36	15.27	9.23	4.10	36.65
BC	6.0	504	2.290	3.29	200.69	67.5336	14.7190	8.9833	4.1579	38.048
BD										
BE	5.97	505	2.31	3.23	194	69.06	14.29	9.16	4.42	34.86

### Measurement Uncertainties Sample N169B

	pH ±	Cond. ±	total- Hardn.±	K <sub>S</sub> 4.3 ±	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	0.03	0.06	3	1.2	0.3	0.6	0.03	0.9
IFA result	0.20	7	0.09	0.13	8	3	0.9	0.9	0.25	2.0
Stability test	0.20	7	0.09	0.13	8	3	0.9	0.9	0.24	1.9
AA	0.36	17.6	0.18	0.19	11.9	5.3	1.00	0.87	0.33	2.9
AB	0.25	13	0.02	0.01	4.1	1.12	0.29	0.19	0.25	1.83
AC										
AD										
AE	0.3	15	0.1	0.2		7	1.5	0.9	0.4	1.8
AF	0.30	25.0		0.82		7.13	1.52	0.93	0.43	3.55
AG	0.19	27.1	0.24	0.167	10.05	7.1	1.51	0.93	0.45	4.724
AH	0.3	21	0.1	0.2	8	6	1.8	1.4	0.6	3
AI	0.1	4.51		0.32		7.6	1.60	0.96	0.48	3.9
AJ										
AK									0.345	
AL	0.20	15	0.23	0.19	11	9.7	2.2	1.09	0.60	3.5
AM	0.20	50.7		0.474	28.9	7.01	1.50	0.921	0.425	1.80
AN	0.2	13	0.24	0.15	9	4.5	1.2	0.76	0.34	2.5
AO	0.05	5		0.06						
AP				0.23		6.1	1.6	0.8	0.4	5.3
AQ	0.269	35.79								0.700
AR	0.325	35	0.351	0.317	16.2	3.8	1.13	0.70	0.250	8.4
AS	0.18	15	0.40	0.25	15	12	2.1	1.4	0.74	3.7
AT		26	0.22	0.33	19.89	13.1	2.17	0.9	0.4	4.56
AU	1.3	50	0.43	0.32	19	12	3.0	1.9	0.90	5.3
AV			0.16	0.10		2.73	0.84	0.58	0.22	1.84
AW										
AX						1.705	0.044	0.057	0.020	0.423
AY			0.13			4	0.8	0.6	0.3	1.8
AZ		12.5				4.09	1.34	0.74	0.39	7.49
BA	0.10		0.10			0.5	0.5			
BB	0.06	31		0.30		8.79	2.03	0.82	0.61	1.98
BC	0.072	42.28	0.2353	0.0747	4.5557	5.9560	1.7265	0.9019	0.6902	3.6830
BD										
BE	0.30	15	0.18	0.13	8	3.45	0.86	0.37	0.35	2.09

## Results Sample N169B

	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> )	KMnO <sub>4</sub> - Index
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0798	0.085	10.0	51.4	<0.009	0.0694	6.35	<0.009	3.58
IFA result	0.081	0.083	9.9	53.0	<0.009	0.075	6.37	<0.009	4.07
Stability test	0.080	0.083	10.2	51.7	<0.009	0.073	6.45	<0.009	
A	0.083	0.080	10.1	52	<0.009		6.3	<0.009	
B	0.0788	0.0828	9.91	51.8	<0.02		6.74	<0.02	
C	0.0867	0.0773	10.6	51.7	<0.015	0.0591	6.10	<0.015	3.12
D	0.0792	0.0794	9.59	51.0	<0.003		6.42	<0.009	
E	0.086	0.091	10.75	55.70	0.0235	0.0592	5.17	0.0100	
F	0.089	0.068	10.1	53.5	0.0223	0.056		0.0216	
G	0.072	0.075	9.7	52	<0.01		5.8	<0.01	3.58
H							6.5		
I	n.a	n.a	9.3	51.9		0.0702	6.50		
J	0.085	0.093	10.077	52.058	<0.015		6.777	<0.015	
K	0.077	0.089	10.5	53.7	<0.010	0.0690	6.32	<0.010	
L	0.083	0.087			<0.04			<0.05	3.40
M	<0.086		9.9	51	<0.461	0.065			
N	0.0788	0.0885	10.3	50.9	<0.0150	0.0698	6.43	<0.0150	
O	0.080	0.100	10.173	52.212	0.0210	0.0705	5.22		3.18
P	0.083	0.075	9.50	47.61	<0.008	0.0671	18.23	<0.022	
Q	0.091	0.0695	10.4	51.8					
R	0.080	0.0806	9.71	51.5	<0.015	0.0695	6.23	<0.015	3.26
S	0.08508		9.657	48.88		0.06595	5.600		
T	0.086	0.101	4.33	53.5	0.211	0.0570	6.25	0.02995	4.02
U		<0.1	10.02	49.52					
V	0.0805	0.0789	9.8	51	<0.0185	0.0653	6.42	<0.0185	
W	0.079	0.055	12.1		<0.006			<0.006	
X	0.076	0.118	11.04	47.57	0.0050		6.44		
Y	0.080	0.081	10.4	52		0.075	6.9	<0.20	3.59
Z		0.089			<0.019			<0.02	

### Measurement Uncertainties Sample N169B

	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> ) ±	KMnO <sub>4</sub> - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Target value	0.0011	0.004	0.3	1.0		0.0005	0.05		0.12
IFA result	0.004	0.002	0.4	1.3		0.006	0.09		0.60
Stability test	0.004	0.002	0.4	1.3		0.006	0.09		
A	0.008	0.025	0.7	3			0.9		
B	0.0134	0.0147	1.17	7.2					
C	0.013	0.0116	1.1	5.2		0.0118	1.10		0.47
D	0.002	0.003	0.2	2	0.002		0.2	0.005	
E	0.0226	0.00886	3.52	19.8	0.0547	0.00579	1.85	0.00082	
F	0.009	0.005	1.2	4.5	0.002	0.0040		0.004	
G	0.0042	0.011	0.45	2.0			0.54		0.16
H									
I			1.3	4.9		0.008	1.20		
J	0.024	0.021	1.318	3.170			1.220		
K	0.008	0.015	1.0	4.3		0.0071	1.16		
L	0.009	0.013							0.870
M			0.147	5.6		0.00464			
N	0.00070	0.00220	1.30	1.27		0.00195	0.0268		
O									
P		0.0075	0.95	4.76	0.002	0.0027	1.82	0.005	
Q									
R	0.001	0.001	0.99	0.06		0.001	0.07		0.15
S									
T	0.008	0.0127	0.5083	6.795	0.0032	0.008	0.495	0.0045	0.8410
U									
V	0.0148	0.0128	1.0	5.1		0.02	0.64		
W	0.0079	0.0084	0.12		0			0	
X	0.01109	0.04649	0.69552	3.8056	0.00238		2.0737		
Y	0.01	0.01	0.8	4.2		0.02	0.9		0.53
Z		0.0039							

## Results Sample N169B

	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> )	KMnO <sub>4</sub> - Index
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Target value	0.0798	0.085	10.0	51.4	<0.009	0.0694	6.35	<0.009	3.58
IFA result	0.081	0.083	9.9	53.0	<0.009	0.075	6.37	<0.009	4.07
Stability test	0.080	0.083	10.2	51.7	<0.009	0.073	6.45	<0.009	
AA	0.0798	0.0844	9.84	51.3	<0.0200	0.0657	6.82	<0.0200	3.71
AB	0.077	0.075	9.66	52.46	0.0090		6.113	<0.009	3.530
AC					0.0099		6.61		
AD									
AE	0.0801	0.0713	9.97	52.82	<0.006	0.0682			
AF	0.084	0.078	10.53	51.94	<0.02	0.065	6.90	<0.02	3.45
AG	0.082	0.085	10.812	51.579	<0.010	0.0680	6.620	<0.01	3.65
AH	0.082	0.083	10.4	52.7	<0.01		6.52	<0.013	
AI	0.080	0.082	10.632	53.880	<0.011	0.0770	6.43	<0.0010	
AJ	0.061	0.0390	9.91	55.7	<0.015				
AK									
AL	0.0983	0.0165	10.0	52.5	<0.06			<0.02	3.70
AM	0.079	0.063	10.2	53.0	0.0120	0.072	6.5	0.0215	
AN	0.083	0.091	10.0	53.6	<0.006	0.072	6.7	<0.005	3.82
AO	0.0250	0.0663	10.0		<0.005			<0.005	3.58
AP	0.081	0.086	10.3	53.6	<0.01	0.0688	6.469	<0.03	3.23
AQ	0.067	0.100							
AR	0.085	0.085	10.0	54	<0.05	0.0606	6.2	<0.02	3.58
AS	0.0802	0.0935	10.0	52.7	<0.015	0.0735	6.53	<0.015	3.81
AT	0.0620	0.1000	8.5	64.28	0.120			0.230	4.10
AU	0.078	0.080	9.83	50.0	<0.1	0.06400	6.60	<0.031	
AV	0.0819	0.0864	10.07	52.65	<0.015		6.38	<0.015	
AW							7.74	<0.0122	
AX		0.093	9.905	51.595					
AY			11.85	51.34					3.52
AZ	0.072	0.0820	9.89	50.8	0.00200	0.0659	6.540		
BA			9.70						
BB	0.084	0.1094	10.13	50.97	<0.030	0.0656	6.51	<0.010	3.82
BC	0.081	0.069	10.234	58.088	<0.0117	0.0633	7.961	<0.0188	
BD									
BE	0.086	0.086	9.90	51.18	<0.006	0.065	6.22	<0.006	



### Measurement Uncertainties Sample N169B

	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> ) ±	KMnO <sub>4</sub> - Index ±
Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Target value	0.0011	0.004	0.3	1.0		0.0005	0.05		0.12
IFA result	0.004	0.002	0.4	1.3		0.006	0.09		0.60
Stability test	0.004	0.002	0.4	1.3		0.006	0.09		
AA	0.0038	0.0057	0.31	2.3		0.0060	1.03		0.52
AB	0.008	0.005	0.58	1.57	0.001		0.917		0.424
AC					0.00158		0.95		
AD									
AE	0.4	0.009	0.5	5.3		0.01			
AF	0.008	0.020	1.05	5.19		0.007	1.38		0.35
AG	0.008	0.009	0.757	5.158		0.007	1.384		0.73
AH	0.006	0.008	0.7	4			1.0		
AI	0.008	0.008	1.06	5.4		0.008	0.64		
AJ									
AK									
AL	0.0118	0.0068	1.0	6.8					0.81
AM	0.0118	0.0063	0.511	2.65	0.00180	0.0086	0.52	0.00337	
AN	0.012	0.016	0.7	2.9		0.010	1.2		0.61
AO	0.003	0.01	1						0.2
AP	0.010	0.013	1.5	4.3		0.0026			
AQ	0.004	0.018							
AR	0.0303	0.0162	1.31	8.7	0.00188	0.00593	0.172	0.00042	0.75
AS	0.0088	0.0075	1.0	8.4		0.010	1.3		0.57
AT	0.0027	0.0118	0.9	6.56	0.0217			0.042	0.41
AU	0.012	0.016	1.5	7.5		0.013	2.0		
AV	0.0039	0.0059	0.39	2.42			0.41		
AW							1.01	0.0003	
AX		0.022	0.017	0.307					
AY			0.6	3					3
AZ			2.06	10.9		0.89			
BA			1.0						
BB	0.007	0.011	0.78	3.98	0.0005	0.007	0.65	0.0001	0.458
BC	0.00562	0.00740	0.8361	5.3673	0.00123	0.00784	0.7802	0.00208	
BD									
BE	0.007	0.008	0.49	3.07		0.007	0.56		

### z-Scores Sample N169A

	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	0.36	0.55	-0.42	1.14	0.21	0.68	-0.35	-1.02	-0.95
B	1.96		-3.49						-1.14
C	-0.64	-0.42	16.09	13.13	-0.21	-0.65	0.35	-2.61	-1.71
D	0.16	0.87	0.35	1.86	-0.21	-0.37	-0.44	-0.57	-0.38
E	0.36	1.85	0.73		0.52	4.01	-0.53	-1.25	1.71
F					-0.83	-1.22	-0.53	-2.50	0.19
G	-2.24	1.52	4.18	4.86	1.44	1.36	0.44	1.82	-0.38
H	1.76		-0.42						
I	-0.24	-0.74	-0.08	-0.05	-0.62	-0.68	0.09	1.82	-1.71
J	1.16								-0.32
K	-0.24	-0.10	-0.88	0.83	0.10	-0.68	-0.97	0.11	0.00
L	1.96		2.26	3.40					
M					-3.51	0.34	-23.22	2.27	5.69
N	0.76	1.20	-0.42	-0.36	1.65	0.03	1.15	1.47	-1.52
O	0.96	1.17	-1.57	0.21	0.80	1.33	0.95	2.27	-0.50
P	0.56	-0.10	-0.04	1.55	-0.67	1.38	-0.19	0.17	-2.66
Q					0.00	0.17	-0.97	-4.99	0.38
R	-0.44	0.23	-0.42	1.34	-0.31	1.12	0.18	-0.34	-0.38
S	1.86		-1.65		0.28	-0.12	0.95	0.50	-4.29
T	-0.04	34.81	3.42	4.34	-0.76	0.48	-0.80	-0.07	-0.30
U	-0.88	165.04	-0.42		1.20	0.44	0.14	10.21	-0.40
V	-0.64	0.55	-0.42	-0.36	0.41	1.02	-0.18	0.91	-1.52
W	0.16		-0.81	-0.83					0.00
X	0.56	1335.55	1.11	-39.64	3.40	1.19	-1.05	-0.45	0.19
Y	-0.04	-1.72	-0.81	0.72	-1.44	-1.36	-2.47	1.70	-0.95
Z									1.80

### z-Scores Sample N169A

	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> )	KMnO <sub>4</sub> - Index
A	0.23		0.53	0.00	-1.50		0.15	-0.05	
B	-0.87		0.05	-0.62	0.14		1.10	0.57	
C	2.29		-0.16	-0.83	0.60	-2.45	1.00	-0.05	-0.96
D	0.00		-0.80	-0.42	0.21		0.25	-0.51	
E	0.87		-0.40	2.81	4.51	-2.45	-4.43	1.11	
F	1.84		10.61	4.16	7.98	-2.45		2.35	
G	-1.71		0.53	1.04	-3.12		0.05	-2.75	0.43
H							1.39		
I			0.27	0.00		0.24	0.70		
J	1.84		0.50	0.92	-0.02		0.54	-1.75	
K	-0.74		0.90	0.62	-0.83	0.07	1.59	-0.74	
L	0.23				0.12			-0.36	-0.07
M			-2.12	4.37		-0.51			
N	-0.32		0.53	-1.25	0.16	0.34	0.50	0.26	
O	0.87		-0.20	0.16	-0.12	0.41	-2.24		-0.94
P	1.20		-1.59	-2.50	-0.19	-0.10	16.95	-0.43	
Q	3.13		1.11	0.96					
R	-0.39		-0.42	0.00	-0.16	0.61	0.25	-0.97	-0.11
S	0.86		-1.68	-0.65		-0.63	-1.72		
T	1.91		1.17	-2.71	5.48	-3.14	0.60	1.55	0.54
U			0.94	-1.98					
V	-0.03		-0.90	-0.83	-0.05	-0.51	0.20	-0.27	
W	-0.10		0.27		-0.72			-0.43	
X	-1.71		1.16	-0.02	1.97		0.80		
Y	-0.10		-0.53	-1.04			1.49		-0.02
Z					2.59			-0.43	

### z-Scores Sample N169A

	Cond.	total-Hardn.	K <sub>S</sub> 4.3	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
AA	1.36	-0.10	1.50	2.79	0.21	-0.65	0.00	3.18	-0.95
AB	0.56	0.55	0.73	0.83	-0.06	0.24	0.41	-0.68	0.02
AC									
AD									
AE	-0.44	-0.10	0.35			0.24	-0.56	0.00	0.25
AF	-0.44	168.27	1.11	0.88	0.61	0.27	0.10	-0.34	2.11
AG	-0.24	0.23	1.38	1.14	0.32	0.29	-0.22	2.94	-0.55
AH	-0.04	0.55	-0.04	-0.21	0.10	-0.44	-0.26	-1.02	0.38
AI	-0.24	1.20	6.49	5.32	1.30	0.47	0.68	-0.05	0.33
AJ	22.79	-1.49	-1.57	0.31	5.36	-14.66			-0.95
AK								-5.22	
AL	-1.24	-0.42	-2.34	-0.41	0.21	-1.02	-0.97	0.00	-2.66
AM	0.16	0.23	-0.04	1.55	0.41	0.00	0.18	-0.23	-0.38
AN	0.76	-0.10	-0.42	-0.36	0.52	1.16	1.77	-0.34	-0.57
AO	0.36		-0.04						
AP	0.16	-0.42	-0.04	0.21	-0.10	-0.41	-0.26	-0.68	1.90
AQ	-1.24								-0.85
AR	-0.24	-0.74	-0.81	-0.83	-0.31	-0.68	-0.62	-1.02	2.09
AS	-0.04	4.11	-1.96	-0.05	3.71	2.82	-0.88	6.35	0.38
AT	-0.24	8.65	1.11	2.48	19.49	44.56	0.79	1.47	-4.82
AU	-1.84	-2.69	-0.23	1.40	-4.43	1.36	0.53	0.57	-1.14
AV	0.76	-0.10	-1.96		0.36	-0.65	0.36	0.34	-1.23
AW									
AX					4.01	0.03	-0.82	-0.95	0.06
AY		4.57			4.65	2.45	3.65	0.57	0.32
AZ	-0.04	165.04	-2.26	-0.29	-0.72	-0.58	-1.32	-0.68	0.00
BA		186.08			3.09	2.72			
BB	-1.04		-0.81		-0.44	-1.09	0.56	-0.45	0.65
BC	-0.04	-1.20	-0.04	1.54	-0.94	-1.04	-1.22	-1.33	-1.07
BD									
BE	-0.04	-0.42	-0.42	-0.41	-0.20	-0.92	-0.19	0.91	-1.50

### z-Scores Sample N169A

	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> )	KMnO <sub>4</sub> - Index
AA	-0.58		-0.37	-0.21	-0.12	-0.31	2.19	0.73	0.02
AB	-1.07		-0.30	-0.04	0.81		-0.50	-0.43	0.86
AC					1.74		1.24		
AD									
AE	-0.29		0.28	0.77	-0.95	0.03			
AF	0.23		-0.20	2.96	3.35	-0.75	1.19	-0.90	-0.47
AG	0.55		0.46	0.12	1.04	0.24	-0.01	0.80	-0.29
AH	0.55		0.74	1.04	0.58		1.34	-0.43	
AI	0.23		-0.03	0.56	0.12	0.95	2.04	-0.97	
AJ	-5.27		-0.11		-6.82				
AK									
AL	5.75		-0.32	0.00				-0.66	0.09
AM	-0.42		0.48	2.71	1.50	0.27	0.90	0.03	
AN	-0.10		0.53	-3.12	1.50	1.16	1.34	-0.28	0.61
AO	-12.70		0.16		-6.99			-7.16	-0.04
AP	0.23		-0.85	0.83	-0.49	0.14	1.04	-1.05	-0.61
AQ	-4.30								
AR	2.17		-0.53	3.54	2.43	-1.98	-0.70	-7.89	0.04
AS	0.23		0.37	0.21	-0.12	1.09	0.40	-0.59	0.11
AT	-9.79		1.54	1.66	43.38			26.47	0.90
AU	-0.42		-3.02	-0.62		-0.99	0.65	0.42	
AV	0.61		0.36	0.25	0.16		0.75	0.28	
AW							2.04	0.12	
AX			0.09	1.69					
AY			-0.05	2.14					-0.67
AZ	-2.04		-0.58	-0.21	0.00	-0.89	1.72	-9.64	
BA			-8.28						
BB	0.55		-0.96	0.77	0.72	0.20	1.29	-0.74	0.67
BC	0.55		-0.58	-1.41	-1.50	-1.16	3.33	-0.24	
BD									
BE	1.20		-0.35	0.19	0.16	-0.78	0.05	0.26	

### z-Scores Sample N169B

	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	0.17	0.00	-1.93	-0.87	-0.09	0.58	1.02	0.38	0.18
B	0.33		-2.73						-1.06
C	-1.16	0.45	6.74	5.50	0.31	0.38	0.34	-2.33	-0.62
D	-0.17	0.30	-0.80	0.00	-0.85	-0.58	-0.75	-0.87	0.27
E	0.17	2.57	0.48		1.60	3.64	-0.85	-1.79	0.18
F					0.00	-0.96	-0.54	-0.60	-1.24
G	-1.16	1.06	2.41	2.54	0.80	0.96	-0.34	0.00	-1.24
H	0.83		-1.60						
I	-0.33	-1.06	-0.90	-0.70	-0.89	-0.96	0.00	0.16	-0.44
J	1.65								-15.68
K	-0.17	-0.45	-2.12	-1.06	-0.49	-0.58	-0.68	0.11	1.24
L	1.32		-0.16	0.47					
M					-1.87	0.58	61.48	-1.19	-1.06
N	0.83	1.82	-0.80	-0.63	2.00	0.19	0.75	0.27	-0.89
O	-0.33	0.86	-1.60	-0.63	0.30	1.48	0.78	2.66	-0.03
P	0.66	-0.15	-0.32	0.34	-0.94	1.78	0.90	0.22	-2.12
Q					-1.20	0.00	-1.53	-0.65	0.27
R	-0.66	-0.30	-1.12	-0.21	-0.62	0.58	0.78	-0.33	-0.71
S	1.40		-2.62		0.11	0.21	1.95	0.38	-2.84
T	-0.17	35.15	0.32	2.33	-0.83	1.11	0.10	-0.31	0.56
U	-1.06	164.04	-1.12		1.24	-10.95	20.48	7.75	-0.04
V	0.00	0.45	-7.06	-5.01	0.04	0.96	0.17	0.65	-0.44
W	0.33		-1.60	-1.27					0.44
X	0.17	1338.83	-1.28	-39.77	2.36	0.82	-1.49	-0.92	-2.48
Y	-0.17	-1.97	-1.28	-0.42	-1.87	-1.15	-2.72	-1.52	-0.44
Z									

### z-Scores Sample N169B

	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> )	KMnO <sub>4</sub> - Index
A	0.74	-0.53	0.34	0.38			-0.15		
B	-0.23	-0.24	-0.31	0.25			1.14		
C	1.60	-0.82	2.07	0.19		-2.03	-0.73		-1.28
D	-0.14	-0.60	-1.41	-0.25			0.20		
E	1.44	0.64	2.59	2.70		-2.01	-3.44		
F	2.13	-1.82	0.34	1.32		-2.64			
G	-1.81	-1.07	-1.03	0.38			-1.60		0.00
H							0.44		
I			-2.41	0.31		0.16	0.44		
J	1.21	0.86	0.27	0.41			1.25		
K	-0.65	0.43	1.72	1.44		-0.08	-0.09		
L	0.74	0.21							-0.50
M			-0.34	-0.25		-0.87			
N	-0.23	0.37	1.03	-0.31		0.08	0.23		
O	0.05	1.60	0.60	0.51		0.22	-3.30		-1.12
P	0.74	-1.07	-1.72	-2.38		-0.45	34.65		
Q	2.60	-1.66	1.38	0.25					
R	0.05	-0.47	-1.00	0.06		0.02	-0.35		-0.89
S	1.23		-1.18	-1.58		-0.68	-2.19		
T	1.44	1.71	-19.55	1.32		-2.45	-0.29		1.23
U			0.07	-1.18					
V	0.16	-0.65	-0.69	-0.25		-0.81	0.20		
W	-0.19	-3.21	7.24						
X	-0.88	3.53	3.59	-2.40			0.26		
Y	0.05	-0.43	1.38	0.38		1.11	1.60		0.03
Z		0.43							

### z-Scores Sample N169B

	Cond.	total-Hardn.	K <sub>S 4.3</sub>	HCO <sub>3</sub> <sup>-</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>
AA	2.15	-0.45	0.16	0.85	-0.49	-0.19	1.43	0.76	-0.53
AB	1.49	0.15	0.48	1.16	-0.08	0.63	0.71	0.05	0.21
AC									
AD									
AE	-0.33	0.61	-1.60		0.12	0.19	-0.68	-0.27	-0.27
AF	-0.99	168.58	-0.32	-0.27	0.49	0.63	0.34	0.00	-0.83
AG	-2.97	0.45	1.06	0.85	0.22	0.38	0.20	0.86	-0.06
AH	0.00	0.45	-0.80	-0.63	-0.18	0.00	0.00	-0.43	0.71
AI	0.00	2.88	-0.80	-0.63	2.50	2.12	1.34	1.01	2.20
AJ	12.21	-0.32	-2.57	-1.46	1.47	-5.56			-0.62
AK								-4.55	
AL	-0.66	-0.61	-2.73	-1.69	-0.36	-0.96	-0.34	-1.52	-1.51
AM	0.33	0.15	-1.93	-0.89	-0.04	0.19	0.03	-0.22	-0.27
AN	-0.17	0.61	-1.12	-0.85	0.22	1.15	0.68	-0.16	0.09
AO	0.50		-0.96						
AP	0.99	1.06	0.00	0.00	0.98	0.38	-0.41	-0.11	0.53
AQ	-0.83								1.02
AR	0.00	-0.30	-1.77	-1.48	-0.53	0.58	1.12	-0.49	2.48
AS	-0.33	4.99	-2.89	-1.69	4.18	4.22	4.76	3.47	0.62
AT	-0.50	-2.42	-0.32	0.40	27.15	13.04	0.34	-0.11	0.57
AU	-0.83	-2.88	-1.93	-0.85	-3.65	0.19	1.02	1.14	-0.97
AV	0.66	-0.30	-1.28		-0.13	-0.79	0.27	0.87	-1.55
AW									
AX					1.98	0.24	-0.23	-0.07	0.54
AY		3.66			3.46	2.01	2.82	1.03	-1.31
AZ	-0.99	159.50	-2.54	-1.37	-1.07	-0.19	-0.61	-0.43	-0.09
BA		181.45			2.47	2.68			
BB	-0.99		-0.80		0.07	0.71	0.10	-1.03	0.22
BC	-0.17	-1.06	0.16	0.78	-1.19	-0.35	-0.74	-0.72	1.46
BD									
BE	0.00	-0.76	-0.80	-0.63	-0.51	-1.17	-0.14	0.70	-1.36



### z-Scores Sample N169B

	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> )	KMnO <sub>4</sub> - Index
AA	0.00	-0.06	-0.55	-0.06		-0.73	1.37		0.36
AB	-0.65	-1.07	-1.17	0.67			-0.69		-0.14
AC							0.76		
AD									
AE	0.07	-1.47	-0.10	0.89		-0.24			
AF	0.97	-0.75	1.83	0.34		-0.87	1.60		-0.36
AG	0.51	0.00	2.80	0.11		-0.28	0.79		0.20
AH	0.51	-0.21	1.38	0.82			0.50		
AI	0.05	-0.32	2.18	1.56		1.50	0.23		
AJ	-4.36	-4.92	-0.31	2.70					
AK									
AL	4.29	-7.33	0.00	0.69					0.34
AM	-0.19	-2.35	0.69	1.00		0.51	0.44		
AN	0.74	0.64	0.00	1.38		0.51	1.02		0.67
AO	-12.72	-2.00	0.00						0.00
AP	0.28	0.11	1.03	1.38		-0.12	0.35		-0.98
AQ	-2.97	1.60							
AR	1.21	0.00	0.00	1.63		-1.74	-0.44		0.00
AS	0.09	0.91	0.00	0.82		0.81	0.52		0.64
AT	-4.13	1.60	-5.17	8.08					1.45
AU	-0.42	-0.53	-0.59	-0.88		-1.07	0.73		
AV	0.49	0.15	0.24	0.78			0.09		
AW							4.05		
AX		0.86	-0.33	0.12					
AY			6.38	-0.04					-0.17
AZ	-1.81	-0.32	-0.38	-0.38		-0.69	0.55		
BA			-1.03						
BB	0.97	2.61	0.45	-0.27		-0.75	0.47		0.67
BC	0.28	-1.71	0.81	4.20		-1.20	4.70		
BD									
BE	1.44	0.11	-0.34	-0.14		-0.87	-0.38		

### Sample N169A

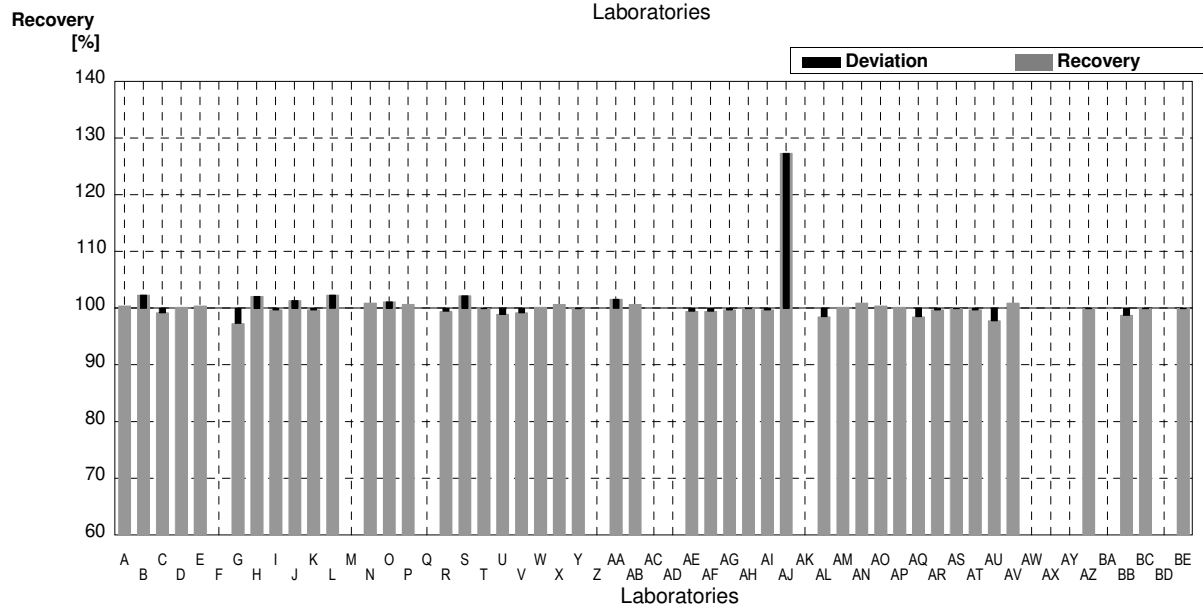
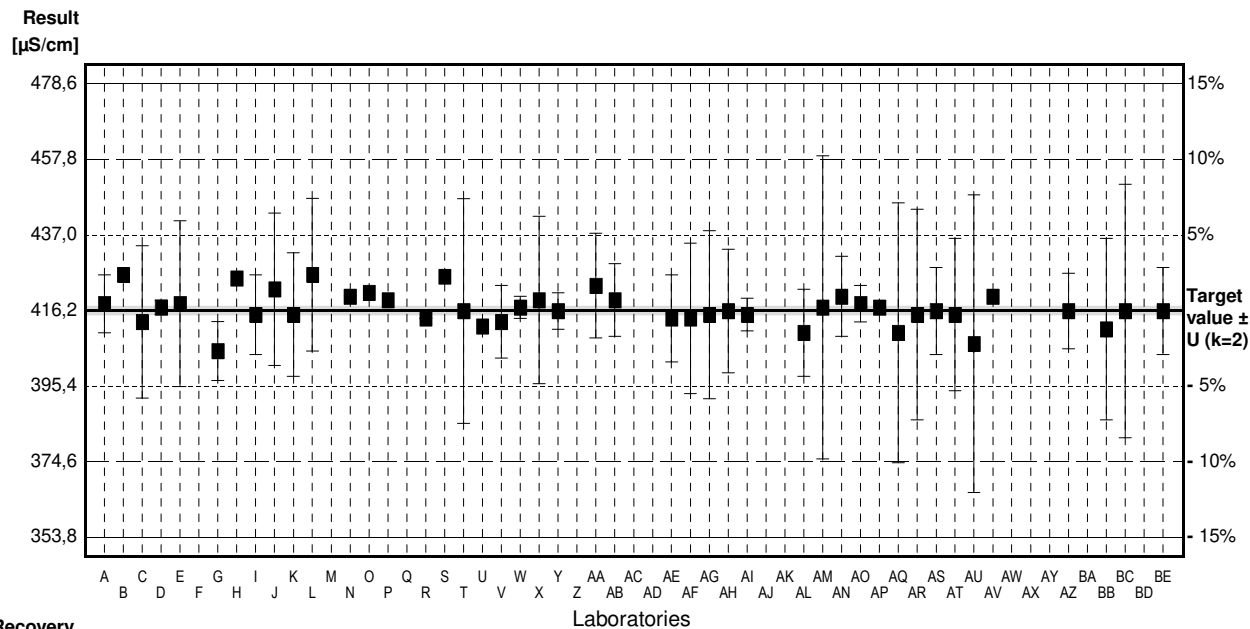
#### Parameter Conductivity

Target value  $\pm U$  (k=2) 416,2  $\mu\text{S/cm}$   $\pm$  1,2  $\mu\text{S/cm}$

IFA result  $\pm U$  (k=2) 416  $\mu\text{S/cm}$   $\pm$  6  $\mu\text{S/cm}$

Stability test  $\pm U$  (k=2) 415  $\mu\text{S/cm}$   $\pm$  6  $\mu\text{S/cm}$

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	418	8	$\mu\text{S/cm}$	100%	0,36
B	426 *		$\mu\text{S/cm}$	102%	1,96
C	413	21	$\mu\text{S/cm}$	99%	-0,64
D	417	2	$\mu\text{S/cm}$	100%	0,16
E	418	22,8	$\mu\text{S/cm}$	100%	0,36
F			$\mu\text{S/cm}$		
G	405 *	8,1	$\mu\text{S/cm}$	97%	-2,24
H	425		$\mu\text{S/cm}$	102%	1,76
I	415	11	$\mu\text{S/cm}$	100%	-0,24
J	422	21	$\mu\text{S/cm}$	101%	1,16
K	415	17	$\mu\text{S/cm}$	100%	-0,24
L	426 *	21,0	$\mu\text{S/cm}$	102%	1,96
M			$\mu\text{S/cm}$		
N	420	0,319	$\mu\text{S/cm}$	101%	0,76
O	421		$\mu\text{S/cm}$	101%	0,96
P	419		$\mu\text{S/cm}$	101%	0,56
Q			$\mu\text{S/cm}$		
R	414	0,1	$\mu\text{S/cm}$	99%	-0,44
S	425,5 *		$\mu\text{S/cm}$	102%	1,86
T	416	30,95	$\mu\text{S/cm}$	100%	-0,04
U	411,8		$\mu\text{S/cm}$	99%	-0,88
V	413	10	$\mu\text{S/cm}$	99%	-0,64
W	417	3	$\mu\text{S/cm}$	100%	0,16
X	419	23,045	$\mu\text{S/cm}$	101%	0,56
Y	416	5	$\mu\text{S/cm}$	100%	-0,04
Z			$\mu\text{S/cm}$		
AA	423	14,4	$\mu\text{S/cm}$	102%	1,36
AB	419	10	$\mu\text{S/cm}$	101%	0,56
AC			$\mu\text{S/cm}$		
AD			$\mu\text{S/cm}$		
AE	414	12	$\mu\text{S/cm}$	99%	-0,44
AF	414	20,7	$\mu\text{S/cm}$	99%	-0,44
AG	415	23,1	$\mu\text{S/cm}$	100%	-0,24
AH	416	17	$\mu\text{S/cm}$	100%	-0,04
AI	415	4,51	$\mu\text{S/cm}$	100%	-0,24
AJ	530 *		$\mu\text{S/cm}$	127%	22,79
AK			$\mu\text{S/cm}$		
AL	410	12	$\mu\text{S/cm}$	99%	-1,24
AM	417	41,7	$\mu\text{S/cm}$	100%	0,16
AN	420	11	$\mu\text{S/cm}$	101%	0,76
AO	418	5	$\mu\text{S/cm}$	100%	0,36



AP	417		μS/cm	100%	0,16
AQ	410	35,79	μS/cm	99%	-1,24
AR	415	29	μS/cm	100%	-0,24
AS	416	12	μS/cm	100%	-0,04
AT	415	21	μS/cm	100%	-0,24
AU	407	41	μS/cm	98%	-1,84
AV	420		μS/cm	101%	0,76
AW			μS/cm		
AX			μS/cm		
AY			μS/cm		
AZ	416	10,4	μS/cm	100%	-0,04
BA			μS/cm		
BB	411	25	μS/cm	99%	-1,04
BC	416	34,90	μS/cm	100%	-0,04
BD			μS/cm		
BE	416	12	μS/cm	100%	-0,04

	All results	Outliers excl.	Unit
Mean ± CI(99%)	419,2 ± 7,0	416,2 ± 1,6	μS/cm
Recov. ± CI(99%)	100,7 ± 1,7	100,0 ± 0,4	%
SD between labs	17,5	3,6	μS/cm
RSD between labs	4,2	0,9	%
n for calculation	45	40	

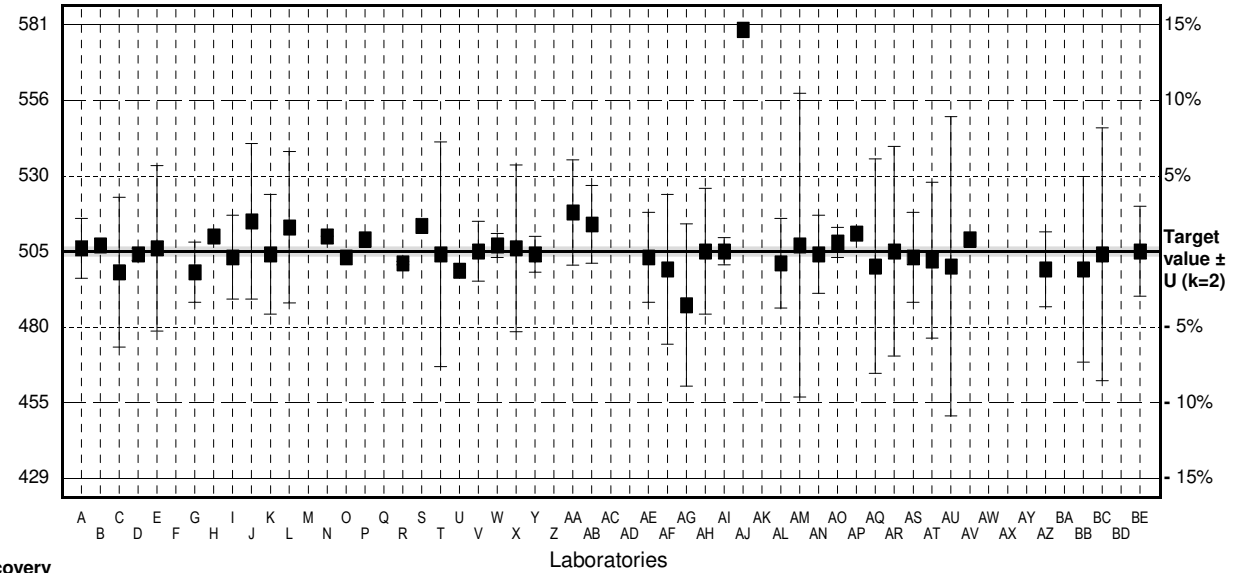
### Sample N169B

#### Parameter Conductivity

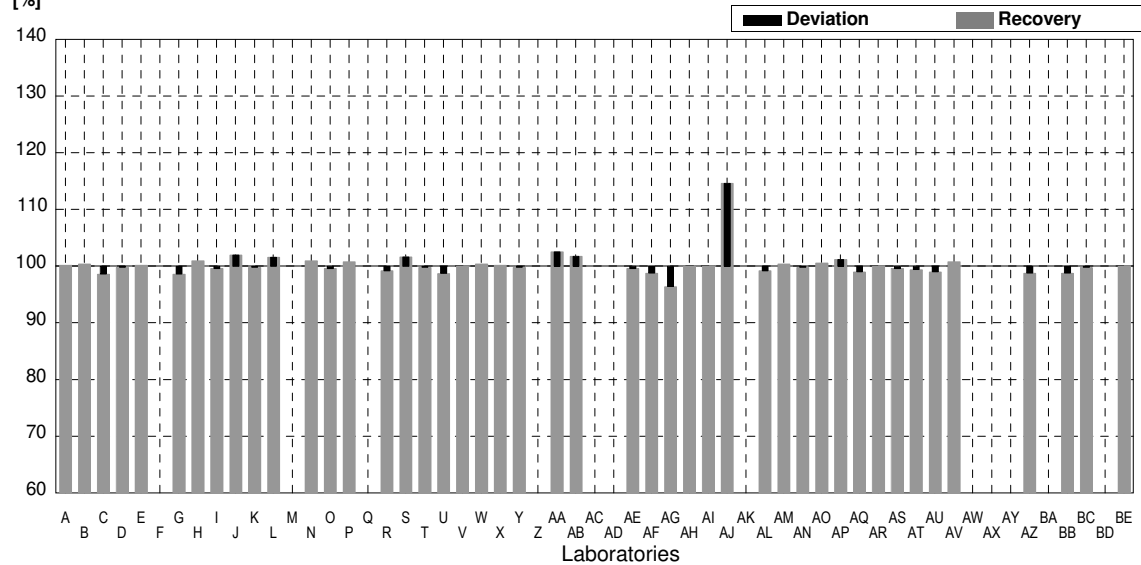
Target value  $\pm U$  (k=2) 505  $\mu\text{S/cm}$   $\pm$  2  $\mu\text{S/cm}$   
 IFA result  $\pm U$  (k=2) 505  $\mu\text{S/cm}$   $\pm$  7  $\mu\text{S/cm}$   
 Stability test  $\pm U$  (k=2) 506  $\mu\text{S/cm}$   $\pm$  7  $\mu\text{S/cm}$

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	506	10	$\mu\text{S/cm}$	100%	0,17
B	507		$\mu\text{S/cm}$	100%	0,33
C	498	25	$\mu\text{S/cm}$	99%	-1,16
D	504	2	$\mu\text{S/cm}$	100%	-0,17
E	506	27,6	$\mu\text{S/cm}$	100%	0,17
F			$\mu\text{S/cm}$		
G	498	10	$\mu\text{S/cm}$	99%	-1,16
H	510		$\mu\text{S/cm}$	101%	0,83
I	503	14	$\mu\text{S/cm}$	100%	-0,33
J	515	26	$\mu\text{S/cm}$	102%	1,65
K	504	20	$\mu\text{S/cm}$	100%	-0,17
L	513	25,3	$\mu\text{S/cm}$	102%	1,32
M			$\mu\text{S/cm}$		
N	510	0,0436	$\mu\text{S/cm}$	101%	0,83
O	503		$\mu\text{S/cm}$	100%	-0,33
P	509		$\mu\text{S/cm}$	101%	0,66
Q			$\mu\text{S/cm}$		
R	501	0,58	$\mu\text{S/cm}$	99%	-0,66
S	513,5		$\mu\text{S/cm}$	102%	1,40
T	504	37,50	$\mu\text{S/cm}$	100%	-0,17
U	498,6		$\mu\text{S/cm}$	99%	-1,06
V	505	10	$\mu\text{S/cm}$	100%	0,00
W	507	4	$\mu\text{S/cm}$	100%	0,33
X	506	27,83	$\mu\text{S/cm}$	100%	0,17
Y	504	6	$\mu\text{S/cm}$	100%	-0,17
Z			$\mu\text{S/cm}$		
AA	518	17,6	$\mu\text{S/cm}$	103%	2,15
AB	514	13	$\mu\text{S/cm}$	102%	1,49
AC			$\mu\text{S/cm}$		
AD			$\mu\text{S/cm}$		
AE	503	15	$\mu\text{S/cm}$	100%	-0,33
AF	499	25,0	$\mu\text{S/cm}$	99%	-0,99
AG	487	*	27,1	96%	-2,97
AH	505	21	$\mu\text{S/cm}$	100%	0,00
AI	505	4,51	$\mu\text{S/cm}$	100%	0,00
AJ	579	*		115%	12,21
AK			$\mu\text{S/cm}$		
AL	501	15	$\mu\text{S/cm}$	99%	-0,66
AM	507	50,7	$\mu\text{S/cm}$	100%	0,33
AN	504	13	$\mu\text{S/cm}$	100%	-0,17
AO	508	5	$\mu\text{S/cm}$	101%	0,50

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



Recovery [%]



AP	511		μS/cm	101%	0,99
AQ	500	35,79	μS/cm	99%	-0,83
AR	505	35	μS/cm	100%	0,00
AS	503	15	μS/cm	100%	-0,33
AT	502	26	μS/cm	99%	-0,50
AU	500	50	μS/cm	99%	-0,83
AV	509		μS/cm	101%	0,66
AW			μS/cm		
AX			μS/cm		
AY			μS/cm		
AZ	499	12,5	μS/cm	99%	-0,99
BA			μS/cm		
BB	499	31	μS/cm	99%	-0,99
BC	504	42,28	μS/cm	100%	-0,17
BD			μS/cm		
BE	505	15	μS/cm	100%	0,00

	All results	Outliers excl.	Unit
Mean ± CI(99%)	506 ± 5	505 ± 2	μS/cm
Recov. ± CI(99%)	100,3 ± 1,0	100,1 ± 0,4	%
SD between labs	12	5	μS/cm
RSD between labs	2,4	1,0	%
n for calculation	45	43	

### Sample N169A

#### Parameter Total hardness

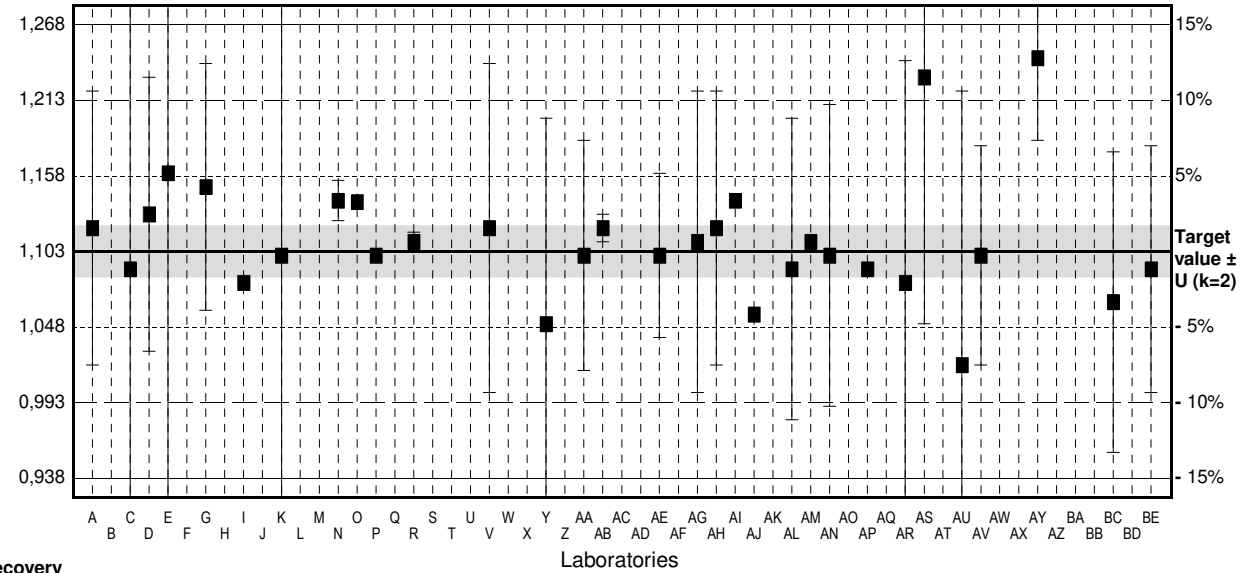
Target value  $\pm U$  (k=2) 1,103 mmol/l  $\pm$  0,019 mmol/l

IFA result  $\pm U$  (k=2) 1,19 mmol/l  $\pm$  0,05 mmol/l

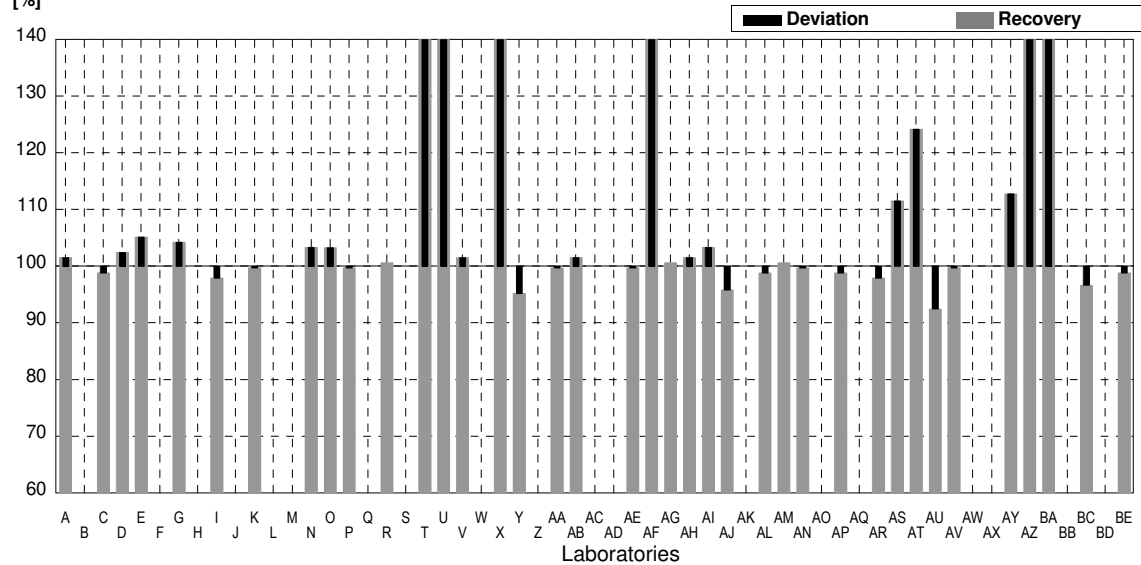
Stability test  $\pm U$  (k=2) 1,19 mmol/l  $\pm$  0,05 mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	1,12	0,1	mmol/l	102%	0,55
B			mmol/l		
C	1,09	0,22	mmol/l	99%	-0,42
D	1,13	0,1	mmol/l	102%	0,87
E	1,16	0,503	mmol/l	105%	1,85
F			mmol/l		
G	1,15	0,09	mmol/l	104%	1,52
H			mmol/l		
I	1,08		mmol/l	98%	-0,74
J			mmol/l		
K	1,10	0,6	mmol/l	100%	-0,10
L			mmol/l		
M			mmol/l		
N	1,14	0,0148	mmol/l	103%	1,20
O	1,139		mmol/l	103%	1,17
P	1,10		mmol/l	100%	-0,10
Q			mmol/l		
R	1,11	0,007	mmol/l	101%	0,23
S			mmol/l		
T	2,178 *	0,436	mmol/l	197%	34,81
U	6,2 *		mmol/l	562%	165,04
V	1,12	0,12	mmol/l	102%	0,55
W			mmol/l		
X	42,35 *	7,2842	mmol/l	3840%	1335,55
Y	1,05	0,15	mmol/l	95%	-1,72
Z			mmol/l		
AA	1,10	0,084	mmol/l	100%	-0,10
AB	1,12	0,01	mmol/l	102%	0,55
AC			mmol/l		
AD			mmol/l		
AE	1,10	0,06	mmol/l	100%	-0,10
AF	6,3 *		mmol/l	571%	168,27
AG	1,11	0,11	mmol/l	101%	0,23
AH	1,12	0,1	mmol/l	102%	0,55
AI	1,14		mmol/l	103%	1,20
AJ	1,057		mmol/l	96%	-1,49
AK			mmol/l		
AL	1,09	0,11	mmol/l	99%	-0,42
AM	1,11		mmol/l	101%	0,23
AO	1,10	0,11	mmol/l	100%	-0,10
AN			mmol/l		
AP			mmol/l		
AQ			mmol/l		
AR			mmol/l		
AS			mmol/l		
AU			mmol/l		
AW			mmol/l		
AX			mmol/l		
AY			mmol/l		
BA			mmol/l		
BC			mmol/l		
BD			mmol/l		

Result [mmol/l]



Recovery [%]



AP	1,09		mmol/l	99%	-0,42
AQ			mmol/l		
AR	1,08	0,162	mmol/l	98%	-0,74
AS	1,23 *	0,18	mmol/l	112%	4,11
AT	1,37 *	0,14	mmol/l	124%	8,65
AU	1,02	0,20	mmol/l	92%	-2,69
AV	1,10	0,08	mmol/l	100%	-0,10
AW			mmol/l		
AX			mmol/l		
AY	1,244 *	0,06	mmol/l	113%	4,57
AZ	6,2 *		mmol/l	562%	165,04
BA	6,85 *	0,10	mmol/l	621%	186,08
BB			mmol/l		
BC	1,066	0,1096	mmol/l	97%	-1,20
BD			mmol/l		
BE	1,09	0,09	mmol/l	99%	-0,42

	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,787 ± 2,997	1,103 ± 0,016	mmol/l
Recov. ± CI(99%)	252,7 ± 271,7	100,0 ± 1,4	%
SD between labs	6,792	0,031	mmol/l
RSD between labs	243,7	2,8	%
n for calculation	38	29	

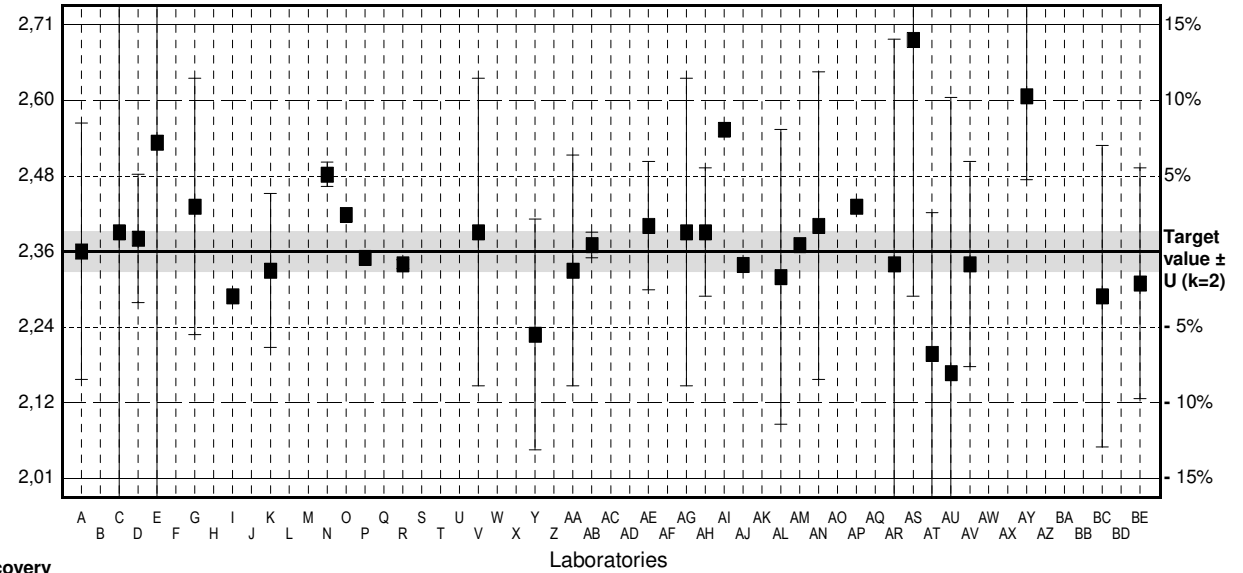
### Sample N169B

#### Parameter Total hardness

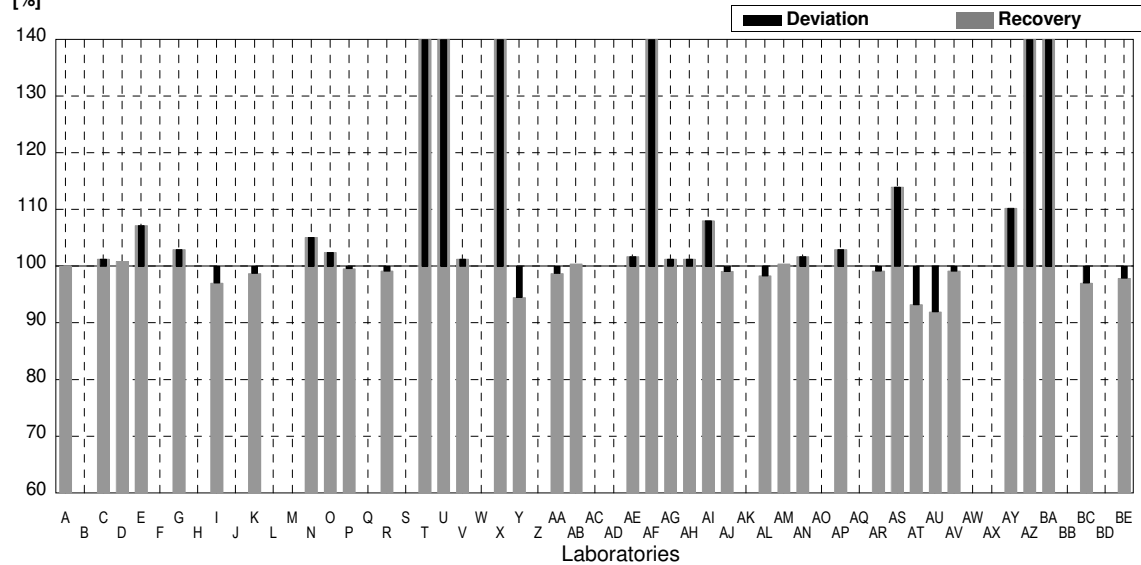
Target value  $\pm U$  (k=2) 2,36 mmol/l  $\pm$  0,03 mmol/l  
 IFA result  $\pm U$  (k=2) 2,52 mmol/l  $\pm$  0,09 mmol/l  
 Stability test  $\pm U$  (k=2) 2,53 mmol/l  $\pm$  0,09 mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	2,36	0,2	mmol/l	100%	0,00
B			mmol/l		
C	2,39	0,48	mmol/l	101%	0,45
D	2,38	0,1	mmol/l	101%	0,30
E	2,53	1,097	mmol/l	107%	2,57
F			mmol/l		
G	2,43	0,20	mmol/l	103%	1,06
H			mmol/l		
I	2,29		mmol/l	97%	-1,06
J			mmol/l		
K	2,33	0,12	mmol/l	99%	-0,45
L			mmol/l		
M			mmol/l		
N	2,48	0,0190	mmol/l	105%	1,82
O	2,417		mmol/l	102%	0,86
P	2,35		mmol/l	100%	-0,15
Q			mmol/l		
R	2,34	0,007	mmol/l	99%	-0,30
S			mmol/l		
T	4,683 *	0,937	mmol/l	198%	35,15
U	13,2 *		mmol/l	559%	164,04
V	2,39	0,24	mmol/l	101%	0,45
W			mmol/l		
X	90,83 *	15,6227	mmol/l	3849%	1338,83
Y	2,23	0,18	mmol/l	94%	-1,97
Z			mmol/l		
AA	2,33	0,18	mmol/l	99%	-0,45
AB	2,37	0,02	mmol/l	100%	0,15
AC			mmol/l		
AD			mmol/l		
AE	2,40	0,1	mmol/l	102%	0,61
AF	13,5 *		mmol/l	572%	168,58
AG	2,39	0,24	mmol/l	101%	0,45
AH	2,39	0,1	mmol/l	101%	0,45
AI	2,550		mmol/l	108%	2,88
AJ	2,339		mmol/l	99%	-0,32
AK			mmol/l		
AL	2,32	0,23	mmol/l	98%	-0,61
AM	2,37		mmol/l	100%	0,15
AN	2,40	0,24	mmol/l	102%	0,61
AO			mmol/l		

Result [mmol/l]



Recovery [%]





AP	2,43		mmol/l	103%	1,06
AQ			mmol/l		
AR	2,34	0,351	mmol/l	99%	-0,30
AS	2,69 *	0,40	mmol/l	114%	4,99
AT	2,20	0,22	mmol/l	93%	-2,42
AU	2,17	0,43	mmol/l	92%	-2,88
AV	2,34	0,16	mmol/l	99%	-0,30
AW			mmol/l		
AX			mmol/l		
AY	2,602	0,13	mmol/l	110%	3,66
AZ	12,9 *		mmol/l	547%	159,50
BA	14,35 *	0,10	mmol/l	608%	181,45
BB			mmol/l		
BC	2,290	0,2353	mmol/l	97%	-1,06
BD			mmol/l		
BE	2,31	0,18	mmol/l	98%	-0,76

	All results	Outliers excl.	Unit
Mean ± CI(99%)	5,94 ± 6,42	2,37 ± 0,05	mmol/l
Recov. ± CI(99%)	251,6 ± 272,2	100,4 ± 1,9	%
SD between labs	14,56	0,09	mmol/l
RSD between labs	245,2	3,9	%
n for calculation	38	31	

# Sample N169A

## Parameter Alkalinity

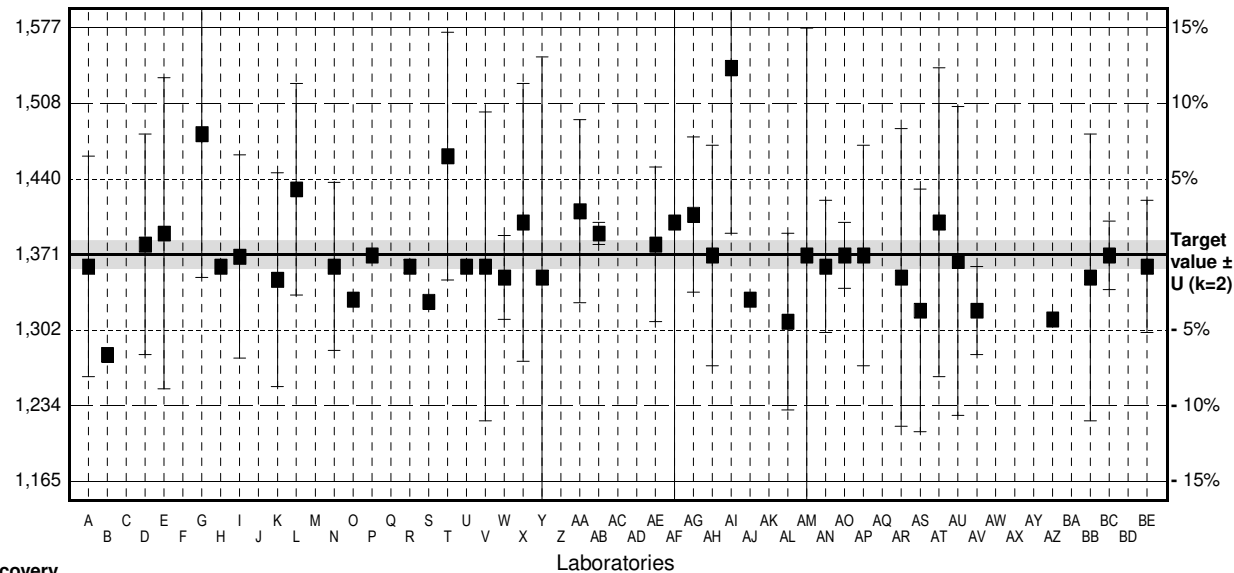
Target value ± U (k=2) 1,371 mmol/l ± 0,013 mmol/l

IFA result ± U (k=2) 1,34 mmol/l ± 0,05 mmol/l

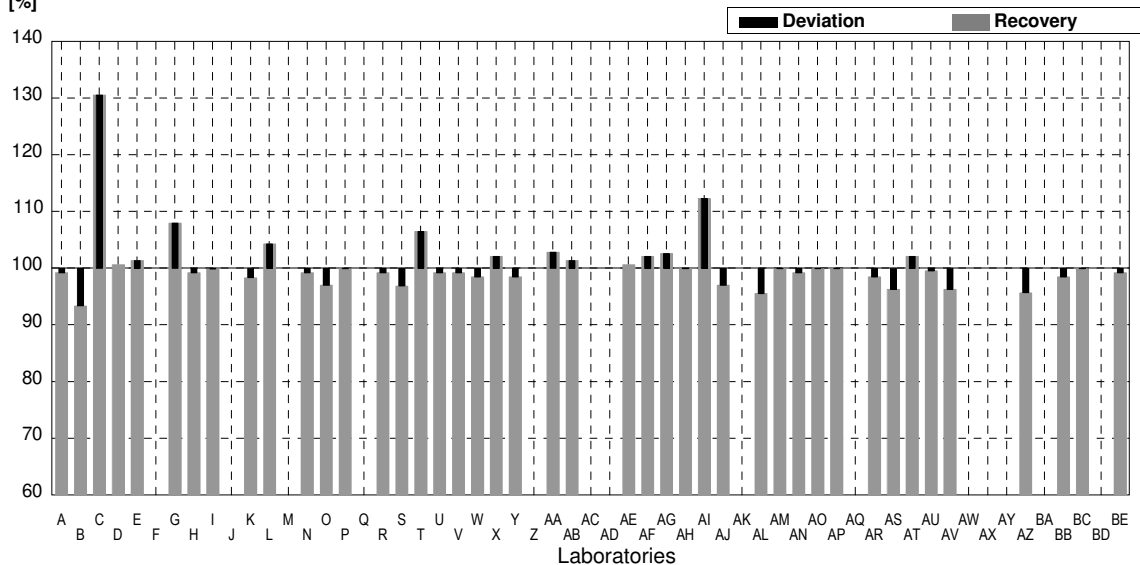
Stability test ± U (k=2) 1,33 mmol/l ± 0,05 mmol/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,36	0,1	mmol/l	99%	-0,42
B	1,28 *		mmol/l	93%	-3,49
C	1,79 *	0,09	mmol/l	131%	16,09
D	1,38	0,1	mmol/l	101%	0,35
E	1,39	0,141	mmol/l	101%	0,73
F			mmol/l		
G	1,48 *	0,13	mmol/l	108%	4,18
H	1,36		mmol/l	99%	-0,42
I	1,369	0,092	mmol/l	100%	-0,08
J			mmol/l		
K	1,348	0,097	mmol/l	98%	-0,88
L	1,43	0,096	mmol/l	104%	2,26
M			mmol/l		
N	1,36	0,0762	mmol/l	99%	-0,42
O	1,33		mmol/l	97%	-1,57
P	1,37		mmol/l	100%	-0,04
Q			mmol/l		
R	1,36	0,006	mmol/l	99%	-0,42
S	1,328		mmol/l	97%	-1,65
T	1,46 *	0,1124	mmol/l	106%	3,42
U	1,36		mmol/l	99%	-0,42
V	1,36	0,14	mmol/l	99%	-0,42
W	1,35	0,038	mmol/l	98%	-0,81
X	1,40	0,126	mmol/l	102%	1,11
Y	1,35	0,2	mmol/l	98%	-0,81
Z			mmol/l		
AA	1,41	0,083	mmol/l	103%	1,50
AB	1,39	0,01	mmol/l	101%	0,73
AC			mmol/l		
AD			mmol/l		
AE	1,38	0,07	mmol/l	101%	0,35
AF	1,40	0,35	mmol/l	102%	1,11
AG	1,407	0,0704	mmol/l	103%	1,38
AH	1,37	0,1	mmol/l	100%	-0,04
AI	1,54 *	0,15	mmol/l	112%	6,49
AJ	1,33		mmol/l	97%	-1,57
AK			mmol/l		
AL	1,31	0,08	mmol/l	96%	-2,34
AM	1,37	0,206	mmol/l	100%	-0,04
AN	1,36	0,06	mmol/l	99%	-0,42
AO	1,37	0,03	mmol/l	100%	-0,04

### Result [mmol/l]



### Recovery [%]



AP	1,37	0,1	mmol/l	100%	-0,04
AQ			mmol/l		
AR	1,35	0,135	mmol/l	98%	-0,81
AS	1,32	0,11	mmol/l	96%	-1,96
AT	1,40	0,14	mmol/l	102%	1,11
AU	1,365	0,14	mmol/l	100%	-0,23
AV	1,32	0,04	mmol/l	96%	-1,96
AW			mmol/l		
AX			mmol/l		
AY			mmol/l		
AZ	1,312		mmol/l	96%	-2,26
BA			mmol/l		
BB	1,35	0,13	mmol/l	98%	-0,81
BC	1,37	0,0311	mmol/l	100%	-0,04
BD			mmol/l		
BE	1,36	0,06	mmol/l	99%	-0,42

	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,381 ± 0,032	1,364 ± 0,012	mmol/l
Recov. ± CI(99%)	100,7 ± 2,4	99,5 ± 0,9	%
SD between labs	0,078	0,028	mmol/l
RSD between labs	5,7	2,0	%
n for calculation	43	38	

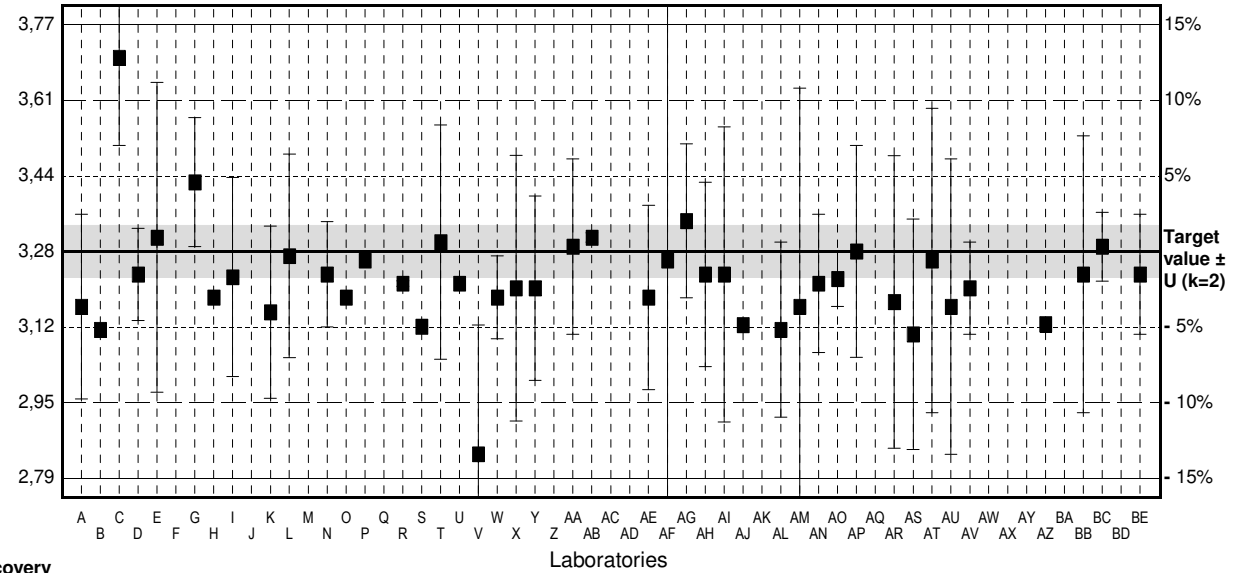
### Sample N169B

#### Parameter Alkalinity

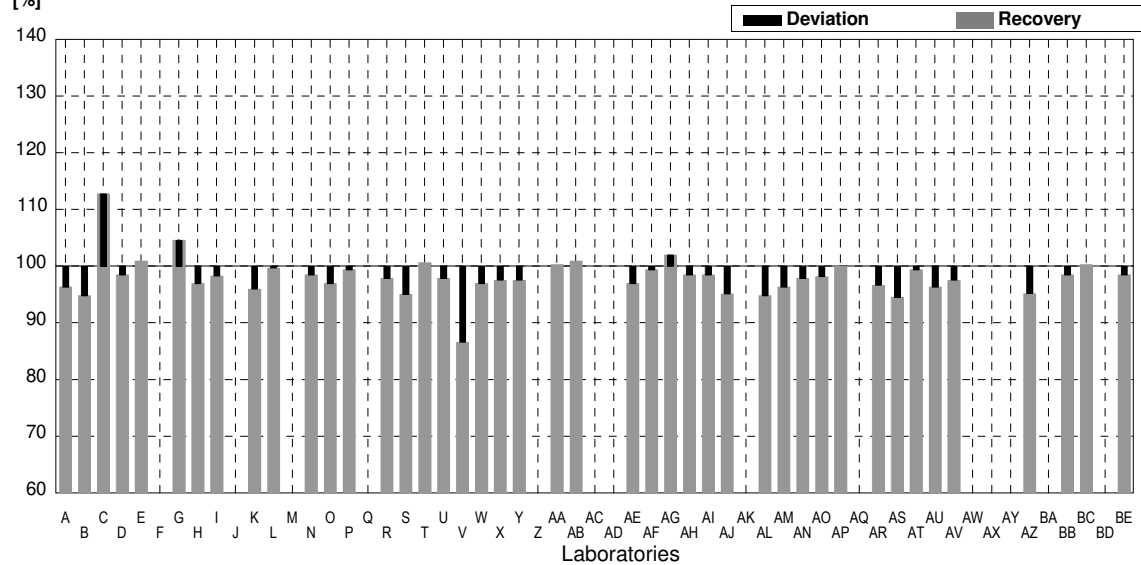
Target value  $\pm U$  (k=2) 3,28 mmol/l  $\pm$  0,06 mmol/l  
 IFA result  $\pm U$  (k=2) 3,21 mmol/l  $\pm$  0,13 mmol/l  
 Stability test  $\pm U$  (k=2) 3,15 mmol/l  $\pm$  0,13 mmol/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	3,16	0,2	mmol/l	96%	-1,93
B	3,11		mmol/l	95%	-2,73
C	3,70 *	0,19	mmol/l	113%	6,74
D	3,23	0,1	mmol/l	98%	-0,80
E	3,31	0,336	mmol/l	101%	0,48
F			mmol/l		
G	3,43	0,14	mmol/l	105%	2,41
H	3,18		mmol/l	97%	-1,60
I	3,224	0,216	mmol/l	98%	-0,90
J			mmol/l		
K	3,148	0,187	mmol/l	96%	-2,12
L	3,27	0,221	mmol/l	100%	-0,16
M			mmol/l		
N	3,23	0,114	mmol/l	98%	-0,80
O	3,18		mmol/l	97%	-1,60
P	3,26		mmol/l	99%	-0,32
Q			mmol/l		
R	3,21	0,006	mmol/l	98%	-1,12
S	3,117		mmol/l	95%	-2,62
T	3,30	0,2541	mmol/l	101%	0,32
U	3,21		mmol/l	98%	-1,12
V	2,84 *	0,28	mmol/l	87%	-7,06
W	3,18	0,090	mmol/l	97%	-1,60
X	3,20	0,288	mmol/l	98%	-1,28
Y	3,20	0,2	mmol/l	98%	-1,28
Z			mmol/l		
AA	3,29	0,19	mmol/l	100%	0,16
AB	3,31	0,01	mmol/l	101%	0,48
AC			mmol/l		
AD			mmol/l		
AE	3,18	0,2	mmol/l	97%	-1,60
AF	3,26	0,82	mmol/l	99%	-0,32
AG	3,346	0,167	mmol/l	102%	1,06
AH	3,23	0,2	mmol/l	98%	-0,80
AI	3,23	0,32	mmol/l	98%	-0,80
AJ	3,12		mmol/l	95%	-2,57
AK			mmol/l		
AL	3,11	0,19	mmol/l	95%	-2,73
AM	3,16	0,474	mmol/l	96%	-1,93
AN	3,21	0,15	mmol/l	98%	-1,12
AO	3,22	0,06	mmol/l	98%	-0,96

Result [mmol/l]



Recovery [%]



AP	3,28	0,23	mmol/l	100%	0,00
AQ			mmol/l		
AR	3,17	0,317	mmol/l	97%	-1,77
AS	3,10	0,25	mmol/l	95%	-2,89
AT	3,26	0,33	mmol/l	99%	-0,32
AU	3,160	0,32	mmol/l	96%	-1,93
AV	3,20	0,10	mmol/l	98%	-1,28
AW			mmol/l		
AX			mmol/l		
AY			mmol/l		
AZ	3,122		mmol/l	95%	-2,54
BA			mmol/l		
BB	3,23	0,30	mmol/l	98%	-0,80
BC	3,29	0,0747	mmol/l	100%	0,16
BD			mmol/l		
BE	3,23	0,13	mmol/l	98%	-0,80

	All results	Outliers excl.	Unit
Mean ± CI(99%)	3,22 ± 0,05	3,22 ± 0,03	mmol/l
Recov. ± CI(99%)	98,1 ± 1,5	98,0 ± 0,9	%
SD between labs	0,12	0,07	mmol/l
RSD between labs	3,6	2,2	%
n for calculation	43	41	

### Sample N169A

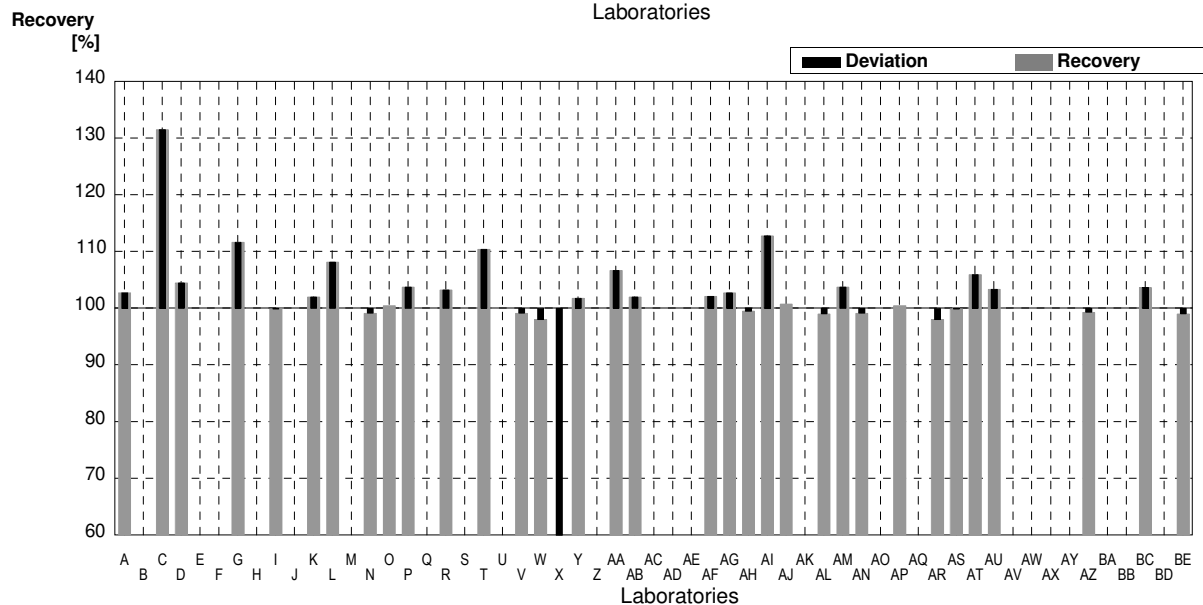
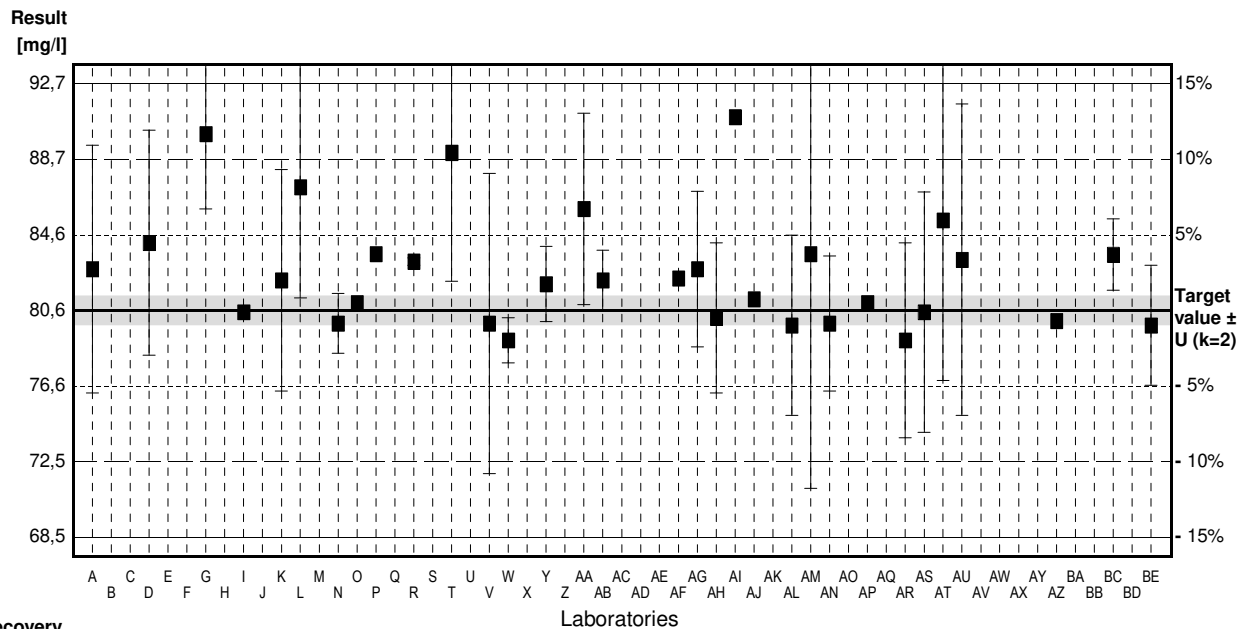
#### Parameter Hydrogen carbonate

Target value ± U (k=2) 80,6 mg/l ± 0,8 mg/l

IFA result ± U (k=2) 79 mg/l ± 3 mg/l

Stability test ± U (k=2) 78 mg/l ± 3 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	82,8	6,6	mg/l	103%	1,14
B			mg/l		
C	106 *	5	mg/l	132%	13,13
D	84,2	6	mg/l	104%	1,86
E			mg/l		
F			mg/l		
G	90	4,0	mg/l	112%	4,86
H			mg/l		
I	80,5		mg/l	100%	-0,05
J			mg/l		
K	82,2	5,9	mg/l	102%	0,83
L	87,17	5,91	mg/l	108%	3,40
M			mg/l		
N	79,9	1,60	mg/l	99%	-0,36
O	81		mg/l	100%	0,21
P	83,6		mg/l	104%	1,55
Q			mg/l		
R	83,2	0,2	mg/l	103%	1,34
S			mg/l		
T	89,0	6,853	mg/l	110%	4,34
U			mg/l		
V	79,9	8,0	mg/l	99%	-0,36
W	79	1,2	mg/l	98%	-0,83
X	3,92 *	0,2961	mg/l	5%	-39,64
Y	82	2	mg/l	102%	0,72
Z			mg/l		
AA	86,0	5,1	mg/l	107%	2,79
AB	82,2	1,6	mg/l	102%	0,83
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	82,3		mg/l	102%	0,88
AG	82,8	4,14	mg/l	103%	1,14
AH	80,2	4	mg/l	100%	-0,21
AI	90,90		mg/l	113%	5,32
AJ	81,2		mg/l	101%	0,31
AK			mg/l		
AL	79,8	4,8	mg/l	99%	-0,41
AM	83,6	12,5	mg/l	104%	1,55
AN	79,9	3,6	mg/l	99%	-0,36
AO			mg/l		



AP	81		mg/l	100%	0,21
AQ			mg/l		
AR	79	5,2	mg/l	98%	-0,83
AS	80,5	6,4	mg/l	100%	-0,05
AT	85,4	8,54	mg/l	106%	2,48
AU	83,3	8,3	mg/l	103%	1,40
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	80,03		mg/l	99%	-0,29
BA			mg/l		
BB			mg/l		
BC	83,57	1,8970	mg/l	104%	1,54
BD			mg/l		
BE	79,8	3,2	mg/l	99%	-0,41

	All results	Outliers excl.	Unit
Mean ± CI(99%)	81,1 ± 6,8	82,7 ± 1,5	mg/l
Recov. ± CI(99%)	100,6 ± 8,5	102,6 ± 1,9	%
SD between labs	14,5	3,1	mg/l
RSD between labs	17,9	3,8	%
n for calculation	34	32	

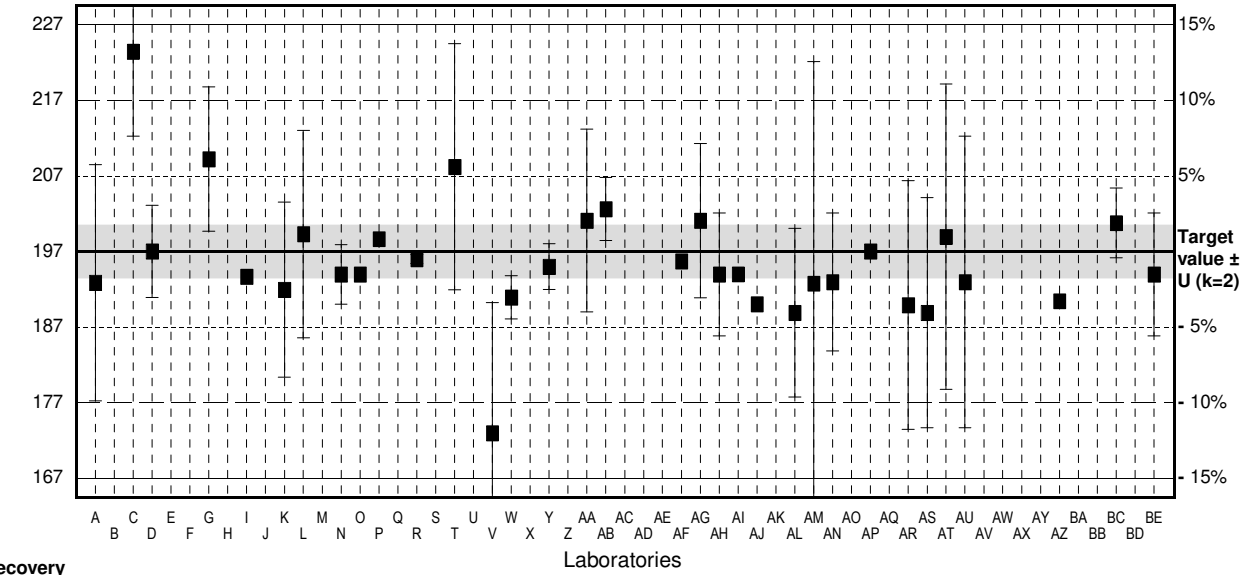
### Sample N169B

#### Parameter Hydrogen carbonate

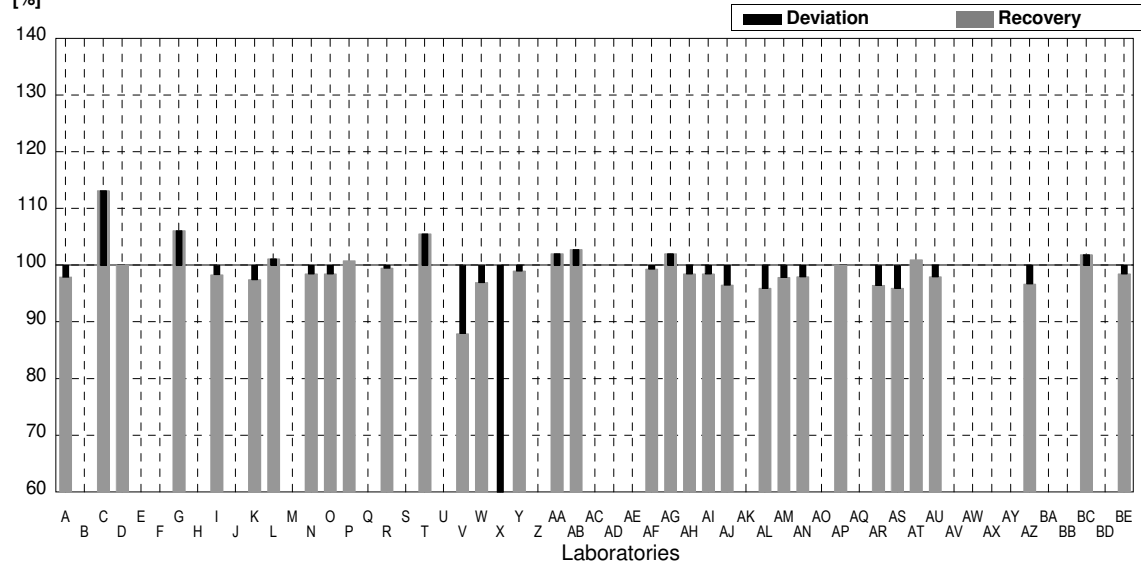
Target value  $\pm$  U (k=2) 197 mg/l  $\pm$  3 mg/l  
 IFA result  $\pm$  U (k=2) 193 mg/l  $\pm$  8 mg/l  
 Stability test  $\pm$  U (k=2) 189 mg/l  $\pm$  8 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	192,9	15,4	mg/l	98%	-0,87
B			mg/l		
C	223 *	11	mg/l	113%	5,50
D	197	6	mg/l	100%	0,00
E			mg/l		
F			mg/l		
G	209 *	9,4	mg/l	106%	2,54
H			mg/l		
I	193,7		mg/l	98%	-0,70
J			mg/l		
K	192,0	11,4	mg/l	97%	-1,06
L	199,24	13,5	mg/l	101%	0,47
M			mg/l		
N	194	3,88	mg/l	98%	-0,63
O	194		mg/l	98%	-0,63
P	198,6		mg/l	101%	0,34
Q			mg/l		
R	196	0,58	mg/l	99%	-0,21
S			mg/l		
T	208	16,02	mg/l	106%	2,33
U			mg/l		
V	173,3 *	17	mg/l	88%	-5,01
W	191	2,8	mg/l	97%	-1,27
X	8,96 *	0,8064	mg/l	5%	-39,77
Y	195	3	mg/l	99%	-0,42
Z			mg/l		
AA	201	11,9	mg/l	102%	0,85
AB	202,5	4,1	mg/l	103%	1,16
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	195,7		mg/l	99%	-0,27
AG	201	10,05	mg/l	102%	0,85
AH	194	8	mg/l	98%	-0,63
AI	194,01		mg/l	98%	-0,63
AJ	190,1		mg/l	96%	-1,46
AK			mg/l		
AL	189	11	mg/l	96%	-1,69
AM	192,8	28,9	mg/l	98%	-0,89
AN	193	9	mg/l	98%	-0,85
AO			mg/l		

Result [mg/l]



Recovery [%]





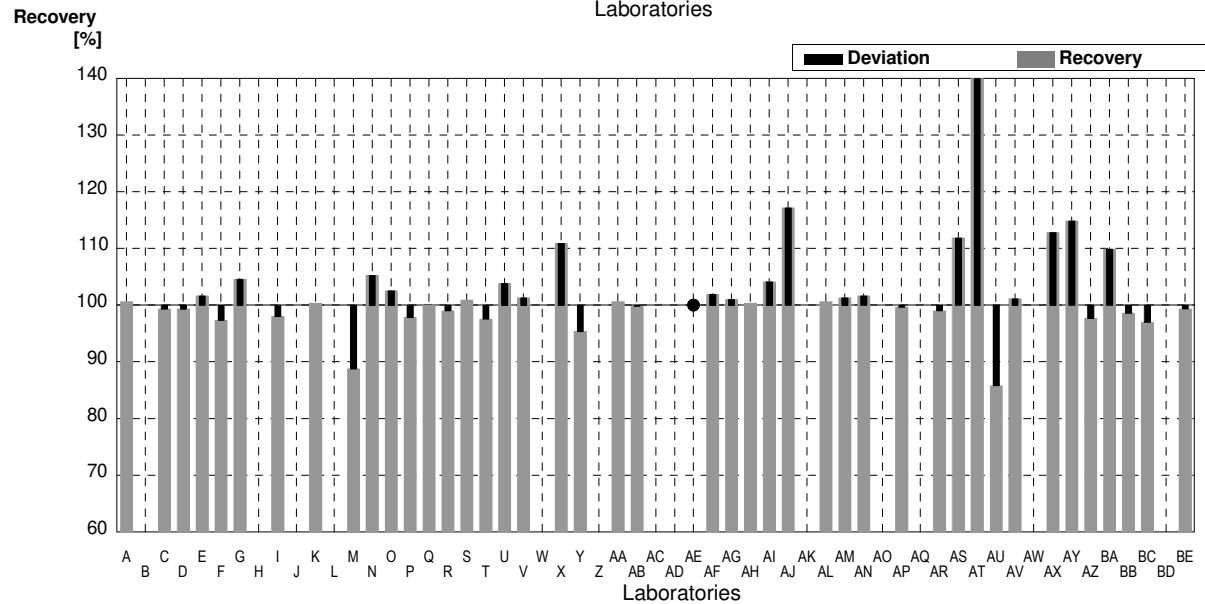
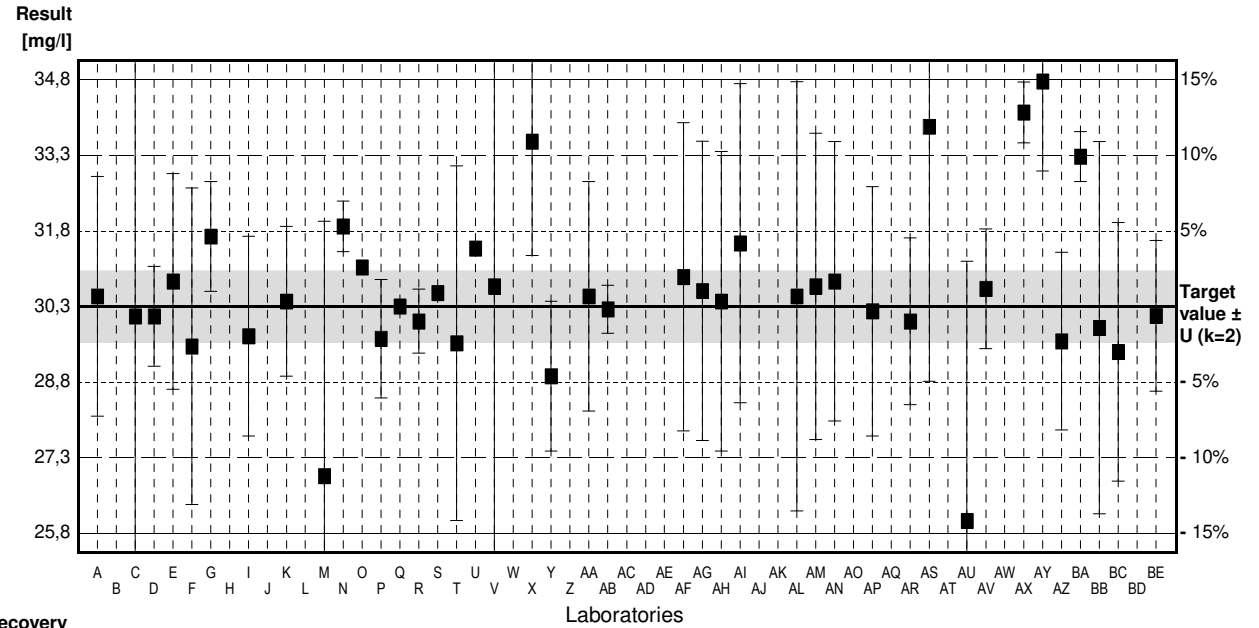
AP	197		mg/l	100%	0,00
AQ			mg/l		
AR	190	16,2	mg/l	96%	-1,48
AS	189	15	mg/l	96%	-1,69
AT	198,9	19,89	mg/l	101%	0,40
AU	193	19	mg/l	98%	-0,85
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	190,5		mg/l	97%	-1,37
BA			mg/l		
BB			mg/l		
BC	200,69	4,5557	mg/l	102%	0,78
BD			mg/l		
BE	194	8	mg/l	98%	-0,63

	All results	Outliers excl.	Unit
Mean ± CI(99%)	190 ± 15	195 ± 2	mg/l
Recov. ± CI(99%)	96,6 ± 7,9	99,1 ± 1,1	%
SD between labs	33	4	mg/l
RSD between labs	17,3	2,3	%
n for calculation	34	30	

**Sample N169A**  
**Parameter Calcium**

Target value ± U (k=2) 30,3 mg/l ± 0,7 mg/l  
 IFA result ± U (k=2) 32,8 mg/l ± 1,5 mg/l  
 Stability test ± U (k=2) 32,9 mg/l ± 1,5 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	30,5	2,4	mg/l	101%	0,21
B			mg/l		
C	30,1	6,0	mg/l	99%	-0,21
D	30,1	1,0	mg/l	99%	-0,21
E	30,8	2,16	mg/l	102%	0,52
F	29,5	3,17	mg/l	97%	-0,83
G	31,7	1,1	mg/l	105%	1,44
H			mg/l		
I	29,7	2,0	mg/l	98%	-0,62
J			mg/l		
K	30,4	1,5	mg/l	100%	0,10
L			mg/l		
M	26,9 *	5,1	mg/l	89%	-3,51
N	31,9	0,507	mg/l	105%	1,65
O	31,08		mg/l	103%	0,80
P	29,65	1,19	mg/l	98%	-0,67
Q	30,3		mg/l	100%	0,00
R	30,0	0,64	mg/l	99%	-0,31
S	30,57		mg/l	101%	0,28
T	29,56	3,55	mg/l	98%	-0,76
U	31,46		mg/l	104%	1,20
V	30,7	6,2	mg/l	101%	0,41
W			mg/l		
X	33,60 *	2,2848	mg/l	111%	3,40
Y	28,9	1,5	mg/l	95%	-1,44
Z			mg/l		
AA	30,5	2,3	mg/l	101%	0,21
AB	30,24	0,48	mg/l	100%	-0,06
AC			mg/l		
AD			mg/l		
AE	<40		mg/l	*	
AF	30,89	3,09	mg/l	102%	0,61
AG	30,61	3	mg/l	101%	0,32
AH	30,4	3	mg/l	100%	0,10
AI	31,565	3,2	mg/l	104%	1,30
AJ	35,5 *		mg/l	117%	5,36
AK			mg/l		
AL	30,5	4,3	mg/l	101%	0,21
AM	30,7	3,07	mg/l	101%	0,41
AN	30,8	2,8	mg/l	102%	0,52
AO			mg/l		



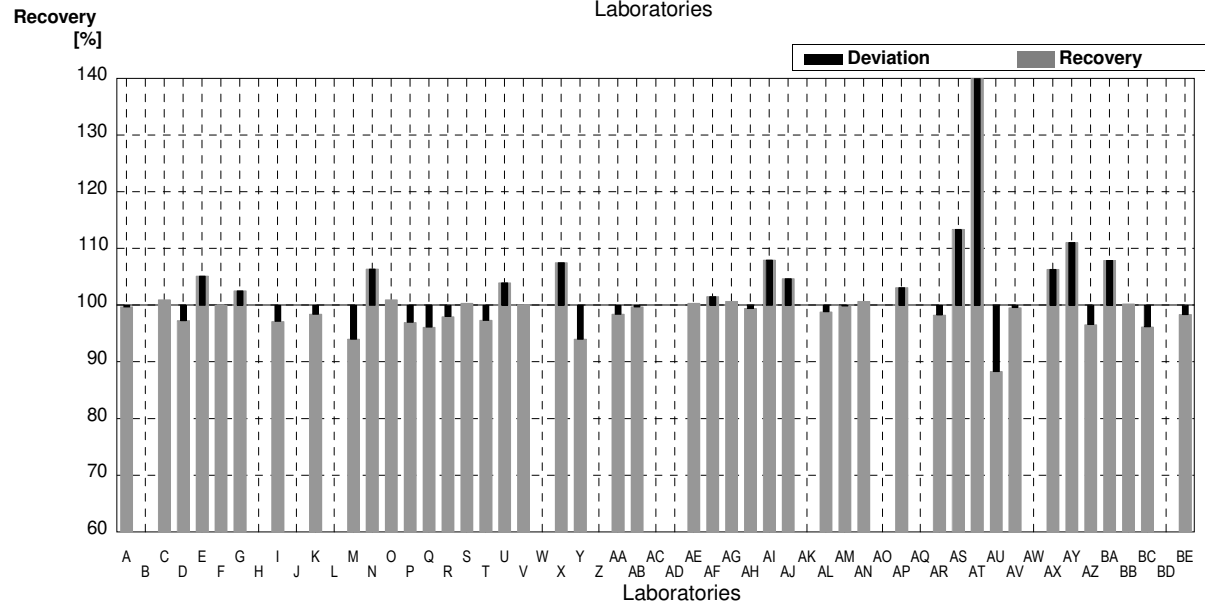
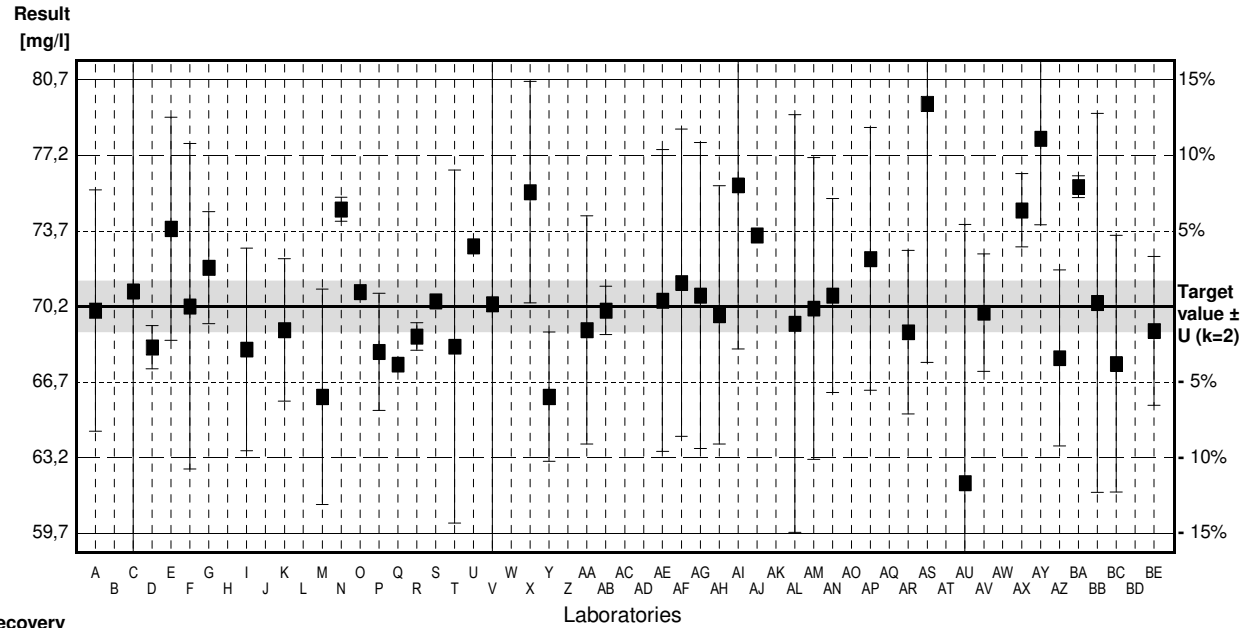
AP	30,2	2,5	mg/l	100%	-0,10
AQ			mg/l		
AR	30,0	1,67	mg/l	99%	-0,31
AS	33,9 *	5,1	mg/l	112%	3,71
AT	49,2 *	4,9	mg/l	162%	19,49
AU	26,0 *	5,2	mg/l	86%	-4,43
AV	30,65	1,20	mg/l	101%	0,36
AW			mg/l		
AX	34,185 *	0,606	mg/l	113%	4,01
AY	34,81 *	1,8	mg/l	115%	4,65
AZ	29,6	1,78	mg/l	98%	-0,72
BA	33,30 *	0,5	mg/l	110%	3,09
BB	29,87	3,73	mg/l	99%	-0,44
BC	29,3892	2,5920	mg/l	97%	-0,94
BD			mg/l		
BE	30,11	1,51	mg/l	99%	-0,20

	All results	Outliers excl.	Unit
Mean ± CI(99%)	31,2 ± 1,4	30,4 ± 0,3	mg/l
Recov. ± CI(99%)	102,9 ± 4,5	100,3 ± 1,1	%
SD between labs	3,3	0,7	mg/l
RSD between labs	10,7	2,2	%
n for calculation	43	34	

**Sample N169B**  
**Parameter Calcium**

Target value ± U (k=2) 70,2 mg/l ± 1,2 mg/l  
 IFA result ± U (k=2) 75 mg/l ± 3 mg/l  
 Stability test ± U (k=2) 75 mg/l ± 3 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	70	5,6	mg/l	100%	-0,09
B			mg/l		
C	70,9	14,2	mg/l	101%	0,31
D	68,3	1,0	mg/l	97%	-0,85
E	73,8	5,18	mg/l	105%	1,60
F	70,2	7,55	mg/l	100%	0,00
G	72	2,6	mg/l	103%	0,80
H			mg/l		
I	68,2	4,7	mg/l	97%	-0,89
J			mg/l		
K	69,1	3,3	mg/l	98%	-0,49
L			mg/l		
M	66	5,0	mg/l	94%	-1,87
N	74,7	0,556	mg/l	106%	2,00
O	70,87		mg/l	101%	0,30
P	68,09	2,72	mg/l	97%	-0,94
Q	67,5		mg/l	96%	-1,20
R	68,8	0,64	mg/l	98%	-0,62
S	70,44		mg/l	100%	0,11
T	68,33	8,20	mg/l	97%	-0,83
U	72,99		mg/l	104%	1,24
V	70,3	14,1	mg/l	100%	0,04
W			mg/l		
X	75,50	5,134	mg/l	108%	2,36
Y	66	3	mg/l	94%	-1,87
Z			mg/l		
AA	69,1	5,3	mg/l	98%	-0,49
AB	70,01	1,12	mg/l	100%	-0,08
AC			mg/l		
AD			mg/l		
AE	70,47	7	mg/l	100%	0,12
AF	71,29	7,13	mg/l	102%	0,49
AG	70,7	7,1	mg/l	101%	0,22
AH	69,8	6	mg/l	99%	-0,18
AI	75,821	7,6	mg/l	108%	2,50
AJ	73,5		mg/l	105%	1,47
AK			mg/l		
AL	69,4	9,7	mg/l	99%	-0,36
AM	70,1	7,01	mg/l	100%	-0,04
AN	70,7	4,5	mg/l	101%	0,22
AO			mg/l		



AP	72,4	6,1	mg/l	103%	0,98
AQ			mg/l		
AR	69	3,8	mg/l	98%	-0,53
AS	79,6 *	12	mg/l	113%	4,18
AT	131,2 *	13,1	mg/l	187%	27,15
AU	62,0	12	mg/l	88%	-3,65
AV	69,91	2,73	mg/l	100%	-0,13
AW			mg/l		
AX	74,658	1,705	mg/l	106%	1,98
AY	77,98	4	mg/l	111%	3,46
AZ	67,8	4,09	mg/l	97%	-1,07
BA	75,75	0,5	mg/l	108%	2,47
BB	70,36	8,79	mg/l	100%	0,07
BC	67,5336	5,9560	mg/l	96%	-1,19
BD			mg/l		
BE	69,06	3,45	mg/l	98%	-0,51

	All results	Outliers excl.	Unit
Mean ± CI(99%)	72,0 ± 3,9	70,5 ± 1,3	mg/l
Recov. ± CI(99%)	102,6 ± 5,6	100,4 ± 1,8	%
SD between labs	9,7	3,0	mg/l
RSD between labs	13,5	4,3	%
n for calculation	44	42	

### Sample N169A

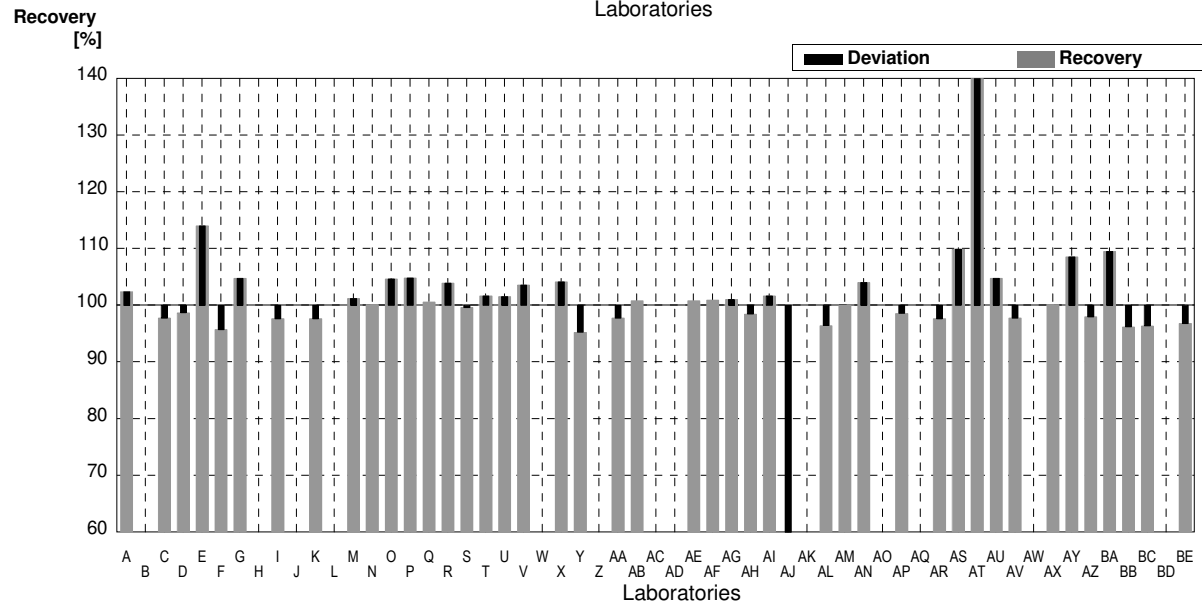
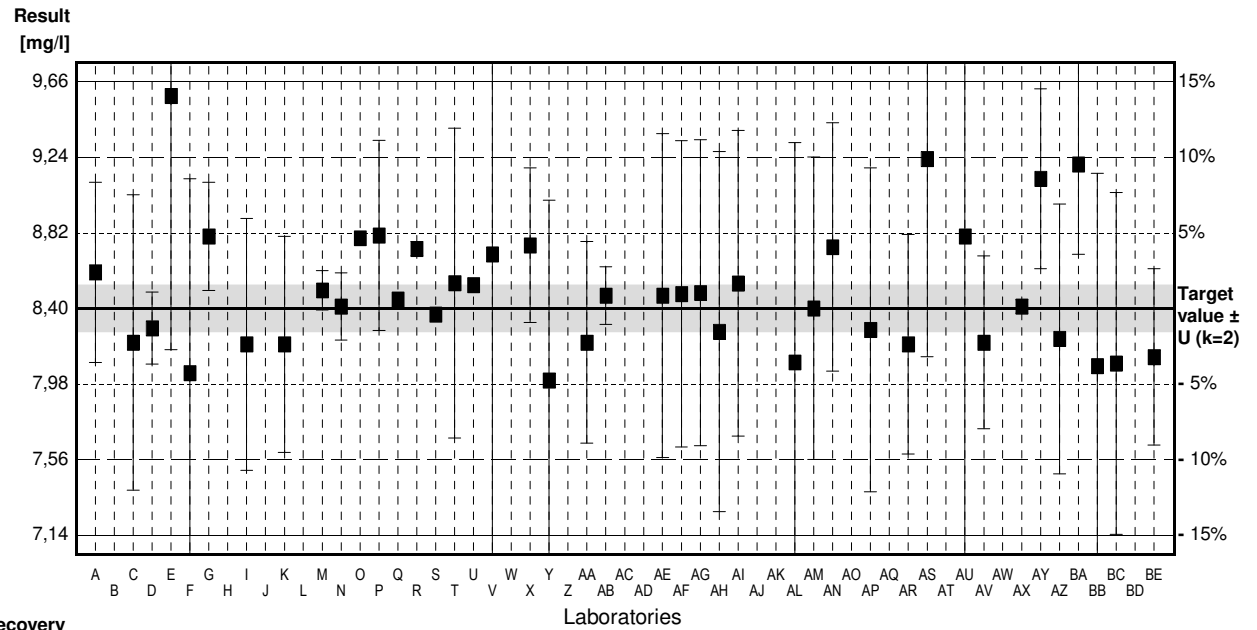
### Parameter Magnesium

Target value ± U (k=2) 8,40 mg/l ± 0,13 mg/l

IFA result ± U (k=2) 9,1 mg/l ± 0,5 mg/l

Stability test ± U (k=2) 9,0 mg/l ± 0,5 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	8,6	0,5	mg/l	102%	0,68
B			mg/l		
C	8,21	0,82	mg/l	98%	-0,65
D	8,29	0,2	mg/l	99%	-0,37
E	9,58	1,41	mg/l	114%	4,01
F	8,04	1,08	mg/l	96%	-1,22
G	8,8	0,30	mg/l	105%	1,36
H			mg/l		
I	8,2	0,7	mg/l	98%	-0,68
J			mg/l		
K	8,2	0,6	mg/l	98%	-0,68
L			mg/l		
M	8,5	0,109	mg/l	101%	0,34
N	8,41	0,186	mg/l	100%	0,03
O	8,79		mg/l	105%	1,33
P	8,805	0,528	mg/l	105%	1,38
Q	8,45		mg/l	101%	0,17
R	8,73	0,04	mg/l	104%	1,12
S	8,366		mg/l	100%	-0,12
T	8,54	0,86	mg/l	102%	0,48
U	8,53		mg/l	102%	0,44
V	8,70	1,7	mg/l	104%	1,02
W			mg/l		
X	8,75	0,4288	mg/l	104%	1,19
Y	8,0	1	mg/l	95%	-1,36
Z			mg/l		
AA	8,21	0,56	mg/l	98%	-0,65
AB	8,47	0,16	mg/l	101%	0,24
AC			mg/l		
AD			mg/l		
AE	8,47	0,9	mg/l	101%	0,24
AF	8,48	0,85	mg/l	101%	0,27
AG	8,486	0,85	mg/l	101%	0,29
AH	8,27	1,0	mg/l	98%	-0,44
AI	8,539	0,85	mg/l	102%	0,47
AJ	4,09 *		mg/l	49%	-14,66
AK			mg/l		
AL	8,10	1,22	mg/l	96%	-1,02
AM	8,4	0,84	mg/l	100%	0,00
AN	8,74	0,69	mg/l	104%	1,16
AO			mg/l		



AP	8,28	0,9	mg/l	99%	-0,41
AQ			mg/l		
AR	8,2	0,61	mg/l	98%	-0,68
AS	9,23	1,1	mg/l	110%	2,82
AT	21,5 *	2,15	mg/l	256%	44,56
AU	8,80	1,8	mg/l	105%	1,36
AV	8,21	0,48	mg/l	98%	-0,65
AW			mg/l		
AX	8,410	0,037	mg/l	100%	0,03
AY	9,12	0,5	mg/l	109%	2,45
AZ	8,23	0,75	mg/l	98%	-0,58
BA	9,20	0,5	mg/l	110%	2,72
BB	8,08	1,07	mg/l	96%	-1,09
BC	8,0937	0,9494	mg/l	96%	-1,04
BD			mg/l		
BE	8,13	0,49	mg/l	97%	-0,92

	All results	Outliers excl.	Unit
Mean ± CI(99%)	8,69 ± 0,86	8,49 ± 0,15	mg/l
Recov. ± CI(99%)	103,4 ± 10,2	101,1 ± 1,7	%
SD between labs	2,11	0,35	mg/l
RSD between labs	24,3	4,1	%
n for calculation	44	42	

### Sample N169B

### Parameter Magnesium

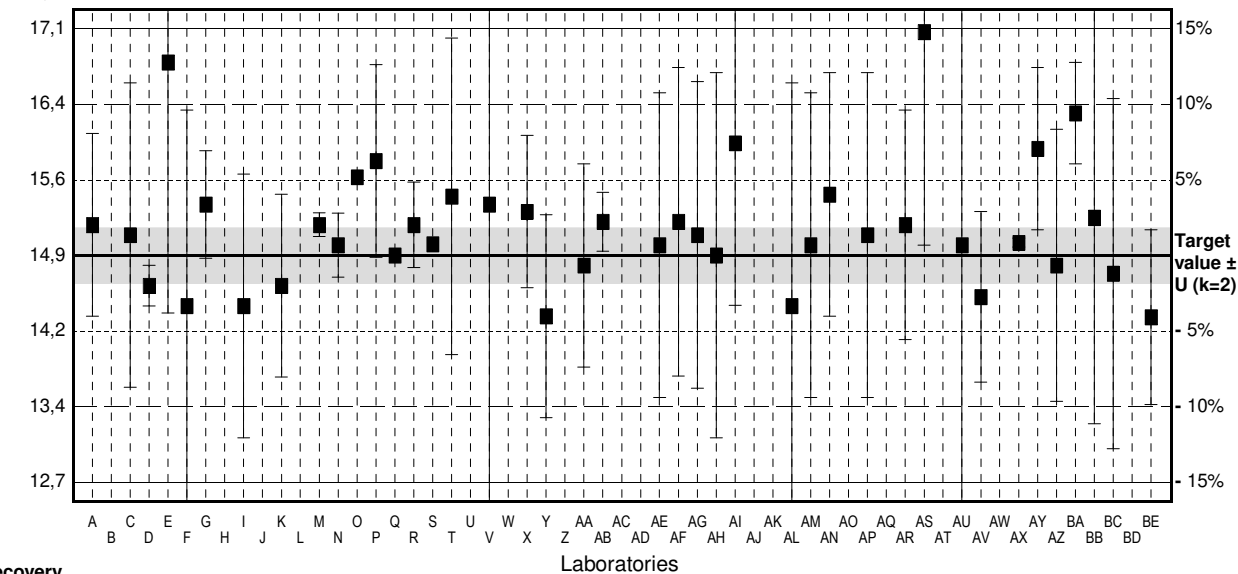
Target value ± U (k=2) 14,9 mg/l ± 0,3 mg/l

IFA result ± U (k=2) 15,9 mg/l ± 0,9 mg/l

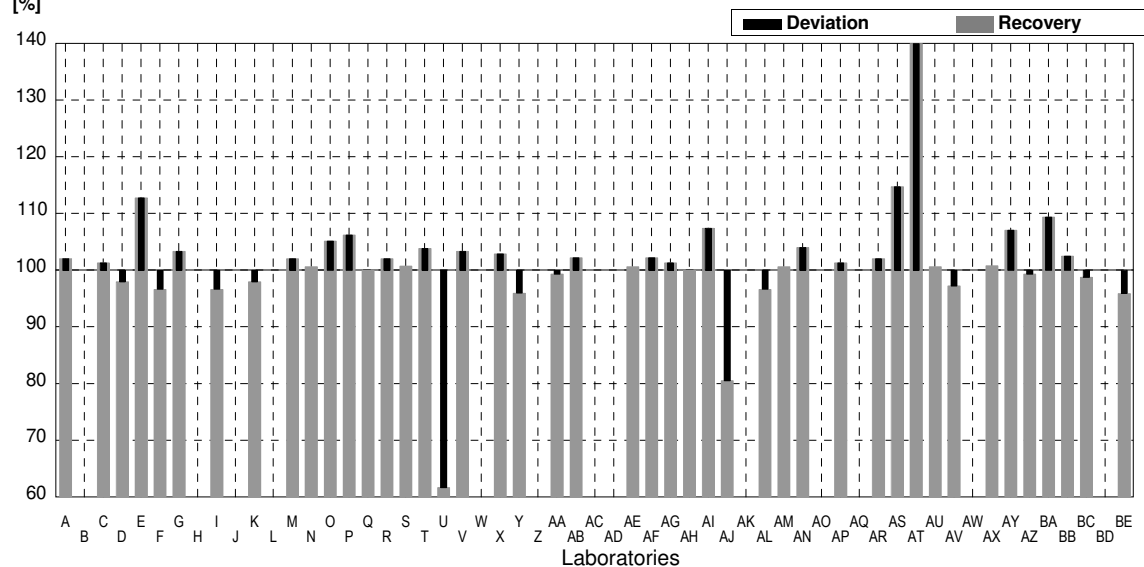
Stability test ± U (k=2) 16,0 mg/l ± 0,9 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	15,2	0,9	mg/l	102%	0,58
B			mg/l		
C	15,1	1,5	mg/l	101%	0,38
D	14,6	0,2	mg/l	98%	-0,58
E	16,8 *	2,47	mg/l	113%	3,64
F	14,4	1,93	mg/l	97%	-0,96
G	15,4	0,53	mg/l	103%	0,96
H			mg/l		
I	14,4	1,3	mg/l	97%	-0,96
J			mg/l		
K	14,6	0,9	mg/l	98%	-0,58
L			mg/l		
M	15,2	0,117	mg/l	102%	0,58
N	15,0	0,315	mg/l	101%	0,19
O	15,67		mg/l	105%	1,48
P	15,83	0,95	mg/l	106%	1,78
Q	14,9		mg/l	100%	0,00
R	15,2	0,42	mg/l	102%	0,58
S	15,01		mg/l	101%	0,21
T	15,48	1,56	mg/l	104%	1,11
U	9,19 *		mg/l	62%	-10,95
V	15,4	3,1	mg/l	103%	0,96
W			mg/l		
X	15,33	0,7512	mg/l	103%	0,82
Y	14,3	1	mg/l	96%	-1,15
Z			mg/l		
AA	14,8	1,00	mg/l	99%	-0,19
AB	15,23	0,29	mg/l	102%	0,63
AC			mg/l		
AD			mg/l		
AE	15,0	1,5	mg/l	101%	0,19
AF	15,23	1,52	mg/l	102%	0,63
AG	15,1	1,51	mg/l	101%	0,38
AH	14,9	1,8	mg/l	100%	0,00
AI	16,005	1,60	mg/l	107%	2,12
AJ	12,0 *		mg/l	81%	-5,56
AK			mg/l		
AL	14,4	2,2	mg/l	97%	-0,96
AM	15,0	1,50	mg/l	101%	0,19
AN	15,5	1,2	mg/l	104%	1,15
AO			mg/l		

Result [mg/l]



Recovery [%]





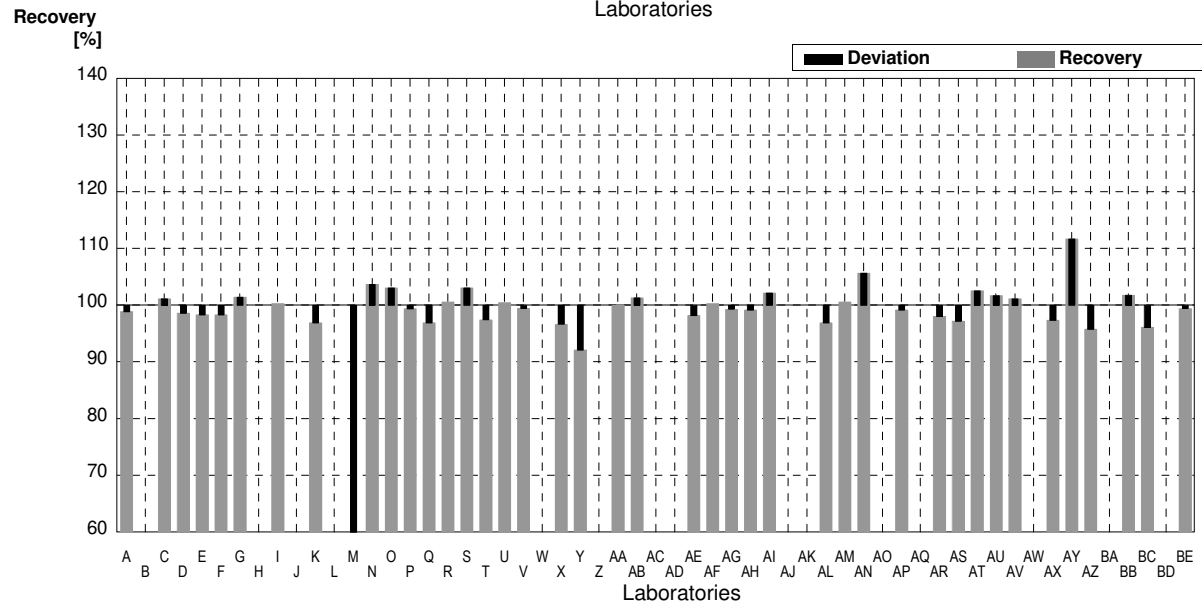
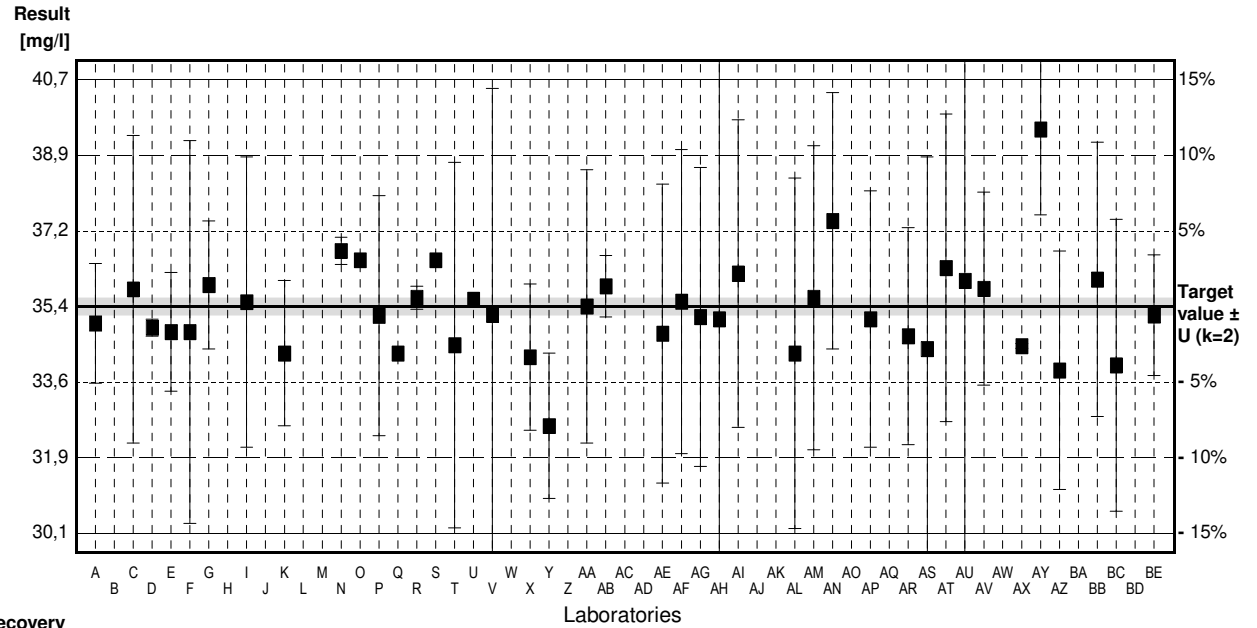
AP	15,1	1,6	mg/l	101%	0,38
AQ			mg/l		
AR	15,2	1,13	mg/l	102%	0,58
AS	17,1 *	2,1	mg/l	115%	4,22
AT	21,7 *	2,17	mg/l	146%	13,04
AU	15,0	3,0	mg/l	101%	0,19
AV	14,49	0,84	mg/l	97%	-0,79
AW			mg/l		
AX	15,024	0,044	mg/l	101%	0,24
AY	15,95	0,8	mg/l	107%	2,01
AZ	14,8	1,34	mg/l	99%	-0,19
BA	16,30	0,5	mg/l	109%	2,68
BB	15,27	2,03	mg/l	102%	0,71
BC	14,7190	1,7265	mg/l	99%	-0,35
BD			mg/l		
BE	14,29	0,86	mg/l	96%	-1,17

	All results	Outliers excl.	Unit
Mean ± CI(99%)	15,1 ± 0,6	15,1 ± 0,2	mg/l
Recov. ± CI(99%)	101,5 ± 4,2	101,2 ± 1,4	%
SD between labs	1,6	0,5	mg/l
RSD between labs	10,3	3,1	%
n for calculation	44	39	

**Sample N169A**  
**Parameter Sodium**

Target value ± U (k=2) 35,4 mg/l ± 0,2 mg/l  
 IFA result ± U (k=2) 36,3 mg/l ± 1,6 mg/l  
 Stability test ± U (k=2) 36,3 mg/l ± 1,6 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	35,0	1,4	mg/l	99%	-0,35
B			mg/l		
C	35,8	3,6	mg/l	101%	0,35
D	34,9	0,2	mg/l	99%	-0,44
E	34,8	1,39	mg/l	98%	-0,53
F	34,8	4,48	mg/l	98%	-0,53
G	35,9	1,5	mg/l	101%	0,44
H			mg/l		
I	35,5	3,4	mg/l	100%	0,09
J			mg/l		
K	34,3	1,7	mg/l	97%	-0,97
L			mg/l		
M	9,1 *	1,48	mg/l	26%	-23,22
N	36,7	0,319	mg/l	104%	1,15
O	36,48		mg/l	103%	0,95
P	35,18	2,81	mg/l	99%	-0,19
Q	34,3		mg/l	97%	-0,97
R	35,6	0,27	mg/l	101%	0,18
S	36,48		mg/l	103%	0,95
T	34,49	4,28	mg/l	97%	-0,80
U	35,56		mg/l	100%	0,14
V	35,2	5,3	mg/l	99%	-0,18
W			mg/l		
X	34,21	1,7105	mg/l	97%	-1,05
Y	32,6	1,7	mg/l	92%	-2,47
Z			mg/l		
AA	35,4	3,2	mg/l	100%	0,00
AB	35,87	0,72	mg/l	101%	0,41
AC			mg/l		
AD			mg/l		
AE	34,76	3,5	mg/l	98%	-0,56
AF	35,51	3,56	mg/l	100%	0,10
AG	35,15	3,5	mg/l	99%	-0,22
AH	35,1	6	mg/l	99%	-0,26
AI	36,167	3,6	mg/l	102%	0,68
AJ			mg/l		
AK			mg/l		
AL	34,3	4,1	mg/l	97%	-0,97
AM	35,6	3,56	mg/l	101%	0,18
AN	37,4	3,0	mg/l	106%	1,77
AO			mg/l		



AP	35,1	3,0	mg/l	99%	-0,26
AQ			mg/l		
AR	34,7	2,54	mg/l	98%	-0,62
AS	34,4	4,5	mg/l	97%	-0,88
AT	36,3	3,6	mg/l	103%	0,79
AU	36,0	7,2	mg/l	102%	0,53
AV	35,81	2,26	mg/l	101%	0,36
AW			mg/l		
AX	34,470	0,054	mg/l	97%	-0,82
AY	39,54 *	2	mg/l	112%	3,65
AZ	33,9	2,79	mg/l	96%	-1,32
BA			mg/l		
BB	36,03	3,21	mg/l	102%	0,56
BC	34,0202	3,4156	mg/l	96%	-1,22
BD			mg/l		
BE	35,19	1,41	mg/l	99%	-0,19

	All results	Outliers excl.	Unit
Mean ± CI(99%)	34,7 ± 1,7	35,2 ± 0,4	mg/l
Recov. ± CI(99%)	98,0 ± 4,9	99,5 ± 1,1	%
SD between labs	4,2	0,9	mg/l
RSD between labs	12,1	2,6	%
n for calculation	42	40	

### Sample N169B

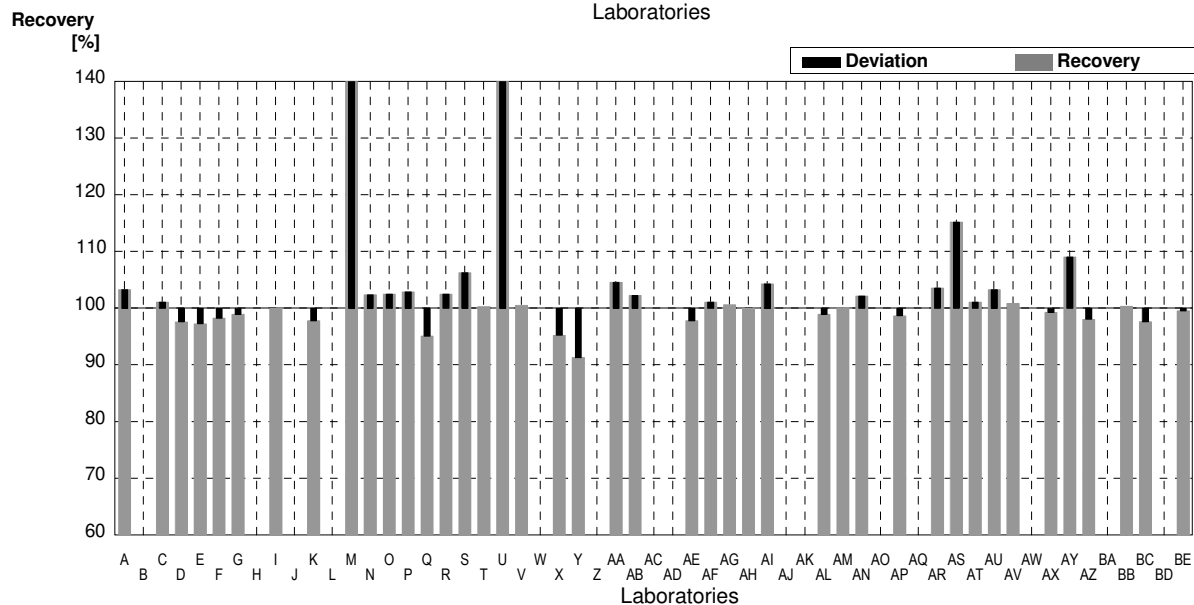
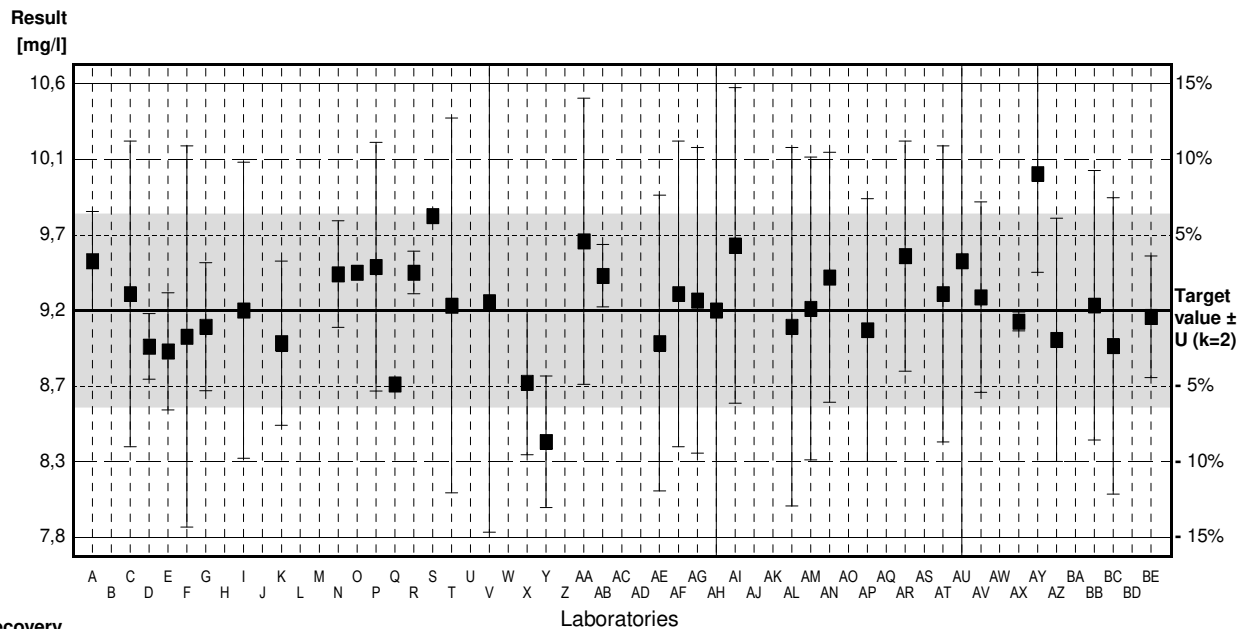
#### Parameter Sodium

Target value ± U (k=2) 9,2 mg/l ± 0,6 mg/l

IFA result ± U (k=2) 9,5 mg/l ± 0,9 mg/l

Stability test ± U (k=2) 9,3 mg/l ± 0,9 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	9,5	0,3	mg/l	103%	1,02
B			mg/l		
C	9,30	0,93	mg/l	101%	0,34
D	8,98	0,2	mg/l	98%	-0,75
E	8,95	0,356	mg/l	97%	-0,85
F	9,04	1,16	mg/l	98%	-0,54
G	9,1	0,39	mg/l	99%	-0,34
H			mg/l		
I	9,2	0,9	mg/l	100%	0,00
J			mg/l		
K	9,0	0,5	mg/l	98%	-0,68
L			mg/l		
M	27,3 *	1,48	mg/l	297%	61,48
N	9,42	0,324	mg/l	102%	0,75
O	9,43		mg/l	103%	0,78
P	9,465	0,757	mg/l	103%	0,90
Q	8,75		mg/l	95%	-1,53
R	9,43	0,13	mg/l	103%	0,78
S	9,775		mg/l	106%	1,95
T	9,229	1,14	mg/l	100%	0,10
U	15,23 *		mg/l	166%	20,48
V	9,25	1,4	mg/l	101%	0,17
W			mg/l		
X	8,76	0,438	mg/l	95%	-1,49
Y	8,4	0,4	mg/l	91%	-2,72
Z			mg/l		
AA	9,62	0,87	mg/l	105%	1,43
AB	9,41	0,19	mg/l	102%	0,71
AC			mg/l		
AD			mg/l		
AE	9,00	0,9	mg/l	98%	-0,68
AF	9,30	0,93	mg/l	101%	0,34
AG	9,26	0,93	mg/l	101%	0,20
AH	9,20	1,4	mg/l	100%	0,00
AI	9,594	0,96	mg/l	104%	1,34
AJ			mg/l		
AK			mg/l		
AL	9,10	1,09	mg/l	99%	-0,34
AM	9,21	0,921	mg/l	100%	0,03
AN	9,40	0,76	mg/l	102%	0,68
AO			mg/l		



AP	9,08	0,8	mg/l	99%	-0,41
AQ			mg/l		
AR	9,53	0,70	mg/l	104%	1,12
AS	10,6 *	1,4	mg/l	115%	4,76
AT	9,3	0,9	mg/l	101%	0,34
AU	9,50	1,9	mg/l	103%	1,02
AV	9,28	0,58	mg/l	101%	0,27
AW			mg/l		
AX	9,132	0,057	mg/l	99%	-0,23
AY	10,03	0,6	mg/l	109%	2,82
AZ	9,02	0,74	mg/l	98%	-0,61
BA			mg/l		
BB	9,23	0,82	mg/l	100%	0,10
BC	8,9833	0,9019	mg/l	98%	-0,74
BD			mg/l		
BE	9,16	0,37	mg/l	100%	-0,14

	All results	Outliers excl.	Unit
Mean ± CI(99%)	9,8 ± 1,2	9,2 ± 0,1	mg/l
Recov. ± CI(99%)	107,0 ± 13,3	100,4 ± 1,4	%
SD between labs	2,9	0,3	mg/l
RSD between labs	29,8	3,2	%
n for calculation	42	39	

### Sample N169A

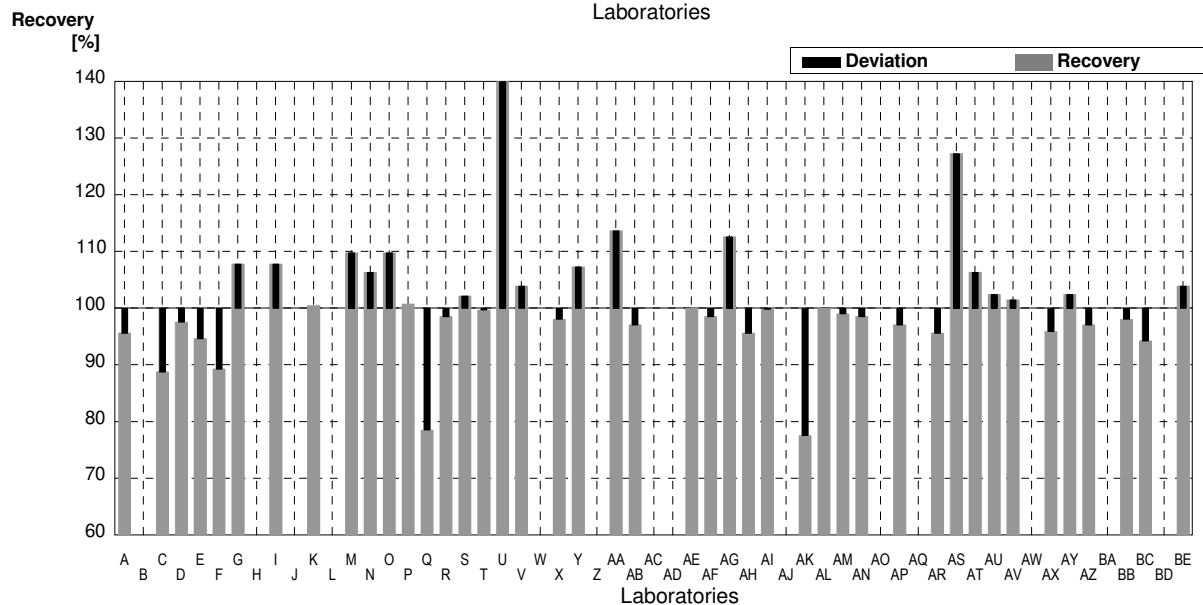
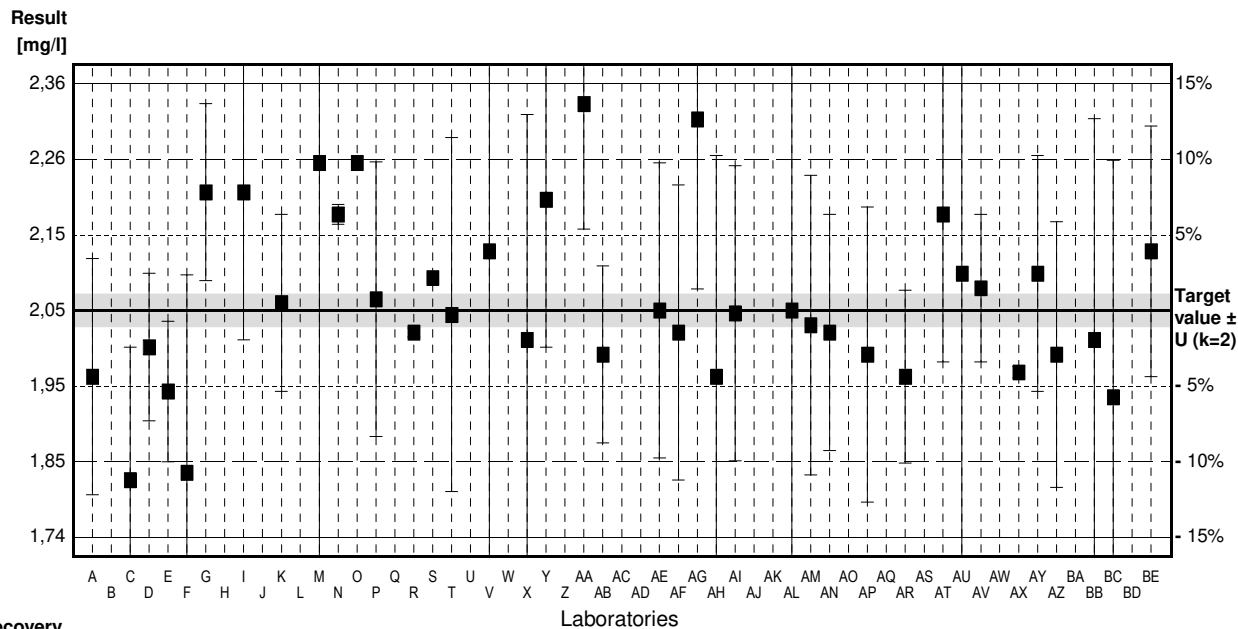
#### Parameter Potassium

Target value ± U (k=2) 2,05 mg/l ± 0,02 mg/l

IFA result ± U (k=2) 2,17 mg/l ± 0,16 mg/l

Stability test ± U (k=2) 2,16 mg/l ± 0,16 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,96	0,16	mg/l	96%	-1,02
B			mg/l		
C	1,82	0,18	mg/l	89%	-2,61
D	2,00	0,1	mg/l	98%	-0,57
E	1,94	0,0953	mg/l	95%	-1,25
F	1,83	0,268	mg/l	89%	-2,50
G	2,21	0,12	mg/l	108%	1,82
H			mg/l		
I	2,21	0,2	mg/l	108%	1,82
J			mg/l		
K	2,06	0,12	mg/l	100%	0,11
L			mg/l		
M	2,25	0,72	mg/l	110%	2,27
N	2,18	0,0135	mg/l	106%	1,47
O	2,25		mg/l	110%	2,27
P	2,065	0,186	mg/l	101%	0,17
Q	1,61 *		mg/l	79%	-4,99
R	2,02	0,006	mg/l	99%	-0,34
S	2,094		mg/l	102%	0,50
T	2,044	0,24	mg/l	100%	-0,07
U	2,95 *		mg/l	144%	10,21
V	2,13	0,43	mg/l	104%	0,91
W			mg/l		
X	2,01	0,3055	mg/l	98%	-0,45
Y	2,20	0,2	mg/l	107%	1,70
Z			mg/l		
AA	2,33	0,17	mg/l	114%	3,18
AB	1,99	0,12	mg/l	97%	-0,68
AC			mg/l		
AD			mg/l		
AE	2,05	0,2	mg/l	100%	0,00
AF	2,02	0,20	mg/l	99%	-0,34
AG	2,309	0,23	mg/l	113%	2,94
AH	1,96	0,3	mg/l	96%	-1,02
AI	2,046	0,20	mg/l	100%	-0,05
AJ			mg/l		
AK	1,59 *	0,159	mg/l	78%	-5,22
AL	2,05	0,31	mg/l	100%	0,00
AM	2,03	0,203	mg/l	99%	-0,23
AN	2,02	0,16	mg/l	99%	-0,34
AO			mg/l		



AP	1,99	0,2	mg/l	97%	-0,68
AQ			mg/l		
AR	1,96	0,117	mg/l	96%	-1,02
AS	2,61 *	0,39	mg/l	127%	6,35
AT	2,18	0,2	mg/l	106%	1,47
AU	2,10	0,42	mg/l	102%	0,57
AV	2,08	0,10	mg/l	101%	0,34
AW			mg/l		
AX	1,966	0,008	mg/l	96%	-0,95
AY	2,10	0,16	mg/l	102%	0,57
AZ	1,99	0,18	mg/l	97%	-0,68
BA			mg/l		
BB	2,01	0,30	mg/l	98%	-0,45
BC	1,9324	0,3208	mg/l	94%	-1,33
BD			mg/l		
BE	2,13	0,17	mg/l	104%	0,91

	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,08 ± 0,09	2,06 ± 0,05	mg/l
Recov. ± CI(99%)	101,3 ± 4,4	100,7 ± 2,5	%
SD between labs	0,22	0,12	mg/l
RSD between labs	10,6	5,7	%
n for calculation	43	39	

### Sample N169B

#### Parameter Potassium

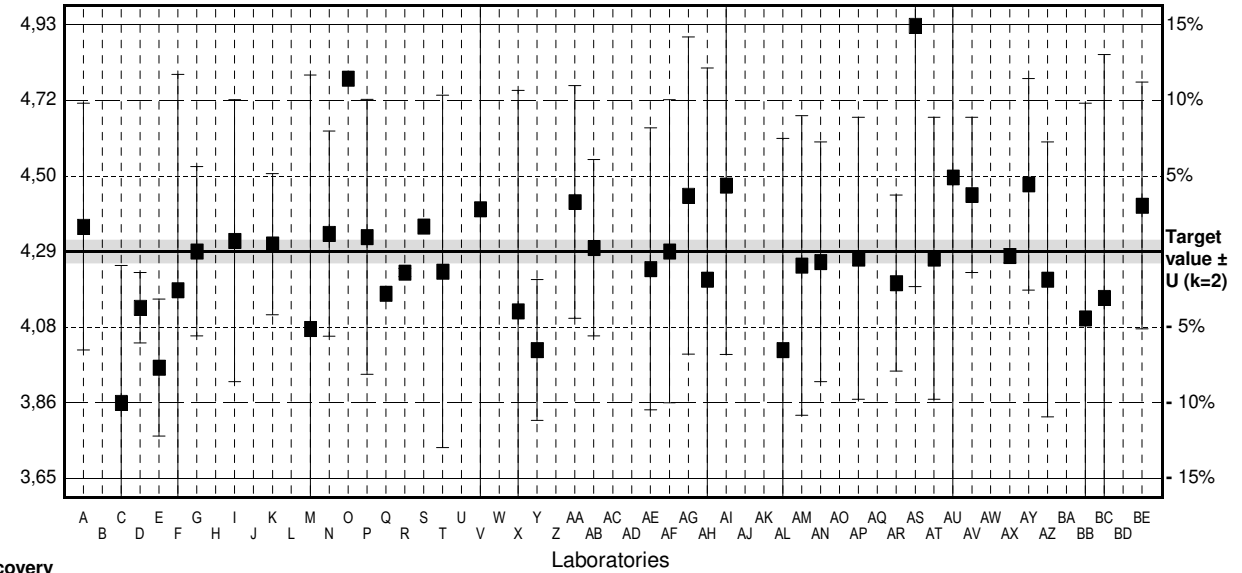
Target value ± U (k=2) 4,29 mg/l ± 0,03 mg/l

IFA result ± U (k=2) 4,33 mg/l ± 0,25 mg/l

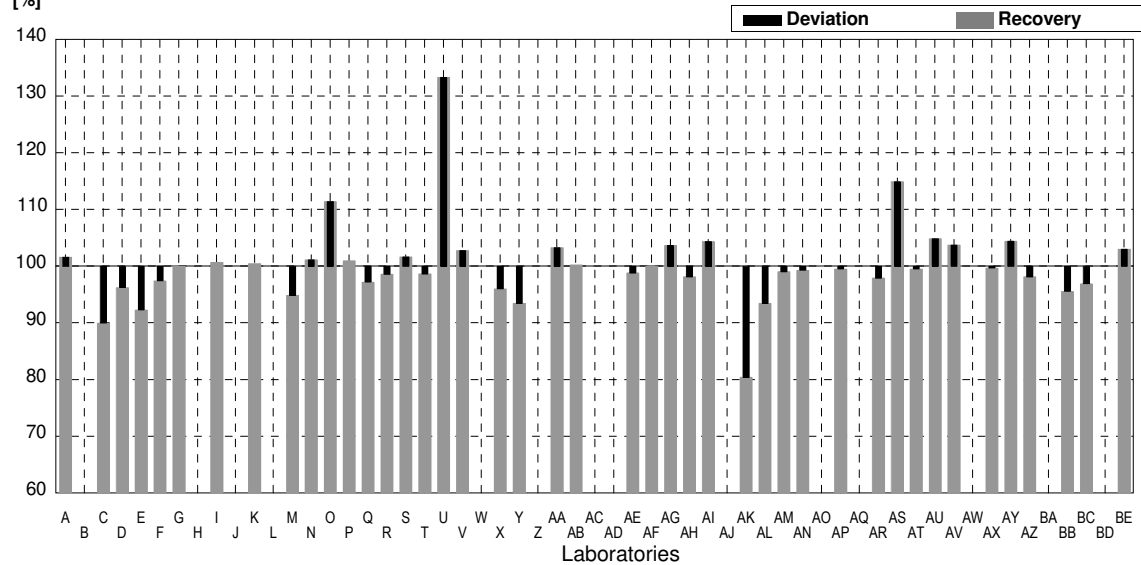
Stability test ± U (k=2) 4,26 mg/l ± 0,24 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	4,36	0,35	mg/l	102%	0,38
B			mg/l		
C	3,86	0,39	mg/l	90%	-2,33
D	4,13	0,1	mg/l	96%	-0,87
E	3,96	0,194	mg/l	92%	-1,79
F	4,18	0,612	mg/l	97%	-0,60
G	4,29	0,24	mg/l	100%	0,00
H			mg/l		
I	4,32	0,4	mg/l	101%	0,16
J			mg/l		
K	4,31	0,20	mg/l	100%	0,11
L			mg/l		
M	4,07	0,72	mg/l	95%	-1,19
N	4,34	0,291	mg/l	101%	0,27
O	4,78 *		mg/l	111%	2,66
P	4,331	0,390	mg/l	101%	0,22
Q	4,17		mg/l	97%	-0,65
R	4,23	0,012	mg/l	99%	-0,33
S	4,361		mg/l	102%	0,38
T	4,233	0,50	mg/l	99%	-0,31
U	5,72 *		mg/l	133%	7,75
V	4,41	0,89	mg/l	103%	0,65
W			mg/l		
X	4,12	0,626	mg/l	96%	-0,92
Y	4,01	0,2	mg/l	93%	-1,52
Z			mg/l		
AA	4,43	0,33	mg/l	103%	0,76
AB	4,30	0,25	mg/l	100%	0,05
AC			mg/l		
AD			mg/l		
AE	4,24	0,4	mg/l	99%	-0,27
AF	4,29	0,43	mg/l	100%	0,00
AG	4,448	0,45	mg/l	104%	0,86
AH	4,21	0,6	mg/l	98%	-0,43
AI	4,477	0,48	mg/l	104%	1,01
AJ			mg/l		
AK	3,45 *	0,345	mg/l	80%	-4,55
AL	4,01	0,60	mg/l	93%	-1,52
AM	4,25	0,425	mg/l	99%	-0,22
AN	4,26	0,34	mg/l	99%	-0,16
AO			mg/l		

Result [mg/l]



Recovery [%]





AP	4,27	0,4	mg/l	100%	-0,11
AQ			mg/l		
AR	4,20	0,250	mg/l	98%	-0,49
AS	4,93 *	0,74	mg/l	115%	3,47
AT	4,27	0,4	mg/l	100%	-0,11
AU	4,50	0,90	mg/l	105%	1,14
AV	4,45	0,22	mg/l	104%	0,87
AW			mg/l		
AX	4,277	0,020	mg/l	100%	-0,07
AY	4,48	0,3	mg/l	104%	1,03
AZ	4,21	0,39	mg/l	98%	-0,43
BA			mg/l		
BB	4,10	0,61	mg/l	96%	-1,03
BC	4,1579	0,6902	mg/l	97%	-0,72
BD			mg/l		
BE	4,42	0,35	mg/l	103%	0,70

	All results	Outliers excl.	Unit
Mean ± CI(99%)	4,30 ± 0,13	4,25 ± 0,06	mg/l
Recov. ± CI(99%)	100,2 ± 3,1	99,2 ± 1,5	%
SD between labs	0,32	0,15	mg/l
RSD between labs	7,4	3,5	%
n for calculation	43	39	

### Sample N169A

#### Parameter Nitrate

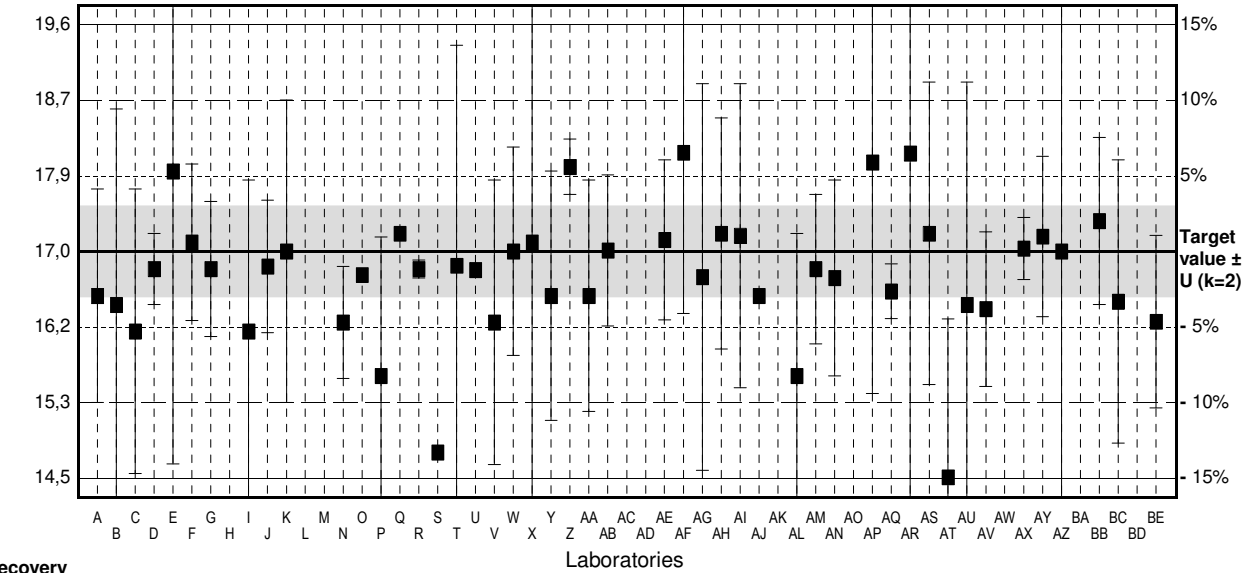
Target value ± U (k=2) 17,0 mg/l ± 0,5 mg/l

IFA result ± U (k=2) 16,5 mg/l ± 0,9 mg/l

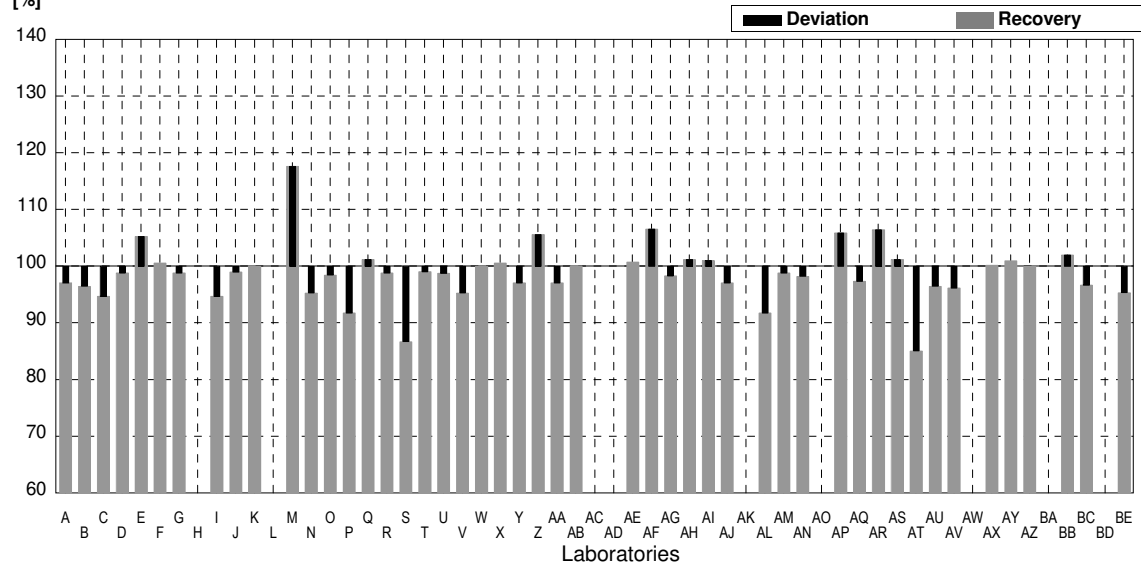
Stability test ± U (k=2) 16,5 mg/l ± 0,9 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	16,5	1,2	mg/l	97%	-0,95
B	16,4	2,2	mg/l	96%	-1,14
C	16,1	1,6	mg/l	95%	-1,71
D	16,8	0,4	mg/l	99%	-0,38
E	17,9	3,29	mg/l	105%	1,71
F	17,1	0,88	mg/l	101%	0,19
G	16,8	0,76	mg/l	99%	-0,38
H			mg/l		
I	16,1	1,7	mg/l	95%	-1,71
J	16,829	0,746	mg/l	99%	-0,32
K	17,0	1,7	mg/l	100%	0,00
L			mg/l		
M	20,0 *	7,3	mg/l	118%	5,69
N	16,2	0,629	mg/l	95%	-1,52
O	16,735		mg/l	98%	-0,50
P	15,6	1,56	mg/l	92%	-2,66
Q	17,2		mg/l	101%	0,38
R	16,8	0,1	mg/l	99%	-0,38
S	14,74 *		mg/l	87%	-4,29
T	16,84	2,475	mg/l	99%	-0,30
U	16,79		mg/l	99%	-0,40
V	16,2	1,6	mg/l	95%	-1,52
W	17,0	1,17	mg/l	100%	0,00
X	17,1	3,3858	mg/l	101%	0,19
Y	16,5	1,4	mg/l	97%	-0,95
Z	17,95	0,311	mg/l	106%	1,80
AA	16,5	1,3	mg/l	97%	-0,95
AB	17,01	0,85	mg/l	100%	0,02
AC			mg/l		
AD			mg/l		
AE	17,13	0,9	mg/l	101%	0,25
AF	18,11	1,81	mg/l	107%	2,11
AG	16,712	2,173	mg/l	98%	-0,55
AH	17,2	1,3	mg/l	101%	0,38
AI	17,176	1,71	mg/l	101%	0,33
AJ	16,5		mg/l	97%	-0,95
AK			mg/l		
AL	15,6	1,6	mg/l	92%	-2,66
AM	16,8	0,84	mg/l	99%	-0,38
AN	16,7	1,1	mg/l	98%	-0,57
AO			mg/l		

Result [mg/l]



Recovery [%]



AP	18,0	2,6	mg/l	106%	1,90
AQ	16,550	0,308	mg/l	97%	-0,85
AR	18,1	3,89	mg/l	106%	2,09
AS	17,2	1,7	mg/l	101%	0,38
AT	14,46 *	1,78	mg/l	85%	-4,82
AU	16,4	2,5	mg/l	96%	-1,14
AV	16,35	0,87	mg/l	96%	-1,23
AW			mg/l		
AX	17,031	0,348	mg/l	100%	0,06
AY	17,167	0,9	mg/l	101%	0,32
AZ	17,0	3,51	mg/l	100%	0,00
BA			mg/l		
BB	17,34	0,94	mg/l	102%	0,65
BC	16,435	1,5909	mg/l	97%	-1,07
BD			mg/l		
BE	16,21	0,97	mg/l	95%	-1,50

	All results	Outliers excl.	Unit
Mean ± CI(99%)	16,8 ± 0,3	16,8 ± 0,2	mg/l
Recov. ± CI(99%)	98,9 ± 2,0	99,0 ± 1,4	%
SD between labs	0,9	0,6	mg/l
RSD between labs	5,1	3,5	%
n for calculation	48	45	

### Sample N169B

#### Parameter Nitrate

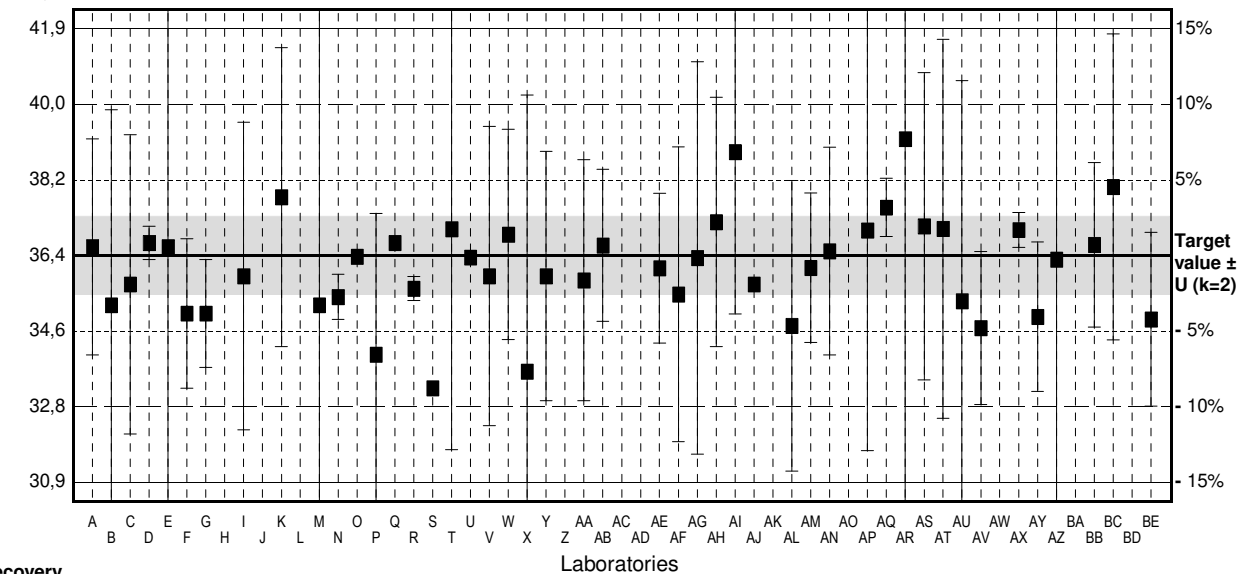
Target value ± U (k=2) 36,4 mg/l ± 0,9 mg/l

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

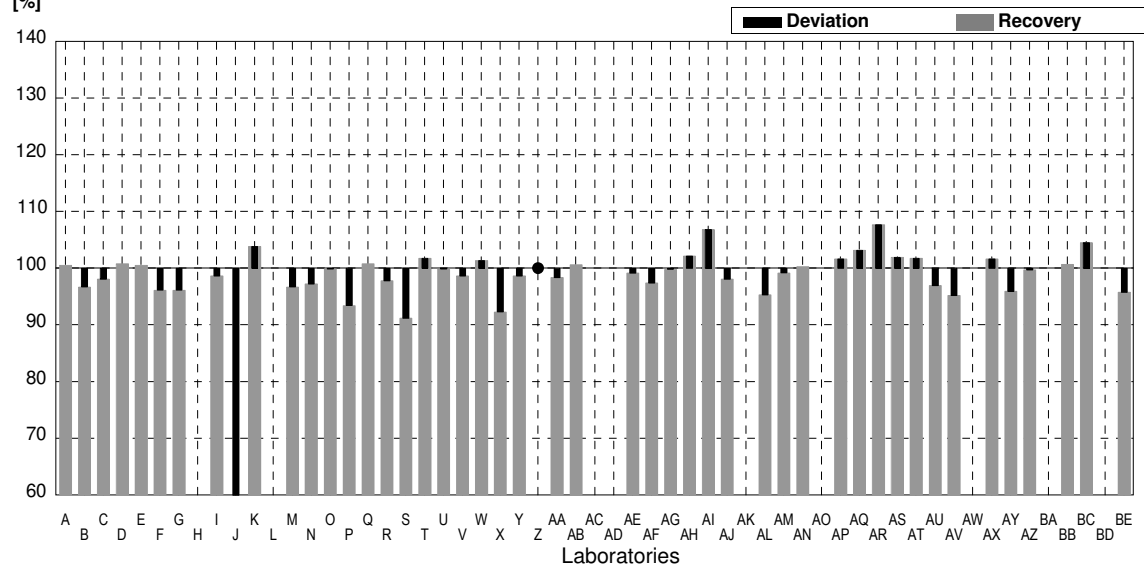
Stability test ± U (k=2) 35,8 mg/l ± 1,9 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	36,6	2,6	mg/l	101%	0,18
B	35,2	4,7	mg/l	97%	-1,06
C	35,7	3,6	mg/l	98%	-0,62
D	36,7	0,4	mg/l	101%	0,27
E	36,6	6,72	mg/l	101%	0,18
F	35,0	1,8	mg/l	96%	-1,24
G	35,0	1,3	mg/l	96%	-1,24
H			mg/l		
I	35,9	3,7	mg/l	99%	-0,44
J	18,706 *	0,829	mg/l	51%	-15,68
K	37,8	3,6	mg/l	104%	1,24
L			mg/l		
M	35,2	7,1	mg/l	97%	-1,06
N	35,4	0,545	mg/l	97%	-0,89
O	36,368		mg/l	100%	-0,03
P	34,01	3,40	mg/l	93%	-2,12
Q	36,7		mg/l	101%	0,27
R	35,6	0,29	mg/l	98%	-0,71
S	33,20		mg/l	91%	-2,84
T	37,03	5,3125	mg/l	102%	0,56
U	36,35		mg/l	100%	-0,04
V	35,9	3,6	mg/l	99%	-0,44
W	36,9	2,53	mg/l	101%	0,44
X	33,6	6,6528	mg/l	92%	-2,48
Y	35,9	3	mg/l	99%	-0,44
Z	>30		mg/l	*	
AA	35,8	2,9	mg/l	98%	-0,53
AB	36,64	1,83	mg/l	101%	0,21
AC			mg/l		
AD			mg/l		
AE	36,09	1,8	mg/l	99%	-0,27
AF	35,46	3,55	mg/l	97%	-0,83
AG	36,336	4,724	mg/l	100%	-0,06
AH	37,2	3	mg/l	102%	0,71
AI	38,885	3,9	mg/l	107%	2,20
AJ	35,7		mg/l	98%	-0,62
AK			mg/l		
AL	34,7	3,5	mg/l	95%	-1,51
AM	36,1	1,80	mg/l	99%	-0,27
AN	36,5	2,5	mg/l	100%	0,09
AO			mg/l		

#### Result [mg/l]



#### Recovery [%]



AP	37,0	5,3	mg/l	102%	0,53
AQ	37,550	0,700	mg/l	103%	1,02
AR	39,2	8,4	mg/l	108%	2,48
AS	37,1	3,7	mg/l	102%	0,62
AT	37,04	4,56	mg/l	102%	0,57
AU	35,3	5,3	mg/l	97%	-0,97
AV	34,65	1,84	mg/l	95%	-1,55
AW			mg/l		
AX	37,010	0,423	mg/l	102%	0,54
AY	34,920	1,8	mg/l	96%	-1,31
AZ	36,3	7,49	mg/l	100%	-0,09
BA			mg/l		
BB	36,65	1,98	mg/l	101%	0,22
BC	38,048	3,6830	mg/l	105%	1,46
BD			mg/l		
BE	34,86	2,09	mg/l	96%	-1,36

	All results	Outliers excl.	Unit
Mean ± CI(99%)	35,8 ± 1,1	36,1 ± 0,5	mg/l
Recov. ± CI(99%)	98,2 ± 3,0	99,2 ± 1,3	%
SD between labs	2,8	1,2	mg/l
RSD between labs	7,9	3,4	%
n for calculation	47	46	

# Sample N169A

## Parameter Nitrite

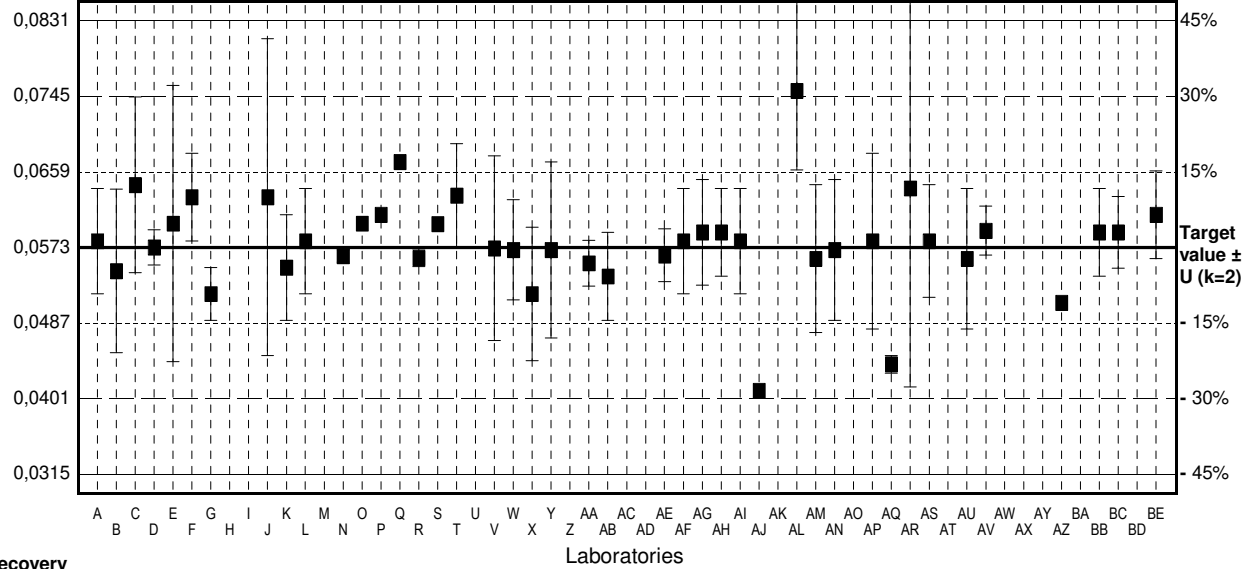
Target value ± U (k=2) 0,0573 mg/l ± 0,0002 mg/l

IFA result ± U (k=2) 0,057 mg/l ± 0,003 mg/l

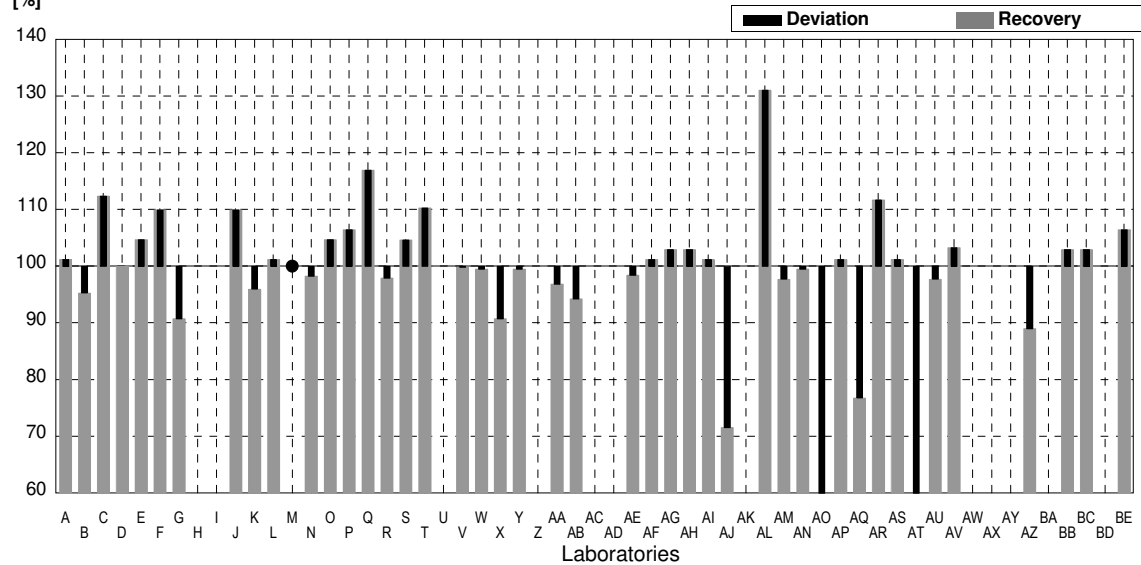
Stability test ± U (k=2) 0,057 mg/l ± 0,003 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,058	0,006	mg/l	101%	0,23
B	0,0546	0,0093	mg/l	95%	-0,87
C	0,0644	0,010	mg/l	112%	2,29
D	0,0573	0,002	mg/l	100%	0,00
E	0,060	0,0157	mg/l	105%	0,87
F	0,063	0,005	mg/l	110%	1,84
G	0,052	0,0030	mg/l	91%	-1,71
H			mg/l		
I	n.a		mg/l		
J	0,063	0,018	mg/l	110%	1,84
K	0,055	0,006	mg/l	96%	-0,74
L	0,058	0,006	mg/l	101%	0,23
M	<0,086		mg/l	*	
N	0,0563	0,00071	mg/l	98%	-0,32
O	0,060		mg/l	105%	0,87
P	0,061		mg/l	106%	1,20
Q	0,067		mg/l	117%	3,13
R	0,0561	0,001	mg/l	98%	-0,39
S	0,05995		mg/l	105%	0,86
T	0,0632	0,00588	mg/l	110%	1,91
U			mg/l		
V	0,0572	0,0105	mg/l	100%	-0,03
W	0,057	0,0057	mg/l	99%	-0,10
X	0,052	0,00759	mg/l	91%	-1,71
Y	0,057	0,01	mg/l	99%	-0,10
Z			mg/l		
AA	0,0555	0,0026	mg/l	97%	-0,58
AB	0,054	0,005	mg/l	94%	-1,07
AC			mg/l		
AD			mg/l		
AE	0,0564	0,003	mg/l	98%	-0,29
AF	0,058	0,006	mg/l	101%	0,23
AG	0,059	0,006	mg/l	103%	0,55
AH	0,059	0,005	mg/l	103%	0,55
AI	0,058	0,006	mg/l	101%	0,23
AJ	0,0410 *		mg/l	72%	-5,27
AK			mg/l		
AL	0,0751 *	0,0090	mg/l	131%	5,75
AM	0,056	0,0084	mg/l	98%	-0,42
AN	0,057	0,008	mg/l	99%	-0,10
AO	0,0180 *	0,002	mg/l	31%	-12,70

Result [mg/l]



Recovery [%]



AP	0,058	0,010	mg/l	101%	0,23
AQ	0,0440 *	0,001	mg/l	77%	-4,30
AR	0,064	0,0226	mg/l	112%	2,17
AS	0,0580	0,0064	mg/l	101%	0,23
AT	0,0270 *	0,0012	mg/l	47%	-9,79
AU	0,056	0,008	mg/l	98%	-0,42
AV	0,0592	0,0028	mg/l	103%	0,61
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,051		mg/l	89%	-2,04
BA			mg/l		
BB	0,059	0,005	mg/l	103%	0,55
BC	0,059	0,00409	mg/l	103%	0,55
BD			mg/l		
BE	0,061	0,005	mg/l	106%	1,20

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0563 ± 0,0037	0,0582 ± 0,0015	mg/l
Recov. ± CI(99%)	98,2 ± 6,5	101,6 ± 2,6	%
SD between labs	0,0092	0,0035	mg/l
RSD between labs	16,4	5,9	%
n for calculation	44	39	

### Sample N169B

#### Parameter Nitrite

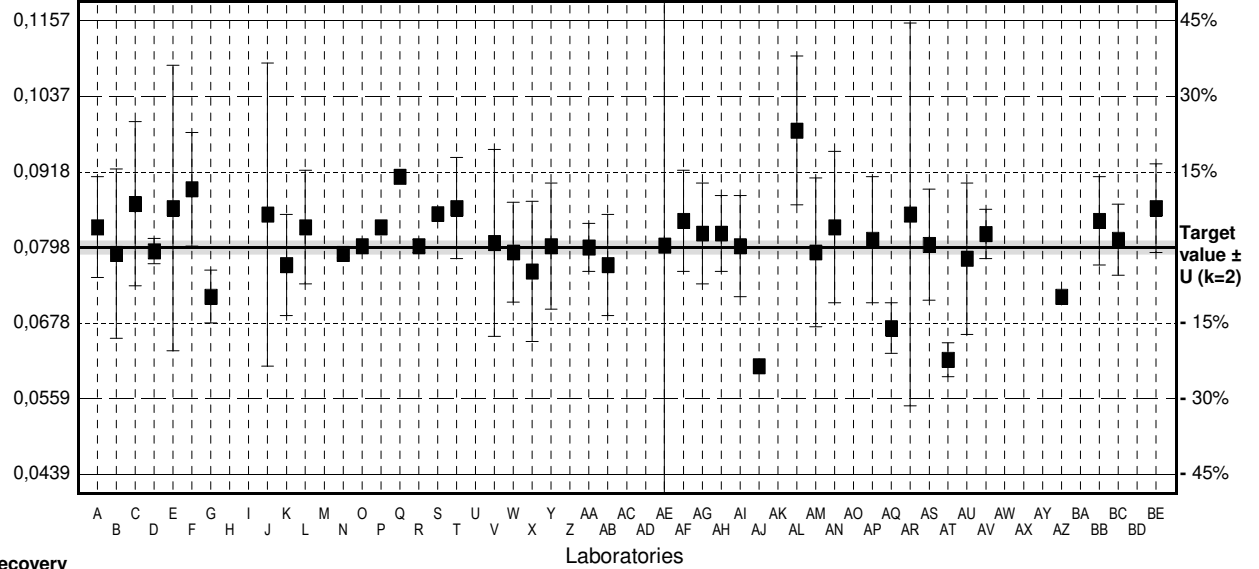
Target value  $\pm U$  (k=2) 0,0798 mg/l  $\pm$  0,0011 mg/l

IFA result  $\pm U$  (k=2) 0,081 mg/l  $\pm$  0,004 mg/l

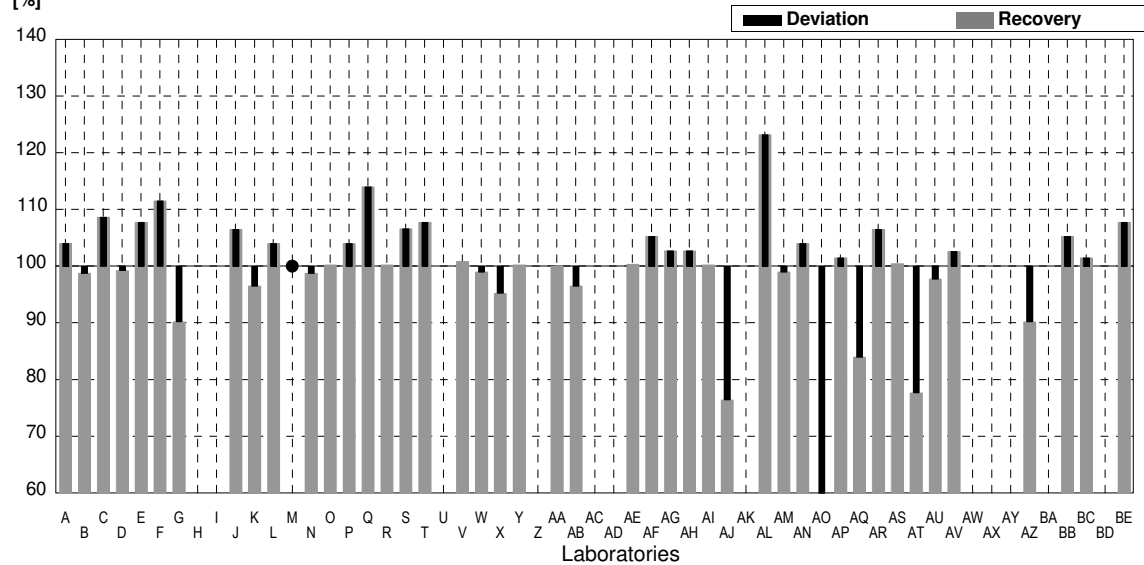
Stability test  $\pm U$  (k=2) 0,080 mg/l  $\pm$  0,004 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	0,083	0,008	mg/l	104%	0,74
B	0,0788	0,0134	mg/l	99%	-0,23
C	0,0867	0,013	mg/l	109%	1,60
D	0,0792	0,002	mg/l	99%	-0,14
E	0,086	0,0226	mg/l	108%	1,44
F	0,089	0,009	mg/l	112%	2,13
G	0,072	0,0042	mg/l	90%	-1,81
H			mg/l		
I	n.a		mg/l		
J	0,085	0,024	mg/l	107%	1,21
K	0,077	0,008	mg/l	96%	-0,65
L	0,083	0,009	mg/l	104%	0,74
M	<0,086		mg/l	.	
N	0,0788	0,00070	mg/l	99%	-0,23
O	0,080		mg/l	100%	0,05
P	0,083		mg/l	104%	0,74
Q	0,091		mg/l	114%	2,60
R	0,080	0,001	mg/l	100%	0,05
S	0,08508		mg/l	107%	1,23
T	0,086	0,008	mg/l	108%	1,44
U			mg/l		
V	0,0805	0,0148	mg/l	101%	0,16
W	0,079	0,0079	mg/l	99%	-0,19
X	0,076	0,01109	mg/l	95%	-0,88
Y	0,080	0,01	mg/l	100%	0,05
Z			mg/l		
AA	0,0798	0,0038	mg/l	100%	0,00
AB	0,077	0,008	mg/l	96%	-0,65
AC			mg/l		
AD			mg/l		
AE	0,0801	0,4	mg/l	100%	0,07
AF	0,084	0,008	mg/l	105%	0,97
AG	0,082	0,008	mg/l	103%	0,51
AH	0,082	0,006	mg/l	103%	0,51
AI	0,080	0,008	mg/l	100%	0,05
AJ	0,061 *		mg/l	76%	-4,36
AK			mg/l		
AL	0,0983 *	0,0118	mg/l	123%	4,29
AM	0,079	0,0118	mg/l	99%	-0,19
AN	0,083	0,012	mg/l	104%	0,74
AO	0,0250 *	0,003	mg/l	31%	-12,72

Result [mg/l]



Recovery [%]





AP	0,081	0,010	mg/l	102%	0,28
AQ	0,067 *	0,004	mg/l	84%	-2,97
AR	0,085	0,0303	mg/l	107%	1,21
AS	0,0802	0,0088	mg/l	101%	0,09
AT	0,0620 *	0,0027	mg/l	78%	-4,13
AU	0,078	0,012	mg/l	98%	-0,42
AV	0,0819	0,0039	mg/l	103%	0,49
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,072		mg/l	90%	-1,81
BA			mg/l		
BB	0,084	0,007	mg/l	105%	0,97
BC	0,081	0,00562	mg/l	102%	0,28
BD			mg/l		
BE	0,086	0,007	mg/l	108%	1,44

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0793 ± 0,0043	0,0814 ± 0,0017	mg/l
Recov. ± CI(99%)	99,4 ± 5,4	102,0 ± 2,2	%
SD between labs	0,0106	0,0040	mg/l
RSD between labs	13,4	4,9	%
n for calculation	44	39	

# Sample N169A

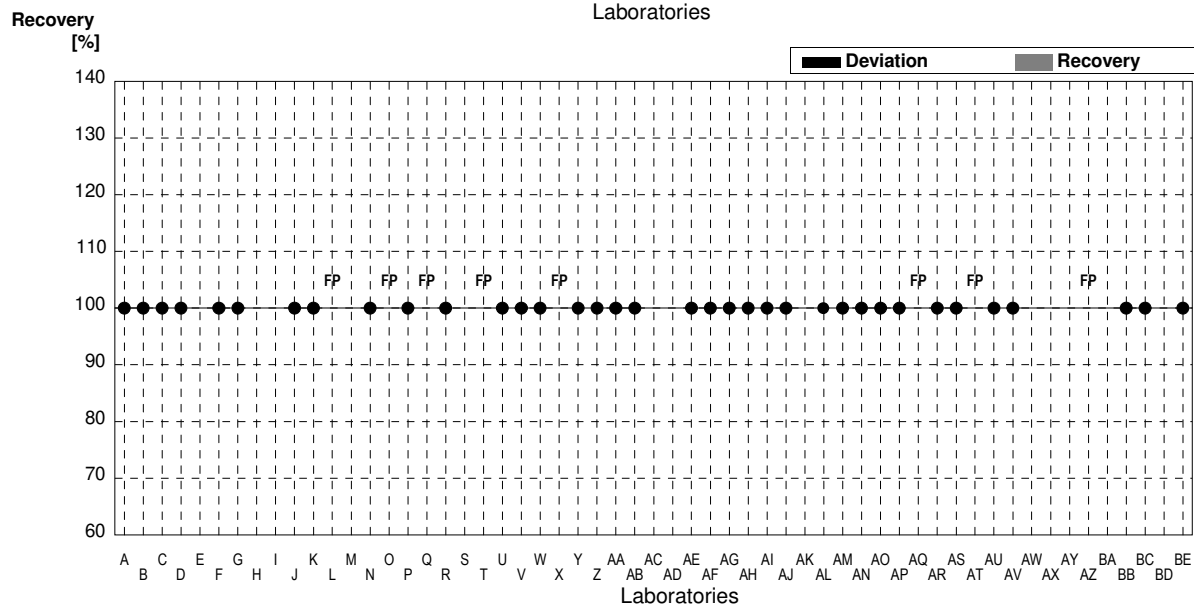
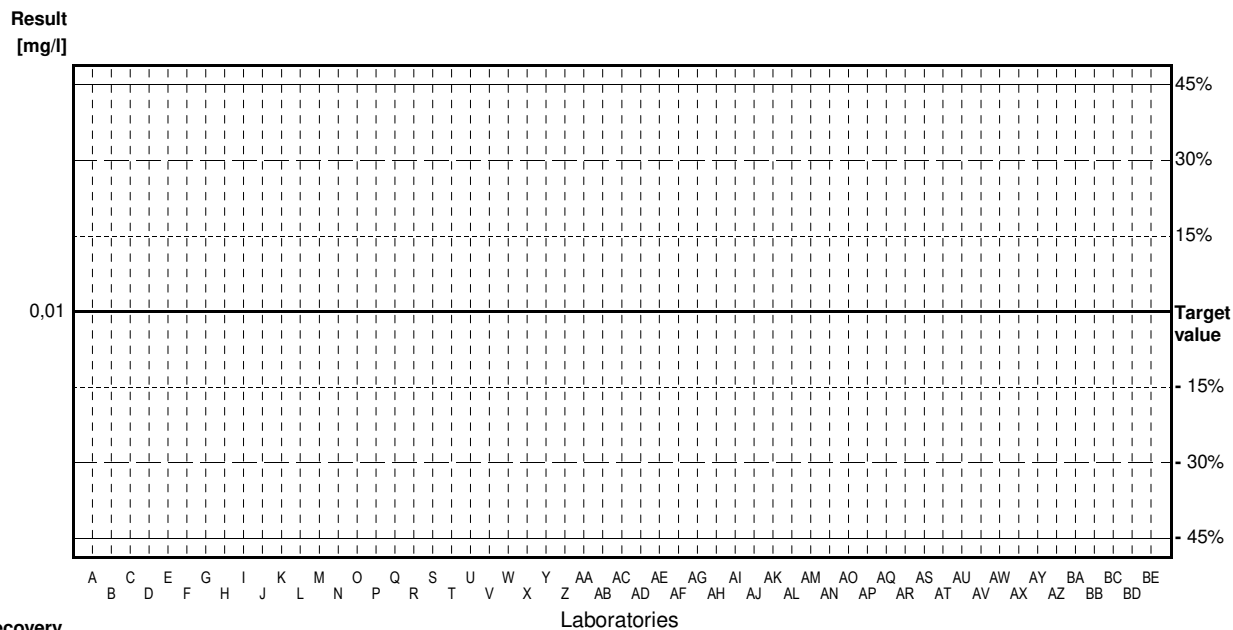
## Parameter Ammonium

Target value <0,01 mg/l

IFA result <0,01 mg/l

Stability test <0,01 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,02		mg/l	•	
B	<0,03		mg/l	•	
C	<0,01		mg/l	•	
D	<0,006	0,003	mg/l	•	
E			mg/l		
F	0,0090	0,001	mg/l	•	
G	<0,01		mg/l	•	
H			mg/l		
I	n.a		mg/l		
J	<0,012		mg/l	•	
K	<0,010		mg/l	•	
L	0,012	0,002	mg/l	FP	
M			mg/l		
N	<0,0100		mg/l	•	
O	0,0100		mg/l	FP	
P	<0,010	0,002	mg/l	•	
Q	0,0450		mg/l	FP	
R	<0,010		mg/l	•	
S			mg/l		
T	0,0270	0,0034	mg/l	FP	
U	<0,1		mg/l	•	
V	<0,010		mg/l	•	
W	<0,005	0	mg/l	•	
X	0,0250	0,00985	mg/l	FP	
Y	<0,02		mg/l	•	
Z	<0,01		mg/l	•	
AA	<0,04		mg/l	•	
AB	<0,01		mg/l	•	
AC			mg/l		
AD			mg/l		
AE	<0,01		mg/l	•	
AF	<0,01		mg/l	•	
AG	<0,01		mg/l	•	
AH	<0,013		mg/l	•	
AI	<0,009		mg/l	•	
AJ	<0,02		mg/l	•	
AK			mg/l		
AL	0,0110	0,0045	mg/l	•	
AM	<0,0052		mg/l	•	
AN	<0,003		mg/l	•	
AO	<0,02		mg/l	•	



AP	<0,01		mg/l	•	
AQ	0,0200	0,004	mg/l	FP	
AR	<0,04	0,00106	mg/l	•	
AS	<0,01		mg/l	•	
AT	0,0200	0,0024	mg/l	FP	
AU	<0,01		mg/l	•	
AV	<0,007		mg/l	•	
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,0220		mg/l	FP	
BA			mg/l		
BB	<0,04	0,001	mg/l	•	
BC	<0,0095	0,00101	mg/l	•	
BD			mg/l		
BE	<0,008		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 N169B

## Parameter Ammonium

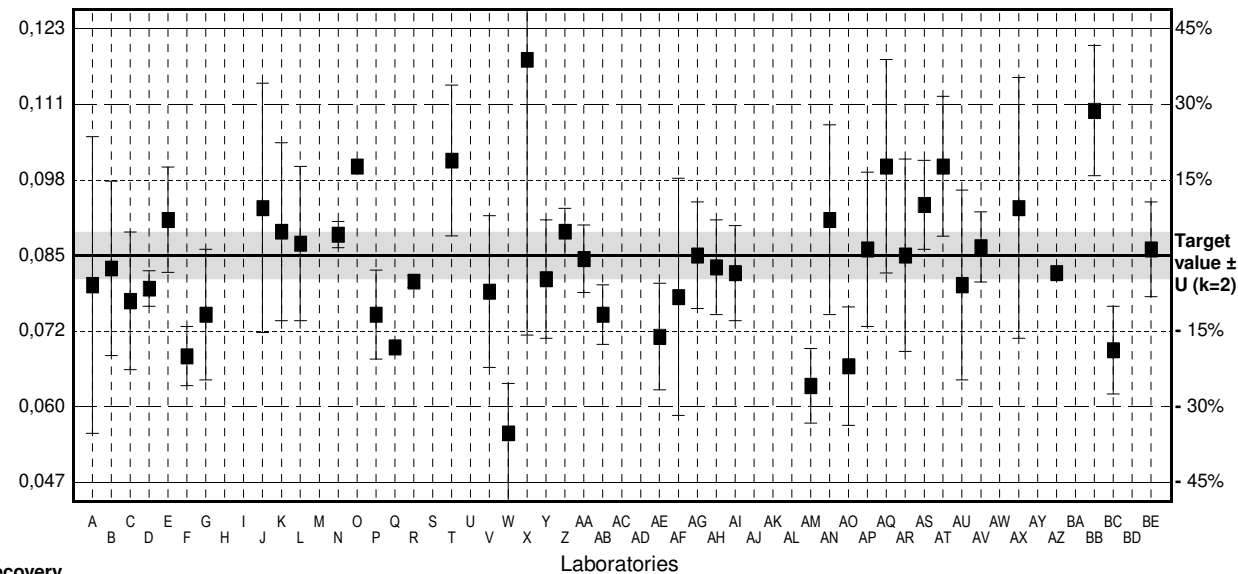
Target value ± U (k=2) 0,085 mg/l ± 0,004 mg/l

IFA result ± U (k=2) 0,083 mg/l ± 0,002 mg/l

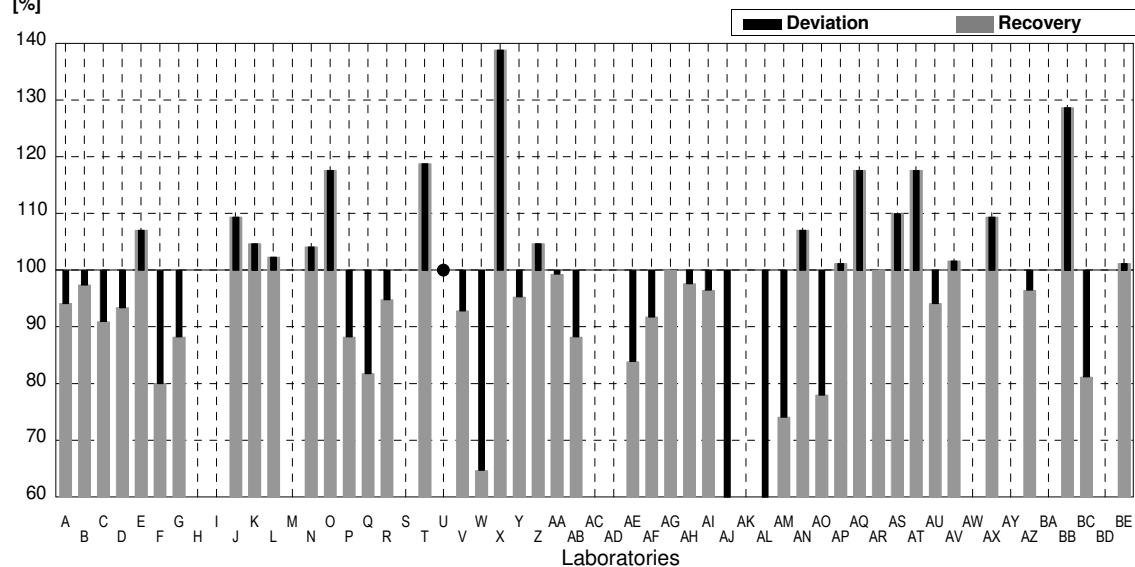
Stability test ± U (k=2) 0,083 mg/l ± 0,002 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,080	0,025	mg/l	94%	-0,53
B	0,0828	0,0147	mg/l	97%	-0,24
C	0,0773	0,0116	mg/l	91%	-0,82
D	0,0794	0,003	mg/l	93%	-0,60
E	0,091	0,00886	mg/l	107%	0,64
F	0,068	0,005	mg/l	80%	-1,82
G	0,075	0,011	mg/l	88%	-1,07
H			mg/l		
I	n.a		mg/l		
J	0,093	0,021	mg/l	109%	0,86
K	0,089	0,015	mg/l	105%	0,43
L	0,087	0,013	mg/l	102%	0,21
M			mg/l		
N	0,0885	0,00220	mg/l	104%	0,37
O	0,100		mg/l	118%	1,60
P	0,075	0,0075	mg/l	88%	-1,07
Q	0,0695		mg/l	82%	-1,66
R	0,0806	0,001	mg/l	95%	-0,47
S			mg/l		
T	0,101	0,0127	mg/l	119%	1,71
U	<0,1		mg/l	*	
V	0,0789	0,0128	mg/l	93%	-0,65
W	0,055	0,0084	mg/l	65%	-3,21
X	0,118	0,04649	mg/l	139%	3,53
Y	0,081	0,01	mg/l	95%	-0,43
Z	0,089	0,0039	mg/l	105%	0,43
AA	0,0844	0,0057	mg/l	99%	-0,06
AB	0,075	0,005	mg/l	88%	-1,07
AC			mg/l		
AD			mg/l		
AE	0,0713	0,009	mg/l	84%	-1,47
AF	0,078	0,020	mg/l	92%	-0,75
AG	0,085	0,009	mg/l	100%	0,00
AH	0,083	0,008	mg/l	98%	-0,21
AI	0,082	0,008	mg/l	96%	-0,32
AJ	0,0390 *		mg/l	46%	-4,92
AK			mg/l		
AL	0,0165 *	0,0068	mg/l	19%	-7,33
AM	0,063	0,0063	mg/l	74%	-2,35
AN	0,091	0,016	mg/l	107%	0,64
AO	0,0663	0,01	mg/l	78%	-2,00

Result [mg/l]



Recovery [%]



AP	0,086	0,013	mg/l	101%	0,11
AQ	0,100	0,018	mg/l	118%	1,60
AR	0,085	0,0162	mg/l	100%	0,00
AS	0,0935	0,0075	mg/l	110%	0,91
AT	0,1000	0,0118	mg/l	118%	1,60
AU	0,080	0,016	mg/l	94%	-0,53
AV	0,0864	0,0059	mg/l	102%	0,15
AW			mg/l		
AX	0,093	0,022	mg/l	109%	0,86
AY			mg/l		
AZ	0,0820		mg/l	96%	-0,32
BA			mg/l		
BB	0,1094	0,011	mg/l	129%	2,61
BC	0,069	0,00740	mg/l	81%	-1,71
BD			mg/l		
BE	0,086	0,008	mg/l	101%	0,11

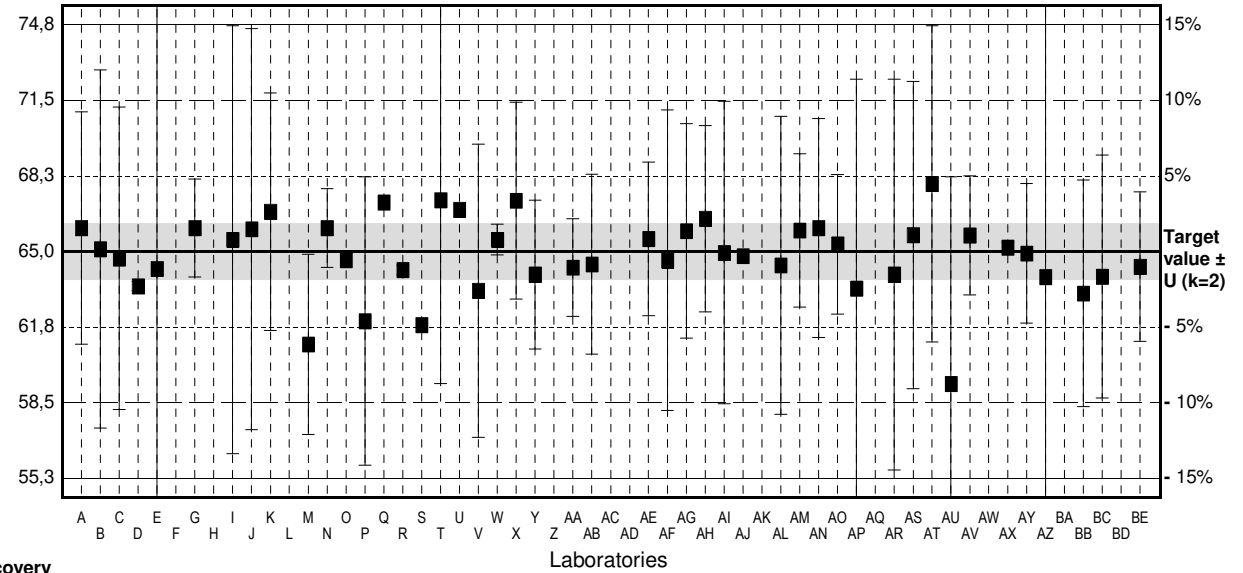
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,081 ± 0,007	0,084 ± 0,005	mg/l
Recov. ± CI(99%)	95,8 ± 7,9	98,7 ± 5,9	%
SD between labs	0,017	0,012	mg/l
RSD between labs	20,7	14,5	%
n for calculation	45	43	

**Sample N169A**  
**Parameter Chloride**

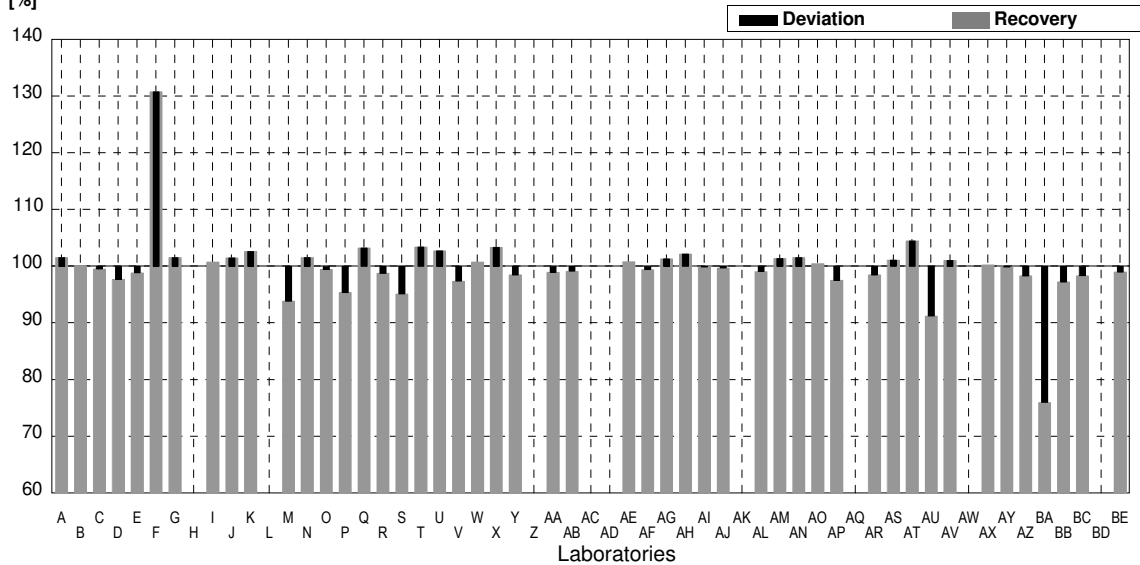
Target value  $\pm$  U (k=2) 65,0 mg/l  $\pm$  1,2 mg/l  
 IFA result  $\pm$  U (k=2) 65 mg/l  $\pm$  2 mg/l  
 Stability test  $\pm$  U (k=2) 64 mg/l  $\pm$  2 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	66	5	mg/l	102%	0,53
B	65,1	7,7	mg/l	100%	0,05
C	64,7	6,5	mg/l	100%	-0,16
D	63,5	0,2	mg/l	98%	-0,80
E	64,25	21,1	mg/l	99%	-0,40
F	85	10	mg/l	131%	10,61
G	66	2,1	mg/l	102%	0,53
H			mg/l		
I	65,5	9,2	mg/l	101%	0,27
J	65,951	8,626	mg/l	101%	0,50
K	66,7	5,1	mg/l	103%	0,90
L			mg/l		
M	61	3,88	mg/l	94%	-2,12
N	66,0	1,69	mg/l	102%	0,53
O	64,627		mg/l	99%	-0,20
P	62,0	6,20	mg/l	95%	-1,59
Q	67,1		mg/l	103%	1,11
R	64,2	0,21	mg/l	99%	-0,42
S	61,84		mg/l	95%	-1,68
T	67,2	7,8834	mg/l	103%	1,17
U	66,78		mg/l	103%	0,94
V	63,3	6,3	mg/l	97%	-0,90
W	65,5	0,66	mg/l	101%	0,27
X	67,18	4,23234	mg/l	103%	1,16
Y	64	3,2	mg/l	98%	-0,53
Z			mg/l		
AA	64,3	2,1	mg/l	99%	-0,37
AB	64,44	3,87	mg/l	99%	-0,30
AC			mg/l		
AD			mg/l		
AE	65,53	3,3	mg/l	101%	0,28
AF	64,62	6,46	mg/l	99%	-0,20
AG	65,872	4,61	mg/l	101%	0,46
AH	66,4	4	mg/l	102%	0,74
AI	64,939	6,5	mg/l	100%	-0,03
AJ	64,8		mg/l	100%	-0,11
AK			mg/l		
AL	64,4	6,4	mg/l	99%	-0,32
AM	65,9	3,29	mg/l	101%	0,48
AN	66,0	4,7	mg/l	102%	0,53
AO	65,3	3	mg/l	100%	0,16

**Result [mg/l]**



**Recovery [%]**



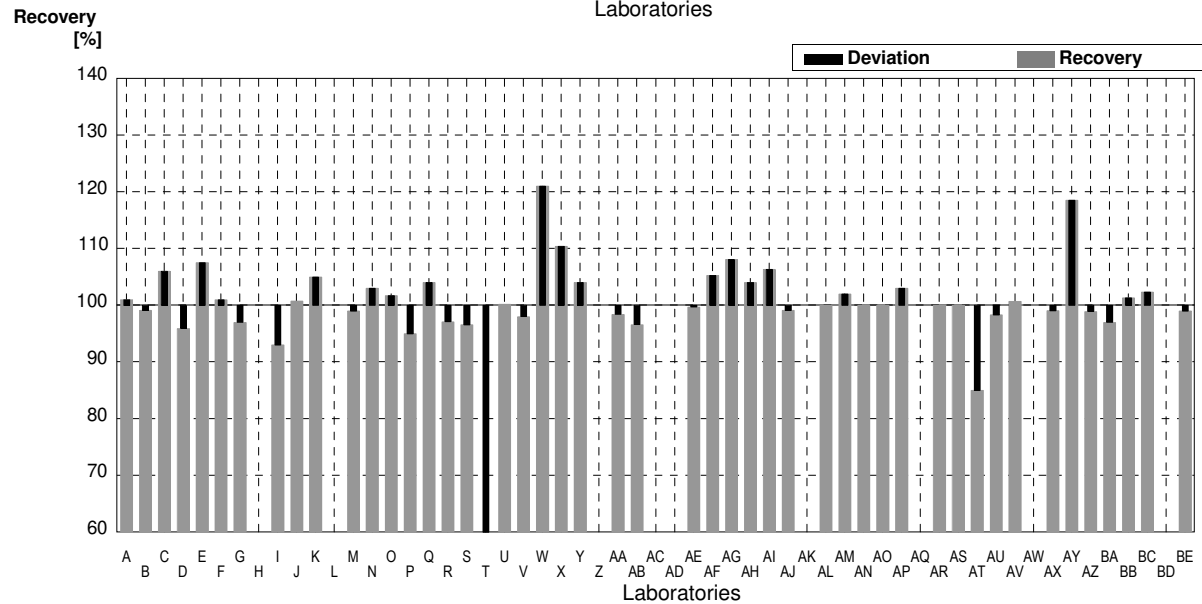
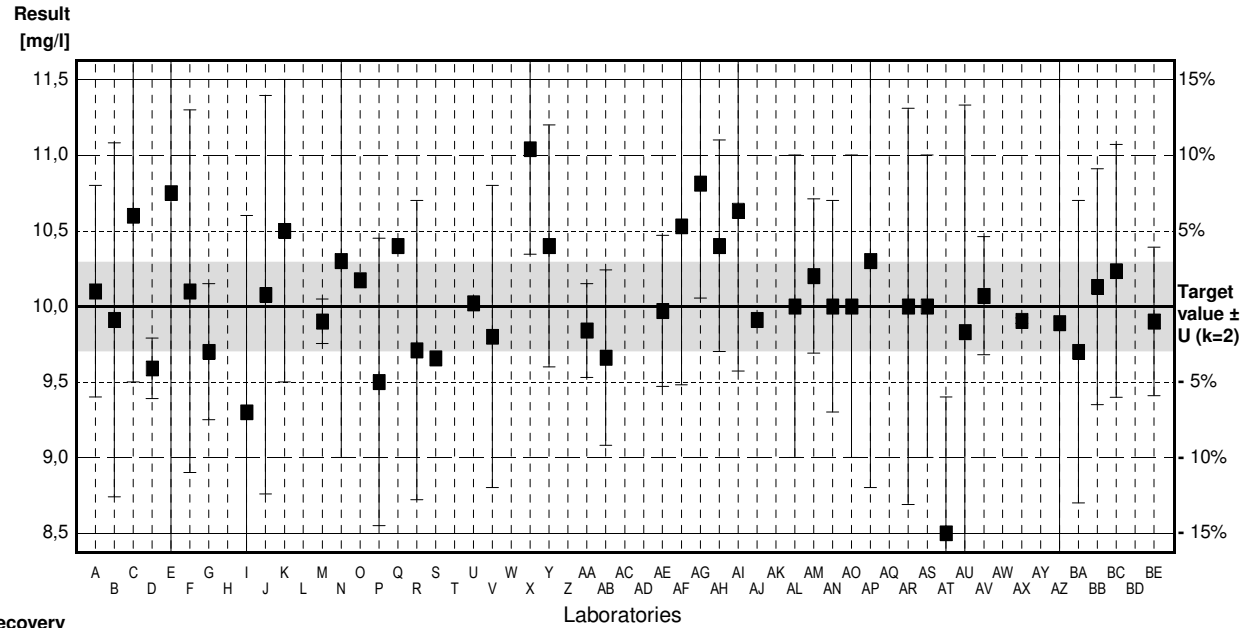
AP	63,4	9,0	mg/l	98%	-0,85
AQ			mg/l		
AR	64	8,4	mg/l	98%	-0,53
AS	65,7	6,6	mg/l	101%	0,37
AT	67,9	6,8	mg/l	104%	1,54
AU	59,3 *	8,9	mg/l	91%	-3,02
AV	65,68	2,56	mg/l	101%	0,36
AW			mg/l		
AX	65,163	0,224	mg/l	100%	0,09
AY	64,91	3	mg/l	100%	-0,05
AZ	63,9	13,3	mg/l	98%	-0,58
BA	49,40 *	1,0	mg/l	76%	-8,28
BB	63,19	4,87	mg/l	97%	-0,96
BC	63,914	5,2218	mg/l	98%	-0,58
BD			mg/l		
BE	64,34	3,21	mg/l	99%	-0,35

	All results	Outliers excl.	Unit
Mean ± CI(99%)	64,9 ± 1,6	65,0 ± 0,6	mg/l
Recov. ± CI(99%)	99,9 ± 2,4	99,9 ± 0,9	%
SD between labs	4,0	1,4	mg/l
RSD between labs	6,2	2,2	%
n for calculation	48	45	

**Sample N169B**  
**Parameter Chloride**

Target value  $\pm U$  (k=2) 10,0 mg/l  $\pm$  0,3 mg/l  
 IFA result  $\pm U$  (k=2) 9,9 mg/l  $\pm$  0,4 mg/l  
 Stability test  $\pm U$  (k=2) 10,2 mg/l  $\pm$  0,4 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	10,1	0,7	mg/l	101%	0,34
B	9,91	1,17	mg/l	99%	-0,31
C	10,6	1,1	mg/l	106%	2,07
D	9,59	0,2	mg/l	96%	-1,41
E	10,75	3,52	mg/l	108%	2,59
F	10,1	1,2	mg/l	101%	0,34
G	9,7	0,45	mg/l	97%	-1,03
H			mg/l		
I	9,3	1,3	mg/l	93%	-2,41
J	10,077	1,318	mg/l	101%	0,27
K	10,5	1,0	mg/l	105%	1,72
L			mg/l		
M	9,9	0,147	mg/l	99%	-0,34
N	10,3	1,30	mg/l	103%	1,03
O	10,173		mg/l	102%	0,60
P	9,50	0,95	mg/l	95%	-1,72
Q	10,4		mg/l	104%	1,38
R	9,71	0,99	mg/l	97%	-1,00
S	9,657		mg/l	97%	-1,18
T	4,33	* 0,5083	mg/l	43%	-19,55
U	10,02		mg/l	100%	0,07
V	9,8	1,0	mg/l	98%	-0,69
W	12,1	* 0,12	mg/l	121%	7,24
X	11,04	0,69552	mg/l	110%	3,59
Y	10,4	0,8	mg/l	104%	1,38
Z			mg/l		
AA	9,84	0,31	mg/l	98%	-0,55
AB	9,66	0,58	mg/l	97%	-1,17
AC			mg/l		
AD			mg/l		
AE	9,97	0,5	mg/l	100%	-0,10
AF	10,53	1,05	mg/l	105%	1,83
AG	10,812	0,757	mg/l	108%	2,80
AH	10,4	0,7	mg/l	104%	1,38
AI	10,632	1,06	mg/l	106%	2,18
AJ	9,91		mg/l	99%	-0,31
AK			mg/l		
AL	10,0	1,0	mg/l	100%	0,00
AM	10,2	0,511	mg/l	102%	0,69
AN	10,0	0,7	mg/l	100%	0,00
AO	10,0	1	mg/l	100%	0,00





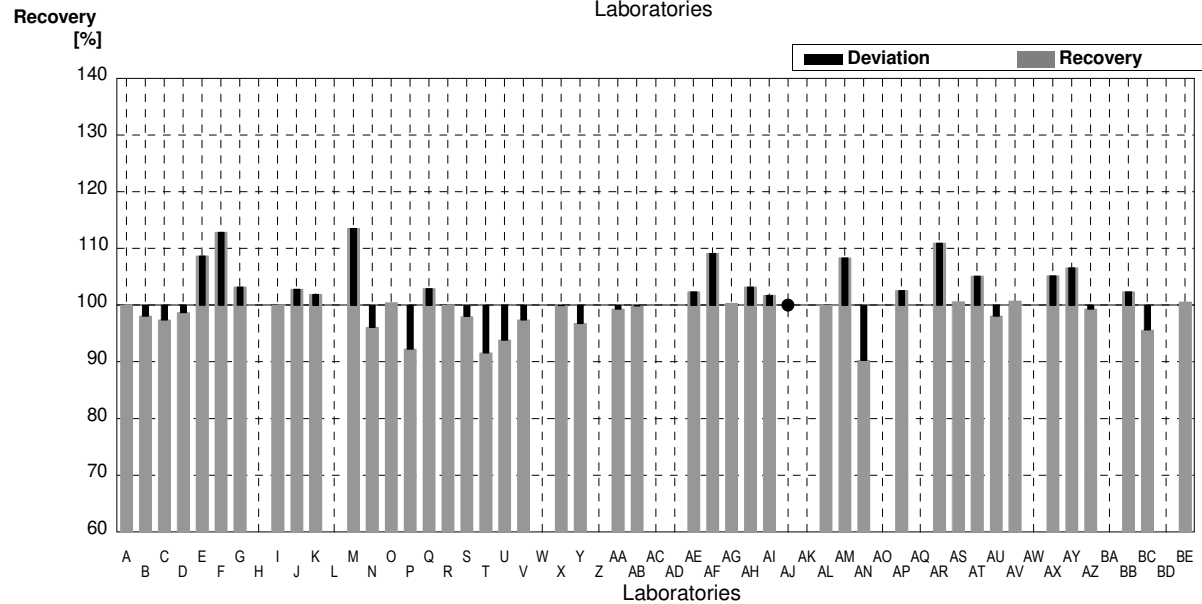
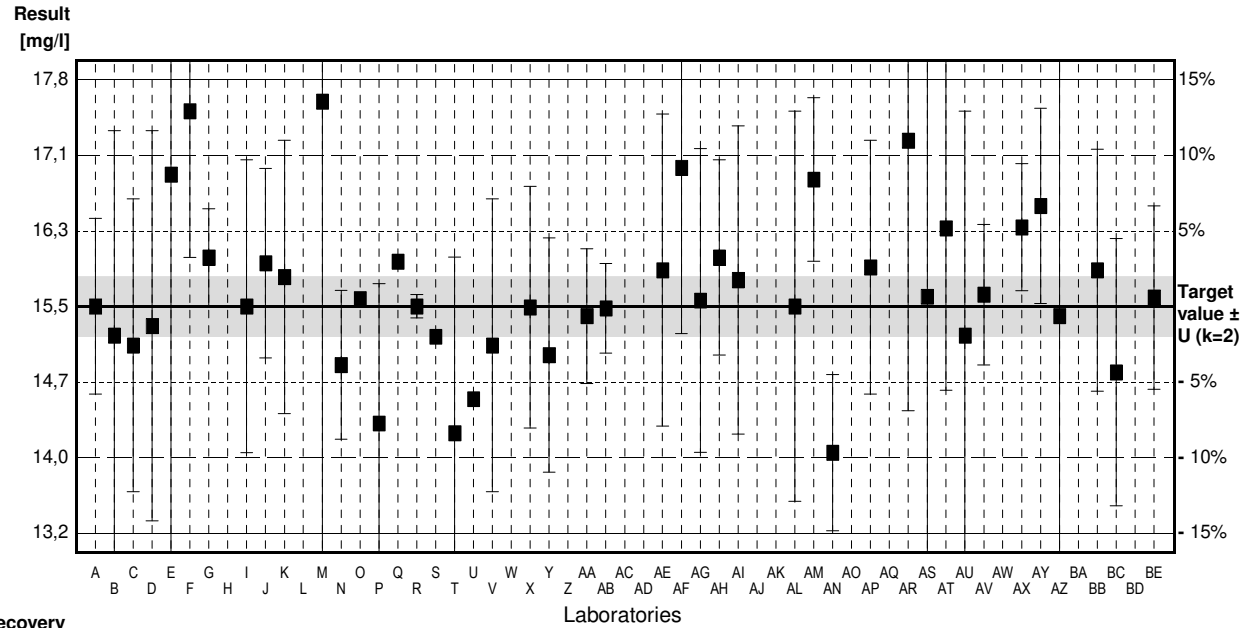
AP	10,3	1,5	mg/l	103%	1,03
AQ			mg/l		
AR	10,0	1,31	mg/l	100%	0,00
AS	10,0	1,0	mg/l	100%	0,00
AT	8,5 *	0,9	mg/l	85%	-5,17
AU	9,83	1,5	mg/l	98%	-0,59
AV	10,07	0,39	mg/l	101%	0,24
AW			mg/l		
AX	9,905	0,017	mg/l	99%	-0,33
AY	11,85 *	0,6	mg/l	119%	6,38
AZ	9,89	2,06	mg/l	99%	-0,38
BA	9,70	1,0	mg/l	97%	-1,03
BB	10,13	0,78	mg/l	101%	0,45
BC	10,234	0,8361	mg/l	102%	0,81
BD			mg/l		
BE	9,90	0,49	mg/l	99%	-0,34

	All results	Outliers excl.	Unit
Mean ± CI(99%)	10,0 ± 0,4	10,1 ± 0,1	mg/l
Recov. ± CI(99%)	100,0 ± 3,9	100,8 ± 1,5	%
SD between labs	1,0	0,4	mg/l
RSD between labs	10,1	3,6	%
n for calculation	48	44	

**Sample N169A**  
**Parameter Sulphate**

Target value ± U (k=2) 15,5 mg/l ± 0,3 mg/l  
 IFA result ± U (k=2) 15,4 mg/l ± 0,5 mg/l  
 Stability test ± U (k=2) 15,5 mg/l ± 0,5 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	15,5	0,9	mg/l	100%	0,00
B	15,2	2,1	mg/l	98%	-0,62
C	15,1	1,5	mg/l	97%	-0,83
D	15,3	2	mg/l	99%	-0,42
E	16,85	5,999	mg/l	109%	2,81
F	17,5 *	1,5	mg/l	113%	4,16
G	16,0	0,50	mg/l	103%	1,04
H			mg/l		
I	15,5	1,5	mg/l	100%	0,00
J	15,943	0,971	mg/l	103%	0,92
K	15,8	1,4	mg/l	102%	0,62
L			mg/l		
M	17,6 *	5,9	mg/l	114%	4,37
N	14,9	0,762	mg/l	96%	-1,25
O	15,577		mg/l	100%	0,16
P	14,3	1,43	mg/l	92%	-2,50
Q	15,96		mg/l	103%	0,96
R	15,5	0,12	mg/l	100%	0,00
S	15,19		mg/l	98%	-0,65
T	14,2	1,803	mg/l	92%	-2,71
U	14,55		mg/l	94%	-1,98
V	15,1	1,5	mg/l	97%	-0,83
W			mg/l		
X	15,49	1,2392	mg/l	100%	-0,02
Y	15,0	1,2	mg/l	97%	-1,04
Z			mg/l		
AA	15,4	0,69	mg/l	99%	-0,21
AB	15,48	0,46	mg/l	100%	-0,04
AC			mg/l		
AD			mg/l		
AE	15,87	1,6	mg/l	102%	0,77
AF	16,92	1,70	mg/l	109%	2,96
AG	15,560	1,556	mg/l	100%	0,12
AH	16,0	1	mg/l	103%	1,04
AI	15,770	1,58	mg/l	102%	0,56
AJ	<40		mg/l	*	
AK			mg/l		
AL	15,5	2,0	mg/l	100%	0,00
AM	16,8	0,838	mg/l	108%	2,71
AN	14,0	0,8	mg/l	90%	-3,12
AO			mg/l		



AP	15,9	1,3	mg/l	103%	0,83
AQ			mg/l		
AR	17,2	2,77	mg/l	111%	3,54
AS	15,6	2,5	mg/l	101%	0,21
AT	16,30	1,66	mg/l	105%	1,66
AU	15,2	2,3	mg/l	98%	-0,62
AV	15,62	0,72	mg/l	101%	0,25
AW			mg/l		
AX	16,310	0,651	mg/l	105%	1,69
AY	16,53	1	mg/l	107%	2,14
AZ	15,4	3,29	mg/l	99%	-0,21
BA			mg/l		
BB	15,87	1,24	mg/l	102%	0,77
BC	14,824	1,3697	mg/l	96%	-1,41
BD			mg/l		
BE	15,59	0,94	mg/l	101%	0,19

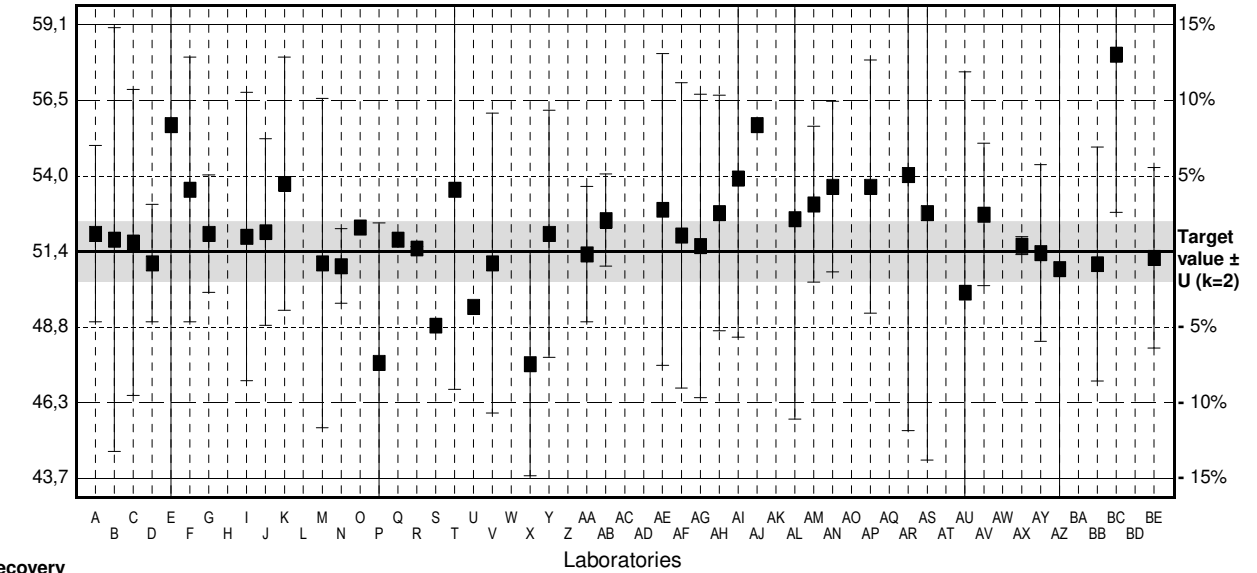
	All results	Outliers excl.	Unit
Mean ± CI(99%)	15,7 ± 0,3	15,6 ± 0,3	mg/l
Recov. ± CI(99%)	101,1 ± 2,1	100,6 ± 1,9	%
SD between labs	0,8	0,7	mg/l
RSD between labs	5,1	4,5	%
n for calculation	44	42	

**Sample N169B**  
**Parameter Sulphate**

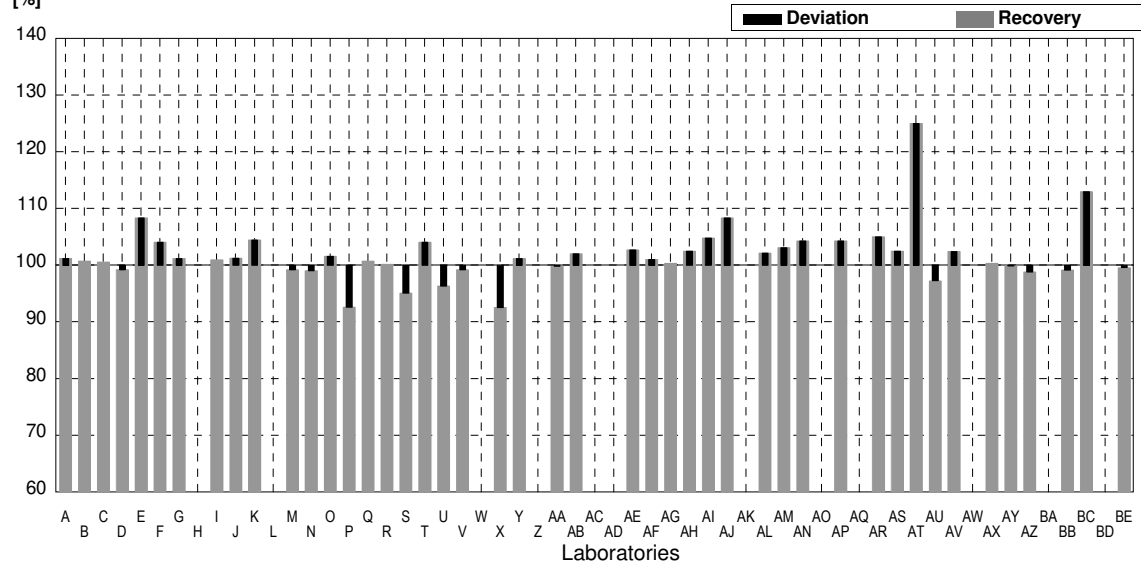
Target value  $\pm U$  (k=2) 51,4 mg/l  $\pm$  1,0 mg/l  
 IFA result  $\pm U$  (k=2) 53,0 mg/l  $\pm$  1,3 mg/l  
 Stability test  $\pm U$  (k=2) 51,7 mg/l  $\pm$  1,3 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	52	3	mg/l	101%	0,38
B	51,8	7,2	mg/l	101%	0,25
C	51,7	5,2	mg/l	101%	0,19
D	51,0	2	mg/l	99%	-0,25
E	55,70	19,8	mg/l	108%	2,70
F	53,5	4,5	mg/l	104%	1,32
G	52	2,0	mg/l	101%	0,38
H			mg/l		
I	51,9	4,9	mg/l	101%	0,31
J	52,058	3,170	mg/l	101%	0,41
K	53,7	4,3	mg/l	104%	1,44
L			mg/l		
M	51	5,6	mg/l	99%	-0,25
N	50,9	1,27	mg/l	99%	-0,31
O	52,212		mg/l	102%	0,51
P	47,61	4,76	mg/l	93%	-2,38
Q	51,8		mg/l	101%	0,25
R	51,5	0,06	mg/l	100%	0,06
S	48,88		mg/l	95%	-1,58
T	53,5	6,795	mg/l	104%	1,32
U	49,52		mg/l	96%	-1,18
V	51	5,1	mg/l	99%	-0,25
W			mg/l		
X	47,57	3,8056	mg/l	93%	-2,40
Y	52	4,2	mg/l	101%	0,38
Z			mg/l		
AA	51,3	2,3	mg/l	100%	-0,06
AB	52,46	1,57	mg/l	102%	0,67
AC			mg/l		
AD			mg/l		
AE	52,82	5,3	mg/l	103%	0,89
AF	51,94	5,19	mg/l	101%	0,34
AG	51,579	5,158	mg/l	100%	0,11
AH	52,7	4	mg/l	103%	0,82
AI	53,880	5,4	mg/l	105%	1,56
AJ	55,7		mg/l	108%	2,70
AK			mg/l		
AL	52,5	6,8	mg/l	102%	0,69
AM	53,0	2,65	mg/l	103%	1,00
AN	53,6	2,9	mg/l	104%	1,38
AO			mg/l		

**Result**  
**[mg/l]**



**Recovery**  
**[%]**



AP	53,6	4,3	mg/l	104%	1,38
AQ			mg/l		
AR	54	8,7	mg/l	105%	1,63
AS	52,7	8,4	mg/l	103%	0,82
AT	64,28 *	6,56	mg/l	125%	8,08
AU	50,0	7,5	mg/l	97%	-0,88
AV	52,65	2,42	mg/l	102%	0,78
AW			mg/l		
AX	51,595	0,307	mg/l	100%	0,12
AY	51,34	3	mg/l	100%	-0,04
AZ	50,8	10,9	mg/l	99%	-0,38
BA			mg/l		
BB	50,97	3,98	mg/l	99%	-0,27
BC	58,088 *	5,3673	mg/l	113%	4,20
BD			mg/l		
BE	51,18	3,07	mg/l	100%	-0,14

	All results	Outliers excl.	Unit
Mean ± CI(99%)	52,3 ± 1,0	51,9 ± 0,7	mg/l
Recov. ± CI(99%)	101,8 ± 2,0	101,0 ± 1,3	%
SD between labs	2,6	1,7	mg/l
RSD between labs	5,0	3,2	%
n for calculation	45	43	

# Sample N169A

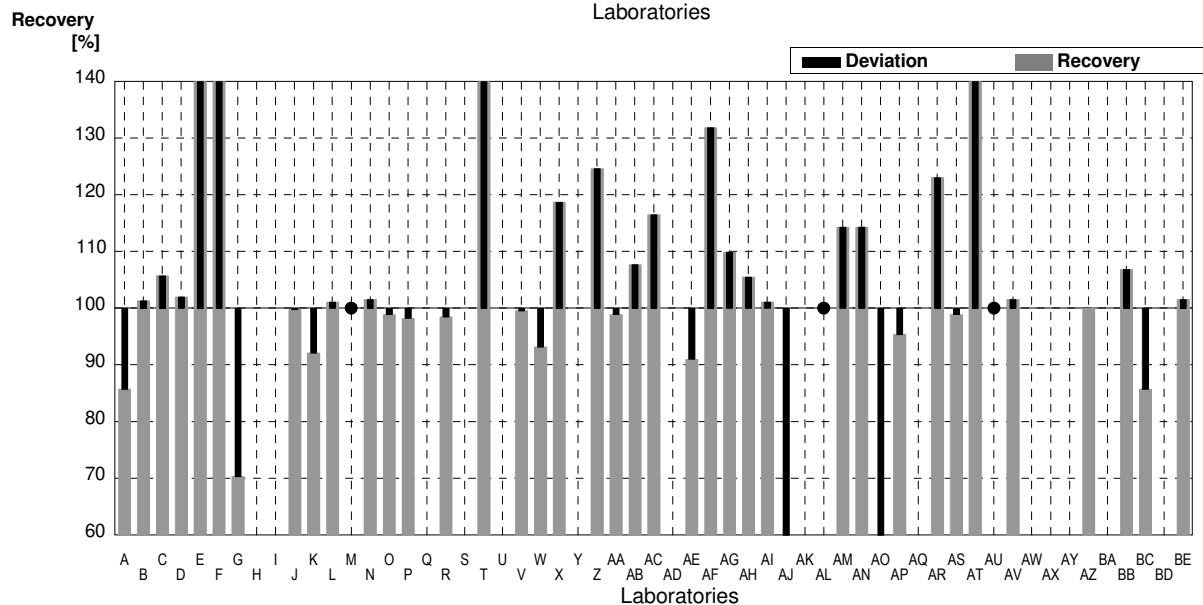
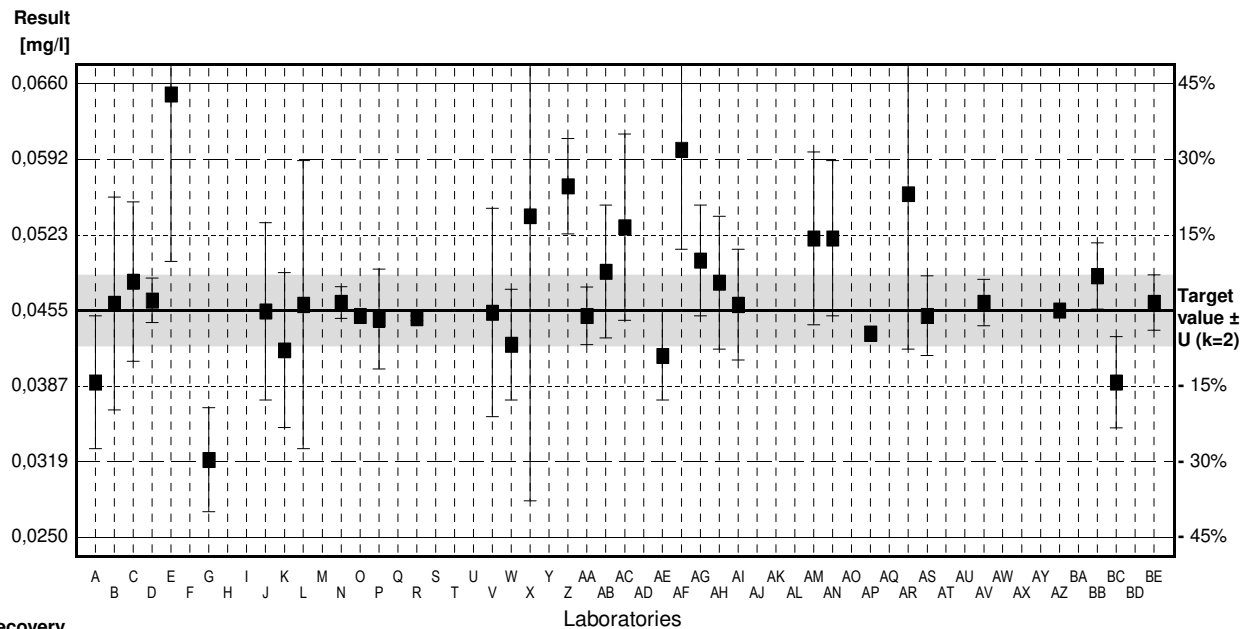
## Parameter Orthophosphate

Target value ± U (k=2) 0,0455 mg/l ± 0,0032 mg/l

IFA result ± U (k=2) 0,0463 mg/l ± 0,0012 mg/l

Stability test ± U (k=2) 0,0467 mg/l ± 0,0012 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,0390	0,0060	mg/l	86%	-1,50
B	0,0461	0,0096	mg/l	101%	0,14
C	0,0481	0,0072	mg/l	106%	0,60
D	0,0464	0,002	mg/l	102%	0,21
E	0,065 *	0,0151	mg/l	143%	4,51
F	0,080 *	0,008	mg/l	176%	7,98
G	0,0320	0,0047	mg/l	70%	-3,12
H			mg/l		
I			mg/l		
J	0,0454	0,008	mg/l	100%	-0,02
K	0,0419	0,007	mg/l	92%	-0,83
L	0,046	0,013	mg/l	101%	0,12
M	<0,461		mg/l	*	
N	0,0462	0,00144	mg/l	102%	0,16
O	0,0450		mg/l	99%	-0,12
P	0,0447	0,0045	mg/l	98%	-0,19
Q			mg/l		
R	0,0448	0,0002	mg/l	98%	-0,16
S			mg/l		
T	0,0692 *	0,0104	mg/l	152%	5,48
U			mg/l		
V	0,0453	0,0094	mg/l	100%	-0,05
W	0,0424	0,0050	mg/l	93%	-0,72
X	0,054	0,0257	mg/l	119%	1,97
Y			mg/l		
Z	0,0567	0,0043	mg/l	125%	2,59
AA	0,0450	0,0026	mg/l	99%	-0,12
AB	0,0490	0,0060	mg/l	108%	0,81
AC	0,053	0,0084	mg/l	116%	1,74
AD			mg/l		
AE	0,0414	0,004	mg/l	91%	-0,95
AF	0,060	0,009	mg/l	132%	3,35
AG	0,0500	0,005	mg/l	110%	1,04
AH	0,0480	0,006	mg/l	105%	0,58
AI	0,0460	0,005	mg/l	101%	0,12
AJ	0,0160 *		mg/l	35%	-6,82
AK			mg/l		
AL	<0,06		mg/l	*	
AM	0,052	0,0078	mg/l	114%	1,50
AN	0,052	0,007	mg/l	114%	1,50
AO	0,0153 *	0,003	mg/l	34%	-6,99



AP	0,0434		mg/l	95%	-0,49
AQ			mg/l		
AR	0,056	0,0140	mg/l	123%	2,43
AS	0,0450	0,0036	mg/l	99%	-0,12
AT	0,233 *	0,042	mg/l	512%	43,38
AU	<0,1		mg/l	•	
AV	0,0462	0,0021	mg/l	102%	0,16
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,0455		mg/l	100%	0,00
BA			mg/l		
BB	0,0486	0,003	mg/l	107%	0,72
BC	0,0390	0,00411	mg/l	86%	-1,50
BD			mg/l		
BE	0,0462	0,0025	mg/l	102%	0,16

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0517 ± 0,0135	0,0468 ± 0,0026	mg/l
Recov. ± CI(99%)	113,7 ± 29,6	102,8 ± 5,6	%
SD between labs	0,0314	0,0054	mg/l
RSD between labs	60,8	11,6	%
n for calculation	40	34	

### Sample N169B

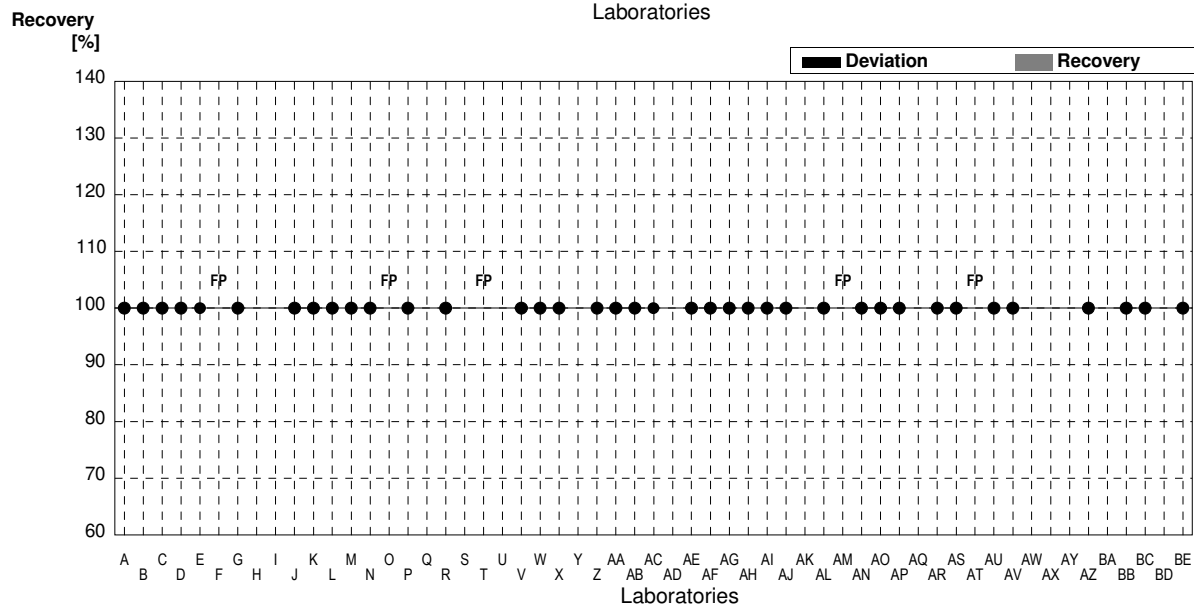
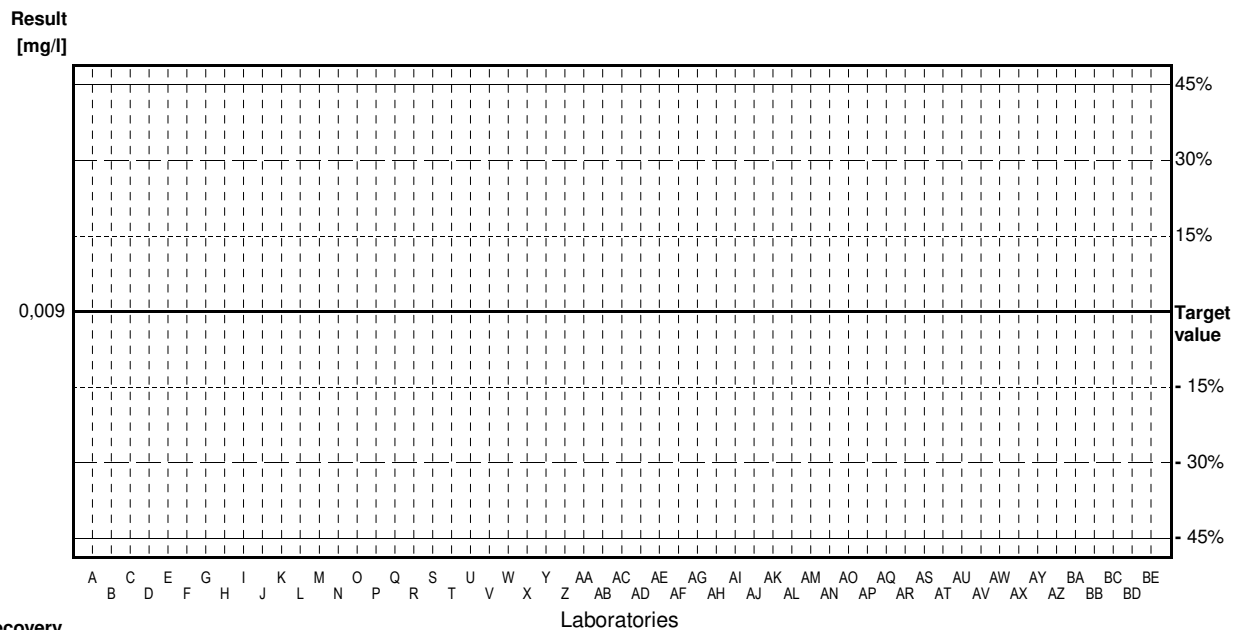
#### Parameter Orthophosphate

Target value <0,009 mg/l

IFA result <0,009 mg/l

Stability test <0,009 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,009		mg/l	•	
B	<0,02		mg/l	•	
C	<0,015		mg/l	•	
D	<0,003	0,002	mg/l	•	
E	0,0235	0,0547	mg/l	•	
F	0,0223	0,002	mg/l	FP	
G	<0,01		mg/l	•	
H			mg/l		
I			mg/l		
J	<0,015		mg/l	•	
K	<0,010		mg/l	•	
L	<0,04		mg/l	•	
M	<0,461		mg/l	•	
N	<0,0150		mg/l	•	
O	0,0210		mg/l	FP	
P	<0,008	0,002	mg/l	•	
Q			mg/l		
R	<0,015		mg/l	•	
S			mg/l		
T	0,211	0,0032	mg/l	FP	
U			mg/l		
V	<0,0185		mg/l	•	
W	<0,006	0	mg/l	•	
X	0,0050	0,00238	mg/l	•	
Y			mg/l		
Z	<0,019		mg/l	•	
AA	<0,0200		mg/l	•	
AB	0,0090	0,001	mg/l	•	
AC	0,0099	0,00158	mg/l	•	
AD			mg/l		
AE	<0,006		mg/l	•	
AF	<0,02		mg/l	•	
AG	<0,010		mg/l	•	
AH	<0,01		mg/l	•	
AI	<0,011		mg/l	•	
AJ	<0,015		mg/l	•	
AK			mg/l		
AL	<0,06		mg/l	•	
AM	0,0120	0,00180	mg/l	FP	
AN	<0,006		mg/l	•	
AO	<0,005		mg/l	•	





AP	<0,01		mg/l	•	
AQ			mg/l		
AR	<0,05	0,00188	mg/l	•	
AS	<0,015		mg/l	•	
AT	0,120	0,0217	mg/l	FP	
AU	<0,1		mg/l	•	
AV	<0,015		mg/l	•	
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,00200		mg/l	•	
BA			mg/l		
BB	<0,030	0,0005	mg/l	•	
BC	<0,0117	0,00123	mg/l	•	
BD			mg/l		
BE	<0,006		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 N169A

## Parameter Boron

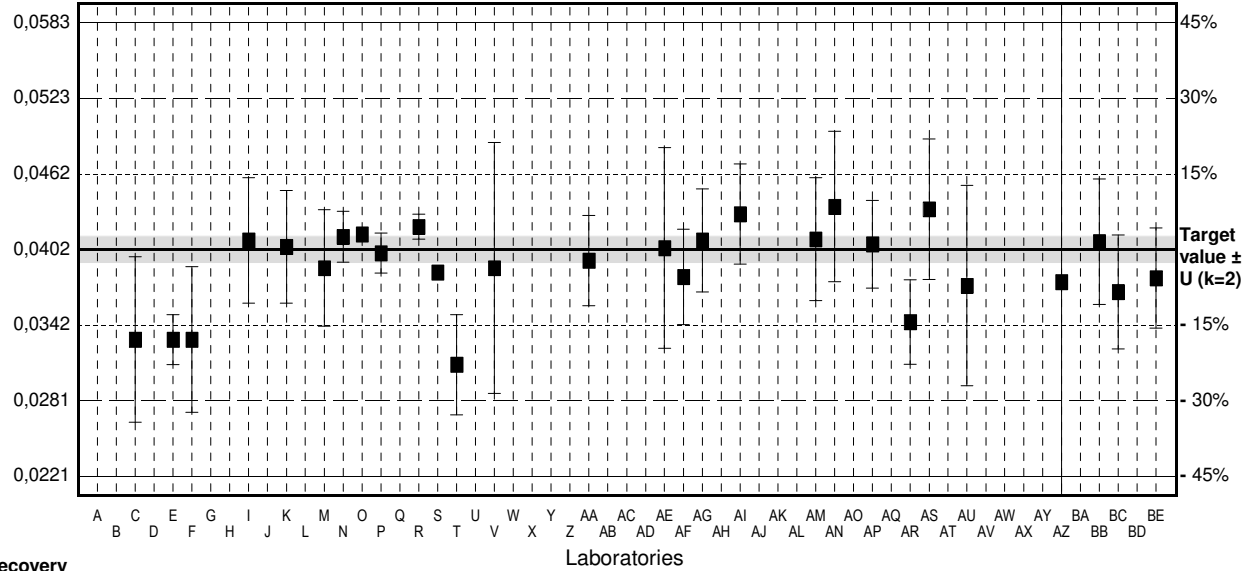
Target value ± U (k=2) 0,0402 mg/l ± 0,0011 mg/l

IFA result ± U (k=2) 0,0432 mg/l ± 0,0033 mg/l

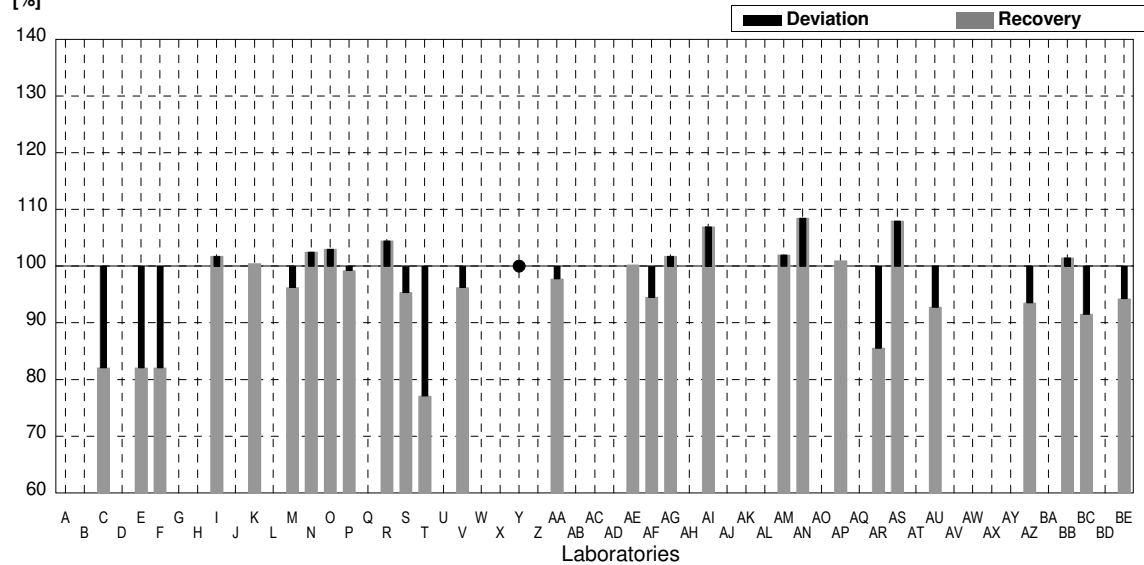
Stability test ± U (k=2) 0,0423 mg/l ± 0,0032 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	0,0330	0,0066	mg/l	82%	-2,45
D			mg/l		
E	0,0330	0,0020	mg/l	82%	-2,45
F	0,0330	0,0058	mg/l	82%	-2,45
G			mg/l		
H			mg/l		
I	0,0409	0,005	mg/l	102%	0,24
J			mg/l		
K	0,0404	0,0045	mg/l	100%	0,07
L			mg/l		
M	0,0387	0,00464	mg/l	96%	-0,51
N	0,0412	0,00202	mg/l	102%	0,34
O	0,0414		mg/l	103%	0,41
P	0,0399	0,0016	mg/l	99%	-0,10
Q			mg/l		
R	0,0420	0,001	mg/l	104%	0,61
S	0,03835		mg/l	95%	-0,63
T	0,0310 *	0,004	mg/l	77%	-3,14
U			mg/l		
V	0,0387	0,01	mg/l	96%	-0,51
W			mg/l		
X			mg/l		
Y	<0,05		mg/l	*	
Z			mg/l		
AA	0,0393	0,0036	mg/l	98%	-0,31
AB			mg/l		
AC			mg/l		
AD			mg/l		
AE	0,0403	0,008	mg/l	100%	0,03
AF	0,0380	0,0038	mg/l	95%	-0,75
AG	0,0409	0,0041	mg/l	102%	0,24
AH			mg/l		
AI	0,0430	0,004	mg/l	107%	0,95
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,0410	0,00490	mg/l	102%	0,27
AN	0,0436	0,006	mg/l	108%	1,16
AO			mg/l		

### Result [mg/l]



### Recovery [%]



AP	0,0406	0,0035	mg/l	101%	0,14
AQ			mg/l		
AR	0,0344	0,00337	mg/l	86%	-1,98
AS	0,0434	0,0056	mg/l	108%	1,09
AT			mg/l		
AU	0,0373	0,008	mg/l	93%	-0,99
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,0376	0,55	mg/l	94%	-0,89
BA			mg/l		
BB	0,0408	0,005	mg/l	101%	0,20
BC	0,0368	0,00455	mg/l	92%	-1,16
BD			mg/l		
BE	0,0379	0,0040	mg/l	94%	-0,78

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0388 ± 0,0018	0,0391 ± 0,0016	mg/l
Recov. ± CI(99%)	96,5 ± 4,4	97,2 ± 4,0	%
SD between labs	0,0033	0,0030	mg/l
RSD between labs	8,6	7,8	%
n for calculation	28	27	

### Sample N169B

#### Parameter Boron

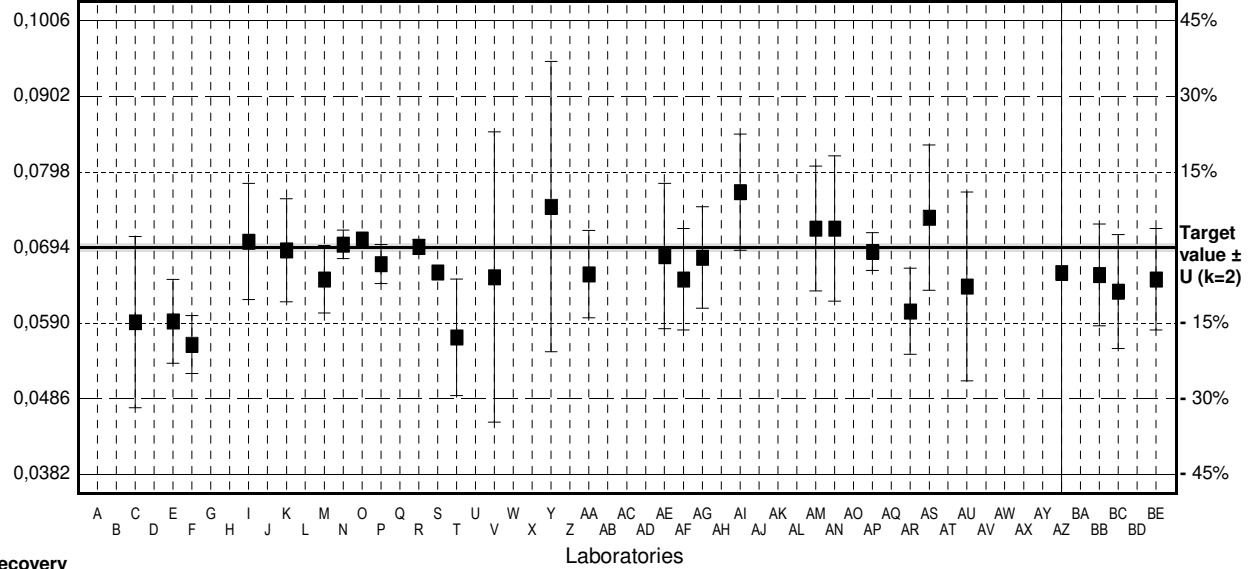
Target value  $\pm U$  (k=2) 0,0694 mg/l  $\pm$  0,0005 mg/l

IFA result  $\pm U$  (k=2) 0,075 mg/l  $\pm$  0,006 mg/l

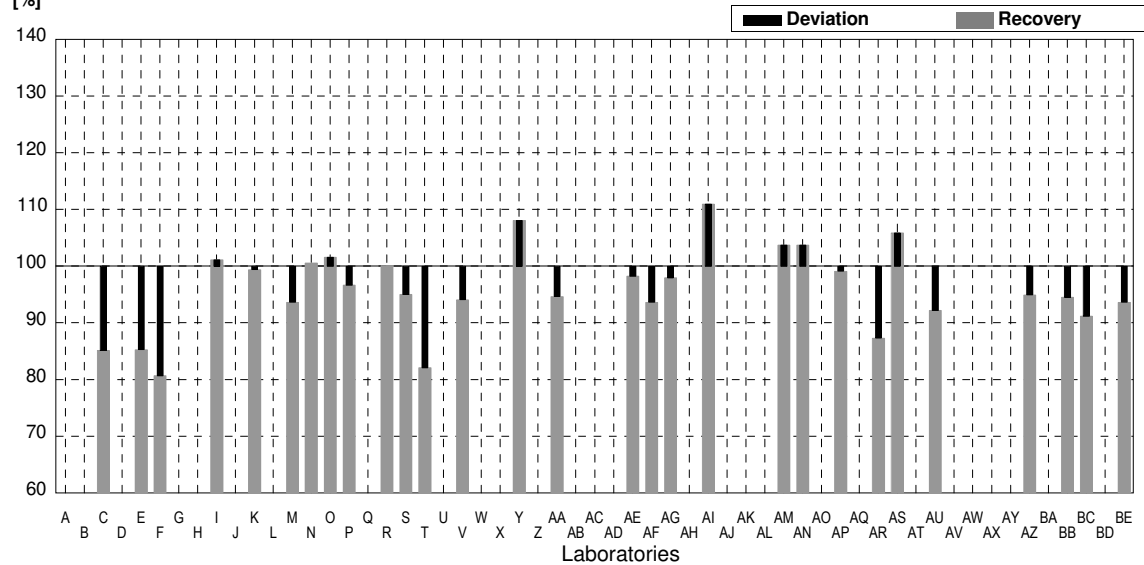
Stability test  $\pm U$  (k=2) 0,073 mg/l  $\pm$  0,006 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	0,0591	0,0118	mg/l	85%	-2,03
D			mg/l		
E	0,0592	0,00579	mg/l	85%	-2,01
F	0,056	0,0040	mg/l	81%	-2,64
G			mg/l		
H			mg/l		
I	0,0702	0,008	mg/l	101%	0,16
J			mg/l		
K	0,0690	0,0071	mg/l	99%	-0,08
L			mg/l		
M	0,065	0,00464	mg/l	94%	-0,87
N	0,0698	0,00195	mg/l	101%	0,08
O	0,0705		mg/l	102%	0,22
P	0,0671	0,0027	mg/l	97%	-0,45
Q			mg/l		
R	0,0695	0,001	mg/l	100%	0,02
S	0,06595		mg/l	95%	-0,68
T	0,0570	0,008	mg/l	82%	-2,45
U			mg/l		
V	0,0653	0,02	mg/l	94%	-0,81
W			mg/l		
X			mg/l		
Y	0,075	0,02	mg/l	108%	1,11
Z			mg/l		
AA	0,0657	0,0060	mg/l	95%	-0,73
AB			mg/l		
AC			mg/l		
AD			mg/l		
AE	0,0682	0,01	mg/l	98%	-0,24
AF	0,065	0,007	mg/l	94%	-0,87
AG	0,0680	0,007	mg/l	98%	-0,28
AH			mg/l		
AI	0,0770	0,008	mg/l	111%	1,50
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	0,072	0,0086	mg/l	104%	0,51
AN	0,072	0,010	mg/l	104%	0,51
AO			mg/l		

Result [mg/l]



Recovery [%]



AP	0,0688	0,0026	mg/l	99%	-0,12
AQ			mg/l		
AR	0,0606	0,00593	mg/l	87%	-1,74
AS	0,0735	0,010	mg/l	106%	0,81
AT			mg/l		
AU	0,06400	0,013	mg/l	92%	-1,07
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY			mg/l		
AZ	0,0659	0,89	mg/l	95%	-0,69
BA			mg/l		
BB	0,0656	0,007	mg/l	95%	-0,75
BC	0,0633	0,00784	mg/l	91%	-1,20
BD			mg/l		
BE	0,065	0,007	mg/l	94%	-0,87

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,0667 ± 0,0026	0,0667 ± 0,0026	mg/l
Recov. ± CI(99%)	96,1 ± 3,8	96,1 ± 3,8	%
SD between labs	0,0051	0,0051	mg/l
RSD between labs	7,6	7,6	%
n for calculation	29	29	

### Sample N169A

#### Parameter DOC

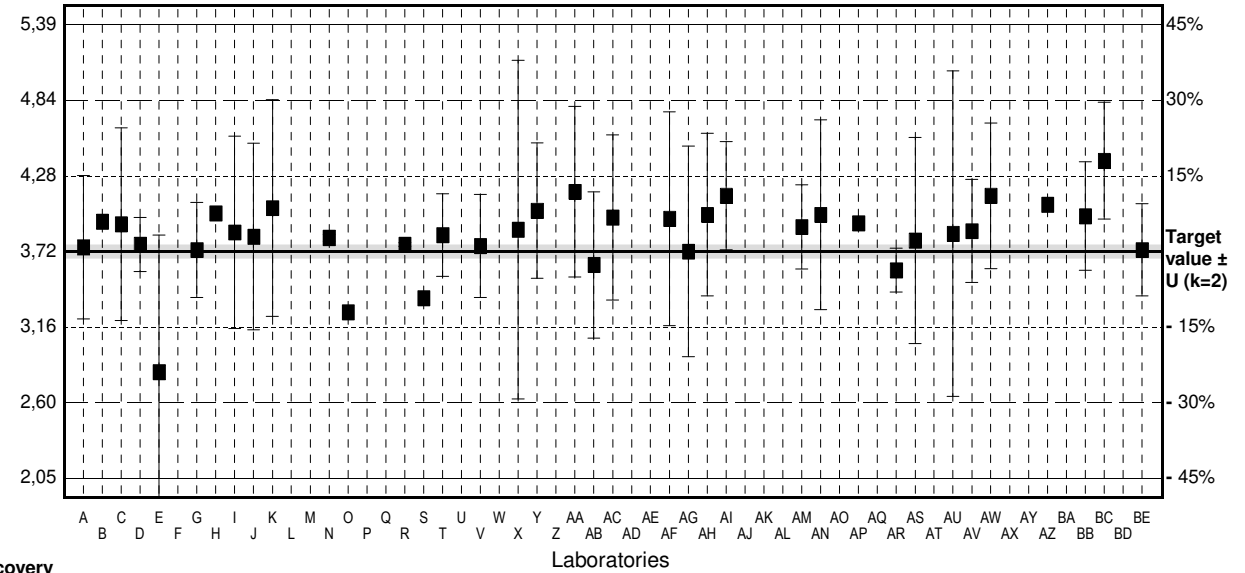
Target value ± U (k=2) 3,72 mg/l ± 0,05 mg/l

IFA result ± U (k=2) 3,86 mg/l ± 0,09 mg/l

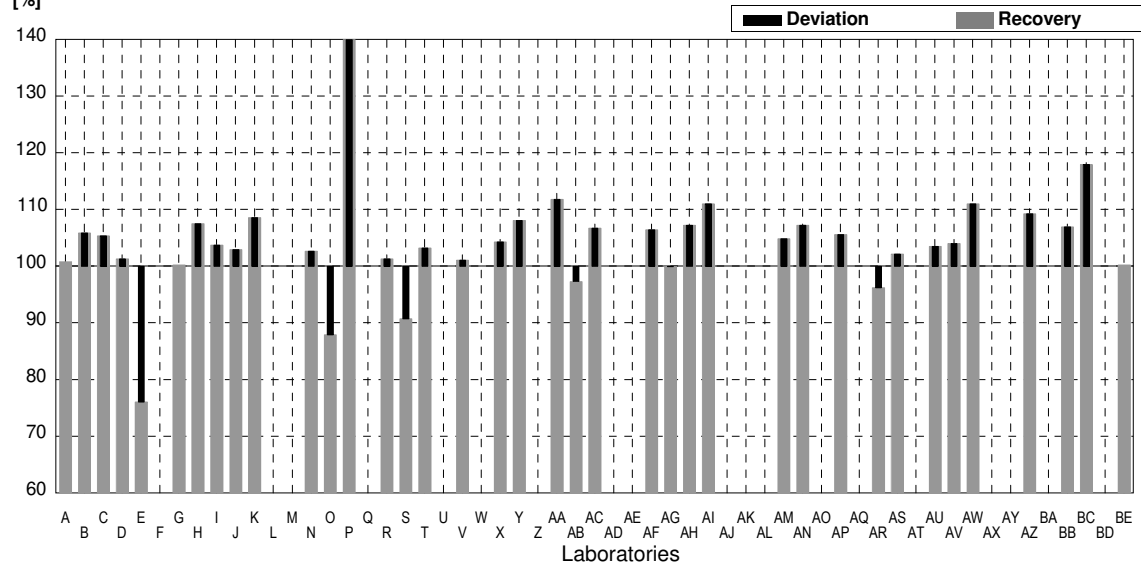
Stability test ± U (k=2) 3,95 mg/l ± 0,09 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	3,75	0,53	mg/l	101%	0,15
B	3,94		mg/l	106%	1,10
C	3,92	0,71	mg/l	105%	1,00
D	3,77	0,2	mg/l	101%	0,25
E	2,83 *	1,01	mg/l	76%	-4,43
F			mg/l		
G	3,73	0,35	mg/l	100%	0,05
H	4,00		mg/l	108%	1,39
I	3,86	0,71	mg/l	104%	0,70
J	3,829	0,689	mg/l	103%	0,54
K	4,04	0,80	mg/l	109%	1,59
L			mg/l		
M			mg/l		
N	3,82	0,0244	mg/l	103%	0,50
O	3,27 *		mg/l	88%	-2,24
P	7,124 *	0,712	mg/l	192%	16,95
Q			mg/l		
R	3,77	0,014	mg/l	101%	0,25
S	3,375		mg/l	91%	-1,72
T	3,84	0,3041	mg/l	103%	0,60
U			mg/l		
V	3,76	0,38	mg/l	101%	0,20
W			mg/l		
X	3,88	1,24936	mg/l	104%	0,80
Y	4,02	0,5	mg/l	108%	1,49
Z			mg/l		
AA	4,16	0,63	mg/l	112%	2,19
AB	3,62	0,54	mg/l	97%	-0,50
AC	3,97	0,61	mg/l	107%	1,24
AD			mg/l		
AE			mg/l		
AF	3,96	0,79	mg/l	106%	1,19
AG	3,718	0,777	mg/l	100%	-0,01
AH	3,99	0,6	mg/l	107%	1,34
AI	4,13	0,4	mg/l	111%	2,04
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	3,90	0,310	mg/l	105%	0,90
AN	3,99	0,70	mg/l	107%	1,34
AO			mg/l		

Result [mg/l]



Recovery [%]



AP	3,928		mg/l	106%	1,04
AQ			mg/l		
AR	3,58	0,162	mg/l	96%	-0,70
AS	3,80	0,76	mg/l	102%	0,40
AT			mg/l		
AU	3,85	1,2	mg/l	103%	0,65
AV	3,87	0,38	mg/l	104%	0,75
AW	4,13	0,537	mg/l	111%	2,04
AX			mg/l		
AY			mg/l		
AZ	4,065		mg/l	109%	1,72
BA			mg/l		
BB	3,98	0,40	mg/l	107%	1,29
BC	4,389	0,4301	mg/l	118%	3,33
BD			mg/l		
BE	3,73	0,34	mg/l	100%	0,05

	All results	Outliers excl.	Unit
Mean ± CI(99%)	3,93 ± 0,26	3,89 ± 0,09	mg/l
Recov. ± CI(99%)	105,6 ± 7,1	104,5 ± 2,3	%
SD between labs	0,59	0,19	mg/l
RSD between labs	15,1	4,8	%
n for calculation	38	35	

### Sample N169B

#### Parameter DOC

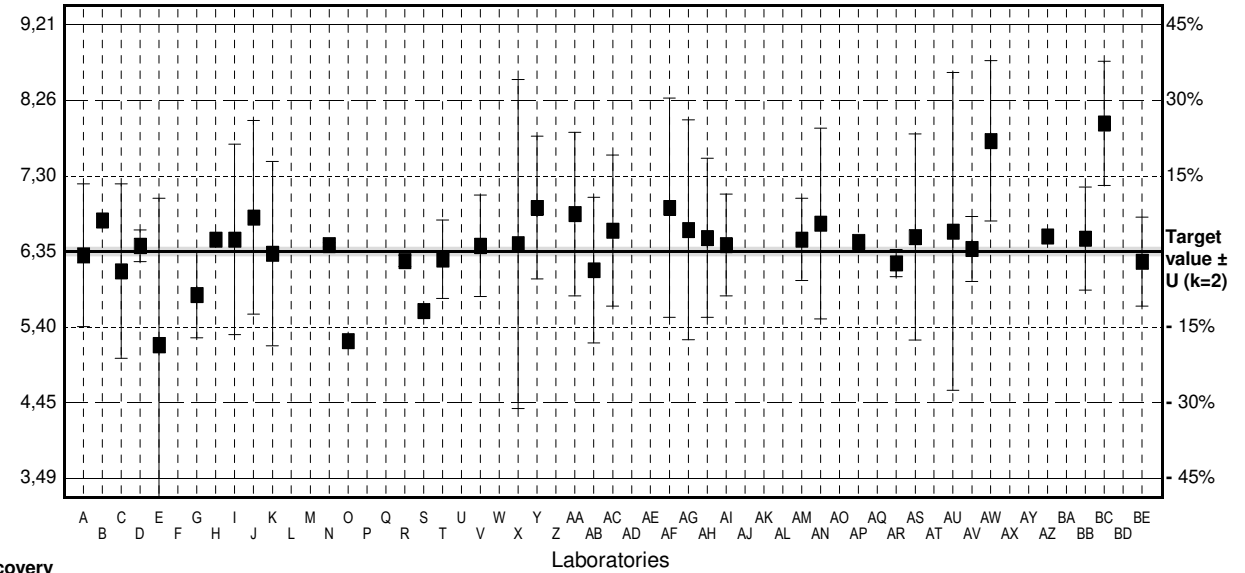
Target value  $\pm U$  (k=2) 6,35 mg/l  $\pm$  0,05 mg/l

IFA result  $\pm U$  (k=2) 6,37 mg/l  $\pm$  0,09 mg/l

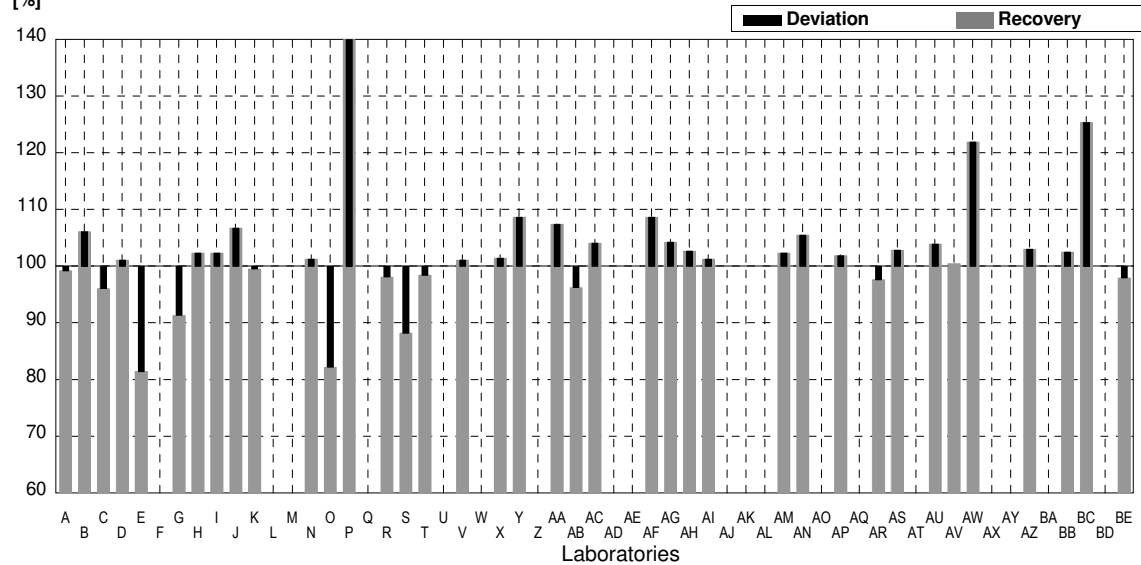
Stability test  $\pm U$  (k=2) 6,45 mg/l  $\pm$  0,09 mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A	6,3	0,9	mg/l	99%	-0,15
B	6,74		mg/l	106%	1,14
C	6,10	1,10	mg/l	96%	-0,73
D	6,42	0,2	mg/l	101%	0,20
E	5,17 *	1,85	mg/l	81%	-3,44
F			mg/l		
G	5,8	0,54	mg/l	91%	-1,60
H	6,5		mg/l	102%	0,44
I	6,50	1,20	mg/l	102%	0,44
J	6,777	1,220	mg/l	107%	1,25
K	6,32	1,16	mg/l	100%	-0,09
L			mg/l		
M			mg/l		
N	6,43	0,0268	mg/l	101%	0,23
O	5,22 *		mg/l	82%	-3,30
P	18,23 *	1,82	mg/l	287%	34,65
Q			mg/l		
R	6,23	0,07	mg/l	98%	-0,35
S	5,600		mg/l	88%	-2,19
T	6,25	0,495	mg/l	98%	-0,29
U			mg/l		
V	6,42	0,64	mg/l	101%	0,20
W			mg/l		
X	6,44	2,0737	mg/l	101%	0,26
Y	6,9	0,9	mg/l	109%	1,60
Z			mg/l		
AA	6,82	1,03	mg/l	107%	1,37
AB	6,113	0,917	mg/l	96%	-0,69
AC	6,61	0,95	mg/l	104%	0,76
AD			mg/l		
AE			mg/l		
AF	6,90	1,38	mg/l	109%	1,60
AG	6,620	1,384	mg/l	104%	0,79
AH	6,52	1,0	mg/l	103%	0,50
AI	6,43	0,64	mg/l	101%	0,23
AJ			mg/l		
AK			mg/l		
AL			mg/l		
AM	6,5	0,52	mg/l	102%	0,44
AN	6,7	1,2	mg/l	106%	1,02
AO			mg/l		

Result [mg/l]



Recovery [%]





AP	6,469		mg/l	102%	0,35
AQ			mg/l		
AR	6,2	0,172	mg/l	98%	-0,44
AS	6,53	1,3	mg/l	103%	0,52
AT			mg/l		
AU	6,60	2,0	mg/l	104%	0,73
AV	6,38	0,41	mg/l	100%	0,09
AW	7,74 *	1,01	mg/l	122%	4,05
AX			mg/l		
AY			mg/l		
AZ	6,540		mg/l	103%	0,55
BA			mg/l		
BB	6,51	0,65	mg/l	103%	0,47
BC	7,961 *	0,7802	mg/l	125%	4,70
BD			mg/l		
BE	6,22	0,56	mg/l	98%	-0,38

	All results	Outliers excl.	Unit
Mean ± CI(99%)	6,76 ± 0,87	6,44 ± 0,13	mg/l
Recov. ± CI(99%)	106,4 ± 13,7	101,4 ± 2,1	%
SD between labs	1,98	0,28	mg/l
RSD between labs	29,3	4,4	%
n for calculation	38	33	

### Sample N169A

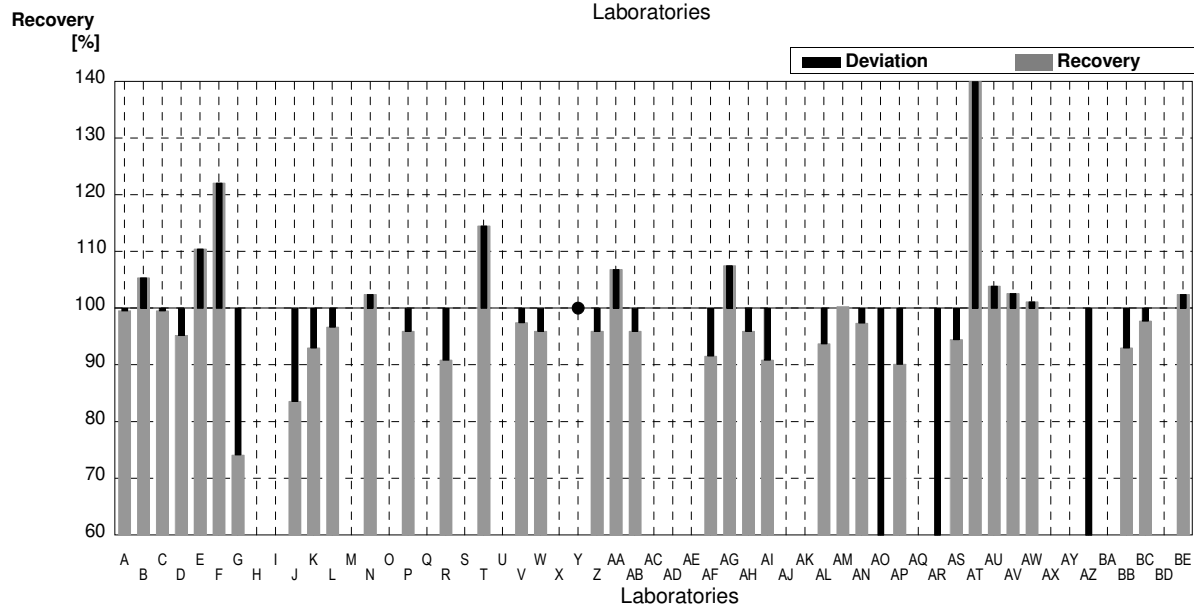
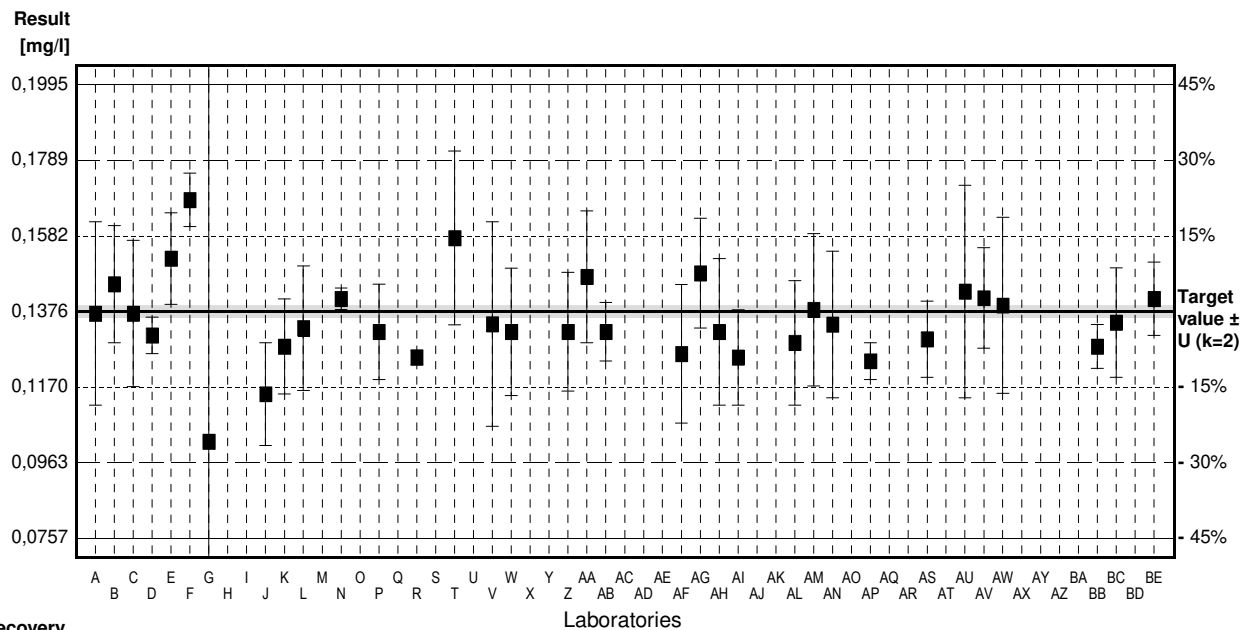
#### Parameter Total P (as PO4)

Target value ± U (k=2) 0,1376 mg/l ± 0,0016 mg/l

IFA result ± U (k=2) 0,156 mg/l ± 0,021 mg/l

Stability test ± U (k=2) 0,164 mg/l ± 0,022 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,137	0,025	mg/l	100%	-0,05
B	0,145	0,016	mg/l	105%	0,57
C	0,137	0,020	mg/l	100%	-0,05
D	0,131	0,005	mg/l	95%	-0,51
E	0,152	0,0125	mg/l	110%	1,11
F	0,168 *	0,0073	mg/l	122%	2,35
G	0,102	0,17	mg/l	74%	-2,75
H			mg/l		
I			mg/l		
J	0,115	0,014	mg/l	84%	-1,75
K	0,128	0,013	mg/l	93%	-0,74
L	0,133	0,017	mg/l	97%	-0,36
M			mg/l		
N	0,141	0,00292	mg/l	102%	0,26
O			mg/l		
P	0,132	0,013	mg/l	96%	-0,43
Q			mg/l		
R	0,125	0,002	mg/l	91%	-0,97
S			mg/l		
T	0,1576	0,0237	mg/l	115%	1,55
U			mg/l		
V	0,1341	0,0279	mg/l	97%	-0,27
W	0,132	0,0174	mg/l	96%	-0,43
X			mg/l		
Y	<0,20		mg/l	*	
Z	0,132	0,0162	mg/l	96%	-0,43
AA	0,147	0,018	mg/l	107%	0,73
AB	0,132	0,008	mg/l	96%	-0,43
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	0,126	0,0189	mg/l	92%	-0,90
AG	0,148	0,015	mg/l	108%	0,80
AH	0,132	0,02	mg/l	96%	-0,43
AI	0,125	0,013	mg/l	91%	-0,97
AJ			mg/l		
AK			mg/l		
AL	0,129	0,017	mg/l	94%	-0,66
AM	0,138	0,0208	mg/l	100%	0,03
AN	0,134	0,020	mg/l	97%	-0,28
AO	0,0450 *	0,003	mg/l	33%	-7,16



AP	0,124	0,005	mg/l	90%	-1,05
AQ			mg/l		
AR	0,0355 *	0,0060	mg/l	26%	-7,89
AS	0,130	0,0104	mg/l	94%	-0,59
AT	0,480 *	0,087	mg/l	349%	26,47
AU	0,143	0,029	mg/l	104%	0,42
AV	0,1412	0,0137	mg/l	103%	0,28
AW	0,1392	0,024	mg/l	101%	0,12
AX			mg/l		
AY			mg/l		
AZ	0,01285 *		mg/l	9%	-9,64
BA			mg/l		
BB	0,128	0,006	mg/l	93%	-0,74
BC	0,1345	0,01492	mg/l	98%	-0,24
BD			mg/l		
BE	0,141	0,010	mg/l	102%	0,26

	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,1360 ± 0,0287	0,1341 ± 0,0050	mg/l
Recov. ± CI(99%)	98,8 ± 20,9	97,5 ± 3,6	%
SD between labs	0,0650	0,0105	mg/l
RSD between labs	47,8	7,8	%
n for calculation	38	33	

### Sample N169B

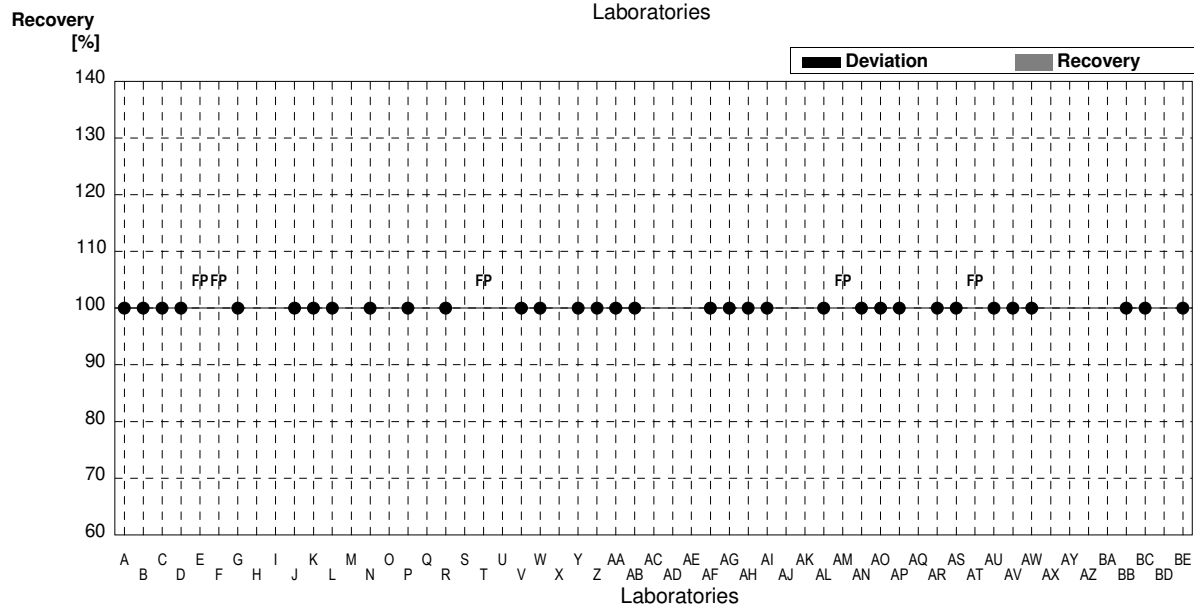
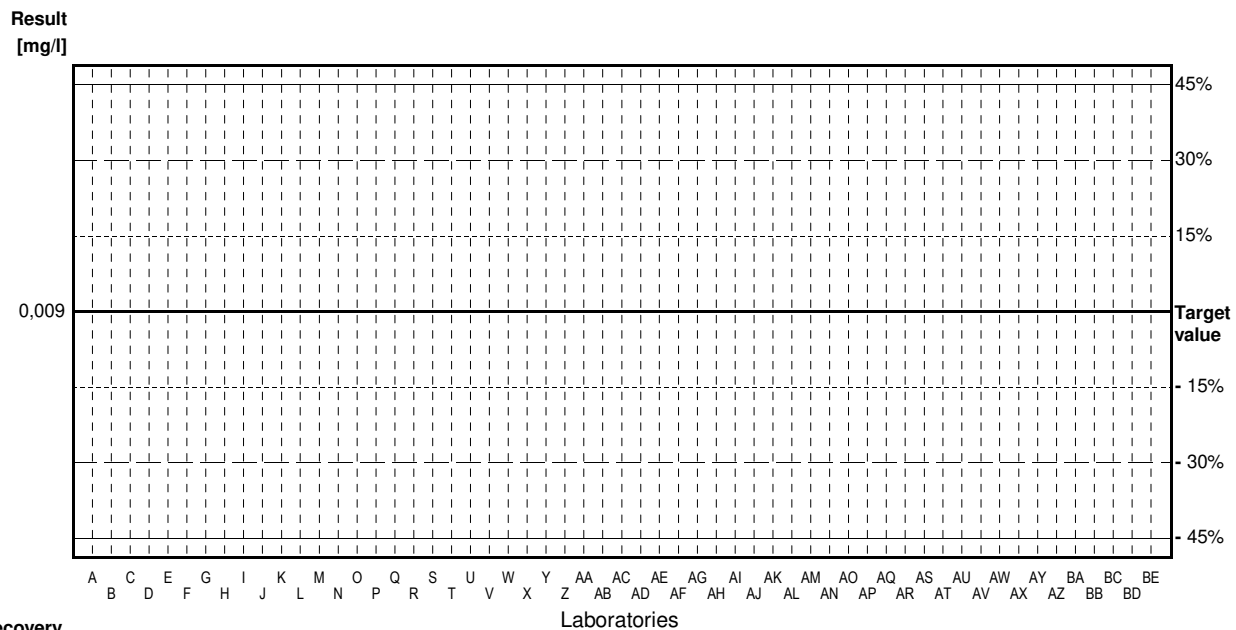
#### Parameter Total P (as PO4)

Target value <0,009 mg/l

IFA result <0,009 mg/l

Stability test <0,009 mg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,009		mg/l	•	
B	<0,02		mg/l	•	
C	<0,015		mg/l	•	
D	<0,009	0,005	mg/l	•	
E	0,0100	0,00082	mg/l	FP	
F	0,0216	0,004	mg/l	FP	
G	<0,01		mg/l	•	
H			mg/l		
I			mg/l		
J	<0,015		mg/l	•	
K	<0,010		mg/l	•	
L	<0,05		mg/l	•	
M			mg/l		
N	<0,0150		mg/l	•	
O			mg/l		
P	<0,022	0,005	mg/l	•	
Q			mg/l		
R	<0,015		mg/l	•	
S			mg/l		
T	0,02995	0,0045	mg/l	FP	
U			mg/l		
V	<0,0185		mg/l	•	
W	<0,006	0	mg/l	•	
X			mg/l		
Y	<0,20		mg/l	•	
Z	<0,02		mg/l	•	
AA	<0,0200		mg/l	•	
AB	<0,009		mg/l	•	
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	<0,02		mg/l	•	
AG	<0,01		mg/l	•	
AH	<0,013		mg/l	•	
AI	<0,0010		mg/l	•	
AJ			mg/l		
AK			mg/l		
AL	<0,02		mg/l	•	
AM	0,0215	0,00337	mg/l	FP	
AN	<0,005		mg/l	•	
AO	<0,005		mg/l	•	



AP	<0,03		mg/l	•	
AQ			mg/l		
AR	<0,02	0,00042	mg/l	•	
AS	<0,015		mg/l	•	
AT	0,230	0,042	mg/l	FP	
AU	<0,031		mg/l	•	
AV	<0,015		mg/l	•	
AW	<0,0122	0,0003	mg/l	•	
AX			mg/l		
AY			mg/l		
AZ			mg/l		
BA			mg/l		
BB	<0,010	0,0001	mg/l	•	
BC	<0,0188	0,00208	mg/l	•	
BD			mg/l		
BE	<0,006		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 N169A

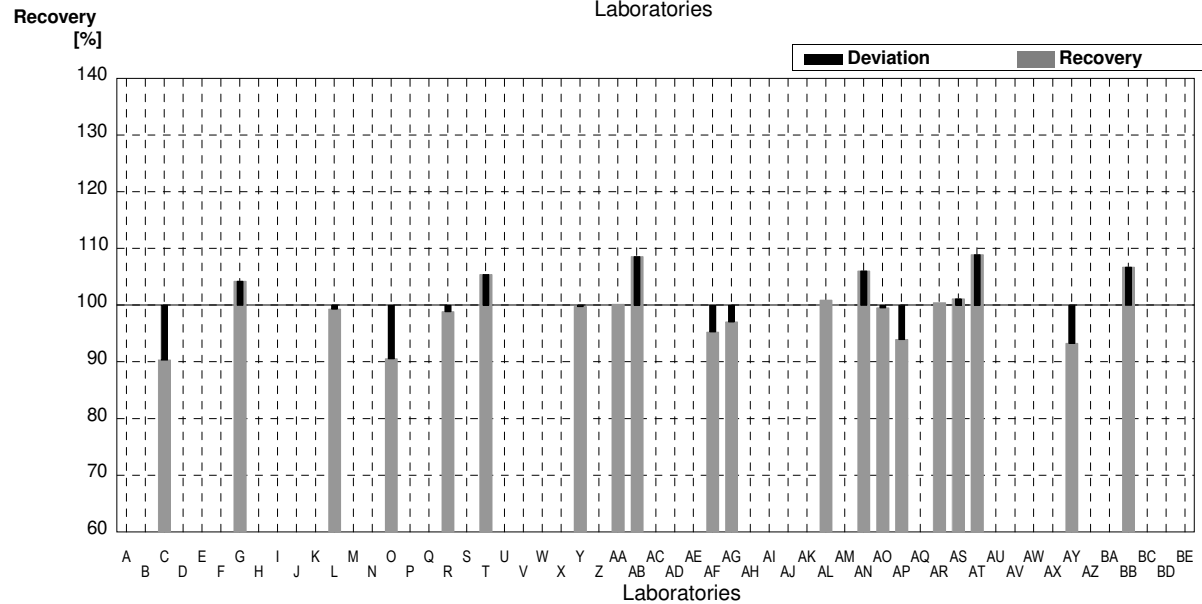
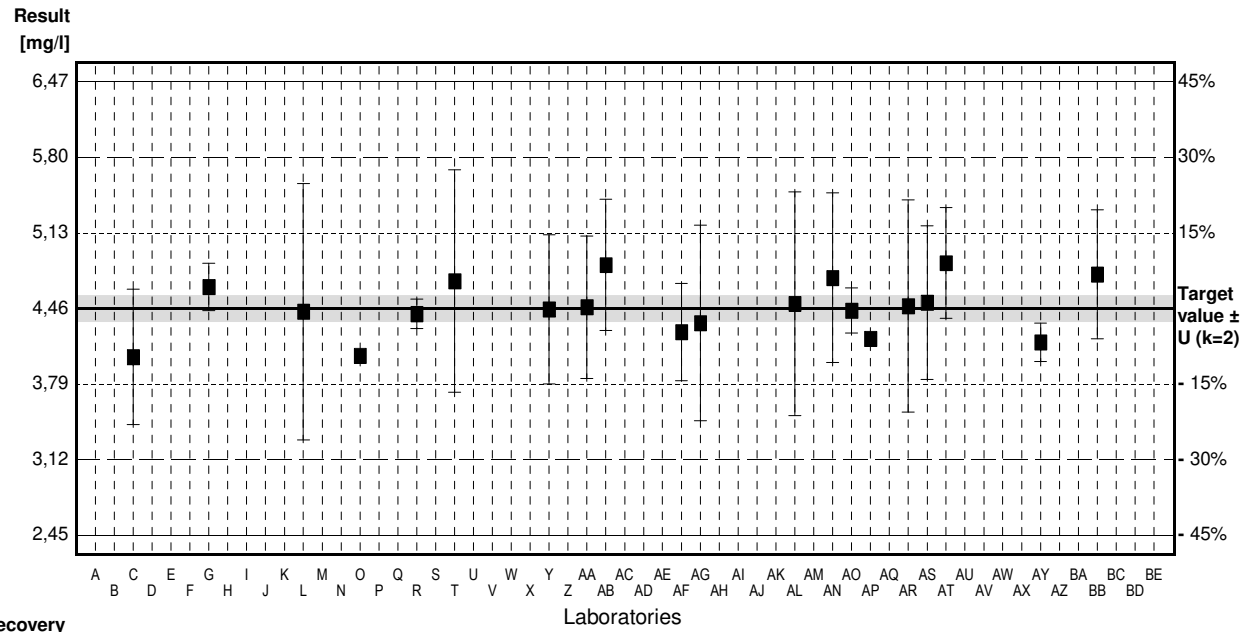
#### Parameter KMnO4-Index

Target value  $\pm$  U (k=2) 4,46 mg/l  $\pm$  0,11 mg/l

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

Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	4,03	0,60	mg/l	90%	-0,96
D			mg/l		
E			mg/l		
F			mg/l		
G	4,65	0,21	mg/l	104%	0,43
H			mg/l		
I			mg/l		
J			mg/l		
K			mg/l		
L	4,43	1,134	mg/l	99%	-0,07
M			mg/l		
N			mg/l		
O	4,04		mg/l	91%	-0,94
P			mg/l		
Q			mg/l		
R	4,41	0,13	mg/l	99%	-0,11
S			mg/l		
T	4,701	0,9832	mg/l	105%	0,54
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y	4,45	0,66	mg/l	100%	-0,02
Z			mg/l		
AA	4,47	0,63	mg/l	100%	0,02
AB	4,844	0,581	mg/l	109%	0,86
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	4,25	0,43	mg/l	95%	-0,47
AG	4,33	0,866	mg/l	97%	-0,29
AH			mg/l		
AI			mg/l		
AJ			mg/l		
AK			mg/l		
AL	4,50	0,99	mg/l	101%	0,09
AM			mg/l		
AN	4,73	0,75	mg/l	106%	0,61
AO	4,44	0,2	mg/l	100%	-0,04



AP	4,19		mg/l	94%	-0,61
AQ			mg/l		
AR	4,48	0,94	mg/l	100%	0,04
AS	4,51	0,68	mg/l	101%	0,11
AT	4,86	0,49	mg/l	109%	0,90
AU			mg/l		
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY	4,16	0,17	mg/l	93%	-0,67
AZ			mg/l		
BA			mg/l		
BB	4,76	0,571	mg/l	107%	0,67
BC			mg/l		
BD			mg/l		
BE			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	4,46 ± 0,16	4,46 ± 0,16	mg/l
Recov. ± CI(99%)	100,0 ± 3,5	100,0 ± 3,5	%
SD between labs	0,25	0,25	mg/l
RSD between labs	5,5	5,5	%
n for calculation	20	20	

### Sample N169B

#### Parameter KMnO4-Index

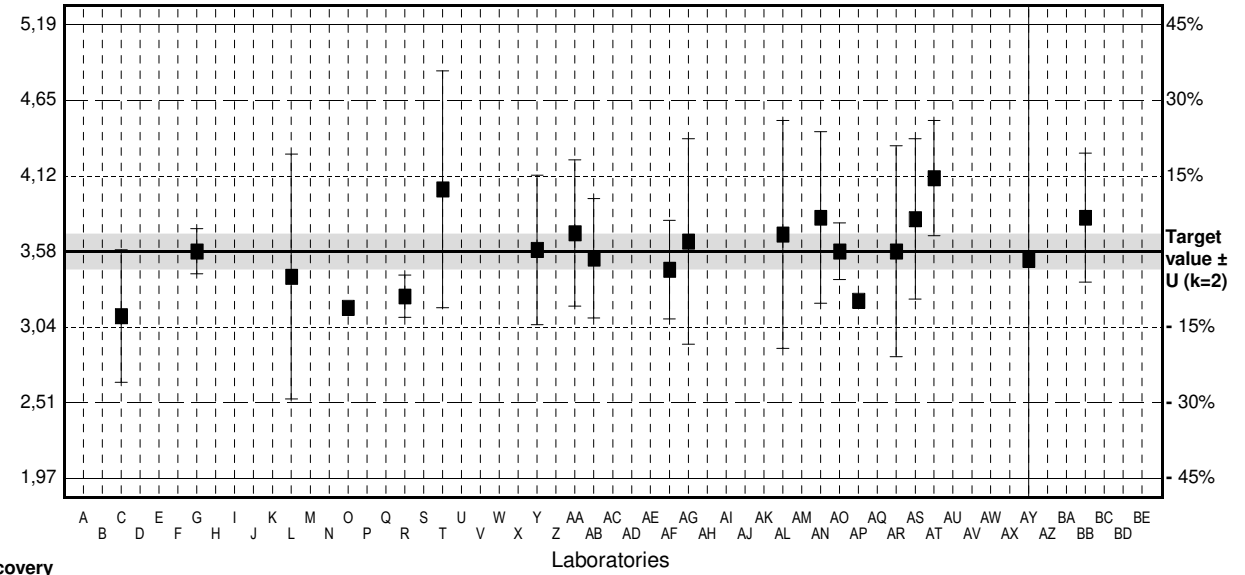
Target value  $\pm$  U (k=2) 3,58 mg/l  $\pm$  0,12 mg/l

IFA result  $\pm$  U (k=2) 4,07 mg/l  $\pm$  0,60 mg/l

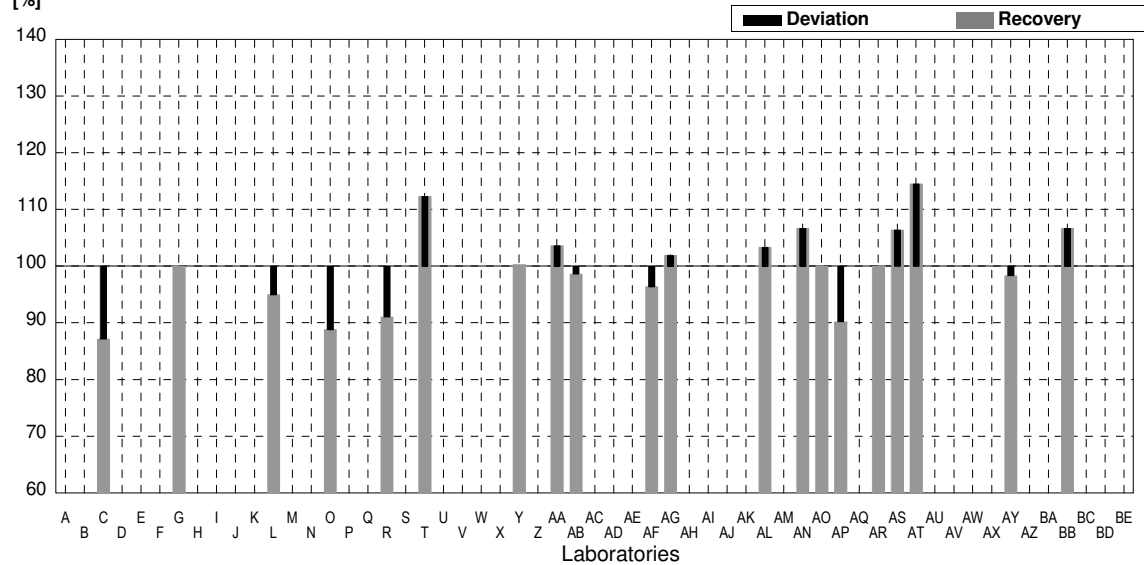
Stability test mg/l

Lab Code	Result	$\pm$	Unit	Recovery	z-Score
A			mg/l		
B			mg/l		
C	3,12	0,47	mg/l	87%	-1,28
D			mg/l		
E			mg/l		
F			mg/l		
G	3,58	0,16	mg/l	100%	0,00
H			mg/l		
I			mg/l		
J			mg/l		
K			mg/l		
L	3,40	0,870	mg/l	95%	-0,50
M			mg/l		
N			mg/l		
O	3,18		mg/l	89%	-1,12
P			mg/l		
Q			mg/l		
R	3,26	0,15	mg/l	91%	-0,89
S			mg/l		
T	4,02	0,8410	mg/l	112%	1,23
U			mg/l		
V			mg/l		
W			mg/l		
X			mg/l		
Y	3,59	0,53	mg/l	100%	0,03
Z			mg/l		
AA	3,71	0,52	mg/l	104%	0,36
AB	3,530	0,424	mg/l	99%	-0,14
AC			mg/l		
AD			mg/l		
AE			mg/l		
AF	3,45	0,35	mg/l	96%	-0,36
AG	3,65	0,73	mg/l	102%	0,20
AH			mg/l		
AI			mg/l		
AJ			mg/l		
AK			mg/l		
AL	3,70	0,81	mg/l	103%	0,34
AM			mg/l		
AN	3,82	0,61	mg/l	107%	0,67
AO	3,58	0,2	mg/l	100%	0,00

Result [mg/l]



Recovery [%]





AP	3,23		mg/l	90%	-0,98
AQ			mg/l		
AR	3,58	0,75	mg/l	100%	0,00
AS	3,81	0,57	mg/l	106%	0,64
AT	4,10	0,41	mg/l	115%	1,45
AU			mg/l		
AV			mg/l		
AW			mg/l		
AX			mg/l		
AY	3,52	3	mg/l	98%	-0,17
AZ			mg/l		
BA			mg/l		
BB	3,82	0,458	mg/l	107%	0,67
BC			mg/l		
BD			mg/l		
BE			mg/l		

	All results	Outliers excl.	Unit
Mean ± CI(99%)	3,58 ± 0,17	3,58 ± 0,17	mg/l
Recov. ± CI(99%)	100,1 ± 4,7	100,1 ± 4,7	%
SD between labs	0,26	0,26	mg/l
RSD between labs	7,4	7,4	%
n for calculation	20	20	



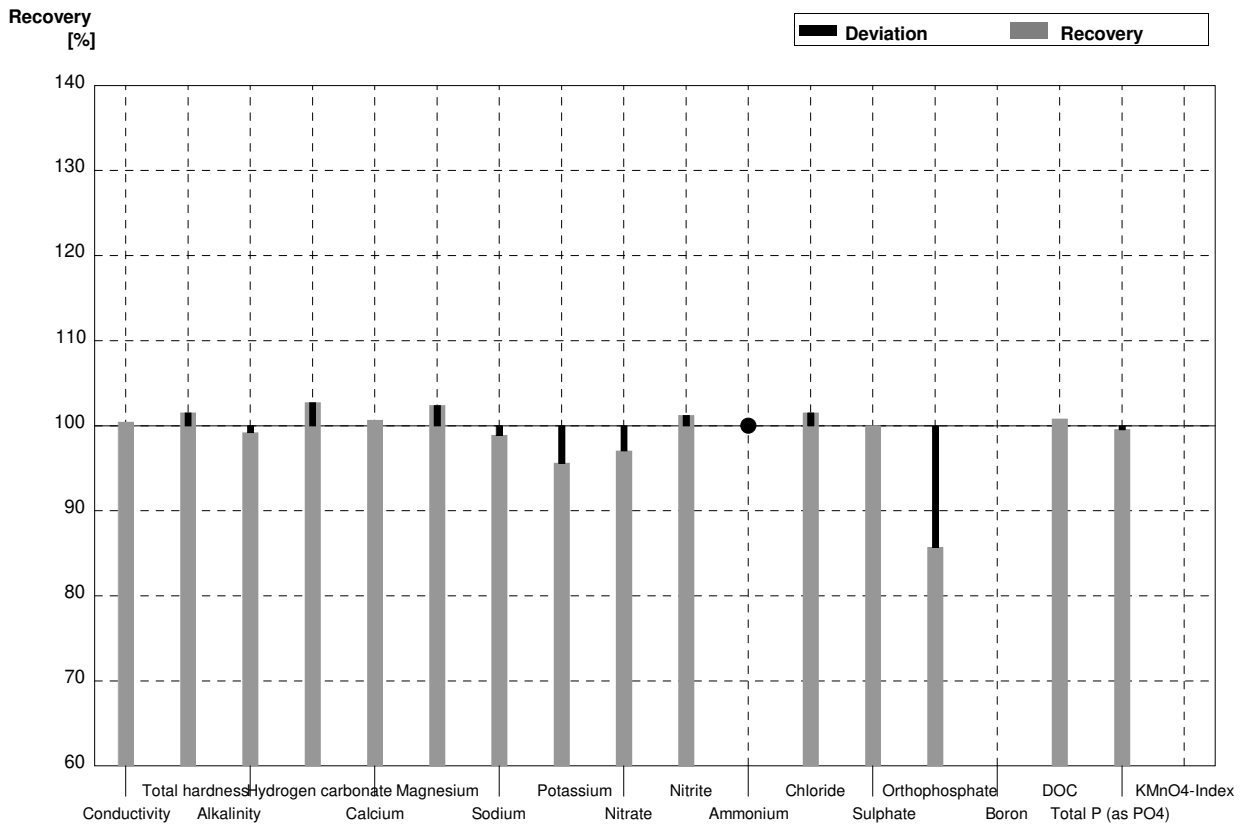
# Illustration of Results Laboratory Oriented Part

Round N169  
Major Ions

Sample Dispatch: 6 November 2023

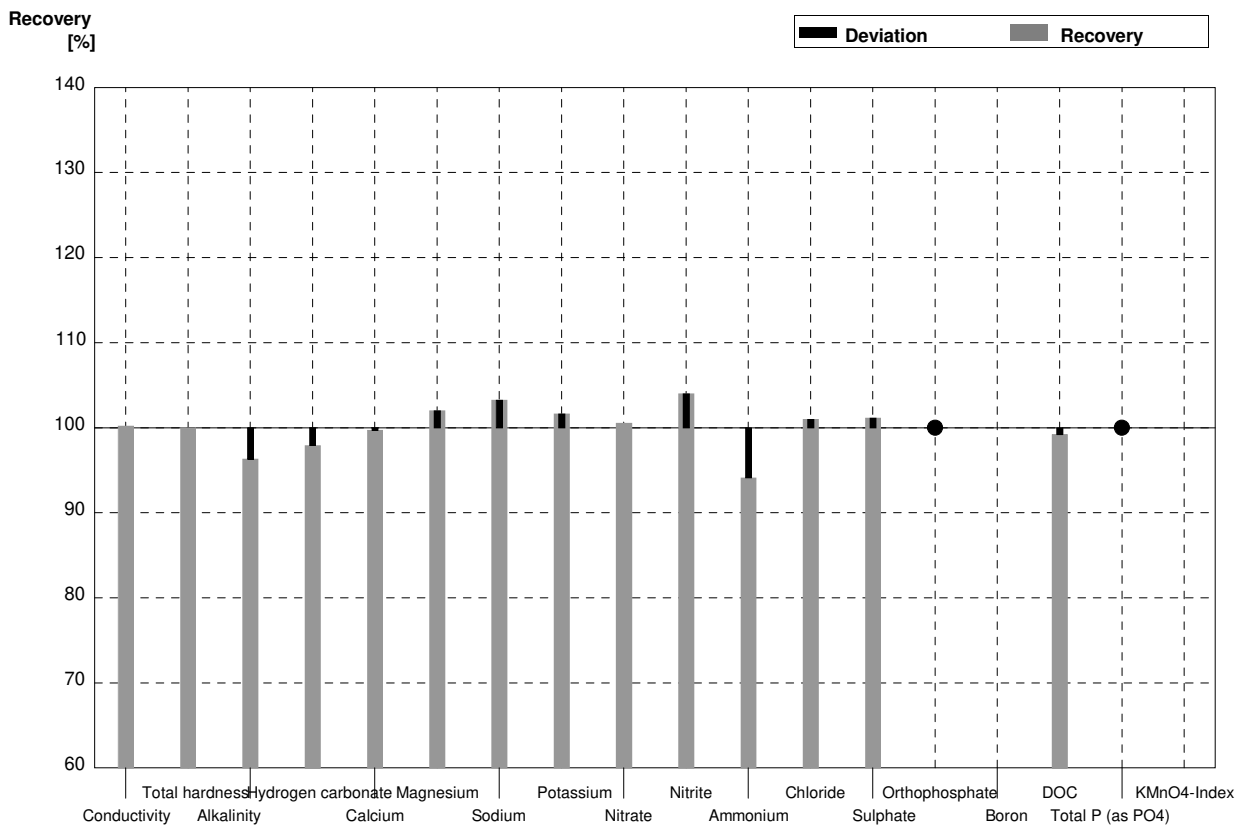
**Sample N169A**  
**Laboratory A**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	418	8	µS/cm	100%
Total hardness	1,103	0,019	1,12	0,1	mmol/l	102%
Alkalinity	1,371	0,013	1,36	0,1	mmol/l	99%
Hydrogen carbonate	80,6	0,8	82,8	6,6	mg/l	103%
Calcium	30,3	0,7	30,5	2,4	mg/l	101%
Magnesium	8,40	0,13	8,6	0,5	mg/l	102%
Sodium	35,4	0,2	35,0	1,4	mg/l	99%
Potassium	2,05	0,02	1,96	0,16	mg/l	96%
Nitrate	17,0	0,5	16,5	1,2	mg/l	97%
Nitrite	0,0573	0,0002	0,058	0,006	mg/l	101%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	65,0	1,2	66	5	mg/l	102%
Sulphate	15,5	0,3	15,5	0,9	mg/l	100%
Orthophosphate	0,0455	0,0032	0,0390	0,0060	mg/l	86%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,75	0,53	mg/l	101%
Total P (as PO4)	0,1376	0,0016	0,137	0,025	mg/l	100%
KMnO4-Index	4,46	0,11			mg/l	



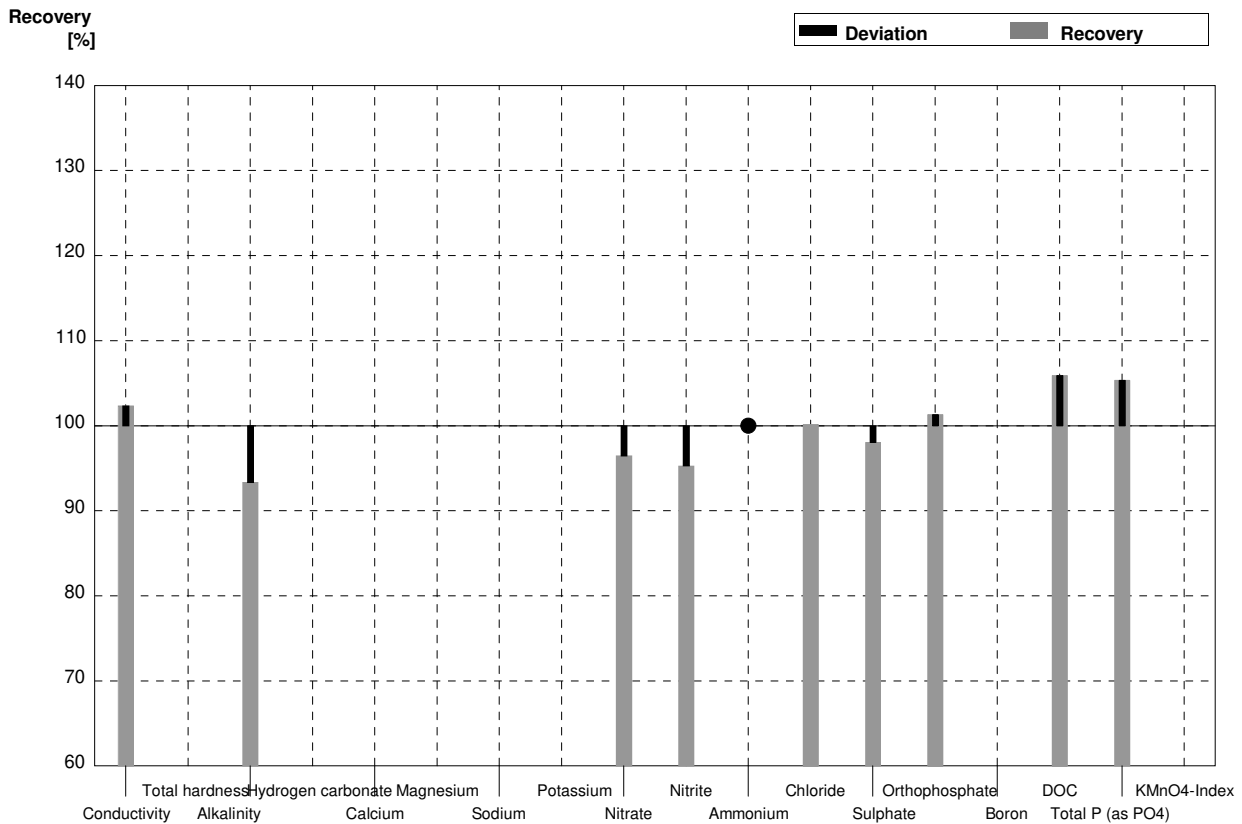
**Sample N169B**  
**Laboratory A**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	506	10	µS/cm	100%
Total hardness	2,36	0,03	2,36	0,2	mmol/l	100%
Alkalinity	3,28	0,06	3,16	0,2	mmol/l	96%
Hydrogen carbonate	197	3	192,9	15,4	mg/l	98%
Calcium	70,2	1,2	70	5,6	mg/l	100%
Magnesium	14,9	0,3	15,2	0,9	mg/l	102%
Sodium	9,2	0,6	9,5	0,3	mg/l	103%
Potassium	4,29	0,03	4,36	0,35	mg/l	102%
Nitrate	36,4	0,9	36,6	2,6	mg/l	101%
Nitrite	0,0798	0,0011	0,083	0,008	mg/l	104%
Ammonium	0,085	0,004	0,080	0,025	mg/l	94%
Chloride	10,0	0,3	10,1	0,7	mg/l	101%
Sulphate	51,4	1,0	52	3	mg/l	101%
Orthophosphate	<0,009		<0,009		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,3	0,9	mg/l	99%
Total P (as PO4)	<0,009		<0,009		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



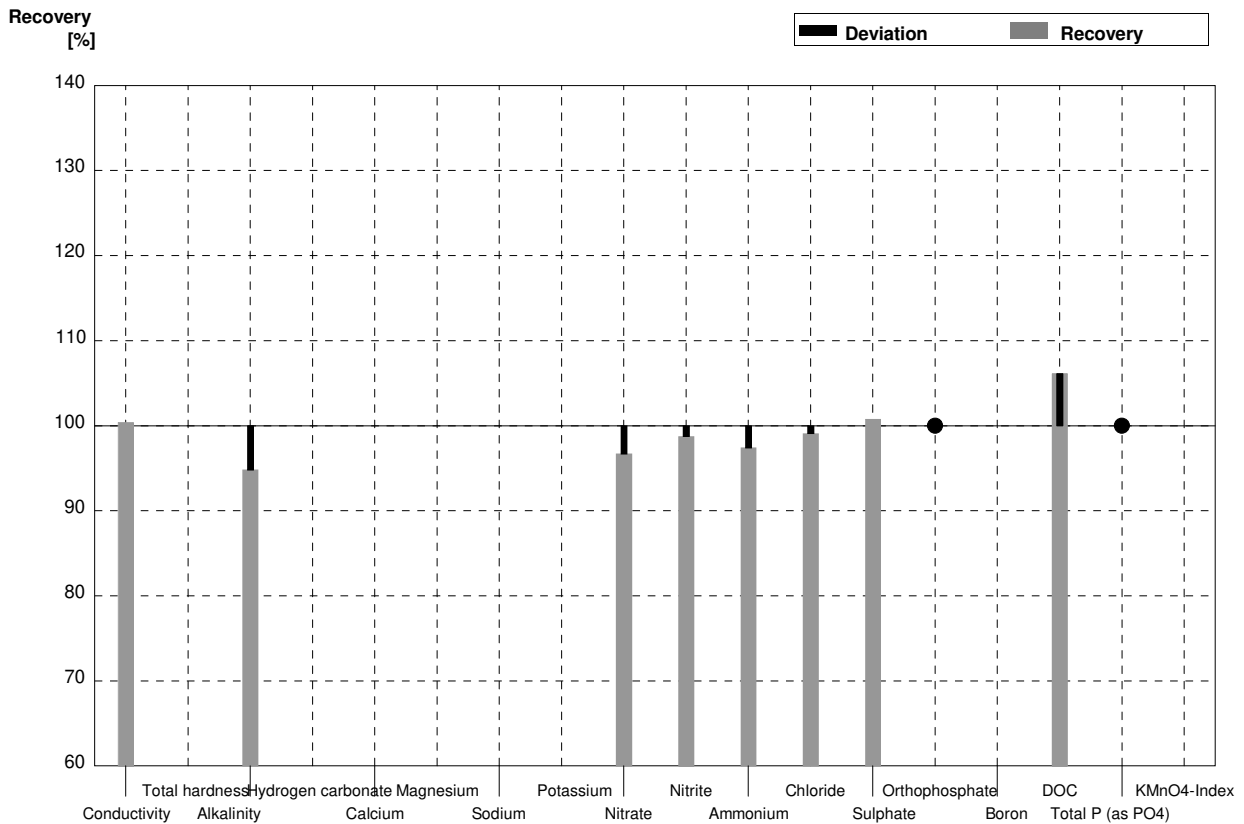
**Sample N169A**  
**Laboratory B**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	426		µS/cm	102%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,28		mmol/l	93%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	16,4	2,2	mg/l	96%
Nitrite	0,0573	0,0002	0,0546	0,0093	mg/l	95%
Ammonium	<0,01		<0,03		mg/l	•
Chloride	65,0	1,2	65,1	7,7	mg/l	100%
Sulphate	15,5	0,3	15,2	2,1	mg/l	98%
Orthophosphate	0,0455	0,0032	0,0461	0,0096	mg/l	101%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,94		mg/l	106%
Total P (as PO4)	0,1376	0,0016	0,145	0,016	mg/l	105%
KMnO4-Index	4,46	0,11			mg/l	



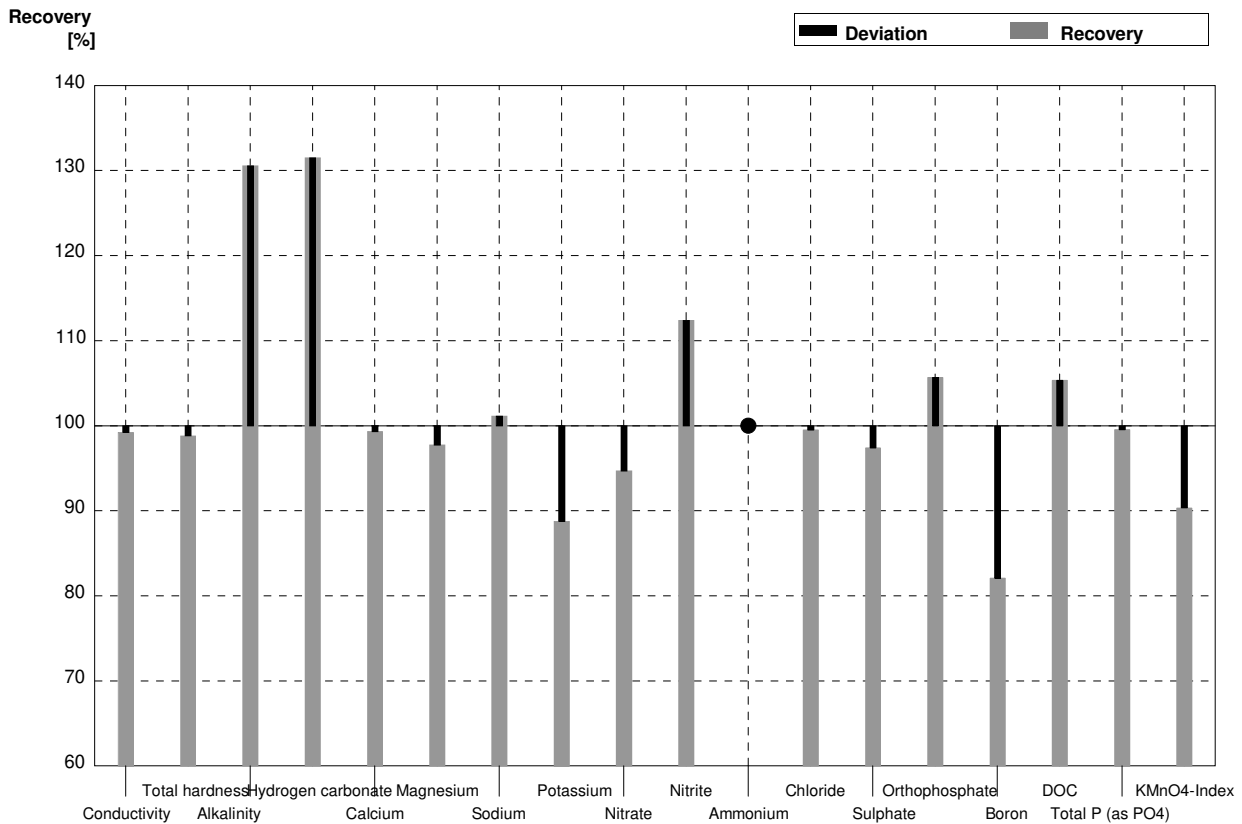
**Sample N169B**  
**Laboratory B**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	507		µS/cm	100%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,11		mmol/l	95%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	35,2	4,7	mg/l	97%
Nitrite	0,0798	0,0011	0,0788	0,0134	mg/l	99%
Ammonium	0,085	0,004	0,0828	0,0147	mg/l	97%
Chloride	10,0	0,3	9,91	1,17	mg/l	99%
Sulphate	51,4	1,0	51,8	7,2	mg/l	101%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,74		mg/l	106%
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory C**

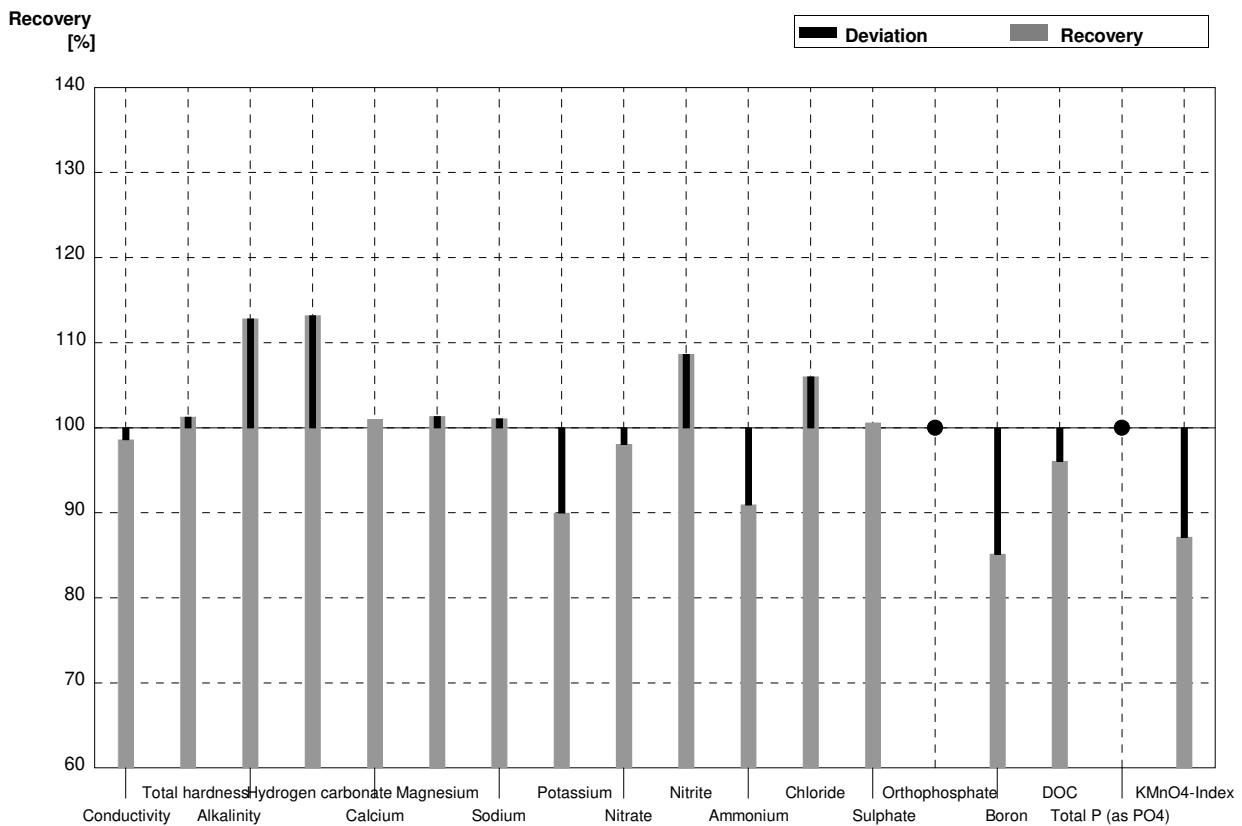
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	413	21	µS/cm	99%
Total hardness	1,103	0,019	1,09	0,22	mmol/l	99%
Alkalinity	1,371	0,013	1,79	0,09	mmol/l	131%
Hydrogen carbonate	80,6	0,8	106	5	mg/l	132%
Calcium	30,3	0,7	30,1	6,0	mg/l	99%
Magnesium	8,40	0,13	8,21	0,82	mg/l	98%
Sodium	35,4	0,2	35,8	3,6	mg/l	101%
Potassium	2,05	0,02	1,82	0,18	mg/l	89%
Nitrate	17,0	0,5	16,1	1,6	mg/l	95%
Nitrite	0,0573	0,0002	0,0644	0,010	mg/l	112%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	64,7	6,5	mg/l	100%
Sulphate	15,5	0,3	15,1	1,5	mg/l	97%
Orthophosphate	0,0455	0,0032	0,0481	0,0072	mg/l	106%
Boron	0,0402	0,0011	0,0330	0,0066	mg/l	82%
DOC	3,72	0,05	3,92	0,71	mg/l	105%
Total P (as PO4)	0,1376	0,0016	0,137	0,020	mg/l	100%
KMnO4-Index	4,46	0,11	4,03	0,60	mg/l	90%





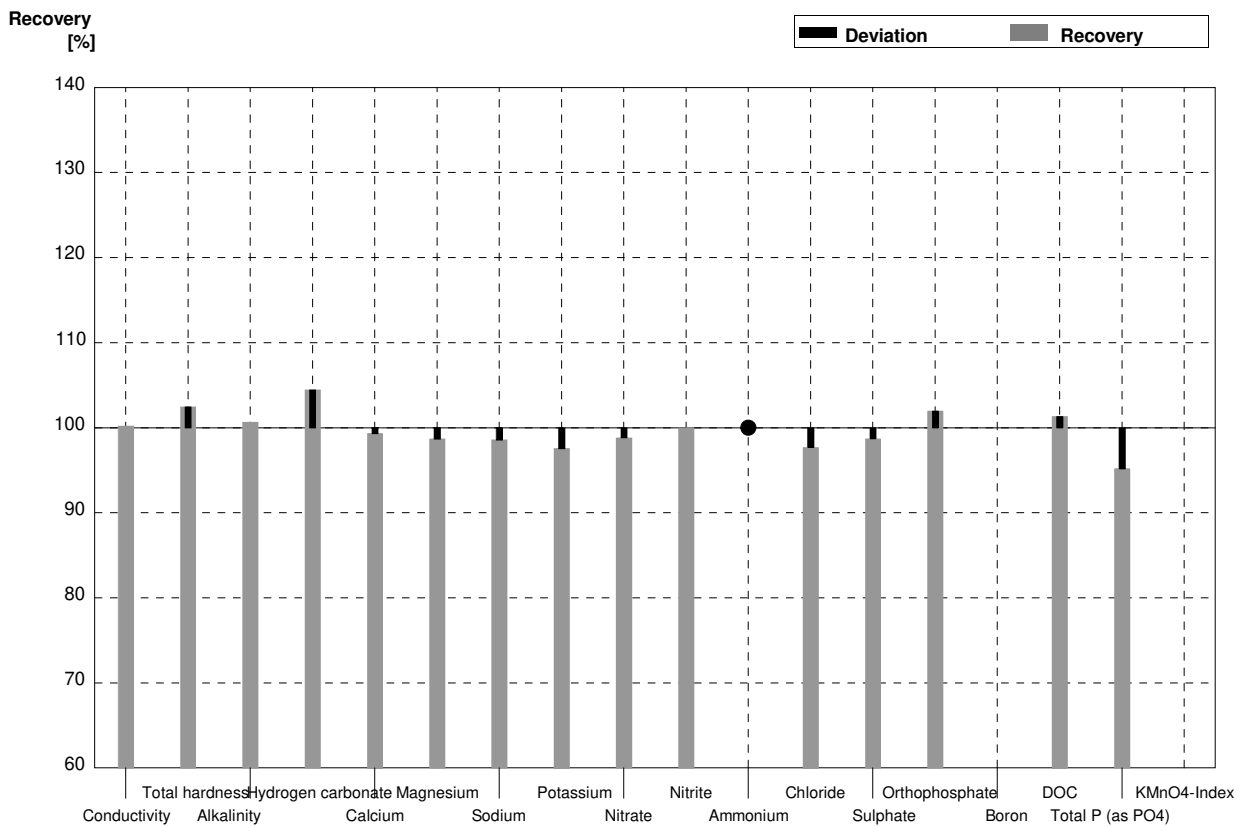
**Sample N169B**  
**Laboratory C**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	498	25	µS/cm	99%
Total hardness	2,36	0,03	2,39	0,48	mmol/l	101%
Alkalinity	3,28	0,06	3,70	0,19	mmol/l	113%
Hydrogen carbonate	197	3	223	11	mg/l	113%
Calcium	70,2	1,2	70,9	14,2	mg/l	101%
Magnesium	14,9	0,3	15,1	1,5	mg/l	101%
Sodium	9,2	0,6	9,30	0,93	mg/l	101%
Potassium	4,29	0,03	3,86	0,39	mg/l	90%
Nitrate	36,4	0,9	35,7	3,6	mg/l	98%
Nitrite	0,0798	0,0011	0,0867	0,013	mg/l	109%
Ammonium	0,085	0,004	0,0773	0,0116	mg/l	91%
Chloride	10,0	0,3	10,6	1,1	mg/l	106%
Sulphate	51,4	1,0	51,7	5,2	mg/l	101%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005	0,0591	0,0118	mg/l	85%
DOC	6,35	0,05	6,10	1,10	mg/l	96%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,58	0,12	3,12	0,47	mg/l	87%



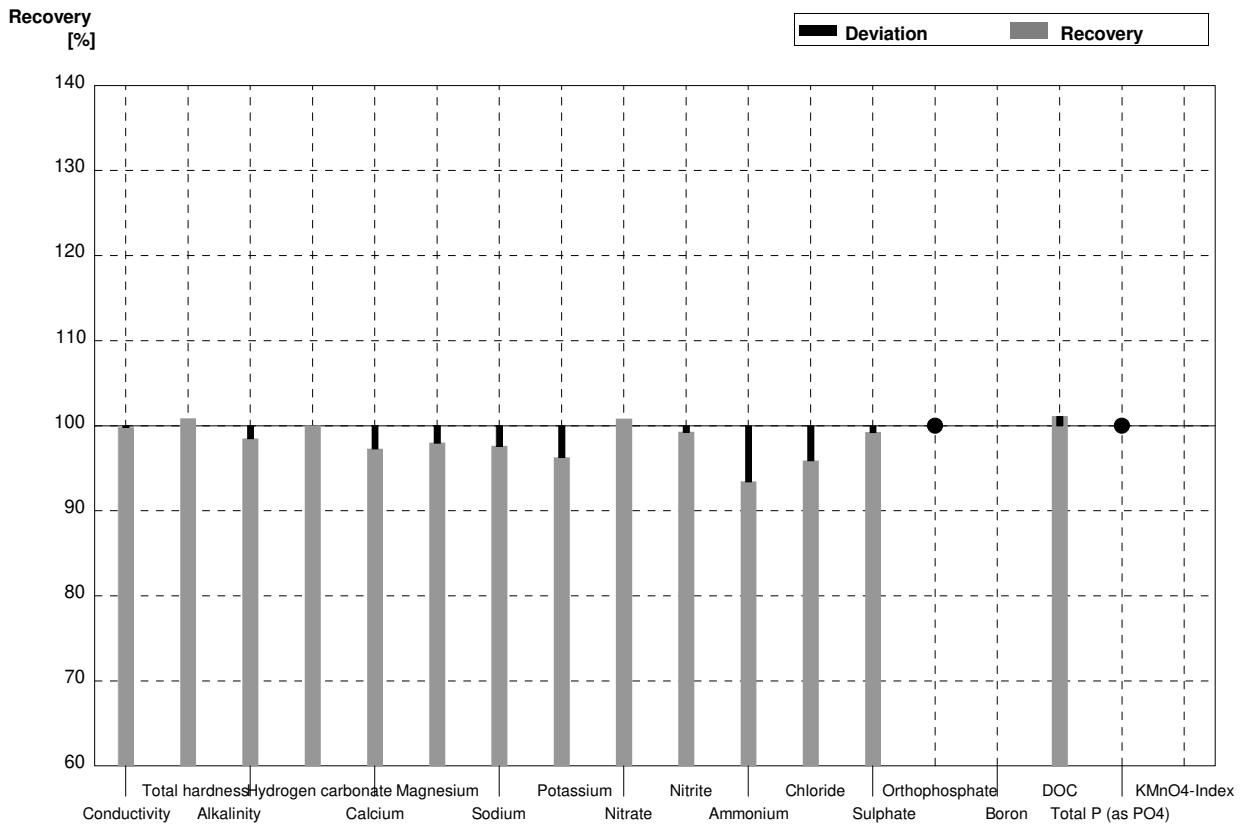
**Sample N169A**  
**Laboratory D**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	417	2	µS/cm	100%
Total hardness	1,103	0,019	1,13	0,1	mmol/l	102%
Alkalinity	1,371	0,013	1,38	0,1	mmol/l	101%
Hydrogen carbonate	80,6	0,8	84,2	6	mg/l	104%
Calcium	30,3	0,7	30,1	1,0	mg/l	99%
Magnesium	8,40	0,13	8,29	0,2	mg/l	99%
Sodium	35,4	0,2	34,9	0,2	mg/l	99%
Potassium	2,05	0,02	2,00	0,1	mg/l	98%
Nitrate	17,0	0,5	16,8	0,4	mg/l	99%
Nitrite	0,0573	0,0002	0,0573	0,002	mg/l	100%
Ammonium	<0,01		<0,006	0,003	mg/l	•
Chloride	65,0	1,2	63,5	0,2	mg/l	98%
Sulphate	15,5	0,3	15,3	2	mg/l	99%
Orthophosphate	0,0455	0,0032	0,0464	0,002	mg/l	102%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,77	0,2	mg/l	101%
Total P (as PO4)	0,1376	0,0016	0,131	0,005	mg/l	95%
KMnO4-Index	4,46	0,11			mg/l	



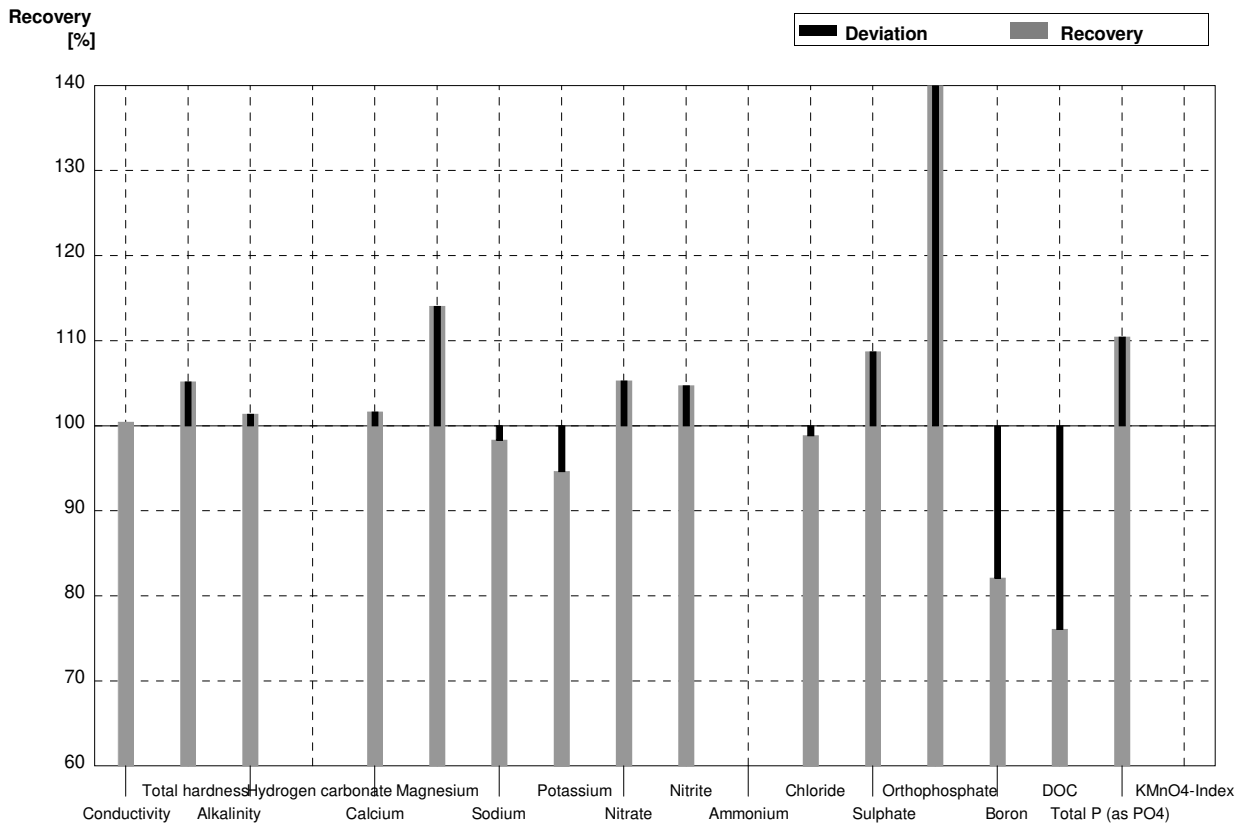
**Sample N169B**  
**Laboratory D**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	2	µS/cm	100%
Total hardness	2,36	0,03	2,38	0,1	mmol/l	101%
Alkalinity	3,28	0,06	3,23	0,1	mmol/l	98%
Hydrogen carbonate	197	3	197	6	mg/l	100%
Calcium	70,2	1,2	68,3	1,0	mg/l	97%
Magnesium	14,9	0,3	14,6	0,2	mg/l	98%
Sodium	9,2	0,6	8,98	0,2	mg/l	98%
Potassium	4,29	0,03	4,13	0,1	mg/l	96%
Nitrate	36,4	0,9	36,7	0,4	mg/l	101%
Nitrite	0,0798	0,0011	0,0792	0,002	mg/l	99%
Ammonium	0,085	0,004	0,0794	0,003	mg/l	93%
Chloride	10,0	0,3	9,59	0,2	mg/l	96%
Sulphate	51,4	1,0	51,0	2	mg/l	99%
Orthophosphate	<0,009		<0,003	0,002	mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,42	0,2	mg/l	101%
Total P (as PO4)	<0,009		<0,009	0,005	mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



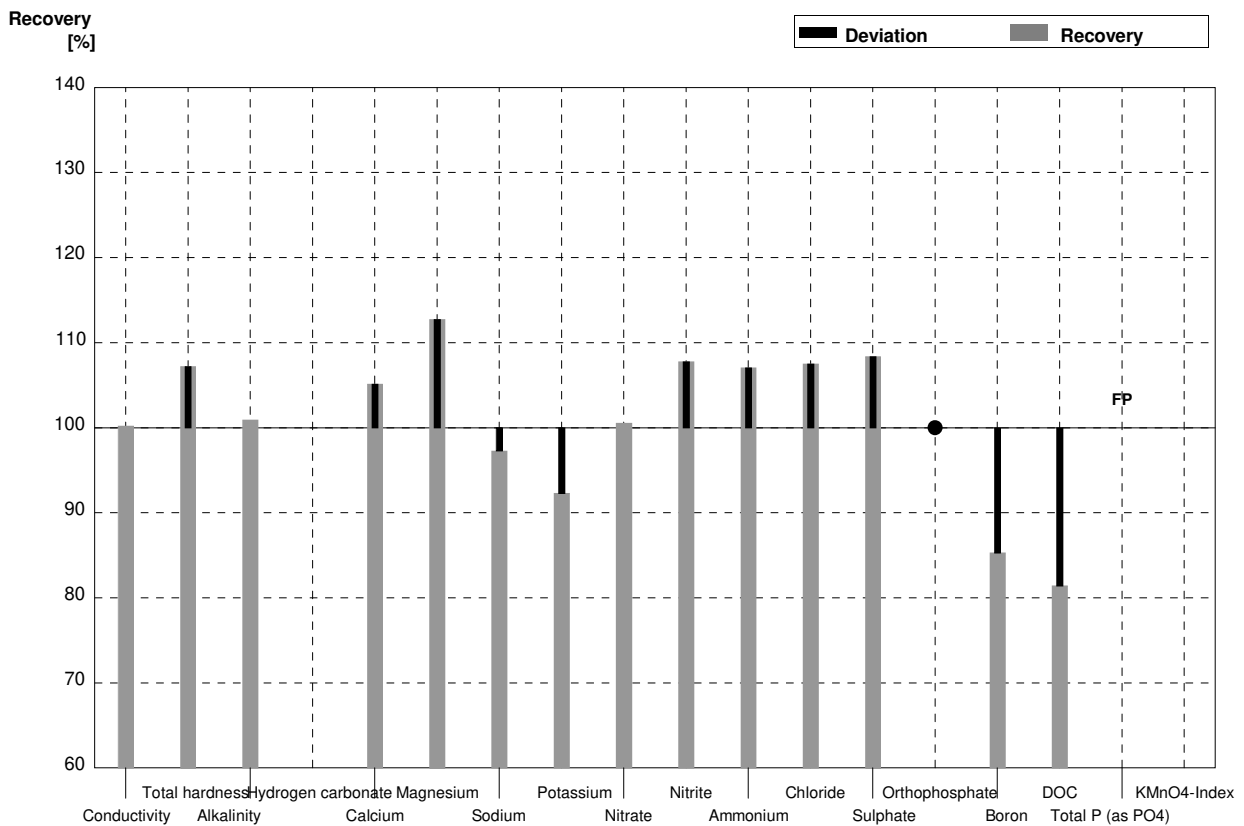
**Sample N169A**  
**Laboratory E**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	418	22,8	µS/cm	100%
Total hardness	1,103	0,019	1,16	0,503	mmol/l	105%
Alkalinity	1,371	0,013	1,39	0,141	mmol/l	101%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	30,8	2,16	mg/l	102%
Magnesium	8,40	0,13	9,58	1,41	mg/l	114%
Sodium	35,4	0,2	34,8	1,39	mg/l	98%
Potassium	2,05	0,02	1,94	0,0953	mg/l	95%
Nitrate	17,0	0,5	17,9	3,29	mg/l	105%
Nitrite	0,0573	0,0002	0,060	0,0157	mg/l	105%
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	64,25	21,1	mg/l	99%
Sulphate	15,5	0,3	16,85	5,999	mg/l	109%
Orthophosphate	0,0455	0,0032	0,065	0,0151	mg/l	143%
Boron	0,0402	0,0011	0,0330	0,0020	mg/l	82%
DOC	3,72	0,05	2,83	1,01	mg/l	76%
Total P (as PO4)	0,1376	0,0016	0,152	0,0125	mg/l	110%
KMnO4-Index	4,46	0,11			mg/l	



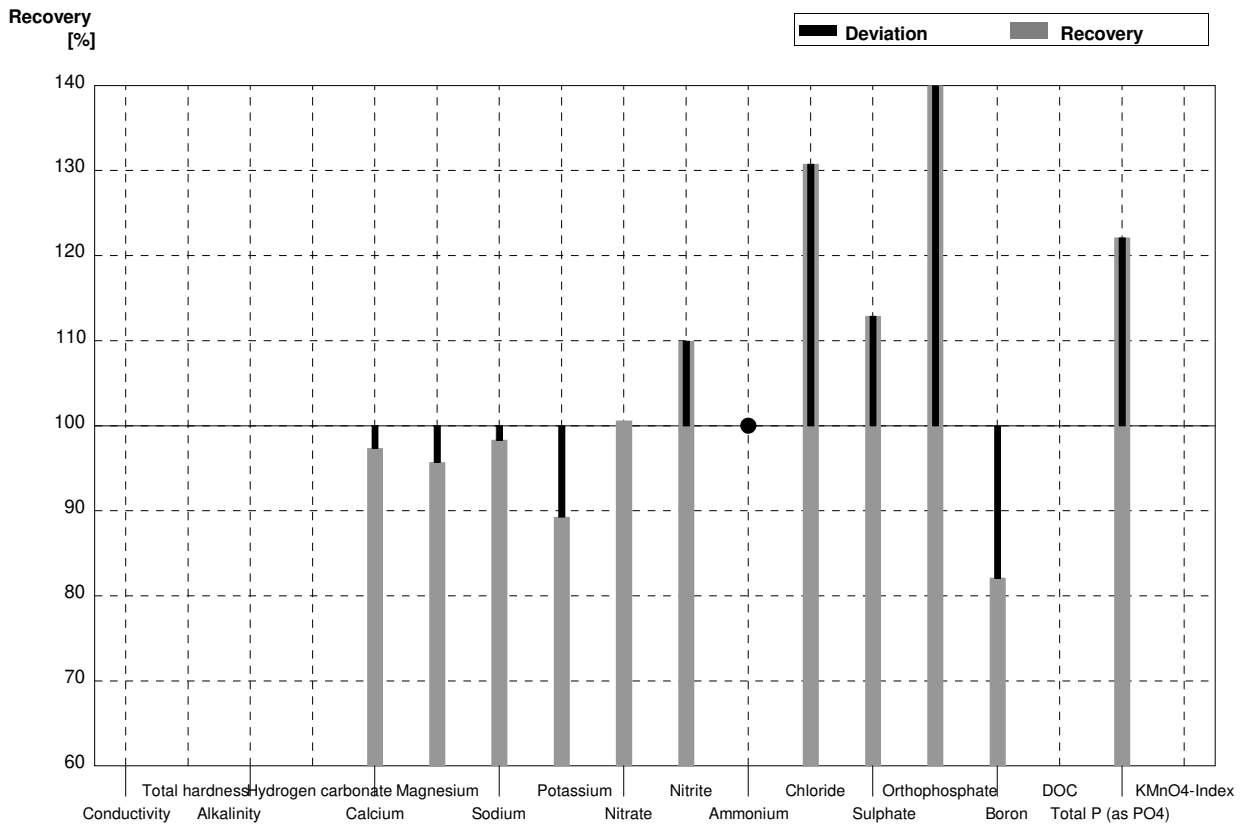
**Sample N169B**  
**Laboratory E**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	506	27,6	µS/cm	100%
Total hardness	2,36	0,03	2,53	1,097	mmol/l	107%
Alkalinity	3,28	0,06	3,31	0,336	mmol/l	101%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	73,8	5,18	mg/l	105%
Magnesium	14,9	0,3	16,8	2,47	mg/l	113%
Sodium	9,2	0,6	8,95	0,356	mg/l	97%
Potassium	4,29	0,03	3,96	0,194	mg/l	92%
Nitrate	36,4	0,9	36,6	6,72	mg/l	101%
Nitrite	0,0798	0,0011	0,086	0,0226	mg/l	108%
Ammonium	0,085	0,004	0,091	0,00886	mg/l	107%
Chloride	10,0	0,3	10,75	3,52	mg/l	108%
Sulphate	51,4	1,0	55,70	19,8	mg/l	108%
Orthophosphate	<0,009		0,0235	0,0547	mg/l	•
Boron	0,0694	0,0005	0,0592	0,00579	mg/l	85%
DOC	6,35	0,05	5,17	1,85	mg/l	81%
Total P (as PO4)	<0,009		0,0100	0,00082	mg/l	FP
KMnO4-Index	3,58	0,12			mg/l	



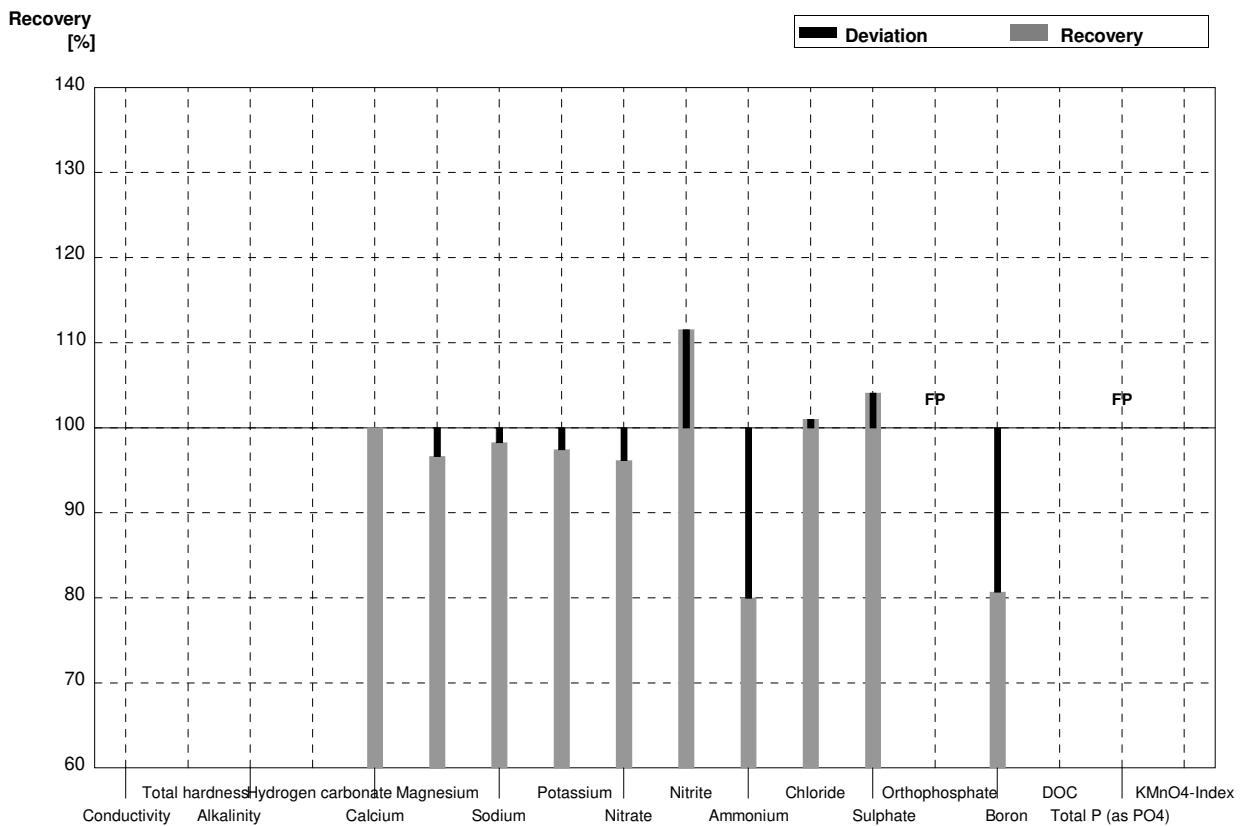
**Sample N169A**  
**Laboratory F**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	29,5	3,17	mg/l	97%
Magnesium	8,40	0,13	8,04	1,08	mg/l	96%
Sodium	35,4	0,2	34,8	4,48	mg/l	98%
Potassium	2,05	0,02	1,83	0,268	mg/l	89%
Nitrate	17,0	0,5	17,1	0,88	mg/l	101%
Nitrite	0,0573	0,0002	0,063	0,005	mg/l	110%
Ammonium	<0,01		0,0090	0,001	mg/l	•
Chloride	65,0	1,2	85	10	mg/l	131%
Sulphate	15,5	0,3	17,5	1,5	mg/l	113%
Orthophosphate	0,0455	0,0032	0,080	0,008	mg/l	176%
Boron	0,0402	0,0011	0,0330	0,0058	mg/l	82%
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,168	0,0073	mg/l	122%
KMnO4-Index	4,46	0,11			mg/l	



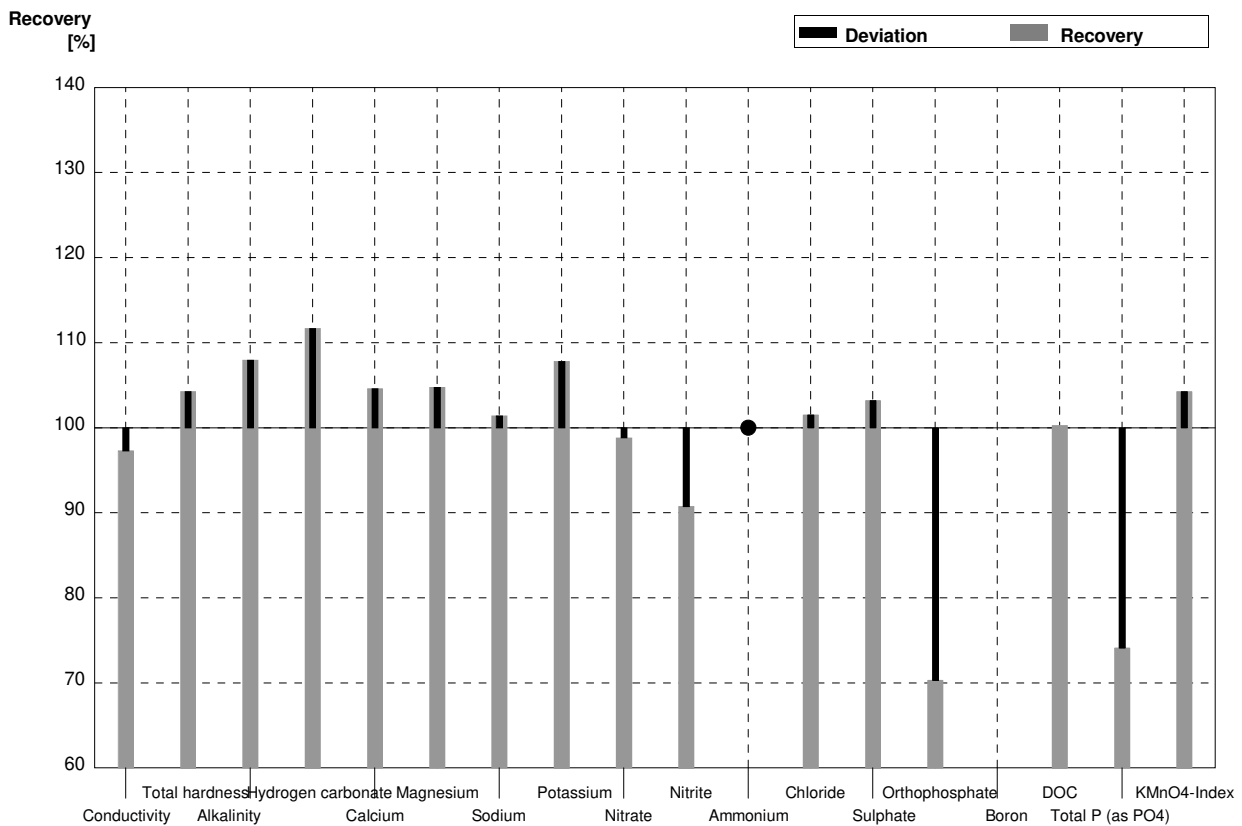
**Sample N169B**  
**Laboratory F**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	70,2	7,55	mg/l	100%
Magnesium	14,9	0,3	14,4	1,93	mg/l	97%
Sodium	9,2	0,6	9,04	1,16	mg/l	98%
Potassium	4,29	0,03	4,18	0,612	mg/l	97%
Nitrate	36,4	0,9	35,0	1,8	mg/l	96%
Nitrite	0,0798	0,0011	0,089	0,009	mg/l	112%
Ammonium	0,085	0,004	0,068	0,005	mg/l	80%
Chloride	10,0	0,3	10,1	1,2	mg/l	101%
Sulphate	51,4	1,0	53,5	4,5	mg/l	104%
Orthophosphate	<0,009		0,0223	0,002	mg/l	FP
Boron	0,0694	0,0005	0,056	0,0040	mg/l	81%
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		0,0216	0,004	mg/l	FP
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory G**

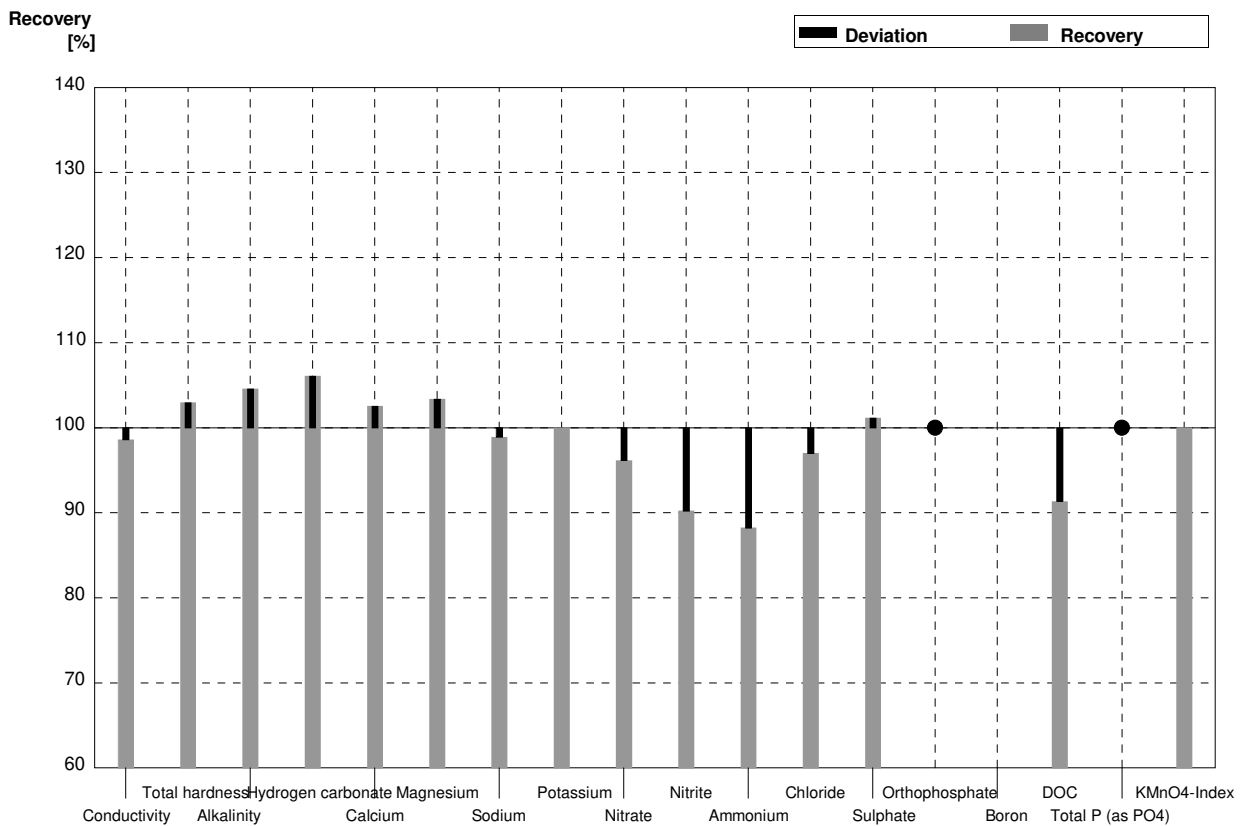
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	405	8,1	µS/cm	97%
Total hardness	1,103	0,019	1,15	0,09	mmol/l	104%
Alkalinity	1,371	0,013	1,48	0,13	mmol/l	108%
Hydrogen carbonate	80,6	0,8	90	4,0	mg/l	112%
Calcium	30,3	0,7	31,7	1,1	mg/l	105%
Magnesium	8,40	0,13	8,8	0,30	mg/l	105%
Sodium	35,4	0,2	35,9	1,5	mg/l	101%
Potassium	2,05	0,02	2,21	0,12	mg/l	108%
Nitrate	17,0	0,5	16,8	0,76	mg/l	99%
Nitrite	0,0573	0,0002	0,052	0,0030	mg/l	91%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	66	2,1	mg/l	102%
Sulphate	15,5	0,3	16,0	0,50	mg/l	103%
Orthophosphate	0,0455	0,0032	0,0320	0,0047	mg/l	70%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,73	0,35	mg/l	100%
Total P (as PO4)	0,1376	0,0016	0,102	0,17	mg/l	74%
KMnO4-Index	4,46	0,11	4,65	0,21	mg/l	104%





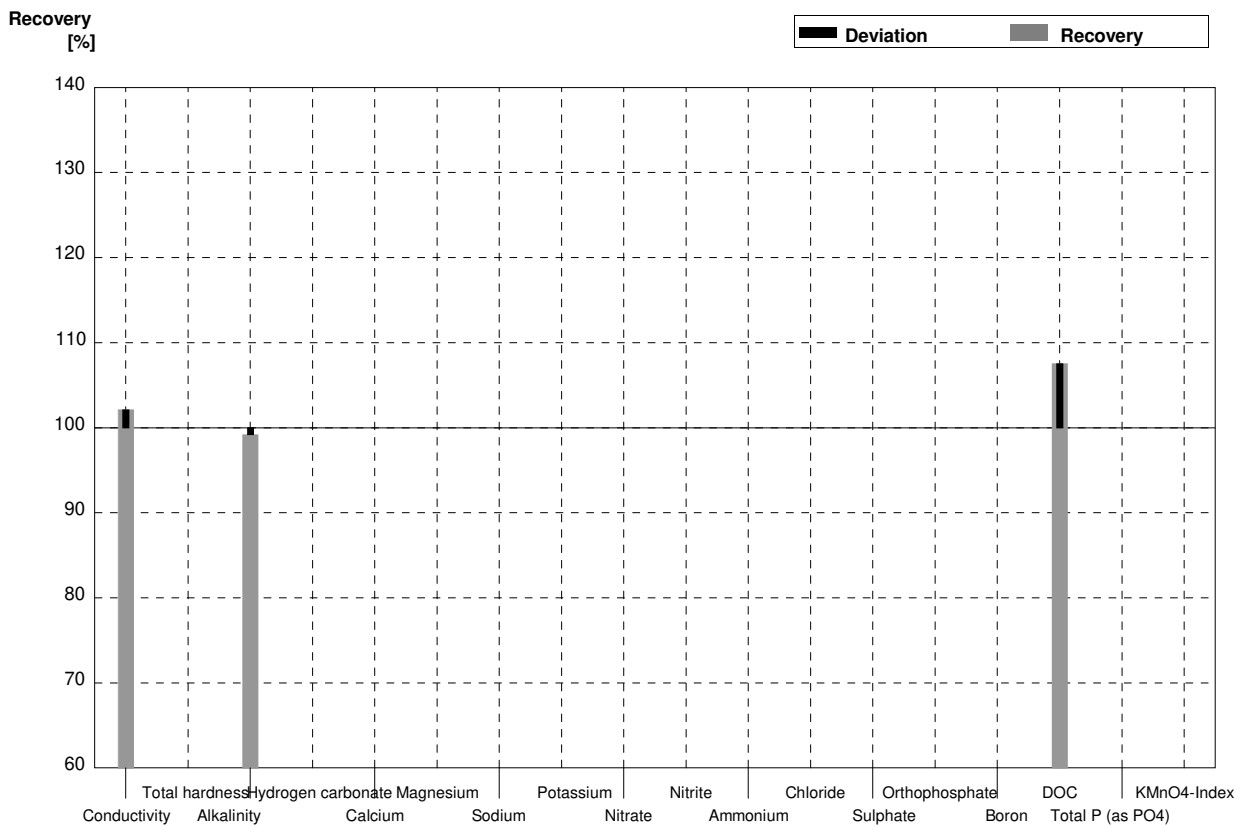
**Sample N169B**  
**Laboratory G**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	498	10	µS/cm	99%
Total hardness	2,36	0,03	2,43	0,20	mmol/l	103%
Alkalinity	3,28	0,06	3,43	0,14	mmol/l	105%
Hydrogen carbonate	197	3	209	9,4	mg/l	106%
Calcium	70,2	1,2	72	2,6	mg/l	103%
Magnesium	14,9	0,3	15,4	0,53	mg/l	103%
Sodium	9,2	0,6	9,1	0,39	mg/l	99%
Potassium	4,29	0,03	4,29	0,24	mg/l	100%
Nitrate	36,4	0,9	35,0	1,3	mg/l	96%
Nitrite	0,0798	0,0011	0,072	0,0042	mg/l	90%
Ammonium	0,085	0,004	0,075	0,011	mg/l	88%
Chloride	10,0	0,3	9,7	0,45	mg/l	97%
Sulphate	51,4	1,0	52	2,0	mg/l	101%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	5,8	0,54	mg/l	91%
Total P (as PO4)	<0,009		<0,01		mg/l	•
KMnO4-Index	3,58	0,12	3,58	0,16	mg/l	100%



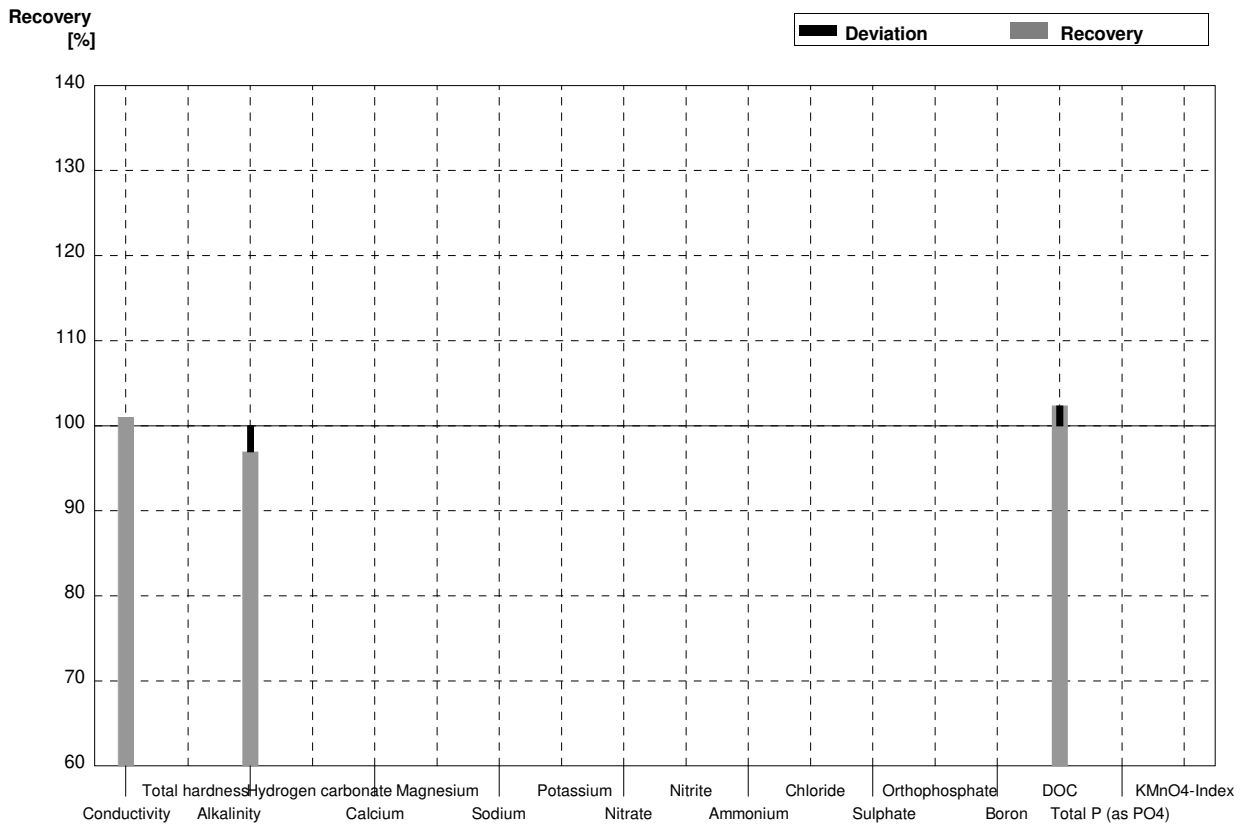
**Sample N169A**  
**Laboratory H**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	425		µS/cm	102%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,36		mmol/l	99%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	4,00		mg/l	108%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



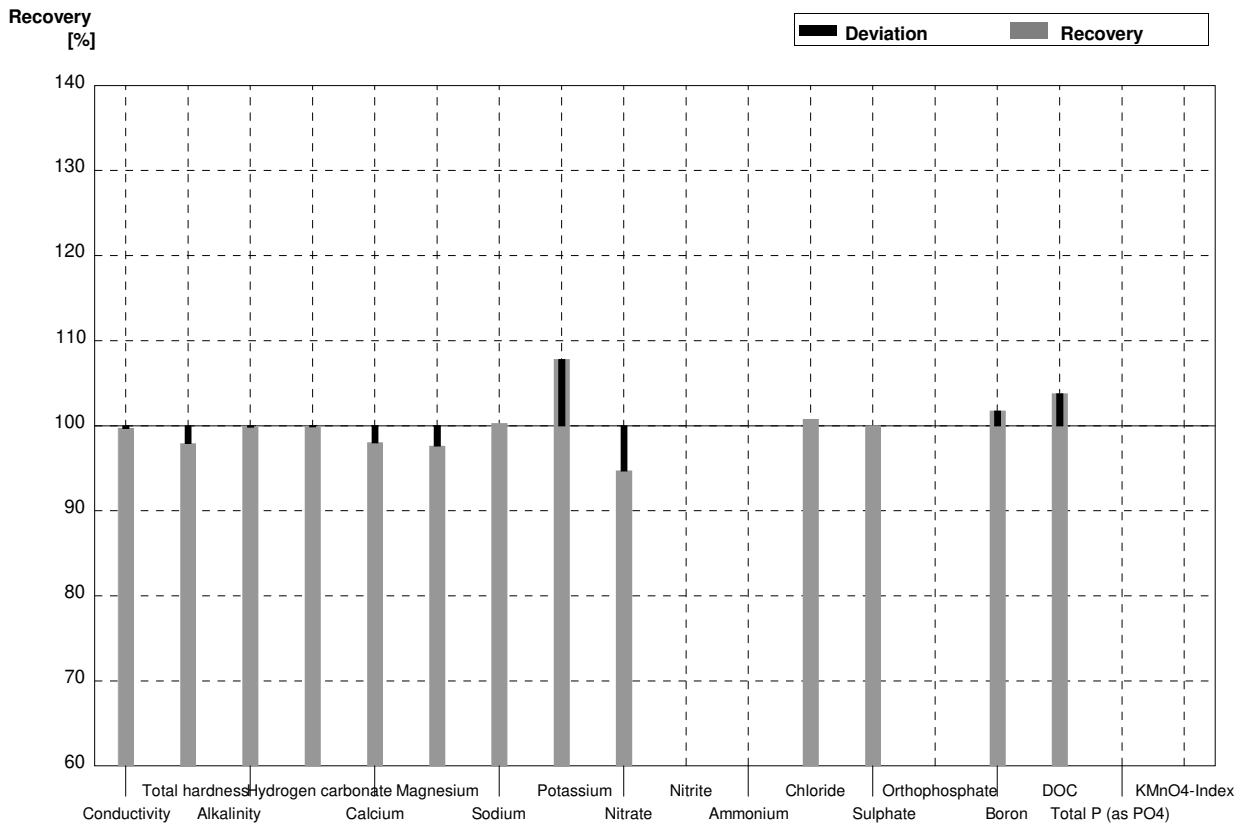
**Sample N169B**  
**Laboratory H**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	510		µS/cm	101%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,18		mmol/l	97%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,5		mg/l	102%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



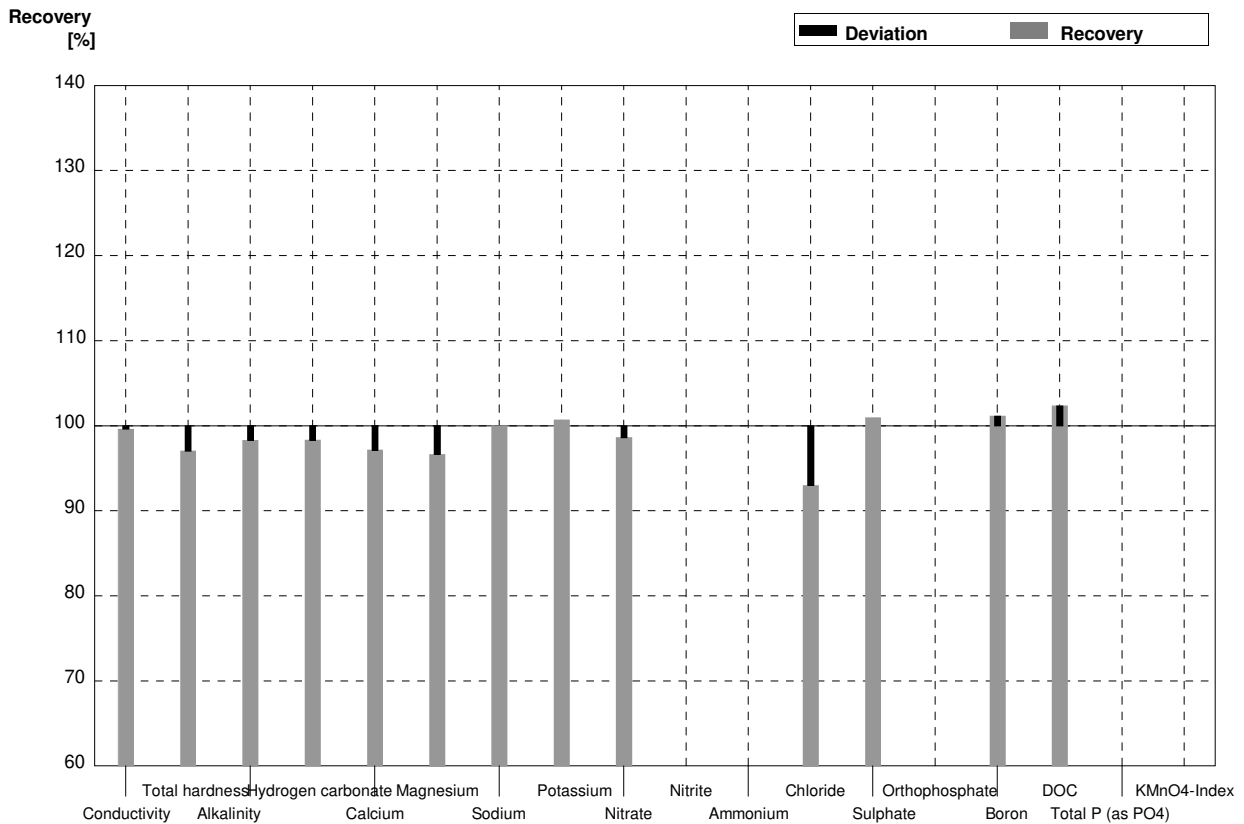
**Sample N169A**  
**Laboratory I**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	11	µS/cm	100%
Total hardness	1,103	0,019	1,08		mmol/l	98%
Alkalinity	1,371	0,013	1,369	0,092	mmol/l	100%
Hydrogen carbonate	80,6	0,8	80,5		mg/l	100%
Calcium	30,3	0,7	29,7	2,0	mg/l	98%
Magnesium	8,40	0,13	8,2	0,7	mg/l	98%
Sodium	35,4	0,2	35,5	3,4	mg/l	100%
Potassium	2,05	0,02	2,21	0,2	mg/l	108%
Nitrate	17,0	0,5	16,1	1,7	mg/l	95%
Nitrite	0,0573	0,0002	n,a		mg/l	
Ammonium	<0,01		n,a		mg/l	
Chloride	65,0	1,2	65,5	9,2	mg/l	101%
Sulphate	15,5	0,3	15,5	1,5	mg/l	100%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011	0,0409	0,005	mg/l	102%
DOC	3,72	0,05	3,86	0,71	mg/l	104%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



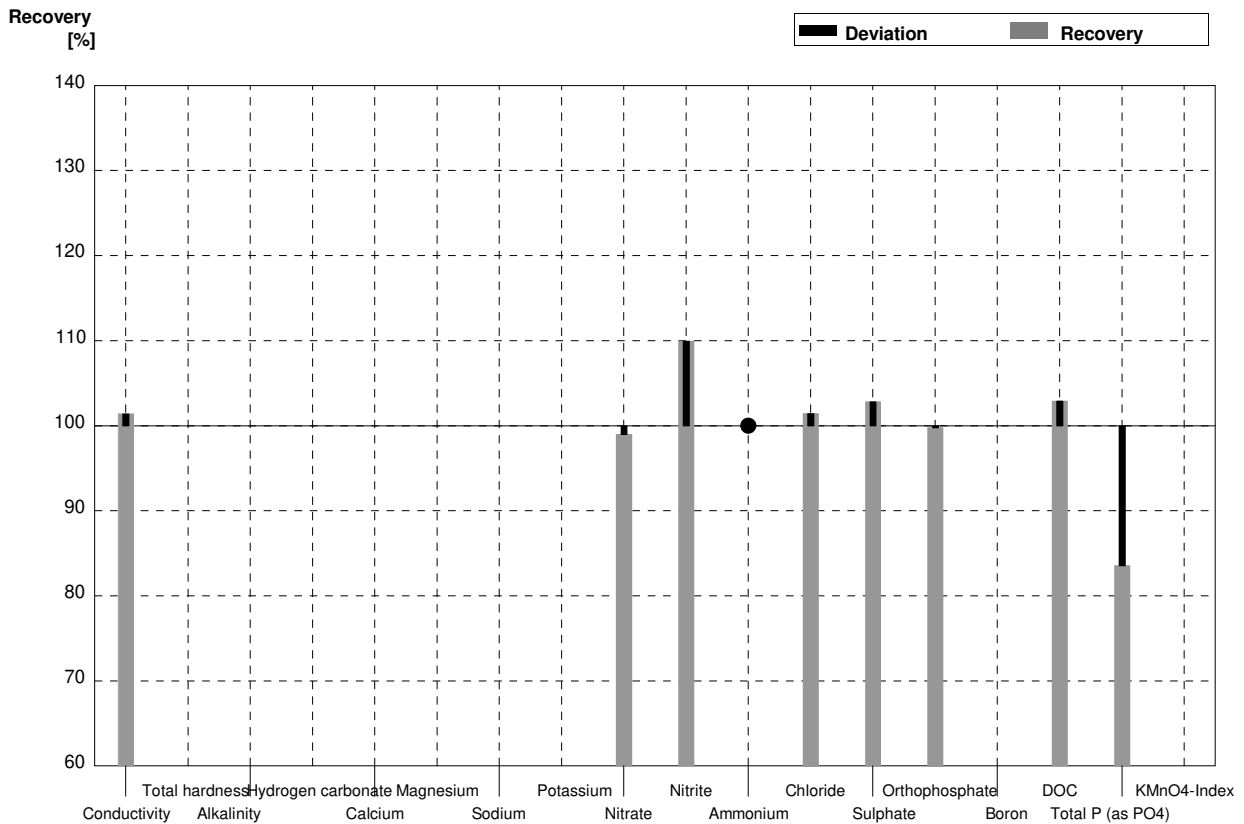
**Sample N169B**  
**Laboratory I**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	503	14	µS/cm	100%
Total hardness	2,36	0,03	2,29		mmol/l	97%
Alkalinity	3,28	0,06	3,224	0,216	mmol/l	98%
Hydrogen carbonate	197	3	193,7		mg/l	98%
Calcium	70,2	1,2	68,2	4,7	mg/l	97%
Magnesium	14,9	0,3	14,4	1,3	mg/l	97%
Sodium	9,2	0,6	9,2	0,9	mg/l	100%
Potassium	4,29	0,03	4,32	0,4	mg/l	101%
Nitrate	36,4	0,9	35,9	3,7	mg/l	99%
Nitrite	0,0798	0,0011	n,a		mg/l	
Ammonium	0,085	0,004	n,a		mg/l	
Chloride	10,0	0,3	9,3	1,3	mg/l	93%
Sulphate	51,4	1,0	51,9	4,9	mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005	0,0702	0,008	mg/l	101%
DOC	6,35	0,05	6,50	1,20	mg/l	102%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



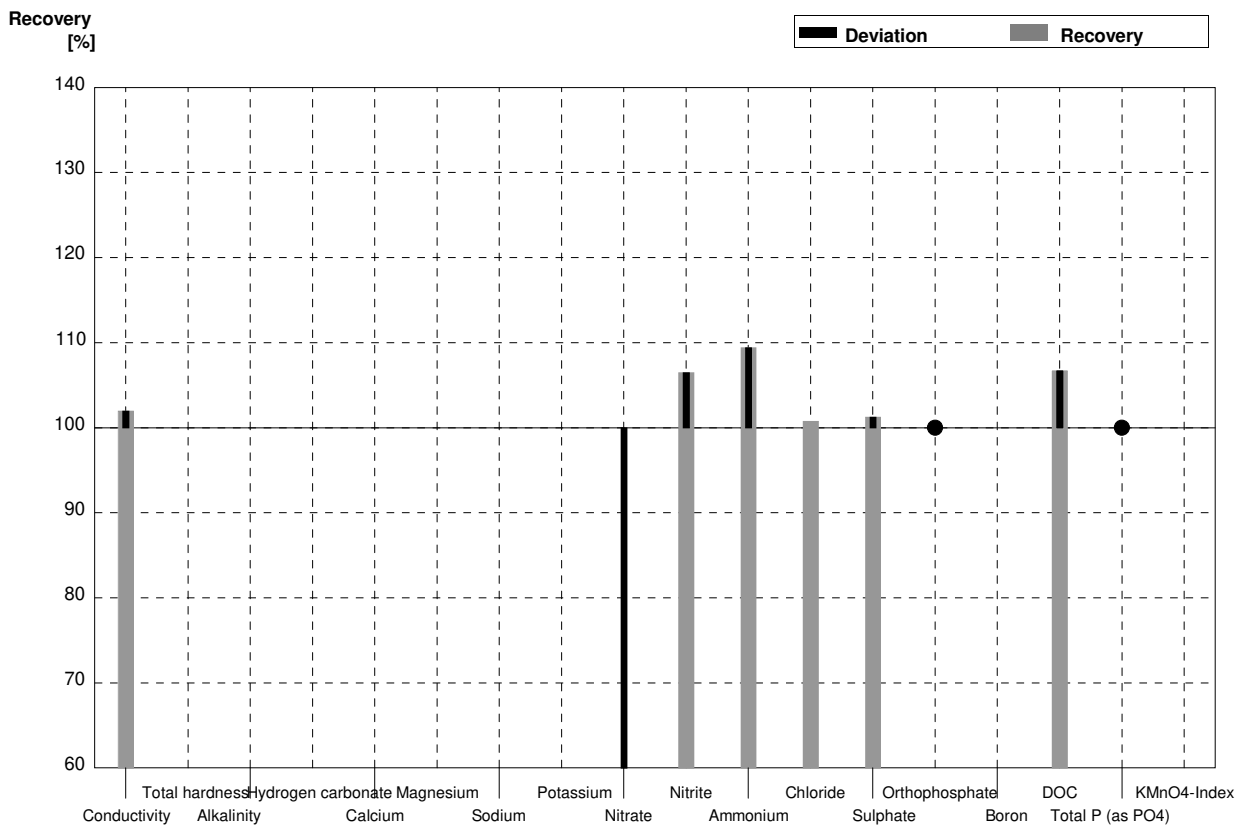
**Sample N169A**  
**Laboratory J**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	422	21	µS/cm	101%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	16,829	0,746	mg/l	99%
Nitrite	0,0573	0,0002	0,063	0,018	mg/l	110%
Ammonium	<0,01		<0,012		mg/l	•
Chloride	65,0	1,2	65,951	8,626	mg/l	101%
Sulphate	15,5	0,3	15,943	0,971	mg/l	103%
Orthophosphate	0,0455	0,0032	0,0454	0,008	mg/l	100%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,829	0,689	mg/l	103%
Total P (as PO4)	0,1376	0,0016	0,115	0,014	mg/l	84%
KMnO4-Index	4,46	0,11			mg/l	



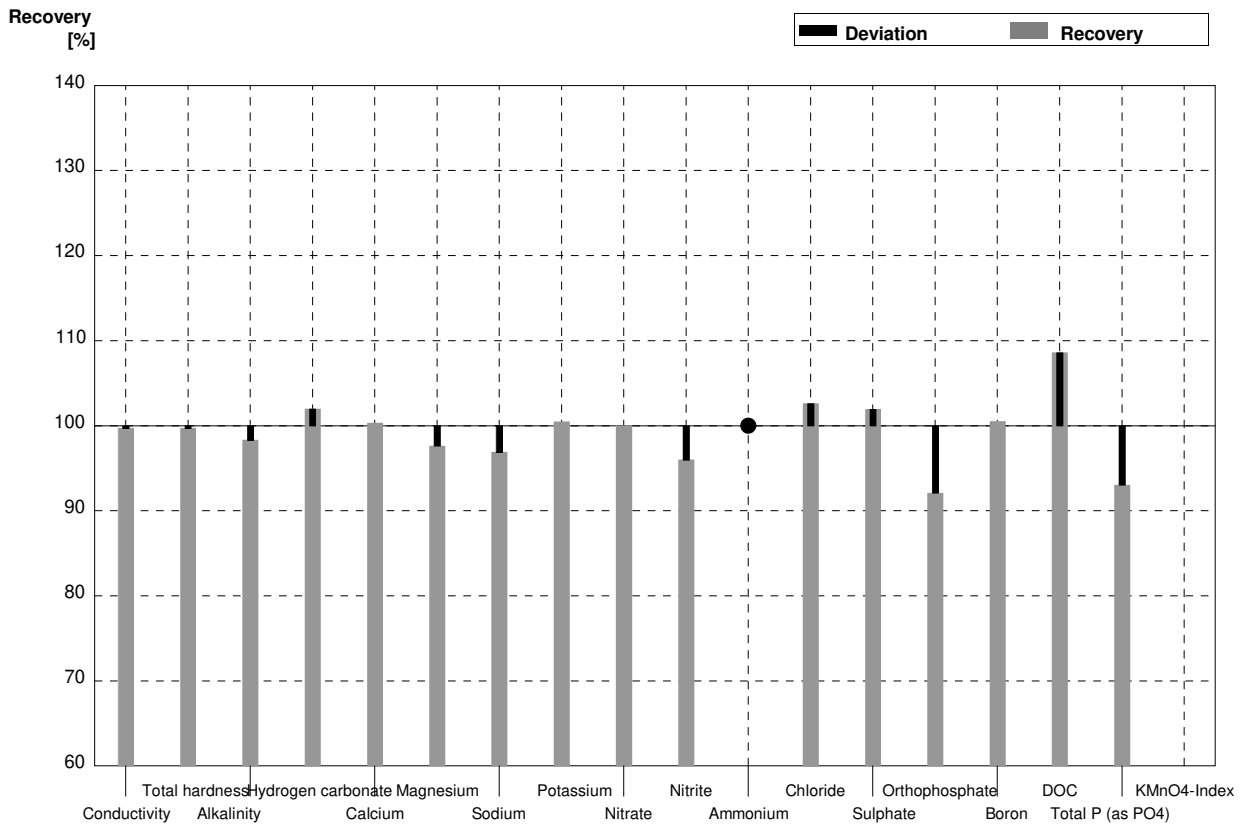
**Sample N169B**  
**Laboratory J**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	515	26	µS/cm	102%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	18,706	0,829	mg/l	51%
Nitrite	0,0798	0,0011	0,085	0,024	mg/l	107%
Ammonium	0,085	0,004	0,093	0,021	mg/l	109%
Chloride	10,0	0,3	10,077	1,318	mg/l	101%
Sulphate	51,4	1,0	52,058	3,170	mg/l	101%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,777	1,220	mg/l	107%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory K**

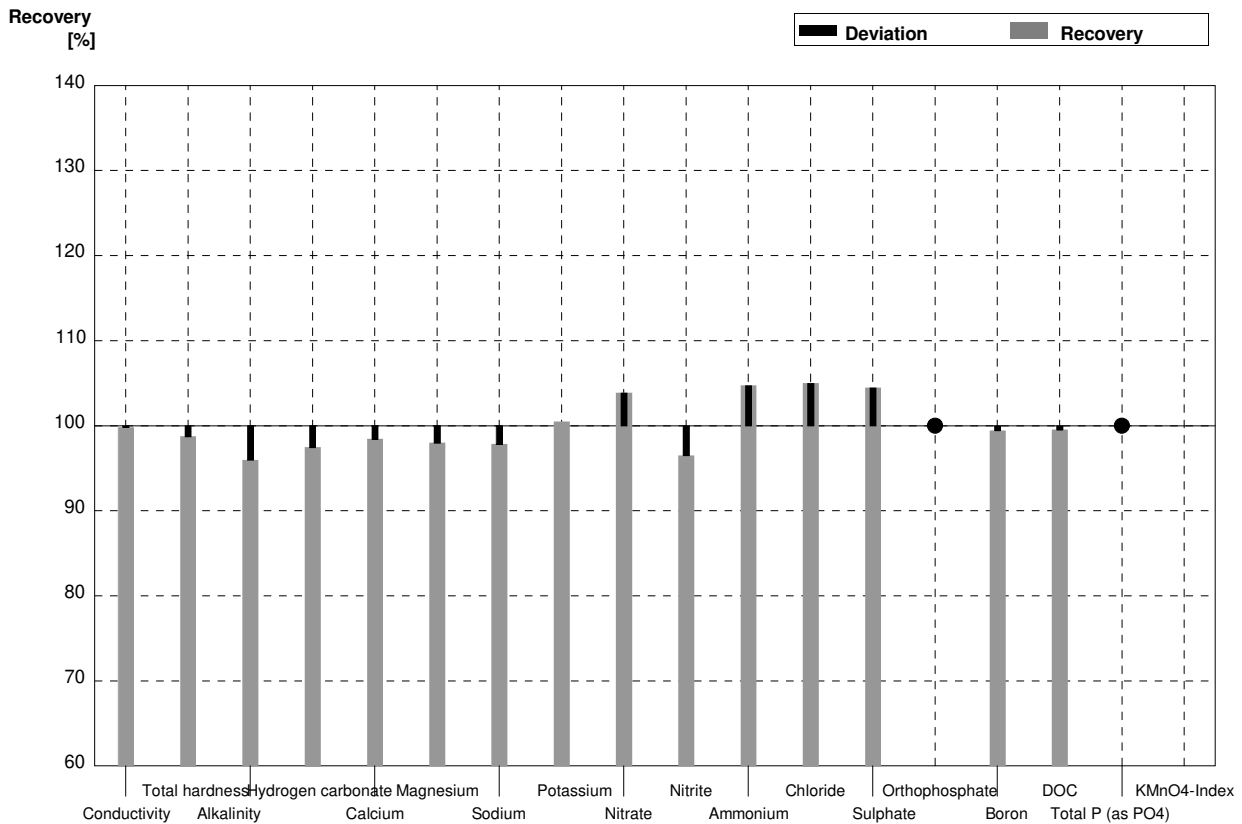
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	17	µS/cm	100%
Total hardness	1,103	0,019	1,10	0,6	mmol/l	100%
Alkalinity	1,371	0,013	1,348	0,097	mmol/l	98%
Hydrogen carbonate	80,6	0,8	82,2	5,9	mg/l	102%
Calcium	30,3	0,7	30,4	1,5	mg/l	100%
Magnesium	8,40	0,13	8,2	0,6	mg/l	98%
Sodium	35,4	0,2	34,3	1,7	mg/l	97%
Potassium	2,05	0,02	2,06	0,12	mg/l	100%
Nitrate	17,0	0,5	17,0	1,7	mg/l	100%
Nitrite	0,0573	0,0002	0,055	0,006	mg/l	96%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	65,0	1,2	66,7	5,1	mg/l	103%
Sulphate	15,5	0,3	15,8	1,4	mg/l	102%
Orthophosphate	0,0455	0,0032	0,0419	0,007	mg/l	92%
Boron	0,0402	0,0011	0,0404	0,0045	mg/l	100%
DOC	3,72	0,05	4,04	0,80	mg/l	109%
Total P (as PO4)	0,1376	0,0016	0,128	0,013	mg/l	93%
KMnO4-Index	4,46	0,11			mg/l	





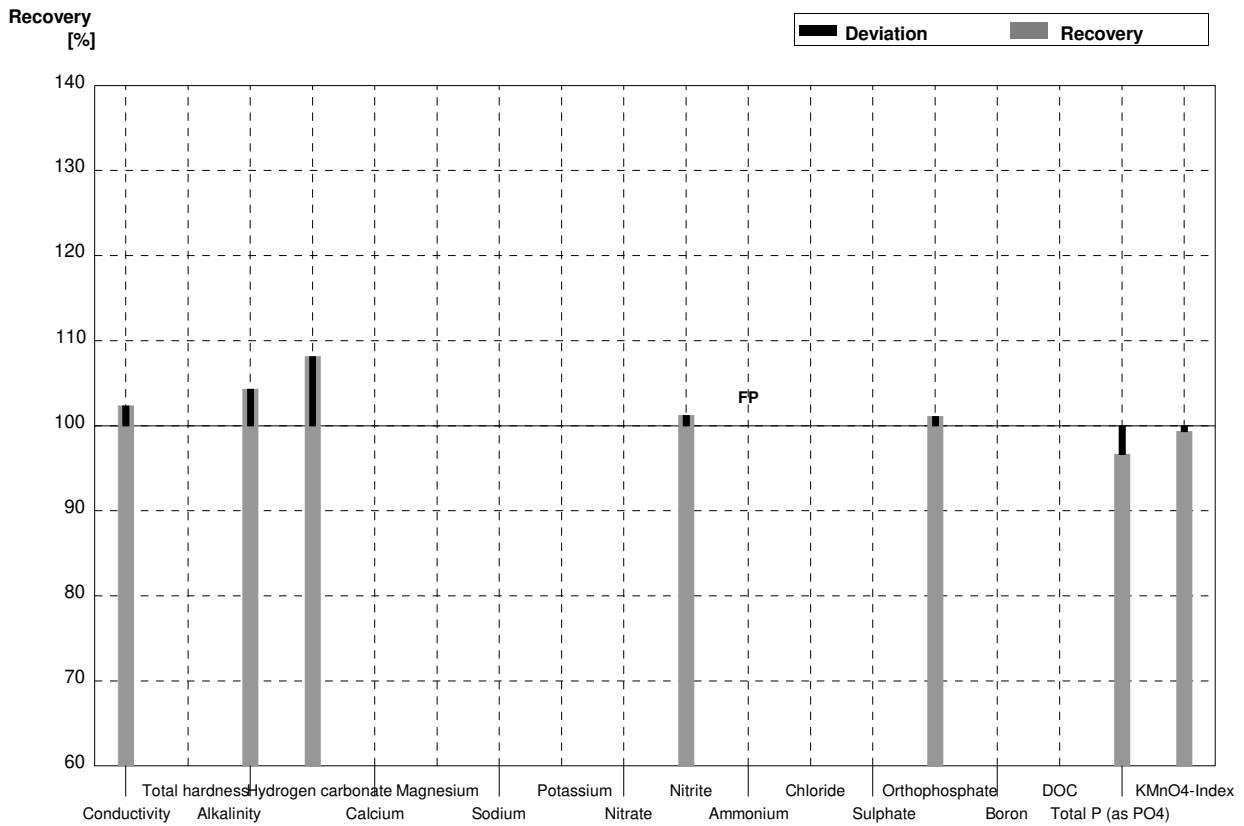
**Sample N169B**  
**Laboratory K**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	20	µS/cm	100%
Total hardness	2,36	0,03	2,33	0,12	mmol/l	99%
Alkalinity	3,28	0,06	3,148	0,187	mmol/l	96%
Hydrogen carbonate	197	3	192,0	11,4	mg/l	97%
Calcium	70,2	1,2	69,1	3,3	mg/l	98%
Magnesium	14,9	0,3	14,6	0,9	mg/l	98%
Sodium	9,2	0,6	9,0	0,5	mg/l	98%
Potassium	4,29	0,03	4,31	0,20	mg/l	100%
Nitrate	36,4	0,9	37,8	3,6	mg/l	104%
Nitrite	0,0798	0,0011	0,077	0,008	mg/l	96%
Ammonium	0,085	0,004	0,089	0,015	mg/l	105%
Chloride	10,0	0,3	10,5	1,0	mg/l	105%
Sulphate	51,4	1,0	53,7	4,3	mg/l	104%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,0694	0,0005	0,0690	0,0071	mg/l	99%
DOC	6,35	0,05	6,32	1,16	mg/l	100%
Total P (as PO4)	<0,009		<0,010		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



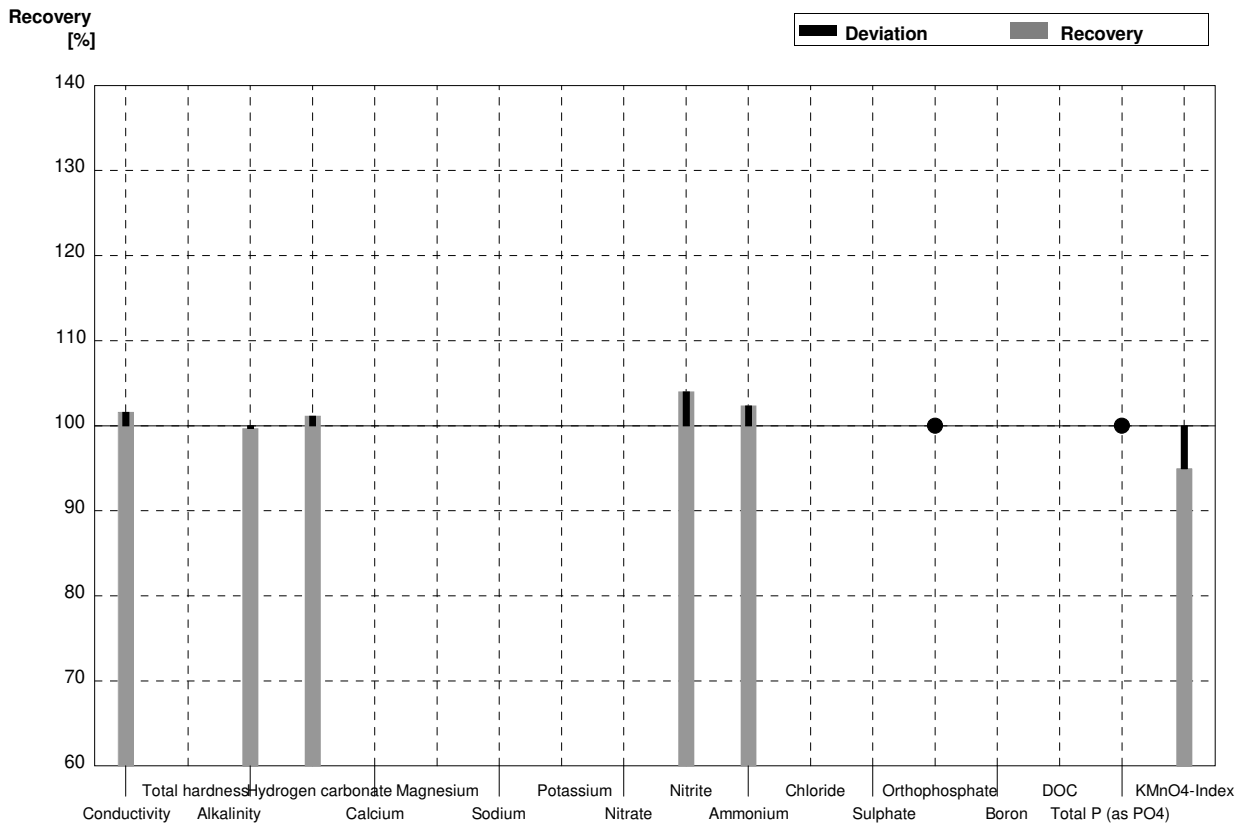
**Sample N169A**  
**Laboratory L**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	426	21,0	µS/cm	102%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,43	0,096	mmol/l	104%
Hydrogen carbonate	80,6	0,8	87,17	5,91	mg/l	108%
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002	0,058	0,006	mg/l	101%
Ammonium	<0,01		0,012	0,002	mg/l	FP
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032	0,046	0,013	mg/l	101%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,133	0,017	mg/l	97%
KMnO4-Index	4,46	0,11	4,43	1,134	mg/l	99%



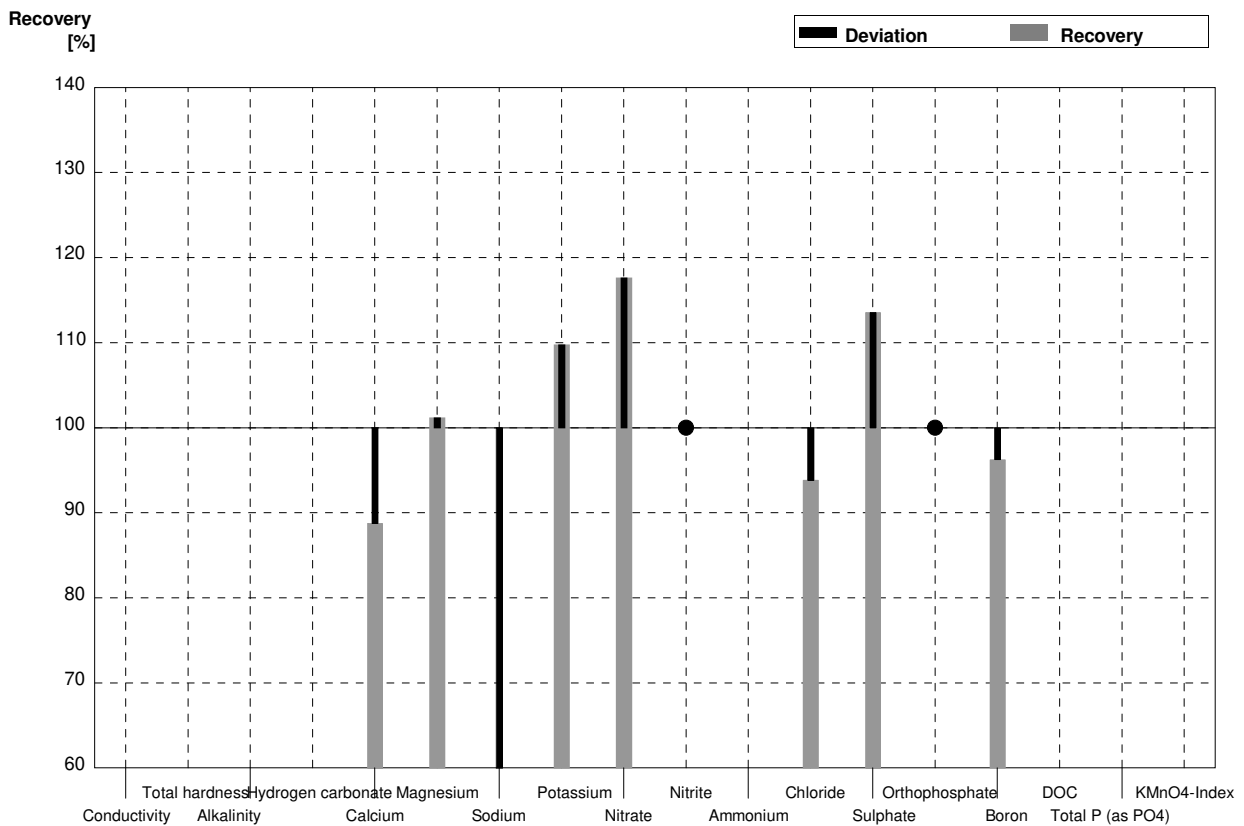
**Sample N169B**  
**Laboratory L**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	513	25,3	µS/cm	102%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,27	0,221	mmol/l	100%
Hydrogen carbonate	197	3	199,24	13,5	mg/l	101%
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011	0,083	0,009	mg/l	104%
Ammonium	0,085	0,004	0,087	0,013	mg/l	102%
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009		<0,04		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		<0,05		mg/l	•
KMnO4-Index	3,58	0,12	3,40	0,870	mg/l	95%



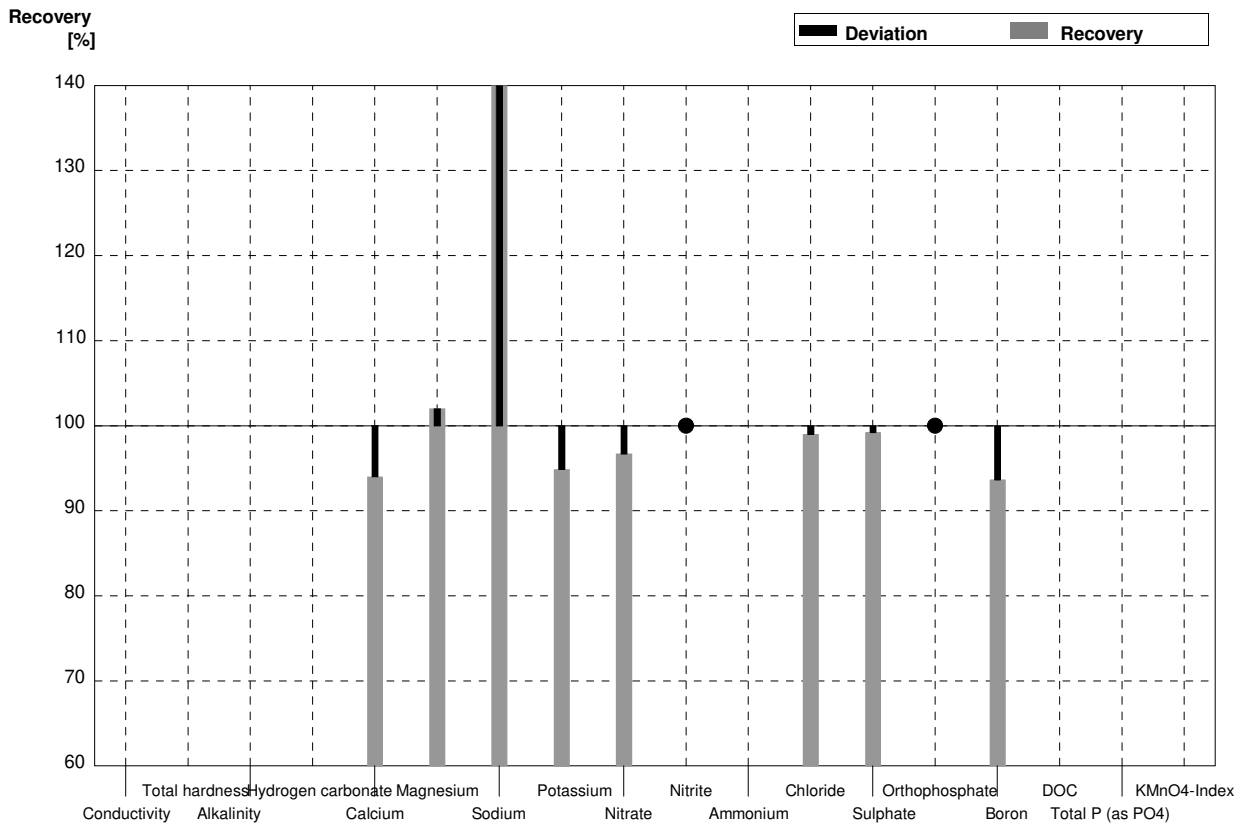
**Sample N169A**  
**Laboratory M**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	26,9	5,1	mg/l	89%
Magnesium	8,40	0,13	8,5	0,109	mg/l	101%
Sodium	35,4	0,2	9,1	1,48	mg/l	26%
Potassium	2,05	0,02	2,25	0,72	mg/l	110%
Nitrate	17,0	0,5	20,0	7,3	mg/l	118%
Nitrite	0,0573	0,0002	<0,086		mg/l	•
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	61	3,88	mg/l	94%
Sulphate	15,5	0,3	17,6	5,9	mg/l	114%
Orthophosphate	0,0455	0,0032	<0,461		mg/l	•
Boron	0,0402	0,0011	0,0387	0,00464	mg/l	96%
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



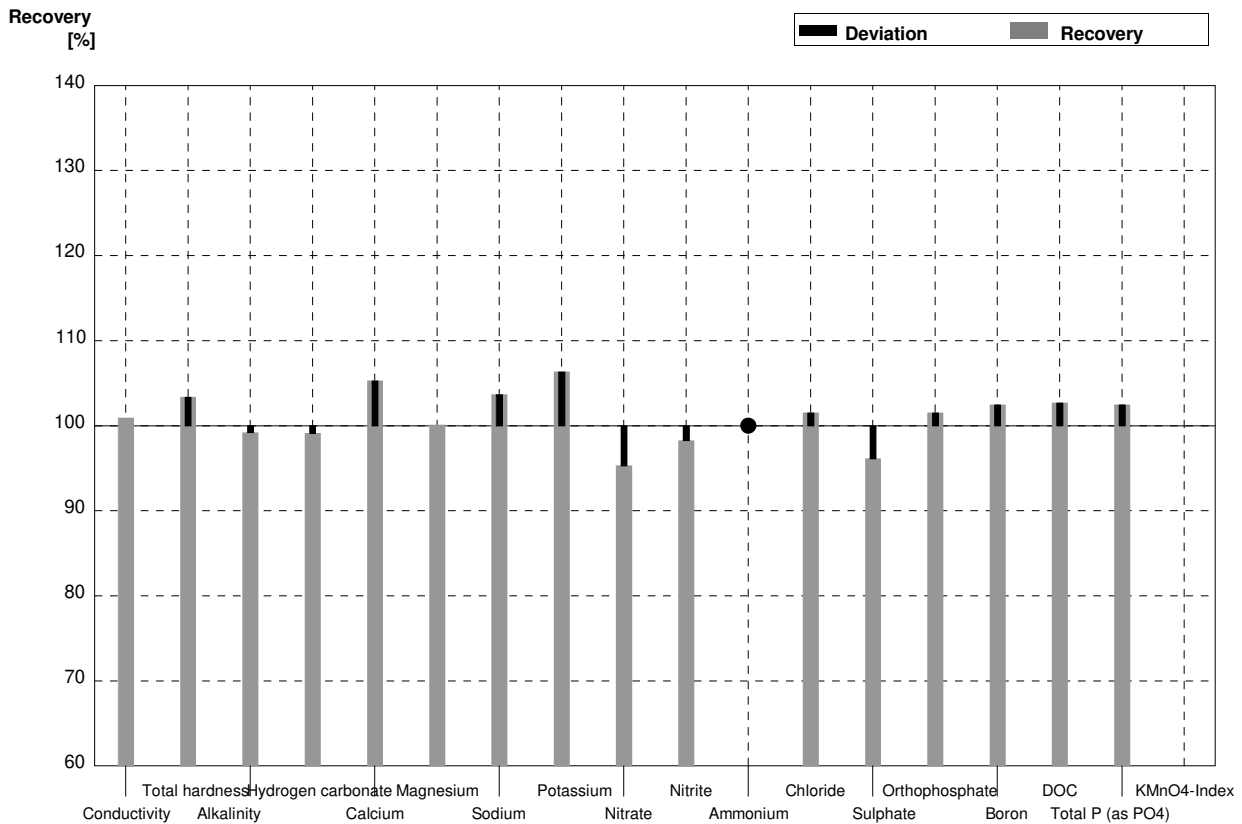
**Sample N169B**  
**Laboratory M**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	66	5,0	mg/l	94%
Magnesium	14,9	0,3	15,2	0,117	mg/l	102%
Sodium	9,2	0,6	27,3	1,48	mg/l	297%
Potassium	4,29	0,03	4,07	0,72	mg/l	95%
Nitrate	36,4	0,9	35,2	7,1	mg/l	97%
Nitrite	0,0798	0,0011	<0,086		mg/l	•
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3	9,9	0,147	mg/l	99%
Sulphate	51,4	1,0	51	5,6	mg/l	99%
Orthophosphate	<0,009		<0,461		mg/l	•
Boron	0,0694	0,0005	0,065	0,00464	mg/l	94%
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



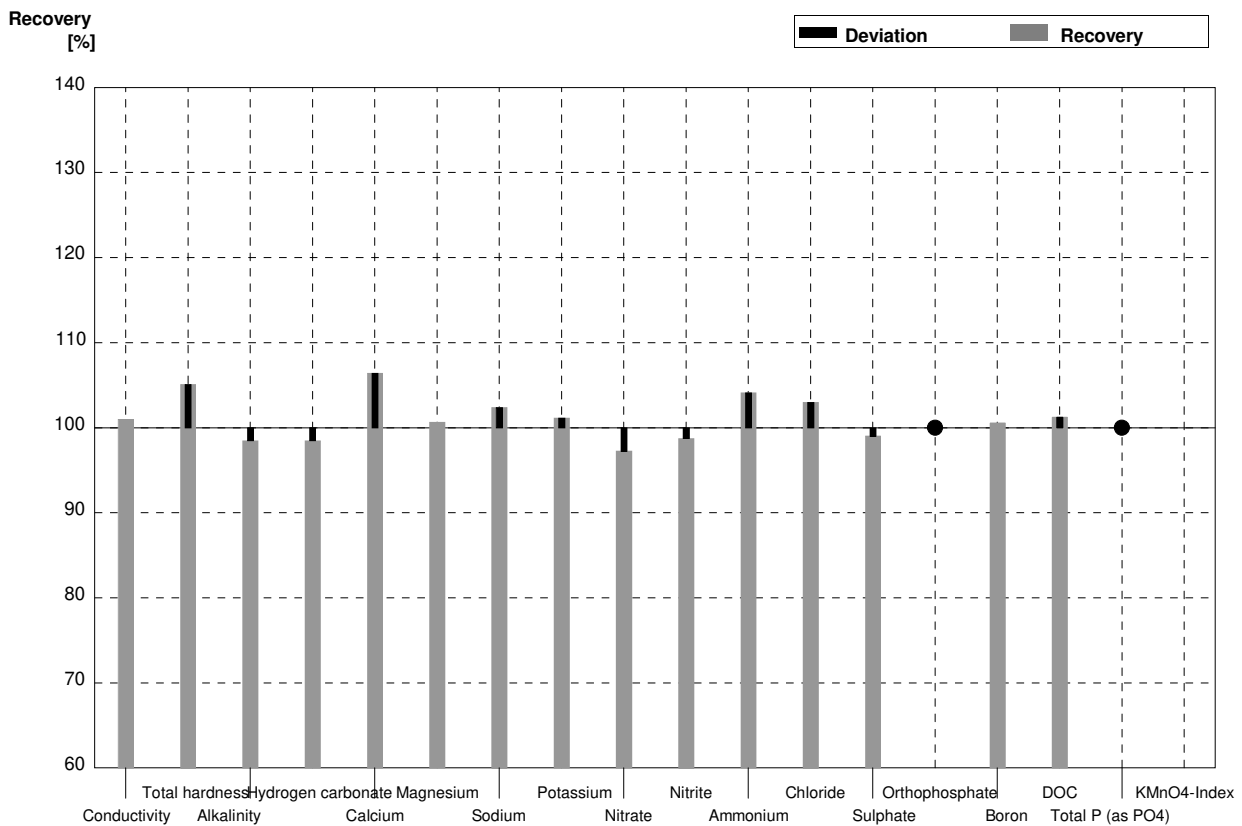
**Sample N169A**  
**Laboratory N**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	420	0,319	µS/cm	101%
Total hardness	1,103	0,019	1,14	0,0148	mmol/l	103%
Alkalinity	1,371	0,013	1,36	0,0762	mmol/l	99%
Hydrogen carbonate	80,6	0,8	79,9	1,60	mg/l	99%
Calcium	30,3	0,7	31,9	0,507	mg/l	105%
Magnesium	8,40	0,13	8,41	0,186	mg/l	100%
Sodium	35,4	0,2	36,7	0,319	mg/l	104%
Potassium	2,05	0,02	2,18	0,0135	mg/l	106%
Nitrate	17,0	0,5	16,2	0,629	mg/l	95%
Nitrite	0,0573	0,0002	0,0563	0,00071	mg/l	98%
Ammonium	<0,01		<0,0100		mg/l	•
Chloride	65,0	1,2	66,0	1,69	mg/l	102%
Sulphate	15,5	0,3	14,9	0,762	mg/l	96%
Orthophosphate	0,0455	0,0032	0,0462	0,00144	mg/l	102%
Boron	0,0402	0,0011	0,0412	0,00202	mg/l	102%
DOC	3,72	0,05	3,82	0,0244	mg/l	103%
Total P (as PO4)	0,1376	0,0016	0,141	0,00292	mg/l	102%
KMnO4-Index	4,46	0,11			mg/l	



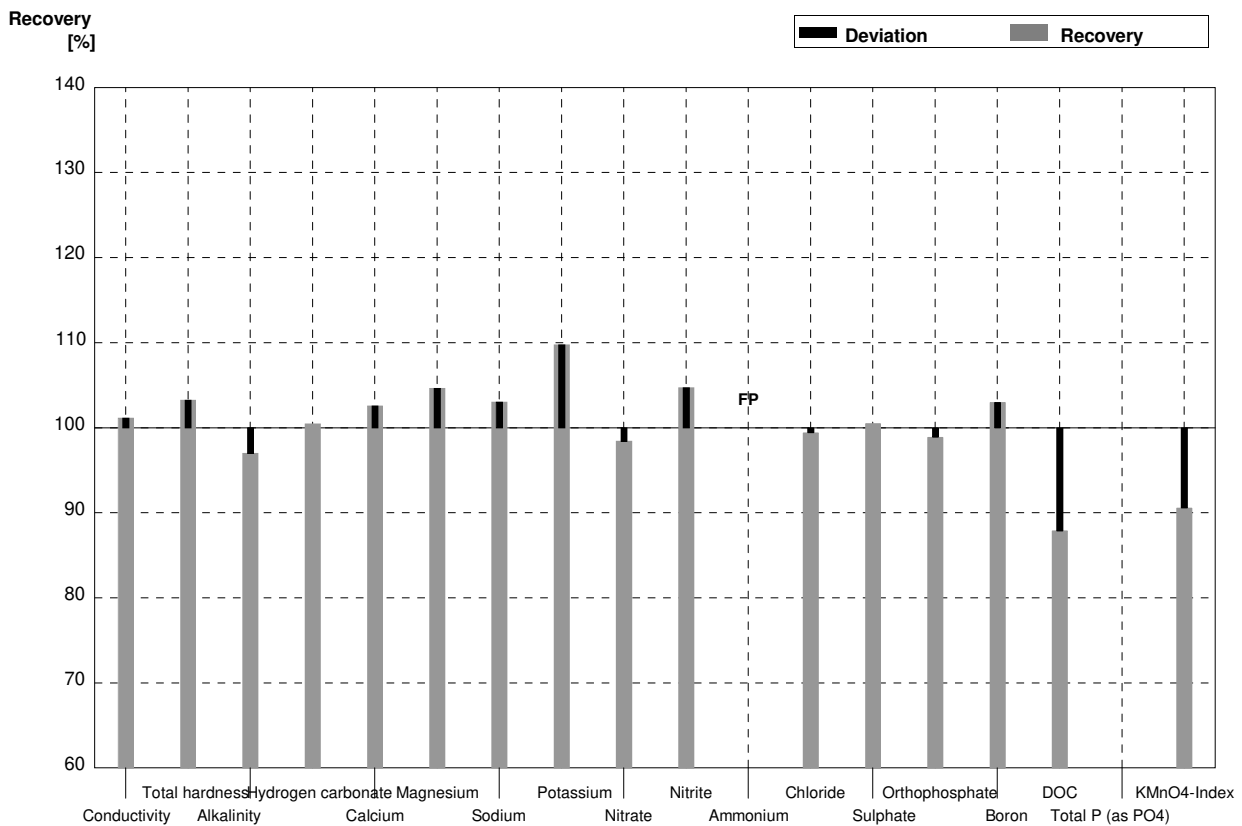
**Sample N169B**  
**Laboratory N**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	510	0,0436	µS/cm	101%
Total hardness	2,36	0,03	2,48	0,0190	mmol/l	105%
Alkalinity	3,28	0,06	3,23	0,114	mmol/l	98%
Hydrogen carbonate	197	3	194	3,88	mg/l	98%
Calcium	70,2	1,2	74,7	0,556	mg/l	106%
Magnesium	14,9	0,3	15,0	0,315	mg/l	101%
Sodium	9,2	0,6	9,42	0,324	mg/l	102%
Potassium	4,29	0,03	4,34	0,291	mg/l	101%
Nitrate	36,4	0,9	35,4	0,545	mg/l	97%
Nitrite	0,0798	0,0011	0,0788	0,00070	mg/l	99%
Ammonium	0,085	0,004	0,0885	0,00220	mg/l	104%
Chloride	10,0	0,3	10,3	1,30	mg/l	103%
Sulphate	51,4	1,0	50,9	1,27	mg/l	99%
Orthophosphate	<0,009		<0,0150		mg/l	•
Boron	0,0694	0,0005	0,0698	0,00195	mg/l	101%
DOC	6,35	0,05	6,43	0,0268	mg/l	101%
Total P (as PO4)	<0,009		<0,0150		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory O**

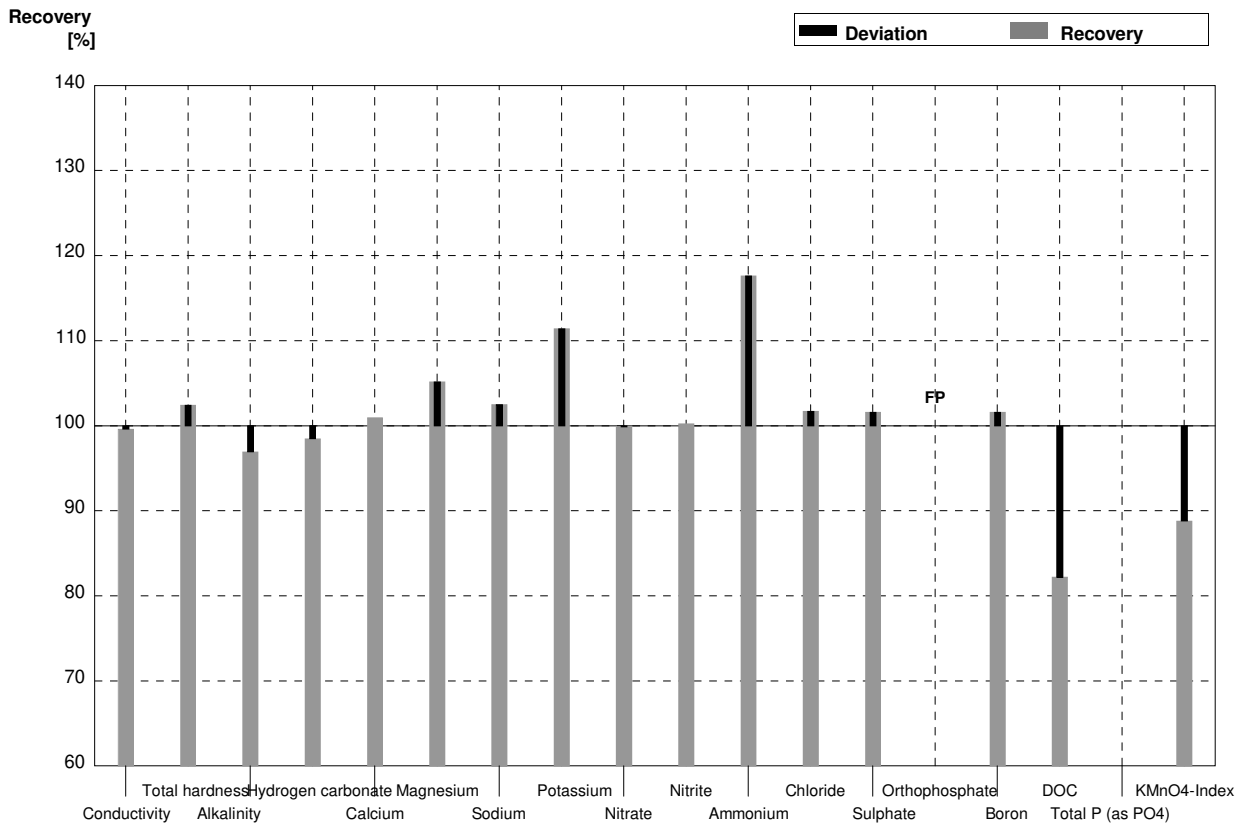
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	421		µS/cm	101%
Total hardness	1,103	0,019	1,139		mmol/l	103%
Alkalinity	1,371	0,013	1,33		mmol/l	97%
Hydrogen carbonate	80,6	0,8	81		mg/l	100%
Calcium	30,3	0,7	31,08		mg/l	103%
Magnesium	8,40	0,13	8,79		mg/l	105%
Sodium	35,4	0,2	36,48		mg/l	103%
Potassium	2,05	0,02	2,25		mg/l	110%
Nitrate	17,0	0,5	16,735		mg/l	98%
Nitrite	0,0573	0,0002	0,060		mg/l	105%
Ammonium	<0,01		0,0100		mg/l	FP
Chloride	65,0	1,2	64,627		mg/l	99%
Sulphate	15,5	0,3	15,577		mg/l	100%
Orthophosphate	0,0455	0,0032	0,0450		mg/l	99%
Boron	0,0402	0,0011	0,0414		mg/l	103%
DOC	3,72	0,05	3,27		mg/l	88%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11	4,04		mg/l	91%





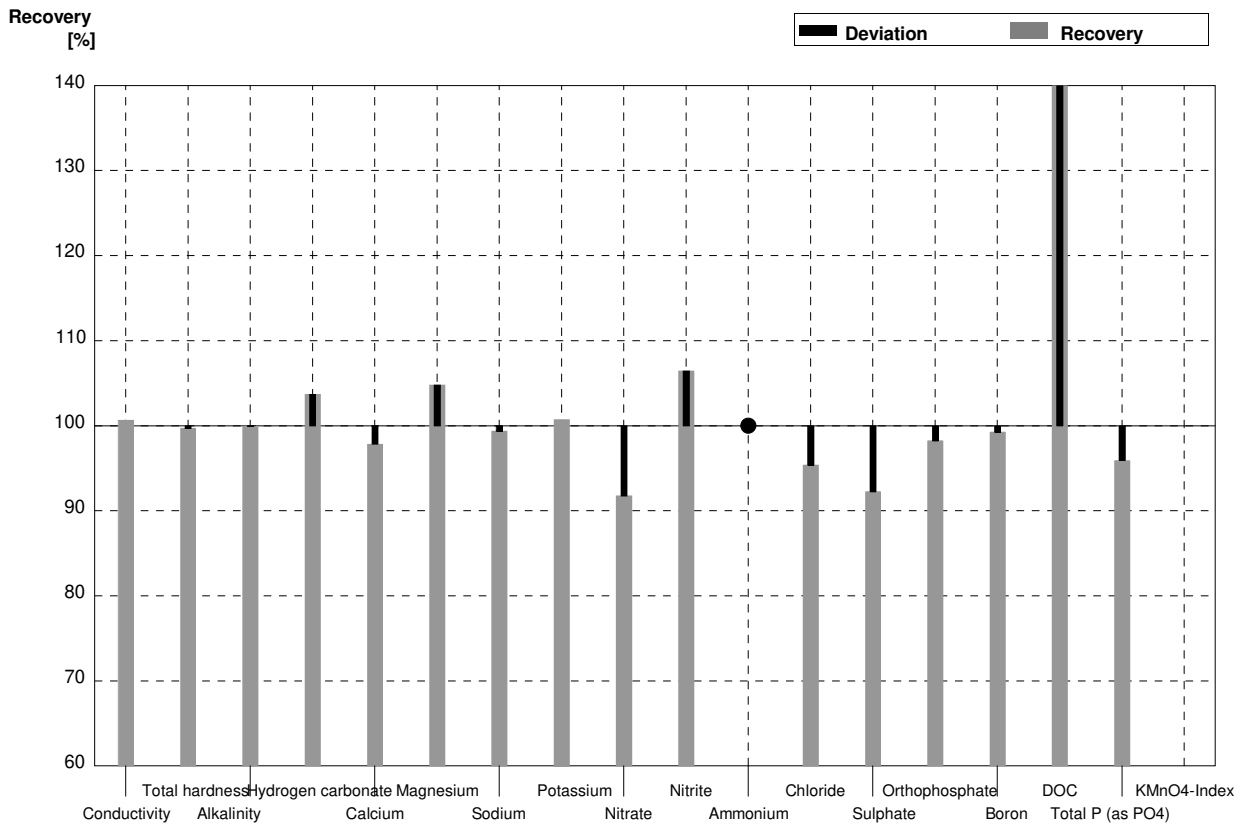
**Sample N169B**  
**Laboratory O**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	503		µS/cm	100%
Total hardness	2,36	0,03	2,417		mmol/l	102%
Alkalinity	3,28	0,06	3,18		mmol/l	97%
Hydrogen carbonate	197	3	194		mg/l	98%
Calcium	70,2	1,2	70,87		mg/l	101%
Magnesium	14,9	0,3	15,67		mg/l	105%
Sodium	9,2	0,6	9,43		mg/l	103%
Potassium	4,29	0,03	4,78		mg/l	111%
Nitrate	36,4	0,9	36,368		mg/l	100%
Nitrite	0,0798	0,0011	0,080		mg/l	100%
Ammonium	0,085	0,004	0,100		mg/l	118%
Chloride	10,0	0,3	10,173		mg/l	102%
Sulphate	51,4	1,0	52,212		mg/l	102%
Orthophosphate	<0,009		0,0210		mg/l	FP
Boron	0,0694	0,0005	0,0705		mg/l	102%
DOC	6,35	0,05	5,22		mg/l	82%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12	3,18		mg/l	89%



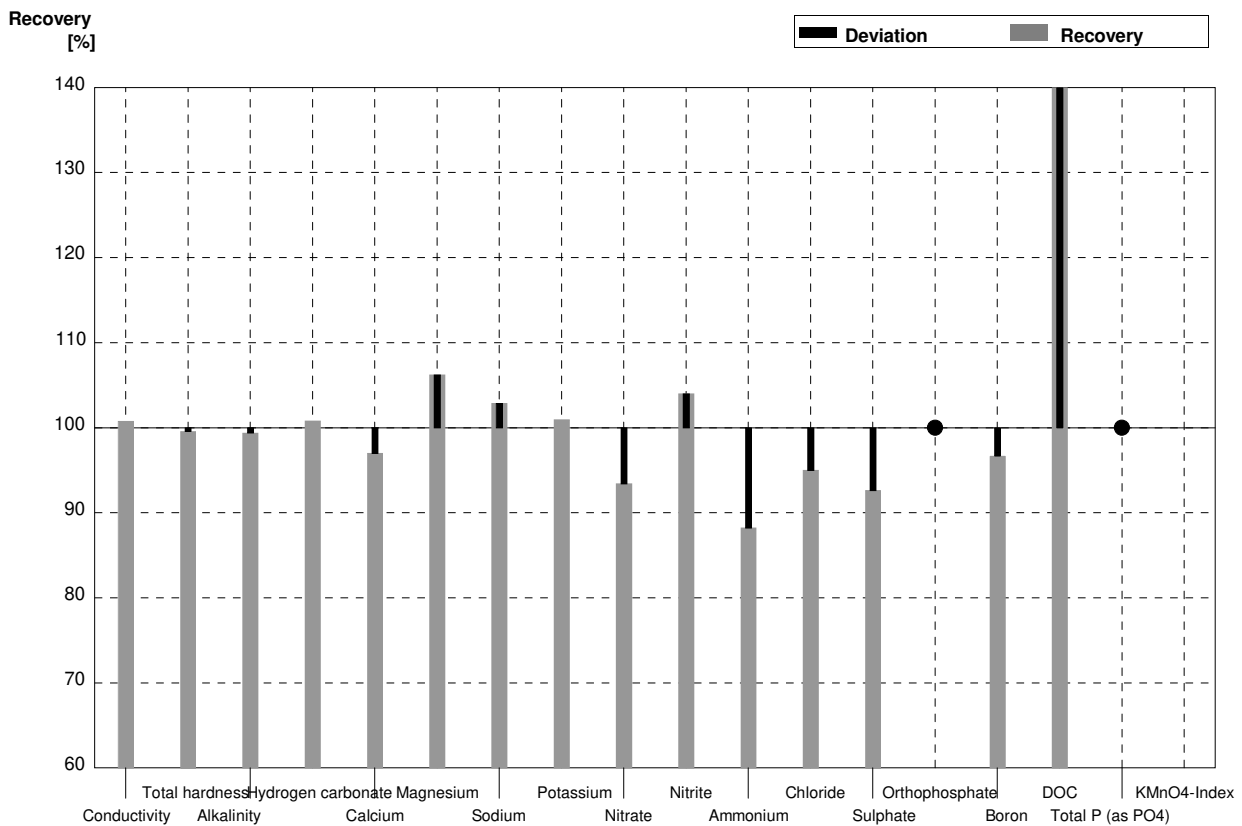
**Sample N169A**  
**Laboratory P**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	419		µS/cm	101%
Total hardness	1,103	0,019	1,10		mmol/l	100%
Alkalinity	1,371	0,013	1,37		mmol/l	100%
Hydrogen carbonate	80,6	0,8	83,6		mg/l	104%
Calcium	30,3	0,7	29,65	1,19	mg/l	98%
Magnesium	8,40	0,13	8,805	0,528	mg/l	105%
Sodium	35,4	0,2	35,18	2,81	mg/l	99%
Potassium	2,05	0,02	2,065	0,186	mg/l	101%
Nitrate	17,0	0,5	15,6	1,56	mg/l	92%
Nitrite	0,0573	0,0002	0,061		mg/l	106%
Ammonium	<0,01		<0,010	0,002	mg/l	•
Chloride	65,0	1,2	62,0	6,20	mg/l	95%
Sulphate	15,5	0,3	14,3	1,43	mg/l	92%
Orthophosphate	0,0455	0,0032	0,0447	0,0045	mg/l	98%
Boron	0,0402	0,0011	0,0399	0,0016	mg/l	99%
DOC	3,72	0,05	7,124	0,712	mg/l	192%
Total P (as PO4)	0,1376	0,0016	0,132	0,013	mg/l	96%
KMnO4-Index	4,46	0,11			mg/l	



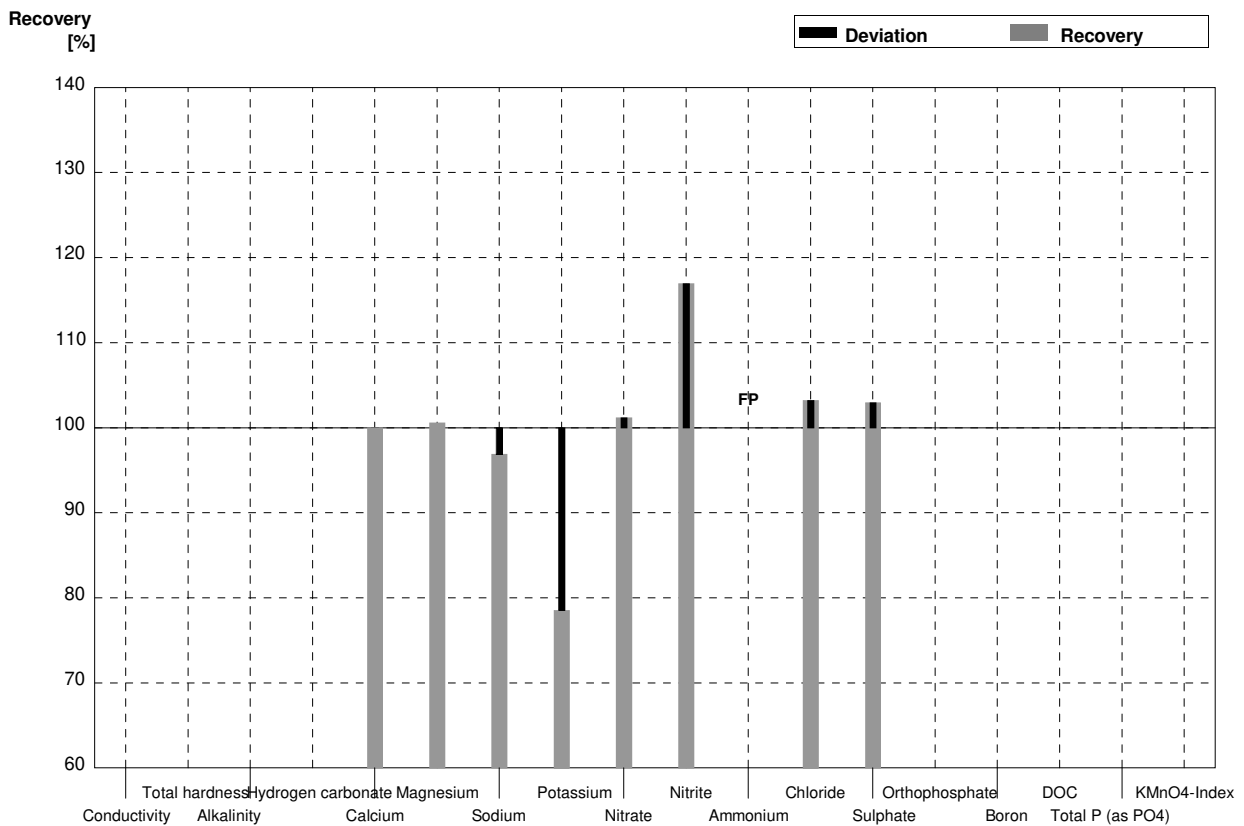
**Sample N169B**  
**Laboratory P**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	509		µS/cm	101%
Total hardness	2,36	0,03	2,35		mmol/l	100%
Alkalinity	3,28	0,06	3,26		mmol/l	99%
Hydrogen carbonate	197	3	198,6		mg/l	101%
Calcium	70,2	1,2	68,09	2,72	mg/l	97%
Magnesium	14,9	0,3	15,83	0,95	mg/l	106%
Sodium	9,2	0,6	9,465	0,757	mg/l	103%
Potassium	4,29	0,03	4,331	0,390	mg/l	101%
Nitrate	36,4	0,9	34,01	3,40	mg/l	93%
Nitrite	0,0798	0,0011	0,083		mg/l	104%
Ammonium	0,085	0,004	0,075	0,0075	mg/l	88%
Chloride	10,0	0,3	9,50	0,95	mg/l	95%
Sulphate	51,4	1,0	47,61	4,76	mg/l	93%
Orthophosphate	<0,009		<0,008	0,002	mg/l	•
Boron	0,0694	0,0005	0,0671	0,0027	mg/l	97%
DOC	6,35	0,05	18,23	1,82	mg/l	287%
Total P (as PO4)	<0,009		<0,022	0,005	mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



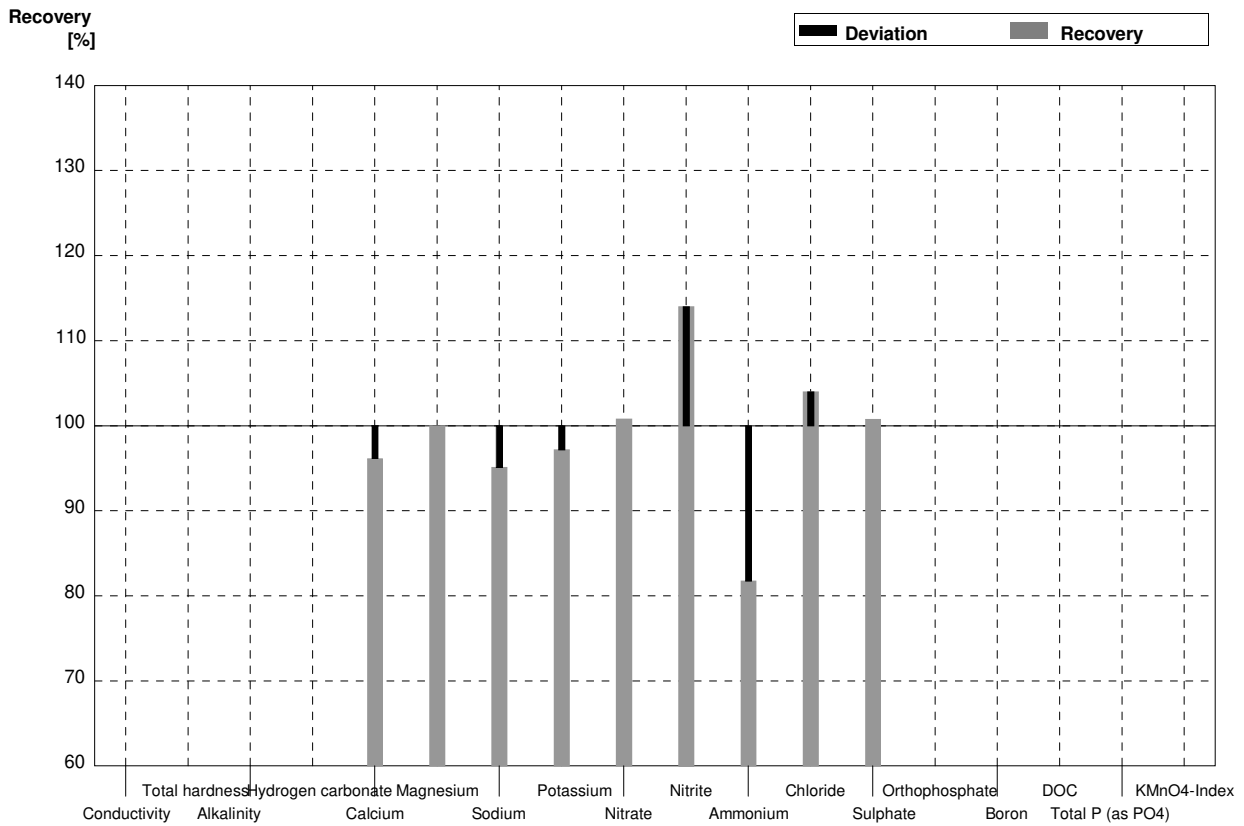
**Sample N169A**  
**Laboratory Q**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	30,3		mg/l	100%
Magnesium	8,40	0,13	8,45		mg/l	101%
Sodium	35,4	0,2	34,3		mg/l	97%
Potassium	2,05	0,02	1,61		mg/l	79%
Nitrate	17,0	0,5	17,2		mg/l	101%
Nitrite	0,0573	0,0002	0,067		mg/l	117%
Ammonium	<0,01		0,0450		mg/l	FP
Chloride	65,0	1,2	67,1		mg/l	103%
Sulphate	15,5	0,3	15,96		mg/l	103%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



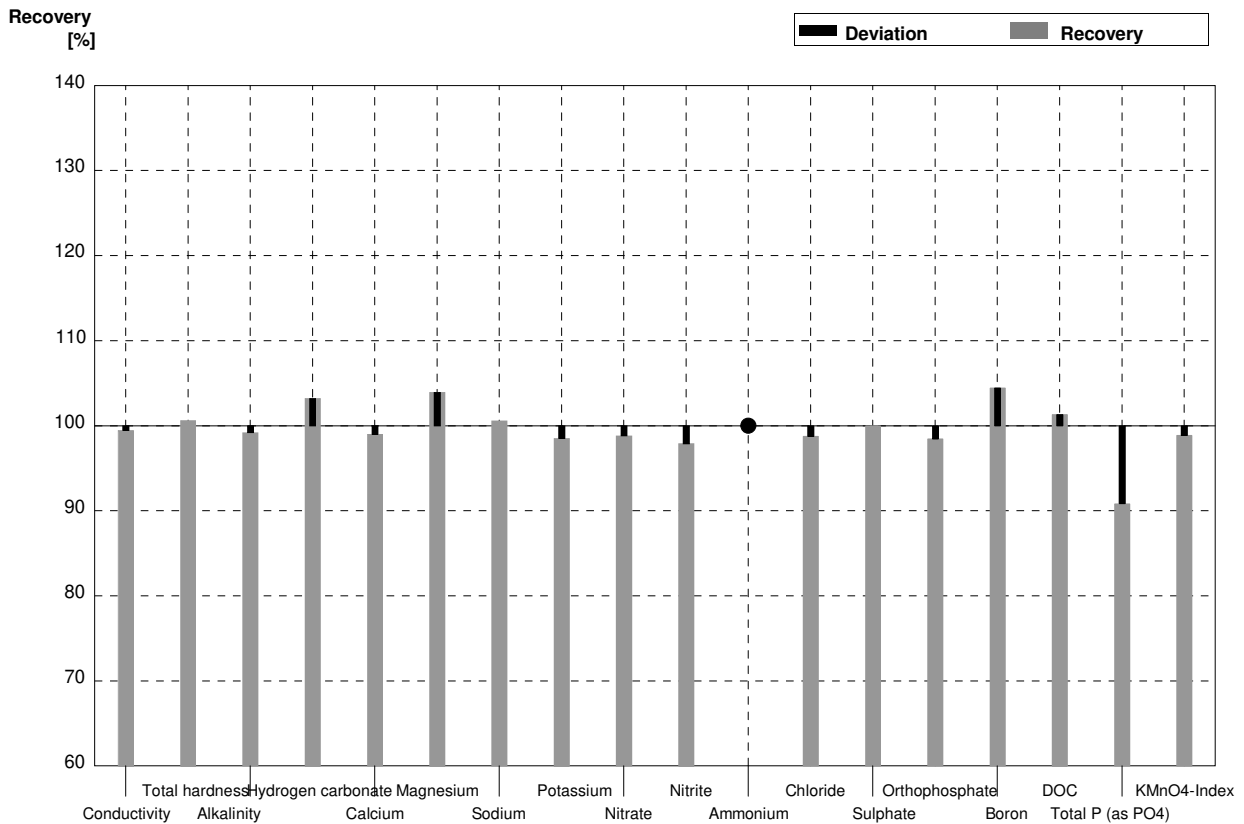
**Sample N169B**  
**Laboratory Q**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	67,5		mg/l	96%
Magnesium	14,9	0,3	14,9		mg/l	100%
Sodium	9,2	0,6	8,75		mg/l	95%
Potassium	4,29	0,03	4,17		mg/l	97%
Nitrate	36,4	0,9	36,7		mg/l	101%
Nitrite	0,0798	0,0011	0,091		mg/l	114%
Ammonium	0,085	0,004	0,0695		mg/l	82%
Chloride	10,0	0,3	10,4		mg/l	104%
Sulphate	51,4	1,0	51,8		mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



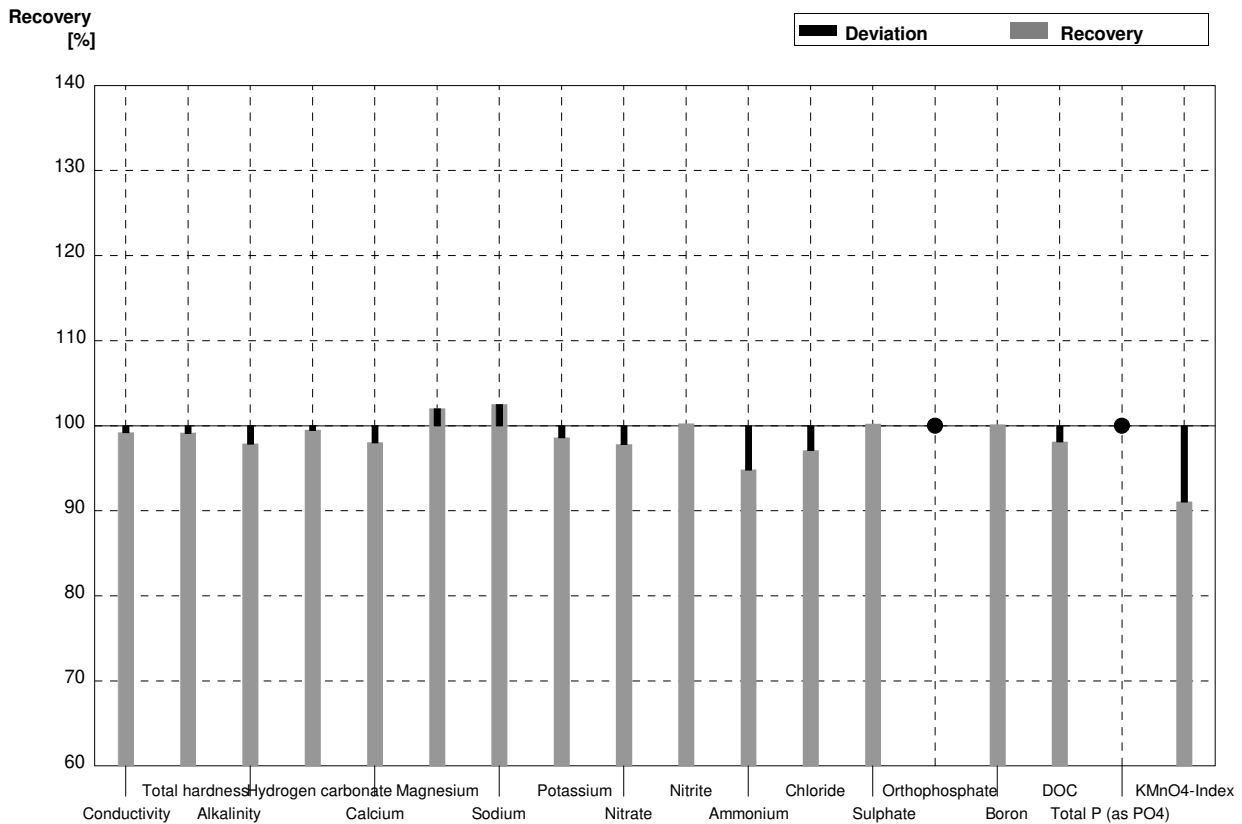
**Sample N169A**  
**Laboratory R**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	414	0,1	µS/cm	99%
Total hardness	1,103	0,019	1,11	0,007	mmol/l	101%
Alkalinity	1,371	0,013	1,36	0,006	mmol/l	99%
Hydrogen carbonate	80,6	0,8	83,2	0,2	mg/l	103%
Calcium	30,3	0,7	30,0	0,64	mg/l	99%
Magnesium	8,40	0,13	8,73	0,04	mg/l	104%
Sodium	35,4	0,2	35,6	0,27	mg/l	101%
Potassium	2,05	0,02	2,02	0,006	mg/l	99%
Nitrate	17,0	0,5	16,8	0,1	mg/l	99%
Nitrite	0,0573	0,0002	0,0561	0,001	mg/l	98%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	65,0	1,2	64,2	0,21	mg/l	99%
Sulphate	15,5	0,3	15,5	0,12	mg/l	100%
Orthophosphate	0,0455	0,0032	0,0448	0,0002	mg/l	98%
Boron	0,0402	0,0011	0,0420	0,001	mg/l	104%
DOC	3,72	0,05	3,77	0,014	mg/l	101%
Total P (as PO4)	0,1376	0,0016	0,125	0,002	mg/l	91%
KMnO4-Index	4,46	0,11	4,41	0,13	mg/l	99%



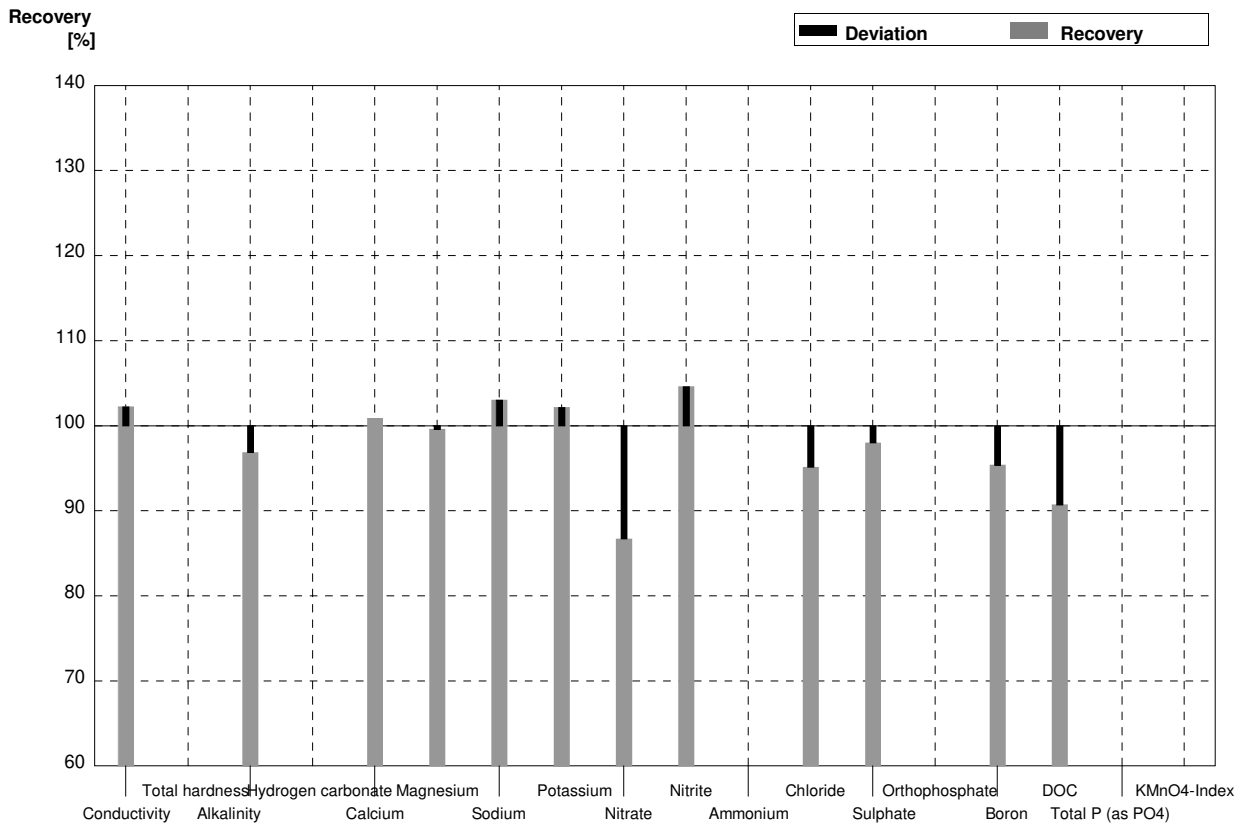
**Sample N169B**  
**Laboratory R**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	501	0,58	µS/cm	99%
Total hardness	2,36	0,03	2,34	0,007	mmol/l	99%
Alkalinity	3,28	0,06	3,21	0,006	mmol/l	98%
Hydrogen carbonate	197	3	196	0,58	mg/l	99%
Calcium	70,2	1,2	68,8	0,64	mg/l	98%
Magnesium	14,9	0,3	15,2	0,42	mg/l	102%
Sodium	9,2	0,6	9,43	0,13	mg/l	103%
Potassium	4,29	0,03	4,23	0,012	mg/l	99%
Nitrate	36,4	0,9	35,6	0,29	mg/l	98%
Nitrite	0,0798	0,0011	0,080	0,001	mg/l	100%
Ammonium	0,085	0,004	0,0806	0,001	mg/l	95%
Chloride	10,0	0,3	9,71	0,99	mg/l	97%
Sulphate	51,4	1,0	51,5	0,06	mg/l	100%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005	0,0695	0,001	mg/l	100%
DOC	6,35	0,05	6,23	0,07	mg/l	98%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,58	0,12	3,26	0,15	mg/l	91%



**Sample N169A**  
**Laboratory S**

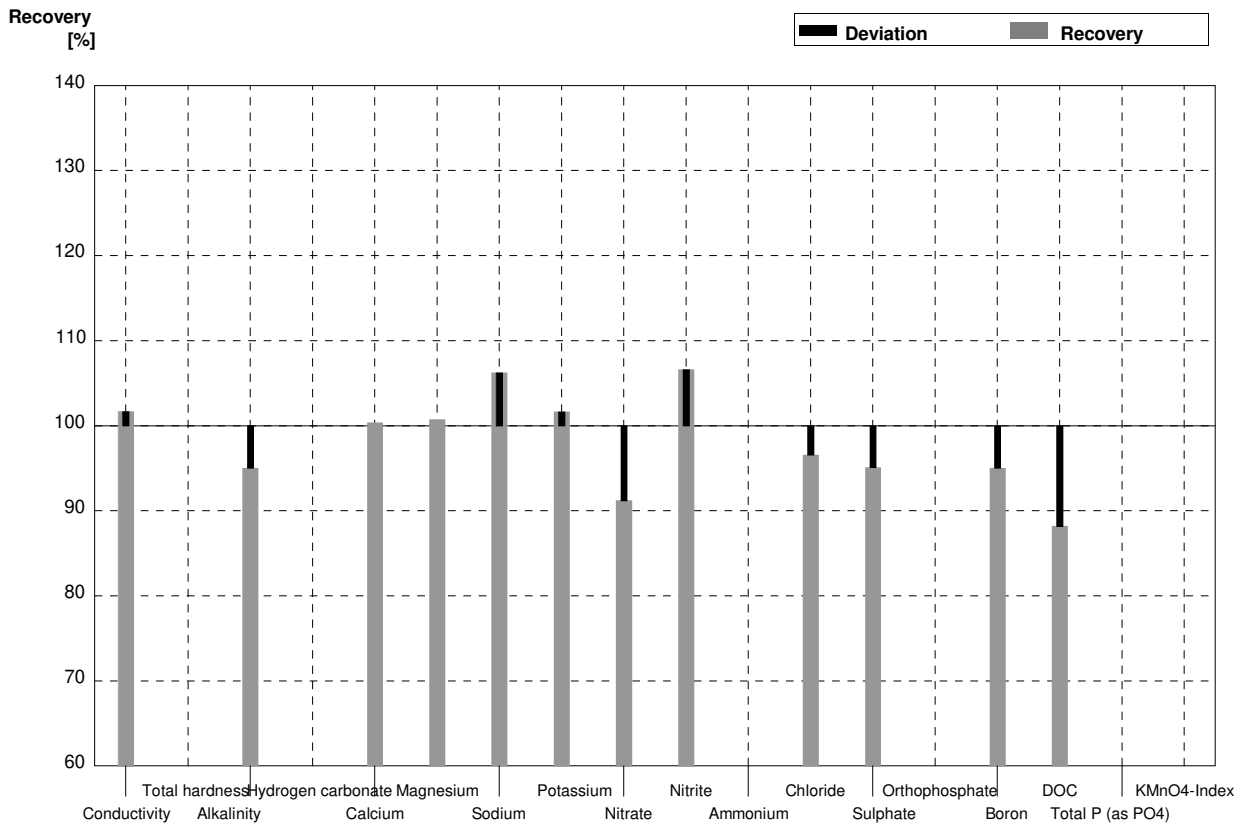
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	425,5		µS/cm	102%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,328		mmol/l	97%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	30,57		mg/l	101%
Magnesium	8,40	0,13	8,366		mg/l	100%
Sodium	35,4	0,2	36,48		mg/l	103%
Potassium	2,05	0,02	2,094		mg/l	102%
Nitrate	17,0	0,5	14,74		mg/l	87%
Nitrite	0,0573	0,0002	0,05995		mg/l	105%
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	61,84		mg/l	95%
Sulphate	15,5	0,3	15,19		mg/l	98%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011	0,03835		mg/l	95%
DOC	3,72	0,05	3,375		mg/l	91%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	





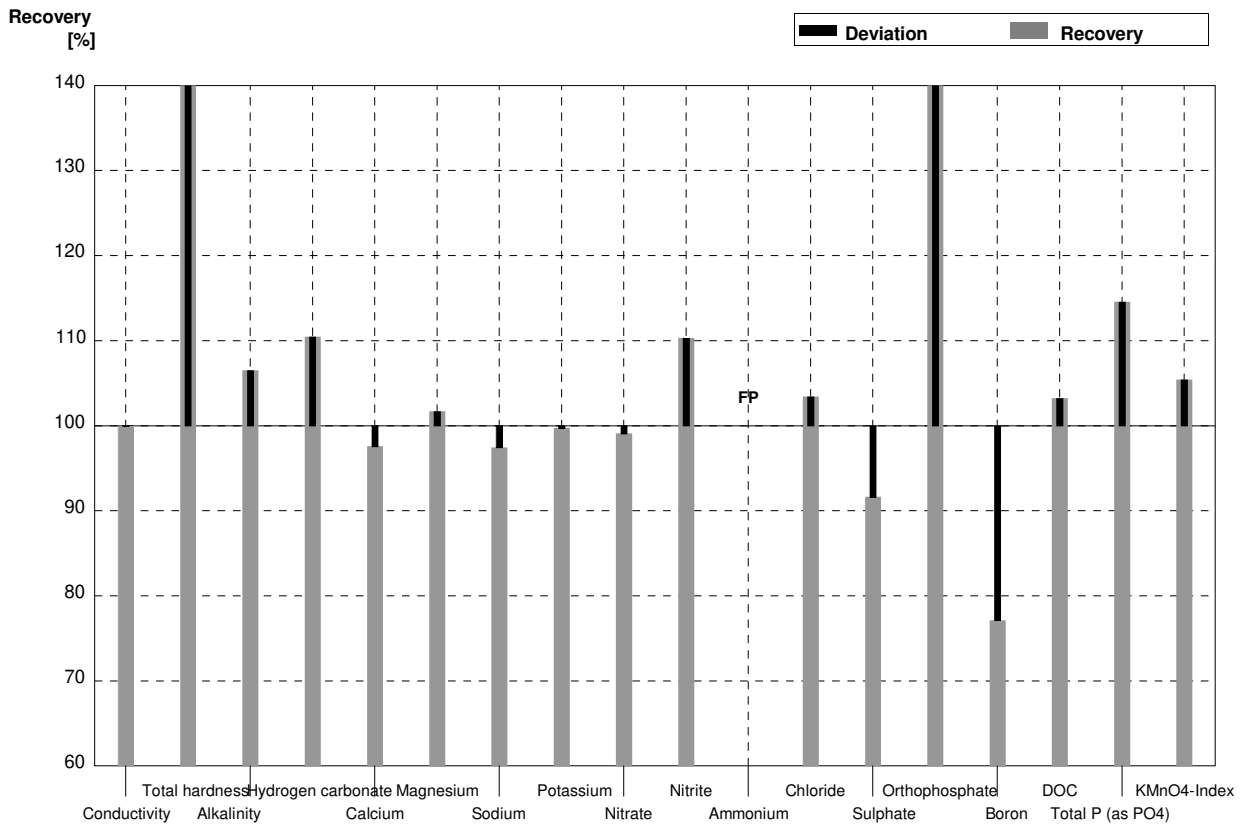
**Sample N169B**  
**Laboratory S**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	513,5		µS/cm	102%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,117		mmol/l	95%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	70,44		mg/l	100%
Magnesium	14,9	0,3	15,01		mg/l	101%
Sodium	9,2	0,6	9,775		mg/l	106%
Potassium	4,29	0,03	4,361		mg/l	102%
Nitrate	36,4	0,9	33,20		mg/l	91%
Nitrite	0,0798	0,0011	0,08508		mg/l	107%
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3	9,657		mg/l	97%
Sulphate	51,4	1,0	48,88		mg/l	95%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005	0,06595		mg/l	95%
DOC	6,35	0,05	5,600		mg/l	88%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



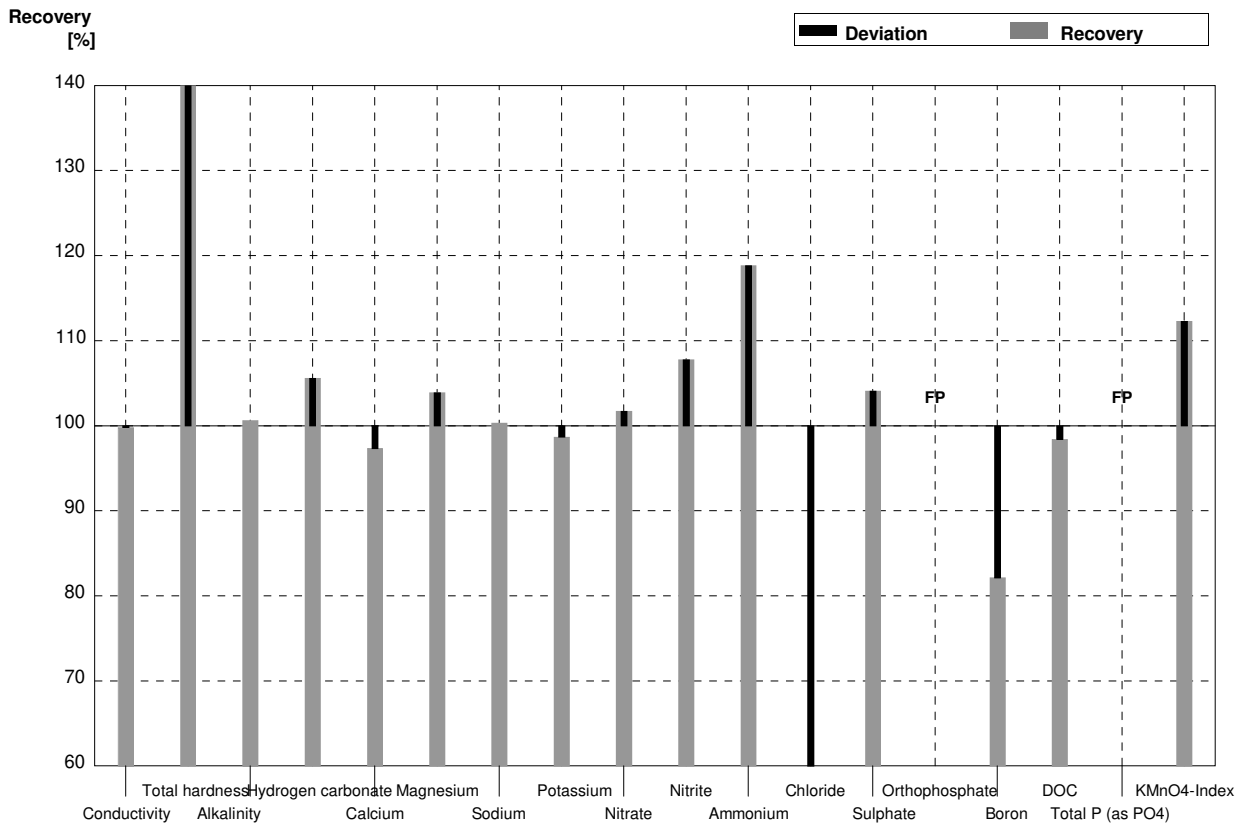
**Sample N169A**  
**Laboratory T**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	30,95	µS/cm	100%
Total hardness	1,103	0,019	2,178	0,436	mmol/l	197%
Alkalinity	1,371	0,013	1,46	0,1124	mmol/l	106%
Hydrogen carbonate	80,6	0,8	89,0	6,853	mg/l	110%
Calcium	30,3	0,7	29,56	3,55	mg/l	98%
Magnesium	8,40	0,13	8,54	0,86	mg/l	102%
Sodium	35,4	0,2	34,49	4,28	mg/l	97%
Potassium	2,05	0,02	2,044	0,24	mg/l	100%
Nitrate	17,0	0,5	16,84	2,475	mg/l	99%
Nitrite	0,0573	0,0002	0,0632	0,00588	mg/l	110%
Ammonium	<0,01		0,0270	0,0034	mg/l	FP
Chloride	65,0	1,2	67,2	7,8834	mg/l	103%
Sulphate	15,5	0,3	14,2	1,803	mg/l	92%
Orthophosphate	0,0455	0,0032	0,0692	0,0104	mg/l	152%
Boron	0,0402	0,0011	0,0310	0,004	mg/l	77%
DOC	3,72	0,05	3,84	0,3041	mg/l	103%
Total P (as PO4)	0,1376	0,0016	0,1576	0,0237	mg/l	115%
KMnO4-Index	4,46	0,11	4,701	0,9832	mg/l	105%



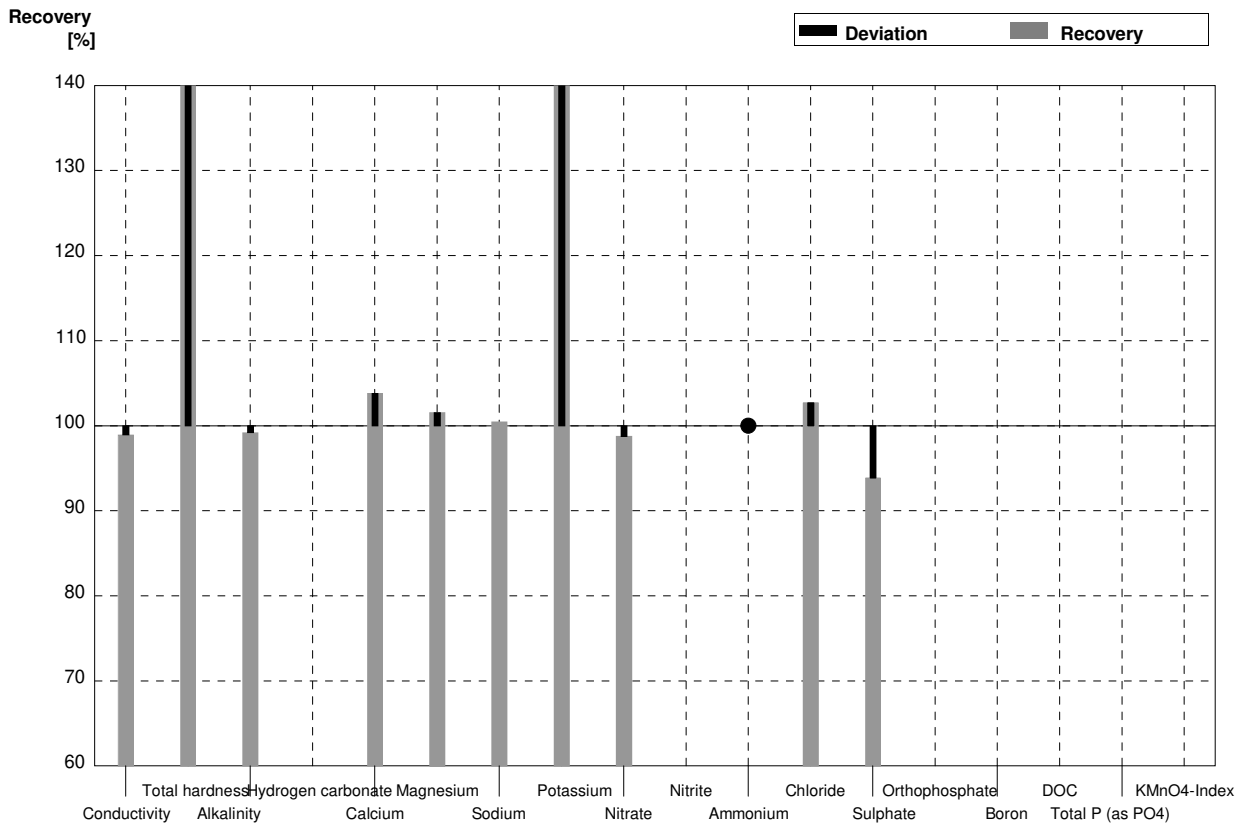
**Sample N169B**  
**Laboratory T**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	37,50	µS/cm	100%
Total hardness	2,36	0,03	4,683	0,937	mmol/l	198%
Alkalinity	3,28	0,06	3,30	0,2541	mmol/l	101%
Hydrogen carbonate	197	3	208	16,02	mg/l	106%
Calcium	70,2	1,2	68,33	8,20	mg/l	97%
Magnesium	14,9	0,3	15,48	1,56	mg/l	104%
Sodium	9,2	0,6	9,229	1,14	mg/l	100%
Potassium	4,29	0,03	4,233	0,50	mg/l	99%
Nitrate	36,4	0,9	37,03	5,3125	mg/l	102%
Nitrite	0,0798	0,0011	0,086	0,008	mg/l	108%
Ammonium	0,085	0,004	0,101	0,0127	mg/l	119%
Chloride	10,0	0,3	4,33	0,5083	mg/l	43%
Sulphate	51,4	1,0	53,5	6,795	mg/l	104%
Orthophosphate	<0,009		0,211	0,0032	mg/l	FP
Boron	0,0694	0,0005	0,0570	0,008	mg/l	82%
DOC	6,35	0,05	6,25	0,495	mg/l	98%
Total P (as PO4)	<0,009		0,02995	0,0045	mg/l	FP
KMnO4-Index	3,58	0,12	4,02	0,8410	mg/l	112%



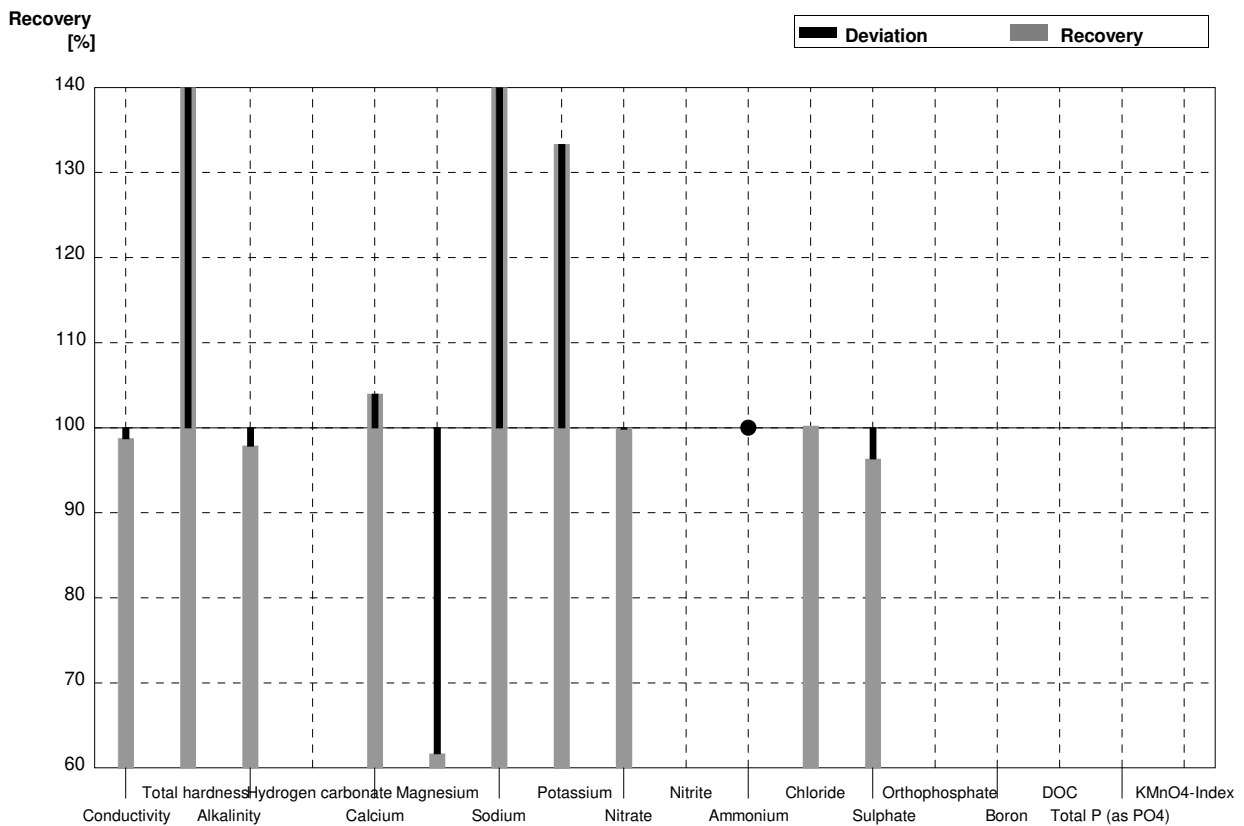
**Sample N169A**  
**Laboratory U**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	411,8		µS/cm	99%
Total hardness	1,103	0,019	6,2		mmol/l	562%
Alkalinity	1,371	0,013	1,36		mmol/l	99%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	31,46		mg/l	104%
Magnesium	8,40	0,13	8,53		mg/l	102%
Sodium	35,4	0,2	35,56		mg/l	100%
Potassium	2,05	0,02	2,95		mg/l	144%
Nitrate	17,0	0,5	16,79		mg/l	99%
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01		<0,1		mg/l	•
Chloride	65,0	1,2	66,78		mg/l	103%
Sulphate	15,5	0,3	14,55		mg/l	94%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



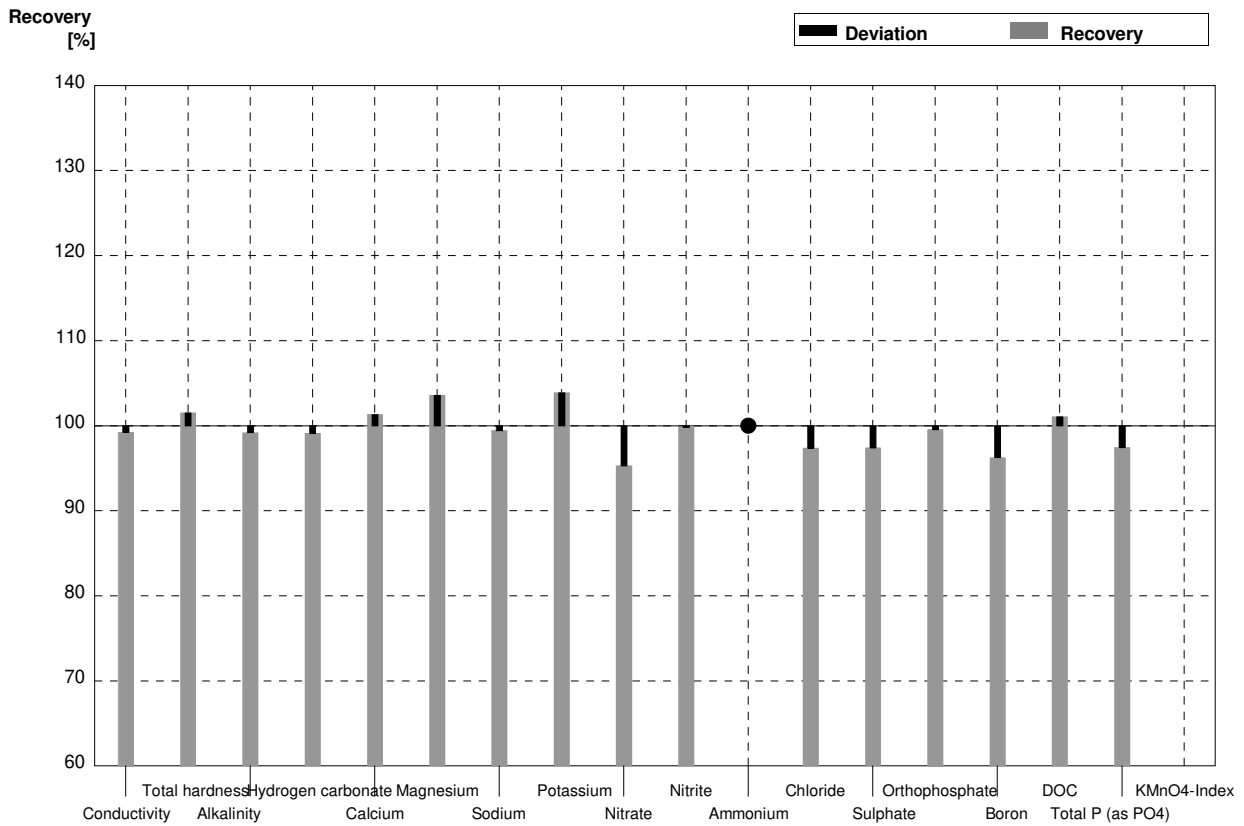
**Sample N169B**  
**Laboratory U**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	498,6		µS/cm	99%
Total hardness	2,36	0,03	13,2		mmol/l	559%
Alkalinity	3,28	0,06	3,21		mmol/l	98%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	72,99		mg/l	104%
Magnesium	14,9	0,3	9,19		mg/l	62%
Sodium	9,2	0,6	15,23		mg/l	166%
Potassium	4,29	0,03	5,72		mg/l	133%
Nitrate	36,4	0,9	36,35		mg/l	100%
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004	<0,1		mg/l	•
Chloride	10,0	0,3	10,02		mg/l	100%
Sulphate	51,4	1,0	49,52		mg/l	96%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



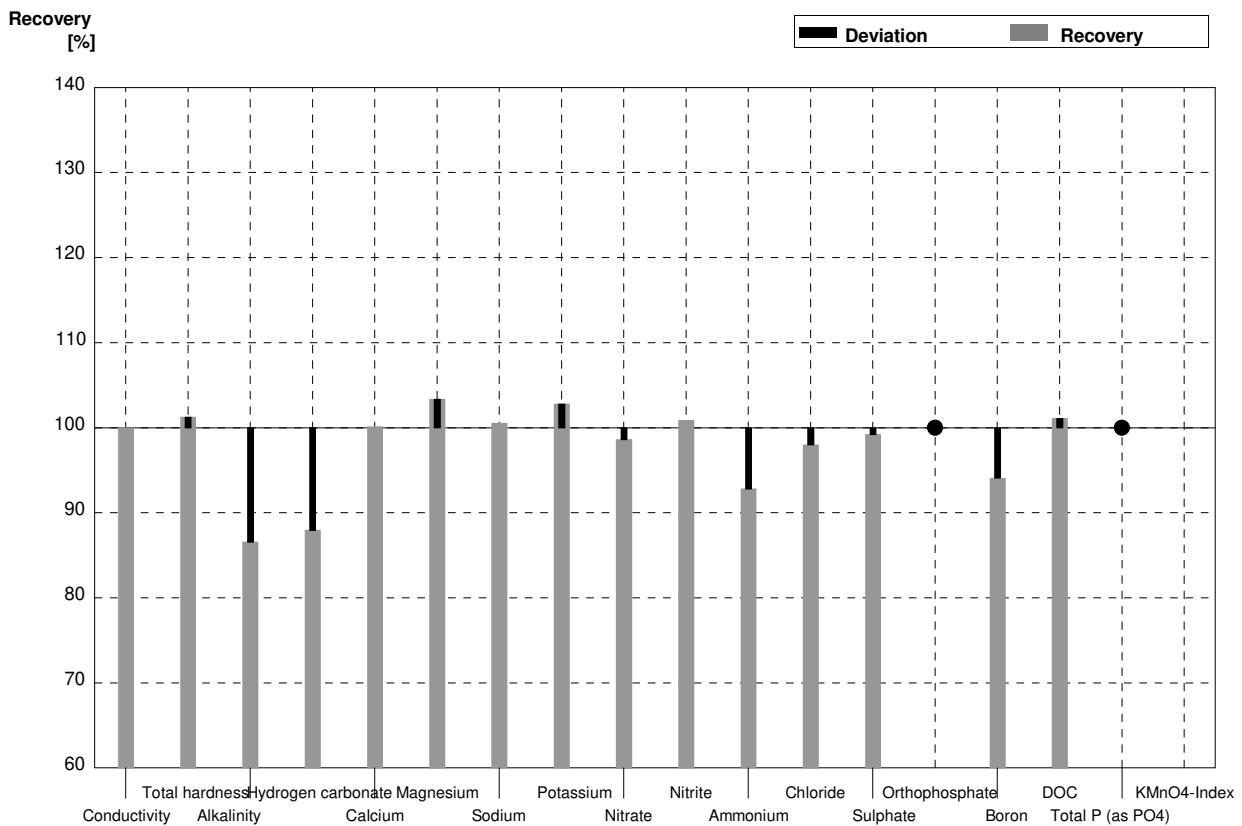
**Sample N169A**  
**Laboratory V**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	413	10	µS/cm	99%
Total hardness	1,103	0,019	1,12	0,12	mmol/l	102%
Alkalinity	1,371	0,013	1,36	0,14	mmol/l	99%
Hydrogen carbonate	80,6	0,8	79,9	8,0	mg/l	99%
Calcium	30,3	0,7	30,7	6,2	mg/l	101%
Magnesium	8,40	0,13	8,70	1,7	mg/l	104%
Sodium	35,4	0,2	35,2	5,3	mg/l	99%
Potassium	2,05	0,02	2,13	0,43	mg/l	104%
Nitrate	17,0	0,5	16,2	1,6	mg/l	95%
Nitrite	0,0573	0,0002	0,0572	0,0105	mg/l	100%
Ammonium	<0,01		<0,010		mg/l	•
Chloride	65,0	1,2	63,3	6,3	mg/l	97%
Sulphate	15,5	0,3	15,1	1,5	mg/l	97%
Orthophosphate	0,0455	0,0032	0,0453	0,0094	mg/l	100%
Boron	0,0402	0,0011	0,0387	0,01	mg/l	96%
DOC	3,72	0,05	3,76	0,38	mg/l	101%
Total P (as PO4)	0,1376	0,0016	0,1341	0,0279	mg/l	97%
KMnO4-Index	4,46	0,11			mg/l	



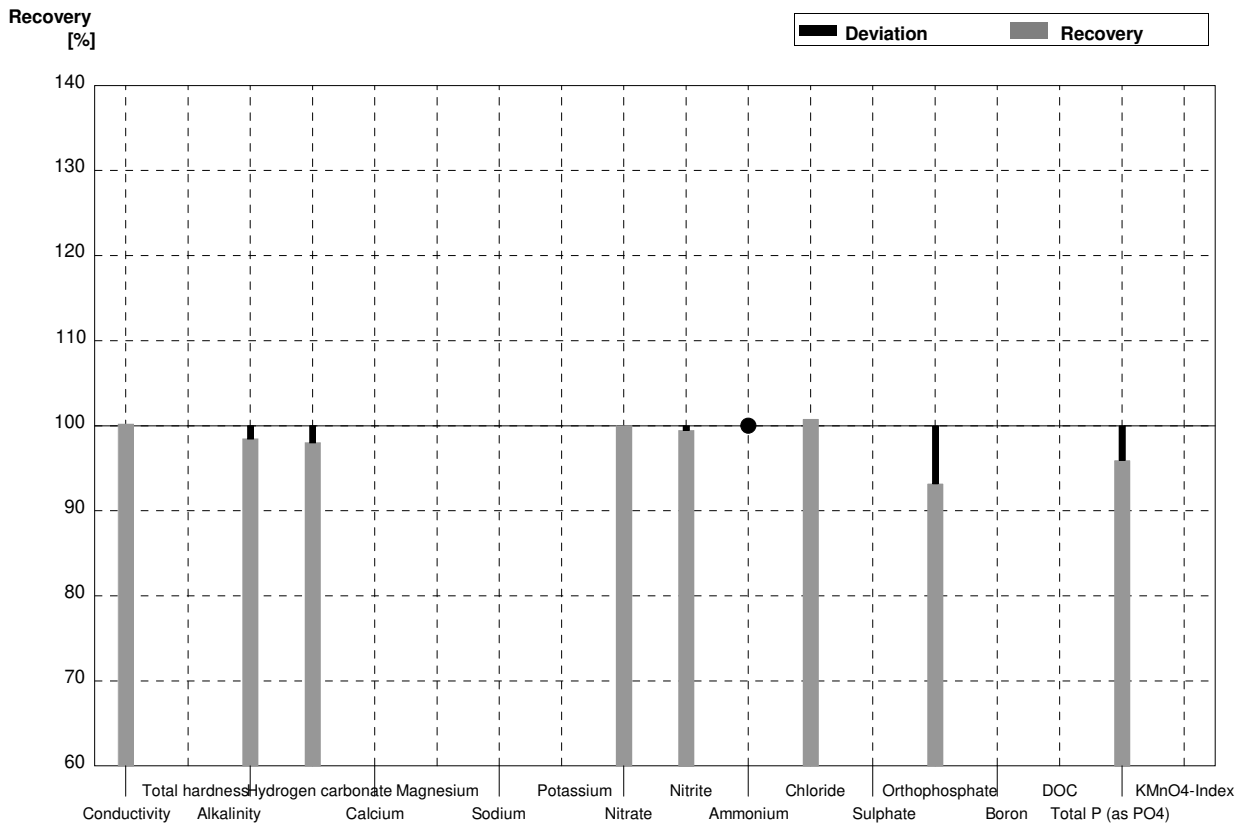
**Sample N169B**  
**Laboratory V**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	505	10	µS/cm	100%
Total hardness	2,36	0,03	2,39	0,24	mmol/l	101%
Alkalinity	3,28	0,06	2,84	0,28	mmol/l	87%
Hydrogen carbonate	197	3	173,3	17	mg/l	88%
Calcium	70,2	1,2	70,3	14,1	mg/l	100%
Magnesium	14,9	0,3	15,4	3,1	mg/l	103%
Sodium	9,2	0,6	9,25	1,4	mg/l	101%
Potassium	4,29	0,03	4,41	0,89	mg/l	103%
Nitrate	36,4	0,9	35,9	3,6	mg/l	99%
Nitrite	0,0798	0,0011	0,0805	0,0148	mg/l	101%
Ammonium	0,085	0,004	0,0789	0,0128	mg/l	93%
Chloride	10,0	0,3	9,8	1,0	mg/l	98%
Sulphate	51,4	1,0	51	5,1	mg/l	99%
Orthophosphate	<0,009		<0,0185		mg/l	•
Boron	0,0694	0,0005	0,0653	0,02	mg/l	94%
DOC	6,35	0,05	6,42	0,64	mg/l	101%
Total P (as PO4)	<0,009		<0,0185		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory W**

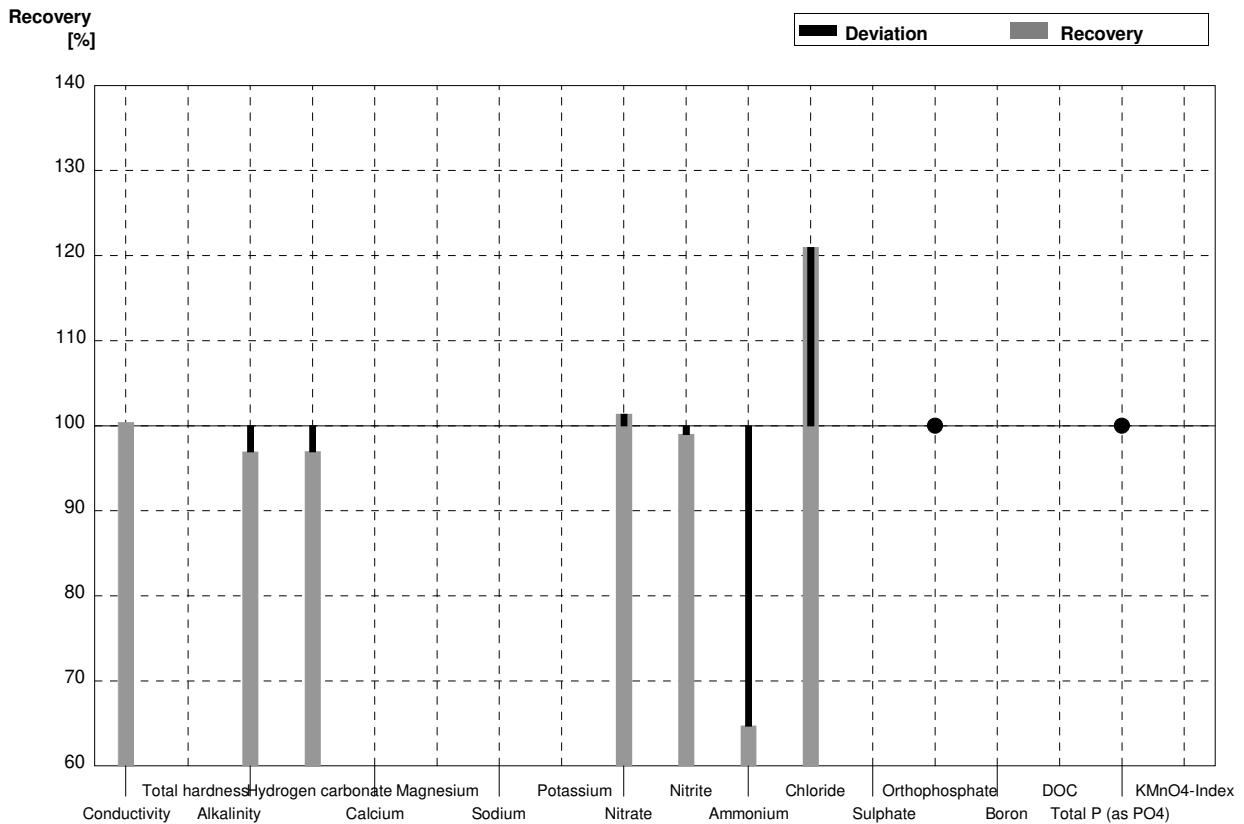
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	417	3	µS/cm	100%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,35	0,038	mmol/l	98%
Hydrogen carbonate	80,6	0,8	79	1,2	mg/l	98%
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	17,0	1,17	mg/l	100%
Nitrite	0,0573	0,0002	0,057	0,0057	mg/l	99%
Ammonium	<0,01		<0,005	0	mg/l	•
Chloride	65,0	1,2	65,5	0,66	mg/l	101%
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032	0,0424	0,0050	mg/l	93%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,132	0,0174	mg/l	96%
KMnO4-Index	4,46	0,11			mg/l	





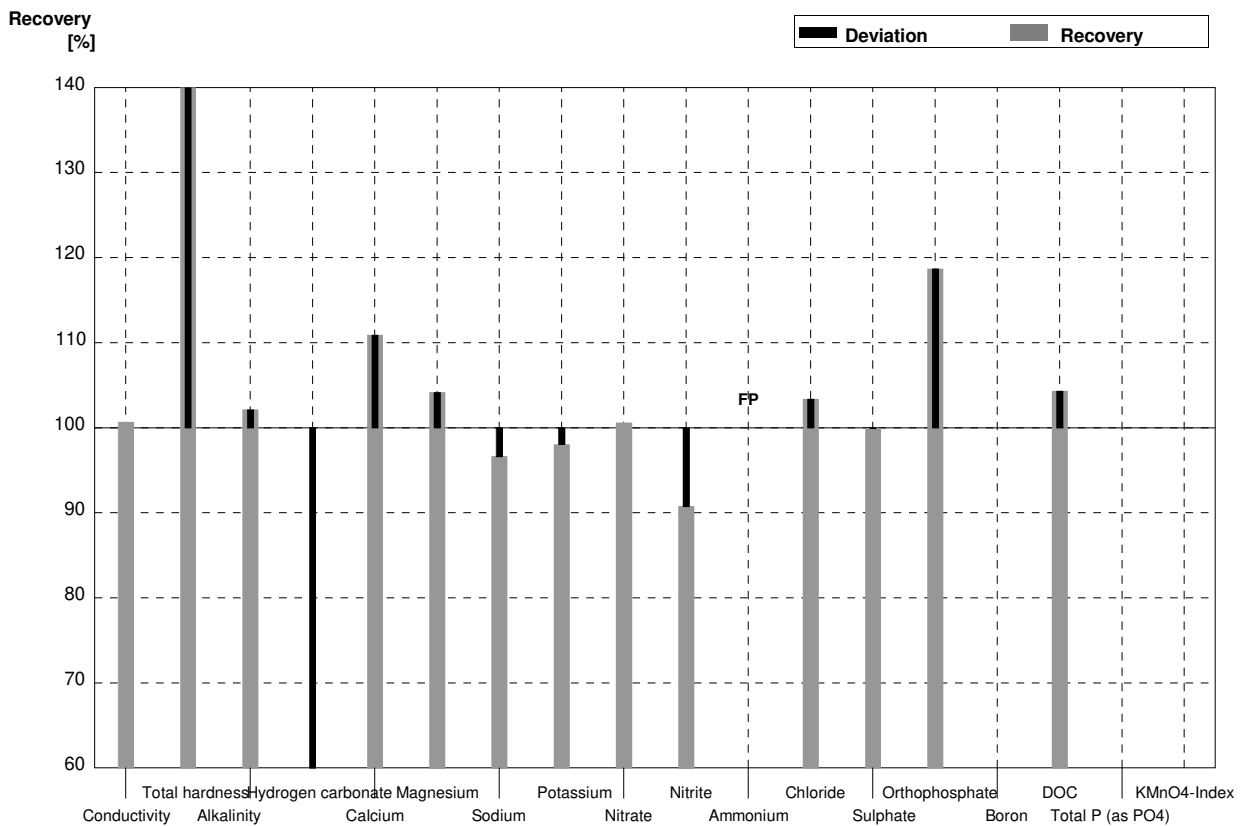
**Sample N169B**  
**Laboratory W**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	507	4	µS/cm	100%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,18	0,090	mmol/l	97%
Hydrogen carbonate	197	3	191	2,8	mg/l	97%
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	36,9	2,53	mg/l	101%
Nitrite	0,0798	0,0011	0,079	0,0079	mg/l	99%
Ammonium	0,085	0,004	0,055	0,0084	mg/l	65%
Chloride	10,0	0,3	12,1	0,12	mg/l	121%
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009		<0,006	0	mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		<0,006	0	mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



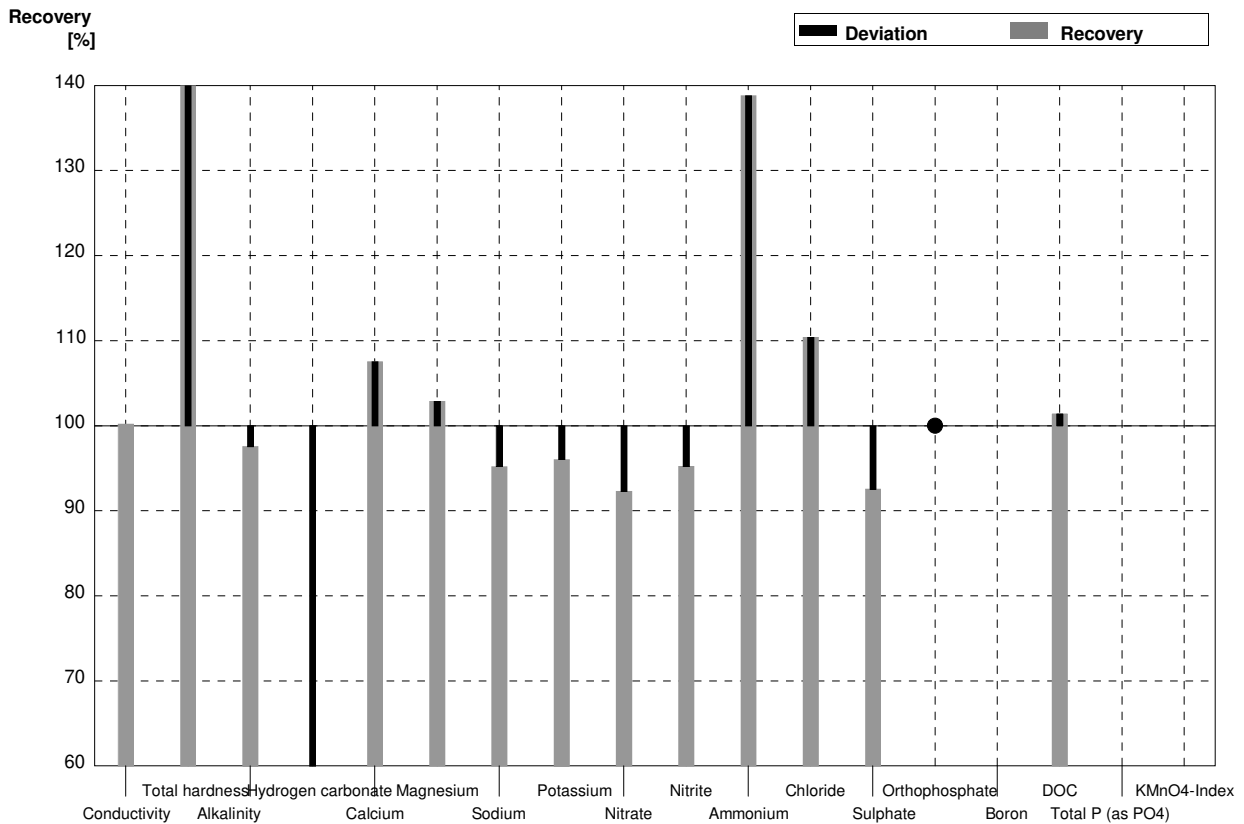
**Sample N169A**  
**Laboratory X**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	419	23,045	µS/cm	101%
Total hardness	1,103	0,019	42,35	7,2842	mmol/l	3840%
Alkalinity	1,371	0,013	1,40	0,126	mmol/l	102%
Hydrogen carbonate	80,6	0,8	3,92	0,2961	mg/l	5%
Calcium	30,3	0,7	33,60	2,2848	mg/l	111%
Magnesium	8,40	0,13	8,75	0,4288	mg/l	104%
Sodium	35,4	0,2	34,21	1,7105	mg/l	97%
Potassium	2,05	0,02	2,01	0,3055	mg/l	98%
Nitrate	17,0	0,5	17,1	3,3858	mg/l	101%
Nitrite	0,0573	0,0002	0,052	0,00759	mg/l	91%
Ammonium	<0,01		0,0250	0,00985	mg/l	FP
Chloride	65,0	1,2	67,18	4,23234	mg/l	103%
Sulphate	15,5	0,3	15,49	1,2392	mg/l	100%
Orthophosphate	0,0455	0,0032	0,054	0,0257	mg/l	119%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,88	1,24936	mg/l	104%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



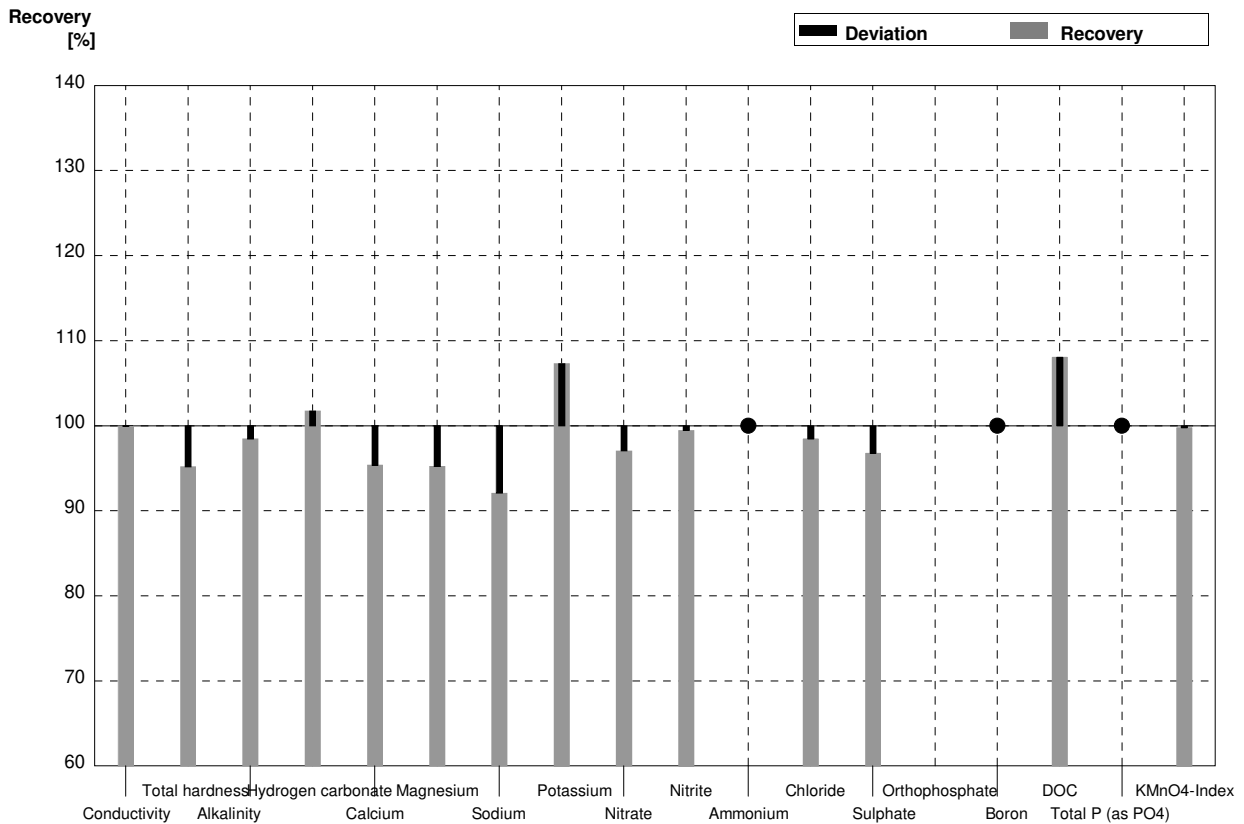
**Sample N169B**  
**Laboratory X**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	506	27,83	µS/cm	100%
Total hardness	2,36	0,03	90,83	15,6227	mmol/l	3849%
Alkalinity	3,28	0,06	3,20	0,288	mmol/l	98%
Hydrogen carbonate	197	3	8,96	0,8064	mg/l	5%
Calcium	70,2	1,2	75,50	5,134	mg/l	108%
Magnesium	14,9	0,3	15,33	0,7512	mg/l	103%
Sodium	9,2	0,6	8,76	0,438	mg/l	95%
Potassium	4,29	0,03	4,12	0,626	mg/l	96%
Nitrate	36,4	0,9	33,6	6,6528	mg/l	92%
Nitrite	0,0798	0,0011	0,076	0,01109	mg/l	95%
Ammonium	0,085	0,004	0,118	0,04649	mg/l	139%
Chloride	10,0	0,3	11,04	0,69552	mg/l	110%
Sulphate	51,4	1,0	47,57	3,8056	mg/l	93%
Orthophosphate	<0,009		0,0050	0,00238	mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,44	2,0737	mg/l	101%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



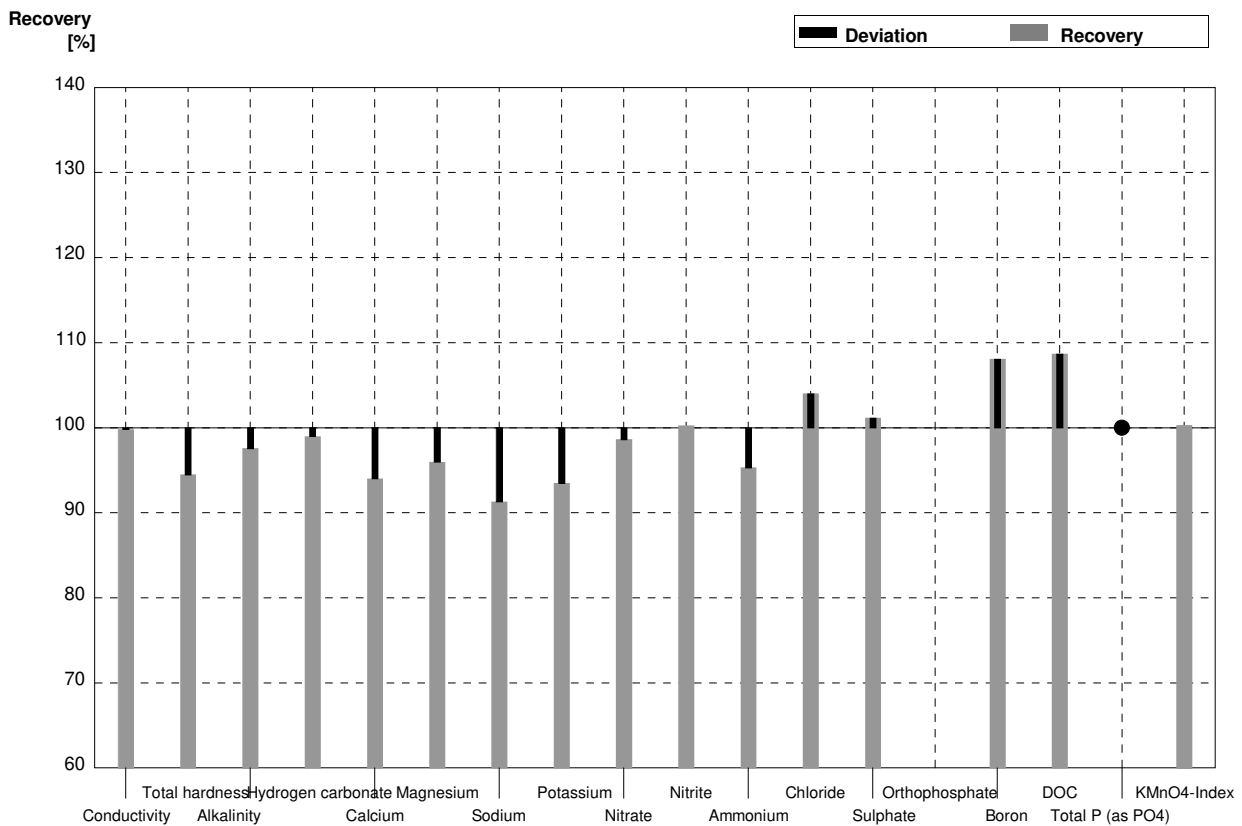
**Sample N169A**  
**Laboratory Y**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	5	µS/cm	100%
Total hardness	1,103	0,019	1,05	0,15	mmol/l	95%
Alkalinity	1,371	0,013	1,35	0,2	mmol/l	98%
Hydrogen carbonate	80,6	0,8	82	2	mg/l	102%
Calcium	30,3	0,7	28,9	1,5	mg/l	95%
Magnesium	8,40	0,13	8,0	1	mg/l	95%
Sodium	35,4	0,2	32,6	1,7	mg/l	92%
Potassium	2,05	0,02	2,20	0,2	mg/l	107%
Nitrate	17,0	0,5	16,5	1,4	mg/l	97%
Nitrite	0,0573	0,0002	0,057	0,01	mg/l	99%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	65,0	1,2	64	3,2	mg/l	98%
Sulphate	15,5	0,3	15,0	1,2	mg/l	97%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011	<0,05		mg/l	•
DOC	3,72	0,05	4,02	0,5	mg/l	108%
Total P (as PO4)	0,1376	0,0016	<0,20		mg/l	•
KMnO4-Index	4,46	0,11	4,45	0,66	mg/l	100%



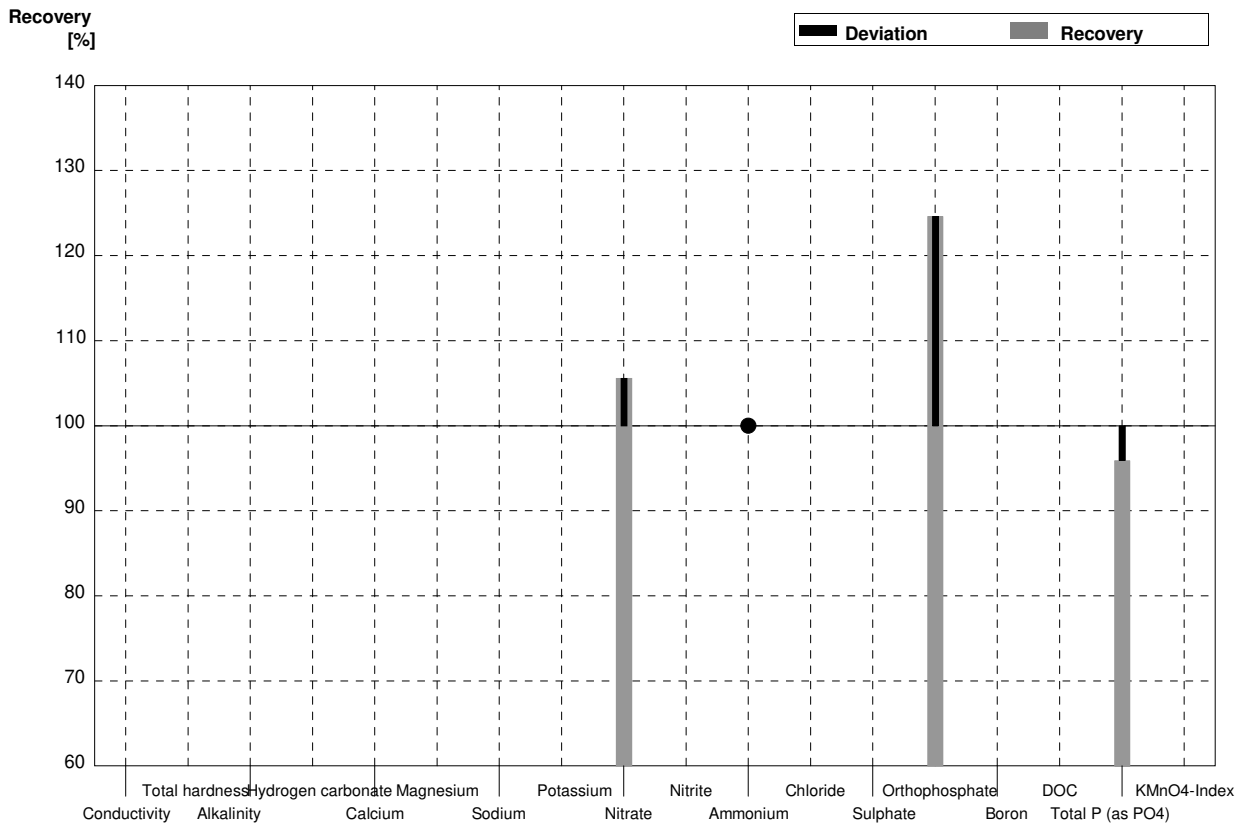
**Sample N169B**  
**Laboratory Y**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	6	µS/cm	100%
Total hardness	2,36	0,03	2,23	0,18	mmol/l	94%
Alkalinity	3,28	0,06	3,20	0,2	mmol/l	98%
Hydrogen carbonate	197	3	195	3	mg/l	99%
Calcium	70,2	1,2	66	3	mg/l	94%
Magnesium	14,9	0,3	14,3	1	mg/l	96%
Sodium	9,2	0,6	8,4	0,4	mg/l	91%
Potassium	4,29	0,03	4,01	0,2	mg/l	93%
Nitrate	36,4	0,9	35,9	3	mg/l	99%
Nitrite	0,0798	0,0011	0,080	0,01	mg/l	100%
Ammonium	0,085	0,004	0,081	0,01	mg/l	95%
Chloride	10,0	0,3	10,4	0,8	mg/l	104%
Sulphate	51,4	1,0	52	4,2	mg/l	101%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005	0,075	0,02	mg/l	108%
DOC	6,35	0,05	6,9	0,9	mg/l	109%
Total P (as PO4)	<0,009		<0,20		mg/l	•
KMnO4-Index	3,58	0,12	3,59	0,53	mg/l	100%



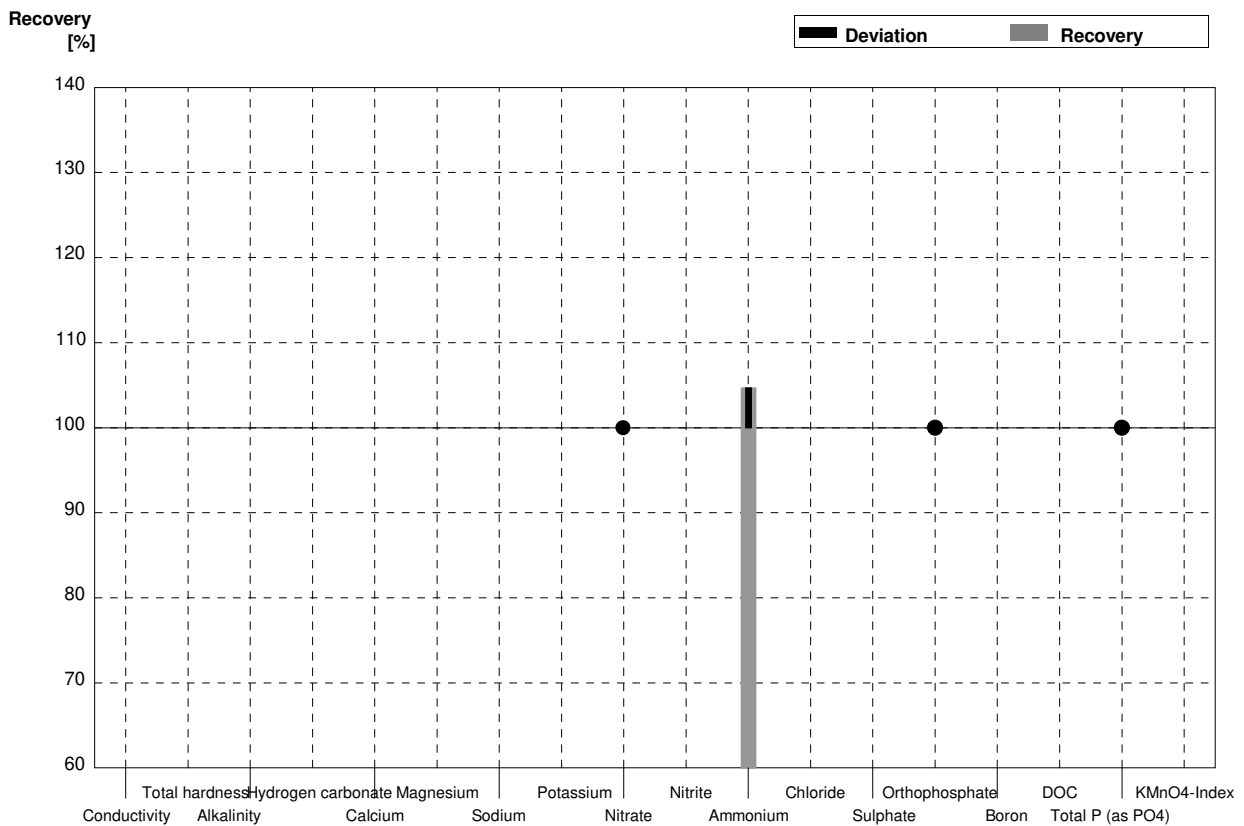
**Sample N169A**  
**Laboratory Z**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	17,95	0,311	mg/l	106%
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032	0,0567	0,0043	mg/l	125%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,132	0,0162	mg/l	96%
KMnO4-Index	4,46	0,11			mg/l	



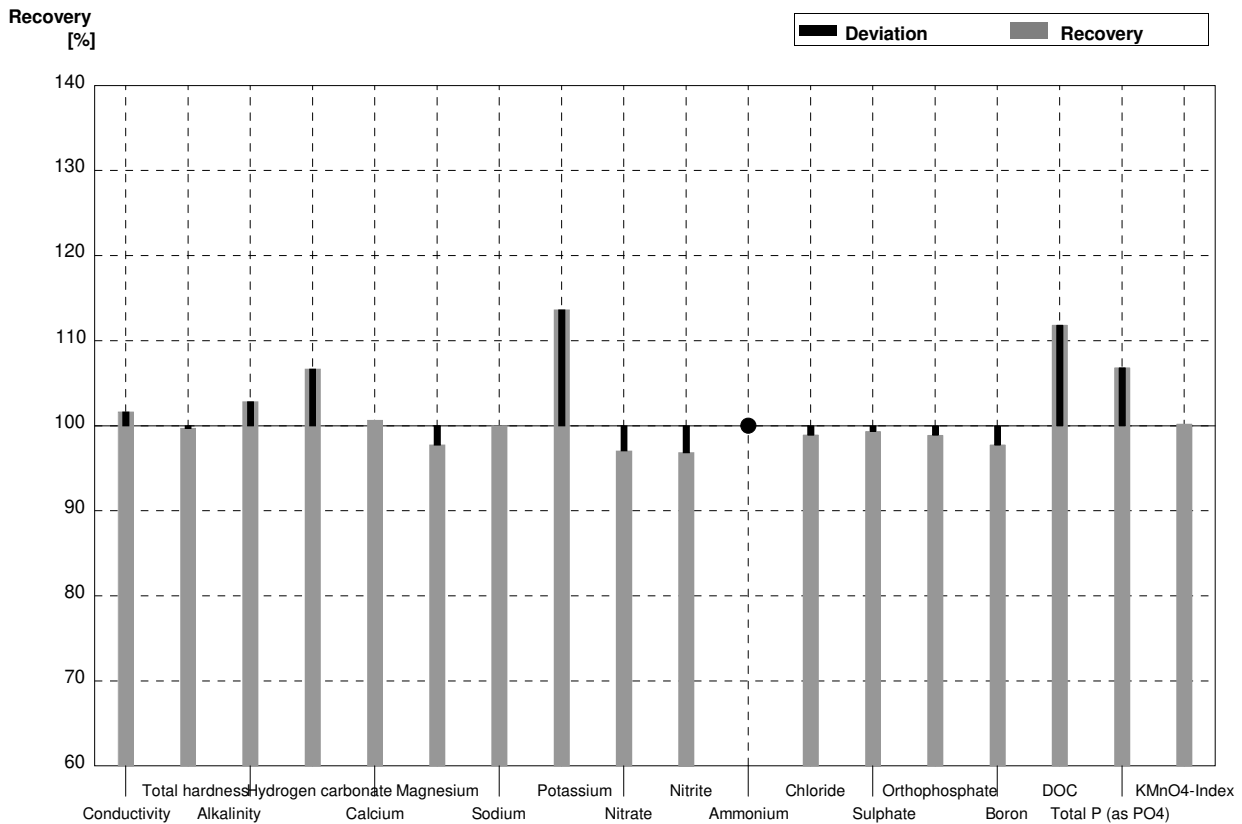
**Sample N169B**  
**Laboratory Z**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	>30		mg/l	•
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004	0,089	0,0039	mg/l	105%
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009		<0,019		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory AA**

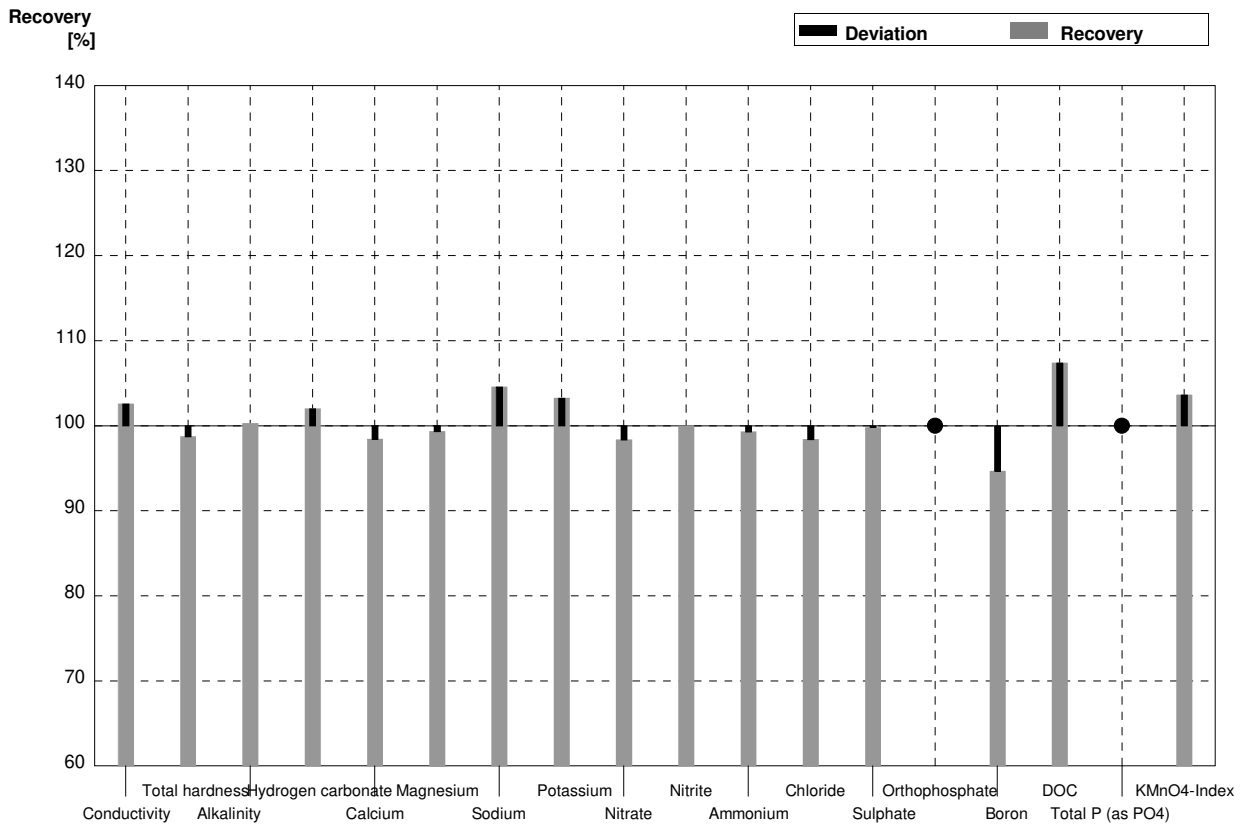
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	423	14,4	µS/cm	102%
Total hardness	1,103	0,019	1,10	0,084	mmol/l	100%
Alkalinity	1,371	0,013	1,41	0,083	mmol/l	103%
Hydrogen carbonate	80,6	0,8	86,0	5,1	mg/l	107%
Calcium	30,3	0,7	30,5	2,3	mg/l	101%
Magnesium	8,40	0,13	8,21	0,56	mg/l	98%
Sodium	35,4	0,2	35,4	3,2	mg/l	100%
Potassium	2,05	0,02	2,33	0,17	mg/l	114%
Nitrate	17,0	0,5	16,5	1,3	mg/l	97%
Nitrite	0,0573	0,0002	0,0555	0,0026	mg/l	97%
Ammonium	<0,01		<0,04		mg/l	•
Chloride	65,0	1,2	64,3	2,1	mg/l	99%
Sulphate	15,5	0,3	15,4	0,69	mg/l	99%
Orthophosphate	0,0455	0,0032	0,0450	0,0026	mg/l	99%
Boron	0,0402	0,0011	0,0393	0,0036	mg/l	98%
DOC	3,72	0,05	4,16	0,63	mg/l	112%
Total P (as PO4)	0,1376	0,0016	0,147	0,018	mg/l	107%
KMnO4-Index	4,46	0,11	4,47	0,63	mg/l	100%





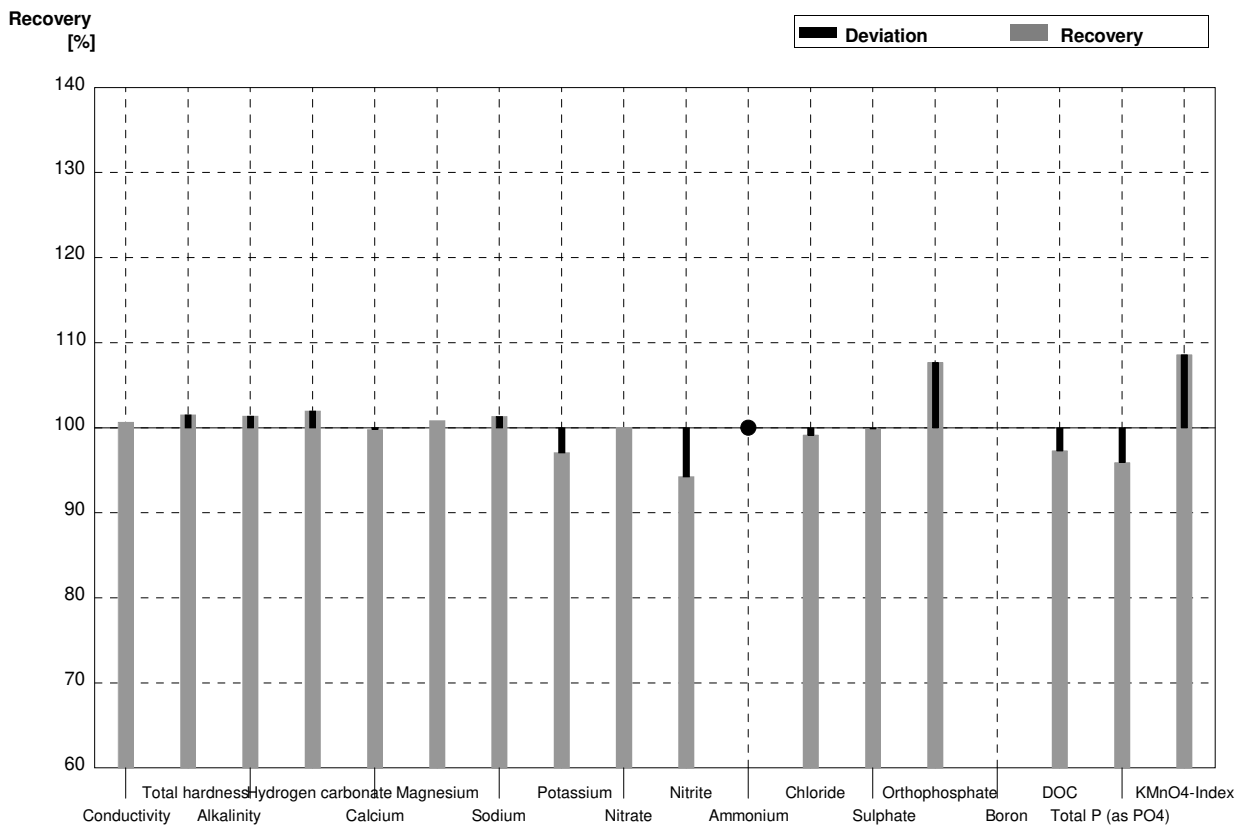
**Sample N169B**  
**Laboratory AA**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	518	17,6	µS/cm	103%
Total hardness	2,36	0,03	2,33	0,18	mmol/l	99%
Alkalinity	3,28	0,06	3,29	0,19	mmol/l	100%
Hydrogen carbonate	197	3	201	11,9	mg/l	102%
Calcium	70,2	1,2	69,1	5,3	mg/l	98%
Magnesium	14,9	0,3	14,8	1,00	mg/l	99%
Sodium	9,2	0,6	9,62	0,87	mg/l	105%
Potassium	4,29	0,03	4,43	0,33	mg/l	103%
Nitrate	36,4	0,9	35,8	2,9	mg/l	98%
Nitrite	0,0798	0,0011	0,0798	0,0038	mg/l	100%
Ammonium	0,085	0,004	0,0844	0,0057	mg/l	99%
Chloride	10,0	0,3	9,84	0,31	mg/l	98%
Sulphate	51,4	1,0	51,3	2,3	mg/l	100%
Orthophosphate	<0,009		<0,0200		mg/l	•
Boron	0,0694	0,0005	0,0657	0,0060	mg/l	95%
DOC	6,35	0,05	6,82	1,03	mg/l	107%
Total P (as PO4)	<0,009		<0,0200		mg/l	•
KMnO4-Index	3,58	0,12	3,71	0,52	mg/l	104%



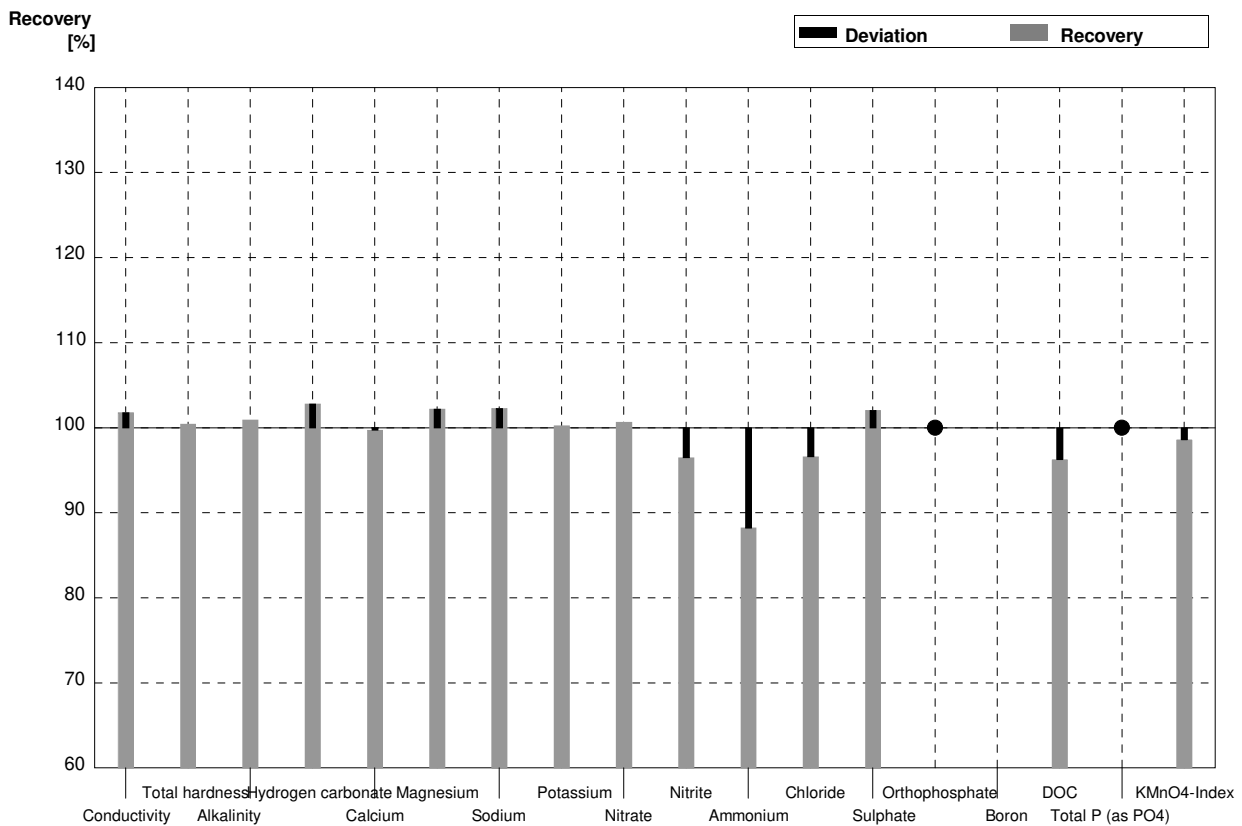
**Sample N169A**  
**Laboratory AB**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	419	10	µS/cm	101%
Total hardness	1,103	0,019	1,12	0,01	mmol/l	102%
Alkalinity	1,371	0,013	1,39	0,01	mmol/l	101%
Hydrogen carbonate	80,6	0,8	82,2	1,6	mg/l	102%
Calcium	30,3	0,7	30,24	0,48	mg/l	100%
Magnesium	8,40	0,13	8,47	0,16	mg/l	101%
Sodium	35,4	0,2	35,87	0,72	mg/l	101%
Potassium	2,05	0,02	1,99	0,12	mg/l	97%
Nitrate	17,0	0,5	17,01	0,85	mg/l	100%
Nitrite	0,0573	0,0002	0,054	0,005	mg/l	94%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	64,44	3,87	mg/l	99%
Sulphate	15,5	0,3	15,48	0,46	mg/l	100%
Orthophosphate	0,0455	0,0032	0,0490	0,0060	mg/l	108%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,62	0,54	mg/l	97%
Total P (as PO4)	0,1376	0,0016	0,132	0,008	mg/l	96%
KMnO4-Index	4,46	0,11	4,844	0,581	mg/l	109%



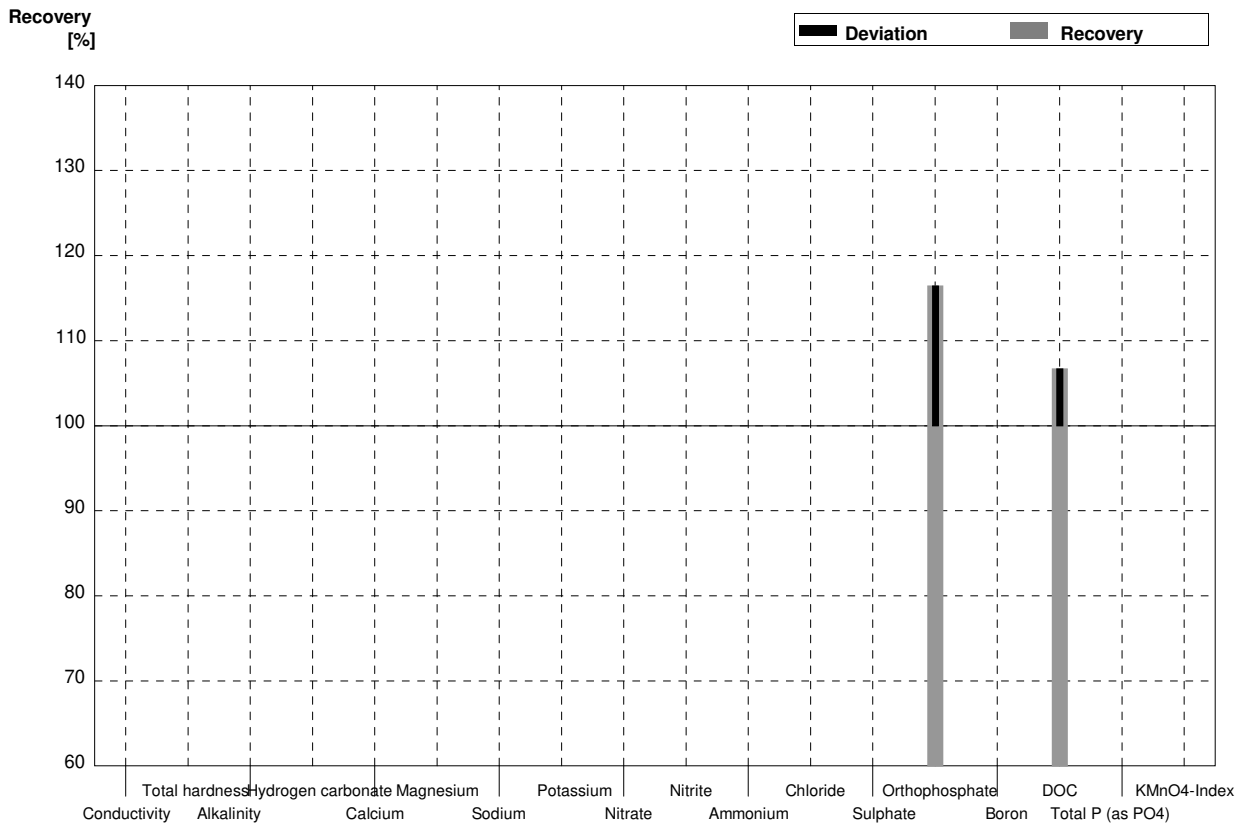
**Sample N169B**  
**Laboratory AB**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	514	13	µS/cm	102%
Total hardness	2,36	0,03	2,37	0,02	mmol/l	100%
Alkalinity	3,28	0,06	3,31	0,01	mmol/l	101%
Hydrogen carbonate	197	3	202,5	4,1	mg/l	103%
Calcium	70,2	1,2	70,01	1,12	mg/l	100%
Magnesium	14,9	0,3	15,23	0,29	mg/l	102%
Sodium	9,2	0,6	9,41	0,19	mg/l	102%
Potassium	4,29	0,03	4,30	0,25	mg/l	100%
Nitrate	36,4	0,9	36,64	1,83	mg/l	101%
Nitrite	0,0798	0,0011	0,077	0,008	mg/l	96%
Ammonium	0,085	0,004	0,075	0,005	mg/l	88%
Chloride	10,0	0,3	9,66	0,58	mg/l	97%
Sulphate	51,4	1,0	52,46	1,57	mg/l	102%
Orthophosphate	<0,009		0,0090	0,001	mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,113	0,917	mg/l	96%
Total P (as PO4)	<0,009		<0,009		mg/l	•
KMnO4-Index	3,58	0,12	3,530	0,424	mg/l	99%



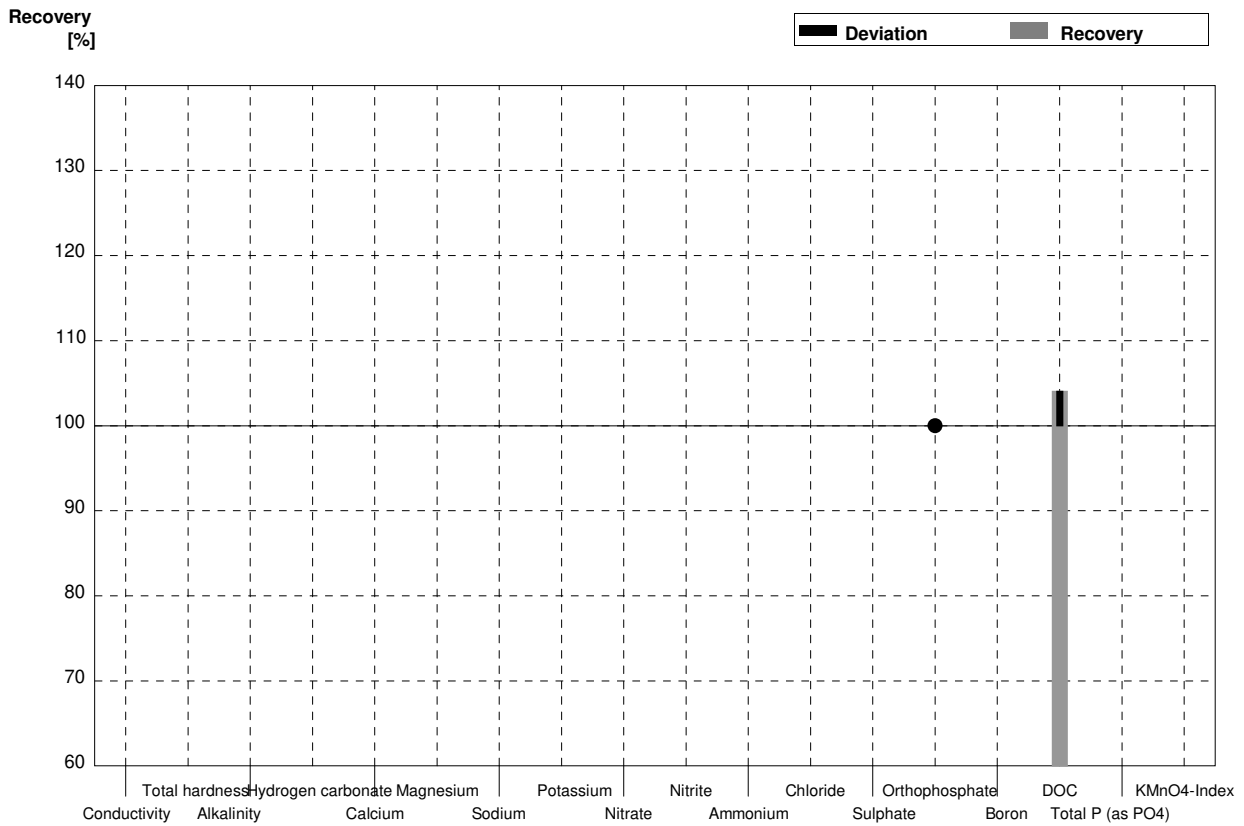
**Sample N169A**  
**Laboratory AC**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032	0,053	0,0084	mg/l	116%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,97	0,61	mg/l	107%
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



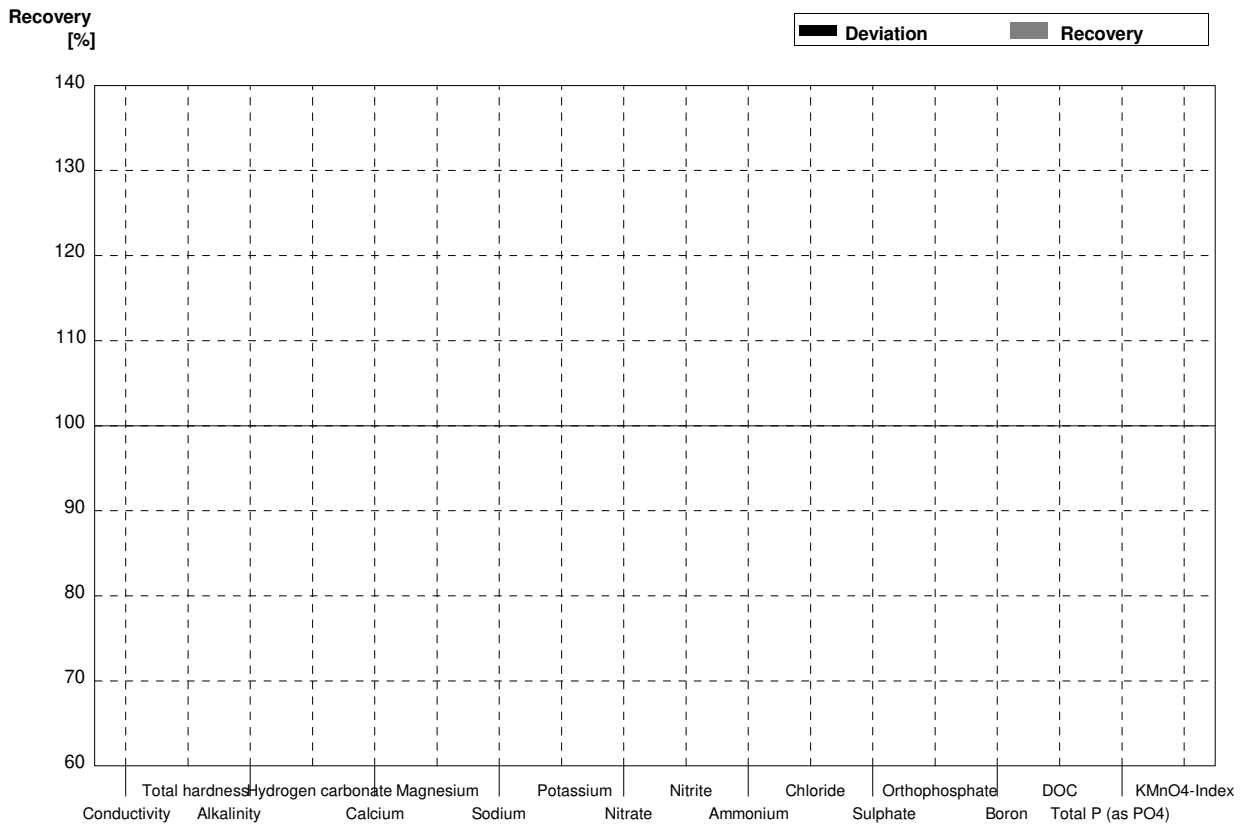
**Sample N169B**  
**Laboratory AC**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009		0,0099	0,00158	mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,61	0,95	mg/l	104%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



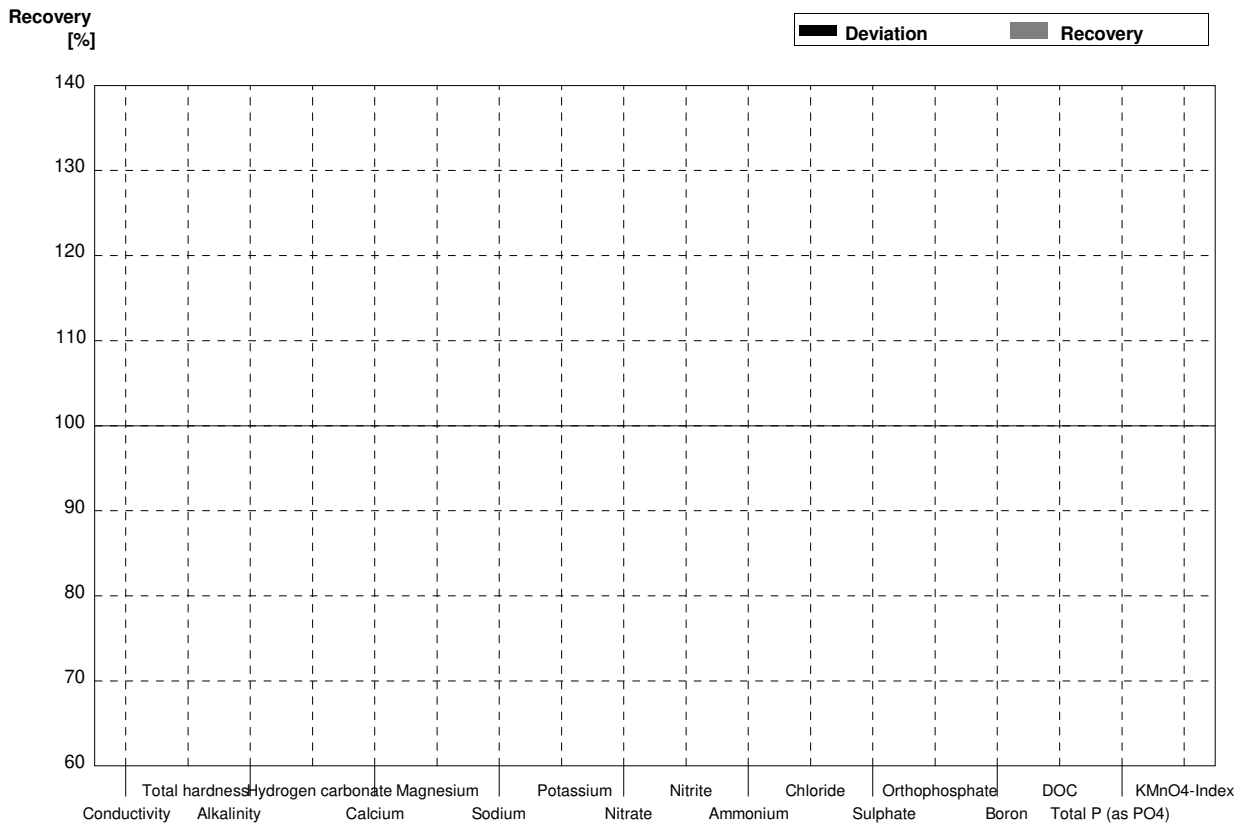
**Sample N169A**  
**Laboratory AD**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



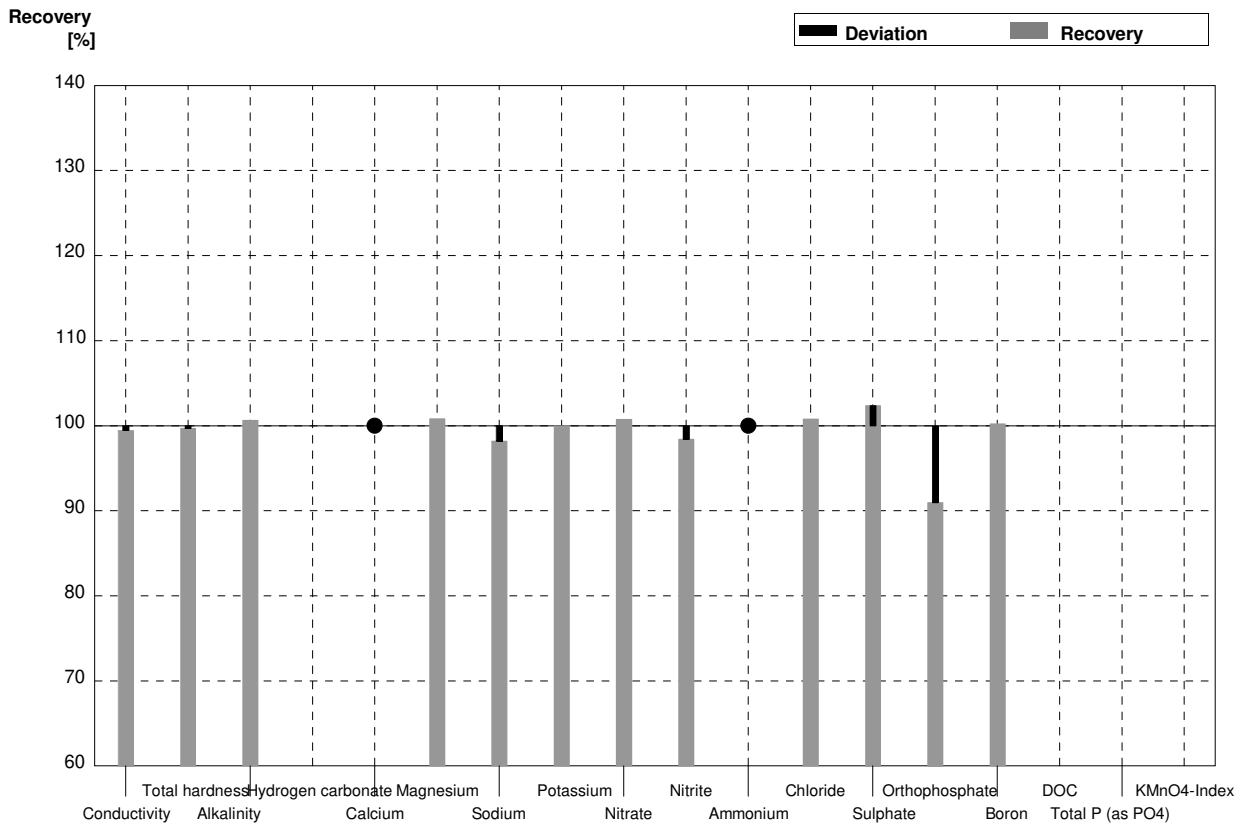
**Sample N169B**  
**Laboratory AD**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory AE**

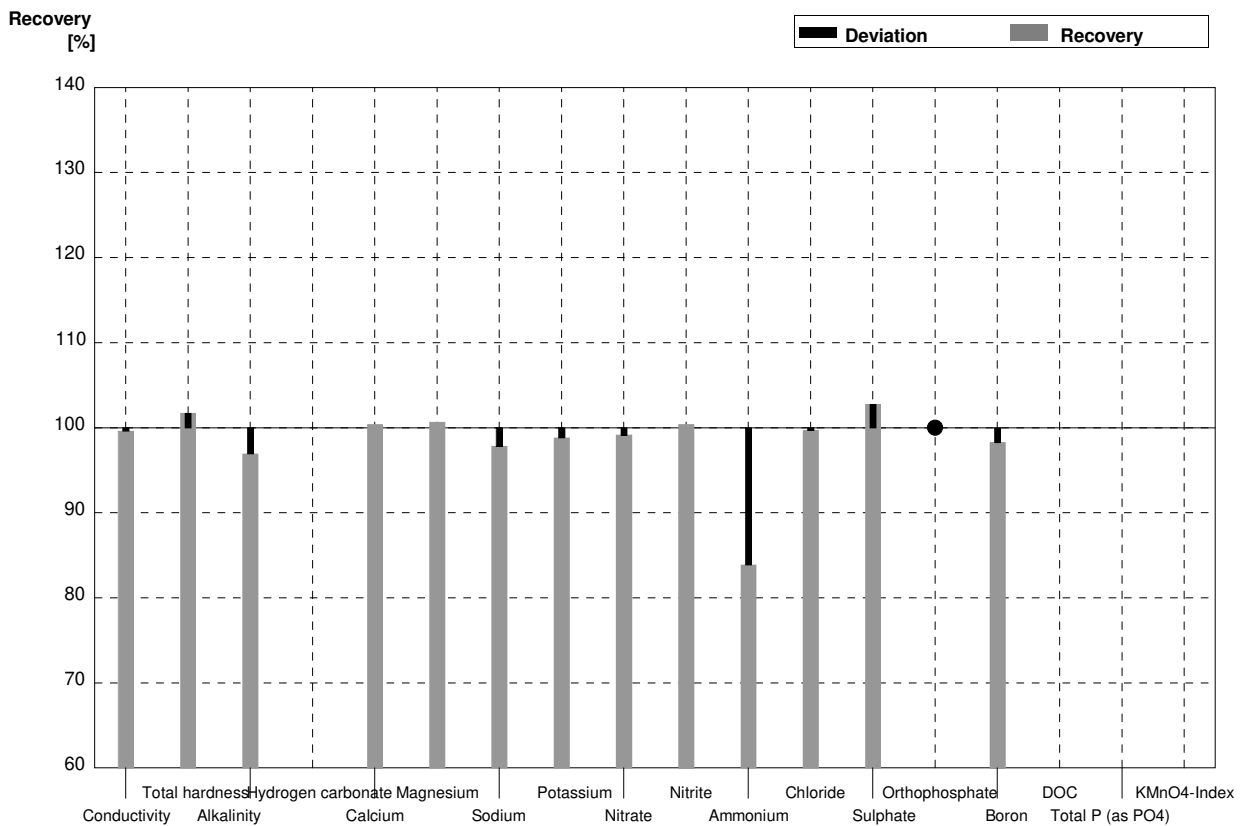
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	414	12	µS/cm	99%
Total hardness	1,103	0,019	1,10	0,06	mmol/l	100%
Alkalinity	1,371	0,013	1,38	0,07	mmol/l	101%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	<40		mg/l	•
Magnesium	8,40	0,13	8,47	0,9	mg/l	101%
Sodium	35,4	0,2	34,76	3,5	mg/l	98%
Potassium	2,05	0,02	2,05	0,2	mg/l	100%
Nitrate	17,0	0,5	17,13	0,9	mg/l	101%
Nitrite	0,0573	0,0002	0,0564	0,003	mg/l	98%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	65,53	3,3	mg/l	101%
Sulphate	15,5	0,3	15,87	1,6	mg/l	102%
Orthophosphate	0,0455	0,0032	0,0414	0,004	mg/l	91%
Boron	0,0402	0,0011	0,0403	0,008	mg/l	100%
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	





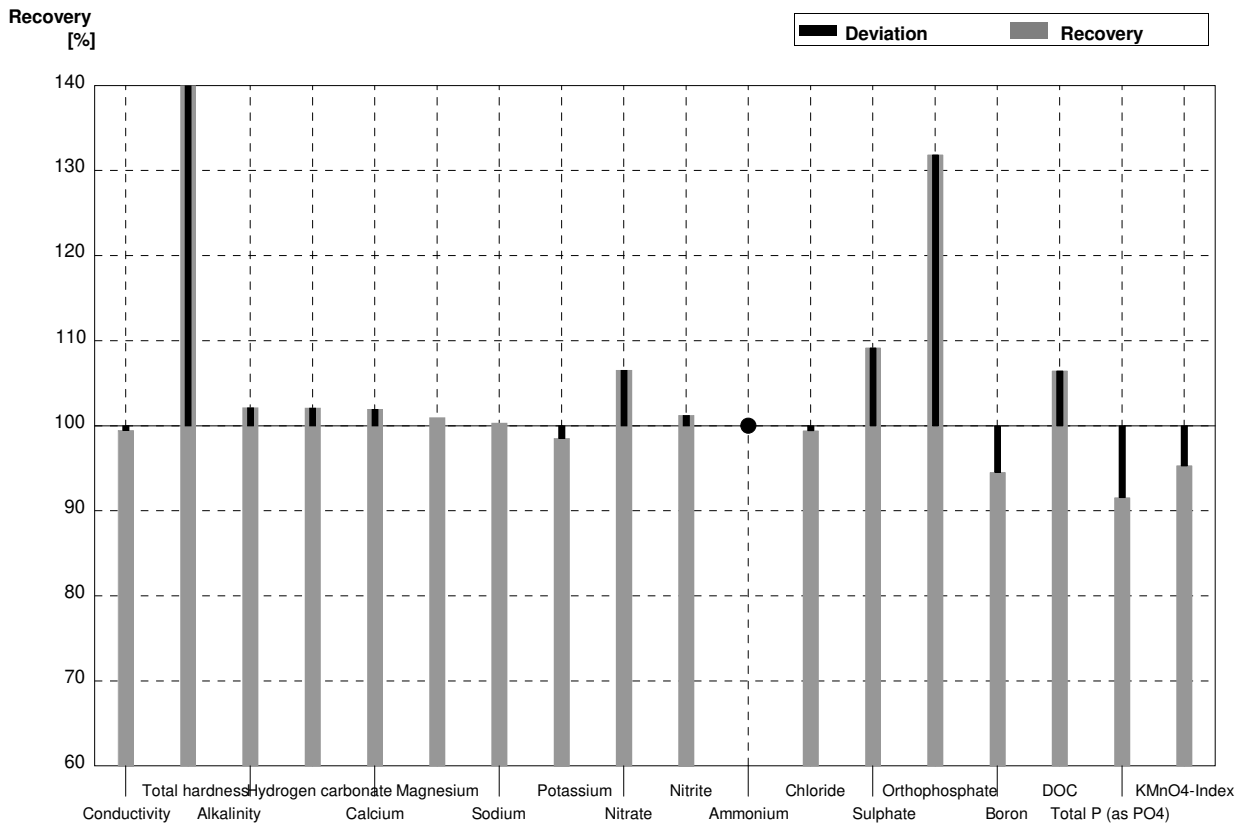
**Sample N169B**  
**Laboratory AE**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	503	15	µS/cm	100%
Total hardness	2,36	0,03	2,40	0,1	mmol/l	102%
Alkalinity	3,28	0,06	3,18	0,2	mmol/l	97%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	70,47	7	mg/l	100%
Magnesium	14,9	0,3	15,0	1,5	mg/l	101%
Sodium	9,2	0,6	9,00	0,9	mg/l	98%
Potassium	4,29	0,03	4,24	0,4	mg/l	99%
Nitrate	36,4	0,9	36,09	1,8	mg/l	99%
Nitrite	0,0798	0,0011	0,0801	0,4	mg/l	100%
Ammonium	0,085	0,004	0,0713	0,009	mg/l	84%
Chloride	10,0	0,3	9,97	0,5	mg/l	100%
Sulphate	51,4	1,0	52,82	5,3	mg/l	103%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,0694	0,0005	0,0682	0,01	mg/l	98%
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



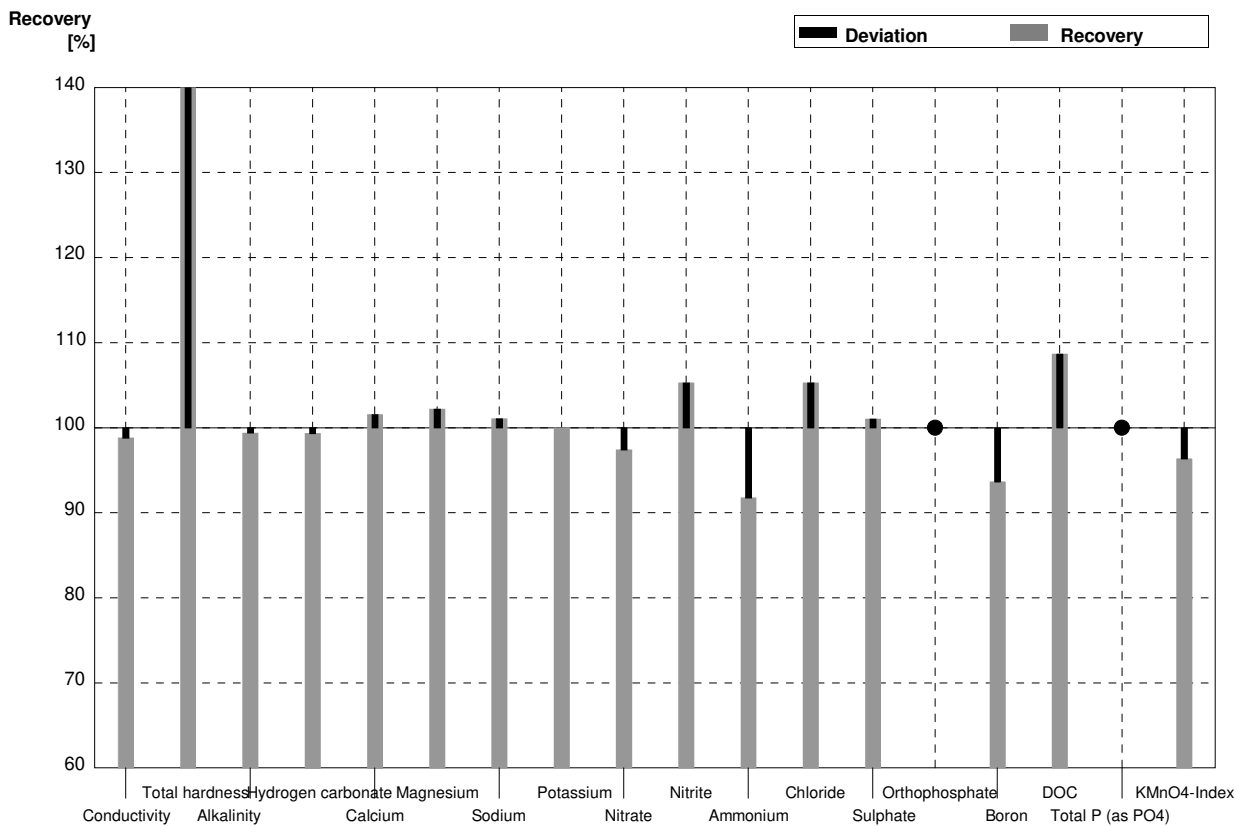
**Sample N169A**  
**Laboratory AF**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	414	20,7	µS/cm	99%
Total hardness	1,103	0,019	6,3		mmol/l	571%
Alkalinity	1,371	0,013	1,40	0,35	mmol/l	102%
Hydrogen carbonate	80,6	0,8	82,3		mg/l	102%
Calcium	30,3	0,7	30,89	3,09	mg/l	102%
Magnesium	8,40	0,13	8,48	0,85	mg/l	101%
Sodium	35,4	0,2	35,51	3,56	mg/l	100%
Potassium	2,05	0,02	2,02	0,20	mg/l	99%
Nitrate	17,0	0,5	18,11	1,81	mg/l	107%
Nitrite	0,0573	0,0002	0,058	0,006	mg/l	101%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	64,62	6,46	mg/l	99%
Sulphate	15,5	0,3	16,92	1,70	mg/l	109%
Orthophosphate	0,0455	0,0032	0,060	0,009	mg/l	132%
Boron	0,0402	0,0011	0,0380	0,0038	mg/l	95%
DOC	3,72	0,05	3,96	0,79	mg/l	106%
Total P (as PO4)	0,1376	0,0016	0,126	0,0189	mg/l	92%
KMnO4-Index	4,46	0,11	4,25	0,43	mg/l	95%



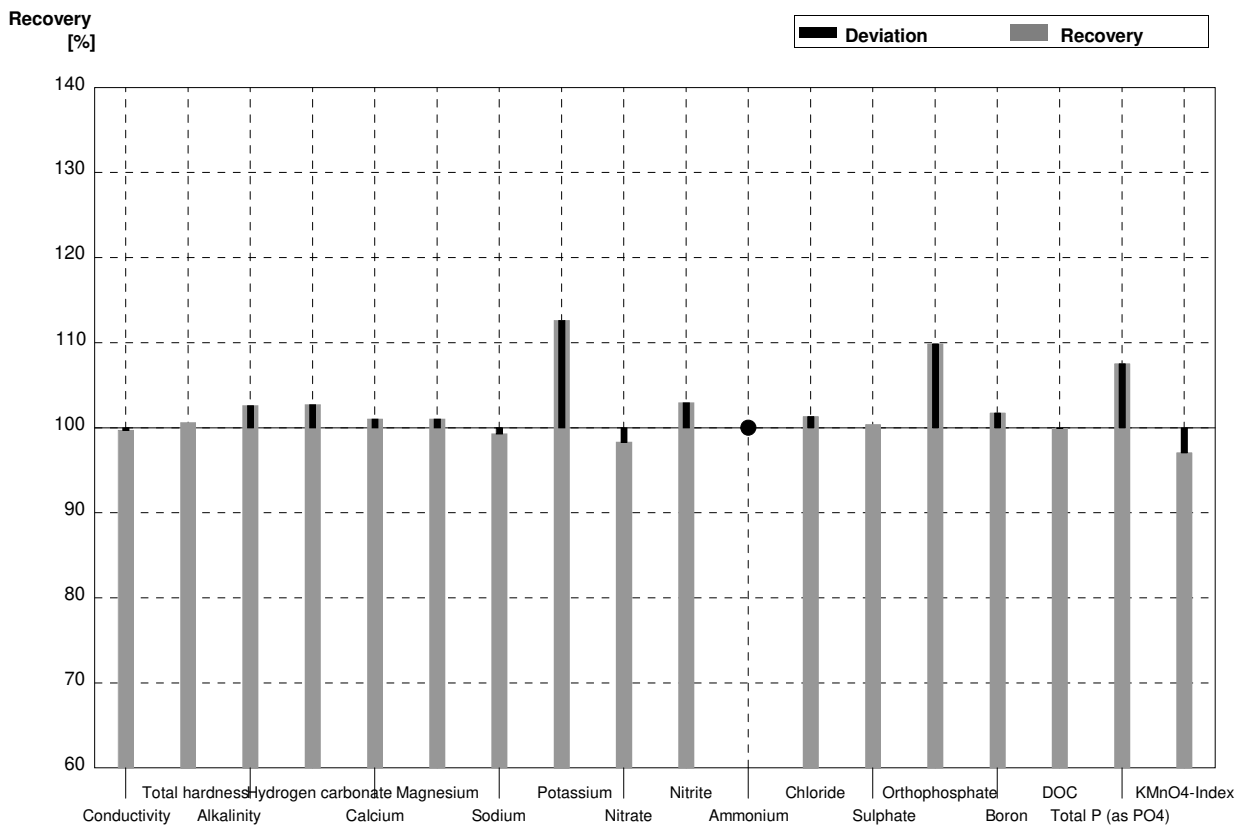
**Sample N169B**  
**Laboratory AF**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	499	25,0	µS/cm	99%
Total hardness	2,36	0,03	13,5		mmol/l	572%
Alkalinity	3,28	0,06	3,26	0,82	mmol/l	99%
Hydrogen carbonate	197	3	195,7		mg/l	99%
Calcium	70,2	1,2	71,29	7,13	mg/l	102%
Magnesium	14,9	0,3	15,23	1,52	mg/l	102%
Sodium	9,2	0,6	9,30	0,93	mg/l	101%
Potassium	4,29	0,03	4,29	0,43	mg/l	100%
Nitrate	36,4	0,9	35,46	3,55	mg/l	97%
Nitrite	0,0798	0,0011	0,084	0,008	mg/l	105%
Ammonium	0,085	0,004	0,078	0,020	mg/l	92%
Chloride	10,0	0,3	10,53	1,05	mg/l	105%
Sulphate	51,4	1,0	51,94	5,19	mg/l	101%
Orthophosphate	<0,009		<0,02		mg/l	•
Boron	0,0694	0,0005	0,065	0,007	mg/l	94%
DOC	6,35	0,05	6,90	1,38	mg/l	109%
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,58	0,12	3,45	0,35	mg/l	96%



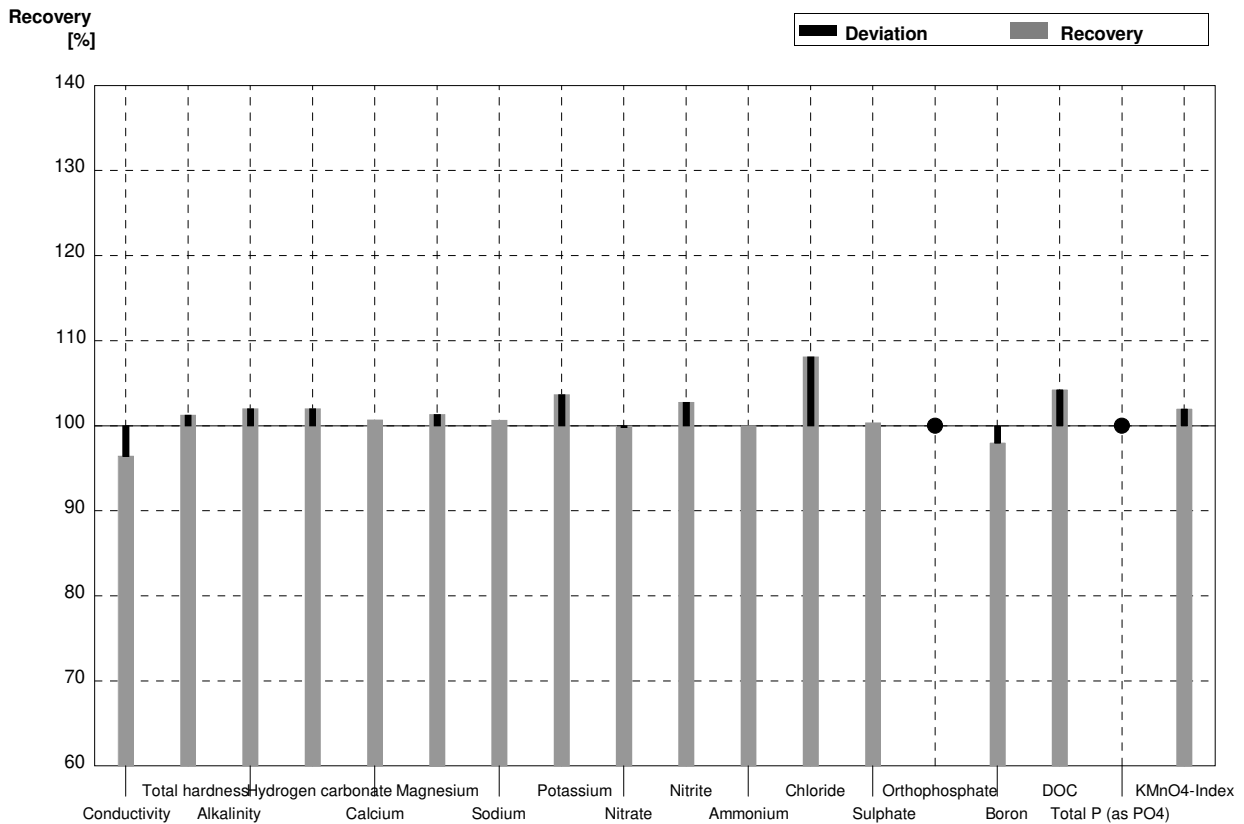
**Sample N169A**  
**Laboratory AG**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	23,1	µS/cm	100%
Total hardness	1,103	0,019	1,11	0,11	mmol/l	101%
Alkalinity	1,371	0,013	1,407	0,0704	mmol/l	103%
Hydrogen carbonate	80,6	0,8	82,8	4,14	mg/l	103%
Calcium	30,3	0,7	30,61	3	mg/l	101%
Magnesium	8,40	0,13	8,486	0,85	mg/l	101%
Sodium	35,4	0,2	35,15	3,5	mg/l	99%
Potassium	2,05	0,02	2,309	0,23	mg/l	113%
Nitrate	17,0	0,5	16,712	2,173	mg/l	98%
Nitrite	0,0573	0,0002	0,059	0,006	mg/l	103%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	65,872	4,61	mg/l	101%
Sulphate	15,5	0,3	15,560	1,556	mg/l	100%
Orthophosphate	0,0455	0,0032	0,0500	0,005	mg/l	110%
Boron	0,0402	0,0011	0,0409	0,0041	mg/l	102%
DOC	3,72	0,05	3,718	0,777	mg/l	100%
Total P (as PO4)	0,1376	0,0016	0,148	0,015	mg/l	108%
KMnO4-Index	4,46	0,11	4,33	0,866	mg/l	97%



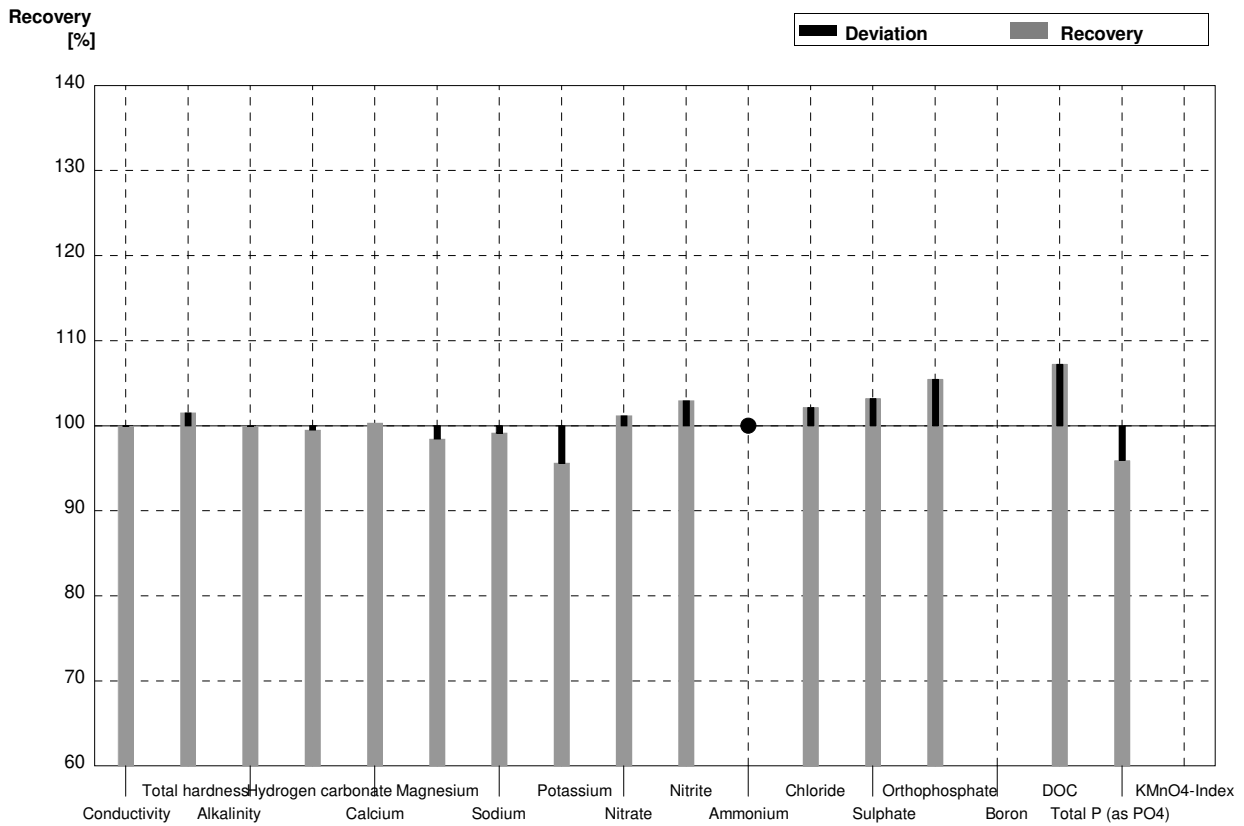
**Sample N169B**  
**Laboratory AG**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	487	27,1	µS/cm	96%
Total hardness	2,36	0,03	2,39	0,24	mmol/l	101%
Alkalinity	3,28	0,06	3,346	0,167	mmol/l	102%
Hydrogen carbonate	197	3	201	10,05	mg/l	102%
Calcium	70,2	1,2	70,7	7,1	mg/l	101%
Magnesium	14,9	0,3	15,1	1,51	mg/l	101%
Sodium	9,2	0,6	9,26	0,93	mg/l	101%
Potassium	4,29	0,03	4,448	0,45	mg/l	104%
Nitrate	36,4	0,9	36,336	4,724	mg/l	100%
Nitrite	0,0798	0,0011	0,082	0,008	mg/l	103%
Ammonium	0,085	0,004	0,085	0,009	mg/l	100%
Chloride	10,0	0,3	10,812	0,757	mg/l	108%
Sulphate	51,4	1,0	51,579	5,158	mg/l	100%
Orthophosphate	<0,009		<0,010		mg/l	•
Boron	0,0694	0,0005	0,0680	0,007	mg/l	98%
DOC	6,35	0,05	6,620	1,384	mg/l	104%
Total P (as PO4)	<0,009		<0,01		mg/l	•
KMnO4-Index	3,58	0,12	3,65	0,73	mg/l	102%



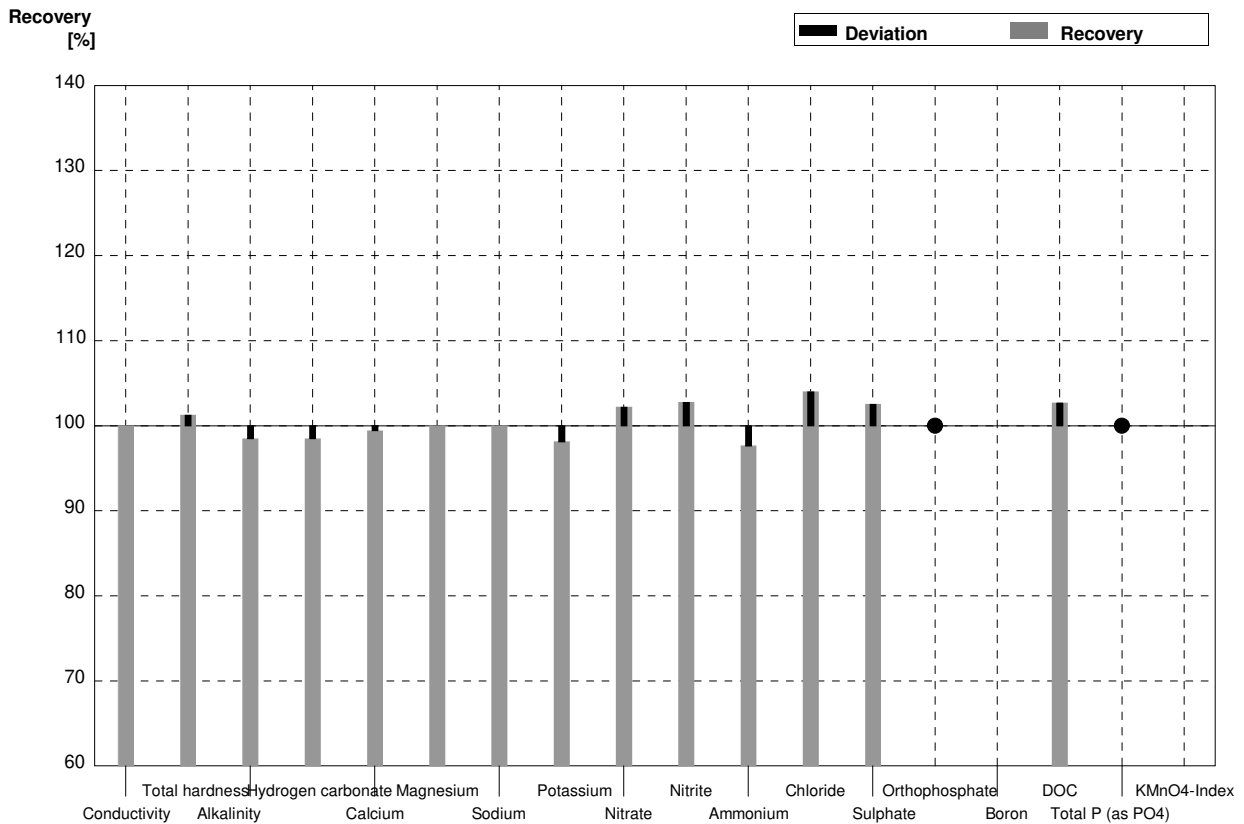
**Sample N169A**  
**Laboratory AH**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	17	µS/cm	100%
Total hardness	1,103	0,019	1,12	0,1	mmol/l	102%
Alkalinity	1,371	0,013	1,37	0,1	mmol/l	100%
Hydrogen carbonate	80,6	0,8	80,2	4	mg/l	100%
Calcium	30,3	0,7	30,4	3	mg/l	100%
Magnesium	8,40	0,13	8,27	1,0	mg/l	98%
Sodium	35,4	0,2	35,1	6	mg/l	99%
Potassium	2,05	0,02	1,96	0,3	mg/l	96%
Nitrate	17,0	0,5	17,2	1,3	mg/l	101%
Nitrite	0,0573	0,0002	0,059	0,005	mg/l	103%
Ammonium	<0,01		<0,013		mg/l	•
Chloride	65,0	1,2	66,4	4	mg/l	102%
Sulphate	15,5	0,3	16,0	1	mg/l	103%
Orthophosphate	0,0455	0,0032	0,0480	0,006	mg/l	105%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,99	0,6	mg/l	107%
Total P (as PO4)	0,1376	0,0016	0,132	0,02	mg/l	96%
KMnO4-Index	4,46	0,11			mg/l	



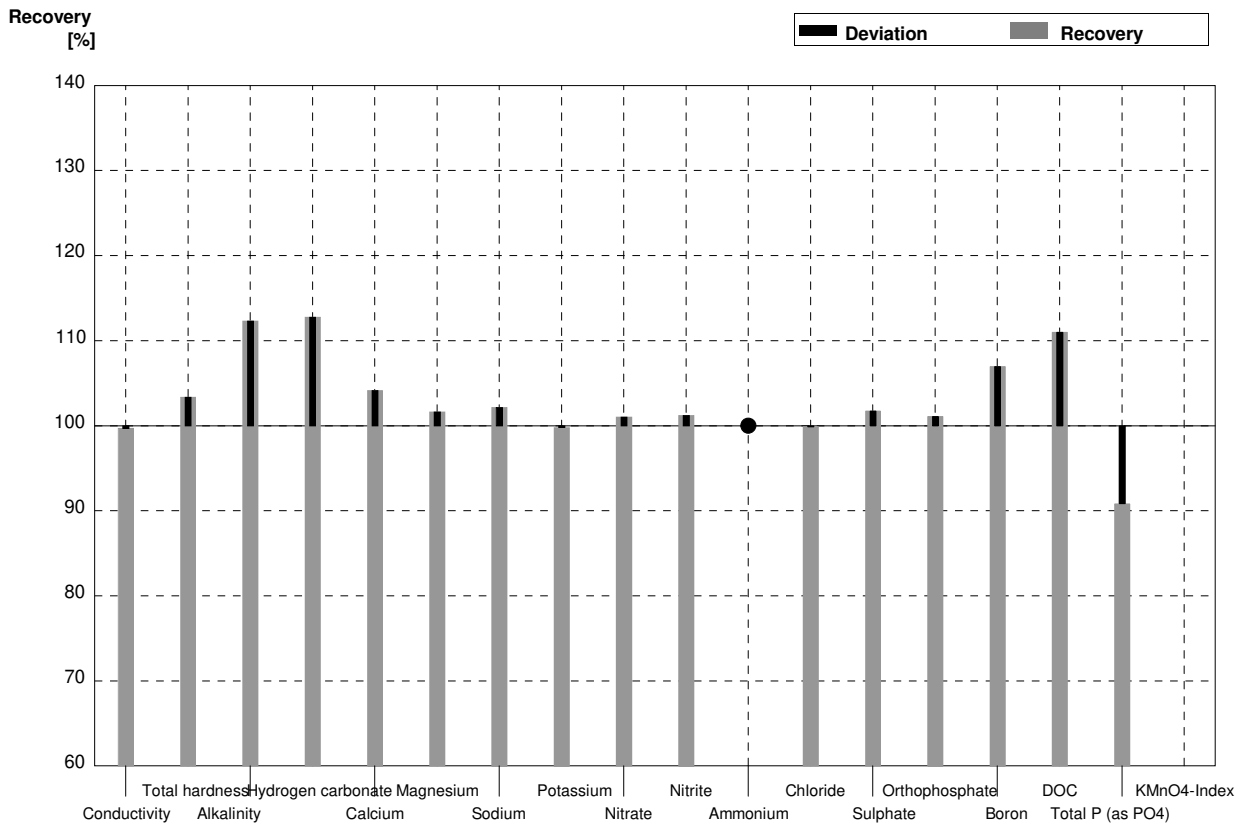
**Sample N169B**  
**Laboratory AH**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	505	21	µS/cm	100%
Total hardness	2,36	0,03	2,39	0,1	mmol/l	101%
Alkalinity	3,28	0,06	3,23	0,2	mmol/l	98%
Hydrogen carbonate	197	3	194	8	mg/l	98%
Calcium	70,2	1,2	69,8	6	mg/l	99%
Magnesium	14,9	0,3	14,9	1,8	mg/l	100%
Sodium	9,2	0,6	9,20	1,4	mg/l	100%
Potassium	4,29	0,03	4,21	0,6	mg/l	98%
Nitrate	36,4	0,9	37,2	3	mg/l	102%
Nitrite	0,0798	0,0011	0,082	0,006	mg/l	103%
Ammonium	0,085	0,004	0,083	0,008	mg/l	98%
Chloride	10,0	0,3	10,4	0,7	mg/l	104%
Sulphate	51,4	1,0	52,7	4	mg/l	103%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,52	1,0	mg/l	103%
Total P (as PO4)	<0,009		<0,013		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory AI**

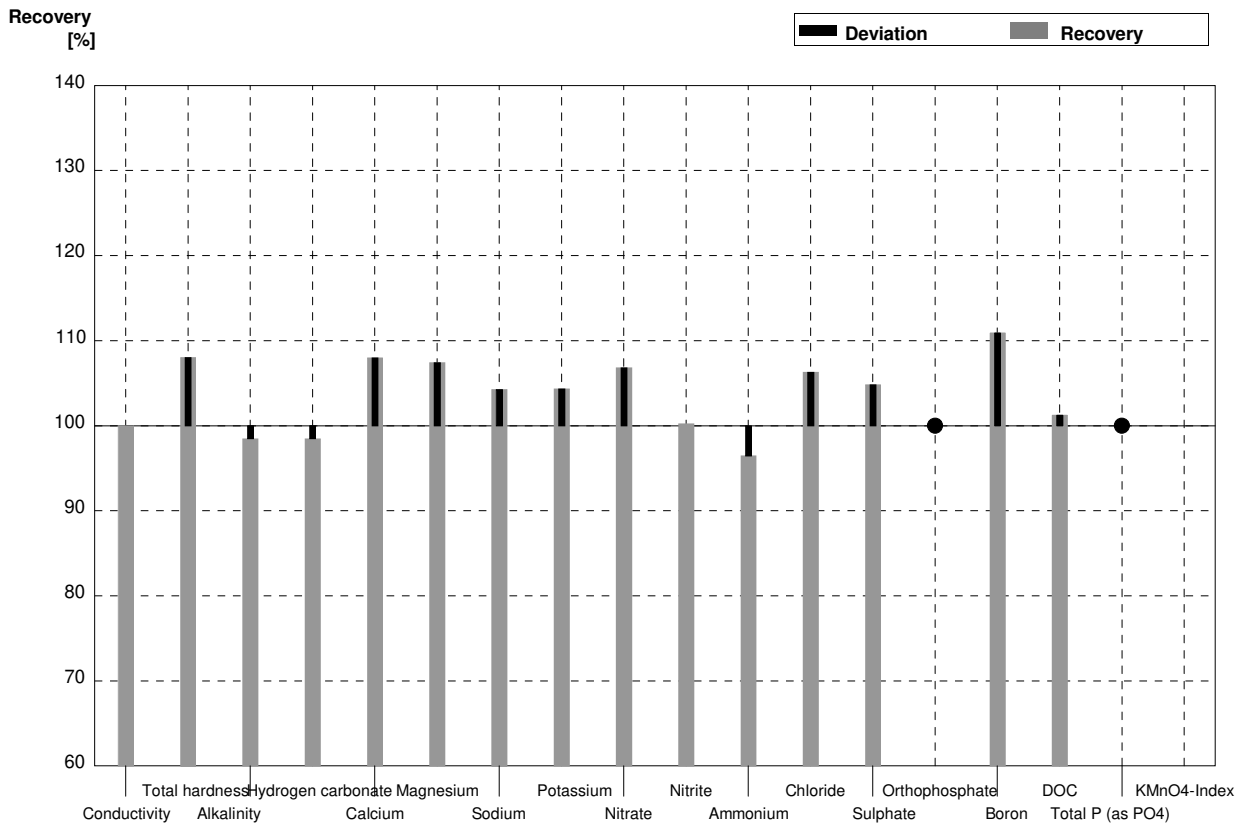
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	4,51	µS/cm	100%
Total hardness	1,103	0,019	1,14		mmol/l	103%
Alkalinity	1,371	0,013	1,54	0,15	mmol/l	112%
Hydrogen carbonate	80,6	0,8	90,90		mg/l	113%
Calcium	30,3	0,7	31,565	3,2	mg/l	104%
Magnesium	8,40	0,13	8,539	0,85	mg/l	102%
Sodium	35,4	0,2	36,167	3,6	mg/l	102%
Potassium	2,05	0,02	2,046	0,20	mg/l	100%
Nitrate	17,0	0,5	17,176	1,71	mg/l	101%
Nitrite	0,0573	0,0002	0,058	0,006	mg/l	101%
Ammonium	<0,01		<0,009		mg/l	•
Chloride	65,0	1,2	64,939	6,5	mg/l	100%
Sulphate	15,5	0,3	15,770	1,58	mg/l	102%
Orthophosphate	0,0455	0,0032	0,0460	0,005	mg/l	101%
Boron	0,0402	0,0011	0,0430	0,004	mg/l	107%
DOC	3,72	0,05	4,13	0,4	mg/l	111%
Total P (as PO4)	0,1376	0,0016	0,125	0,013	mg/l	91%
KMnO4-Index	4,46	0,11			mg/l	





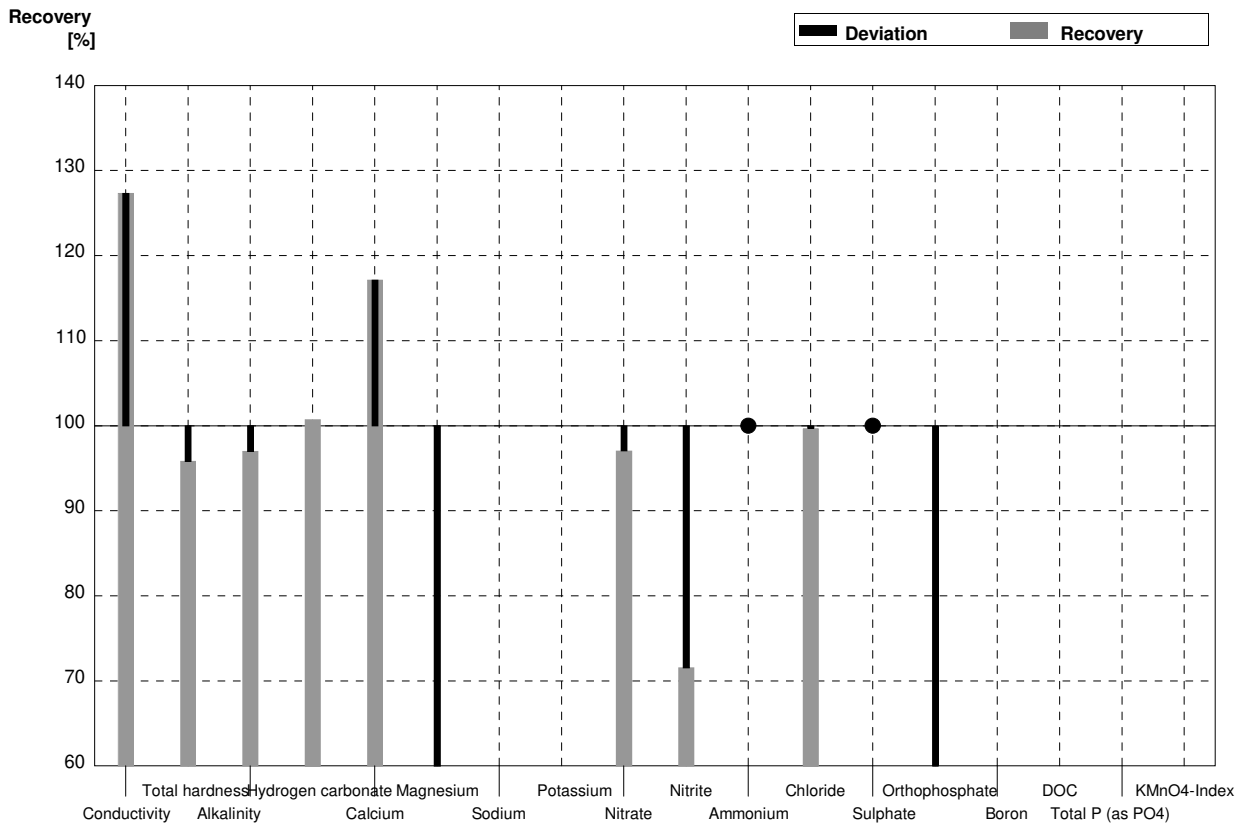
**Sample N169B**  
**Laboratory AI**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	505	4,51	µS/cm	100%
Total hardness	2,36	0,03	2,550		mmol/l	108%
Alkalinity	3,28	0,06	3,23	0,32	mmol/l	98%
Hydrogen carbonate	197	3	194,01		mg/l	98%
Calcium	70,2	1,2	75,821	7,6	mg/l	108%
Magnesium	14,9	0,3	16,005	1,60	mg/l	107%
Sodium	9,2	0,6	9,594	0,96	mg/l	104%
Potassium	4,29	0,03	4,477	0,48	mg/l	104%
Nitrate	36,4	0,9	38,885	3,9	mg/l	107%
Nitrite	0,0798	0,0011	0,080	0,008	mg/l	100%
Ammonium	0,085	0,004	0,082	0,008	mg/l	96%
Chloride	10,0	0,3	10,632	1,06	mg/l	106%
Sulphate	51,4	1,0	53,880	5,4	mg/l	105%
Orthophosphate	<0,009		<0,011		mg/l	•
Boron	0,0694	0,0005	0,0770	0,008	mg/l	111%
DOC	6,35	0,05	6,43	0,64	mg/l	101%
Total P (as PO4)	<0,009		<0,0010		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



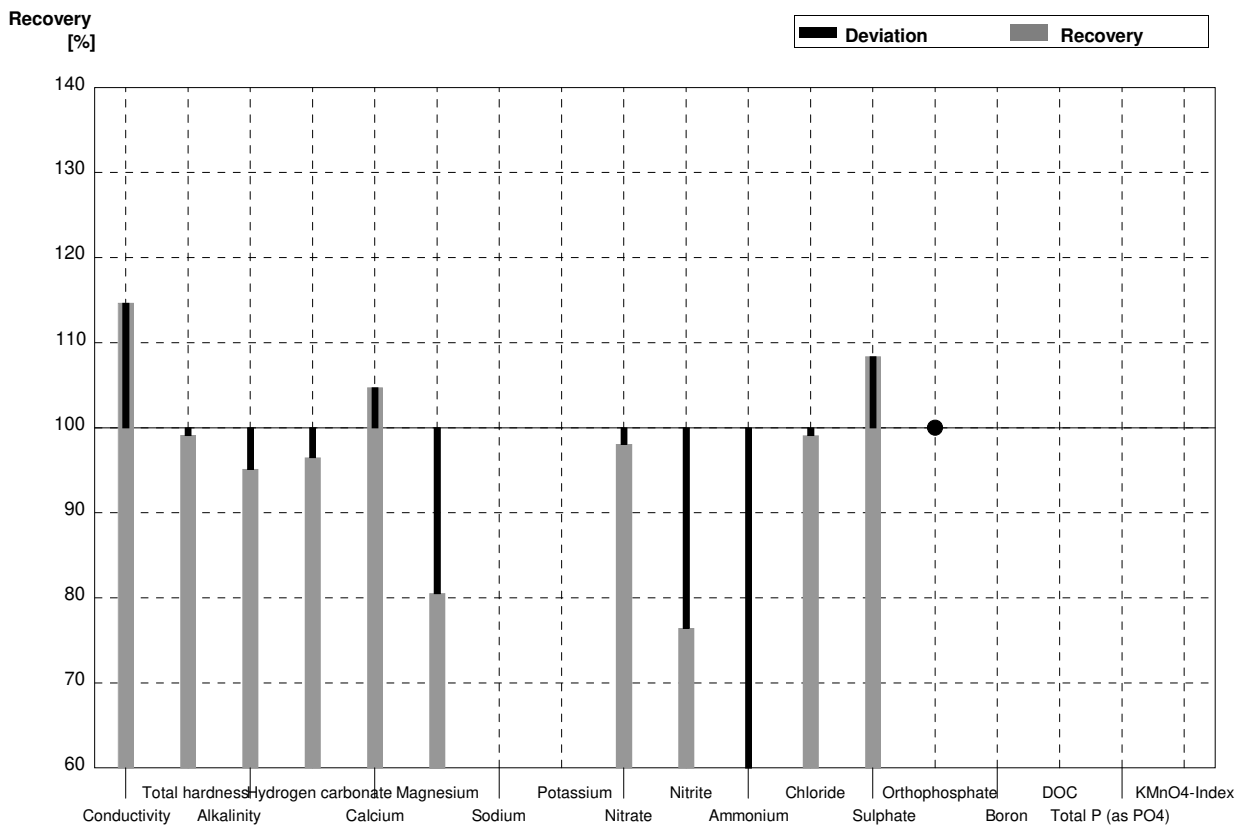
**Sample N169A**  
**Laboratory AJ**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	530		µS/cm	127%
Total hardness	1,103	0,019	1,057		mmol/l	96%
Alkalinity	1,371	0,013	1,33		mmol/l	97%
Hydrogen carbonate	80,6	0,8	81,2		mg/l	101%
Calcium	30,3	0,7	35,5		mg/l	117%
Magnesium	8,40	0,13	4,09		mg/l	49%
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	16,5		mg/l	97%
Nitrite	0,0573	0,0002	0,0410		mg/l	72%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	65,0	1,2	64,8		mg/l	100%
Sulphate	15,5	0,3	<40		mg/l	•
Orthophosphate	0,0455	0,0032	0,0160		mg/l	35%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



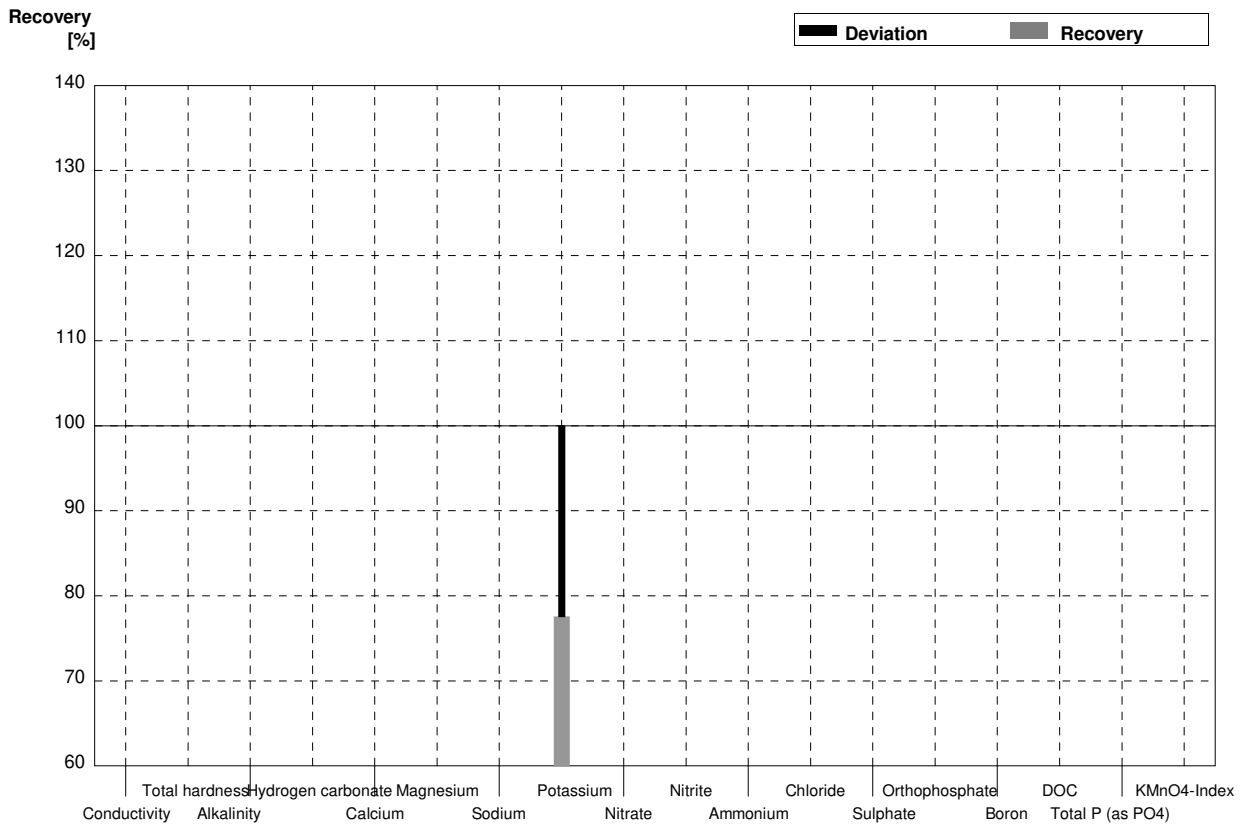
**Sample N169B**  
**Laboratory AJ**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	579		µS/cm	115%
Total hardness	2,36	0,03	2,339		mmol/l	99%
Alkalinity	3,28	0,06	3,12		mmol/l	95%
Hydrogen carbonate	197	3	190,1		mg/l	96%
Calcium	70,2	1,2	73,5		mg/l	105%
Magnesium	14,9	0,3	12,0		mg/l	81%
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	35,7		mg/l	98%
Nitrite	0,0798	0,0011	0,061		mg/l	76%
Ammonium	0,085	0,004	0,0390		mg/l	46%
Chloride	10,0	0,3	9,91		mg/l	99%
Sulphate	51,4	1,0	55,7		mg/l	108%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



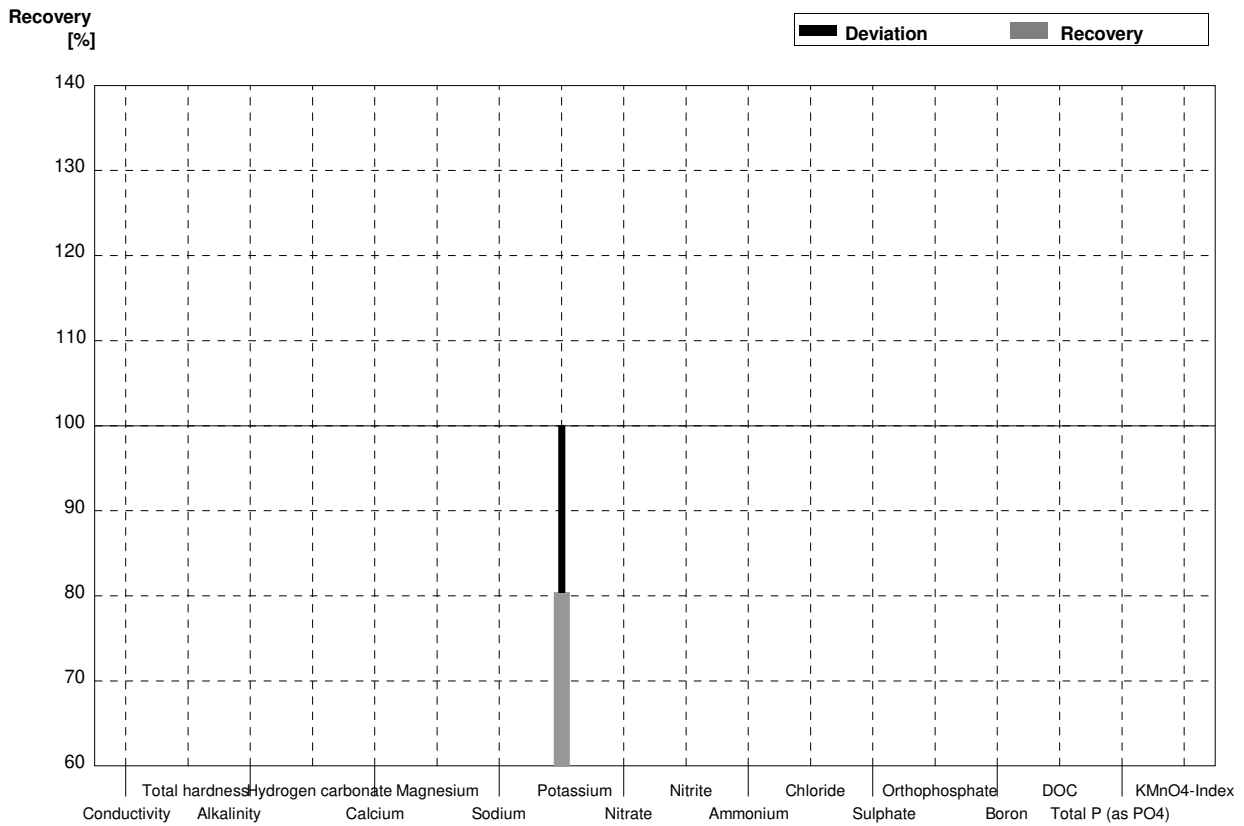
**Sample N169A**  
**Laboratory AK**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02	1,59	0,159	mg/l	78%
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



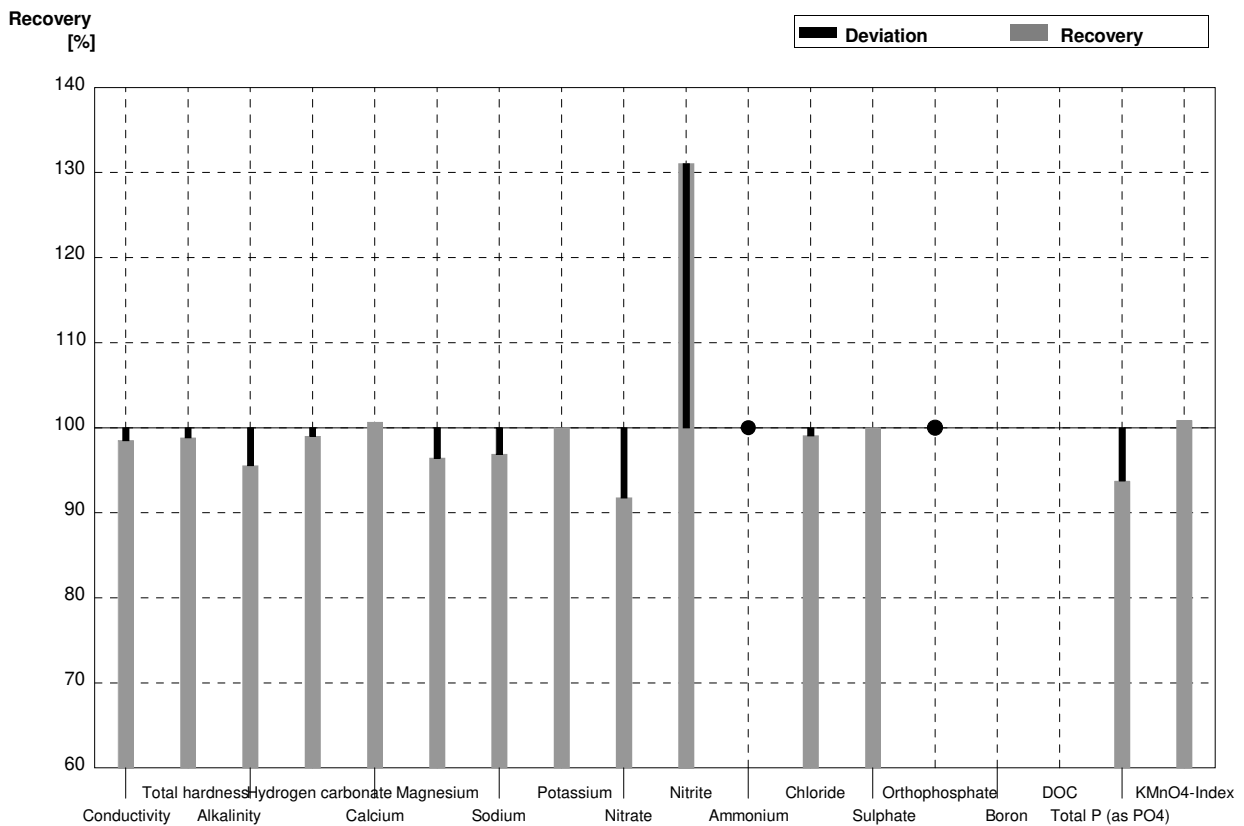
**Sample N169B**  
**Laboratory AK**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03	3,45	0,345	mg/l	80%
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



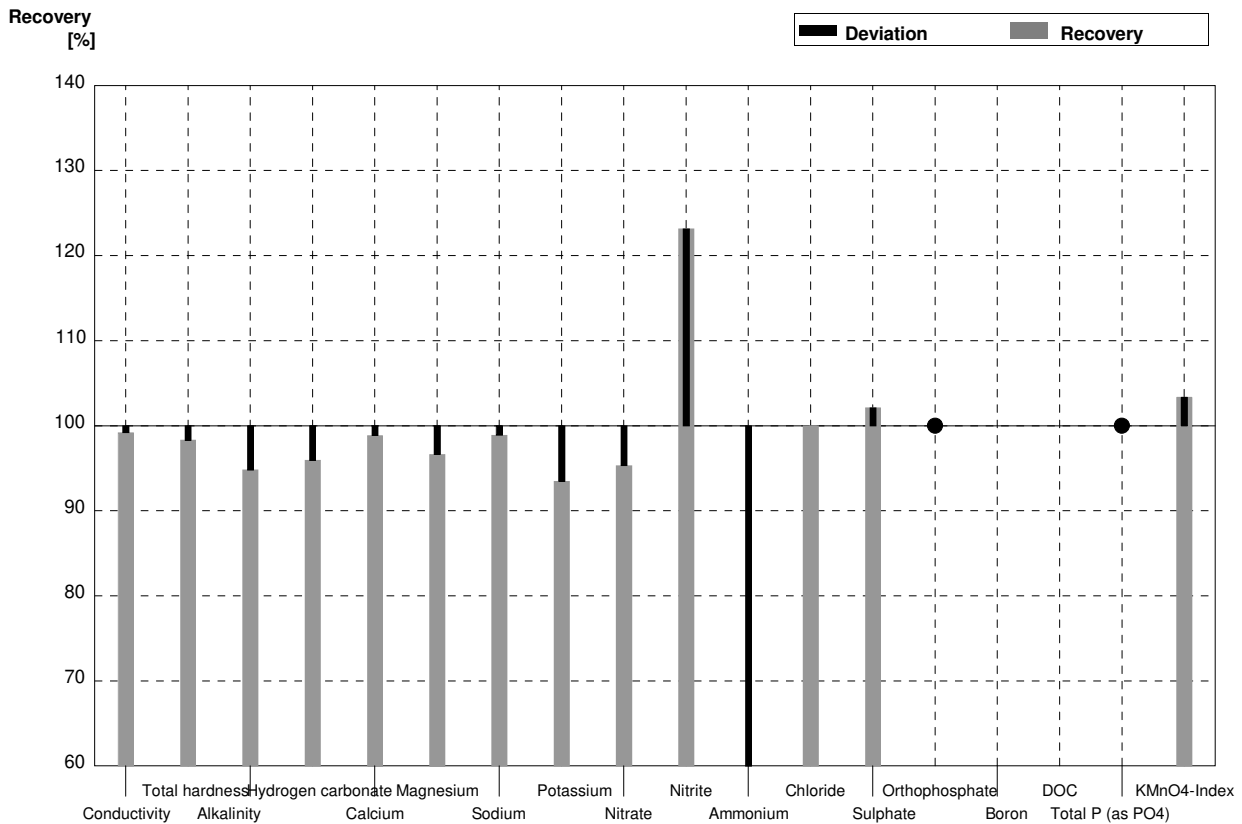
**Sample N169A**  
**Laboratory AL**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	410	12	µS/cm	99%
Total hardness	1,103	0,019	1,09	0,11	mmol/l	99%
Alkalinity	1,371	0,013	1,31	0,08	mmol/l	96%
Hydrogen carbonate	80,6	0,8	79,8	4,8	mg/l	99%
Calcium	30,3	0,7	30,5	4,3	mg/l	101%
Magnesium	8,40	0,13	8,10	1,22	mg/l	96%
Sodium	35,4	0,2	34,3	4,1	mg/l	97%
Potassium	2,05	0,02	2,05	0,31	mg/l	100%
Nitrate	17,0	0,5	15,6	1,6	mg/l	92%
Nitrite	0,0573	0,0002	0,0751	0,0090	mg/l	131%
Ammonium	<0,01		0,0110	0,0045	mg/l	•
Chloride	65,0	1,2	64,4	6,4	mg/l	99%
Sulphate	15,5	0,3	15,5	2,0	mg/l	100%
Orthophosphate	0,0455	0,0032	<0,06		mg/l	•
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,129	0,017	mg/l	94%
KMnO4-Index	4,46	0,11	4,50	0,99	mg/l	101%



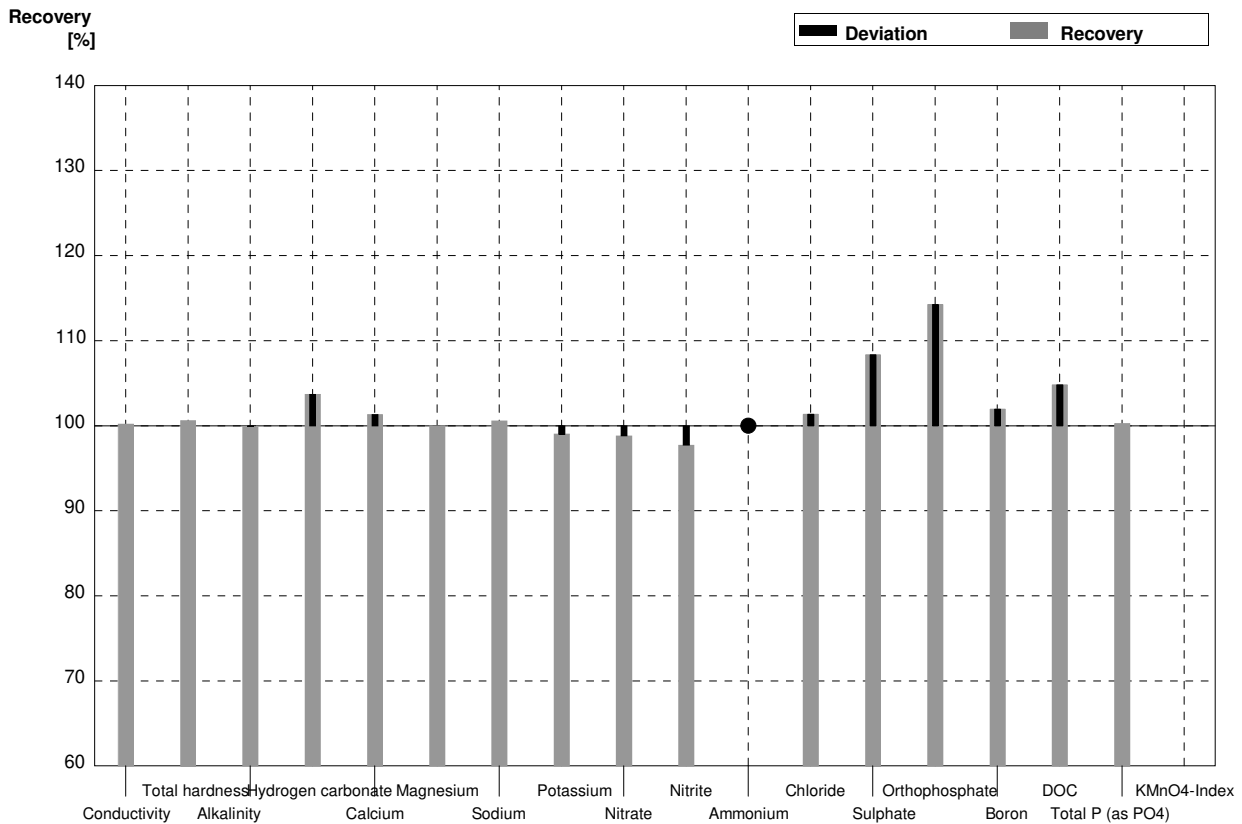
**Sample N169B**  
**Laboratory AL**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	501	15	µS/cm	99%
Total hardness	2,36	0,03	2,32	0,23	mmol/l	98%
Alkalinity	3,28	0,06	3,11	0,19	mmol/l	95%
Hydrogen carbonate	197	3	189	11	mg/l	96%
Calcium	70,2	1,2	69,4	9,7	mg/l	99%
Magnesium	14,9	0,3	14,4	2,2	mg/l	97%
Sodium	9,2	0,6	9,10	1,09	mg/l	99%
Potassium	4,29	0,03	4,01	0,60	mg/l	93%
Nitrate	36,4	0,9	34,7	3,5	mg/l	95%
Nitrite	0,0798	0,0011	0,0983	0,0118	mg/l	123%
Ammonium	0,085	0,004	0,0165	0,0068	mg/l	19%
Chloride	10,0	0,3	10,0	1,0	mg/l	100%
Sulphate	51,4	1,0	52,5	6,8	mg/l	102%
Orthophosphate	<0,009		<0,06		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		<0,02		mg/l	•
KMnO4-Index	3,58	0,12	3,70	0,81	mg/l	103%



**Sample N169A**  
**Laboratory AM**

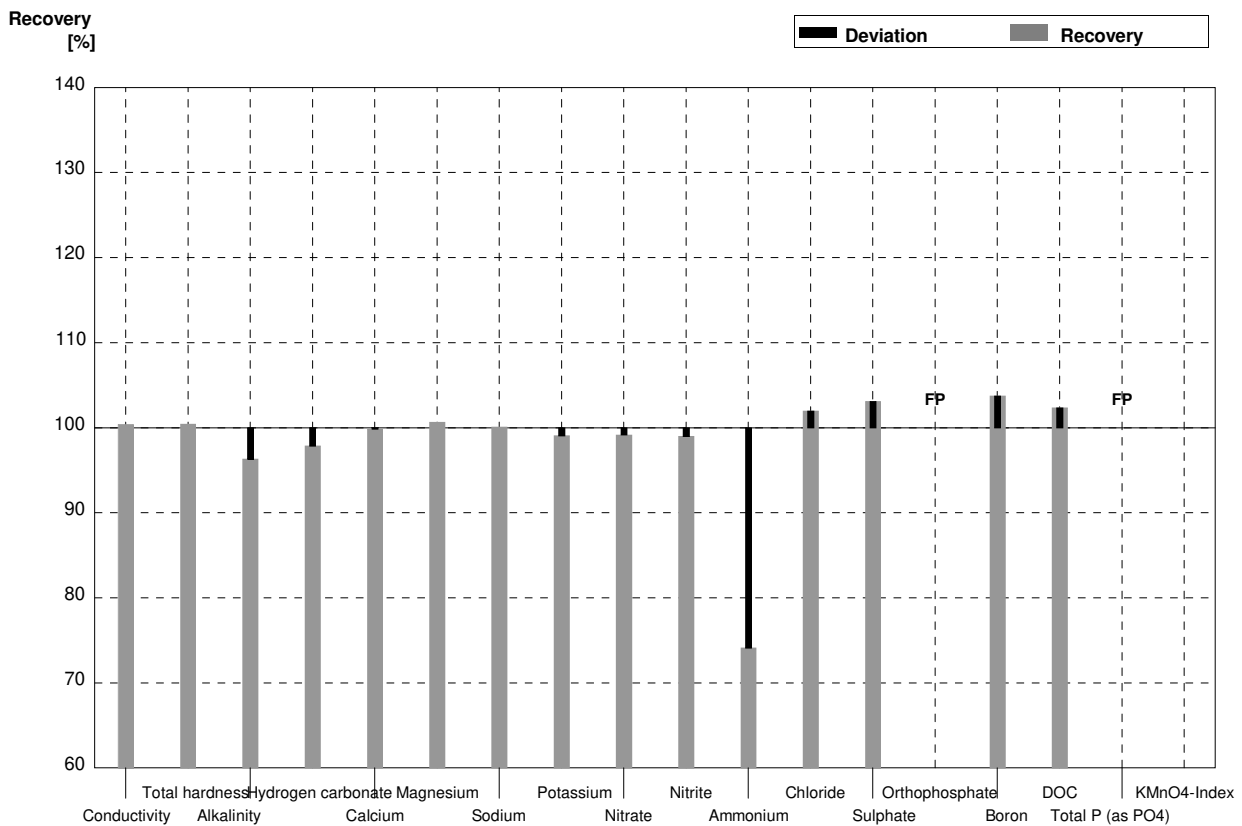
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	417	41,7	µS/cm	100%
Total hardness	1,103	0,019	1,11		mmol/l	101%
Alkalinity	1,371	0,013	1,37	0,206	mmol/l	100%
Hydrogen carbonate	80,6	0,8	83,6	12,5	mg/l	104%
Calcium	30,3	0,7	30,7	3,07	mg/l	101%
Magnesium	8,40	0,13	8,4	0,84	mg/l	100%
Sodium	35,4	0,2	35,6	3,56	mg/l	101%
Potassium	2,05	0,02	2,03	0,203	mg/l	99%
Nitrate	17,0	0,5	16,8	0,84	mg/l	99%
Nitrite	0,0573	0,0002	0,056	0,0084	mg/l	98%
Ammonium	<0,01		<0,0052		mg/l	•
Chloride	65,0	1,2	65,9	3,29	mg/l	101%
Sulphate	15,5	0,3	16,8	0,838	mg/l	108%
Orthophosphate	0,0455	0,0032	0,052	0,0078	mg/l	114%
Boron	0,0402	0,0011	0,0410	0,00490	mg/l	102%
DOC	3,72	0,05	3,90	0,310	mg/l	105%
Total P (as PO4)	0,1376	0,0016	0,138	0,0208	mg/l	100%
KMnO4-Index	4,46	0,11			mg/l	





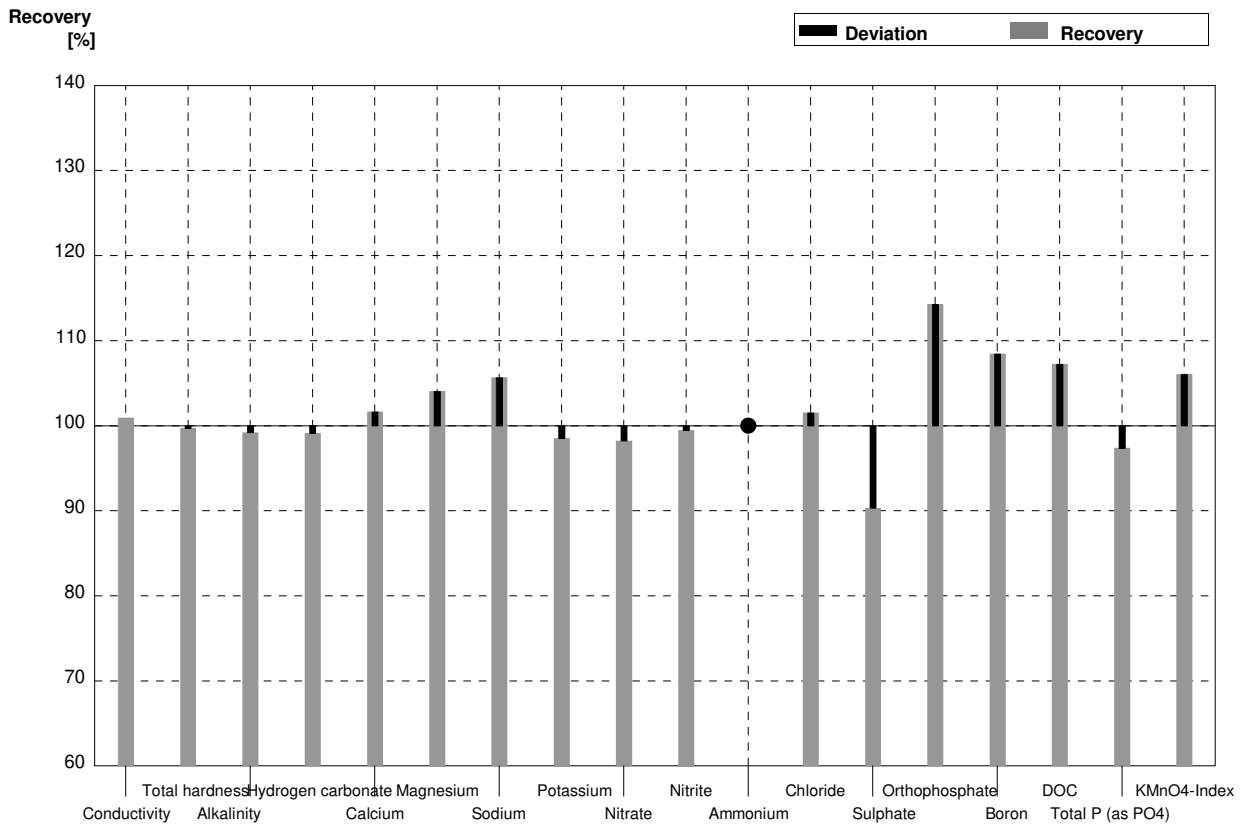
**Sample N169B**  
**Laboratory AM**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	507	50,7	µS/cm	100%
Total hardness	2,36	0,03	2,37		mmol/l	100%
Alkalinity	3,28	0,06	3,16	0,474	mmol/l	96%
Hydrogen carbonate	197	3	192,8	28,9	mg/l	98%
Calcium	70,2	1,2	70,1	7,01	mg/l	100%
Magnesium	14,9	0,3	15,0	1,50	mg/l	101%
Sodium	9,2	0,6	9,21	0,921	mg/l	100%
Potassium	4,29	0,03	4,25	0,425	mg/l	99%
Nitrate	36,4	0,9	36,1	1,80	mg/l	99%
Nitrite	0,0798	0,0011	0,079	0,0118	mg/l	99%
Ammonium	0,085	0,004	0,063	0,0063	mg/l	74%
Chloride	10,0	0,3	10,2	0,511	mg/l	102%
Sulphate	51,4	1,0	53,0	2,65	mg/l	103%
Orthophosphate	<0,009		0,0120	0,00180	mg/l	FP
Boron	0,0694	0,0005	0,072	0,0086	mg/l	104%
DOC	6,35	0,05	6,5	0,52	mg/l	102%
Total P (as PO4)	<0,009		0,0215	0,00337	mg/l	FP
KMnO4-Index	3,58	0,12			mg/l	



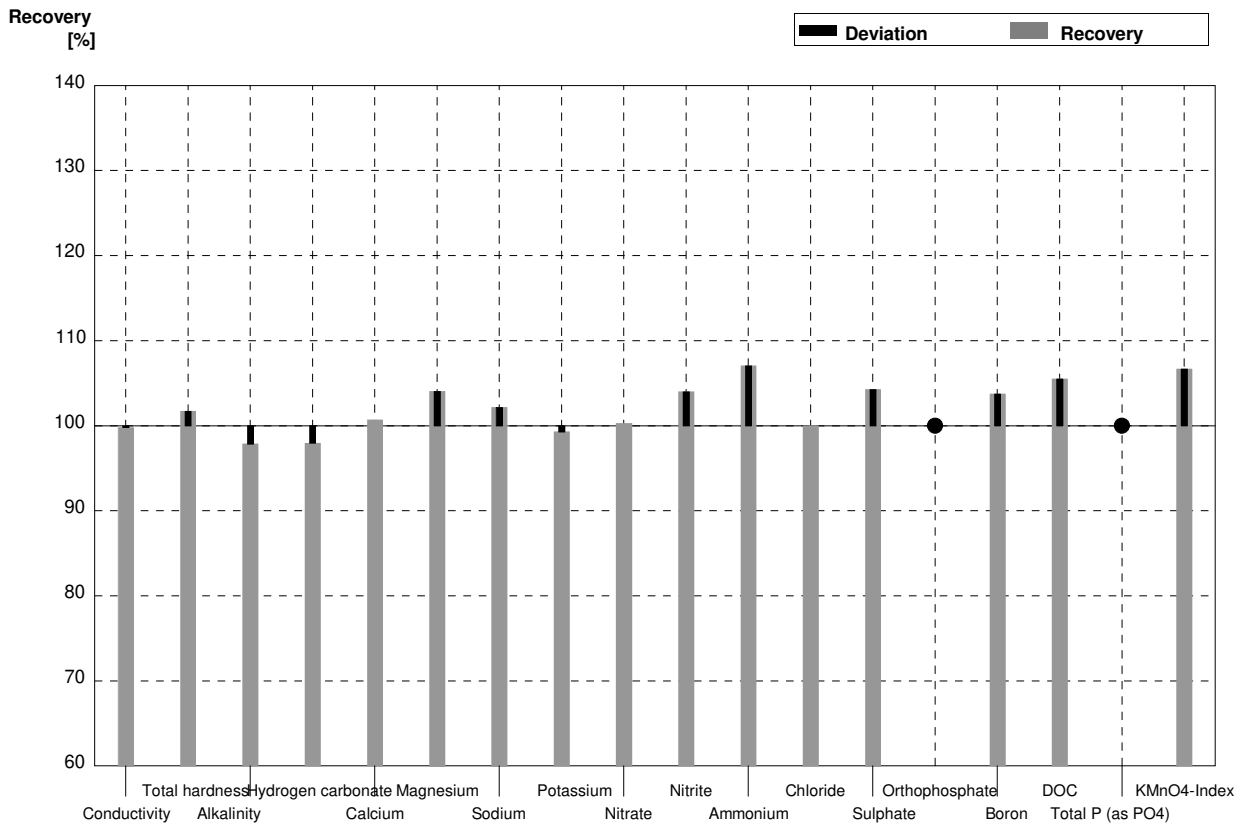
**Sample N169A**  
**Laboratory AN**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	420	11	µS/cm	101%
Total hardness	1,103	0,019	1,10	0,11	mmol/l	100%
Alkalinity	1,371	0,013	1,36	0,06	mmol/l	99%
Hydrogen carbonate	80,6	0,8	79,9	3,6	mg/l	99%
Calcium	30,3	0,7	30,8	2,8	mg/l	102%
Magnesium	8,40	0,13	8,74	0,69	mg/l	104%
Sodium	35,4	0,2	37,4	3,0	mg/l	106%
Potassium	2,05	0,02	2,02	0,16	mg/l	99%
Nitrate	17,0	0,5	16,7	1,1	mg/l	98%
Nitrite	0,0573	0,0002	0,057	0,008	mg/l	99%
Ammonium	<0,01		<0,003		mg/l	•
Chloride	65,0	1,2	66,0	4,7	mg/l	102%
Sulphate	15,5	0,3	14,0	0,8	mg/l	90%
Orthophosphate	0,0455	0,0032	0,052	0,007	mg/l	114%
Boron	0,0402	0,0011	0,0436	0,006	mg/l	108%
DOC	3,72	0,05	3,99	0,70	mg/l	107%
Total P (as PO4)	0,1376	0,0016	0,134	0,020	mg/l	97%
KMnO4-Index	4,46	0,11	4,73	0,75	mg/l	106%



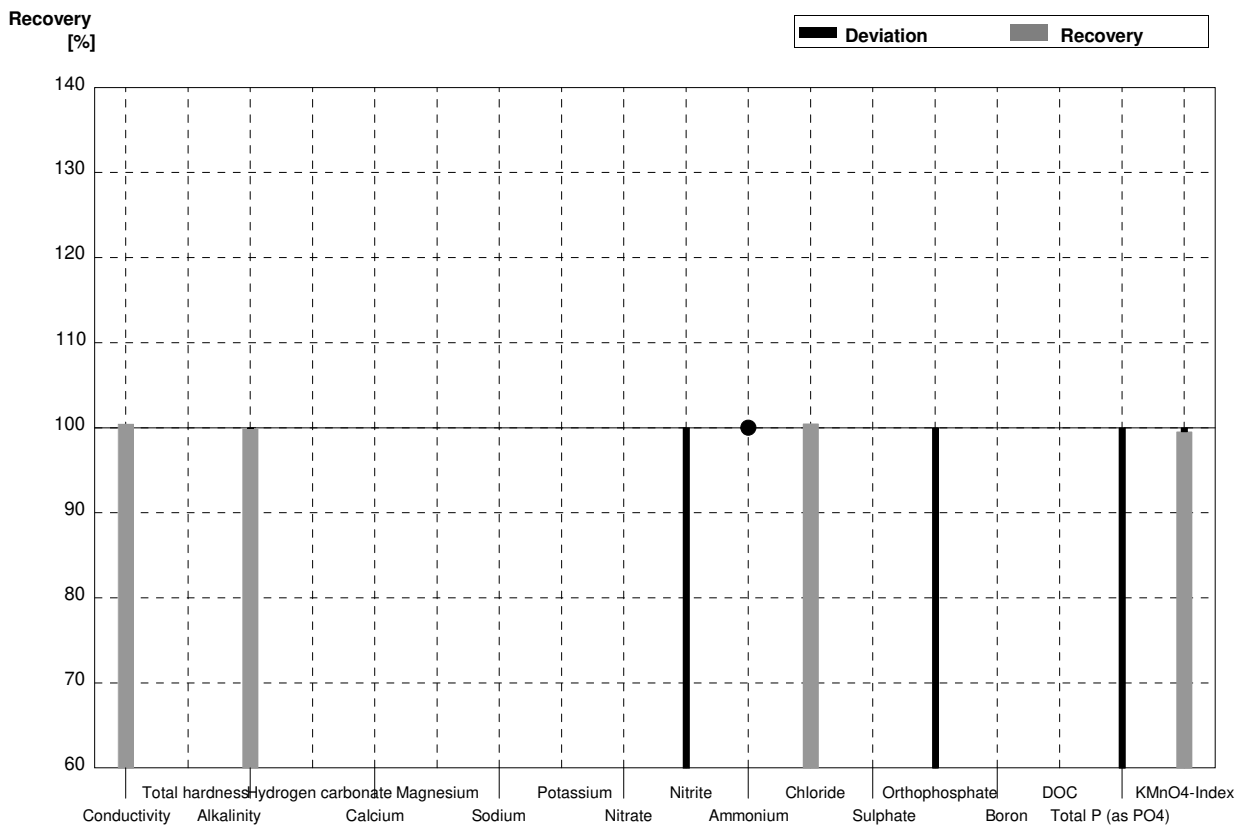
**Sample N169B**  
**Laboratory AN**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	13	µS/cm	100%
Total hardness	2,36	0,03	2,40	0,24	mmol/l	102%
Alkalinity	3,28	0,06	3,21	0,15	mmol/l	98%
Hydrogen carbonate	197	3	193	9	mg/l	98%
Calcium	70,2	1,2	70,7	4,5	mg/l	101%
Magnesium	14,9	0,3	15,5	1,2	mg/l	104%
Sodium	9,2	0,6	9,40	0,76	mg/l	102%
Potassium	4,29	0,03	4,26	0,34	mg/l	99%
Nitrate	36,4	0,9	36,5	2,5	mg/l	100%
Nitrite	0,0798	0,0011	0,083	0,012	mg/l	104%
Ammonium	0,085	0,004	0,091	0,016	mg/l	107%
Chloride	10,0	0,3	10,0	0,7	mg/l	100%
Sulphate	51,4	1,0	53,6	2,9	mg/l	104%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,0694	0,0005	0,072	0,010	mg/l	104%
DOC	6,35	0,05	6,7	1,2	mg/l	106%
Total P (as PO4)	<0,009		<0,005		mg/l	•
KMnO4-Index	3,58	0,12	3,82	0,61	mg/l	107%



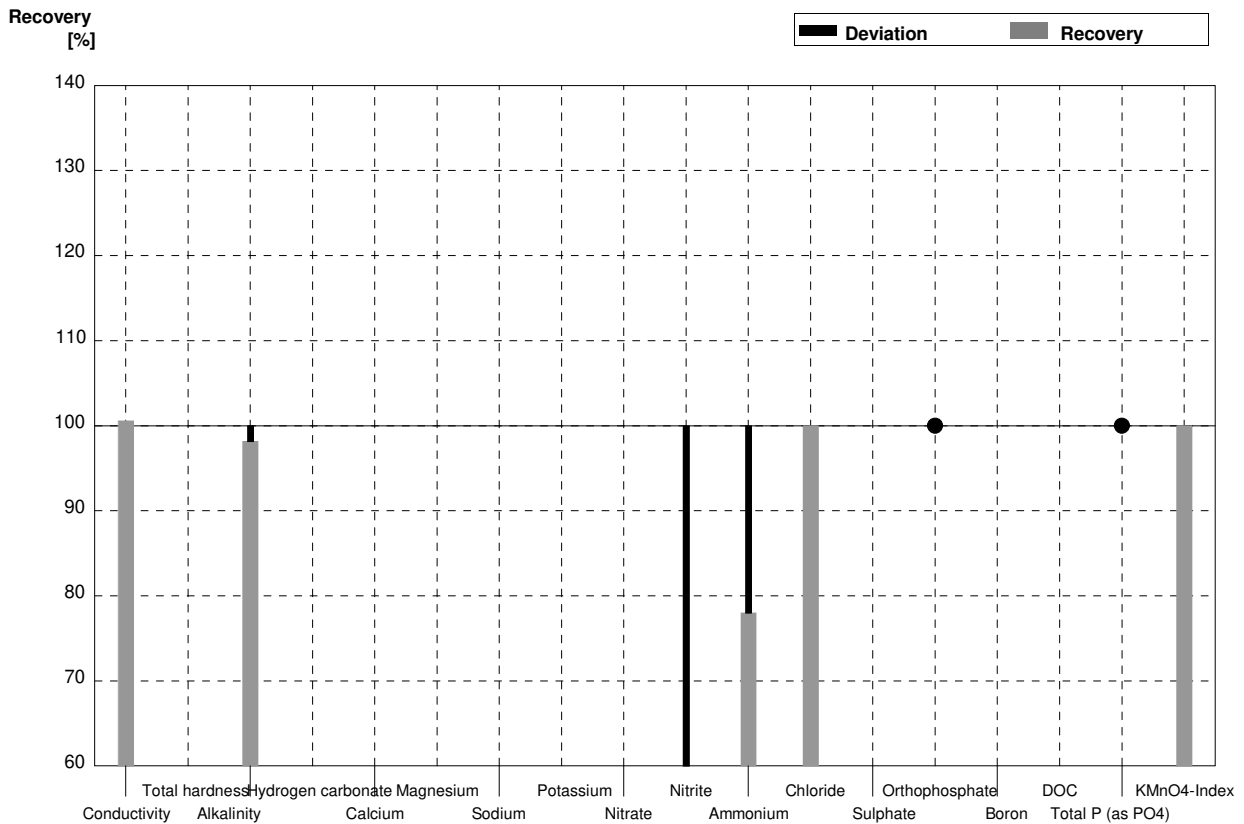
**Sample N169A**  
**Laboratory AO**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	418	5	µS/cm	100%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,37	0,03	mmol/l	100%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002	0,0180	0,002	mg/l	31%
Ammonium	<0,01		<0,02		mg/l	•
Chloride	65,0	1,2	65,3	3	mg/l	100%
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032	0,0153	0,003	mg/l	34%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,0450	0,003	mg/l	33%
KMnO4-Index	4,46	0,11	4,44	0,2	mg/l	100%



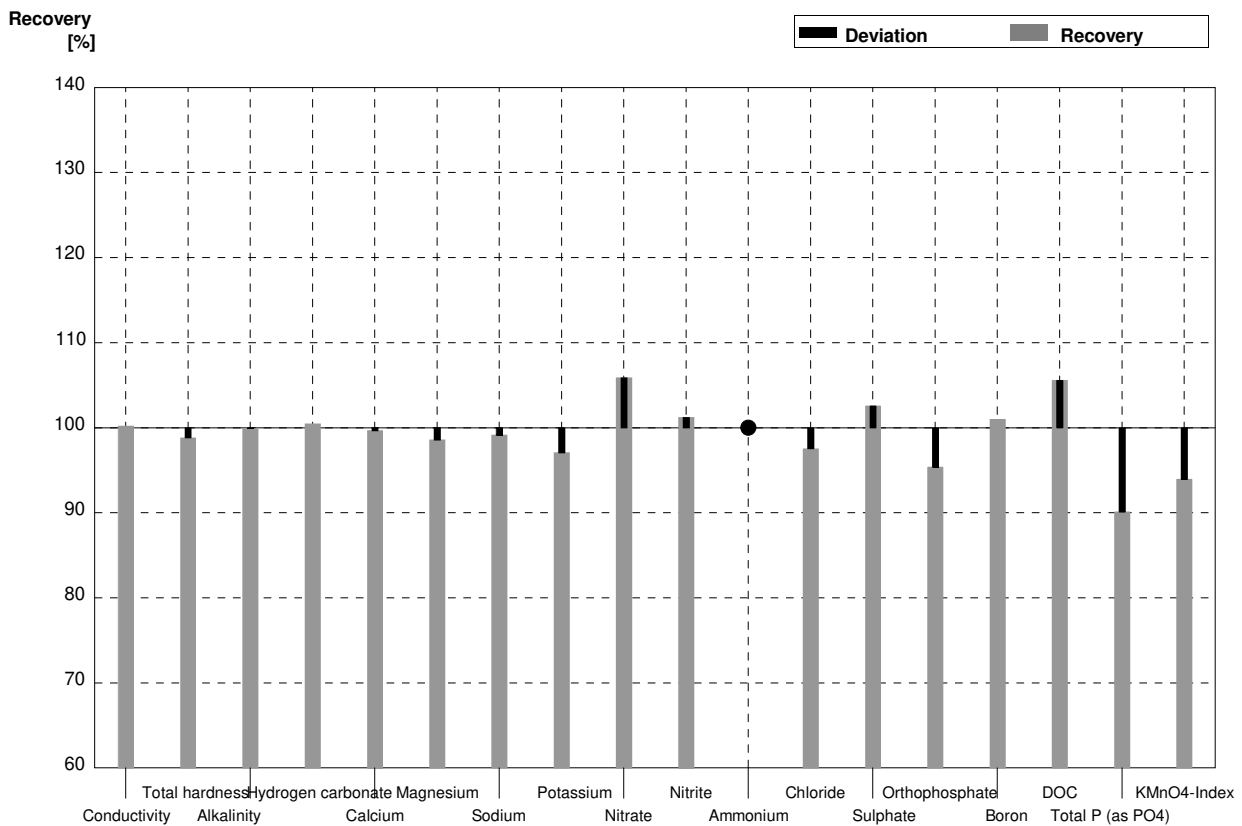
**Sample N169B**  
**Laboratory AO**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	508	5	µS/cm	101%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,22	0,06	mmol/l	98%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011	0,0250	0,003	mg/l	31%
Ammonium	0,085	0,004	0,0663	0,01	mg/l	78%
Chloride	10,0	0,3	10,0	1	mg/l	100%
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009		<0,005		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		<0,005		mg/l	•
KMnO4-Index	3,58	0,12	3,58	0,2	mg/l	100%



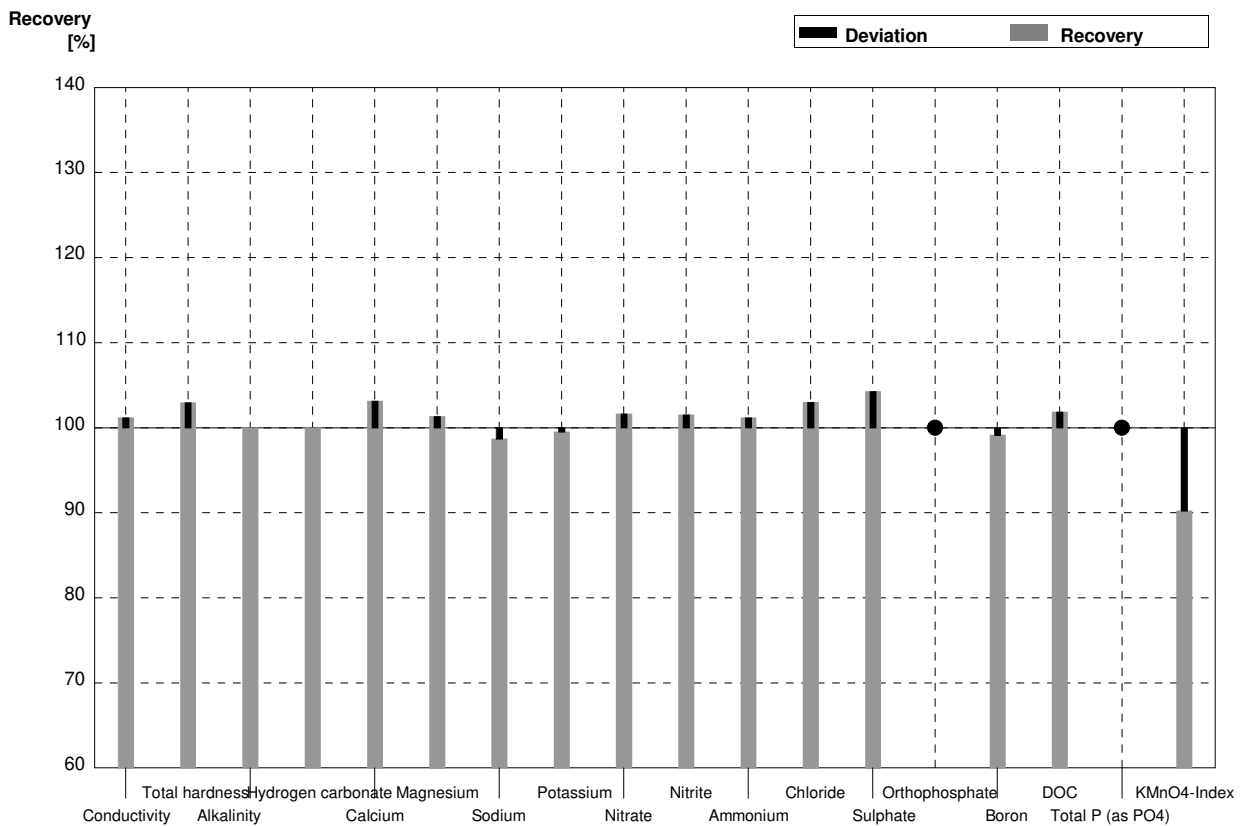
**Sample N169A**  
**Laboratory AP**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	417		µS/cm	100%
Total hardness	1,103	0,019	1,09		mmol/l	99%
Alkalinity	1,371	0,013	1,37	0,1	mmol/l	100%
Hydrogen carbonate	80,6	0,8	81		mg/l	100%
Calcium	30,3	0,7	30,2	2,5	mg/l	100%
Magnesium	8,40	0,13	8,28	0,9	mg/l	99%
Sodium	35,4	0,2	35,1	3,0	mg/l	99%
Potassium	2,05	0,02	1,99	0,2	mg/l	97%
Nitrate	17,0	0,5	18,0	2,6	mg/l	106%
Nitrite	0,0573	0,0002	0,058	0,010	mg/l	101%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	63,4	9,0	mg/l	98%
Sulphate	15,5	0,3	15,9	1,3	mg/l	103%
Orthophosphate	0,0455	0,0032	0,0434		mg/l	95%
Boron	0,0402	0,0011	0,0406	0,0035	mg/l	101%
DOC	3,72	0,05	3,928		mg/l	106%
Total P (as PO4)	0,1376	0,0016	0,124	0,005	mg/l	90%
KMnO4-Index	4,46	0,11	4,19		mg/l	94%



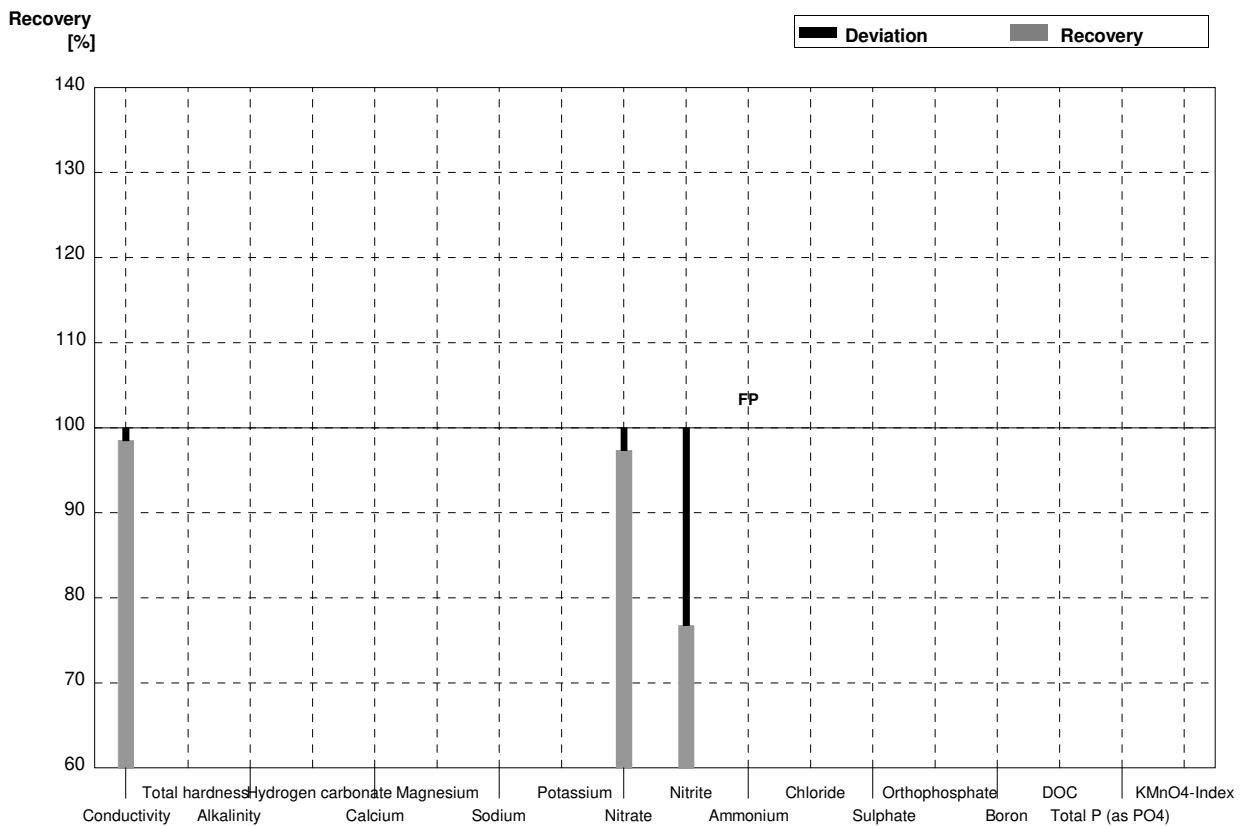
**Sample N169B**  
**Laboratory AP**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	511		µS/cm	101%
Total hardness	2,36	0,03	2,43		mmol/l	103%
Alkalinity	3,28	0,06	3,28	0,23	mmol/l	100%
Hydrogen carbonate	197	3	197		mg/l	100%
Calcium	70,2	1,2	72,4	6,1	mg/l	103%
Magnesium	14,9	0,3	15,1	1,6	mg/l	101%
Sodium	9,2	0,6	9,08	0,8	mg/l	99%
Potassium	4,29	0,03	4,27	0,4	mg/l	100%
Nitrate	36,4	0,9	37,0	5,3	mg/l	102%
Nitrite	0,0798	0,0011	0,081	0,010	mg/l	102%
Ammonium	0,085	0,004	0,086	0,013	mg/l	101%
Chloride	10,0	0,3	10,3	1,5	mg/l	103%
Sulphate	51,4	1,0	53,6	4,3	mg/l	104%
Orthophosphate	<0,009		<0,01		mg/l	•
Boron	0,0694	0,0005	0,0688	0,0026	mg/l	99%
DOC	6,35	0,05	6,469		mg/l	102%
Total P (as PO4)	<0,009		<0,03		mg/l	•
KMnO4-Index	3,58	0,12	3,23		mg/l	90%



**Sample N169A**  
**Laboratory AQ**

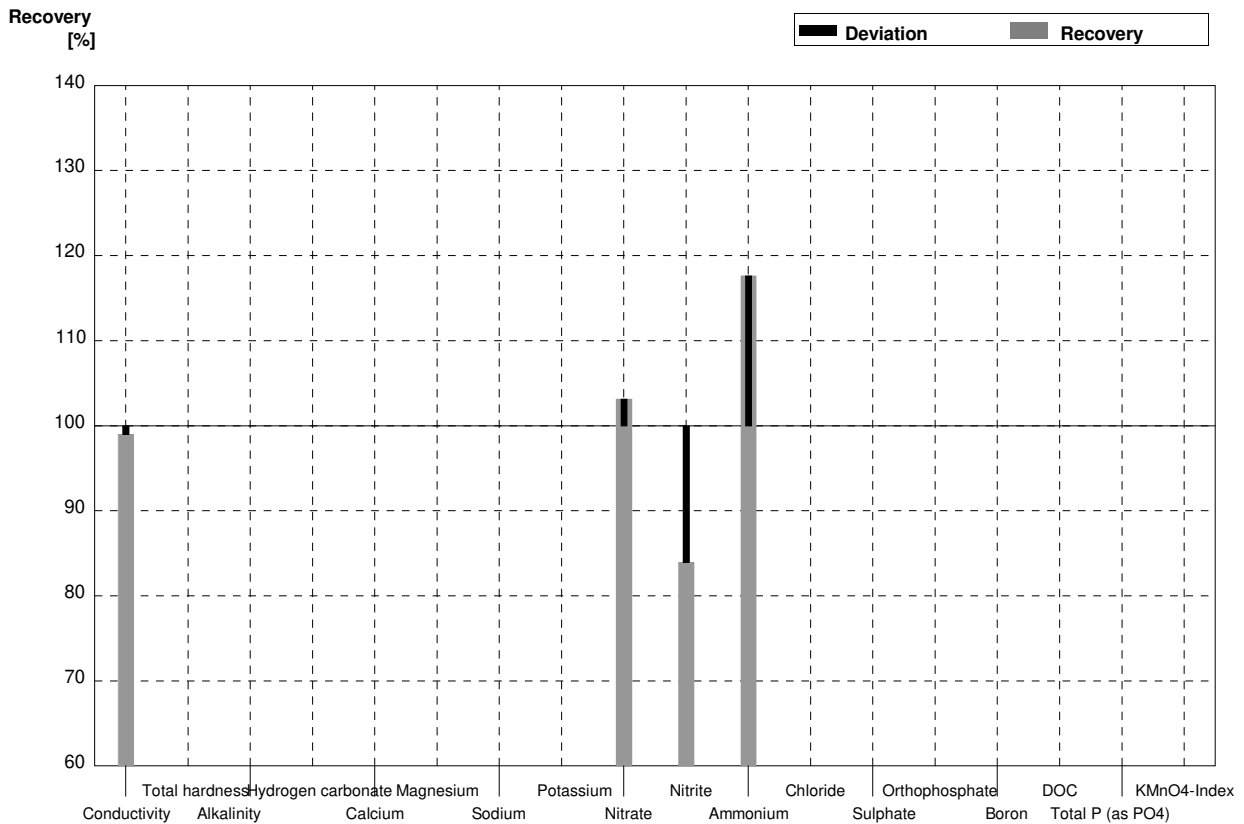
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	410	35,79	µS/cm	99%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5	16,550	0,308	mg/l	97%
Nitrite	0,0573	0,0002	0,0440	0,001	mg/l	77%
Ammonium	<0,01		0,0200	0,004	mg/l	FP
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	





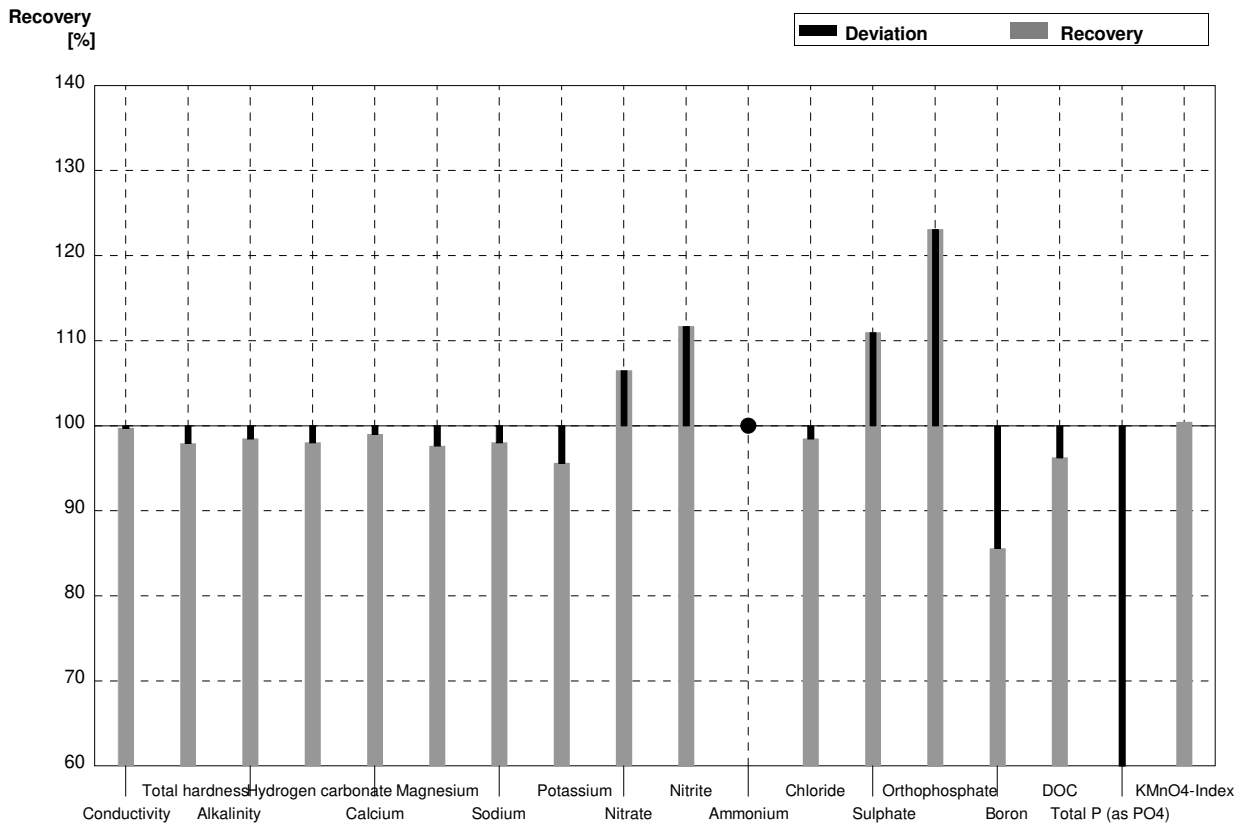
**Sample N169B**  
**Laboratory AQ**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	500	35,79	µS/cm	99%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9	37,550	0,700	mg/l	103%
Nitrite	0,0798	0,0011	0,067	0,004	mg/l	84%
Ammonium	0,085	0,004	0,100	0,018	mg/l	118%
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



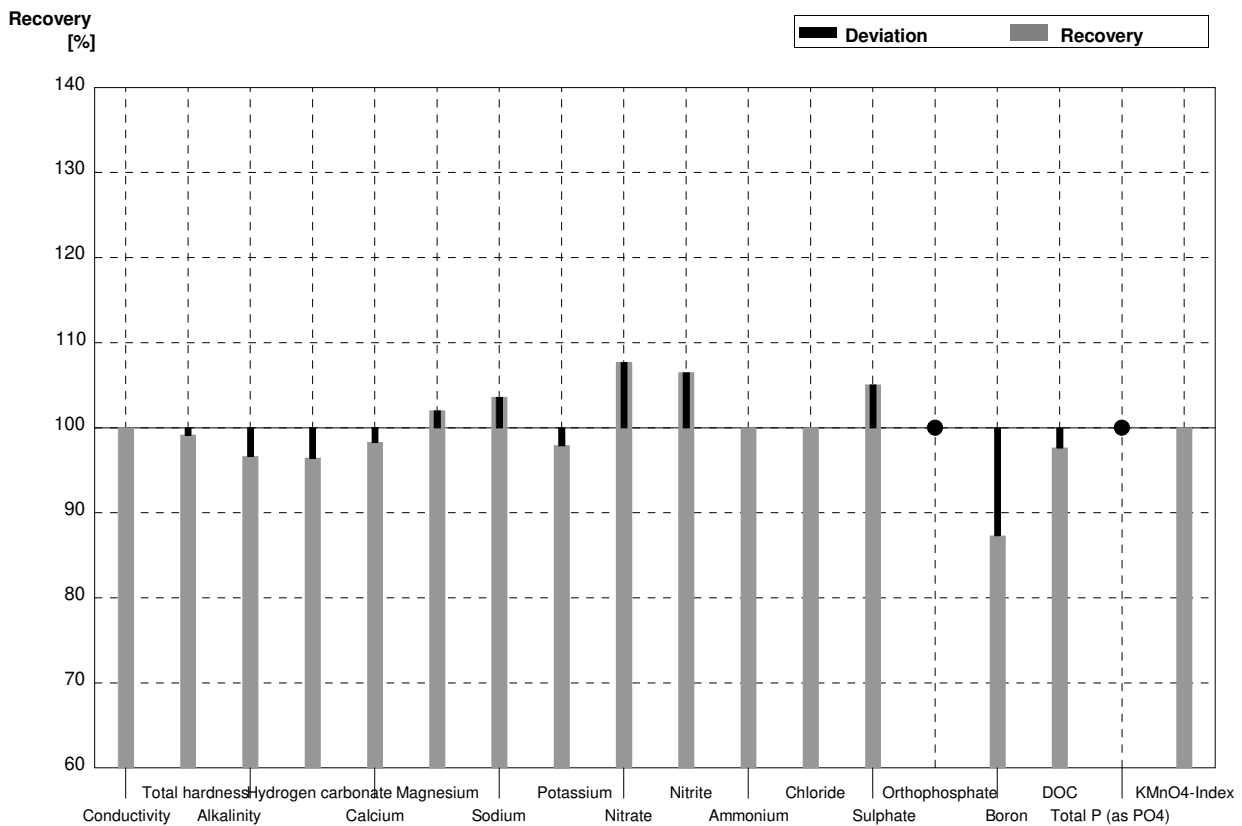
**Sample N169A**  
**Laboratory AR**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	29	µS/cm	100%
Total hardness	1,103	0,019	1,08	0,162	mmol/l	98%
Alkalinity	1,371	0,013	1,35	0,135	mmol/l	98%
Hydrogen carbonate	80,6	0,8	79	5,2	mg/l	98%
Calcium	30,3	0,7	30,0	1,67	mg/l	99%
Magnesium	8,40	0,13	8,2	0,61	mg/l	98%
Sodium	35,4	0,2	34,7	2,54	mg/l	98%
Potassium	2,05	0,02	1,96	0,117	mg/l	96%
Nitrate	17,0	0,5	18,1	3,89	mg/l	106%
Nitrite	0,0573	0,0002	0,064	0,0226	mg/l	112%
Ammonium	<0,01		<0,04	0,00106	mg/l	•
Chloride	65,0	1,2	64	8,4	mg/l	98%
Sulphate	15,5	0,3	17,2	2,77	mg/l	111%
Orthophosphate	0,0455	0,0032	0,056	0,0140	mg/l	123%
Boron	0,0402	0,0011	0,0344	0,00337	mg/l	86%
DOC	3,72	0,05	3,58	0,162	mg/l	96%
Total P (as PO4)	0,1376	0,0016	0,0355	0,0060	mg/l	26%
KMnO4-Index	4,46	0,11	4,48	0,94	mg/l	100%



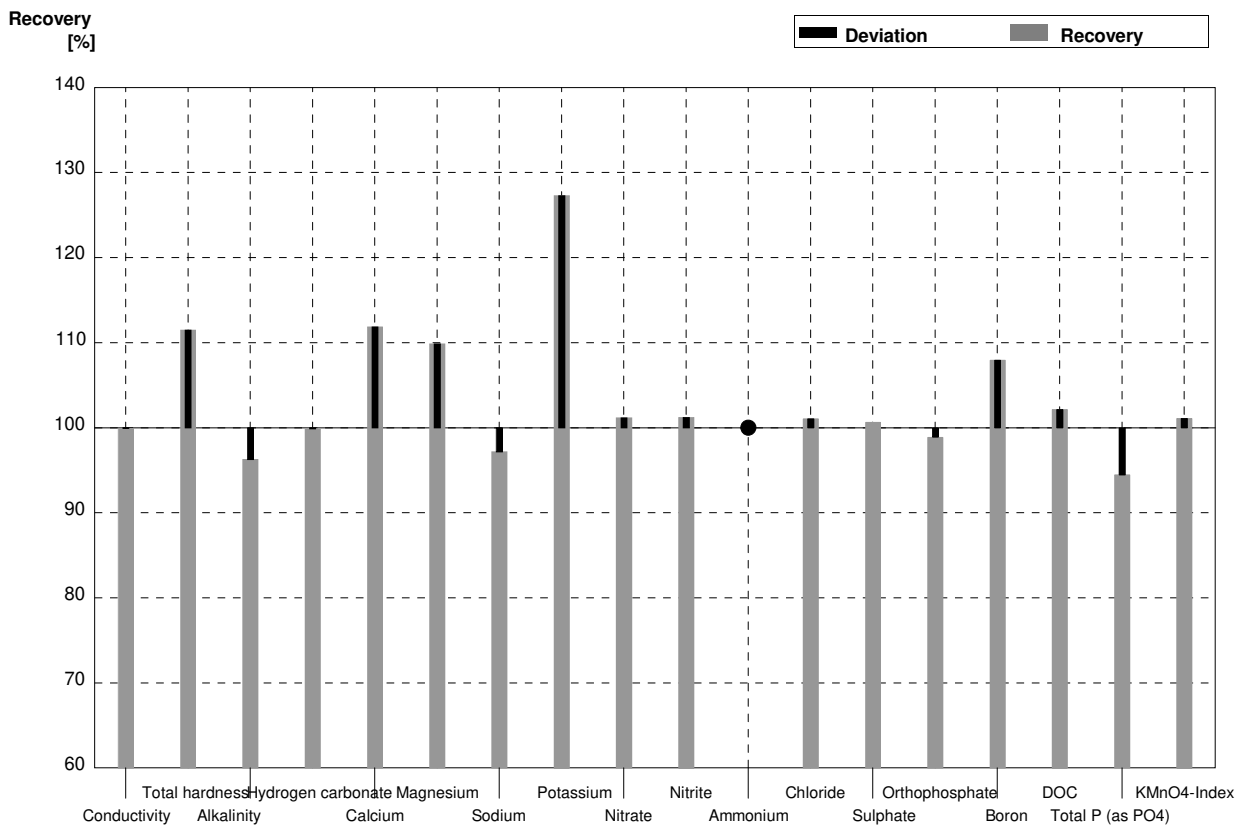
**Sample N169B**  
**Laboratory AR**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	505	35	µS/cm	100%
Total hardness	2,36	0,03	2,34	0,351	mmol/l	99%
Alkalinity	3,28	0,06	3,17	0,317	mmol/l	97%
Hydrogen carbonate	197	3	190	16,2	mg/l	96%
Calcium	70,2	1,2	69	3,8	mg/l	98%
Magnesium	14,9	0,3	15,2	1,13	mg/l	102%
Sodium	9,2	0,6	9,53	0,70	mg/l	104%
Potassium	4,29	0,03	4,20	0,250	mg/l	98%
Nitrate	36,4	0,9	39,2	8,4	mg/l	108%
Nitrite	0,0798	0,0011	0,085	0,0303	mg/l	107%
Ammonium	0,085	0,004	0,085	0,0162	mg/l	100%
Chloride	10,0	0,3	10,0	1,31	mg/l	100%
Sulphate	51,4	1,0	54	8,7	mg/l	105%
Orthophosphate	<0,009		<0,05	0,00188	mg/l	•
Boron	0,0694	0,0005	0,0606	0,00593	mg/l	87%
DOC	6,35	0,05	6,2	0,172	mg/l	98%
Total P (as PO4)	<0,009		<0,02	0,00042	mg/l	•
KMnO4-Index	3,58	0,12	3,58	0,75	mg/l	100%



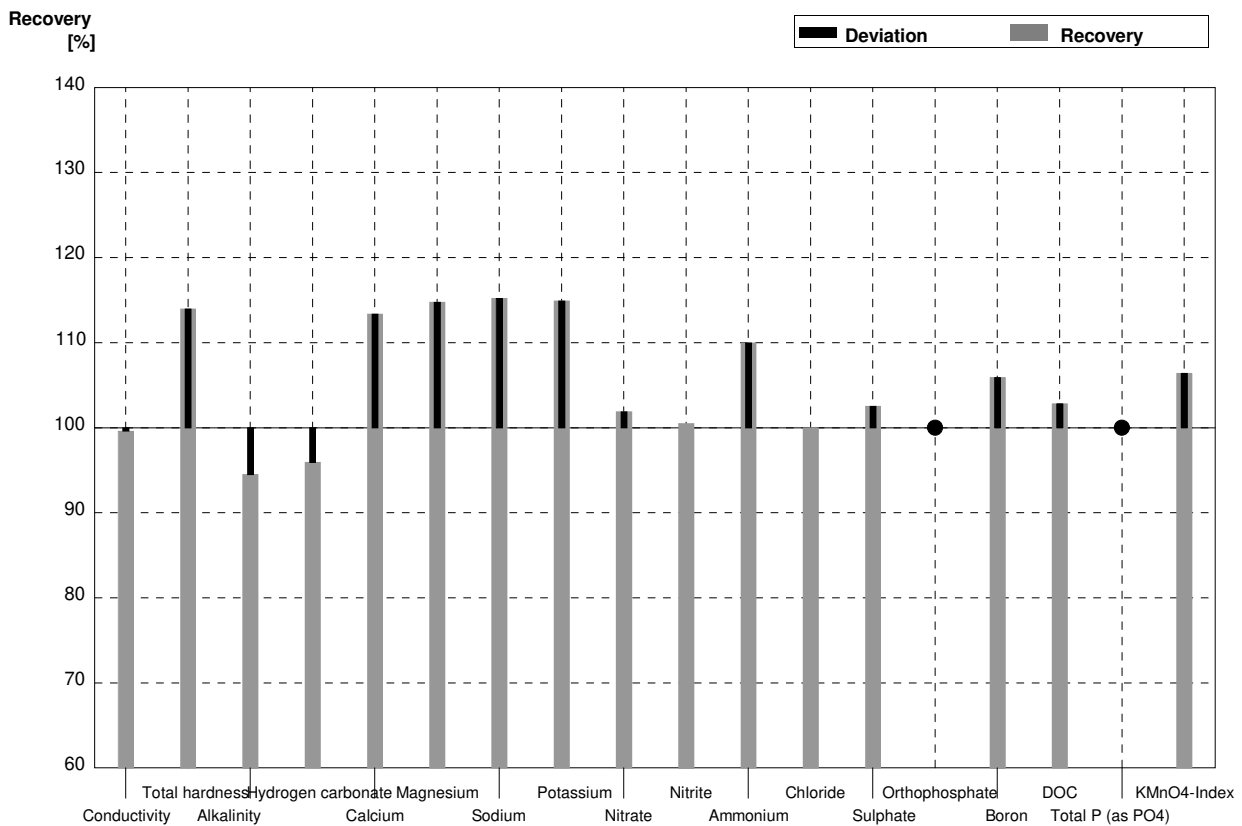
**Sample N169A**  
**Laboratory AS**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	12	µS/cm	100%
Total hardness	1,103	0,019	1,23	0,18	mmol/l	112%
Alkalinity	1,371	0,013	1,32	0,11	mmol/l	96%
Hydrogen carbonate	80,6	0,8	80,5	6,4	mg/l	100%
Calcium	30,3	0,7	33,9	5,1	mg/l	112%
Magnesium	8,40	0,13	9,23	1,1	mg/l	110%
Sodium	35,4	0,2	34,4	4,5	mg/l	97%
Potassium	2,05	0,02	2,61	0,39	mg/l	127%
Nitrate	17,0	0,5	17,2	1,7	mg/l	101%
Nitrite	0,0573	0,0002	0,0580	0,0064	mg/l	101%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	65,7	6,6	mg/l	101%
Sulphate	15,5	0,3	15,6	2,5	mg/l	101%
Orthophosphate	0,0455	0,0032	0,0450	0,0036	mg/l	99%
Boron	0,0402	0,0011	0,0434	0,0056	mg/l	108%
DOC	3,72	0,05	3,80	0,76	mg/l	102%
Total P (as PO4)	0,1376	0,0016	0,130	0,0104	mg/l	94%
KMnO4-Index	4,46	0,11	4,51	0,68	mg/l	101%



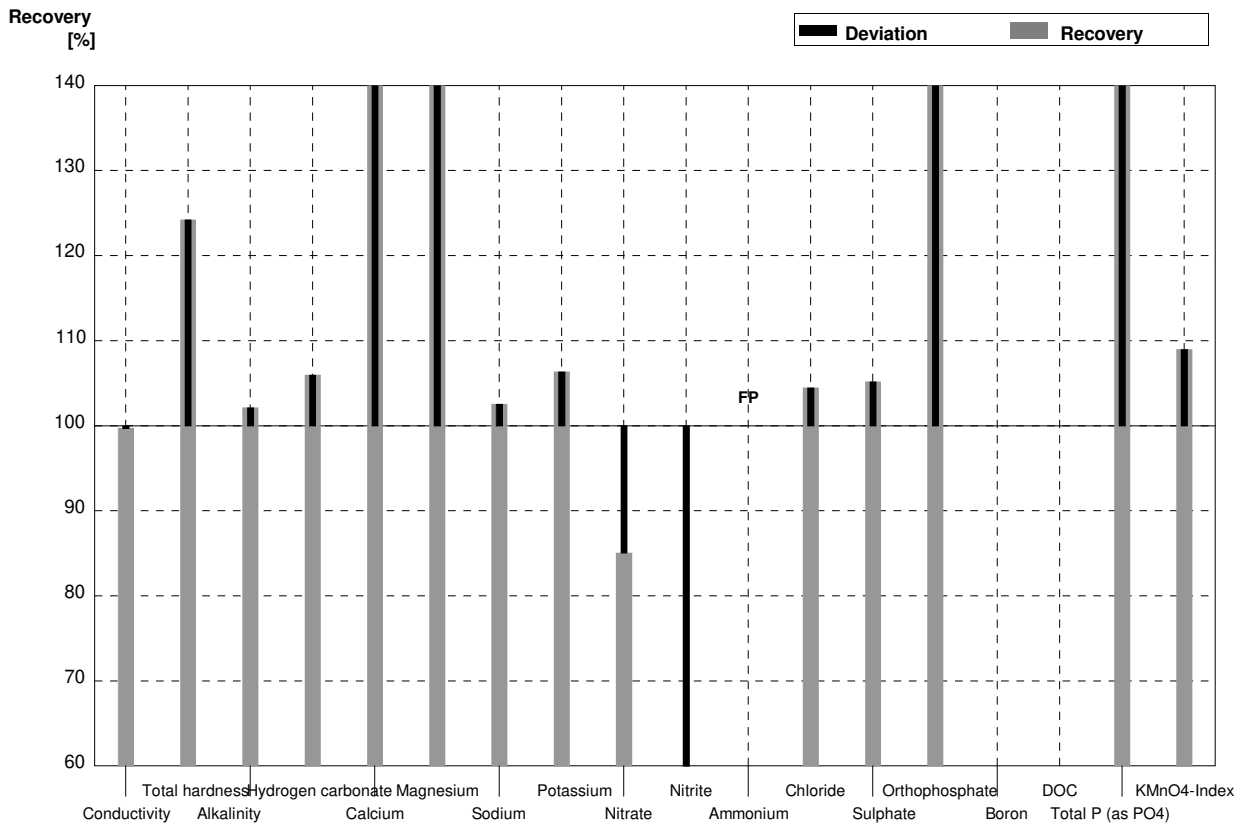
**Sample N169B**  
**Laboratory AS**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	503	15	µS/cm	100%
Total hardness	2,36	0,03	2,69	0,40	mmol/l	114%
Alkalinity	3,28	0,06	3,10	0,25	mmol/l	95%
Hydrogen carbonate	197	3	189	15	mg/l	96%
Calcium	70,2	1,2	79,6	12	mg/l	113%
Magnesium	14,9	0,3	17,1	2,1	mg/l	115%
Sodium	9,2	0,6	10,6	1,4	mg/l	115%
Potassium	4,29	0,03	4,93	0,74	mg/l	115%
Nitrate	36,4	0,9	37,1	3,7	mg/l	102%
Nitrite	0,0798	0,0011	0,0802	0,0088	mg/l	101%
Ammonium	0,085	0,004	0,0935	0,0075	mg/l	110%
Chloride	10,0	0,3	10,0	1,0	mg/l	100%
Sulphate	51,4	1,0	52,7	8,4	mg/l	103%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005	0,0735	0,010	mg/l	106%
DOC	6,35	0,05	6,53	1,3	mg/l	103%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,58	0,12	3,81	0,57	mg/l	106%



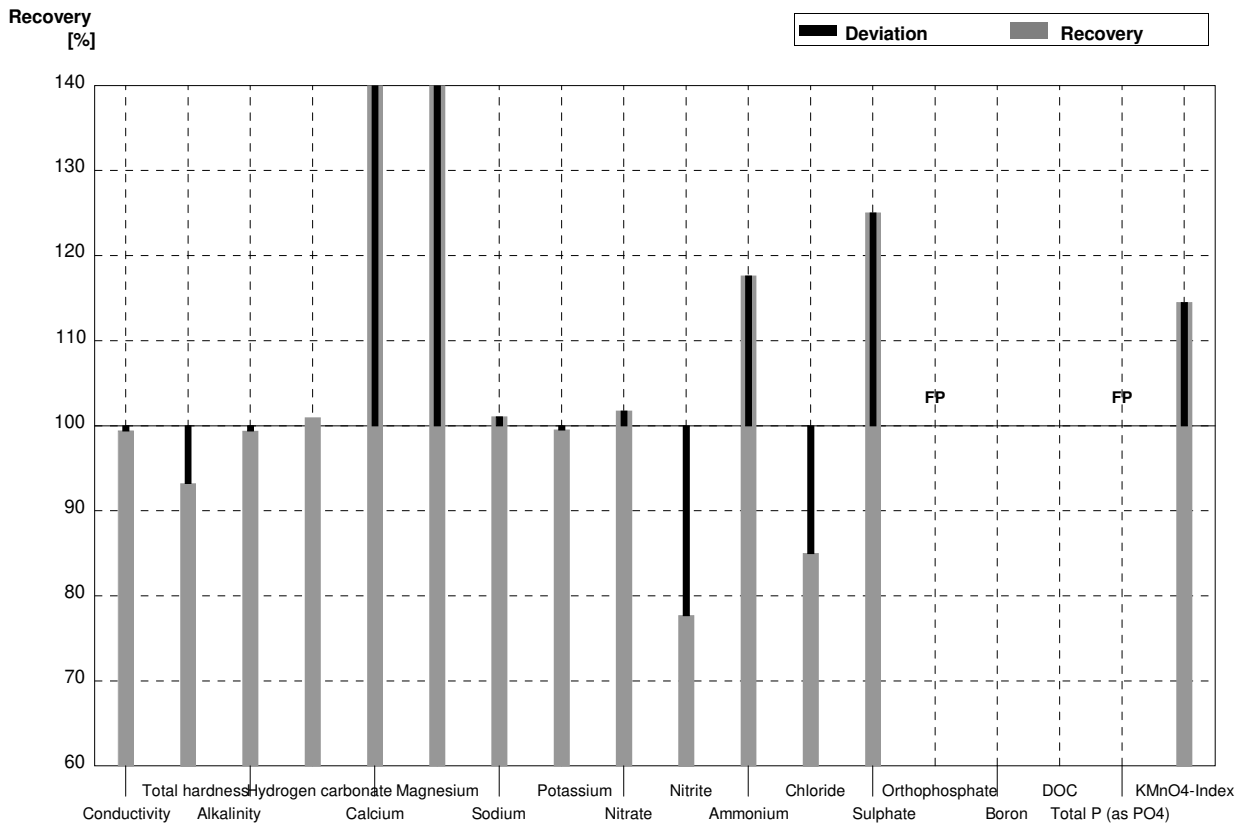
**Sample N169A**  
**Laboratory AT**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	415	21	µS/cm	100%
Total hardness	1,103	0,019	1,37	0,14	mmol/l	124%
Alkalinity	1,371	0,013	1,40	0,14	mmol/l	102%
Hydrogen carbonate	80,6	0,8	85,4	8,54	mg/l	106%
Calcium	30,3	0,7	49,2	4,9	mg/l	162%
Magnesium	8,40	0,13	21,5	2,15	mg/l	256%
Sodium	35,4	0,2	36,3	3,6	mg/l	103%
Potassium	2,05	0,02	2,18	0,2	mg/l	106%
Nitrate	17,0	0,5	14,46	1,78	mg/l	85%
Nitrite	0,0573	0,0002	0,0270	0,0012	mg/l	47%
Ammonium	<0,01		0,0200	0,0024	mg/l	FP
Chloride	65,0	1,2	67,9	6,8	mg/l	104%
Sulphate	15,5	0,3	16,30	1,66	mg/l	105%
Orthophosphate	0,0455	0,0032	0,233	0,042	mg/l	512%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016	0,480	0,087	mg/l	349%
KMnO4-Index	4,46	0,11	4,86	0,49	mg/l	109%



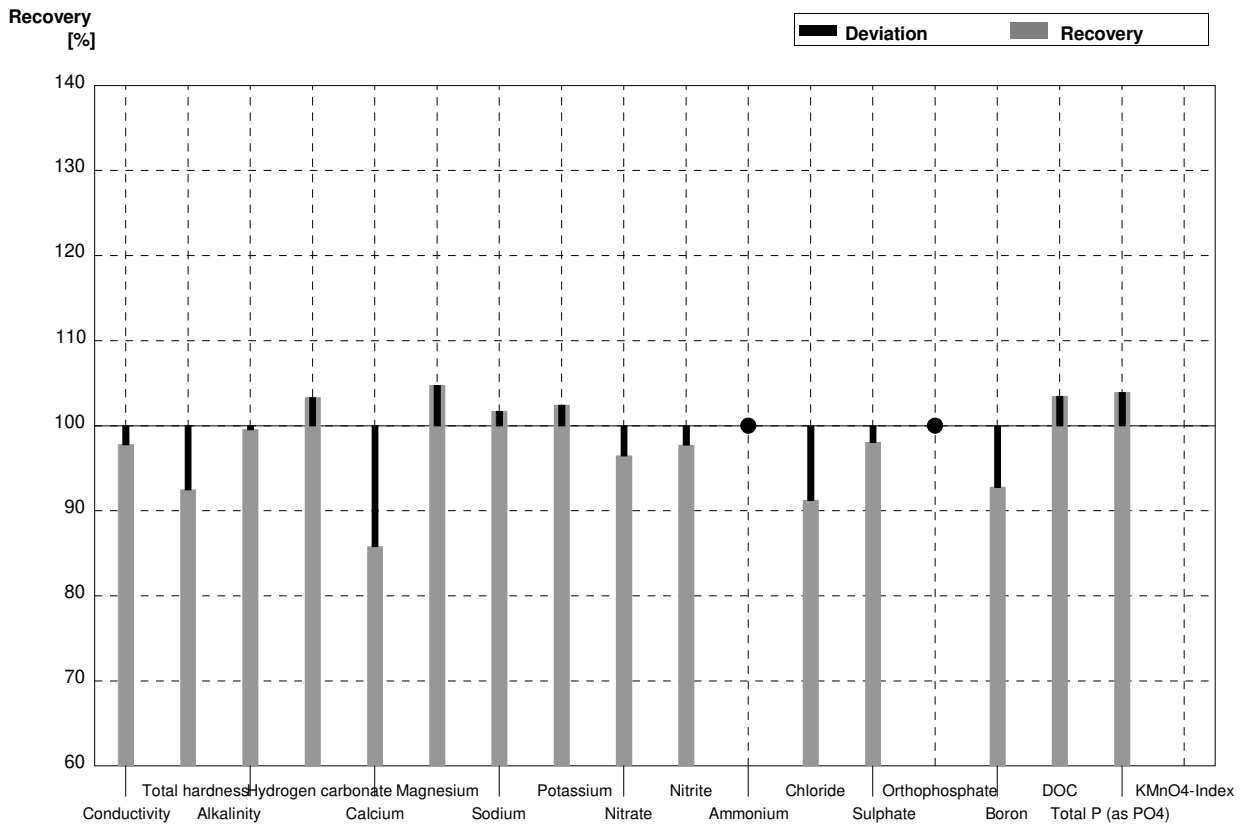
**Sample N169B**  
**Laboratory AT**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	502	26	µS/cm	99%
Total hardness	2,36	0,03	2,20	0,22	mmol/l	93%
Alkalinity	3,28	0,06	3,26	0,33	mmol/l	99%
Hydrogen carbonate	197	3	198,9	19,89	mg/l	101%
Calcium	70,2	1,2	131,2	13,1	mg/l	187%
Magnesium	14,9	0,3	21,7	2,17	mg/l	146%
Sodium	9,2	0,6	9,3	0,9	mg/l	101%
Potassium	4,29	0,03	4,27	0,4	mg/l	100%
Nitrate	36,4	0,9	37,04	4,56	mg/l	102%
Nitrite	0,0798	0,0011	0,0620	0,0027	mg/l	78%
Ammonium	0,085	0,004	0,1000	0,0118	mg/l	118%
Chloride	10,0	0,3	8,5	0,9	mg/l	85%
Sulphate	51,4	1,0	64,28	6,56	mg/l	125%
Orthophosphate	<0,009		0,120	0,0217	mg/l	FP
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009		0,230	0,042	mg/l	FP
KMnO4-Index	3,58	0,12	4,10	0,41	mg/l	115%



**Sample N169A**  
**Laboratory AU**

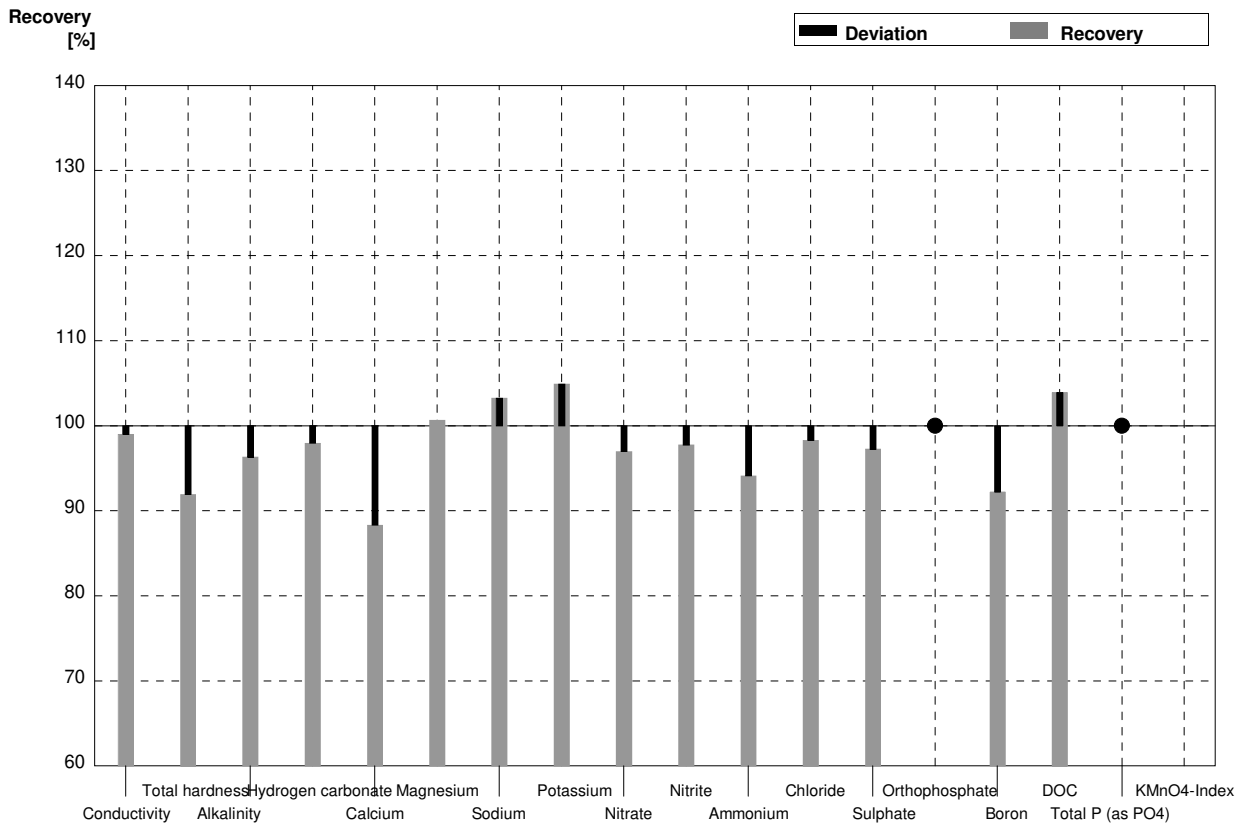
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	407	41	µS/cm	98%
Total hardness	1,103	0,019	1,02	0,20	mmol/l	92%
Alkalinity	1,371	0,013	1,365	0,14	mmol/l	100%
Hydrogen carbonate	80,6	0,8	83,3	8,3	mg/l	103%
Calcium	30,3	0,7	26,0	5,2	mg/l	86%
Magnesium	8,40	0,13	8,80	1,8	mg/l	105%
Sodium	35,4	0,2	36,0	7,2	mg/l	102%
Potassium	2,05	0,02	2,10	0,42	mg/l	102%
Nitrate	17,0	0,5	16,4	2,5	mg/l	96%
Nitrite	0,0573	0,0002	0,056	0,008	mg/l	98%
Ammonium	<0,01		<0,01		mg/l	•
Chloride	65,0	1,2	59,3	8,9	mg/l	91%
Sulphate	15,5	0,3	15,2	2,3	mg/l	98%
Orthophosphate	0,0455	0,0032	<0,1		mg/l	•
Boron	0,0402	0,0011	0,0373	0,008	mg/l	93%
DOC	3,72	0,05	3,85	1,2	mg/l	103%
Total P (as PO4)	0,1376	0,0016	0,143	0,029	mg/l	104%
KMnO4-Index	4,46	0,11			mg/l	





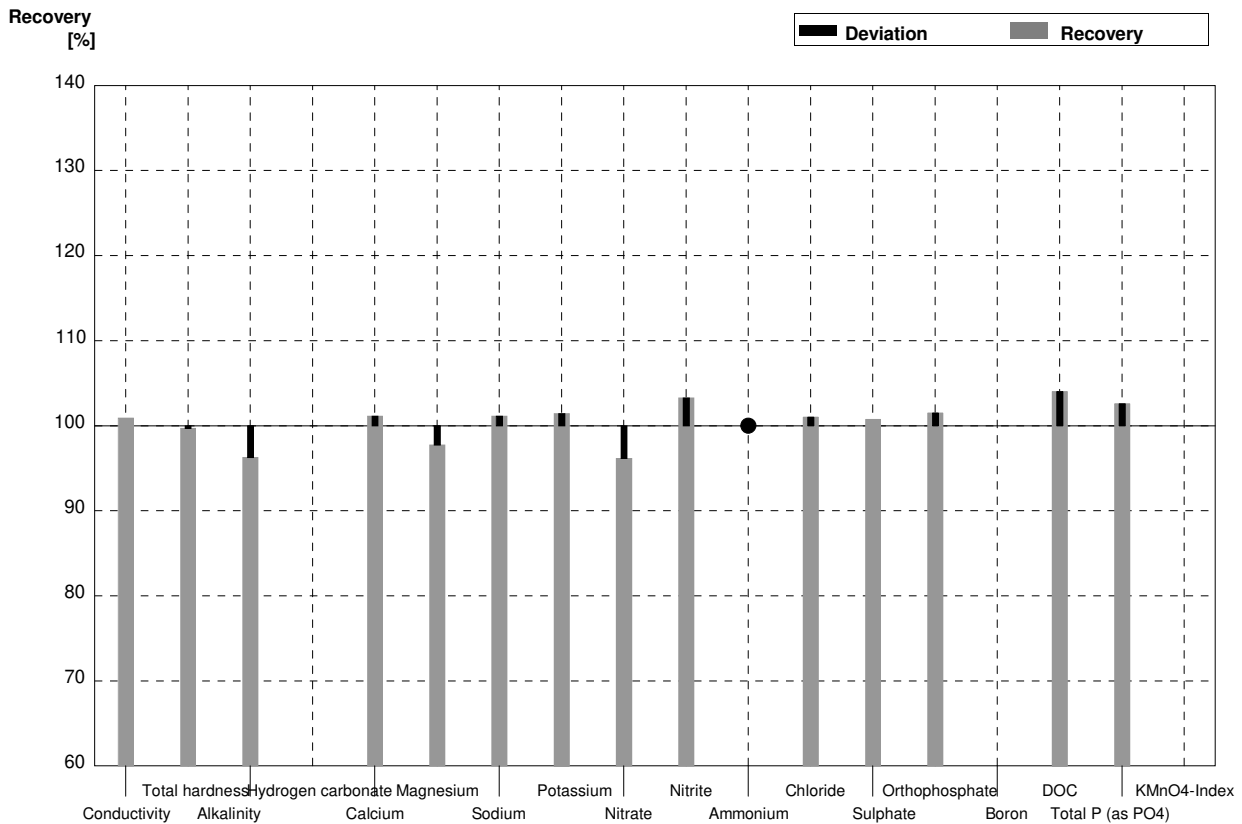
**Sample N169B**  
**Laboratory AU**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	500	50	µS/cm	99%
Total hardness	2,36	0,03	2,17	0,43	mmol/l	92%
Alkalinity	3,28	0,06	3,160	0,32	mmol/l	96%
Hydrogen carbonate	197	3	193	19	mg/l	98%
Calcium	70,2	1,2	62,0	12	mg/l	88%
Magnesium	14,9	0,3	15,0	3,0	mg/l	101%
Sodium	9,2	0,6	9,50	1,9	mg/l	103%
Potassium	4,29	0,03	4,50	0,90	mg/l	105%
Nitrate	36,4	0,9	35,3	5,3	mg/l	97%
Nitrite	0,0798	0,0011	0,078	0,012	mg/l	98%
Ammonium	0,085	0,004	0,080	0,016	mg/l	94%
Chloride	10,0	0,3	9,83	1,5	mg/l	98%
Sulphate	51,4	1,0	50,0	7,5	mg/l	97%
Orthophosphate	<0,009		<0,1		mg/l	•
Boron	0,0694	0,0005	0,06400	0,013	mg/l	92%
DOC	6,35	0,05	6,60	2,0	mg/l	104%
Total P (as PO4)	<0,009		<0,031		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



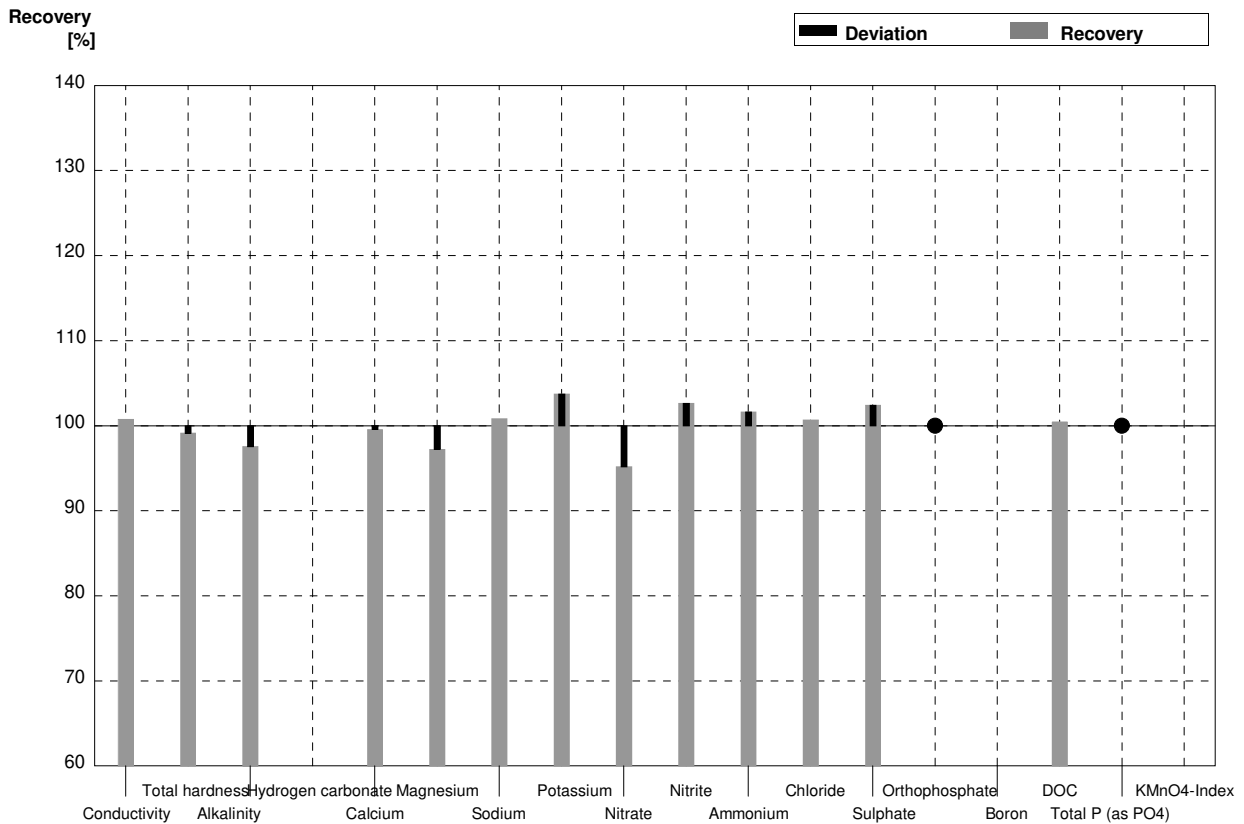
**Sample N169A**  
**Laboratory AV**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	420		µS/cm	101%
Total hardness	1,103	0,019	1,10	0,08	mmol/l	100%
Alkalinity	1,371	0,013	1,32	0,04	mmol/l	96%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	30,65	1,20	mg/l	101%
Magnesium	8,40	0,13	8,21	0,48	mg/l	98%
Sodium	35,4	0,2	35,81	2,26	mg/l	101%
Potassium	2,05	0,02	2,08	0,10	mg/l	101%
Nitrate	17,0	0,5	16,35	0,87	mg/l	96%
Nitrite	0,0573	0,0002	0,0592	0,0028	mg/l	103%
Ammonium	<0,01		<0,007		mg/l	•
Chloride	65,0	1,2	65,68	2,56	mg/l	101%
Sulphate	15,5	0,3	15,62	0,72	mg/l	101%
Orthophosphate	0,0455	0,0032	0,0462	0,0021	mg/l	102%
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	3,87	0,38	mg/l	104%
Total P (as PO4)	0,1376	0,0016	0,1412	0,0137	mg/l	103%
KMnO4-Index	4,46	0,11			mg/l	



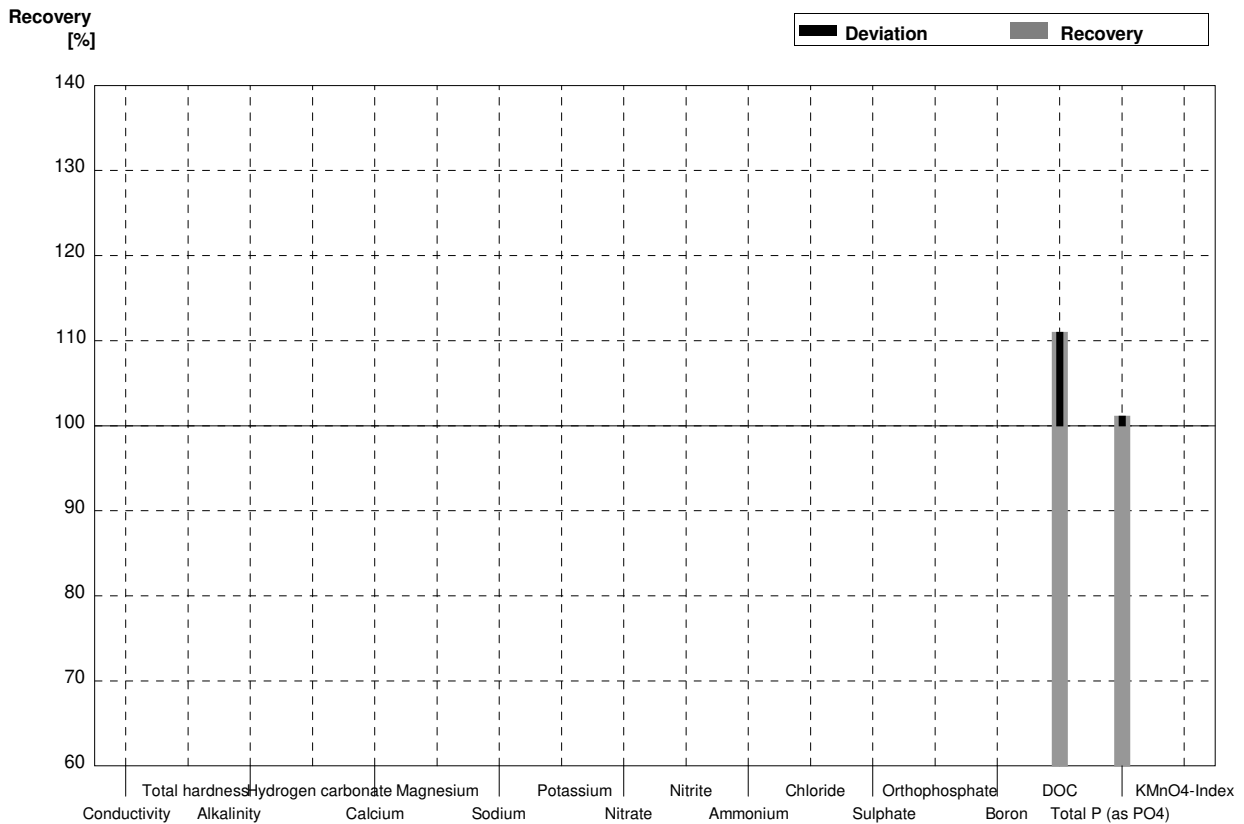
**Sample N169B**  
**Laboratory AV**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	509		µS/cm	101%
Total hardness	2,36	0,03	2,34	0,16	mmol/l	99%
Alkalinity	3,28	0,06	3,20	0,10	mmol/l	98%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	69,91	2,73	mg/l	100%
Magnesium	14,9	0,3	14,49	0,84	mg/l	97%
Sodium	9,2	0,6	9,28	0,58	mg/l	101%
Potassium	4,29	0,03	4,45	0,22	mg/l	104%
Nitrate	36,4	0,9	34,65	1,84	mg/l	95%
Nitrite	0,0798	0,0011	0,0819	0,0039	mg/l	103%
Ammonium	0,085	0,004	0,0864	0,0059	mg/l	102%
Chloride	10,0	0,3	10,07	0,39	mg/l	101%
Sulphate	51,4	1,0	52,65	2,42	mg/l	102%
Orthophosphate	<0,009		<0,015		mg/l	•
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	6,38	0,41	mg/l	100%
Total P (as PO4)	<0,009		<0,015		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



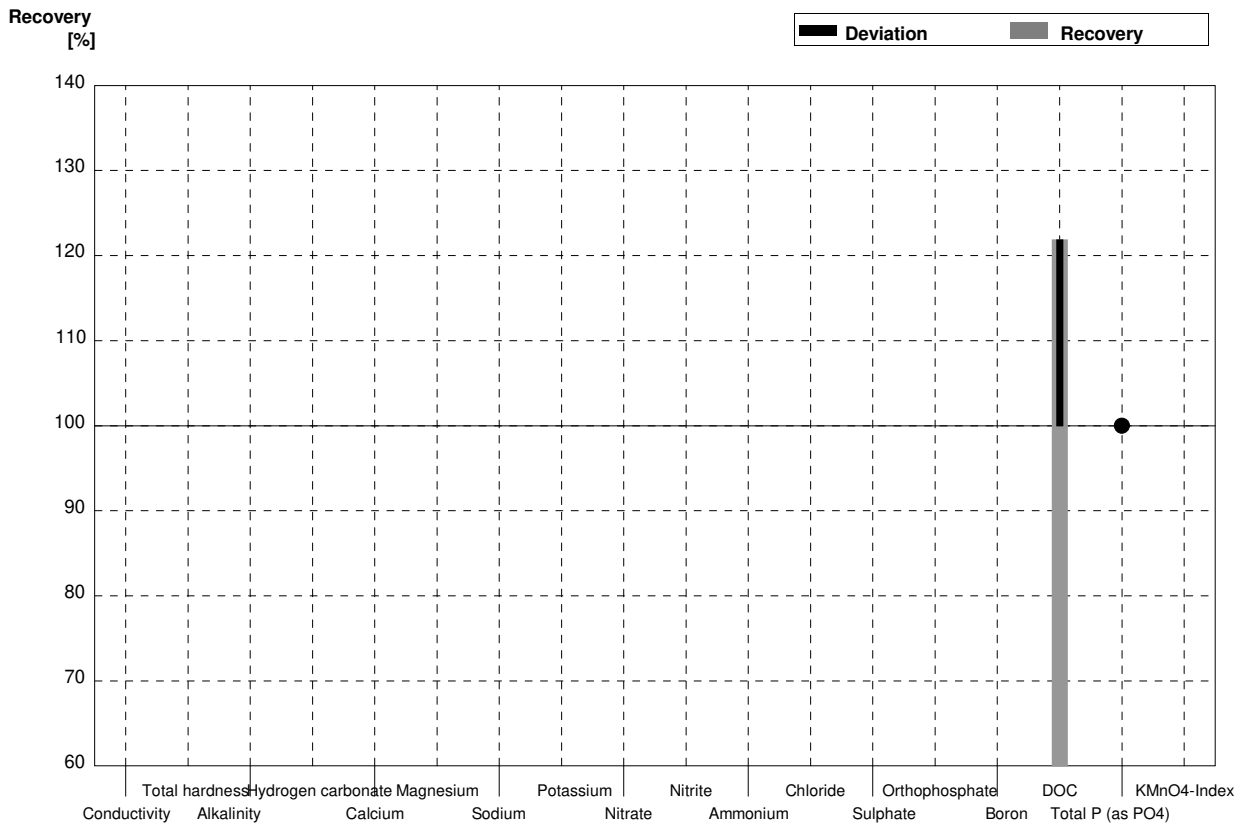
**Sample N169A**  
**Laboratory AW**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05	4,13	0,537	mg/l	111%
Total P (as PO4)	0,1376	0,0016	0,1392	0,024	mg/l	101%
KMnO4-Index	4,46	0,11			mg/l	



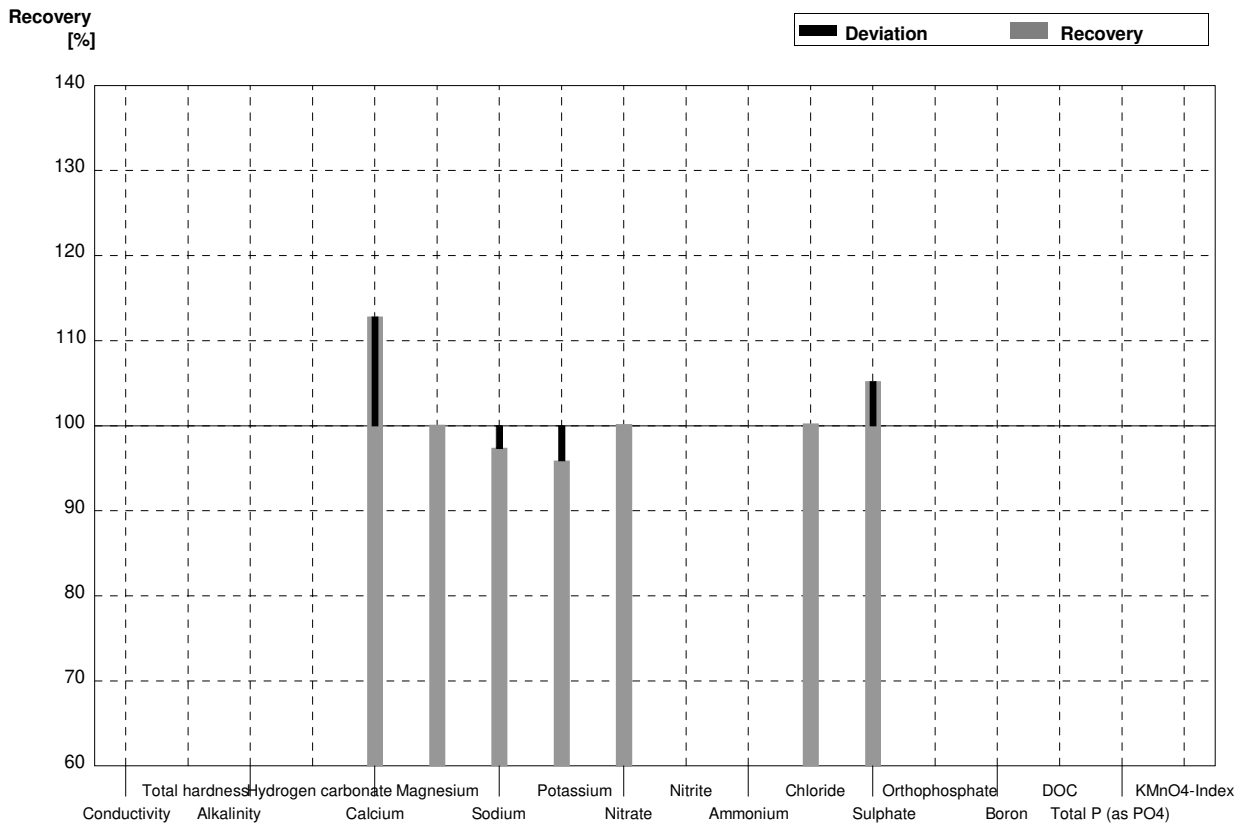
**Sample N169B**  
**Laboratory AW**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05	7,74	1,01	mg/l	122%
Total P (as PO4)	<0,009		<0,0122	0,0003	mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



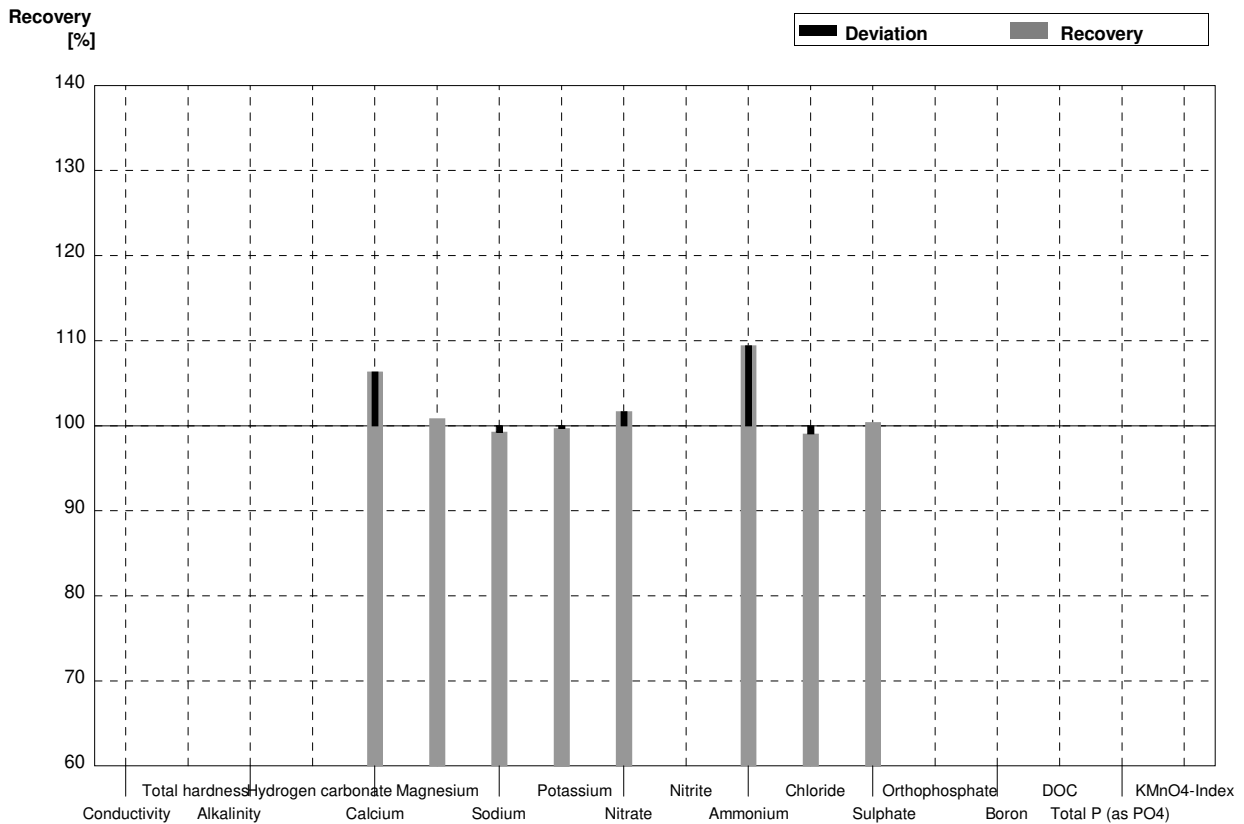
**Sample N169A**  
**Laboratory AX**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	34,185	0,606	mg/l	113%
Magnesium	8,40	0,13	8,410	0,037	mg/l	100%
Sodium	35,4	0,2	34,470	0,054	mg/l	97%
Potassium	2,05	0,02	1,966	0,008	mg/l	96%
Nitrate	17,0	0,5	17,031	0,348	mg/l	100%
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	65,163	0,224	mg/l	100%
Sulphate	15,5	0,3	16,310	0,651	mg/l	105%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



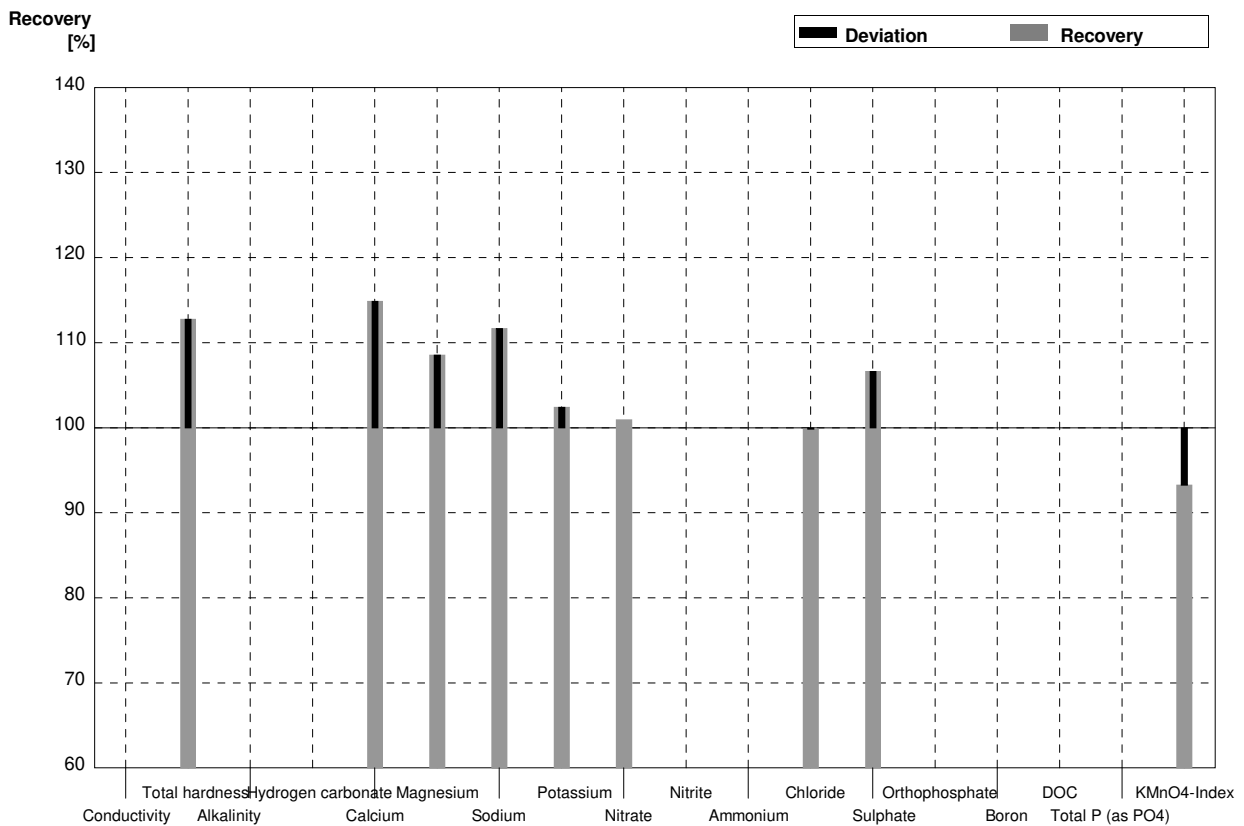
**Sample N169B**  
**Laboratory AX**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	74,658	1,705	mg/l	106%
Magnesium	14,9	0,3	15,024	0,044	mg/l	101%
Sodium	9,2	0,6	9,132	0,057	mg/l	99%
Potassium	4,29	0,03	4,277	0,020	mg/l	100%
Nitrate	36,4	0,9	37,010	0,423	mg/l	102%
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004	0,093	0,022	mg/l	109%
Chloride	10,0	0,3	9,905	0,017	mg/l	99%
Sulphate	51,4	1,0	51,595	0,307	mg/l	100%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory AY**

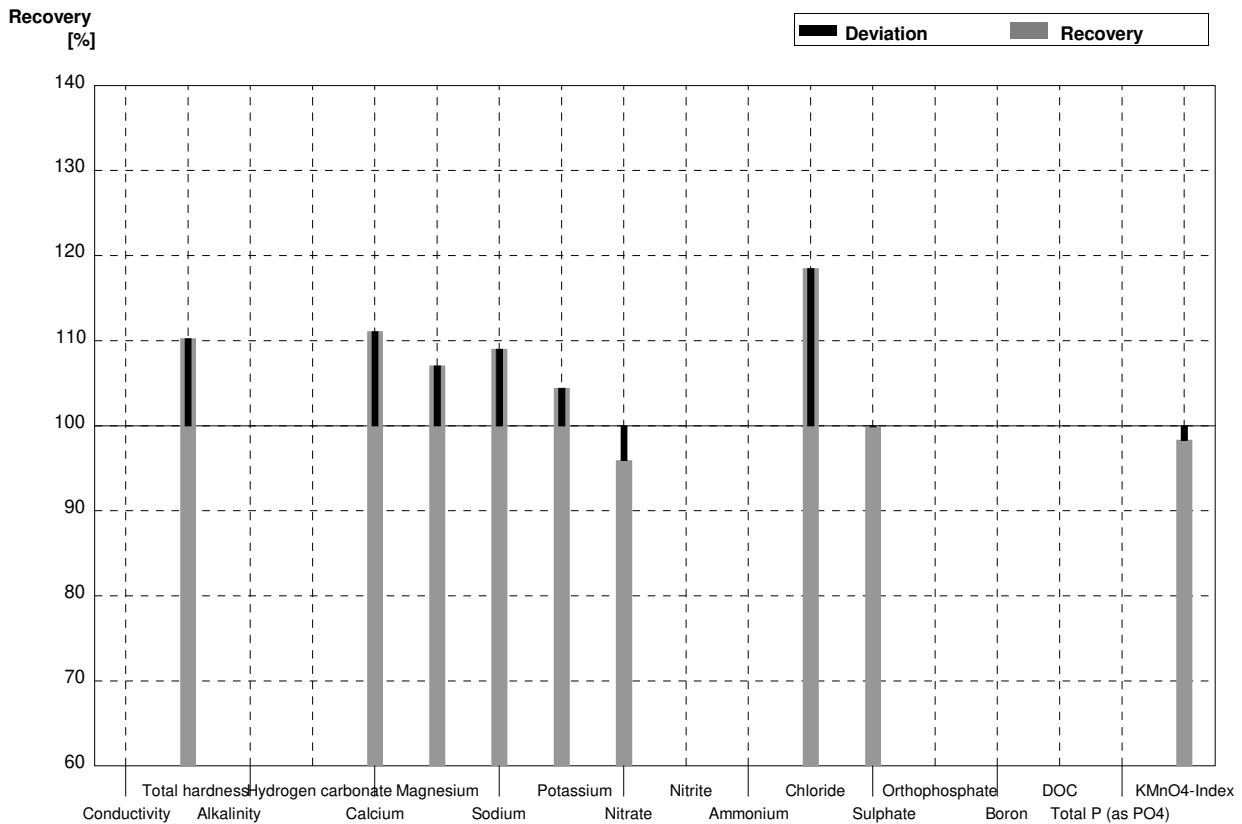
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019	1,244	0,06	mmol/l	113%
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	34,81	1,8	mg/l	115%
Magnesium	8,40	0,13	9,12	0,5	mg/l	109%
Sodium	35,4	0,2	39,54	2	mg/l	112%
Potassium	2,05	0,02	2,10	0,16	mg/l	102%
Nitrate	17,0	0,5	17,167	0,9	mg/l	101%
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	64,91	3	mg/l	100%
Sulphate	15,5	0,3	16,53	1	mg/l	107%
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11	4,16	0,17	mg/l	93%





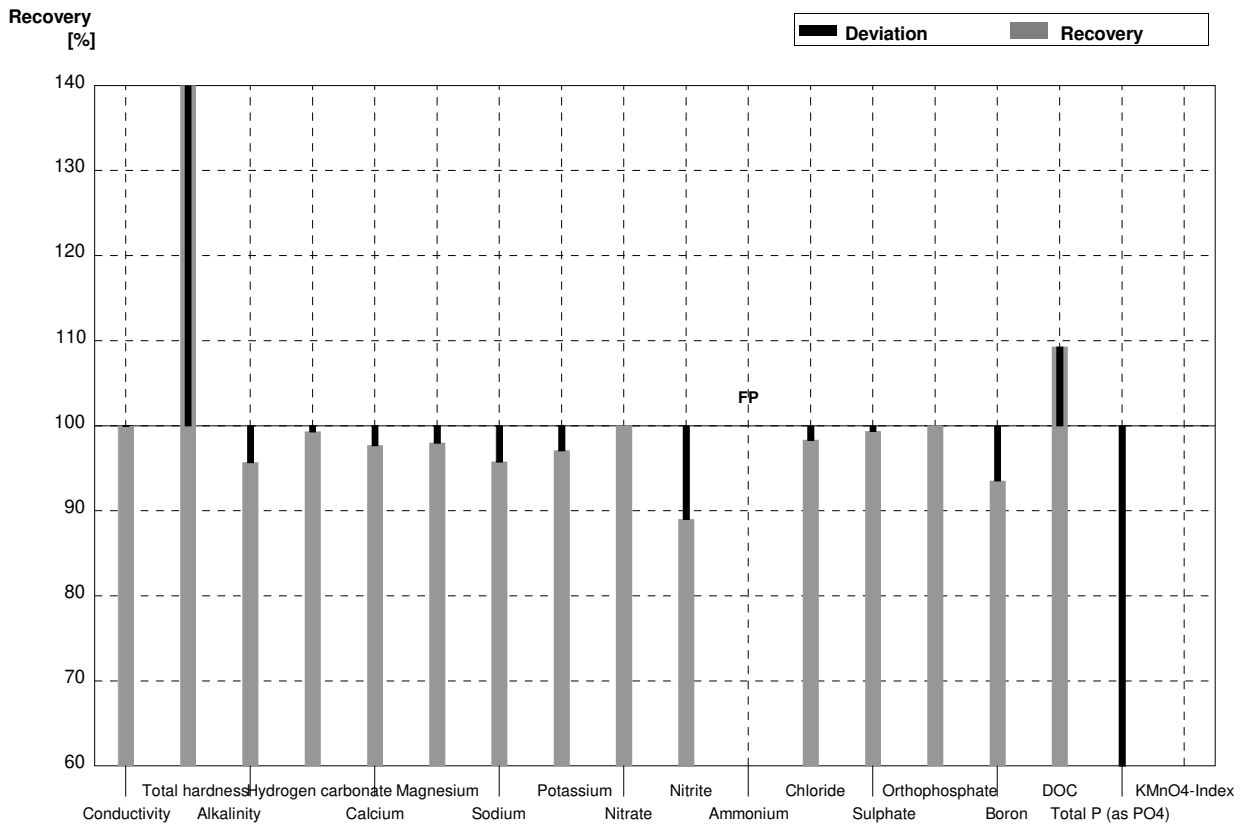
**Sample N169B**  
**Laboratory AY**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03	2,602	0,13	mmol/l	110%
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	77,98	4	mg/l	111%
Magnesium	14,9	0,3	15,95	0,8	mg/l	107%
Sodium	9,2	0,6	10,03	0,6	mg/l	109%
Potassium	4,29	0,03	4,48	0,3	mg/l	104%
Nitrate	36,4	0,9	34,920	1,8	mg/l	96%
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3	11,85	0,6	mg/l	119%
Sulphate	51,4	1,0	51,34	3	mg/l	100%
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12	3,52	3	mg/l	98%



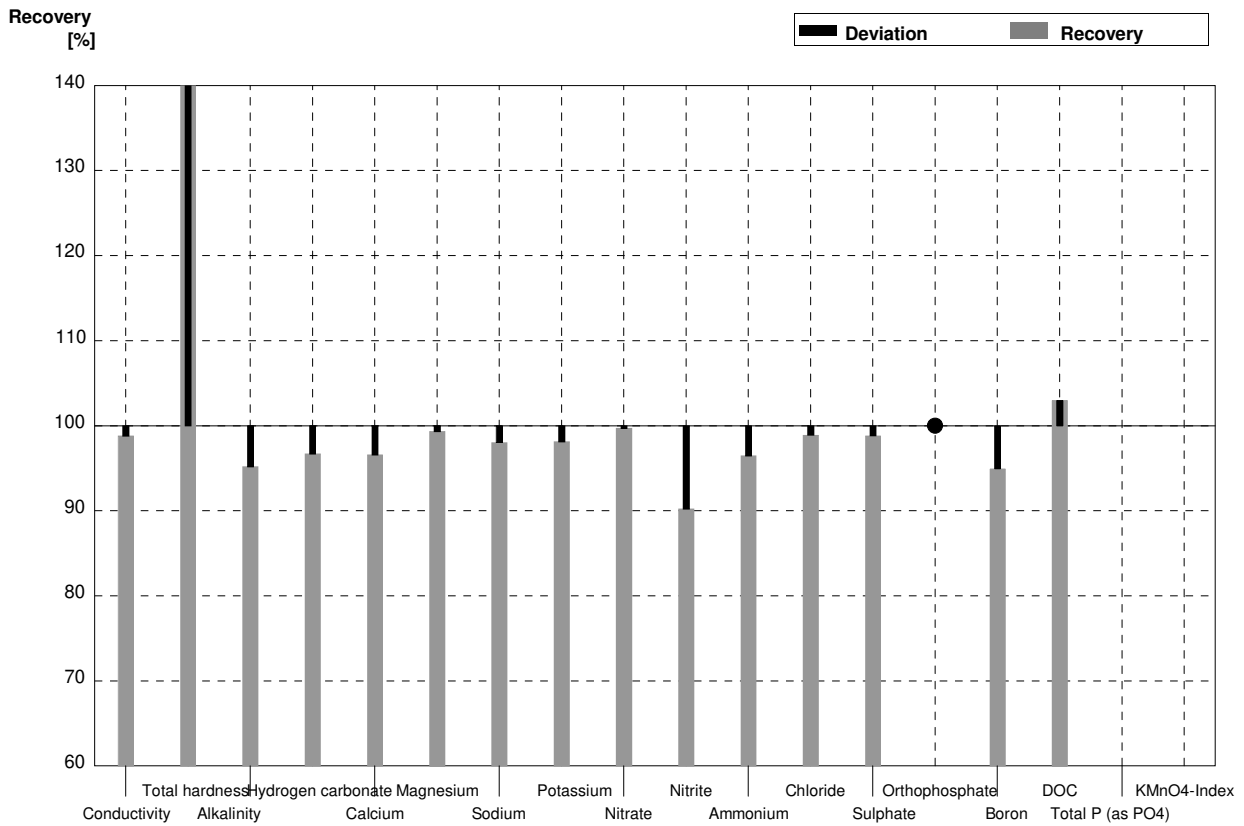
**Sample N169A**  
**Laboratory AZ**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	10,4	µS/cm	100%
Total hardness	1,103	0,019	6,2		mmol/l	562%
Alkalinity	1,371	0,013	1,312		mmol/l	96%
Hydrogen carbonate	80,6	0,8	80,03		mg/l	99%
Calcium	30,3	0,7	29,6	1,78	mg/l	98%
Magnesium	8,40	0,13	8,23	0,75	mg/l	98%
Sodium	35,4	0,2	33,9	2,79	mg/l	96%
Potassium	2,05	0,02	1,99	0,18	mg/l	97%
Nitrate	17,0	0,5	17,0	3,51	mg/l	100%
Nitrite	0,0573	0,0002	0,051		mg/l	89%
Ammonium	<0,01		0,0220		mg/l	FP
Chloride	65,0	1,2	63,9	13,3	mg/l	98%
Sulphate	15,5	0,3	15,4	3,29	mg/l	99%
Orthophosphate	0,0455	0,0032	0,0455		mg/l	100%
Boron	0,0402	0,0011	0,0376	0,55	mg/l	94%
DOC	3,72	0,05	4,065		mg/l	109%
Total P (as PO4)	0,1376	0,0016	0,01285		mg/l	9%
KMnO4-Index	4,46	0,11			mg/l	



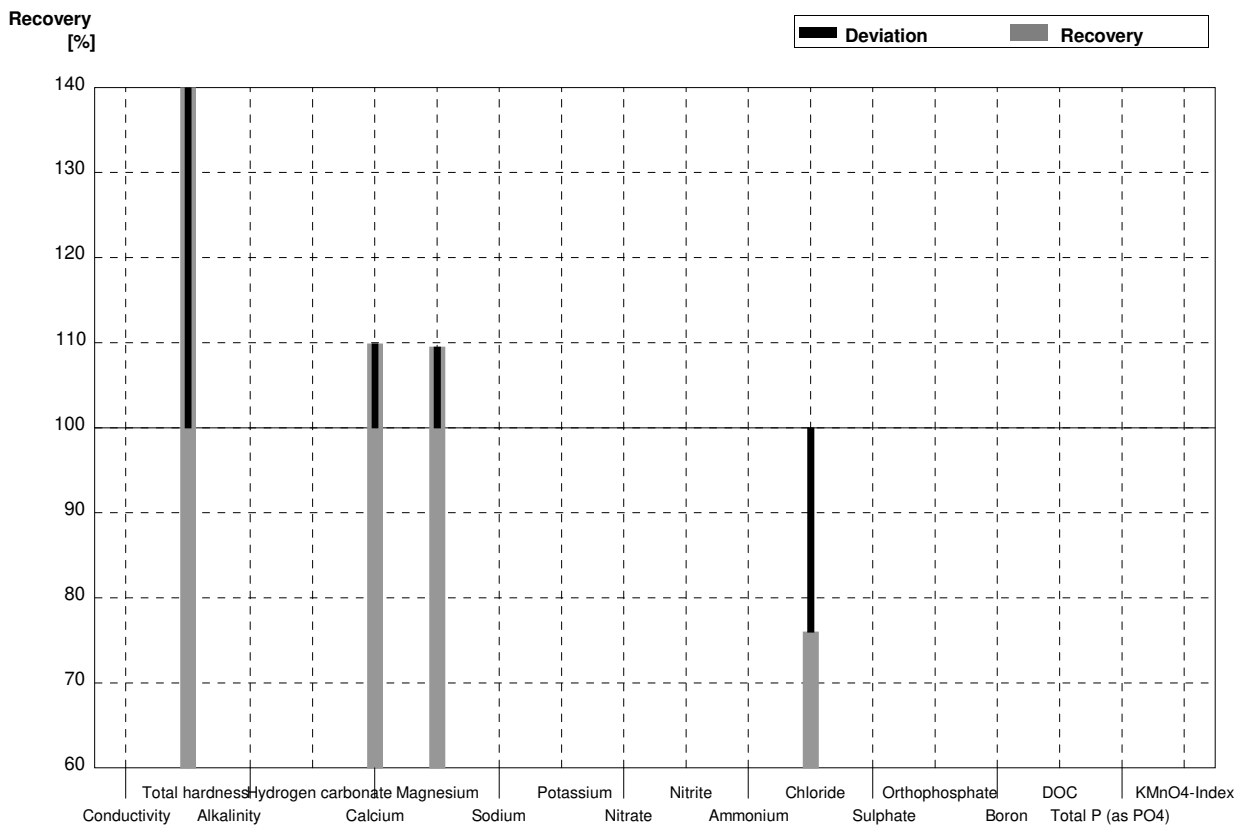
**Sample N169B**  
**Laboratory AZ**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	499	12,5	µS/cm	99%
Total hardness	2,36	0,03	12,9		mmol/l	547%
Alkalinity	3,28	0,06	3,122		mmol/l	95%
Hydrogen carbonate	197	3	190,5		mg/l	97%
Calcium	70,2	1,2	67,8	4,09	mg/l	97%
Magnesium	14,9	0,3	14,8	1,34	mg/l	99%
Sodium	9,2	0,6	9,02	0,74	mg/l	98%
Potassium	4,29	0,03	4,21	0,39	mg/l	98%
Nitrate	36,4	0,9	36,3	7,49	mg/l	100%
Nitrite	0,0798	0,0011	0,072		mg/l	90%
Ammonium	0,085	0,004	0,0820		mg/l	96%
Chloride	10,0	0,3	9,89	2,06	mg/l	99%
Sulphate	51,4	1,0	50,8	10,9	mg/l	99%
Orthophosphate	<0,009		0,00200		mg/l	•
Boron	0,0694	0,0005	0,0659	0,89	mg/l	95%
DOC	6,35	0,05	6,540		mg/l	103%
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



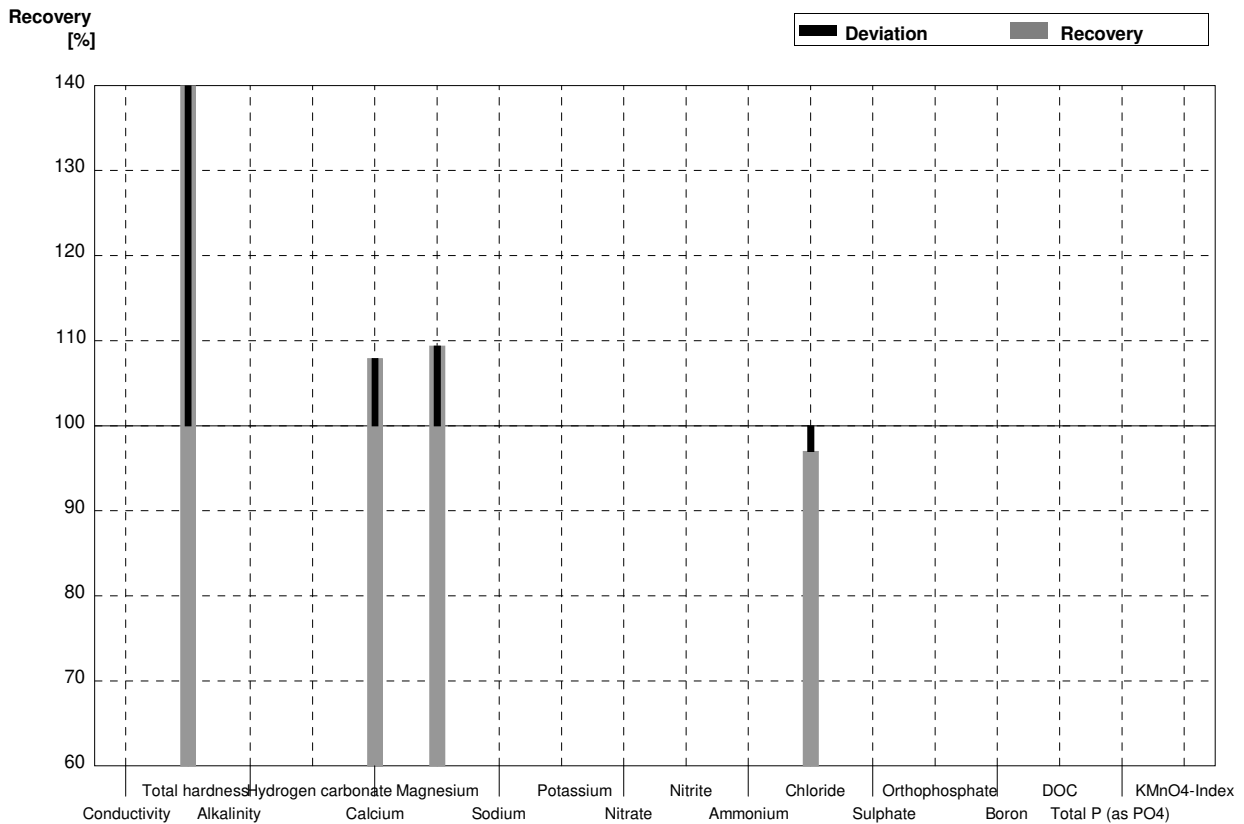
**Sample N169A**  
**Laboratory BA**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019	6,85	0,10	mmol/l	621%
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	33,30	0,5	mg/l	110%
Magnesium	8,40	0,13	9,20	0,5	mg/l	110%
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2	49,40	1,0	mg/l	76%
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



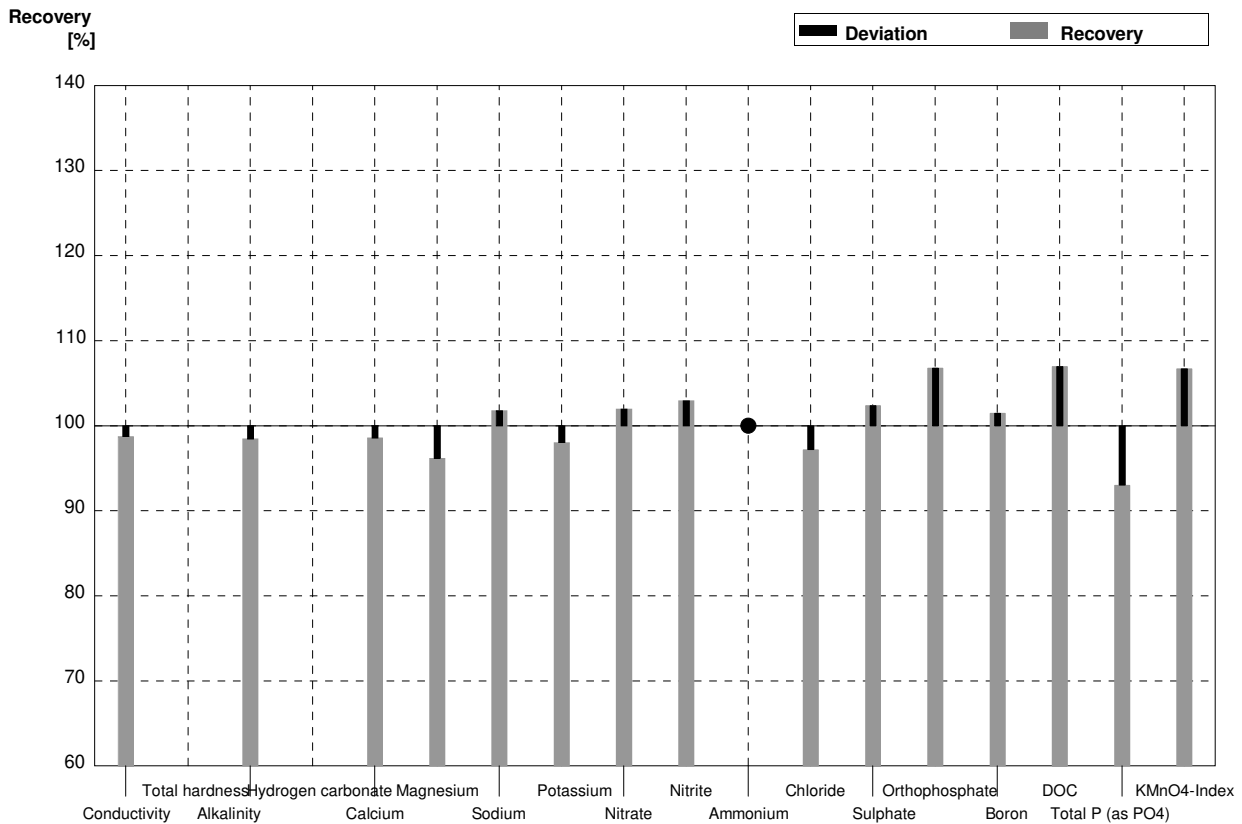
**Sample N169B**  
**Laboratory BA**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03	14,35	0,10	mmol/l	608%
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	75,75	0,5	mg/l	108%
Magnesium	14,9	0,3	16,30	0,5	mg/l	109%
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3	9,70	1,0	mg/l	97%
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



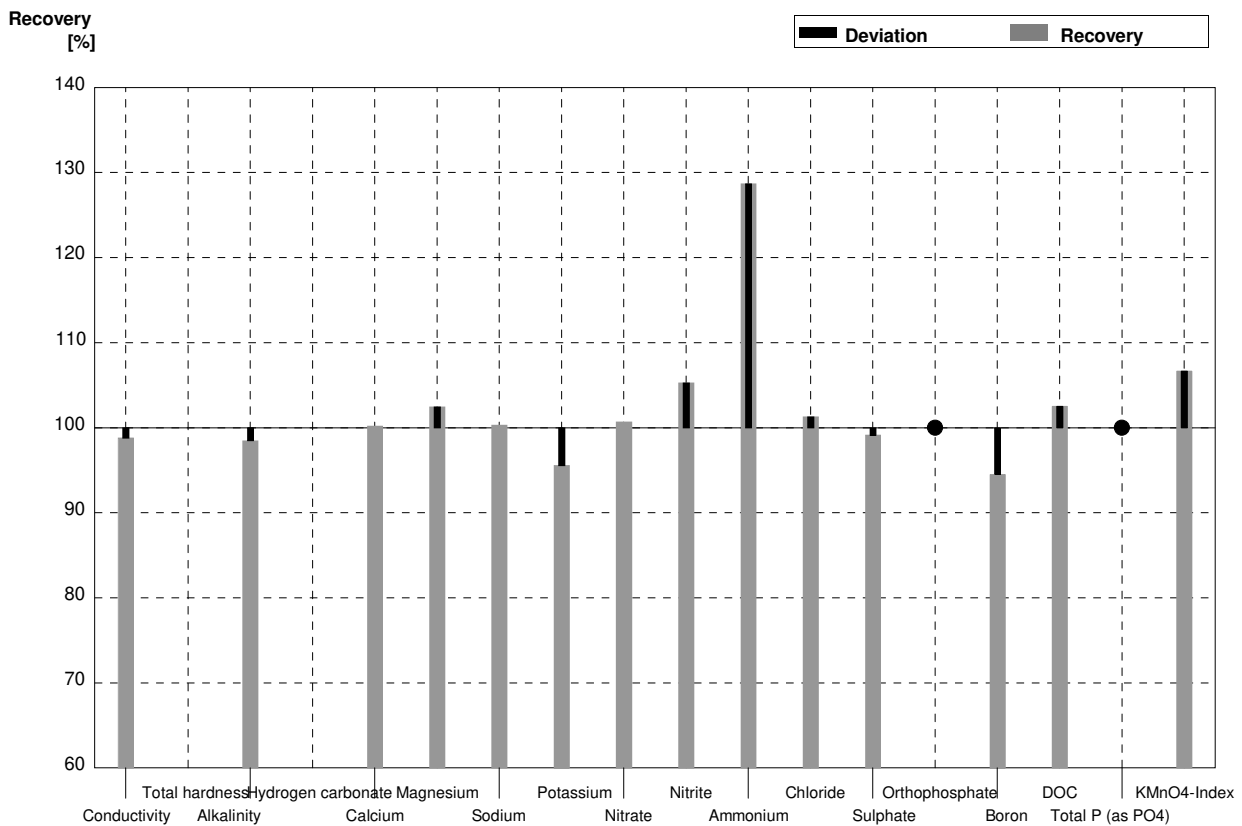
**Sample N169A**  
**Laboratory BB**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	411	25	µS/cm	99%
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013	1,35	0,13	mmol/l	98%
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7	29,87	3,73	mg/l	99%
Magnesium	8,40	0,13	8,08	1,07	mg/l	96%
Sodium	35,4	0,2	36,03	3,21	mg/l	102%
Potassium	2,05	0,02	2,01	0,30	mg/l	98%
Nitrate	17,0	0,5	17,34	0,94	mg/l	102%
Nitrite	0,0573	0,0002	0,059	0,005	mg/l	103%
Ammonium	<0,01		<0,04	0,001	mg/l	•
Chloride	65,0	1,2	63,19	4,87	mg/l	97%
Sulphate	15,5	0,3	15,87	1,24	mg/l	102%
Orthophosphate	0,0455	0,0032	0,0486	0,003	mg/l	107%
Boron	0,0402	0,0011	0,0408	0,005	mg/l	101%
DOC	3,72	0,05	3,98	0,40	mg/l	107%
Total P (as PO4)	0,1376	0,0016	0,128	0,006	mg/l	93%
KMnO4-Index	4,46	0,11	4,76	0,571	mg/l	107%



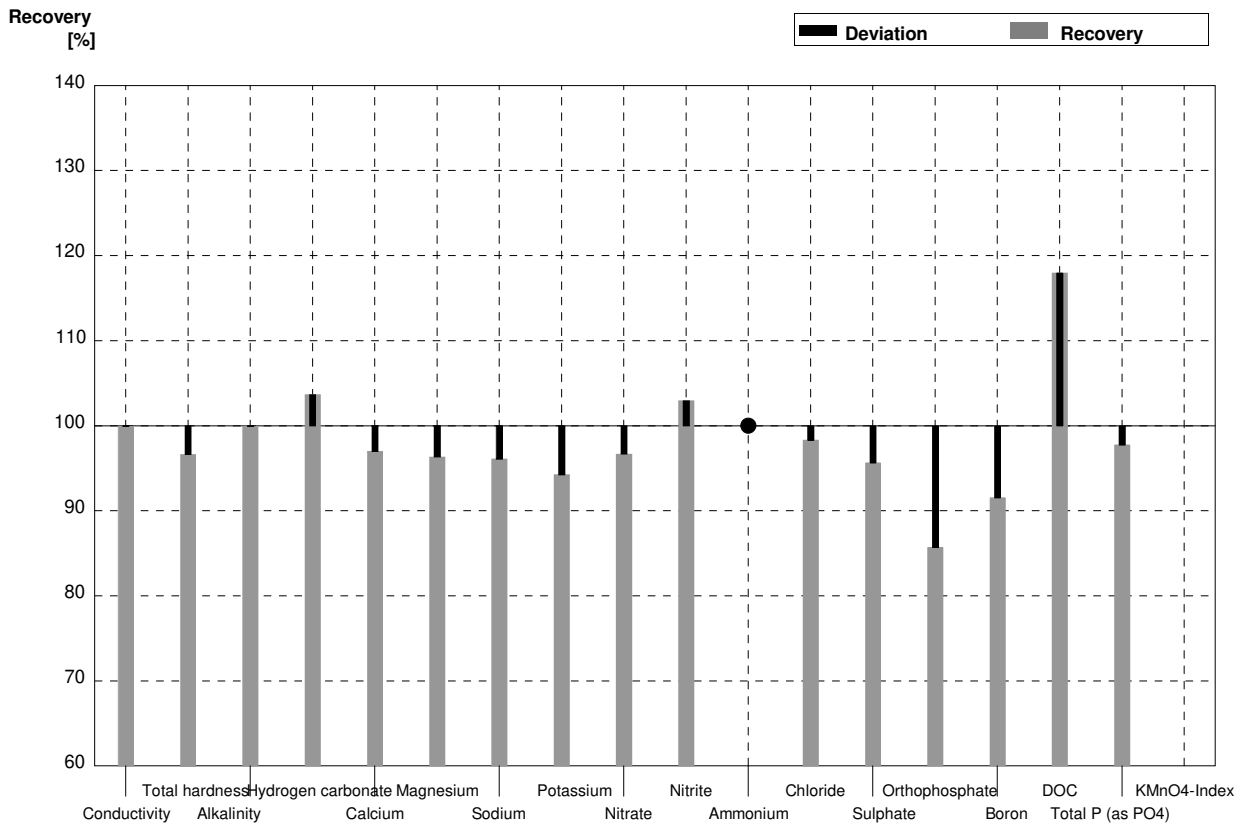
**Sample N169B**  
**Laboratory BB**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	499	31	µS/cm	99%
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06	3,23	0,30	mmol/l	98%
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2	70,36	8,79	mg/l	100%
Magnesium	14,9	0,3	15,27	2,03	mg/l	102%
Sodium	9,2	0,6	9,23	0,82	mg/l	100%
Potassium	4,29	0,03	4,10	0,61	mg/l	96%
Nitrate	36,4	0,9	36,65	1,98	mg/l	101%
Nitrite	0,0798	0,0011	0,084	0,007	mg/l	105%
Ammonium	0,085	0,004	0,1094	0,011	mg/l	129%
Chloride	10,0	0,3	10,13	0,78	mg/l	101%
Sulphate	51,4	1,0	50,97	3,98	mg/l	99%
Orthophosphate	<0,009		<0,030	0,0005	mg/l	•
Boron	0,0694	0,0005	0,0656	0,007	mg/l	95%
DOC	6,35	0,05	6,51	0,65	mg/l	103%
Total P (as PO4)	<0,009		<0,010	0,0001	mg/l	•
KMnO4-Index	3,58	0,12	3,82	0,458	mg/l	107%



**Sample N169A**  
**Laboratory BC**

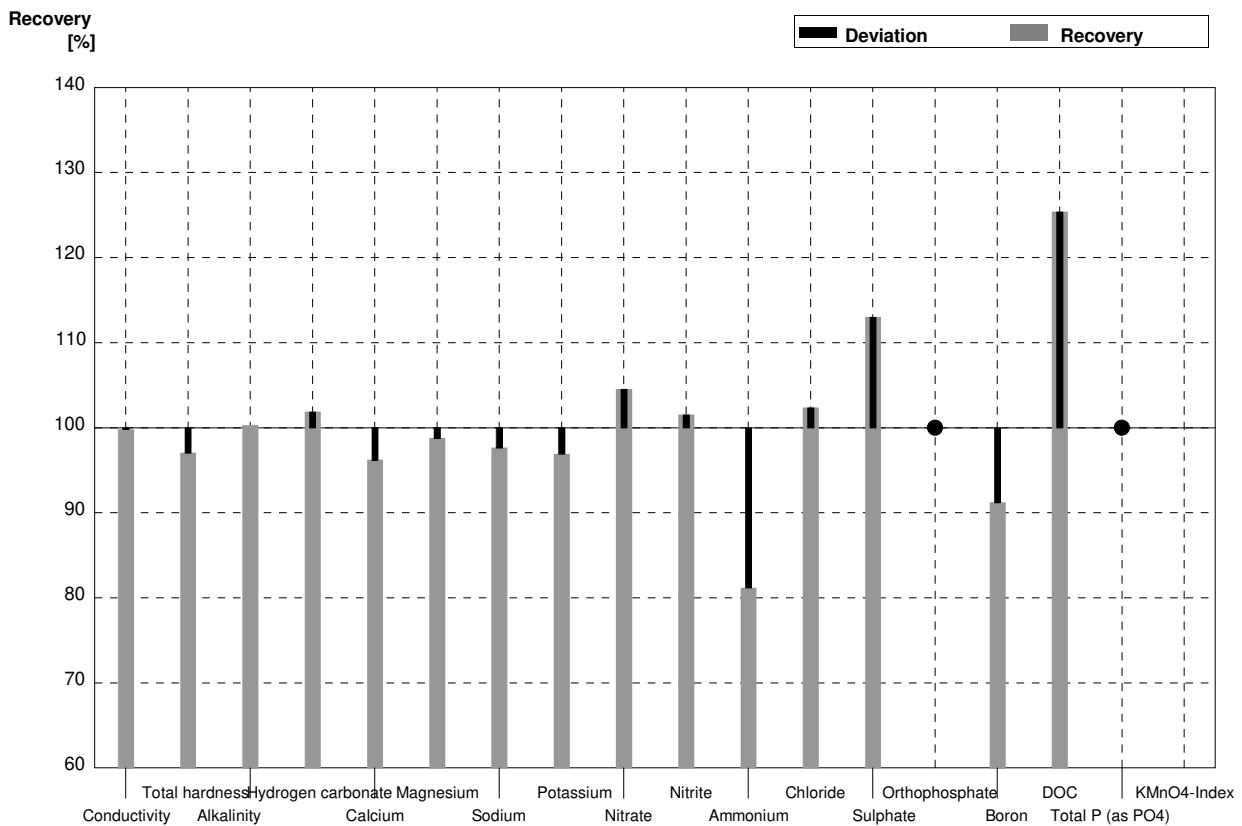
Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	34,90	µS/cm	100%
Total hardness	1,103	0,019	1,066	0,1096	mmol/l	97%
Alkalinity	1,371	0,013	1,37	0,0311	mmol/l	100%
Hydrogen carbonate	80,6	0,8	83,57	1,8970	mg/l	104%
Calcium	30,3	0,7	29,3892	2,5920	mg/l	97%
Magnesium	8,40	0,13	8,0937	0,9494	mg/l	96%
Sodium	35,4	0,2	34,0202	3,4156	mg/l	96%
Potassium	2,05	0,02	1,9324	0,3208	mg/l	94%
Nitrate	17,0	0,5	16,435	1,5909	mg/l	97%
Nitrite	0,0573	0,0002	0,059	0,00409	mg/l	103%
Ammonium	<0,01		<0,0095	0,00101	mg/l	•
Chloride	65,0	1,2	63,914	5,2218	mg/l	98%
Sulphate	15,5	0,3	14,824	1,3697	mg/l	96%
Orthophosphate	0,0455	0,0032	0,0390	0,00411	mg/l	86%
Boron	0,0402	0,0011	0,0368	0,00455	mg/l	92%
DOC	3,72	0,05	4,389	0,4301	mg/l	118%
Total P (as PO4)	0,1376	0,0016	0,1345	0,01492	mg/l	98%
KMnO4-Index	4,46	0,11			mg/l	





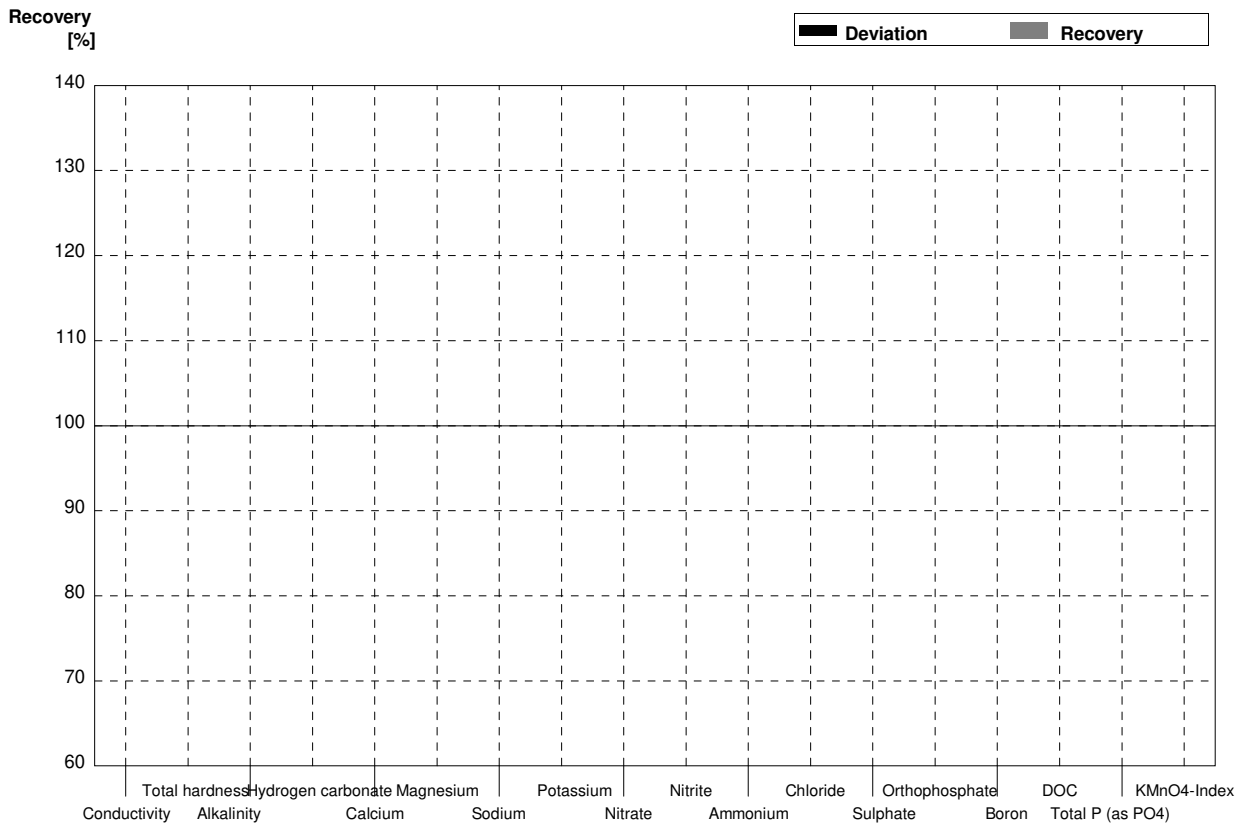
**Sample N169B**  
**Laboratory BC**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	504	42,28	µS/cm	100%
Total hardness	2,36	0,03	2,290	0,2353	mmol/l	97%
Alkalinity	3,28	0,06	3,29	0,0747	mmol/l	100%
Hydrogen carbonate	197	3	200,69	4,5557	mg/l	102%
Calcium	70,2	1,2	67,5336	5,9560	mg/l	96%
Magnesium	14,9	0,3	14,7190	1,7265	mg/l	99%
Sodium	9,2	0,6	8,9833	0,9019	mg/l	98%
Potassium	4,29	0,03	4,1579	0,6902	mg/l	97%
Nitrate	36,4	0,9	38,048	3,6830	mg/l	105%
Nitrite	0,0798	0,0011	0,081	0,00562	mg/l	102%
Ammonium	0,085	0,004	0,069	0,00740	mg/l	81%
Chloride	10,0	0,3	10,234	0,8361	mg/l	102%
Sulphate	51,4	1,0	58,088	5,3673	mg/l	113%
Orthophosphate	<0,009		<0,0117	0,00123	mg/l	•
Boron	0,0694	0,0005	0,0633	0,00784	mg/l	91%
DOC	6,35	0,05	7,961	0,7802	mg/l	125%
Total P (as PO4)	<0,009		<0,0188	0,00208	mg/l	•
KMnO4-Index	3,58	0,12			mg/l	



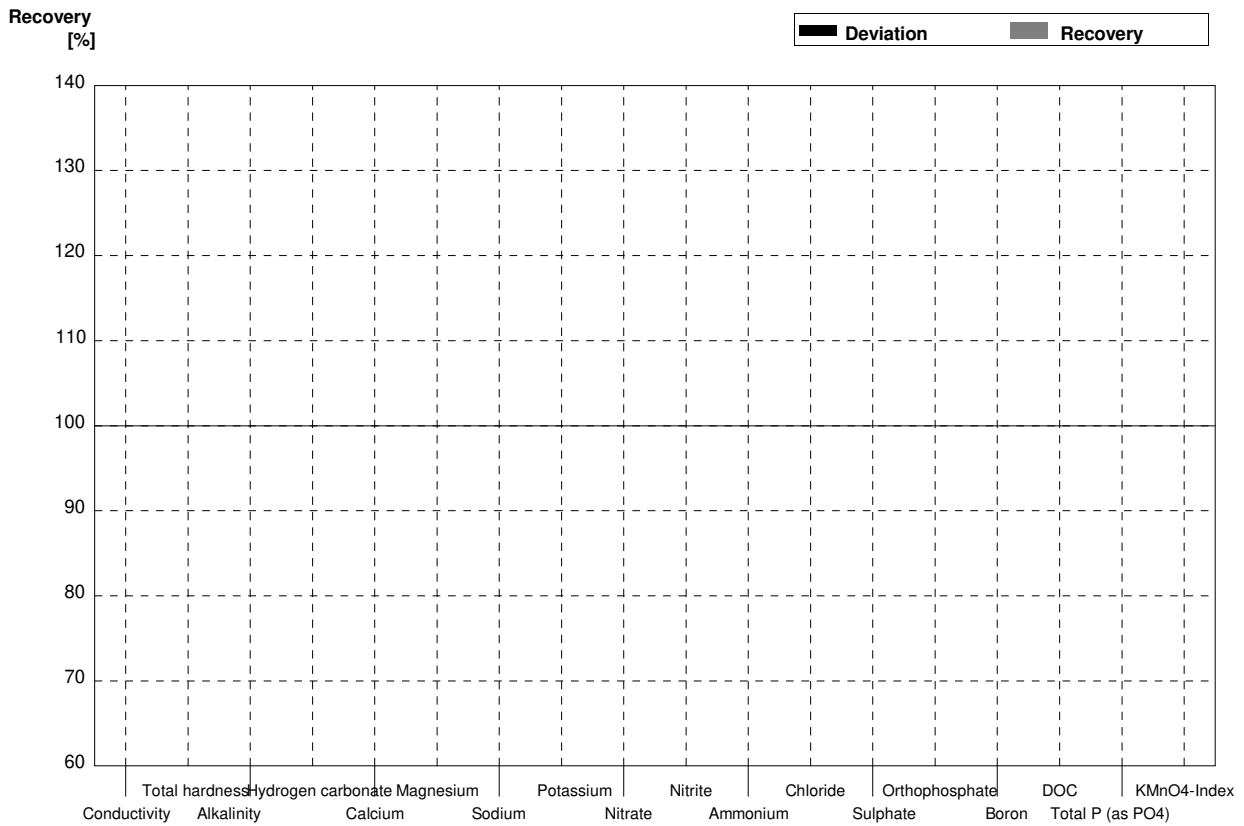
**Sample N169A**  
**Laboratory BD**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2			µS/cm	
Total hardness	1,103	0,019			mmol/l	
Alkalinity	1,371	0,013			mmol/l	
Hydrogen carbonate	80,6	0,8			mg/l	
Calcium	30,3	0,7			mg/l	
Magnesium	8,40	0,13			mg/l	
Sodium	35,4	0,2			mg/l	
Potassium	2,05	0,02			mg/l	
Nitrate	17,0	0,5			mg/l	
Nitrite	0,0573	0,0002			mg/l	
Ammonium	<0,01				mg/l	
Chloride	65,0	1,2			mg/l	
Sulphate	15,5	0,3			mg/l	
Orthophosphate	0,0455	0,0032			mg/l	
Boron	0,0402	0,0011			mg/l	
DOC	3,72	0,05			mg/l	
Total P (as PO4)	0,1376	0,0016			mg/l	
KMnO4-Index	4,46	0,11			mg/l	



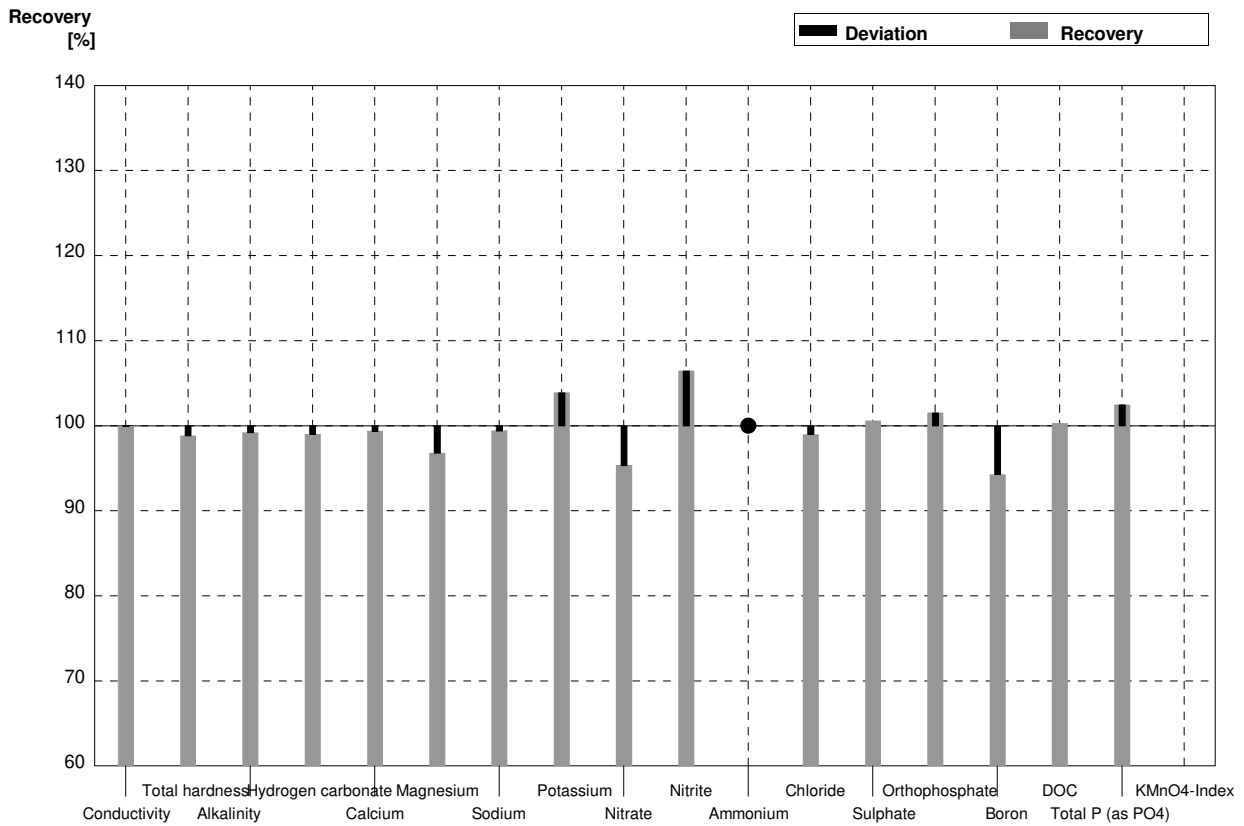
**Sample N169B**  
**Laboratory BD**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2			µS/cm	
Total hardness	2,36	0,03			mmol/l	
Alkalinity	3,28	0,06			mmol/l	
Hydrogen carbonate	197	3			mg/l	
Calcium	70,2	1,2			mg/l	
Magnesium	14,9	0,3			mg/l	
Sodium	9,2	0,6			mg/l	
Potassium	4,29	0,03			mg/l	
Nitrate	36,4	0,9			mg/l	
Nitrite	0,0798	0,0011			mg/l	
Ammonium	0,085	0,004			mg/l	
Chloride	10,0	0,3			mg/l	
Sulphate	51,4	1,0			mg/l	
Orthophosphate	<0,009				mg/l	
Boron	0,0694	0,0005			mg/l	
DOC	6,35	0,05			mg/l	
Total P (as PO4)	<0,009				mg/l	
KMnO4-Index	3,58	0,12			mg/l	



**Sample N169A**  
**Laboratory BE**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	416,2	1,2	416	12	µS/cm	100%
Total hardness	1,103	0,019	1,09	0,09	mmol/l	99%
Alkalinity	1,371	0,013	1,36	0,06	mmol/l	99%
Hydrogen carbonate	80,6	0,8	79,8	3,2	mg/l	99%
Calcium	30,3	0,7	30,11	1,51	mg/l	99%
Magnesium	8,40	0,13	8,13	0,49	mg/l	97%
Sodium	35,4	0,2	35,19	1,41	mg/l	99%
Potassium	2,05	0,02	2,13	0,17	mg/l	104%
Nitrate	17,0	0,5	16,21	0,97	mg/l	95%
Nitrite	0,0573	0,0002	0,061	0,005	mg/l	106%
Ammonium	<0,01		<0,008		mg/l	•
Chloride	65,0	1,2	64,34	3,21	mg/l	99%
Sulphate	15,5	0,3	15,59	0,94	mg/l	101%
Orthophosphate	0,0455	0,0032	0,0462	0,0025	mg/l	102%
Boron	0,0402	0,0011	0,0379	0,0040	mg/l	94%
DOC	3,72	0,05	3,73	0,34	mg/l	100%
Total P (as PO4)	0,1376	0,0016	0,141	0,010	mg/l	102%
KMnO4-Index	4,46	0,11			mg/l	



**Sample N169B**  
**Laboratory BE**

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Conductivity	505	2	505	15	µS/cm	100%
Total hardness	2,36	0,03	2,31	0,18	mmol/l	98%
Alkalinity	3,28	0,06	3,23	0,13	mmol/l	98%
Hydrogen carbonate	197	3	194	8	mg/l	98%
Calcium	70,2	1,2	69,06	3,45	mg/l	98%
Magnesium	14,9	0,3	14,29	0,86	mg/l	96%
Sodium	9,2	0,6	9,16	0,37	mg/l	100%
Potassium	4,29	0,03	4,42	0,35	mg/l	103%
Nitrate	36,4	0,9	34,86	2,09	mg/l	96%
Nitrite	0,0798	0,0011	0,086	0,007	mg/l	108%
Ammonium	0,085	0,004	0,086	0,008	mg/l	101%
Chloride	10,0	0,3	9,90	0,49	mg/l	99%
Sulphate	51,4	1,0	51,18	3,07	mg/l	100%
Orthophosphate	<0,009		<0,006		mg/l	•
Boron	0,0694	0,0005	0,065	0,007	mg/l	94%
DOC	6,35	0,05	6,22	0,56	mg/l	98%
Total P (as PO4)	<0,009		<0,006		mg/l	•
KMnO4-Index	3,58	0,12			mg/l	

