

IFA-Proficiency Testing Scheme zur Wasseranalytik / for Water Analysis

Endbericht / Final Report
Eignungsprüfungsrunde / Proficiency testing round
N174

Nährstoffe
Nutrients / Major ions

Probenversand / Sample dispatch: 11. 11. 2024

Durchführung gemäß Verfahren / In accordance with the procedure: AVKPS.01



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Allgemeine Informationen

Diese Zusammenfassung beschreibt die 174. Runde der regelmäßigen Eignungsprüfungen zur Parametergruppe „Nährstoffe“. Die Prüfgegenstände N174A und N174B wurden am 11. November 2024 an 43 Teilnehmer versendet. Jedes Labor erhielt zwei Prüfgegenstände zu 1000 ml, abgefüllt in je zwei 500-ml-Flaschen aus PET.

Einsendeschluss für die Ergebnisse war am 6. Dezember 2024. Von 42 Teilnehmern wurden Ergebnisse übermittelt. Zur Anonymisierung wurde jedem Labor per Zufallsgenerator ein Buchstabencode zugeteilt.

Zusammensetzung der Prüfgegenstände

Die Prüfgegenstände N174A und N174B wurden durch Einwaage von reinen Salzen hergestellt, wobei die meisten der in der österreichischen Gewässerzustandsüberwachungsverordnung (GZÜV i.d.g.F.) für den Parameterblock 1 genannten Parameter berücksichtigt wurden. Zur Herstellung wurden CaCO_3 , CaCl_2 , $\text{Ca}(\text{NO}_3)_2$, MgSO_4 , MgCl_2 , $\text{Mg}(\text{NO}_3)_2$, Natriumsalicylat (für KMnO_4 -Index), NaCl , NaHCO_3 , KHCO_3 , $\text{C}_6\text{H}_{15}\text{PO}_3$ (für Gesamt-P) und Kaliumhydrogenphthalat (für DOC) als Reinsubstanzen sowie zertifizierte Standardlösungen von NaNO_2 , Na_2SiO_3 , NH_4Cl , KH_2PO_4 und H_3BO_3 verwendet. Beide Prüfgegenstände enthielten freies CO_2 , welches zum Lösen von CaCO_3 und zum Neutralisieren von Na_2SiO_3 verwendet wurde. Stabilisierung der Prüfgegenstände erfolgte durch Sterilfiltration und über die Temperatur.

Homogenitäts-, Richtigkeits- und Stabilitätsuntersuchung

Die Prüfgegenstände wurden vor dem Versand am IFA-Tulln auf Homogenität und Richtigkeit untersucht. Die Ergebnisse der Kontrollanalytik finden sich auf den Rohdatenblättern sowie auf den Auswertungen zu jedem Parameter.

Zur Überprüfung der Stabilität wurden vier Wochen nach dem Versand alle Parameter nochmals bestimmt. Die Ergebnisse befinden sich ebenfalls auf den Rohdatenblättern sowie auf den Auswertungen zu jedem Parameter.

Unserer Erfahrung nach sind die Prüfgegenstände hinsichtlich der Parameter Leitfähigkeit, Gesamthärte, Säurekapazität, Ca^{2+} , Mg^{2+} , Na^+ , K^+ , NO_3^- , Cl^- , SO_4^{2-} , Bor und HCO_3^- bis 18 Monate stabil. Für die Parameter NH_4^+ , NO_2^- , o-PO_4^{3-} Gesamt-P, DOC und KMnO_4 -Index sind die Prüfgegenstände mehrere Wochen stabil, wobei die ersten Veränderungen üblicherweise bei Ammonium beobachtet werden können.

Zugewiesene Werte

Die zugewiesenen Werte ergaben sich aus den Einwaagewerten der verwendeten Chemikalien. Die Unsicherheiten der zugewiesenen Werte (erweiterte Unsicherheiten, $k = 2$, $\alpha = 0,05$) wurden nach den Vorgaben des EURACHEM / CITAC Guides „Quantifying Uncertainty in Analytical Measurement, 3rd Edition (2012)“ ermittelt.

Der zugewiesene Wert für die Leitfähigkeit wurde mit einer Näherung nach Debye-Hückel berechnet. Die Auswertung der bis jetzt erhobenen Daten zeigte, dass bei mehr als 20 Teilnehmern und den beobachteten Standardabweichungen der Messwerte zwischen den Labors von ca. 1 % die Mittelwerte der ausreißerbereinigten Daten eine geringere Unsicherheit haben als die mit der Näherung berechneten Werte. Deshalb wurde die Leitfähigkeit über die Labormittelwerte ausgewertet. Die mit der Näherung berechneten Werte waren $351 \mu\text{S}/\text{cm}$ für N174A und $536 \mu\text{S}/\text{cm}$ für N174B.

Für den pH-Wert lassen sich keine zugewiesenen Werte angeben. Daher wurden die Messwerte nicht weiter ausgewertet. Die Werte können anhand der Rohdatenblätter verglichen werden. Dabei ist jedoch zu berücksichtigen, dass die Prüfgegenstände nur schwach gepuffert waren und freies CO_2 enthielten. Man beobachtet daher in der Regel ein leichtes Ansteigen des pH-Wertes mit der Zeit.

Als Standardsubstanz für den Parameter Gesamt-P (als PO_4^{3-}) nach Aufschluss nach DIN EN ISO 6878 wurde Ethylphosphonsäurediethylester ($\text{C}_6\text{H}_{15}\text{PO}_3$) verwendet. Diese Substanz kann nur nach einem oxidierenden Aufschluss als Phosphat erfasst werden. Die zugewiesenen Werte wurden aus den Einwaagen von KH_2PO_4 und $\text{C}_6\text{H}_{15}\text{PO}_3$ berechnet. Die Ergebnisse wurden in mg/l PO_4^{3-} angegeben.

Als Standardsubstanz für den KMnO_4 -Index wurde Natriumsalicylat in den Konzentrationen 1,51 mg/l (N174A) und 2,41 mg/l (N174B) verwendet. Geht man von einer vollständigen Oxidation zu CO_2 , Wasser und Nitrat aus, ergeben sich unter Berücksichtigung von Nitrit theoretische Werte von 2,11 mg/l O_2 (N174A) und 3,39 mg/l O_2 (N174B). Die endgültige Auswertung erfolgte über die Labormittelwerte. Diese waren 2,10 mg/l O_2 für N174A und 3,13 mg/l O_2 für N174B.

Dem Prüfgegenstand N174A wurden keine Phosphorverbindungen und N174B kein Ammonium zugesetzt. Die zugewiesenen Werte von $<0,01 \text{ mg/l NH}_4^+$, $<0,009 \text{ mg/l o-PO}_4^{3-}$ und $<0,009 \text{ mg/l Ges-P (als PO}_4^{3-})$ wurden bei diesen Überprüfungen der Blindwerte entsprechend den Mindestbestimmungsgrenzen der GZÜV festgelegt.

Auswertung

Mit den bei uns eingegangenen Messwerten wurde ein Ausreißertest nach Hampel durchgeführt. Die durch den Test als auffällig eingestuft Werte wurden in der parameterorientierten Auswertung mit einem Stern gekennzeichnet. Die aus den ausreißerbereinigten Daten berechneten, auf die zugewiesenen Werte bezogenen mittleren Wiederfindungen lagen zwischen 97,0 % (Orthophosphat in N174B) und 105,7 % (DOC in N174B). Die aus den ausreißerbereinigten Daten berechneten Standardabweichungen bewegten sich im Bereich von 1,2 % (Leitfähigkeit in N174A und N174B) bis 16,2 % (Orthophosphat in N174B).

Zu den Mittelwerten und mittleren Wiederfindungen wurden auch die Vertrauensbereiche ($P=99\%$) angegeben. Diese Vertrauensbereiche der Labormittelwerte enthalten in allen Fällen mit Ausnahme von DOC in N174B ($105,7\% \pm 3,4\%$) die entsprechenden zugewiesenen Werte mit ihren Unsicherheiten.

Die Standardunsicherheiten aller zugewiesenen Werte wurden nach dem Kriterium

$$u(x_{pp}) < 0,3\sigma_{pp} \text{ oder } u(x_{pp}) < 0,1\delta E \text{ (DIN ISO 13528, Punkt 9.2)}$$

überprüft und entsprach in allen Fällen bis auf Säurekapazität und Nitrat im Prüfgegenstand N174A und Säurekapazität, Nitrat, Nitrit, Sulfat und Orthophosphat im Prüfgegenstand N174B der Vorgabe.

Bei diesen Parametern, sowie auch für den DOC in N174B wurde deshalb zusätzlich der Vergleich der absoluten Differenz zwischen zugewiesenem Wert (x_{pt}) und Labormittelwert (\bar{X}) unter Berücksichtigung der Messunsicherheiten $u(x_{pt})$ und $u(\bar{X})$ durchgeführt. Alle Parameter entsprachen der Vorgabe:

$$|x_{pt} - \bar{X}| < 2 * \sqrt{u(x_{pt})^2 + u(\bar{X})^2} \quad (\text{DIN ISO 13528, Punkt 7 und E7})$$

Daher wurden alle ermittelten zugewiesenen Werte mit ihren Standardunsicherheiten übernommen.

z-Score-Auswertung

Ein z-Score ist die auf eine Standardabweichung bezogene Abweichung eines Messwertes vom zugewiesenen Wert. Er wird mittels folgender Formel berechnet:

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

| | |
|---------------|--|
| z | z-Score |
| x_i | Messwert eines Labors |
| X | Zugewiesener Wert oder ausreißerbereinigter Mittelwert („konventioneller zugewiesener Wert“) |
| σ_{pt} | Standardabweichung für die Eignungsbewertung |

Es handelt sich also um das Verhältnis der Abweichung des Messwertes eines Labors vom zugewiesenen Wert zu einer vorgegebenen Standardabweichung.

Die Standardabweichungen für die Eignungsbewertung wurden aus den Ergebnissen der im Zeitraum 2013 - 2023 vom IFA-Tulln veranstalteten Eignungsprüfungen berechnet.

Diese Vorgehensweise wurde deshalb gewählt, weil unserer Erfahrung nach, die Standardabweichungen der ausreißerbereinigten Messwerte zwischen den einzelnen Eignungsprüfungen variieren. Die Ermittlung der Standardabweichung über die Eignungsprüfungsrunden aus mehreren Jahren bieten jedoch eine gut abgesicherte Basis auf einer breiten Datengrundlage und ist somit meistens besser geeignet, als das bei der direkt aus der Eignungsprüfung berechneten Standardabweichung der Fall wäre. (EN ISO/IEC 17043:2010, B.3.1.3)

Der Vorteil, der sich für alle Teilnehmer daraus ergibt ist, dass dadurch bei unseren Eignungsprüfungen schon vor der Teilnahme vorhersehbar ist, welche z-Scores man mit den eigenen, aus Routineverfahren bekannten, Messabweichungen erwarten kann.

Rechenbeispiel:

Ein Labor bestimmte für den Parameter DOC einen Wert von 7,00 mg/l (Wiederfindung von 116%). Der zugewiesene Wert war 6,02 mg/l (100%).

In der nachfolgenden Tabelle (und in der Tabelle des Jahresprogrammes www.ifatest.at) ist die relative Standardabweichung für die Eignungsbewertung beim Parameter DOC mit 5,4 % angegeben. Bezogen auf den zugewiesenen Wert von 6,02 mg/l DOC entsprechen 5,4 % 0,33 mg/l.

$$z = \frac{x_i - X}{\sigma_{pt}} = \frac{7,00 \text{ mg/l} - 6,02 \text{ mg/l}}{0,33 \text{ mg/l}} \approx 3,0 \quad \text{oder} \quad \frac{116 \% - 100 \%}{5,4 \%} \approx 3,0$$

| | |
|---------------|---|
| z | z-Score |
| x_i | 7,00 mg/l entsprechen 116 % (Messwert des Labors) |
| X | 6,02 mg/l entsprechen 100 % (zugewiesener Wert) |
| σ_{pt} | 0,33 mg/l entsprechen 5,4 % (Standardabweichung für die Eignungsbewertung, siehe Tabelle) |

Abweichungen in den Nachkommastellen können sich bei Nachberechnung dadurch ergeben, dass im Bericht bei den Wiederfindungen zwecks Übersichtlichkeit gerundete Werte angegeben sind.

Die folgende Tabelle enthält die Standardabweichung für die Eignungsbewertung bezogen auf den zugewiesenen Wert mit ihren Anwendungsbereichen. Die Berechnung von z-Scores erfolgt nur dann, wenn der zugehörige zugewiesene Wert über der in der Tabelle angegebenen Konzentration liegt.

| Parameter | Standardabweichung für die Eignungsbewertung bezogen auf den zugewiesenen Wert | untere Grenze |
|---|--|---------------|
| Ammonium | 11 % | 0,01 mg/l |
| Bor | 7,1 % | 0,012 mg/l |
| Calcium | 3,1 % | 9 mg/l |
| Chlorid | 2,7 % | 2 mg/l |
| DOC | 5,4 % | 1 mg/l |
| Gesamthärte | 2,8 % | 0,1 mmol/l |
| Gesamt-P (als PO ₄ ³⁻) | 9,1 % | 0,015 mg/l |
| Hydrogencarbonat | 2,3 % | 20 mg/l |
| Kalium | 4,0 % | 0,5 mg/l |
| KMnO ₄ -Index | 8,2 % | 1 mg/l |
| Leitfähigkeit | 1,2 % | 50 µS/cm |
| Magnesium | 3,5 % | 1 mg/l |
| Natrium | 3,1 % | 1 mg/l |
| Nitrat | 3,0 % | 2 mg/l |
| Nitrit | 5,5 % | 0,01 mg/l |
| Orthophosphat | 9,2 % | 0,015 mg/l |
| Säurekapazität | 1,8 % | 0,2 mmol/l |
| Sulfat | 3,0 % | 3 mg/l |

Zur Interpretation von z-Scores wird meist folgende Klassifikation vorgeschlagen:

| z-Score | Klassifikation |
|---------|-------------------------|
| ≤2 | zufriedenstellend |
| 2< z <3 | fraglich |
| ≥3 | nicht zufriedenstellend |

Die z-Scores sind in der parameterorientierten Auswertung in den Tabellen neben den Wiederfindungen angegeben. Jedes Labor erhält zusätzlich zu dieser Auswertung ein Blatt, auf dem die erzielten z-Scores zusammengefasst und grafisch dargestellt sind. Die Standardabweichungen für die Eignungsbewertung sind dort in Konzentrationseinheiten angegeben.

Eine Übersichtstabelle aller z-Scores ist im Anschluss an die Rohdatentabellen im parameterorientierten Teil zu finden.

Darstellung der Ergebnisse in der Auswertung

Eine Legende zur Darstellung der Ergebnisse finden Sie auf der nächsten Seite. In den Tabellen der Auswertung sind jeweils der zugewiesene Wert, Messwert, Unsicherheit und die Wiederfindung dargestellt. In der parameterorientierten Auswertung befindet sich der direkt unter der Parameterbezeichnung. Die Unsicherheit des zugewiesenen Wertes ist immer als erweiterte Unsicherheit ($k = 2$; $\alpha = 0,05$) angegeben. Sie wurde nach den Vorgaben des EURACHEM / CITAC Guides „Quantifying Uncertainty in Analytical Measurement, 3rd Edition (2012)“ ermittelt. Die grafische Darstellung der Ergebnisse enthält die Unsicherheit des zugewiesenen Wertes als grau unterlegtes Band.

In der parameterorientierten Auswertung wurden die Messwerte, die nach dem Test nach Hampel als Ausreißer gewertet wurden, mit einem Stern (*) gekennzeichnet. Die Grafik der Messwerte wurde für Nitrit, Ammonium, Orthophosphat, Bor, DOC, ges-P (als PO_4^{3-}) und KMnO_4 -Index auf $100 \% \pm 45 \%$ des zugewiesenen Wertes und für alle übrigen Parameter auf $100 \% \pm 15 \%$ des zugewiesenen Wertes skaliert. Die kleine Tabelle unten links enthält statistische Parameter, darunter den 99 % - Vertrauensbereich der Labormittelwerte vor und nach Ausreißereliminierung.

Ergebnisse, für die keine Wiederfindung bzw. Abweichung vom zugewiesenen Wert berechnet werden kann (d.h. „kleiner als“ Ergebnisse oder Zahlenwerte bei nicht zugegebenen Substanzen) werden in den Tabellen und Grafiken entweder als **FN** (falsch negativ), **FP** (falsch positiv) oder als • - Symbol dargestellt.

- Als falsch negativ gelten „< Ergebnisse“ mit einem Betrag des < - Wertes unterhalb des zugewiesenen Wertes bzw. Messwert „0“ bei zugegebenen Substanzen.
- Falsch positive Ergebnisse sind nur für Substanzen möglich, die über „< zugewiesener Wert“ ausgewertet wurden. Mit FP werden alle Messwerte gekennzeichnet, die mit Ihren Unsicherheiten das Kriterium „< zugewiesener Wert“ nicht einschließen (tangieren).
- Mit einem • - Symbol werden alle weiteren Ergebnisse illustriert, für die keine Wiederfindung berechnet werden kann

Prüfmethoden

Den Teilnehmenden stand, mit Ausnahme der Parameter Gesamt-P (als PO_4^{3-}) und KMnO_4 -Index, die Wahl der Analysenmethode frei. Die Prüfmethoden sollten mit den jeweilig im Teilnehmerlabor verwendeten Routineverfahren übereinstimmen. Gesamt-P (als PO_4^{3-}) sollte gemäß DIN EN ISO 6878:2004 nach oxidierendem Aufschluss und KMnO_4 -Index nach EN ISO 8467 (H5) analysiert werden, wobei gleichwertige oder bessere Verfahren, die vergleichbare Messwerte liefern, zulässig waren. Eine Übersicht der angewendeten Methoden befindet sich am Ende des Berichts. „< Werte“ bzw. „> Werte“ sowie stark abweichende Messwerte, welche zu einer unübersichtlichen Skalierung führen würden, sind in den Graphiken nicht berücksichtigt.

Tulln, 16. December 2024

Probe M106A

Parameter Kupfer

*Sollwert ± U (k=2) 4,79 µg/l ± 0,13 µg/l
 IFA-Kontrolle ± U (k=2) 4,79 µg/l ± 0,38 µg/l
 IFA-Stabilität ± U (k=2) 4,69 µg/l ± 0,38 µg/l

*Sollwert = "zugewiesener Wert"
Sollwert ± Unsicherheit aus Einwaage
Kontrollmessung IFA vor Versand
Messung IFA 3 Wochen nach Versand

| Labor-Kennung | Messwert | ± | Einheit | Wiederfindung | 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 | 95% | -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 | * | |

Wiederfindung des zugewiesenen Wertes in Prozent

z-Score des Labors

Ein Stern markiert einen Ausreißer nach dem Hampel-Test

Ergebnisunsicherheit laut Teilnehmer

| | alle Ergebnisse | ohne Ausreißer | Einheit |
|-------------------|-----------------|----------------|---------|
| MW ± VB(99%) | 4,65 ± 0,57 | 4,51 ± 0,42 | µg/l |
| WF ± VB(99%) | 97,1 ± 12,0 | 94,1 ± 8,8 | % |
| Standardabw. | 0,84 | 0,59 | µg/l |
| rel. Standardabw. | 18,1 | 13,2 | % |
| n für Berechnung | 18 | 17 | |

Standardabweichung zwischen den Labors

Mittelwert der Messwerte und Wiederfindung des zugewiesenen Wertes mit zugehörigen Vertrauensbereichen (p=99%)

Anzahl der Messungen zur Berechnung der statistischen Kenngrößen

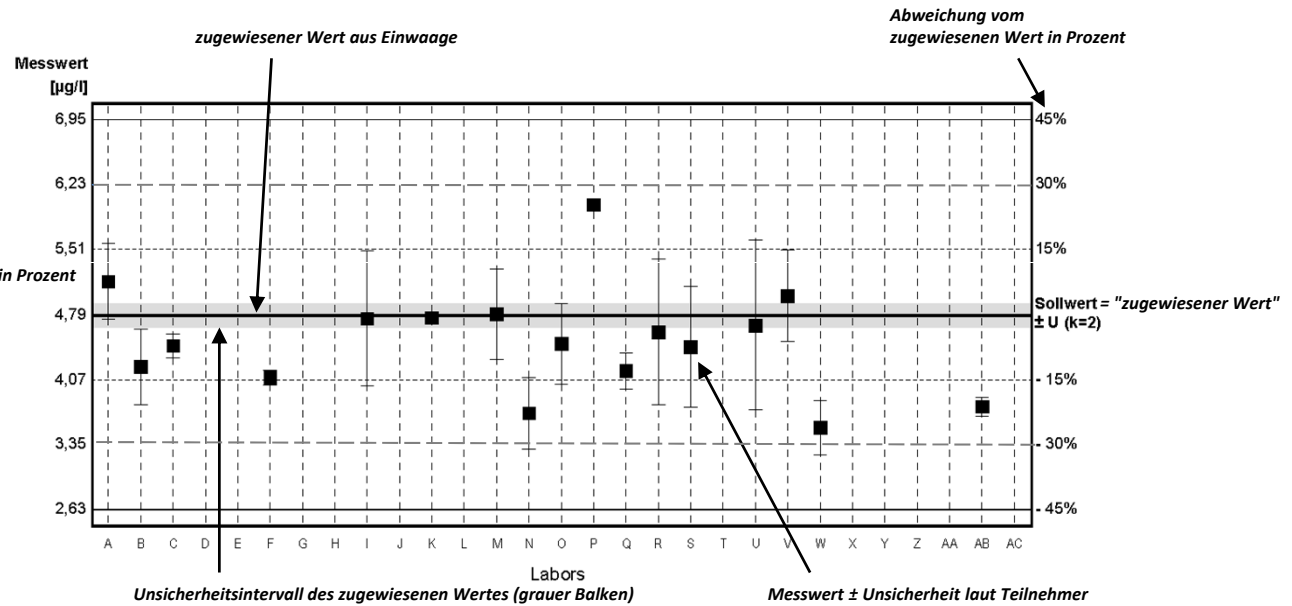
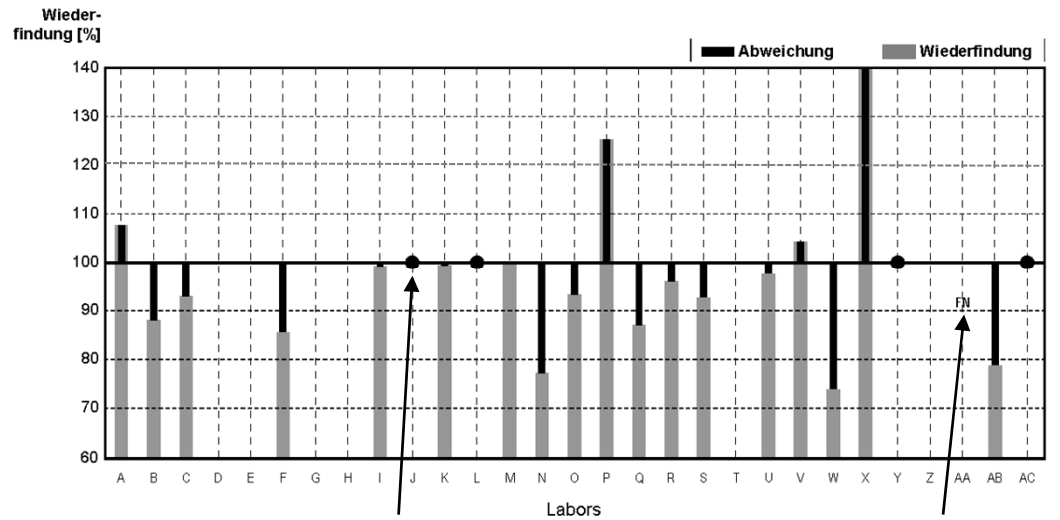


Diagramm 1: Messwerte mit zugehörigen Unsicherheitsintervallen



Ergebnis abgegeben, Berechnung der Wiederfindung oder Zuordnung FN, FP nicht möglich

Falsch negativ „< Ergebnis“ kleiner als der theoretische Sollwert

Diagramm 2: Wiederfindung und Abweichung vom zugewiesenen Wert

LEGENDE

Information

This report summarises the results of round N174 (major ions) within the IFA-Proficiency Testing Scheme for Water Analysis. The proficiency testing items N174A and N174B were distributed to 43 participants on Monday, 11. November 2024. Each participant received two proficiency testing items of 1000 mL, each filled into two 500 mL PET bottles.

Closing date for reporting results to the IFA-Tulln was Friday, 6 December 2024. 42 participants submitted results. To make the participants anonymous, each laboratory obtained a letter code by random.

Proficiency testing items

The proficiency testing items consisted of artificial ground water. For proficiency testing item preparation, ultrapure water was spiked with solutions of salts and standards to simulate the ionic composition of natural Austrian ground water. The following substances were added to the proficiency testing items: CaCO_3 , CaCl_2 , $\text{Ca}(\text{NO}_3)_2$, MgSO_4 , MgCl_2 , $\text{Mg}(\text{NO}_3)_2$, NaCl , NaHCO_3 , KHCO_3 , diethyl ethylphosphonate ($\text{C}_6\text{H}_{15}\text{PO}_3$, for total-P), potassium hydrogen phthalate (for DOC), sodium salicylate (for KMnO_4 -Index) and certified standard solutions of NaNO_2 , Na_2SiO_3 , NH_4Cl , KH_2PO_4 and H_3BO_3 . Both proficiency testing items, N174A and N174B, contained free CO_2 , which was used for dissolution of CaCO_3 and neutralisation of Na_2SiO_3 . No other substances (e.g. preservatives) were added. The proficiency testing items were stabilised by sterile filtration and low temperature.

Homogeneity, accuracy and stability tests

The proficiency testing items 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 of proficiency testing items N174A and N174B were determined in several proficiency testing items four weeks after shipment. The results are listed in the result tables ("Stability test") and the parameter oriented part of the report ("IFA result").

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

Results

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

The assigned value of the electrical conductivity was set to the laboratory mean (consensus value). When calculated from more than 20 results with a standard deviation between the laboratories of about 1 %, the consensus value has a confidence interval that is smaller than the uncertainty of our estimate calculated from the assigned concentrations by Debye-Hückel's theory: 2.4 % ($p = 95$ %). However, the calculated electrical conductivity was 351 $\mu\text{S}/\text{cm}$ in proficiency testing item N174A and 536 $\mu\text{S}/\text{cm}$ in proficiency testing item N174B.

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

Total phosphorus after digestion had to be determined according to DIN EN ISO 6878. Diethyl ethylphosphonate ($C_6H_{15}PO_3$), which can be determined as phosphate only after oxidative digestion and potassium dihydrogen phosphate (KH_2PO_4) were used for preparation. The assigned values of total-P were calculated from the weights of the two substances. The results were given in mg/L PO_4^{3-} .

The concentrations of sodium salicylate, which was used as standard substance for the $KMnO_4$ -Index, were 1.51 mg/L in proficiency testing item N174A and 2.41 mg/L in proficiency testing item N174B. Assuming complete oxidation to carbon dioxide, nitrate and water (considering nitrite), the theoretical values were 2.11 mg/L O_2 (N174A) and 3.39 mg/L O_2 (N174B). However, the laboratory mean values were taken as reference values in this report: 2.10 mg/L O_2 for N174A and 3.13 mg/L O_2 for N174B.

No phosphorus substances were added to N174A. Ammonium was not added added to N174B to check the analytical blank values. The assigned concentrations were set to <0.01 mg/L NH_4^+ , <0.009 mg/L $o-PO_4^{3-}$ and <0.009 mg/L total-P (as PO_4^{3-}), which meets the minimum quantifiable values defined by the Austrian ground and river water monitoring program and the quantification limits of the analytical methods applied in the IFA.

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

The recoveries of the concentrations, calculated from outlier-corrected data mean values ranged between 97.0 % (orthophosphate in N174B) and 105.7 % (DOC in N174B).

The between laboratory CVs covered the range between 1.2 % (conductivity in N174A and N174B) and 16.2 % (orthophosphate in N174B).

All confidence intervals of the outlier-corrected laboratory mean values except for DOC in N174B ($105.7 \% \pm 3.4 \%$) encompass the corresponding assigned values with their uncertainties. For all other parameters, statistically, no difference could be detected between theoretical concentrations and outlier corrected laboratory means.

The standard uncertainties of all assigned values were checked according to the criterion

$$u(x_{pp}) < 0,3\sigma_{pp} \text{ oder } u(x_{pp}) < 0,1\delta E, \text{ (DIN ISO 13528, Section 9.2)}$$

and met the requirement in all cases except for alkalinity and nitrate in N174A and alkalinity, nitrate, nitrite, sulphate and orthophosphate in N174B.

For these parameters and additionally for DOC in N174B, the comparison of the absolute difference between the assigned value (x_{pt}) and the laboratory mean value (\bar{X}), considering the measurement uncertainties $u(x_{pt})$ and $u(\bar{X})$, was additionally carried out. All parameters met the requirement:

$$|x_{pt} - \bar{X}| < 2 * \sqrt{u(x_{pt})^2 + u(\bar{X})^2} \quad \text{(DIN ISO 13528, Section 7 and E7)}$$

Therefore, all determined assigned values with their standard uncertainties were adopted.

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 assigned value or mean value („consensus value“)
 σ_{PT} standard deviation for proficiency assessment

Thus, the z-score is the ratio of the estimated bias (difference between result and assigned 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 2013 to 2023. 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 assigned value for the DOC was 6.02 mg/L (100 %). The relative standard deviation for proficiency assessment is given in the table below (as well as in the annual program www.ifatest.eu) by 5.4 %, which is 0.33 mg/L DOC, when based on the assigned 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 % (assigned value)
 σ_{PT} 0.33 mg/L equivalent to 3.0 % (standard deviation for proficiency assessment, see table below)

In the case of recalculation, deviations in the last digits may occur since 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 assigned values were higher than these limits.

| Parameter | standard deviation for proficiency assessment based on the assigned value | Lower limit |
|---|---|---------------|
| Alkalinity $K_{S4.3}$ | 1.8 % | 0.2 mmol/L |
| Ammonium | 11 % | 0.01 mg/L |
| Boron | 7.1 % | 0.012 mg/L |
| Calcium | 3.1 % | 9 mg/L |
| Chloride | 2.7 % | 2 mg/L |
| el. Conductivity | 1.2 % | 50 μ S/cm |
| DOC | 5.4 % | 1 mg/L |
| Hydrogen carbonate | 2.3 % | 20 mg/L |
| KMnO ₄ -Index | 8.2 % | 1 mg/L |
| Magnesium | 3.5 % | 1 mg/L |
| Nitrate | 3.0 % | 2 mg/L |
| Nitrite | 5.5 % | 0.01 mg/L |
| Orthophosphate | 9.2 % | 0.015 mg/L |
| Potassium | 4.0 % | 0.5 mg/L |
| Sodium | 3.1 % | 1 mg/L |
| Sulphate | 3.0 % | 3 mg/L |
| Total hardness | 2.8 % | 0.1 mmol/L |
| Total-P (as PO ₄ ³⁻) | 9.1 % | 0.015 mg/L |

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

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

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

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

Illustration of results

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

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

In the **parameter oriented part** the reported results and corresponding uncertainties are illustrated together with recoveries of the assigned 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 assigned values. The uncertainty intervals correspond to the expanded uncertainty (coverage factor $k = 2$) as described in the EURACHEM / CITAC Guide "Quantifying Uncertainty in Analytical Measurement", 3rd Edition (2012)". The uncertainty interval of the reference concentration is illustrated in the graphs as a grey band around the 100 % recovery line.

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

- "FN": A result is considered false negative when the "< result" reported is lower than the corresponding assigned 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 based on "< assigned value". A result is termed FP if it does not include (strike) the "< "assigned value" with its measurement uncertainty.
- "•": All other results for which no recoveries can be calculated are illustrated by this symbol

Overview of measurement methods

Except for total-P (as PO_4^{3-}) and KMnO_4 -Index the participants were free to choose the analysis method. The test methods should be consistent with the methods applied in routine. Total-P (as PO_4^{3-}) should be analysed according to EN ISO 6878:2004 and KMnO_4 -Index should be analysed according to EN ISO 8467-H5 whereby equivalent or better methods that provide comparable measured values were allowed. An overview of the methods used can be found at the end of the report.

"< values" or "> values" as well as significantly different measured values, which would lead to confusing scaling, are not included in the graphics.

Tulln, 16 December 2024

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

**Target value = "assigned value"*
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 assigned 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 assigned value with corresponding confidence intervals (p=99%)

Number of results used for calculation of statistic parameters

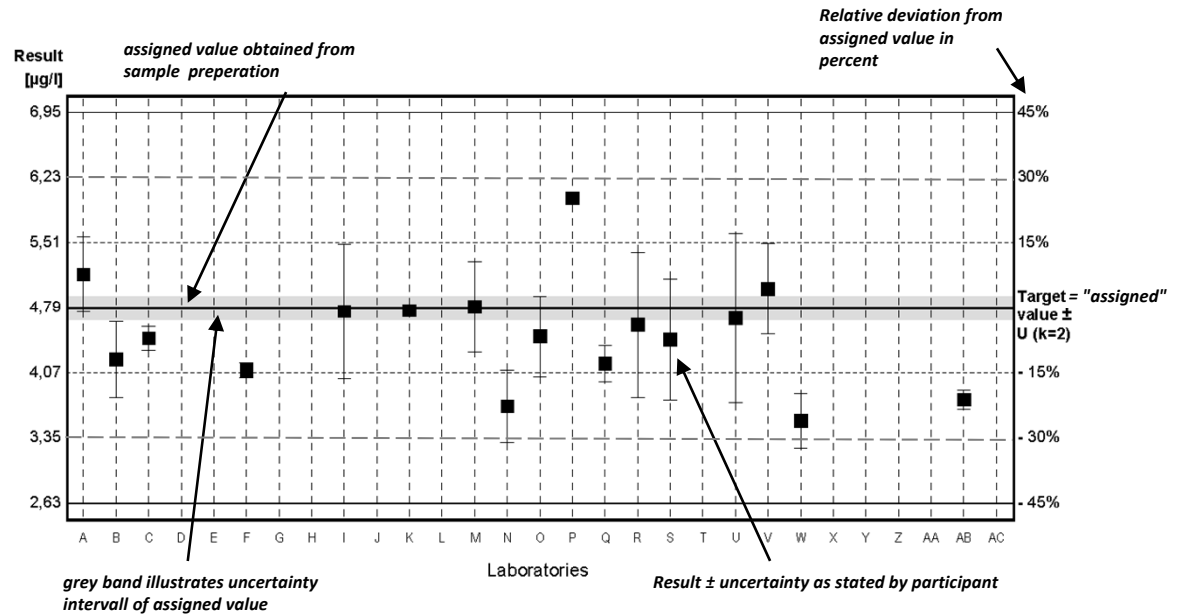


Diagram 1: Measurement results and their uncertainties

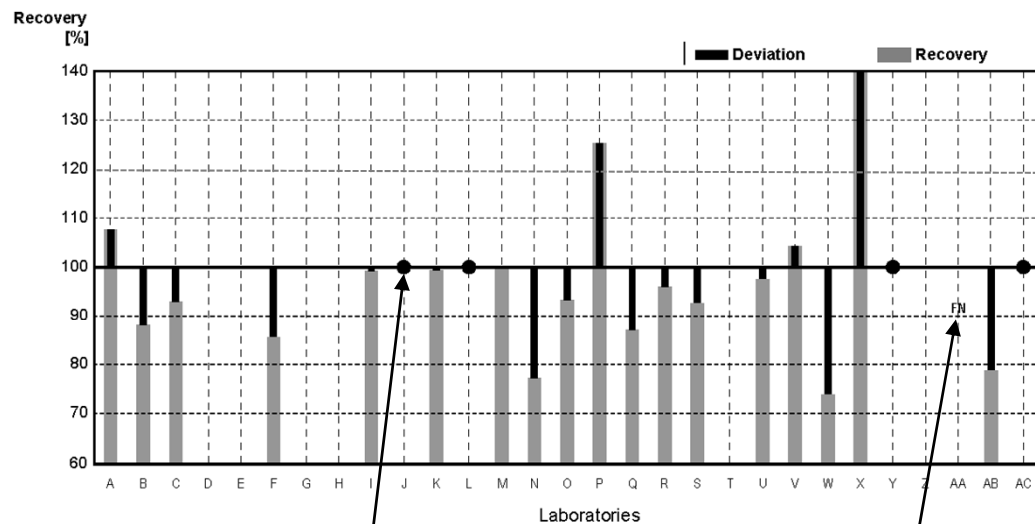


Diagram 2: Recoveries and deviations from assigned values

EXPLANATION

**Rohdatenblätter und
Parameterorientierte Auswertung
Tables and Parameter Oriented Part**

Eignungsprüfungsrunde / Proficiency testing round
N174

Nährstoffe
Nutrients / Major ions

Versand / Dispatch: 11.11.2024

Results N174A

| | pH | Cond. | total-Hardn. | K _{S 4.3} | HCO ₃ ⁻ | Ca ²⁺ | Mg ²⁺ | Na ⁺ | K ⁺ | NO ₃ ⁻ |
|----------------|------|-------|--------------|--------------------|-------------------------------|------------------|------------------|-----------------|----------------|------------------------------|
| Unit | | μS/cm | mmol/L | mmol/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | | 360 | 0.879 | 1.517 | 89.5 | 25.1 | 6.15 | 32.9 | 5.90 | 9.7 |
| IFA result | 6.57 | 359 | 0.90 | 1.48 | 87 | 25.7 | 6.3 | 34.5 | 5.9 | 9.5 |
| Stability test | 6.57 | 359 | 0.89 | 1.49 | 88 | 25.1 | 6.5 | 32.9 | 5.8 | 9.6 |
| A | 7.08 | 362 | 0.87 | 1.53 | 93.33 | 24.2 | 6.48 | 34.6 | 6.07 | |
| B | | | | | | | | | | |
| C | 6.43 | 365 | 0.91 | 1.48 | 90.3 | 26.2 | 6.17 | 33.7 | 6.13 | 9.17 |
| D | 6.59 | 359 | 0.842 | 1.50 | 88.5 | 24.1 | 5.84 | 33.2 | 5.93 | 9.35 |
| E | 6.8 | 361 | 0.88 | 1.50 | 88.5 | 24.6 | 6.47 | 33.5 | 6.09 | 9.96 |
| F | 6.90 | 359 | 4.93 | 1.44 | 88.1 | 25.0 | 6.19 | 32.7 | 5.81 | 9.20 |
| G | 6.58 | 357 | 0.888 | 1.511 | 92.2 | 24.54 | 5.93 | 32.19 | 5.95 | 9.54 |
| H | | 362 | | | | | | | | |
| I | 6.43 | 356 | 0.876 | 1.504 | 88.7 | 24.8 | 6.26 | 32.9 | 5.97 | 9.62 |
| J | 6.4 | 360 | 0.86 | 1.50 | 92 | 24.7 | 6.1 | 32.1 | 6.2 | 9.3 |
| K | 6.50 | 361 | | | | | | | | 9.483 |
| L | 6.63 | 353 | 0.881 | 1.50 | 91.3 | 25.0 | 6.33 | 33.0 | 5.75 | 8.93 |
| M | 6.38 | 355.0 | 0.872 | 1.45 | 85.37 | 25.05 | 6.00 | 32.76 | 5.97 | 9.39 |
| N | | 354 | 0.90 | 1.51 | 92 | 25.71 | 6.16 | 33.8 | 6.19 | 9.95 |
| O | | | | | | | | | | 9.802 |
| P | | | | | | 25.9 | 6.61 | 34.8 | 6.17 | 9.69 |
| Q | 6.32 | 361 | 0.92296 | 1.50 | | 26.47 | 6.38 | 31.28 | 6.03 | 10.31 |
| R | 6.40 | 364.4 | 0.88 | 1.78 | 109 | | | | | 9.10 |
| S | | 355 | 0.888 | 1.52 | | | | | | 11.677 |
| T | | | | | | | | | | |
| U | 7.7 | 295 | 0.91 | 1.96 | 119.6 | 26.12 | 6.21 | 33.47 | 6.02 | 9.544 |
| V | 6.75 | 360 | 1.93 | 1.96 | 119.5 | 46.3 | 20.0 | 8.88 | 1.196 | 8.78 |
| W | 6.43 | 363 | 0.91 | 1.51 | | 26.3 | 6.2 | 33.1 | 5.98 | 9.4 |
| X | | | | | | 26.75 | 6.03 | 32.88 | 5.96 | 9.59 |
| Y | 6.7 | 357 | 0.856 | 1.48 | 90.2 | 24.4 | 6.0 | 32.0 | 5.7 | 9.7 |
| Z | 6.66 | 366 | 0.882 | 1.54 | 90.90 | 25.704 | 5.857 | 32.866 | 5.321 | 10.382 |
| AA | 6.51 | 361 | | 1.50 | 88 | | | | | 9.2 |
| AB | 6.75 | 366 | 0.83 | 1.467 | 86.46 | 29.2 | <3 | | | 9.7 |
| AC | 6.6 | 355 | 0.909 | 1.51 | 89.1 | 26.0 | 6.3 | 33.5 | 6.02 | 9.7 |
| AD | 6.4 | 368 | 0.89 | 1.531 | 90.3 | 24.93 | 6.44 | 34.57 | 6.218 | 9.813 |
| AE | 6.4 | 363 | 0.842 | 1.58 | 93.4 | 24.1 | 5.85 | 30.3 | 5.72 | 9.80 |
| AF | 6.68 | 369 | | 1.525 | 90.0 | | | | | 9.86 |
| AG | 6.64 | 357 | 0.908 | 1.580 | 96.4 | 26.1 | 6.3 | 33.2 | 6.9 | 10.0 |
| AH | 6.42 | 359 | 0.845 | 1.49 | 1.44 | 23.7 | 6.2 | 31.6 | 5.66 | 9.72 |
| AI | 6.53 | 357 | 0.91 | 1.49 | 87.9 | 26.4 | 6.18 | 33.2 | 5.77 | 9.73 |
| AJ | 6.58 | 354 | 0.912 | 1.53 | 92.7 | 26.2 | 6.34 | 35.3 | 5.70 | 9.79 |
| AK | 6.45 | 359 | 0.88 | 1.53 | 88.7 | 24.76 | 5.97 | 32.71 | 5.5 | 9.49 |
| AL | 6.63 | 358 | 0.863 | 1.00 | 58.0 | 24.6 | 6.05 | 32.1 | 5.72 | 9.40 |
| AM | 6.46 | 354 | 1.61 | 0.85 | 98 | 24.1 | 6.0 | 33.7 | 6.0 | 9.8 |
| AN | | | | 1.47 | | | | | | |
| AO | 6.55 | 359 | 0.869 | 1.49 | 90.9 | 25.0 | 5.94 | 31.3 | 5.57 | 9.35 |
| AP | 6.46 | 370 | 0.870 | 1.49 | 87.9 | 25.0 | 5.97 | 32.6 | 5.61 | 8.95 |
| AQ | 6.63 | 360 | | | | | | | | 9.6 |

Measurement Uncertainties N174A

| | pH ± | Cond. ± | total- Hardn. ± | K _S 4.3 ± | HCO ₃ ⁻ ± | Ca ²⁺ ± | Mg ²⁺ ± | Na ⁺ ± | K ⁺ ± | NO ₃ ⁻ ± |
|----------------|---------|------------|--------------------|-------------------------|------------------------------------|-----------------------|-----------------------|----------------------|---------------------|-----------------------------------|
| Unit | | µS/cm | mmol/L | mmol/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | | 1 | 0.010 | 0.018 | 1.1 | 0.4 | 0.10 | 0.2 | 0.03 | 0.3 |
| IFA result | 0.20 | 6 | 0.05 | 0.06 | 4 | 1.7 | 0.4 | 1.2 | 0.3 | 0.5 |
| Stability test | 0.20 | 6 | 0.05 | 0.06 | 4 | 1.7 | 0.4 | 1.2 | 0.3 | 0.5 |
| A | 0.04 | 5.4 | | 0.05 | | 1.5 | 0.39 | 1.2 | 0.18 | |
| B | | | | | | | | | | |
| C | 0.04 | 18 | 0.055 | 0.089 | 5.4 | 0.79 | 0.185 | 2.02 | 0.18 | 0.73 |
| D | 0.0659 | 0.198 | 0.0217 | 0.0790 | 1.77 | 0.870 | 0.0354 | 0.594 | 0.535 | 0.0873 |
| E | 0.1 | 10 | 0.09 | 0.2 | 8.9 | 5.0 | 1.3 | 5.1 | 1.2 | 1.0 |
| F | 0.30 | 11 | 0.37 | 0.05 | 3.5 | 1.2 | 0.36 | 1.0 | 0.46 | 0.49 |
| G | 0.05 | 2 | 0.1 | 0.1 | 6.1 | 1.0 | 0.2 | 0.2 | 0.1 | 0.4 |
| H | | 4.489 | | | | | | | | |
| I | 0.3 | 15 | 0.03 | 0.1 | 4 | 2 | 0.8 | 5 | 0.8 | 0.7 |
| J | 0.1 | 4 | 0.15 | 0.2 | 2 | 1.5 | 1 | 1.7 | 0.5 | 1 |
| K | 0.65 | 18 | | | | | | | | 0.420 |
| L | 0.66 | 35 | 0.18 | 0.15 | 9.13 | 5.0 | 1.3 | 6.6 | 1.2 | 1.3 |
| M | 0.26 | 7.8 | 0.03 | 0.03 | 1.79 | 0.98 | 0.28 | 1.57 | 0.38 | 0.63 |
| N | | 11 | 0.05 | 0.08 | 7 | 1.50 | 0.50 | 2.0 | 0.50 | 0.60 |
| O | | | | | | | | | | 0.909 |
| P | | | | | | 3.89 | 0.991 | 5.22 | 0.925 | 1.45 |
| Q | | | | | | | | | | |
| R | | | | | | | | | | |
| S | | 7.06 | 0.064 | 0.04 | | | | | | 0.81 |
| T | | | | | | | | | | |
| U | 0.2 | 29.5 | | 0.294 | 17.94 | 2.612 | 0.621 | 3.347 | 0.602 | 0.4772 |
| V | | | | 0.0078 | 0.48 | 0.46 | 0.14 | 0.088 | 0.036 | 0.20 |
| W | 0.06 | 4 | 0.04 | 0.005 | | 1.1 | 0.3 | 2.3 | 0.5 | 0.6 |
| X | | | | | | 0.36 | 0.12 | 0.05 | 0.08 | 0.24 |
| Y | 0.2 | 14 | 0.041 | 0.10 | 6.3 | 1.0 | 0.4 | 1.8 | 0.3 | 1.0 |
| Z | 0.1 | 4.51 | | 0.15 | | 2.55 | 0.59 | 3.31 | 0.53 | 1.06 |
| AA | 0.01 | 3 | | 0.04 | 1 | | | | | 0.6 |
| AB | | | | | | | | | | |
| AC | | 7.0 | | 0.103 | | 1.7 | 0.5 | 2.5 | 0.52 | 0.7 |
| AD | 0.19 | 20.46 | 0.05 | 0.084 | 4.97 | 1.37 | 0.23 | 1.21 | 0.22 | 0.942 |
| AE | 0.32 | 10.9 | 0.067 | 0.174 | 10.3 | 2.89 | 0.53 | 3.03 | 0.629 | 0.98 |
| AF | 0.04 | 10.7 | | 0.147 | 8.7 | | | | | 0.36 |
| AG | 0.05 | 8 | 0.075 | 0.070 | 4.3 | 1.2 | 0.3 | 1.4 | 0.3 | 0.4 |
| AH | 0.13 | 18 | 0.17 | 0.15 | 0.14 | 3.92 | 0.68 | 2.84 | 0.68 | 0.74 |
| AI | | | | 0.10 | | 2.2 | 0.7 | 2.8 | 0.5 | 1.4 |
| AJ | 0.20 | 0.58 | 0.009 | 0.006 | 0.40 | 0.42 | 0.075 | 0.41 | 0.026 | 0.035 |
| AK | 0.25 | 9 | 0.04 | 0.01 | 3.6 | 0.10 | 0.11 | 0.65 | 0.3 | 0.47 |
| AL | | | | | | | | | | |
| AM | 0.06 | 7.6 | 0.13 | 0.072 | 4.4 | 1.2 | 0.38 | 2.6 | 0.21 | 0.47 |
| AN | | | | 0.22 | | | | | | |
| AO | 0.20 | 11 | 0.13 | 0.12 | 7.3 | 3.8 | 0.71 | 4.1 | 0.56 | 0.94 |
| AP | 0.10 | 19 | 0.174 | 0.07 | 4.4 | 5.0 | 0.60 | 3.3 | 0.56 | 0.89 |
| AQ | | | | | | | | | | 0.35 |

Results N174A

| | NO ₂ ⁻ | NH ₄ ⁺ | Cl ⁻ | SO ₄ ²⁻ | o-PO ₄ ³⁻ | Boron | DOC | total-P (as PO ₄ ³⁻) | KMnO ₄ - Index |
|----------------|------------------------------|------------------------------|-----------------|-------------------------------|---------------------------------|--------|-------|--|------------------------------|
| Unit | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | 0.02228 | 0.0406 | 46.5 | 16.8 | <0.009 | 0.136 | 5.53 | <0.009 | 2.10 |
| IFA result | 0.0219 | 0.0410 | 46.2 | 16.5 | <0.009 | 0.135 | 5.42 | <0.009 | 2.30 |
| Stability test | 0.0215 | 0.0408 | 45.9 | 16.7 | <0.009 | 0.129 | 5.49 | <0.009 | 2.37 |
| A | 0.0200 | 0.0390 | | | <0.007 | | | <0.005 | 2.25 |
| B | | | | | | | | 0.0060 | |
| C | 0.0200 | 0.0400 | 43.8 | 15.5 | <0.01 | 0.129 | 6.7 | <0.01 | |
| D | 0.0222 | 0.0464 | 45.2 | 15.7 | <0.0150 | 0.135 | 5.52 | <0.0150 | |
| E | 0.0234 | 0.0426 | 46.75 | 16.54 | <0.009 | 0.136 | 5.69 | <0.009 | |
| F | 0.0210 | 0.0439 | 46.0 | 17.4 | <0.006 | 0.0780 | 5.38 | <0.006 | |
| G | 0.0244 | 0.0390 | 46.20 | 16.35 | 0.00307 | | 5.86 | <0.0092 | |
| H | | 0.0515 | | | 0.0105 | | | 0.0405 | |
| I | 0.0220 | 0.0410 | 46.9 | 16.8 | <0.01 | | 5.70 | <0.013 | |
| J | 0.0212 | 0.0439 | 46.4 | 16.4 | | 0.142 | 5.8 | <0.20 | 2.10 |
| K | 0.0246 | 0.0465 | 45.596 | 16.276 | <0.015 | | 5.673 | <0.015 | |
| L | 0.0200 | 0.0475 | 44.5 | 15.8 | <0.1 | 0.132 | 5.38 | <0.031 | 2.00 |
| M | | 0.0386 | 46.87 | 16.49 | | | 5.631 | | 2.16 |
| N | 0.0210 | 0.0400 | 46.9 | 17.2 | <0.0090 | | 5.3 | <0.0090 | |
| O | | 0.0454 | | | <0.019 | | | <0.02 | |
| P | 0.0308 | 0.0694 | | | <0.01 | 0.145 | | | |
| Q | <0.033 | 0.0617 | 47.55 | 14.80 | | | | | 2.02 |
| R | 0.0300 | <0.10 | 45.80 | 12.58 | | | | | |
| S | 0.0230 | 0.0475 | | | <0.04 | 0.189 | | <0.0004 | |
| T | | | | | | | | | |
| U | 0.0230 | 0.050 | 46.63 | 17.52 | 0.0120 | 0.137 | 5.60 | <0.01533 | 2.44 |
| V | 0.0206 | 0.0279 | 44.45 | 15.15 | 0.0092 | 0.0155 | 5.688 | 0.0250 | 1.60 |
| W | 0.0180 | 0.0400 | 46.6 | 16.7 | <0.03 | 0.140 | 5.6 | <0.03 | 2.00 |
| X | | | 46.43 | 16.80 | | | | | |
| Y | 0.0207 | 0.0437 | 47.0 | 16.9 | <0.010 | 0.135 | 5.4 | <0.010 | |
| Z | 0.0224 | 0.0390 | 50.05 | 17.198 | <0.001 | 0.140 | 5.86 | <0.0032 | |
| AA | 0.0228 | 0.0415 | 47.0 | | <0.006 | | | <0.006 | |
| AB | <0.05 | <0.05 | 50.2 | <40 | <0.15 | | | | |
| AC | 0.0223 | <0.050 | 47.3 | 16.5 | | 0.142 | 0.489 | | |
| AD | 0.0200 | 0.0410 | 45.118 | 16.84 | <0.010 | 0.140 | 5.595 | <0.010 | 2.36 |
| AE | <0.200 | 0.0490 | 42.8 | 15.4 | <0.015 | 132 | 6.32 | <0.015 | |
| AF | 0.02233 | <0.038 | 47.38 | 18.72 | <0.0153 | | 5.35 | <0.0153 | 1.94 |
| AG | 0.0220 | 0.0446 | 48.1 | 17.0 | <0.01 | | 5.8 | <0.1 | 2.39 |
| AH | 0.0226 | 0.0330 | 45.9 | 16.7 | <0.1 | 0.140 | 5.97 | <0.03 | 2.12 |
| AI | 0.0225 | 0.0430 | 46.3 | 16.5 | <0.01 | 0.140 | 5.61 | <0.031 | 1.92 |
| AJ | 0.0207 | 0.0393 | 49.9 | 16.9 | <0.009 | 0.143 | 5.47 | <0.009 | 1.95 |
| AK | 0.0240 | 0.0410 | 45.78 | 16.53 | <0.005 | | 5.41 | 0.0092 | 2.13 |
| AL | 0.0270 | | 46.4 | 16.2 | | 0.128 | | | |
| AM | 0.020 | 0.0380 | 44.8 | 15.3 | <0.01 | | 5.4 | 0.050 | 2.02 |
| AN | | 0.0443 | | | <0.015 | | | | |
| AO | 0.0236 | 0.0433 | 46.9 | 16.4 | <0.015 | 0.137 | 5.45 | <0.015 | 2.08 |
| AP | 0.0230 | 0.0457 | 44.6 | 15.5 | <0.015 | 0.129 | 5.96 | <0.015 | 2.28 |
| AQ | 0.0490 | | | | | | | | |

Measurement Uncertainties N174A

| | NO ₂ ⁻ ± | NH ₄ ⁺ ± | Cl ⁻ ± | SO ₄ ²⁻ ± | o-PO ₄ ³⁻ ± | Boron ± | DOC ± | total-P (as PO ₄ ³⁻) ± | KMnO ₄ - Index ± |
|----------------|-----------------------------------|-----------------------------------|----------------------|------------------------------------|--------------------------------------|------------|----------|--|--------------------------------|
| Unit | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | 0.00008 | 0.0019 | 0.5 | 0.3 | | 0.004 | 0.07 | | 0.10 |
| IFA result | 0.0010 | 0.0017 | 1.6 | 0.5 | | 0.012 | 0.11 | | 0.23 |
| Stability test | 0.0010 | 0.0017 | 1.6 | 0.5 | | 0.011 | 0.11 | | 0.24 |
| A | 0.001 | 0.002 | | | | | | | 0.21 |
| B | | | | | | | | 0.00037 | |
| C | 0.006 | 0.012 | 3.5 | 1.55 | 0.0033 | 0.016 | 0.54 | 0.0033 | |
| D | 0.00093 | 0.00082 | 1.63 | 1.70 | | 0.00132 | 0.0457 | | |
| E | 0.0034 | 0.007 | 4.7 | 1.7 | | 0.034 | 0.57 | | |
| F | 0.0015 | 0.0036 | 2.3 | 1.0 | | 0.0070 | 0.48 | | |
| G | 0.002 | 0.003 | 0.2 | 2 | 0.0015 | | 0.2 | 0.0046 | |
| H | | 0.0118 | | | 0.00072 | | | 0.00488 | |
| I | 0.002 | 0.005 | 4 | 1.1 | | | 0.8 | | |
| J | 0.01 | 0.01 | 2 | 1.2 | | 0.02 | 0.5 | | 0.3 |
| K | 0.0069 | 0.0107 | 5.964 | 0.991 | | | 1.021 | | |
| L | 0.003 | 0.0095 | 6.7 | 2.4 | | 0.027 | 1.6 | | 0.4 |
| M | | 0.007 | 2.20 | 0.82 | | | 0.98 | | 0.46 |
| N | 0.0030 | 0.0080 | 3.8 | 1.0 | | | 0.7 | | |
| O | | 0.0015 | | | | | | | |
| P | 0.0023 | 0.0083 | | | | 0.022 | | | |
| Q | | | | | | | | | |
| R | | | | | | | | | |
| S | 0.0026 | 0.0065 | | | | 0.0295 | | | |
| T | | | | | | | | | |
| U | 0.00340 | 0.0050 | 4.663 | 1.752 | 0.00180 | 0.0206 | 0.45 | | 0.390 |
| V | 0.0013 | 0.0009 | 3.11 | 0.88 | 0.0011 | 0.00071 | 0.068 | 0.007 | 0.0 |
| W | 0.001 | 0.002 | 2.8 | 1.0 | 0 | 0.014 | 0.3 | 0 | 0.04 |
| X | | | 0.34 | 0.34 | | | | | |
| Y | 0.0032 | 0.0085 | 3.7 | 1.5 | | 0.0098 | 1.0 | | |
| Z | 0.002 | 0.004 | 5.11 | 1.73 | | 0.014 | 0.59 | | |
| AA | 0.0023 | 0.0063 | 0.5 | | | | | | |
| AB | | | | | | | | | |
| AC | 0.004 | | 6.1 | 0.8 | | 0.016 | 0.080 | | |
| AD | 0.002 | 0.004 | 4.74 | 1.448 | | 0.025 | 1.119 | | 0.307 |
| AE | | 0.007 | 4.28 | 1.08 | | 15.8 | 1.01 | | |
| AF | 0.00078 | | 2.27 | 0.86 | | | 0.31 | | 0.19 |
| AG | 0.0016 | 0.0054 | 1.9 | 0.7 | | | 0.8 | | 0.32 |
| AH | 0.003 | 0.004 | 5.92 | 2.27 | | 0.02 | 1.13 | 0.01 | 0.23 |
| AI | 0.003 | 0.006 | 6.6 | 1.3 | | 0.024 | 0.67 | | |
| AJ | 0.001 | 0.001 | 0.23 | 0.15 | | 0.003 | 0.031 | | 0.020 |
| AK | 0.0024 | 0.0025 | 2.75 | 0.50 | | | 0.81 | 0.0015 | 0.26 |
| AL | | | | | | | | | |
| AM | 0.0012 | 0.0028 | 3.6 | 0.93 | | | 0.50 | 0.0065 | 0.092 |
| AN | | 0.00443 | | | | | | | |
| AO | 0.0026 | 0.0035 | 4.7 | 2.6 | | 0.018 | 1.1 | | 0.31 |
| AP | 0.0032 | 0.0064 | 4.5 | 1.6 | | 0.026 | 1.07 | | 0.34 |
| AQ | 0.001 | | | | | | | | |

Results N174B

| | pH | Cond. | total-Hardn. | K _S 4.3 | HCO ₃ ⁻ | Ca ²⁺ | Mg ²⁺ | Na ⁺ | K ⁺ | NO ₃ ⁻ |
|----------------|------|-------|--------------|--------------------|-------------------------------|------------------|------------------|-----------------|----------------|------------------------------|
| Unit | | µS/cm | mmol/L | mmol/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | | 544 | 1.92 | 3.70 | 222 | 55.5 | 12.93 | 39.9 | 1.97 | 40.1 |
| IFA result | 6.38 | 544 | 2.01 | 3.78 | 228 | 58 | 13.4 | 41.7 | 1.91 | 39.5 |
| Stability test | 6.38 | 543 | 1.94 | 3.82 | 230 | 56 | 13.3 | 39.8 | 1.86 | 40.1 |
| A | 6.91 | 549 | 1.93 | 3.68 | 224.48 | 54.5 | 13.93 | 42.4 | 2.00 | |
| B | | | | | | | | | | |
| C | 6.22 | 554 | 1.95 | 3.53 | 215 | 56.8 | 13.0 | 40.8 | 2.06 | 39.1 |
| D | 6.40 | 545 | 1.85 | 3.64 | 219 | 53.9 | 12.2 | 40.1 | 2.01 | 38.5 |
| E | 6.6 | 546 | 1.91 | 3.61 | 220.3 | 54.3 | 13.4 | 40.5 | 1.92 | 41.18 |
| F | 6.93 | 544 | 10.6 | 3.58 | 218 | 54.5 | 13.0 | 39.5 | 1.91 | 38.0 |
| G | 6.40 | 541 | 1.923 | 3.671 | 224 | 54.37 | 12.57 | 38.69 | 1.94 | 38.96 |
| H | | 548 | | | | | | | | |
| I | 6.25 | 544 | 1.90 | 3.636 | 219 | 54.6 | 13.0 | 39.6 | 2.00 | 39.5 |
| J | 6.2 | 545 | 1.89 | 3.55 | 217 | 54.7 | 12.7 | 38.4 | 2.25 | 39.7 |
| K | 6.34 | 547 | | | | | | | | 39.004 |
| L | 6.40 | 542 | 1.87 | 3.72 | 227 | 53.8 | 13.0 | 40.0 | 1.90 | 38.5 |
| M | 6.25 | 536.0 | 1.886 | 3.50 | 210.38 | 54.80 | 12.62 | 39.62 | 1.91 | 39.41 |
| N | | 536 | 1.94 | 3.57 | 218 | 55.97 | 13.088 | 40.8 | 2.17 | 42.2 |
| O | | | | | | | | | | >30 |
| P | | | | | | 57.6 | 13.1 | 42.5 | 1.86 | 40.1 |
| Q | 6.16 | 546 | 1.99307 | 3.60 | | 57.98 | 13.28 | 37.99 | 2.37 | 41.45 |
| R | 6.25 | 547.9 | 2.84 | 3.95 | 241 | | | | | 39.37 |
| S | | 530 | 1.895 | 3.64 | | | | | | 40.997 |
| T | | | | | | | | | | |
| U | 7.7 | 165 | 1.95 | 1.39 | 84.8 | 56.47 | 13.09 | 40.86 | 2.01 | 39.425 |
| V | 6.51 | 546 | 1.95 | 4.298 | 262.3 | 46.88 | 20.26 | 8.93 | 1.198 | 41.21 |
| W | 6.27 | 550 | 2.00 | 3.64 | | 57.3 | 13.9 | 39.8 | 2.00 | 38.5 |
| X | | | | | | 58.12 | 13.02 | 39.57 | 1.88 | 39.72 |
| Y | 6.5 | 543 | 1.91 | 3.58 | 218.3 | 55.6 | 12.7 | 38.4 | 1.98 | 39.9 |
| Z | 6.51 | 551 | 1.955 | 3.66 | 220.24 | 57.465 | 12.682 | 40.846 | 1.957 | 43.810 |
| AA | 6.34 | 545 | | 3.61 | 217 | | | | | 39.7 |
| AB | 6.23 | 548 | 1.83 | 3.538 | 212.83 | 58.8 | 8.44 | | | 39.5 |
| AC | 6.5 | 532 | 1.89 | 3.64 | 219 | 54.5 | 12.9 | 39.8 | 2.08 | 39.5 |
| AD | 6.2 | 560 | 1.92 | 3.727 | 224 | 54.75 | 13.52 | 41.39 | 2.072 | 39.35 |
| AE | 6.2 | 551 | 1.83 | 3.70 | 223 | 52.9 | 12.5 | 37.9 | 1.94 | 40.9 |
| AF | 6.24 | 543 | | 3.63 | 218.4 | | | | | 39.44 |
| AG | 6.63 | 542 | 1.92 | 3.73 | 228 | 56 | 13.0 | 40.3 | 2.83 | 40.4 |
| AH | 6.2 | 536 | 1.86 | 3.62 | 3.58 | 52.9 | 13.0 | 38.5 | 1.88 | 39.7 |
| AI | 6.86 | 538 | 1.92 | 3.60 | 216.6 | 55.9 | 12.7 | 40.0 | 1.93 | 38.9 |
| AJ | 6.36 | 537 | 1.93 | 3.64 | 222 | 54.4 | 13.9 | 39.2 | 1.98 | 41.0 |
| AK | 6.23 | 546 | 1.90 | 3.66 | 220 | 54.93 | 12.6 | 39.44 | 2.19 | 39.38 |
| AL | 6.24 | 543 | 1.856 | 2.50 | 149.5 | 53.4 | 12.7 | 38.8 | 1.91 | 39.5 |
| AM | 6.28 | 440 | 1.84 | 3.78 | 231 | 53 | 12.7 | 40.7 | 2.14 | 40.7 |
| AN | | | | 3.62 | | | | | | |
| AO | 6.37 | 541 | 1.87 | 3.56 | 217 | 54.6 | 12.4 | 38.0 | 1.73 | 39.6 |
| AP | 6.28 | 557 | 1.93 | 3.57 | 215 | 55.2 | 13.4 | 39.5 | 2.01 | 38.6 |
| AQ | 6.40 | 534 | | | | | | | | 40.6 |

Measurement Uncertainties N174B

| | pH ± | Cond. ± | total- Hardn. ± | K _S 4.3 ± | HCO ₃ ⁻ ± | Ca ²⁺ ± | Mg ²⁺ ± | Na ⁺ ± | K ⁺ ± | NO ₃ ⁻ ± |
|----------------|---------|------------|--------------------|-------------------------|------------------------------------|-----------------------|-----------------------|----------------------|---------------------|-----------------------------------|
| Unit | | µS/cm | mmol/L | mmol/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | | 2 | 0.02 | 0.05 | 3 | 0.9 | 0.18 | 0.6 | 0.04 | 1.0 |
| IFA result | 0.20 | 9 | 0.11 | 0.16 | 9 | 4 | 0.7 | 1.4 | 0.16 | 2.0 |
| Stability test | 0.20 | 9 | 0.10 | 0.16 | 9 | 4 | 0.7 | 1.3 | 0.15 | 2.0 |
| A | 0.03 | 8.2 | | 0.13 | | 3.3 | 0.84 | 1.5 | 0.06 | |
| B | | | | | | | | | | |
| C | 0.04 | 27 | 0.12 | 0.21 | 13 | 1.70 | 0.39 | 2.45 | 0.06 | 3.1 |
| D | 0.0640 | 0.233 | 0.0246 | 0.122 | 4.37 | 0.900 | 0.245 | 0.633 | 0.0314 | 1.61 |
| E | 0.1 | 10 | 0.2 | 0.4 | 22.0 | 10.9 | 2.7 | 6.1 | 0.39 | 4.1 |
| F | 0.30 | 16 | 0.8 | 0.12 | 9 | 2.6 | 0.8 | 1.2 | 0.15 | 2.0 |
| G | 0.05 | 2 | 0.1 | 0.1 | 6.1 | 1.0 | 0.2 | 0.2 | 0.1 | 0.4 |
| H | | 6.795 | | | | | | | | |
| I | 0.3 | 22 | 0.1 | 0.2 | 9 | 5 | 1.6 | 6 | 0.3 | 3 |
| J | 0.1 | 6 | 0.18 | 0.2 | 3 | 2 | 1 | 1.8 | 0.2 | 3 |
| K | 0.63 | 27 | | | | | | | | 1.728 |
| L | 0.64 | 54 | 0.37 | 0.37 | 23 | 11 | 2.6 | 8.0 | 0.38 | 5.8 |
| M | 0.25 | 11.8 | 0.08 | 0.07 | 4.42 | 2.14 | 0.59 | 1.90 | 0.12 | 2.64 |
| N | | 16 | 0.10 | 0.18 | 17 | 3.36 | 1.05 | 2.5 | 0.17 | 2.5 |
| O | | | | | | | | | | |
| P | | | | | | 8.63 | 1.96 | 6.37 | 0.278 | 6.02 |
| Q | | | | | | | | | | |
| R | | | | | | | | | | |
| S | | 10.55 | 0.137 | 0.10 | | | | | | 2.85 |
| T | | | | | | | | | | |
| U | 0.2 | 16.5 | | 0.209 | 12.72 | 5.647 | 1.309 | 4.086 | 0.201 | 1.9713 |
| V | | | | 0.16 | 9.97 | 0.94 | 0.43 | 0.14 | 0.026 | 1.11 |
| W | 0.06 | 6 | 0.09 | 0.01 | | 2.3 | 0.7 | 2.8 | 0.2 | 2.3 |
| X | | | | | | 0.61 | 0.11 | 0.42 | 0.01 | 0.24 |
| Y | 0.2 | 22 | 0.084 | 0.21 | 12.7 | 2.1 | 0.8 | 2.2 | 0.14 | 3.9 |
| Z | 0.1 | 4.51 | | 0.36 | | 5.73 | 1.27 | 4.11 | 0.19 | 4.42 |
| AA | 0.01 | 4 | | 0.10 | 3 | | | | | 2.7 |
| AB | | | | | | | | | | |
| AC | | 11 | | 0.248 | | 3.5 | 1.1 | 2.9 | 0.18 | 2.7 |
| AD | 0.19 | 31.14 | 0.096 | 0.205 | 12.32 | 3.01 | 0.47 | 1.45 | 0.08 | 3.78 |
| AE | 0.31 | 17.0 | 0.147 | 0.407 | 24.5 | 6.35 | 1.13 | 3.79 | 0.213 | 3.68 |
| AF | 0.04 | 15.7 | | 0.351 | 21.1 | | | | | 1.46 |
| AG | 0.05 | 12 | 0.16 | 0.17 | 11 | 3 | 0.5 | 1.7 | 0.11 | 1.5 |
| AH | 0.12 | 27 | 0.37 | 0.36 | 0.36 | 8.5 | 1.44 | 3.46 | 0.23 | 3.02 |
| AI | | | | 0.25 | | 4.7 | 1.4 | 3.4 | 0.2 | 5.5 |
| AJ | 0.20 | 1.16 | 0.018 | 0.012 | 0.92 | 0.84 | 0.15 | 0.46 | 0.012 | 0.21 |
| AK | 0.25 | 14 | 0.08 | 0.01 | 9 | 0.88 | 0.24 | 0.79 | 0.13 | 1.97 |
| AL | | | | | | | | | | |
| AM | 0.06 | 9.5 | 0.15 | 0.32 | 10 | 2.7 | 0.80 | 3.1 | 0.075 | 2.0 |
| AN | | | | 0.54 | | | | | | |
| AO | 0.19 | 16 | 0.28 | 0.28 | 17 | 8.2 | 1.5 | 4.9 | 0.17 | 4.0 |
| AP | 0.10 | 28 | 0.39 | 0.18 | 11 | 11.0 | 1.3 | 3.9 | 0.20 | 3.9 |
| AQ | | | | | | | | | | 1.49 |

Results N174B

| | NO ₂ ⁻ | NH ₄ ⁺ | Cl ⁻ | SO ₄ ²⁻ | o-PO ₄ ³⁻ | Boron | DOC | total-P (as PO ₄ ³⁻) | KMnO ₄ - Index |
|----------------|------------------------------|------------------------------|-----------------|-------------------------------|---------------------------------|--------|-------|--|------------------------------|
| Unit | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | 0.0432 | <0.01 | 23.6 | 29.7 | 0.0456 | 0.086 | 4.14 | 0.115 | 3.13 |
| IFA result | 0.0429 | <0.01 | 23.4 | 29.5 | 0.0460 | 0.086 | 4.18 | 0.124 | 3.35 |
| Stability test | 0.0420 | <0.01 | 22.9 | 29.1 | 0.0456 | 0.081 | 4.22 | 0.119 | 3.53 |
| A | 0.0410 | <0.03 | | | 0.0294 | | | 0.114 | 3.28 |
| B | | | | | | | | 0.1195 | |
| C | 0.0400 | <0.01 | 21.5 | 28.8 | 0.050 | 0.072 | 7.7 | 0.110 | |
| D | 0.0422 | <0.0100 | 22.7 | 27.9 | 0.0436 | 0.0823 | 4.23 | 0.115 | |
| E | 0.0441 | <0.010 | 22.85 | 29.09 | 0.0499 | 0.0854 | 4.27 | 0.1121 | |
| F | 0.0430 | <0.008 | 23.5 | 29.6 | 0.0475 | 0.120 | 4.14 | 0.120 | |
| G | 0.0468 | <0.0064 | 23.40 | 28.89 | 0.0460 | | 4.51 | 0.109 | |
| H | | 0.00500 | | | 0.0475 | | | 0.1015 | |
| I | 0.0430 | <0.013 | 23.7 | 29.0 | 0.0460 | | 4.39 | 0.115 | |
| J | 0.0412 | <0.02 | 24.0 | 29.1 | | 0.093 | 4.88 | <0.20 | 3.00 |
| K | 0.0458 | <0.012 | 23.189 | 28.776 | 0.0445 | | 4.467 | 0.101 | |
| L | 0.0400 | <0.01 | 23.0 | 28.8 | <0.1 | 0.0818 | 4.13 | 0.124 | 2.70 |
| M | | <0.002 | 23.84 | 29.27 | | | 4.314 | | 3.25 |
| N | 0.0430 | <0.020 | 23.1 | 30.7 | 0.0450 | | 4.05 | 0.121 | |
| O | | <0.01 | | | 0.0317 | | | 0.121 | |
| P | 0.0780 | 0.0250 | | | 0.0306 | 0.0921 | | | |
| Q | 0.0440 | 0.0180 | 24.25 | 27.75 | | | | | 3.15 |
| R | 0.0480 | <0.1 | 23.04 | 24.89 | | | | | |
| S | 0.0450 | <0.010 | | | 0.0515 | 0.1455 | | 0.108 | |
| T | | | | | | | | | |
| U | 0.0430 | <0.00515 | 13.61 | 30.19 | 0.0430 | 0.087 | 4.30 | 0.1012 | 3.48 |
| V | 0.0399 | <0.02 | 22.26 | 30.44 | 0.060 | 7.00 | 4.398 | 0.117 | 2.40 |
| W | 0.0390 | <0.03 | 23.5 | 29.7 | 0.0400 | 0.080 | 4.32 | 0.120 | 3.14 |
| X | | | 23.61 | 29.41 | | | | | |
| Y | 0.0417 | <0.010 | 24.3 | 29.8 | 0.0463 | 0.0836 | 4.15 | 0.113 | |
| Z | 0.0431 | <0.0090 | 25.688 | 30.801 | 0.0402 | 0.093 | 4.57 | 0.1165 | |
| AA | 0.0436 | <0.005 | 23.1 | | 0.0408 | | | 0.114 | |
| AB | <0.05 | <0.05 | 25.6 | <40 | <0.15 | | | | |
| AC | 0.0440 | <0.050 | 22.6 | 29.0 | | 0.088 | 4.08 | | |
| AD | 0.0420 | <0.010 | 22.6 | 29.39 | 0.0470 | 89.24 | 4.256 | 0.116 | 3.29 |
| AE | 0.0460 | <0.010 | 22.3 | 30.3 | 0.053 | 81.4 | 4.95 | 0.109 | |
| AF | 0.04269 | <0.038 | 25.20 | 31.98 | 0.0527 | | 4.18 | 0.1147 | 2.84 |
| AG | 0.0432 | <0.02 | 23.7 | 30.2 | 0.0471 | | 4.58 | 0.110 | 3.50 |
| AH | 0.0143 | <0.02 | 23.5 | 28.9 | <0.1 | 0.087 | 5.94 | 0.115 | 3.12 |
| AI | 0.0432 | <0.01 | 23.5 | 29.3 | 0.0437 | 0.0883 | 4.19 | 0.106 | 2.91 |
| AJ | 0.0433 | <0.01 | 25.4 | 30.6 | 0.0245 | 0.0858 | 4.17 | 0.0831 | 3.07 |
| AK | 0.0450 | n.n. | 23.03 | 29.03 | 0.0429 | | 4.19 | 0.1134 | 3.19 |
| AL | 0.0490 | | 23.5 | 29.0 | | 0.0795 | | | |
| AM | 0.039 | <0.01 | 21.3 | 27.0 | 0.0260 | | 4.54 | 0.154 | 2.98 |
| AN | | <0.01 | | | 0.0417 | | | | |
| AO | 0.0447 | <0.0100 | 23.5 | 29.9 | 0.0468 | 0.0840 | 4.92 | 0.113 | 3.17 |
| AP | 0.0427 | <0.010 | 23.4 | 28.2 | 0.0300 | 0.0780 | 4.62 | 0.0780 | 3.14 |
| AQ | 0.063 | | | | | | | | |

Measurement Uncertainties N174B

| | NO ₂ ⁻ ± | NH ₄ ⁺ ± | Cl ⁻ ± | SO ₄ ²⁻ ± | o-PO ₄ ³⁻ ± | Boron ± | DOC ± | total-P (as PO ₄ ³⁻) ± | KMnO ₄ - Index ± |
|----------------|-----------------------------------|-----------------------------------|----------------------|------------------------------------|--------------------------------------|------------|----------|--|--------------------------------|
| Unit | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| assigned value | 0.0015 | | 0.3 | 0.6 | 0.0030 | 0.002 | 0.07 | 0.003 | 0.11 |
| IFA result | 0.0017 | | 0.8 | 0.8 | 0.0015 | 0.007 | 0.09 | 0.021 | 0.33 |
| Stability test | 0.0021 | | 0.8 | 0.8 | 0.0015 | 0.007 | 0.09 | 0.020 | 0.35 |
| A | 0.002 | | | | 0.0025 | | | | 0.31 |
| B | | | | | | | | 0.0074 | |
| C | 0.012 | 0.0033 | 1.7 | 2.88 | 0.005 | 0.0009 | 0.62 | 0.011 | |
| D | 0.00090 | | 1.47 | 1.83 | 0.00099 | 0.00122 | 0.0438 | 0.00101 | |
| E | 0.0064 | | 2.3 | 2.9 | 0.0059 | 0.022 | 0.43 | 0.0132 | |
| F | 0.0031 | | 1.2 | 1.6 | 0.0022 | 0.011 | 0.37 | 0.008 | |
| G | 0.002 | 0.003 | 0.2 | 2 | 0.0015 | | 0.2 | 0.0046 | |
| H | | 0.00115 | | | 0.00326 | | | 0.01223 | |
| I | 0.004 | | 2 | 2 | 0.008 | | 0.7 | 0.02 | |
| J | 0.01 | | 1.5 | 2 | | 0.02 | 0.8 | | 0.5 |
| K | 0.0128 | | 3.03 | 1.752 | 0.0076 | | 0.804 | 0.012 | |
| L | 0.006 | | 3.5 | 4.3 | | 0.016 | 1.2 | 0.025 | 0.54 |
| M | | | 1.12 | 1.46 | | | 0.75 | | 0.69 |
| N | 0.0060 | | 1.8 | 2.2 | 0.0090 | | 0.57 | 0.017 | |
| O | | | | | 0.0071 | | | 0.0094 | |
| P | 0.0059 | 0.0030 | | | 0.0030 | 0.014 | | | |
| Q | | | | | | | | | |
| R | | | | | | | | | |
| S | 0.0052 | | | | 0.0037 | 0.0227 | | 0.011 | |
| T | | | | | | | | | |
| U | 0.0064 | | 2.316 | 3.019 | 0.0064 | 0.0131 | 0.34 | 0.01533 | 0.557 |
| V | 0.00032 | | 0.31 | 1.00 | 0.0 | 1.41 | 0.15 | 0.012 | 0.0 |
| W | 0.002 | 0 | 1.4 | 1.8 | 0.002 | 0.008 | 0.2 | 0.005 | 0.06 |
| X | | | 0.17 | 0.44 | | | | | |
| Y | 0.0049 | | 2.0 | 2.5 | 0.0070 | 0.0008 | 0.81 | 0.012 | |
| Z | 0.004 | | 2.60 | 3.09 | 0.004 | 0.009 | 0.46 | 0.012 | |
| AA | 0.0044 | | 0.2 | | 0.0048 | | | 0.015 | |
| AB | | | | | | | | | |
| AC | 0.009 | | 2.9 | 1.4 | | 0.009 | 0.66 | | |
| AD | 0.004 | | 2.396 | 2.528 | 0.005 | 16 | 0.851 | 0.012 | 0.428 |
| AE | 0.006 | | 2.23 | 2.12 | 0.007 | 9.77 | 0.792 | 0.0163 | |
| AF | 0.00149 | | 1.21 | 1.47 | 0.0042 | | 0.24 | 0.0093 | 0.28 |
| AG | 0.0032 | | 1.0 | 1.2 | 0.0041 | | 0.57 | 0.024 | 0.47 |
| AH | 0.002 | | 3.03 | 3.93 | | 0.01 | 1.13 | 0.015 | 0.34 |
| AI | 0.006 | | 3.3 | 2.4 | | 0.02 | 0.50 | 0.009 | |
| AJ | 0.002 | | 0.10 | 0.29 | 0.001 | 0.001 | 0.015 | 0.001 | 0.042 |
| AK | 0.0045 | | 1.38 | 0.87 | 0.0052 | | 0.63 | 0.0205 | 0.38 |
| AL | | | | | | | | | |
| AM | 0.0023 | | 1.7 | 1.6 | 0.0038 | | 0.42 | 0.020 | 0.14 |
| AN | | | | | 0.00626 | | | | |
| AO | 0.0049 | | 2.4 | 4.8 | 0.0037 | 0.011 | 1.0 | 0.0091 | 0.48 |
| AP | 0.0060 | | 2.3 | 2.8 | 0.0042 | 0.0156 | 0.83 | 0.0117 | 0.47 |
| AQ | 0.001 | | | | | | | | |

z-Scores N174A

| | Cond. | total-Hardn. | K _{s4.3} | HCO ₃ ⁻ | Ca ²⁺ | Mg ²⁺ | Na ⁺ | K ⁺ | NO ₃ ⁻ |
|----|--------|--------------|-------------------|-------------------------------|------------------|------------------|-----------------|----------------|------------------------------|
| A | 0.46 | -0.37 | 0.48 | 1.86 | -1.16 | 1.53 | 1.67 | 0.72 | |
| B | | | | | | | | | |
| C | 1.16 | 1.26 | -1.36 | 0.39 | 1.41 | 0.09 | 0.78 | 0.97 | -1.82 |
| D | -0.23 | -1.50 | -0.62 | -0.49 | -1.29 | -1.44 | 0.29 | 0.13 | -1.20 |
| E | 0.23 | 0.04 | -0.62 | -0.49 | -0.64 | 1.49 | 0.59 | 0.81 | 0.89 |
| F | -0.23 | 164.59 | -2.82 | -0.68 | -0.13 | 0.19 | -0.20 | -0.38 | -1.72 |
| G | -0.69 | 0.37 | -0.22 | 1.31 | -0.72 | -1.02 | -0.70 | 0.21 | -0.55 |
| H | 0.46 | | | | | | | | |
| I | -0.93 | -0.12 | -0.48 | -0.39 | -0.39 | 0.51 | 0.00 | 0.30 | -0.27 |
| J | 0.00 | -0.77 | -0.62 | 1.21 | -0.51 | -0.23 | -0.78 | 1.27 | -1.37 |
| K | 0.23 | | | | | | | | -0.75 |
| L | -1.62 | 0.08 | -0.62 | 0.87 | -0.13 | 0.84 | 0.10 | -0.64 | -2.65 |
| M | -1.16 | -0.28 | -2.45 | -2.01 | -0.06 | -0.70 | -0.14 | 0.30 | -1.07 |
| N | -1.39 | 0.85 | -0.26 | 1.21 | 0.78 | 0.05 | 0.88 | 1.23 | 0.86 |
| O | | | | | | | | | 0.35 |
| P | | | | | 1.03 | 2.14 | 1.86 | 1.14 | -0.03 |
| Q | 0.23 | 1.79 | -0.62 | | 1.76 | 1.07 | -1.59 | 0.55 | 2.10 |
| R | 1.02 | 0.04 | 9.63 | 9.47 | | | | | -2.06 |
| S | -1.16 | 0.37 | 0.11 | | | | | | 6.79 |
| T | | | | | | | | | |
| U | -15.05 | 1.26 | 16.22 | 14.62 | 1.31 | 0.28 | 0.56 | 0.51 | -0.54 |
| V | 0.00 | 42.70 | 16.22 | 14.57 | 27.25 | 64.34 | -23.55 | -19.93 | -3.16 |
| W | 0.69 | 1.26 | -0.26 | | 1.54 | 0.23 | 0.20 | 0.34 | -1.03 |
| X | | | | | 2.12 | -0.56 | -0.02 | 0.25 | -0.38 |
| Y | -0.69 | -0.93 | -1.36 | 0.34 | -0.90 | -0.70 | -0.88 | -0.85 | 0.00 |
| Z | 1.39 | 0.12 | 0.84 | 0.68 | 0.78 | -1.36 | -0.03 | -2.45 | 2.34 |
| AA | 0.23 | | -0.62 | -0.73 | | | | | -1.72 |
| AB | 1.39 | -1.99 | -1.83 | -1.48 | 5.27 | | | | 0.00 |
| AC | -1.16 | 1.22 | -0.26 | -0.19 | 1.16 | 0.70 | 0.59 | 0.51 | 0.00 |
| AD | 1.85 | 0.45 | 0.51 | 0.39 | -0.22 | 1.35 | 1.64 | 1.35 | 0.39 |
| AE | 0.69 | -1.50 | 2.31 | 1.89 | -1.29 | -1.39 | -2.55 | -0.76 | 0.34 |
| AF | 2.08 | | 0.29 | 0.24 | | | | | 0.55 |
| AG | -0.69 | 1.18 | 2.31 | 3.35 | 1.29 | 0.70 | 0.29 | 4.24 | 1.03 |
| AH | -0.23 | -1.38 | -0.99 | -42.78 | -1.80 | 0.23 | -1.27 | -1.02 | 0.07 |
| AI | -0.69 | 1.26 | -0.99 | -0.78 | 1.67 | 0.14 | 0.29 | -0.55 | 0.10 |
| AJ | -1.39 | 1.34 | 0.48 | 1.55 | 1.41 | 0.88 | 2.35 | -0.85 | 0.31 |
| AK | -0.23 | 0.04 | 0.48 | -0.39 | -0.44 | -0.84 | -0.19 | -1.69 | -0.72 |
| AL | -0.46 | -0.65 | -18.93 | -15.30 | -0.64 | -0.46 | -0.78 | -0.76 | -1.03 |
| AM | -1.39 | 29.70 | -24.43 | 4.13 | -1.29 | -0.70 | 0.78 | 0.42 | 0.34 |
| AN | | | -1.72 | | | | | | |
| AO | -0.23 | -0.41 | -0.99 | 0.68 | -0.13 | -0.98 | -1.57 | -1.40 | -1.20 |
| AP | 2.31 | -0.37 | -0.99 | -0.78 | -0.13 | -0.84 | -0.29 | -1.23 | -2.58 |
| AQ | 0.00 | | | | | | | | -0.34 |

z-Scores N174A

| | NO ₂ ⁻ | NH ₄ ⁺ | Cl ⁻ | SO ₄ ²⁻ | o-PO ₄ ³⁻ | Boron | DOC | total-P (as PO ₄ ³⁻) | KMnO ₄ - Index |
|----|------------------------------|------------------------------|-----------------|-------------------------------|---------------------------------|----------|--------|--|------------------------------|
| A | -1.86 | -0.36 | | | | | | | 0.87 |
| B | | | | | | | | | |
| C | -1.86 | -0.13 | -2.15 | -2.58 | | -0.72 | 3.92 | | |
| D | -0.07 | 1.30 | -1.04 | -2.18 | | -0.10 | -0.03 | | |
| E | 0.91 | 0.45 | 0.20 | -0.52 | | 0.00 | 0.54 | | |
| F | -1.04 | 0.74 | -0.40 | 1.19 | | -6.01 | -0.50 | | |
| G | 1.73 | -0.36 | -0.24 | -0.89 | | | 1.11 | | |
| H | | 2.44 | | | | | | | |
| I | -0.23 | 0.09 | 0.32 | 0.00 | | | 0.57 | | |
| J | -0.88 | 0.74 | -0.08 | -0.79 | | 0.62 | 0.90 | | 0.00 |
| K | 1.89 | 1.32 | -0.72 | -1.04 | | | 0.48 | | |
| L | -1.86 | 1.55 | -1.59 | -1.98 | | -0.41 | -0.50 | | -0.58 |
| M | | -0.45 | 0.29 | -0.62 | | | 0.34 | | 0.35 |
| N | -1.04 | -0.13 | 0.32 | 0.79 | | | -0.77 | | |
| O | | 1.07 | | | | | | | |
| P | 6.95 | 6.45 | | | | 0.93 | | | |
| Q | | 4.72 | 0.84 | -3.97 | | | | | -0.46 |
| R | 6.30 | | -0.56 | -8.37 | | | | | |
| S | 0.59 | 1.55 | | | | 5.49 | | | |
| T | | | | | | | | | |
| U | 0.59 | 2.10 | 0.10 | 1.43 | | 0.10 | 0.23 | | 1.97 |
| V | -1.37 | -2.84 | -1.63 | -3.27 | | -12.48 | 0.53 | | -2.90 |
| W | -3.49 | -0.13 | 0.08 | -0.20 | | 0.41 | 0.23 | | -0.58 |
| X | | | -0.06 | 0.00 | | | | | |
| Y | -1.29 | 0.69 | 0.40 | 0.20 | | -0.10 | -0.44 | | |
| Z | 0.10 | -0.36 | 2.83 | 0.79 | | 0.41 | 1.11 | | |
| AA | 0.42 | 0.20 | 0.40 | | | | | | |
| AB | | | 2.95 | | | | | | |
| AC | 0.02 | | 0.64 | -0.60 | | 0.62 | -16.88 | | |
| AD | -1.86 | 0.09 | -1.10 | 0.08 | | 0.41 | 0.22 | | 1.51 |
| AE | | 1.88 | -2.95 | -2.78 | | 13656.17 | 2.65 | | |
| AF | 0.04 | | 0.70 | 3.81 | | | -0.60 | | -0.93 |
| AG | -0.23 | 0.90 | 1.27 | 0.40 | | | 0.90 | | 1.68 |
| AH | 0.26 | -1.70 | -0.48 | -0.20 | | 0.41 | 1.47 | | 0.12 |
| AI | 0.18 | 0.54 | -0.16 | -0.60 | | 0.41 | 0.27 | | -1.05 |
| AJ | -1.29 | -0.29 | 2.71 | 0.20 | | 0.72 | -0.20 | | -0.87 |
| AK | 1.40 | 0.09 | -0.57 | -0.54 | | | -0.40 | | 0.17 |
| AL | 3.85 | | -0.08 | -1.19 | | -0.83 | | | |
| AM | -1.86 | -0.58 | -1.35 | -2.98 | | | -0.44 | | -0.46 |
| AN | | 0.83 | | | | | | | |
| AO | 1.08 | 0.60 | 0.32 | -0.79 | | 0.10 | -0.27 | | -0.12 |
| AP | 0.59 | 1.14 | -1.51 | -2.58 | | -0.72 | 1.44 | | 1.05 |
| AQ | 21.81 | | | | | | | | |

z-Scores N174B

| | Cond. | total-Hardn. | K _{s4.3} | HCO ₃ ⁻ | Ca ²⁺ | Mg ²⁺ | Na ⁺ | K ⁺ | NO ₃ ⁻ |
|----|--------|--------------|-------------------|-------------------------------|------------------|------------------|-----------------|----------------|------------------------------|
| A | 0.77 | 0.19 | -0.30 | 0.49 | -0.58 | 2.21 | 2.02 | 0.38 | |
| B | | | | | | | | | |
| C | 1.53 | 0.56 | -2.55 | -1.37 | 0.76 | 0.15 | 0.73 | 1.14 | -0.83 |
| D | 0.15 | -1.30 | -0.90 | -0.59 | -0.93 | -1.61 | 0.16 | 0.51 | -1.33 |
| E | 0.31 | -0.19 | -1.35 | -0.33 | -0.70 | 1.04 | 0.49 | -0.63 | 0.90 |
| F | 0.00 | 161.46 | -1.80 | -0.78 | -0.58 | 0.15 | -0.32 | -0.76 | -1.75 |
| G | -0.46 | 0.06 | -0.44 | 0.39 | -0.66 | -0.80 | -0.98 | -0.38 | -0.95 |
| H | 0.61 | | | | | | | | |
| I | 0.00 | -0.37 | -0.96 | -0.59 | -0.52 | 0.15 | -0.24 | 0.38 | -0.50 |
| J | 0.15 | -0.56 | -2.25 | -0.98 | -0.46 | -0.51 | -1.21 | 3.55 | -0.33 |
| K | 0.46 | | | | | | | | -0.91 |
| L | -0.31 | -0.93 | 0.30 | 0.98 | -0.99 | 0.15 | 0.08 | -0.89 | -1.33 |
| M | -1.23 | -0.63 | -3.00 | -2.28 | -0.41 | -0.69 | -0.23 | -0.76 | -0.57 |
| N | -1.23 | 0.37 | -1.95 | -0.78 | 0.27 | 0.35 | 0.73 | 2.54 | 1.75 |
| O | | | | | | | | | |
| P | | | | | 1.22 | 0.38 | 2.10 | -1.40 | 0.00 |
| Q | 0.31 | 1.36 | -1.50 | | 1.44 | 0.77 | -1.54 | 5.08 | 1.12 |
| R | 0.60 | 17.11 | 3.75 | 3.72 | | | | | -0.61 |
| S | -2.14 | -0.47 | -0.90 | | | | | | 0.75 |
| T | | | | | | | | | |
| U | -58.06 | 0.56 | -34.68 | -26.87 | 0.56 | 0.35 | 0.78 | 0.51 | -0.56 |
| V | 0.31 | 0.56 | 8.98 | 7.89 | -5.01 | 16.20 | -25.04 | -9.80 | 0.92 |
| W | 0.92 | 1.49 | -0.90 | | 1.05 | 2.14 | -0.08 | 0.38 | -1.33 |
| X | | | | | 1.52 | 0.20 | -0.27 | -1.14 | -0.32 |
| Y | -0.15 | -0.19 | -1.80 | -0.72 | 0.06 | -0.51 | -1.21 | 0.13 | -0.17 |
| Z | 1.07 | 0.65 | -0.60 | -0.34 | 1.14 | -0.55 | 0.76 | -0.16 | 3.08 |
| AA | 0.15 | | -1.35 | -0.98 | | | | | -0.33 |
| AB | 0.61 | -1.67 | -2.43 | -1.80 | 1.92 | -9.92 | | | -0.50 |
| AC | -1.84 | -0.56 | -0.90 | -0.59 | -0.58 | -0.07 | -0.08 | 1.40 | -0.50 |
| AD | 2.45 | 0.00 | 0.41 | 0.39 | -0.44 | 1.30 | 1.20 | 1.29 | -0.62 |
| AE | 1.07 | -1.67 | 0.00 | 0.20 | -1.51 | -0.95 | -1.62 | -0.38 | 0.67 |
| AF | -0.15 | | -1.05 | -0.71 | | | | | -0.55 |
| AG | -0.31 | 0.00 | 0.45 | 1.18 | 0.29 | 0.15 | 0.32 | 10.91 | 0.25 |
| AH | -1.23 | -1.12 | -1.20 | -42.78 | -1.51 | 0.15 | -1.13 | -1.14 | -0.33 |
| AI | -0.92 | 0.00 | -1.50 | -1.06 | 0.23 | -0.51 | 0.08 | -0.51 | -1.00 |
| AJ | -1.07 | 0.19 | -0.90 | 0.00 | -0.64 | 2.14 | -0.57 | 0.13 | 0.75 |
| AK | 0.31 | -0.37 | -0.60 | -0.39 | -0.33 | -0.73 | -0.37 | 2.79 | -0.60 |
| AL | -0.15 | -1.19 | -18.02 | -14.20 | -1.22 | -0.51 | -0.89 | -0.76 | -0.50 |
| AM | -15.93 | -1.49 | 1.20 | 1.76 | -1.45 | -0.51 | 0.65 | 2.16 | 0.50 |
| AN | | | -1.20 | | | | | | |
| AO | -0.46 | -0.93 | -2.10 | -0.98 | -0.52 | -1.17 | -1.54 | -3.05 | -0.42 |
| AP | 1.99 | 0.19 | -1.95 | -1.37 | -0.17 | 1.04 | -0.32 | 0.51 | -1.25 |
| AQ | -1.53 | | | | | | | | 0.42 |

z-Scores N174B

| | NO ₂ ⁻ | NH ₄ ⁺ | Cl ⁻ | SO ₄ ²⁻ | o-PO ₄ ³⁻ | Boron | DOC | total-P (as PO ₄ ³⁻) | KMnO ₄ - Index ⁻ |
|----|------------------------------|------------------------------|-----------------|-------------------------------|---------------------------------|----------|-------|--|---|
| A | -0.93 | | | | -3.86 | | | -0.10 | 0.58 |
| B | | | | | | | | 0.43 | |
| C | -1.35 | | -3.30 | -1.01 | 1.05 | -2.29 | 15.92 | -0.48 | |
| D | -0.42 | | -1.41 | -2.02 | -0.48 | -0.61 | 0.40 | 0.00 | |
| E | 0.38 | | -1.18 | -0.68 | 1.02 | -0.10 | 0.58 | -0.28 | |
| F | -0.08 | | -0.16 | -0.11 | 0.45 | 5.57 | 0.00 | 0.48 | |
| G | 1.52 | | -0.31 | -0.91 | 0.10 | | 1.66 | -0.57 | |
| H | | | | | 0.45 | | | -1.29 | |
| I | -0.08 | | 0.16 | -0.79 | 0.10 | | 1.12 | 0.00 | |
| J | -0.84 | | 0.63 | -0.67 | | 1.15 | 3.31 | | -0.51 |
| K | 1.09 | | -0.65 | -1.04 | -0.26 | | 1.46 | -1.34 | |
| L | -1.35 | | -0.94 | -1.01 | | -0.69 | -0.04 | 0.86 | -1.68 |
| M | | | 0.38 | -0.48 | | | 0.78 | | 0.47 |
| N | -0.08 | | -0.78 | 1.12 | -0.14 | | -0.40 | 0.57 | |
| O | | | | | -3.31 | | | 0.57 | |
| P | 14.65 | | | | -3.58 | 1.00 | | | |
| Q | 0.34 | | 1.02 | -2.19 | | | | | 0.08 |
| R | 2.02 | | -0.88 | -5.40 | | | | | |
| S | 0.76 | | | | 1.41 | 9.74 | | -0.67 | |
| T | | | | | | | | | |
| U | -0.08 | | -15.68 | 0.55 | -0.62 | 0.16 | 0.72 | -1.32 | 1.36 |
| V | -1.39 | | -2.10 | 0.83 | 3.43 | 1132.33 | 1.15 | 0.19 | -2.84 |
| W | -1.77 | | -0.16 | 0.00 | -1.33 | -0.98 | 0.81 | 0.48 | 0.04 |
| X | | | 0.02 | -0.33 | | | | | |
| Y | -0.63 | | 1.10 | 0.11 | 0.17 | -0.39 | 0.04 | -0.19 | |
| Z | -0.04 | | 3.28 | 1.24 | -1.29 | 1.15 | 1.92 | 0.14 | |
| AA | 0.17 | | -0.78 | | -1.14 | | | -0.10 | |
| AB | | | 3.14 | | | | | | |
| AC | 0.34 | | -1.57 | -0.79 | | 0.33 | -0.27 | | |
| AD | -0.51 | | -1.57 | -0.35 | 0.33 | 14601.05 | 0.52 | 0.10 | 0.62 |
| AE | 1.18 | | -2.04 | 0.67 | 1.76 | 13317.07 | 3.62 | -0.57 | |
| AF | -0.21 | | 2.51 | 2.56 | 1.69 | | 0.18 | -0.03 | -1.13 |
| AG | 0.00 | | 0.16 | 0.56 | 0.36 | | 1.97 | -0.48 | 1.44 |
| AH | -12.16 | | -0.16 | -0.90 | | 0.16 | 8.05 | 0.00 | -0.04 |
| AI | 0.00 | | -0.16 | -0.45 | -0.45 | 0.38 | 0.22 | -0.86 | -0.86 |
| AJ | 0.04 | | 2.82 | 1.01 | -5.03 | -0.03 | 0.13 | -3.05 | -0.23 |
| AK | 0.76 | | -0.89 | -0.75 | -0.64 | | 0.22 | -0.15 | 0.23 |
| AL | 2.44 | | -0.16 | -0.79 | | -1.06 | | | |
| AM | -1.77 | | -3.61 | -3.03 | -4.67 | | 1.79 | 3.73 | -0.58 |
| AN | | | | | -0.93 | | | | |
| AO | 0.63 | | -0.16 | 0.22 | 0.29 | -0.33 | 3.49 | -0.19 | 0.16 |
| AP | -0.21 | | -0.31 | -1.68 | -3.72 | -1.31 | 2.15 | -3.54 | 0.04 |
| AQ | 8.33 | | | | | | | | |

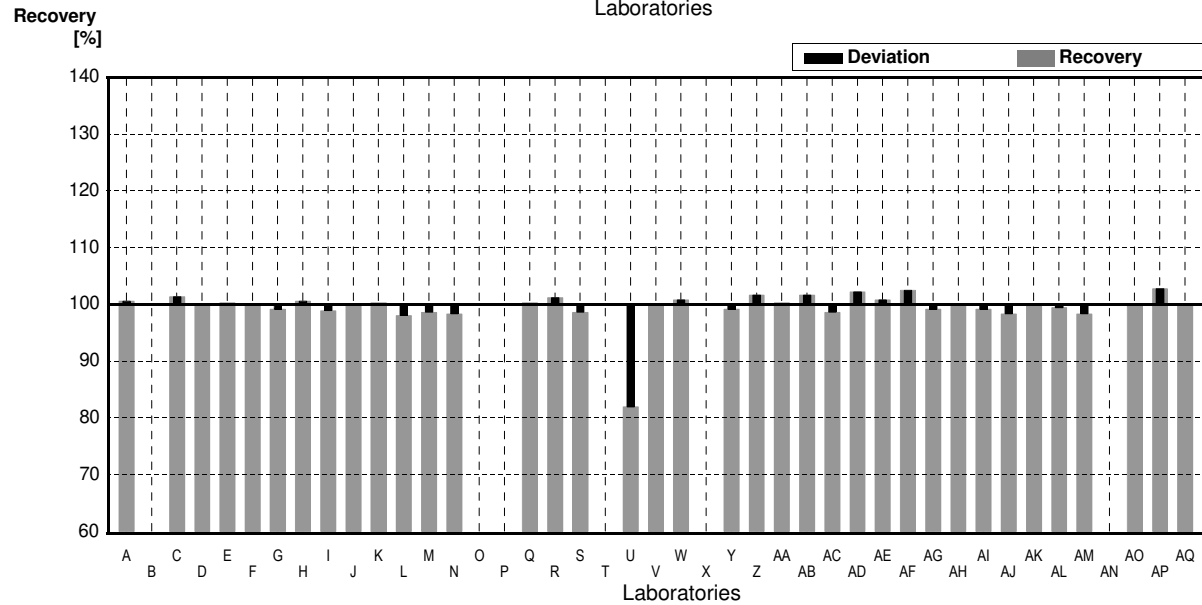
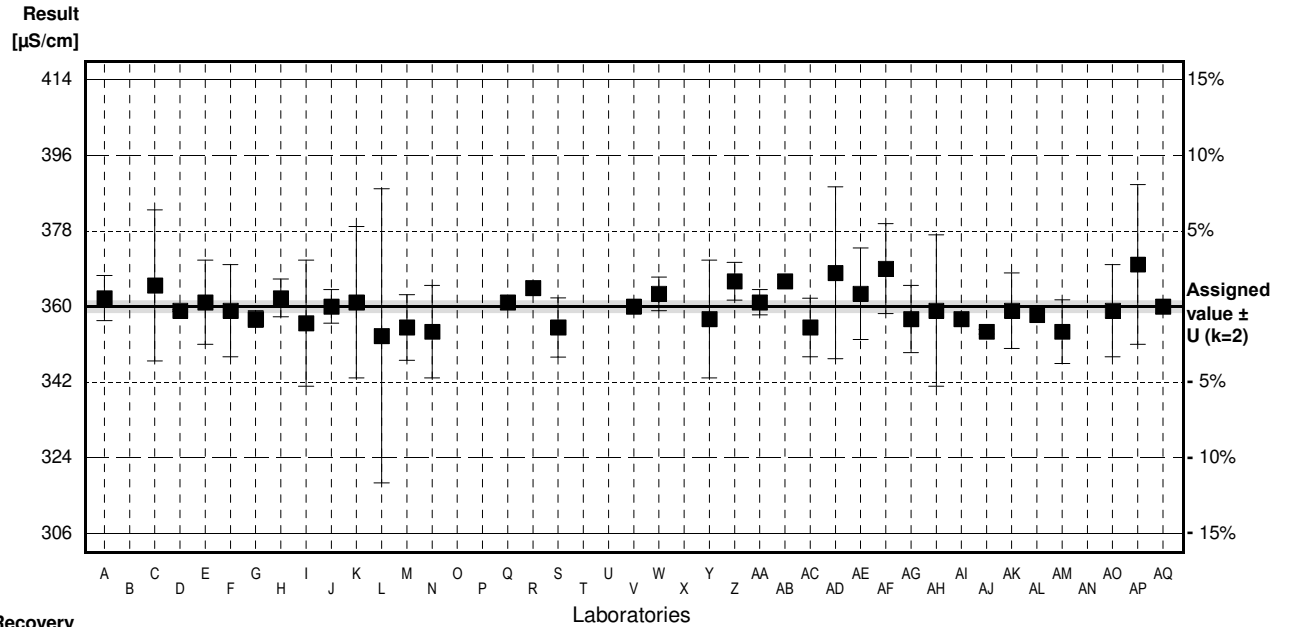
Sample N174A

Parameter Conductivity (25°C)

Assigned value ± U (k=2) 360 µS/cm ± 1 µS/cm
 IFA result ± U (k=2) 359 µS/cm ± 6 µS/cm
 Stability test ± U (k=2) 359 µS/cm ± 6 µS/cm

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|-------|----------|---------|
| A | 362 | 5.4 | µS/cm | 101% | 0.46 |
| B | | | µS/cm | | |
| C | 365 | 18 | µS/cm | 101% | 1.16 |
| D | 359 | 0.198 | µS/cm | 100% | -0.23 |
| E | 361 | 10 | µS/cm | 100% | 0.23 |
| F | 359 | 11 | µS/cm | 100% | -0.23 |
| G | 357 | 2 | µS/cm | 99% | -0.69 |
| H | 362 | 4.489 | µS/cm | 101% | 0.46 |
| I | 356 | 15 | µS/cm | 99% | -0.93 |
| J | 360 | 4 | µS/cm | 100% | 0.00 |
| K | 361 | 18 | µS/cm | 100% | 0.23 |
| L | 353 | 35 | µS/cm | 98% | -1.62 |
| M | 355.0 | 7.8 | µS/cm | 99% | -1.16 |
| N | 354 | 11 | µS/cm | 98% | -1.39 |
| O | | | µS/cm | | |
| P | | | µS/cm | | |
| Q | 361 | | µS/cm | 100% | 0.23 |
| R | 364.4 | | µS/cm | 101% | 1.02 |
| S | 355 | 7.06 | µS/cm | 99% | -1.16 |
| T | | | µS/cm | | |
| U | 295 * | 29.5 | µS/cm | 82% | -15.05 |
| V | 360 | | µS/cm | 100% | 0.00 |
| W | 363 | 4 | µS/cm | 101% | 0.69 |
| X | | | µS/cm | | |
| Y | 357 | 14 | µS/cm | 99% | -0.69 |
| Z | 366 | 4.51 | µS/cm | 102% | 1.39 |
| AA | 361 | 3 | µS/cm | 100% | 0.23 |
| AB | 366 | | µS/cm | 102% | 1.39 |
| AC | 355 | 7.0 | µS/cm | 99% | -1.16 |
| AD | 368 | 20.46 | µS/cm | 102% | 1.85 |
| AE | 363 | 10.9 | µS/cm | 101% | 0.69 |
| AF | 369 | 10.7 | µS/cm | 103% | 2.08 |
| AG | 357 | 8 | µS/cm | 99% | -0.69 |
| AH | 359 | 18 | µS/cm | 100% | -0.23 |
| AI | 357 | | µS/cm | 99% | -0.69 |
| AJ | 354 | 0.58 | µS/cm | 98% | -1.39 |
| AK | 359 | 9 | µS/cm | 100% | -0.23 |
| AL | 358 | | µS/cm | 99% | -0.46 |
| AM | 354 | 7.6 | µS/cm | 98% | -1.39 |
| AN | | | µS/cm | | |
| AO | 359 | 11 | µS/cm | 100% | -0.23 |
| AP | 370 | 19 | µS/cm | 103% | 2.31 |
| AQ | 360 | | µS/cm | 100% | 0.00 |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|-------|
| Mean ± CI(99%) | 358 ± 5 | 360 ± 2 | µS/cm |
| Recov. ± CI(99%) | 99,5 ± 1,4 | 100,0 ± 0,6 | % |
| SD between labs | 12 | 4 | µS/cm |
| RSD between labs | 3,2 | 1,2 | % |
| n for calculation | 37 | 36 | |



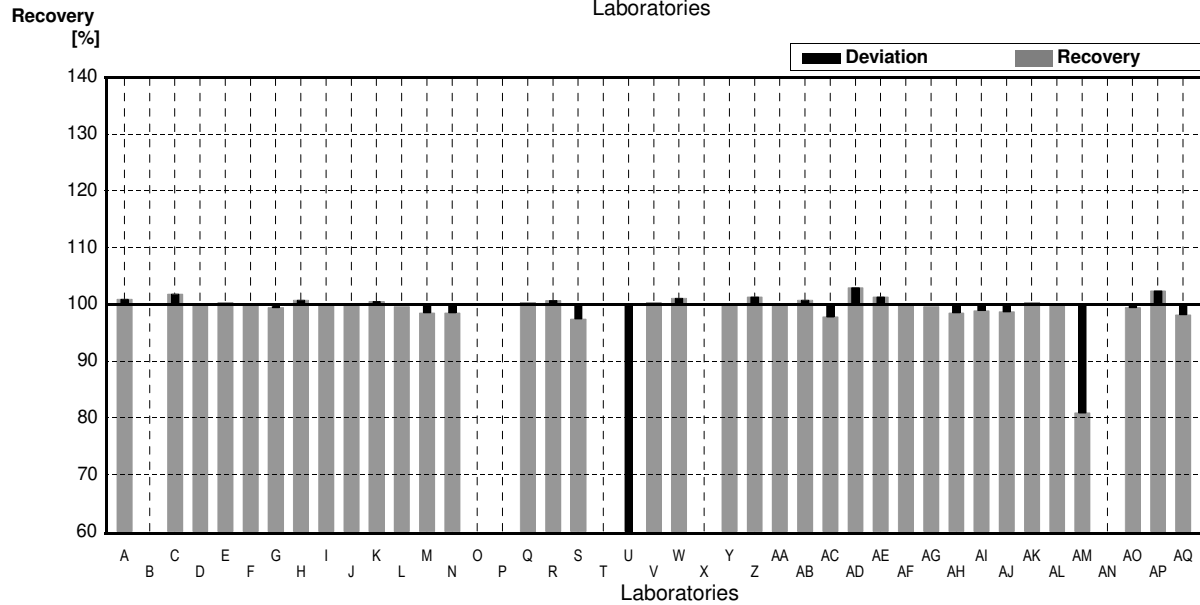
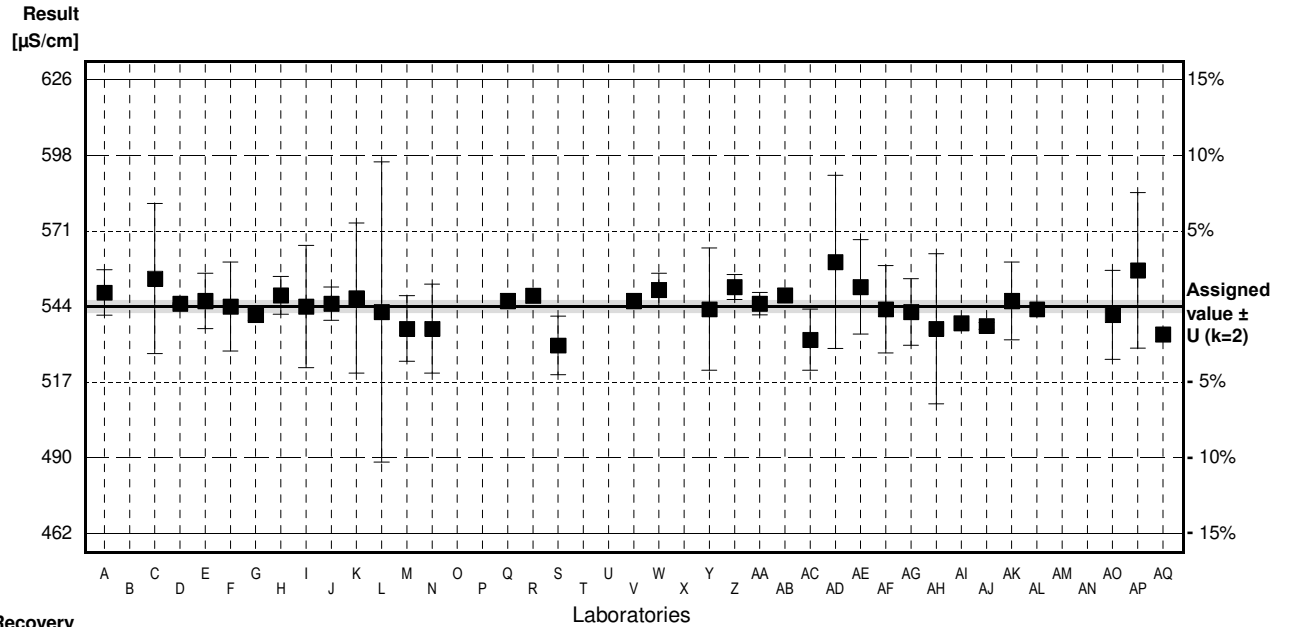
Sample N174B

Parameter Conductivity (25°C)

Assigned value ± U (k=2) 544 µS/cm ± 2 µS/cm
 IFA result ± U (k=2) 544 µS/cm ± 9 µS/cm
 Stability test ± U (k=2) 543 µS/cm ± 9 µS/cm

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|-------|----------|---------|
| A | 549 | 8.2 | µS/cm | 101% | 0.77 |
| B | | | µS/cm | | |
| C | 554 | 27 | µS/cm | 102% | 1.53 |
| D | 545 | 0.233 | µS/cm | 100% | 0.15 |
| E | 546 | 10 | µS/cm | 100% | 0.31 |
| F | 544 | 16 | µS/cm | 100% | 0.00 |
| G | 541 | 2 | µS/cm | 99% | -0.46 |
| H | 548 | 6.795 | µS/cm | 101% | 0.61 |
| I | 544 | 22 | µS/cm | 100% | 0.00 |
| J | 545 | 6 | µS/cm | 100% | 0.15 |
| K | 547 | 27 | µS/cm | 101% | 0.46 |
| L | 542 | 54 | µS/cm | 100% | -0.31 |
| M | 536.0 | 11.8 | µS/cm | 99% | -1.23 |
| N | 536 | 16 | µS/cm | 99% | -1.23 |
| O | | | µS/cm | | |
| P | | | µS/cm | | |
| Q | 546 | | µS/cm | 100% | 0.31 |
| R | 547.9 | | µS/cm | 101% | 0.60 |
| S | 530 | 10.55 | µS/cm | 97% | -2.14 |
| T | | | µS/cm | | |
| U | 165 * | 16.5 | µS/cm | 30% | -58.06 |
| V | 546 | | µS/cm | 100% | 0.31 |
| W | 550 | 6 | µS/cm | 101% | 0.92 |
| X | | | µS/cm | | |
| Y | 543 | 22 | µS/cm | 100% | -0.15 |
| Z | 551 | 4.51 | µS/cm | 101% | 1.07 |
| AA | 545 | 4 | µS/cm | 100% | 0.15 |
| AB | 548 | | µS/cm | 101% | 0.61 |
| AC | 532 | 11 | µS/cm | 98% | -1.84 |
| AD | 560 | 31.14 | µS/cm | 103% | 2.45 |
| AE | 551 | 17.0 | µS/cm | 101% | 1.07 |
| AF | 543 | 15.7 | µS/cm | 100% | -0.15 |
| AG | 542 | 12 | µS/cm | 100% | -0.31 |
| AH | 536 | 27 | µS/cm | 99% | -1.23 |
| AI | 538 | | µS/cm | 99% | -0.92 |
| AJ | 537 | 1.16 | µS/cm | 99% | -1.07 |
| AK | 546 | 14 | µS/cm | 100% | 0.31 |
| AL | 543 | | µS/cm | 100% | -0.15 |
| AM | 440 * | 9.5 | µS/cm | 81% | -15.93 |
| AN | | | µS/cm | | |
| AO | 541 | 16 | µS/cm | 99% | -0.46 |
| AP | 557 | 28 | µS/cm | 102% | 1.99 |
| AQ | 534 | | µS/cm | 98% | -1.53 |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|-------|
| Mean ± CI(99%) | 531 ± 29 | 544 ± 3 | µS/cm |
| Recov. ± CI(99%) | 97,6 ± 5,3 | 100,0 ± 0,6 | % |
| SD between labs | 64 | 7 | µS/cm |
| RSD between labs | 12.1 | 1.2 | % |
| n for calculation | 37 | 35 | |



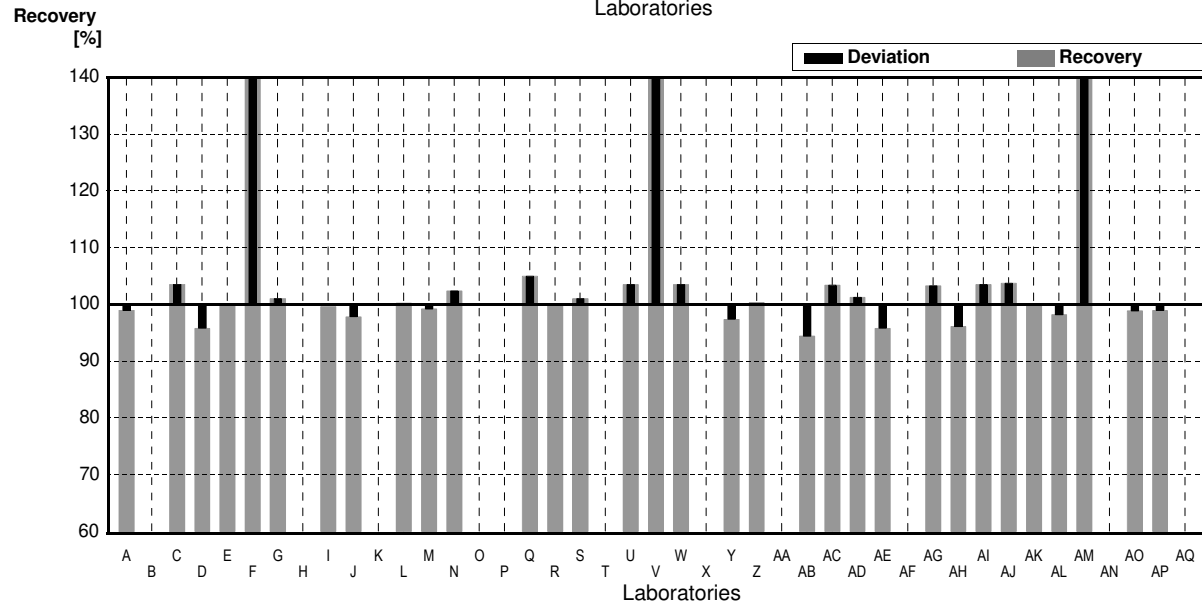
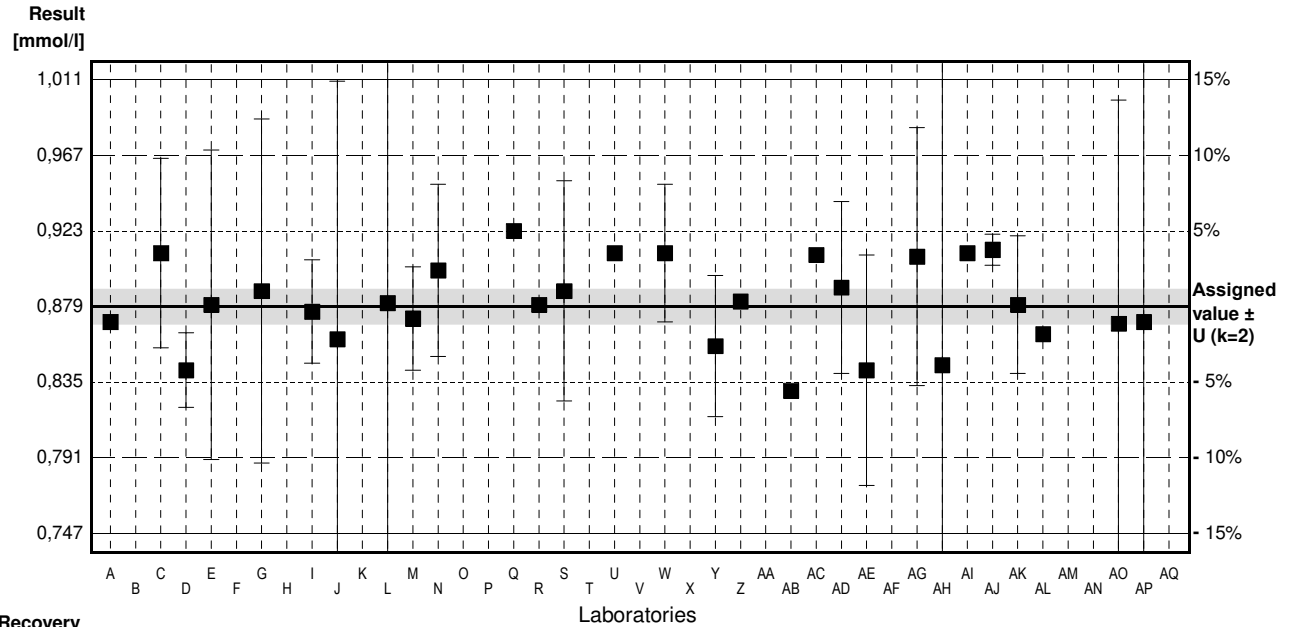
Sample N174A

Parameter Total hardness

Assigned value ± U (k=2) 0,879 mmol/l ± 0,010 mmol/l
 IFA result ± U (k=2) 0,90 mmol/l ± 0,05 mmol/l
 Stability test ± U (k=2) 0,89 mmol/l ± 0,05 mmol/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|--------|--------|----------|---------|
| A | 0.87 | | mmol/l | 99% | -0.37 |
| B | | | mmol/l | | |
| C | 0.91 | 0.055 | mmol/l | 104% | 1.26 |
| D | 0.842 | 0.0217 | mmol/l | 96% | -1.50 |
| E | 0.88 | 0.09 | mmol/l | 100% | 0.04 |
| F | 4.93 * | 0.37 | mmol/l | 561% | 164.59 |
| G | 0.888 | 0.1 | mmol/l | 101% | 0.37 |
| H | | | mmol/l | | |
| I | 0.876 | 0.03 | mmol/l | 100% | -0.12 |
| J | 0.86 | 0.15 | mmol/l | 98% | -0.77 |
| K | | | mmol/l | | |
| L | 0.881 | 0.18 | mmol/l | 100% | 0.08 |
| M | 0.872 | 0.03 | mmol/l | 99% | -0.28 |
| N | 0.90 | 0.05 | mmol/l | 102% | 0.85 |
| O | | | mmol/l | | |
| P | | | mmol/l | | |
| Q | 0.92296 | | mmol/l | 105% | 1.79 |
| R | 0.88 | | mmol/l | 100% | 0.04 |
| S | 0.888 | 0.064 | mmol/l | 101% | 0.37 |
| T | | | mmol/l | | |
| U | 0.91 | | mmol/l | 104% | 1.26 |
| V | 1.93 * | | mmol/l | 220% | 42.70 |
| W | 0.91 | 0.04 | mmol/l | 104% | 1.26 |
| X | | | mmol/l | | |
| Y | 0.856 | 0.041 | mmol/l | 97% | -0.93 |
| Z | 0.882 | | mmol/l | 100% | 0.12 |
| AA | | | mmol/l | | |
| AB | 0.83 | | mmol/l | 94% | -1.99 |
| AC | 0.909 | | mmol/l | 103% | 1.22 |
| AD | 0.89 | 0.05 | mmol/l | 101% | 0.45 |
| AE | 0.842 | 0.067 | mmol/l | 96% | -1.50 |
| AF | | | mmol/l | | |
| AG | 0.908 | 0.075 | mmol/l | 103% | 1.18 |
| AH | 0.845 | 0.17 | mmol/l | 96% | -1.38 |
| AI | 0.91 | | mmol/l | 104% | 1.26 |
| AJ | 0.912 | 0.009 | mmol/l | 104% | 1.34 |
| AK | 0.88 | 0.04 | mmol/l | 100% | 0.04 |
| AL | 0.863 | | mmol/l | 98% | -0.65 |
| AM | 1.61 * | 0.13 | mmol/l | 183% | 29.70 |
| AN | | | mmol/l | | |
| AO | 0.869 | 0.13 | mmol/l | 99% | -0.41 |
| AP | 0.870 | 0.174 | mmol/l | 99% | -0.37 |
| AQ | | | mmol/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|---------------|----------------|--------|
| Mean ± CI(99%) | 1,063 ± 0,360 | 0,881 ± 0,013 | mmol/l |
| Recov. ± CI(99%) | 121,0 ± 40,9 | 100,3 ± 1,4 | % |
| SD between labs | 0,740 | 0,025 | mmol/l |
| RSD between labs | 69.6 | 2.8 | % |
| n for calculation | 32 | 29 | |



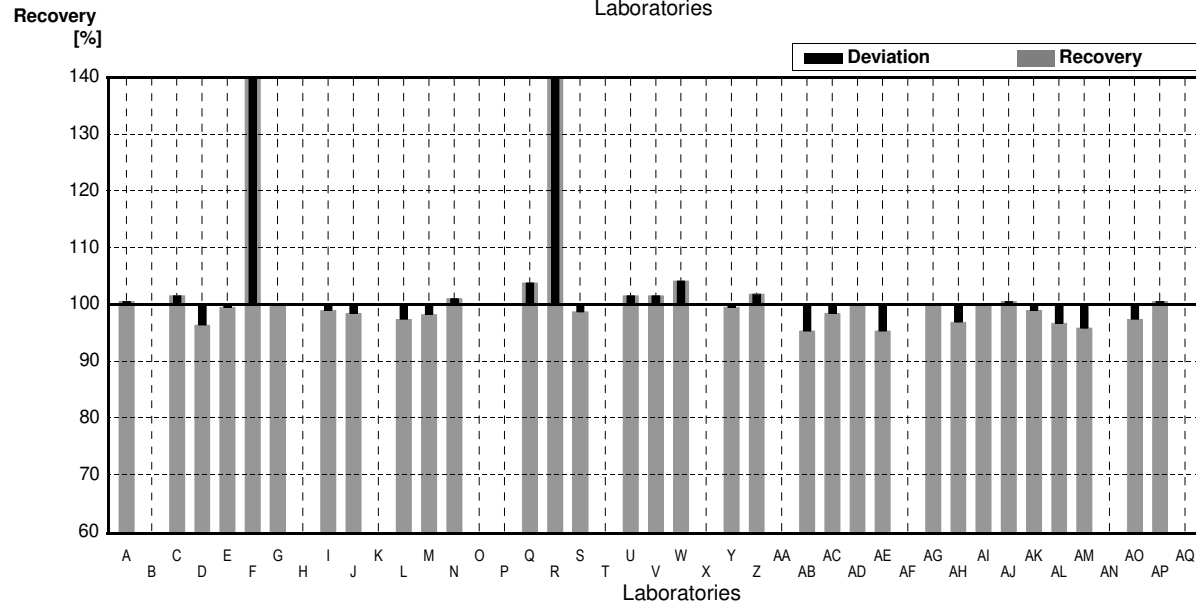
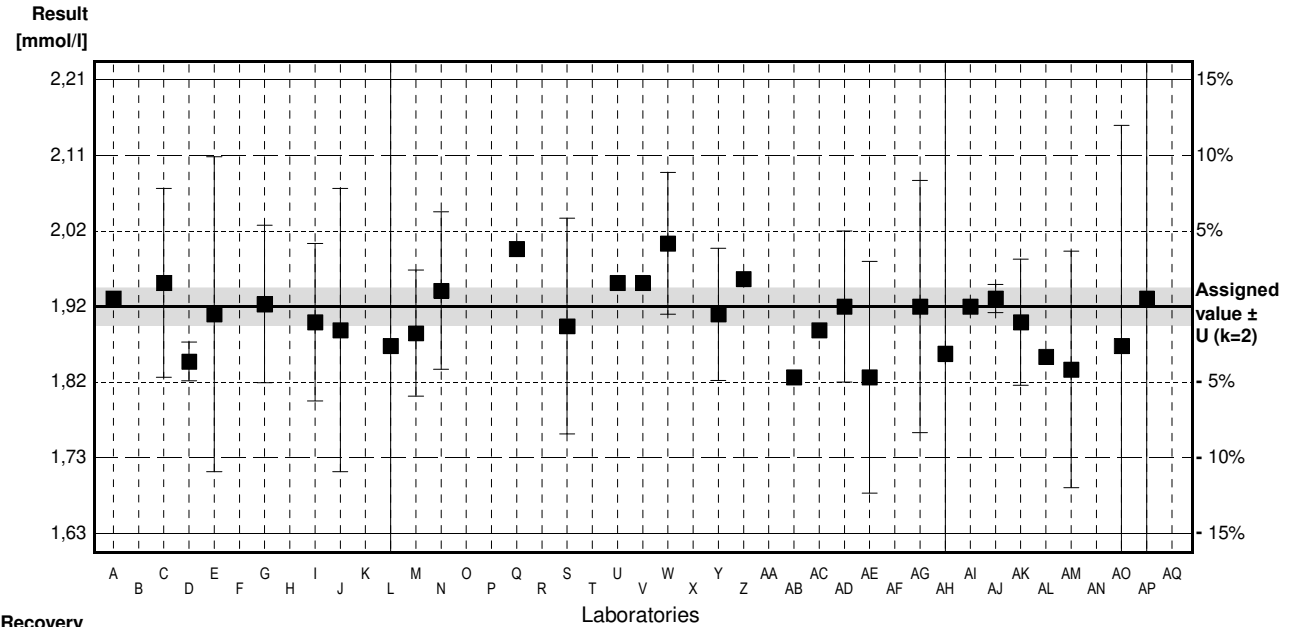
Sample N174B

Parameter Total hardness

Assigned value ± U (k=2) 1,92 mmol/l ± 0,02 mmol/l
 IFA result ± U (k=2) 2,01 mmol/l ± 0,11 mmol/l
 Stability test ± U (k=2) 1,94 mmol/l ± 0,10 mmol/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|--------|--------|----------|---------|
| A | 1.93 | | mmol/l | 101% | 0.19 |
| B | | | mmol/l | | |
| C | 1.95 | 0.12 | mmol/l | 102% | 0.56 |
| D | 1.85 | 0.0246 | mmol/l | 96% | -1.30 |
| E | 1.91 | 0.2 | mmol/l | 99% | -0.19 |
| F | 10.6 * | 0.8 | mmol/l | 552% | 161.46 |
| G | 1.923 | 0.1 | mmol/l | 100% | 0.06 |
| H | | | mmol/l | | |
| I | 1.90 | 0.1 | mmol/l | 99% | -0.37 |
| J | 1.89 | 0.18 | mmol/l | 98% | -0.56 |
| K | | | mmol/l | | |
| L | 1.87 | 0.37 | mmol/l | 97% | -0.93 |
| M | 1.886 | 0.08 | mmol/l | 98% | -0.63 |
| N | 1.94 | 0.10 | mmol/l | 101% | 0.37 |
| O | | | mmol/l | | |
| P | | | mmol/l | | |
| Q | 1.99307 | | mmol/l | 104% | 1.36 |
| R | 2.84 * | | mmol/l | 148% | 17.11 |
| S | 1.895 | 0.137 | mmol/l | 99% | -0.47 |
| T | | | mmol/l | | |
| U | 1.95 | | mmol/l | 102% | 0.56 |
| V | 1.95 | | mmol/l | 102% | 0.56 |
| W | 2.00 | 0.09 | mmol/l | 104% | 1.49 |
| X | | | mmol/l | | |
| Y | 1.91 | 0.084 | mmol/l | 99% | -0.19 |
| Z | 1.955 | | mmol/l | 102% | 0.65 |
| AA | | | mmol/l | | |
| AB | 1.83 | | mmol/l | 95% | -1.67 |
| AC | 1.89 | | mmol/l | 98% | -0.56 |
| AD | 1.92 | 0.096 | mmol/l | 100% | 0.00 |
| AE | 1.83 | 0.147 | mmol/l | 95% | -1.67 |
| AF | | | mmol/l | | |
| AG | 1.92 | 0.16 | mmol/l | 100% | 0.00 |
| AH | 1.86 | 0.37 | mmol/l | 97% | -1.12 |
| AI | 1.92 | | mmol/l | 100% | 0.00 |
| AJ | 1.93 | 0.018 | mmol/l | 101% | 0.19 |
| AK | 1.90 | 0.08 | mmol/l | 99% | -0.37 |
| AL | 1.856 | | mmol/l | 97% | -1.19 |
| AM | 1.84 | 0.15 | mmol/l | 96% | -1.49 |
| AN | | | mmol/l | | |
| AO | 1.87 | 0.28 | mmol/l | 97% | -0.93 |
| AP | 1.93 | 0.39 | mmol/l | 101% | 0.19 |
| AQ | | | mmol/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|--------------|----------------|--------|
| Mean ± CI(99%) | 2,21 ± 0,75 | 1,91 ± 0,02 | mmol/l |
| Recov. ± CI(99%) | 115,0 ± 39,0 | 99,3 ± 1,2 | % |
| SD between labs | 1,54 | 0,04 | mmol/l |
| RSD between labs | 69,8 | 2,3 | % |
| n for calculation | 32 | 30 | |



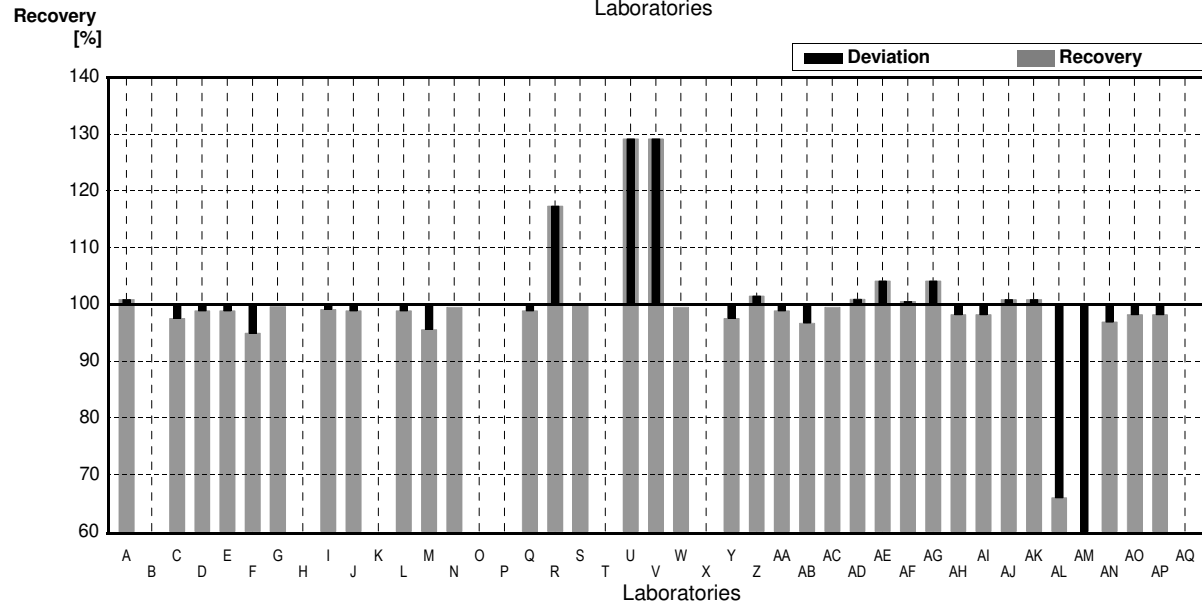
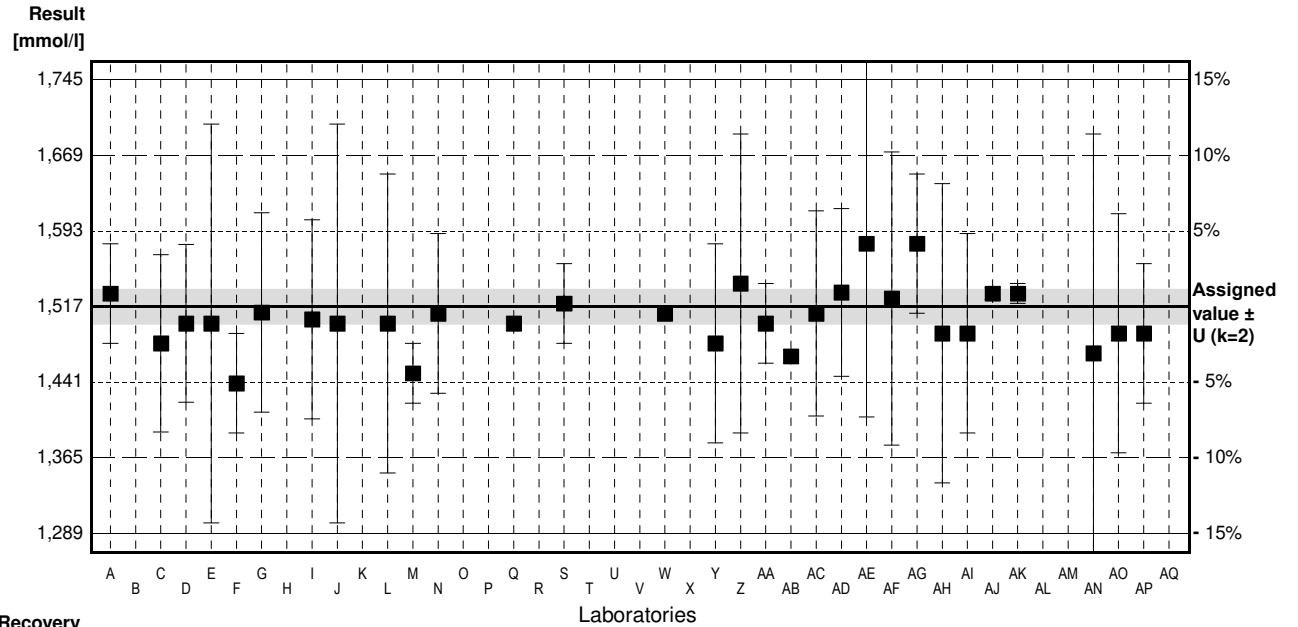
Sample N174A

Parameter Alkalinity KS 4,3 (as H+)

Assigned value ± U (k=2) 1,517 mmol/l ± 0,018 mmol/l
 IFA result ± U (k=2) 1,48 mmol/l ± 0,06 mmol/l
 Stability test ± U (k=2) 1,49 mmol/l ± 0,06 mmol/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|--------|--------|----------|---------|
| A | 1.53 | 0.05 | mmol/l | 101% | 0.48 |
| B | | | mmol/l | | |
| C | 1.48 | 0.089 | mmol/l | 98% | -1.36 |
| D | 1.50 | 0.0790 | mmol/l | 99% | -0.62 |
| E | 1.50 | 0.2 | mmol/l | 99% | -0.62 |
| F | 1.44 | 0.05 | mmol/l | 95% | -2.82 |
| G | 1.511 | 0.1 | mmol/l | 100% | -0.22 |
| H | | | mmol/l | | |
| I | 1.504 | 0.1 | mmol/l | 99% | -0.48 |
| J | 1.50 | 0.2 | mmol/l | 99% | -0.62 |
| K | | | mmol/l | | |
| L | 1.50 | 0.15 | mmol/l | 99% | -0.62 |
| M | 1.45 | 0.03 | mmol/l | 96% | -2.45 |
| N | 1.51 | 0.08 | mmol/l | 100% | -0.26 |
| O | | | mmol/l | | |
| P | | | mmol/l | | |
| Q | 1.50 | | mmol/l | 99% | -0.62 |
| R | 1.78 | * | mmol/l | 117% | 9.63 |
| S | 1.52 | 0.04 | mmol/l | 100% | 0.11 |
| T | | | mmol/l | | |
| U | 1.96 | * | 0.294 | 129% | 16.22 |
| V | 1.96 | * | 0.0078 | 129% | 16.22 |
| W | 1.51 | 0.005 | mmol/l | 100% | -0.26 |
| X | | | mmol/l | | |
| Y | 1.48 | 0.10 | mmol/l | 98% | -1.36 |
| Z | 1.54 | 0.15 | mmol/l | 102% | 0.84 |
| AA | 1.50 | 0.04 | mmol/l | 99% | -0.62 |
| AB | 1.467 | | mmol/l | 97% | -1.83 |
| AC | 1.51 | 0.103 | mmol/l | 100% | -0.26 |
| AD | 1.531 | 0.084 | mmol/l | 101% | 0.51 |
| AE | 1.58 | 0.174 | mmol/l | 104% | 2.31 |
| AF | 1.525 | 0.147 | mmol/l | 101% | 0.29 |
| AG | 1.580 | 0.070 | mmol/l | 104% | 2.31 |
| AH | 1.49 | 0.15 | mmol/l | 98% | -0.99 |
| AI | 1.49 | 0.10 | mmol/l | 98% | -0.99 |
| AJ | 1.53 | 0.006 | mmol/l | 101% | 0.48 |
| AK | 1.53 | 0.01 | mmol/l | 101% | 0.48 |
| AL | 1.00 | * | mmol/l | 66% | -18.93 |
| AM | 0.85 | * | 0.072 | 56% | -24.43 |
| AN | 1.47 | 0.22 | mmol/l | 97% | -1.72 |
| AO | 1.49 | 0.12 | mmol/l | 98% | -0.99 |
| AP | 1.49 | 0.07 | mmol/l | 98% | -0.99 |
| AQ | | | mmol/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|---------------|----------------|--------|
| Mean ± CI(99%) | 1,506 ± 0,087 | 1,505 ± 0,016 | mmol/l |
| Recov. ± CI(99%) | 99,3 ± 5,7 | 99,2 ± 1,0 | % |
| SD between labs | 0,188 | 0,031 | mmol/l |
| RSD between labs | 12,5 | 2,1 | % |
| n for calculation | 35 | 30 | |



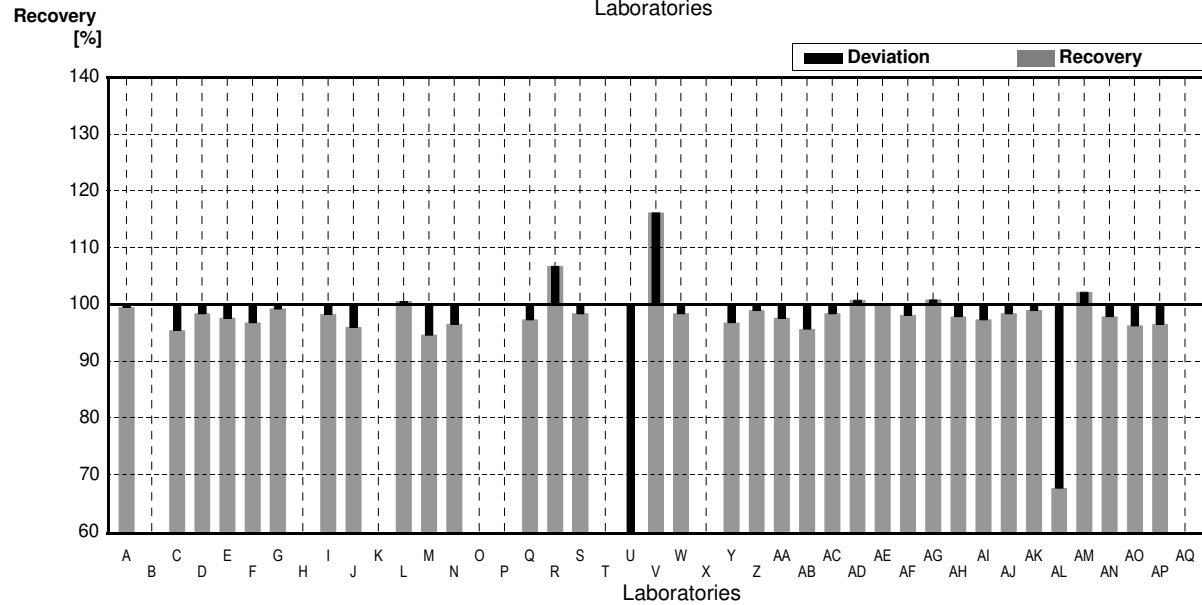
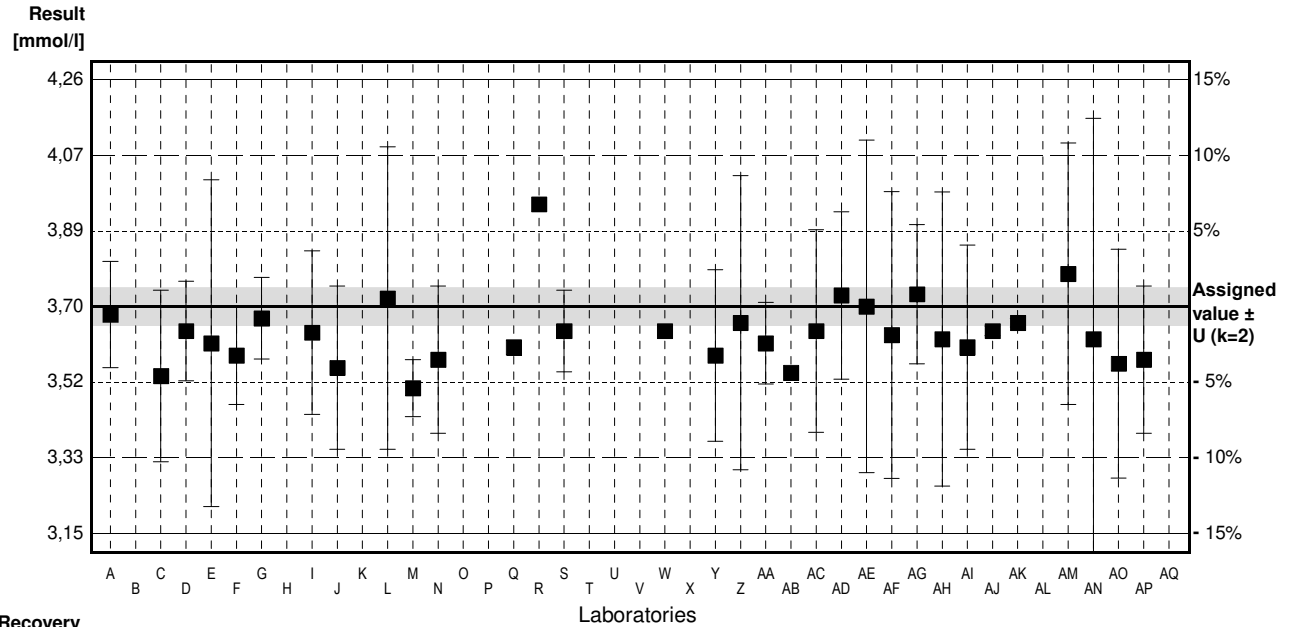
Sample N174B

Parameter Alkalinity KS 4,3 (as H+)

Assigned value ± U (k=2) 3,70 mmol/l ± 0,05 mmol/l
 IFA result ± U (k=2) 3,78 mmol/l ± 0,16 mmol/l
 Stability test ± U (k=2) 3,82 mmol/l ± 0,16 mmol/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|--------|----------|---------|
| A | 3.68 | 0.13 | mmol/l | 99% | -0.30 |
| B | | | mmol/l | | |
| C | 3.53 | 0.21 | mmol/l | 95% | -2.55 |
| D | 3.64 | 0.122 | mmol/l | 98% | -0.90 |
| E | 3.61 | 0.4 | mmol/l | 98% | -1.35 |
| F | 3.58 | 0.12 | mmol/l | 97% | -1.80 |
| G | 3.671 | 0.1 | mmol/l | 99% | -0.44 |
| H | | | mmol/l | | |
| I | 3.636 | 0.2 | mmol/l | 98% | -0.96 |
| J | 3.55 | 0.2 | mmol/l | 96% | -2.25 |
| K | | | mmol/l | | |
| L | 3.72 | 0.37 | mmol/l | 101% | 0.30 |
| M | 3.50 | 0.07 | mmol/l | 95% | -3.00 |
| N | 3.57 | 0.18 | mmol/l | 96% | -1.95 |
| O | | | mmol/l | | |
| P | | | mmol/l | | |
| Q | 3.60 | | mmol/l | 97% | -1.50 |
| R | 3.95 | * | mmol/l | 107% | 3.75 |
| S | 3.64 | 0.10 | mmol/l | 98% | -0.90 |
| T | | | mmol/l | | |
| U | 1.39 | * | 0.209 | 38% | -34.68 |
| V | 4.298 | * | 0.16 | 116% | 8.98 |
| W | 3.64 | 0.01 | mmol/l | 98% | -0.90 |
| X | | | mmol/l | | |
| Y | 3.58 | 0.21 | mmol/l | 97% | -1.80 |
| Z | 3.66 | 0.36 | mmol/l | 99% | -0.60 |
| AA | 3.61 | 0.10 | mmol/l | 98% | -1.35 |
| AB | 3.538 | | mmol/l | 96% | -2.43 |
| AC | 3.64 | 0.248 | mmol/l | 98% | -0.90 |
| AD | 3.727 | 0.205 | mmol/l | 101% | 0.41 |
| AE | 3.70 | 0.407 | mmol/l | 100% | 0.00 |
| AF | 3.63 | 0.351 | mmol/l | 98% | -1.05 |
| AG | 3.73 | 0.17 | mmol/l | 101% | 0.45 |
| AH | 3.62 | 0.36 | mmol/l | 98% | -1.20 |
| AI | 3.60 | 0.25 | mmol/l | 97% | -1.50 |
| AJ | 3.64 | 0.012 | mmol/l | 98% | -0.90 |
| AK | 3.66 | 0.01 | mmol/l | 99% | -0.60 |
| AL | 2.50 | * | mmol/l | 68% | -18.02 |
| AM | 3.78 | 0.32 | mmol/l | 102% | 1.20 |
| AN | 3.62 | 0.54 | mmol/l | 98% | -1.20 |
| AO | 3.56 | 0.28 | mmol/l | 96% | -2.10 |
| AP | 3.57 | 0.18 | mmol/l | 96% | -1.95 |
| AQ | | | mmol/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|--------|
| Mean ± CI(99%) | 3,56 ± 0,21 | 3,63 ± 0,03 | mmol/l |
| Recov. ± CI(99%) | 96,2 ± 5,6 | 98,0 ± 0,9 | % |
| SD between labs | 0,45 | 0,06 | mmol/l |
| RSD between labs | 12,6 | 1,8 | % |
| n for calculation | 35 | 31 | |



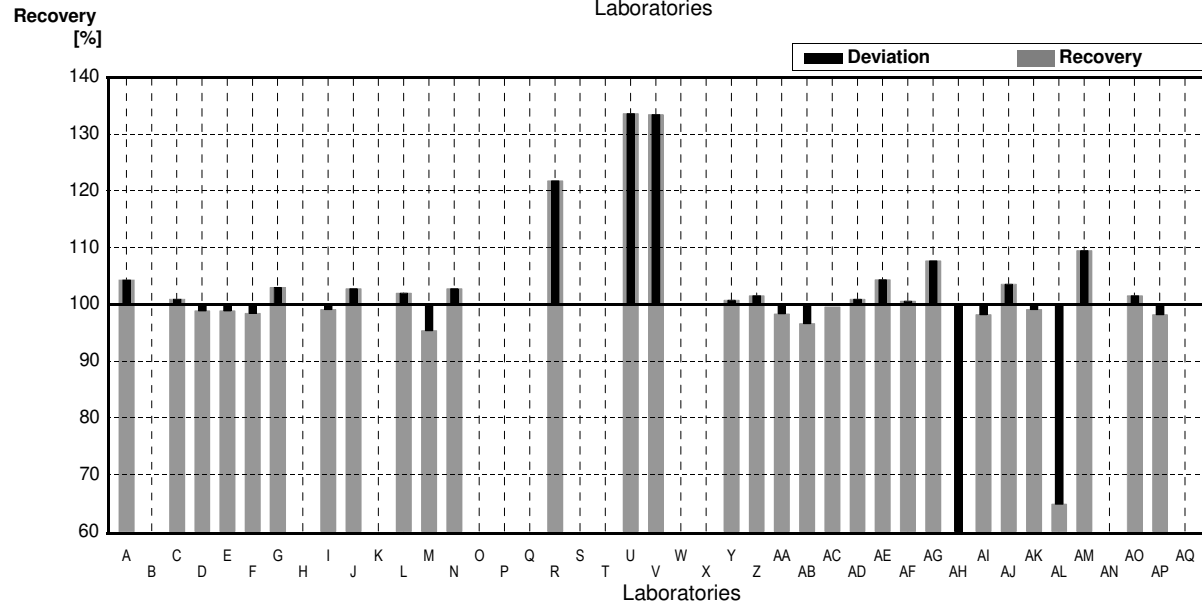
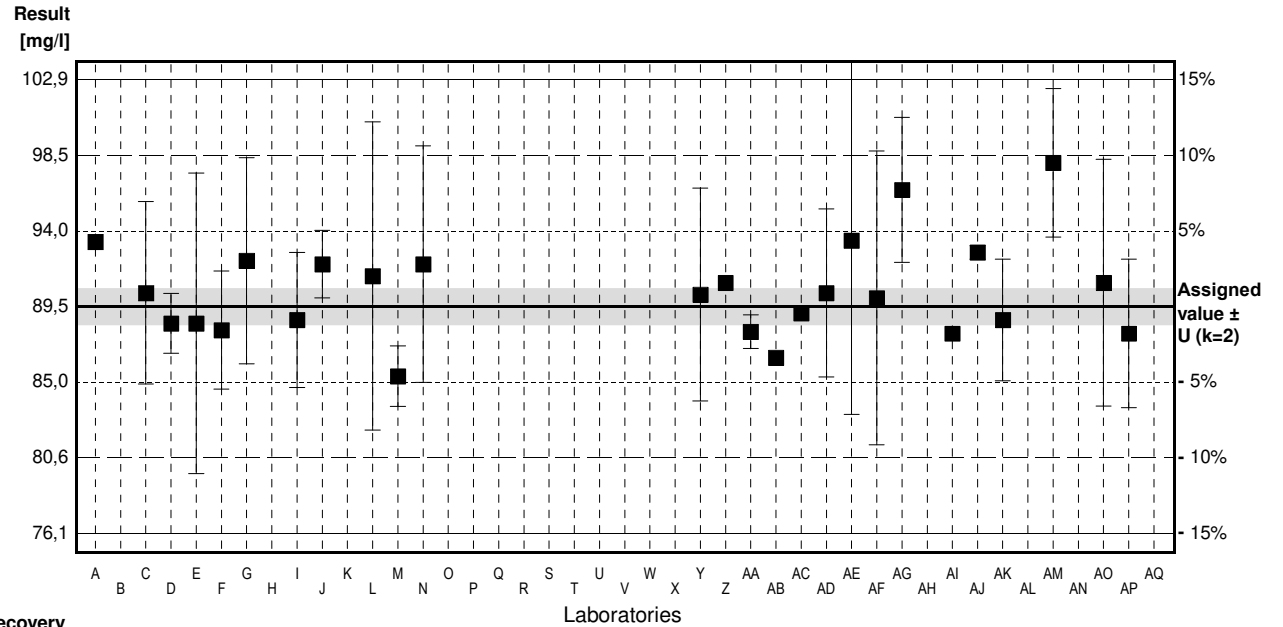
Sample N174A

Parameter Hydrogen carbonate

Assigned value ± U (k=2) 89,5 mg/l ± 1,1 mg/l
 IFA result ± U (k=2) 87 mg/l ± 4 mg/l
 Stability test ± U (k=2) 88 mg/l ± 4 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|-------|------|----------|---------|
| A | 93.33 | | mg/l | 104% | 1.86 |
| B | | | mg/l | | |
| C | 90.3 | 5.4 | mg/l | 101% | 0.39 |
| D | 88.5 | 1.77 | mg/l | 99% | -0.49 |
| E | 88.5 | 8.9 | mg/l | 99% | -0.49 |
| F | 88.1 | 3.5 | mg/l | 98% | -0.68 |
| G | 92.2 | 6.1 | mg/l | 103% | 1.31 |
| H | | | mg/l | | |
| I | 88.7 | 4 | mg/l | 99% | -0.39 |
| J | 92 | 2 | mg/l | 103% | 1.21 |
| K | | | mg/l | | |
| L | 91.3 | 9.13 | mg/l | 102% | 0.87 |
| M | 85.37 | 1.79 | mg/l | 95% | -2.01 |
| N | 92 | 7 | mg/l | 103% | 1.21 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | 109 * | | mg/l | 122% | 9.47 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 119.6 * | 17.94 | mg/l | 134% | 14.62 |
| V | 119.5 * | 0.48 | mg/l | 134% | 14.57 |
| W | | | mg/l | | |
| X | | | mg/l | | |
| Y | 90.2 | 6.3 | mg/l | 101% | 0.34 |
| Z | 90.90 | | mg/l | 102% | 0.68 |
| AA | 88 | 1 | mg/l | 98% | -0.73 |
| AB | 86.46 | | mg/l | 97% | -1.48 |
| AC | 89.1 | | mg/l | 100% | -0.19 |
| AD | 90.3 | 4.97 | mg/l | 101% | 0.39 |
| AE | 93.4 | 10.3 | mg/l | 104% | 1.89 |
| AF | 90.0 | 8.7 | mg/l | 101% | 0.24 |
| AG | 96.4 | 4.3 | mg/l | 108% | 3.35 |
| AH | 1.44 * | 0.14 | mg/l | 2% | -42.78 |
| AI | 87.9 | | mg/l | 98% | -0.78 |
| AJ | 92.7 | 0.40 | mg/l | 104% | 1.55 |
| AK | 88.7 | 3.6 | mg/l | 99% | -0.39 |
| AL | 58.0 * | | mg/l | 65% | -15.30 |
| AM | 98 | 4.4 | mg/l | 109% | 4.13 |
| AN | | | mg/l | | |
| AO | 90.9 | 7.3 | mg/l | 102% | 0.68 |
| AP | 87.9 | 4.4 | mg/l | 98% | -0.78 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 89,0 ± 9,5 | 90,4 ± 1,6 | mg/l |
| Recov. ± CI(99%) | 99,4 ± 10,6 | 101,0 ± 1,8 | % |
| SD between labs | 19,3 | 2,9 | mg/l |
| RSD between labs | 21,7 | 3,2 | % |
| n for calculation | 31 | 26 | |



Sample N174B

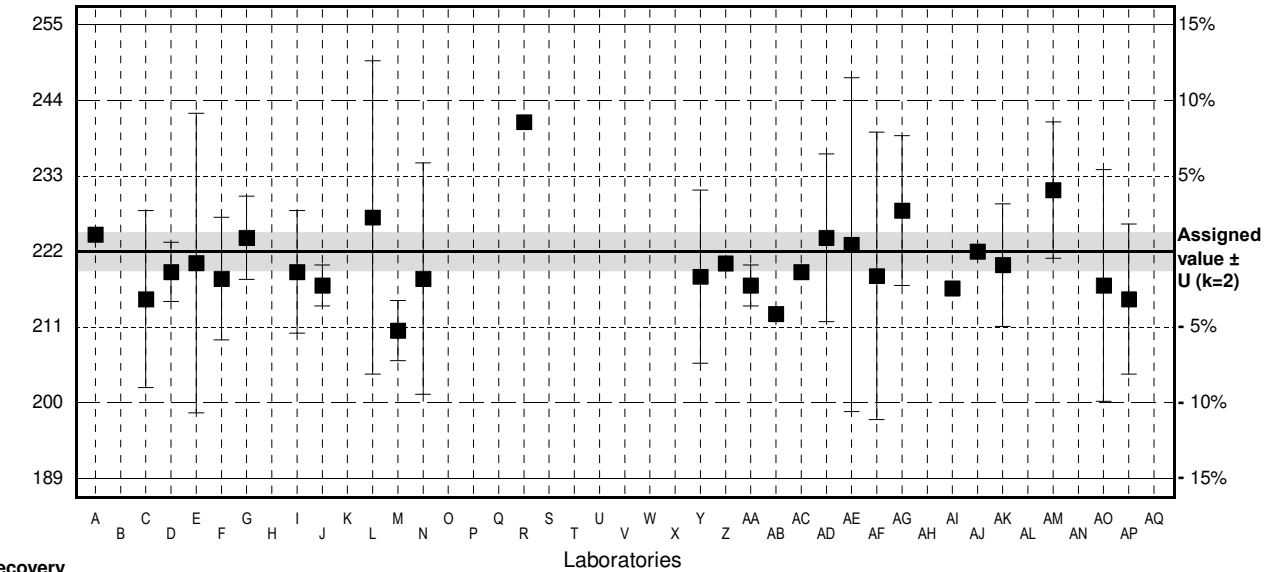
Parameter Hydrogen carbonate

Assigned value ± U (k=2) 222 mg/l ± 3 mg/l
 IFA result ± U (k=2) 228 mg/l ± 9 mg/l
 Stability test ± U (k=2) 230 mg/l ± 9 mg/l

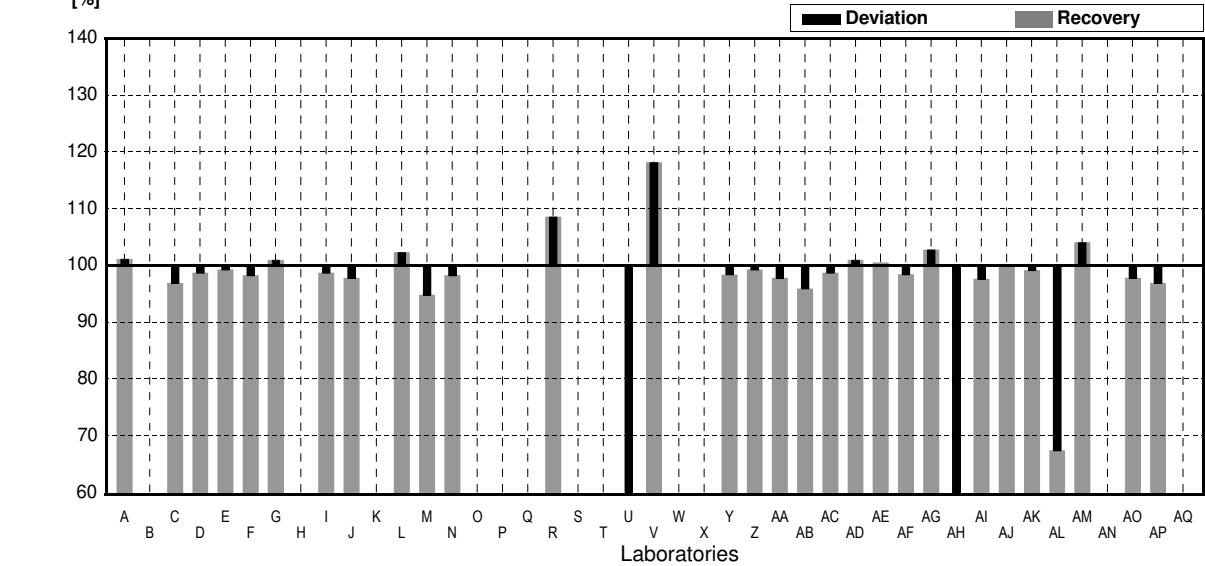
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|-------|----------|---------|
| A | 224.48 | | mg/l | 101% | 0.49 |
| B | | | mg/l | | |
| C | 215 | 13 | mg/l | 97% | -1.37 |
| D | 219 | 4.37 | mg/l | 99% | -0.59 |
| E | 220.3 | 22.0 | mg/l | 99% | -0.33 |
| F | 218 | 9 | mg/l | 98% | -0.78 |
| G | 224 | 6.1 | mg/l | 101% | 0.39 |
| H | | | mg/l | | |
| I | 219 | 9 | mg/l | 99% | -0.59 |
| J | 217 | 3 | mg/l | 98% | -0.98 |
| K | | | mg/l | | |
| L | 227 | 23 | mg/l | 102% | 0.98 |
| M | 210.38 | 4.42 | mg/l | 95% | -2.28 |
| N | 218 | 17 | mg/l | 98% | -0.78 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | 241 | * | mg/l | 109% | 3.72 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 84.8 | * | 12.72 | 38% | -26.87 |
| V | 262.3 | * | 9.97 | 118% | 7.89 |
| W | | | mg/l | | |
| X | | | mg/l | | |
| Y | 218.3 | 12.7 | mg/l | 98% | -0.72 |
| Z | 220.24 | | mg/l | 99% | -0.34 |
| AA | 217 | 3 | mg/l | 98% | -0.98 |
| AB | 212.83 | | mg/l | 96% | -1.80 |
| AC | 219 | | mg/l | 99% | -0.59 |
| AD | 224 | 12.32 | mg/l | 101% | 0.39 |
| AE | 223 | 24.5 | mg/l | 100% | 0.20 |
| AF | 218.4 | 21.1 | mg/l | 98% | -0.71 |
| AG | 228 | 11 | mg/l | 103% | 1.18 |
| AH | 3.58 | * | 0.36 | 2% | -42.78 |
| AI | 216.6 | | mg/l | 98% | -1.06 |
| AJ | 222 | 0.92 | mg/l | 100% | 0.00 |
| AK | 220 | 9 | mg/l | 99% | -0.39 |
| AL | 149.5 | * | mg/l | 67% | -14.20 |
| AM | 231 | 10 | mg/l | 104% | 1.76 |
| AN | | | mg/l | | |
| AO | 217 | 17 | mg/l | 98% | -0.98 |
| AP | 215 | 11 | mg/l | 97% | -1.37 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 208 ± 24 | 220 ± 3 | mg/l |
| Recov. ± CI(99%) | 93,8 ± 10,6 | 99,0 ± 1,2 | % |
| SD between labs | 48 | 5 | mg/l |
| RSD between labs | 23.0 | 2.1 | % |
| n for calculation | 31 | 26 | |

Result [mg/l]



Recovery [%]



Sample N174A

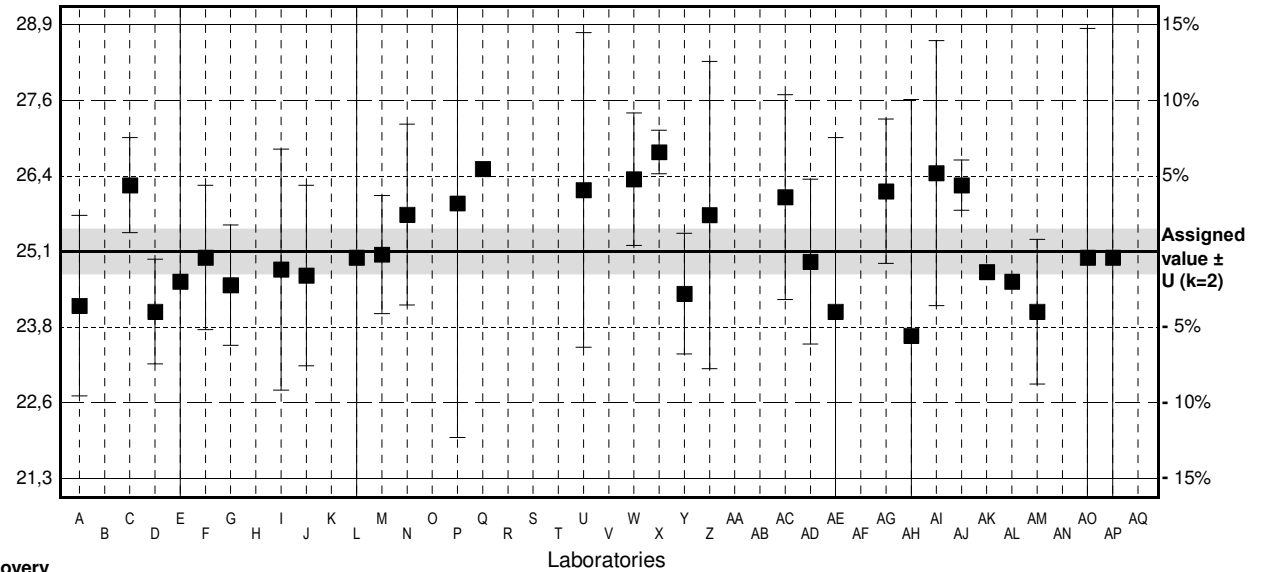
Parameter Calcium

Assigned value ± U (k=2) 25,1 mg/l ± 0,4 mg/l
 IFA result ± U (k=2) 25,7 mg/l ± 1,7 mg/l
 Stability test ± U (k=2) 25,1 mg/l ± 1,7 mg/l

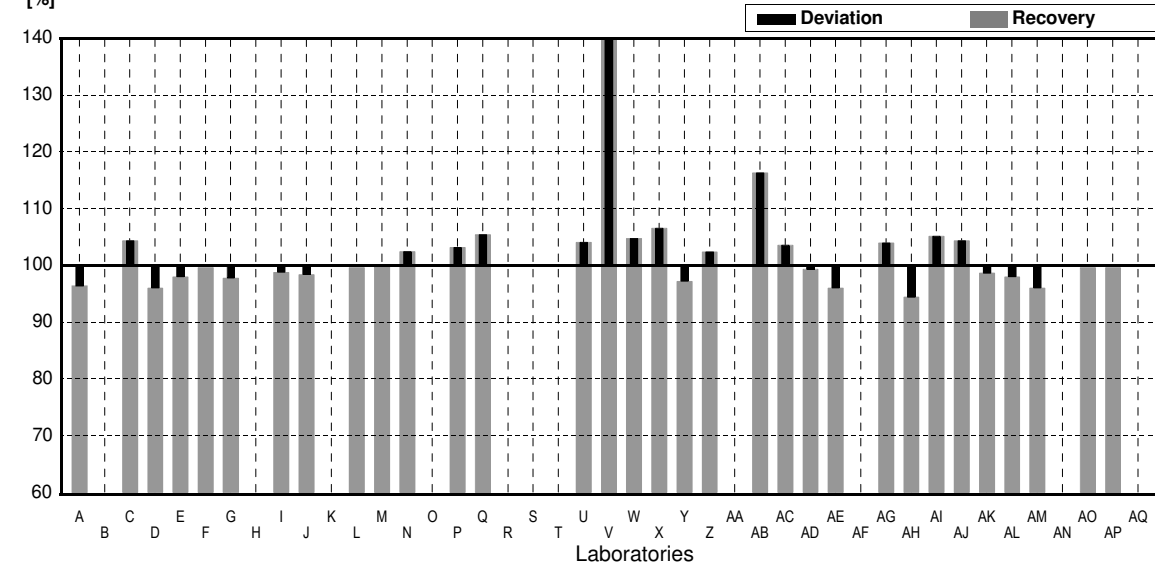
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 24.2 | 1.5 | mg/l | 96% | -1.16 |
| B | | | mg/l | | |
| C | 26.2 | 0.79 | mg/l | 104% | 1.41 |
| D | 24.1 | 0.870 | mg/l | 96% | -1.29 |
| E | 24.6 | 5.0 | mg/l | 98% | -0.64 |
| F | 25.0 | 1.2 | mg/l | 100% | -0.13 |
| G | 24.54 | 1.0 | mg/l | 98% | -0.72 |
| H | | | mg/l | | |
| I | 24.8 | 2 | mg/l | 99% | -0.39 |
| J | 24.7 | 1.5 | mg/l | 98% | -0.51 |
| K | | | mg/l | | |
| L | 25.0 | 5.0 | mg/l | 100% | -0.13 |
| M | 25.05 | 0.98 | mg/l | 100% | -0.06 |
| N | 25.71 | 1.50 | mg/l | 102% | 0.78 |
| O | | | mg/l | | |
| P | 25.9 | 3.89 | mg/l | 103% | 1.03 |
| Q | 26.47 | | mg/l | 105% | 1.76 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 26.12 | 2.612 | mg/l | 104% | 1.31 |
| V | 46.3 * | 0.46 | mg/l | 184% | 27.25 |
| W | 26.3 | 1.1 | mg/l | 105% | 1.54 |
| X | 26.75 | 0.36 | mg/l | 107% | 2.12 |
| Y | 24.4 | 1.0 | mg/l | 97% | -0.90 |
| Z | 25.704 | 2.55 | mg/l | 102% | 0.78 |
| AA | | | mg/l | | |
| AB | 29.2 * | | mg/l | 116% | 5.27 |
| AC | 26.0 | 1.7 | mg/l | 104% | 1.16 |
| AD | 24.93 | 1.37 | mg/l | 99% | -0.22 |
| AE | 24.1 | 2.89 | mg/l | 96% | -1.29 |
| AF | | | mg/l | | |
| AG | 26.1 | 1.2 | mg/l | 104% | 1.29 |
| AH | 23.7 | 3.92 | mg/l | 94% | -1.80 |
| AI | 26.4 | 2.2 | mg/l | 105% | 1.67 |
| AJ | 26.2 | 0.42 | mg/l | 104% | 1.41 |
| AK | 24.76 | 0.10 | mg/l | 99% | -0.44 |
| AL | 24.6 | | mg/l | 98% | -0.64 |
| AM | 24.1 | 1.2 | mg/l | 96% | -1.29 |
| AN | | | mg/l | | |
| AO | 25.0 | 3.8 | mg/l | 100% | -0.13 |
| AP | 25.0 | 5.0 | mg/l | 100% | -0.13 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 26,0 ± 1,9 | 25,2 ± 0,4 | mg/l |
| Recov. ± CI(99%) | 103,6 ± 7,5 | 100,5 ± 1,7 | % |
| SD between labs | 3,9 | 0,9 | mg/l |
| RSD between labs | 14,9 | 3,4 | % |
| n for calculation | 32 | 30 | |

Result [mg/l]



Recovery [%]



Sample N174B

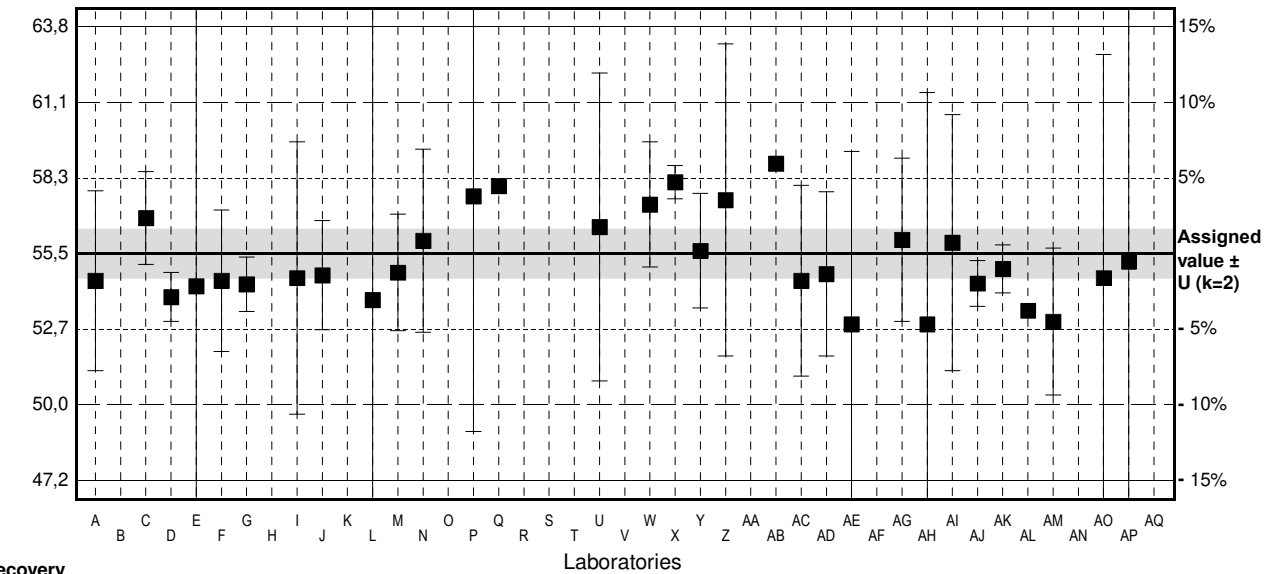
Parameter Calcium

Assigned value ± U (k=2) 55,5 mg/l ± 0,9 mg/l
 IFA result ± U (k=2) 58 mg/l ± 4 mg/l
 Stability test ± U (k=2) 56 mg/l ± 4 mg/l

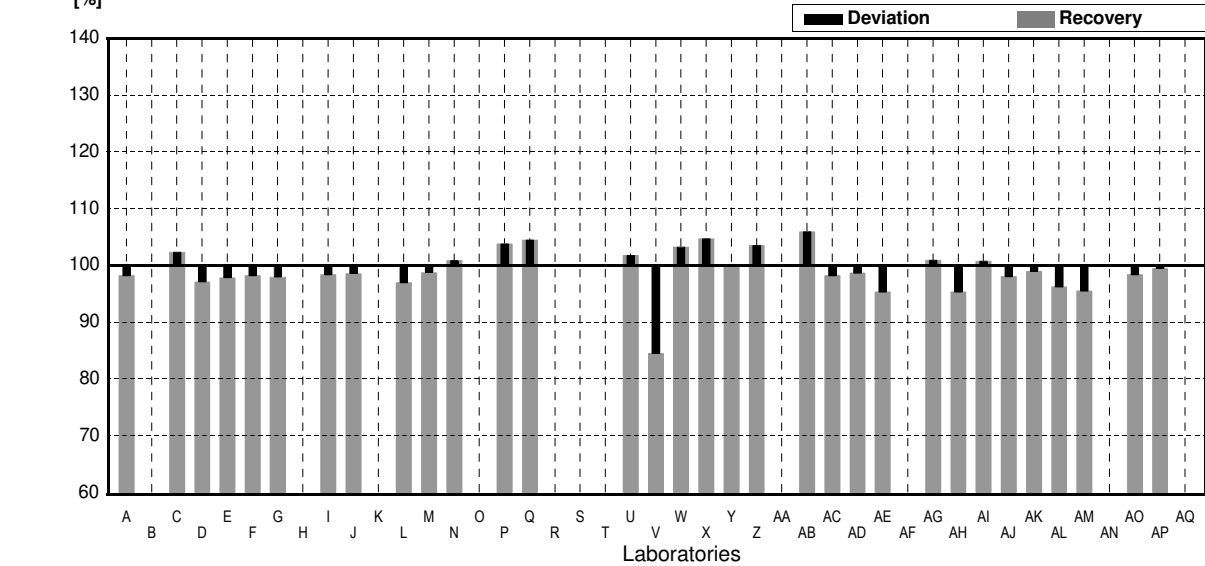
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 54.5 | 3.3 | mg/l | 98% | -0.58 |
| B | | | mg/l | | |
| C | 56.8 | 1.70 | mg/l | 102% | 0.76 |
| D | 53.9 | 0.900 | mg/l | 97% | -0.93 |
| E | 54.3 | 10.9 | mg/l | 98% | -0.70 |
| F | 54.5 | 2.6 | mg/l | 98% | -0.58 |
| G | 54.37 | 1.0 | mg/l | 98% | -0.66 |
| H | | | mg/l | | |
| I | 54.6 | 5 | mg/l | 98% | -0.52 |
| J | 54.7 | 2 | mg/l | 99% | -0.46 |
| K | | | mg/l | | |
| L | 53.8 | 11 | mg/l | 97% | -0.99 |
| M | 54.80 | 2.14 | mg/l | 99% | -0.41 |
| N | 55.97 | 3.36 | mg/l | 101% | 0.27 |
| O | | | mg/l | | |
| P | 57.6 | 8.63 | mg/l | 104% | 1.22 |
| Q | 57.98 | | mg/l | 104% | 1.44 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 56.47 | 5.647 | mg/l | 102% | 0.56 |
| V | 46.88 | 0.94 | mg/l | 84% | -5.01 |
| W | 57.3 | 2.3 | mg/l | 103% | 1.05 |
| X | 58.12 | 0.61 | mg/l | 105% | 1.52 |
| Y | 55.6 | 2.1 | mg/l | 100% | 0.06 |
| Z | 57.465 | 5.73 | mg/l | 104% | 1.14 |
| AA | | | mg/l | | |
| AB | 58.8 | | mg/l | 106% | 1.92 |
| AC | 54.5 | 3.5 | mg/l | 98% | -0.58 |
| AD | 54.75 | 3.01 | mg/l | 99% | -0.44 |
| AE | 52.9 | 6.35 | mg/l | 95% | -1.51 |
| AF | | | mg/l | | |
| AG | 56 | 3 | mg/l | 101% | 0.29 |
| AH | 52.9 | 8.5 | mg/l | 95% | -1.51 |
| AI | 55.9 | 4.7 | mg/l | 101% | 0.23 |
| AJ | 54.4 | 0.84 | mg/l | 98% | -0.64 |
| AK | 54.93 | 0.88 | mg/l | 99% | -0.33 |
| AL | 53.4 | | mg/l | 96% | -1.22 |
| AM | 53 | 2.7 | mg/l | 95% | -1.45 |
| AN | | | mg/l | | |
| AO | 54.6 | 8.2 | mg/l | 98% | -0.52 |
| AP | 55.2 | 11.0 | mg/l | 99% | -0.17 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 55,0 ± 1,1 | 55,3 ± 0,8 | mg/l |
| Recov. ± CI(99%) | 99,2 ± 1,9 | 99,6 ± 1,4 | % |
| SD between labs | 2,2 | 1,6 | mg/l |
| RSD between labs | 3,9 | 2,9 | % |
| n for calculation | 32 | 31 | |

Result [mg/l]



Recovery [%]



Sample N174A

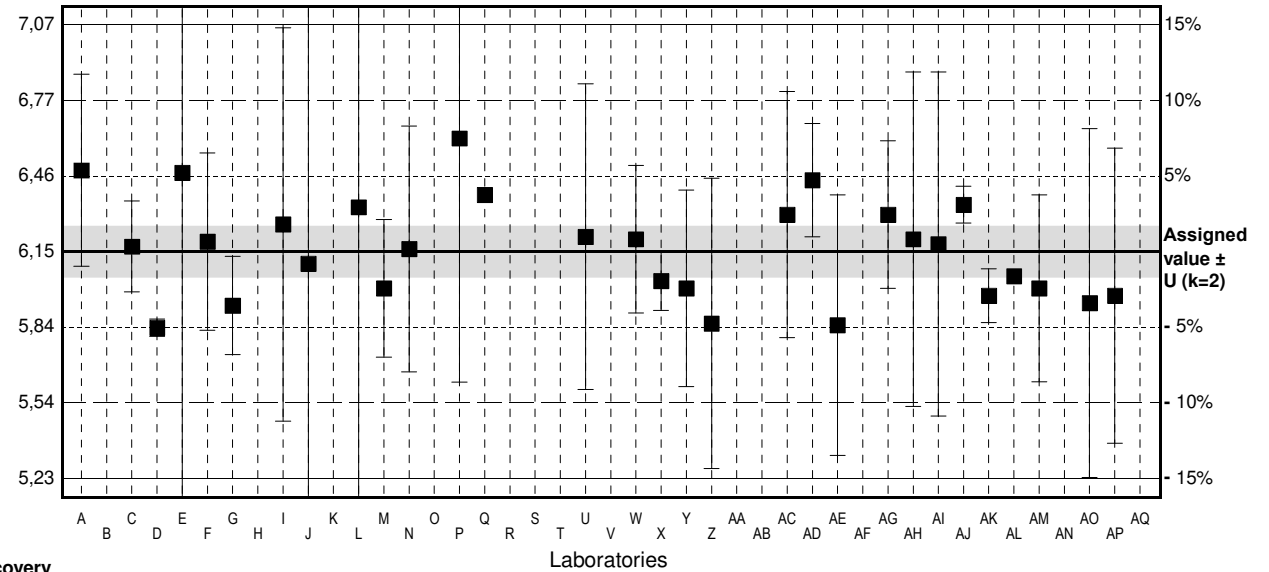
Parameter Magnesium

Assigned value ± U (k=2) 6,15 mg/l ± 0,10 mg/l
 IFA result ± U (k=2) 6,3 mg/l ± 0,4 mg/l
 Stability test ± U (k=2) 6,5 mg/l ± 0,4 mg/l

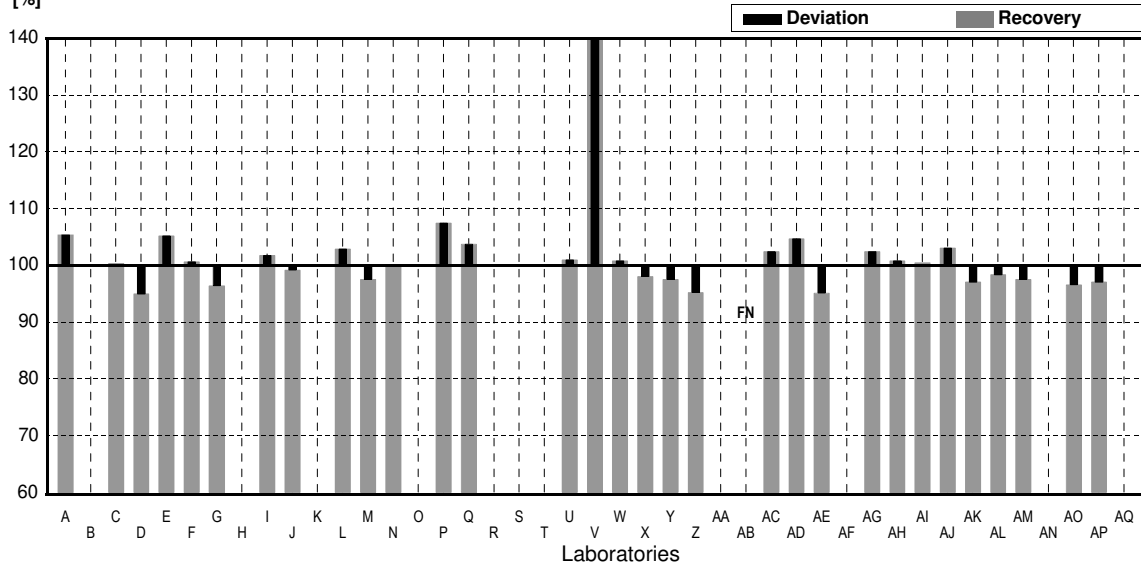
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|--------|------|----------|---------|
| A | 6.48 | 0.39 | mg/l | 105% | 1.53 |
| B | | | mg/l | | |
| C | 6.17 | 0.185 | mg/l | 100% | 0.09 |
| D | 5.84 | 0.0354 | mg/l | 95% | -1.44 |
| E | 6.47 | 1.3 | mg/l | 105% | 1.49 |
| F | 6.19 | 0.36 | mg/l | 101% | 0.19 |
| G | 5.93 | 0.2 | mg/l | 96% | -1.02 |
| H | | | mg/l | | |
| I | 6.26 | 0.8 | mg/l | 102% | 0.51 |
| J | 6.1 | 1 | mg/l | 99% | -0.23 |
| K | | | mg/l | | |
| L | 6.33 | 1.3 | mg/l | 103% | 0.84 |
| M | 6.00 | 0.28 | mg/l | 98% | -0.70 |
| N | 6.16 | 0.50 | mg/l | 100% | 0.05 |
| O | | | mg/l | | |
| P | 6.61 | 0.991 | mg/l | 107% | 2.14 |
| Q | 6.38 | | mg/l | 104% | 1.07 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 6.21 | 0.621 | mg/l | 101% | 0.28 |
| V | 20.0 * | 0.14 | mg/l | 325% | 64.34 |
| W | 6.2 | 0.3 | mg/l | 101% | 0.23 |
| X | 6.03 | 0.12 | mg/l | 98% | -0.56 |
| Y | 6.0 | 0.4 | mg/l | 98% | -0.70 |
| Z | 5.857 | 0.59 | mg/l | 95% | -1.36 |
| AA | | | mg/l | | |
| AB | <3 | | mg/l | FN | |
| AC | 6.3 | 0.5 | mg/l | 102% | 0.70 |
| AD | 6.44 | 0.23 | mg/l | 105% | 1.35 |
| AE | 5.85 | 0.53 | mg/l | 95% | -1.39 |
| AF | | | mg/l | | |
| AG | 6.3 | 0.3 | mg/l | 102% | 0.70 |
| AH | 6.2 | 0.68 | mg/l | 101% | 0.23 |
| AI | 6.18 | 0.7 | mg/l | 100% | 0.14 |
| AJ | 6.34 | 0.075 | mg/l | 103% | 0.88 |
| AK | 5.97 | 0.11 | mg/l | 97% | -0.84 |
| AL | 6.05 | | mg/l | 98% | -0.46 |
| AM | 6.0 | 0.38 | mg/l | 98% | -0.70 |
| AN | | | mg/l | | |
| AO | 5.94 | 0.71 | mg/l | 97% | -0.98 |
| AP | 5.97 | 0.60 | mg/l | 97% | -0.84 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|--------------|----------------|------|
| Mean ± CI(99%) | 6,61 ± 1,23 | 6,16 ± 0,10 | mg/l |
| Recov. ± CI(99%) | 107,4 ± 20,0 | 100,1 ± 1,7 | % |
| SD between labs | 2,49 | 0,20 | mg/l |
| RSD between labs | 37,8 | 3,3 | % |
| n for calculation | 31 | 30 | |

Result [mg/l]



Recovery [%]



Sample N174B

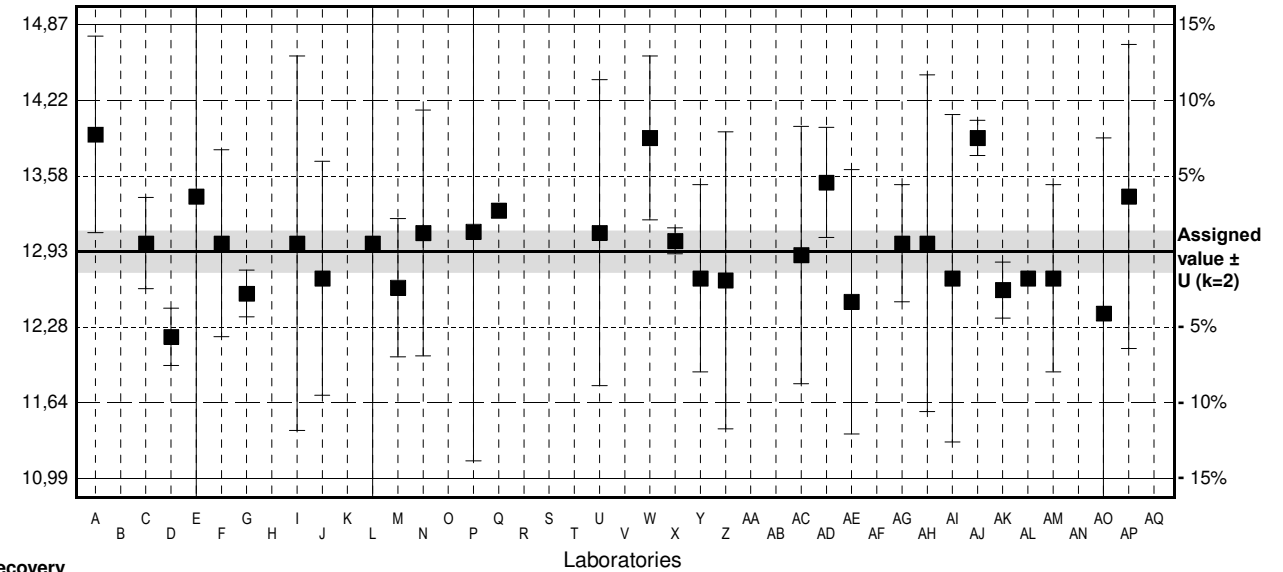
Parameter Magnesium

Assigned value ± U (k=2) 12,93 mg/l ± 0,18 mg/l
 IFA result ± U (k=2) 13,4 mg/l ± 0,7 mg/l
 Stability test ± U (k=2) 13,3 mg/l ± 0,7 mg/l

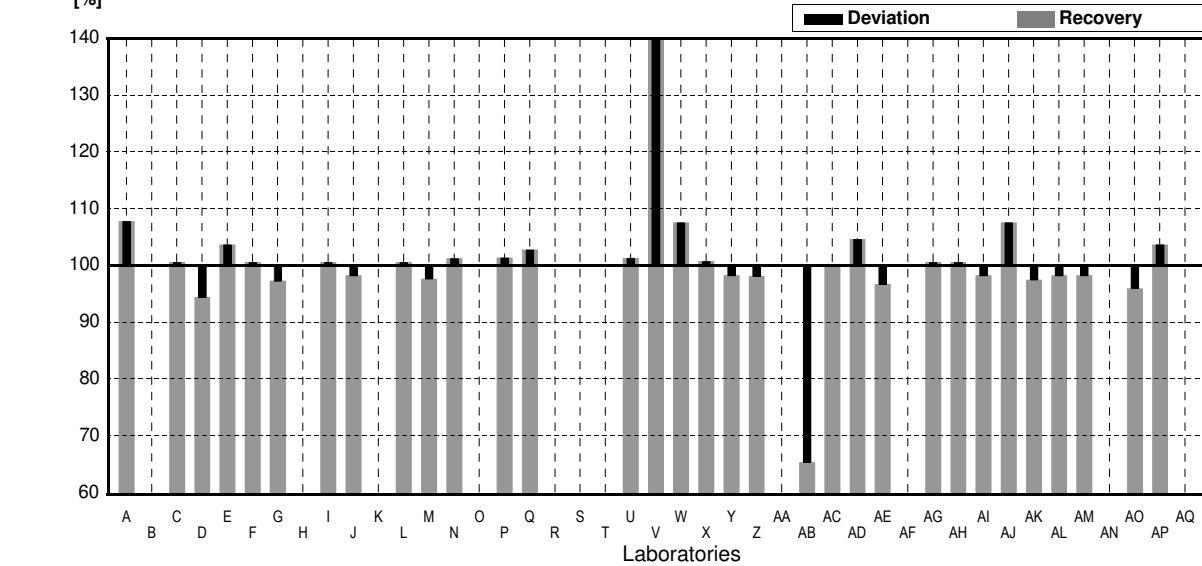
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|-------|------|----------|---------|
| A | 13,93 | 0,84 | mg/l | 108% | 2,21 |
| B | | | mg/l | | |
| C | 13,0 | 0,39 | mg/l | 101% | 0,15 |
| D | 12,2 | 0,245 | mg/l | 94% | -1,61 |
| E | 13,4 | 2,7 | mg/l | 104% | 1,04 |
| F | 13,0 | 0,8 | mg/l | 101% | 0,15 |
| G | 12,57 | 0,2 | mg/l | 97% | -0,80 |
| H | | | mg/l | | |
| I | 13,0 | 1,6 | mg/l | 101% | 0,15 |
| J | 12,7 | 1 | mg/l | 98% | -0,51 |
| K | | | mg/l | | |
| L | 13,0 | 2,6 | mg/l | 101% | 0,15 |
| M | 12,62 | 0,59 | mg/l | 98% | -0,69 |
| N | 13,088 | 1,05 | mg/l | 101% | 0,35 |
| O | | | mg/l | | |
| P | 13,1 | 1,96 | mg/l | 101% | 0,38 |
| Q | 13,28 | | mg/l | 103% | 0,77 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 13,09 | 1,309 | mg/l | 101% | 0,35 |
| V | 20,26 * | 0,43 | mg/l | 157% | 16,20 |
| W | 13,9 | 0,7 | mg/l | 108% | 2,14 |
| X | 13,02 | 0,11 | mg/l | 101% | 0,20 |
| Y | 12,7 | 0,8 | mg/l | 98% | -0,51 |
| Z | 12,682 | 1,27 | mg/l | 98% | -0,55 |
| AA | | | mg/l | | |
| AB | 8,44 * | | mg/l | 65% | -9,92 |
| AC | 12,9 | 1,1 | mg/l | 100% | -0,07 |
| AD | 13,52 | 0,47 | mg/l | 105% | 1,30 |
| AE | 12,5 | 1,13 | mg/l | 97% | -0,95 |
| AF | | | mg/l | | |
| AG | 13,0 | 0,5 | mg/l | 101% | 0,15 |
| AH | 13,0 | 1,44 | mg/l | 101% | 0,15 |
| AI | 12,7 | 1,4 | mg/l | 98% | -0,51 |
| AJ | 13,9 | 0,15 | mg/l | 108% | 2,14 |
| AK | 12,6 | 0,24 | mg/l | 97% | -0,73 |
| AL | 12,7 | | mg/l | 98% | -0,51 |
| AM | 12,7 | 0,80 | mg/l | 98% | -0,51 |
| AN | | | mg/l | | |
| AO | 12,4 | 1,5 | mg/l | 96% | -1,17 |
| AP | 13,4 | 1,3 | mg/l | 104% | 1,04 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|--------------|----------------|------|
| Mean ± CI(99%) | 13,07 ± 0,78 | 12,99 ± 0,22 | mg/l |
| Recov. ± CI(99%) | 101,1 ± 6,0 | 100,4 ± 1,7 | % |
| SD between labs | 1,59 | 0,43 | mg/l |
| RSD between labs | 12,2 | 3,3 | % |
| n for calculation | 32 | 30 | |

Result [mg/l]



Recovery [%]



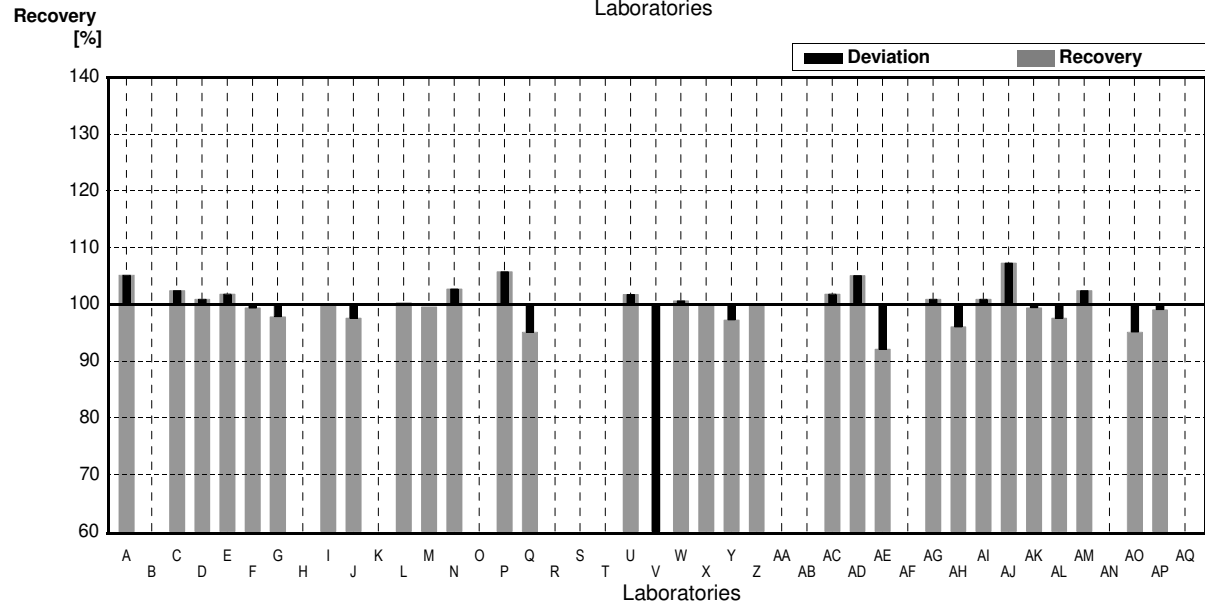
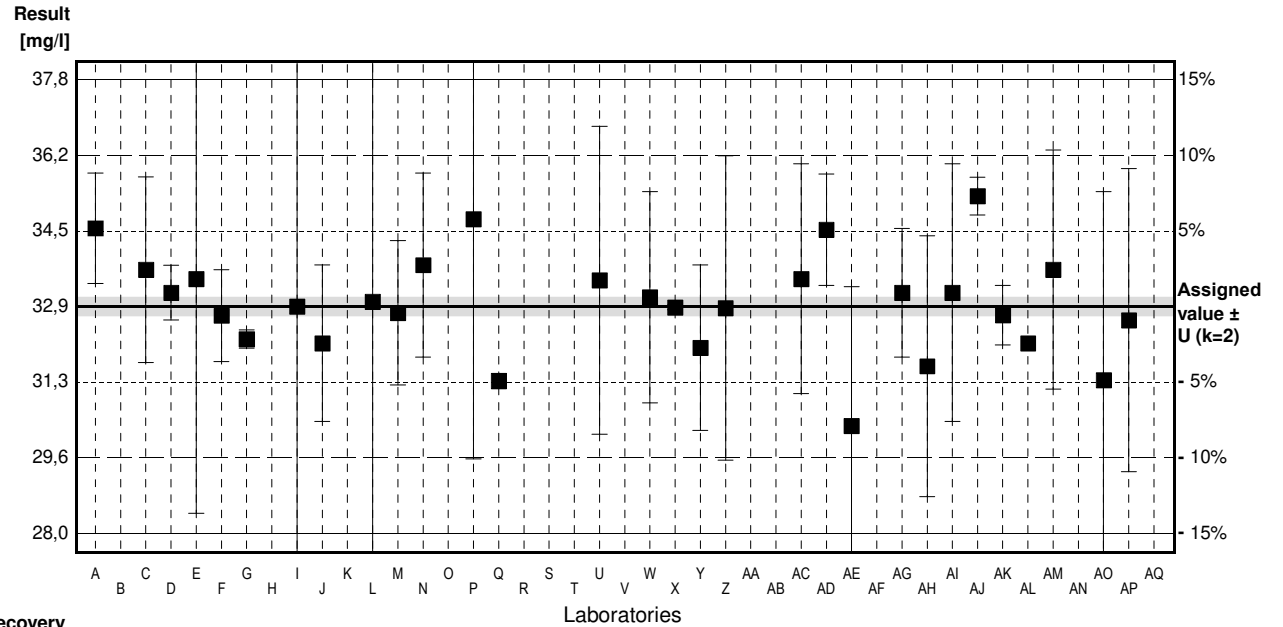
Sample N174A

Parameter Sodium

Assigned value ± U (k=2) 32,9 mg/l ± 0,2 mg/l
 IFA result ± U (k=2) 34,5 mg/l ± 1,2 mg/l
 Stability test ± U (k=2) 32,9 mg/l ± 1,2 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 34.6 | 1.2 | mg/l | 105% | 1.67 |
| B | | | mg/l | | |
| C | 33.7 | 2.02 | mg/l | 102% | 0.78 |
| D | 33.2 | 0.594 | mg/l | 101% | 0.29 |
| E | 33.5 | 5.1 | mg/l | 102% | 0.59 |
| F | 32.7 | 1.0 | mg/l | 99% | -0.20 |
| G | 32.19 | 0.2 | mg/l | 98% | -0.70 |
| H | | | mg/l | | |
| I | 32.9 | 5 | mg/l | 100% | 0.00 |
| J | 32.1 | 1.7 | mg/l | 98% | -0.78 |
| K | | | mg/l | | |
| L | 33.0 | 6.6 | mg/l | 100% | 0.10 |
| M | 32.76 | 1.57 | mg/l | 100% | -0.14 |
| N | 33.8 | 2.0 | mg/l | 103% | 0.88 |
| O | | | mg/l | | |
| P | 34.8 | 5.22 | mg/l | 106% | 1.86 |
| Q | 31.28 | | mg/l | 95% | -1.59 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 33.47 | 3.347 | mg/l | 102% | 0.56 |
| V | 8.88 | 0.088 | mg/l | 27% | -23.55 |
| W | 33.1 | 2.3 | mg/l | 101% | 0.20 |
| X | 32.88 | 0.05 | mg/l | 100% | -0.02 |
| Y | 32.0 | 1.8 | mg/l | 97% | -0.88 |
| Z | 32.866 | 3.31 | mg/l | 100% | -0.03 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 33.5 | 2.5 | mg/l | 102% | 0.59 |
| AD | 34.57 | 1.21 | mg/l | 105% | 1.64 |
| AE | 30.3 | 3.03 | mg/l | 92% | -2.55 |
| AF | | | mg/l | | |
| AG | 33.2 | 1.4 | mg/l | 101% | 0.29 |
| AH | 31.6 | 2.84 | mg/l | 96% | -1.27 |
| AI | 33.2 | 2.8 | mg/l | 101% | 0.29 |
| AJ | 35.3 | 0.41 | mg/l | 107% | 2.35 |
| AK | 32.71 | 0.65 | mg/l | 99% | -0.19 |
| AL | 32.1 | | mg/l | 98% | -0.78 |
| AM | 33.7 | 2.6 | mg/l | 102% | 0.78 |
| AN | | | mg/l | | |
| AO | 31.3 | 4.1 | mg/l | 95% | -1.57 |
| AP | 32.6 | 3.3 | mg/l | 99% | -0.29 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 32,2 ± 2,2 | 33,0 ± 0,6 | mg/l |
| Recov. ± CI(99%) | 97,8 ± 6,7 | 100,2 ± 1,7 | % |
| SD between labs | 4,5 | 1,1 | mg/l |
| RSD between labs | 13,8 | 3,3 | % |
| n for calculation | 31 | 30 | |



Sample N174B

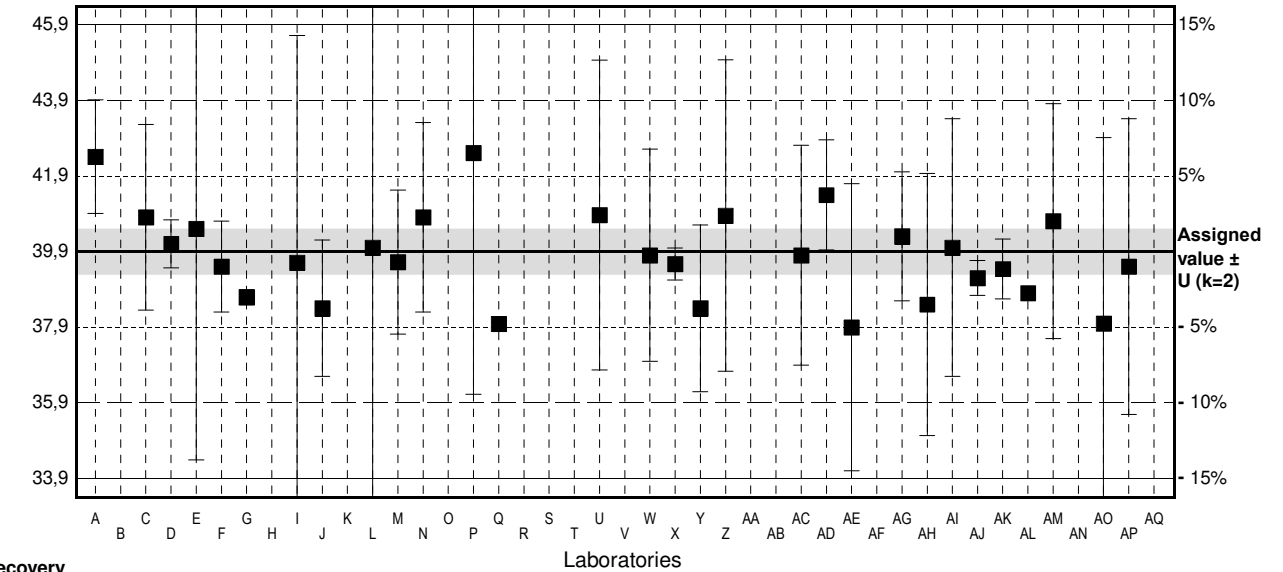
Parameter Sodium

Assigned value ± U (k=2) 39,9 mg/l ± 0,6 mg/l
 IFA result ± U (k=2) 41,7 mg/l ± 1,4 mg/l
 Stability test ± U (k=2) 39,8 mg/l ± 1,3 mg/l

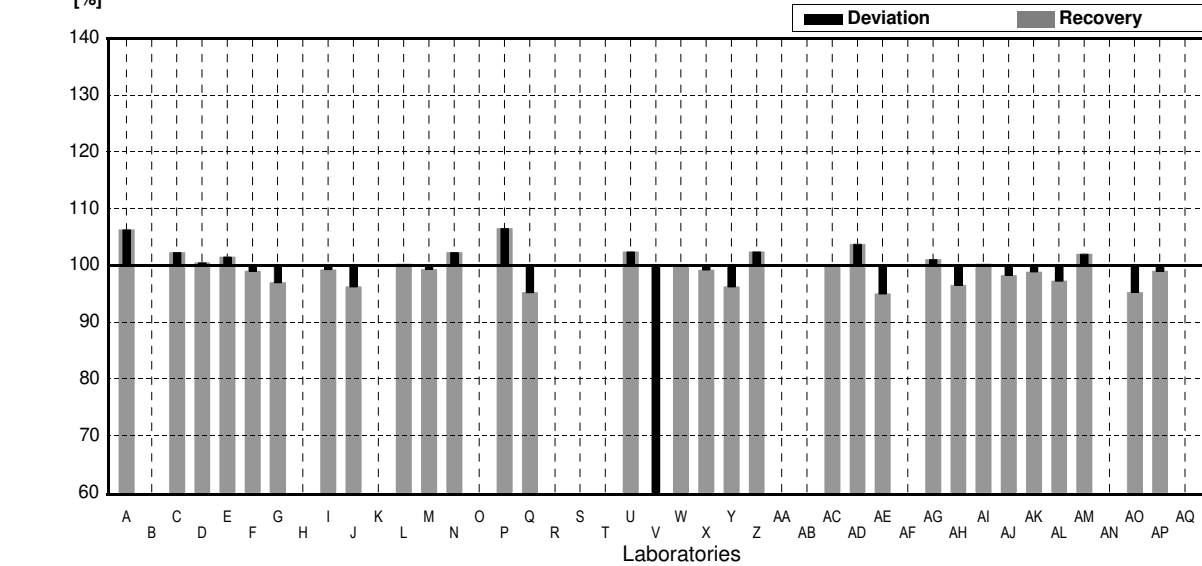
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 42.4 | 1.5 | mg/l | 106% | 2.02 |
| B | | | mg/l | | |
| C | 40.8 | 2.45 | mg/l | 102% | 0.73 |
| D | 40.1 | 0.633 | mg/l | 101% | 0.16 |
| E | 40.5 | 6.1 | mg/l | 102% | 0.49 |
| F | 39.5 | 1.2 | mg/l | 99% | -0.32 |
| G | 38.69 | 0.2 | mg/l | 97% | -0.98 |
| H | | | mg/l | | |
| I | 39.6 | 6 | mg/l | 99% | -0.24 |
| J | 38.4 | 1.8 | mg/l | 96% | -1.21 |
| K | | | mg/l | | |
| L | 40.0 | 8.0 | mg/l | 100% | 0.08 |
| M | 39.62 | 1.90 | mg/l | 99% | -0.23 |
| N | 40.8 | 2.5 | mg/l | 102% | 0.73 |
| O | | | mg/l | | |
| P | 42.5 | 6.37 | mg/l | 107% | 2.10 |
| Q | 37.99 | | mg/l | 95% | -1.54 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 40.86 | 4.086 | mg/l | 102% | 0.78 |
| V | 8.93 | 0.14 | mg/l | 22% | -25.04 |
| W | 39.8 | 2.8 | mg/l | 100% | -0.08 |
| X | 39.57 | 0.42 | mg/l | 99% | -0.27 |
| Y | 38.4 | 2.2 | mg/l | 96% | -1.21 |
| Z | 40.846 | 4.11 | mg/l | 102% | 0.76 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 39.8 | 2.9 | mg/l | 100% | -0.08 |
| AD | 41.39 | 1.45 | mg/l | 104% | 1.20 |
| AE | 37.9 | 3.79 | mg/l | 95% | -1.62 |
| AF | | | mg/l | | |
| AG | 40.3 | 1.7 | mg/l | 101% | 0.32 |
| AH | 38.5 | 3.46 | mg/l | 96% | -1.13 |
| AI | 40.0 | 3.4 | mg/l | 100% | 0.08 |
| AJ | 39.2 | 0.46 | mg/l | 98% | -0.57 |
| AK | 39.44 | 0.79 | mg/l | 99% | -0.37 |
| AL | 38.8 | | mg/l | 97% | -0.89 |
| AM | 40.7 | 3.1 | mg/l | 102% | 0.65 |
| AN | | | mg/l | | |
| AO | 38.0 | 4.9 | mg/l | 95% | -1.54 |
| AP | 39.5 | 3.9 | mg/l | 99% | -0.32 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 38,8 ± 2,8 | 39,8 ± 0,6 | mg/l |
| Recov. ± CI(99%) | 97,2 ± 7,0 | 99,7 ± 1,5 | % |
| SD between labs | 5,7 | 1,2 | mg/l |
| RSD between labs | 14,6 | 3,0 | % |
| n for calculation | 31 | 30 | |

Result [mg/l]



Recovery [%]



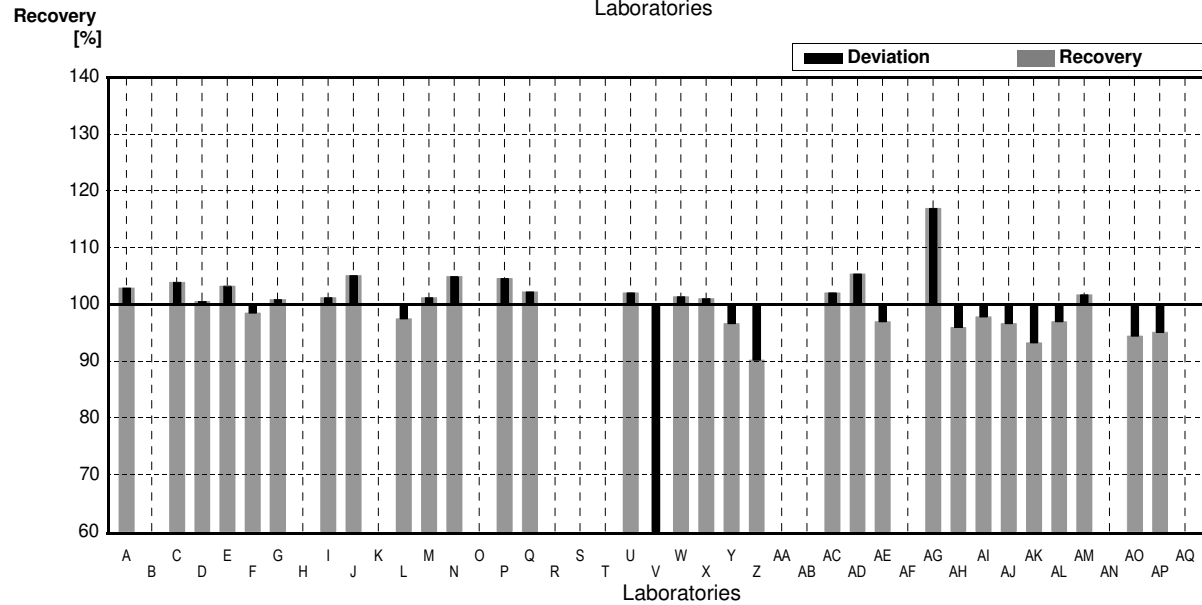
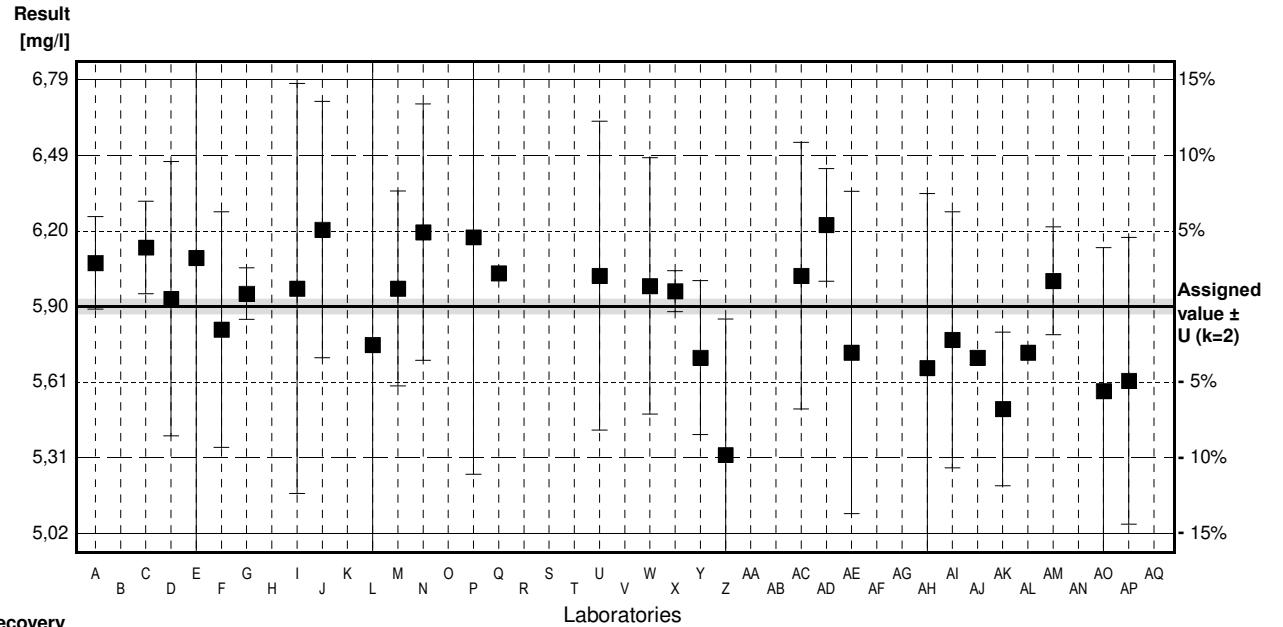
Sample N174A

Parameter Potassium

Assigned value ± U (k=2) 5,90 mg/l ± 0,03 mg/l
 IFA result ± U (k=2) 5,9 mg/l ± 0,3 mg/l
 Stability test ± U (k=2) 5,8 mg/l ± 0,3 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|-------|------|----------|---------|
| A | 6.07 | 0.18 | mg/l | 103% | 0.72 |
| B | | | mg/l | | |
| C | 6.13 | 0.18 | mg/l | 104% | 0.97 |
| D | 5.93 | 0.535 | mg/l | 101% | 0.13 |
| E | 6.09 | 1.2 | mg/l | 103% | 0.81 |
| F | 5.81 | 0.46 | mg/l | 98% | -0.38 |
| G | 5.95 | 0.1 | mg/l | 101% | 0.21 |
| H | | | mg/l | | |
| I | 5.97 | 0.8 | mg/l | 101% | 0.30 |
| J | 6.2 | 0.5 | mg/l | 105% | 1.27 |
| K | | | mg/l | | |
| L | 5.75 | 1.2 | mg/l | 97% | -0.64 |
| M | 5.97 | 0.38 | mg/l | 101% | 0.30 |
| N | 6.19 | 0.50 | mg/l | 105% | 1.23 |
| O | | | mg/l | | |
| P | 6.17 | 0.925 | mg/l | 105% | 1.14 |
| Q | 6.03 | | mg/l | 102% | 0.55 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 6.02 | 0.602 | mg/l | 102% | 0.51 |
| V | 1.196 * | 0.036 | mg/l | 20% | -19.93 |
| W | 5.98 | 0.5 | mg/l | 101% | 0.34 |
| X | 5.96 | 0.08 | mg/l | 101% | 0.25 |
| Y | 5.7 | 0.3 | mg/l | 97% | -0.85 |
| Z | 5.321 | 0.53 | mg/l | 90% | -2.45 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 6.02 | 0.52 | mg/l | 102% | 0.51 |
| AD | 6.218 | 0.22 | mg/l | 105% | 1.35 |
| AE | 5.72 | 0.629 | mg/l | 97% | -0.76 |
| AF | | | mg/l | | |
| AG | 6.9 | 0.3 | mg/l | 117% | 4.24 |
| AH | 5.66 | 0.68 | mg/l | 96% | -1.02 |
| AI | 5.77 | 0.5 | mg/l | 98% | -0.55 |
| AJ | 5.70 | 0.026 | mg/l | 97% | -0.85 |
| AK | 5.5 | 0.3 | mg/l | 93% | -1.69 |
| AL | 5.72 | | mg/l | 97% | -0.76 |
| AM | 6.0 | 0.21 | mg/l | 102% | 0.42 |
| AN | | | mg/l | | |
| AO | 5.57 | 0.56 | mg/l | 94% | -1.40 |
| AP | 5.61 | 0.56 | mg/l | 95% | -1.23 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 5,77 ± 0,44 | 5,92 ± 0,15 | mg/l |
| Recov. ± CI(99%) | 97,8 ± 7,5 | 100,4 ± 2,5 | % |
| SD between labs | 0,90 | 0,29 | mg/l |
| RSD between labs | 15,5 | 4,9 | % |
| n for calculation | 31 | 30 | |



Sample N174B

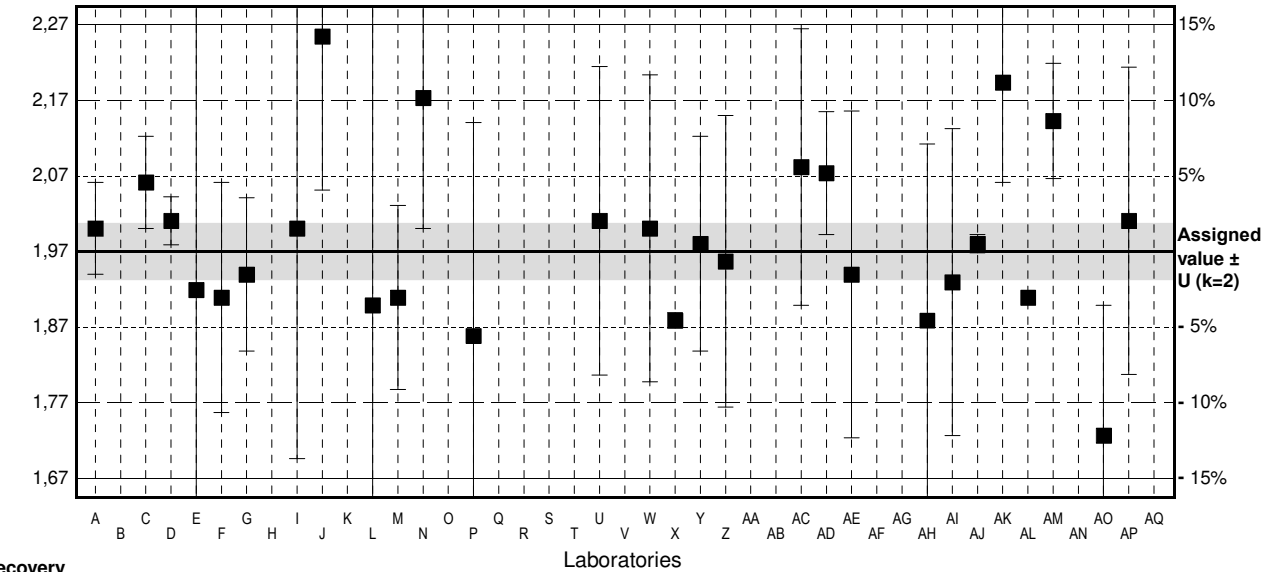
Parameter Potassium

Assigned value ± U (k=2) 1,97 mg/l ± 0,04 mg/l
 IFA result ± U (k=2) 1,91 mg/l ± 0,16 mg/l
 Stability test ± U (k=2) 1,86 mg/l ± 0,15 mg/l

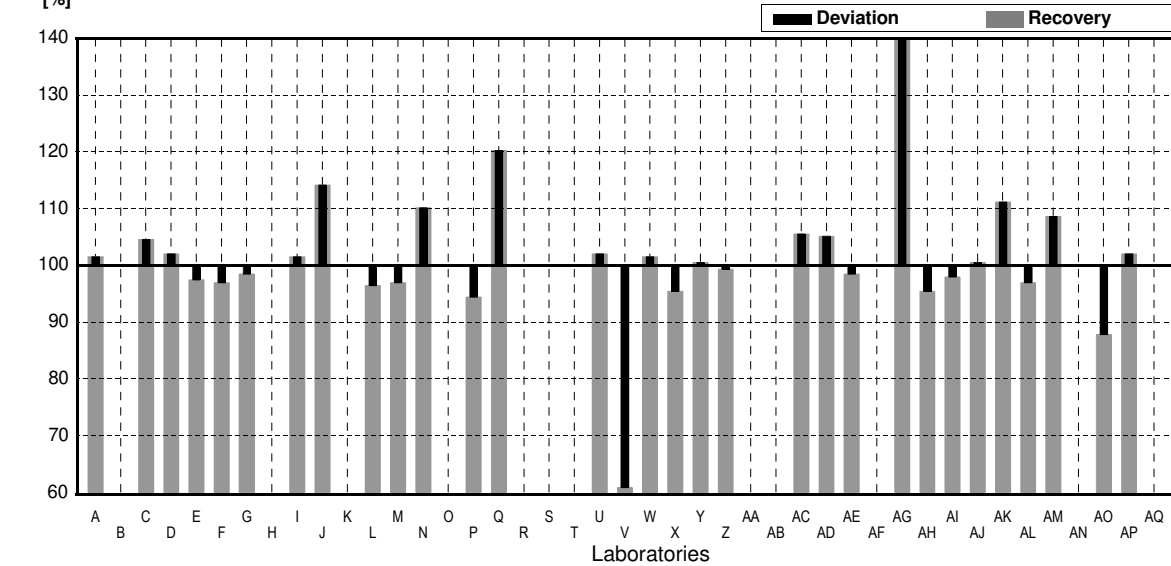
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|--------|-------|----------|---------|
| A | 2.00 | 0.06 | mg/l | 102% | 0.38 |
| B | | | mg/l | | |
| C | 2.06 | 0.06 | mg/l | 105% | 1.14 |
| D | 2.01 | 0.0314 | mg/l | 102% | 0.51 |
| E | 1.92 | 0.39 | mg/l | 97% | -0.63 |
| F | 1.91 | 0.15 | mg/l | 97% | -0.76 |
| G | 1.94 | 0.1 | mg/l | 98% | -0.38 |
| H | | | mg/l | | |
| I | 2.00 | 0.3 | mg/l | 102% | 0.38 |
| J | 2.25 | 0.2 | mg/l | 114% | 3.55 |
| K | | | mg/l | | |
| L | 1.90 | 0.38 | mg/l | 96% | -0.89 |
| M | 1.91 | 0.12 | mg/l | 97% | -0.76 |
| N | 2.17 | 0.17 | mg/l | 110% | 2.54 |
| O | | | mg/l | | |
| P | 1.86 | 0.278 | mg/l | 94% | -1.40 |
| Q | 2.37 | * | mg/l | 120% | 5.08 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 2.01 | 0.201 | mg/l | 102% | 0.51 |
| V | 1.198 | * | 0.026 | 61% | -9.80 |
| W | 2.00 | 0.2 | mg/l | 102% | 0.38 |
| X | 1.88 | 0.01 | mg/l | 95% | -1.14 |
| Y | 1.98 | 0.14 | mg/l | 101% | 0.13 |
| Z | 1.957 | 0.19 | mg/l | 99% | -0.16 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 2.08 | 0.18 | mg/l | 106% | 1.40 |
| AD | 2.072 | 0.08 | mg/l | 105% | 1.29 |
| AE | 1.94 | 0.213 | mg/l | 98% | -0.38 |
| AF | | | mg/l | | |
| AG | 2.83 | * | 0.11 | 144% | 10.91 |
| AH | 1.88 | 0.23 | mg/l | 95% | -1.14 |
| AI | 1.93 | 0.2 | mg/l | 98% | -0.51 |
| AJ | 1.98 | 0.012 | mg/l | 101% | 0.13 |
| AK | 2.19 | 0.13 | mg/l | 111% | 2.79 |
| AL | 1.91 | | mg/l | 97% | -0.76 |
| AM | 2.14 | 0.075 | mg/l | 109% | 2.16 |
| AN | | | mg/l | | |
| AO | 1.73 | 0.17 | mg/l | 88% | -3.05 |
| AP | 2.01 | 0.20 | mg/l | 102% | 0.51 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 2,00 ± 0,12 | 1,99 ± 0,06 | mg/l |
| Recov. ± CI(99%) | 101,6 ± 6,2 | 100,8 ± 3,0 | % |
| SD between labs | 0,25 | 0,11 | mg/l |
| RSD between labs | 12,3 | 5,6 | % |
| n for calculation | 31 | 28 | |

Result [mg/l]



Recovery [%]



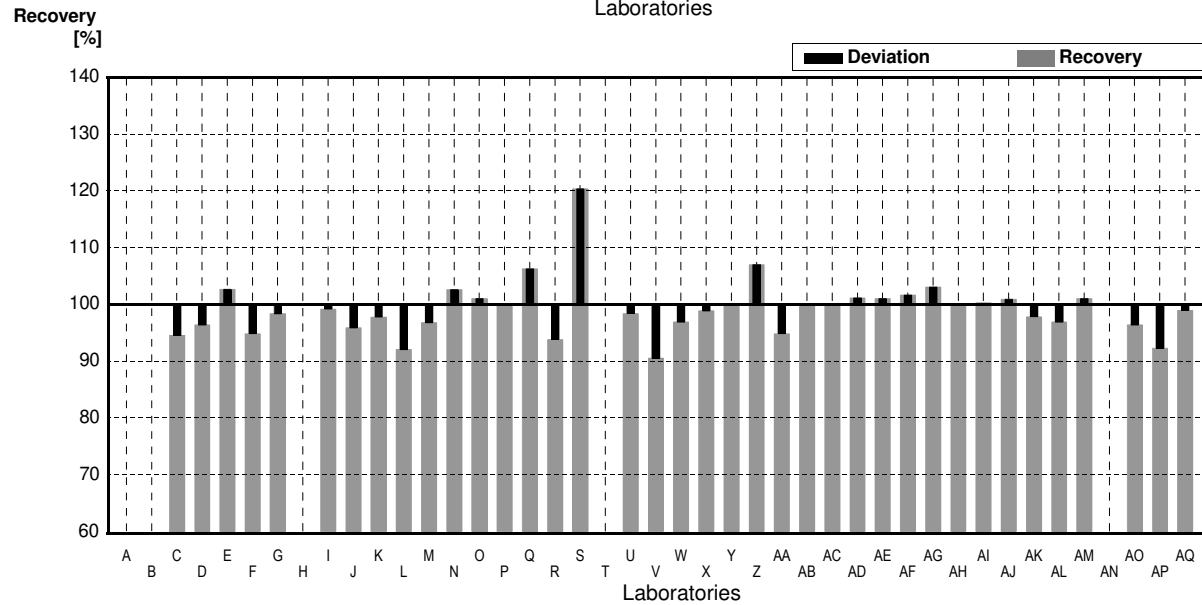
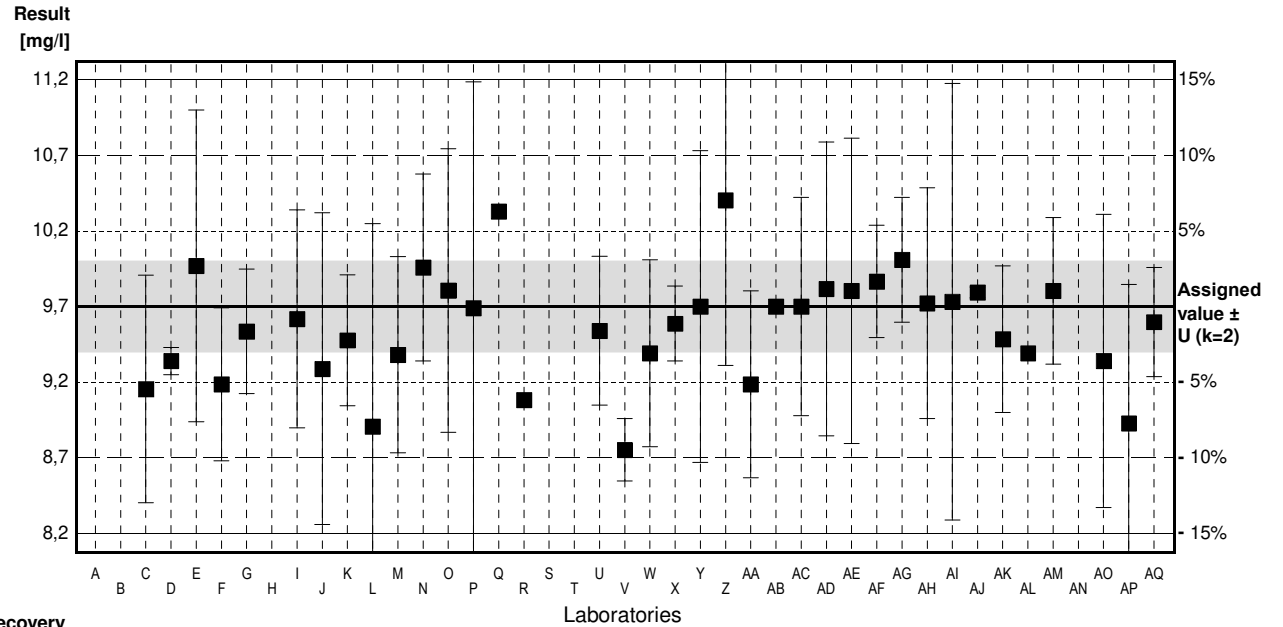
Sample N174A

Parameter Nitrate (as NO3)

Assigned value ± U (k=2) 9,7 mg/l ± 0,3 mg/l
 IFA result ± U (k=2) 9,5 mg/l ± 0,5 mg/l
 Stability test ± U (k=2) 9,6 mg/l ± 0,5 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|--------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 9,17 | 0,73 | mg/l | 95% | -1,82 |
| D | 9,35 | 0,0873 | mg/l | 96% | -1,20 |
| E | 9,96 | 1,0 | mg/l | 103% | 0,89 |
| F | 9,20 | 0,49 | mg/l | 95% | -1,72 |
| G | 9,54 | 0,4 | mg/l | 98% | -0,55 |
| H | | | mg/l | | |
| I | 9,62 | 0,7 | mg/l | 99% | -0,27 |
| J | 9,3 | 1 | mg/l | 96% | -1,37 |
| K | 9,483 | 0,420 | mg/l | 98% | -0,75 |
| L | 8,93 | 1,3 | mg/l | 92% | -2,65 |
| M | 9,39 | 0,63 | mg/l | 97% | -1,07 |
| N | 9,95 | 0,60 | mg/l | 103% | 0,86 |
| O | 9,802 | 0,909 | mg/l | 101% | 0,35 |
| P | 9,69 | 1,45 | mg/l | 100% | -0,03 |
| Q | 10,31 | | mg/l | 106% | 2,10 |
| R | 9,10 | | mg/l | 94% | -2,06 |
| S | 11,677 * | 0,81 | mg/l | 120% | 6,79 |
| T | | | mg/l | | |
| U | 9,544 | 0,4772 | mg/l | 98% | -0,54 |
| V | 8,78 | 0,20 | mg/l | 91% | -3,16 |
| W | 9,4 | 0,6 | mg/l | 97% | -1,03 |
| X | 9,59 | 0,24 | mg/l | 99% | -0,38 |
| Y | 9,7 | 1,0 | mg/l | 100% | 0,00 |
| Z | 10,382 | 1,06 | mg/l | 107% | 2,34 |
| AA | 9,2 | 0,6 | mg/l | 95% | -1,72 |
| AB | 9,7 | | mg/l | 100% | 0,00 |
| AC | 9,7 | 0,7 | mg/l | 100% | 0,00 |
| AD | 9,813 | 0,942 | mg/l | 101% | 0,39 |
| AE | 9,80 | 0,98 | mg/l | 101% | 0,34 |
| AF | 9,86 | 0,36 | mg/l | 102% | 0,55 |
| AG | 10,0 | 0,4 | mg/l | 103% | 1,03 |
| AH | 9,72 | 0,74 | mg/l | 100% | 0,07 |
| AI | 9,73 | 1,4 | mg/l | 100% | 0,10 |
| AJ | 9,79 | 0,035 | mg/l | 101% | 0,31 |
| AK | 9,49 | 0,47 | mg/l | 98% | -0,72 |
| AL | 9,40 | | mg/l | 97% | -1,03 |
| AM | 9,8 | 0,47 | mg/l | 101% | 0,34 |
| AN | | | mg/l | | |
| AO | 9,35 | 0,94 | mg/l | 96% | -1,20 |
| AP | 8,95 | 0,89 | mg/l | 92% | -2,58 |
| AQ | 9,6 | 0,35 | mg/l | 99% | -0,34 |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 9,6 ± 0,2 | 9,6 ± 0,2 | mg/l |
| Recov. ± CI(99%) | 99,2 ± 2,2 | 98,7 ± 1,6 | % |
| SD between labs | 0,5 | 0,4 | mg/l |
| RSD between labs | 5,1 | 3,7 | % |
| n for calculation | 38 | 37 | |



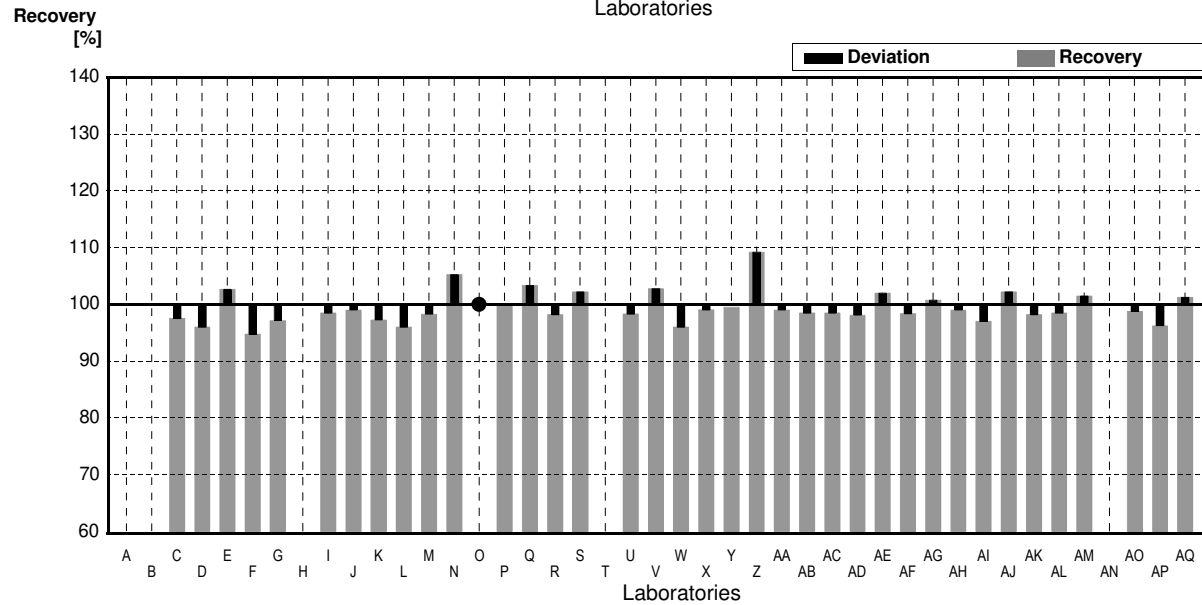
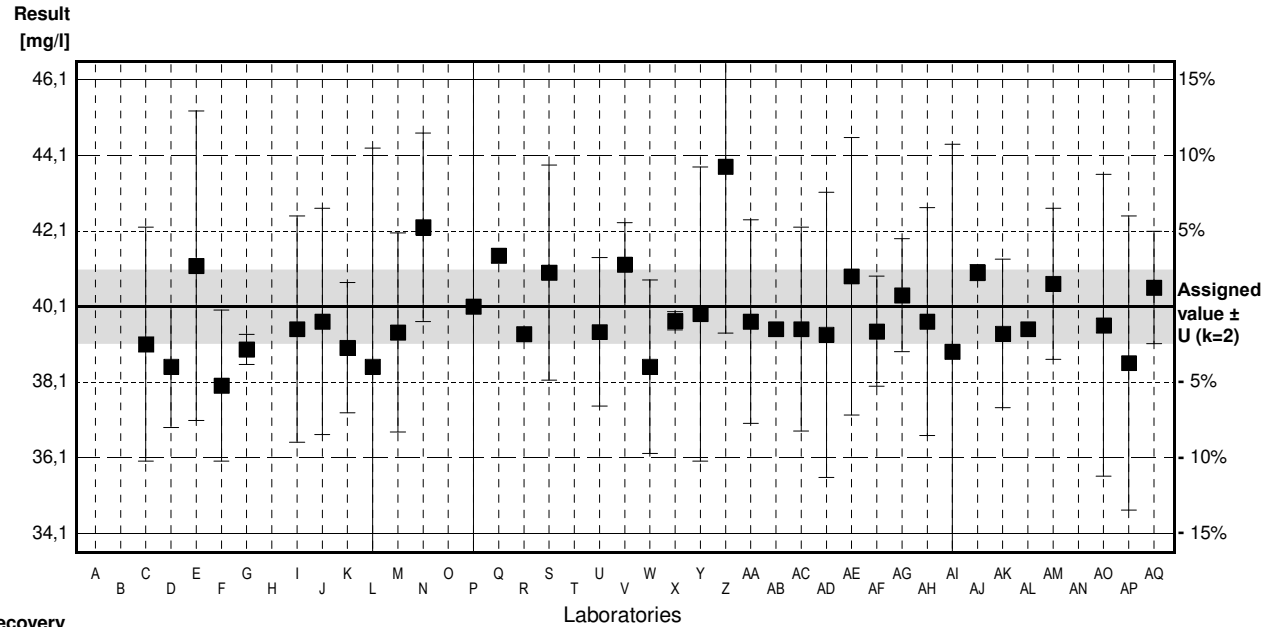
Sample N174B

Parameter Nitrate (as NO3)

Assigned value ± U (k=2) 40,1 mg/l ± 1,0 mg/l
 IFA result ± U (k=2) 39,5 mg/l ± 2,0 mg/l
 Stability test ± U (k=2) 40,1 mg/l ± 2,0 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|--------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 39.1 | 3.1 | mg/l | 98% | -0.83 |
| D | 38.5 | 1.61 | mg/l | 96% | -1.33 |
| E | 41.18 | 4.1 | mg/l | 103% | 0.90 |
| F | 38.0 | 2.0 | mg/l | 95% | -1.75 |
| G | 38.96 | 0.4 | mg/l | 97% | -0.95 |
| H | | | mg/l | | |
| I | 39.5 | 3 | mg/l | 99% | -0.50 |
| J | 39.7 | 3 | mg/l | 99% | -0.33 |
| K | 39.004 | 1.728 | mg/l | 97% | -0.91 |
| L | 38.5 | 5.8 | mg/l | 96% | -1.33 |
| M | 39.41 | 2.64 | mg/l | 98% | -0.57 |
| N | 42.2 * | 2.5 | mg/l | 105% | 1.75 |
| O | >30 | | mg/l | * | |
| P | 40.1 | 6.02 | mg/l | 100% | 0.00 |
| Q | 41.45 | | mg/l | 103% | 1.12 |
| R | 39.37 | | mg/l | 98% | -0.61 |
| S | 40.997 | 2.85 | mg/l | 102% | 0.75 |
| T | | | mg/l | | |
| U | 39.425 | 1.9713 | mg/l | 98% | -0.56 |
| V | 41.21 | 1.11 | mg/l | 103% | 0.92 |
| W | 38.5 | 2.3 | mg/l | 96% | -1.33 |
| X | 39.72 | 0.24 | mg/l | 99% | -0.32 |
| Y | 39.9 | 3.9 | mg/l | 100% | -0.17 |
| Z | 43.810 * | 4.42 | mg/l | 109% | 3.08 |
| AA | 39.7 | 2.7 | mg/l | 99% | -0.33 |
| AB | 39.5 | | mg/l | 99% | -0.50 |
| AC | 39.5 | 2.7 | mg/l | 99% | -0.50 |
| AD | 39.35 | 3.78 | mg/l | 98% | -0.62 |
| AE | 40.9 | 3.68 | mg/l | 102% | 0.67 |
| AF | 39.44 | 1.46 | mg/l | 98% | -0.55 |
| AG | 40.4 | 1.5 | mg/l | 101% | 0.25 |
| AH | 39.7 | 3.02 | mg/l | 99% | -0.33 |
| AI | 38.9 | 5.5 | mg/l | 97% | -1.00 |
| AJ | 41.0 | 0.21 | mg/l | 102% | 0.75 |
| AK | 39.38 | 1.97 | mg/l | 98% | -0.60 |
| AL | 39.5 | | mg/l | 99% | -0.50 |
| AM | 40.7 | 2.0 | mg/l | 101% | 0.50 |
| AN | | | mg/l | | |
| AO | 39.6 | 4.0 | mg/l | 99% | -0.42 |
| AP | 38.6 | 3.9 | mg/l | 96% | -1.25 |
| AQ | 40.6 | 1.49 | mg/l | 101% | 0.42 |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 39,9 ± 0,5 | 39,7 ± 0,4 | mg/l |
| Recov. ± CI(99%) | 99,4 ± 1,3 | 99,0 ± 1,0 | % |
| SD between labs | 1,2 | 0,9 | mg/l |
| RSD between labs | 2,9 | 2,2 | % |
| n for calculation | 37 | 35 | |



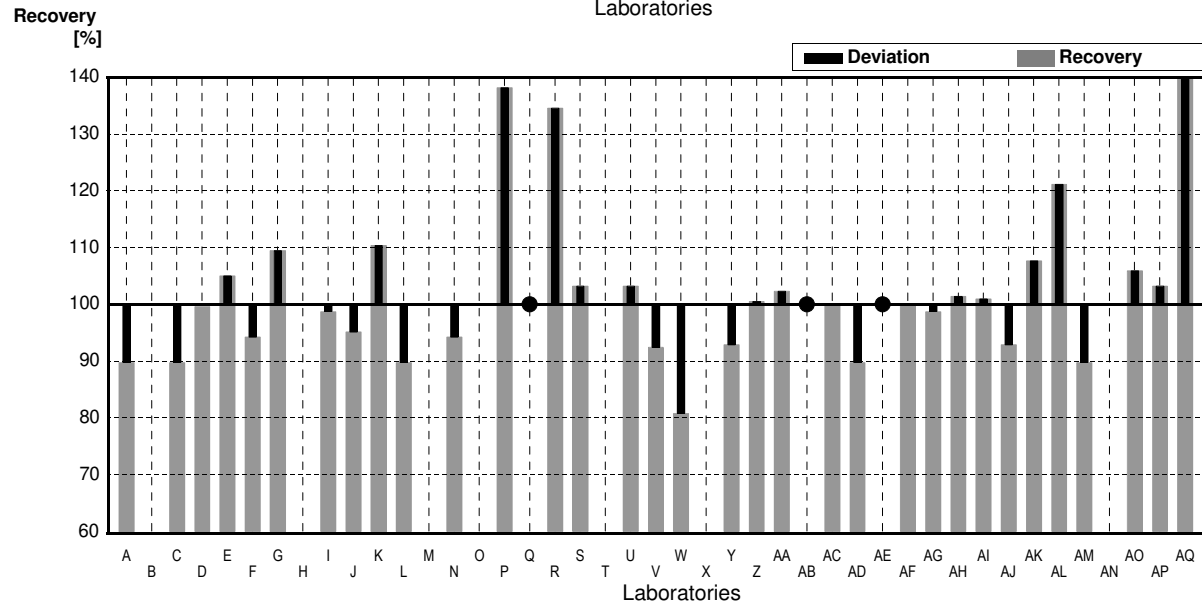
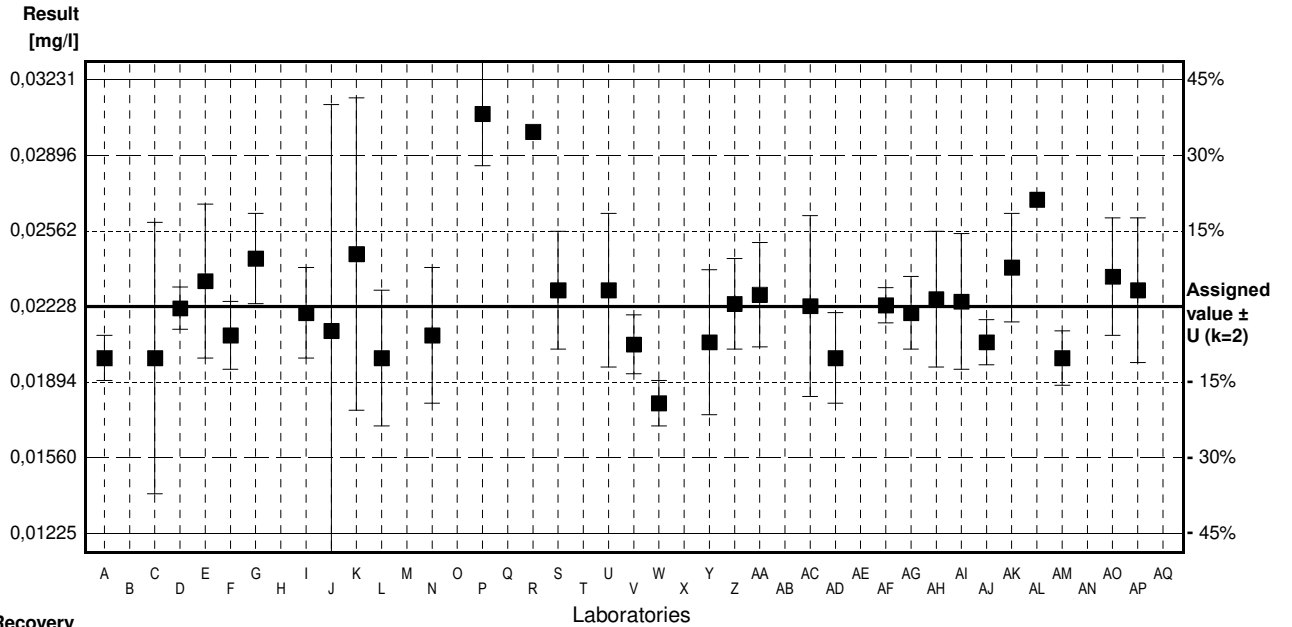
Sample N174A

Parameter Nitrite (as NO2)

Assigned value ± U (k=2) 0,02228 mg/l ± 0,00008 mg/l
 IFA result ± U (k=2) 0,0219 mg/l ± 0,0010 mg/l
 Stability test ± U (k=2) 0,0215 mg/l ± 0,0010 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|---------|
| A | 0.0200 | 0.001 | mg/l | 90% | -1.86 |
| B | | | mg/l | | |
| C | 0.0200 | 0.006 | mg/l | 90% | -1.86 |
| D | 0.0222 | 0.00093 | mg/l | 100% | -0.07 |
| E | 0.0234 | 0.0034 | mg/l | 105% | 0.91 |
| F | 0.0210 | 0.0015 | mg/l | 94% | -1.04 |
| G | 0.0244 | 0.002 | mg/l | 110% | 1.73 |
| H | | | mg/l | | |
| I | 0.0220 | 0.002 | mg/l | 99% | -0.23 |
| J | 0.0212 | 0.01 | mg/l | 95% | -0.88 |
| K | 0.0246 | 0.0069 | mg/l | 110% | 1.89 |
| L | 0.0200 | 0.003 | mg/l | 90% | -1.86 |
| M | | | mg/l | | |
| N | 0.0210 | 0.0030 | mg/l | 94% | -1.04 |
| O | | | mg/l | | |
| P | 0.0308 * | 0.0023 | mg/l | 138% | 6.95 |
| Q | <0.033 | | mg/l | * | |
| R | 0.0300 * | | mg/l | 135% | 6.30 |
| S | 0.0230 | 0.0026 | mg/l | 103% | 0.59 |
| T | | | mg/l | | |
| U | 0.0230 | 0.00340 | mg/l | 103% | 0.59 |
| V | 0.0206 | 0.0013 | mg/l | 92% | -1.37 |
| W | 0.0180 | 0.001 | mg/l | 81% | -3.49 |
| X | | | mg/l | | |
| Y | 0.0207 | 0.0032 | mg/l | 93% | -1.29 |
| Z | 0.0224 | 0.002 | mg/l | 101% | 0.10 |
| AA | 0.0228 | 0.0023 | mg/l | 102% | 0.42 |
| AB | <0.05 | | mg/l | * | |
| AC | 0.0223 | 0.004 | mg/l | 100% | 0.02 |
| AD | 0.0200 | 0.002 | mg/l | 90% | -1.86 |
| AE | <0.200 | | mg/l | * | |
| AF | 0.02233 | 0.00078 | mg/l | 100% | 0.04 |
| AG | 0.0220 | 0.0016 | mg/l | 99% | -0.23 |
| AH | 0.0226 | 0.003 | mg/l | 101% | 0.26 |
| AI | 0.0225 | 0.003 | mg/l | 101% | 0.18 |
| AJ | 0.0207 | 0.001 | mg/l | 93% | -1.29 |
| AK | 0.0240 | 0.0024 | mg/l | 108% | 1.40 |
| AL | 0.0270 | | mg/l | 121% | 3.85 |
| AM | 0.020 | 0.0012 | mg/l | 90% | -1.86 |
| AN | | | mg/l | | |
| AO | 0.0236 | 0.0026 | mg/l | 106% | 1.08 |
| AP | 0.0230 | 0.0032 | mg/l | 103% | 0.59 |
| AQ | 0.0490 * | 0.001 | mg/l | 220% | 21.81 |

| | All results | Outliers excl. | Unit |
|-------------------|------------------|------------------|------|
| Mean ± CI(99%) | 0,02334 ± 0,0025 | 0,02201 ± 0,0009 | mg/l |
| Recov. ± CI(99%) | 104,7 ± 11,4 | 98,8 ± 4,1 | % |
| SD between labs | 0,00532 | 0,00181 | mg/l |
| RSD between labs | 22,8 | 8,2 | % |
| n for calculation | 33 | 30 | |



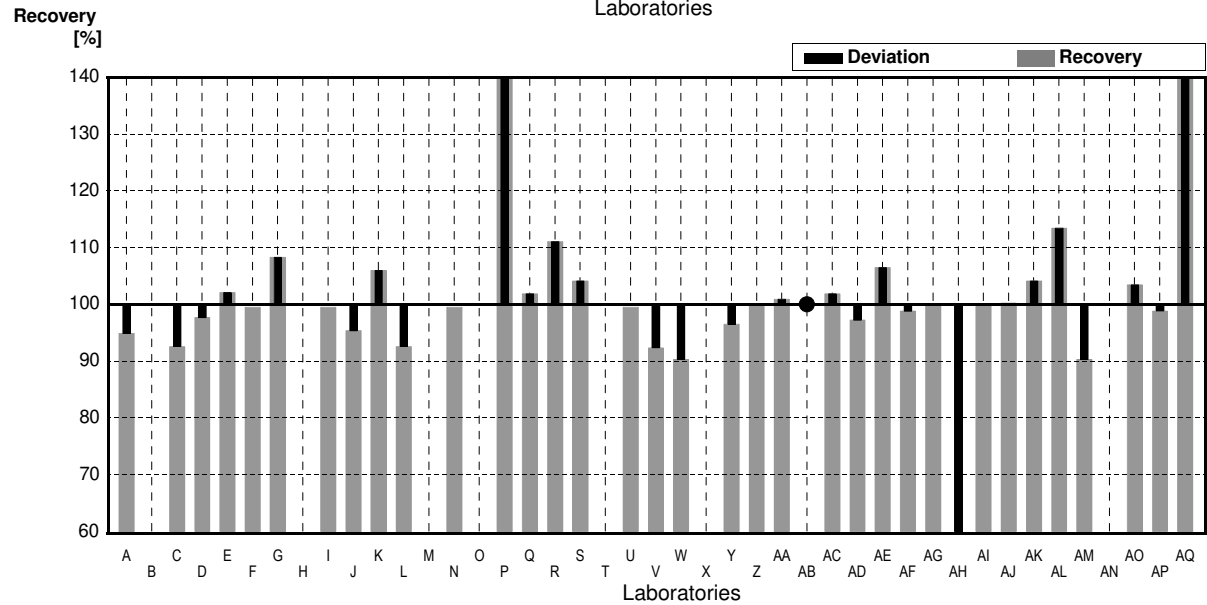
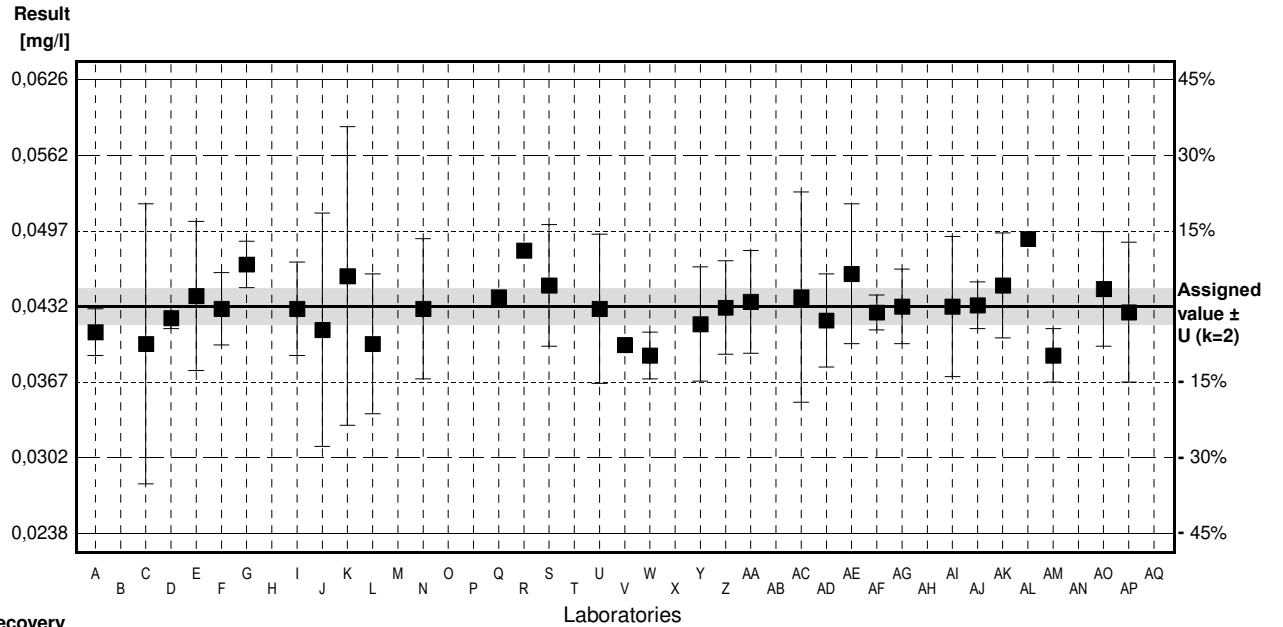
Sample N174B

Parameter Nitrite (as NO2)

Assigned value ± U (k=2) 0,0432 mg/l ± 0,0015 mg/l
 IFA result ± U (k=2) 0,0429 mg/l ± 0,0017 mg/l
 Stability test ± U (k=2) 0,0420 mg/l ± 0,0021 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|---------|
| A | 0.0410 | 0.002 | mg/l | 95% | -0.93 |
| B | | | mg/l | | |
| C | 0.0400 | 0.012 | mg/l | 93% | -1.35 |
| D | 0.0422 | 0.00090 | mg/l | 98% | -0.42 |
| E | 0.0441 | 0.0064 | mg/l | 102% | 0.38 |
| F | 0.0430 | 0.0031 | mg/l | 100% | -0.08 |
| G | 0.0468 | 0.002 | mg/l | 108% | 1.52 |
| H | | | mg/l | | |
| I | 0.0430 | 0.004 | mg/l | 100% | -0.08 |
| J | 0.0412 | 0.01 | mg/l | 95% | -0.84 |
| K | 0.0458 | 0.0128 | mg/l | 106% | 1.09 |
| L | 0.0400 | 0.006 | mg/l | 93% | -1.35 |
| M | | | mg/l | | |
| N | 0.0430 | 0.0060 | mg/l | 100% | -0.08 |
| O | | | mg/l | | |
| P | 0.0780 * | 0.0059 | mg/l | 181% | 14.65 |
| Q | 0.0440 | | mg/l | 102% | 0.34 |
| R | 0.0480 | | mg/l | 111% | 2.02 |
| S | 0.0450 | 0.0052 | mg/l | 104% | 0.76 |
| T | | | mg/l | | |
| U | 0.0430 | 0.0064 | mg/l | 100% | -0.08 |
| V | 0.0399 | 0.00032 | mg/l | 92% | -1.39 |
| W | 0.0390 | 0.002 | mg/l | 90% | -1.77 |
| X | | | mg/l | | |
| Y | 0.0417 | 0.0049 | mg/l | 97% | -0.63 |
| Z | 0.0431 | 0.004 | mg/l | 100% | -0.04 |
| AA | 0.0436 | 0.0044 | mg/l | 101% | 0.17 |
| AB | <0.05 | | mg/l | - | |
| AC | 0.0440 | 0.009 | mg/l | 102% | 0.34 |
| AD | 0.0420 | 0.004 | mg/l | 97% | -0.51 |
| AE | 0.0460 | 0.006 | mg/l | 106% | 1.18 |
| AF | 0.04269 | 0.00149 | mg/l | 99% | -0.21 |
| AG | 0.0432 | 0.0032 | mg/l | 100% | 0.00 |
| AH | 0.0143 * | 0.002 | mg/l | 33% | -12.16 |
| AI | 0.0432 | 0.006 | mg/l | 100% | 0.00 |
| AJ | 0.0433 | 0.002 | mg/l | 100% | 0.04 |
| AK | 0.0450 | 0.0045 | mg/l | 104% | 0.76 |
| AL | 0.0490 | | mg/l | 113% | 2.44 |
| AM | 0.039 | 0.0023 | mg/l | 90% | -1.77 |
| AN | | | mg/l | | |
| AO | 0.0447 | 0.0049 | mg/l | 103% | 0.63 |
| AP | 0.0427 | 0.0060 | mg/l | 99% | -0.21 |
| AQ | 0.063 * | 0.001 | mg/l | 146% | 8.33 |

| | All results | Outliers excl. | Unit |
|-------------------|-----------------|-----------------|------|
| Mean ± CI(99%) | 0,0439 ± 0,0040 | 0,0432 ± 0,0012 | mg/l |
| Recov. ± CI(99%) | 101,7 ± 9,3 | 100,0 ± 2,7 | % |
| SD between labs | 0,0087 | 0,0024 | mg/l |
| RSD between labs | 19,9 | 5,5 | % |
| n for calculation | 35 | 32 | |



Sample N174A

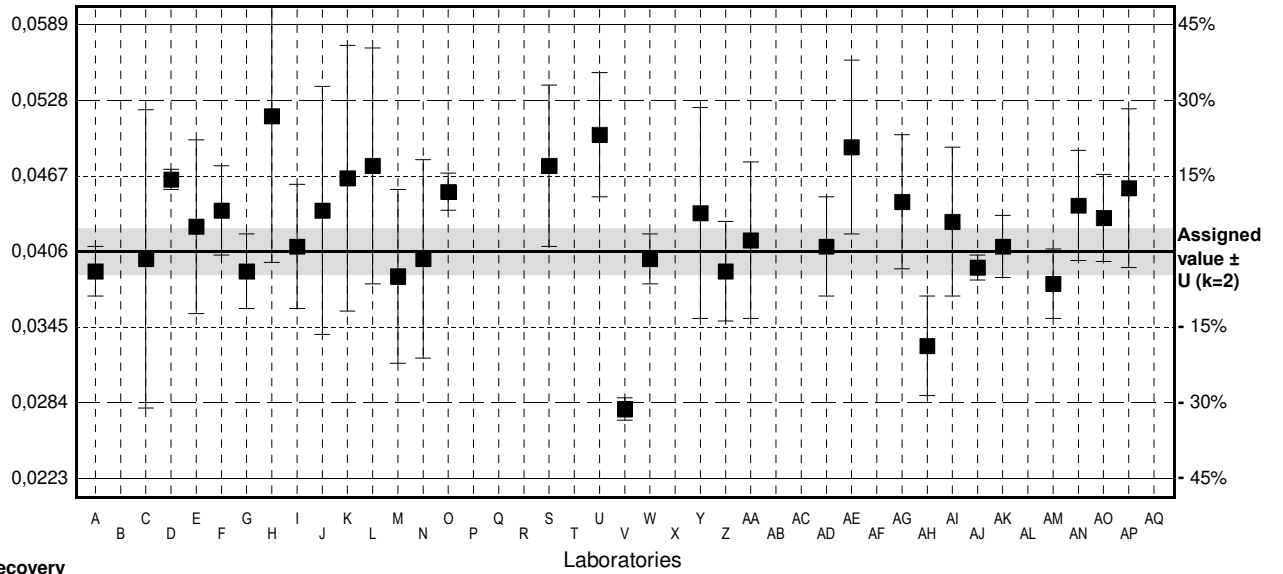
Parameter Ammonium (as NH4)

Assigned value ± U (k=2) 0,0406 mg/l ± 0,0019 mg/l
 IFA result ± U (k=2) 0,0410 mg/l ± 0,0017 mg/l
 Stability test ± U (k=2) 0,0408 mg/l ± 0,0017 mg/l

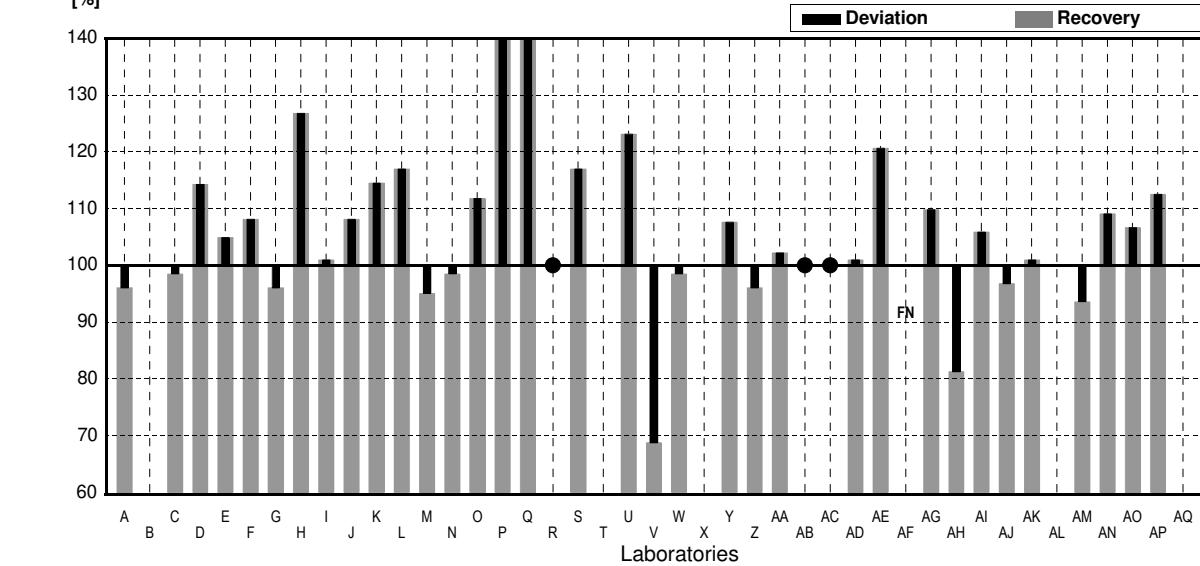
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|---------|
| A | 0.0390 | 0.002 | mg/l | 96% | -0.36 |
| B | | | mg/l | | |
| C | 0.0400 | 0.012 | mg/l | 99% | -0.13 |
| D | 0.0464 | 0.00082 | mg/l | 114% | 1.30 |
| E | 0.0426 | 0.007 | mg/l | 105% | 0.45 |
| F | 0.0439 | 0.0036 | mg/l | 108% | 0.74 |
| G | 0.0390 | 0.003 | mg/l | 96% | -0.36 |
| H | 0.0515 | 0.0118 | mg/l | 127% | 2.44 |
| I | 0.0410 | 0.005 | mg/l | 101% | 0.09 |
| J | 0.0439 | 0.01 | mg/l | 108% | 0.74 |
| K | 0.0465 | 0.0107 | mg/l | 115% | 1.32 |
| L | 0.0475 | 0.0095 | mg/l | 117% | 1.55 |
| M | 0.0386 | 0.007 | mg/l | 95% | -0.45 |
| N | 0.0400 | 0.0080 | mg/l | 99% | -0.13 |
| O | 0.0454 | 0.0015 | mg/l | 112% | 1.07 |
| P | 0.0694 * | 0.0083 | mg/l | 171% | 6.45 |
| Q | 0.0617 * | | mg/l | 152% | 4.72 |
| R | <0.10 | | mg/l | * | |
| S | 0.0475 | 0.0065 | mg/l | 117% | 1.55 |
| T | | | mg/l | | |
| U | 0.050 | 0.0050 | mg/l | 123% | 2.10 |
| V | 0.0279 * | 0.0009 | mg/l | 69% | -2.84 |
| W | 0.0400 | 0.002 | mg/l | 99% | -0.13 |
| X | | | mg/l | | |
| Y | 0.0437 | 0.0085 | mg/l | 108% | 0.69 |
| Z | 0.0390 | 0.004 | mg/l | 96% | -0.36 |
| AA | 0.0415 | 0.0063 | mg/l | 102% | 0.20 |
| AB | <0.05 | | mg/l | * | |
| AC | <0.050 | | mg/l | * | |
| AD | 0.0410 | 0.004 | mg/l | 101% | 0.09 |
| AE | 0.0490 | 0.007 | mg/l | 121% | 1.88 |
| AF | <0.038 | | mg/l | FN | |
| AG | 0.0446 | 0.0054 | mg/l | 110% | 0.90 |
| AH | 0.0330 | 0.004 | mg/l | 81% | -1.70 |
| AI | 0.0430 | 0.006 | mg/l | 106% | 0.54 |
| AJ | 0.0393 | 0.001 | mg/l | 97% | -0.29 |
| AK | 0.0410 | 0.0025 | mg/l | 101% | 0.09 |
| AL | | | mg/l | | |
| AM | 0.0380 | 0.0028 | mg/l | 94% | -0.58 |
| AN | 0.0443 | 0.00443 | mg/l | 109% | 0.83 |
| AO | 0.0433 | 0.0035 | mg/l | 107% | 0.60 |
| AP | 0.0457 | 0.0064 | mg/l | 113% | 1.14 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-----------------|-----------------|------|
| Mean ± CI(99%) | 0,0438 ± 0,0034 | 0,0429 ± 0,0020 | mg/l |
| Recov. ± CI(99%) | 107,8 ± 8,4 | 105,6 ± 4,9 | % |
| SD between labs | 0,0073 | 0,0040 | mg/l |
| RSD between labs | 16,6 | 9,4 | % |
| n for calculation | 34 | 31 | |

Result [mg/l]



Recovery [%]



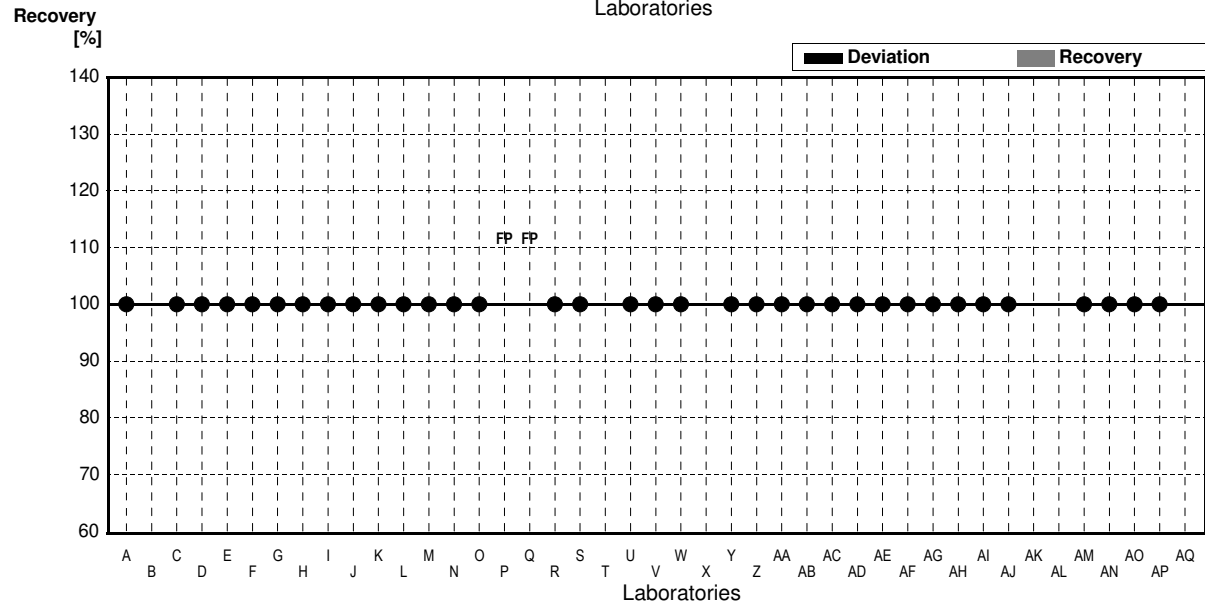
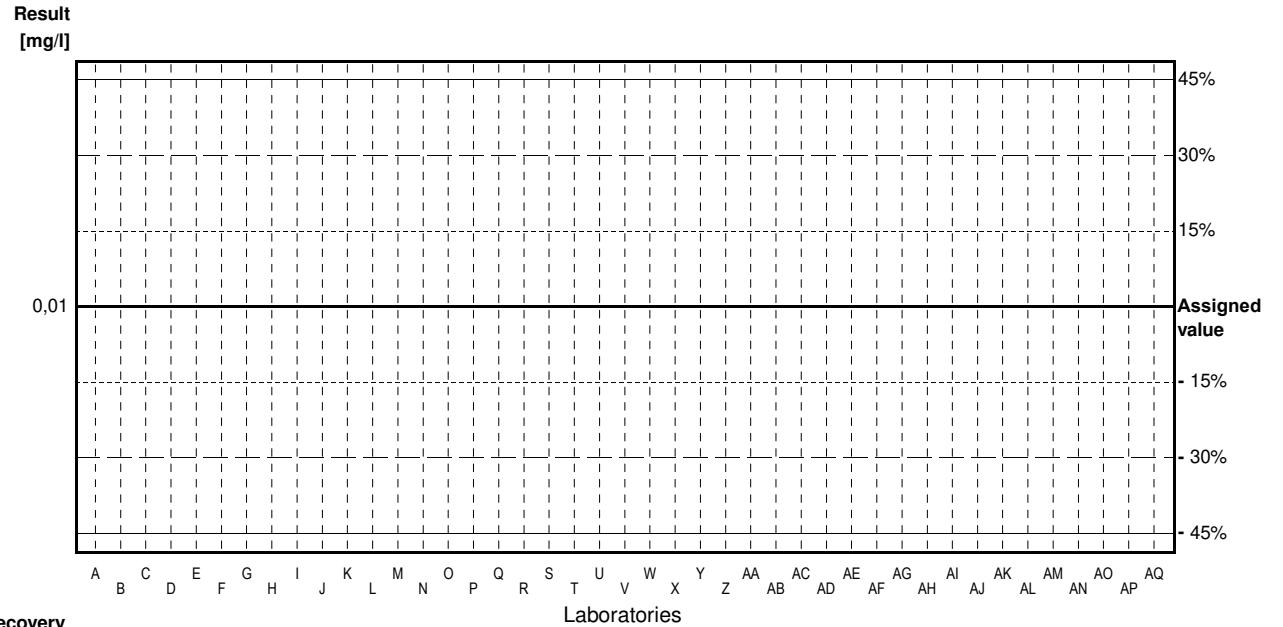
Sample N174B

Parameter Ammonium (as NH4)

Assigned 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 | <0.03 | | mg/l | • | |
| B | | | mg/l | • | |
| C | <0.01 | 0.0033 | mg/l | • | |
| D | <0.0100 | | mg/l | • | |
| E | <0.010 | | mg/l | • | |
| F | <0.008 | | mg/l | • | |
| G | <0.0064 | 0.003 | mg/l | • | |
| H | 0.00500 | 0.00115 | mg/l | • | |
| I | <0.013 | | mg/l | • | |
| J | <0.02 | | mg/l | • | |
| K | <0.012 | | mg/l | • | |
| L | <0.01 | | mg/l | • | |
| M | <0.002 | | mg/l | • | |
| N | <0.020 | | mg/l | • | |
| O | <0.01 | | mg/l | • | |
| P | 0.0250 | 0.0030 | mg/l | FP | |
| Q | 0.0180 | | mg/l | FP | |
| R | <0.1 | | mg/l | • | |
| S | <0.010 | | mg/l | • | |
| T | | | mg/l | • | |
| U | <0.00515 | | mg/l | • | |
| V | <0.02 | | mg/l | • | |
| W | <0.03 | 0 | mg/l | • | |
| X | | | mg/l | • | |
| Y | <0.010 | | mg/l | • | |
| Z | <0.0090 | | mg/l | • | |
| AA | <0.005 | | mg/l | • | |
| AB | <0.05 | | mg/l | • | |
| AC | <0.050 | | mg/l | • | |
| AD | <0.010 | | mg/l | • | |
| AE | <0.010 | | mg/l | • | |
| AF | <0.038 | | mg/l | • | |
| AG | <0.02 | | mg/l | • | |
| AH | <0.02 | | mg/l | • | |
| AI | <0.01 | | mg/l | • | |
| AJ | <0.01 | | mg/l | • | |
| AK | n.n. | | mg/l | | |
| AL | | | mg/l | | |
| AM | <0.01 | | mg/l | • | |
| AN | <0.01 | | mg/l | • | |
| AO | <0.0100 | | mg/l | • | |
| AP | <0.010 | | mg/l | • | |
| AQ | | | 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 | | | |



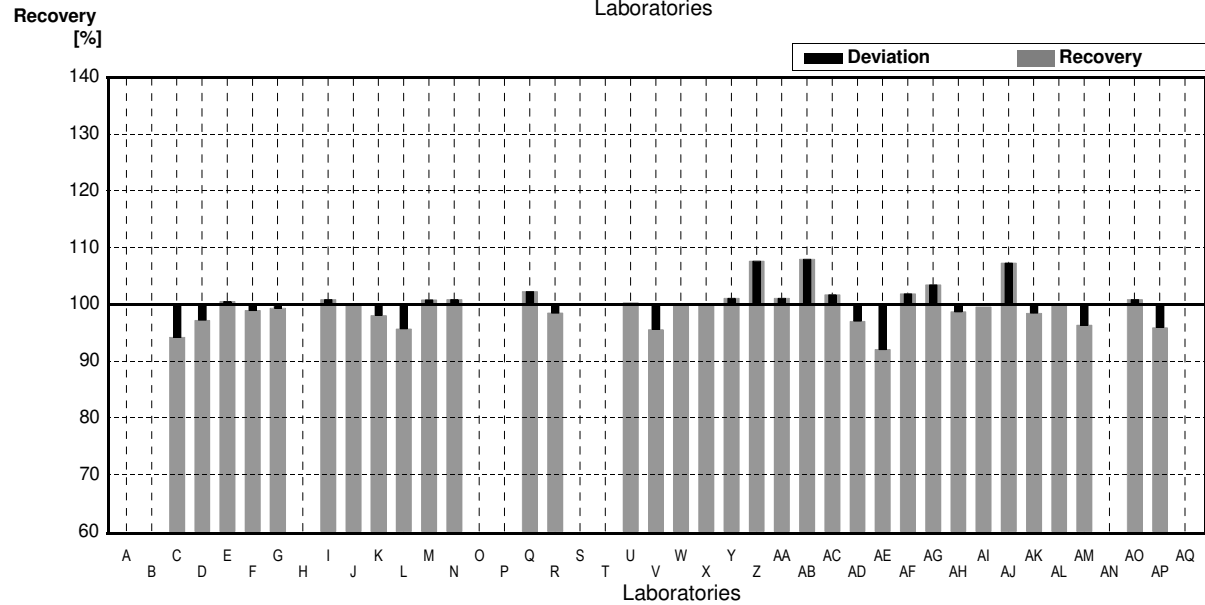
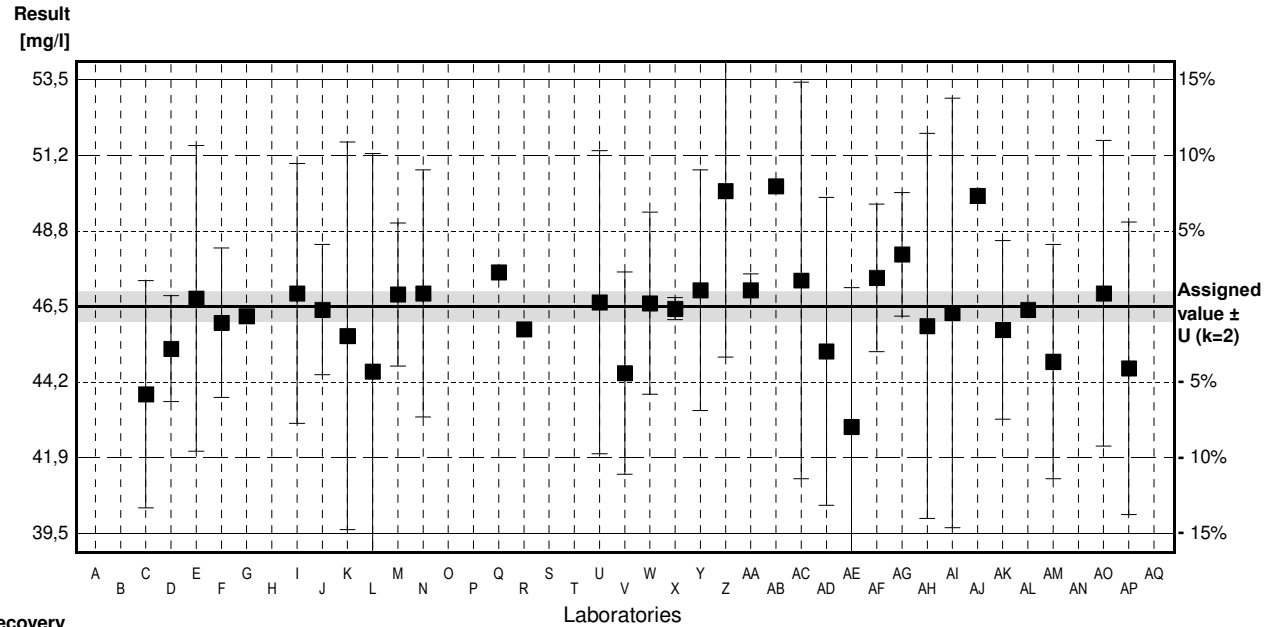
Sample N174A

Parameter Chloride

Assigned value ± U (k=2) 46,5 mg/l ± 0,5 mg/l
 IFA result ± U (k=2) 46,2 mg/l ± 1,6 mg/l
 Stability test ± U (k=2) 45,9 mg/l ± 1,6 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|-------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 43.8 | 3.5 | mg/l | 94% | -2.15 |
| D | 45.2 | 1.63 | mg/l | 97% | -1.04 |
| E | 46.75 | 4.7 | mg/l | 101% | 0.20 |
| F | 46.0 | 2.3 | mg/l | 99% | -0.40 |
| G | 46.20 | 0.2 | mg/l | 99% | -0.24 |
| H | | | mg/l | | |
| I | 46.9 | 4 | mg/l | 101% | 0.32 |
| J | 46.4 | 2 | mg/l | 100% | -0.08 |
| K | 45.596 | 5.964 | mg/l | 98% | -0.72 |
| L | 44.5 | 6.7 | mg/l | 96% | -1.59 |
| M | 46.87 | 2.20 | mg/l | 101% | 0.29 |
| N | 46.9 | 3.8 | mg/l | 101% | 0.32 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 47.55 | | mg/l | 102% | 0.84 |
| R | 45.80 | | mg/l | 98% | -0.56 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 46.63 | 4.663 | mg/l | 100% | 0.10 |
| V | 44.45 | 3.11 | mg/l | 96% | -1.63 |
| W | 46.6 | 2.8 | mg/l | 100% | 0.08 |
| X | 46.43 | 0.34 | mg/l | 100% | -0.06 |
| Y | 47.0 | 3.7 | mg/l | 101% | 0.40 |
| Z | 50.05 * | 5.11 | mg/l | 108% | 2.83 |
| AA | 47.0 | 0.5 | mg/l | 101% | 0.40 |
| AB | 50.2 * | | mg/l | 108% | 2.95 |
| AC | 47.3 | 6.1 | mg/l | 102% | 0.64 |
| AD | 45.118 | 4.74 | mg/l | 97% | -1.10 |
| AE | 42.8 * | 4.28 | mg/l | 92% | -2.95 |
| AF | 47.38 | 2.27 | mg/l | 102% | 0.70 |
| AG | 48.1 | 1.9 | mg/l | 103% | 1.27 |
| AH | 45.9 | 5.92 | mg/l | 99% | -0.48 |
| AI | 46.3 | 6.6 | mg/l | 100% | -0.16 |
| AJ | 49.9 * | 0.23 | mg/l | 107% | 2.71 |
| AK | 45.78 | 2.75 | mg/l | 98% | -0.57 |
| AL | 46.4 | | mg/l | 100% | -0.08 |
| AM | 44.8 | 3.6 | mg/l | 96% | -1.35 |
| AN | | | mg/l | | |
| AO | 46.9 | 4.7 | mg/l | 101% | 0.32 |
| AP | 44.6 | 4.5 | mg/l | 96% | -1.51 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 46,4 ± 0,8 | 46,2 ± 0,5 | mg/l |
| Recov. ± CI(99%) | 99,8 ± 1,6 | 99,3 ± 1,1 | % |
| SD between labs | 1,6 | 1,0 | mg/l |
| RSD between labs | 3,5 | 2,2 | % |
| n for calculation | 34 | 30 | |



Sample N174B

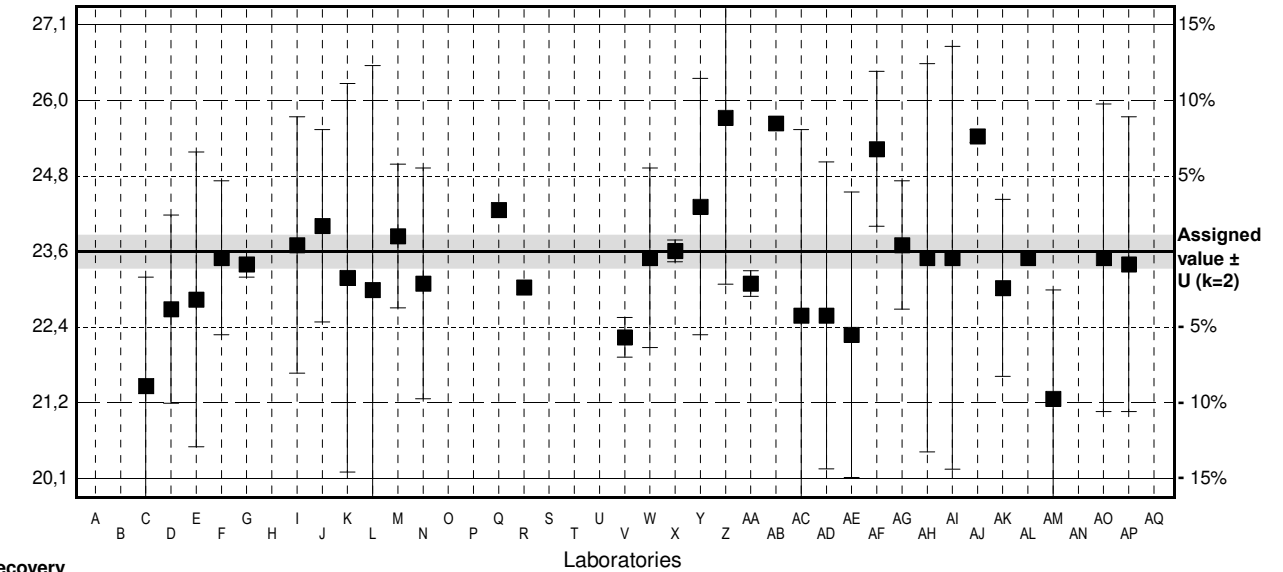
Parameter Chloride

Assigned value ± U (k=2) 23,6 mg/l ± 0,3 mg/l
 IFA result ± U (k=2) 23,4 mg/l ± 0,8 mg/l
 Stability test ± U (k=2) 22,9 mg/l ± 0,8 mg/l

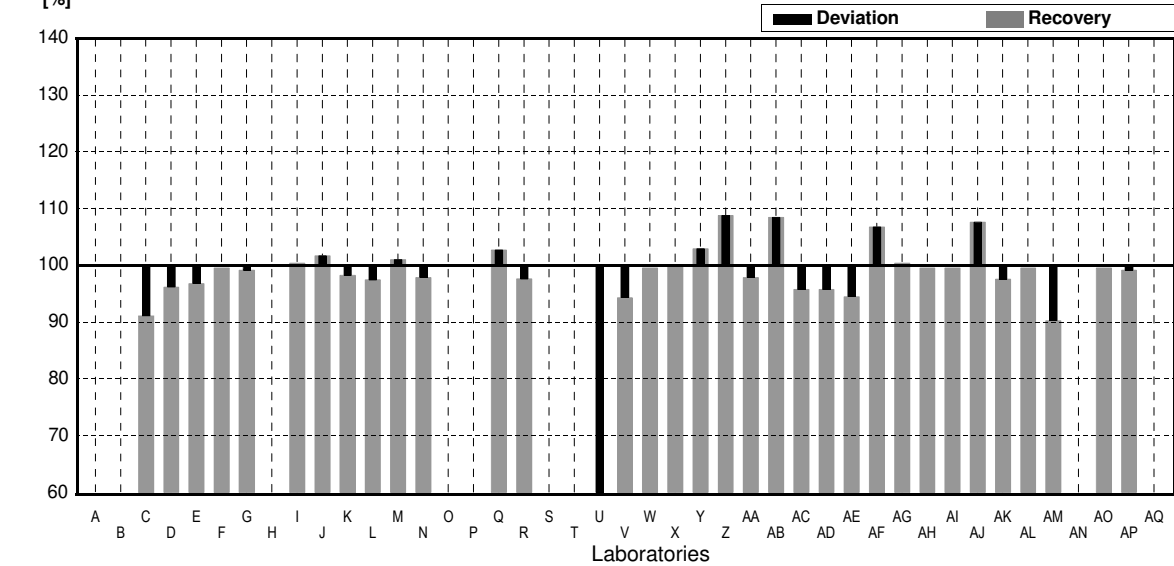
| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|-------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 21,5 | 1,7 | mg/l | 91% | -3,30 |
| D | 22,7 | 1,47 | mg/l | 96% | -1,41 |
| E | 22,85 | 2,3 | mg/l | 97% | -1,18 |
| F | 23,5 | 1,2 | mg/l | 100% | -0,16 |
| G | 23,40 | 0,2 | mg/l | 99% | -0,31 |
| H | | | mg/l | | |
| I | 23,7 | 2 | mg/l | 100% | 0,16 |
| J | 24,0 | 1,5 | mg/l | 102% | 0,63 |
| K | 23,189 | 3,03 | mg/l | 98% | -0,65 |
| L | 23,0 | 3,5 | mg/l | 97% | -0,94 |
| M | 23,84 | 1,12 | mg/l | 101% | 0,38 |
| N | 23,1 | 1,8 | mg/l | 98% | -0,78 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 24,25 | | mg/l | 103% | 1,02 |
| R | 23,04 | | mg/l | 98% | -0,88 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 13,61 * | 2,316 | mg/l | 58% | -15,68 |
| V | 22,26 | 0,31 | mg/l | 94% | -2,10 |
| W | 23,5 | 1,4 | mg/l | 100% | -0,16 |
| X | 23,61 | 0,17 | mg/l | 100% | 0,02 |
| Y | 24,3 | 2,0 | mg/l | 103% | 1,10 |
| Z | 25,688 * | 2,60 | mg/l | 109% | 3,28 |
| AA | 23,1 | 0,2 | mg/l | 98% | -0,78 |
| AB | 25,6 * | | mg/l | 108% | 3,14 |
| AC | 22,6 | 2,9 | mg/l | 96% | -1,57 |
| AD | 22,6 | 2,396 | mg/l | 96% | -1,57 |
| AE | 22,3 | 2,23 | mg/l | 94% | -2,04 |
| AF | 25,20 | 1,21 | mg/l | 107% | 2,51 |
| AG | 23,7 | 1,0 | mg/l | 100% | 0,16 |
| AH | 23,5 | 3,03 | mg/l | 100% | -0,16 |
| AI | 23,5 | 3,3 | mg/l | 100% | -0,16 |
| AJ | 25,4 | 0,10 | mg/l | 108% | 2,82 |
| AK | 23,03 | 1,38 | mg/l | 98% | -0,89 |
| AL | 23,5 | | mg/l | 100% | -0,16 |
| AM | 21,3 * | 1,7 | mg/l | 90% | -3,61 |
| AN | | | mg/l | | |
| AO | 23,5 | 2,4 | mg/l | 100% | -0,16 |
| AP | 23,4 | 2,3 | mg/l | 99% | -0,31 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 23,2 ± 0,9 | 23,4 ± 0,4 | mg/l |
| Recov. ± CI(99%) | 98,1 ± 3,9 | 99,0 ± 1,7 | % |
| SD between labs | 2,0 | 0,8 | mg/l |
| RSD between labs | 8,5 | 3,4 | % |
| n for calculation | 34 | 30 | |

Result [mg/l]



Recovery [%]



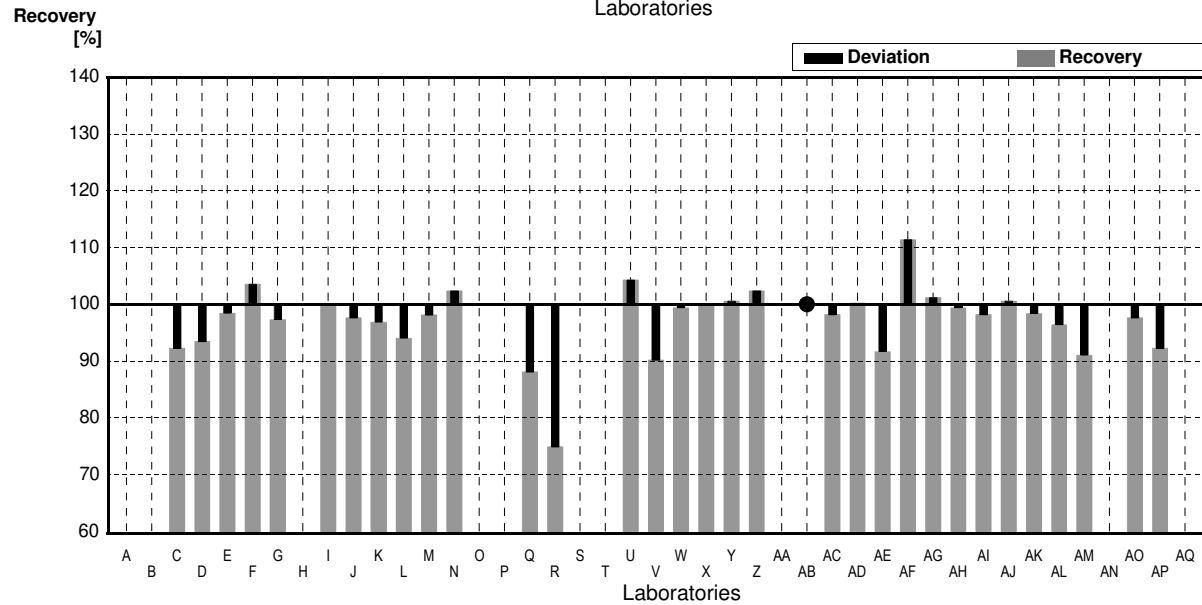
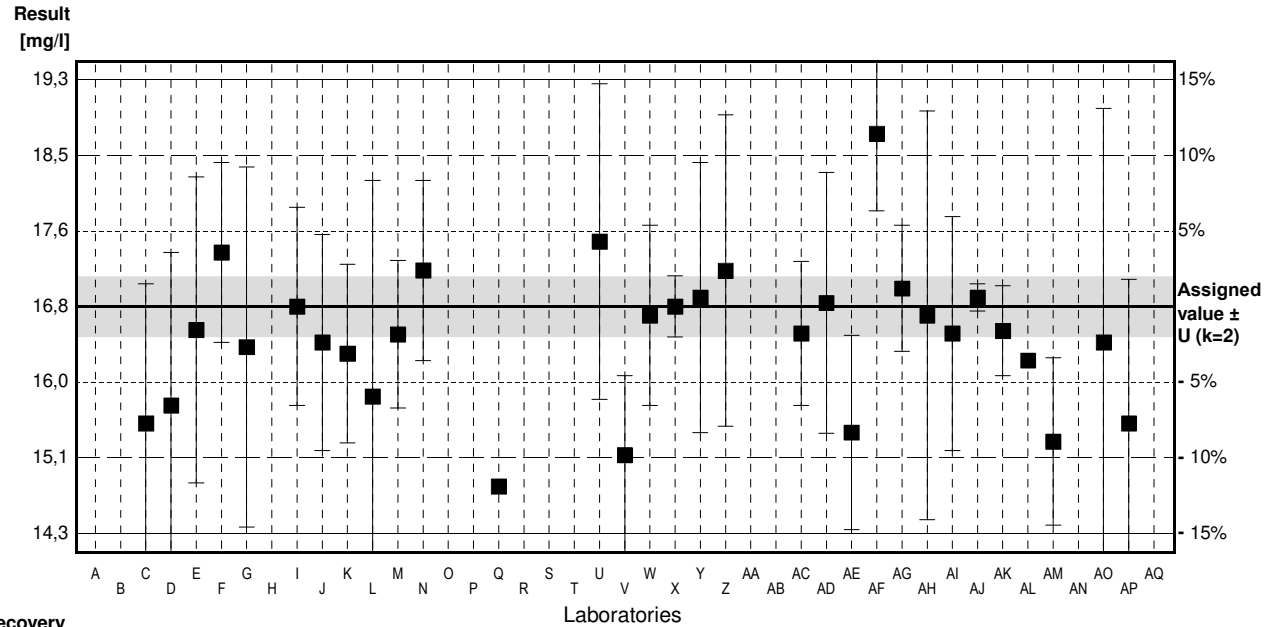
Sample N174A

Parameter Sulphate (as SO4)

Assigned value ± U (k=2) 16,8 mg/l ± 0,3 mg/l
 IFA result ± U (k=2) 16,5 mg/l ± 0,5 mg/l
 Stability test ± U (k=2) 16,7 mg/l ± 0,5 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 15.5 | 1.55 | mg/l | 92% | -2.58 |
| D | 15.7 | 1.70 | mg/l | 93% | -2.18 |
| E | 16.54 | 1.7 | mg/l | 98% | -0.52 |
| F | 17.4 | 1.0 | mg/l | 104% | 1.19 |
| G | 16.35 | 2 | mg/l | 97% | -0.89 |
| H | | | mg/l | | |
| I | 16.8 | 1.1 | mg/l | 100% | 0.00 |
| J | 16.4 | 1.2 | mg/l | 98% | -0.79 |
| K | 16.276 | 0.991 | mg/l | 97% | -1.04 |
| L | 15.8 | 2.4 | mg/l | 94% | -1.98 |
| M | 16.49 | 0.82 | mg/l | 98% | -0.62 |
| N | 17.2 | 1.0 | mg/l | 102% | 0.79 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 14.80 | | mg/l | 88% | -3.97 |
| R | 12.58 | * | mg/l | 75% | -8.37 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 17.52 | 1.752 | mg/l | 104% | 1.43 |
| V | 15.15 | 0.88 | mg/l | 90% | -3.27 |
| W | 16.7 | 1.0 | mg/l | 99% | -0.20 |
| X | 16.80 | 0.34 | mg/l | 100% | 0.00 |
| Y | 16.9 | 1.5 | mg/l | 101% | 0.20 |
| Z | 17.198 | 1.73 | mg/l | 102% | 0.79 |
| AA | | | mg/l | | |
| AB | <40 | | mg/l | - | |
| AC | 16.5 | 0.8 | mg/l | 98% | -0.60 |
| AD | 16.84 | 1.448 | mg/l | 100% | 0.08 |
| AE | 15.4 | 1.08 | mg/l | 92% | -2.78 |
| AF | 18.72 | * | mg/l | 111% | 3.81 |
| AG | 17.0 | 0.7 | mg/l | 101% | 0.40 |
| AH | 16.7 | 2.27 | mg/l | 99% | -0.20 |
| AI | 16.5 | 1.3 | mg/l | 98% | -0.60 |
| AJ | 16.9 | 0.15 | mg/l | 101% | 0.20 |
| AK | 16.53 | 0.50 | mg/l | 98% | -0.54 |
| AL | 16.2 | | mg/l | 96% | -1.19 |
| AM | 15.3 | 0.93 | mg/l | 91% | -2.98 |
| AN | | | mg/l | | |
| AO | 16.4 | 2.6 | mg/l | 98% | -0.79 |
| AP | 15.5 | 1.6 | mg/l | 92% | -2.58 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 16,3 ± 0,5 | 16,4 ± 0,4 | mg/l |
| Recov. ± CI(99%) | 97,2 ± 3,0 | 97,5 ± 2,1 | % |
| SD between labs | 1,0 | 0,7 | mg/l |
| RSD between labs | 6,4 | 4,2 | % |
| n for calculation | 32 | 30 | |



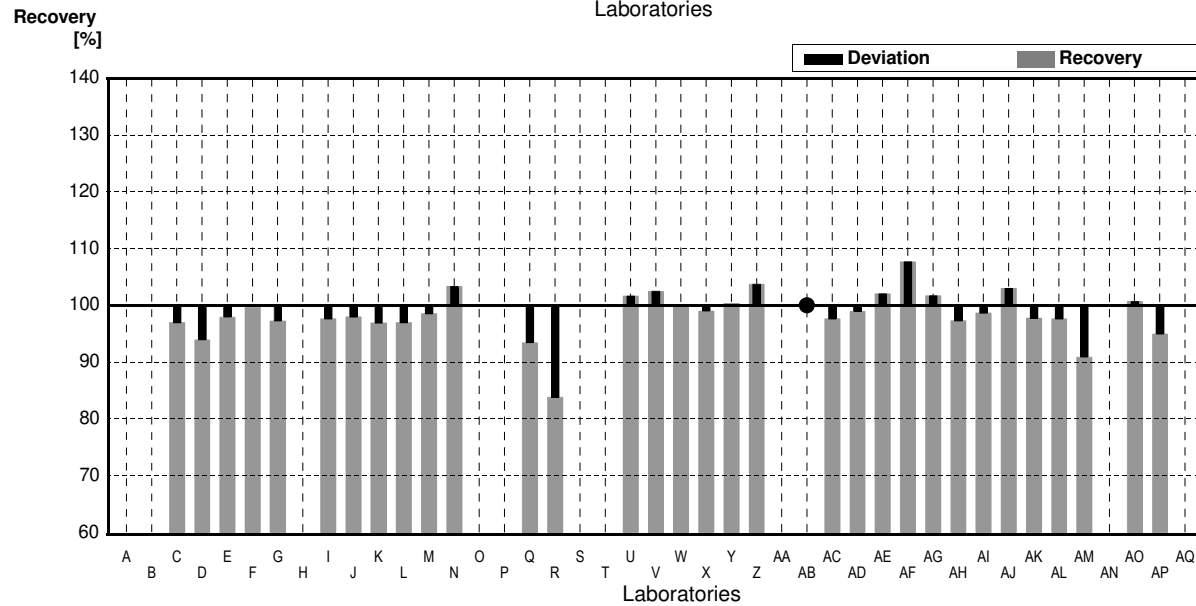
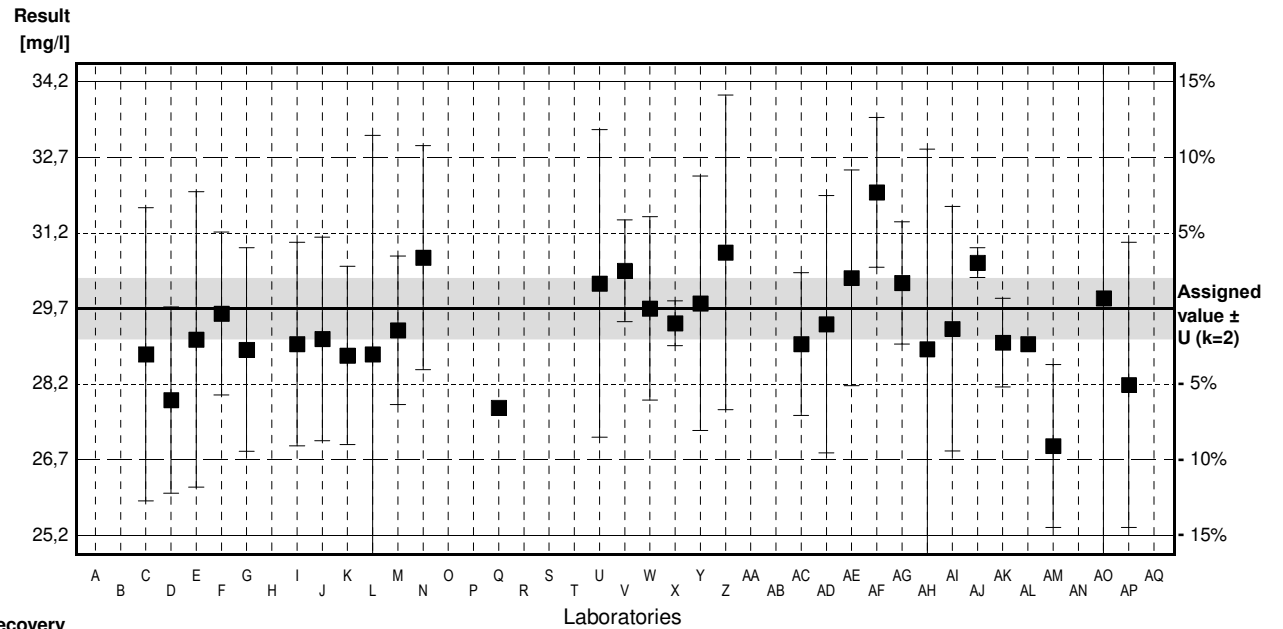
Sample N174B

Parameter Sulphate (as SO4)

Assigned value ± U (k=2) 29,7 mg/l ± 0,6 mg/l
 IFA result ± U (k=2) 29,5 mg/l ± 0,8 mg/l
 Stability test ± U (k=2) 29,1 mg/l ± 0,8 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|-------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 28.8 | 2.88 | mg/l | 97% | -1.01 |
| D | 27.9 | 1.83 | mg/l | 94% | -2.02 |
| E | 29.09 | 2.9 | mg/l | 98% | -0.68 |
| F | 29.6 | 1.6 | mg/l | 100% | -0.11 |
| G | 28.89 | 2 | mg/l | 97% | -0.91 |
| H | | | mg/l | | |
| I | 29.0 | 2 | mg/l | 98% | -0.79 |
| J | 29.1 | 2 | mg/l | 98% | -0.67 |
| K | 28.776 | 1.752 | mg/l | 97% | -1.04 |
| L | 28.8 | 4.3 | mg/l | 97% | -1.01 |
| M | 29.27 | 1.46 | mg/l | 99% | -0.48 |
| N | 30.7 | 2.2 | mg/l | 103% | 1.12 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 27.75 | | mg/l | 93% | -2.19 |
| R | 24.89 * | | mg/l | 84% | -5.40 |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 30.19 | 3.019 | mg/l | 102% | 0.55 |
| V | 30.44 | 1.00 | mg/l | 102% | 0.83 |
| W | 29.7 | 1.8 | mg/l | 100% | 0.00 |
| X | 29.41 | 0.44 | mg/l | 99% | -0.33 |
| Y | 29.8 | 2.5 | mg/l | 100% | 0.11 |
| Z | 30.801 | 3.09 | mg/l | 104% | 1.24 |
| AA | | | mg/l | | |
| AB | <40 | | mg/l | - | |
| AC | 29.0 | 1.4 | mg/l | 98% | -0.79 |
| AD | 29.39 | 2.528 | mg/l | 99% | -0.35 |
| AE | 30.3 | 2.12 | mg/l | 102% | 0.67 |
| AF | 31.98 * | 1.47 | mg/l | 108% | 2.56 |
| AG | 30.2 | 1.2 | mg/l | 102% | 0.56 |
| AH | 28.9 | 3.93 | mg/l | 97% | -0.90 |
| AI | 29.3 | 2.4 | mg/l | 99% | -0.45 |
| AJ | 30.6 | 0.29 | mg/l | 103% | 1.01 |
| AK | 29.03 | 0.87 | mg/l | 98% | -0.75 |
| AL | 29.0 | | mg/l | 98% | -0.79 |
| AM | 27.0 * | 1.6 | mg/l | 91% | -3.03 |
| AN | | | mg/l | | |
| AO | 29.9 | 4.8 | mg/l | 101% | 0.22 |
| AP | 28.2 | 2.8 | mg/l | 95% | -1.68 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 29,2 ± 0,6 | 29,4 ± 0,4 | mg/l |
| Recov. ± CI(99%) | 98,5 ± 2,1 | 98,9 ± 1,4 | % |
| SD between labs | 1,3 | 0,8 | mg/l |
| RSD between labs | 4,3 | 2,7 | % |
| n for calculation | 32 | 29 | |



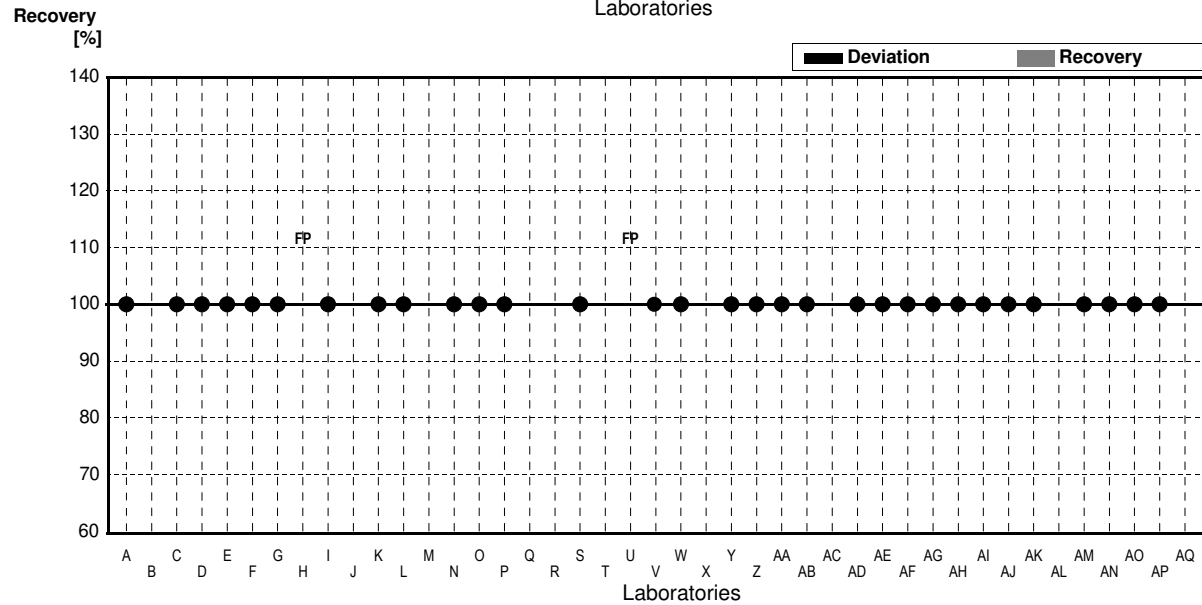
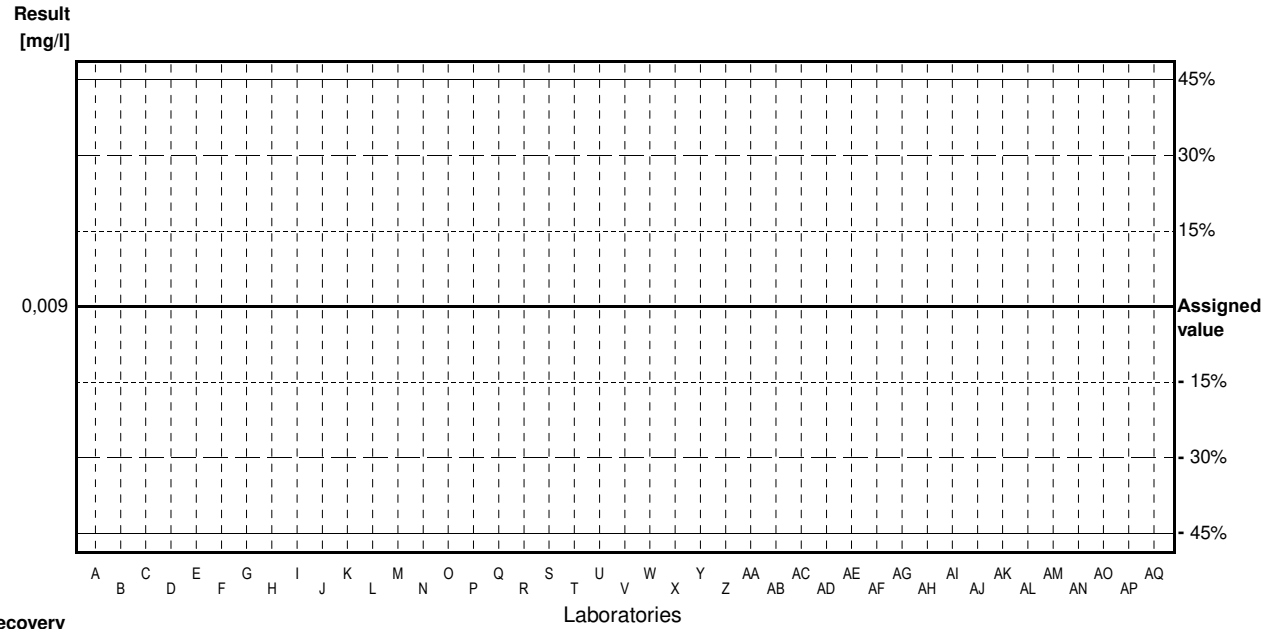
Sample N174A

Parameter Orthophosphate (as PO4)

Assigned 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 | <0.007 | | mg/l | • | |
| B | | | mg/l | • | |
| C | <0.01 | 0.0033 | mg/l | • | |
| D | <0.0150 | | mg/l | • | |
| E | <0.009 | | mg/l | • | |
| F | <0.006 | | mg/l | • | |
| G | 0.00307 | 0.0015 | mg/l | • | |
| H | 0.0105 | 0.00072 | mg/l | FP | |
| I | <0.01 | | mg/l | • | |
| J | | | mg/l | • | |
| K | <0.015 | | mg/l | • | |
| L | <0.1 | | mg/l | • | |
| M | | | mg/l | • | |
| N | <0.0090 | | mg/l | • | |
| O | <0.019 | | mg/l | • | |
| P | <0.01 | | mg/l | • | |
| Q | | | mg/l | • | |
| R | | | mg/l | • | |
| S | <0.04 | | mg/l | • | |
| T | | | mg/l | • | |
| U | 0.0120 | 0.00180 | mg/l | FP | |
| V | 0.0092 | 0.0011 | mg/l | • | |
| W | <0.03 | 0 | mg/l | • | |
| X | | | mg/l | • | |
| Y | <0.010 | | mg/l | • | |
| Z | <0.001 | | mg/l | • | |
| AA | <0.006 | | mg/l | • | |
| AB | <0.15 | | mg/l | • | |
| AC | | | mg/l | • | |
| AD | <0.010 | | mg/l | • | |
| AE | <0.015 | | mg/l | • | |
| AF | <0.0153 | | mg/l | • | |
| AG | <0.01 | | mg/l | • | |
| AH | <0.1 | | mg/l | • | |
| AI | <0.01 | | mg/l | • | |
| AJ | <0.009 | | mg/l | • | |
| AK | <0.005 | | mg/l | • | |
| AL | | | mg/l | • | |
| AM | <0.01 | | mg/l | • | |
| AN | <0.015 | | mg/l | • | |
| AO | <0.015 | | mg/l | • | |
| AP | <0.015 | | mg/l | • | |
| AQ | | | 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 | | | |



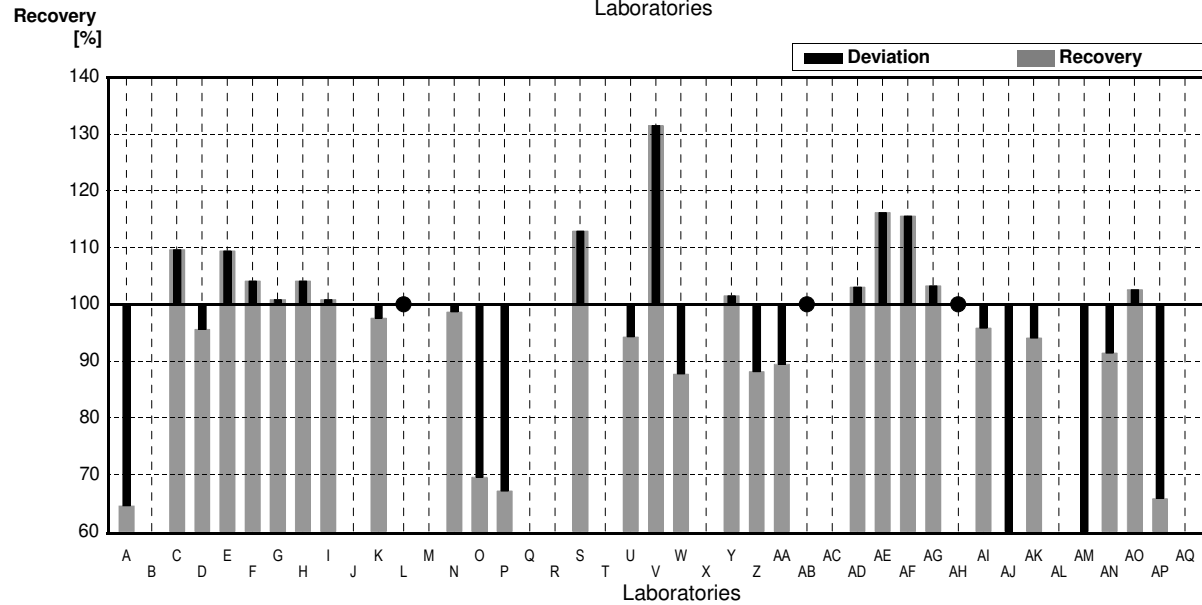
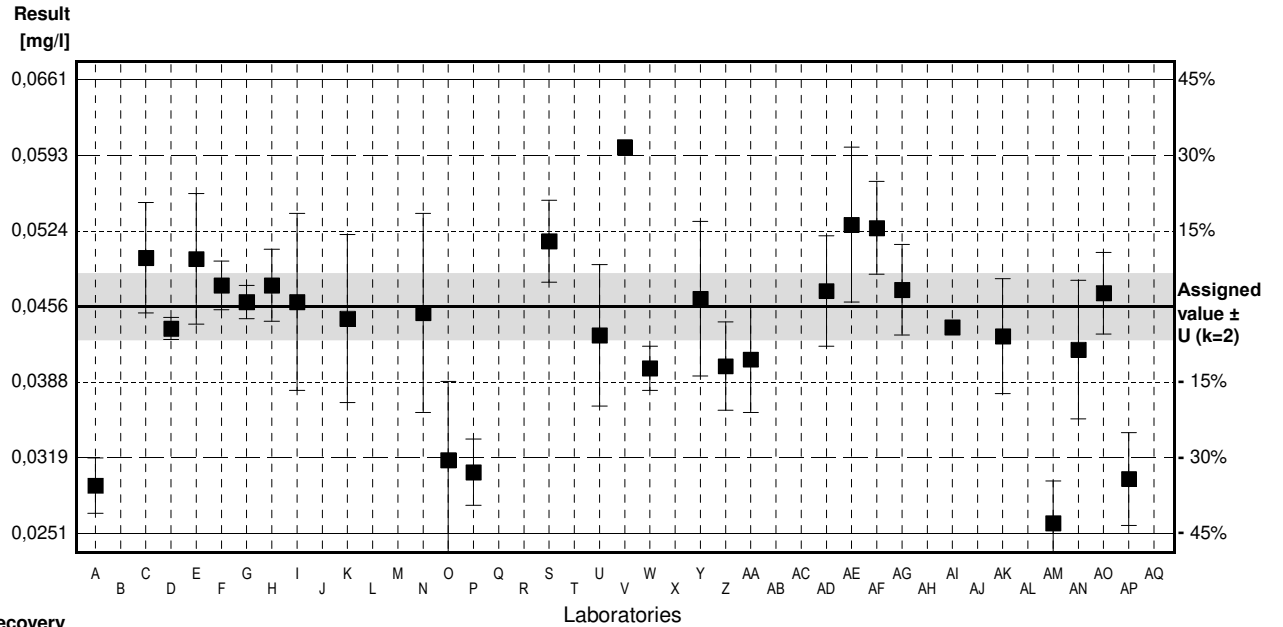
Sample N174B

Parameter Orthophosphate (as PO4)

Assigned value ± U (k=2) 0,0456 mg/l ± 0,0030 mg/l
 IFA result ± U (k=2) 0,0460 mg/l ± 0,0015 mg/l
 Stability test ± U (k=2) 0,0456 mg/l ± 0,0015 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|---------|
| A | 0.0294 | 0.0025 | mg/l | 64% | -3.86 |
| B | | | mg/l | | |
| C | 0.050 | 0.005 | mg/l | 110% | 1.05 |
| D | 0.0436 | 0.00099 | mg/l | 96% | -0.48 |
| E | 0.0499 | 0.0059 | mg/l | 109% | 1.02 |
| F | 0.0475 | 0.0022 | mg/l | 104% | 0.45 |
| G | 0.0460 | 0.0015 | mg/l | 101% | 0.10 |
| H | 0.0475 | 0.00326 | mg/l | 104% | 0.45 |
| I | 0.0460 | 0.008 | mg/l | 101% | 0.10 |
| J | | | mg/l | | |
| K | 0.0445 | 0.0076 | mg/l | 98% | -0.26 |
| L | <0.1 | | mg/l | * | |
| M | | | mg/l | | |
| N | 0.0450 | 0.0090 | mg/l | 99% | -0.14 |
| O | 0.0317 | 0.0071 | mg/l | 70% | -3.31 |
| P | 0.0306 | 0.0030 | mg/l | 67% | -3.58 |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | 0.0515 | 0.0037 | mg/l | 113% | 1.41 |
| T | | | mg/l | | |
| U | 0.0430 | 0.0064 | mg/l | 94% | -0.62 |
| V | 0.060 | 0.0 | mg/l | 132% | 3.43 |
| W | 0.0400 | 0.002 | mg/l | 88% | -1.33 |
| X | | | mg/l | | |
| Y | 0.0463 | 0.0070 | mg/l | 102% | 0.17 |
| Z | 0.0402 | 0.004 | mg/l | 88% | -1.29 |
| AA | 0.0408 | 0.0048 | mg/l | 89% | -1.14 |
| AB | <0.15 | | mg/l | * | |
| AC | | | mg/l | | |
| AD | 0.0470 | 0.005 | mg/l | 103% | 0.33 |
| AE | 0.053 | 0.007 | mg/l | 116% | 1.76 |
| AF | 0.0527 | 0.0042 | mg/l | 116% | 1.69 |
| AG | 0.0471 | 0.0041 | mg/l | 103% | 0.36 |
| AH | <0.1 | | mg/l | * | |
| AI | 0.0437 | | mg/l | 96% | -0.45 |
| AJ | 0.0245 * | 0.001 | mg/l | 54% | -5.03 |
| AK | 0.0429 | 0.0052 | mg/l | 94% | -0.64 |
| AL | | | mg/l | | |
| AM | 0.0260 * | 0.0038 | mg/l | 57% | -4.67 |
| AN | 0.0417 | 0.00626 | mg/l | 91% | -0.93 |
| AO | 0.0468 | 0.0037 | mg/l | 103% | 0.29 |
| AP | 0.0300 | 0.0042 | mg/l | 66% | -3.72 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-----------------|-----------------|------|
| Mean ± CI(99%) | 0,0430 ± 0,0043 | 0,0442 ± 0,0038 | mg/l |
| Recov. ± CI(99%) | 94,2 ± 9,3 | 97,0 ± 8,2 | % |
| SD between labs | 0,0084 | 0,0072 | mg/l |
| RSD between labs | 19,6 | 16,2 | % |
| n for calculation | 30 | 28 | |



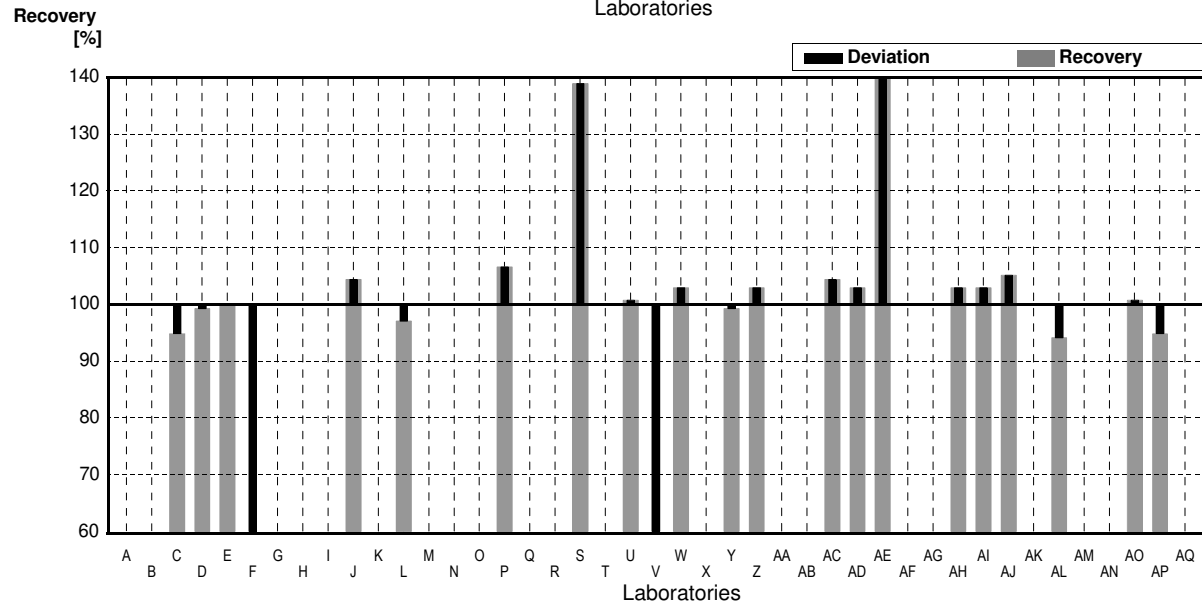
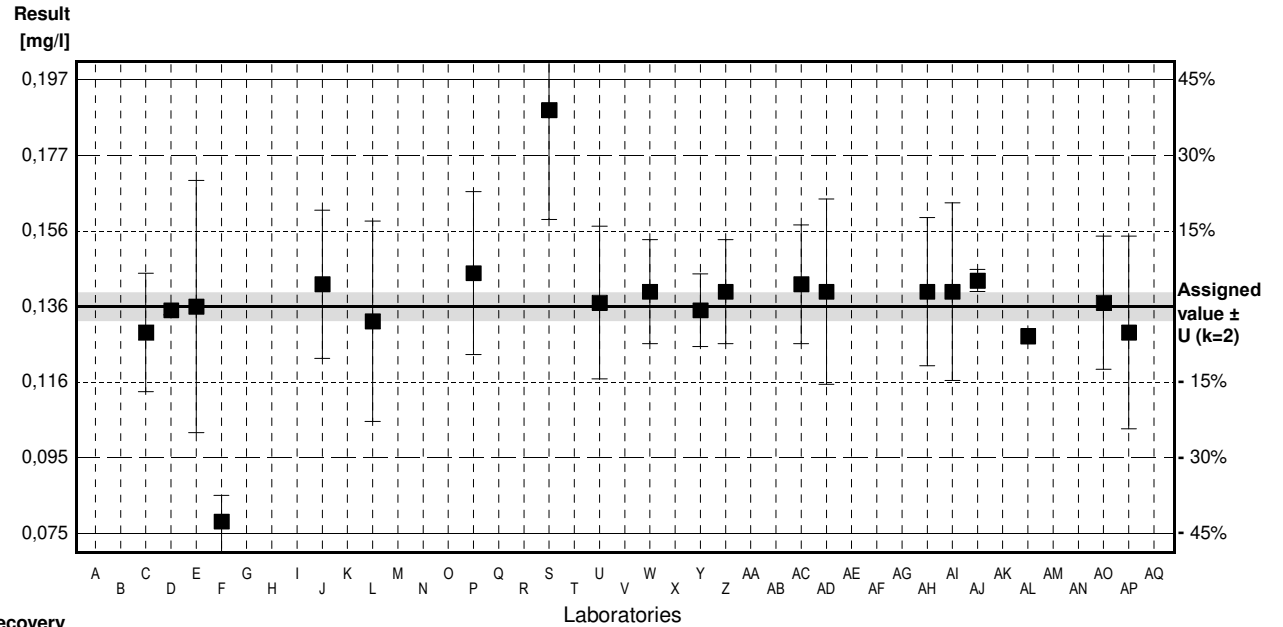
Sample N174A

Parameter Boron

Assigned value ± U (k=2) 0,136 mg/l ± 0,004 mg/l
 IFA result ± U (k=2) 0,135 mg/l ± 0,012 mg/l
 Stability test ± U (k=2) 0,129 mg/l ± 0,011 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|----------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 0.129 | 0.016 | mg/l | 95% | -0.72 |
| D | 0.135 | 0.00132 | mg/l | 99% | -0.10 |
| E | 0.136 | 0.034 | mg/l | 100% | 0.00 |
| F | 0.0780 * | 0.0070 | mg/l | 57% | -6.01 |
| G | | | mg/l | | |
| H | | | mg/l | | |
| I | | | mg/l | | |
| J | 0.142 | 0.02 | mg/l | 104% | 0.62 |
| K | | | mg/l | | |
| L | 0.132 | 0.027 | mg/l | 97% | -0.41 |
| M | | | mg/l | | |
| N | | | mg/l | | |
| O | | | mg/l | | |
| P | 0.145 | 0.022 | mg/l | 107% | 0.93 |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | 0.189 * | 0.0295 | mg/l | 139% | 5.49 |
| T | | | mg/l | | |
| U | 0.137 | 0.0206 | mg/l | 101% | 0.10 |
| V | 0.0155 * | 0.00071 | mg/l | 11% | -12.48 |
| W | 0.140 | 0.014 | mg/l | 103% | 0.41 |
| X | | | mg/l | | |
| Y | 0.135 | 0.0098 | mg/l | 99% | -0.10 |
| Z | 0.140 | 0.014 | mg/l | 103% | 0.41 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 0.142 | 0.016 | mg/l | 104% | 0.62 |
| AD | 0.140 | 0.025 | mg/l | 103% | 0.41 |
| AE | 132 * | 15.8 | mg/l | 97059% | 13656.17 |
| AF | | | mg/l | | |
| AG | | | mg/l | | |
| AH | 0.140 | 0.02 | mg/l | 103% | 0.41 |
| AI | 0.140 | 0.024 | mg/l | 103% | 0.41 |
| AJ | 0.143 | 0.003 | mg/l | 105% | 0.72 |
| AK | | | mg/l | | |
| AL | 0.128 | | mg/l | 94% | -0.83 |
| AM | | | mg/l | | |
| AN | | | mg/l | | |
| AO | 0.137 | 0.018 | mg/l | 101% | 0.10 |
| AP | 0.129 | 0.026 | mg/l | 95% | -0.72 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-----------------|----------------|------|
| Mean ± CI(99%) | 6,125 ± 16,963 | 0,137 ± 0,003 | mg/l |
| Recov. ± CI(99%) | 4503,8 ± 12472, | 100,9 ± 2,5 | % |
| SD between labs | 28,115 | 0,005 | mg/l |
| RSD between labs | 459,0 | 3,7 | % |
| n for calculation | 22 | 18 | |



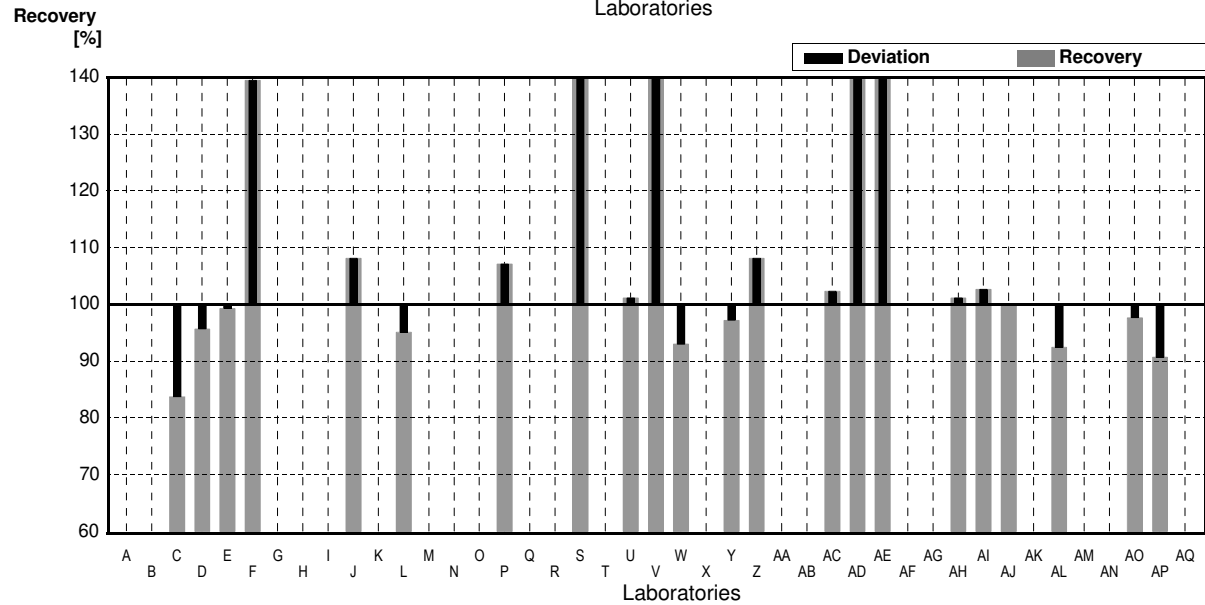
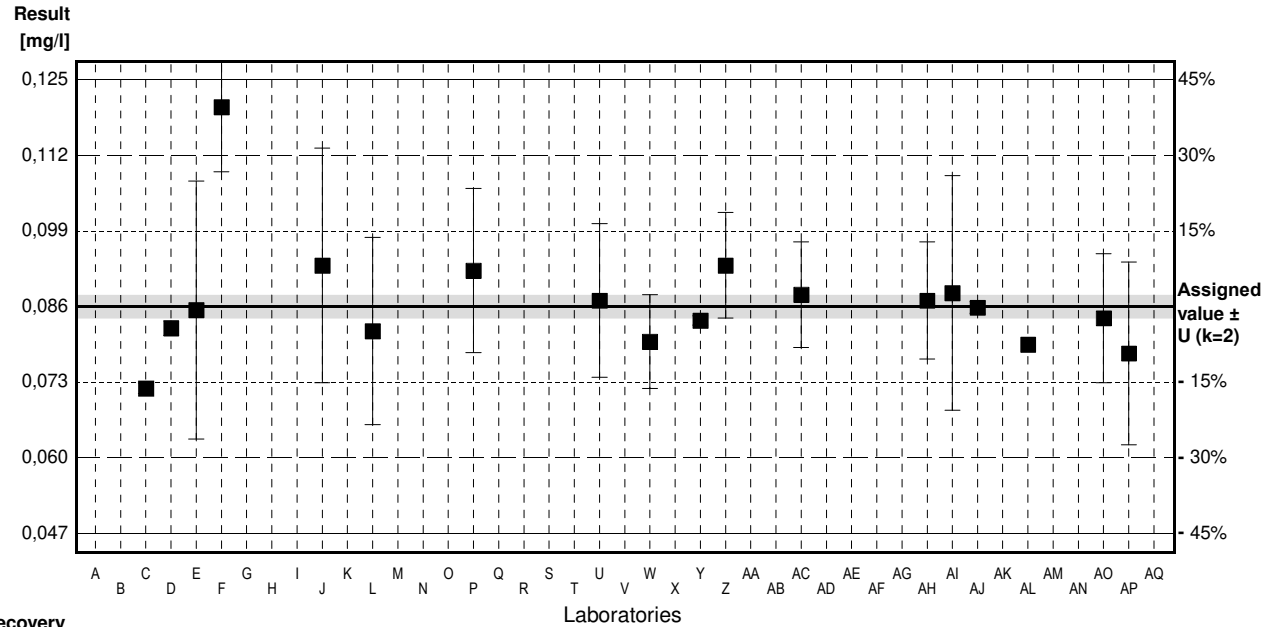
Sample N174B

Parameter Boron

Assigned value ± U (k=2) 0,086 mg/l ± 0,002 mg/l
 IFA result ± U (k=2) 0,086 mg/l ± 0,007 mg/l
 Stability test ± U (k=2) 0,081 mg/l ± 0,007 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|----------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 0.072 | 0.0009 | mg/l | 84% | -2.29 |
| D | 0.0823 | 0.00122 | mg/l | 96% | -0.61 |
| E | 0.0854 | 0.022 | mg/l | 99% | -0.10 |
| F | 0.120 * | 0.011 | mg/l | 140% | 5.57 |
| G | | | mg/l | | |
| H | | | mg/l | | |
| I | | | mg/l | | |
| J | 0.093 | 0.02 | mg/l | 108% | 1.15 |
| K | | | mg/l | | |
| L | 0.0818 | 0.016 | mg/l | 95% | -0.69 |
| M | | | mg/l | | |
| N | | | mg/l | | |
| O | | | mg/l | | |
| P | 0.0921 | 0.014 | mg/l | 107% | 1.00 |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | 0.1455 * | 0.0227 | mg/l | 169% | 9.74 |
| T | | | mg/l | | |
| U | 0.087 | 0.0131 | mg/l | 101% | 0.16 |
| V | 7.00 * | 1.41 | mg/l | 8140% | 1132.33 |
| W | 0.080 | 0.008 | mg/l | 93% | -0.98 |
| X | | | mg/l | | |
| Y | 0.0836 | 0.0008 | mg/l | 97% | -0.39 |
| Z | 0.093 | 0.009 | mg/l | 108% | 1.15 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 0.088 | 0.009 | mg/l | 102% | 0.33 |
| AD | 89.24 * | 16 | mg/l | 103767% | 14601.05 |
| AE | 81.4 * | 9.77 | mg/l | 94651% | 13317.07 |
| AF | | | mg/l | | |
| AG | | | mg/l | | |
| AH | 0.087 | 0.01 | mg/l | 101% | 0.16 |
| AI | 0.0883 | 0.02 | mg/l | 103% | 0.38 |
| AJ | 0.0858 | 0.001 | mg/l | 100% | -0.03 |
| AK | | | mg/l | | |
| AL | 0.0795 | | mg/l | 92% | -1.06 |
| AM | | | mg/l | | |
| AN | | | mg/l | | |
| AO | 0.0840 | 0.011 | mg/l | 98% | -0.33 |
| AP | 0.0780 | 0.0156 | mg/l | 91% | -1.31 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-----------------|----------------|------|
| Mean ± CI(99%) | 8,152 ± 15,114 | 0,085 ± 0,004 | mg/l |
| Recov. ± CI(99%) | 9479,2 ± 17574, | 98,5 ± 4,6 | % |
| SD between labs | 25,049 | 0,006 | mg/l |
| RSD between labs | 307,3 | 6,6 | % |
| n for calculation | 22 | 17 | |



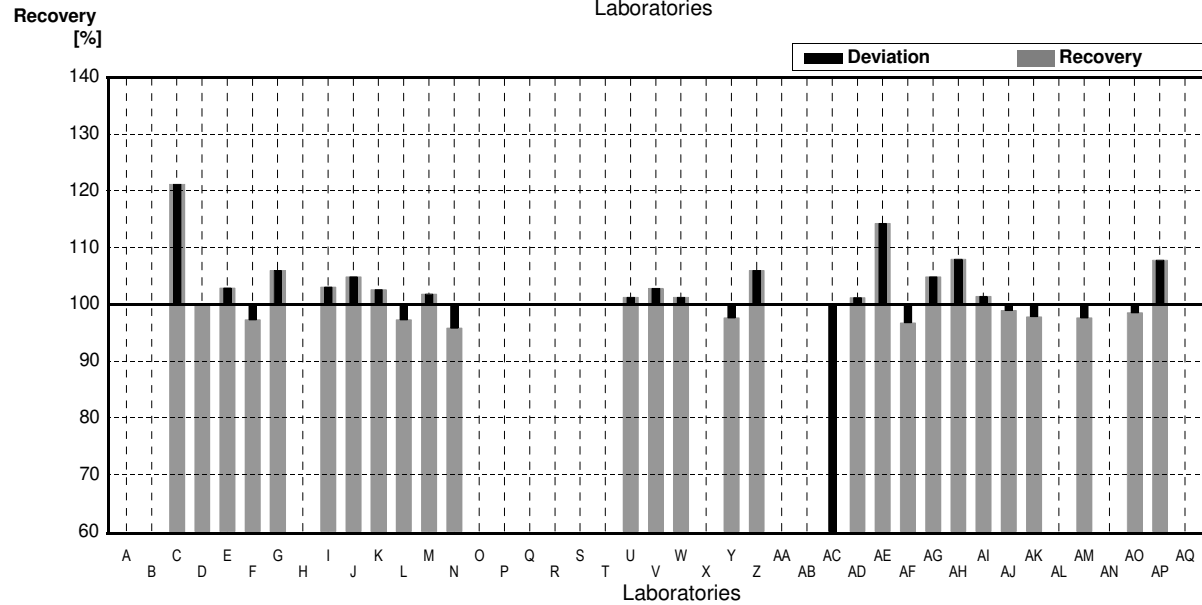
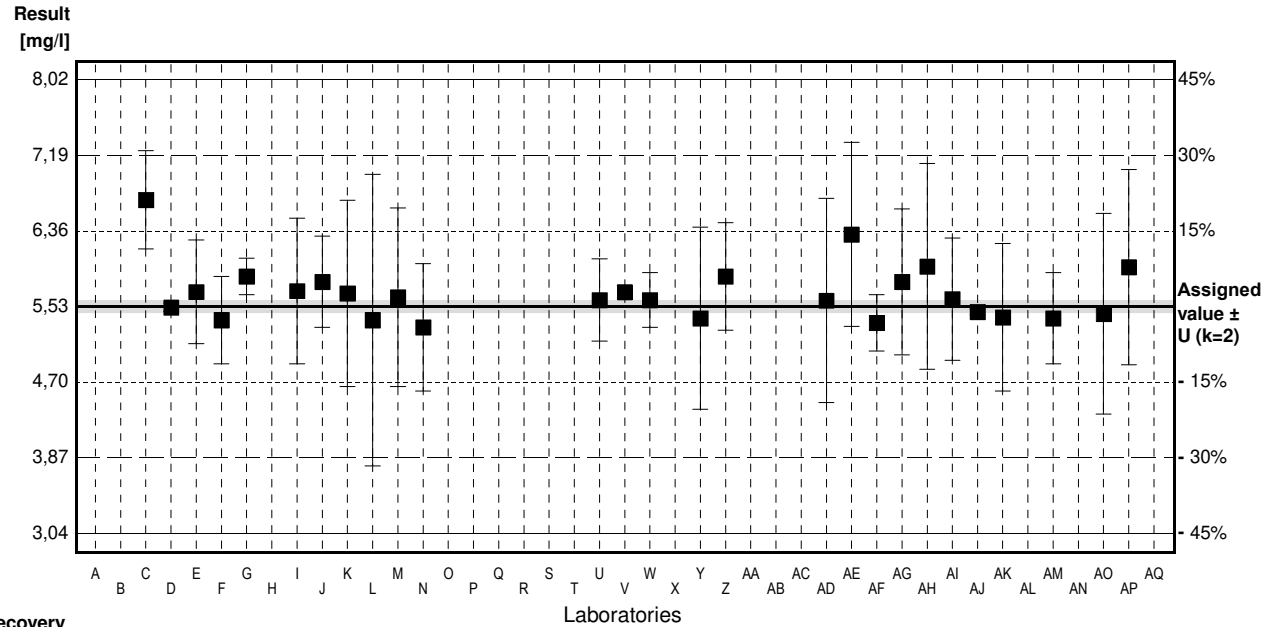
Sample N174A

Parameter DOC (as C)

Assigned value ± U (k=2) 5,53 mg/l ± 0,07 mg/l
 IFA result ± U (k=2) 5,42 mg/l ± 0,11 mg/l
 Stability test ± U (k=2) 5,49 mg/l ± 0,11 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|---------|--------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 6.7 * | 0.54 | mg/l | 121% | 3.92 |
| D | 5.52 | 0.0457 | mg/l | 100% | -0.03 |
| E | 5.69 | 0.57 | mg/l | 103% | 0.54 |
| F | 5.38 | 0.48 | mg/l | 97% | -0.50 |
| G | 5.86 | 0.2 | mg/l | 106% | 1.11 |
| H | | | mg/l | | |
| I | 5.70 | 0.8 | mg/l | 103% | 0.57 |
| J | 5.8 | 0.5 | mg/l | 105% | 0.90 |
| K | 5.673 | 1.021 | mg/l | 103% | 0.48 |
| L | 5.38 | 1.6 | mg/l | 97% | -0.50 |
| M | 5.631 | 0.98 | mg/l | 102% | 0.34 |
| N | 5.3 | 0.7 | mg/l | 96% | -0.77 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 5.60 | 0.45 | mg/l | 101% | 0.23 |
| V | 5.688 | 0.068 | mg/l | 103% | 0.53 |
| W | 5.6 | 0.3 | mg/l | 101% | 0.23 |
| X | | | mg/l | | |
| Y | 5.4 | 1.0 | mg/l | 98% | -0.44 |
| Z | 5.86 | 0.59 | mg/l | 106% | 1.11 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 0.489 * | 0.080 | mg/l | 9% | -16.88 |
| AD | 5.595 | 1.119 | mg/l | 101% | 0.22 |
| AE | 6.32 | 1.01 | mg/l | 114% | 2.65 |
| AF | 5.35 | 0.31 | mg/l | 97% | -0.60 |
| AG | 5.8 | 0.8 | mg/l | 105% | 0.90 |
| AH | 5.97 | 1.13 | mg/l | 108% | 1.47 |
| AI | 5.61 | 0.67 | mg/l | 101% | 0.27 |
| AJ | 5.47 | 0.031 | mg/l | 99% | -0.20 |
| AK | 5.41 | 0.81 | mg/l | 98% | -0.40 |
| AL | | | mg/l | | |
| AM | 5.4 | 0.50 | mg/l | 98% | -0.44 |
| AN | | | mg/l | | |
| AO | 5.45 | 1.1 | mg/l | 99% | -0.27 |
| AP | 5.96 | 1.07 | mg/l | 108% | 1.44 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 5,49 ± 0,54 | 5,63 ± 0,13 | mg/l |
| Recov. ± CI(99%) | 99,2 ± 9,7 | 101,8 ± 2,4 | % |
| SD between labs | 1,03 | 0,24 | mg/l |
| RSD between labs | 18,7 | 4,2 | % |
| n for calculation | 28 | 26 | |



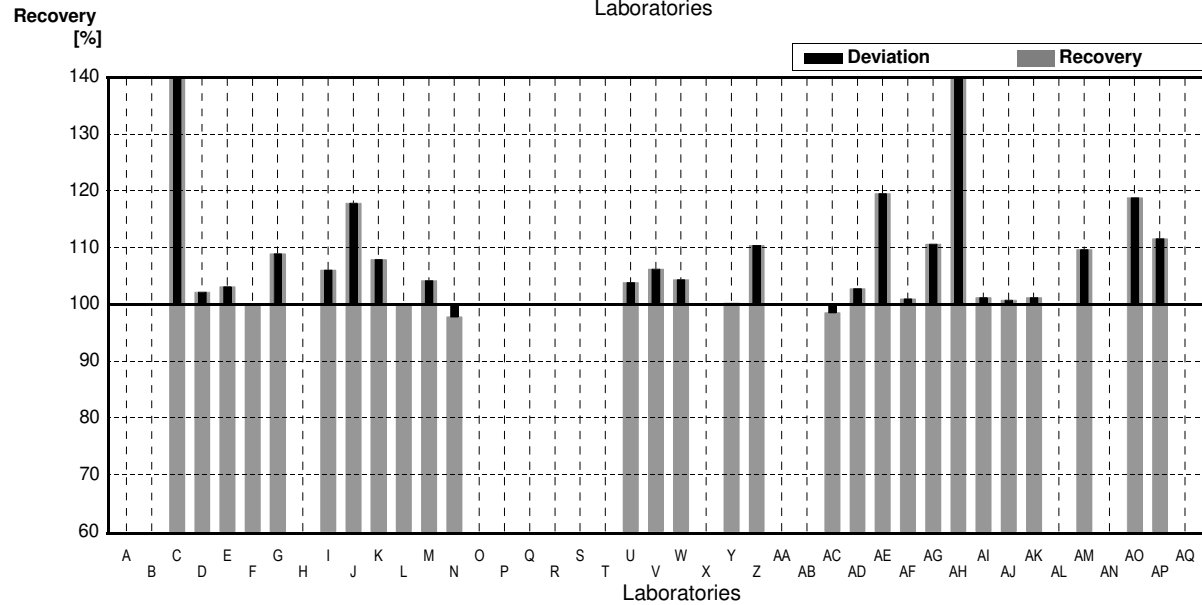
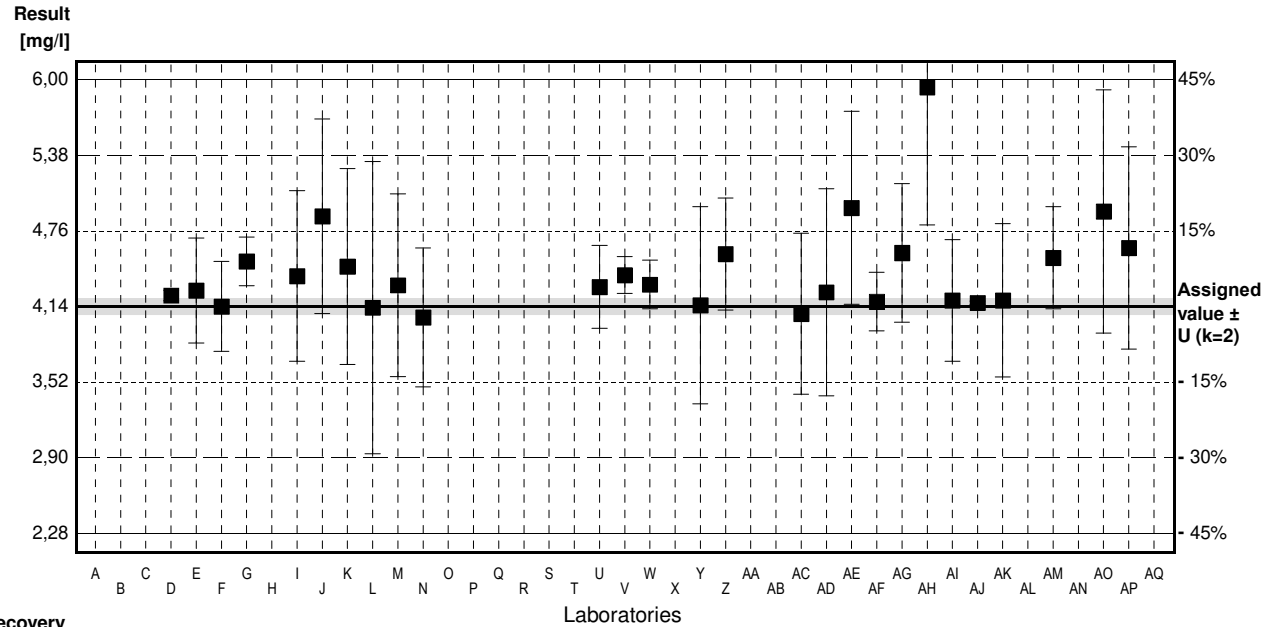
Sample N174B

Parameter DOC (as C)

Assigned value ± U (k=2) 4,14 mg/l ± 0,07 mg/l
 IFA result ± U (k=2) 4,18 mg/l ± 0,09 mg/l
 Stability test ± U (k=2) 4,22 mg/l ± 0,09 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|--------|------|----------|---------|
| A | | | mg/l | | |
| B | | | mg/l | | |
| C | 7.7 * | 0.62 | mg/l | 186% | 15.92 |
| D | 4.23 | 0.0438 | mg/l | 102% | 0.40 |
| E | 4.27 | 0.43 | mg/l | 103% | 0.58 |
| F | 4.14 | 0.37 | mg/l | 100% | 0.00 |
| G | 4.51 | 0.2 | mg/l | 109% | 1.66 |
| H | | | mg/l | | |
| I | 4.39 | 0.7 | mg/l | 106% | 1.12 |
| J | 4.88 | 0.8 | mg/l | 118% | 3.31 |
| K | 4.467 | 0.804 | mg/l | 108% | 1.46 |
| L | 4.13 | 1.2 | mg/l | 100% | -0.04 |
| M | 4.314 | 0.75 | mg/l | 104% | 0.78 |
| N | 4.05 | 0.57 | mg/l | 98% | -0.40 |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 4.30 | 0.34 | mg/l | 104% | 0.72 |
| V | 4.398 | 0.15 | mg/l | 106% | 1.15 |
| W | 4.32 | 0.2 | mg/l | 104% | 0.81 |
| X | | | mg/l | | |
| Y | 4.15 | 0.81 | mg/l | 100% | 0.04 |
| Z | 4.57 | 0.46 | mg/l | 110% | 1.92 |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | 4.08 | 0.66 | mg/l | 99% | -0.27 |
| AD | 4.256 | 0.851 | mg/l | 103% | 0.52 |
| AE | 4.95 | 0.792 | mg/l | 120% | 3.62 |
| AF | 4.18 | 0.24 | mg/l | 101% | 0.18 |
| AG | 4.58 | 0.57 | mg/l | 111% | 1.97 |
| AH | 5.94 * | 1.13 | mg/l | 143% | 8.05 |
| AI | 4.19 | 0.50 | mg/l | 101% | 0.22 |
| AJ | 4.17 | 0.015 | mg/l | 101% | 0.13 |
| AK | 4.19 | 0.63 | mg/l | 101% | 0.22 |
| AL | | | mg/l | | |
| AM | 4.54 | 0.42 | mg/l | 110% | 1.79 |
| AN | | | mg/l | | |
| AO | 4.92 | 1.0 | mg/l | 119% | 3.49 |
| AP | 4.62 | 0.83 | mg/l | 112% | 2.15 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 4,55 ± 0,38 | 4,38 ± 0,14 | mg/l |
| Recov. ± CI(99%) | 109,9 ± 9,2 | 105,7 ± 3,4 | % |
| SD between labs | 0,73 | 0,26 | mg/l |
| RSD between labs | 16,0 | 5,9 | % |
| n for calculation | 28 | 26 | |



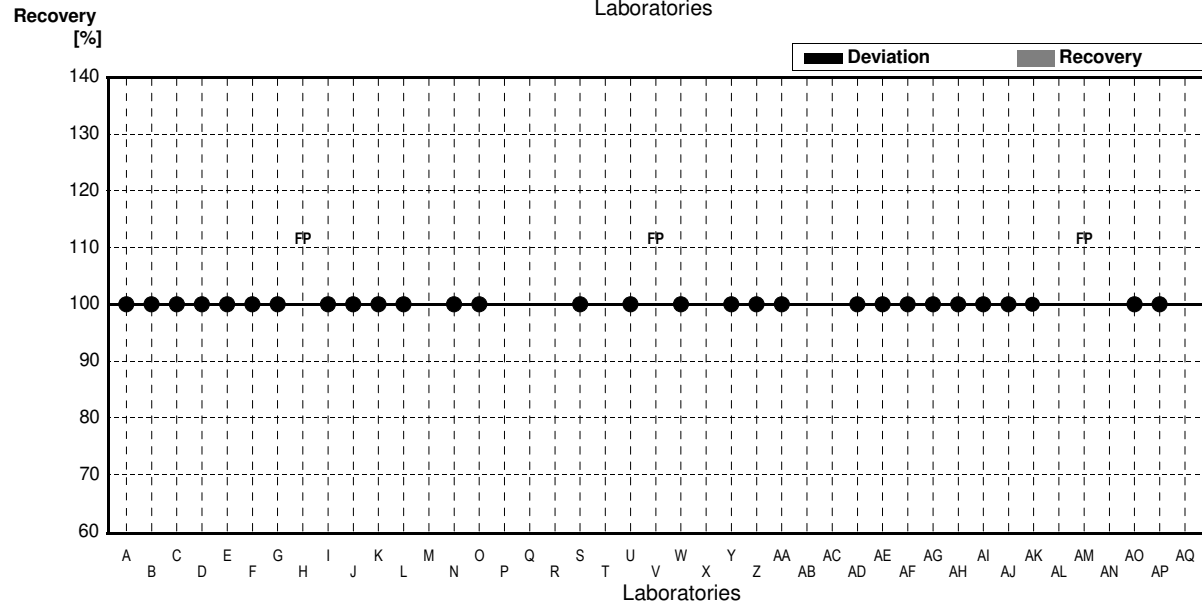
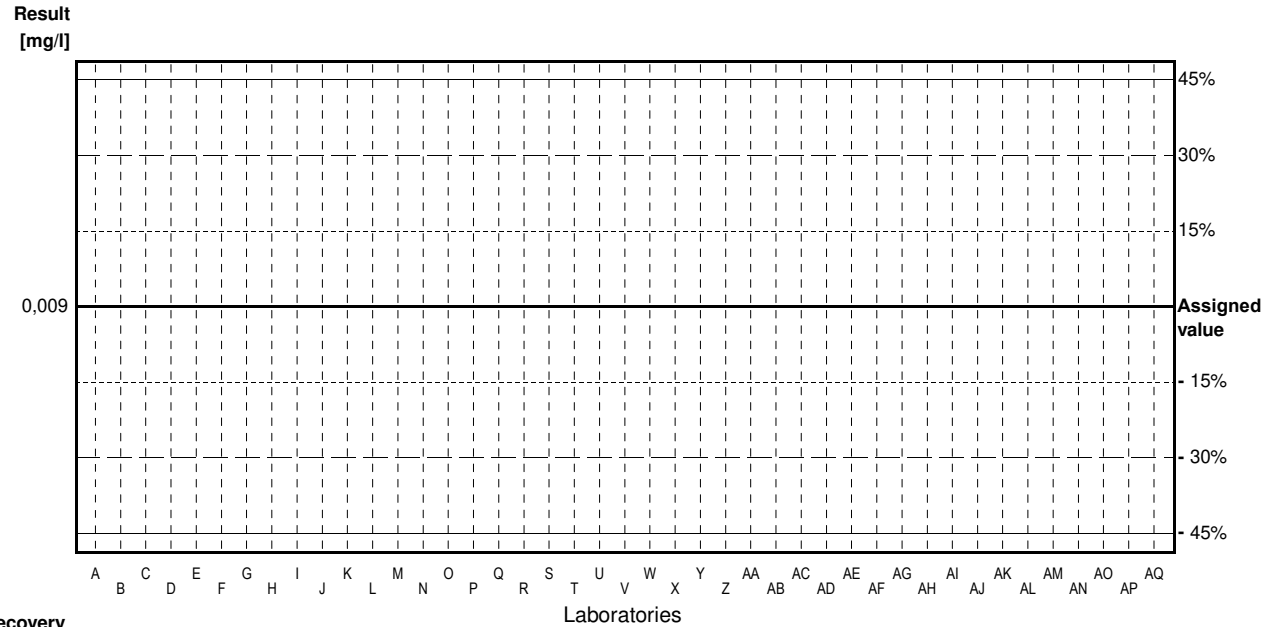
Sample N174A

Parameter Total P (as PO4)

Assigned 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 | <0.005 | | mg/l | • | |
| B | 0.0060 | 0.00037 | mg/l | • | |
| C | <0.01 | 0.0033 | mg/l | • | |
| D | <0.0150 | | mg/l | • | |
| E | <0.009 | | mg/l | • | |
| F | <0.006 | | mg/l | • | |
| G | <0.0092 | 0.0046 | mg/l | • | |
| H | 0.0405 | 0.00488 | mg/l | FP | |
| I | <0.013 | | mg/l | • | |
| J | <0.20 | | mg/l | • | |
| K | <0.015 | | mg/l | • | |
| L | <0.031 | | mg/l | • | |
| M | | | mg/l | | |
| N | <0.0090 | | mg/l | • | |
| O | <0.02 | | mg/l | • | |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | <0.0004 | | mg/l | • | |
| T | | | mg/l | | |
| U | <0.01533 | | mg/l | • | |
| V | 0.0250 | 0.007 | mg/l | FP | |
| W | <0.03 | 0 | mg/l | • | |
| X | | | mg/l | | |
| Y | <0.010 | | mg/l | • | |
| Z | <0.0032 | | mg/l | • | |
| AA | <0.006 | | mg/l | • | |
| AB | | | mg/l | | |
| AC | | | mg/l | | |
| AD | <0.010 | | mg/l | • | |
| AE | <0.015 | | mg/l | • | |
| AF | <0.0153 | | mg/l | • | |
| AG | <0.1 | | mg/l | • | |
| AH | <0.03 | 0.01 | mg/l | • | |
| AI | <0.031 | | mg/l | • | |
| AJ | <0.009 | | mg/l | • | |
| AK | 0.0092 | 0.0015 | mg/l | • | |
| AL | | | mg/l | | |
| AM | 0.050 | 0.0065 | mg/l | FP | |
| AN | | | mg/l | | |
| AO | <0.015 | | mg/l | • | |
| AP | <0.015 | | mg/l | • | |
| AQ | | | 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 | | | |



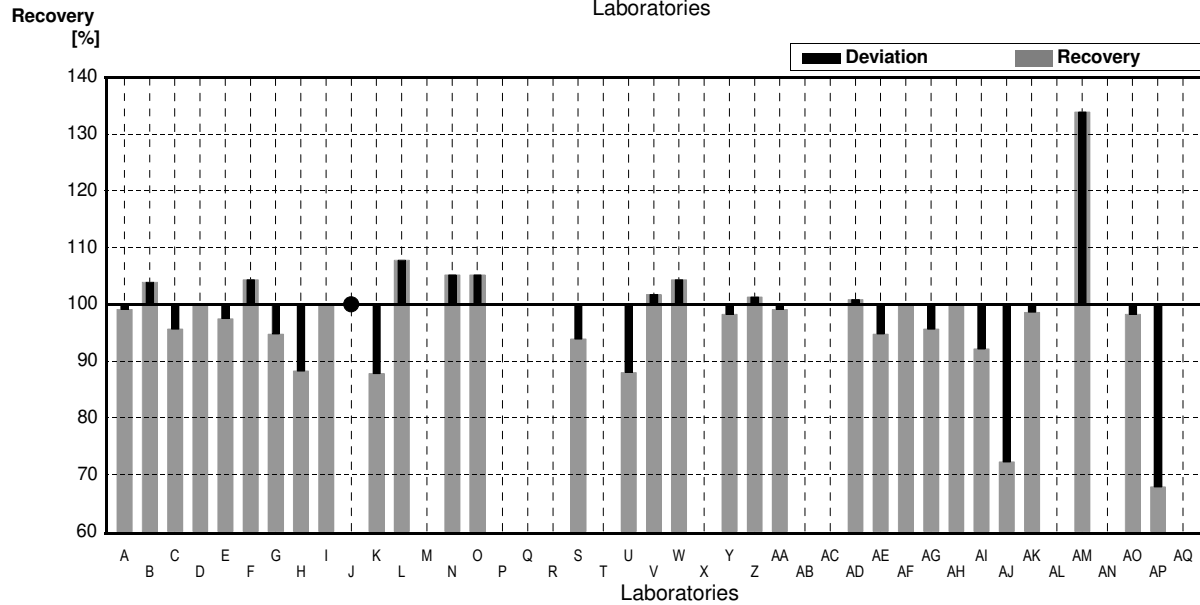
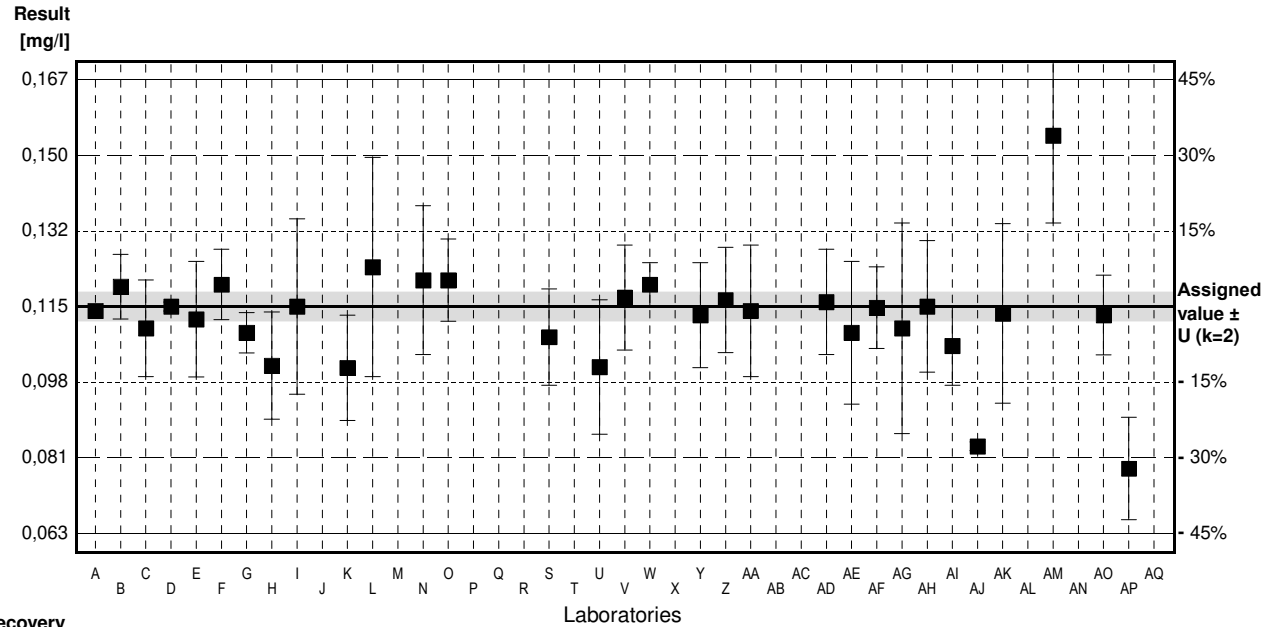
Sample N174B

Parameter Total P (as PO4)

Assigned value ± U (k=2) 0,115 mg/l ± 0,003 mg/l
 IFA result ± U (k=2) 0,124 mg/l ± 0,021 mg/l
 Stability test ± U (k=2) 0,119 mg/l ± 0,020 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|----------|---------|------|----------|---------|
| A | 0.114 | | mg/l | 99% | -0.10 |
| B | 0.1195 | 0.0074 | mg/l | 104% | 0.43 |
| C | 0.110 | 0.011 | mg/l | 96% | -0.48 |
| D | 0.115 | 0.00101 | mg/l | 100% | 0.00 |
| E | 0.1121 | 0.0132 | mg/l | 97% | -0.28 |
| F | 0.120 | 0.008 | mg/l | 104% | 0.48 |
| G | 0.109 | 0.0046 | mg/l | 95% | -0.57 |
| H | 0.1015 | 0.01223 | mg/l | 88% | -1.29 |
| I | 0.115 | 0.02 | mg/l | 100% | 0.00 |
| J | <0.20 | | mg/l | * | |
| K | 0.101 | 0.012 | mg/l | 88% | -1.34 |
| L | 0.124 | 0.025 | mg/l | 108% | 0.86 |
| M | | | mg/l | | |
| N | 0.121 | 0.017 | mg/l | 105% | 0.57 |
| O | 0.121 | 0.0094 | mg/l | 105% | 0.57 |
| P | | | mg/l | | |
| Q | | | mg/l | | |
| R | | | mg/l | | |
| S | 0.108 | 0.011 | mg/l | 94% | -0.67 |
| T | | | mg/l | | |
| U | 0.1012 | 0.01533 | mg/l | 88% | -1.32 |
| V | 0.117 | 0.012 | mg/l | 102% | 0.19 |
| W | 0.120 | 0.005 | mg/l | 104% | 0.48 |
| X | | | mg/l | | |
| Y | 0.113 | 0.012 | mg/l | 98% | -0.19 |
| Z | 0.1165 | 0.012 | mg/l | 101% | 0.14 |
| AA | 0.114 | 0.015 | mg/l | 99% | -0.10 |
| AB | | | mg/l | | |
| AC | | | mg/l | | |
| AD | 0.116 | 0.012 | mg/l | 101% | 0.10 |
| AE | 0.109 | 0.0163 | mg/l | 95% | -0.57 |
| AF | 0.1147 | 0.0093 | mg/l | 100% | -0.03 |
| AG | 0.110 | 0.024 | mg/l | 96% | -0.48 |
| AH | 0.115 | 0.015 | mg/l | 100% | 0.00 |
| AI | 0.106 | 0.009 | mg/l | 92% | -0.86 |
| AJ | 0.0831 * | 0.001 | mg/l | 72% | -3.05 |
| AK | 0.1134 | 0.0205 | mg/l | 99% | -0.15 |
| AL | | | mg/l | | |
| AM | 0.154 * | 0.020 | mg/l | 134% | 3.73 |
| AN | | | mg/l | | |
| AO | 0.113 | 0.0091 | mg/l | 98% | -0.19 |
| AP | 0.0780 * | 0.0117 | mg/l | 68% | -3.54 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|---------------|----------------|------|
| Mean ± CI(99%) | 0,112 ± 0,006 | 0,113 ± 0,003 | mg/l |
| Recov. ± CI(99%) | 97,8 ± 5,4 | 98,4 ± 2,7 | % |
| SD between labs | 0,013 | 0,006 | mg/l |
| RSD between labs | 11,2 | 5,3 | % |
| n for calculation | 31 | 28 | |



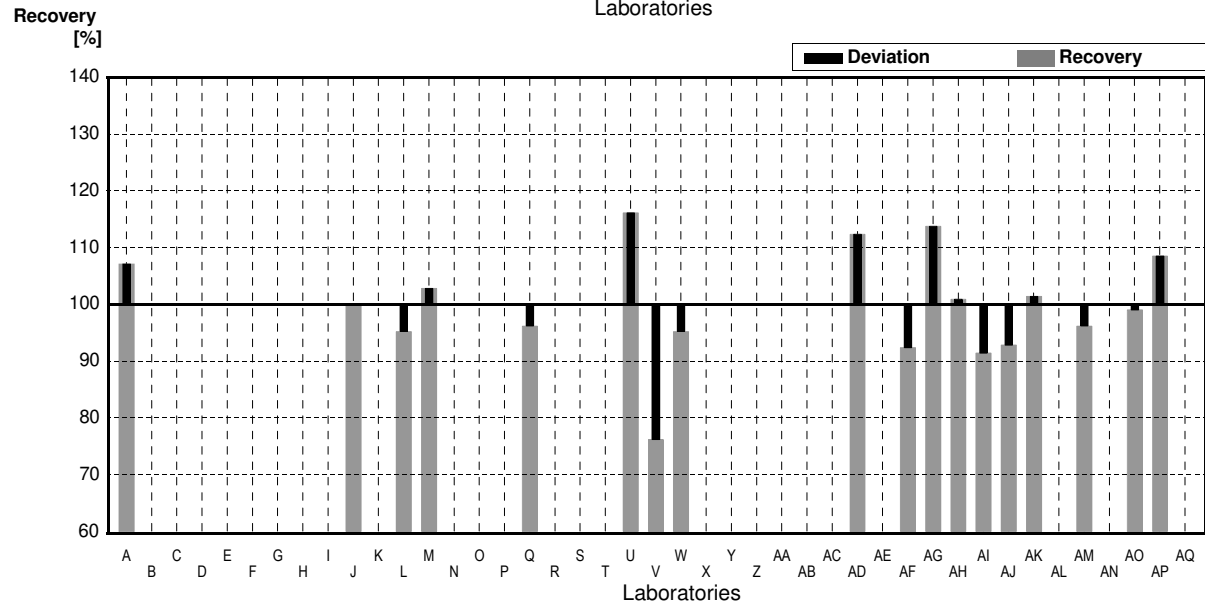
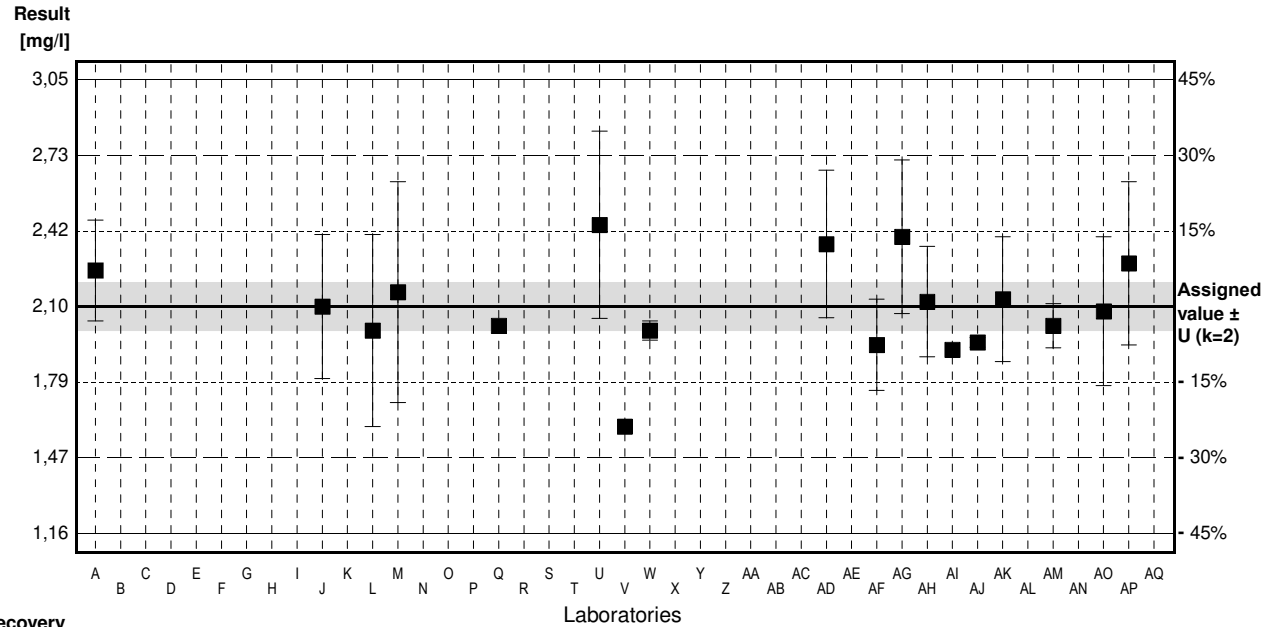
Sample N174A

Parameter KMnO4-Index (as O2)

Assigned value ± U (k=2) 2,10 mg/l ± 0,10 mg/l
 IFA result ± U (k=2) 2,30 mg/l ± 0,23 mg/l
 Stability test ± U (k=2) 2,37 mg/l ± 0,24 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 2,25 | 0,21 | mg/l | 107% | 0,87 |
| B | | | mg/l | | |
| C | | | mg/l | | |
| D | | | mg/l | | |
| E | | | mg/l | | |
| F | | | mg/l | | |
| G | | | mg/l | | |
| H | | | mg/l | | |
| I | | | mg/l | | |
| J | 2,10 | 0,3 | mg/l | 100% | 0,00 |
| K | | | mg/l | | |
| L | 2,00 | 0,4 | mg/l | 95% | -0,58 |
| M | 2,16 | 0,46 | mg/l | 103% | 0,35 |
| N | | | mg/l | | |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 2,02 | | mg/l | 96% | -0,46 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 2,44 | 0,390 | mg/l | 116% | 1,97 |
| V | 1,60 | 0,0 | mg/l | 76% | -2,90 |
| W | 2,00 | 0,04 | mg/l | 95% | -0,58 |
| X | | | mg/l | | |
| Y | | | mg/l | | |
| Z | | | mg/l | | |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | | | mg/l | | |
| AD | 2,36 | 0,307 | mg/l | 112% | 1,51 |
| AE | | | mg/l | | |
| AF | 1,94 | 0,19 | mg/l | 92% | -0,93 |
| AG | 2,39 | 0,32 | mg/l | 114% | 1,68 |
| AH | 2,12 | 0,23 | mg/l | 101% | 0,12 |
| AI | 1,92 | | mg/l | 91% | -1,05 |
| AJ | 1,95 | 0,020 | mg/l | 93% | -0,87 |
| AK | 2,13 | 0,26 | mg/l | 101% | 0,17 |
| AL | | | mg/l | | |
| AM | 2,02 | 0,092 | mg/l | 96% | -0,46 |
| AN | | | mg/l | | |
| AO | 2,08 | 0,31 | mg/l | 99% | -0,12 |
| AP | 2,28 | 0,34 | mg/l | 109% | 1,05 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 2,10 ± 0,14 | 2,10 ± 0,14 | mg/l |
| Recov. ± CI(99%) | 99,9 ± 6,6 | 99,9 ± 6,6 | % |
| SD between labs | 0,20 | 0,20 | mg/l |
| RSD between labs | 9,6 | 9,6 | % |
| n for calculation | 18 | 18 | |



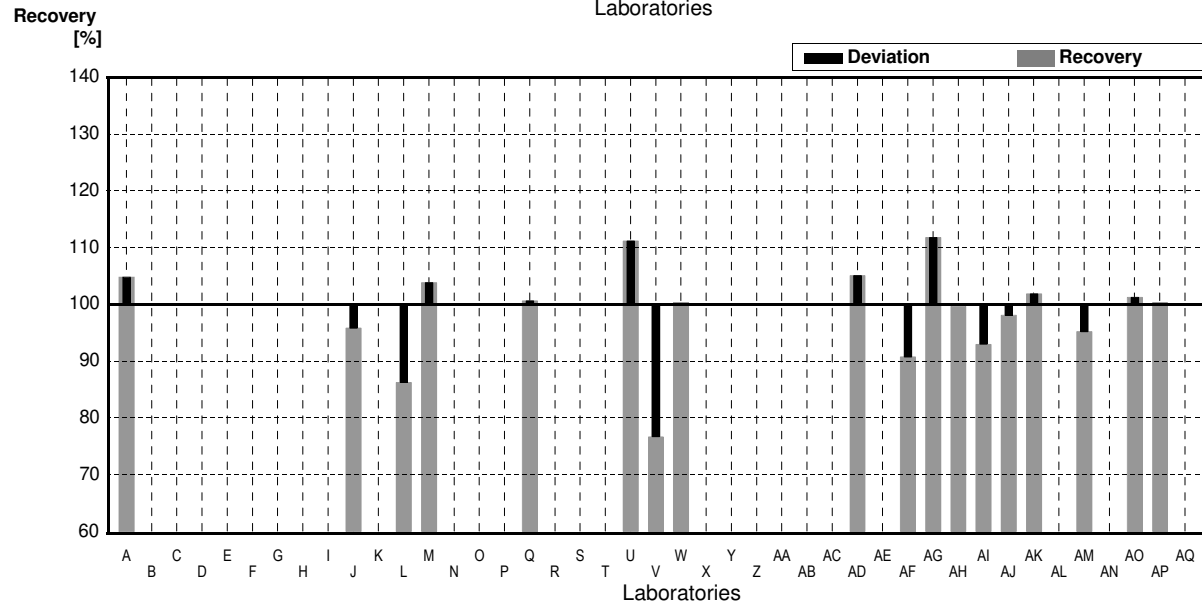
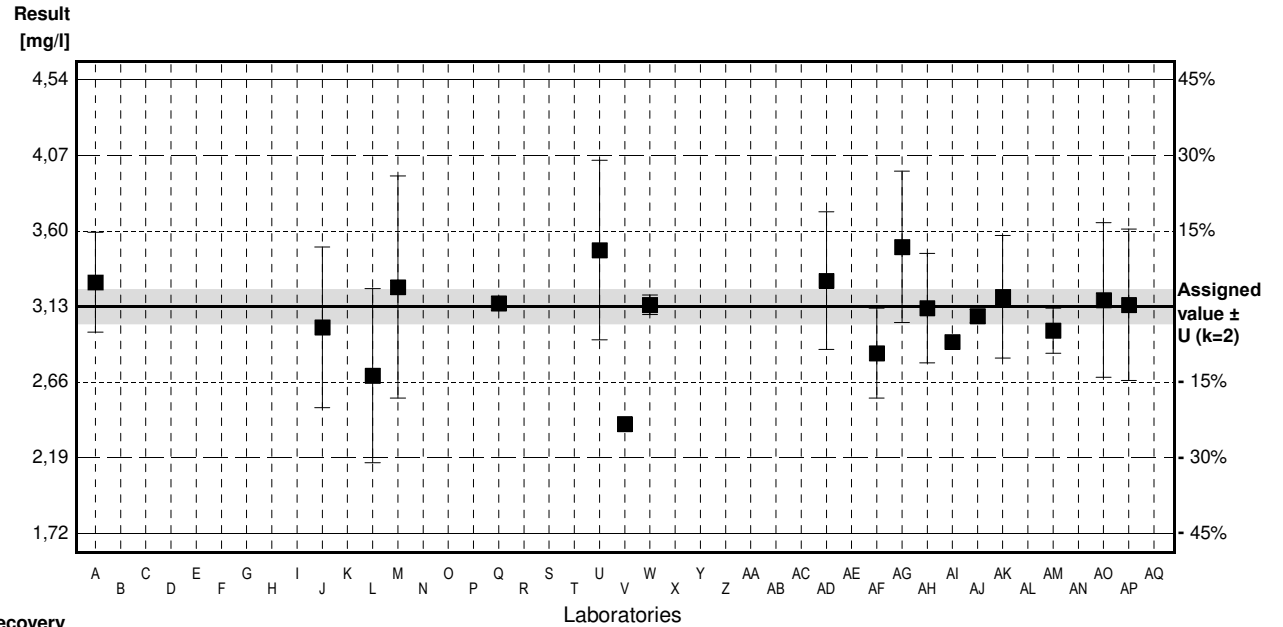
Sample N174B

Parameter KMnO4-Index (as O2)

Assigned value ± U (k=2) 3,13 mg/l ± 0,11 mg/l
 IFA result ± U (k=2) 3,35 mg/l ± 0,33 mg/l
 Stability test ± U (k=2) 3,53 mg/l ± 0,35 mg/l

| Lab Code | Result | ± | Unit | Recovery | z-Score |
|----------|--------|-------|------|----------|---------|
| A | 3,28 | 0,31 | mg/l | 105% | 0,58 |
| B | | | mg/l | | |
| C | | | mg/l | | |
| D | | | mg/l | | |
| E | | | mg/l | | |
| F | | | mg/l | | |
| G | | | mg/l | | |
| H | | | mg/l | | |
| I | | | mg/l | | |
| J | 3,00 | 0,5 | mg/l | 96% | -0,51 |
| K | | | mg/l | | |
| L | 2,70 | 0,54 | mg/l | 86% | -1,68 |
| M | 3,25 | 0,69 | mg/l | 104% | 0,47 |
| N | | | mg/l | | |
| O | | | mg/l | | |
| P | | | mg/l | | |
| Q | 3,15 | | mg/l | 101% | 0,08 |
| R | | | mg/l | | |
| S | | | mg/l | | |
| T | | | mg/l | | |
| U | 3,48 | 0,557 | mg/l | 111% | 1,36 |
| V | 2,40 | 0,0 | mg/l | 77% | -2,84 |
| W | 3,14 | 0,06 | mg/l | 100% | 0,04 |
| X | | | mg/l | | |
| Y | | | mg/l | | |
| Z | | | mg/l | | |
| AA | | | mg/l | | |
| AB | | | mg/l | | |
| AC | | | mg/l | | |
| AD | 3,29 | 0,428 | mg/l | 105% | 0,62 |
| AE | | | mg/l | | |
| AF | 2,84 | 0,28 | mg/l | 91% | -1,13 |
| AG | 3,50 | 0,47 | mg/l | 112% | 1,44 |
| AH | 3,12 | 0,34 | mg/l | 100% | -0,04 |
| AI | 2,91 | | mg/l | 93% | -0,86 |
| AJ | 3,07 | 0,042 | mg/l | 98% | -0,23 |
| AK | 3,19 | 0,38 | mg/l | 102% | 0,23 |
| AL | | | mg/l | | |
| AM | 2,98 | 0,14 | mg/l | 95% | -0,58 |
| AN | | | mg/l | | |
| AO | 3,17 | 0,48 | mg/l | 101% | 0,16 |
| AP | 3,14 | 0,47 | mg/l | 100% | 0,04 |
| AQ | | | mg/l | | |

| | All results | Outliers excl. | Unit |
|-------------------|-------------|----------------|------|
| Mean ± CI(99%) | 3,09 ± 0,18 | 3,13 ± 0,15 | mg/l |
| Recov. ± CI(99%) | 98,7 ± 5,8 | 100,0 ± 4,7 | % |
| SD between labs | 0,26 | 0,21 | mg/l |
| RSD between labs | 8,6 | 6,6 | % |
| n for calculation | 18 | 17 | |



Labororientierte Auswertung

Laboratory Oriented Part

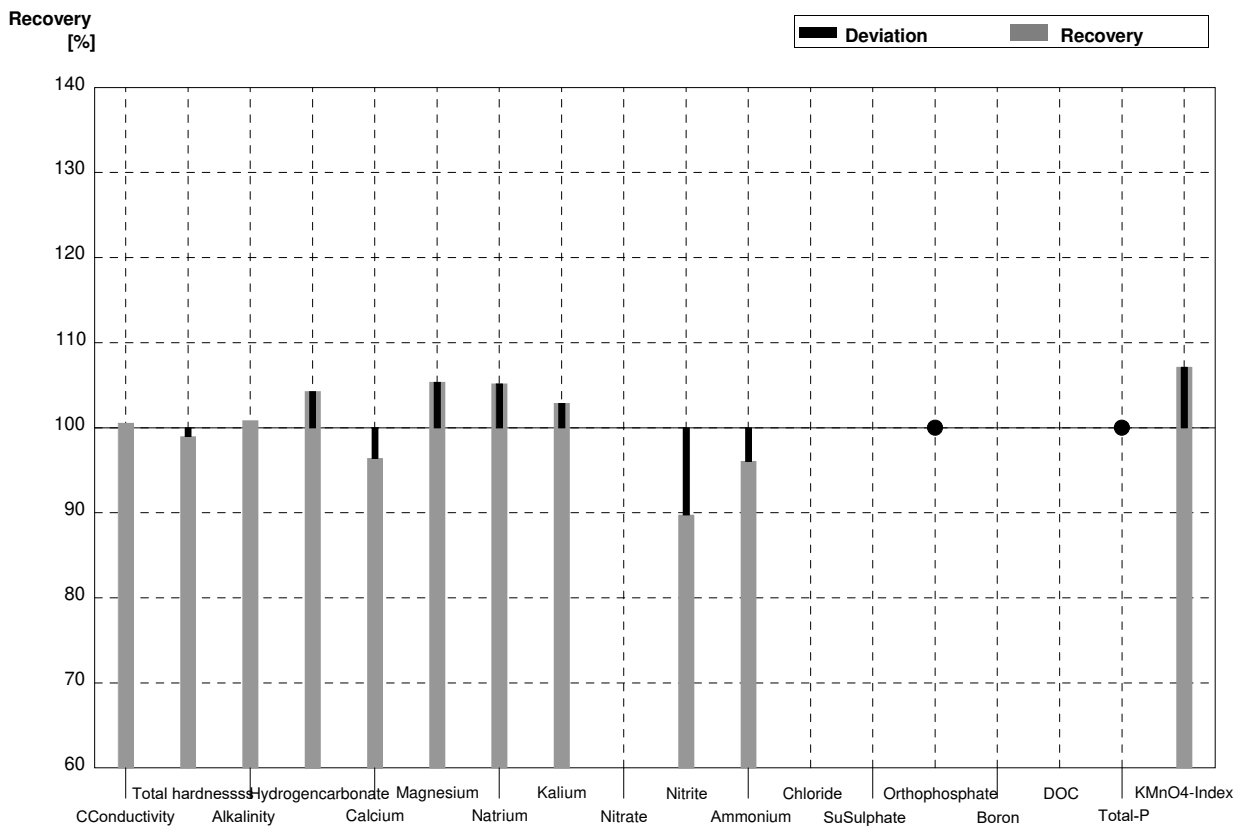
Eignungsprüfungsrunde / Proficiency testing round
N174

Nährstoffe
Nutrients / Major ions

Versand / Dispatch: 11.11.2024

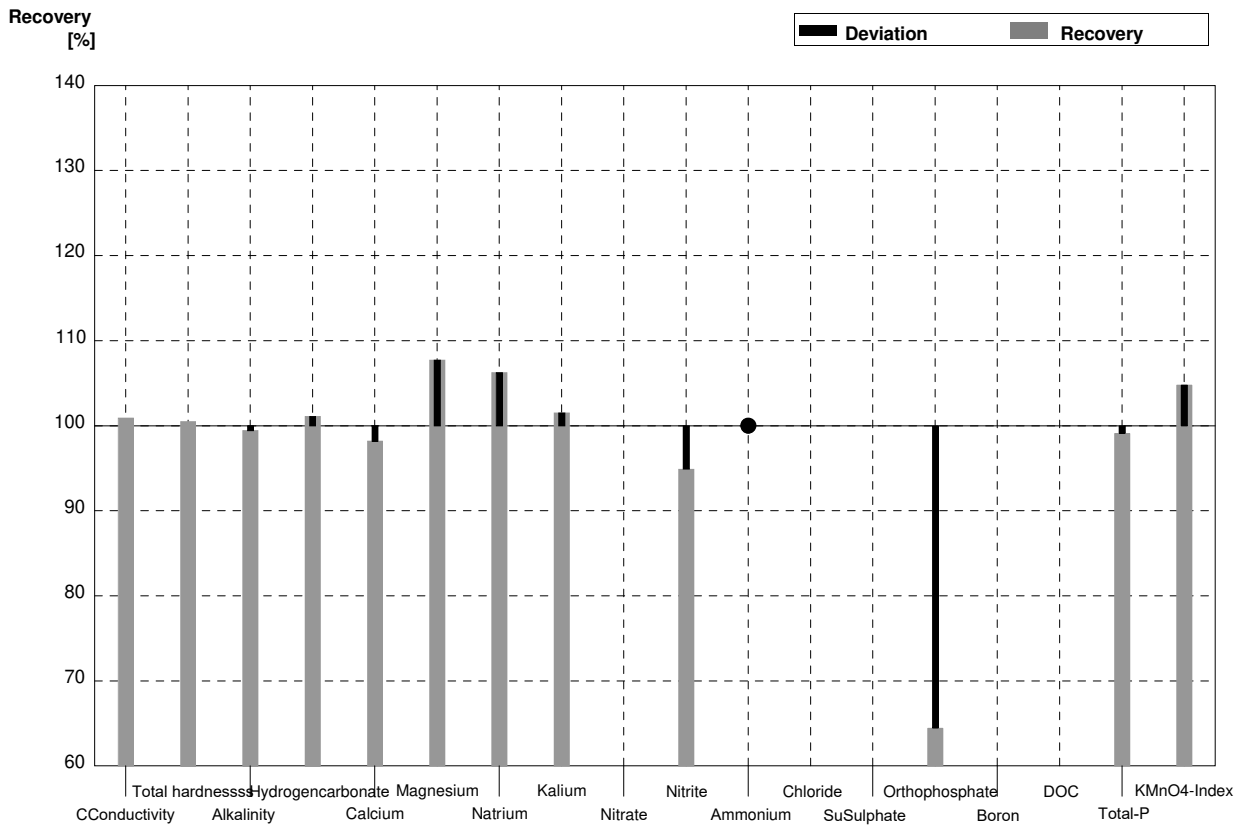
Sample N174A
Laboratory A

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 362 | 5,4 | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | 0,87 | | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,53 | 0,05 | mmol/l | 101% |
| Hydrogen carbonate | 89,5 | 1,1 | 93,33 | | mg/l | 104% |
| Calcium | 25,1 | 0,4 | 24,2 | 1,5 | mg/l | 96% |
| Magnesium | 6,15 | 0,10 | 6,48 | 0,39 | mg/l | 105% |
| Sodium | 32,9 | 0,2 | 34,6 | 1,2 | mg/l | 105% |
| Potassium | 5,90 | 0,03 | 6,07 | 0,18 | mg/l | 103% |
| Nitrate (as NO3) | 9,7 | 0,3 | | | mg/l | |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0200 | 0,001 | mg/l | 90% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0390 | 0,002 | mg/l | 96% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,007 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | <0,005 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,25 | 0,21 | mg/l | 107% |



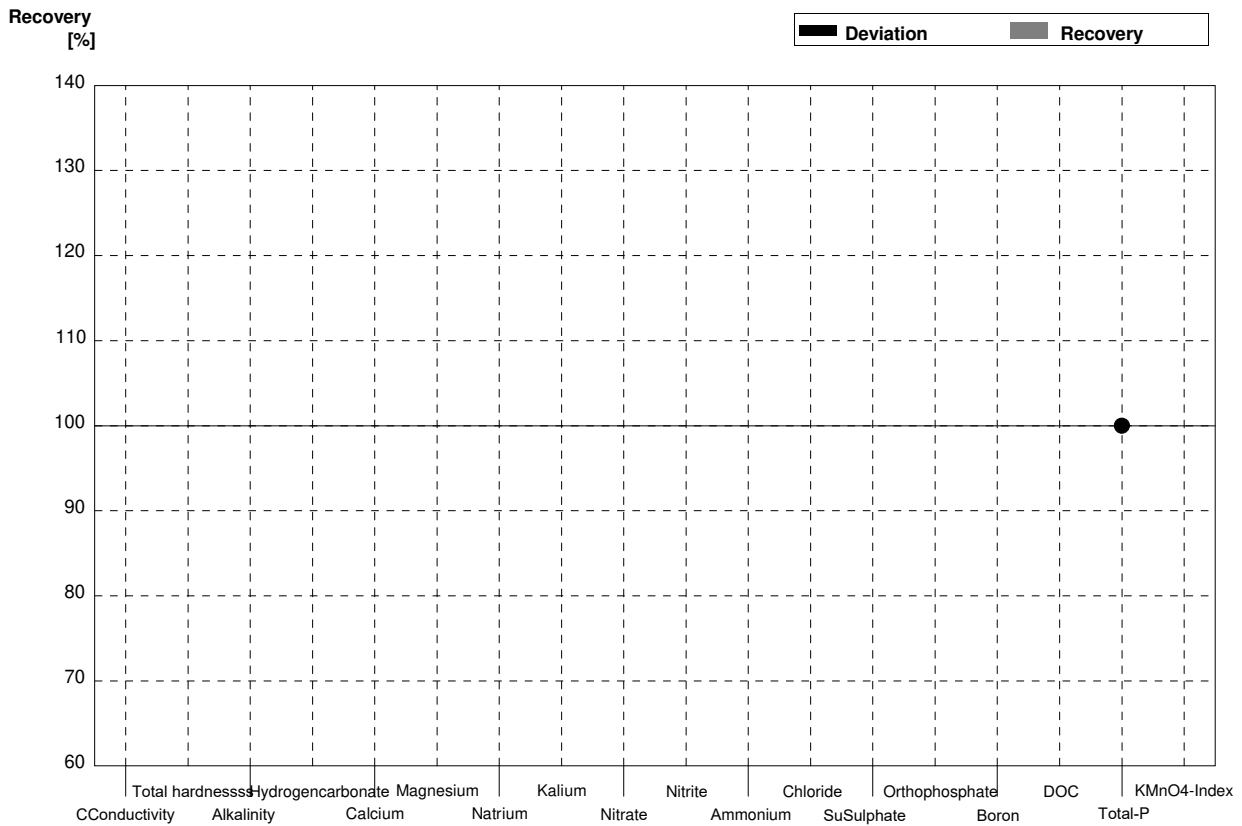
Sample N174B
Laboratory A

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 549 | 8,2 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 1,93 | | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,68 | 0,13 | mmol/l | 99% |
| Hydrogen carbonate | 222 | 3 | 224,48 | | mg/l | 101% |
| Calcium | 55,5 | 0,9 | 54,5 | 3,3 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 13,93 | 0,84 | mg/l | 108% |
| Sodium | 39,9 | 0,6 | 42,4 | 1,5 | mg/l | 106% |
| Potassium | 1,97 | 0,04 | 2,00 | 0,06 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | | | mg/l | |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0410 | 0,002 | mg/l | 95% |
| Ammonium (as NH4) | <0,01 | | <0,03 | | mg/l | • |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0294 | 0,0025 | mg/l | 64% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0,114 | | mg/l | 99% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,28 | 0,31 | mg/l | 105% |



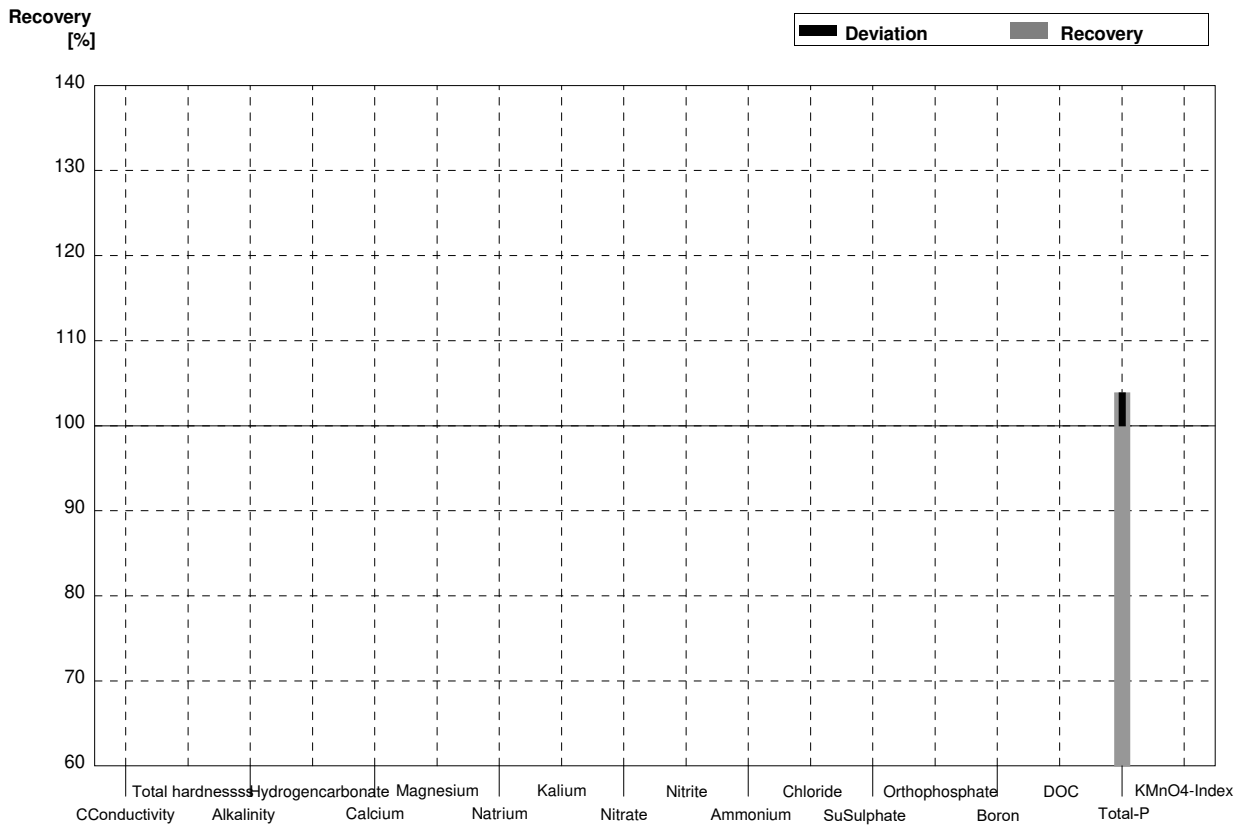
Sample N174A
Laboratory B

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | | | mg/l | |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | | | mg/l | |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | 0,0060 | 0,00037 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



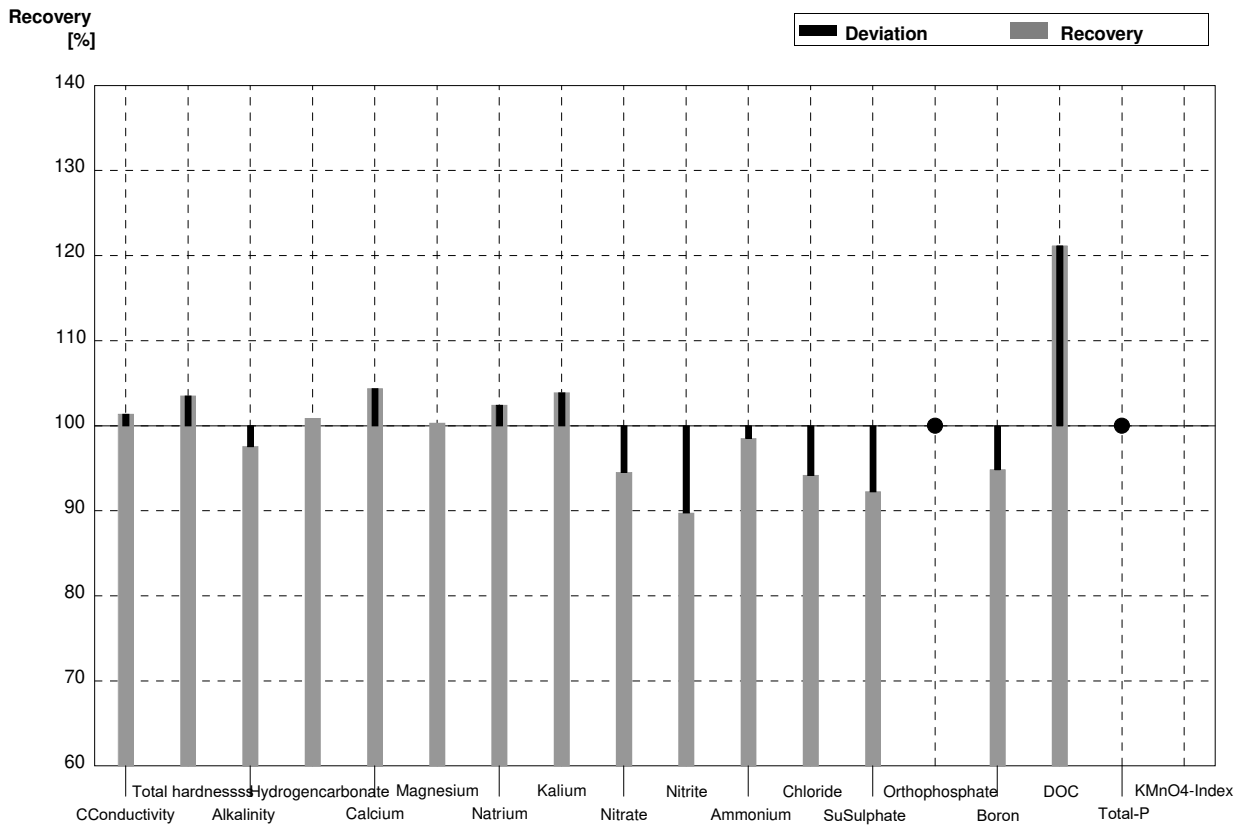
Sample N174B
Laboratory B

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | | | mg/l | |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | | | mg/l | |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0,1195 | 0,0074 | mg/l | 104% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



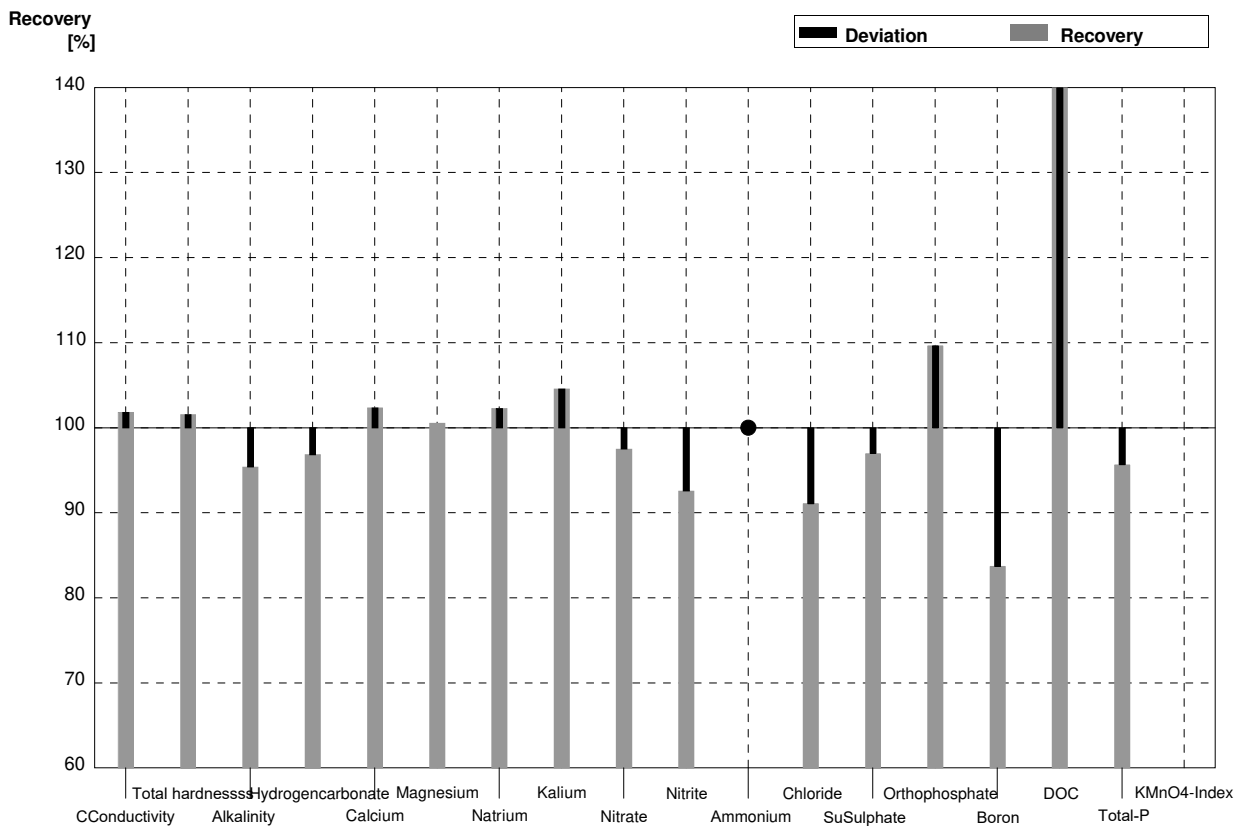
Sample N174A
Laboratory C

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 365 | 18 | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | 0,91 | 0,055 | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,48 | 0,089 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,3 | 5,4 | mg/l | 101% |
| Calcium | 25,1 | 0,4 | 26,2 | 0,79 | mg/l | 104% |
| Magnesium | 6,15 | 0,10 | 6,17 | 0,185 | mg/l | 100% |
| Sodium | 32,9 | 0,2 | 33,7 | 2,02 | mg/l | 102% |
| Potassium | 5,90 | 0,03 | 6,13 | 0,18 | mg/l | 104% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,17 | 0,73 | mg/l | 95% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0200 | 0,006 | mg/l | 90% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0400 | 0,012 | mg/l | 99% |
| Chloride | 46,5 | 0,5 | 43,8 | 3,5 | mg/l | 94% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,5 | 1,55 | mg/l | 92% |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | 0,0033 | mg/l | • |
| Boron | 0,136 | 0,004 | 0,129 | 0,016 | mg/l | 95% |
| DOC (as C) | 5,53 | 0,07 | 6,7 | 0,54 | mg/l | 121% |
| Total P (as PO4) | <0,009 | | <0,01 | 0,0033 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



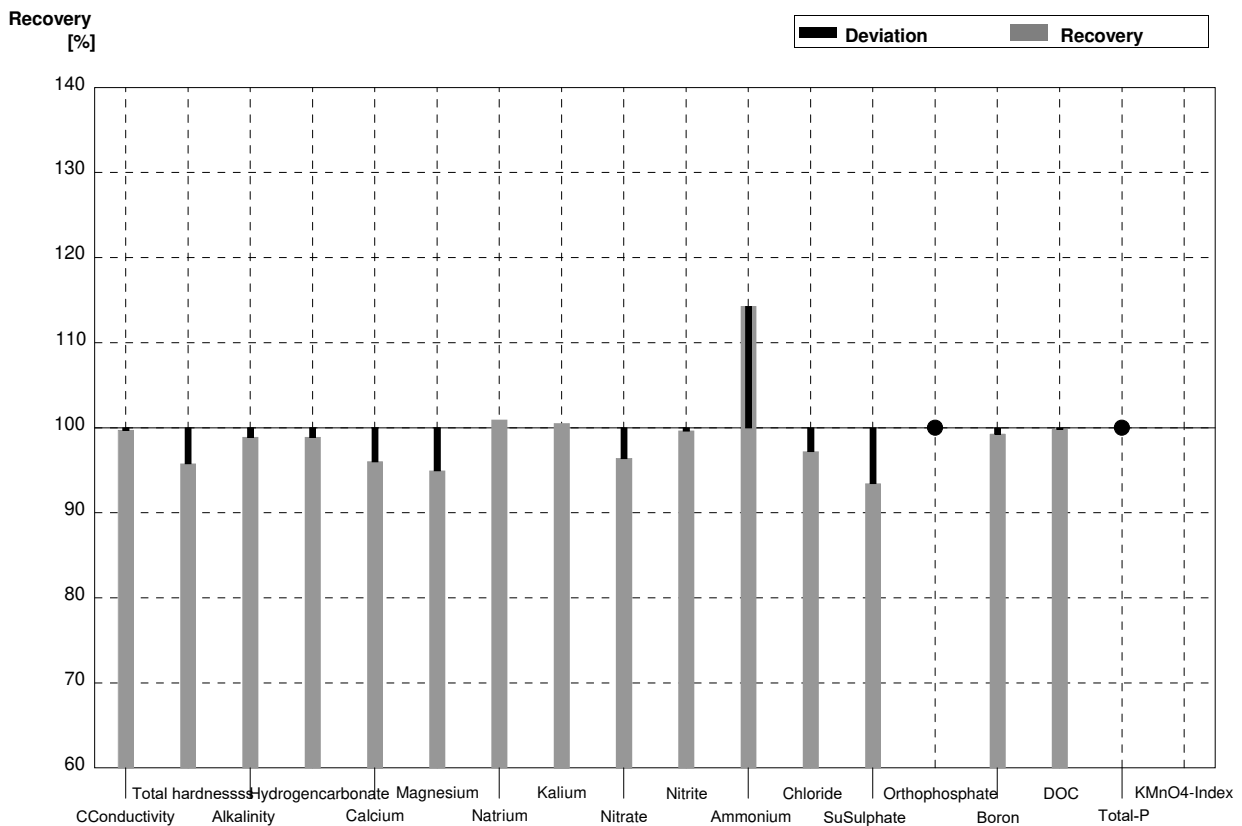
Sample N174B
Laboratory C

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 554 | 27 | µS/cm | 102% |
| Total hardness | 1,92 | 0,02 | 1,95 | 0,12 | mmol/l | 102% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,53 | 0,21 | mmol/l | 95% |
| Hydrogen carbonate | 222 | 3 | 215 | 13 | mg/l | 97% |
| Calcium | 55,5 | 0,9 | 56,8 | 1,70 | mg/l | 102% |
| Magnesium | 12,93 | 0,18 | 13,0 | 0,39 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 40,8 | 2,45 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 2,06 | 0,06 | mg/l | 105% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,1 | 3,1 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0400 | 0,012 | mg/l | 93% |
| Ammonium (as NH4) | <0,01 | | <0,01 | 0,0033 | mg/l | • |
| Chloride | 23,6 | 0,3 | 21,5 | 1,7 | mg/l | 91% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,8 | 2,88 | mg/l | 97% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,050 | 0,005 | mg/l | 110% |
| Boron | 0,086 | 0,002 | 0,072 | 0,0009 | mg/l | 84% |
| DOC (as C) | 4,14 | 0,07 | 7,7 | 0,62 | mg/l | 186% |
| Total P (as PO4) | 0,115 | 0,003 | 0,110 | 0,011 | mg/l | 96% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



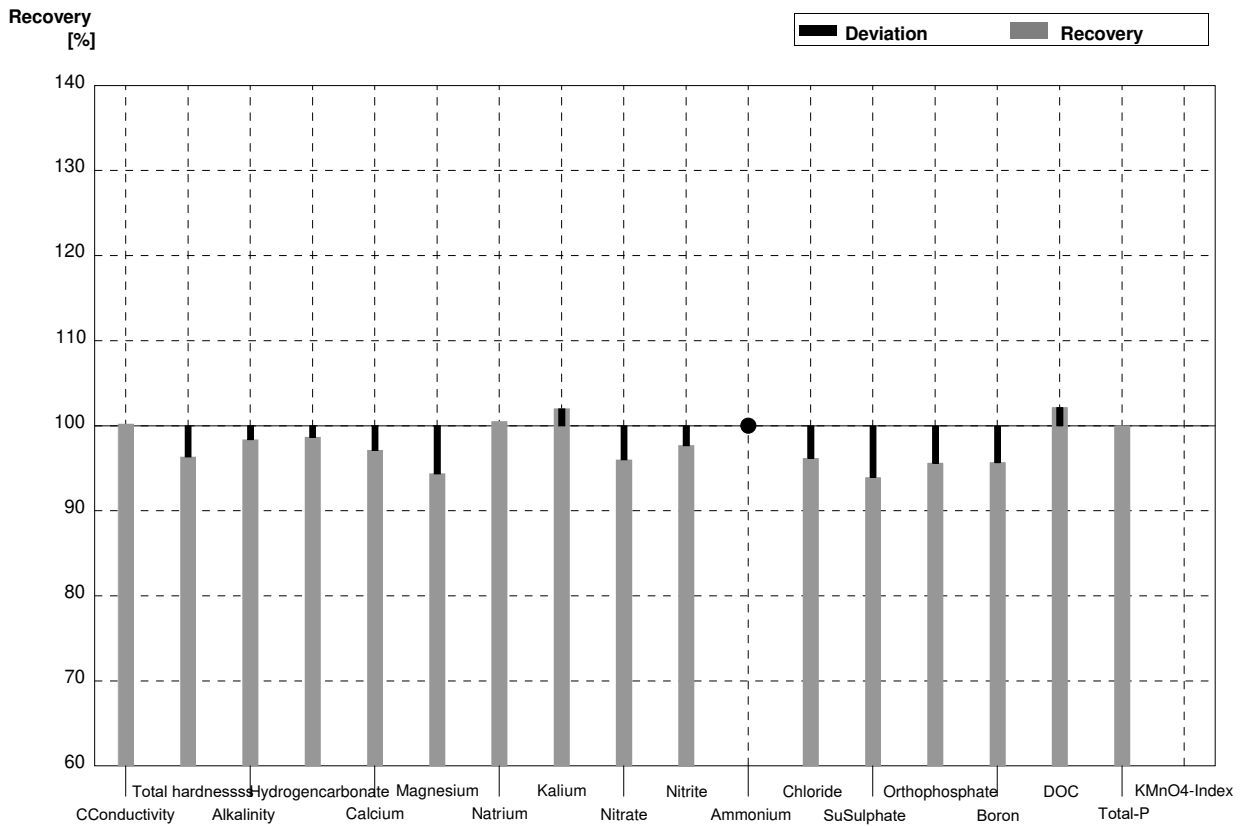
Sample N174A
Laboratory D

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 359 | 0,198 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,842 | 0,0217 | mmol/l | 96% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | 0,0790 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 88,5 | 1,77 | mg/l | 99% |
| Calcium | 25,1 | 0,4 | 24,1 | 0,870 | mg/l | 96% |
| Magnesium | 6,15 | 0,10 | 5,84 | 0,0354 | mg/l | 95% |
| Sodium | 32,9 | 0,2 | 33,2 | 0,594 | mg/l | 101% |
| Potassium | 5,90 | 0,03 | 5,93 | 0,535 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,35 | 0,0873 | mg/l | 96% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0222 | 0,00093 | mg/l | 100% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0464 | 0,00082 | mg/l | 114% |
| Chloride | 46,5 | 0,5 | 45,2 | 1,63 | mg/l | 97% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,7 | 1,70 | mg/l | 93% |
| Orthophosphate (as PO4) | <0,009 | | <0,0150 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,135 | 0,00132 | mg/l | 99% |
| DOC (as C) | 5,53 | 0,07 | 5,52 | 0,0457 | mg/l | 100% |
| Total P (as PO4) | <0,009 | | <0,0150 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



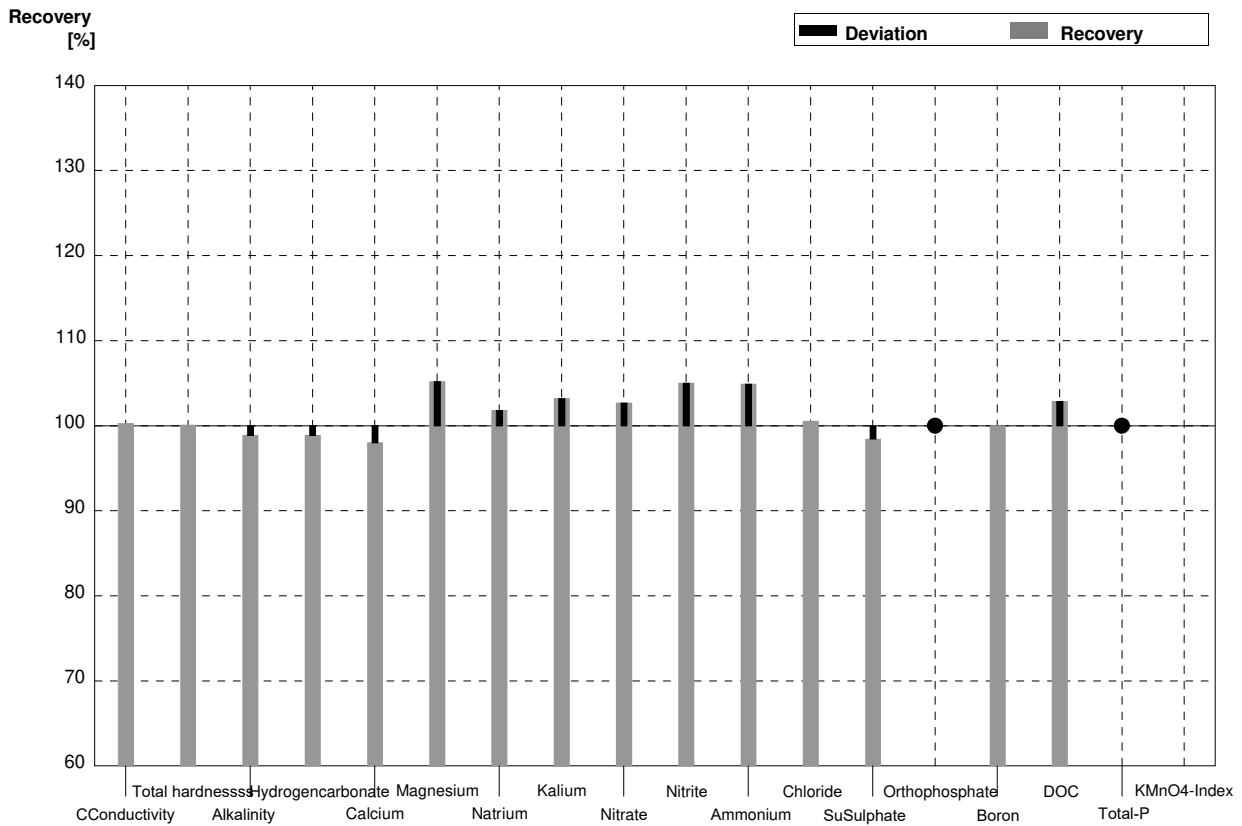
Sample N174B
Laboratory D

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 545 | 0,233 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,85 | 0,0246 | mmol/l | 96% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,64 | 0,122 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 219 | 4,37 | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 53,9 | 0,900 | mg/l | 97% |
| Magnesium | 12,93 | 0,18 | 12,2 | 0,245 | mg/l | 94% |
| Sodium | 39,9 | 0,6 | 40,1 | 0,633 | mg/l | 101% |
| Potassium | 1,97 | 0,04 | 2,01 | 0,0314 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,5 | 1,61 | mg/l | 96% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0422 | 0,00090 | mg/l | 98% |
| Ammonium (as NH4) | <0,01 | | <0,0100 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,7 | 1,47 | mg/l | 96% |
| Sulphate (as SO4) | 29,7 | 0,6 | 27,9 | 1,83 | mg/l | 94% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0436 | 0,00099 | mg/l | 96% |
| Boron | 0,086 | 0,002 | 0,0823 | 0,00122 | mg/l | 96% |
| DOC (as C) | 4,14 | 0,07 | 4,23 | 0,0438 | mg/l | 102% |
| Total P (as PO4) | 0,115 | 0,003 | 0,115 | 0,00101 | mg/l | 100% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



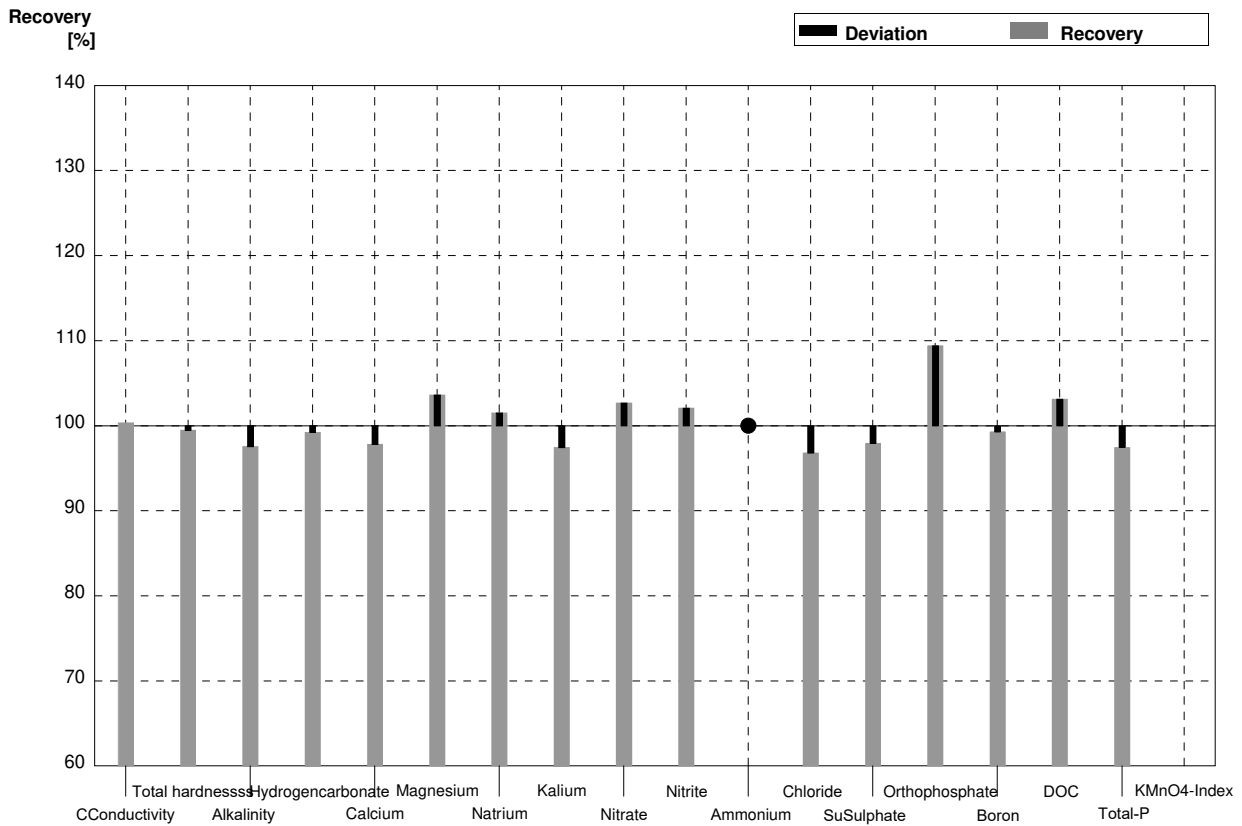
Sample N174A
Laboratory E

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 361 | 10 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,88 | 0,09 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | 0,2 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 88,5 | 8,9 | mg/l | 99% |
| Calcium | 25,1 | 0,4 | 24,6 | 5,0 | mg/l | 98% |
| Magnesium | 6,15 | 0,10 | 6,47 | 1,3 | mg/l | 105% |
| Sodium | 32,9 | 0,2 | 33,5 | 5,1 | mg/l | 102% |
| Potassium | 5,90 | 0,03 | 6,09 | 1,2 | mg/l | 103% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,96 | 1,0 | mg/l | 103% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0234 | 0,0034 | mg/l | 105% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0426 | 0,007 | mg/l | 105% |
| Chloride | 46,5 | 0,5 | 46,75 | 4,7 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,54 | 1,7 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | <0,009 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,136 | 0,034 | mg/l | 100% |
| DOC (as C) | 5,53 | 0,07 | 5,69 | 0,57 | mg/l | 103% |
| Total P (as PO4) | <0,009 | | <0,009 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



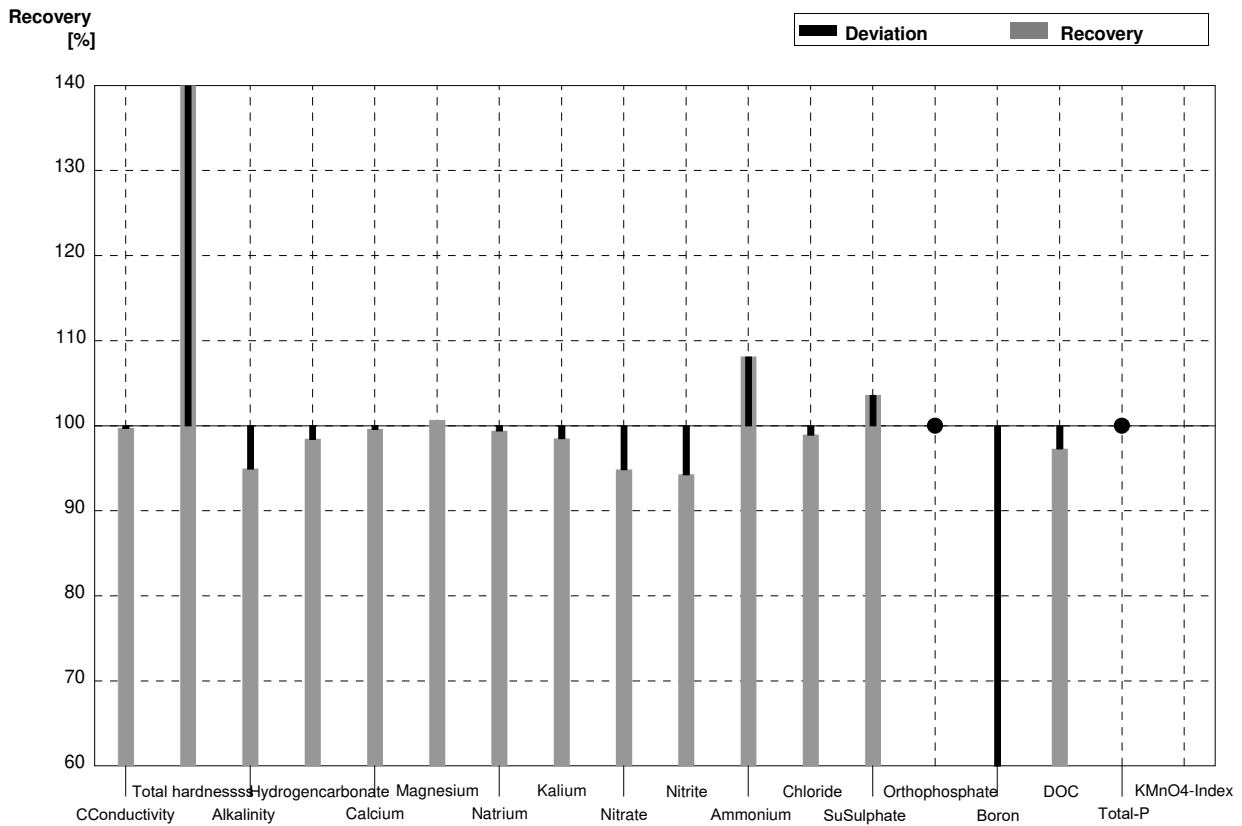
Sample N174B
Laboratory E

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 546 | 10 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,91 | 0,2 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,61 | 0,4 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 220,3 | 22,0 | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 54,3 | 10,9 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 13,4 | 2,7 | mg/l | 104% |
| Sodium | 39,9 | 0,6 | 40,5 | 6,1 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 1,92 | 0,39 | mg/l | 97% |
| Nitrate (as NO3) | 40,1 | 1,0 | 41,18 | 4,1 | mg/l | 103% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0441 | 0,0064 | mg/l | 102% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,85 | 2,3 | mg/l | 97% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,09 | 2,9 | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0499 | 0,0059 | mg/l | 109% |
| Boron | 0,086 | 0,002 | 0,0854 | 0,022 | mg/l | 99% |
| DOC (as C) | 4,14 | 0,07 | 4,27 | 0,43 | mg/l | 103% |
| Total P (as PO4) | 0,115 | 0,003 | 0,1121 | 0,0132 | mg/l | 97% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



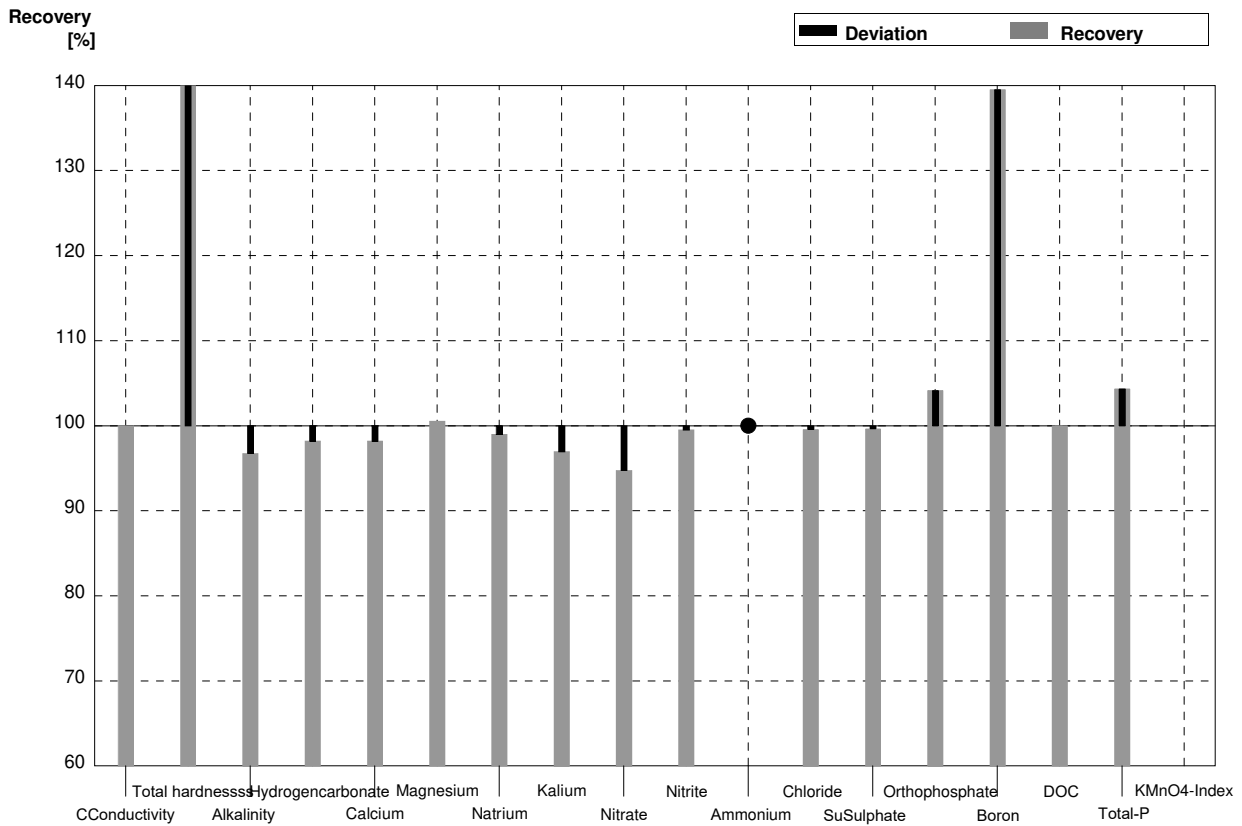
Sample N174A
Laboratory F

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 359 | 11 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 4,93 | 0,37 | mmol/l | 561% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,44 | 0,05 | mmol/l | 95% |
| Hydrogen carbonate | 89,5 | 1,1 | 88,1 | 3,5 | mg/l | 98% |
| Calcium | 25,1 | 0,4 | 25,0 | 1,2 | mg/l | 100% |
| Magnesium | 6,15 | 0,10 | 6,19 | 0,36 | mg/l | 101% |
| Sodium | 32,9 | 0,2 | 32,7 | 1,0 | mg/l | 99% |
| Potassium | 5,90 | 0,03 | 5,81 | 0,46 | mg/l | 98% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,20 | 0,49 | mg/l | 95% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0210 | 0,0015 | mg/l | 94% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0439 | 0,0036 | mg/l | 108% |
| Chloride | 46,5 | 0,5 | 46,0 | 2,3 | mg/l | 99% |
| Sulphate (as SO4) | 16,8 | 0,3 | 17,4 | 1,0 | mg/l | 104% |
| Orthophosphate (as PO4) | <0,009 | | <0,006 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,0780 | 0,0070 | mg/l | 57% |
| DOC (as C) | 5,53 | 0,07 | 5,38 | 0,48 | mg/l | 97% |
| Total P (as PO4) | <0,009 | | <0,006 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



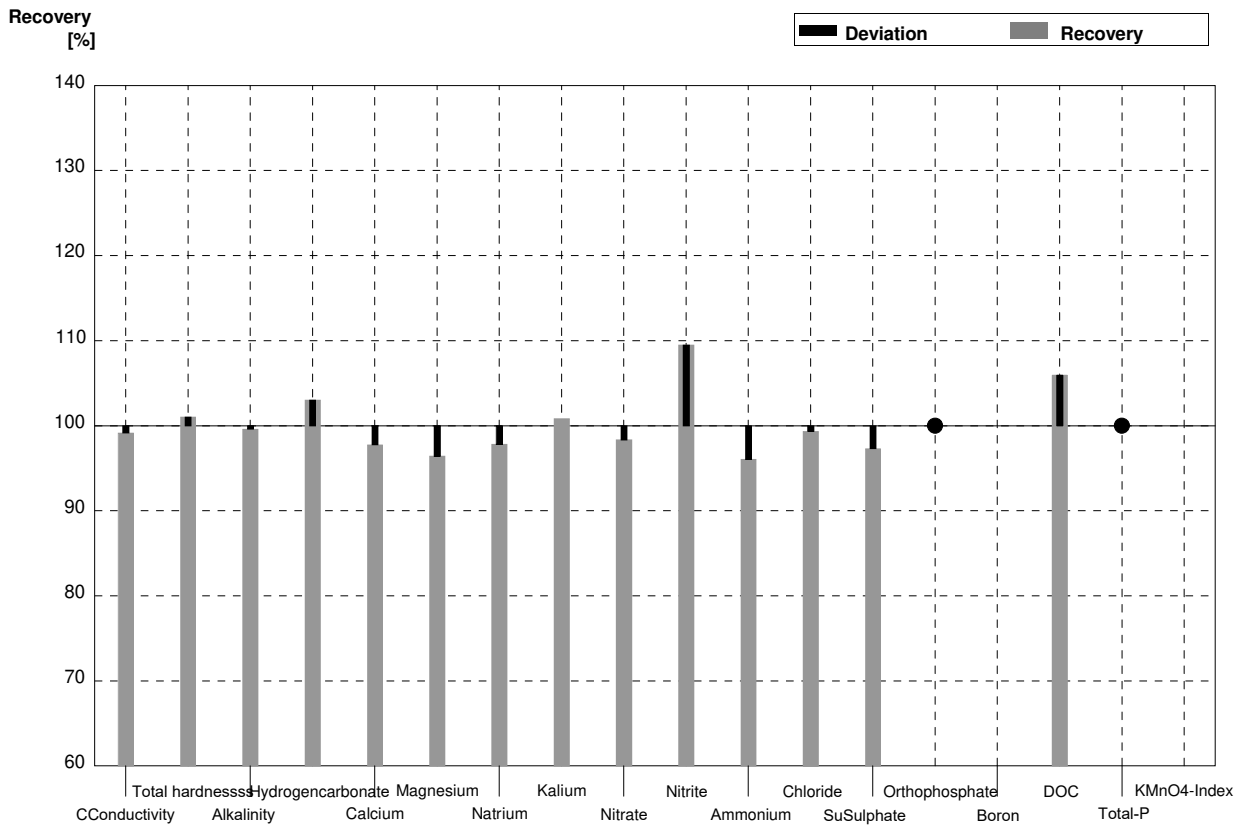
Sample N174B
Laboratory F

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 544 | 16 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 10,6 | 0,8 | mmol/l | 552% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,58 | 0,12 | mmol/l | 97% |
| Hydrogen carbonate | 222 | 3 | 218 | 9 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 54,5 | 2,6 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 13,0 | 0,8 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 39,5 | 1,2 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 1,91 | 0,15 | mg/l | 97% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,0 | 2,0 | mg/l | 95% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0430 | 0,0031 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,008 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,5 | 1,2 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,6 | 1,6 | mg/l | 100% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0475 | 0,0022 | mg/l | 104% |
| Boron | 0,086 | 0,002 | 0,120 | 0,011 | mg/l | 140% |
| DOC (as C) | 4,14 | 0,07 | 4,14 | 0,37 | mg/l | 100% |
| Total P (as PO4) | 0,115 | 0,003 | 0,120 | 0,008 | mg/l | 104% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



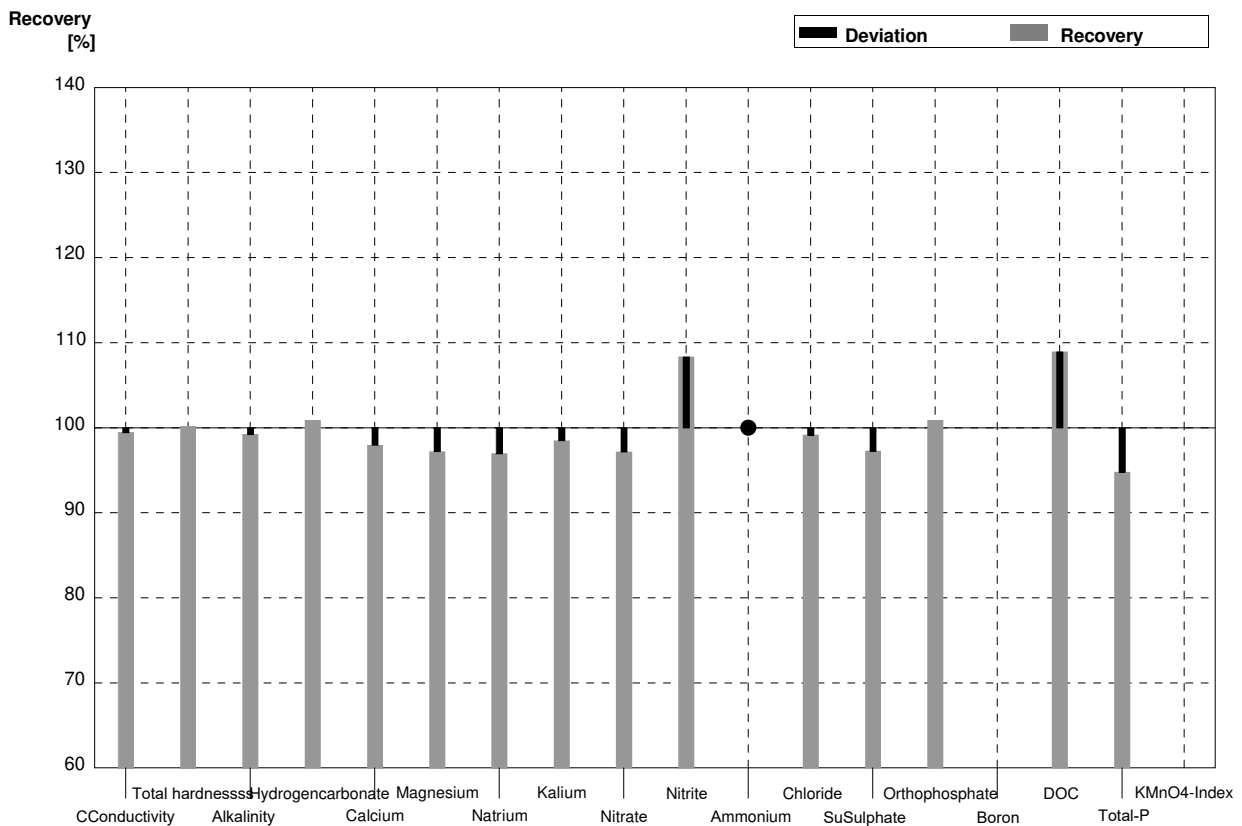
Sample N174A
Laboratory G

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 357 | 2 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,888 | 0,1 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,511 | 0,1 | mmol/l | 100% |
| Hydrogen carbonate | 89,5 | 1,1 | 92,2 | 6,1 | mg/l | 103% |
| Calcium | 25,1 | 0,4 | 24,54 | 1,0 | mg/l | 98% |
| Magnesium | 6,15 | 0,10 | 5,93 | 0,2 | mg/l | 96% |
| Sodium | 32,9 | 0,2 | 32,19 | 0,2 | mg/l | 98% |
| Potassium | 5,90 | 0,03 | 5,95 | 0,1 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,54 | 0,4 | mg/l | 98% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0244 | 0,002 | mg/l | 110% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0390 | 0,003 | mg/l | 96% |
| Chloride | 46,5 | 0,5 | 46,20 | 0,2 | mg/l | 99% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,35 | 2 | mg/l | 97% |
| Orthophosphate (as PO4) | <0,009 | | 0,00307 | 0,0015 | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,86 | 0,2 | mg/l | 106% |
| Total P (as PO4) | <0,009 | | <0,0092 | 0,0046 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



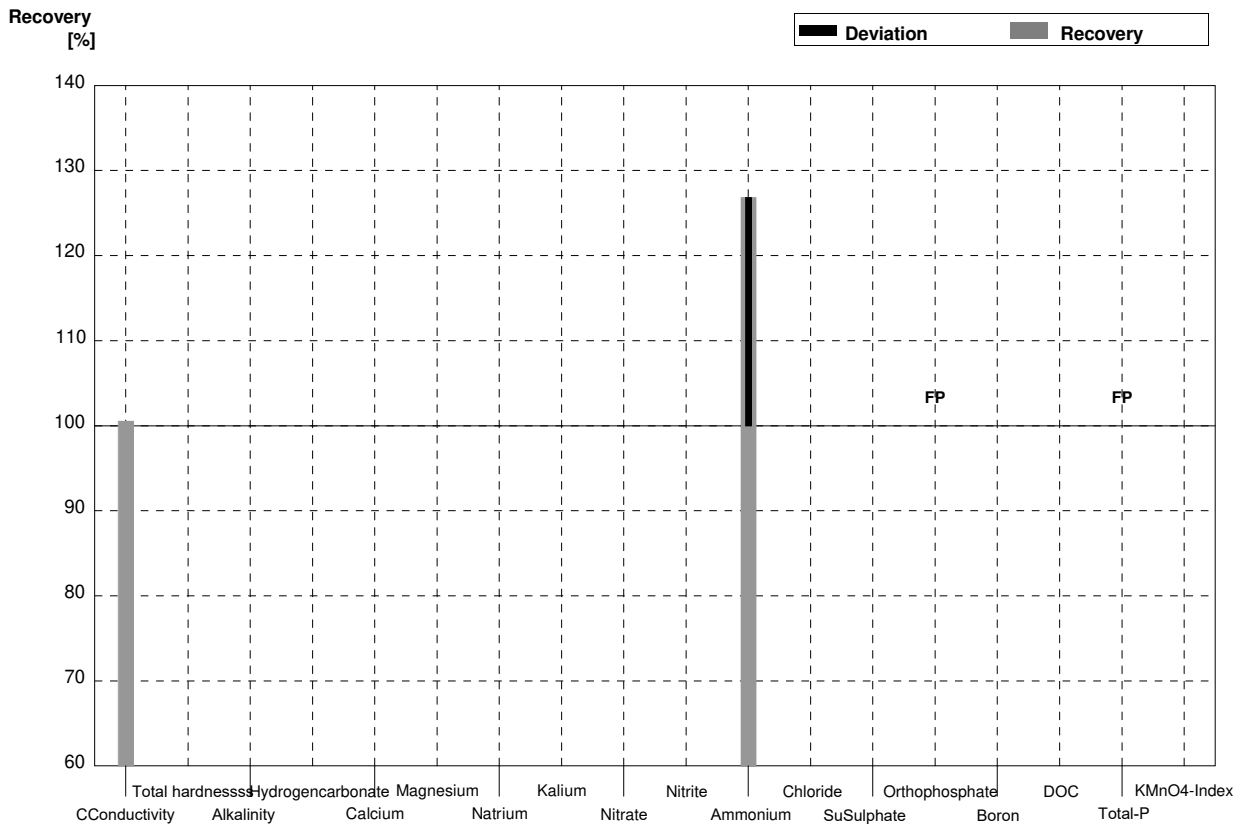
Sample N174B
Laboratory G

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 541 | 2 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,923 | 0,1 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,671 | 0,1 | mmol/l | 99% |
| Hydrogen carbonate | 222 | 3 | 224 | 6,1 | mg/l | 101% |
| Calcium | 55,5 | 0,9 | 54,37 | 1,0 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 12,57 | 0,2 | mg/l | 97% |
| Sodium | 39,9 | 0,6 | 38,69 | 0,2 | mg/l | 97% |
| Potassium | 1,97 | 0,04 | 1,94 | 0,1 | mg/l | 98% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,96 | 0,4 | mg/l | 97% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0468 | 0,002 | mg/l | 108% |
| Ammonium (as NH4) | <0,01 | | <0,0064 | 0,003 | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,40 | 0,2 | mg/l | 99% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,89 | 2 | mg/l | 97% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0460 | 0,0015 | mg/l | 101% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,51 | 0,2 | mg/l | 109% |
| Total P (as PO4) | 0,115 | 0,003 | 0,109 | 0,0046 | mg/l | 95% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



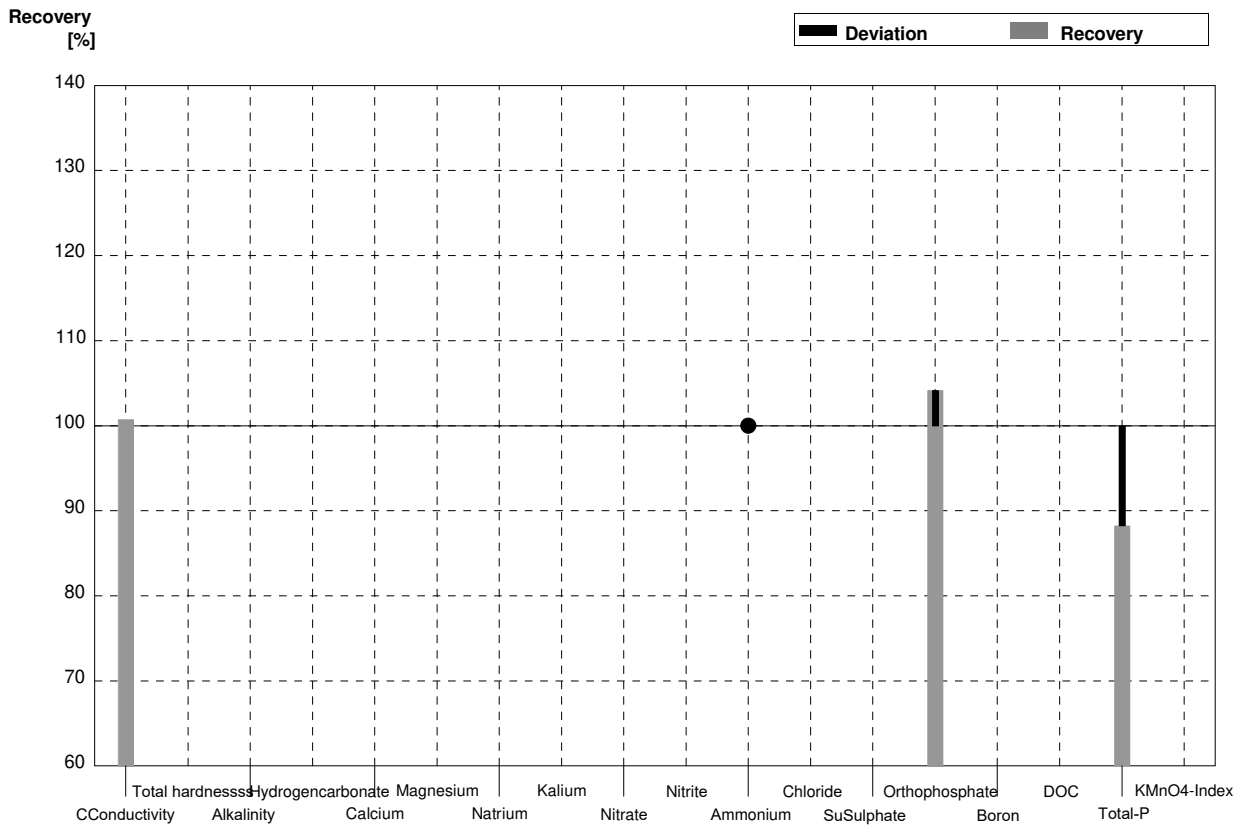
Sample N174A
Laboratory H

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 362 | 4,489 | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | | | mg/l | |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0515 | 0,0118 | mg/l | 127% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | 0,0105 | 0,00072 | mg/l | FP |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | 0,0405 | 0,00488 | mg/l | FP |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



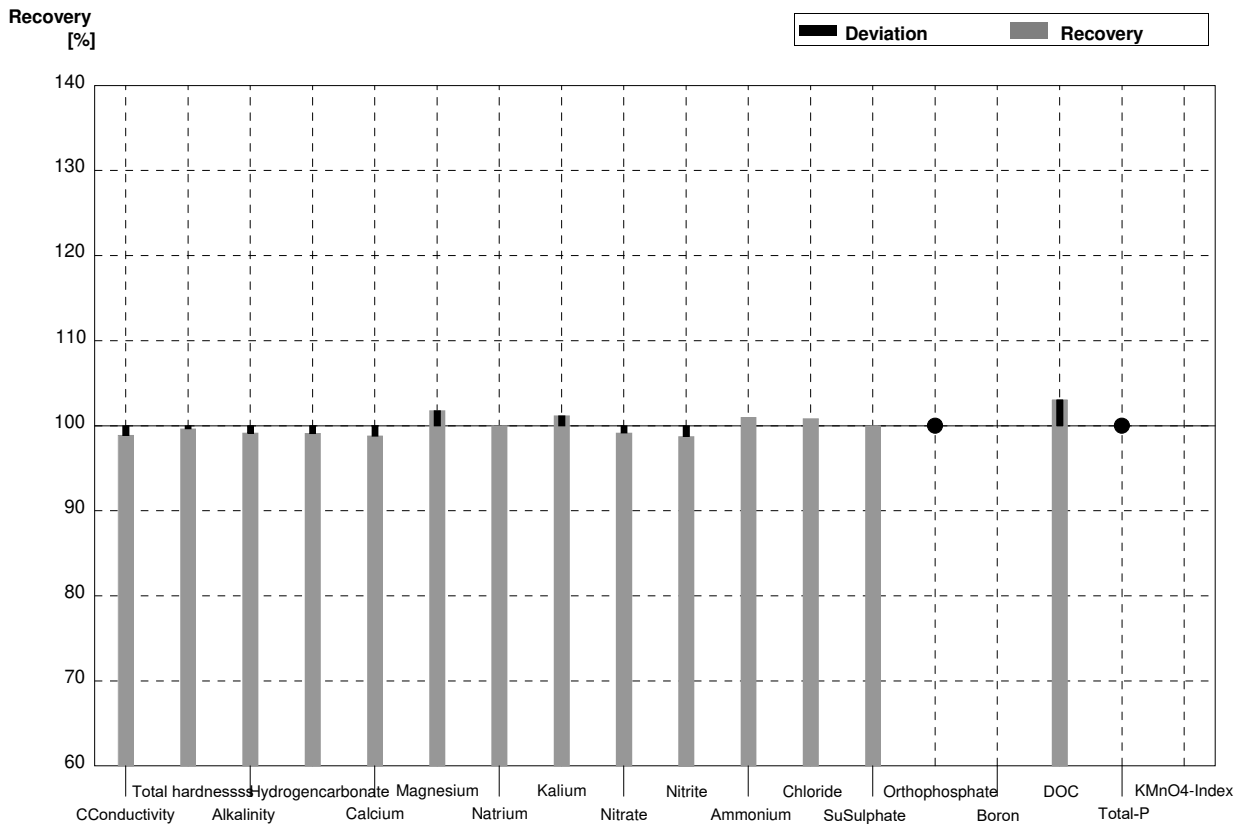
Sample N174B
Laboratory H

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 548 | 6,795 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | | | mg/l | |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | 0,00500 | 0,00115 | mg/l | • |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0475 | 0,00326 | mg/l | 104% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0, 1015 | 0,01223 | mg/l | 88% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



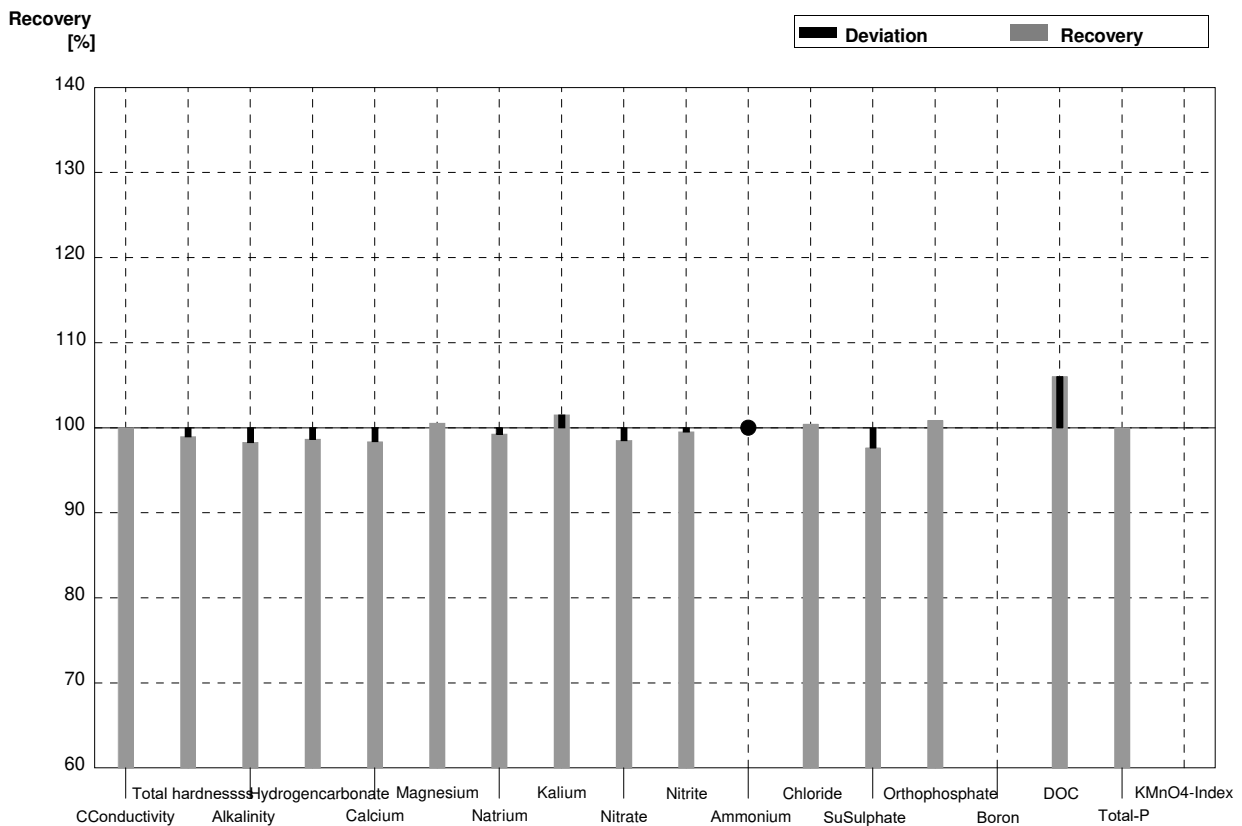
Sample N174A
Laboratory I

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 356 | 15 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,876 | 0,03 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,504 | 0,1 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 88,7 | 4 | mg/l | 99% |
| Calcium | 25,1 | 0,4 | 24,8 | 2 | mg/l | 99% |
| Magnesium | 6,15 | 0,10 | 6,26 | 0,8 | mg/l | 102% |
| Sodium | 32,9 | 0,2 | 32,9 | 5 | mg/l | 100% |
| Potassium | 5,90 | 0,03 | 5,97 | 0,8 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,62 | 0,7 | mg/l | 99% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0220 | 0,002 | mg/l | 99% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0410 | 0,005 | mg/l | 101% |
| Chloride | 46,5 | 0,5 | 46,9 | 4 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,8 | 1,1 | mg/l | 100% |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,70 | 0,8 | mg/l | 103% |
| Total P (as PO4) | <0,009 | | <0,013 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



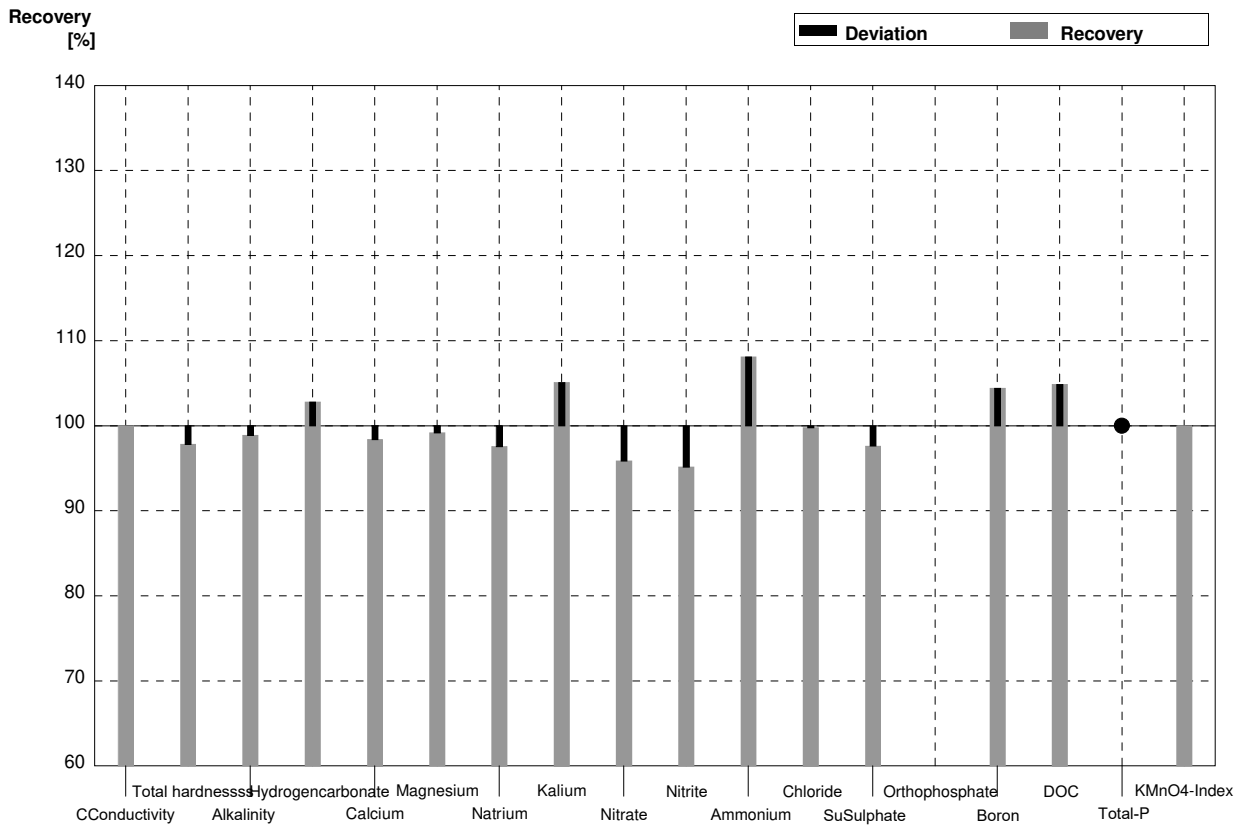
Sample N174B
Laboratory I

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 544 | 22 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,90 | 0,1 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,636 | 0,2 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 219 | 9 | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 54,6 | 5 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 13,0 | 1,6 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 39,6 | 6 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 2,00 | 0,3 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,5 | 3 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0430 | 0,004 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,013 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,7 | 2 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,0 | 2 | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0460 | 0,008 | mg/l | 101% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,39 | 0,7 | mg/l | 106% |
| Total P (as PO4) | 0,115 | 0,003 | 0,115 | 0,02 | mg/l | 100% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



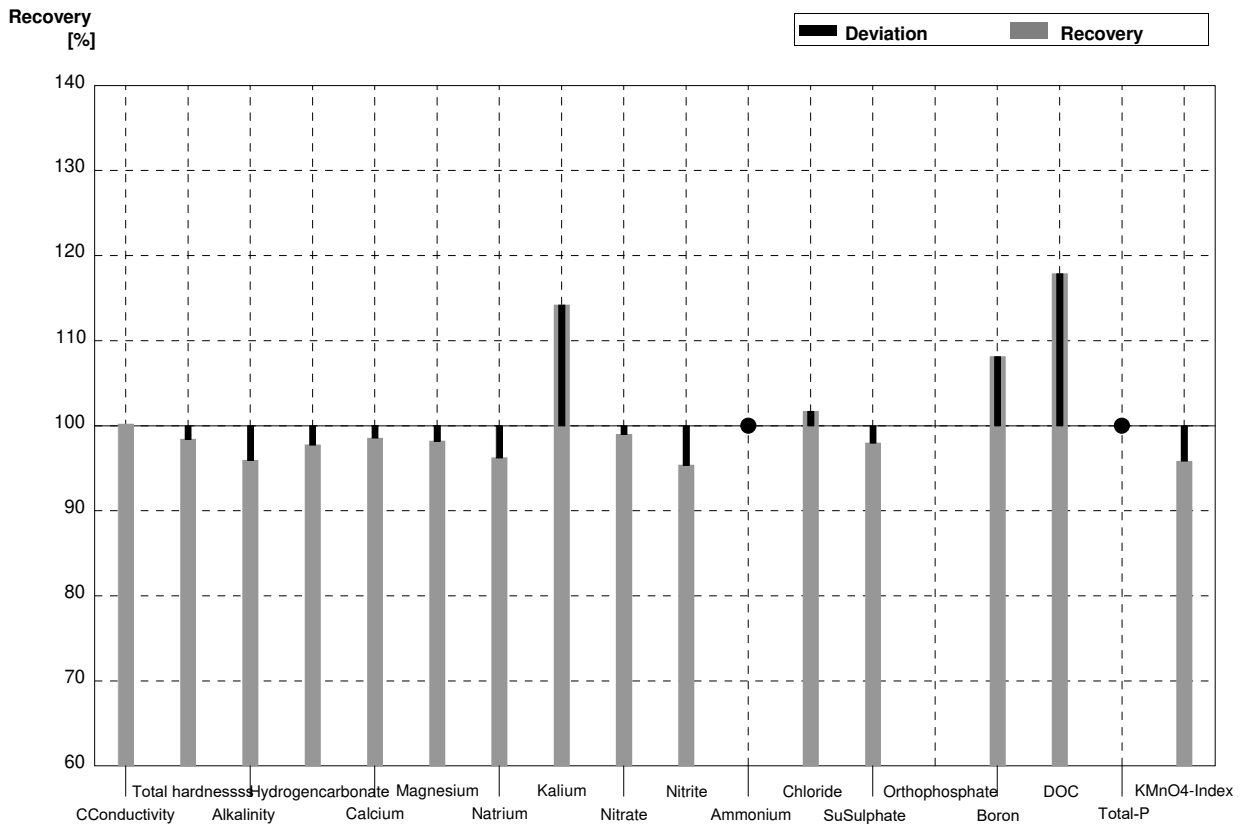
Sample N174A
Laboratory J

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 360 | 4 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,86 | 0,15 | mmol/l | 98% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | 0,2 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 92 | 2 | mg/l | 103% |
| Calcium | 25,1 | 0,4 | 24,7 | 1,5 | mg/l | 98% |
| Magnesium | 6,15 | 0,10 | 6,1 | 1 | mg/l | 99% |
| Sodium | 32,9 | 0,2 | 32,1 | 1,7 | mg/l | 98% |
| Potassium | 5,90 | 0,03 | 6,2 | 0,5 | mg/l | 105% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,3 | 1 | mg/l | 96% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0212 | 0,01 | mg/l | 95% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0439 | 0,01 | mg/l | 108% |
| Chloride | 46,5 | 0,5 | 46,4 | 2 | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,4 | 1,2 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | 0,142 | 0,02 | mg/l | 104% |
| DOC (as C) | 5,53 | 0,07 | 5,8 | 0,5 | mg/l | 105% |
| Total P (as PO4) | <0,009 | | <0,20 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,10 | 0,3 | mg/l | 100% |



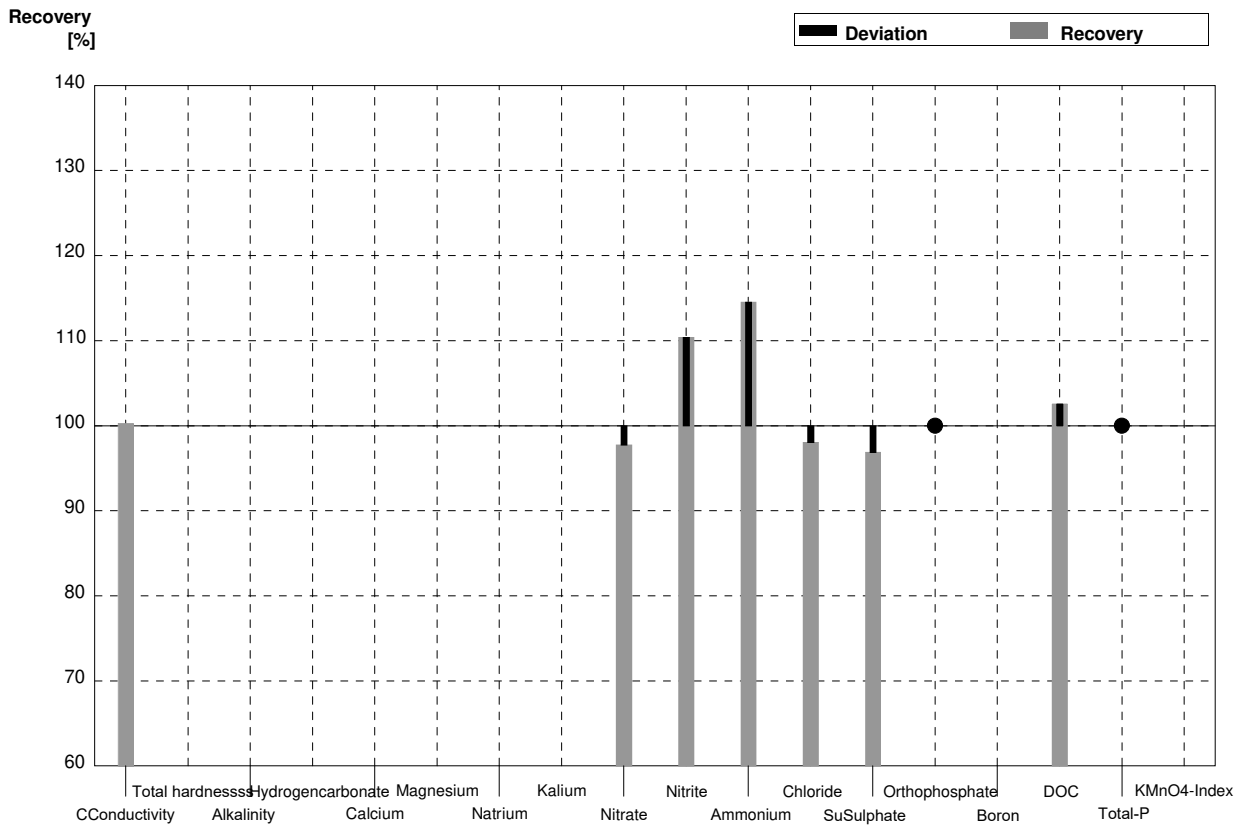
Sample N174B
Laboratory J

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 545 | 6 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,89 | 0,18 | mmol/l | 98% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,55 | 0,2 | mmol/l | 96% |
| Hydrogen carbonate | 222 | 3 | 217 | 3 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 54,7 | 2 | mg/l | 99% |
| Magnesium | 12,93 | 0,18 | 12,7 | 1 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 38,4 | 1,8 | mg/l | 96% |
| Potassium | 1,97 | 0,04 | 2,25 | 0,2 | mg/l | 114% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,7 | 3 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0412 | 0,01 | mg/l | 95% |
| Ammonium (as NH4) | <0,01 | | <0,02 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 24,0 | 1,5 | mg/l | 102% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,1 | 2 | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | 0,093 | 0,02 | mg/l | 108% |
| DOC (as C) | 4,14 | 0,07 | 4,88 | 0,8 | mg/l | 118% |
| Total P (as PO4) | 0,115 | 0,003 | <0,20 | | mg/l | • |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,00 | 0,5 | mg/l | 96% |



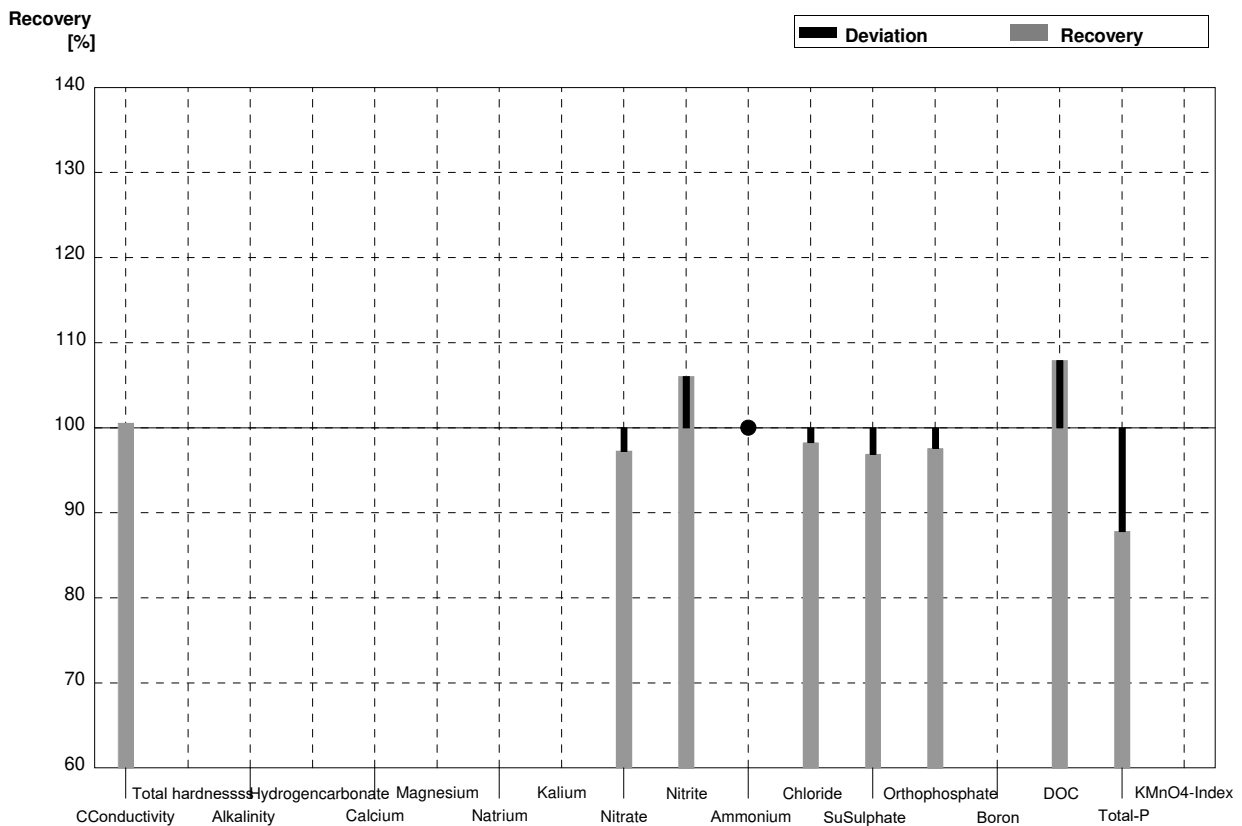
Sample N174A
Laboratory K

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 361 | 18 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,483 | 0,420 | mg/l | 98% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0246 | 0,0069 | mg/l | 110% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0465 | 0,0107 | mg/l | 115% |
| Chloride | 46,5 | 0,5 | 45,596 | 5,964 | mg/l | 98% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,276 | 0,991 | mg/l | 97% |
| Orthophosphate (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,673 | 1,021 | mg/l | 103% |
| Total P (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



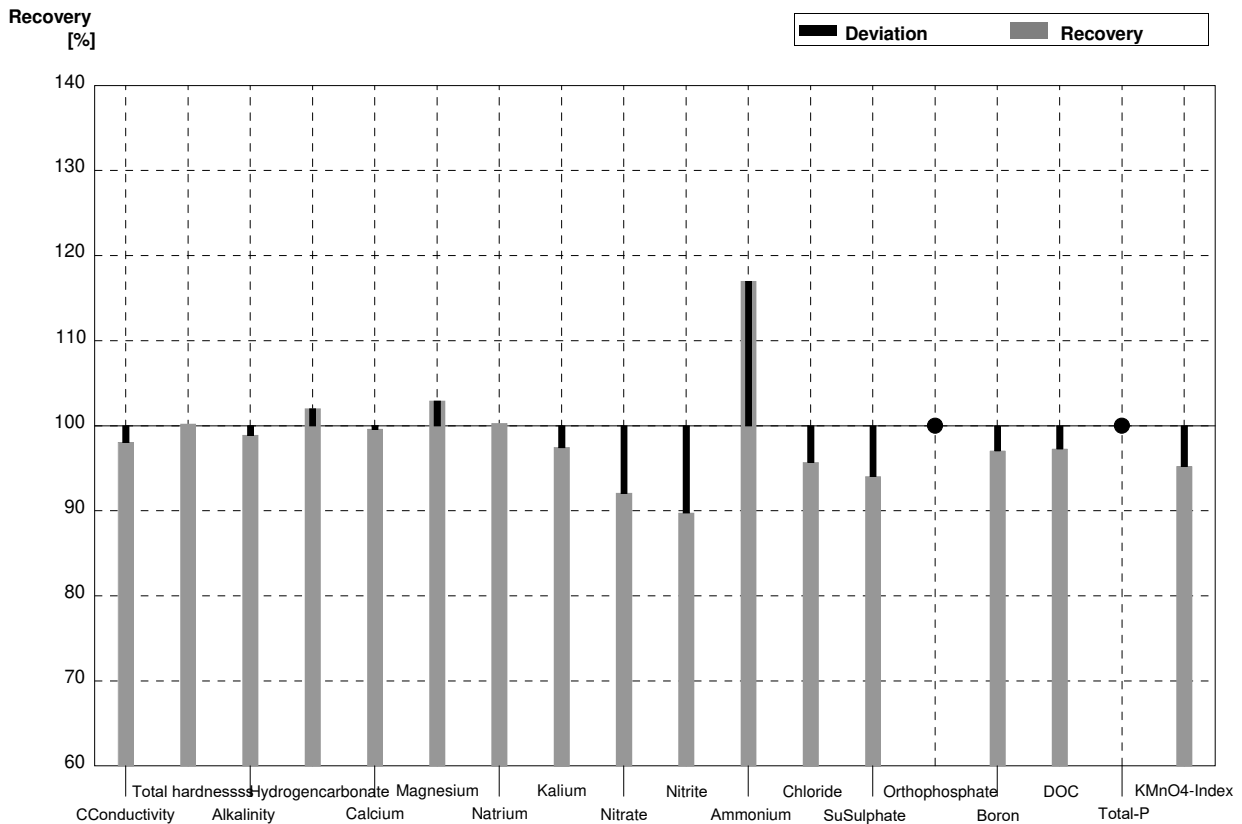
Sample N174B
Laboratory K

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 547 | 27 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,004 | 1,728 | mg/l | 97% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0458 | 0,0128 | mg/l | 106% |
| Ammonium (as NH4) | <0,01 | | <0,012 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,189 | 3,03 | mg/l | 98% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,776 | 1,752 | mg/l | 97% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0445 | 0,0076 | mg/l | 98% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,467 | 0,804 | mg/l | 108% |
| Total P (as PO4) | 0,115 | 0,003 | 0,101 | 0,012 | mg/l | 88% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



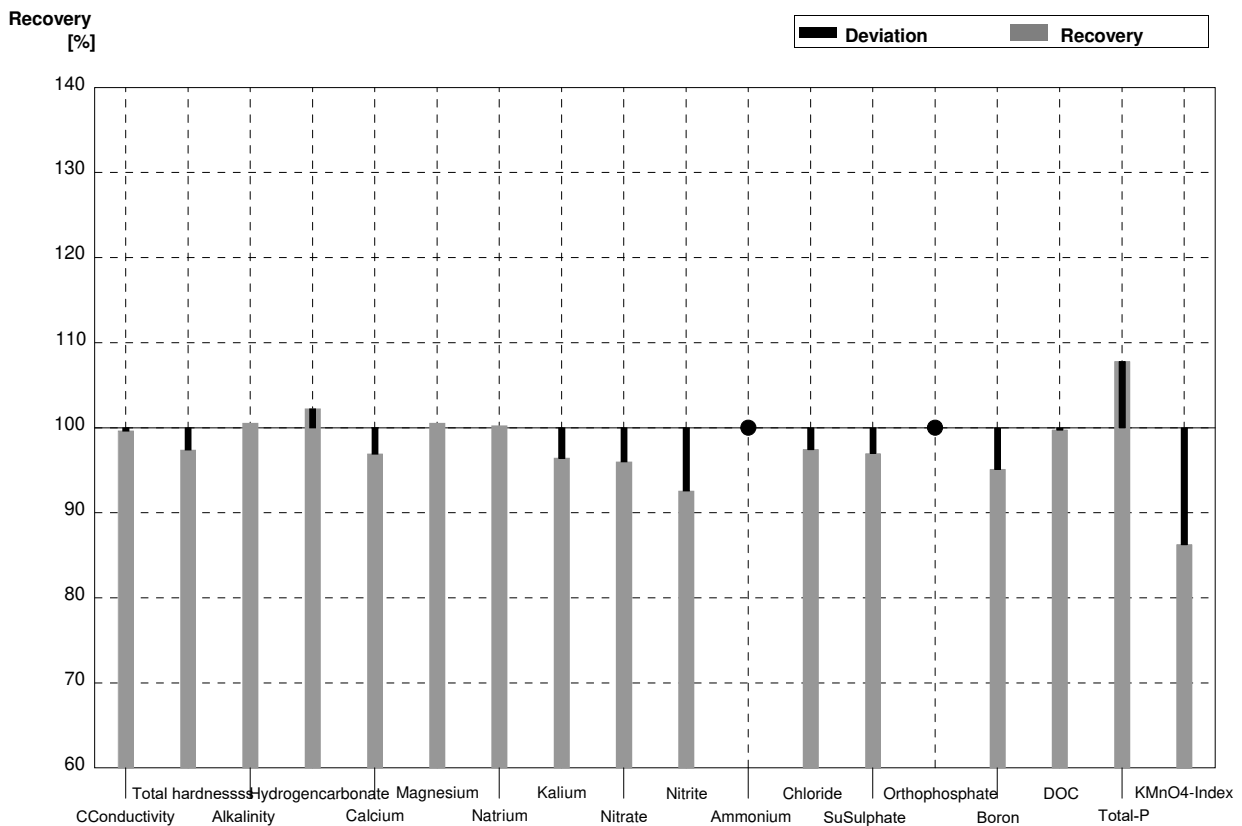
Sample N174A
Laboratory L

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 353 | 35 | µS/cm | 98% |
| Total hardness | 0,879 | 0,010 | 0,881 | 0,18 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | 0,15 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 91,3 | 9,13 | mg/l | 102% |
| Calcium | 25,1 | 0,4 | 25,0 | 5,0 | mg/l | 100% |
| Magnesium | 6,15 | 0,10 | 6,33 | 1,3 | mg/l | 103% |
| Sodium | 32,9 | 0,2 | 33,0 | 6,6 | mg/l | 100% |
| Potassium | 5,90 | 0,03 | 5,75 | 1,2 | mg/l | 97% |
| Nitrate (as NO3) | 9,7 | 0,3 | 8,93 | 1,3 | mg/l | 92% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0200 | 0,003 | mg/l | 90% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0475 | 0,0095 | mg/l | 117% |
| Chloride | 46,5 | 0,5 | 44,5 | 6,7 | mg/l | 96% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,8 | 2,4 | mg/l | 94% |
| Orthophosphate (as PO4) | <0,009 | | <0,1 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,132 | 0,027 | mg/l | 97% |
| DOC (as C) | 5,53 | 0,07 | 5,38 | 1,6 | mg/l | 97% |
| Total P (as PO4) | <0,009 | | <0,031 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,00 | 0,4 | mg/l | 95% |



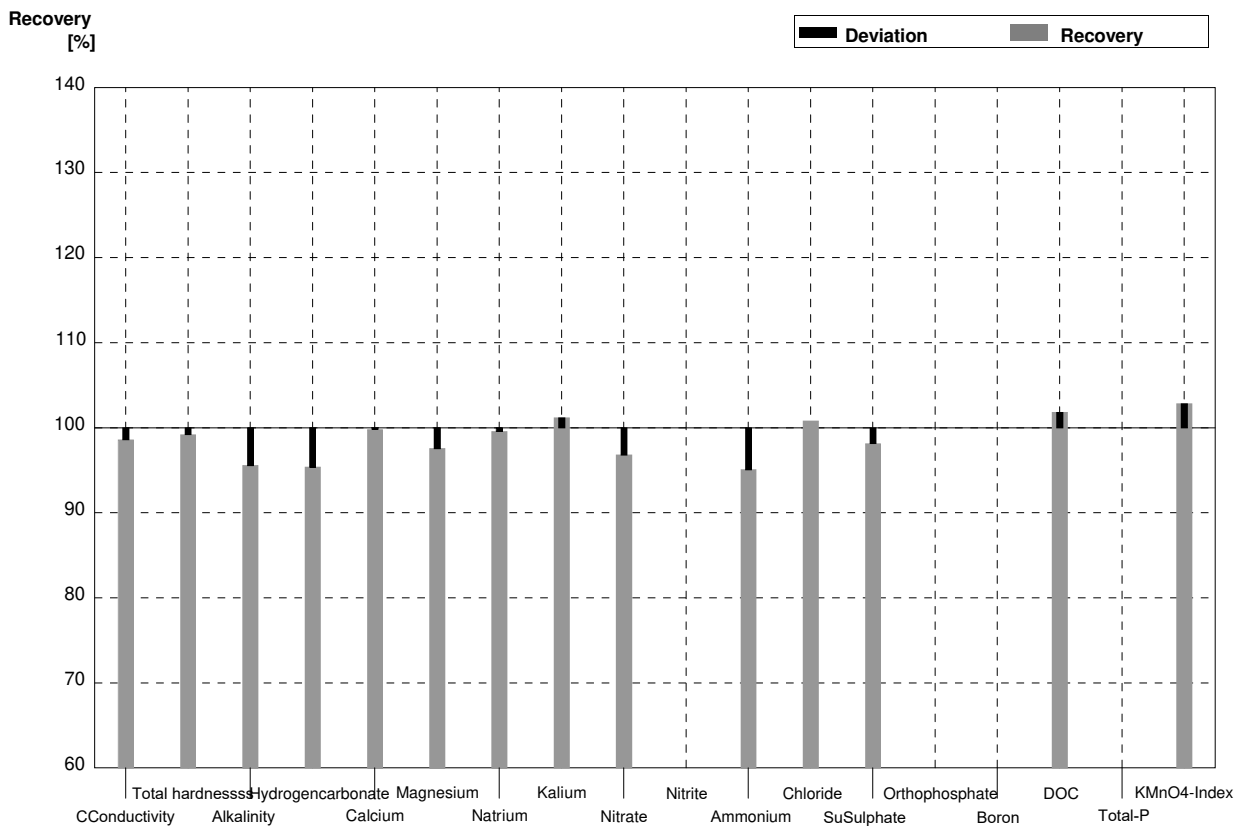
Sample N174B
Laboratory L

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 542 | 54 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,87 | 0,37 | mmol/l | 97% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,72 | 0,37 | mmol/l | 101% |
| Hydrogen carbonate | 222 | 3 | 227 | 23 | mg/l | 102% |
| Calcium | 55,5 | 0,9 | 53,8 | 11 | mg/l | 97% |
| Magnesium | 12,93 | 0,18 | 13,0 | 2,6 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 40,0 | 8,0 | mg/l | 100% |
| Potassium | 1,97 | 0,04 | 1,90 | 0,38 | mg/l | 96% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,5 | 5,8 | mg/l | 96% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0400 | 0,006 | mg/l | 93% |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,0 | 3,5 | mg/l | 97% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,8 | 4,3 | mg/l | 97% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | <0,1 | | mg/l | • |
| Boron | 0,086 | 0,002 | 0,0818 | 0,016 | mg/l | 95% |
| DOC (as C) | 4,14 | 0,07 | 4,13 | 1,2 | mg/l | 100% |
| Total P (as PO4) | 0,115 | 0,003 | 0,124 | 0,025 | mg/l | 108% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 2,70 | 0,54 | mg/l | 86% |



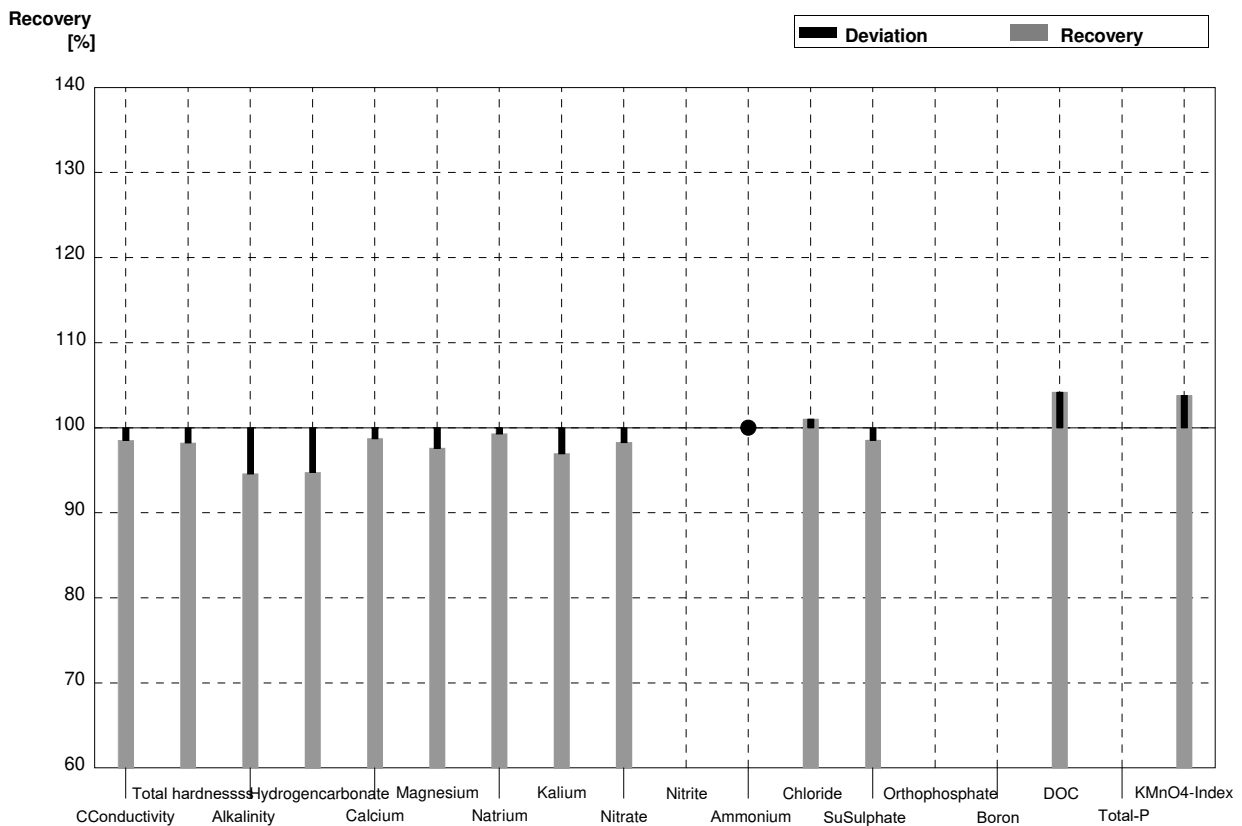
Sample N174A
Laboratory M

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 355,0 | 7,8 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,872 | 0,03 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,45 | 0,03 | mmol/l | 96% |
| Hydrogen carbonate | 89,5 | 1,1 | 85,37 | 1,79 | mg/l | 95% |
| Calcium | 25,1 | 0,4 | 25,05 | 0,98 | mg/l | 100% |
| Magnesium | 6,15 | 0,10 | 6,00 | 0,28 | mg/l | 98% |
| Sodium | 32,9 | 0,2 | 32,76 | 1,57 | mg/l | 100% |
| Potassium | 5,90 | 0,03 | 5,97 | 0,38 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,39 | 0,63 | mg/l | 97% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0386 | 0,007 | mg/l | 95% |
| Chloride | 46,5 | 0,5 | 46,87 | 2,20 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,49 | 0,82 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,631 | 0,98 | mg/l | 102% |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,16 | 0,46 | mg/l | 103% |



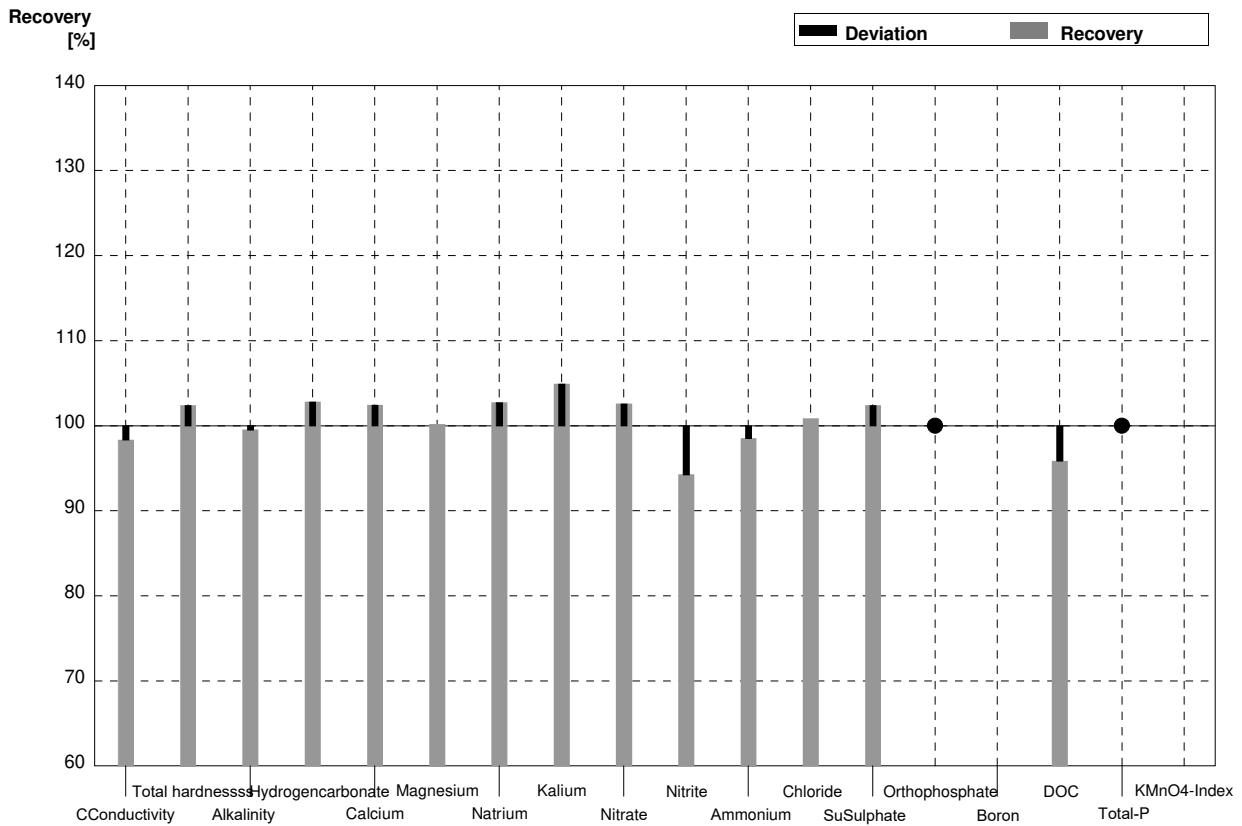
Sample N174B
Laboratory M

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 536,0 | 11,8 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,886 | 0,08 | mmol/l | 98% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,50 | 0,07 | mmol/l | 95% |
| Hydrogen carbonate | 222 | 3 | 210,38 | 4,42 | mg/l | 95% |
| Calcium | 55,5 | 0,9 | 54,80 | 2,14 | mg/l | 99% |
| Magnesium | 12,93 | 0,18 | 12,62 | 0,59 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 39,62 | 1,90 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 1,91 | 0,12 | mg/l | 97% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,41 | 2,64 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | <0,002 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,84 | 1,12 | mg/l | 101% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,27 | 1,46 | mg/l | 99% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,314 | 0,75 | mg/l | 104% |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,25 | 0,69 | mg/l | 104% |



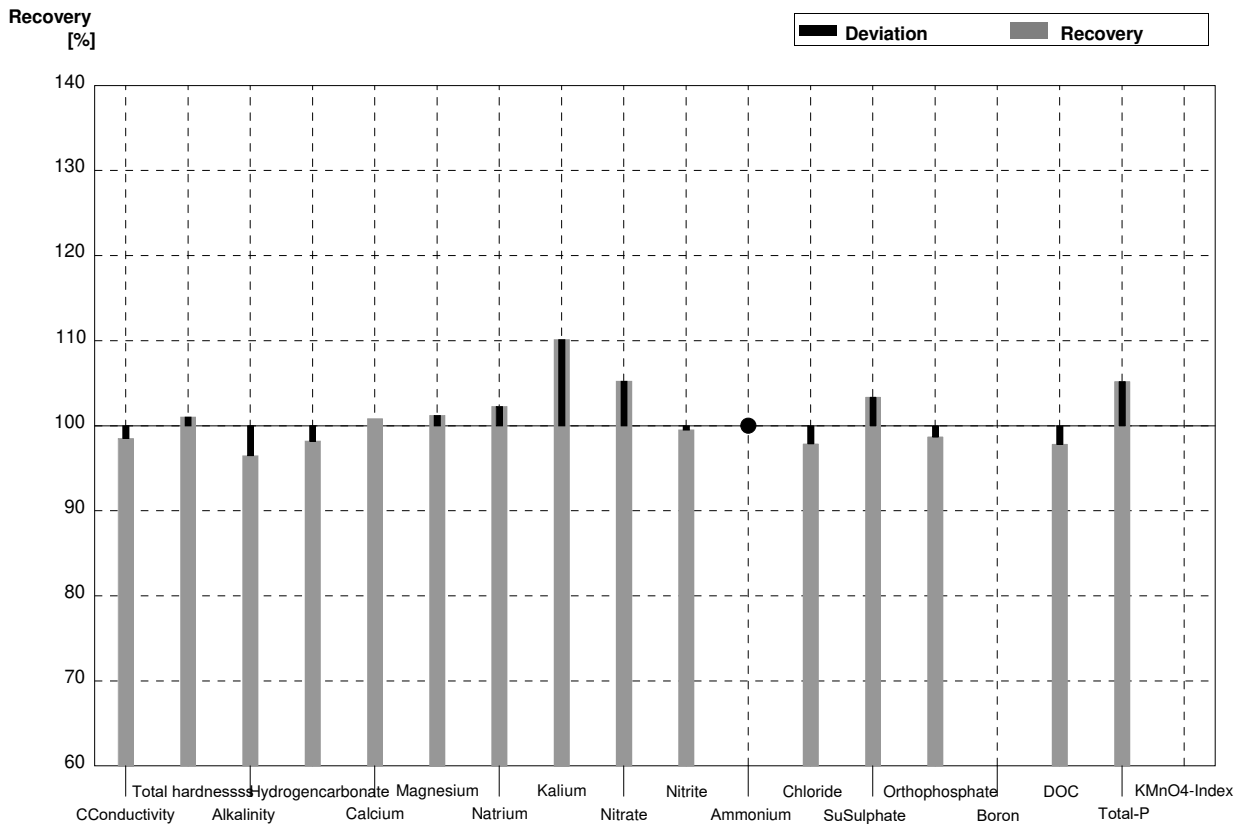
Sample N174A
Laboratory N

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 354 | 11 | µS/cm | 98% |
| Total hardness | 0,879 | 0,010 | 0,90 | 0,05 | mmol/l | 102% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,51 | 0,08 | mmol/l | 100% |
| Hydrogen carbonate | 89,5 | 1,1 | 92 | 7 | mg/l | 103% |
| Calcium | 25,1 | 0,4 | 25,71 | 1,50 | mg/l | 102% |
| Magnesium | 6,15 | 0,10 | 6,16 | 0,50 | mg/l | 100% |
| Sodium | 32,9 | 0,2 | 33,8 | 2,0 | mg/l | 103% |
| Potassium | 5,90 | 0,03 | 6,19 | 0,50 | mg/l | 105% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,95 | 0,60 | mg/l | 103% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0210 | 0,0030 | mg/l | 94% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0400 | 0,0080 | mg/l | 99% |
| Chloride | 46,5 | 0,5 | 46,9 | 3,8 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 17,2 | 1,0 | mg/l | 102% |
| Orthophosphate (as PO4) | <0,009 | | <0,0090 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,3 | 0,7 | mg/l | 96% |
| Total P (as PO4) | <0,009 | | <0,0090 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



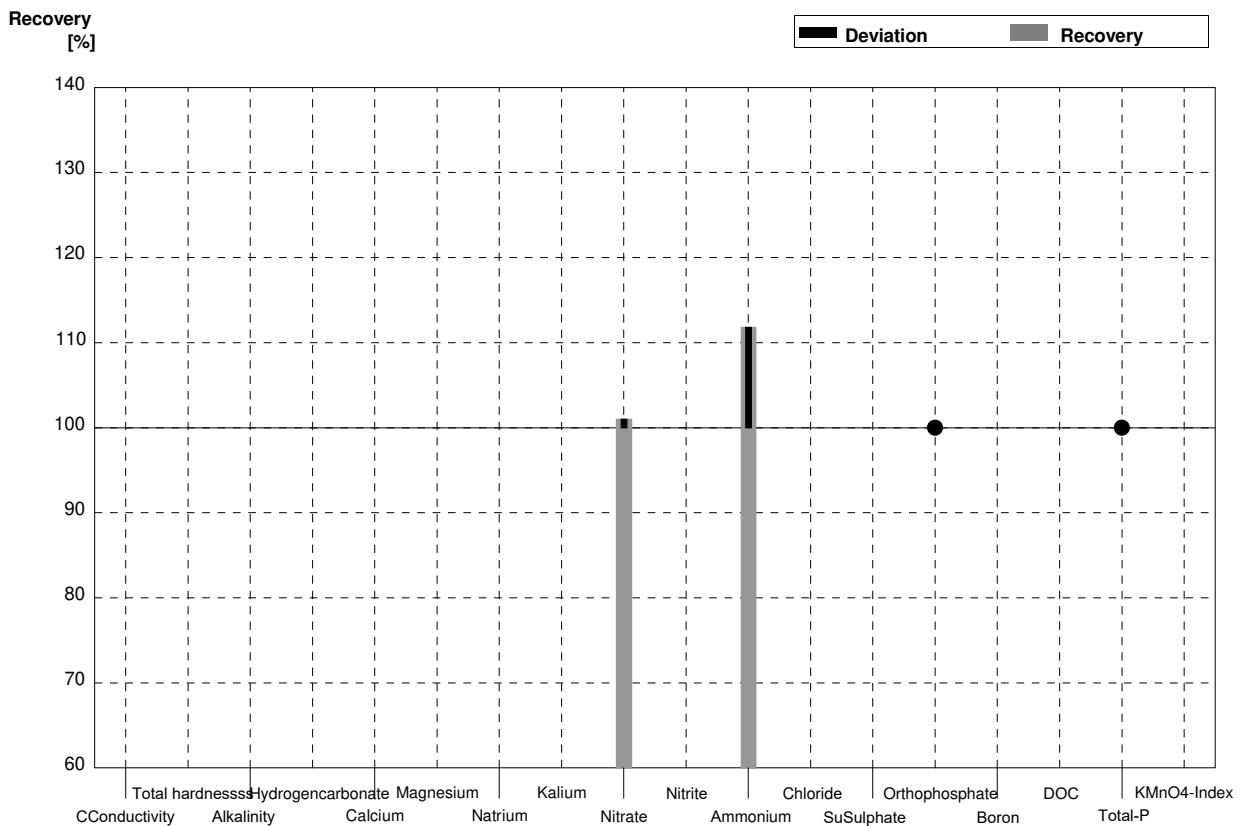
Sample N174B
Laboratory N

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 536 | 16 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,94 | 0,10 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,57 | 0,18 | mmol/l | 96% |
| Hydrogen carbonate | 222 | 3 | 218 | 17 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 55,97 | 3,36 | mg/l | 101% |
| Magnesium | 12,93 | 0,18 | 13,088 | 1,05 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 40,8 | 2,5 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 2,17 | 0,17 | mg/l | 110% |
| Nitrate (as NO3) | 40,1 | 1,0 | 42,2 | 2,5 | mg/l | 105% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0430 | 0,0060 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,020 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,1 | 1,8 | mg/l | 98% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,7 | 2,2 | mg/l | 103% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0450 | 0,0090 | mg/l | 99% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,05 | 0,57 | mg/l | 98% |
| Total P (as PO4) | 0,115 | 0,003 | 0,121 | 0,017 | mg/l | 105% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



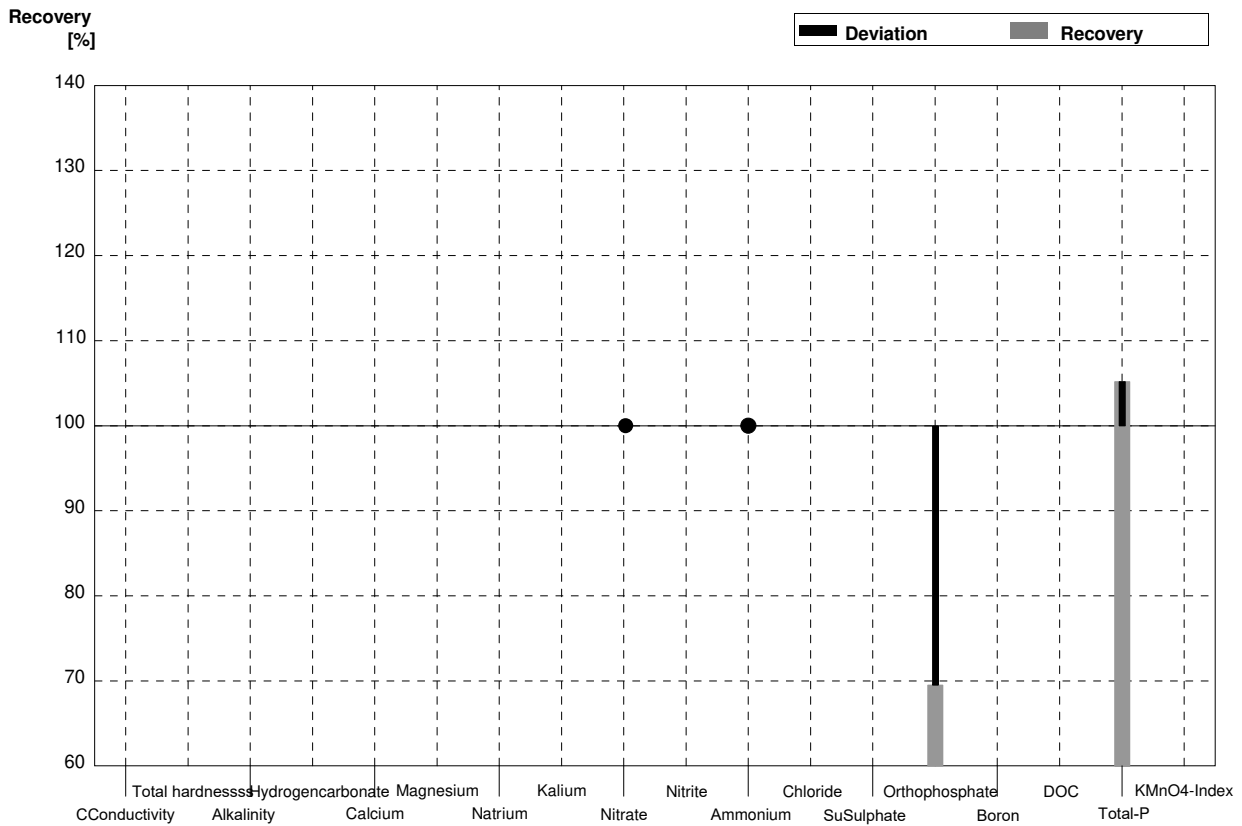
Sample N174A
Laboratory O

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,802 | 0,909 | mg/l | 101% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0454 | 0,0015 | mg/l | 112% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,019 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | <0,02 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



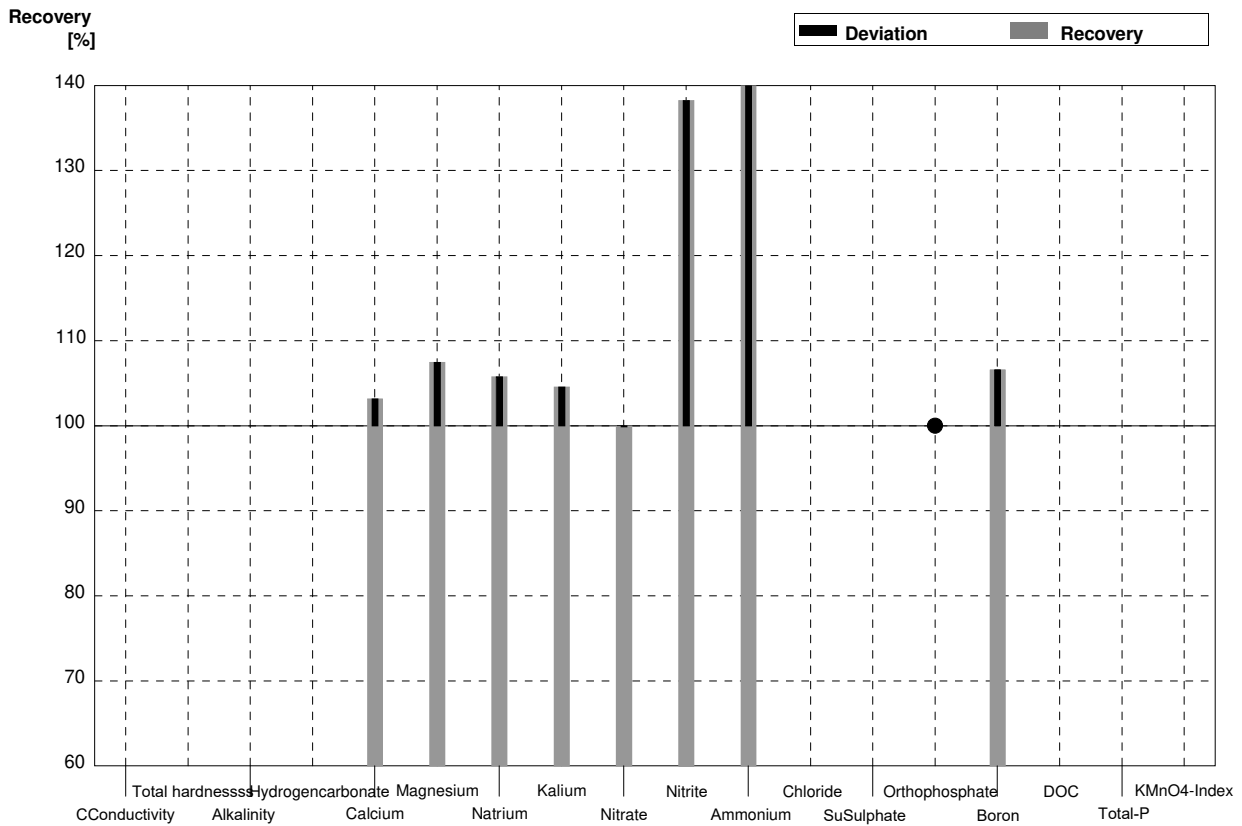
Sample N174B
Laboratory O

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | >30 | | mg/l | • |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0317 | 0,0071 | mg/l | 70% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0,121 | 0,0094 | mg/l | 105% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



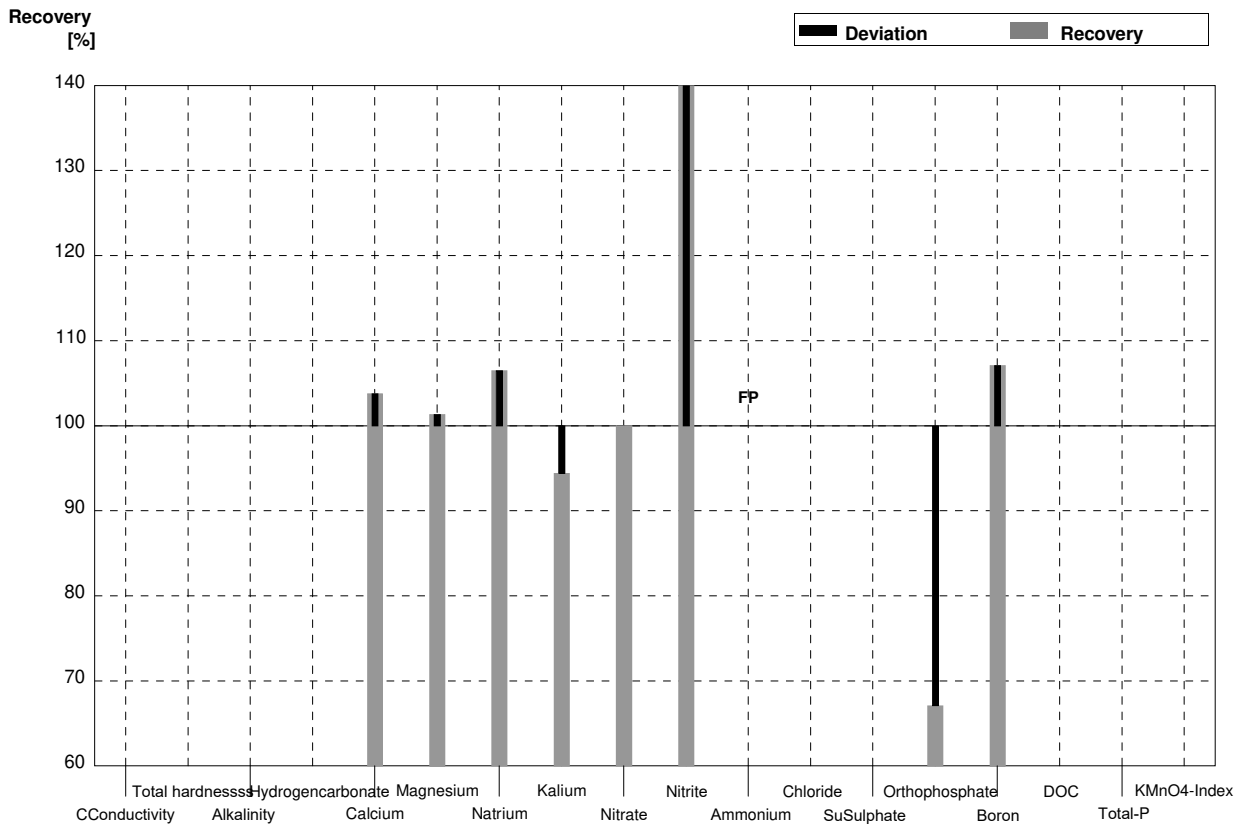
Sample N174A
Laboratory P

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | 25,9 | 3,89 | mg/l | 103% |
| Magnesium | 6,15 | 0,10 | 6,61 | 0,991 | mg/l | 107% |
| Sodium | 32,9 | 0,2 | 34,8 | 5,22 | mg/l | 106% |
| Potassium | 5,90 | 0,03 | 6,17 | 0,925 | mg/l | 105% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,69 | 1,45 | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0308 | 0,0023 | mg/l | 138% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0694 | 0,0083 | mg/l | 171% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,145 | 0,022 | mg/l | 107% |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



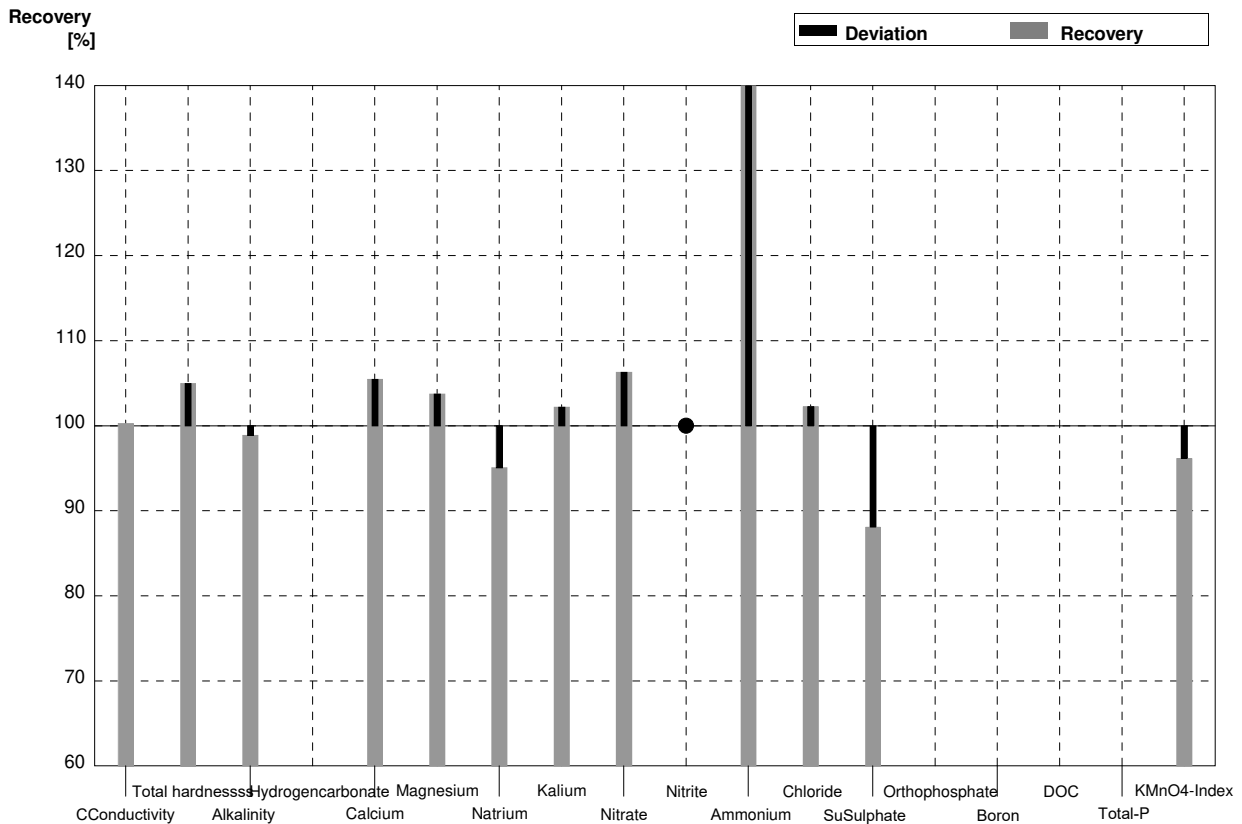
Sample N174B
Laboratory P

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | 57,6 | 8,63 | mg/l | 104% |
| Magnesium | 12,93 | 0,18 | 13,1 | 1,96 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 42,5 | 6,37 | mg/l | 107% |
| Potassium | 1,97 | 0,04 | 1,86 | 0,278 | mg/l | 94% |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,1 | 6,02 | mg/l | 100% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0780 | 0,0059 | mg/l | 181% |
| Ammonium (as NH4) | <0,01 | | 0,0250 | 0,0030 | mg/l | FP |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0306 | 0,0030 | mg/l | 67% |
| Boron | 0,086 | 0,002 | 0,0921 | 0,014 | mg/l | 107% |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



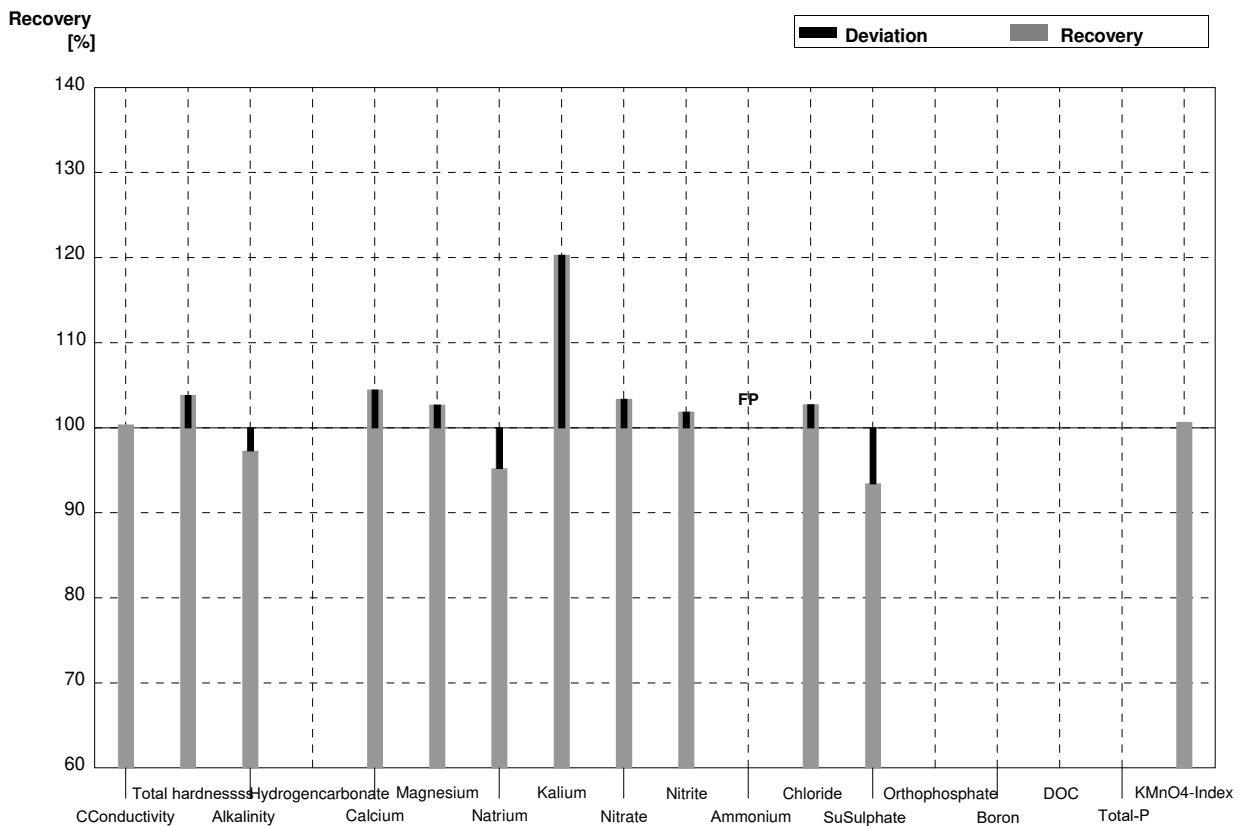
Sample N174A
Laboratory Q

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---|--------|----------|
| Conductivity (25°C) | 360 | 1 | 361 | | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,92296 | | mmol/l | 105% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | 26,47 | | mg/l | 105% |
| Magnesium | 6,15 | 0,10 | 6,38 | | mg/l | 104% |
| Sodium | 32,9 | 0,2 | 31,28 | | mg/l | 95% |
| Potassium | 5,90 | 0,03 | 6,03 | | mg/l | 102% |
| Nitrate (as NO3) | 9,7 | 0,3 | 10,31 | | mg/l | 106% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | <0,033 | | mg/l | • |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0617 | | mg/l | 152% |
| Chloride | 46,5 | 0,5 | 47,55 | | mg/l | 102% |
| Sulphate (as SO4) | 16,8 | 0,3 | 14,80 | | mg/l | 88% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,02 | | mg/l | 96% |



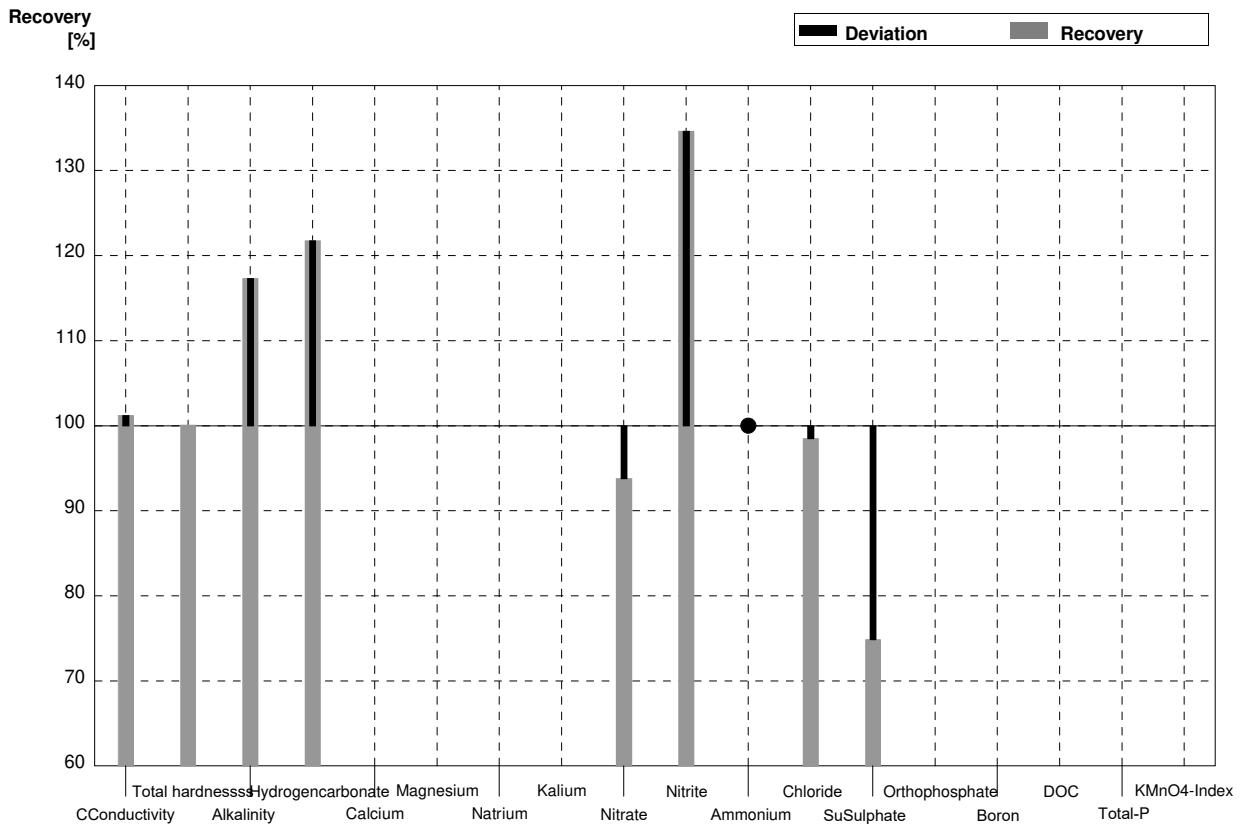
Sample N174B
Laboratory Q

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---|--------|----------|
| Conductivity (25°C) | 544 | 2 | 546 | | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,99307 | | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,60 | | mmol/l | 97% |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | 57,98 | | mg/l | 104% |
| Magnesium | 12,93 | 0,18 | 13,28 | | mg/l | 103% |
| Sodium | 39,9 | 0,6 | 37,99 | | mg/l | 95% |
| Potassium | 1,97 | 0,04 | 2,37 | | mg/l | 120% |
| Nitrate (as NO3) | 40,1 | 1,0 | 41,45 | | mg/l | 103% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0440 | | mg/l | 102% |
| Ammonium (as NH4) | <0,01 | | 0,0180 | | mg/l | FP |
| Chloride | 23,6 | 0,3 | 24,25 | | mg/l | 103% |
| Sulphate (as SO4) | 29,7 | 0,6 | 27,75 | | mg/l | 93% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,15 | | mg/l | 101% |



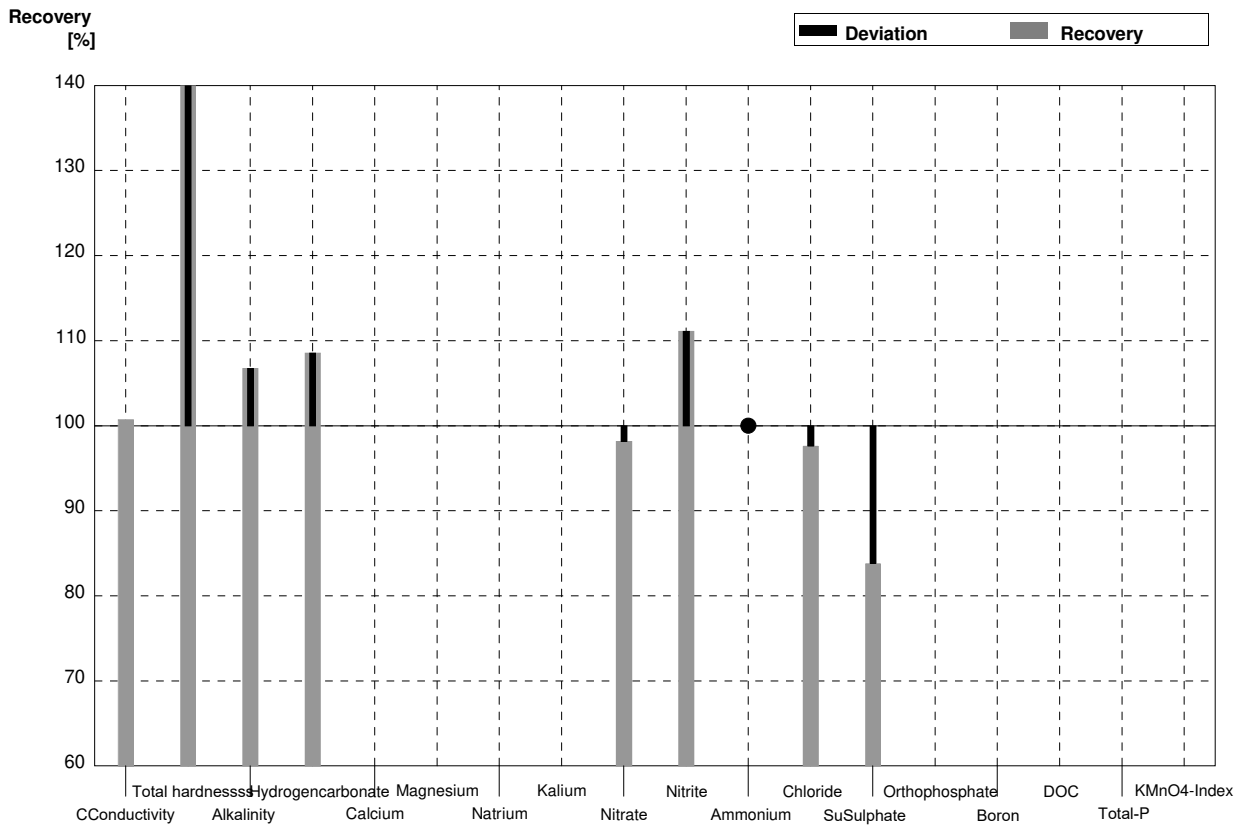
Sample N174A
Laboratory R

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 360 | 1 | 364,4 | | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | 0,88 | | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,78 | | mmol/l | 117% |
| Hydrogen carbonate | 89,5 | 1,1 | 109 | | mg/l | 122% |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,10 | | mg/l | 94% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0300 | | mg/l | 135% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | <0,10 | | mg/l | • |
| Chloride | 46,5 | 0,5 | 45,80 | | mg/l | 98% |
| Sulphate (as SO4) | 16,8 | 0,3 | 12,58 | | mg/l | 75% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



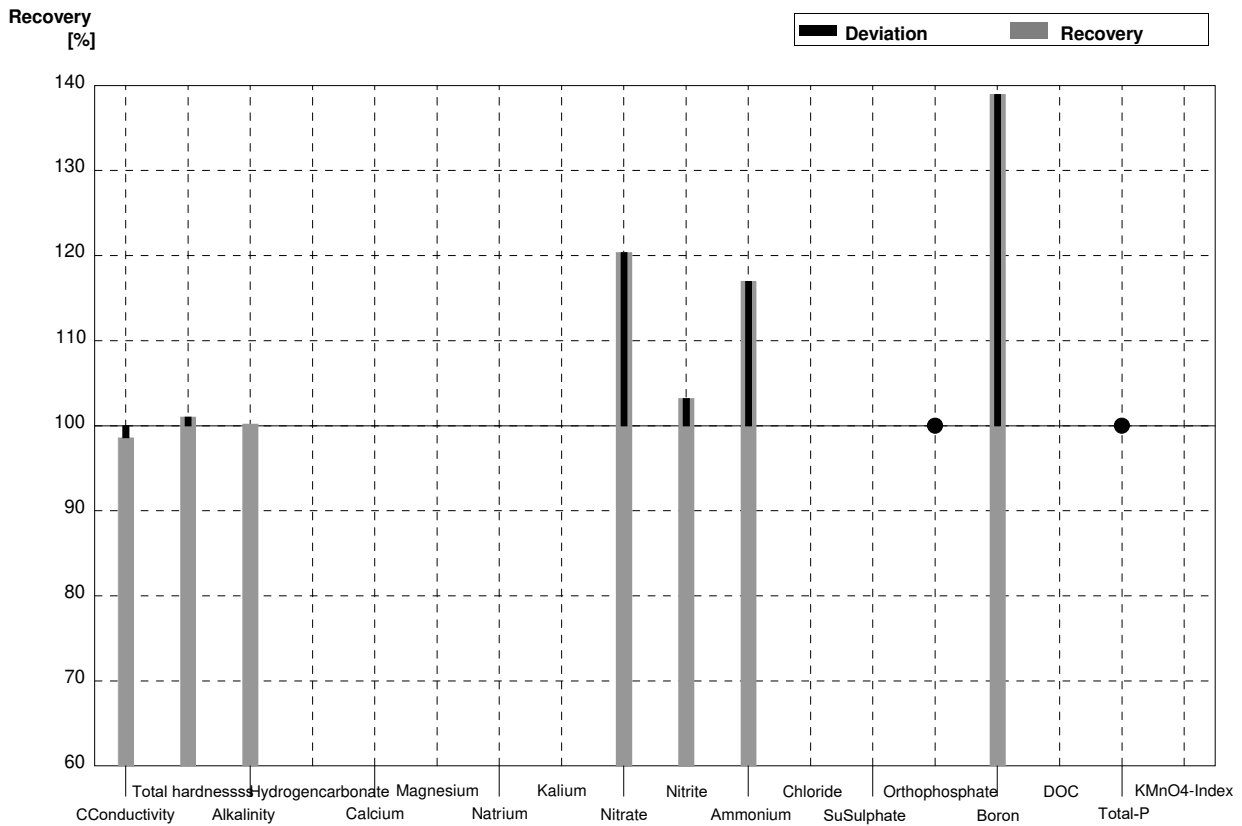
Sample N174B
Laboratory R

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 544 | 2 | 547,9 | | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 2,84 | | mmol/l | 148% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,95 | | mmol/l | 107% |
| Hydrogen carbonate | 222 | 3 | 241 | | mg/l | 109% |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,37 | | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0480 | | mg/l | 111% |
| Ammonium (as NH4) | <0,01 | | <0,1 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,04 | | mg/l | 98% |
| Sulphate (as SO4) | 29,7 | 0,6 | 24,89 | | mg/l | 84% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



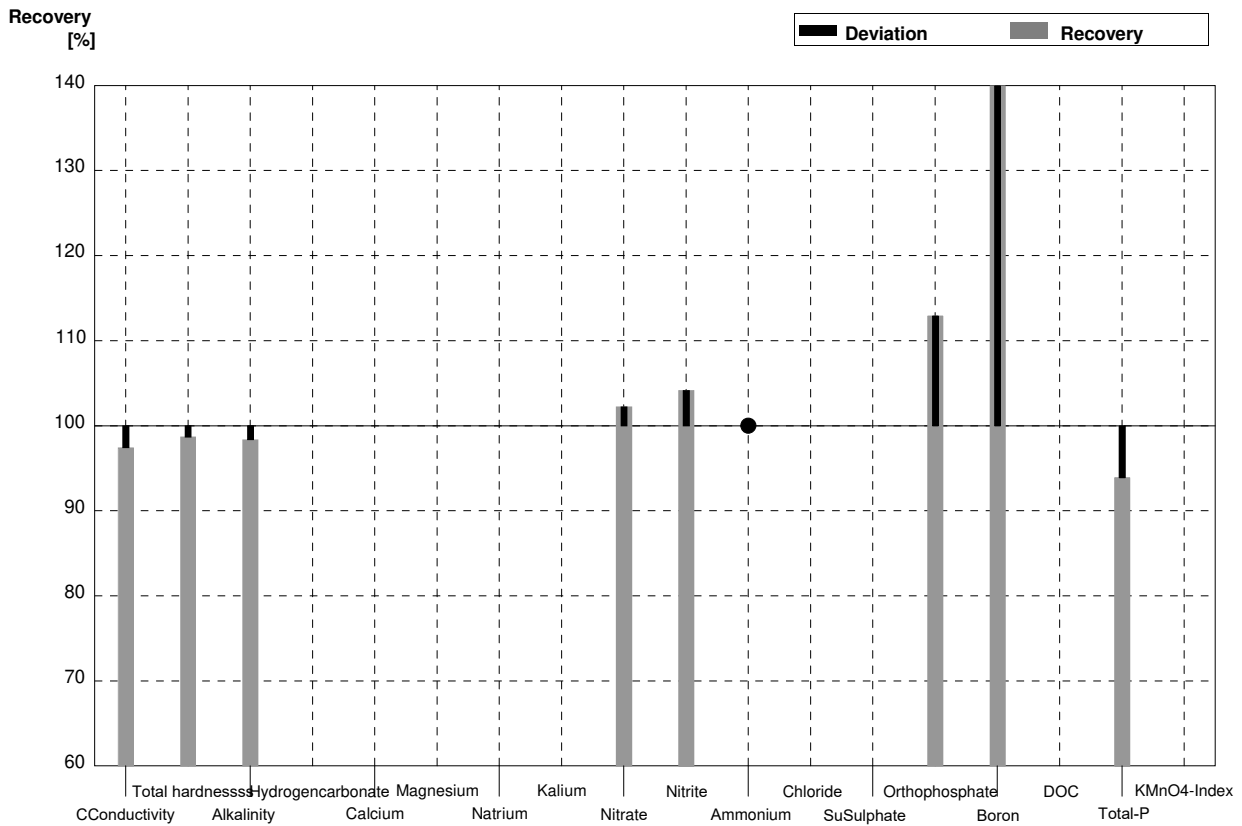
Sample N174A
Laboratory S

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 355 | 7,06 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,888 | 0,064 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,52 | 0,04 | mmol/l | 100% |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 11,677 | 0,81 | mg/l | 120% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0230 | 0,0026 | mg/l | 103% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0475 | 0,0065 | mg/l | 117% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,04 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,189 | 0,0295 | mg/l | 139% |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | <0,0004 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



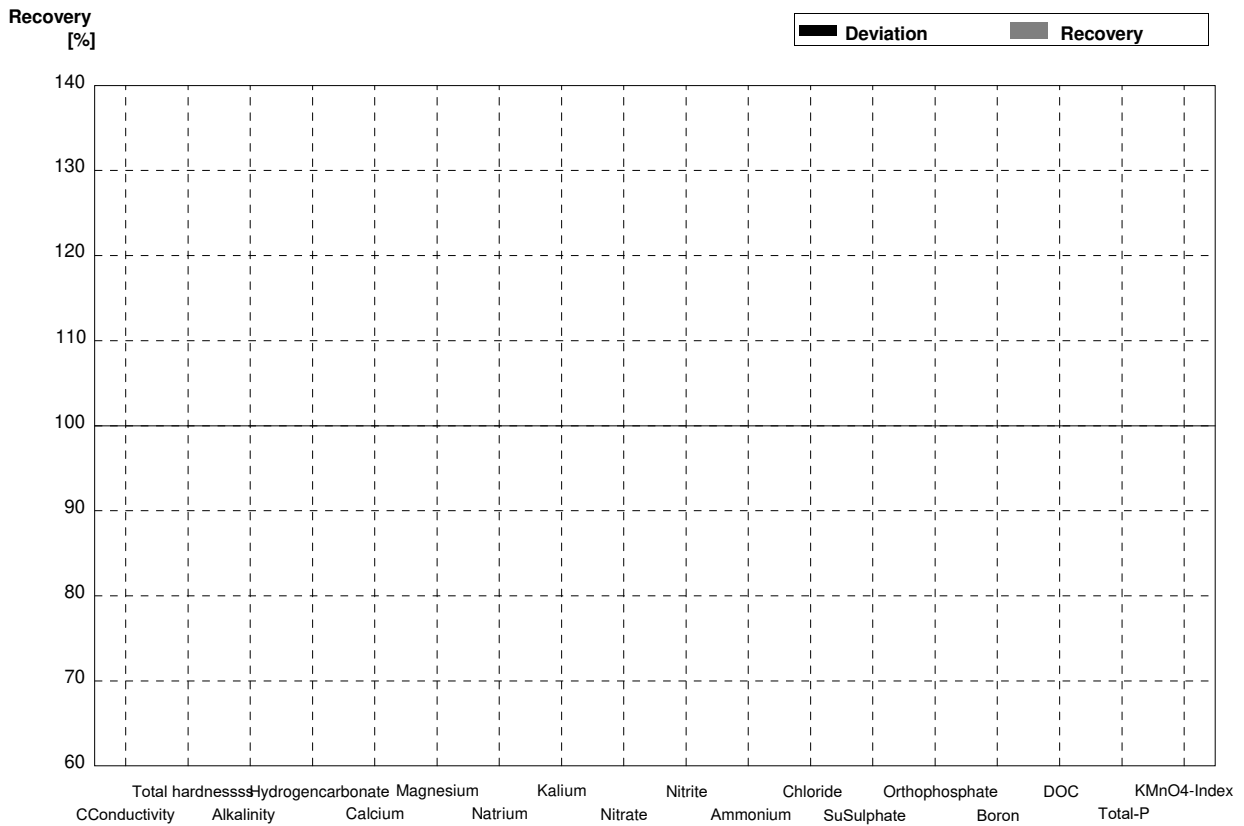
Sample N174B
Laboratory S

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 530 | 10,55 | µS/cm | 97% |
| Total hardness | 1,92 | 0,02 | 1,895 | 0,137 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,64 | 0,10 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,997 | 2,85 | mg/l | 102% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0450 | 0,0052 | mg/l | 104% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0515 | 0,0037 | mg/l | 113% |
| Boron | 0,086 | 0,002 | 0,1455 | 0,0227 | mg/l | 169% |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0,108 | 0,011 | mg/l | 94% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



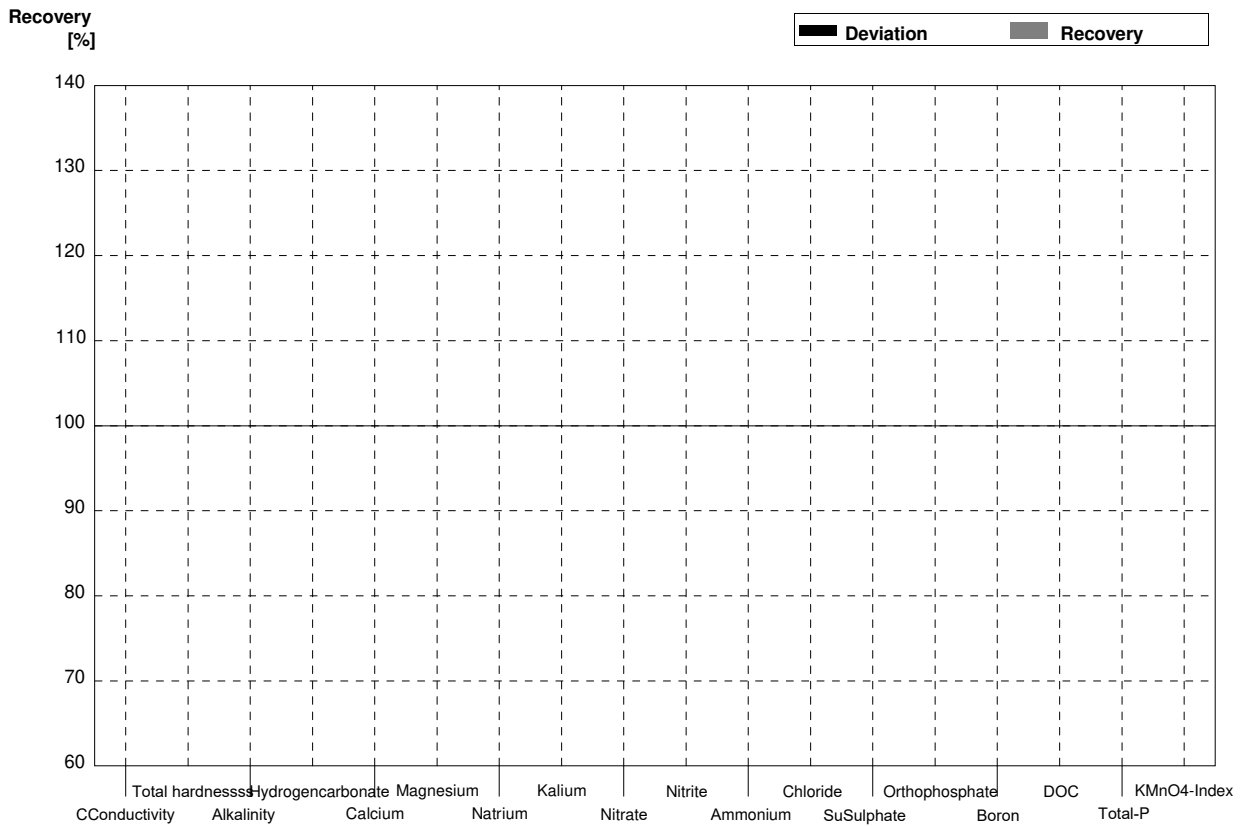
Sample N174A
Laboratory T

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | | | mg/l | |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | | | mg/l | |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



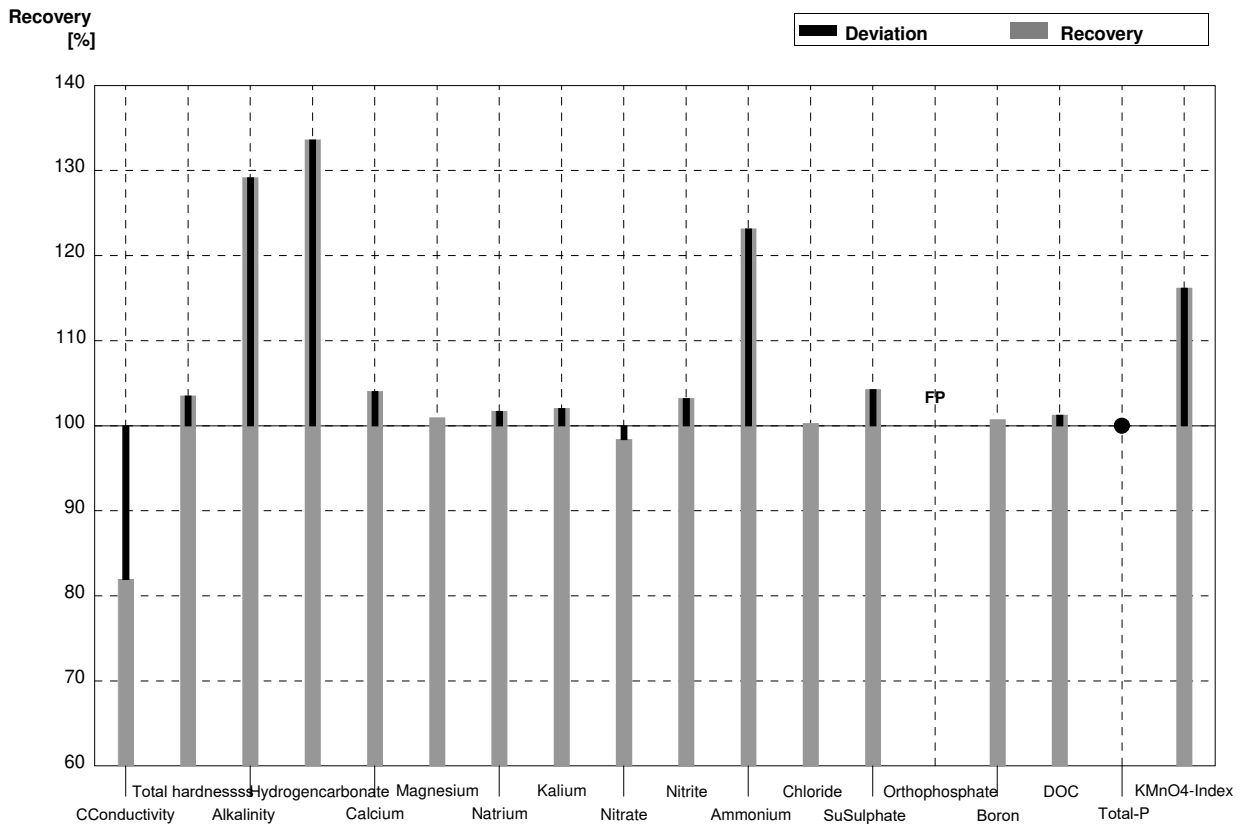
Sample N174B
Laboratory T

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | | | mg/l | |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | | | mg/l | |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



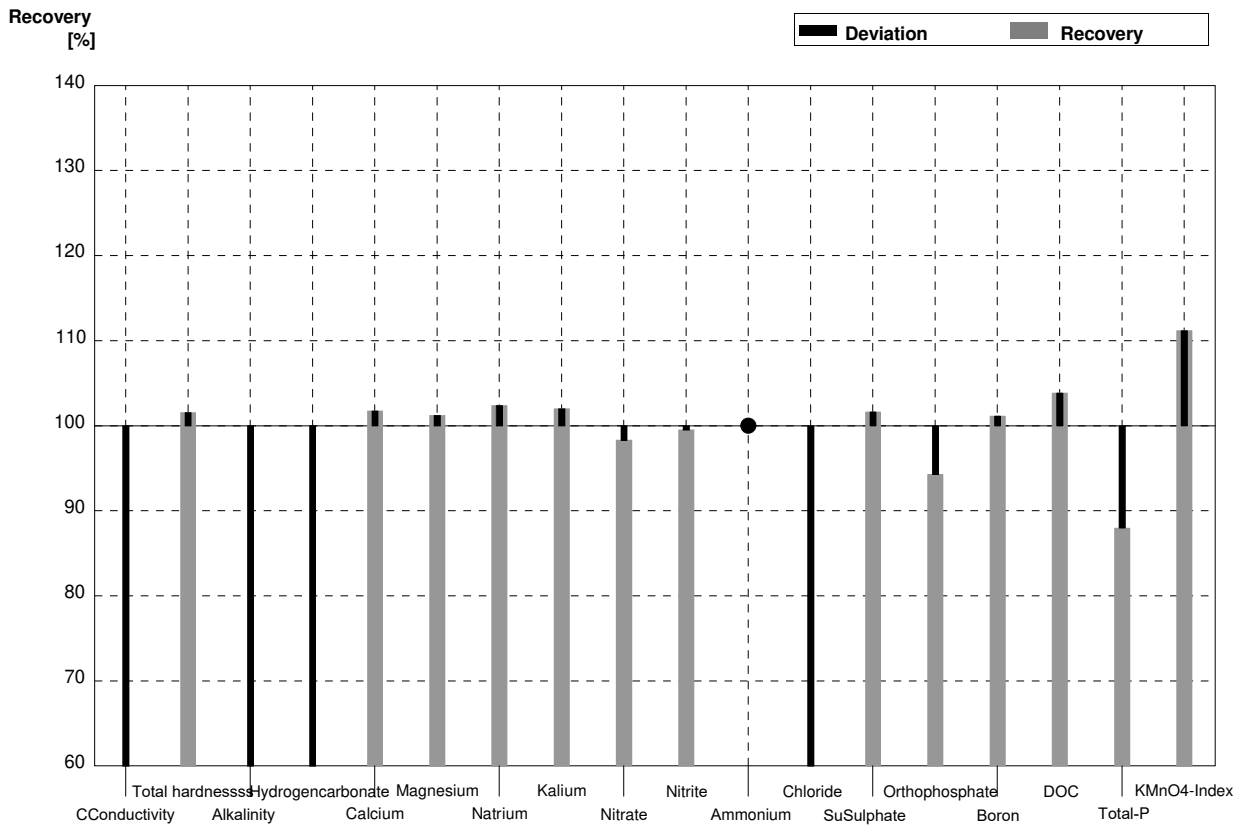
Sample N174A
Laboratory U

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|----------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 295 | 29,5 | µS/cm | 82% |
| Total hardness | 0,879 | 0,010 | 0,91 | | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,96 | 0,294 | mmol/l | 129% |
| Hydrogen carbonate | 89,5 | 1,1 | 119,6 | 17,94 | mg/l | 134% |
| Calcium | 25,1 | 0,4 | 26,12 | 2,612 | mg/l | 104% |
| Magnesium | 6,15 | 0,10 | 6,21 | 0,621 | mg/l | 101% |
| Sodium | 32,9 | 0,2 | 33,47 | 3,347 | mg/l | 102% |
| Potassium | 5,90 | 0,03 | 6,02 | 0,602 | mg/l | 102% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,544 | 0,4772 | mg/l | 98% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0230 | 0,00340 | mg/l | 103% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,050 | 0,0050 | mg/l | 123% |
| Chloride | 46,5 | 0,5 | 46,63 | 4,663 | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 17,52 | 1,752 | mg/l | 104% |
| Orthophosphate (as PO4) | <0,009 | | 0,0120 | 0,00180 | mg/l | FP |
| Boron | 0,136 | 0,004 | 0,137 | 0,0206 | mg/l | 101% |
| DOC (as C) | 5,53 | 0,07 | 5,60 | 0,45 | mg/l | 101% |
| Total P (as PO4) | <0,009 | | <0,01533 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,44 | 0,390 | mg/l | 116% |



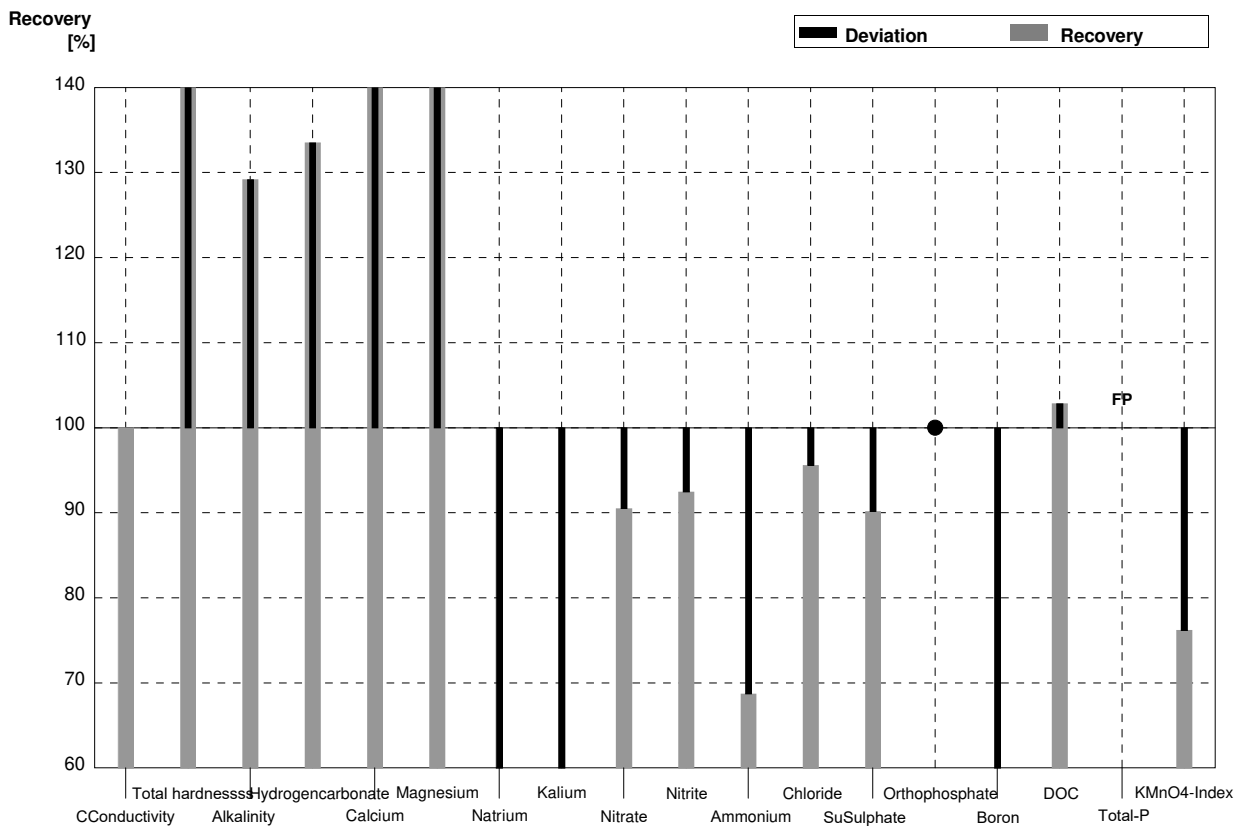
Sample N174B
Laboratory U

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|----------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 165 | 16,5 | µS/cm | 30% |
| Total hardness | 1,92 | 0,02 | 1,95 | | mmol/l | 102% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 1,39 | 0,209 | mmol/l | 38% |
| Hydrogen carbonate | 222 | 3 | 84,8 | 12,72 | mg/l | 38% |
| Calcium | 55,5 | 0,9 | 56,47 | 5,647 | mg/l | 102% |
| Magnesium | 12,93 | 0,18 | 13,09 | 1,309 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 40,86 | 4,086 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 2,01 | 0,201 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,425 | 1,9713 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0430 | 0,0064 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,00515 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 13,61 | 2,316 | mg/l | 58% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,19 | 3,019 | mg/l | 102% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0430 | 0,0064 | mg/l | 94% |
| Boron | 0,086 | 0,002 | 0,087 | 0,0131 | mg/l | 101% |
| DOC (as C) | 4,14 | 0,07 | 4,30 | 0,34 | mg/l | 104% |
| Total P (as PO4) | 0,115 | 0,003 | 0,1012 | 0,01533 | mg/l | 88% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,48 | 0,557 | mg/l | 111% |



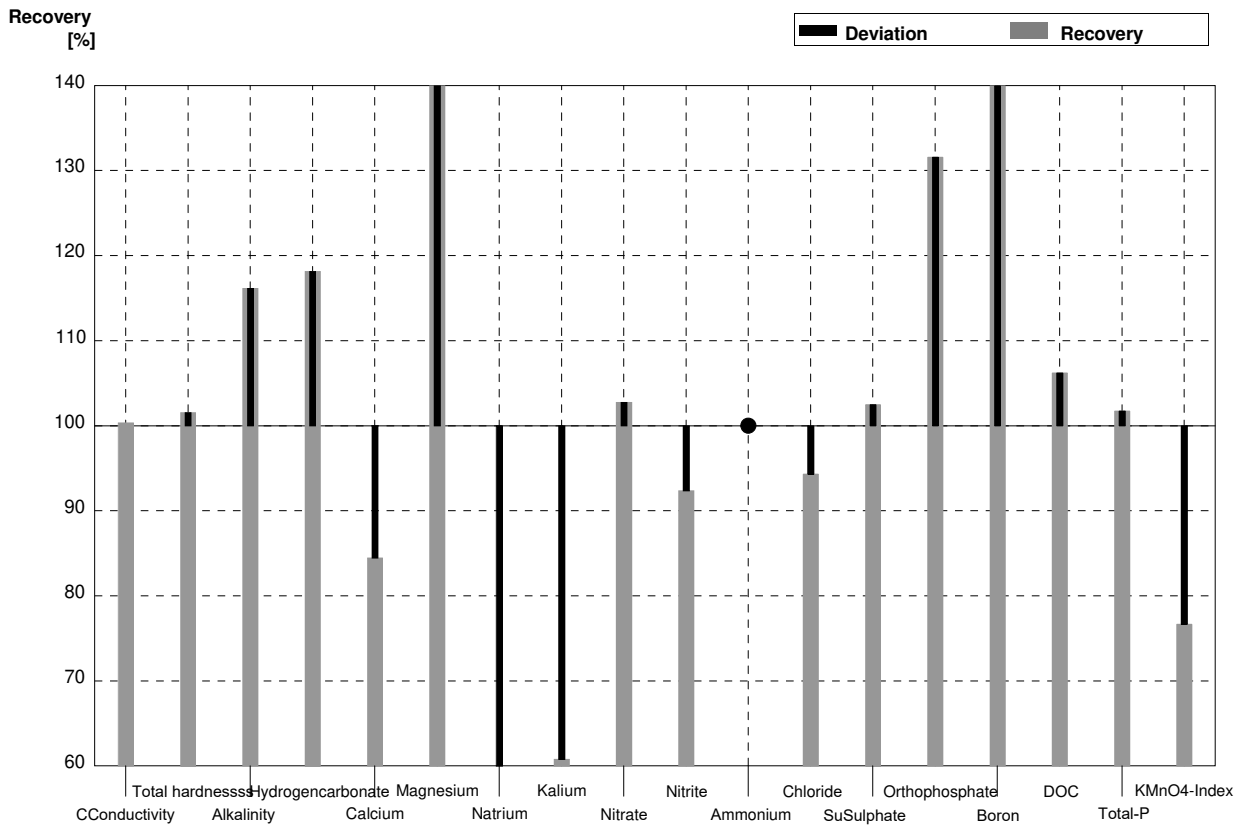
Sample N174A
Laboratory V

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 360 | | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 1,93 | | mmol/l | 220% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,96 | 0,0078 | mmol/l | 129% |
| Hydrogen carbonate | 89,5 | 1,1 | 119,5 | 0,48 | mg/l | 134% |
| Calcium | 25,1 | 0,4 | 46,3 | 0,46 | mg/l | 184% |
| Magnesium | 6,15 | 0,10 | 20,0 | 0,14 | mg/l | 325% |
| Sodium | 32,9 | 0,2 | 8,88 | 0,088 | mg/l | 27% |
| Potassium | 5,90 | 0,03 | 1,196 | 0,036 | mg/l | 20% |
| Nitrate (as NO3) | 9,7 | 0,3 | 8,78 | 0,20 | mg/l | 91% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0206 | 0,0013 | mg/l | 92% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0279 | 0,0009 | mg/l | 69% |
| Chloride | 46,5 | 0,5 | 44,45 | 3,11 | mg/l | 96% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,15 | 0,88 | mg/l | 90% |
| Orthophosphate (as PO4) | <0,009 | | 0,0092 | 0,0011 | mg/l | • |
| Boron | 0,136 | 0,004 | 0,0155 | 0,00071 | mg/l | 11% |
| DOC (as C) | 5,53 | 0,07 | 5,688 | 0,068 | mg/l | 103% |
| Total P (as PO4) | <0,009 | | 0,0250 | 0,007 | mg/l | FP |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 1,60 | 0,0 | mg/l | 76% |



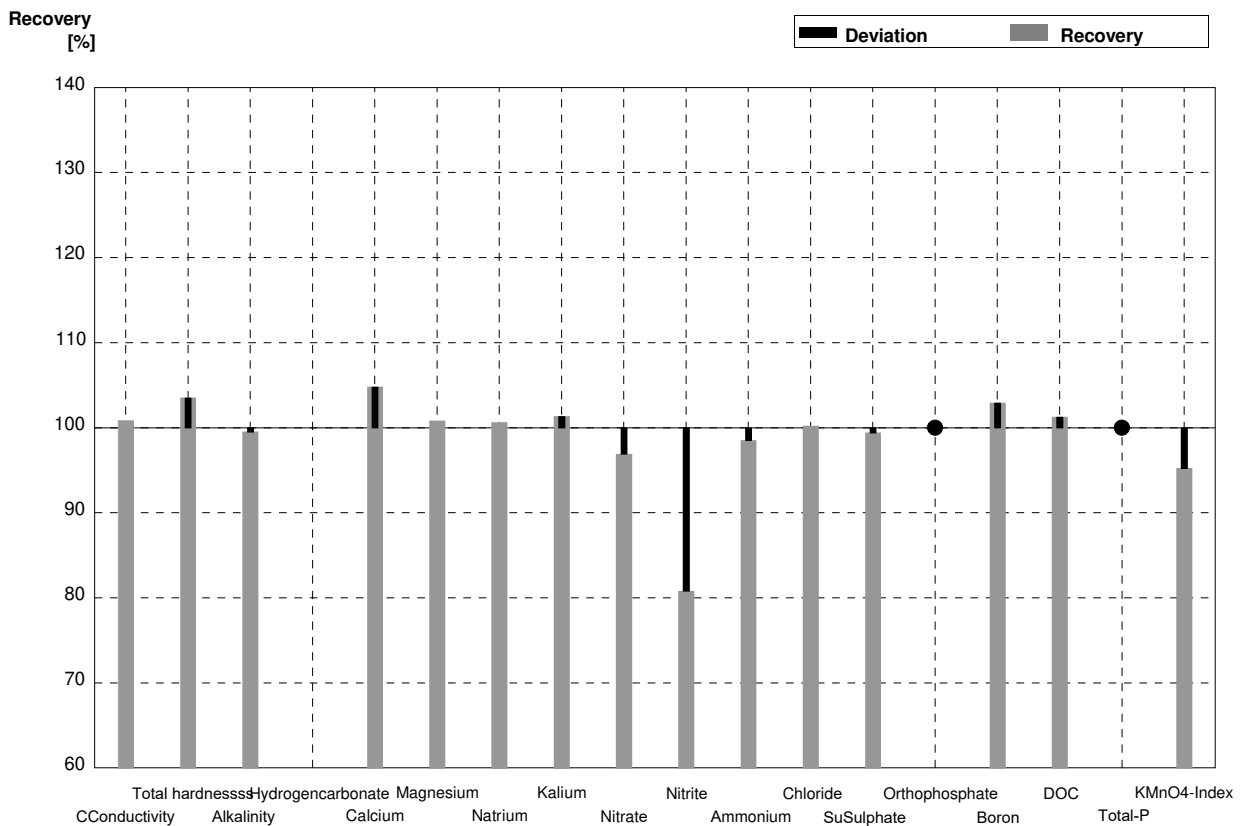
Sample N174B
Laboratory V

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 546 | | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,95 | | mmol/l | 102% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 4,298 | 0,16 | mmol/l | 116% |
| Hydrogen carbonate | 222 | 3 | 262,3 | 9,97 | mg/l | 118% |
| Calcium | 55,5 | 0,9 | 46,88 | 0,94 | mg/l | 84% |
| Magnesium | 12,93 | 0,18 | 20,26 | 0,43 | mg/l | 157% |
| Sodium | 39,9 | 0,6 | 8,93 | 0,14 | mg/l | 22% |
| Potassium | 1,97 | 0,04 | 1,198 | 0,026 | mg/l | 61% |
| Nitrate (as NO3) | 40,1 | 1,0 | 41,21 | 1,11 | mg/l | 103% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0399 | 0,00032 | mg/l | 92% |
| Ammonium (as NH4) | <0,01 | | <0,02 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,26 | 0,31 | mg/l | 94% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,44 | 1,00 | mg/l | 102% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,060 | 0,0 | mg/l | 132% |
| Boron | 0,086 | 0,002 | 7,00 | 1,41 | mg/l | 8140% |
| DOC (as C) | 4,14 | 0,07 | 4,398 | 0,15 | mg/l | 106% |
| Total P (as PO4) | 0,115 | 0,003 | 0,117 | 0,012 | mg/l | 102% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 2,40 | 0,0 | mg/l | 77% |



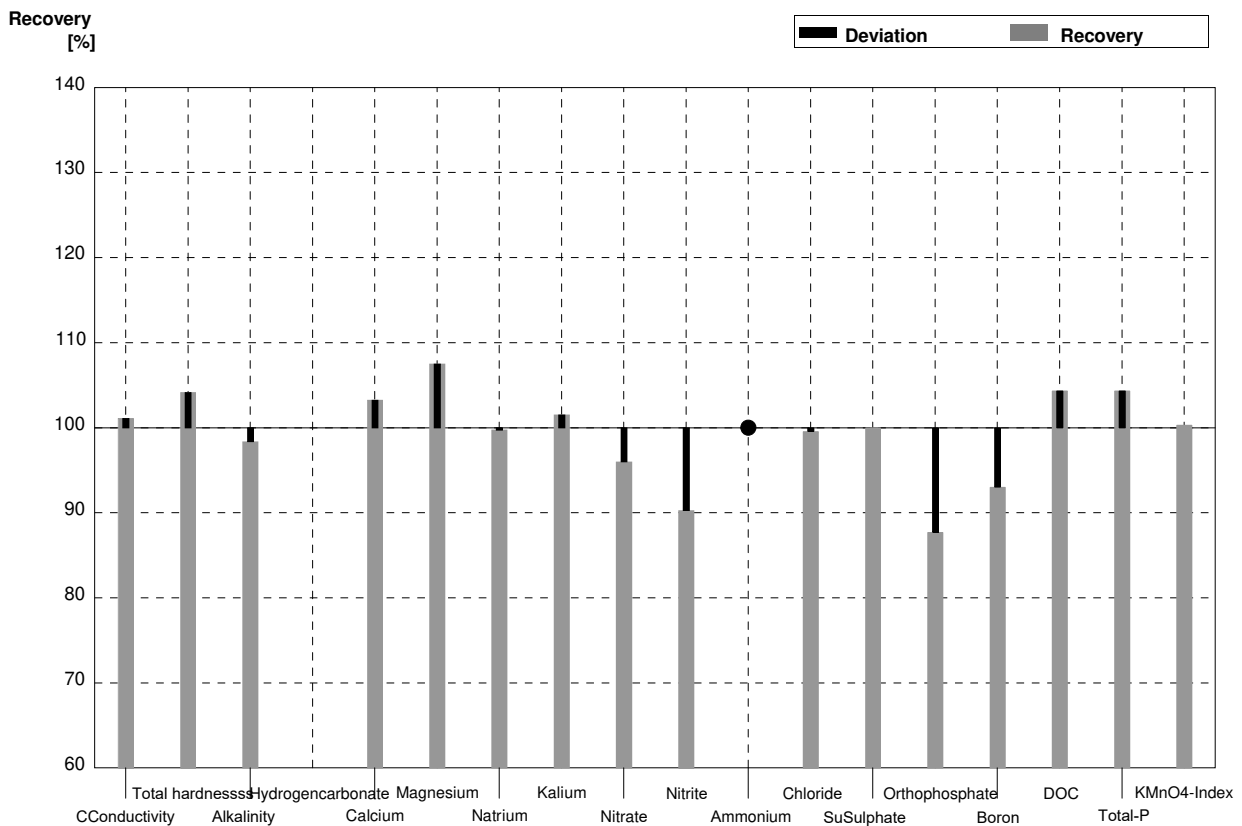
Sample N174A
Laboratory W

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 363 | 4 | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | 0,91 | 0,04 | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,51 | 0,005 | mmol/l | 100% |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | 26,3 | 1,1 | mg/l | 105% |
| Magnesium | 6,15 | 0,10 | 6,2 | 0,3 | mg/l | 101% |
| Sodium | 32,9 | 0,2 | 33,1 | 2,3 | mg/l | 101% |
| Potassium | 5,90 | 0,03 | 5,98 | 0,5 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,4 | 0,6 | mg/l | 97% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0180 | 0,001 | mg/l | 81% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0400 | 0,002 | mg/l | 99% |
| Chloride | 46,5 | 0,5 | 46,6 | 2,8 | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,7 | 1,0 | mg/l | 99% |
| Orthophosphate (as PO4) | <0,009 | | <0,03 | 0 | mg/l | • |
| Boron | 0,136 | 0,004 | 0,140 | 0,014 | mg/l | 103% |
| DOC (as C) | 5,53 | 0,07 | 5,6 | 0,3 | mg/l | 101% |
| Total P (as PO4) | <0,009 | | <0,03 | 0 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,00 | 0,04 | mg/l | 95% |



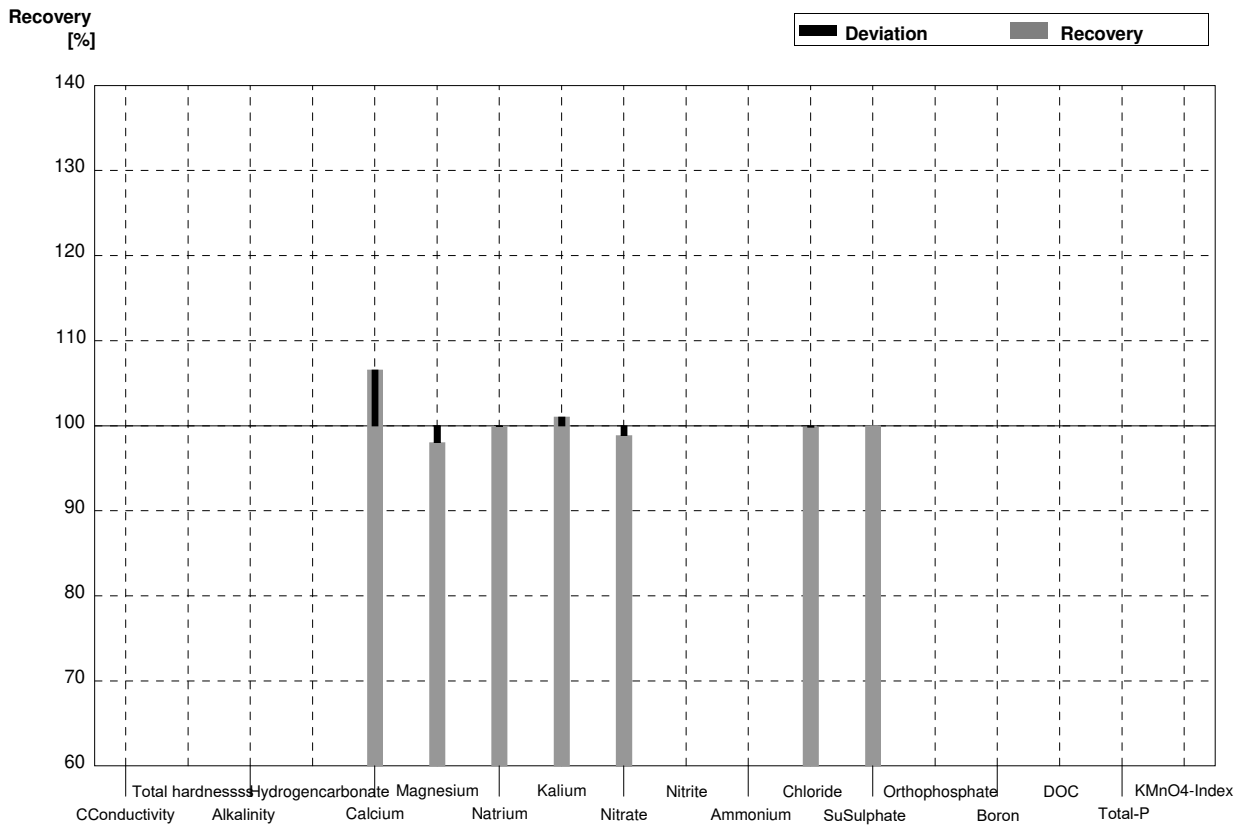
Sample N174B
Laboratory W

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 550 | 6 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 2,00 | 0,09 | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,64 | 0,01 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | 57,3 | 2,3 | mg/l | 103% |
| Magnesium | 12,93 | 0,18 | 13,9 | 0,7 | mg/l | 108% |
| Sodium | 39,9 | 0,6 | 39,8 | 2,8 | mg/l | 100% |
| Potassium | 1,97 | 0,04 | 2,00 | 0,2 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,5 | 2,3 | mg/l | 96% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0390 | 0,002 | mg/l | 90% |
| Ammonium (as NH4) | <0,01 | | <0,03 | 0 | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,5 | 1,4 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,7 | 1,8 | mg/l | 100% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0400 | 0,002 | mg/l | 88% |
| Boron | 0,086 | 0,002 | 0,080 | 0,008 | mg/l | 93% |
| DOC (as C) | 4,14 | 0,07 | 4,32 | 0,2 | mg/l | 104% |
| Total P (as PO4) | 0,115 | 0,003 | 0,120 | 0,005 | mg/l | 104% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,14 | 0,06 | mg/l | 100% |



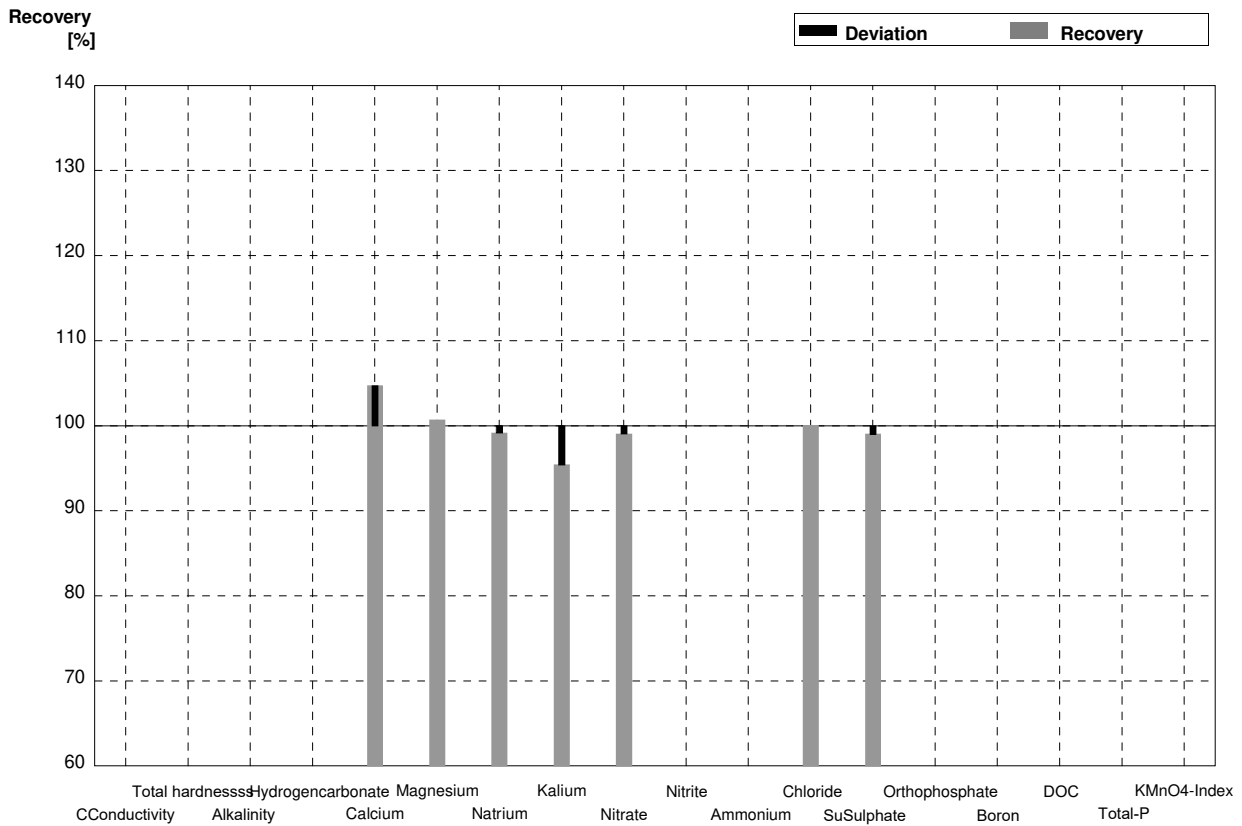
Sample N174A
Laboratory X

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|------|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | 26,75 | 0,36 | mg/l | 107% |
| Magnesium | 6,15 | 0,10 | 6,03 | 0,12 | mg/l | 98% |
| Sodium | 32,9 | 0,2 | 32,88 | 0,05 | mg/l | 100% |
| Potassium | 5,90 | 0,03 | 5,96 | 0,08 | mg/l | 101% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,59 | 0,24 | mg/l | 99% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | | | mg/l | |
| Chloride | 46,5 | 0,5 | 46,43 | 0,34 | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,80 | 0,34 | mg/l | 100% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



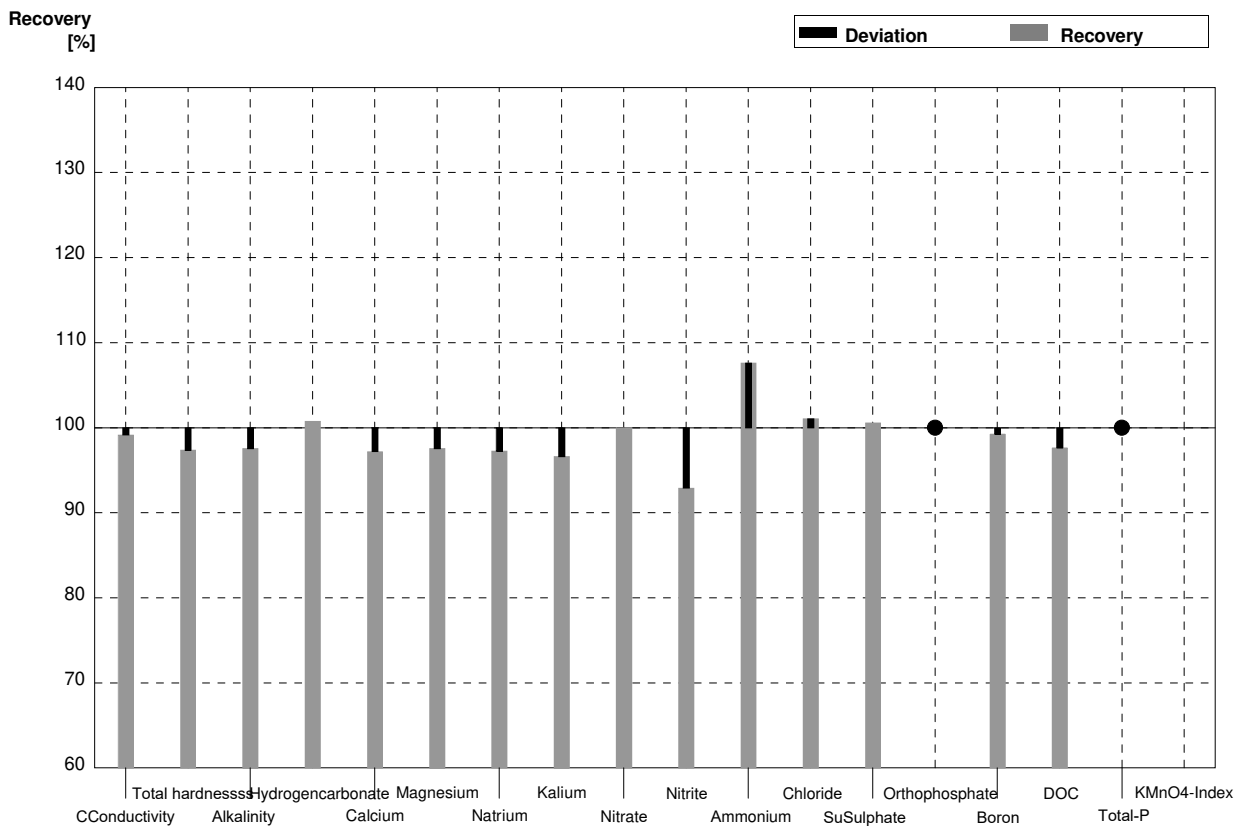
Sample N174B
Laboratory X

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|------|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | 58,12 | 0,61 | mg/l | 105% |
| Magnesium | 12,93 | 0,18 | 13,02 | 0,11 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 39,57 | 0,42 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 1,88 | 0,01 | mg/l | 95% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,72 | 0,24 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | | | mg/l | |
| Chloride | 23,6 | 0,3 | 23,61 | 0,17 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,41 | 0,44 | mg/l | 99% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



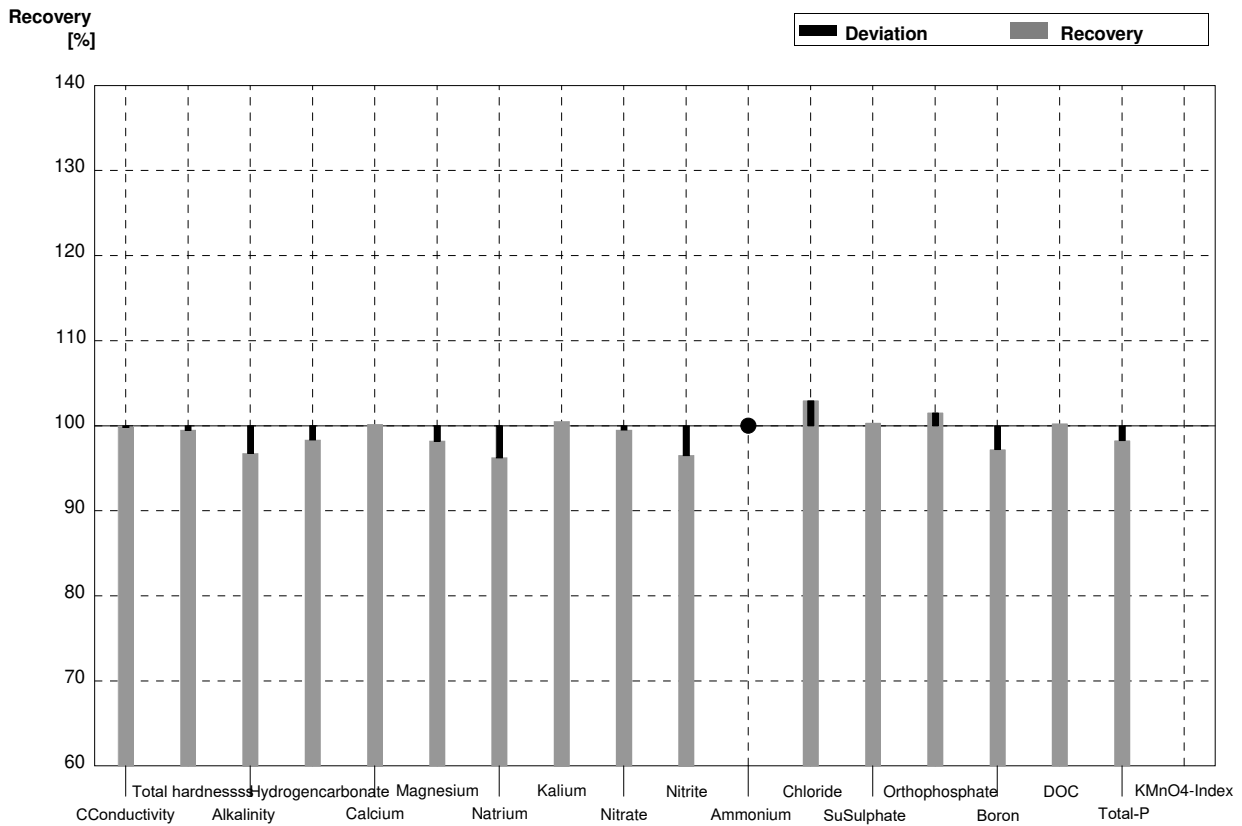
Sample N174A
Laboratory Y

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 357 | 14 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,856 | 0,041 | mmol/l | 97% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,48 | 0,10 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,2 | 6,3 | mg/l | 101% |
| Calcium | 25,1 | 0,4 | 24,4 | 1,0 | mg/l | 97% |
| Magnesium | 6,15 | 0,10 | 6,0 | 0,4 | mg/l | 98% |
| Sodium | 32,9 | 0,2 | 32,0 | 1,8 | mg/l | 97% |
| Potassium | 5,90 | 0,03 | 5,7 | 0,3 | mg/l | 97% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,7 | 1,0 | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0207 | 0,0032 | mg/l | 93% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0437 | 0,0085 | mg/l | 108% |
| Chloride | 46,5 | 0,5 | 47,0 | 3,7 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,9 | 1,5 | mg/l | 101% |
| Orthophosphate (as PO4) | <0,009 | | <0,010 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,135 | 0,0098 | mg/l | 99% |
| DOC (as C) | 5,53 | 0,07 | 5,4 | 1,0 | mg/l | 98% |
| Total P (as PO4) | <0,009 | | <0,010 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



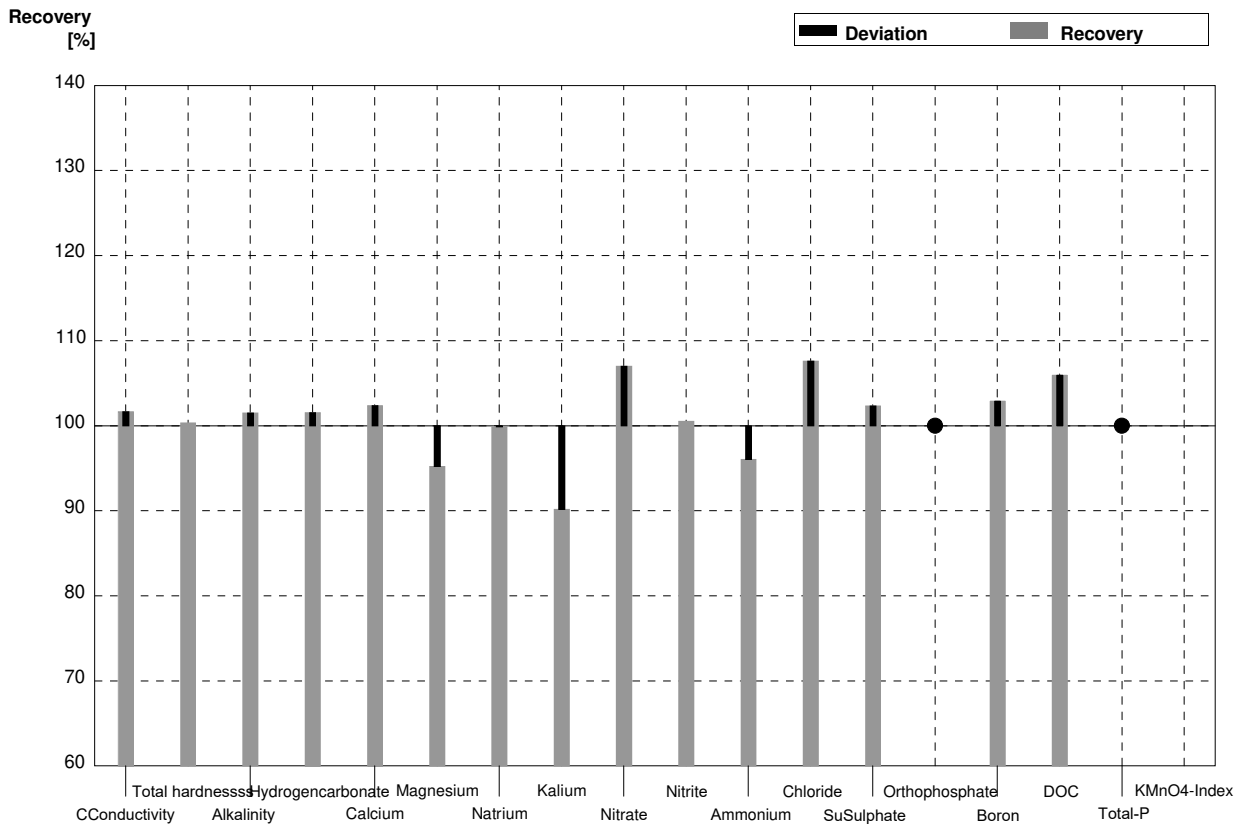
Sample N174B
Laboratory Y

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 543 | 22 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,91 | 0,084 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,58 | 0,21 | mmol/l | 97% |
| Hydrogen carbonate | 222 | 3 | 218,3 | 12,7 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 55,6 | 2,1 | mg/l | 100% |
| Magnesium | 12,93 | 0,18 | 12,7 | 0,8 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 38,4 | 2,2 | mg/l | 96% |
| Potassium | 1,97 | 0,04 | 1,98 | 0,14 | mg/l | 101% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,9 | 3,9 | mg/l | 100% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0417 | 0,0049 | mg/l | 97% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 24,3 | 2,0 | mg/l | 103% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,8 | 2,5 | mg/l | 100% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0463 | 0,0070 | mg/l | 102% |
| Boron | 0,086 | 0,002 | 0,0836 | 0,0008 | mg/l | 97% |
| DOC (as C) | 4,14 | 0,07 | 4,15 | 0,81 | mg/l | 100% |
| Total P (as PO4) | 0,115 | 0,003 | 0,113 | 0,012 | mg/l | 98% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



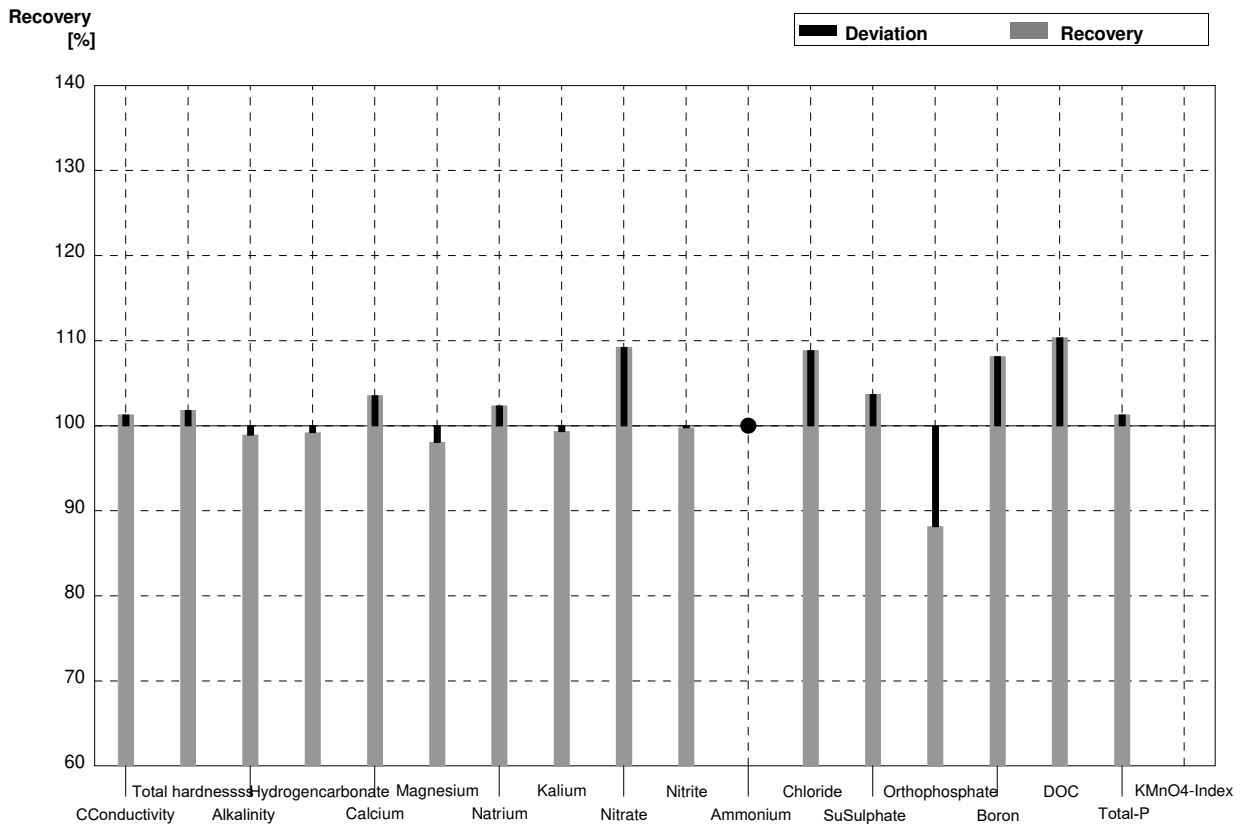
Sample N174A
Laboratory Z

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 366 | 4,51 | µS/cm | 102% |
| Total hardness | 0,879 | 0,010 | 0,882 | | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,54 | 0,15 | mmol/l | 102% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,90 | | mg/l | 102% |
| Calcium | 25,1 | 0,4 | 25,704 | 2,55 | mg/l | 102% |
| Magnesium | 6,15 | 0,10 | 5,857 | 0,59 | mg/l | 95% |
| Sodium | 32,9 | 0,2 | 32,866 | 3,31 | mg/l | 100% |
| Potassium | 5,90 | 0,03 | 5,321 | 0,53 | mg/l | 90% |
| Nitrate (as NO3) | 9,7 | 0,3 | 10,382 | 1,06 | mg/l | 107% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0224 | 0,002 | mg/l | 101% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0390 | 0,004 | mg/l | 96% |
| Chloride | 46,5 | 0,5 | 50,05 | 5,11 | mg/l | 108% |
| Sulphate (as SO4) | 16,8 | 0,3 | 17,198 | 1,73 | mg/l | 102% |
| Orthophosphate (as PO4) | <0,009 | | <0,001 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,140 | 0,014 | mg/l | 103% |
| DOC (as C) | 5,53 | 0,07 | 5,86 | 0,59 | mg/l | 106% |
| Total P (as PO4) | <0,009 | | <0,0032 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



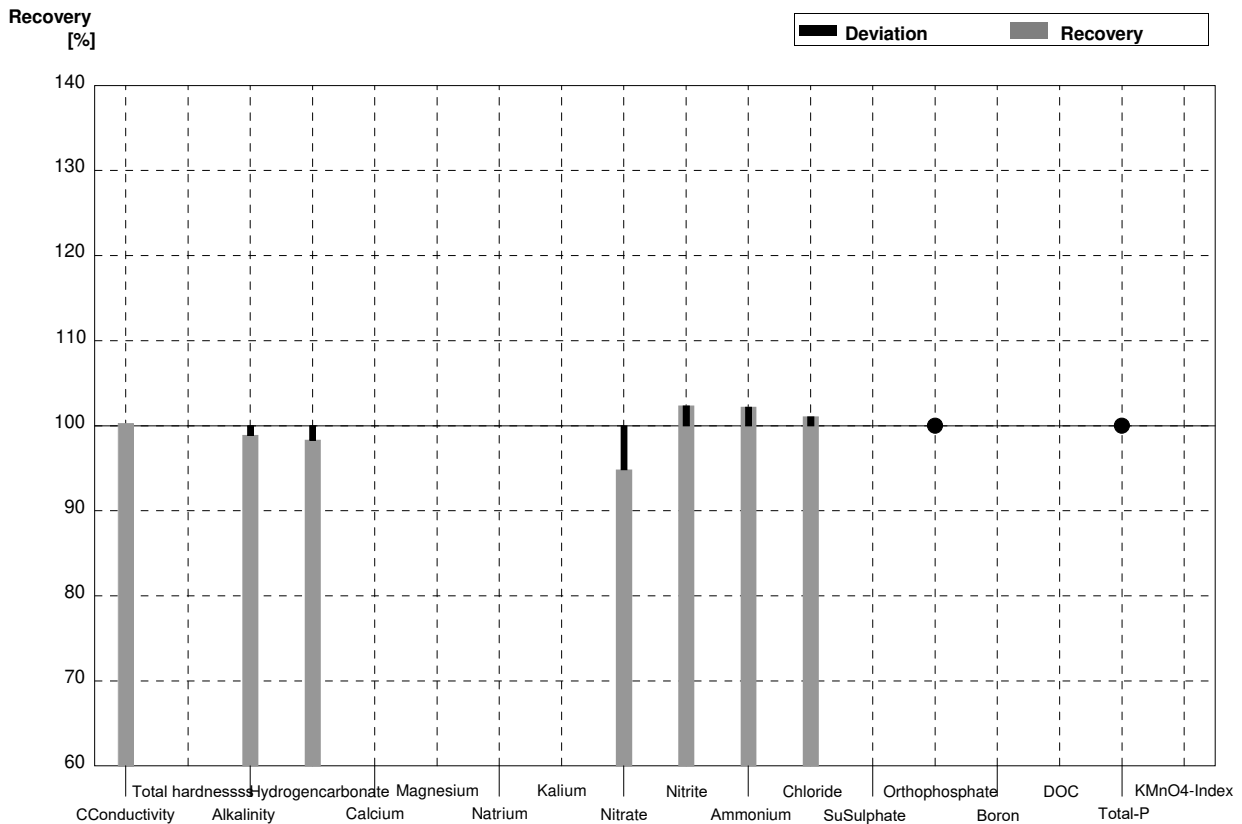
Sample N174B
Laboratory Z

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 551 | 4,51 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 1,955 | | mmol/l | 102% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,66 | 0,36 | mmol/l | 99% |
| Hydrogen carbonate | 222 | 3 | 220,24 | | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 57,465 | 5,73 | mg/l | 104% |
| Magnesium | 12,93 | 0,18 | 12,682 | 1,27 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 40,846 | 4,11 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 1,957 | 0,19 | mg/l | 99% |
| Nitrate (as NO3) | 40,1 | 1,0 | 43,810 | 4,42 | mg/l | 109% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0431 | 0,004 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,0090 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 25,688 | 2,60 | mg/l | 109% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,801 | 3,09 | mg/l | 104% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0402 | 0,004 | mg/l | 88% |
| Boron | 0,086 | 0,002 | 0,093 | 0,009 | mg/l | 108% |
| DOC (as C) | 4,14 | 0,07 | 4,57 | 0,46 | mg/l | 110% |
| Total P (as PO4) | 0,115 | 0,003 | 0,1165 | 0,012 | mg/l | 101% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



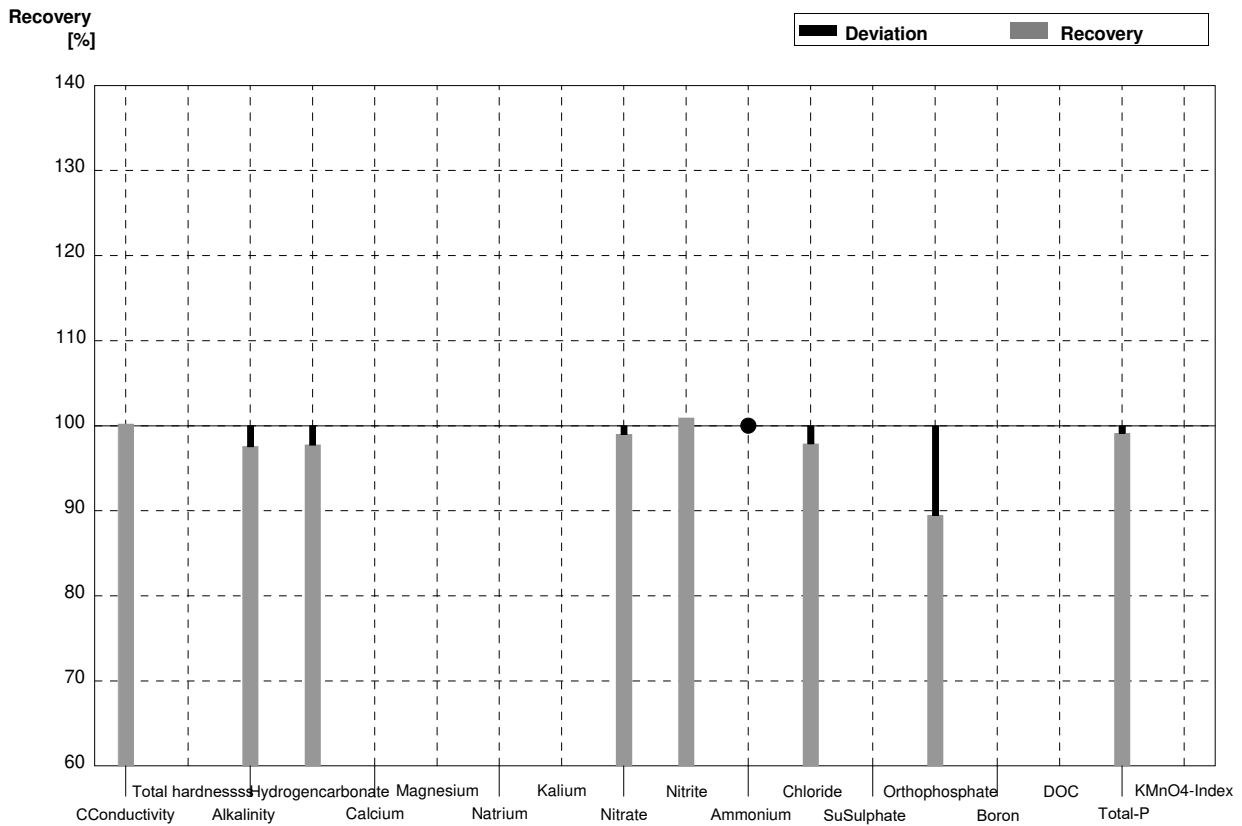
Sample N174A
Laboratory AA

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 361 | 3 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,50 | 0,04 | mmol/l | 99% |
| Hydrogen carbonate | 89,5 | 1,1 | 88 | 1 | mg/l | 98% |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,2 | 0,6 | mg/l | 95% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0228 | 0,0023 | mg/l | 102% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0415 | 0,0063 | mg/l | 102% |
| Chloride | 46,5 | 0,5 | 47,0 | 0,5 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,006 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | <0,006 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



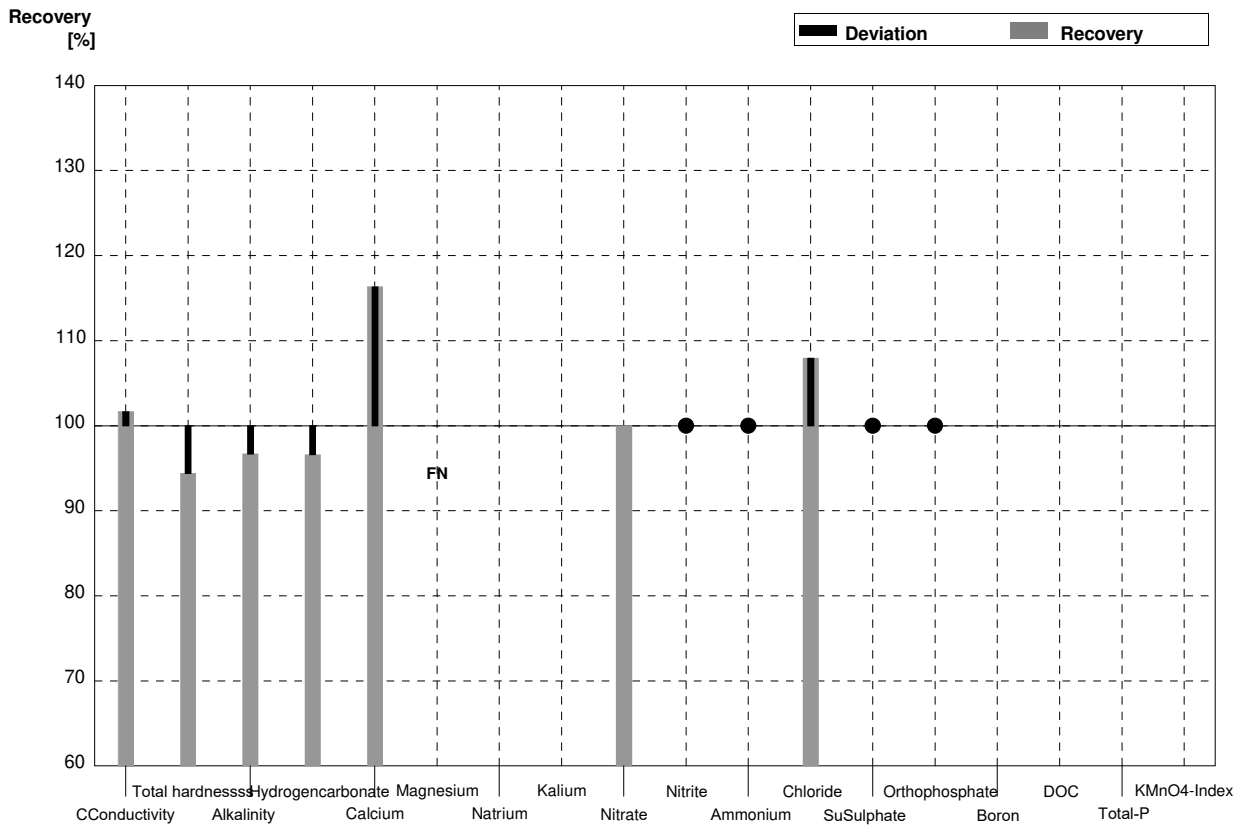
Sample N174B
Laboratory AA

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 545 | 4 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,61 | 0,10 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 217 | 3 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,7 | 2,7 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0436 | 0,0044 | mg/l | 101% |
| Ammonium (as NH4) | <0,01 | | <0,005 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,1 | 0,2 | mg/l | 98% |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0408 | 0,0048 | mg/l | 89% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | 0,114 | 0,015 | mg/l | 99% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



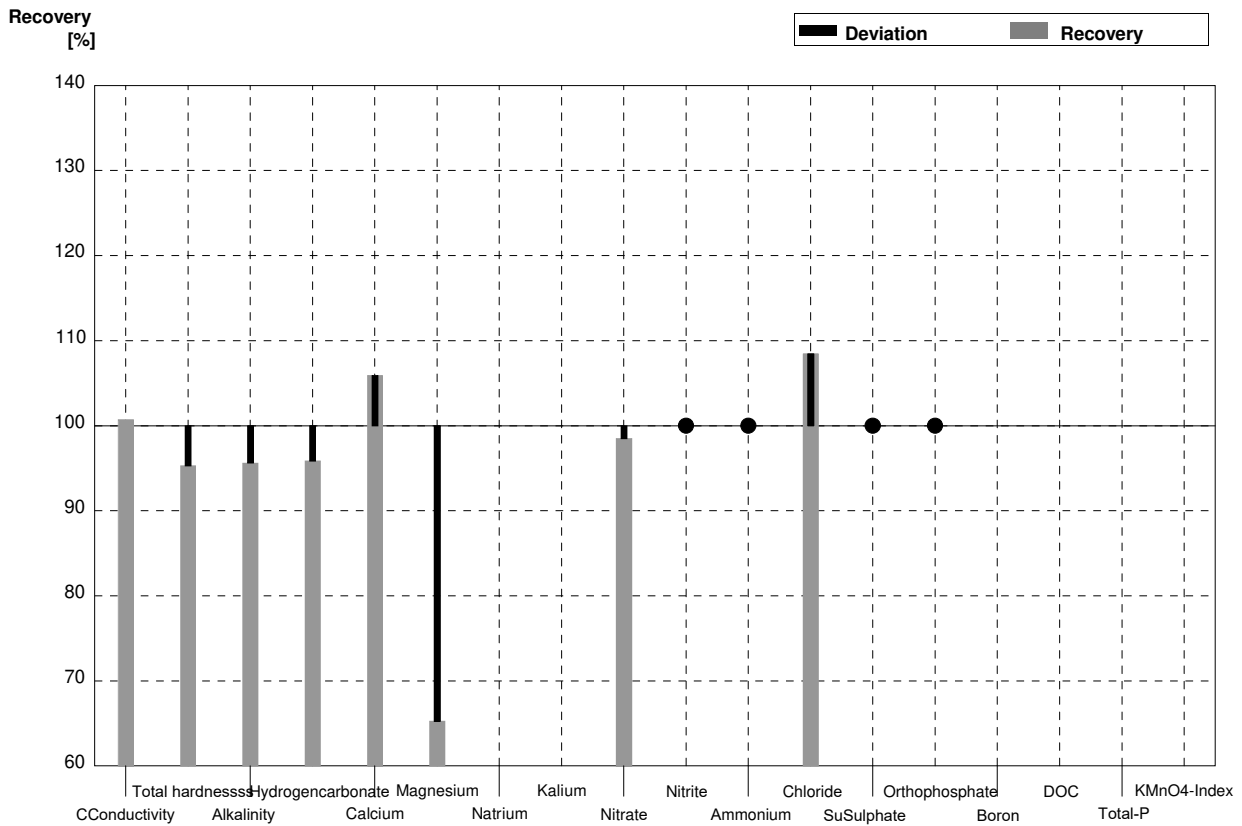
Sample N174A
Laboratory AB

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 360 | 1 | 366 | | µS/cm | 102% |
| Total hardness | 0,879 | 0,010 | 0,83 | | mmol/l | 94% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,467 | | mmol/l | 97% |
| Hydrogen carbonate | 89,5 | 1,1 | 86,46 | | mg/l | 97% |
| Calcium | 25,1 | 0,4 | 29,2 | | mg/l | 116% |
| Magnesium | 6,15 | 0,10 | <3 | | mg/l | FN |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,7 | | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | <0,05 | | mg/l | • |
| Ammonium (as NH4) | 0,0406 | 0,0019 | <0,05 | | mg/l | • |
| Chloride | 46,5 | 0,5 | 50,2 | | mg/l | 108% |
| Sulphate (as SO4) | 16,8 | 0,3 | <40 | | mg/l | • |
| Orthophosphate (as PO4) | <0,009 | | <0,15 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



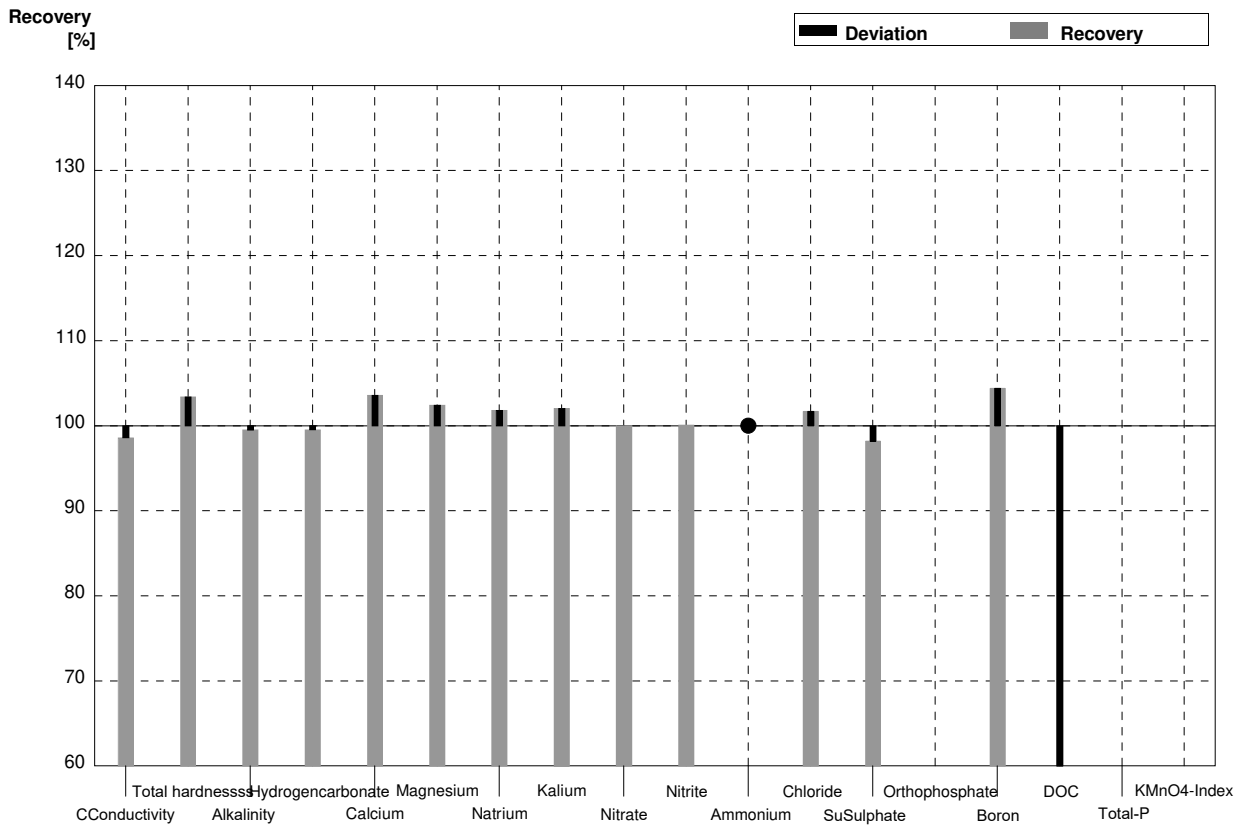
Sample N174B
Laboratory AB

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 544 | 2 | 548 | | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 1,83 | | mmol/l | 95% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,538 | | mmol/l | 96% |
| Hydrogen carbonate | 222 | 3 | 212,83 | | mg/l | 96% |
| Calcium | 55,5 | 0,9 | 58,8 | | mg/l | 106% |
| Magnesium | 12,93 | 0,18 | 8,44 | | mg/l | 65% |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,5 | | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | <0,05 | | mg/l | • |
| Ammonium (as NH4) | <0,01 | | <0,05 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 25,6 | | mg/l | 108% |
| Sulphate (as SO4) | 29,7 | 0,6 | <40 | | mg/l | • |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | <0,15 | | mg/l | • |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



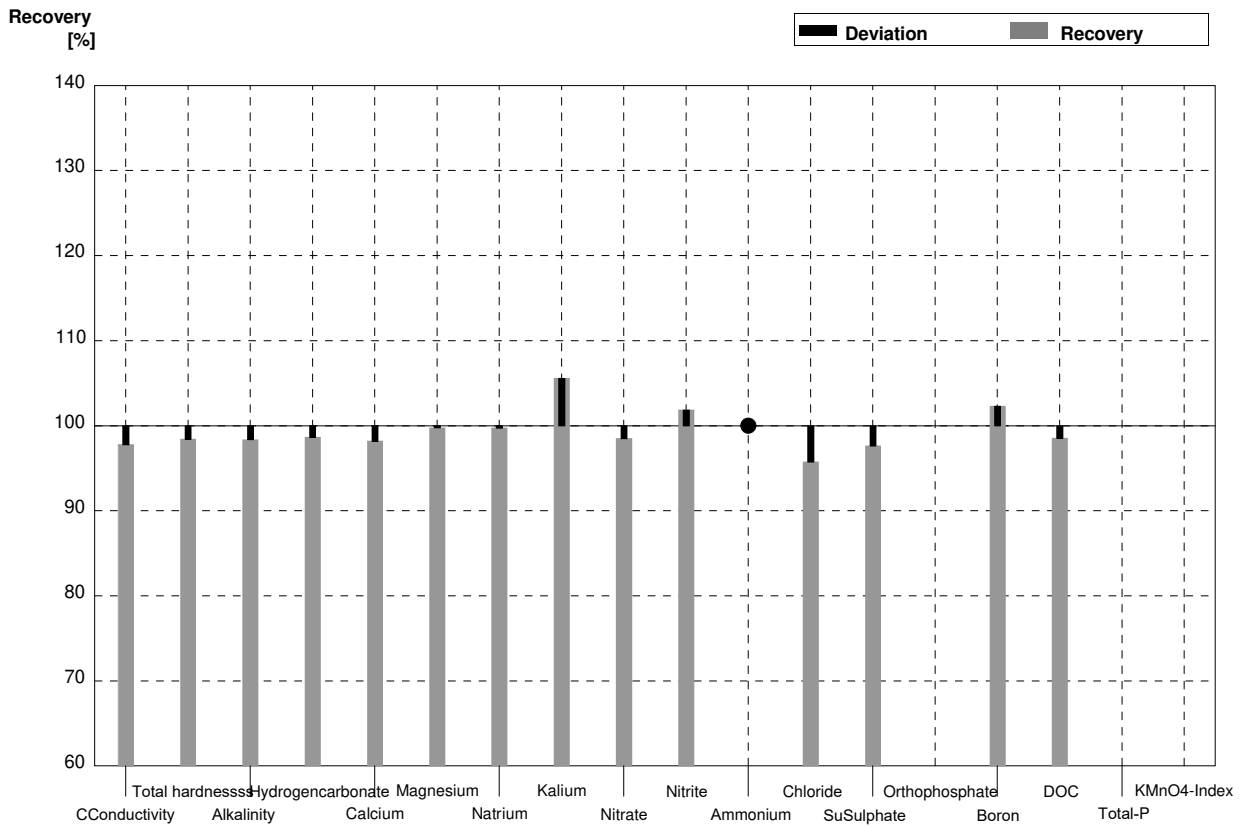
Sample N174A
Laboratory AC

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 355 | 7,0 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,909 | | mmol/l | 103% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,51 | 0,103 | mmol/l | 100% |
| Hydrogen carbonate | 89,5 | 1,1 | 89,1 | | mg/l | 100% |
| Calcium | 25,1 | 0,4 | 26,0 | 1,7 | mg/l | 104% |
| Magnesium | 6,15 | 0,10 | 6,3 | 0,5 | mg/l | 102% |
| Sodium | 32,9 | 0,2 | 33,5 | 2,5 | mg/l | 102% |
| Potassium | 5,90 | 0,03 | 6,02 | 0,52 | mg/l | 102% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,7 | 0,7 | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0223 | 0,004 | mg/l | 100% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | <0,050 | | mg/l | • |
| Chloride | 46,5 | 0,5 | 47,3 | 6,1 | mg/l | 102% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,5 | 0,8 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | 0,142 | 0,016 | mg/l | 104% |
| DOC (as C) | 5,53 | 0,07 | 0,489 | 0,080 | mg/l | 9% |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



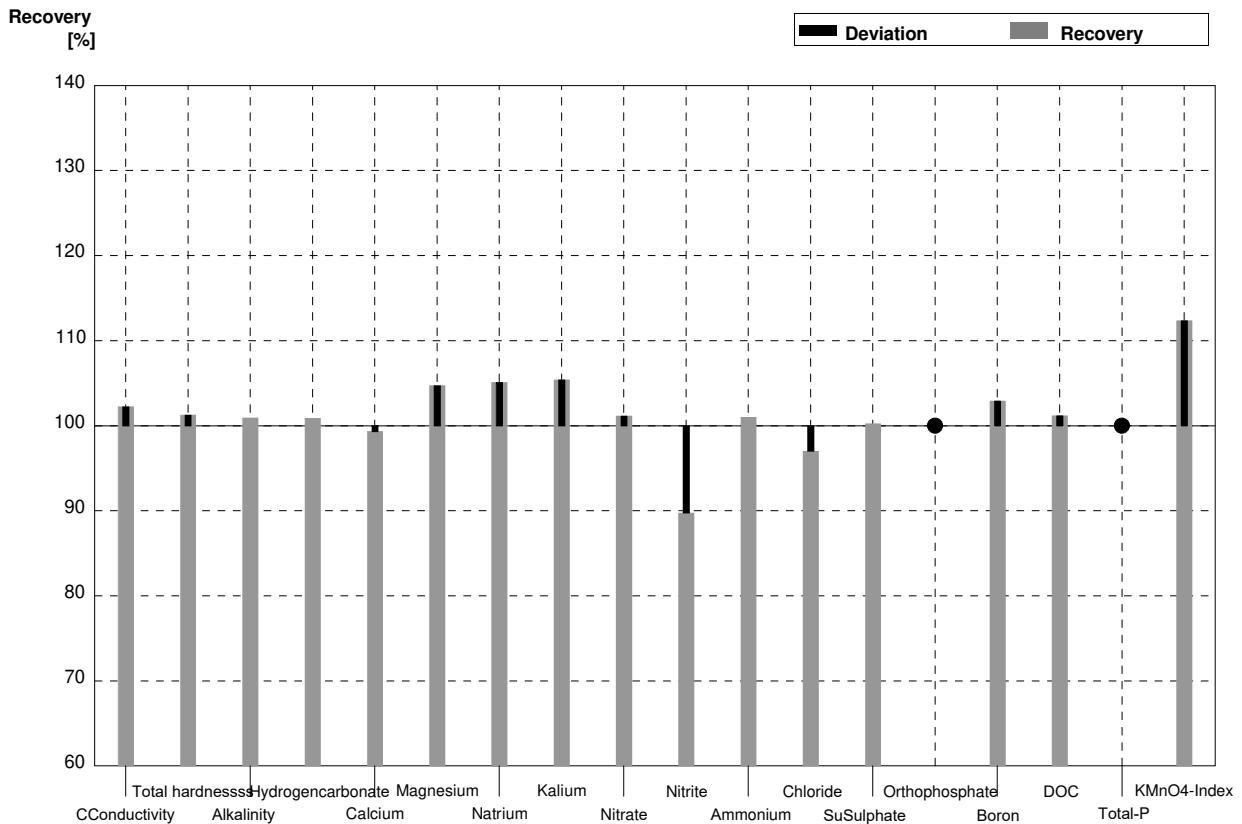
Sample N174B
Laboratory AC

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 532 | 11 | µS/cm | 98% |
| Total hardness | 1,92 | 0,02 | 1,89 | | mmol/l | 98% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,64 | 0,248 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 219 | | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 54,5 | 3,5 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 12,9 | 1,1 | mg/l | 100% |
| Sodium | 39,9 | 0,6 | 39,8 | 2,9 | mg/l | 100% |
| Potassium | 1,97 | 0,04 | 2,08 | 0,18 | mg/l | 106% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,5 | 2,7 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0440 | 0,009 | mg/l | 102% |
| Ammonium (as NH4) | <0,01 | | <0,050 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,6 | 2,9 | mg/l | 96% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,0 | 1,4 | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | 0,088 | 0,009 | mg/l | 102% |
| DOC (as C) | 4,14 | 0,07 | 4,08 | 0,66 | mg/l | 99% |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



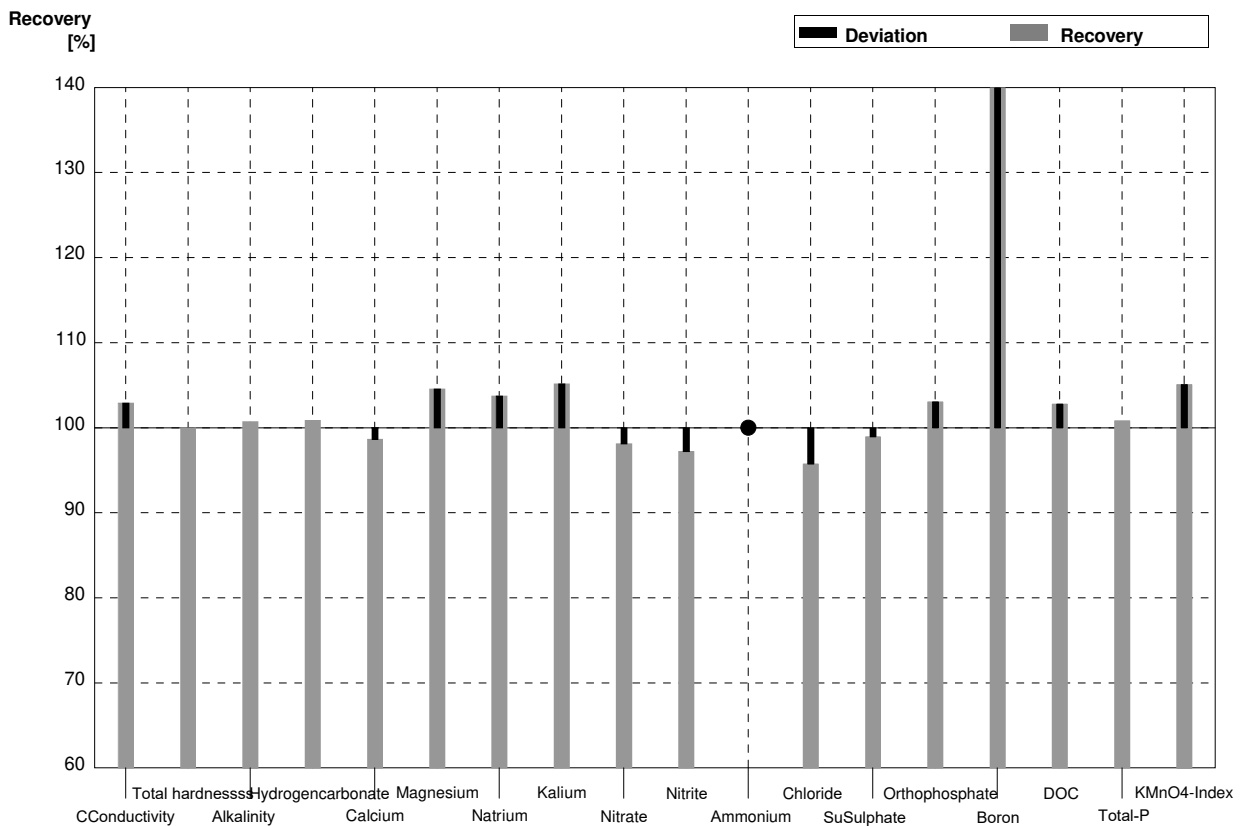
Sample N174A
Laboratory AD

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 368 | 20,46 | µS/cm | 102% |
| Total hardness | 0,879 | 0,010 | 0,89 | 0,05 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,531 | 0,084 | mmol/l | 101% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,3 | 4,97 | mg/l | 101% |
| Calcium | 25,1 | 0,4 | 24,93 | 1,37 | mg/l | 99% |
| Magnesium | 6,15 | 0,10 | 6,44 | 0,23 | mg/l | 105% |
| Sodium | 32,9 | 0,2 | 34,57 | 1,21 | mg/l | 105% |
| Potassium | 5,90 | 0,03 | 6,218 | 0,22 | mg/l | 105% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,813 | 0,942 | mg/l | 101% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0200 | 0,002 | mg/l | 90% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0410 | 0,004 | mg/l | 101% |
| Chloride | 46,5 | 0,5 | 45,118 | 4,74 | mg/l | 97% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,84 | 1,448 | mg/l | 100% |
| Orthophosphate (as PO4) | <0,009 | | <0,010 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,140 | 0,025 | mg/l | 103% |
| DOC (as C) | 5,53 | 0,07 | 5,595 | 1,119 | mg/l | 101% |
| Total P (as PO4) | <0,009 | | <0,010 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,36 | 0,307 | mg/l | 112% |



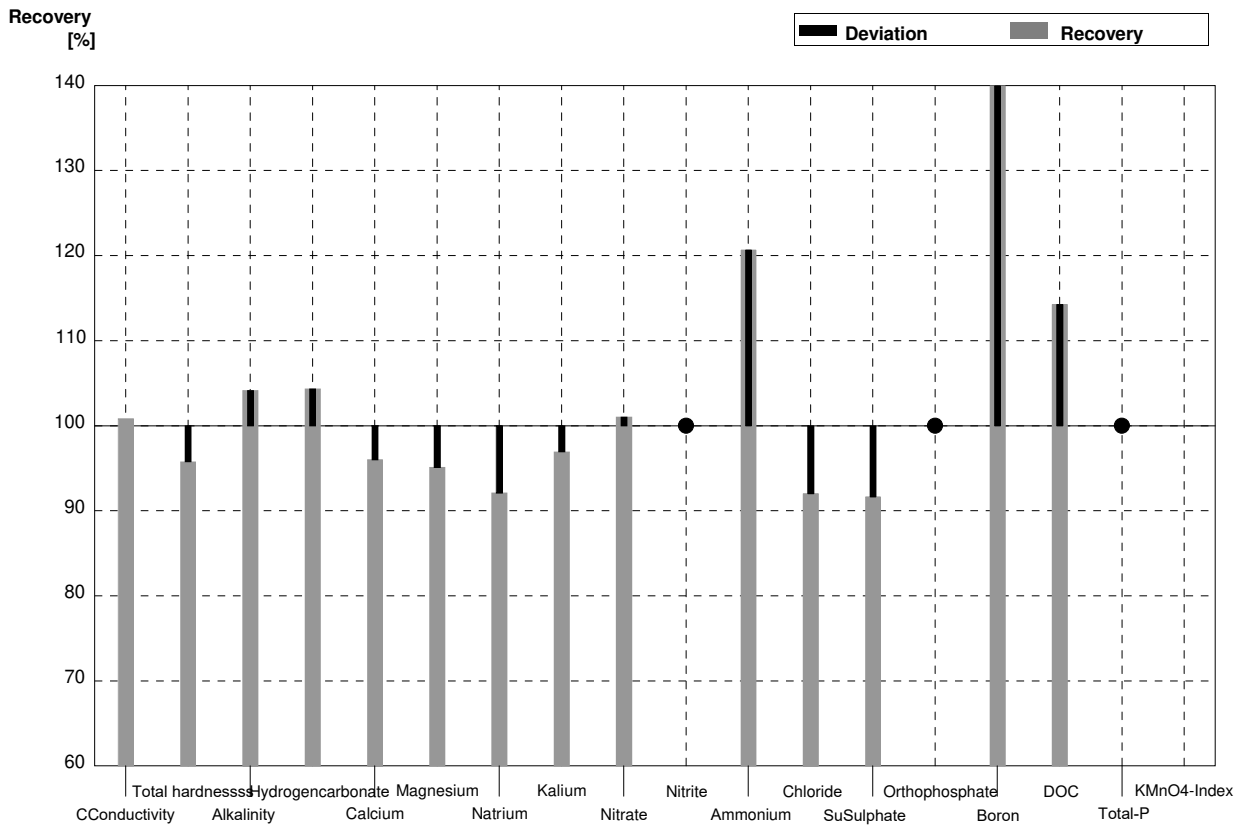
Sample N174B
Laboratory AD

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 560 | 31,14 | µS/cm | 103% |
| Total hardness | 1,92 | 0,02 | 1,92 | 0,096 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,727 | 0,205 | mmol/l | 101% |
| Hydrogen carbonate | 222 | 3 | 224 | 12,32 | mg/l | 101% |
| Calcium | 55,5 | 0,9 | 54,75 | 3,01 | mg/l | 99% |
| Magnesium | 12,93 | 0,18 | 13,52 | 0,47 | mg/l | 105% |
| Sodium | 39,9 | 0,6 | 41,39 | 1,45 | mg/l | 104% |
| Potassium | 1,97 | 0,04 | 2,072 | 0,08 | mg/l | 105% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,35 | 3,78 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0420 | 0,004 | mg/l | 97% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,6 | 2,396 | mg/l | 96% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,39 | 2,528 | mg/l | 99% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0470 | 0,005 | mg/l | 103% |
| Boron | 0,086 | 0,002 | 89,24 | 16 | mg/l | 103767% |
| DOC (as C) | 4,14 | 0,07 | 4,256 | 0,851 | mg/l | 103% |
| Total P (as PO4) | 0,115 | 0,003 | 0,116 | 0,012 | mg/l | 101% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,29 | 0,428 | mg/l | 105% |



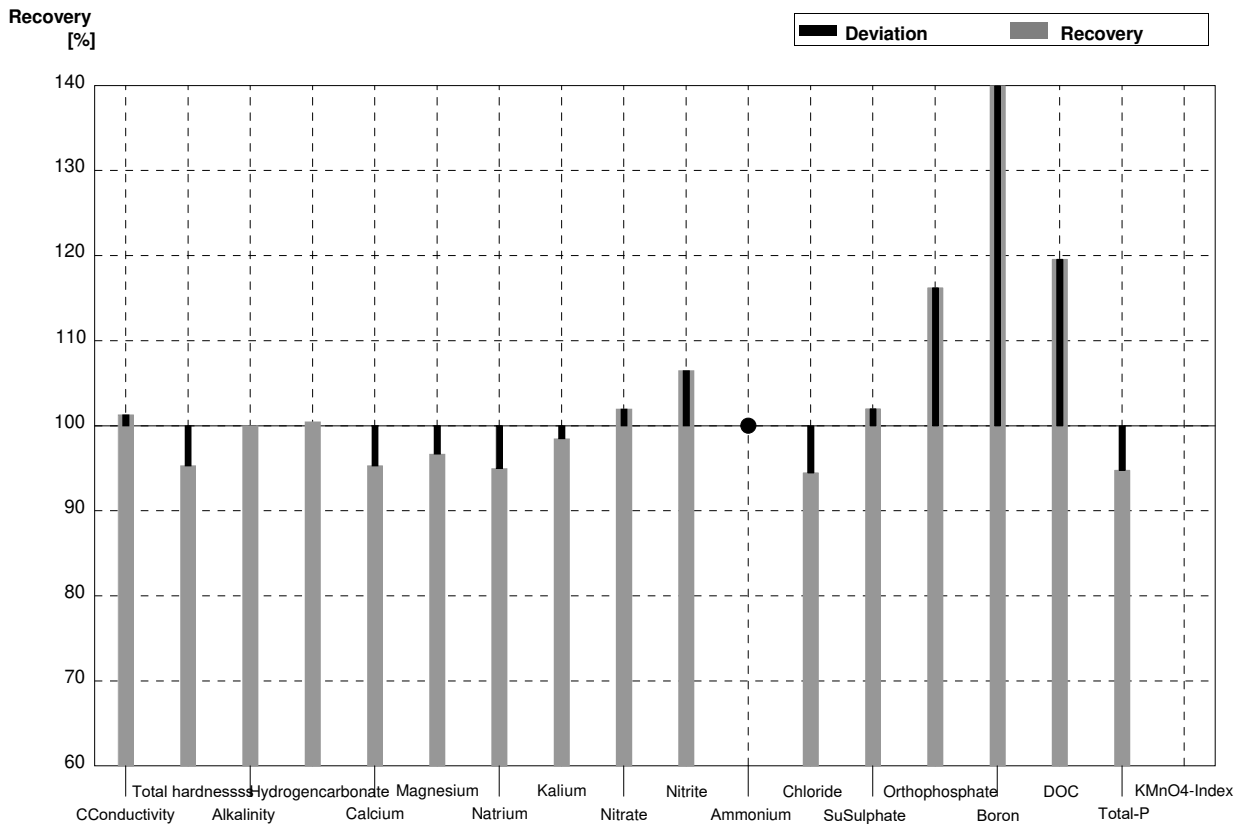
Sample N174A
Laboratory AE

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 363 | 10,9 | µS/cm | 101% |
| Total hardness | 0,879 | 0,010 | 0,842 | 0,067 | mmol/l | 96% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,58 | 0,174 | mmol/l | 104% |
| Hydrogen carbonate | 89,5 | 1,1 | 93,4 | 10,3 | mg/l | 104% |
| Calcium | 25,1 | 0,4 | 24,1 | 2,89 | mg/l | 96% |
| Magnesium | 6,15 | 0,10 | 5,85 | 0,53 | mg/l | 95% |
| Sodium | 32,9 | 0,2 | 30,3 | 3,03 | mg/l | 92% |
| Potassium | 5,90 | 0,03 | 5,72 | 0,629 | mg/l | 97% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,80 | 0,98 | mg/l | 101% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | <0,200 | | mg/l | • |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0490 | 0,007 | mg/l | 121% |
| Chloride | 46,5 | 0,5 | 42,8 | 4,28 | mg/l | 92% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,4 | 1,08 | mg/l | 92% |
| Orthophosphate (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| Boron | 0,136 | 0,004 | 132 | 15,8 | mg/l | 97059% |
| DOC (as C) | 5,53 | 0,07 | 6,32 | 1,01 | mg/l | 114% |
| Total P (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



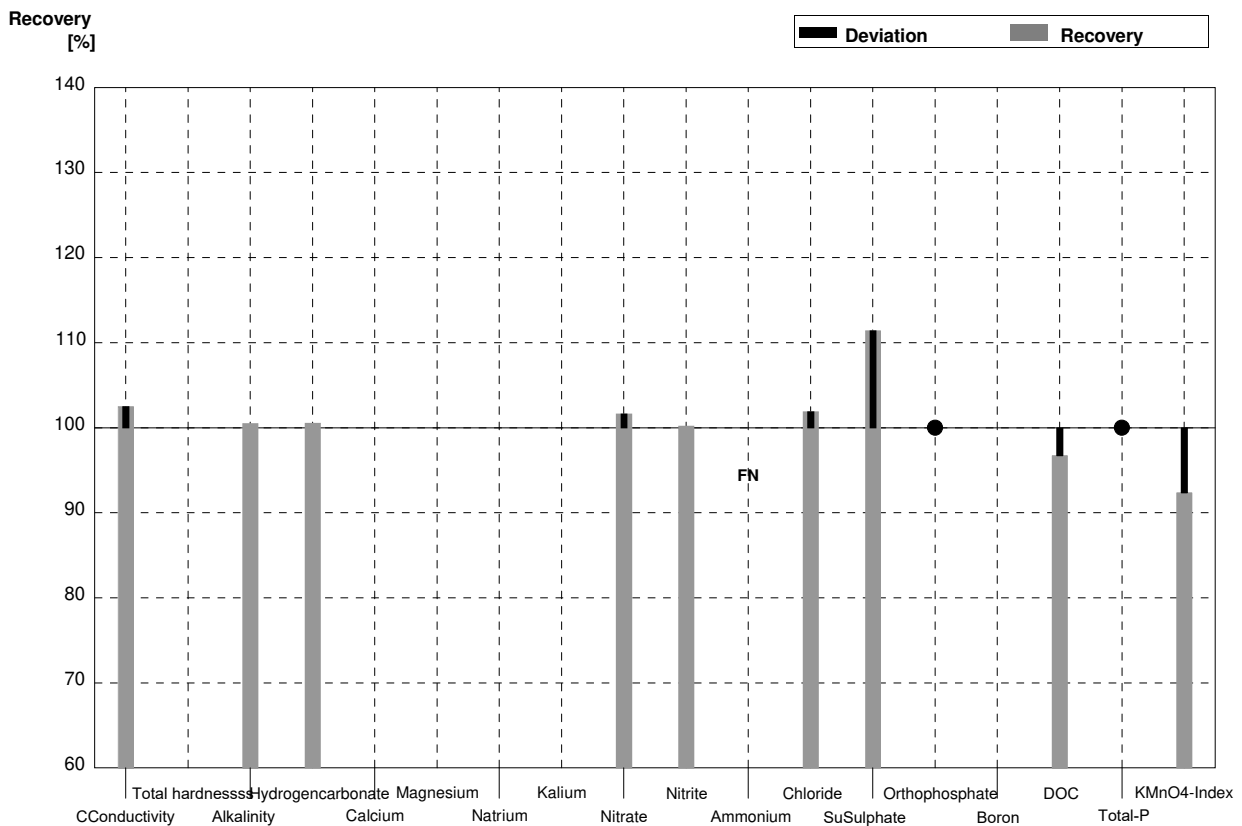
Sample N174B
Laboratory AE

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 551 | 17,0 | µS/cm | 101% |
| Total hardness | 1,92 | 0,02 | 1,83 | 0,147 | mmol/l | 95% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,70 | 0,407 | mmol/l | 100% |
| Hydrogen carbonate | 222 | 3 | 223 | 24,5 | mg/l | 100% |
| Calcium | 55,5 | 0,9 | 52,9 | 6,35 | mg/l | 95% |
| Magnesium | 12,93 | 0,18 | 12,5 | 1,13 | mg/l | 97% |
| Sodium | 39,9 | 0,6 | 37,9 | 3,79 | mg/l | 95% |
| Potassium | 1,97 | 0,04 | 1,94 | 0,213 | mg/l | 98% |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,9 | 3,68 | mg/l | 102% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0460 | 0,006 | mg/l | 106% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 22,3 | 2,23 | mg/l | 94% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,3 | 2,12 | mg/l | 102% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,053 | 0,007 | mg/l | 116% |
| Boron | 0,086 | 0,002 | 81,4 | 9,77 | mg/l | 94651% |
| DOC (as C) | 4,14 | 0,07 | 4,95 | 0,792 | mg/l | 120% |
| Total P (as PO4) | 0,115 | 0,003 | 0,109 | 0,0163 | mg/l | 95% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



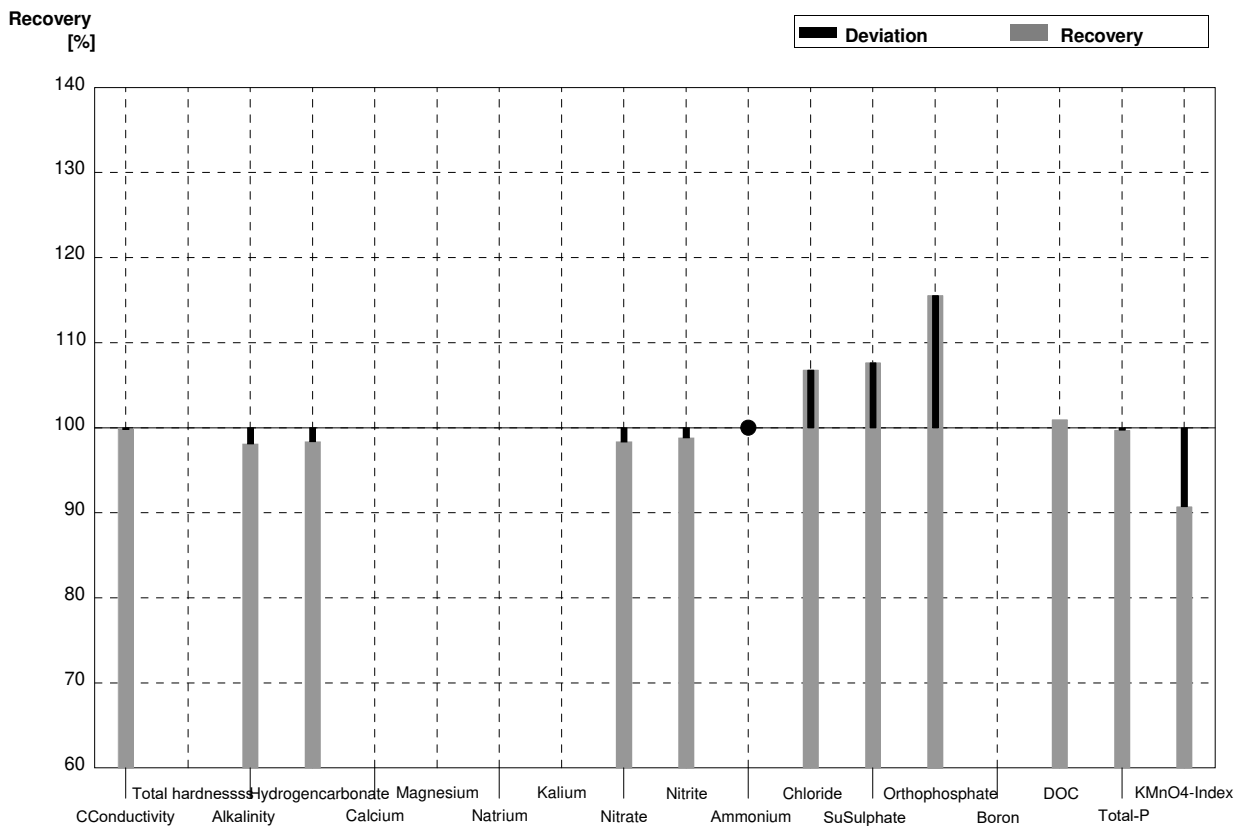
Sample N174A
Laboratory AF

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 369 | 10,7 | µS/cm | 103% |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,525 | 0,147 | mmol/l | 101% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,0 | 8,7 | mg/l | 101% |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,86 | 0,36 | mg/l | 102% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,02233 | 0,00078 | mg/l | 100% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | <0,038 | | mg/l | FN |
| Chloride | 46,5 | 0,5 | 47,38 | 2,27 | mg/l | 102% |
| Sulphate (as SO4) | 16,8 | 0,3 | 18,72 | 0,86 | mg/l | 111% |
| Orthophosphate (as PO4) | <0,009 | | <0,0153 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,35 | 0,31 | mg/l | 97% |
| Total P (as PO4) | <0,009 | | <0,0153 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 1,94 | 0,19 | mg/l | 92% |



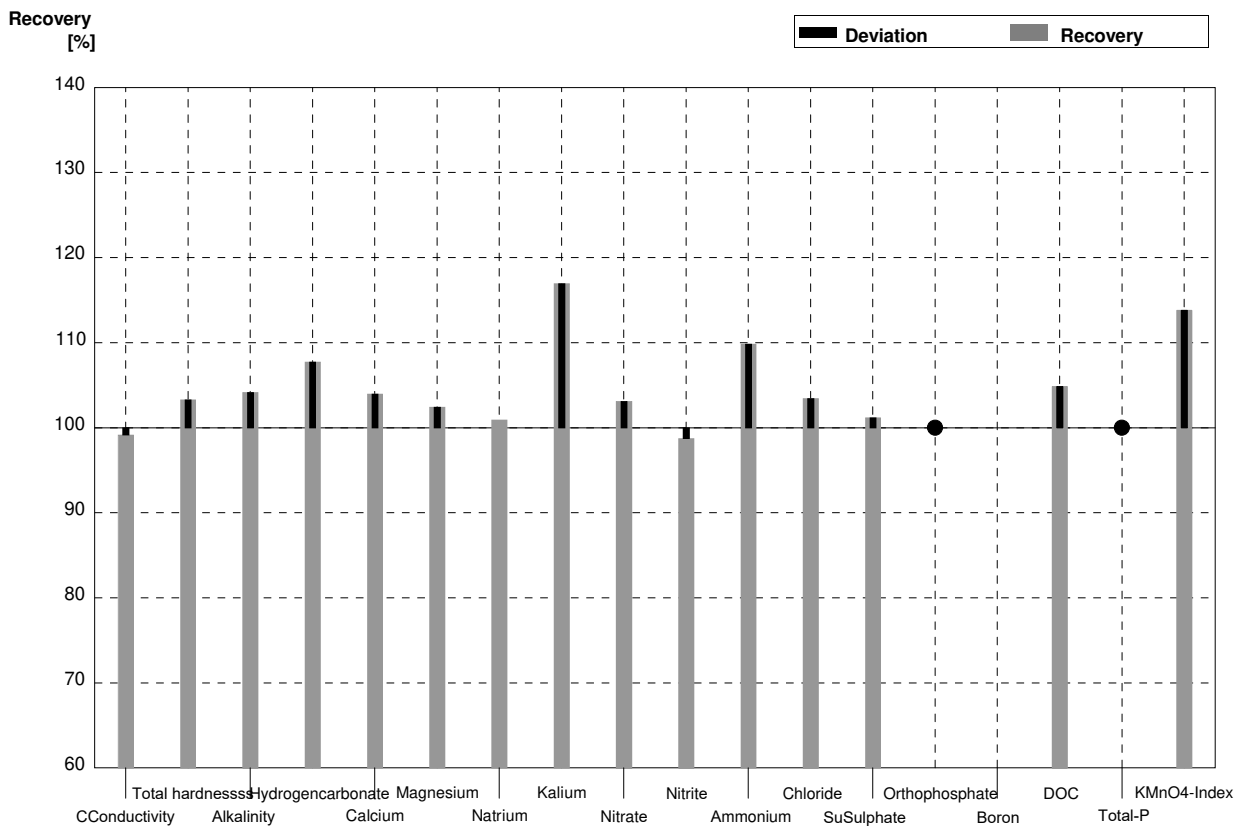
Sample N174B
Laboratory AF

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 543 | 15,7 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,63 | 0,351 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 218,4 | 21,1 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,44 | 1,46 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,04269 | 0,00149 | mg/l | 99% |
| Ammonium (as NH4) | <0,01 | | <0,038 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 25,20 | 1,21 | mg/l | 107% |
| Sulphate (as SO4) | 29,7 | 0,6 | 31,98 | 1,47 | mg/l | 108% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0527 | 0,0042 | mg/l | 116% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,18 | 0,24 | mg/l | 101% |
| Total P (as PO4) | 0,115 | 0,003 | 0,1147 | 0,0093 | mg/l | 100% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 2,84 | 0,28 | mg/l | 91% |



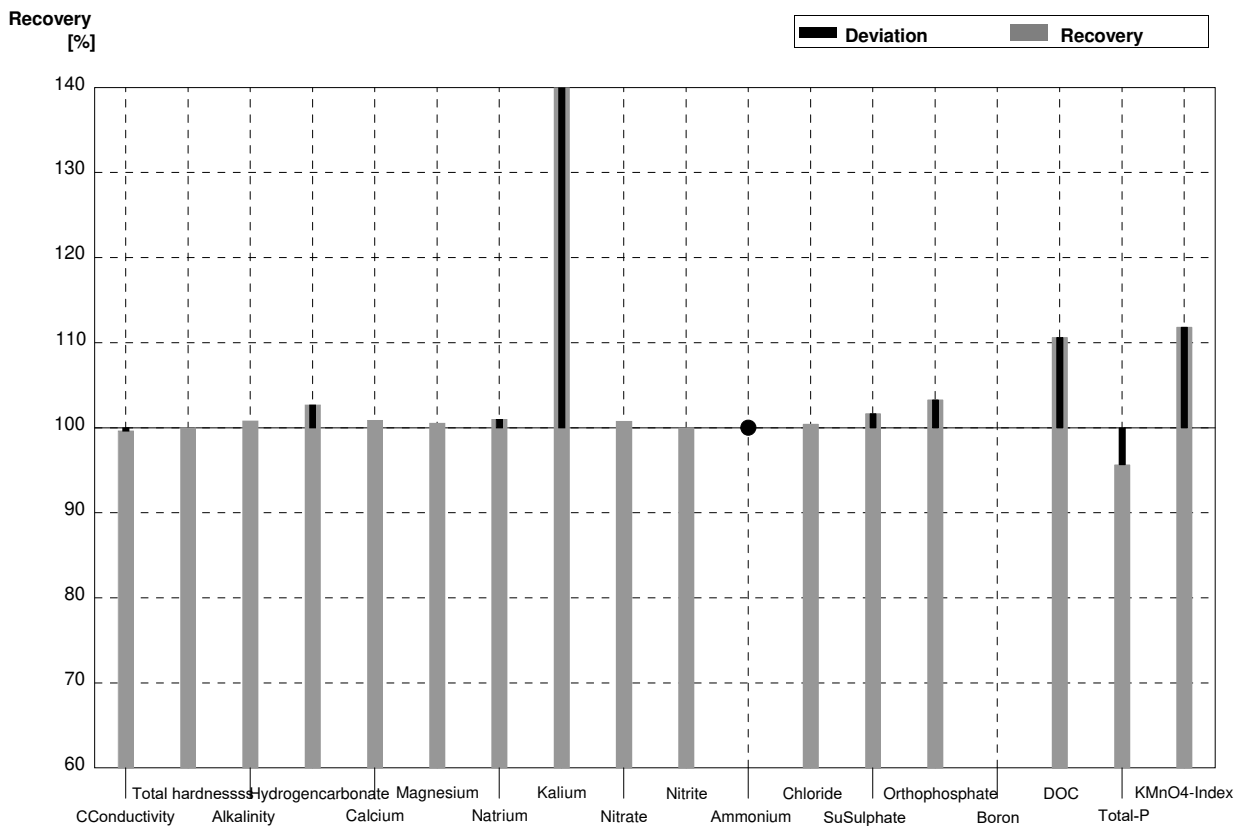
Sample N174A
Laboratory AG

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 357 | 8 | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,908 | 0,075 | mmol/l | 103% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,580 | 0,070 | mmol/l | 104% |
| Hydrogen carbonate | 89,5 | 1,1 | 96,4 | 4,3 | mg/l | 108% |
| Calcium | 25,1 | 0,4 | 26,1 | 1,2 | mg/l | 104% |
| Magnesium | 6,15 | 0,10 | 6,3 | 0,3 | mg/l | 102% |
| Sodium | 32,9 | 0,2 | 33,2 | 1,4 | mg/l | 101% |
| Potassium | 5,90 | 0,03 | 6,9 | 0,3 | mg/l | 117% |
| Nitrate (as NO3) | 9,7 | 0,3 | 10,0 | 0,4 | mg/l | 103% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0220 | 0,0016 | mg/l | 99% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0446 | 0,0054 | mg/l | 110% |
| Chloride | 46,5 | 0,5 | 48,1 | 1,9 | mg/l | 103% |
| Sulphate (as SO4) | 16,8 | 0,3 | 17,0 | 0,7 | mg/l | 101% |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,8 | 0,8 | mg/l | 105% |
| Total P (as PO4) | <0,009 | | <0,1 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,39 | 0,32 | mg/l | 114% |



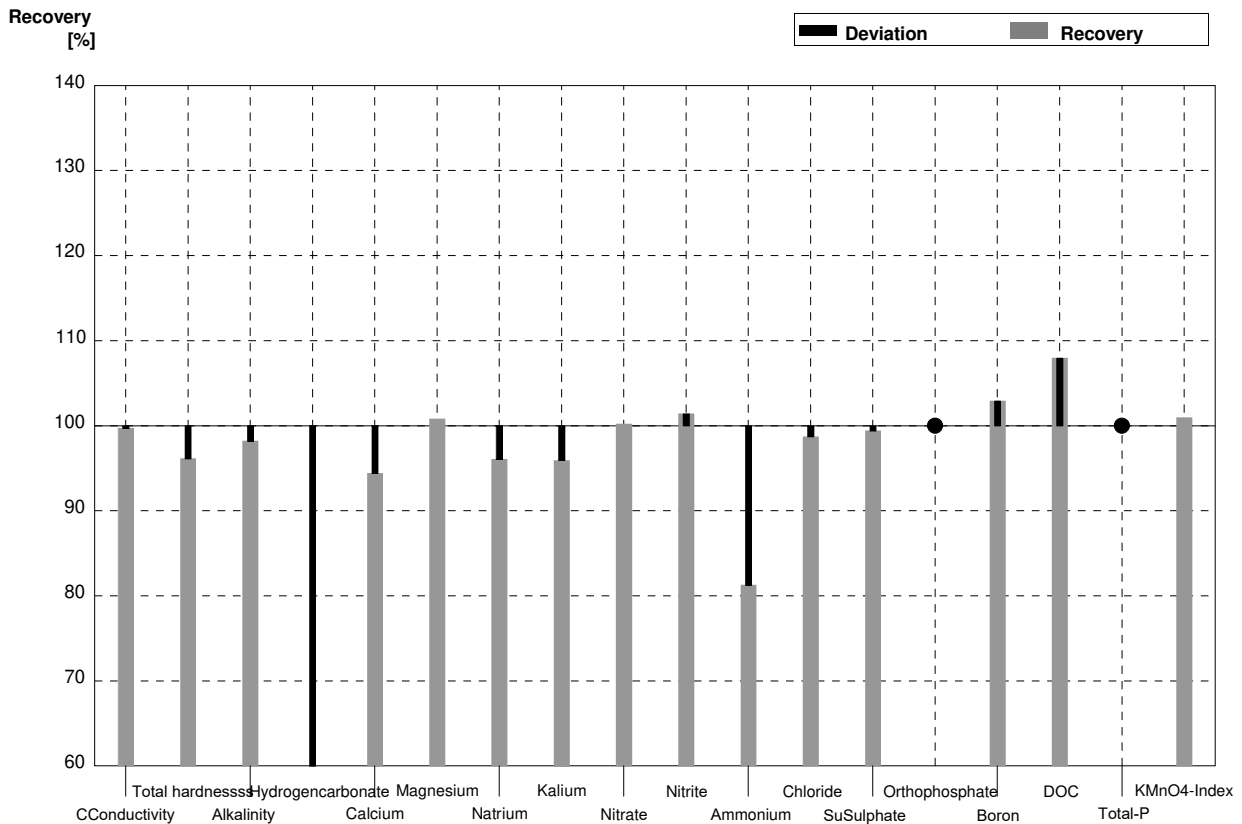
Sample N174B
Laboratory AG

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 542 | 12 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,92 | 0,16 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,73 | 0,17 | mmol/l | 101% |
| Hydrogen carbonate | 222 | 3 | 228 | 11 | mg/l | 103% |
| Calcium | 55,5 | 0,9 | 56 | 3 | mg/l | 101% |
| Magnesium | 12,93 | 0,18 | 13,0 | 0,5 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 40,3 | 1,7 | mg/l | 101% |
| Potassium | 1,97 | 0,04 | 2,83 | 0,11 | mg/l | 144% |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,4 | 1,5 | mg/l | 101% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0432 | 0,0032 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,02 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,7 | 1,0 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,2 | 1,2 | mg/l | 102% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0471 | 0,0041 | mg/l | 103% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,58 | 0,57 | mg/l | 111% |
| Total P (as PO4) | 0,115 | 0,003 | 0,110 | 0,024 | mg/l | 96% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,50 | 0,47 | mg/l | 112% |



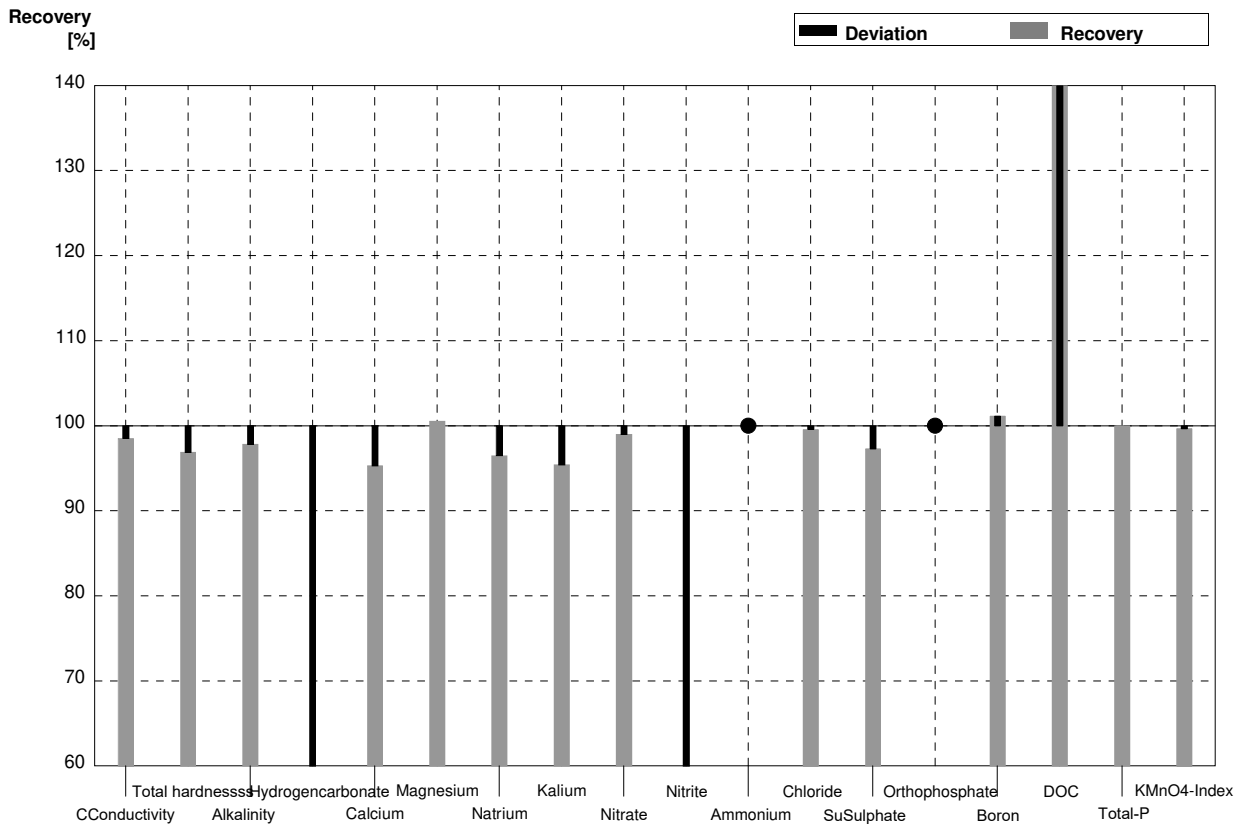
Sample N174A
Laboratory AH

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 359 | 18 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,845 | 0,17 | mmol/l | 96% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,49 | 0,15 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 1,44 | 0,14 | mg/l | 2% |
| Calcium | 25,1 | 0,4 | 23,7 | 3,92 | mg/l | 94% |
| Magnesium | 6,15 | 0,10 | 6,2 | 0,68 | mg/l | 101% |
| Sodium | 32,9 | 0,2 | 31,6 | 2,84 | mg/l | 96% |
| Potassium | 5,90 | 0,03 | 5,66 | 0,68 | mg/l | 96% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,72 | 0,74 | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0226 | 0,003 | mg/l | 101% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0330 | 0,004 | mg/l | 81% |
| Chloride | 46,5 | 0,5 | 45,9 | 5,92 | mg/l | 99% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,7 | 2,27 | mg/l | 99% |
| Orthophosphate (as PO4) | <0,009 | | <0,1 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,140 | 0,02 | mg/l | 103% |
| DOC (as C) | 5,53 | 0,07 | 5,97 | 1,13 | mg/l | 108% |
| Total P (as PO4) | <0,009 | | <0,03 | 0,01 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,12 | 0,23 | mg/l | 101% |



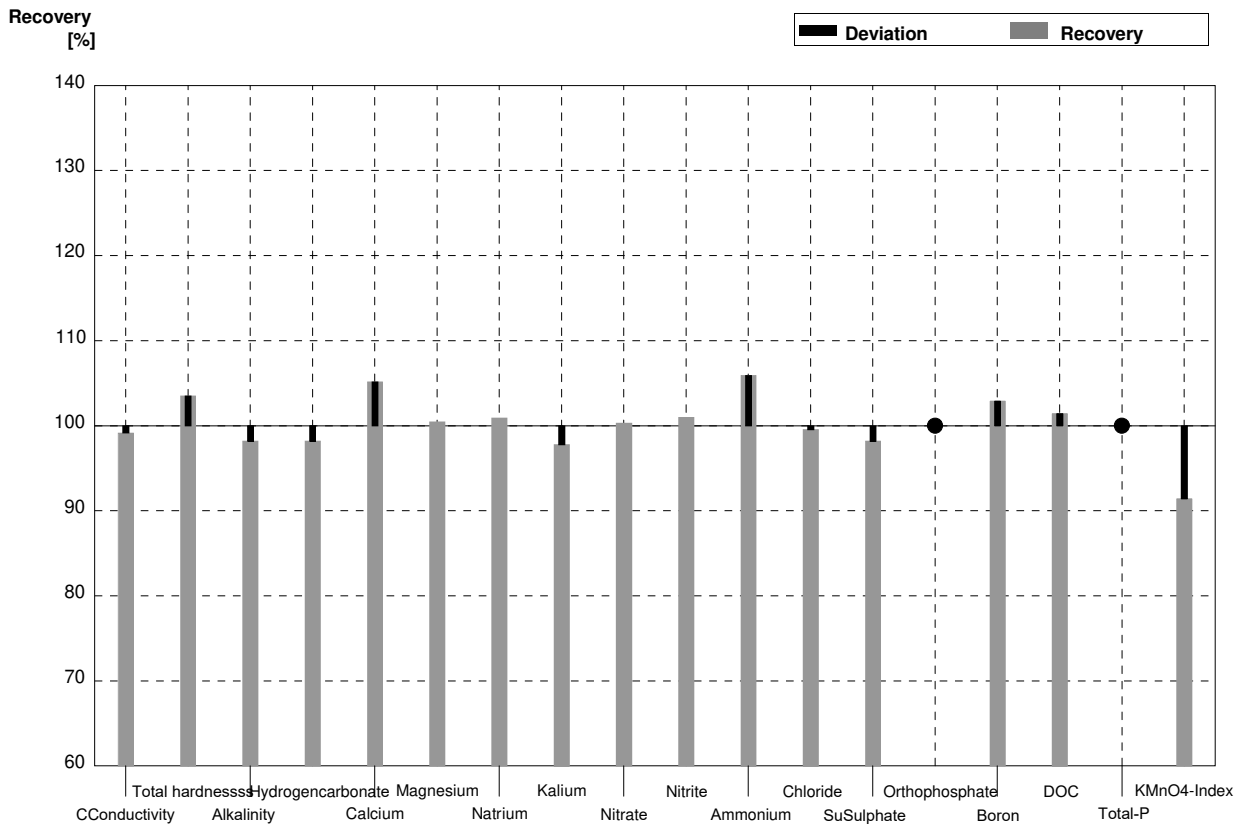
Sample N174B
Laboratory AH

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 536 | 27 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,86 | 0,37 | mmol/l | 97% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,62 | 0,36 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 3,58 | 0,36 | mg/l | 2% |
| Calcium | 55,5 | 0,9 | 52,9 | 8,5 | mg/l | 95% |
| Magnesium | 12,93 | 0,18 | 13,0 | 1,44 | mg/l | 101% |
| Sodium | 39,9 | 0,6 | 38,5 | 3,46 | mg/l | 96% |
| Potassium | 1,97 | 0,04 | 1,88 | 0,23 | mg/l | 95% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,7 | 3,02 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0143 | 0,002 | mg/l | 33% |
| Ammonium (as NH4) | <0,01 | | <0,02 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,5 | 3,03 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,9 | 3,93 | mg/l | 97% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | <0,1 | | mg/l | • |
| Boron | 0,086 | 0,002 | 0,087 | 0,01 | mg/l | 101% |
| DOC (as C) | 4,14 | 0,07 | 5,94 | 1,13 | mg/l | 143% |
| Total P (as PO4) | 0,115 | 0,003 | 0,115 | 0,015 | mg/l | 100% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,12 | 0,34 | mg/l | 100% |



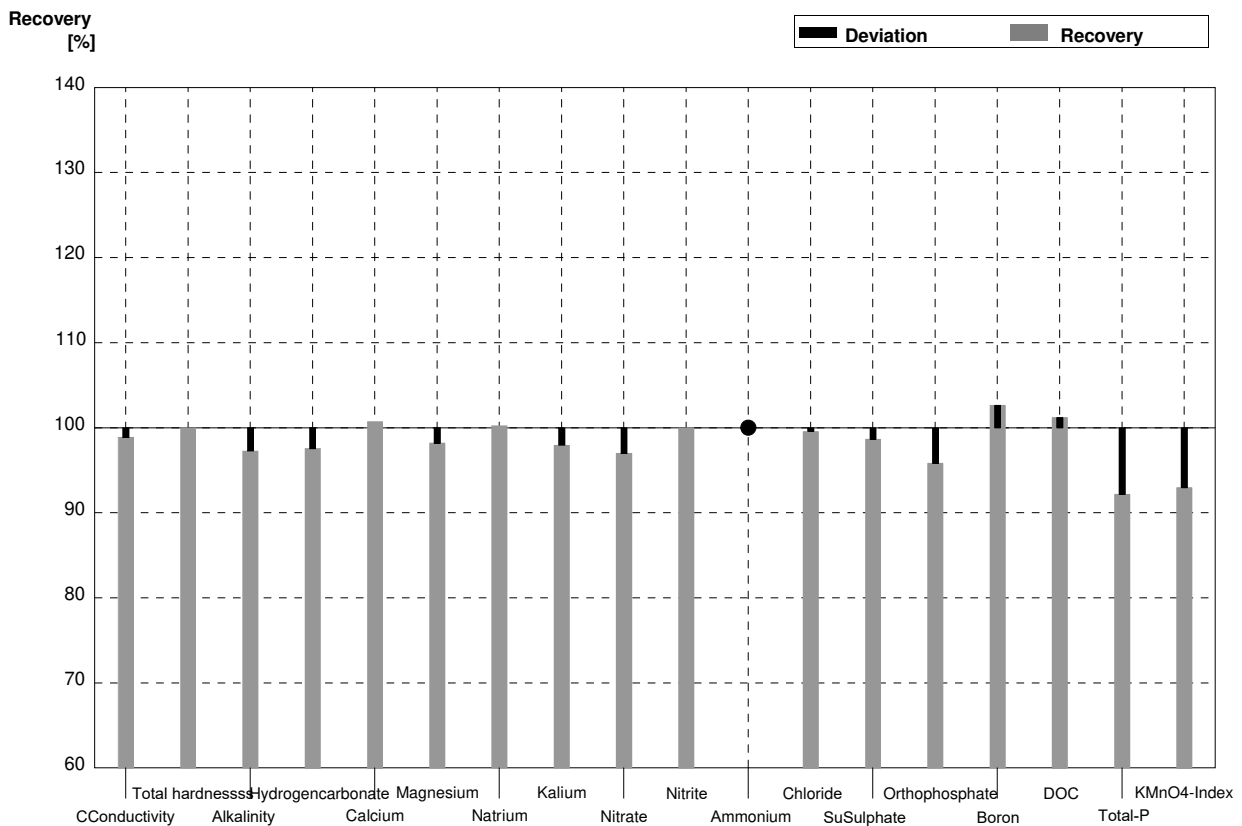
Sample N174A
Laboratory AI

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 357 | | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,91 | | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,49 | 0,10 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 87,9 | | mg/l | 98% |
| Calcium | 25,1 | 0,4 | 26,4 | 2,2 | mg/l | 105% |
| Magnesium | 6,15 | 0,10 | 6,18 | 0,7 | mg/l | 100% |
| Sodium | 32,9 | 0,2 | 33,2 | 2,8 | mg/l | 101% |
| Potassium | 5,90 | 0,03 | 5,77 | 0,5 | mg/l | 98% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,73 | 1,4 | mg/l | 100% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0225 | 0,003 | mg/l | 101% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0430 | 0,006 | mg/l | 106% |
| Chloride | 46,5 | 0,5 | 46,3 | 6,6 | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,5 | 1,3 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,140 | 0,024 | mg/l | 103% |
| DOC (as C) | 5,53 | 0,07 | 5,61 | 0,67 | mg/l | 101% |
| Total P (as PO4) | <0,009 | | <0,031 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 1,92 | | mg/l | 91% |



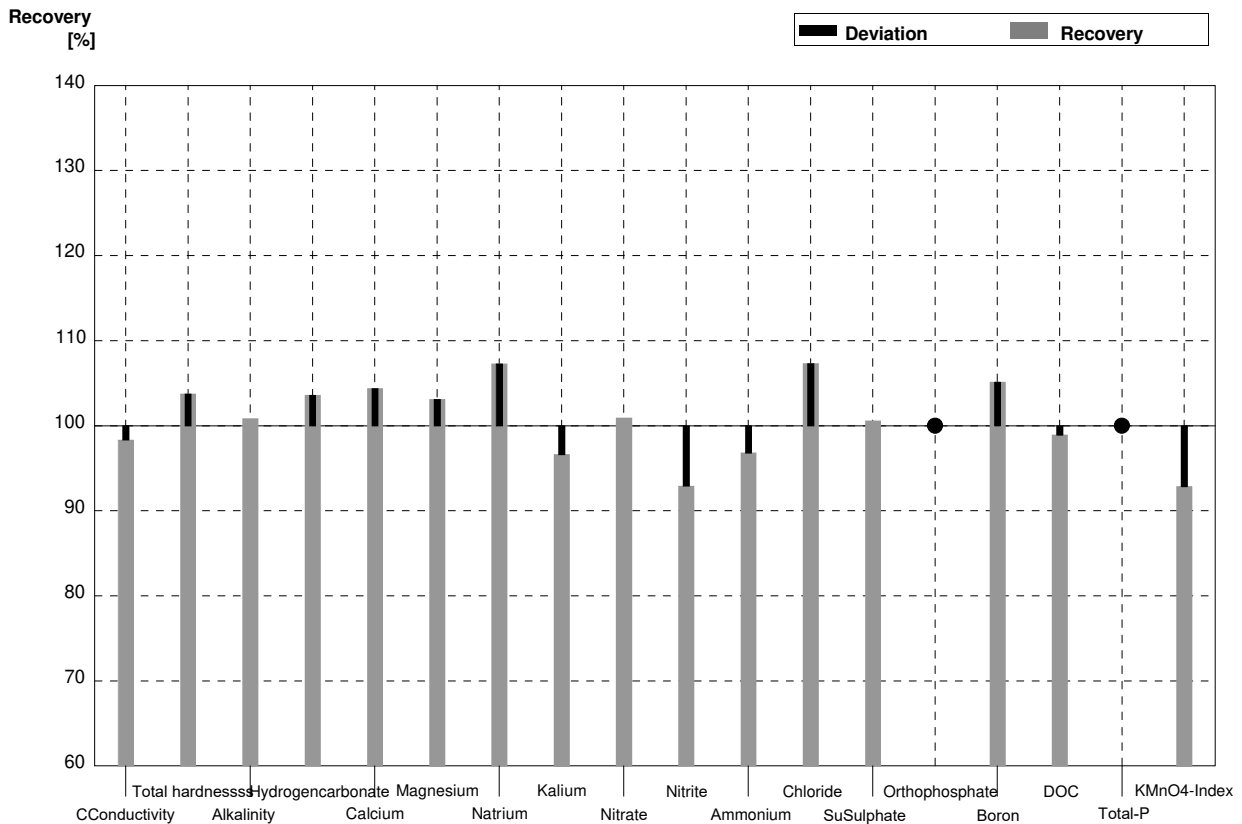
Sample N174B
Laboratory AI

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 538 | | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,92 | | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,60 | 0,25 | mmol/l | 97% |
| Hydrogen carbonate | 222 | 3 | 216,6 | | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 55,9 | 4,7 | mg/l | 101% |
| Magnesium | 12,93 | 0,18 | 12,7 | 1,4 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 40,0 | 3,4 | mg/l | 100% |
| Potassium | 1,97 | 0,04 | 1,93 | 0,2 | mg/l | 98% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,9 | 5,5 | mg/l | 97% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0432 | 0,006 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,5 | 3,3 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,3 | 2,4 | mg/l | 99% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0437 | | mg/l | 96% |
| Boron | 0,086 | 0,002 | 0,0883 | 0,02 | mg/l | 103% |
| DOC (as C) | 4,14 | 0,07 | 4,19 | 0,50 | mg/l | 101% |
| Total P (as PO4) | 0,115 | 0,003 | 0,106 | 0,009 | mg/l | 92% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 2,91 | | mg/l | 93% |



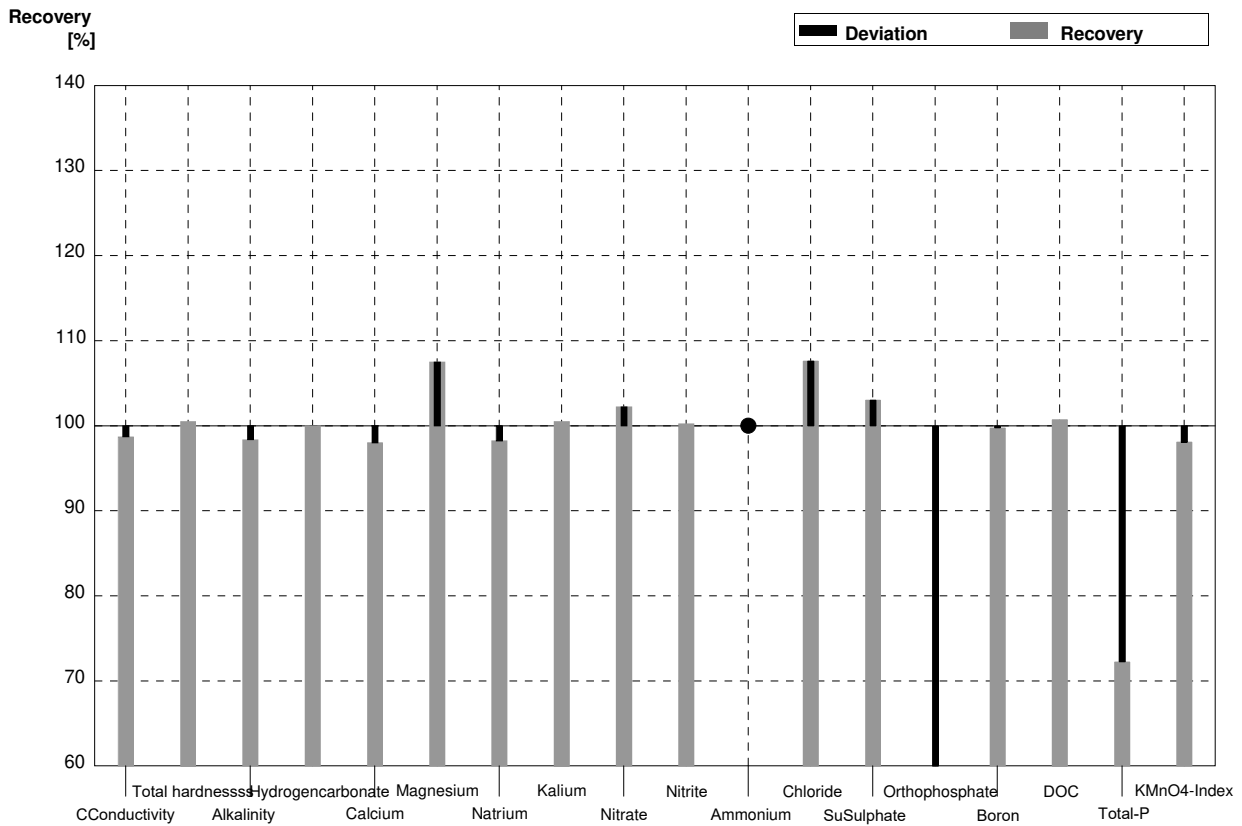
Sample N174A
Laboratory AJ

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 354 | 0,58 | µS/cm | 98% |
| Total hardness | 0,879 | 0,010 | 0,912 | 0,009 | mmol/l | 104% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,53 | 0,006 | mmol/l | 101% |
| Hydrogen carbonate | 89,5 | 1,1 | 92,7 | 0,40 | mg/l | 104% |
| Calcium | 25,1 | 0,4 | 26,2 | 0,42 | mg/l | 104% |
| Magnesium | 6,15 | 0,10 | 6,34 | 0,075 | mg/l | 103% |
| Sodium | 32,9 | 0,2 | 35,3 | 0,41 | mg/l | 107% |
| Potassium | 5,90 | 0,03 | 5,70 | 0,026 | mg/l | 97% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,79 | 0,035 | mg/l | 101% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0207 | 0,001 | mg/l | 93% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0393 | 0,001 | mg/l | 97% |
| Chloride | 46,5 | 0,5 | 49,9 | 0,23 | mg/l | 107% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,9 | 0,15 | mg/l | 101% |
| Orthophosphate (as PO4) | <0,009 | | <0,009 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,143 | 0,003 | mg/l | 105% |
| DOC (as C) | 5,53 | 0,07 | 5,47 | 0,031 | mg/l | 99% |
| Total P (as PO4) | <0,009 | | <0,009 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 1,95 | 0,020 | mg/l | 93% |



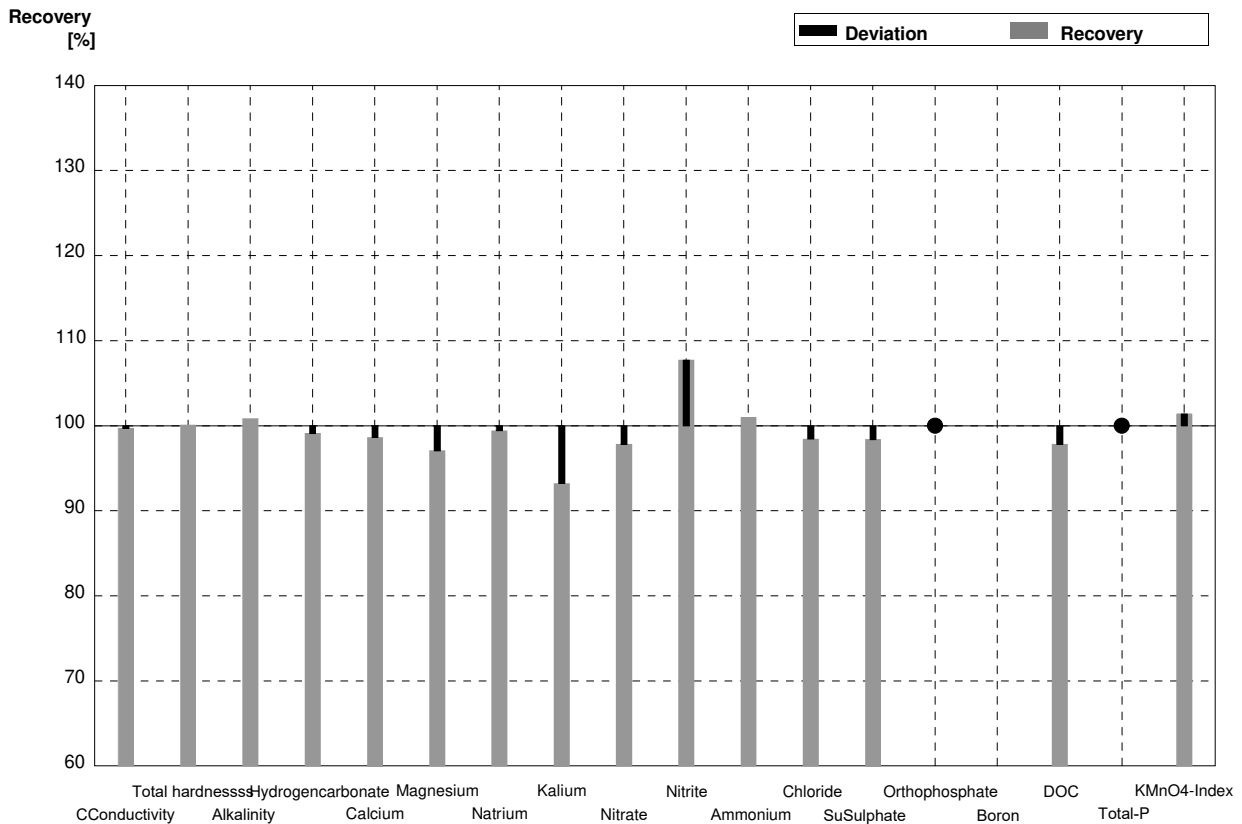
Sample N174B
Laboratory AJ

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 537 | 1,16 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,93 | 0,018 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,64 | 0,012 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | 222 | 0,92 | mg/l | 100% |
| Calcium | 55,5 | 0,9 | 54,4 | 0,84 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 13,9 | 0,15 | mg/l | 108% |
| Sodium | 39,9 | 0,6 | 39,2 | 0,46 | mg/l | 98% |
| Potassium | 1,97 | 0,04 | 1,98 | 0,012 | mg/l | 101% |
| Nitrate (as NO3) | 40,1 | 1,0 | 41,0 | 0,21 | mg/l | 102% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0433 | 0,002 | mg/l | 100% |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 25,4 | 0,10 | mg/l | 108% |
| Sulphate (as SO4) | 29,7 | 0,6 | 30,6 | 0,29 | mg/l | 103% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0245 | 0,001 | mg/l | 54% |
| Boron | 0,086 | 0,002 | 0,0858 | 0,001 | mg/l | 100% |
| DOC (as C) | 4,14 | 0,07 | 4,17 | 0,015 | mg/l | 101% |
| Total P (as PO4) | 0,115 | 0,003 | 0,0831 | 0,001 | mg/l | 72% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,07 | 0,042 | mg/l | 98% |



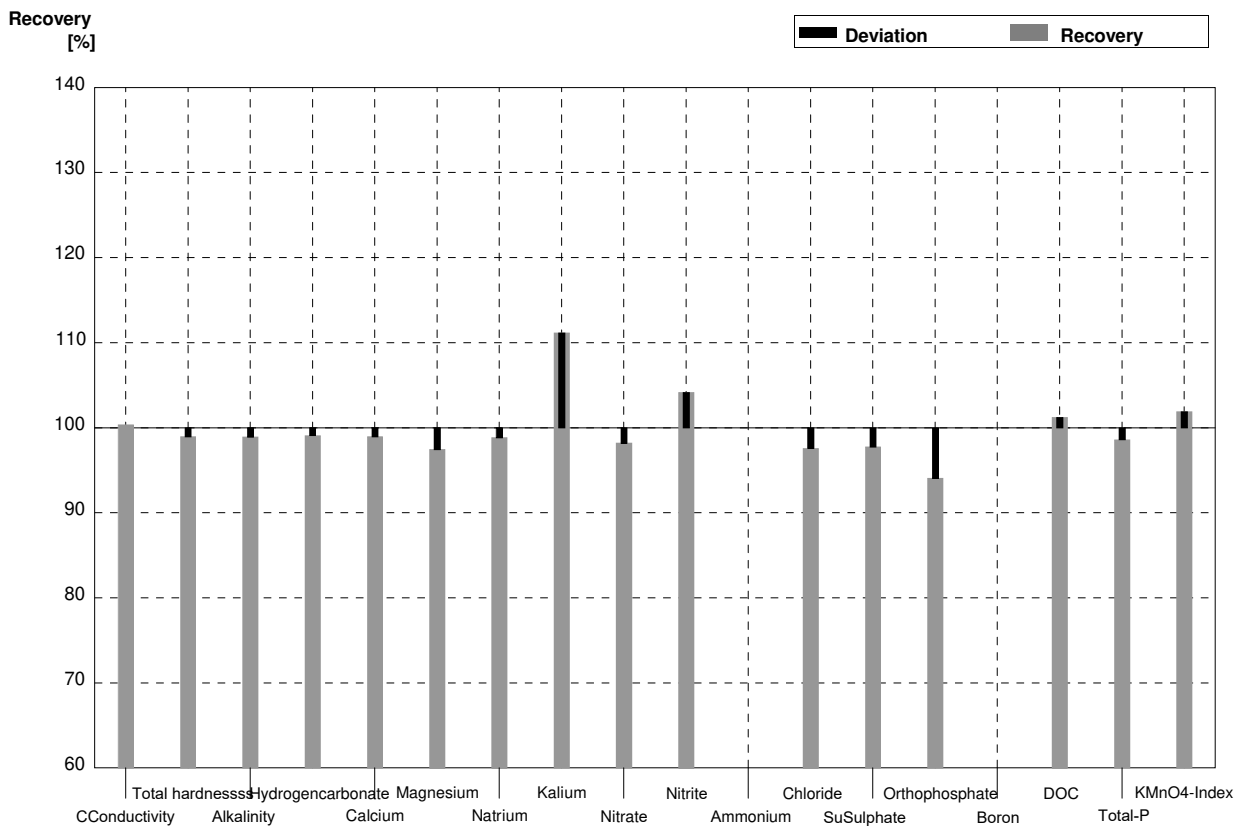
Sample N174A
Laboratory AK

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 359 | 9 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,88 | 0,04 | mmol/l | 100% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,53 | 0,01 | mmol/l | 101% |
| Hydrogen carbonate | 89,5 | 1,1 | 88,7 | 3,6 | mg/l | 99% |
| Calcium | 25,1 | 0,4 | 24,76 | 0,10 | mg/l | 99% |
| Magnesium | 6,15 | 0,10 | 5,97 | 0,11 | mg/l | 97% |
| Sodium | 32,9 | 0,2 | 32,71 | 0,65 | mg/l | 99% |
| Potassium | 5,90 | 0,03 | 5,5 | 0,3 | mg/l | 93% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,49 | 0,47 | mg/l | 98% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0240 | 0,0024 | mg/l | 108% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0410 | 0,0025 | mg/l | 101% |
| Chloride | 46,5 | 0,5 | 45,78 | 2,75 | mg/l | 98% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,53 | 0,50 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | <0,005 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,41 | 0,81 | mg/l | 98% |
| Total P (as PO4) | <0,009 | | 0,0092 | 0,0015 | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,13 | 0,26 | mg/l | 101% |



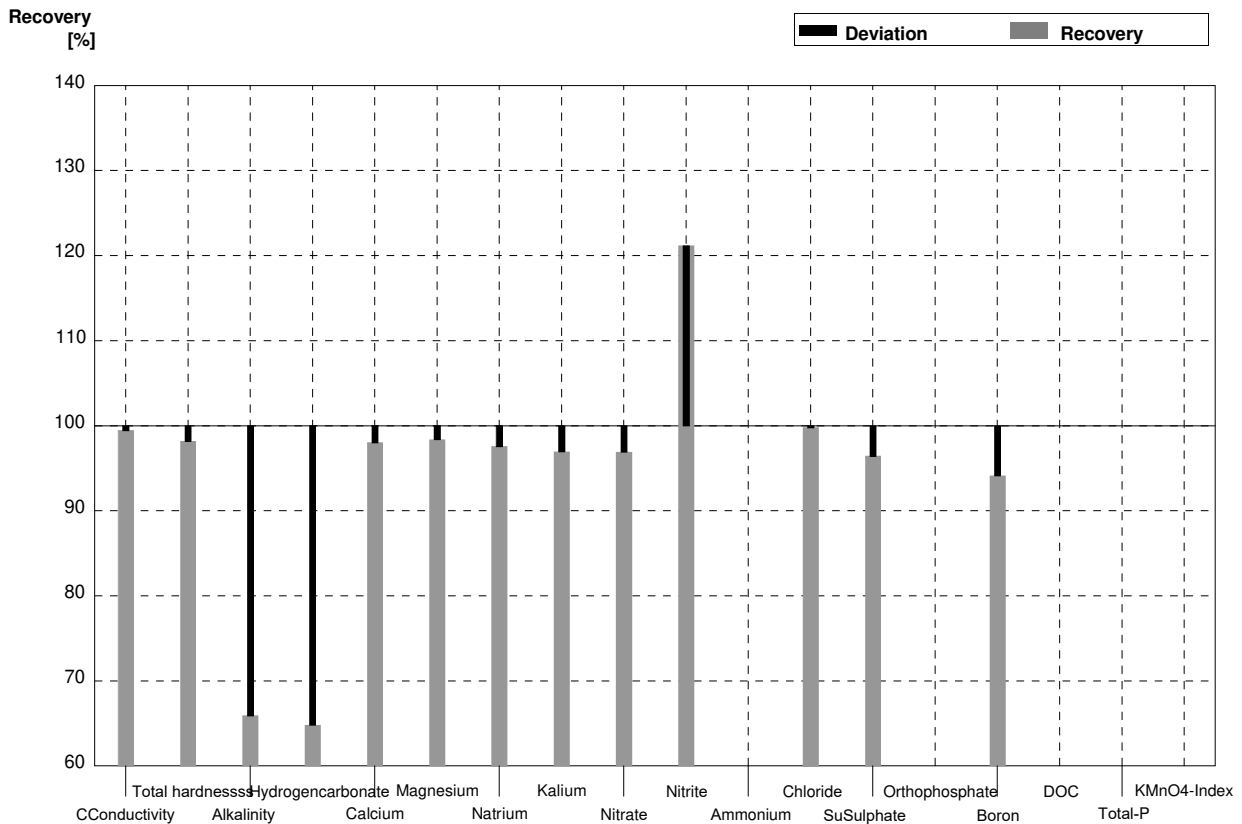
Sample N174B
Laboratory AK

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 546 | 14 | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,90 | 0,08 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,66 | 0,01 | mmol/l | 99% |
| Hydrogen carbonate | 222 | 3 | 220 | 9 | mg/l | 99% |
| Calcium | 55,5 | 0,9 | 54,93 | 0,88 | mg/l | 99% |
| Magnesium | 12,93 | 0,18 | 12,6 | 0,24 | mg/l | 97% |
| Sodium | 39,9 | 0,6 | 39,44 | 0,79 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 2,19 | 0,13 | mg/l | 111% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,38 | 1,97 | mg/l | 98% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0450 | 0,0045 | mg/l | 104% |
| Ammonium (as NH4) | <0,01 | | n.n. | | mg/l | |
| Chloride | 23,6 | 0,3 | 23,03 | 1,38 | mg/l | 98% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,03 | 0,87 | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0429 | 0,0052 | mg/l | 94% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,19 | 0,63 | mg/l | 101% |
| Total P (as PO4) | 0,115 | 0,003 | 0,1134 | 0,0205 | mg/l | 99% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,19 | 0,38 | mg/l | 102% |



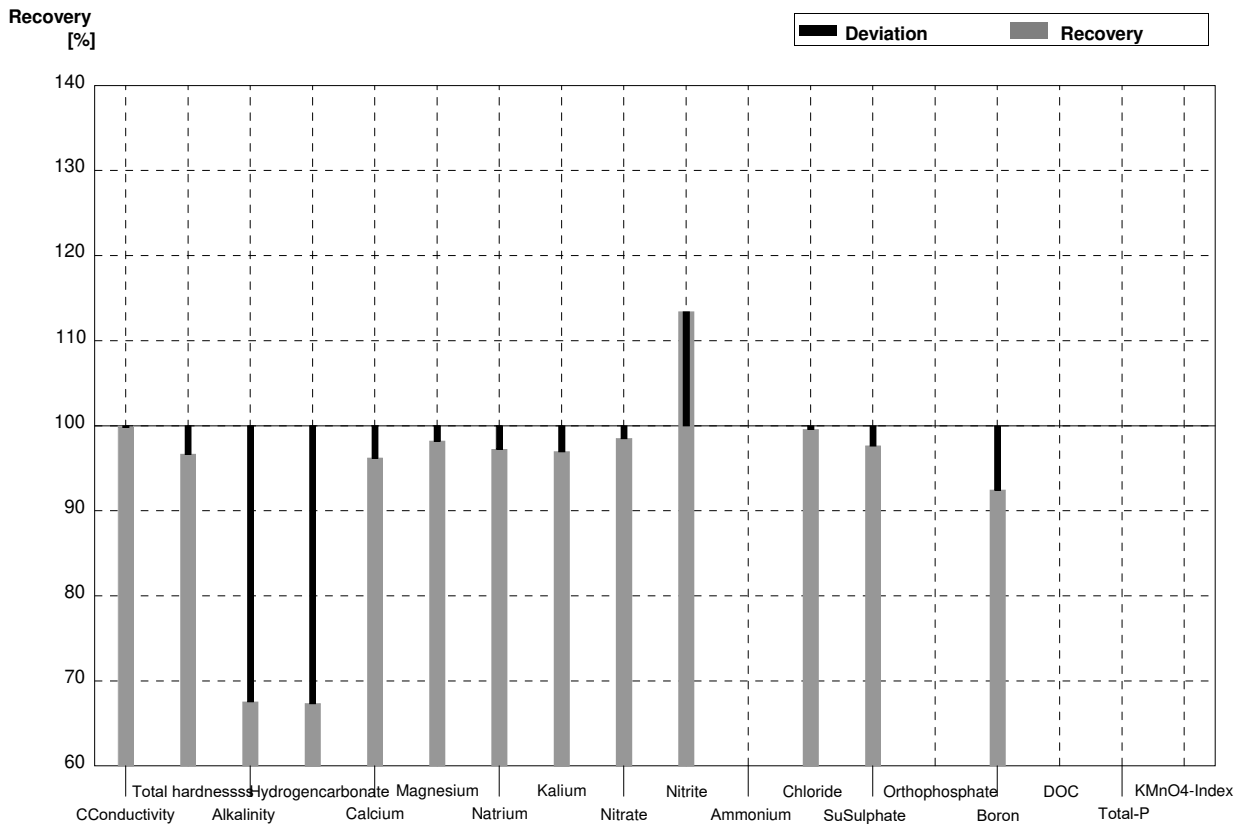
Sample N174A
Laboratory AL

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 360 | 1 | 358 | | µS/cm | 99% |
| Total hardness | 0,879 | 0,010 | 0,863 | | mmol/l | 98% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,00 | | mmol/l | 66% |
| Hydrogen carbonate | 89,5 | 1,1 | 58,0 | | mg/l | 65% |
| Calcium | 25,1 | 0,4 | 24,6 | | mg/l | 98% |
| Magnesium | 6,15 | 0,10 | 6,05 | | mg/l | 98% |
| Sodium | 32,9 | 0,2 | 32,1 | | mg/l | 98% |
| Potassium | 5,90 | 0,03 | 5,72 | | mg/l | 97% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,40 | | mg/l | 97% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0270 | | mg/l | 121% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | | | mg/l | |
| Chloride | 46,5 | 0,5 | 46,4 | | mg/l | 100% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,2 | | mg/l | 96% |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | 0,128 | | mg/l | 94% |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



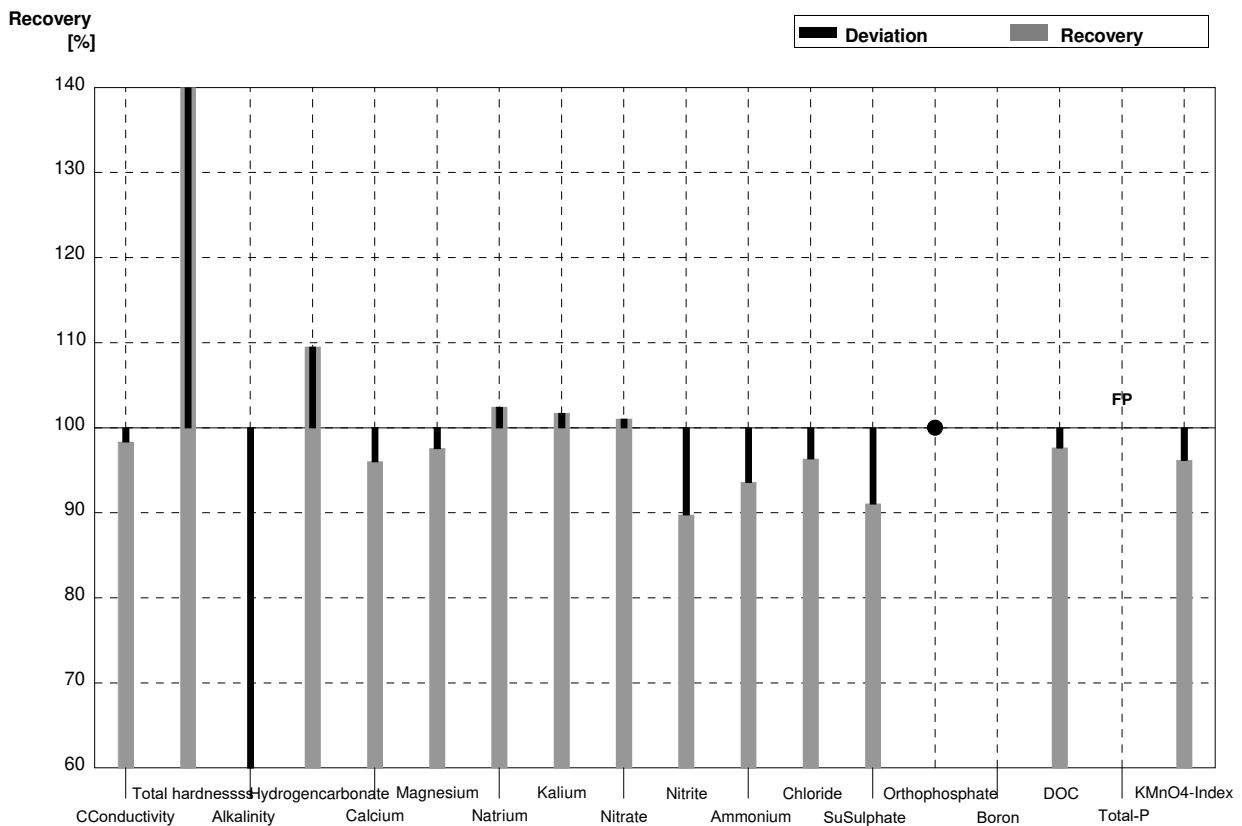
Sample N174B
Laboratory AL

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---|--------|----------|
| Conductivity (25°C) | 544 | 2 | 543 | | µS/cm | 100% |
| Total hardness | 1,92 | 0,02 | 1,856 | | mmol/l | 97% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 2,50 | | mmol/l | 68% |
| Hydrogen carbonate | 222 | 3 | 149,5 | | mg/l | 67% |
| Calcium | 55,5 | 0,9 | 53,4 | | mg/l | 96% |
| Magnesium | 12,93 | 0,18 | 12,7 | | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 38,8 | | mg/l | 97% |
| Potassium | 1,97 | 0,04 | 1,91 | | mg/l | 97% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,5 | | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0490 | | mg/l | 113% |
| Ammonium (as NH4) | <0,01 | | | | mg/l | |
| Chloride | 23,6 | 0,3 | 23,5 | | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,0 | | mg/l | 98% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | 0,0795 | | mg/l | 92% |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



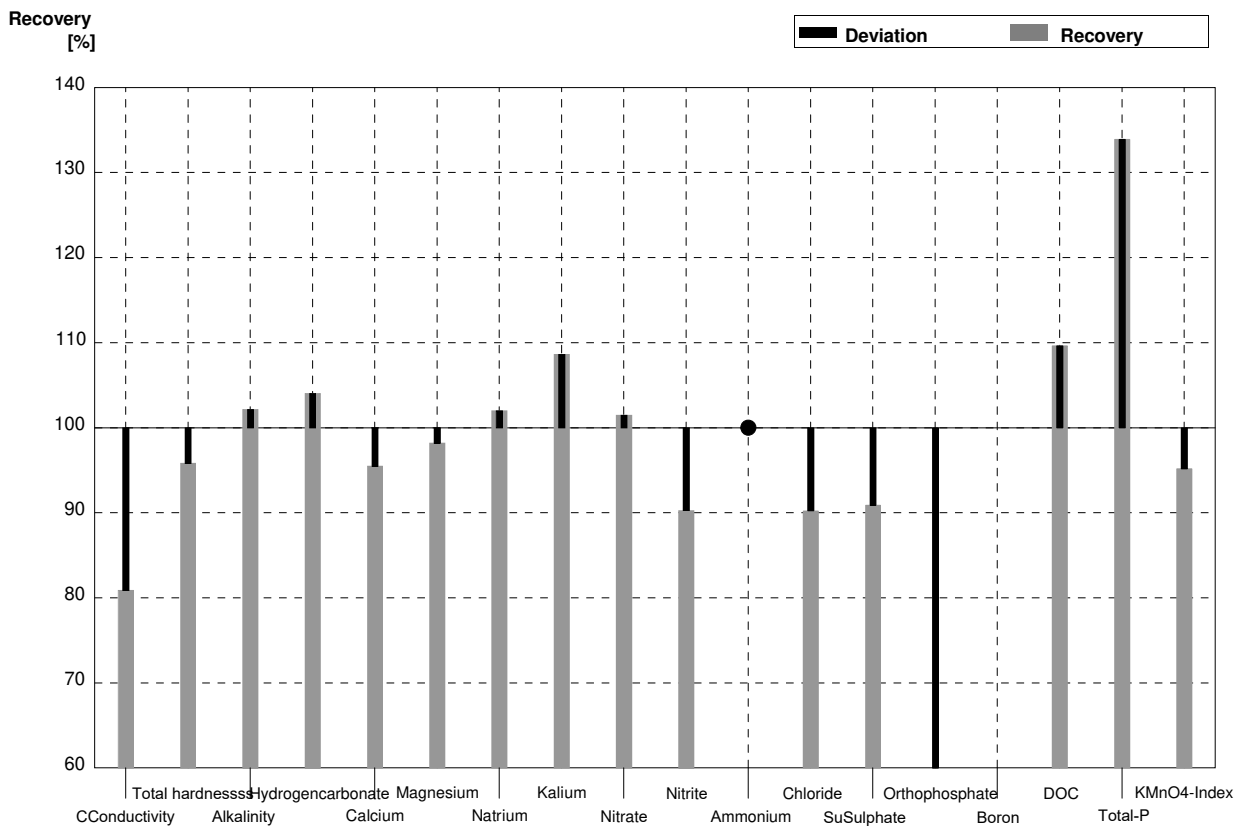
Sample N174A
Laboratory AM

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 354 | 7,6 | µS/cm | 98% |
| Total hardness | 0,879 | 0,010 | 1,61 | 0,13 | mmol/l | 183% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 0,85 | 0,072 | mmol/l | 56% |
| Hydrogen carbonate | 89,5 | 1,1 | 98 | 4,4 | mg/l | 109% |
| Calcium | 25,1 | 0,4 | 24,1 | 1,2 | mg/l | 96% |
| Magnesium | 6,15 | 0,10 | 6,0 | 0,38 | mg/l | 98% |
| Sodium | 32,9 | 0,2 | 33,7 | 2,6 | mg/l | 102% |
| Potassium | 5,90 | 0,03 | 6,0 | 0,21 | mg/l | 102% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,8 | 0,47 | mg/l | 101% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,020 | 0,0012 | mg/l | 90% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0380 | 0,0028 | mg/l | 94% |
| Chloride | 46,5 | 0,5 | 44,8 | 3,6 | mg/l | 96% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,3 | 0,93 | mg/l | 91% |
| Orthophosphate (as PO4) | <0,009 | | <0,01 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | 5,4 | 0,50 | mg/l | 98% |
| Total P (as PO4) | <0,009 | | 0,050 | 0,0065 | mg/l | FP |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,02 | 0,092 | mg/l | 96% |



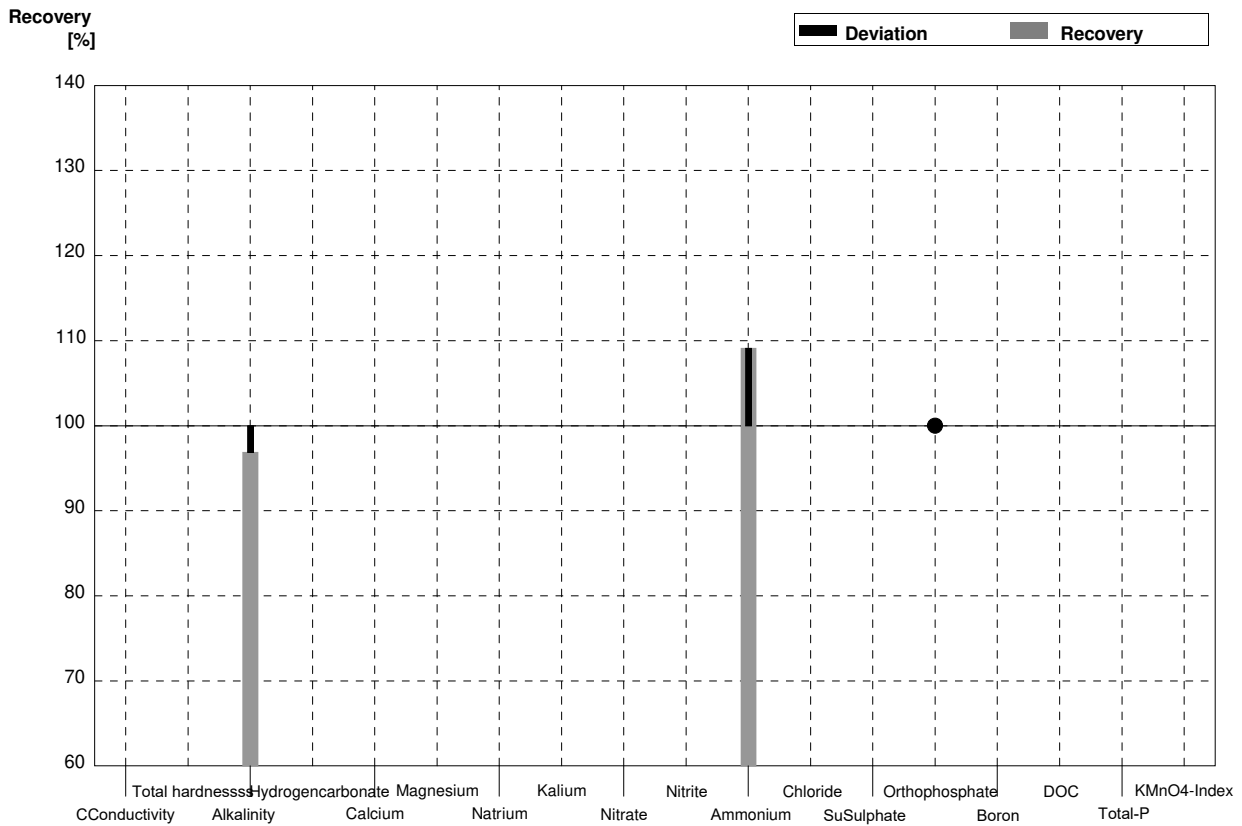
Sample N174B
Laboratory AM

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 440 | 9,5 | µS/cm | 81% |
| Total hardness | 1,92 | 0,02 | 1,84 | 0,15 | mmol/l | 96% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,78 | 0,32 | mmol/l | 102% |
| Hydrogen carbonate | 222 | 3 | 231 | 10 | mg/l | 104% |
| Calcium | 55,5 | 0,9 | 53 | 2,7 | mg/l | 95% |
| Magnesium | 12,93 | 0,18 | 12,7 | 0,80 | mg/l | 98% |
| Sodium | 39,9 | 0,6 | 40,7 | 3,1 | mg/l | 102% |
| Potassium | 1,97 | 0,04 | 2,14 | 0,075 | mg/l | 109% |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,7 | 2,0 | mg/l | 101% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,039 | 0,0023 | mg/l | 90% |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 21,3 | 1,7 | mg/l | 90% |
| Sulphate (as SO4) | 29,7 | 0,6 | 27,0 | 1,6 | mg/l | 91% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0260 | 0,0038 | mg/l | 57% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | 4,54 | 0,42 | mg/l | 110% |
| Total P (as PO4) | 0,115 | 0,003 | 0,154 | 0,020 | mg/l | 134% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 2,98 | 0,14 | mg/l | 95% |



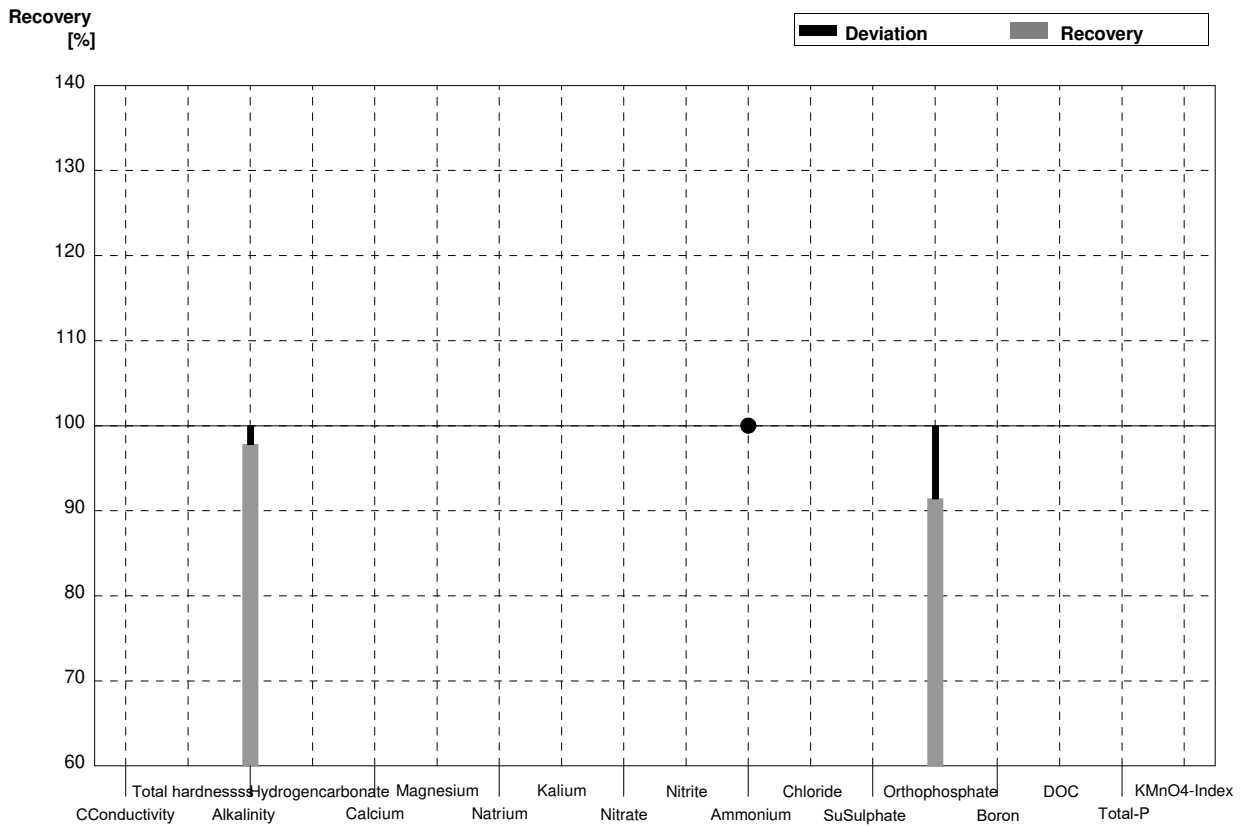
Sample N174A
Laboratory AN

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 360 | 1 | | | µS/cm | |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,47 | 0,22 | mmol/l | 97% |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | | | mg/l | |
| Nitrite (as NO2) | 0,02228 | 0,00008 | | | mg/l | |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0443 | 0,00443 | mg/l | 109% |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



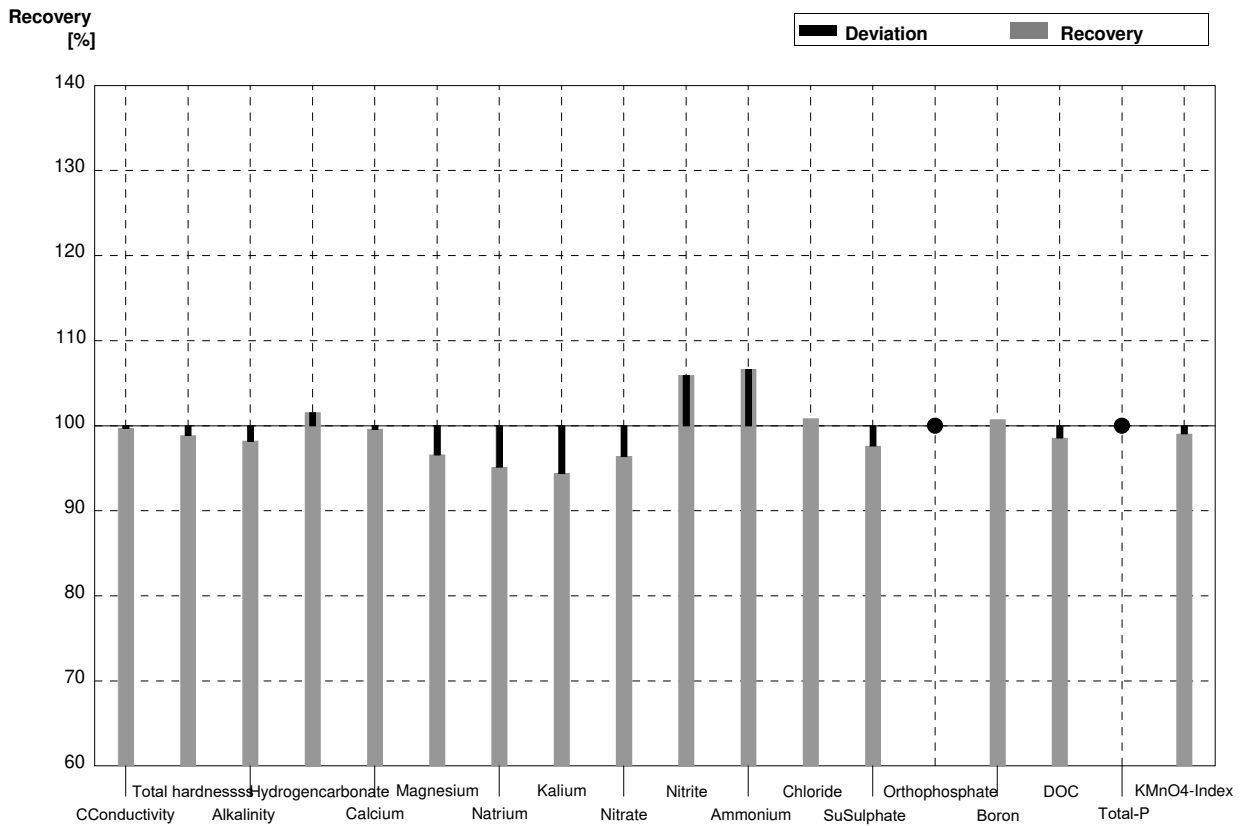
Sample N174B
Laboratory AN

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|---------|--------|----------|
| Conductivity (25°C) | 544 | 2 | | | µS/cm | |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,62 | 0,54 | mmol/l | 98% |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | | | mg/l | |
| Nitrite (as NO2) | 0,0432 | 0,0015 | | | mg/l | |
| Ammonium (as NH4) | <0,01 | | <0,01 | | mg/l | • |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0417 | 0,00626 | mg/l | 91% |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



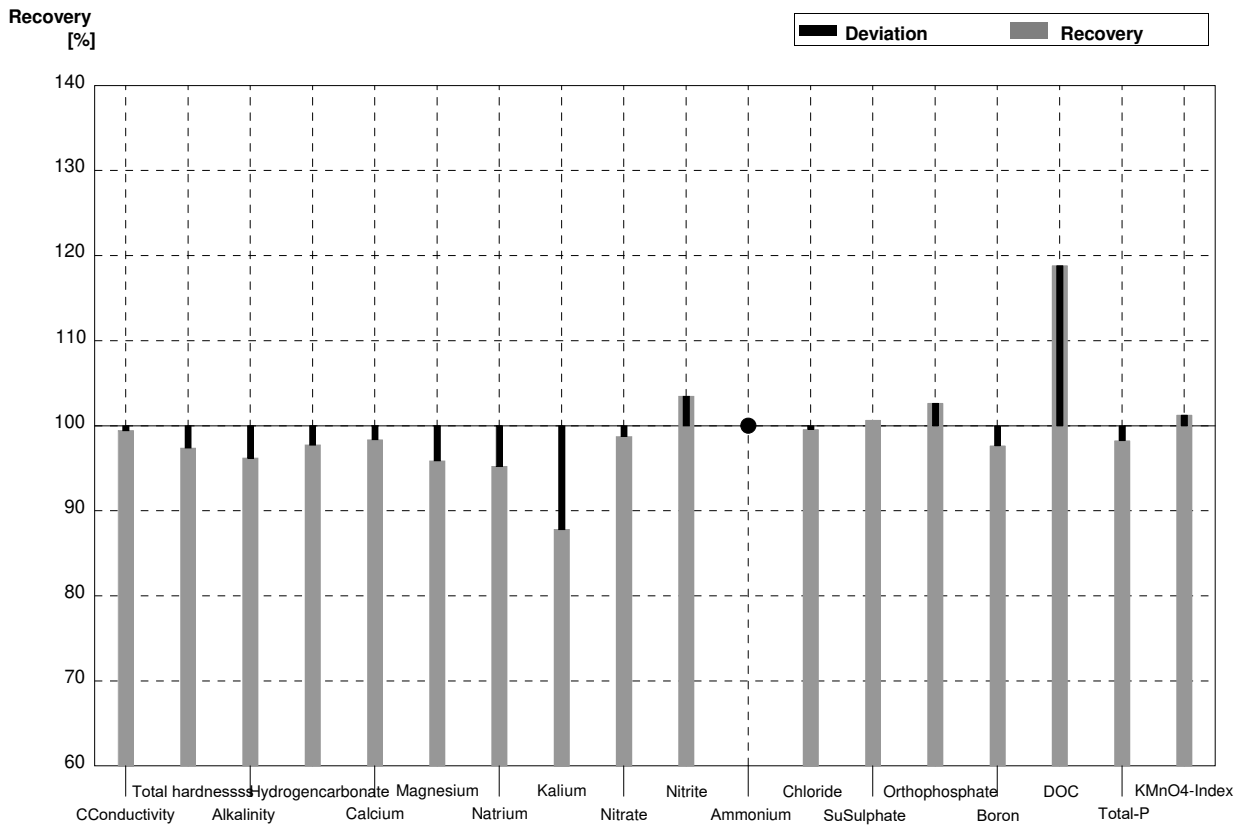
Sample N174A
Laboratory AO

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 359 | 11 | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | 0,869 | 0,13 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,49 | 0,12 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 90,9 | 7,3 | mg/l | 102% |
| Calcium | 25,1 | 0,4 | 25,0 | 3,8 | mg/l | 100% |
| Magnesium | 6,15 | 0,10 | 5,94 | 0,71 | mg/l | 97% |
| Sodium | 32,9 | 0,2 | 31,3 | 4,1 | mg/l | 95% |
| Potassium | 5,90 | 0,03 | 5,57 | 0,56 | mg/l | 94% |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,35 | 0,94 | mg/l | 96% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0236 | 0,0026 | mg/l | 106% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0433 | 0,0035 | mg/l | 107% |
| Chloride | 46,5 | 0,5 | 46,9 | 4,7 | mg/l | 101% |
| Sulphate (as SO4) | 16,8 | 0,3 | 16,4 | 2,6 | mg/l | 98% |
| Orthophosphate (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,137 | 0,018 | mg/l | 101% |
| DOC (as C) | 5,53 | 0,07 | 5,45 | 1,1 | mg/l | 99% |
| Total P (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,08 | 0,31 | mg/l | 99% |



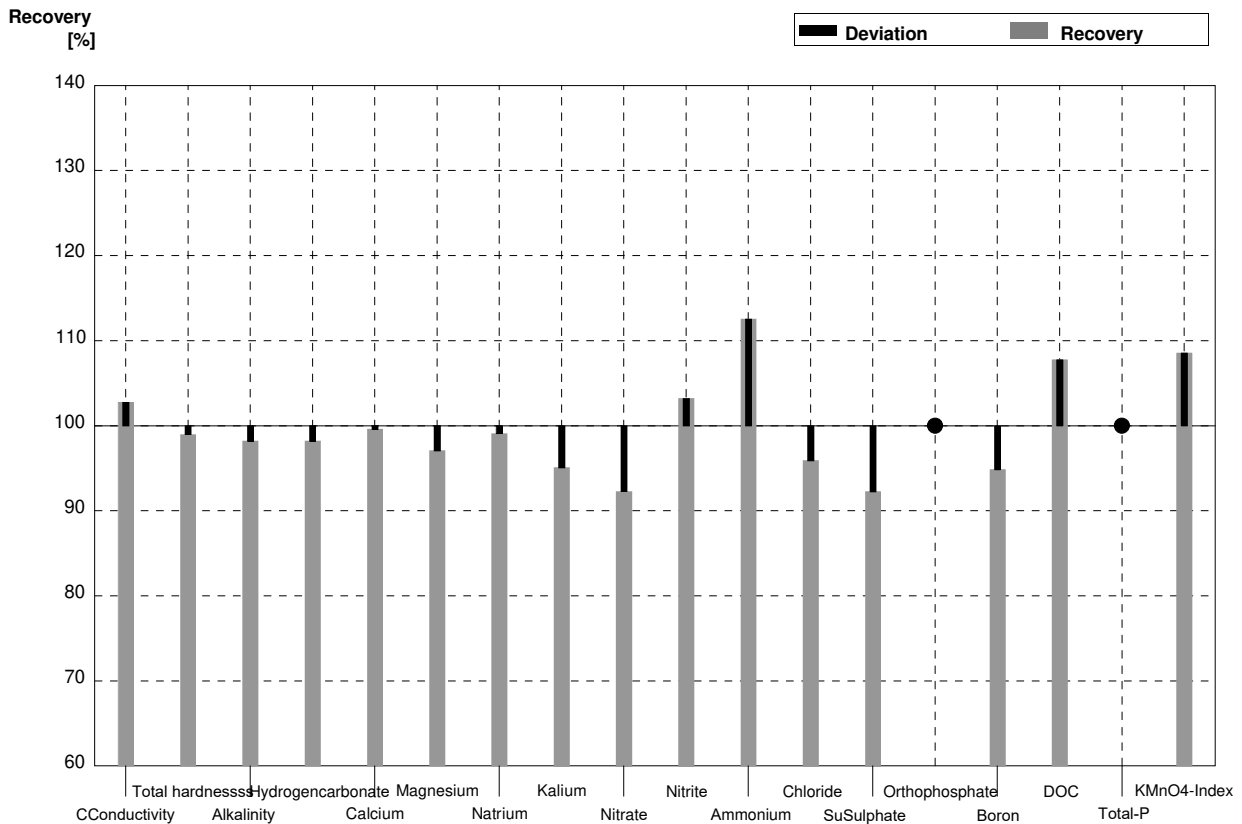
Sample N174B
Laboratory AO

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|---------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 541 | 16 | µS/cm | 99% |
| Total hardness | 1,92 | 0,02 | 1,87 | 0,28 | mmol/l | 97% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,56 | 0,28 | mmol/l | 96% |
| Hydrogen carbonate | 222 | 3 | 217 | 17 | mg/l | 98% |
| Calcium | 55,5 | 0,9 | 54,6 | 8,2 | mg/l | 98% |
| Magnesium | 12,93 | 0,18 | 12,4 | 1,5 | mg/l | 96% |
| Sodium | 39,9 | 0,6 | 38,0 | 4,9 | mg/l | 95% |
| Potassium | 1,97 | 0,04 | 1,73 | 0,17 | mg/l | 88% |
| Nitrate (as NO3) | 40,1 | 1,0 | 39,6 | 4,0 | mg/l | 99% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0447 | 0,0049 | mg/l | 103% |
| Ammonium (as NH4) | <0,01 | | <0,0100 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,5 | 2,4 | mg/l | 100% |
| Sulphate (as SO4) | 29,7 | 0,6 | 29,9 | 4,8 | mg/l | 101% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0468 | 0,0037 | mg/l | 103% |
| Boron | 0,086 | 0,002 | 0,0840 | 0,011 | mg/l | 98% |
| DOC (as C) | 4,14 | 0,07 | 4,92 | 1,0 | mg/l | 119% |
| Total P (as PO4) | 0,115 | 0,003 | 0,113 | 0,0091 | mg/l | 98% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,17 | 0,48 | mg/l | 101% |



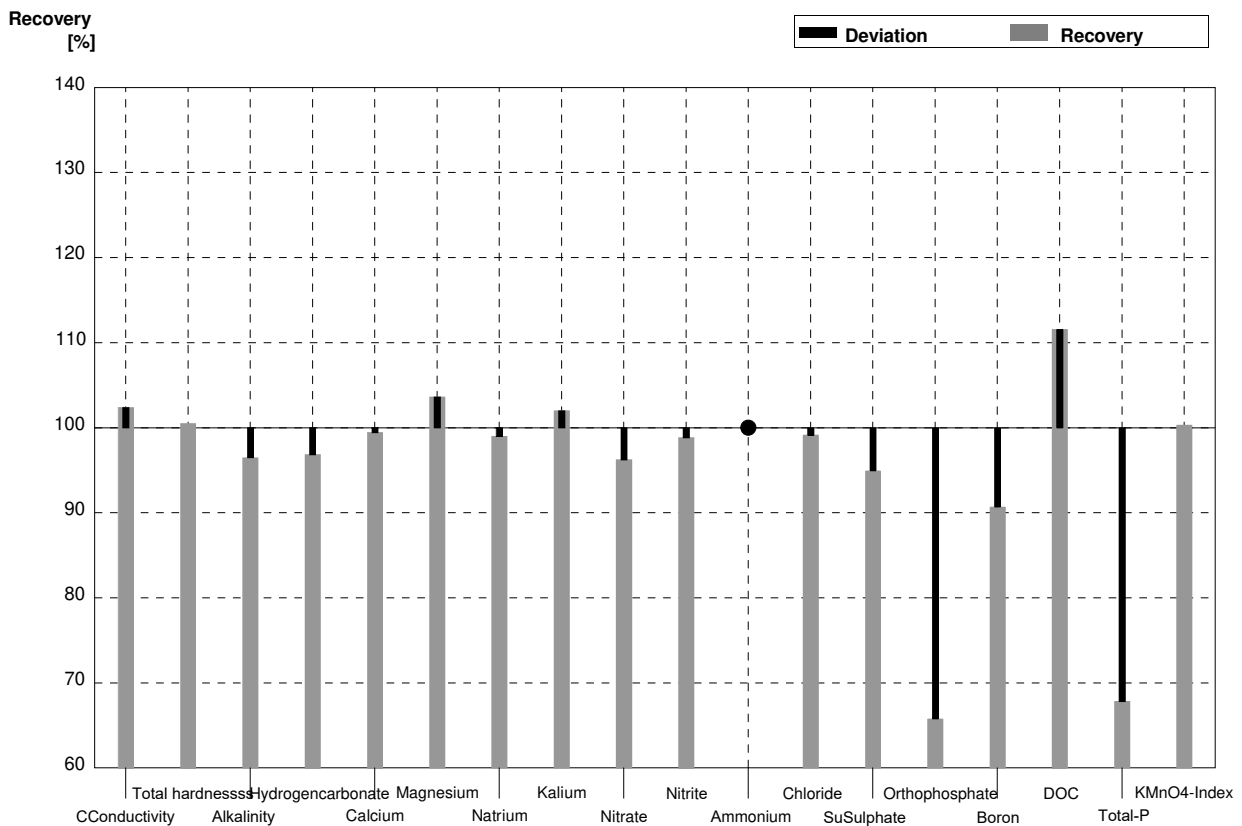
Sample N174A
Laboratory AP

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 370 | 19 | µS/cm | 103% |
| Total hardness | 0,879 | 0,010 | 0,870 | 0,174 | mmol/l | 99% |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | 1,49 | 0,07 | mmol/l | 98% |
| Hydrogen carbonate | 89,5 | 1,1 | 87,9 | 4,4 | mg/l | 98% |
| Calcium | 25,1 | 0,4 | 25,0 | 5,0 | mg/l | 100% |
| Magnesium | 6,15 | 0,10 | 5,97 | 0,60 | mg/l | 97% |
| Sodium | 32,9 | 0,2 | 32,6 | 3,3 | mg/l | 99% |
| Potassium | 5,90 | 0,03 | 5,61 | 0,56 | mg/l | 95% |
| Nitrate (as NO3) | 9,7 | 0,3 | 8,95 | 0,89 | mg/l | 92% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0230 | 0,0032 | mg/l | 103% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | 0,0457 | 0,0064 | mg/l | 113% |
| Chloride | 46,5 | 0,5 | 44,6 | 4,5 | mg/l | 96% |
| Sulphate (as SO4) | 16,8 | 0,3 | 15,5 | 1,6 | mg/l | 92% |
| Orthophosphate (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| Boron | 0,136 | 0,004 | 0,129 | 0,026 | mg/l | 95% |
| DOC (as C) | 5,53 | 0,07 | 5,96 | 1,07 | mg/l | 108% |
| Total P (as PO4) | <0,009 | | <0,015 | | mg/l | • |
| KMnO4-Index (as O2) | 2,10 | 0,10 | 2,28 | 0,34 | mg/l | 109% |



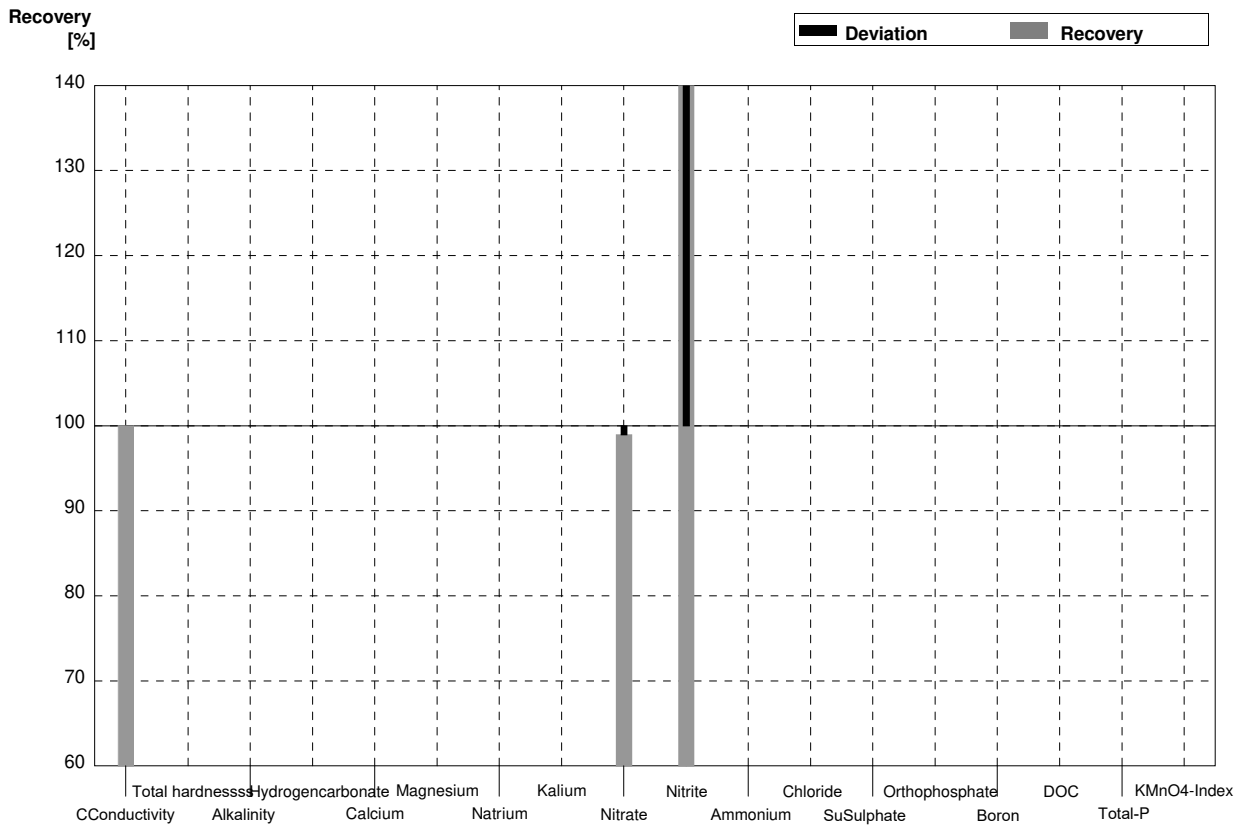
Sample N174B
Laboratory AP

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|--------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 557 | 28 | µS/cm | 102% |
| Total hardness | 1,92 | 0,02 | 1,93 | 0,39 | mmol/l | 101% |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | 3,57 | 0,18 | mmol/l | 96% |
| Hydrogen carbonate | 222 | 3 | 215 | 11 | mg/l | 97% |
| Calcium | 55,5 | 0,9 | 55,2 | 11,0 | mg/l | 99% |
| Magnesium | 12,93 | 0,18 | 13,4 | 1,3 | mg/l | 104% |
| Sodium | 39,9 | 0,6 | 39,5 | 3,9 | mg/l | 99% |
| Potassium | 1,97 | 0,04 | 2,01 | 0,20 | mg/l | 102% |
| Nitrate (as NO3) | 40,1 | 1,0 | 38,6 | 3,9 | mg/l | 96% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,0427 | 0,0060 | mg/l | 99% |
| Ammonium (as NH4) | <0,01 | | <0,010 | | mg/l | • |
| Chloride | 23,6 | 0,3 | 23,4 | 2,3 | mg/l | 99% |
| Sulphate (as SO4) | 29,7 | 0,6 | 28,2 | 2,8 | mg/l | 95% |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | 0,0300 | 0,0042 | mg/l | 66% |
| Boron | 0,086 | 0,002 | 0,0780 | 0,0156 | mg/l | 91% |
| DOC (as C) | 4,14 | 0,07 | 4,62 | 0,83 | mg/l | 112% |
| Total P (as PO4) | 0,115 | 0,003 | 0,0780 | 0,0117 | mg/l | 68% |
| KMnO4-Index (as O2) | 3,13 | 0,11 | 3,14 | 0,47 | mg/l | 100% |



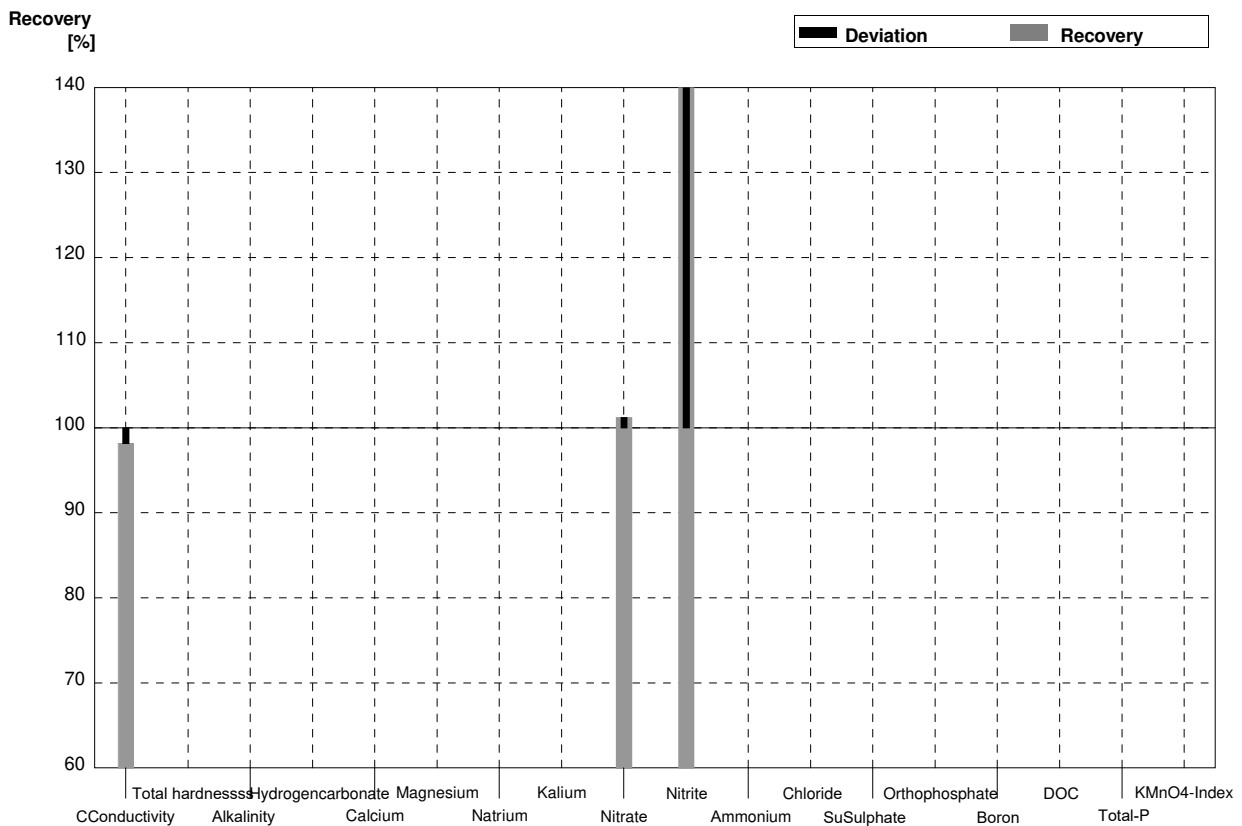
Sample N174A
Laboratory AQ

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 360 | 1 | 360 | | µS/cm | 100% |
| Total hardness | 0,879 | 0,010 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 1,517 | 0,018 | | | mmol/l | |
| Hydrogen carbonate | 89,5 | 1,1 | | | mg/l | |
| Calcium | 25,1 | 0,4 | | | mg/l | |
| Magnesium | 6,15 | 0,10 | | | mg/l | |
| Sodium | 32,9 | 0,2 | | | mg/l | |
| Potassium | 5,90 | 0,03 | | | mg/l | |
| Nitrate (as NO3) | 9,7 | 0,3 | 9,6 | 0,35 | mg/l | 99% |
| Nitrite (as NO2) | 0,02228 | 0,00008 | 0,0490 | 0,001 | mg/l | 220% |
| Ammonium (as NH4) | 0,0406 | 0,0019 | | | mg/l | |
| Chloride | 46,5 | 0,5 | | | mg/l | |
| Sulphate (as SO4) | 16,8 | 0,3 | | | mg/l | |
| Orthophosphate (as PO4) | <0,009 | | | | mg/l | |
| Boron | 0,136 | 0,004 | | | mg/l | |
| DOC (as C) | 5,53 | 0,07 | | | mg/l | |
| Total P (as PO4) | <0,009 | | | | mg/l | |
| KMnO4-Index (as O2) | 2,10 | 0,10 | | | mg/l | |



Sample N174B
Laboratory AQ

| Parameter | Assigned value | ± U (k=2) | Result | ± | Unit | Recovery |
|---------------------------|----------------|-----------|--------|-------|--------|----------|
| Conductivity (25°C) | 544 | 2 | 534 | | µS/cm | 98% |
| Total hardness | 1,92 | 0,02 | | | mmol/l | |
| Alkalinity KS 4,3 (as H+) | 3,70 | 0,05 | | | mmol/l | |
| Hydrogen carbonate | 222 | 3 | | | mg/l | |
| Calcium | 55,5 | 0,9 | | | mg/l | |
| Magnesium | 12,93 | 0,18 | | | mg/l | |
| Sodium | 39,9 | 0,6 | | | mg/l | |
| Potassium | 1,97 | 0,04 | | | mg/l | |
| Nitrate (as NO3) | 40,1 | 1,0 | 40,6 | 1,49 | mg/l | 101% |
| Nitrite (as NO2) | 0,0432 | 0,0015 | 0,063 | 0,001 | mg/l | 146% |
| Ammonium (as NH4) | <0,01 | | | | mg/l | |
| Chloride | 23,6 | 0,3 | | | mg/l | |
| Sulphate (as SO4) | 29,7 | 0,6 | | | mg/l | |
| Orthophosphate (as PO4) | 0,0456 | 0,0030 | | | mg/l | |
| Boron | 0,086 | 0,002 | | | mg/l | |
| DOC (as C) | 4,14 | 0,07 | | | mg/l | |
| Total P (as PO4) | 0,115 | 0,003 | | | mg/l | |
| KMnO4-Index (as O2) | 3,13 | 0,11 | | | mg/l | |



Methodenvergleich

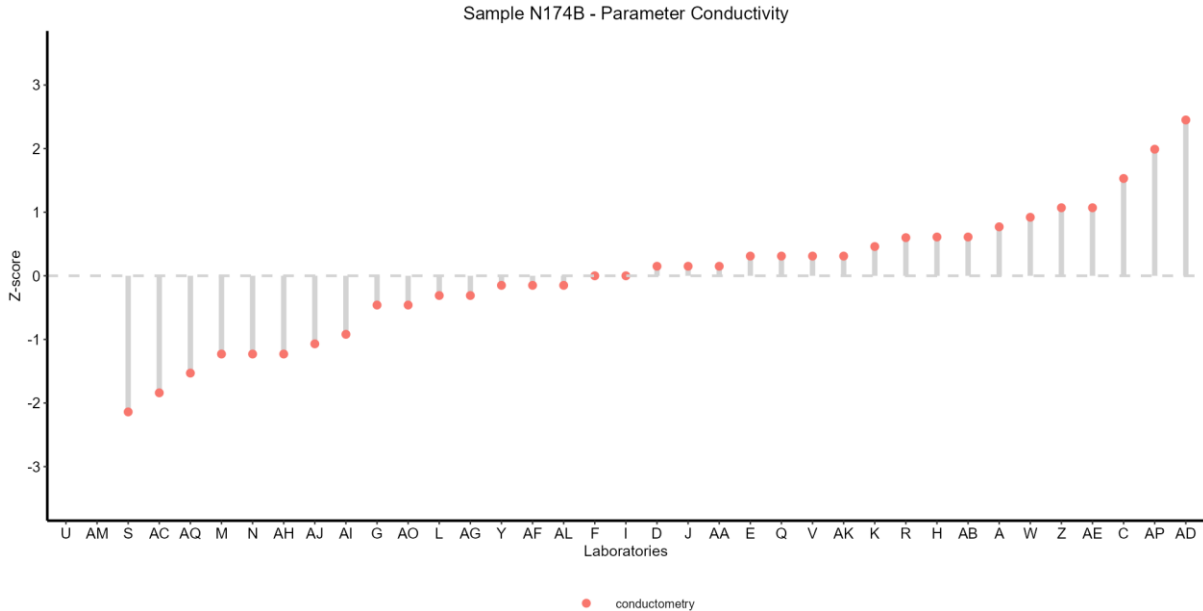
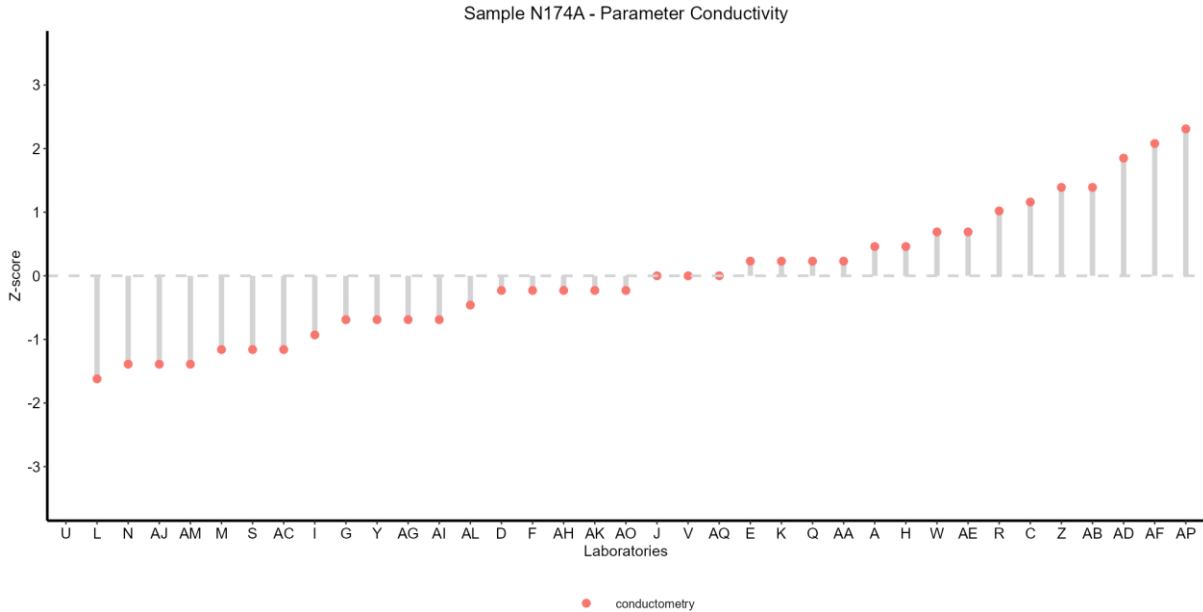
Method comparison

Eignungsprüfungsrunde / Proficiency testing round
N174

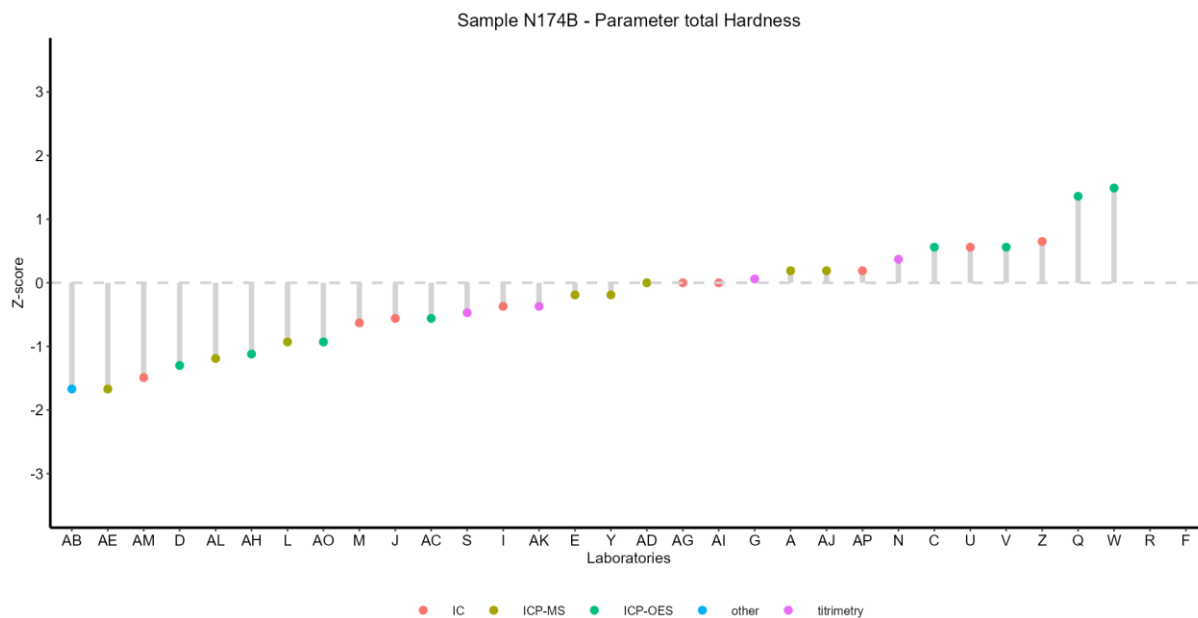
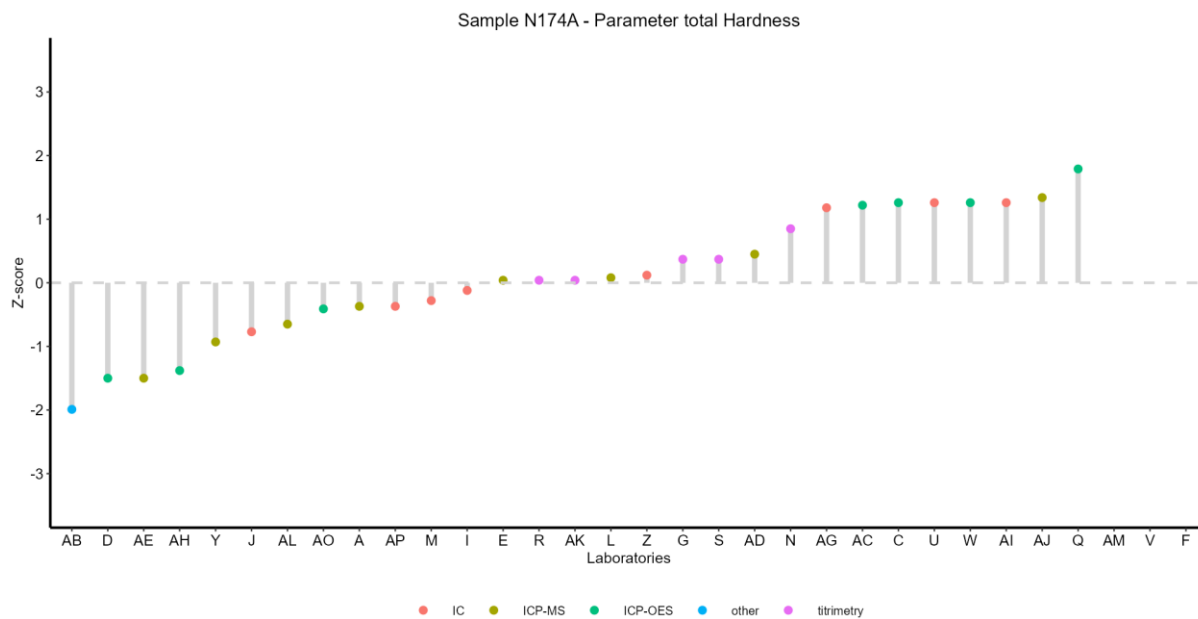
Nährstoffe
Nutrients / Major ions

Versand / Dispatch: 11.11.2024

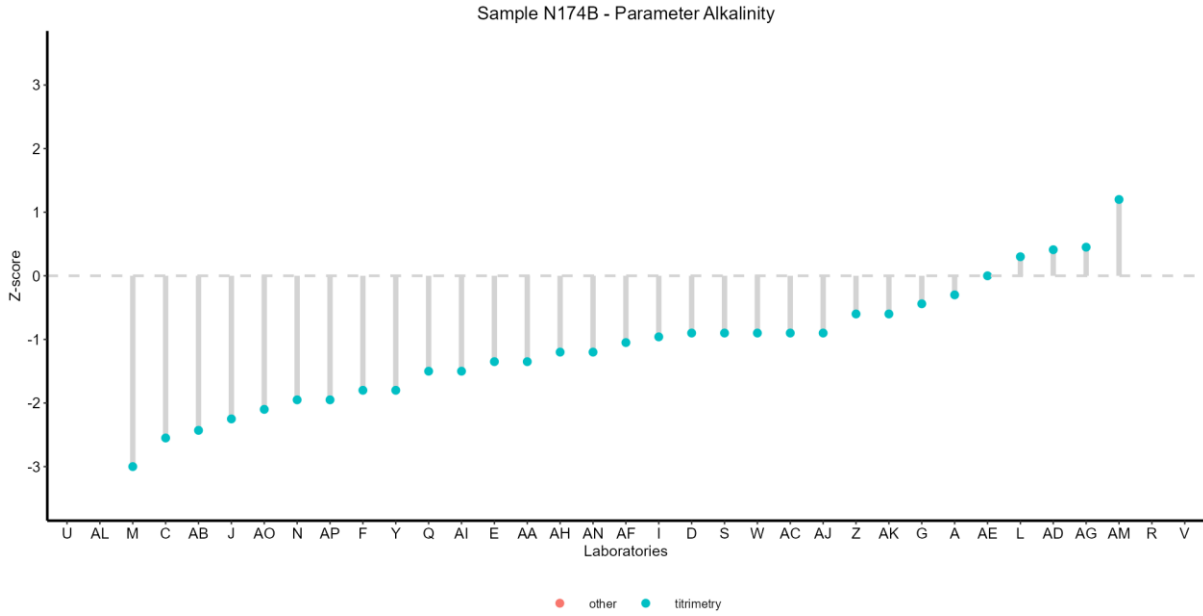
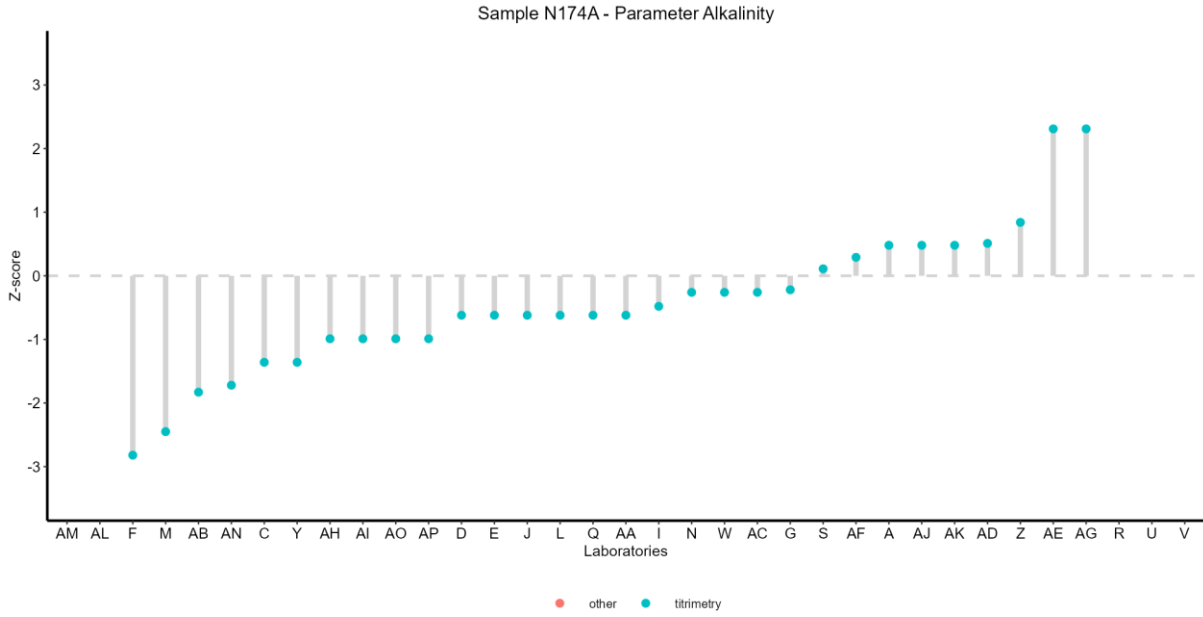
Conductivity



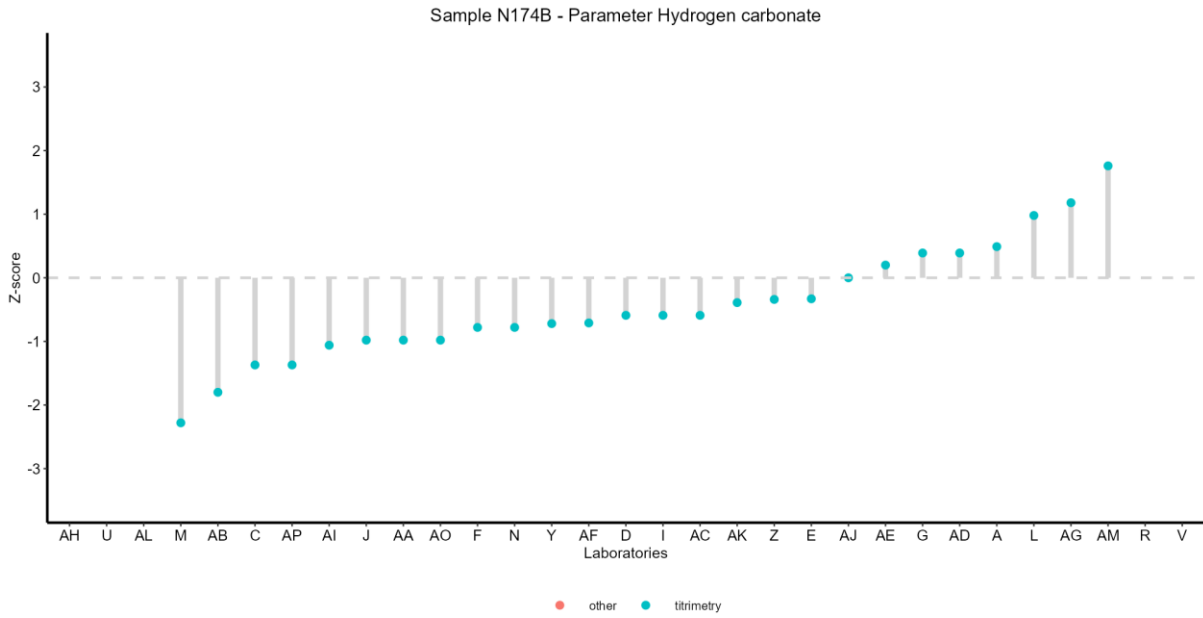
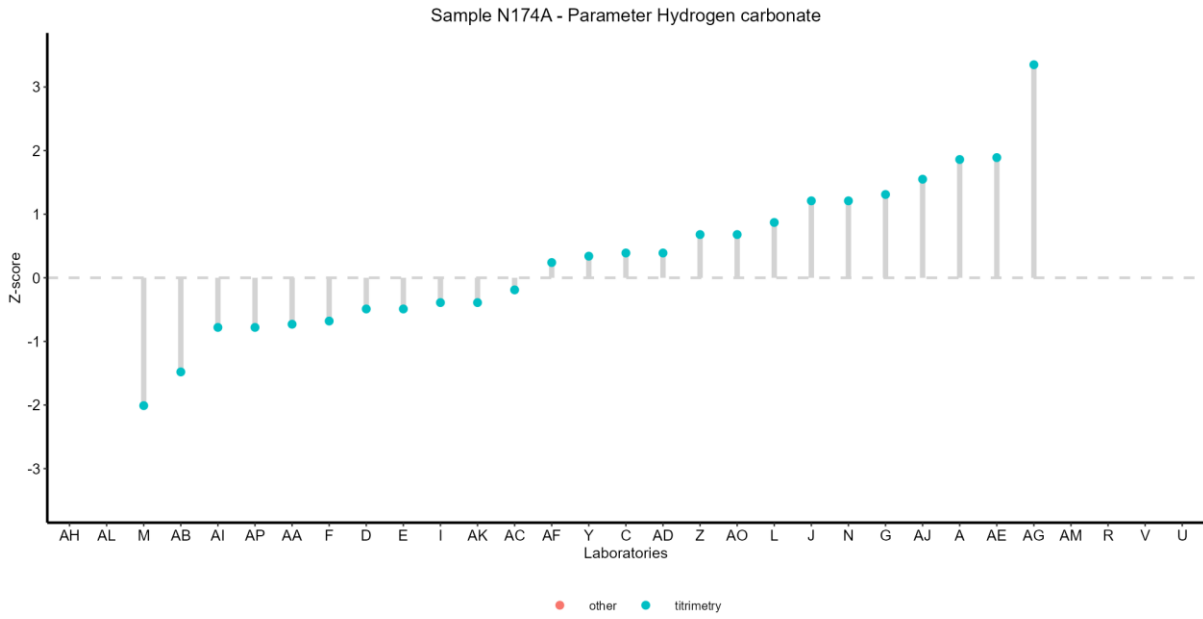
Total Hardness



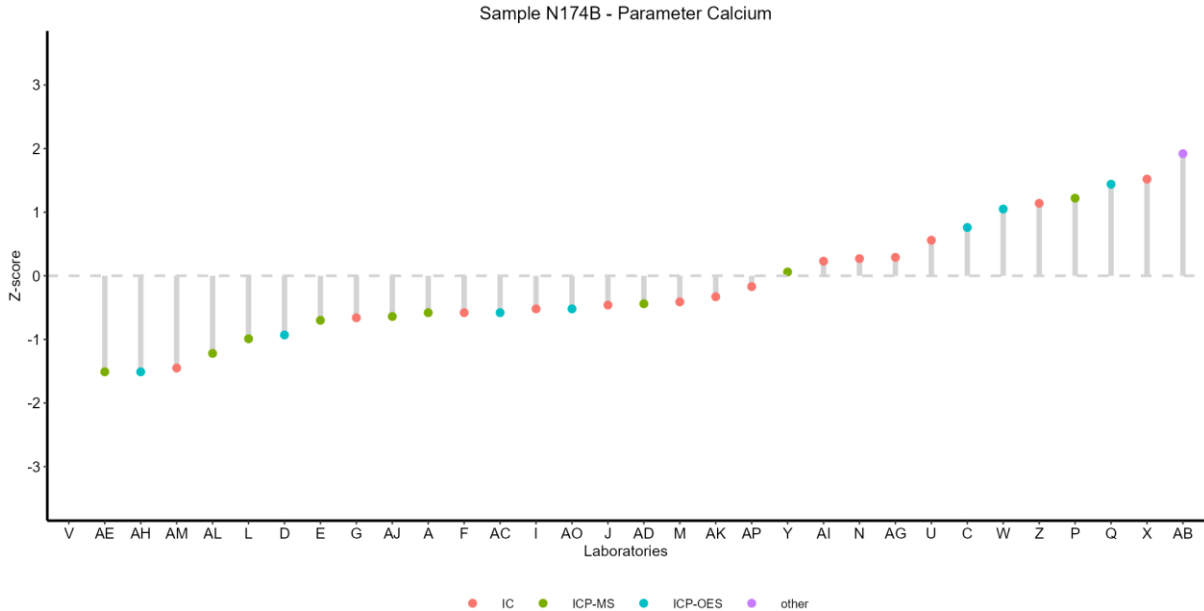
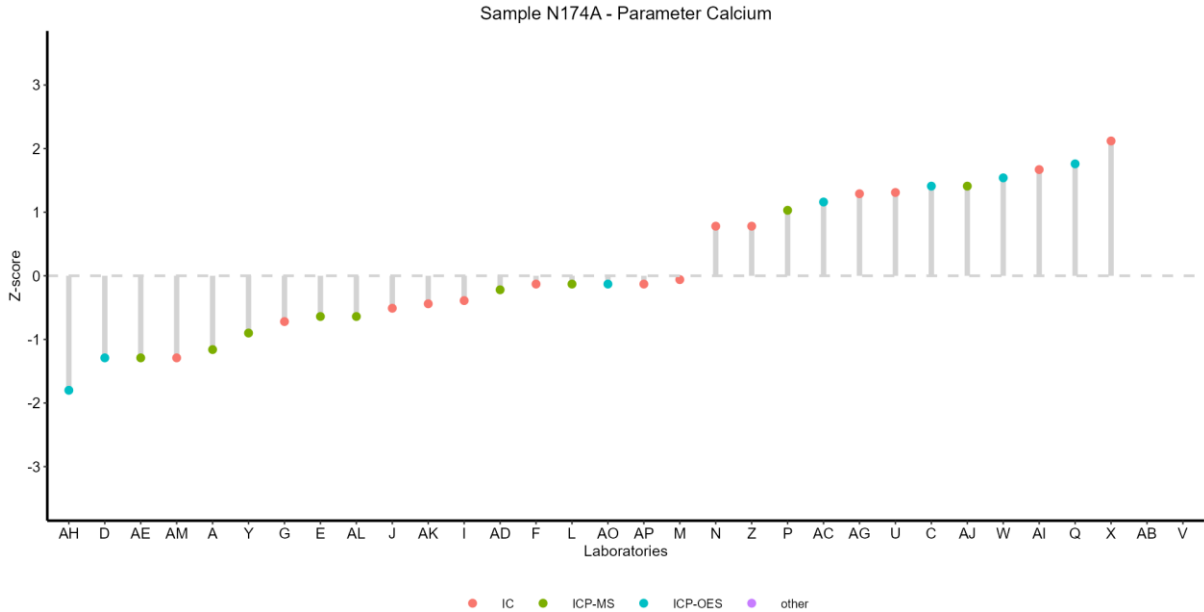
Alkalinity $K_{s 4.3}$ (as H^+)



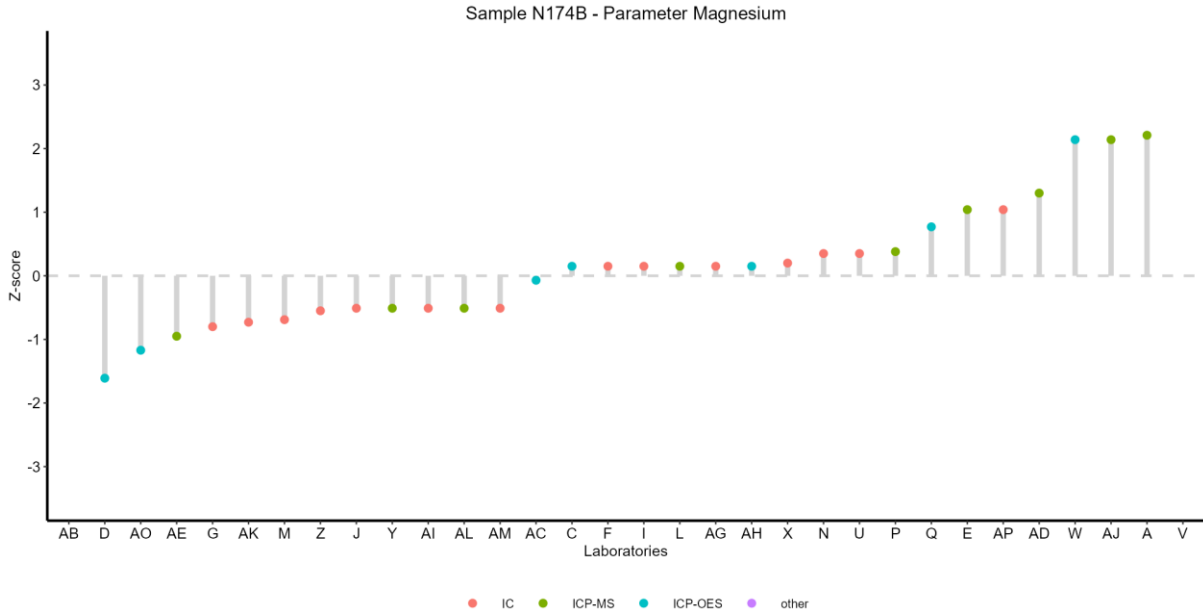
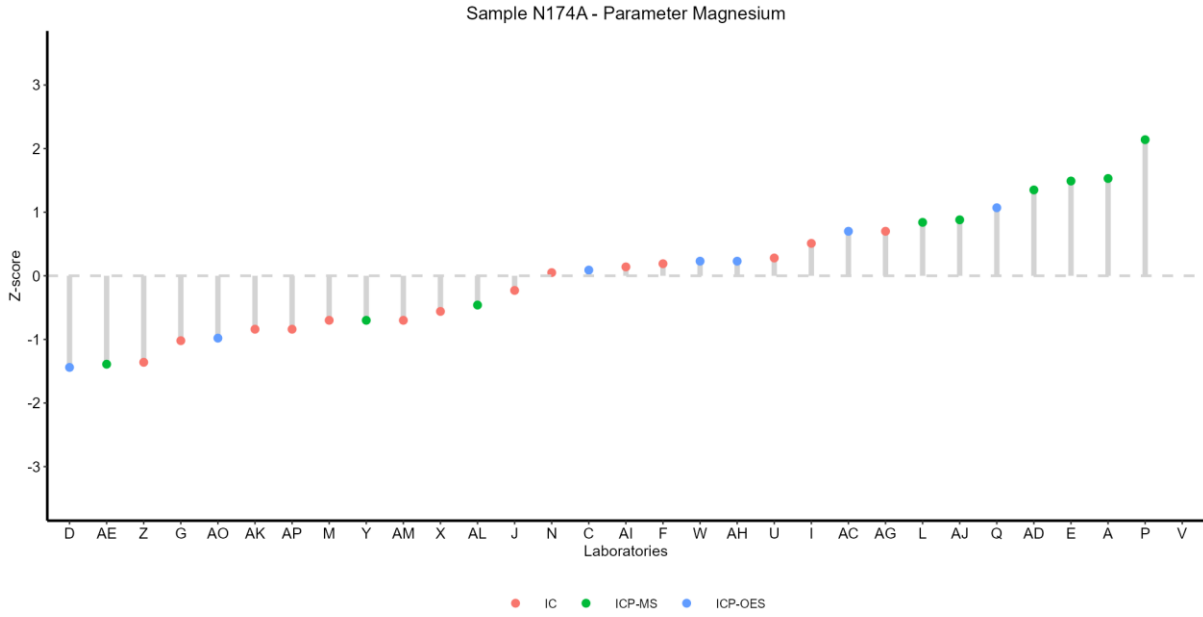
Hydrogen carbonate



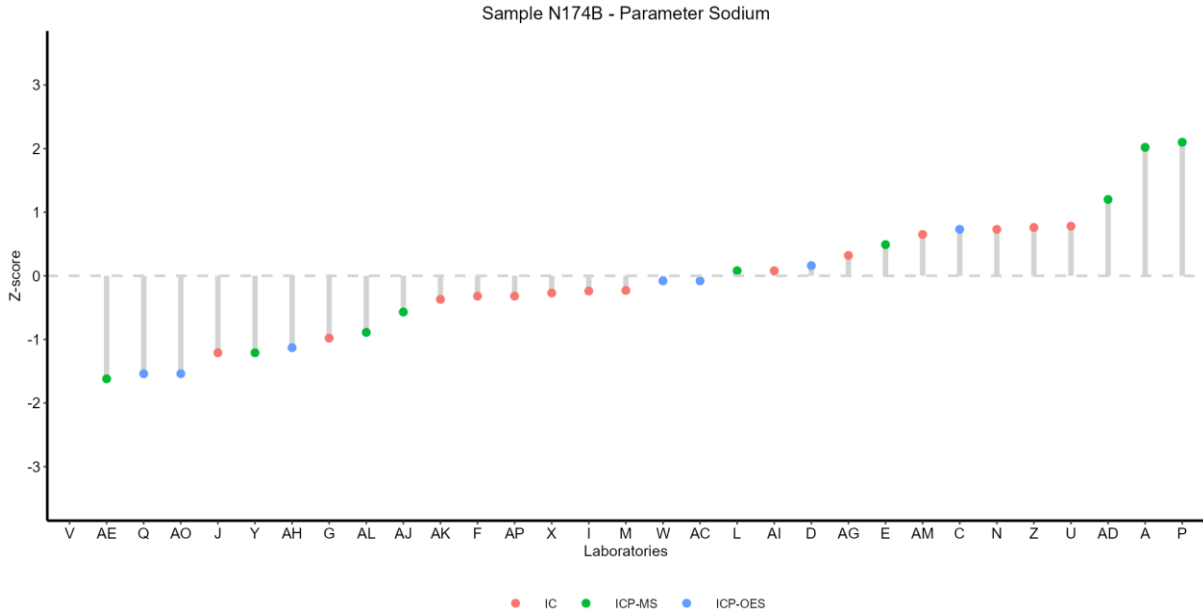
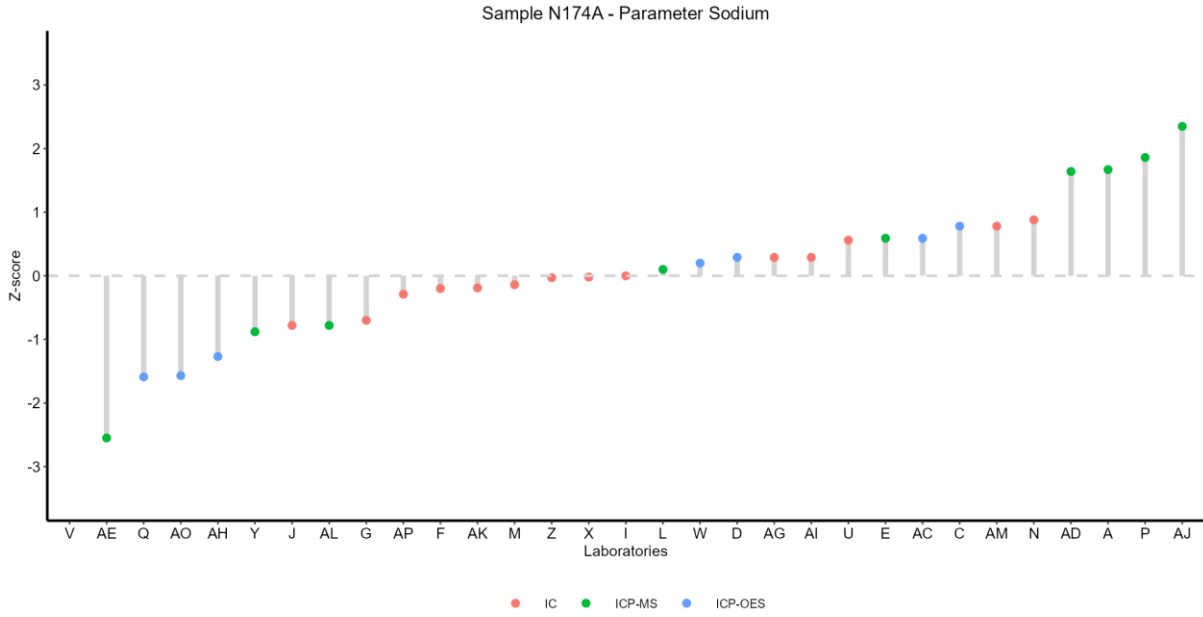
Calcium



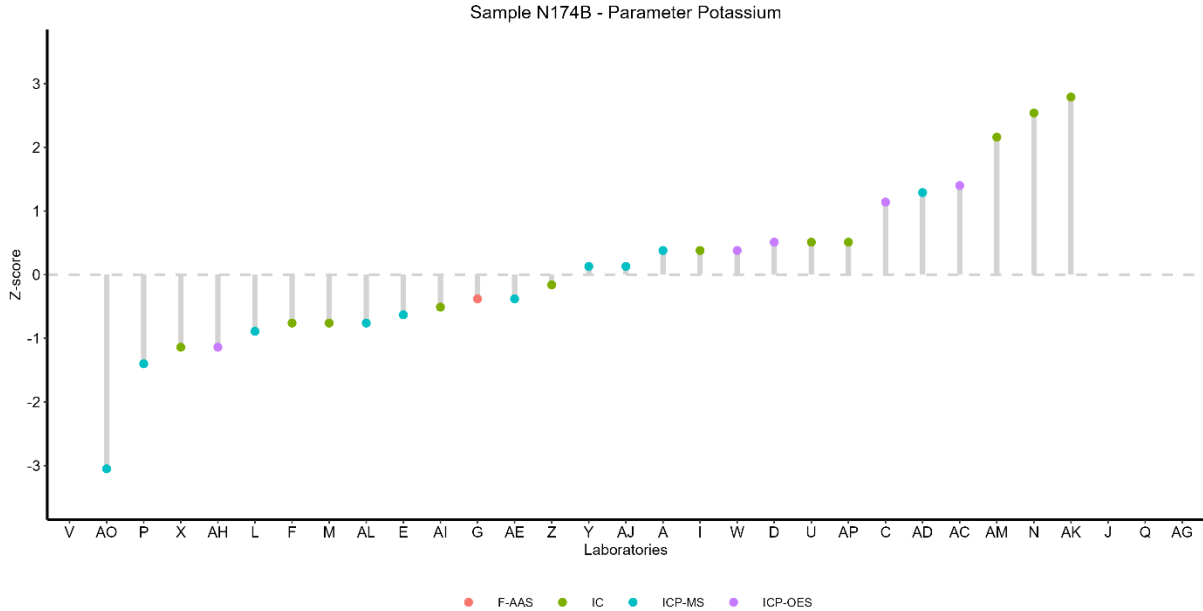
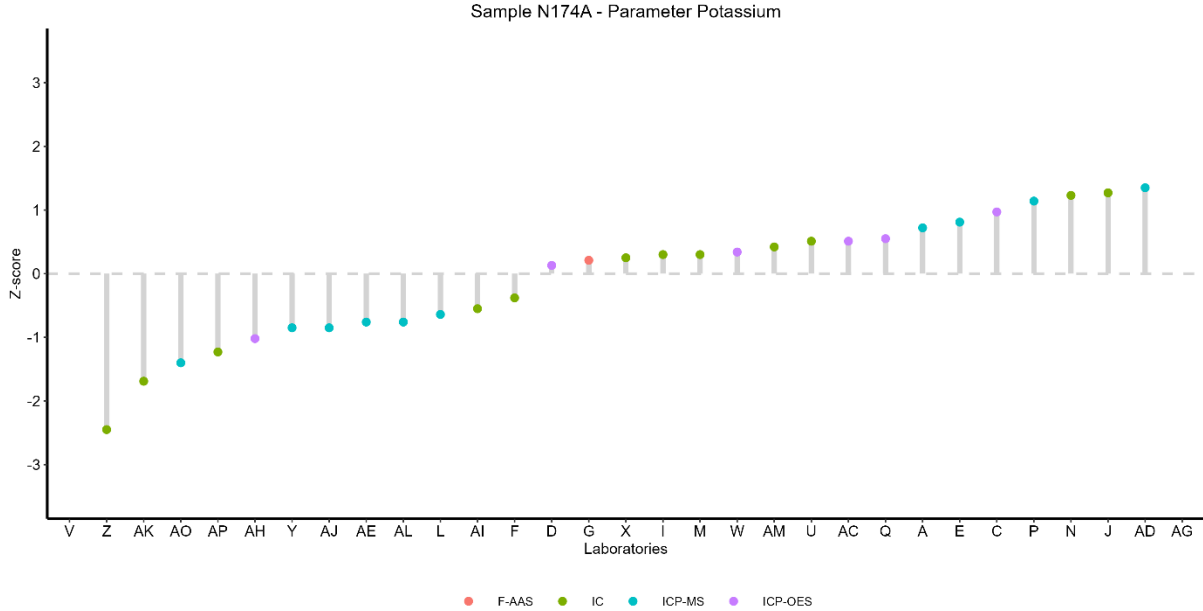
Magnesium



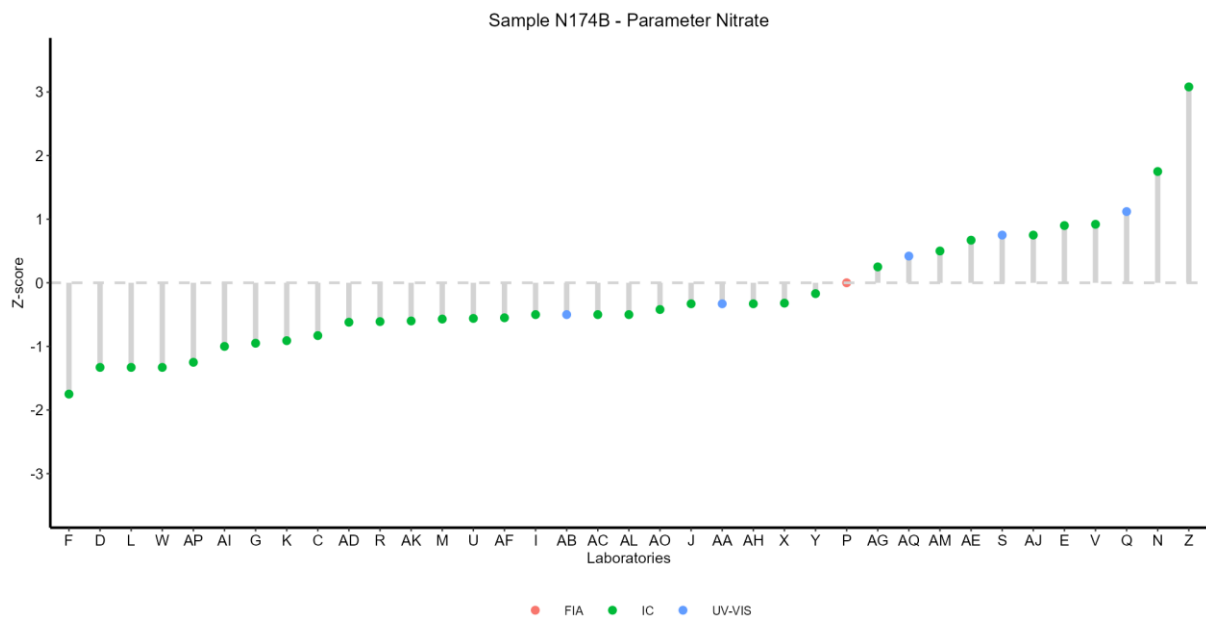
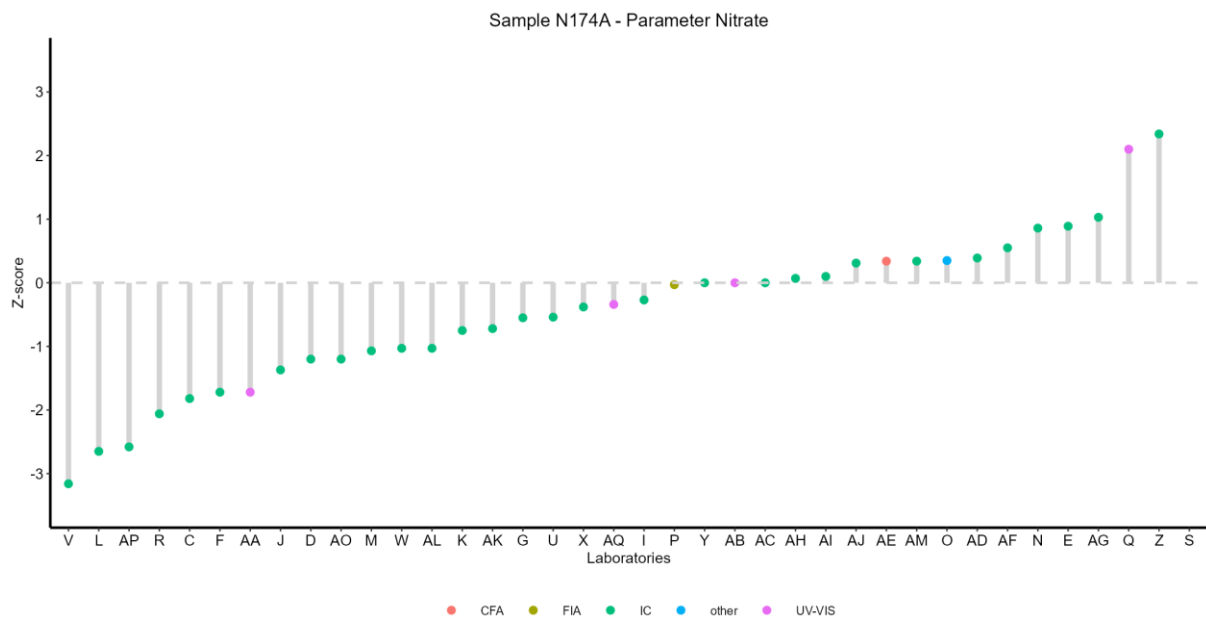
Sodium



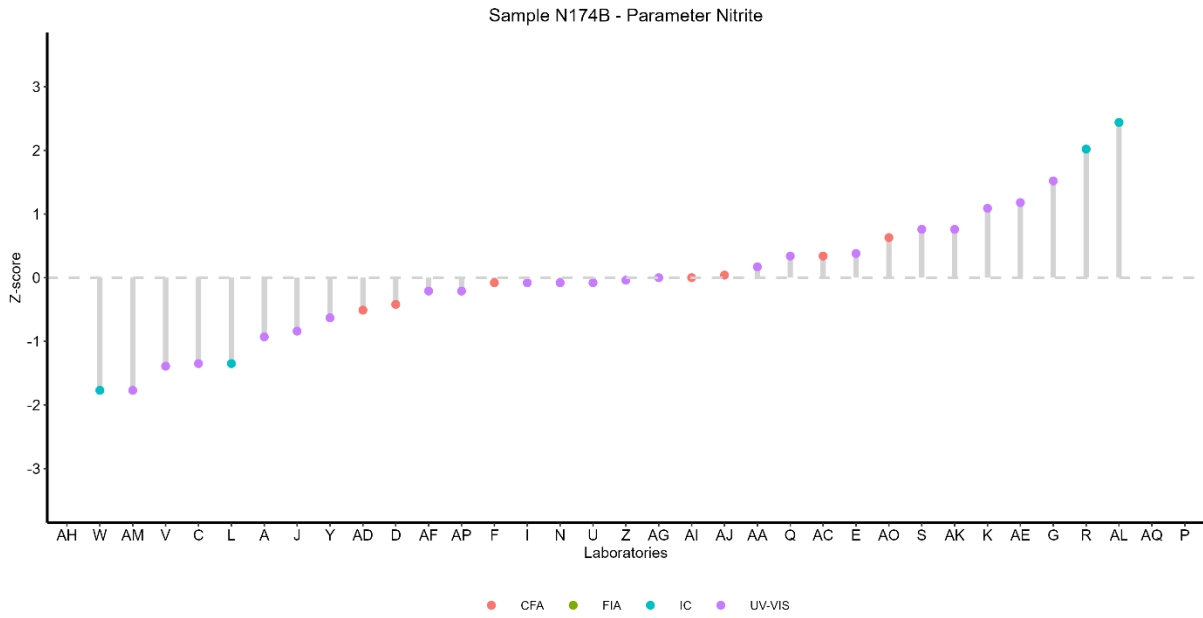
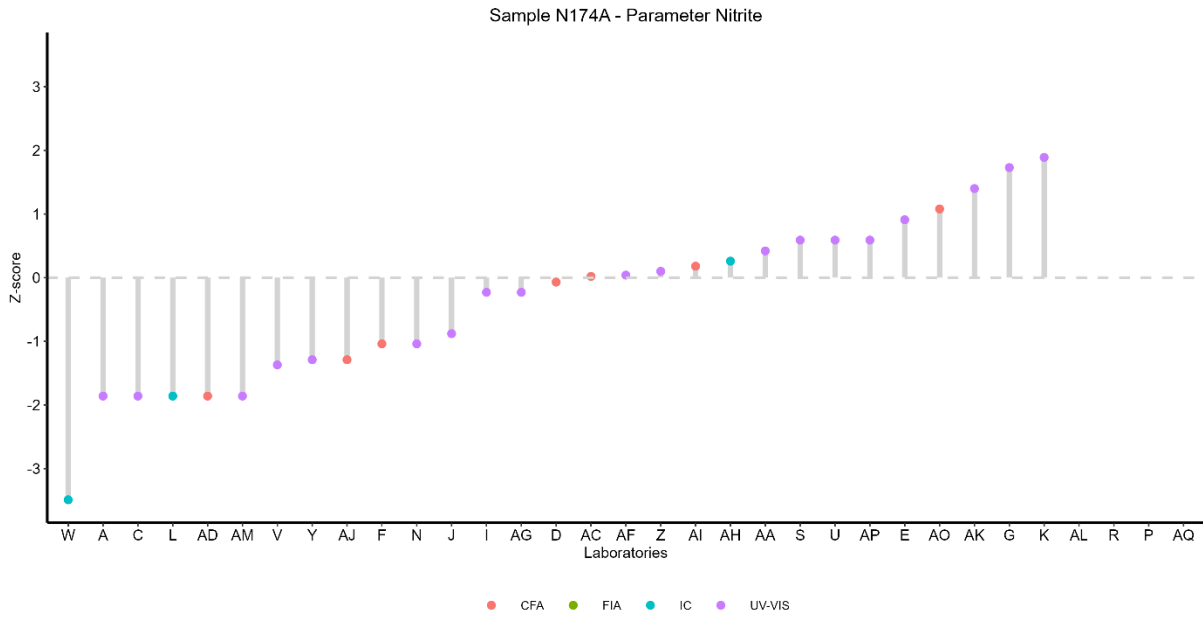
Potassium



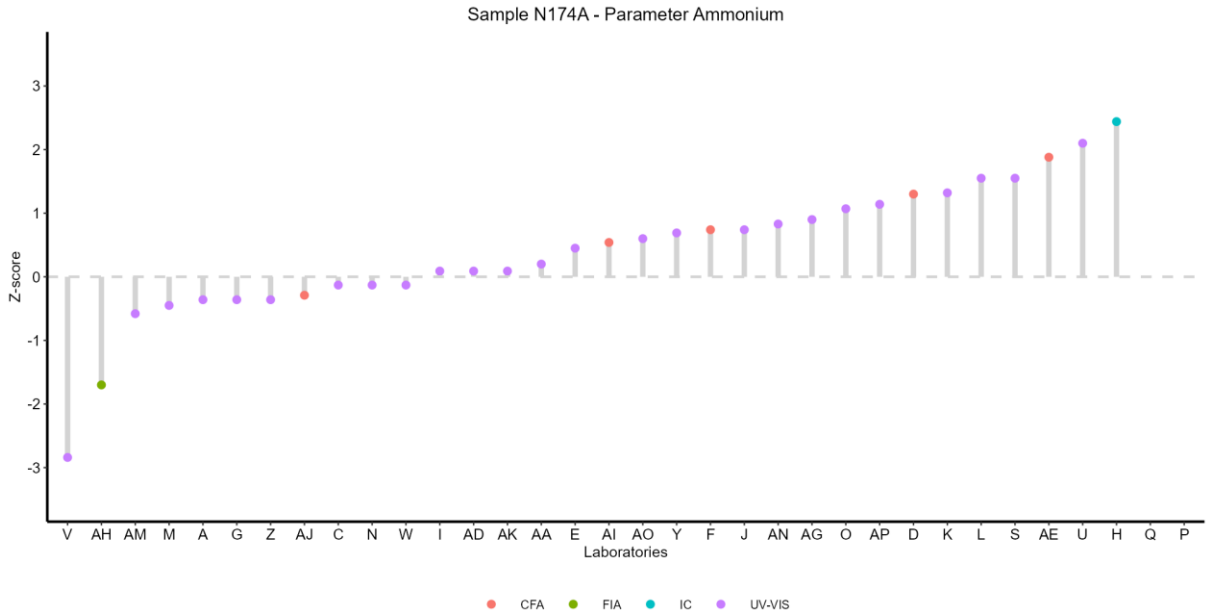
Nitrate (as NO₃⁻)



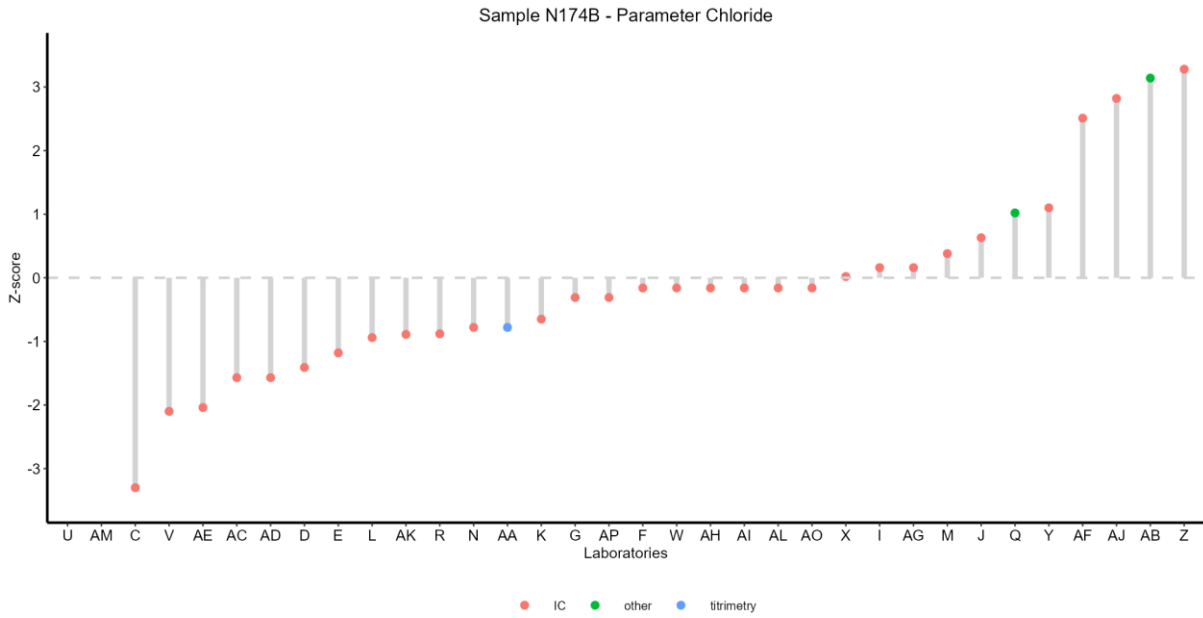
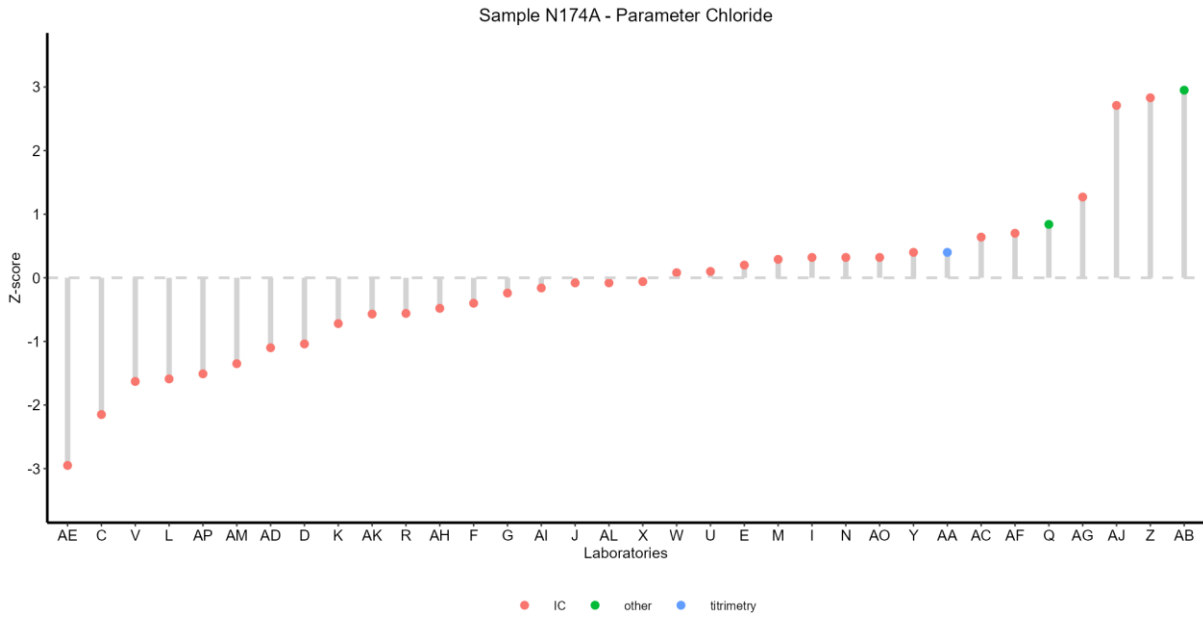
Nitrite (as NO₂⁻)



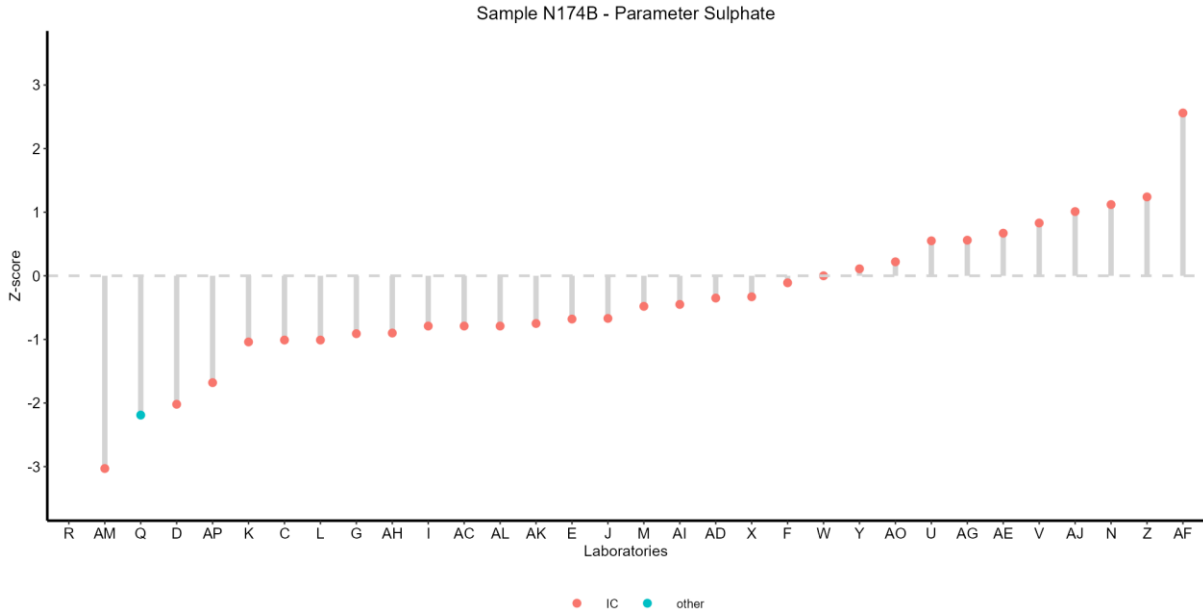
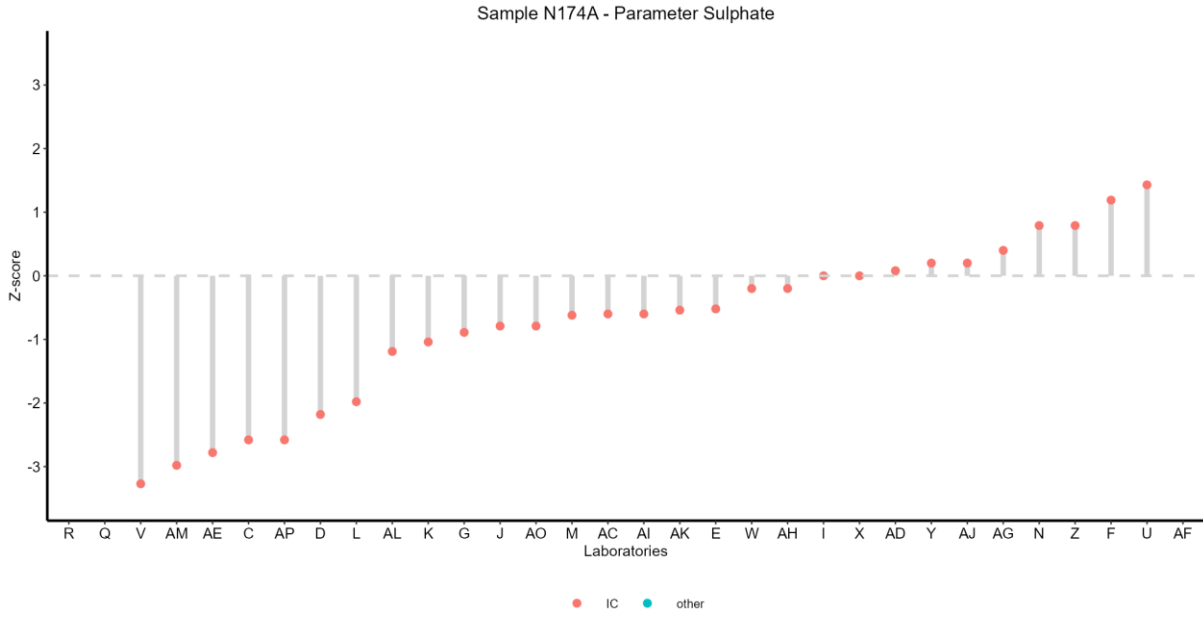
Ammonium (as NH₄⁺)



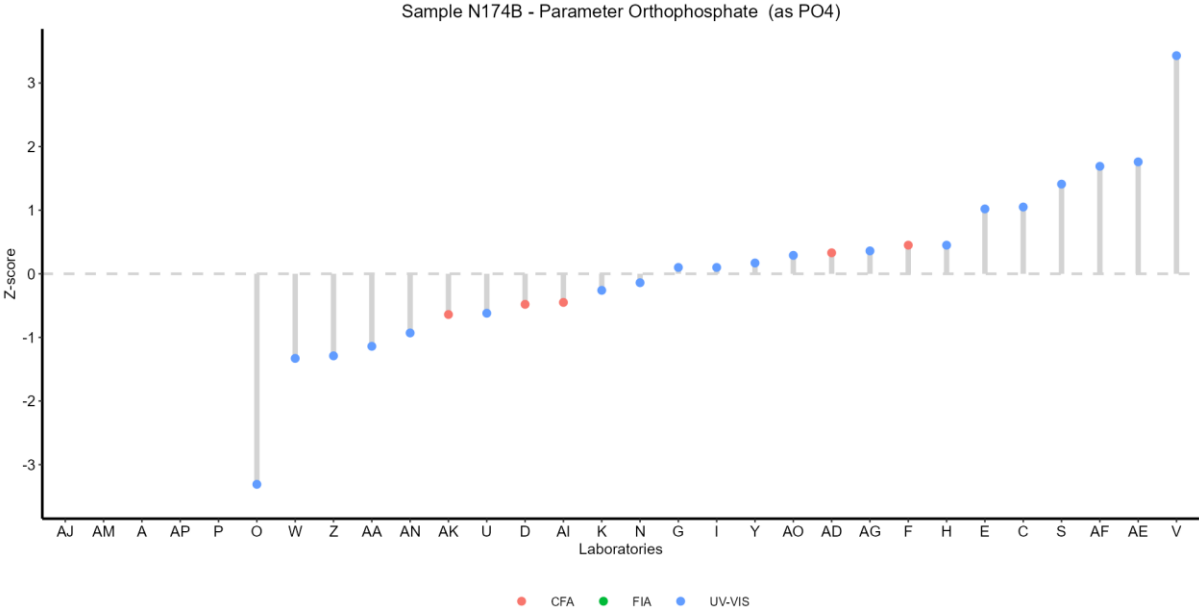
Chloride



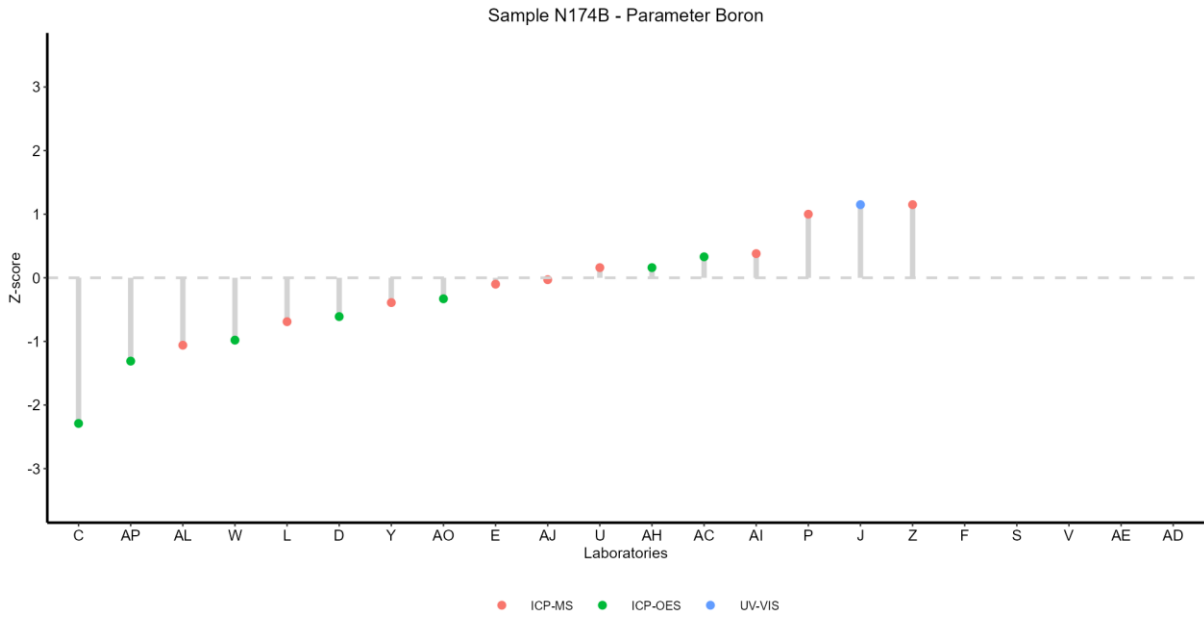
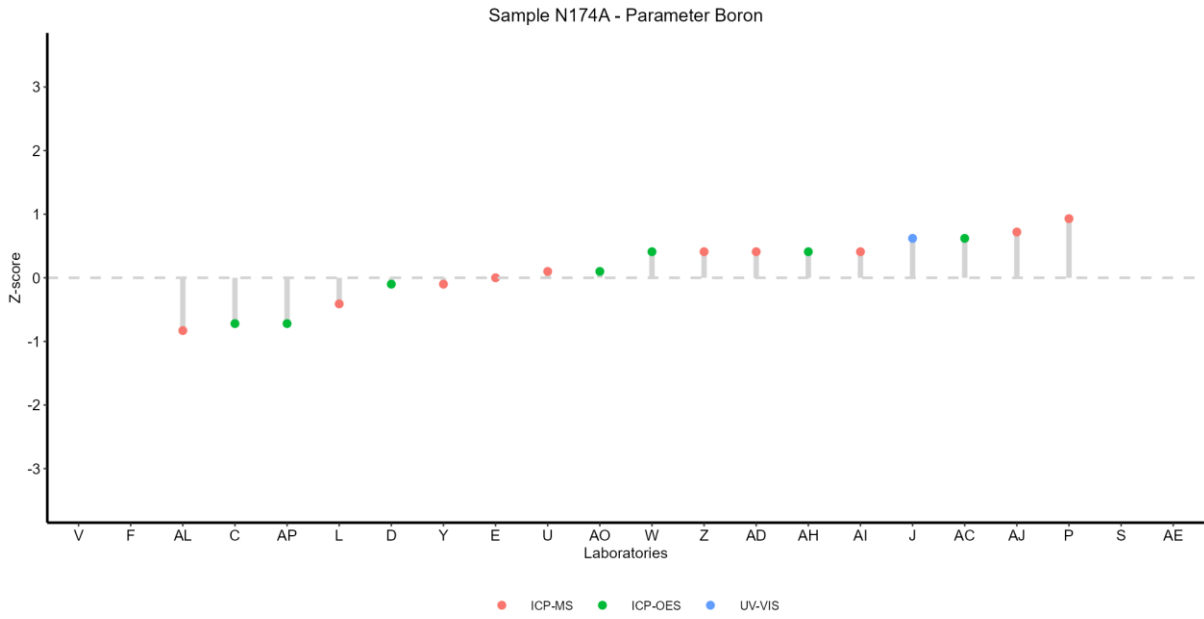
Sulphate (as SO₄²⁻)



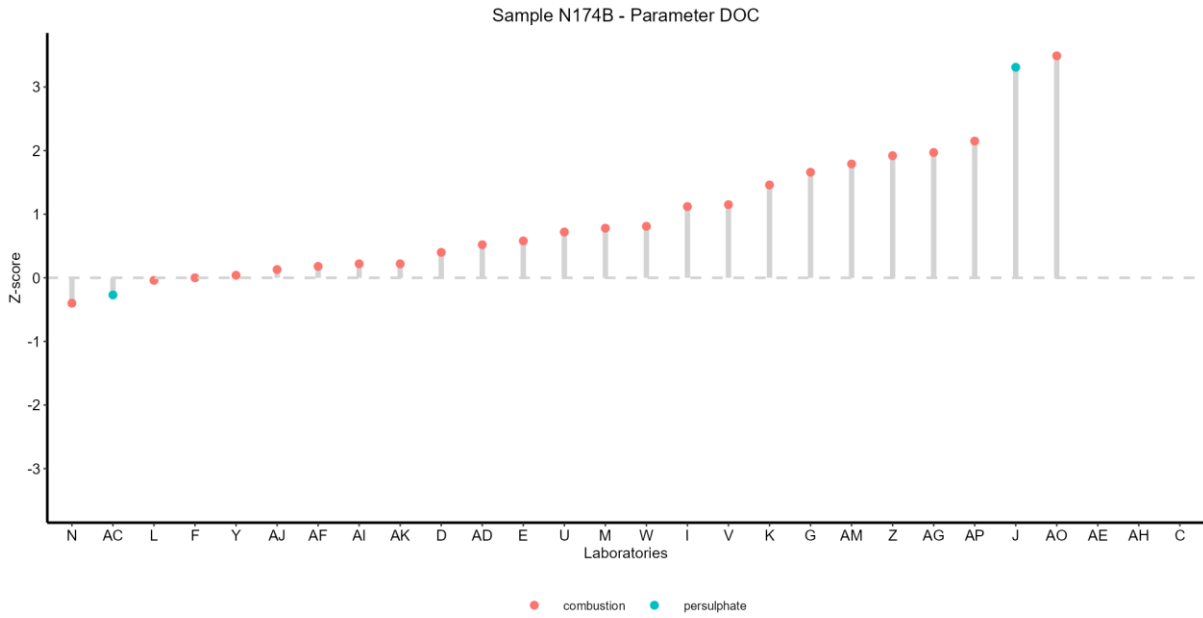
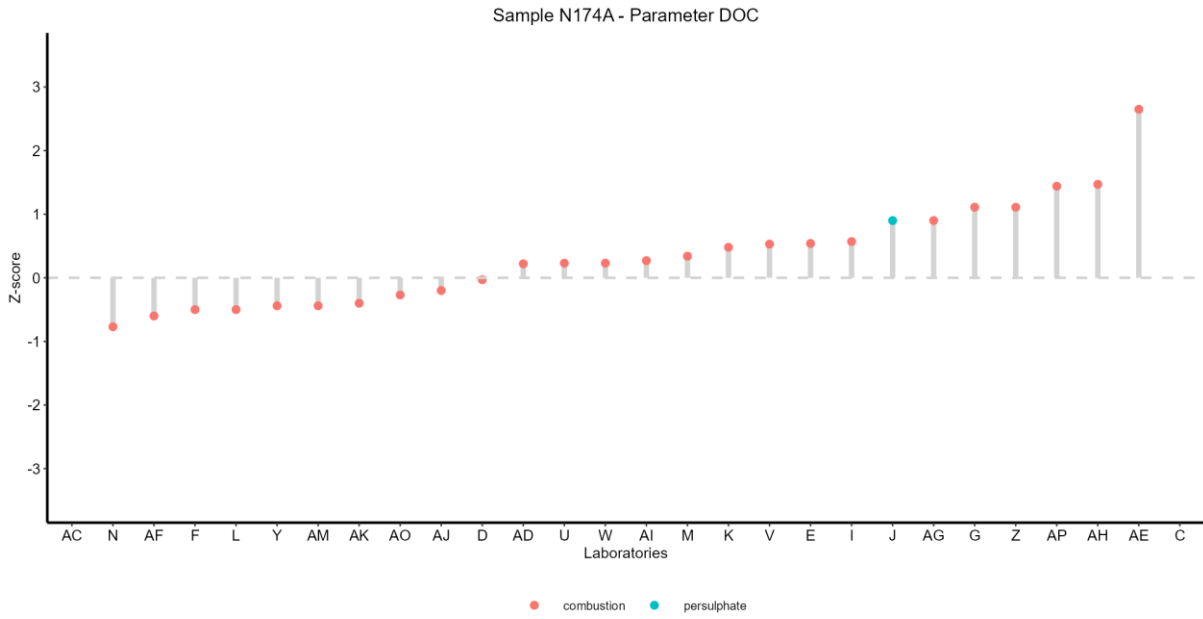
Orthophosphate (as PO₄³⁻)



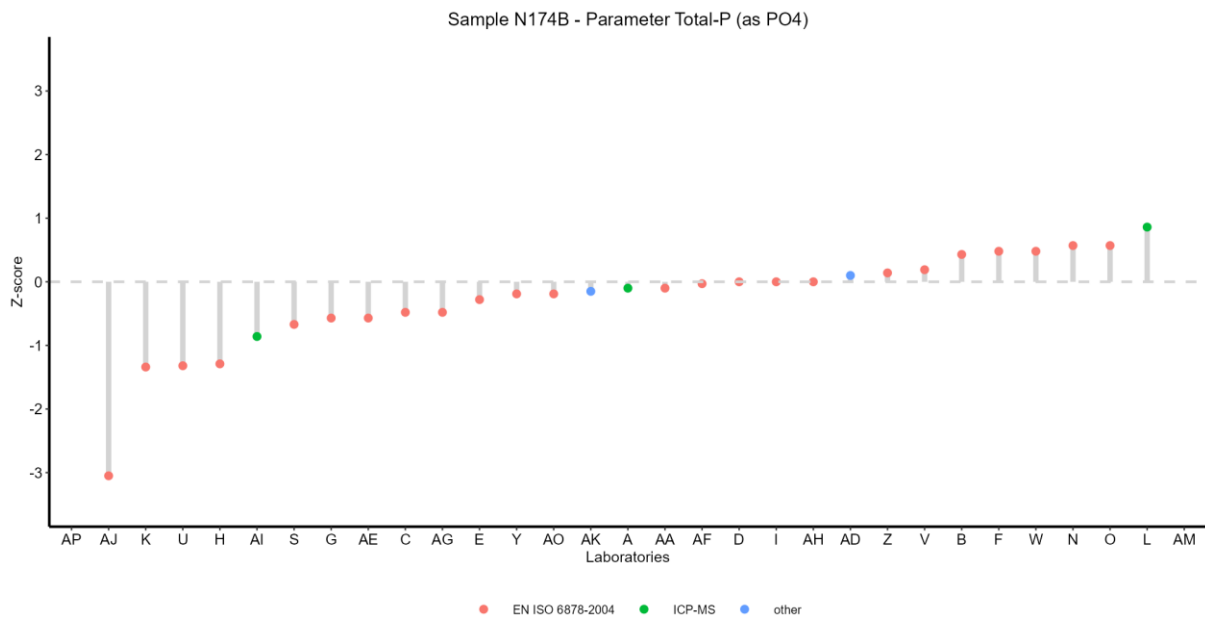
Boron



DOC (as C)



Total-P (as PO₄³⁻)



Permanganate index (as O₂)

