ENVIRONMENT AGENCY AUSTRIA umweltbundesamt

Proficiency Testing Scheme Umweltanalytik

Abfall nach der Deponie-VO (Eluat Metalle) - AB08

Proficiency Testing Scheme Environmental Analysis

Waste according to landfill directive (eluate metals) - AB08

BERICHT / REPORT

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D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen:24
- Anzahl der übermittelten Datensätze:24
- Probenversand: 22.09.2020
- Einsendeschluss der Daten: 20.10.2020

Die Ergebnisabgabe erfolgte auf elektronischem Weg mittels passwortgeschützter Online-Dateneingabe. Beim Abschluss der Dateneingabe bestätigte der Teilnehmer die vollständige und korrekte Eingabe aller Daten und die Freigabe der Ergebnisse zur Auswertung.

Zur Anonymisierung der Ergebnisse wurde jedem Labor willkürlich ein Laborcode zugeteilt.

D1.2. Beschreibung der Prüfgegenstände

Als Probenmaterial diente ein Abfalleluat (Mischung Bodenaushub, Aschen und Stäube).

Das Probenmaterial umfasste:

- 2 Proben Eluat (AB08 und AB08Hg)

Um homogene Probeneluate zu erzielen, wurde die Herstellung der Eluatprobe bereits am 19.08.2020 begonnen (gemäß ÖNORM EN 12457-4 L/S=10 l/kg TM). Nach der Elution wurde das Eluat über einen 0,45 µm Membranfilter am 13.09.2020 filtriert. Danach wurden die Proben bis zur Abfüllung gekühlt gelagert (4 +/-3°C).

Die o.a. Proben wurden im Rührkessel unter ständigem Rühren zusätzlich mit einzelnen Substanzen dotiert.

Das Abfüllen der Proben erfolgte unter ständigem Rühren (Rührkessel). Die Stabilisierung erfolgte durch Zusatz von 1% Salpetersäure (HNO_3) bzw. durch Zusatz von 1% Salzsäure (HCl) (Probe AB08Hg).

Die homogenen Prüfgegenstände wurden am 22.09.2020 verschickt.

Jedes Teilnehmerlabor erhielt:

- 2 Proben zu je 100 ml, jeweils abgefüllt in 1 x 100 ml LDPE-Flaschen

D1.3. Anweisungen für die Teilnehmer

Aus Stabilitätsgründen wurde empfohlen bis spätestens 30.09.2020 mit den Analysen zu beginnen.

Den Teilnehmern stand die Wahl der Analysenmethode bzw. der verwendeten Norm frei, welche mit ihrem Routineverfahren übereinstimmen sollte. Eine Übersicht der angewendeten Methoden findet sich unter E9.

D1.4. Kontrollanalytik zur Bewertung der Homogenität

Im Zuge der Abfüllung wurden zu willkürlichen Zeitpunkten mehrere Aliquote pro Probe zur Kontrollanalytik entnommen.
Es wurden für beide Proben jeweils n=5 Kontrollproben sowie n=1 undotierte Realprobe dem Labor zur Analyse übergeben.

Alle Parameter wurden in der Prüfstelle am Umweltbundesamt (Prüfstelle für Umwelt- , GVO- & Treibstoffanalytik, akkreditiert nach EN ISO/IEC 17025 für die angeführten Substanzen) zeitnah zum Probenversand analysiert.

Im Zuge der Auswertung wurde die relative Standardabweichung zwischen den Kontrollprobenabfüllungen bewertet und mit der Vergleichsstandardabweichung beim aktuellen Ringversuch verglichen.
Die Ergebnisse der Kontrollanalytik sind in der parameterorientieren Auswertung (E.7.) in Form von Mittelwerten ± Messunsicherheit als Kontrollwert (control test value) ± U gelistet (jeweils angegeben als erweiterte Messunsicherheit, k=2).

D1.5. Trendtest zur Bewertung der Stabilität

Um die ausreichende Stabilität der Prüfgegenstände der aktuellen Eignungsprüfungsrunde bis zum Abgabetermin zu überprüfen, wurde die Darstellung der Teilnehmerergebnisse nach Analysendatum ausgewertet und auf systematische Trends geprüft (unauffällig). Durch Darstellung der Teilnehmerergebnisse nach Abfüllreihenfolge wurde auf das Vorliegen möglicher systematischer Trends der Ergebnisse geprüft (unauffällig).

Aufgrund der bisherigen Erfahrungen und aufgrund der Bewertungsgrundlagen der aktuellen Eignungsprüfungsrunde gilt die Stabilität der Prüfgegenstände im empfohlenen Zeitraum für die Analyse bis zum Abgabeschluss als gewährleistet.

D1.6. Ermittlung des zugewiesenen Wertes

Die Ergebnisse der Analysen mussten spätestens bis zum 22.10.2020 beim Veranstalter vorliegen. Später eingehende Werte wurden nicht berücksichtigt.

Im Zuge der Plausibilitätsprüfung der Daten (z.B. Check korrekte Einheiten, Messunsicherheitsangabe, …) wurden die Teilnehmer mit auffälligen Ergebnissen zum erneuten Datencheck der Eingabe und um Rückmeldung binnen 24 h aufgefordert.

Nach Abschluss der Plausibilitätsprüfung, wurde der Ausreißertest nach Hampel durchgeführt und die Ausreißer ermittelt. Die von diesem Test auffällig eingestuften Werte wurden in der Auswertung gekennzeichnet („H“). In begründeten Fällen, z.B. wenn der Ausreißertest nach Hampel nicht anwendbar ist (z.B. Ergebnisse liegen sehr eng beieinander oder überwiegend selber Zahlenwert bzw. bei wenig abgegebenen Daten mit sehr hoher Streuung), kann eine Ausreißereliminierung nach weiteren Kriterien erfolgen (z.B. Dean- und Dixon Test bzw. manuelle Ausreißerdefinition aufgrund Expertenbefund). Diese Vorgangsweise wird nach Anwendung unter Punkt D4 des Berichts dokumentiert.

Die weitere Auswertung erfolgte gemäß ISO 5725-2. Eine statistische Auswertung der Ringversuchsdaten erfolgte erst ab zumindest 6 gültigen, nummerischen Ergebnissen pro Parameter. Ergebnisse kleiner Bestimmungs- oder Nachweisgrenze wurden bei den Berechnungen nicht berücksichtigt.

Der zugewiesene Wert wird im Normalfall jeweils als der ausreißerbereinigte Mittelwert über alle übermittelten Ergebnisse gebildet.

Bei sehr hohen Streuungen der Teilnehmerergebnisse von über 50 % oder bei mangelhafter Rückführbarkeit der statistischen Kenndaten aus den ausreißerbereinigten Ergebnissen der Teilnehmer auf den Mittelwert des Kontrolllabores bzw. einer zu geringen Anzahl an ausreißerbereinigten Ergebnissen über die Gruppe der akkreditierten Labore, kann die Situation auftreten, dass kein zugewiesener Wert für den aktuellen Ringversuch festgelegt werden kann und daher keine Bewertung der Teilnehmerergebnisse für diesen Parameter möglich ist. Ein entsprechender Hinweis wird im Bericht unter E7 bei der informativen Auswertung angebracht. Im Rahmen der internen Qualitätssicherung der Teilnehmer kann ein Vergleich mit den Ergebnissen des Kontrolllabors durchgeführt werden. Diese Vorgehensweise wird bei Anwendung jeweils parameter- und probenbezogen unter Punkt D4 des Berichts dokumentiert.

D2. Kriterien der Leistungsbewertung

D2.1. Leistungskriterium z-Score

Als Basis zur Berechnung der Wiederfindungsraten sowie der z-Scores wurde der ausreißerbereinigte Mittelwert über alle übermittelten Ergebnisse herangezogen.

Die Ermittlung der z-Scores erfolgte gemäß nachfolgender Formel:

$$z - score = \frac{x_i - \overline{X}}{Kriterium}$$

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
$\overline{X}$	zugewiesener Wert Sollwert für die Leistungsbewertung der Teilnehmer (angegeben auf 3 signifikante Stellen); im Regelfall: ausreißerbereinigter Mittelwert der Teilnehmerergebnisse. Eine davon abweichende Vorgehensweise wird unter Punkt D4 des Berichts beschrieben.
Kriterium	Vergleichsstandardabweichung berechnet aus den Statistiken der ausreißerbereinigten Teilnehmerergebnissen (sR) des aktuellen Ringversuchs. In begründeten Fällen (z.B. Ergebnisse nahe an Mindestbestimmungsgrenze oder regulatorischer Vorgaben) erfolgt die Festlegung nach Expertenbefund und die Vorgangsweise wird unter Punkt **Fehler! Verweisquelle konnte nicht gefunden werden.** des Berichts beschrieben.

D2.2. Leistungskriterium E_n-Score

Für die realen Wasserproben erfolgen seit 2019 zusätzliche Bewertungen unter Einbeziehung der erweiterten Messunsicherheiten der Teilnehmer und der erweiterten Messunsicherheit des zugewiesenen Wertes, gemäß E_n-Score. Diese Auswertungen werden für die Teilnehmer im Bericht unter Punkt E8, jeweils im Anschluss an die z-Score Auswertung dargestellt.

Die Ermittlung der E_n-Scores erfolgte gemäß nachfolgender Formel:

$$E_n - score = \frac{x_i - \bar{X}}{\sqrt{U(x_i)^2 + U(\bar{X})^2}}$$

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
$\overline{X}$	zugewiesener Wert Sollwert für die Leistungsbewertung der Teilnehmer (angegeben auf 3 signifikante Stellen); im Regelfall: ausreißerbereinigter Mittelwert der Teilnehmerergebnisse. Eine davon abweichende Vorgehensweise wird unter Punkt D4 des Berichts beschrieben.
U(x_i)	erweiterte Messunsicherheit des Messergebnisses (Teilnehmerergebnis), k=2
U($\bar{X}$)	erweiterte Messunsicherheit des zugewiesenen Wertes, k=2

D2.3. Leistungsbewertung z-Score und E_n-Score

Interpretation der z-Scores:

- |z-Score| ≤ 2.0 Ergebnis gut
- 2.0 < |z-Score| < 3.0 Ergebnis fragwürdig
- |z-Score| ≥ 3.0 Ergebnis nicht zufriedenstellend

Hinweis: Bei der Bewertung mittels z-Score wird die Messunsicherheit der Teilnehmer nicht mitberücksichtigt. Der Vergleich der Abweichung zum zugewiesenen Wert erfolgt über das Kriterium.

Interpretation der E_n-Scores:

- |E_n-Score| ≤ 1.0 zufriedenstellende Leistung
- |E_n-Score| > 1.0 nicht zufriedenstellende Leistung

Hinweis: Bei der Bewertung mittels E_n-Score erfolgt die Berücksichtigung der erweiterten Messunsicherheiten der Teilnehmer und des zugewiesenen Wertes. |E_n-Score| > 1.0 können darauf hinweisen, dass die Unsicherheitsschätzungen überprüft oder ein Messproblem korrigiert werden muss.

D3. Darstellung und Interpretation der Messergebnisse

In der parameterorientierten Auswertung ist eine tabellarische Übersicht mit den Messergebnissen inklusive der Unsicherheit (± U), der Wiederfindung zum zugewiesenen Wert und dem berechneten z-Score dargestellt. Weiterhin werden unter Anmerkungen die Ausreißer gekennzeichnet. Die in der Tabelle angeführten Ergebnisse werden auch grafisch dargestellt.

In der laborientierten Auswertung werden pro Labor in anonymisierter Form die Ergebnisse der einzelnen Labore als Messergebnis ± U sowie die Wiederfindungen und die ermittelten z-Scores bezugnehmend auf das Kriterium dargestellt. Weiters werden die E_n-Scores unter Berücksichtigung der erweiterten Unsicherheiten in unabhängigen Tabellen ausgegeben. Die laborientierten Auswertungen enthalten jeweils die Bewertungsgrundlagen wie zugewiesener Wert samt erweiterter Messunsicherheit sowie das Kriterium.

Eine Erläuterung zu den Tabellen und Grafiken kann Punkt D.5. entnommen werden.

D4. Anmerkungen zur Auswertung

Wie unter Punkt D2 ersichtlich, können die z-Scores auch unter Einbeziehung der Vergleichsstandardabweichung der ausreißerbereinigten Teilnehmerergebnisse des aktuellen Ringversuchs berechnet werden. Das kann zur Folge haben, dass es bei Parametern mit hoher Ergebnisstreuung dazu kommen kann, dass der Bereich z-Score - 2 bis z-Score + 2 einen ungewöhnlich hohen Wiederfindungsbereich abdeckt. Umgekehrt führt eine sehr geringe Streuung der Teilnehmerergebnisse dazu, dass z-Score - 2 bis z-Score + 2 einen ungewöhnlich kleinen Wiederfindungsbereich abdeckt.

Die Wiederfindungsrate wird unabhängig von der Streuung der Ergebnisse, als prozentuelle Abweichung vom zugewiesenen Wert berechnet und sollte bei der Bewertung von Ergebnissen im Rahmen des internen Qualitätsmanagementsystems der teilnehmenden Labore berücksichtigt werden.

Als Kriterien wurden die relativen Vergleichsstandardabweichungen (vR) des aktuellen Ringversuchs verwendet.

Parameter Ag Probe AB08: Aufgrund der geringen Analyt-Konzentration in der Probe konnte kein Sollwert berechnet werden.

Parameter As, B, Ba, Co, Cu, Fe, Ni und Zn Probe AB08: Diese Parameter wiesen geringe Streuungen auf (vR < 5 %). Für diese Parameter wurden relative Vergleichsstandardabweichungen (vR) von 5 % für die Bewertung gewählt.

Parameter Cd Probe AB08 und Parameter Hg Probe AB08Hg: Die auf Basis der Teilnehmerergebnisse berechneten Sollwerte lagen außerhalb der Messunsicherheit des Kontrollwertes und es ist über Kontrolllabor keine Rückführbarkeit möglich. Der zugewiesene Wert wurde daher über die ausreißerbereinigeten Mittelwerte aus der Gruppe der akkreditierten Teilnehmer berechnet.

D5. Erläuterung zu Tabellen und Grafiken

D5.1. Angaben und Abkürzungen in Tabellen

Parameter	Allgemeine Bezeichnung des Analysenparameters
Probe	Bezeichnung der übermittelten Probe
Einheit	Vorgegebene Einheit für Messwert und Ergebnisunsicherheit (z.B. µg/l)
Zugewiesener Wert	Sollwert für die Leistungsbewertung der Teilnehmer (angegeben auf 3 signifikante Stellen)
U (k=2)	erweiterte Unsicherheit (k=2) des zugewiesenen Wertes, (angegeben auf 3 signifikante Stellen)
Kriterium	Vorgabewert zur Ermittlung des z-Scores in der angegebenen Einheit (angegeben auf 3 signifikante Stellen)
Kriterium [%]	Vorgabewert zur Ermittlung des z-Scores in % des zugewiesenen Wertes (angegeben auf 2 signifikante Stellen)
Mittelwert	Ausreißerbereinigter Mittelwert über die Teilnehmer-ergebnisse (angegeben auf 3 signifikante Stellen)
VB (99%)	99% Vertrauensbereich (angegeben auf 3 signifikante Stellen)
Minimum	Minimales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
Maximum	Maximales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
sR	Vergleichsstandardabweichung, berechnet aus den ausreißerbereinigten Teilnehmerergebnissen des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Teilnehmerergebnissen des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)
Laborcode	anonymisierte, eindeutige Teilnehmerkennung im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Teilnehmerangabe (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Teilnehmerangabe (maximal 5 Nachkommastellen

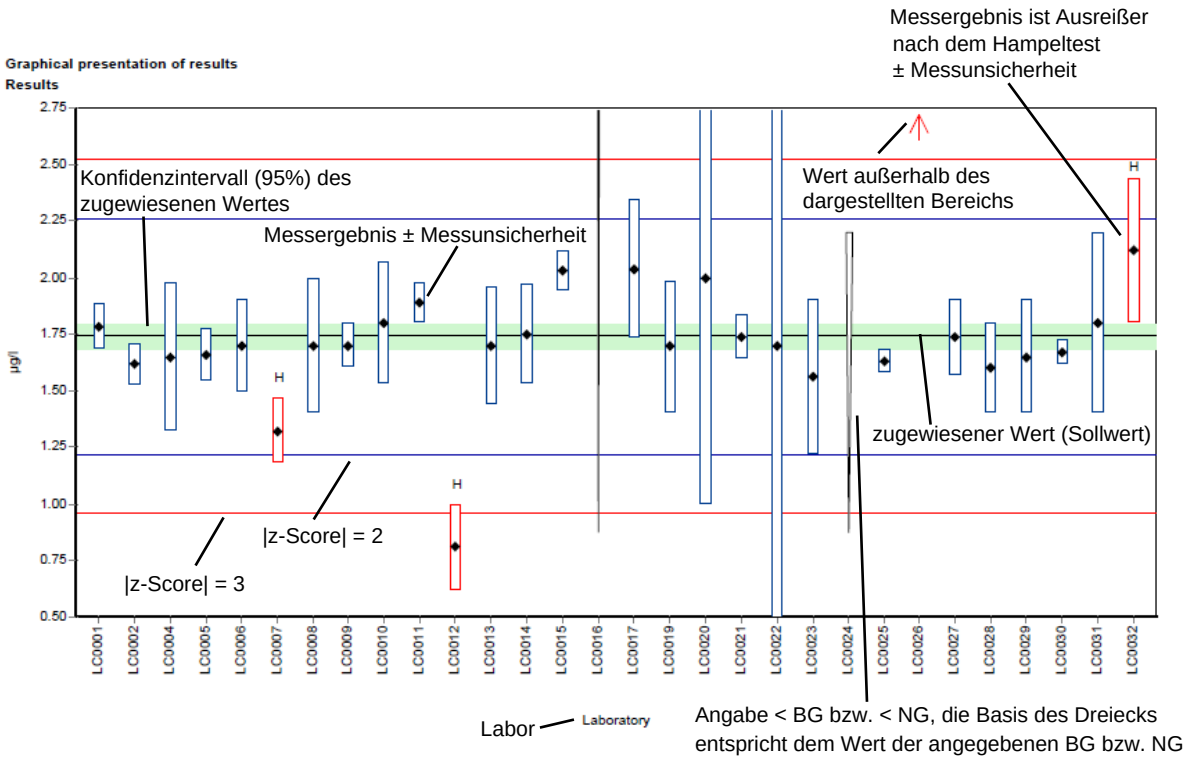
	dargestellt). Bei Eignungsprüfungsrunden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmer.
± U	kombinierte Messunsicherheit ohne Erweiterungsfaktor (k=1) lt. Teilnehmerangabe (maximal 5 Nachkommastellen dargestellt)
BG	Bestimmungsgrenze
NG	Nachweisgrenze
WF	Wiederfindungsrate in %, bezogen auf den zugewiesenen Wert (angegeben auf 3 signifikante Stellen, dargestellt maximal 1 Nachkommastelle)
MW	Mittelwert
z-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches des Kriteriums (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen)
E_n-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches der kombinierten Messunsicherheiten, bestehend aus erweiterter Unsicherheit des zugewiesenen Wertes und der erweiterten Unsicherheit der Messergebnisse der Teilnehmer (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim E_n-Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmer.
-	Keine Daten übermittelt bzw. keine Berechnung möglich
Anmerkungen	Anmerkungen zum jeweiligen Messergebnis (z.B. H, FN, FP)
H	Ausreißer nach dem Hampel-Test
FN	Falsch negativ – Messergebnis kleiner Bestimmungs- bzw. Nachweisgrenze dessen Betrag die Bedingungen eines Ausreißers nach dem Hampeltest erfüllt.
FP	Falsch positiv – Falls aufgrund des geringen Analytgehalts kein zugewiesener Wert ermittelt werden kann (n < 6), wird der Median der Beträge der übermittelten Nachweis- bzw. Bestimmungsgrenzen ermittelt. Als falsch positiv wird ein Messergebnis bewertet, welches diesen Median um mehr als 100 % übersteigt.
Standardabweichung	Vergleichsstandardabweichung berechnet aus den Teilnehmerergebnissen des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)

rel. Standardabweichung	relative Vergleichsstandardabweichung in %, berechnet aus den Teilnehmerergebnissen des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 3 signifikante Stellen)
n	Anzahl der Messergebnisse

D5.2. Graphische Darstellung der Ergebnisse

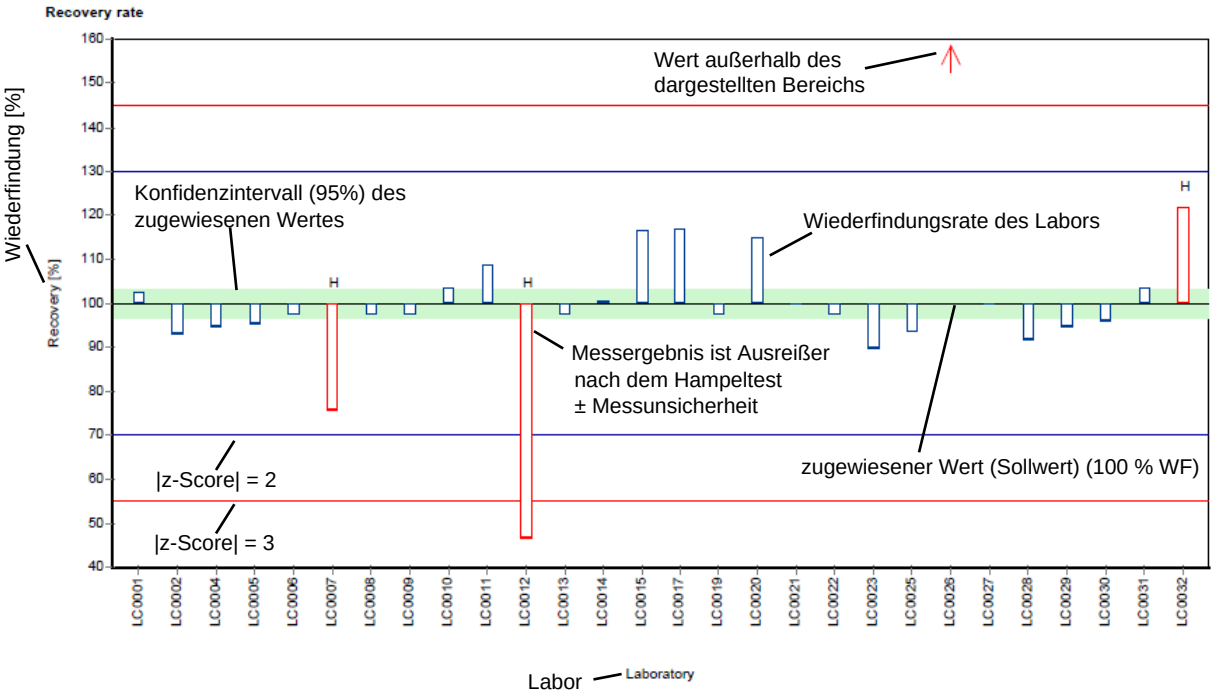
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

Beispieldiagramm: Messwerte



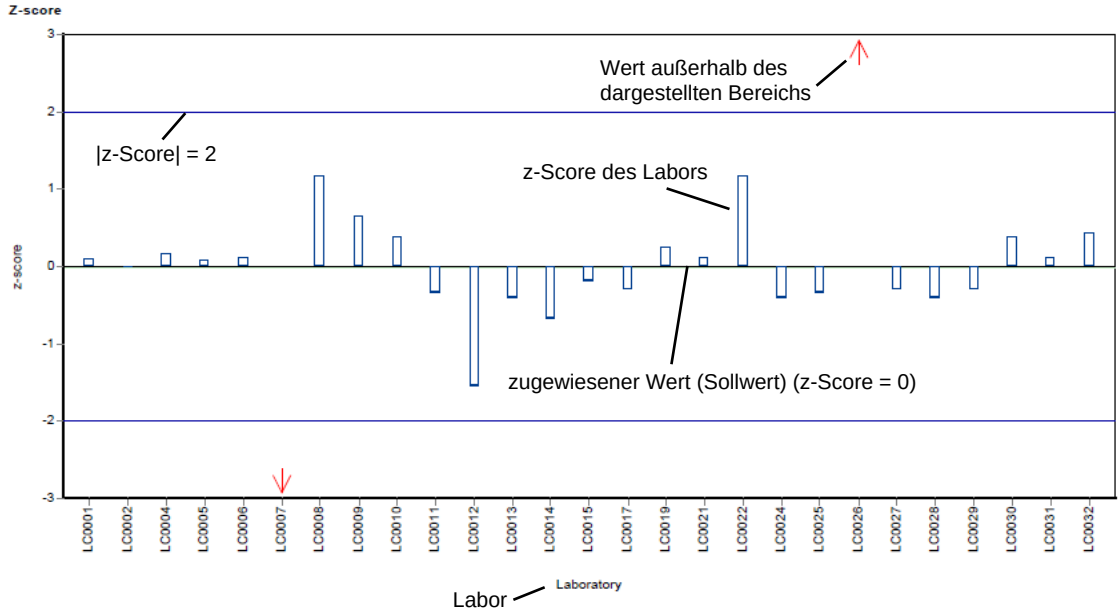
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



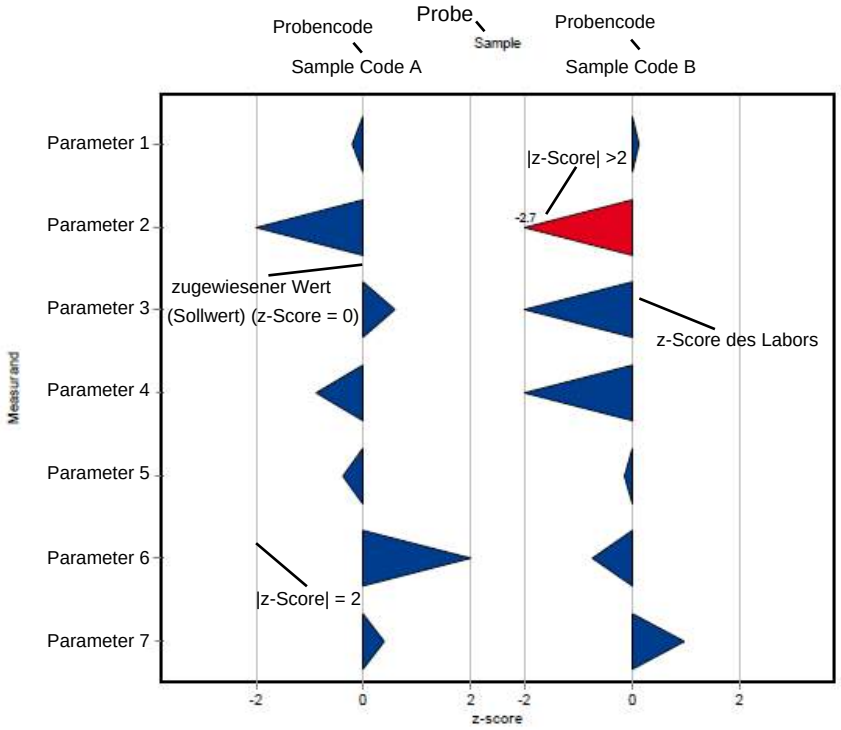
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score

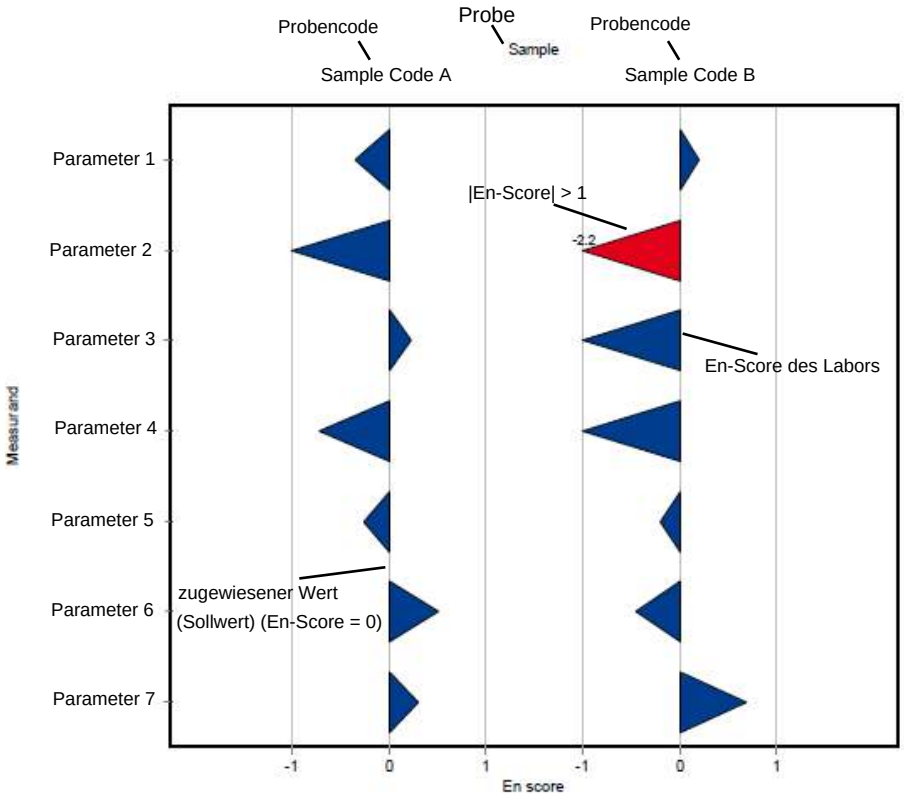


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score (laborientierte Auswertung)



Beispieldiagramm: En-Score (laborientierte Auswertung)



D6. Zusammenfassung

D6.1. Tabelle der zugewiesenen Werte

Parameter	Probe	Einheit	zugewiesener Wert	±	U (k=2)	Kriterium	Kriterium [%]
Aluminium	AB08	mg/l	0.909	±	0.0319	0.0745	8.2
Antimon	AB08	mg/l	0.0017	±	0.000076	0.000131	7.7
Arsen	AB08	mg/l	0.0124	±	0.00019	0.000621	5
Barium	AB08	mg/l	0.11	±	0.00216	0.00551	5
Bor	AB08	mg/l	0.308	±	0.00629	0.0154	5
Cadmium	AB08	mg/l	0.00144	±	0.000057	0.000111	7.7
Chrom	AB08	mg/l	0.0954	±	0.00205	0.00496	5.2
Cobalt	AB08	mg/l	0.0109	±	0.000134	0.000547	5
Kupfer	AB08	mg/l	0.108	±	0.00179	0.00541	5
Eisen	AB08	mg/l	0.23	±	0.00474	0.0115	5
Blei	AB08	mg/l	0.0109	±	0.000279	0.000588	5.4
Quecksilber	AB08 Hg	mg/l	0.0000989	±	0.000007	0.000009	9.1
Molybdän	AB08	mg/l	0.014	±	0.000441	0.000908	6.5
Nickel	AB08	mg/l	0.0111	±	0.000252	0.000555	5
Selen	AB08	mg/l	0.0119	±	0.000658	0.00155	13
Silber	AB08	mg/l	-	±	-	-	-
Zinn	AB08	mg/l	0.0327	±	0.00156	0.00327	10
Vanadium	AB08	mg/l	0.0145	±	0.000688	0.0016	11
Zink	AB08	mg/l	0.329	±	0.00699	0.0165	5

D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert	± VB (99%)	Minimum	Maximum	sR	vR [%]
Aluminium	AB08	22	1	mg/l	0.909	± 0.0478	0.75	1.08	0.0748	8.2
Antimon	AB08	12	3	mg/l	0.0017	± 0.000114	0.00157	0.002	0.000132	7.7
Arsen	AB08	17	4	mg/l	0.0124	± 0.000284	0.012	0.0131	0.000391	3.1
Barium	AB08	23	0	mg/l	0.11	± 0.00324	0.1	0.12	0.00519	4.7
Bor	AB08	21	2	mg/l	0.308	± 0.00943	0.28	0.335	0.0144	4.7
Cadmium	AB08	17	3	mg/l	0.00145	± 0.000076	0.00124	0.0016	0.000106	7.3
Chrom	AB08	23	1	mg/l	0.0954	± 0.00308	0.085	0.103	0.00493	5.2
Cobalt	AB08	16	6	mg/l	0.0109	± 0.000201	0.0104	0.0116	0.000268	2.5
Kupfer	AB08	22	1	mg/l	0.108	± 0.00268	0.0995	0.115	0.00419	3.9
Eisen	AB08	19	4	mg/l	0.23	± 0.0071	0.21	0.251	0.0103	4.5
Blei	AB08	18	2	mg/l	0.0109	± 0.000418	0.0098	0.0122	0.000591	5.4
Quecksilber	AB08 Hg	10	3	mg/l	0.000129	± 0.000048	0.000089	0.00023	0.0000512	40
Molybdän	AB08	17	2	mg/l	0.014	± 0.000661	0.0122	0.016	0.000908	6.5
Nickel	AB08	17	5	mg/l	0.0111	± 0.000377	0.01	0.012	0.000519	4.7
Selen	AB08	22	1	mg/l	0.0119	± 0.000987	0.00898	0.0148	0.00154	13
Silber	AB08	5	0	mg/l	-	± -	0.0000223	0.0012	-	-
Zinn	AB08	18	4	mg/l	0.0327	± 0.00234	0.0257	0.037	0.0033	10
Vanadium	AB08	20	1	mg/l	0.0145	± 0.00103	0.011	0.017	0.00154	11
Zink	AB08	21	1	mg/l	0.329	± 0.0105	0.296	0.36	0.016	4.9

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 24
- Number of submitted data records: 24
- Dispatch of samples: 22nd September 2020
- Closing date for submission of data: 20th October 2020

The results were submitted electronically by a password-protected online data entry. Upon completion of the data entry, the participant confirmed the complete and correct entry of all data and the authorization of the results for evaluation.

To anonymize results, each laboratory was given a laboratory code on a random basis.

E1.2. Description of the proficiency test items

The sample material was waste eluate (mixture of excavated soil, ashes and dust).

The following samples were made available:

- 2 samples eluate (AB08 and AB08Hg)

To guarantee homogenous samples, the production of the eluate samples was started on 19th of August 2020 (eluate according to ÖNORM EN 12457-4; s : l = 1:10). After the elution, the eluate was filtered using 0.45 µm membrane disc filters on 13th of September 2020. Afterwards, the samples were stored at 4 +/- 3°C until further processing.

The samples were partly spiked with specific substances under continuous stirring in the stirring vessel.

The samples were filled into bottles under continuous stirring (stirring vessel) and stabilized by addition of 1 % nitric acid (HNO_3) and by addition of 1 % hydrochloric acid (HCl) (Sample AB08Hg), respectively.

The homogeneous proficiency test items were dispatched on 22nd September 2020.

Each participant received:

- 2 samples of 100 ml each, filled in 1 x 100ml LDPE bottles

E1.3. Instructions for the participants

For reasons of stability, it was recommended to start the analysis by the 30th September 2020 at the latest.

The participants are expected to use the test method or measurement method of their choice, which should be consistent with their routine procedures. In E9. you will find the overview of applied methods in course of the proficiency testing.

E1.4. Control testing for homogeneity evaluation

During filling of the bottles, aliquots of each sample were collected randomly for control testing. From each of both samples, n=5 control test samples and n=1 unspiked real water sample were transferred to the laboratory for control testing.

All further parameters were tested in the testing laboratory at Environment Agency Austria (Prüfstelle für Umwelt-, GVO- & Treibstoffanalytik, accredited according to EN ISO/IEC 17025 for the listed parameters) close to the time of sample dispatch.

During evaluation the relative standard deviation between the individual results of the control test samples was assessed for each parameter by comparison with the reproducibility standard deviation of the actual proficiency test.

In the parameter-oriented evaluation (E.7.), the results of the control testing are given in the form of arithmetic means of the detected concentrations ± expanded measurement uncertainty as control test value ± U (expanded uncertainty, k=2).

E1.5. Trend test for stability evaluation

The assessment of the stability of the proficiency test items of the current round was carried out by evaluation of all participant results sorted by analysis date (until submission deadline): No systematic trends were identified.

Using all participants results, it was furthermore tested if systematic trends could be detected depending on the order in which the bottles were filled for the proficiency test: No systematic trends could be identified.

According to data obtained from previous rounds and based on the trend test evaluation of the current round, the stability of the test items for proficiency testing can be confirmed for the recommended analysis period until deadline for submission of data.

E1.6. Determination of the assigned values

The analytical results had to be made available to the organiser not later than 20th October 2020. Any values received at a later date were not considered.

In the course of the plausibility assessment of all received data (e.g. check for correct units, indication of measurement uncertainty, …) the participants with noticeable results were asked to perform a subsequent data check and to give a prompt feedback within 24 h.

After plausibility assessment an outlier test according to Hampel was performed to identify outliers. Values identified as conspicuous are marked specifically in the parameter-oriented evaluation ('H').

In justified cases, for instance, when the outlier test according to Hampel is not applicable (e.g. many similar or identical results of the participants or in case of a very limited number of highly scattering results) a different outlier identification method can be applied (e.g. Dean and Dixon outlier test or manual outlier elimination by expert judgement). In such a case, this procedure is documented in section E4 of the report.

Further data evaluation was performed in accordance with ISO 5725-2. A statistical evaluation of proficiency testing data was only carried out if at least 6 valid results per parameter were available. Results < LOQ or < LOD are not included in the calculation for the assigned value.

The assigned values are normally calculated as the mean over all submitted results, after removal of outliers.

For real water samples in some exceptional cases it might occur, that no assigned value based on participants' results can be calculated and no evaluation of the participants results can be made. E.g due to large variations in the participant results (vR > 50 %) and/or insufficient traceability of the calculated mean of all participants after outlier-clearing to the mean of control testing or if the number of results (without outliers) of the group of accredited testing laboratories is too low.

In this case, a clear statement in section E7 of the report is made and all provided statistical data are for information only. In section E4 further information is given, when applicable, for each parameter and proficiency test item. In course of the internal quality measures, the participants can compare their results with the control test values.

E2. Criteria of performance evaluation

E2.1. Performance criterion z-Score

The adjusted average value (after removal of outliers) for all submitted results was used as a basis for the calculation of recovery rates and z-scores.

z-Scores were calculated on the basis of the following formula:

$$z - score = \frac{x_i - \overline{X}}{Criteria}$$

In this context,

x_i	is the measurement value (result) of the participating laboratory;
$\overline{X}$	assigned value the target value for the assessment of the performance of the participants (3 significant digits), normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section E4
Criteria	is the reproducibility standard deviation calculated the participants' results after removal of outliers (sR) in the current round. Where justified (e.g. results are close to minimum quantification limit or in case of regulatory requirements) the criteria is defined by expert judgement and the procedure is clearly described in section **Fehler! Verweisquelle konnte nicht gefunden werden.** of the report.

E2.2. Performance criterion E_n-Score

Since 2019 additional assessment of the participants' results using E_n-Scores for proficiency testing of real water samples is performed. This additional assessment takes into account the expanded measurement uncertainties of the participants results and the expanded uncertainty of the assigned value and is provided in the laboratory oriented part of the report (see E8 after the z-scores evaluation).

E_n-Scores were calculated on the basis of the following formula:

$$E_n - score = \frac{x_i - \bar{X}}{\sqrt{U(x_i)^2 + U(\bar{X})^2}}$$

In this context,

x_i	is the measurement value (result) of the participating laboratory
$\overline{X}$	assigned value

the target value for the assessment of the performance of the participants (3 significant digits), normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section E4

$U(x_i)$ expanded measurement uncertainty for the result of the participating laboratory, k=2

$U(\bar{X})$ expanded measurement uncertainty for the assigned value, k=2

E2.3. Performance evaluation z-Score and E_n-Score

Interpretation of z-Scores:

- |z-Score| ≤ 2.0 good result
- 2.0 < |z-Score| < 3.0 questionable result
- |z-Score| ≥ 3.0 unsatisfactory result

Note: In case of assessment of the participants' performance by z-scores the measurement uncertainty of the participants' results is not taken into account. The difference between result of participants and the assigned value is evaluated by the criteria.

Interpretation of E_n-Scores:

- $|E_n$-Score| ≤ 1.0 satisfactory performance
- $|E_n$-Score| > 1.0 unsatisfactory performance

Note: In case of assessment of the participants' performance by E_n-Scores the expanded measurement uncertainties for the results and for the assigned values are taken into account. IE_n-ScoreI > 1.0 might indicate to check the measurement uncertainty estimation or might point out to correct a measurement problem.

E3. Representation and interpretation of measurement results

The parameter-oriented report provides the measurement values (results) including uncertainty (± U), recovery rate, calculated z-Score and the outliers in tabular form. The results listed in the table are also represented graphically.

The laboratory oriented report shows the results of the individual laboratories (anonymous), including the measurement uncertainty (± U), recovery rates, z-Scores and additionally evaluation of E_n-Scores on separate pages.

The tables also contain the basis for the data assessment as the assigned values and expanded measurement uncertainties and the criteria.

An annotation of the tables and graphics is given in section E.5.

E4. Explanatory notes

As explained in section E2, the z-Score can also be calculated using the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round. It might occur that the z-Score between -2 and 2 covers a large range of measurement values when the variance of the results is high. On the other hand, the range of good results can be very narrow, when the variation of the participants' results is small.

The recovery rate is calculated for the individual result based on the assigned value and is thus independent of the reproducibility standard deviation. In the case of a high variance of the results, participants should also consider recovery rates as additional criteria to decide on the necessity of internal quality assurance measures.

The relative reproducibility standard deviation (vR) of the current proficiency testing round was used as criteria.

Parameter Ag sample AB08: Assigned values were not calculated due to the low analyte concentration.

Parameters As, B, Ba, Co, Cu, Fe, Ni and Zn sample AB08: These parameters showed small standard deviations (vR < 5 %), therefore a reproducibility standard deviaton (vR) of 5 % was chosen for assessment.

Parameter Cd sample AB08 and parameter Hg sample AB08Hg: The assigned values calculated based on the participant results were outside the measurement uncertainty of the control value and thus traceability could not be proven by this procedure. Therefore, new assigned values were defined by the group of accredited participating laboratories after outlier-assessment.

E5. Annotations on tables and charts

E5.1. Information and abbreviations in tables

Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)

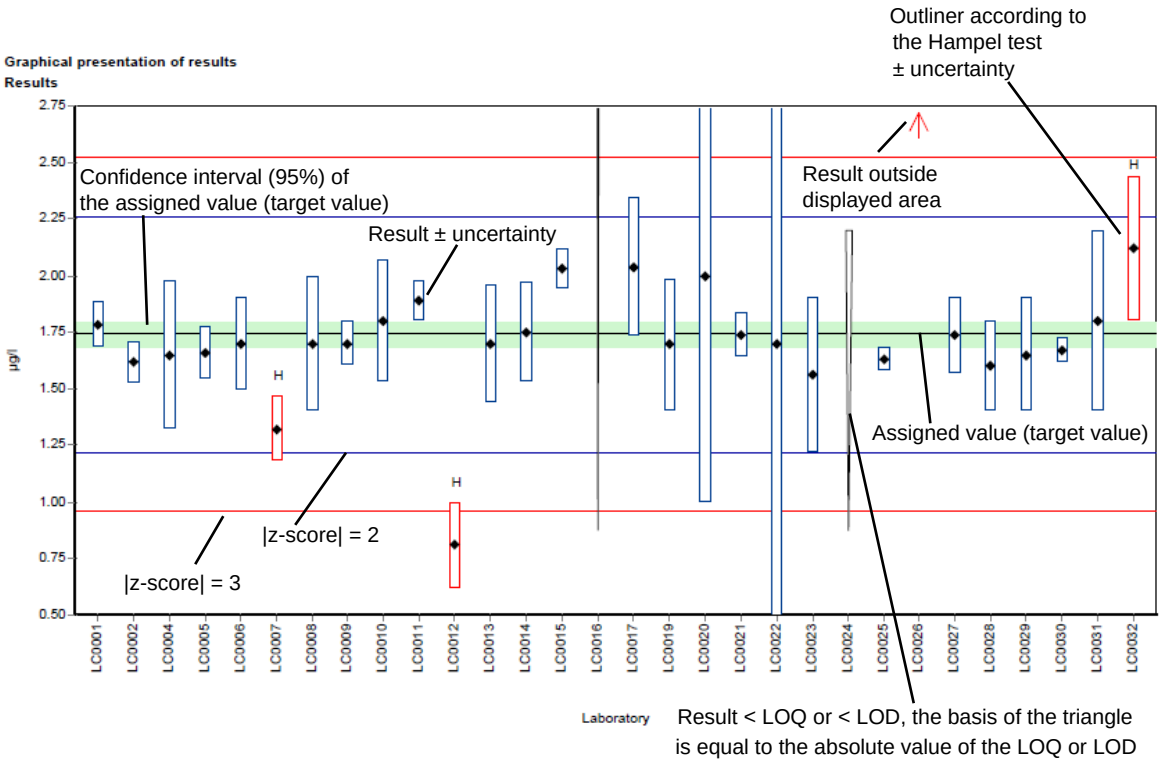
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criteria	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criteria [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)
Mean	Mean of the participants results, without outliers (3 significant digits)
CI (99 %)	99% confidence interval (3 significant digits)
Minimum	Minimum of all submitted results, after removal of outliers (3 significant digits)
Maximum	Maximum of all submitted results, after removal of outliers (3 significant digits)
SD	Reproducibility standard deviation, calculated from the participants results, after removal of outliers (3 significant digits)
RSD %	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, after removal of outliers (2 significant digits)
Control test value ± U (k=2)	Mean of control test value ± expanded measurement uncertainty (3 significant digits)
Labcode	Laboratory identifier (anonymized)
Result	Result as indicated by participant (max. 5 decimal places)
± U	combined measurement uncertainty without expansion factor (k=1), as indicated by participant (max. 5 decimal places)
LOQ	Limit of quantification
LOD	Limit of detection
Recovery	Recovery rate in % based on assigned value (target value) (3 significant digits, max. one decimal place given)
z-Score	Deviation of result based on the assigned value (target value) given as a multiple of the criteria (3 significant digits, max. 2 decimal places given)
E_n-Score	Deviation of result based on the assigned value (target value) given as a multiple of the combined expanded measurement uncertainty of the participant's results and expanded measurement uncertainty for the assigned value (3 significant digits, max. 2 decimal places given). Note: E_n-Score assessment takes into account the measurement uncertainty of the participants.
-	No data available or no calculation possible
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test

FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive – for parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results

E5.2. Graphical presentation of results

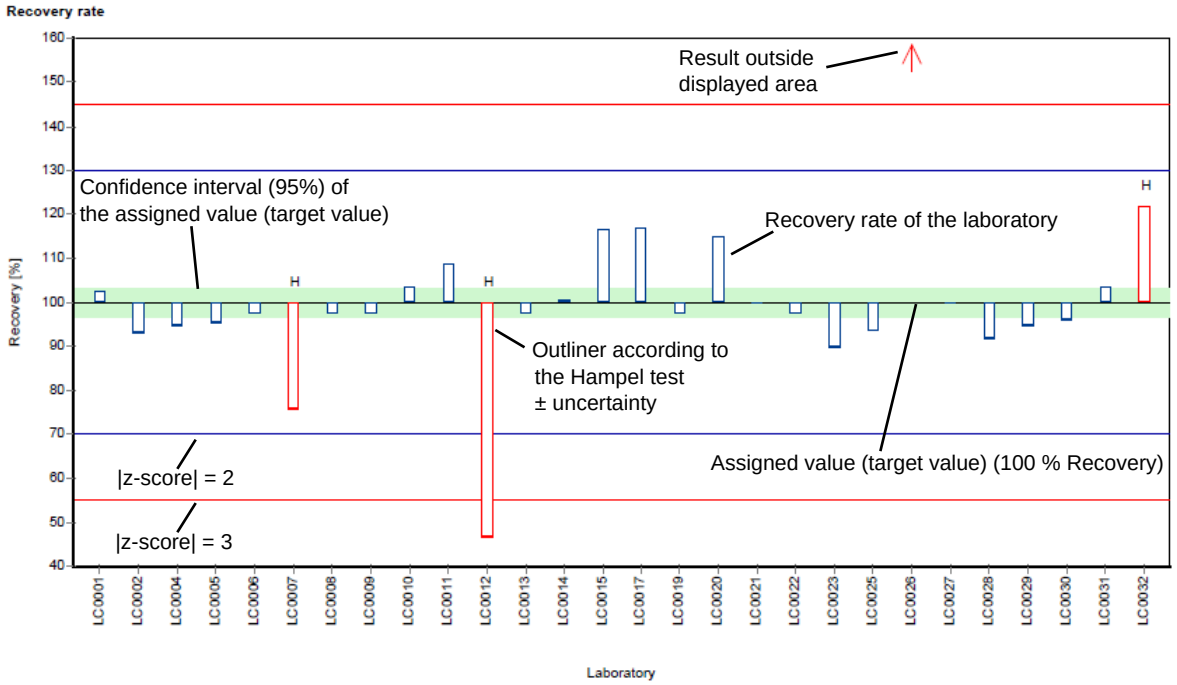
The graphic representation in the report is explained below by means of commented example diagrams:

Example chart: Results



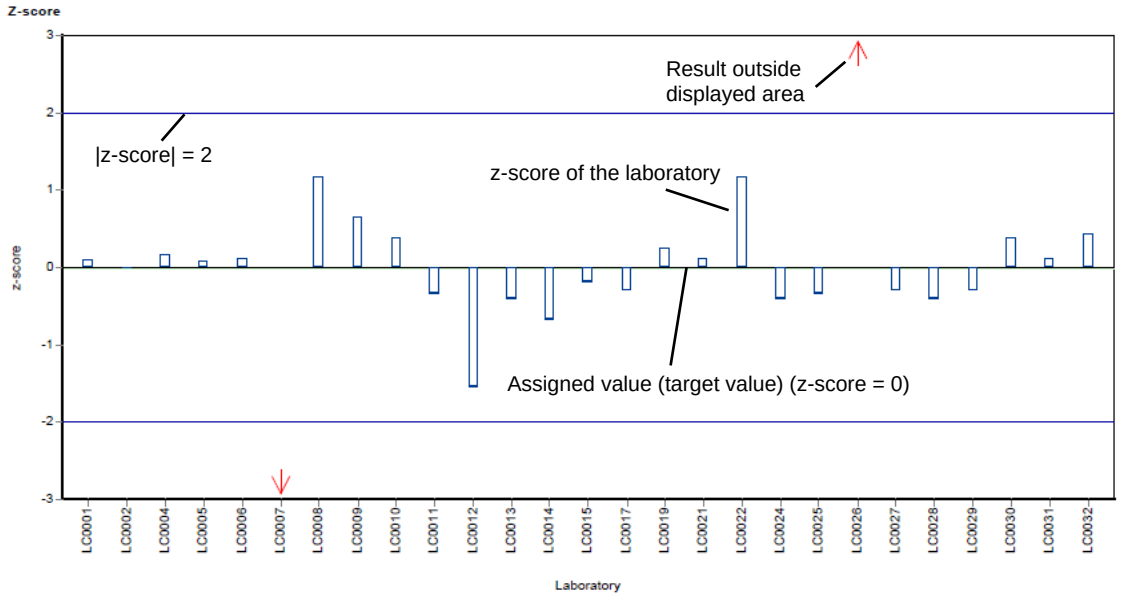
Different analysis methods are represented with different colors.

Example chart: Recovery



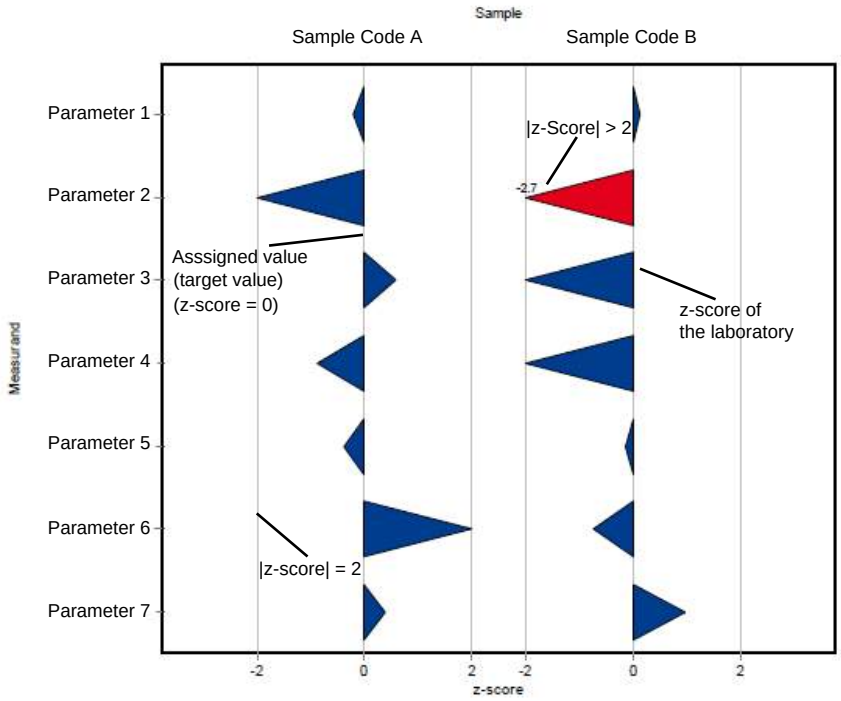
Different analysis methods are represented with different colors.

Example chart: z-score

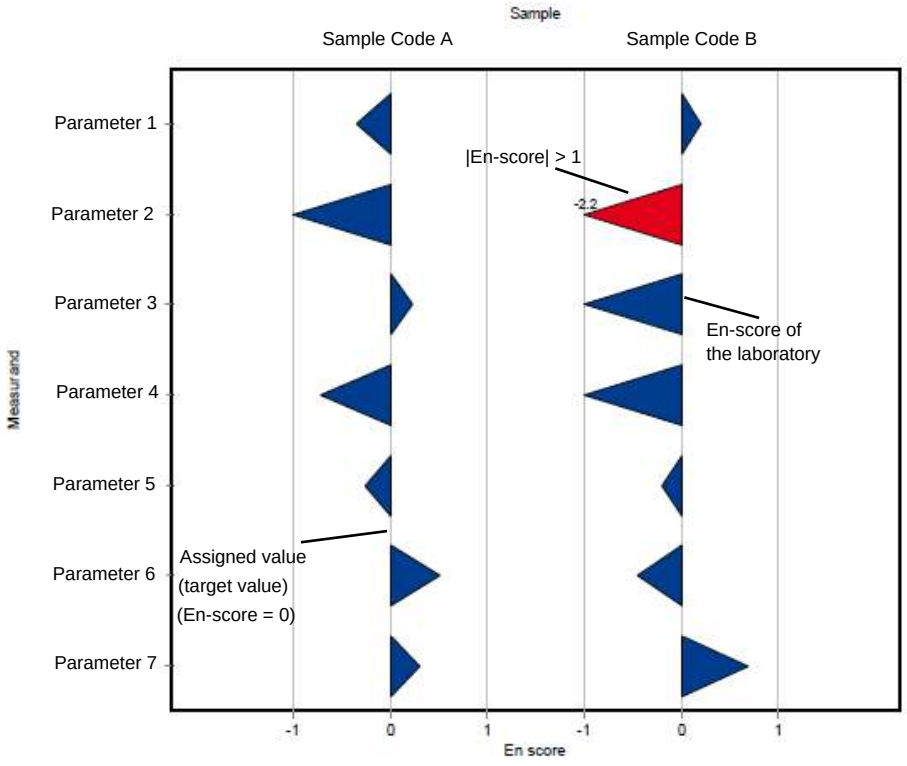


Different analysis methods are represented with different colors.

Example chart: z-score (laboratory oriented report)



Example chart: En-score (laboratory oriented report)



E6. Summary

E6.1. Table of assigned values

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Aluminium	AB08	mg/l	0.909	±	0.0319	0.0745	8.2
Antimony	AB08	mg/l	0.0017	±	0.000076	0.000131	7.7
Arsenic	AB08	mg/l	0.0124	±	0.00019	0.000621	5
Barium	AB08	mg/l	0.11	±	0.00216	0.00551	5
Boron	AB08	mg/l	0.308	±	0.00629	0.0154	5
Cadmium	AB08	mg/l	0.00144	±	0.000057	0.000111	7.7
Chromium	AB08	mg/l	0.0954	±	0.00205	0.00496	5.2
Cobalt	AB08	mg/l	0.0109	±	0.000134	0.000547	5
Copper	AB08	mg/l	0.108	±	0.00179	0.00541	5
Iron	AB08	mg/l	0.23	±	0.00474	0.0115	5
Lead	AB08	mg/l	0.0109	±	0.000279	0.000588	5.4
Mercury	AB08 Hg	mg/l	0.0000989	±	0.000007	0.000009	9.1
Molybdenum	AB08	mg/l	0.014	±	0.000441	0.000908	6.5
Nickel	AB08	mg/l	0.0111	±	0.000252	0.000555	5
Selenium	AB08	mg/l	0.0119	±	0.000658	0.00155	13
Silver	AB08	mg/l	-	±	-	-	-
Tin	AB08	mg/l	0.0327	±	0.00156	0.00327	10
Vanadium	AB08	mg/l	0.0145	±	0.000688	0.0016	11
Zinc	AB08	mg/l	0.329	±	0.00699	0.0165	5

E6.2. Summary of results, after removal of outliers

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean	± CI (99%)	Minimum	Maximum	sR	vR [%]
Aluminium	AB08	22	1	mg/l	0.909	± 0.0478	0.75	1.08	0.0748	8.2
Antimony	AB08	12	3	mg/l	0.0017	± 0.000114	0.00157	0.002	0.000132	7.7
Arsenic	AB08	17	4	mg/l	0.0124	± 0.000284	0.012	0.0131	0.000391	3.1
Barium	AB08	23	0	mg/l	0.11	± 0.00324	0.1	0.12	0.00519	4.7
Boron	AB08	21	2	mg/l	0.308	± 0.00943	0.28	0.335	0.0144	4.7
Cadmium	AB08	17	3	mg/l	0.00145	± 0.000076	0.00124	0.0016	0.000106	7.3
Chromium	AB08	23	1	mg/l	0.0954	± 0.00308	0.085	0.103	0.00493	5.2
Cobalt	AB08	16	6	mg/l	0.0109	± 0.000201	0.0104	0.0116	0.000268	2.5
Copper	AB08	22	1	mg/l	0.108	± 0.00268	0.0995	0.115	0.00419	3.9
Iron	AB08	19	4	mg/l	0.23	± 0.0071	0.21	0.251	0.0103	4.5
Lead	AB08	18	2	mg/l	0.0109	± 0.000418	0.0098	0.0122	0.000591	5.4
Mercury	AB08 Hg	10	3	mg/l	0.000129	± 0.000048	0.000089	0.00023	0.0000512	40
Molybdenum	AB08	17	2	mg/l	0.014	± 0.000661	0.0122	0.016	0.000908	6.5
Nickel	AB08	17	5	mg/l	0.0111	± 0.000377	0.01	0.012	0.000519	4.7
Selenium	AB08	22	1	mg/l	0.0119	± 0.000987	0.00898	0.0148	0.00154	13
Silver	AB08	5	0	mg/l	-	± -	0.0000223	0.0012	-	-
Tin	AB08	18	4	mg/l	0.0327	± 0.00234	0.0257	0.037	0.0033	10
Vanadium	AB08	20	1	mg/l	0.0145	± 0.00103	0.011	0.017	0.00154	11
Zinc	AB08	21	1	mg/l	0.329	± 0.0105	0.296	0.36	0.016	4.9

E7. Parameterorientierte Auswertung / Parameter oriented report

Parameter oriented report

AB08

Aluminium

Unit	mg/l
Assigned value ± U (k=2)	0.909 ± 0.0319
Criterion	0.0745 (8.2 %)
Minimum - Maximum	0.75 - 1.08
Control test value ± U (k=2)	0.926 ± 0.0833

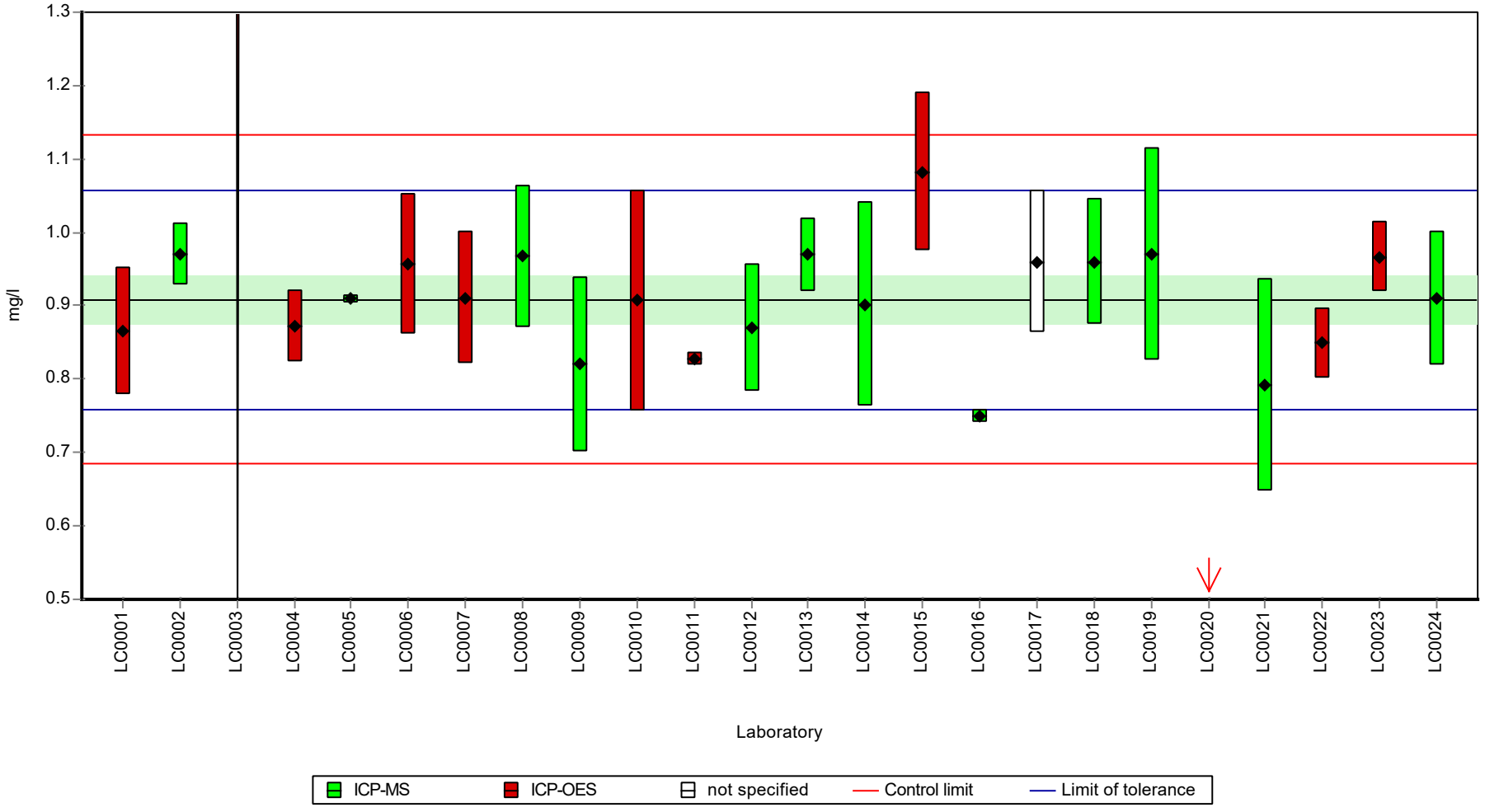
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.865	0.087	95.2	-0.58	
LC0002	0.97	0.043	107	0.82	
LC0003	< 4 (LOQ)	-	-	-	
LC0004	0.872	0.049	96	-0.49	
LC0005	0.909	0.0055	100	0.01	
LC0006	0.957	0.096	105	0.65	
LC0007	0.911	0.0911	100	0.03	
LC0008	0.967	0.096	106	0.78	
LC0009	0.82	0.12	90.2	-1.19	
LC0010	0.907	0.151	99.8	-0.02	
LC0011	0.828	0.009	91.1	-1.08	
LC0012	0.8708	0.0871	95.8	-0.51	
LC0013	0.97	0.05	107	0.82	
LC0014	0.902	0.14	99.3	-0.09	
LC0015	1.0825	0.10825	119	2.33	
LC0016	0.75	0.009	82.5	-2.13	
LC0017	0.96	0.096	106	0.69	
LC0018	0.96	0.086	106	0.69	
LC0019	0.9701	0.1455	107	0.83	
LC0020	0.087	0.0104	9.6	-11	H
LC0021	0.792	0.144	87.2	-1.56	
LC0022	0.849	0.0472	93.4	-0.8	
LC0023	0.9667	0.0483	106	0.78	
LC0024	0.91	0.091	100	0.02	

Characteristics of parameter

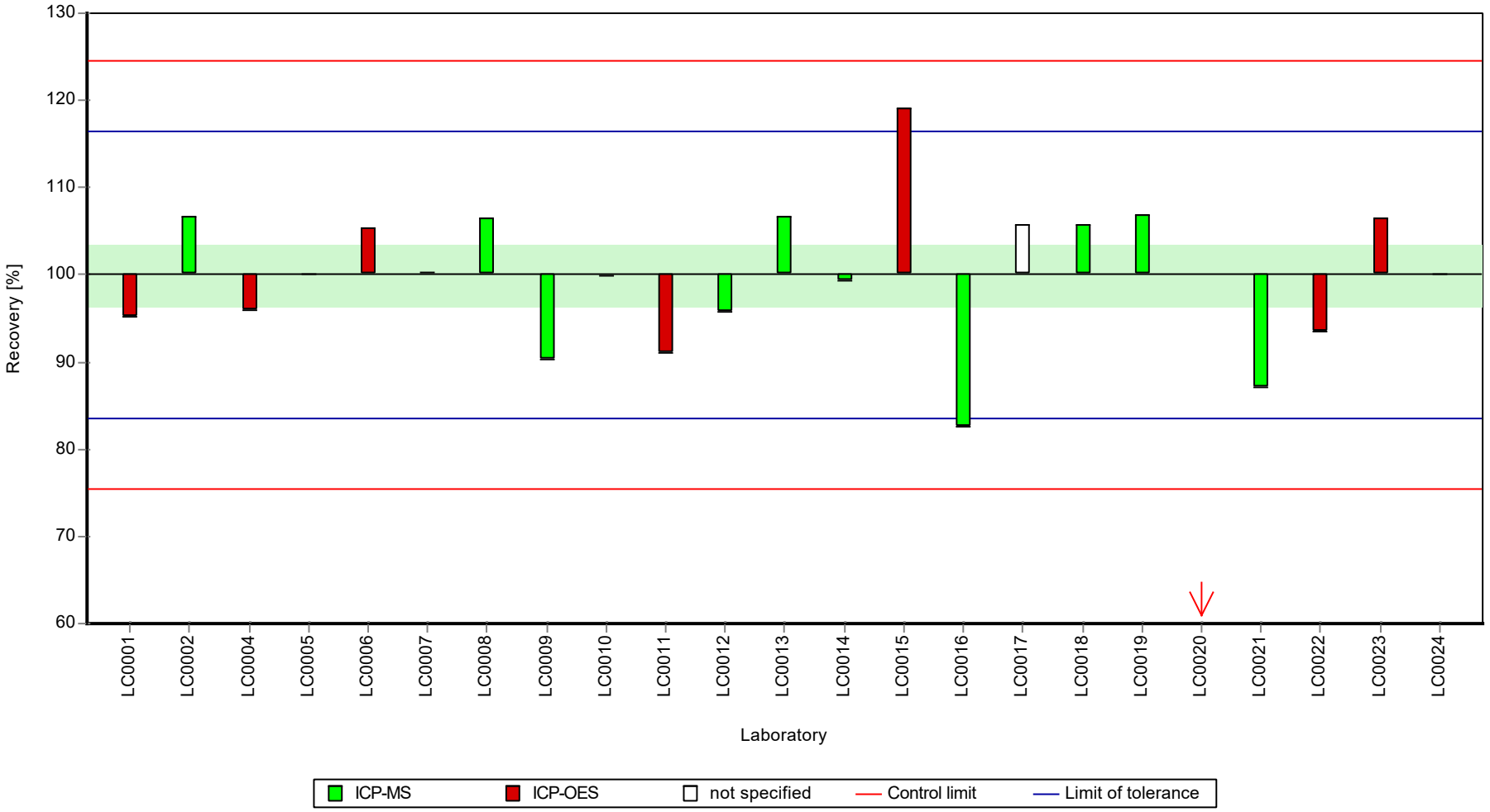
	all results	without outliers	Unit
Mean ± CI (99%)	0.873 ± 0.116	0.909 ± 0.0478	mg/l
Minimum	0.087	0.75	mg/l
Maximum	1.08	1.08	mg/l
Standard deviation	0.186	0.0748	mg/l
rel. standard deviation	21.3	8.23	%
n	23	22	-

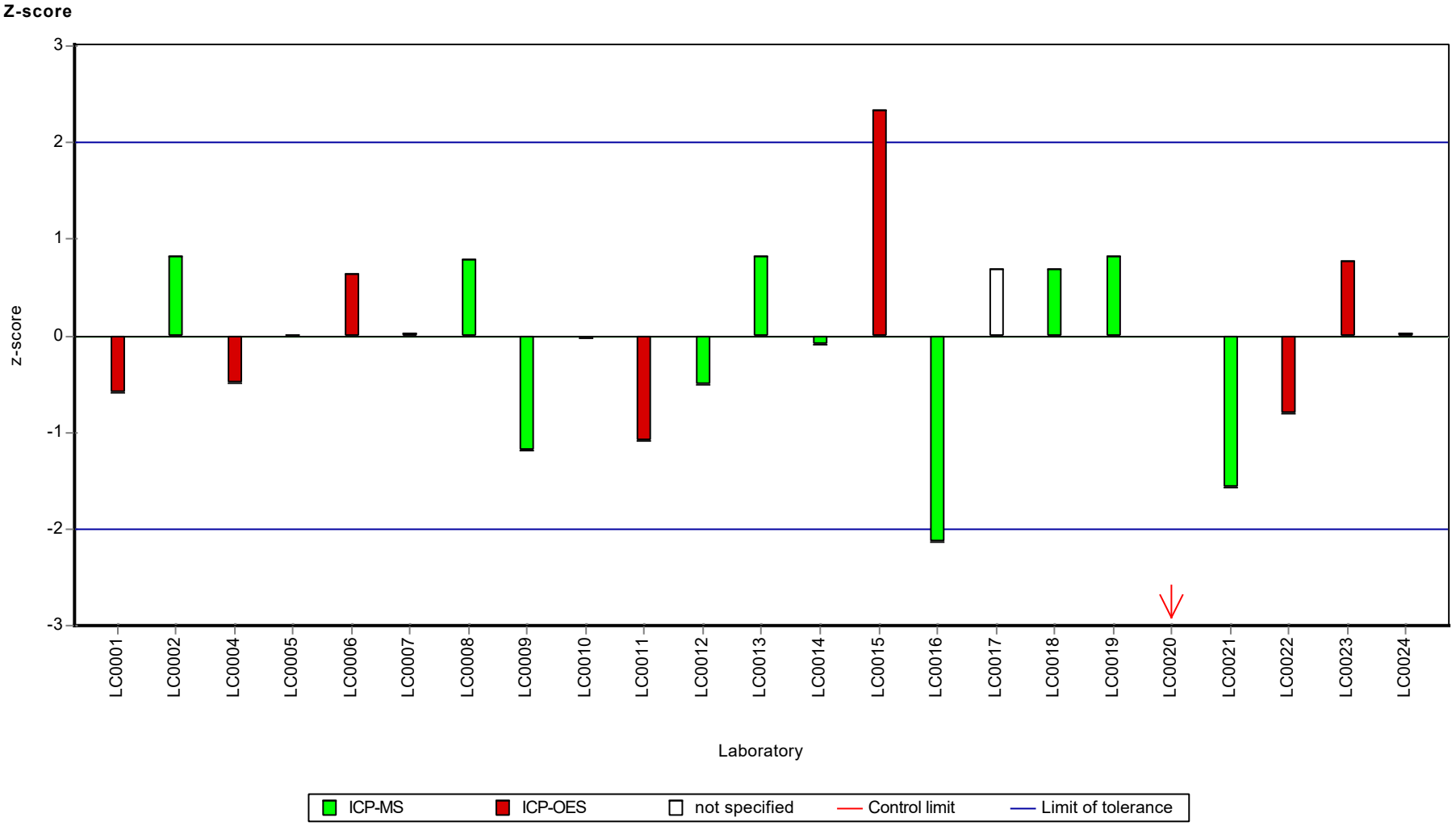
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Antimony

Unit	mg/l
Assigned value ± U (k=2)	0.0017 ± 0.000076
Criterion	0.000131 (7.7 %)
Minimum - Maximum	0.00157 - 0.002
Control test value ± U (k=2)	0.00162 ± 0.00013

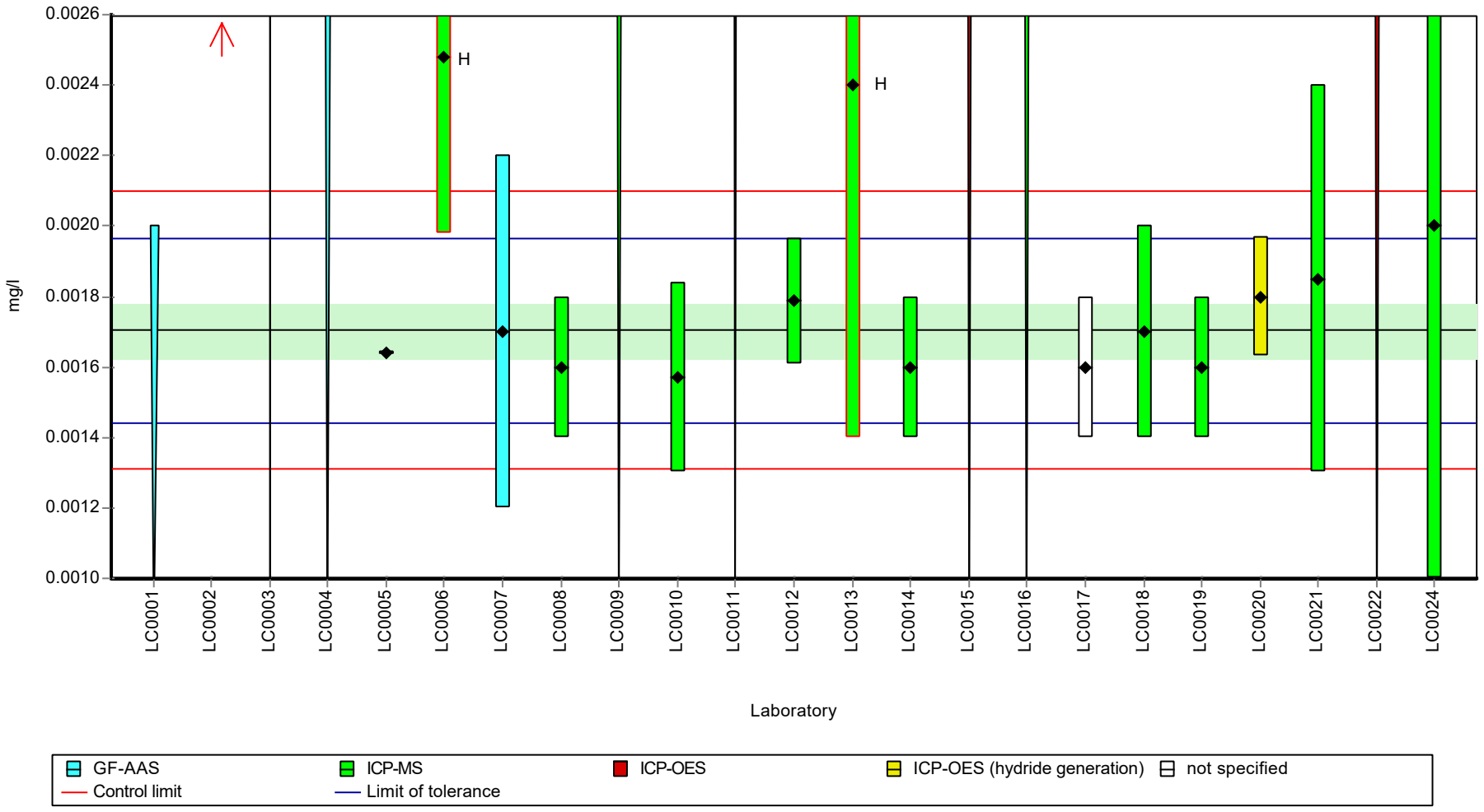
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.002 (LOQ)	-	-	-	
LC0002	0.00271	0.00013	159	7.67	H
LC0003	< 0.07 (LOQ)	-	-	-	
LC0004	< 0.004 (LOQ)	-	-	-	
LC0005	0.00164	0.00000	96.2	-0.49	
LC0006	0.00248	0.0005	146	5.91	H
LC0007	0.0017	0.0005	99.8	-0.03	
LC0008	0.0016	0.0002	93.9	-0.79	
LC0009	< 0.005 (LOQ)	-	-	-	
LC0010	0.00157	0.00027	92.1	-1.02	
LC0011	< 0.01 (LOQ)	-	-	-	
LC0012	0.00179	0.00018	105	0.63	
LC0013	0.0024	0.001	141	5.31	H
LC0014	0.0016	0.0002	93.9	-0.79	
LC0015	< 0.006 (LOQ)	-	-	-	
LC0016	< 0.005 (LOQ)	-	-	-	
LC0017	0.0016	0.0002	93.9	-0.79	
LC0018	0.0017	0.0003	99.8	-0.03	
LC0019	0.0016	0.0002	93.9	-0.79	
LC0020	0.0018	0.00017	106	0.73	
LC0021	0.00185	0.00055	109	1.11	
LC0022	< 0.005 (LOQ)	-	-	-	
LC0023	-	-	-	-	
LC0024	0.002	0.001	117	2.26	

Characteristics of parameter

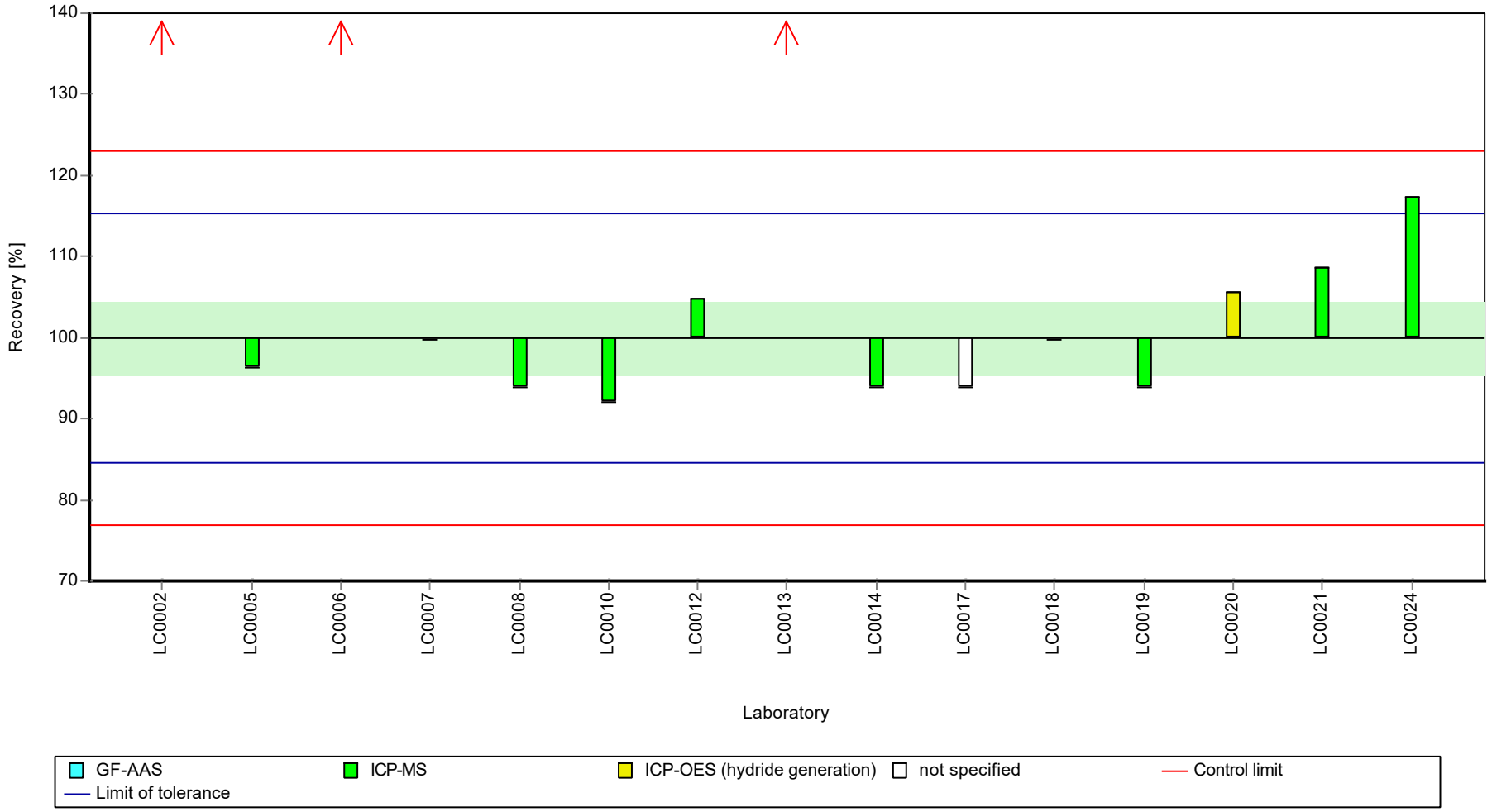
	all results	without outliers	Unit
Mean ± CI (99%)	0.00187 ± 0.000284	0.0017 ± 0.000114	mg/l
Minimum	0.00157	0.00157	mg/l
Maximum	0.00271	0.002	mg/l
Standard deviation	0.000366	0.000132	mg/l
rel. standard deviation	19.6	7.72	%
n	15	12	-

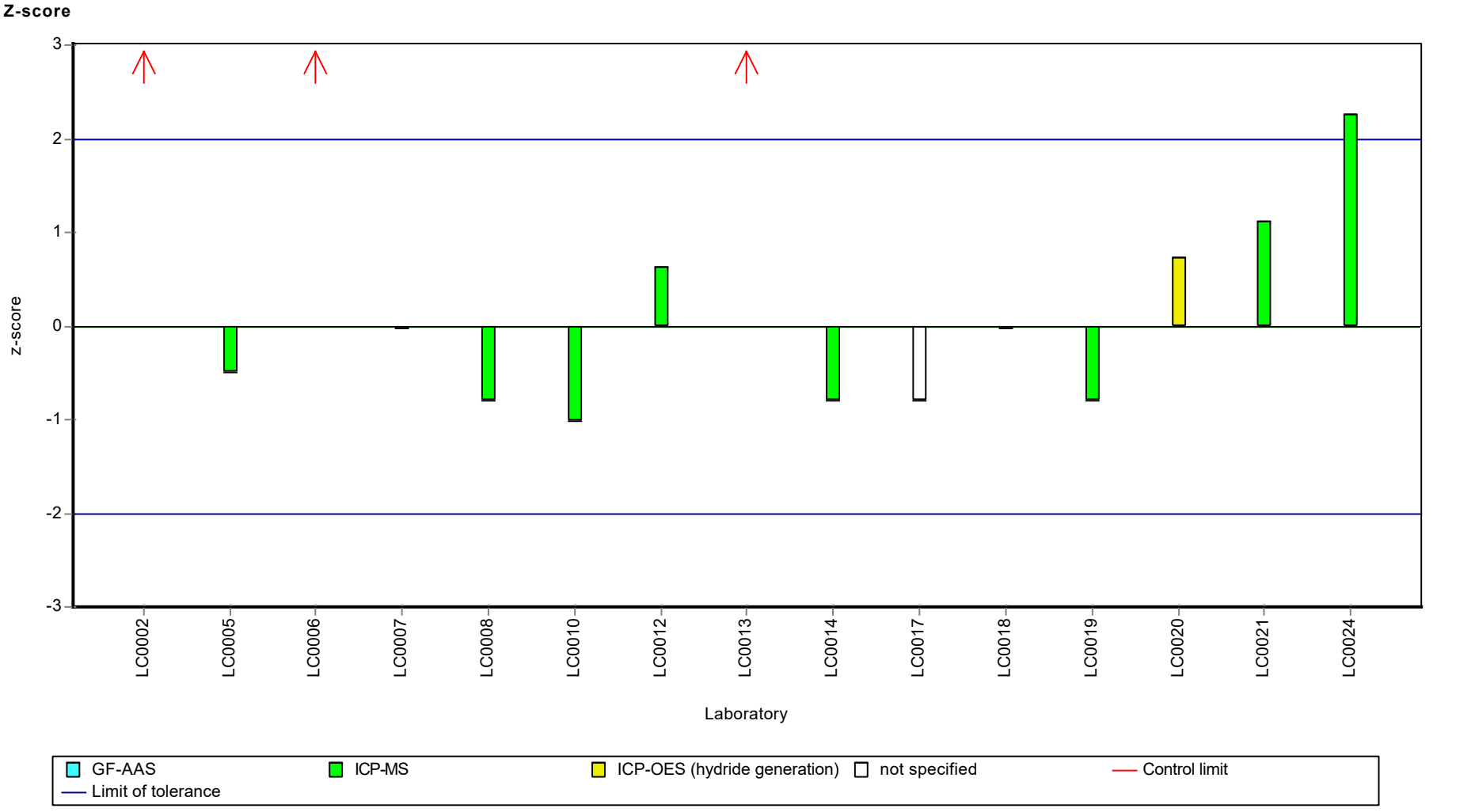
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0002
LC0005
LC0006
LC0007
LC0008
LC0010
LC0012
LC0013
LC0014
LC0017
LC0018
LC0019
LC0020
LC0021
LC0024
Laboratory
GF-AAS
ICP-MS
ICP-OES (hydride generation)
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Arsenic

Unit	mg/l
Assigned value ± U (k=2)	0.0124 ± 0.00019
Criterion	0.000621 (5 %)
Minimum - Maximum	0.012 - 0.0131
Control test value ± U (k=2)	0.0132 ± 0.00079

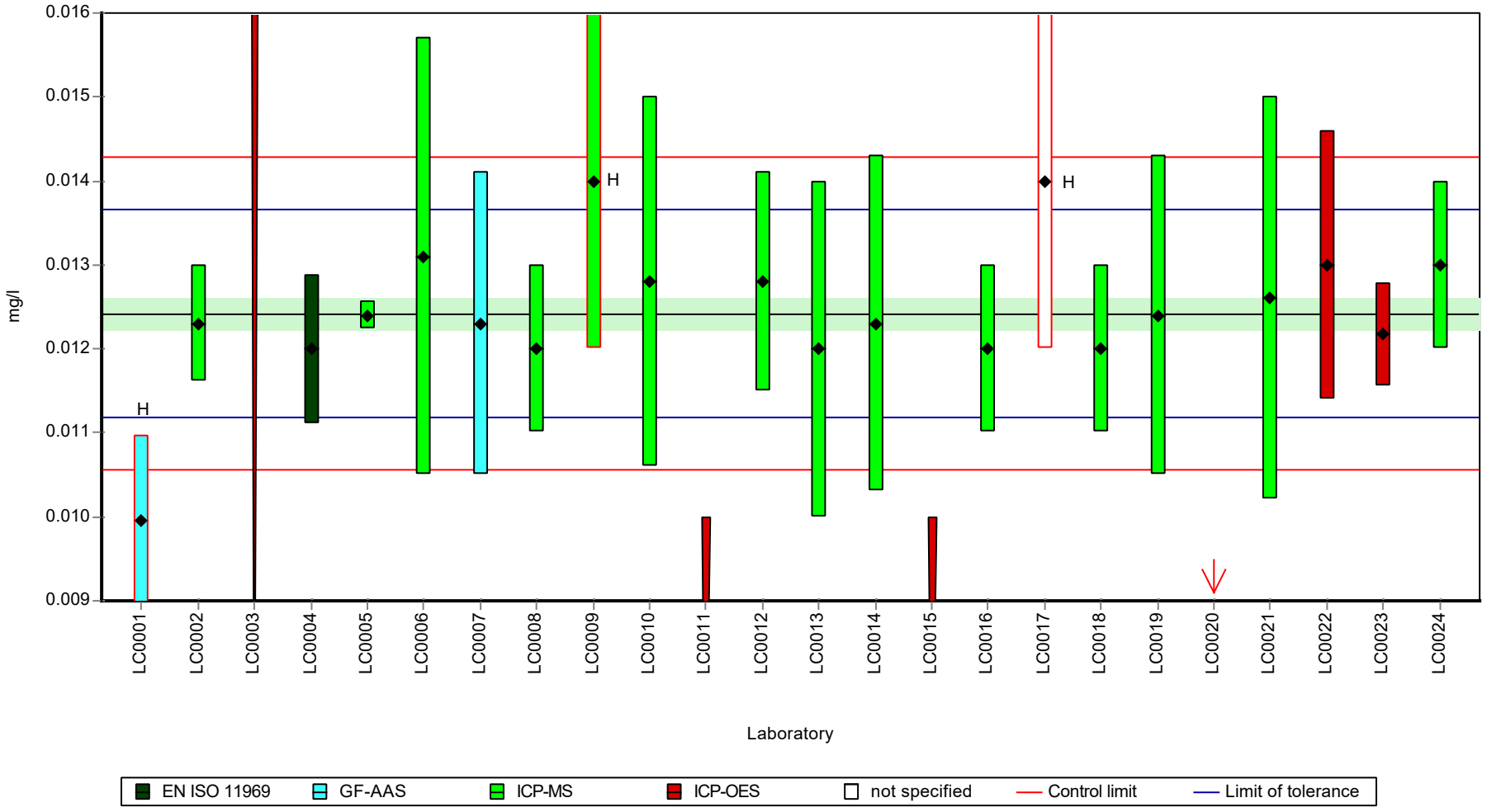
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.00996	0.001	80.2	-3.96	H
LC0002	0.0123	0.00069	99	-0.2	
LC0003	< 0.02 (LOQ)	-	-	-	
LC0004	0.012	0.00089	96.6	-0.68	
LC0005	0.0124	0.00016	99.8	-0.04	
LC0006	0.0131	0.0026	105	1.09	
LC0007	0.0123	0.0018	99	-0.2	
LC0008	0.012	0.001	96.6	-0.68	
LC0009	0.014	0.002	113	2.54	H
LC0010	0.0128	0.0022	103	0.61	
LC0011	< 0.01 (LOQ)	-	-	-	FN
LC0012	0.0128	0.0013	103	0.61	
LC0013	0.012	0.002	96.6	-0.68	
LC0014	0.0123	0.002	99	-0.2	
LC0015	< 0.01 (LOQ)	-	-	-	FN
LC0016	0.012	0.001	96.6	-0.68	
LC0017	0.014	0.002	113	2.54	H
LC0018	0.012	0.001	96.6	-0.68	
LC0019	0.0124	0.0019	99.8	-0.04	
LC0020	0.0051	0.00049	41.1	-11.8	H
LC0021	0.0126	0.0024	101	0.29	
LC0022	0.013	0.0016	105	0.93	
LC0023	0.01217	0.00061	98	-0.41	
LC0024	0.013	0.001	105	0.93	

Characteristics of parameter

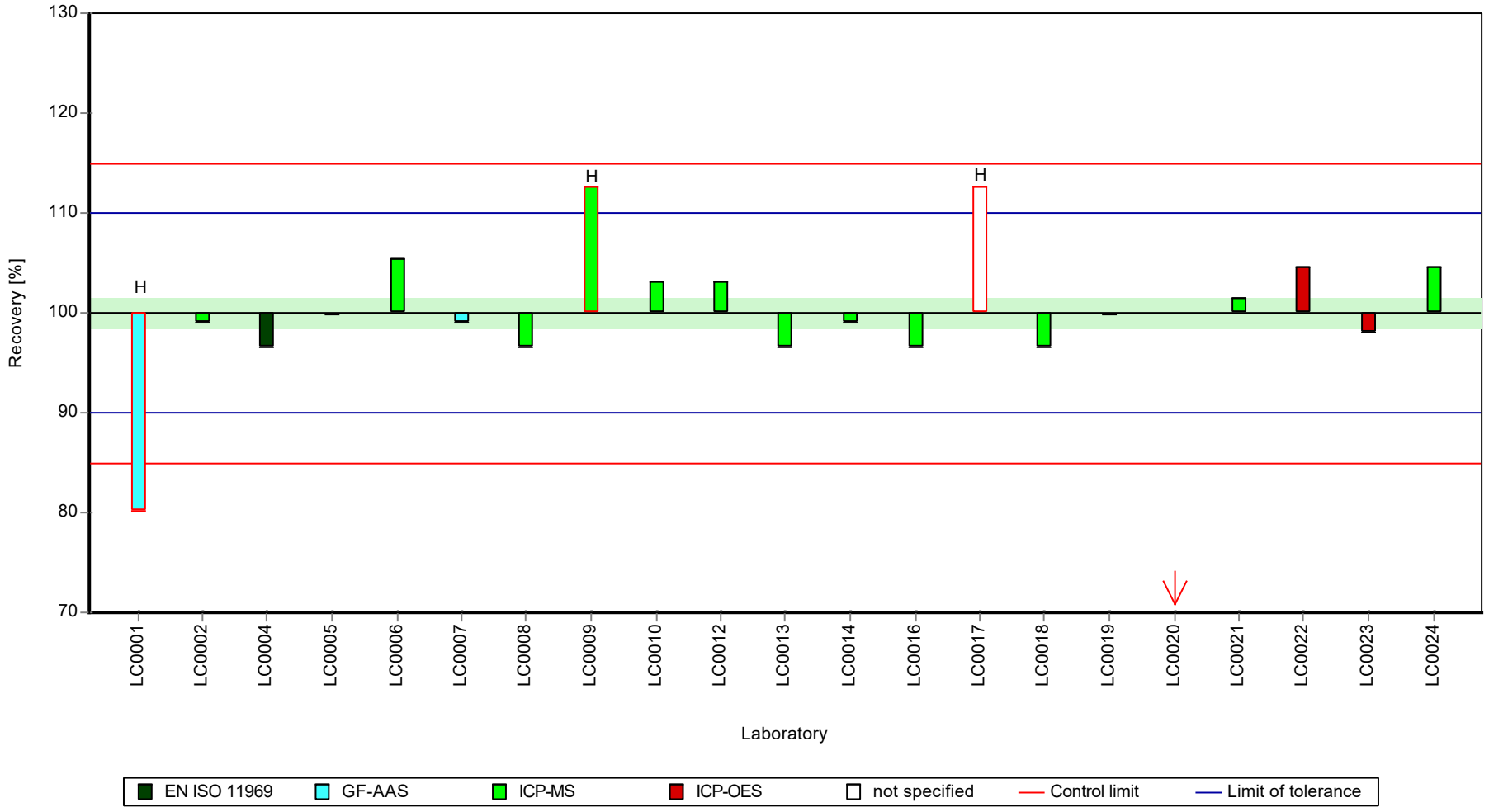
	all results	without outliers	Unit
Mean ± CI (99%)	0.0121 ± 0.00118	0.0124 ± 0.000284	mg/l
Minimum	0.0051	0.012	mg/l
Maximum	0.014	0.0131	mg/l
Standard deviation	0.0018	0.000391	mg/l
rel. standard deviation	14.9	3.15	%
n	21	17	-

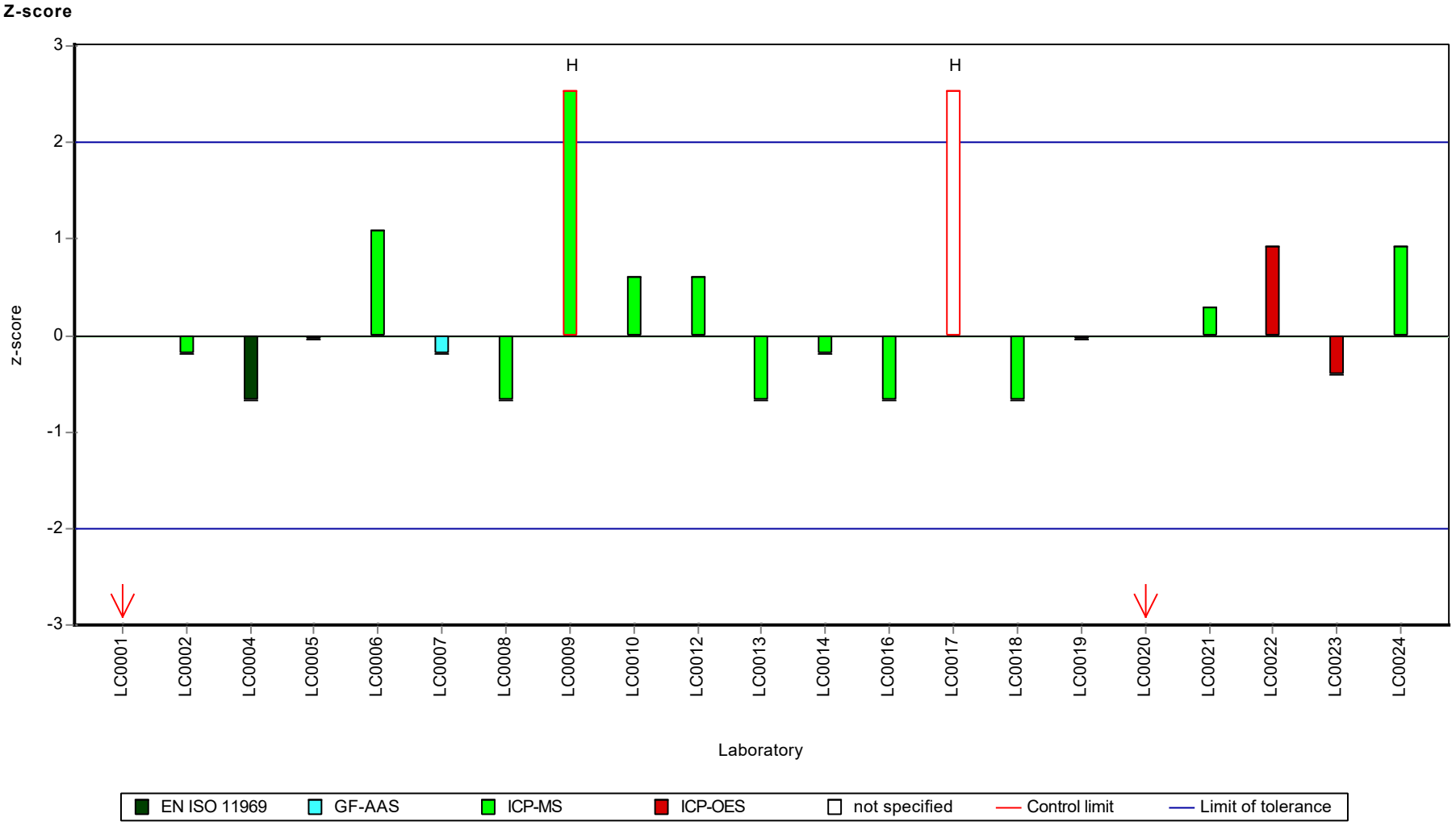
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
H
H
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
EN ISO 11969
GF-AAS
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Barium

Unit	mg/l
Assigned value ± U (k=2)	0.11 ± 0.00216
Criterion	0.00551 (5 %)
Minimum - Maximum	0.1 - 0.12
Control test value ± U (k=2)	0.114 ± 0.00569

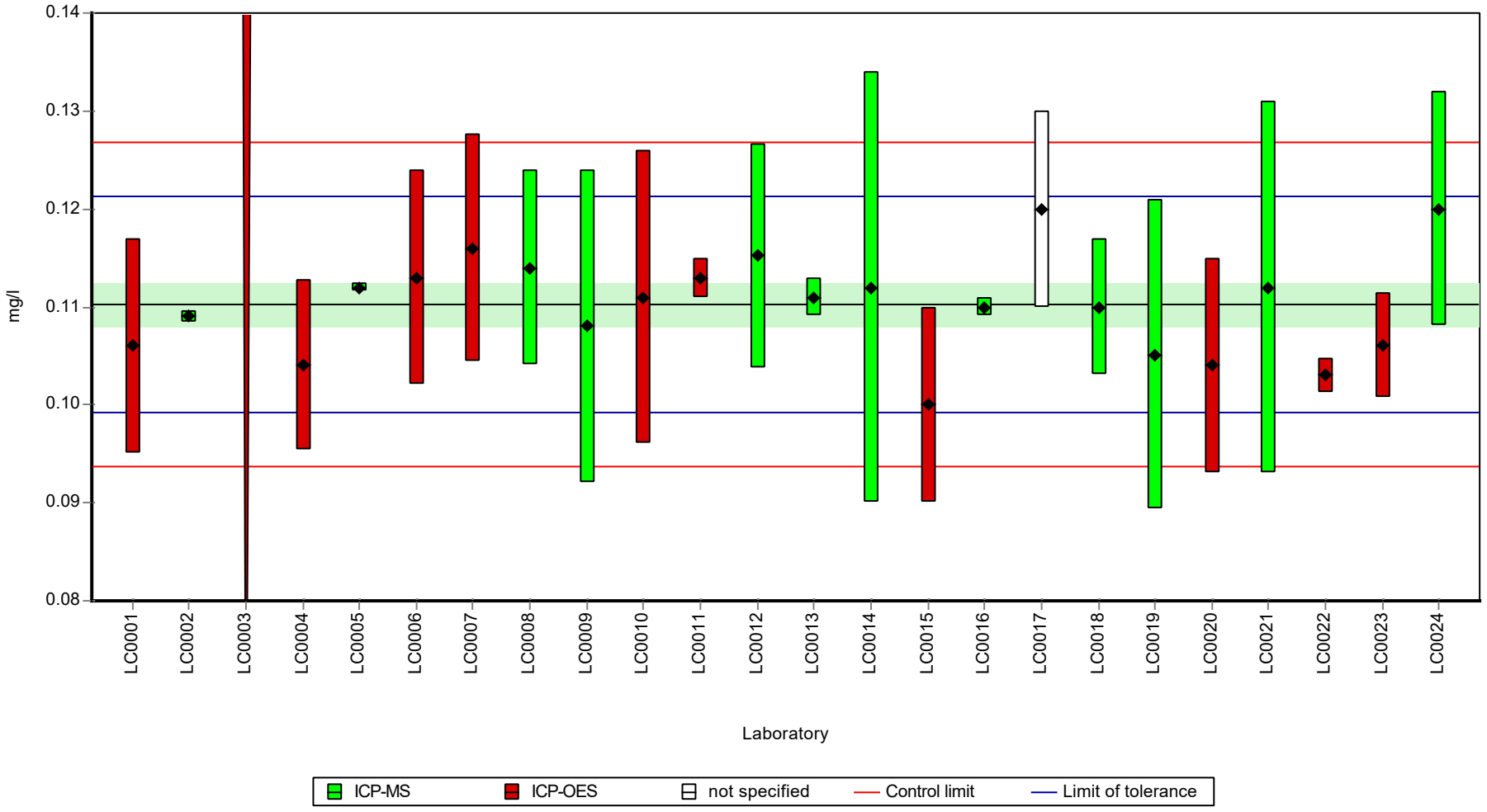
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.106	0.011	96.2	-0.76	
LC0002	0.109	0.00051	98.9	-0.22	
LC0003	< 0.15 (LOQ)	-	-	-	
LC0004	0.104	0.0087	94.4	-1.12	
LC0005	0.112	0.00049	102	0.33	
LC0006	0.113	0.011	103	0.51	
LC0007	0.116	0.0116	105	1.05	
LC0008	0.114	0.01	103	0.69	
LC0009	0.108	0.016	98	-0.4	
LC0010	0.111	0.015	101	0.15	
LC0011	0.113	0.002	103	0.51	
LC0012	0.1152	0.0115	105	0.91	
LC0013	0.111	0.002	101	0.15	
LC0014	0.112	0.022	102	0.33	
LC0015	0.1	0.01	90.8	-1.85	
LC0016	0.11	0.001	99.8	-0.03	
LC0017	0.12	0.01	109	1.78	
LC0018	0.11	0.007	99.8	-0.03	
LC0019	0.1051	0.0158	95.4	-0.92	
LC0020	0.104	0.011	94.4	-1.12	
LC0021	0.112	0.019	102	0.33	
LC0022	0.103	0.0018	93.5	-1.31	
LC0023	0.1061	0.00531	96.3	-0.74	
LC0024	0.12	0.012	109	1.78	

Characteristics of parameter

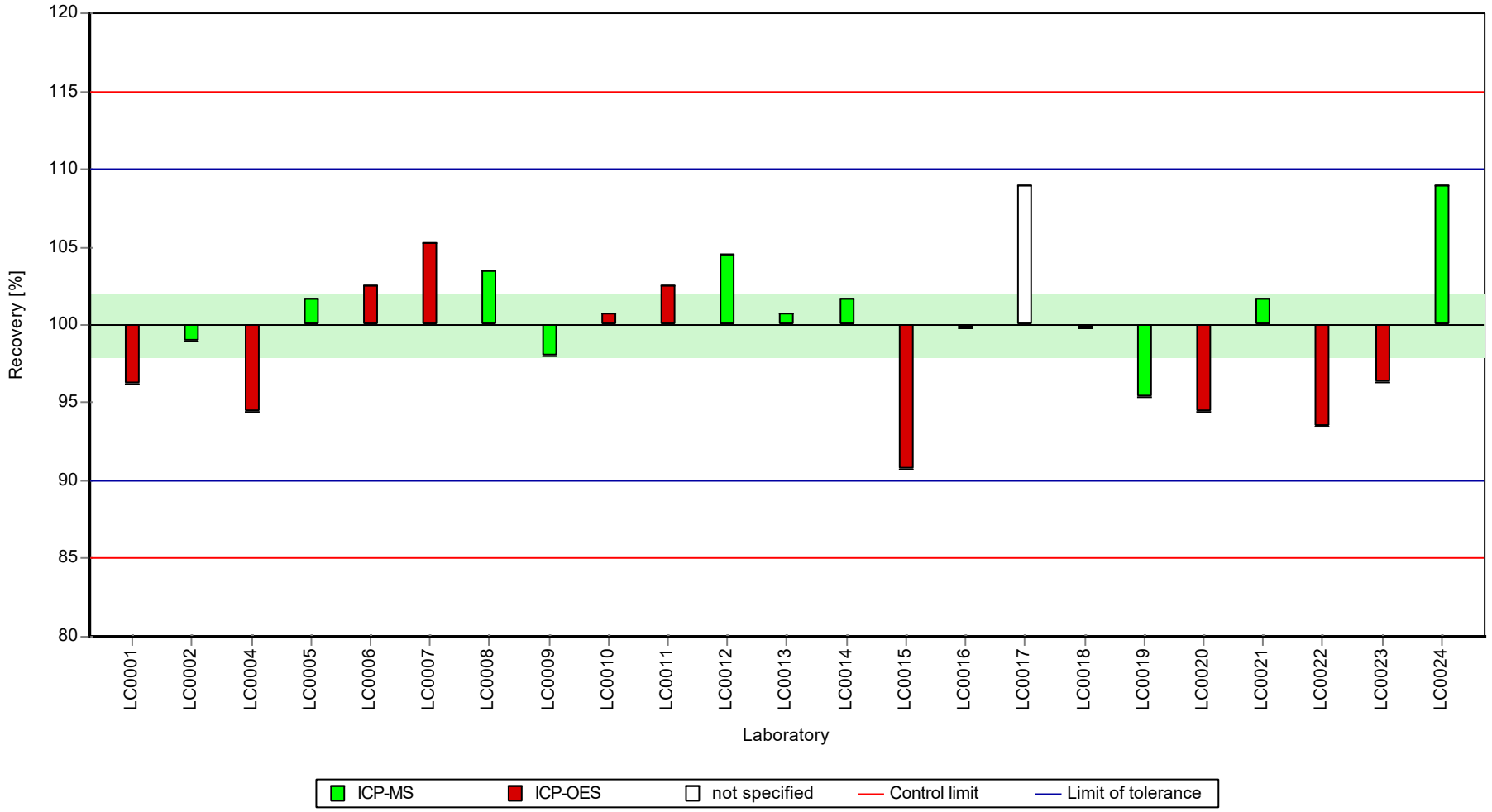
	all results	without outliers	Unit
Mean ± CI (99%)	0.11 ± 0.00324	0.11 ± 0.00324	mg/l
Minimum	0.1	0.1	mg/l
Maximum	0.12	0.12	mg/l
Standard deviation	0.00519	0.00519	mg/l
rel. standard deviation	4.71	4.71	%
n	23	23	-

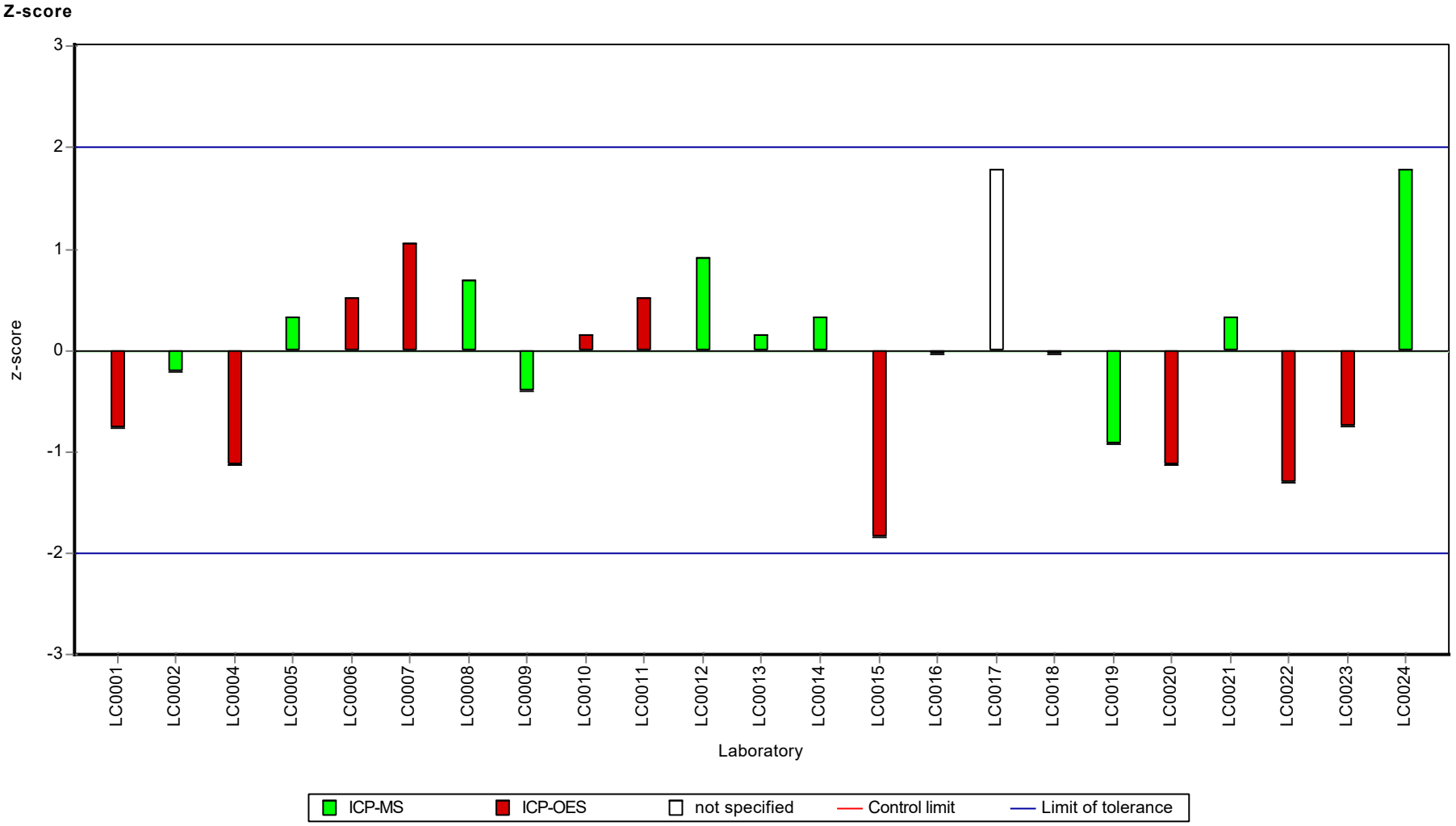
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Boron

Unit	mg/l
Assigned value ± U (k=2)	0.308 ± 0.00629
Criterion	0.0154 (5 %)
Minimum - Maximum	0.28 - 0.335
Control test value ± U (k=2)	0.311 ± 0.0218

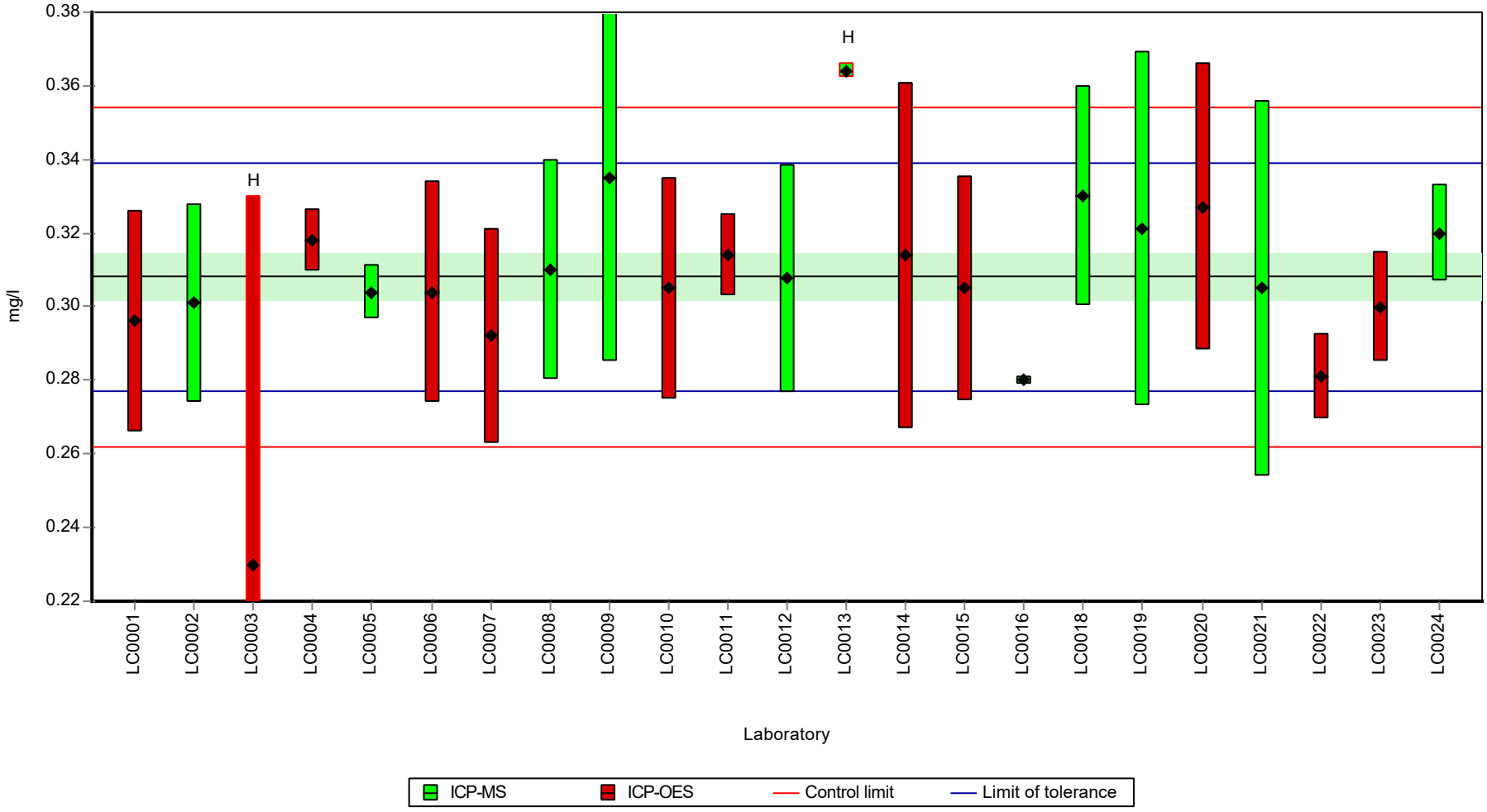
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.296	0.03	96.1	-0.78	
LC0002	0.301	0.027	97.7	-0.46	
LC0003	0.23	0.1	74.7	-5.07	H
LC0004	0.318	0.0086	103	0.64	
LC0005	0.304	0.0072	98.7	-0.27	
LC0006	0.304	0.03	98.7	-0.27	
LC0007	0.292	0.0292	94.8	-1.04	
LC0008	0.31	0.03	101	0.13	
LC0009	0.335	0.05	109	1.75	
LC0010	0.305	0.03	99	-0.2	
LC0011	0.314	0.011	102	0.39	
LC0012	0.3076	0.0308	99.8	-0.03	
LC0013	0.364	0.002	118	3.63	H
LC0014	0.314	0.047	102	0.39	
LC0015	0.305	0.0305	99	-0.2	
LC0016	0.28	0.001	90.9	-1.82	
LC0017	-	-	-	-	
LC0018	0.33	0.03	107	1.42	
LC0019	0.3211	0.0482	104	0.84	
LC0020	0.327	0.039	106	1.23	
LC0021	0.305	0.051	99	-0.2	
LC0022	0.281	0.0116	91.2	-1.76	
LC0023	0.2999	0.01499	97.3	-0.53	
LC0024	0.32	0.013	104	0.77	

Characteristics of parameter

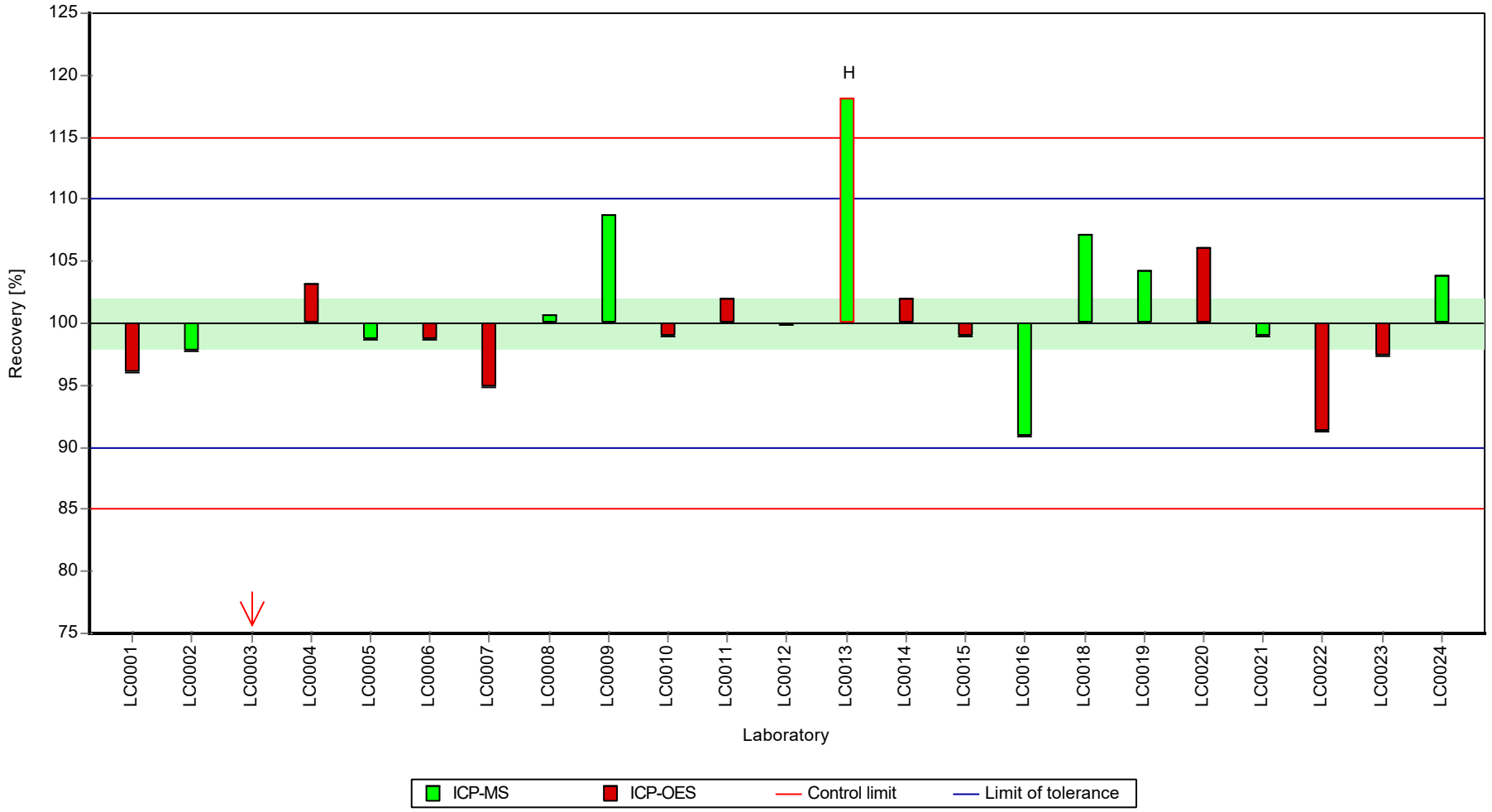
	all results	without outliers	Unit
Mean ± CI (99%)	0.307 ± 0.0154	0.308 ± 0.00943	mg/l
Minimum	0.23	0.28	mg/l
Maximum	0.364	0.335	mg/l
Standard deviation	0.0246	0.0144	mg/l
rel. standard deviation	8.02	4.68	%
n	23	21	-

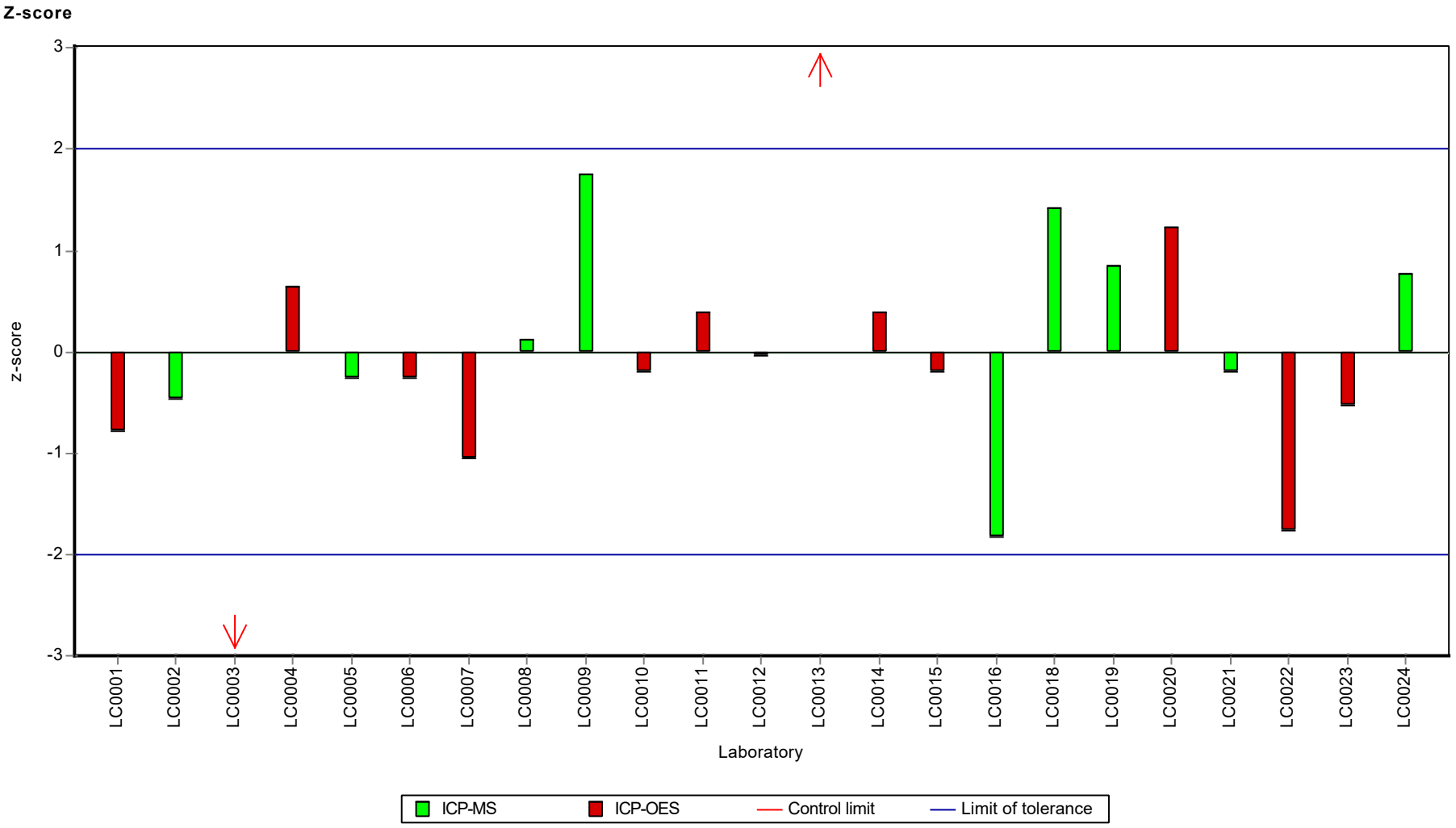
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
Control limit
Limit of tolerance

Parameter oriented report

AB08

Cadmium

Unit	mg/l
Assigned value ± U (k=2)	0.00144 ± 0.000057
Criterion	0.000111 (7.7 %)
Minimum - Maximum	0.00124 - 0.0016
Control test value ± U (k=2)	0.00159 ± 0.000111

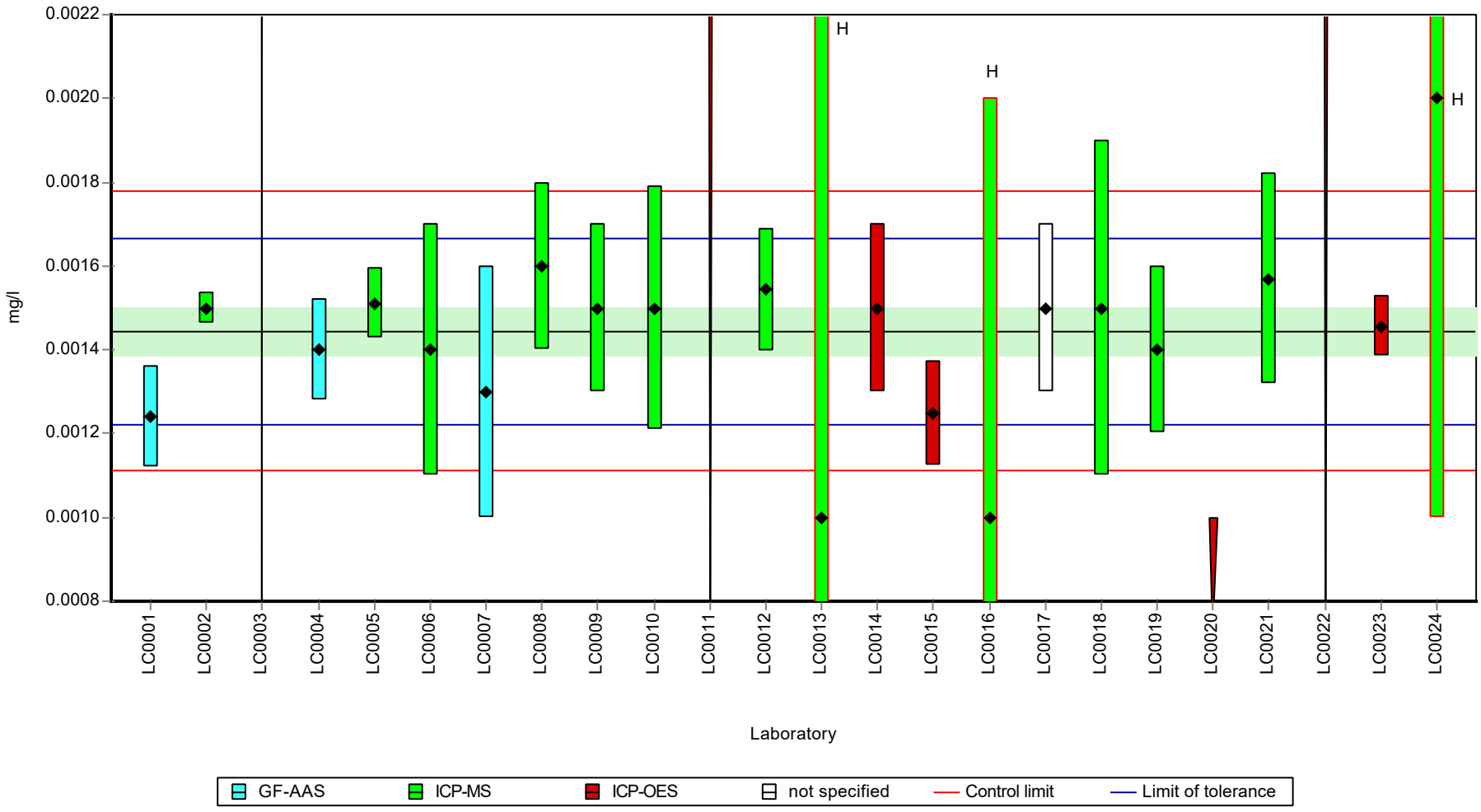
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.00124	0.00012	85.8	-1.84	
LC0002	0.0015	0.00004	104	0.5	
LC0003	< 0.04 (LOQ)	-	-	-	
LC0004	0.0014	0.00012	96.9	-0.4	
LC0005	0.00151	0.00008	105	0.59	
LC0006	0.0014	0.0003	96.9	-0.4	
LC0007	0.0013	0.0003	90	-1.3	
LC0008	0.0016	0.0002	111	1.4	
LC0009	0.0015	0.0002	104	0.5	
LC0010	0.0015	0.00029	104	0.5	
LC0011	< 0.005 (LOQ)	-	-	-	
LC0012	0.00154	0.00015	107	0.89	
LC0013	0.001	0.002	69.2	-4.01	H
LC0014	0.0015	0.0002	104	0.5	
LC0015	0.00125	0.00013	86.5	-1.75	
LC0016	0.001	0.001	69.2	-4.01	H
LC0017	0.0015	0.0002	104	0.5	
LC0018	0.0015	0.0004	104	0.5	
LC0019	0.0014	0.0002	96.9	-0.4	
LC0020	< 0.001 (LOQ)	-	-	-	FN
LC0021	0.00157	0.00025	109	1.13	
LC0022	< 0.005 (LOQ)	-	-	-	
LC0023	0.00146	0.00007	101	0.11	
LC0024	0.002	0.001	138	5	H

Characteristics of parameter

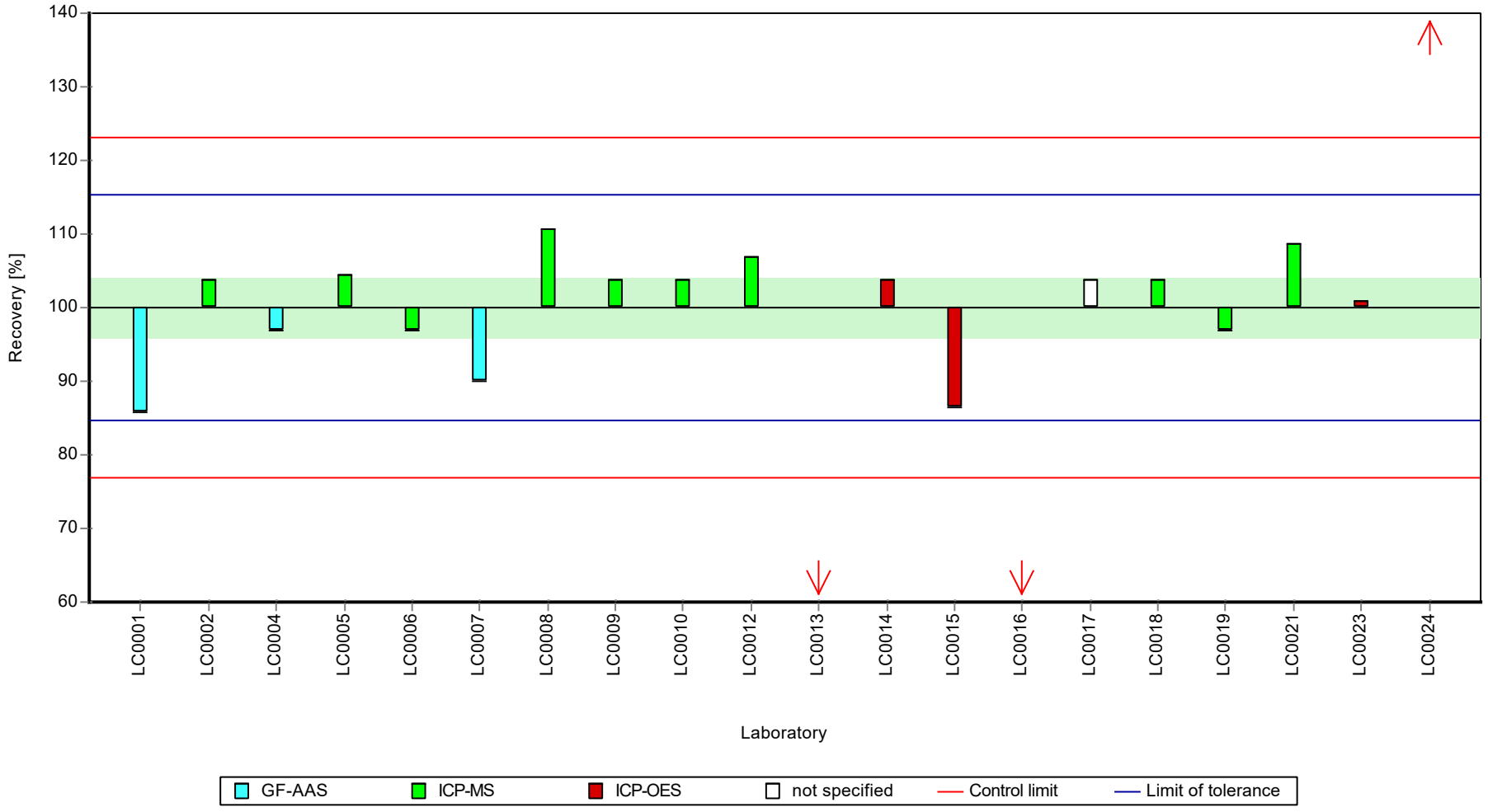
	all results	without outliers	Unit
Mean ± CI (99%)	0.00143 ± 0.000144	0.00145 ± 0.000076	mg/l
Minimum	0.001	0.00124	mg/l
Maximum	0.002	0.0016	mg/l
Standard deviation	0.000215	0.000106	mg/l
rel. standard deviation	15	7.27	%
n	20	17	-

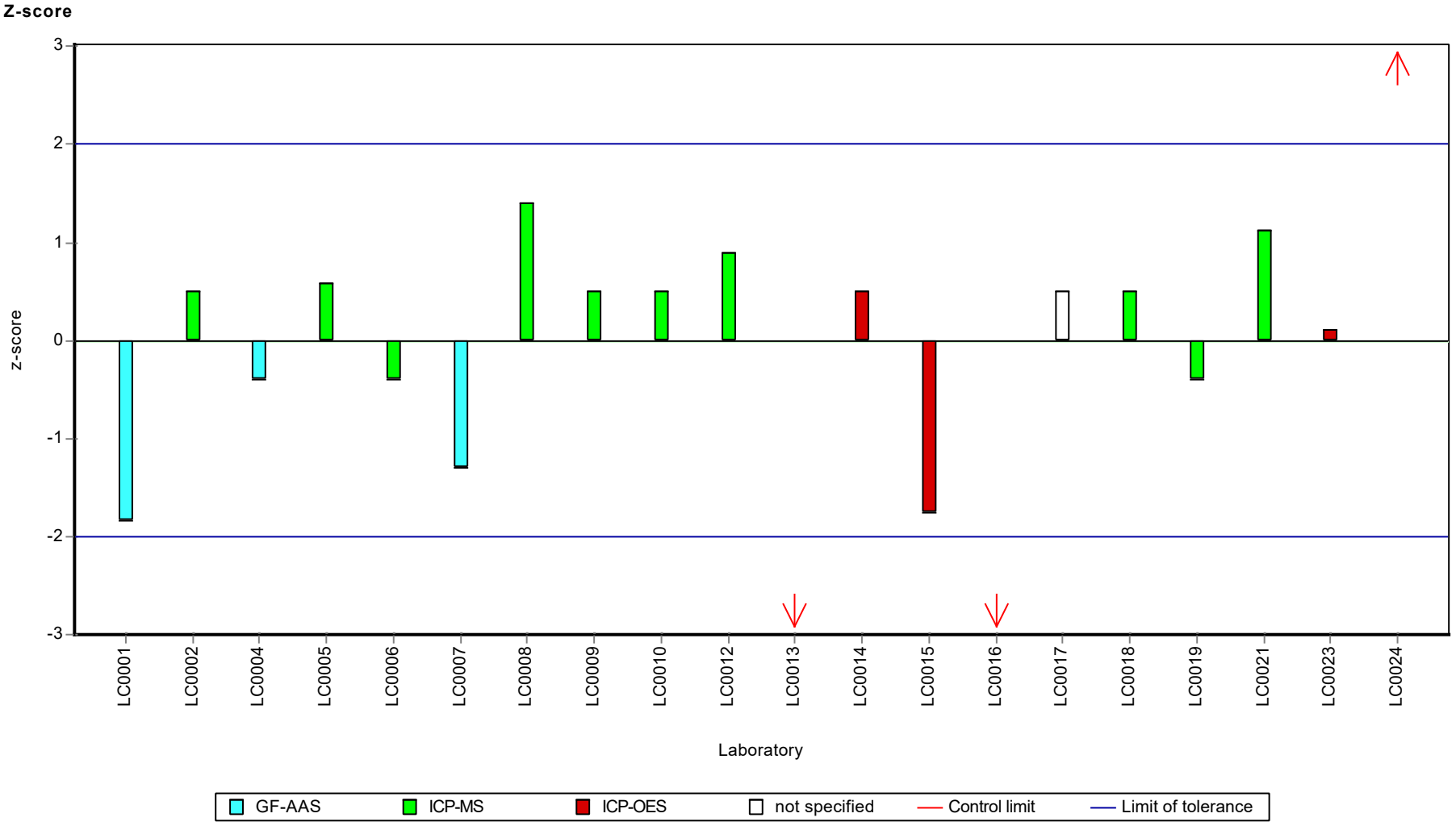
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0021
LC0023
LC0024
Laboratory
GF-AAS
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Chromium

Unit	mg/l
Assigned value ± U (k=2)	0.0954 ± 0.00205
Criterion	0.00496 (5.2 %)
Minimum - Maximum	0.085 - 0.103
Control test value ± U (k=2)	0.0928 ± 0.00371

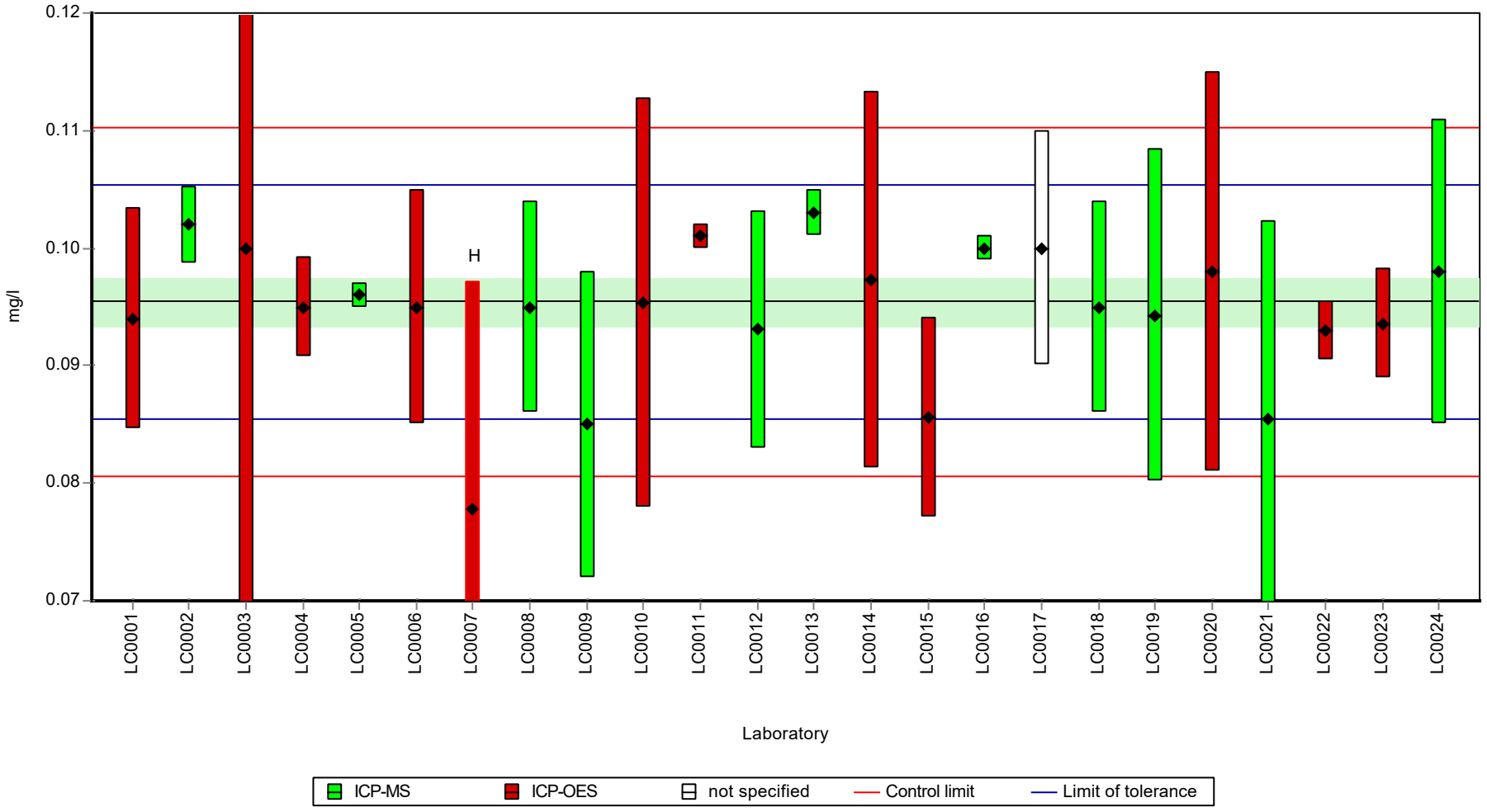
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.094	0.0094	98.5	-0.29	
LC0002	0.102	0.00326	107	1.33	
LC0003	0.1	0.05	105	0.92	
LC0004	0.095	0.0042	99.6	-0.08	
LC0005	0.096	0.001	101	0.12	
LC0006	0.095	0.01	99.6	-0.08	
LC0007	0.0778	0.0194	81.5	-3.55	H
LC0008	0.095	0.009	99.6	-0.08	
LC0009	0.085	0.013	89.1	-2.1	
LC0010	0.0953	0.0174	99.9	-0.02	
LC0011	0.101	0.001	106	1.12	
LC0012	0.0931	0.0101	97.6	-0.47	
LC0013	0.103	0.002	108	1.53	
LC0014	0.0973	0.016	102	0.38	
LC0015	0.0856	0.00856	89.7	-1.98	
LC0016	0.1	0.001	105	0.92	
LC0017	0.1	0.01	105	0.92	
LC0018	0.095	0.009	99.6	-0.08	
LC0019	0.0943	0.0141	98.8	-0.23	
LC0020	0.098	0.017	103	0.52	
LC0021	0.0855	0.0168	89.6	-2	
LC0022	0.093	0.0025	97.5	-0.49	
LC0023	0.09355	0.00468	98	-0.38	
LC0024	0.098	0.013	103	0.52	

Characteristics of parameter

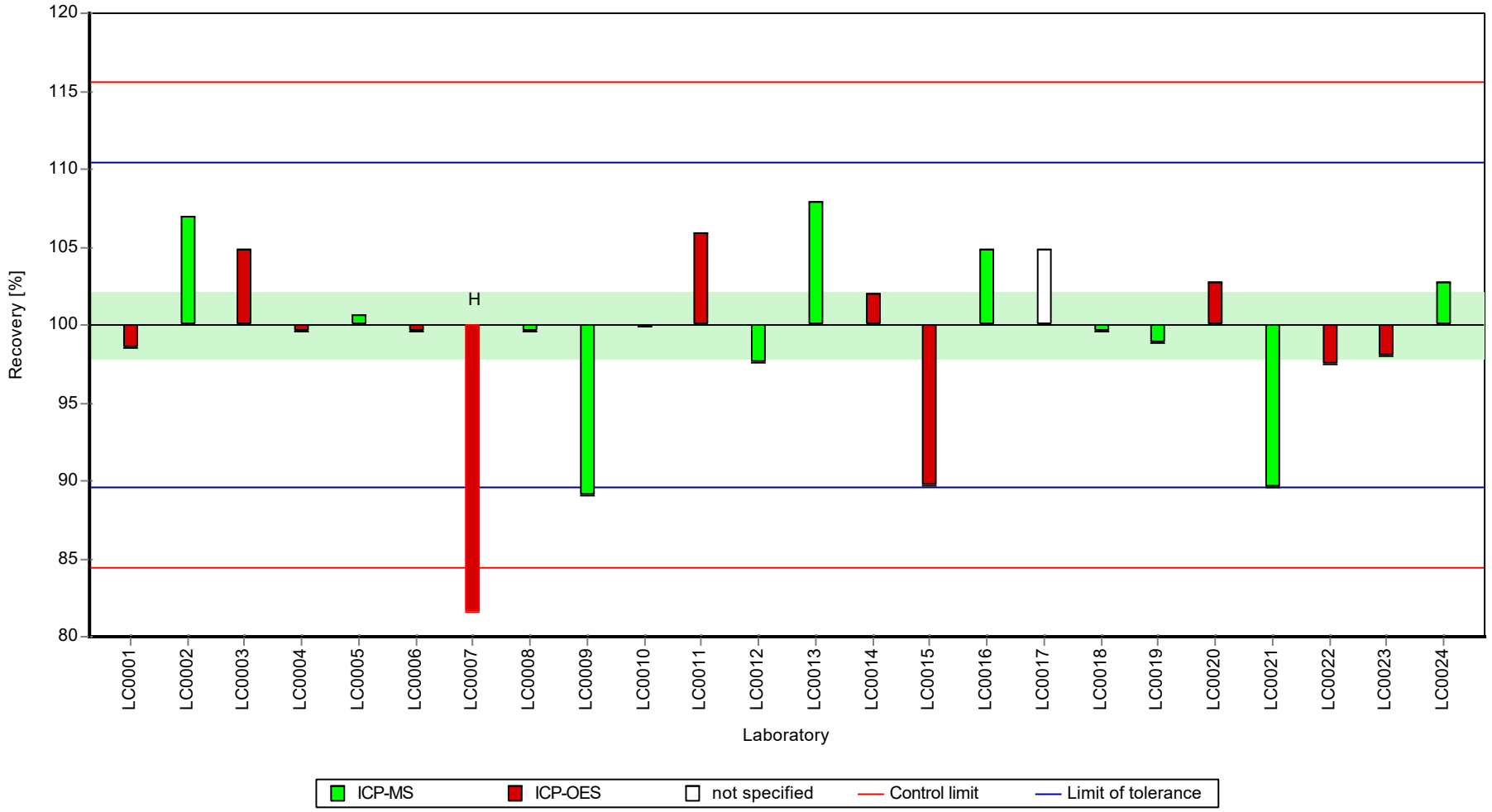
	all results	without outliers	Unit
Mean ± CI (99%)	0.0947 ± 0.00368	0.0954 ± 0.00308	mg/l
Minimum	0.0778	0.085	mg/l
Maximum	0.103	0.103	mg/l
Standard deviation	0.00601	0.00493	mg/l
rel. standard deviation	6.35	5.16	%
n	24	23	-

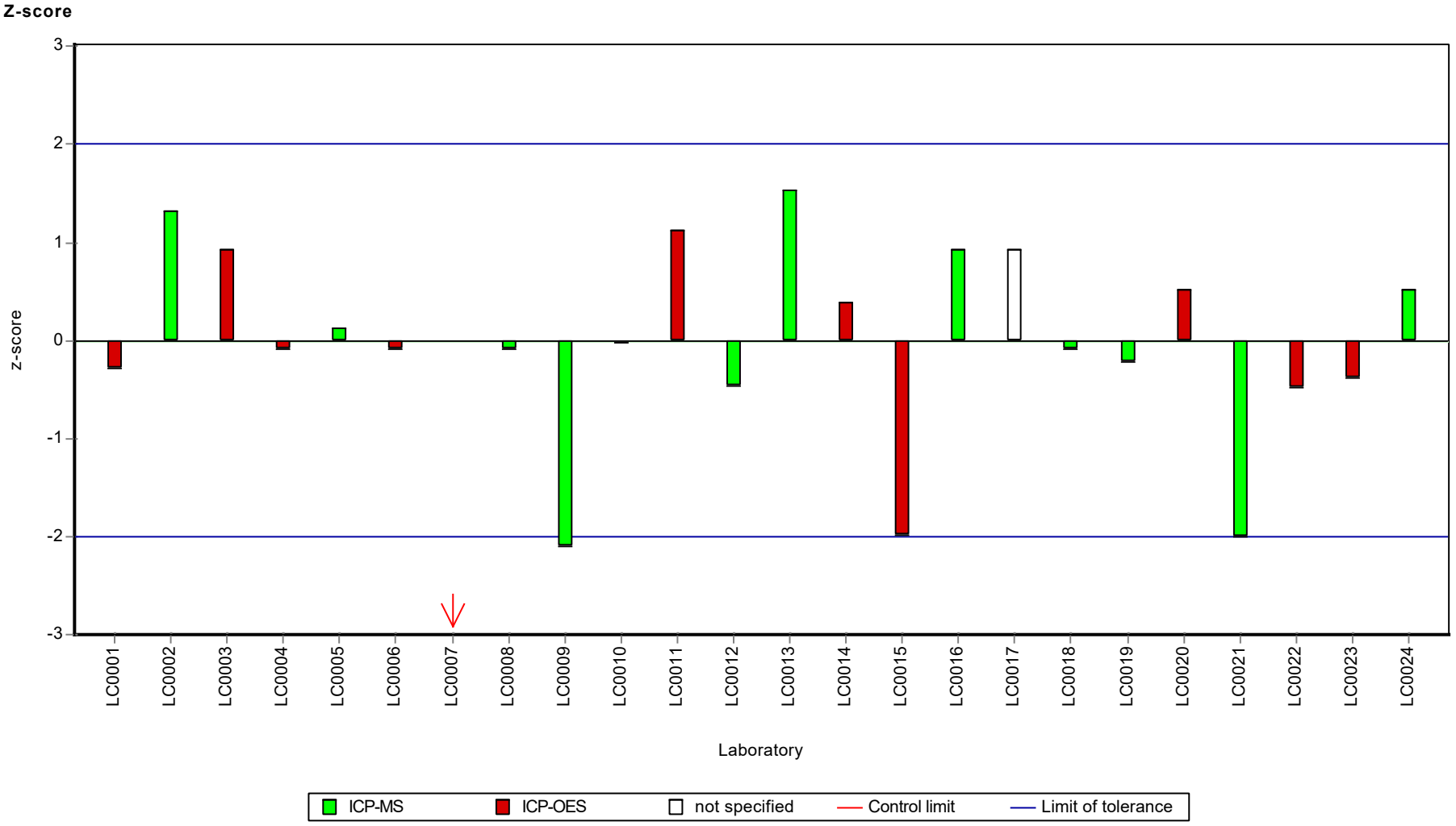
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Cobalt

Unit	mg/l
Assigned value ± U (k=2)	0.0109 ± 0.000134
Criterion	0.000547 (5 %)
Minimum - Maximum	0.0104 - 0.0116
Control test value ± U (k=2)	0.0107 ± 0.000536

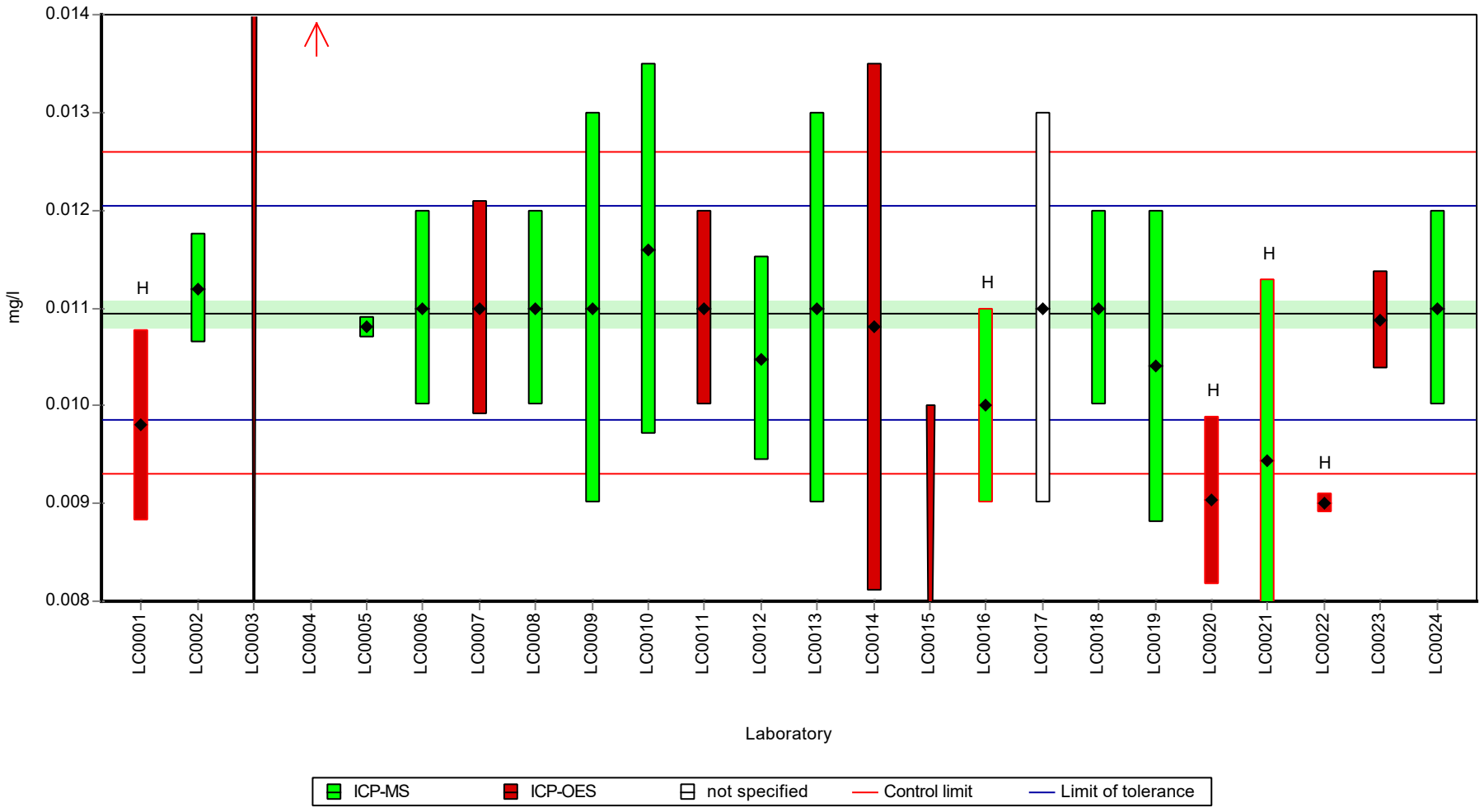
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0098	0.00098	89.5	-2.1	H
LC0002	0.0112	0.00056	102	0.46	
LC0003	< 0.02 (LOQ)	-	-	-	
LC0004	0.0147	0.00093	134	6.86	H
LC0005	0.0108	0.00011	98.7	-0.27	
LC0006	0.011	0.001	100	0.1	
LC0007	0.011	0.0011	100	0.1	
LC0008	0.011	0.001	100	0.1	
LC0009	0.011	0.002	100	0.1	
LC0010	0.0116	0.0019	106	1.19	
LC0011	0.011	0.001	100	0.1	
LC0012	0.01048	0.00105	95.7	-0.85	
LC0013	0.011	0.002	100	0.1	
LC0014	0.0108	0.0027	98.7	-0.27	
LC0015	< 0.01 (LOQ)	-	-	-	FN
LC0016	0.01	0.001	91.3	-1.73	H
LC0017	0.011	0.002	100	0.1	
LC0018	0.011	0.001	100	0.1	
LC0019	0.0104	0.0016	95	-1	
LC0020	0.00903	0.00086	82.5	-3.5	H
LC0021	0.00944	0.00185	86.2	-2.75	H
LC0022	0.009	0.0001	82.2	-3.56	H
LC0023	0.01088	0.0005	99.4	-0.12	
LC0024	0.011	0.001	100	0.1	

Characteristics of parameter

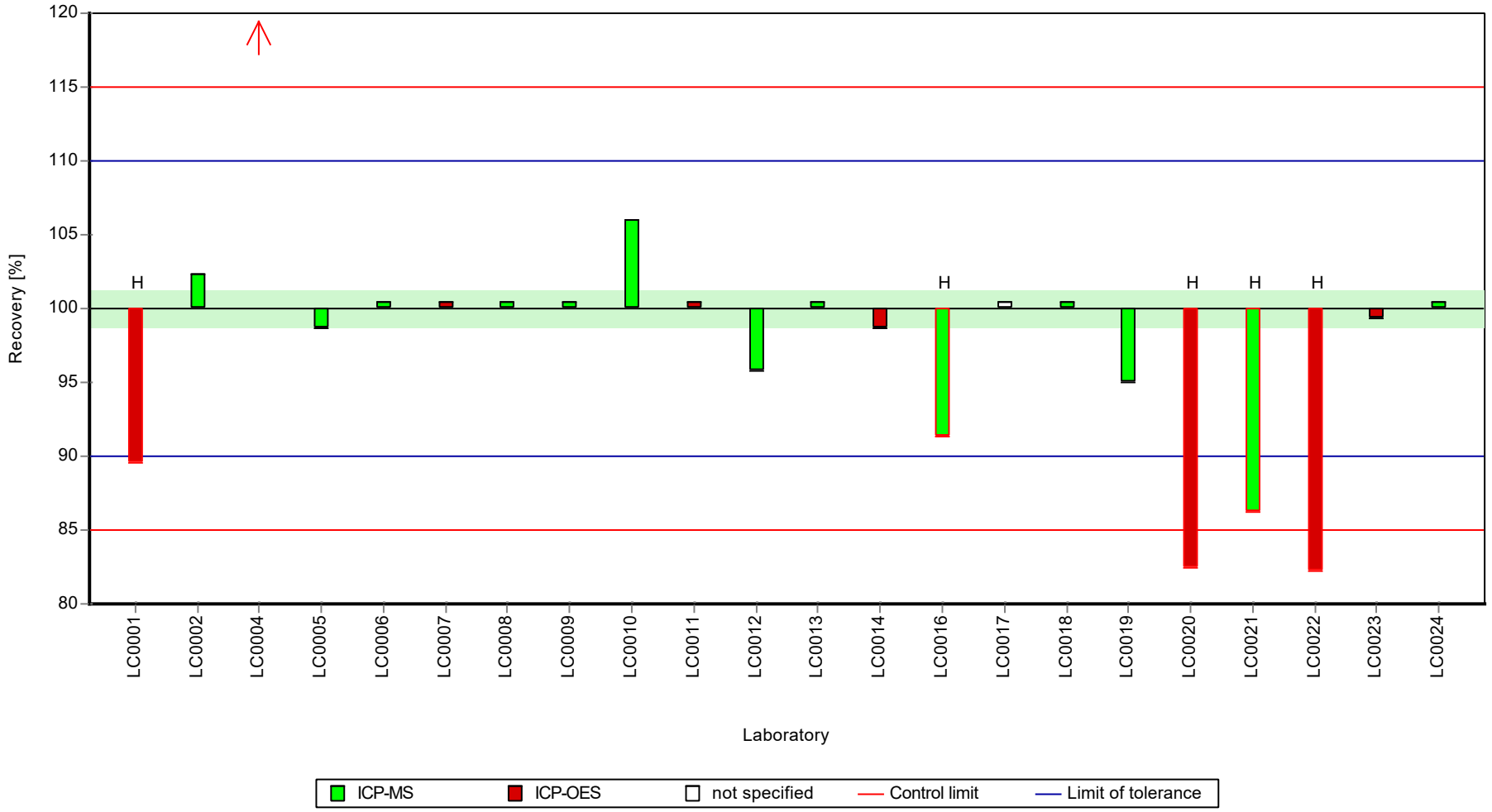
	all results	without outliers	Unit
Mean ± CI (99%)	0.0108 ± 0.000718	0.0109 ± 0.000201	mg/l
Minimum	0.009	0.0104	mg/l
Maximum	0.0147	0.0116	mg/l
Standard deviation	0.00112	0.000268	mg/l
rel. standard deviation	10.4	2.45	%
n	22	16	-

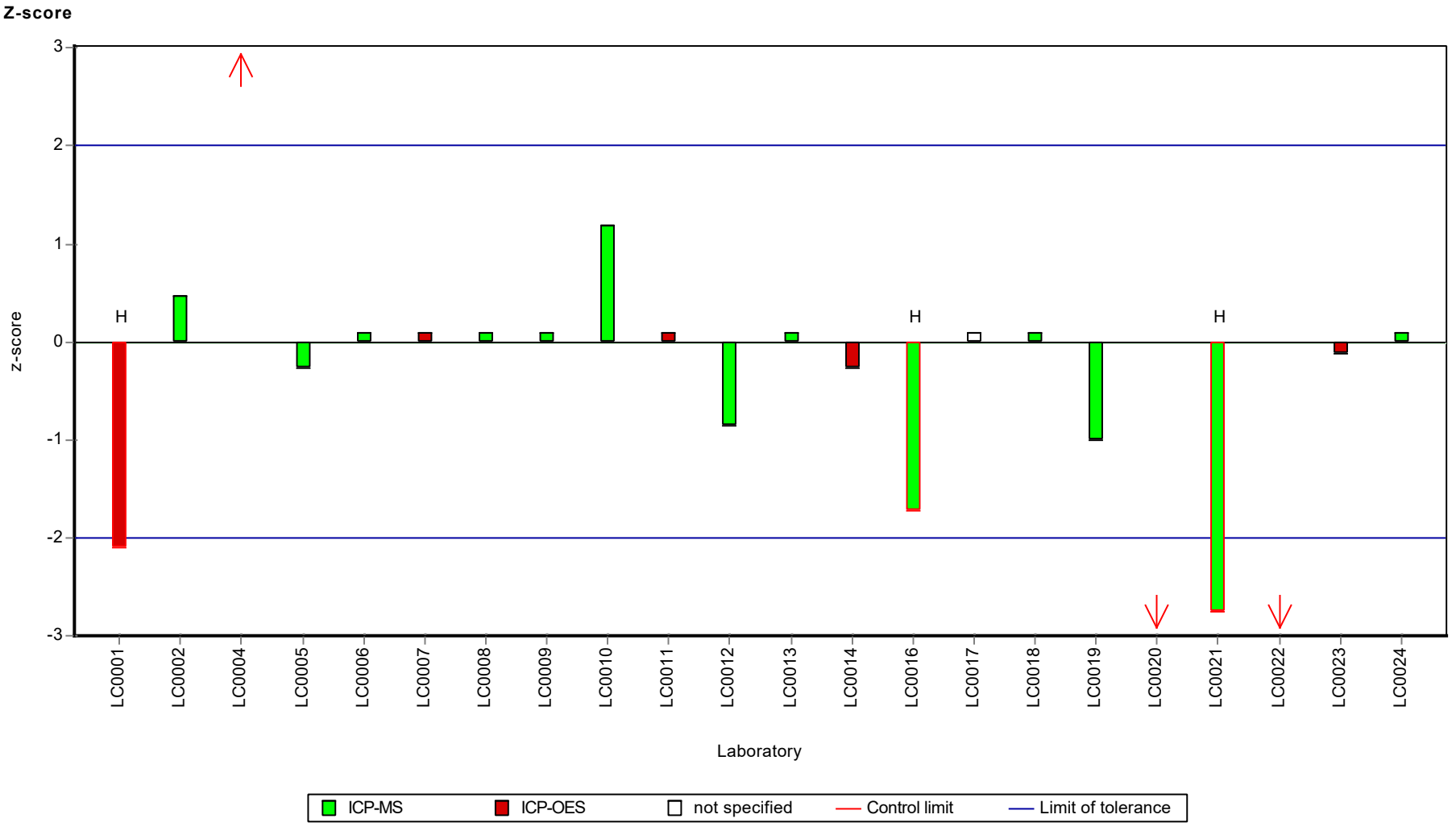
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
H
H
H
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Copper

Unit	mg/l
Assigned value ± U (k=2)	0.108 ± 0.00179
Criterion	0.00541 (5 %)
Minimum - Maximum	0.0995 - 0.115
Control test value ± U (k=2)	0.105 ± 0.0084

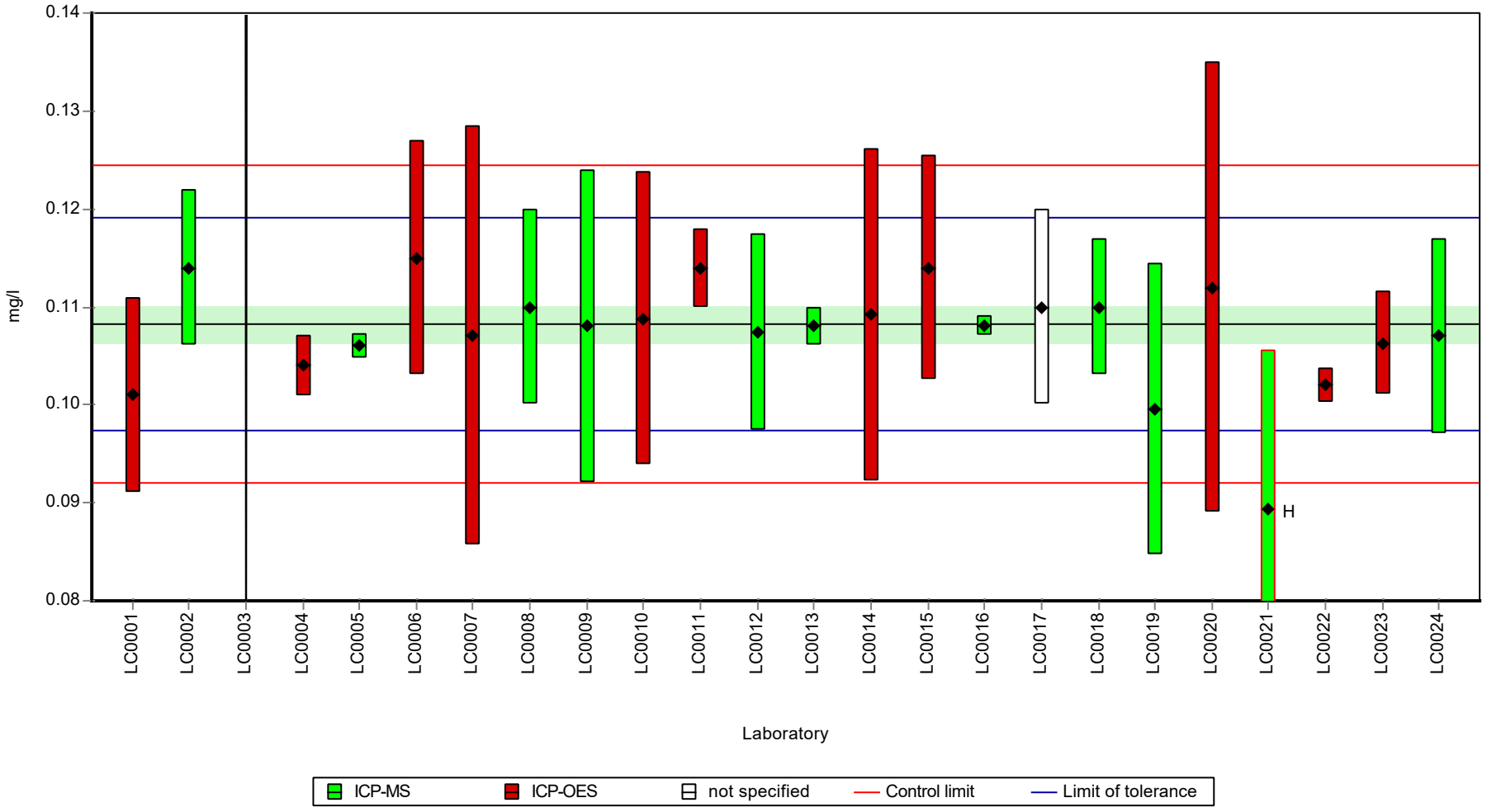
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.101	0.01	93.3	-1.34	
LC0002	0.114	0.008	105	1.07	
LC0003	< 0.6 (LOQ)	-	-	-	
LC0004	0.104	0.0031	96.1	-0.78	
LC0005	0.106	0.0012	97.9	-0.41	
LC0006	0.115	0.012	106	1.25	
LC0007	0.107	0.0214	98.9	-0.23	
LC0008	0.11	0.01	102	0.33	
LC0009	0.108	0.016	99.8	-0.04	
LC0010	0.1088	0.015	101	0.1	
LC0011	0.114	0.004	105	1.07	
LC0012	0.1074	0.0101	99.2	-0.15	
LC0013	0.108	0.002	99.8	-0.04	
LC0014	0.1092	0.017	101	0.18	
LC0015	0.114	0.0114	105	1.07	
LC0016	0.108	0.001	99.8	-0.04	
LC0017	0.11	0.01	102	0.33	
LC0018	0.11	0.007	102	0.33	
LC0019	0.0995	0.0149	91.9	-1.61	
LC0020	0.112	0.023	103	0.69	
LC0021	0.0893	0.0162	82.5	-3.5	H
LC0022	0.102	0.0018	94.2	-1.15	
LC0023	0.1063	0.00531	98.2	-0.36	
LC0024	0.107	0.01	98.9	-0.23	

Characteristics of parameter

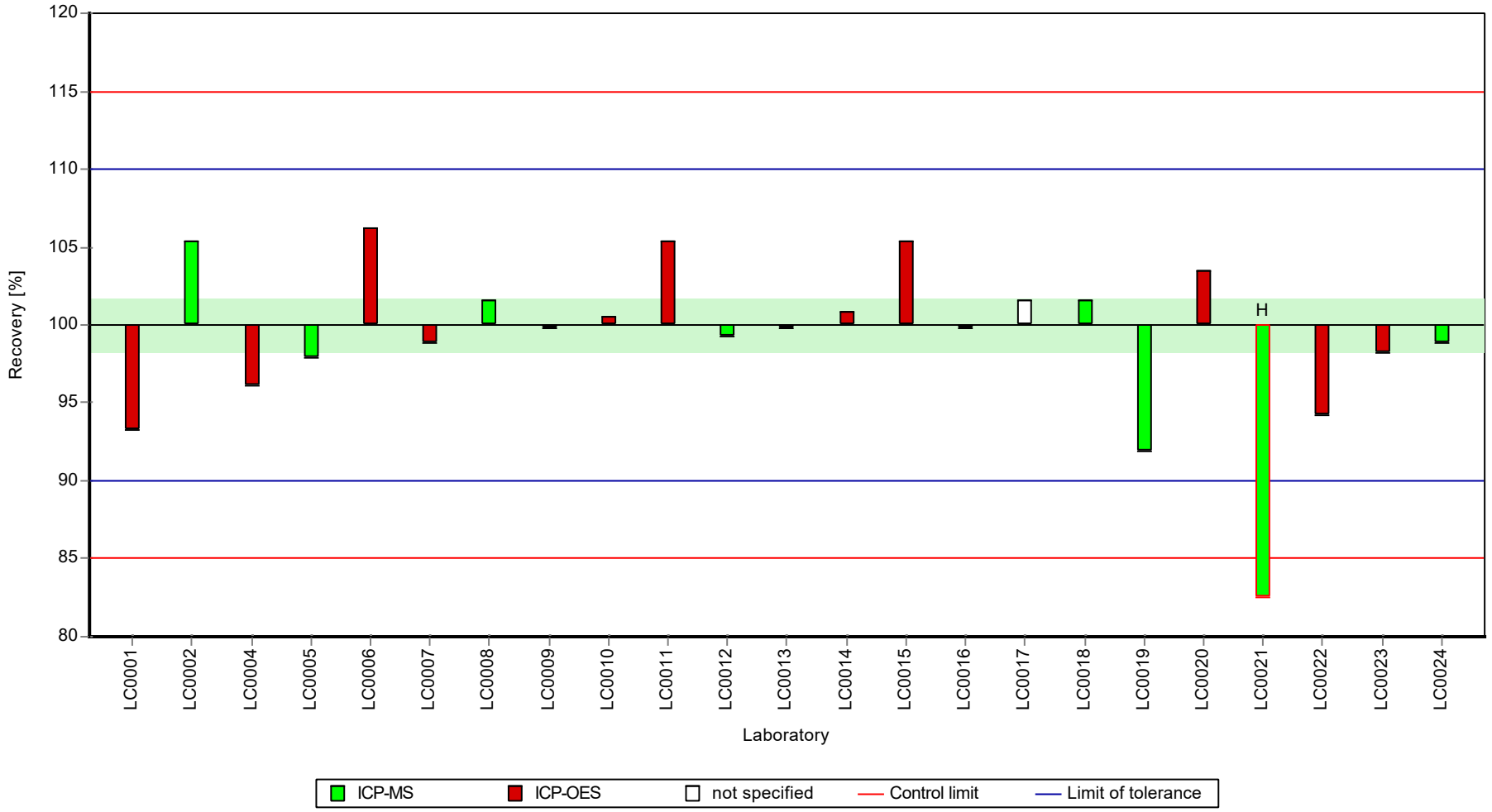
	all results	without outliers	Unit
Mean ± CI (99%)	0.107 ± 0.00356	0.108 ± 0.00268	mg/l
Minimum	0.0893	0.0995	mg/l
Maximum	0.115	0.115	mg/l
Standard deviation	0.00569	0.00419	mg/l
rel. standard deviation	5.29	3.87	%
n	23	22	-

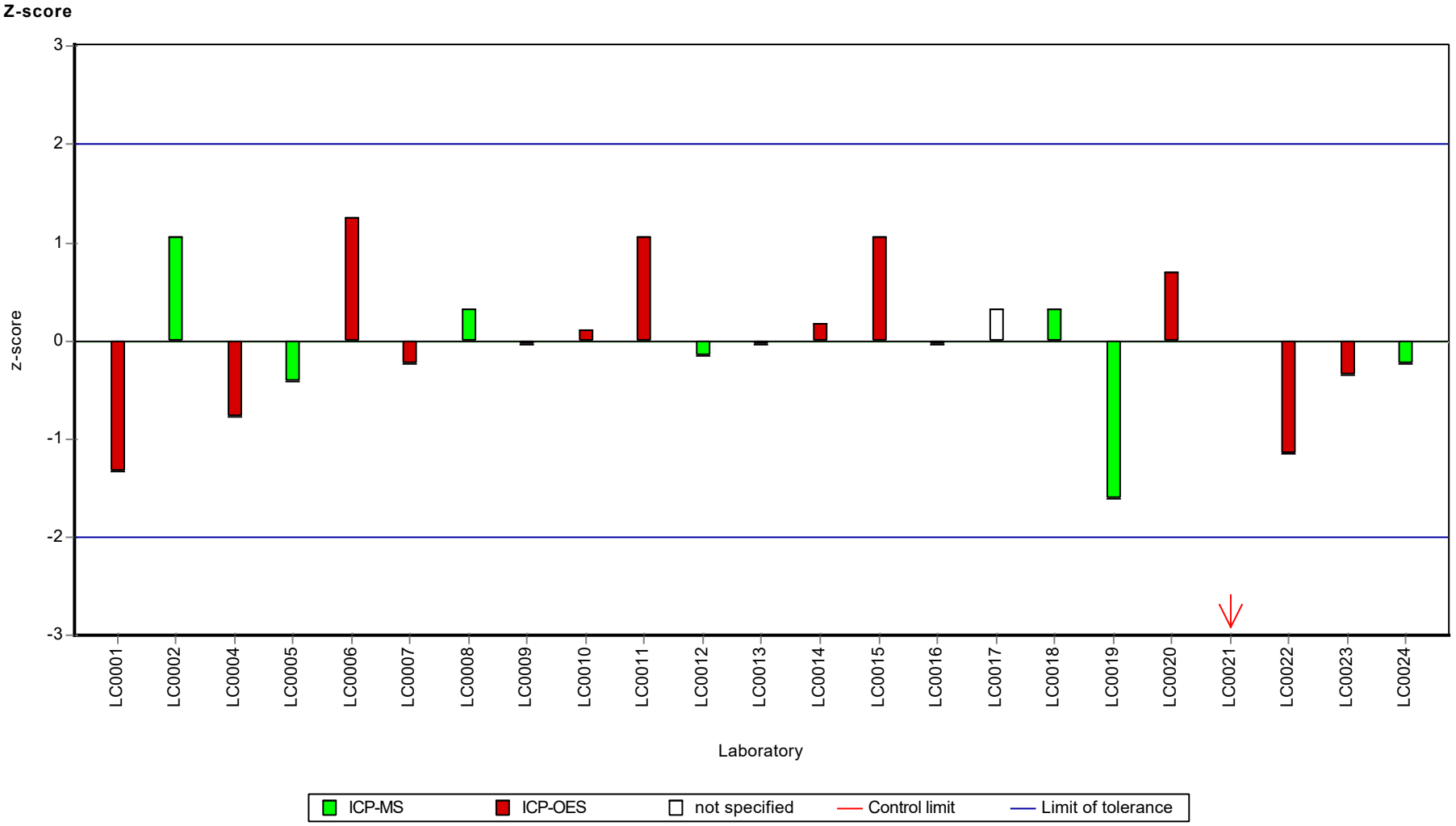
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
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LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Iron

Unit	mg/l
Assigned value ± U (k=2)	0.23 ± 0.00474
Criterion	0.0115 (5 %)
Minimum - Maximum	0.21 - 0.251
Control test value ± U (k=2)	0.227 ± 0.0182

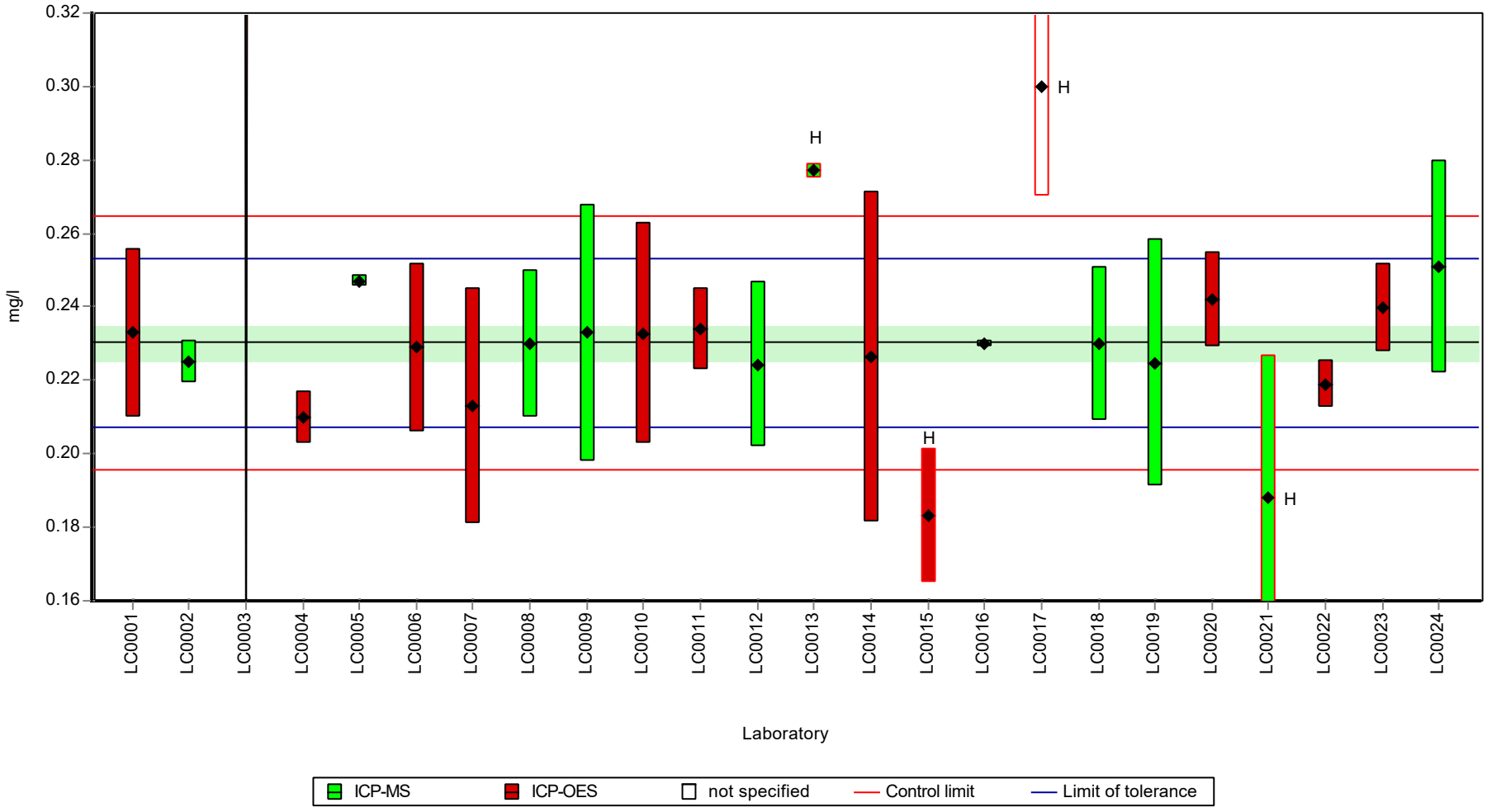
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.233	0.023	101	0.24	
LC0002	0.225	0.0059	97.7	-0.45	
LC0003	< 1 (LOQ)	-	-	-	
LC0004	0.21	0.0072	91.2	-1.76	
LC0005	0.247	0.0015	107	1.46	
LC0006	0.229	0.023	99.5	-0.1	
LC0007	0.213	0.032	92.5	-1.5	
LC0008	0.23	0.02	99.9	-0.02	
LC0009	0.233	0.035	101	0.24	
LC0010	0.2328	0.03	101	0.23	
LC0011	0.234	0.011	102	0.33	
LC0012	0.2244	0.0224	97.5	-0.51	
LC0013	0.277	0.002	120	4.06	H
LC0014	0.2264	0.045	98.3	-0.33	
LC0015	0.183	0.0183	79.5	-4.1	H
LC0016	0.23	0.001	99.9	-0.02	
LC0017	0.3	0.03	130	6.06	H
LC0018	0.23	0.021	99.9	-0.02	
LC0019	0.2247	0.0337	97.6	-0.48	
LC0020	0.242	0.0131	105	1.02	
LC0021	0.188	0.039	81.7	-3.67	H
LC0022	0.219	0.0063	95.1	-0.97	
LC0023	0.2397	0.01199	104	0.82	
LC0024	0.251	0.029	109	1.81	

Characteristics of parameter

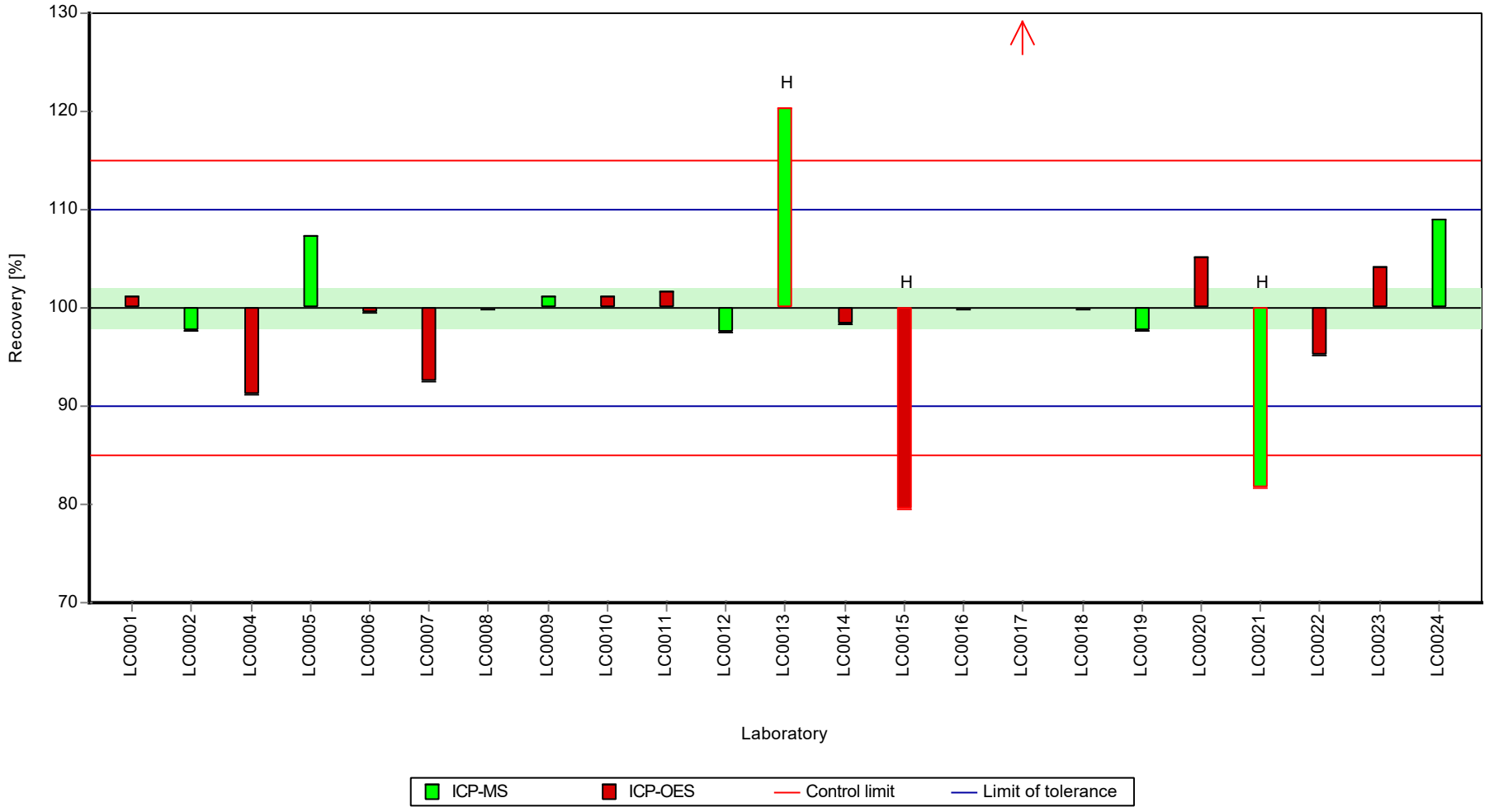
	all results	without outliers	Unit
Mean ± CI (99%)	0.231 ± 0.0152	0.23 ± 0.0071	mg/l
Minimum	0.183	0.21	mg/l
Maximum	0.3	0.251	mg/l
Standard deviation	0.0243	0.0103	mg/l
rel. standard deviation	10.5	4.48	%
n	23	19	-

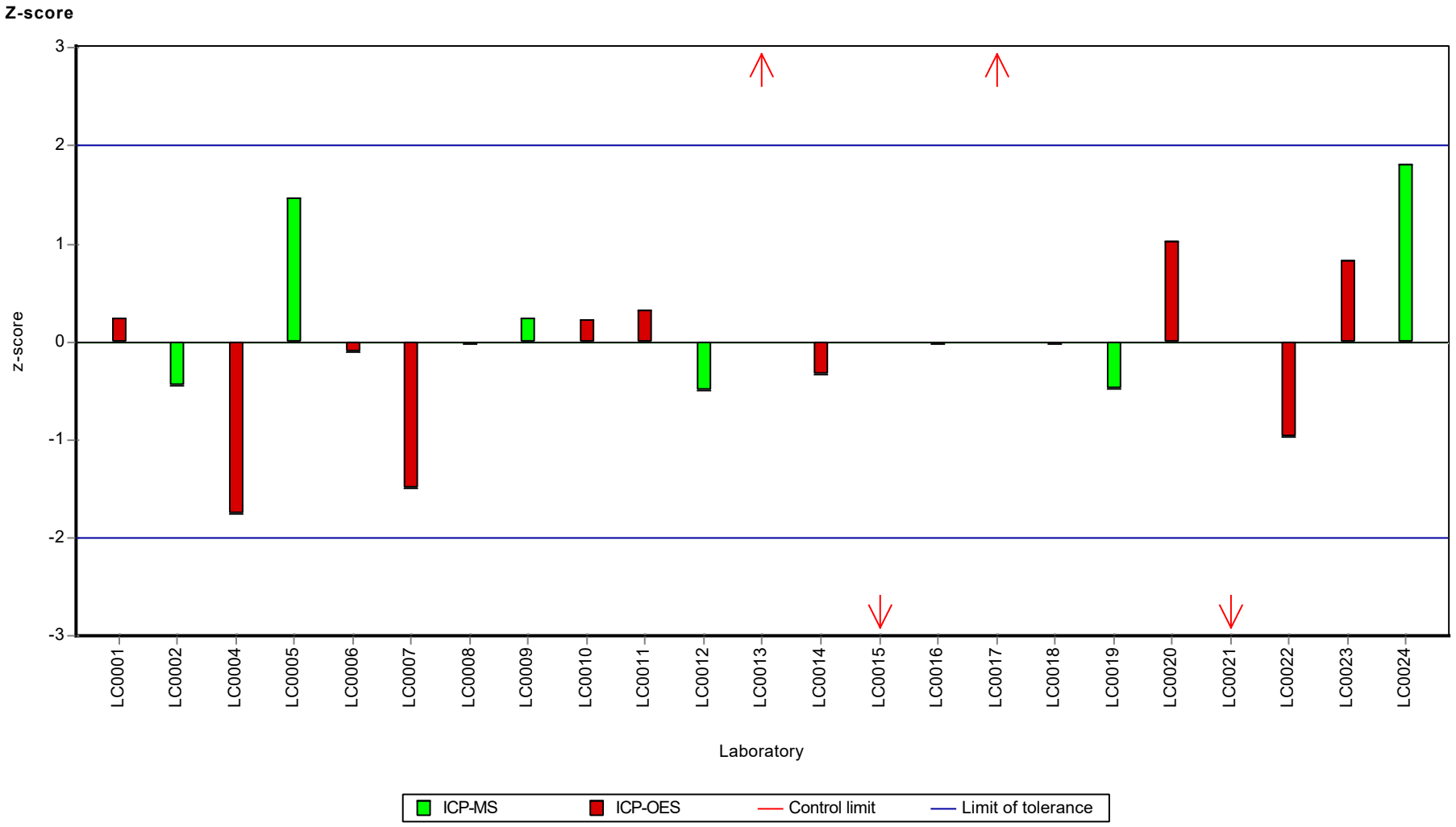
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
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LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
Control limit
Limit of tolerance

Parameter oriented report

AB08

Lead

Unit	mg/l
Assigned value ± U (k=2)	0.0109 ± 0.000279
Criterion	0.000588 (5.4 %)
Minimum - Maximum	0.0098 - 0.0122
Control test value ± U (k=2)	0.0112 ± 0.000782

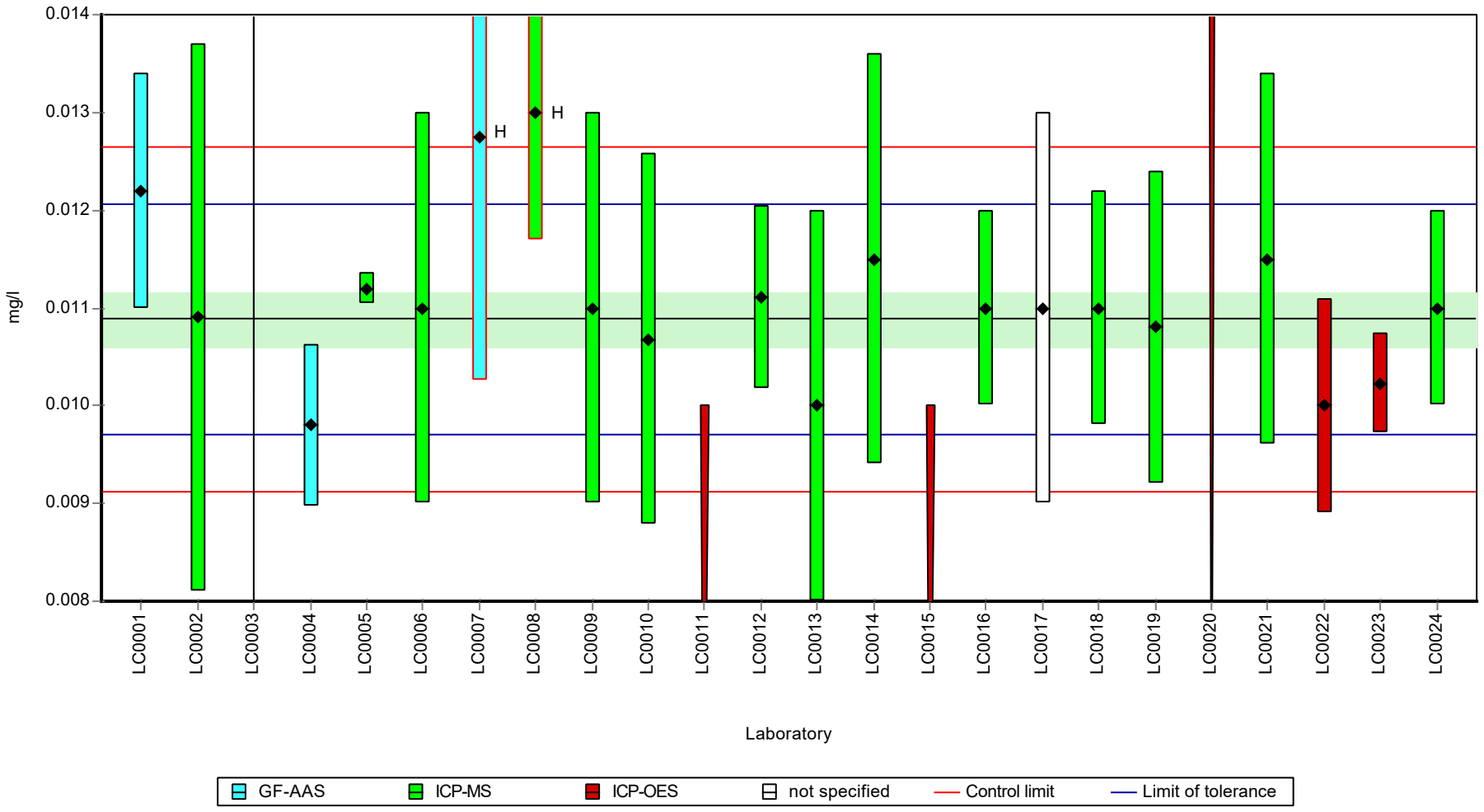
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0122	0.0012	112	2.24	
LC0002	0.0109	0.0028	100	0.03	
LC0003	< 0.6 (LOQ)	-	-	-	
LC0004	0.0098	0.00083	90	-1.85	
LC0005	0.0112	0.00016	103	0.54	
LC0006	0.011	0.002	101	0.2	
LC0007	0.01275	0.0025	117	3.17	H
LC0008	0.013	0.0013	119	3.6	H
LC0009	0.011	0.002	101	0.2	
LC0010	0.01068	0.0019	98.1	-0.35	
LC0011	< 0.01 (LOQ)	-	-	-	
LC0012	0.01111	0.00093	102	0.38	
LC0013	0.01	0.002	91.9	-1.5	
LC0014	0.0115	0.0021	106	1.05	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	0.011	0.001	101	0.2	
LC0017	0.011	0.002	101	0.2	
LC0018	0.011	0.0012	101	0.2	
LC0019	0.0108	0.0016	99.2	-0.14	
LC0020	< 0.02 (LOQ)	-	-	-	
LC0021	0.0115	0.0019	106	1.05	
LC0022	0.01	0.0011	91.9	-1.5	
LC0023	0.01023	0.00051	94	-1.11	
LC0024	0.011	0.001	101	0.2	

Characteristics of parameter

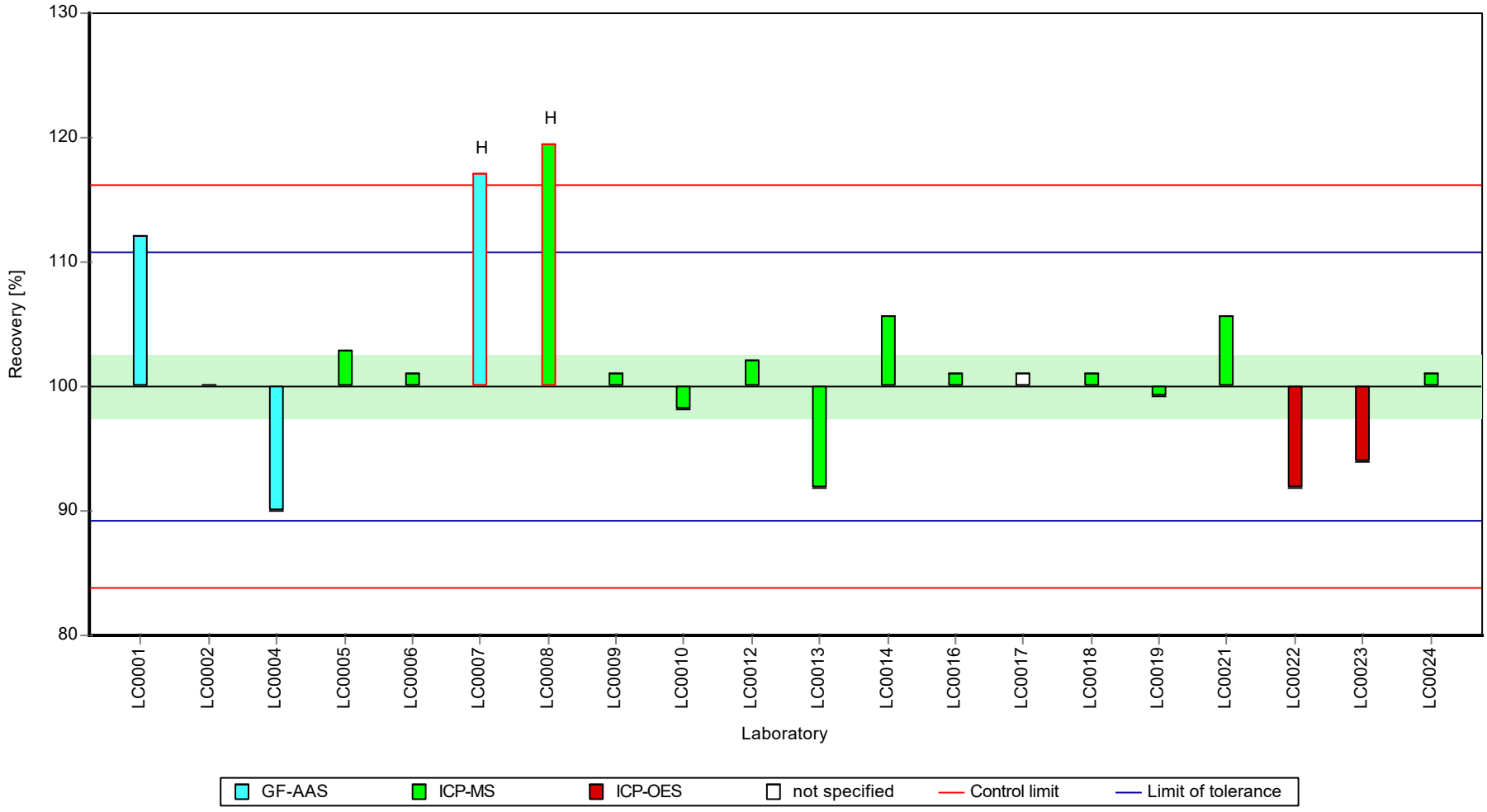
	all results	without outliers	Unit
Mean ± CI (99%)	0.0111 ± 0.000557	0.0109 ± 0.000418	mg/l
Minimum	0.0098	0.0098	mg/l
Maximum	0.013	0.0122	mg/l
Standard deviation	0.00083	0.000591	mg/l
rel. standard deviation	7.49	5.43	%
n	20	18	-

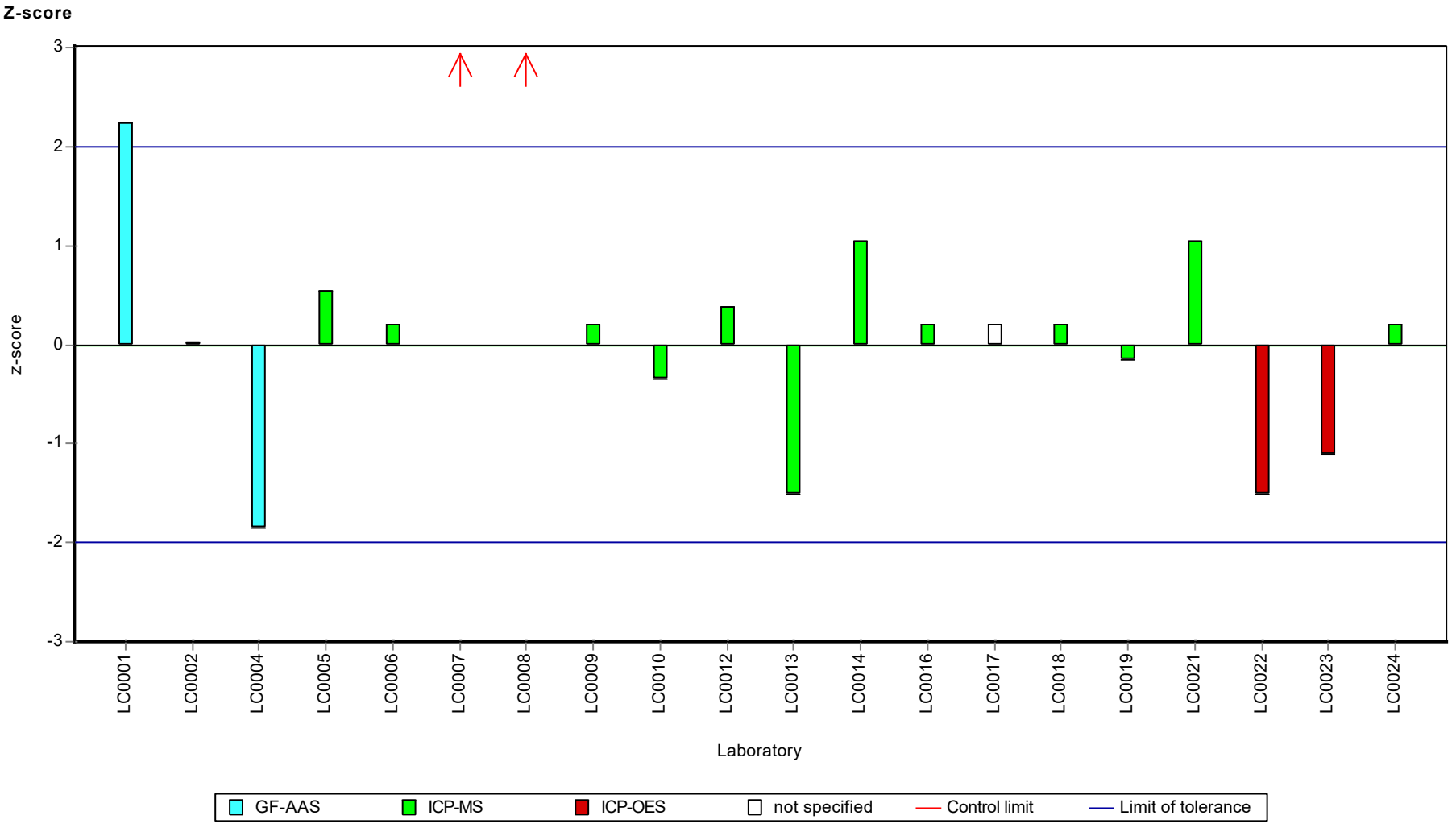
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0016
LC0017
LC0018
LC0019
LC0021
LC0022
LC0023
LC0024
Laboratory
GF-AAS
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08 Hg

Mercury

Unit	mg/l
Assigned value ± U (k=2)	0.0000989 ± 0.000007
Criterion	0.000009 (9.1 %)
Minimum - Maximum	0.000089 - 0.00023
Control test value ± U (k=2)	0.0000855 ± 0.00000855

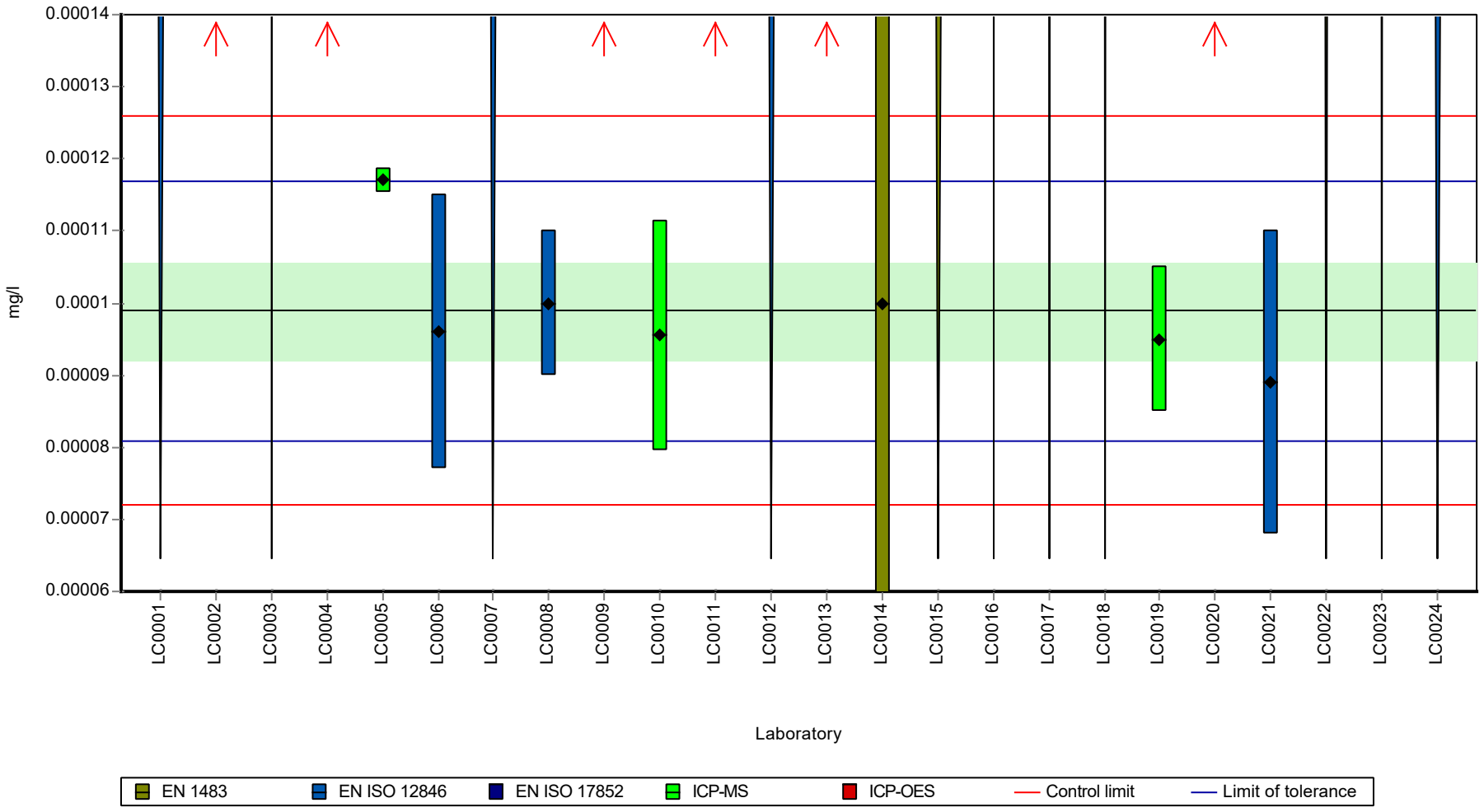
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.0002 (LOQ)	-	-	-	
LC0002	0.00017	0.00001	171	7.79	
LC0003	< 0.02 (LOQ)	-	-	-	
LC0004	0.00023	0.00002	232	14.6	
LC0005	0.00012	0.00000	118	2.01	
LC0006	0.0001	0.00002	97	-0.33	
LC0007	< 0.0002 (LOQ)	-	-	-	
LC0008	0.0001	0.00001	101	0.12	
LC0009	0.0002	0.00003	202	11.2	
LC0010	0.0001	0.00002	96.5	-0.38	
LC0011	0.00052	0.00012	526	46.8	H
LC0012	< 0.0002 (LOQ)	-	-	-	
LC0013	0.0042	0.0001	4250	456	H
LC0014	0.0001	0.00005	101	0.12	
LC0015	< 0.0002 (LOQ)	-	-	-	
LC0016	< 0.01 (LOQ)	-	-	-	
LC0017	< 0.5 (LOQ)	-	-	-	
LC0018	< 0.001 (LOQ)	-	-	-	
LC0019	0.0001	0.00001	96	-0.44	
LC0020	0.0004	0.00006	404	33.5	H
LC0021	0.00009	0.00002	90	-1.1	
LC0022	< 0.0004 (LOQ)	-	-	-	
LC0023	< 0.001 (LOQ)	-	-	-	
LC0024	< 0.0002 (LOQ)	-	-	-	

Characteristics of parameter

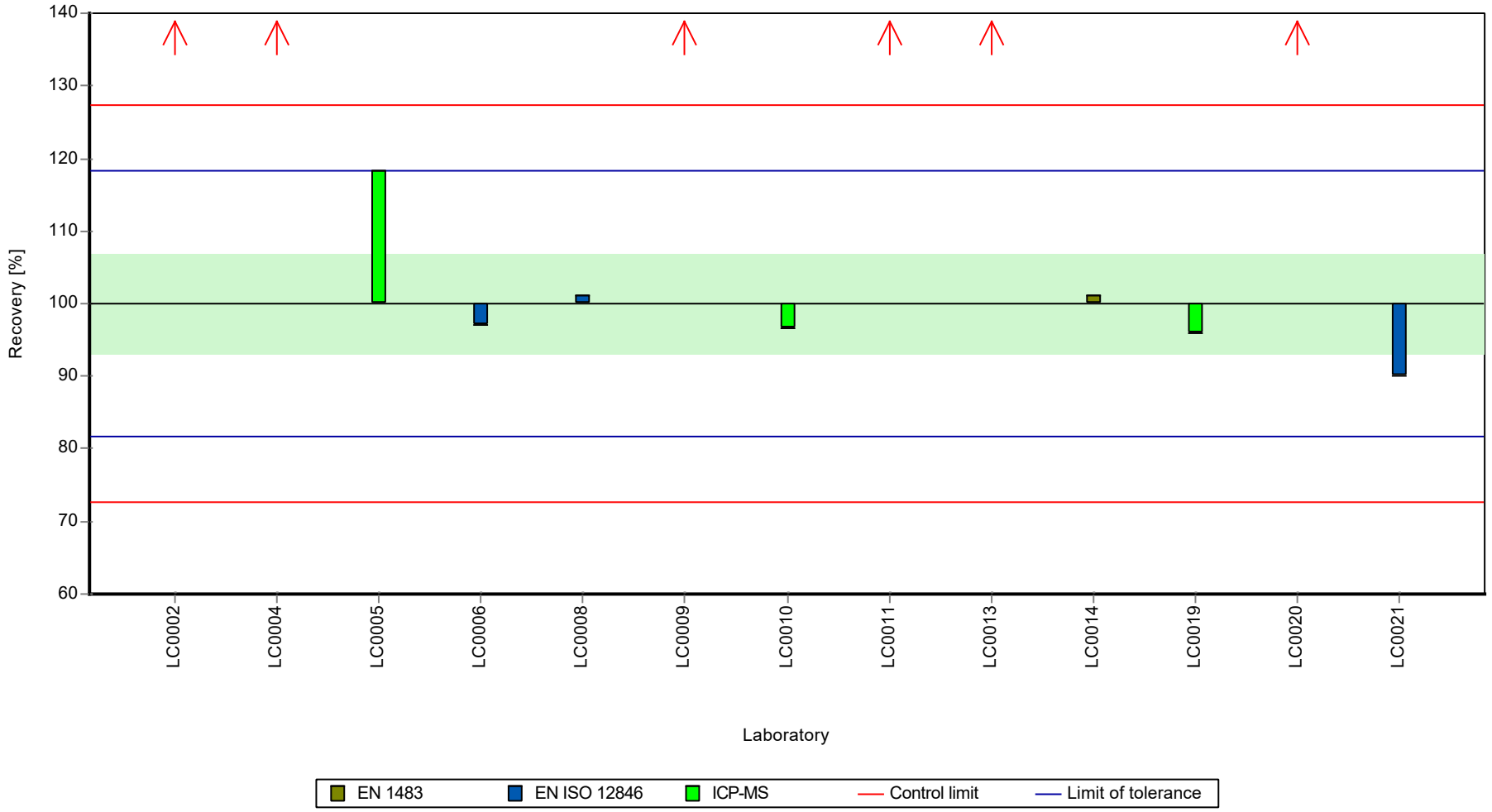
	all results	without outliers	Unit
Mean ± CI (99%)	0.000493 ± 0.000933	0.000129 ± 0.000048	mg/l
Minimum	0.000089	0.000089	mg/l
Maximum	0.0042	0.00023	mg/l
Standard deviation	0.00112	0.0000512	mg/l
rel. standard deviation	227	39.7	%
n	13	10	-

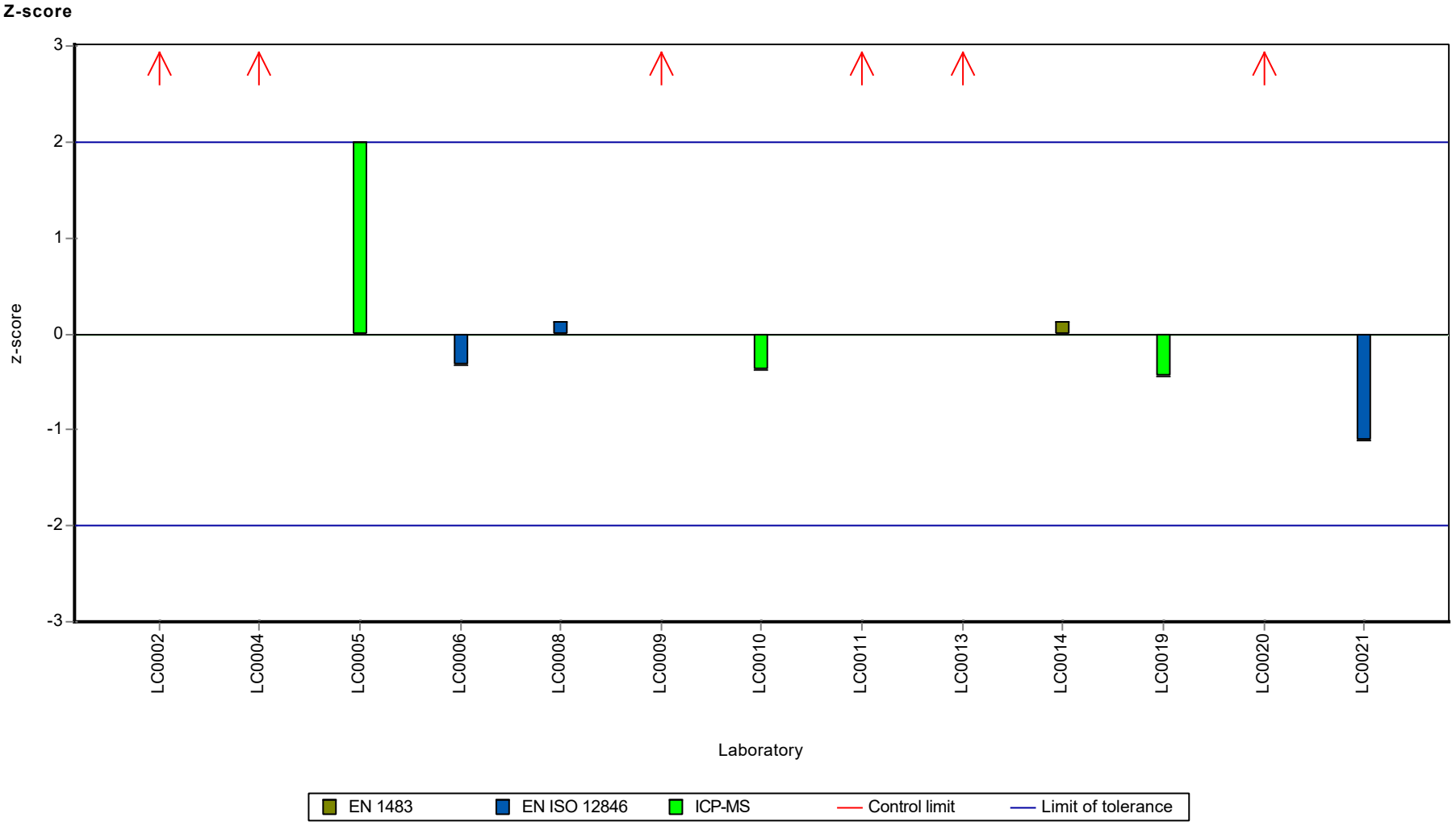
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0002
LC0004
LC0005
LC0006
LC0008
LC0009
LC0010
LC0011
LC0013
LC0014
LC0019
LC0020
LC0021
Laboratory
EN 1483
EN ISO 12846
ICP-MS
Control limit
Limit of tolerance

Parameter oriented report

AB08

Molybdenum

Unit	mg/l
Assigned value ± U (k=2)	0.014 ± 0.000441
Criterion	0.000908 (6.5 %)
Minimum - Maximum	0.0122 - 0.016
Control test value ± U (k=2)	0.0139 ± 0.000694

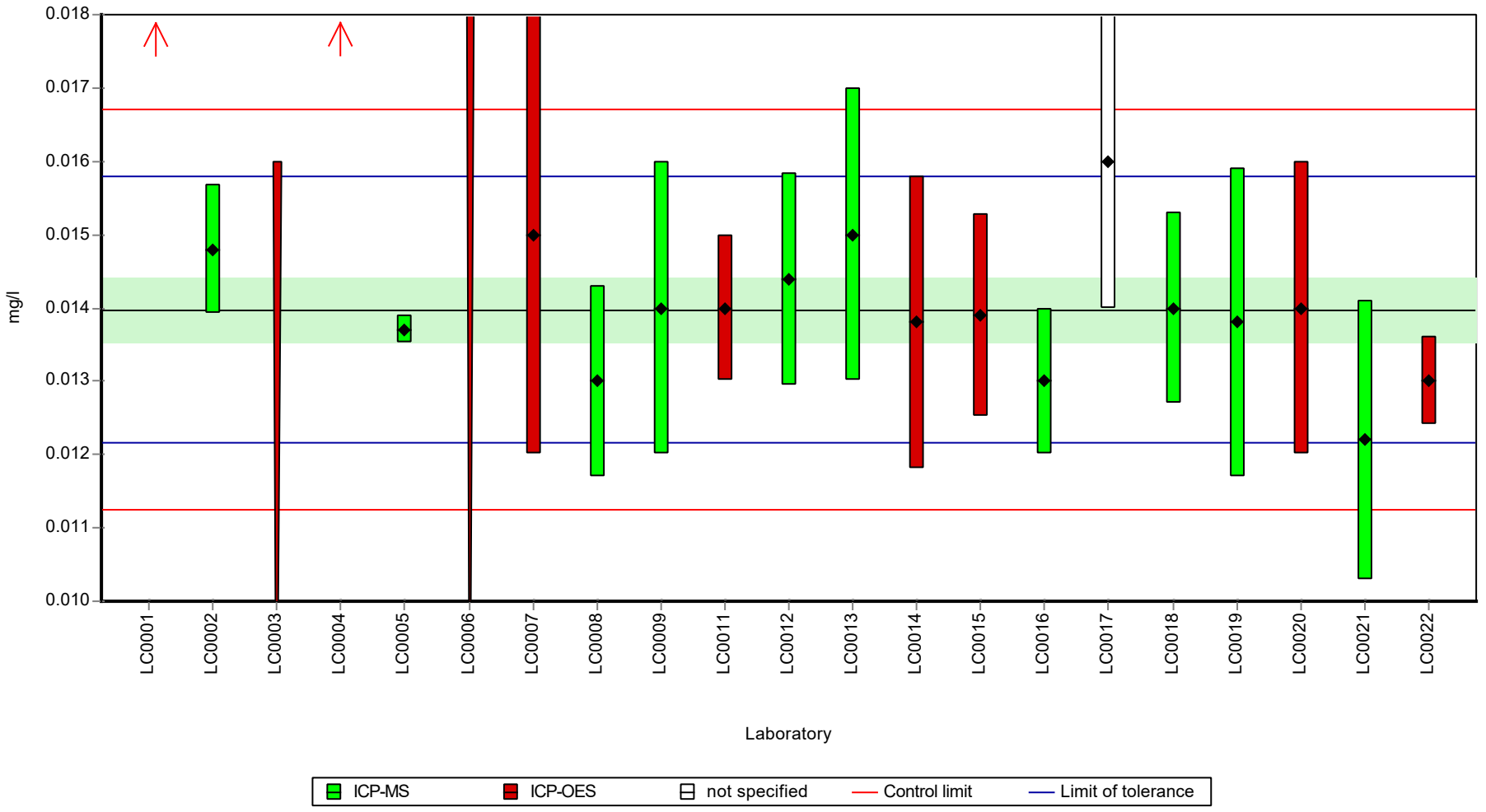
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0182	0.0018	130	4.65	H
LC0002	0.0148	0.00088	106	0.91	
LC0003	< 0.016 (LOQ)	-	-	-	
LC0004	0.02	0.00082	143	6.63	H
LC0005	0.0137	0.00019	98	-0.3	
LC0006	< 0.02 (LOQ)	-	-	-	
LC0007	0.015	0.003	107	1.13	
LC0008	0.013	0.0013	93	-1.07	
LC0009	0.014	0.002	100	0.03	
LC0010	-	-	-	-	
LC0011	0.014	0.001	100	0.03	
LC0012	0.01439	0.00144	103	0.46	
LC0013	0.015	0.002	107	1.13	
LC0014	0.0138	0.002	98.7	-0.19	
LC0015	0.0139	0.00139	99.5	-0.08	
LC0016	0.013	0.001	93	-1.07	
LC0017	0.016	0.002	114	2.23	
LC0018	0.014	0.0013	100	0.03	
LC0019	0.0138	0.0021	98.7	-0.19	
LC0020	0.014	0.002	100	0.03	
LC0021	0.0122	0.0019	87.3	-1.96	
LC0022	0.013	0.0006	93	-1.07	
LC0023	-	-	-	-	
LC0024	-	-	-	-	

Characteristics of parameter

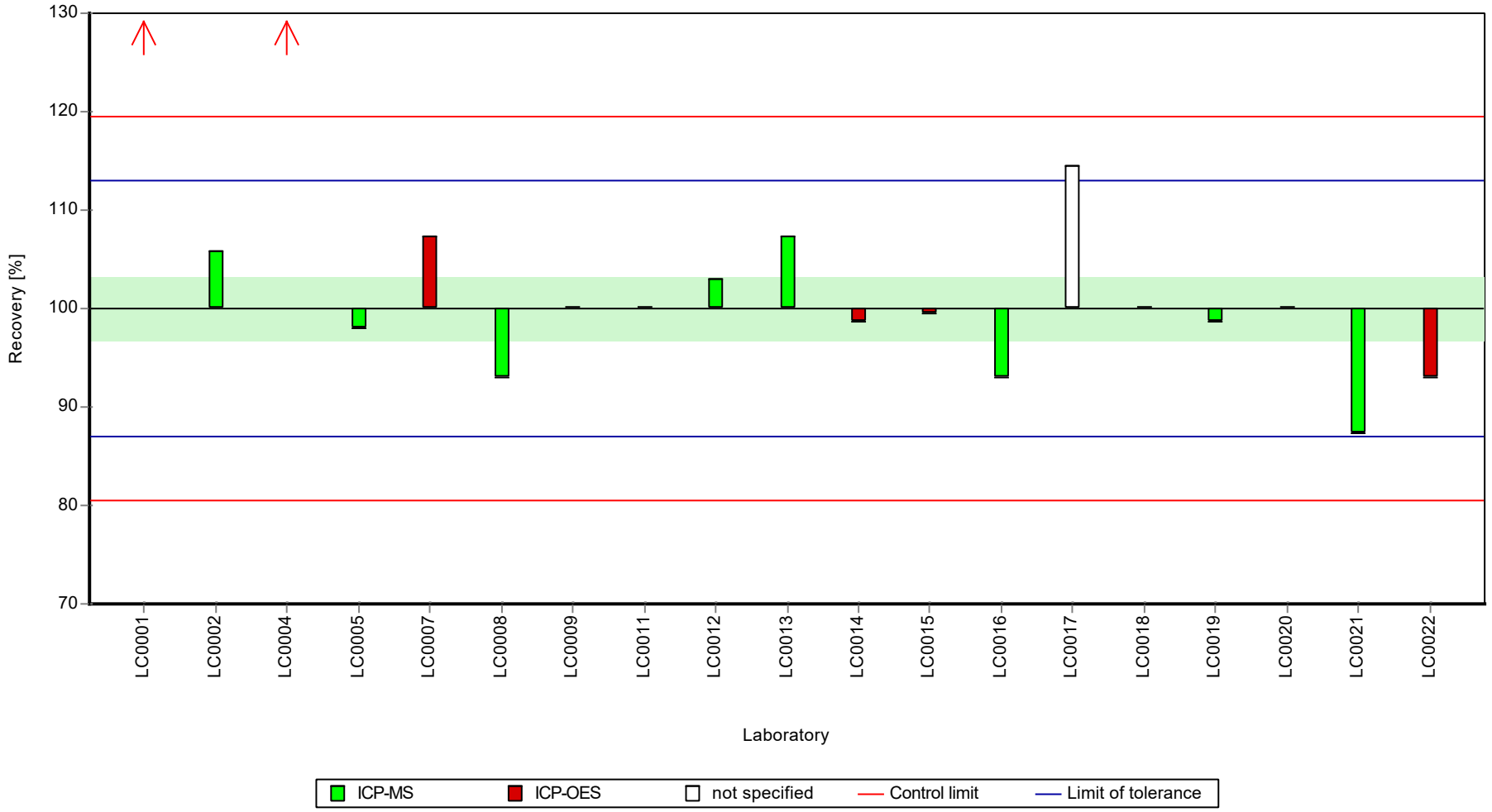
	all results	without outliers	Unit
Mean ± CI (99%)	0.0145 ± 0.00128	0.014 ± 0.000661	mg/l
Minimum	0.0122	0.0122	mg/l
Maximum	0.02	0.016	mg/l
Standard deviation	0.00185	0.000908	mg/l
rel. standard deviation	12.8	6.5	%
n	19	17	-

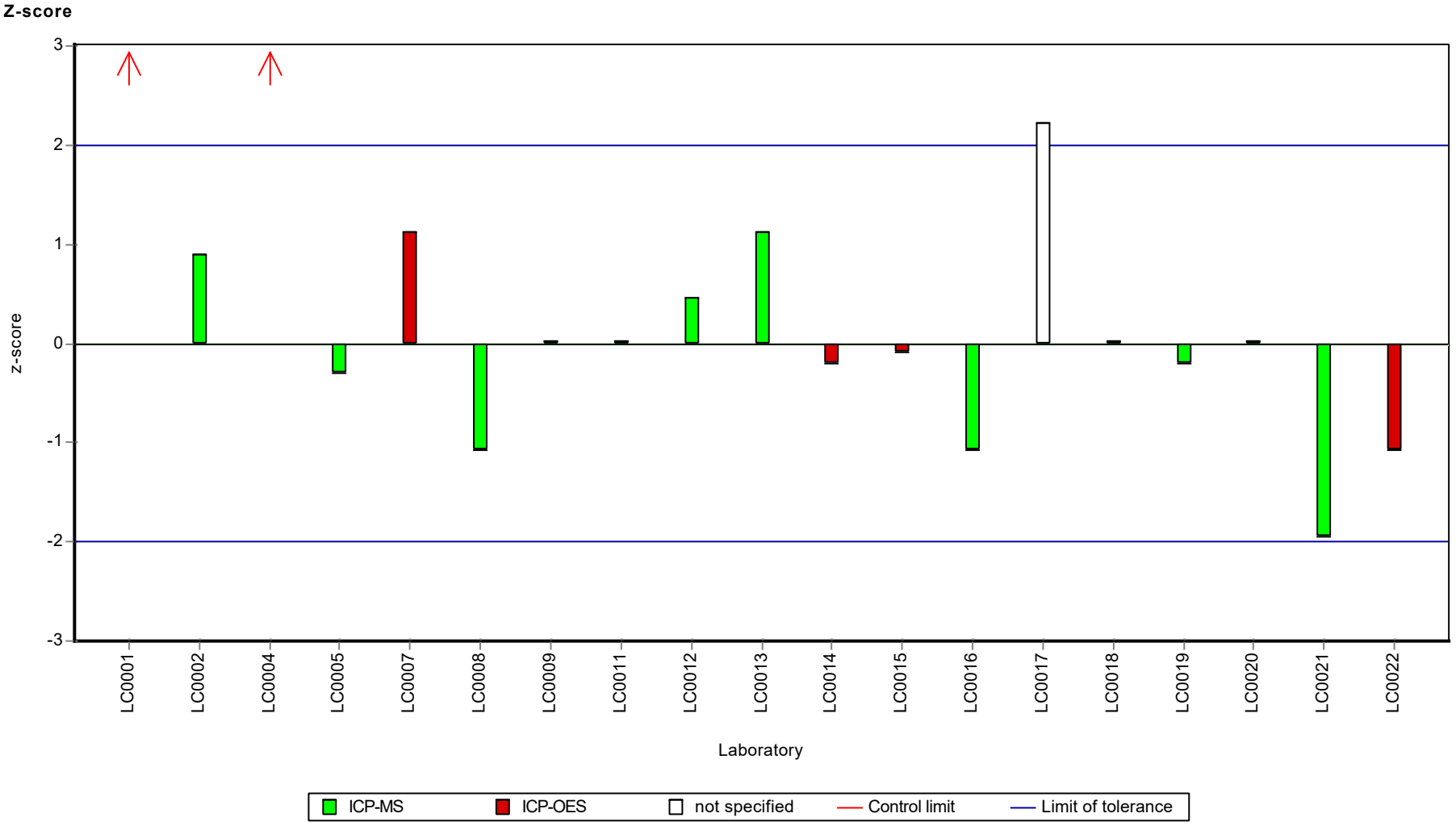
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Nickel

Unit	mg/l
Assigned value ± U (k=2)	0.0111 ± 0.000252
Criterion	0.000555 (5 %)
Minimum - Maximum	0.01 - 0.012
Control test value ± U (k=2)	0.0112 ± 0.000674

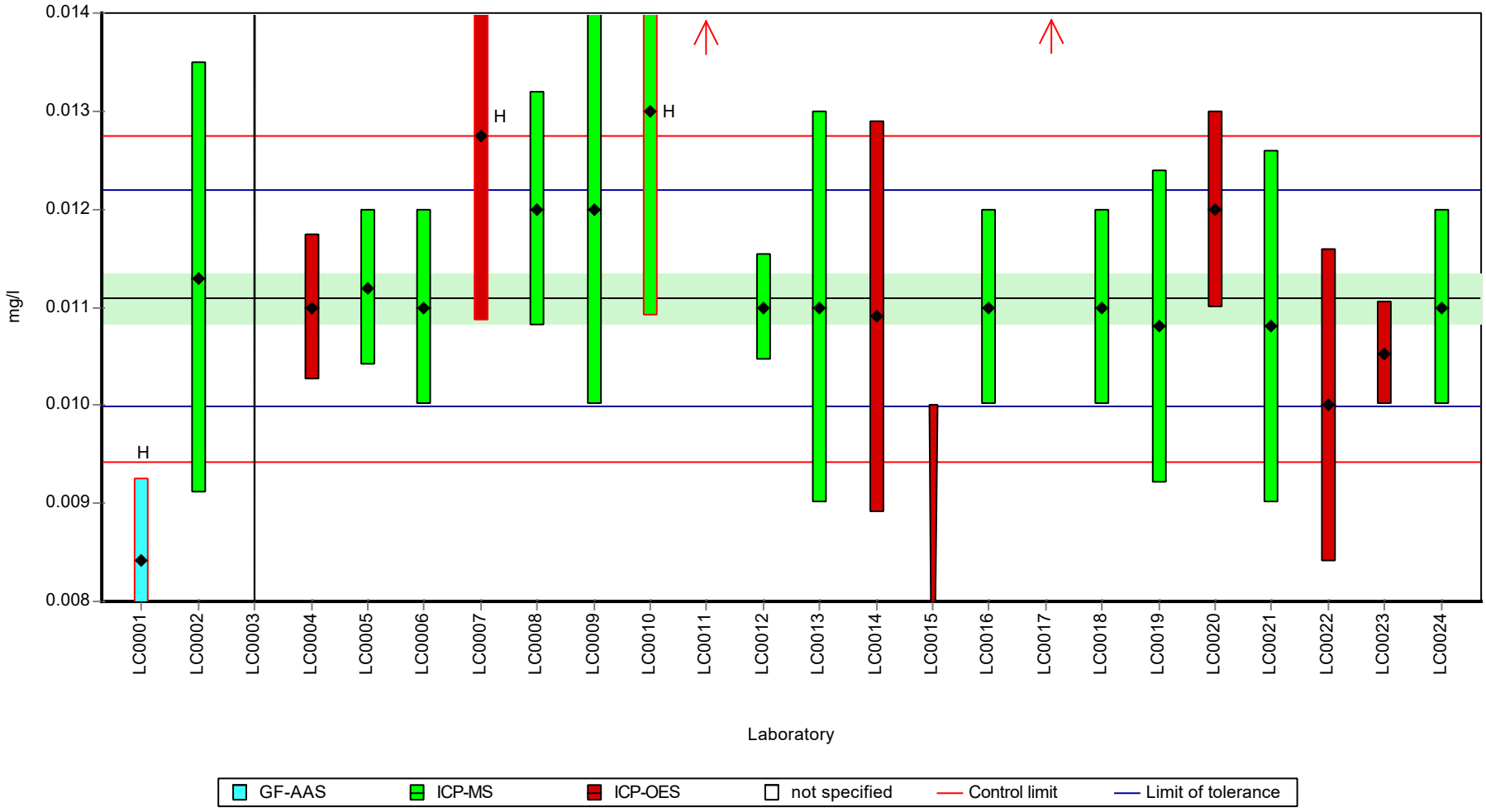
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.00842	0.00084	75.9	-4.82	H
LC0002	0.0113	0.0022	102	0.38	
LC0003	< 0.1 (LOQ)	-	-	-	
LC0004	0.011	0.00074	99.2	-0.16	
LC0005	0.0112	0.00079	101	0.2	
LC0006	0.011	0.001	99.2	-0.16	
LC0007	0.01275	0.0019	115	2.99	H
LC0008	0.012	0.0012	108	1.64	
LC0009	0.012	0.002	108	1.64	
LC0010	0.013	0.0021	117	3.44	H
LC0011	0.016	0.001	144	8.85	H
LC0012	0.011	0.00055	99.2	-0.16	
LC0013	0.011	0.002	99.2	-0.16	
LC0014	0.0109	0.002	98.3	-0.34	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	0.011	0.001	99.2	-0.16	
LC0017	0.016	0.002	144	8.85	H
LC0018	0.011	0.001	99.2	-0.16	
LC0019	0.0108	0.0016	97.4	-0.52	
LC0020	0.012	0.001	108	1.64	
LC0021	0.0108	0.0018	97.4	-0.52	
LC0022	0.01	0.0016	90.2	-1.97	
LC0023	0.01053	0.00053	95	-1.01	
LC0024	0.011	0.001	99.2	-0.16	

Characteristics of parameter

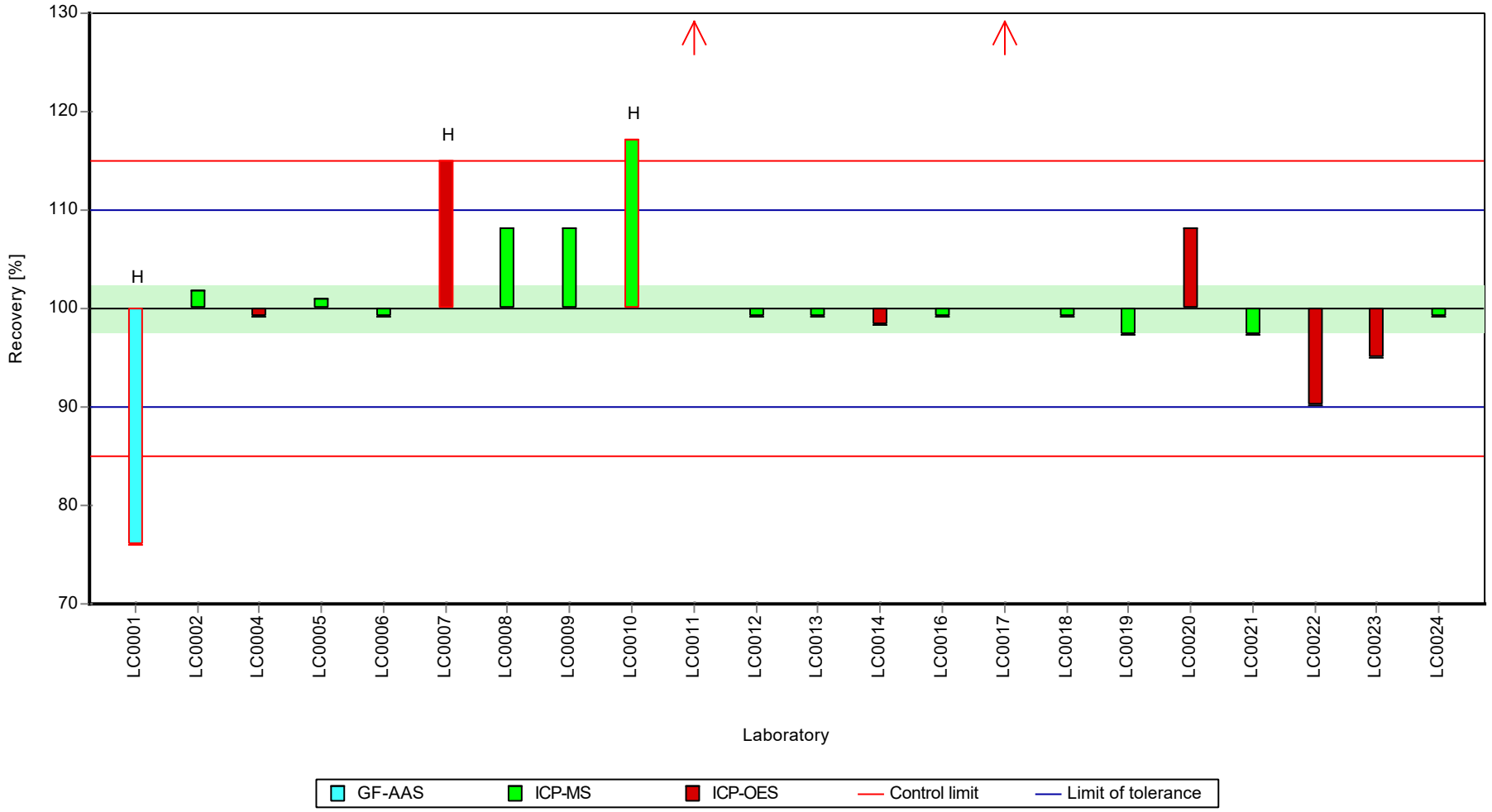
	all results	without outliers	Unit
Mean ± CI (99%)	0.0116 ± 0.00109	0.0111 ± 0.000377	mg/l
Minimum	0.00842	0.01	mg/l
Maximum	0.016	0.012	mg/l
Standard deviation	0.0017	0.000519	mg/l
rel. standard deviation	14.7	4.68	%
n	22	17	-

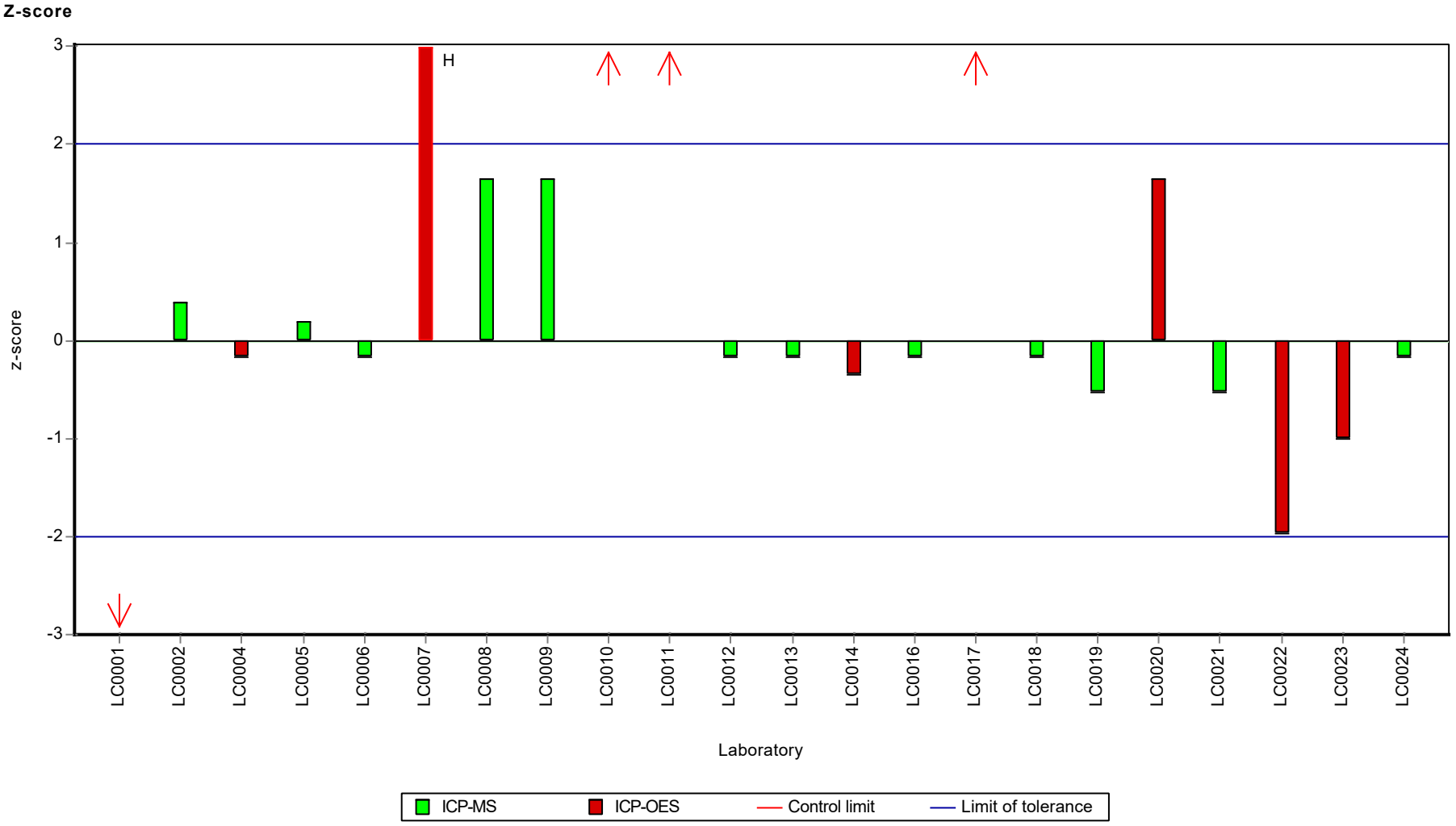
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
H
LC0001
LC0002
LC0004
LC0005
LC0006
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LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
Control limit
Limit of tolerance

Parameter oriented report

AB08

Selenium

Unit	mg/l
Assigned value ± U (k=2)	0.0119 ± 0.000658
Criterion	0.00155 (13 %)
Minimum - Maximum	0.00898 - 0.0148
Control test value ± U (k=2)	0.012 ± 0.00192

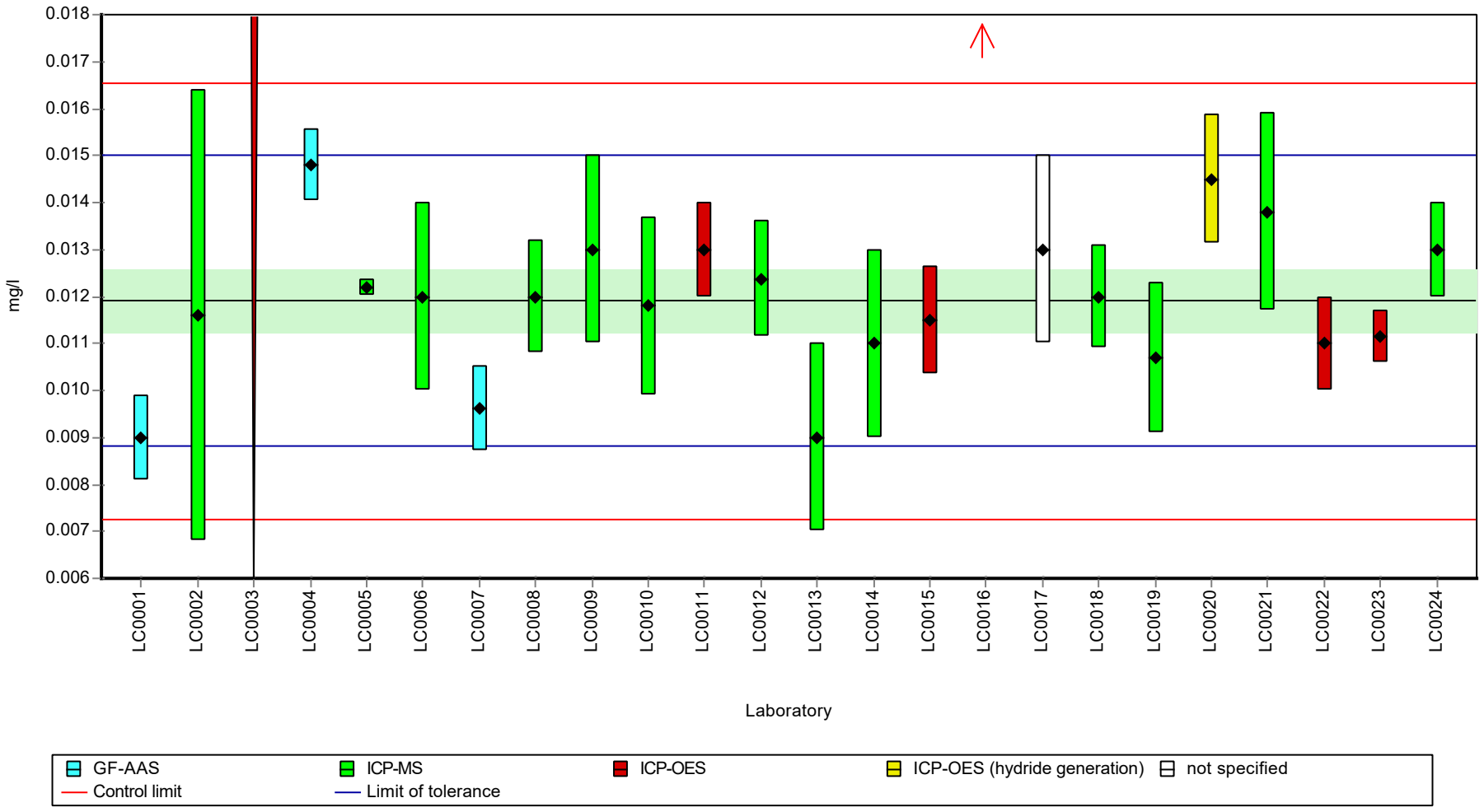
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.00898	0.0009	75.4	-1.89	
LC0002	0.0116	0.0048	97.4	-0.2	
LC0003	< 0.022 (LOQ)	-	-	-	
LC0004	0.0148	0.00077	124	1.87	
LC0005	0.0122	0.00018	102	0.19	
LC0006	0.012	0.002	101	0.06	
LC0007	0.00961	0.0009	80.7	-1.49	
LC0008	0.012	0.0012	101	0.06	
LC0009	0.013	0.002	109	0.7	
LC0010	0.0118	0.0019	99.1	-0.07	
LC0011	0.013	0.001	109	0.7	
LC0012	0.01238	0.00124	104	0.3	
LC0013	0.009	0.002	75.6	-1.88	
LC0014	0.011	0.002	92.4	-0.59	
LC0015	0.0115	0.00115	96.6	-0.27	
LC0016	0.019	0.001	160	4.58	H
LC0017	0.013	0.002	109	0.7	
LC0018	0.012	0.0011	101	0.06	
LC0019	0.0107	0.0016	89.8	-0.78	
LC0020	0.0145	0.00138	122	1.67	
LC0021	0.0138	0.0021	116	1.22	
LC0022	0.011	0.001	92.4	-0.59	
LC0023	0.01116	0.00056	93.7	-0.48	
LC0024	0.013	0.001	109	0.7	

Characteristics of parameter

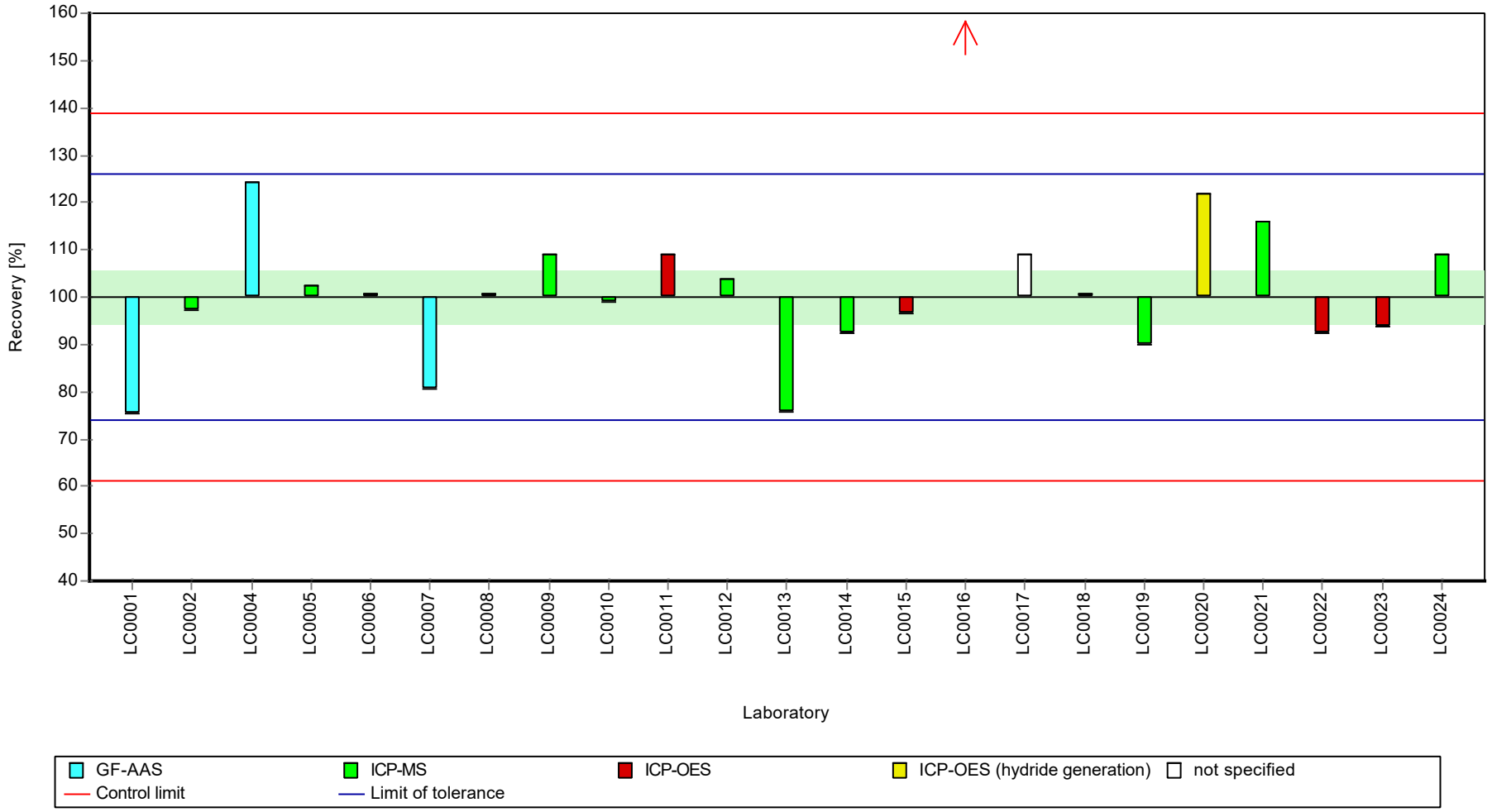
	all results	without outliers	Unit
Mean ± CI (99%)	0.0122 ± 0.00132	0.0119 ± 0.000987	mg/l
Minimum	0.00898	0.00898	mg/l
Maximum	0.019	0.0148	mg/l
Standard deviation	0.00211	0.00154	mg/l
rel. standard deviation	17.3	13	%
n	23	22	-

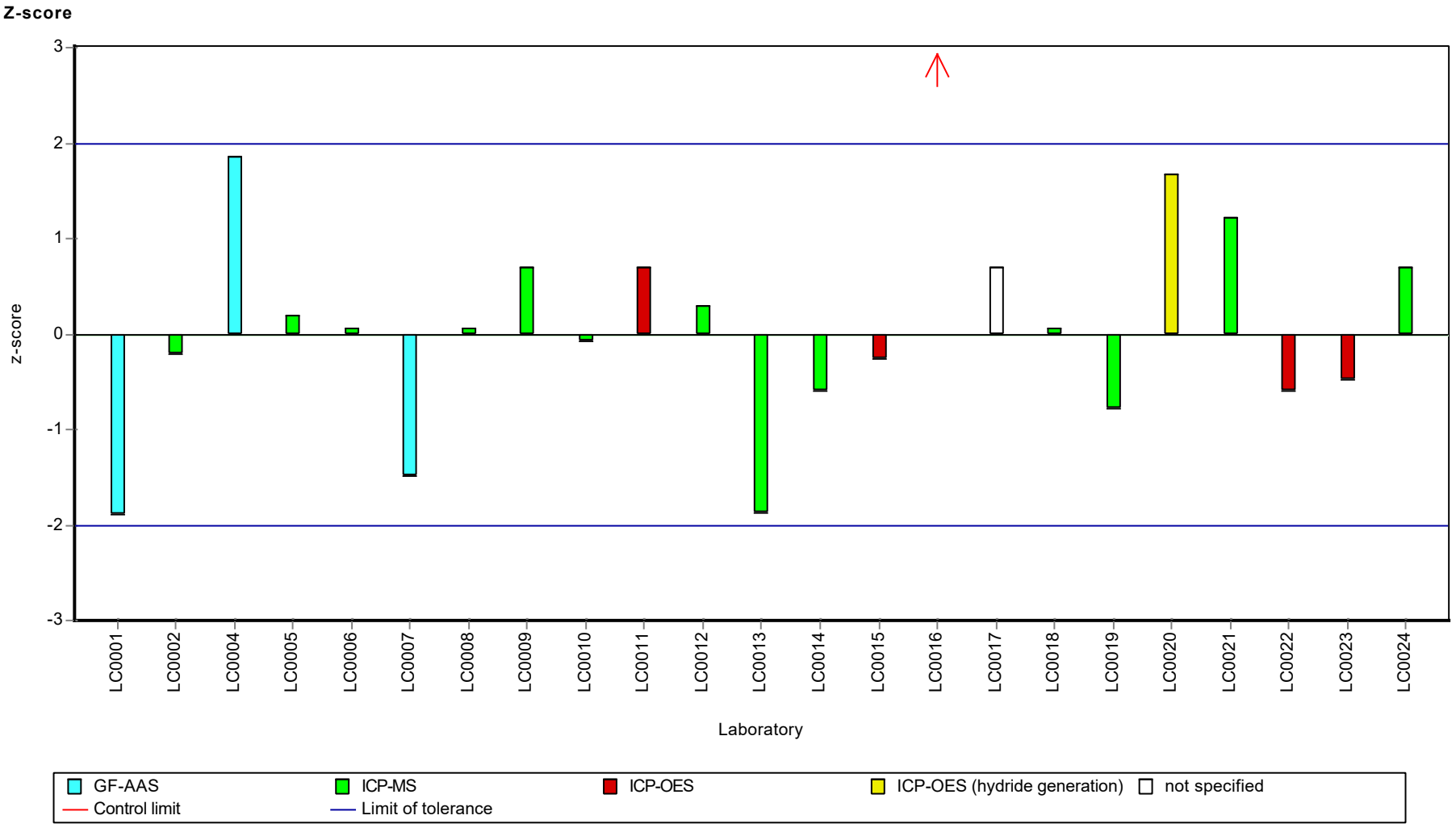
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
GF-AAS
ICP-MS
ICP-OES
ICP-OES (hydride generation)
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Silver

Unit	mg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0000223 - 0.0012
Control test value ± U (k=2)	<0.000025 (LOQ)

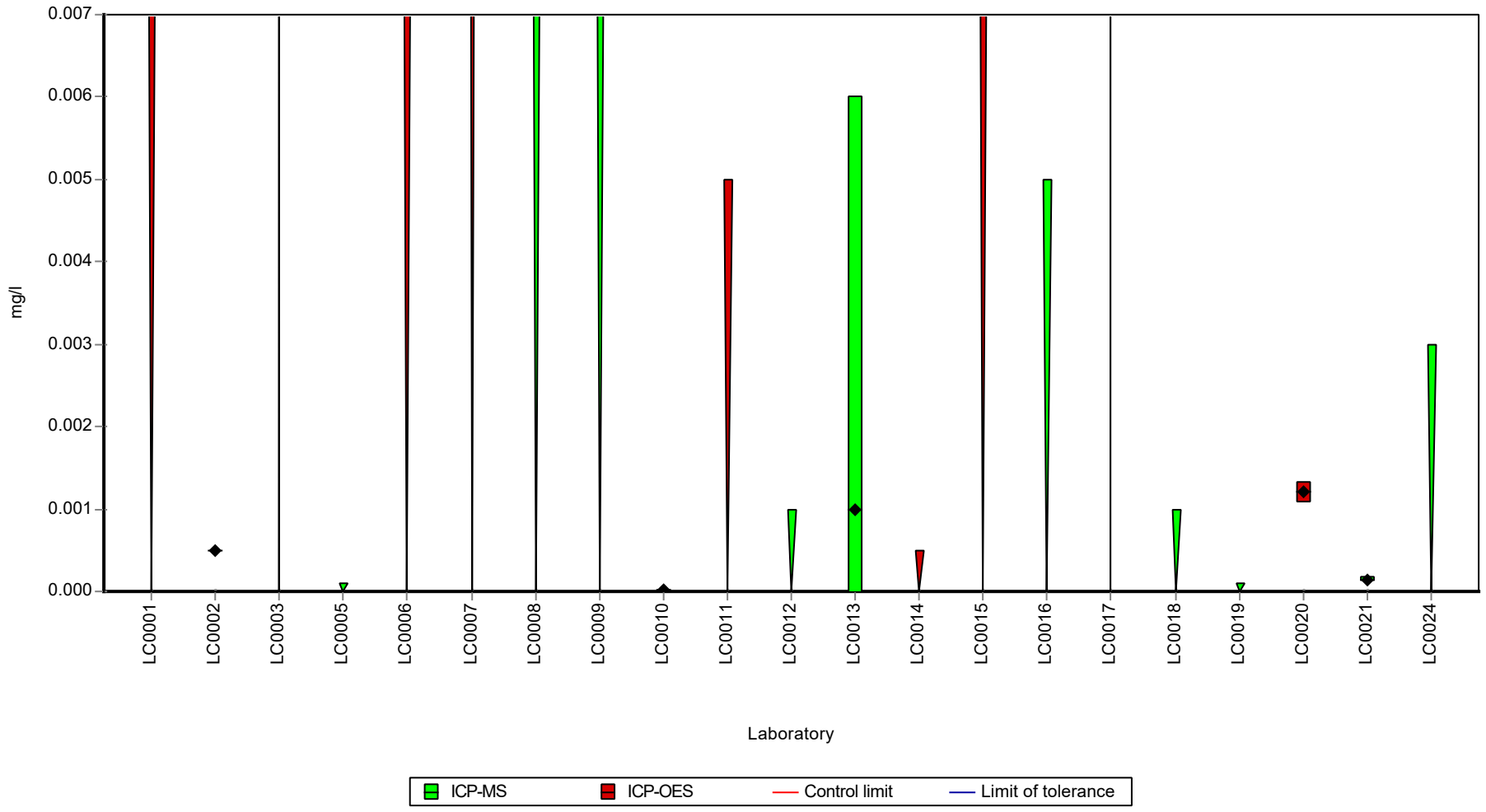
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.01 (LOQ)	-	-	-	
LC0002	0.0005	0.00001	-	-	
LC0003	< 0.2 (LOQ)	-	-	-	
LC0004	-	-	-	-	
LC0005	< 0.0001 (LOQ)	-	-	-	
LC0006	< 0.01 (LOQ)	-	-	-	
LC0007	< 0.02 (LOQ)	-	-	-	
LC0008	< 0.01 (LOQ)	-	-	-	
LC0009	< 0.01 (LOQ)	-	-	-	
LC0010	0.00002	0.00001	-	-	
LC0011	< 0.005 (LOQ)	-	-	-	
LC0012	< 0.001 (LOQ)	-	-	-	
LC0013	0.001	0.005	-	-	
LC0014	< 0.0005 (LOQ)	-	-	-	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	< 0.005 (LOQ)	-	-	-	
LC0017	< 1 (LOQ)	-	-	-	
LC0018	< 0.001 (LOQ)	-	-	-	
LC0019	< 0.0001 (LOQ)	-	-	-	
LC0020	0.0012	0.00012	-	-	
LC0021	0.00015	0.00003	-	-	
LC0022	-	-	-	-	
LC0023	-	-	-	-	
LC0024	< 0.003 (LOQ)	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.000574 ± 0.000692	-	mg/l
Minimum	0.0000223	0.0000223	mg/l
Maximum	0.0012	0.0012	mg/l
Standard deviation	0.000516	-	mg/l
rel. standard deviation	89.9	-	%
n	5	5	-

Graphical presentation of results

Results



Parameter oriented report

AB08

Tin

Unit	mg/l
Assigned value ± U (k=2)	0.0327 ± 0.00156
Criterion	0.00327 (10 %)
Minimum - Maximum	0.0257 - 0.037
Control test value ± U (k=2)	0.0324 ± 0.00486

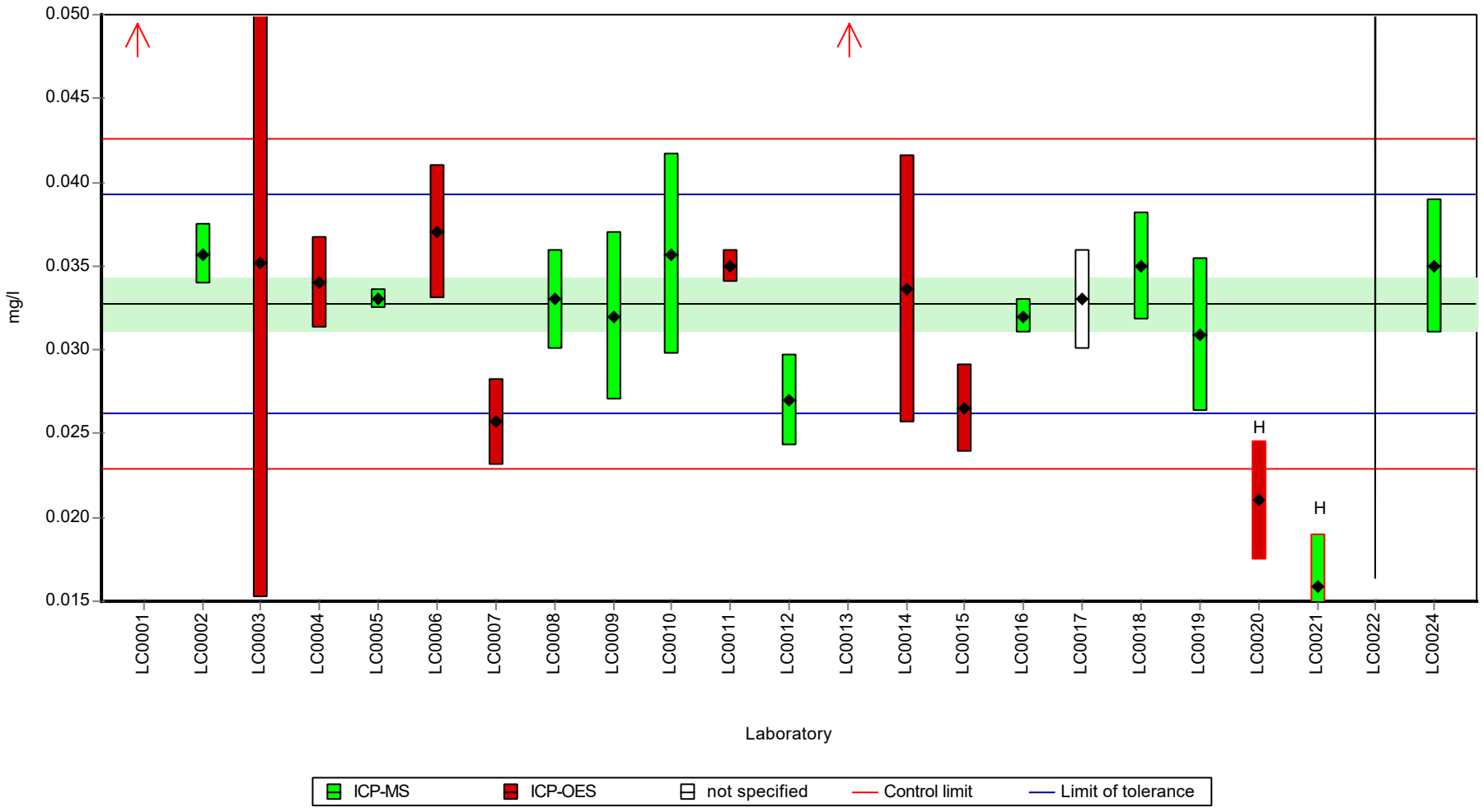
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0536	0.0054	164	6.37	H
LC0002	0.0357	0.0018	109	0.91	
LC0003	0.0352	0.02	108	0.75	
LC0004	0.034	0.0027	104	0.39	
LC0005	0.033	0.00058	101	0.08	
LC0006	0.037	0.004	113	1.3	
LC0007	0.0257	0.00257	78.5	-2.15	
LC0008	0.033	0.003	101	0.08	
LC0009	0.032	0.005	97.7	-0.23	
LC0010	0.0357	0.006	109	0.91	
LC0011	0.035	0.001	107	0.69	
LC0012	0.02699	0.0027	82.4	-1.76	
LC0013	0.054	0.005	165	6.49	H
LC0014	0.0336	0.008	103	0.26	
LC0015	0.0265	0.00265	80.9	-1.91	
LC0016	0.032	0.001	97.7	-0.23	
LC0017	0.033	0.003	101	0.08	
LC0018	0.035	0.0032	107	0.69	
LC0019	0.0309	0.0046	94.4	-0.56	
LC0020	0.021	0.0036	64.1	-3.59	H
LC0021	0.0159	0.0031	48.6	-5.14	H
LC0022	< 0.5 (LOQ)	-	-	-	
LC0023	-	-	-	-	
LC0024	0.035	0.004	107	0.69	

Characteristics of parameter

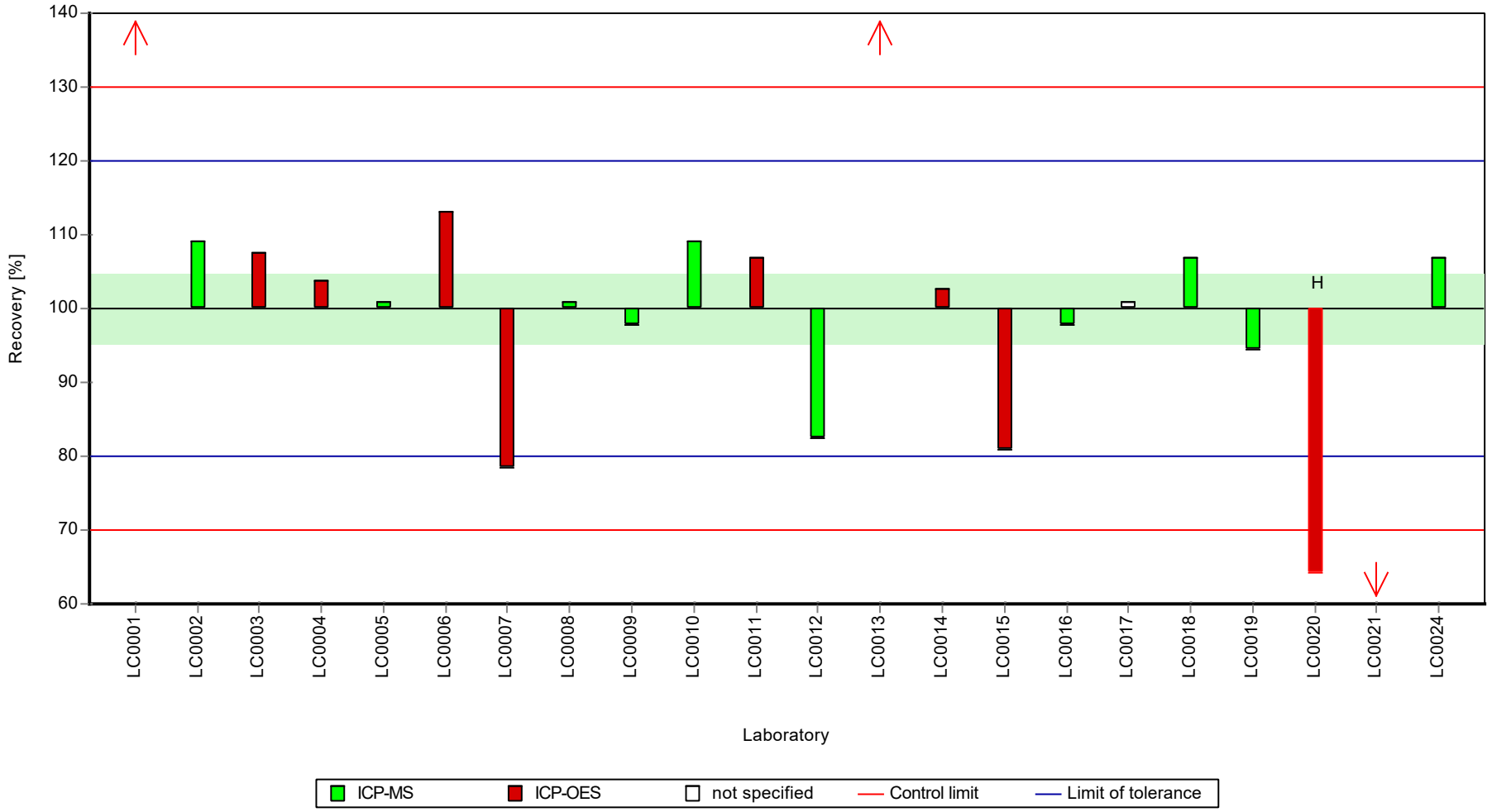
	all results	without outliers	Unit
Mean ± CI (99%)	0.0334 ± 0.00538	0.0327 ± 0.00234	mg/l
Minimum	0.0159	0.0257	mg/l
Maximum	0.054	0.037	mg/l
Standard deviation	0.00841	0.0033	mg/l
rel. standard deviation	25.2	10.1	%
n	22	18	-

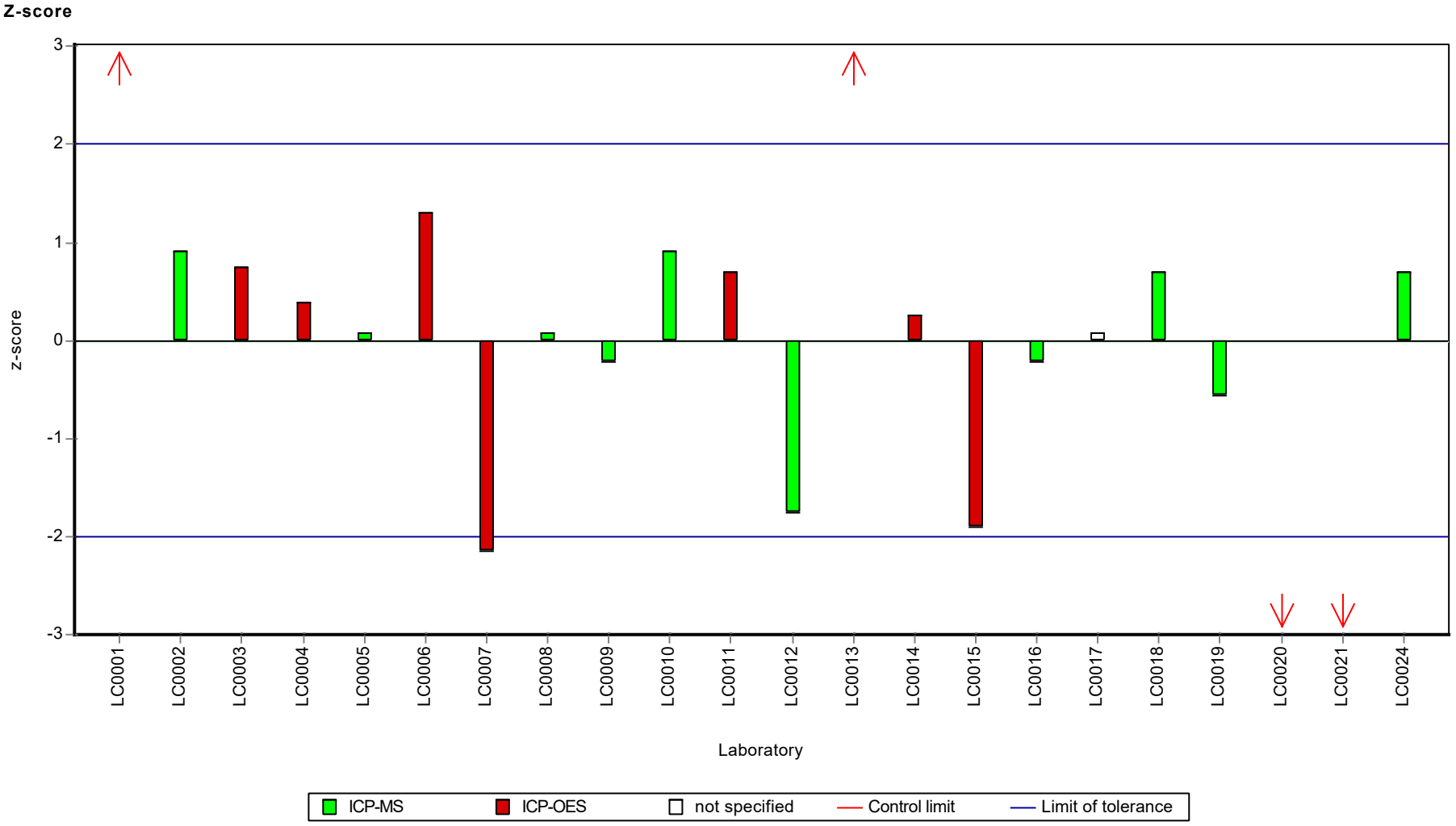
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Vanadium

Unit	mg/l
Assigned value ± U (k=2)	0.0145 ± 0.000688
Criterion	0.0016 (11 %)
Minimum - Maximum	0.011 - 0.017
Control test value ± U (k=2)	0.0143 ± 0.001

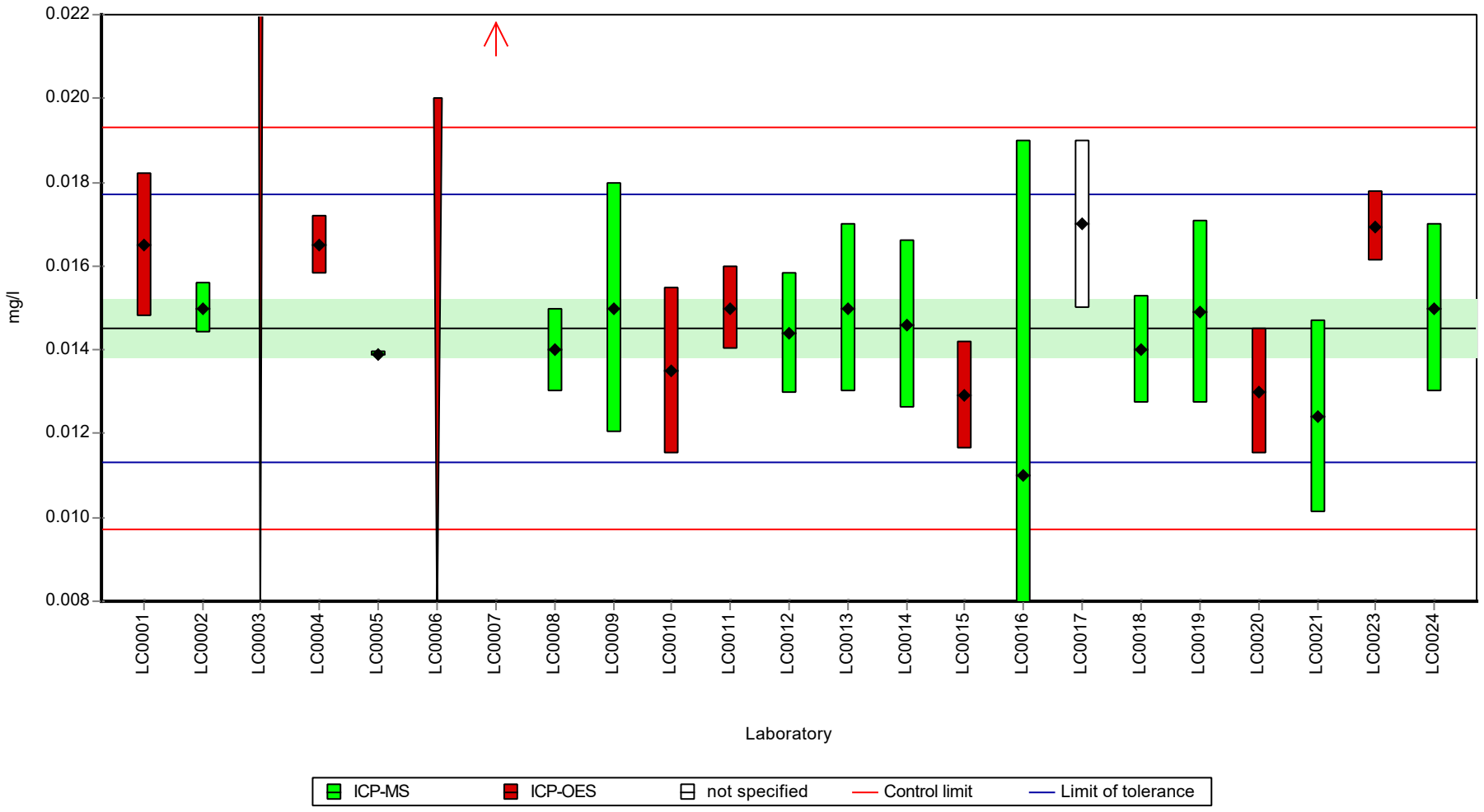
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0165	0.0017	114	1.23	
LC0002	0.015	0.0006	103	0.3	
LC0003	< 0.04 (LOQ)	-	-	-	
LC0004	0.0165	0.00069	114	1.23	
LC0005	0.0139	0.00005	95.7	-0.39	
LC0006	< 0.02 (LOQ)	-	-	-	
LC0007	0.046	0.0046	317	19.7	H
LC0008	0.014	0.001	96.4	-0.33	
LC0009	0.015	0.003	103	0.3	
LC0010	0.0135	0.002	92.9	-0.64	
LC0011	0.015	0.001	103	0.3	
LC0012	0.01439	0.00144	99.1	-0.09	
LC0013	0.015	0.002	103	0.3	
LC0014	0.0146	0.002	101	0.05	
LC0015	0.0129	0.00129	88.8	-1.02	
LC0016	0.011	0.008	75.7	-2.21	
LC0017	0.017	0.002	117	1.55	
LC0018	0.014	0.0013	96.4	-0.33	
LC0019	0.0149	0.0022	103	0.23	
LC0020	0.013	0.0015	89.5	-0.96	
LC0021	0.0124	0.0023	85.4	-1.33	
LC0022	-	-	-	-	
LC0023	0.01695	0.00085	117	1.52	
LC0024	0.015	0.002	103	0.3	

Characteristics of parameter

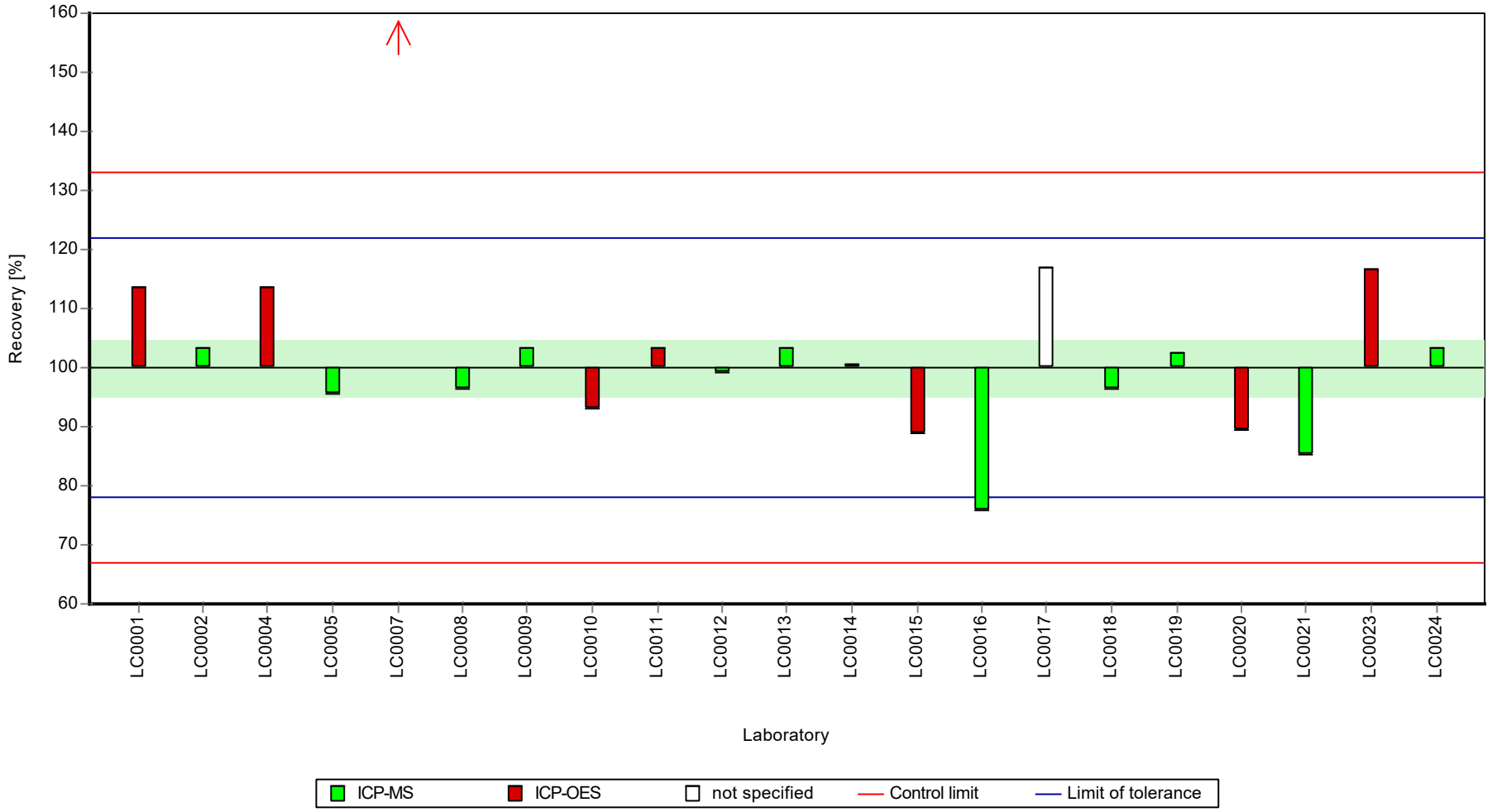
	all results	without outliers	Unit
Mean ± CI (99%)	0.016 ± 0.0046	0.0145 ± 0.00103	mg/l
Minimum	0.011	0.011	mg/l
Maximum	0.046	0.017	mg/l
Standard deviation	0.00703	0.00154	mg/l
rel. standard deviation	43.9	10.6	%
n	21	20	-

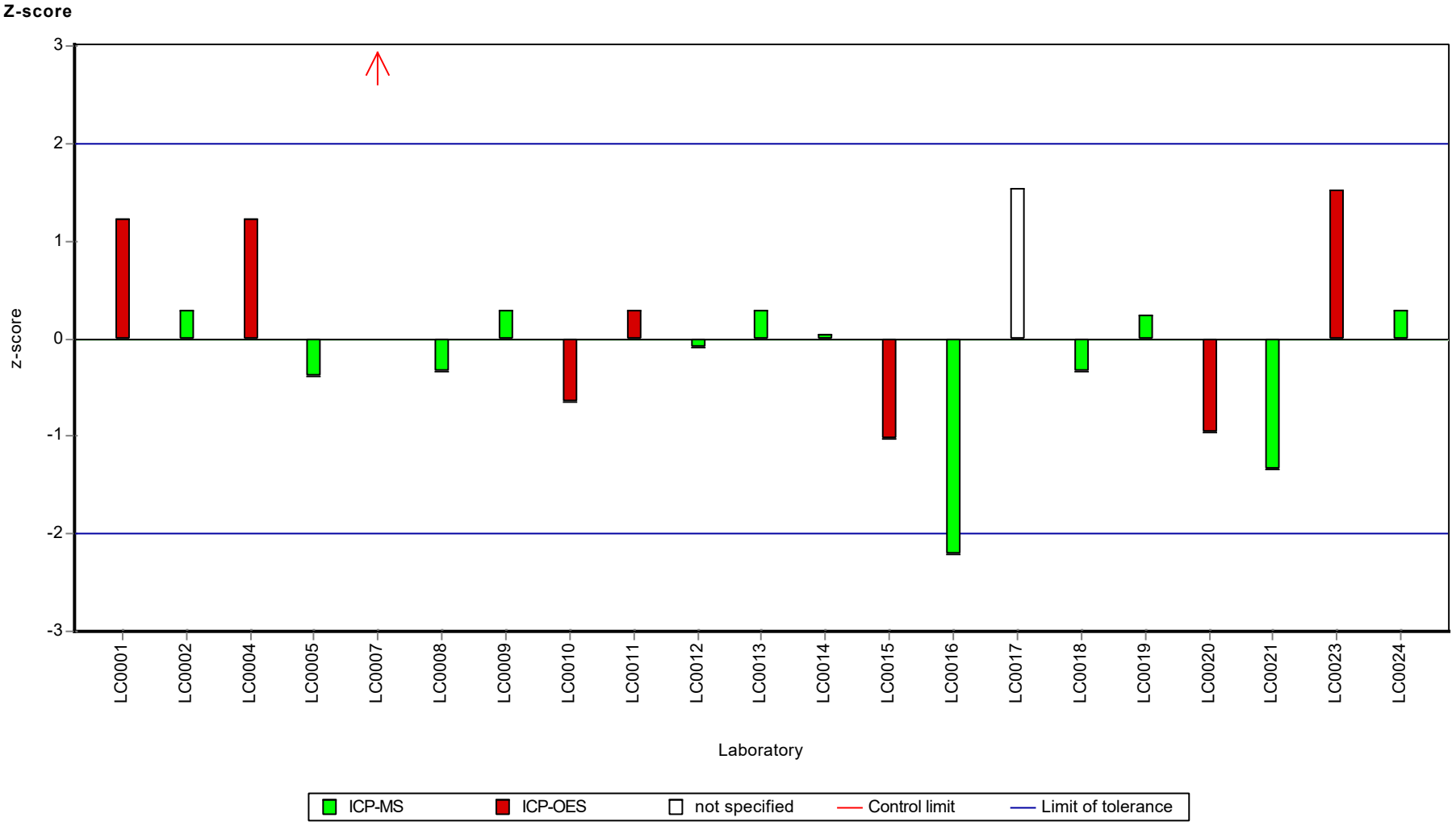
Graphical presentation of results

Results



Recovery rate




Z-score
3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

Parameter oriented report

AB08

Zinc

Unit	mg/l
Assigned value ± U (k=2)	0.329 ± 0.00699
Criterion	0.0165 (5 %)
Minimum - Maximum	0.296 - 0.36
Control test value ± U (k=2)	0.332 ± 0.0266

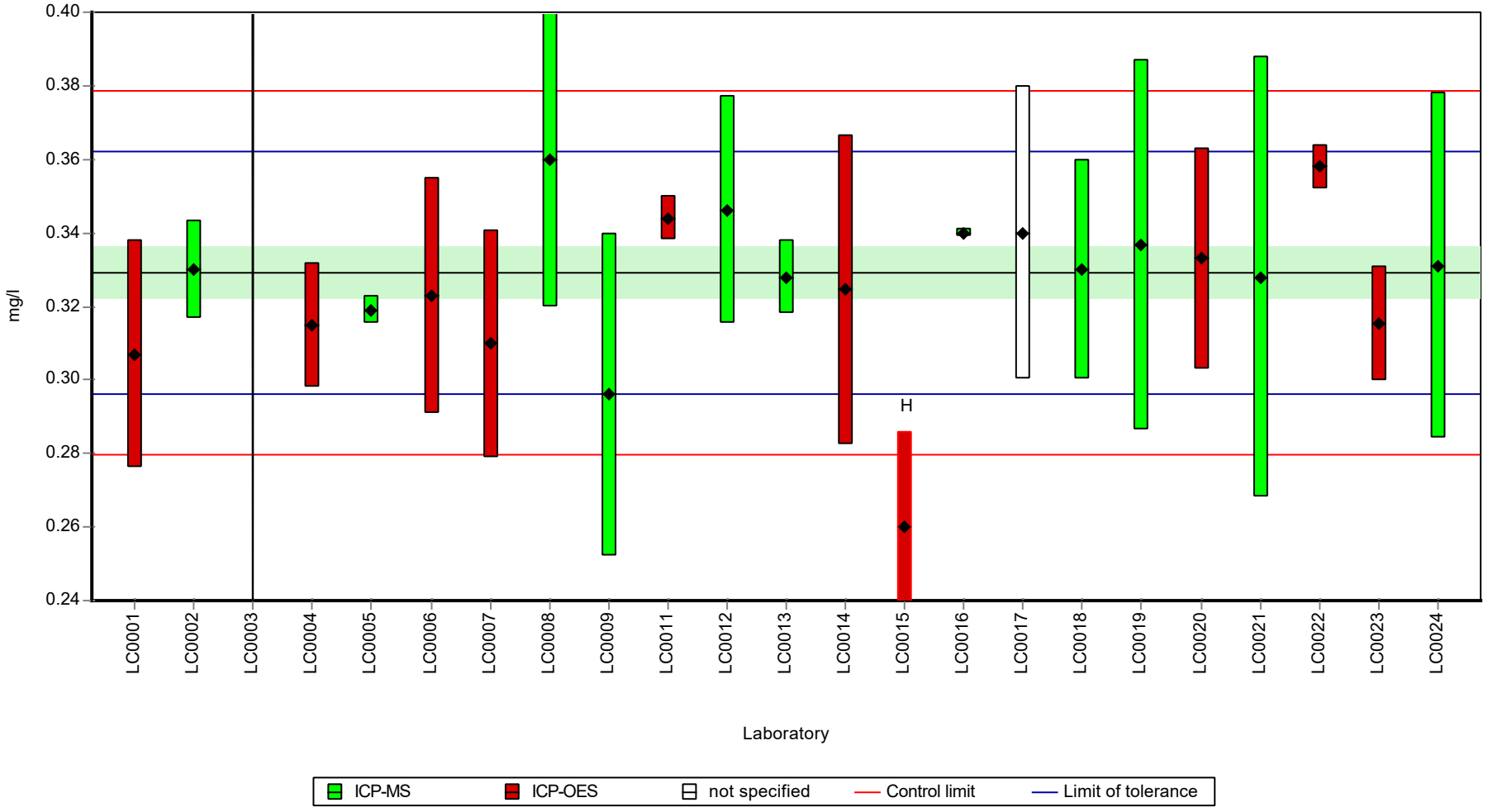
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.307	0.031	93.2	-1.35	
LC0002	0.33	0.0132	100	0.04	
LC0003	< 2 (LOQ)	-	-	-	
LC0004	0.315	0.017	95.7	-0.87	
LC0005	0.319	0.0037	96.9	-0.62	
LC0006	0.323	0.032	98.1	-0.38	
LC0007	0.3098	0.031	94.1	-1.18	
LC0008	0.36	0.04	109	1.87	
LC0009	0.296	0.044	89.9	-2.02	
LC0010	-	-	-	-	
LC0011	0.344	0.006	104	0.9	
LC0012	0.3462	0.0309	105	1.03	
LC0013	0.328	0.01	99.6	-0.08	
LC0014	0.3245	0.042	98.6	-0.29	
LC0015	0.26	0.026	79	-4.21	H
LC0016	0.34	0.001	103	0.65	
LC0017	0.34	0.04	103	0.65	
LC0018	0.33	0.03	100	0.04	
LC0019	0.3367	0.0505	102	0.45	
LC0020	0.333	0.0302	101	0.23	
LC0021	0.328	0.06	99.6	-0.08	
LC0022	0.358	0.0061	109	1.75	
LC0023	0.3153	0.01577	95.8	-0.85	
LC0024	0.331	0.047	101	0.11	

Characteristics of parameter

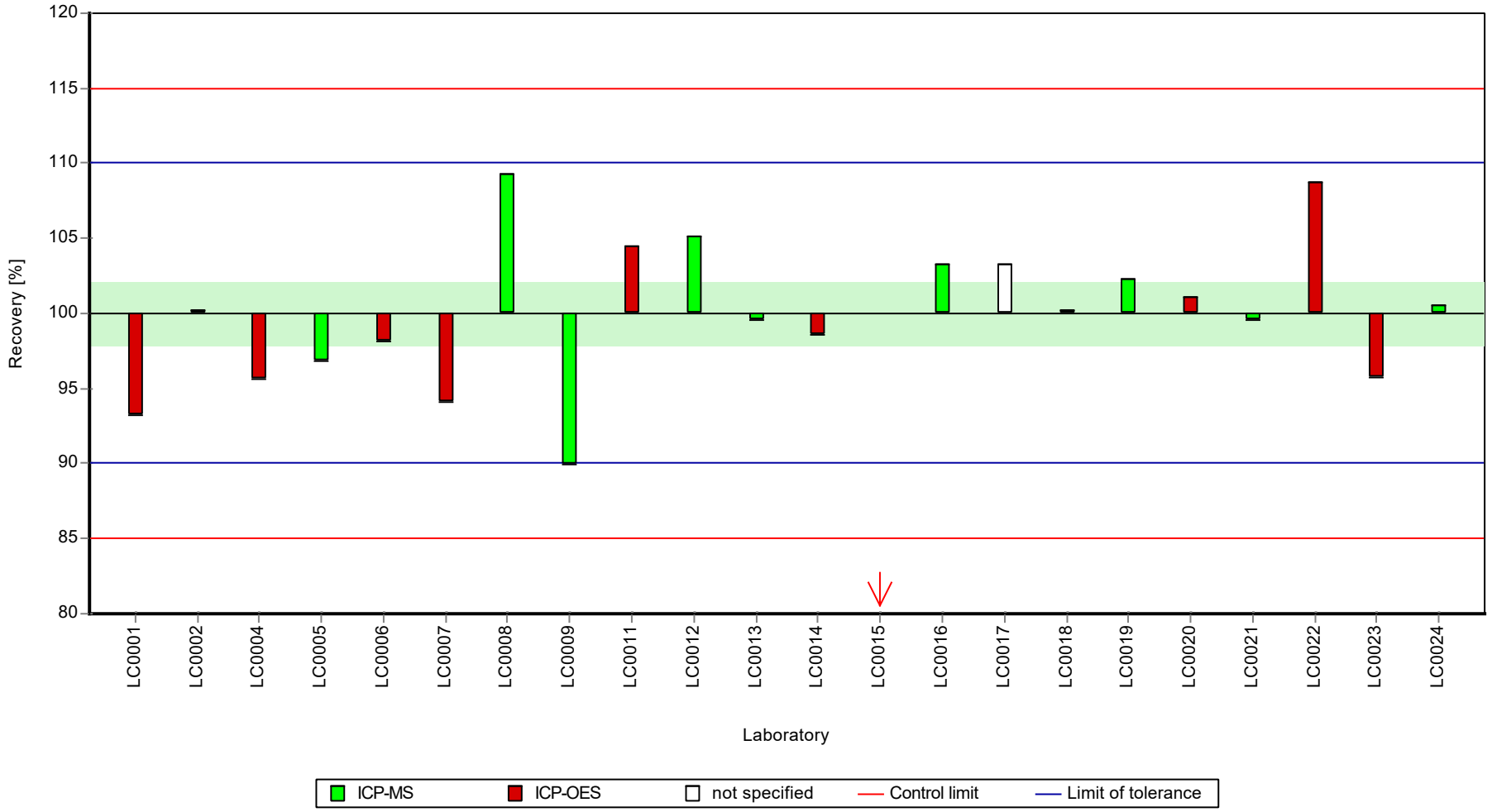
	all results	without outliers	Unit
Mean ± CI (99%)	0.326 ± 0.0138	0.329 ± 0.0105	mg/l
Minimum	0.26	0.296	mg/l
Maximum	0.36	0.36	mg/l
Standard deviation	0.0215	0.016	mg/l
rel. standard deviation	6.59	4.86	%
n	22	21	-

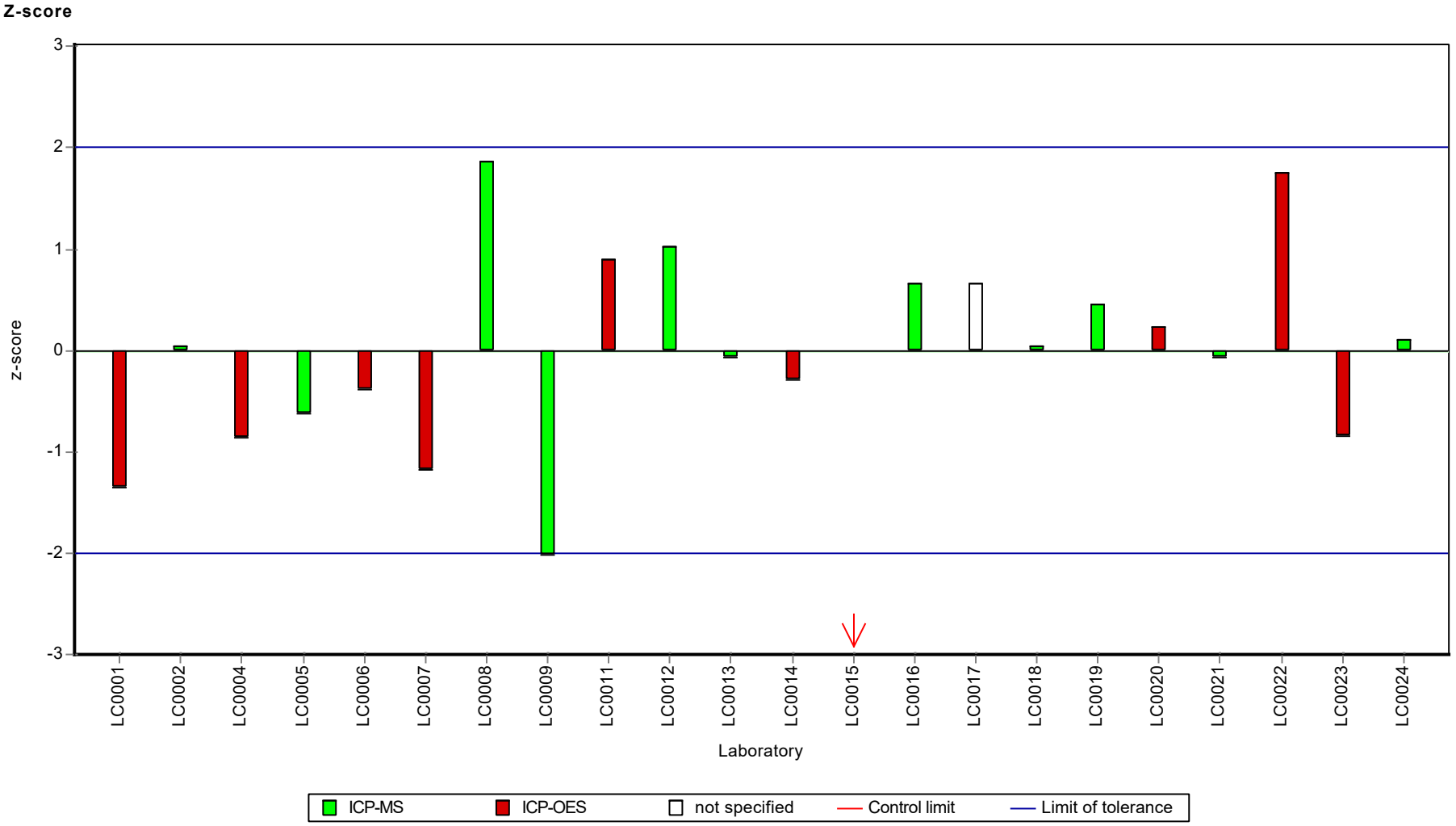
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
3
2
1
0
-1
-2
-3
LC0001
LC0002
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
Laboratory
ICP-MS
ICP-OES
not specified
Control limit
Limit of tolerance

E8. Laborientierte Auswertung / Laboratory oriented report

Die Laborientierte Auswertung ist nach dem Laborcode sortiert.

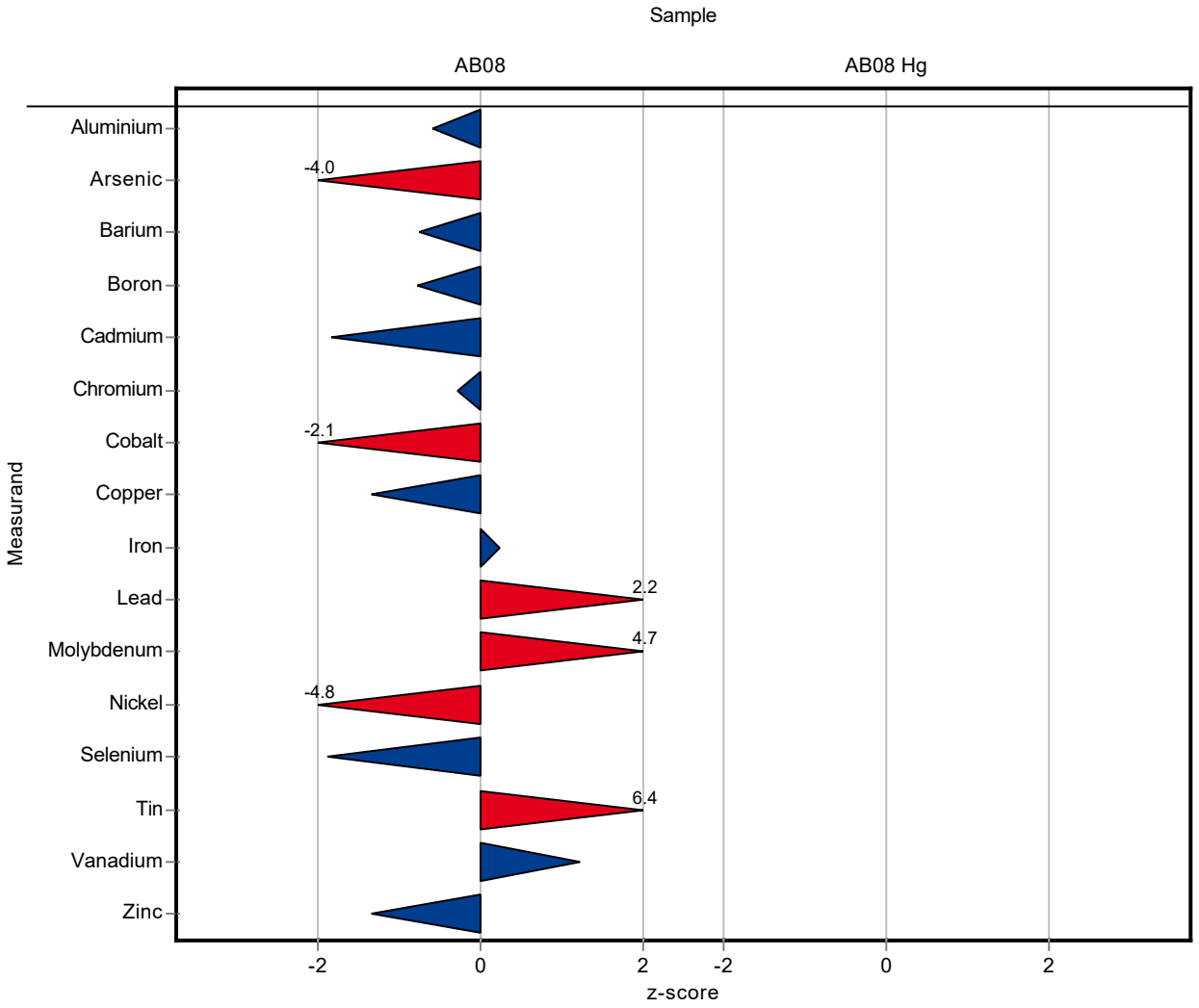
The laboratory oriented report is sorted by laboratory code.

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.865 ± 0.087	0.0745	95.2	-0.58
Antimony	mg/l	0.0017 ± 0.000076	<0.002 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.00996 ± 0.001	0.000621	80.2	-3.96
Barium	mg/l	0.11 ± 0.00216	0.106 ± 0.011	0.00551	96.2	-0.76
Boron	mg/l	0.308 ± 0.00629	0.296 ± 0.03	0.0154	96.1	-0.78
Cadmium	mg/l	0.00144 ± 0.000057	0.00124 ± 0.00012	0.000111	85.8	-1.84
Chromium	mg/l	0.0954 ± 0.00205	0.094 ± 0.0094	0.00496	98.5	-0.29
Cobalt	mg/l	0.0109 ± 0.000134	0.0098 ± 0.00098	0.000547	89.5	-2.10
Copper	mg/l	0.108 ± 0.00179	0.101 ± 0.01	0.00541	93.3	-1.34
Iron	mg/l	0.23 ± 0.00474	0.233 ± 0.023	0.0115	101	0.24
Lead	mg/l	0.0109 ± 0.000279	0.0122 ± 0.0012	0.000588	112	2.24
Molybdenum	mg/l	0.014 ± 0.000441	0.0182 ± 0.0018	0.000908	130	4.65
Nickel	mg/l	0.0111 ± 0.000252	0.00842 ± 0.00084	0.000555	75.9	-4.82
Selenium	mg/l	0.0119 ± 0.000658	0.00898 ± 0.0009	0.00155	75.4	-1.89
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0536 ± 0.0054	0.00327	164	6.37
Vanadium	mg/l	0.0145 ± 0.000688	0.0165 ± 0.0017	0.0016	114	1.23
Zinc	mg/l	0.329 ± 0.00699	0.307 ± 0.031	0.0165	93.2	-1.35

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

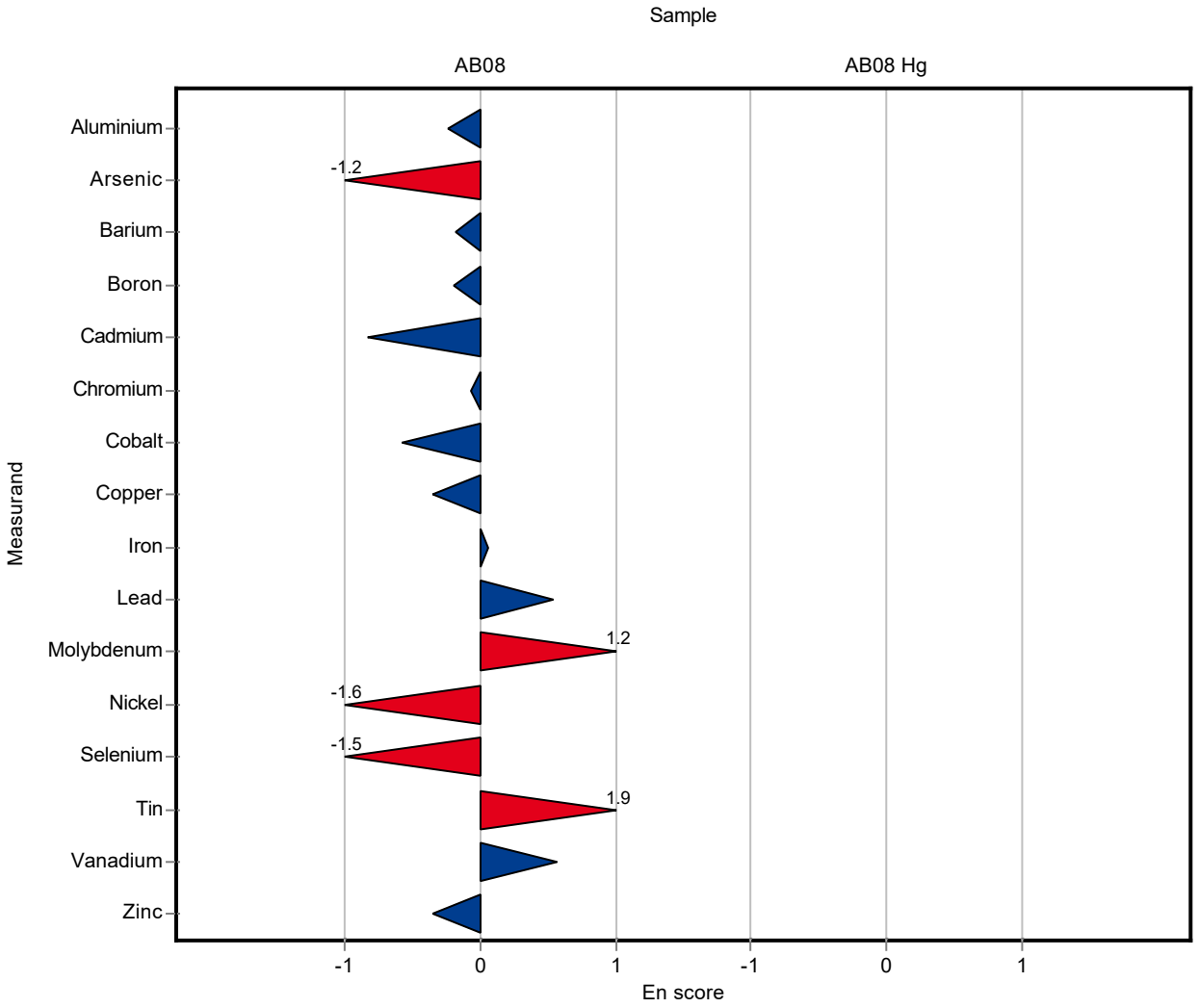

Sample
AB08
AB08 Hg
Measurand
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-4.0
-2.1
2.2
4.7
-4.8
6.4
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.865 ± 0.087	0.0745	95.2	-0.25
Antimony	mg/l	0.0017 ± 0.000076	<0.002 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.00996 ± 0.001	0.000621	80.2	-1.23
Barium	mg/l	0.11 ± 0.00216	0.106 ± 0.011	0.00551	96.2	-0.19
Boron	mg/l	0.308 ± 0.00629	0.296 ± 0.03	0.0154	96.1	-0.20
Cadmium	mg/l	0.00144 ± 0.000057	0.00124 ± 0.00012	0.000111	85.8	-0.83
Chromium	mg/l	0.0954 ± 0.00205	0.094 ± 0.0094	0.00496	98.5	-0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.0098 ± 0.00098	0.000547	89.5	-0.58
Copper	mg/l	0.108 ± 0.00179	0.101 ± 0.01	0.00541	93.3	-0.36
Iron	mg/l	0.23 ± 0.00474	0.233 ± 0.023	0.0115	101	0.06
Lead	mg/l	0.0109 ± 0.000279	0.0122 ± 0.0012	0.000588	112	0.54
Molybdenum	mg/l	0.014 ± 0.000441	0.0182 ± 0.0018	0.000908	130	1.16
Nickel	mg/l	0.0111 ± 0.000252	0.00842 ± 0.00084	0.000555	75.9	-1.57
Selenium	mg/l	0.0119 ± 0.000658	0.00898 ± 0.0009	0.00155	75.4	-1.53
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0536 ± 0.0054	0.00327	164	1.91
Vanadium	mg/l	0.0145 ± 0.000688	0.0165 ± 0.0017	0.0016	114	0.57
Zinc	mg/l	0.329 ± 0.00699	0.307 ± 0.031	0.0165	93.2	-0.36

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

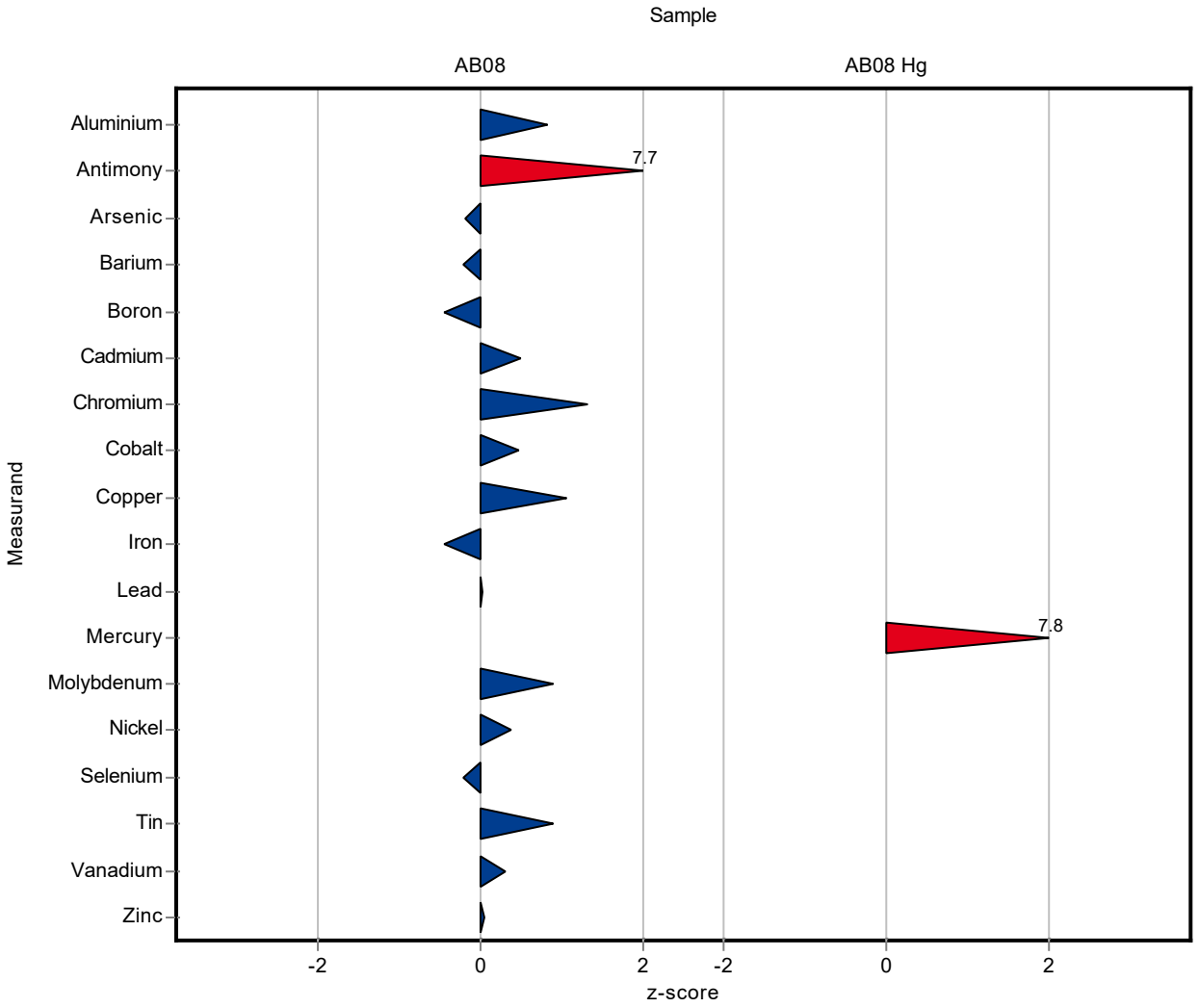

Sample
AB08
AB08 Hg
Measurand
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-1.2
1.2
-1.6
-1.5
1.9
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.97 ± 0.043	0.0745	107	0.82
Antimony	mg/l	0.0017 ± 0.000076	0.00271 ± 0.00013	0.000131	159	7.67
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.00069	0.000621	99	-0.20
Barium	mg/l	0.11 ± 0.00216	0.109 ± 0.00051	0.00551	98.9	-0.22
Boron	mg/l	0.308 ± 0.00629	0.301 ± 0.027	0.0154	97.7	-0.46
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.000036	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.102 ± 0.00326	0.00496	107	1.33
Cobalt	mg/l	0.0109 ± 0.000134	0.0112 ± 0.00056	0.000547	102	0.46
Copper	mg/l	0.108 ± 0.00179	0.114 ± 0.008	0.00541	105	1.07
Iron	mg/l	0.23 ± 0.00474	0.225 ± 0.0059	0.0115	97.7	-0.45
Lead	mg/l	0.0109 ± 0.000279	0.0109 ± 0.0028	0.000588	100	0.03
Molybdenum	mg/l	0.014 ± 0.000441	0.0148 ± 0.00088	0.000908	106	0.91
Nickel	mg/l	0.0111 ± 0.000252	0.0113 ± 0.0022	0.000555	102	0.38
Selenium	mg/l	0.0119 ± 0.000658	0.0116 ± 0.0048	0.00155	97.4	-0.20
Silver	mg/l	- ± -	0.0005 ± 0.000012	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0357 ± 0.0018	0.00327	109	0.91
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.0006	0.0016	103	0.30
Zinc	mg/l	0.329 ± 0.00699	0.33 ± 0.0132	0.0165	100	0.04

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000169 ± 0.000008	0.000009	171	7.79

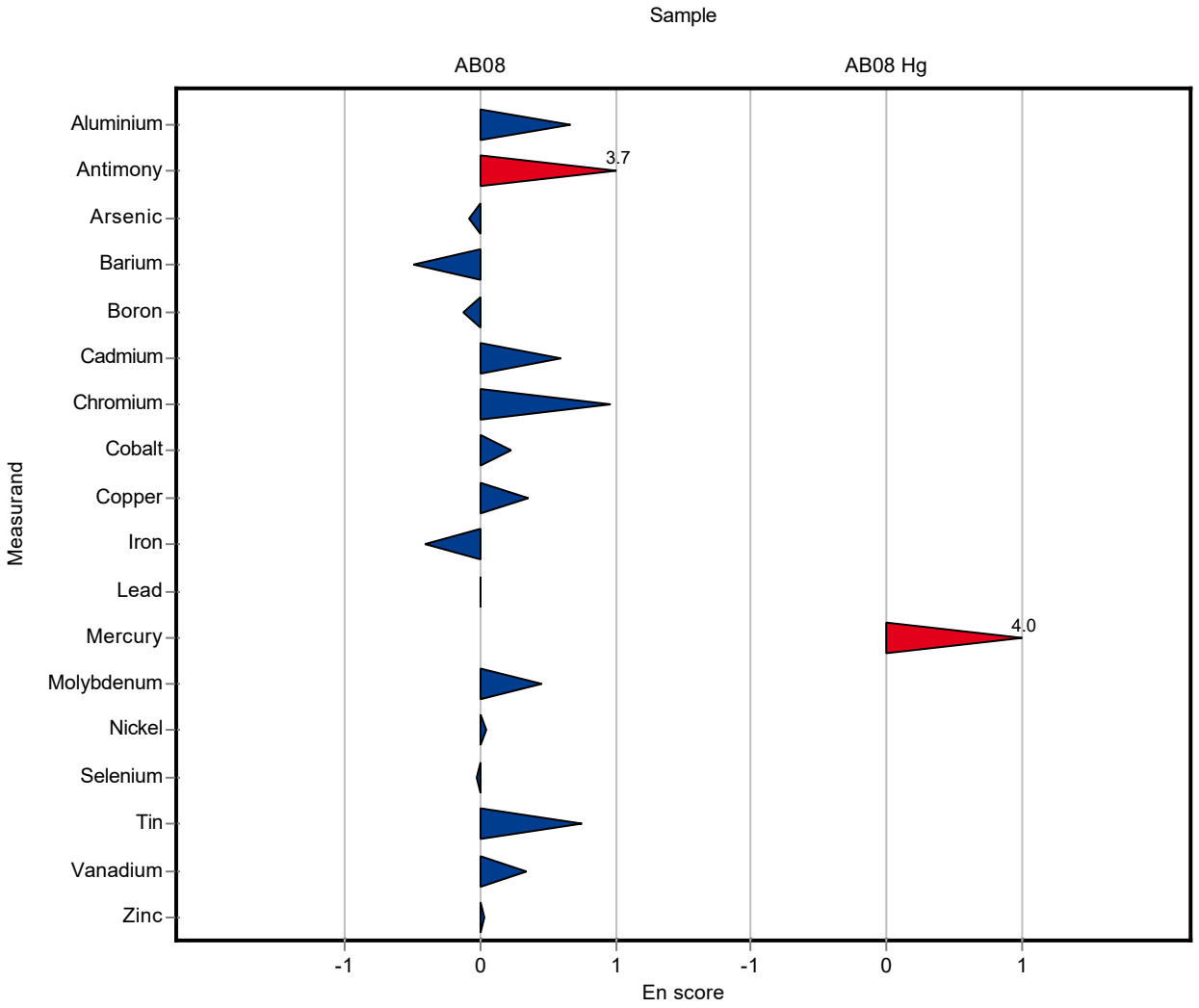

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
7.7
7.8
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.97 ± 0.043	0.0745	107	0.67
Antimony	mg/l	0.0017 ± 0.000076	0.00271 ± 0.00013	0.000131	159	3.71
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.00069	0.000621	99	-0.09
Barium	mg/l	0.11 ± 0.00216	0.109 ± 0.00051	0.00551	98.9	-0.50
Boron	mg/l	0.308 ± 0.00629	0.301 ± 0.027	0.0154	97.7	-0.13
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.000036	0.000111	104	0.60
Chromium	mg/l	0.0954 ± 0.00205	0.102 ± 0.00326	0.00496	107	0.96
Cobalt	mg/l	0.0109 ± 0.000134	0.0112 ± 0.00056	0.000547	102	0.22
Copper	mg/l	0.108 ± 0.00179	0.114 ± 0.008	0.00541	105	0.36
Iron	mg/l	0.23 ± 0.00474	0.225 ± 0.0059	0.0115	97.7	-0.41
Lead	mg/l	0.0109 ± 0.000279	0.0109 ± 0.0028	0.000588	100	0.00
Molybdenum	mg/l	0.014 ± 0.000441	0.0148 ± 0.00088	0.000908	106	0.45
Nickel	mg/l	0.0111 ± 0.000252	0.0113 ± 0.0022	0.000555	102	0.05
Selenium	mg/l	0.0119 ± 0.000658	0.0116 ± 0.0048	0.00155	97.4	-0.03
Silver	mg/l	- ± -	0.0005 ± 0.000012	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0357 ± 0.0018	0.00327	109	0.76
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.0006	0.0016	103	0.34
Zinc	mg/l	0.329 ± 0.00699	0.33 ± 0.0132	0.0165	100	0.03

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000169 ± 0.000008	0.000009	171	4.04

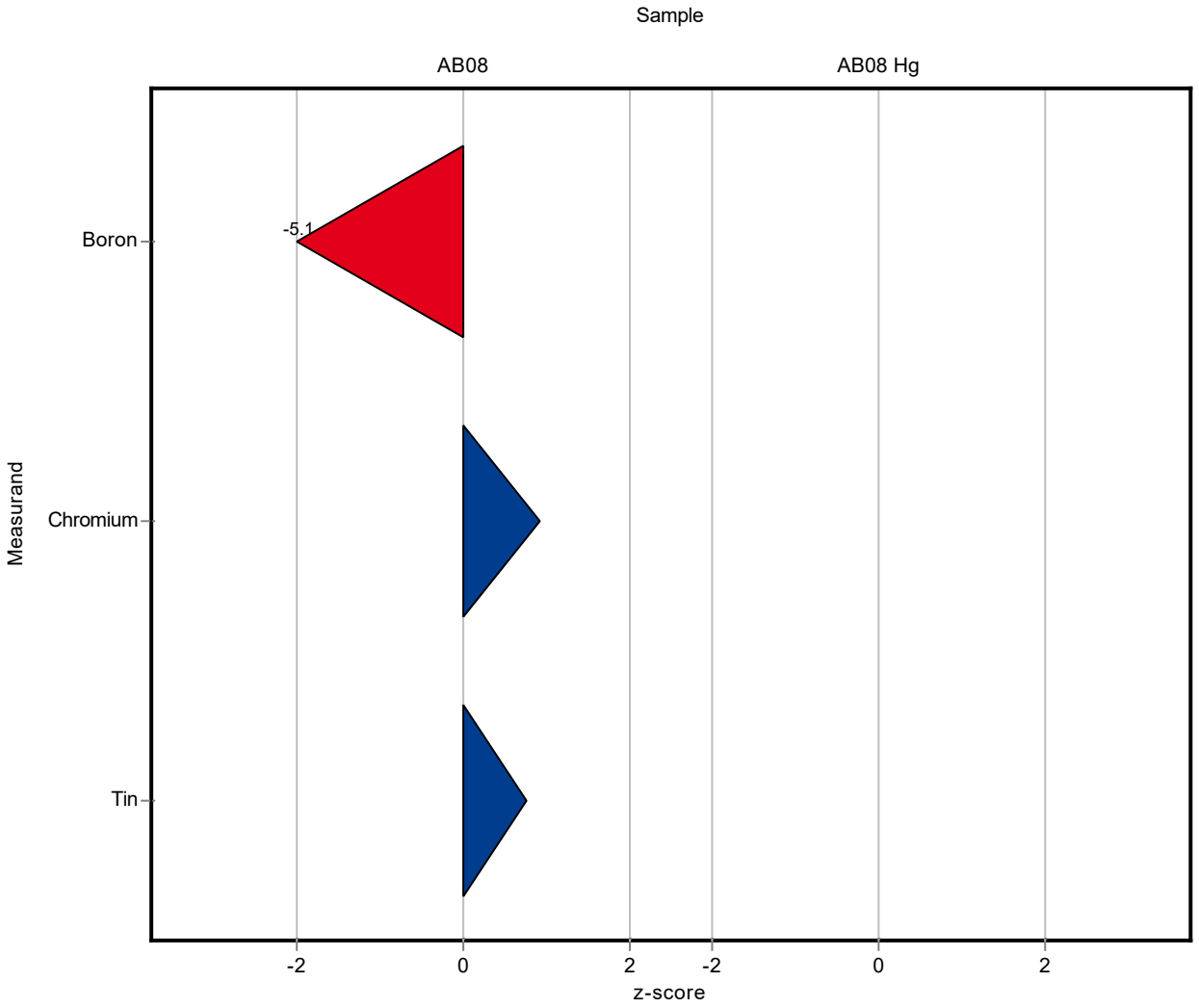

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
3.7
4.0
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	<4 (LOQ) ± -	0.0745	-	-
Antimony	mg/l	0.0017 ± 0.000076	<0.07 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	<0.02 (LOQ) ± -	0.000621	-	-
Barium	mg/l	0.11 ± 0.00216	<0.15 (LOQ) ± -	0.00551	-	-
Boron	mg/l	0.308 ± 0.00629	0.23 ± 0.1	0.0154	74.7	-5.07
Cadmium	mg/l	0.00144 ± 0.000057	<0.04 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.05	0.00496	105	0.92
Cobalt	mg/l	0.0109 ± 0.000134	<0.02 (LOQ) ± -	0.000547	-	-
Copper	mg/l	0.108 ± 0.00179	<0.6 (LOQ) ± -	0.00541	-	-
Iron	mg/l	0.23 ± 0.00474	<1 (LOQ) ± -	0.0115	-	-
Lead	mg/l	0.0109 ± 0.000279	<0.6 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	<0.016 (LOQ) ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	<0.1 (LOQ) ± -	0.000555	-	-
Selenium	mg/l	0.0119 ± 0.000658	<0.022 (LOQ) ± -	0.00155	-	-
Silver	mg/l	- ± -	<0.2 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0352 ± 0.02	0.00327	108	0.75
Vanadium	mg/l	0.0145 ± 0.000688	<0.04 (LOQ) ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	<2 (LOQ) ± -	0.0165	-	-

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.02 (LOQ) ± -	0.000009	-	-

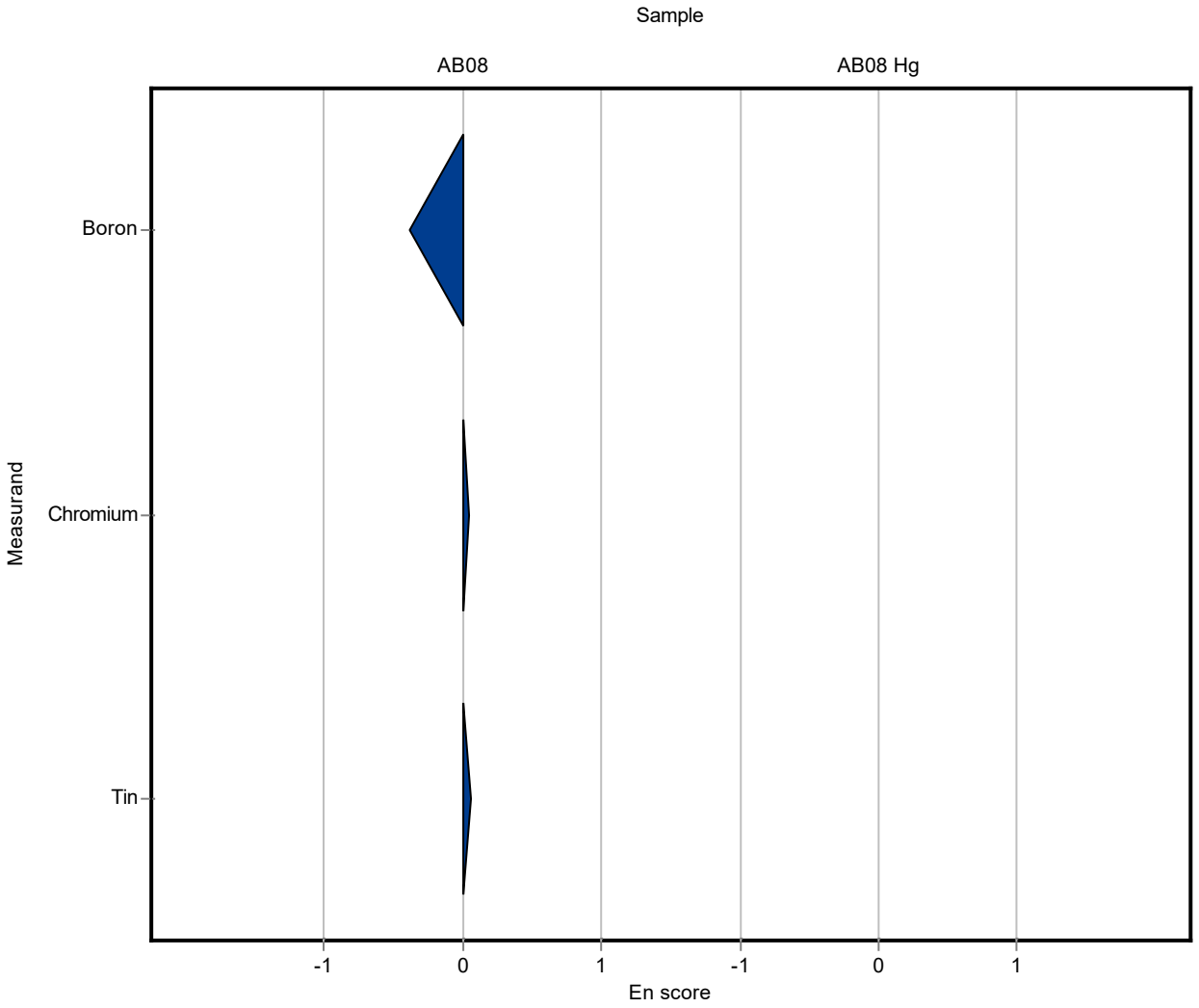

Sample
AB08
AB08 Hg
Boron
Chromium
Tin
Measurand
-5.1
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	<4 (LOQ) ± -	0.0745	-	-
Antimony	mg/l	0.0017 ± 0.000076	<0.07 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	<0.02 (LOQ) ± -	0.000621	-	-
Barium	mg/l	0.11 ± 0.00216	<0.15 (LOQ) ± -	0.00551	-	-
Boron	mg/l	0.308 ± 0.00629	0.23 ± 0.1	0.0154	74.7	-0.39
Cadmium	mg/l	0.00144 ± 0.000057	<0.04 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.05	0.00496	105	0.05
Cobalt	mg/l	0.0109 ± 0.000134	<0.02 (LOQ) ± -	0.000547	-	-
Copper	mg/l	0.108 ± 0.00179	<0.6 (LOQ) ± -	0.00541	-	-
Iron	mg/l	0.23 ± 0.00474	<1 (LOQ) ± -	0.0115	-	-
Lead	mg/l	0.0109 ± 0.000279	<0.6 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	<0.016 (LOQ) ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	<0.1 (LOQ) ± -	0.000555	-	-
Selenium	mg/l	0.0119 ± 0.000658	<0.022 (LOQ) ± -	0.00155	-	-
Silver	mg/l	- ± -	<0.2 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0352 ± 0.02	0.00327	108	0.06
Vanadium	mg/l	0.0145 ± 0.000688	<0.04 (LOQ) ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	<2 (LOQ) ± -	0.0165	-	-

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.02 (LOQ) ± -	0.000009	-	-

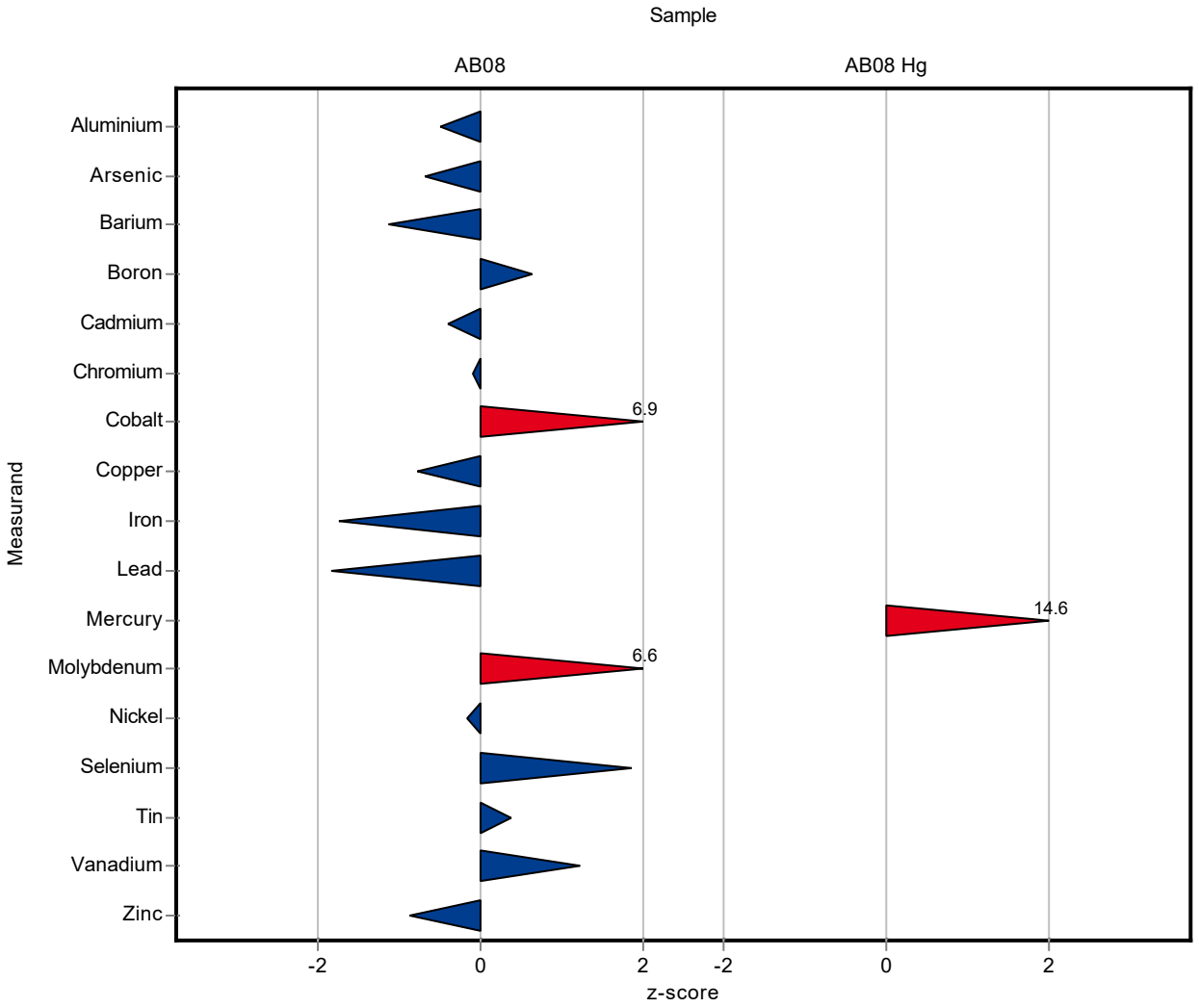

Sample
AB08
AB08 Hg
Boron
Chromium
Tin
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.872 ± 0.049	0.0745	96	-0.49
Antimony	mg/l	0.0017 ± 0.000076	<0.004 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.00089	0.000621	96.6	-0.68
Barium	mg/l	0.11 ± 0.00216	0.104 ± 0.0087	0.00551	94.4	-1.12
Boron	mg/l	0.308 ± 0.00629	0.318 ± 0.0086	0.0154	103	0.64
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.00012	0.000111	96.9	-0.40
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.0042	0.00496	99.6	-0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.0147 ± 0.00093	0.000547	134	6.86
Copper	mg/l	0.108 ± 0.00179	0.104 ± 0.0031	0.00541	96.1	-0.78
Iron	mg/l	0.23 ± 0.00474	0.21 ± 0.0072	0.0115	91.2	-1.76
Lead	mg/l	0.0109 ± 0.000279	0.0098 ± 0.00083	0.000588	90	-1.85
Molybdenum	mg/l	0.014 ± 0.000441	0.02 ± 0.00082	0.000908	143	6.63
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.00074	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.0148 ± 0.00077	0.00155	124	1.87
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.034 ± 0.0027	0.00327	104	0.39
Vanadium	mg/l	0.0145 ± 0.000688	0.0165 ± 0.00069	0.0016	114	1.23
Zinc	mg/l	0.329 ± 0.00699	0.315 ± 0.017	0.0165	95.7	-0.87

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.00023 ± 0.000015	0.000009	232	14.60

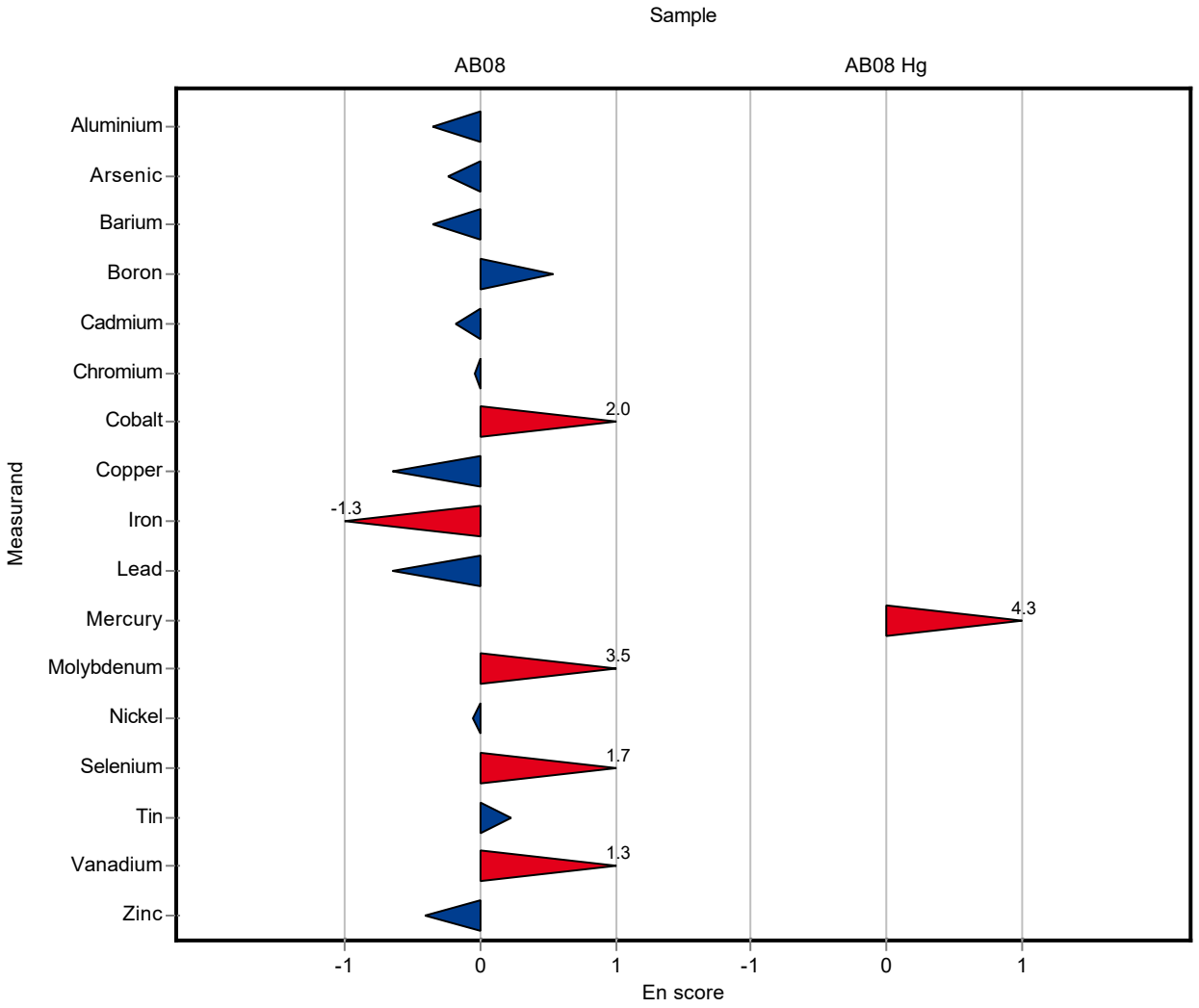

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
6.9
14.6
6.6
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.872 ± 0.049	0.0745	96	-0.35
Antimony	mg/l	0.0017 ± 0.000076	<0.004 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.00089	0.000621	96.6	-0.24
Barium	mg/l	0.11 ± 0.00216	0.104 ± 0.0087	0.00551	94.4	-0.35
Boron	mg/l	0.308 ± 0.00629	0.318 ± 0.0086	0.0154	103	0.54
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.00012	0.000111	96.9	-0.18
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.0042	0.00496	99.6	-0.05
Cobalt	mg/l	0.0109 ± 0.000134	0.0147 ± 0.00093	0.000547	134	2.01
Copper	mg/l	0.108 ± 0.00179	0.104 ± 0.0031	0.00541	96.1	-0.66
Iron	mg/l	0.23 ± 0.00474	0.21 ± 0.0072	0.0115	91.2	-1.33
Lead	mg/l	0.0109 ± 0.000279	0.0098 ± 0.00083	0.000588	90	-0.64
Molybdenum	mg/l	0.014 ± 0.000441	0.02 ± 0.00082	0.000908	143	3.55
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.00074	0.000555	99.2	-0.06
Selenium	mg/l	0.0119 ± 0.000658	0.0148 ± 0.00077	0.00155	124	1.73
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.034 ± 0.0027	0.00327	104	0.22
Vanadium	mg/l	0.0145 ± 0.000688	0.0165 ± 0.00069	0.0016	114	1.28
Zinc	mg/l	0.329 ± 0.00699	0.315 ± 0.017	0.0165	95.7	-0.41

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.00023 ± 0.000015	0.000009	232	4.27

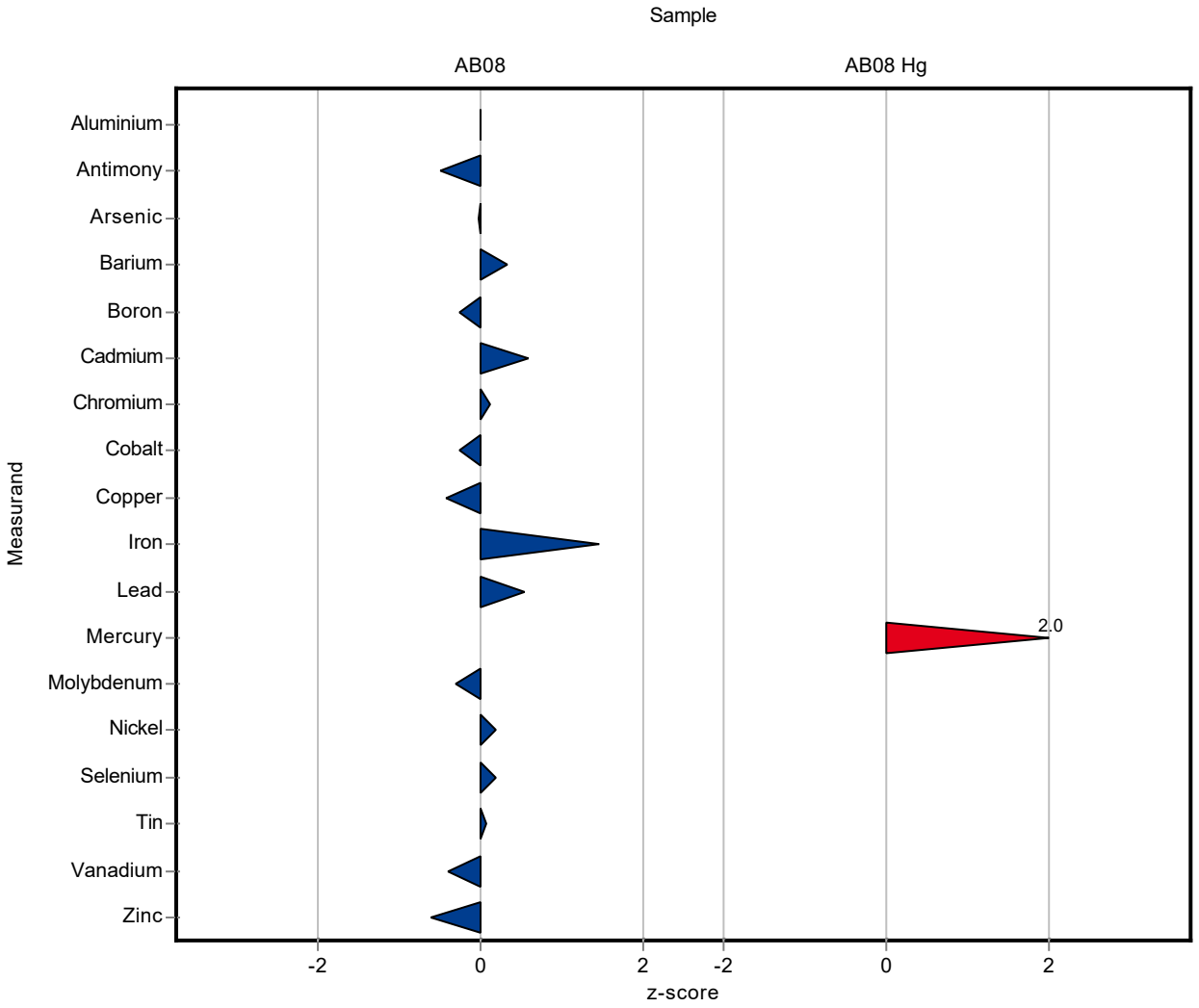

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
2.0
-1.3
4.3
3.5
1.7
1.3
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.909 ± 0.0055	0.0745	100	0.01
Antimony	mg/l	0.0017 ± 0.000076	0.00164 ± 0.000004	0.000131	96.2	-0.49
Arsenic	mg/l	0.0124 ± 0.00019	0.0124 ± 0.00016	0.000621	99.8	-0.04
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.00049	0.00551	102	0.33
Boron	mg/l	0.308 ± 0.00629	0.304 ± 0.0072	0.0154	98.7	-0.27
Cadmium	mg/l	0.00144 ± 0.000057	0.00151 ± 0.000084	0.000111	105	0.59
Chromium	mg/l	0.0954 ± 0.00205	0.096 ± 0.001	0.00496	101	0.12
Cobalt	mg/l	0.0109 ± 0.000134	0.0108 ± 0.00011	0.000547	98.7	-0.27
Copper	mg/l	0.108 ± 0.00179	0.106 ± 0.0012	0.00541	97.9	-0.41
Iron	mg/l	0.23 ± 0.00474	0.247 ± 0.0015	0.0115	107	1.46
Lead	mg/l	0.0109 ± 0.000279	0.0112 ± 0.00016	0.000588	103	0.54
Molybdenum	mg/l	0.014 ± 0.000441	0.0137 ± 0.00019	0.000908	98	-0.30
Nickel	mg/l	0.0111 ± 0.000252	0.0112 ± 0.00079	0.000555	101	0.20
Selenium	mg/l	0.0119 ± 0.000658	0.0122 ± 0.00018	0.00155	102	0.19
Silver	mg/l	- ± -	<0.0001 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.00058	0.00327	101	0.08
Vanadium	mg/l	0.0145 ± 0.000688	0.0139 ± 0.00005	0.0016	95.7	-0.39
Zinc	mg/l	0.329 ± 0.00699	0.319 ± 0.0037	0.0165	96.9	-0.62

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000117 ± 0.000002	0.000009	118	2.01

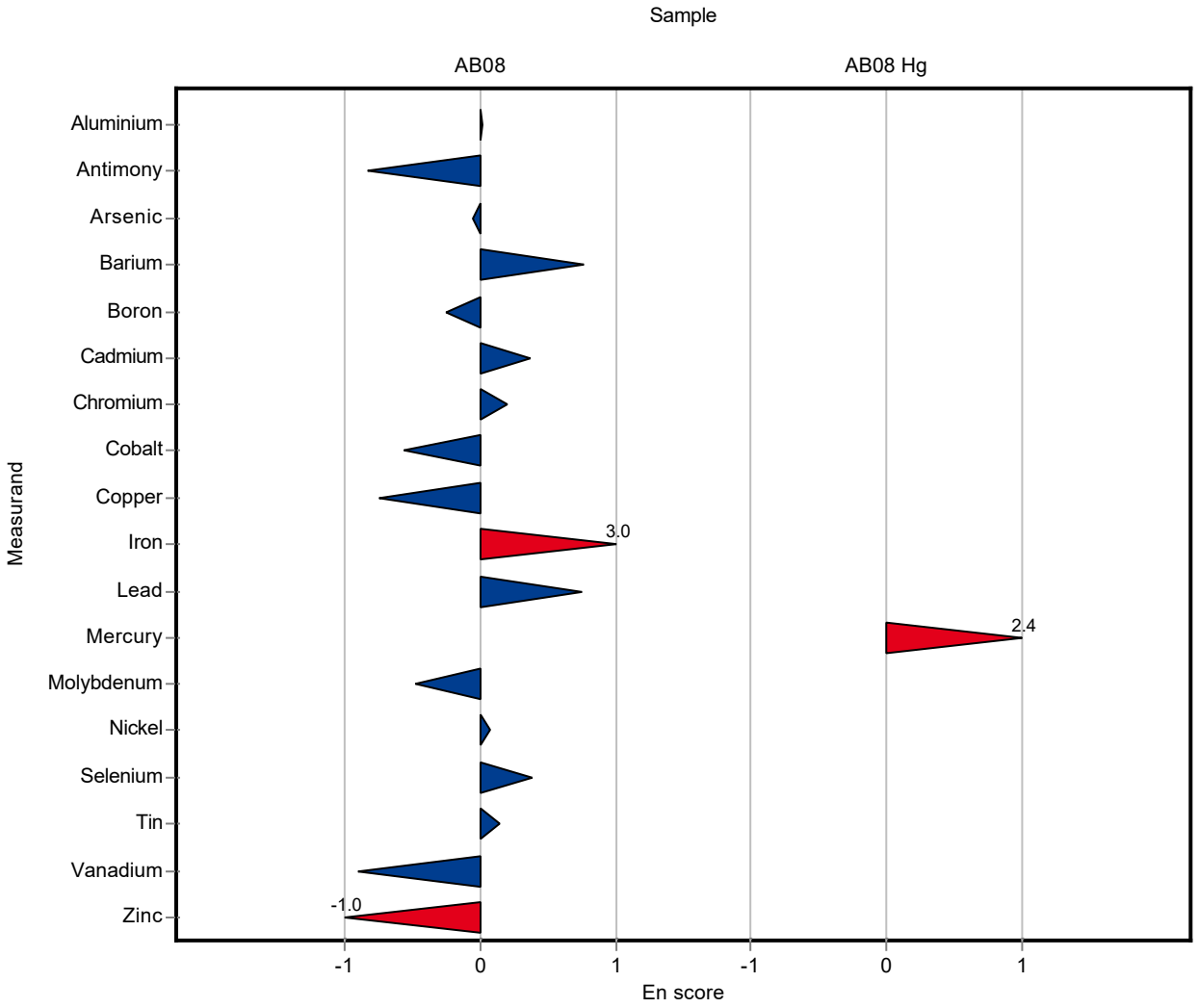

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
2.0
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.909 ± 0.0055	0.0745	100	0.01
Antimony	mg/l	0.0017 ± 0.000076	0.00164 ± 0.000004	0.000131	96.2	-0.84
Arsenic	mg/l	0.0124 ± 0.00019	0.0124 ± 0.00016	0.000621	99.8	-0.06
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.00049	0.00551	102	0.76
Boron	mg/l	0.308 ± 0.00629	0.304 ± 0.0072	0.0154	98.7	-0.26
Cadmium	mg/l	0.00144 ± 0.000057	0.00151 ± 0.000084	0.000111	105	0.37
Chromium	mg/l	0.0954 ± 0.00205	0.096 ± 0.001	0.00496	101	0.20
Cobalt	mg/l	0.0109 ± 0.000134	0.0108 ± 0.00011	0.000547	98.7	-0.57
Copper	mg/l	0.108 ± 0.00179	0.106 ± 0.0012	0.00541	97.9	-0.75
Iron	mg/l	0.23 ± 0.00474	0.247 ± 0.0015	0.0115	107	2.99
Lead	mg/l	0.0109 ± 0.000279	0.0112 ± 0.00016	0.000588	103	0.74
Molybdenum	mg/l	0.014 ± 0.000441	0.0137 ± 0.00019	0.000908	98	-0.47
Nickel	mg/l	0.0111 ± 0.000252	0.0112 ± 0.00079	0.000555	101	0.07
Selenium	mg/l	0.0119 ± 0.000658	0.0122 ± 0.00018	0.00155	102	0.39
Silver	mg/l	- ± -	<0.0001 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.00058	0.00327	101	0.14
Vanadium	mg/l	0.0145 ± 0.000688	0.0139 ± 0.00005	0.0016	95.7	-0.90
Zinc	mg/l	0.329 ± 0.00699	0.319 ± 0.0037	0.0165	96.9	-1.01

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000117 ± 0.000002	0.000009	118	2.39

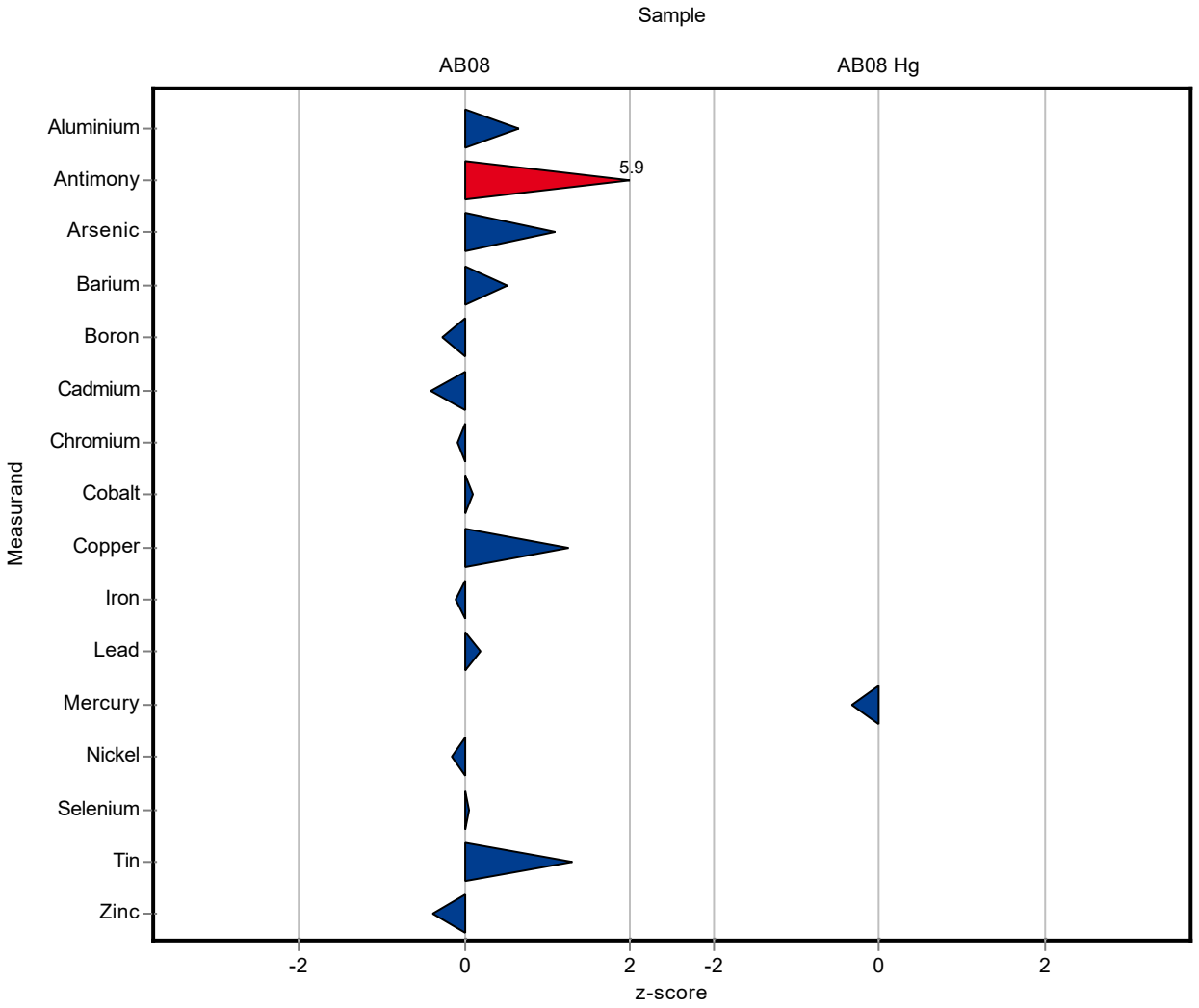

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
3.0
2.4
-1.0
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.957 ± 0.096	0.0745	105	0.65
Antimony	mg/l	0.0017 ± 0.000076	0.00248 ± 0.0005	0.000131	146	5.91
Arsenic	mg/l	0.0124 ± 0.00019	0.0131 ± 0.0026	0.000621	105	1.09
Barium	mg/l	0.11 ± 0.00216	0.113 ± 0.011	0.00551	103	0.51
Boron	mg/l	0.308 ± 0.00629	0.304 ± 0.03	0.0154	98.7	-0.27
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.0003	0.000111	96.9	-0.40
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.01	0.00496	99.6	-0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.115 ± 0.012	0.00541	106	1.25
Iron	mg/l	0.23 ± 0.00474	0.229 ± 0.023	0.0115	99.5	-0.10
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	<0.02 (LOQ) ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.002	0.00155	101	0.06
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.037 ± 0.004	0.00327	113	1.30
Vanadium	mg/l	0.0145 ± 0.000688	<0.02 (LOQ) ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	0.323 ± 0.032	0.0165	98.1	-0.38

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000096 ± 0.000019	0.000009	97	-0.33

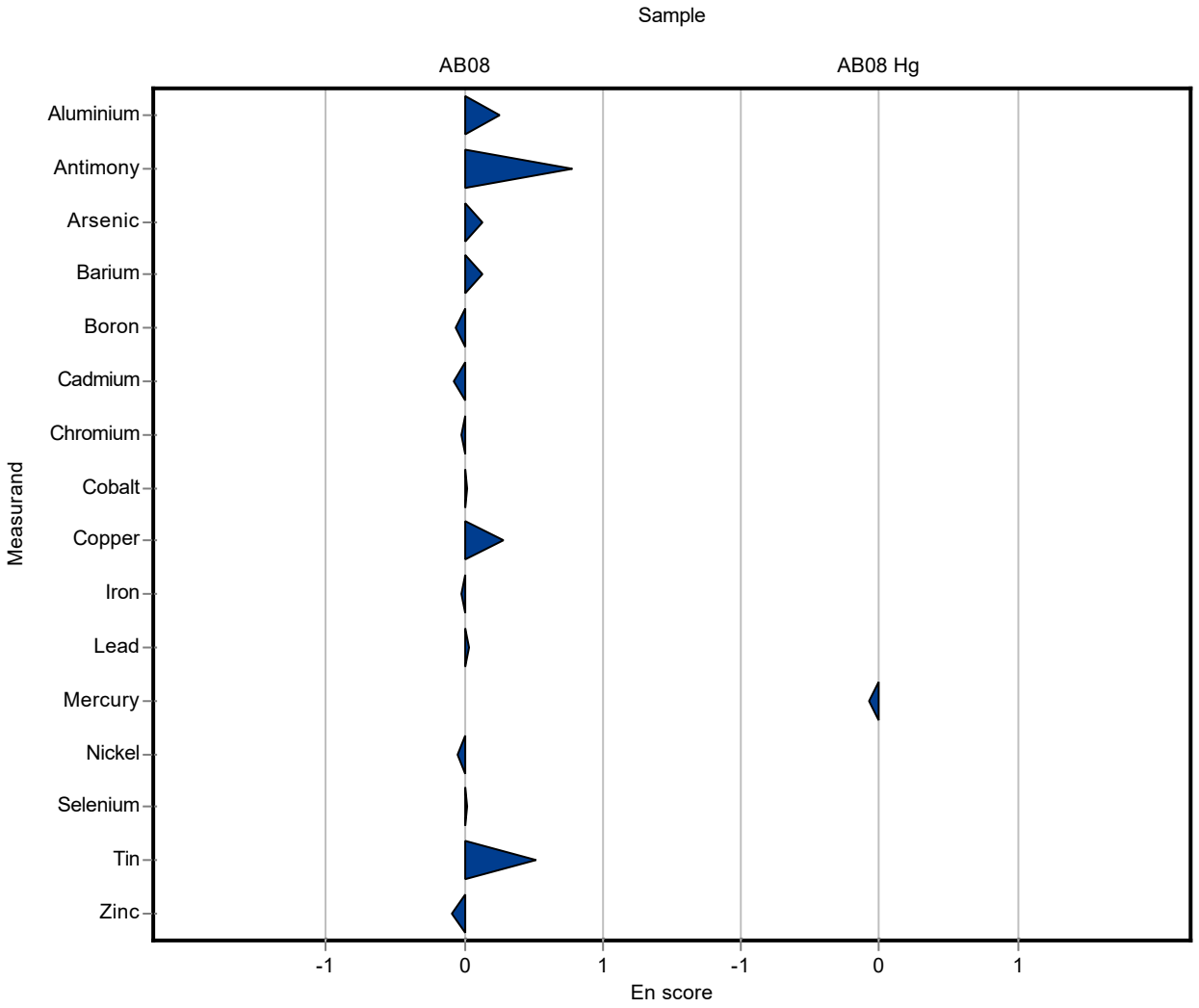

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Nickel
Selenium
Tin
Zinc
5.9
Measurand
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.957 ± 0.096	0.0745	105	0.25
Antimony	mg/l	0.0017 ± 0.000076	0.00248 ± 0.0005	0.000131	146	0.77
Arsenic	mg/l	0.0124 ± 0.00019	0.0131 ± 0.0026	0.000621	105	0.13
Barium	mg/l	0.11 ± 0.00216	0.113 ± 0.011	0.00551	103	0.13
Boron	mg/l	0.308 ± 0.00629	0.304 ± 0.03	0.0154	98.7	-0.07
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.0003	0.000111	96.9	-0.07
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.01	0.00496	99.6	-0.02
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.03
Copper	mg/l	0.108 ± 0.00179	0.115 ± 0.012	0.00541	106	0.28
Iron	mg/l	0.23 ± 0.00474	0.229 ± 0.023	0.0115	99.5	-0.03
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.03
Molybdenum	mg/l	0.014 ± 0.000441	<0.02 (LOQ) ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.04
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.002	0.00155	101	0.02
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.037 ± 0.004	0.00327	113	0.52
Vanadium	mg/l	0.0145 ± 0.000688	<0.02 (LOQ) ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	0.323 ± 0.032	0.0165	98.1	-0.10

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000096 ± 0.000019	0.000009	97	-0.08

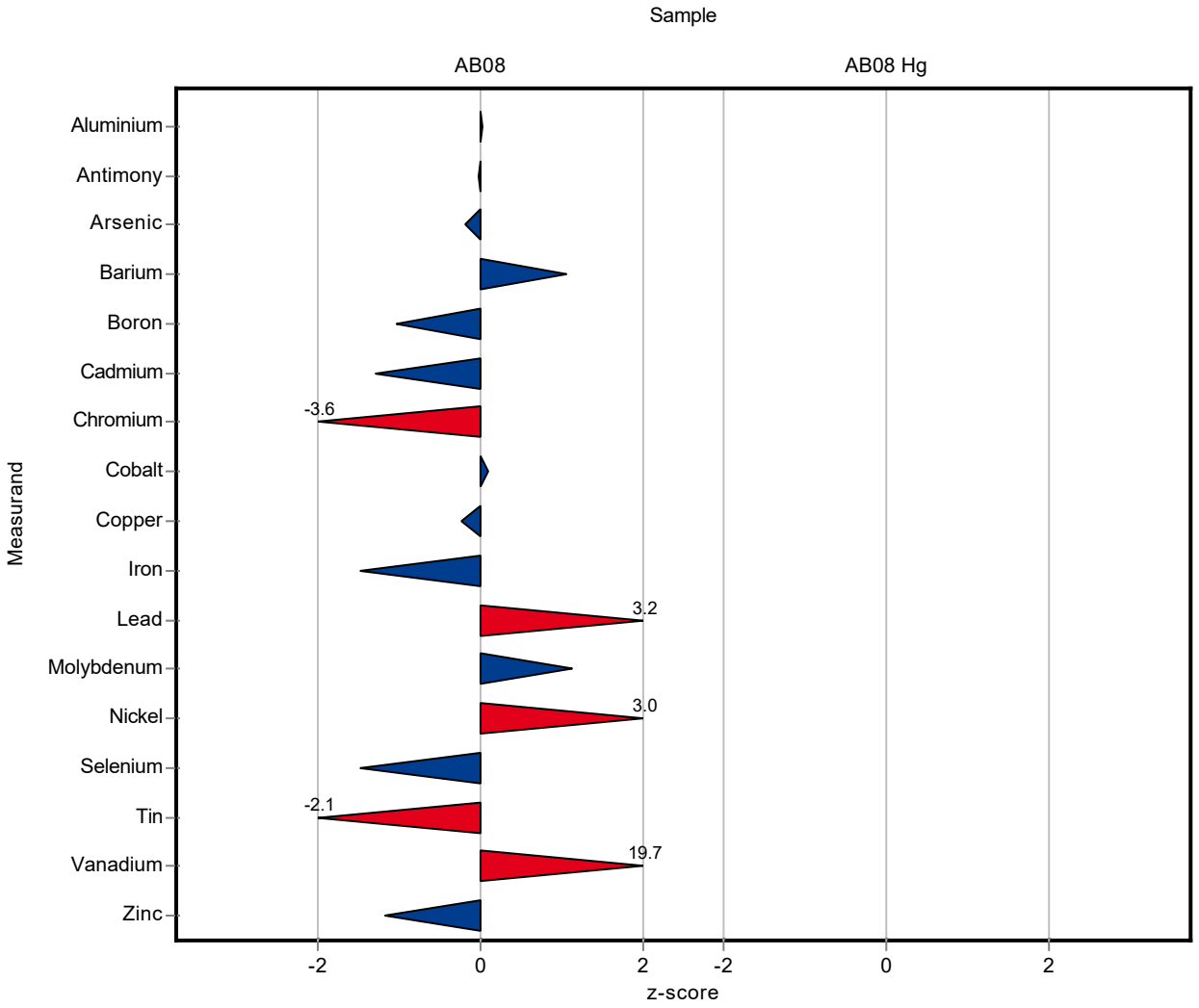

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Nickel
Selenium
Tin
Zinc
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.911 ± 0.0911	0.0745	100	0.03
Antimony	mg/l	0.0017 ± 0.000076	0.0017 ± 0.0005	0.000131	99.8	-0.03
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.0018	0.000621	99	-0.20
Barium	mg/l	0.11 ± 0.00216	0.116 ± 0.0116	0.00551	105	1.05
Boron	mg/l	0.308 ± 0.00629	0.292 ± 0.0292	0.0154	94.8	-1.04
Cadmium	mg/l	0.00144 ± 0.000057	0.0013 ± 0.0003	0.000111	90	-1.30
Chromium	mg/l	0.0954 ± 0.00205	0.0778 ± 0.0194	0.00496	81.5	-3.55
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.0011	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.107 ± 0.0214	0.00541	98.9	-0.23
Iron	mg/l	0.23 ± 0.00474	0.213 ± 0.032	0.0115	92.5	-1.50
Lead	mg/l	0.0109 ± 0.000279	0.01275 ± 0.0025	0.000588	117	3.17
Molybdenum	mg/l	0.014 ± 0.000441	0.015 ± 0.003	0.000908	107	1.13
Nickel	mg/l	0.0111 ± 0.000252	0.01275 ± 0.0019	0.000555	115	2.99
Selenium	mg/l	0.0119 ± 0.000658	0.00961 ± 0.0009	0.00155	80.7	-1.49
Silver	mg/l	- ± -	<0.02 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0257 ± 0.00257	0.00327	78.5	-2.15
Vanadium	mg/l	0.0145 ± 0.000688	0.046 ± 0.0046	0.0016	317	19.70
Zinc	mg/l	0.329 ± 0.00699	0.3098 ± 0.031	0.0165	94.1	-1.18

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

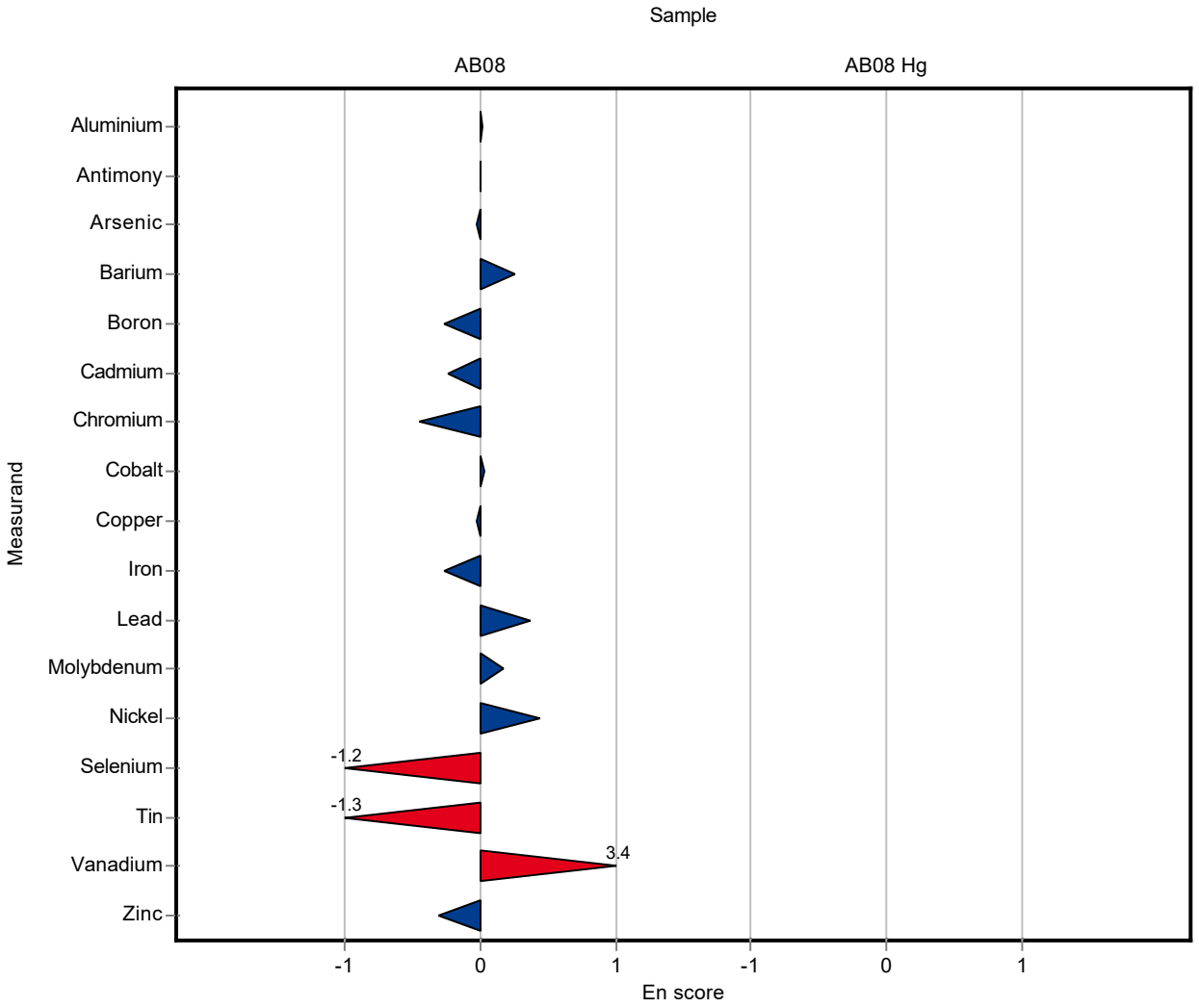

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-3.6
3.2
3.0
-2.1
19.7
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.911 ± 0.0911	0.0745	100	0.01
Antimony	mg/l	0.0017 ± 0.000076	0.0017 ± 0.0005	0.000131	99.8	0.00
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.0018	0.000621	99	-0.03
Barium	mg/l	0.11 ± 0.00216	0.116 ± 0.0116	0.00551	105	0.25
Boron	mg/l	0.308 ± 0.00629	0.292 ± 0.0292	0.0154	94.8	-0.27
Cadmium	mg/l	0.00144 ± 0.000057	0.0013 ± 0.0003	0.000111	90	-0.24
Chromium	mg/l	0.0954 ± 0.00205	0.0778 ± 0.0194	0.00496	81.5	-0.45
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.0011	0.000547	100	0.02
Copper	mg/l	0.108 ± 0.00179	0.107 ± 0.0214	0.00541	98.9	-0.03
Iron	mg/l	0.23 ± 0.00474	0.213 ± 0.032	0.0115	92.5	-0.27
Lead	mg/l	0.0109 ± 0.000279	0.01275 ± 0.0025	0.000588	117	0.37
Molybdenum	mg/l	0.014 ± 0.000441	0.015 ± 0.003	0.000908	107	0.17
Nickel	mg/l	0.0111 ± 0.000252	0.01275 ± 0.0019	0.000555	115	0.44
Selenium	mg/l	0.0119 ± 0.000658	0.00961 ± 0.0009	0.00155	80.7	-1.20
Silver	mg/l	- ± -	<0.02 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0257 ± 0.00257	0.00327	78.5	-1.31
Vanadium	mg/l	0.0145 ± 0.000688	0.046 ± 0.0046	0.0016	317	3.41
Zinc	mg/l	0.329 ± 0.00699	0.3098 ± 0.031	0.0165	94.1	-0.31

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

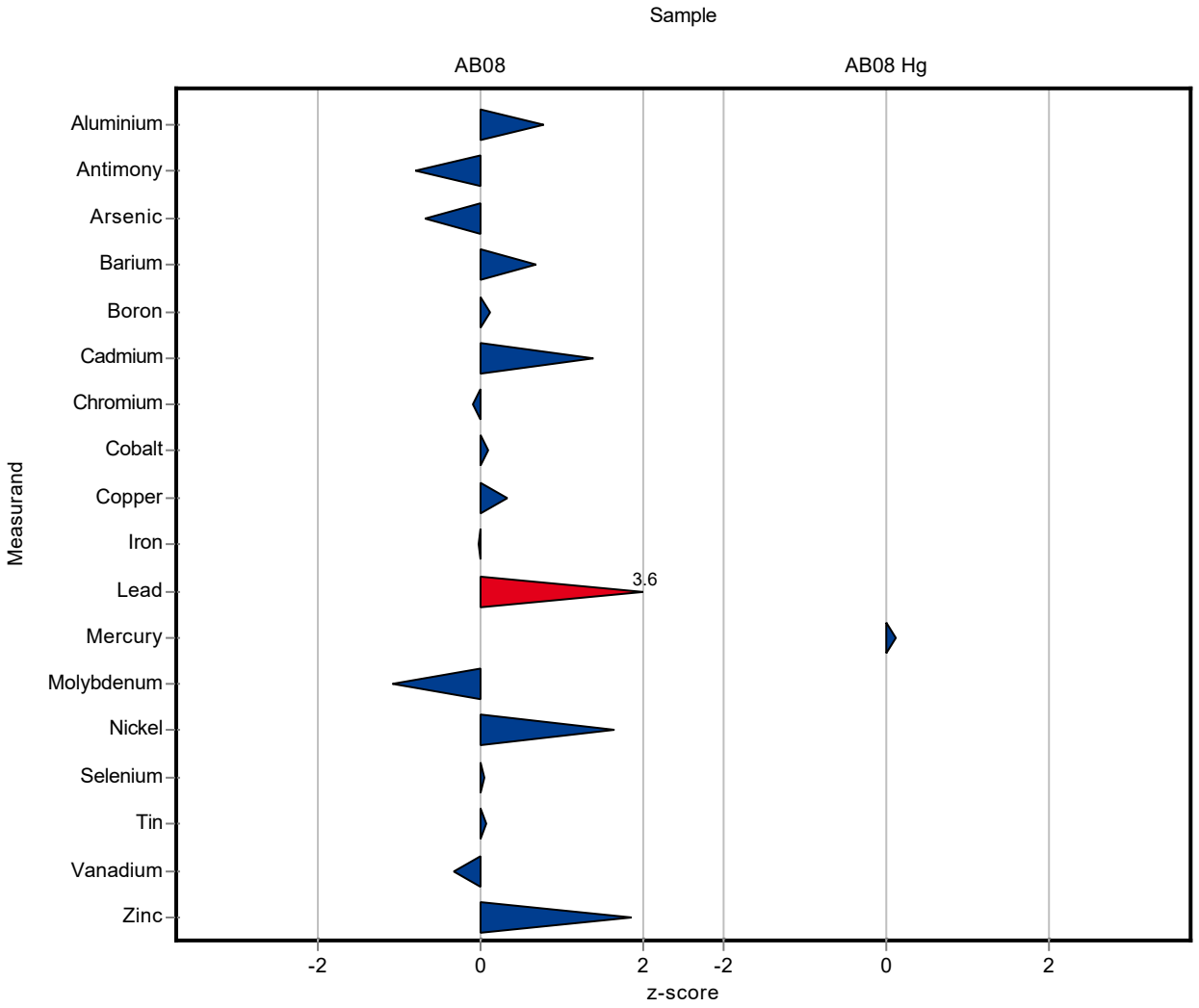

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-1.2
-1.3
3.4
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.967 ± 0.096	0.0745	106	0.78
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.79
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.68
Barium	mg/l	0.11 ± 0.00216	0.114 ± 0.01	0.00551	103	0.69
Boron	mg/l	0.308 ± 0.00629	0.31 ± 0.03	0.0154	101	0.13
Cadmium	mg/l	0.00144 ± 0.000057	0.0016 ± 0.0002	0.000111	111	1.40
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.009	0.00496	99.6	-0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.01	0.00541	102	0.33
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.02	0.0115	99.9	-0.02
Lead	mg/l	0.0109 ± 0.000279	0.013 ± 0.0013	0.000588	119	3.60
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.0013	0.000908	93	-1.07
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.0012	0.000555	108	1.64
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.0012	0.00155	101	0.06
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.003	0.00327	101	0.08
Vanadium	mg/l	0.0145 ± 0.000688	0.014 ± 0.001	0.0016	96.4	-0.33
Zinc	mg/l	0.329 ± 0.00699	0.36 ± 0.04	0.0165	109	1.87

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0001 ± 0.00001	0.000009	101	0.12

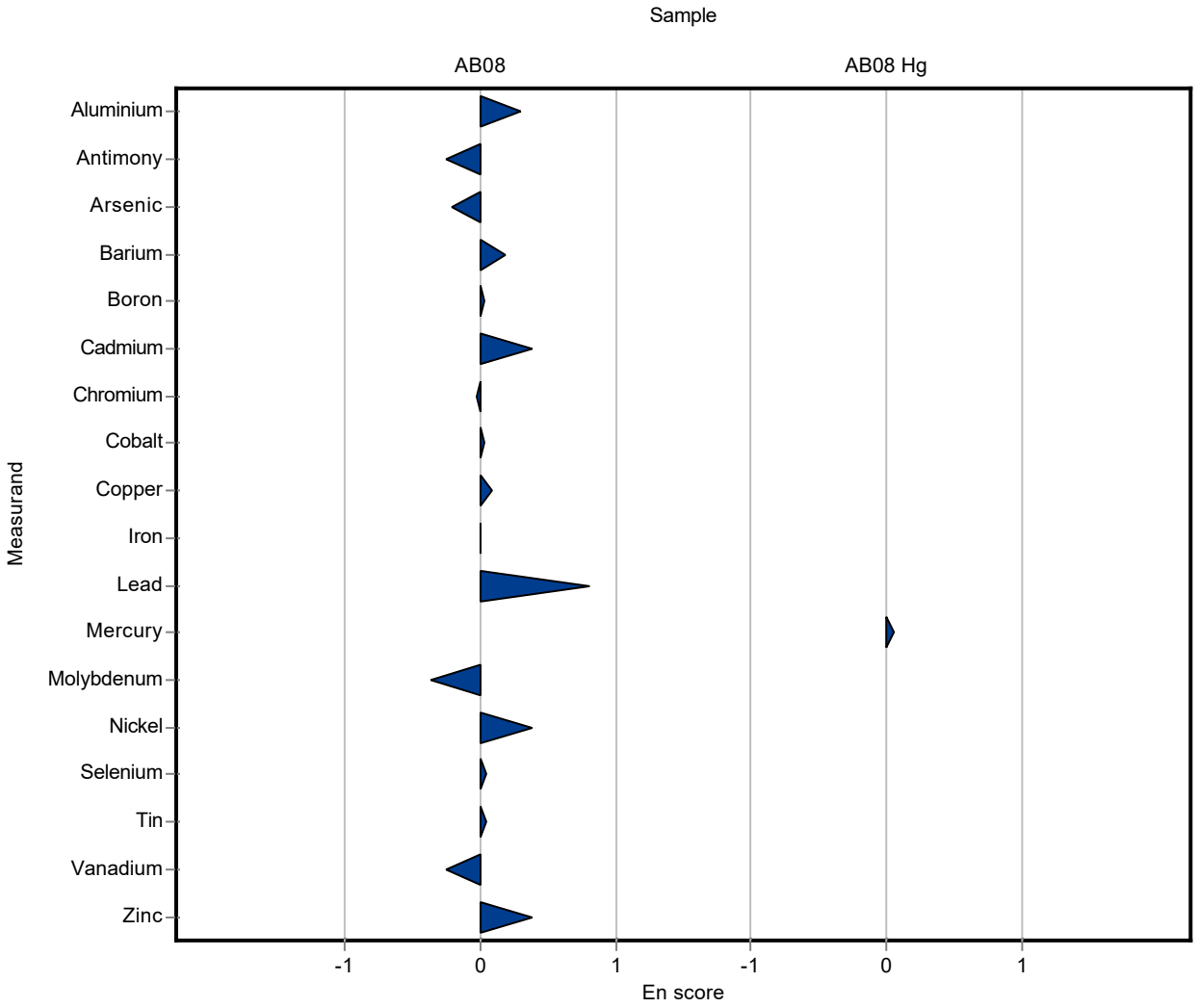

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
3.6
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.967 ± 0.096	0.0745	106	0.30
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.26
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.21
Barium	mg/l	0.11 ± 0.00216	0.114 ± 0.01	0.00551	103	0.19
Boron	mg/l	0.308 ± 0.00629	0.31 ± 0.03	0.0154	101	0.03
Cadmium	mg/l	0.00144 ± 0.000057	0.0016 ± 0.0002	0.000111	111	0.38
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.009	0.00496	99.6	-0.02
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.03
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.01	0.00541	102	0.09
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.02	0.0115	99.9	-0.01
Lead	mg/l	0.0109 ± 0.000279	0.013 ± 0.0013	0.000588	119	0.81
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.0013	0.000908	93	-0.37
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.0012	0.000555	108	0.38
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.0012	0.00155	101	0.04
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.003	0.00327	101	0.04
Vanadium	mg/l	0.0145 ± 0.000688	0.014 ± 0.001	0.0016	96.4	-0.25
Zinc	mg/l	0.329 ± 0.00699	0.36 ± 0.04	0.0165	109	0.38

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0001 ± 0.00001	0.000009	101	0.05

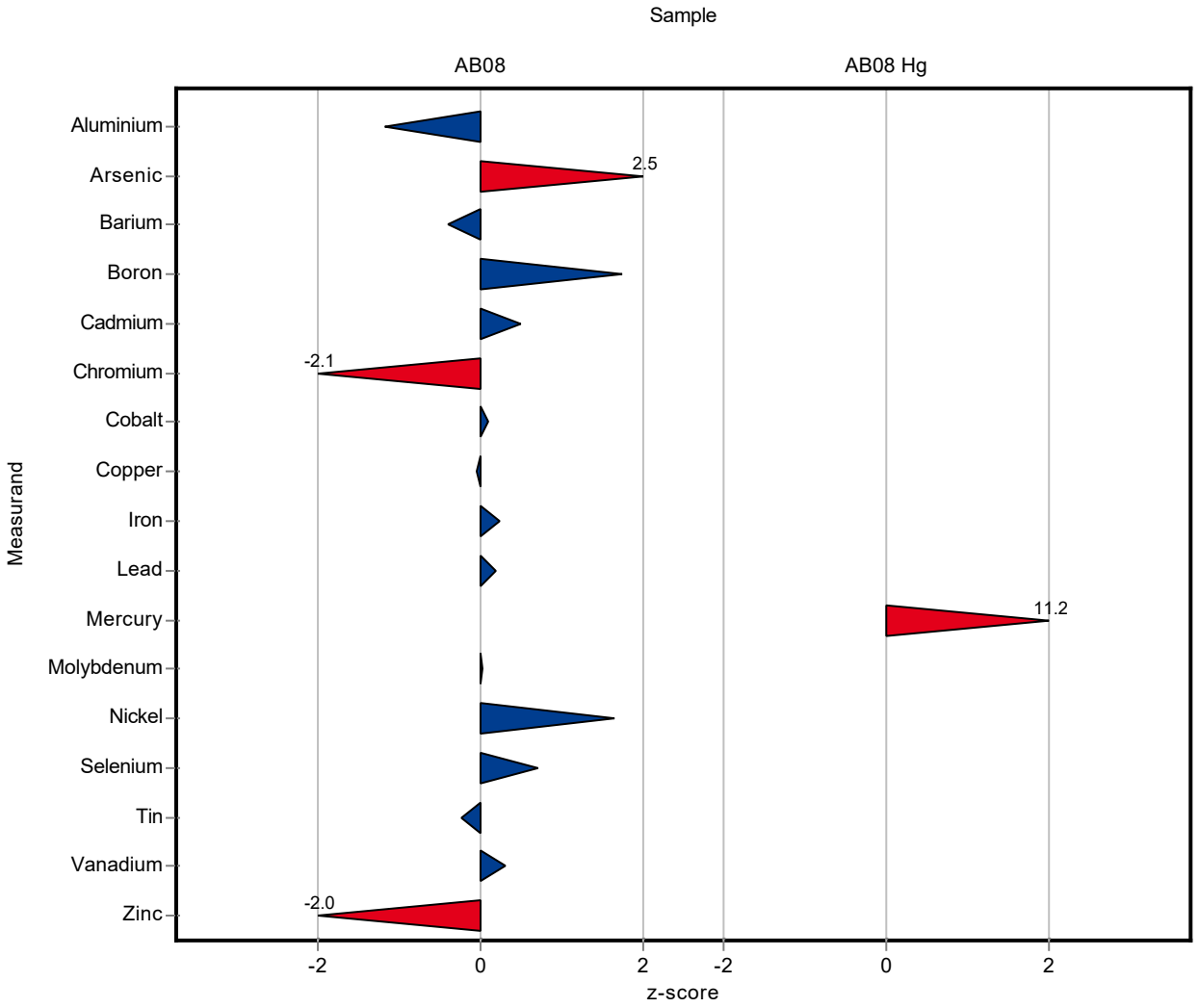

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.82 ± 0.12	0.0745	90.2	-1.19
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.014 ± 0.002	0.000621	113	2.54
Barium	mg/l	0.11 ± 0.00216	0.108 ± 0.016	0.00551	98	-0.40
Boron	mg/l	0.308 ± 0.00629	0.335 ± 0.05	0.0154	109	1.75
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.085 ± 0.013	0.00496	89.1	-2.10
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.016	0.00541	99.8	-0.04
Iron	mg/l	0.23 ± 0.00474	0.233 ± 0.035	0.0115	101	0.24
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.002	0.000908	100	0.03
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.002	0.000555	108	1.64
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.002	0.00155	109	0.70
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.032 ± 0.005	0.00327	97.7	-0.23
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.003	0.0016	103	0.30
Zinc	mg/l	0.329 ± 0.00699	0.296 ± 0.044	0.0165	89.9	-2.02

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0002 ± 0.00003	0.000009	202	11.20

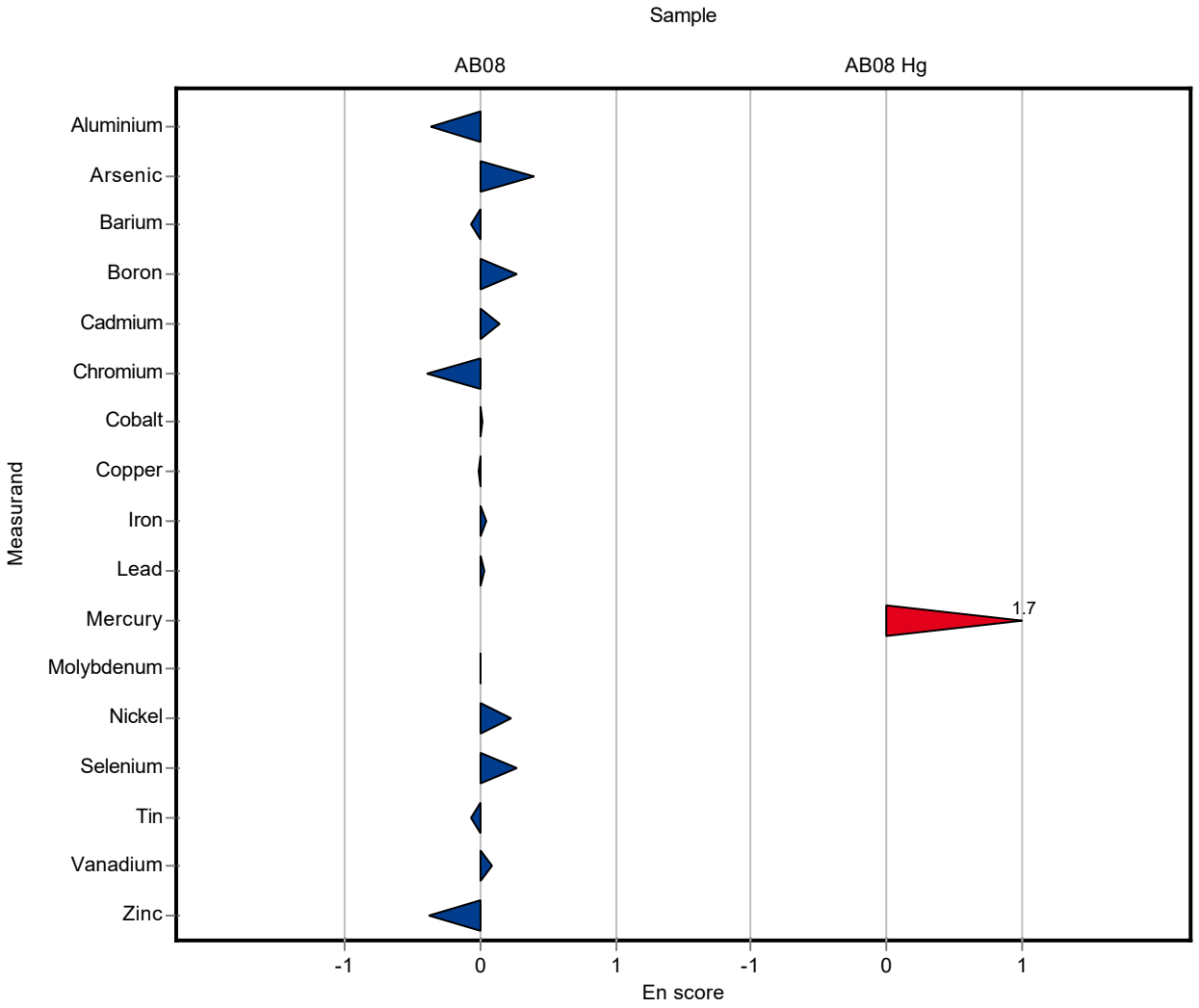

Sample
AB08
AB08 Hg
Measurand
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
2.5
-2.1
11.2
-2.0
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.82 ± 0.12	0.0745	90.2	-0.37
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.014 ± 0.002	0.000621	113	0.39
Barium	mg/l	0.11 ± 0.00216	0.108 ± 0.016	0.00551	98	-0.07
Boron	mg/l	0.308 ± 0.00629	0.335 ± 0.05	0.0154	109	0.27
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.14
Chromium	mg/l	0.0954 ± 0.00205	0.085 ± 0.013	0.00496	89.1	-0.40
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.01
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.016	0.00541	99.8	-0.01
Iron	mg/l	0.23 ± 0.00474	0.233 ± 0.035	0.0115	101	0.04
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.03
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.002	0.000908	100	0.01
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.002	0.000555	108	0.23
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.002	0.00155	109	0.27
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.032 ± 0.005	0.00327	97.7	-0.07
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.003	0.0016	103	0.08
Zinc	mg/l	0.329 ± 0.00699	0.296 ± 0.044	0.0165	89.9	-0.38

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0002 ± 0.00003	0.000009	202	1.67

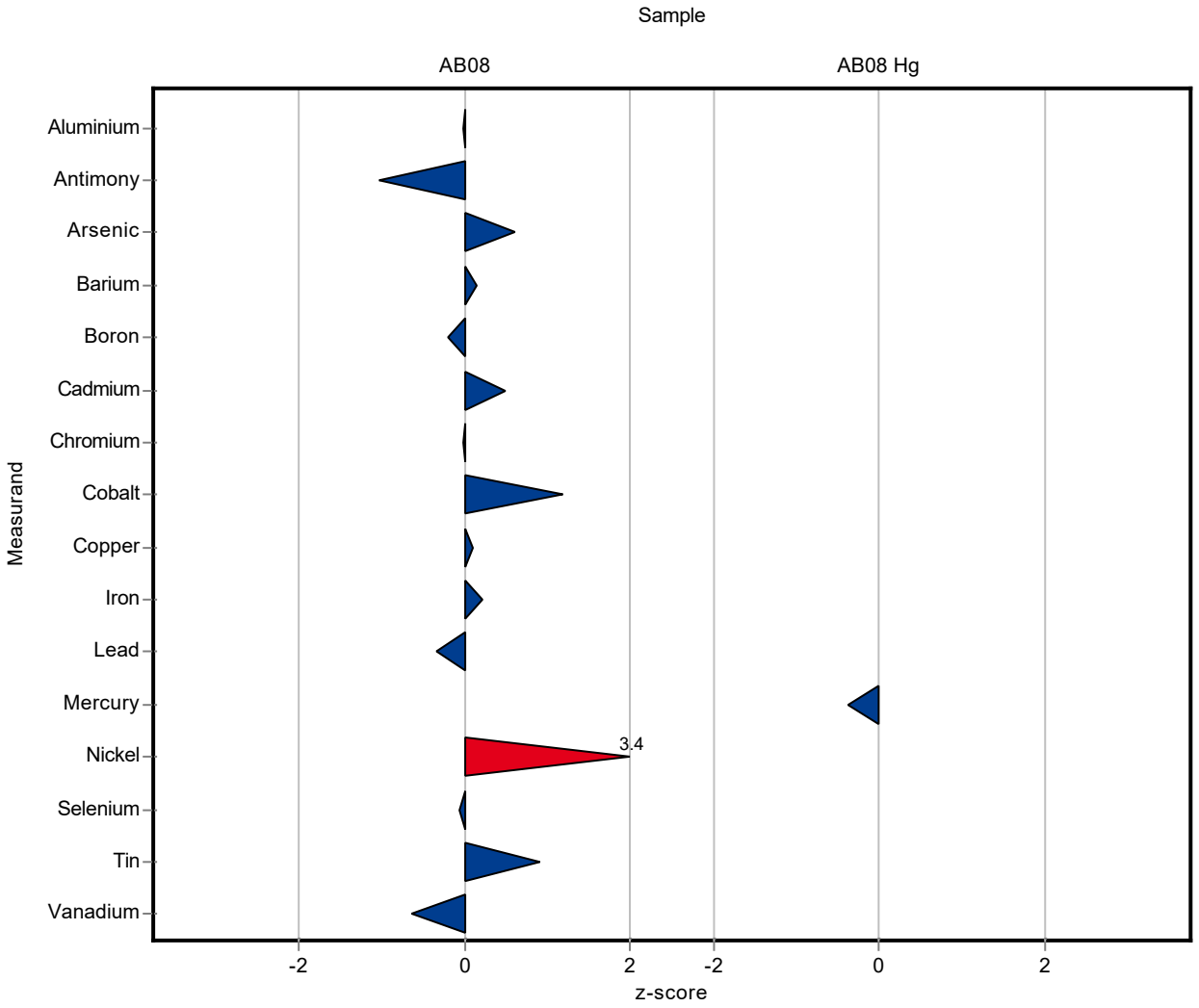

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
1.7
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.907 ± 0.151	0.0745	99.8	-0.02
Antimony	mg/l	0.0017 ± 0.000076	0.00157 ± 0.00027	0.000131	92.1	-1.02
Arsenic	mg/l	0.0124 ± 0.00019	0.0128 ± 0.0022	0.000621	103	0.61
Barium	mg/l	0.11 ± 0.00216	0.111 ± 0.015	0.00551	101	0.15
Boron	mg/l	0.308 ± 0.00629	0.305 ± 0.03	0.0154	99	-0.20
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.00029	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.0953 ± 0.0174	0.00496	99.9	-0.02
Cobalt	mg/l	0.0109 ± 0.000134	0.0116 ± 0.0019	0.000547	106	1.19
Copper	mg/l	0.108 ± 0.00179	0.1088 ± 0.015	0.00541	101	0.10
Iron	mg/l	0.23 ± 0.00474	0.2328 ± 0.03	0.0115	101	0.23
Lead	mg/l	0.0109 ± 0.000279	0.01068 ± 0.0019	0.000588	98.1	-0.35
Molybdenum	mg/l	0.014 ± 0.000441	- ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.013 ± 0.0021	0.000555	117	3.44
Selenium	mg/l	0.0119 ± 0.000658	0.0118 ± 0.0019	0.00155	99.1	-0.07
Silver	mg/l	- ± -	0.0000223 ± 0.000006	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0357 ± 0.006	0.00327	109	0.91
Vanadium	mg/l	0.0145 ± 0.000688	0.0135 ± 0.002	0.0016	92.9	-0.64
Zinc	mg/l	0.329 ± 0.00699	- ± -	0.0165	-	-

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0000955 ± 0.000016	0.000009	96.5	-0.38

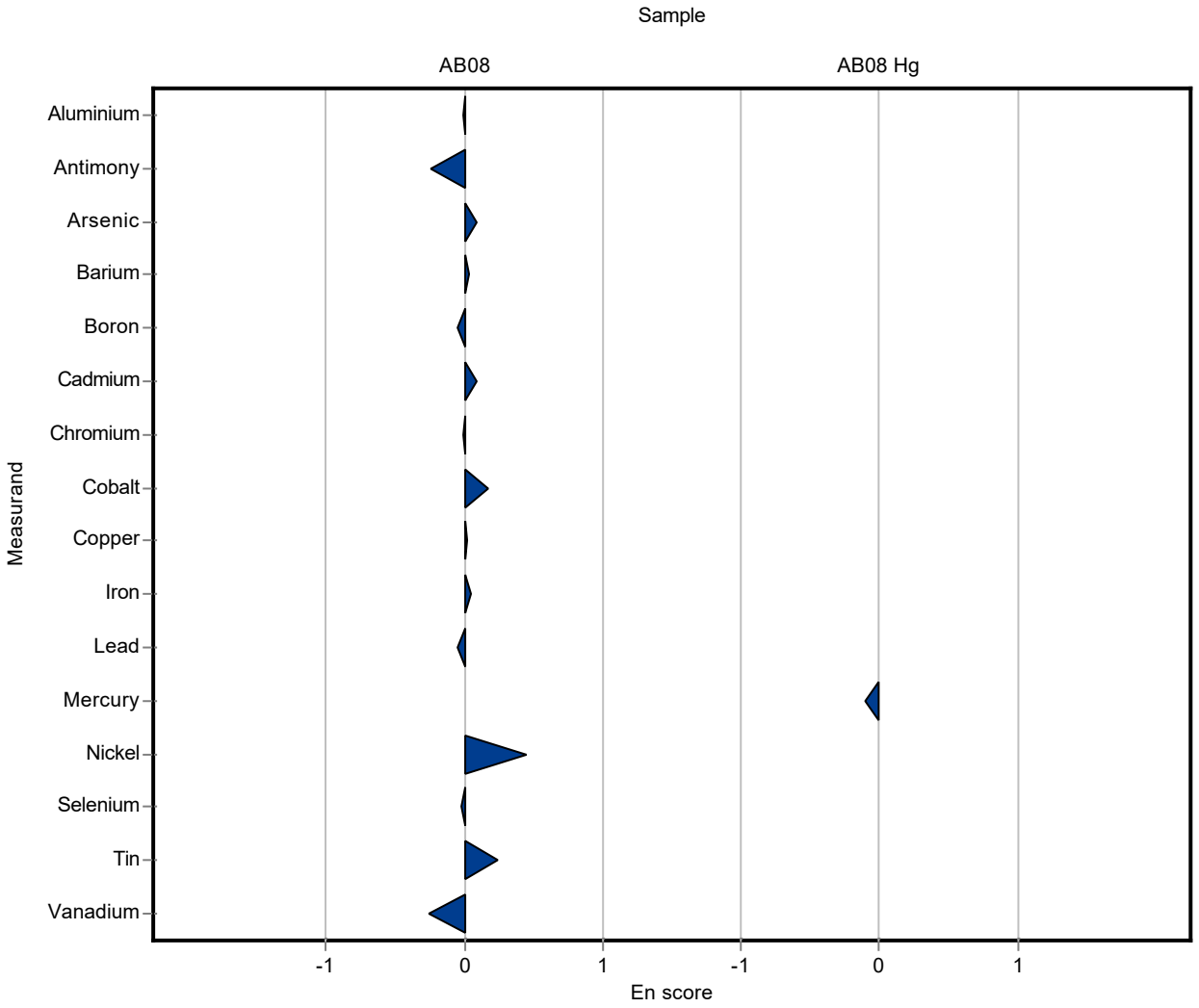

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Nickel
Selenium
Tin
Vanadium
3.4
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.907 ± 0.151	0.0745	99.8	-0.01
Antimony	mg/l	0.0017 ± 0.000076	0.00157 ± 0.00027	0.000131	92.1	-0.25
Arsenic	mg/l	0.0124 ± 0.00019	0.0128 ± 0.0022	0.000621	103	0.09
Barium	mg/l	0.11 ± 0.00216	0.111 ± 0.015	0.00551	101	0.03
Boron	mg/l	0.308 ± 0.00629	0.305 ± 0.03	0.0154	99	-0.05
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.00029	0.000111	104	0.09
Chromium	mg/l	0.0954 ± 0.00205	0.0953 ± 0.0174	0.00496	99.9	0.00
Cobalt	mg/l	0.0109 ± 0.000134	0.0116 ± 0.0019	0.000547	106	0.17
Copper	mg/l	0.108 ± 0.00179	0.1088 ± 0.015	0.00541	101	0.02
Iron	mg/l	0.23 ± 0.00474	0.2328 ± 0.03	0.0115	101	0.04
Lead	mg/l	0.0109 ± 0.000279	0.01068 ± 0.0019	0.000588	98.1	-0.05
Molybdenum	mg/l	0.014 ± 0.000441	- ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.013 ± 0.0021	0.000555	117	0.45
Selenium	mg/l	0.0119 ± 0.000658	0.0118 ± 0.0019	0.00155	99.1	-0.03
Silver	mg/l	- ± -	0.0000223 ± 0.000006	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0357 ± 0.006	0.00327	109	0.24
Vanadium	mg/l	0.0145 ± 0.000688	0.0135 ± 0.002	0.0016	92.9	-0.25
Zinc	mg/l	0.329 ± 0.00699	- ± -	0.0165	-	-

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0000955 ± 0.000016	0.000009	96.5	-0.10

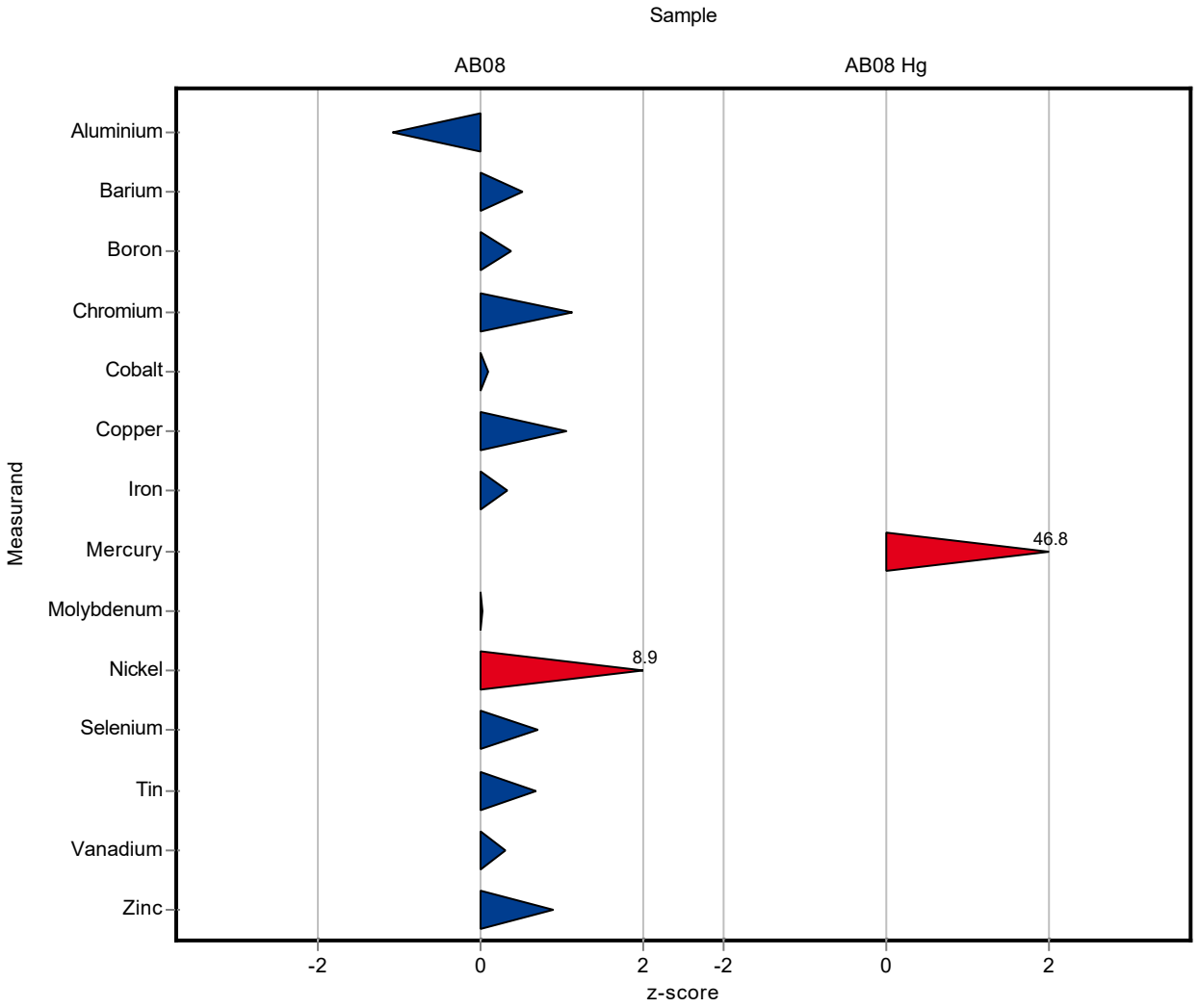

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Nickel
Selenium
Tin
Vanadium
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.828 ± 0.009	0.0745	91.1	-1.08
Antimony	mg/l	0.0017 ± 0.000076	<0.01 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	<0.01 (LOQ) ± -	0.000621	-	-
Barium	mg/l	0.11 ± 0.00216	0.113 ± 0.002	0.00551	103	0.51
Boron	mg/l	0.308 ± 0.00629	0.314 ± 0.011	0.0154	102	0.39
Cadmium	mg/l	0.00144 ± 0.000057	<0.005 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.101 ± 0.001	0.00496	106	1.12
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.114 ± 0.004	0.00541	105	1.07
Iron	mg/l	0.23 ± 0.00474	0.234 ± 0.011	0.0115	102	0.33
Lead	mg/l	0.0109 ± 0.000279	<0.01 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.001	0.000908	100	0.03
Nickel	mg/l	0.0111 ± 0.000252	0.016 ± 0.001	0.000555	144	8.85
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.001	0.00155	109	0.70
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.001	0.00327	107	0.69
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.001	0.0016	103	0.30
Zinc	mg/l	0.329 ± 0.00699	0.344 ± 0.006	0.0165	104	0.90

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.00052 ± 0.00012	0.000009	526	46.80

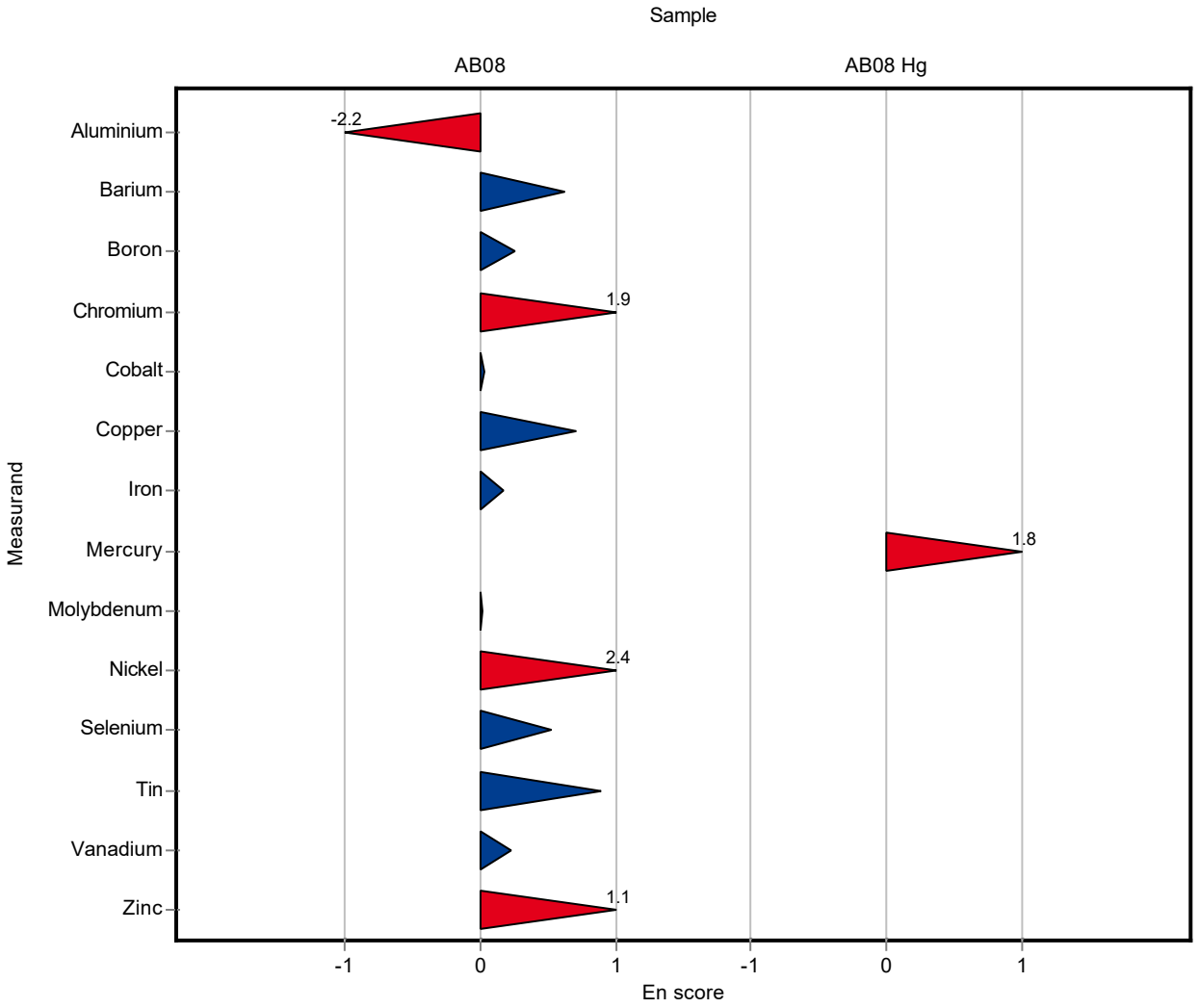

Sample
AB08
AB08 Hg
Measurand
Aluminium
Barium
Boron
Chromium
Cobalt
Copper
Iron
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
46.8
8.9
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.828 ± 0.009	0.0745	91.1	-2.20
Antimony	mg/l	0.0017 ± 0.000076	<0.01 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	<0.01 (LOQ) ± -	0.000621	-	-
Barium	mg/l	0.11 ± 0.00216	0.113 ± 0.002	0.00551	103	0.62
Boron	mg/l	0.308 ± 0.00629	0.314 ± 0.011	0.0154	102	0.26
Cadmium	mg/l	0.00144 ± 0.000057	<0.005 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.101 ± 0.001	0.00496	106	1.95
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.03
Copper	mg/l	0.108 ± 0.00179	0.114 ± 0.004	0.00541	105	0.70
Iron	mg/l	0.23 ± 0.00474	0.234 ± 0.011	0.0115	102	0.17
Lead	mg/l	0.0109 ± 0.000279	<0.01 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.001	0.000908	100	0.01
Nickel	mg/l	0.0111 ± 0.000252	0.016 ± 0.001	0.000555	144	2.44
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.001	0.00155	109	0.52
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.001	0.00327	107	0.89
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.001	0.0016	103	0.22
Zinc	mg/l	0.329 ± 0.00699	0.344 ± 0.006	0.0165	104	1.06

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.00052 ± 0.00012	0.000009	526	1.75

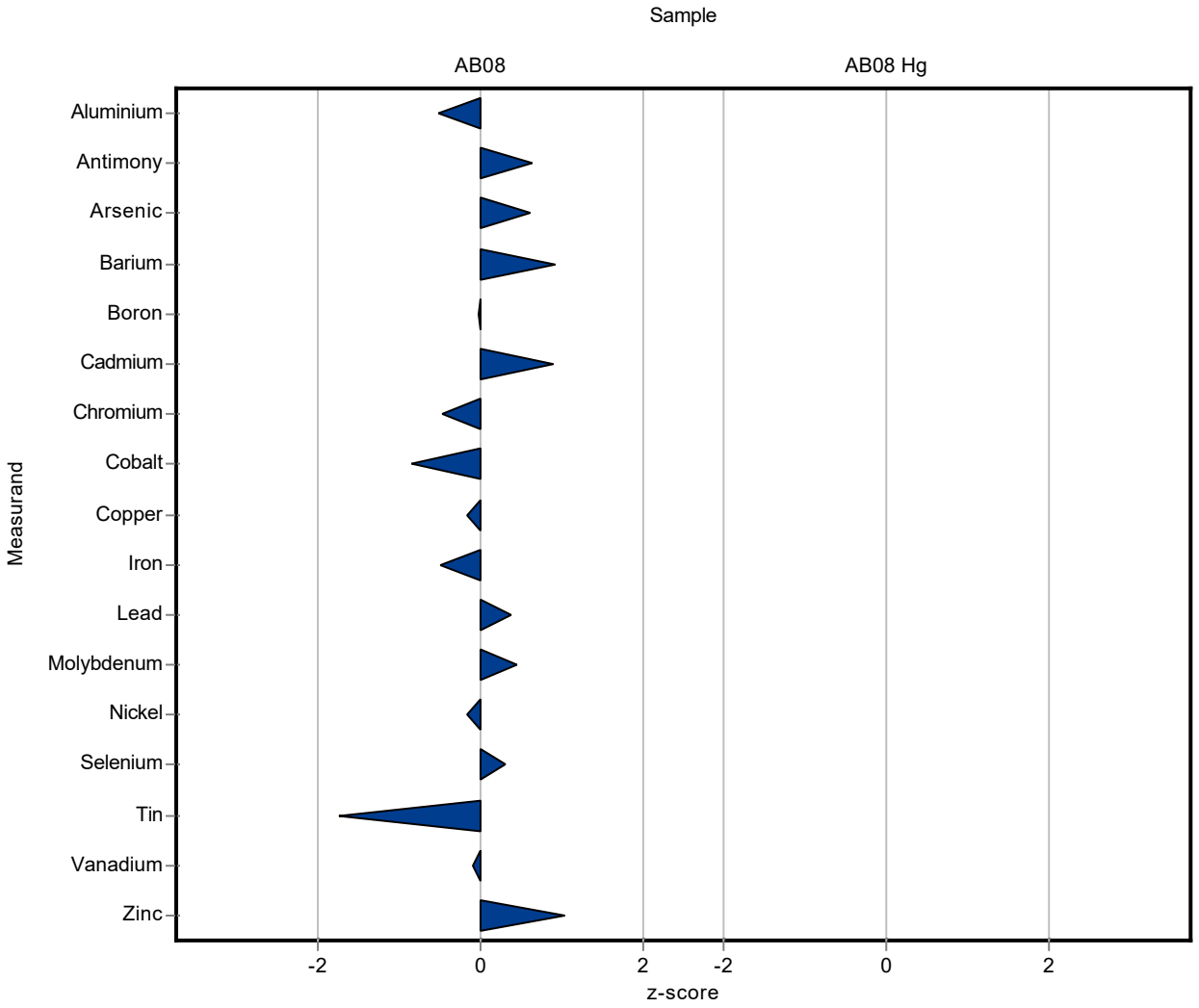

Sample
AB08
AB08 Hg
Measurand
Aluminium
Barium
Boron
Chromium
Cobalt
Copper
Iron
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2.2
1.9
1.8
2.4
1.1
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.8708 ± 0.0871	0.0745	95.8	-0.51
Antimony	mg/l	0.0017 ± 0.000076	0.001787 ± 0.000179	0.000131	105	0.63
Arsenic	mg/l	0.0124 ± 0.00019	0.0128 ± 0.0013	0.000621	103	0.61
Barium	mg/l	0.11 ± 0.00216	0.1152 ± 0.0115	0.00551	105	0.91
Boron	mg/l	0.308 ± 0.00629	0.3076 ± 0.0308	0.0154	99.8	-0.03
Cadmium	mg/l	0.00144 ± 0.000057	0.001543 ± 0.000148	0.000111	107	0.89
Chromium	mg/l	0.0954 ± 0.00205	0.0931 ± 0.0101	0.00496	97.6	-0.47
Cobalt	mg/l	0.0109 ± 0.000134	0.01048 ± 0.00105	0.000547	95.7	-0.85
Copper	mg/l	0.108 ± 0.00179	0.1074 ± 0.0101	0.00541	99.2	-0.15
Iron	mg/l	0.23 ± 0.00474	0.2244 ± 0.0224	0.0115	97.5	-0.51
Lead	mg/l	0.0109 ± 0.000279	0.01111 ± 0.000934	0.000588	102	0.38
Molybdenum	mg/l	0.014 ± 0.000441	0.01439 ± 0.00144	0.000908	103	0.46
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.000551	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.01238 ± 0.00124	0.00155	104	0.30
Silver	mg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.02699 ± 0.0027	0.00327	82.4	-1.76
Vanadium	mg/l	0.0145 ± 0.000688	0.01439 ± 0.00144	0.0016	99.1	-0.09
Zinc	mg/l	0.329 ± 0.00699	0.3462 ± 0.0309	0.0165	105	1.03

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

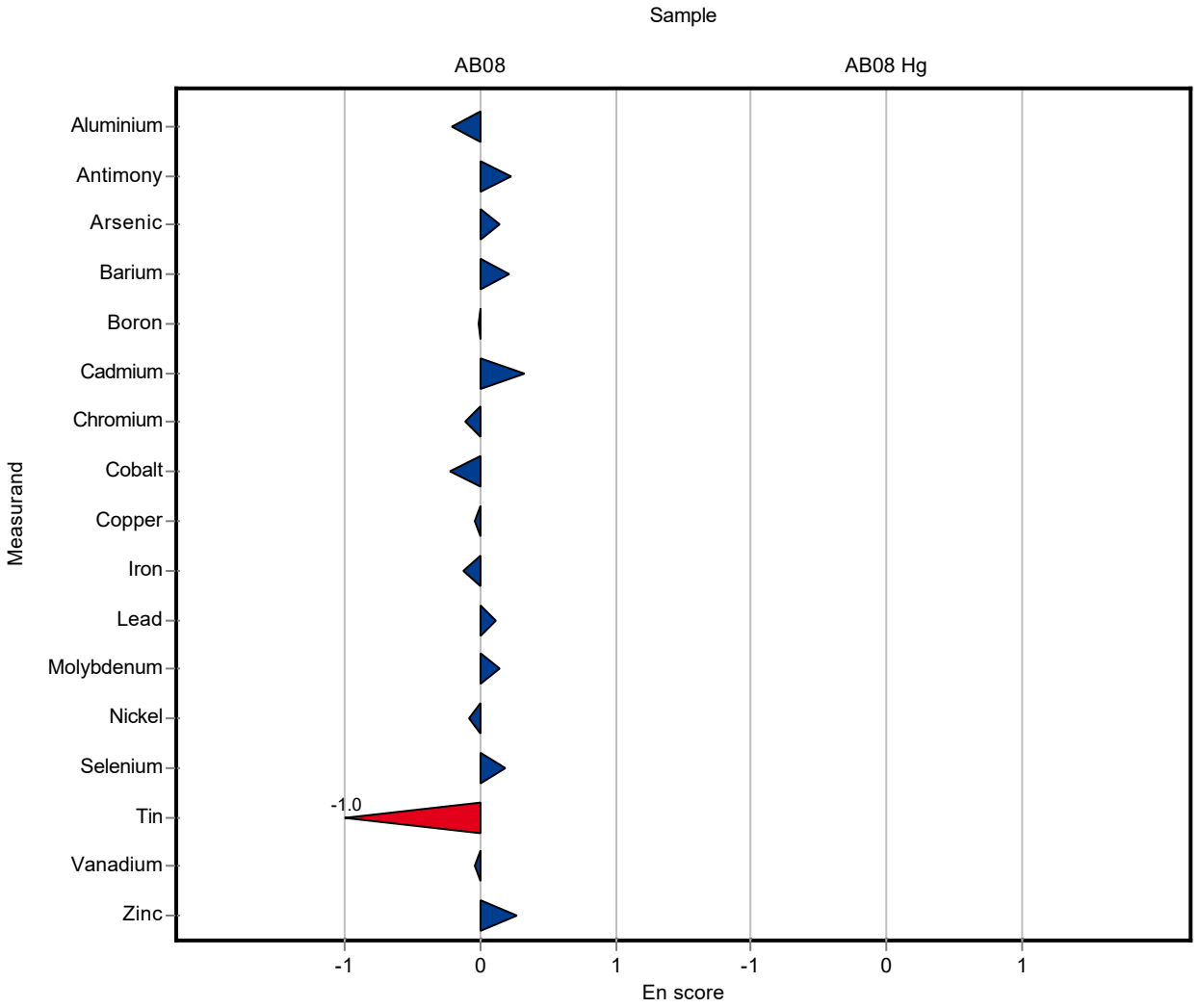

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.8708 ± 0.0871	0.0745	95.8	-0.21
Antimony	mg/l	0.0017 ± 0.000076	0.001787 ± 0.000179	0.000131	105	0.23
Arsenic	mg/l	0.0124 ± 0.00019	0.0128 ± 0.0013	0.000621	103	0.14
Barium	mg/l	0.11 ± 0.00216	0.1152 ± 0.0115	0.00551	105	0.22
Boron	mg/l	0.308 ± 0.00629	0.3076 ± 0.0308	0.0154	99.8	-0.01
Cadmium	mg/l	0.00144 ± 0.000057	0.001543 ± 0.000148	0.000111	107	0.33
Chromium	mg/l	0.0954 ± 0.00205	0.0931 ± 0.0101	0.00496	97.6	-0.11
Cobalt	mg/l	0.0109 ± 0.000134	0.01048 ± 0.00105	0.000547	95.7	-0.22
Copper	mg/l	0.108 ± 0.00179	0.1074 ± 0.0101	0.00541	99.2	-0.04
Iron	mg/l	0.23 ± 0.00474	0.2244 ± 0.0224	0.0115	97.5	-0.13
Lead	mg/l	0.0109 ± 0.000279	0.01111 ± 0.000934	0.000588	102	0.12
Molybdenum	mg/l	0.014 ± 0.000441	0.01439 ± 0.00144	0.000908	103	0.14
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.000551	0.000555	99.2	-0.08
Selenium	mg/l	0.0119 ± 0.000658	0.01238 ± 0.00124	0.00155	104	0.18
Silver	mg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.02699 ± 0.0027	0.00327	82.4	-1.02
Vanadium	mg/l	0.0145 ± 0.000688	0.01439 ± 0.00144	0.0016	99.1	-0.05
Zinc	mg/l	0.329 ± 0.00699	0.3462 ± 0.0309	0.0165	105	0.27

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

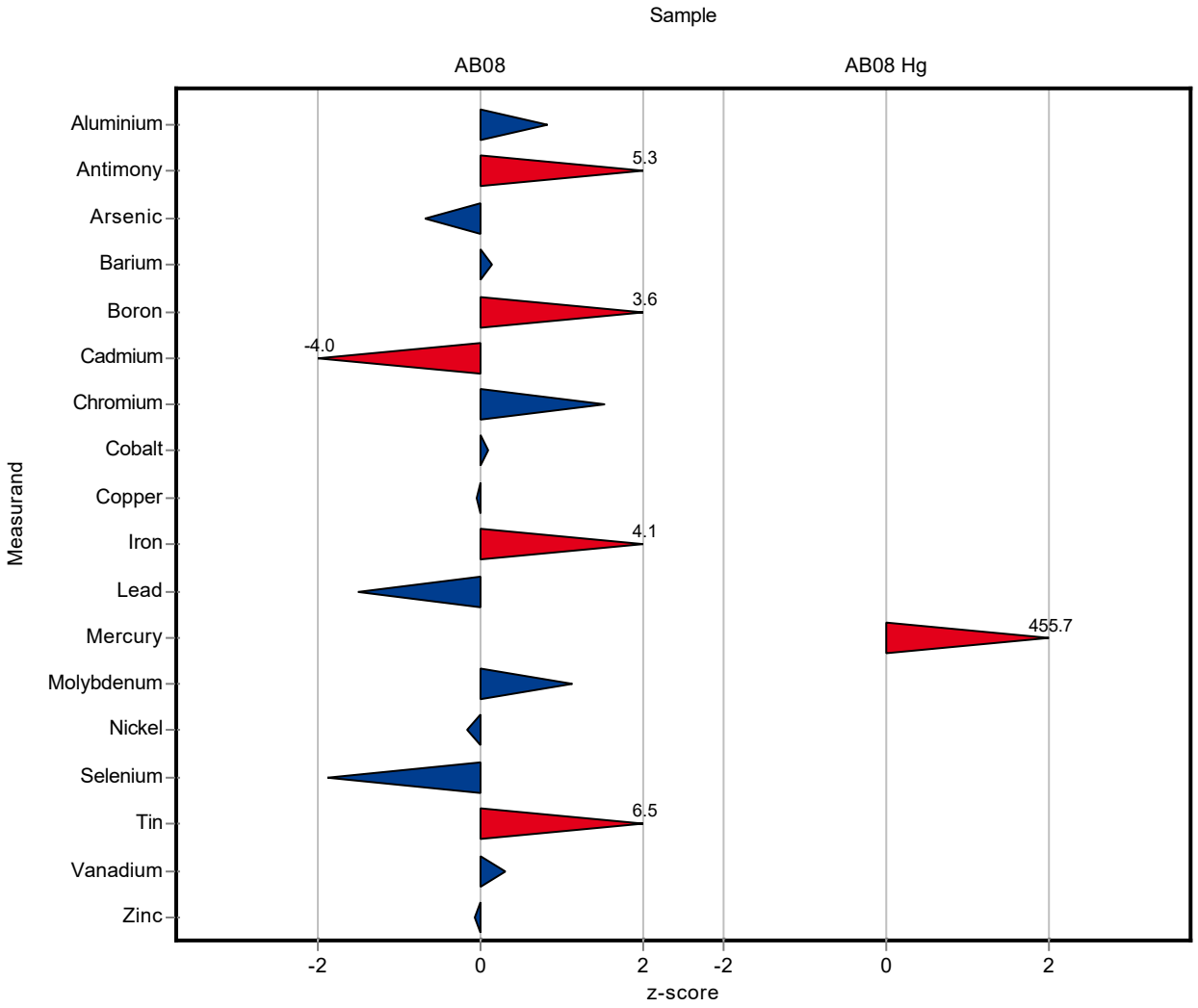

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-1.0
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.97 ± 0.05	0.0745	107	0.82
Antimony	mg/l	0.0017 ± 0.000076	0.0024 ± 0.001	0.000131	141	5.31
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.002	0.000621	96.6	-0.68
Barium	mg/l	0.11 ± 0.00216	0.111 ± 0.002	0.00551	101	0.15
Boron	mg/l	0.308 ± 0.00629	0.364 ± 0.002	0.0154	118	3.63
Cadmium	mg/l	0.00144 ± 0.000057	0.001 ± 0.002	0.000111	69.2	-4.01
Chromium	mg/l	0.0954 ± 0.00205	0.103 ± 0.002	0.00496	108	1.53
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.002	0.00541	99.8	-0.04
Iron	mg/l	0.23 ± 0.00474	0.277 ± 0.002	0.0115	120	4.06
Lead	mg/l	0.0109 ± 0.000279	0.01 ± 0.002	0.000588	91.9	-1.50
Molybdenum	mg/l	0.014 ± 0.000441	0.015 ± 0.002	0.000908	107	1.13
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.002	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.009 ± 0.002	0.00155	75.6	-1.88
Silver	mg/l	- ± -	0.001 ± 0.005	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.054 ± 0.005	0.00327	165	6.49
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.002	0.0016	103	0.30
Zinc	mg/l	0.329 ± 0.00699	0.328 ± 0.01	0.0165	99.6	-0.08

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0042 ± 0.0001	0.000009	4250	456.00

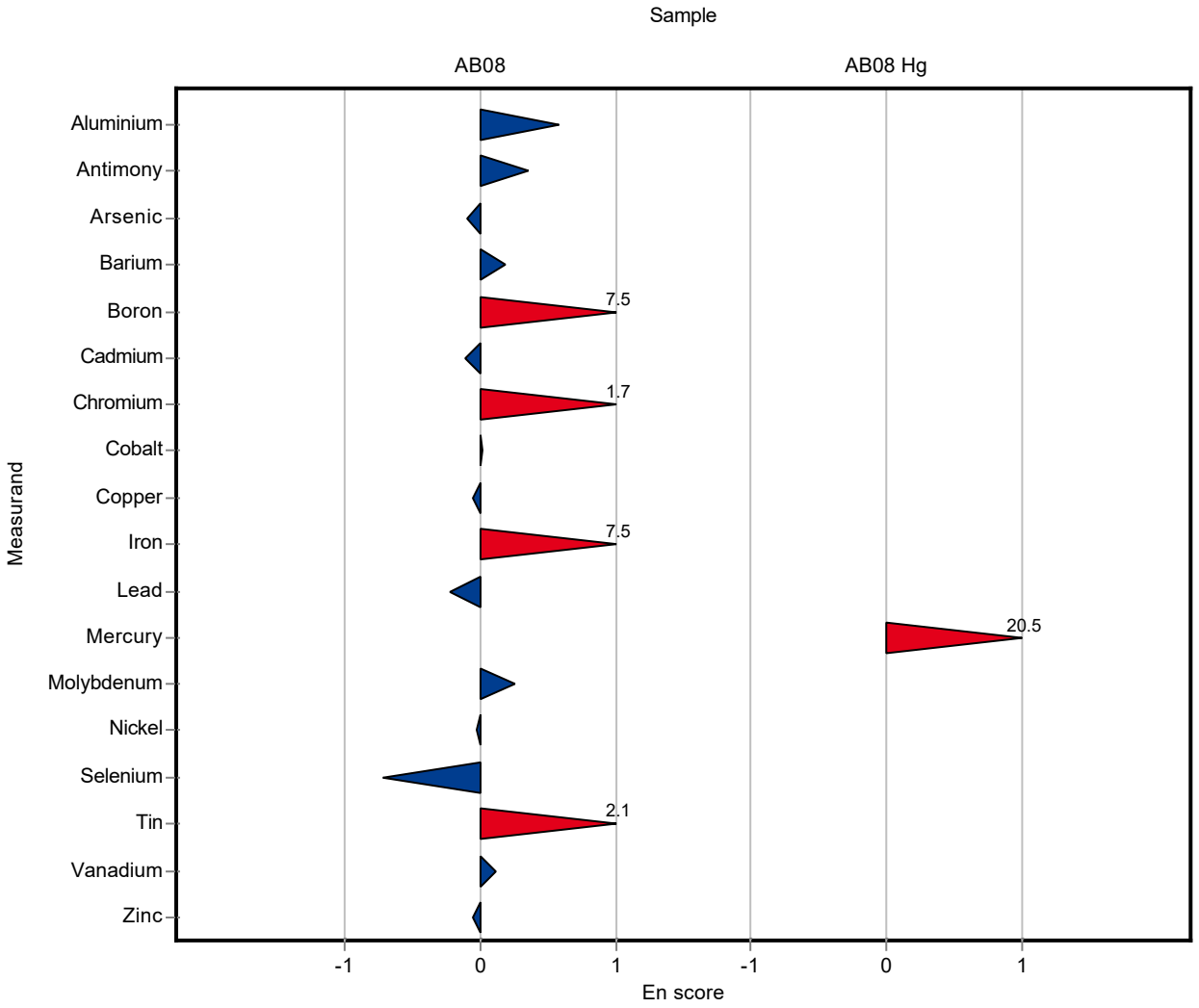

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
5.3
3.6
-4.0
4.1
455.7
6.5
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.97 ± 0.05	0.0745	107	0.58
Antimony	mg/l	0.0017 ± 0.000076	0.0024 ± 0.001	0.000131	141	0.35
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.002	0.000621	96.6	-0.10
Barium	mg/l	0.11 ± 0.00216	0.111 ± 0.002	0.00551	101	0.18
Boron	mg/l	0.308 ± 0.00629	0.364 ± 0.002	0.0154	118	7.50
Cadmium	mg/l	0.00144 ± 0.000057	0.001 ± 0.002	0.000111	69.2	-0.11
Chromium	mg/l	0.0954 ± 0.00205	0.103 ± 0.002	0.00496	108	1.69
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.01
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.002	0.00541	99.8	-0.05
Iron	mg/l	0.23 ± 0.00474	0.277 ± 0.002	0.0115	120	7.55
Lead	mg/l	0.0109 ± 0.000279	0.01 ± 0.002	0.000588	91.9	-0.22
Molybdenum	mg/l	0.014 ± 0.000441	0.015 ± 0.002	0.000908	107	0.25
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.002	0.000555	99.2	-0.02
Selenium	mg/l	0.0119 ± 0.000658	0.009 ± 0.002	0.00155	75.6	-0.72
Silver	mg/l	- ± -	0.001 ± 0.005	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.054 ± 0.005	0.00327	165	2.10
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.002	0.0016	103	0.12
Zinc	mg/l	0.329 ± 0.00699	0.328 ± 0.01	0.0165	99.6	-0.06

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0042 ± 0.0001	0.000009	4250	20.50

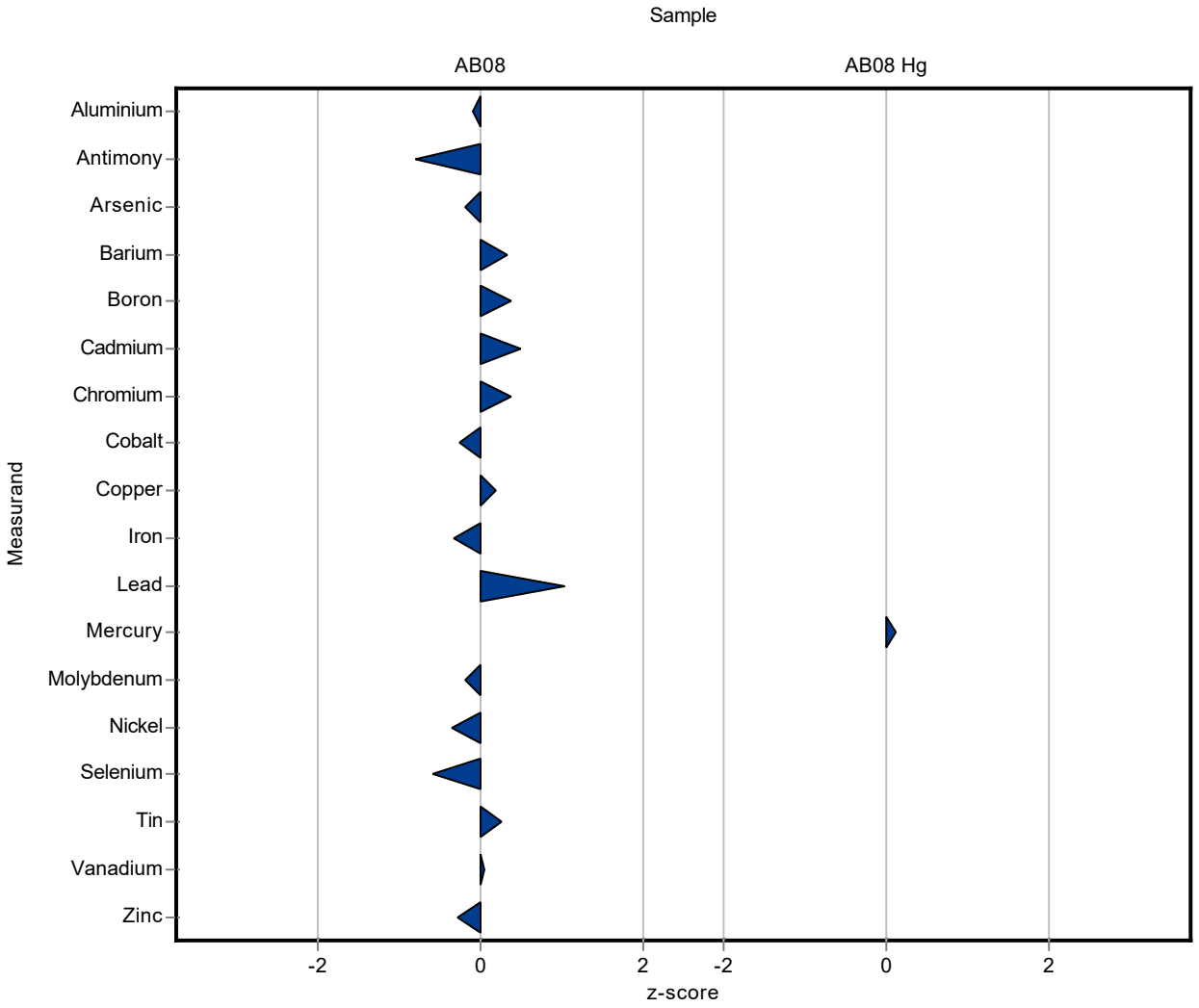

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
7.5
1.7
7.5
20.5
2.1
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.902 ± 0.14	0.0745	99.3	-0.09
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.79
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.002	0.000621	99	-0.20
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.022	0.00551	102	0.33
Boron	mg/l	0.308 ± 0.00629	0.314 ± 0.047	0.0154	102	0.39
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.0973 ± 0.016	0.00496	102	0.38
Cobalt	mg/l	0.0109 ± 0.000134	0.0108 ± 0.0027	0.000547	98.7	-0.27
Copper	mg/l	0.108 ± 0.00179	0.1092 ± 0.017	0.00541	101	0.18
Iron	mg/l	0.23 ± 0.00474	0.2264 ± 0.045	0.0115	98.3	-0.33
Lead	mg/l	0.0109 ± 0.000279	0.0115 ± 0.0021	0.000588	106	1.05
Molybdenum	mg/l	0.014 ± 0.000441	0.0138 ± 0.002	0.000908	98.7	-0.19
Nickel	mg/l	0.0111 ± 0.000252	0.0109 ± 0.002	0.000555	98.3	-0.34
Selenium	mg/l	0.0119 ± 0.000658	0.011 ± 0.002	0.00155	92.4	-0.59
Silver	mg/l	- ± -	<0.0005 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0336 ± 0.008	0.00327	103	0.26
Vanadium	mg/l	0.0145 ± 0.000688	0.0146 ± 0.002	0.0016	101	0.05
Zinc	mg/l	0.329 ± 0.00699	0.3245 ± 0.042	0.0165	98.6	-0.29

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0001 ± 0.00005	0.000009	101	0.12

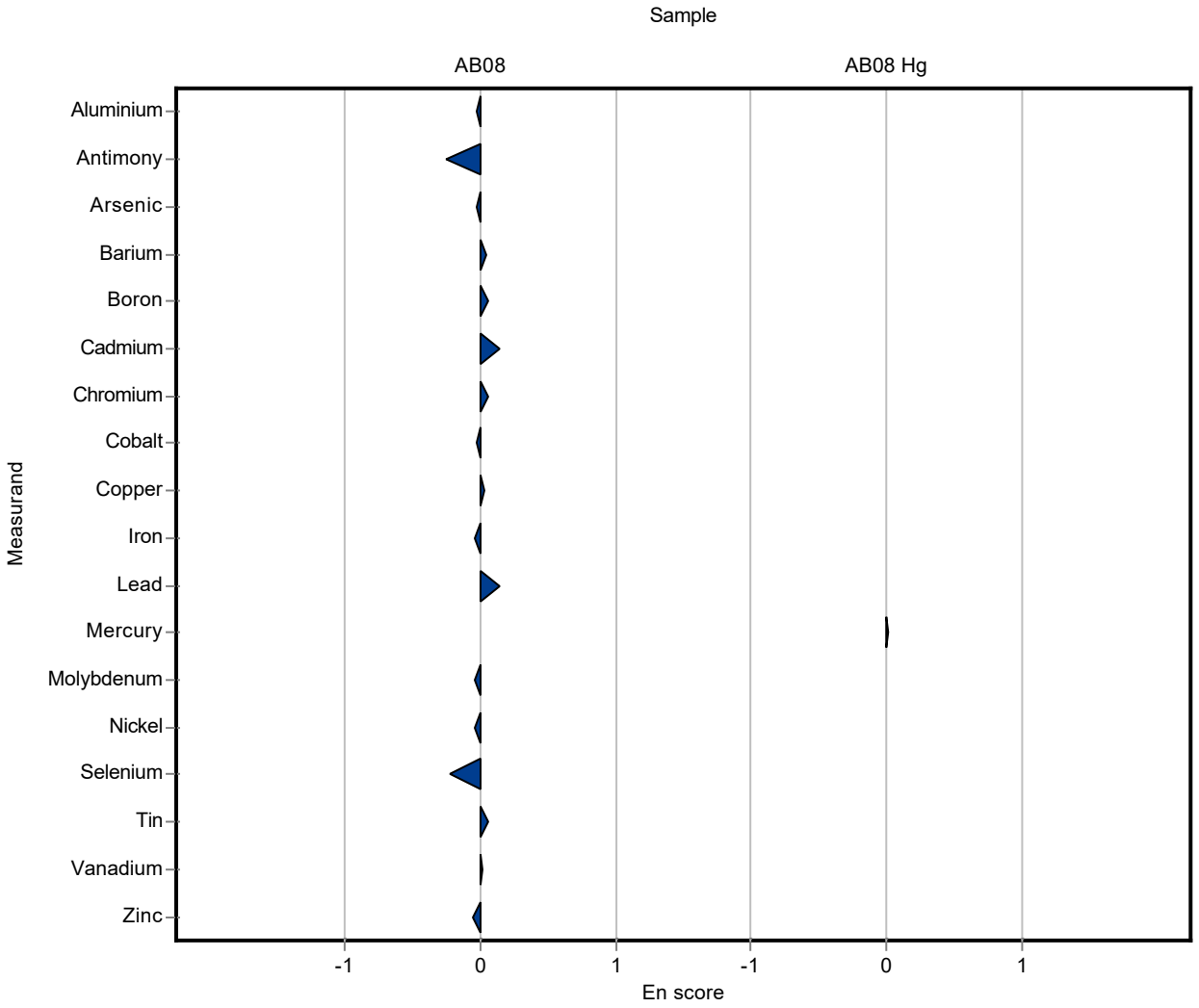

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.902 ± 0.14	0.0745	99.3	-0.02
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.26
Arsenic	mg/l	0.0124 ± 0.00019	0.0123 ± 0.002	0.000621	99	-0.03
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.022	0.00551	102	0.04
Boron	mg/l	0.308 ± 0.00629	0.314 ± 0.047	0.0154	102	0.06
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.14
Chromium	mg/l	0.0954 ± 0.00205	0.0973 ± 0.016	0.00496	102	0.06
Cobalt	mg/l	0.0109 ± 0.000134	0.0108 ± 0.0027	0.000547	98.7	-0.03
Copper	mg/l	0.108 ± 0.00179	0.1092 ± 0.017	0.00541	101	0.03
Iron	mg/l	0.23 ± 0.00474	0.2264 ± 0.045	0.0115	98.3	-0.04
Lead	mg/l	0.0109 ± 0.000279	0.0115 ± 0.0021	0.000588	106	0.15
Molybdenum	mg/l	0.014 ± 0.000441	0.0138 ± 0.002	0.000908	98.7	-0.04
Nickel	mg/l	0.0111 ± 0.000252	0.0109 ± 0.002	0.000555	98.3	-0.05
Selenium	mg/l	0.0119 ± 0.000658	0.011 ± 0.002	0.00155	92.4	-0.23
Silver	mg/l	- ± -	<0.0005 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0336 ± 0.008	0.00327	103	0.05
Vanadium	mg/l	0.0145 ± 0.000688	0.0146 ± 0.002	0.0016	101	0.02
Zinc	mg/l	0.329 ± 0.00699	0.3245 ± 0.042	0.0165	98.6	-0.06

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0001 ± 0.00005	0.000009	101	0.01

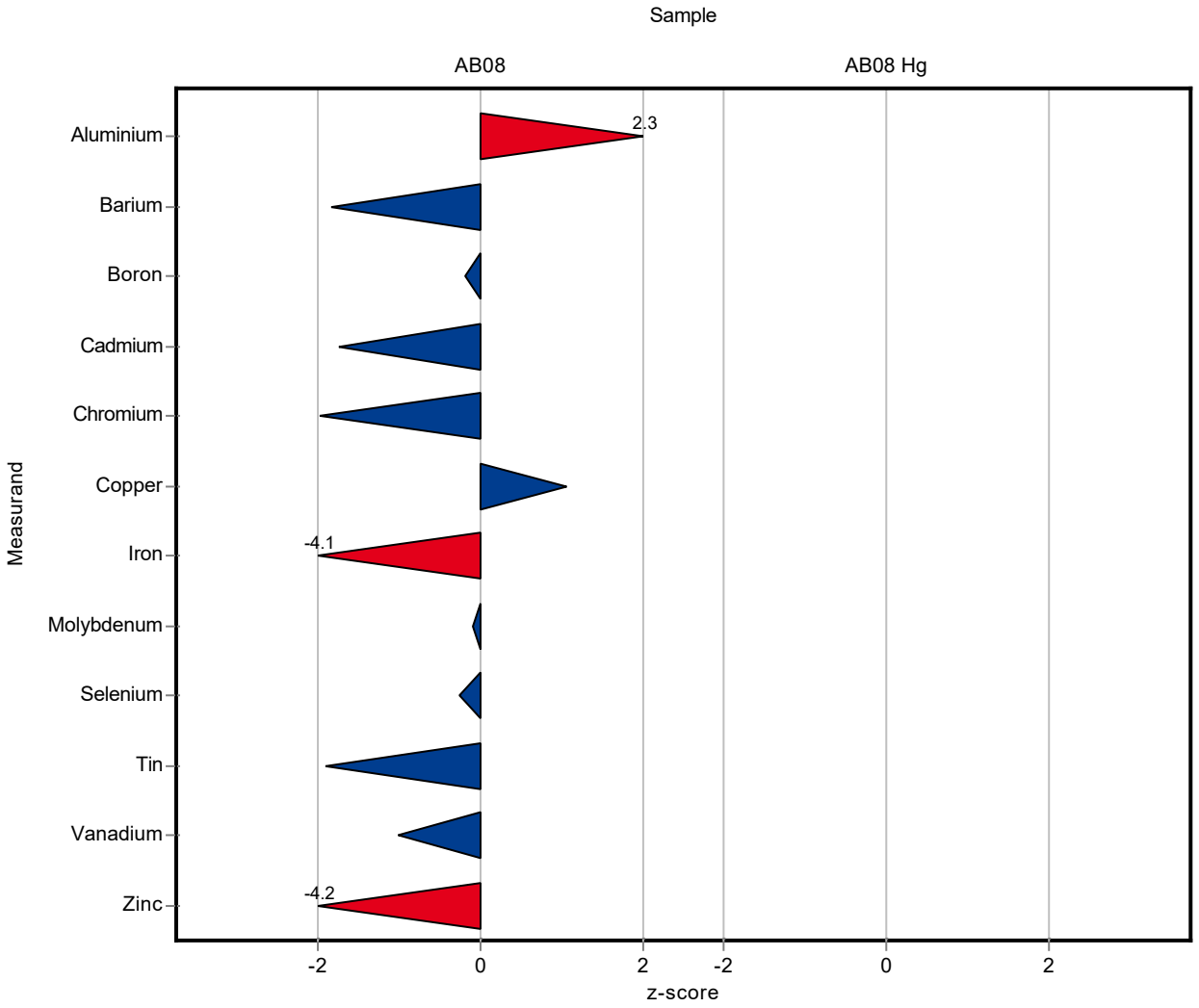

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	1.0825 ± 0.10825	0.0745	119	2.33
Antimony	mg/l	0.0017 ± 0.000076	<0.006 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	<0.01 (LOQ) ± -	0.000621	-	-
Barium	mg/l	0.11 ± 0.00216	0.1 ± 0.01	0.00551	90.8	-1.85
Boron	mg/l	0.308 ± 0.00629	0.305 ± 0.0305	0.0154	99	-0.20
Cadmium	mg/l	0.00144 ± 0.000057	0.00125 ± 0.000125	0.000111	86.5	-1.75
Chromium	mg/l	0.0954 ± 0.00205	0.0856 ± 0.00856	0.00496	89.7	-1.98
Cobalt	mg/l	0.0109 ± 0.000134	<0.01 (LOQ) ± -	0.000547	-	-
Copper	mg/l	0.108 ± 0.00179	0.114 ± 0.0114	0.00541	105	1.07
Iron	mg/l	0.23 ± 0.00474	0.183 ± 0.0183	0.0115	79.5	-4.10
Lead	mg/l	0.0109 ± 0.000279	<0.01 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	0.0139 ± 0.00139	0.000908	99.5	-0.08
Nickel	mg/l	0.0111 ± 0.000252	<0.01 (LOQ) ± -	0.000555	-	-
Selenium	mg/l	0.0119 ± 0.000658	0.0115 ± 0.00115	0.00155	96.6	-0.27
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0265 ± 0.00265	0.00327	80.9	-1.91
Vanadium	mg/l	0.0145 ± 0.000688	0.0129 ± 0.00129	0.0016	88.8	-1.02
Zinc	mg/l	0.329 ± 0.00699	0.26 ± 0.026	0.0165	79	-4.21

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

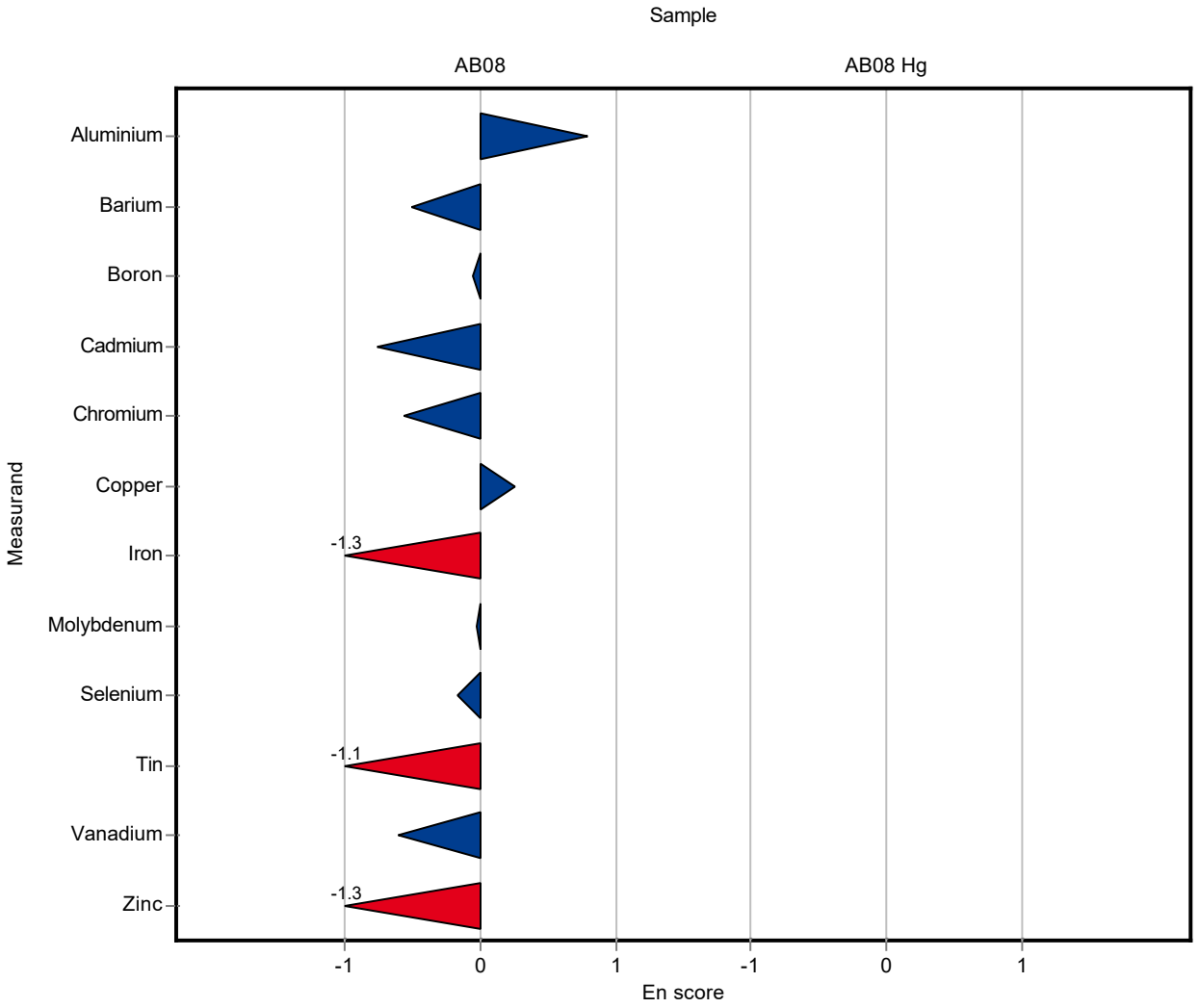

Sample
AB08
AB08 Hg
Aluminium
Barium
Boron
Cadmium
Chromium
Copper
Iron
Molybdenum
Selenium
Tin
Vanadium
Zinc
Measurand
2.3
-4.1
-4.2
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909	±	0.0319	1.0825	±	0.10825	0.0745	119	0.80
Antimony	mg/l	0.0017	±	0.000076	<0.006 (LOQ)	±	-	0.000131	-	-
Arsenic	mg/l	0.0124	±	0.00019	<0.01 (LOQ)	±	-	0.000621	-	-
Barium	mg/l	0.11	±	0.00216	0.1	±	0.01	0.00551	90.8	-0.51
Boron	mg/l	0.308	±	0.00629	0.305	±	0.0305	0.0154	99	-0.05
Cadmium	mg/l	0.00144	±	0.000057	0.00125	±	0.000125	0.000111	86.5	-0.76
Chromium	mg/l	0.0954	±	0.00205	0.0856	±	0.00856	0.00496	89.7	-0.57
Cobalt	mg/l	0.0109	±	0.000134	<0.01 (LOQ)	±	-	0.000547	-	-
Copper	mg/l	0.108	±	0.00179	0.114	±	0.0114	0.00541	105	0.25
Iron	mg/l	0.23	±	0.00474	0.183	±	0.0183	0.0115	79.5	-1.28
Lead	mg/l	0.0109	±	0.000279	<0.01 (LOQ)	±	-	0.000588	-	-
Molybdenum	mg/l	0.014	±	0.000441	0.0139	±	0.00139	0.000908	99.5	-0.03
Nickel	mg/l	0.0111	±	0.000252	<0.01 (LOQ)	±	-	0.000555	-	-
Selenium	mg/l	0.0119	±	0.000658	0.0115	±	0.00115	0.00155	96.6	-0.17
Silver	mg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Tin	mg/l	0.0327	±	0.00156	0.0265	±	0.00265	0.00327	80.9	-1.13
Vanadium	mg/l	0.0145	±	0.000688	0.0129	±	0.00129	0.0016	88.8	-0.61
Zinc	mg/l	0.329	±	0.00699	0.26	±	0.026	0.0165	79	-1.32

Sample: AB08HG

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989	±	0.000007	<0.0002	±	-	0.000009	-	-

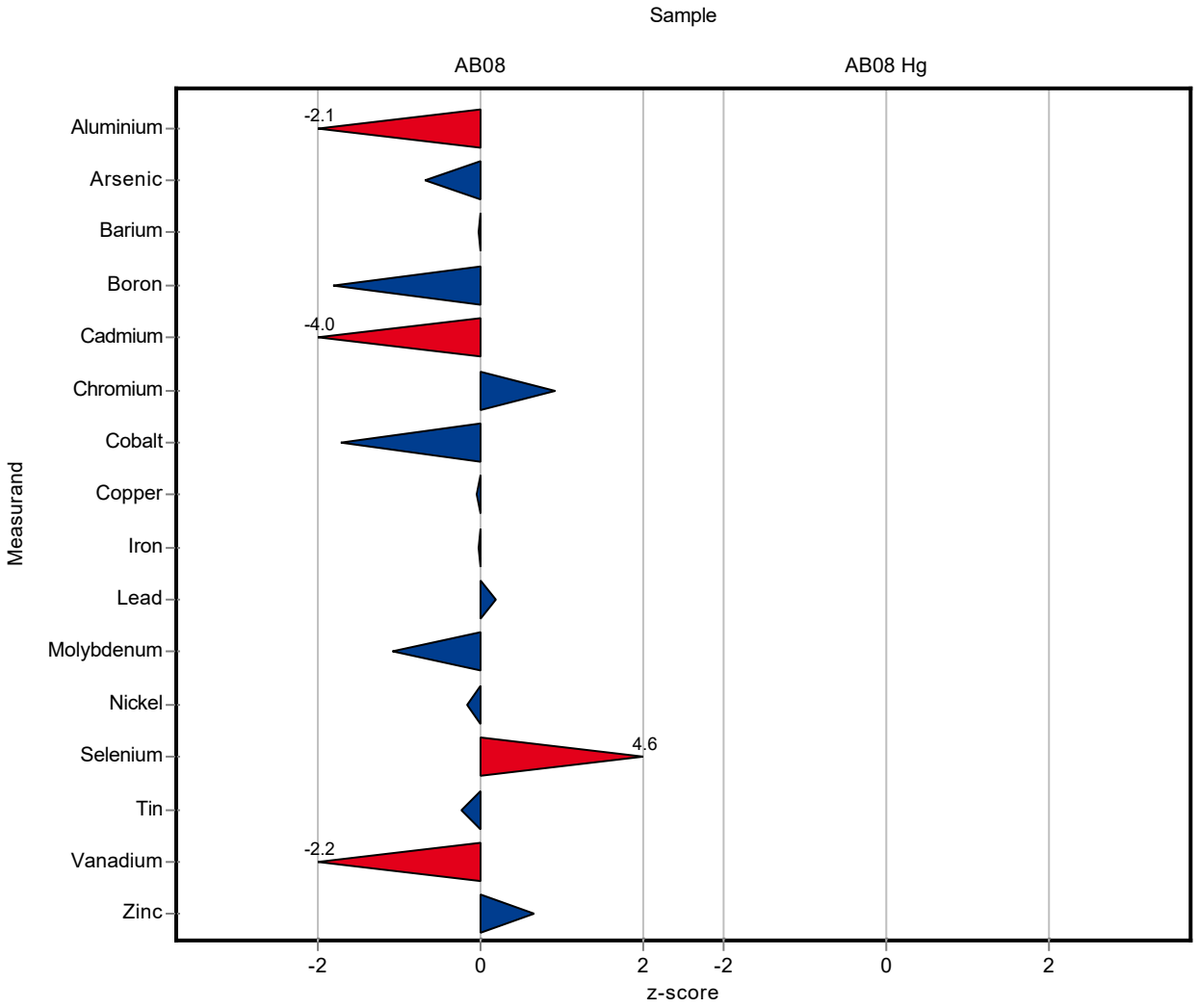

Sample
AB08
AB08 Hg
Aluminium
Barium
Boron
Cadmium
Chromium
Copper
Iron
Molybdenum
Selenium
Tin
Vanadium
Zinc
Measurand
-1.3
-1.1
-1.3
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.75 ± 0.009	0.0745	82.5	-2.13
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.68
Barium	mg/l	0.11 ± 0.00216	0.11 ± 0.001	0.00551	99.8	-0.03
Boron	mg/l	0.308 ± 0.00629	0.28 ± 0.001	0.0154	90.9	-1.82
Cadmium	mg/l	0.00144 ± 0.000057	0.001 ± 0.001	0.000111	69.2	-4.01
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.001	0.00496	105	0.92
Cobalt	mg/l	0.0109 ± 0.000134	0.01 ± 0.001	0.000547	91.3	-1.73
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.001	0.00541	99.8	-0.04
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.001	0.0115	99.9	-0.02
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.001	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.001	0.000908	93	-1.07
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.019 ± 0.001	0.00155	160	4.58
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.032 ± 0.001	0.00327	97.7	-0.23
Vanadium	mg/l	0.0145 ± 0.000688	0.011 ± 0.008	0.0016	75.7	-2.21
Zinc	mg/l	0.329 ± 0.00699	0.34 ± 0.001	0.0165	103	0.65

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.01 (LOQ) ± -	0.000009	-	-

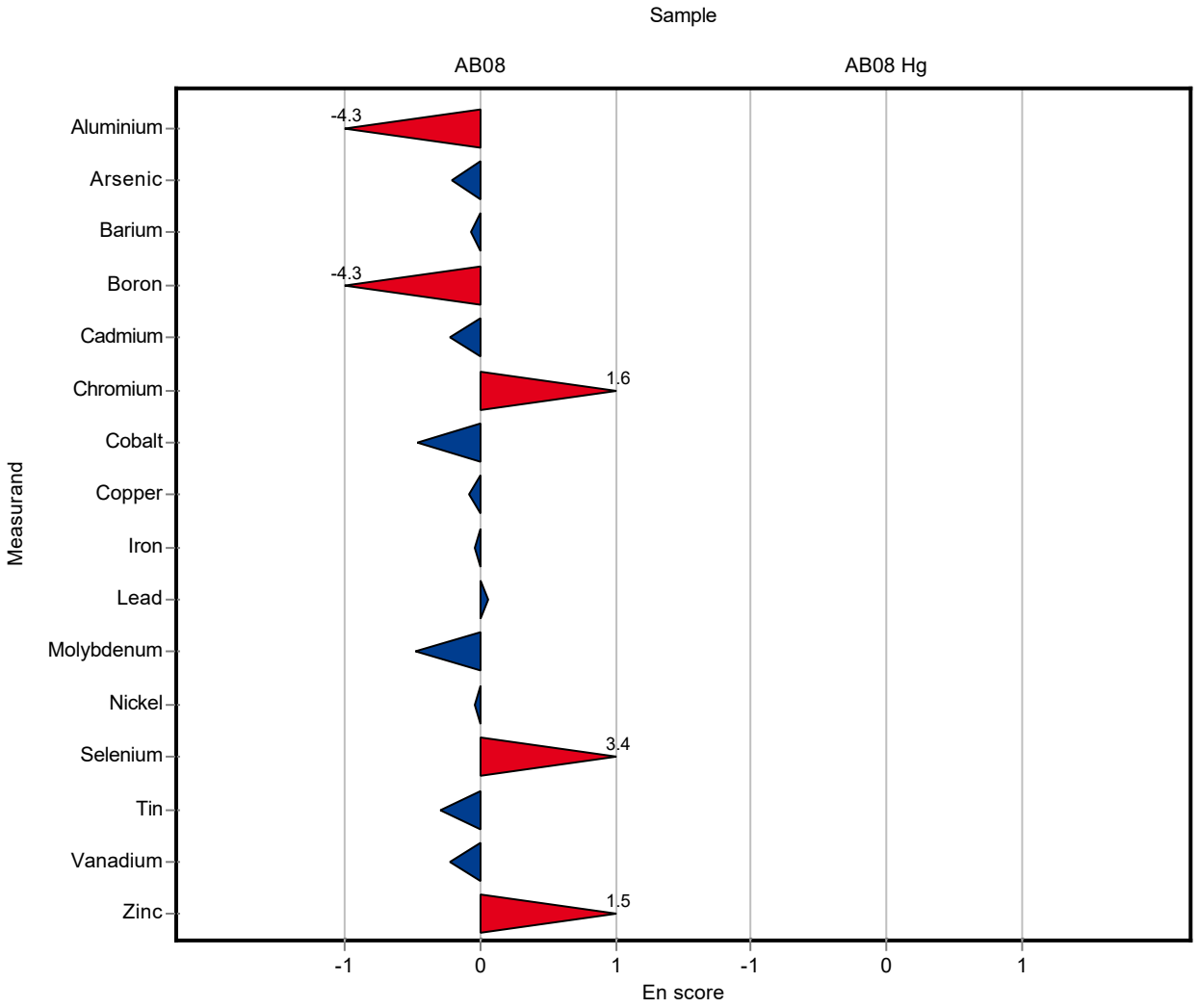

Sample
AB08
AB08 Hg
Measurand
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2.1
-4.0
4.6
-2.2
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.75 ± 0.009	0.0745	82.5	-4.33
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.21
Barium	mg/l	0.11 ± 0.00216	0.11 ± 0.001	0.00551	99.8	-0.06
Boron	mg/l	0.308 ± 0.00629	0.28 ± 0.001	0.0154	90.9	-4.25
Cadmium	mg/l	0.00144 ± 0.000057	0.001 ± 0.001	0.000111	69.2	-0.22
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.001	0.00496	105	1.60
Cobalt	mg/l	0.0109 ± 0.000134	0.01 ± 0.001	0.000547	91.3	-0.47
Copper	mg/l	0.108 ± 0.00179	0.108 ± 0.001	0.00541	99.8	-0.09
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.001	0.0115	99.9	-0.04
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.001	0.000588	101	0.06
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.001	0.000908	93	-0.48
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.04
Selenium	mg/l	0.0119 ± 0.000658	0.019 ± 0.001	0.00155	160	3.37
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.032 ± 0.001	0.00327	97.7	-0.29
Vanadium	mg/l	0.0145 ± 0.000688	0.011 ± 0.008	0.0016	75.7	-0.22
Zinc	mg/l	0.329 ± 0.00699	0.34 ± 0.001	0.0165	103	1.48

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.01 (LOQ) ± -	0.000009	-	-

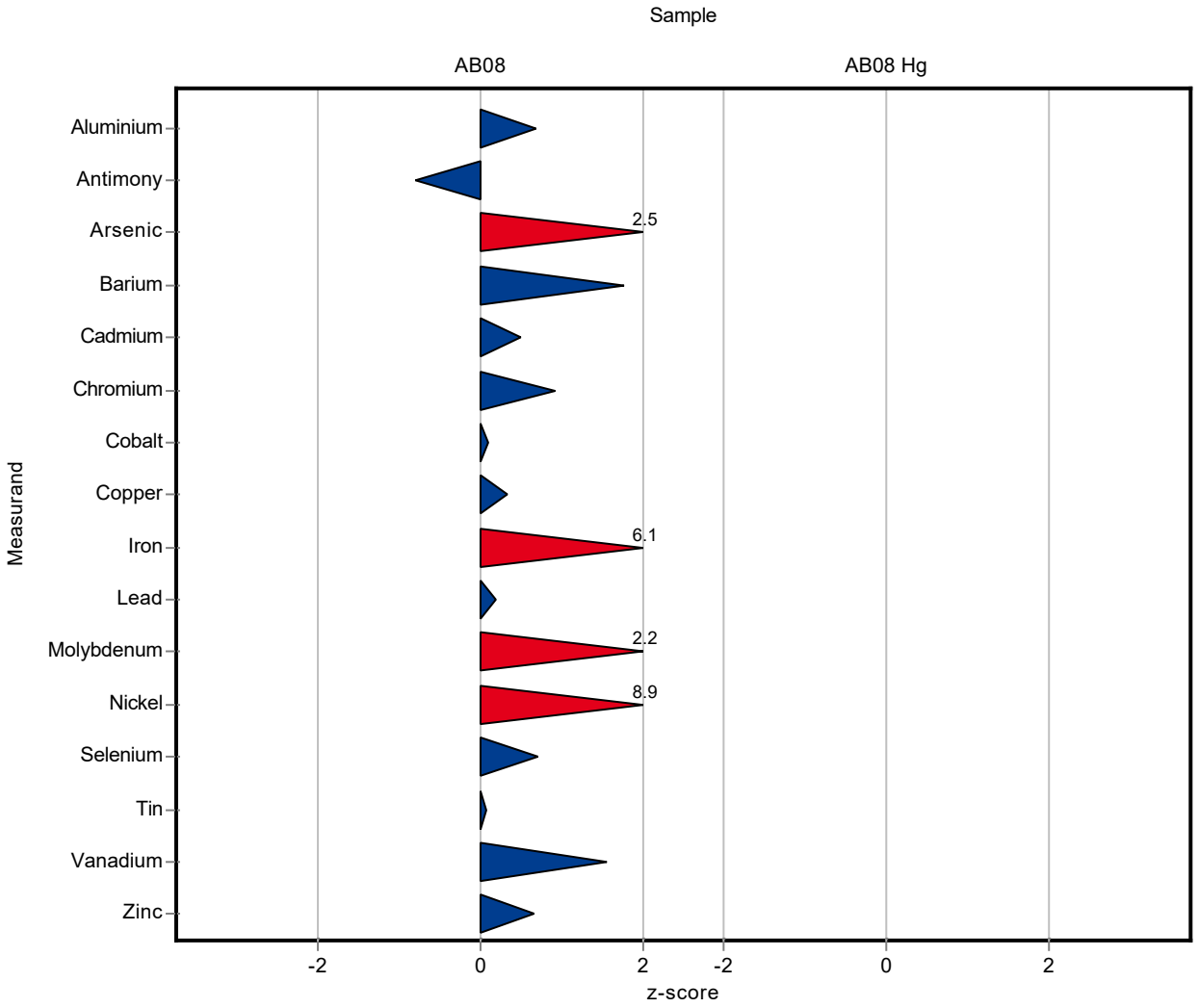

Sample
AB08
AB08 Hg
Measurand
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-4.3
-4.3
1.6
3.4
1.5
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.96 ± 0.096	0.0745	106	0.69
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.79
Arsenic	mg/l	0.0124 ± 0.00019	0.014 ± 0.002	0.000621	113	2.54
Barium	mg/l	0.11 ± 0.00216	0.12 ± 0.01	0.00551	109	1.78
Boron	mg/l	0.308 ± 0.00629	- ± -	0.0154	-	-
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.01	0.00496	105	0.92
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.01	0.00541	102	0.33
Iron	mg/l	0.23 ± 0.00474	0.3 ± 0.03	0.0115	130	6.06
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	0.016 ± 0.002	0.000908	114	2.23
Nickel	mg/l	0.0111 ± 0.000252	0.016 ± 0.002	0.000555	144	8.85
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.002	0.00155	109	0.70
Silver	mg/l	- ± -	<1 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.003	0.00327	101	0.08
Vanadium	mg/l	0.0145 ± 0.000688	0.017 ± 0.002	0.0016	117	1.55
Zinc	mg/l	0.329 ± 0.00699	0.34 ± 0.04	0.0165	103	0.65

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.5 (LOQ) ± -	0.000009	-	-

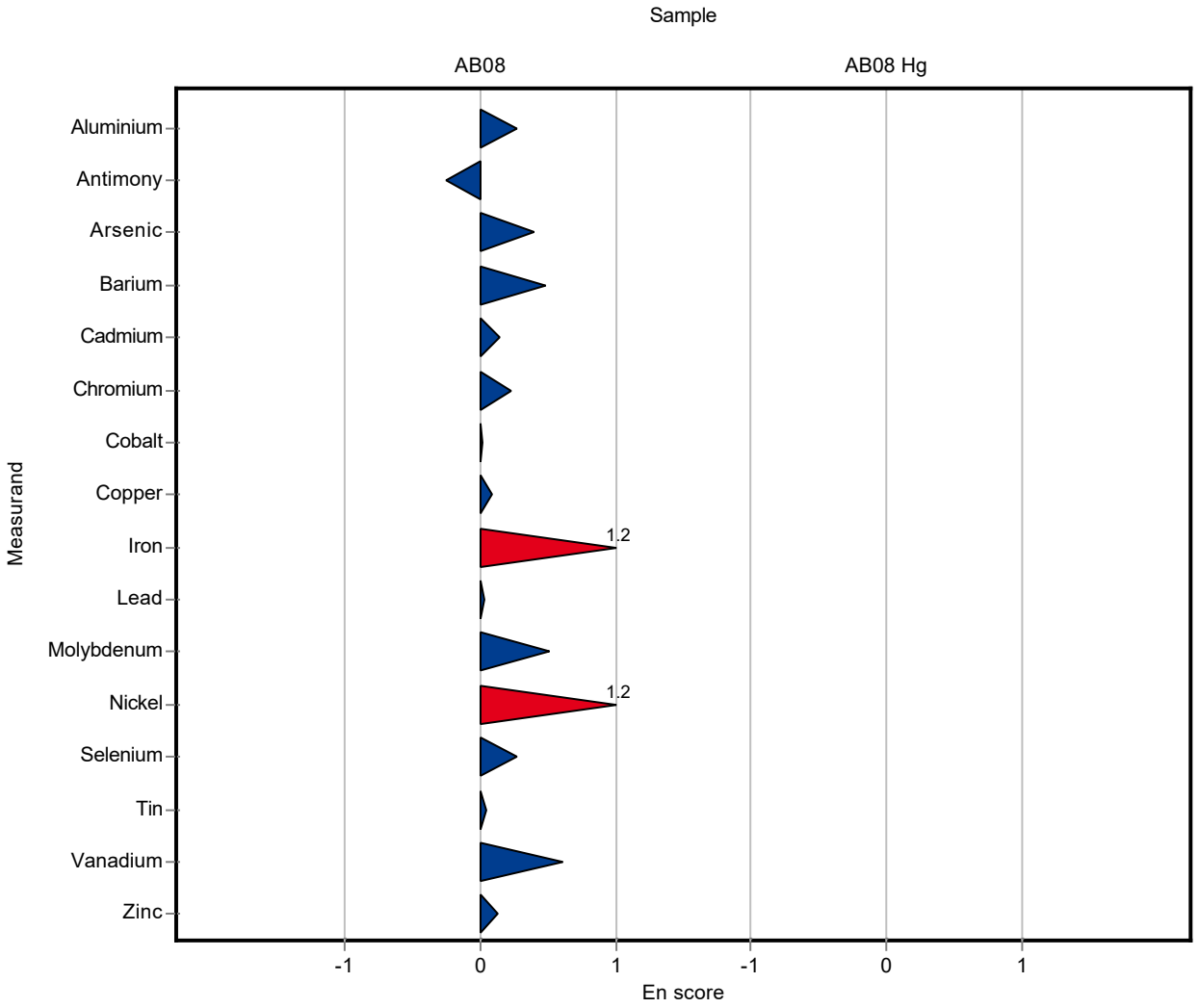

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
2.5
6.1
2.2
8.9
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.96 ± 0.096	0.0745	106	0.26
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.26
Arsenic	mg/l	0.0124 ± 0.00019	0.014 ± 0.002	0.000621	113	0.39
Barium	mg/l	0.11 ± 0.00216	0.12 ± 0.01	0.00551	109	0.49
Boron	mg/l	0.308 ± 0.00629	- ± -	0.0154	-	-
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0002	0.000111	104	0.14
Chromium	mg/l	0.0954 ± 0.00205	0.1 ± 0.01	0.00496	105	0.23
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.002	0.000547	100	0.01
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.01	0.00541	102	0.09
Iron	mg/l	0.23 ± 0.00474	0.3 ± 0.03	0.0115	130	1.16
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.002	0.000588	101	0.03
Molybdenum	mg/l	0.014 ± 0.000441	0.016 ± 0.002	0.000908	114	0.50
Nickel	mg/l	0.0111 ± 0.000252	0.016 ± 0.002	0.000555	144	1.23
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.002	0.00155	109	0.27
Silver	mg/l	- ± -	<1 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.033 ± 0.003	0.00327	101	0.04
Vanadium	mg/l	0.0145 ± 0.000688	0.017 ± 0.002	0.0016	117	0.61
Zinc	mg/l	0.329 ± 0.00699	0.34 ± 0.04	0.0165	103	0.13

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.5 (LOQ) ± -	0.000009	-	-

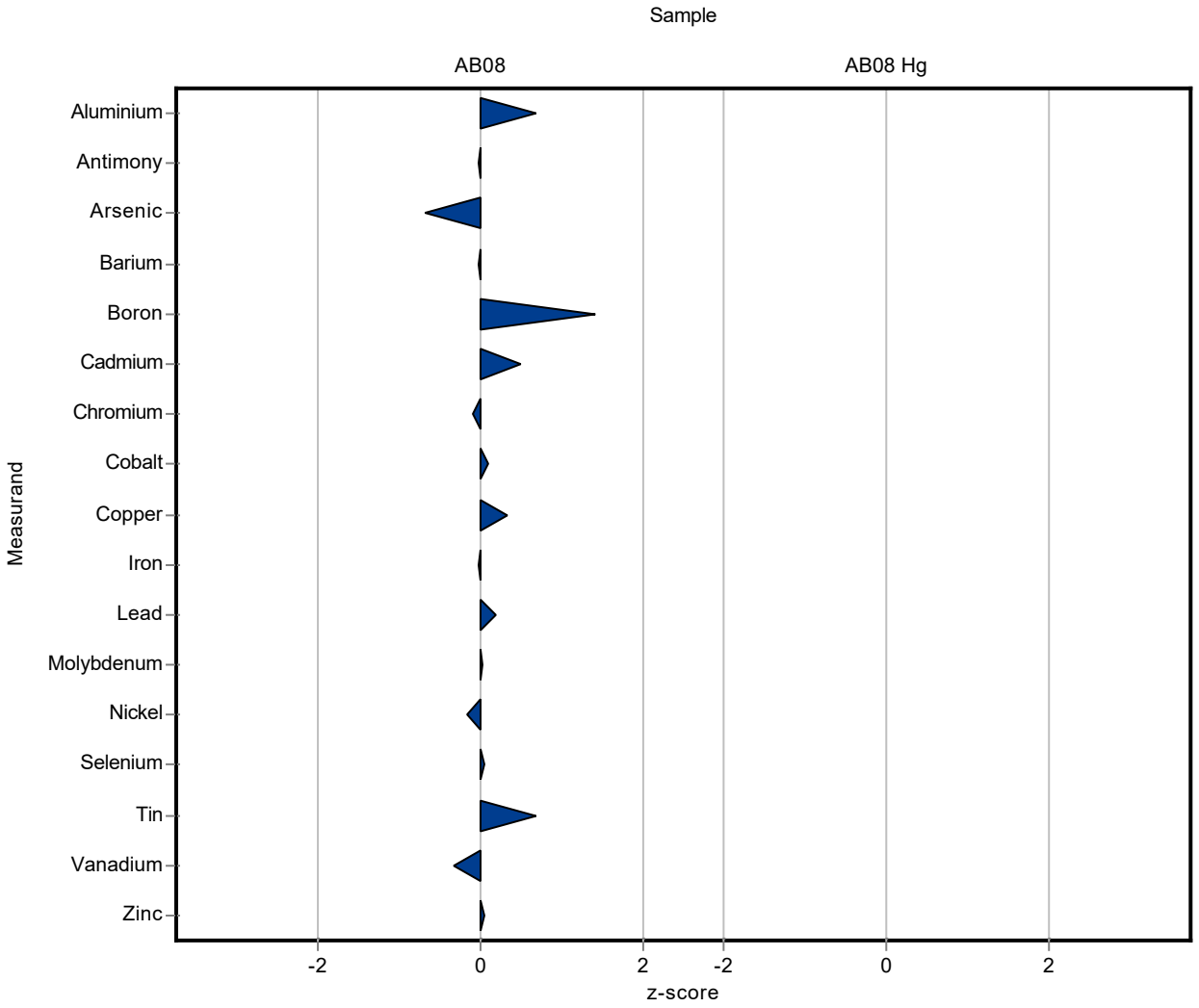

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
1.2
1.2
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.96 ± 0.086	0.0745	106	0.69
Antimony	mg/l	0.0017 ± 0.000076	0.0017 ± 0.0003	0.000131	99.8	-0.03
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.68
Barium	mg/l	0.11 ± 0.00216	0.11 ± 0.007	0.00551	99.8	-0.03
Boron	mg/l	0.308 ± 0.00629	0.33 ± 0.03	0.0154	107	1.42
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0004	0.000111	104	0.50
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.009	0.00496	99.6	-0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.007	0.00541	102	0.33
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.021	0.0115	99.9	-0.02
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.0012	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.0013	0.000908	100	0.03
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.0011	0.00155	101	0.06
Silver	mg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.0032	0.00327	107	0.69
Vanadium	mg/l	0.0145 ± 0.000688	0.014 ± 0.0013	0.0016	96.4	-0.33
Zinc	mg/l	0.329 ± 0.00699	0.33 ± 0.03	0.0165	100	0.04

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.001 (LOQ) ± -	0.000009	-	-

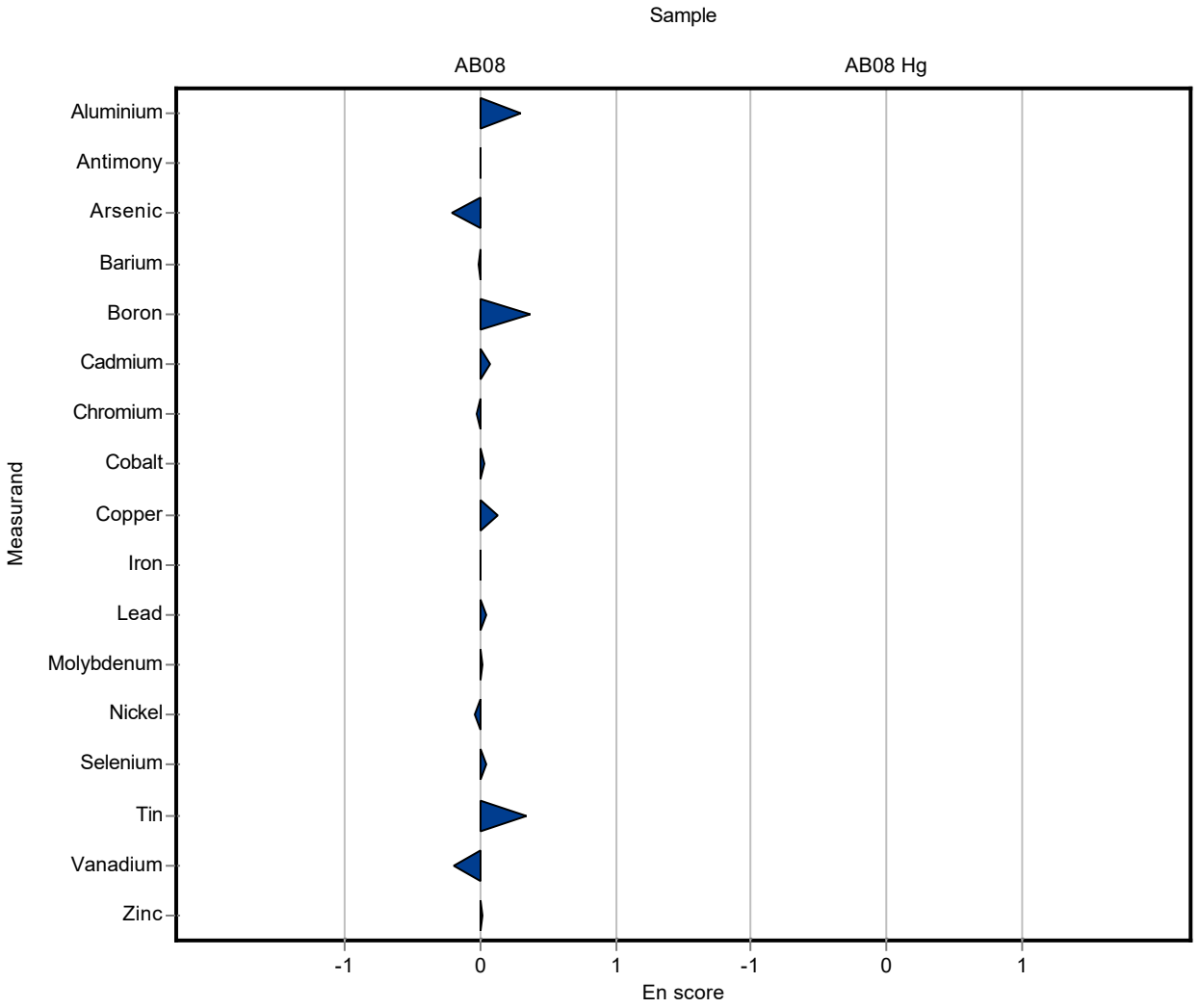

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.96 ± 0.086	0.0745	106	0.29
Antimony	mg/l	0.0017 ± 0.000076	0.0017 ± 0.0003	0.000131	99.8	-0.01
Arsenic	mg/l	0.0124 ± 0.00019	0.012 ± 0.001	0.000621	96.6	-0.21
Barium	mg/l	0.11 ± 0.00216	0.11 ± 0.007	0.00551	99.8	-0.01
Boron	mg/l	0.308 ± 0.00629	0.33 ± 0.03	0.0154	107	0.36
Cadmium	mg/l	0.00144 ± 0.000057	0.0015 ± 0.0004	0.000111	104	0.07
Chromium	mg/l	0.0954 ± 0.00205	0.095 ± 0.009	0.00496	99.6	-0.02
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.03
Copper	mg/l	0.108 ± 0.00179	0.11 ± 0.007	0.00541	102	0.13
Iron	mg/l	0.23 ± 0.00474	0.23 ± 0.021	0.0115	99.9	0.00
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.0012	0.000588	101	0.05
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.0013	0.000908	100	0.01
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.04
Selenium	mg/l	0.0119 ± 0.000658	0.012 ± 0.0011	0.00155	101	0.04
Silver	mg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.0032	0.00327	107	0.34
Vanadium	mg/l	0.0145 ± 0.000688	0.014 ± 0.0013	0.0016	96.4	-0.20
Zinc	mg/l	0.329 ± 0.00699	0.33 ± 0.03	0.0165	100	0.01

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.001 (LOQ) ± -	0.000009	-	-

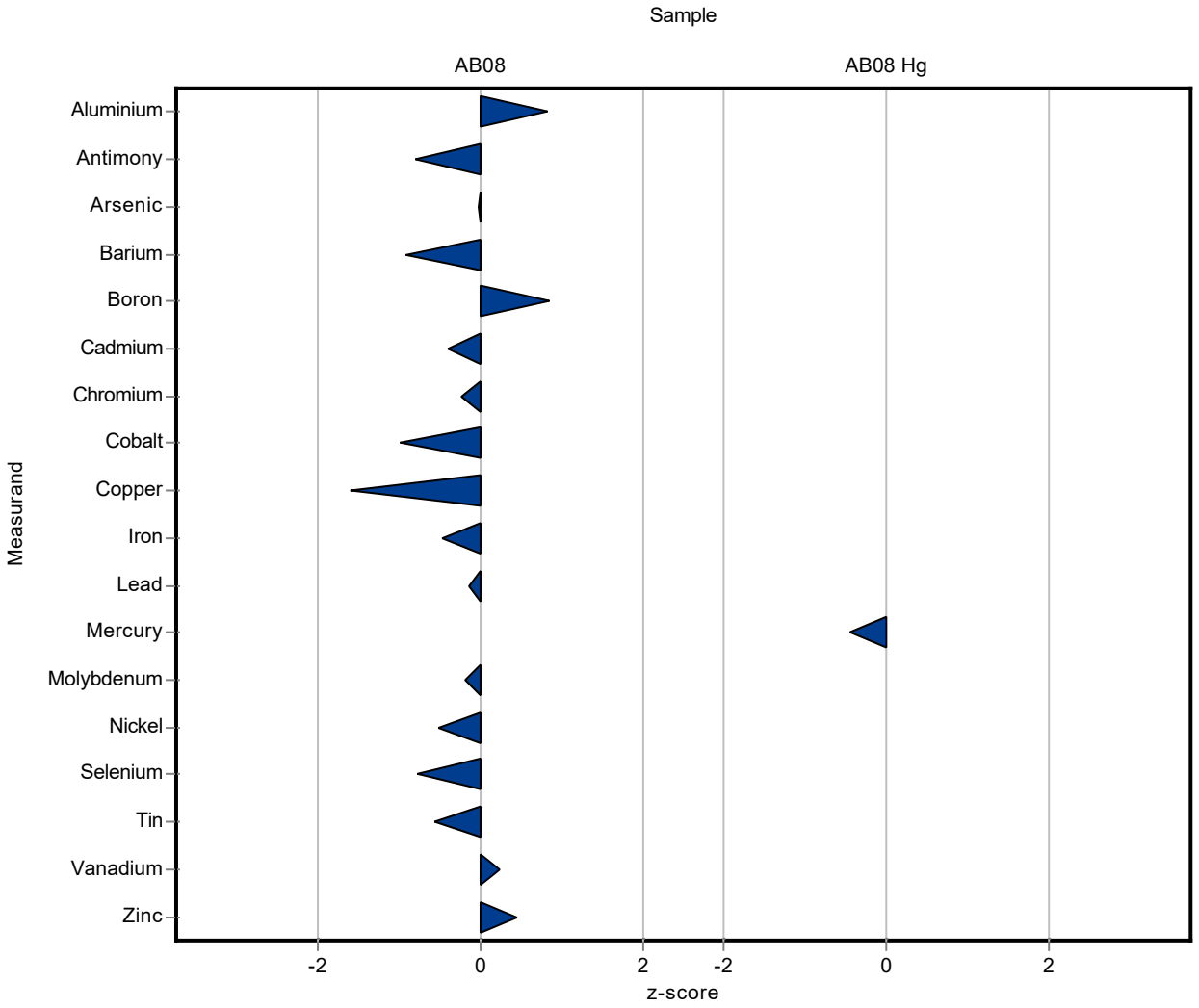

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.9701 ± 0.1455	0.0745	107	0.83
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.79
Arsenic	mg/l	0.0124 ± 0.00019	0.0124 ± 0.0019	0.000621	99.8	-0.04
Barium	mg/l	0.11 ± 0.00216	0.1051 ± 0.0158	0.00551	95.4	-0.92
Boron	mg/l	0.308 ± 0.00629	0.3211 ± 0.0482	0.0154	104	0.84
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.0002	0.000111	96.9	-0.40
Chromium	mg/l	0.0954 ± 0.00205	0.0943 ± 0.0141	0.00496	98.8	-0.23
Cobalt	mg/l	0.0109 ± 0.000134	0.0104 ± 0.0016	0.000547	95	-1.00
Copper	mg/l	0.108 ± 0.00179	0.0995 ± 0.0149	0.00541	91.9	-1.61
Iron	mg/l	0.23 ± 0.00474	0.2247 ± 0.0337	0.0115	97.6	-0.48
Lead	mg/l	0.0109 ± 0.000279	0.0108 ± 0.0016	0.000588	99.2	-0.14
Molybdenum	mg/l	0.014 ± 0.000441	0.0138 ± 0.0021	0.000908	98.7	-0.19
Nickel	mg/l	0.0111 ± 0.000252	0.0108 ± 0.0016	0.000555	97.4	-0.52
Selenium	mg/l	0.0119 ± 0.000658	0.0107 ± 0.0016	0.00155	89.8	-0.78
Silver	mg/l	- ± -	<0.0001 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0309 ± 0.0046	0.00327	94.4	-0.56
Vanadium	mg/l	0.0145 ± 0.000688	0.0149 ± 0.0022	0.0016	103	0.23
Zinc	mg/l	0.329 ± 0.00699	0.3367 ± 0.0505	0.0165	102	0.45

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000095 ± 0.00001	0.000009	96	-0.44

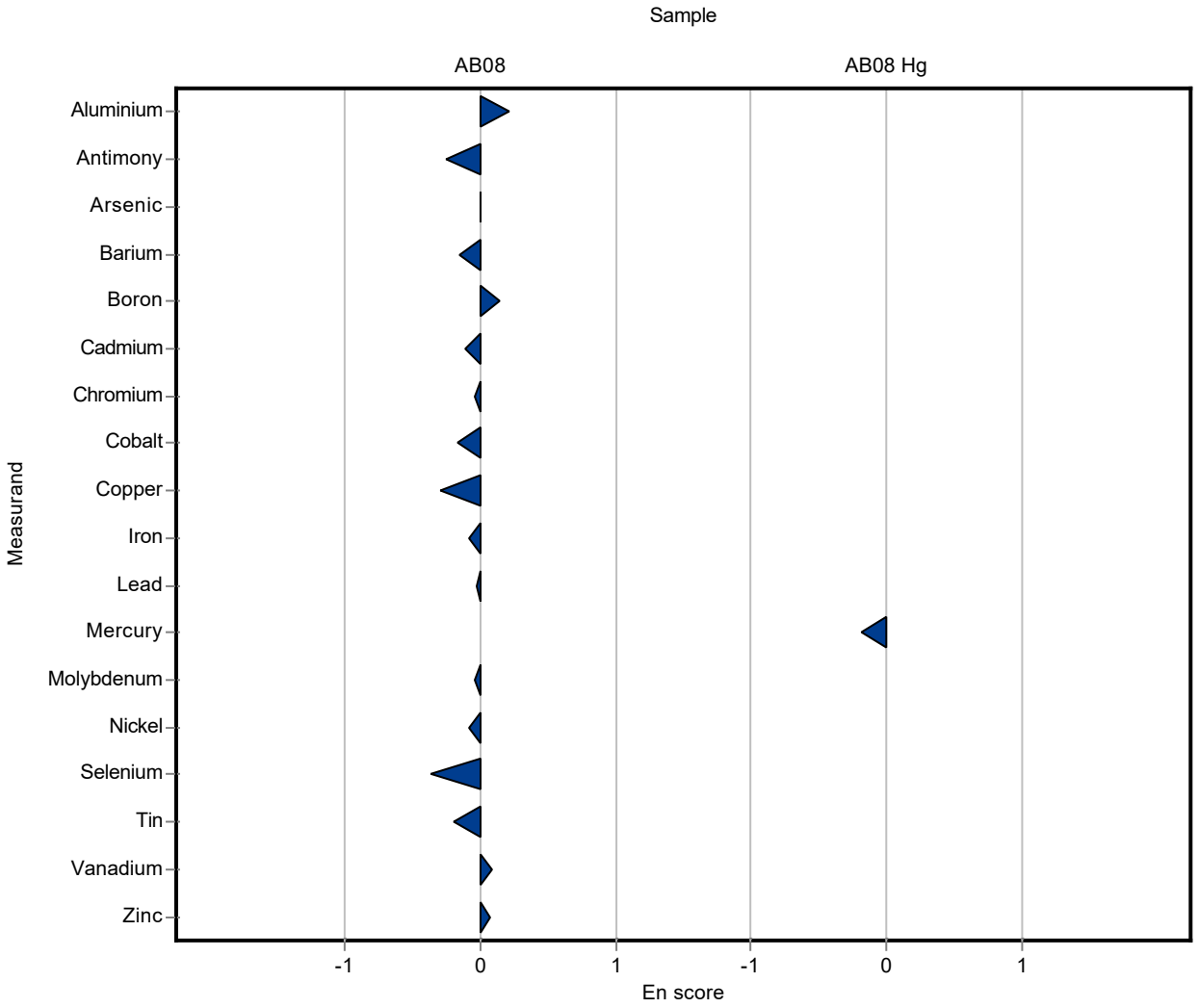

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.9701 ± 0.1455	0.0745	107	0.21
Antimony	mg/l	0.0017 ± 0.000076	0.0016 ± 0.0002	0.000131	93.9	-0.26
Arsenic	mg/l	0.0124 ± 0.00019	0.0124 ± 0.0019	0.000621	99.8	-0.01
Barium	mg/l	0.11 ± 0.00216	0.1051 ± 0.0158	0.00551	95.4	-0.16
Boron	mg/l	0.308 ± 0.00629	0.3211 ± 0.0482	0.0154	104	0.14
Cadmium	mg/l	0.00144 ± 0.000057	0.0014 ± 0.0002	0.000111	96.9	-0.11
Chromium	mg/l	0.0954 ± 0.00205	0.0943 ± 0.0141	0.00496	98.8	-0.04
Cobalt	mg/l	0.0109 ± 0.000134	0.0104 ± 0.0016	0.000547	95	-0.17
Copper	mg/l	0.108 ± 0.00179	0.0995 ± 0.0149	0.00541	91.9	-0.29
Iron	mg/l	0.23 ± 0.00474	0.2247 ± 0.0337	0.0115	97.6	-0.08
Lead	mg/l	0.0109 ± 0.000279	0.0108 ± 0.0016	0.000588	99.2	-0.03
Molybdenum	mg/l	0.014 ± 0.000441	0.0138 ± 0.0021	0.000908	98.7	-0.04
Nickel	mg/l	0.0111 ± 0.000252	0.0108 ± 0.0016	0.000555	97.4	-0.09
Selenium	mg/l	0.0119 ± 0.000658	0.0107 ± 0.0016	0.00155	89.8	-0.37
Silver	mg/l	- ± -	<0.0001 ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0309 ± 0.0046	0.00327	94.4	-0.20
Vanadium	mg/l	0.0145 ± 0.000688	0.0149 ± 0.0022	0.0016	103	0.08
Zinc	mg/l	0.329 ± 0.00699	0.3367 ± 0.0505	0.0165	102	0.07

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000095 ± 0.00001	0.000009	96	-0.19

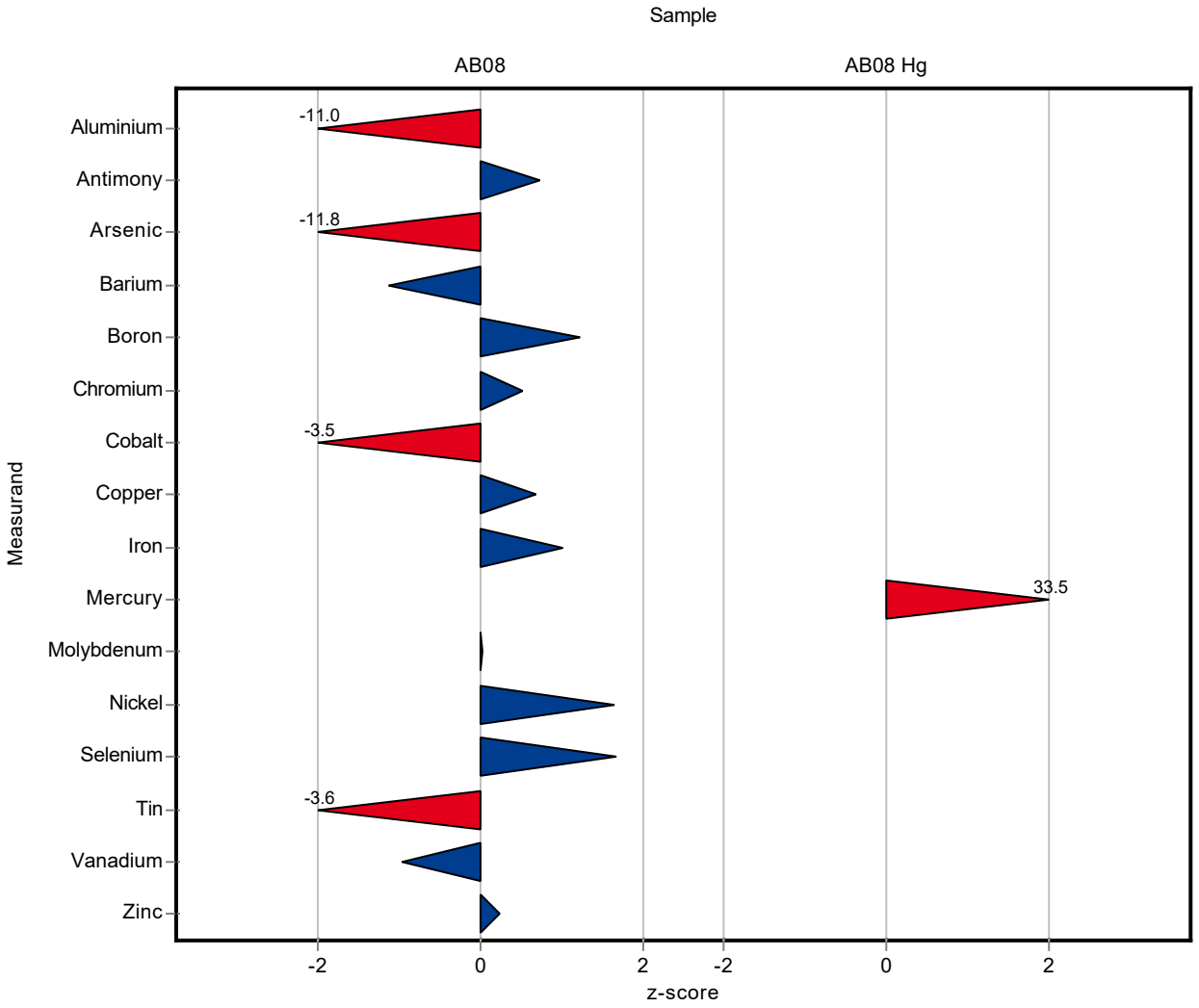

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.087 ± 0.0104	0.0745	9.58	-11.00
Antimony	mg/l	0.0017 ± 0.000076	0.0018 ± 0.00017	0.000131	106	0.73
Arsenic	mg/l	0.0124 ± 0.00019	0.0051 ± 0.00049	0.000621	41.1	-11.80
Barium	mg/l	0.11 ± 0.00216	0.104 ± 0.011	0.00551	94.4	-1.12
Boron	mg/l	0.308 ± 0.00629	0.327 ± 0.039	0.0154	106	1.23
Cadmium	mg/l	0.00144 ± 0.000057	<0.001 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.098 ± 0.017	0.00496	103	0.52
Cobalt	mg/l	0.0109 ± 0.000134	0.00903 ± 0.00086	0.000547	82.5	-3.50
Copper	mg/l	0.108 ± 0.00179	0.112 ± 0.023	0.00541	103	0.69
Iron	mg/l	0.23 ± 0.00474	0.242 ± 0.0131	0.0115	105	1.02
Lead	mg/l	0.0109 ± 0.000279	<0.02 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.002	0.000908	100	0.03
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.001	0.000555	108	1.64
Selenium	mg/l	0.0119 ± 0.000658	0.0145 ± 0.00138	0.00155	122	1.67
Silver	mg/l	- ± -	0.0012 ± 0.00012	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.021 ± 0.0036	0.00327	64.1	-3.59
Vanadium	mg/l	0.0145 ± 0.000688	0.013 ± 0.0015	0.0016	89.5	-0.96
Zinc	mg/l	0.329 ± 0.00699	0.333 ± 0.0302	0.0165	101	0.23

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0004 ± 0.00006	0.000009	404	33.50

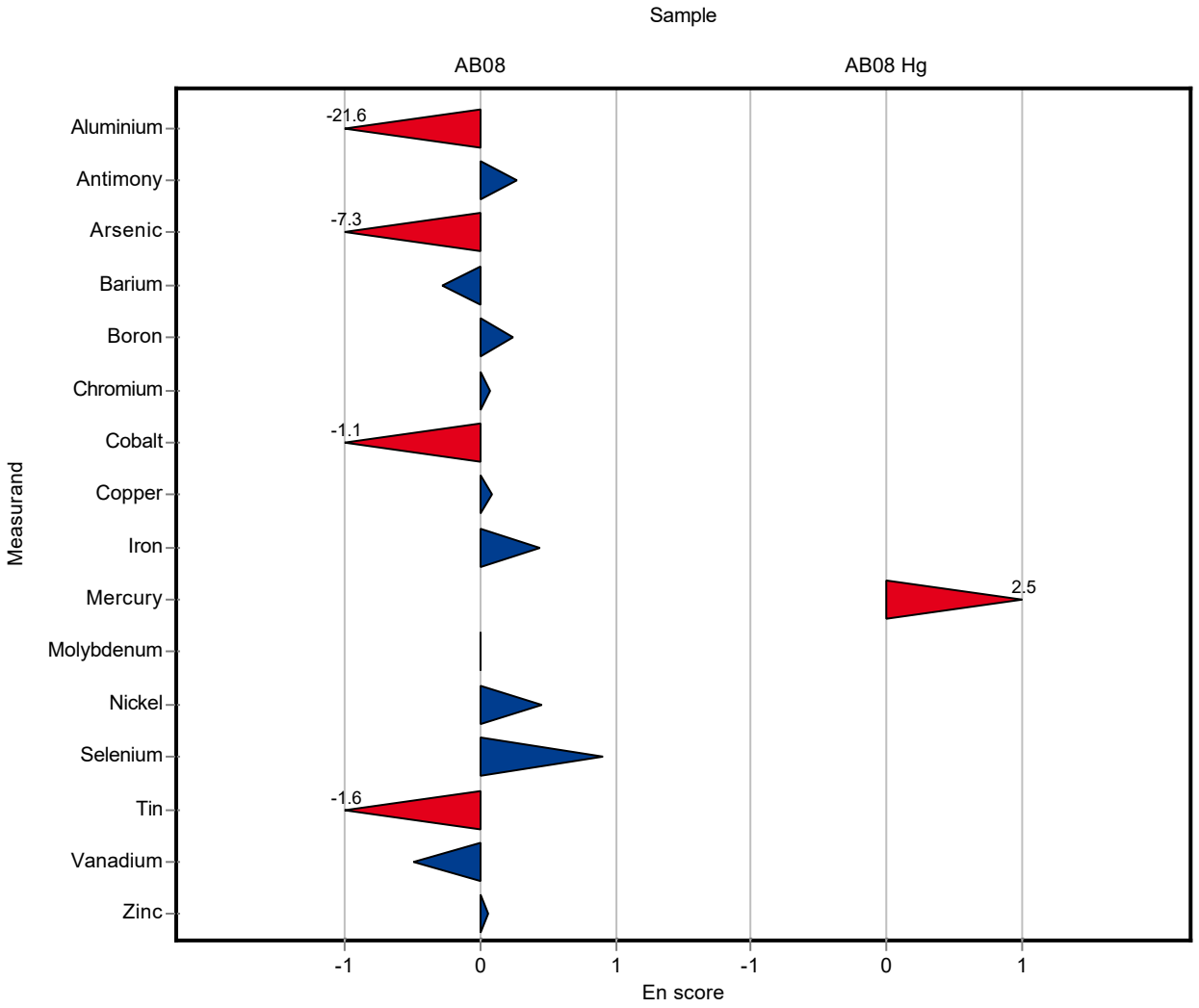

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Chromium
Cobalt
Copper
Iron
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-11.0
-11.8
-3.5
-3.6
33.5
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.087 ± 0.0104	0.0745	9.58	-21.60
Antimony	mg/l	0.0017 ± 0.000076	0.0018 ± 0.00017	0.000131	106	0.28
Arsenic	mg/l	0.0124 ± 0.00019	0.0051 ± 0.00049	0.000621	41.1	-7.34
Barium	mg/l	0.11 ± 0.00216	0.104 ± 0.011	0.00551	94.4	-0.28
Boron	mg/l	0.308 ± 0.00629	0.327 ± 0.039	0.0154	106	0.24
Cadmium	mg/l	0.00144 ± 0.000057	<0.001 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.098 ± 0.017	0.00496	103	0.08
Cobalt	mg/l	0.0109 ± 0.000134	0.00903 ± 0.00086	0.000547	82.5	-1.11
Copper	mg/l	0.108 ± 0.00179	0.112 ± 0.023	0.00541	103	0.08
Iron	mg/l	0.23 ± 0.00474	0.242 ± 0.0131	0.0115	105	0.44
Lead	mg/l	0.0109 ± 0.000279	<0.02 (LOQ) ± -	0.000588	-	-
Molybdenum	mg/l	0.014 ± 0.000441	0.014 ± 0.002	0.000908	100	0.01
Nickel	mg/l	0.0111 ± 0.000252	0.012 ± 0.001	0.000555	108	0.45
Selenium	mg/l	0.0119 ± 0.000658	0.0145 ± 0.00138	0.00155	122	0.91
Silver	mg/l	- ± -	0.0012 ± 0.00012	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.021 ± 0.0036	0.00327	64.1	-1.59
Vanadium	mg/l	0.0145 ± 0.000688	0.013 ± 0.0015	0.0016	89.5	-0.50
Zinc	mg/l	0.329 ± 0.00699	0.333 ± 0.0302	0.0165	101	0.06

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.0004 ± 0.00006	0.000009	404	2.51

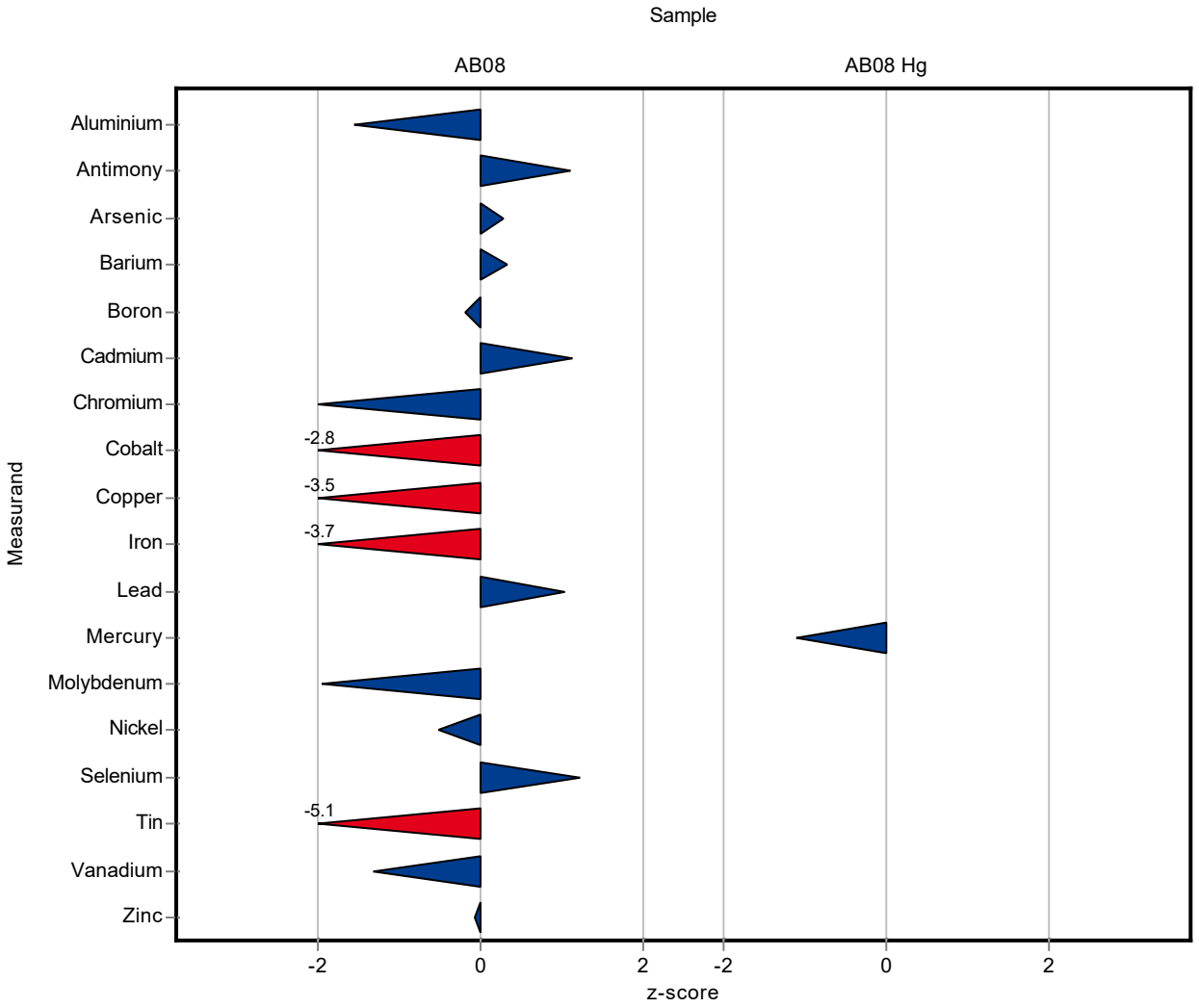

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Chromium
Cobalt
Copper
Iron
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-21.6
-7.3
-1.1
-1.6
2.5
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.792 ± 0.144	0.0745	87.2	-1.56
Antimony	mg/l	0.0017 ± 0.000076	0.00185 ± 0.00055	0.000131	109	1.11
Arsenic	mg/l	0.0124 ± 0.00019	0.0126 ± 0.0024	0.000621	101	0.29
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.019	0.00551	102	0.33
Boron	mg/l	0.308 ± 0.00629	0.305 ± 0.051	0.0154	99	-0.20
Cadmium	mg/l	0.00144 ± 0.000057	0.00157 ± 0.00025	0.000111	109	1.13
Chromium	mg/l	0.0954 ± 0.00205	0.0855 ± 0.0168	0.00496	89.6	-2.00
Cobalt	mg/l	0.0109 ± 0.000134	0.00944 ± 0.00185	0.000547	86.2	-2.75
Copper	mg/l	0.108 ± 0.00179	0.0893 ± 0.0162	0.00541	82.5	-3.50
Iron	mg/l	0.23 ± 0.00474	0.188 ± 0.039	0.0115	81.7	-3.67
Lead	mg/l	0.0109 ± 0.000279	0.0115 ± 0.0019	0.000588	106	1.05
Molybdenum	mg/l	0.014 ± 0.000441	0.0122 ± 0.0019	0.000908	87.3	-1.96
Nickel	mg/l	0.0111 ± 0.000252	0.0108 ± 0.0018	0.000555	97.4	-0.52
Selenium	mg/l	0.0119 ± 0.000658	0.0138 ± 0.0021	0.00155	116	1.22
Silver	mg/l	- ± -	0.000148 ± 0.000029	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0159 ± 0.0031	0.00327	48.6	-5.14
Vanadium	mg/l	0.0145 ± 0.000688	0.0124 ± 0.0023	0.0016	85.4	-1.33
Zinc	mg/l	0.329 ± 0.00699	0.328 ± 0.06	0.0165	99.6	-0.08

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000089 ± 0.000021	0.000009	90	-1.10

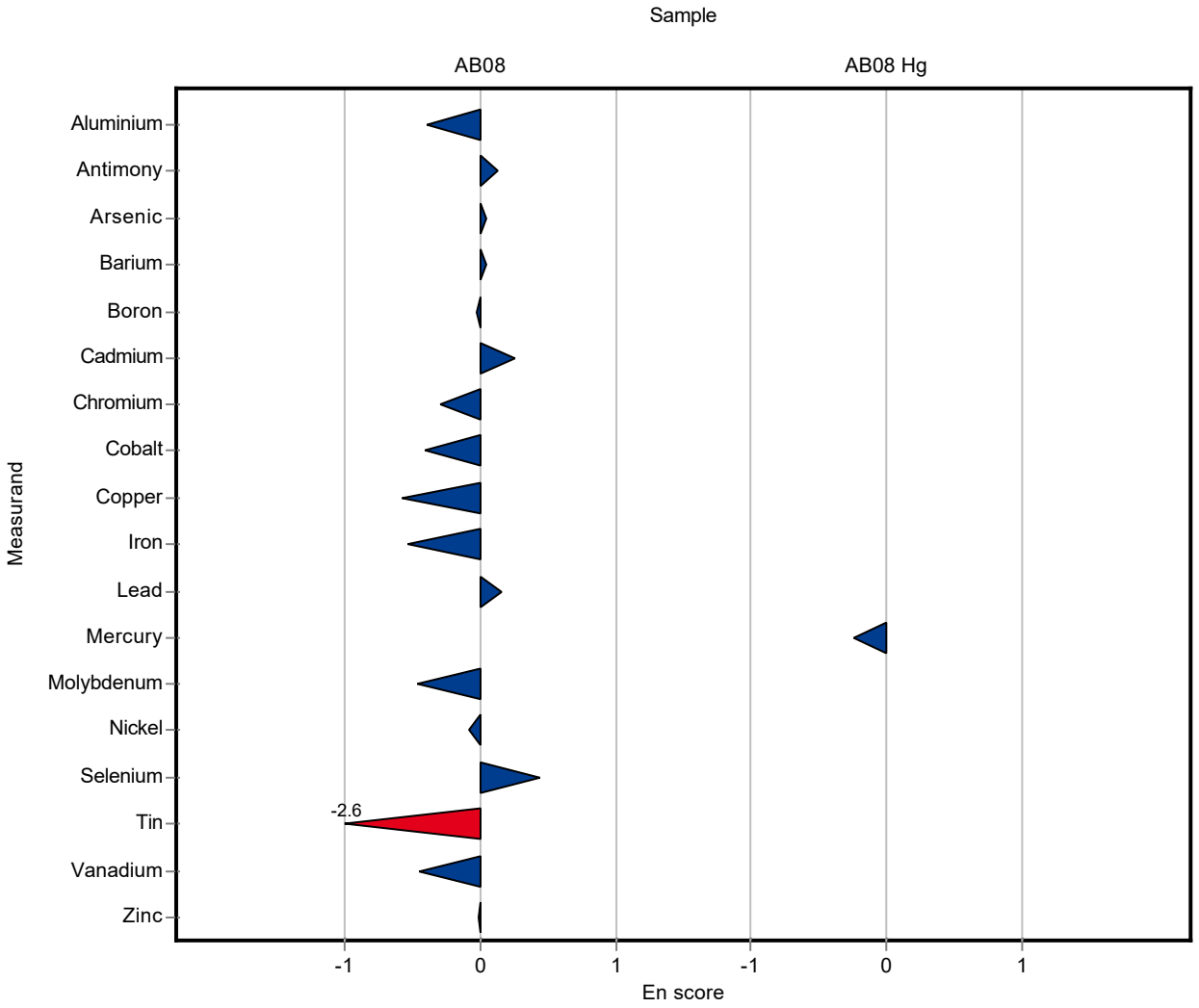

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2.8
-3.5
-3.7
-5.1
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.792 ± 0.144	0.0745	87.2	-0.40
Antimony	mg/l	0.0017 ± 0.000076	0.00185 ± 0.00055	0.000131	109	0.13
Arsenic	mg/l	0.0124 ± 0.00019	0.0126 ± 0.0024	0.000621	101	0.04
Barium	mg/l	0.11 ± 0.00216	0.112 ± 0.019	0.00551	102	0.05
Boron	mg/l	0.308 ± 0.00629	0.305 ± 0.051	0.0154	99	-0.03
Cadmium	mg/l	0.00144 ± 0.000057	0.00157 ± 0.00025	0.000111	109	0.25
Chromium	mg/l	0.0954 ± 0.00205	0.0855 ± 0.0168	0.00496	89.6	-0.29
Cobalt	mg/l	0.0109 ± 0.000134	0.00944 ± 0.00185	0.000547	86.2	-0.41
Copper	mg/l	0.108 ± 0.00179	0.0893 ± 0.0162	0.00541	82.5	-0.58
Iron	mg/l	0.23 ± 0.00474	0.188 ± 0.039	0.0115	81.7	-0.54
Lead	mg/l	0.0109 ± 0.000279	0.0115 ± 0.0019	0.000588	106	0.16
Molybdenum	mg/l	0.014 ± 0.000441	0.0122 ± 0.0019	0.000908	87.3	-0.46
Nickel	mg/l	0.0111 ± 0.000252	0.0108 ± 0.0018	0.000555	97.4	-0.08
Selenium	mg/l	0.0119 ± 0.000658	0.0138 ± 0.0021	0.00155	116	0.44
Silver	mg/l	- ± -	0.000148 ± 0.000029	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.0159 ± 0.0031	0.00327	48.6	-2.63
Vanadium	mg/l	0.0145 ± 0.000688	0.0124 ± 0.0023	0.0016	85.4	-0.46
Zinc	mg/l	0.329 ± 0.00699	0.328 ± 0.06	0.0165	99.6	-0.01

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	0.000089 ± 0.000021	0.000009	90	-0.23

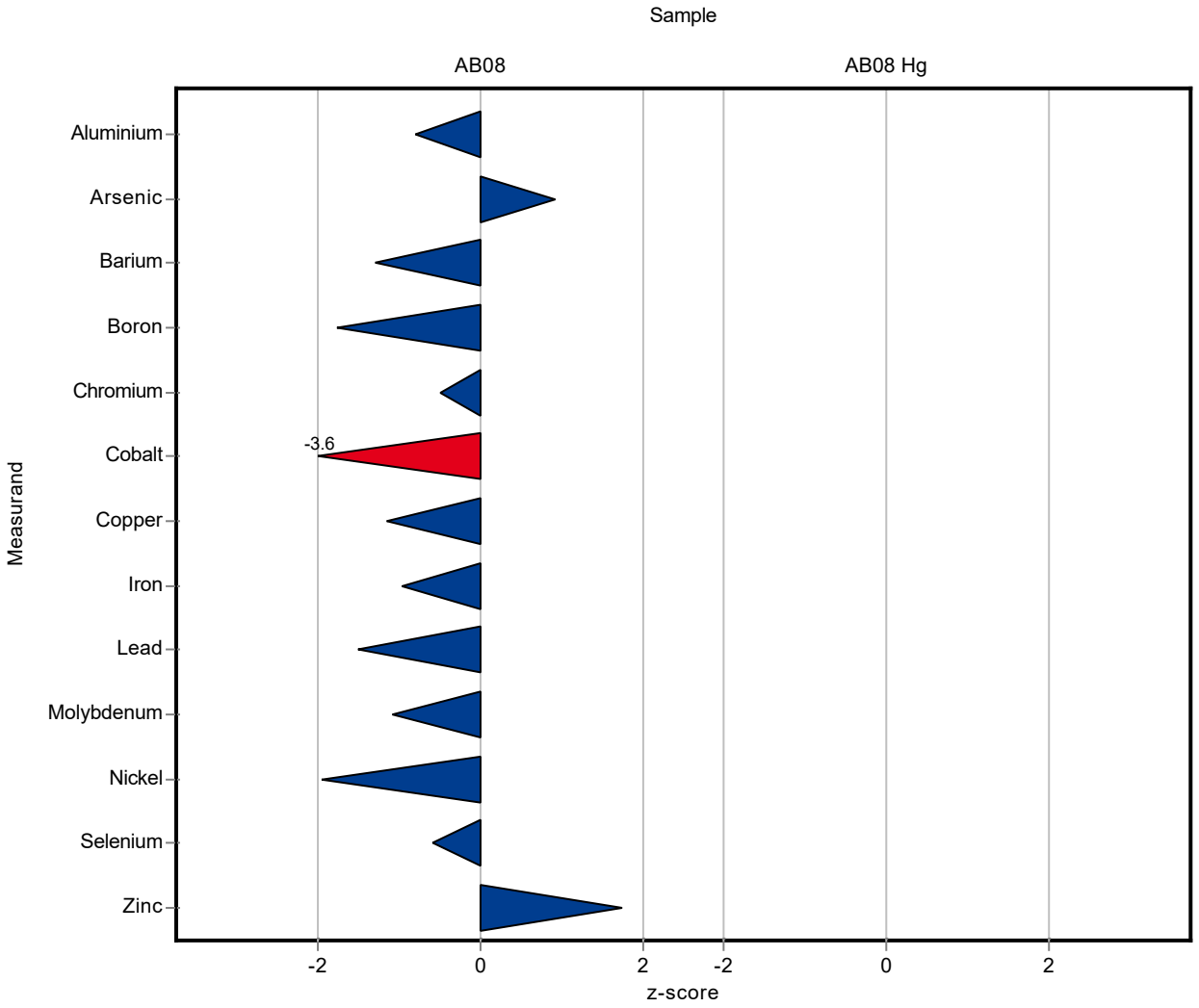

Sample
AB08
AB08 Hg
Measurand
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Mercury
Molybdenum
Nickel
Selenium
Tin
Vanadium
Zinc
-2.6
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.849 ± 0.0472	0.0745	93.4	-0.80
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.013 ± 0.0016	0.000621	105	0.93
Barium	mg/l	0.11 ± 0.00216	0.103 ± 0.0018	0.00551	93.5	-1.31
Boron	mg/l	0.308 ± 0.00629	0.281 ± 0.0116	0.0154	91.2	-1.76
Cadmium	mg/l	0.00144 ± 0.000057	<0.005 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.093 ± 0.0025	0.00496	97.5	-0.49
Cobalt	mg/l	0.0109 ± 0.000134	0.009 ± 0.0001	0.000547	82.2	-3.56
Copper	mg/l	0.108 ± 0.00179	0.102 ± 0.0018	0.00541	94.2	-1.15
Iron	mg/l	0.23 ± 0.00474	0.219 ± 0.0063	0.0115	95.1	-0.97
Lead	mg/l	0.0109 ± 0.000279	0.01 ± 0.0011	0.000588	91.9	-1.50
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.0006	0.000908	93	-1.07
Nickel	mg/l	0.0111 ± 0.000252	0.01 ± 0.0016	0.000555	90.2	-1.97
Selenium	mg/l	0.0119 ± 0.000658	0.011 ± 0.001	0.00155	92.4	-0.59
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	<0.5 (LOQ) ± -	0.00327	-	-
Vanadium	mg/l	0.0145 ± 0.000688	- ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	0.358 ± 0.0061	0.0165	109	1.75

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0004 ± -	0.000009	-	-

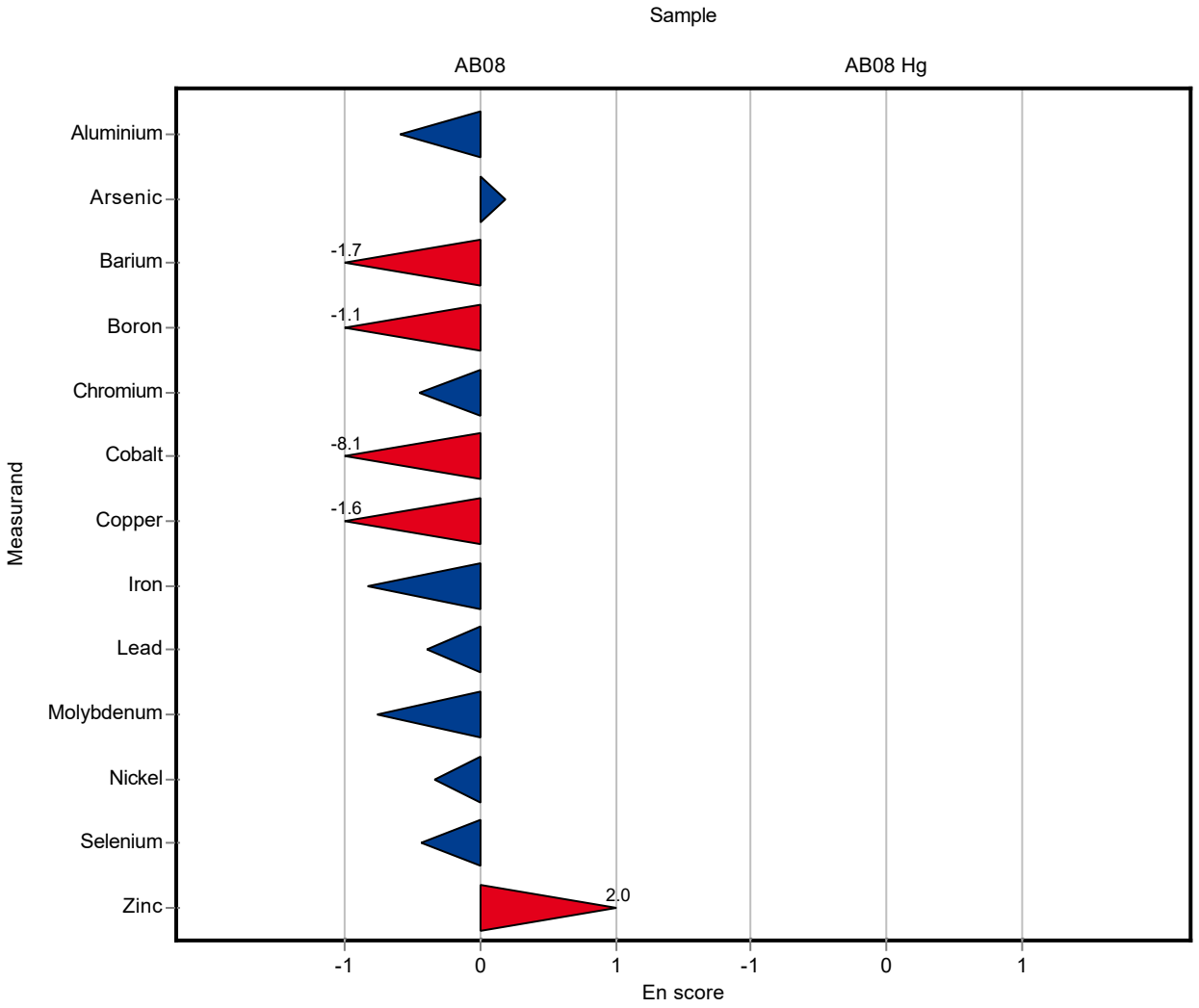

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Zinc
Measurand
-3.6
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.849 ± 0.0472	0.0745	93.4	-0.60
Antimony	mg/l	0.0017 ± 0.000076	<0.005 (LOQ) ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.013 ± 0.0016	0.000621	105	0.18
Barium	mg/l	0.11 ± 0.00216	0.103 ± 0.0018	0.00551	93.5	-1.71
Boron	mg/l	0.308 ± 0.00629	0.281 ± 0.0116	0.0154	91.2	-1.13
Cadmium	mg/l	0.00144 ± 0.000057	<0.005 (LOQ) ± -	0.000111	-	-
Chromium	mg/l	0.0954 ± 0.00205	0.093 ± 0.0025	0.00496	97.5	-0.45
Cobalt	mg/l	0.0109 ± 0.000134	0.009 ± 0.0001	0.000547	82.2	-8.09
Copper	mg/l	0.108 ± 0.00179	0.102 ± 0.0018	0.00541	94.2	-1.55
Iron	mg/l	0.23 ± 0.00474	0.219 ± 0.0063	0.0115	95.1	-0.83
Lead	mg/l	0.0109 ± 0.000279	0.01 ± 0.0011	0.000588	91.9	-0.40
Molybdenum	mg/l	0.014 ± 0.000441	0.013 ± 0.0006	0.000908	93	-0.76
Nickel	mg/l	0.0111 ± 0.000252	0.01 ± 0.0016	0.000555	90.2	-0.34
Selenium	mg/l	0.0119 ± 0.000658	0.011 ± 0.001	0.00155	92.4	-0.43
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	<0.5 (LOQ) ± -	0.00327	-	-
Vanadium	mg/l	0.0145 ± 0.000688	- ± -	0.0016	-	-
Zinc	mg/l	0.329 ± 0.00699	0.358 ± 0.0061	0.0165	109	2.04

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0004 ± -	0.000009	-	-

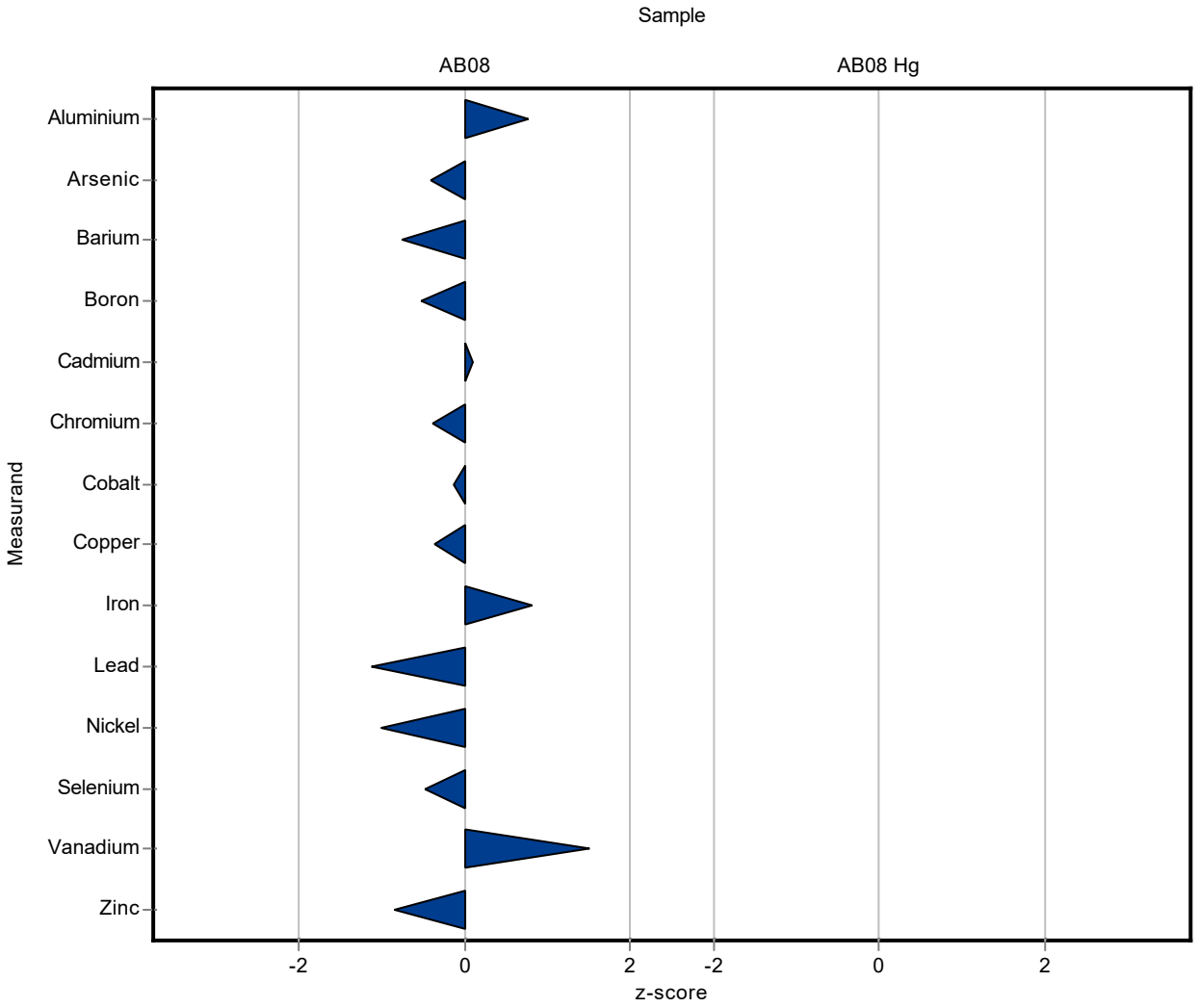

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Chromium
Cobalt
Copper
Iron
Lead
Molybdenum
Nickel
Selenium
Zinc
-1.7
-1.1
-8.1
-1.6
2.0
Measurand
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.9667 ± 0.0483	0.0745	106	0.78
Antimony	mg/l	0.0017 ± 0.000076	- ± -	0.000131	-	-
Arsenic	mg/l	0.0124 ± 0.00019	0.01217 ± 0.000608	0.000621	98	-0.41
Barium	mg/l	0.11 ± 0.00216	0.1061 ± 0.005306	0.00551	96.3	-0.74
Boron	mg/l	0.308 ± 0.00629	0.2999 ± 0.01499	0.0154	97.3	-0.53
Cadmium	mg/l	0.00144 ± 0.000057	0.001457 ± 0.000073	0.000111	101	0.11
Chromium	mg/l	0.0954 ± 0.00205	0.09355 ± 0.004677	0.00496	98	-0.38
Cobalt	mg/l	0.0109 ± 0.000134	0.01088 ± 0.000504	0.000547	99.4	-0.12
Copper	mg/l	0.108 ± 0.00179	0.1063 ± 0.005313	0.00541	98.2	-0.36
Iron	mg/l	0.23 ± 0.00474	0.2397 ± 0.01199	0.0115	104	0.82
Lead	mg/l	0.0109 ± 0.000279	0.01023 ± 0.000511	0.000588	94	-1.11
Molybdenum	mg/l	0.014 ± 0.000441	- ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.01053 ± 0.000527	0.000555	95	-1.01
Selenium	mg/l	0.0119 ± 0.000658	0.01116 ± 0.000558	0.00155	93.7	-0.48
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	- ± -	0.00327	-	-
Vanadium	mg/l	0.0145 ± 0.000688	0.01695 ± 0.000847	0.0016	117	1.52
Zinc	mg/l	0.329 ± 0.00699	0.3153 ± 0.01577	0.0165	95.8	-0.85

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.001 (LOQ) ± -	0.000009	-	-

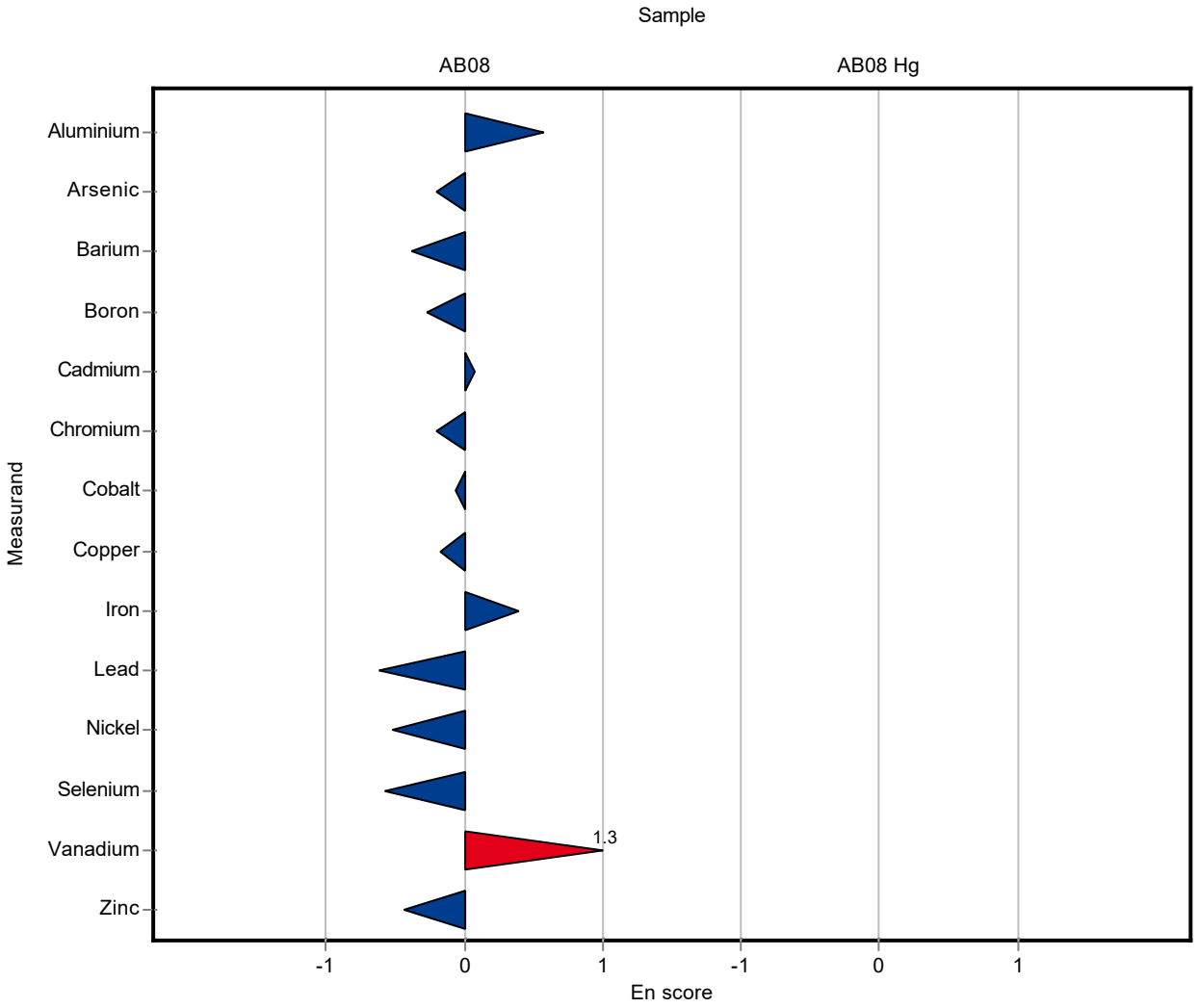

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Nickel
Selenium
Vanadium
Zinc
Measurand
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909	±	0.0319	0.9667	±	0.0483	0.0745	106	0.57
Antimony	mg/l	0.0017	±	0.000076	-	±	-	0.000131	-	-
Arsenic	mg/l	0.0124	±	0.00019	0.01217	±	0.000608	0.000621	98	-0.20
Barium	mg/l	0.11	±	0.00216	0.1061	±	0.005306	0.00551	96.3	-0.38
Boron	mg/l	0.308	±	0.00629	0.2999	±	0.01499	0.0154	97.3	-0.27
Cadmium	mg/l	0.00144	±	0.000057	0.001457	±	0.000073	0.000111	101	0.08
Chromium	mg/l	0.0954	±	0.00205	0.09355	±	0.004677	0.00496	98	-0.20
Cobalt	mg/l	0.0109	±	0.000134	0.01088	±	0.000504	0.000547	99.4	-0.07
Copper	mg/l	0.108	±	0.00179	0.1063	±	0.005313	0.00541	98.2	-0.18
Iron	mg/l	0.23	±	0.00474	0.2397	±	0.01199	0.0115	104	0.39
Lead	mg/l	0.0109	±	0.000279	0.01023	±	0.000511	0.000588	94	-0.62
Molybdenum	mg/l	0.014	±	0.000441	-	±	-	0.000908	-	-
Nickel	mg/l	0.0111	±	0.000252	0.01053	±	0.000527	0.000555	95	-0.52
Selenium	mg/l	0.0119	±	0.000658	0.01116	±	0.000558	0.00155	93.7	-0.58
Silver	mg/l	-	±	-	-	±	-	-	-	-
Tin	mg/l	0.0327	±	0.00156	-	±	-	0.00327	-	-
Vanadium	mg/l	0.0145	±	0.000688	0.01695	±	0.000847	0.0016	117	1.32
Zinc	mg/l	0.329	±	0.00699	0.3153	±	0.01577	0.0165	95.8	-0.43

Sample: AB08HG

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989	±	0.000007	<0.001 (LOQ)	±	-	0.000009	-	-

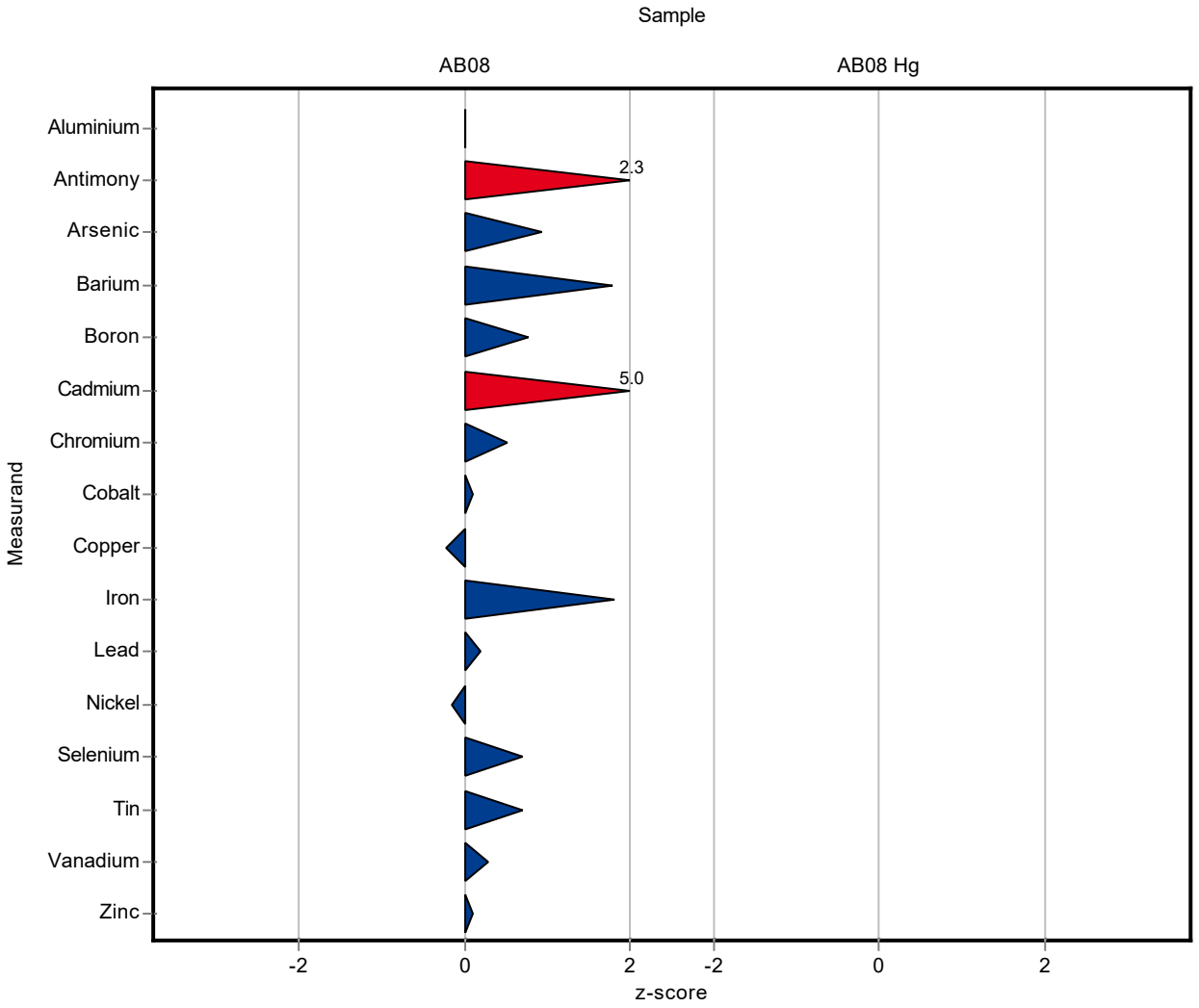

Sample
AB08
AB08 Hg
Aluminium
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Nickel
Selenium
Vanadium
Zinc
Measurand
1.3
-1
0
1
-1
0
1
En score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.909 ± 0.0319	0.91 ± 0.091	0.0745	100	0.02
Antimony	mg/l	0.0017 ± 0.000076	0.002 ± 0.001	0.000131	117	2.26
Arsenic	mg/l	0.0124 ± 0.00019	0.013 ± 0.001	0.000621	105	0.93
Barium	mg/l	0.11 ± 0.00216	0.12 ± 0.012	0.00551	109	1.78
Boron	mg/l	0.308 ± 0.00629	0.32 ± 0.013	0.0154	104	0.77
Cadmium	mg/l	0.00144 ± 0.000057	0.002 ± 0.001	0.000111	138	5.00
Chromium	mg/l	0.0954 ± 0.00205	0.098 ± 0.013	0.00496	103	0.52
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.10
Copper	mg/l	0.108 ± 0.00179	0.107 ± 0.01	0.00541	98.9	-0.23
Iron	mg/l	0.23 ± 0.00474	0.251 ± 0.029	0.0115	109	1.81
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.001	0.000588	101	0.20
Molybdenum	mg/l	0.014 ± 0.000441	- ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.16
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.001	0.00155	109	0.70
Silver	mg/l	- ± -	<0.003 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.004	0.00327	107	0.69
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.002	0.0016	103	0.30
Zinc	mg/l	0.329 ± 0.00699	0.331 ± 0.047	0.0165	101	0.11

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-

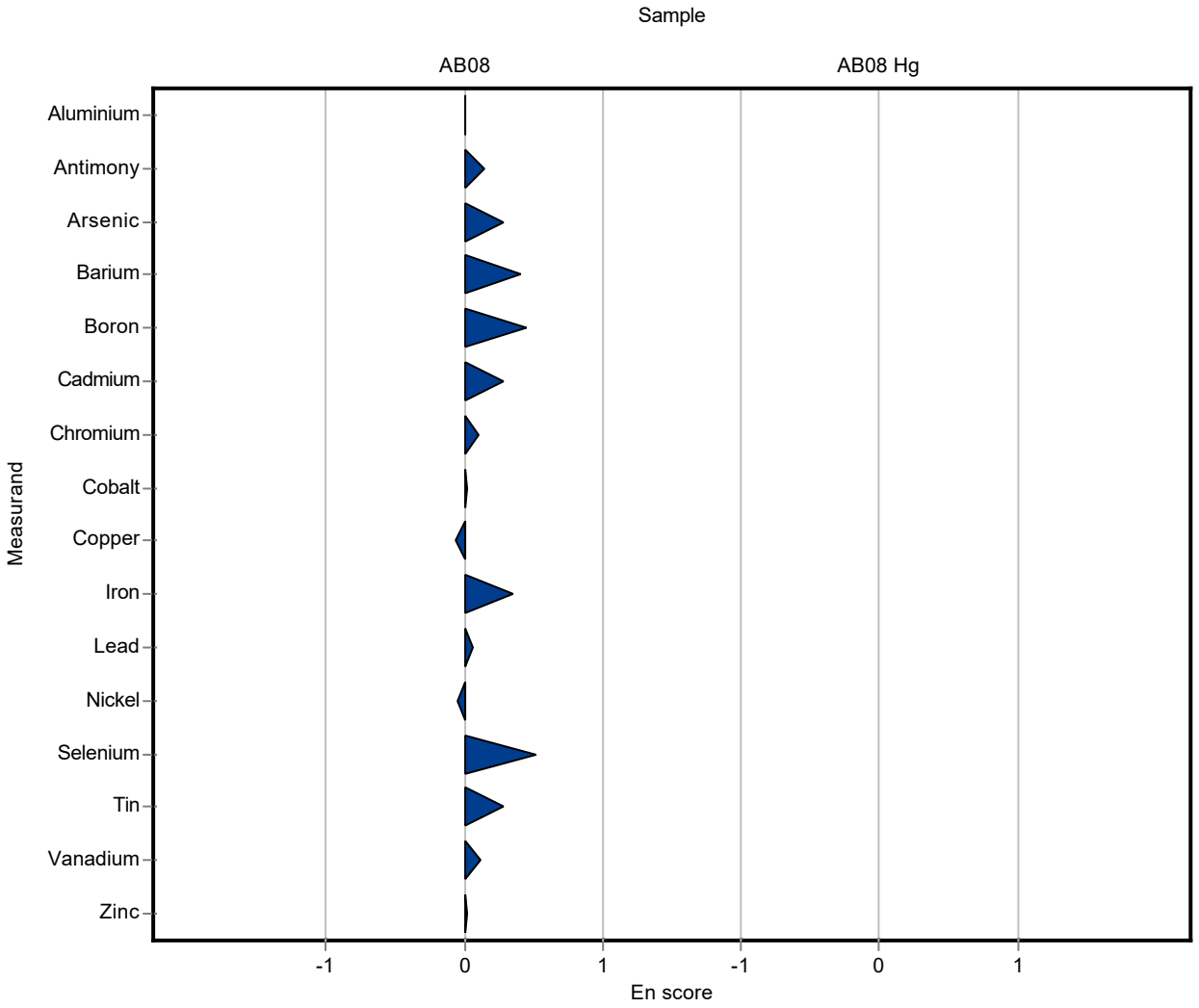

Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
2.3
5.0
-2
0
2
-2
0
2
z-score

Sample: AB08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.909 ± 0.0319	0.91 ± 0.091	0.0745	100	0.01
Antimony	mg/l	0.0017 ± 0.000076	0.002 ± 0.001	0.000131	117	0.15
Arsenic	mg/l	0.0124 ± 0.00019	0.013 ± 0.001	0.000621	105	0.29
Barium	mg/l	0.11 ± 0.00216	0.12 ± 0.012	0.00551	109	0.41
Boron	mg/l	0.308 ± 0.00629	0.32 ± 0.013	0.0154	104	0.45
Cadmium	mg/l	0.00144 ± 0.000057	0.002 ± 0.001	0.000111	138	0.28
Chromium	mg/l	0.0954 ± 0.00205	0.098 ± 0.013	0.00496	103	0.10
Cobalt	mg/l	0.0109 ± 0.000134	0.011 ± 0.001	0.000547	100	0.03
Copper	mg/l	0.108 ± 0.00179	0.107 ± 0.01	0.00541	98.9	-0.06
Iron	mg/l	0.23 ± 0.00474	0.251 ± 0.029	0.0115	109	0.36
Lead	mg/l	0.0109 ± 0.000279	0.011 ± 0.001	0.000588	101	0.06
Molybdenum	mg/l	0.014 ± 0.000441	- ± -	0.000908	-	-
Nickel	mg/l	0.0111 ± 0.000252	0.011 ± 0.001	0.000555	99.2	-0.04
Selenium	mg/l	0.0119 ± 0.000658	0.013 ± 0.001	0.00155	109	0.52
Silver	mg/l	- ± -	<0.003 (LOQ) ± -	-	-	-
Tin	mg/l	0.0327 ± 0.00156	0.035 ± 0.004	0.00327	107	0.28
Vanadium	mg/l	0.0145 ± 0.000688	0.015 ± 0.002	0.0016	103	0.12
Zinc	mg/l	0.329 ± 0.00699	0.331 ± 0.047	0.0165	101	0.02

Sample: AB08HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Mercury	mg/l	0.0000989 ± 0.000007	<0.0002 ± -	0.000009	-	-


Sample
AB08
AB08 Hg
Aluminium
Antimony
Arsenic
Barium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Nickel
Selenium
Tin
Vanadium
Zinc
Measurand
-1
0
1
-1
0
1
En score

E9. Methodenübersicht / Overview of methods

LabCode	Sample	Silver	Aluminium	Arsenic	Cadmium	Chromium
LC0001	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	GF-AAS; EN ISO 15586	ICP-OES; EN ISO 11885
LC0002	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0003	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0004	AB08 and AB08 Hg		ICP-OES; EN ISO 11885	EN ISO 11969; hydride generation	GF-AAS; EN ISO 5961	ICP-OES; EN ISO 11885
LC0005	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0007	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	GF-AAS; EN ISO 15586	ICP-OES; EN ISO 11885
LC0008	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB08 and AB08 Hg	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1
LC0010	AB08 and AB08 Hg	ICP-MS;	ICP-OES;	ICP-MS;	ICP-MS;	ICP-OES;
LC0011	AB08 and AB08 Hg	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;
LC0012	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0015	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0016	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0017	AB08 and AB08 Hg					
LC0018	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0019	AB08 and AB08 Hg	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;
LC0020	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES (hydride generation); EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0021	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB08 and AB08 Hg		ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB08 and AB08 Hg		ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0024	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2

LabCode	Sample	Copper	Iron	Nickel	Lead	Selenium
LC0001	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	GF-AAS; EN ISO 15586	GF-AAS; EN ISO 15586
LC0002	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0003	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0004	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; DIN 38406-6	GF-AAS; DIN 38405-23 Part 1
LC0005	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	GF-AAS; EN ISO 15586
LC0008	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB08 and AB08 Hg	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1
LC0010	AB08 and AB08 Hg	ICP-OES;	ICP-OES;	ICP-MS;	ICP-MS;	ICP-MS;
LC0011	AB08 and AB08 Hg	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;
LC0012	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0016	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0017	AB08 and AB08 Hg					
LC0018	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0019	AB08 and AB08 Hg	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;
LC0020	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES (hydride generation); EN ISO 11885
LC0021	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0024	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2

	Sample	Zinc	Boron	Antimony	Barium	Cobalt
LC0001	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0002	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0003	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0004	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; DIN 38405-32	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0005	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2
LC0007	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	GF-AAS; EN ISO 15586	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0008	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB08 and AB08 Hg	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1
LC0010	AB08 and AB08 Hg		ICP-OES;	ICP-MS;	ICP-OES;	ICP-MS;
LC0011	AB08 and AB08 Hg	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;	ICP-OES;
LC0012	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0015	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0016	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0017	AB08 and AB08 Hg					
LC0018	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0019	AB08 and AB08 Hg	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;
LC0020	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES (hydride generation); EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0021	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0024	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2

	Sample	Molybdenum	Vanadium	Tin	Mercury
LC0001	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	EN ISO 12846;
LC0002	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 17852; (E 35), AFS
LC0003	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0004	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	EN 1483; CV-AAS
LC0005	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	EN ISO 12846;
LC0007	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	EN ISO 12846; Hg Analyzer
LC0008	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;
LC0009	AB08 and AB08 Hg	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1	ICP-MS; ISO 17294-1
LC0010	AB08 and AB08 Hg		ICP-OES;	ICP-MS;	ICP-MS;
LC0011	AB08 and AB08 Hg	ICP-OES;	ICP-OES;	ICP-OES;	AAS (DMA); F-01 DMA80
LC0012	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;
LC0013	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;
LC0014	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885	EN 1483; CV-AAS
LC0015	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	EN 1483; CV-AAS
LC0016	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;
LC0017	AB08 and AB08 Hg				
LC0018	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;
LC0019	AB08 and AB08 Hg	ICP-MS;	ICP-MS;	ICP-MS;	ICP-MS;
LC0020	AB08 and AB08 Hg	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	AAS;
LC0021	AB08 and AB08 Hg	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846; (E12)
LC0022	AB08 and AB08 Hg	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885	EN 1483; CV-AAS
LC0023	AB08 and AB08 Hg		ICP-OES; EN ISO 11885		EN ISO 17852;
LC0024	AB08 and AB08 Hg		ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	EN ISO 12846;