

Proficiency Testing Scheme für die Umweltanalytik

AB14 Abfall nach der Deponie-VO (Eluat Metalle)

Proficiency Testing Scheme for Environmental Analysis

AB14 Waste according to landfill directive (eluate metals)

BERICHT / REPORT

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D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 29
- Anzahl der übermittelten Datensätze: 29
- Probenversand: 24.09.2024
- Einsendeschluss der Daten: 22.10.2024

Die Ergebnisabgabe erfolgte auf elektronischem Weg mittels passwortgeschützter Online-Dateneingabe. Beim Abschluss der Dateneingabe bestätigten die Teilnehmenden 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, hergestellt aus Bodenaushubmaterial und Filterstaub.

Das Probenmaterial umfasste:

- 2 Proben Eluat (AB14 und AB14Hg)

Um homogene Probeneluate zu erzielen, wurde die Herstellung der Eluatprobe bereits am 18.07.2024 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 21.08.2024 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 Salpetersäure (Probe AB14, final 1 % HNO₃) bzw. durch Zusatz von Salzsäure (Probe AB14Hg, final 1 % HCl).

Die homogenen Prüfgegenstände wurden am 24.09.2024 verschickt.

Jedes Teilnehmerlabor erhielt:

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

D1.3. Anweisungen für die Teilnehmenden

Aus Stabilitätsgründen wurde empfohlen bis spätestens 02.10.2024 mit den Analysen zu beginnen.

Den Teilnehmenden 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 die A- bzw. B-Probe 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) 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 parameterorientierten Auswertung (E7) in Form von Mittelwerten \pm Messunsicherheit als Kontrollwert (control test value) \pm U gelistet (jeweils angegeben als erweiterte Messunsicherheit, $k=2$).

D1.5. Trendtest zur Bewertung der Stabilität

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

Aufgrund der bisherigen Erfahrungen und aufgrund der Bewertungsgrundlagen der aktuellen Eignungsprüfungsrounde 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 22.10.2024 beim Veranstalter vorliegen. Später eingehende Werte wurden nicht berücksichtigt.

Im Zuge der Plausibilitätsprüfung der Daten (z.B. Check korrekte Einheiten, Messunsicherheitsangabe, ...) wurden die Teilnehmenden 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, numerischen 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 Ergebnisse der Teilnehmenden von über 50 % oder bei mangelhafter Rückführbarkeit der statistischen Kenndaten aus den ausreißerbereinigten Ergebnissen der Teilnehmenden 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 Ergebnisse der Teilnehmenden für diesen Parameter möglich ist. Ein entsprechender Hinweis wird im Bericht unter E7 bei der informativen Auswertung angebracht. Im Rahmen der internen Qualitätssicherung der Teilnehmenden 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:

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

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
\bar{X}	zugewiesener Wert Sollwert für die Leistungsbewertung der Teilnehmenden (angegeben auf 3 signifikante Stellen); im Regelfall: ausreißerbereinigter Mittelwert der Ergebnisse der Teilnehmenden. Eine davon abweichende Vorgehensweise wird unter Punkt D4 des Berichts beschrieben.
Kriterium	Vergleichsstandardabweichung berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden (sR) des aktuellen Ringversuchs. In begründeten Fällen (z.B. Ergebnisse Realproben nahe an Mindestbestimmungsgrenze oder regulatorischer Vorgaben) erfolgt die Festlegung nach Expertenbefund und die Vorgangsweise wird unter Punkt D4 des Berichts beschrieben.

D2.2. Leistungskriterium E_n-Score

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

Die Ermittlung der E_n-Scores erfolgte gemäß nachfolgender Formel:

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

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
-------	---------------------------------------

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

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

Interpretation der z-Scores:

- $|z\text{-Score}| \leq 2.0$ Ergebnis gut
- $2.0 < |z\text{-Score}| < 3.0$ Ergebnis fragwürdig
- $|z\text{-Score}| \geq 3.0$ Ergebnis nicht zufriedenstellend

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

Interpretation der E_n -Scores:

- $|E_n\text{-Score}| \leq 1.0$ zufriedenstellende Leistung
- $|E_n\text{-Score}| > 1.0$ nicht zufriedenstellende Leistung

Hinweis: Bei der Bewertung mittels E_n -Score erfolgt die Berücksichtigung der erweiterten Messunsicherheiten der Teilnehmenden und des zugewiesenen Wertes. $|E_n\text{-Score}| > 1.0$ 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 ($\pm U$), 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 labororientierten Auswertung werden pro Labor in anonymisierter Form die Ergebnisse der einzelnen Labore als Messergebnis $\pm U$ 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 labororientierten Auswertungen enthalten

jeweils die Bewertungsgrundlagen wie zugewiesener Wert samt erweiterter Messunsicherheit sowie das Kriterium.

Eine Erläuterung zu den Tabellen und Grafiken kann Punkt D5 entnommen werden.

D4. Anmerkungen zur Auswertung

Wie unter Punkt D2 ersichtlich, können die z-Scores auch unter Einbeziehung der Vergleichsstandardabweichung der ausreißerbereinigten Ergebnisse der Teilnehmenden des aktuellen Ringversuchs berechnet werden. Das kann zur Folge haben, dass es bei Parametern mit hoher Ergebnistreuung 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 Ergebnisse der Teilnehmenden 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.

Parameter Aluminium, Arsen, Chrom, Eisen, Nickel, Selen, Vanadium, Zink bei Probe AB14: Bei diesen Parametern erfolgt die Berechnung der Scores nach D2.

Parameter Barium, Cadmium, Kobalt, Kupfer, Molybdän, Blei, Antimon, Zinn bei Probe AB14: Die auf Basis der Ergebnisse der Teilnehmenden berechneten Sollwerte lagen außerhalb der Messunsicherheit des Kontrollwertes und es ist über das Kontrolllabor keine Rückführbarkeit möglich. Der zugewiesene Wert wurde daher über die ausreißerbereinigten Mittelwerte aus der Gruppe der akkreditierten Teilnehmenden berechnet.

Parameter Bor, Molybdän, Zinn bei Probe AB14: Für diese Parameter wurden relative Vergleichsstandardabweichungen (vR) von jeweils 10 % für die Bewertung gewählt.

Parameter Silber bei Probe AB14 und Parameter Quecksilber bei Probe AB14Hg: Aufgrund der geringen Silberkonzentration in der Probe bzw. der hohen relativen Vergleichsstandardabweichung bei der Gruppe der akkreditierten Teilnehmenden von über 50 % bei beiden Parametern konnte kein zugewiesener Wert festgelegt werden. Für diese Parameter empfehlen wir einen Vergleich mit den in D6.1 angeführten informativen Werten.

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. hier mg/l)
Zugewiesener Wert	Sollwert für die Leistungsbewertung der Teilnehmenden (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 Ergebnisse der Teilnehmenden (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 Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden 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 Kennung des teilnehmenden Labors im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt).

	Bei Eignungsprüfungsrunden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmenden.
± U	kombinierte Messunsicherheit ohne Erweiterungsfaktor ($k=1$) lt. Angabe der Teilnehmenden (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 Teilnehmenden (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim E _n -Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmenden.
-	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 Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)

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

n Anzahl der Messergebnisse

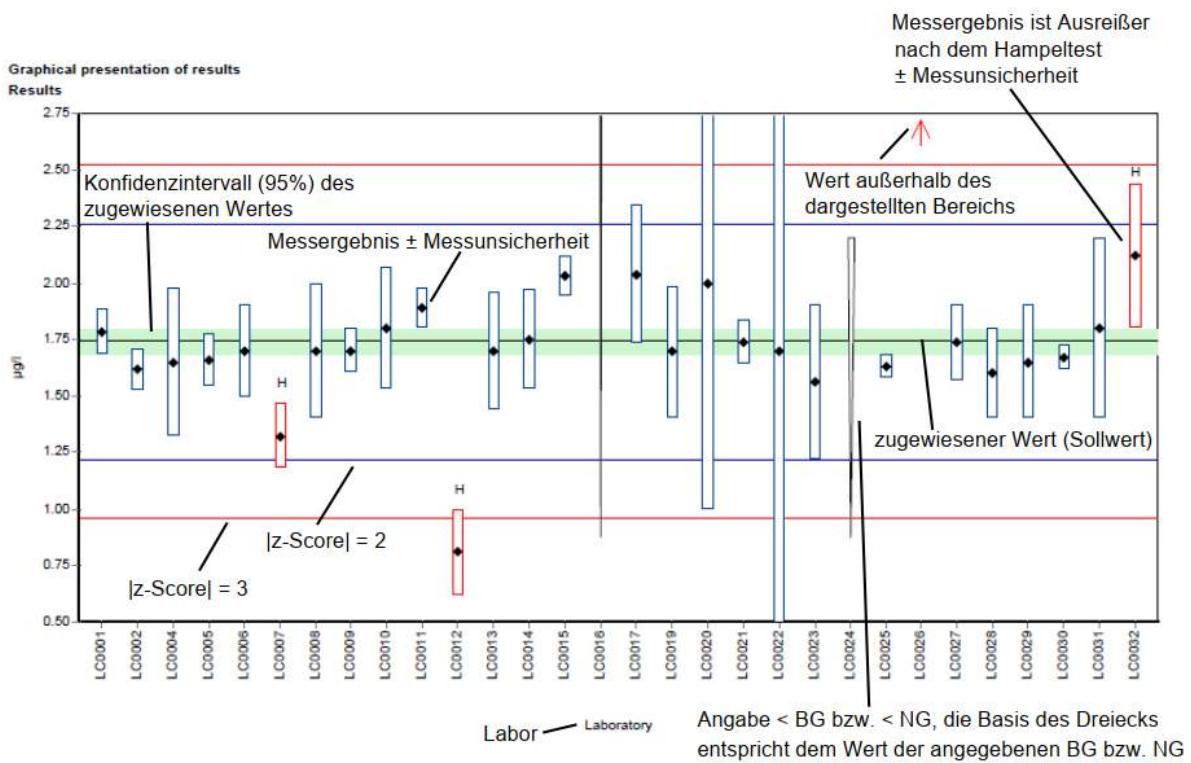
*

Kennzeichnung für Hinweise zur Erläuterung

D5.2. Graphische Darstellung der Ergebnisse

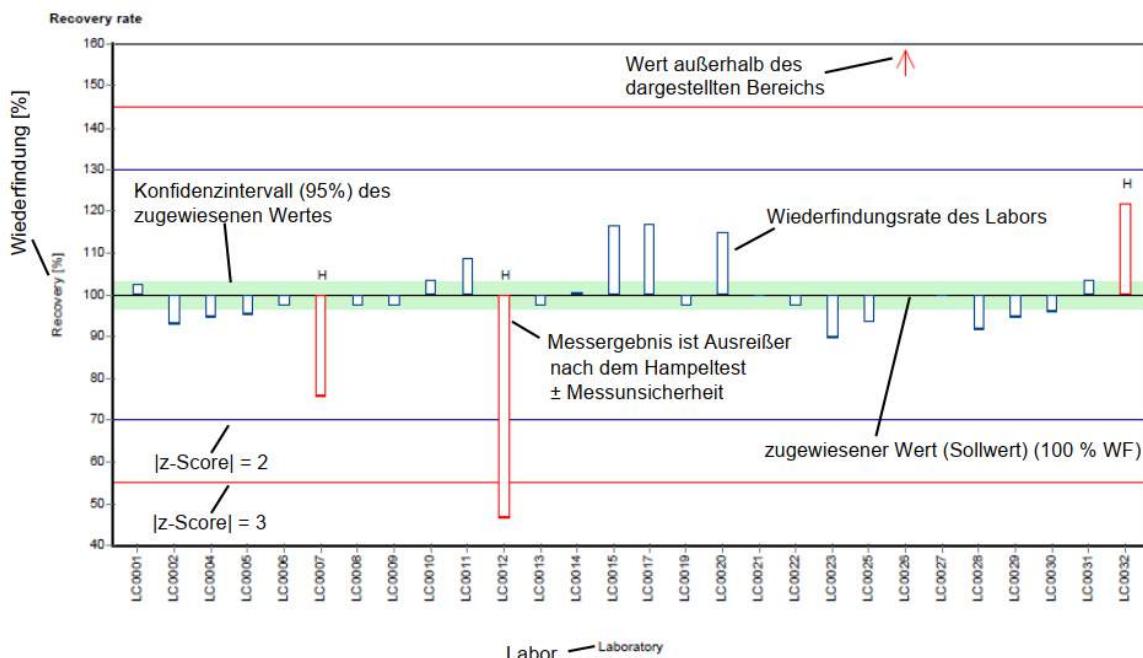
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

Beispieldiagramm: Messwerte



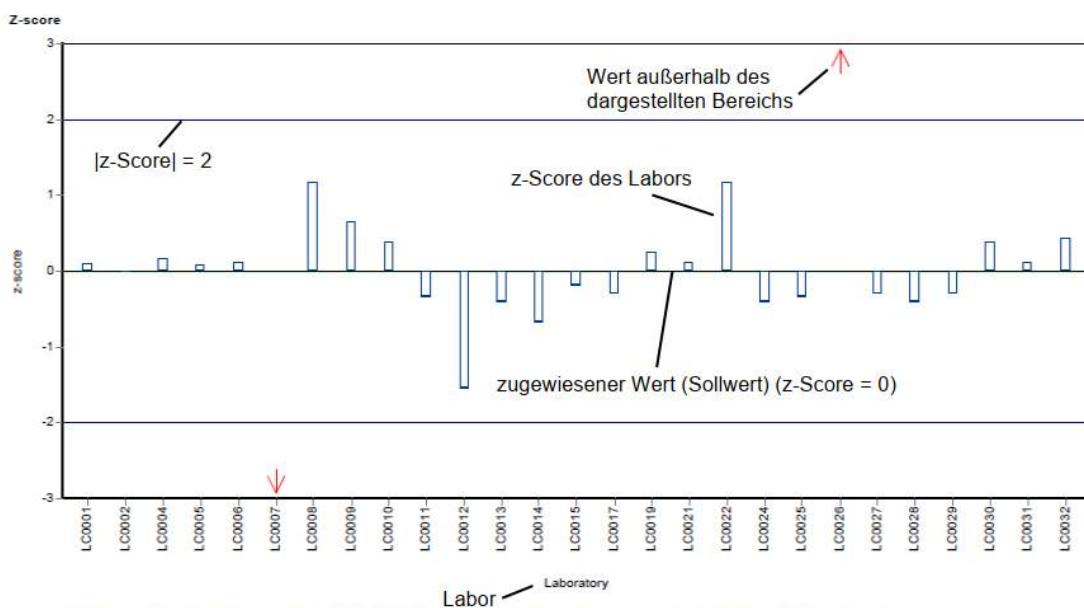
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



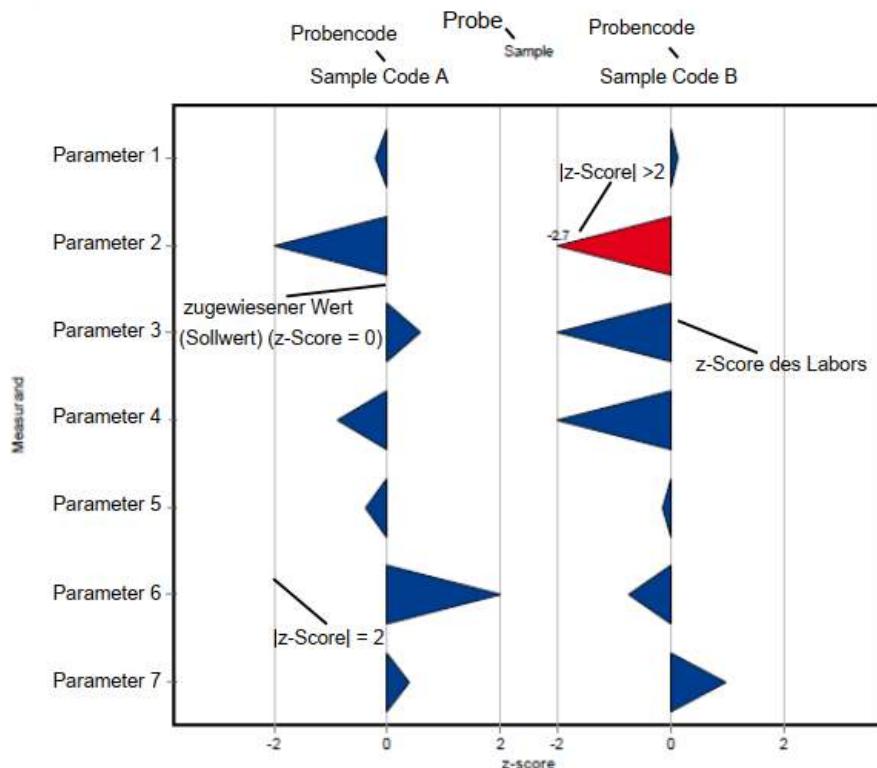
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score

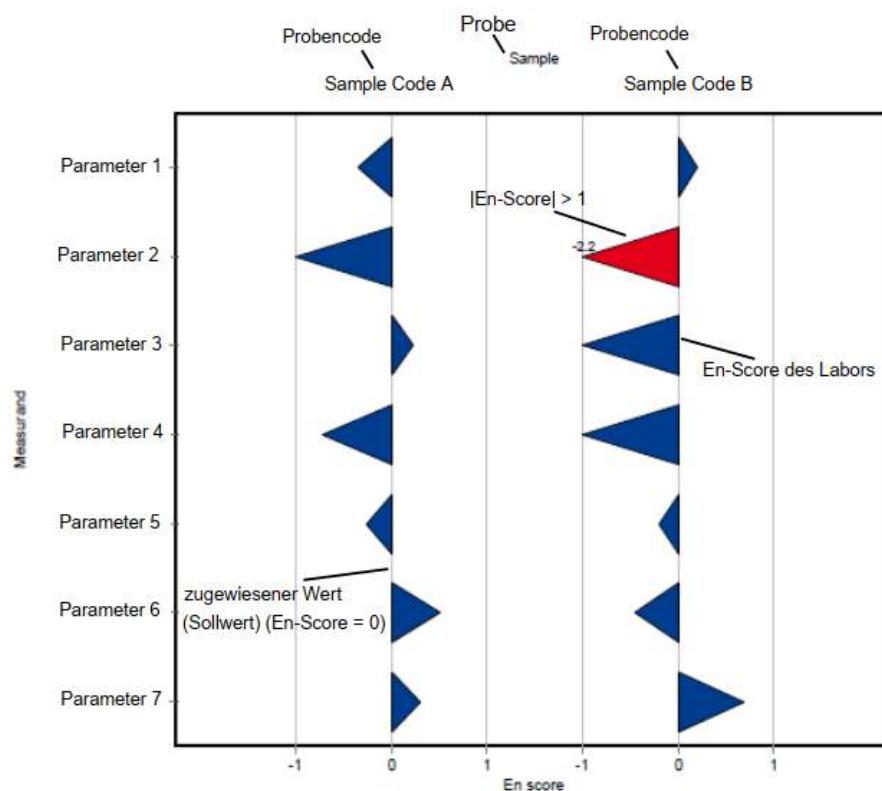


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score (labororientierte Auswertung)



Beispieldiagramm: En-Score (labororientierte Auswertung)



D6. Zusammenfassung

D6.1. Tabelle der zugewiesenen Werte

Parameter	Probe	Einheit	zugewiesener Wert	±	U (k=2)	Kriterium	Kriterium [%]
Aluminium	AB14	mg/l	0.923	±	0.062	0.157	17
Antimon	AB14	mg/l	0.00112	±	0.000262	0.000435	39
Arsen	AB14	mg/l	0.0241	±	0.00101	0.00265	11
Barium	AB14	mg/l	0.331	±	0.0135	0.0364	11
Bor	AB14	mg/l	1.4	±	0.039	0.14	10
Cadmium	AB14	mg/l	0.00145	±	0.000113	0.000276	19
Chrom	AB14	mg/l	0.0408	±	0.00175	0.00489	12
Cobalt	AB14	mg/l	0.0245	±	0.00112	0.0027	11
Kupfer	AB14	mg/l	0.12	±	0.00506	0.0157	13
Eisen	AB14	mg/l	0.83	±	0.0389	0.0996	12
Blei	AB14	mg/l	0.317	±	0.0159	0.0412	13
Quecksilber*	AB14 HG	mg/l	-	±	-	-	-
Molybdän	AB14	mg/l	0.401	±	0.013	0.0401	10
Nickel	AB14	mg/l	0.0103	±	0.000538	0.00133	13
Selen	AB14	mg/l	0.0118	±	0.000592	0.00141	12
Silber*	AB14	mg/l	-	±	-	-	-
Zinn	AB14	mg/l	0.0296	±	0.00112	0.00296	10
Vanadium	AB14	mg/l	0.0184	±	0.00132	0.00313	17
Zink	AB14	mg/l	0.429	±	0.0175	0.0472	11

*Für nachfolgende Parameter können keine zugewiesenen Werte ermittelt werden (Vergleichsstandardabweichungen >50%). Daher sind zur Information die berechneten Mittelwerte MW+/- U(k=2) über die Daten der akkreditierten Labore (n) nach Ausreißerbereinigung angeführt. Diese können zum Vergleich im Rahmen Ihrer internen QS-Maßnahmen herangezogen werden.

Quecksilber: MW (n=25; akkr.) +/- U(k=2): 0.00231+/-0.00073 mg/l

Silber: MW (n=7; akkr.) +/- U(k=2): <0.005 (0.00196+/-0.00084) mg/l

D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert	± VB (99%)	Minimum	Maximum	sR	vR [%]
Aluminium	AB14	26	0	mg/l	0.923	± 0.0931	0.584	1.09	0.158	17
Antimon	AB14	11	3	mg/l	0.00112	± 0.000393	0.00077	0.0019	0.000434	39
Arsen	AB14	28	1	mg/l	0.0241	± 0.00151	0.0165	0.029	0.00267	11
Barium	AB14	28	1	mg/l	0.332	± 0.0197	0.26	0.373	0.0347	10
Bor	AB14	22	1	mg/l	1.4	± 0.0584	1.19	1.55	0.0914	6.5
Cadmium	AB14	25	1	mg/l	0.00144	± 0.000167	0.001	0.00193	0.000279	19
Chrom	AB14	29	0	mg/l	0.0408	± 0.00262	0.0323	0.0504	0.0047	12
Cobalt	AB14	24	2	mg/l	0.0245	± 0.00167	0.0198	0.0292	0.00273	11
Kupfer	AB14	29	0	mg/l	0.119	± 0.00866	0.0758	0.142	0.0155	13
Eisen	AB14	25	1	mg/l	0.83	± 0.0584	0.67	1.08	0.0973	12
Blei	AB14	29	0	mg/l	0.316	± 0.0231	0.238	0.397	0.0415	13
Quecksilber	AB14 HG	28	0	mg/l	0.00265	± 0.0012	0.00021	0.00835	0.00211	80
Molybdän	AB14	29	0	mg/l	0.399	± 0.0189	0.33	0.466	0.0339	8.5
Nickel	AB14	25	1	mg/l	0.0103	± 0.000807	0.007	0.0127	0.00135	13
Selen	AB14	23	5	mg/l	0.0118	± 0.000888	0.00835	0.0134	0.00142	12
Silber	AB14	10	1	mg/l	0.00179	± 0.000924	0.00093	0.00425	0.000974	54
Zinn	AB14	21	2	mg/l	0.0296	± 0.00156	0.0249	0.033	0.00239	8.1
Vanadium	AB14	22	1	mg/l	0.0184	± 0.00198	0.0133	0.0245	0.00309	17
Zink	AB14	29	0	mg/l	0.429	± 0.0263	0.337	0.539	0.0472	11

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 29
- Number of submitted data records: 29
- Dispatch of samples: September 24th, 2024
- Closing date for submission of data: October 22nd, 2024

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 prepared from excavated soil and fly ash.

The following samples were made available:

- 2 samples eluate (AB14 and AB14Hg)

To guarantee homogenous samples, the production of the eluate samples was started on 18th of July 2024 (eluate according to OENORM EN 12457-4; s : l = 1 : 10). After the elution, the eluate was filtered using 0.45 µm membrane disc filters on 21st of August 2024. 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 nitric acid (final concentration 1 % HNO₃) and by addition of hydrochloric acid (final concentration 1 % HCl) (Sample AB14Hg), respectively.

The homogeneous proficiency test items were dispatched on 24th September 2024.

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 02nd of October 2024 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 the samples A and B, n=5 control test samples and n=1 unspiked real sample were transferred to the laboratory for control testing.

All parameters were tested in the testing laboratory at Environment Agency Austria (Prüfstelle für Umwelt-, GVO- & Treibstoffanalytik) 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 (E7), the results of the control testing are given in the form of arithmetic means of the detected concentrations \pm expanded measurement uncertainty as control test value $\pm U$ (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 of real samples 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 22nd of October 2024. 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 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:

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

In this context,

x_i	is the measurement value (result) of the participating laboratory;
\bar{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 from the participants' results after removal of outliers (s_R) in the current round. Where justified (e.g. results for real samples 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 E4 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 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
\bar{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:

- $|z\text{-Score}| \leq 2.0$ good result
- $2.0 < |z\text{-Score}| < 3.0$ questionable result
- $|z\text{-Score}| \geq 3.0$ 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:

- $|E_n\text{-Score}| \leq 1.0$ satisfactory performance
- $|E_n\text{-Score}| > 1.0$ 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-Score| > 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 ($\pm U$), 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 ($\pm U$), 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 E5.

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.

Parameters aluminium, arsenic, chromium, iron, nickel, selenium, vanadium, zinc for sample AB14: Scores for all listed parameters were calculated according to E2.

Parameters barium, cadmium, cobalt, copper, molybdenum, lead, antimony, tin for sample AB14: The assigned values calculated based on the participant's results were outside of the measurement uncertainty of the control test 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.

Parameters boron, molybdenum, tin for sample AB14: A reproducibility standard deviation (vR) of 10 % was chosen for assessment of each of these parameters.

Parameter silver for sample AB14 and parameter mercury for sample AB14Hg: Due to the low silver concentration in the sample and the high relative reproducibility standard deviations in the group of accredited participants of over 50 % for both parameters, no assigned values could be determined. For these parameters, we recommend a comparison with the informative values listed in E6.1.

E5. Annotations on tables and charts

E5.1. Information and abbreviations in tables

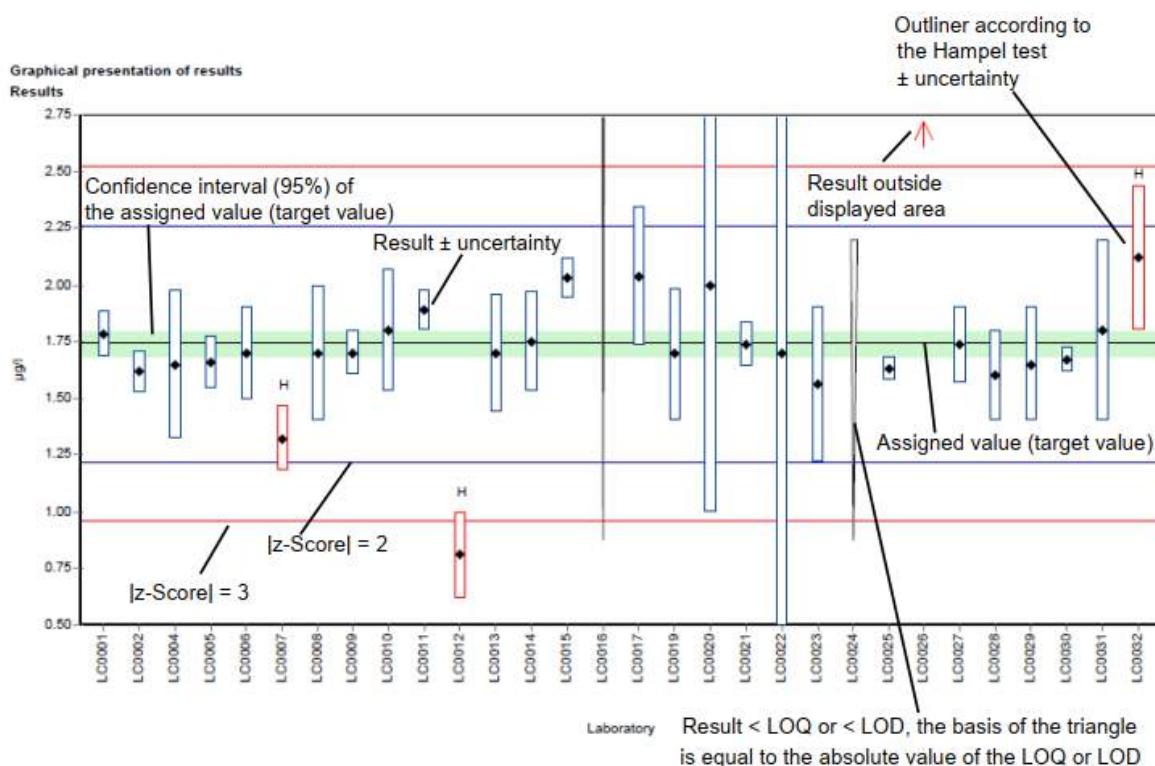
Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. here mg/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criteria	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
*	mark for additional comments

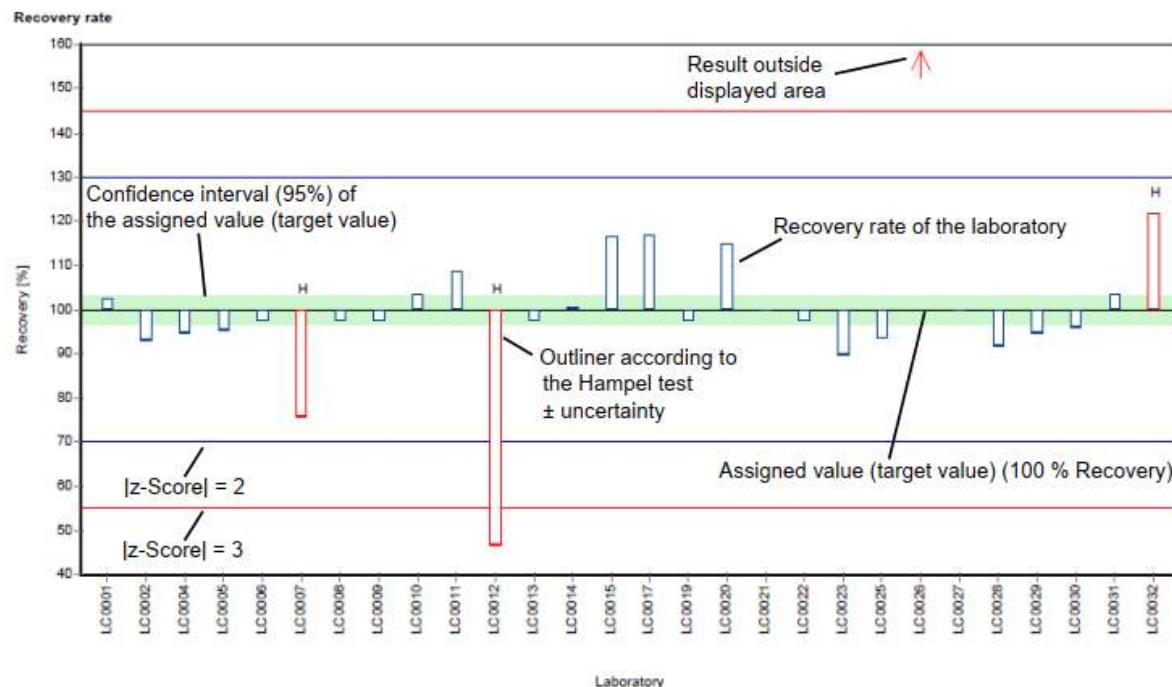
E5.2. Graphical presentation of results

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

Example chart: Results

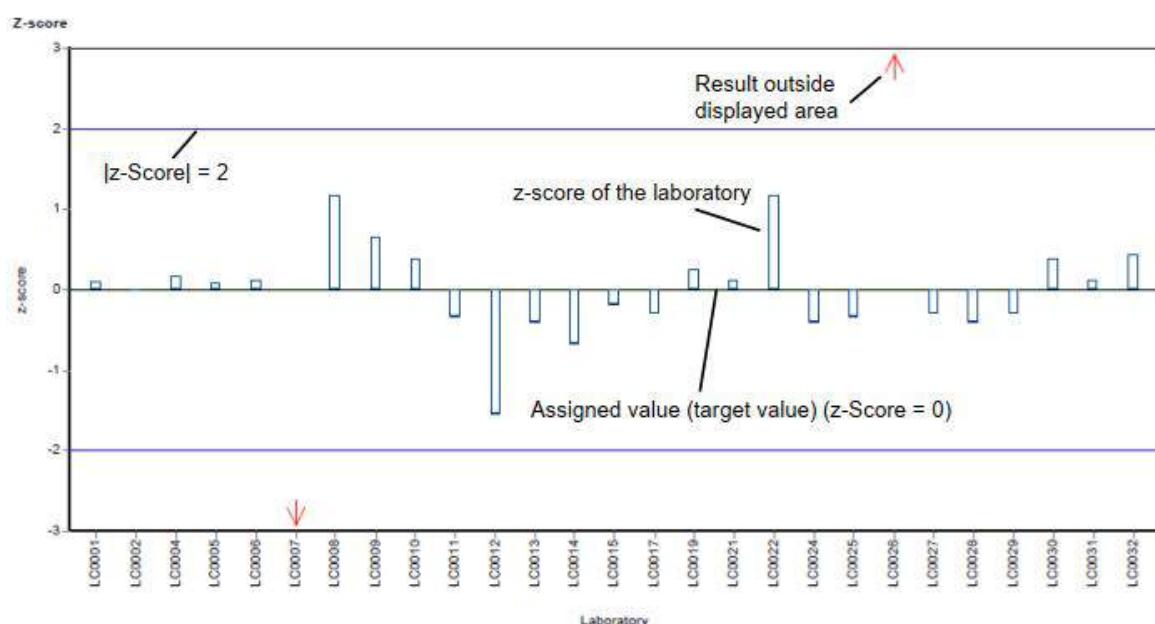


Example chart: Recovery



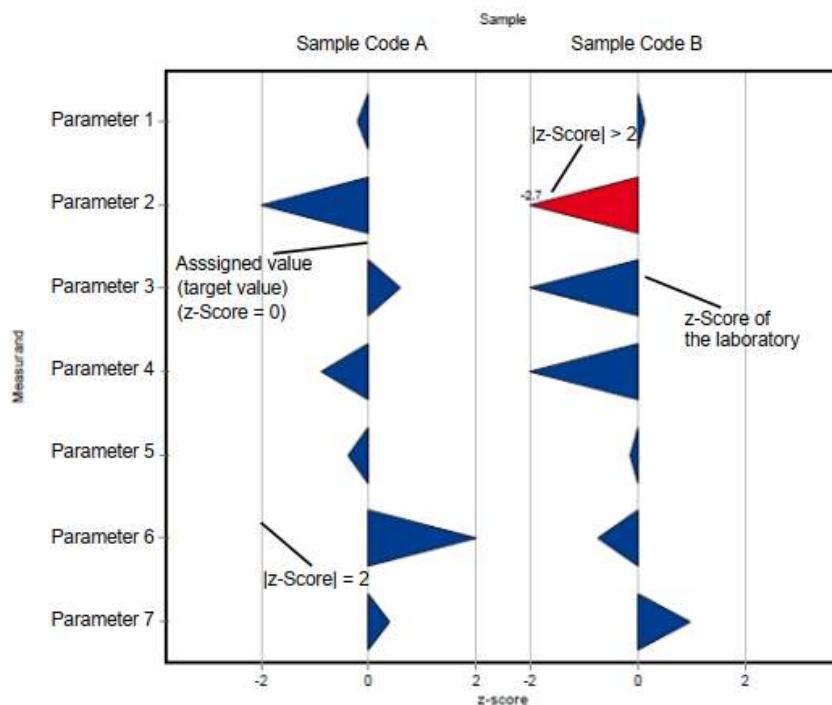
Different analysis methods are represented with different colors.

Example chart: z-Score

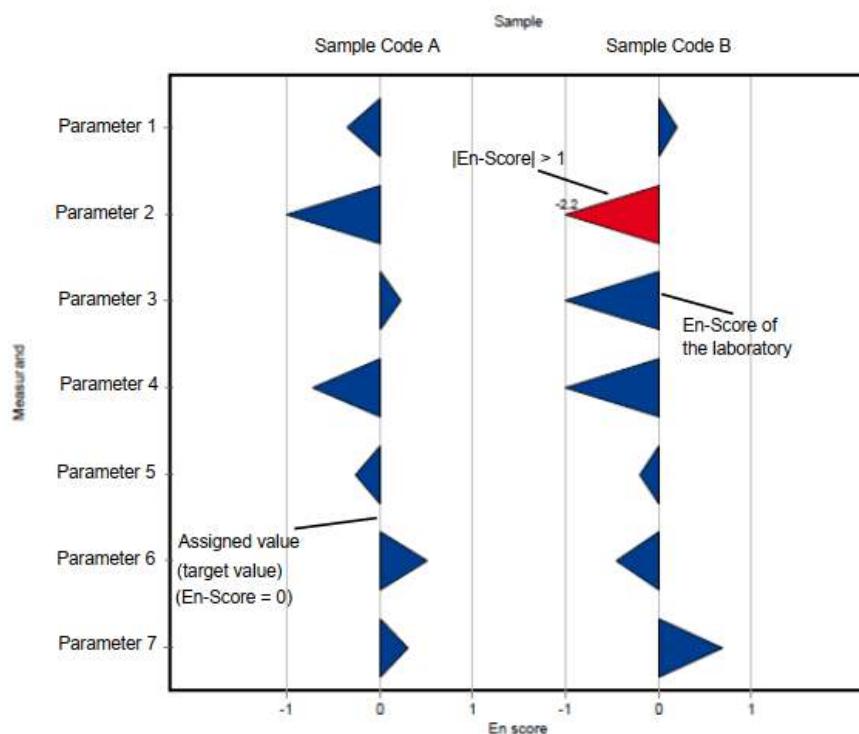


Different analysis methods are represented with different colors.

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	\pm	U (k=2)	Criterion	Criterion [%]
Aluminium	AB14	mg/l	0.923	\pm	0.062	0.157	17
Antimony	AB14	mg/l	0.00112	\pm	0.000262	0.000435	39
Arsenic	AB14	mg/l	0.0241	\pm	0.00101	0.00265	11
Barium	AB14	mg/l	0.331	\pm	0.0135	0.0364	11
Boron	AB14	mg/l	1.4	\pm	0.039	0.14	10
Cadmium	AB14	mg/l	0.00145	\pm	0.000113	0.000276	19
Chromium	AB14	mg/l	0.0408	\pm	0.00175	0.00489	12
Cobalt	AB14	mg/l	0.0245	\pm	0.00112	0.0027	11
Copper	AB14	mg/l	0.12	\pm	0.00506	0.0157	13
Iron	AB14	mg/l	0.83	\pm	0.0389	0.0996	12
Lead	AB14	mg/l	0.317	\pm	0.0159	0.0412	13
Mercury*	AB14 HG	mg/l	-	\pm	-	-	-
Molybdenum	AB14	mg/l	0.401	\pm	0.013	0.0401	10
Nickel	AB14	mg/l	0.0103	\pm	0.000538	0.00133	13
Selenium	AB14	mg/l	0.0118	\pm	0.000592	0.00141	12
Silver*	AB14	mg/l	-	\pm	-	-	-
Tin	AB14	mg/l	0.0296	\pm	0.00112	0.00296	10
Vanadium	AB14	mg/l	0.0184	\pm	0.00132	0.00313	17
Zinc	AB14	mg/l	0.429	\pm	0.0175	0.0472	11

*Due to the high reproducibility standard deviations (>50%) for the following parameters no assigned values can be determined. Therefore, the calculated mean values MV +/- U(k=2) based on the data of the accredited laboratories (n) after outlier removal are listed for information and can be used for comparison as part of your internal QA measures.

Mercury: MV (n=25; accr.) +/- U(k=2): 0.00231 +/- 0.00073 mg/l

Silver: MV (n=7; accr.) +/- U(k=2): <0.005 (0.00196 +/- 0.00084) mg/l

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	AB14	26	0	mg/l	0.923	± 0.0931	0.584	1.09	0.158	17
Antimony	AB14	11	3	mg/l	0.00112	± 0.000393	0.00077	0.0019	0.000434	39
Arsenic	AB14	28	1	mg/l	0.0241	± 0.00151	0.0165	0.029	0.00267	11
Barium	AB14	28	1	mg/l	0.332	± 0.0197	0.26	0.373	0.0347	10
Boron	AB14	22	1	mg/l	1.4	± 0.0584	1.19	1.55	0.0914	6.5
Cadmium	AB14	25	1	mg/l	0.00144	± 0.000167	0.001	0.00193	0.000279	19
Chromium	AB14	29	0	mg/l	0.0408	± 0.00262	0.0323	0.0504	0.0047	12
Cobalt	AB14	24	2	mg/l	0.0245	± 0.00167	0.0198	0.0292	0.00273	11
Copper	AB14	29	0	mg/l	0.119	± 0.00866	0.0758	0.142	0.0155	13
Iron	AB14	25	1	mg/l	0.83	± 0.0584	0.67	1.08	0.0973	12
Lead	AB14	29	0	mg/l	0.316	± 0.0231	0.238	0.397	0.0415	13
Mercury	AB14 HG	28	0	mg/l	0.00265	± 0.0012	0.00021	0.00835	0.00211	80
Molybdenum	AB14	29	0	mg/l	0.399	± 0.0189	0.33	0.466	0.0339	8.5
Nickel	AB14	25	1	mg/l	0.0103	± 0.000807	0.007	0.0127	0.00135	13
Selenium	AB14	23	5	mg/l	0.0118	± 0.000888	0.00835	0.0134	0.00142	12
Silver	AB14	10	1	mg/l	0.00179	± 0.000924	0.00093	0.00425	0.000974	54
Tin	AB14	21	2	mg/l	0.0296	± 0.00156	0.0249	0.033	0.00239	8.1
Vanadium	AB14	22	1	mg/l	0.0184	± 0.00198	0.0133	0.0245	0.00309	17
Zinc	AB14	29	0	mg/l	0.429	± 0.0263	0.337	0.539	0.0472	11

E7. Parameterorientierte Auswertung / Parameter oriented report

Aluminium	33
Antimony	38
Arsenic	43
Barium.....	48
Boron	53
Cadmium.....	58
Chromium.....	63
Cobalt.....	68
Copper	73
Iron.....	78
Lead	83
Mercury	88
Molybdenum.....	91
Nickel	96
Selenium	101
Silver	106
Tin.....	109
Vanadium.....	114
Zinc	119

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Aluminium

Parameter oriented report

AB14

Aluminium

Unit	mg/l
Assigned value ± U (k=2)	0.923 ± 0.062
Criterion	0.157 (17 %)
Minimum - Maximum	0.584 - 1.09
Control test value ± U (k=2)	0.958 ± 0.134

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.09	0.22	118	1.06	
LC0002	1.07	0.136	116	0.94	
LC0003	0.767	0.131	83.1	-0.99	
LC0004	-	-	-	-	
LC0005	1.01	0.182	109	0.55	
LC0006	1.0351	0.107	112	0.71	
LC0007	1.03	0.1	112	0.68	
LC0008	1.052	0.07	114	0.82	
LC0009	-	-	-	-	
LC0010	0.675	0.005	73.1	-1.58	
LC0011	0.955	0.0937	103	0.2	
LC0012	1.07386	0.21477	116	0.96	
LC0013	0.966	0.227	105	0.27	
LC0014	1.09	0.327	118	1.06	
LC0015	1.0057	0.0921	109	0.53	
LC0016	0.887	0.095	96.1	-0.23	
LC0017	0.584	0.117	63.3	-2.16	
LC0018	0.592	0.04	64.1	-2.11	
LC0019	0.927	0.083	100	0.03	
LC0020	0.9649	0.058	105	0.27	
LC0021	0.9916	0.114	107	0.44	
LC0022	1.07	0.19	116	0.94	
LC0023	0.918	0.207	99.5	-0.03	
LC0024	0.8597	0.138	93.1	-0.4	
LC0025	0.965	0.047	105	0.27	
LC0026	0.691	0.104	74.9	-1.48	
LC0027	-	-	-	-	
LC0028	1.04	0.156	113	0.75	
LC0029	0.69	0.069	74.8	-1.49	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Aluminium

Characteristics of parameter

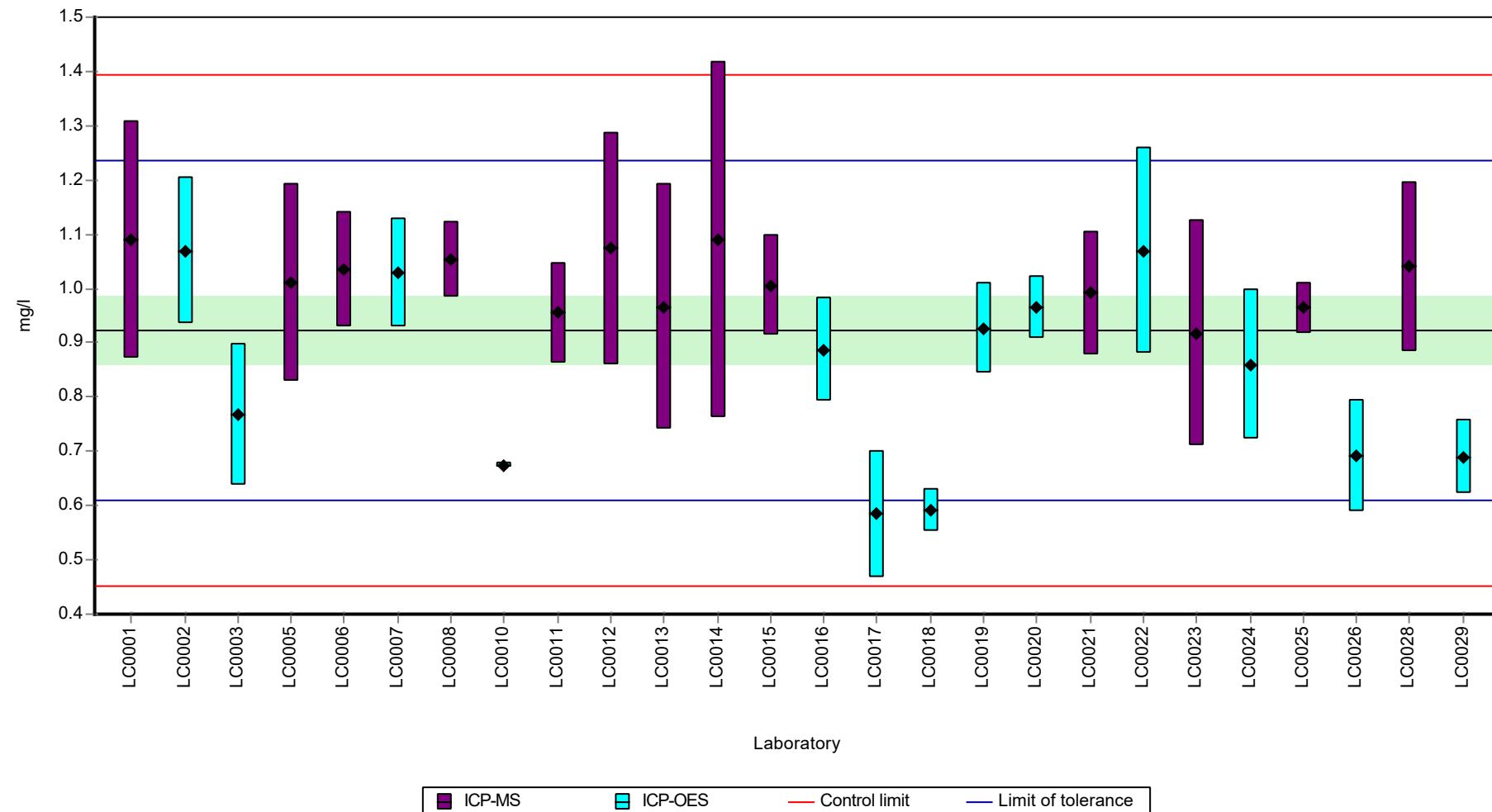
	all results	without outliers	Unit
Mean ± CI (99%)	0.923 ± 0.0931	0.923 ± 0.0931	mg/l
Minimum	0.584	0.584	mg/l
Maximum	1.09	1.09	mg/l
Standard deviation	0.158	0.158	mg/l
rel. standard deviation	17.1	17.1	%
n	26	26	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Aluminium

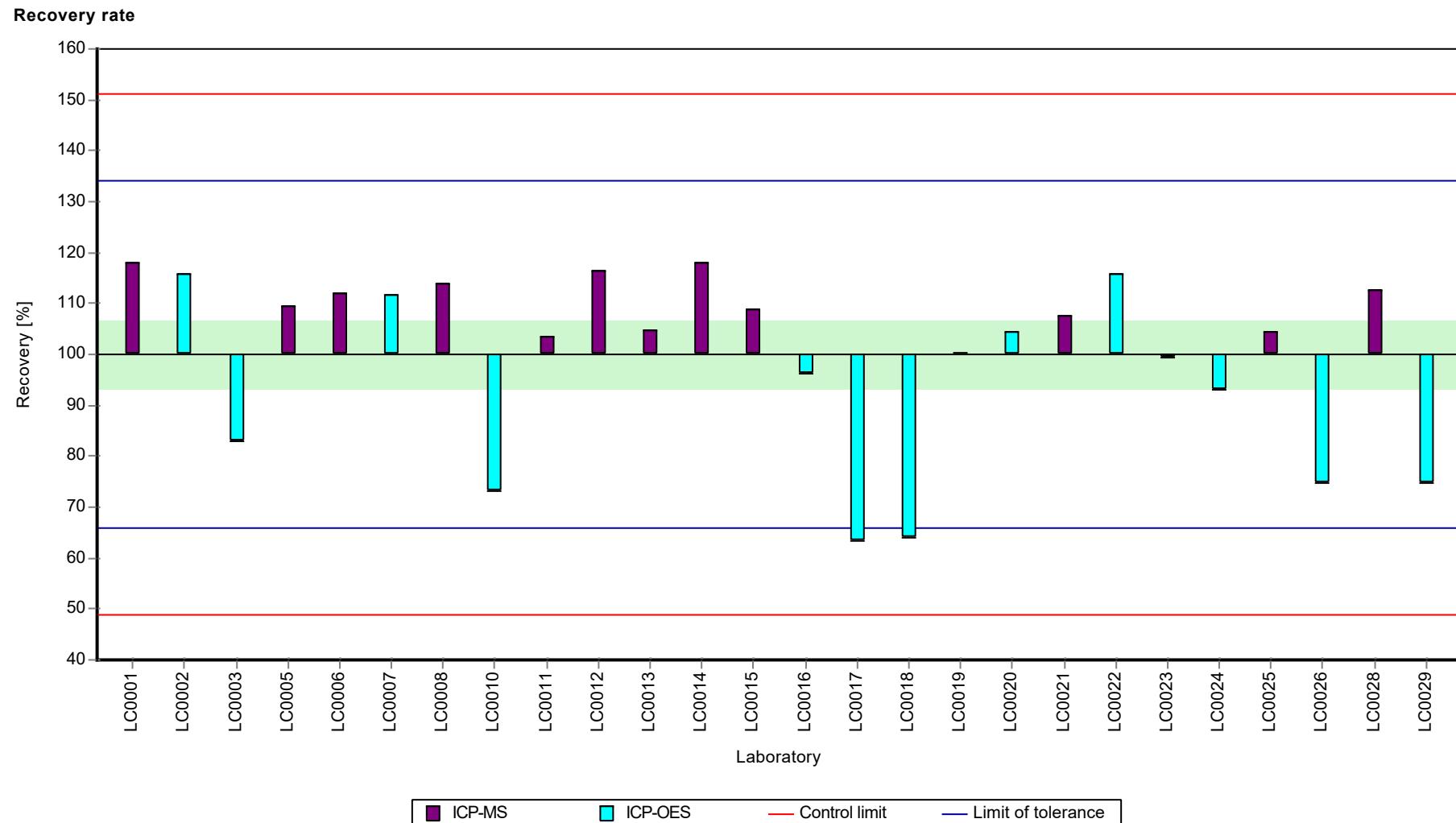
Graphical presentation of results

Results



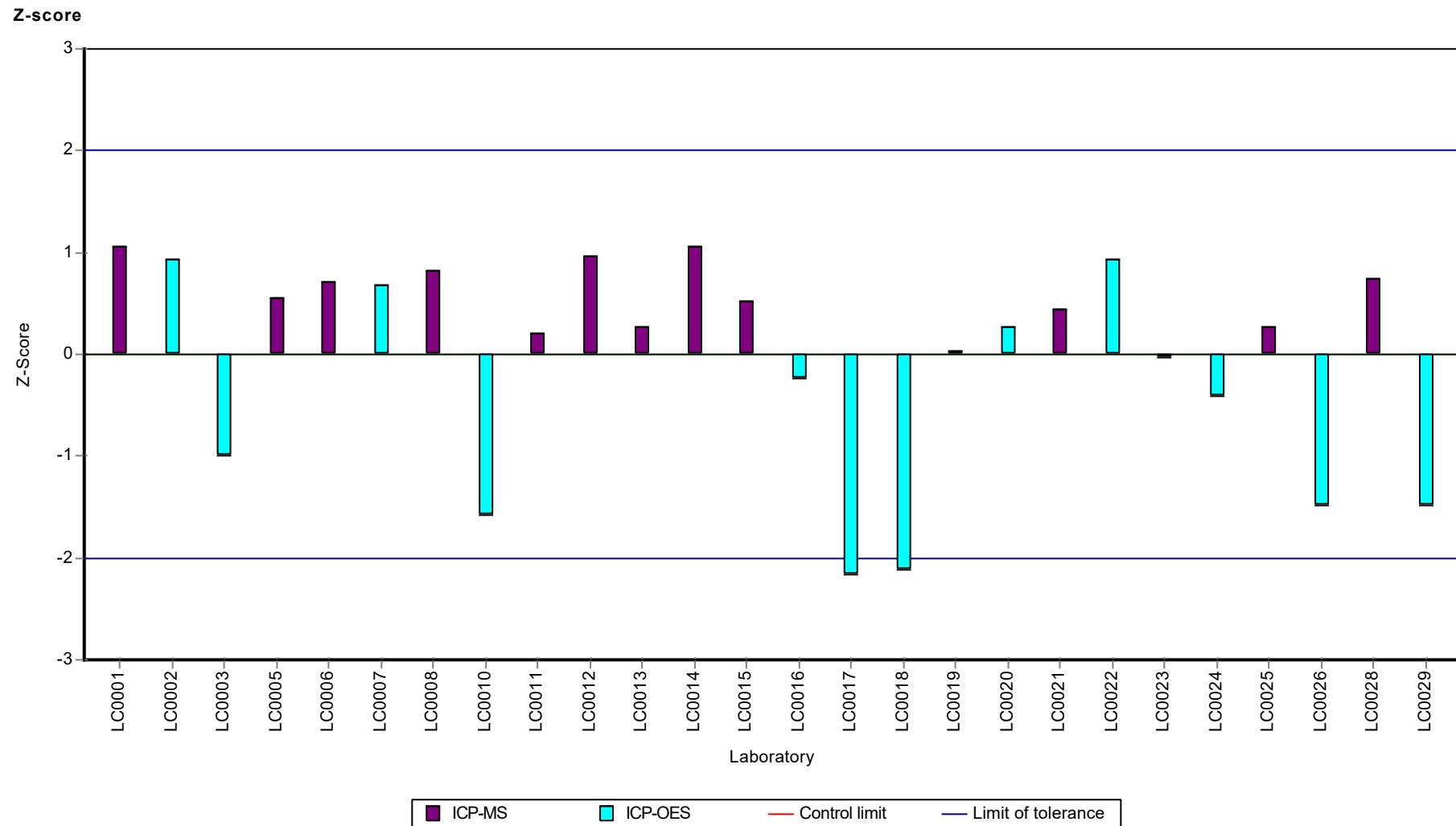
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Aluminium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Aluminium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Antimony

Parameter oriented report

AB14

Antimony

Unit	mg/l
Assigned value ± U (k=2)	0.00112 ± 0.000262
Criterion	0.000435 (39 %)
Minimum - Maximum	0.00077 - 0.0019
Control test value ± U (k=2)	0.000702 ± 0.0000492

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.005 (LOQ)	-	-	-	
LC0002	< 0.001 (LOQ)	-	-	-	
LC0003	< 0.01 (LOQ)	-	-	-	
LC0004	0.0008	0.00012	71.7	-0.73	
LC0005	< 0.05 (LOQ)	-	-	-	
LC0006	0.0008	0.00006	71.7	-0.73	
LC0007	0.00102	0.0002	91.4	-0.22	
LC0008	0.00173	0.0006	155	1.41	
LC0009	< 0.005 (LOQ)	-	-	-	
LC0010	0.01	0.005	896	20.4	H
LC0011	0.001	0.0001	89.6	-0.27	
LC0012	0.00077	0.00015	69	-0.8	
LC0013	0.0009	0.0001	80.6	-0.5	
LC0014	0.00084	0.00025	75.1	-0.64	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	< 0.003 (LOQ)	-	-	-	
LC0018	0.00258	0.0002	231	3.36	H
LC0019	< 0.005 (LOQ)	-	-	-	
LC0020	< 0.001 (LOQ)	-	-	-	
LC0021	< 0.002 (LOQ)	-	-	-	
LC0022	< 0.001 (LOQ)	-	-	-	
LC0023	< 0.0015 (LOQ)	-	-	-	
LC0024	0.0019	0.00028	170	1.8	
LC0025	0.00082	0.00004	73.7	-0.67	
LC0026	0.003	0.0006	269	4.33	H
LC0027	< 0.001 (LOQ)	-	-	-	
LC0028	< 0.002 (LOQ)	-	-	-	
LC0029	0.0017	0.00017	152	1.34	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Antimony

Characteristics of parameter

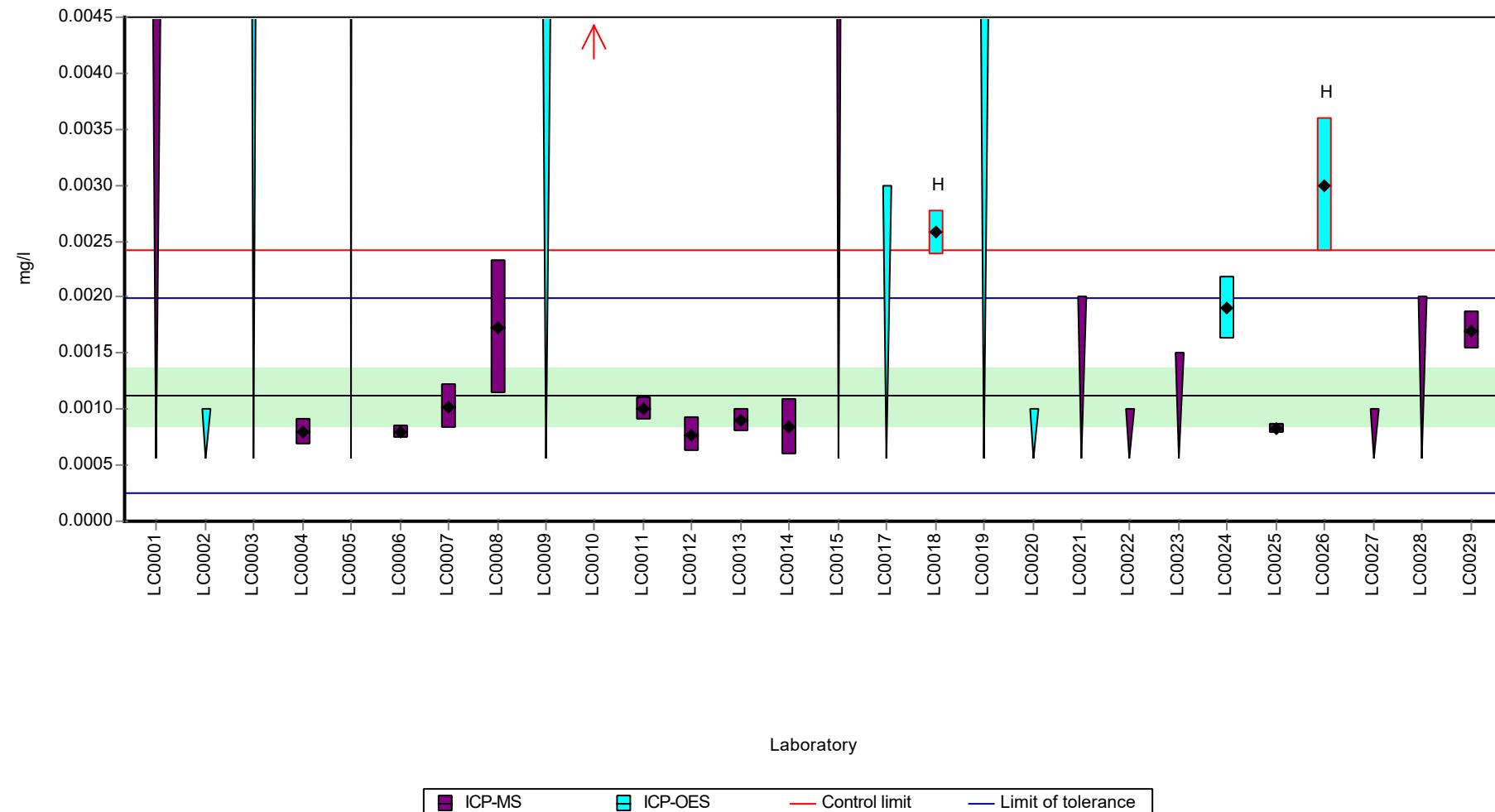
	all results	without outliers	Unit
Mean ± CI (99%)	0.00199 ± 0.00194	0.00112 ± 0.000393	mg/l
Minimum	0.00077	0.00077	mg/l
Maximum	0.01	0.0019	mg/l
Standard deviation	0.00241	0.000434	mg/l
rel. standard deviation	121	38.9	%
n	14	11	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Antimony

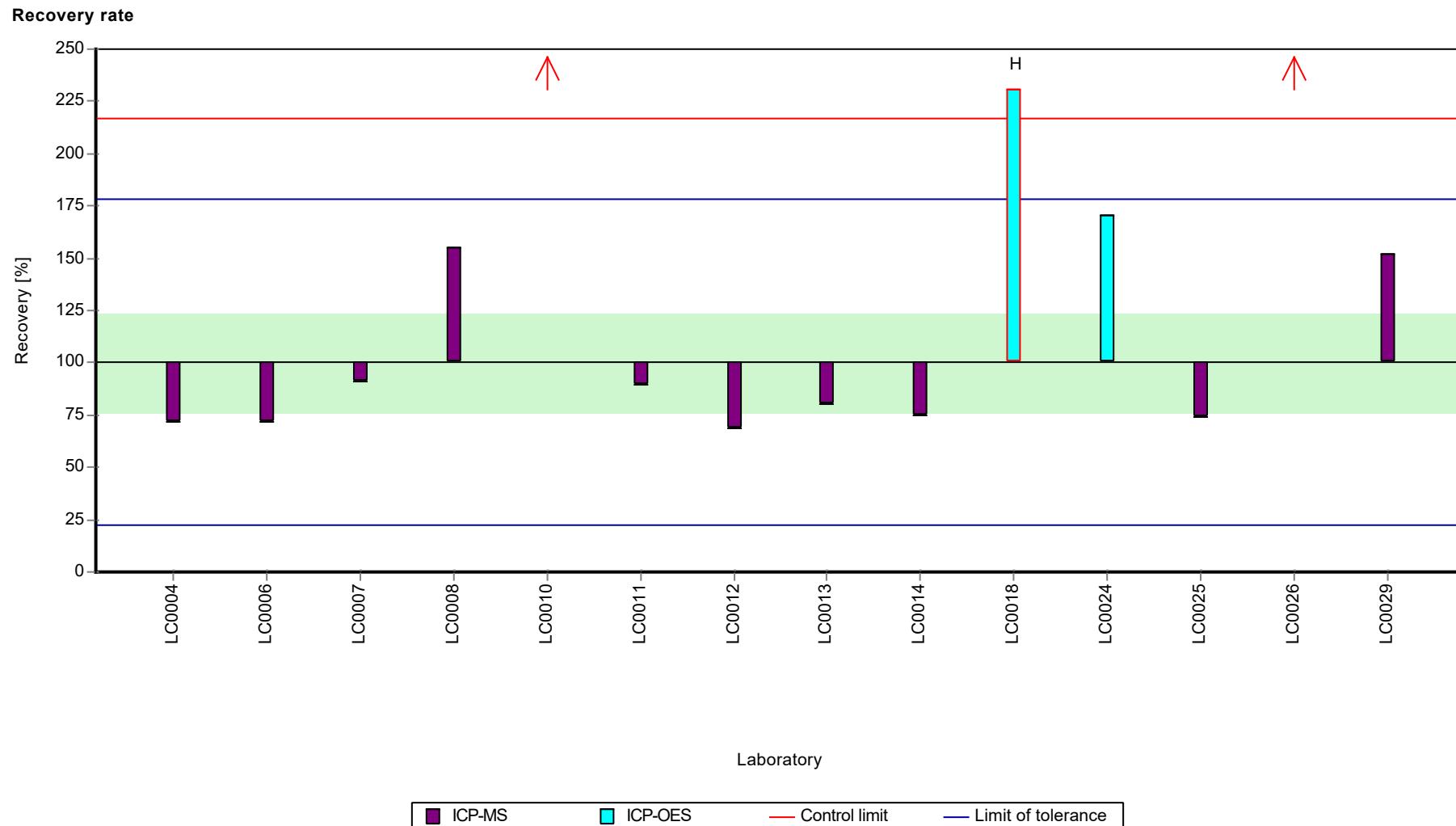
Graphical presentation of results

Results



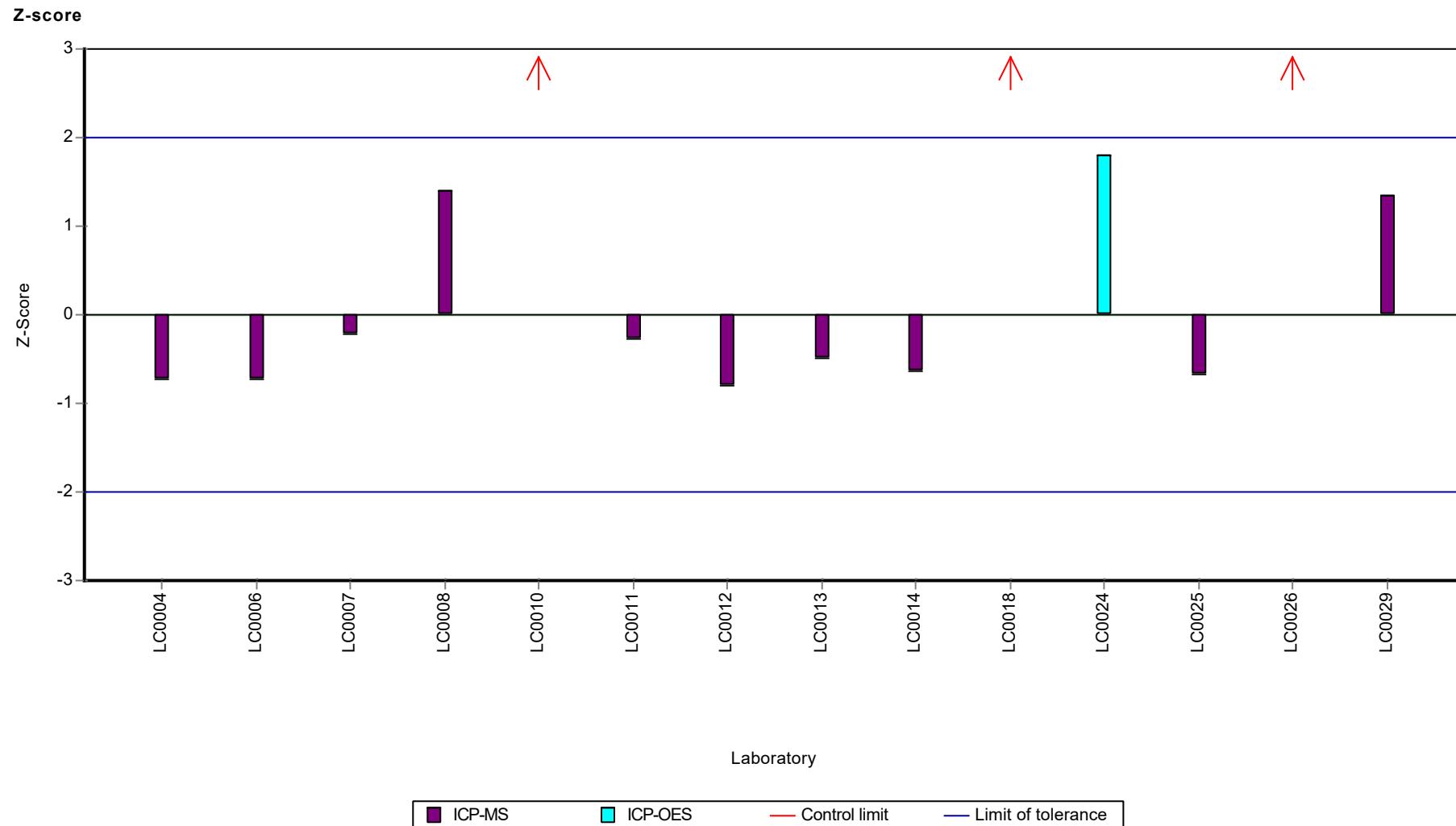
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Antimony



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Antimony



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Arsenic

Parameter oriented report

AB14

Arsenic

Unit	mg/l
Assigned value ± U (k=2)	0.0241 ± 0.00101
Criterion	0.00265 (11 %)
Minimum - Maximum	0.0165 - 0.029
Control test value ± U (k=2)	0.0219 ± 0.00241

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0268	0.00149	111	1.02	
LC0002	0.0249	0.0037	103	0.31	
LC0003	0.0165	0.00623	68.5	-2.86	
LC0004	0.02654	0.00398	110	0.93	
LC0005	0.021	0.004	87.2	-1.17	
LC0006	0.024	0.003	99.6	-0.03	
LC0007	0.0251	0.005	104	0.38	
LC0008	0.0247	0.002	103	0.23	
LC0009	0.022	0.006	91.3	-0.79	
LC0010	0.025	0.005	104	0.34	
LC0011	0.026	0.0015	108	0.72	
LC0012	0.029	0.0058	120	1.85	
LC0013	0.0253	0.0033	105	0.46	
LC0014	0.0239	0.00717	99.2	-0.07	
LC0015	0.027	0.0011	112	1.1	
LC0016	0.025	0.0045	104	0.34	
LC0017	0.0218	0.0044	90.5	-0.86	
LC0018	0.0213	0.002	88.4	-1.05	
LC0019	0.021	0.0017	87.2	-1.17	
LC0020	0.0207	0.0022	85.9	-1.28	
LC0021	0.02691	0.0039	112	1.07	
LC0022	0.0214	0.0013	88.8	-1.01	
LC0023	0.0249	0.0037	103	0.31	
LC0024	0.0226	0.00316	93.8	-0.56	
LC0025	0.0237	0.0012	98.4	-0.15	
LC0026	0.0253	0.005	105	0.46	
LC0027	0.0275	0.0017	114	1.29	
LC0028	0.0246	0.0037	102	0.19	
LC0029	0.042	0.0042	174	6.76	H

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Arsenic

Characteristics of parameter

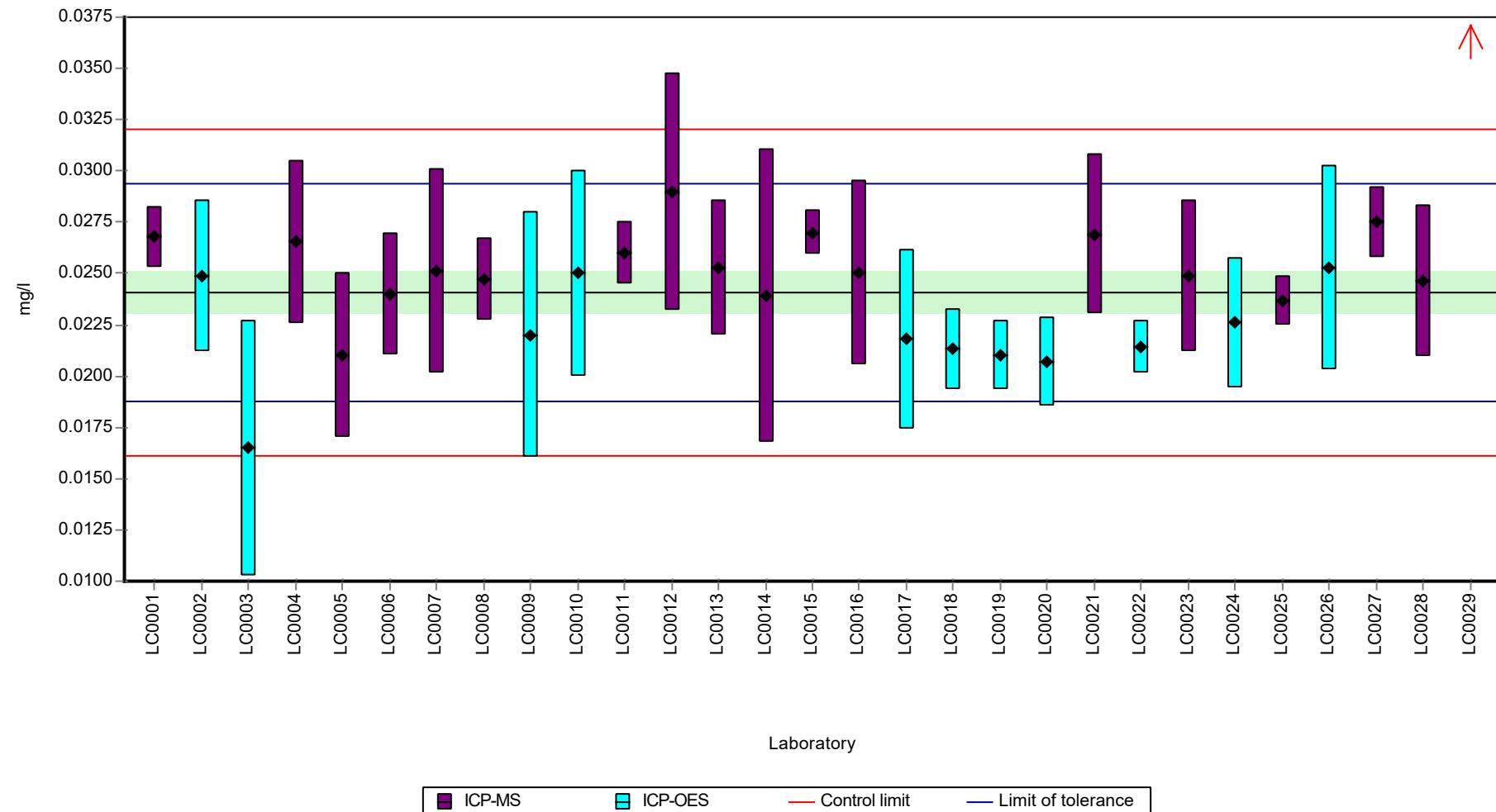
	all results	without outliers	Unit
Mean ± CI (99%)	0.0247 ± 0.00236	0.0241 ± 0.00151	mg/l
Minimum	0.0165	0.0165	mg/l
Maximum	0.042	0.029	mg/l
Standard deviation	0.00423	0.00267	mg/l
rel. standard deviation	17.1	11.1	%
n	29	28	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Arsenic

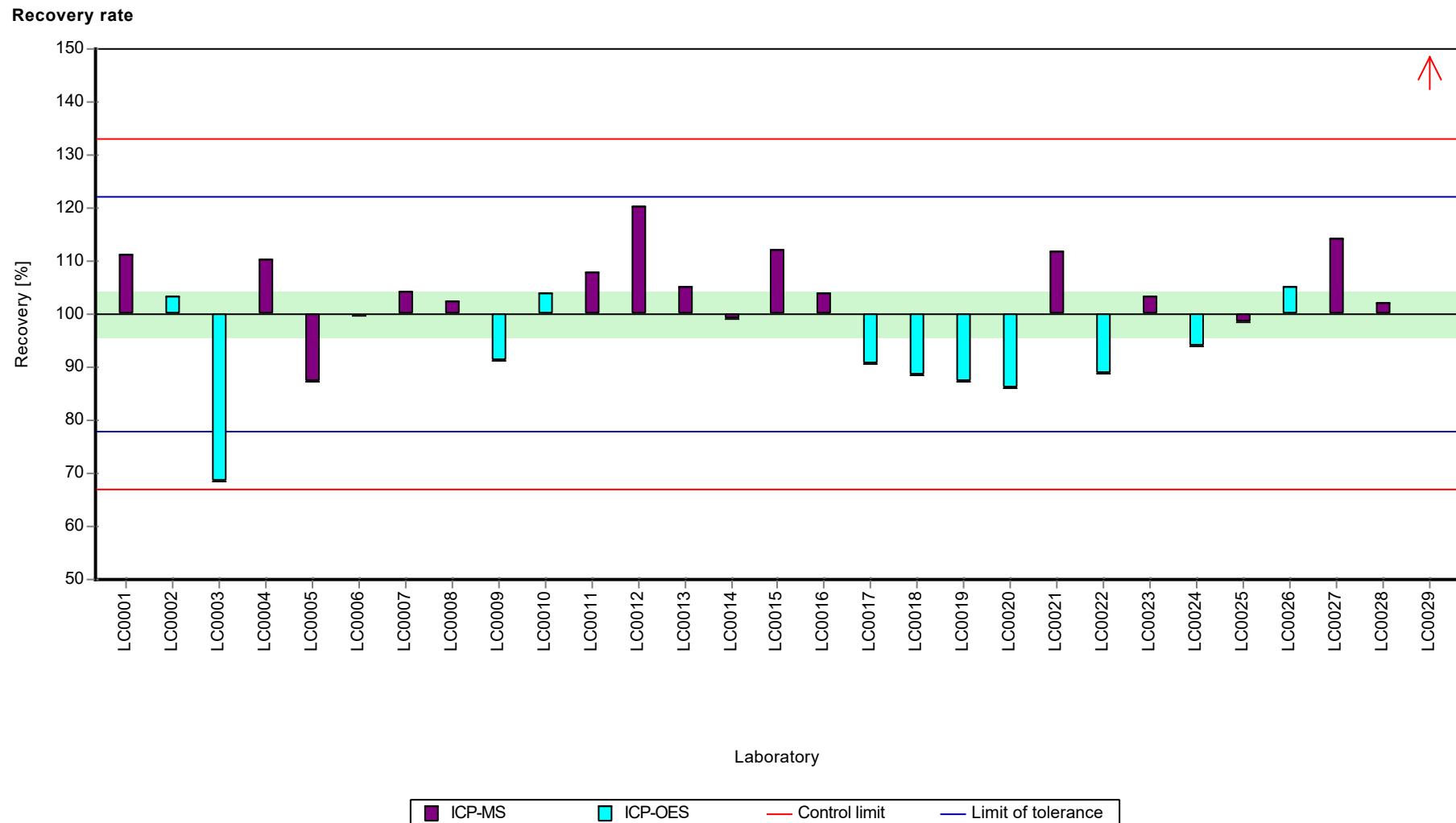
Graphical presentation of results

Results



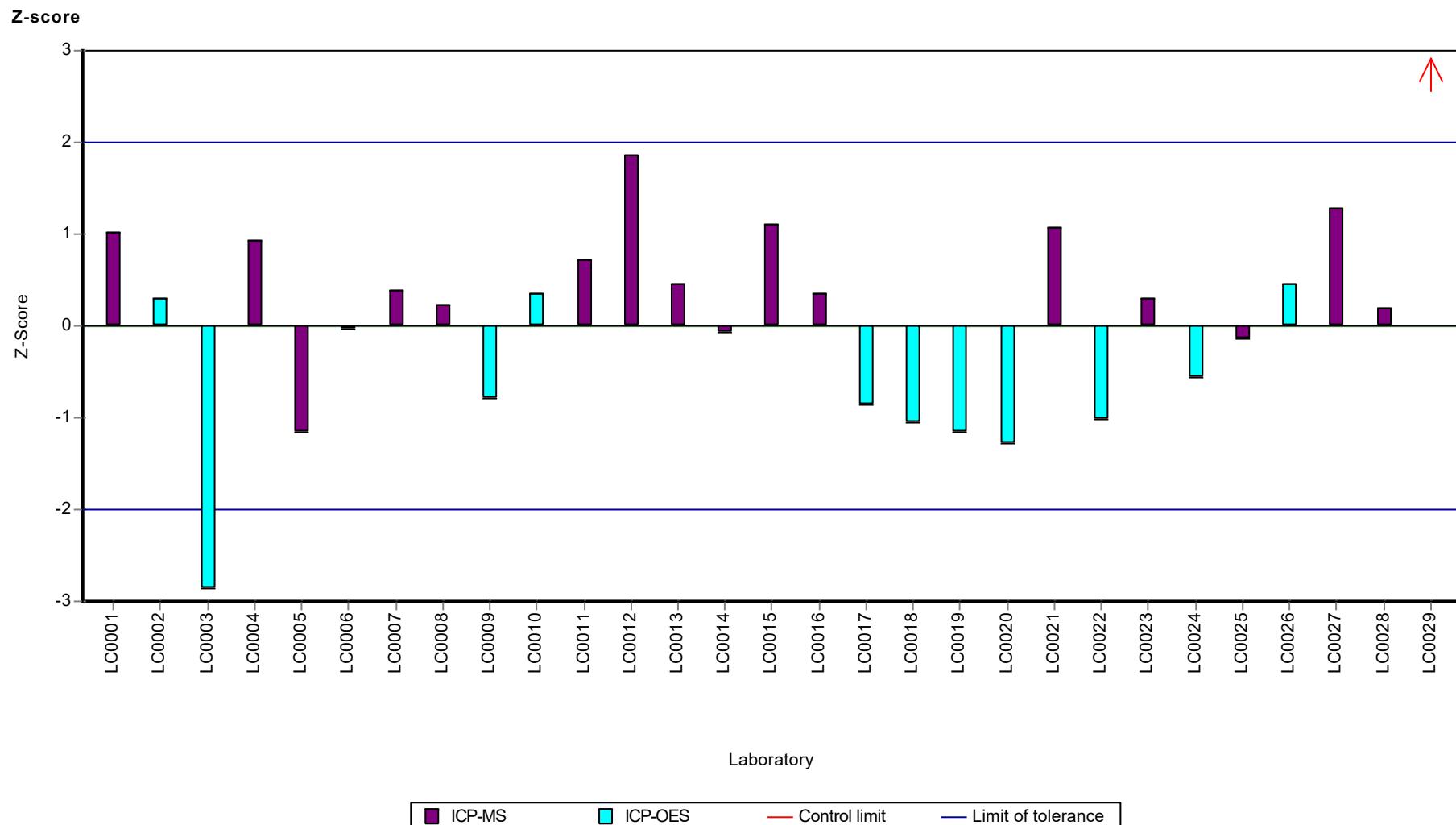
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Arsenic



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Arsenic



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Barium

Parameter oriented report

AB14

Barium

Unit	mg/l
Assigned value ± U (k=2)	0.331 ± 0.0135
Criterion	0.0364 (11 %)
Minimum - Maximum	0.26 - 0.373
Control test value ± U (k=2)	0.367 ± 0.0183

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.373	0.0134	113	1.16	
LC0002	0.0402	0.006	12.2	-7.99	H
LC0003	0.284	0.114	85.8	-1.29	
LC0004	0.3639	0.05458	110	0.91	
LC0005	0.37	0.067	112	1.08	
LC0006	0.3505	0.022	106	0.54	
LC0007	0.358	0.036	108	0.75	
LC0008	0.357	0.015	108	0.72	
LC0009	0.301	0.09	91	-0.82	
LC0010	0.29	0.005	87.7	-1.12	
LC0011	0.326	0.0138	98.5	-0.13	
LC0012	0.37032	0.07406	112	1.08	
LC0013	0.369	0.0428	112	1.05	
LC0014	0.315	0.0945	95.2	-0.44	
LC0015	0.3667	0.0152	111	0.99	
LC0016	0.328	0.036	99.1	-0.08	
LC0017	0.265	0.053	80.1	-1.81	
LC0018	0.355	0.03	107	0.66	
LC0019	0.26	0.018	78.6	-1.95	
LC0020	0.3329	0.0176	101	0.06	
LC0021	0.2921	0.0424	88.3	-1.06	
LC0022	0.3467	0.0087	105	0.44	
LC0023	0.351	0.07	106	0.55	
LC0024	0.3546	0.0532	107	0.65	
LC0025	0.36	0.018	109	0.8	
LC0026	0.289	0.244	87.4	-1.15	
LC0027	0.334	0.033	101	0.09	
LC0028	0.335	0.05	101	0.11	
LC0029	0.29	0.029	87.7	-1.12	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Barium

Characteristics of parameter

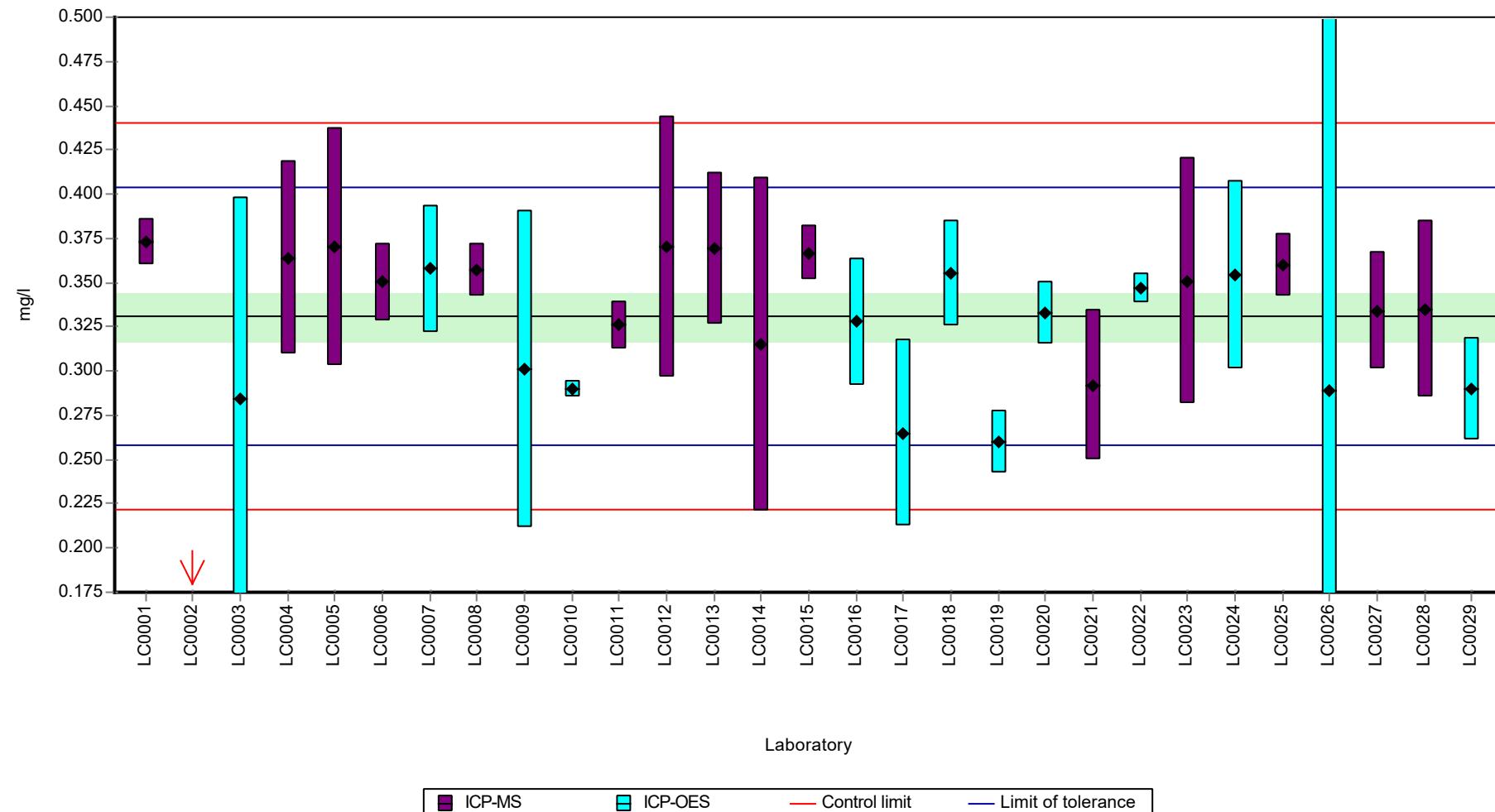
	all results	without outliers	Unit
Mean ± CI (99%)	0.322 ± 0.0356	0.332 ± 0.0197	mg/l
Minimum	0.0402	0.26	mg/l
Maximum	0.373	0.373	mg/l
Standard deviation	0.064	0.0347	mg/l
rel. standard deviation	19.9	10.5	%
n	29	28	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Barium

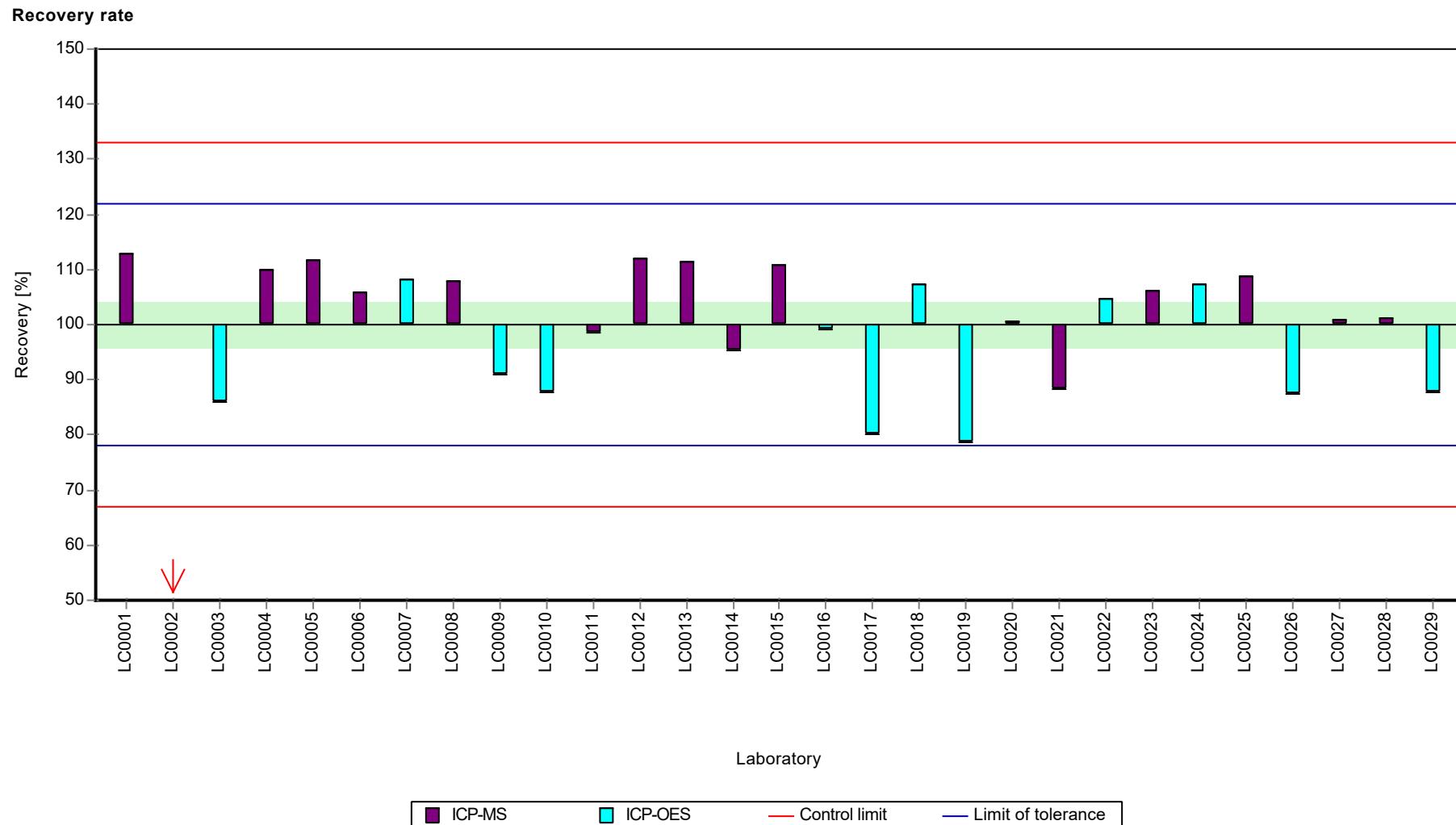
Graphical presentation of results

Results



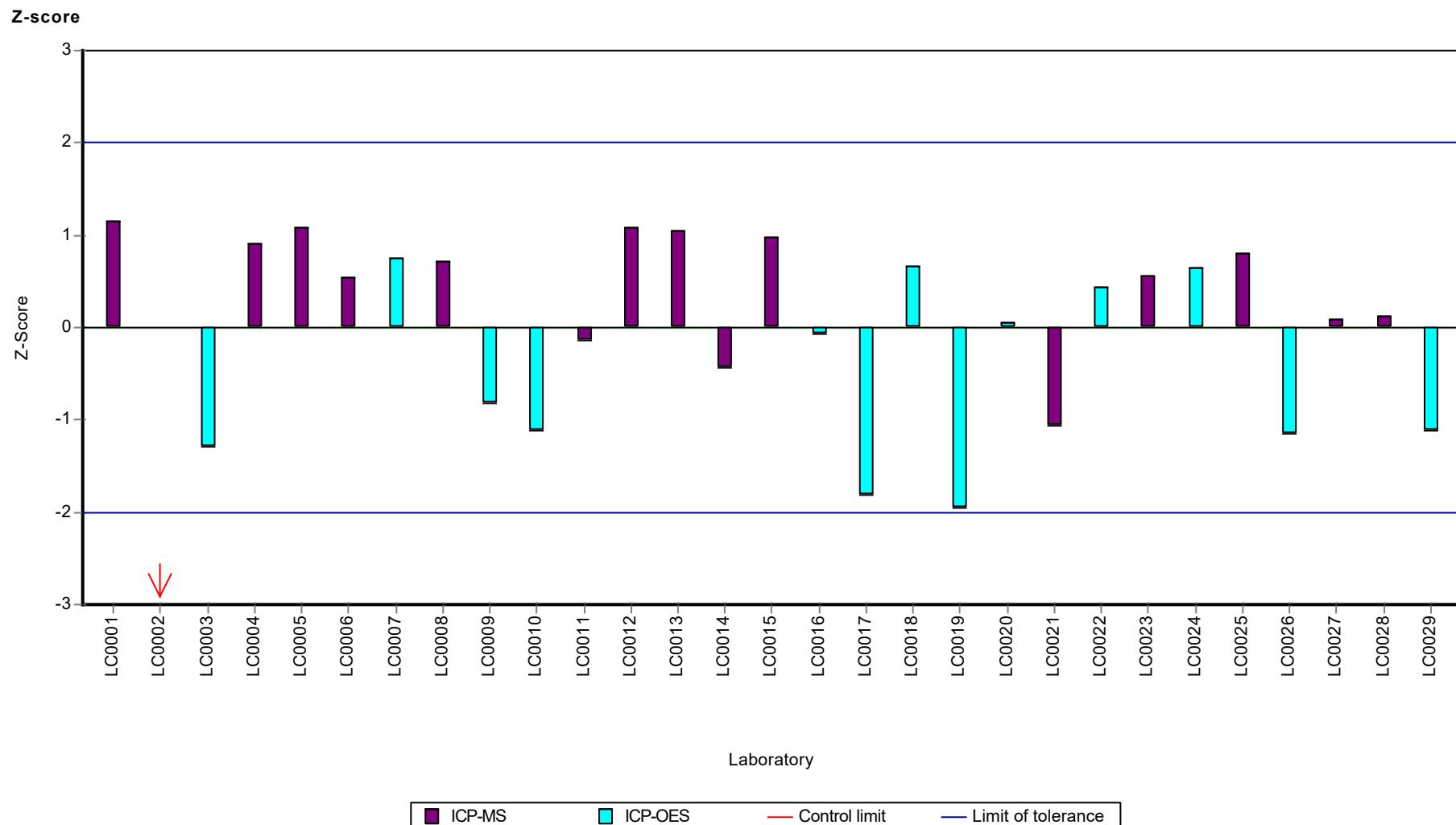
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Barium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Barium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Boron

Parameter oriented report

AB14

Boron

Unit	mg/l
Assigned value ± U (k=2)	1.4 ± 0.039
Criterion	0.14 (10 %)
Minimum - Maximum	1.19 - 1.55
Control test value ± U (k=2)	1.39 ± 0.0972

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.49	0.103	107	0.67	
LC0002	1.5	0.225	107	0.74	
LC0003	1.22	0.0741	87.4	-1.26	
LC0004	-	-	-	-	
LC0005	1.41	0.254	101	0.1	
LC0006	1.4052	0.196	101	0.06	
LC0007	1.49	0.15	107	0.67	
LC0008	1.49	0.05	107	0.67	
LC0009	-	-	-	-	
LC0010	1.19	0.005	85.2	-1.48	
LC0011	1.36	0.113	97.4	-0.26	
LC0012	-	-	-	-	
LC0013	1.344	0.316	96.3	-0.37	
LC0014	1.44	0.432	103	0.31	
LC0015	1.3961	0.1614	100	0	
LC0016	-	-	-	-	
LC0017	1.29	0.26	92.4	-0.76	
LC0018	1.4	0.1	100	0.03	
LC0019	1.335	0.16	95.6	-0.44	
LC0020	-	-	-	-	
LC0021	1.466	0.167	105	0.5	
LC0022	1.41	0.19	101	0.1	
LC0023	1.43	0.286	102	0.24	
LC0024	1.3929	0.209	99.8	-0.02	
LC0025	1.28	0.064	91.7	-0.83	
LC0026	0.875	0.212	62.7	-3.73	H
LC0027	-	-	-	-	
LC0028	1.546	0.232	111	1.07	
LC0029	1.43	0.143	102	0.24	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Boron

Characteristics of parameter

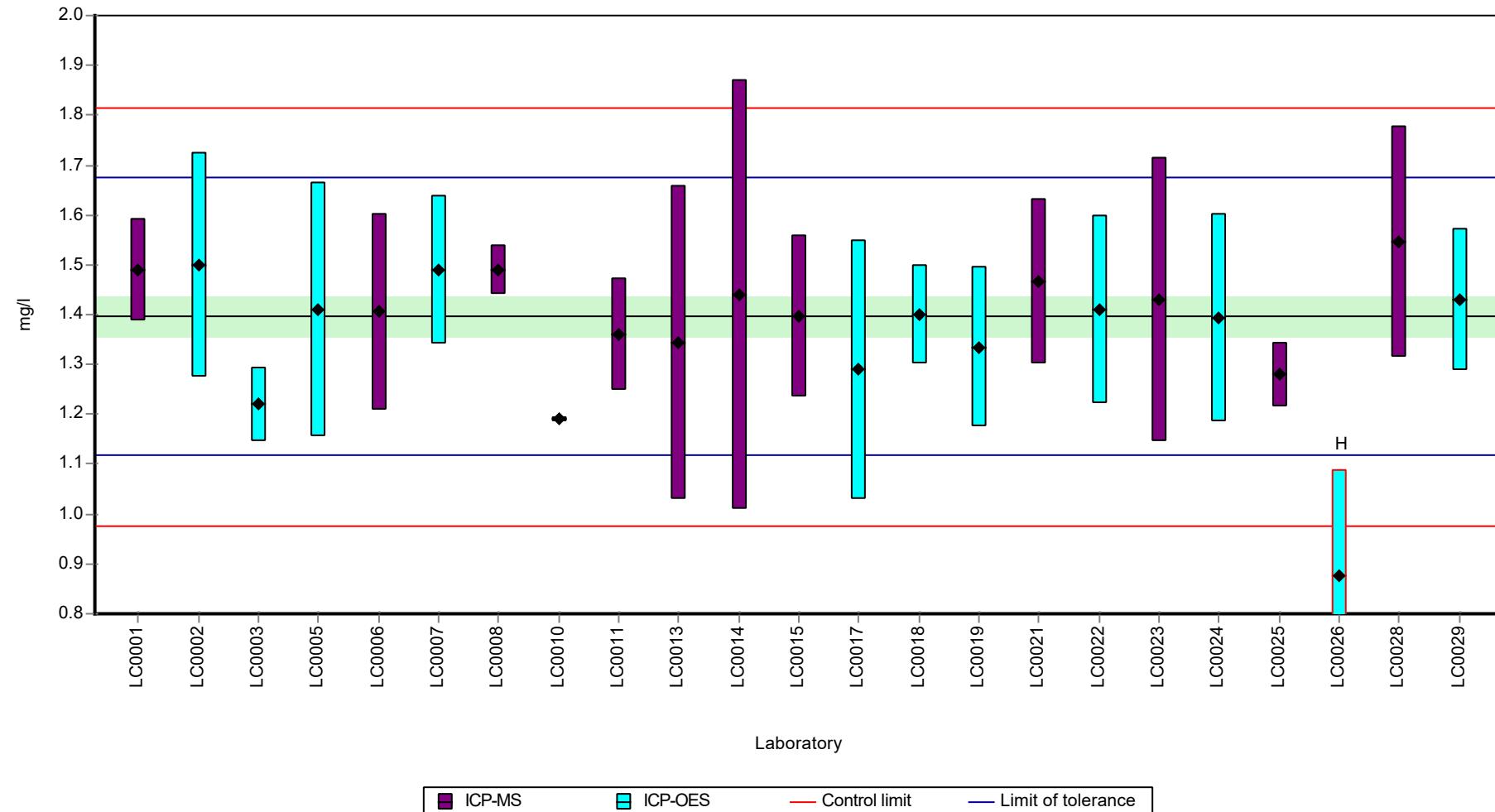
	all results	without outliers	Unit
Mean ± CI (99%)	1.37 ± 0.088	1.4 ± 0.0584	mg/l
Minimum	0.875	1.19	mg/l
Maximum	1.55	1.55	mg/l
Standard deviation	0.141	0.0914	mg/l
rel. standard deviation	10.2	6.54	%
n	23	22	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Boron

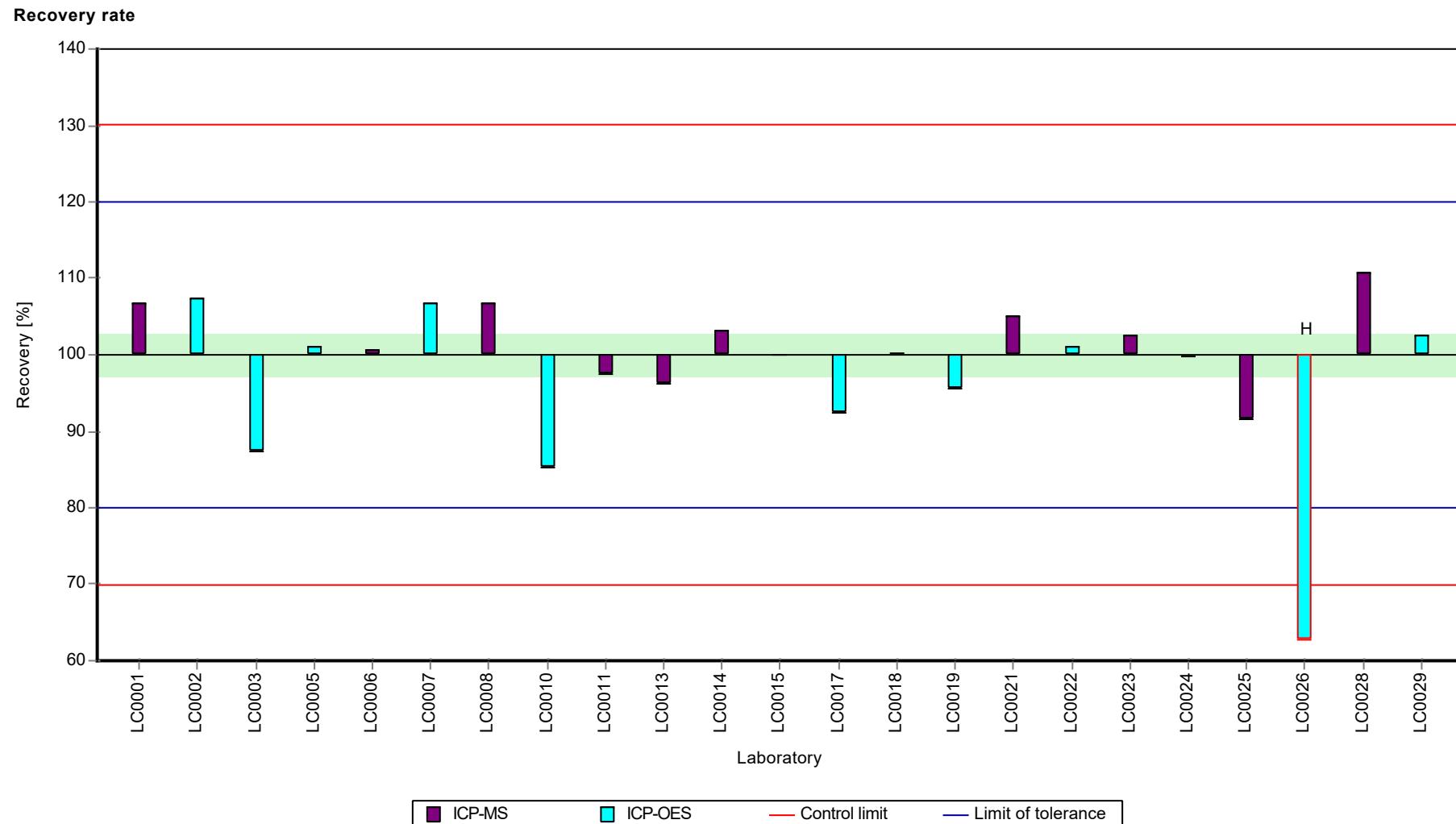
Graphical presentation of results

Results



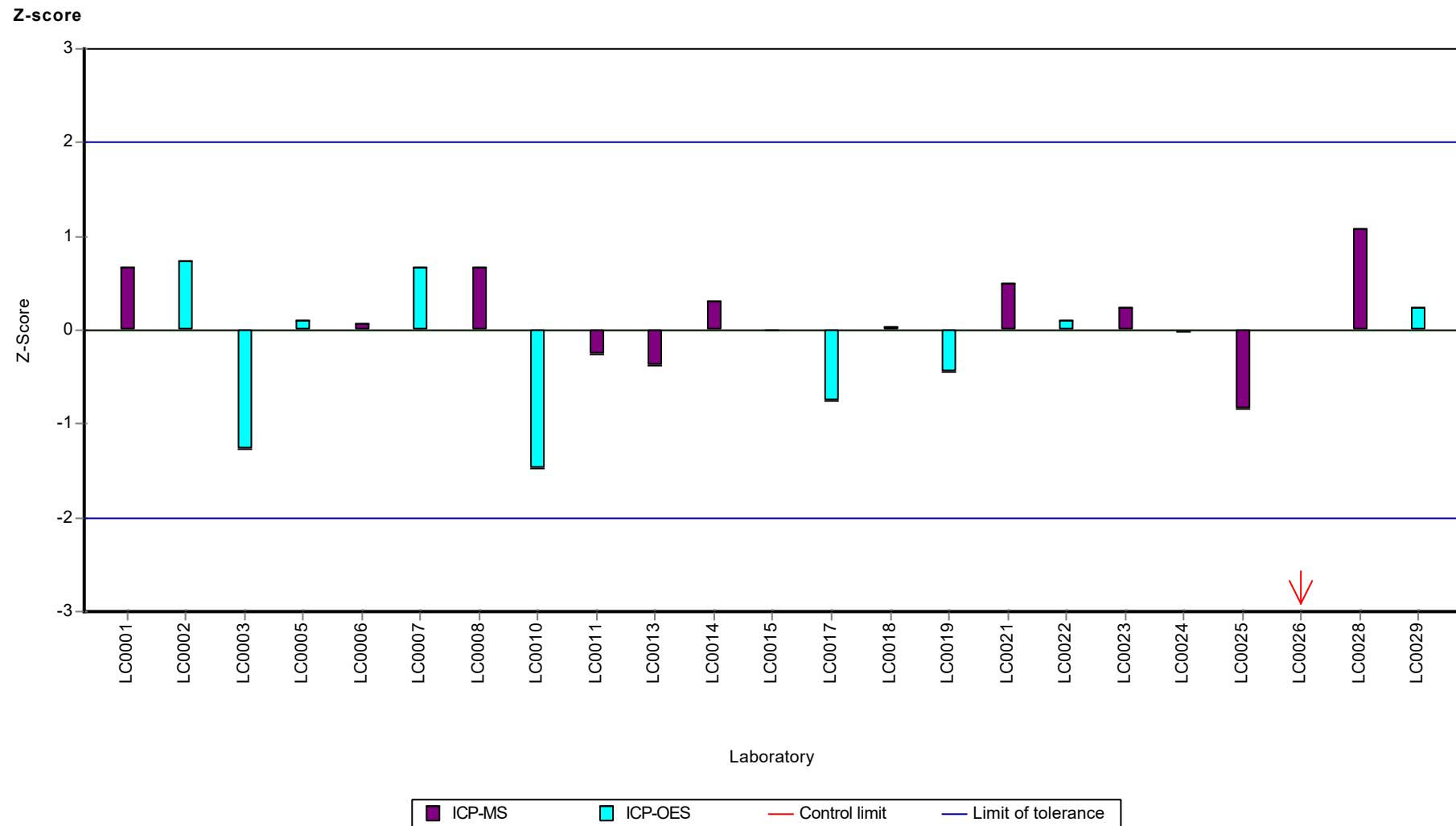
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Boron



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Boron



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Cadmium

Parameter oriented report

AB14

Cadmium

Unit	mg/l
Assigned value ± U (k=2)	0.00145 ± 0.000113
Criterion	0.000276 (19 %)
Minimum - Maximum	0.001 - 0.00193
Control test value ± U (k=2)	0.00272 ± 0.000136

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.00193	0.0001	133	1.73	
LC0002	0.0012	0.0001	82.7	-0.91	
LC0003	0.00108	0.00046	74.4	-1.35	
LC0004	0.00149	0.00022	103	0.14	
LC0005	0.00165	0.0003	114	0.72	
LC0006	0.0018	0.0002	124	1.26	
LC0007	0.00138	0.00028	95.1	-0.26	
LC0008	0.00148	0.0001	102	0.1	
LC0009	< 0.005 (LOQ)	-	-	-	
LC0010	0.001	0.0005	68.9	-1.64	
LC0011	0.0016	0.0001	110	0.54	
LC0012	0.00159	0.00032	110	0.5	
LC0013	0.0016	0.0003	110	0.54	
LC0014	0.00136	0.00041	93.7	-0.33	
LC0015	0.00171	0.0001	118	0.94	
LC0016	0.00182	0.00037	125	1.34	
LC0017	0.0011	0.00022	75.8	-1.27	
LC0018	0.00112	0.0001	77.2	-1.2	
LC0019	< 0.005 (LOQ)	-	-	-	
LC0020	0.00107	0.00016	73.7	-1.38	
LC0021	0.00154	0.00019	106	0.31	
LC0022	< 0.001 (LOQ)	-	-	-	
LC0023	0.00135	0.0002	93	-0.37	
LC0024	0.0012	0.00014	82.7	-0.91	
LC0025	0.00139	0.00007	95.8	-0.22	
LC0026	0.0011	0.0002	75.8	-1.27	
LC0027	0.0015	0.0001	103	0.18	
LC0028	0.0019	0.0003	131	1.63	
LC0029	0.0034	0.00034	234	7.06	H

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Cadmium

Characteristics of parameter

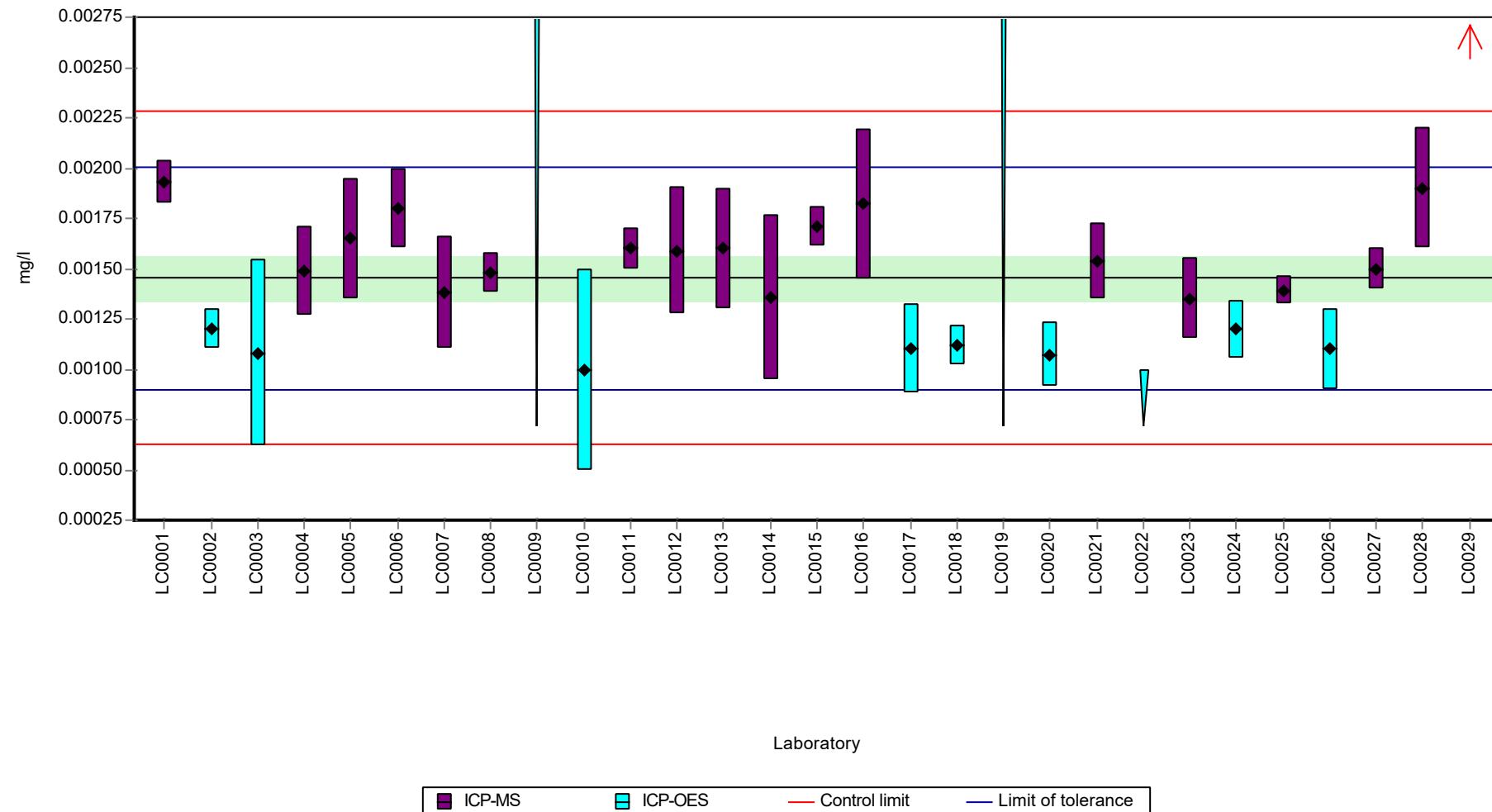
	all results	without outliers	Unit
Mean ± CI (99%)	0.00151 ± 0.000278	0.00144 ± 0.000167	mg/l
Minimum	0.001	0.001	mg/l
Maximum	0.0034	0.00193	mg/l
Standard deviation	0.000472	0.000279	mg/l
rel. standard deviation	31.2	19.4	%
n	26	25	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cadmium

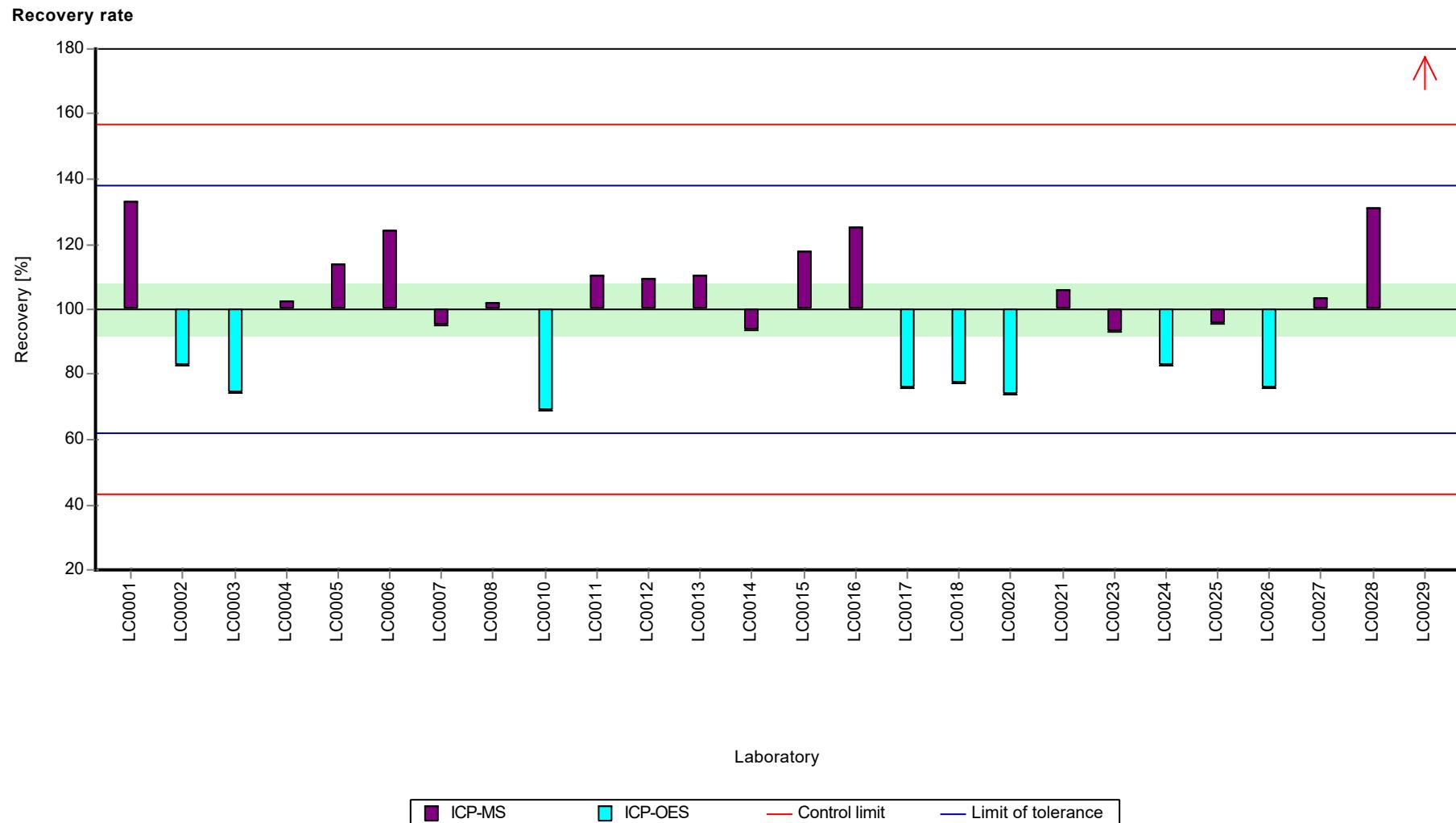
Graphical presentation of results

Results



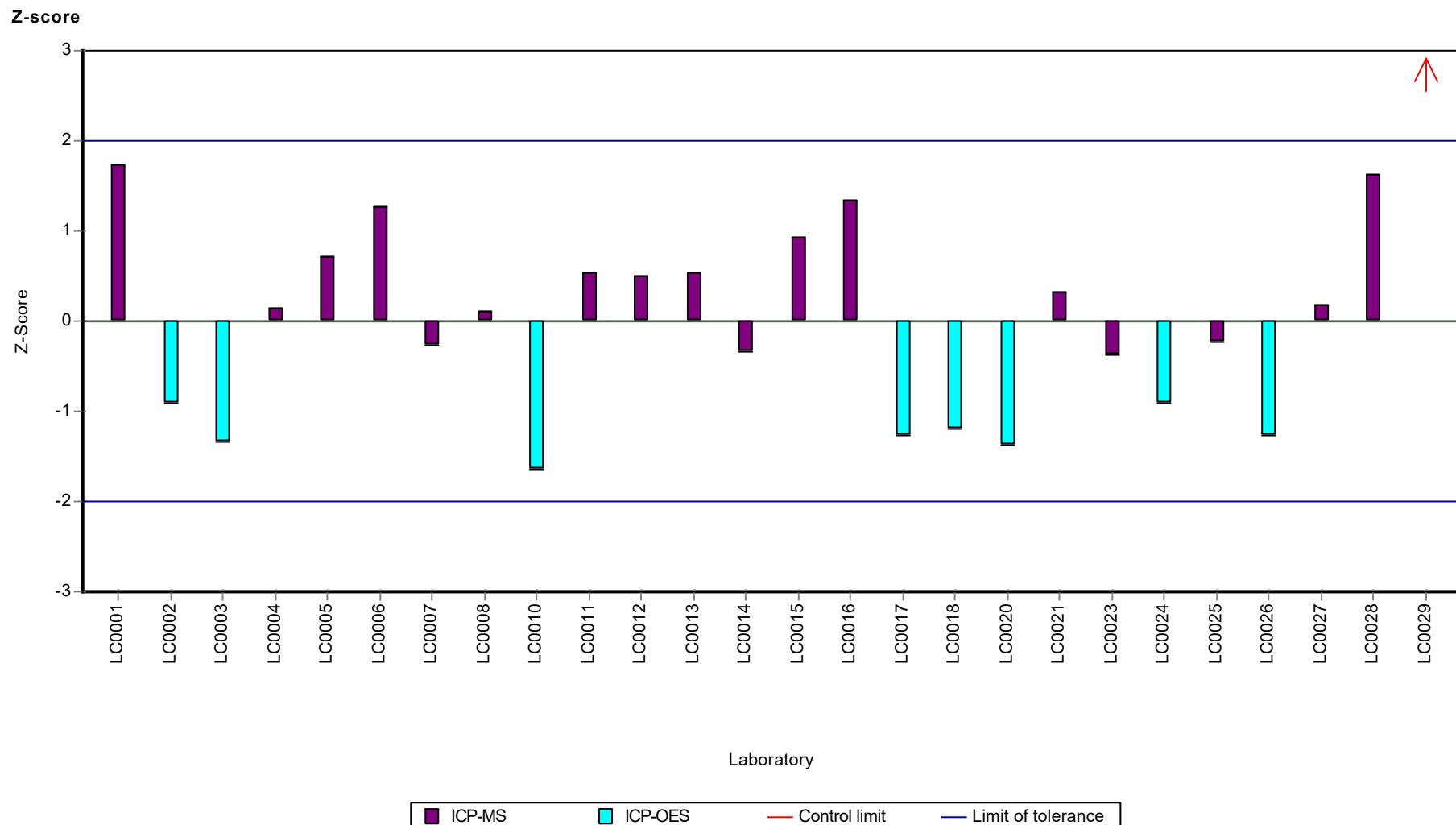
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cadmium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cadmium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Chromium

Parameter oriented report

AB14

Chromium

Unit	mg/l
Assigned value ± U (k=2)	0.0408 ± 0.00175
Criterion	0.00489 (12 %)
Minimum - Maximum	0.0323 - 0.0504
Control test value ± U (k=2)	0.0383 ± 0.00421

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0459	0.00167	113	1.05	
LC0002	0.0418	0.0041	103	0.21	
LC0003	0.0354	0.0163	86.8	-1.1	
LC0004	0.04703	0.00705	115	1.28	
LC0005	0.043	0.008	105	0.46	
LC0006	0.0417	0.004	102	0.19	
LC0007	0.0412	0.0041	101	0.09	
LC0008	0.0447	0.002	110	0.8	
LC0009	0.039	0.01	95.7	-0.36	
LC0010	0.037	0.005	90.8	-0.77	
LC0011	0.04	0.0017	98.1	-0.16	
LC0012	0.04979	0.00996	122	1.84	
LC0013	0.0424	0.0062	104	0.33	
LC0014	0.0405	0.0122	99.3	-0.05	
LC0015	0.0411	0.0029	101	0.07	
LC0016	0.0393	0.006	96.4	-0.3	
LC0017	0.0333	0.0067	81.7	-1.53	
LC0018	0.0323	0.003	79.2	-1.73	
LC0019	0.033	0.0021	80.9	-1.59	
LC0020	0.03537	0.00206	86.8	-1.1	
LC0021	0.05036	0.0063	124	1.96	
LC0022	0.0417	0.0015	102	0.19	
LC0023	0.0461	0.007	113	1.09	
LC0024	0.0386	0.00501	94.7	-0.44	
LC0025	0.0418	0.0021	103	0.21	
LC0026	0.034	0.004	83.4	-1.38	
LC0027	0.0433	0.0022	106	0.52	
LC0028	0.0406	0.0061	99.6	-0.03	
LC0029	0.042	0.0042	103	0.25	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Chromium

Characteristics of parameter

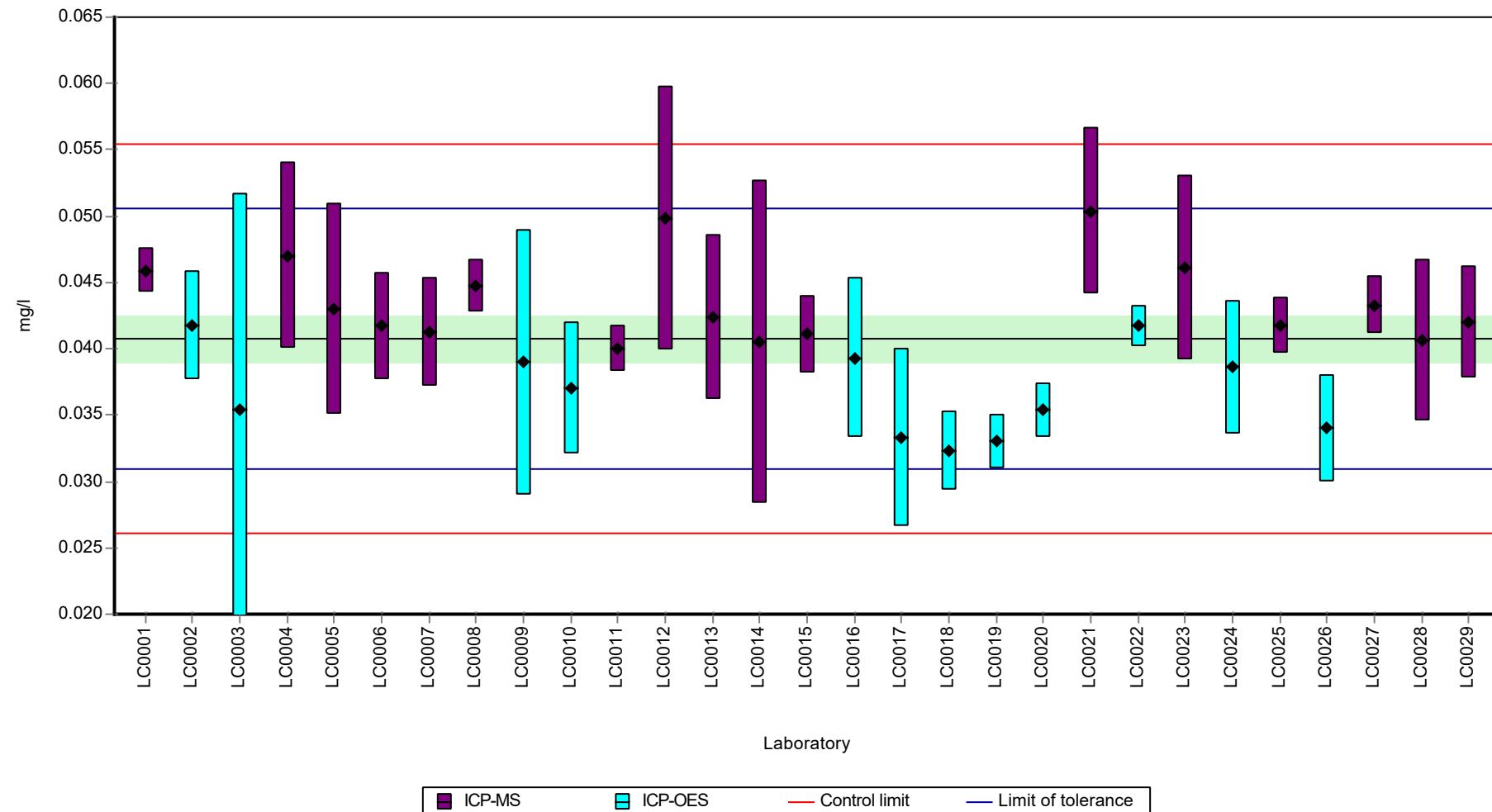
	all results	without outliers	Unit
Mean ± CI (99%)	0.0408 ± 0.00262	0.0408 ± 0.00262	mg/l
Minimum	0.0323	0.0323	mg/l
Maximum	0.0504	0.0504	mg/l
Standard deviation	0.0047	0.0047	mg/l
rel. standard deviation	11.5	11.5	%
n	29	29	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Chromium

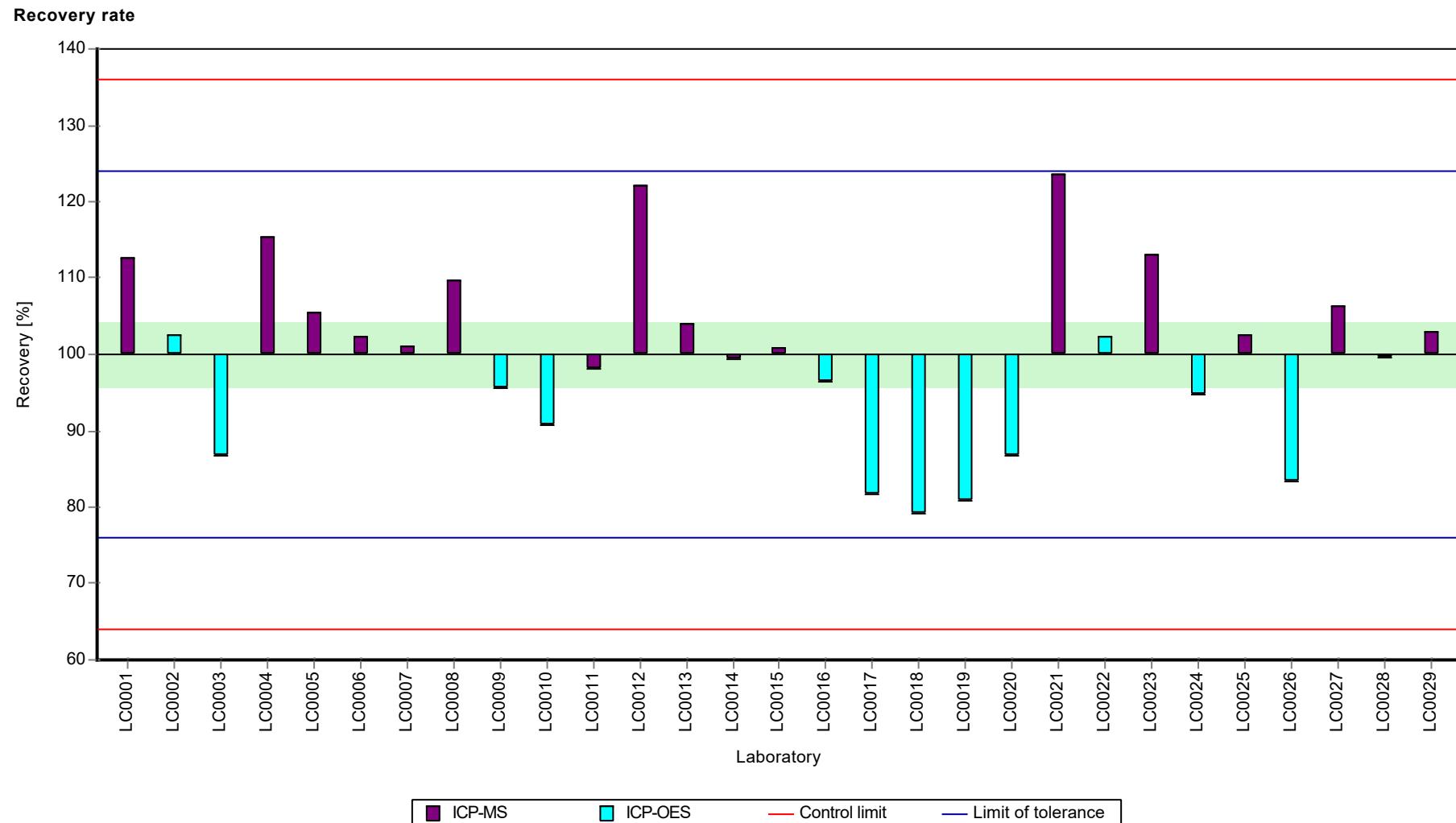
Graphical presentation of results

Results



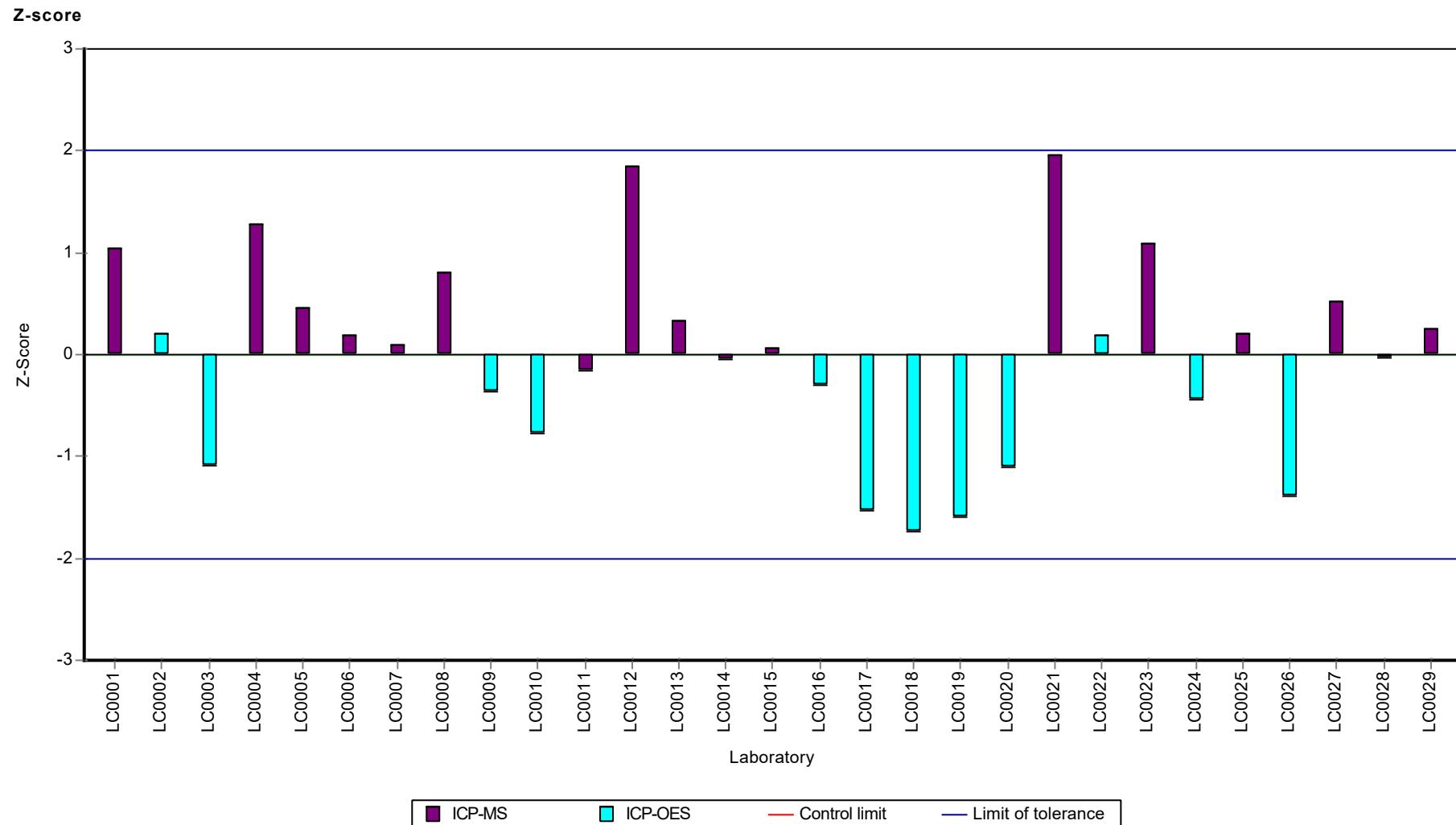
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Chromium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Chromium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Cobalt

Parameter oriented report

AB14

Cobalt

Unit	mg/l
Assigned value ± U (k=2)	0.0245 ± 0.00112
Criterion	0.0027 (11 %)
Minimum - Maximum	0.0198 - 0.0292
Control test value ± U (k=2)	0.0225 ± 0.00135

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0263	0.00156	107	0.66	
LC0002	0.0248	0.00372	101	0.11	
LC0003	0.0204	0.00064	83.2	-1.52	
LC0004	-	-	-	-	
LC0005	0.026	0.005	106	0.55	
LC0006	0.0278	0.001	113	1.22	
LC0007	0.0258	0.0026	105	0.48	
LC0008	0.0261	0.001	106	0.59	
LC0009	-	-	-	-	
LC0010	0.021	0.005	85.7	-1.3	
LC0011	0.023	0.0011	93.8	-0.56	
LC0012	0.02919	0.00584	119	1.74	
LC0013	0.0247	0.0034	101	0.07	
LC0014	0.0268	0.008	109	0.85	
LC0015	0.0243	0.0036	99.1	-0.08	
LC0016	0.0257	0.0021	105	0.44	
LC0017	0.0198	0.004	80.8	-1.75	
LC0018	0.738	0.07	3010	264.65	H
LC0019	0.015	0.0015	61.2	-3.53	H
LC0020	0.02127	0.0011	86.8	-1.2	
LC0021	0.02876	0.0024	117	1.58	
LC0022	0.0243	0.0023	99.1	-0.08	
LC0023	0.0275	0.0041	112	1.11	
LC0024	0.0238	0.00405	97.1	-0.26	
LC0025	0.0254	0.0013	104	0.33	
LC0026	0.0203	0.003	82.8	-1.56	
LC0027	-	-	-	-	
LC0028	0.0242	0.0036	98.7	-0.11	
LC0029	0.021	0.0021	85.7	-1.3	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Cobalt

Characteristics of parameter

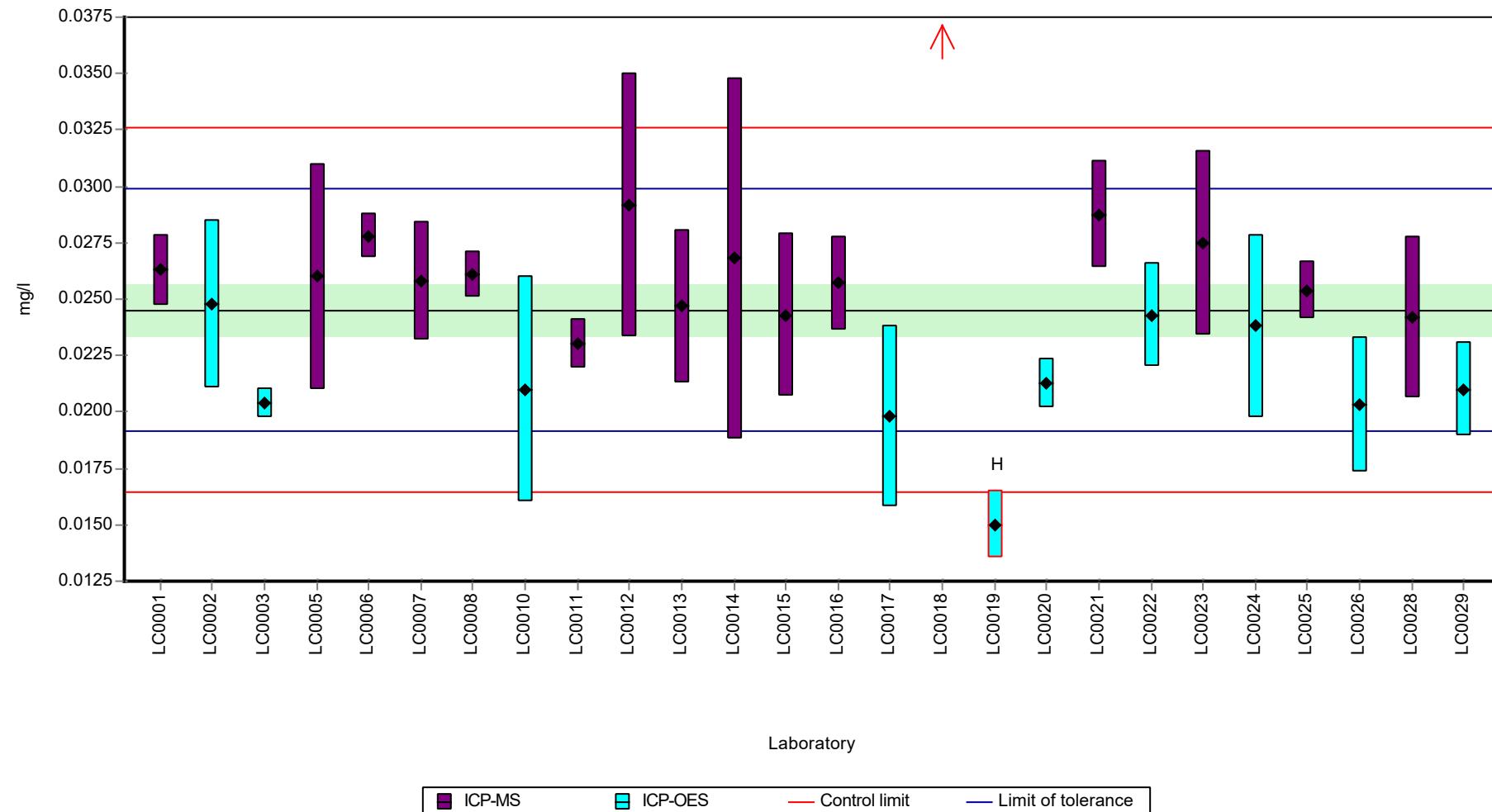
	all results	without outliers	Unit
Mean ± CI (99%)	0.0516 ± 0.0824	0.0245 ± 0.00167	mg/l
Minimum	0.015	0.0198	mg/l
Maximum	0.738	0.0292	mg/l
Standard deviation	0.14	0.00273	mg/l
rel. standard deviation	271	11.2	%
n	26	24	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cobalt

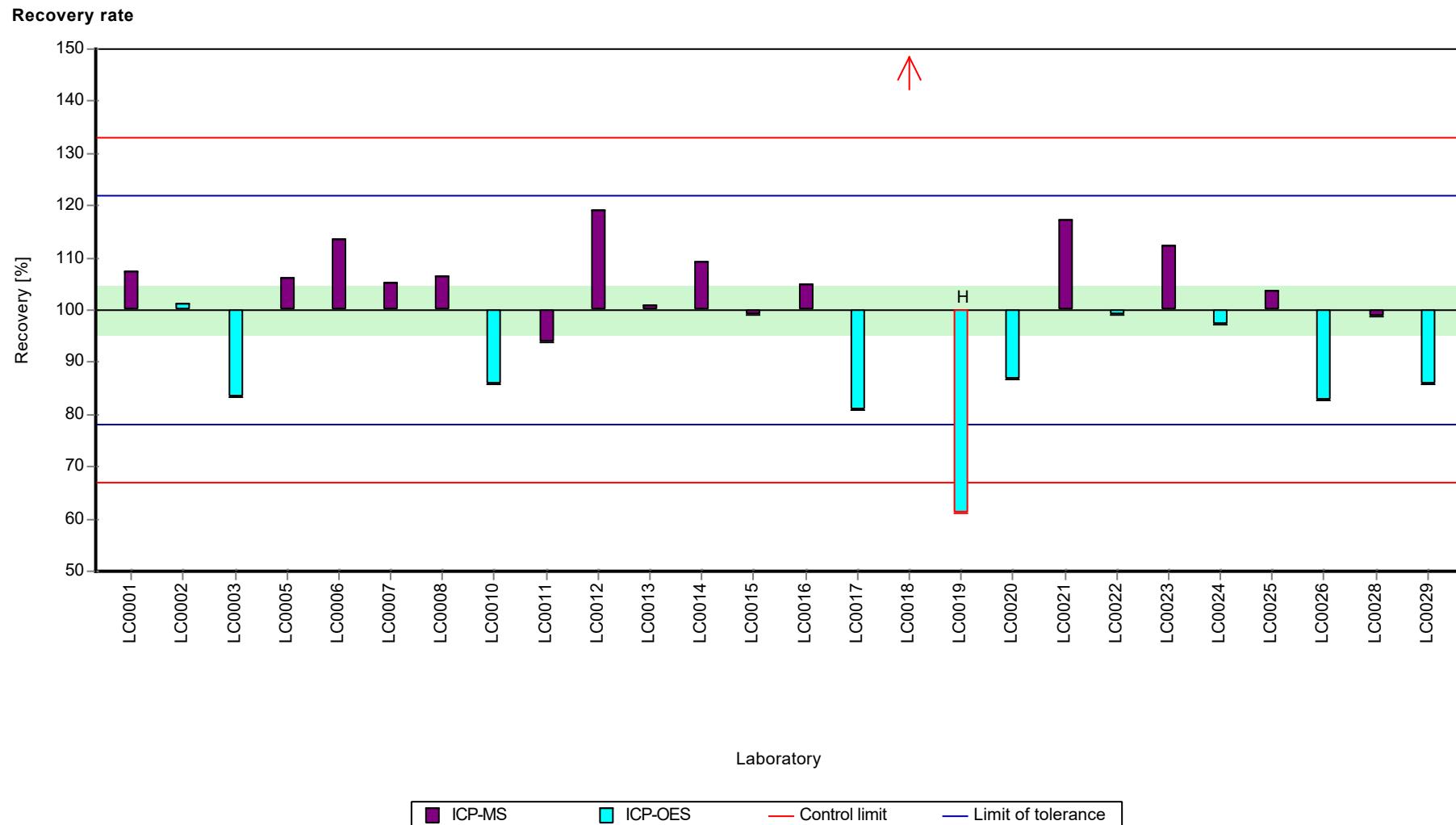
Graphical presentation of results

Results



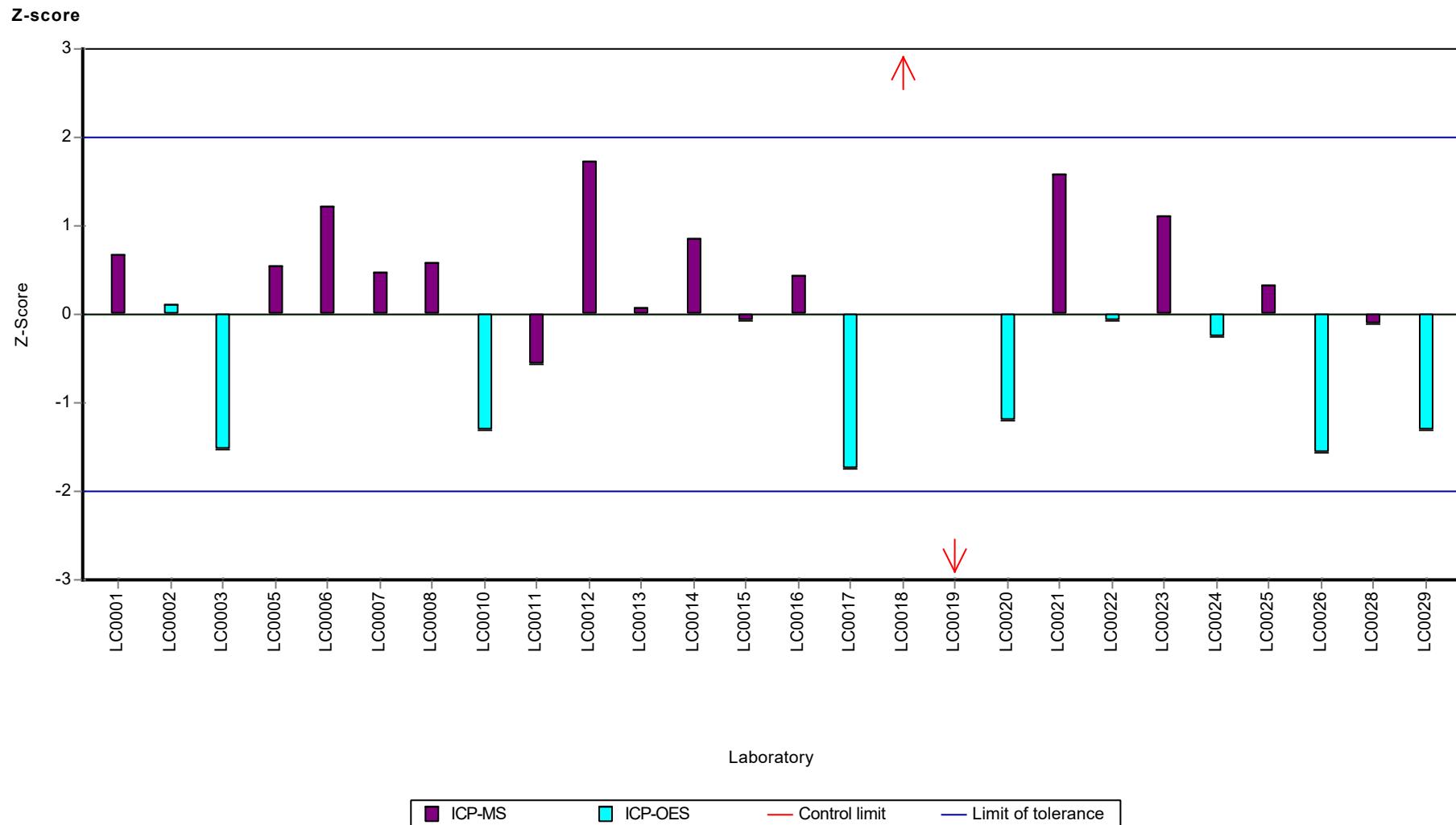
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cobalt



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Cobalt



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Copper

Parameter oriented report

AB14

Copper

Unit	mg/l
Assigned value ± U (k=2)	0.12 ± 0.00506
Criterion	0.0157 (13 %)
Minimum - Maximum	0.0758 - 0.142
Control test value ± U (k=2)	0.0993 ± 0.0119

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.119	0.00616	98.8	-0.09	
LC0002	0.142	0.0169	118	1.38	
LC0003	0.108	0.0218	89.7	-0.79	
LC0004	0.13334	0.02	111	0.83	
LC0005	0.127	0.023	105	0.42	
LC0006	0.1249	0.016	104	0.29	
LC0007	0.142	0.014	118	1.38	
LC0008	0.125	0.008	104	0.29	
LC0009	0.103	0.03	85.5	-1.11	
LC0010	0.103	0.005	85.5	-1.11	
LC0011	0.123	0.0068	102	0.16	
LC0012	0.1289	0.02578	107	0.54	
LC0013	0.119	0.0223	98.8	-0.09	
LC0014	0.118	0.0354	98	-0.15	
LC0015	0.1225	0.0104	102	0.13	
LC0016	0.13	0.02	108	0.61	
LC0017	0.1	0.02	83	-1.3	
LC0018	0.0758	0.007	62.9	-2.85	
LC0019	0.098	0.0073	81.4	-1.43	
LC0020	0.1303	0.0083	108	0.63	
LC0021	0.1327	0.0126	110	0.78	
LC0022	0.1338	0.0054	111	0.85	
LC0023	0.122	0.018	101	0.1	
LC0024	0.1364	0.0191	113	1.02	
LC0025	0.118	0.0059	98	-0.15	
LC0026	0.11	0.014	91.3	-0.67	
LC0027	0.101	0.007	83.9	-1.24	
LC0028	0.125	0.019	104	0.29	
LC0029	0.096	0.0096	79.7	-1.56	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Copper

Characteristics of parameter

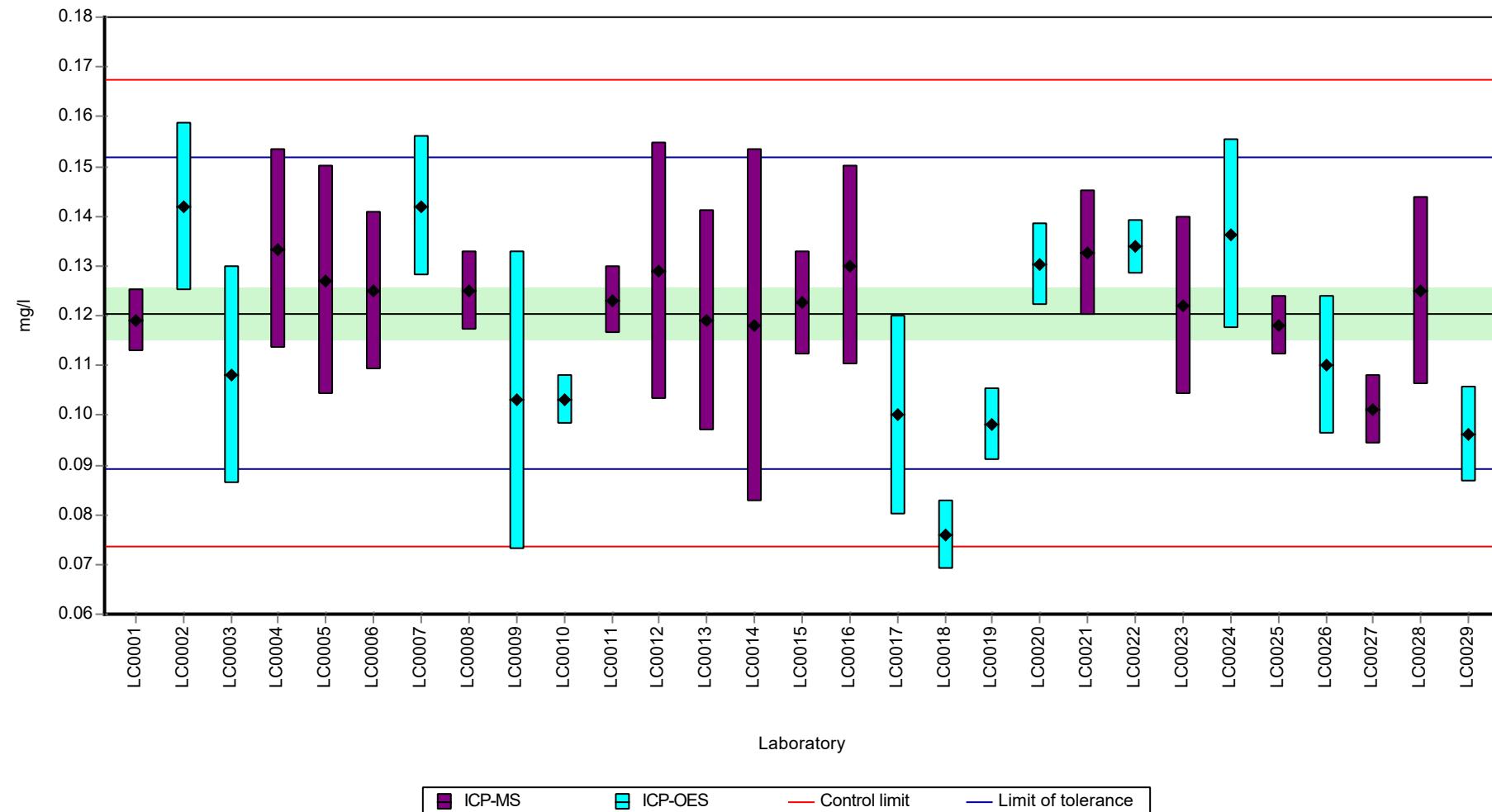
	all results	without outliers	Unit
Mean ± CI (99%)	0.119 ± 0.00866	0.119 ± 0.00866	mg/l
Minimum	0.0758	0.0758	mg/l
Maximum	0.142	0.142	mg/l
Standard deviation	0.0155	0.0155	mg/l
rel. standard deviation	13.1	13.1	%
n	29	29	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Copper

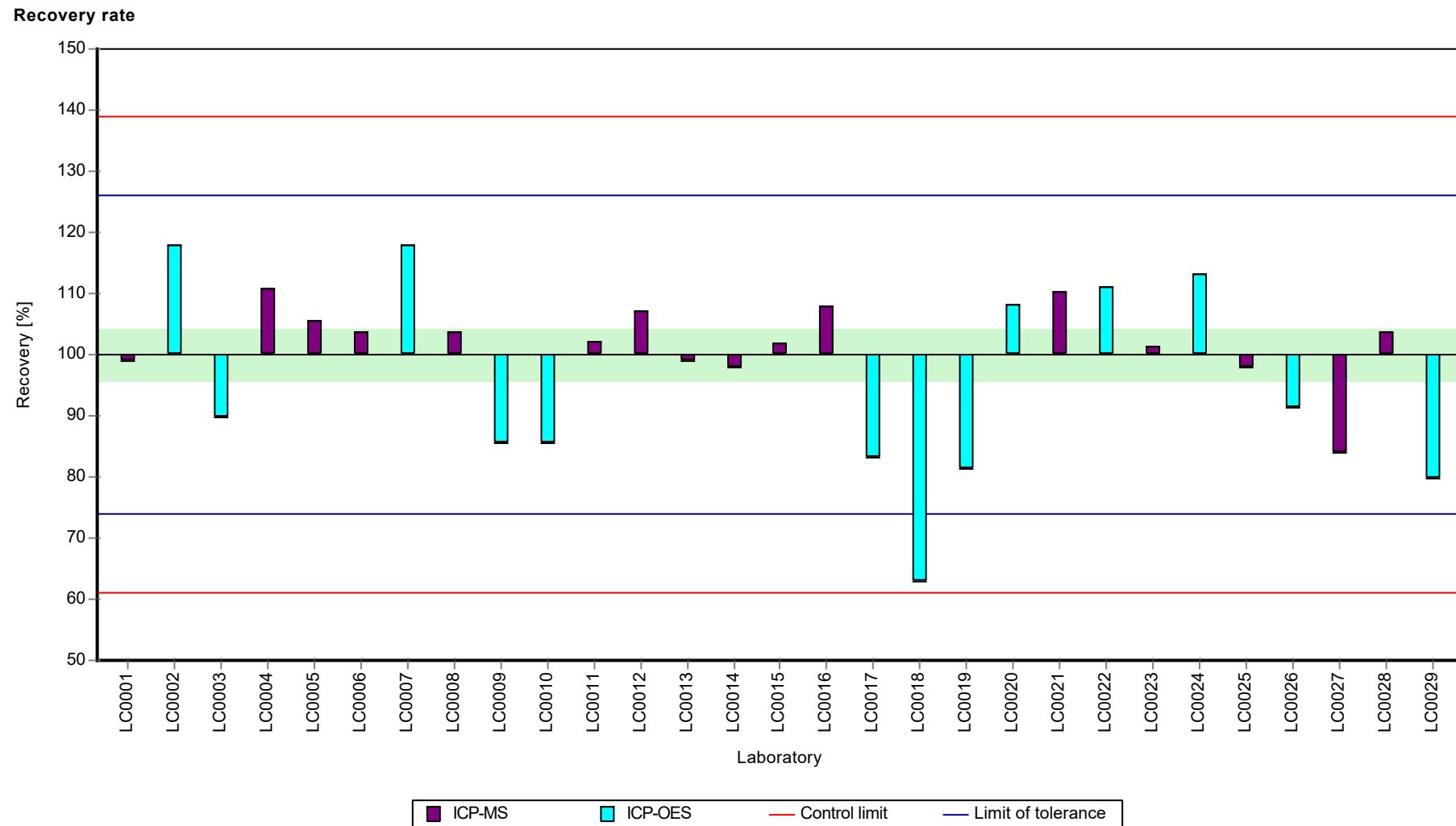
Graphical presentation of results

Results



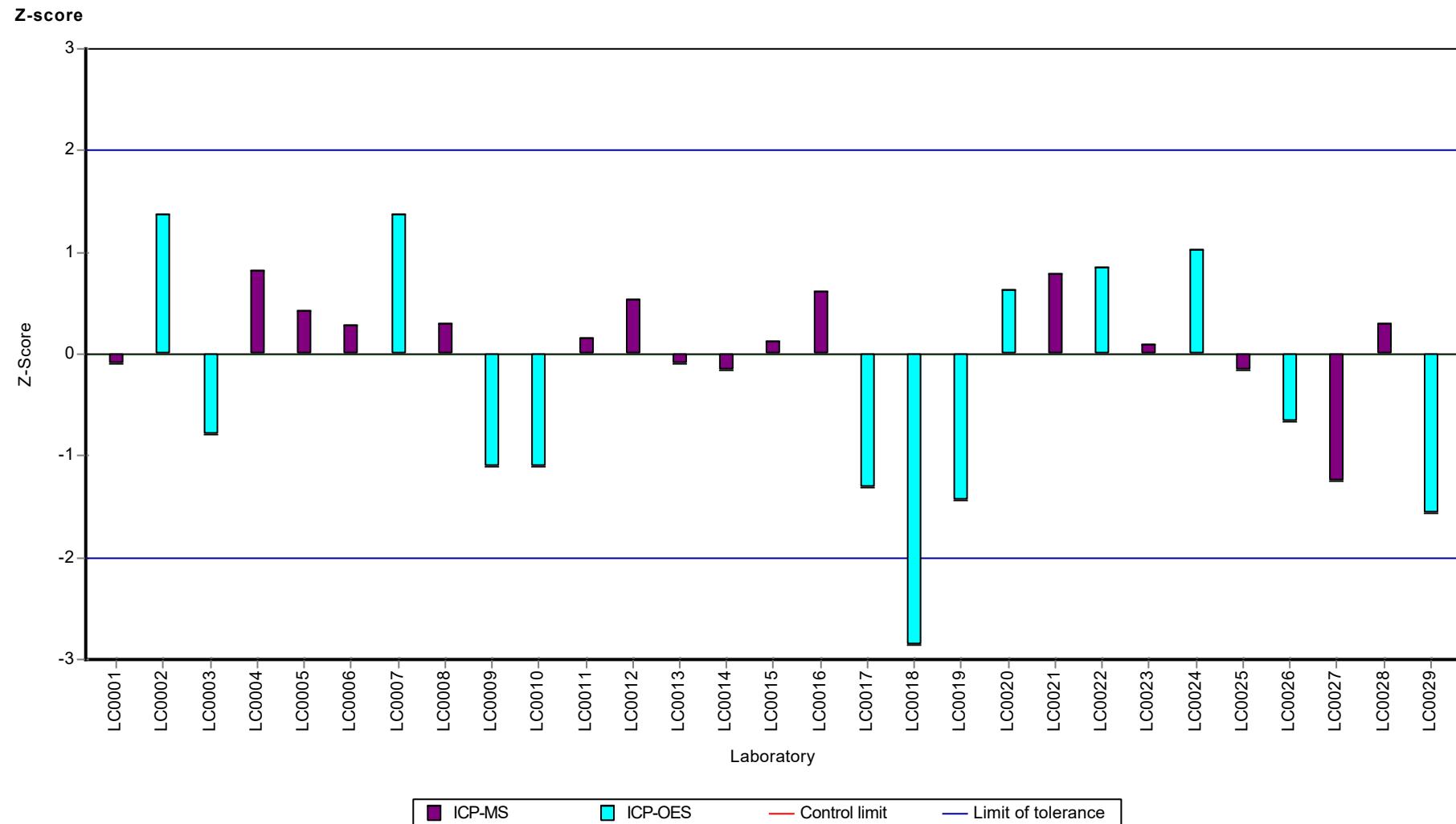
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Copper



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Copper



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Iron

Parameter oriented report

AB14

Iron

Unit	mg/l
Assigned value ± U (k=2)	0.83 ± 0.0389
Criterion	0.0996 (12 %)
Minimum - Maximum	0.67 - 1.08
Control test value ± U (k=2)	0.773 ± 0.0927

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.903	0.36	109	0.73	
LC0002	0.849	0.0714	102	0.19	
LC0003	0.767	0.0915	92.4	-0.63	
LC0004	-	-	-	-	
LC0005	0.867	0.156	104	0.37	
LC0006	0.923	0.099	111	0.93	
LC0007	0.846	0.085	102	0.16	
LC0008	0.843	0.05	102	0.13	
LC0009	-	-	-	-	
LC0010	0.7	0.005	84.3	-1.31	
LC0011	1.08	0.105	130	2.51	
LC0012	0.97431	0.19486	117	1.45	
LC0013	0.863	0.1311	104	0.33	
LC0014	0.826	0.248	99.5	-0.04	
LC0015	0.7712	0.0785	92.9	-0.59	
LC0016	0.788	0.084	94.9	-0.42	
LC0017	0.688	0.138	82.9	-1.43	
LC0018	0.738	0.07	88.9	-0.93	
LC0019	0.788	0.054	94.9	-0.42	
LC0020	0.7283	0.0451	87.7	-1.02	
LC0021	0.9412	0.118	113	1.11	
LC0022	0.844	0.051	102	0.14	
LC0023	0.911	0.137	110	0.81	
LC0024	0.387	0.058	46.6	-4.45	H
LC0025	0.911	0.091	110	0.81	
LC0026	0.747	0.157	90	-0.83	
LC0027	-	-	-	-	
LC0028	0.787	0.118	94.8	-0.43	
LC0029	0.67	0.067	80.7	-1.61	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Iron

Characteristics of parameter

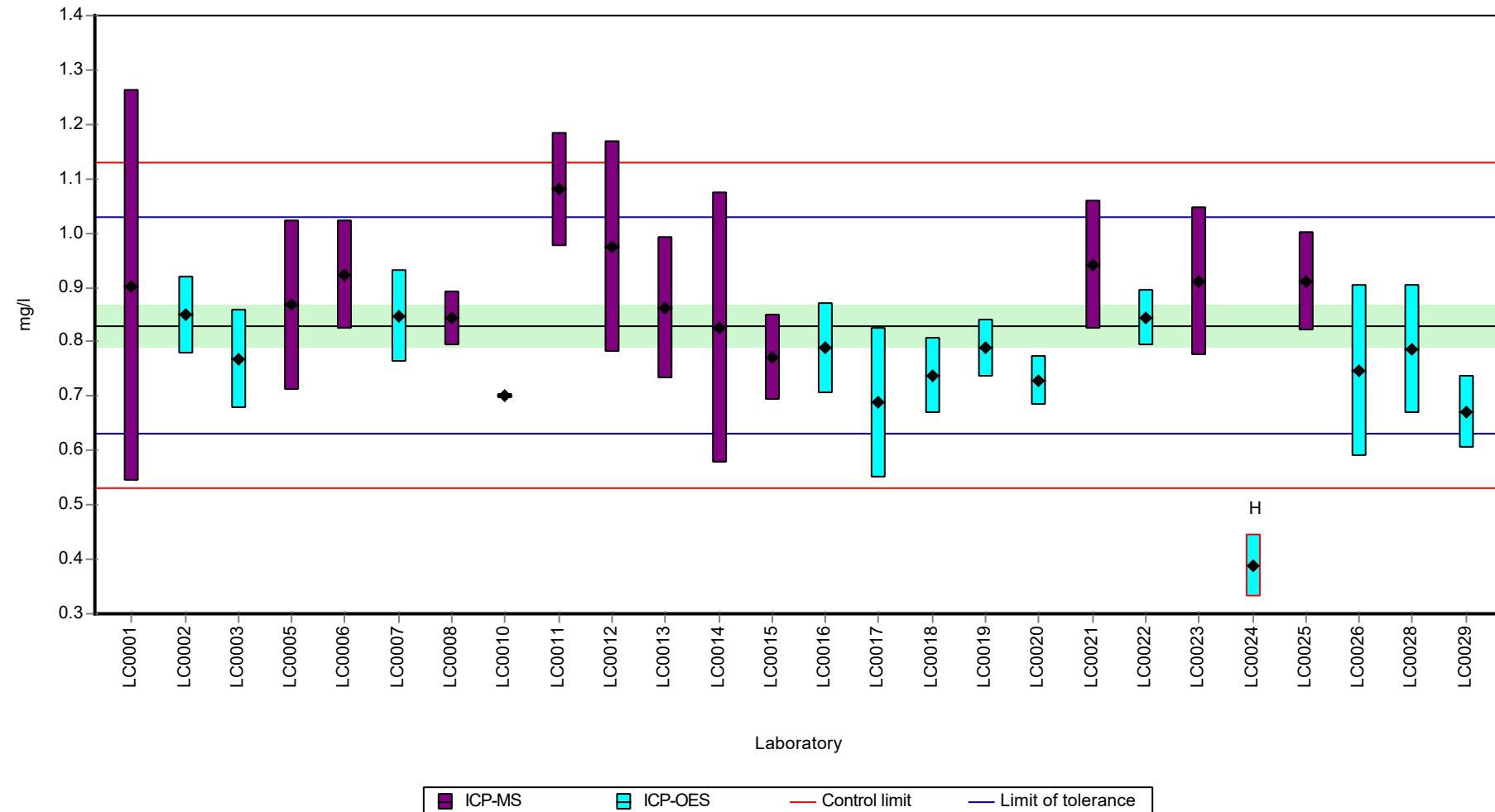
	all results	without outliers	Unit
Mean ± CI (99%)	0.813 ± 0.0759	0.83 ± 0.0584	mg/l
Minimum	0.387	0.67	mg/l
Maximum	1.08	1.08	mg/l
Standard deviation	0.129	0.0973	mg/l
rel. standard deviation	15.9	11.7	%
n	26	25	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Iron

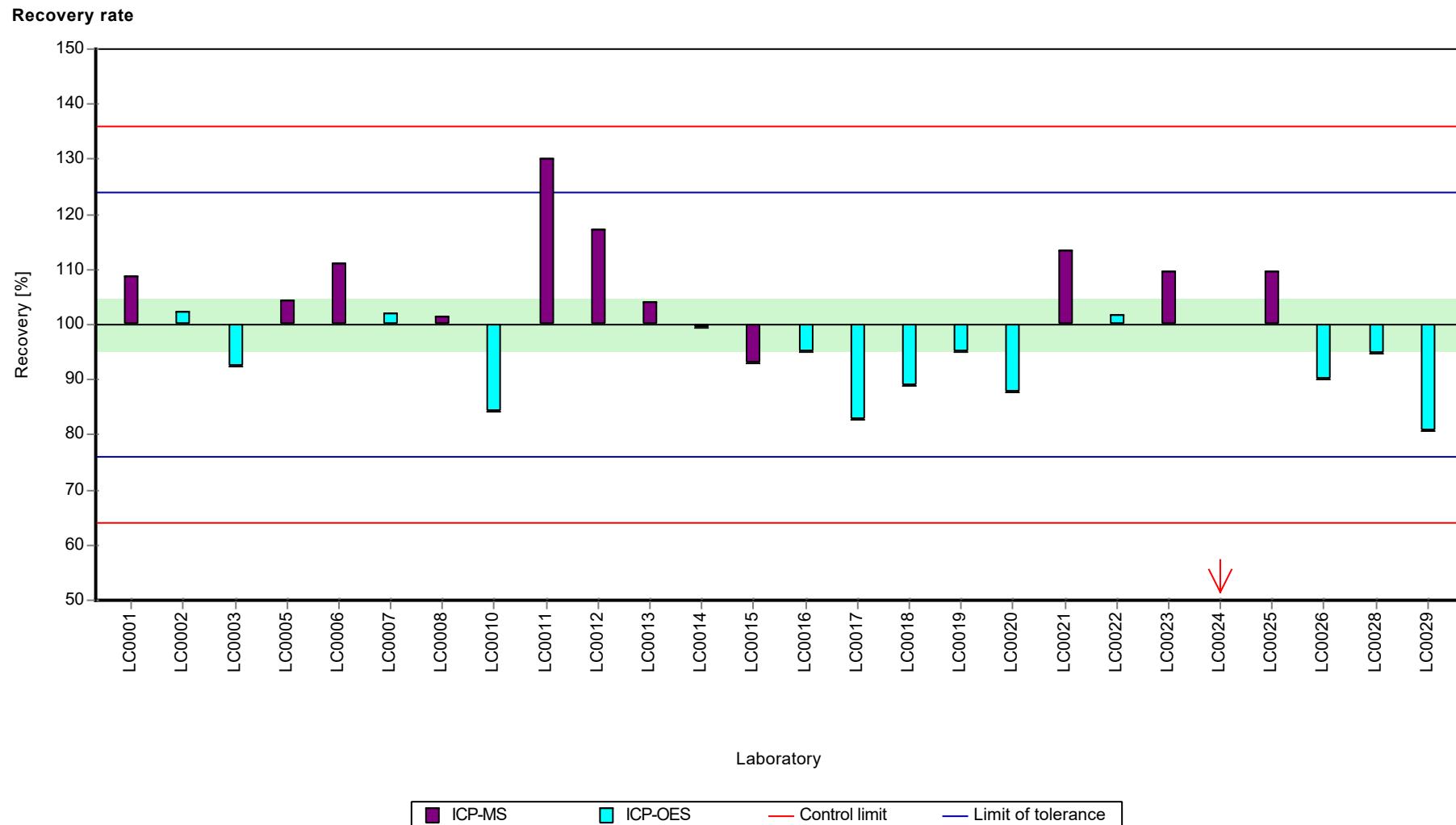
Graphical presentation of results

Results



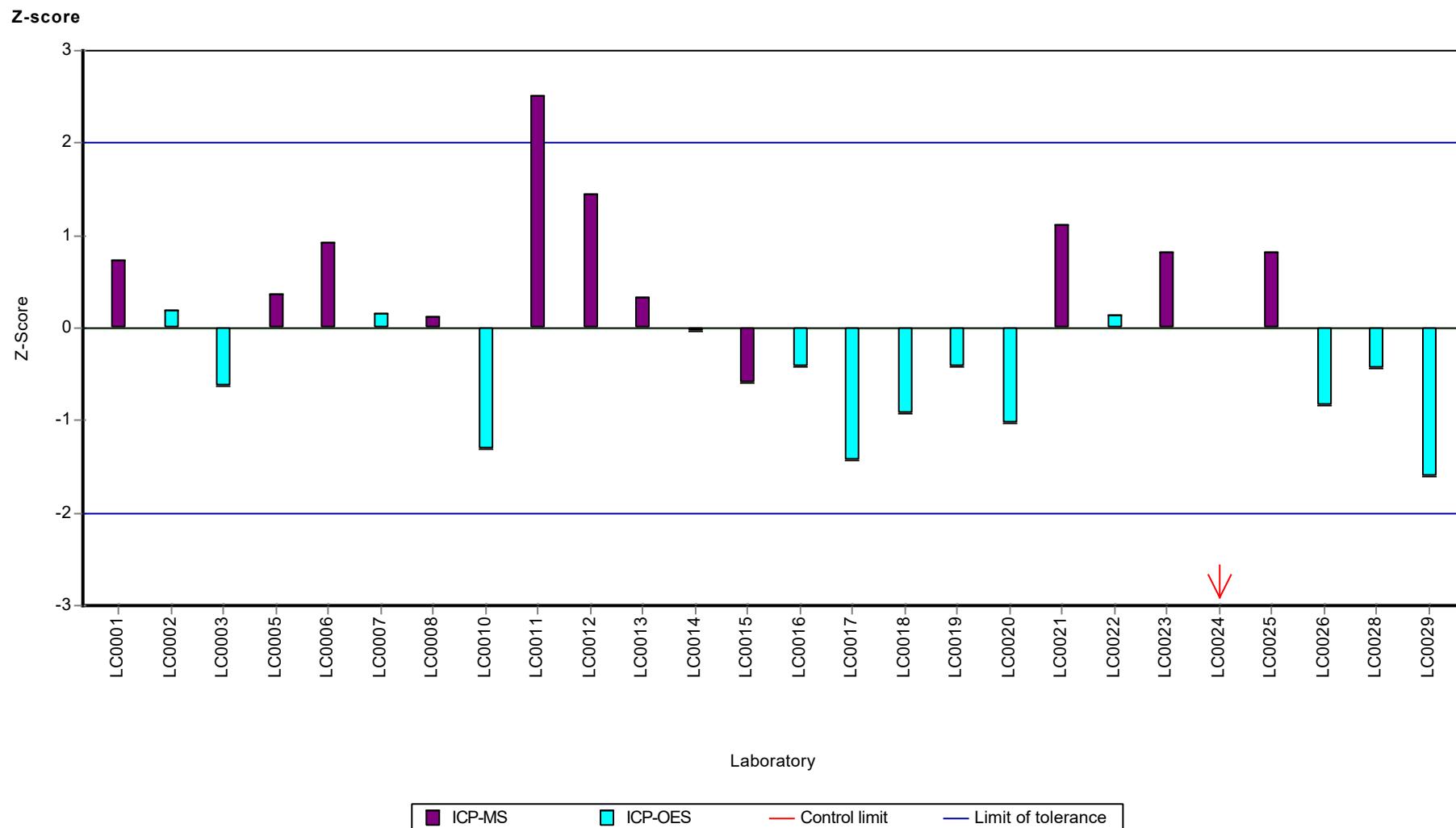
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Iron



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Iron



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Lead

Parameter oriented report

AB14

Lead

Unit	mg/l
Assigned value ± U (k=2)	0.317 ± 0.0159
Criterion	0.0412 (13 %)
Minimum - Maximum	0.238 - 0.397
Control test value ± U (k=2)	0.362 ± 0.0326

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.307	0.0149	96.8	-0.24	
LC0002	0.334	0.0431	105	0.41	
LC0003	0.275	0.183	86.7	-1.02	
LC0004	0.35445	0.05317	112	0.91	
LC0005	0.353	0.064	111	0.87	
LC0006	0.3973	0.057	125	1.95	
LC0007	0.342	0.068	108	0.6	
LC0008	0.239	0.012	75.4	-1.89	
LC0009	0.322	0.1	102	0.12	
LC0010	0.29	0.005	91.5	-0.66	
LC0011	0.268	0.0161	84.5	-1.19	
LC0012	0.33676	0.06735	106	0.48	
LC0013	0.342	0.0837	108	0.6	
LC0014	0.346	0.104	109	0.7	
LC0015	0.3164	0.0254	99.8	-0.02	
LC0016	0.364	0.064	115	1.14	
LC0017	0.26	0.052	82	-1.38	
LC0018	0.293	0.02	92.4	-0.58	
LC0019	0.238	0.024	75.1	-1.92	
LC0020	0.3092	0.0314	97.5	-0.19	
LC0021	0.2686	0.0336	84.7	-1.18	
LC0022	0.351	0.028	111	0.82	
LC0023	0.333	0.05	105	0.39	
LC0024	0.3498	0.0525	110	0.79	
LC0025	0.355	0.018	112	0.92	
LC0026	0.265	0.039	83.6	-1.26	
LC0027	0.344	0.024	108	0.65	
LC0028	0.348	0.052	110	0.75	
LC0029	0.27	0.027	85.1	-1.14	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Lead

Characteristics of parameter

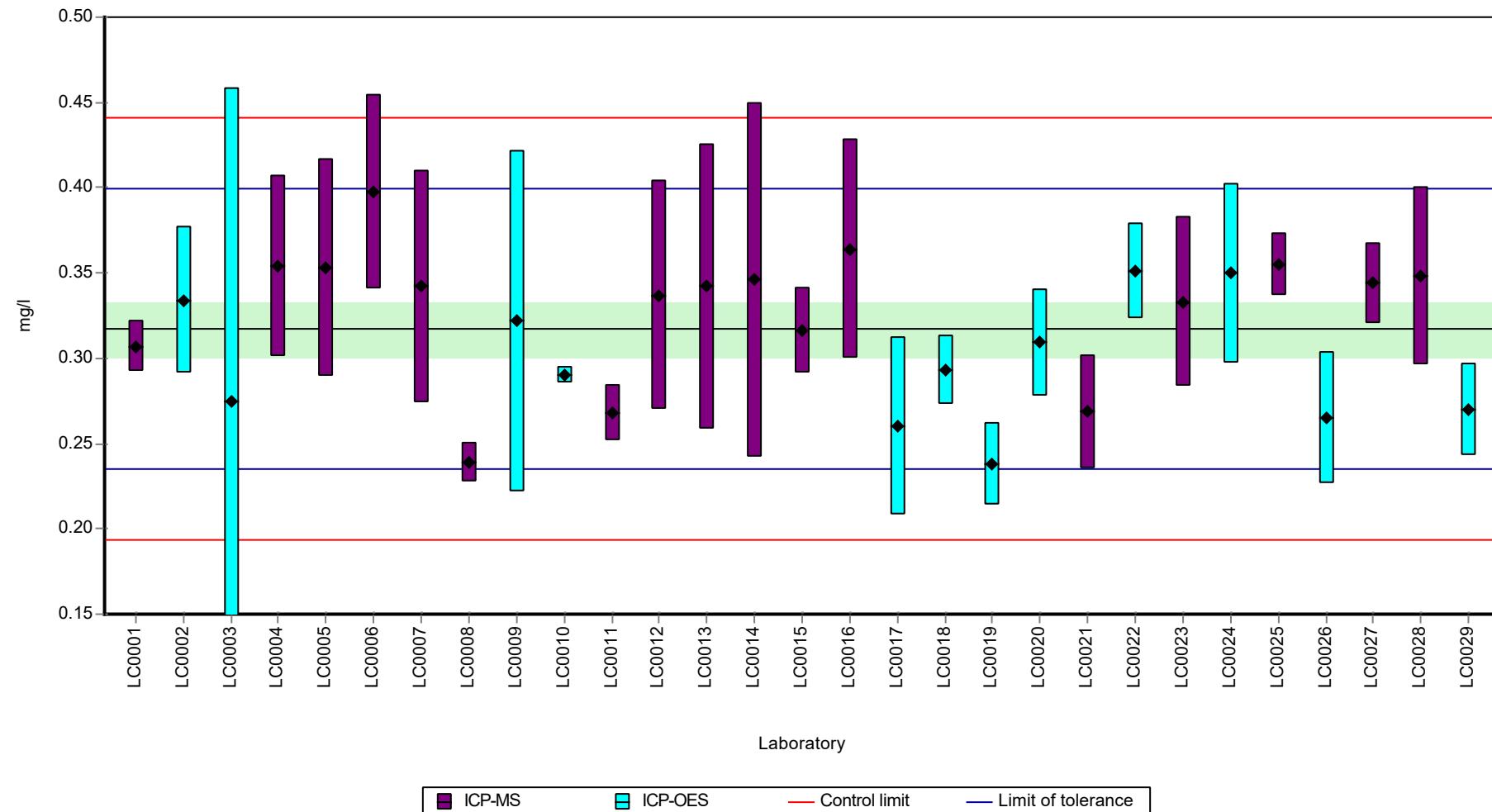
	all results	without outliers	Unit
Mean ± CI (99%)	0.316 ± 0.0231	0.316 ± 0.0231	mg/l
Minimum	0.238	0.238	mg/l
Maximum	0.397	0.397	mg/l
Standard deviation	0.0415	0.0415	mg/l
rel. standard deviation	13.1	13.1	%
n	29	29	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Lead

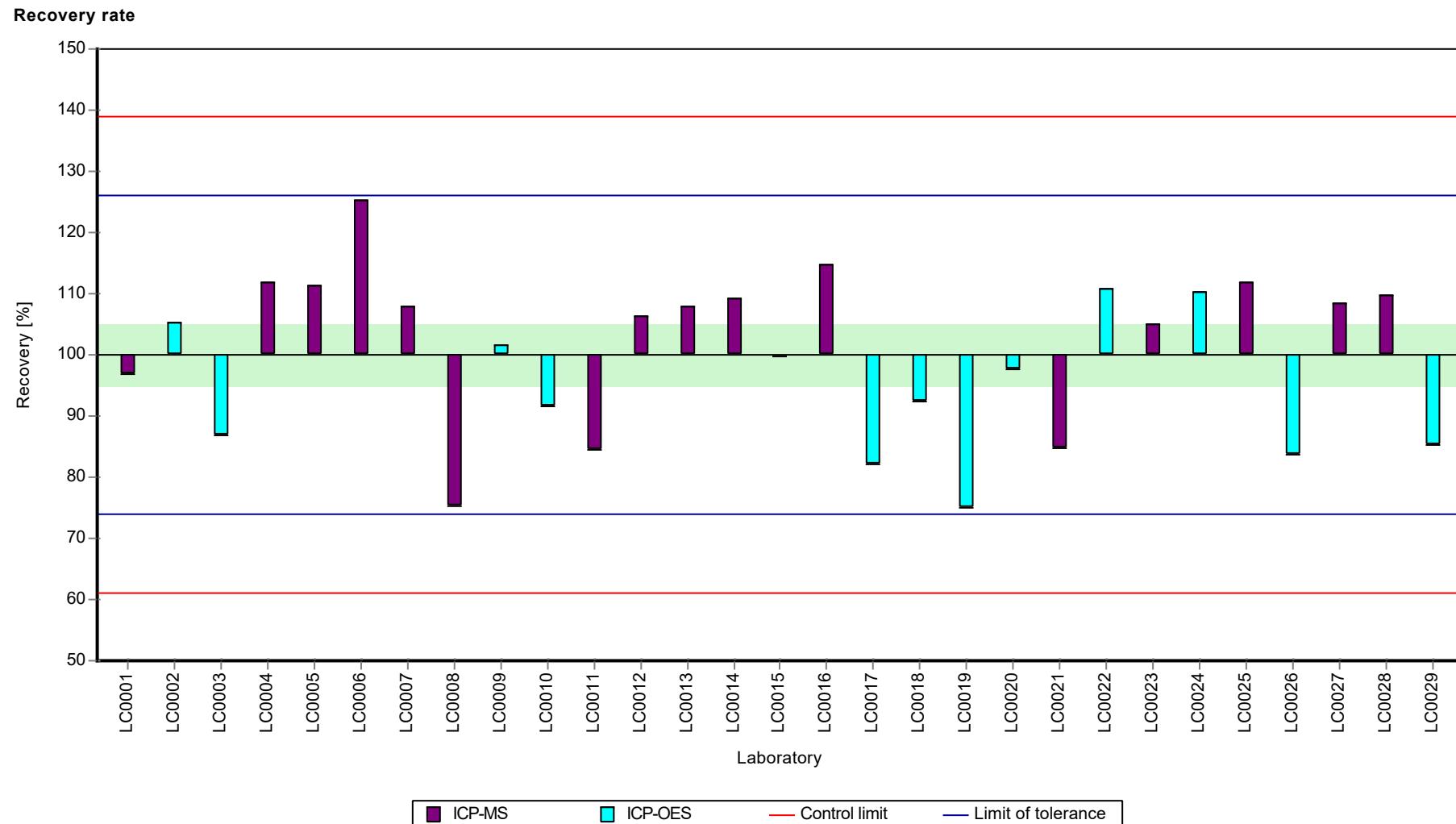
Graphical presentation of results

Results



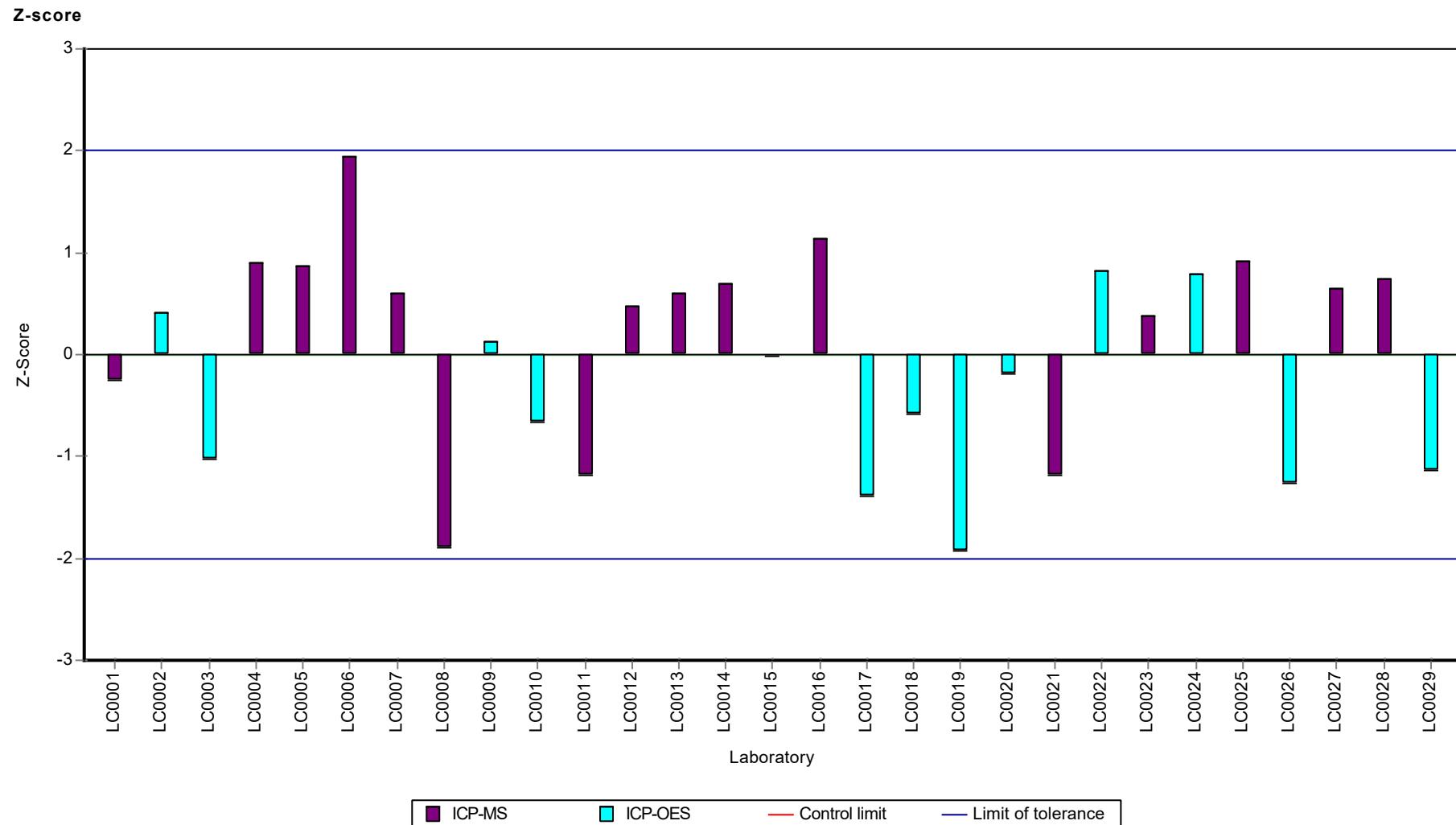
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Lead



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Lead



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14HG, Parameter: Mercury

Parameter oriented report

AB14 HG

Mercury*

Unit mg/l

Assigned value \pm U (k=2) -

Criterion -

Minimum - Maximum 0.00021 - 0.0053

Control test value \pm U (k=2) 0.000327 \pm 0.000049

*Due to the high reproducibility standard deviation (>50%)
no assigned value can be determined. Therefore, the calculated mean value
MV \pm U(k=2) based on the data of the accredited laboratories (n)
after outlier removal is listed for information and can be used
for comparison as part of your internal QA measures.

Labcode	Result	\pm U	Recovery [%]	z-score	Comments
LC0001	0.00404	0.00016	-	-	
LC0002	0.00128	0.00019	-	-	
LC0003	0.00473	0.00165	-	-	
LC0004	0.00299	0.0003	-	-	
LC0005	0.00194	0.0003	-	-	
LC0006	0.00445	0.0008	-	-	
LC0007	0.00069	0.00014	-	-	
LC0008	0.00095	0.00003	-	-	
LC0009	-	-	-	-	
LC0010	0.0031	0.0005	-	-	
LC0011	0.0009	0.00007	-	-	
LC0012	0.00313	0.00063	-	-	
LC0013	0.0035	0.0004	-	-	
LC0014	0.00023	0.00007	-	-	
LC0015	0.00021	0.00003	-	-	
LC0016	0.0042	0.00064	-	-	
LC0017	0.00051	0.0001	-	-	
LC0018	0.00835	0.0008	-	-	
LC0019	0.004	0.0004	-	-	
LC0020	0.00038	0.00000	-	-	
LC0021	0.00346	0.00029	-	-	
LC0022	0.00047	0.00004	-	-	
LC0023	0.00034	0.00007	-	-	
LC0024	0.00077	0.00015	-	-	
LC0025	0.00449	0.00039	-	-	
LC0026	0.005	0.003	-	-	
LC0027	0.00033	0.00004	-	-	
LC0028	0.0053	0.0008	-	-	
LC0029	0.0045	0.00045	-	-	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14HG, Parameter: Mercury

Characteristics of parameter

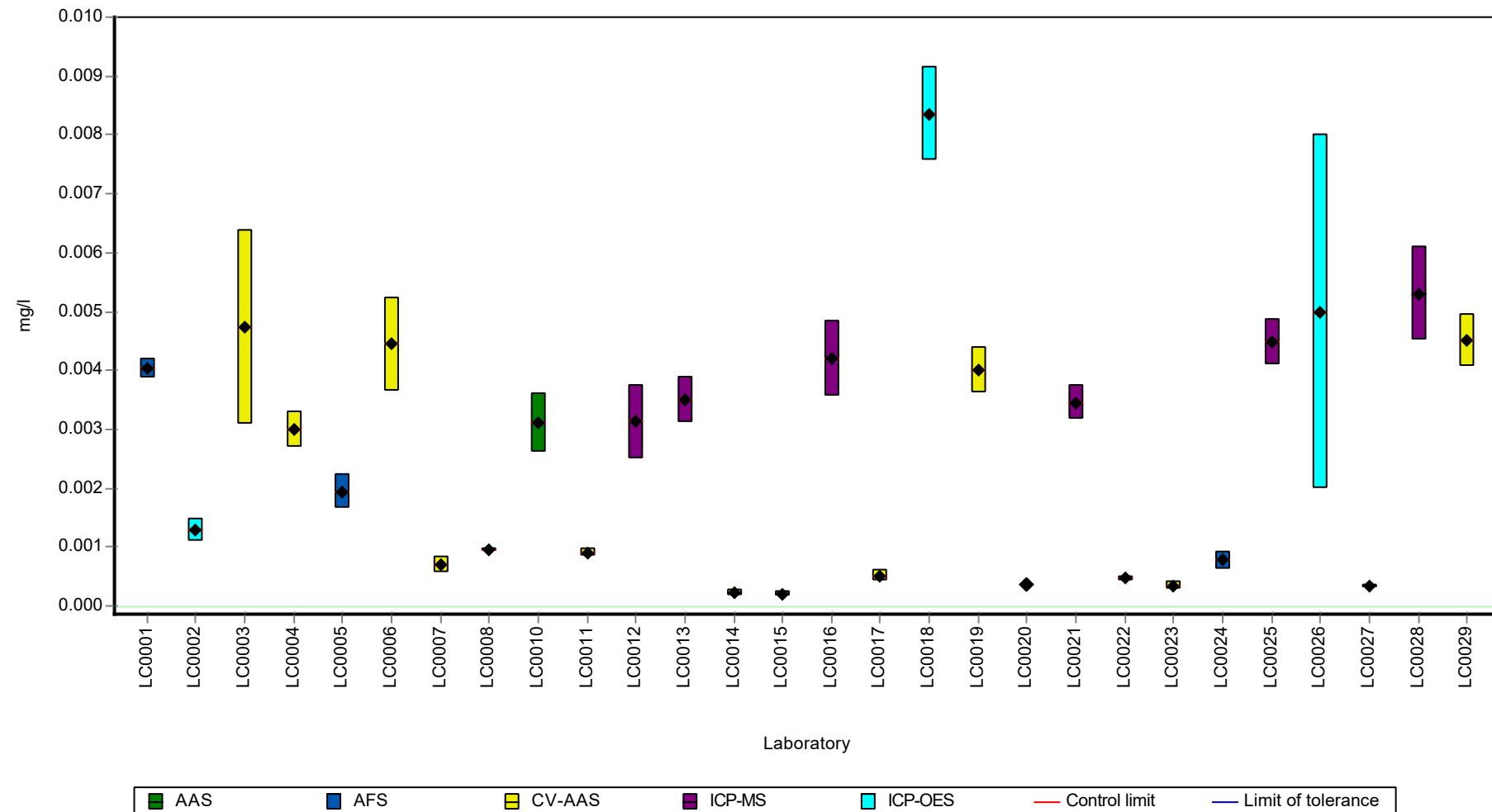
	all results	without outliers	Unit
Mean ± CI (99%)	0.00265 ± 0.0012	0.00265 ± 0.0012	mg/l
Minimum	0.00021	0.00021	mg/l
Maximum	0.00835	0.00835	mg/l
Standard deviation	0.00211	0.00211	mg/l
rel. standard deviation	79.6	79.6	%
n	28	28	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14HG, Parameter: Mercury

Graphical presentation of results

Results



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Molybdenum

Parameter oriented report

AB14

Molybdenum

Unit	mg/l
Assigned value ± U (k=2)	0.401 ± 0.013
Criterion	0.0401 (10 %)
Minimum - Maximum	0.33 - 0.466
Control test value ± U (k=2)	0.368 ± 0.0257

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.429	0.0245	107	0.7	
LC0002	0.406	0.0609	101	0.12	
LC0003	0.398	0.0744	99.2	-0.08	
LC0004	0.43885	0.06583	109	0.94	
LC0005	0.413	0.074	103	0.3	
LC0006	0.3911	0.023	97.5	-0.25	
LC0007	0.417	0.042	104	0.4	
LC0008	0.425	0.022	106	0.6	
LC0009	0.378	0.12	94.2	-0.58	
LC0010	0.4	0.005	99.7	-0.03	
LC0011	0.412	0.0223	103	0.27	
LC0012	0.4225	0.0845	105	0.53	
LC0013	0.42	0.0412	105	0.47	
LC0014	0.466	0.139	116	1.62	
LC0015	0.3758	0.021	93.7	-0.63	
LC0016	0.382	0.042	95.2	-0.48	
LC0017	0.335	0.067	83.5	-1.65	
LC0018	0.4	0.035	99.7	-0.03	
LC0019	0.33	0.023	82.3	-1.77	
LC0020	0.3512	0.0416	87.6	-1.24	
LC0021	0.4317	0.0778	108	0.76	
LC0022	0.399	0.008	99.5	-0.05	
LC0023	0.444	0.067	111	1.07	
LC0024	0.4033	0.0605	101	0.06	
LC0025	0.42	0.024	105	0.47	
LC0026	0.351	0.147	87.5	-1.25	
LC0027	0.428	0.034	107	0.67	
LC0028	0.363	0.054	90.5	-0.95	
LC0029	0.35	0.035	87.3	-1.27	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Molybdenum

Characteristics of parameter

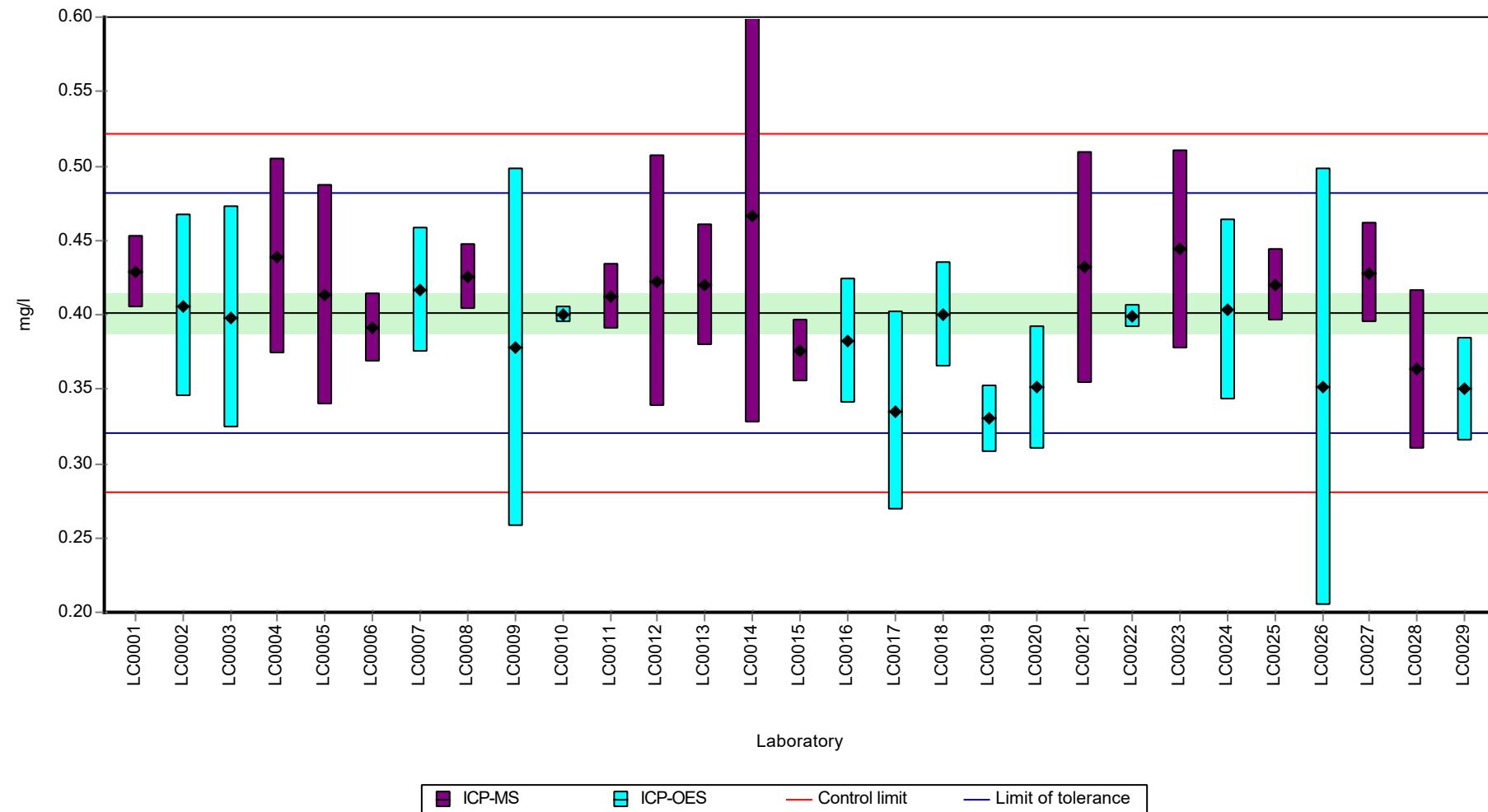
	all results	without outliers	Unit
Mean ± CI (99%)	0.399 ± 0.0189	0.399 ± 0.0189	mg/l
Minimum	0.33	0.33	mg/l
Maximum	0.466	0.466	mg/l
Standard deviation	0.0339	0.0339	mg/l
rel. standard deviation	8.5	8.5	%
n	29	29	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Molybdenum

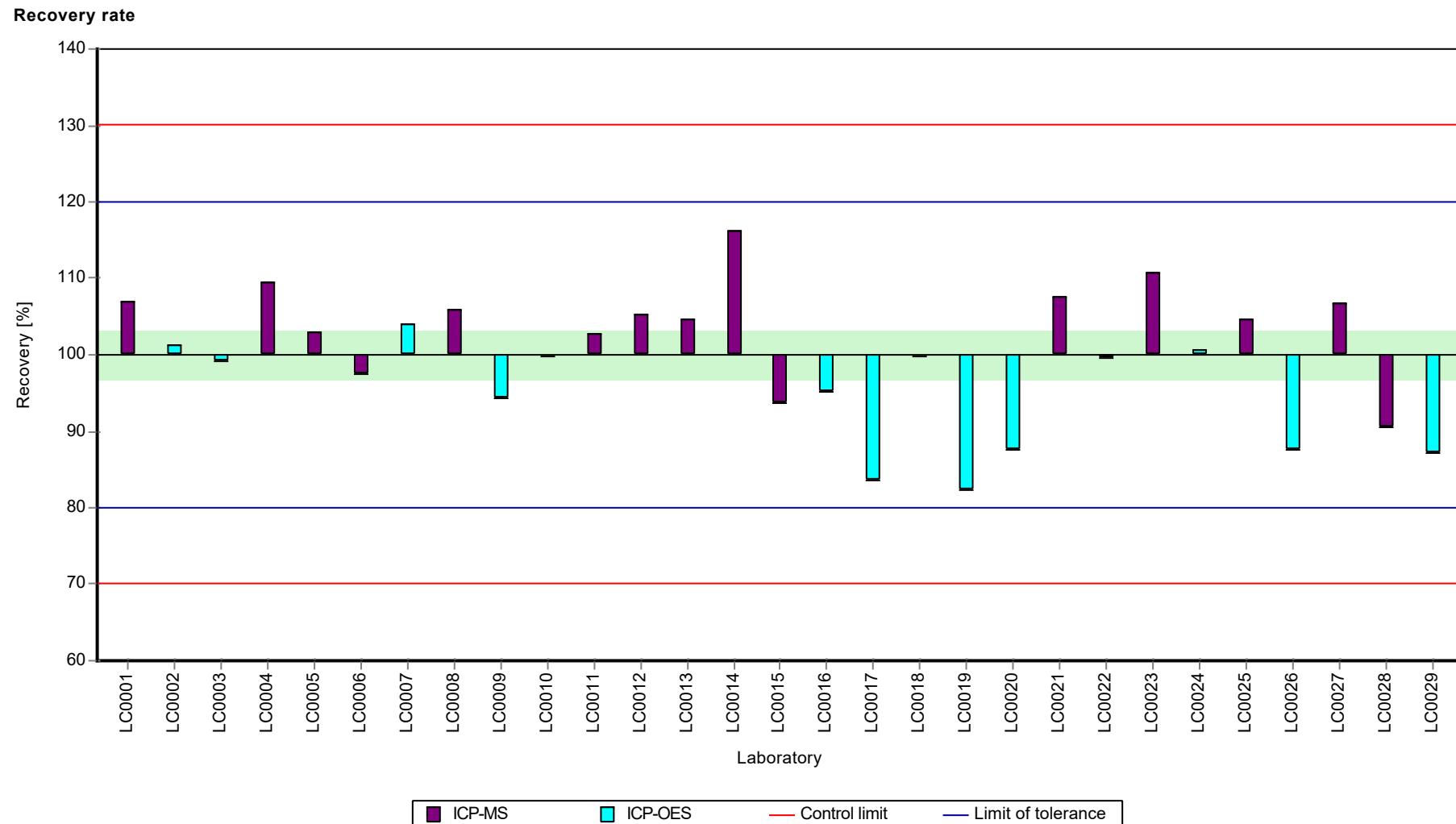
Graphical presentation of results

Results



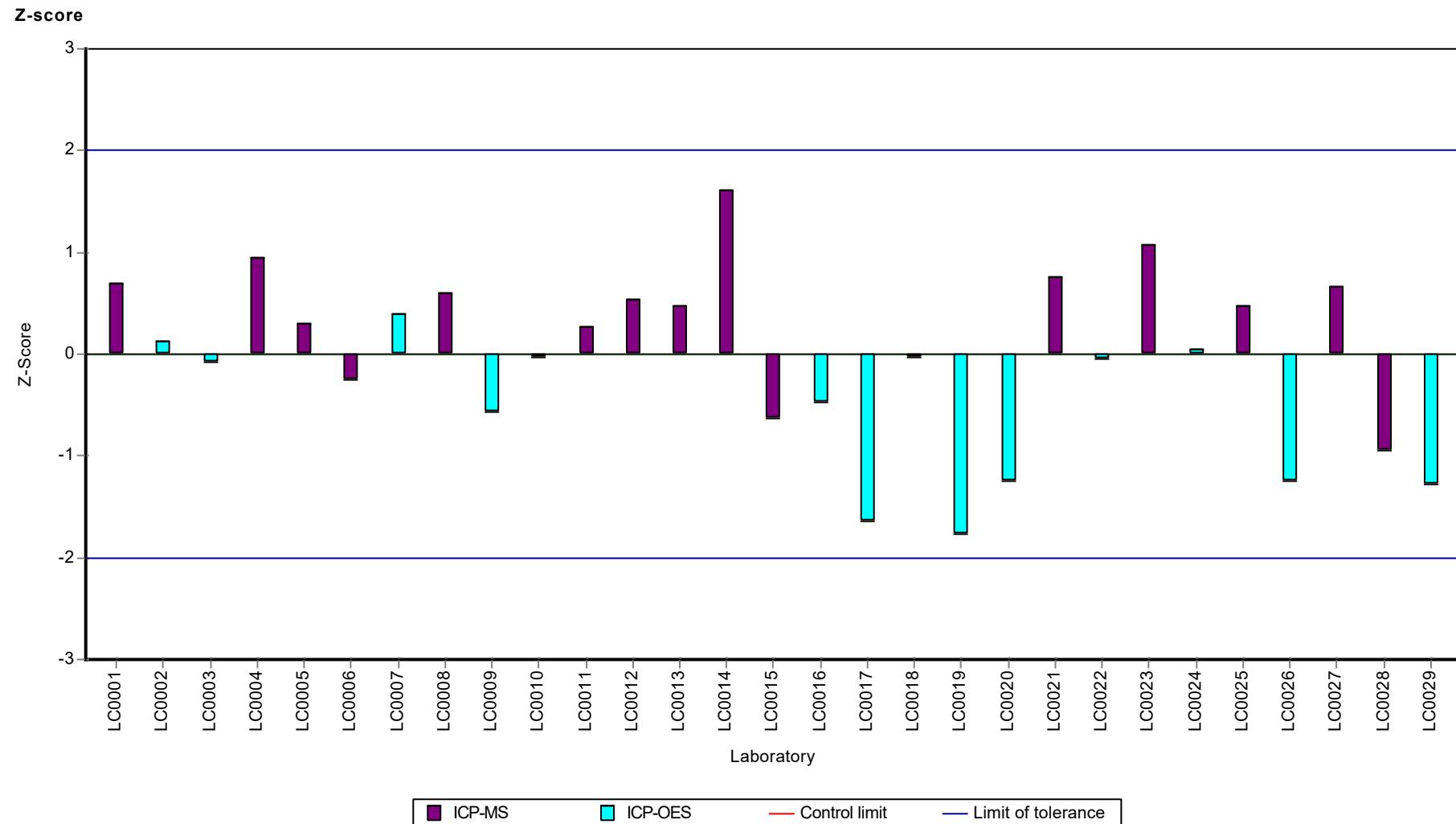
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Molybdenum



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Molybdenum



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Nickel

Parameter oriented report

AB14

Nickel

Unit	mg/l
Assigned value ± U (k=2)	0.0103 ± 0.000538
Criterion	0.00133 (13 %)
Minimum - Maximum	0.007 - 0.0127
Control test value ± U (k=2)	0.0102 ± 0.00123

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0111	0.00054	108	0.63	
LC0002	0.0101	0.00095	98.5	-0.12	
LC0003	< 0.01 (LOQ)	-	-	-	
LC0004	0.01161	0.00174	113	1.02	
LC0005	0.011	0.002	107	0.56	
LC0006	0.0118	0.002	115	1.16	
LC0007	0.0105	0.0021	102	0.18	
LC0008	0.0113	0.0007	110	0.79	
LC0009	0.009	0.003	87.8	-0.94	
LC0010	0.01	0.005	97.5	-0.19	
LC0011	0.01	0.0005	97.5	-0.19	
LC0012	0.01274	0.00255	124	1.87	
LC0013	0.0099	0.0014	96.6	-0.27	
LC0014	0.0108	0.00324	105	0.41	
LC0015	0.0105	0.0008	102	0.18	
LC0016	-	-	-	-	
LC0017	0.00859	0.00172	83.8	-1.25	
LC0018	< 0.001 (LOQ)	-	-	-	FN
LC0019	0.007	0.0007	68.3	-2.44	
LC0020	0.00863	0.0004	84.2	-1.22	
LC0021	0.01179	0.00141	115	1.15	
LC0022	0.01178	0.00065	115	1.15	
LC0023	0.0109	0.0016	106	0.48	
LC0024	0.0089	0.00221	86.8	-1.02	
LC0025	0.0102	0.00051	99.5	-0.04	
LC0026	0.0248	0.004	242	10.91	H
LC0027	0.0105	0.0018	102	0.18	
LC0028	0.0097	0.0015	94.6	-0.42	
LC0029	0.008	0.0008	78	-1.69	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Nickel

Characteristics of parameter

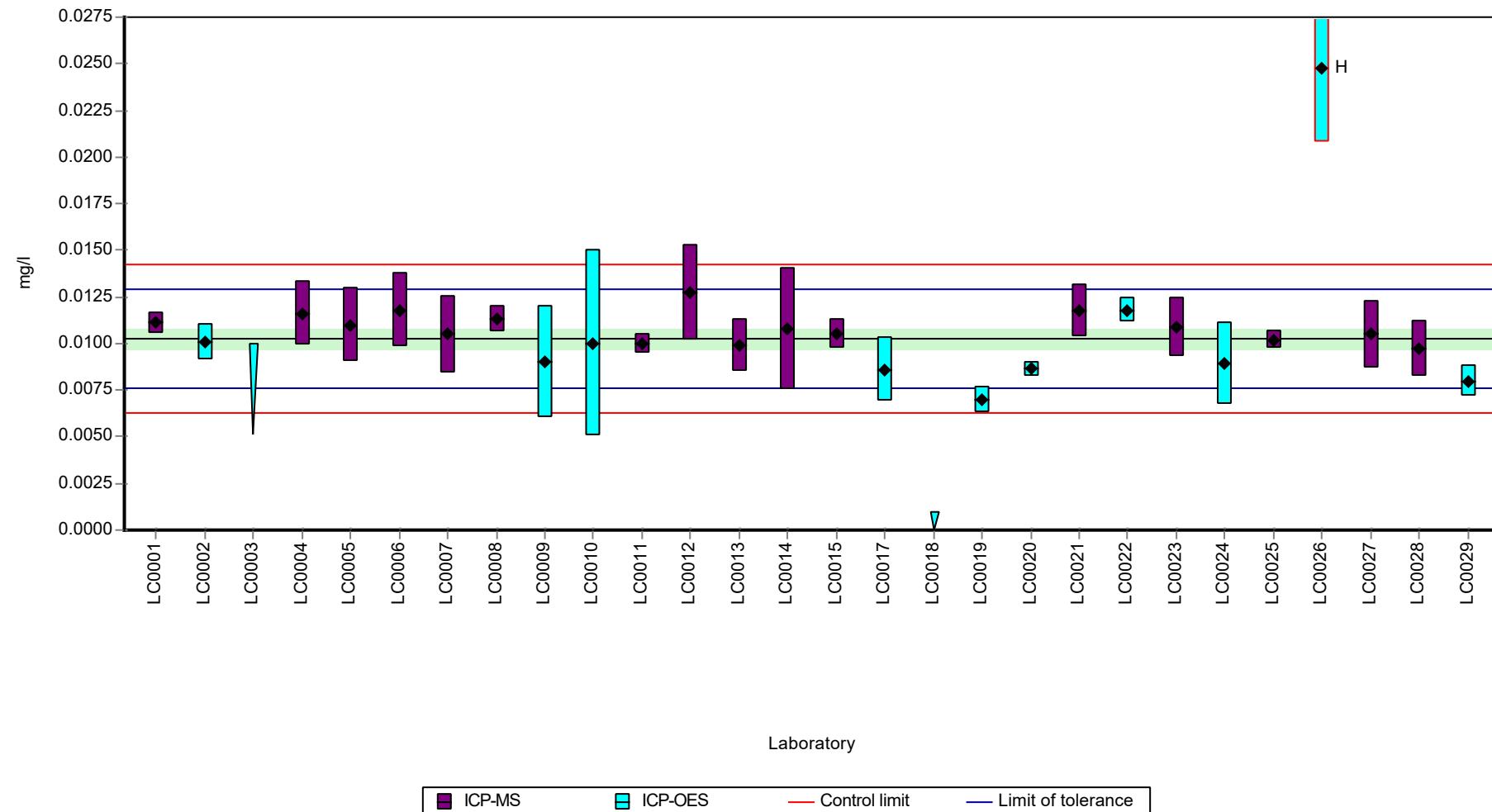
	all results	without outliers	Unit
Mean ± CI (99%)	0.0108 ± 0.00185	0.0103 ± 0.000807	mg/l
Minimum	0.007	0.007	mg/l
Maximum	0.0248	0.0127	mg/l
Standard deviation	0.00314	0.00135	mg/l
rel. standard deviation	29.1	13.1	%
n	26	25	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Nickel

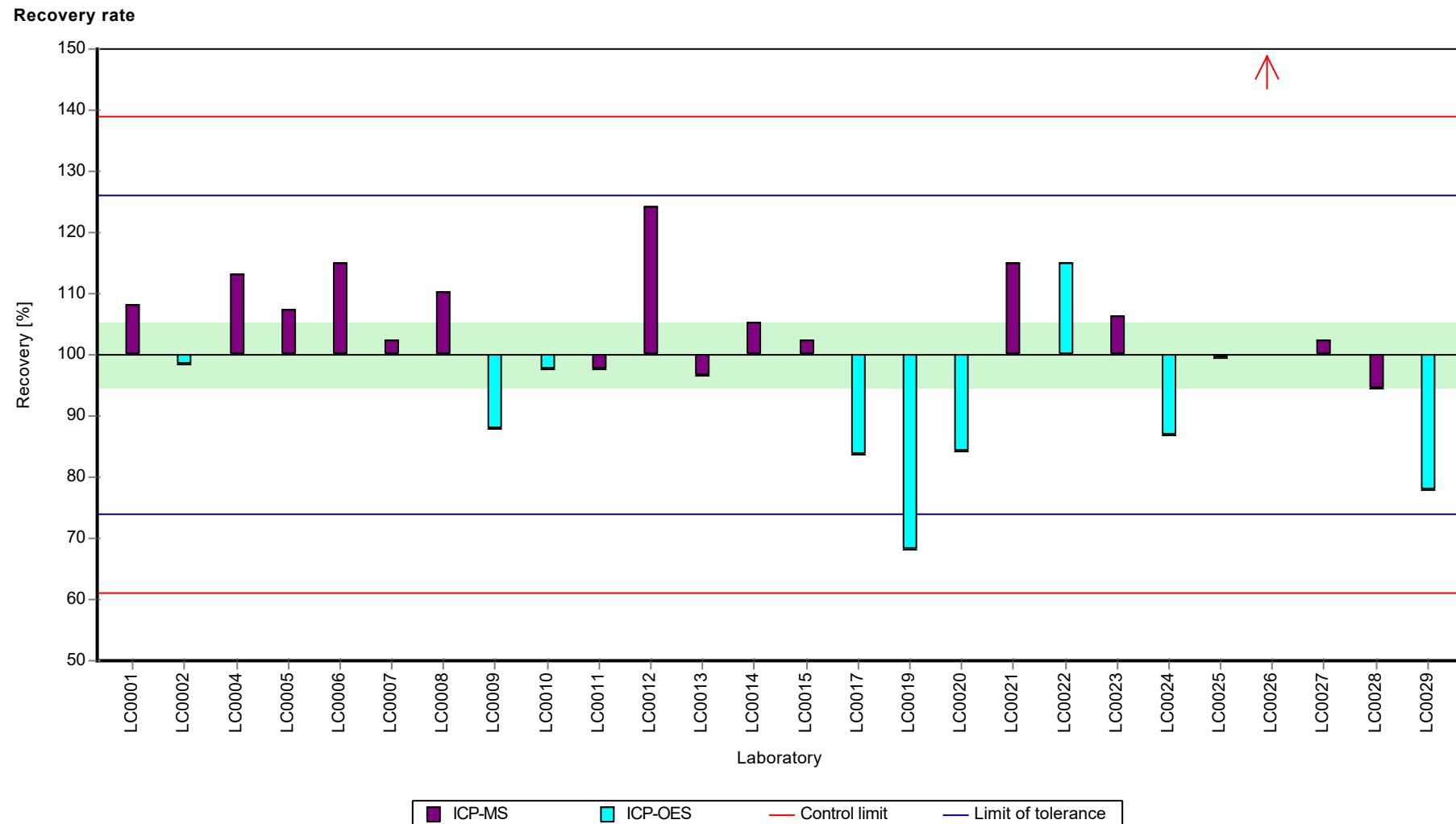
Graphical presentation of results

Results



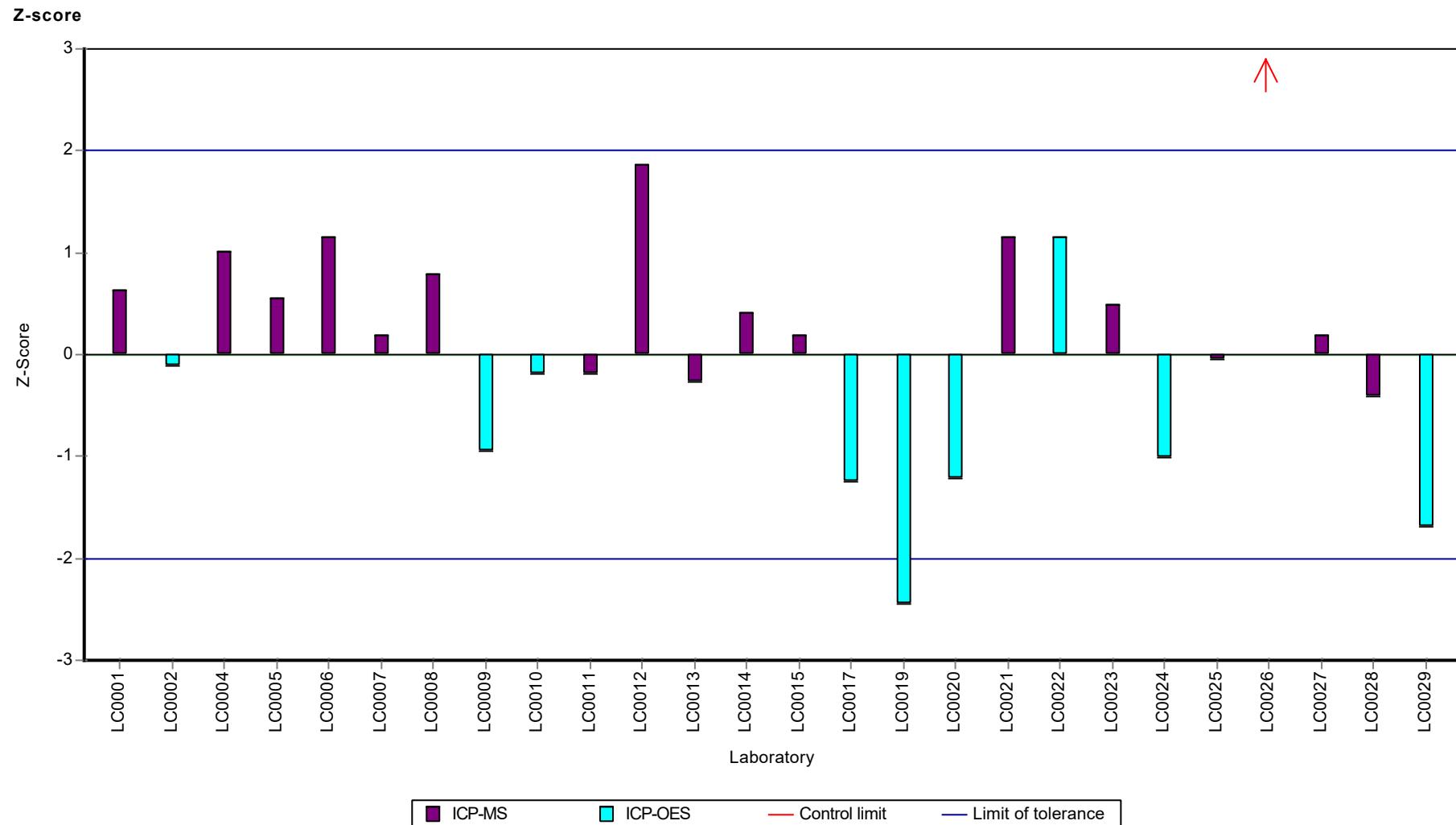
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Nickel



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Nickel



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Selenium

Parameter oriented report

AB14

Selenium

Unit	mg/l
Assigned value ± U (k=2)	0.0118 ± 0.000592
Criterion	0.00141 (12 %)
Minimum - Maximum	0.00835 - 0.0134
Control test value ± U (k=2)	0.0115 ± 0.00172

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0125	0.00071	106	0.53	
LC0002	0.00178	0.00027	15.1	-7.07	H
LC0003	< 0.01 (LOQ)	-	-	-	
LC0004	0.01301	0.00195	111	0.89	
LC0005	0.024	0.004	204	8.69	H
LC0006	0.0134	0.002	114	1.17	
LC0007	0.0132	0.0026	112	1.03	
LC0008	0.0132	0.001	112	1.03	
LC0009	0.013	0.004	111	0.89	
LC0010	0.011	0.005	93.6	-0.53	
LC0011	0.012	0.0013	102	0.18	
LC0012	0.08683	0.01737	739	53.24	H
LC0013	0.0108	0.0018	91.9	-0.67	
LC0014	0.011	0.0033	93.6	-0.53	
LC0015	0.0132	0.001	112	1.03	
LC0016	0.0122	0.0023	104	0.32	
LC0017	0.00924	0.00185	78.6	-1.78	
LC0018	0.00835	0.0008	71.1	-2.41	
LC0019	0.011	0.0013	93.6	-0.53	
LC0020	0.00935	0.001	79.6	-1.7	
LC0021	0.01282	0.00179	109	0.76	
LC0022	0.0111	0.0015	94.5	-0.46	
LC0023	0.0114	0.0017	97	-0.25	
LC0024	0.0109	0.00174	92.8	-0.6	
LC0025	0.0118	0.00059	100	0.03	
LC0026	0.0131	0.006	111	0.96	
LC0027	0.0127	0.0008	108	0.67	
LC0028	0.133	0.02	1130	85.99	H
LC0029	0.072	0.0072	613	42.73	H

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Selenium

Characteristics of parameter

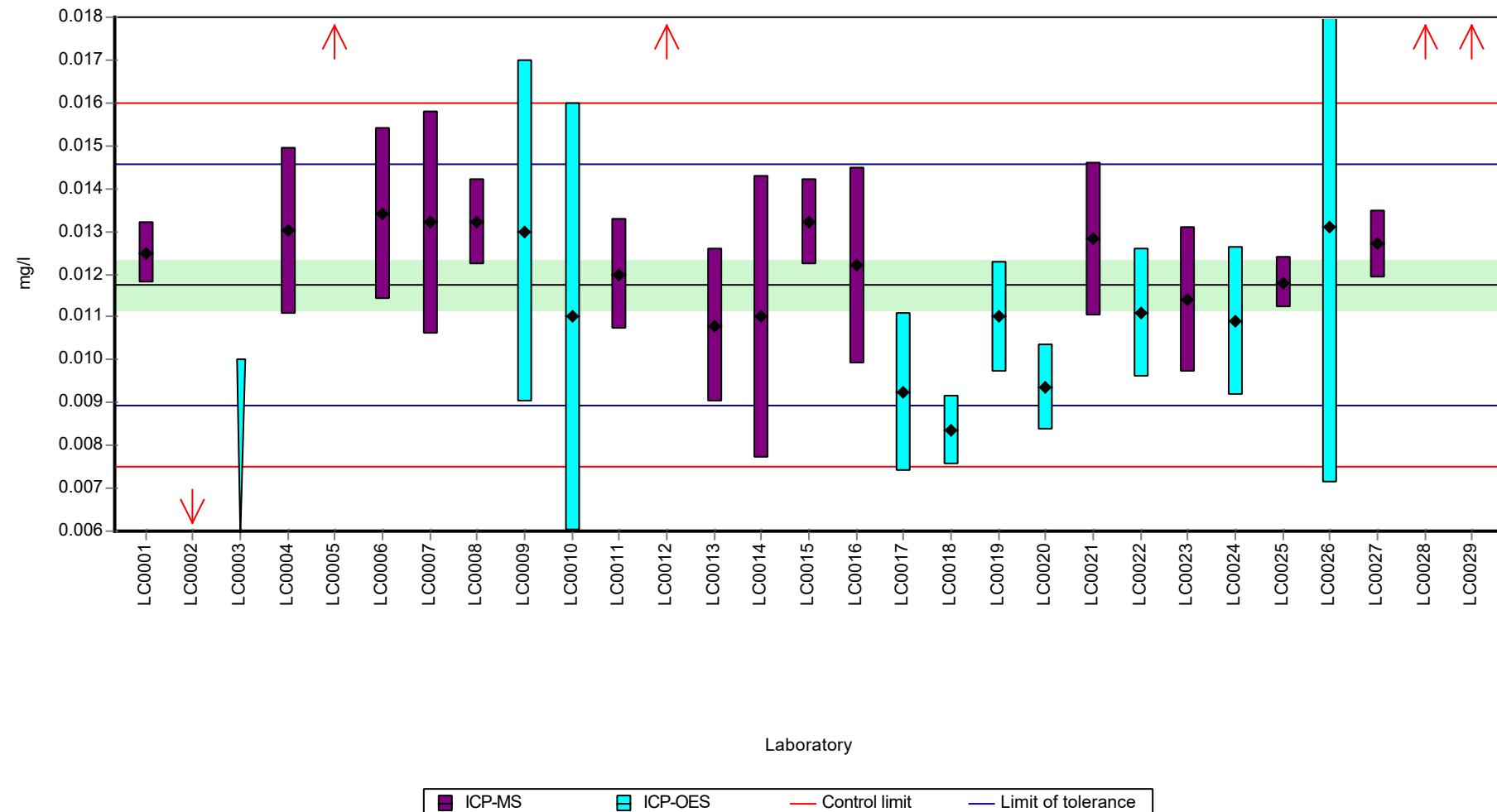
	all results	without outliers	Unit
Mean ± CI (99%)	0.021 ± 0.0161	0.0118 ± 0.000888	mg/l
Minimum	0.00178	0.00835	mg/l
Maximum	0.133	0.0134	mg/l
Standard deviation	0.0285	0.00142	mg/l
rel. standard deviation	136	12.1	%
n	28	23	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Selenium

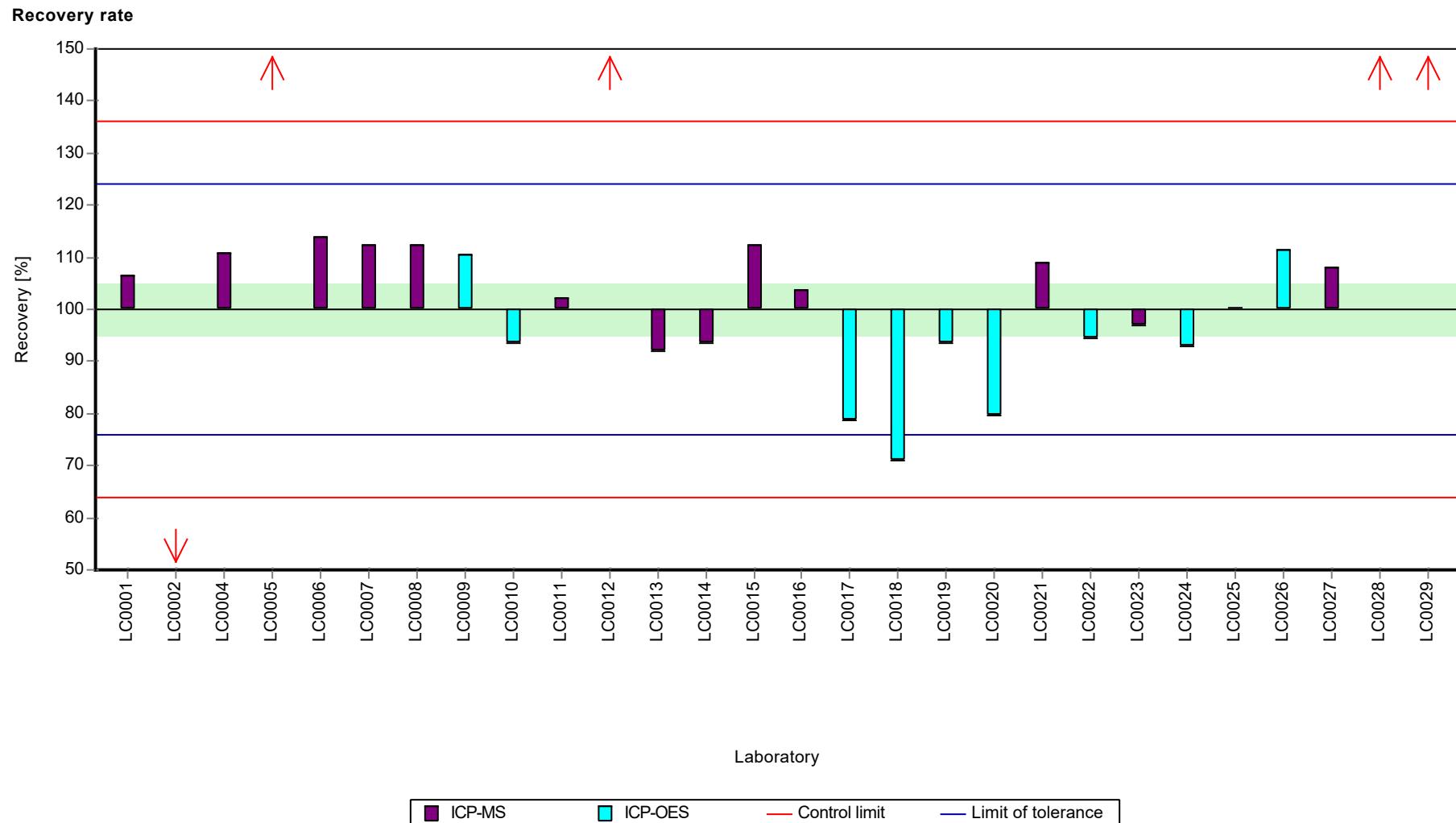
Graphical presentation of results

Results



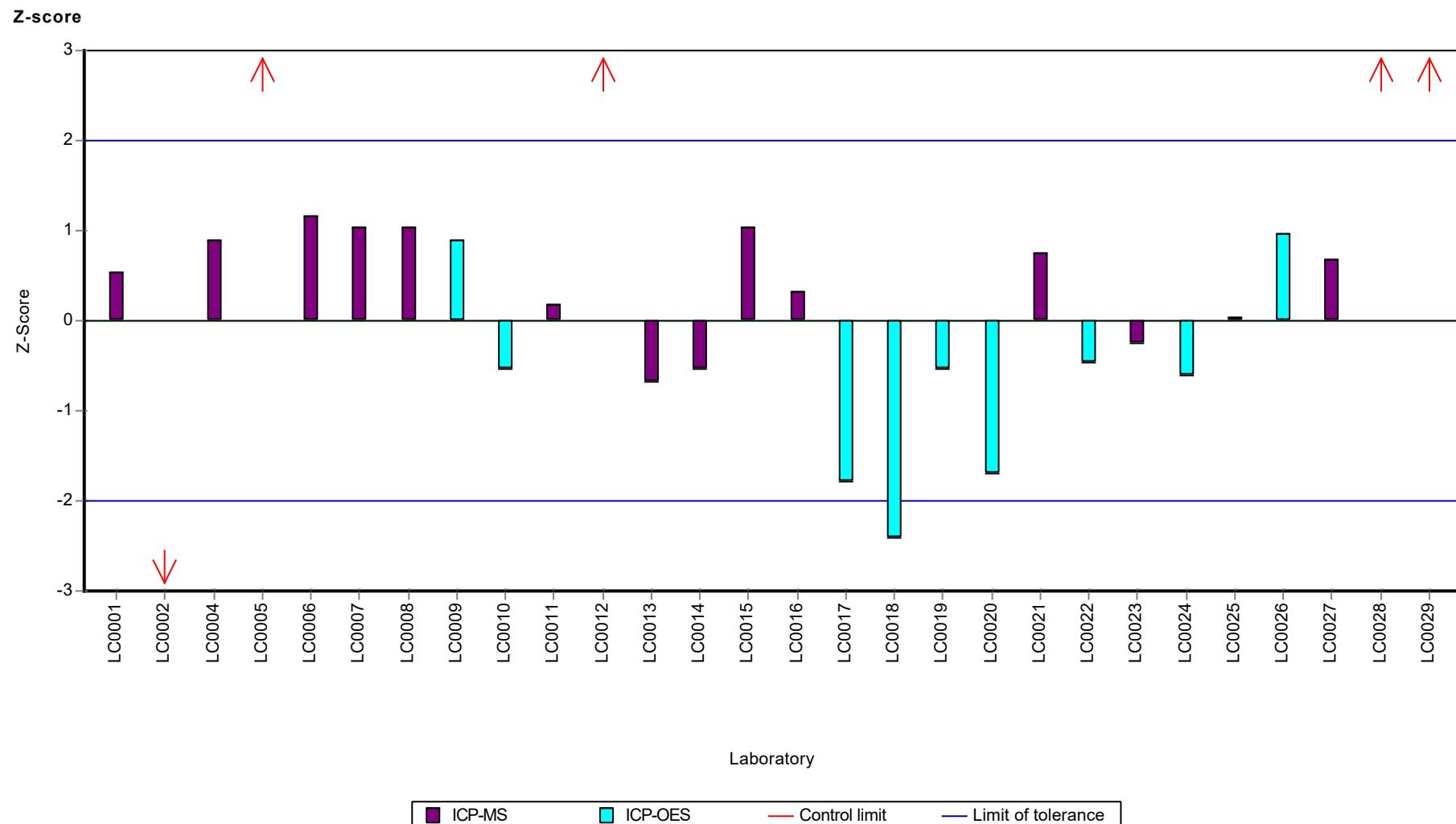
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Selenium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Selenium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Silver

Parameter oriented report

AB14

Silver*

Unit	mg/l	
Assigned value ± U (k=2)	-	
Criterion	-	MV (n=7; accr.) +/- U(k=2): <0.005 (0.00196+/-0.00084) mg/l
Minimum - Maximum	0.00093 - 0.00425	
Control test value ± U (k=2)	0.00131 ± 0.000118	

*Due to the high reproducibility standard deviation (>50%) no assigned value can be determined. Therefore, the calculated mean value MV +/- U(k=2) based on the data of the accredited laboratories (n) after outlier removal is listed for information and can be used for comparison as part of your internal QA measures.

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.005 (LOQ)	-	-	-	
LC0002	0.00425	0.00064	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 0.02 (LOQ)	-	-	-	
LC0006	< 0.003 (LOQ)	-	-	-	
LC0007	0.00183	0.00037	-	-	
LC0008	0.00093	0.00009	-	-	
LC0009	-	-	-	-	
LC0010	0.005	0.005	-	-	H
LC0011	0.001	0.0001	-	-	
LC0012	0.0016	0.00032	-	-	
LC0013	0.0018	0.0002	-	-	
LC0014	0.00169	0.00051	-	-	
LC0015	< 0.05 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	< 0.005 (LOQ)	-	-	-	
LC0018	0.00087	0.00009	-	-	
LC0019	< 0.005 (LOQ)	-	-	-	
LC0020	-	-	-	-	
LC0021	< 0.002 (LOQ)	-	-	-	
LC0022	< 0.005 (LOQ)	-	-	-	
LC0023	< 0.01 (LOQ)	-	-	-	
LC0024	< 0.01 (LOQ)	-	-	-	
LC0025	0.00225	0.00016	-	-	
LC0026	0.0017	0.0009	-	-	
LC0027	-	-	-	-	
LC0028	< 0.005 (LOQ)	-	-	-	
LC0029	< 0.01 (LOQ)	-	-	-	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

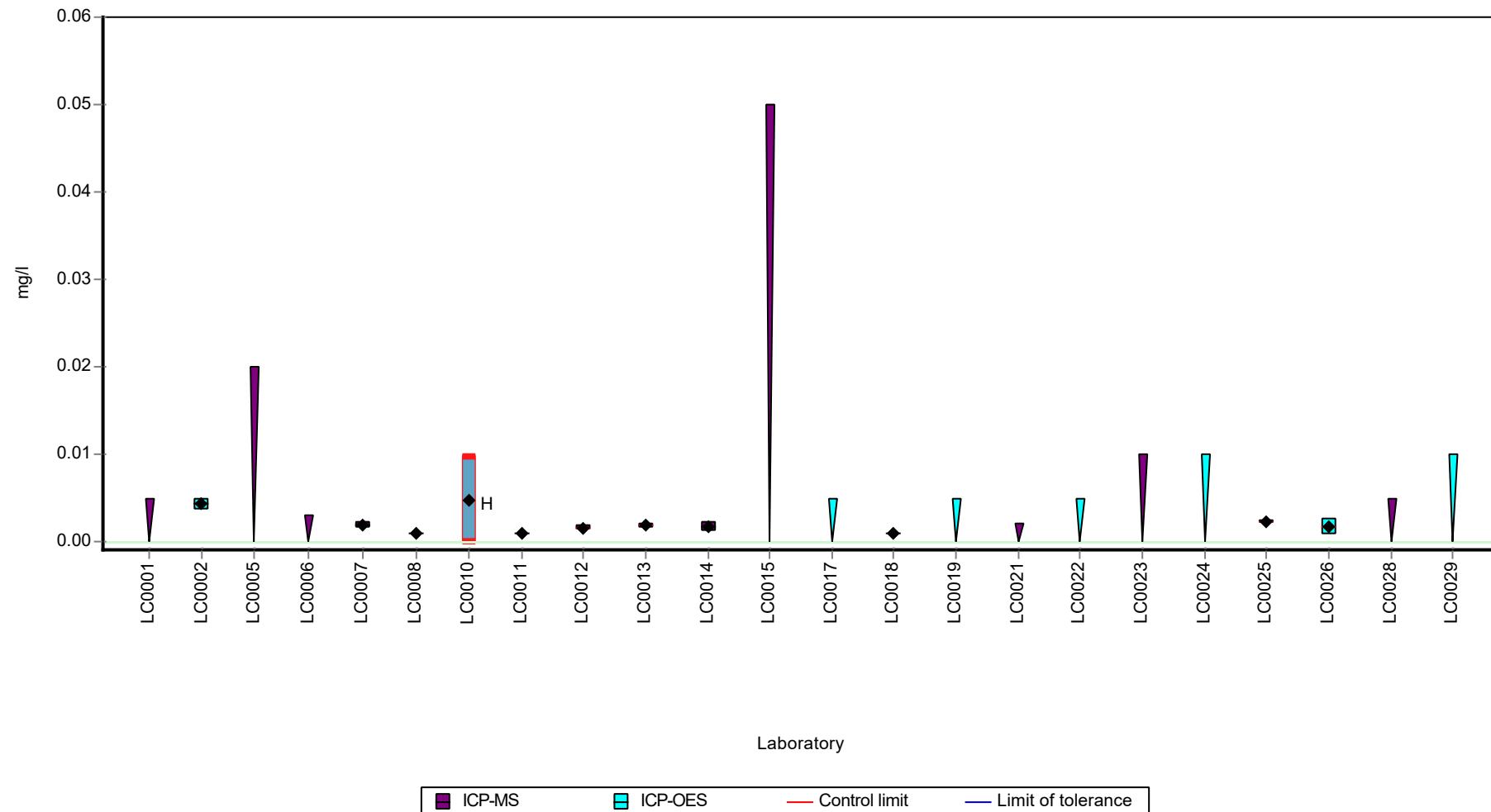
Sample: AB14, Parameter: Silver

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.00208 ± 0.00121	0.00179 ± 0.00924	mg/l
Minimum	0.000869	0.00093	mg/l
Maximum	0.005	0.00425	mg/l
Standard deviation	0.00134	0.000974	mg/l
rel. standard deviation	64.2	54.4	%
n	11	10	-

Graphical presentation of results

Results



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Tin

Parameter oriented report

AB14

Tin

Unit	mg/l
Assigned value ± U (k=2)	0.0296 ± 0.00112
Criterion	0.00296 (10 %)
Minimum - Maximum	0.0249 - 0.033
Control test value ± U (k=2)	0.0334 ± 0.00334

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0313	0.0015	106	0.56	
LC0002	0.0292	0.00438	98.5	-0.15	
LC0003	0.0487	0.0249	164	6.43	H
LC0004	-	-	-	-	
LC0005	0.033	0.006	111	1.13	
LC0006	0.0317	0.002	107	0.69	
LC0007	0.0301	0.003	102	0.15	
LC0008	0.0315	0.002	106	0.62	
LC0009	-	-	-	-	
LC0010	0.025	0.005	84.3	-1.57	
LC0011	0.029	0.0028	97.8	-0.22	
LC0012	0.03162	0.00632	107	0.67	
LC0013	0.0305	0.0042	103	0.29	
LC0014	0.0306	0.00918	103	0.32	
LC0015	0.0249	0.0037	84	-1.6	
LC0016	-	-	-	-	
LC0017	0.0276	0.0055	93.1	-0.69	
LC0018	0.0272	0.002	91.7	-0.83	
LC0019	0.02	0.002	67.5	-3.25	H
LC0020	-	-	-	-	
LC0021	0.02949	0.0029	99.5	-0.05	
LC0022	0.0296	0.0037	99.8	-0.02	
LC0023	0.0322	0.0064	109	0.86	
LC0024	< 0.01 (LOQ)	-	-	-	FN
LC0025	0.0315	0.0016	106	0.62	
LC0026	0.0301	0.006	102	0.15	
LC0027	-	-	-	-	
LC0028	0.0295	0.004	99.5	-0.05	
LC0029	0.025	0.0025	84.3	-1.57	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Tin

Characteristics of parameter

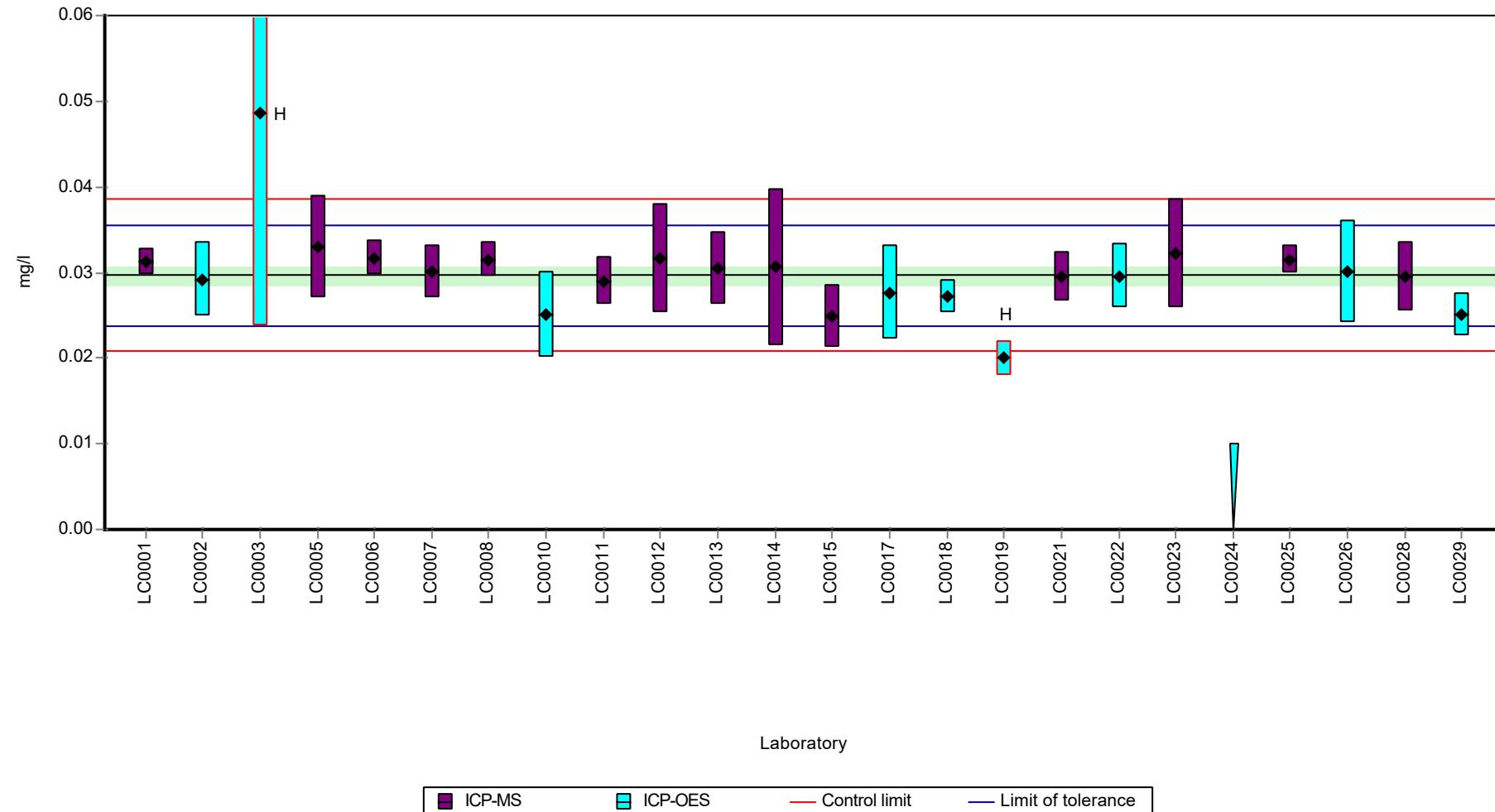
	all results	without outliers	Unit
Mean ± CI (99%)	0.03 ± 0.00318	0.0296 ± 0.00156	mg/l
Minimum	0.02	0.0249	mg/l
Maximum	0.0487	0.033	mg/l
Standard deviation	0.00508	0.00239	mg/l
rel. standard deviation	17	8.08	%
n	23	21	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Tin

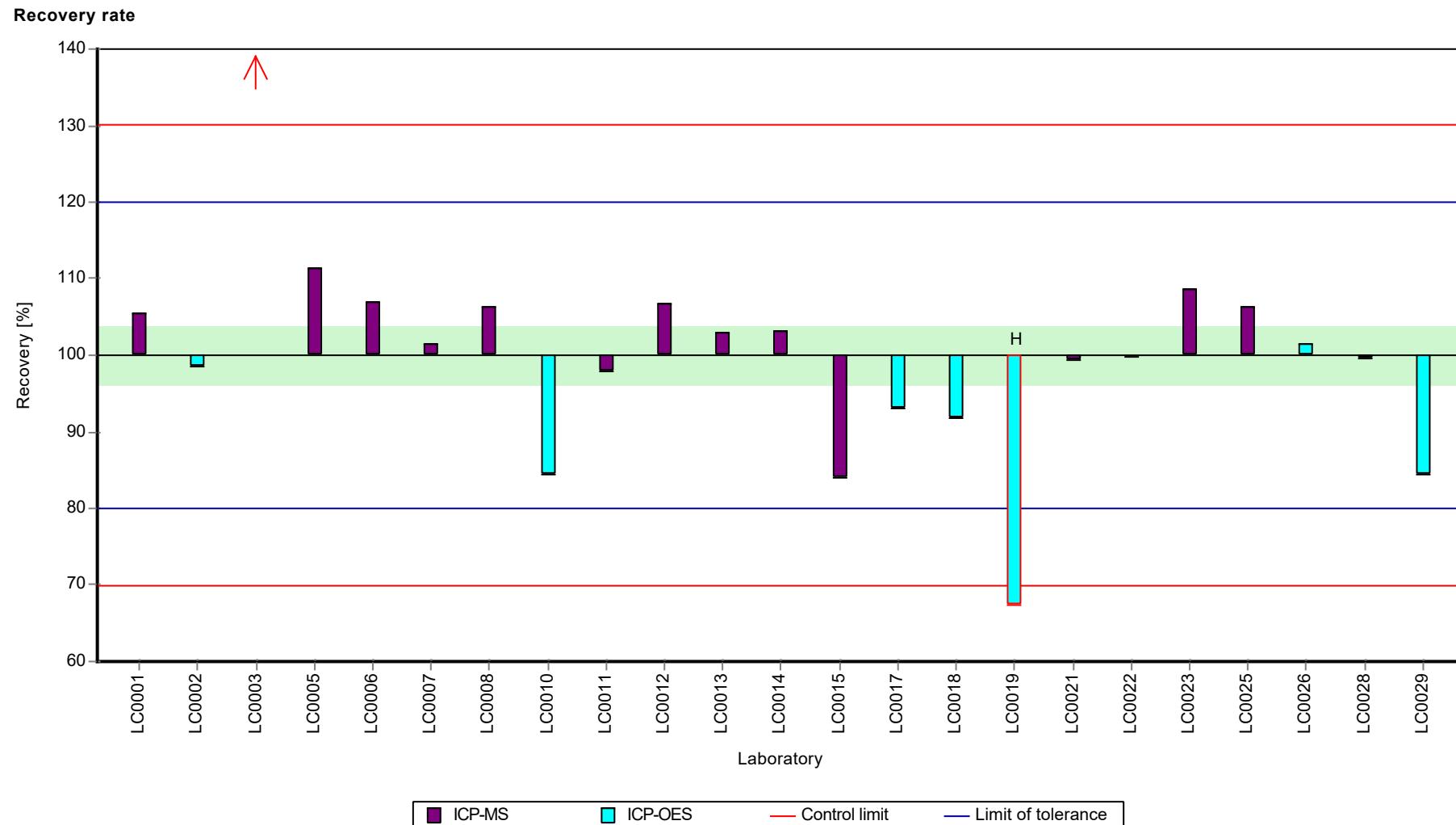
Graphical presentation of results

Results



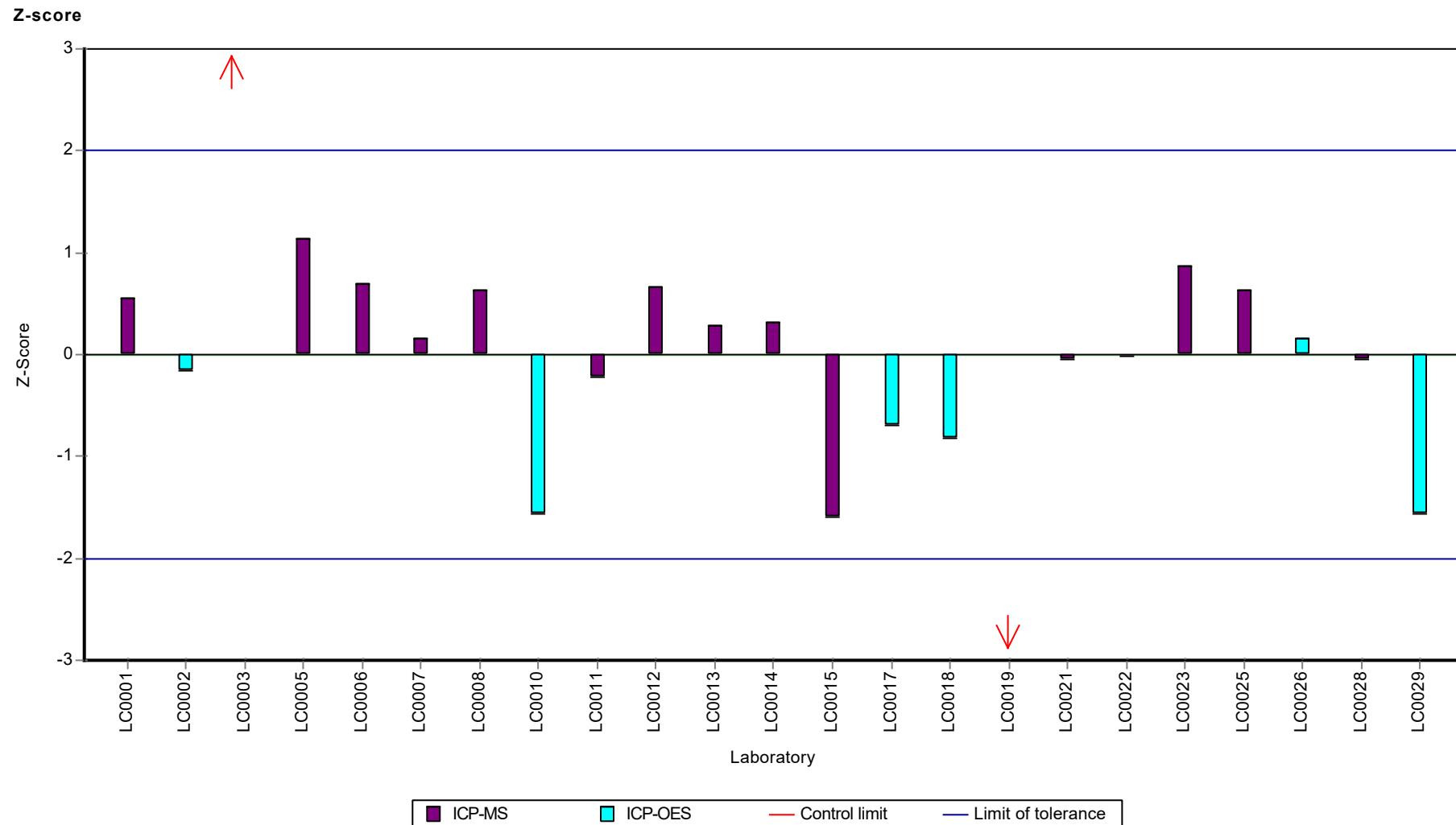
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Tin



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Tin



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Vanadium

Parameter oriented report

AB14

Vanadium

Unit	mg/l
Assigned value ± U (k=2)	0.0184 ± 0.00132
Criterion	0.00313 (17 %)
Minimum - Maximum	0.0133 - 0.0245
Control test value ± U (k=2)	0.0181 ± 0.00181

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.0218	0.00118	119	1.09	
LC0002	0.0176	0.00264	95.7	-0.25	
LC0003	0.0137	0.00752	74.5	-1.5	
LC0004	-	-	-	-	
LC0005	< 0.02 (LOQ)	-	-	-	
LC0006	0.0202	0.004	110	0.58	
LC0007	0.0193	0.0039	105	0.29	
LC0008	0.0207	0.001	113	0.74	
LC0009	-	-	-	-	
LC0010	0.015	0.005	81.6	-1.08	
LC0011	0.018	0.0008	97.9	-0.12	
LC0012	0.02447	0.00489	133	1.94	
LC0013	0.0183	0.0022	99.5	-0.03	
LC0014	0.0205	0.00615	111	0.67	
LC0015	0.0192	0.0029	104	0.26	
LC0016	0.0169	0.004	91.9	-0.48	
LC0017	0.0146	0.0029	79.4	-1.21	
LC0018	0.0133	0.001	72.3	-1.63	
LC0019	-	-	-	-	
LC0020	-	-	-	-	
LC0021	0.02356	0.00318	128	1.65	
LC0022	0.01725	0.00069	93.8	-0.36	
LC0023	0.0212	0.0032	115	0.9	
LC0024	0.0164	0.00279	89.2	-0.64	
LC0025	0.0191	0.00099	104	0.23	
LC0026	0.014	0.007	76.1	-1.4	
LC0027	-	-	-	-	
LC0028	0.0195	0.0029	106	0.36	
LC0029	0.061	0.0061	332	13.63	H

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Vanadium

Characteristics of parameter

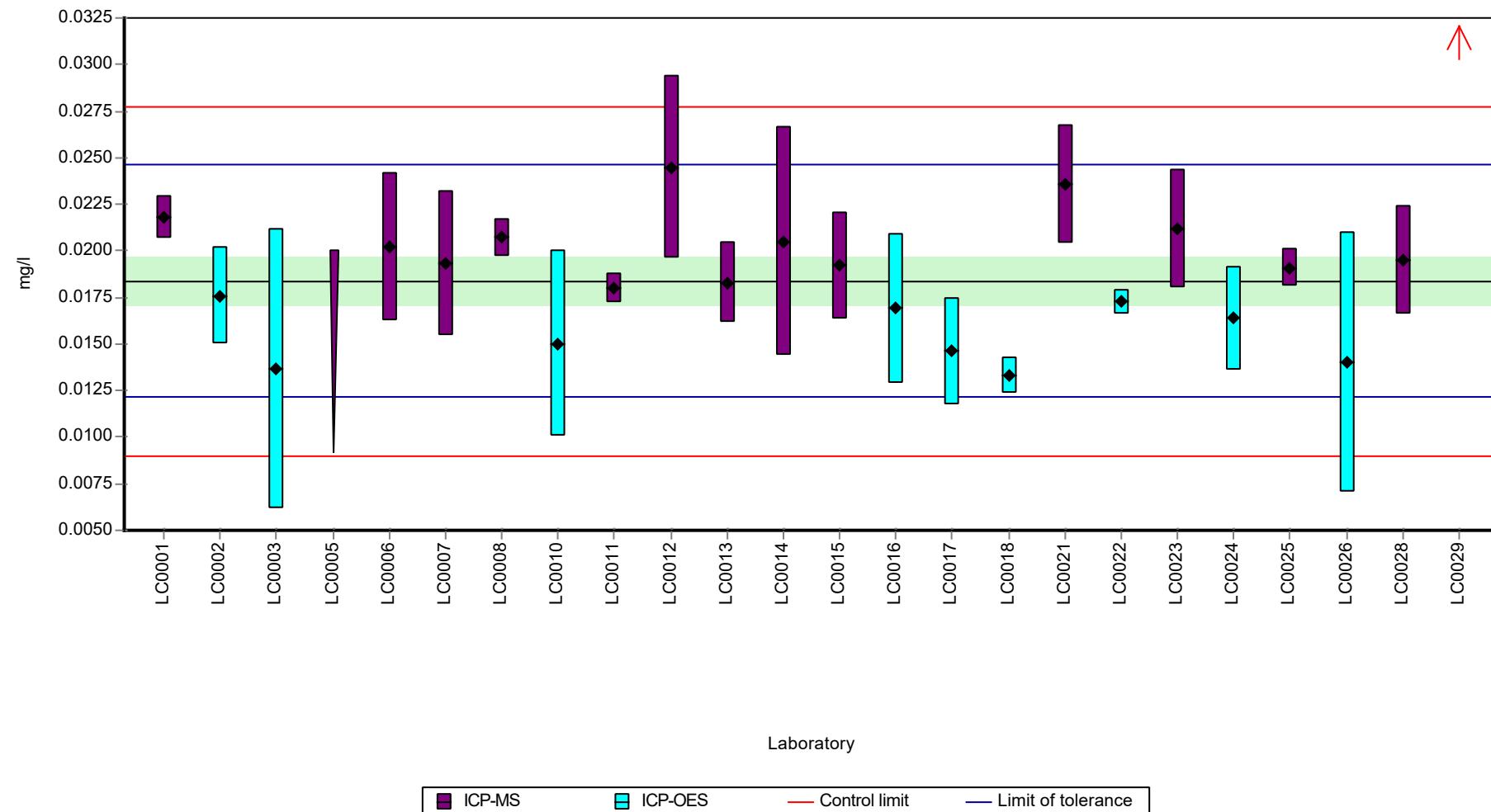
	all results	without outliers	Unit
Mean ± CI (99%)	0.0202 ± 0.00587	0.0184 ± 0.00198	mg/l
Minimum	0.0133	0.0133	mg/l
Maximum	0.061	0.0245	mg/l
Standard deviation	0.00938	0.00309	mg/l
rel. standard deviation	46.4	16.8	%
n	23	22	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Vanadium

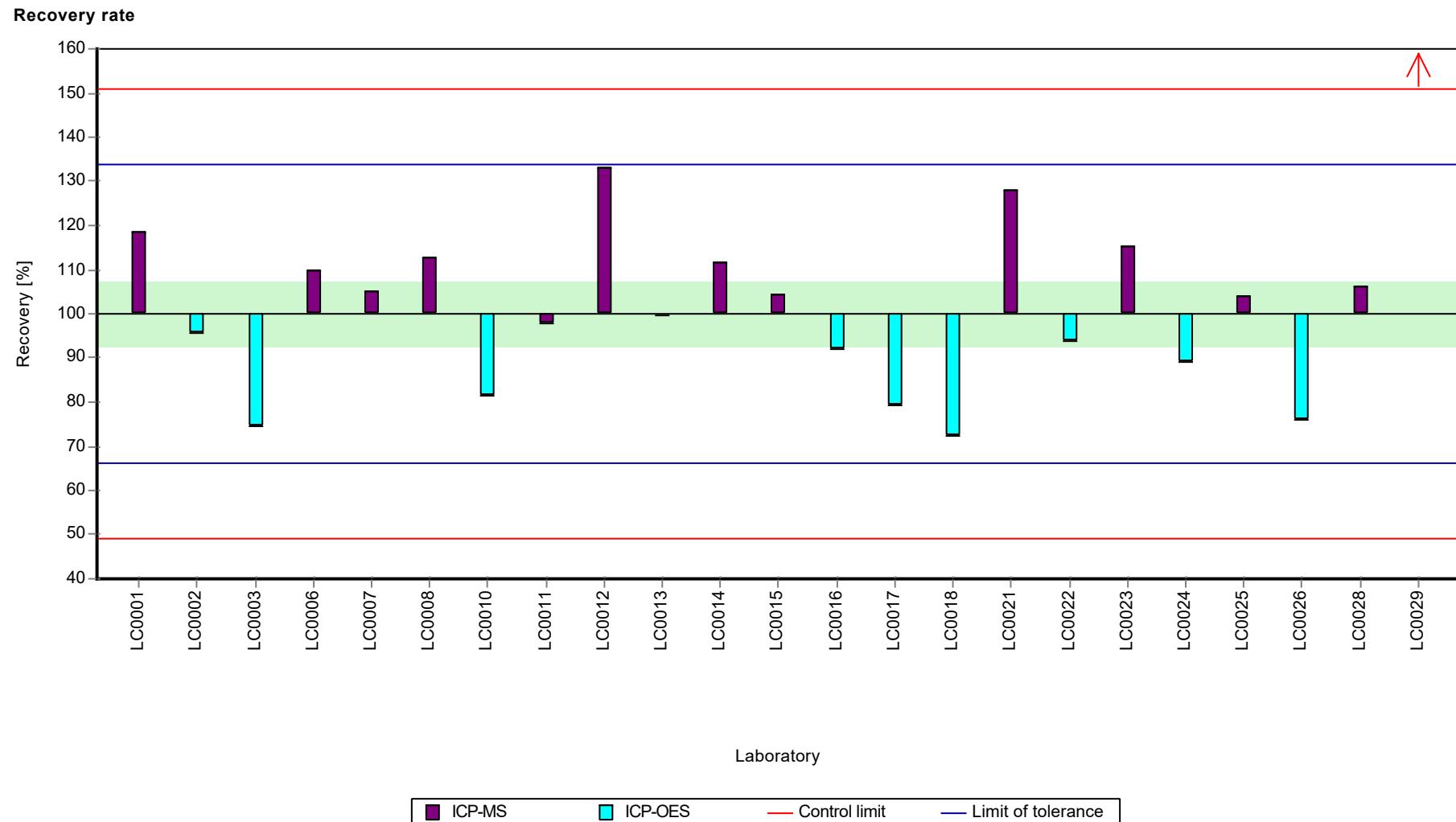
Graphical presentation of results

Results



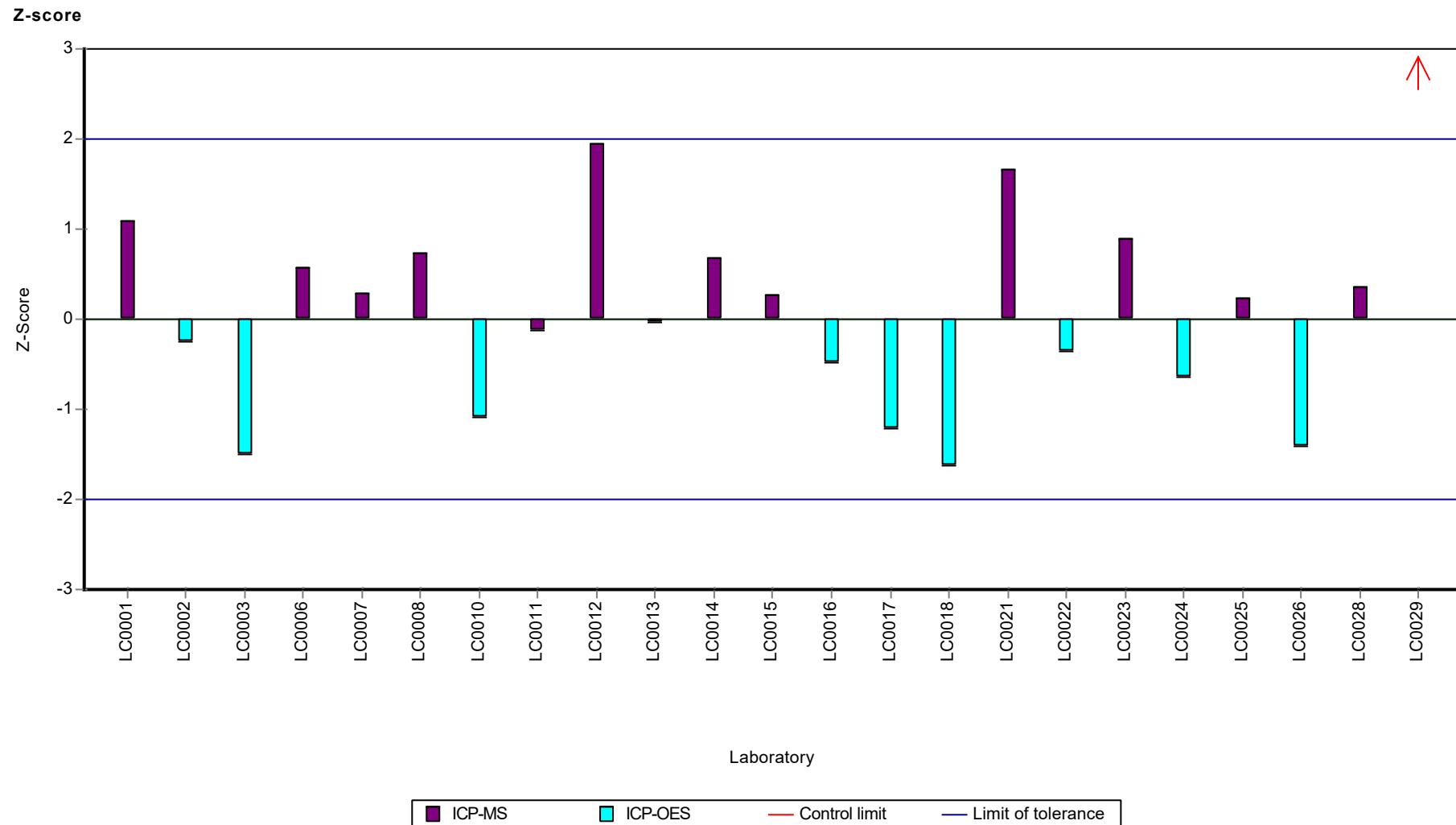
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Vanadium



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Vanadium



Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Zinc

Parameter oriented report

AB14

Zinc

Unit	mg/l
Assigned value ± U (k=2)	0.429 ± 0.0175
Criterion	0.0472 (11 %)
Minimum - Maximum	0.337 - 0.539
Control test value ± U (k=2)	0.386 ± 0.0463

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.437	0.0186	102	0.16	
LC0002	0.432	0.0461	101	0.06	
LC0003	0.337	0.104	78.5	-1.95	
LC0004	0.48497	0.07275	113	1.18	
LC0005	0.432	0.078	101	0.06	
LC0006	0.5149	0.065	120	1.81	
LC0007	0.45	0.045	105	0.44	
LC0008	0.438	0.025	102	0.18	
LC0009	0.419	0.13	97.6	-0.22	
LC0010	0.38	0.005	88.5	-1.04	
LC0011	0.539	0.0456	126	2.32	
LC0012	0.45824	0.09165	107	0.61	
LC0013	0.4156	0.0644	96.8	-0.29	
LC0014	0.471	0.141	110	0.88	
LC0015	0.4719	0.0515	110	0.9	
LC0016	0.474	0.068	110	0.95	
LC0017	0.373	0.075	86.9	-1.19	
LC0018	0.379	0.03	88.3	-1.07	
LC0019	0.384	0.023	89.4	-0.96	
LC0020	0.4177	0.0199	97.3	-0.25	
LC0021	0.4558	0.0752	106	0.56	
LC0022	0.455	0.03	106	0.54	
LC0023	0.421	0.084	98.1	-0.18	
LC0024	0.4023	0.05632	93.7	-0.57	
LC0025	0.433	0.022	101	0.08	
LC0026	0.392	0.039	91.3	-0.79	
LC0027	0.388	0.039	90.4	-0.88	
LC0028	0.455	0.068	106	0.54	
LC0029	0.34	0.034	79.2	-1.89	

Parameter oriented report Waste acc to landfill
directive (eluate metals) - AB14

Sample: AB14, Parameter: Zinc

Characteristics of parameter

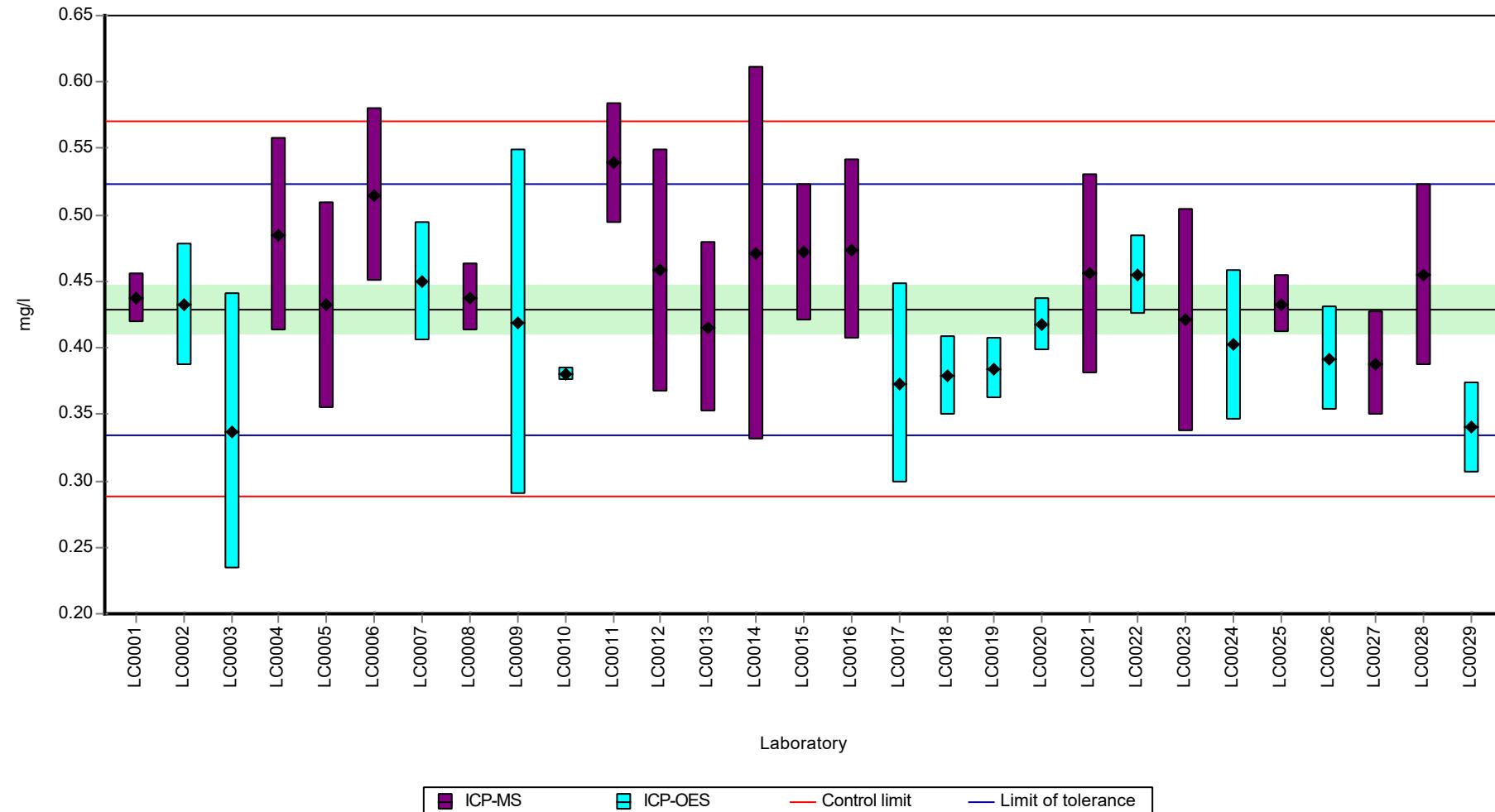
	all results	without outliers	Unit
Mean ± CI (99%)	0.429 ± 0.0263	0.429 ± 0.0263	mg/l
Minimum	0.337	0.337	mg/l
Maximum	0.539	0.539	mg/l
Standard deviation	0.0472	0.0472	mg/l
rel. standard deviation	11	11	%
n	29	29	-

Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Zinc

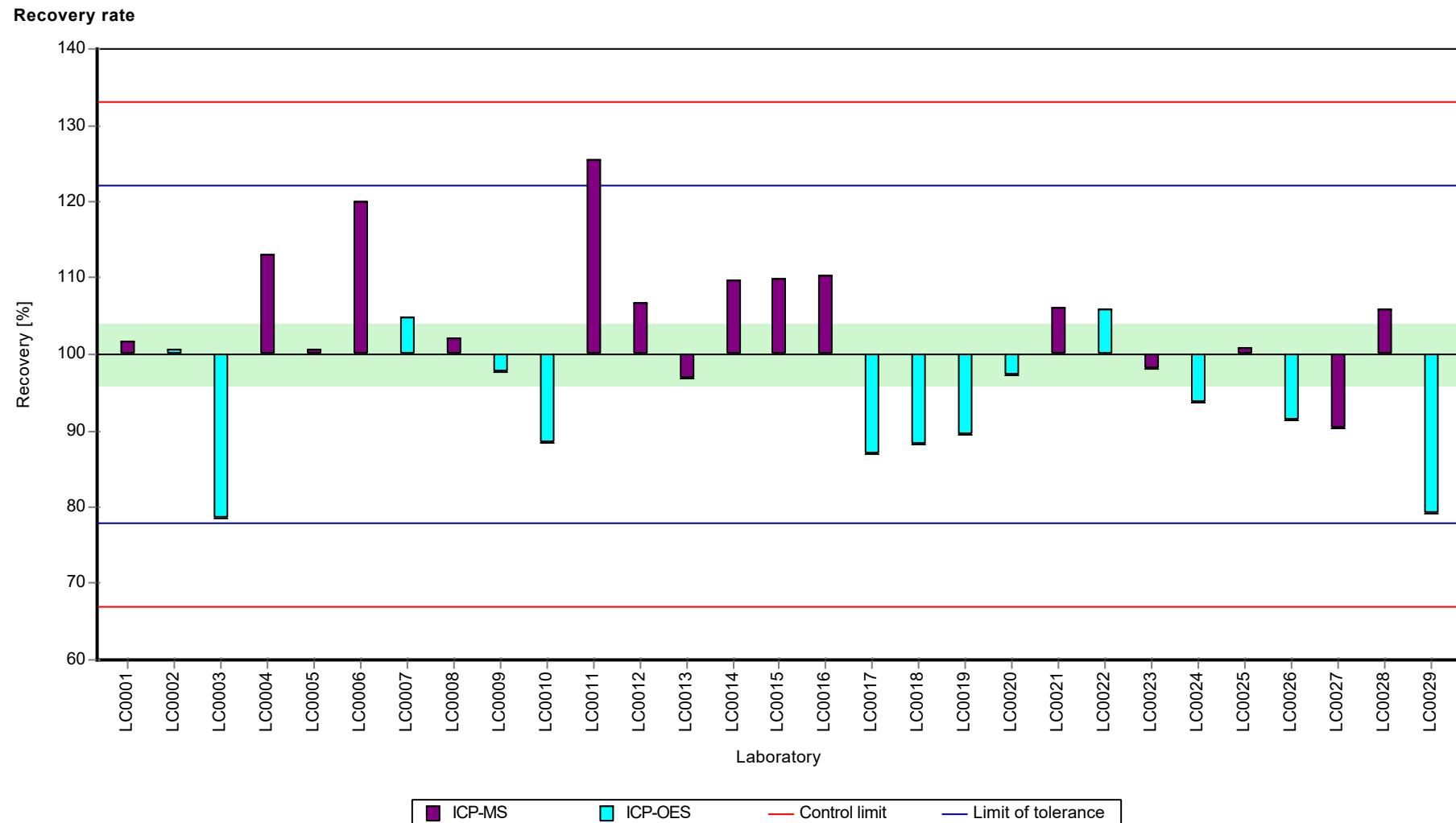
Graphical presentation of results

Results



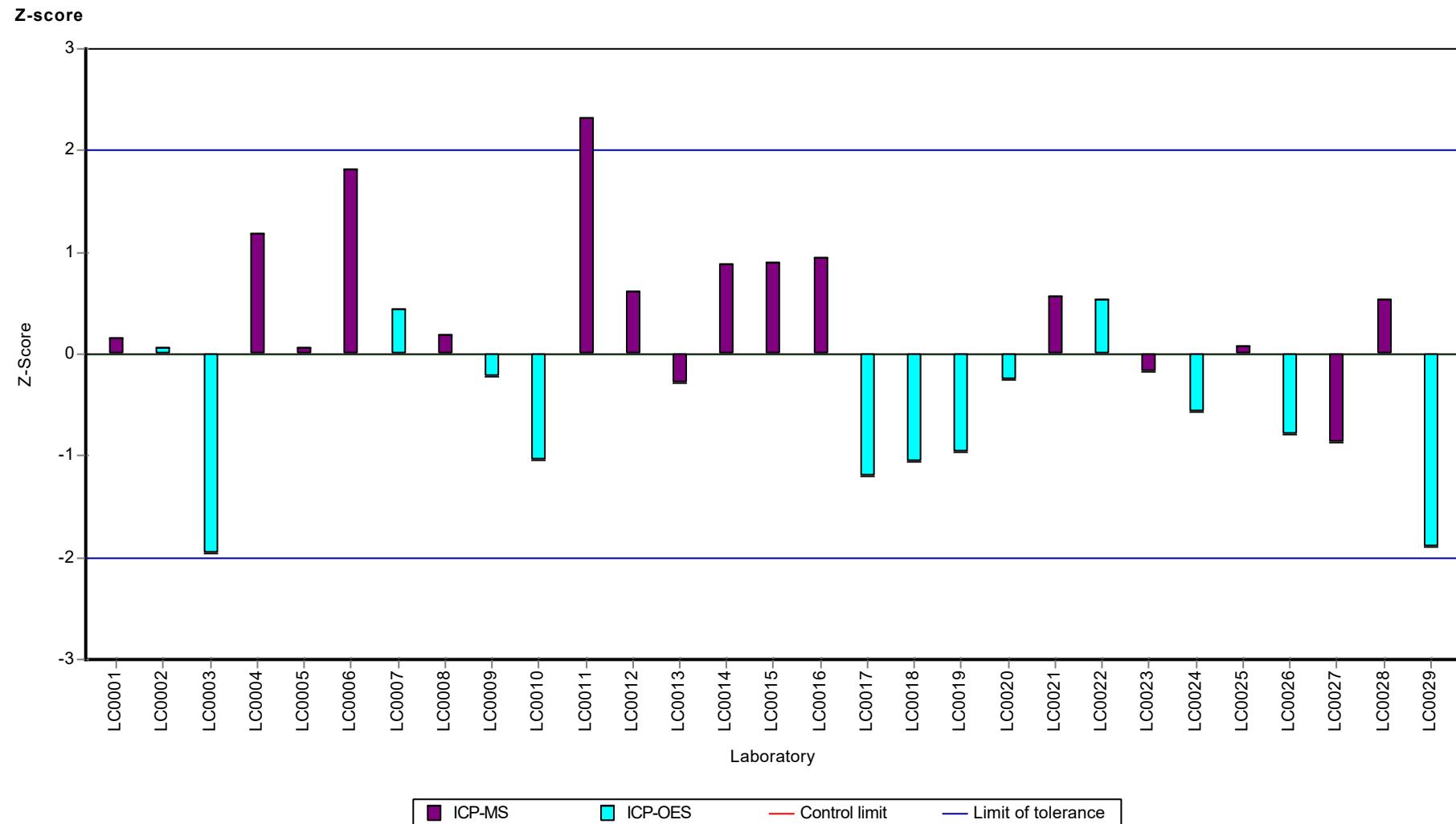
Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Zinc



Parameter oriented report Waste acc to landfill directive (eluate metals) - AB14

Sample: AB14, Parameter: Zinc



E8. Labororientierte Auswertung / Laboratory oriented report

Die Labororientierte Auswertung ist nach dem Laborcode sortiert.

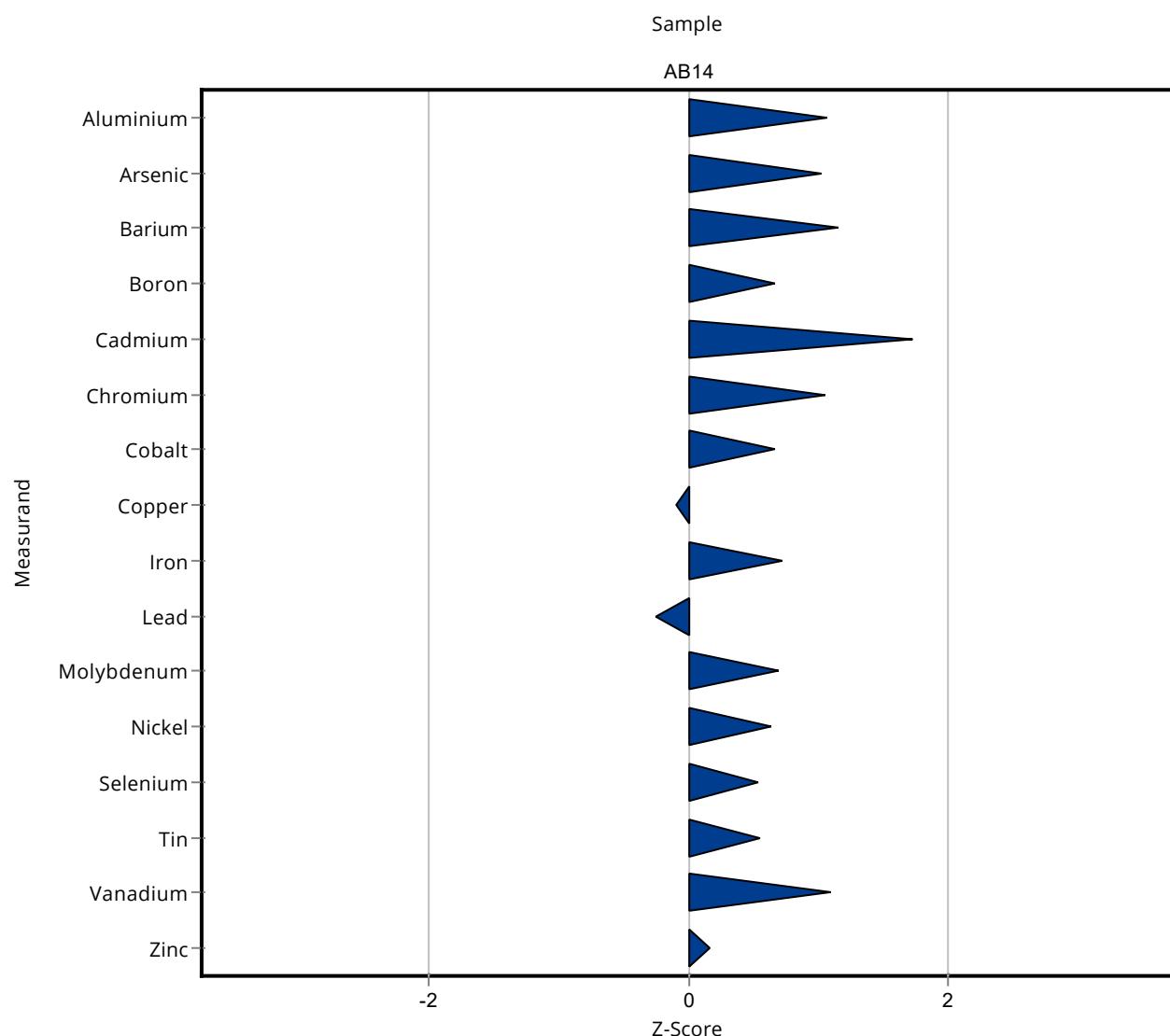
The laboratory oriented report is sorted by laboratory code.

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.09 ± 0.22	0.157	118	1.06
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0268 ± 0.00149	0.00265	111	1.02
Barium	mg/l	0.331 ± 0.0135	0.373 ± 0.0134	0.0364	113	1.16
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.103	0.14	107	0.67
Cadmium	mg/l	0.00145 ± 0.000113	0.00193 ± 0.000103	0.000276	133	1.73
Chromium	mg/l	0.0408 ± 0.00175	0.0459 ± 0.00167	0.00489	113	1.05
Cobalt	mg/l	0.0245 ± 0.00112	0.0263 ± 0.00156	0.0027	107	0.66
Copper	mg/l	0.12 ± 0.00506	0.119 ± 0.00616	0.0157	98.8	-0.09
Iron	mg/l	0.83 ± 0.0389	0.903 ± 0.36	0.0996	109	0.73
Lead	mg/l	0.317 ± 0.0159	0.307 ± 0.0149	0.0412	96.8	-0.24
Molybdenum	mg/l	0.401 ± 0.013	0.429 ± 0.0245	0.0401	107	0.70
Nickel	mg/l	0.0103 ± 0.000538	0.0111 ± 0.000537	0.00133	108	0.63
Selenium	mg/l	0.0118 ± 0.000592	0.0125 ± 0.000711	0.00141	106	0.53
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0313 ± 0.0015	0.00296	106	0.56
Vanadium	mg/l	0.0184 ± 0.00132	0.0218 ± 0.00118	0.00313	119	1.09
Zinc	mg/l	0.429 ± 0.0175	0.437 ± 0.0186	0.0472	102	0.16

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00404 ± 0.000164	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

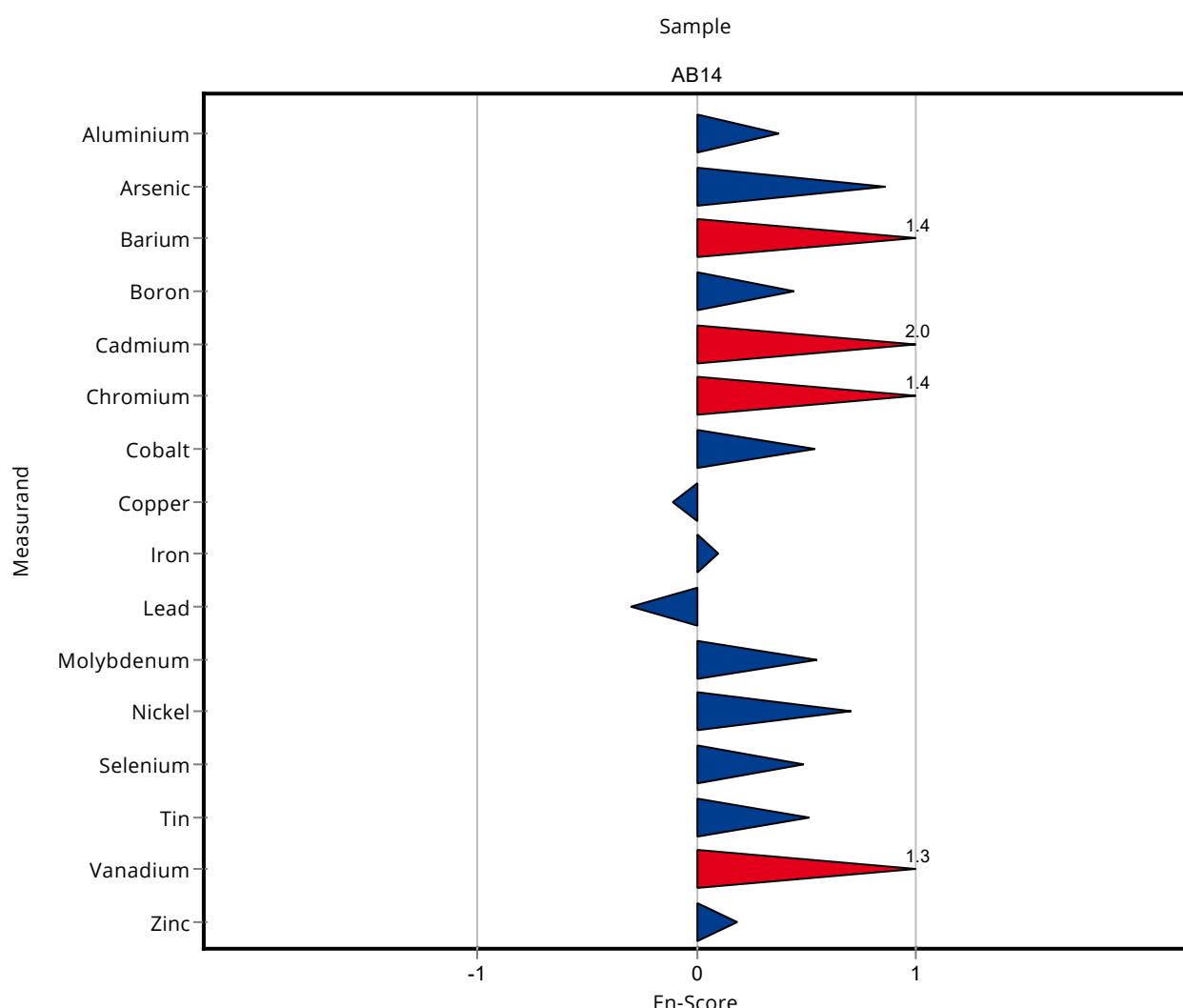
Labcode: LC0001

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.09 ± 0.22	0.157	118	0.38
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0268 ± 0.00149	0.00265	111	0.86
Barium	mg/l	0.331 ± 0.0135	0.373 ± 0.0134	0.0364	113	1.41
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.103	0.14	107	0.45
Cadmium	mg/l	0.00145 ± 0.000113	0.00193 ± 0.0001030	0.000276	133	2.04
Chromium	mg/l	0.0408 ± 0.00175	0.0459 ± 0.00167	0.00489	113	1.36
Cobalt	mg/l	0.0245 ± 0.00112	0.0263 ± 0.00156	0.0027	107	0.54
Copper	mg/l	0.12 ± 0.00506	0.119 ± 0.00616	0.0157	98.8	-0.11
Iron	mg/l	0.83 ± 0.0389	0.903 ± 0.36	0.0996	109	0.10
Lead	mg/l	0.317 ± 0.0159	0.307 ± 0.0149	0.0412	96.8	-0.30
Molybdenum	mg/l	0.401 ± 0.013	0.429 ± 0.0245	0.0401	107	0.55
Nickel	mg/l	0.0103 ± 0.000538	0.0111 ± 0.000537	0.00133	108	0.70
Selenium	mg/l	0.0118 ± 0.000592	0.0125 ± 0.000711	0.00141	106	0.49
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0313 ± 0.0015	0.00296	106	0.52
Vanadium	mg/l	0.0184 ± 0.00132	0.0218 ± 0.00118	0.00313	119	1.26
Zinc	mg/l	0.429 ± 0.0175	0.437 ± 0.0186	0.0472	102	0.19

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00404 ± 0.000164	-	-	-

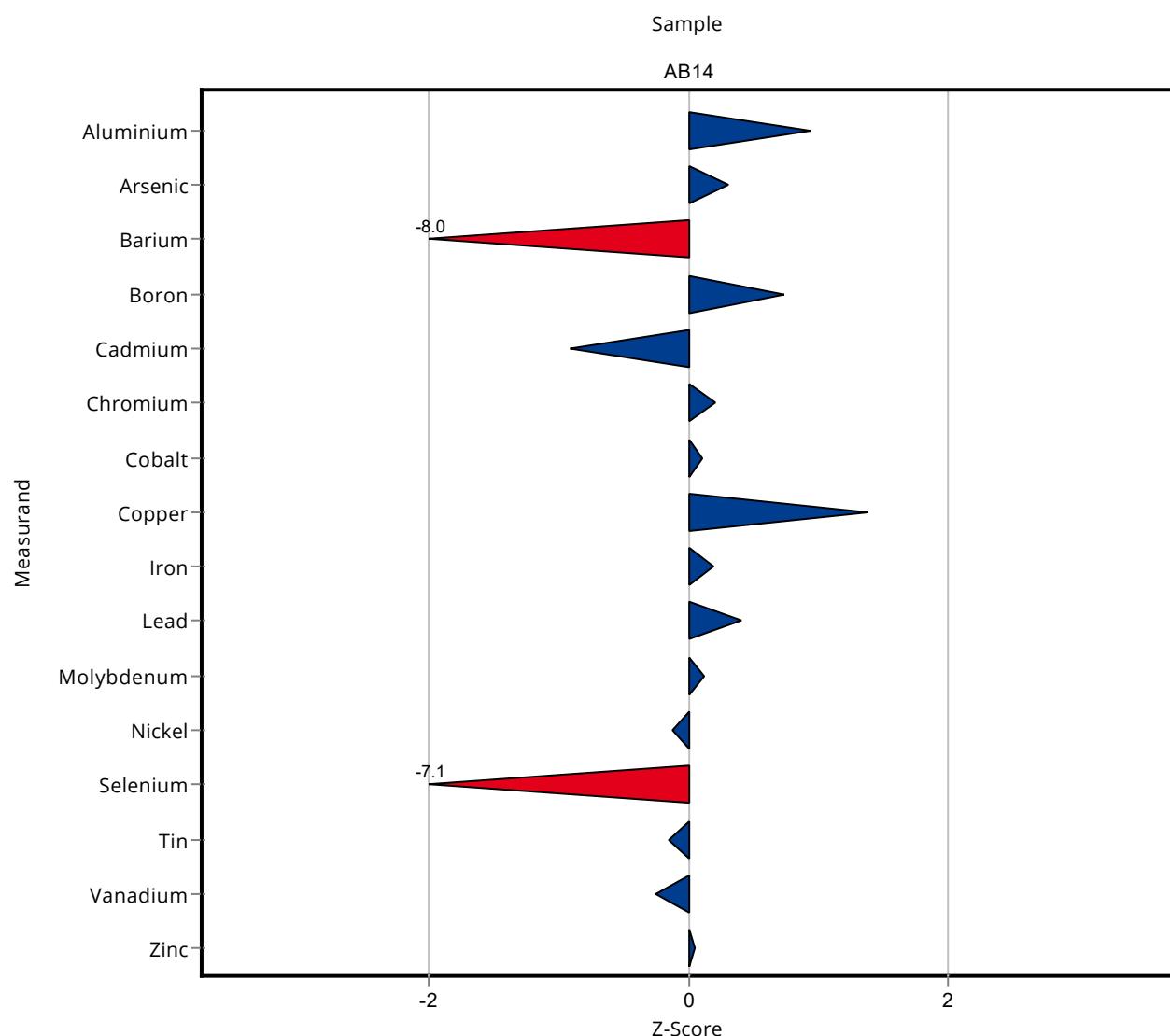


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.07 ± 0.136	0.157	116	0.94
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0249 ± 0.0037	0.00265	103	0.31
Barium	mg/l	0.331 ± 0.0135	0.0402 ± 0.006	0.0364	12.2	-7.99
Boron	mg/l	1.4 ± 0.039	1.5 ± 0.225	0.14	107	0.74
Cadmium	mg/l	0.00145 ± 0.000113	0.0012 ± 0.0001	0.000276	82.7	-0.91
Chromium	mg/l	0.0408 ± 0.00175	0.0418 ± 0.0041	0.00489	103	0.21
Cobalt	mg/l	0.0245 ± 0.00112	0.0248 ± 0.00372	0.0027	101	0.11
Copper	mg/l	0.12 ± 0.00506	0.142 ± 0.0169	0.0157	118	1.38
Iron	mg/l	0.83 ± 0.0389	0.849 ± 0.0714	0.0996	102	0.19
Lead	mg/l	0.317 ± 0.0159	0.334 ± 0.0431	0.0412	105	0.41
Molybdenum	mg/l	0.401 ± 0.013	0.406 ± 0.0609	0.0401	101	0.12
Nickel	mg/l	0.0103 ± 0.000538	0.0101 ± 0.00095	0.00133	98.5	-0.12
Selenium	mg/l	0.0118 ± 0.000592	0.00178 ± 0.00027	0.00141	15.1	-7.07
Silver	mg/l	- ± -	0.00425 ± 0.00064	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0292 ± 0.00438	0.00296	98.5	-0.15
Vanadium	mg/l	0.0184 ± 0.00132	0.0176 ± 0.00264	0.00313	95.7	-0.25
Zinc	mg/l	0.429 ± 0.0175	0.432 ± 0.0461	0.0472	101	0.06

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00128 ± 0.000192	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

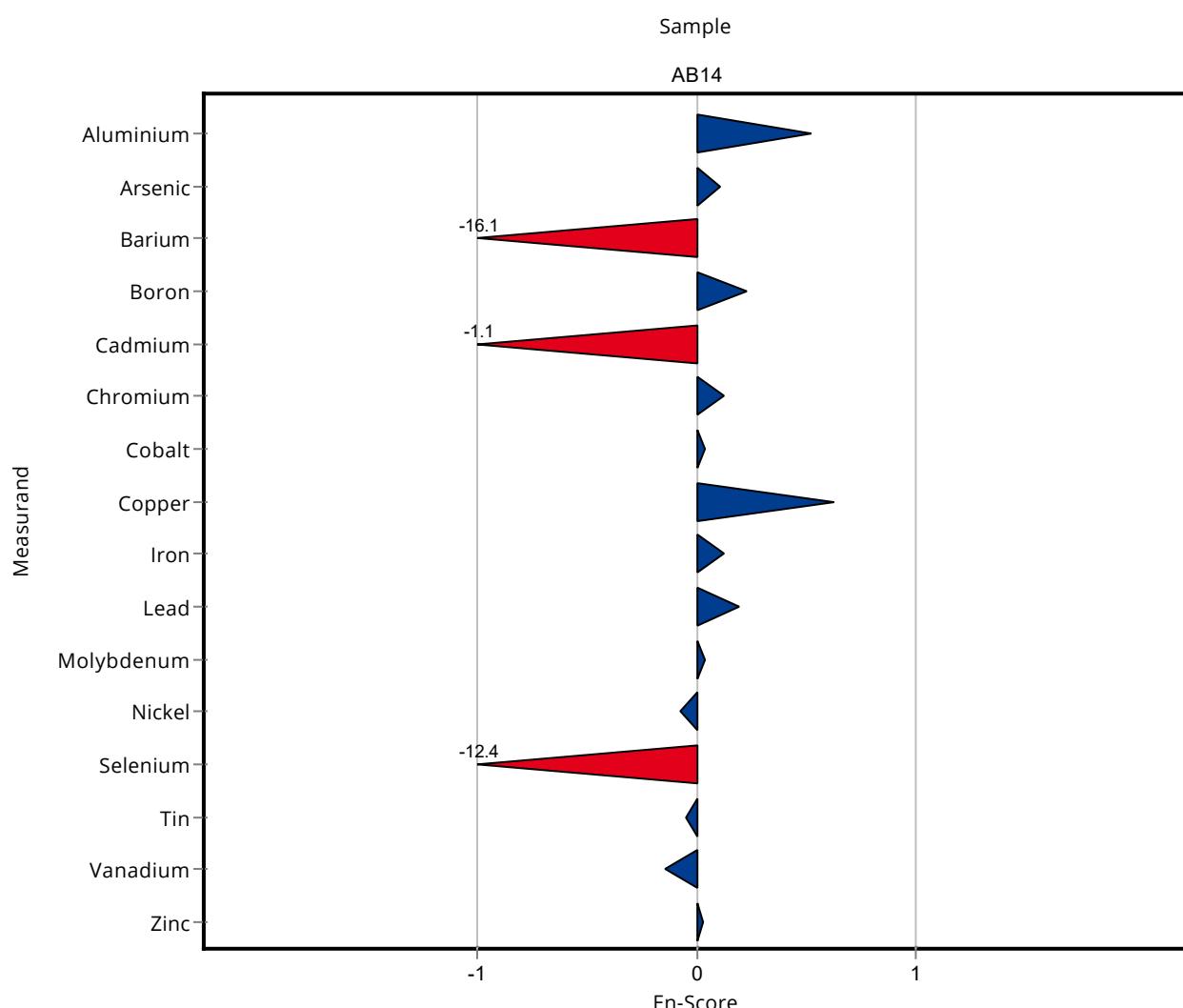
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Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.07 ± 0.136	0.157	116	0.53
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0249 ± 0.0037	0.00265	103	0.11
Barium	mg/l	0.331 ± 0.0135	0.0402 ± 0.006	0.0364	12.2	-16.10
Boron	mg/l	1.4 ± 0.039	1.5 ± 0.225	0.14	107	0.23
Cadmium	mg/l	0.00145 ± 0.000113	0.0012 ± 0.0001	0.000276	82.7	-1.10
Chromium	mg/l	0.0408 ± 0.00175	0.0418 ± 0.0041	0.00489	103	0.12
Cobalt	mg/l	0.0245 ± 0.00112	0.0248 ± 0.00372	0.0027	101	0.04
Copper	mg/l	0.12 ± 0.00506	0.142 ± 0.0169	0.0157	118	0.63
Iron	mg/l	0.83 ± 0.0389	0.849 ± 0.0714	0.0996	102	0.13
Lead	mg/l	0.317 ± 0.0159	0.334 ± 0.0431	0.0412	105	0.19
Molybdenum	mg/l	0.401 ± 0.013	0.406 ± 0.0609	0.0401	101	0.04
Nickel	mg/l	0.0103 ± 0.000538	0.0101 ± 0.00095	0.00133	98.5	-0.08
Selenium	mg/l	0.0118 ± 0.000592	0.00178 ± 0.00027	0.00141	15.1	-12.44
Silver	mg/l	- ± -	0.00425 ± 0.00064	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0292 ± 0.00438	0.00296	98.5	-0.05
Vanadium	mg/l	0.0184 ± 0.00132	0.0176 ± 0.00264	0.00313	95.7	-0.15
Zinc	mg/l	0.429 ± 0.0175	0.432 ± 0.0461	0.0472	101	0.03

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00128 ± 0.000192	-	-	-

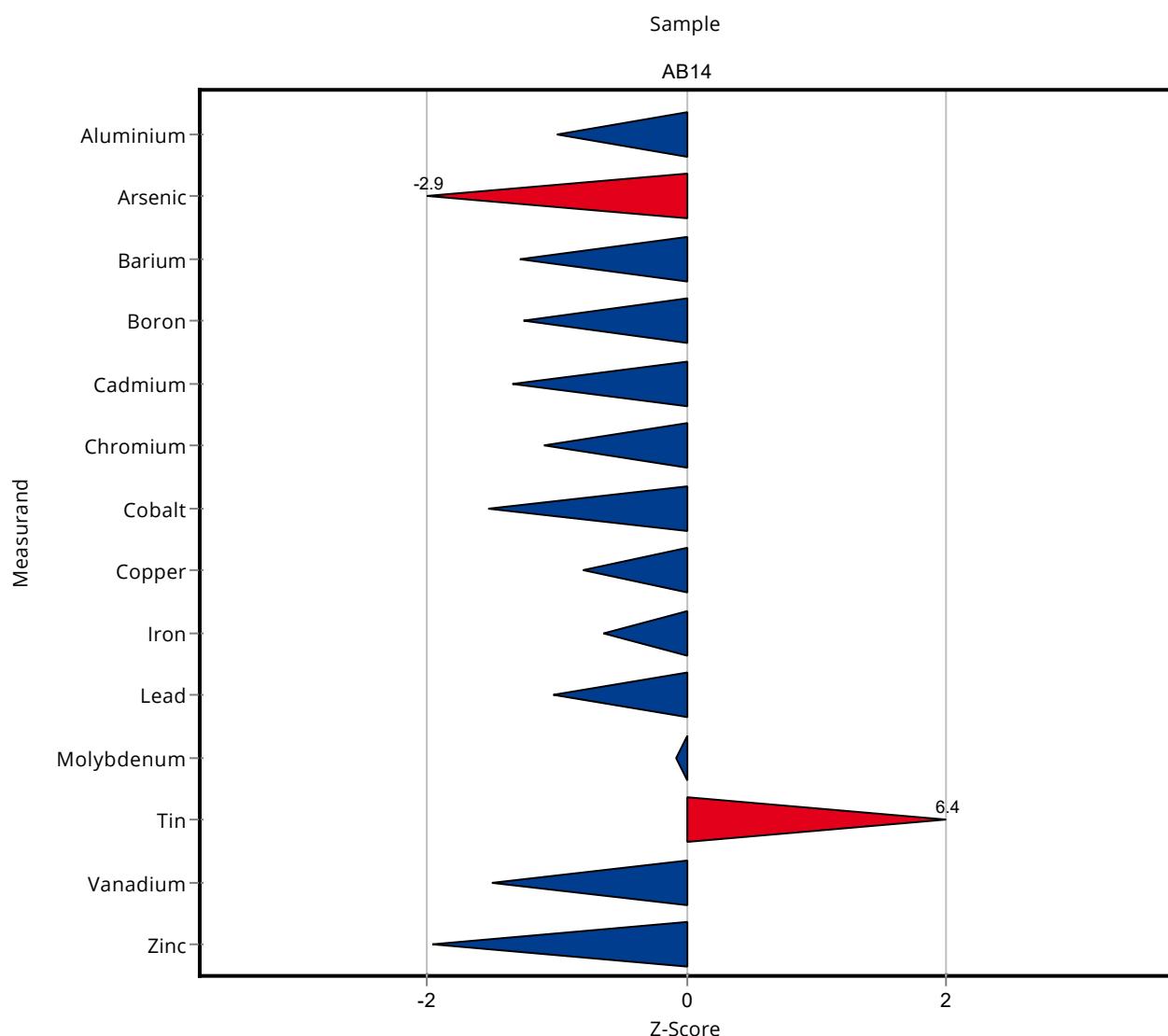


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.767 ± 0.131	0.157	83.1	-0.99
Antimony	mg/l	0.00112 ± 0.000262 <0.01 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0165 ± 0.00623	0.00265	68.5	-2.86
Barium	mg/l	0.331 ± 0.0135	0.284 ± 0.114	0.0364	85.8	-1.29
Boron	mg/l	1.4 ± 0.039	1.22 ± 0.0741	0.14	87.4	-1.26
Cadmium	mg/l	0.00145 ± 0.000113	0.00108 ± 0.000464	0.000276	74.4	-1.35
Chromium	mg/l	0.0408 ± 0.00175	0.0354 ± 0.0163	0.00489	86.8	-1.10
Cobalt	mg/l	0.0245 ± 0.00112	0.0204 ± 0.000636	0.0027	83.2	-1.52
Copper	mg/l	0.12 ± 0.00506	0.108 ± 0.0218	0.0157	89.7	-0.79
Iron	mg/l	0.83 ± 0.0389	0.767 ± 0.0915	0.0996	92.4	-0.63
Lead	mg/l	0.317 ± 0.0159	0.275 ± 0.183	0.0412	86.7	-1.02
Molybdenum	mg/l	0.401 ± 0.013	0.398 ± 0.0744	0.0401	99.2	-0.08
Nickel	mg/l	0.0103 ± 0.000538 <0.01 (LOQ) ± -		0.00133	-	-
Selenium	mg/l	0.0118 ± 0.000592 <0.01 (LOQ) ± -		0.00141	-	-
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0487 ± 0.0249	0.00296	164	6.43
Vanadium	mg/l	0.0184 ± 0.00132	0.0137 ± 0.00752	0.00313	74.5	-1.50
Zinc	mg/l	0.429 ± 0.0175	0.337 ± 0.104	0.0472	78.5	-1.95

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00473 ± 0.00165	-	-	-

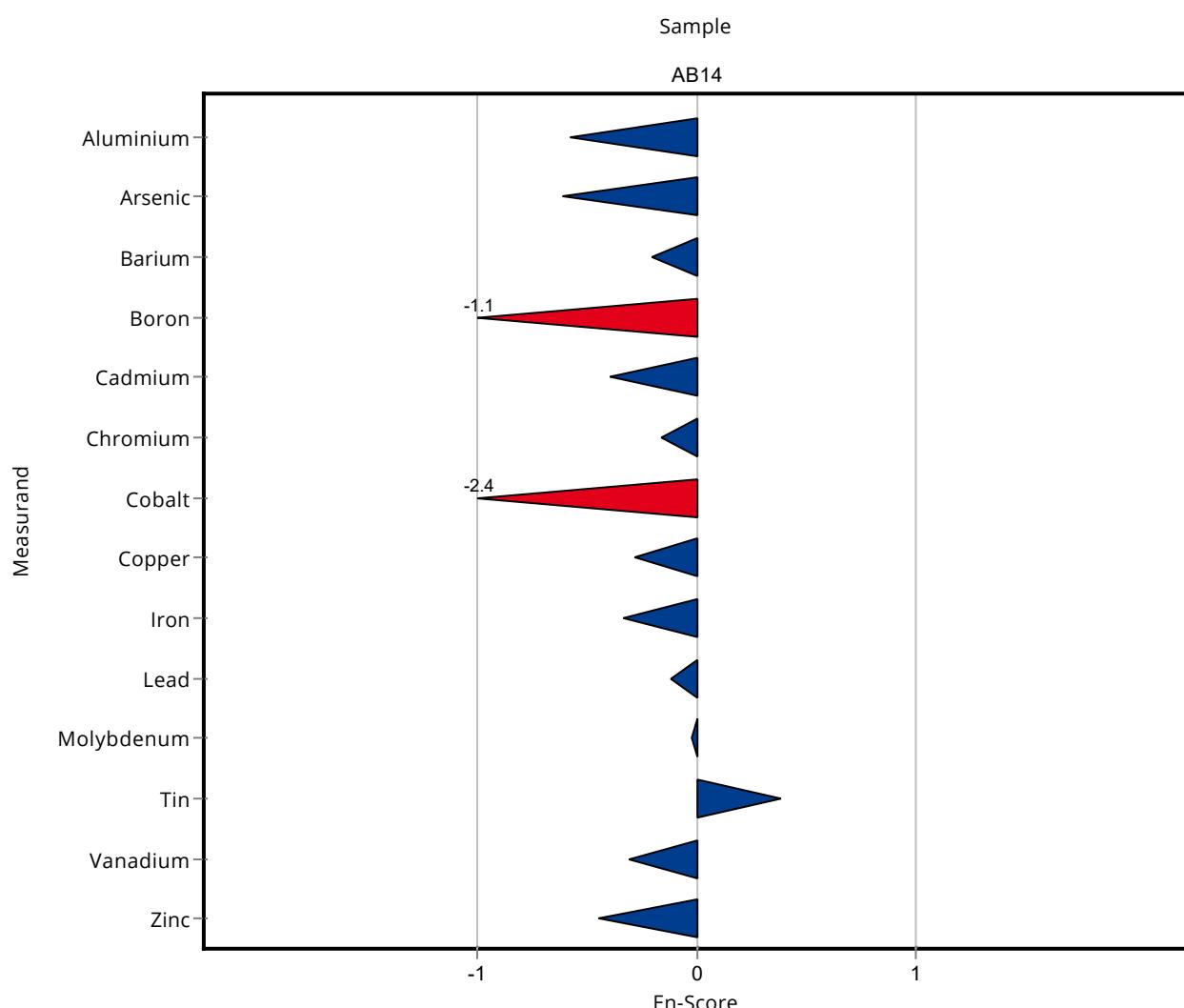


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.767 ± 0.131	0.157	83.1	-0.58
Antimony	mg/l	0.00112 ± 0.000262 <0.01 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0165 ± 0.00623	0.00265	68.5	-0.61
Barium	mg/l	0.331 ± 0.0135	0.284 ± 0.114	0.0364	85.8	-0.21
Boron	mg/l	1.4 ± 0.039	1.22 ± 0.0741	0.14	87.4	-1.15
Cadmium	mg/l	0.00145 ± 0.000113	0.00108 ± 0.0004640.000276		74.4	-0.40
Chromium	mg/l	0.0408 ± 0.00175	0.0354 ± 0.0163	0.00489	86.8	-0.16
Cobalt	mg/l	0.0245 ± 0.00112	0.0204 ± 0.000636	0.0027	83.2	-2.43
Copper	mg/l	0.12 ± 0.00506	0.108 ± 0.0218	0.0157	89.7	-0.28
Iron	mg/l	0.83 ± 0.0389	0.767 ± 0.0915	0.0996	92.4	-0.34
Lead	mg/l	0.317 ± 0.0159	0.275 ± 0.183	0.0412	86.7	-0.11
Molybdenum	mg/l	0.401 ± 0.013	0.398 ± 0.0744	0.0401	99.2	-0.02
Nickel	mg/l	0.0103 ± 0.000538 <0.01 (LOQ) ± -		0.00133	-	-
Selenium	mg/l	0.0118 ± 0.000592 <0.01 (LOQ) ± -		0.00141	-	-
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0487 ± 0.0249	0.00296	164	0.38
Vanadium	mg/l	0.0184 ± 0.00132	0.0137 ± 0.00752	0.00313	74.5	-0.31
Zinc	mg/l	0.429 ± 0.0175	0.337 ± 0.104	0.0472	78.5	-0.44

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00473 ± 0.00165	-	-	-

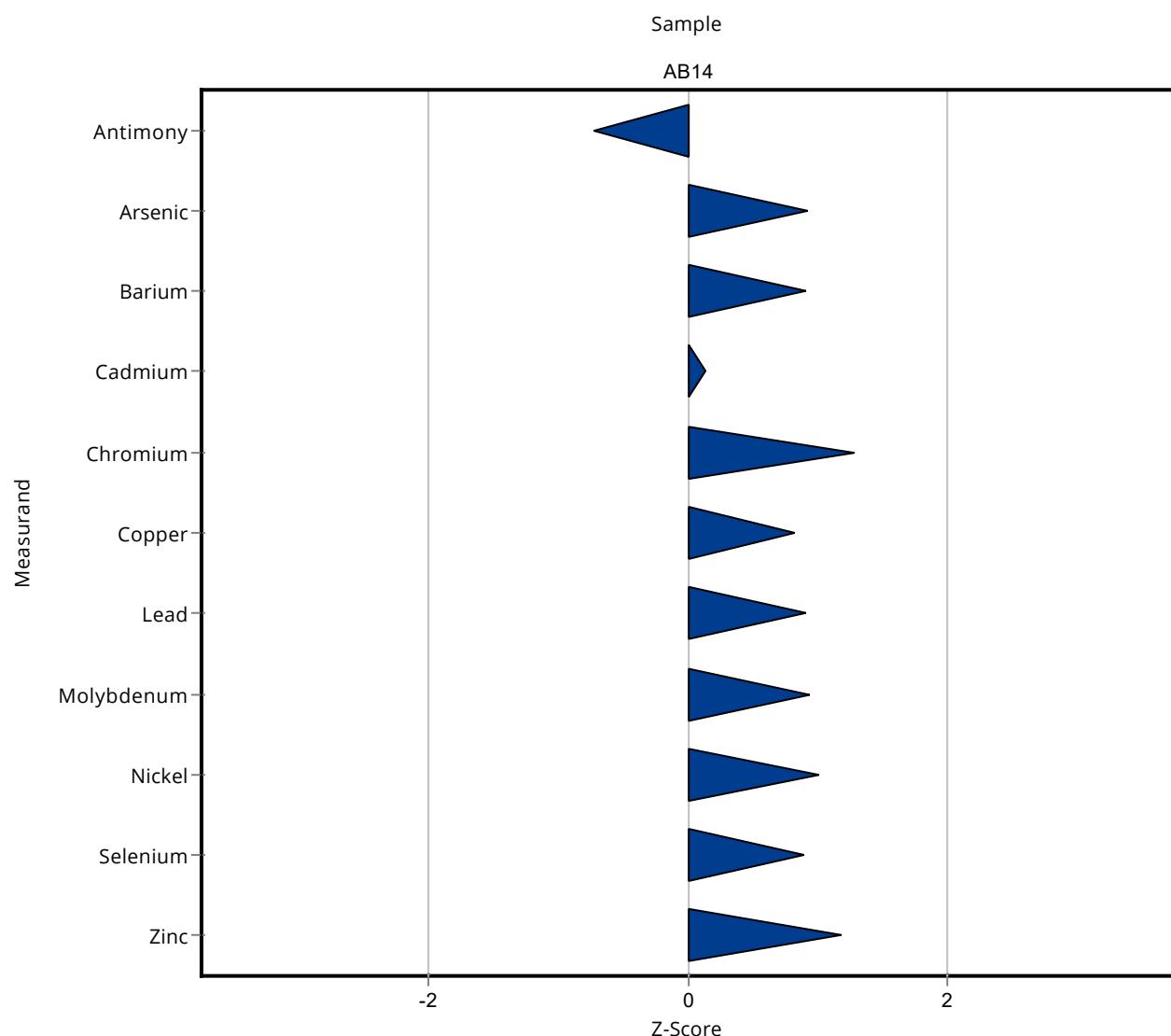


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262	0.0008 ± 0.00012	0.000435	71.7	-0.73
Arsenic	mg/l	0.0241 ± 0.00101	0.02654 ± 0.00398	0.00265	110	0.93
Barium	mg/l	0.331 ± 0.0135	0.3639 ± 0.05458	0.0364	110	0.91
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00149 ± 0.00022	0.000276	103	0.14
Chromium	mg/l	0.0408 ± 0.00175	0.04703 ± 0.00705	0.00489	115	1.28
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.13334 ± 0.02	0.0157	111	0.83
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.35445 ± 0.05317	0.0412	112	0.91
Molybdenum	mg/l	0.401 ± 0.013	0.43885 ± 0.06583	0.0401	109	0.94
Nickel	mg/l	0.0103 ± 0.000538	0.01161 ± 0.00174	0.00133	113	1.02
Selenium	mg/l	0.0118 ± 0.000592	0.01301 ± 0.00195	0.00141	111	0.89
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.48497 ± 0.07275	0.0472	113	1.18

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.002995 ± 0.0003	-	-	-

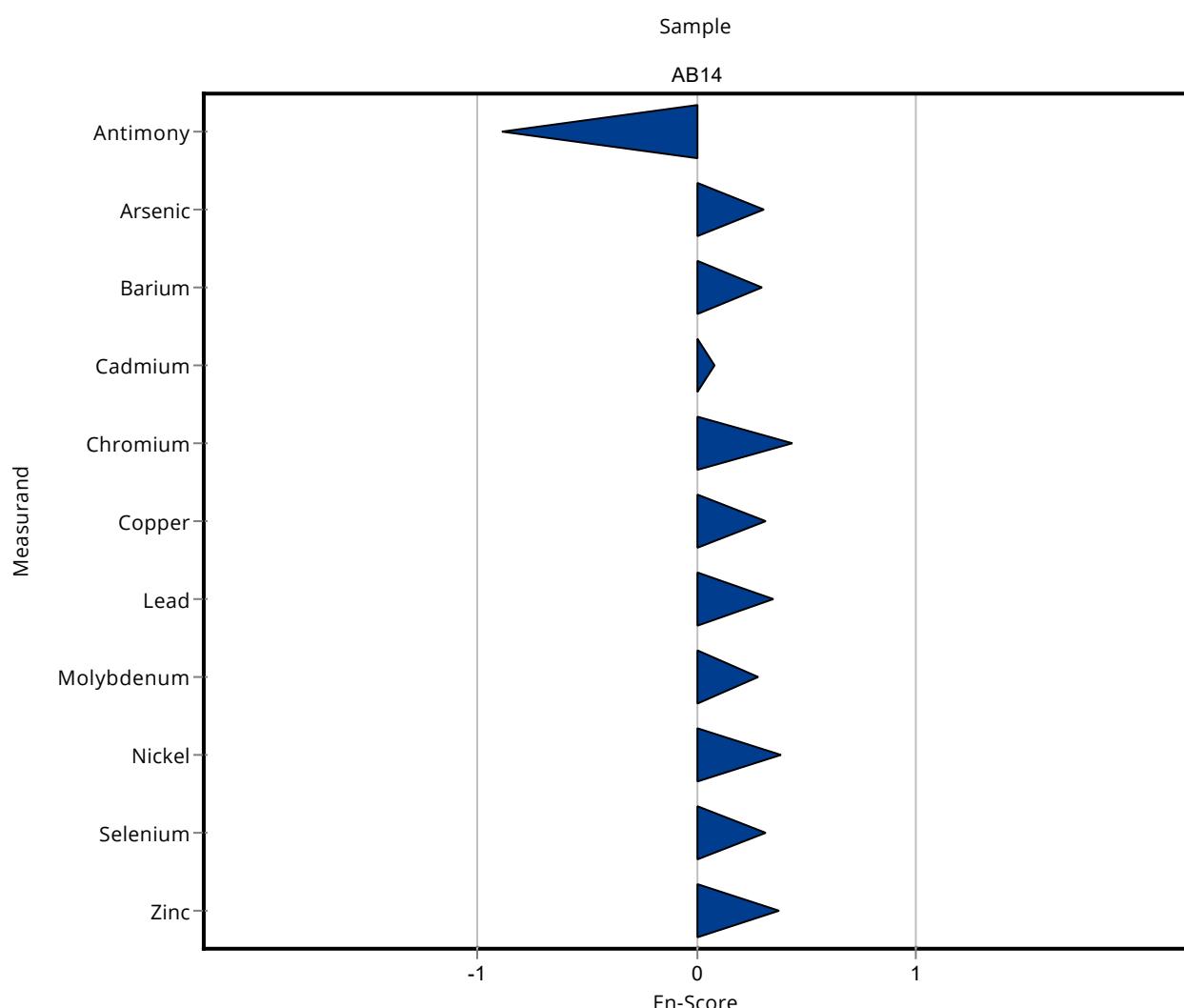


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262	0.0008 ± 0.00012	0.000435	71.7	-0.89
Arsenic	mg/l	0.0241 ± 0.00101	0.02654 ± 0.00398	0.00265	110	0.31
Barium	mg/l	0.331 ± 0.0135	0.3639 ± 0.05458	0.0364	110	0.30
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00149 ± 0.00022	0.000276	103	0.08
Chromium	mg/l	0.0408 ± 0.00175	0.04703 ± 0.00705	0.00489	115	0.44
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.13334 ± 0.02	0.0157	111	0.32
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.35445 ± 0.05317	0.0412	112	0.35
Molybdenum	mg/l	0.401 ± 0.013	0.43885 ± 0.06583	0.0401	109	0.29
Nickel	mg/l	0.0103 ± 0.000538	0.01161 ± 0.00174	0.00133	113	0.39
Selenium	mg/l	0.0118 ± 0.000592	0.01301 ± 0.00195	0.00141	111	0.32
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.48497 ± 0.07275	0.0472	113	0.38

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]
Mercury	mg/l	- ± -	0.002995 ± 0.0003	-	-

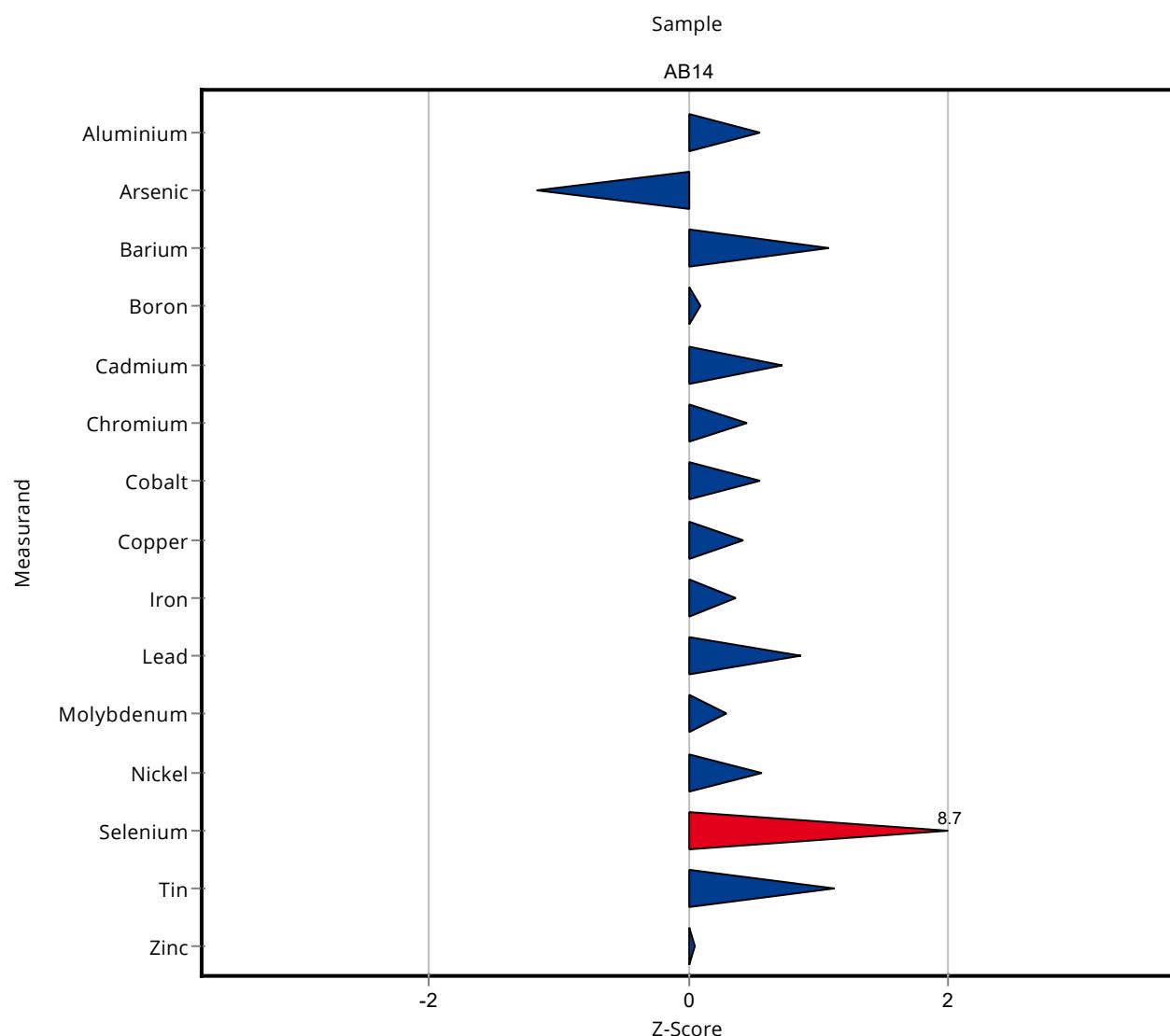


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.01 ± 0.182	0.157	109	0.55
Antimony	mg/l	0.00112 ± 0.000262	<0.05 (LOQ) ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.021 ± 0.004	0.00265	87.2	-1.17
Barium	mg/l	0.331 ± 0.0135	0.37 ± 0.067	0.0364	112	1.08
Boron	mg/l	1.4 ± 0.039	1.41 ± 0.254	0.14	101	0.10
Cadmium	mg/l	0.00145 ± 0.000113	0.00165 ± 0.0003	0.000276	114	0.72
Chromium	mg/l	0.0408 ± 0.00175	0.043 ± 0.008	0.00489	105	0.46
Cobalt	mg/l	0.0245 ± 0.00112	0.026 ± 0.005	0.0027	106	0.55
Copper	mg/l	0.12 ± 0.00506	0.127 ± 0.023	0.0157	105	0.42
Iron	mg/l	0.83 ± 0.0389	0.867 ± 0.156	0.0996	104	0.37
Lead	mg/l	0.317 ± 0.0159	0.353 ± 0.064	0.0412	111	0.87
Molybdenum	mg/l	0.401 ± 0.013	0.413 ± 0.074	0.0401	103	0.30
Nickel	mg/l	0.0103 ± 0.000538	0.011 ± 0.002	0.00133	107	0.56
Selenium	mg/l	0.0118 ± 0.000592	0.024 ± 0.004	0.00141	204	8.69
Silver	mg/l	- ± -	<0.02 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.033 ± 0.006	0.00296	111	1.13
Vanadium	mg/l	0.0184 ± 0.00132	<0.02 (LOQ) ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.432 ± 0.078	0.0472	101	0.06

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00194 ± 0.0003	-	-	-

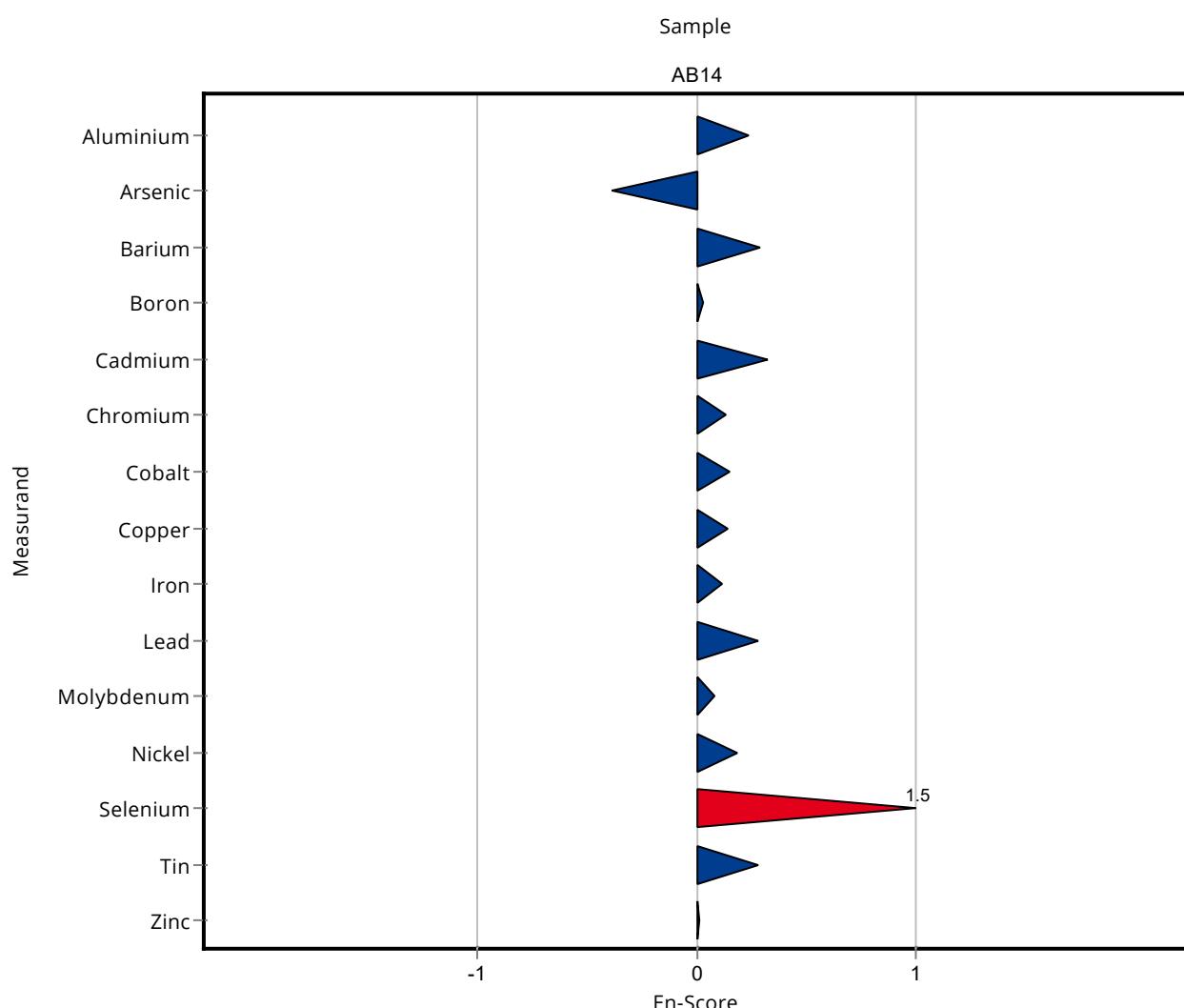


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.01 ± 0.182	0.157	109	0.24
Antimony	mg/l	0.00112 ± 0.000262 <0.05 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.021 ± 0.004	0.00265	87.2	-0.38
Barium	mg/l	0.331 ± 0.0135	0.37 ± 0.067	0.0364	112	0.29
Boron	mg/l	1.4 ± 0.039	1.41 ± 0.254	0.14	101	0.03
Cadmium	mg/l	0.00145 ± 0.000113	0.00165 ± 0.0003	0.000276	114	0.32
Chromium	mg/l	0.0408 ± 0.00175	0.043 ± 0.008	0.00489	105	0.14
Cobalt	mg/l	0.0245 ± 0.00112	0.026 ± 0.005	0.0027	106	0.15
Copper	mg/l	0.12 ± 0.00506	0.127 ± 0.023	0.0157	105	0.14
Iron	mg/l	0.83 ± 0.0389	0.867 ± 0.156	0.0996	104	0.12
Lead	mg/l	0.317 ± 0.0159	0.353 ± 0.064	0.0412	111	0.28
Molybdenum	mg/l	0.401 ± 0.013	0.413 ± 0.074	0.0401	103	0.08
Nickel	mg/l	0.0103 ± 0.000538	0.011 ± 0.002	0.00133	107	0.18
Selenium	mg/l	0.0118 ± 0.000592	0.024 ± 0.004	0.00141	204	1.53
Silver	mg/l	- ± -	<0.02 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.033 ± 0.006	0.00296	111	0.28
Vanadium	mg/l	0.0184 ± 0.00132	<0.02 (LOQ) ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.432 ± 0.078	0.0472	101	0.02

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00194 ± 0.0003	-	-	-

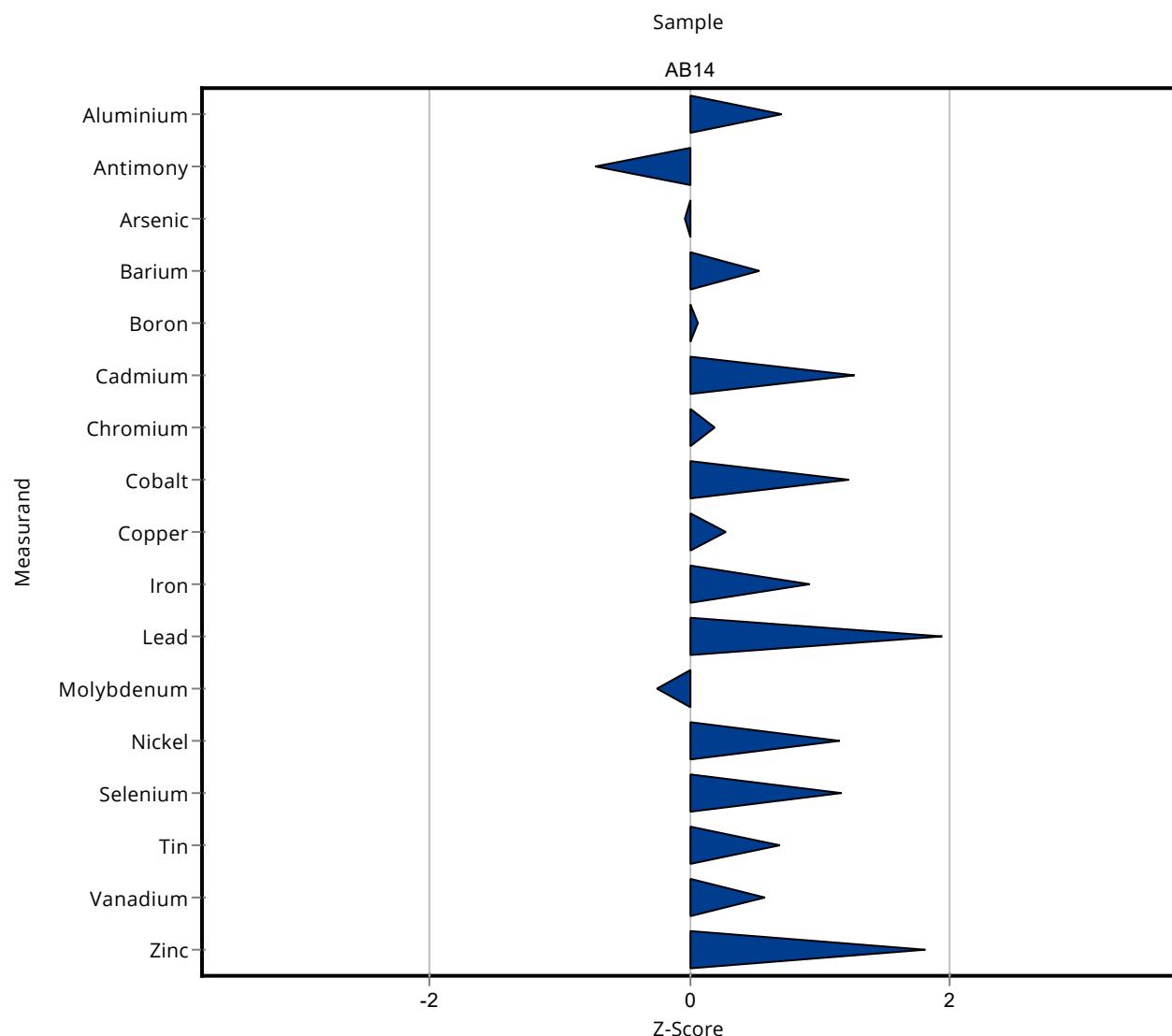


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.0351 ± 0.107	0.157	112	0.71
Antimony	mg/l	0.00112 ± 0.000262	0.0008 ± 0.00006	0.000435	71.7	-0.73
Arsenic	mg/l	0.0241 ± 0.00101	0.024 ± 0.003	0.00265	99.6	-0.03
Barium	mg/l	0.331 ± 0.0135	0.3505 ± 0.022	0.0364	106	0.54
Boron	mg/l	1.4 ± 0.039	1.4052 ± 0.196	0.14	101	0.06
Cadmium	mg/l	0.00145 ± 0.000113	0.0018 ± 0.0002	0.000276	124	1.26
Chromium	mg/l	0.0408 ± 0.00175	0.0417 ± 0.004	0.00489	102	0.19
Cobalt	mg/l	0.0245 ± 0.00112	0.0278 ± 0.001	0.0027	113	1.22
Copper	mg/l	0.12 ± 0.00506	0.1249 ± 0.016	0.0157	104	0.29
Iron	mg/l	0.83 ± 0.0389	0.923 ± 0.099	0.0996	111	0.93
Lead	mg/l	0.317 ± 0.0159	0.3973 ± 0.057	0.0412	125	1.95
Molybdenum	mg/l	0.401 ± 0.013	0.3911 ± 0.023	0.0401	97.5	-0.25
Nickel	mg/l	0.0103 ± 0.000538	0.0118 ± 0.002	0.00133	115	1.16
Selenium	mg/l	0.0118 ± 0.000592	0.0134 ± 0.002	0.00141	114	1.17
Silver	mg/l	- ± -	<0.003 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0317 ± 0.002	0.00296	107	0.69
Vanadium	mg/l	0.0184 ± 0.00132	0.0202 ± 0.004	0.00313	110	0.58
Zinc	mg/l	0.429 ± 0.0175	0.5149 ± 0.065	0.0472	120	1.81

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00445 ± 0.0008	-	-	-

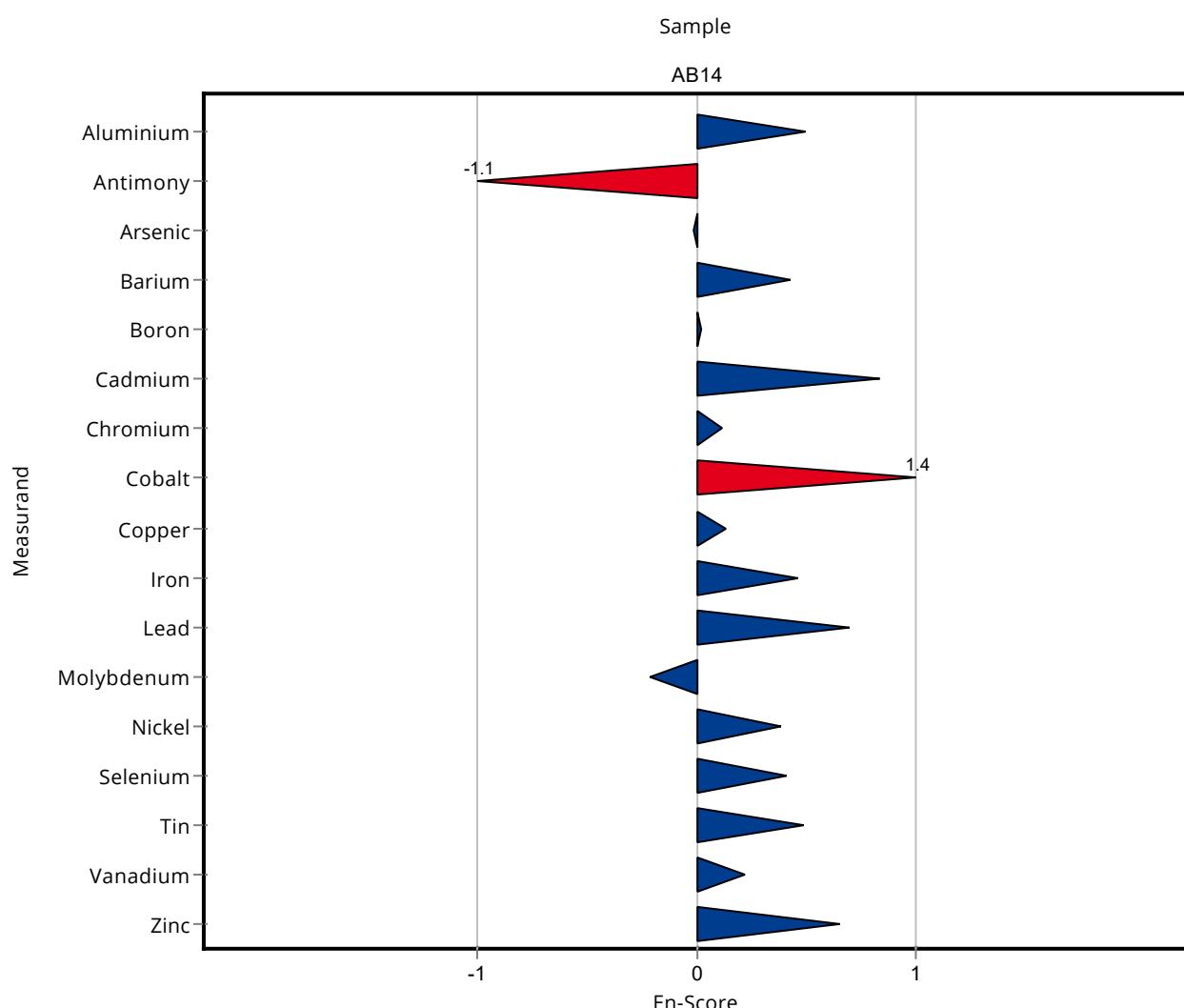


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.0351 ± 0.107	0.157	112	0.50
Antimony	mg/l	0.00112 ± 0.000262	0.0008 ± 0.00006	0.000435	71.7	-1.10
Arsenic	mg/l	0.0241 ± 0.00101	0.024 ± 0.003	0.00265	99.6	-0.01
Barium	mg/l	0.331 ± 0.0135	0.3505 ± 0.022	0.0364	106	0.43
Boron	mg/l	1.4 ± 0.039	1.4052 ± 0.196	0.14	101	0.02
Cadmium	mg/l	0.00145 ± 0.000113	0.0018 ± 0.0002	0.000276	124	0.84
Chromium	mg/l	0.0408 ± 0.00175	0.0417 ± 0.004	0.00489	102	0.11
Cobalt	mg/l	0.0245 ± 0.00112	0.0278 ± 0.001	0.0027	113	1.44
Copper	mg/l	0.12 ± 0.00506	0.1249 ± 0.016	0.0157	104	0.14
Iron	mg/l	0.83 ± 0.0389	0.923 ± 0.099	0.0996	111	0.46
Lead	mg/l	0.317 ± 0.0159	0.3973 ± 0.057	0.0412	125	0.70
Molybdenum	mg/l	0.401 ± 0.013	0.3911 ± 0.023	0.0401	97.5	-0.21
Nickel	mg/l	0.0103 ± 0.000538	0.0118 ± 0.002	0.00133	115	0.38
Selenium	mg/l	0.0118 ± 0.000592	0.0134 ± 0.002	0.00141	114	0.41
Silver	mg/l	- ± -	<0.003 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0317 ± 0.002	0.00296	107	0.49
Vanadium	mg/l	0.0184 ± 0.00132	0.0202 ± 0.004	0.00313	110	0.22
Zinc	mg/l	0.429 ± 0.0175	0.5149 ± 0.065	0.0472	120	0.65

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00445 ± 0.0008	-	-	-

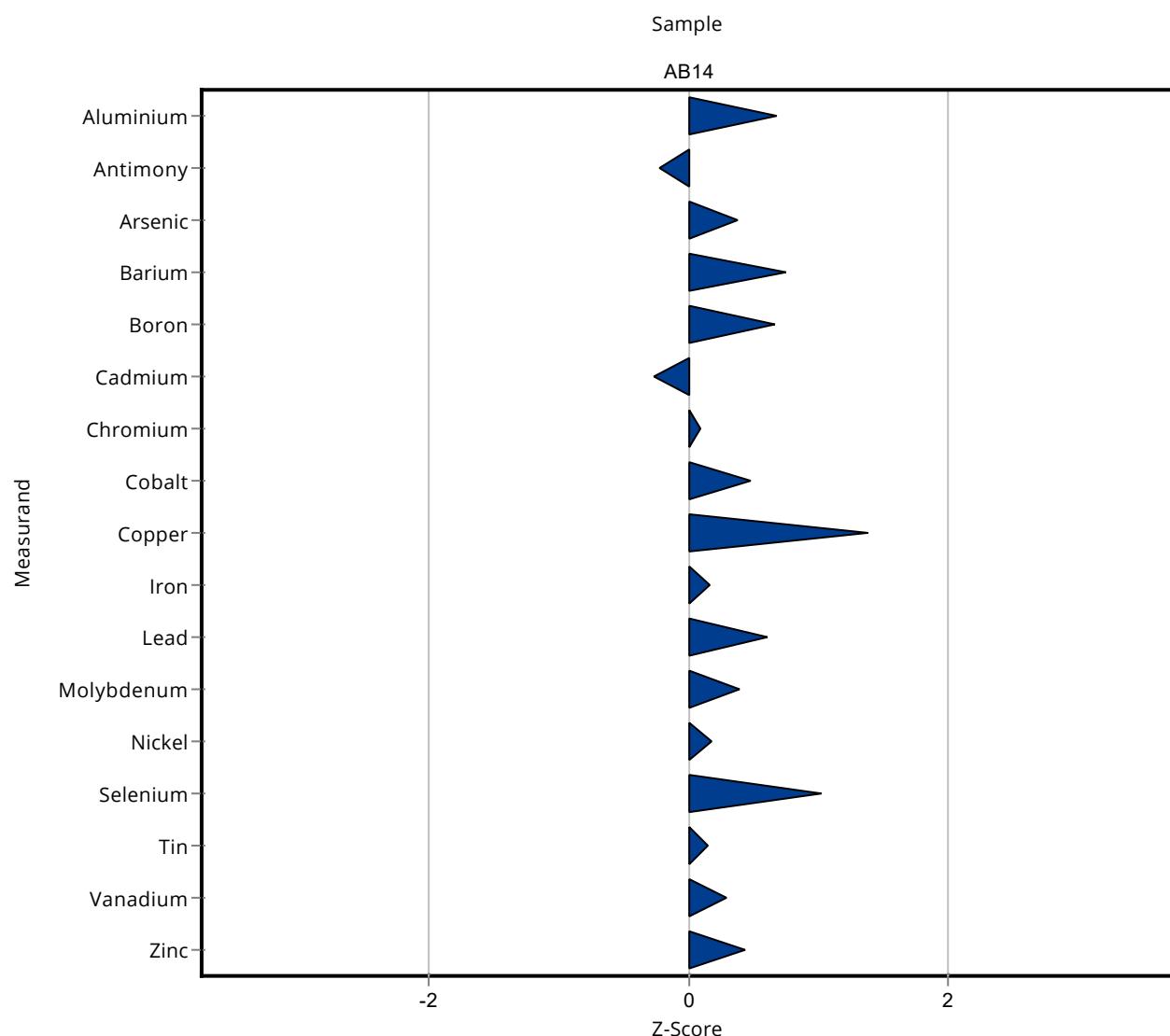


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.03 ± 0.1	0.157	112	0.68
Antimony	mg/l	0.00112 ± 0.000262	0.00102 ± 0.0002	0.000435	91.4	-0.22
Arsenic	mg/l	0.0241 ± 0.00101	0.0251 ± 0.005	0.00265	104	0.38
Barium	mg/l	0.331 ± 0.0135	0.358 ± 0.036	0.0364	108	0.75
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.15	0.14	107	0.67
Cadmium	mg/l	0.00145 ± 0.000113	0.00138 ± 0.00028	0.000276	95.1	-0.26
Chromium	mg/l	0.0408 ± 0.00175	0.0412 ± 0.0041	0.00489	101	0.09
Cobalt	mg/l	0.0245 ± 0.00112	0.0258 ± 0.0026	0.0027	105	0.48
Copper	mg/l	0.12 ± 0.00506	0.142 ± 0.014	0.0157	118	1.38
Iron	mg/l	0.83 ± 0.0389	0.846 ± 0.085	0.0996	102	0.16
Lead	mg/l	0.317 ± 0.0159	0.342 ± 0.068	0.0412	108	0.60
Molybdenum	mg/l	0.401 ± 0.013	0.417 ± 0.042	0.0401	104	0.40
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0021	0.00133	102	0.18
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.0026	0.00141	112	1.03
Silver	mg/l	- ± -	0.00183 ± 0.00037	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0301 ± 0.003	0.00296	102	0.15
Vanadium	mg/l	0.0184 ± 0.00132	0.0193 ± 0.0039	0.00313	105	0.29
Zinc	mg/l	0.429 ± 0.0175	0.45 ± 0.045	0.0472	105	0.44

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000689 ± 0.000138	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

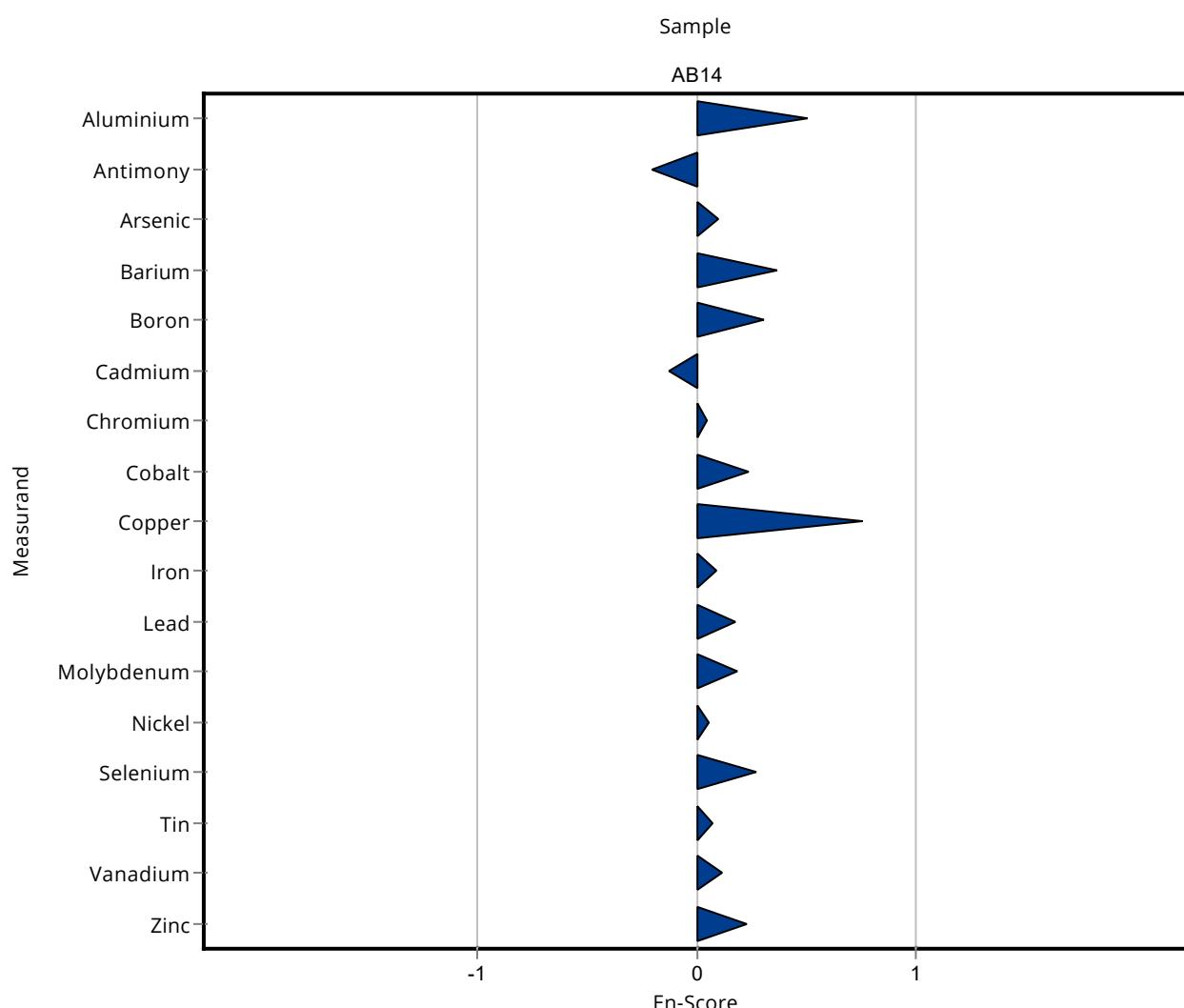
Labcode: LC0007

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.03 ± 0.1	0.157	112	0.51
Antimony	mg/l	0.00112 ± 0.000262	0.00102 ± 0.0002	0.000435	91.4	-0.20
Arsenic	mg/l	0.0241 ± 0.00101	0.0251 ± 0.005	0.00265	104	0.10
Barium	mg/l	0.331 ± 0.0135	0.358 ± 0.036	0.0364	108	0.37
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.15	0.14	107	0.31
Cadmium	mg/l	0.00145 ± 0.000113	0.00138 ± 0.00028	0.000276	95.1	-0.13
Chromium	mg/l	0.0408 ± 0.00175	0.0412 ± 0.0041	0.00489	101	0.05
Cobalt	mg/l	0.0245 ± 0.00112	0.0258 ± 0.0026	0.0027	105	0.24
Copper	mg/l	0.12 ± 0.00506	0.142 ± 0.014	0.0157	118	0.76
Iron	mg/l	0.83 ± 0.0389	0.846 ± 0.085	0.0996	102	0.09
Lead	mg/l	0.317 ± 0.0159	0.342 ± 0.068	0.0412	108	0.18
Molybdenum	mg/l	0.401 ± 0.013	0.417 ± 0.042	0.0401	104	0.19
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0021	0.00133	102	0.06
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.0026	0.00141	112	0.28
Silver	mg/l	- ± -	0.00183 ± 0.00037	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0301 ± 0.003	0.00296	102	0.07
Vanadium	mg/l	0.0184 ± 0.00132	0.0193 ± 0.0039	0.00313	105	0.12
Zinc	mg/l	0.429 ± 0.0175	0.45 ± 0.045	0.0472	105	0.23

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.000689 ± 0.000138	-	-	-

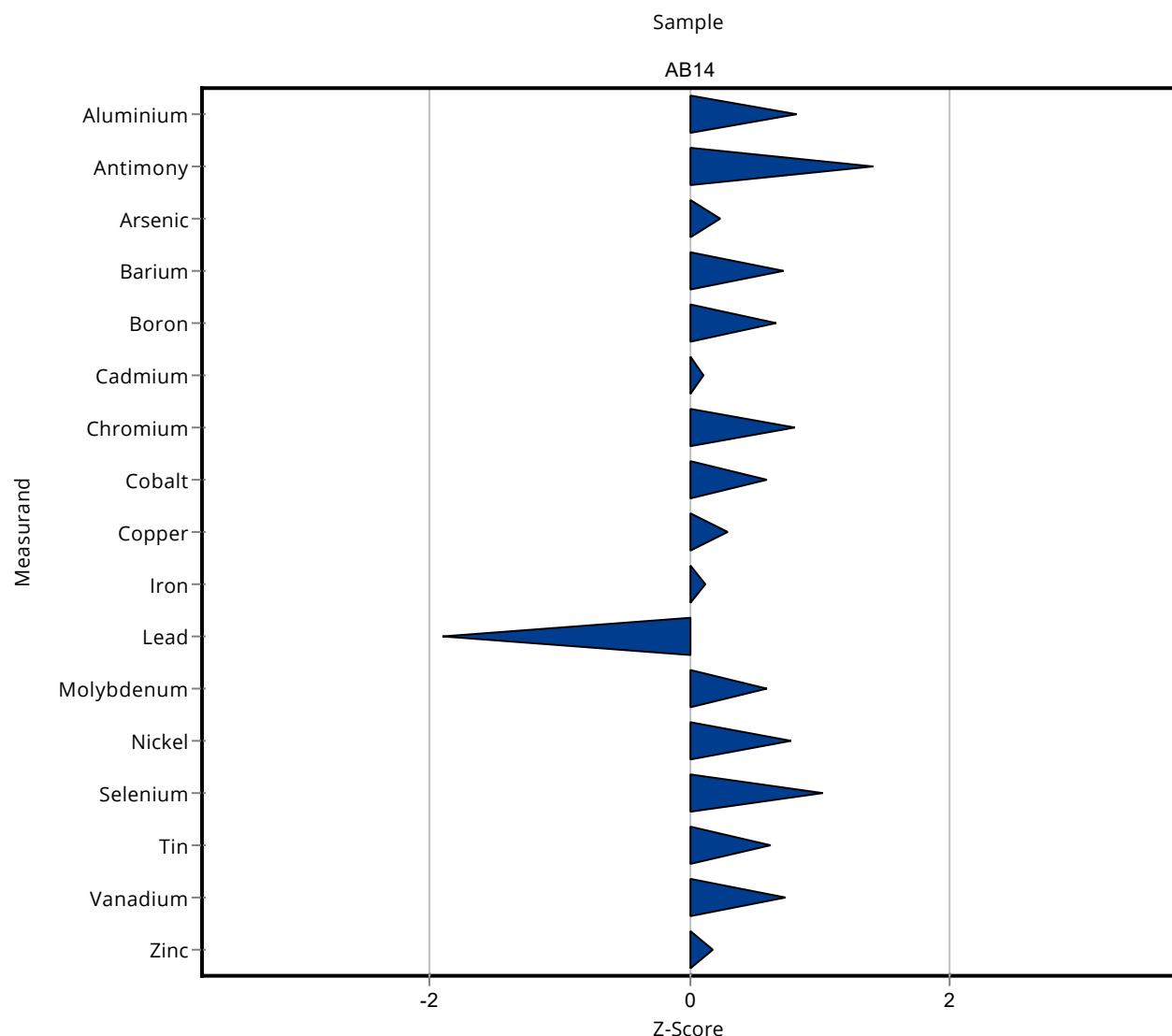


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.052 ± 0.07	0.157	114	0.82
Antimony	mg/l	0.00112 ± 0.000262	0.00173 ± 0.0006	0.000435	155	1.41
Arsenic	mg/l	0.0241 ± 0.00101	0.0247 ± 0.002	0.00265	103	0.23
Barium	mg/l	0.331 ± 0.0135	0.357 ± 0.015	0.0364	108	0.72
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.05	0.14	107	0.67
Cadmium	mg/l	0.00145 ± 0.000113	0.00148 ± 0.0001	0.000276	102	0.10
Chromium	mg/l	0.0408 ± 0.00175	0.0447 ± 0.002	0.00489	110	0.80
Cobalt	mg/l	0.0245 ± 0.00112	0.0261 ± 0.001	0.0027	106	0.59
Copper	mg/l	0.12 ± 0.00506	0.125 ± 0.008	0.0157	104	0.29
Iron	mg/l	0.83 ± 0.0389	0.843 ± 0.05	0.0996	102	0.13
Lead	mg/l	0.317 ± 0.0159	0.239 ± 0.012	0.0412	75.4	-1.89
Molybdenum	mg/l	0.401 ± 0.013	0.425 ± 0.022	0.0401	106	0.60
Nickel	mg/l	0.0103 ± 0.000538	0.0113 ± 0.0007	0.00133	110	0.79
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.001	0.00141	112	1.03
Silver	mg/l	- ± -	0.00093 ± 0.00009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0315 ± 0.002	0.00296	106	0.62
Vanadium	mg/l	0.0184 ± 0.00132	0.0207 ± 0.001	0.00313	113	0.74
Zinc	mg/l	0.429 ± 0.0175	0.438 ± 0.025	0.0472	102	0.18

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000947 ± 0.00003	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

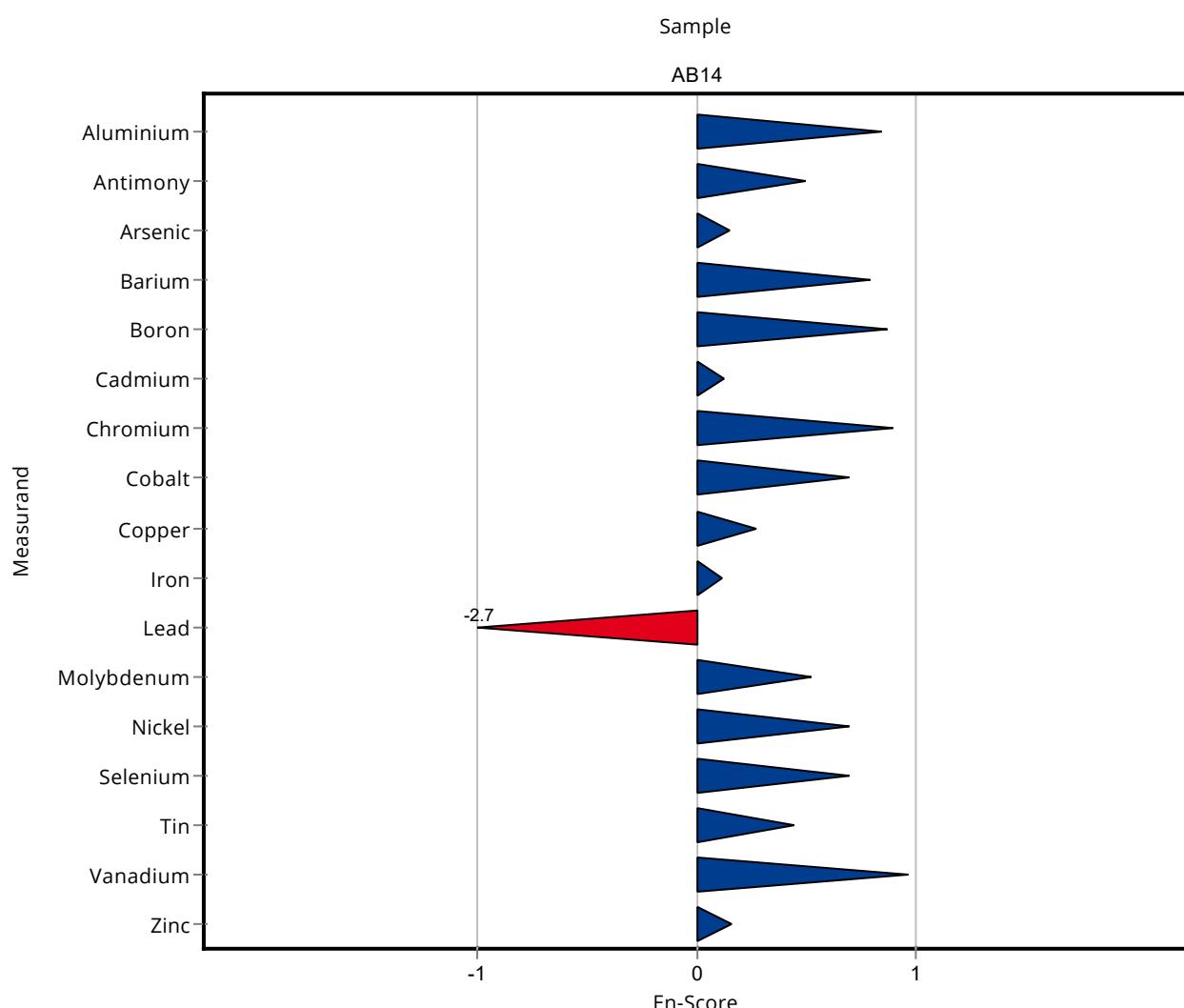
Labcode: LC0008

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.923 ± 0.062	1.052 ± 0.07	0.157	114	0.84
Antimony	mg/l	0.00112 ± 0.000262	0.00173 ± 0.0006	0.000435	155	0.50
Arsenic	mg/l	0.0241 ± 0.00101	0.0247 ± 0.002	0.00265	103	0.15
Barium	mg/l	0.331 ± 0.0135	0.357 ± 0.015	0.0364	108	0.80
Boron	mg/l	1.4 ± 0.039	1.49 ± 0.05	0.14	107	0.87
Cadmium	mg/l	0.00145 ± 0.000113	0.00148 ± 0.0001	0.000276	102	0.12
Chromium	mg/l	0.0408 ± 0.00175	0.0447 ± 0.002	0.00489	110	0.90
Cobalt	mg/l	0.0245 ± 0.00112	0.0261 ± 0.001	0.0027	106	0.69
Copper	mg/l	0.12 ± 0.00506	0.125 ± 0.008	0.0157	104	0.27
Iron	mg/l	0.83 ± 0.0389	0.843 ± 0.05	0.0996	102	0.12
Lead	mg/l	0.317 ± 0.0159	0.239 ± 0.012	0.0412	75.4	-2.71
Molybdenum	mg/l	0.401 ± 0.013	0.425 ± 0.022	0.0401	106	0.52
Nickel	mg/l	0.0103 ± 0.000538	0.0113 ± 0.0007	0.00133	110	0.70
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.001	0.00141	112	0.69
Silver	mg/l	- ± -	0.00093 ± 0.00009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0315 ± 0.002	0.00296	106	0.45
Vanadium	mg/l	0.0184 ± 0.00132	0.0207 ± 0.001	0.00313	113	0.96
Zinc	mg/l	0.429 ± 0.0175	0.438 ± 0.025	0.0472	102	0.16

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]
Mercury	mg/l	- ± -	0.000947 ± 0.00003	-	-

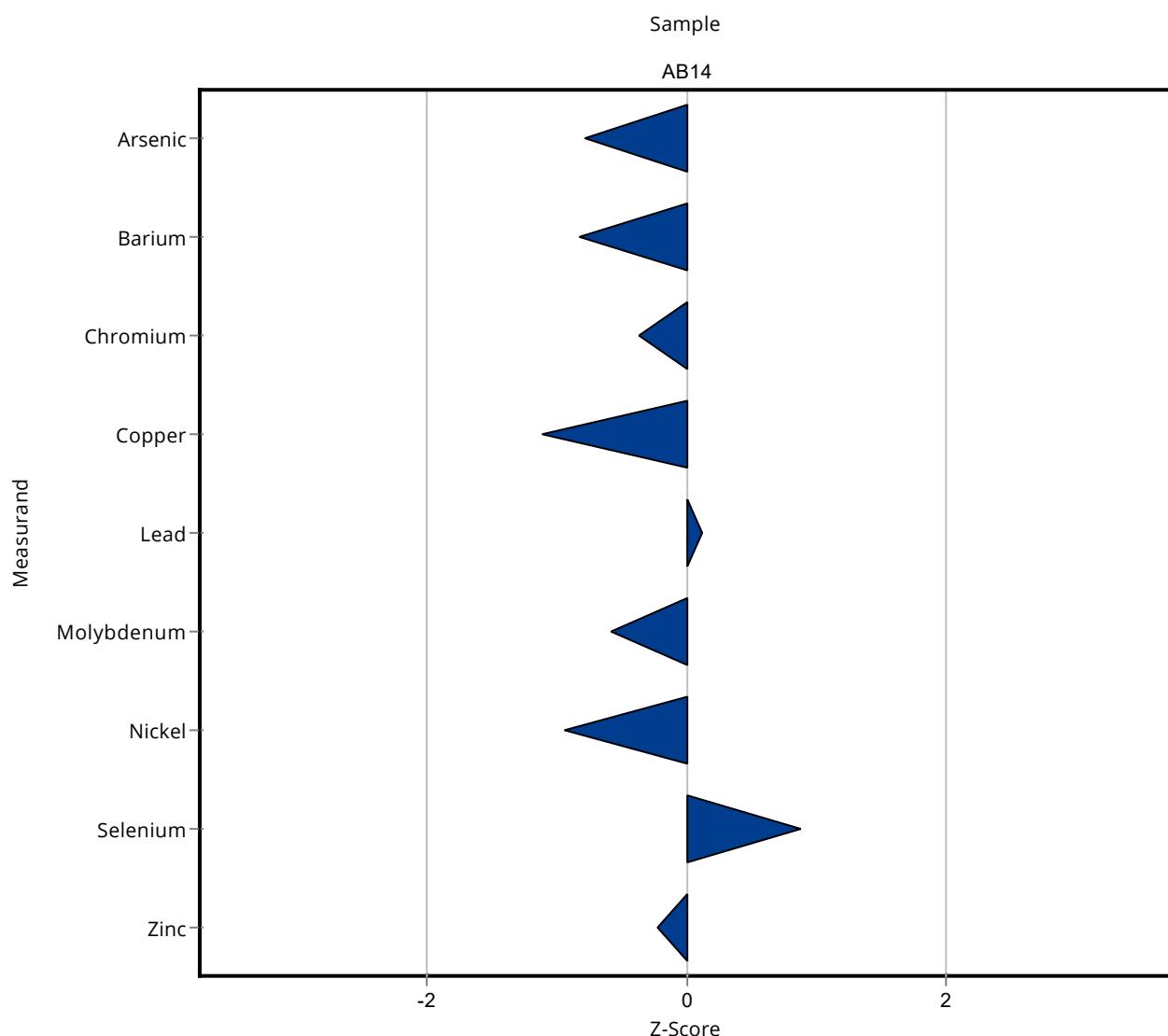


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -	-	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.022 ± 0.006	0.00265	91.3	-0.79
Barium	mg/l	0.331 ± 0.0135	0.301 ± 0.09	0.0364	91	-0.82
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113 <0.005 (LOQ) ± -	-	0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.039 ± 0.01	0.00489	95.7	-0.36
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.103 ± 0.03	0.0157	85.5	-1.11
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.322 ± 0.1	0.0412	102	0.12
Molybdenum	mg/l	0.401 ± 0.013	0.378 ± 0.12	0.0401	94.2	-0.58
Nickel	mg/l	0.0103 ± 0.000538	0.009 ± 0.003	0.00133	87.8	-0.94
Selenium	mg/l	0.0118 ± 0.000592	0.013 ± 0.004	0.00141	111	0.89
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.419 ± 0.13	0.0472	97.6	-0.22

Sample: AB14HG

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

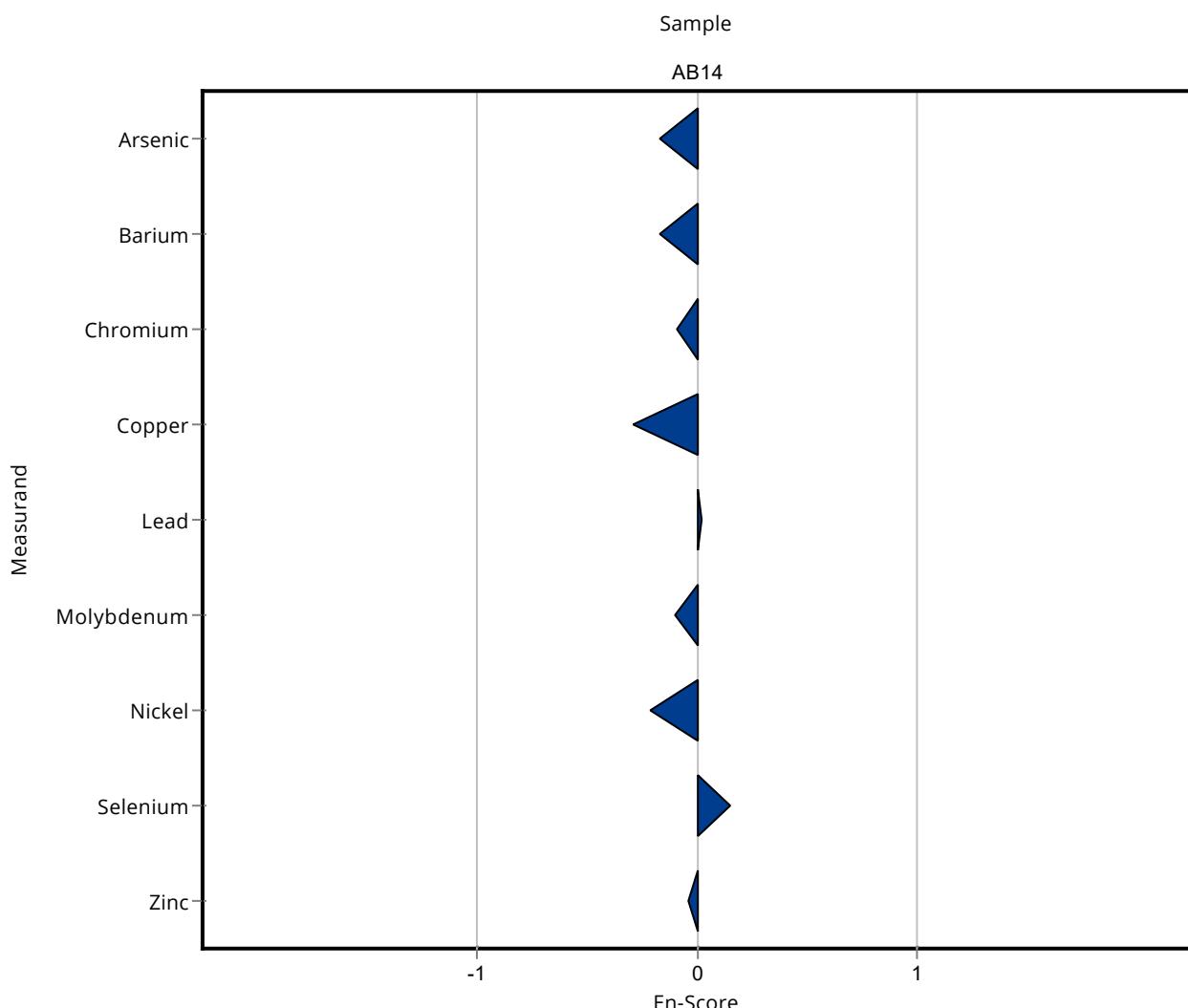


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -	-	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.022 ± 0.006	0.00265	91.3	-0.17
Barium	mg/l	0.331 ± 0.0135	0.301 ± 0.09	0.0364	91	-0.17
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113 <0.005 (LOQ) ± -	-	0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.039 ± 0.01	0.00489	95.7	-0.09
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.103 ± 0.03	0.0157	85.5	-0.29
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.322 ± 0.1	0.0412	102	0.02
Molybdenum	mg/l	0.401 ± 0.013	0.378 ± 0.12	0.0401	94.2	-0.10
Nickel	mg/l	0.0103 ± 0.000538	0.009 ± 0.003	0.00133	87.8	-0.21
Selenium	mg/l	0.0118 ± 0.000592	0.013 ± 0.004	0.00141	111	0.16
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.419 ± 0.13	0.0472	97.6	-0.04

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]
Mercury	mg/l	- ± -	- ± -	-	-

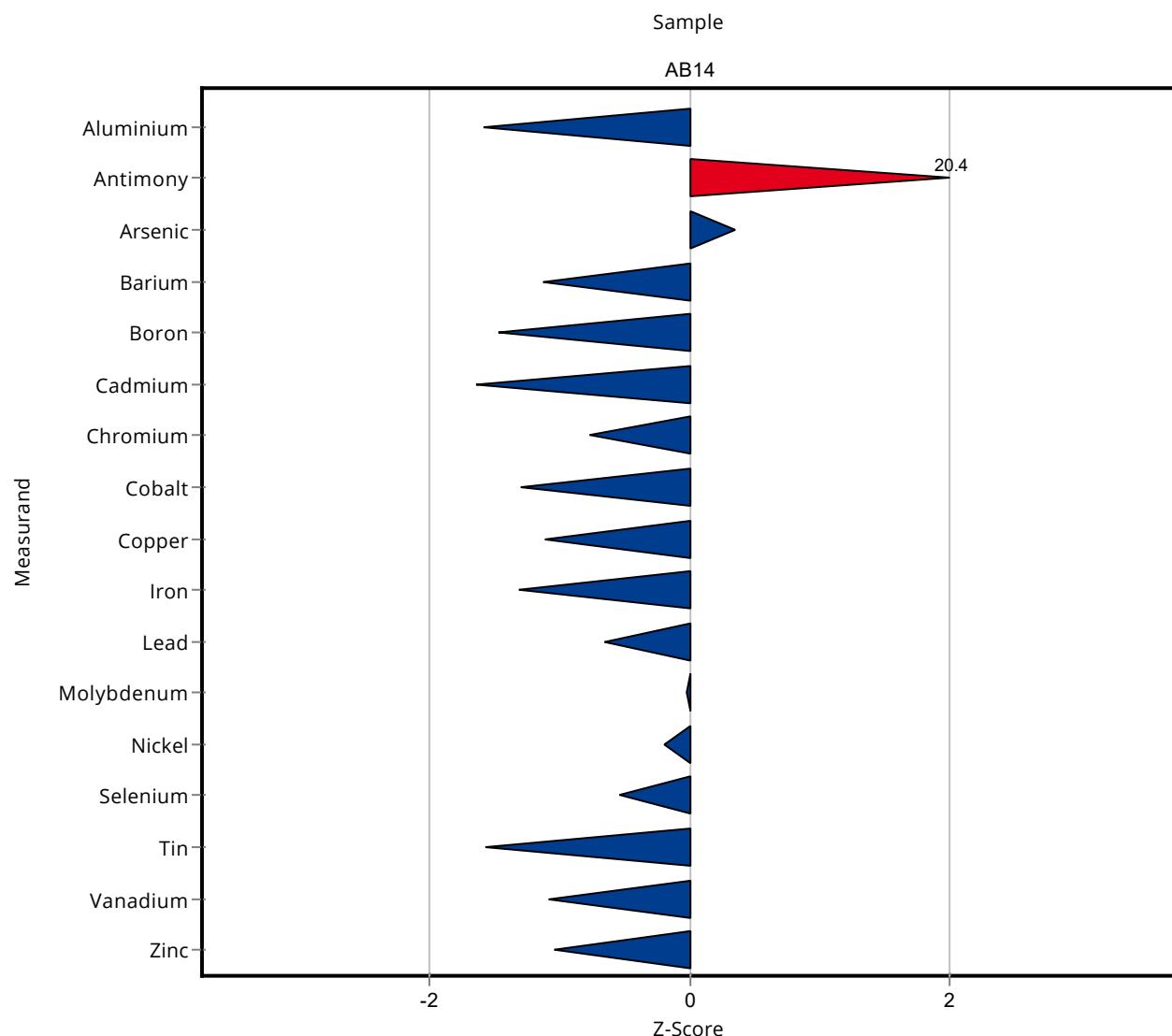


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.675 ± 0.005	0.157	73.1	-1.58
Antimony	mg/l	0.00112 ± 0.000262	0.01 ± 0.005	0.000435	896	20.40
Arsenic	mg/l	0.0241 ± 0.00101	0.025 ± 0.005	0.00265	104	0.34
Barium	mg/l	0.331 ± 0.0135	0.29 ± 0.005	0.0364	87.7	-1.12
Boron	mg/l	1.4 ± 0.039	1.19 ± 0.005	0.14	85.2	-1.48
Cadmium	mg/l	0.00145 ± 0.000113	0.001 ± 0.0005	0.000276	68.9	-1.64
Chromium	mg/l	0.0408 ± 0.00175	0.037 ± 0.005	0.00489	90.8	-0.77
Cobalt	mg/l	0.0245 ± 0.00112	0.021 ± 0.005	0.0027	85.7	-1.30
Copper	mg/l	0.12 ± 0.00506	0.103 ± 0.005	0.0157	85.5	-1.11
Iron	mg/l	0.83 ± 0.0389	0.7 ± 0.005	0.0996	84.3	-1.31
Lead	mg/l	0.317 ± 0.0159	0.29 ± 0.005	0.0412	91.5	-0.66
Molybdenum	mg/l	0.401 ± 0.013	0.4 ± 0.005	0.0401	99.7	-0.03
Nickel	mg/l	0.0103 ± 0.000538	0.01 ± 0.005	0.00133	97.5	-0.19
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.005	0.00141	93.6	-0.53
Silver	mg/l	- ± -	0.005 ± 0.005	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.025 ± 0.005	0.00296	84.3	-1.57
Vanadium	mg/l	0.0184 ± 0.00132	0.015 ± 0.005	0.00313	81.6	-1.08
Zinc	mg/l	0.429 ± 0.0175	0.38 ± 0.005	0.0472	88.5	-1.04

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0031 ± 0.0005	-	-	-

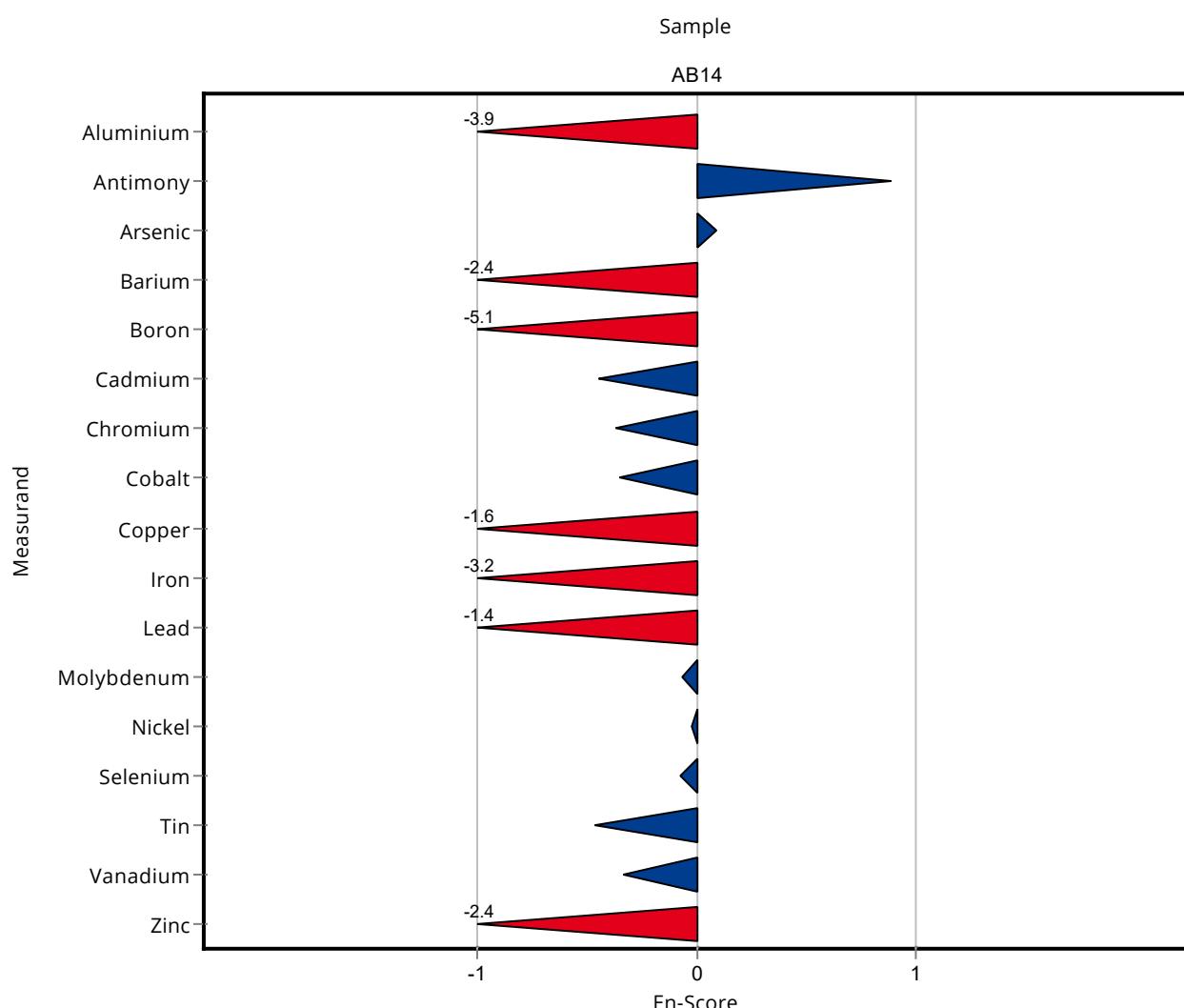


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.675 ± 0.005	0.157	73.1	-3.95
Antimony	mg/l	0.00112 ± 0.000262	0.01 ± 0.005	0.000435	896	0.89
Arsenic	mg/l	0.0241 ± 0.00101	0.025 ± 0.005	0.00265	104	0.09
Barium	mg/l	0.331 ± 0.0135	0.29 ± 0.005	0.0364	87.7	-2.43
Boron	mg/l	1.4 ± 0.039	1.19 ± 0.005	0.14	85.2	-5.13
Cadmium	mg/l	0.00145 ± 0.000113	0.001 ± 0.0005	0.000276	68.9	-0.45
Chromium	mg/l	0.0408 ± 0.00175	0.037 ± 0.005	0.00489	90.8	-0.37
Cobalt	mg/l	0.0245 ± 0.00112	0.021 ± 0.005	0.0027	85.7	-0.35
Copper	mg/l	0.12 ± 0.00506	0.103 ± 0.005	0.0157	85.5	-1.55
Iron	mg/l	0.83 ± 0.0389	0.7 ± 0.005	0.0996	84.3	-3.24
Lead	mg/l	0.317 ± 0.0159	0.29 ± 0.005	0.0412	91.5	-1.44
Molybdenum	mg/l	0.401 ± 0.013	0.4 ± 0.005	0.0401	99.7	-0.07
Nickel	mg/l	0.0103 ± 0.000538	0.01 ± 0.005	0.00133	97.5	-0.03
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.005	0.00141	93.6	-0.07
Silver	mg/l	- ± -	0.005 ± 0.005	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.025 ± 0.005	0.00296	84.3	-0.46
Vanadium	mg/l	0.0184 ± 0.00132	0.015 ± 0.005	0.00313	81.6	-0.34
Zinc	mg/l	0.429 ± 0.0175	0.38 ± 0.005	0.0472	88.5	-2.44

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0031 ± 0.0005	-	-	-

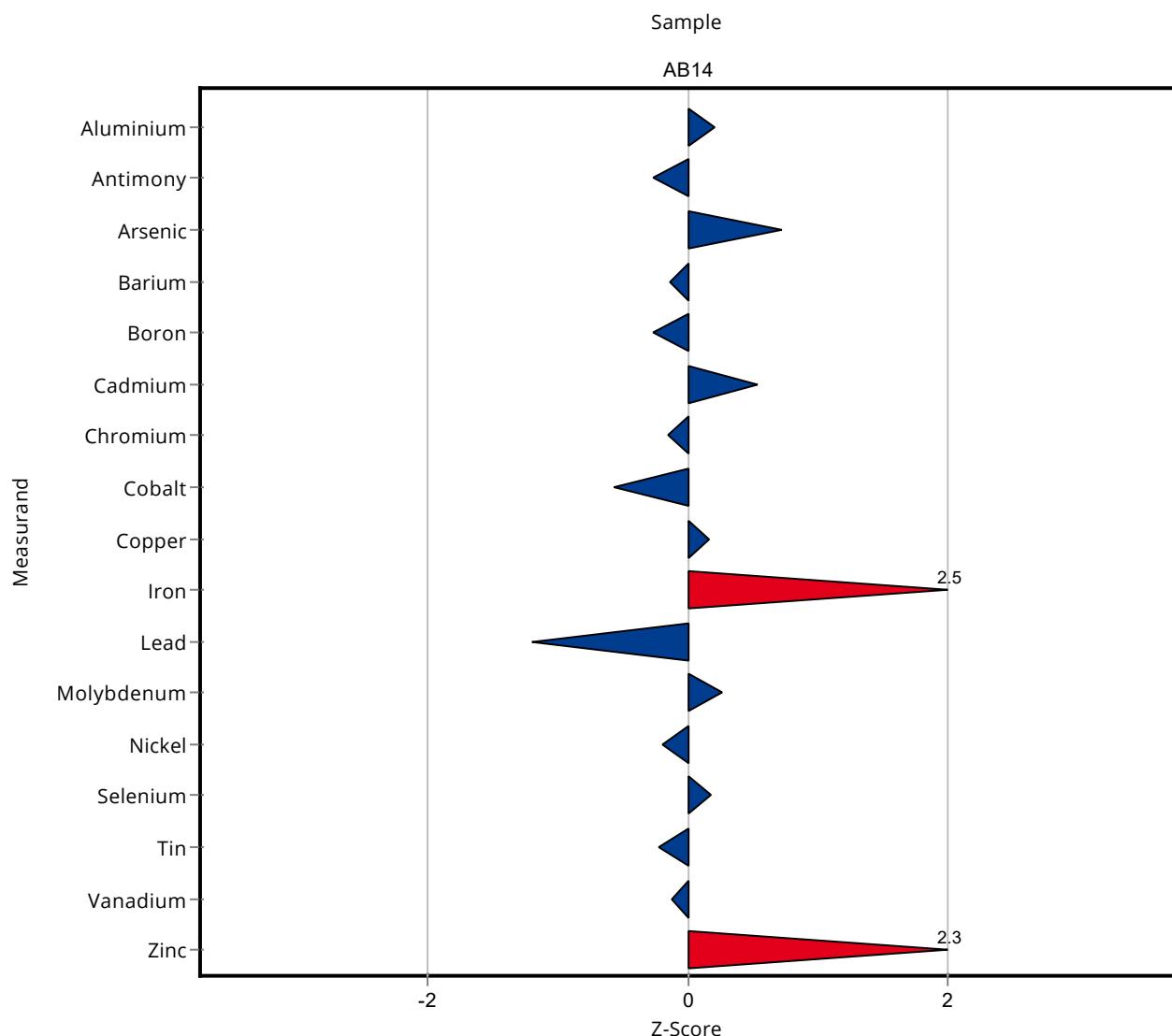


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.955 ± 0.0937	0.157	103	0.20
Antimony	mg/l	0.00112 ± 0.000262	0.001 ± 0.0001	0.000435	89.6	-0.27
Arsenic	mg/l	0.0241 ± 0.00101	0.026 ± 0.0015	0.00265	108	0.72
Barium	mg/l	0.331 ± 0.0135	0.326 ± 0.0138	0.0364	98.5	-0.13
Boron	mg/l	1.4 ± 0.039	1.36 ± 0.113	0.14	97.4	-0.26
Cadmium	mg/l	0.00145 ± 0.000113	0.0016 ± 0.0001	0.000276	110	0.54
Chromium	mg/l	0.0408 ± 0.00175	0.04 ± 0.0017	0.00489	98.1	-0.16
Cobalt	mg/l	0.0245 ± 0.00112	0.023 ± 0.0011	0.0027	93.8	-0.56
Copper	mg/l	0.12 ± 0.00506	0.123 ± 0.0068	0.0157	102	0.16
Iron	mg/l	0.83 ± 0.0389	1.08 ± 0.105	0.0996	130	2.51
Lead	mg/l	0.317 ± 0.0159	0.268 ± 0.0161	0.0412	84.5	-1.19
Molybdenum	mg/l	0.401 ± 0.013	0.412 ± 0.0223	0.0401	103	0.27
Nickel	mg/l	0.0103 ± 0.000538	0.01 ± 0.0005	0.00133	97.5	-0.19
Selenium	mg/l	0.0118 ± 0.000592	0.012 ± 0.0013	0.00141	102	0.18
Silver	mg/l	- ± -	0.001 ± 0.0001	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.029 ± 0.0028	0.00296	97.8	-0.22
Vanadium	mg/l	0.0184 ± 0.00132	0.018 ± 0.0008	0.00313	97.9	-0.12
Zinc	mg/l	0.429 ± 0.0175	0.539 ± 0.0456	0.0472	126	2.32

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0009 ± 0.00007	-	-	-

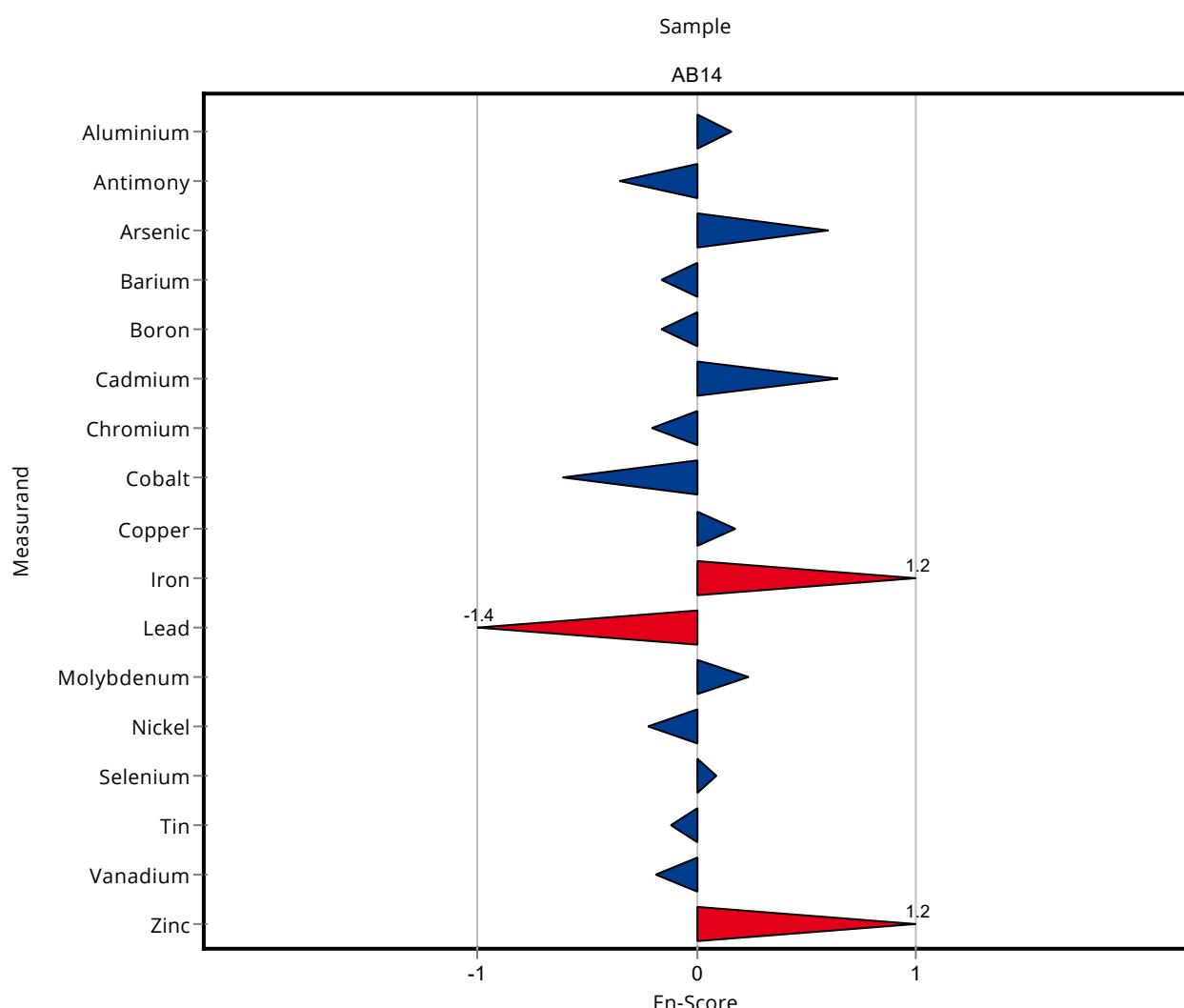


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.955 ± 0.0937	0.157	103	0.16
Antimony	mg/l	0.00112 ± 0.000262	0.001 ± 0.0001	0.000435	89.6	-0.35
Arsenic	mg/l	0.0241 ± 0.00101	0.026 ± 0.0015	0.00265	108	0.60
Barium	mg/l	0.331 ± 0.0135	0.326 ± 0.0138	0.0364	98.5	-0.16
Boron	mg/l	1.4 ± 0.039	1.36 ± 0.113	0.14	97.4	-0.16
Cadmium	mg/l	0.00145 ± 0.000113	0.0016 ± 0.0001	0.000276	110	0.65
Chromium	mg/l	0.0408 ± 0.00175	0.04 ± 0.0017	0.00489	98.1	-0.20
Cobalt	mg/l	0.0245 ± 0.00112	0.023 ± 0.0011	0.0027	93.8	-0.61
Copper	mg/l	0.12 ± 0.00506	0.123 ± 0.0068	0.0157	102	0.18
Iron	mg/l	0.83 ± 0.0389	1.08 ± 0.105	0.0996	130	1.17
Lead	mg/l	0.317 ± 0.0159	0.268 ± 0.0161	0.0412	84.5	-1.37
Molybdenum	mg/l	0.401 ± 0.013	0.412 ± 0.0223	0.0401	103	0.23
Nickel	mg/l	0.0103 ± 0.000538	0.01 ± 0.0005	0.00133	97.5	-0.22
Selenium	mg/l	0.0118 ± 0.000592	0.012 ± 0.0013	0.00141	102	0.09
Silver	mg/l	- ± -	0.001 ± 0.0001	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.029 ± 0.0028	0.00296	97.8	-0.11
Vanadium	mg/l	0.0184 ± 0.00132	0.018 ± 0.0008	0.00313	97.9	-0.19
Zinc	mg/l	0.429 ± 0.0175	0.539 ± 0.0456	0.0472	126	1.18

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0009 ± 0.00007	-	-	-

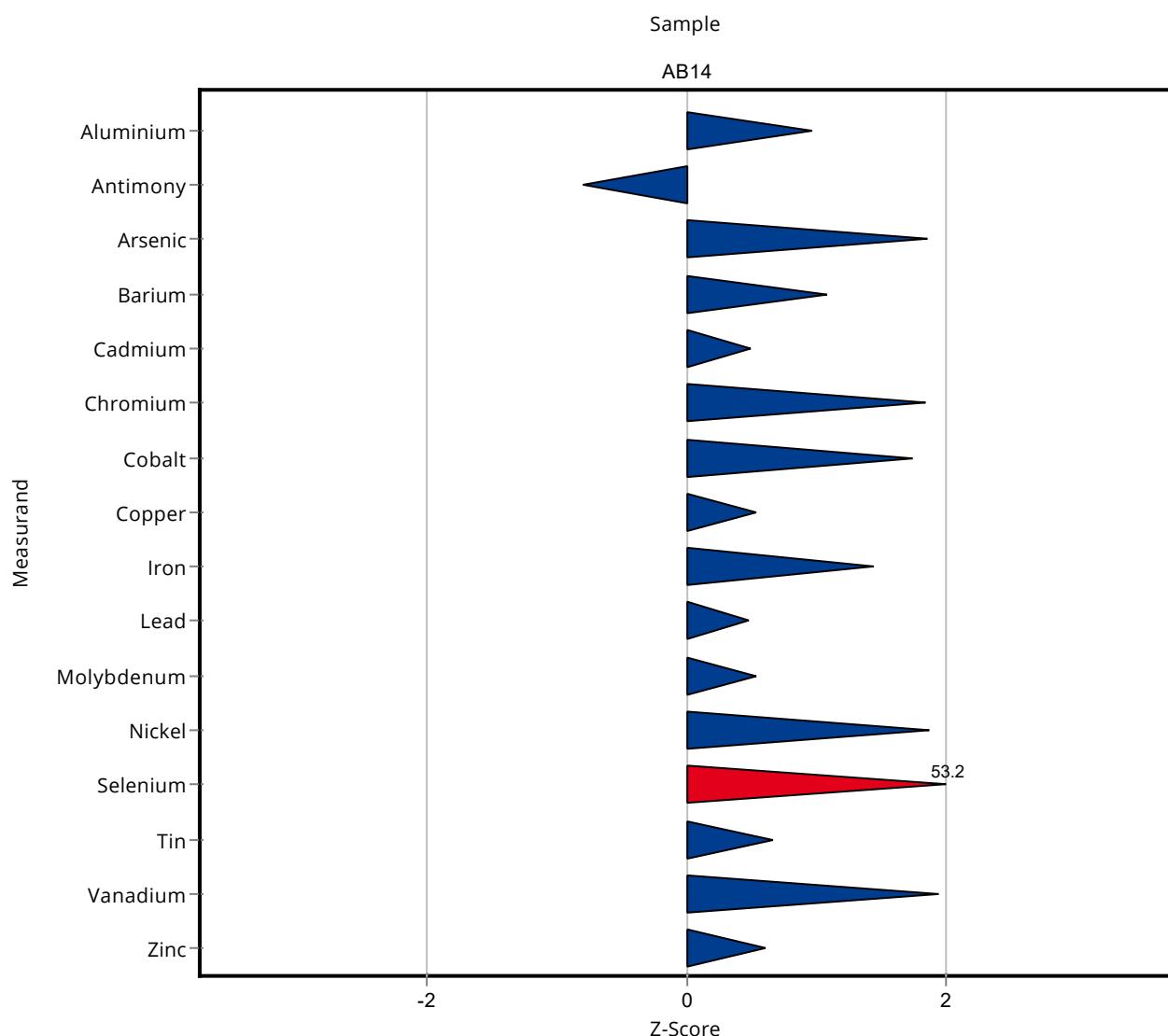


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.07386 ± 0.214772	0.157	116	0.96
Antimony	mg/l	0.00112 ± 0.000262	0.00077 ± 0.000154	0.000435	69	-0.80
Arsenic	mg/l	0.0241 ± 0.00101	0.029 ± 0.0058	0.00265	120	1.85
Barium	mg/l	0.331 ± 0.0135	0.37032 ± 0.074064	0.0364	112	1.08
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00159 ± 0.000318	0.000276	110	0.50
Chromium	mg/l	0.0408 ± 0.00175	0.04979 ± 0.009958	0.00489	122	1.84
Cobalt	mg/l	0.0245 ± 0.00112	0.02919 ± 0.005838	0.0027	119	1.74
Copper	mg/l	0.12 ± 0.00506	0.1289 ± 0.02578	0.0157	107	0.54
Iron	mg/l	0.83 ± 0.0389	0.97431 ± 0.194862	0.0996	117	1.45
Lead	mg/l	0.317 ± 0.0159	0.33676 ± 0.067352	0.0412	106	0.48
Molybdenum	mg/l	0.401 ± 0.013	0.4225 ± 0.0845	0.0401	105	0.53
Nickel	mg/l	0.0103 ± 0.000538	0.01274 ± 0.002548	0.00133	124	1.87
Selenium	mg/l	0.0118 ± 0.000592	0.08683 ± 0.017366	0.00141	739	53.24
Silver	mg/l	- ± -	0.0016 ± 0.00032	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.03162 ± 0.006324	0.00296	107	0.67
Vanadium	mg/l	0.0184 ± 0.00132	0.02447 ± 0.004894	0.00313	133	1.94
Zinc	mg/l	0.429 ± 0.0175	0.45824 ± 0.091648	0.0472	107	0.61

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00313 ± 0.000626	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

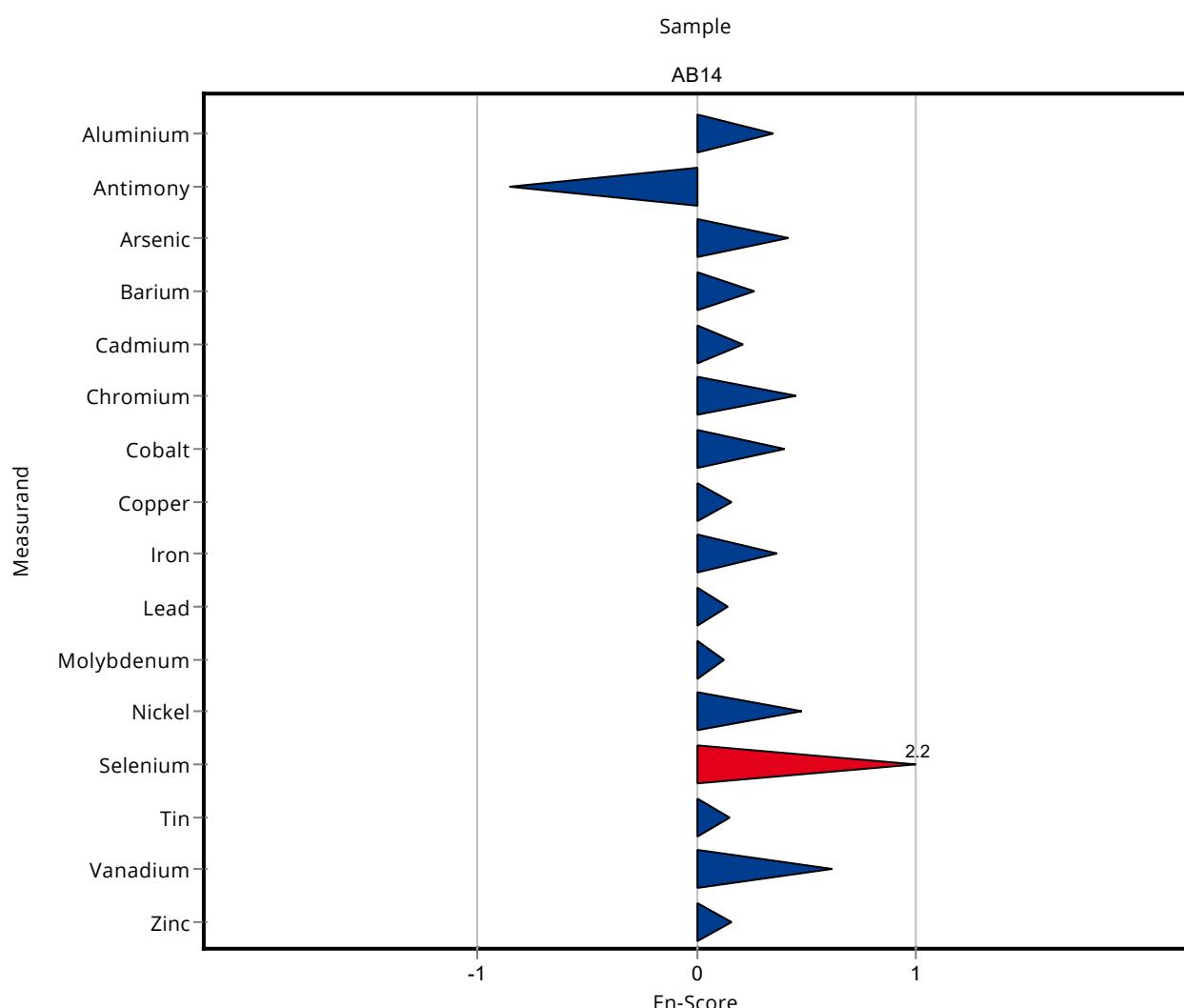
Labcode: LC0012

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.07386 ± 0.214772	0.157	116	0.35
Antimony	mg/l	0.00112 ± 0.000262	0.00077 ± 0.0001540	0.000435	69	-0.86
Arsenic	mg/l	0.0241 ± 0.00101	0.029 ± 0.0058	0.00265	120	0.42
Barium	mg/l	0.331 ± 0.0135	0.37032 ± 0.074064	0.0364	112	0.27
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00159 ± 0.0003180	0.000276	110	0.21
Chromium	mg/l	0.0408 ± 0.00175	0.04979 ± 0.009958	0.00489	122	0.45
Cobalt	mg/l	0.0245 ± 0.00112	0.02919 ± 0.005838	0.0027	119	0.40
Copper	mg/l	0.12 ± 0.00506	0.1289 ± 0.02578	0.0157	107	0.16
Iron	mg/l	0.83 ± 0.0389	0.97431 ± 0.194862	0.0996	117	0.37
Lead	mg/l	0.317 ± 0.0159	0.33676 ± 0.067352	0.0412	106	0.15
Molybdenum	mg/l	0.401 ± 0.013	0.4225 ± 0.0845	0.0401	105	0.13
Nickel	mg/l	0.0103 ± 0.000538	0.01274 ± 0.002548	0.00133	124	0.49
Selenium	mg/l	0.0118 ± 0.000592	0.08683 ± 0.017366	0.00141	739	2.16
Silver	mg/l	- ± -	0.0016 ± 0.00032	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.03162 ± 0.006324	0.00296	107	0.16
Vanadium	mg/l	0.0184 ± 0.00132	0.02447 ± 0.004894	0.00313	133	0.62
Zinc	mg/l	0.429 ± 0.0175	0.45824 ± 0.091648	0.0472	107	0.16

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00313 ± 0.000626	-	-	-

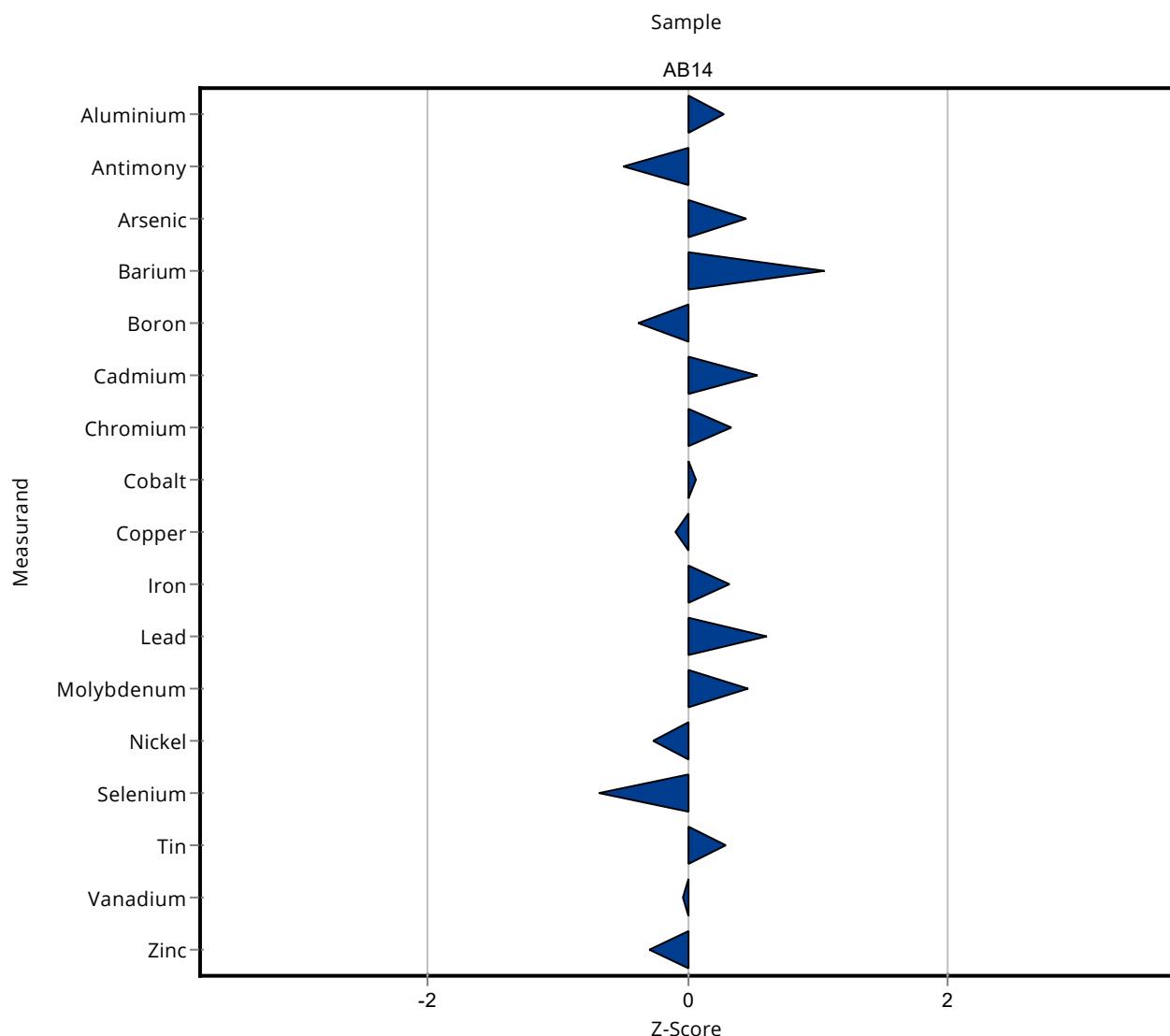


Sample: AB14

Parameter	Unit	Assigned value \pm U (k=2)	Result \pm U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 \pm 0.062	0.966 \pm 0.227	0.157	105	0.27
Antimony	mg/l	0.00112 \pm 0.000262	0.0009 \pm 0.0001	0.000435	80.6	-0.50
Arsenic	mg/l	0.0241 \pm 0.00101	0.0253 \pm 0.0033	0.00265	105	0.46
Barium	mg/l	0.331 \pm 0.0135	0.369 \pm 0.0428	0.0364	112	1.05
Boron	mg/l	1.4 \pm 0.039	1.344 \pm 0.316	0.14	96.3	-0.37
Cadmium	mg/l	0.00145 \pm 0.000113	0.0016 \pm 0.0003	0.000276	110	0.54
Chromium	mg/l	0.0408 \pm 0.00175	0.0424 \pm 0.0062	0.00489	104	0.33
Cobalt	mg/l	0.0245 \pm 0.00112	0.0247 \pm 0.0034	0.0027	101	0.07
Copper	mg/l	0.12 \pm 0.00506	0.119 \pm 0.0223	0.0157	98.8	-0.09
Iron	mg/l	0.83 \pm 0.0389	0.863 \pm 0.1311	0.0996	104	0.33
Lead	mg/l	0.317 \pm 0.0159	0.342 \pm 0.0837	0.0412	108	0.60
Molybdenum	mg/l	0.401 \pm 0.013	0.42 \pm 0.0412	0.0401	105	0.47
Nickel	mg/l	0.0103 \pm 0.000538	0.0099 \pm 0.0014	0.00133	96.6	-0.27
Selenium	mg/l	0.0118 \pm 0.000592	0.0108 \pm 0.0018	0.00141	91.9	-0.67
Silver	mg/l	- \pm -	0.0018 \pm 0.0002	-	-	-
Tin	mg/l	0.0296 \pm 0.00112	0.0305 \pm 0.0042	0.00296	103	0.29
Vanadium	mg/l	0.0184 \pm 0.00132	0.0183 \pm 0.0022	0.00313	99.5	-0.03
Zinc	mg/l	0.429 \pm 0.0175	0.4156 \pm 0.0644	0.0472	96.8	-0.29

Sample: AB14HG

Parameter	Unit	Assigned value \pm U (k=2)	Result \pm U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- \pm -	0.0035 \pm 0.0004	-	-	-

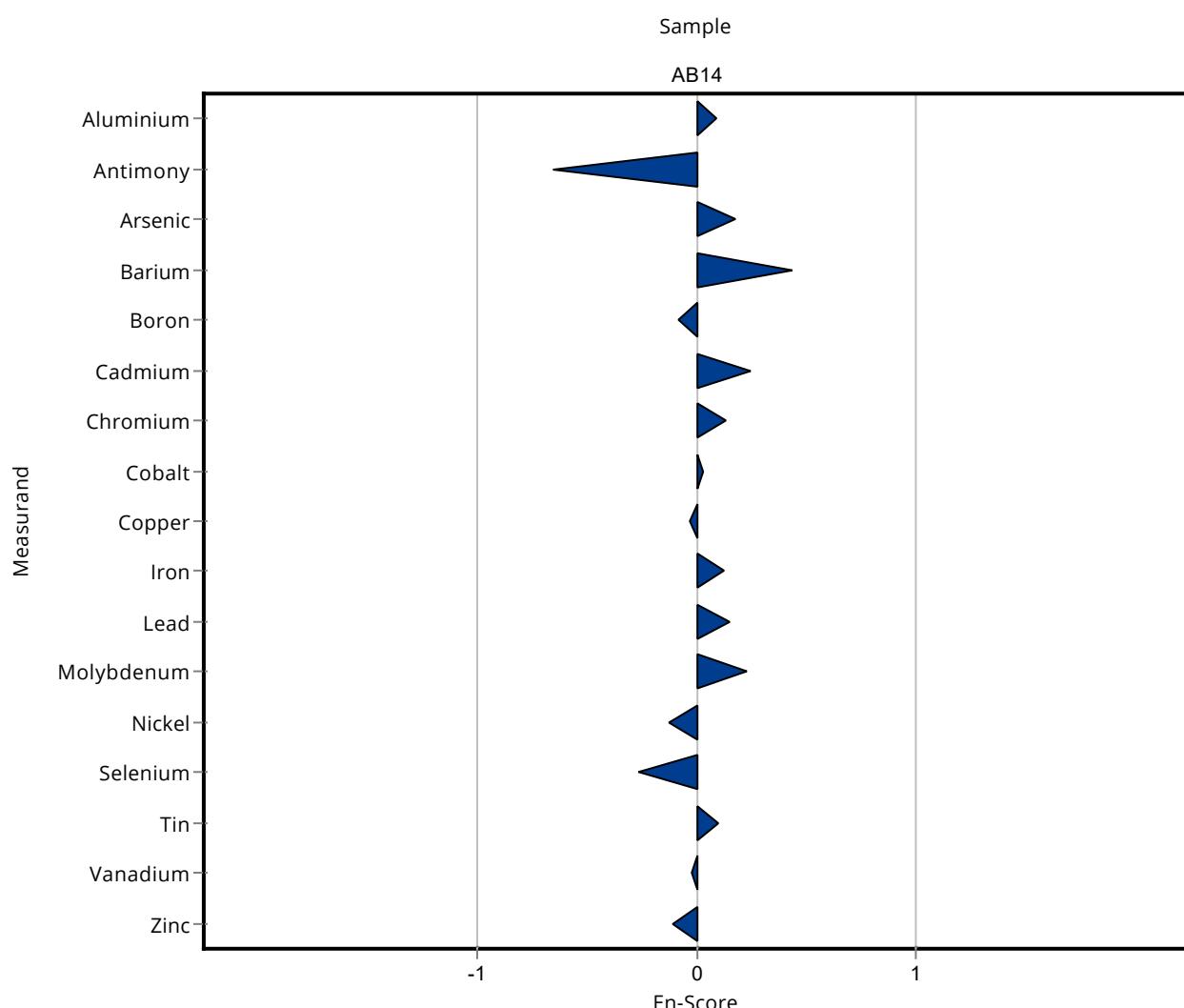


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.966 ± 0.227	0.157	105	0.09
Antimony	mg/l	0.00112 ± 0.000262	0.0009 ± 0.0001	0.000435	80.6	-0.66
Arsenic	mg/l	0.0241 ± 0.00101	0.0253 ± 0.0033	0.00265	105	0.18
Barium	mg/l	0.331 ± 0.0135	0.369 ± 0.0428	0.0364	112	0.44
Boron	mg/l	1.4 ± 0.039	1.344 ± 0.316	0.14	96.3	-0.08
Cadmium	mg/l	0.00145 ± 0.000113	0.0016 ± 0.0003	0.000276	110	0.24
Chromium	mg/l	0.0408 ± 0.00175	0.0424 ± 0.0062	0.00489	104	0.13
Cobalt	mg/l	0.0245 ± 0.00112	0.0247 ± 0.0034	0.0027	101	0.03
Copper	mg/l	0.12 ± 0.00506	0.119 ± 0.0223	0.0157	98.8	-0.03
Iron	mg/l	0.83 ± 0.0389	0.863 ± 0.1311	0.0996	104	0.12
Lead	mg/l	0.317 ± 0.0159	0.342 ± 0.0837	0.0412	108	0.15
Molybdenum	mg/l	0.401 ± 0.013	0.42 ± 0.0412	0.0401	105	0.23
Nickel	mg/l	0.0103 ± 0.000538	0.0099 ± 0.0014	0.00133	96.6	-0.12
Selenium	mg/l	0.0118 ± 0.000592	0.0108 ± 0.0018	0.00141	91.9	-0.26
Silver	mg/l	- ± -	0.0018 ± 0.0002	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0305 ± 0.0042	0.00296	103	0.10
Vanadium	mg/l	0.0184 ± 0.00132	0.0183 ± 0.0022	0.00313	99.5	-0.02
Zinc	mg/l	0.429 ± 0.0175	0.4156 ± 0.0644	0.0472	96.8	-0.11

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0035 ± 0.0004	-	-	-

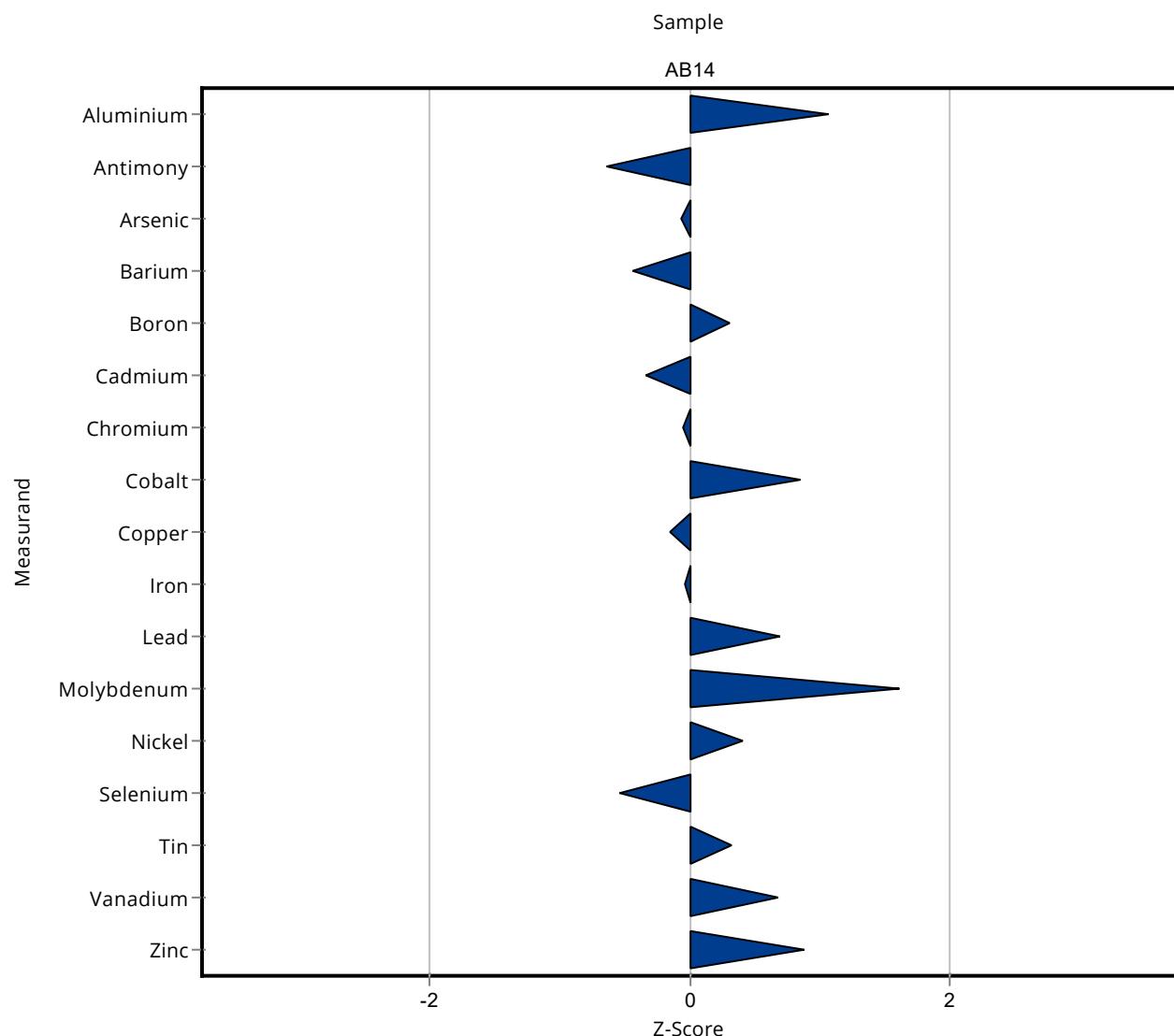


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.09 ± 0.327	0.157	118	1.06
Antimony	mg/l	0.00112 ± 0.000262	0.000838 ± 0.000251	0.000435	75.1	-0.64
Arsenic	mg/l	0.0241 ± 0.00101	0.0239 ± 0.00717	0.00265	99.2	-0.07
Barium	mg/l	0.331 ± 0.0135	0.315 ± 0.0945	0.0364	95.2	-0.44
Boron	mg/l	1.4 ± 0.039	1.44 ± 0.432	0.14	103	0.31
Cadmium	mg/l	0.00145 ± 0.000113	0.00136 ± 0.00041	0.000276	93.7	-0.33
Chromium	mg/l	0.0408 ± 0.00175	0.0405 ± 0.0122	0.00489	99.3	-0.05
Cobalt	mg/l	0.0245 ± 0.00112	0.0268 ± 0.008	0.0027	109	0.85
Copper	mg/l	0.12 ± 0.00506	0.118 ± 0.0354	0.0157	98	-0.15
Iron	mg/l	0.83 ± 0.0389	0.826 ± 0.248	0.0996	99.5	-0.04
Lead	mg/l	0.317 ± 0.0159	0.346 ± 0.104	0.0412	109	0.70
Molybdenum	mg/l	0.401 ± 0.013	0.466 ± 0.139	0.0401	116	1.62
Nickel	mg/l	0.0103 ± 0.000538	0.0108 ± 0.00324	0.00133	105	0.41
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.0033	0.00141	93.6	-0.53
Silver	mg/l	- ± -	0.00169 ± 0.000507	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0306 ± 0.00918	0.00296	103	0.32
Vanadium	mg/l	0.0184 ± 0.00132	0.0205 ± 0.00615	0.00313	111	0.67
Zinc	mg/l	0.429 ± 0.0175	0.471 ± 0.141	0.0472	110	0.88

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000226 ± 0.000068	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

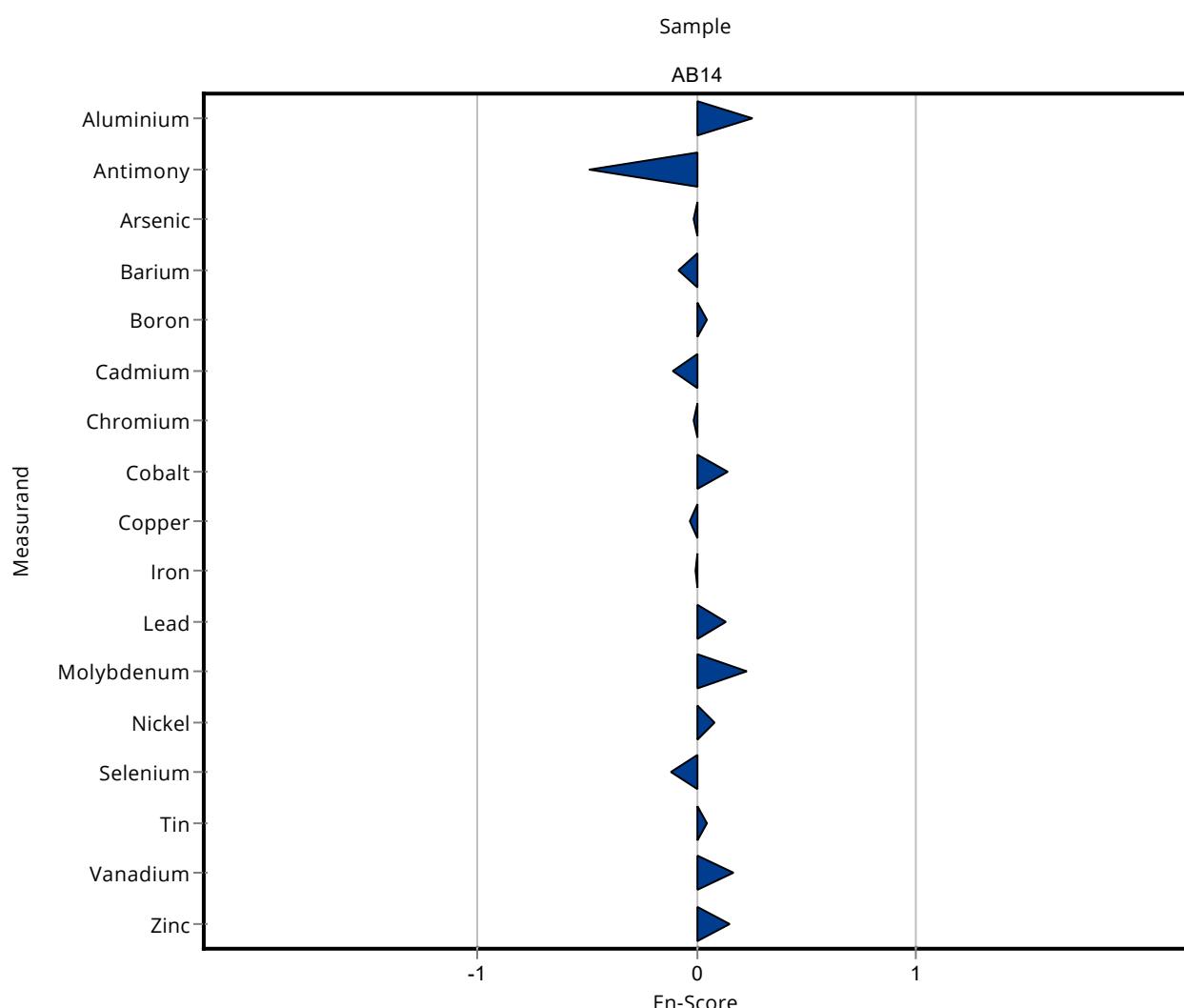
Labcode: LC0014

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.09 ± 0.327	0.157	118	0.25
Antimony	mg/l	0.00112 ± 0.000262	0.000838 ± 0.000251	0.000435	75.1	-0.49
Arsenic	mg/l	0.0241 ± 0.00101	0.0239 ± 0.00717	0.00265	99.2	-0.01
Barium	mg/l	0.331 ± 0.0135	0.315 ± 0.0945	0.0364	95.2	-0.08
Boron	mg/l	1.4 ± 0.039	1.44 ± 0.432	0.14	103	0.05
Cadmium	mg/l	0.00145 ± 0.000113	0.00136 ± 0.00041	0.000276	93.7	-0.11
Chromium	mg/l	0.0408 ± 0.00175	0.0405 ± 0.0122	0.00489	99.3	-0.01
Cobalt	mg/l	0.0245 ± 0.00112	0.0268 ± 0.008	0.0027	109	0.14
Copper	mg/l	0.12 ± 0.00506	0.118 ± 0.0354	0.0157	98	-0.03
Iron	mg/l	0.83 ± 0.0389	0.826 ± 0.248	0.0996	99.5	-0.01
Lead	mg/l	0.317 ± 0.0159	0.346 ± 0.104	0.0412	109	0.14
Molybdenum	mg/l	0.401 ± 0.013	0.466 ± 0.139	0.0401	116	0.23
Nickel	mg/l	0.0103 ± 0.000538	0.0108 ± 0.00324	0.00133	105	0.08
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.0033	0.00141	93.6	-0.11
Silver	mg/l	- ± -	0.00169 ± 0.000507	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0306 ± 0.00918	0.00296	103	0.05
Vanadium	mg/l	0.0184 ± 0.00132	0.0205 ± 0.00615	0.00313	111	0.17
Zinc	mg/l	0.429 ± 0.0175	0.471 ± 0.141	0.0472	110	0.15

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.000226 ± 0.000068	-	-	-

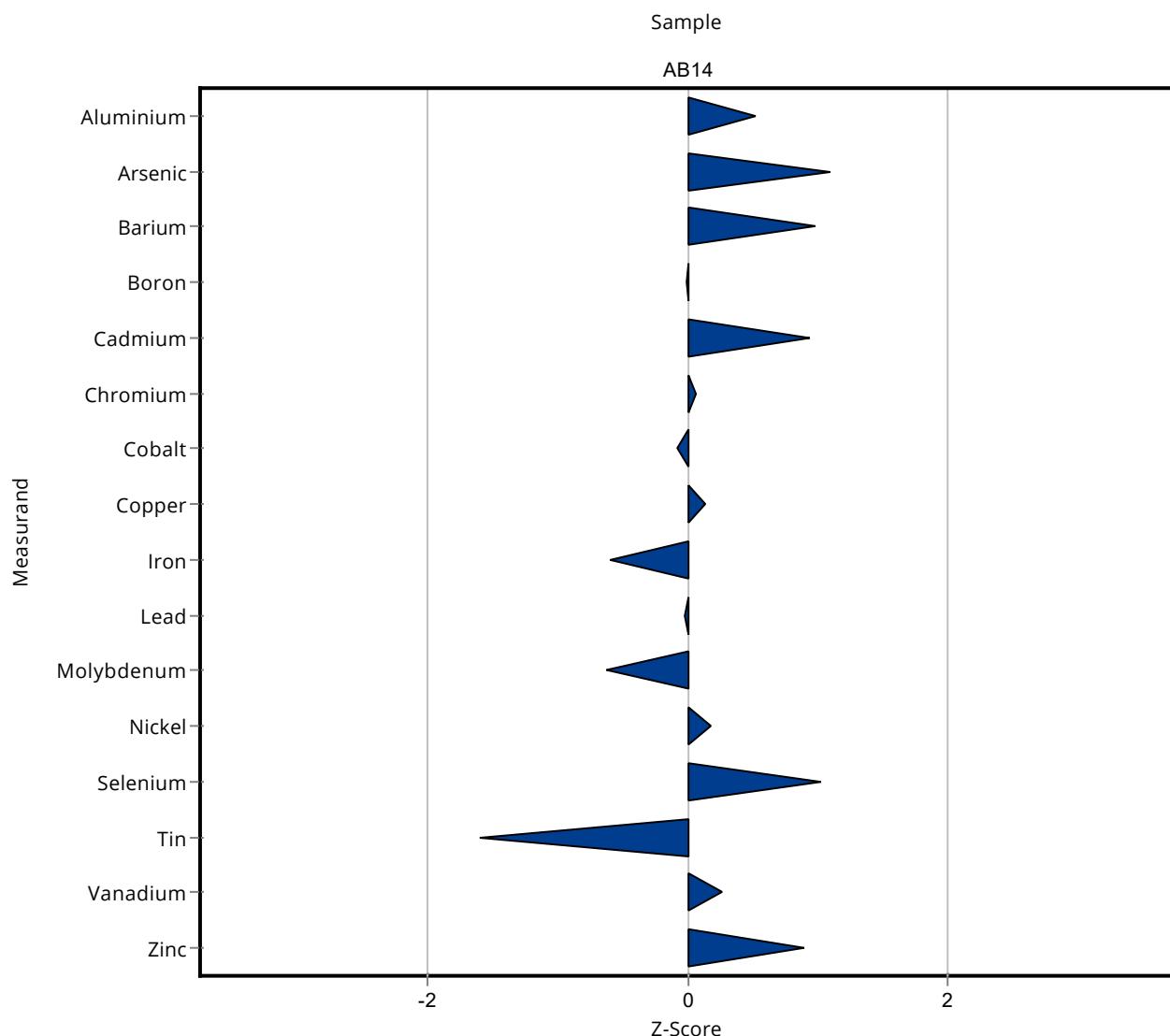


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.0057 ± 0.0921	0.157	109	0.53
Antimony	mg/l	0.00112 ± 0.000262	<0.01 (LOQ) ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.027 ± 0.0011	0.00265	112	1.10
Barium	mg/l	0.331 ± 0.0135	0.3667 ± 0.0152	0.0364	111	0.99
Boron	mg/l	1.4 ± 0.039	1.3961 ± 0.1614	0.14	100	0.00
Cadmium	mg/l	0.00145 ± 0.000113	0.00171 ± 0.0001	0.000276	118	0.94
Chromium	mg/l	0.0408 ± 0.00175	0.0411 ± 0.0029	0.00489	101	0.07
Cobalt	mg/l	0.0245 ± 0.00112	0.0243 ± 0.0036	0.0027	99.1	-0.08
Copper	mg/l	0.12 ± 0.00506	0.1225 ± 0.0104	0.0157	102	0.13
Iron	mg/l	0.83 ± 0.0389	0.7712 ± 0.0785	0.0996	92.9	-0.59
Lead	mg/l	0.317 ± 0.0159	0.3164 ± 0.0254	0.0412	99.8	-0.02
Molybdenum	mg/l	0.401 ± 0.013	0.3758 ± 0.021	0.0401	93.7	-0.63
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0008	0.00133	102	0.18
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.001	0.00141	112	1.03
Silver	mg/l	- ± -	<0.05 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0249 ± 0.0037	0.00296	84	-1.60
Vanadium	mg/l	0.0184 ± 0.00132	0.0192 ± 0.0029	0.00313	104	0.26
Zinc	mg/l	0.429 ± 0.0175	0.4719 ± 0.0515	0.0472	110	0.90

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00021 ± 0.000032	-	-	-

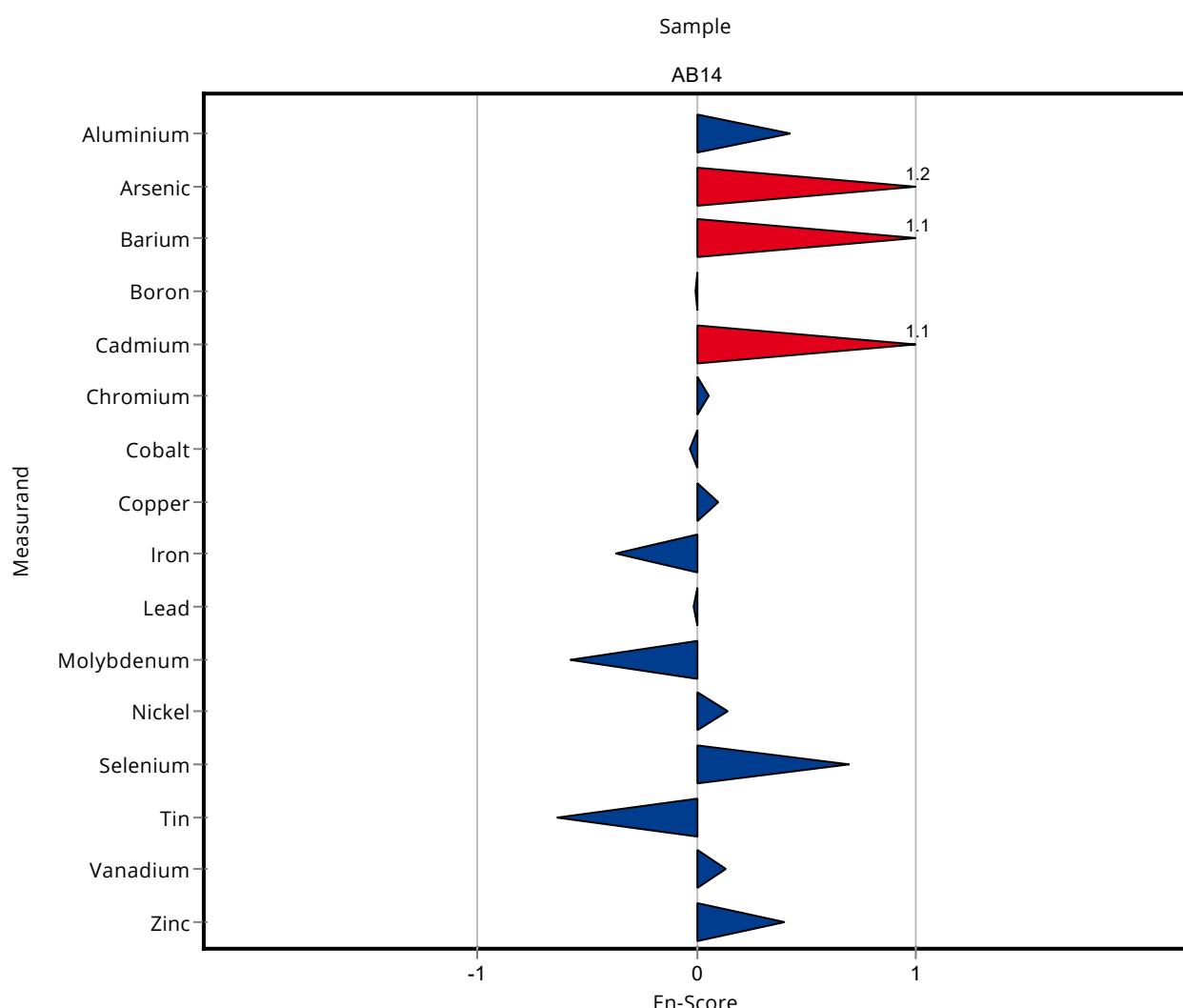


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.0057 ± 0.0921	0.157	109	0.43
Antimony	mg/l	0.00112 ± 0.000262 <0.01 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.027 ± 0.0011	0.00265	112	1.20
Barium	mg/l	0.331 ± 0.0135	0.3667 ± 0.0152	0.0364	111	1.08
Boron	mg/l	1.4 ± 0.039	1.3961 ± 0.1614	0.14	100	0.00
Cadmium	mg/l	0.00145 ± 0.000113	0.00171 ± 0.0001	0.000276	118	1.13
Chromium	mg/l	0.0408 ± 0.00175	0.0411 ± 0.0029	0.00489	101	0.05
Cobalt	mg/l	0.0245 ± 0.00112	0.0243 ± 0.0036	0.0027	99.1	-0.03
Copper	mg/l	0.12 ± 0.00506	0.1225 ± 0.0104	0.0157	102	0.10
Iron	mg/l	0.83 ± 0.0389	0.7712 ± 0.0785	0.0996	92.9	-0.36
Lead	mg/l	0.317 ± 0.0159	0.3164 ± 0.0254	0.0412	99.8	-0.01
Molybdenum	mg/l	0.401 ± 0.013	0.3758 ± 0.021	0.0401	93.7	-0.58
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0008	0.00133	102	0.15
Selenium	mg/l	0.0118 ± 0.000592	0.0132 ± 0.001	0.00141	112	0.69
Silver	mg/l	- ± -	<0.05 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0249 ± 0.0037	0.00296	84	-0.63
Vanadium	mg/l	0.0184 ± 0.00132	0.0192 ± 0.0029	0.00313	104	0.14
Zinc	mg/l	0.429 ± 0.0175	0.4719 ± 0.0515	0.0472	110	0.41

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00021 ± 0.000032	-	-	-

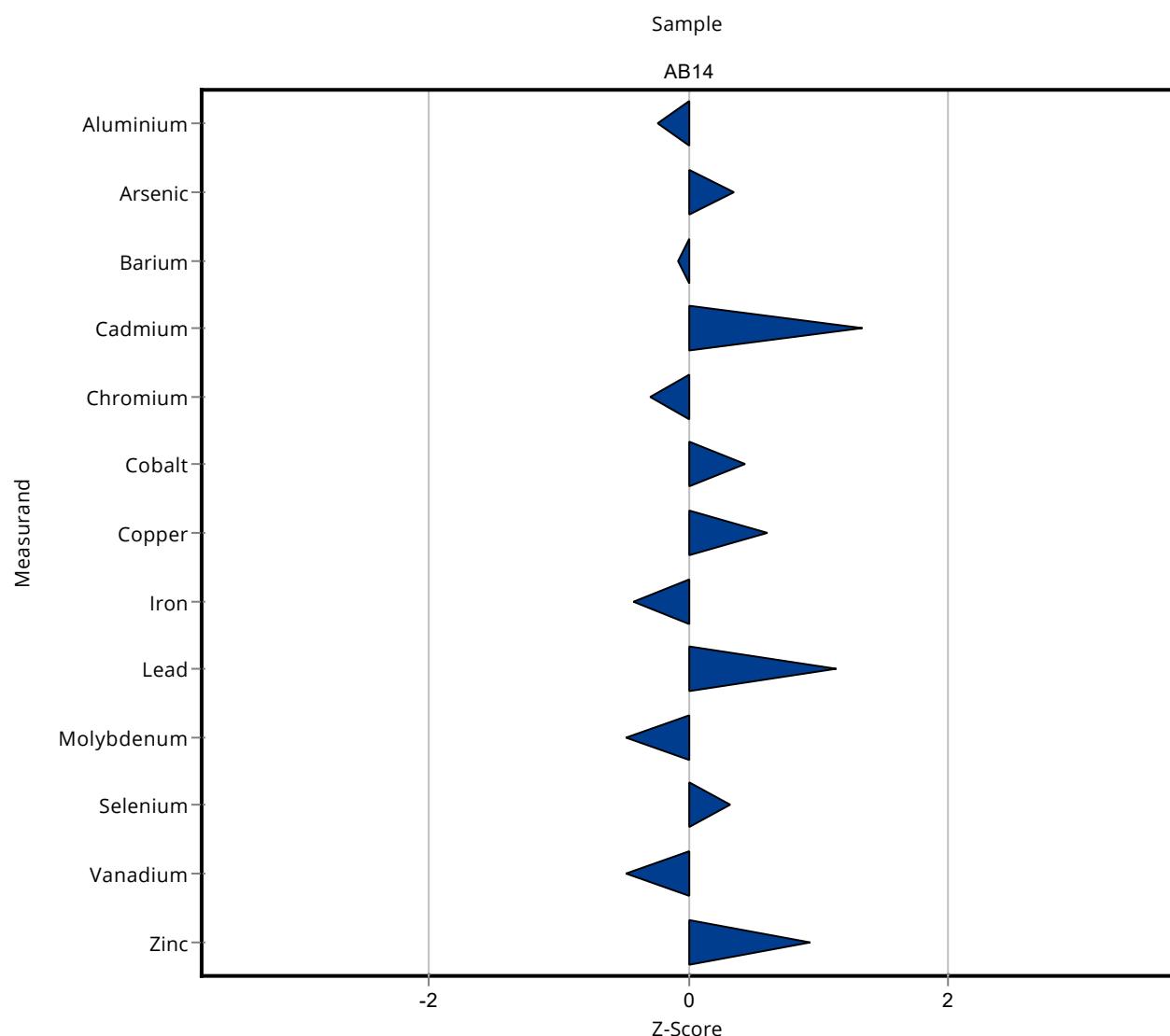


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.887 ± 0.095	0.157	96.1	-0.23
Antimony	mg/l	0.00112 ± 0.000262	- ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.025 ± 0.0045	0.00265	104	0.34
Barium	mg/l	0.331 ± 0.0135	0.328 ± 0.036	0.0364	99.1	-0.08
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00182 ± 0.00037	0.000276	125	1.34
Chromium	mg/l	0.0408 ± 0.00175	0.0393 ± 0.006	0.00489	96.4	-0.30
Cobalt	mg/l	0.0245 ± 0.00112	0.0257 ± 0.0021	0.0027	105	0.44
Copper	mg/l	0.12 ± 0.00506	0.13 ± 0.02	0.0157	108	0.61
Iron	mg/l	0.83 ± 0.0389	0.788 ± 0.084	0.0996	94.9	-0.42
Lead	mg/l	0.317 ± 0.0159	0.364 ± 0.064	0.0412	115	1.14
Molybdenum	mg/l	0.401 ± 0.013	0.382 ± 0.042	0.0401	95.2	-0.48
Nickel	mg/l	0.0103 ± 0.000538	- ± -	0.00133	-	-
Selenium	mg/l	0.0118 ± 0.000592	0.0122 ± 0.0023	0.00141	104	0.32
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	0.0169 ± 0.004	0.00313	91.9	-0.48
Zinc	mg/l	0.429 ± 0.0175	0.474 ± 0.068	0.0472	110	0.95

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0042 ± 0.00064	-	-	-

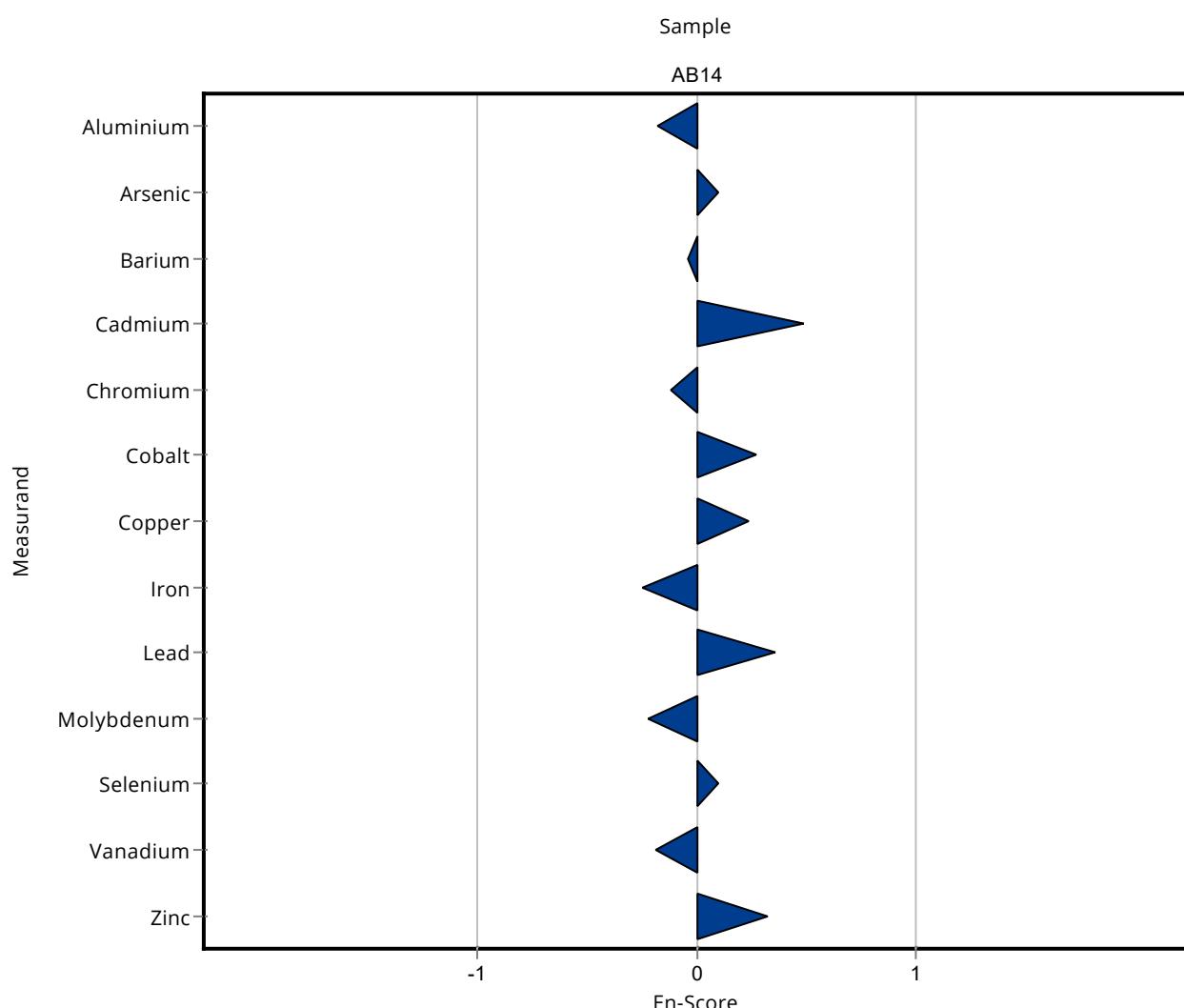


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.887 ± 0.095	0.157	96.1	-0.18
Antimony	mg/l	0.00112 ± 0.000262	- ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.025 ± 0.0045	0.00265	104	0.10
Barium	mg/l	0.331 ± 0.0135	0.328 ± 0.036	0.0364	99.1	-0.04
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00182 ± 0.00037	0.000276	125	0.49
Chromium	mg/l	0.0408 ± 0.00175	0.0393 ± 0.006	0.00489	96.4	-0.12
Cobalt	mg/l	0.0245 ± 0.00112	0.0257 ± 0.0021	0.0027	105	0.27
Copper	mg/l	0.12 ± 0.00506	0.13 ± 0.02	0.0157	108	0.24
Iron	mg/l	0.83 ± 0.0389	0.788 ± 0.084	0.0996	94.9	-0.24
Lead	mg/l	0.317 ± 0.0159	0.364 ± 0.064	0.0412	115	0.36
Molybdenum	mg/l	0.401 ± 0.013	0.382 ± 0.042	0.0401	95.2	-0.22
Nickel	mg/l	0.0103 ± 0.000538	- ± -	0.00133	-	-
Selenium	mg/l	0.0118 ± 0.000592	0.0122 ± 0.0023	0.00141	104	0.10
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	0.0169 ± 0.004	0.00313	91.9	-0.18
Zinc	mg/l	0.429 ± 0.0175	0.474 ± 0.068	0.0472	110	0.33

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0042 ± 0.00064	-	-	-

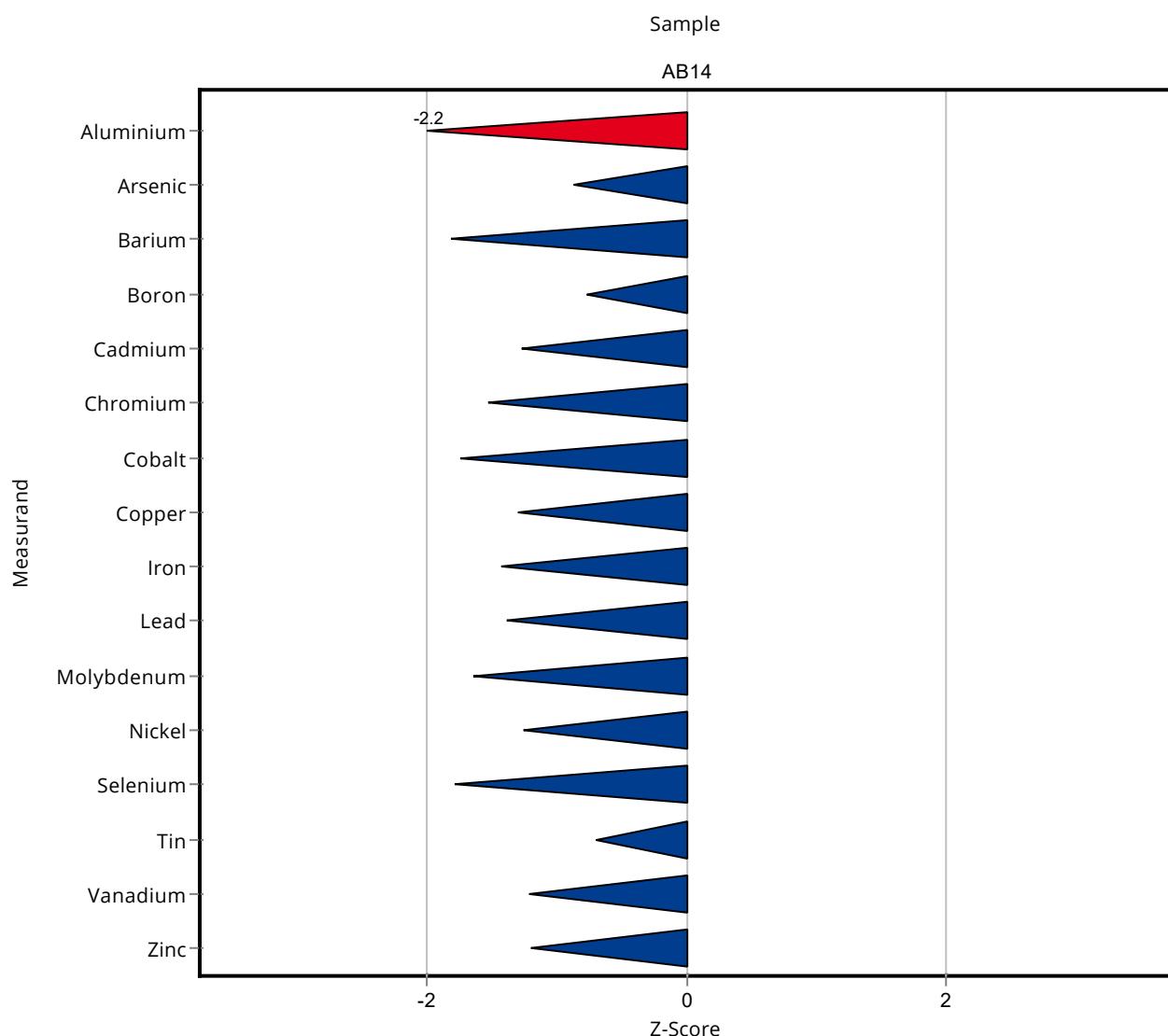


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.584 ± 0.117	0.157	63.3	-2.16
Antimony	mg/l	0.00112 ± 0.000262 <0.003 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0218 ± 0.0044	0.00265	90.5	-0.86
Barium	mg/l	0.331 ± 0.0135	0.265 ± 0.053	0.0364	80.1	-1.81
Boron	mg/l	1.4 ± 0.039	1.29 ± 0.26	0.14	92.4	-0.76
Cadmium	mg/l	0.00145 ± 0.000113	0.0011 ± 0.00022	0.000276	75.8	-1.27
Chromium	mg/l	0.0408 ± 0.00175	0.0333 ± 0.0067	0.00489	81.7	-1.53
Cobalt	mg/l	0.0245 ± 0.00112	0.0198 ± 0.004	0.0027	80.8	-1.75
Copper	mg/l	0.12 ± 0.00506	0.1 ± 0.02	0.0157	83	-1.30
Iron	mg/l	0.83 ± 0.0389	0.688 ± 0.138	0.0996	82.9	-1.43
Lead	mg/l	0.317 ± 0.0159	0.26 ± 0.052	0.0412	82	-1.38
Molybdenum	mg/l	0.401 ± 0.013	0.335 ± 0.067	0.0401	83.5	-1.65
Nickel	mg/l	0.0103 ± 0.000538	0.00859 ± 0.00172	0.00133	83.8	-1.25
Selenium	mg/l	0.0118 ± 0.000592	0.00924 ± 0.00185	0.00141	78.6	-1.78
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0276 ± 0.0055	0.00296	93.1	-0.69
Vanadium	mg/l	0.0184 ± 0.00132	0.0146 ± 0.0029	0.00313	79.4	-1.21
Zinc	mg/l	0.429 ± 0.0175	0.373 ± 0.075	0.0472	86.9	-1.19

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000514 ± 0.000103	-	-	-

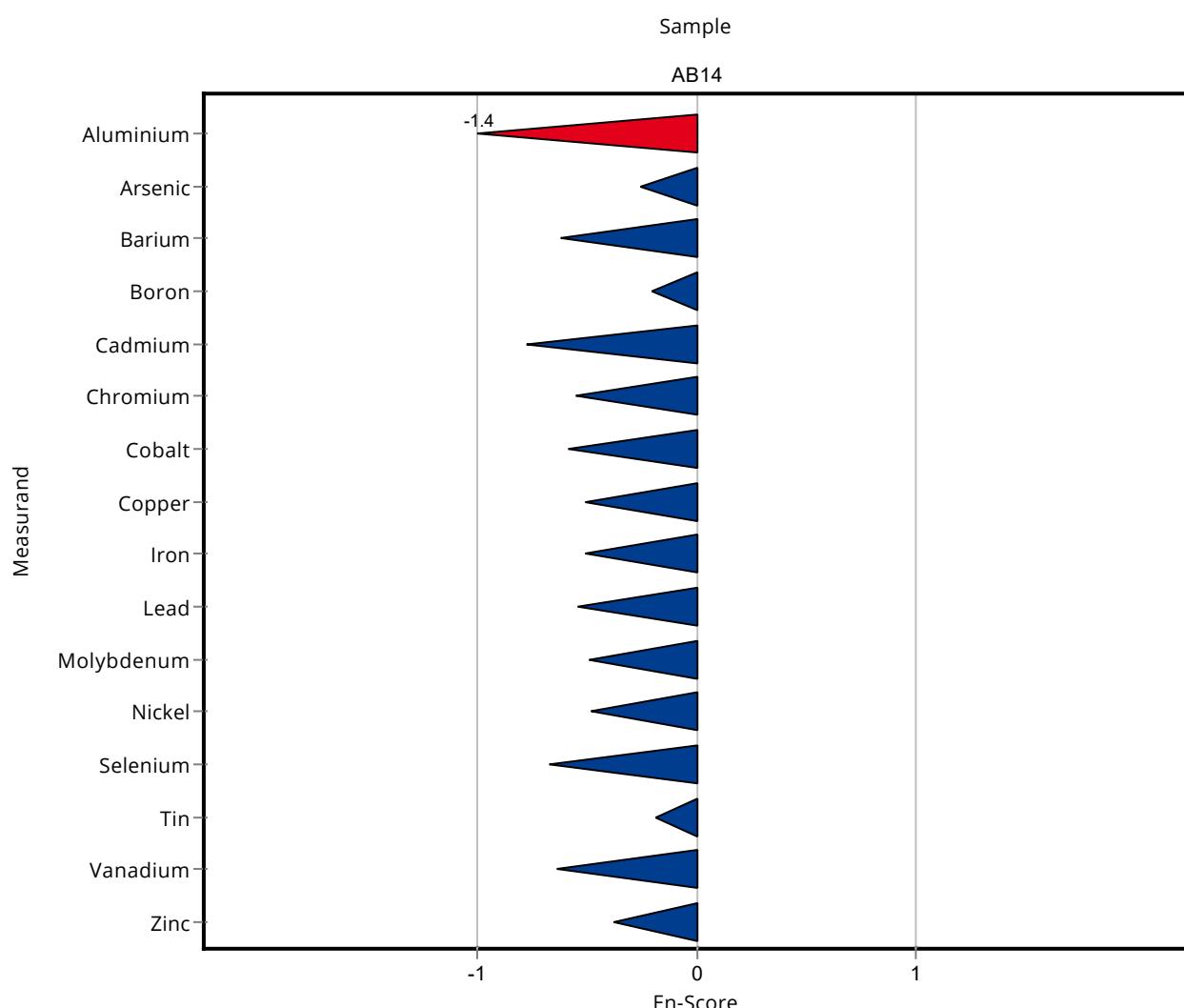


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.584 ± 0.117	0.157	63.3	-1.40
Antimony	mg/l	0.00112 ± 0.000262 <0.003 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0218 ± 0.0044	0.00265	90.5	-0.26
Barium	mg/l	0.331 ± 0.0135	0.265 ± 0.053	0.0364	80.1	-0.62
Boron	mg/l	1.4 ± 0.039	1.29 ± 0.26	0.14	92.4	-0.20
Cadmium	mg/l	0.00145 ± 0.000113	0.0011 ± 0.00022	0.000276	75.8	-0.77
Chromium	mg/l	0.0408 ± 0.00175	0.0333 ± 0.0067	0.00489	81.7	-0.55
Cobalt	mg/l	0.0245 ± 0.00112	0.0198 ± 0.004	0.0027	80.8	-0.58
Copper	mg/l	0.12 ± 0.00506	0.1 ± 0.02	0.0157	83	-0.51
Iron	mg/l	0.83 ± 0.0389	0.688 ± 0.138	0.0996	82.9	-0.51
Lead	mg/l	0.317 ± 0.0159	0.26 ± 0.052	0.0412	82	-0.54
Molybdenum	mg/l	0.401 ± 0.013	0.335 ± 0.067	0.0401	83.5	-0.49
Nickel	mg/l	0.0103 ± 0.000538	0.00859 ± 0.00172	0.00133	83.8	-0.48
Selenium	mg/l	0.0118 ± 0.000592	0.00924 ± 0.00185	0.00141	78.6	-0.67
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0276 ± 0.0055	0.00296	93.1	-0.19
Vanadium	mg/l	0.0184 ± 0.00132	0.0146 ± 0.0029	0.00313	79.4	-0.64
Zinc	mg/l	0.429 ± 0.0175	0.373 ± 0.075	0.0472	86.9	-0.37

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.000514 ± 0.000103	-	-	-

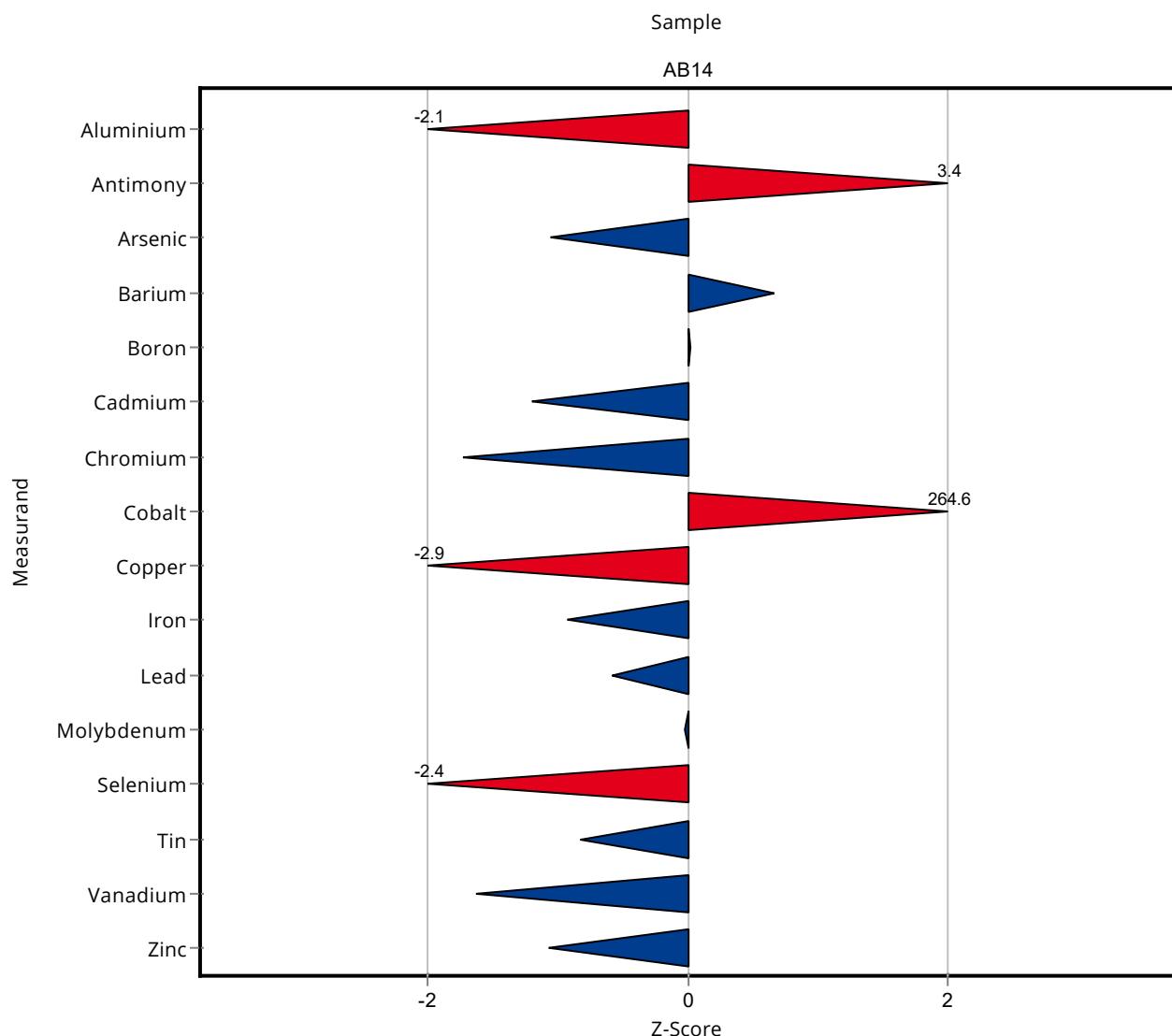


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.592 ± 0.04	0.157	64.1	-2.11
Antimony	mg/l	0.00112 ± 0.000262	0.00258 ± 0.0002	0.000435	231	3.36
Arsenic	mg/l	0.0241 ± 0.00101	0.0213 ± 0.002	0.00265	88.4	-1.05
Barium	mg/l	0.331 ± 0.0135	0.355 ± 0.03	0.0364	107	0.66
Boron	mg/l	1.4 ± 0.039	1.4 ± 0.1	0.14	100	0.03
Cadmium	mg/l	0.00145 ± 0.000113	0.00112 ± 0.0001	0.000276	77.2	-1.20
Chromium	mg/l	0.0408 ± 0.00175	0.0323 ± 0.003	0.00489	79.2	-1.73
Cobalt	mg/l	0.0245 ± 0.00112	0.738 ± 0.07	0.0027	3010	264.65
Copper	mg/l	0.12 ± 0.00506	0.0758 ± 0.007	0.0157	62.9	-2.85
Iron	mg/l	0.83 ± 0.0389	0.738 ± 0.07	0.0996	88.9	-0.93
Lead	mg/l	0.317 ± 0.0159	0.293 ± 0.02	0.0412	92.4	-0.58
Molybdenum	mg/l	0.401 ± 0.013	0.4 ± 0.035	0.0401	99.7	-0.03
Nickel	mg/l	0.0103 ± 0.000538 <0.001 (LOQ) ± -		0.00133	-	-
Selenium	mg/l	0.0118 ± 0.000592	0.00835 ± 0.0008	0.00141	71.1	-2.41
Silver	mg/l	- ± -	0.000869 ± 0.00009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0272 ± 0.002	0.00296	91.7	-0.83
Vanadium	mg/l	0.0184 ± 0.00132	0.0133 ± 0.001	0.00313	72.3	-1.63
Zinc	mg/l	0.429 ± 0.0175	0.379 ± 0.03	0.0472	88.3	-1.07

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00835 ± 0.0008	-	-	-

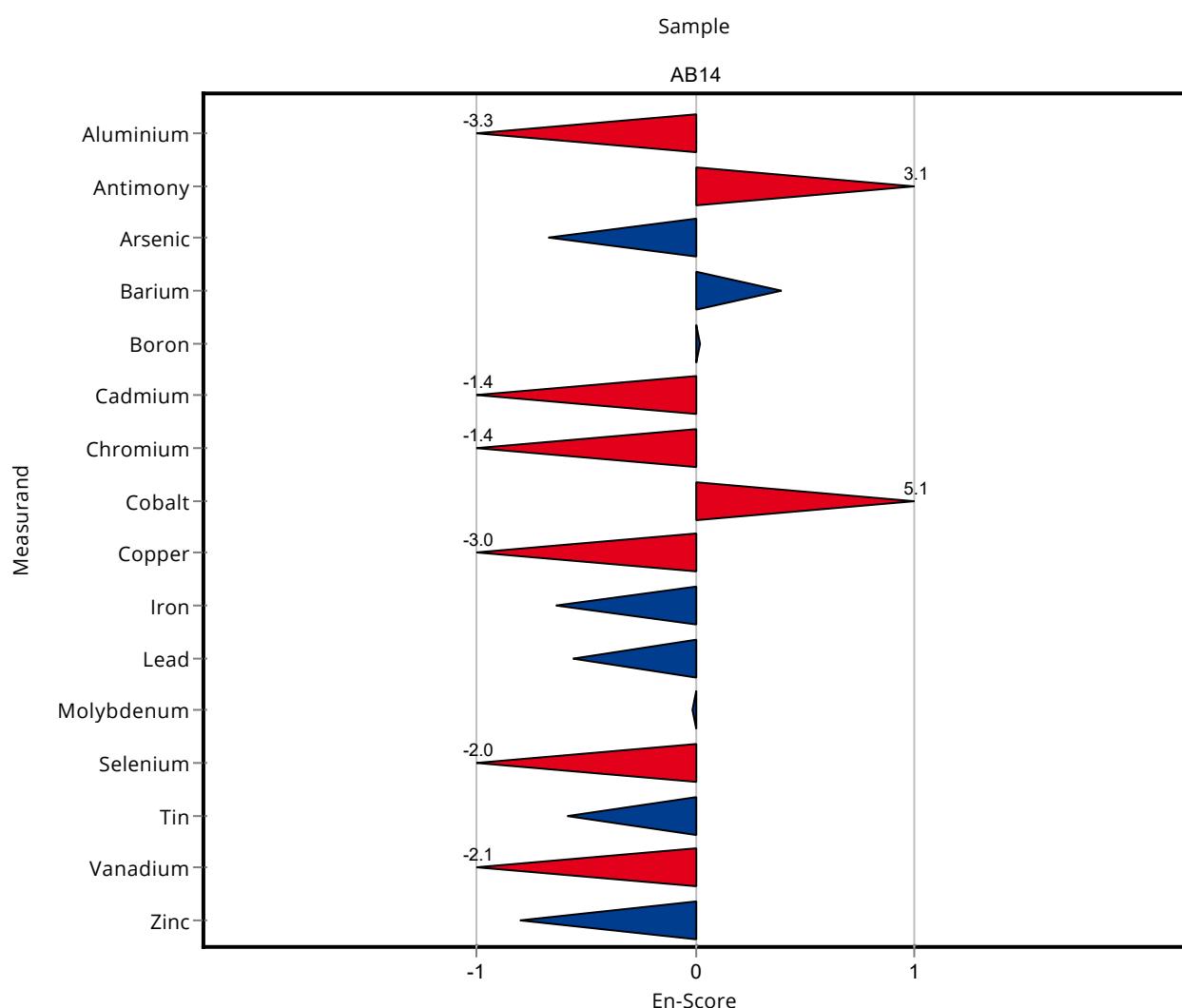


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.592 ± 0.04	0.157	64.1	-3.27
Antimony	mg/l	0.00112 ± 0.000262	0.00258 ± 0.0002	0.000435	231	3.06
Arsenic	mg/l	0.0241 ± 0.00101	0.0213 ± 0.002	0.00265	88.4	-0.68
Barium	mg/l	0.331 ± 0.0135	0.355 ± 0.03	0.0364	107	0.39
Boron	mg/l	1.4 ± 0.039	1.4 ± 0.1	0.14	100	0.02
Cadmium	mg/l	0.00145 ± 0.000113	0.00112 ± 0.0001	0.000276	77.2	-1.44
Chromium	mg/l	0.0408 ± 0.00175	0.0323 ± 0.003	0.00489	79.2	-1.35
Cobalt	mg/l	0.0245 ± 0.00112	0.738 ± 0.07	0.0027	3010	5.10
Copper	mg/l	0.12 ± 0.00506	0.0758 ± 0.007	0.0157	62.9	-3.00
Iron	mg/l	0.83 ± 0.0389	0.738 ± 0.07	0.0996	88.9	-0.63
Lead	mg/l	0.317 ± 0.0159	0.293 ± 0.02	0.0412	92.4	-0.56
Molybdenum	mg/l	0.401 ± 0.013	0.4 ± 0.035	0.0401	99.7	-0.02
Nickel	mg/l	0.0103 ± 0.000538 <0.001 (LOQ) ± -	0.00133	-	-	-
Selenium	mg/l	0.0118 ± 0.000592	0.00835 ± 0.0008	0.00141	71.1	-1.99
Silver	mg/l	- ± -	0.000869 ± 0.00009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0272 ± 0.002	0.00296	91.7	-0.59
Vanadium	mg/l	0.0184 ± 0.00132	0.0133 ± 0.001	0.00313	72.3	-2.12
Zinc	mg/l	0.429 ± 0.0175	0.379 ± 0.03	0.0472	88.3	-0.81

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00835 ± 0.0008	-	-	-

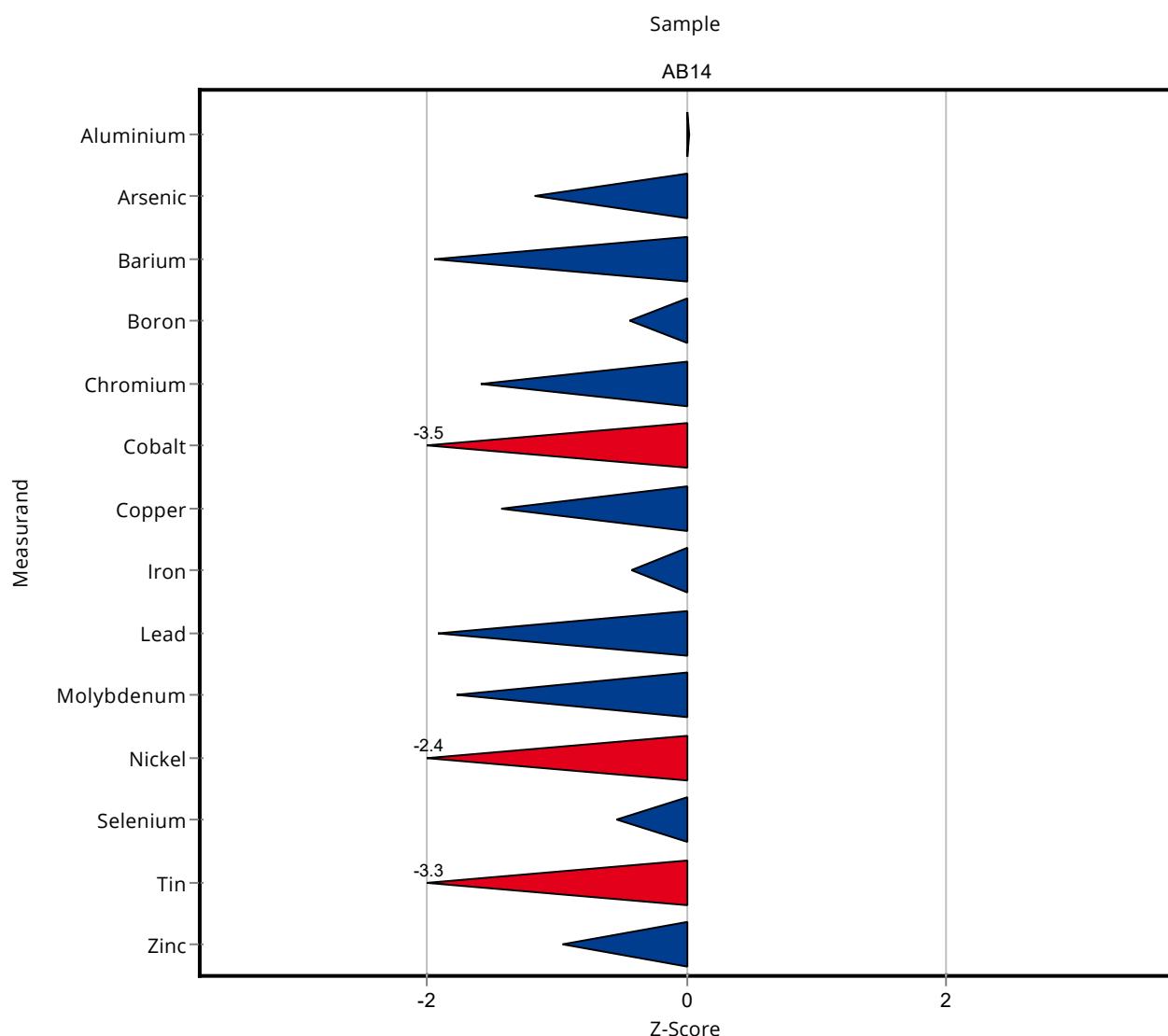


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.927 ± 0.083	0.157	100	0.03
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.021 ± 0.0017	0.00265	87.2	-1.17
Barium	mg/l	0.331 ± 0.0135	0.26 ± 0.018	0.0364	78.6	-1.95
Boron	mg/l	1.4 ± 0.039	1.335 ± 0.16	0.14	95.6	-0.44
Cadmium	mg/l	0.00145 ± 0.000113 <0.005 (LOQ) ± -		0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.033 ± 0.0021	0.00489	80.9	-1.59
Cobalt	mg/l	0.0245 ± 0.00112	0.015 ± 0.0015	0.0027	61.2	-3.53
Copper	mg/l	0.12 ± 0.00506	0.098 ± 0.0073	0.0157	81.4	-1.43
Iron	mg/l	0.83 ± 0.0389	0.788 ± 0.054	0.0996	94.9	-0.42
Lead	mg/l	0.317 ± 0.0159	0.238 ± 0.024	0.0412	75.1	-1.92
Molybdenum	mg/l	0.401 ± 0.013	0.33 ± 0.023	0.0401	82.3	-1.77
Nickel	mg/l	0.0103 ± 0.000538	0.007 ± 0.0007	0.00133	68.3	-2.44
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.0013	0.00141	93.6	-0.53
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.02 ± 0.002	0.00296	67.5	-3.25
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.384 ± 0.023	0.0472	89.4	-0.96

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.004 ± 0.0004	-	-	-

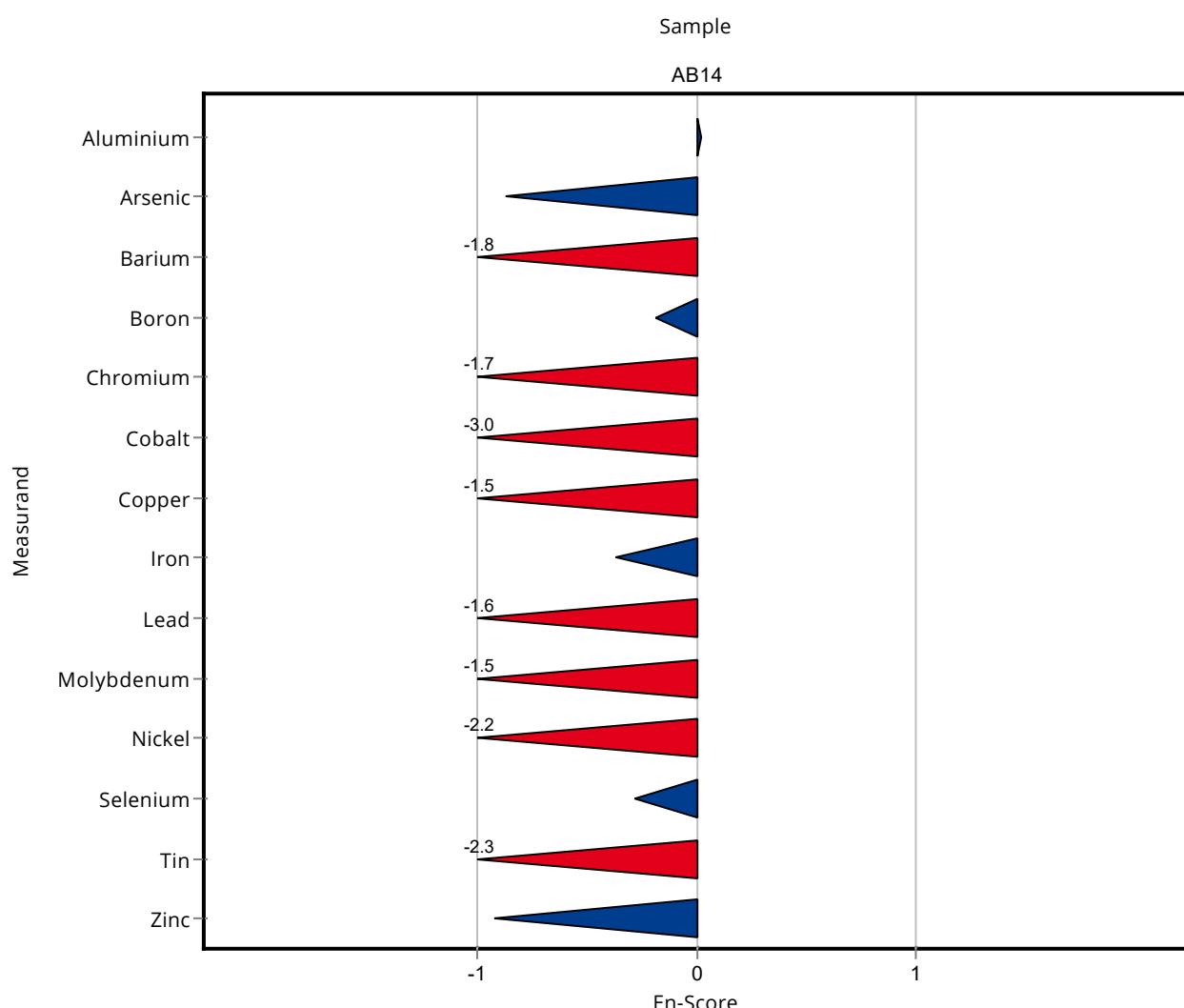


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.927 ± 0.083	0.157	100	0.02
Antimony	mg/l	0.00112 ± 0.000262 <0.005 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.021 ± 0.0017	0.00265	87.2	-0.87
Barium	mg/l	0.331 ± 0.0135	0.26 ± 0.018	0.0364	78.6	-1.84
Boron	mg/l	1.4 ± 0.039	1.335 ± 0.16	0.14	95.6	-0.19
Cadmium	mg/l	0.00145 ± 0.000113 <0.005 (LOQ) ± -		0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.033 ± 0.0021	0.00489	80.9	-1.71
Cobalt	mg/l	0.0245 ± 0.00112	0.015 ± 0.0015	0.0027	61.2	-2.97
Copper	mg/l	0.12 ± 0.00506	0.098 ± 0.0073	0.0157	81.4	-1.45
Iron	mg/l	0.83 ± 0.0389	0.788 ± 0.054	0.0996	94.9	-0.37
Lead	mg/l	0.317 ± 0.0159	0.238 ± 0.024	0.0412	75.1	-1.56
Molybdenum	mg/l	0.401 ± 0.013	0.33 ± 0.023	0.0401	82.3	-1.49
Nickel	mg/l	0.0103 ± 0.000538	0.007 ± 0.0007	0.00133	68.3	-2.17
Selenium	mg/l	0.0118 ± 0.000592	0.011 ± 0.0013	0.00141	93.6	-0.28
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.02 ± 0.002	0.00296	67.5	-2.32
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.384 ± 0.023	0.0472	89.4	-0.92

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.004 ± 0.0004	-	-	-

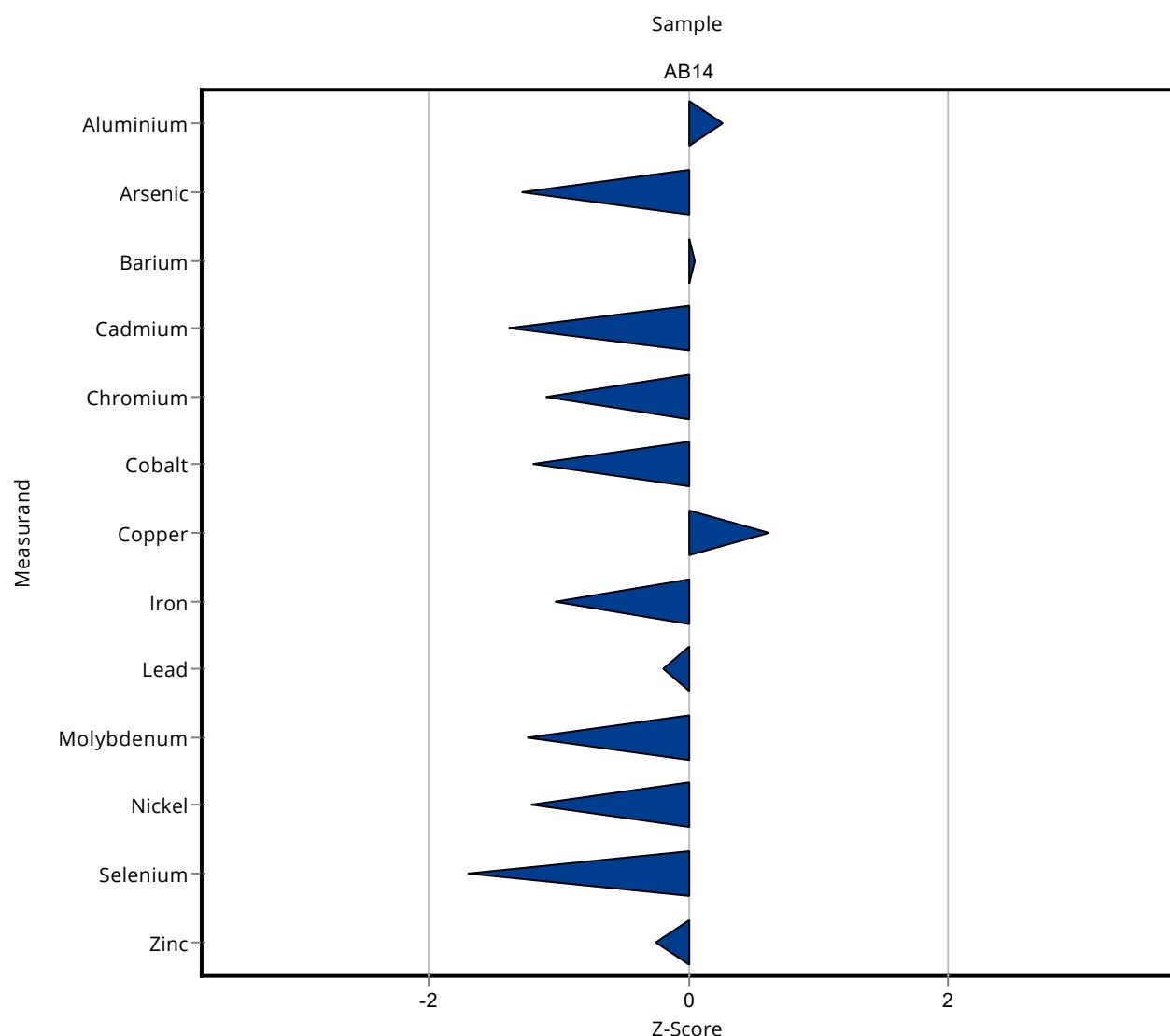


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.9649 ± 0.058	0.157	105	0.27
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0207 ± 0.0022	0.00265	85.9	-1.28
Barium	mg/l	0.331 ± 0.0135	0.3329 ± 0.0176	0.0364	101	0.06
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00107 ± 0.00016	0.000276	73.7	-1.38
Chromium	mg/l	0.0408 ± 0.00175	0.03537 ± 0.00206	0.00489	86.8	-1.10
Cobalt	mg/l	0.0245 ± 0.00112	0.02127 ± 0.0011	0.0027	86.8	-1.20
Copper	mg/l	0.12 ± 0.00506	0.1303 ± 0.0083	0.0157	108	0.63
Iron	mg/l	0.83 ± 0.0389	0.7283 ± 0.0451	0.0996	87.7	-1.02
Lead	mg/l	0.317 ± 0.0159	0.3092 ± 0.0314	0.0412	97.5	-0.19
Molybdenum	mg/l	0.401 ± 0.013	0.3512 ± 0.0416	0.0401	87.6	-1.24
Nickel	mg/l	0.0103 ± 0.000538	0.00863 ± 0.0004	0.00133	84.2	-1.22
Selenium	mg/l	0.0118 ± 0.000592	0.00935 ± 0.001	0.00141	79.6	-1.70
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.4177 ± 0.0199	0.0472	97.3	-0.25

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0003761 ± 0.000004	-	-	-



Summary of results Waste acc to landfill directive (eluate metals) - AB14 - En-Score

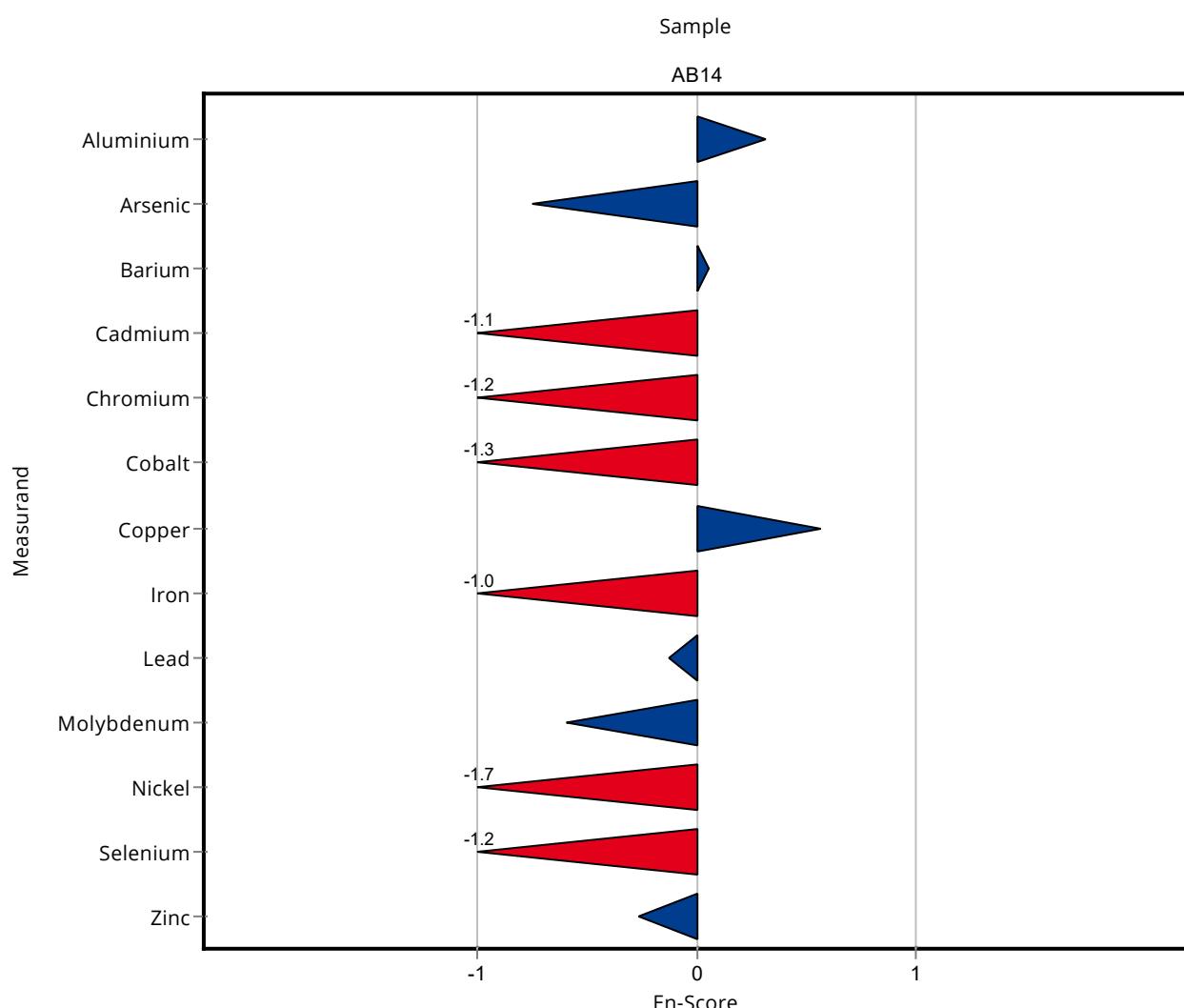
Labcode: LC0020

Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.9649 ± 0.058	0.157	105	0.32
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0207 ± 0.0022	0.00265	85.9	-0.75
Barium	mg/l	0.331 ± 0.0135	0.3329 ± 0.0176	0.0364	101	0.05
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.00107 ± 0.00016	0.000276	73.7	-1.12
Chromium	mg/l	0.0408 ± 0.00175	0.03537 ± 0.00206	0.00489	86.8	-1.21
Cobalt	mg/l	0.0245 ± 0.00112	0.02127 ± 0.0011	0.0027	86.8	-1.31
Copper	mg/l	0.12 ± 0.00506	0.1303 ± 0.0083	0.0157	108	0.57
Iron	mg/l	0.83 ± 0.0389	0.7283 ± 0.0451	0.0996	87.7	-1.04
Lead	mg/l	0.317 ± 0.0159	0.3092 ± 0.0314	0.0412	97.5	-0.12
Molybdenum	mg/l	0.401 ± 0.013	0.3512 ± 0.0416	0.0401	87.6	-0.59
Nickel	mg/l	0.0103 ± 0.000538	0.00863 ± 0.0004	0.00133	84.2	-1.68
Selenium	mg/l	0.0118 ± 0.000592	0.00935 ± 0.001	0.00141	79.6	-1.15
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.4177 ± 0.0199	0.0472	97.3	-0.27

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0003761 ± 0.000004	-	-	-

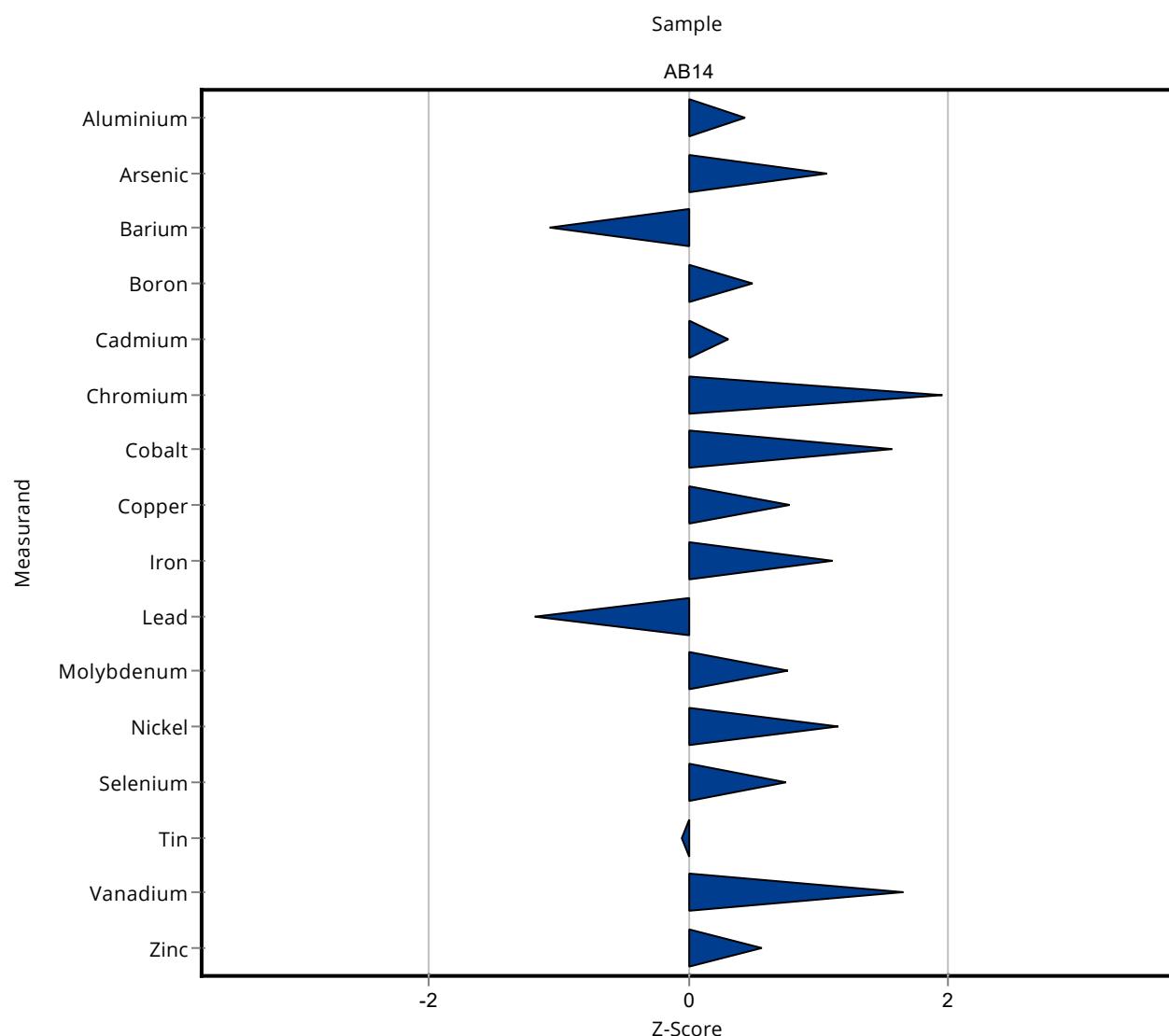


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.9916 ± 0.114	0.157	107	0.44
Antimony	mg/l	0.00112 ± 0.000262 <0.002 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.02691 ± 0.0039	0.00265	112	1.07
Barium	mg/l	0.331 ± 0.0135	0.2921 ± 0.0424	0.0364	88.3	-1.06
Boron	mg/l	1.4 ± 0.039	1.466 ± 0.167	0.14	105	0.50
Cadmium	mg/l	0.00145 ± 0.000113	0.001538 ± 0.00019	0.000276	106	0.31
Chromium	mg/l	0.0408 ± 0.00175	0.05036 ± 0.0063	0.00489	124	1.96
Cobalt	mg/l	0.0245 ± 0.00112	0.02876 ± 0.0024	0.0027	117	1.58
Copper	mg/l	0.12 ± 0.00506	0.1327 ± 0.0126	0.0157	110	0.78
Iron	mg/l	0.83 ± 0.0389	0.9412 ± 0.118	0.0996	113	1.11
Lead	mg/l	0.317 ± 0.0159	0.2686 ± 0.0336	0.0412	84.7	-1.18
Molybdenum	mg/l	0.401 ± 0.013	0.4317 ± 0.0778	0.0401	108	0.76
Nickel	mg/l	0.0103 ± 0.000538	0.01179 ± 0.00141	0.00133	115	1.15
Selenium	mg/l	0.0118 ± 0.000592	0.01282 ± 0.00179	0.00141	109	0.76
Silver	mg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.02949 ± 0.0029	0.00296	99.5	-0.05
Vanadium	mg/l	0.0184 ± 0.00132	0.02356 ± 0.00318	0.00313	128	1.65
Zinc	mg/l	0.429 ± 0.0175	0.4558 ± 0.0752	0.0472	106	0.56

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.003459 ± 0.00029	-	-	-

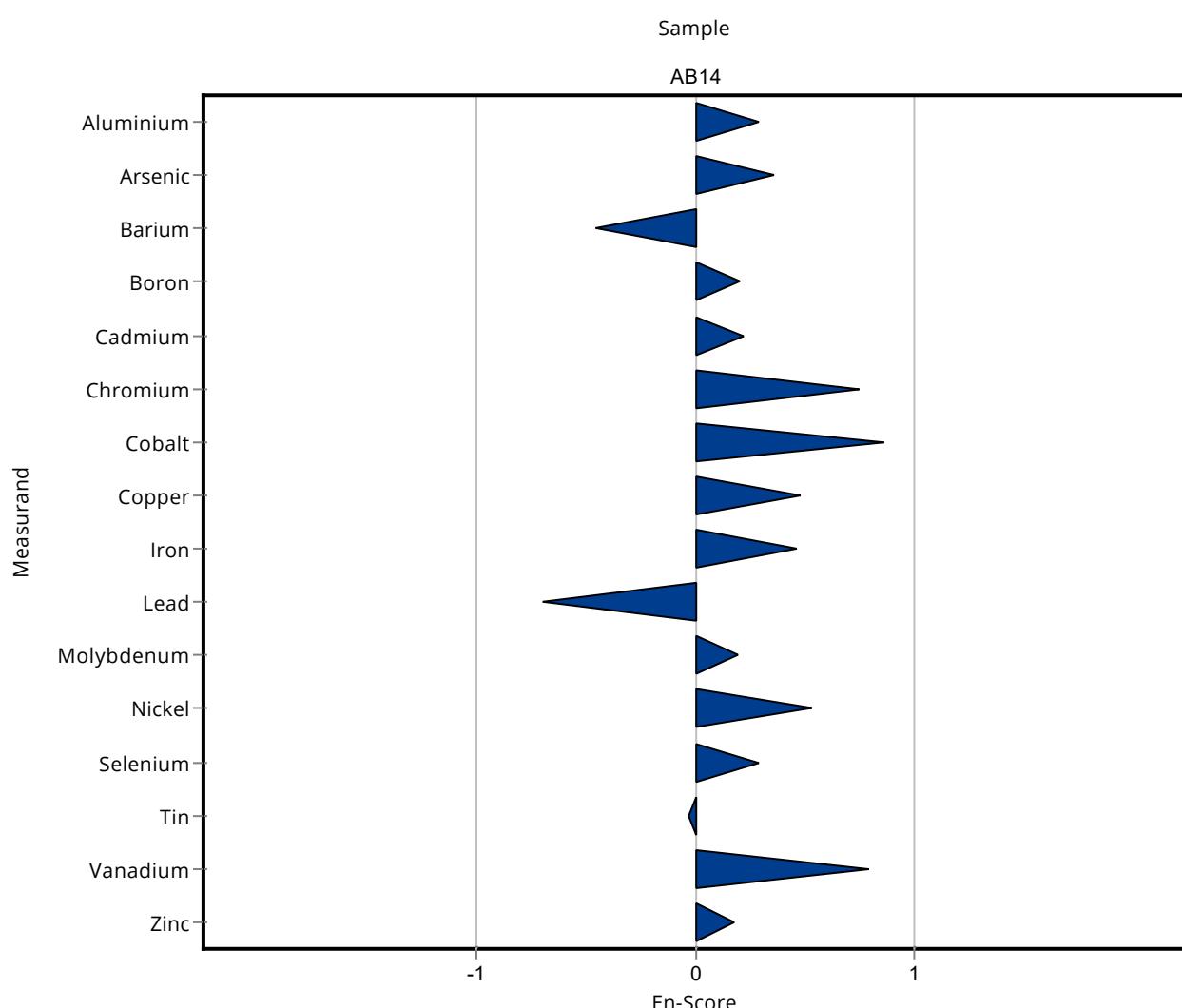


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.9916 ± 0.114	0.157	107	0.29
Antimony	mg/l	0.00112 ± 0.000262 <0.002 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.02691 ± 0.0039	0.00265	112	0.36
Barium	mg/l	0.331 ± 0.0135	0.2921 ± 0.0424	0.0364	88.3	-0.45
Boron	mg/l	1.4 ± 0.039	1.466 ± 0.167	0.14	105	0.21
Cadmium	mg/l	0.00145 ± 0.000113	0.001538 ± 0.00019	0.000276	106	0.22
Chromium	mg/l	0.0408 ± 0.00175	0.05036 ± 0.0063	0.00489	124	0.75
Cobalt	mg/l	0.0245 ± 0.00112	0.02876 ± 0.0024	0.0027	117	0.86
Copper	mg/l	0.12 ± 0.00506	0.1327 ± 0.0126	0.0157	110	0.48
Iron	mg/l	0.83 ± 0.0389	0.9412 ± 0.118	0.0996	113	0.46
Lead	mg/l	0.317 ± 0.0159	0.2686 ± 0.0336	0.0412	84.7	-0.70
Molybdenum	mg/l	0.401 ± 0.013	0.4317 ± 0.0778	0.0401	108	0.20
Nickel	mg/l	0.0103 ± 0.000538	0.01179 ± 0.00141	0.00133	115	0.54
Selenium	mg/l	0.0118 ± 0.000592	0.01282 ± 0.00179	0.00141	109	0.29
Silver	mg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.02949 ± 0.0029	0.00296	99.5	-0.03
Vanadium	mg/l	0.0184 ± 0.00132	0.02356 ± 0.00318	0.00313	128	0.80
Zinc	mg/l	0.429 ± 0.0175	0.4558 ± 0.0752	0.0472	106	0.17

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.003459 ± 0.00029	-	-	-

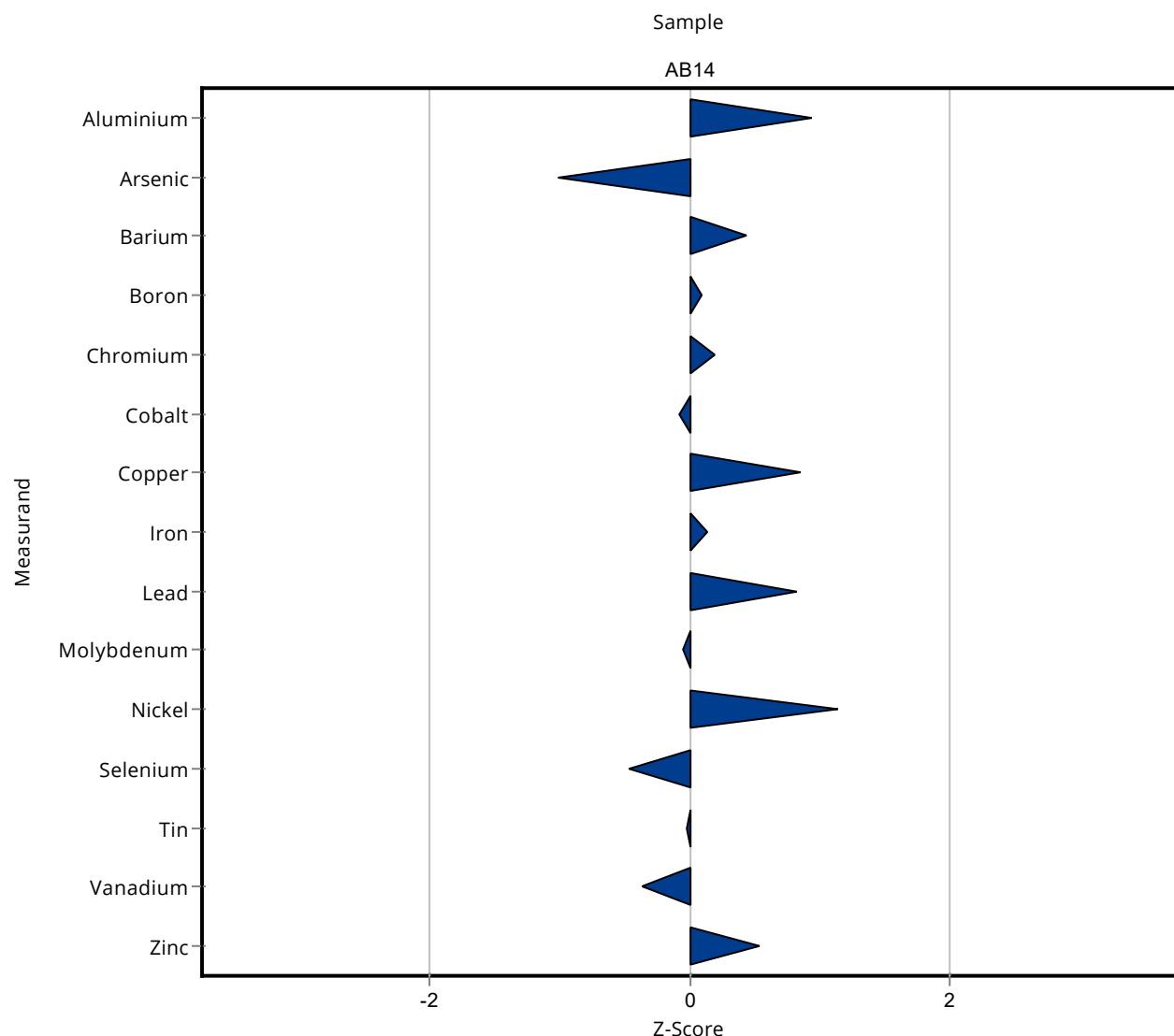


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.07 ± 0.19	0.157	116	0.94
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0214 ± 0.0013	0.00265	88.8	-1.01
Barium	mg/l	0.331 ± 0.0135	0.3467 ± 0.0087	0.0364	105	0.44
Boron	mg/l	1.4 ± 0.039	1.41 ± 0.19	0.14	101	0.10
Cadmium	mg/l	0.00145 ± 0.000113 <0.001 (LOQ) ± -		0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.0417 ± 0.0015	0.00489	102	0.19
Cobalt	mg/l	0.0245 ± 0.00112	0.0243 ± 0.0023	0.0027	99.1	-0.08
Copper	mg/l	0.12 ± 0.00506	0.1338 ± 0.0054	0.0157	111	0.85
Iron	mg/l	0.83 ± 0.0389	0.844 ± 0.051	0.0996	102	0.14
Lead	mg/l	0.317 ± 0.0159	0.351 ± 0.028	0.0412	111	0.82
Molybdenum	mg/l	0.401 ± 0.013	0.399 ± 0.008	0.0401	99.5	-0.05
Nickel	mg/l	0.0103 ± 0.000538	0.01178 ± 0.00065	0.00133	115	1.15
Selenium	mg/l	0.0118 ± 0.000592	0.0111 ± 0.0015	0.00141	94.5	-0.46
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0296 ± 0.0037	0.00296	99.8	-0.02
Vanadium	mg/l	0.0184 ± 0.00132	0.01725 ± 0.00069	0.00313	93.8	-0.36
Zinc	mg/l	0.429 ± 0.0175	0.455 ± 0.03	0.0472	106	0.54

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00047 ± 0.00004	-	-	-

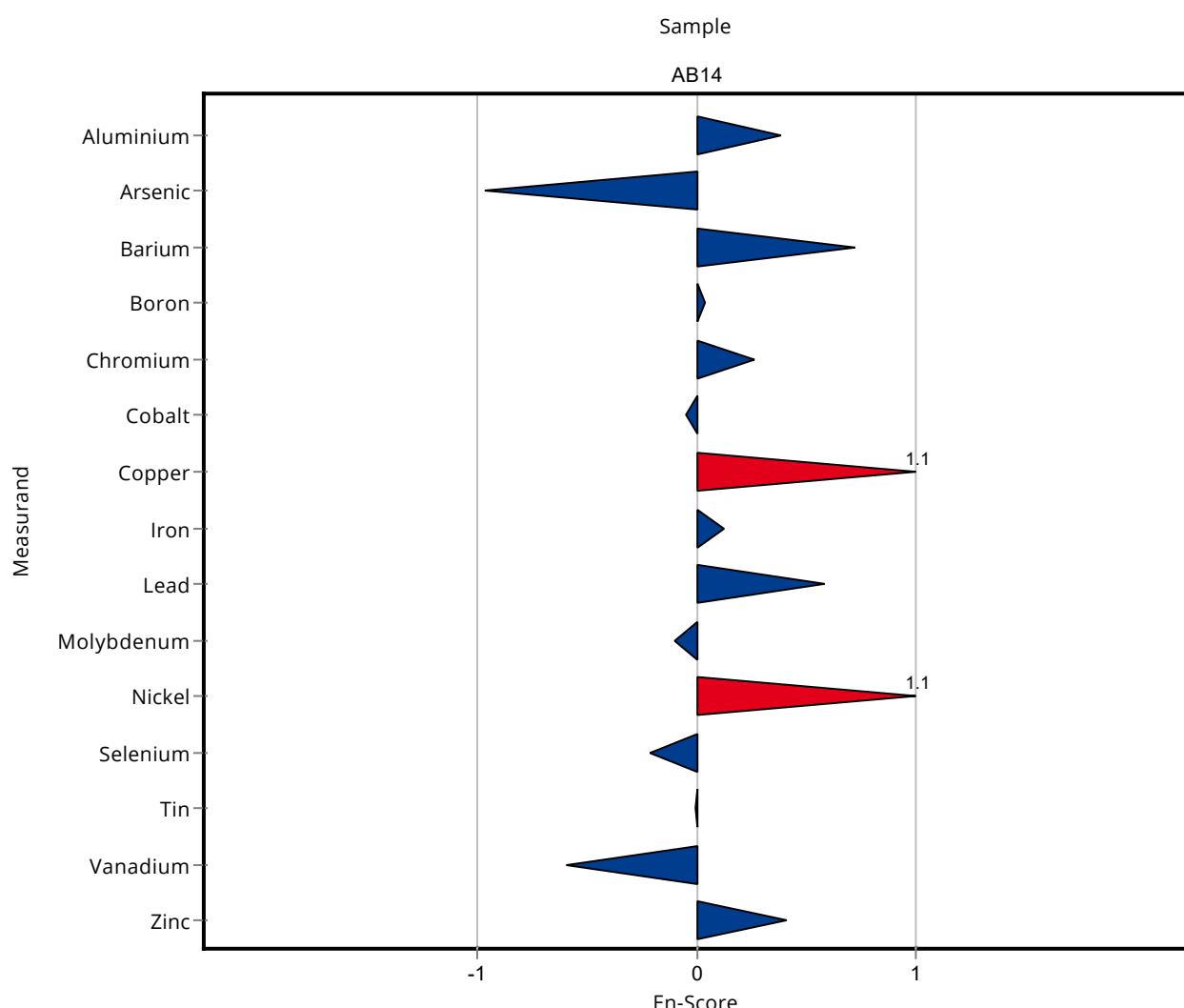


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.07 ± 0.19	0.157	116	0.38
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0214 ± 0.0013	0.00265	88.8	-0.96
Barium	mg/l	0.331 ± 0.0135	0.3467 ± 0.0087	0.0364	105	0.72
Boron	mg/l	1.4 ± 0.039	1.41 ± 0.19	0.14	101	0.04
Cadmium	mg/l	0.00145 ± 0.000113 <0.001 (LOQ) ± -		0.000276	-	-
Chromium	mg/l	0.0408 ± 0.00175	0.0417 ± 0.0015	0.00489	102	0.27
Cobalt	mg/l	0.0245 ± 0.00112	0.0243 ± 0.0023	0.0027	99.1	-0.04
Copper	mg/l	0.12 ± 0.00506	0.1338 ± 0.0054	0.0157	111	1.12
Iron	mg/l	0.83 ± 0.0389	0.844 ± 0.051	0.0996	102	0.13
Lead	mg/l	0.317 ± 0.0159	0.351 ± 0.028	0.0412	111	0.58
Molybdenum	mg/l	0.401 ± 0.013	0.399 ± 0.008	0.0401	99.5	-0.10
Nickel	mg/l	0.0103 ± 0.000538	0.01178 ± 0.00065	0.00133	115	1.08
Selenium	mg/l	0.0118 ± 0.000592	0.0111 ± 0.0015	0.00141	94.5	-0.21
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0296 ± 0.0037	0.00296	99.8	-0.01
Vanadium	mg/l	0.0184 ± 0.00132	0.01725 ± 0.00069	0.00313	93.8	-0.60
Zinc	mg/l	0.429 ± 0.0175	0.455 ± 0.03	0.0472	106	0.41

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00047 ± 0.00004	-	-	-

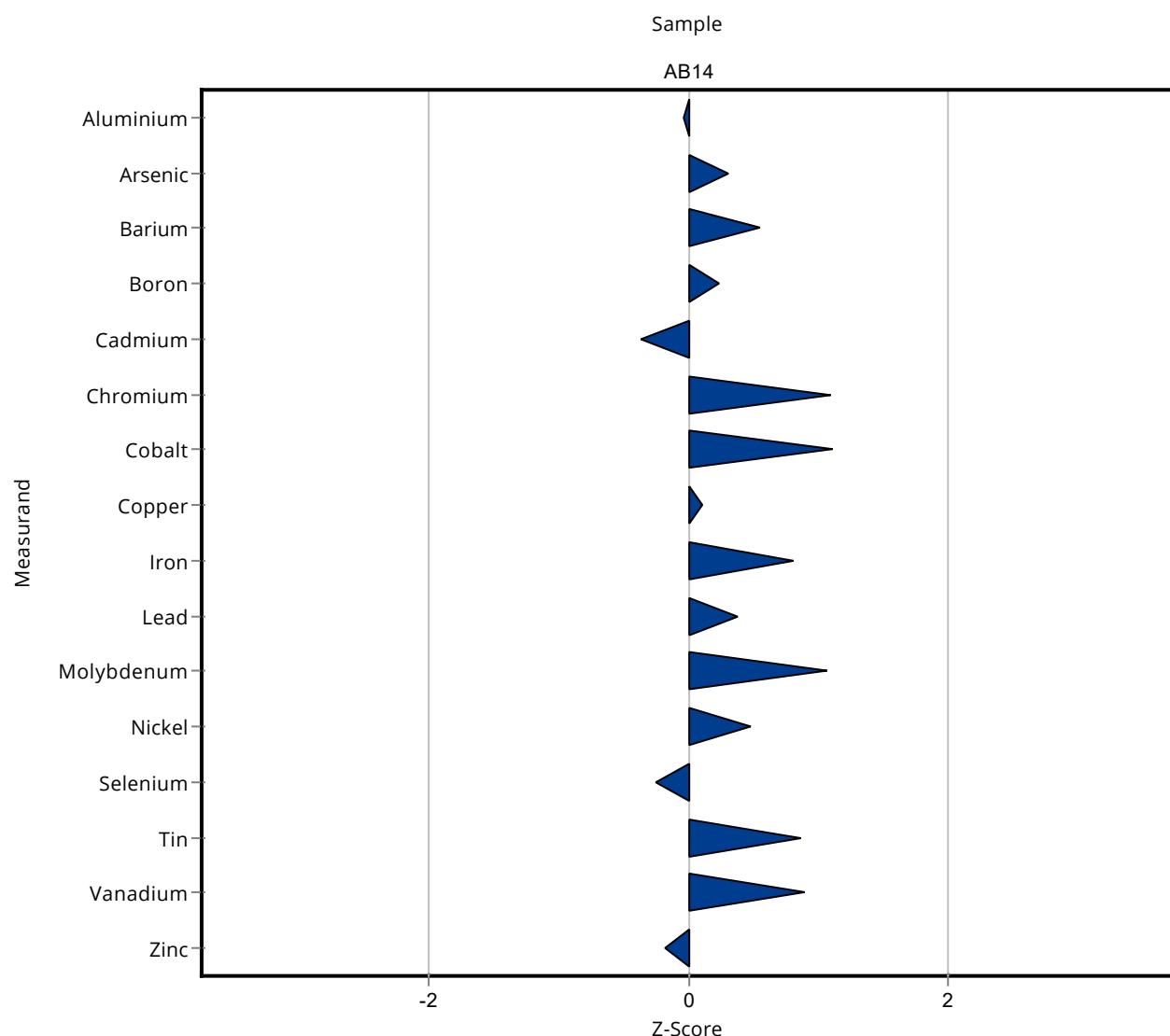


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.918 ± 0.207	0.157	99.5	-0.03
Antimony	mg/l	0.00112 ± 0.000262	<0.0015 ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0249 ± 0.0037	0.00265	103	0.31
Barium	mg/l	0.331 ± 0.0135	0.351 ± 0.07	0.0364	106	0.55
Boron	mg/l	1.4 ± 0.039	1.43 ± 0.286	0.14	102	0.24
Cadmium	mg/l	0.00145 ± 0.000113	0.00135 ± 0.0002	0.000276	93	-0.37
Chromium	mg/l	0.0408 ± 0.00175	0.0461 ± 0.007	0.00489	113	1.09
Cobalt	mg/l	0.0245 ± 0.00112	0.0275 ± 0.0041	0.0027	112	1.11
Copper	mg/l	0.12 ± 0.00506	0.122 ± 0.018	0.0157	101	0.10
Iron	mg/l	0.83 ± 0.0389	0.911 ± 0.137	0.0996	110	0.81
Lead	mg/l	0.317 ± 0.0159	0.333 ± 0.05	0.0412	105	0.39
Molybdenum	mg/l	0.401 ± 0.013	0.444 ± 0.067	0.0401	111	1.07
Nickel	mg/l	0.0103 ± 0.000538	0.0109 ± 0.0016	0.00133	106	0.48
Selenium	mg/l	0.0118 ± 0.000592	0.0114 ± 0.0017	0.00141	97	-0.25
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0322 ± 0.0064	0.00296	109	0.86
Vanadium	mg/l	0.0184 ± 0.00132	0.0212 ± 0.0032	0.00313	115	0.90
Zinc	mg/l	0.429 ± 0.0175	0.421 ± 0.084	0.0472	98.1	-0.18

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000341 ± 0.000068	-	-	-

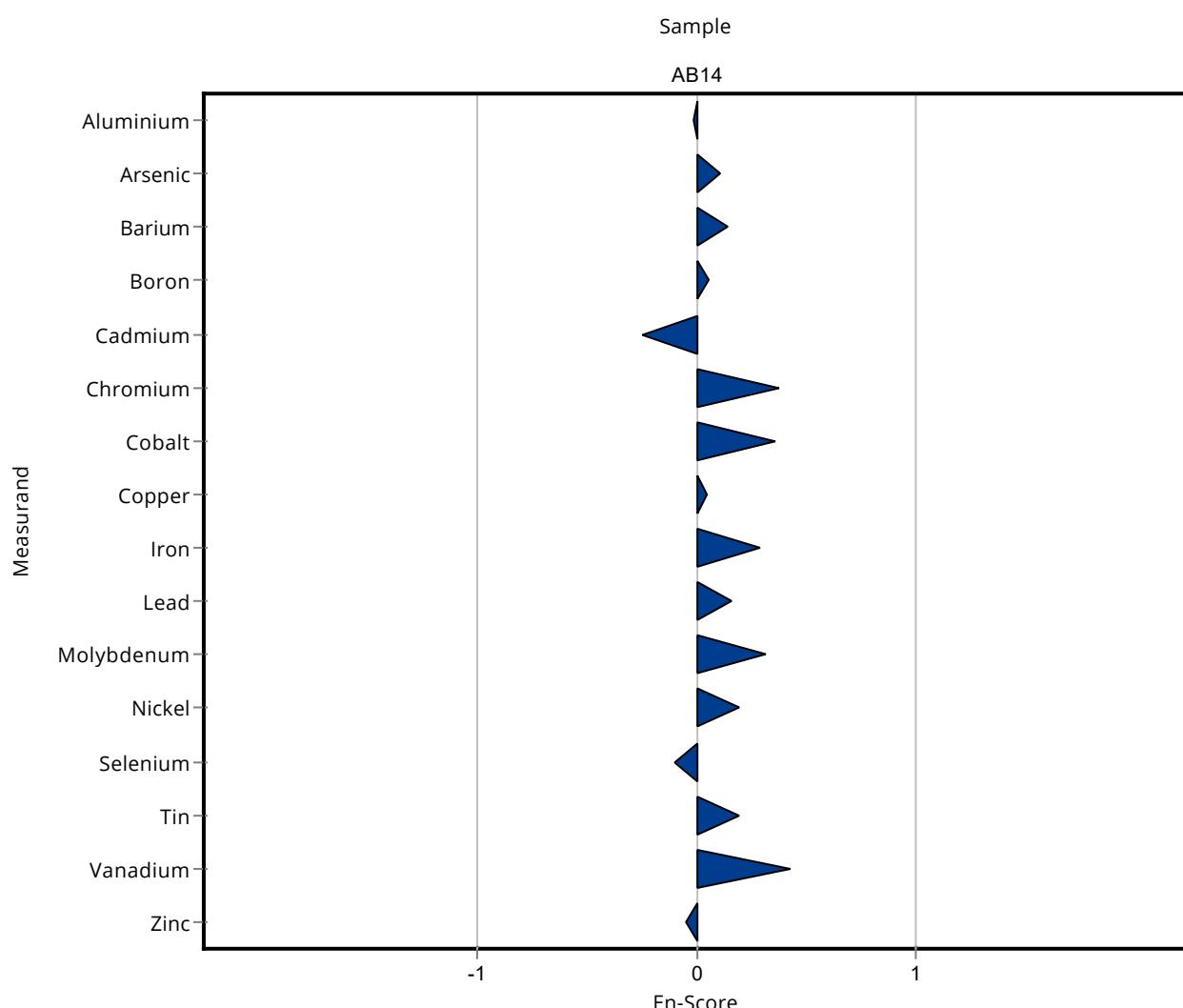


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.918 ± 0.207	0.157	99.5	-0.01
Antimony	mg/l	0.00112 ± 0.000262	<0.0015 ± -	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0249 ± 0.0037	0.00265	103	0.11
Barium	mg/l	0.331 ± 0.0135	0.351 ± 0.07	0.0364	106	0.14
Boron	mg/l	1.4 ± 0.039	1.43 ± 0.286	0.14	102	0.06
Cadmium	mg/l	0.00145 ± 0.000113	0.00135 ± 0.0002	0.000276	93	-0.24
Chromium	mg/l	0.0408 ± 0.00175	0.0461 ± 0.007	0.00489	113	0.38
Cobalt	mg/l	0.0245 ± 0.00112	0.0275 ± 0.0041	0.0027	112	0.36
Copper	mg/l	0.12 ± 0.00506	0.122 ± 0.018	0.0157	101	0.04
Iron	mg/l	0.83 ± 0.0389	0.911 ± 0.137	0.0996	110	0.29
Lead	mg/l	0.317 ± 0.0159	0.333 ± 0.05	0.0412	105	0.16
Molybdenum	mg/l	0.401 ± 0.013	0.444 ± 0.067	0.0401	111	0.32
Nickel	mg/l	0.0103 ± 0.000538	0.0109 ± 0.0016	0.00133	106	0.20
Selenium	mg/l	0.0118 ± 0.000592	0.0114 ± 0.0017	0.00141	97	-0.10
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0322 ± 0.0064	0.00296	109	0.20
Vanadium	mg/l	0.0184 ± 0.00132	0.0212 ± 0.0032	0.00313	115	0.43
Zinc	mg/l	0.429 ± 0.0175	0.421 ± 0.084	0.0472	98.1	-0.05

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.000341 ± 0.000068	-	-	-

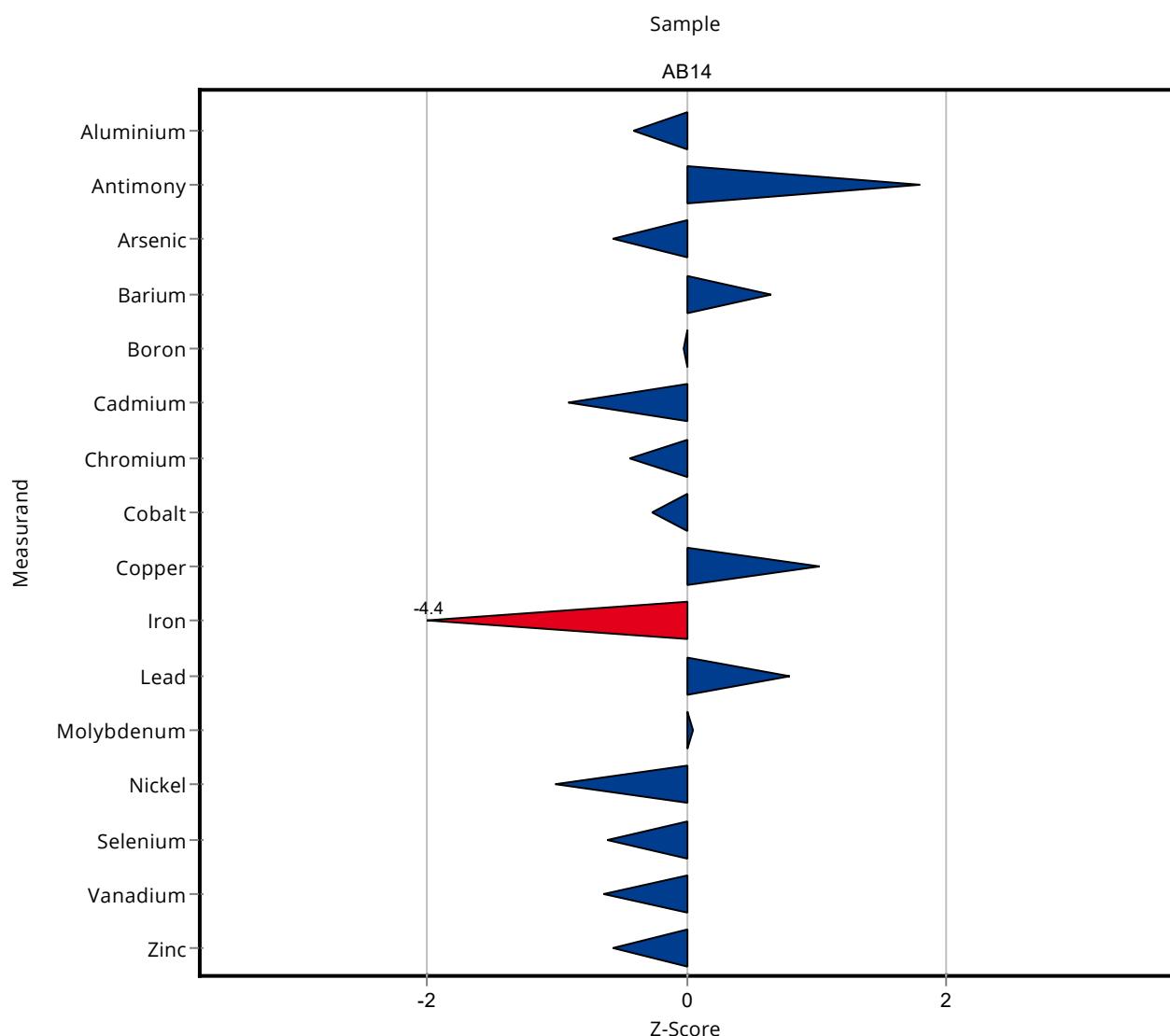


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.8597 ± 0.138	0.157	93.1	-0.40
Antimony	mg/l	0.00112 ± 0.000262	0.0019 ± 0.000278	0.000435	170	1.80
Arsenic	mg/l	0.0241 ± 0.00101	0.0226 ± 0.00316	0.00265	93.8	-0.56
Barium	mg/l	0.331 ± 0.0135	0.3546 ± 0.0532	0.0364	107	0.65
Boron	mg/l	1.4 ± 0.039	1.3929 ± 0.209	0.14	99.8	-0.02
Cadmium	mg/l	0.00145 ± 0.000113	0.0012 ± 0.000143	0.000276	82.7	-0.91
Chromium	mg/l	0.0408 ± 0.00175	0.0386 ± 0.00501	0.00489	94.7	-0.44
Cobalt	mg/l	0.0245 ± 0.00112	0.0238 ± 0.00405	0.0027	97.1	-0.26
Copper	mg/l	0.12 ± 0.00506	0.1364 ± 0.0191	0.0157	113	1.02
Iron	mg/l	0.83 ± 0.0389	0.387 ± 0.058	0.0996	46.6	-4.45
Lead	mg/l	0.317 ± 0.0159	0.3498 ± 0.0525	0.0412	110	0.79
Molybdenum	mg/l	0.401 ± 0.013	0.4033 ± 0.0605	0.0401	101	0.06
Nickel	mg/l	0.0103 ± 0.000538	0.0089 ± 0.00221	0.00133	86.8	-1.02
Selenium	mg/l	0.0118 ± 0.000592	0.0109 ± 0.00174	0.00141	92.8	-0.60
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	<0.01 (LOQ) ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	0.0164 ± 0.00279	0.00313	89.2	-0.64
Zinc	mg/l	0.429 ± 0.0175	0.4023 ± 0.05632	0.0472	93.7	-0.57

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000774 ± 0.000153	-	-	-

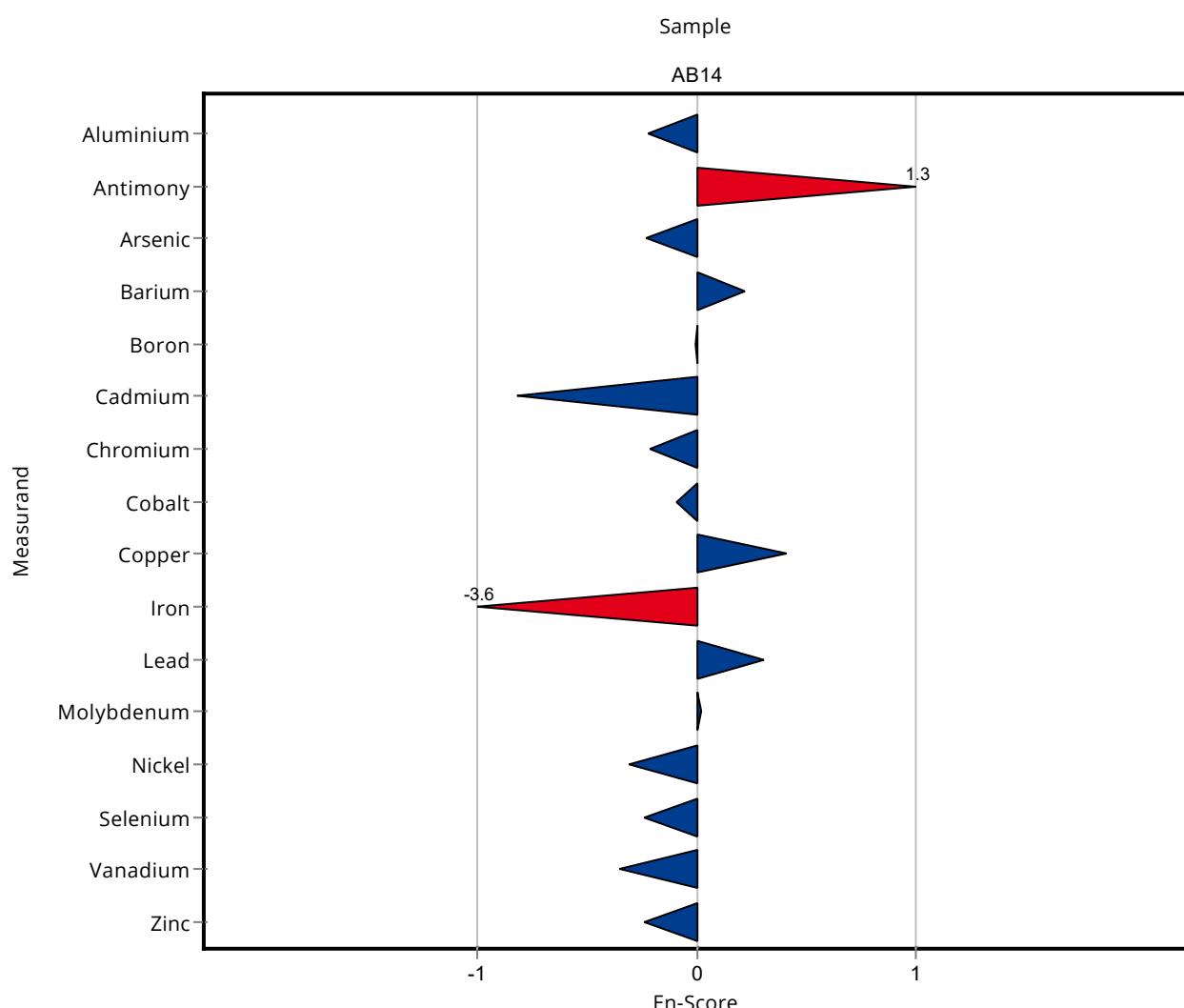


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.8597 ± 0.138	0.157	93.1	-0.22
Antimony	mg/l	0.00112 ± 0.000262	0.0019 ± 0.0002780.000435	170	1.27	
Arsenic	mg/l	0.0241 ± 0.00101	0.0226 ± 0.00316	0.00265	93.8	-0.23
Barium	mg/l	0.331 ± 0.0135	0.3546 ± 0.0532	0.0364	107	0.22
Boron	mg/l	1.4 ± 0.039	1.3929 ± 0.209	0.14	99.8	-0.01
Cadmium	mg/l	0.00145 ± 0.000113	0.0012 ± 0.0001430.000276	82.7	-0.82	
Chromium	mg/l	0.0408 ± 0.00175	0.0386 ± 0.00501	0.00489	94.7	-0.21
Cobalt	mg/l	0.0245 ± 0.00112	0.0238 ± 0.00405	0.0027	97.1	-0.09
Copper	mg/l	0.12 ± 0.00506	0.1364 ± 0.0191	0.0157	113	0.41
Iron	mg/l	0.83 ± 0.0389	0.387 ± 0.058	0.0996	46.6	-3.62
Lead	mg/l	0.317 ± 0.0159	0.3498 ± 0.0525	0.0412	110	0.31
Molybdenum	mg/l	0.401 ± 0.013	0.4033 ± 0.0605	0.0401	101	0.02
Nickel	mg/l	0.0103 ± 0.000538	0.0089 ± 0.00221	0.00133	86.8	-0.30
Selenium	mg/l	0.0118 ± 0.000592	0.0109 ± 0.00174	0.00141	92.8	-0.24
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	<0.01 (LOQ) ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	0.0164 ± 0.00279	0.00313	89.2	-0.35
Zinc	mg/l	0.429 ± 0.0175	0.4023 ± 0.05632	0.0472	93.7	-0.24

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.000774 ± 0.000153	-	-	-

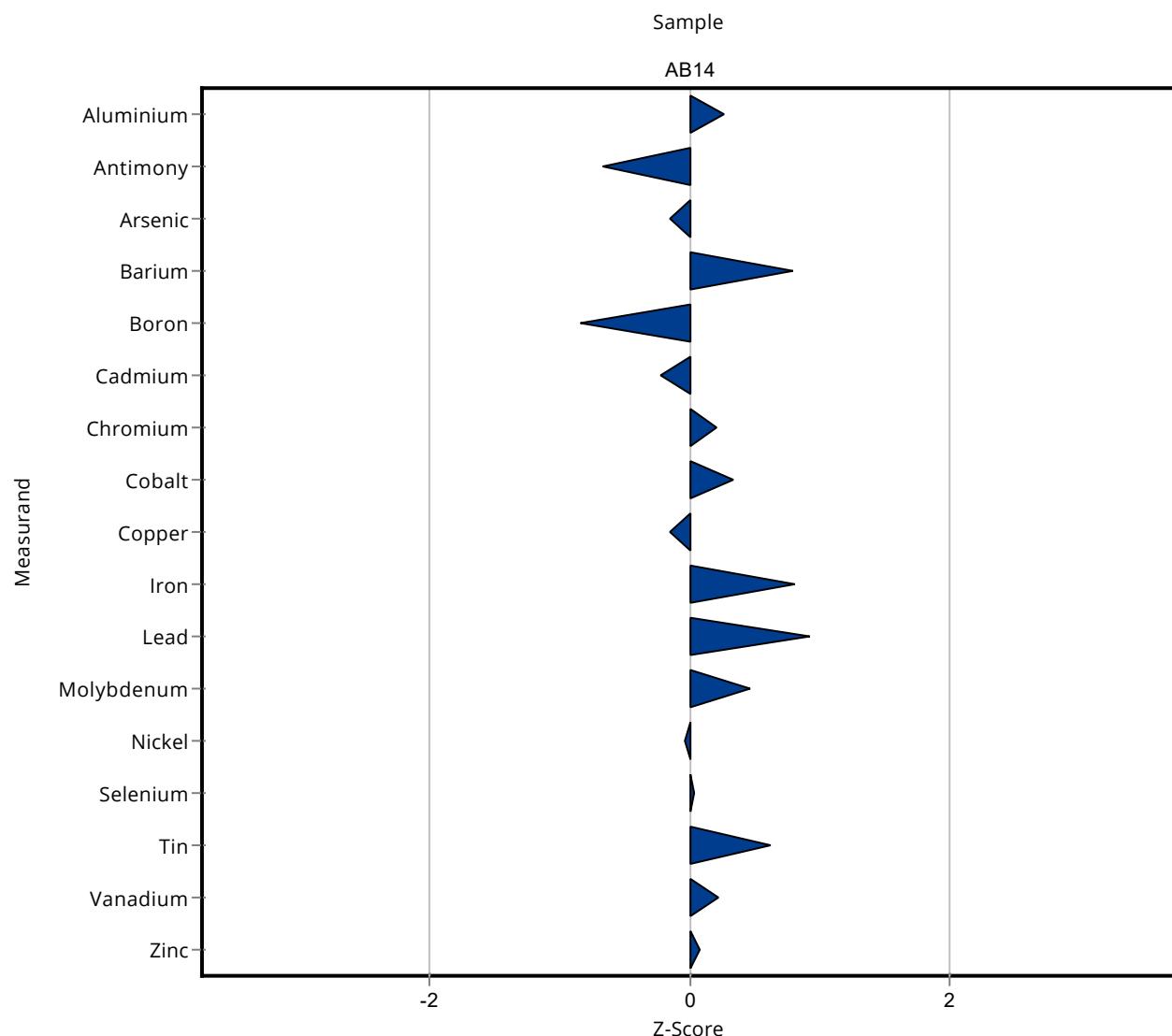


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.965 ± 0.047	0.157	105	0.27
Antimony	mg/l	0.00112 ± 0.000262	0.000823 ± 0.000041	0.000435	73.7	-0.67
Arsenic	mg/l	0.0241 ± 0.00101	0.0237 ± 0.0012	0.00265	98.4	-0.15
Barium	mg/l	0.331 ± 0.0135	0.36 ± 0.018	0.0364	109	0.80
Boron	mg/l	1.4 ± 0.039	1.28 ± 0.064	0.14	91.7	-0.83
Cadmium	mg/l	0.00145 ± 0.000113	0.00139 ± 0.00007	0.000276	95.8	-0.22
Chromium	mg/l	0.0408 ± 0.00175	0.0418 ± 0.0021	0.00489	103	0.21
Cobalt	mg/l	0.0245 ± 0.00112	0.0254 ± 0.0013	0.0027	104	0.33
Copper	mg/l	0.12 ± 0.00506	0.118 ± 0.0059	0.0157	98	-0.15
Iron	mg/l	0.83 ± 0.0389	0.911 ± 0.091	0.0996	110	0.81
Lead	mg/l	0.317 ± 0.0159	0.355 ± 0.018	0.0412	112	0.92
Molybdenum	mg/l	0.401 ± 0.013	0.42 ± 0.024	0.0401	105	0.47
Nickel	mg/l	0.0103 ± 0.000538	0.0102 ± 0.00051	0.00133	99.5	-0.04
Selenium	mg/l	0.0118 ± 0.000592	0.0118 ± 0.00059	0.00141	100	0.03
Silver	mg/l	- ± -	0.00225 ± 0.00016	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0315 ± 0.0016	0.00296	106	0.62
Vanadium	mg/l	0.0184 ± 0.00132	0.0191 ± 0.00099	0.00313	104	0.23
Zinc	mg/l	0.429 ± 0.0175	0.433 ± 0.022	0.0472	101	0.08

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.00449 ± 0.00039	-	-	-

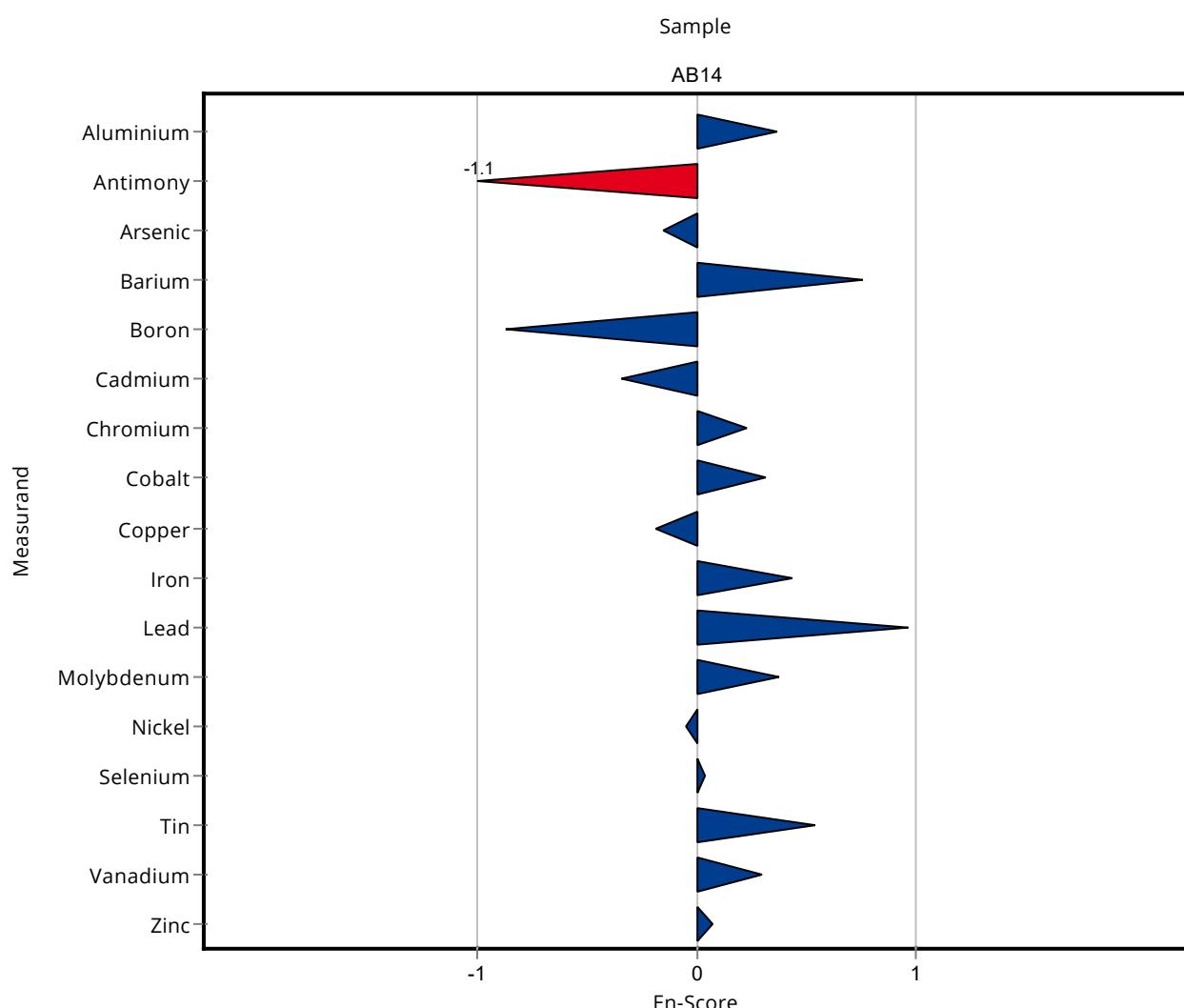


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.965 ± 0.047	0.157	105	0.37
Antimony	mg/l	0.00112 ± 0.000262	0.000823 ± 0.000041	0.000435	73.7	-1.07
Arsenic	mg/l	0.0241 ± 0.00101	0.0237 ± 0.0012	0.00265	98.4	-0.15
Barium	mg/l	0.331 ± 0.0135	0.36 ± 0.018	0.0364	109	0.76
Boron	mg/l	1.4 ± 0.039	1.28 ± 0.064	0.14	91.7	-0.87
Cadmium	mg/l	0.00145 ± 0.000113	0.00139 ± 0.00007	0.000276	95.8	-0.34
Chromium	mg/l	0.0408 ± 0.00175	0.0418 ± 0.0021	0.00489	103	0.23
Cobalt	mg/l	0.0245 ± 0.00112	0.0254 ± 0.0013	0.0027	104	0.31
Copper	mg/l	0.12 ± 0.00506	0.118 ± 0.0059	0.0157	98	-0.19
Iron	mg/l	0.83 ± 0.0389	0.911 ± 0.091	0.0996	110	0.43
Lead	mg/l	0.317 ± 0.0159	0.355 ± 0.018	0.0412	112	0.96
Molybdenum	mg/l	0.401 ± 0.013	0.42 ± 0.024	0.0401	105	0.38
Nickel	mg/l	0.0103 ± 0.000538	0.0102 ± 0.00051	0.00133	99.5	-0.05
Selenium	mg/l	0.0118 ± 0.000592	0.0118 ± 0.00059	0.00141	100	0.04
Silver	mg/l	- ± -	0.00225 ± 0.00016	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0315 ± 0.0016	0.00296	106	0.55
Vanadium	mg/l	0.0184 ± 0.00132	0.0191 ± 0.00099	0.00313	104	0.30
Zinc	mg/l	0.429 ± 0.0175	0.433 ± 0.022	0.0472	101	0.08

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.00449 ± 0.00039	-	-	-

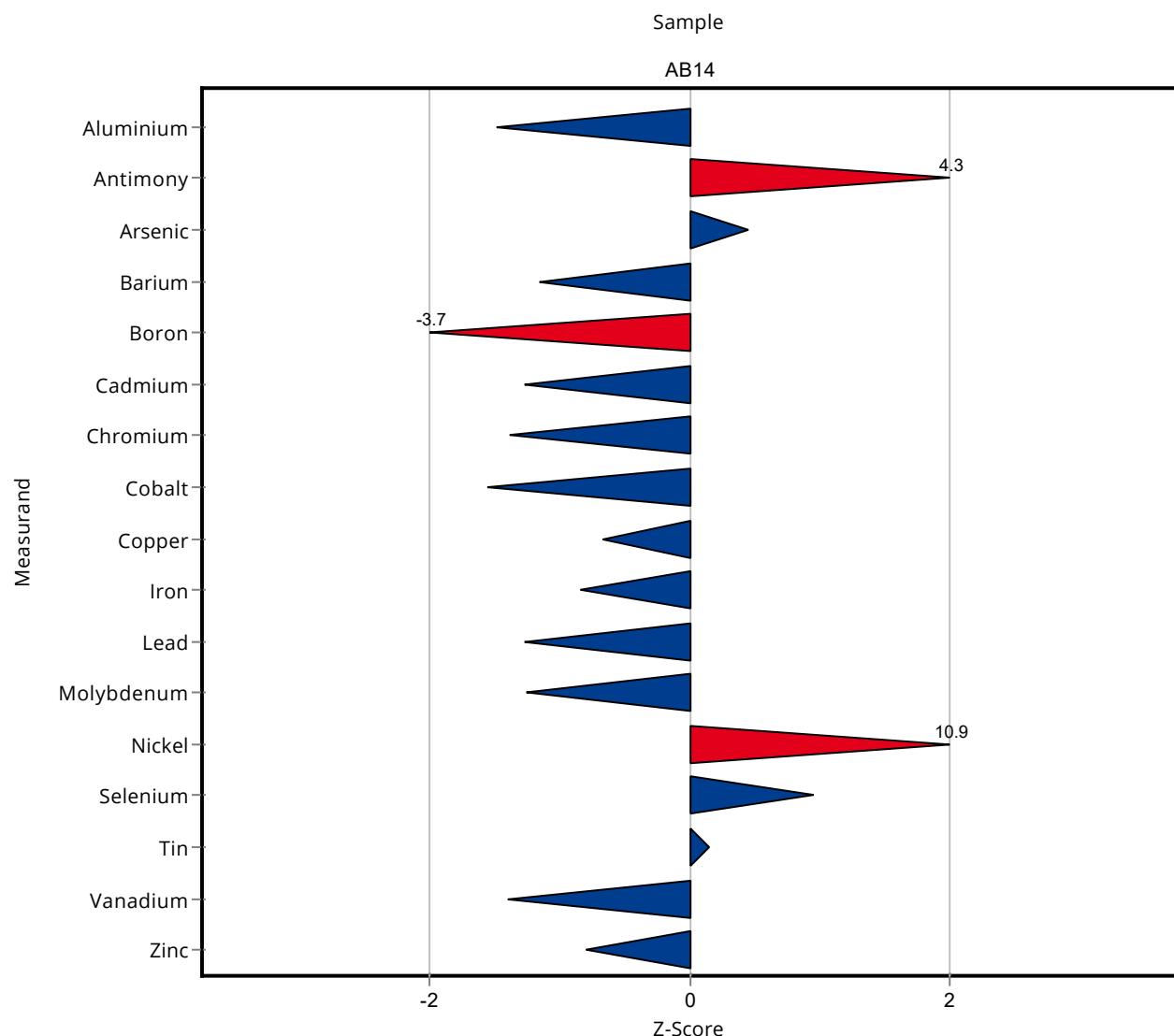


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.691 ± 0.104	0.157	74.9	-1.48
Antimony	mg/l	0.00112 ± 0.000262	0.003 ± 0.0006	0.000435	269	4.33
Arsenic	mg/l	0.0241 ± 0.00101	0.0253 ± 0.005	0.00265	105	0.46
Barium	mg/l	0.331 ± 0.0135	0.289 ± 0.244	0.0364	87.4	-1.15
Boron	mg/l	1.4 ± 0.039	0.875 ± 0.212	0.14	62.7	-3.73
Cadmium	mg/l	0.00145 ± 0.000113	0.0011 ± 0.0002	0.000276	75.8	-1.27
Chromium	mg/l	0.0408 ± 0.00175	0.034 ± 0.004	0.00489	83.4	-1.38
Cobalt	mg/l	0.0245 ± 0.00112	0.0203 ± 0.003	0.0027	82.8	-1.56
Copper	mg/l	0.12 ± 0.00506	0.11 ± 0.014	0.0157	91.3	-0.67
Iron	mg/l	0.83 ± 0.0389	0.747 ± 0.157	0.0996	90	-0.83
Lead	mg/l	0.317 ± 0.0159	0.265 ± 0.039	0.0412	83.6	-1.26
Molybdenum	mg/l	0.401 ± 0.013	0.351 ± 0.147	0.0401	87.5	-1.25
Nickel	mg/l	0.0103 ± 0.000538	0.0248 ± 0.004	0.00133	242	10.91
Selenium	mg/l	0.0118 ± 0.000592	0.0131 ± 0.006	0.00141	111	0.96
Silver	mg/l	- ± -	0.0017 ± 0.0009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0301 ± 0.006	0.00296	102	0.15
Vanadium	mg/l	0.0184 ± 0.00132	0.014 ± 0.007	0.00313	76.1	-1.40
Zinc	mg/l	0.429 ± 0.0175	0.392 ± 0.039	0.0472	91.3	-0.79

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.005 ± 0.003	-	-	-

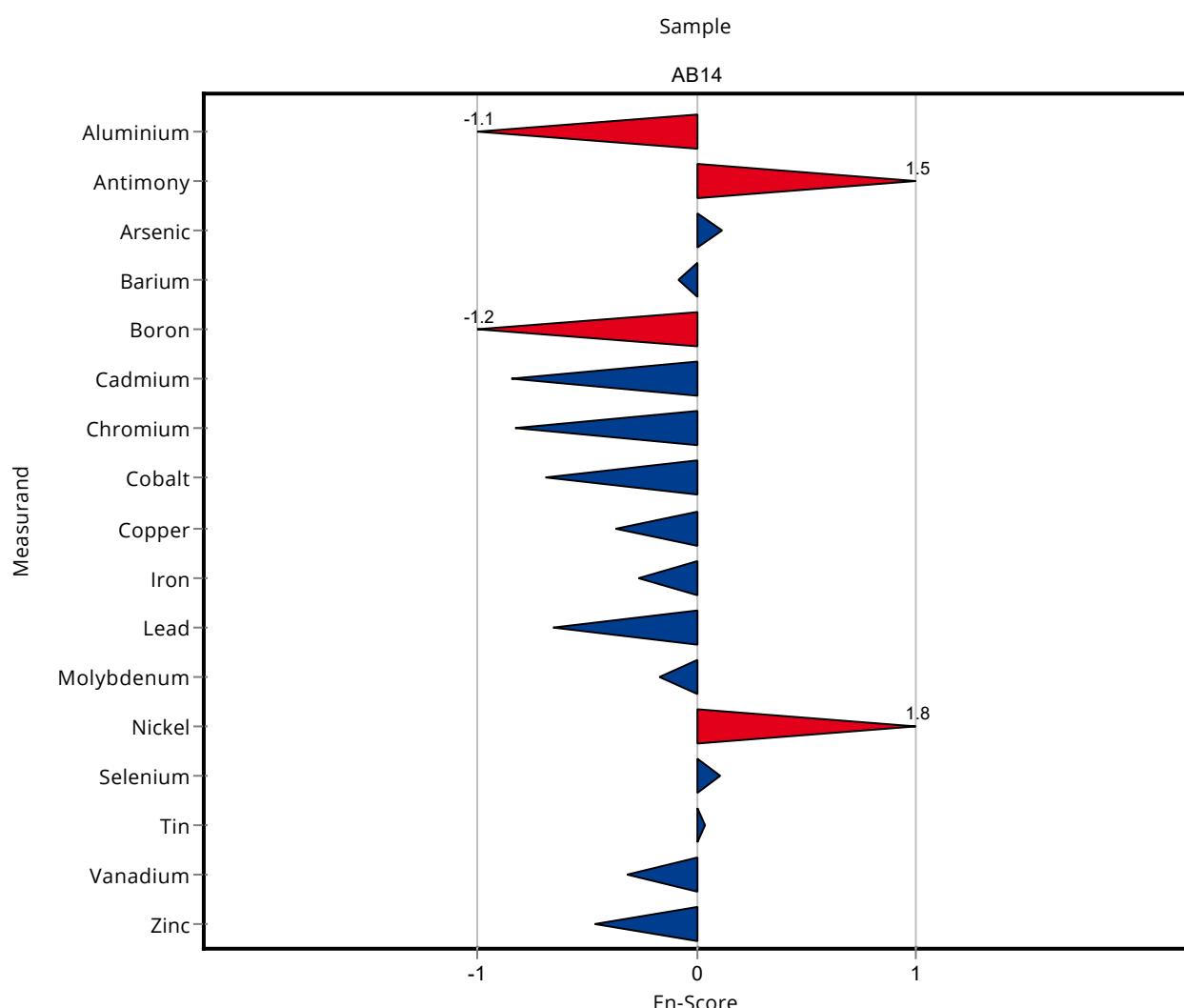


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.691 ± 0.104	0.157	74.9	-1.07
Antimony	mg/l	0.00112 ± 0.000262	0.003 ± 0.0006	0.000435	269	1.53
Arsenic	mg/l	0.0241 ± 0.00101	0.0253 ± 0.005	0.00265	105	0.12
Barium	mg/l	0.331 ± 0.0135	0.289 ± 0.244	0.0364	87.4	-0.09
Boron	mg/l	1.4 ± 0.039	0.875 ± 0.212	0.14	62.7	-1.22
Cadmium	mg/l	0.00145 ± 0.000113	0.0011 ± 0.0002	0.000276	75.8	-0.85
Chromium	mg/l	0.0408 ± 0.00175	0.034 ± 0.004	0.00489	83.4	-0.83
Cobalt	mg/l	0.0245 ± 0.00112	0.0203 ± 0.003	0.0027	82.8	-0.69
Copper	mg/l	0.12 ± 0.00506	0.11 ± 0.014	0.0157	91.3	-0.37
Iron	mg/l	0.83 ± 0.0389	0.747 ± 0.157	0.0996	90	-0.26
Lead	mg/l	0.317 ± 0.0159	0.265 ± 0.039	0.0412	83.6	-0.65
Molybdenum	mg/l	0.401 ± 0.013	0.351 ± 0.147	0.0401	87.5	-0.17
Nickel	mg/l	0.0103 ± 0.000538	0.0248 ± 0.004	0.00133	242	1.81
Selenium	mg/l	0.0118 ± 0.000592	0.0131 ± 0.006	0.00141	111	0.11
Silver	mg/l	- ± -	0.0017 ± 0.0009	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0301 ± 0.006	0.00296	102	0.04
Vanadium	mg/l	0.0184 ± 0.00132	0.014 ± 0.007	0.00313	76.1	-0.31
Zinc	mg/l	0.429 ± 0.0175	0.392 ± 0.039	0.0472	91.3	-0.47

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.005 ± 0.003	-	-	-

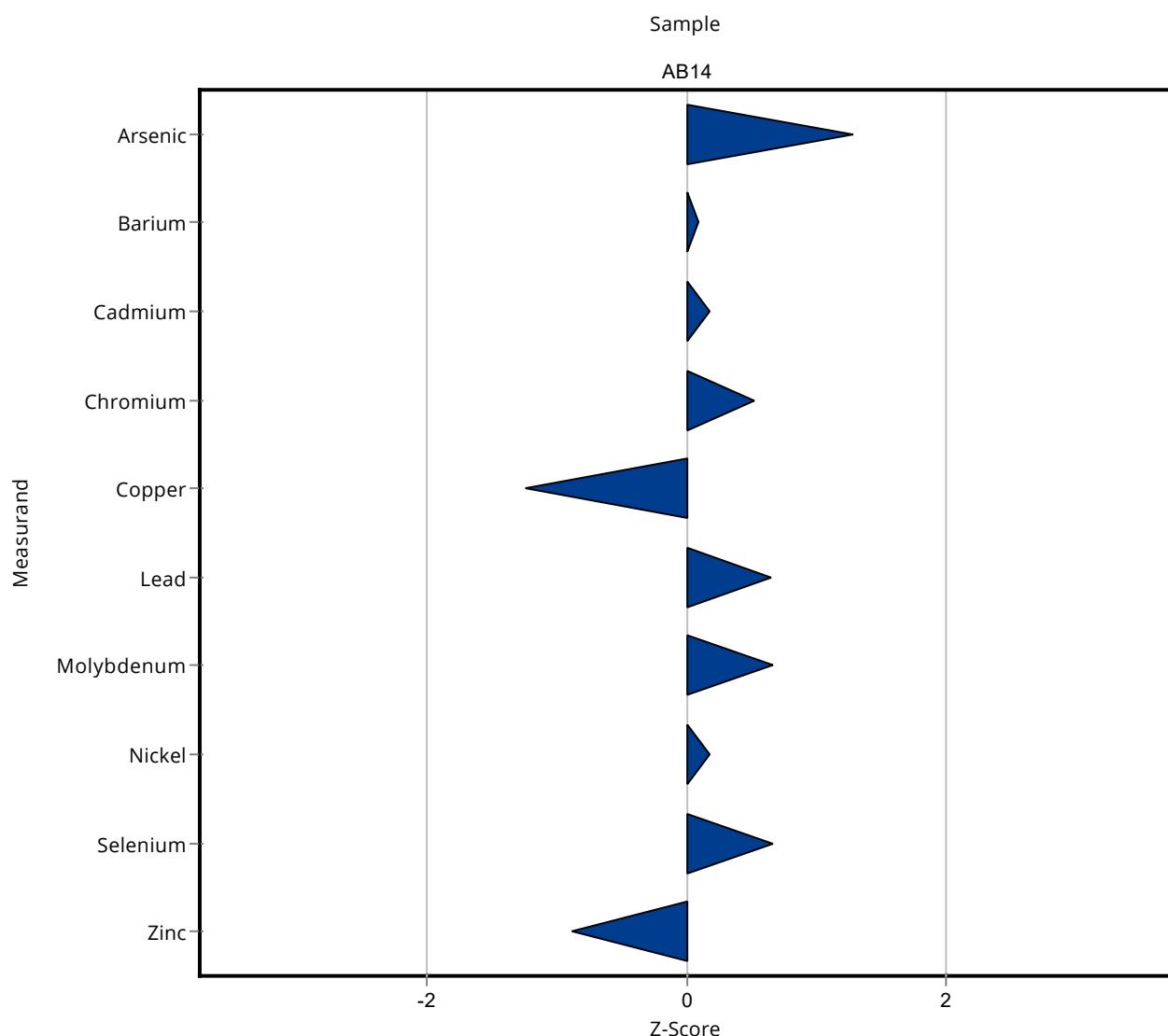


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -	-	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0275 ± 0.0017	0.00265	114	1.29
Barium	mg/l	0.331 ± 0.0135	0.334 ± 0.033	0.0364	101	0.09
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.0015 ± 0.0001	0.000276	103	0.18
Chromium	mg/l	0.0408 ± 0.00175	0.0433 ± 0.0022	0.00489	106	0.52
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.101 ± 0.007	0.0157	83.9	-1.24
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.344 ± 0.024	0.0412	108	0.65
Molybdenum	mg/l	0.401 ± 0.013	0.428 ± 0.034	0.0401	107	0.67
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0018	0.00133	102	0.18
Selenium	mg/l	0.0118 ± 0.000592	0.0127 ± 0.0008	0.00141	108	0.67
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.388 ± 0.039	0.0472	90.4	-0.88

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.000334 ± 0.000037	-	-	-

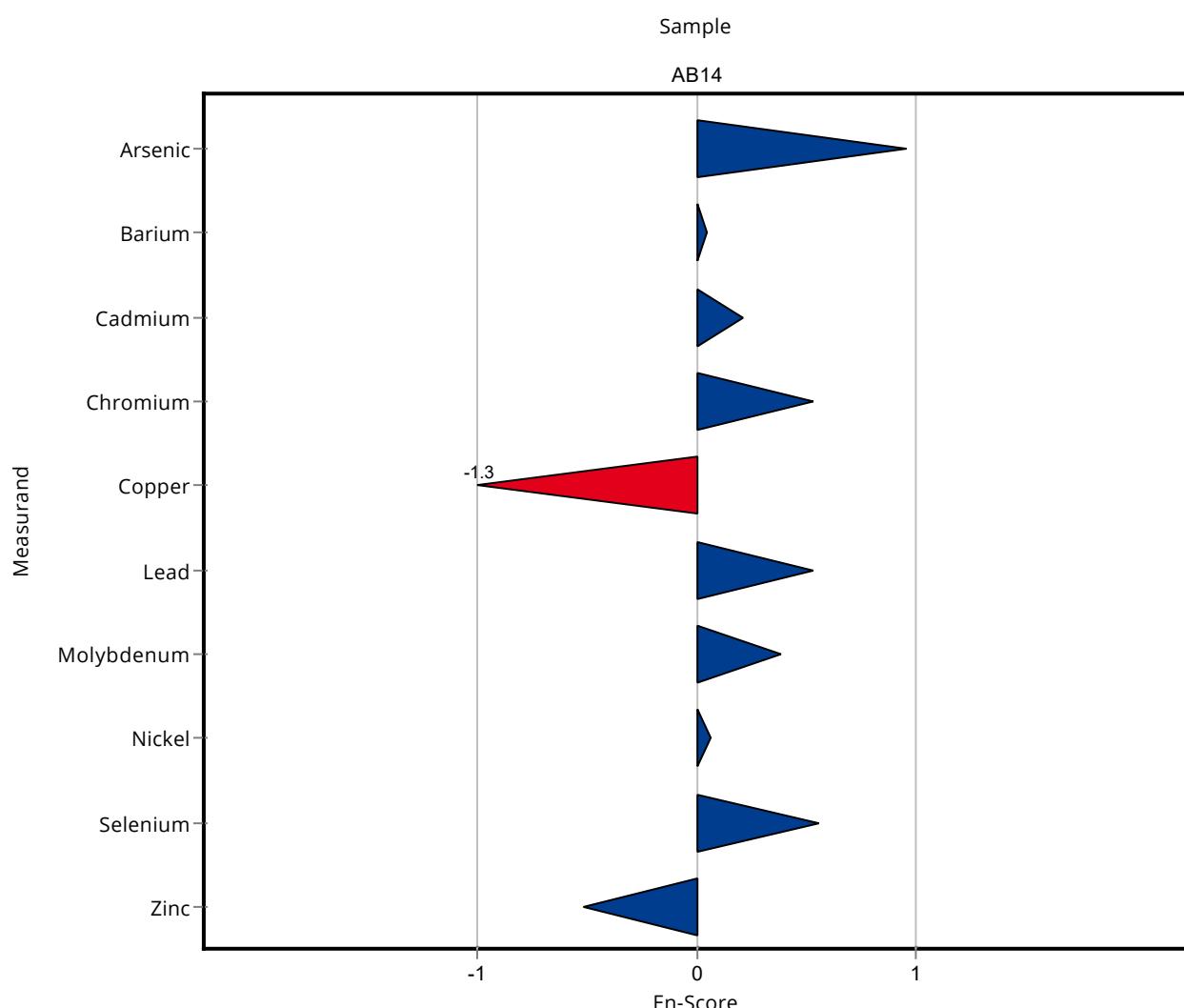


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Aluminium	mg/l	0.923 ± 0.062	- ± -	0.157	-	-
Antimony	mg/l	0.00112 ± 0.000262 <0.001 (LOQ) ± -	-	0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0275 ± 0.0017	0.00265	114	0.96
Barium	mg/l	0.331 ± 0.0135	0.334 ± 0.033	0.0364	101	0.05
Boron	mg/l	1.4 ± 0.039	- ± -	0.14	-	-
Cadmium	mg/l	0.00145 ± 0.000113	0.0015 ± 0.0001	0.000276	103	0.21
Chromium	mg/l	0.0408 ± 0.00175	0.0433 ± 0.0022	0.00489	106	0.54
Cobalt	mg/l	0.0245 ± 0.00112	- ± -	0.0027	-	-
Copper	mg/l	0.12 ± 0.00506	0.101 ± 0.007	0.0157	83.9	-1.30
Iron	mg/l	0.83 ± 0.0389	- ± -	0.0996	-	-
Lead	mg/l	0.317 ± 0.0159	0.344 ± 0.024	0.0412	108	0.53
Molybdenum	mg/l	0.401 ± 0.013	0.428 ± 0.034	0.0401	107	0.39
Nickel	mg/l	0.0103 ± 0.000538	0.0105 ± 0.0018	0.00133	102	0.07
Selenium	mg/l	0.0118 ± 0.000592	0.0127 ± 0.0008	0.00141	108	0.56
Silver	mg/l	- ± -	- ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	- ± -	0.00296	-	-
Vanadium	mg/l	0.0184 ± 0.00132	- ± -	0.00313	-	-
Zinc	mg/l	0.429 ± 0.0175	0.388 ± 0.039	0.0472	90.4	-0.52

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]
Mercury	mg/l	- ± -	0.000334 ± 0.000037	-	-

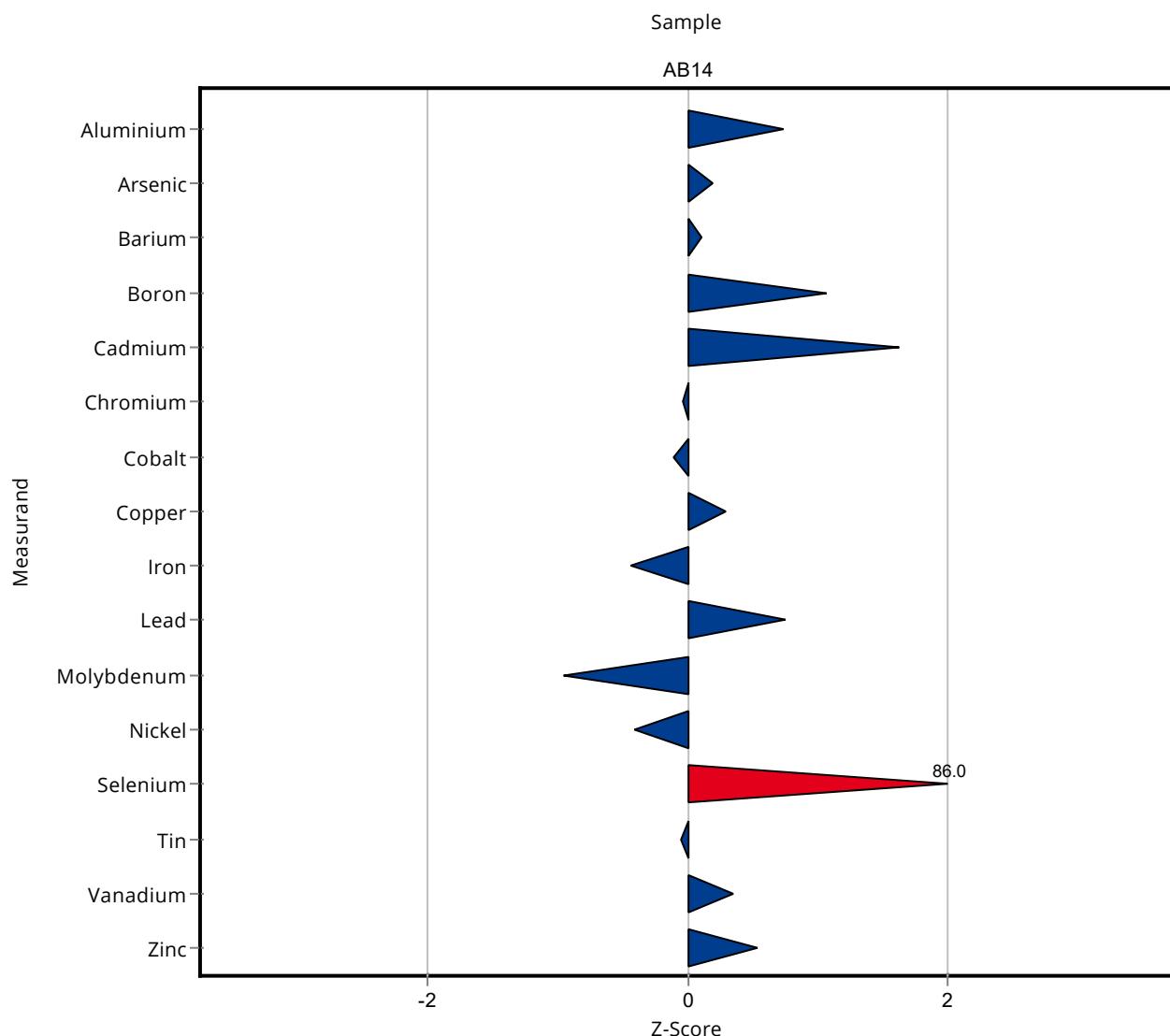


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	1.04 ± 0.156	0.157	113	0.75
Antimony	mg/l	0.00112 ± 0.000262 <0.002 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0246 ± 0.0037	0.00265	102	0.19
Barium	mg/l	0.331 ± 0.0135	0.335 ± 0.05	0.0364	101	0.11
Boron	mg/l	1.4 ± 0.039	1.546 ± 0.232	0.14	111	1.07
Cadmium	mg/l	0.00145 ± 0.000113	0.0019 ± 0.0003	0.000276	131	1.63
Chromium	mg/l	0.0408 ± 0.00175	0.0406 ± 0.0061	0.00489	99.6	-0.03
Cobalt	mg/l	0.0245 ± 0.00112	0.0242 ± 0.0036	0.0027	98.7	-0.11
Copper	mg/l	0.12 ± 0.00506	0.125 ± 0.019	0.0157	104	0.29
Iron	mg/l	0.83 ± 0.0389	0.787 ± 0.118	0.0996	94.8	-0.43
Lead	mg/l	0.317 ± 0.0159	0.348 ± 0.052	0.0412	110	0.75
Molybdenum	mg/l	0.401 ± 0.013	0.363 ± 0.054	0.0401	90.5	-0.95
Nickel	mg/l	0.0103 ± 0.000538	0.0097 ± 0.0015	0.00133	94.6	-0.42
Selenium	mg/l	0.0118 ± 0.000592	0.133 ± 0.02	0.00141	1130	85.99
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0295 ± 0.004	0.00296	99.5	-0.05
Vanadium	mg/l	0.0184 ± 0.00132	0.0195 ± 0.0029	0.00313	106	0.36
Zinc	mg/l	0.429 ± 0.0175	0.455 ± 0.068	0.0472	106	0.54

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0053 ± 0.0008	-	-	-

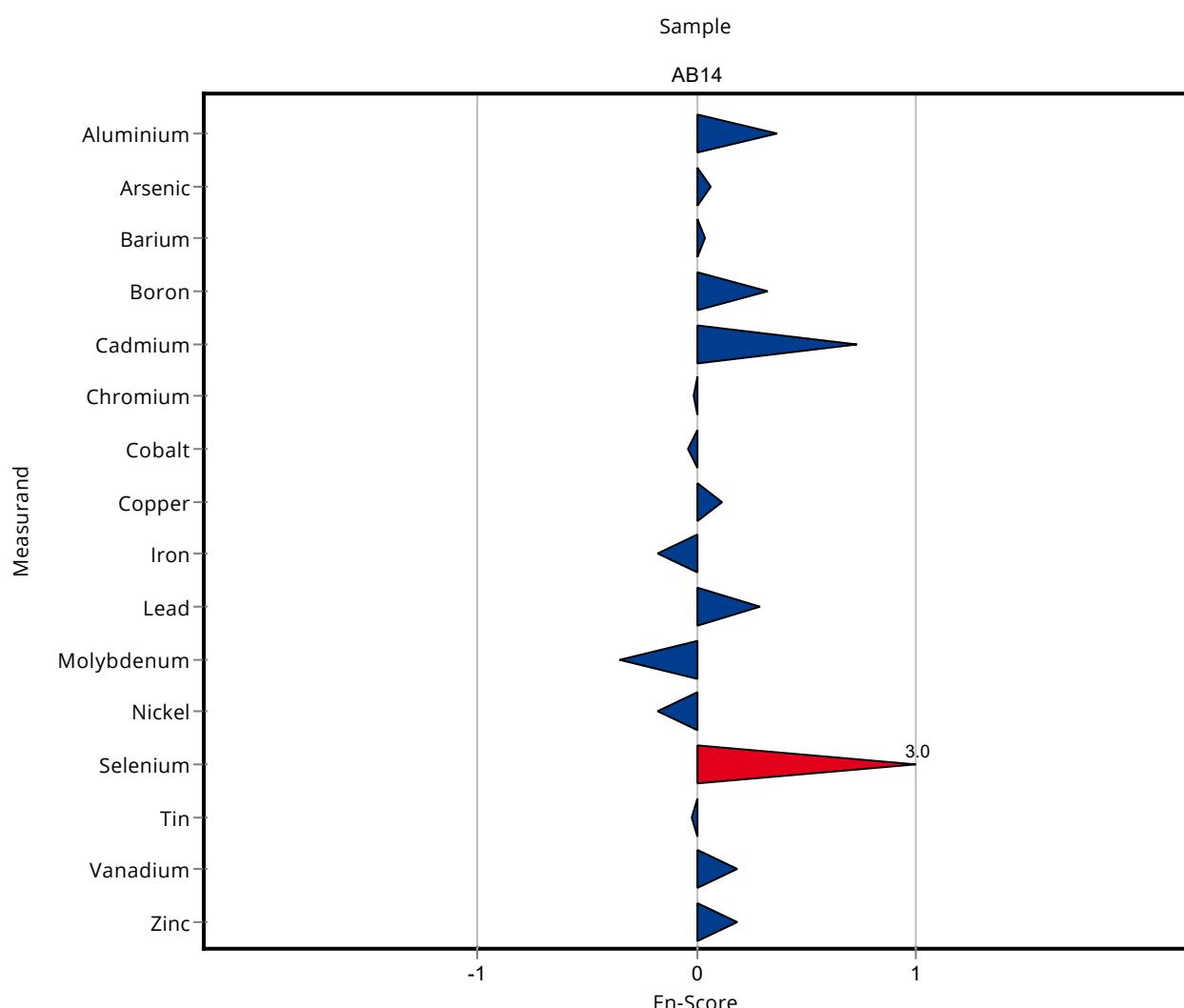


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	1.04 ± 0.156	0.157	113	0.37
Antimony	mg/l	0.00112 ± 0.000262 <0.002 (LOQ) ± -		0.000435	-	-
Arsenic	mg/l	0.0241 ± 0.00101	0.0246 ± 0.0037	0.00265	102	0.07
Barium	mg/l	0.331 ± 0.0135	0.335 ± 0.05	0.0364	101	0.04
Boron	mg/l	1.4 ± 0.039	1.546 ± 0.232	0.14	111	0.32
Cadmium	mg/l	0.00145 ± 0.000113	0.0019 ± 0.0003	0.000276	131	0.73
Chromium	mg/l	0.0408 ± 0.00175	0.0406 ± 0.0061	0.00489	99.6	-0.01
Cobalt	mg/l	0.0245 ± 0.00112	0.0242 ± 0.0036	0.0027	98.7	-0.04
Copper	mg/l	0.12 ± 0.00506	0.125 ± 0.019	0.0157	104	0.12
Iron	mg/l	0.83 ± 0.0389	0.787 ± 0.118	0.0996	94.8	-0.18
Lead	mg/l	0.317 ± 0.0159	0.348 ± 0.052	0.0412	110	0.29
Molybdenum	mg/l	0.401 ± 0.013	0.363 ± 0.054	0.0401	90.5	-0.35
Nickel	mg/l	0.0103 ± 0.000538	0.0097 ± 0.0015	0.00133	94.6	-0.18
Selenium	mg/l	0.0118 ± 0.000592	0.133 ± 0.02	0.00141	1130	3.03
Silver	mg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.0295 ± 0.004	0.00296	99.5	-0.02
Vanadium	mg/l	0.0184 ± 0.00132	0.0195 ± 0.0029	0.00313	106	0.19
Zinc	mg/l	0.429 ± 0.0175	0.455 ± 0.068	0.0472	106	0.19

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0053 ± 0.0008	-	-	-

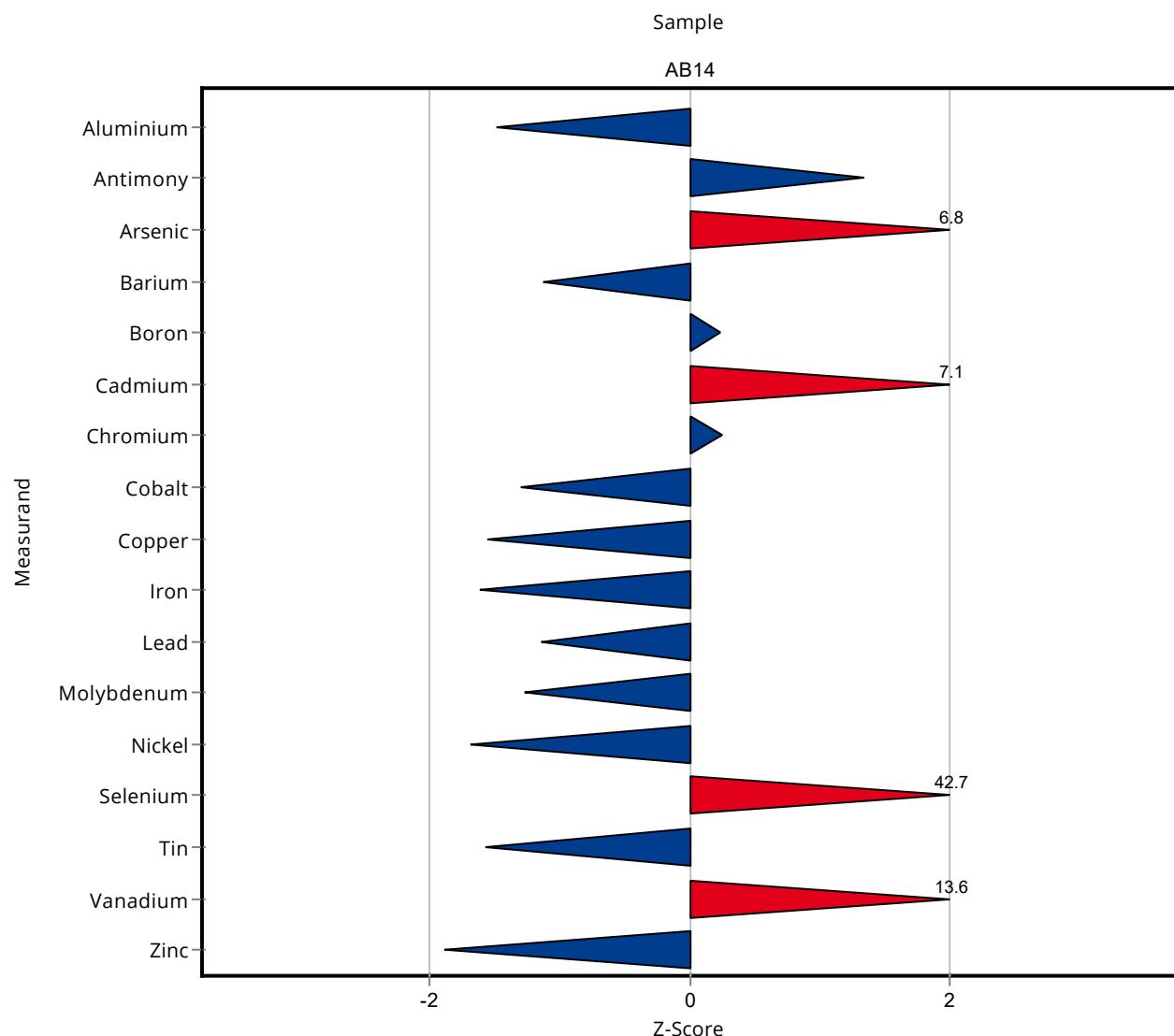


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Aluminium	mg/l	0.923 ± 0.062	0.69 ± 0.069	0.157	74.8	-1.49
Antimony	mg/l	0.00112 ± 0.000262	0.0017 ± 0.00017	0.000435	152	1.34
Arsenic	mg/l	0.0241 ± 0.00101	0.042 ± 0.0042	0.00265	174	6.76
Barium	mg/l	0.331 ± 0.0135	0.29 ± 0.029	0.0364	87.7	-1.12
Boron	mg/l	1.4 ± 0.039	1.43 ± 0.143	0.14	102	0.24
Cadmium	mg/l	0.00145 ± 0.000113	0.0034 ± 0.00034	0.000276	234	7.06
Chromium	mg/l	0.0408 ± 0.00175	0.042 ± 0.0042	0.00489	103	0.25
Cobalt	mg/l	0.0245 ± 0.00112	0.021 ± 0.0021	0.0027	85.7	-1.30
Copper	mg/l	0.12 ± 0.00506	0.096 ± 0.0096	0.0157	79.7	-1.56
Iron	mg/l	0.83 ± 0.0389	0.67 ± 0.067	0.0996	80.7	-1.61
Lead	mg/l	0.317 ± 0.0159	0.27 ± 0.027	0.0412	85.1	-1.14
Molybdenum	mg/l	0.401 ± 0.013	0.35 ± 0.035	0.0401	87.3	-1.27
Nickel	mg/l	0.0103 ± 0.000538	0.008 ± 0.0008	0.00133	78	-1.69
Selenium	mg/l	0.0118 ± 0.000592	0.072 ± 0.0072	0.00141	613	42.73
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.025 ± 0.0025	0.00296	84.3	-1.57
Vanadium	mg/l	0.0184 ± 0.00132	0.061 ± 0.0061	0.00313	332	13.63
Zinc	mg/l	0.429 ± 0.0175	0.34 ± 0.034	0.0472	79.2	-1.89

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Mercury	mg/l	- ± -	0.0045 ± 0.00045	-	-	-

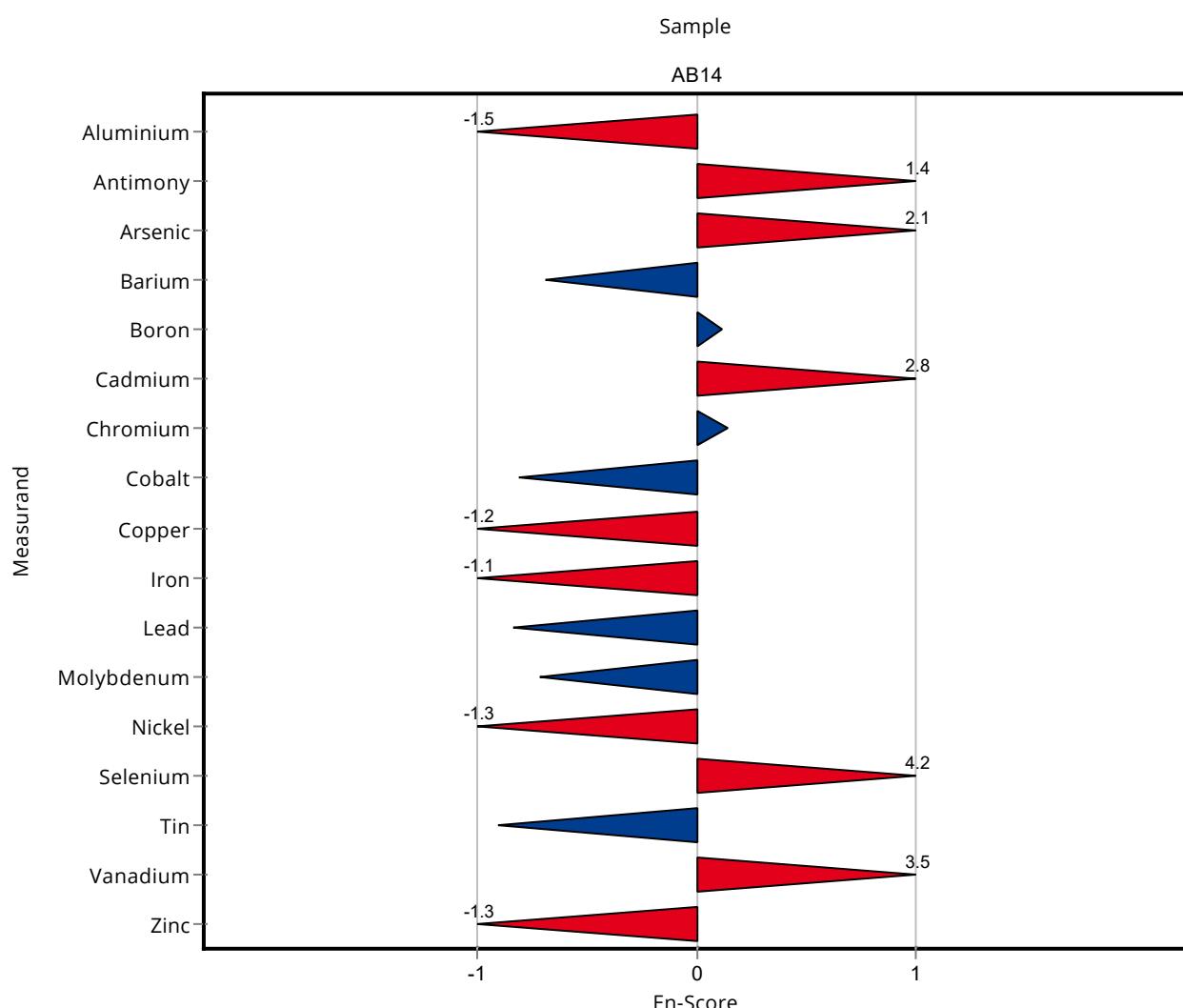


Sample: AB14

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Aluminium	mg/l	0.923 ± 0.062	0.69 ± 0.069	0.157	74.8	-1.54
Antimony	mg/l	0.00112 ± 0.000262	0.0017 ± 0.00017	0.000435	152	1.36
Arsenic	mg/l	0.0241 ± 0.00101	0.042 ± 0.0042	0.00265	174	2.12
Barium	mg/l	0.331 ± 0.0135	0.29 ± 0.029	0.0364	87.7	-0.69
Boron	mg/l	1.4 ± 0.039	1.43 ± 0.143	0.14	102	0.12
Cadmium	mg/l	0.00145 ± 0.000113	0.0034 ± 0.00034	0.000276	234	2.83
Chromium	mg/l	0.0408 ± 0.00175	0.042 ± 0.0042	0.00489	103	0.14
Cobalt	mg/l	0.0245 ± 0.00112	0.021 ± 0.0021	0.0027	85.7	-0.81
Copper	mg/l	0.12 ± 0.00506	0.096 ± 0.0096	0.0157	79.7	-1.23
Iron	mg/l	0.83 ± 0.0389	0.67 ± 0.067	0.0996	80.7	-1.15
Lead	mg/l	0.317 ± 0.0159	0.27 ± 0.027	0.0412	85.1	-0.84
Molybdenum	mg/l	0.401 ± 0.013	0.35 ± 0.035	0.0401	87.3	-0.72
Nickel	mg/l	0.0103 ± 0.000538	0.008 ± 0.0008	0.00133	78	-1.34
Selenium	mg/l	0.0118 ± 0.000592	0.072 ± 0.0072	0.00141	613	4.18
Silver	mg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Tin	mg/l	0.0296 ± 0.00112	0.025 ± 0.0025	0.00296	84.3	-0.91
Vanadium	mg/l	0.0184 ± 0.00132	0.061 ± 0.0061	0.00313	332	3.47
Zinc	mg/l	0.429 ± 0.0175	0.34 ± 0.034	0.0472	79.2	-1.27

Sample: AB14HG

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score [%]
Mercury	mg/l	- ± -	0.0045 ± 0.00045	-	-	-



E9. Methodenübersicht / Overview of methods

LabCode	Sample	Aluminium	Antimony	Arsenic
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0004	AB14		ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14		ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14	ICP-OES; EN ISO 11885		ICP-MS; EN ISO 17294-2
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0020	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14		ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0028	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-OES; EN ISO 11885; E22	ICP-MS; EN ISO 17294-2; E29	ICP-MS; EN ISO 17294-2; E29

LabCode	Sample	Barium	Boron	Cadmium
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0004	AB14	ICP-MS; EN ISO 17294-2		ICP-MS; EN ISO 17294-2
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2		ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14	ICP-OES; EN ISO 11885		ICP-MS; EN ISO 17294-2
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0020	AB14	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14	ICP-MS; EN ISO 17294-2		ICP-MS; EN ISO 17294-2
LC0028	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-MS; EN ISO 17294-2; E29

LabCode	Sample	Chromium	Cobalt	Copper
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0004	AB14	ICP-MS; EN ISO 17294-2		ICP-MS; EN ISO 17294-2
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0020	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14	ICP-MS; EN ISO 17294-2		ICP-MS; EN ISO 17294-2
LC0028	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-MS; EN ISO 17294-2; E29	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22

LabCode	Sample	Iron	Lead	Molybdenum
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0004	AB14		ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14		ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0020	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14		ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0028	AB14	ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22

LabCode	Sample	Nickel	Selenium	Silver
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	
LC0004	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14		ICP-MS; EN ISO 17294-2	
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0020	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	
LC0028	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-OES; EN ISO 11885; E22	ICP-MS; EN ISO 17294-2; E29	ICP-OES; EN ISO 11885; E22

LabCode	Sample	Tin	Vanadium	Zinc
LC0001	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0002	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0003	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0004	AB14			ICP-MS; EN ISO 17294-2
LC0005	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0006	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0007	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-OES; EN ISO 11885
LC0008	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0009	AB14			ICP-OES; EN ISO 11885
LC0010	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0011	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0012	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0013	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0014	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0015	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0016	AB14		ICP-OES; EN ISO 11885	ICP-MS; EN ISO 17294-2
LC0017	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0018	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0019	AB14	ICP-OES; EN ISO 11885		ICP-OES; EN ISO 11885
LC0020	AB14			ICP-OES; EN ISO 11885
LC0021	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0022	AB14	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885	ICP-OES; EN ISO 11885
LC0023	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0024	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0025	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0026	AB14	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22	ICP-OES; EN ISO 11885; E22
LC0027	AB14			ICP-MS; EN ISO 17294-2
LC0028	AB14	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2	ICP-MS; EN ISO 17294-2
LC0029	AB14	ICP-OES; EN ISO 11885; E22	ICP-MS; EN ISO 17294-2; E29	ICP-OES; EN ISO 11885; E22

LabCode	Sample	Mercury
LC0001	AB14HG	AFS; EN ISO 17852; E35
LC0002	AB14HG	ICP-OES; EN ISO 11885
LC0003	AB14HG	CV-AAS; EN ISO 12846
LC0004	AB14HG	CV-AAS; EN ISO 12846
LC0005	AB14HG	AFS; EN ISO 17852
LC0006	AB14HG	CV-AAS; EN ISO 12846
LC0007	AB14HG	CV-AAS; EN ISO 12846
LC0008	AB14HG	CV-AAS; EN ISO 12846
LC0009	AB14HG	
LC0010	AB14HG	AAS; EN 1483
LC0011	AB14HG	CV-AAS; EN ISO 12846
LC0012	AB14HG	ICP-MS; EN ISO 17294-2
LC0013	AB14HG	ICP-MS; EN ISO 17294-2
LC0014	AB14HG	CV-AAS; EN ISO 12846
LC0015	AB14HG	AAS; EN 1483
LC0016	AB14HG	ICP-MS; EN ISO 17294-2
LC0017	AB14HG	CV-AAS; EN ISO 12846
LC0018	AB14HG	ICP-OES; EN ISO 11885
LC0019	AB14HG	CV-AAS; EN ISO 12846
LC0020	AB14HG	AFS; EN ISO 17852
LC0021	AB14HG	ICP-MS; EN ISO 17294-2
LC0022	AB14HG	CV-AAS; EN ISO 12846
LC0023	AB14HG	CV-AAS; EN ISO 12846
LC0024	AB14HG	AFS; EN ISO 17852; E35
LC0025	AB14HG	ICP-MS; EN ISO 17294-2
LC0026	AB14HG	ICP-OES; EN ISO 11885; E22
LC0027	AB14HG	CV-AAS; EN ISO 12846; E12
LC0028	AB14HG	ICP-MS; EN ISO 17294-2
LC0029	AB14HG	CV-AAS; EN ISO 12846; E12