

**Proficiency Testing Scheme  
Umweltanalytik  
CBL06 Chlorierte Kohlenwasserstoffe (CKW)  
und BTEX & C5-C10**

**Proficiency Testing Scheme for  
Environmental Analysis  
CBL06 Chlorinated hydrocarbons (CHC) and  
BTEX & C5-C10**

**BERICHT / REPORT**

Probenversand / Sample dispatch: 06.10.2020

**Ausgabe/Edition 1: 24.11.2020**

Dieser Report umfasst 184 Seiten.  
This report comprises 184 pages.

**Anbieter der Eignungsprüfung / Provider of the proficiency test:**

**Anschrift / Address:** Umweltbundesamt GmbH  
Spittelauer Lände 5  
1090 Vienna/Austria

**E-Mail:** [ringversuche@umweltbundesamt.at](mailto:ringversuche@umweltbundesamt.at)

**Tel:** +43 (0) 1 31304 4334

**Website deutsch:** [www.umweltbundesamt.at/ringversuche](http://www.umweltbundesamt.at/ringversuche)  
[www.imatest.at](http://www.imatest.at)

**Website english:** <https://www.umweltbundesamt.at/en/proficiency-testing>  
[www.imatest.eu](http://www.imatest.eu)

**Koordination und technische Leitung Eignungsprüfungen / coordinator and technical management:**

Dipl.-Ing. Monika Denner

**Verantwortlich für die Durchführung der Eignungsprüfungsrunde / Responsible for the implementation of this proficiency test:**

Dipl.-Ing. Johannes Urteil; Martha Schmid MSc

Tel.: +43 (0) 1 31304 4334

**Verantwortlich für die Freigabe des Berichts / Responsible for authorizing the report:**

Dipl.-Ing. Monika Denner

Leitung Eignungsprüfungen für den Bereich chemische Analytik/ Management for proficiency tests for chemical analysis

## Inhaltsverzeichnis / Table of Contents

D1. Beschreibung des Ringversuchs.....	5
D1.1.  Ausgestaltung und Durchführung .....	5
D1.2.  Beschreibung der Prüfgegenstände.....	5
D1.3.  Anweisungen für die Teilnehmer .....	6
D1.4.  Kontrollanalytik zur Bewertung der Homogenität .....	6
D1.5.  Trendtest zur Bewertung der Stabilität .....	6
D1.6.  Ermittlung des zugewiesenen Wertes.....	7
D2. Kriterien der Leistungsbewertung .....	8
D2.1.  Leistungskriterium z-Score.....	8
D2.2.  Leistungskriterium E <sub>n</sub> -Score .....	8
D2.3.  Leistungsbewertung z-Score und E <sub>n</sub> -Score .....	9
D3. Darstellung und Interpretation der Messergebnisse.....	9
D4. Anmerkungen zur Auswertung.....	10
D5. Erläuterung zu Tabellen und Grafiken .....	11
D5.1.  Angaben und Abkürzungen in Tabellen .....	11
D5.2.  Graphische Darstellung der Ergebnisse .....	13
D6. Zusammenfassung .....	16
D6.1.  Tabelle der zugewiesenen Werte .....	16
D6.2.  Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse ...	17
E1. Description of the proficiency test .....	18
E1.1.  Design and implementation .....	18
E1.2.  Description of the proficiency test items.....	18
E1.3.  Instructions for the participants .....	19
E1.4.  Control testing for homogeneity evaluation .....	19
E1.5.  Trend test for stability evaluation .....	19
E1.6.  Determination of the assigned values .....	20
E2. Criteria of performance evaluation .....	21
E2.1.  Performance criterion z-Score .....	21
E2.2.  Performance criterion E <sub>n</sub> -Score .....	21
E2.3.  Performance evaluation z-Score and E <sub>n</sub> -Score.....	22
E3. Representation and interpretation of measurement results .....	23
E4. Explanatory notes .....	23

E5. Annotations on tables and charts .....	24
E5.1. Information and abbreviations in tables .....	24
E5.2. Graphical presentation of results .....	26
E6. Summary .....	29
E6.1. Table of assigned values .....	29
E6.2. Summary of results, after removal of outliers .....	30
E7. Parameterorientierte Auswertung / Parameter oriented report .....	31
E8. Labororientierte Auswertung / Laboratory oriented report .....	104
E9. Methodenübersicht / Overview of methods .....	181

## D1. Beschreibung des Ringversuchs

### D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 20
- Anzahl der übermittelten Datensätze: 18
- Probenversand: 06.10.2020
- Einsendeschluss der Daten: 03.11.2020

Beim Ringversuch CBL06 bestand die Möglichkeit, an den Teilen CL07 (CKW) und/oder BL08 (BTEX & C5-C10) teilzunehmen.

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

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

### D1.2. Beschreibung der Prüfgegenstände

Als Probe wurde jeweils ein mit zertifiziertem Kalibriergas beladenes Aktivkohleröhrchen versandt. Zusätzlich wurde ein unbeladenes Röhrchen zur Blindwertbestimmung beigelegt. Die Beladung der Röhrchen erfolgte in zwei Serien (CL07 und BL08). Es wurde ein definiertes Volumen des Kalibriergases der Firma Air Liquide mit einer Pumpe über Orbo 32S Aktivkohleröhrchen (Supelco) gesaugt. Die verwendeten Kalibriergase enthielten zum einen die Substanzen cis-1,2-Dichlorethen, trans-1,2-Dichlorethen, Trichlormethan, 1,1,1-Trichlorethan, Trichlorethen, Tetrachlormethan und Tetrachlorethen (CL07) und zum anderen Benzol, Ethylbenzol, o-, m- und p-Xylol, Toluol, n-Pentan, n-Hexan, n-Heptan, n-Oktan, n-Nonan und n-Dekan (BL08). Die Beladung der Röhrchen erfolgte über ein Y-Stück im drucklosen Zustand. Der eingestellte Pumpenfluss wurde sowohl vor als auch nach der Beladung der Aktivkohleröhrchen kontrolliert. Das Beladen der Röhrchen erfolgte am 30.09.2020. Die Proben wurden bis zum Versand bei < -70 °C gelagert und am 06.10.2020 verschickt.

Jedes Teilnehmerlabor erhielt je nach Anmeldung:

- 1 beladenes Aktivkohleröhrchen Probe CL07 und/oder
- 1 beladenes Aktivkohleröhrchen Probe BL08
- sowie 1 unbeladenes Aktivkohleröhrchen (Blindwert) pro Probe

### **D1.3. Anweisungen für die Teilnehmer**

Aus Stabilitätsgründen wurde empfohlen bis spätestens 14.10.2020 mit den Analysen zu beginnen.

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

### **D1.4. Kontrollanalytik zur Bewertung der Homogenität**

Im Zuge des Beladens wurden zu willkürlichen Zeitpunkten mehrere Aliquote pro Probe zur Kontrollanalytik entnommen.

Es wurden für CL07 bzw. BL08 jeweils  $n=5$  Kontrollproben dem Labor zur Analyse übergeben.

Die Bestimmung der Parameter wurde an ein externes Labor (akkreditiert nach EN ISO/IEC 17025 für die o.a. Parameter) im Unterauftrag vergeben (verdeckte Vergabe, Proben anonymisiert) und erfolgte zeitnah zum Probenversand.

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**

Die Bewertung der Stabilität der Prüfgegenstände erfolgte auf Basis der Datenstatistik aus den vergangenen Runden für Proben im Zeitraum 2013 bis 2019.

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

---

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

## **D1.6. Ermittlung des zugewiesenen Wertes**

Die Ergebnisse der Analysen mussten spätestens bis zum 03.11.2020 beim Veranstalter vorliegen. Später eingehende Werte wurden nicht berücksichtigt.

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

Nach Abschluss der Plausibilitätsprüfung, wurde der Ausreißertest nach Hampel durchgeführt und die Ausreißer ermittelt. Die von diesem Test auffällig eingestuft 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 DIN 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 Teilnehmerergebnisse von über 50 % und/oder bei mangelhafter Rückführbarkeit der statistischen Kenndaten aus den ausreißerbereinigten Ergebnissen der Teilnehmer auf den Mittelwert des Kontrolllabores, kann die Situation auftreten, dass kein zugewiesener Wert für den aktuellen Ringversuch festgelegt werden kann und daher keine Bewertung der Teilnehmerergebnisse für diesen Parameter möglich ist. Ein entsprechender Hinweis wird im Bericht unter E7 bei der informativen Auswertung angebracht. Im Rahmen der internen Qualitätssicherung der Teilnehmer kann ein Vergleich mit den Ergebnissen des Kontrolllabors durchgeführt werden. Diese Vorgehensweise wird bei Anwendung jeweils parameter- und probenbezogen unter Punkt D4 des Berichts dokumentiert.

## D2. Kriterien der Leistungsbewertung

### D2.1. Leistungskriterium z-Score

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

Die Ermittlung der z-Scores erfolgte gemäß nachfolgender Formel:

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

Dabei ist:

$x_i$	Messergebnis des teilnehmenden Labors
$\bar{X}$	zugewiesener Wert Sollwert für die Leistungsbewertung der Teilnehmer (angegeben auf 3 signifikante Stellen); im Regelfall: ausreißerbereinigter Mittelwert der Teilnehmerergebnisse. Eine davon abweichende Vorgehensweise wird unter Punkt D4 des Berichts beschrieben.
<i>Kriterium</i>	Vergleichsstandardabweichung berechnet aus den Statistiken für Proben der vorangegangenen Runden im Zeitraum 2013 bis 2019 (RSDpooled) bzw. aus den ausreißerbereinigten Teilnehmerergebnissen (sR) des aktuellen Ringversuchs (falls noch weniger als 6 vorangegangene Runden vorlagen). In begründeten Fällen (z.B. Ergebnisse Prüfgegenstände 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<sub>n</sub>-Score

Für die Prüfgegenstände erfolgen neu ab 2019 zusätzliche Bewertungen unter Einbeziehung der erweiterten Messunsicherheiten der Teilnehmer und der erweiterten Messunsicherheit des zugewiesenen Wertes, gemäß E<sub>n</sub>-Score. Diese Auswertungen werden für die Teilnehmer im Bericht unter Punkt E8, jeweils im Anschluss an die z-Score Auswertung dargestellt.

Die Ermittlung der E<sub>n</sub>-Scores erfolgte gemäß nachfolgender Formel:

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



Dabei ist:

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

### D2.3. Leistungsbewertung z-Score und E<sub>n</sub>-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 Teilnehmer nicht mitberücksichtigt. Der Vergleich der Abweichung zum zugewiesenen Wert erfolgt über das Kriterium.

#### Interpretation der E<sub>n</sub>-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<sub>n</sub>-Score erfolgt die Berücksichtigung der erweiterten Messunsicherheiten der Teilnehmer 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 Teilnehmerergebnisse des aktuellen Ringversuchs berechnet werden. Das kann zur Folge haben, dass es bei Parametern mit hoher Ergebnisstreuung dazu kommen kann, dass der Bereich z-Score - 2 bis z-Score + 2 einen ungewöhnlich hohen Wiederfindungsbereich abdeckt. Umgekehrt führt eine sehr geringe Streuung der Teilnehmerergebnisse dazu, dass z-Score - 2 bis z-Score + 2 einen ungewöhnlich kleinen Wiederfindungsbereich abdeckt.

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

Als Ergebnis einer Langzeitauswertung über aktuell 7 Eignungsprüfungsrunden (2013 - 2019) in Realproben wurden Kriterien (RSDpool) zur Ergebnisbewertung berechnet. Diese wurden im Zuge der Auswertung den relativen Vergleichsstandardabweichungen ( $vR$ ) des aktuellen Ringversuchs gegenübergestellt.

Parameter Benzol Probe BL08 und Parameter 1,1,1-Trichlorethan und Trichlormethan Probe CL07: Als Kriterium wurde die Vergleichsstandardabweichung berechnet aus den Statistiken für Proben der vorangegangenen Runden gewählt (RSDpool).

Für alle weiteren Parameter wurde als Kriterium für die Berechnung des z-Scores die aktuelle relative Vergleichsstandardabweichung ( $vR$ ) der ausreißerbereinigten Teilnehmerergebnisse gewählt.

Parameter n-Hexan Probe BL08 und Parameter Trichlorethen Probe CL07: Die auf Basis der Teilnehmerergebnisse 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 Teilnehmer berechnet.

## D5. Erläuterung zu Tabellen und Grafiken

### D5.1. Angaben und Abkürzungen in Tabellen

Parameter	Allgemeine Bezeichnung des Analysenparameters
Probe	Bezeichnung der übermittelten Probe
Einheit	Vorgegebene Einheit für Messwert und Ergebnisunsicherheit (z.B. µg/l)
Zugewiesener Wert	Sollwert für die Leistungsbewertung der Teilnehmer (angegeben auf 3 signifikante Stellen)
U (k=2)	erweiterte Unsicherheit (k=2) des zugewiesenen Wertes, (angegeben auf 3 signifikante Stellen)
Kriterium	Vorgabewert zur Ermittlung des z-Scores in der angegebenen Einheit (angegeben auf 3 signifikante Stellen)
Kriterium [%]	Vorgabewert zur Ermittlung des z-Scores in % des zugewiesenen Wertes (angegeben auf 2 signifikante Stellen)
Mittelwert	Ausreißerbereinigter Mittelwert über die Teilnehmerergebnisse (angegeben auf 3 signifikante Stellen)
VB (99%)	99% Vertrauensbereich (angegeben auf 3 signifikante Stellen)
Minimum	Minimales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
Maximum	Maximales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
sR	Vergleichsstandardabweichung, berechnet aus den ausreißerbereinigten Teilnehmerergebnissen des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Teilnehmerergebnissen des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)

Laborcode	anonymisierte, eindeutige Teilnehmerkennung im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Teilnehmerangabe (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Teilnehmerangabe (maximal 5 Nachkommastellen dargestellt). Bei Eignungsprüfungsrunden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmer.
$\pm U$	kombinierte Messunsicherheit ohne Erweiterungsfaktor ( $k=1$ ) lt. Teilnehmerangabe (maximal 5 Nachkommastellen dargestellt)
BG	Bestimmungsgrenze
NG	Nachweisgrenze
WF	Wiederfindungsrate in %, bezogen auf den zugewiesenen Wert (angegeben auf 3 signifikante Stellen, dargestellt maximal 1 Nachkommastelle)
MW	Mittelwert
z-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches des Kriteriums (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen)
$E_n$ -Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches der kombinierten Messunsicherheiten, bestehend aus erweiterter Unsicherheit des zugewiesenen Wertes und der erweiterten Unsicherheit der Messergebnisse der Teilnehmer (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim $E_n$ -Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmer.
-	Keine Daten übermittelt bzw. keine Berechnung möglich
Anmerkungen	Anmerkungen zum jeweiligen Messergebnis (z.B. H, FN, FP)
H	Ausreißer nach dem Hampel-Test
FN	Falsch negativ – Messergebnis kleiner Bestimmungsgrenze dessen Betrag die Bedingungen eines Ausreißers nach dem Hampeltest erfüllt.
FP	Falsch positiv – Falls aufgrund des geringen Analytgehalts kein zugewiesener Wert ermittelt werden kann ( $n < 6$ ), wird der Median der Beträge der übermittelten Nachweis- bzw.

Bestimmungsgrenzen ermittelt. Als falsch positiv wird ein Messergebnis bewertet, welches diesen Median um mehr als 100 % übersteigt.

Standardabweichung Vergleichsstandardabweichung berechnet aus den Teilnehmerergebnissen des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)

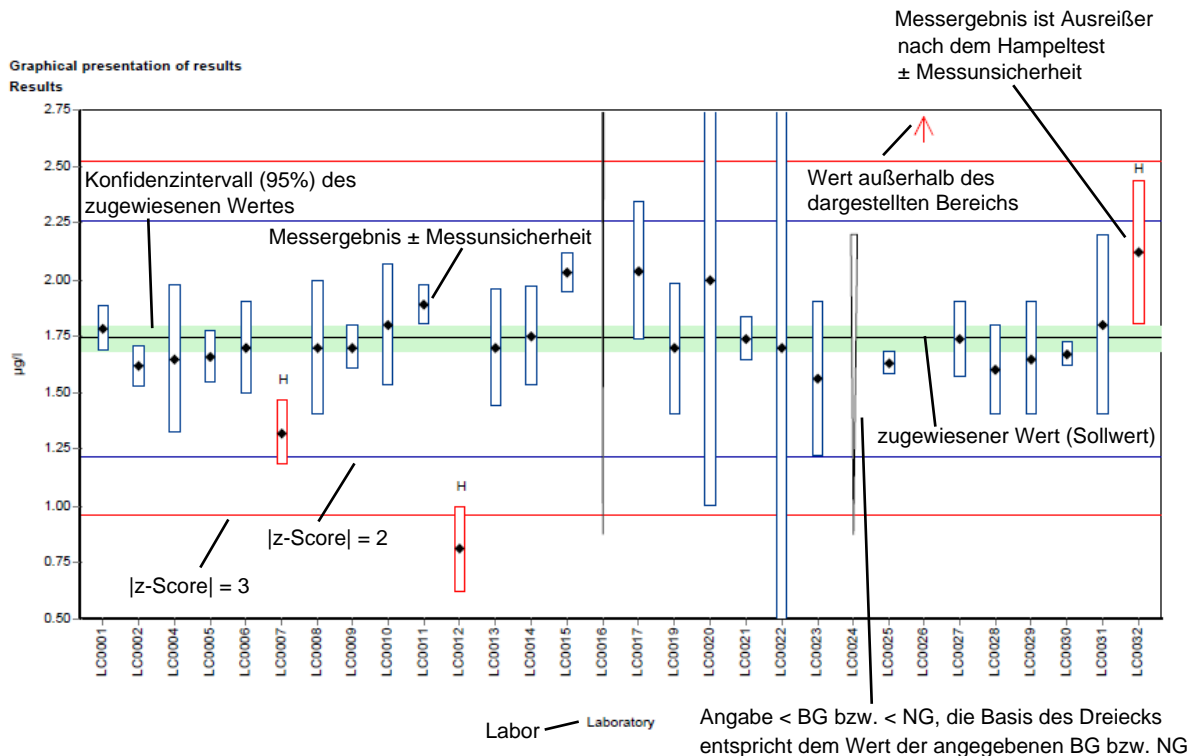
rel. Standardabweichung relative Vergleichsstandardabweichung in %, berechnet aus den Teilnehmerergebnissen des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 3 signifikante Stellen)

n Anzahl der Messergebnisse

## D5.2. Graphische Darstellung der Ergebnisse

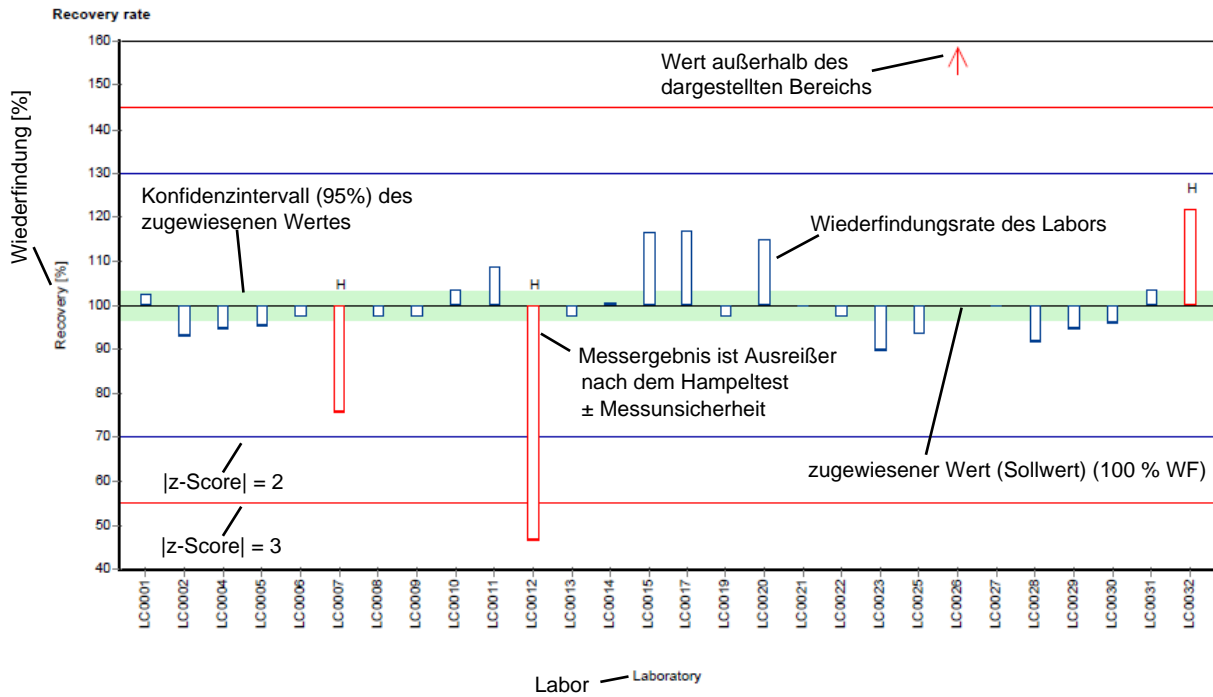
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

### Beispieldiagramm: Messwerte



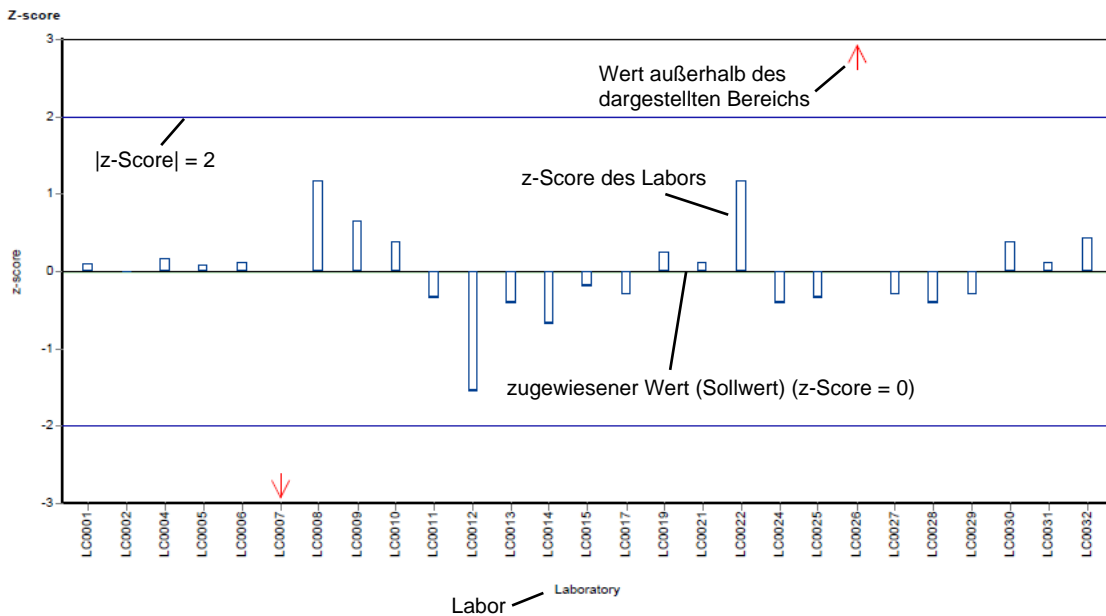
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

### Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



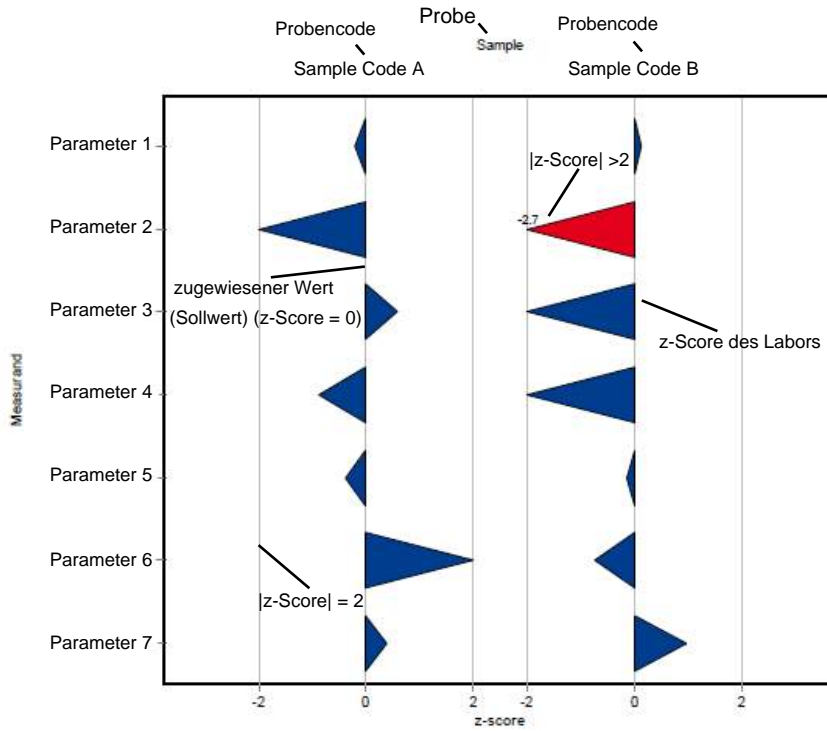
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

### Beispieldiagramm: z-Score

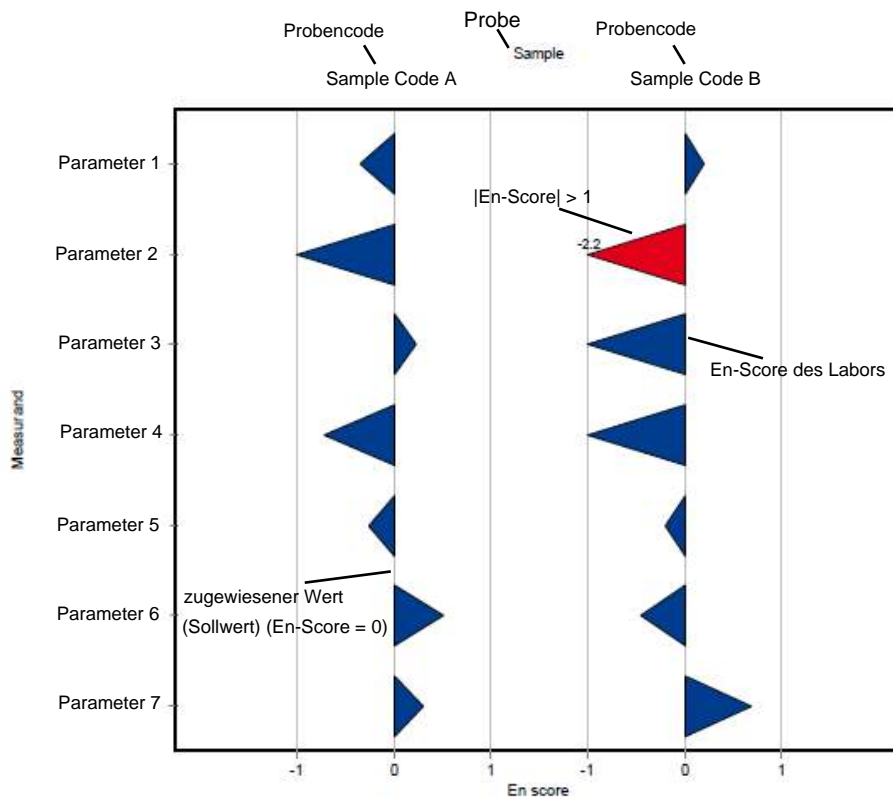


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

**Beispieldiagramm: z-Score (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 [%]
1,1,1-Trichlorethan	CL07 - CKW	µg/Röhrchen	6.67	±	0.384	0.867	13
Benzol	BL08 - BTEX & C5-C10	µg/Röhrchen	4.67	±	0.31	0.701	15
cis-1,2-Dichlorethen	CL07 - CKW	µg/Röhrchen	4.67	±	0.457	0.888	19
Ethylbenzol	BL08 - BTEX & C5-C10	µg/Röhrchen	4.87	±	0.528	1.12	23
n-Dekan	BL08 - BTEX & C5-C10	µg/Röhrchen	2.7	±	0.356	0.54	20
n-Heptan	BL08 - BTEX & C5-C10	µg/Röhrchen	6.46	±	0.446	0.646	10
n-Hexan	BL08 - BTEX & C5-C10	µg/Röhrchen	6.32	±	0.775	1.01	16
n-Nonan	BL08 - BTEX & C5-C10	µg/Röhrchen	4.97	±	0.458	0.696	14
n-Oktan	BL08 - BTEX & C5-C10	µg/Röhrchen	6.24	±	0.424	0.624	10
n-Pentan	BL08 - BTEX & C5-C10	µg/Röhrchen	5.48	±	1.36	2.14	39
o-Xylol	BL08 - BTEX & C5-C10	µg/Röhrchen	4.58	±	0.555	1.19	26
Summe von m-Xylol und p-Xylol	BL08 - BTEX & C5-C10	µg/Röhrchen	9.16	±	0.881	1.83	20
Tetrachlorethen	CL07 - CKW	µg/Röhrchen	5.29	±	0.779	1.53	29
Tetrachlormethan	CL07 - CKW	µg/Röhrchen	7.67	±	0.559	0.997	13
Toluol	BL08 - BTEX & C5-C10	µg/Röhrchen	5.05	±	0.409	0.858	17
trans-1,2-Dichlorethen	CL07 - CKW	µg/Röhrchen	4.55	±	0.764	1.5	33
Trichlorethen	CL07 - CKW	µg/Röhrchen	5.84	±	0.374	0.934	16
Trichlormethan	CL07 - CKW	µg/Röhrchen	5.83	±	0.324	0.583	10



## D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert	± VB (99%)	Minimum	Maximum	sR	vR [%]
1,1,1-Trichlorethan	CL07 - CKW	14	2	µg/Röhrchen	6.67	± 0.576	5.69	7.87	0.719	11
Benzol	BL08 - BTEX & C5-C10	16	2	µg/Röhrchen	4.67	± 0.464	3.4	5.65	0.619	13
cis-1,2-Dichlorethen	CL07 - CKW	15	0	µg/Röhrchen	4.67	± 0.686	3.1	6.16	0.886	19
Ethylbenzol	BL08 - BTEX & C5-C10	18	0	µg/Röhrchen	4.87	± 0.792	3	7.13	1.12	23
n-Dekan	BL08 - BTEX & C5-C10	9	1	µg/Röhrchen	2.7	± 0.534	2.09	3.53	0.534	20
n-Heptan	BL08 - BTEX & C5-C10	9	1	µg/Röhrchen	6.46	± 0.669	5.51	7.54	0.669	10
n-Hexan	BL08 - BTEX & C5-C10	9	1	µg/Röhrchen	6.26	± 0.925	4.88	8.1	0.925	15
n-Nonan	BL08 - BTEX & C5-C10	9	1	µg/Röhrchen	4.97	± 0.687	3.85	5.8	0.687	14
n-Oktan	BL08 - BTEX & C5-C10	9	1	µg/Röhrchen	6.24	± 0.636	5.53	7.18	0.636	10
n-Pentan	BL08 - BTEX & C5-C10	10	0	µg/Röhrchen	5.48	± 2.04	0.75	7.94	2.15	39
o-Xylol	BL08 - BTEX & C5-C10	18	0	µg/Röhrchen	4.58	± 0.832	2.77	7.21	1.18	26
Summe von m-Xylol und p-Xylol	BL08 - BTEX & C5-C10	18	0	µg/Röhrchen	9.16	± 1.32	6.1	12.5	1.87	20
Tetrachlorethen	CL07 - CKW	16	0	µg/Röhrchen	5.29	± 1.17	1.3	8.22	1.56	29
Tetrachlormethan	CL07 - CKW	13	3	µg/Röhrchen	7.67	± 0.838	5.67	9.49	1.01	13
Toluol	BL08 - BTEX & C5-C10	17	1	µg/Röhrchen	5.05	± 0.613	3.4	6.52	0.842	17
trans-1,2-Dichlorethen	CL07 - CKW	15	0	µg/Röhrchen	4.55	± 1.15	1.77	8.2	1.48	33
Trichlorethen	CL07 - CKW	14	2	µg/Röhrchen	5.66	± 0.73	3.44	7	0.91	16
Trichlormethan	CL07 - CKW	14	2	µg/Röhrchen	5.83	± 0.487	5.01	6.86	0.607	10

## **E1. Description of the proficiency test**

### **E1.1. Design and implementation**

- Number of registrations: 20
- Number of submitted data records: 18
- Dispatch of samples: 6<sup>th</sup> October 2020
- Closing date for submission of data: 3<sup>th</sup> November 2020

For the interlaboratory comparison test CBL06 the participants could participate in CL07 (CHC) and/or BL08 (BTEX & C5-C10).

The results were submitted electronically through 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 assigned a laboratory code on a random basis.

### **E1.2. Description of the proficiency test items**

An activated charcoal tube loaded with certified calibration gas was prepared. In addition, an unloaded activated charcoal tube was made available to determine the blank value. The tubes were loaded in two series (CL07 and BL08). A defined volume of the calibration gas from Air Liquide was loaded on Orbo 32S activated charcoal tubes (Supelco) with a pump. The calibration gases contained the substances cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Trichloromethane, 1,1,1-Trichloroethane, Trichloroethene, Tetrachloromethane and Tetrachloroethene for CL07 and the substances Benzene, Ethylbenzene, o-, m- and p-Xylene, Toluene, n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane and n-Decane for BL08. The tubes were loaded using a Y-piece under pressure-less condition. The set flow of the pump was checked before and after loading of the activated charcoal tubes. The tubes were loaded on September, 30<sup>th</sup> 2020. The samples were stored at < -70 °C and dispatched on October, 6<sup>th</sup> 2020.

Each participant received (depending on the registration):

- 1 loaded activated charcoal tube sample CL07 and / or
- 1 loaded activated charcoal tube sample BL08
- and 1 unloaded charcoal tube (blank value) per each sample

### **E1.3. Instructions for the participants**

For reasons of stability, it was recommended to start the analysis by the 14<sup>th</sup> October 2020 at the latest.

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

### **E1.4. Control testing for homogeneity evaluation**

During the loading of the tubes, aliquots of each sample were collected randomly for control testing. From each of the samples CL07 and BL08, n=5 control test samples were transferred to the laboratory for control testing.

The determination of the parameters was assigned to an external laboratory (accredited according to EN ISO/IEC 17025 for the parameters listed) in subcontract (anonymous submission) and testing was performed close to the time of sample dispatch.

During evaluation, the relative standard deviation between the individual results of the control test samples was assessed and compared with the reproducibility standard deviation of the current 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 evaluation of stability of the proficiency test items was performed using data statistics of previous results of proficiency testing rounds during the period 2013 to 2019.

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

According to data obtained from previous rounds for from 2013 to 2019 and based on the trend test evaluation of the current round, the stability of the test items for proficiency testing can be confirmed for the recommended analysis period until deadline for submission of data.

## **E1.6. Determination of the assigned values**

The analytical results had to be made available to the organiser not later than 3<sup>th</sup> November 2020. Any values received at a later date were not considered.

In the course of the plausibility assessment of all received data (e.g. check for correct units, indication of measurement uncertainty,...) 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 DIN 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 of the assigned value.

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

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.

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 assurance, the participants can compare their results to 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 based on the following formula:

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

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 previous rounds for proficiency testing for samples from 2013 to 2019 (as RSD pooled) or from the participants' results after removal of outliers (sR) in the current round (if less than 6 previous rounds are available). Where justified (e.g. results are close to minimum quantification limit or in case of regulatory requirements) the criteria is defined by expert judgement and the procedure is clearly described in section E4 of the report.

### E2.2. Performance criterion E<sub>n</sub>-Score

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

E<sub>n</sub>-Scores were calculated based on 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 the results 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.  $|E_n\text{-Score}| > 1.0$  might indicate to check the measurement uncertainty estimation or 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 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 the evaluation of  $E_n$ -Scores on separate pages.

The tables also contain the evaluation basis such as the assigned values including 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 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.

As a result of a long-term evaluation of 7 proficiency testing rounds (2013 - 2019) in real samples, evaluation criteria (RSDpool) were calculated. These criteria were compared with the relative reproducibility standard deviation ( $vR$ ) of the current proficiency testing.

Parameter Benzene sample BL08 and parameters 1,1,1-Trichloroethane and Trichloromethane sample CL07: The reproducibility standard deviation calculated from previous rounds for proficiency testing for samples was chosen as criterion (RSDpool).

For all other parameters, the current relative reproducibility standard deviation ( $vR$ ) was selected as the criterion for calculating the z-Score.

Parameter n-Hexane sample BL08 and parameter Trichloroethene sample CL07: The assigned values calculated based on the participant results were outside the measurement uncertainty of the control value and thus traceability could not be proven

by this procedure. Therefore, new assigned values were defined by the group of accredited participating laboratories after outlier-assessment.

## E5. Annotations on tables and charts

### E5.1. Information and abbreviations in tables

Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criterion	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criterion [%]	Specified value for the determination of the z-score in % of the assigned value (3 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)
sR	Reproducibility standard deviation, calculated from the participants results, after removal of outliers (3 significant digits)
vR [%]	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 ± U	Result as indicated by participant (max. 5 decimal places) combined measurement uncertainty without expansion factor (k=1), as indicated by participant (max. 5 decimal places)
LOQ	Limit of quantification
LOD	Limit of detection

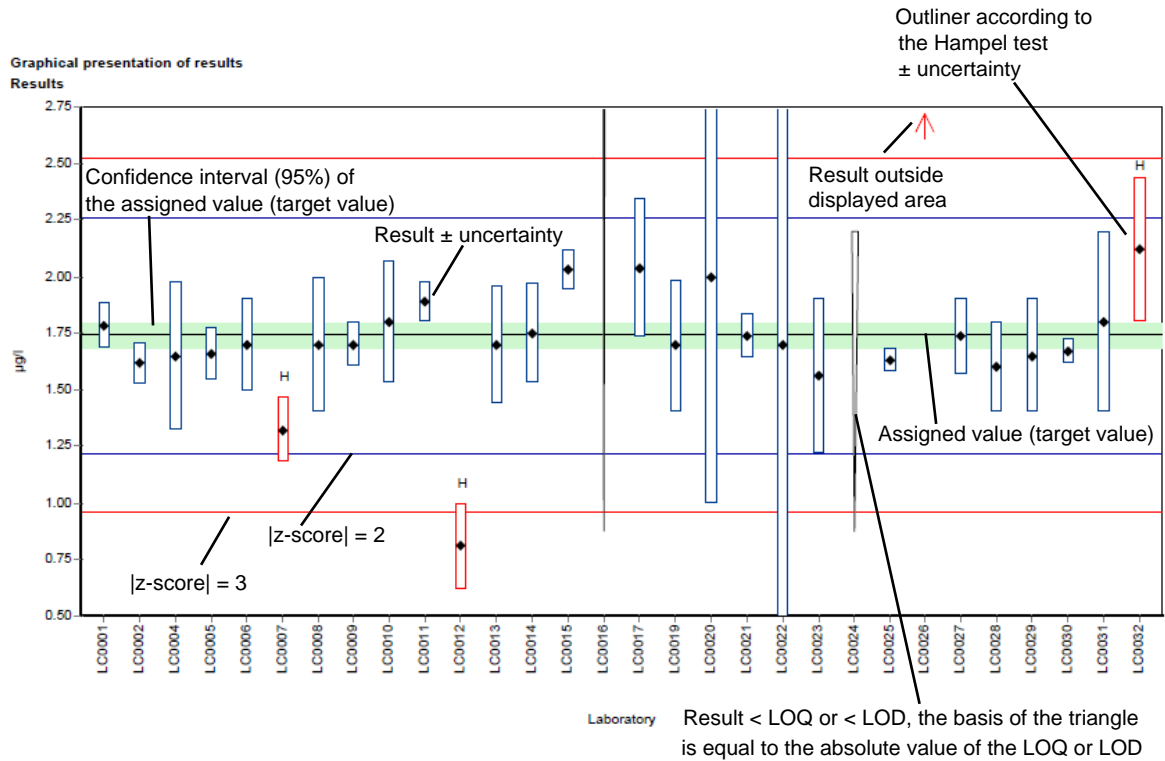


Recovery	Recovery rate in % based on assigned value (target value) (3 significant digits, max. one decimal place given)
z-Score	Deviation of result based on the assigned value (target value) given as a multiple of the criteria (3 significant digits, max. 2 decimal places given)
E <sub>n</sub> -Score	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 <sub>n</sub> -Score assessment takes into account the measurement uncertainty of the participants.
-	No data available or no calculation possible
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test
FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive – for parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results

## E5.2. Graphical presentation of results

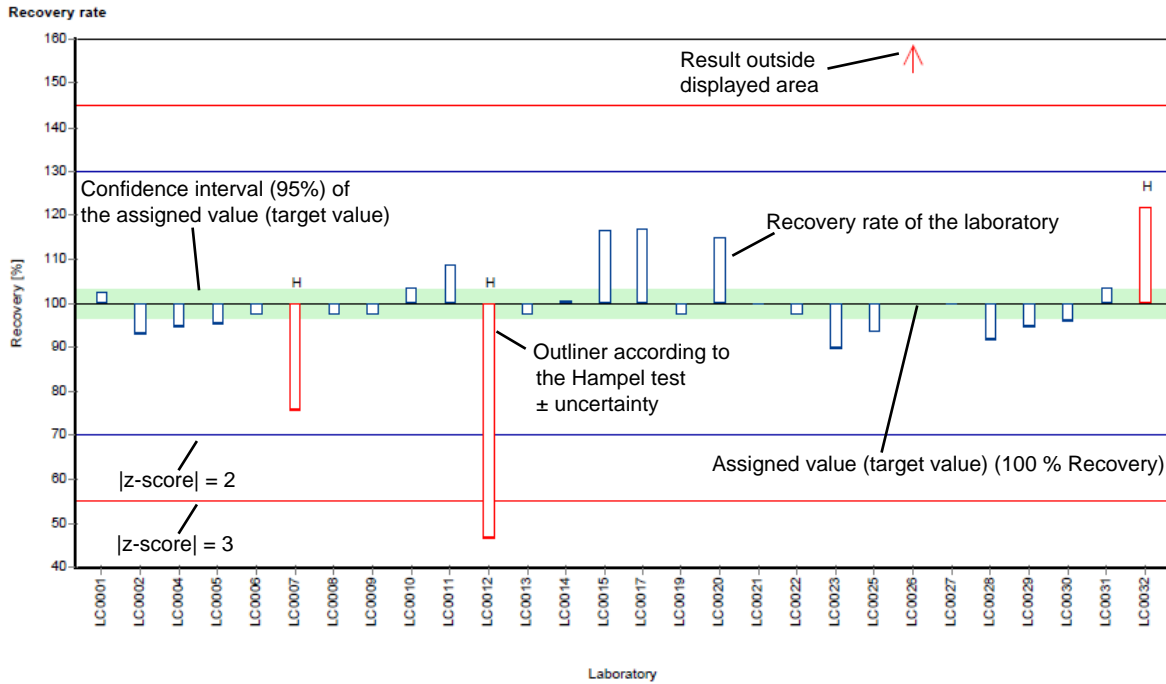
The graphic representation in the report is explained below by means of commented example diagrams:

### Example chart: Results



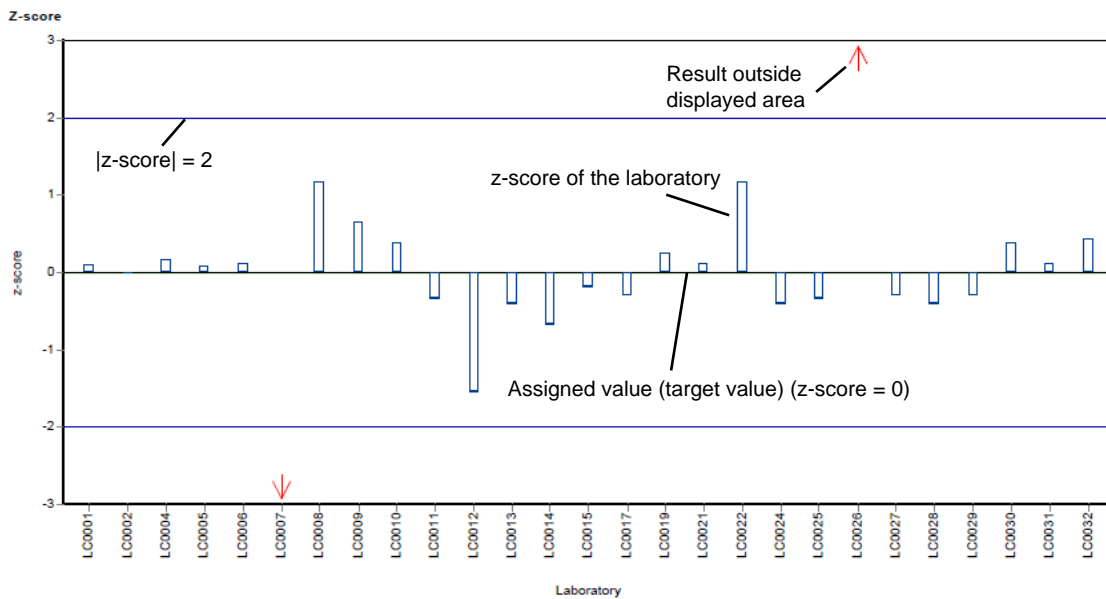
Different analysis methods are represented with different colors.

**Example chart: Recovery**



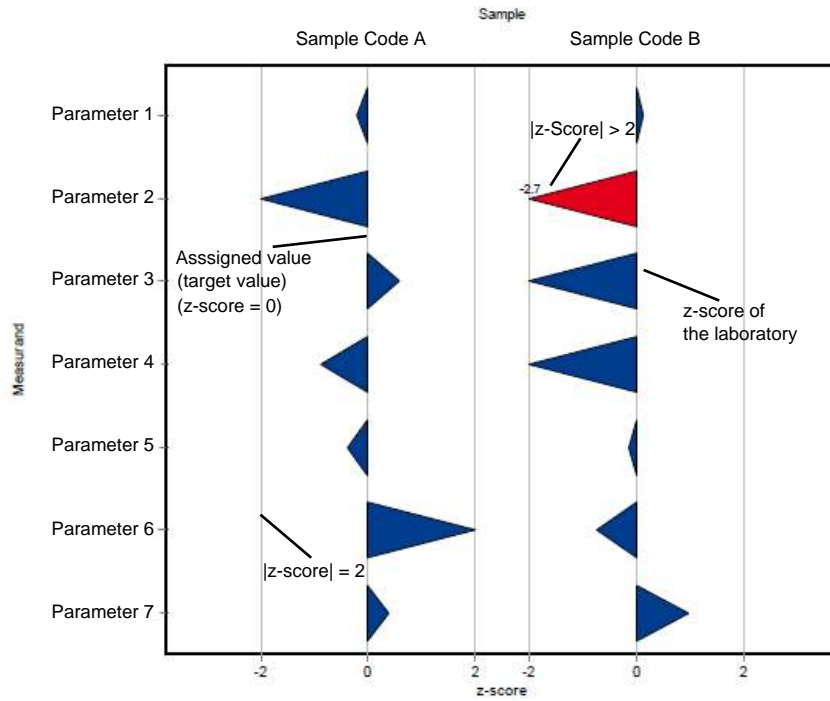
Different analysis methods are represented with different colors.

**Example chart: z-score**

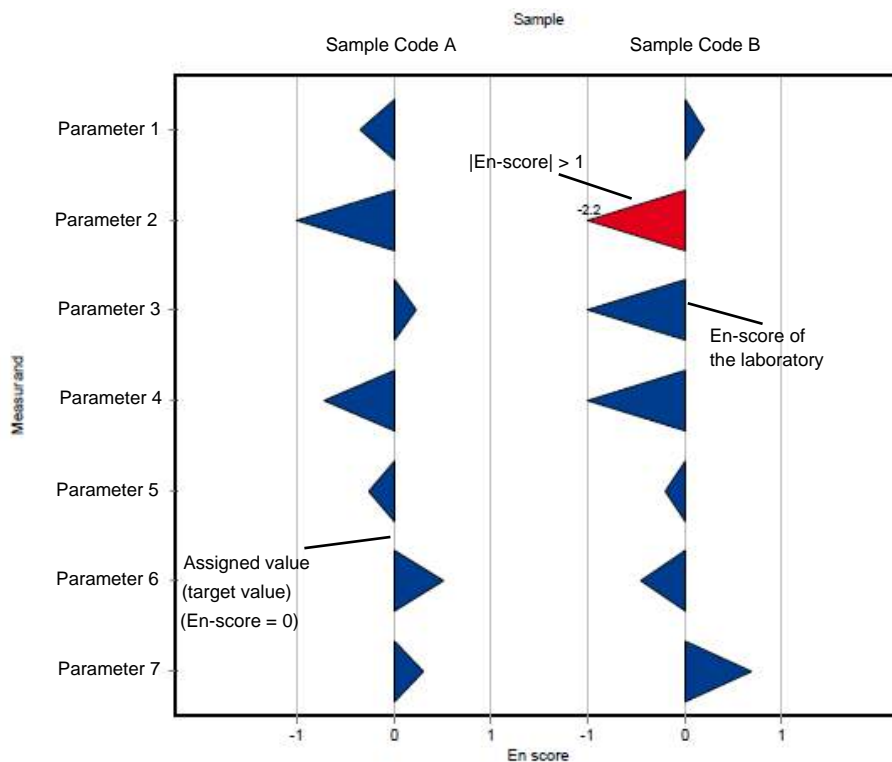


Different analysis methods are represented with different colors.

**Example chart: z-score (laboratory oriented report)**



**Example chart: En-score (laboratory oriented report)**



## E6. Summary

### E6.1. Table of assigned values

Parameter	Sample	Unit	Assigned value ±	U (k=2)	Criterion	Criterion [%]
1,1,1-Trichloroethane	CL07 - CHC	µg/tube	6.67 ±	0.384	0.867	13
Benzene	BL08 - BTEX & C5-C10	µg/tube	4.67 ±	0.31	0.701	15
cis-1,2-Dichloroethene	CL07 - CHC	µg/tube	4.67 ±	0.457	0.888	19
Ethylbenzene	BL08 - BTEX & C5-C10	µg/tube	4.87 ±	0.528	1.12	23
n-Decane	BL08 - BTEX & C5-C10	µg/tube	2.7 ±	0.356	0.54	20
n-Heptane	BL08 - BTEX & C5-C10	µg/tube	6.46 ±	0.446	0.646	10
n-Hexane	BL08 - BTEX & C5-C10	µg/tube	6.32 ±	0.775	1.01	16
n-Nonane	BL08 - BTEX & C5-C10	µg/tube	4.97 ±	0.458	0.696	14
n-Octane	BL08 - BTEX & C5-C10	µg/tube	6.24 ±	0.424	0.624	10
n-Pentane	BL08 - BTEX & C5-C10	µg/tube	5.48 ±	1.36	2.14	39
o-Xylene	BL08 - BTEX & C5-C10	µg/tube	4.58 ±	0.555	1.19	26
Sum of m-Xylene and p-Xylene	BL08 - BTEX & C5-C10	µg/tube	9.16 ±	0.881	1.83	20
Tetrachloroethene	CL07 - CHC	µg/tube	5.29 ±	0.779	1.53	29
Tetrachloromethane	CL07 - CHC	µg/tube	7.67 ±	0.559	0.997	13
Toluene	BL08 - BTEX & C5-C10	µg/tube	5.05 ±	0.409	0.858	17
trans-1,2-Dichloroethene	CL07 - CHC	µg/tube	4.55 ±	0.764	1.5	33
Trichloroethene	CL07 - CHC	µg/tube	5.84 ±	0.374	0.934	16
Trichloromethane	CL07 - CHC	µg/tube	5.83 ±	0.324	0.583	10

## 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 [%]
1,1,1-Trichloroethane	CL07 - CHC	14	2	µg/tube	6.67	± 0.576	5.69	7.87	0.719	11
Benzene	BL08 - BTEX & C5-C10	16	2	µg/tube	4.67	± 0.464	3.4	5.65	0.619	13
cis-1,2-Dichloroethene	CL07 - CHC	15	0	µg/tube	4.67	± 0.686	3.1	6.16	0.886	19
Ethylbenzene	BL08 - BTEX & C5-C10	18	0	µg/tube	4.87	± 0.792	3	7.13	1.12	23
n-Decane	BL08 - BTEX & C5-C10	9	1	µg/tube	2.7	± 0.534	2.09	3.53	0.534	20
n-Heptane	BL08 - BTEX & C5-C10	9	1	µg/tube	6.46	± 0.669	5.51	7.54	0.669	10
n-Hexane	BL08 - BTEX & C5-C10	9	1	µg/tube	6.26	± 0.925	4.88	8.1	0.925	15
n-Nonane	BL08 - BTEX & C5-C10	9	1	µg/tube	4.97	± 0.687	3.85	5.8	0.687	14
n-Octane	BL08 - BTEX & C5-C10	9	1	µg/tube	6.24	± 0.636	5.53	7.18	0.636	10
n-Pentane	BL08 - BTEX & C5-C10	10	0	µg/tube	5.48	± 2.04	0.75	7.94	2.15	39
o-Xylene	BL08 - BTEX & C5-C10	18	0	µg/tube	4.58	± 0.832	2.77	7.21	1.18	26
Sum of m-Xylene and p-Xylene	BL08 - BTEX & C5-C10	18	0	µg/tube	9.16	± 1.32	6.1	12.5	1.87	20
Tetrachloroethene	CL07 - CHC	16	0	µg/tube	5.29	± 1.17	1.3	8.22	1.56	29
Tetrachloromethane	CL07 - CHC	13	3	µg/tube	7.67	± 0.838	5.67	9.49	1.01	13
Toluene	BL08 - BTEX & C5-C10	17	1	µg/tube	5.05	± 0.613	3.4	6.52	0.842	17
trans-1,2-Dichloroethene	CL07 - CHC	15	0	µg/tube	4.55	± 1.15	1.77	8.2	1.48	33
Trichloroethene	CL07 - CHC	14	2	µg/tube	5.66	± 0.73	3.44	7	0.91	16
Trichloromethane	CL07 - CHC	14	2	µg/tube	5.83	± 0.487	5.01	6.86	0.607	10

## E7. Parameterorientierte Auswertung / Parameter oriented report

1,1,1-Trichloroethane .....	32
Benzene .....	36
cis -1,2-Dichloroethene .....	40
Ethylbenzene .....	44
n-Decane .....	48
n-Heptane .....	52
n-Hexane .....	56
n-Nonane .....	60
n-Octane .....	64
n-Pentane .....	68
o-Xylene .....	72
Sum of m -Xylene and p -Xylene .....	76
Tetrachloroethene .....	80
Tetrachloromethane .....	84
Toluene .....	88
trans -1,2-Dichloroethene .....	92
Trichloroethene .....	96
Trichloromethane .....	100

## Parameter oriented report

### CL07 - CHC

#### 1,1,1-Trichloroethane

Unit	µg/tube
Assigned value ± U (k=2)	6.67 ± 0.384
Criterion	0.867 (13 %)
Minimum - Maximum	5.69 - 7.87
Control test value ± U (k=2)	5.8 ± 1.37

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.5	1.4	113	0.96	
LC0002	10.5	2.63	158	4.42	H
LC0003	6.2	0.6	93	-0.54	
LC0004	1.9	0.38	28.5	-5.5	H
LC0006	6.17	0.4	92.6	-0.57	
LC0007	7.47	0.66	112	0.93	
LC0009	6.19	1.24	92.9	-0.55	
LC0010	7.87	0.63	118	1.39	
LC0011	-	-	-	-	
LC0012	6.98	1.58	105	0.36	
LC0013	6.5	0.78	97.5	-0.19	
LC0014	5.84	0.27	87.6	-0.95	
LC0015	6.825	0.785	102	0.18	
LC0016	6.65	1.66	99.8	-0.02	
LC0017	5.69	1.1	85.4	-1.13	
LC0019	5.87	1.17	88.1	-0.92	
LC0020	7.57	0.76	114	1.04	

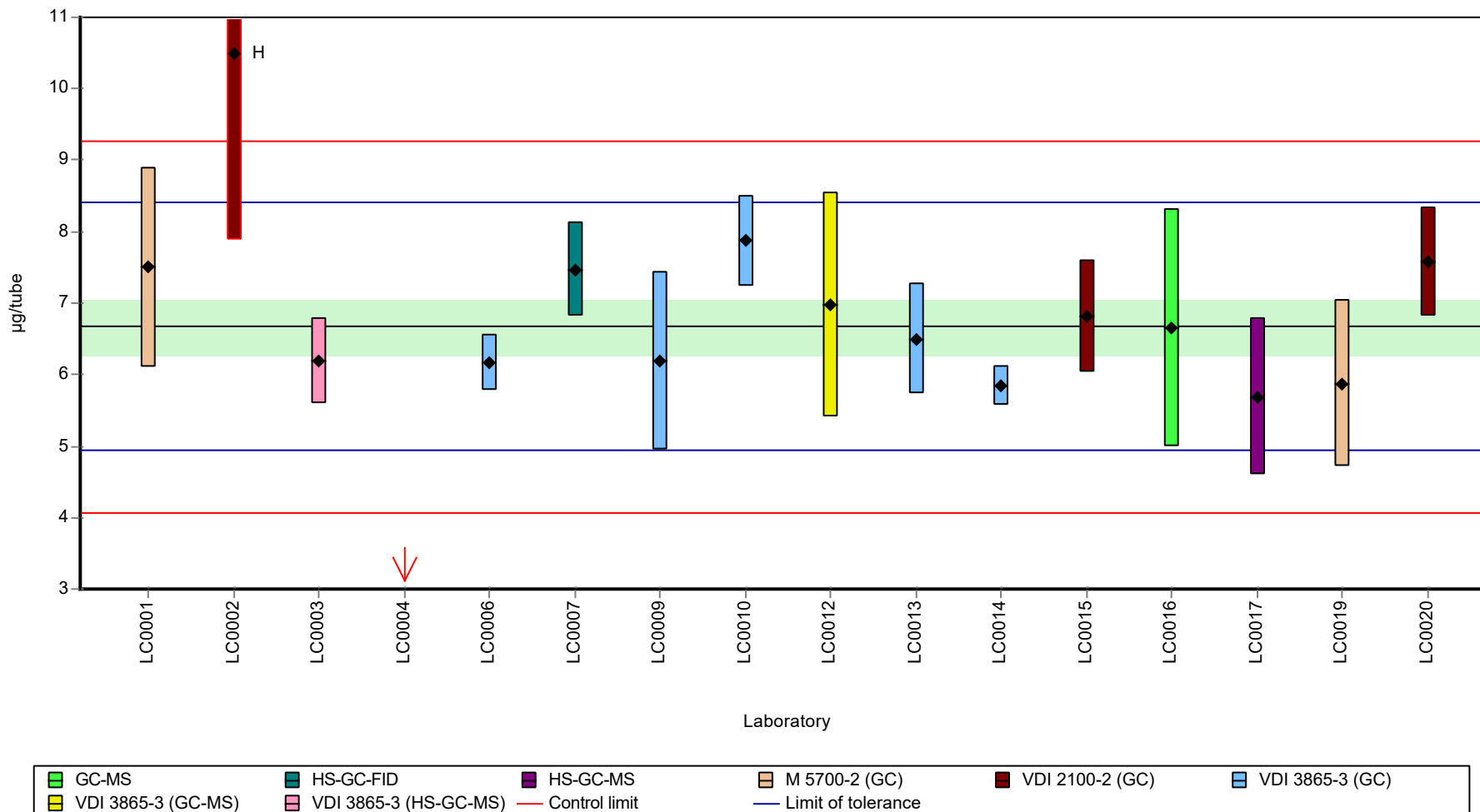
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	6.61 ± 1.29	6.67 ± 0.576	µg/tube
Minimum	1.9	5.69	µg/tube
Maximum	10.5	7.87	µg/tube
Standard deviation	1.71	0.719	µg/tube
rel. standard deviation	25.9	10.8 %	
n	16	14	-

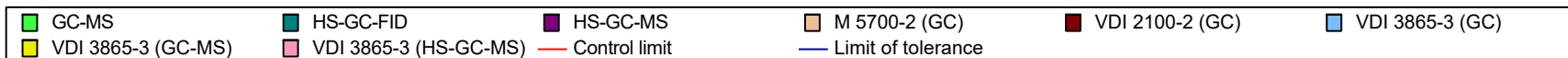
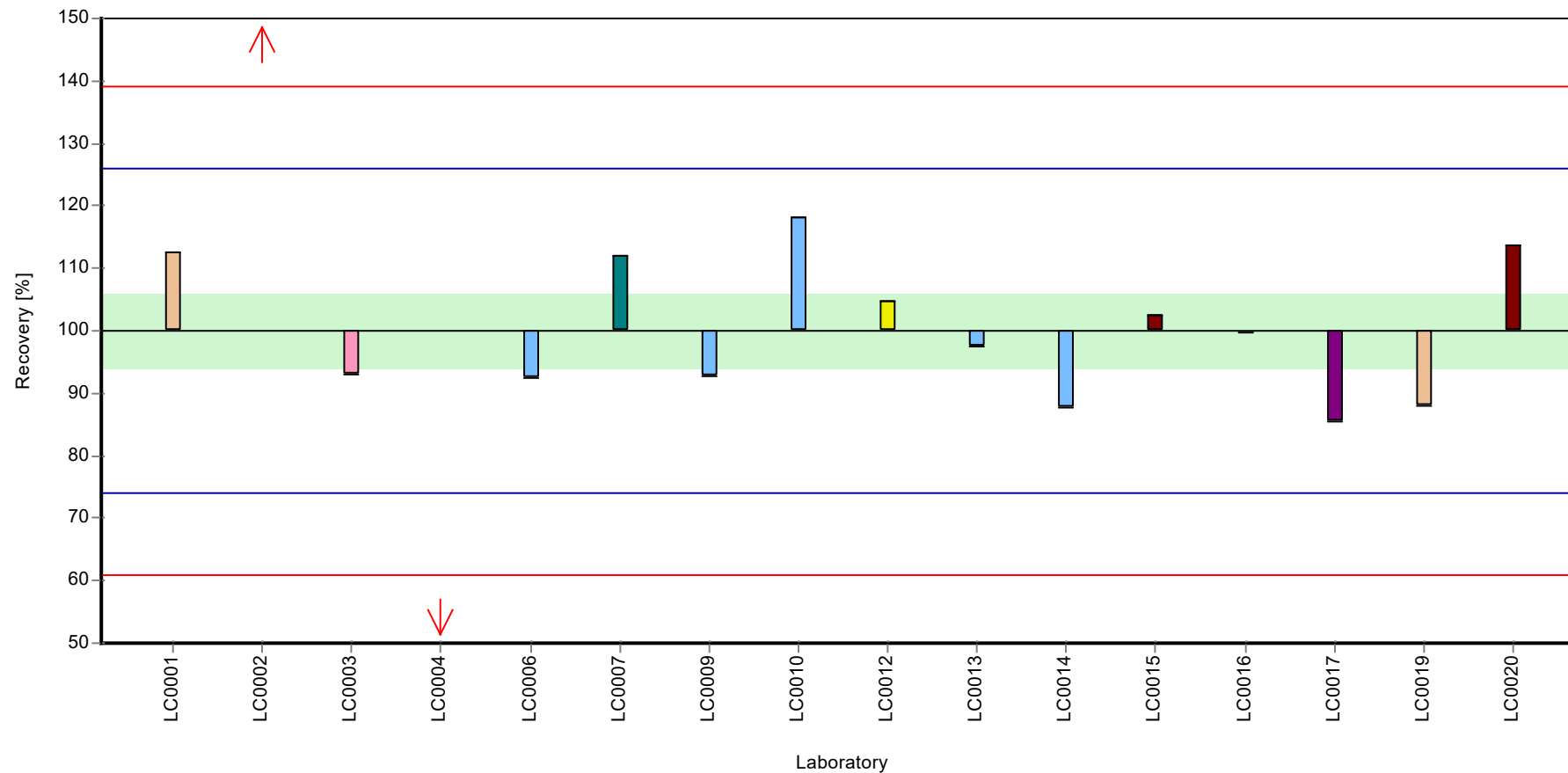


Graphical presentation of results

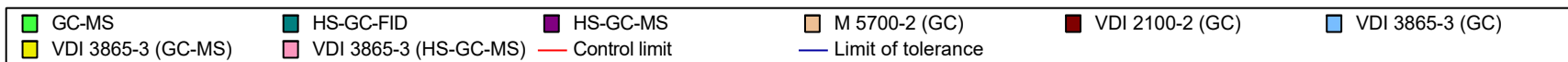
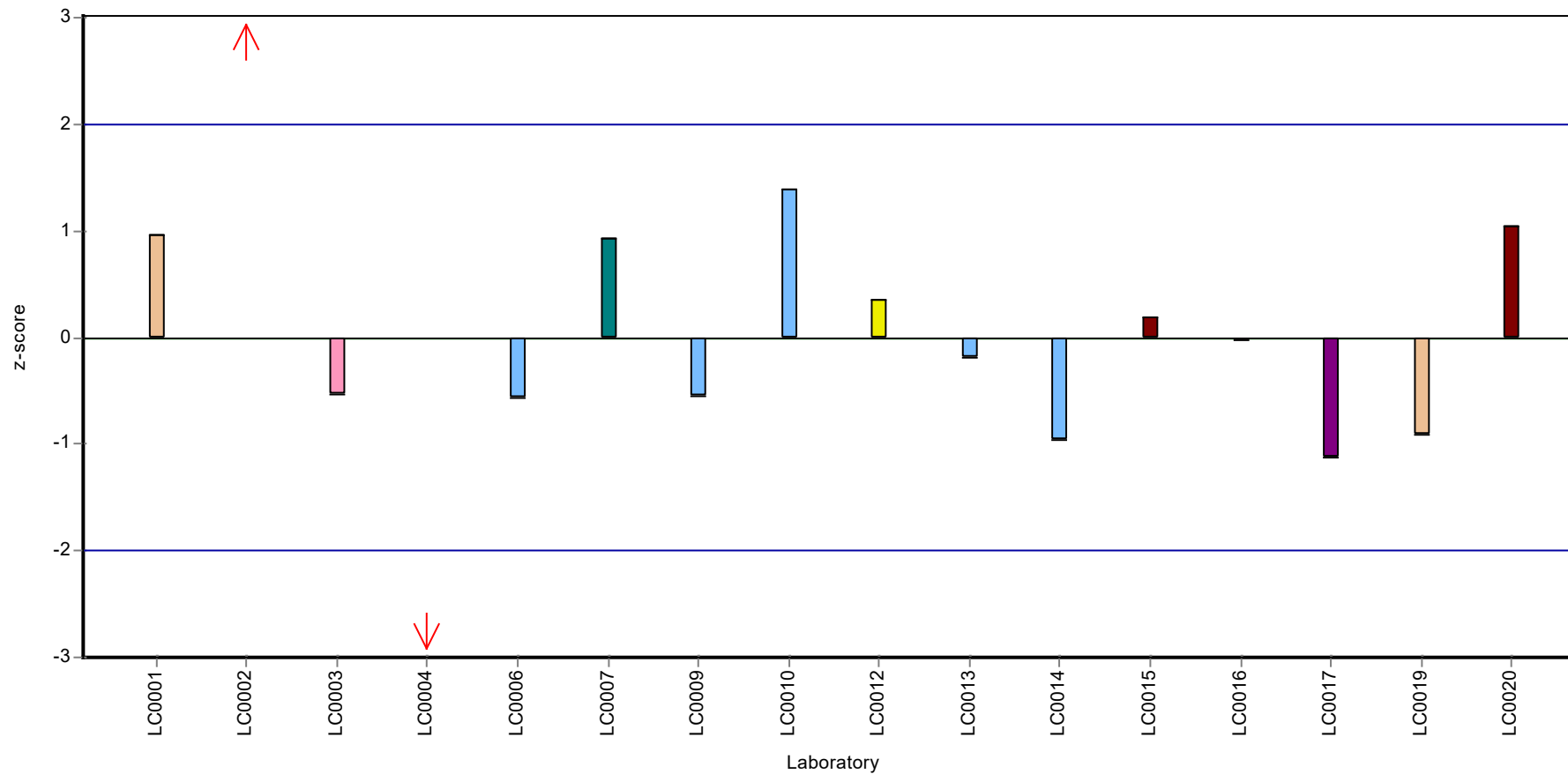
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### Benzene

Unit	µg/tube
Assigned value ± U (k=2)	4.67 ± 0.31
Criterion	0.701 (15 %)
Minimum - Maximum	3.4 - 5.65
Control test value ± U (k=2)	5.11 ± 1.02

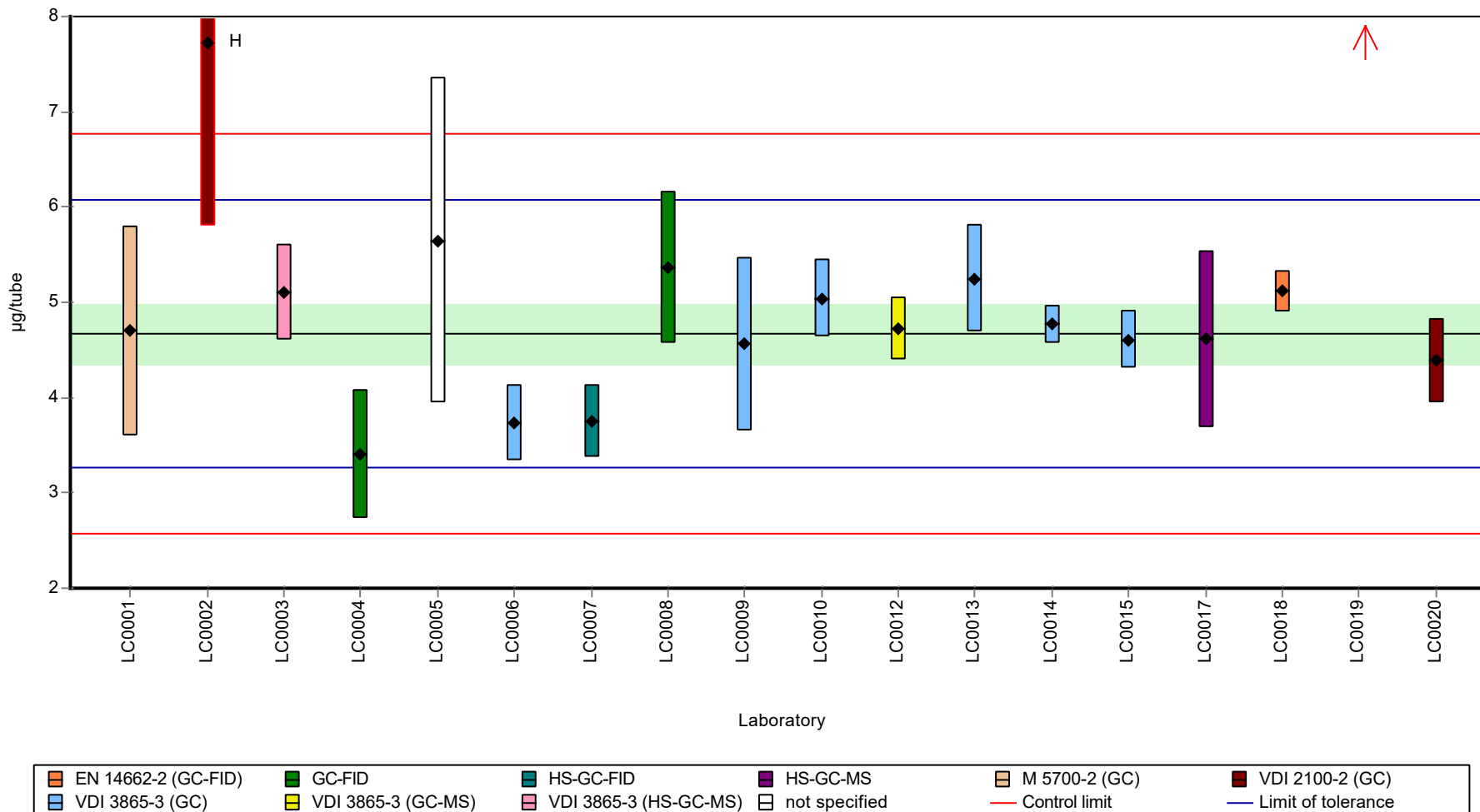
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.7	1.1	101	0.04	
LC0002	7.73	1.93	165	4.36	H
LC0003	5.1	0.5	109	0.61	
LC0004	3.4	0.68	72.8	-1.82	
LC0005	5.65	1.7	121	1.39	
LC0006	3.73	0.4	79.8	-1.35	
LC0007	3.75	0.38	80.3	-1.32	
LC0008	5.36	0.8	115	0.98	
LC0009	4.56	0.91	97.6	-0.16	
LC0010	5.04	0.403	108	0.52	
LC0011	-	-	-	-	
LC0012	4.73	0.33	101	0.08	
LC0013	5.25	0.57	112	0.82	
LC0014	4.77	0.2	102	0.14	
LC0015	4.608	0.3	98.6	-0.09	
LC0017	4.61	0.92	98.7	-0.09	
LC0018	5.116	0.22	109	0.63	
LC0019	9.38	1.88	201	6.72	H
LC0020	4.39	0.44	93.9	-0.4	

#### Characteristics of parameter

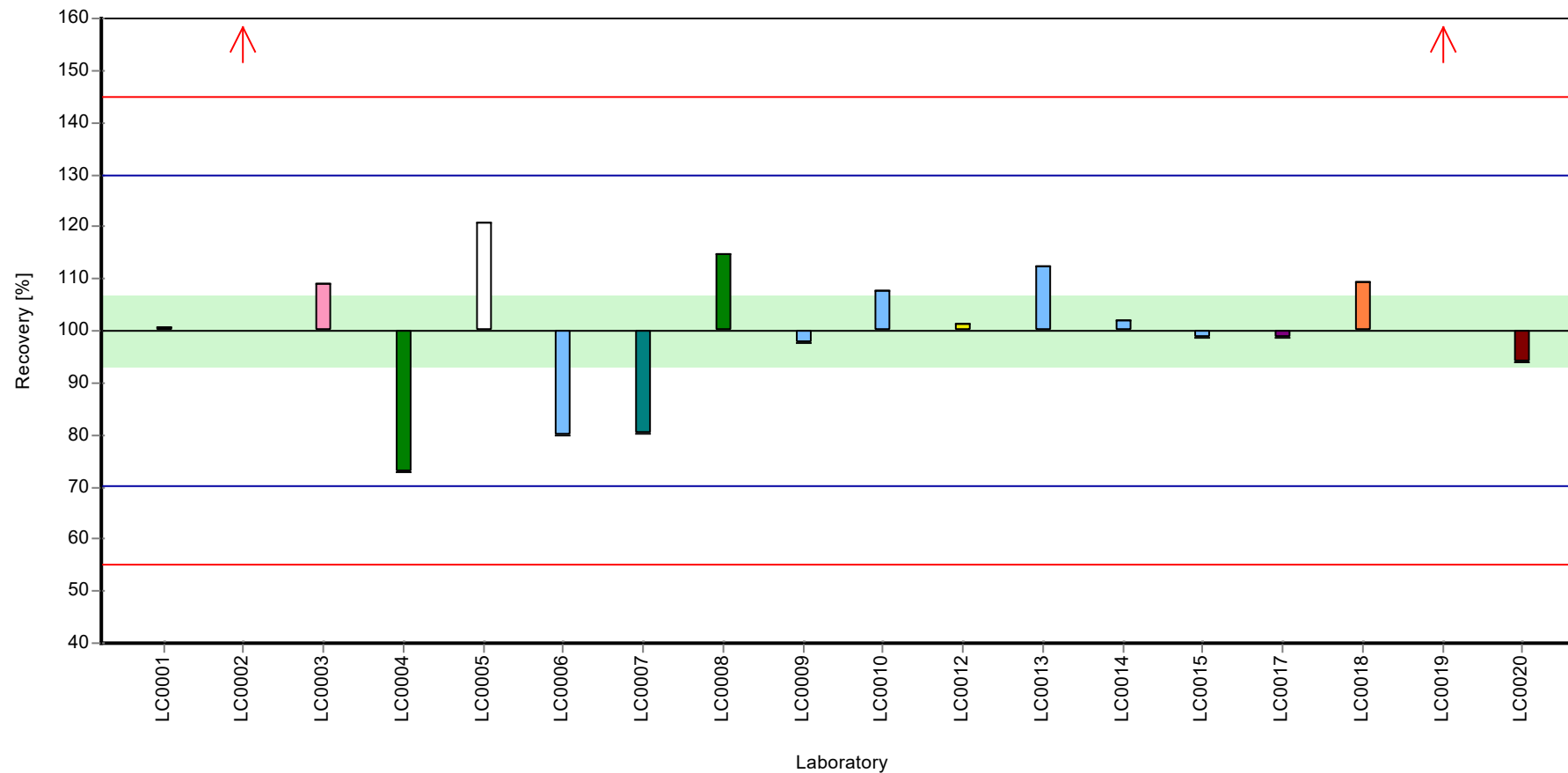
	all results	without outliers	Unit
Mean ± CI (99%)	5.1 ± 0.999	4.67 ± 0.464	µg/tube
Minimum	3.4	3.4	µg/tube
Maximum	9.38	5.65	µg/tube
Standard deviation	1.41	0.619	µg/tube
rel. standard deviation	27.7	13.2 %	
n	18	16	-

Graphical presentation of results

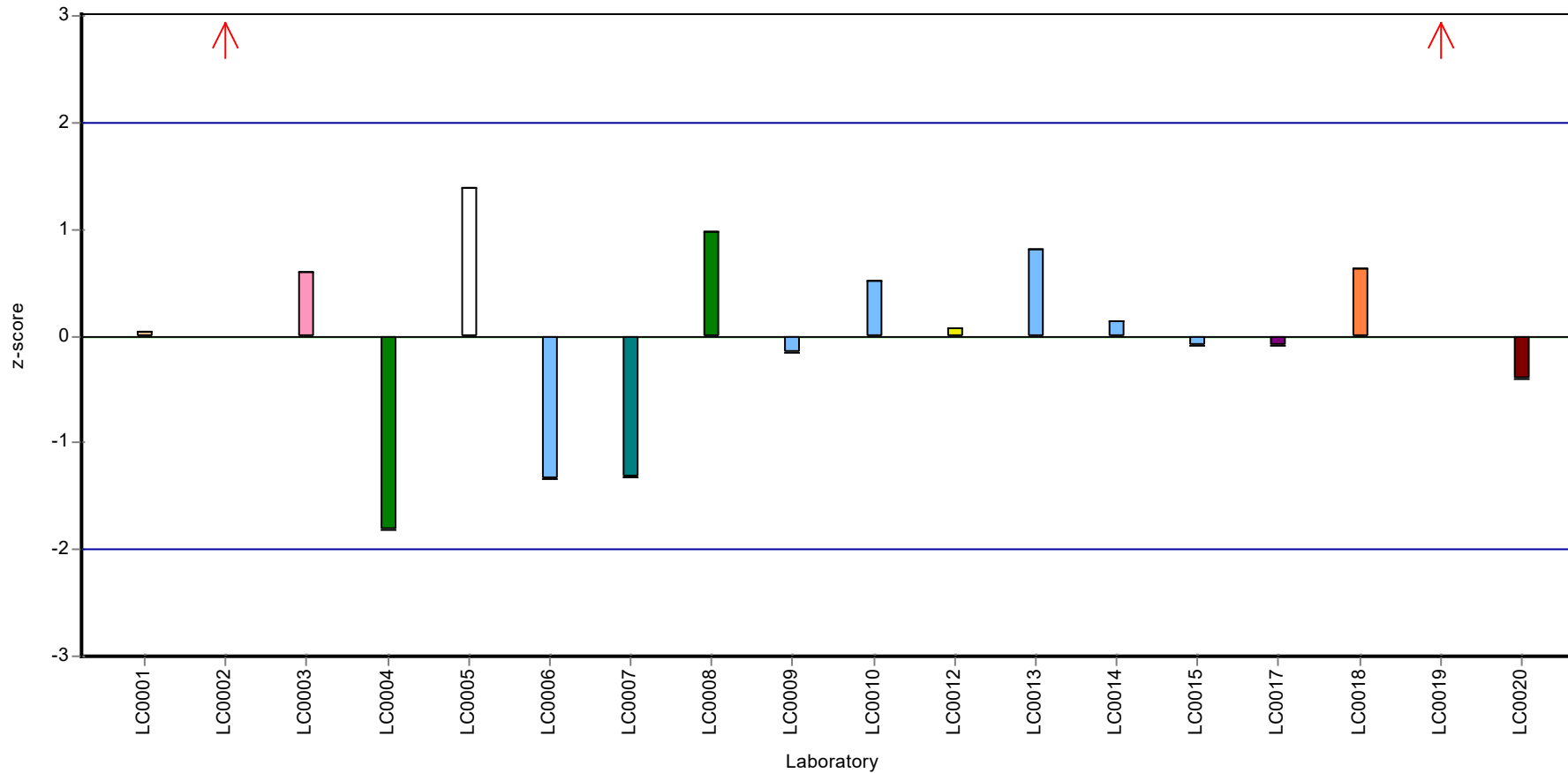
Results



Recovery rate



Z-score



## Parameter oriented report

### CL07 - CHC

#### cis-1,2-Dichloroethene

Unit	µg/tube
Assigned value ± U (k=2)	4.67 ± 0.457
Criterion	0.888 (19 %)
Minimum - Maximum	3.1 - 6.16
Control test value ± U (k=2)	4.02 ± 0.875

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.7	0.77	101	0.03	
LC0002	6.16	1.54	132	1.68	
LC0003	4.3	0.4	92	-0.42	
LC0004	3.1	0.62	66.4	-1.77	
LC0006	4.27	0.4	91.4	-0.45	
LC0007	-	-	-	-	
LC0009	4.77	0.95	102	0.11	
LC0010	5.5	0.44	118	0.93	
LC0011	-	-	-	-	
LC0012	4.36	1.48	93.3	-0.35	
LC0013	5.19	0.62	111	0.58	
LC0014	3.18	0.13	68.1	-1.68	
LC0015	4.566	0.411	97.7	-0.12	
LC0016	4.67	1.17	100	0.00	
LC0017	3.98	0.8	85.2	-0.78	
LC0019	6.02	1.2	129	1.52	
LC0020	5.31	0.53	114	0.72	

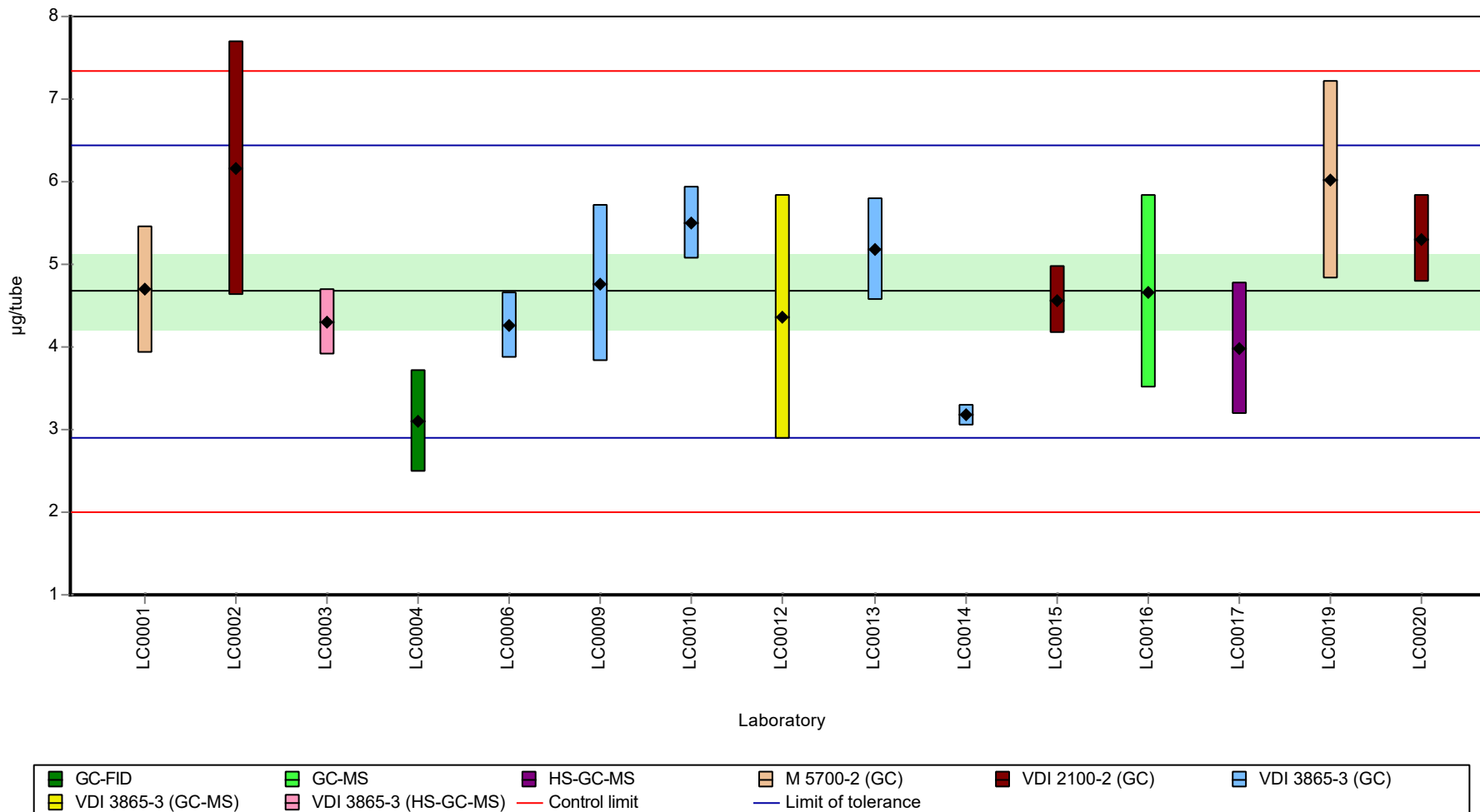
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	4.67 ± 0.686	4.67 ± 0.686	µg/tube
Minimum	3.1	3.1	µg/tube
Maximum	6.16	6.16	µg/tube
Standard deviation	0.886	0.886	µg/tube
rel. standard deviation	19	19	%
n	15	15	-

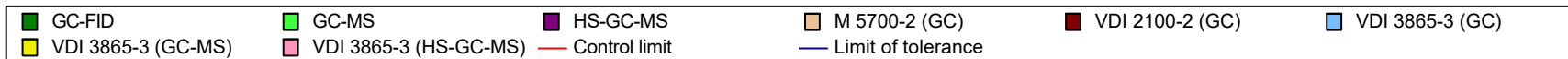
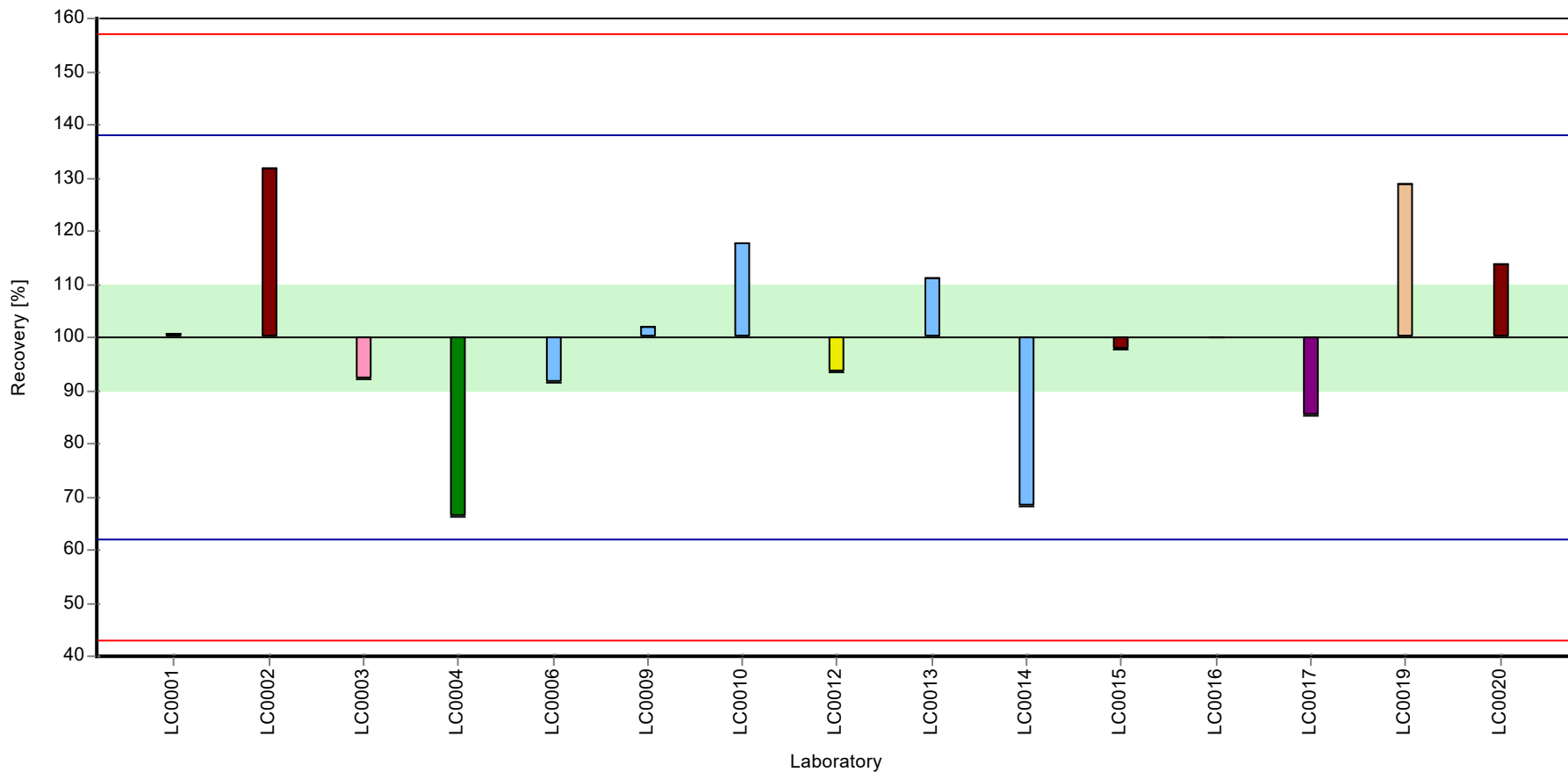


Graphical presentation of results

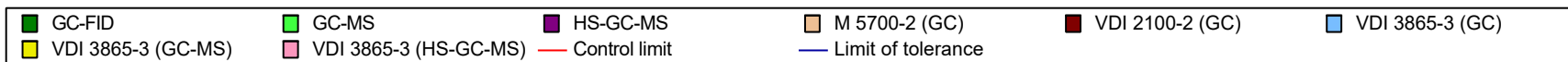
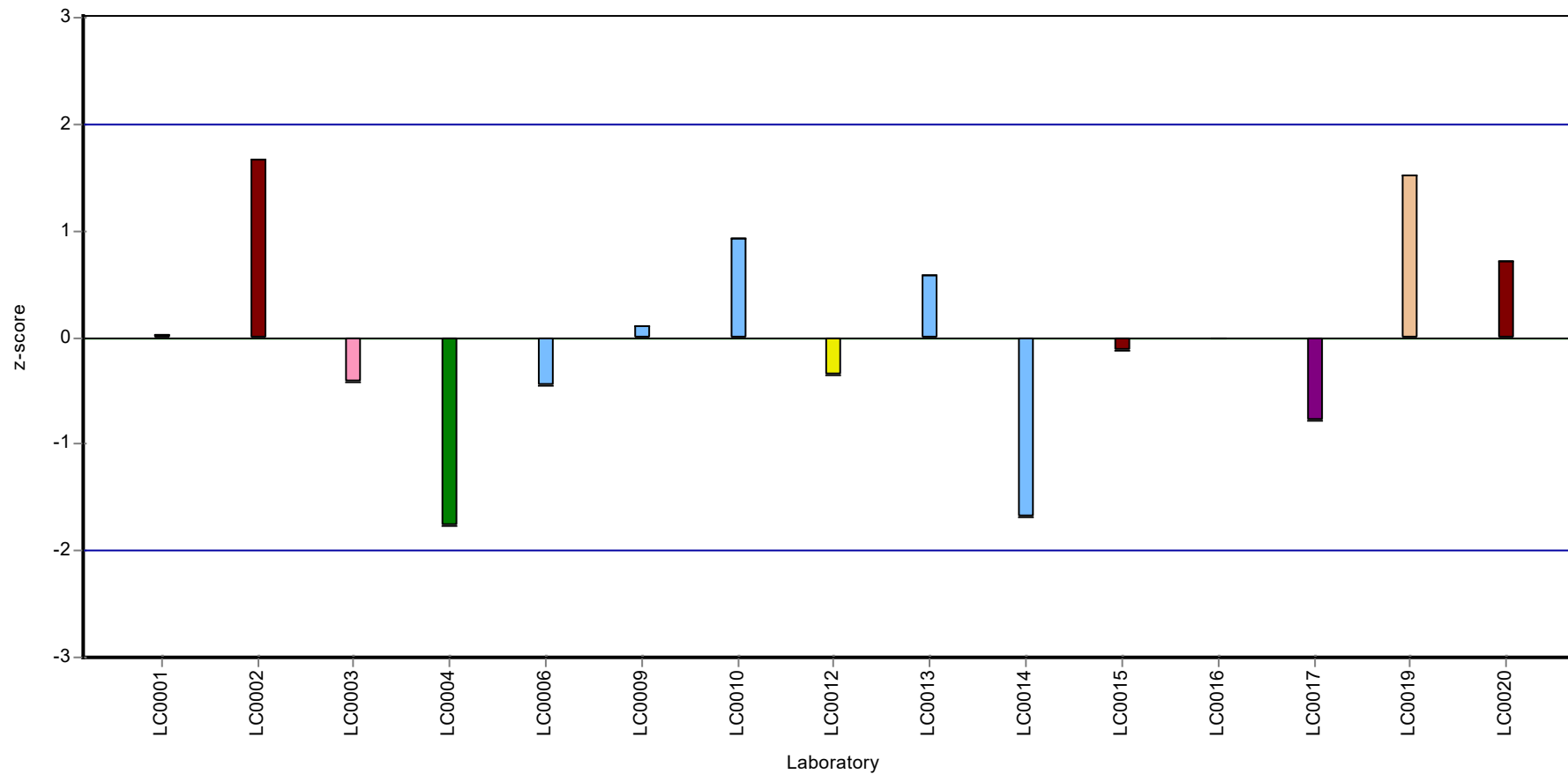
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### Ethylbenzene

Unit	µg/tube
Assigned value ± U (k=2)	4.87 ± 0.528
Criterion	1.12 (23 %)
Minimum - Maximum	3 - 7.13
Control test value ± U (k=2)	4.56 ± 1.04

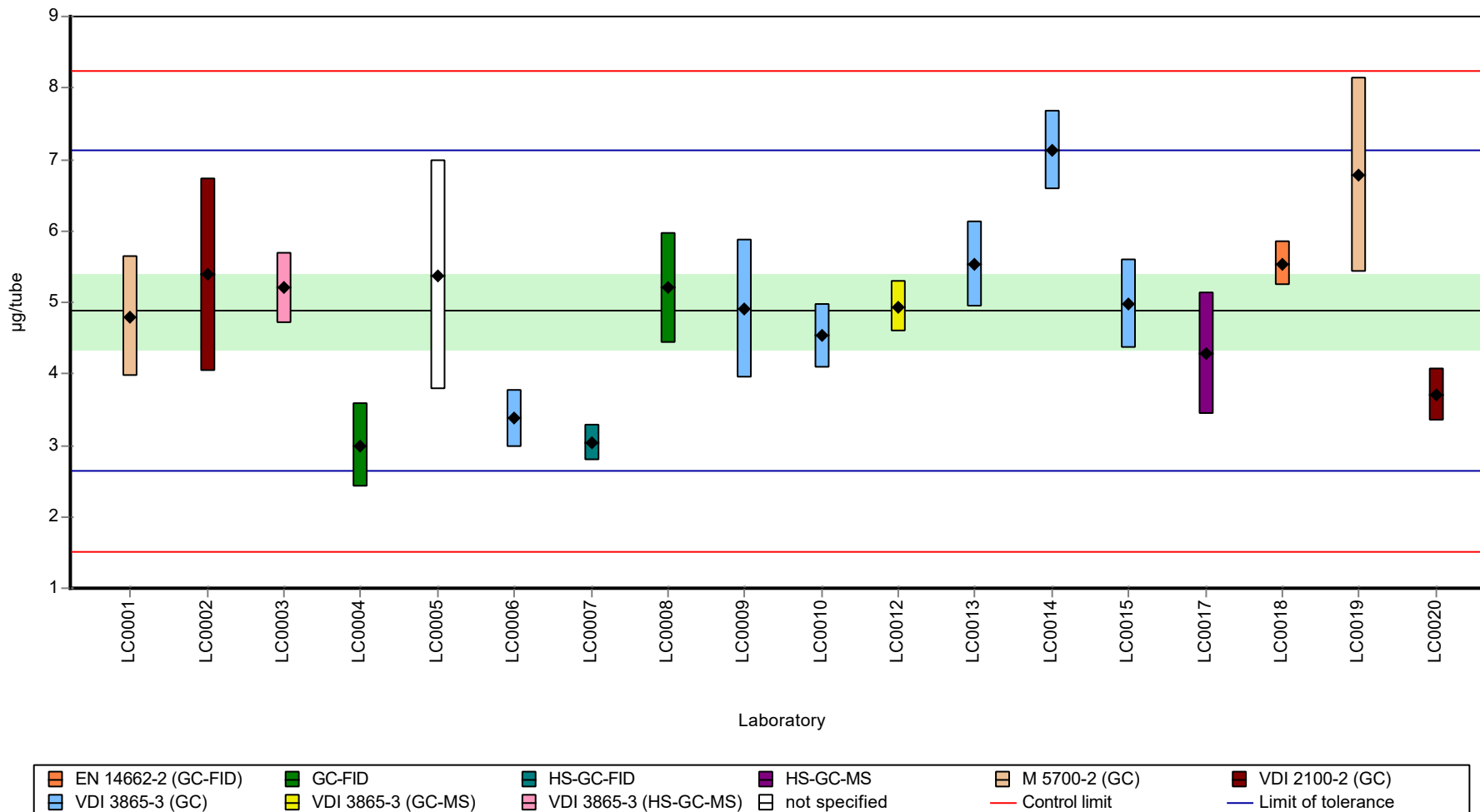
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.8	0.84	98.5	-0.07	
LC0002	5.39	1.35	111	0.46	
LC0003	5.2	0.5	107	0.29	
LC0004	3	0.6	61.6	-1.67	
LC0005	5.38	1.61	110	0.45	
LC0006	3.37	0.4	69.1	-1.34	
LC0007	3.04	0.26	62.4	-1.64	
LC0008	5.2	0.78	107	0.29	
LC0009	4.91	0.98	101	0.03	
LC0010	4.53	0.453	92.9	-0.31	
LC0011	-	-	-	-	
LC0012	4.94	0.35	101	0.06	
LC0013	5.54	0.6	114	0.59	
LC0014	7.13	0.56	146	2.01	
LC0015	4.98	0.623	102	0.09	
LC0017	4.29	0.86	88	-0.52	
LC0018	5.539	0.31	114	0.59	
LC0019	6.78	1.36	139	1.7	
LC0020	3.71	0.37	76.1	-1.04	

#### Characteristics of parameter

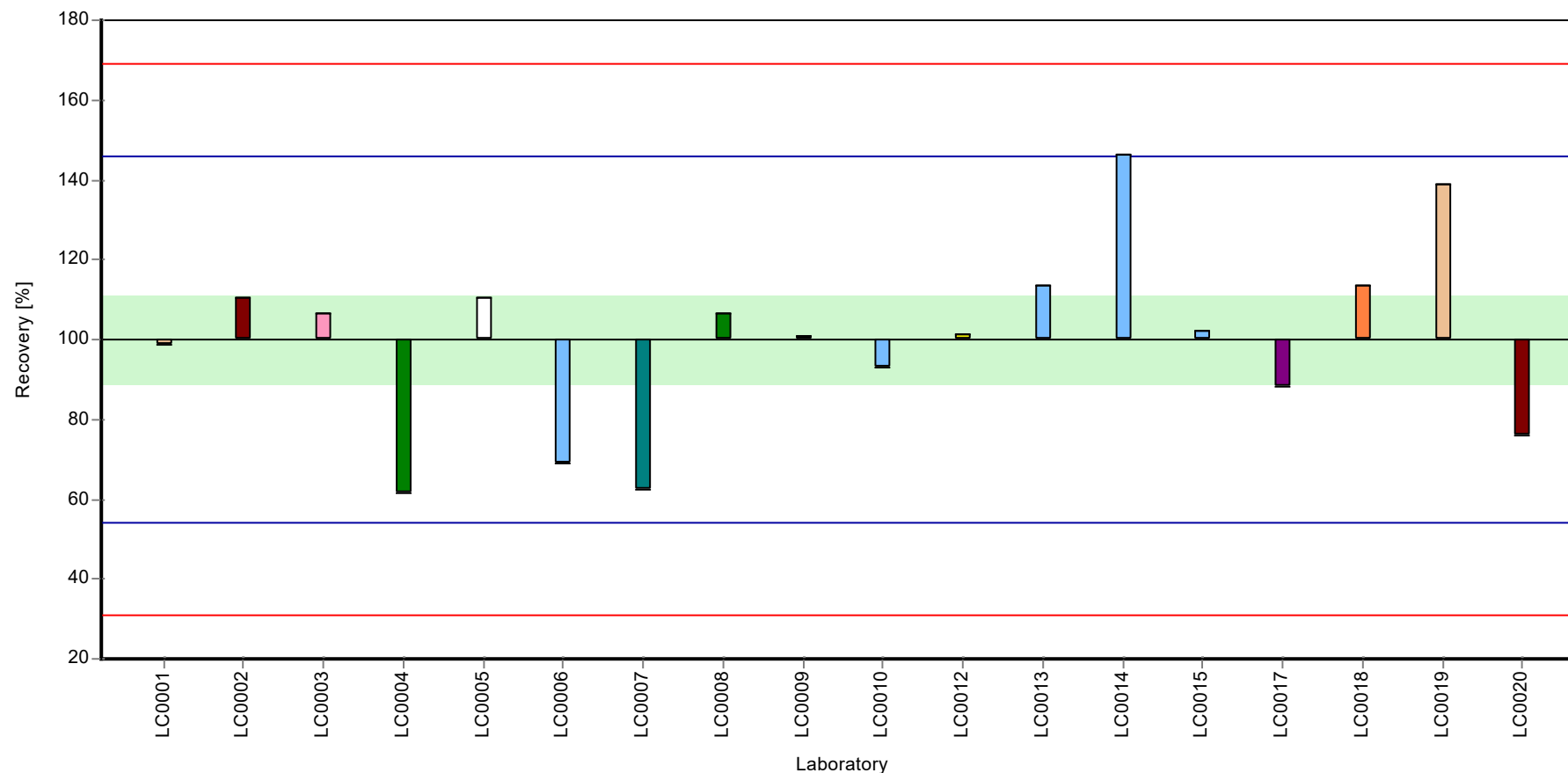
	all results	without outliers	Unit
Mean ± CI (99%)	4.87 ± 0.792	4.87 ± 0.792	µg/tube
Minimum	3	3	µg/tube
Maximum	7.13	7.13	µg/tube
Standard deviation	1.12	1.12	µg/tube
rel. standard deviation	23	23	%
n	18	18	-

Graphical presentation of results

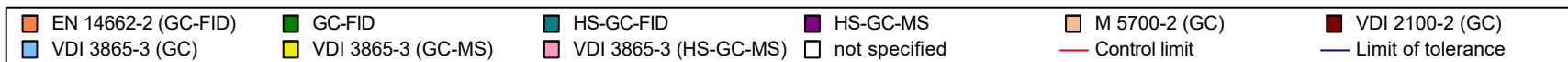
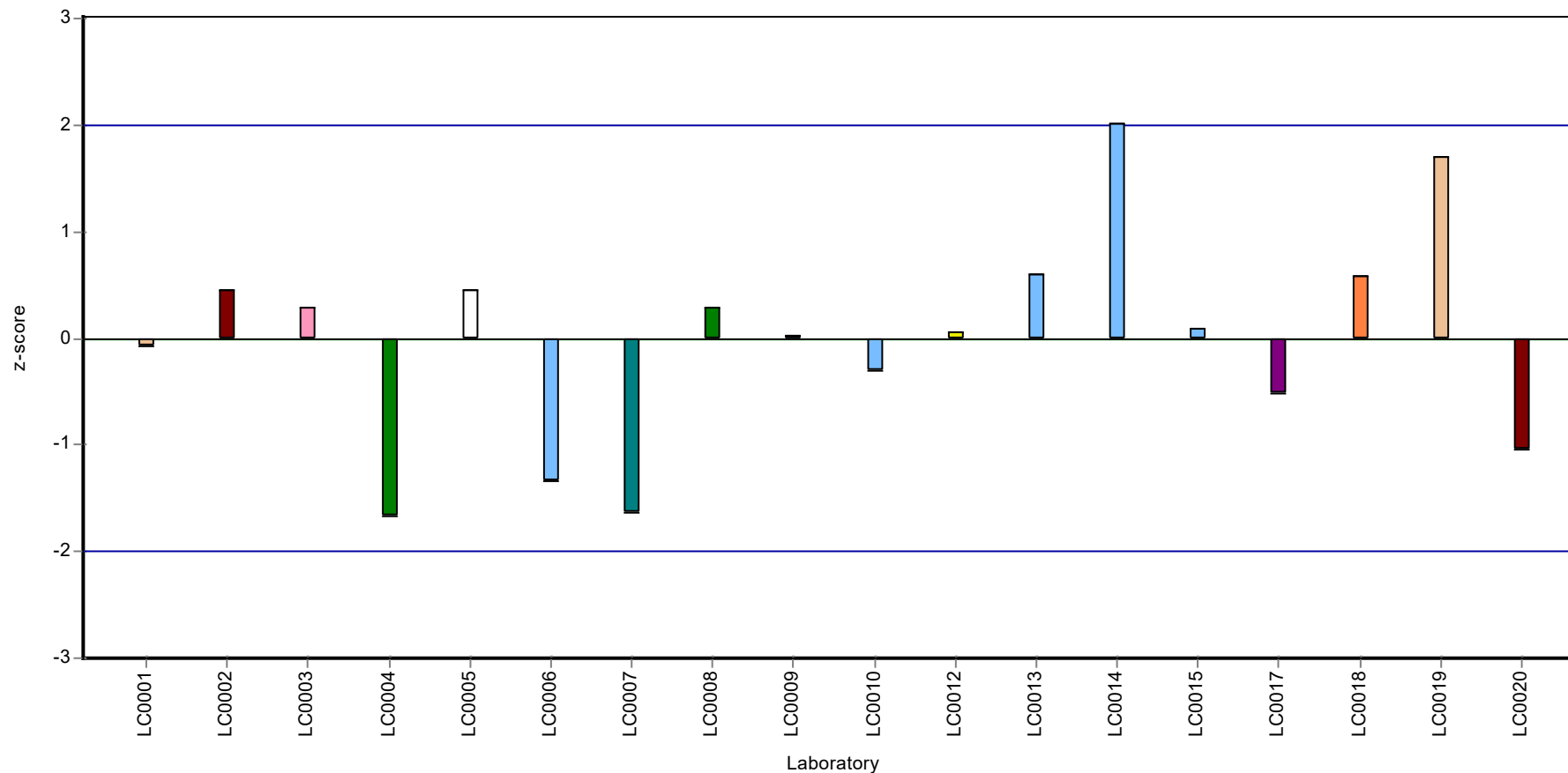
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Decane

Unit	µg/tube
Assigned value ± U (k=2)	2.7 ± 0.356
Criterion	0.54 (20 %)
Minimum - Maximum	2.09 - 3.53
Control test value ± U (k=2)	3.49 ± 1.21

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.1	0.41	77.8	-1.11	
LC0002	-	-	-	-	
LC0003	2.7	0.3	100	0.00	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.25	0.4	9.3	-4.54	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	2.54	0.51	94.1	-0.29	
LC0010	2.34	0.304	86.7	-0.66	
LC0011	-	-	-	-	
LC0012	2.49	0.98	92.3	-0.39	
LC0013	3.53	0.52	131	1.54	
LC0014	3.42	0.11	127	1.34	
LC0015	3.075	0.307	114	0.7	
LC0017	2.09	0.42	77.5	-1.13	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

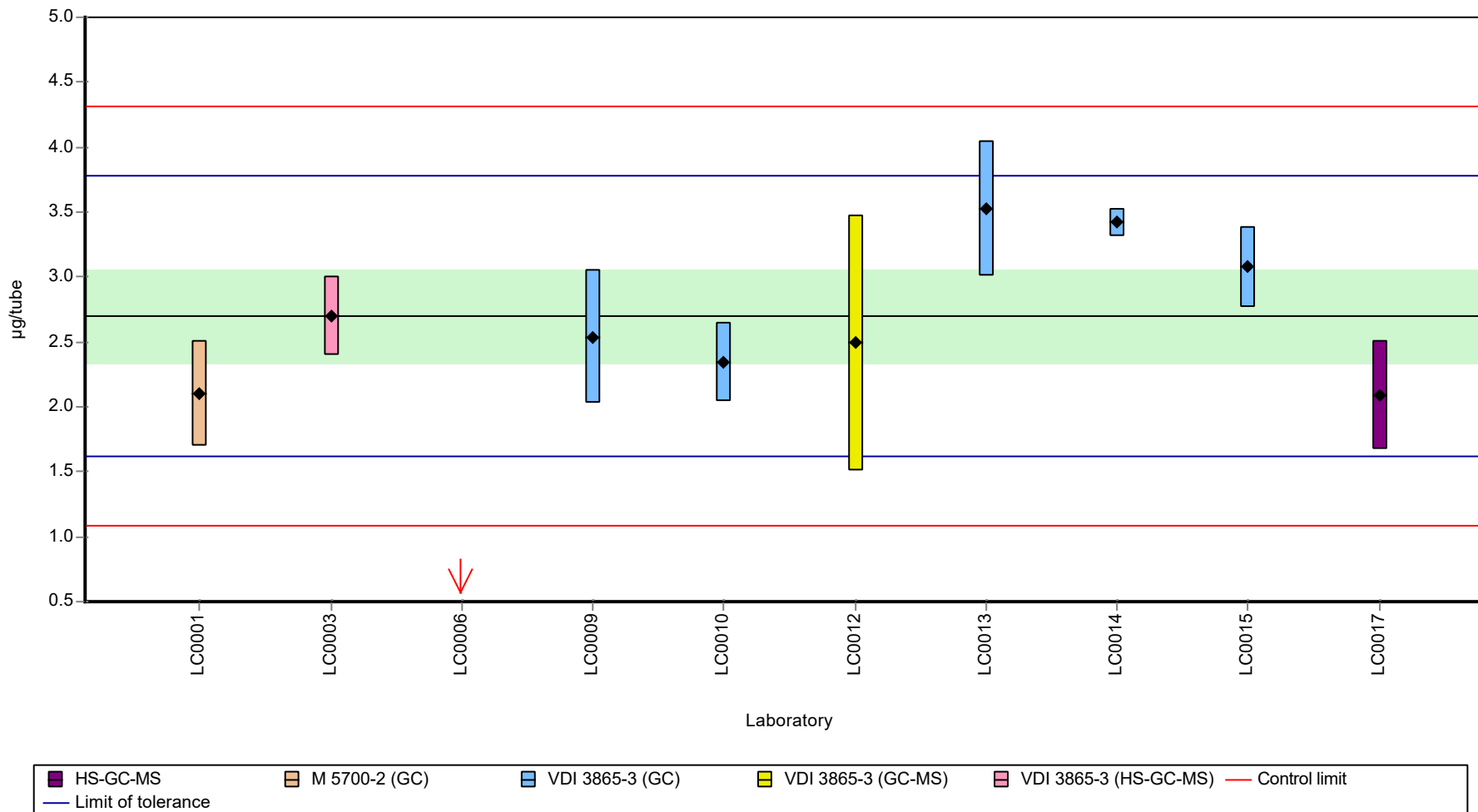
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	2.45 ± 0.876	2.7 ± 0.534	µg/tube
Minimum	0.25	2.09	µg/tube
Maximum	3.53	3.53	µg/tube
Standard deviation	0.923	0.534	µg/tube
rel. standard deviation	37.6	19.8 %	
n	10	9	-

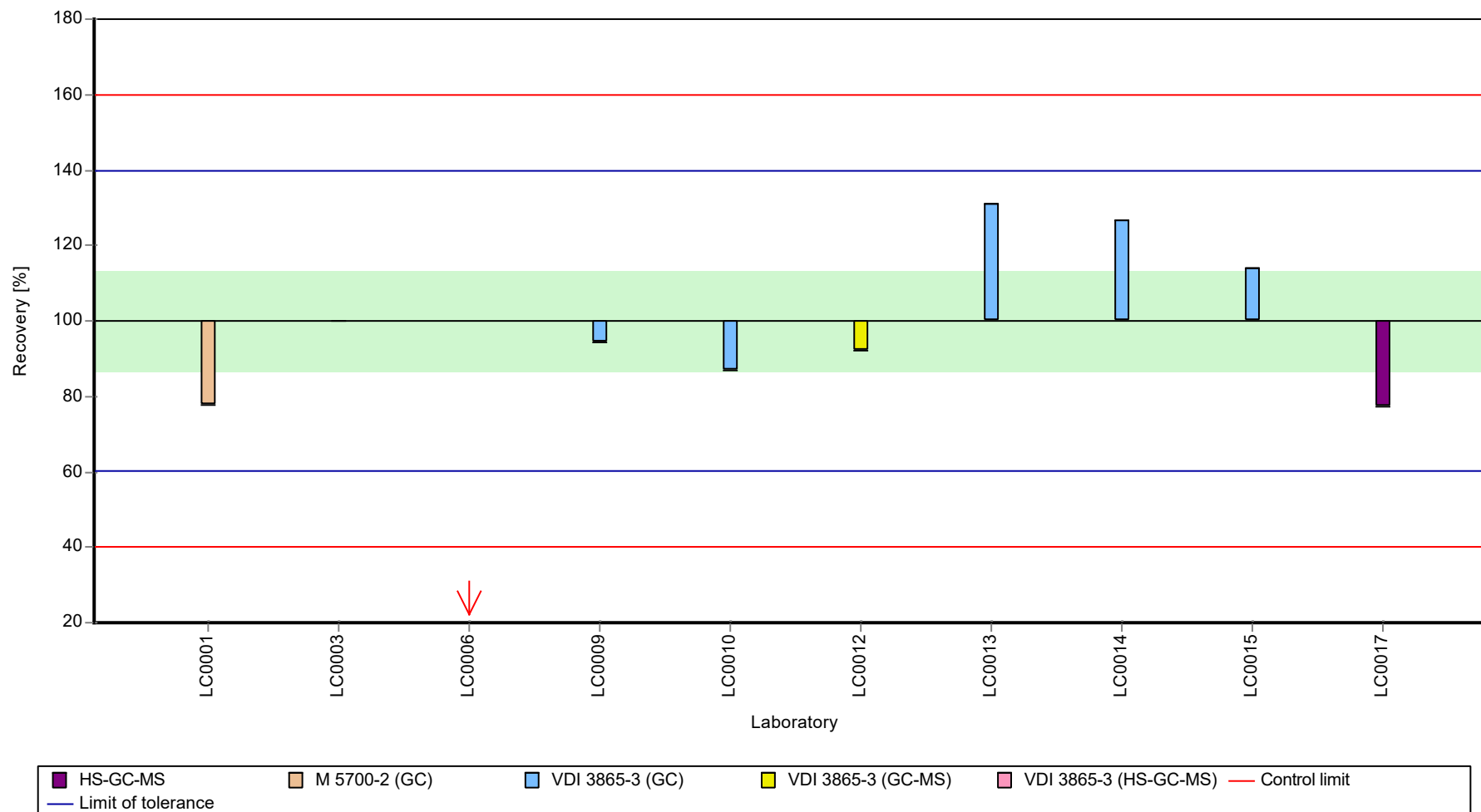


Graphical presentation of results

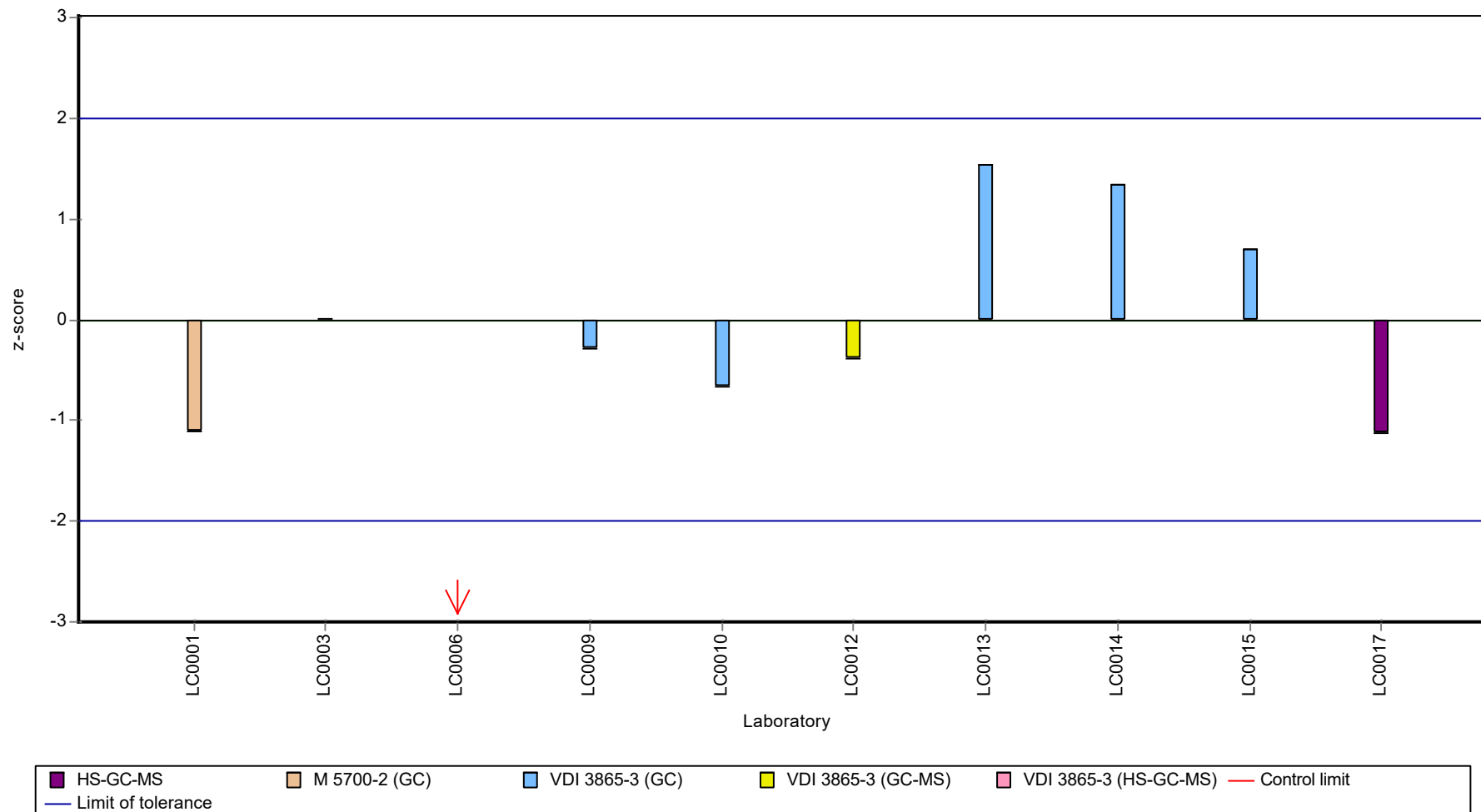
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Heptane

Unit	µg/tube
Assigned value ± U (k=2)	6.46 ± 0.446
Criterion	0.646 (10 %)
Minimum - Maximum	5.51 - 7.54
Control test value ± U (k=2)	5.86 ± 1.62

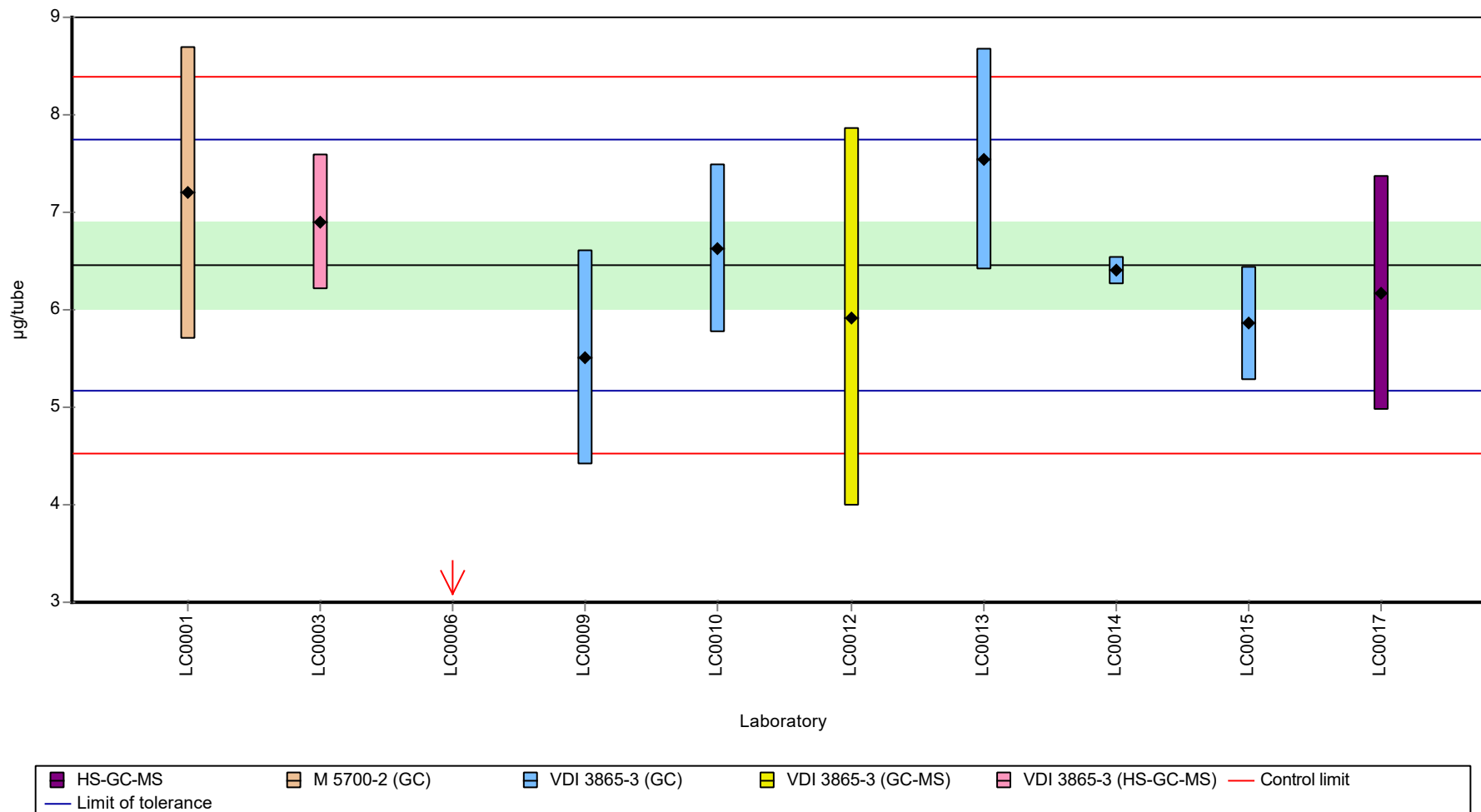
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.2	1.5	111	1.15	
LC0002	-	-	-	-	
LC0003	6.9	0.7	107	0.68	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.7	0.4	10.8	-8.92	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	5.51	1.1	85.3	-1.47	
LC0010	6.63	0.862	103	0.27	
LC0011	-	-	-	-	
LC0012	5.92	1.94	91.7	-0.83	
LC0013	7.54	1.13	117	1.67	
LC0014	6.4	0.14	99.1	-0.09	
LC0015	5.862	0.586	90.8	-0.92	
LC0017	6.17	1.2	95.5	-0.45	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

#### Characteristics of parameter

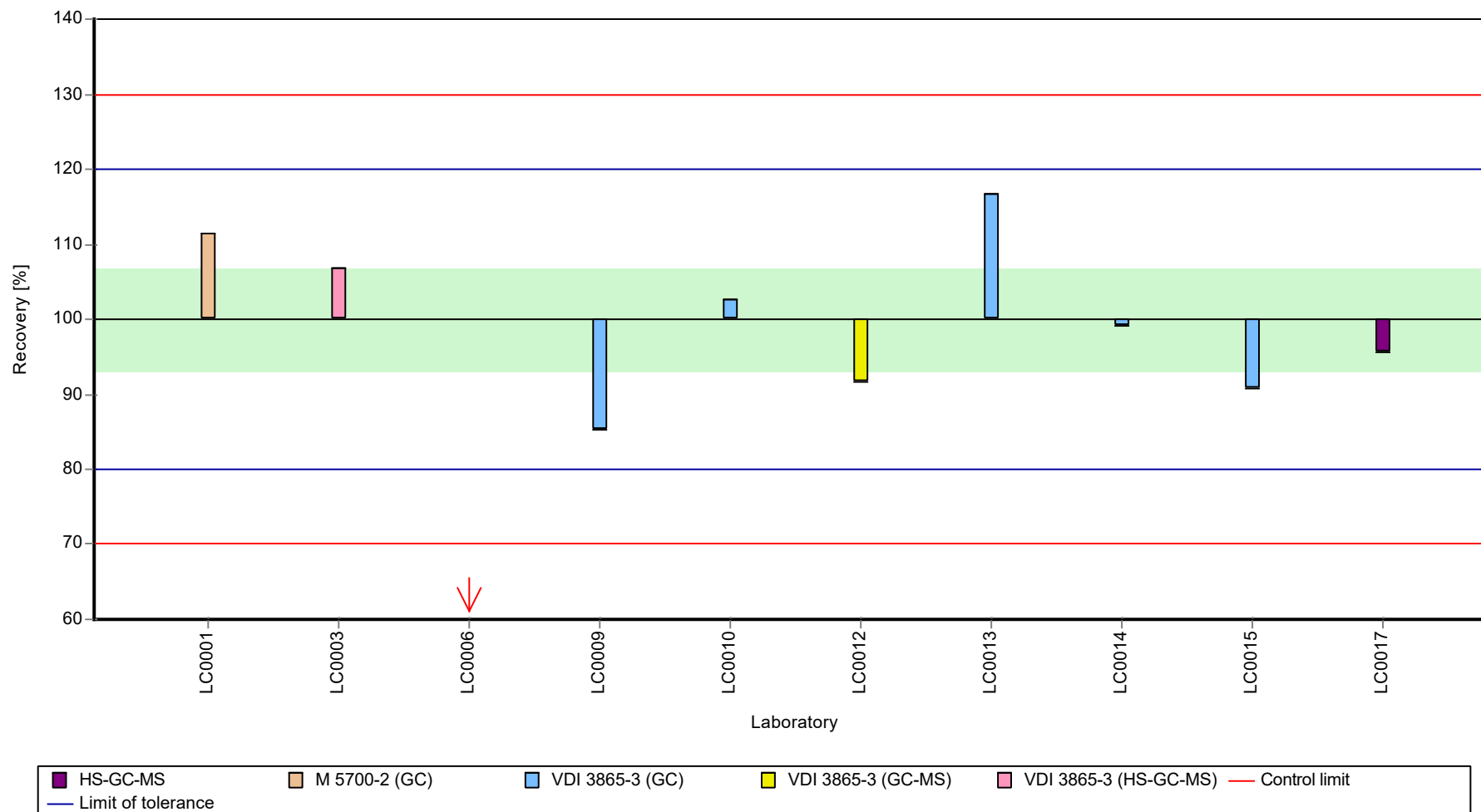
	all results	without outliers	Unit
Mean ± CI (99%)	5.88 ± 1.83	6.46 ± 0.669	µg/tube
Minimum	0.7	5.51	µg/tube
Maximum	7.54	7.54	µg/tube
Standard deviation	1.93	0.669	µg/tube
rel. standard deviation	32.8	10.4 %	
n	10	9	-

Graphical presentation of results

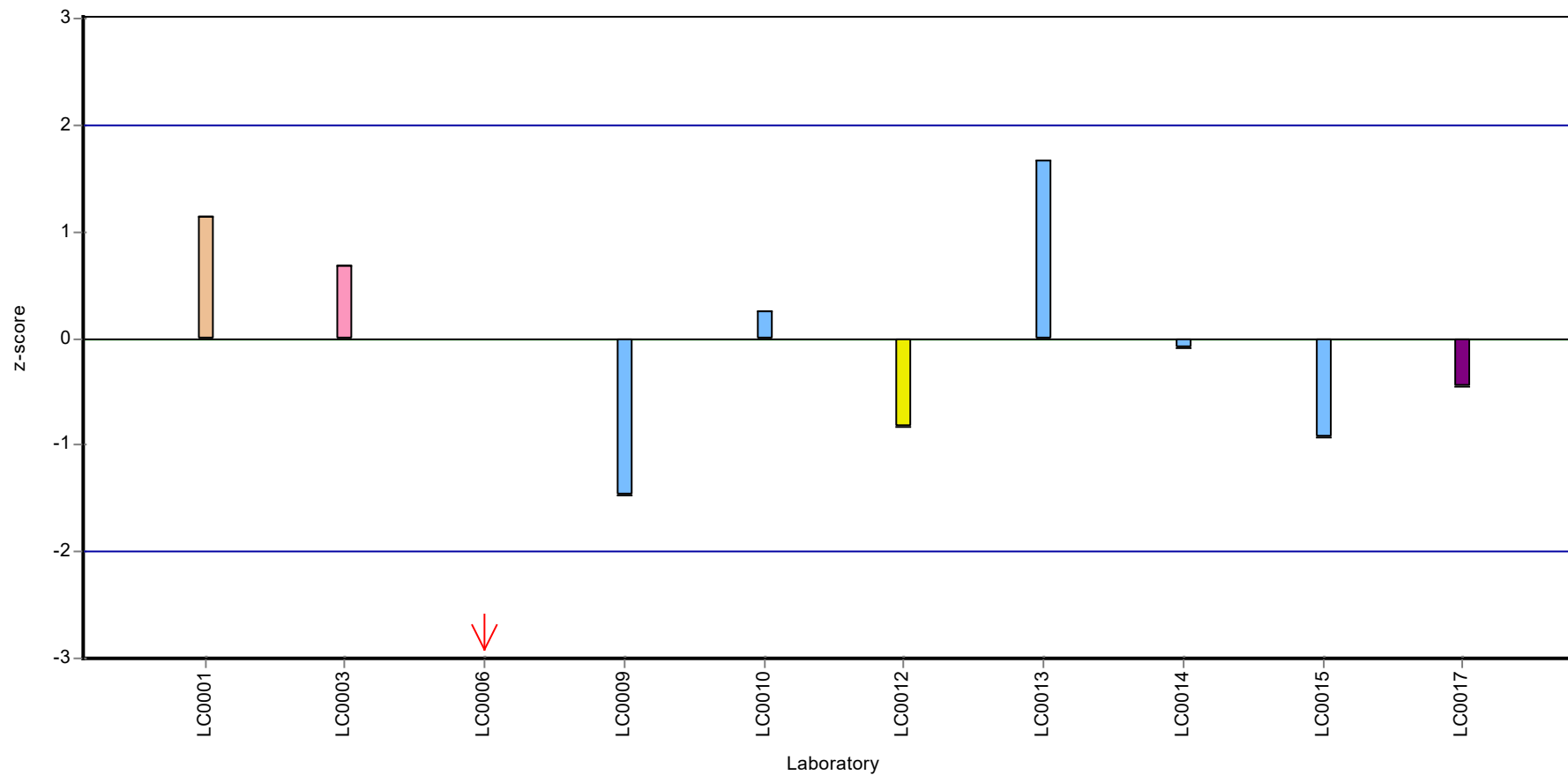
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Hexane

Unit	µg/tube
Assigned value ± U (k=2)	6.32 ± 0.775
Criterion	1.01 (16 %)
Minimum - Maximum	4.88 - 8.1
Control test value ± U (k=2)	4.39 ± 1.57

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	8.1	1.6	128	1.76	
LC0002	-	-	-	-	
LC0003	6.7	0.7	106	0.38	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.72	0.4	11.4	-5.54	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.88	0.98	77.2	-1.42	
LC0010	6.38	0.829	101	0.06	
LC0011	-	-	-	-	
LC0012	5.58	0.72	88.3	-0.73	
LC0013	6.41	0.96	101	0.09	
LC0014	6.39	0.14	101	0.07	
LC0015	5.372	0.537	85	-0.94	
LC0017	6.49	1.3	103	0.17	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

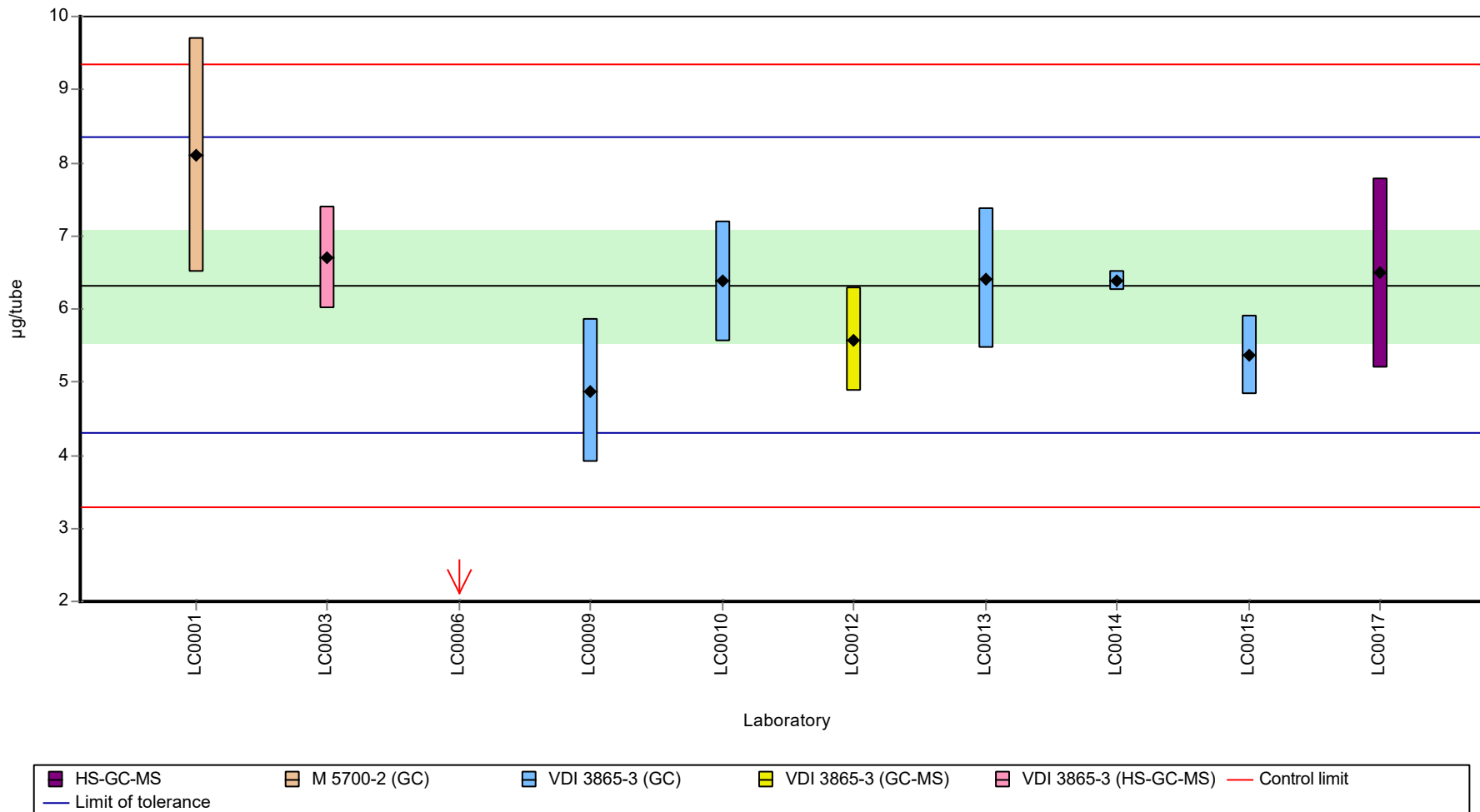
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.7 ± 1.86	6.26 ± 0.925	µg/tube
Minimum	0.72	4.88	µg/tube
Maximum	8.1	8.1	µg/tube
Standard deviation	1.96	0.925	µg/tube
rel. standard deviation	34.3	14.8 %	
n	10	9	-

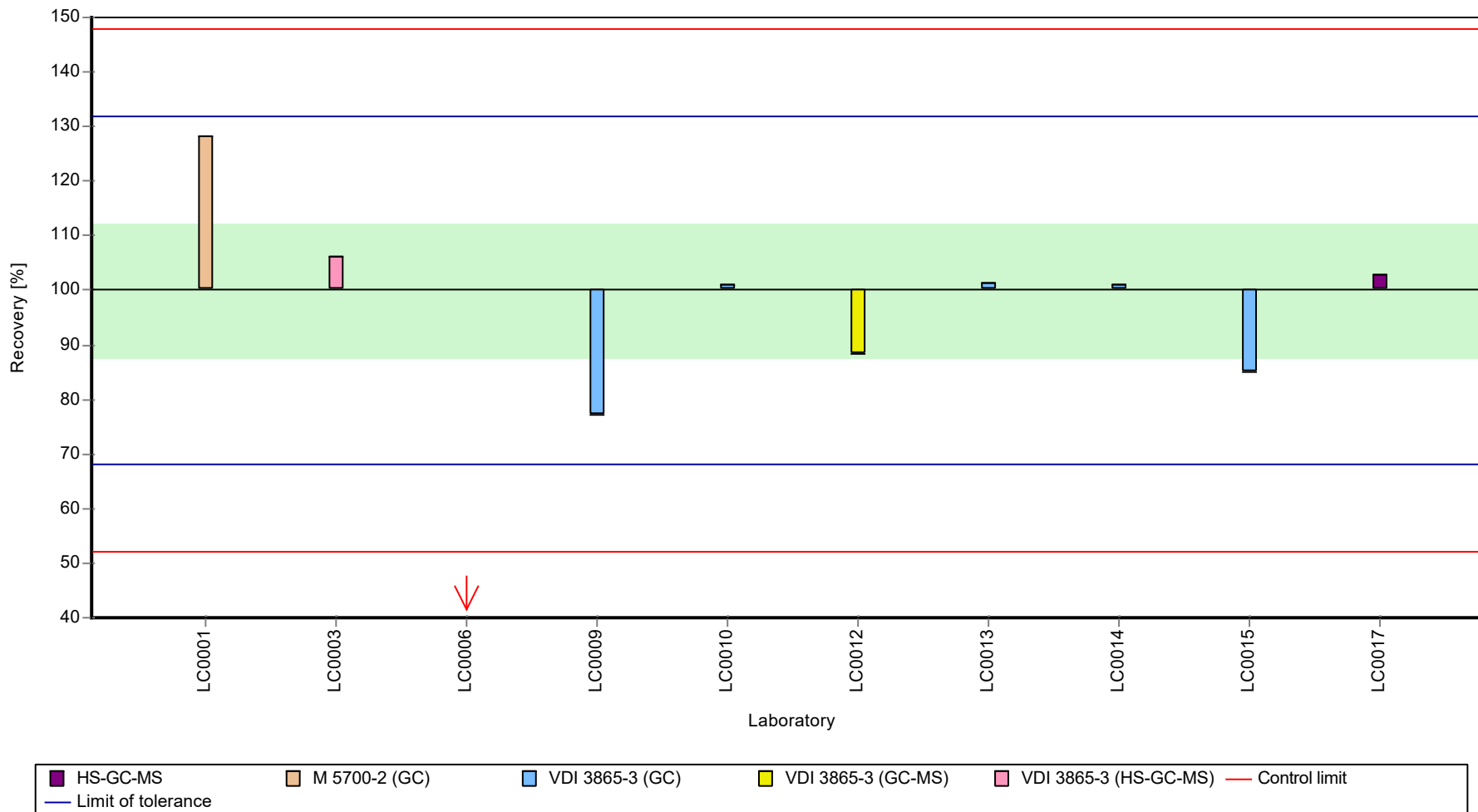


Graphical presentation of results

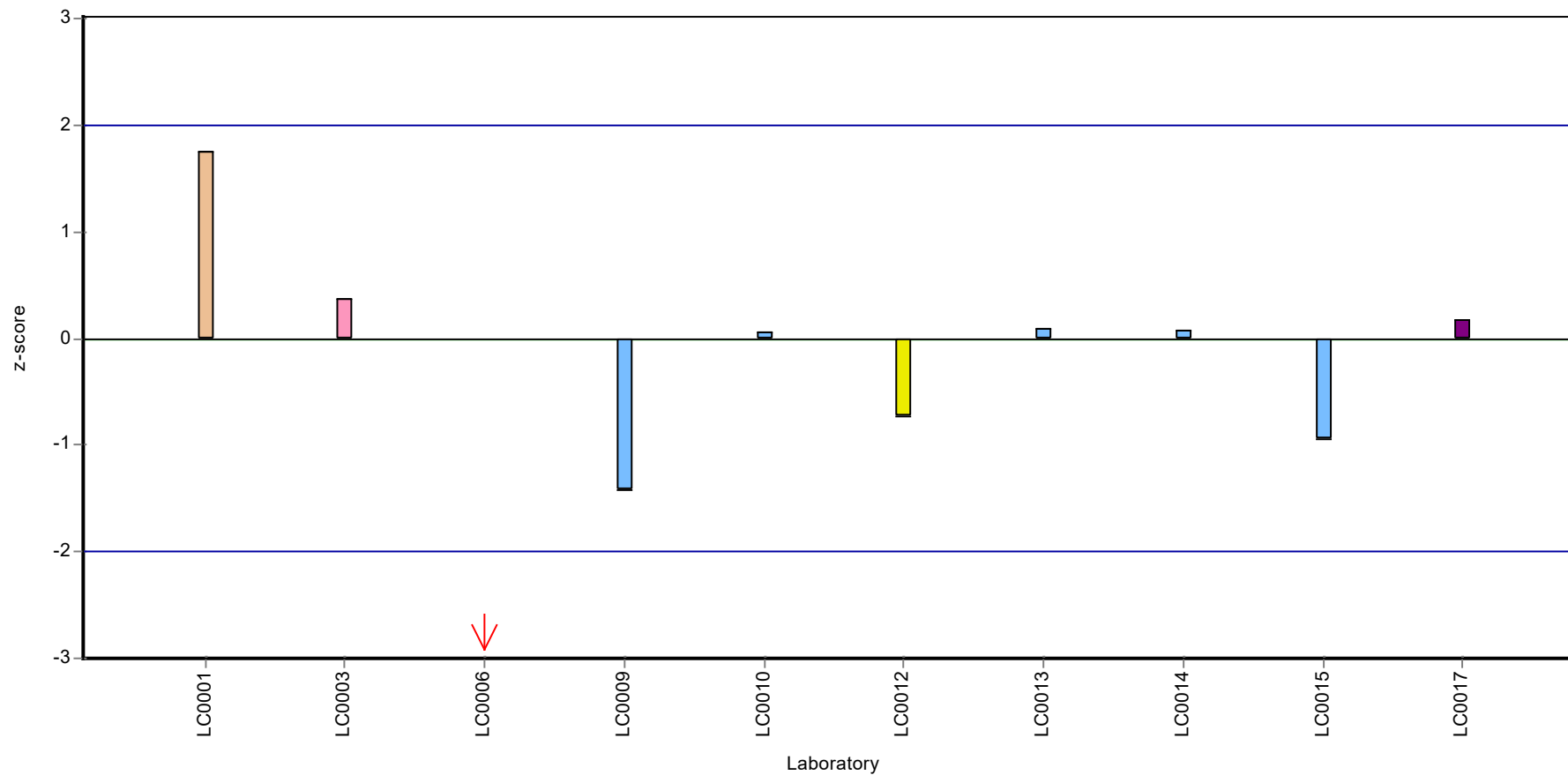
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Nonane

Unit	µg/tube
Assigned value ± U (k=2)	4.97 ± 0.458
Criterion	0.696 (14 %)
Minimum - Maximum	3.85 - 5.8
Control test value ± U (k=2)	4.49 ± 1.26

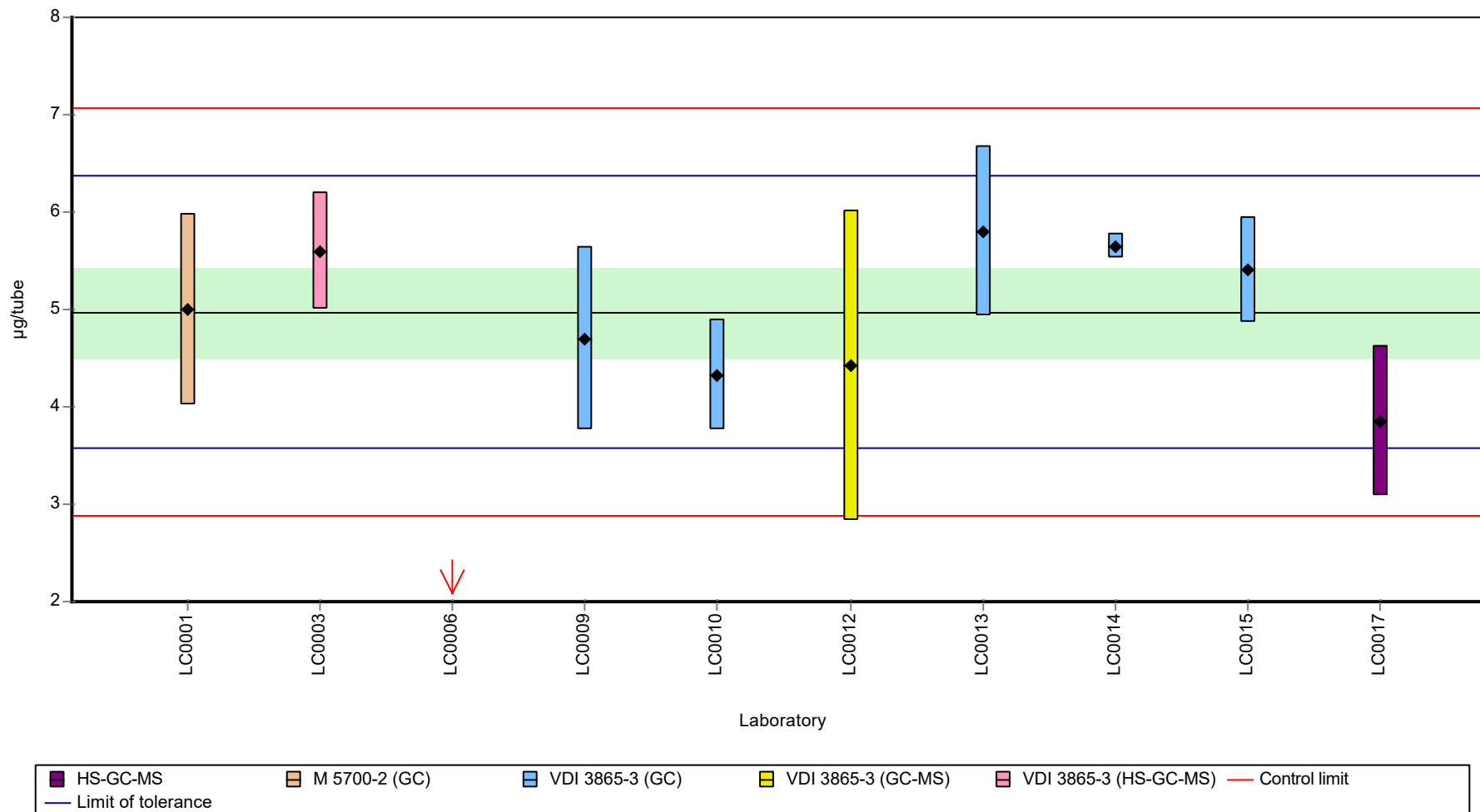
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5	0.98	101	0.04	
LC0002	-	-	-	-	
LC0003	5.6	0.6	113	0.9	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.48	0.4	9.7	-6.45	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.7	0.94	94.5	-0.39	
LC0010	4.33	0.563	87.1	-0.92	
LC0011	-	-	-	-	
LC0012	4.42	1.59	88.9	-0.79	
LC0013	5.8	0.87	117	1.19	
LC0014	5.65	0.13	114	0.97	
LC0015	5.407	0.541	109	0.62	
LC0017	3.85	0.77	77.4	-1.61	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

#### Characteristics of parameter

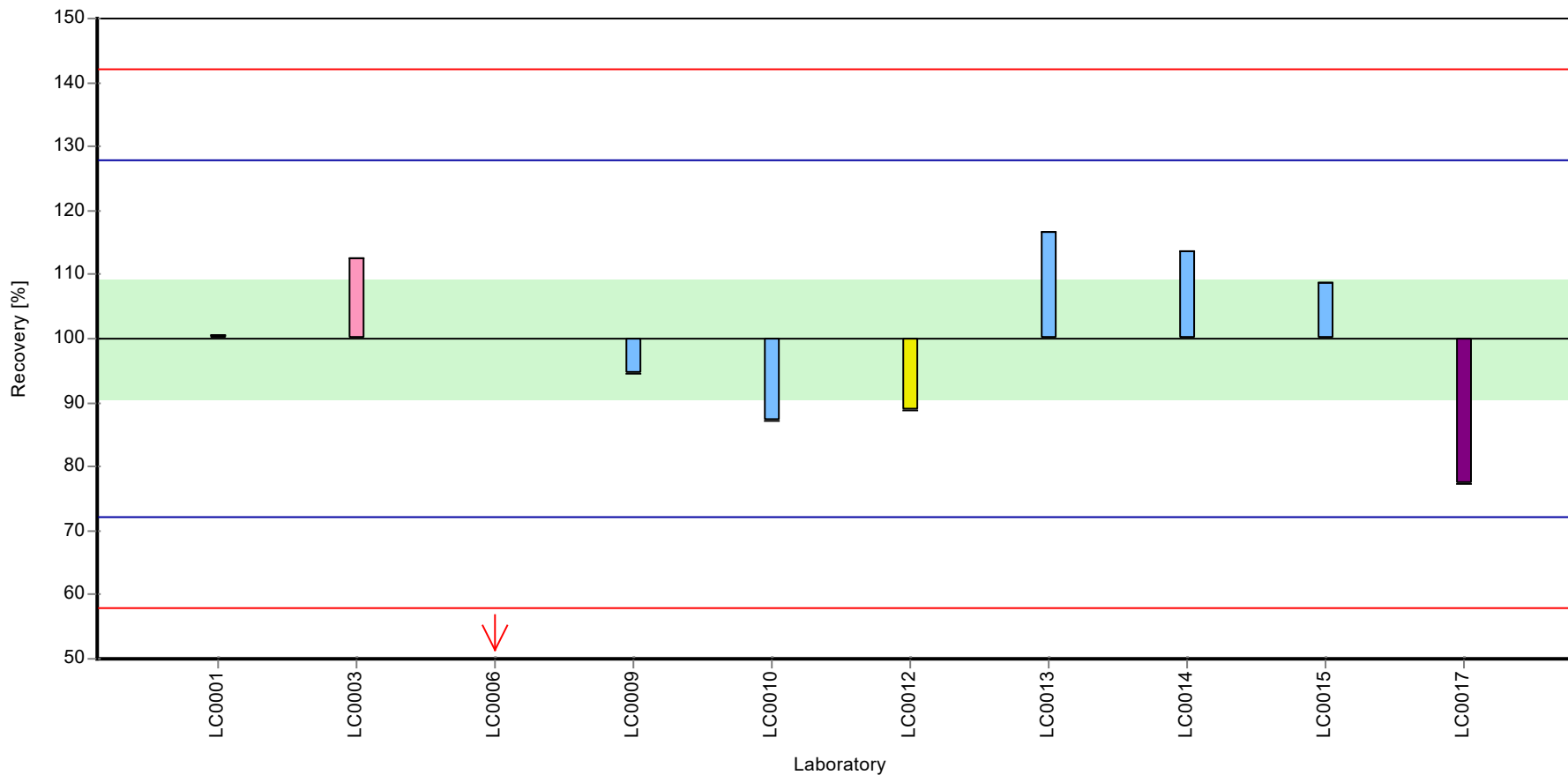
	all results	without outliers	Unit
Mean ± CI (99%)	4.52 ± 1.48	4.97 ± 0.687	µg/tube
Minimum	0.48	3.85	µg/tube
Maximum	5.8	5.8	µg/tube
Standard deviation	1.56	0.687	µg/tube
rel. standard deviation	34.5	13.8 %	
n	10	9	-

Graphical presentation of results

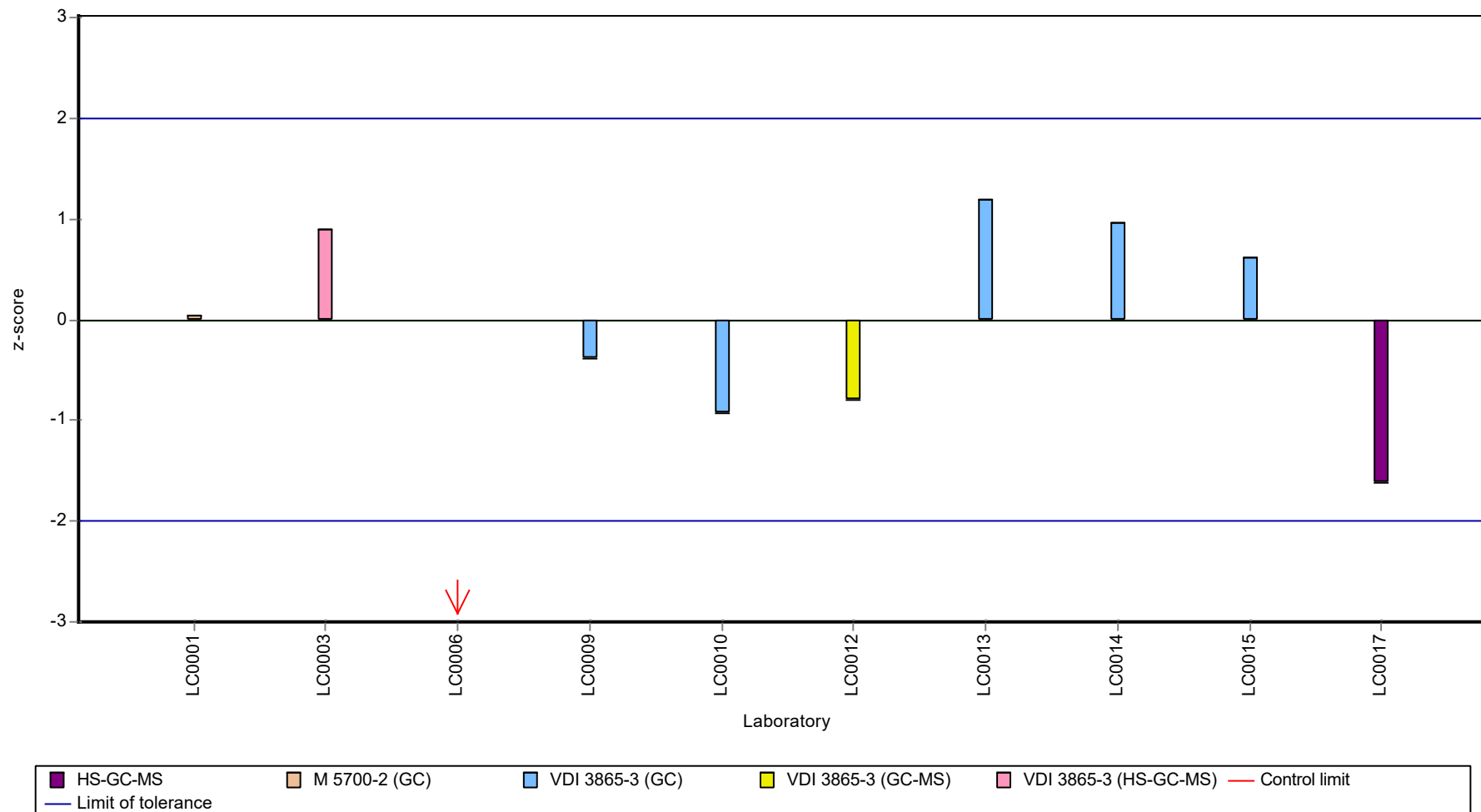
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Octane

Unit	µg/tube
Assigned value ± U (k=2)	6.24 ± 0.424
Criterion	0.624 (10 %)
Minimum - Maximum	5.53 - 7.18
Control test value ± U (k=2)	6.2 ± 2.16

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.8	1.5	109	0.91	
LC0002	-	-	-	-	
LC0003	7	0.7	112	1.23	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.65	0.4	10.4	-8.96	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	5.53	1.11	88.7	-1.13	
LC0010	5.94	0.772	95.3	-0.47	
LC0011	-	-	-	-	
LC0012	5.66	1.82	90.8	-0.92	
LC0013	7.18	1.07	115	1.52	
LC0014	6.39	0.15	102	0.25	
LC0015	6.068	0.607	97.3	-0.27	
LC0017	5.55	1.1	89	-1.1	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

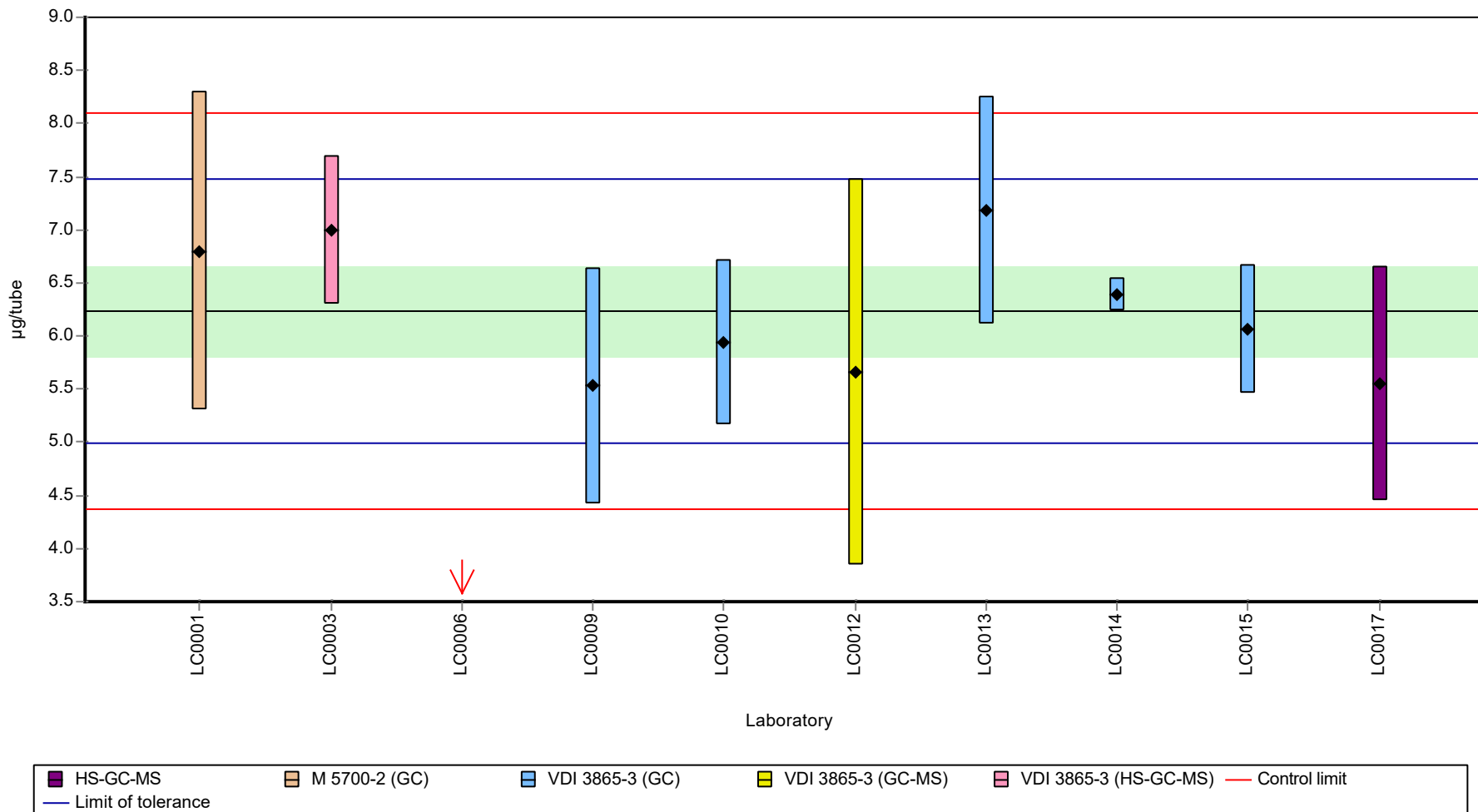
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.68 ± 1.77	6.24 ± 0.636	µg/tube
Minimum	0.65	5.53	µg/tube
Maximum	7.18	7.18	µg/tube
Standard deviation	1.87	0.636	µg/tube
rel. standard deviation	32.9	10.2 %	
n	10	9	-

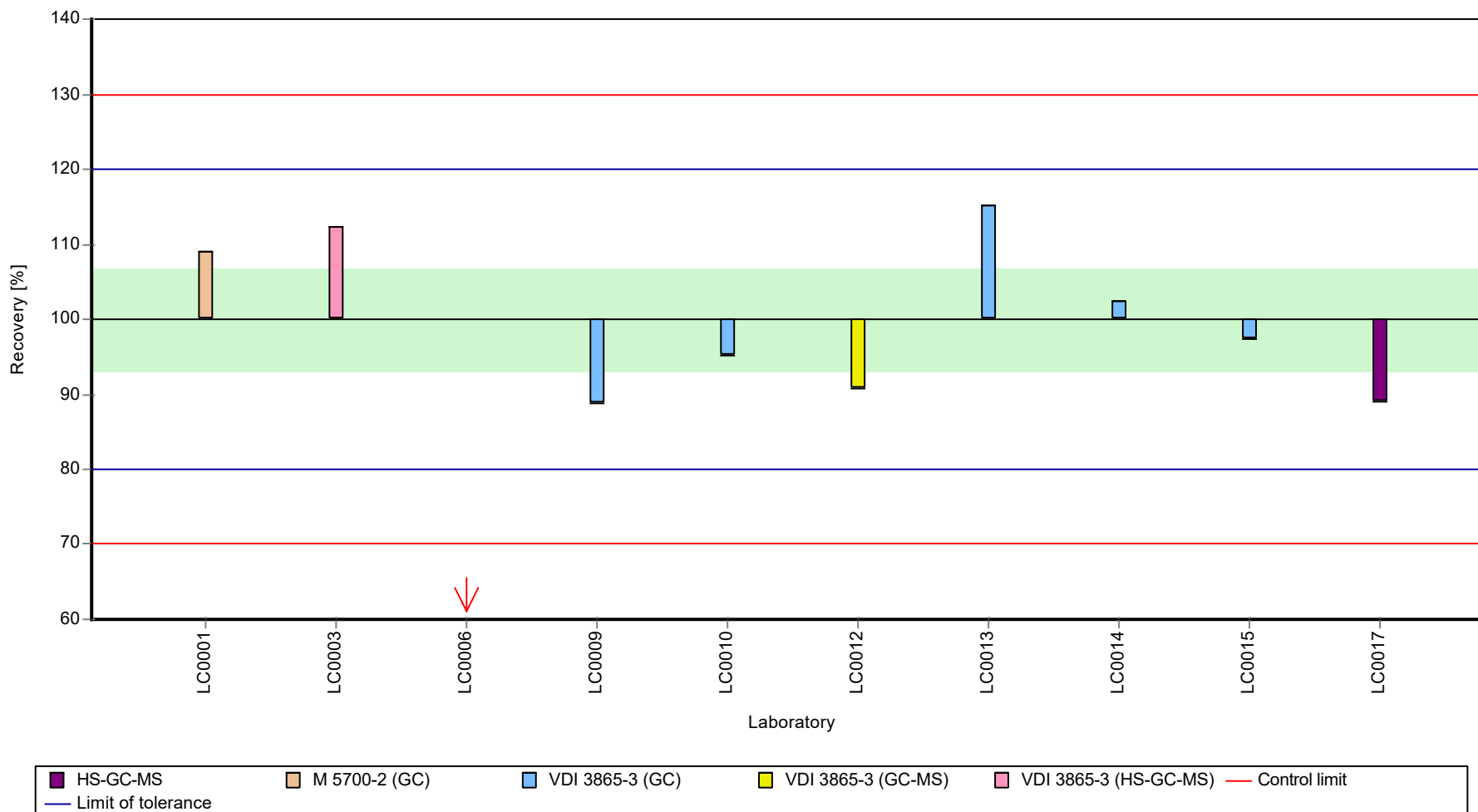


Graphical presentation of results

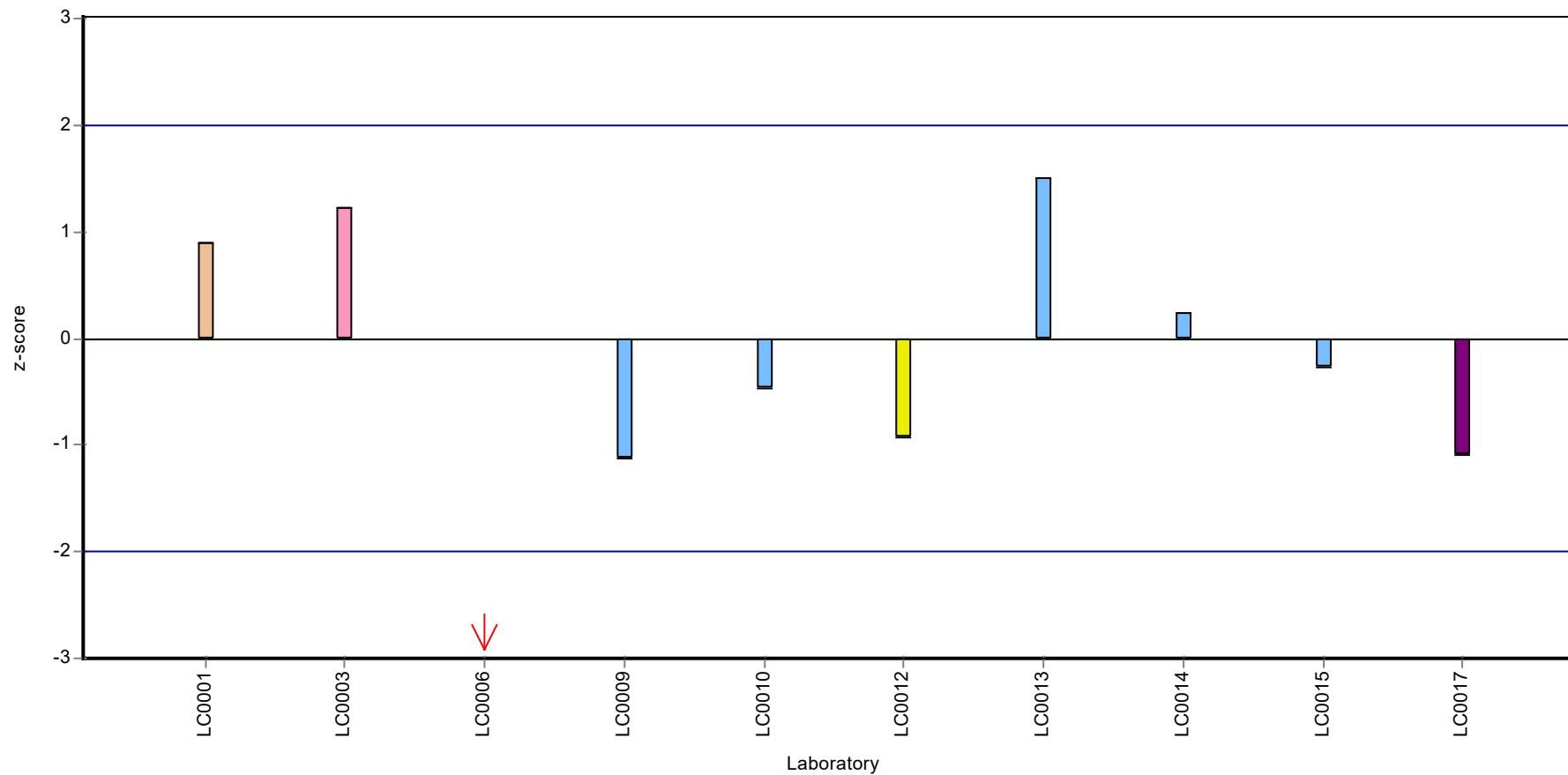
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### n-Pentane

Unit	µg/tube
Assigned value ± U (k=2)	5.48 ± 1.36
Criterion	2.14 (39 %)
Minimum - Maximum	0.75 - 7.94
Control test value ± U (k=2)	5.63 ± 2.46

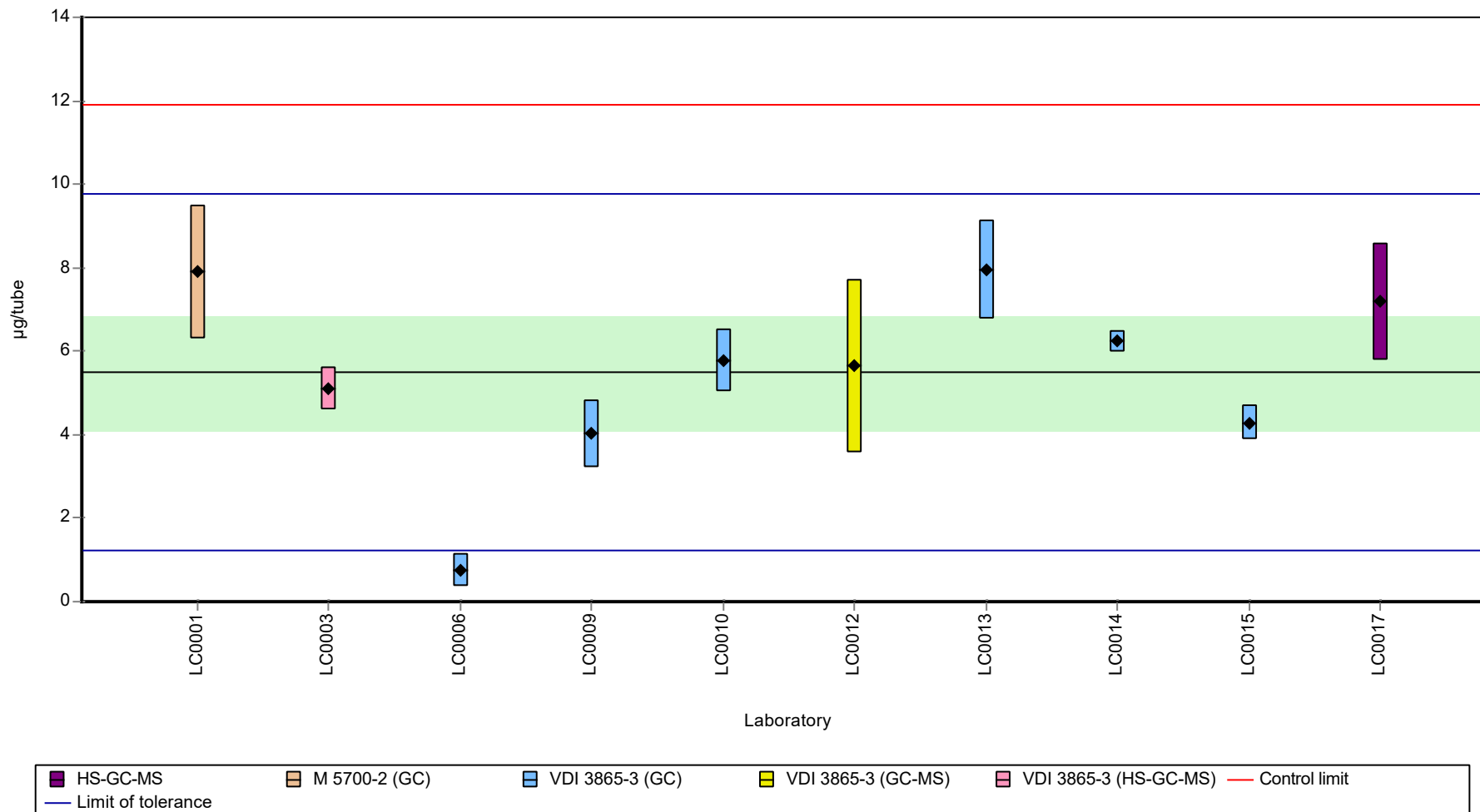
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.9	1.6	144	1.13	
LC0002	-	-	-	-	
LC0003	5.1	0.5	93	-0.18	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.75	0.4	13.7	-2.21	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.03	0.81	73.5	-0.68	
LC0010	5.76	0.749	105	0.13	
LC0011	-	-	-	-	
LC0012	5.65	2.08	103	0.08	
LC0013	7.94	1.19	145	1.15	
LC0014	6.24	0.26	114	0.35	
LC0015	4.287	0.429	78.2	-0.56	
LC0017	7.19	1.4	131	0.8	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	

#### Characteristics of parameter

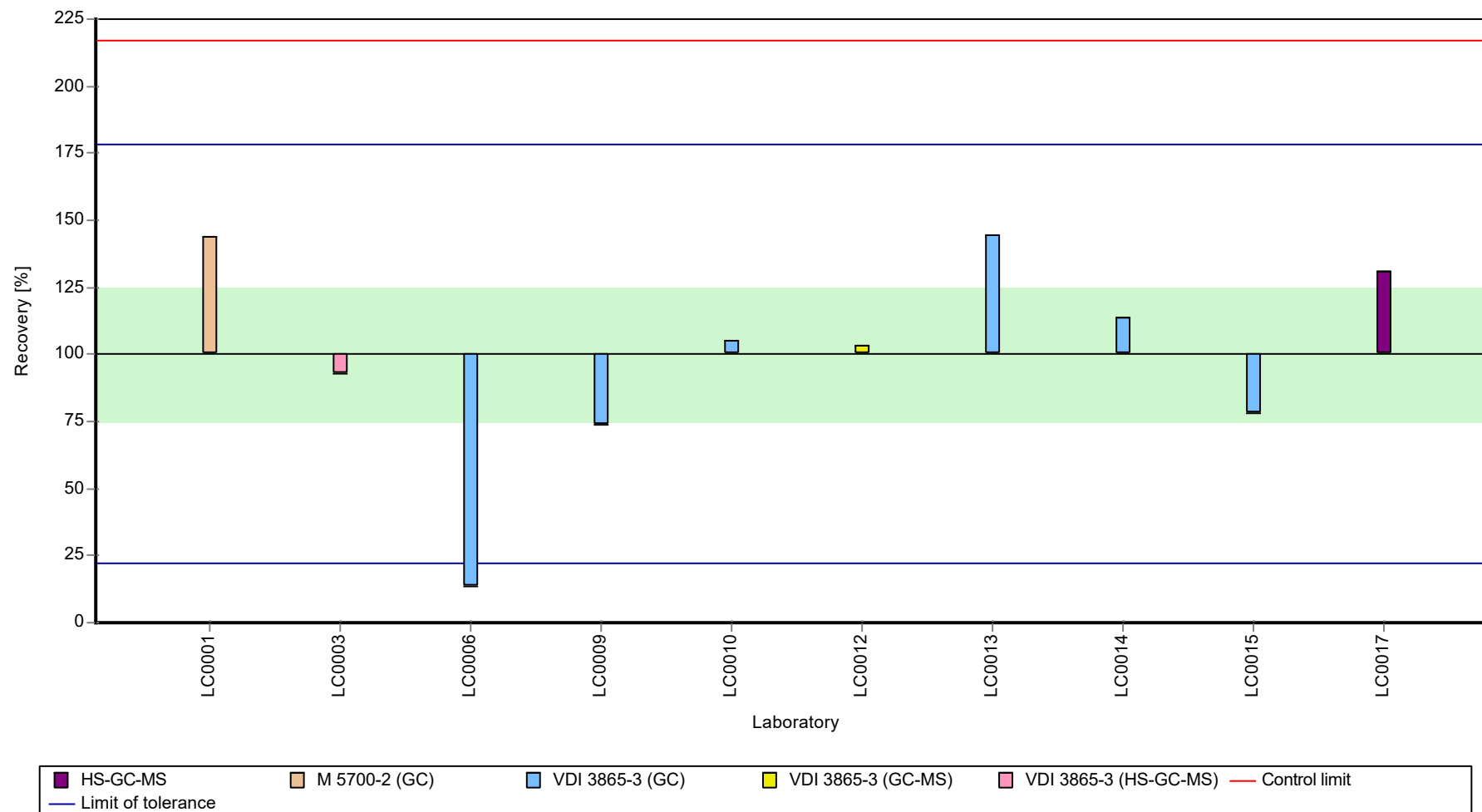
	all results	without outliers	Unit
Mean ± CI (99%)	5.48 ± 2.04	5.48 ± 2.04	µg/tube
Minimum	0.75	0.75	µg/tube
Maximum	7.94	7.94	µg/tube
Standard deviation	2.15	2.15	µg/tube
rel. standard deviation	39.2	39.2	%
n	10	10	-

Graphical presentation of results

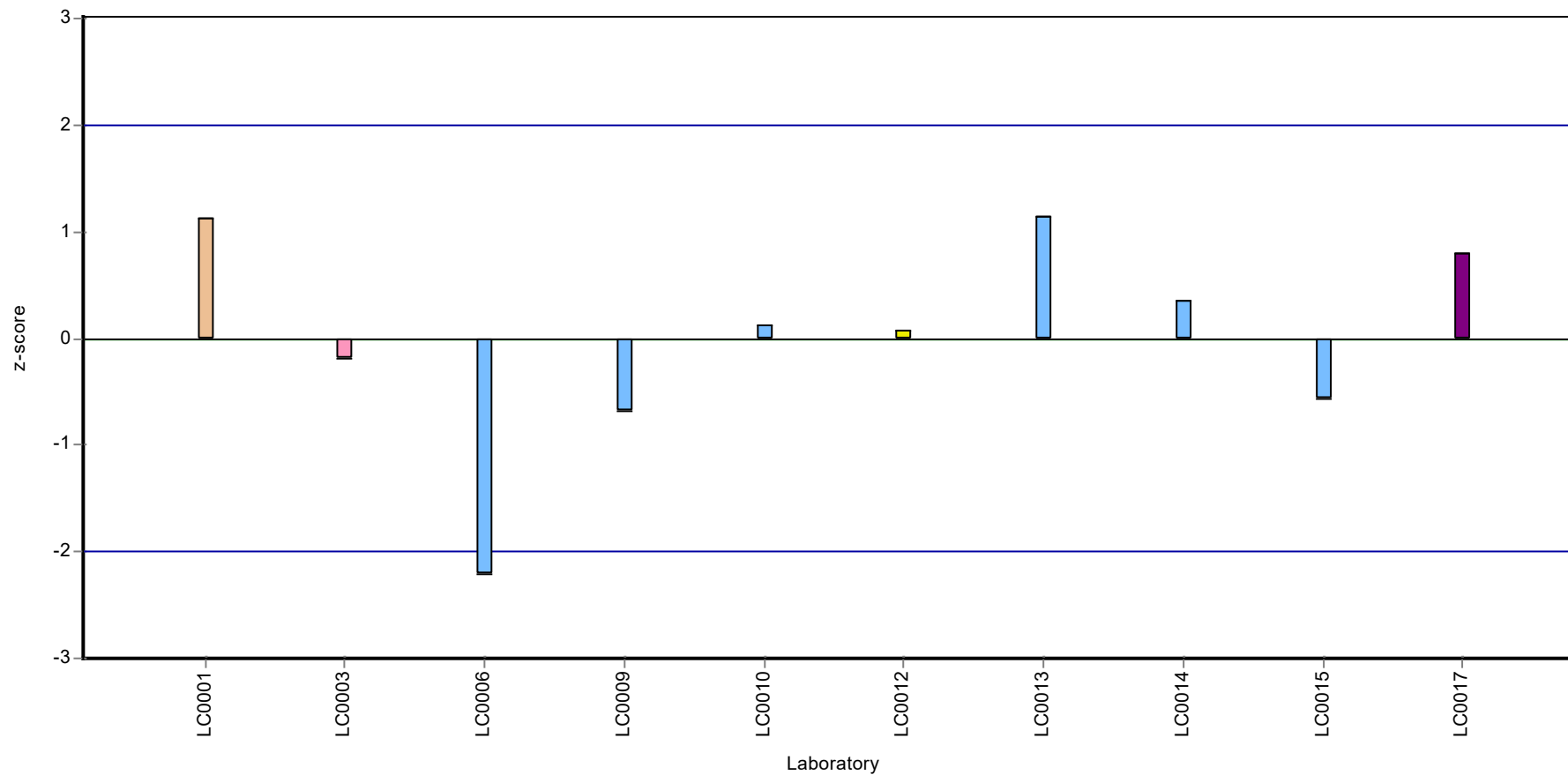
Results



Recovery rate



**Z-score**



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### o-Xylene

Unit	µg/tube
Assigned value ± U (k=2)	4.58 ± 0.555
Criterion	1.19 (26 %)
Minimum - Maximum	2.77 - 7.21
Control test value ± U (k=2)	3.79 ± 0.868

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.1	0.47	89.5	-0.4	
LC0002	4.47	1.12	97.6	-0.09	
LC0003	4.5	0.4	98.3	-0.07	
LC0004	2.9	0.58	63.3	-1.41	
LC0005	5.05	1.52	110	0.4	
LC0006	2.77	0.4	60.5	-1.52	
LC0007	7.21	0.38	157	2.21	
LC0008	4.69	0.7	102	0.09	
LC0009	4.68	0.94	102	0.09	
LC0010	3.73	0.298	81.5	-0.71	
LC0011	-	-	-	-	
LC0012	4.4	0.41	96.1	-0.15	
LC0013	5.11	0.55	112	0.45	
LC0014	6.19	0.33	135	1.35	
LC0015	4.367	0.24	95.4	-0.18	
LC0017	3.87	0.77	84.5	-0.59	
LC0018	5.087	0.29	111	0.43	
LC0019	6.32	1.26	138	1.46	
LC0020	2.97	0.3	64.9	-1.35	

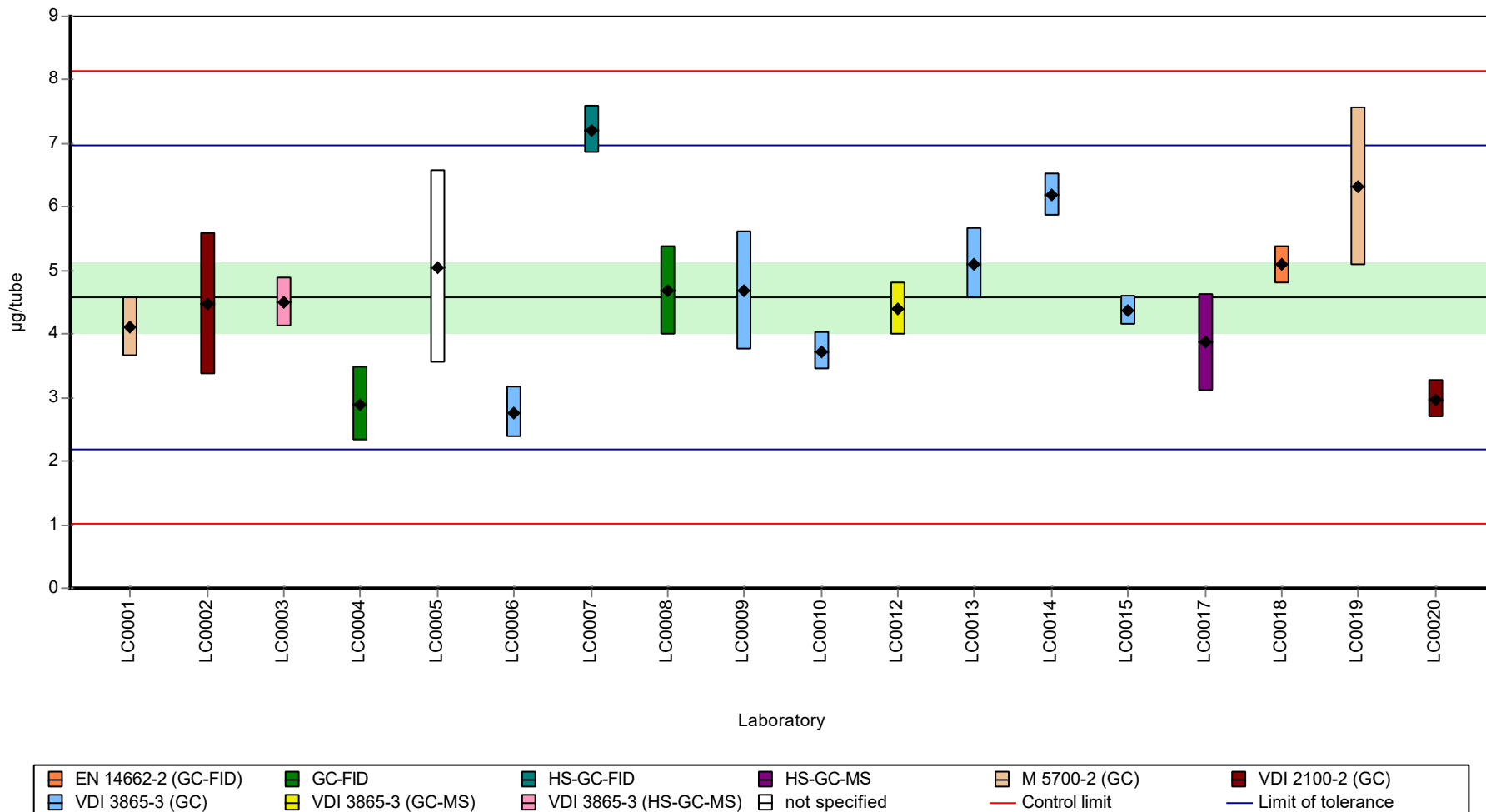
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	4.58 ± 0.832	4.58 ± 0.832	µg/tube
Minimum	2.77	2.77	µg/tube
Maximum	7.21	7.21	µg/tube
Standard deviation	1.18	1.18	µg/tube
rel. standard deviation	25.7	25.7	%
n	18	18	-

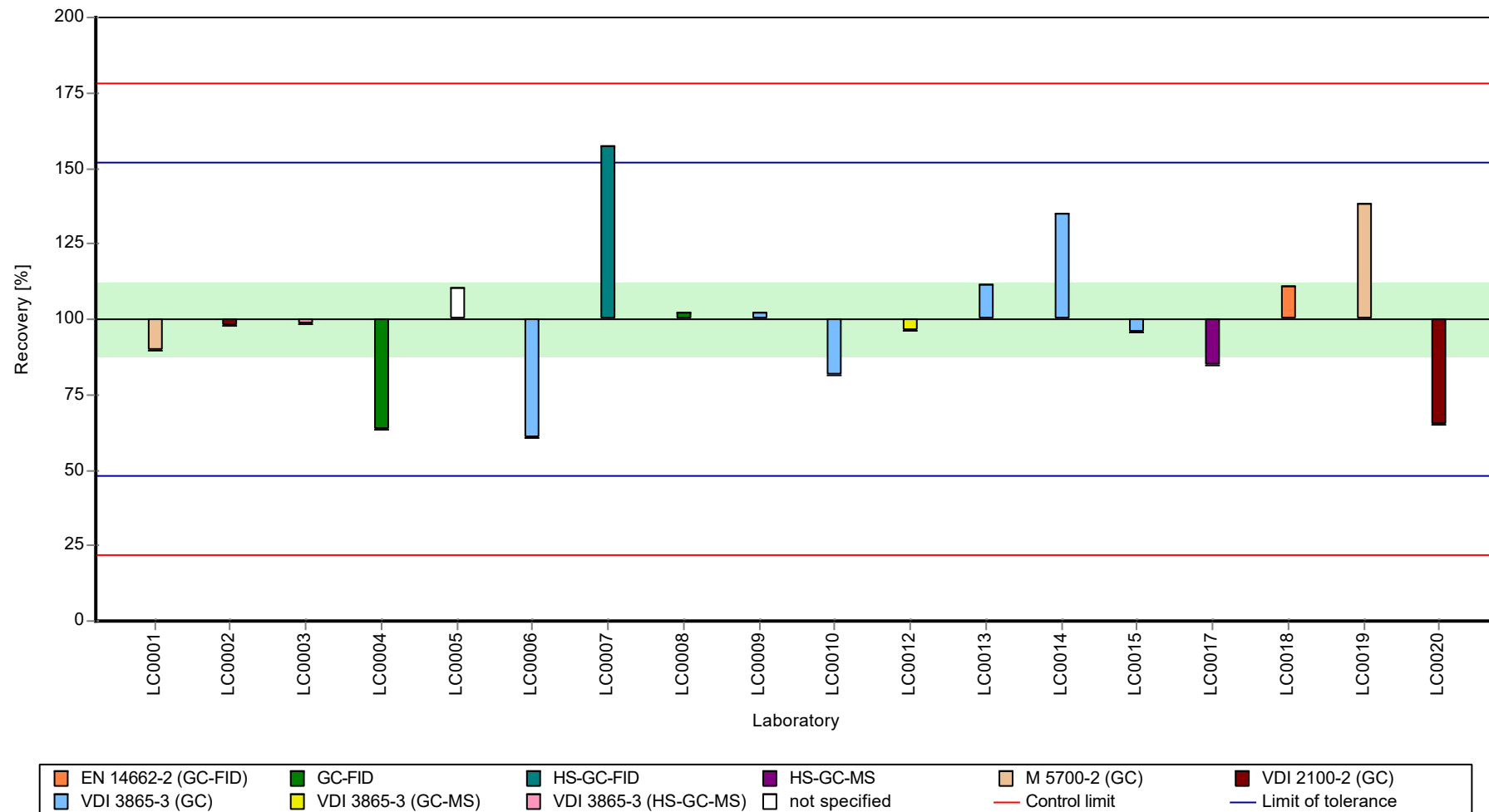


Graphical presentation of results

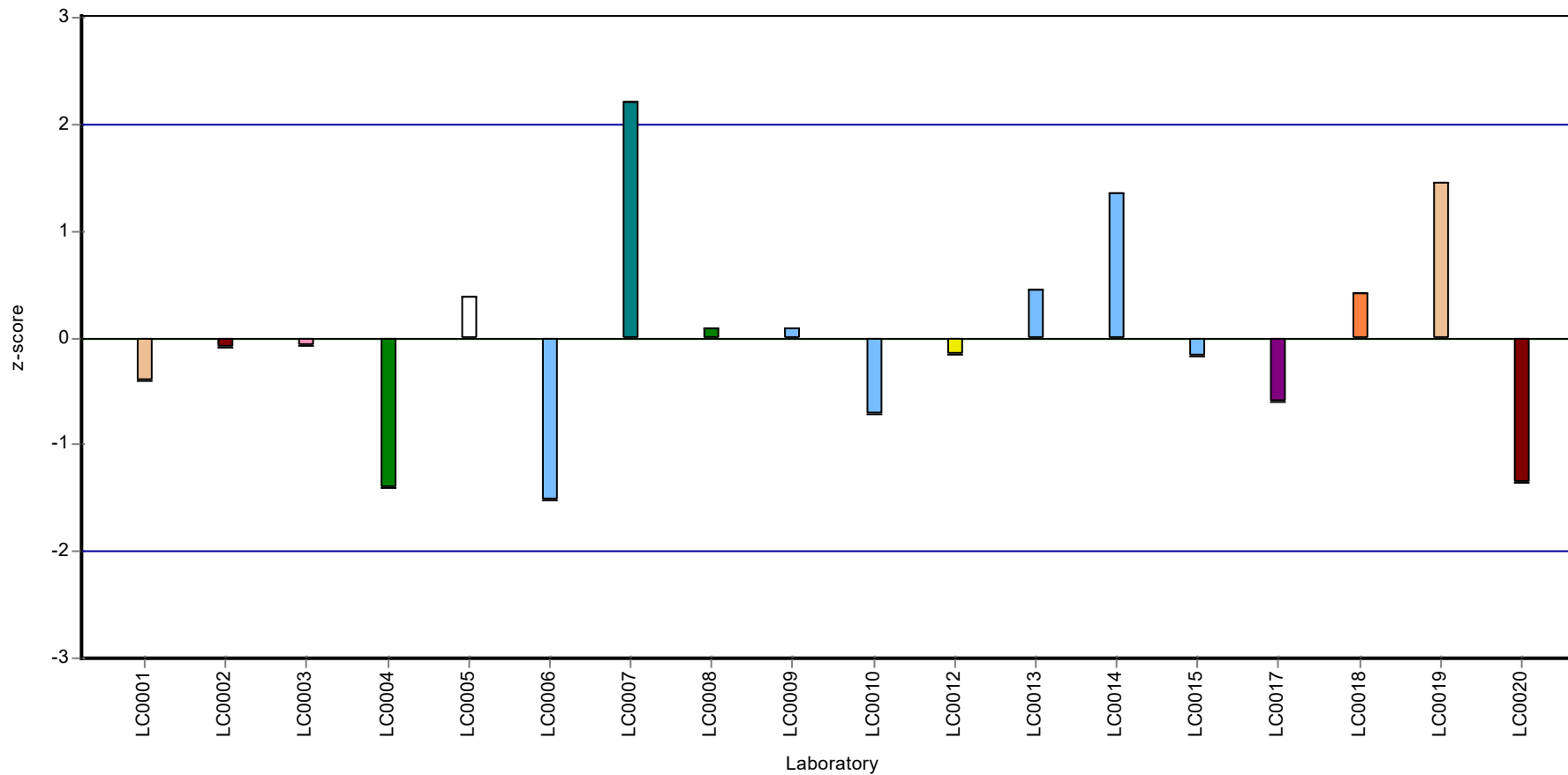
Results



Recovery rate



Z-score



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### Sum of m-Xylene and p-Xylene

Unit	µg/tube
Assigned value ± U (k=2)	9.16 ± 0.881
Criterion	1.83 (20 %)
Minimum - Maximum	6.1 - 12.5
Control test value ± U (k=2)	8.5 ± 1.69

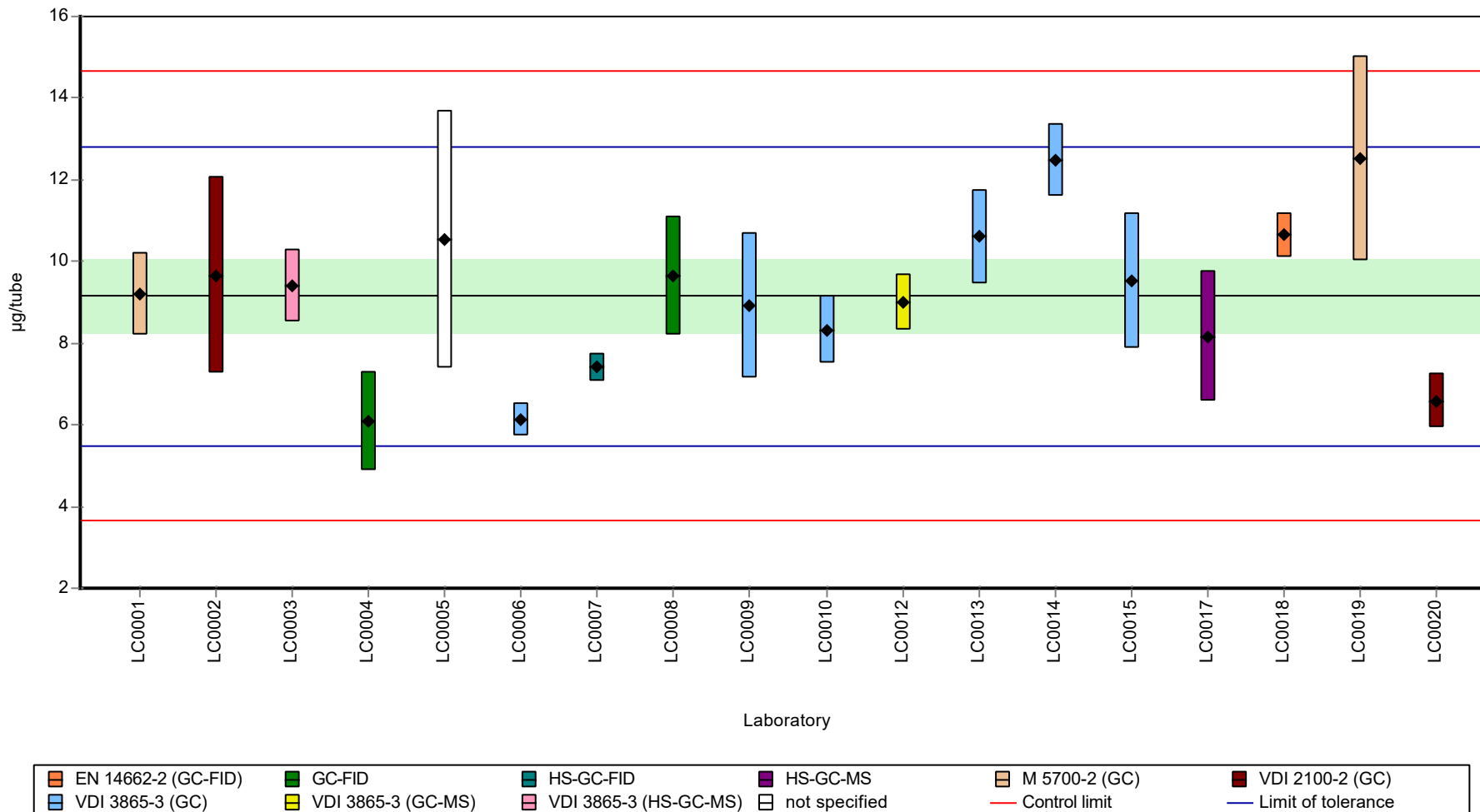
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	9.2	1	100	0.02	
LC0002	9.66	2.41	105	0.27	
LC0003	9.4	0.9	103	0.13	
LC0004	6.1	1.22	66.6	-1.67	
LC0005	10.54	3.16	115	0.75	
LC0006	6.12	0.4	66.8	-1.66	
LC0007	7.41	0.35	80.9	-0.95	
LC0008	9.65	1.45	105	0.27	
LC0009	8.91	1.78	97.3	-0.14	
LC0010	8.32	0.832	90.8	-0.46	
LC0011	-	-	-	-	
LC0012	9.01	0.69	98.4	-0.08	
LC0013	10.6	1.15	116	0.79	
LC0014	12.49	0.89	136	1.82	
LC0015	9.53	1.668	104	0.2	
LC0017	8.16	1.6	89.1	-0.55	
LC0018	10.639	0.56	116	0.81	
LC0019	12.53	2.51	137	1.84	
LC0020	6.59	0.66	72	-1.4	

#### Characteristics of parameter

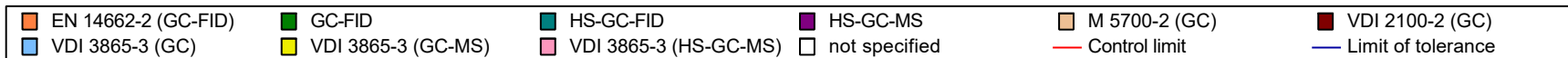
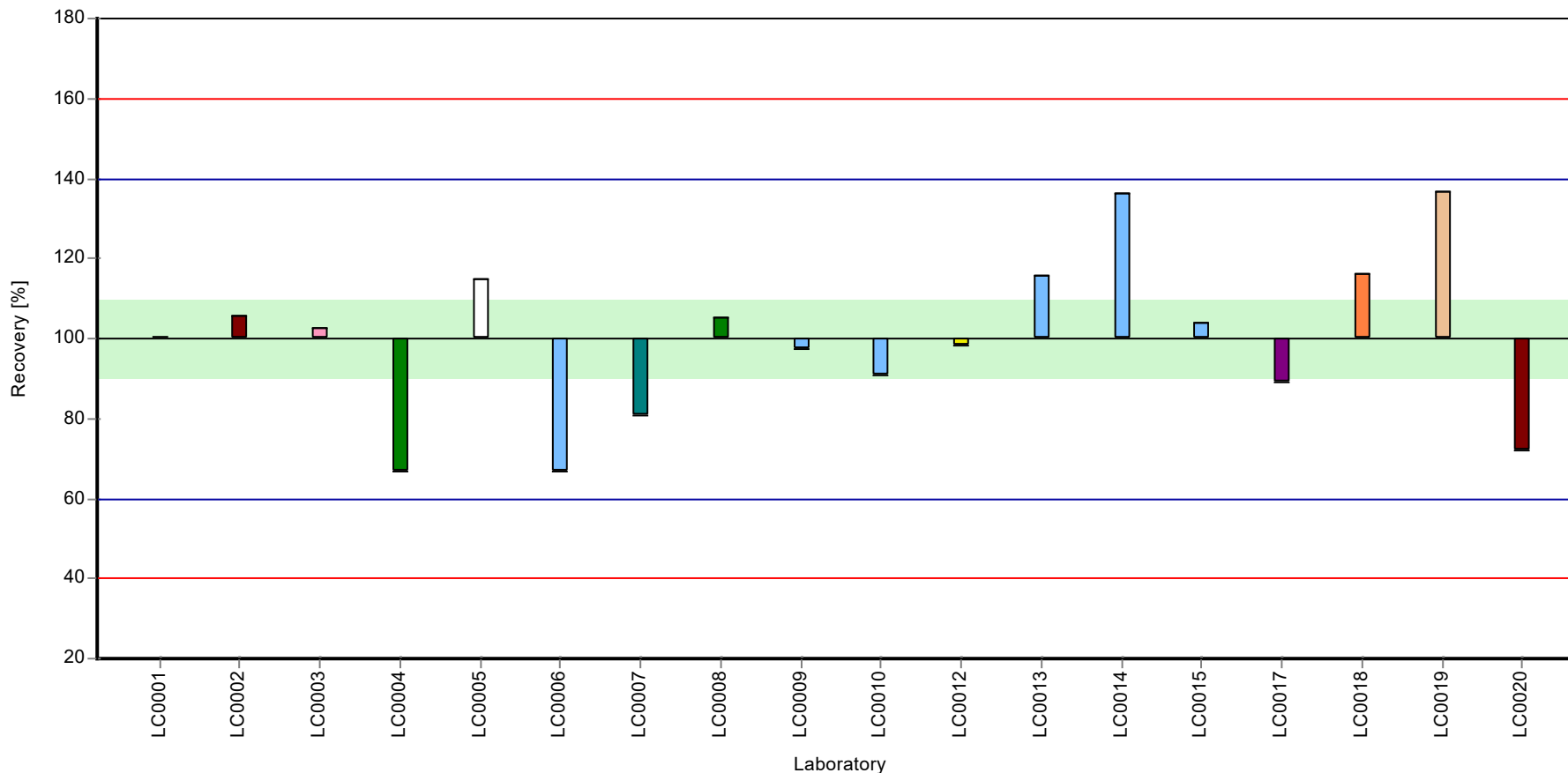
	all results	without outliers	Unit
Mean ± CI (99%)	9.16 ± 1.32	9.16 ± 1.32	µg/tube
Minimum	6.1	6.1	µg/tube
Maximum	12.5	12.5	µg/tube
Standard deviation	1.87	1.87	µg/tube
rel. standard deviation	20.4	20.4	%
n	18	18	-

Graphical presentation of results

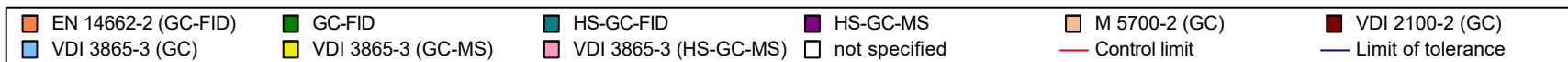
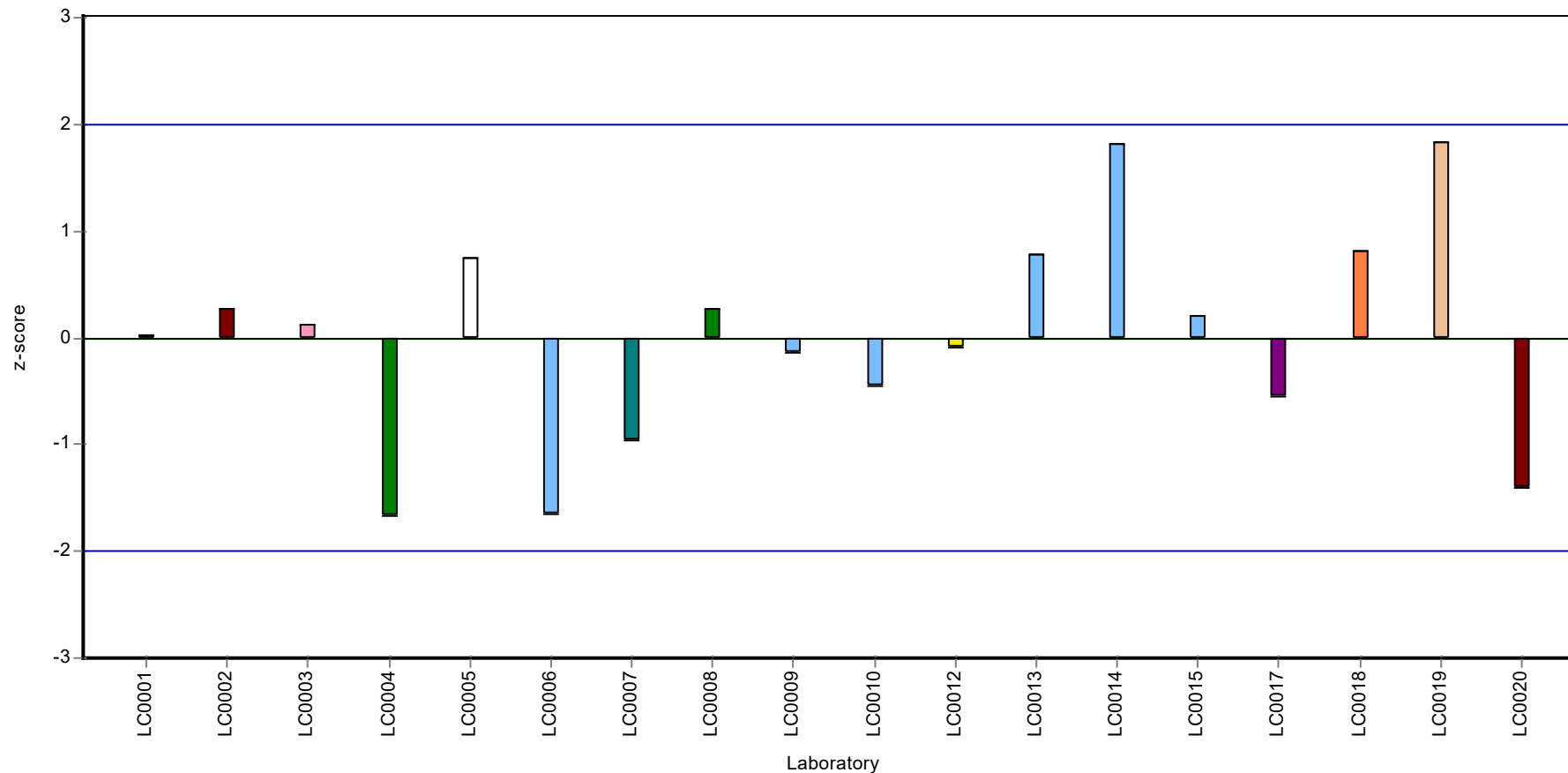
Results



Recovery rate



**Z-score**



## Parameter oriented report

### CL07 - CHC

#### Tetrachloroethene

Unit	µg/tube
Assigned value ± U (k=2)	5.29 ± 0.779
Criterion	1.53 (29 %)
Minimum - Maximum	1.3 - 8.22
Control test value ± U (k=2)	4.23 ± 0.843

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.1	0.88	134	1.18	
LC0002	8.22	2.06	155	1.91	
LC0003	4.3	0.4	81.3	-0.65	
LC0004	1.3	0.26	24.6	-2.6	
LC0006	4.23	0.4	79.9	-0.69	
LC0007	5.75	0.33	109	0.3	
LC0009	4.78	0.96	90.3	-0.33	
LC0010	6.63	0.53	125	0.87	
LC0011	-	-	-	-	
LC0012	5.52	1.21	104	0.15	
LC0013	5.4	0.65	102	0.07	
LC0014	5.71	0.47	108	0.27	
LC0015	4.245	0.34	80.2	-0.68	
LC0016	5.21	1.3	98.5	-0.05	
LC0017	5.19	1	98.1	-0.07	
LC0019	4.36	0.87	82.4	-0.61	
LC0020	6.72	0.67	127	0.93	

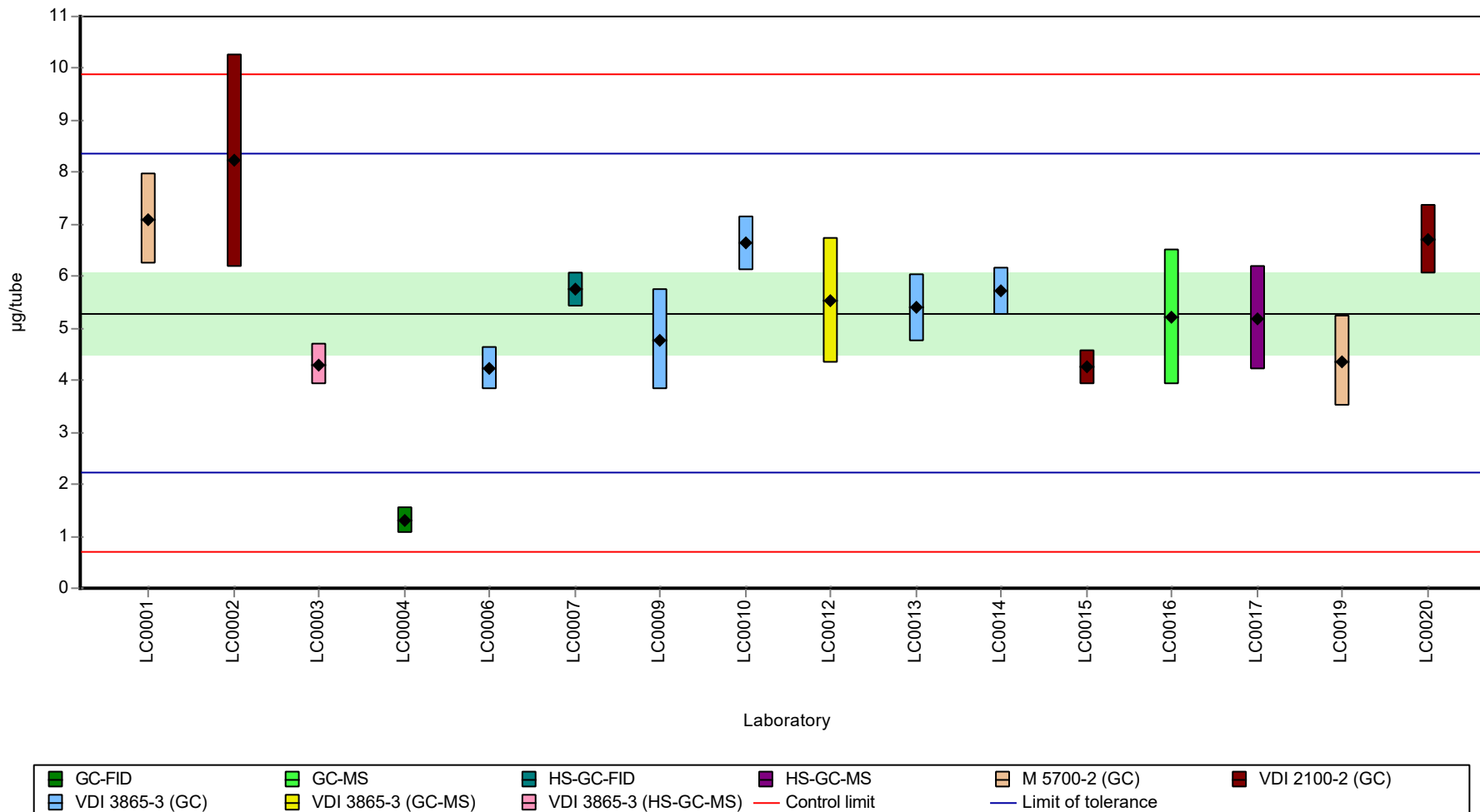
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.29 ± 1.17	5.29 ± 1.17	µg/tube
Minimum	1.3	1.3	µg/tube
Maximum	8.22	8.22	µg/tube
Standard deviation	1.56	1.56	µg/tube
rel. standard deviation	29.4	29.4	%
n	16	16	-

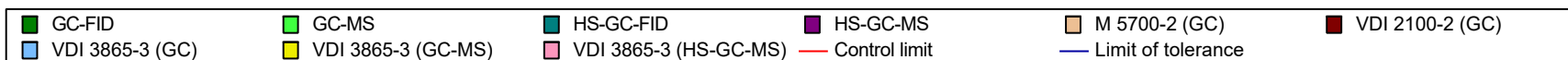
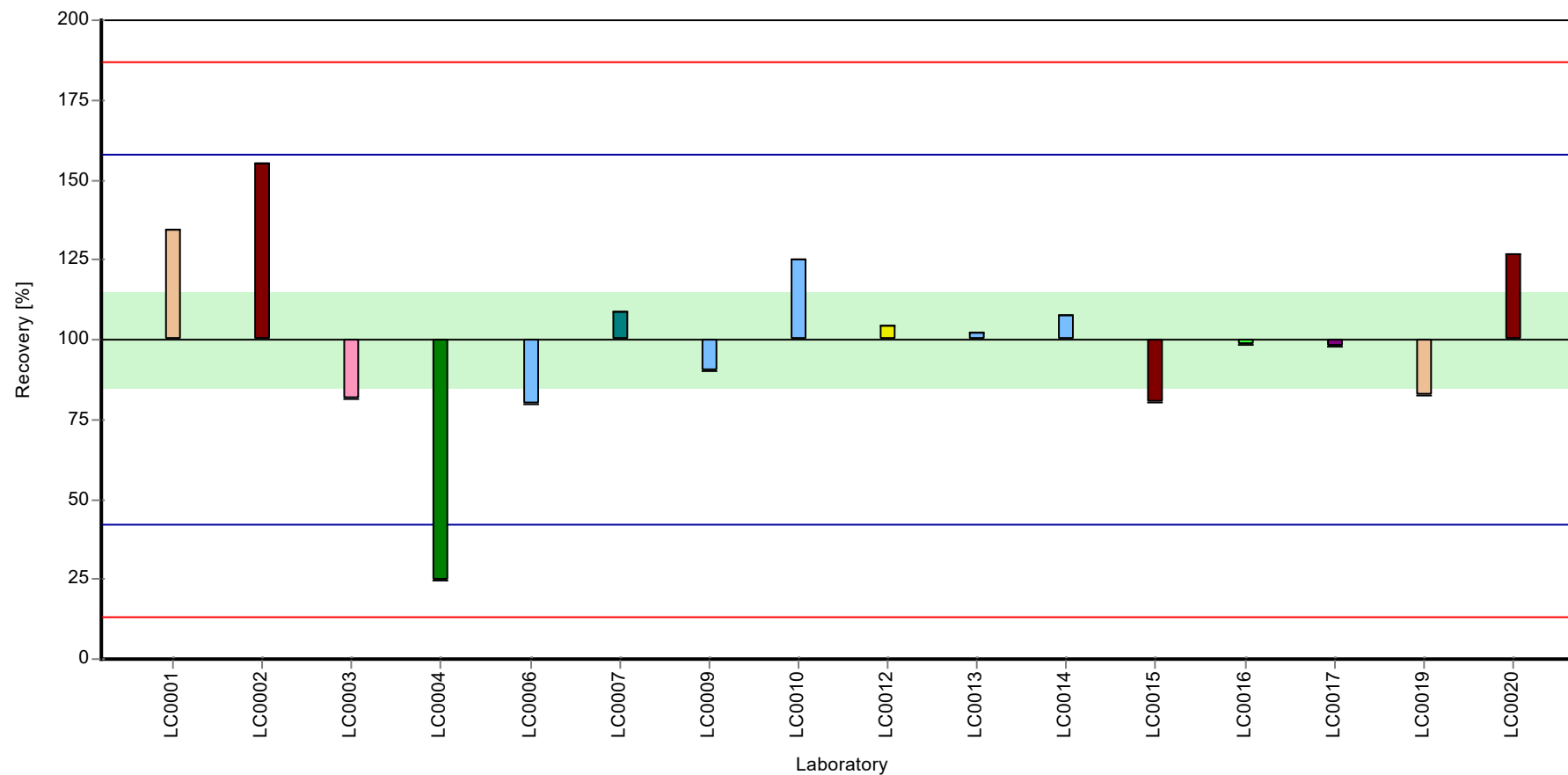


Graphical presentation of results

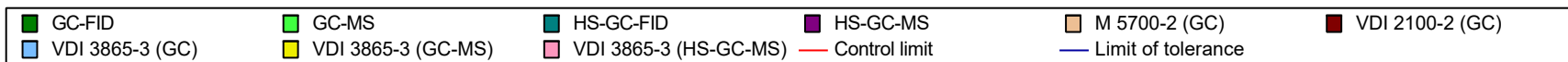
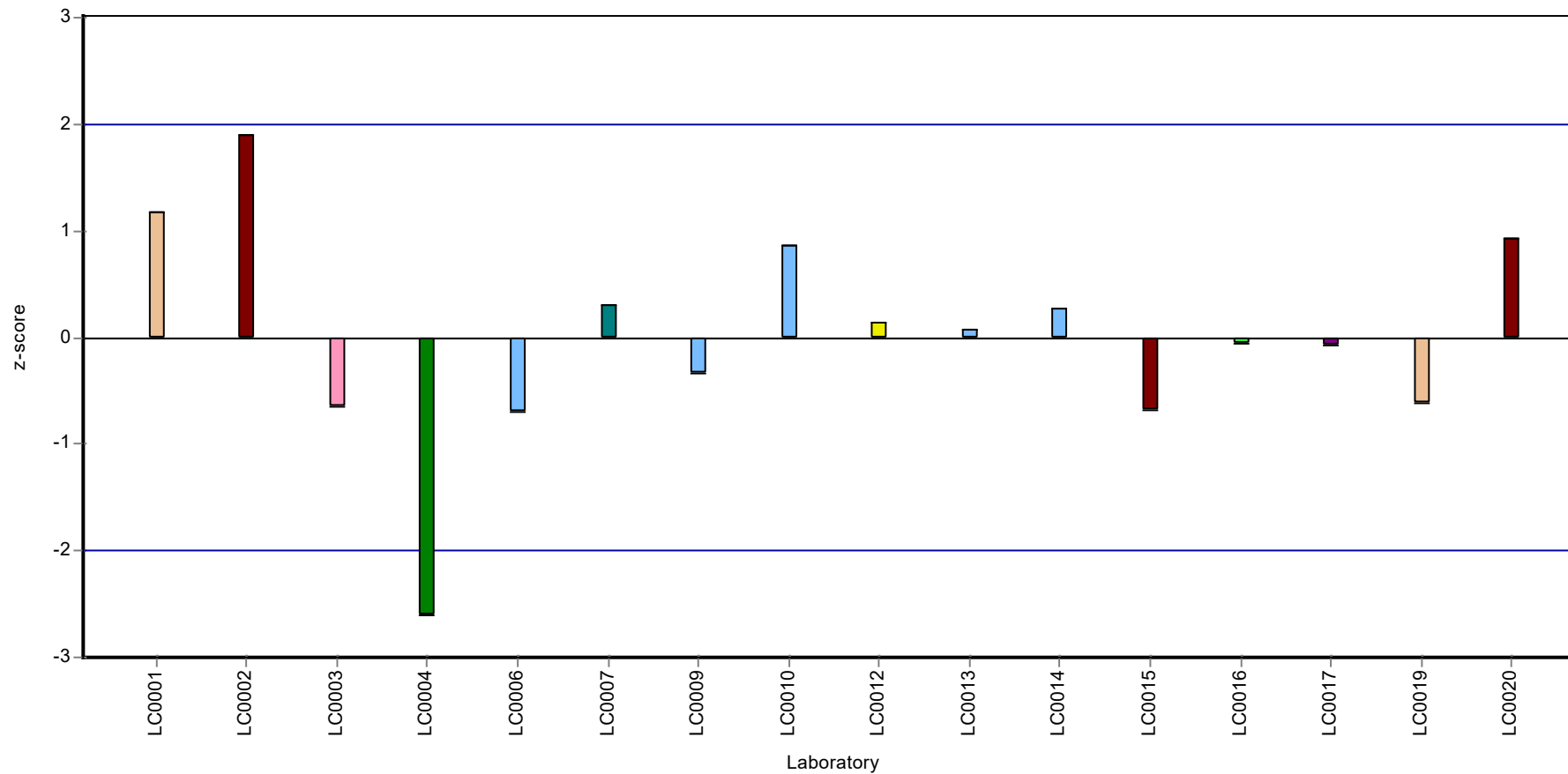
Results



Recovery rate



**Z-score**



## Parameter oriented report

### CL07 - CHC

#### Tetrachloromethane

Unit	µg/tube
Assigned value ± U (k=2)	7.67 ± 0.559
Criterion	0.997 (13 %)
Minimum - Maximum	5.67 - 9.49
Control test value ± U (k=2)	7.25 ± 1.53

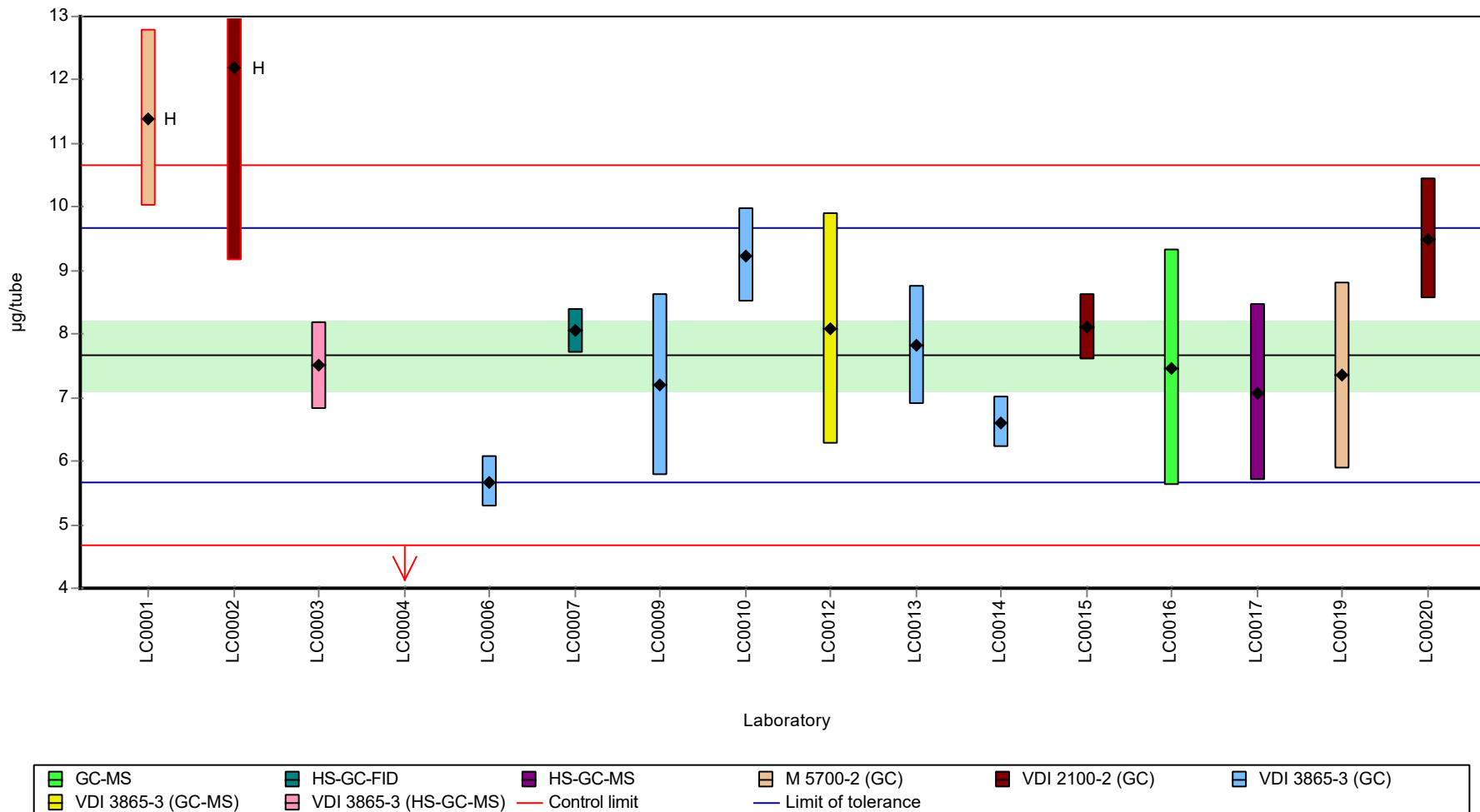
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	11.4	1.4	149	3.74	H
LC0002	12.2	3.06	159	4.55	H
LC0003	7.5	0.7	97.8	-0.17	
LC0004	2.2	0.66	28.7	-5.49	H
LC0006	5.67	0.4	74	-2	
LC0007	8.05	0.35	105	0.38	
LC0009	7.2	1.44	93.9	-0.47	
LC0010	9.24	0.739	121	1.58	
LC0011	-	-	-	-	
LC0012	8.09	1.82	106	0.42	
LC0013	7.82	0.94	102	0.15	
LC0014	6.61	0.41	86.2	-1.06	
LC0015	8.105	0.527	106	0.44	
LC0016	7.47	1.87	97.4	-0.2	
LC0017	7.08	1.4	92.3	-0.59	
LC0019	7.35	1.47	95.9	-0.32	
LC0020	9.49	0.95	124	1.83	

#### Characteristics of parameter

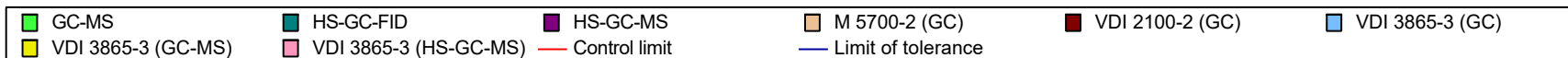
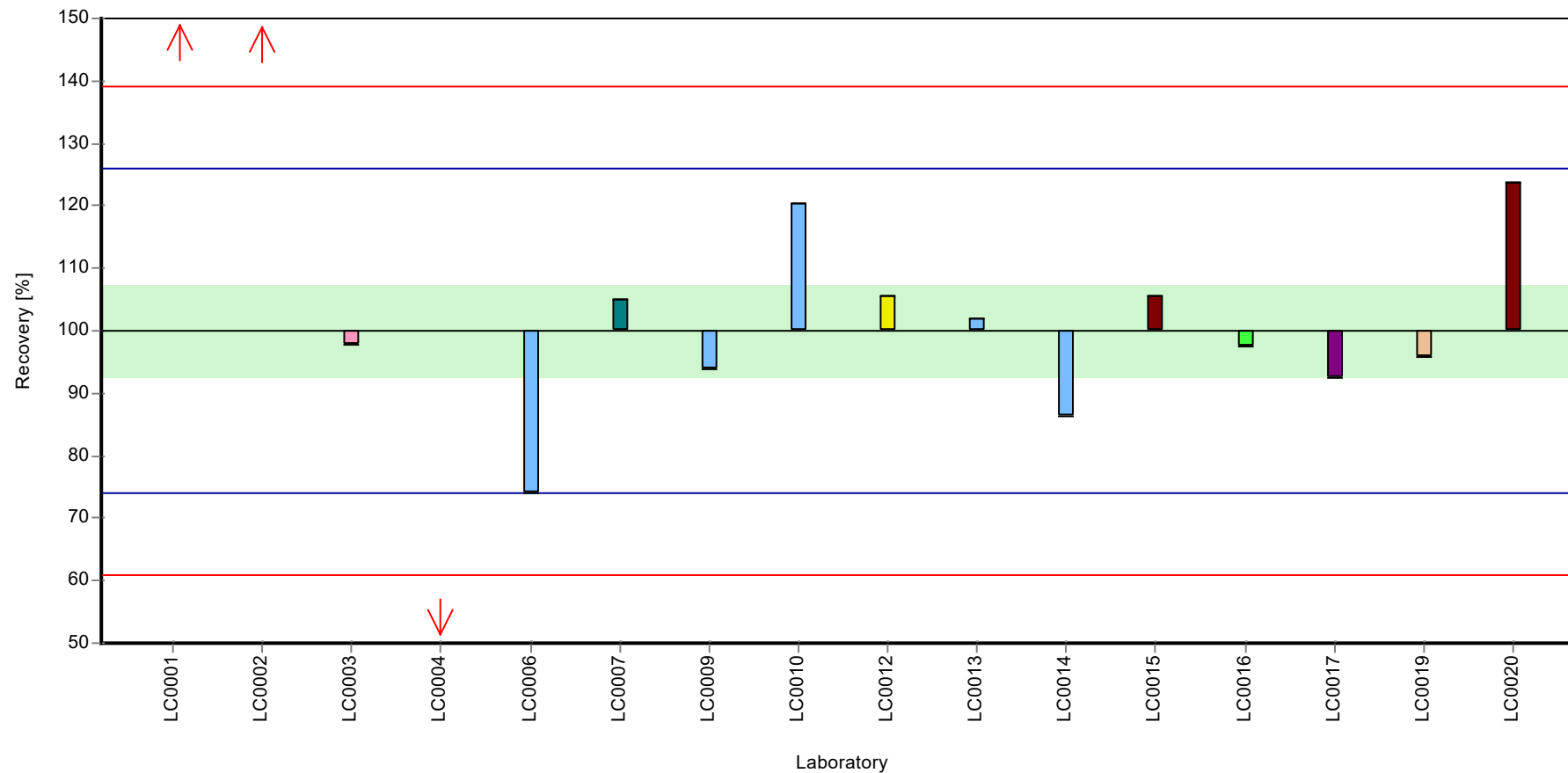
	all results	without outliers	Unit
Mean ± CI (99%)	7.84 ± 1.69	7.67 ± 0.838	µg/tube
Minimum	2.2	5.67	µg/tube
Maximum	12.2	9.49	µg/tube
Standard deviation	2.25	1.01	µg/tube
rel. standard deviation	28.7	13.1	%
n	16	13	-

Graphical presentation of results

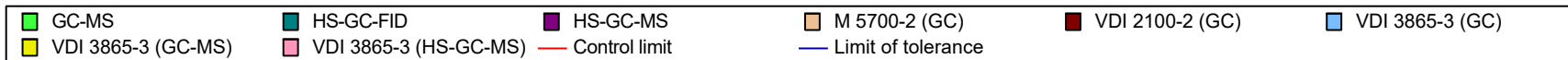
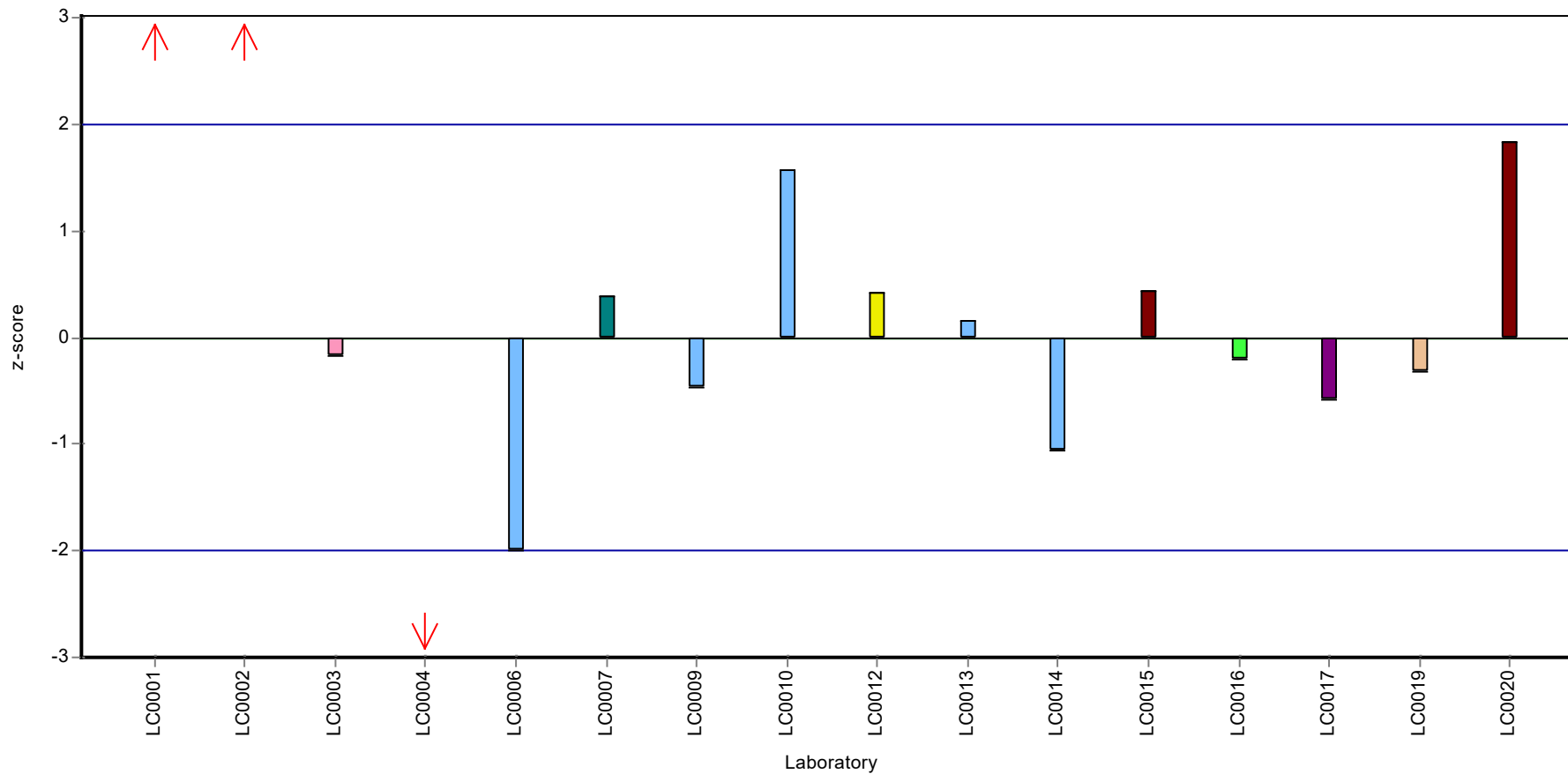
Results



Recovery rate



Z-score



## Parameter oriented report

### BL08 - BTEX & C5-C10

#### Toluene

Unit	µg/tube
Assigned value ± U (k=2)	5.05 ± 0.409
Criterion	0.858 (17 %)
Minimum - Maximum	3.4 - 6.52
Control test value ± U (k=2)	6.08 ± 1.39

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.4	0.93	107	0.41	
LC0002	6.16	1.54	122	1.3	
LC0003	4.6	0.5	91.2	-0.52	
LC0004	3.4	0.68	67.4	-1.92	
LC0005	6.12	1.84	121	1.25	
LC0006	4.45	0.4	88.2	-0.69	
LC0007	3.51	0.23	69.6	-1.79	
LC0008	5.54	0.83	110	0.57	
LC0009	4.98	1	98.7	-0.08	
LC0010	4.9	0.392	97.1	-0.17	
LC0011	-	-	-	-	
LC0012	5.04	0.34	99.9	-0.01	
LC0013	5.32	0.56	105	0.32	
LC0014	6.52	0.34	129	1.72	
LC0015	4.994	0.3	99	-0.06	
LC0017	4.96	0.99	98.3	-0.1	
LC0018	5.524	0.26	109	0.56	
LC0019	8.27	1.65	164	3.76	H
LC0020	4.37	0.44	86.6	-0.79	

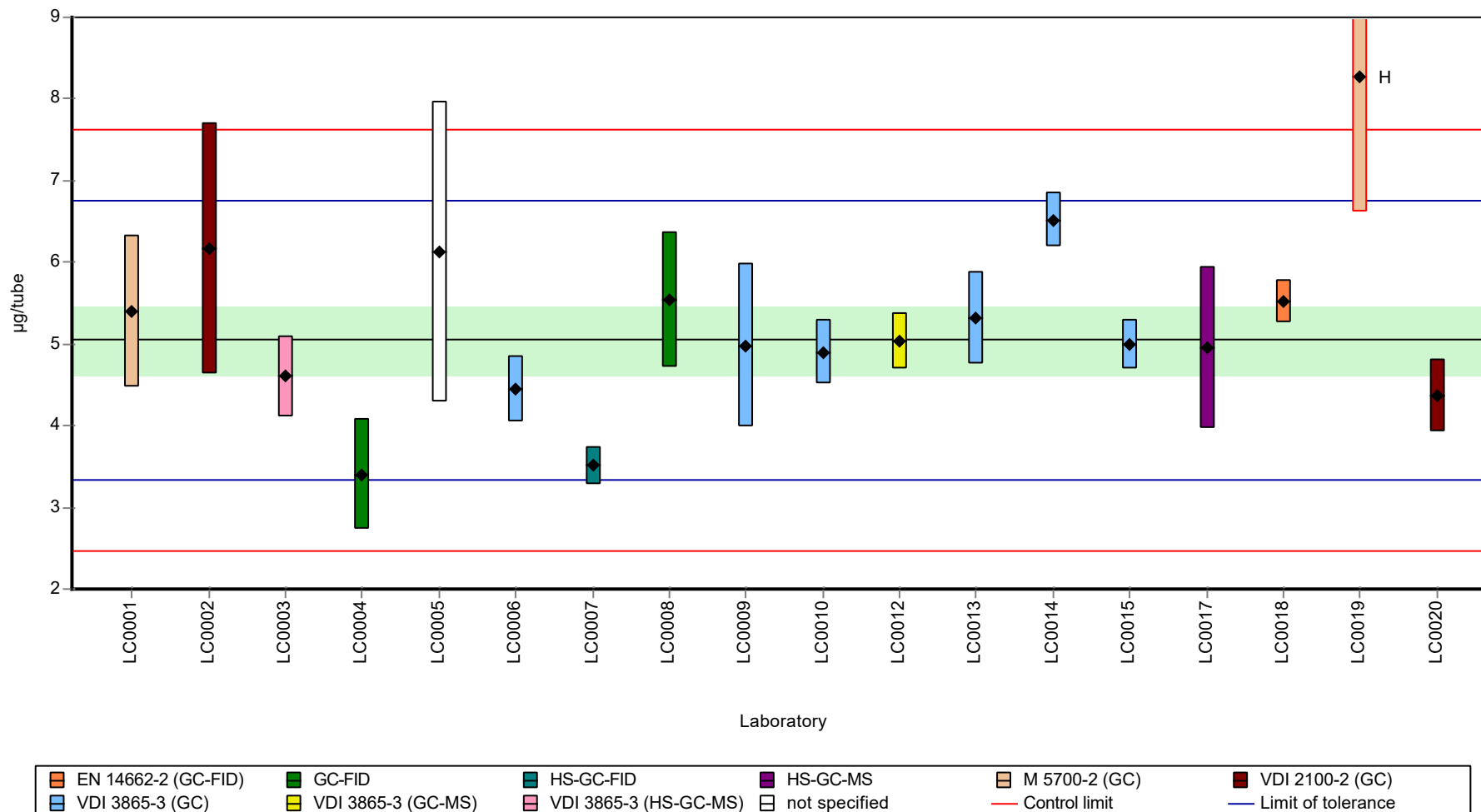
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.23 ± 0.789	5.05 ± 0.613	µg/tube
Minimum	3.4	3.4	µg/tube
Maximum	8.27	6.52	µg/tube
Standard deviation	1.12	0.842	µg/tube
rel. standard deviation	21.4	16.7	%
n	18	17	-

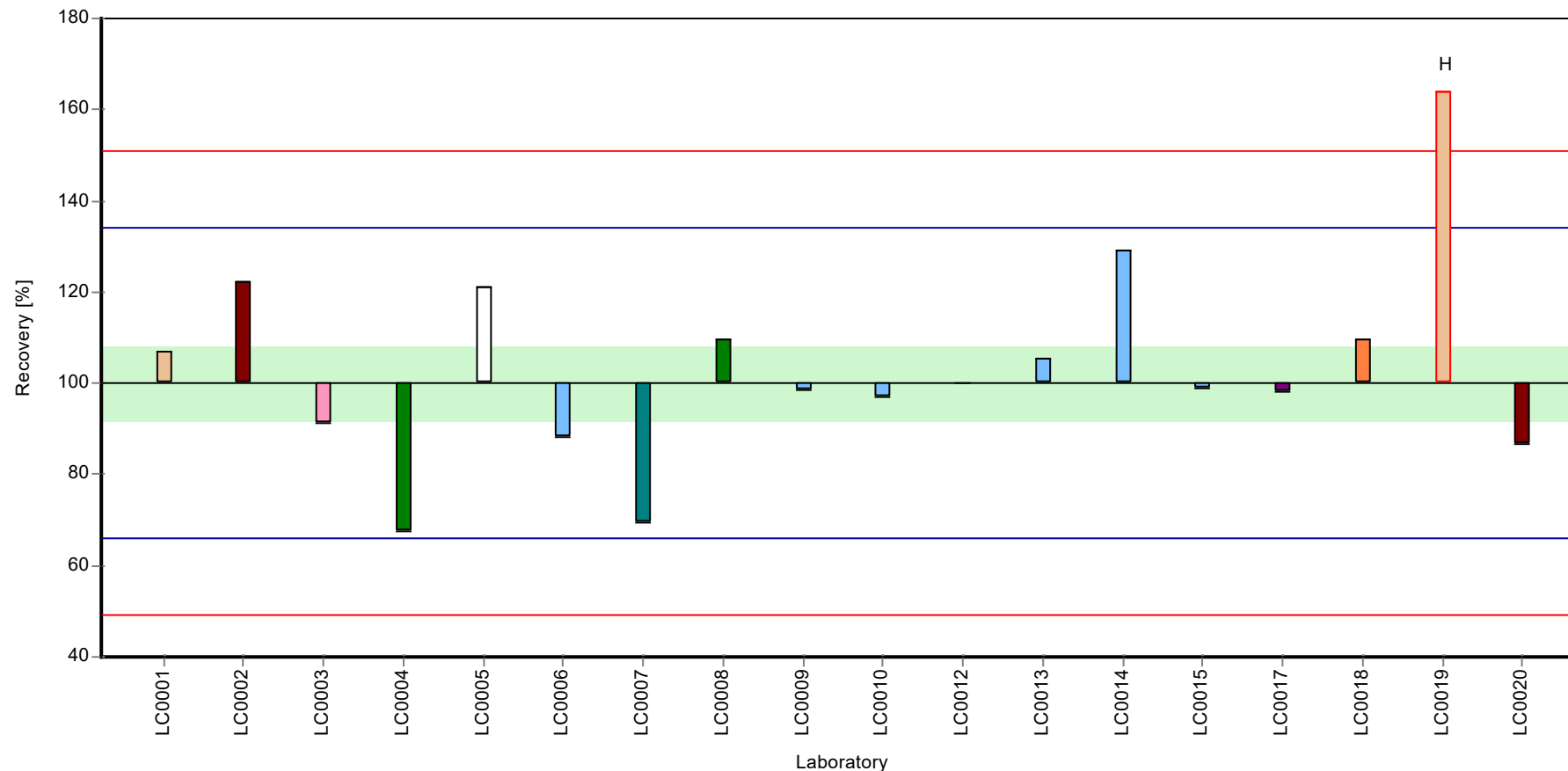


Graphical presentation of results

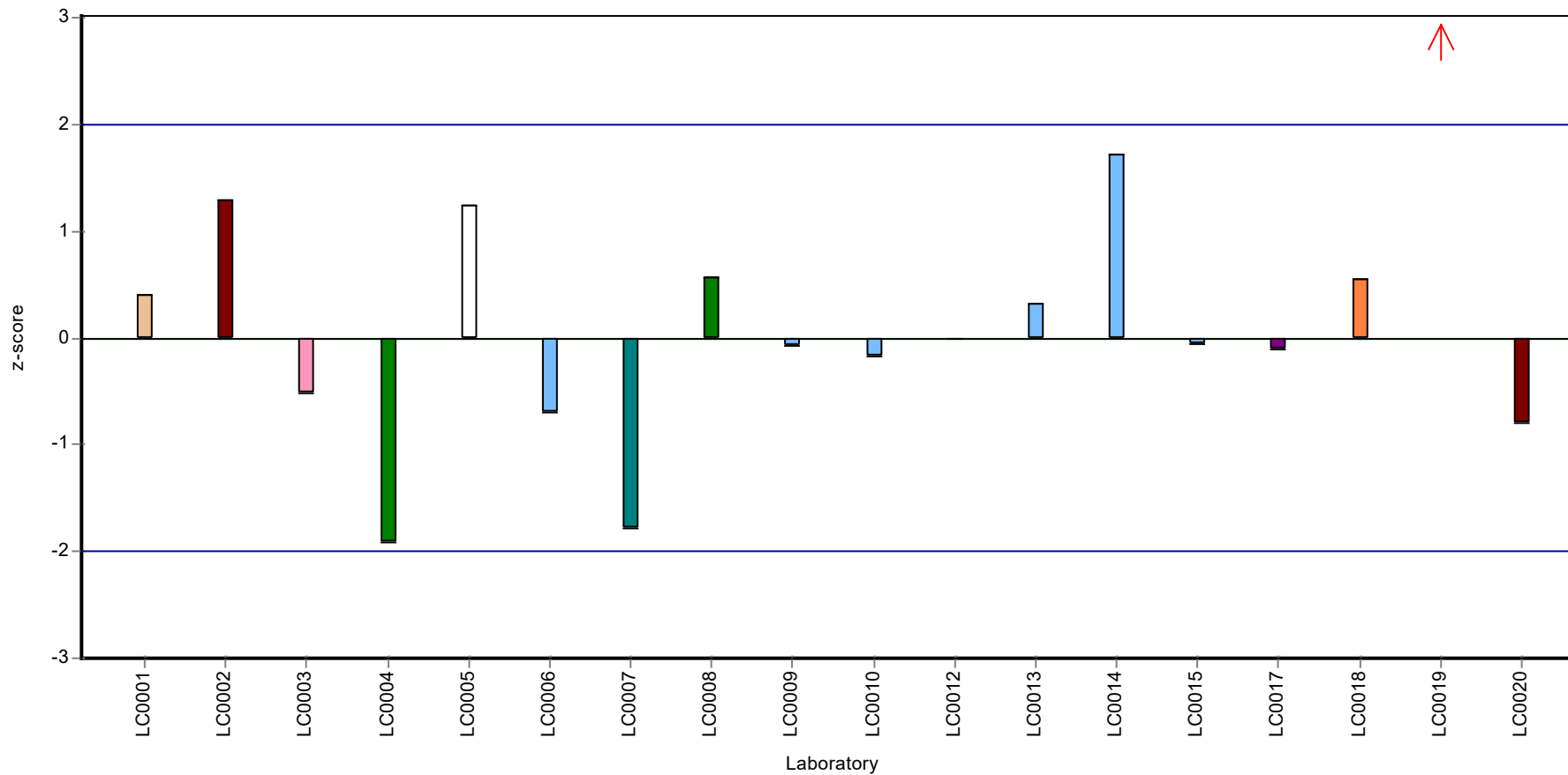
Results



Recovery rate



Z-score



## Parameter oriented report

### CL07 - CHC

#### trans-1,2-Dichloroethene

Unit	µg/tube
Assigned value ± U (k=2)	4.55 ± 0.764
Criterion	1.5 (33 %)
Minimum - Maximum	1.77 - 8.2
Control test value ± U (k=2)	3.95 ± 0.788

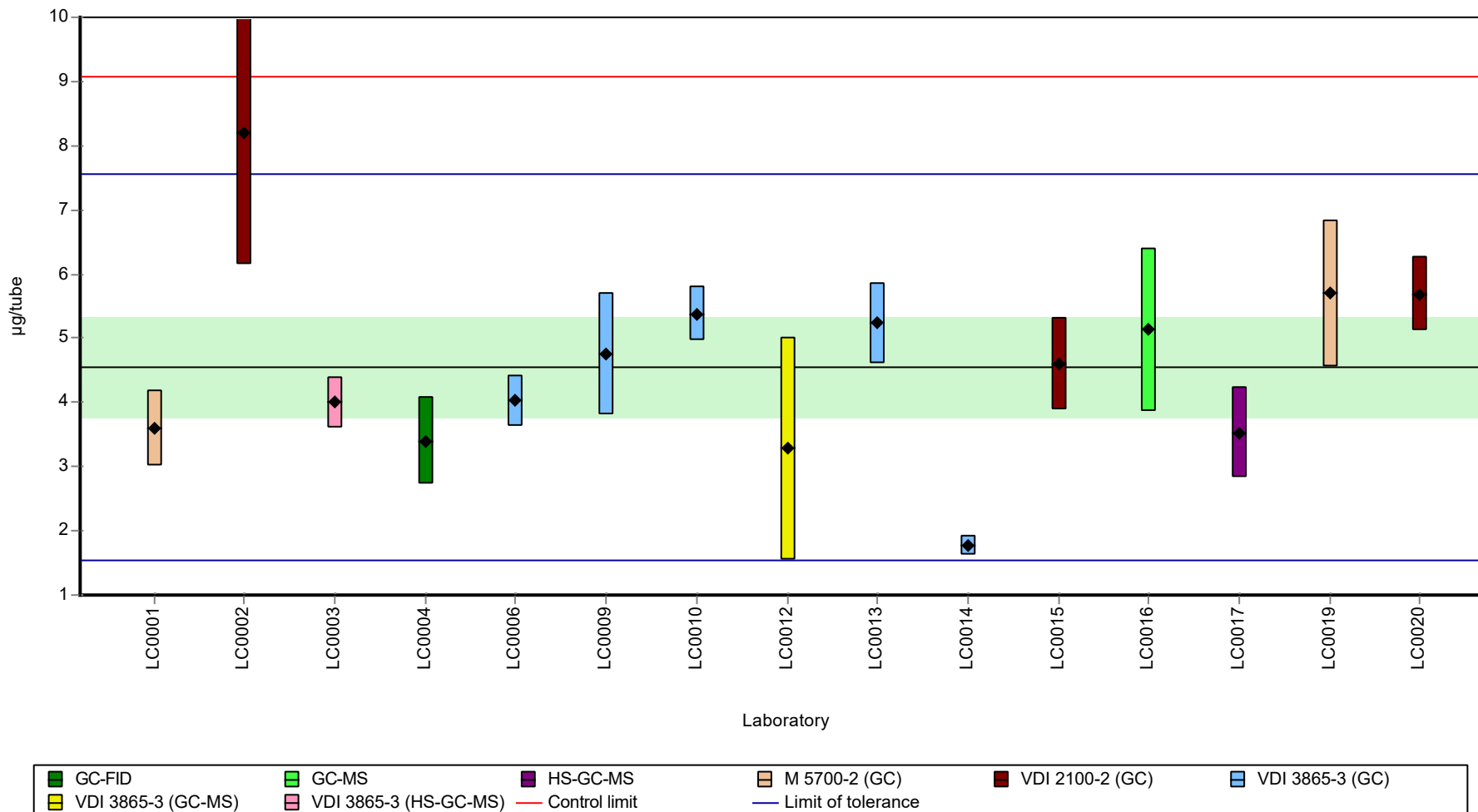
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.6	0.59	79.1	-0.64	
LC0002	8.2	2.05	180	2.43	
LC0003	4	0.4	87.8	-0.37	
LC0004	3.4	0.68	74.7	-0.77	
LC0006	4.03	0.4	88.5	-0.35	
LC0007	-	-	-	-	
LC0009	4.76	0.95	105	0.14	
LC0010	5.38	0.43	118	0.55	
LC0011	-	-	-	-	
LC0012	3.28	1.74	72	-0.85	
LC0013	5.24	0.63	115	0.46	
LC0014	1.77	0.15	38.9	-1.85	
LC0015	4.601	0.713	101	0.03	
LC0016	5.13	1.28	113	0.38	
LC0017	3.53	0.71	77.5	-0.68	
LC0019	5.7	1.14	125	0.76	
LC0020	5.69	0.57	125	0.76	

#### Characteristics of parameter

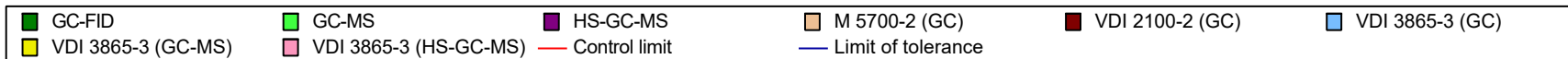
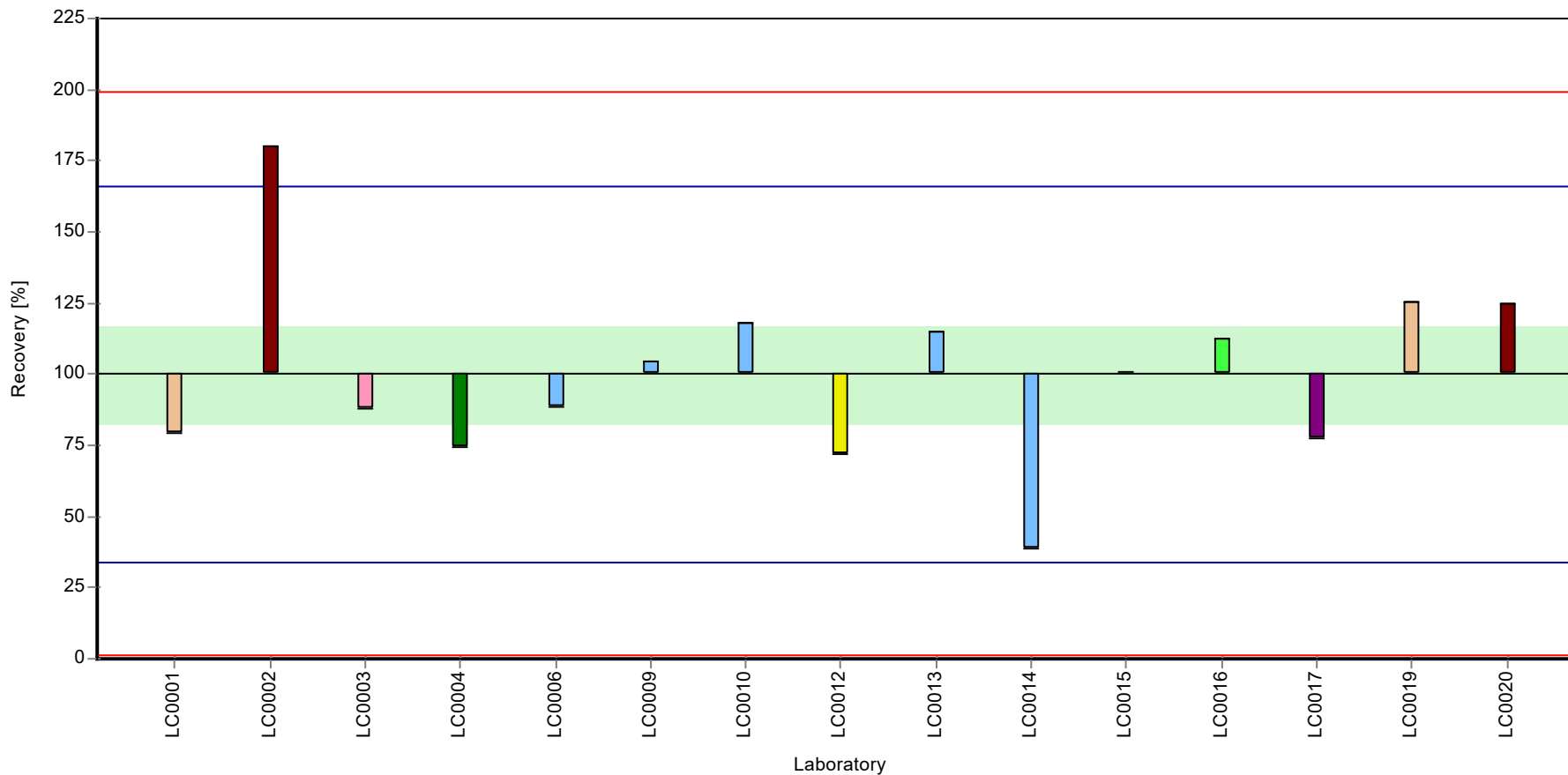
	all results	without outliers	Unit
Mean ± CI (99%)	4.55 ± 1.15	4.55 ± 1.15	µg/tube
Minimum	1.77	1.77	µg/tube
Maximum	8.2	8.2	µg/tube
Standard deviation	1.48	1.48	µg/tube
rel. standard deviation	32.5	32.5	%
n	15	15	-

Graphical presentation of results

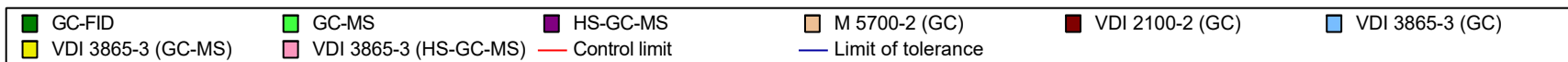
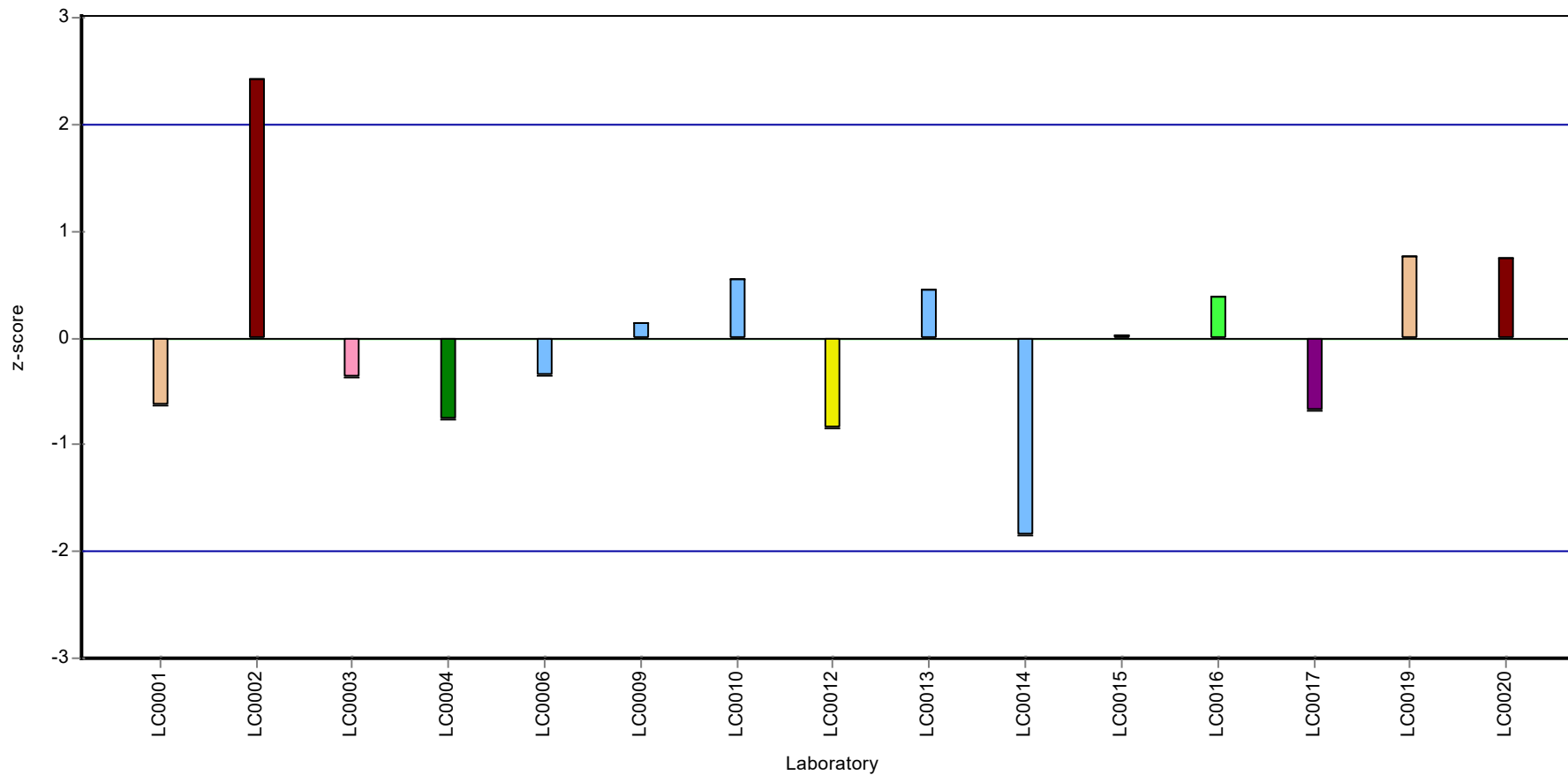
Results



Recovery rate



**Z-score**



## Parameter oriented report

### CL07 - CHC

#### Trichloroethene

Unit	µg/tube
Assigned value ± U (k=2)	5.84 ± 0.374
Criterion	0.934 (16 %)
Minimum - Maximum	3.44 - 7
Control test value ± U (k=2)	4.43 ± 0.882

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7	0.74	120	1.25	
LC0002	8.84	2.21	151	3.22	H
LC0003	4.7	0.5	80.5	-1.22	
LC0004	1.4	0.28	24	-4.75	H
LC0006	4.88	0.4	83.6	-1.02	
LC0007	5.47	0.34	93.7	-0.39	
LC0009	5.6	1.12	96	-0.25	
LC0010	6.45	0.516	111	0.66	
LC0011	-	-	-	-	
LC0012	5.93	1.29	102	0.1	
LC0013	5.85	0.7	100	0.02	
LC0014	6.14	0.81	105	0.33	
LC0015	5.666	0.68	97.1	-0.18	
LC0016	5.67	1.42	97.2	-0.18	
LC0017	3.44	0.69	58.9	-2.57	
LC0019	5.62	1.12	96.3	-0.23	
LC0020	6.89	0.69	118	1.13	

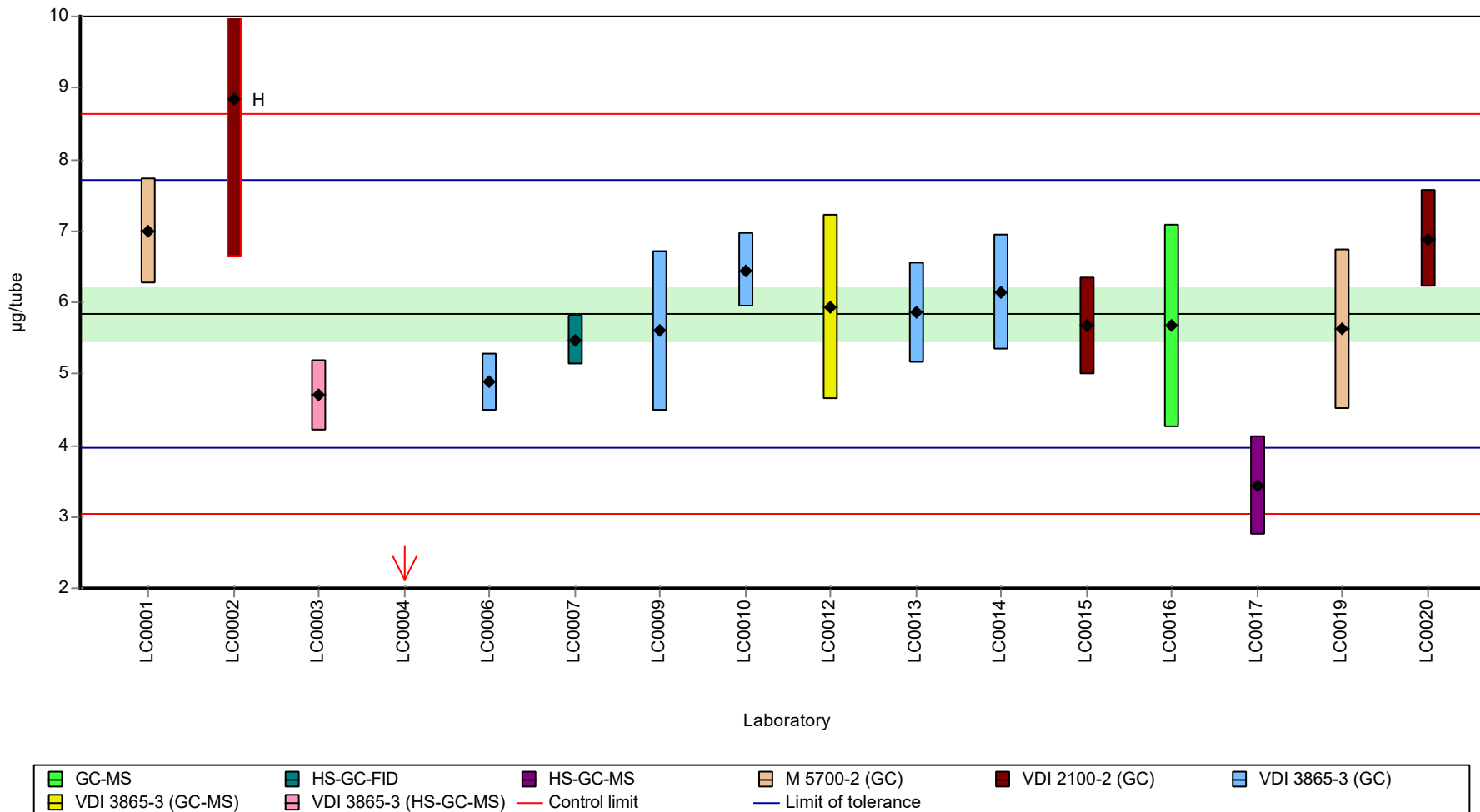
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.6 ± 1.21	5.66 ± 0.73	µg/tube
Minimum	1.4	3.44	µg/tube
Maximum	8.84	7	µg/tube
Standard deviation	1.61	0.91	µg/tube
rel. standard deviation	28.8	16.1	%
n	16	14	-

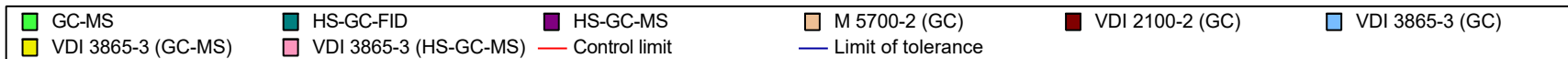
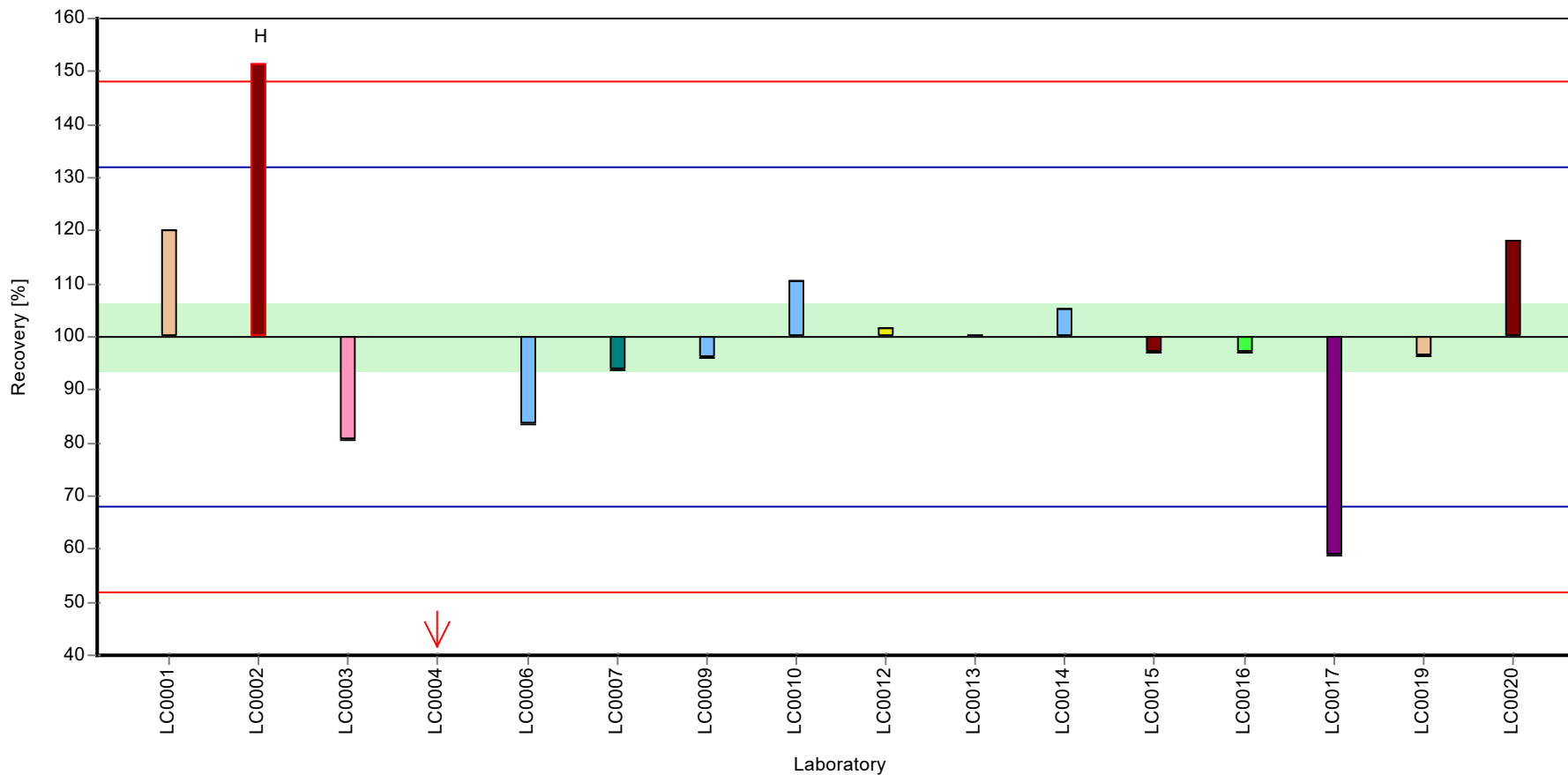


Graphical presentation of results

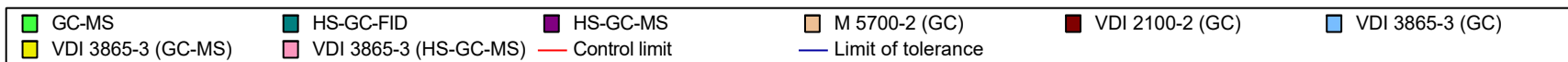
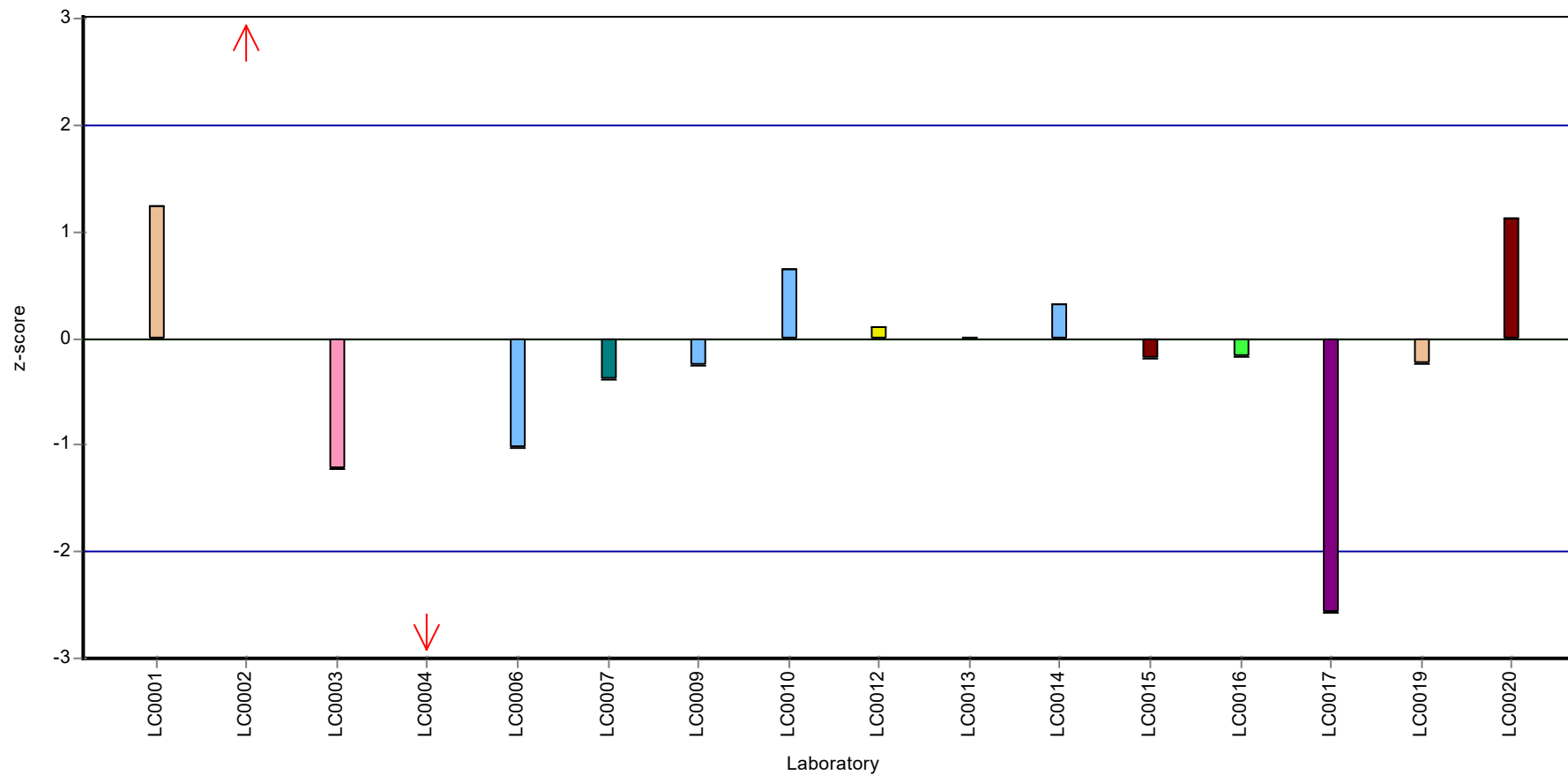
Results



Recovery rate



**Z-score**



## Parameter oriented report

### CL07 - CHC

#### Trichloromethane

Unit	µg/tube
Assigned value ± U (k=2)	5.83 ± 0.324
Criterion	0.583 (10 %)
Minimum - Maximum	5.01 - 6.86
Control test value ± U (k=2)	5.09 ± 1.37

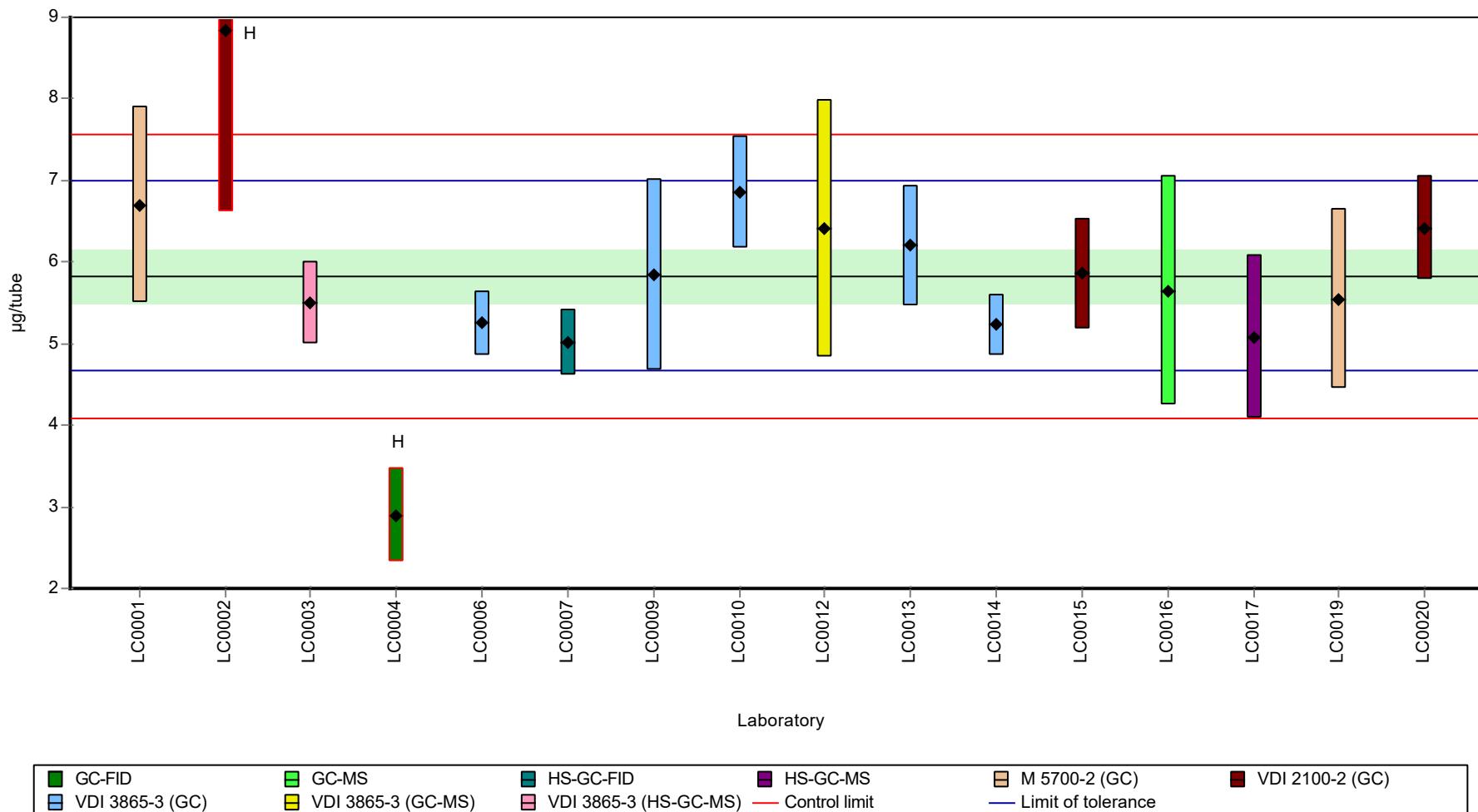
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.7	1.2	115	1.5	
LC0002	8.83	2.21	152	5.16	H
LC0003	5.5	0.5	94.4	-0.56	
LC0004	2.9	0.58	49.8	-5.02	H
LC0006	5.25	0.4	90.1	-0.99	
LC0007	5.01	0.41	86	-1.4	
LC0009	5.84	1.17	100	0.02	
LC0010	6.86	0.686	118	1.78	
LC0011	-	-	-	-	
LC0012	6.41	1.57	110	1	
LC0013	6.2	0.74	106	0.64	
LC0014	5.23	0.38	89.8	-1.02	
LC0015	5.858	0.674	101	0.06	
LC0016	5.65	1.41	97	-0.3	
LC0017	5.08	1	87.2	-1.28	
LC0019	5.55	1.11	95.3	-0.47	
LC0020	6.42	0.64	110	1.02	

#### Characteristics of parameter

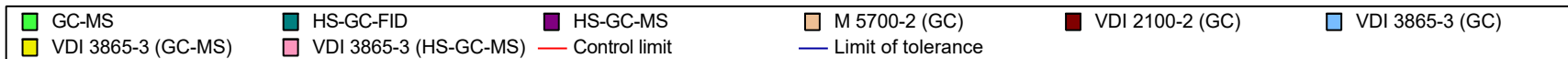
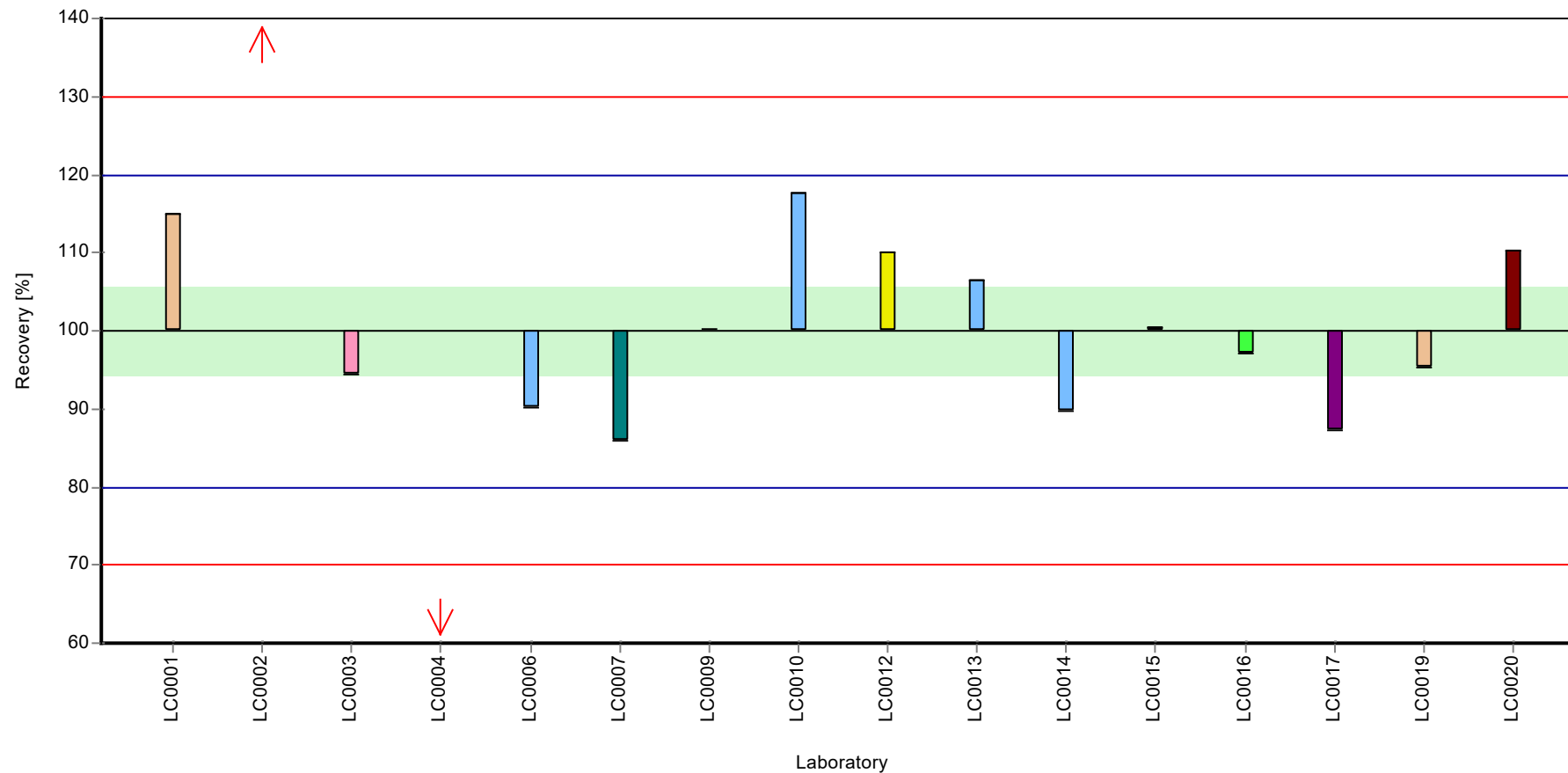
	all results	without outliers	Unit
Mean ± CI (99%)	5.83 ± 0.916	5.83 ± 0.487	µg/tube
Minimum	2.9	5.01	µg/tube
Maximum	8.83	6.86	µg/tube
Standard deviation	1.22	0.607	µg/tube
rel. standard deviation	20.9	10.4 %	
n	16	14	-

Graphical presentation of results

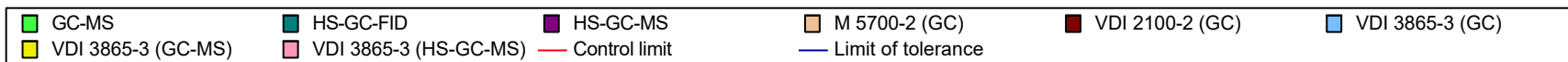
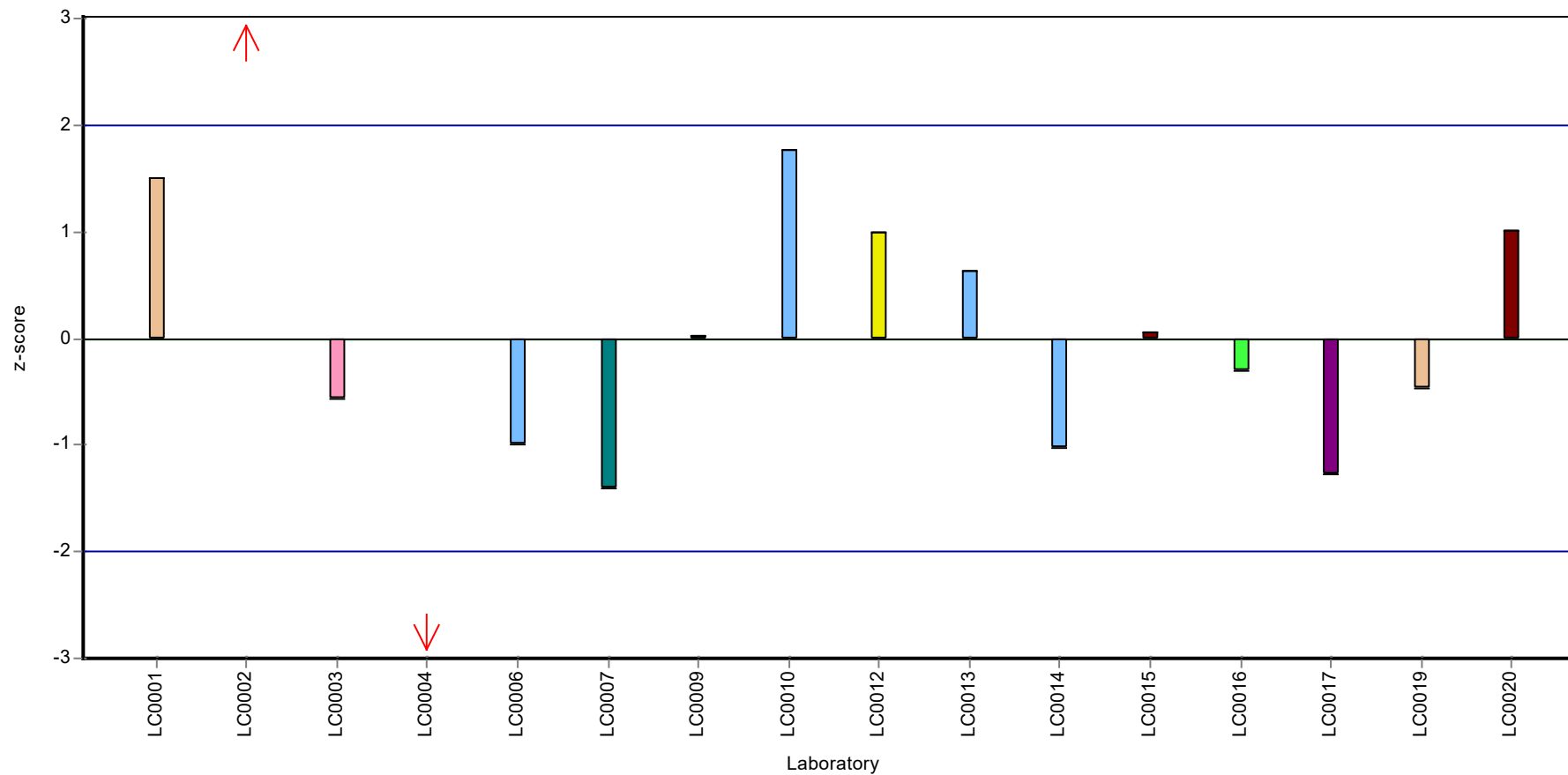
Results



Recovery rate



**Z-score**



## **E8. Labororientierte Auswertung / Laboratory oriented report**

Die Labororientierte Auswertung ist nach dem Laborcode sortiert.

The laboratory oriented report is sorted by laboratory code.

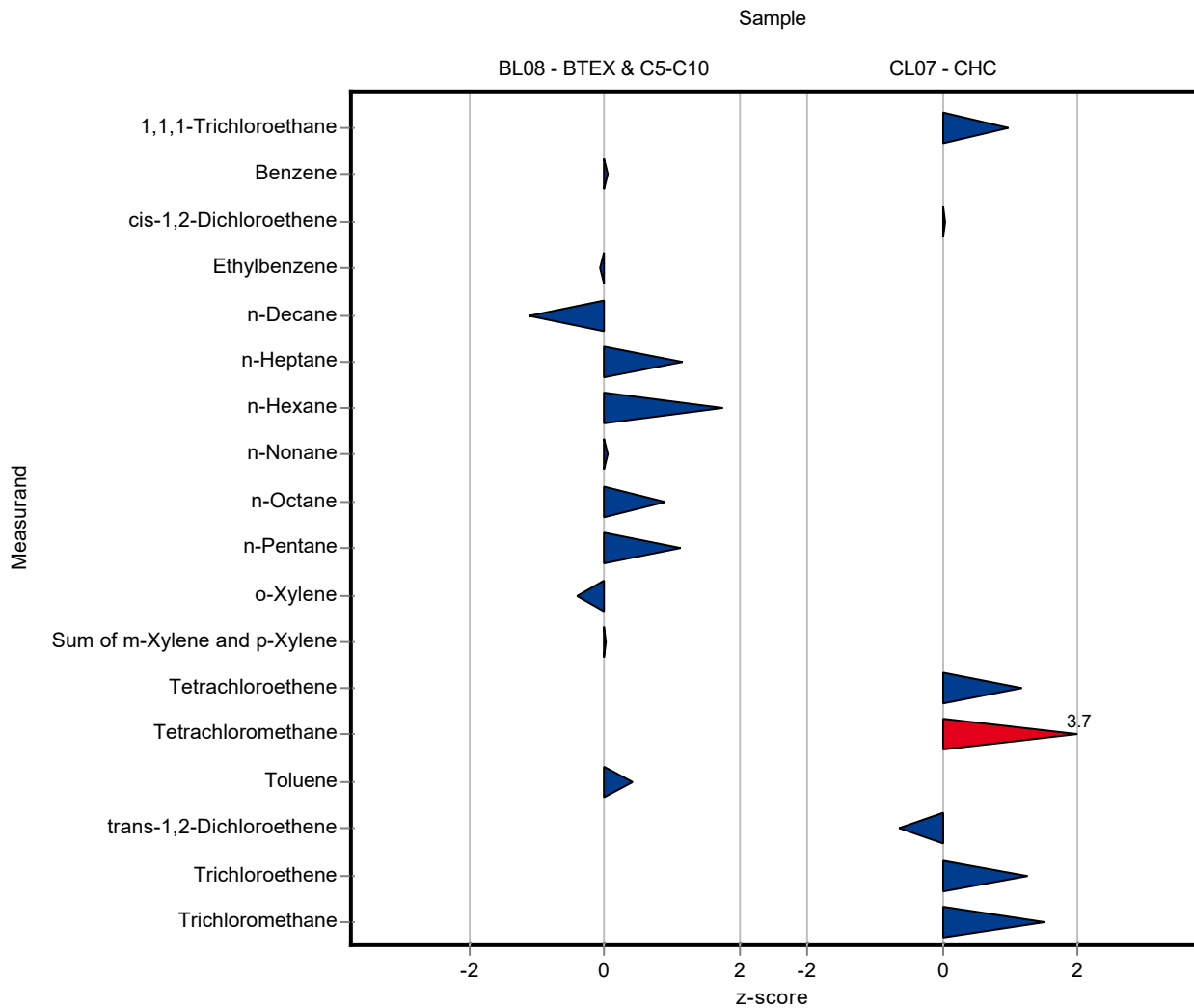


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.7 ± 1.1	0.701	101	0.04
Ethylbenzene	µg/tube	4.87 ± 0.528	4.8 ± 0.84	1.12	98.5	-0.07
n-Decane	µg/tube	2.7 ± 0.356	2.1 ± 0.41	0.54	77.8	-1.11
n-Heptane	µg/tube	6.46 ± 0.446	7.2 ± 1.5	0.646	111	1.15
n-Hexane	µg/tube	6.32 ± 0.775	8.1 ± 1.6	1.01	128	1.76
n-Nonane	µg/tube	4.97 ± 0.458	5 ± 0.98	0.696	101	0.04
n-Octane	µg/tube	6.24 ± 0.424	6.8 ± 1.5	0.624	109	0.91
n-Pentane	µg/tube	5.48 ± 1.36	7.9 ± 1.6	2.14	144	1.13
o-Xylene	µg/tube	4.58 ± 0.555	4.1 ± 0.47	1.19	89.5	-0.40
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.2 ± 1	1.83	100	0.02
Toluene	µg/tube	5.05 ± 0.409	5.4 ± 0.93	0.858	107	0.41

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.5 ± 1.4	0.867	113	0.96
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.7 ± 0.77	0.888	101	0.03
Tetrachloroethene	µg/tube	5.29 ± 0.779	7.1 ± 0.88	1.53	134	1.18
Tetrachloromethane	µg/tube	7.67 ± 0.559	11.4 ± 1.4	0.997	149	3.74
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.6 ± 0.59	1.5	79.1	-0.64
Trichloroethene	µg/tube	5.84 ± 0.374	7 ± 0.74	0.934	120	1.25
Trichloromethane	µg/tube	5.83 ± 0.324	6.7 ± 1.2	0.583	115	1.50

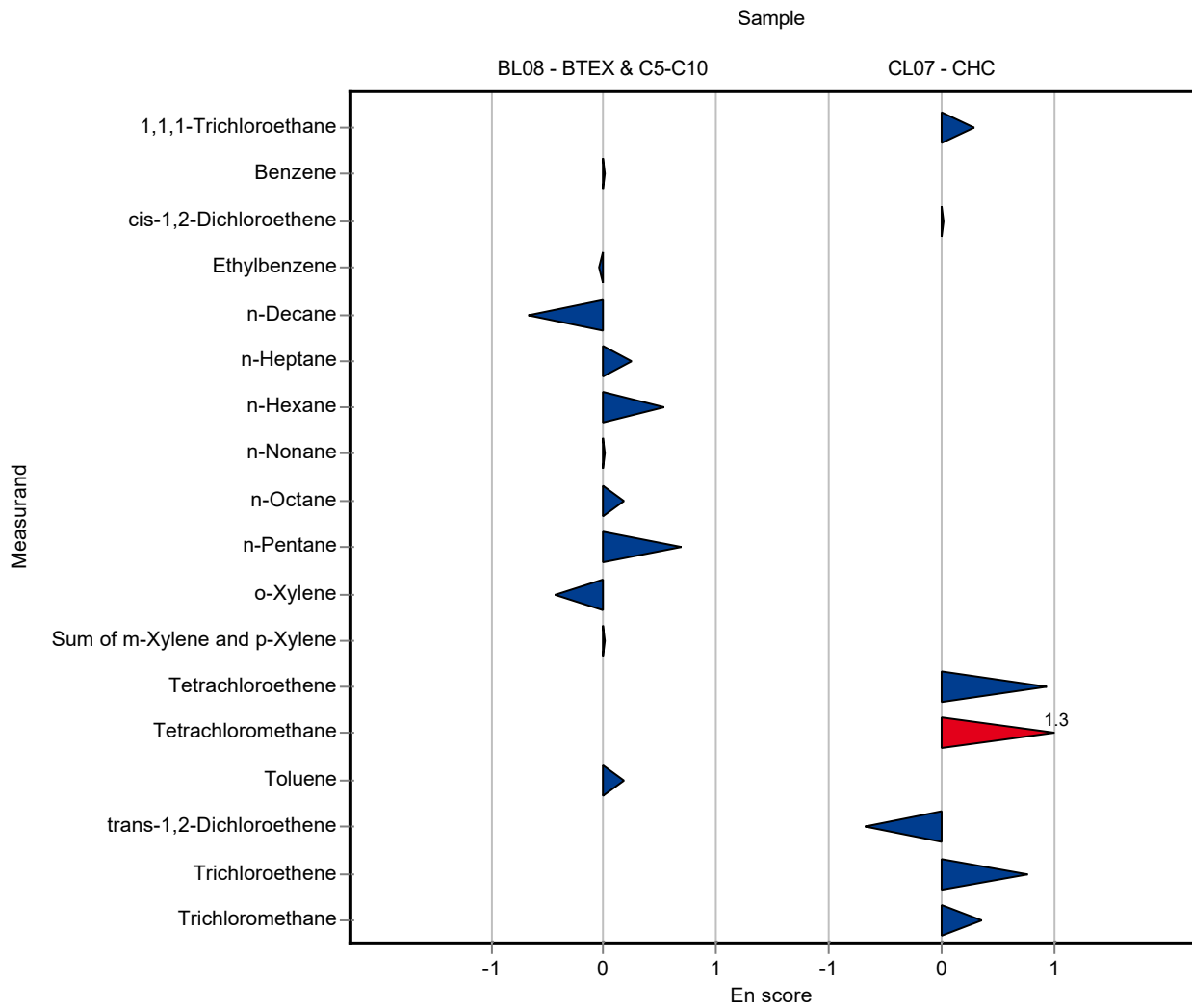


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.7 ± 1.1	0.701	101	0.01
Ethylbenzene	µg/tube	4.87 ± 0.528	4.8 ± 0.84	1.12	98.5	-0.04
n-Decane	µg/tube	2.7 ± 0.356	2.1 ± 0.41	0.54	77.8	-0.67
n-Heptane	µg/tube	6.46 ± 0.446	7.2 ± 1.5	0.646	111	0.24
n-Hexane	µg/tube	6.32 ± 0.775	8.1 ± 1.6	1.01	128	0.54
n-Nonane	µg/tube	4.97 ± 0.458	5 ± 0.98	0.696	101	0.01
n-Octane	µg/tube	6.24 ± 0.424	6.8 ± 1.5	0.624	109	0.19
n-Pentane	µg/tube	5.48 ± 1.36	7.9 ± 1.6	2.14	144	0.69
o-Xylene	µg/tube	4.58 ± 0.555	4.1 ± 0.47	1.19	89.5	-0.44
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.2 ± 1	1.83	100	0.02
Toluene	µg/tube	5.05 ± 0.409	5.4 ± 0.93	0.858	107	0.19

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.5 ± 1.4	0.867	113	0.29
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.7 ± 0.77	0.888	101	0.02
Tetrachloroethene	µg/tube	5.29 ± 0.779	7.1 ± 0.88	1.53	134	0.94
Tetrachloromethane	µg/tube	7.67 ± 0.559	11.4 ± 1.4	0.997	149	1.31
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.6 ± 0.59	1.5	79.1	-0.68
Trichloroethene	µg/tube	5.84 ± 0.374	7 ± 0.74	0.934	120	0.76
Trichloromethane	µg/tube	5.83 ± 0.324	6.7 ± 1.2	0.583	115	0.36

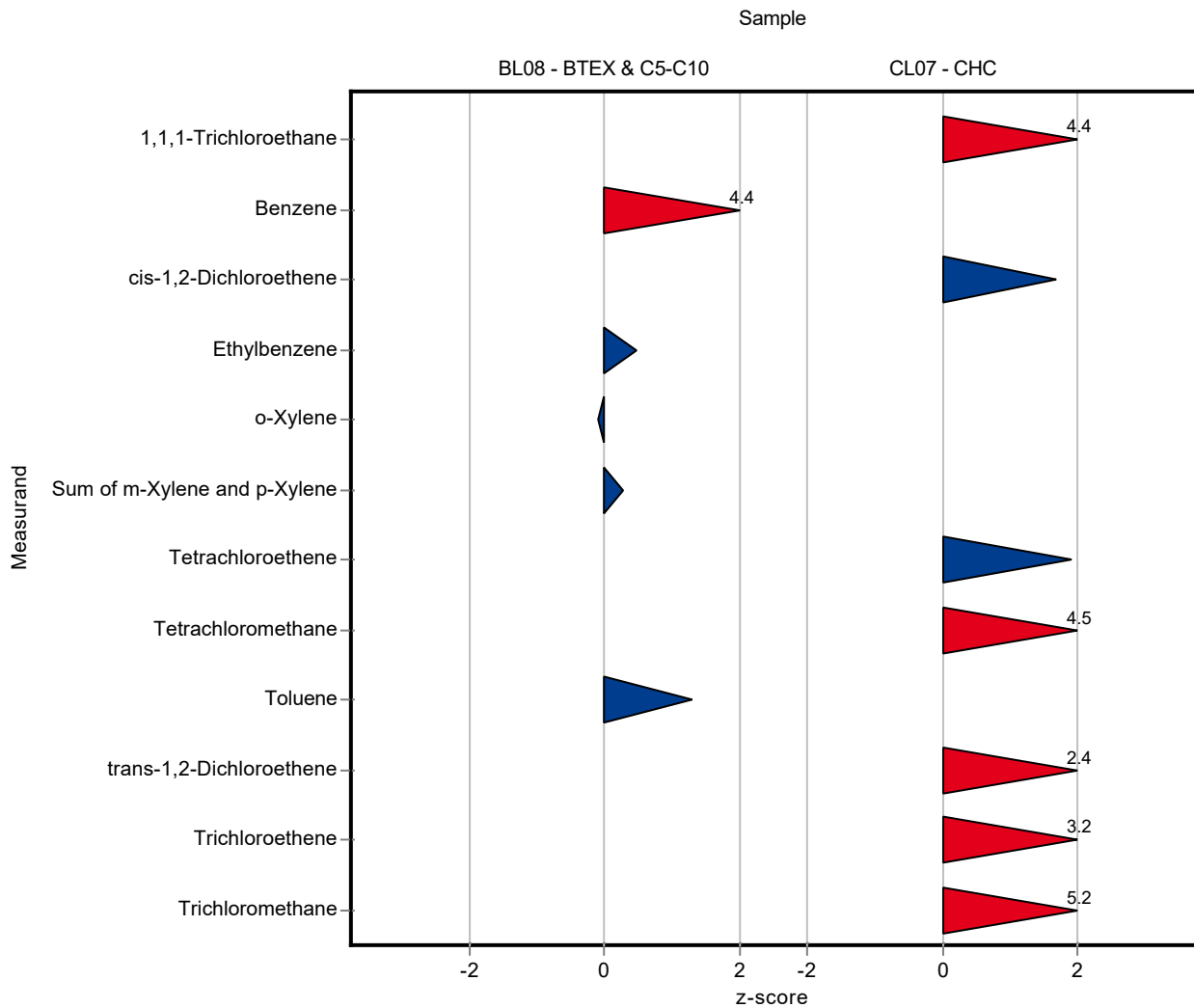


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	7.73 ± 1.93	0.701	165	4.36
Ethylbenzene	µg/tube	4.87 ± 0.528	5.39 ± 1.35	1.12	111	0.46
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	4.47 ± 1.12	1.19	97.6	-0.09
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.66 ± 2.41	1.83	105	0.27
Toluene	µg/tube	5.05 ± 0.409	6.16 ± 1.54	0.858	122	1.30

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	10.5 ± 2.63	0.867	158	4.42
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	6.16 ± 1.54	0.888	132	1.68
Tetrachloroethene	µg/tube	5.29 ± 0.779	8.22 ± 2.06	1.53	155	1.91
Tetrachloromethane	µg/tube	7.67 ± 0.559	12.2 ± 3.06	0.997	159	4.55
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	8.2 ± 2.05	1.5	180	2.43
Trichloroethene	µg/tube	5.84 ± 0.374	8.84 ± 2.21	0.934	151	3.22
Trichloromethane	µg/tube	5.83 ± 0.324	8.83 ± 2.21	0.583	152	5.16

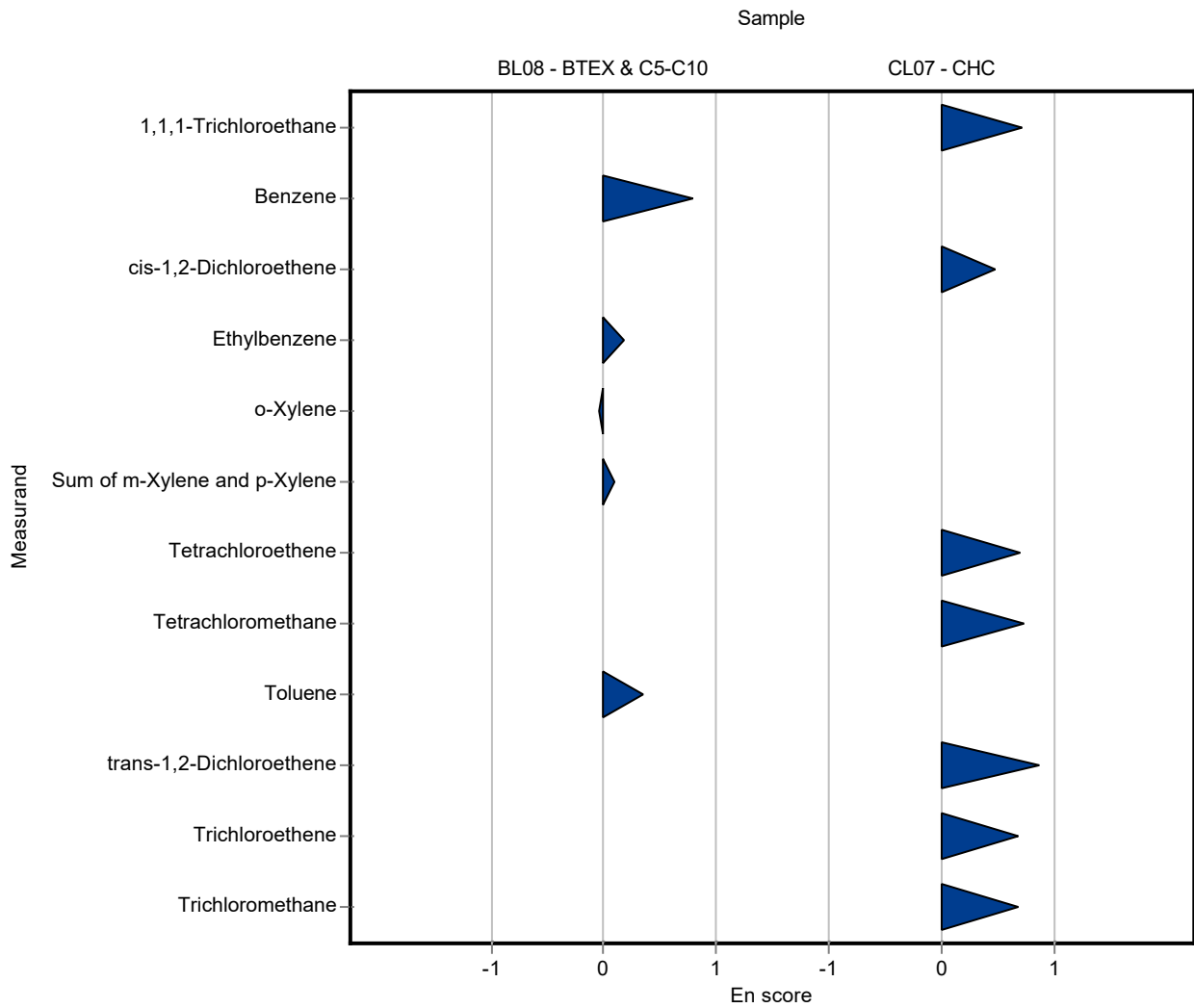


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	7.73 ± 1.93	0.701	165	0.79
Ethylbenzene	µg/tube	4.87 ± 0.528	5.39 ± 1.35	1.12	111	0.19
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	4.47 ± 1.12	1.19	97.6	-0.05
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.66 ± 2.41	1.83	105	0.10
Toluene	µg/tube	5.05 ± 0.409	6.16 ± 1.54	0.858	122	0.36

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	10.5 ± 2.63	0.867	158	0.73
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	6.16 ± 1.54	0.888	132	0.48
Tetrachloroethene	µg/tube	5.29 ± 0.779	8.22 ± 2.06	1.53	155	0.70
Tetrachloromethane	µg/tube	7.67 ± 0.559	12.2 ± 3.06	0.997	159	0.74
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	8.2 ± 2.05	1.5	180	0.87
Trichloroethene	µg/tube	5.84 ± 0.374	8.84 ± 2.21	0.934	151	0.68
Trichloromethane	µg/tube	5.83 ± 0.324	8.83 ± 2.21	0.583	152	0.68



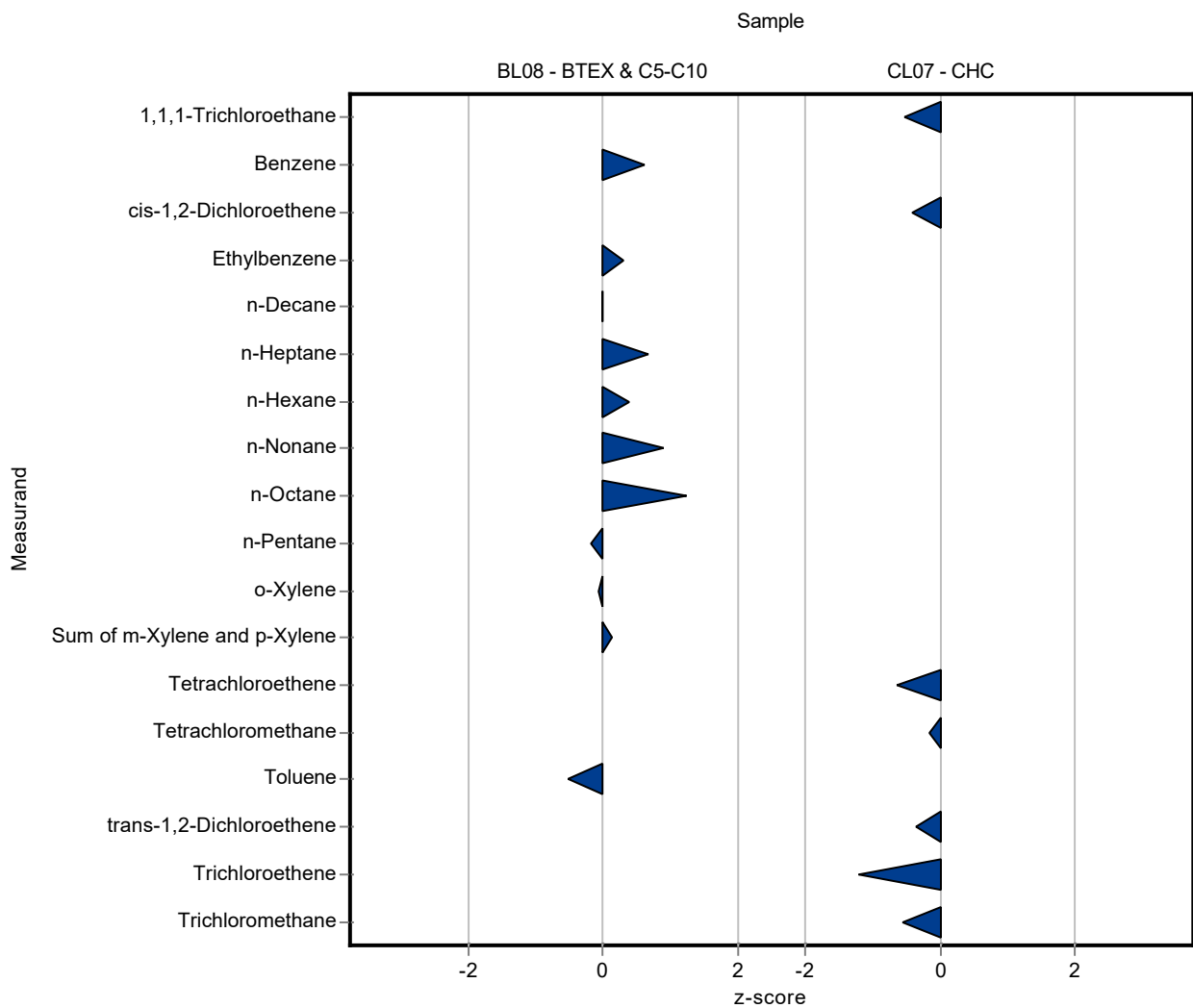


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.1 ± 0.5	0.701	109	0.61
Ethylbenzene	µg/tube	4.87 ± 0.528	5.2 ± 0.5	1.12	107	0.29
n-Decane	µg/tube	2.7 ± 0.356	2.7 ± 0.3	0.54	100	0.00
n-Heptane	µg/tube	6.46 ± 0.446	6.9 ± 0.7	0.646	107	0.68
n-Hexane	µg/tube	6.32 ± 0.775	6.7 ± 0.7	1.01	106	0.38
n-Nonane	µg/tube	4.97 ± 0.458	5.6 ± 0.6	0.696	113	0.90
n-Octane	µg/tube	6.24 ± 0.424	7 ± 0.7	0.624	112	1.23
n-Pentane	µg/tube	5.48 ± 1.36	5.1 ± 0.5	2.14	93	-0.18
o-Xylene	µg/tube	4.58 ± 0.555	4.5 ± 0.4	1.19	98.3	-0.07
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.4 ± 0.9	1.83	103	0.13
Toluene	µg/tube	5.05 ± 0.409	4.6 ± 0.5	0.858	91.2	-0.52

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.2 ± 0.6	0.867	93	-0.54
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.3 ± 0.4	0.888	92	-0.42
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.3 ± 0.4	1.53	81.3	-0.65
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.5 ± 0.7	0.997	97.8	-0.17
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4 ± 0.4	1.5	87.8	-0.37
Trichloroethene	µg/tube	5.84 ± 0.374	4.7 ± 0.5	0.934	80.5	-1.22
Trichloromethane	µg/tube	5.83 ± 0.324	5.5 ± 0.5	0.583	94.4	-0.56

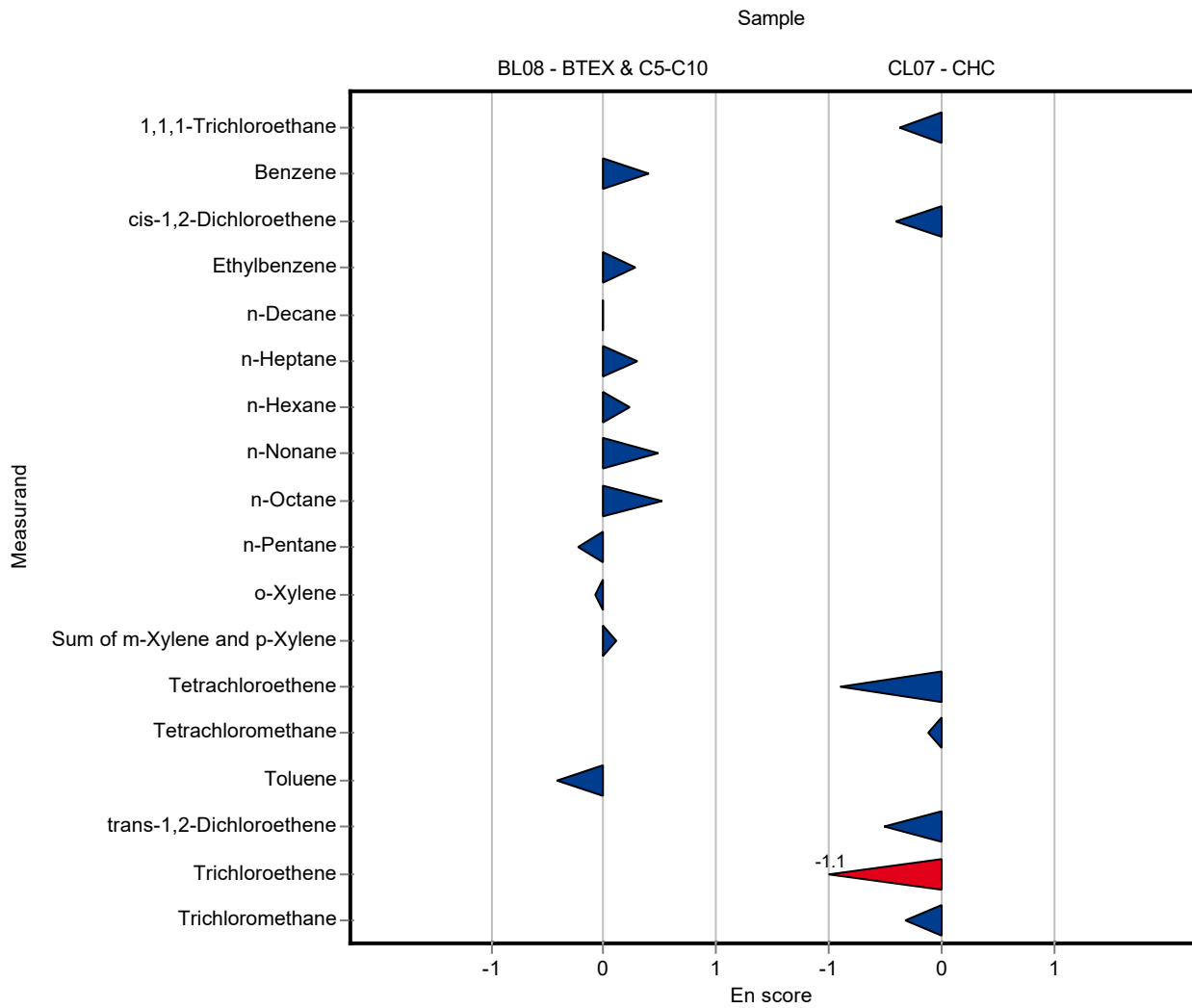


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.1 ± 0.5	0.701	109	0.41
Ethylbenzene	µg/tube	4.87 ± 0.528	5.2 ± 0.5	1.12	107	0.29
n-Decane	µg/tube	2.7 ± 0.356	2.7 ± 0.3	0.54	100	0.00
n-Heptane	µg/tube	6.46 ± 0.446	6.9 ± 0.7	0.646	107	0.30
n-Hexane	µg/tube	6.32 ± 0.775	6.7 ± 0.7	1.01	106	0.24
n-Nonane	µg/tube	4.97 ± 0.458	5.6 ± 0.6	0.696	113	0.49
n-Octane	µg/tube	6.24 ± 0.424	7 ± 0.7	0.624	112	0.52
n-Pentane	µg/tube	5.48 ± 1.36	5.1 ± 0.5	2.14	93	-0.23
o-Xylene	µg/tube	4.58 ± 0.555	4.5 ± 0.4	1.19	98.3	-0.08
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.4 ± 0.9	1.83	103	0.12
Toluene	µg/tube	5.05 ± 0.409	4.6 ± 0.5	0.858	91.2	-0.41

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.2 ± 0.6	0.867	93	-0.37
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.3 ± 0.4	0.888	92	-0.40
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.3 ± 0.4	1.53	81.3	-0.89
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.5 ± 0.7	0.997	97.8	-0.11
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4 ± 0.4	1.5	87.8	-0.50
Trichloroethene	µg/tube	5.84 ± 0.374	4.7 ± 0.5	0.934	80.5	-1.06
Trichloromethane	µg/tube	5.83 ± 0.324	5.5 ± 0.5	0.583	94.4	-0.31

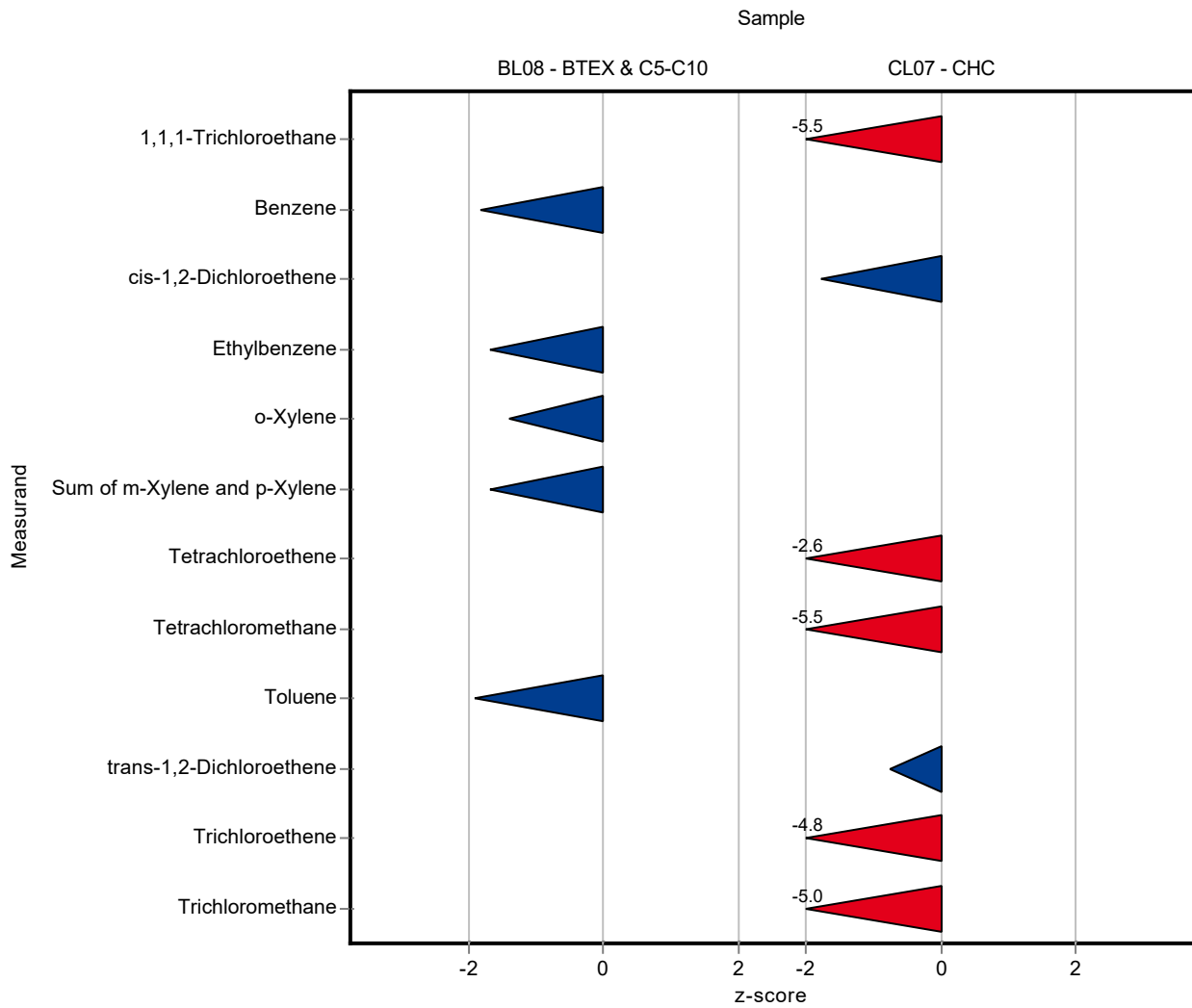


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	3.4 ± 0.68	0.701	72.8	-1.82
Ethylbenzene	µg/tube	4.87 ± 0.528	3 ± 0.6	1.12	61.6	-1.67
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	2.9 ± 0.58	1.19	63.3	-1.41
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.1 ± 1.22	1.83	66.6	-1.67
Toluene	µg/tube	5.05 ± 0.409	3.4 ± 0.68	0.858	67.4	-1.92

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	1.9 ± 0.38	0.867	28.5	-5.50
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.1 ± 0.62	0.888	66.4	-1.77
Tetrachloroethene	µg/tube	5.29 ± 0.779	1.3 ± 0.26	1.53	24.6	-2.60
Tetrachloromethane	µg/tube	7.67 ± 0.559	2.2 ± 0.66	0.997	28.7	-5.49
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.4 ± 0.68	1.5	74.7	-0.77
Trichloroethene	µg/tube	5.84 ± 0.374	1.4 ± 0.28	0.934	24	-4.75
Trichloromethane	µg/tube	5.83 ± 0.324	2.9 ± 0.58	0.583	49.8	-5.02

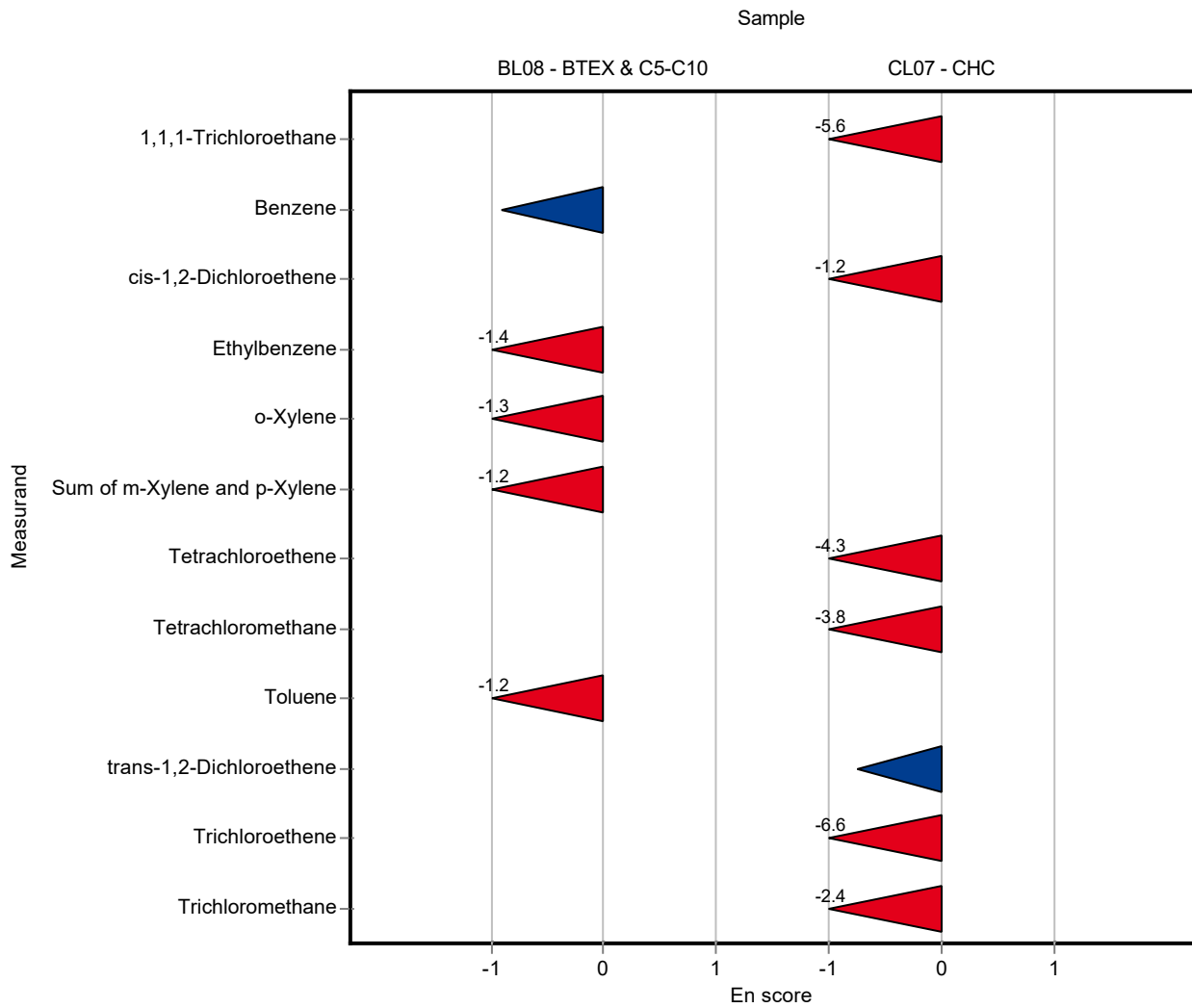


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	3.4 ± 0.68	0.701	72.8	-0.91
Ethylbenzene	µg/tube	4.87 ± 0.528	3 ± 0.6	1.12	61.6	-1.43
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	2.9 ± 0.58	1.19	63.3	-1.31
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.1 ± 1.22	1.83	66.6	-1.18
Toluene	µg/tube	5.05 ± 0.409	3.4 ± 0.68	0.858	67.4	-1.16

Sample: CL07

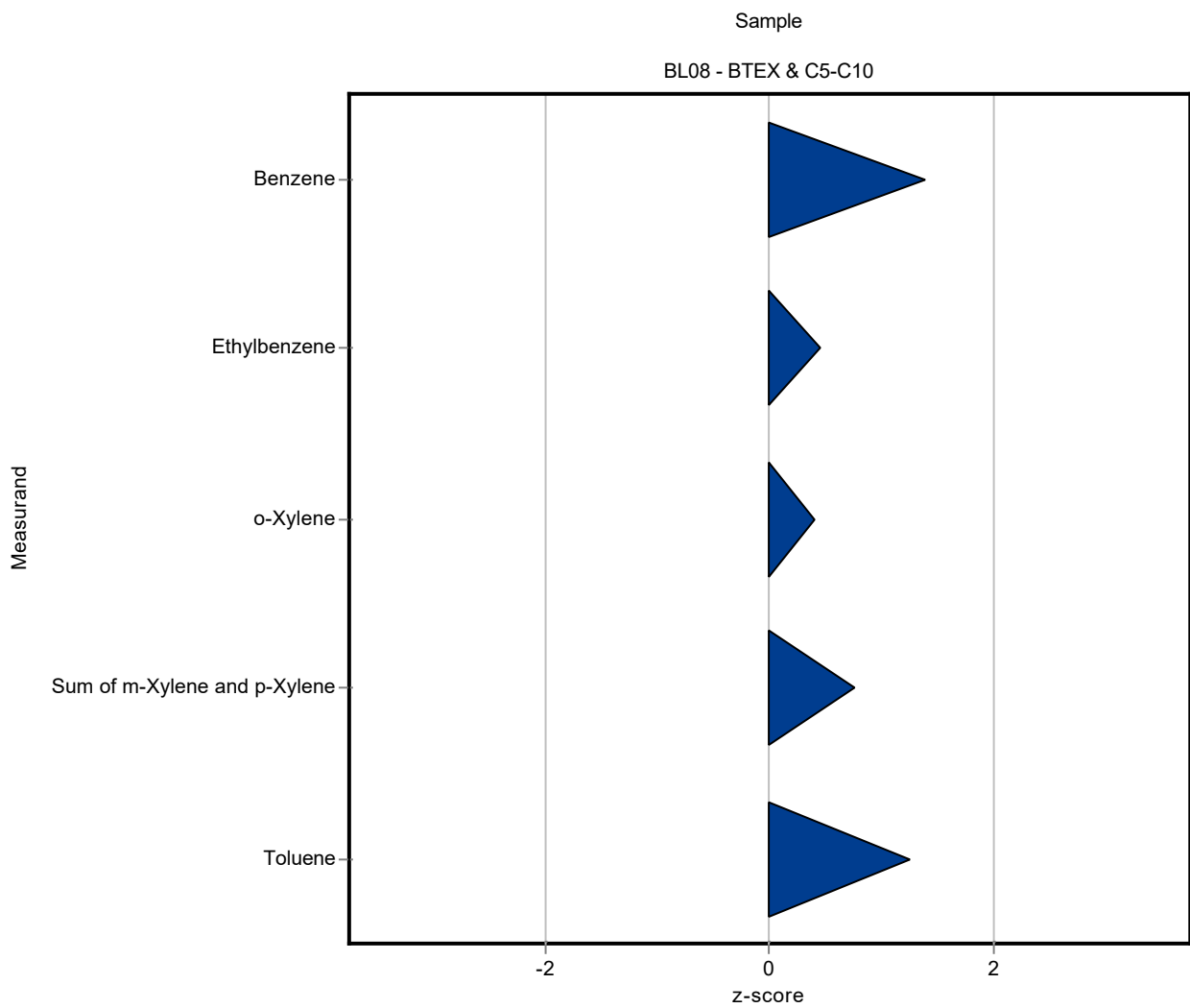
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	1.9 ± 0.38	0.867	28.5	-5.60
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.1 ± 0.62	0.888	66.4	-1.19
Tetrachloroethene	µg/tube	5.29 ± 0.779	1.3 ± 0.26	1.53	24.6	-4.26
Tetrachloromethane	µg/tube	7.67 ± 0.559	2.2 ± 0.66	0.997	28.7	-3.81
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.4 ± 0.68	1.5	74.7	-0.74
Trichloroethene	µg/tube	5.84 ± 0.374	1.4 ± 0.28	0.934	24	-6.59
Trichloromethane	µg/tube	5.83 ± 0.324	2.9 ± 0.58	0.583	49.8	-2.43





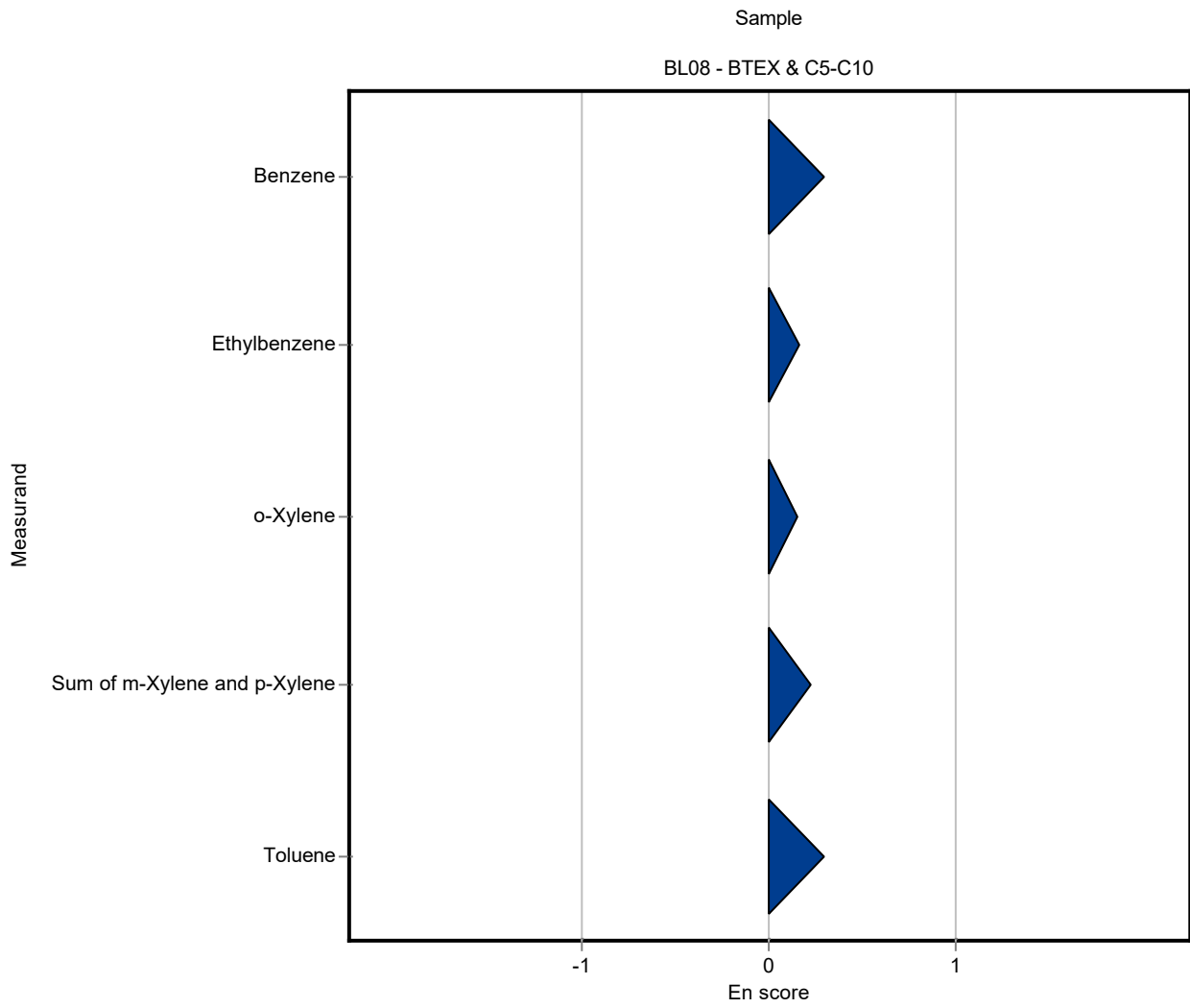
Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.65 ± 1.7	0.701	121	1.39
Ethylbenzene	µg/tube	4.87 ± 0.528	5.38 ± 1.61	1.12	110	0.45
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	5.05 ± 1.52	1.19	110	0.40
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.54 ± 3.16	1.83	115	0.75
Toluene	µg/tube	5.05 ± 0.409	6.12 ± 1.84	0.858	121	1.25



Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.65 ± 1.7	0.701	121	0.29
Ethylbenzene	µg/tube	4.87 ± 0.528	5.38 ± 1.61	1.12	110	0.15
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	5.05 ± 1.52	1.19	110	0.15
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.54 ± 3.16	1.83	115	0.22
Toluene	µg/tube	5.05 ± 0.409	6.12 ± 1.84	0.858	121	0.29

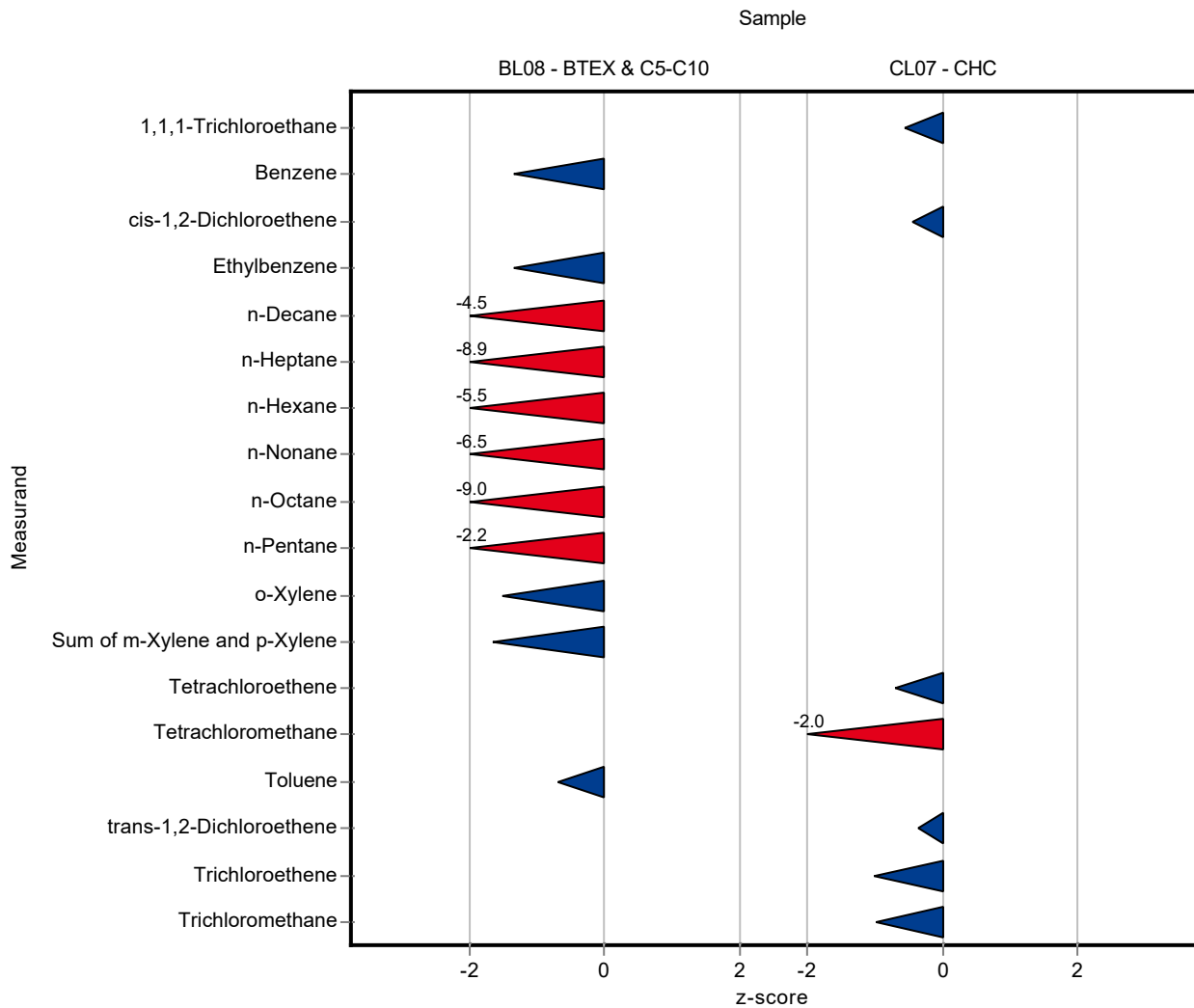


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	3.73 ± 0.4	0.701	79.8	-1.35
Ethylbenzene	µg/tube	4.87 ± 0.528	3.37 ± 0.4	1.12	69.1	-1.34
n-Decane	µg/tube	2.7 ± 0.356	0.25 ± 0.4	0.54	9.26	-4.54
n-Heptane	µg/tube	6.46 ± 0.446	0.7 ± 0.4	0.646	10.8	-8.92
n-Hexane	µg/tube	6.32 ± 0.775	0.72 ± 0.4	1.01	11.4	-5.54
n-Nonane	µg/tube	4.97 ± 0.458	0.48 ± 0.4	0.696	9.65	-6.45
n-Octane	µg/tube	6.24 ± 0.424	0.65 ± 0.4	0.624	10.4	-8.96
n-Pentane	µg/tube	5.48 ± 1.36	0.75 ± 0.4	2.14	13.7	-2.21
o-Xylene	µg/tube	4.58 ± 0.555	2.77 ± 0.4	1.19	60.5	-1.52
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.12 ± 0.4	1.83	66.8	-1.66
Toluene	µg/tube	5.05 ± 0.409	4.45 ± 0.4	0.858	88.2	-0.69

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.17 ± 0.4	0.867	92.6	-0.57
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.27 ± 0.4	0.888	91.4	-0.45
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.23 ± 0.4	1.53	79.9	-0.69
Tetrachloromethane	µg/tube	7.67 ± 0.559	5.67 ± 0.4	0.997	74	-2.00
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.03 ± 0.4	1.5	88.5	-0.35
Trichloroethene	µg/tube	5.84 ± 0.374	4.88 ± 0.4	0.934	83.6	-1.02
Trichloromethane	µg/tube	5.83 ± 0.324	5.25 ± 0.4	0.583	90.1	-0.99

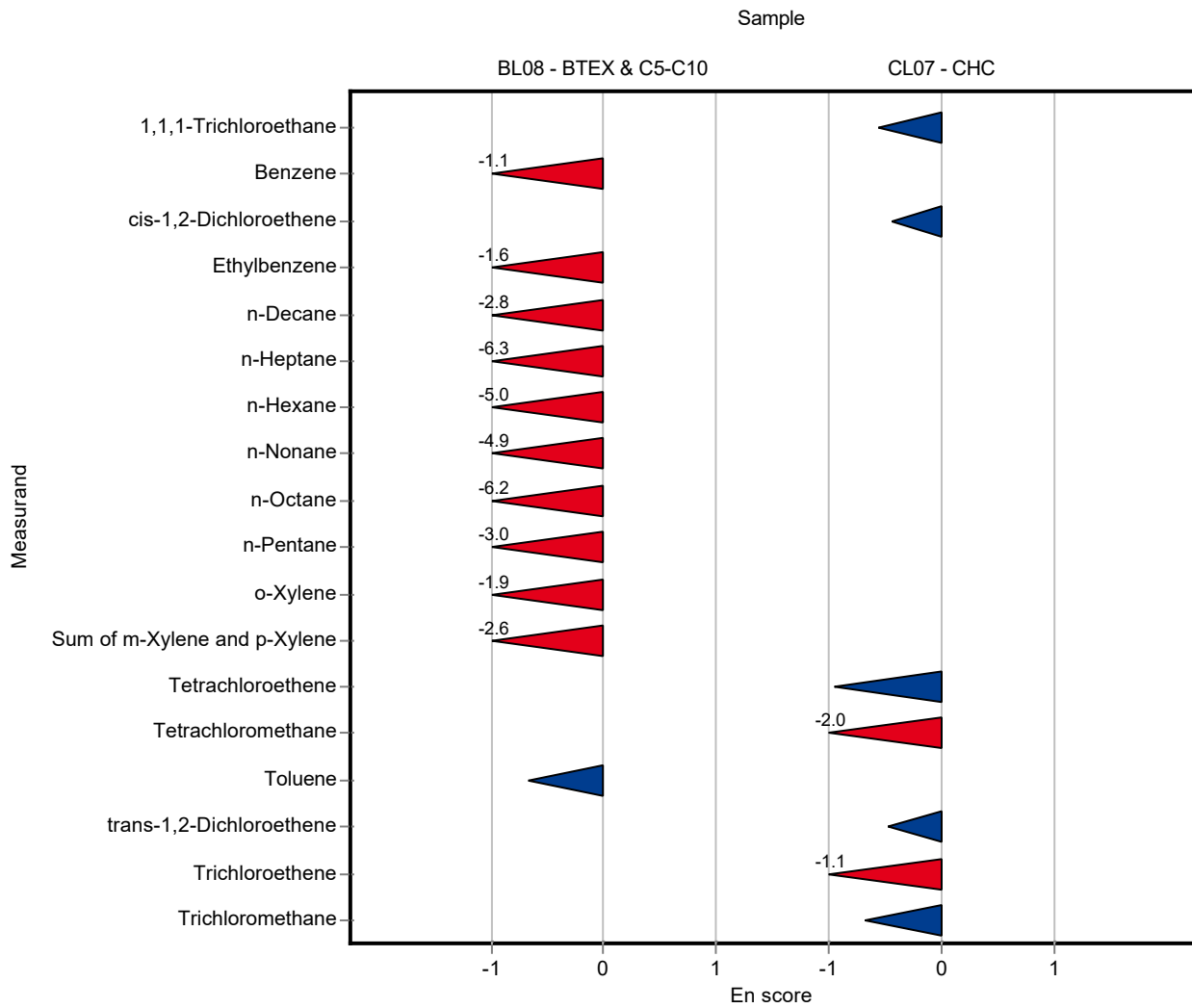


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	3.73 ± 0.4	0.701	79.8	-1.10
Ethylbenzene	µg/tube	4.87 ± 0.528	3.37 ± 0.4	1.12	69.1	-1.57
n-Decane	µg/tube	2.7 ± 0.356	0.25 ± 0.4	0.54	9.26	-2.80
n-Heptane	µg/tube	6.46 ± 0.446	0.7 ± 0.4	0.646	10.8	-6.29
n-Hexane	µg/tube	6.32 ± 0.775	0.72 ± 0.4	1.01	11.4	-5.03
n-Nonane	µg/tube	4.97 ± 0.458	0.48 ± 0.4	0.696	9.65	-4.87
n-Octane	µg/tube	6.24 ± 0.424	0.65 ± 0.4	0.624	10.4	-6.17
n-Pentane	µg/tube	5.48 ± 1.36	0.75 ± 0.4	2.14	13.7	-3.00
o-Xylene	µg/tube	4.58 ± 0.555	2.77 ± 0.4	1.19	60.5	-1.86
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.12 ± 0.4	1.83	66.8	-2.55
Toluene	µg/tube	5.05 ± 0.409	4.45 ± 0.4	0.858	88.2	-0.66

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.17 ± 0.4	0.867	92.6	-0.56
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.27 ± 0.4	0.888	91.4	-0.44
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.23 ± 0.4	1.53	79.9	-0.95
Tetrachloromethane	µg/tube	7.67 ± 0.559	5.67 ± 0.4	0.997	74	-2.05
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.03 ± 0.4	1.5	88.5	-0.47
Trichloroethene	µg/tube	5.84 ± 0.374	4.88 ± 0.4	0.934	83.6	-1.08
Trichloromethane	µg/tube	5.83 ± 0.324	5.25 ± 0.4	0.583	90.1	-0.67



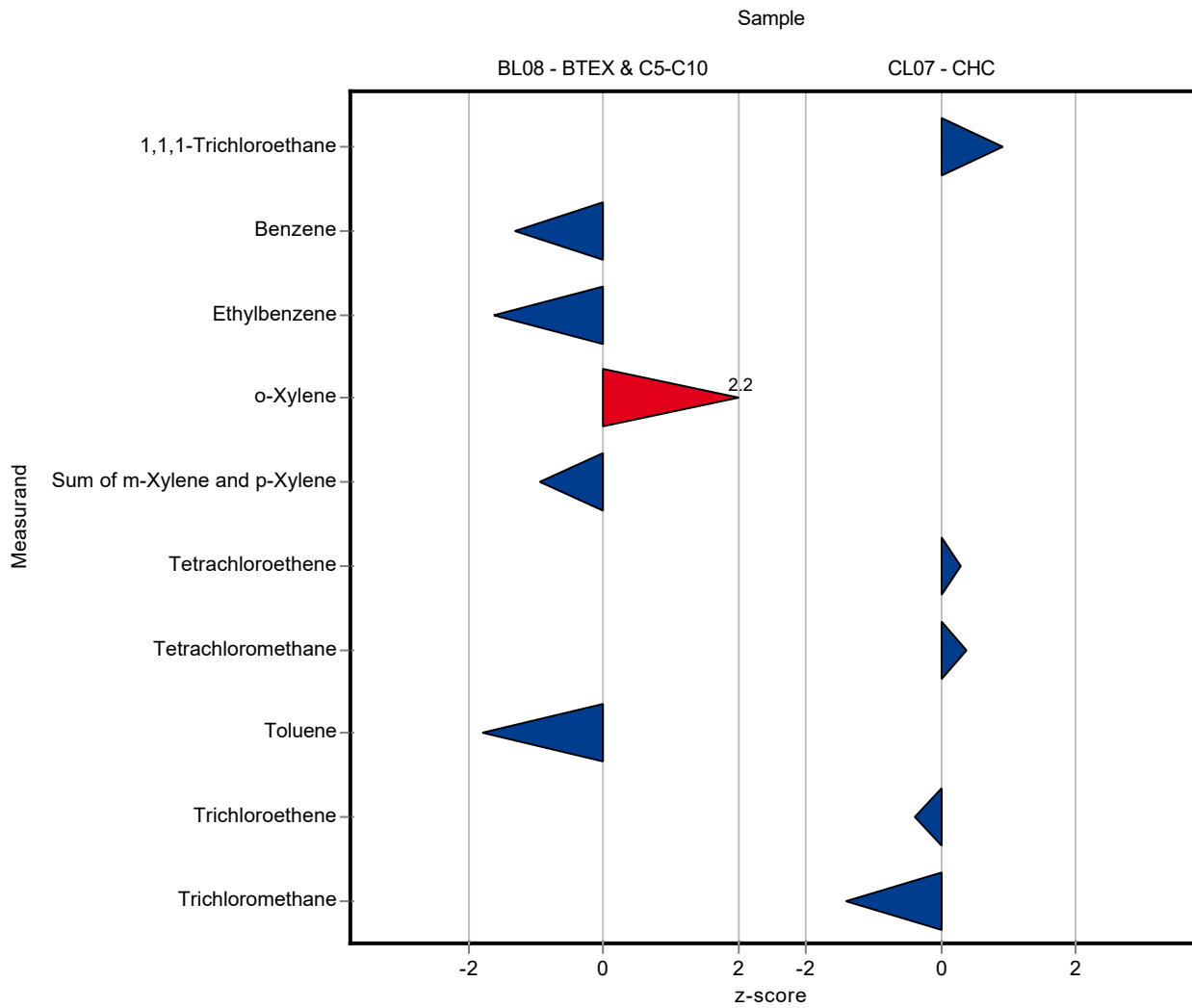


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	3.75 ± 0.38	0.701	80.3	-1.32
Ethylbenzene	µg/tube	4.87 ± 0.528	3.04 ± 0.26	1.12	62.4	-1.64
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	7.21 ± 0.38	1.19	157	2.21
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	7.41 ± 0.35	1.83	80.9	-0.95
Toluene	µg/tube	5.05 ± 0.409	3.51 ± 0.23	0.858	69.6	-1.79

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.47 ± 0.66	0.867	112	0.93
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	- ± -	0.888	-	-
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.75 ± 0.33	1.53	109	0.30
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.05 ± 0.35	0.997	105	0.38
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	- ± -	1.5	-	-
Trichloroethene	µg/tube	5.84 ± 0.374	5.47 ± 0.34	0.934	93.7	-0.39
Trichloromethane	µg/tube	5.83 ± 0.324	5.01 ± 0.41	0.583	86	-1.40

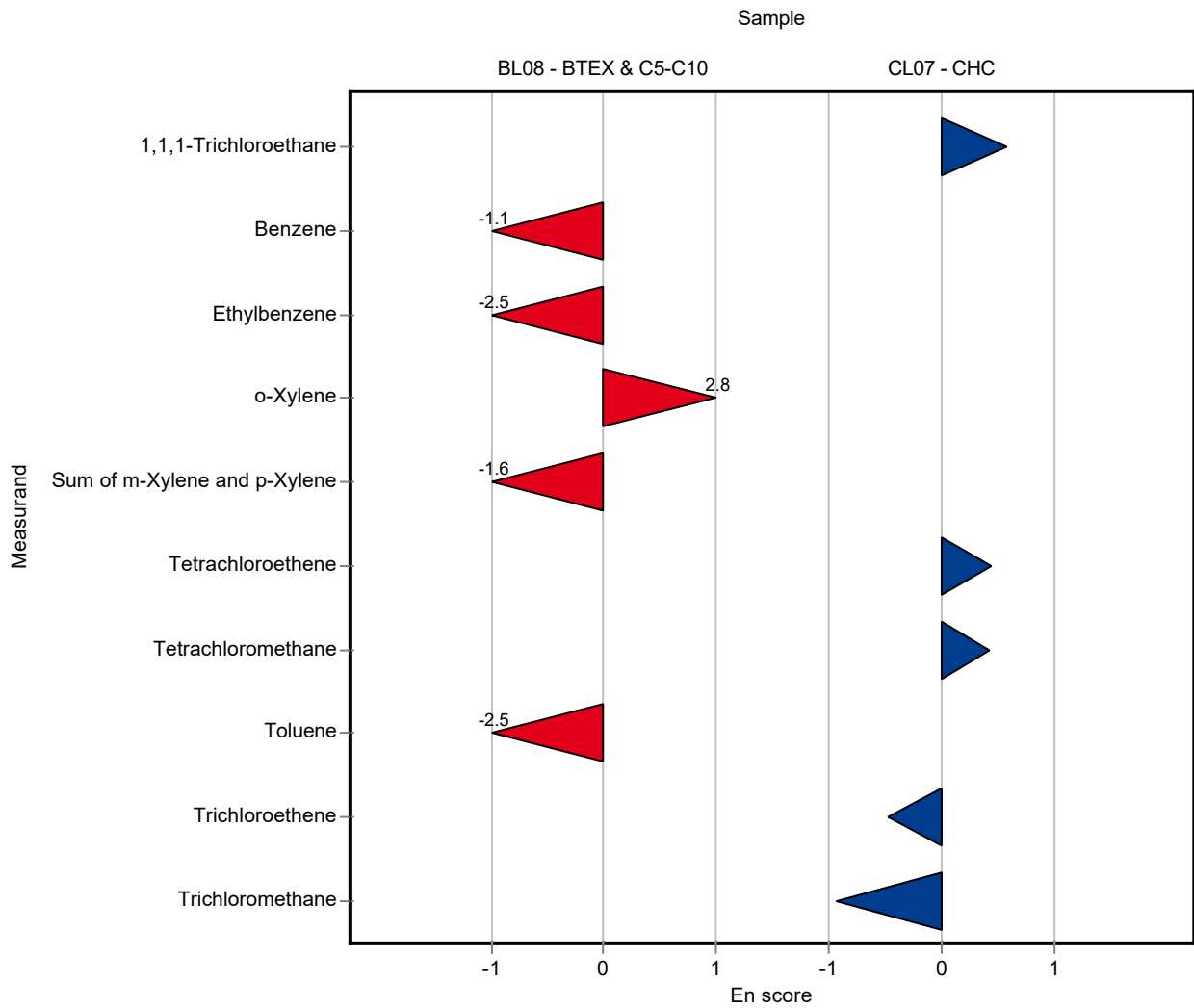


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	3.75 ± 0.38	0.701	80.3	-1.12
Ethylbenzene	µg/tube	4.87 ± 0.528	3.04 ± 0.26	1.12	62.4	-2.47
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	7.21 ± 0.38	1.19	157	2.80
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	7.41 ± 0.35	1.83	80.9	-1.55
Toluene	µg/tube	5.05 ± 0.409	3.51 ± 0.23	0.858	69.6	-2.50

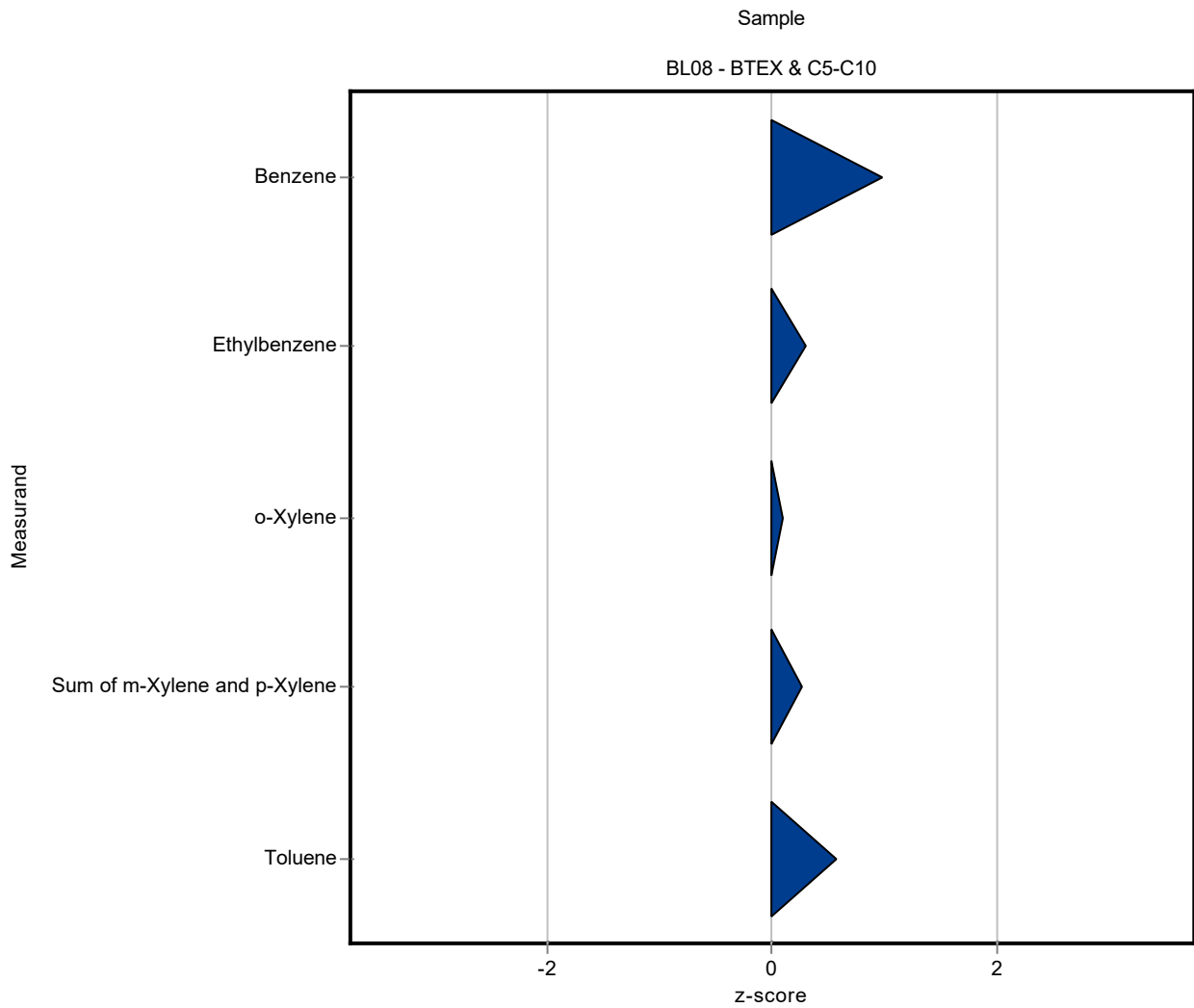
Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.47 ± 0.66	0.867	112	0.58
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	- ± -	0.888	-	-
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.75 ± 0.33	1.53	109	0.45
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.05 ± 0.35	0.997	105	0.43
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	- ± -	1.5	-	-
Trichloroethene	µg/tube	5.84 ± 0.374	5.47 ± 0.34	0.934	93.7	-0.47
Trichloromethane	µg/tube	5.83 ± 0.324	5.01 ± 0.41	0.583	86	-0.93



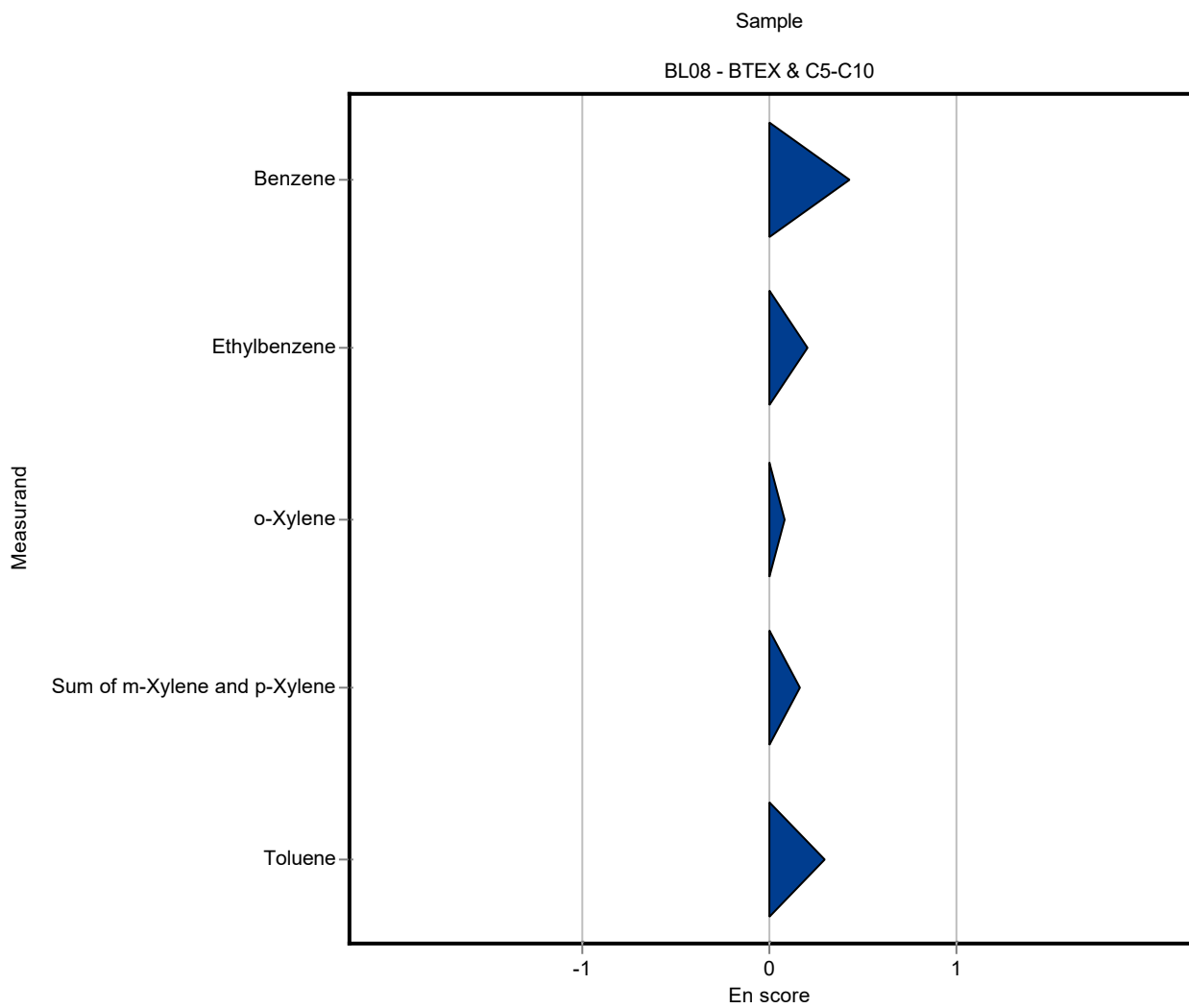
Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.36 ± 0.8	0.701	115	0.98
Ethylbenzene	µg/tube	4.87 ± 0.528	5.2 ± 0.78	1.12	107	0.29
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	4.69 ± 0.7	1.19	102	0.09
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.65 ± 1.45	1.83	105	0.27
Toluene	µg/tube	5.05 ± 0.409	5.54 ± 0.83	0.858	110	0.57



Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.36 ± 0.8	0.701	115	0.42
Ethylbenzene	µg/tube	4.87 ± 0.528	5.2 ± 0.78	1.12	107	0.20
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	4.69 ± 0.7	1.19	102	0.07
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.65 ± 1.45	1.83	105	0.16
Toluene	µg/tube	5.05 ± 0.409	5.54 ± 0.83	0.858	110	0.29



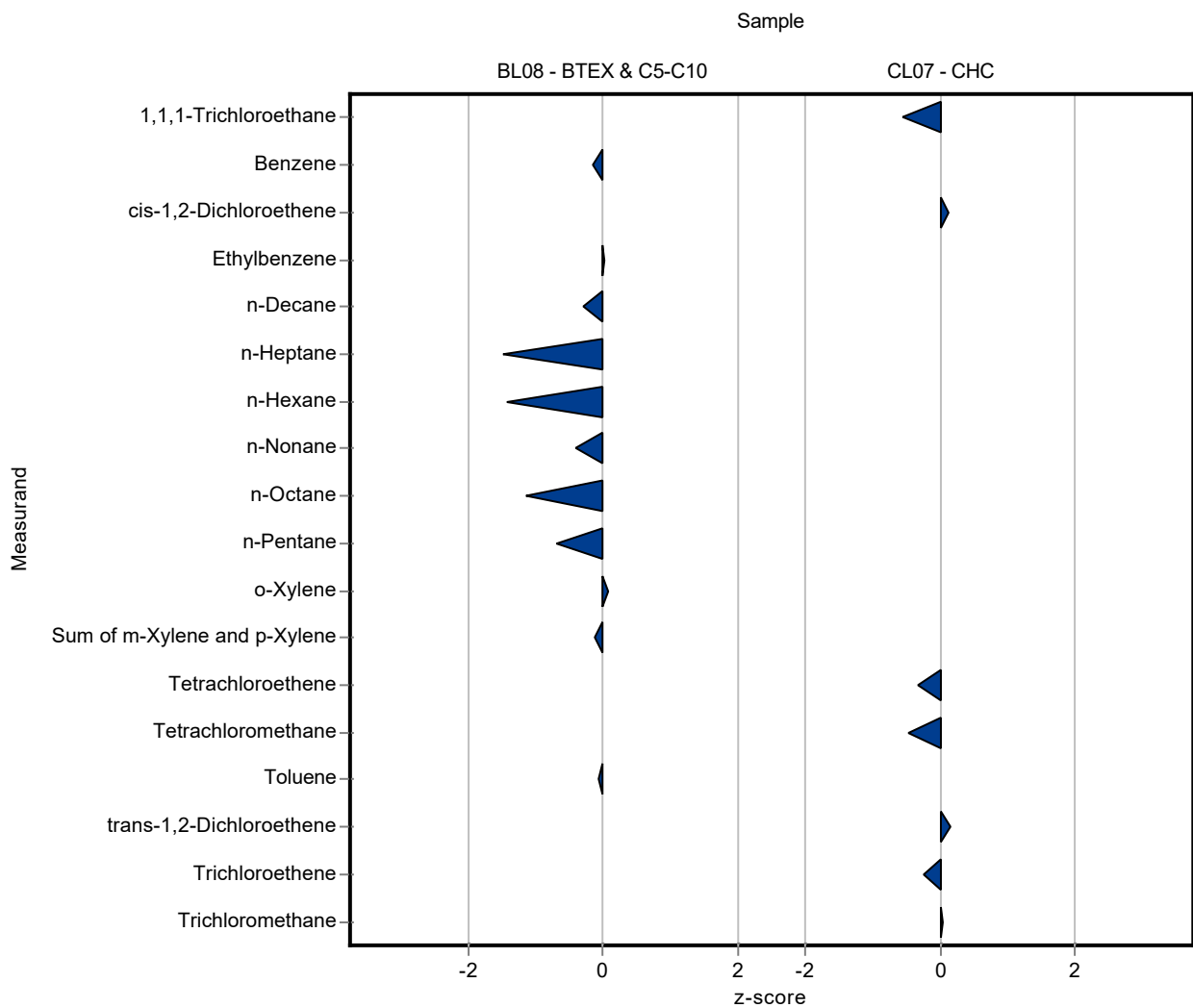


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.56 ± 0.91	0.701	97.6	-0.16
Ethylbenzene	µg/tube	4.87 ± 0.528	4.91 ± 0.98	1.12	101	0.03
n-Decane	µg/tube	2.7 ± 0.356	2.54 ± 0.51	0.54	94.1	-0.29
n-Heptane	µg/tube	6.46 ± 0.446	5.51 ± 1.1	0.646	85.3	-1.47
n-Hexane	µg/tube	6.32 ± 0.775	4.88 ± 0.98	1.01	77.2	-1.42
n-Nonane	µg/tube	4.97 ± 0.458	4.7 ± 0.94	0.696	94.5	-0.39
n-Octane	µg/tube	6.24 ± 0.424	5.53 ± 1.11	0.624	88.7	-1.13
n-Pentane	µg/tube	5.48 ± 1.36	4.03 ± 0.81	2.14	73.5	-0.68
o-Xylene	µg/tube	4.58 ± 0.555	4.68 ± 0.94	1.19	102	0.09
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.91 ± 1.78	1.83	97.3	-0.14
Toluene	µg/tube	5.05 ± 0.409	4.98 ± 1	0.858	98.7	-0.08

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.19 ± 1.24	0.867	92.9	-0.55
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.77 ± 0.95	0.888	102	0.11
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.78 ± 0.96	1.53	90.3	-0.33
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.2 ± 1.44	0.997	93.9	-0.47
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.76 ± 0.95	1.5	105	0.14
Trichloroethene	µg/tube	5.84 ± 0.374	5.6 ± 1.12	0.934	96	-0.25
Trichloromethane	µg/tube	5.83 ± 0.324	5.84 ± 1.17	0.583	100	0.02

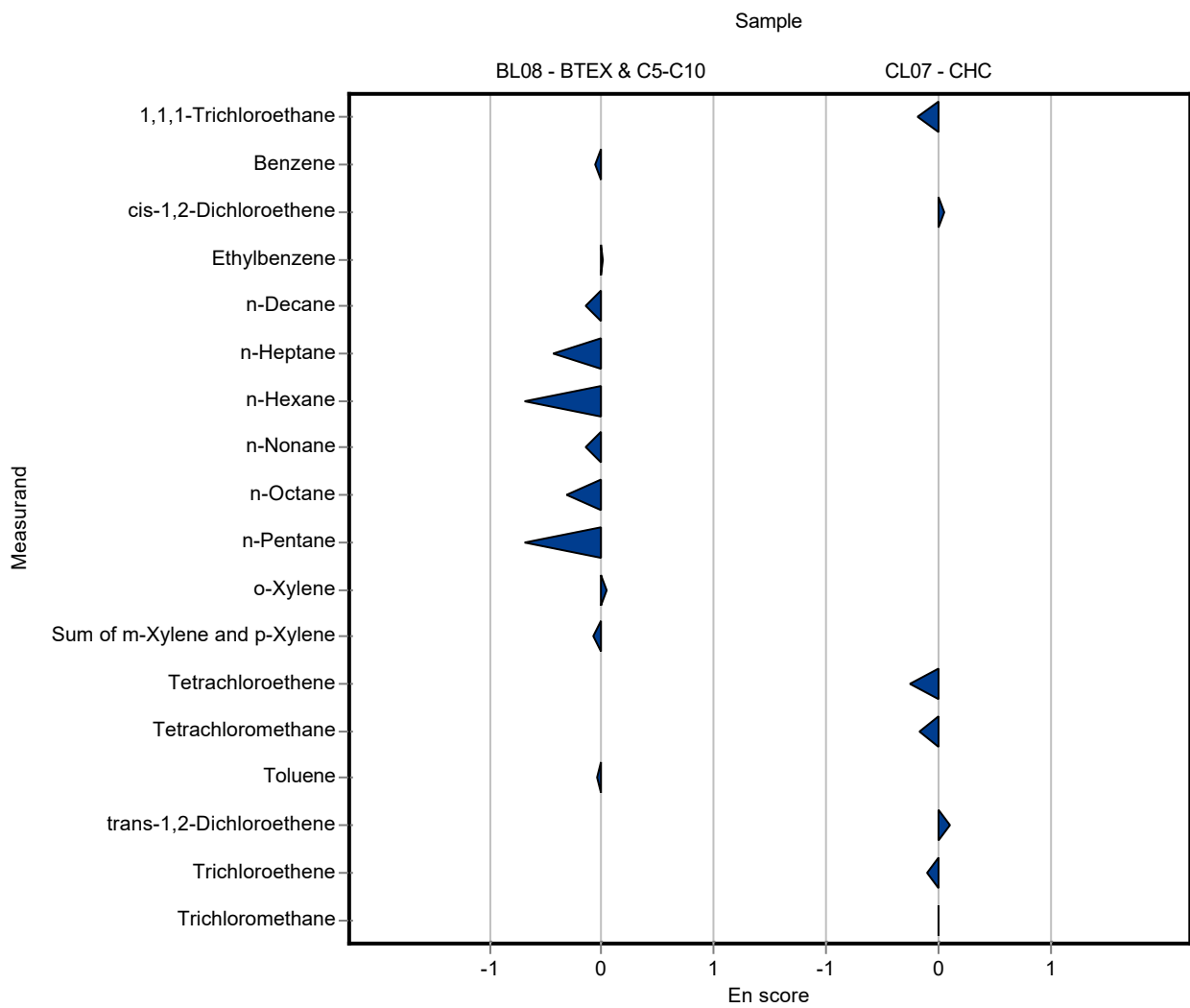


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.56 ± 0.91	0.701	97.6	-0.06
Ethylbenzene	µg/tube	4.87 ± 0.528	4.91 ± 0.98	1.12	101	0.02
n-Decane	µg/tube	2.7 ± 0.356	2.54 ± 0.51	0.54	94.1	-0.15
n-Heptane	µg/tube	6.46 ± 0.446	5.51 ± 1.1	0.646	85.3	-0.42
n-Hexane	µg/tube	6.32 ± 0.775	4.88 ± 0.98	1.01	77.2	-0.68
n-Nonane	µg/tube	4.97 ± 0.458	4.7 ± 0.94	0.696	94.5	-0.14
n-Octane	µg/tube	6.24 ± 0.424	5.53 ± 1.11	0.624	88.7	-0.31
n-Pentane	µg/tube	5.48 ± 1.36	4.03 ± 0.81	2.14	73.5	-0.69
o-Xylene	µg/tube	4.58 ± 0.555	4.68 ± 0.94	1.19	102	0.05
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.91 ± 1.78	1.83	97.3	-0.07
Toluene	µg/tube	5.05 ± 0.409	4.98 ± 1	0.858	98.7	-0.03

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.19 ± 1.24	0.867	92.9	-0.19
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.77 ± 0.95	0.888	102	0.05
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.78 ± 0.96	1.53	90.3	-0.25
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.2 ± 1.44	0.997	93.9	-0.16
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.76 ± 0.95	1.5	105	0.10
Trichloroethene	µg/tube	5.84 ± 0.374	5.6 ± 1.12	0.934	96	-0.10
Trichloromethane	µg/tube	5.83 ± 0.324	5.84 ± 1.17	0.583	100	0.01

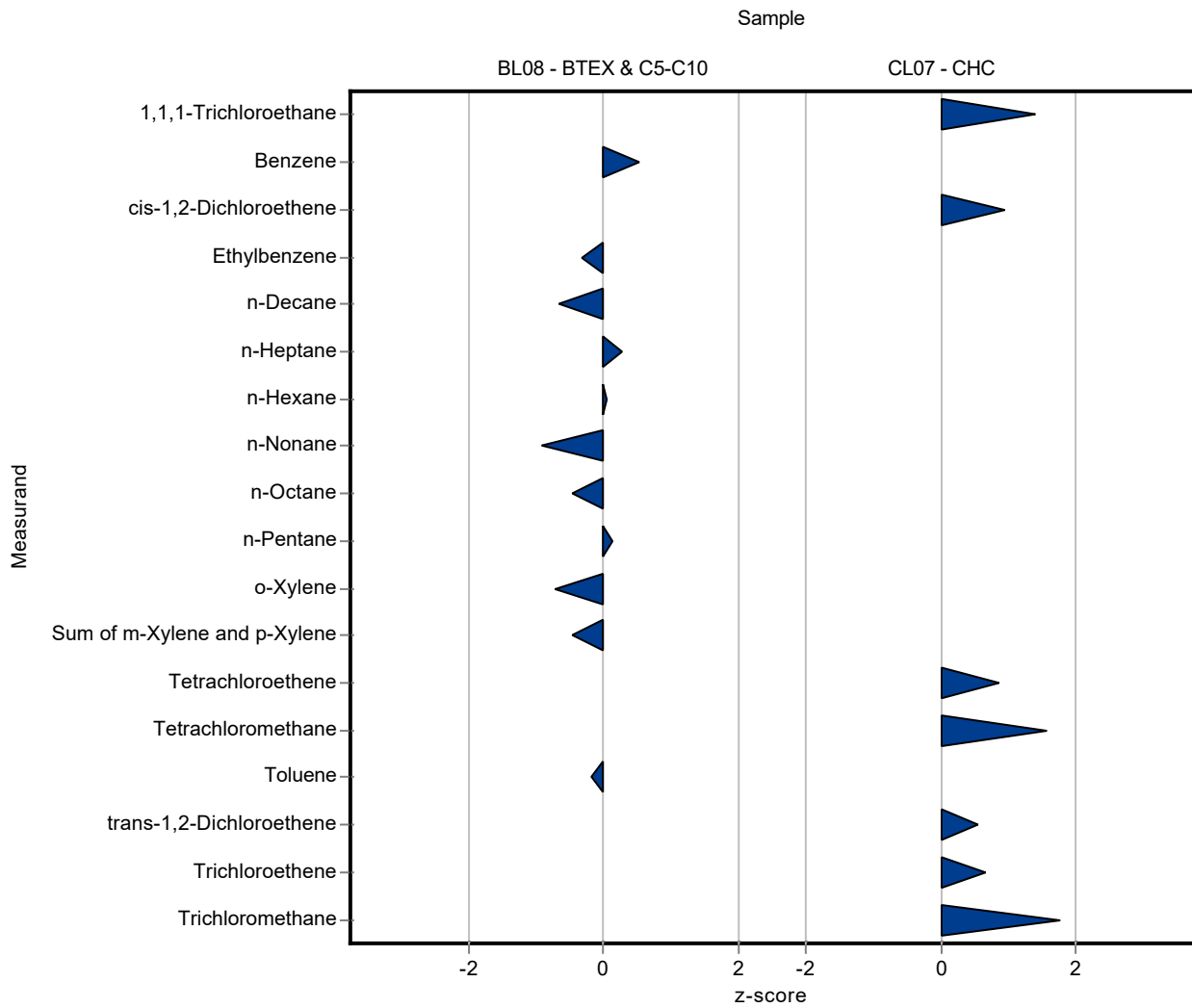


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.04 ± 0.403	0.701	108	0.52
Ethylbenzene	µg/tube	4.87 ± 0.528	4.53 ± 0.453	1.12	92.9	-0.31
n-Decane	µg/tube	2.7 ± 0.356	2.34 ± 0.304	0.54	86.7	-0.66
n-Heptane	µg/tube	6.46 ± 0.446	6.63 ± 0.862	0.646	103	0.27
n-Hexane	µg/tube	6.32 ± 0.775	6.38 ± 0.829	1.01	101	0.06
n-Nonane	µg/tube	4.97 ± 0.458	4.33 ± 0.563	0.696	87.1	-0.92
n-Octane	µg/tube	6.24 ± 0.424	5.94 ± 0.772	0.624	95.3	-0.47
n-Pentane	µg/tube	5.48 ± 1.36	5.76 ± 0.749	2.14	105	0.13
o-Xylene	µg/tube	4.58 ± 0.555	3.73 ± 0.298	1.19	81.5	-0.71
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.32 ± 0.832	1.83	90.8	-0.46
Toluene	µg/tube	5.05 ± 0.409	4.9 ± 0.392	0.858	97.1	-0.17

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.87 ± 0.63	0.867	118	1.39
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.5 ± 0.44	0.888	118	0.93
Tetrachloroethene	µg/tube	5.29 ± 0.779	6.63 ± 0.53	1.53	125	0.87
Tetrachloromethane	µg/tube	7.67 ± 0.559	9.24 ± 0.739	0.997	121	1.58
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.38 ± 0.43	1.5	118	0.55
Trichloroethene	µg/tube	5.84 ± 0.374	6.45 ± 0.516	0.934	111	0.66
Trichloromethane	µg/tube	5.83 ± 0.324	6.86 ± 0.686	0.583	118	1.78

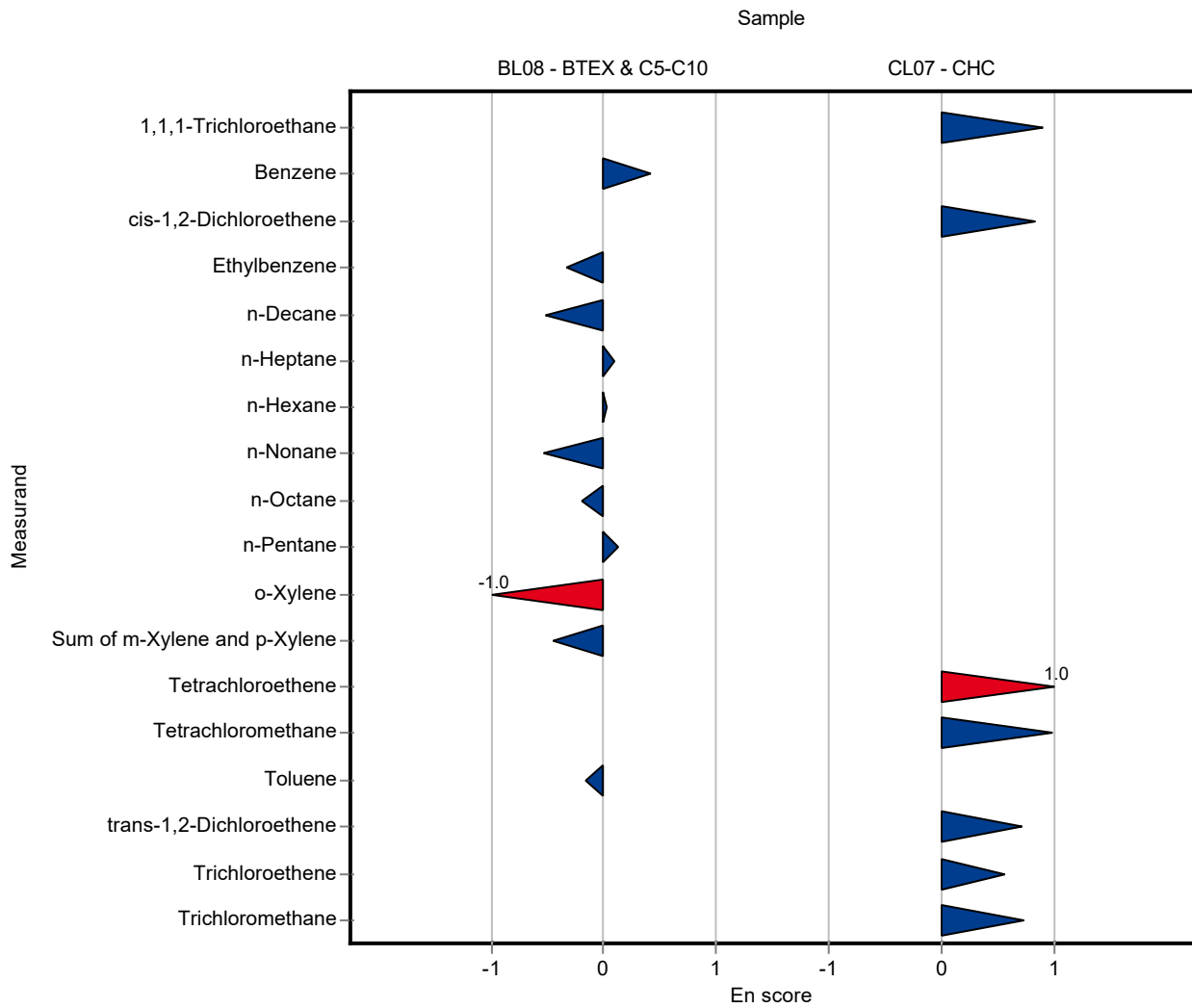


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.04 ± 0.403	0.701	108	0.42
Ethylbenzene	µg/tube	4.87 ± 0.528	4.53 ± 0.453	1.12	92.9	-0.33
n-Decane	µg/tube	2.7 ± 0.356	2.34 ± 0.304	0.54	86.7	-0.51
n-Heptane	µg/tube	6.46 ± 0.446	6.63 ± 0.862	0.646	103	0.10
n-Hexane	µg/tube	6.32 ± 0.775	6.38 ± 0.829	1.01	101	0.03
n-Nonane	µg/tube	4.97 ± 0.458	4.33 ± 0.563	0.696	87.1	-0.53
n-Octane	µg/tube	6.24 ± 0.424	5.94 ± 0.772	0.624	95.3	-0.18
n-Pentane	µg/tube	5.48 ± 1.36	5.76 ± 0.749	2.14	105	0.14
o-Xylene	µg/tube	4.58 ± 0.555	3.73 ± 0.298	1.19	81.5	-1.04
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.32 ± 0.832	1.83	90.8	-0.45
Toluene	µg/tube	5.05 ± 0.409	4.9 ± 0.392	0.858	97.1	-0.17

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.87 ± 0.63	0.867	118	0.91
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.5 ± 0.44	0.888	118	0.83
Tetrachloroethene	µg/tube	5.29 ± 0.779	6.63 ± 0.53	1.53	125	1.02
Tetrachloromethane	µg/tube	7.67 ± 0.559	9.24 ± 0.739	0.997	121	0.99
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.38 ± 0.43	1.5	118	0.72
Trichloroethene	µg/tube	5.84 ± 0.374	6.45 ± 0.516	0.934	111	0.56
Trichloromethane	µg/tube	5.83 ± 0.324	6.86 ± 0.686	0.583	118	0.73





Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	- ± -	0.701	-	-
Ethylbenzene	µg/tube	4.87 ± 0.528	- ± -	1.12	-	-
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	- ± -	1.19	-	-
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	- ± -	1.83	-	-
Toluene	µg/tube	5.05 ± 0.409	- ± -	0.858	-	-

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	- ± -	0.867	-	-
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	- ± -	0.888	-	-
Tetrachloroethene	µg/tube	5.29 ± 0.779	- ± -	1.53	-	-
Tetrachloromethane	µg/tube	7.67 ± 0.559	- ± -	0.997	-	-
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	- ± -	1.5	-	-
Trichloroethene	µg/tube	5.84 ± 0.374	- ± -	0.934	-	-
Trichloromethane	µg/tube	5.83 ± 0.324	- ± -	0.583	-	-

Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	- ± -	0.701	-	-
Ethylbenzene	µg/tube	4.87 ± 0.528	- ± -	1.12	-	-
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	- ± -	1.19	-	-
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	- ± -	1.83	-	-
Toluene	µg/tube	5.05 ± 0.409	- ± -	0.858	-	-

Sample: CL07

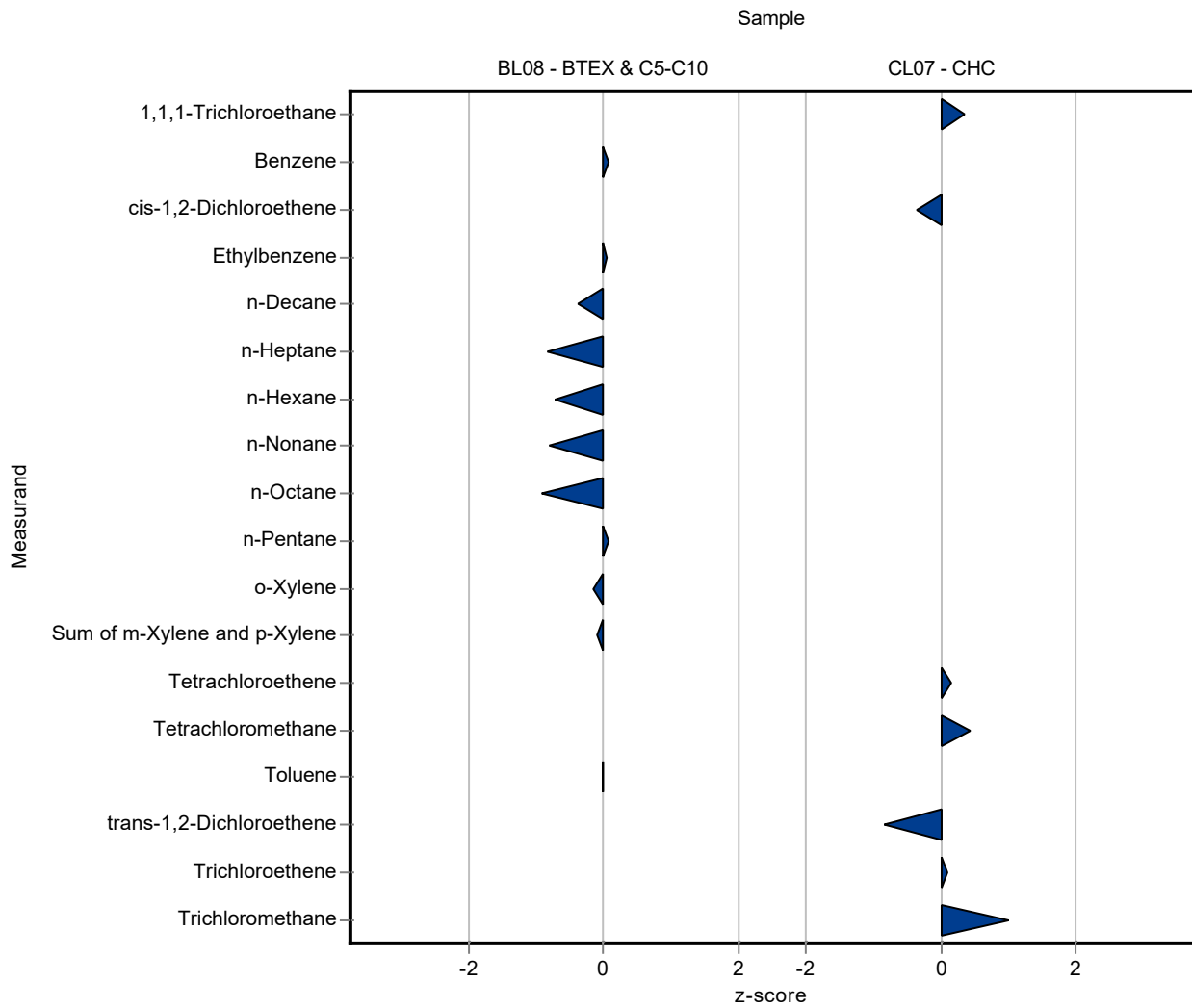
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	- ± -	0.867	-	-
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	- ± -	0.888	-	-
Tetrachloroethene	µg/tube	5.29 ± 0.779	- ± -	1.53	-	-
Tetrachloromethane	µg/tube	7.67 ± 0.559	- ± -	0.997	-	-
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	- ± -	1.5	-	-
Trichloroethene	µg/tube	5.84 ± 0.374	- ± -	0.934	-	-
Trichloromethane	µg/tube	5.83 ± 0.324	- ± -	0.583	-	-

Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.73 ± 0.33	0.701	101	0.08
Ethylbenzene	µg/tube	4.87 ± 0.528	4.94 ± 0.35	1.12	101	0.06
n-Decane	µg/tube	2.7 ± 0.356	2.49 ± 0.98	0.54	92.3	-0.39
n-Heptane	µg/tube	6.46 ± 0.446	5.92 ± 1.94	0.646	91.7	-0.83
n-Hexane	µg/tube	6.32 ± 0.775	5.58 ± 0.72	1.01	88.3	-0.73
n-Nonane	µg/tube	4.97 ± 0.458	4.42 ± 1.59	0.696	88.9	-0.79
n-Octane	µg/tube	6.24 ± 0.424	5.66 ± 1.82	0.624	90.8	-0.92
n-Pentane	µg/tube	5.48 ± 1.36	5.65 ± 2.08	2.14	103	0.08
o-Xylene	µg/tube	4.58 ± 0.555	4.4 ± 0.41	1.19	96.1	-0.15
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.01 ± 0.69	1.83	98.4	-0.08
Toluene	µg/tube	5.05 ± 0.409	5.04 ± 0.34	0.858	99.9	-0.01

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.98 ± 1.58	0.867	105	0.36
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.36 ± 1.48	0.888	93.3	-0.35
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.52 ± 1.21	1.53	104	0.15
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.09 ± 1.82	0.997	106	0.42
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.28 ± 1.74	1.5	72	-0.85
Trichloroethene	µg/tube	5.84 ± 0.374	5.93 ± 1.29	0.934	102	0.10
Trichloromethane	µg/tube	5.83 ± 0.324	6.41 ± 1.57	0.583	110	1.00

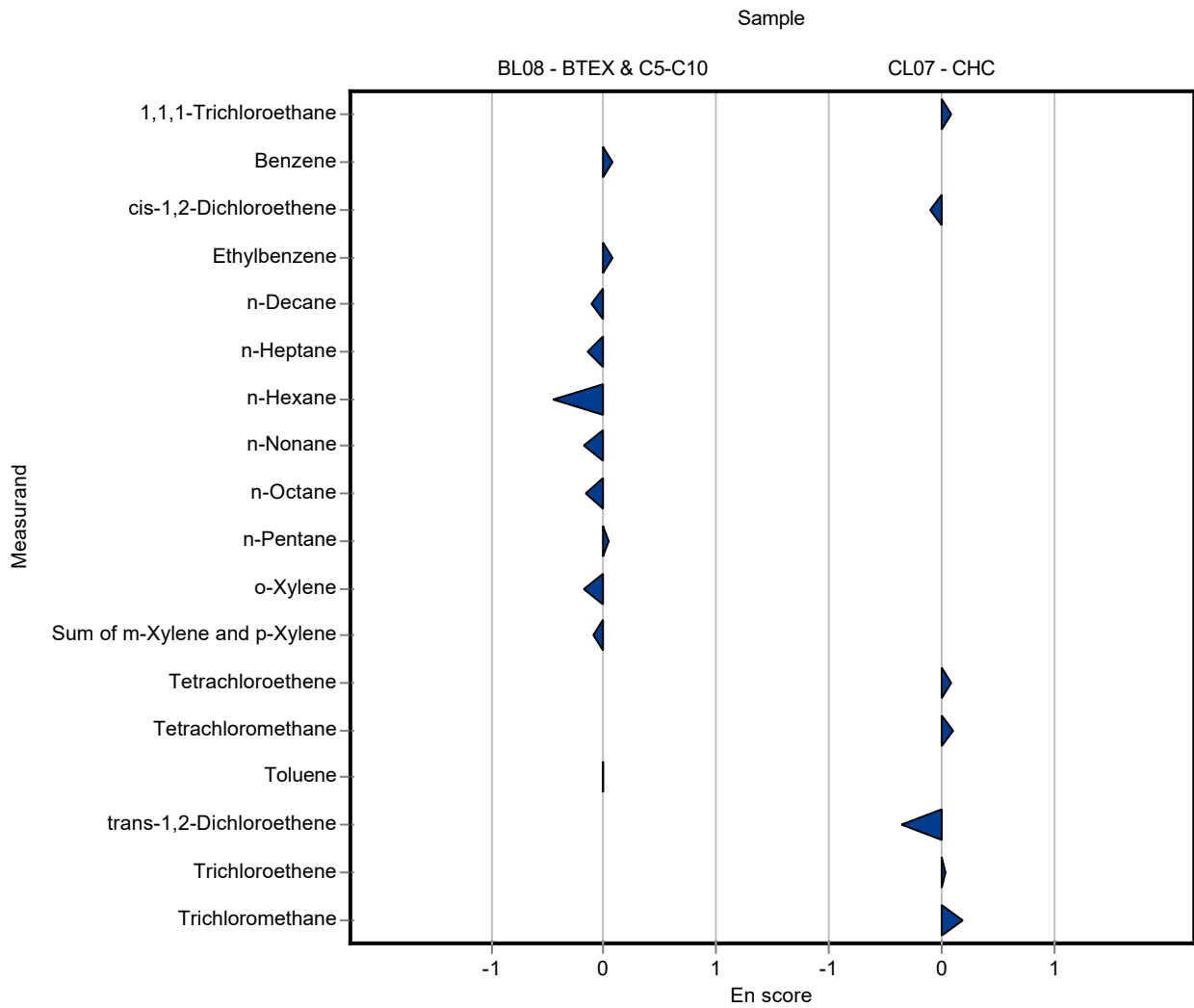


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.73 ± 0.33	0.701	101	0.08
Ethylbenzene	µg/tube	4.87 ± 0.528	4.94 ± 0.35	1.12	101	0.08
n-Decane	µg/tube	2.7 ± 0.356	2.49 ± 0.98	0.54	92.3	-0.10
n-Heptane	µg/tube	6.46 ± 0.446	5.92 ± 1.94	0.646	91.7	-0.14
n-Hexane	µg/tube	6.32 ± 0.775	5.58 ± 0.72	1.01	88.3	-0.45
n-Nonane	µg/tube	4.97 ± 0.458	4.42 ± 1.59	0.696	88.9	-0.17
n-Octane	µg/tube	6.24 ± 0.424	5.66 ± 1.82	0.624	90.8	-0.16
n-Pentane	µg/tube	5.48 ± 1.36	5.65 ± 2.08	2.14	103	0.04
o-Xylene	µg/tube	4.58 ± 0.555	4.4 ± 0.41	1.19	96.1	-0.18
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.01 ± 0.69	1.83	98.4	-0.09
Toluene	µg/tube	5.05 ± 0.409	5.04 ± 0.34	0.858	99.9	-0.01

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.98 ± 1.58	0.867	105	0.10
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.36 ± 1.48	0.888	93.3	-0.10
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.52 ± 1.21	1.53	104	0.09
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.09 ± 1.82	0.997	106	0.12
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.28 ± 1.74	1.5	72	-0.36
Trichloroethene	µg/tube	5.84 ± 0.374	5.93 ± 1.29	0.934	102	0.04
Trichloromethane	µg/tube	5.83 ± 0.324	6.41 ± 1.57	0.583	110	0.18

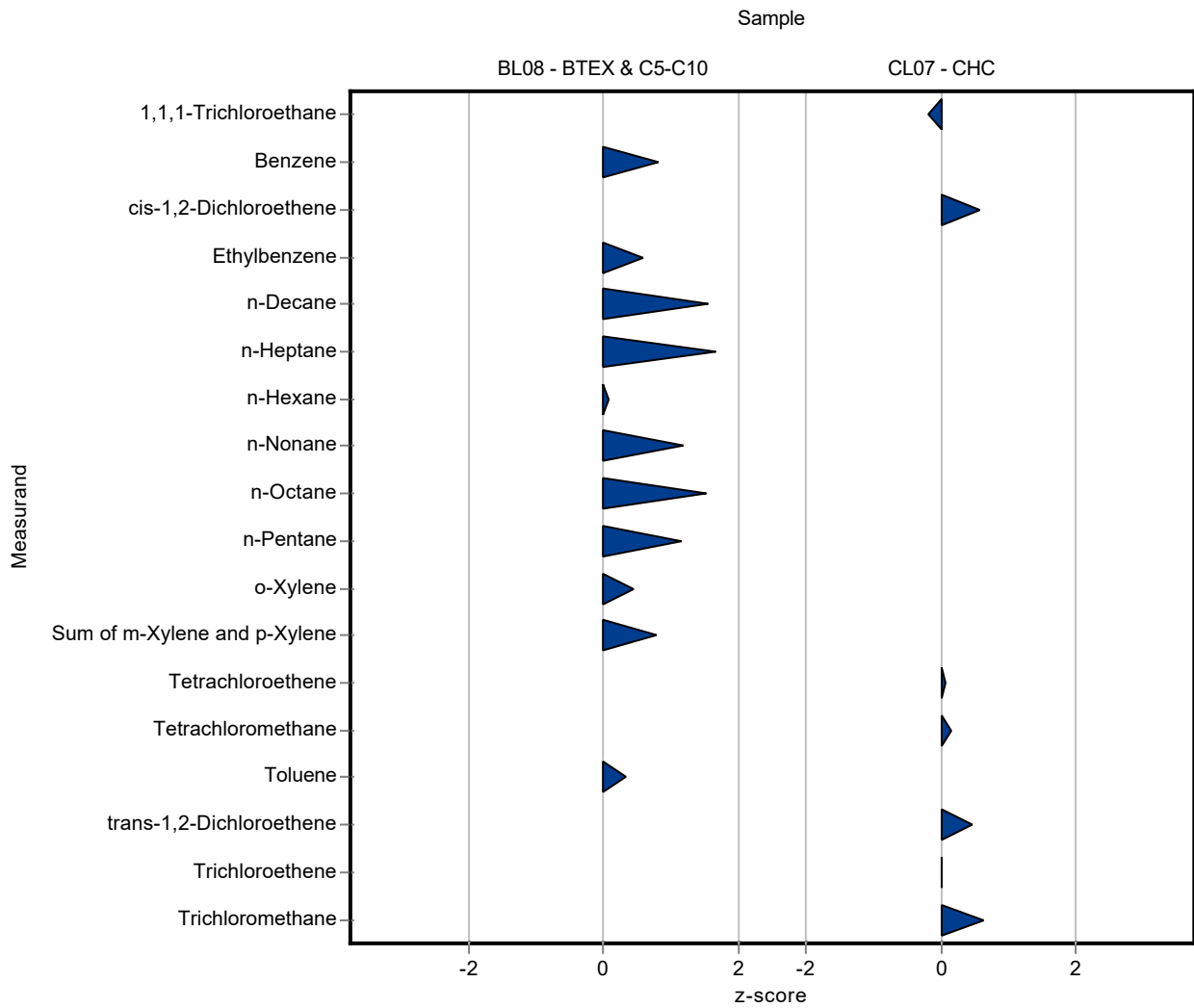


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.25 ± 0.57	0.701	112	0.82
Ethylbenzene	µg/tube	4.87 ± 0.528	5.54 ± 0.6	1.12	114	0.59
n-Decane	µg/tube	2.7 ± 0.356	3.53 ± 0.52	0.54	131	1.54
n-Heptane	µg/tube	6.46 ± 0.446	7.54 ± 1.13	0.646	117	1.67
n-Hexane	µg/tube	6.32 ± 0.775	6.41 ± 0.96	1.01	101	0.09
n-Nonane	µg/tube	4.97 ± 0.458	5.8 ± 0.87	0.696	117	1.19
n-Octane	µg/tube	6.24 ± 0.424	7.18 ± 1.07	0.624	115	1.52
n-Pentane	µg/tube	5.48 ± 1.36	7.94 ± 1.19	2.14	145	1.15
o-Xylene	µg/tube	4.58 ± 0.555	5.11 ± 0.55	1.19	112	0.45
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.6 ± 1.15	1.83	116	0.79
Toluene	µg/tube	5.05 ± 0.409	5.32 ± 0.56	0.858	105	0.32

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.5 ± 0.78	0.867	97.5	-0.19
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.19 ± 0.62	0.888	111	0.58
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.4 ± 0.65	1.53	102	0.07
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.82 ± 0.94	0.997	102	0.15
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.24 ± 0.63	1.5	115	0.46
Trichloroethene	µg/tube	5.84 ± 0.374	5.85 ± 0.7	0.934	100	0.02
Trichloromethane	µg/tube	5.83 ± 0.324	6.2 ± 0.74	0.583	106	0.64



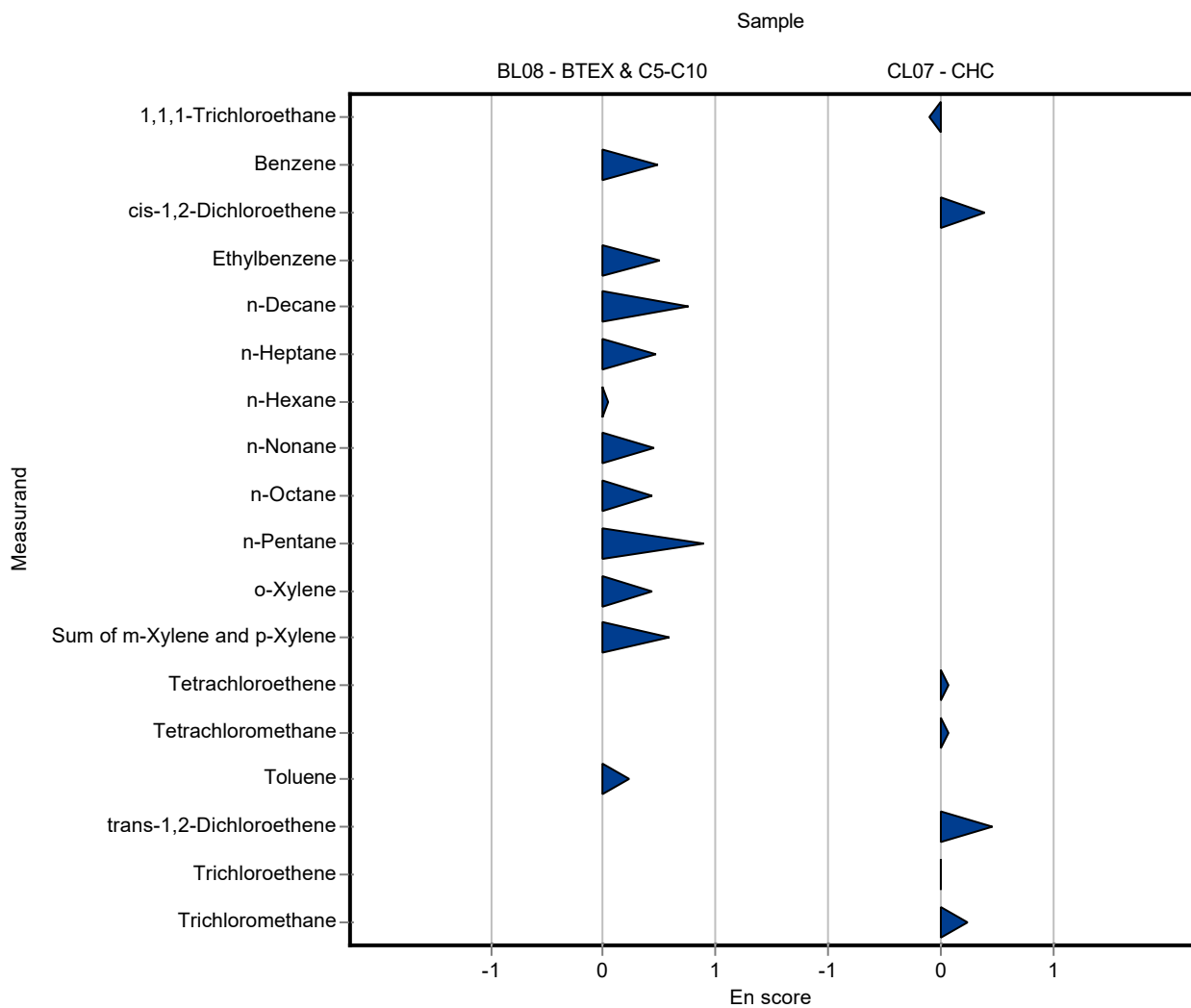


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.25 ± 0.57	0.701	112	0.49
Ethylbenzene	µg/tube	4.87 ± 0.528	5.54 ± 0.6	1.12	114	0.51
n-Decane	µg/tube	2.7 ± 0.356	3.53 ± 0.52	0.54	131	0.76
n-Heptane	µg/tube	6.46 ± 0.446	7.54 ± 1.13	0.646	117	0.47
n-Hexane	µg/tube	6.32 ± 0.775	6.41 ± 0.96	1.01	101	0.04
n-Nonane	µg/tube	4.97 ± 0.458	5.8 ± 0.87	0.696	117	0.46
n-Octane	µg/tube	6.24 ± 0.424	7.18 ± 1.07	0.624	115	0.43
n-Pentane	µg/tube	5.48 ± 1.36	7.94 ± 1.19	2.14	145	0.90
o-Xylene	µg/tube	4.58 ± 0.555	5.11 ± 0.55	1.19	112	0.43
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.6 ± 1.15	1.83	116	0.58
Toluene	µg/tube	5.05 ± 0.409	5.32 ± 0.56	0.858	105	0.23

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.5 ± 0.78	0.867	97.5	-0.10
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.19 ± 0.62	0.888	111	0.39
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.4 ± 0.65	1.53	102	0.07
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.82 ± 0.94	0.997	102	0.08
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.24 ± 0.63	1.5	115	0.47
Trichloroethene	µg/tube	5.84 ± 0.374	5.85 ± 0.7	0.934	100	0.01
Trichloromethane	µg/tube	5.83 ± 0.324	6.2 ± 0.74	0.583	106	0.25

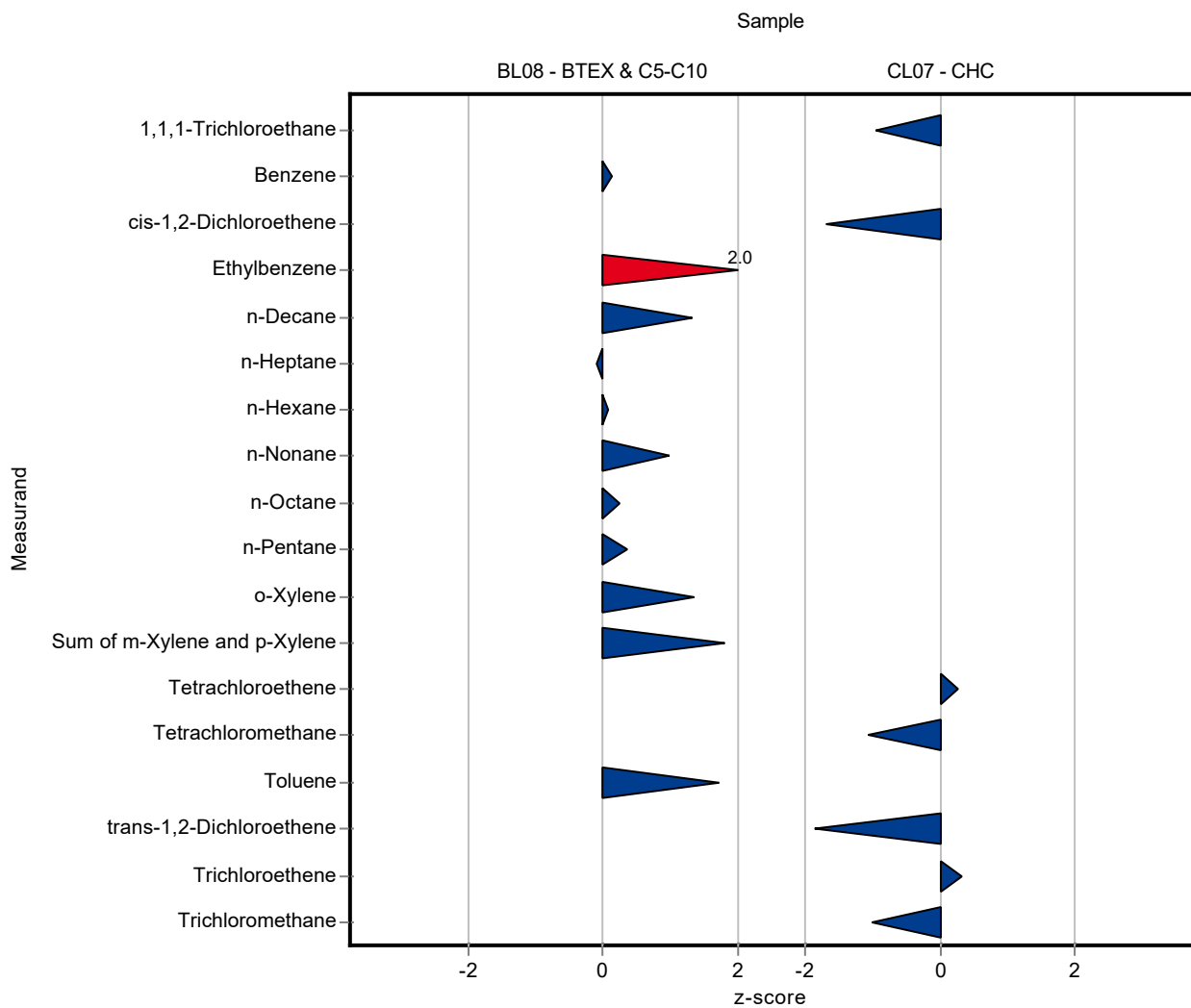


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.77 ± 0.2	0.701	102	0.14
Ethylbenzene	µg/tube	4.87 ± 0.528	7.13 ± 0.56	1.12	146	2.01
n-Decane	µg/tube	2.7 ± 0.356	3.42 ± 0.11	0.54	127	1.34
n-Heptane	µg/tube	6.46 ± 0.446	6.4 ± 0.14	0.646	99.1	-0.09
n-Hexane	µg/tube	6.32 ± 0.775	6.39 ± 0.14	1.01	101	0.07
n-Nonane	µg/tube	4.97 ± 0.458	5.65 ± 0.13	0.696	114	0.97
n-Octane	µg/tube	6.24 ± 0.424	6.39 ± 0.15	0.624	102	0.25
n-Pentane	µg/tube	5.48 ± 1.36	6.24 ± 0.26	2.14	114	0.35
o-Xylene	µg/tube	4.58 ± 0.555	6.19 ± 0.33	1.19	135	1.35
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	12.49 ± 0.89	1.83	136	1.82
Toluene	µg/tube	5.05 ± 0.409	6.52 ± 0.34	0.858	129	1.72

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.84 ± 0.27	0.867	87.6	-0.95
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.18 ± 0.13	0.888	68.1	-1.68
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.71 ± 0.47	1.53	108	0.27
Tetrachloromethane	µg/tube	7.67 ± 0.559	6.61 ± 0.41	0.997	86.2	-1.06
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	1.77 ± 0.15	1.5	38.9	-1.85
Trichloroethene	µg/tube	5.84 ± 0.374	6.14 ± 0.81	0.934	105	0.33
Trichloromethane	µg/tube	5.83 ± 0.324	5.23 ± 0.38	0.583	89.8	-1.02

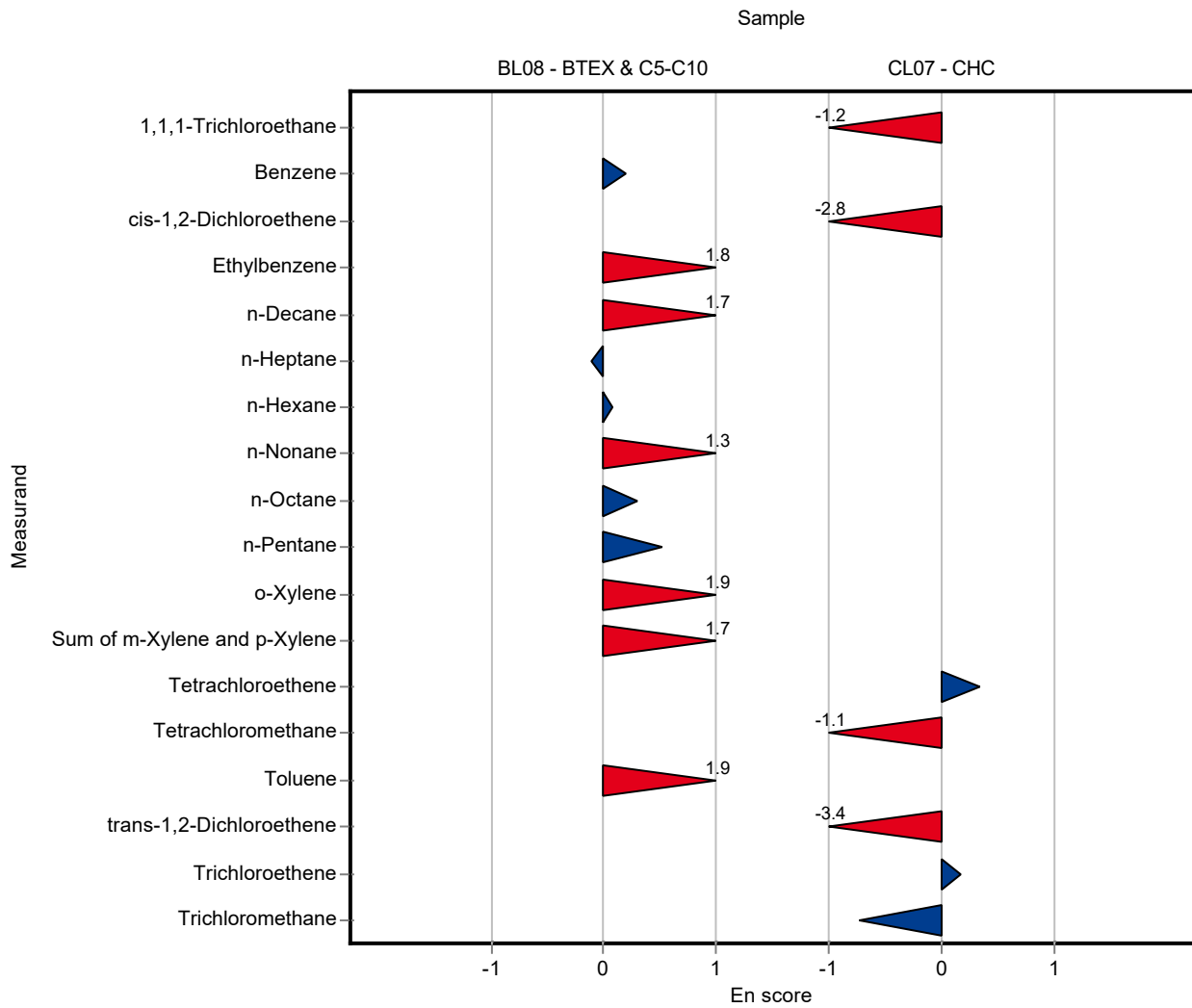


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.77 ± 0.2	0.701	102	0.19
Ethylbenzene	µg/tube	4.87 ± 0.528	7.13 ± 0.56	1.12	146	1.82
n-Decane	µg/tube	2.7 ± 0.356	3.42 ± 0.11	0.54	127	1.72
n-Heptane	µg/tube	6.46 ± 0.446	6.4 ± 0.14	0.646	99.1	-0.11
n-Hexane	µg/tube	6.32 ± 0.775	6.39 ± 0.14	1.01	101	0.09
n-Nonane	µg/tube	4.97 ± 0.458	5.65 ± 0.13	0.696	114	1.29
n-Octane	µg/tube	6.24 ± 0.424	6.39 ± 0.15	0.624	102	0.30
n-Pentane	µg/tube	5.48 ± 1.36	6.24 ± 0.26	2.14	114	0.52
o-Xylene	µg/tube	4.58 ± 0.555	6.19 ± 0.33	1.19	135	1.87
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	12.49 ± 0.89	1.83	136	1.68
Toluene	µg/tube	5.05 ± 0.409	6.52 ± 0.34	0.858	129	1.86

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.84 ± 0.27	0.867	87.6	-1.25
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.18 ± 0.13	0.888	68.1	-2.83
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.71 ± 0.47	1.53	108	0.34
Tetrachloromethane	µg/tube	7.67 ± 0.559	6.61 ± 0.41	0.997	86.2	-1.07
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	1.77 ± 0.15	1.5	38.9	-3.39
Trichloroethene	µg/tube	5.84 ± 0.374	6.14 ± 0.81	0.934	105	0.18
Trichloromethane	µg/tube	5.83 ± 0.324	5.23 ± 0.38	0.583	89.8	-0.72

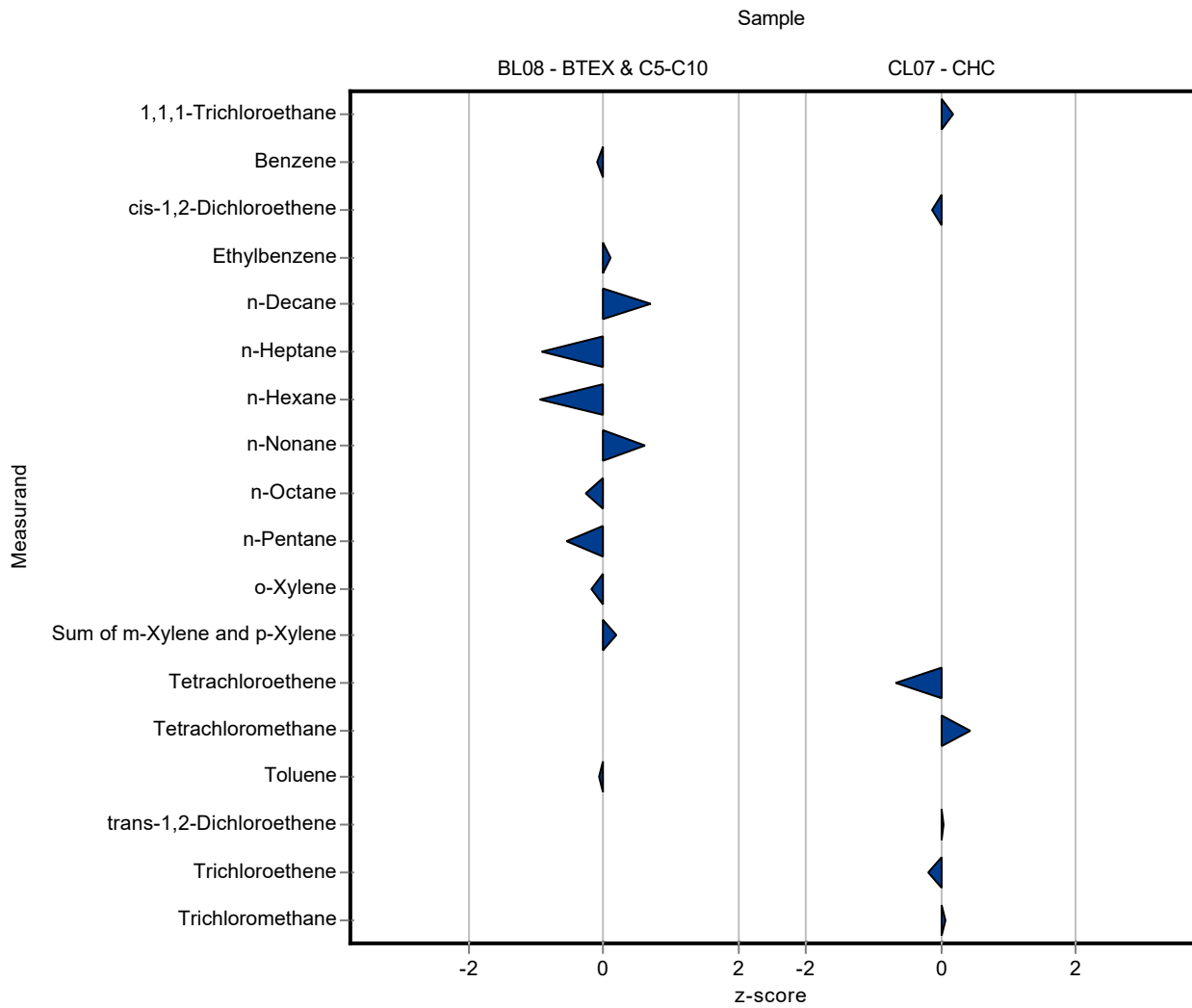


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.608 ± 0.3	0.701	98.6	-0.09
Ethylbenzene	µg/tube	4.87 ± 0.528	4.98 ± 0.623	1.12	102	0.09
n-Decane	µg/tube	2.7 ± 0.356	3.075 ± 0.307	0.54	114	0.70
n-Heptane	µg/tube	6.46 ± 0.446	5.862 ± 0.586	0.646	90.8	-0.92
n-Hexane	µg/tube	6.32 ± 0.775	5.372 ± 0.537	1.01	85	-0.94
n-Nonane	µg/tube	4.97 ± 0.458	5.407 ± 0.541	0.696	109	0.62
n-Octane	µg/tube	6.24 ± 0.424	6.068 ± 0.607	0.624	97.3	-0.27
n-Pentane	µg/tube	5.48 ± 1.36	4.287 ± 0.429	2.14	78.2	-0.56
o-Xylene	µg/tube	4.58 ± 0.555	4.367 ± 0.24	1.19	95.4	-0.18
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.53 ± 1.668	1.83	104	0.20
Toluene	µg/tube	5.05 ± 0.409	4.994 ± 0.3	0.858	99	-0.06

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.825 ± 0.785	0.867	102	0.18
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.566 ± 0.411	0.888	97.7	-0.12
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.245 ± 0.34	1.53	80.2	-0.68
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.105 ± 0.527	0.997	106	0.44
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.601 ± 0.713	1.5	101	0.03
Trichloroethene	µg/tube	5.84 ± 0.374	5.666 ± 0.68	0.934	97.1	-0.18
Trichloromethane	µg/tube	5.83 ± 0.324	5.858 ± 0.674	0.583	101	0.06



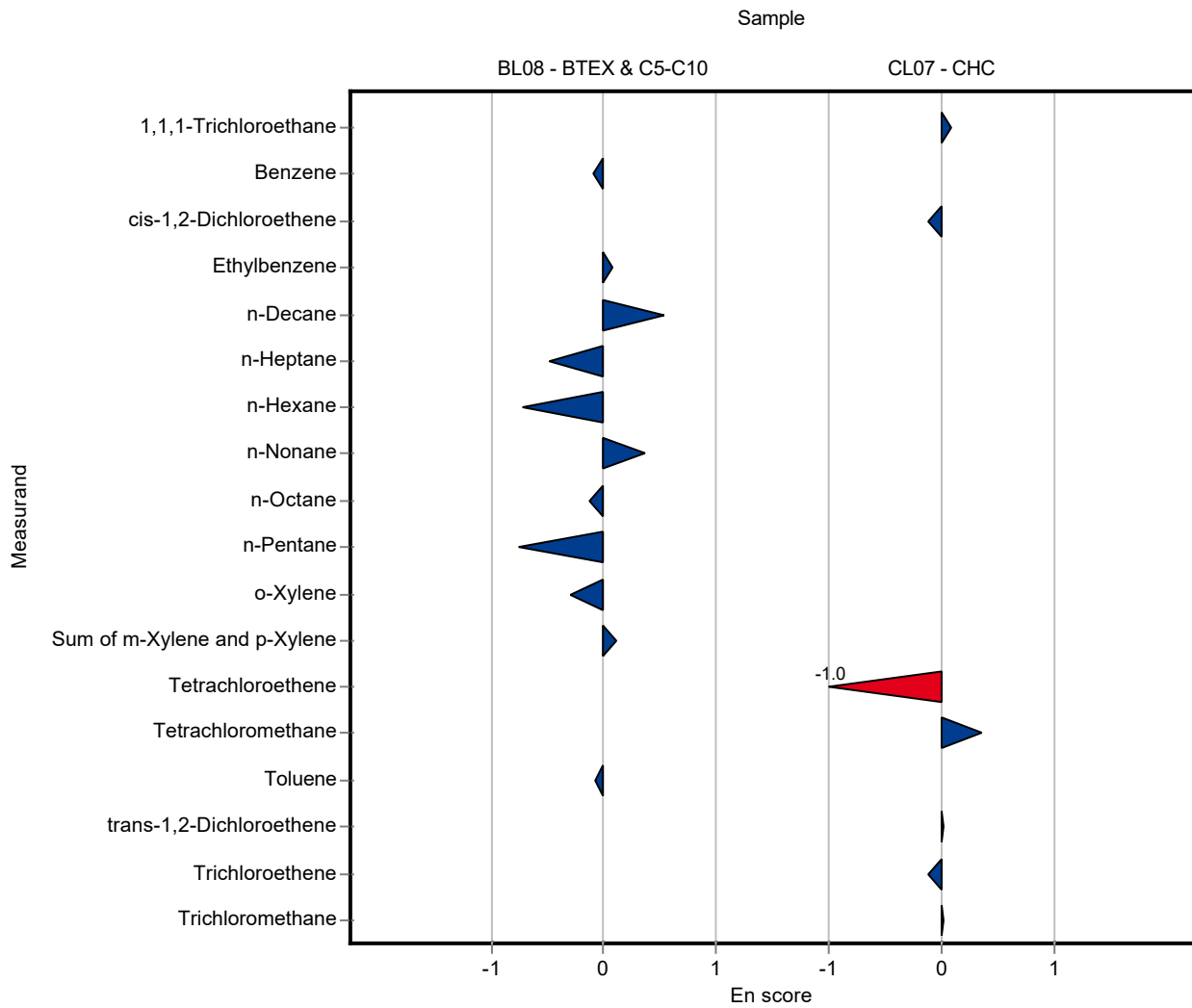


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.608 ± 0.3	0.701	98.6	-0.10
Ethylbenzene	µg/tube	4.87 ± 0.528	4.98 ± 0.623	1.12	102	0.08
n-Decane	µg/tube	2.7 ± 0.356	3.075 ± 0.307	0.54	114	0.53
n-Heptane	µg/tube	6.46 ± 0.446	5.862 ± 0.586	0.646	90.8	-0.48
n-Hexane	µg/tube	6.32 ± 0.775	5.372 ± 0.537	1.01	85	-0.71
n-Nonane	µg/tube	4.97 ± 0.458	5.407 ± 0.541	0.696	109	0.37
n-Octane	µg/tube	6.24 ± 0.424	6.068 ± 0.607	0.624	97.3	-0.13
n-Pentane	µg/tube	5.48 ± 1.36	4.287 ± 0.429	2.14	78.2	-0.74
o-Xylene	µg/tube	4.58 ± 0.555	4.367 ± 0.24	1.19	95.4	-0.29
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	9.53 ± 1.668	1.83	104	0.11
Toluene	µg/tube	5.05 ± 0.409	4.994 ± 0.3	0.858	99	-0.07

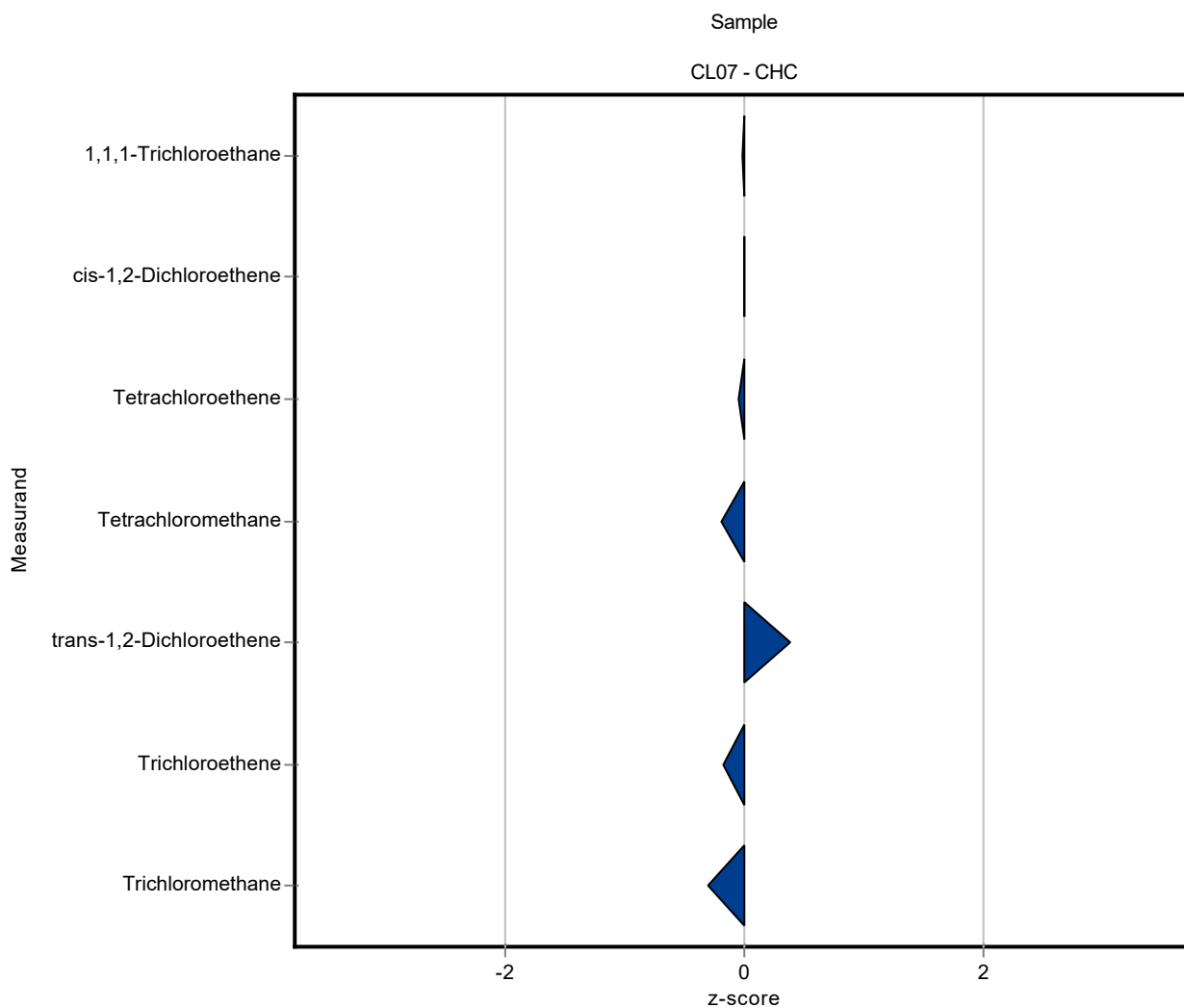
Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.825 ± 0.785	0.867	102	0.10
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.566 ± 0.411	0.888	97.7	-0.11
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.245 ± 0.34	1.53	80.2	-1.01
Tetrachloromethane	µg/tube	7.67 ± 0.559	8.105 ± 0.527	0.997	106	0.37
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	4.601 ± 0.713	1.5	101	0.03
Trichloroethene	µg/tube	5.84 ± 0.374	5.666 ± 0.68	0.934	97.1	-0.12
Trichloromethane	µg/tube	5.83 ± 0.324	5.858 ± 0.674	0.583	101	0.02



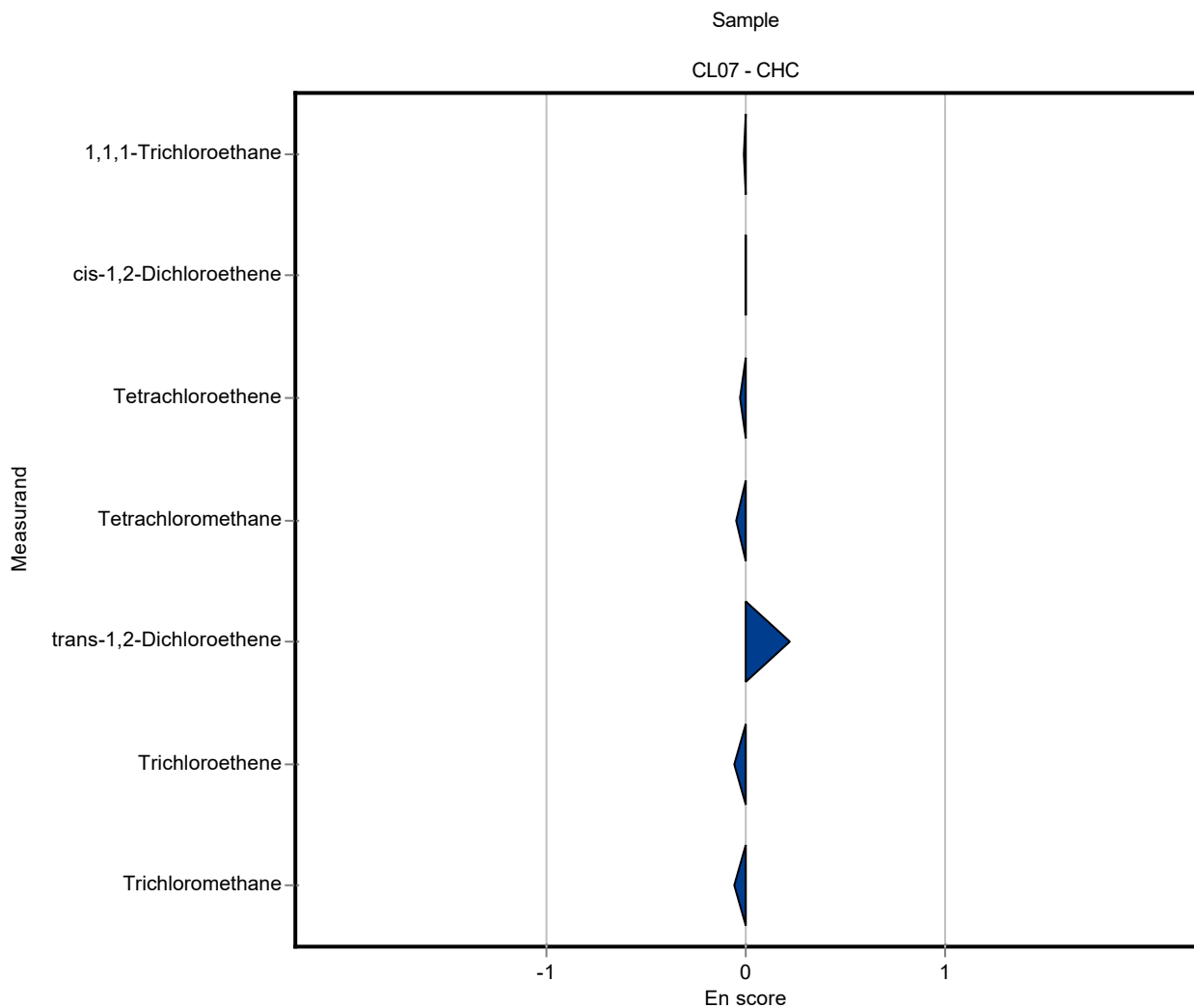
Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.65 ± 1.66	0.867	99.8	-0.02
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.67 ± 1.17	0.888	100	0.00
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.21 ± 1.3	1.53	98.5	-0.05
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.47 ± 1.87	0.997	97.4	-0.20
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.13 ± 1.28	1.5	113	0.38
Trichloroethene	µg/tube	5.84 ± 0.374	5.67 ± 1.42	0.934	97.2	-0.18
Trichloromethane	µg/tube	5.83 ± 0.324	5.65 ± 1.41	0.583	97	-0.30



Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	6.65 ± 1.66	0.867	99.8	0.00
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	4.67 ± 1.17	0.888	100	0.00
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.21 ± 1.3	1.53	98.5	-0.03
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.47 ± 1.87	0.997	97.4	-0.05
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.13 ± 1.28	1.5	113	0.22
Trichloroethene	µg/tube	5.84 ± 0.374	5.67 ± 1.42	0.934	97.2	-0.06
Trichloromethane	µg/tube	5.83 ± 0.324	5.65 ± 1.41	0.583	97	-0.06

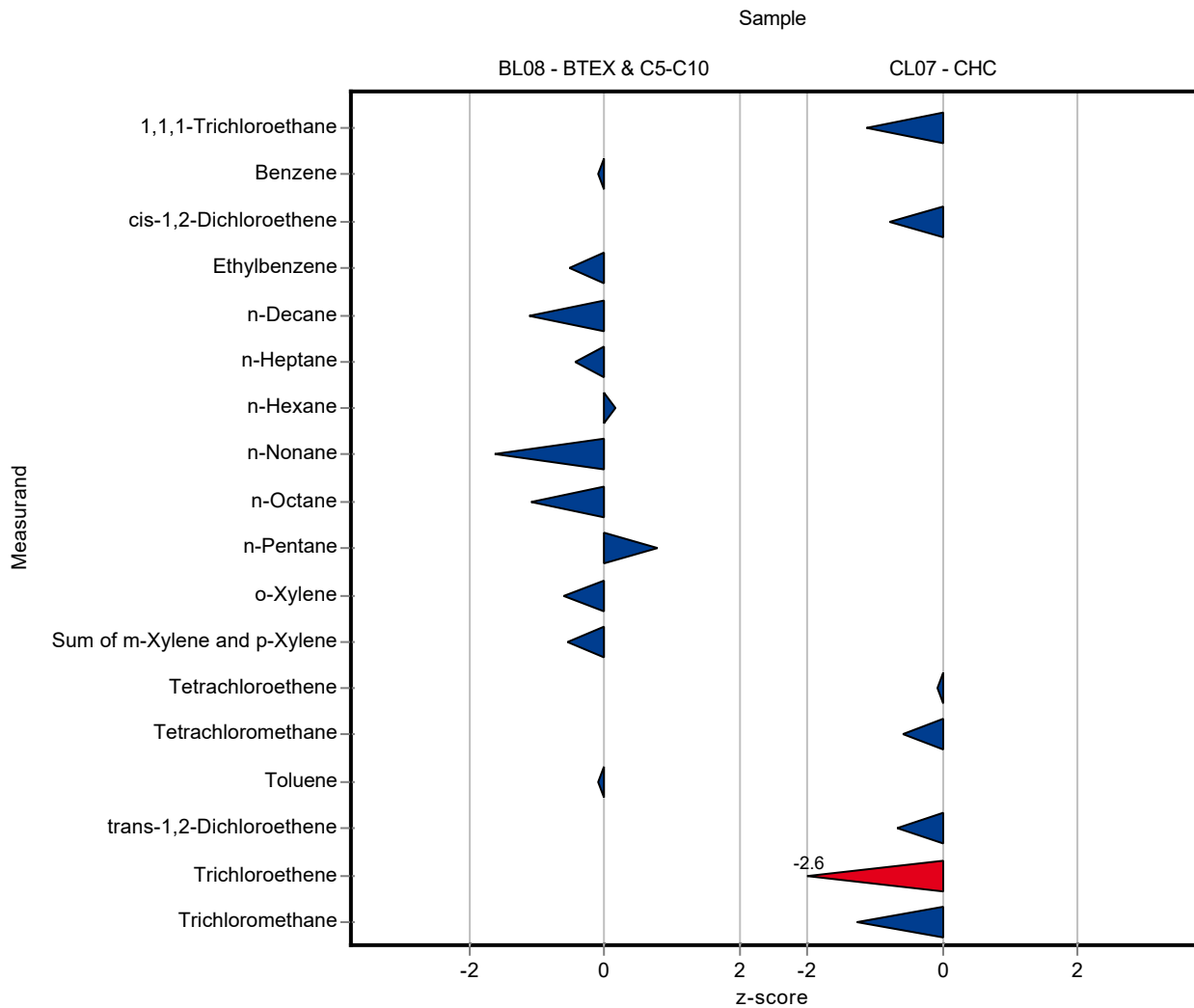


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.61 ± 0.92	0.701	98.7	-0.09
Ethylbenzene	µg/tube	4.87 ± 0.528	4.29 ± 0.86	1.12	88	-0.52
n-Decane	µg/tube	2.7 ± 0.356	2.09 ± 0.42	0.54	77.5	-1.13
n-Heptane	µg/tube	6.46 ± 0.446	6.17 ± 1.2	0.646	95.5	-0.45
n-Hexane	µg/tube	6.32 ± 0.775	6.49 ± 1.3	1.01	103	0.17
n-Nonane	µg/tube	4.97 ± 0.458	3.85 ± 0.77	0.696	77.4	-1.61
n-Octane	µg/tube	6.24 ± 0.424	5.55 ± 1.1	0.624	89	-1.10
n-Pentane	µg/tube	5.48 ± 1.36	7.19 ± 1.4	2.14	131	0.80
o-Xylene	µg/tube	4.58 ± 0.555	3.87 ± 0.77	1.19	84.5	-0.59
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.16 ± 1.6	1.83	89.1	-0.55
Toluene	µg/tube	5.05 ± 0.409	4.96 ± 0.99	0.858	98.3	-0.10

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.69 ± 1.1	0.867	85.4	-1.13
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.98 ± 0.8	0.888	85.2	-0.78
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.19 ± 1	1.53	98.1	-0.07
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.08 ± 1.4	0.997	92.3	-0.59
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.53 ± 0.71	1.5	77.5	-0.68
Trichloroethene	µg/tube	5.84 ± 0.374	3.44 ± 0.69	0.934	58.9	-2.57
Trichloromethane	µg/tube	5.83 ± 0.324	5.08 ± 1	0.583	87.2	-1.28

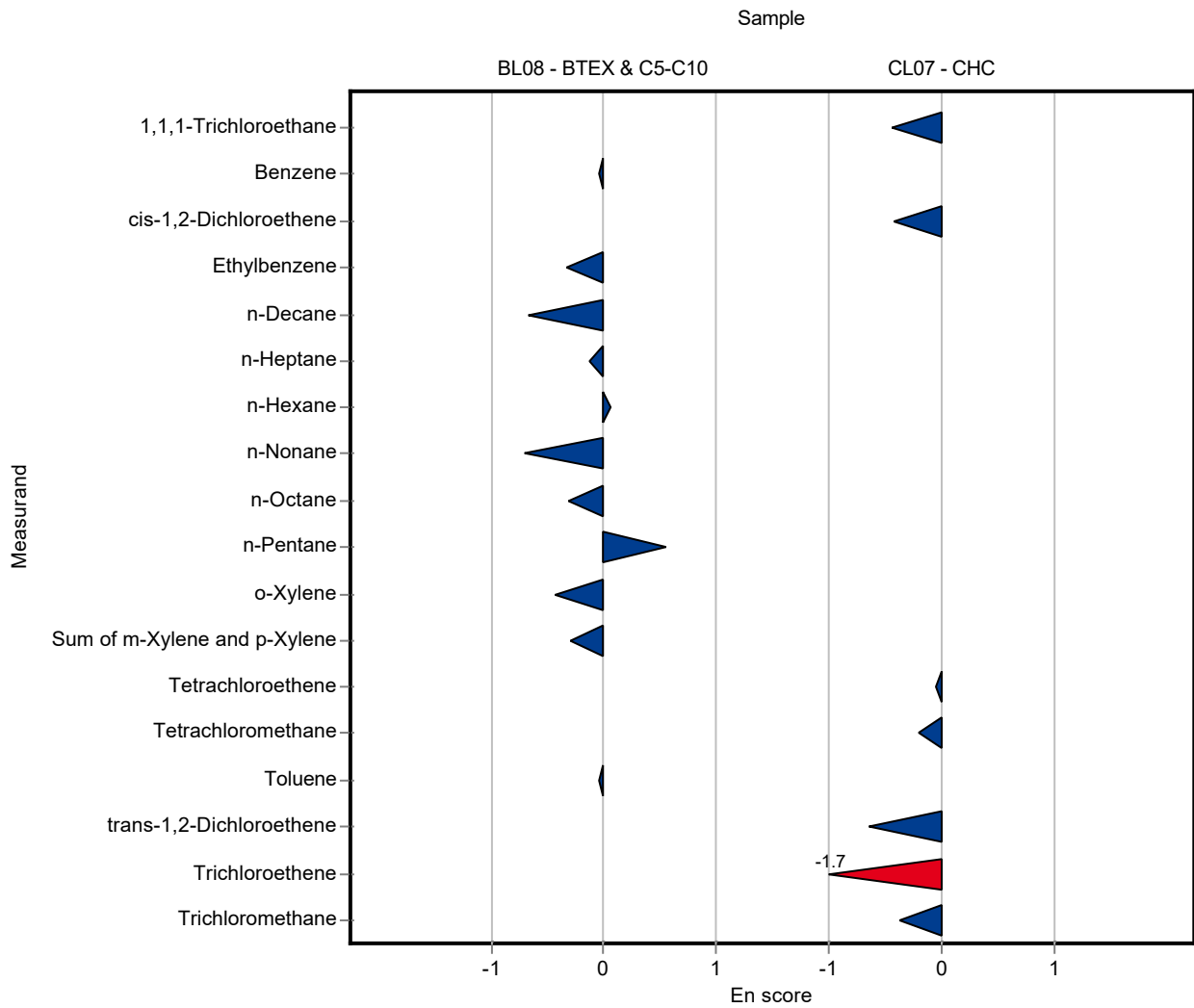


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.61 ± 0.92	0.701	98.7	-0.03
Ethylbenzene	µg/tube	4.87 ± 0.528	4.29 ± 0.86	1.12	88	-0.32
n-Decane	µg/tube	2.7 ± 0.356	2.09 ± 0.42	0.54	77.5	-0.67
n-Heptane	µg/tube	6.46 ± 0.446	6.17 ± 1.2	0.646	95.5	-0.12
n-Hexane	µg/tube	6.32 ± 0.775	6.49 ± 1.3	1.01	103	0.06
n-Nonane	µg/tube	4.97 ± 0.458	3.85 ± 0.77	0.696	77.4	-0.70
n-Octane	µg/tube	6.24 ± 0.424	5.55 ± 1.1	0.624	89	-0.31
n-Pentane	µg/tube	5.48 ± 1.36	7.19 ± 1.4	2.14	131	0.55
o-Xylene	µg/tube	4.58 ± 0.555	3.87 ± 0.77	1.19	84.5	-0.43
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	8.16 ± 1.6	1.83	89.1	-0.30
Toluene	µg/tube	5.05 ± 0.409	4.96 ± 0.99	0.858	98.3	-0.04

Sample: CL07

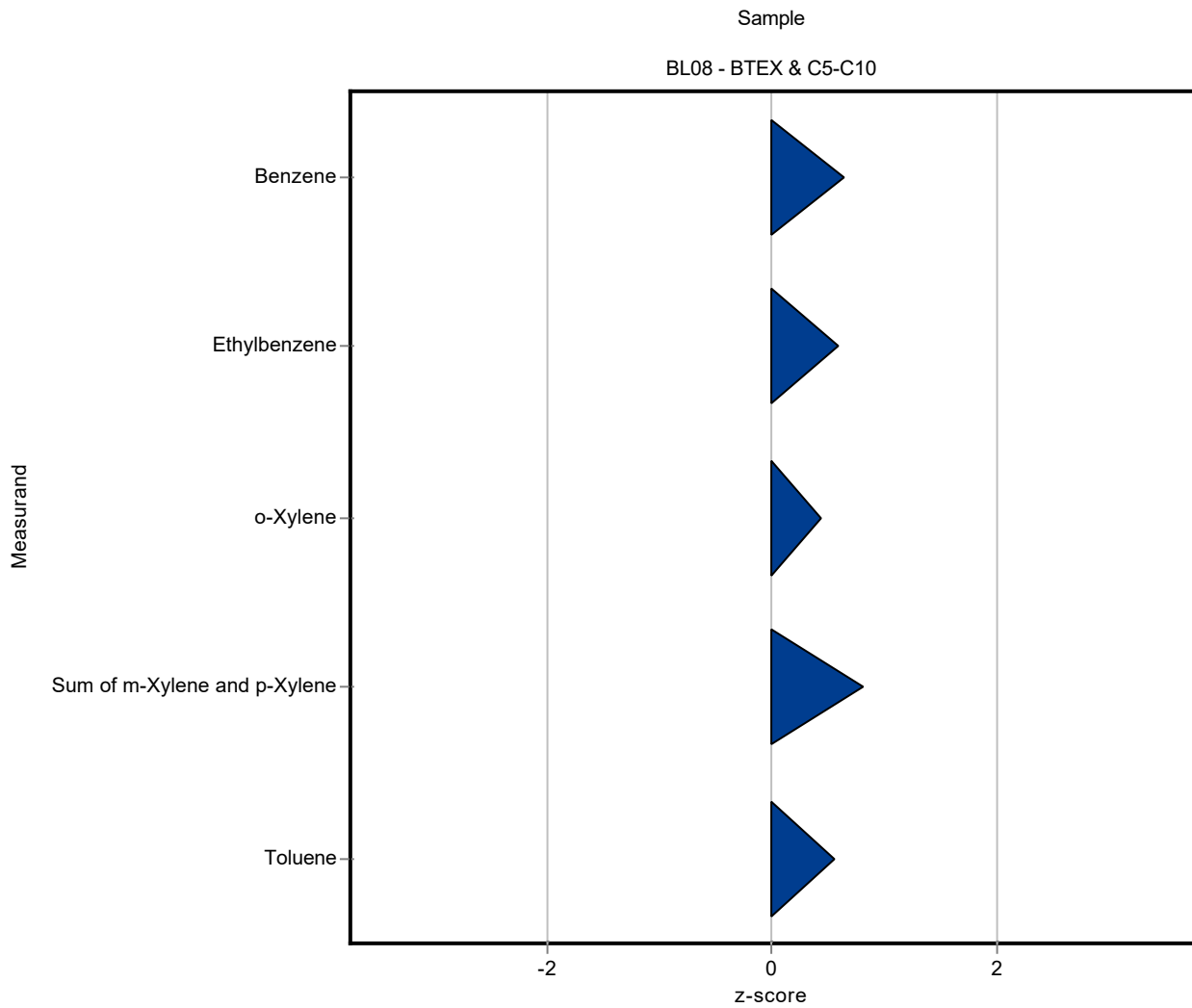
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.69 ± 1.1	0.867	85.4	-0.44
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	3.98 ± 0.8	0.888	85.2	-0.42
Tetrachloroethene	µg/tube	5.29 ± 0.779	5.19 ± 1	1.53	98.1	-0.05
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.08 ± 1.4	0.997	92.3	-0.21
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	3.53 ± 0.71	1.5	77.5	-0.64
Trichloroethene	µg/tube	5.84 ± 0.374	3.44 ± 0.69	0.934	58.9	-1.68
Trichloromethane	µg/tube	5.83 ± 0.324	5.08 ± 1	0.583	87.2	-0.37





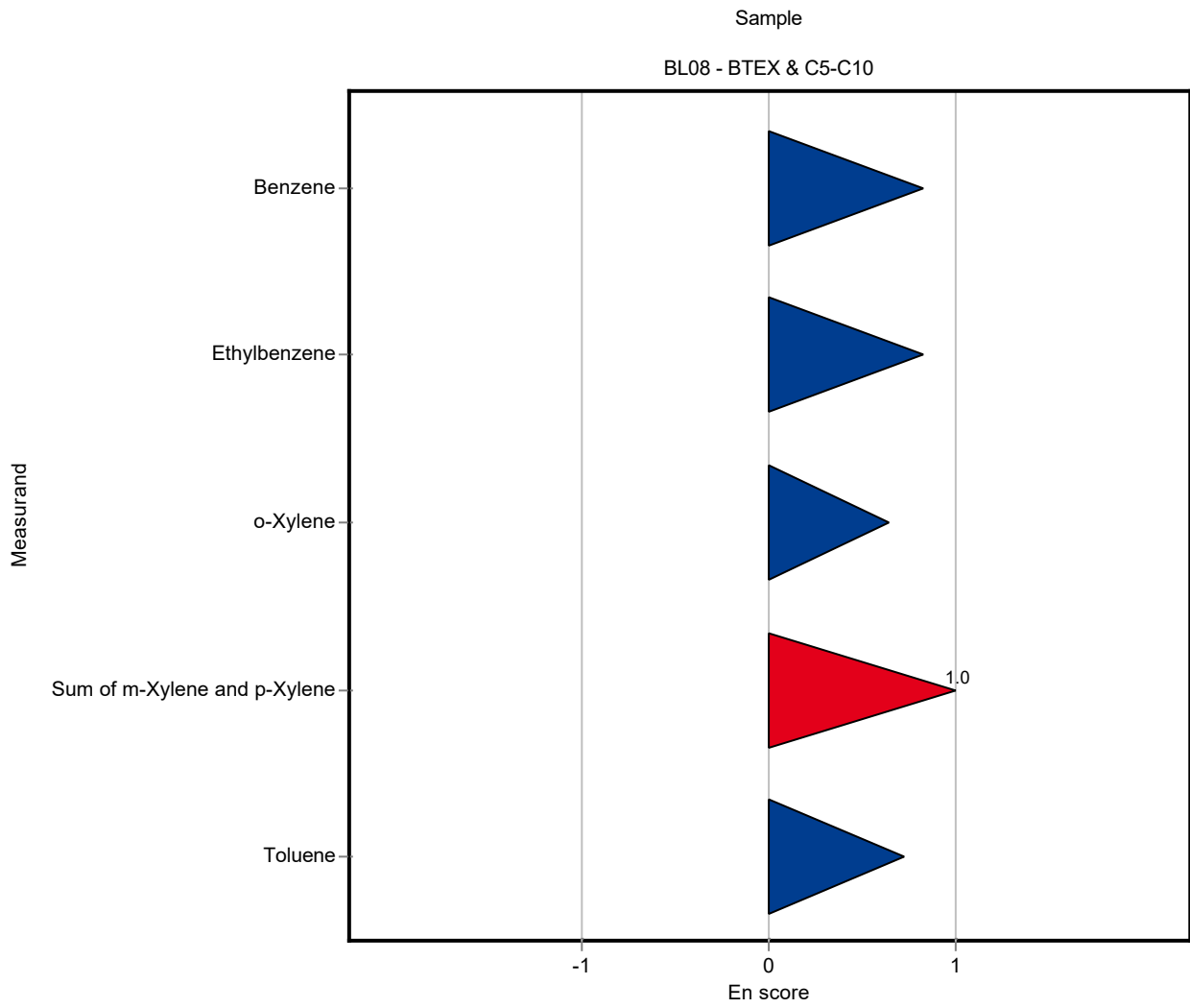
Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	5.116 ± 0.22	0.701	109	0.63
Ethylbenzene	µg/tube	4.87 ± 0.528	5.539 ± 0.31	1.12	114	0.59
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	5.087 ± 0.29	1.19	111	0.43
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.639 ± 0.56	1.83	116	0.81
Toluene	µg/tube	5.05 ± 0.409	5.524 ± 0.26	0.858	109	0.56



Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	5.116 ± 0.22	0.701	109	0.82
Ethylbenzene	µg/tube	4.87 ± 0.528	5.539 ± 0.31	1.12	114	0.82
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	5.087 ± 0.29	1.19	111	0.63
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	10.639 ± 0.56	1.83	116	1.04
Toluene	µg/tube	5.05 ± 0.409	5.524 ± 0.26	0.858	109	0.72

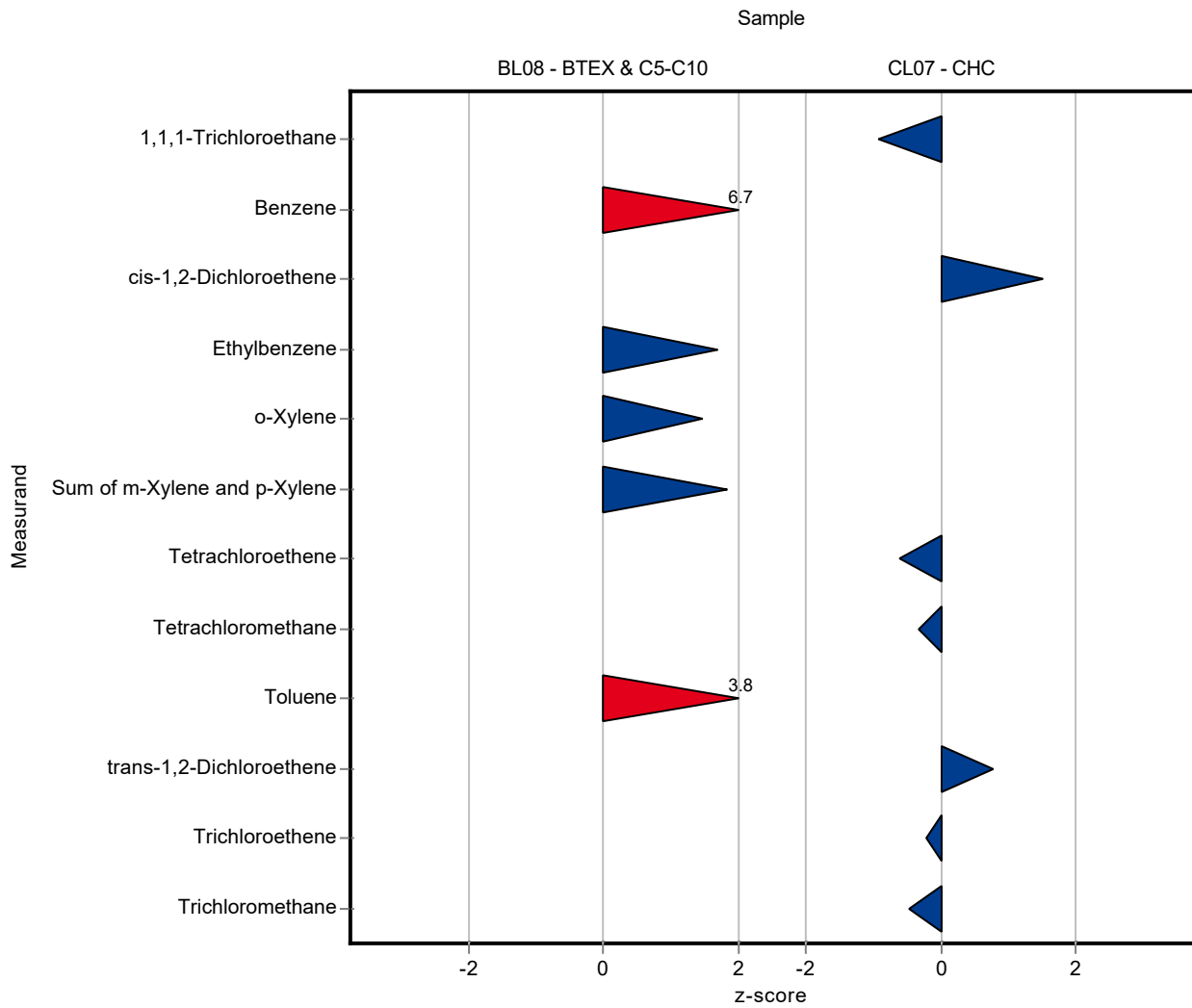


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	9.38 ± 1.88	0.701	201	6.72
Ethylbenzene	µg/tube	4.87 ± 0.528	6.78 ± 1.36	1.12	139	1.70
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	6.32 ± 1.26	1.19	138	1.46
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	12.53 ± 2.51	1.83	137	1.84
Toluene	µg/tube	5.05 ± 0.409	8.27 ± 1.65	0.858	164	3.76

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.87 ± 1.17	0.867	88.1	-0.92
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	6.02 ± 1.2	0.888	129	1.52
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.36 ± 0.87	1.53	82.4	-0.61
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.35 ± 1.47	0.997	95.9	-0.32
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.7 ± 1.14	1.5	125	0.76
Trichloroethene	µg/tube	5.84 ± 0.374	5.62 ± 1.12	0.934	96.3	-0.23
Trichloromethane	µg/tube	5.83 ± 0.324	5.55 ± 1.11	0.583	95.3	-0.47

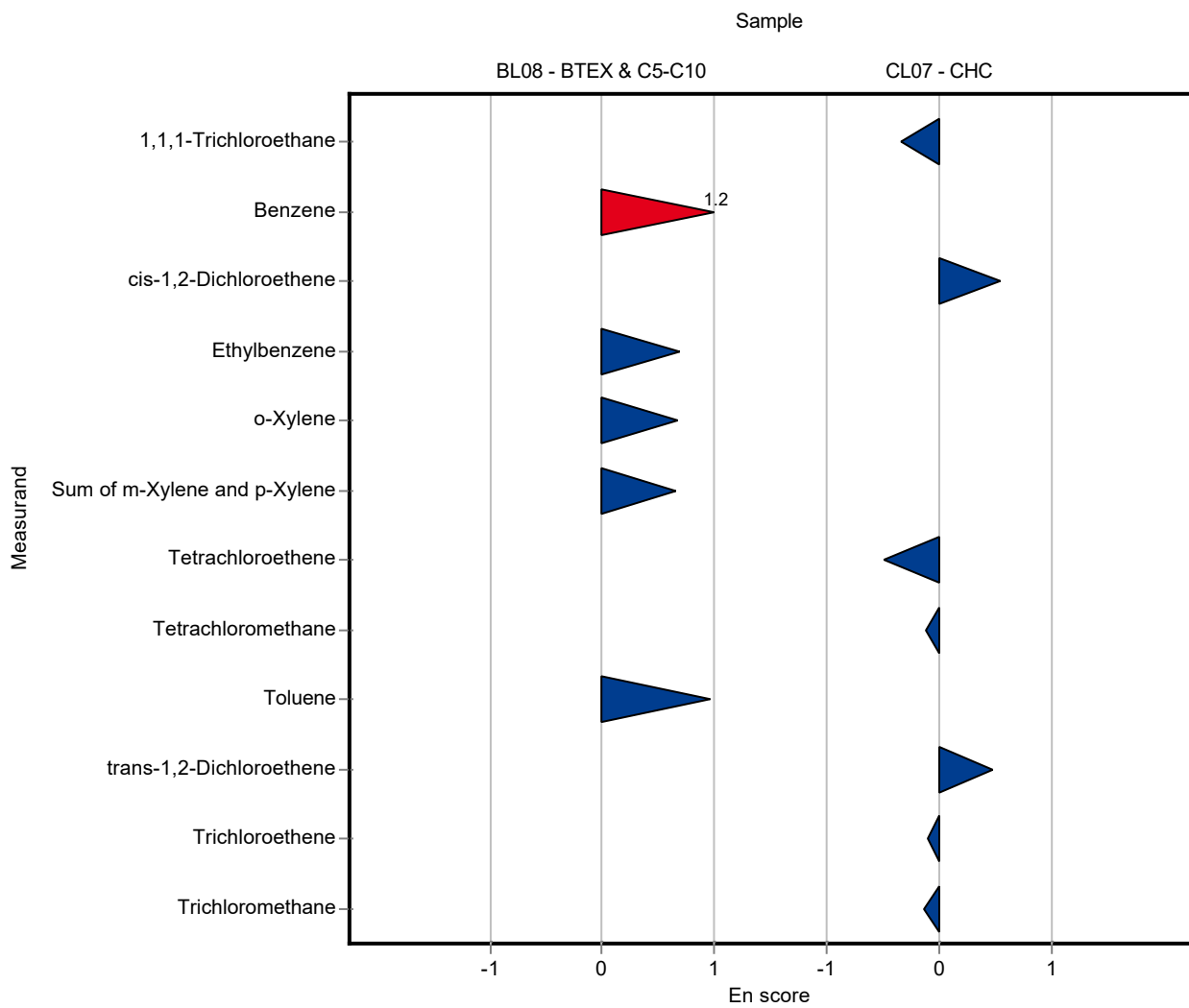


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	9.38 ± 1.88	0.701	201	1.25
Ethylbenzene	µg/tube	4.87 ± 0.528	6.78 ± 1.36	1.12	139	0.69
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	6.32 ± 1.26	1.19	138	0.68
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	12.53 ± 2.51	1.83	137	0.66
Toluene	µg/tube	5.05 ± 0.409	8.27 ± 1.65	0.858	164	0.97

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	5.87 ± 1.17	0.867	88.1	-0.34
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	6.02 ± 1.2	0.888	129	0.55
Tetrachloroethene	µg/tube	5.29 ± 0.779	4.36 ± 0.87	1.53	82.4	-0.49
Tetrachloromethane	µg/tube	7.67 ± 0.559	7.35 ± 1.47	0.997	95.9	-0.11
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.7 ± 1.14	1.5	125	0.48
Trichloroethene	µg/tube	5.84 ± 0.374	5.62 ± 1.12	0.934	96.3	-0.10
Trichloromethane	µg/tube	5.83 ± 0.324	5.55 ± 1.11	0.583	95.3	-0.12



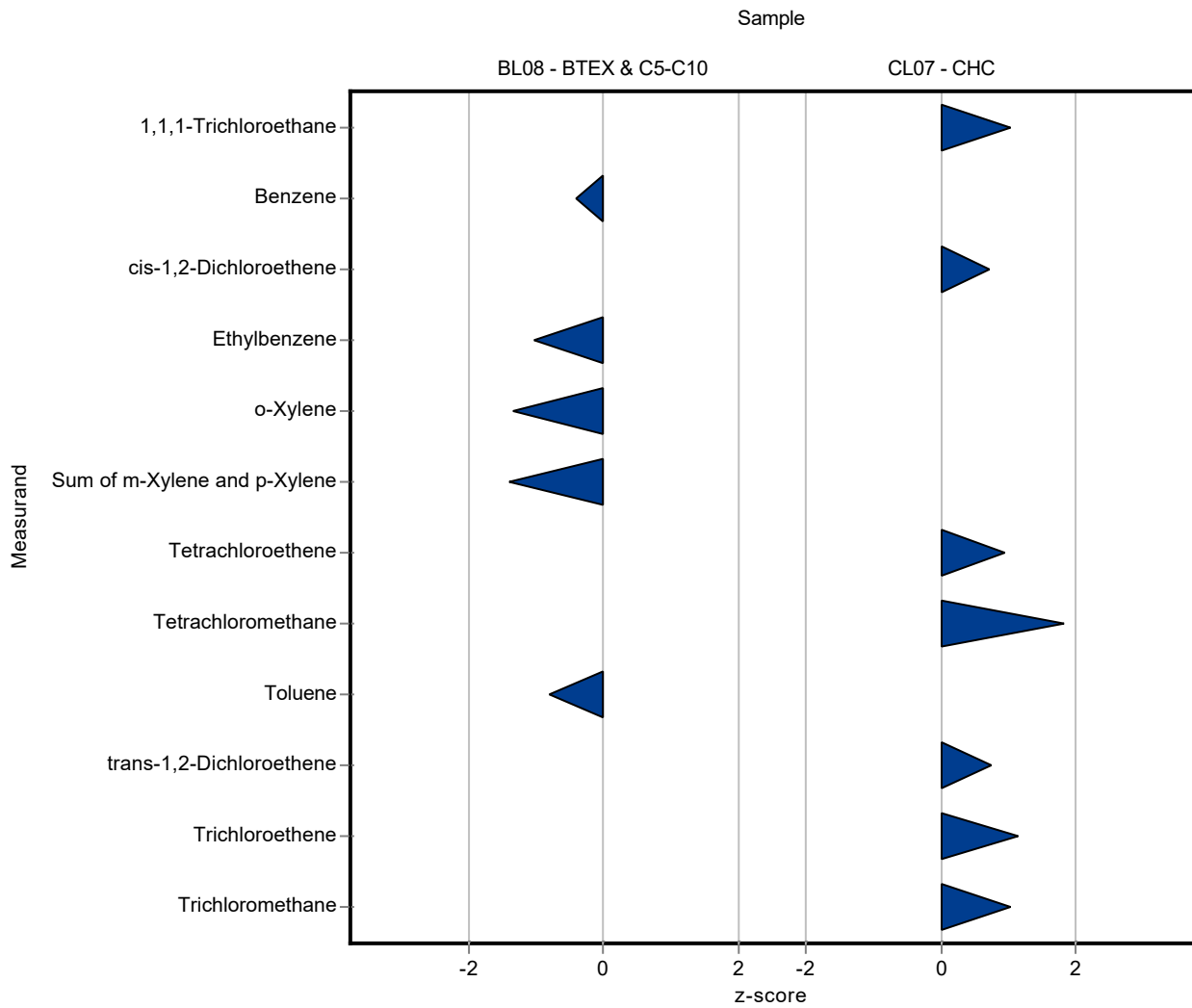


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	4.67 ± 0.31	4.39 ± 0.44	0.701	93.9	-0.40
Ethylbenzene	µg/tube	4.87 ± 0.528	3.71 ± 0.37	1.12	76.1	-1.04
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	2.97 ± 0.3	1.19	64.9	-1.35
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.59 ± 0.66	1.83	72	-1.40
Toluene	µg/tube	5.05 ± 0.409	4.37 ± 0.44	0.858	86.6	-0.79

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.57 ± 0.76	0.867	114	1.04
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.31 ± 0.53	0.888	114	0.72
Tetrachloroethene	µg/tube	5.29 ± 0.779	6.72 ± 0.67	1.53	127	0.93
Tetrachloromethane	µg/tube	7.67 ± 0.559	9.49 ± 0.95	0.997	124	1.83
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.69 ± 0.57	1.5	125	0.76
Trichloroethene	µg/tube	5.84 ± 0.374	6.89 ± 0.69	0.934	118	1.13
Trichloromethane	µg/tube	5.83 ± 0.324	6.42 ± 0.64	0.583	110	1.02

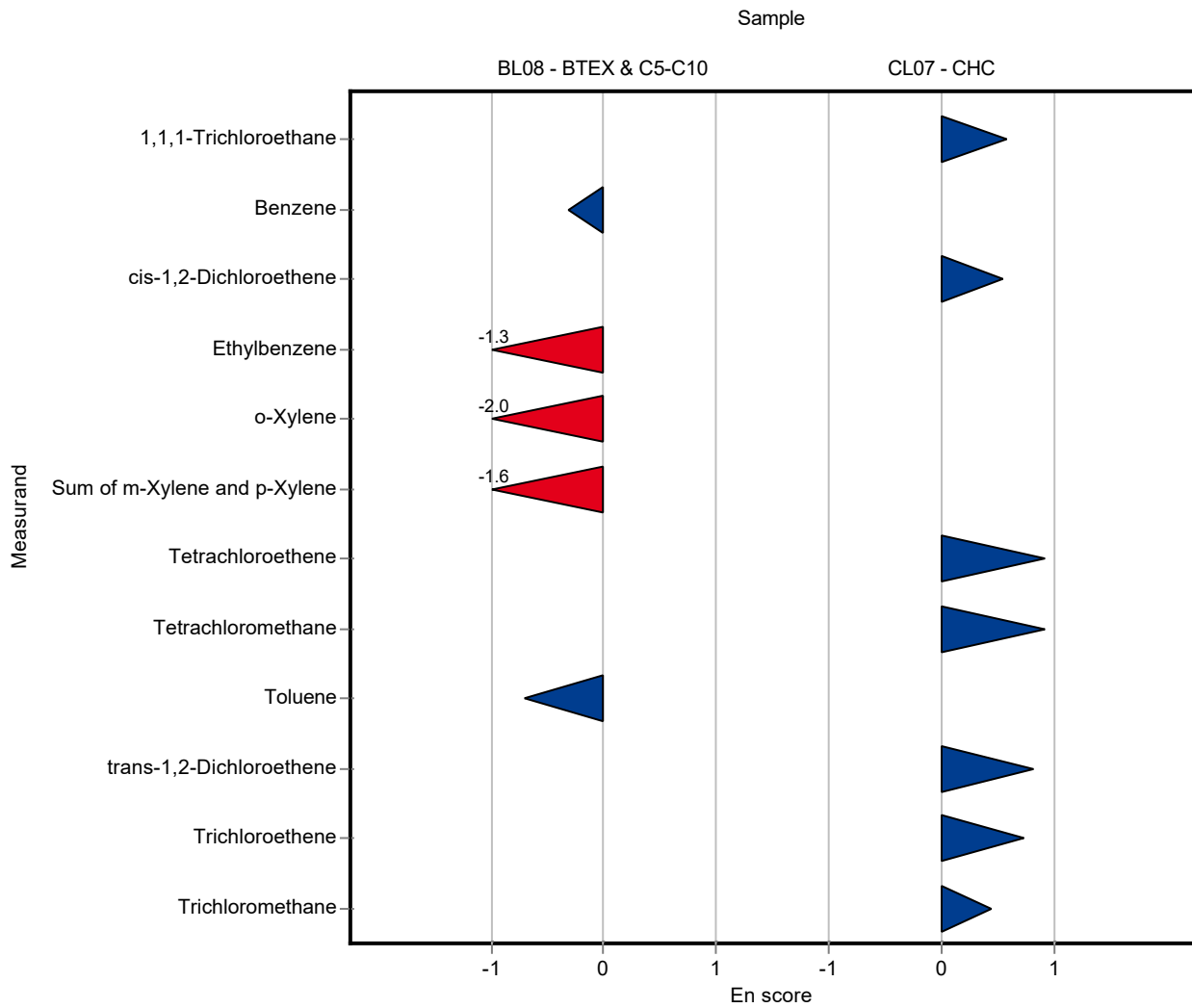


Sample: BL08

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	4.67 ± 0.31	4.39 ± 0.44	0.701	93.9	-0.30
Ethylbenzene	µg/tube	4.87 ± 0.528	3.71 ± 0.37	1.12	76.1	-1.28
n-Decane	µg/tube	2.7 ± 0.356	- ± -	0.54	-	-
n-Heptane	µg/tube	6.46 ± 0.446	- ± -	0.646	-	-
n-Hexane	µg/tube	6.32 ± 0.775	- ± -	1.01	-	-
n-Nonane	µg/tube	4.97 ± 0.458	- ± -	0.696	-	-
n-Octane	µg/tube	6.24 ± 0.424	- ± -	0.624	-	-
n-Pentane	µg/tube	5.48 ± 1.36	- ± -	2.14	-	-
o-Xylene	µg/tube	4.58 ± 0.555	2.97 ± 0.3	1.19	64.9	-1.97
Sum of m-Xylene and p-Xylene	µg/tube	9.16 ± 0.881	6.59 ± 0.66	1.83	72	-1.62
Toluene	µg/tube	5.05 ± 0.409	4.37 ± 0.44	0.858	86.6	-0.70

Sample: CL07

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	6.67 ± 0.384	7.57 ± 0.76	0.867	114	0.58
cis-1,2-Dichloroethene	µg/tube	4.67 ± 0.457	5.31 ± 0.53	0.888	114	0.55
Tetrachloroethene	µg/tube	5.29 ± 0.779	6.72 ± 0.67	1.53	127	0.92
Tetrachloromethane	µg/tube	7.67 ± 0.559	9.49 ± 0.95	0.997	124	0.92
trans-1,2-Dichloroethene	µg/tube	4.55 ± 0.764	5.69 ± 0.57	1.5	125	0.83
Trichloroethene	µg/tube	5.84 ± 0.374	6.89 ± 0.69	0.934	118	0.74
Trichloromethane	µg/tube	5.83 ± 0.324	6.42 ± 0.64	0.583	110	0.45



## E9. Methodenübersicht / Overview of methods

LabCode	Sample	Benzene	Toluene	Ethylbenzene	Sum of m-Xylene and p-Xylene	o-Xylene
LC0001	BL08	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0002	BL08	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)
LC0003	BL08	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)
LC0004	BL08	GC-FID; NIOSH 1501	GC-FID; NIOSH 1501	GC-FID; NIOSH 1501	GC-FID; NIOSH 1501	GC-FID; NIOSH 1501
LC0005	BL08					
LC0006	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0007	BL08	HS-GC-FID; Headspace	HS-GC-FID; Headspace	HS-GC-FID; Headspace	HS-GC-FID; Headspace	HS-GC-FID; Headspace
LC0008	BL08	GC-FID;	GC-FID;	GC-FID;	GC-FID;	GC-FID;
LC0009	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0011	BL08					
LC0012	BL08	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0013	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0014	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0015	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0017	BL08	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)
LC0018	BL08	EN 14662-2 (GC-FID);	EN 14662-2 (GC-FID);	EN 14662-2 (GC-FID);	EN 14662-2 (GC-FID);	EN 14662-2 (GC-FID);
LC0019	BL08	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0020	BL08	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);

LabCode	Sample	n-Pentane	n-Hexane	n-Heptane	n-Octane	n-Nonane	n-Decane
LC0001	BL08	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0002	BL08						
LC0003	BL08	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)
LC0004	BL08						
LC0005	BL08						
LC0006	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0007	BL08						
LC0008	BL08						
LC0009	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0011	BL08						
LC0012	BL08	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0013	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0014	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0015	BL08	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0017	BL08	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)
LC0018	BL08						
LC0019	BL08						
LC0020	BL08						

LabCode	Sample	1,1,1-Trichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Tetrachloromethane
LC0001	CL07	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0002	CL07	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)
LC0003	CL07	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)
LC0004	CL07	GC-FID; NIOSH 1003	GC-FID; NIOSH 1003	GC-FID; NIOSH 1003	GC-FID; NIOSH 1003
LC0006	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0007	CL07	HS-GC-FID; Headspace		HS-GC-FID; Headspace	HS-GC-FID; Headspace
LC0009	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0011	CL07				
LC0012	CL07	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0013	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0014	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0015	CL07	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);
LC0016	CL07	GC-MS; AM 266	GC-MS; AM 266	GC-MS; AM 266	GC-MS; AM 266
LC0017	CL07	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)
LC0019	CL07	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0020	CL07	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);

LabCode	Sample	trans-1,2-Dichloroethene	Trichloroethene	Trichloromethane
LC0001	CL07	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0002	CL07	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)	VDI 2100-2 (GC); (Variant D)
LC0003	CL07	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)	VDI 3865-3 (HS-GC-MS); (Headspace)
LC0004	CL07	GC-FID; NIOSH 1003	GC-FID; NIOSH 1003	GC-FID; NIOSH 1003
LC0006	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0007	CL07		HS-GC-FID; Headspace	HS-GC-FID; Headspace
LC0009	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0011	CL07			
LC0012	CL07	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0013	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0014	CL07	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0015	CL07	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);
LC0016	CL07	GC-MS; AM 266	GC-MS; AM 266	GC-MS; AM 266
LC0017	CL07	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)	HS-GC-MS; House method (Headspace)
LC0019	CL07	M 5700-2 (GC);	M 5700-2 (GC);	M 5700-2 (GC);
LC0020	CL07	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);