

**Proficiency Testing Scheme
Umweltanalytik
CBL08 Chlorierte Kohlenwasserstoffe (CKW)
und BTEX & C5-C10**

**Proficiency Testing Scheme for
Environmental Analysis**

**CBL08 Chlorinated hydrocarbons (CHC) and
BTEX & C5-C10**

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D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 28
- Anzahl der übermittelten Datensätze: 28
- Probenversand: 04.10.2022
- Einsendeschluss der Daten: 08.11.2022

Beim Ringversuch CBL08 bestand die Möglichkeit, an den Teilen CL09 (CKW) und/oder BL10 (BTEX & C5–C10) teilzunehmen.

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

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

D1.2. Beschreibung der Prüfgegenstände

Als 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 (CL09 und BL10). 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 (CL09) und zum anderen Benzol, Ethylbenzol, o-Xylol, Summe von m- und p-Xylol, Toluol, n-Pantan, n-Hexan, n-Heptan, n-Oktan, n-Nonan und n-Dekan (BL10). 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 28.09.2022. Die Proben wurden bis zum Versand bei < -70 °C gelagert und am 04.10.2022 verschickt.

Jedes Teilnehmerlabor erhielt je nach Anmeldung:

- 1 beladenes Aktivkohleröhrchen Probe CL09 und/oder
- 1 beladenes Aktivkohleröhrchen Probe BL10
- sowie 1 unbeladenes Aktivkohleröhrchen (Blindwert) pro Probe

D1.3. Anweisungen für die Teilnehmenden

Aus Stabilitätsgründen wurde empfohlen bis spätestens 12.10.2022 mit den Analysen zu beginnen.

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

D1.4. Kontrollanalytik zur Bewertung der Homogenität

Im Zuge der Abfüllung wurden zu willkürlichen Zeitpunkten mehrere Aliquote pro Probe zur Kontrollanalytik entnommen.

Es wurden für CL09 bzw. BL10 jeweils n=5 Kontrollproben sowie je n=1 unbeladene Kontrollprobe 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

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

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

D1.6. Ermittlung des zugewiesenen Wertes

Die Ergebnisse der Analysen mussten spätestens bis zum 08.11.2022 beim Veranstalter vorliegen. Später eingehende Werte wurden nicht berücksichtigt.

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

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

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

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

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

D2. Kriterien der Leistungsbewertung

D2.1. Leistungskriterium z-Score

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

Die Ermittlung der z-Scores erfolgte gemäß nachfolgender Formel:

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

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
\bar{X}	zugewiesener Wert Sollwert für die Leistungsbewertung der Teilnehmenden (angegeben auf 3 signifikante Stellen); im Regelfall: ausreißerbereinigter Mittelwert der Ergebnisse der Teilnehmenden. Eine davon abweichende Vorgehensweise wird unter Punkt D4 des Berichts beschrieben.
Kriterium	Vergleichsstandardabweichung berechnet aus den Statistiken für Prüfgegenstände der vorangegangenen Runden im Zeitraum 2015 bis 2021 (RSD pooled) bzw. aus den ausreißerbereinigten Ergebnissen der Teilnehmenden (sR) des aktuellen Ringversuchs (falls noch weniger als 6 Ergebnisse für die Prüfgegenstände 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_n-Score

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

Die Ermittlung der E_n-Scores erfolgte gemäß nachfolgender Formel:

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

Dabei ist:

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

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

Interpretation der z-Scores:

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

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

Interpretation der E_n -Scores:

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

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

D3. Darstellung und Interpretation der Messergebnisse

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

In der labororientierten Auswertung werden pro Labor in anonymisierter Form die Ergebnisse der einzelnen Labore als Messergebnis $\pm U$ sowie die Wiederfindungen

und die ermittelten z-Scores bezugnehmend auf das Kriterium dargestellt. Weiters werden die E_n-Scores unter Berücksichtigung der erweiterten Unsicherheiten in unabhängigen Tabellen ausgegeben. Die labororientierten Auswertungen enthalten jeweils die Bewertungsgrundlagen wie zugewiesener Wert samt erweiterter Messunsicherheit sowie das Kriterium.

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

D4. Anmerkungen zur Auswertung

Wie unter Punkt D2 ersichtlich, können die z-Scores auch unter Einbeziehung der Vergleichsstandardabweichung der ausreißerbereinigten Ergebnisse der Teilnehmenden des aktuellen Ringversuchs berechnet werden. Das kann zur Folge haben, dass es bei Parametern mit hoher Ergebnistreuung dazu kommen kann, dass der Bereich z-Score - 2 bis z-Score + 2 einen ungewöhnlich hohen Wiederfindungsbereich abdeckt (siehe cis-1,2-Dichlorethen, Tetrachlorethen, trans-1,2-Dichlorethen sowie Trichlorethen).

Umgekehrt führt eine sehr geringe Streuung der Ergebnisse der Teilnehmenden dazu, dass z-Score - 2 bis z-Score + 2 einen ungewöhnlich kleinen Wiederfindungsbereich abdeckt.

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

Als Ergebnis einer Langzeitauswertung über aktuell 7 Eignungsprüfungsrounden (2015–2021) wurden Kriterien (RSDpool) zur Ergebnisbewertung berechnet. Diese wurden im Zuge der Auswertung den relativen Vergleichsstandardabweichungen (vR) des aktuellen Ringversuchs gegenübergestellt.

Probe BL10

Bei den Parametern Benzol, Toluol und Ethylbenzol wurde zur Bewertung das Kriterium (RSDpool) herangezogen. Die Berechnung der Scores erfolgte nach D2.

Für n-Pantan und n-Heptan wurde die aktuelle Vergleichsstandardabweichung als Kriterium definiert (vR auf 2 signifikante Stellen gerundet).

Für die Summe aus m- und p-Xylol sowie o-Xylol, n-Hexan, n-Oktan, n-Nonan und n-Dekan wurde die aktuelle Vergleichsstandardabweichung zur Festlegung des Kriteriums herangezogen (vR jeweils auf ganze Zahl aufgerundet).

Probe CL09

Für 1,1,1-Trichlorethan, cis-1,2-Dichlorethen, Tetrachlormethan, Trichlorethen und Trichlormethan wurde die aktuelle Vergleichsstandardabweichung als Kriterium definiert (vR auf 2 signifikante Stellen gerundet).

Für Tetrachlorethen wurde als Kriterium die Vergleichsstandardabweichung aus der Gruppe der ausreißerbereinigten Ergebnissen (H99, H95) der akkreditierten Labore ermittelt (aufgerundet 45 %).

Parameter n-Heptan, n-Oktan, n-Nonan bei Probe BL10 und Parameter cis-1,2-Dichlorethen bei Probe CL09:

Die auf Basis der Ergebnisse der Teilnehmenden berechneten Sollwerte lagen außerhalb der Messunsicherheit des Kontrollwertes und es ist über das Kontrolllabor keine Rückführbarkeit möglich. Der zugewiesene Wert wurde daher über die ausreißerbereinigten Mittelwerte aus der Gruppe der akkreditierten Teilnehmenden berechnet.

Für Tetrachlorethen (Probe CL09) wurde aufgrund der hohen Streuung zwischen den Ergebnissen der Teilnehmenden der zugewiesene Wert über die ausreißerbereinigten Ergebnisse (H95, H99) über die Gruppe der akkreditierten Labore berechnet. Das Kriterium wurde analog über die Vergleichsstandardabweichung dieser Gruppe ermittelt (aufgerundet 45 %).

Für trans-1,2-Dichlorethen (Probe CL09) konnte aufgrund der zu hohen Streuungen zwischen den Ergebnissen der teilnehmenden Labore ($vR > 50\%$) kein zugewiesener Wert festgelegt werden. Es wird im Rahmen der internen Qualitätssichernden Maßnahmen ein informativer Vergleich mit dem Mittelwert, berechnet aus den Ergebnissen der Gruppe der akkreditierten Labore ohne Hampel-Ausreißer (H99, H95) empfohlen: trans-1,2-Dichlorethen MW ($n=16$): 2.033 ± 1.24 U($k=2$) $\mu\text{g}/\text{Röhrchen}$.

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. $\mu\text{g}/\text{l}$)
Zugewiesener Wert	Sollwert für die Leistungsbewertung der Teilnehmenden (angegeben auf 3 signifikante Stellen)
U ($k=2$)	erweiterte Unsicherheit ($k=2$) des zugewiesenen Wertes, (angegeben auf 3 signifikante Stellen)

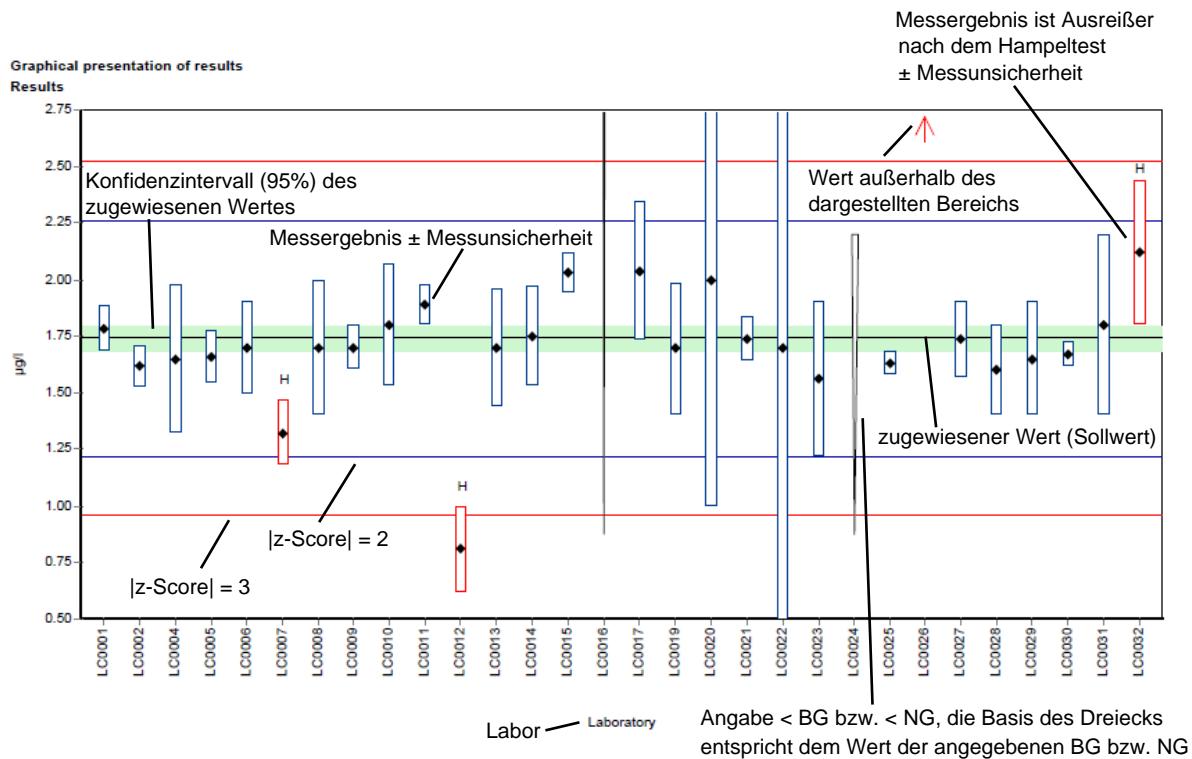
Kriterium	Vorgabewert zur Ermittlung des z-Scores in der angegebenen Einheit (angegeben auf 3 signifikante Stellen)
Kriterium [%]	Vorgabewert zur Ermittlung des z-Scores in % des zugewiesenen Wertes (angegeben auf 2 signifikante Stellen)
Mittelwert	Ausreißerbereinigter Mittelwert über die Ergebnisse der Teilnehmenden (angegeben auf 3 signifikante Stellen)
VB (99%)	99 % Vertrauensbereich (angegeben auf 3 signifikante Stellen)
Minimum	Minimales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
Maximum	Maximales abgegebenes Messergebnis, ausreißerbereinigt (angegeben auf 3 signifikante Stellen)
sR	Vergleichsstandardabweichung, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)
Laborcode	anonymisierte, eindeutige Kennung des teilnehmenden Labors im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt). Bei Eignungsprüfungsrounden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmenden.
± U	kombinierte Messunsicherheit ohne Erweiterungsfaktor (k=1) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
BG	Bestimmungsgrenze
NG	Nachweisgrenze

WF	Wiederfindungsrate in %, bezogen auf den zugewiesenen Wert (angegeben auf 3 signifikante Stellen, dargestellt maximal 1 Nachkommastelle)
MW	Mittelwert
z-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches des Kriteriums (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen)
E _n -Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches der kombinierten Messunsicherheiten, bestehend aus erweiterter Unsicherheit des zugewiesenen Wertes und der erweiterten Unsicherheit der Messergebnisse der Teilnehmenden (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim E _n -Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmenden.
-	Keine Daten übermittelt bzw. keine Berechnung möglich
Anmerkungen	Anmerkungen zum jeweiligen Messergebnis (z.B. H, FN, FP)
H	Ausreißer nach dem Hampel-Test
FN	Falsch negativ – Messergebnis kleiner Bestimmungs- bzw. Nachweisgrenze dessen Betrag die Bedingungen eines Ausreißers nach dem Hampeltest erfüllt.
FP	Falsch positiv – Falls aufgrund des geringen Analytgehalts kein zugewiesener Wert ermittelt werden kann ($n < 6$), wird der Median der Beträge der übermittelten Nachweis- bzw. Bestimmungsgrenzen ermittelt. Als falsch positiv wird ein Messergebnis bewertet, welches diesen Median um mehr als 100 % übersteigt.
Standardabweichung	Vergleichsstandardabweichung berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
rel. Standardabweichung	relative Vergleichsstandardabweichung in %, berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 3 signifikante Stellen)
n	Anzahl der Messergebnisse
*	Kennzeichnung für Hinweise zur Erläuterung

D5.2. Graphische Darstellung der Ergebnisse

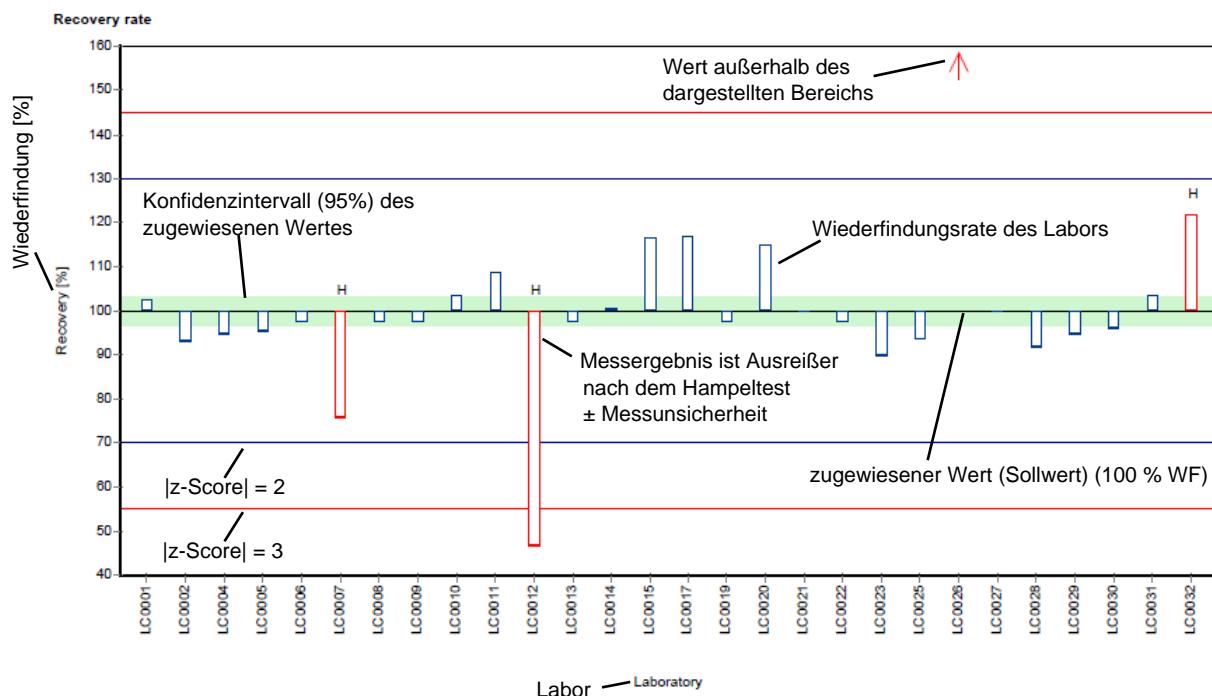
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

Beispieldiagramm: Messwerte



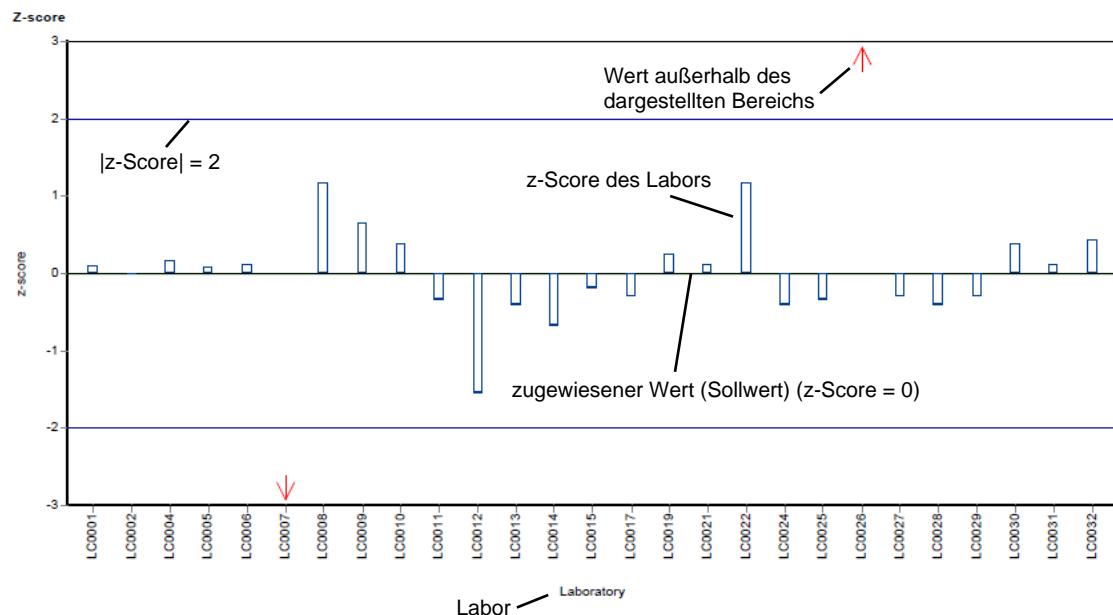
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



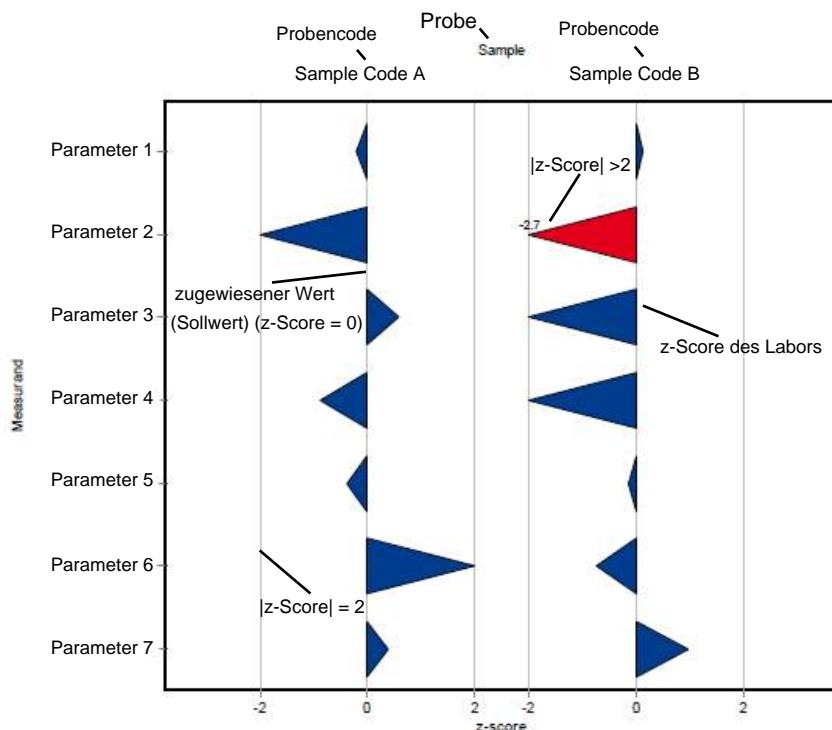
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kennlich gemacht.

Beispieldiagramm: z-Score

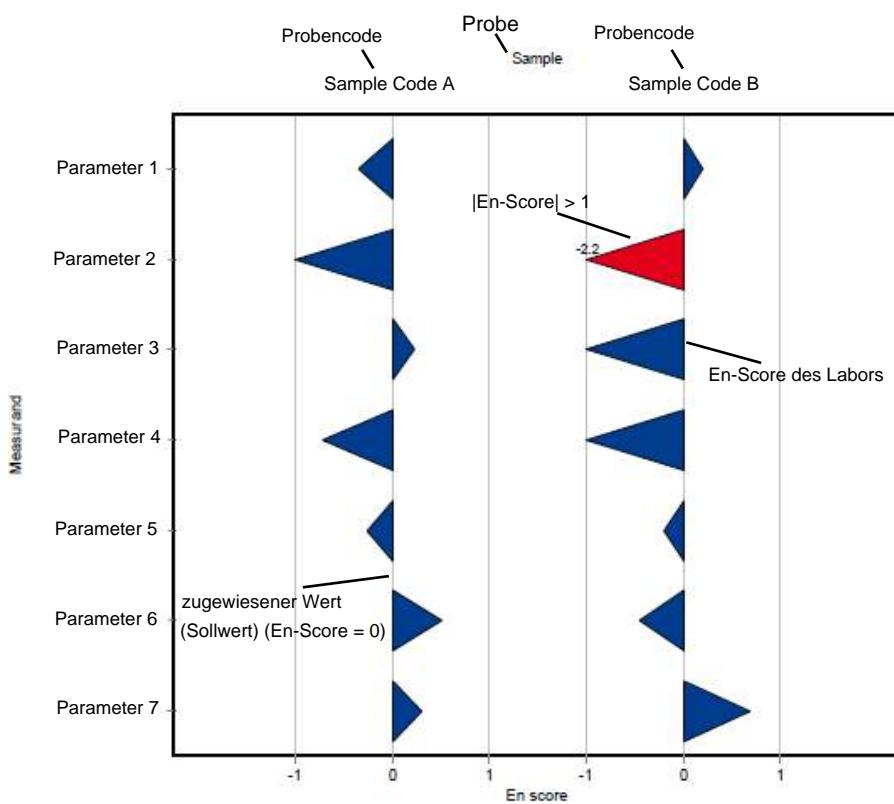


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kennlich gemacht.

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	CL09 - CKW	µg/Röhrchen	3.37	± 0.347	0.708	21	
Benzol	BL10 - BTEX & C5-C10	µg/Röhrchen	5.52	± 0.294	0.829	15	
cis-1,2-Dichlorethen	CL09 - CKW	µg/Röhrchen	2.16	± 0.409	0.906	42	
Ethylbenzol	BL10 - BTEX & C5-C10	µg/Röhrchen	5.71	± 0.32	1.03	18	
n-Dekan	BL10 - BTEX & C5-C10	µg/Röhrchen	3.5	± 0.468	1.01	29	
n-Heptan	BL10 - BTEX & C5-C10	µg/Röhrchen	6.87	± 0.338	0.756	11	
n-Hexan	BL10 - BTEX & C5-C10	µg/Röhrchen	6.79	± 0.283	0.679	10	
n-Nonan	BL10 - BTEX & C5-C10	µg/Röhrchen	5.54	± 0.448	0.886	16	
n-Oktan	BL10 - BTEX & C5-C10	µg/Röhrchen	6.62	± 0.317	0.729	11	
n-Pentan	BL10 - BTEX & C5-C10	µg/Röhrchen	6.29	± 0.338	0.629	10	
o-Xylool	BL10 - BTEX & C5-C10	µg/Röhrchen	5.11	± 0.48	1.28	25	
Summe von m-Xylool und p-Xylool	BL10 - BTEX & C5-C10	µg/Röhrchen	10.7	± 0.86	2.24	21	
Tetrachlorethen	CL09 - CKW	µg/Röhrchen	2.69	± 0.588	1.21	45	
Tetrachlormethan	CL09 - CKW	µg/Röhrchen	3.75	± 0.464	0.901	24	
Toluol	BL10 - BTEX & C5-C10	µg/Röhrchen	5.75	± 0.323	0.862	15	
trans-1,2-Dichlorethen*	CL09 - CKW	µg/Röhrchen	-	± -	-	-	-
Trichlorethen	CL09 - CKW	µg/Röhrchen	2.56	± 0.411	0.846	33	
Trichlormethan	CL09 - CKW	µg/Röhrchen	3.14	± 0.257	0.503	16	

*Aufgrund der zu hohen Streuung zwischen den Ergebnissen der teilnehmenden Labore ist die Festlegung eines zugewiesenen Wertes nicht möglich.

Es wird im Rahmen der internen qualitätssichernden Maßnahmen ein informativer Vergleich mit dem Mittelwert, berechnet aus den Ergebnissen der Gruppe der akkreditierten Labore ohne Hampel-Ausreißer (H99, H95) empfohlen:

trans-1,2-Dichlorethen: MW(n=16): 2.033 +/- 1.24 U(k=2)

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	CL09 - CKW	16	3	µg/Röhrchen	3.37	± 0.521	1.83	4.71	0.694	21
Benzol	BL10 - BTEX & C5-C10	24	3	µg/Röhrchen	5.52	± 0.441	3.9	6.95	0.72	13
cis-1,2-Dichlorethen	CL09 - CKW	17	2	µg/Röhrchen	2.07	± 0.633	0.428	3.24	0.87	42
Ethylbenzol	BL10 - BTEX & C5-C10	25	2	µg/Röhrchen	5.71	± 0.48	3.71	7.02	0.8	14
n-Dekan	BL10 - BTEX & C5-C10	18	0	µg/Röhrchen	3.5	± 0.702	1.55	5.07	0.993	28
n-Heptan	BL10 - BTEX & C5-C10	19	0	µg/Röhrchen	7.09	± 0.515	5.34	8.27	0.748	11
n-Hexan	BL10 - BTEX & C5-C10	17	1	µg/Röhrchen	6.79	± 0.425	6.13	8.29	0.584	8.6
n-Nonan	BL10 - BTEX & C5-C10	18	0	µg/Röhrchen	5.61	± 0.615	4.14	6.79	0.869	15
n-Oktan	BL10 - BTEX & C5-C10	18	1	µg/Röhrchen	6.74	± 0.496	5.24	8.13	0.702	10
n-Pentan	BL10 - BTEX & C5-C10	14	1	µg/Röhrchen	6.29	± 0.507	5.65	7.82	0.632	10
o-Xylool	BL10 - BTEX & C5-C10	27	0	µg/Röhrchen	5.11	± 0.72	1.66	7.87	1.25	24
Summe von m-Xylool und p-Xylool	BL10 - BTEX & C5-C10	26	1	µg/Röhrchen	10.7	± 1.29	4.94	14.2	2.19	21
Tetrachlorethen	CL09 - CKW	17	2	µg/Röhrchen	2.61	± 0.863	0.703	5.51	1.19	45
Tetrachlormethan	CL09 - CKW	15	4	µg/Röhrchen	3.75	± 0.696	1.73	4.85	0.899	24
Toluol	BL10 - BTEX & C5-C10	27	0	µg/Röhrchen	5.75	± 0.484	4.15	7.04	0.839	15
trans-1,2-Dichlorethen	CL09 - CKW	16	2	µg/Röhrchen	2.03	± 0.932	0.136	4.26	1.24	61
Trichlorethen	CL09 - CKW	17	2	µg/Röhrchen	2.56	± 0.616	0.995	3.7	0.847	33
Trichlormethan	CL09 - CKW	15	4	µg/Röhrchen	3.14	± 0.385	2.19	4	0.497	16

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 28
- Number of submitted data records: 28
- Dispatch of samples: 04th October 2022
- Closing date for submission of data: 08th November 2022

For the interlaboratory comparison test CBL08 the participants could participate in CL09 (CHC) and/or BL10 (BTEX & C5–C10).

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

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

E1.2. Description of the proficiency test items

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 (CL09 and BL10). 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 CL09 and the substances Benzene, Ethylbenzene, o-Xylene, sum of m- and p-Xylene, Toluene, n-Pentane, n-Hexane, n-Heptane, n-Octane, n-Nonane and n-Decane for BL10. 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, 28th 2022. The samples were stored at < -70 °C and dispatched on October, 4th 2022.

Each participant received (depending on the registration):

- 1 loaded activated charcoal tube sample CL09 and/or
- 1 loaded activated charcoal tube sample BL10
- 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 12th October 2022 at the latest.

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

E1.4. Control testing for homogeneity evaluation

During filling of the bottles, aliquots of each sample were collected randomly for control testing. From each of the samples CL09 and BL10, n=5 control test samples and n=1 unspiked control sample were transferred to the laboratory for control testing.

The determination of the parameters was performed at an external laboratory (accredited by 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 for each parameter by comparison with the reproducibility standard deviation of the actual proficiency test.

In the parameter-oriented evaluation (E7), the results of the control testing are given in the form of arithmetic means of the detected concentrations \pm expanded measurement uncertainty as control test value $\pm U$ (expanded uncertainty, k=2).

E1.5. Trend test for stability evaluation

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

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

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

E1.6. Determination of the assigned values

The analytical results had to be made available to the organiser not later than 08th November 2022. Any values received at a later date were not considered.

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

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

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

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

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

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

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

E2. Criteria of performance evaluation

E2.1. Performance criterion z-Score

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

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

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

In this context,

x_i	is the measurement value (result) of the participating laboratory;
\bar{X}	assigned value the target value for the assessment of the performance of the participants (3 significant digits), normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section E4
Criteria	is the reproducibility standard deviation calculated from previous rounds for proficiency tests from 2015 to 2021 (as RSD pooled) or from the participants' results after removal of outliers (sR) in the current round (e.g. if less than 6 previous rounds are available). Where justified (e.g. results for samples are close to minimum quantification limit or in case of regulatory requirements) the criteria is defined by expert judgement and the procedure is clearly described in section E4 of the report.

E2.2. Performance criterion E_n-Score

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

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

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

In this context,

x_i	is the measurement value (result) of the participating laboratory
\bar{X}	assigned value the target value for the assessment of the performance of the participants (3 significant digits), normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section E4
$U(x_i)$	expanded measurement uncertainty for the result of the participating laboratory, $k=2$
$U(\bar{X})$	expanded measurement uncertainty for the assigned value, $k=2$

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

Interpretation of z-Scores:

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

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

Interpretation of E_n -Scores:

- $|E_n\text{-Score}| \leq 1.0$ satisfactory performance
- $|E_n\text{-Score}| > 1.0$ unsatisfactory performance

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

E3. Representation and interpretation of measurement results

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

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

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

An annotation of the tables and graphics is given in section E5.

E4. Explanatory notes

As explained in section E2, the z-Score can also be calculated using the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round. It might occur that the z-Score between -2 and 2 covers a large range of measurement values when the variance of the results is high (e.g. for parameters cis-1,2-Dichloroethene, Tetrachloroethene, trans-1,2-Dichloroethene and Trichloroethene).

On the other hand, the range of good results can be very narrow, when the variation of the participants' results is small.

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

As a result of a long-term evaluation of 7 proficiency testing rounds (2015–2021), evaluation criteria (RSDpool) were calculated. These criteria were compared with the relative reproducibility standard deviation (vR) of the current proficiency testing.

Sample BL10

For the parameters benzene, toluene and ethylbenzene, the criterion (RSDpool) was used for evaluation. The scores were calculated according to E2.

For n-pentane and n-heptane, the actual reproducibility standard deviation was defined as the criterion (vR rounded to 2 significant digits).

For the sum of m- and p-xylene as well as o-xylene, n-hexane, n-octane, n-nonane and n-decane, the actual reproducibility standard deviation was used to define the criterion (vR rounded up to whole number in each case).

Sample CL09

For 1,1,1-trichloroethane, cis-1,2-dichloroethene, tetrachloromethane, trichloroethene, and trichloromethane, the actual reproducibility standard deviation was defined as the criterion (vR rounded to 2 significant digits).

For tetrachloroethene, the criterion was defined as reproducibility standard deviation from the group of the accredited laboratories results after elimination of Hampel-outliers (H99, H95) (rounded up to 45 %).

Parameters n-heptane, n-octane, n-nonane for sample BL10 and parameter cis-1,2-dichloroethene for sample CL09:

The assigned values calculated based on the participants results were outside of the measurement uncertainty of the control test value and thus traceability could not be proven by this procedure. Therefore, new assigned values were defined by the group of accredited participating laboratories after outlier-assessment.

For tetrachloroethene (sample CL09), due to the high dispersion between the results of the participants, the assigned value was calculated via the outlier-cleaned results (H95, H99) over the group of accredited laboratories. The criterion was set analogously via the reproducibility standard deviation of this group (rounded up 45%).

For trans-1,2-dichloroethene (sample CL09) no assigned value could be determined due to the too high scatter between the results of the participating laboratories ($vR > 50\%$). For this parameter we recommend to compare your results with the informative mean value calculated from the results of the group of accredited laboratories without Hampel outliers (H99, H95) in course of your internal quality assurance measures: trans-1,2-dichloroethene MV ($n=16$): 2.033 ± 1.24 U($k=2$) $\mu\text{g/tube}$.

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. $\mu\text{g/l}$)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U ($k=2$)	Expanded uncertainty ($k=2$) of the assigned value (3 significant digits)
Criteria	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criteria [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)
Mean	Mean of the participants results, without outliers (3 significant digits)
CI (99 %)	99 % confidence interval (3 significant digits)
Minimum	Minimum of all submitted results, after removal of outliers (3 significant digits)
Maximum	Maximum of all submitted results, after removal of outliers (3 significant digits)

SD	Reproducibility standard deviation, calculated from the participants results, after removal of outliers (3 significant digits)
RSD %	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, after removal of outliers (2 significant digits)
Control test value ± U (k=2)	Mean of control test value ± expanded measurement uncertainty (3 significant digits)
Labcode	Laboratory identifier (anonymized)
Result	Result as indicated by participant (max. 5 decimal places)
± U	combined measurement uncertainty without expansion factor (k=1), as indicated by participant (max. 5 decimal places)
LOQ	Limit of quantification
LOD	Limit of detection
Recovery	Recovery rate in % based on assigned value (target value) (3 significant digits, max. one decimal place given)
z-Score	Deviation of result based on the assigned value (target value) given as a multiple of the criteria (3 significant digits, max. 2 decimal places given)
E _n -Score	Deviation of result based on the assigned value (target value) given as a multiple of the combined expanded measurement uncertainty of the participant's results and expanded measurement uncertainty for the assigned value (3 significant digits, max. 2 decimal places given). Note: E _n -Score assessment takes into account the measurement uncertainty of the participants.
-	No data available or no calculation possible
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test
FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive – for parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results

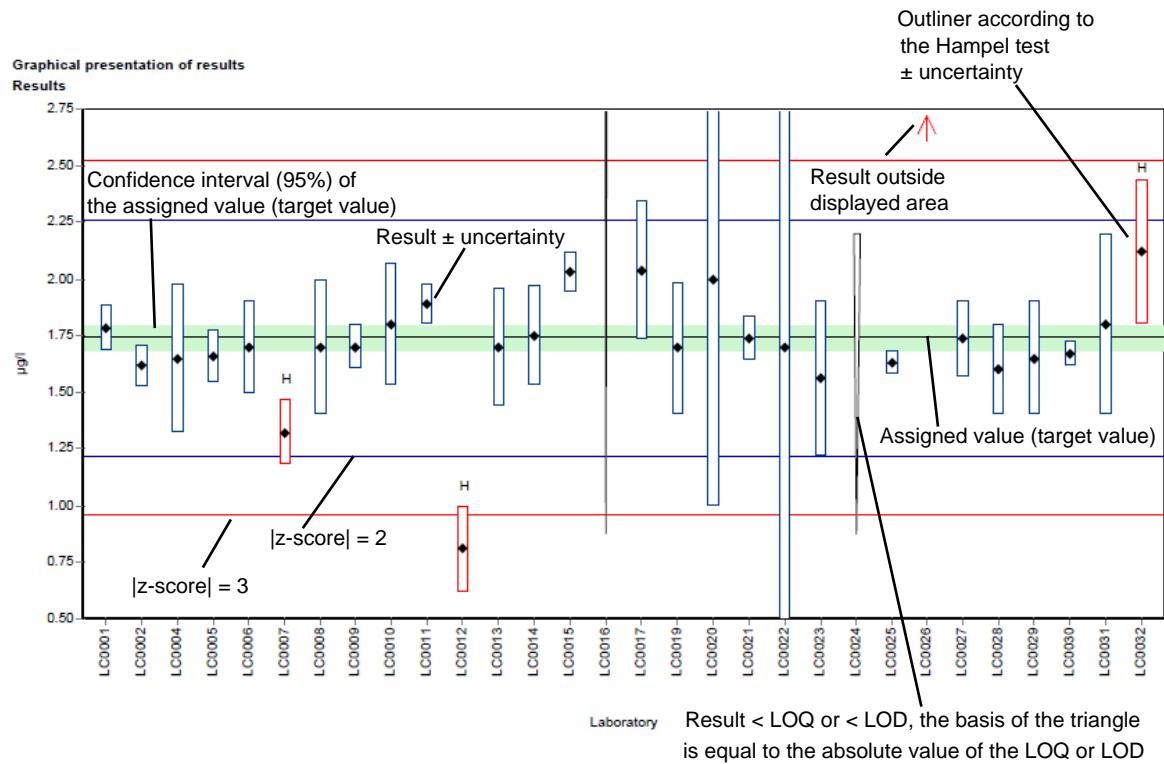
*

mark for additional comments

E5.2. Graphical presentation of results

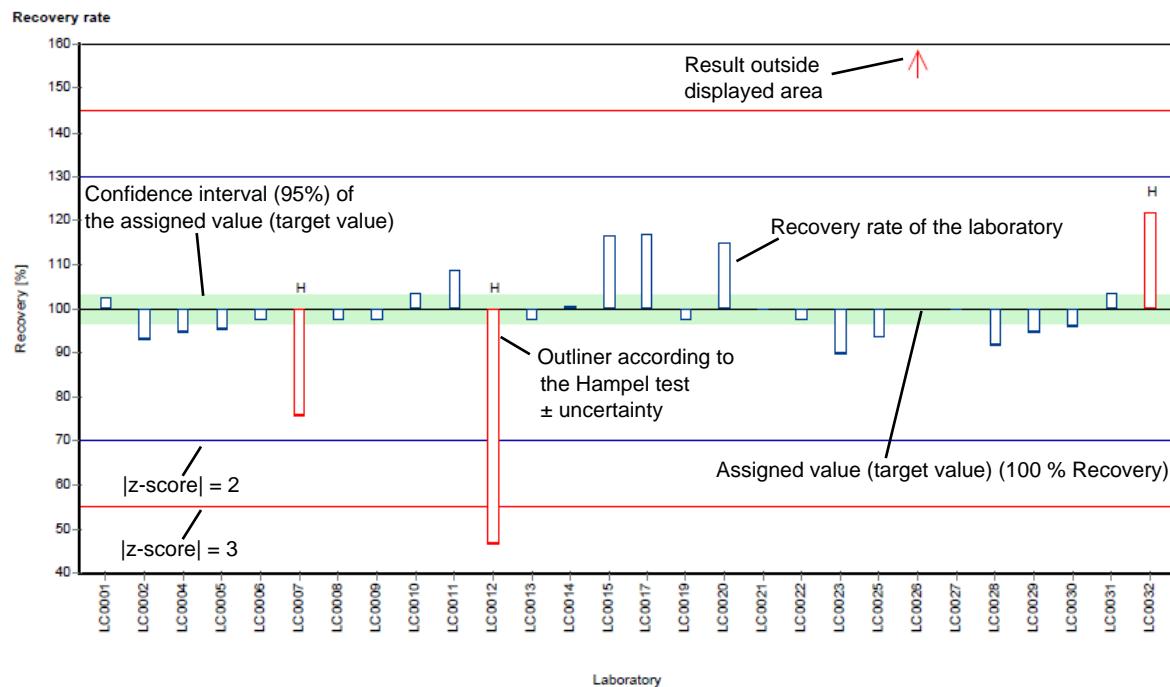
The graphic representation in the report is explained below by means of commented example diagrams:

Example chart: Results

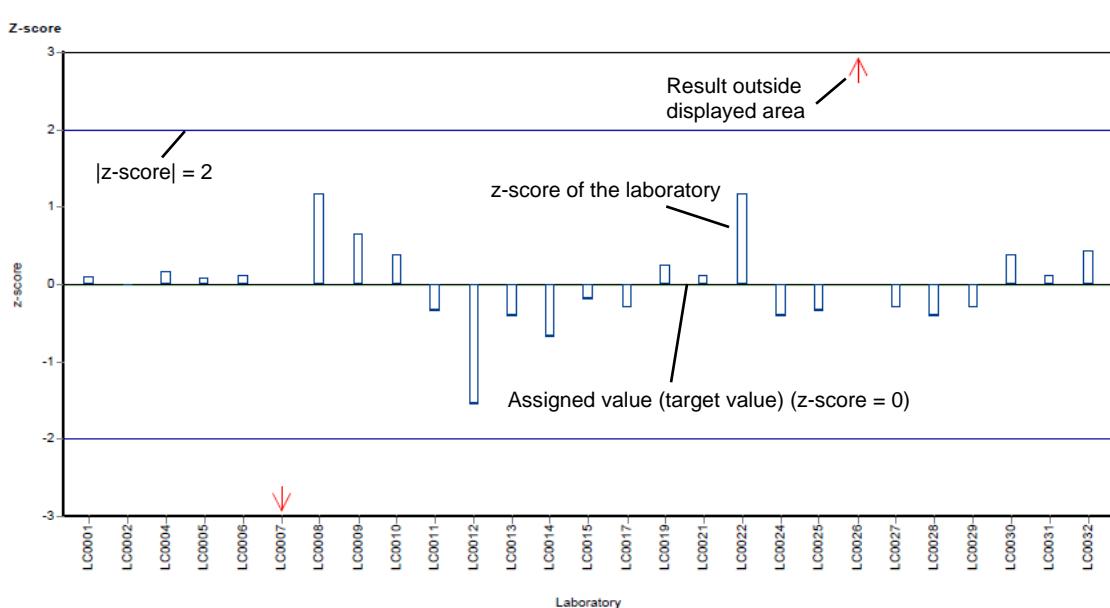


Different analysis methods are represented with different colors.

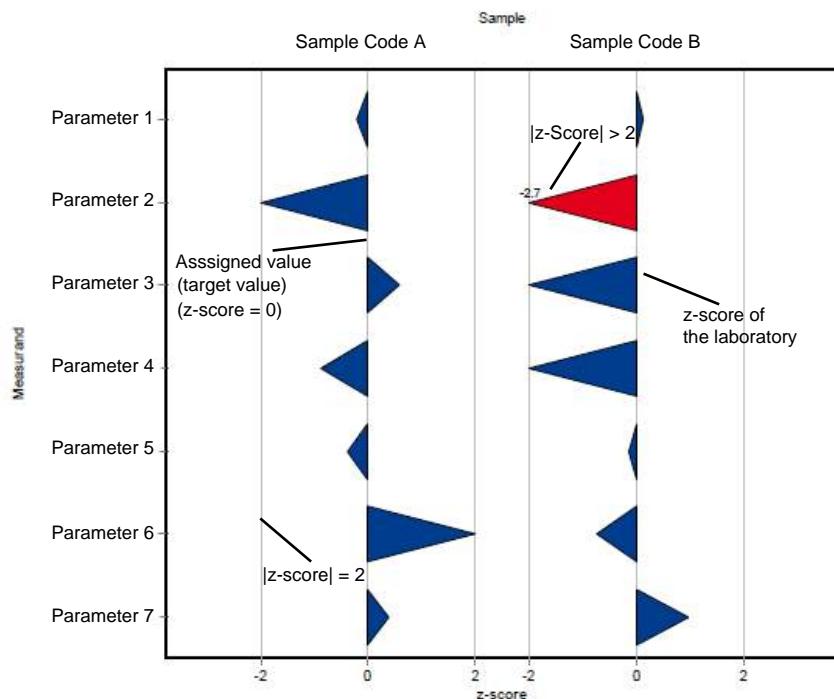
Example chart: Recovery



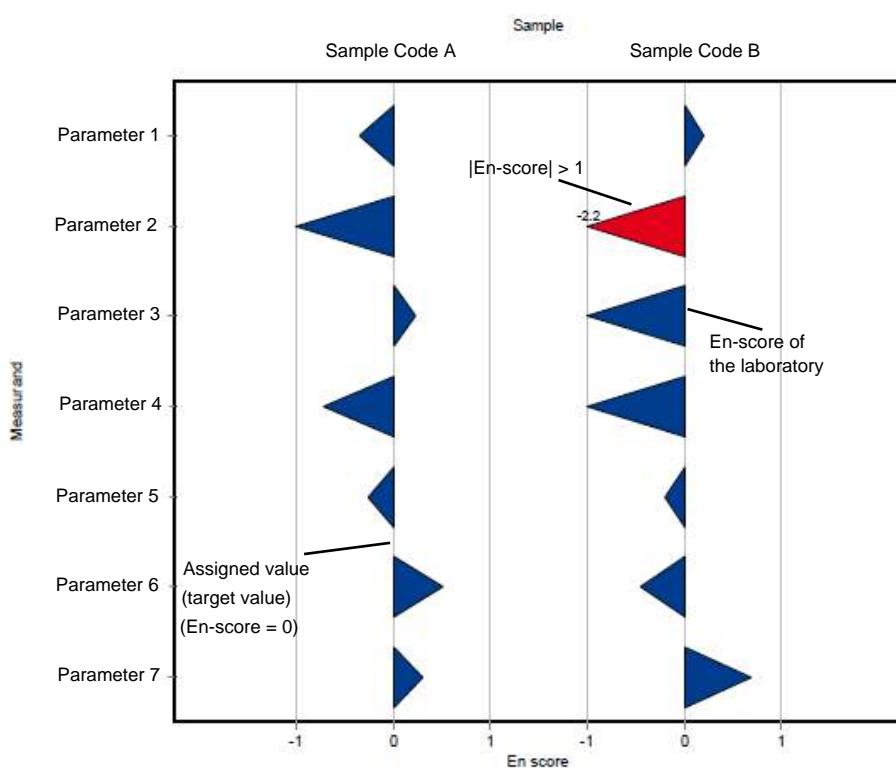
Example chart: z-score



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	CL09 - CHC	µg/tube	3.37	± 0.347	0.708	21	
Benzene	BL10 - BTEX & C5-C10	µg/tube	5.52	± 0.294	0.829	15	
cis-1,2-Dichloroethene	CL09 - CHC	µg/tube	2.16	± 0.409	0.906	42	
Ethylbenzene	BL10 - BTEX & C5-C10	µg/tube	5.71	± 0.32	1.03	18	
n-Decane	BL10 - BTEX & C5-C10	µg/tube	3.5	± 0.468	1.01	29	
n-Heptane	BL10 - BTEX & C5-C10	µg/tube	6.87	± 0.338	0.756	11	
n-Hexane	BL10 - BTEX & C5-C10	µg/tube	6.79	± 0.283	0.679	10	
n-Nonane	BL10 - BTEX & C5-C10	µg/tube	5.54	± 0.448	0.886	16	
n-Octane	BL10 - BTEX & C5-C10	µg/tube	6.62	± 0.317	0.729	11	
n-Pentane	BL10 - BTEX & C5-C10	µg/tube	6.29	± 0.338	0.629	10	
o-Xylene	BL10 - BTEX & C5-C10	µg/tube	5.11	± 0.48	1.28	25	
Sum of m-Xylene and p-Xylene	BL10 - BTEX & C5-C10	µg/tube	10.7	± 0.86	2.24	21	
Tetrachloroethene	CL09 - CHC	µg/tube	2.69	± 0.588	1.21	45	
Tetrachloromethane	CL09 - CHC	µg/tube	3.75	± 0.464	0.901	24	
Toluene	BL10 - BTEX & C5-C10	µg/tube	5.75	± 0.323	0.862	15	
trans-1,2-Dichloroethene*	CL09 - CHC	µg/tube	-	± -	-	-	
Trichloroethene	CL09 - CHC	µg/tube	2.56	± 0.411	0.846	33	
Trichloromethane	CL09 - CHC	µg/tube	3.14	± 0.257	0.503	16	

*Due to a too high scatter between the results of the participating laboratories, the determination of an assigned value is not possible.

Within the framework of internal quality assurance measures, an informative comparison with the mean value calculated from the results of the group of accredited laboratories without Hampel outliers (H99, H95) is recommended:

trans-1,2-Dichlorethene: MV(n=16): 2.033 +/- 1.24 U(k=2)

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

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean	\pm CI (99%)	Minimum	Maximum	sR	vR [%]
1,1,1-Trichloroethane	CL09 - CHC	16	3	µg/tube	3.37	\pm 0.521	1.83	4.71	0.694	21
Benzene	BL10 - BTEX & C5-C10	24	3	µg/tube	5.52	\pm 0.441	3.9	6.95	0.72	13
cis-1,2-Dichloroethene	CL09 - CHC	17	2	µg/tube	2.07	\pm 0.633	0.428	3.24	0.87	42
Ethylbenzene	BL10 - BTEX& C5-C10	25	2	µg/tube	5.71	\pm 0.48	3.71	7.02	0.8	14
n-Decane	BL10 - BTEX& C5-C10	18	0	µg/tube	3.5	\pm 0.702	1.55	5.07	0.993	28
n-Heptane	BL10 - BTEX& C5-C10	19	0	µg/tube	7.09	\pm 0.515	5.34	8.27	0.748	11
n-Hexane	BL10 - BTEX& C5-C10	17	1	µg/tube	6.79	\pm 0.425	6.13	8.29	0.584	8.6
n-Nonane	BL10 - BTEX& C5-C10	18	0	µg/tube	5.61	\pm 0.615	4.14	6.79	0.869	15
n-Octane	BL10 - BTEX& C5-C10	18	1	µg/tube	6.74	\pm 0.496	5.24	8.13	0.702	10
n-Pentane	BL10 - BTEX& C5-C10	14	1	µg/tube	6.29	\pm 0.507	5.65	7.82	0.632	10
o-Xylene	BL10 - BTEX& C5-C10	27	0	µg/tube	5.11	\pm 0.72	1.66	7.87	1.25	24
Sum of m-Xylene and p-Xylene	BL10 - BTEX& C5-C10	26	1	µg/tube	10.7	\pm 1.29	4.94	14.2	2.19	21
Tetrachloroethene	CL09 - CHC	17	2	µg/tube	2.61	\pm 0.863	0.703	5.51	1.19	45
Tetrachloromethane	CL09 - CHC	15	4	µg/tube	3.75	\pm 0.696	1.73	4.85	0.899	24
Toluene	BL10 - BTEX& C5-C10	27	0	µg/tube	5.75	\pm 0.484	4.15	7.04	0.839	15
trans-1,2-Dichloroethene	CL09 - CHC	16	2	µg/tube	2.03	\pm 0.932	0.136	4.26	1.24	61
Trichloroethene	CL09 - CHC	17	2	µg/tube	2.56	\pm 0.616	0.995	3.7	0.847	33
Trichloromethane	CL09 - CHC	15	4	µg/tube	3.14	\pm 0.385	2.19	4	0.497	16

E7. Parameterorientierte Auswertung / Parameter oriented report

1,1,1-Trichloroethane	34
Benzene	38
cis-1,2-Dichloroethene	42
Ethylbenzene	46
n-Decane	50
n-Heptane	54
n-Hexane	58
n-Nonane	62
n-Octane	66
n-Pentane	70
o-Xylene	74
Sum of m-Xylene and p-Xylene	78
Tetrachloroethene	82
Tetrachloromethane	86
Toluene	90
trans-1,2-Dichloroethene	94
Trichloroethene	96
Trichloromethane	100

Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: 1,1,1-Trichloroethane

Parameter oriented report

CL09 - CHC

1,1,1-Trichloroethane

Unit	µg/tube
Assigned value ± U (k=2)	3.37 ± 0.347
Criterion	0.708 (21 %)
Minimum - Maximum	1.83 - 4.71
Control test value ± U (k=2)	3.90 ± 0.937

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.84	0.58	114	0.66	
LC0002	3.81	0.76	113	0.62	
LC0003	3.6	1.08	107	0.33	
LC0005	9.85	0.62	292	9.16	H
LC0006	3.57	0.71	106	0.28	
LC0007	3.38	0.283	100	0.01	
LC0008	8.78	0.878	261	7.64	H
LC0009	4.71	0.48	140	1.89	
LC0010	2.97	0.24	88.1	-0.57	
LC0013	3.38	0.33	100	0.01	
LC0014	3.197	1.44	94.9	-0.24	
LC0015	4.03	0.46	120	0.93	
LC0021	8.156	1.22	242	6.76	H
LC0022	3.72	1.5	110	0.49	
LC0023	1.825	0.137	54.2	-2.18	
LC0024	3.707	0.675	110	0.48	
LC0025	3.08	0.8	91.4	-0.41	
LC0026	2.2	0.4	65.3	-1.65	
LC0028	2.9	0.318	86.1	-0.66	

Characteristics of parameter

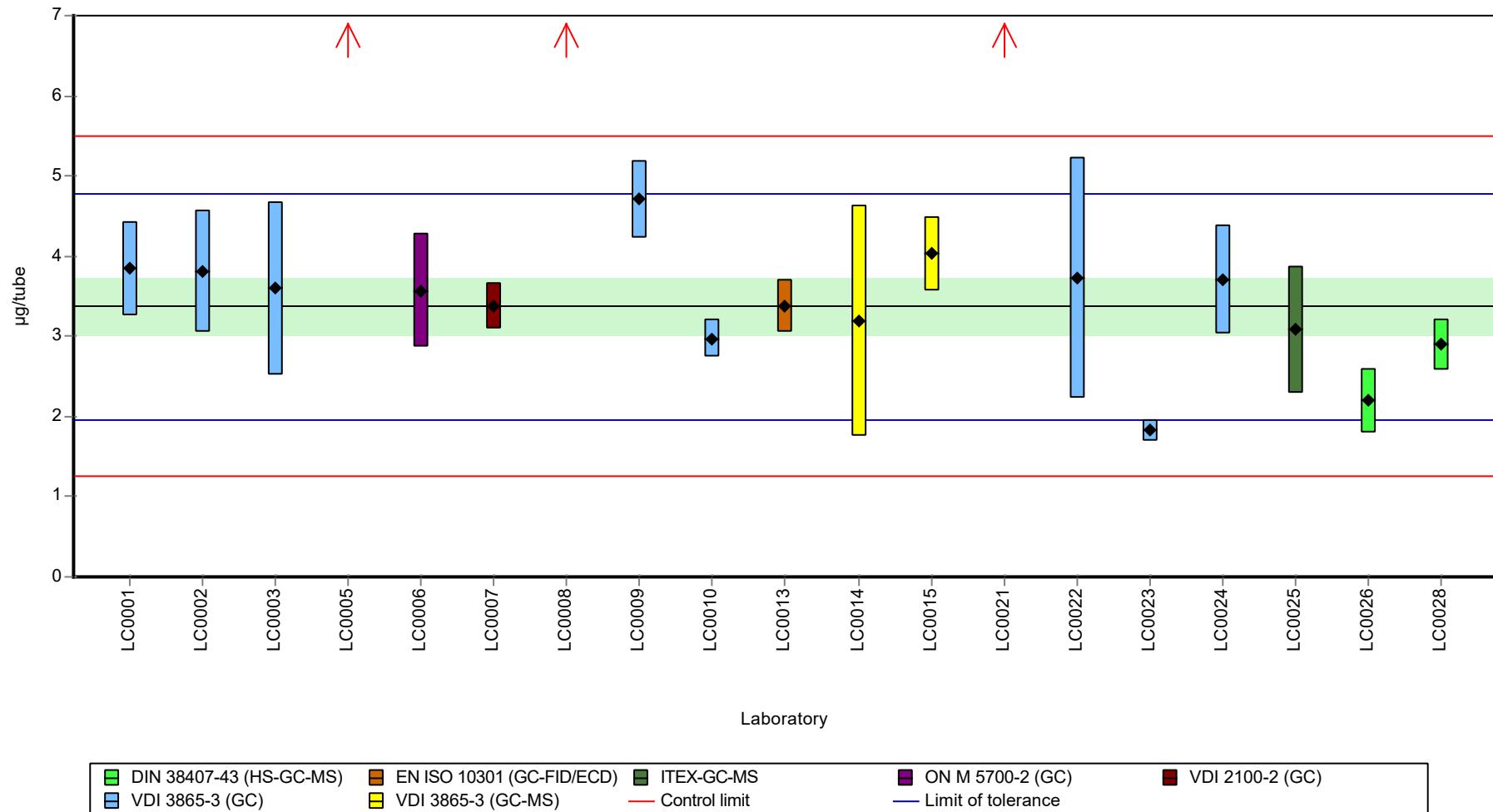
	all results	without outliers	Unit
Mean ± CI (99%)	4.25 ± 1.51	3.37 ± 0.521	µg/tube
Minimum	1.83	1.83	µg/tube
Maximum	9.85	4.71	µg/tube
Standard deviation	2.2	0.694	µg/tube
rel. standard deviation	51.7	20.6 %	
n	19	16	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: 1,1,1-Trichloroethane

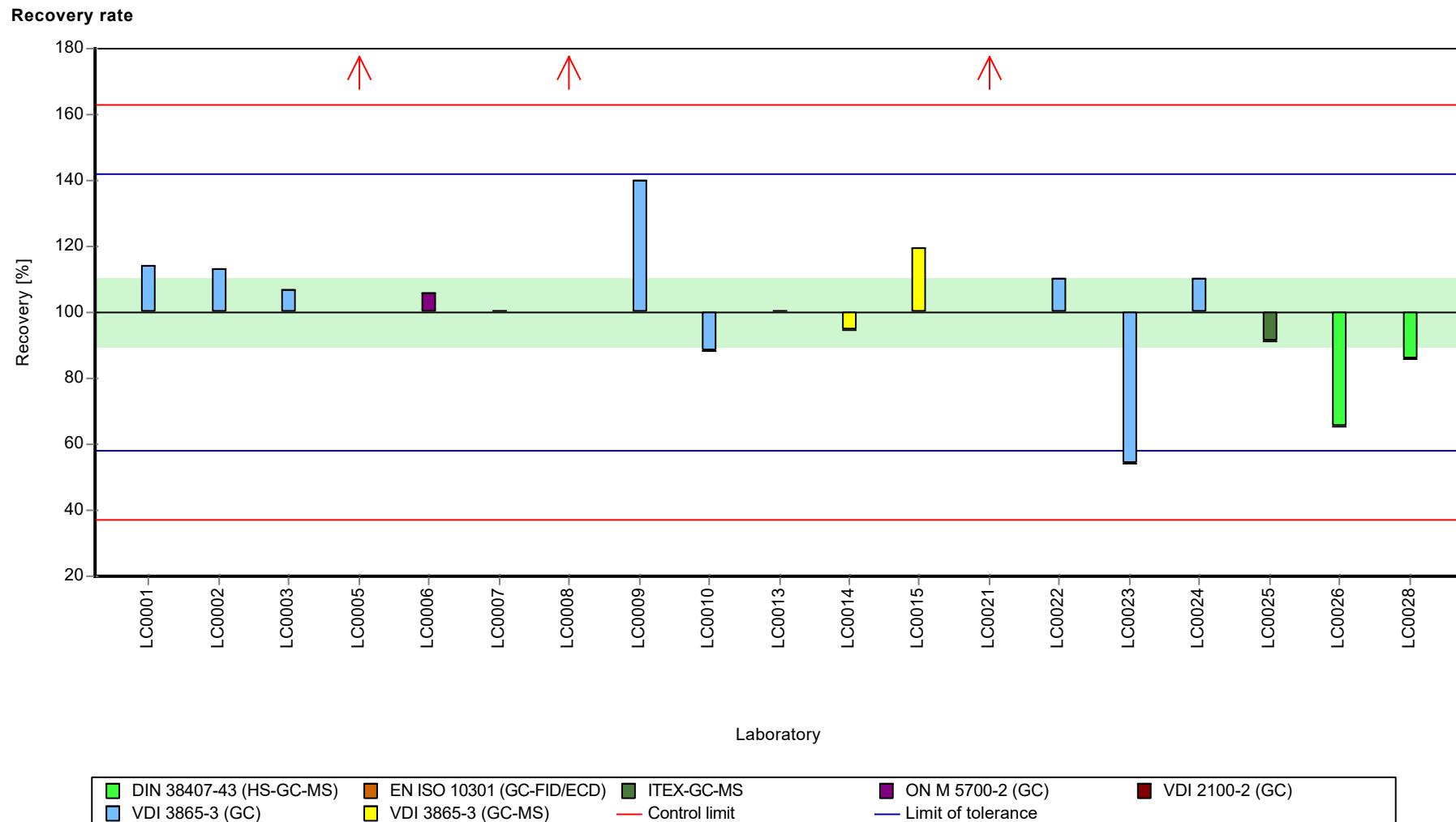
Graphical presentation of results

Results



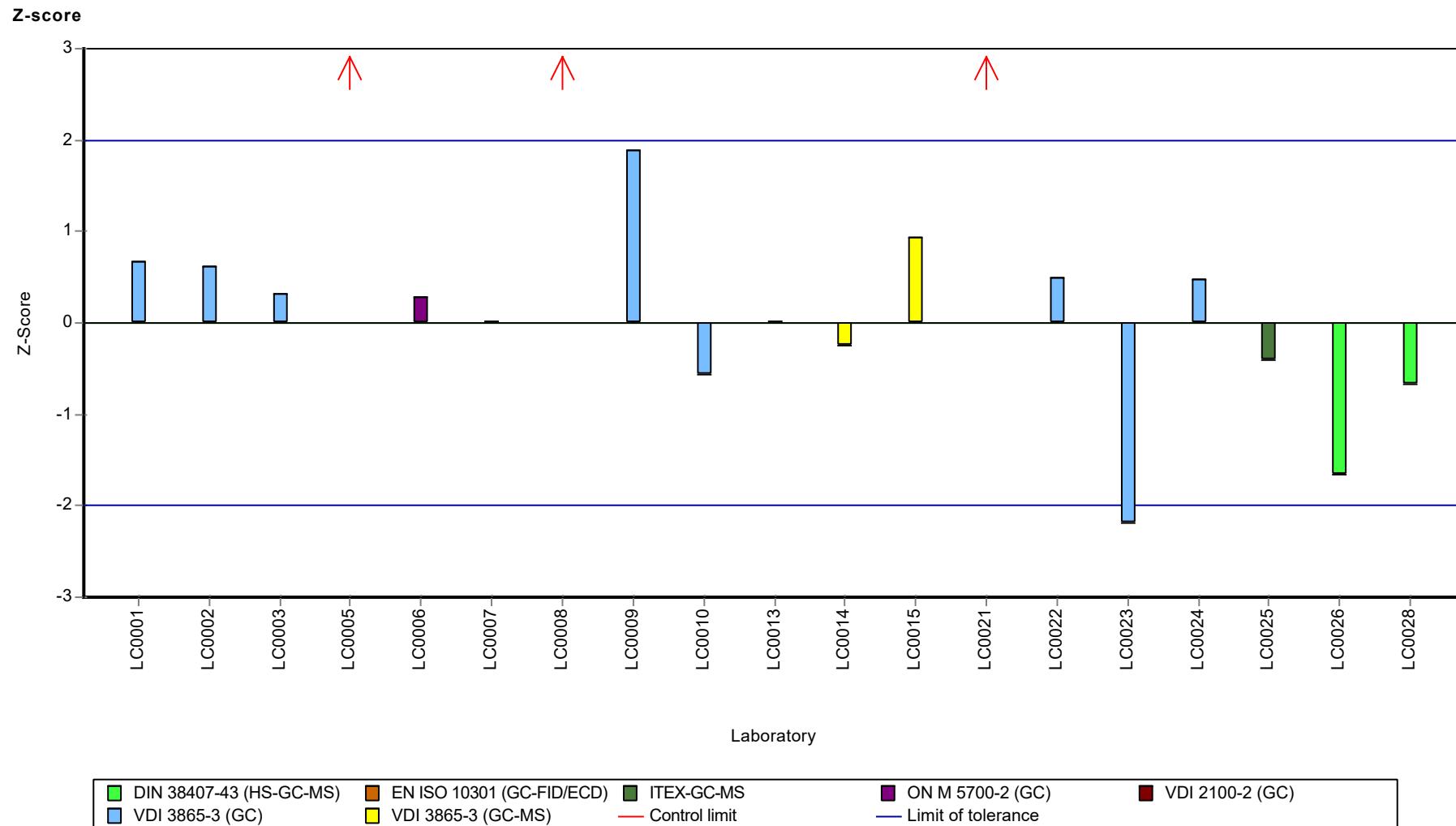
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: 1,1,1-Trichloroethane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: 1,1,1-Trichloroethane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: Benzene

Parameter oriented report

BL10 - BTEX & C5-C10

Benzene

Unit	µg/tube
Assigned value ± U (k=2)	5.52 ± 0.294
Criterion	0.829 (15 %)
Minimum - Maximum	3.9 - 6.95
Control test value ± U (k=2)	6.43 ± 1.29

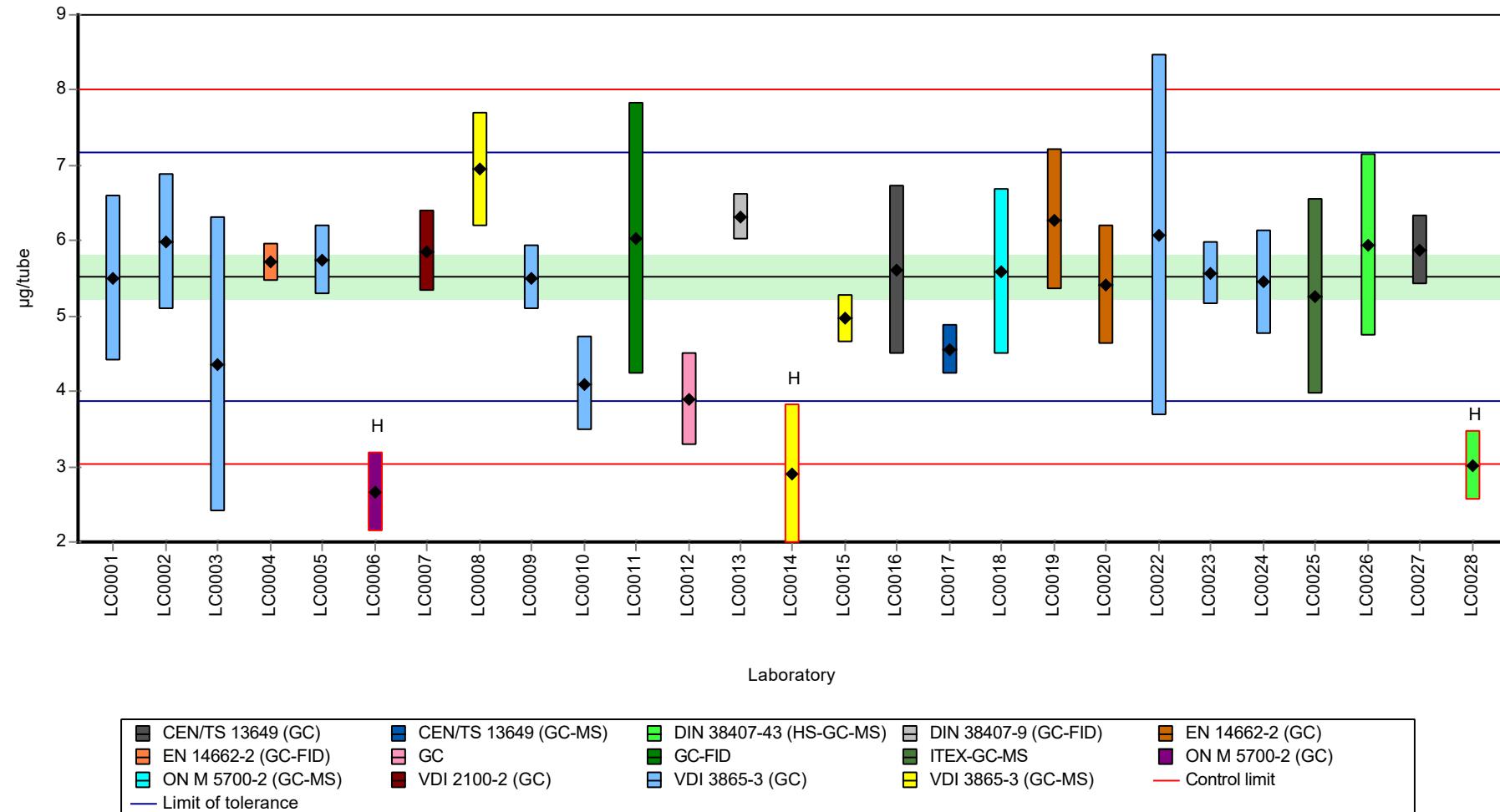
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.51	1.1	99.8	-0.02	
LC0002	5.99	0.9	108	0.56	
LC0003	4.35	1.96	78.8	-1.42	
LC0004	5.716	0.25	103	0.23	
LC0005	5.74	0.47	104	0.26	
LC0006	2.66	0.53	48.2	-3.46	H
LC0007	5.86	0.537	106	0.41	
LC0008	6.95	0.758	126	1.72	
LC0009	5.51	0.42	99.8	-0.02	
LC0010	4.1	0.62	74.2	-1.72	
LC0011	6.03	1.81	109	0.61	
LC0012	3.895	0.619	70.5	-1.97	
LC0013	6.32	0.31	114	0.96	
LC0014	2.901	0.93	52.5	-3.17	H
LC0015	4.97	0.32	90	-0.67	
LC0016	5.61	1.122	102	0.1	
LC0017	4.553	0.34	82.4	-1.17	
LC0018	5.59	1.1	101	0.08	
LC0019	6.28	0.94	114	0.91	
LC0020	5.414	0.79	98	-0.13	
LC0022	6.08	2.4	110	0.67	
LC0023	5.564	0.417	101	0.05	
LC0024	5.45	0.691	98.7	-0.09	
LC0025	5.26	1.3	95.2	-0.32	
LC0026	5.94	1.2	108	0.5	
LC0027	5.88	0.46	106	0.43	
LC0028	3.01	0.464	54.5	-3.03	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.23 ± 0.63	5.52 ± 0.441	µg/tube
Minimum	2.66	3.9	µg/tube
Maximum	6.95	6.95	µg/tube
Standard deviation	1.09	0.72	µg/tube
rel. standard deviation	20.9	13	%
n	27	24	-

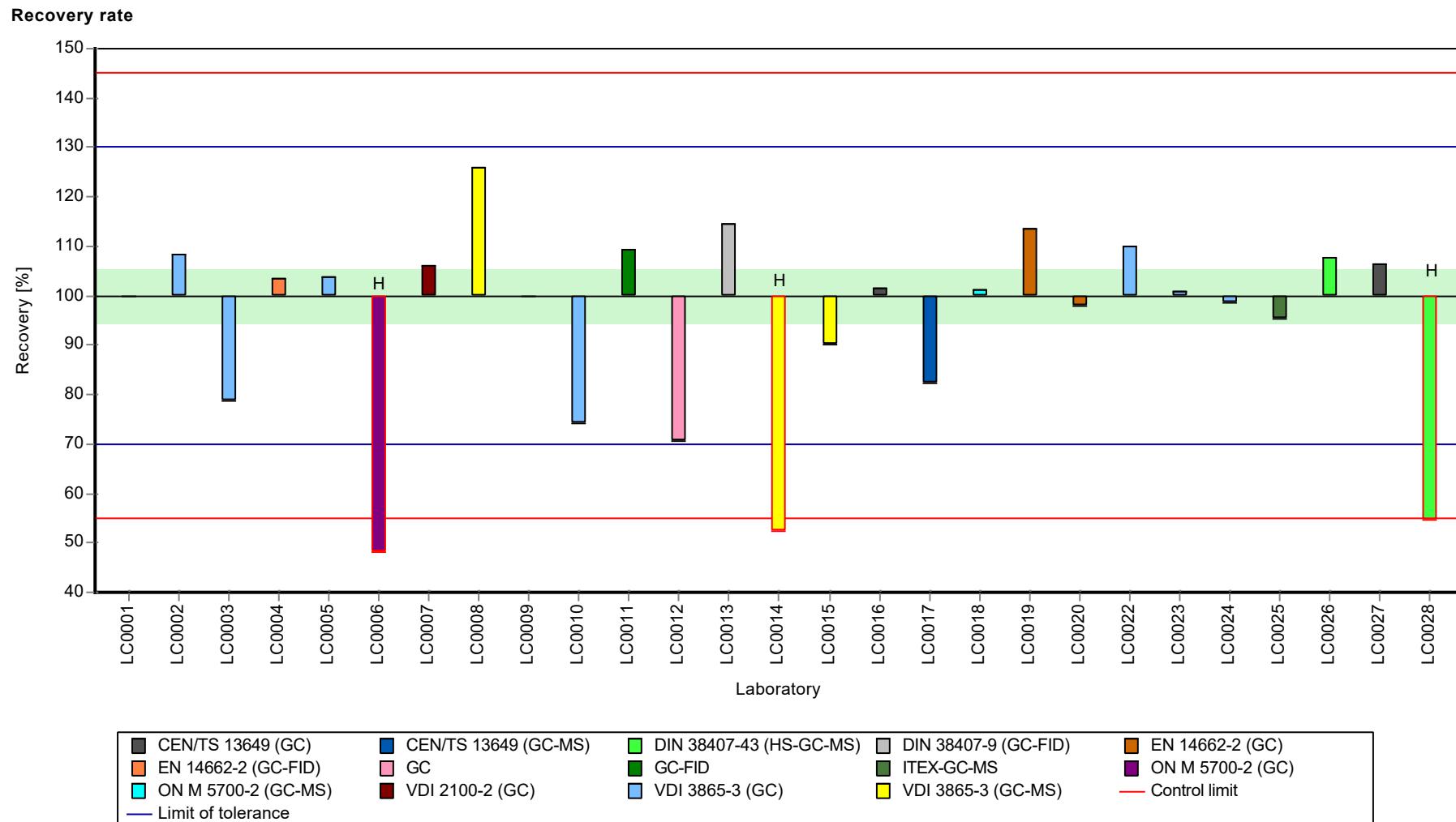
Graphical presentation of results

Results



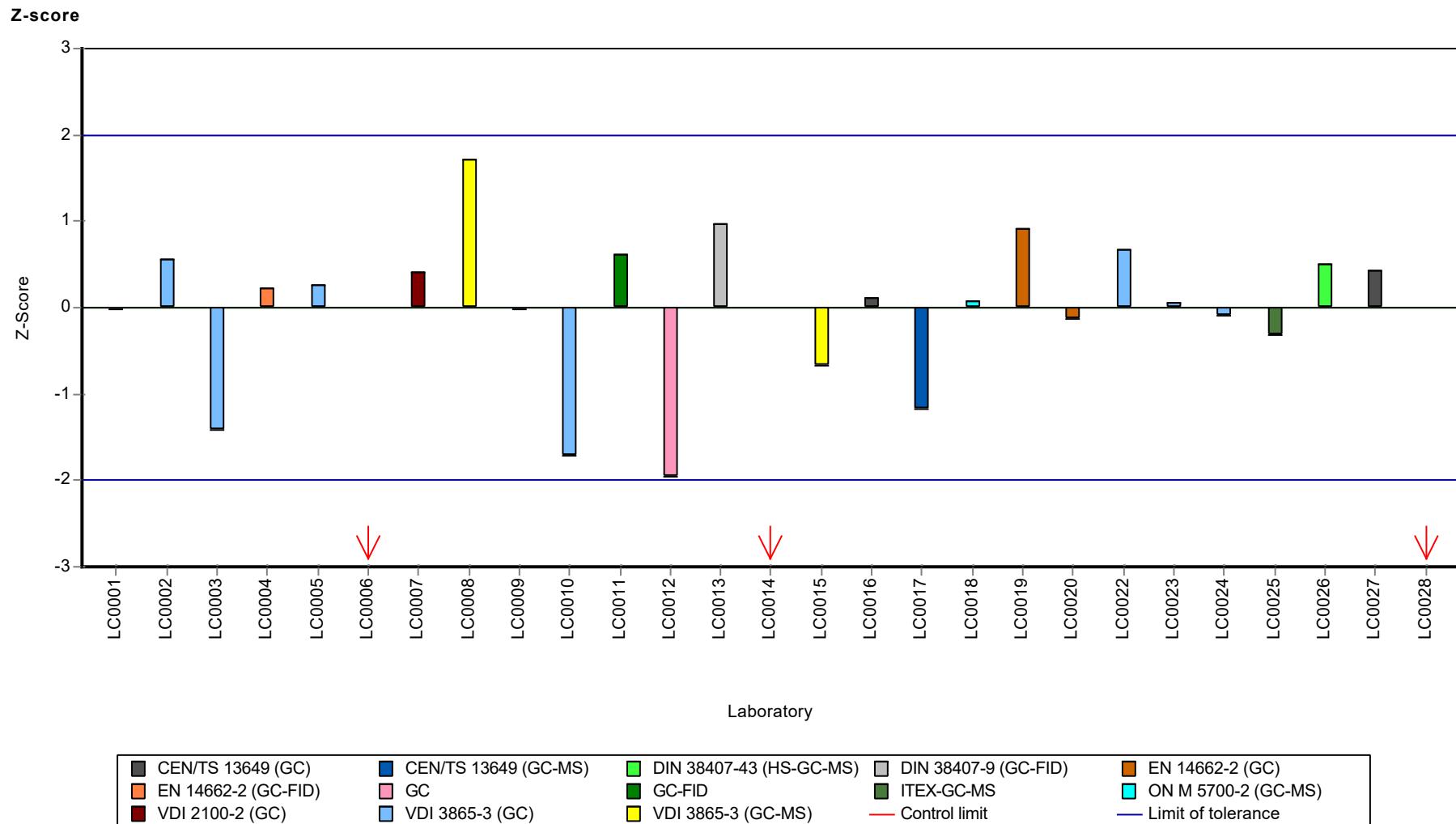
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Benzene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Benzene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: cis-1,2-Dichloroethene

Parameter oriented report

CL09 - CHC

cis-1,2-Dichloroethene

Unit	µg/tube
Assigned value ± U (k=2)	2.16 ± 0.409
Criterion	0.906 (42 %)
Minimum - Maximum	0.428 - 3.24
Control test value ± U (k=2)	2.84 ± 0.626

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.09	0.84	96.9	-0.07	
LC0002	2.87	0.57	133	0.79	
LC0003	0.71	0.21	32.9	-1.6	
LC0005	4.88	0.54	226	3.01	H
LC0006	2.13	0.43	98.7	-0.03	
LC0007	2.934	0.239	136	0.86	
LC0008	6.02	0.602	279	4.26	H
LC0009	3.24	0.33	150	1.2	
LC0010	2.96	0.24	137	0.89	
LC0013	1.59	0.16	73.7	-0.63	
LC0014	0.428	0.19	19.8	-1.91	
LC0015	2.66	0.23	123	0.56	
LC0021	2.441	0.37	113	0.31	
LC0022	2.56	1	119	0.44	
LC0023	1.356	0.102	62.9	-0.88	
LC0024	2.504	0.513	116	0.38	
LC0025	2.46	0.6	114	0.33	
LC0026	0.67	0.13	31.1	-1.64	
LC0028	1.58	0.263	73.2	-0.64	

Characteristics of parameter

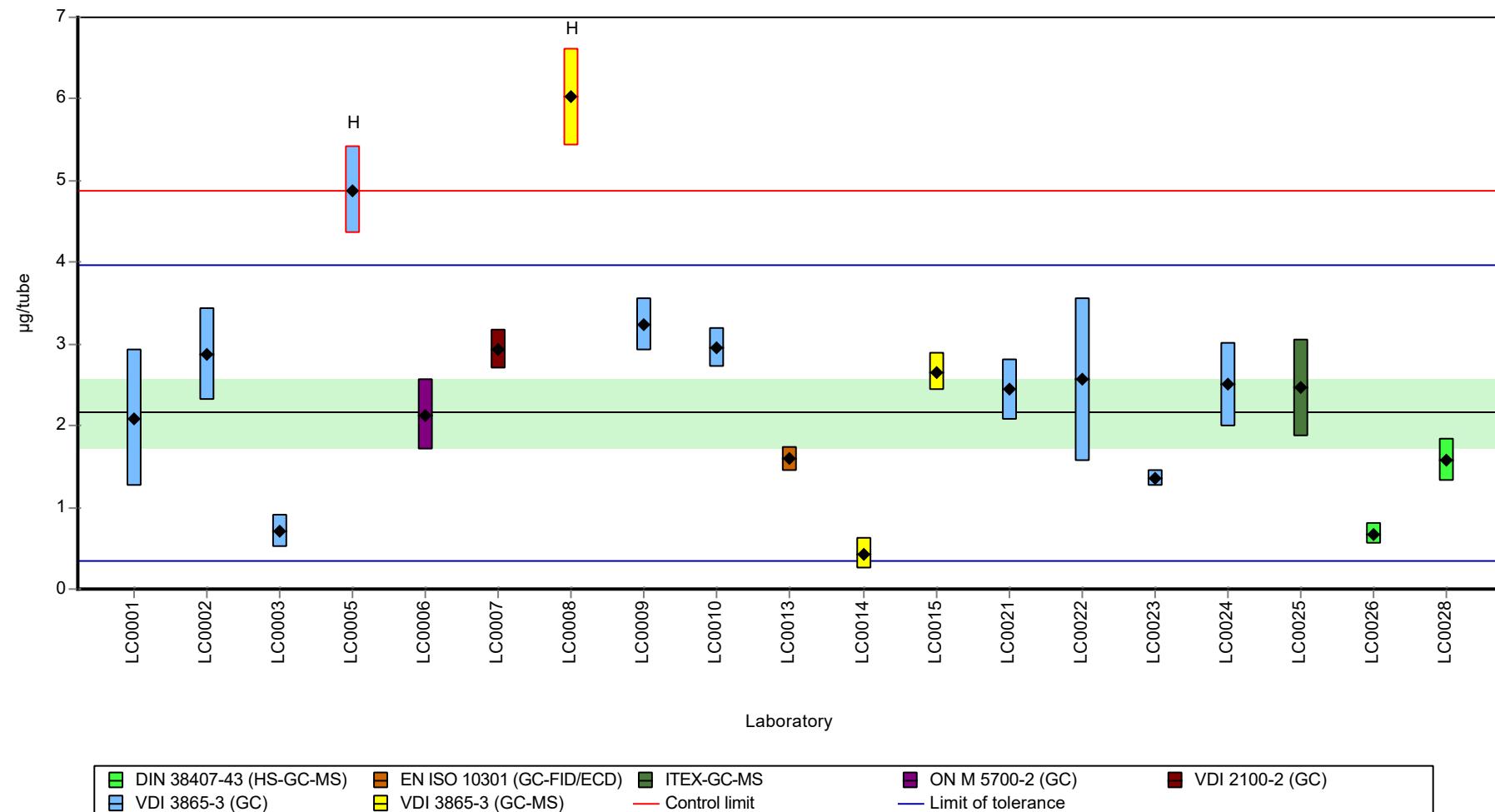
	all results	without outliers	Unit
Mean ± CI (99%)	2.43 ± 0.935	2.07 ± 0.633	µg/tube
Minimum	0.428	0.428	µg/tube
Maximum	6.02	3.24	µg/tube
Standard deviation	1.36	0.87	µg/tube
rel. standard deviation	56	42	%
n	19	17	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: cis-1,2-Dichloroethene

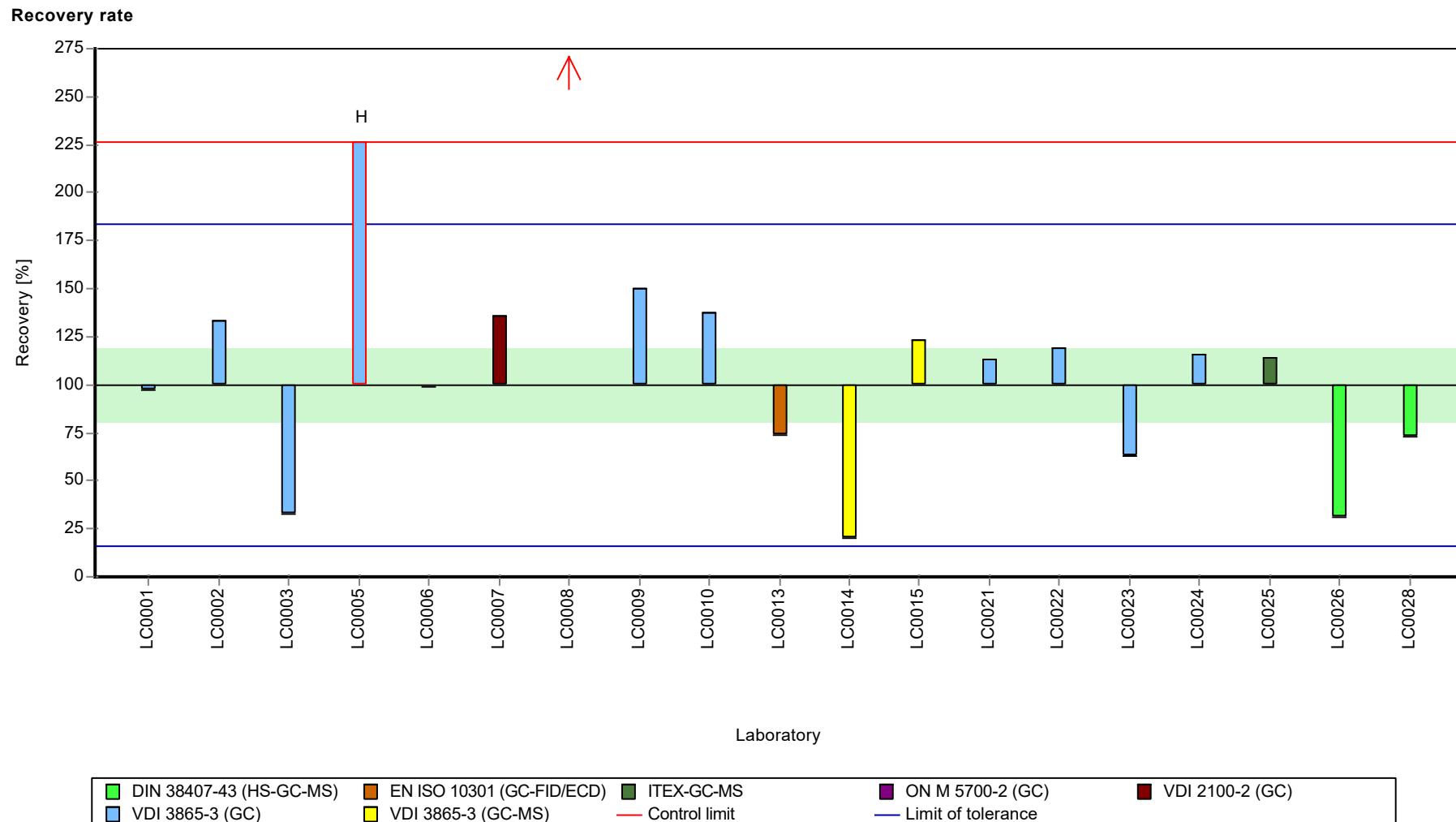
Graphical presentation of results

Results



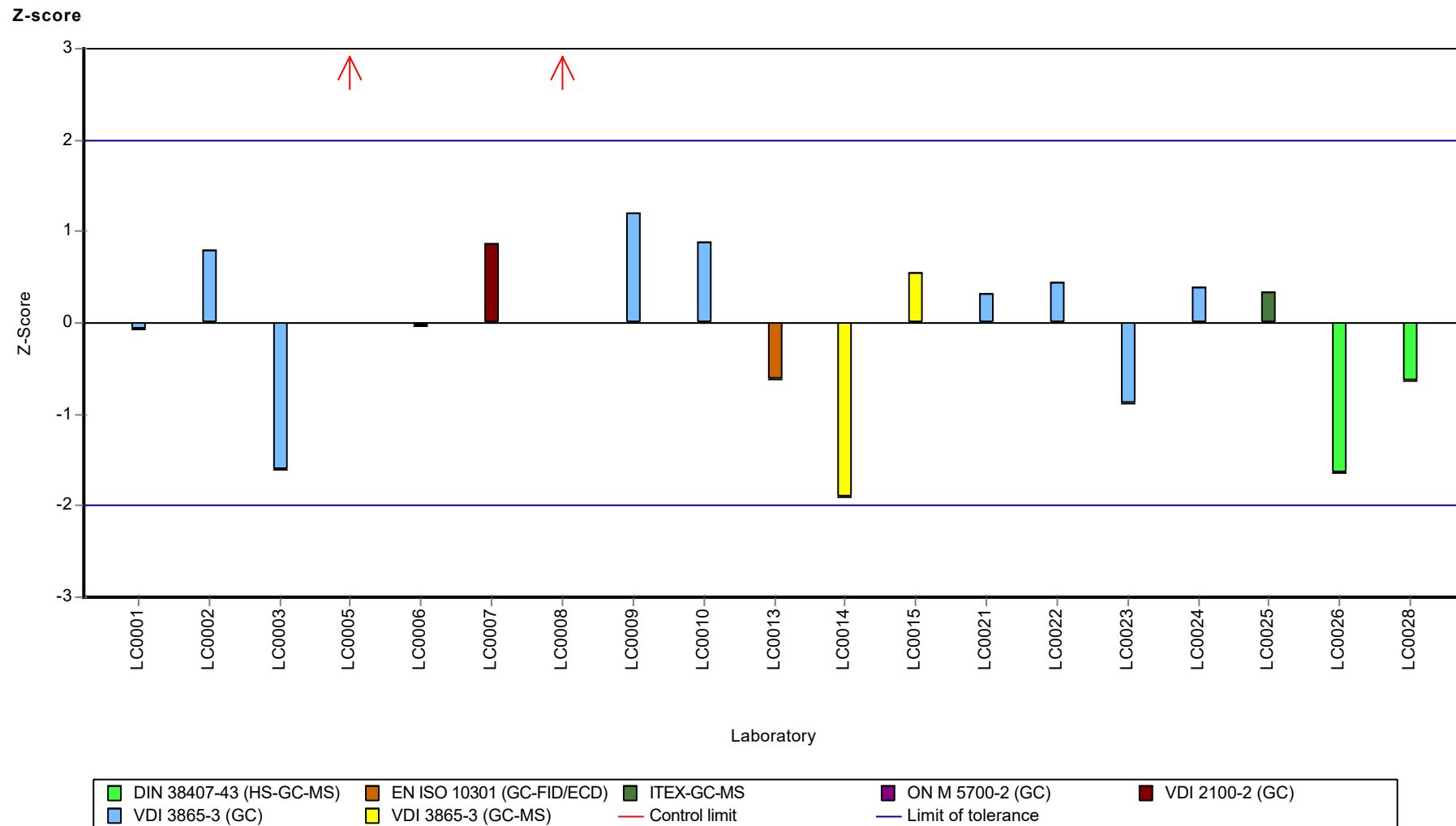
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: cis-1,2-Dichloroethene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: cis-1,2-Dichloroethene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: Ethylbenzene

Parameter oriented report

BL10 - BTEX & C5-C10

Ethylbenzene

Unit	µg/tube
Assigned value ± U (k=2)	5.71 ± 0.32
Criterion	1.03 (18 %)
Minimum - Maximum	3.71 - 7.02
Control test value ± U (k=2)	4.90 ± 1.13

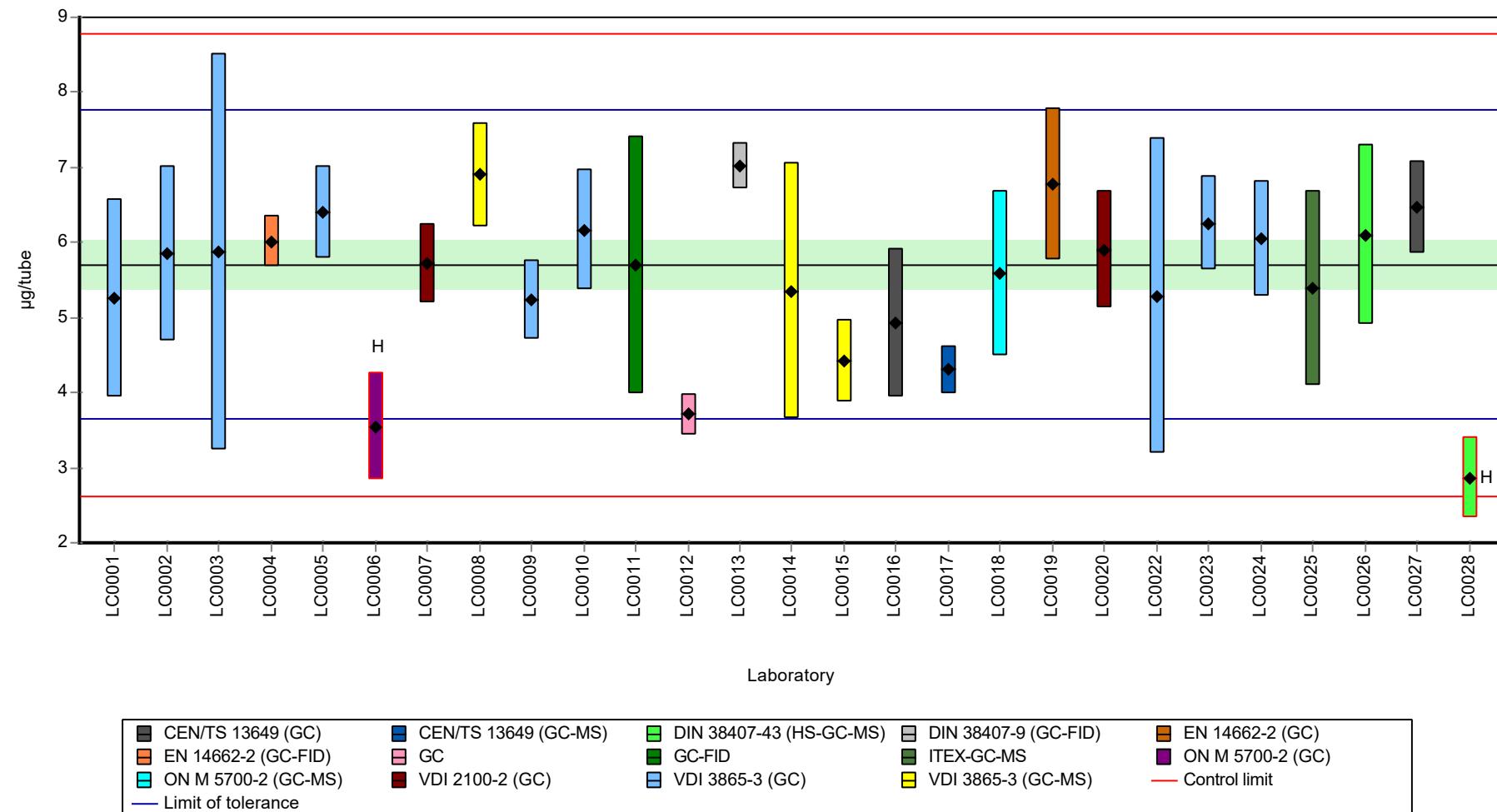
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.26	1.32	92.2	-0.44	
LC0002	5.85	1.17	102	0.14	
LC0003	5.87	2.64	103	0.16	
LC0004	6.011	0.34	105	0.3	
LC0005	6.4	0.62	112	0.67	
LC0006	3.55	0.71	62.2	-2.1	H
LC0007	5.72	0.537	100	0.01	
LC0008	6.9	0.69	121	1.16	
LC0009	5.23	0.53	91.6	-0.46	
LC0010	6.17	0.8	108	0.45	
LC0011	5.7	1.71	99.9	-0.01	
LC0012	3.706	0.267	64.9	-1.95	
LC0013	7.02	0.3	123	1.28	
LC0014	5.356	1.71	93.8	-0.34	
LC0015	4.43	0.55	77.6	-1.24	
LC0016	4.93	0.986	86.4	-0.76	
LC0017	4.31	0.32	75.5	-1.36	
LC0018	5.59	1.1	97.9	-0.11	
LC0019	6.78	1.02	119	1.04	
LC0020	5.906	0.78	103	0.19	
LC0022	5.29	2.1	92.7	-0.41	
LC0023	6.251	0.625	110	0.53	
LC0024	6.045	0.767	106	0.33	
LC0025	5.39	1.3	94.4	-0.31	
LC0026	6.1	1.2	107	0.38	
LC0027	6.47	0.62	113	0.74	
LC0028	2.86	0.54	50.1	-2.77	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.52 ± 0.59	5.71 ± 0.48	µg/tube
Minimum	2.86	3.71	µg/tube
Maximum	7.02	7.02	µg/tube
Standard deviation	1.02	0.8	µg/tube
rel. standard deviation	18.5	14	%
n	27	25	-

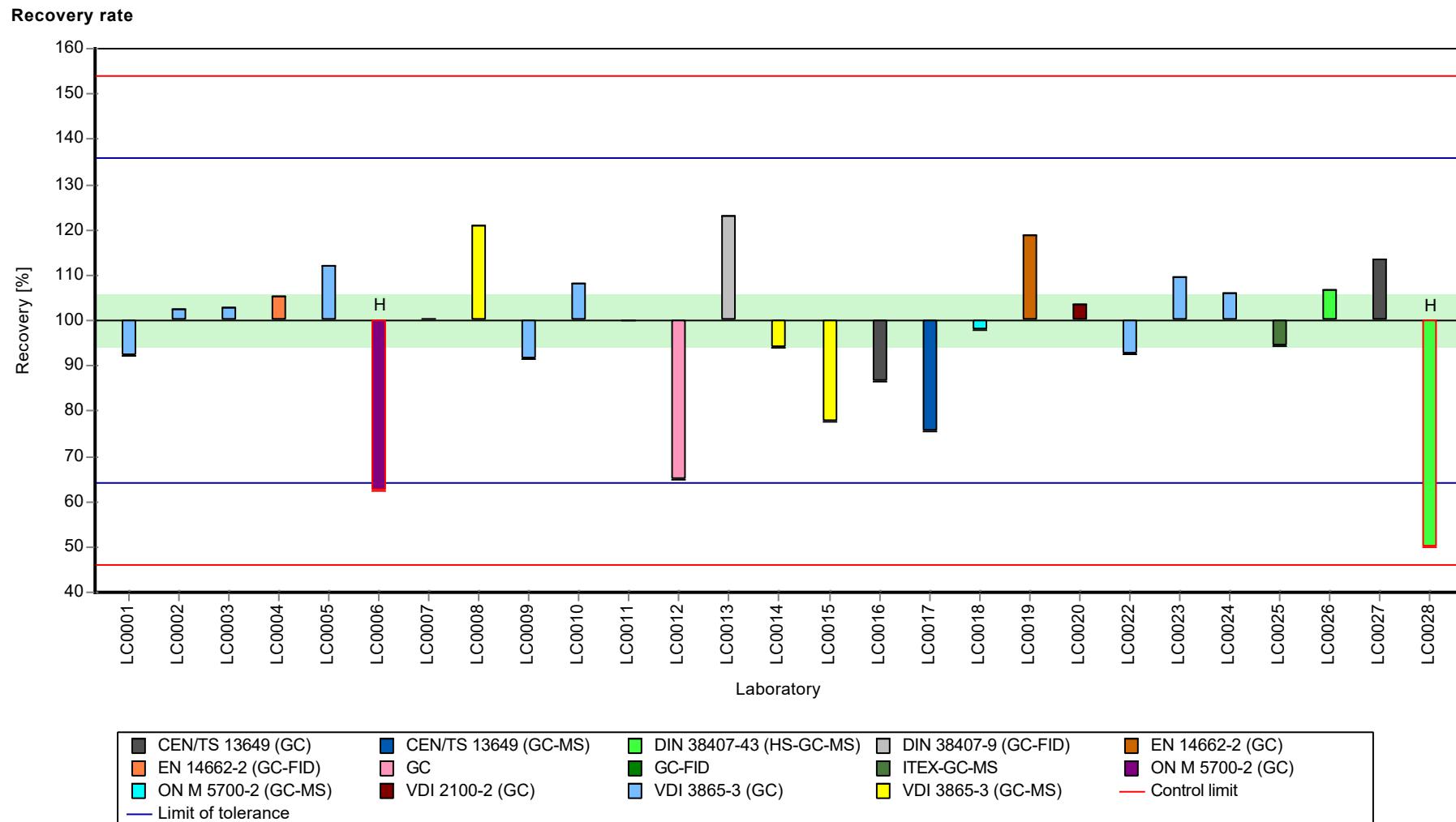
Graphical presentation of results

Results



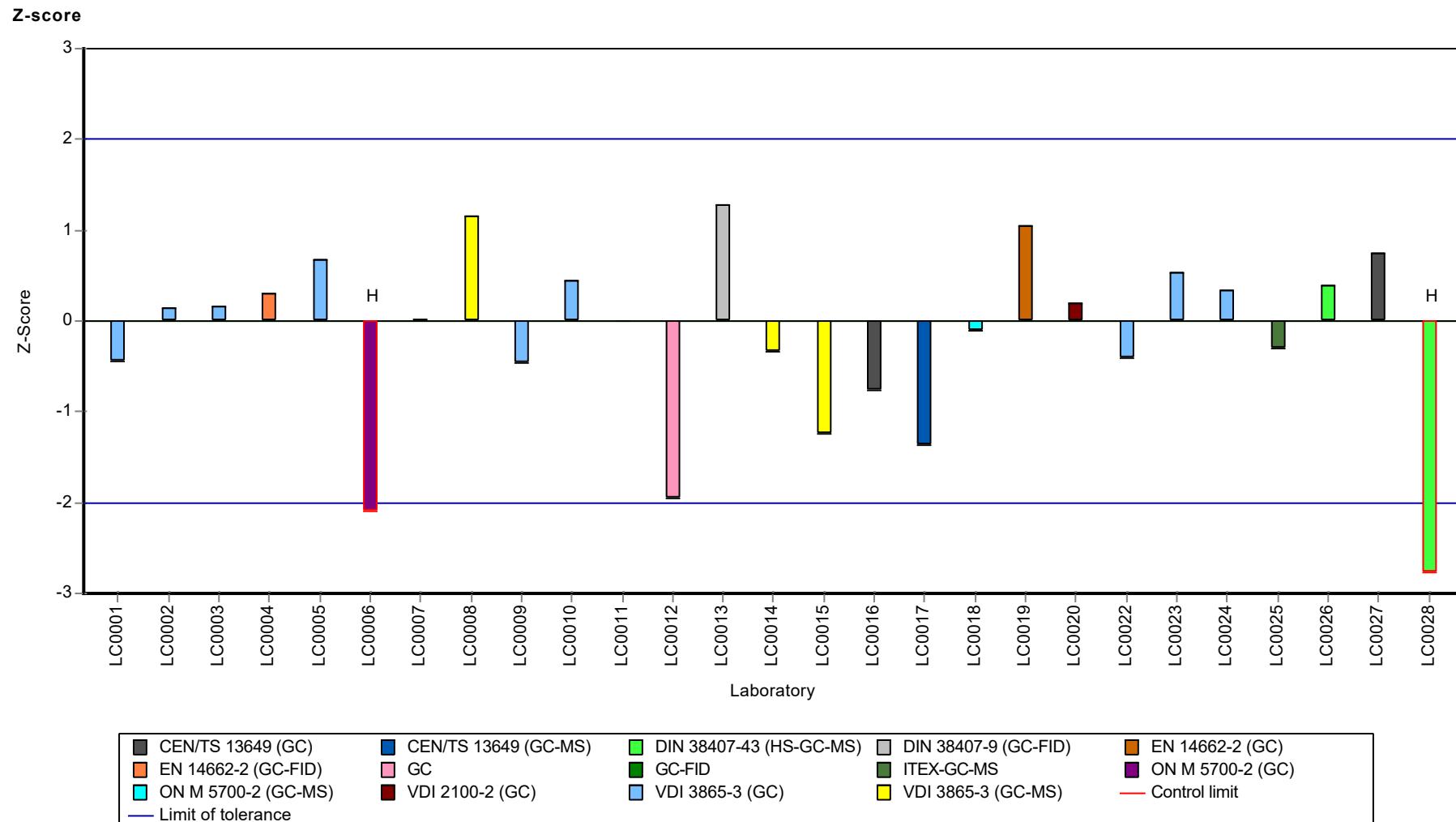
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Ethylbenzene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Ethylbenzene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Decane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Decane

Unit	µg/tube
Assigned value ± U (k=2)	3.5 ± 0.468
Criterion	1.01 (29 %)
Minimum - Maximum	1.55 - 5.07
Control test value ± U (k=2)	2.95 ± 1.03

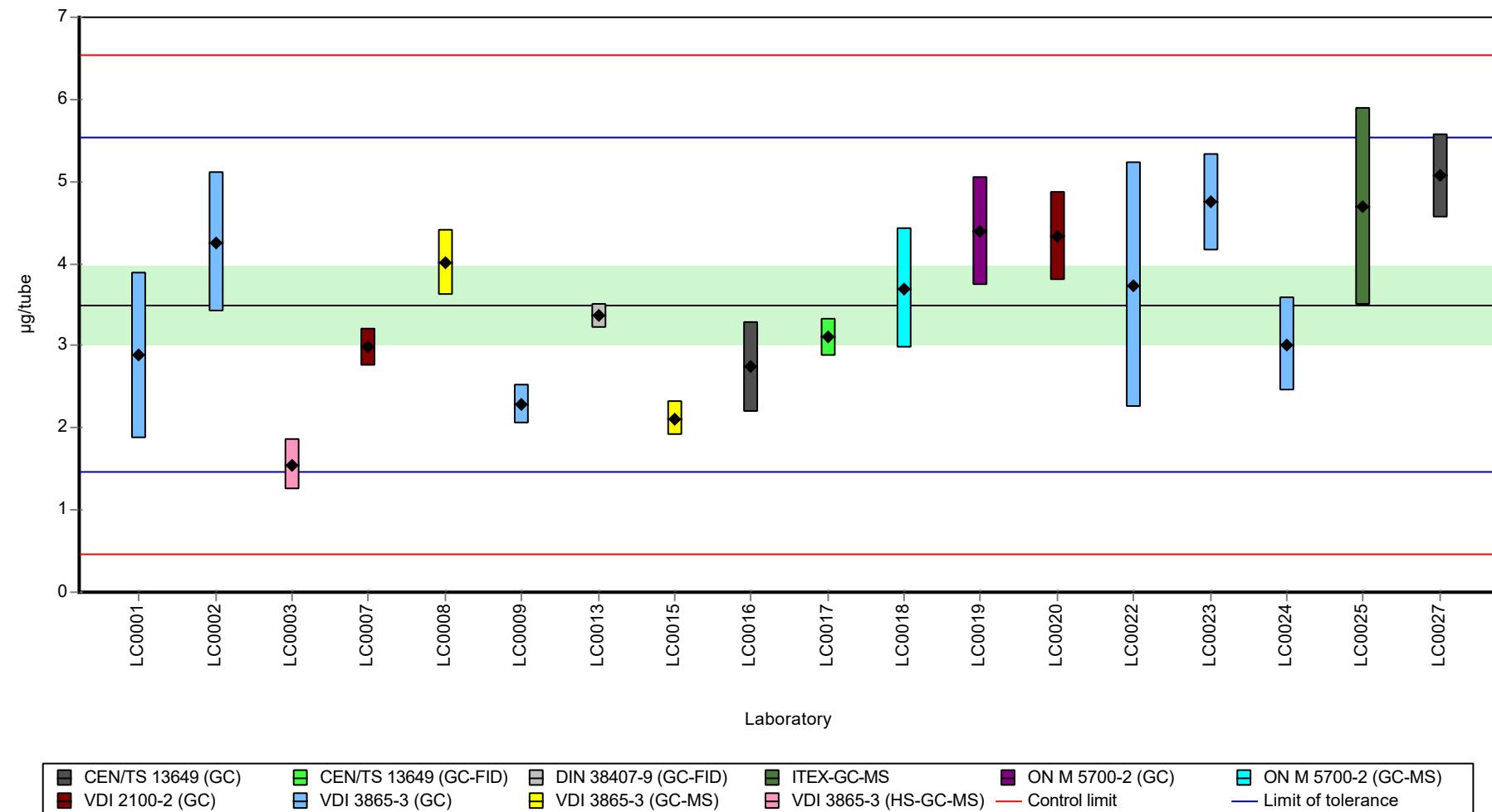
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.88	1.01	82.3	-0.61	
LC0002	4.26	0.85	122	0.75	
LC0003	1.55	0.31	44.3	-1.92	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	2.98	0.233	85.2	-0.51	
LC0008	4.02	0.402	115	0.51	
LC0009	2.28	0.24	65.2	-1.2	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	3.36	0.16	96	-0.14	
LC0014	-	-	-	-	
LC0015	2.11	0.21	60.3	-1.37	
LC0016	2.74	0.548	78.3	-0.75	
LC0017	3.101	0.23	88.6	-0.39	
LC0018	3.7	0.74	106	0.2	
LC0019	4.4	0.66	126	0.89	
LC0020	4.326	0.54	124	0.82	
LC0022	3.74	1.5	107	0.24	
LC0023	4.747	0.593	136	1.23	
LC0024	3.012	0.575	86.1	-0.48	
LC0025	4.7	1.2	134	1.18	
LC0026	-	-	-	-	
LC0027	5.07	0.51	145	1.55	
LC0028	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	3.5 ± 0.702	3.5 ± 0.702	µg/tube
Minimum	1.55	1.55	µg/tube
Maximum	5.07	5.07	µg/tube
Standard deviation	0.993	0.993	µg/tube
rel. standard deviation	28.4	28.4	%
n	18	18	-

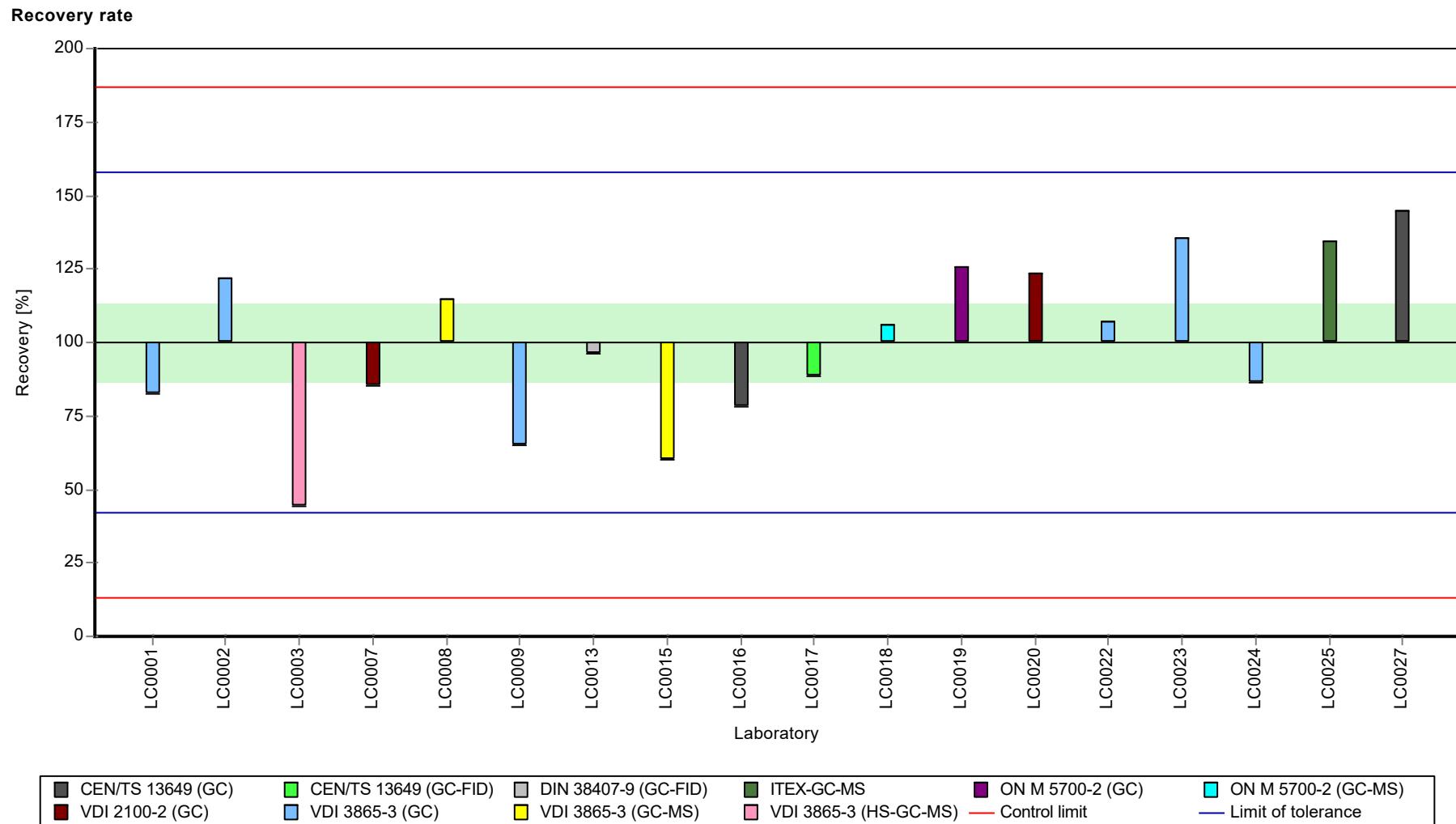
Graphical presentation of results

Results



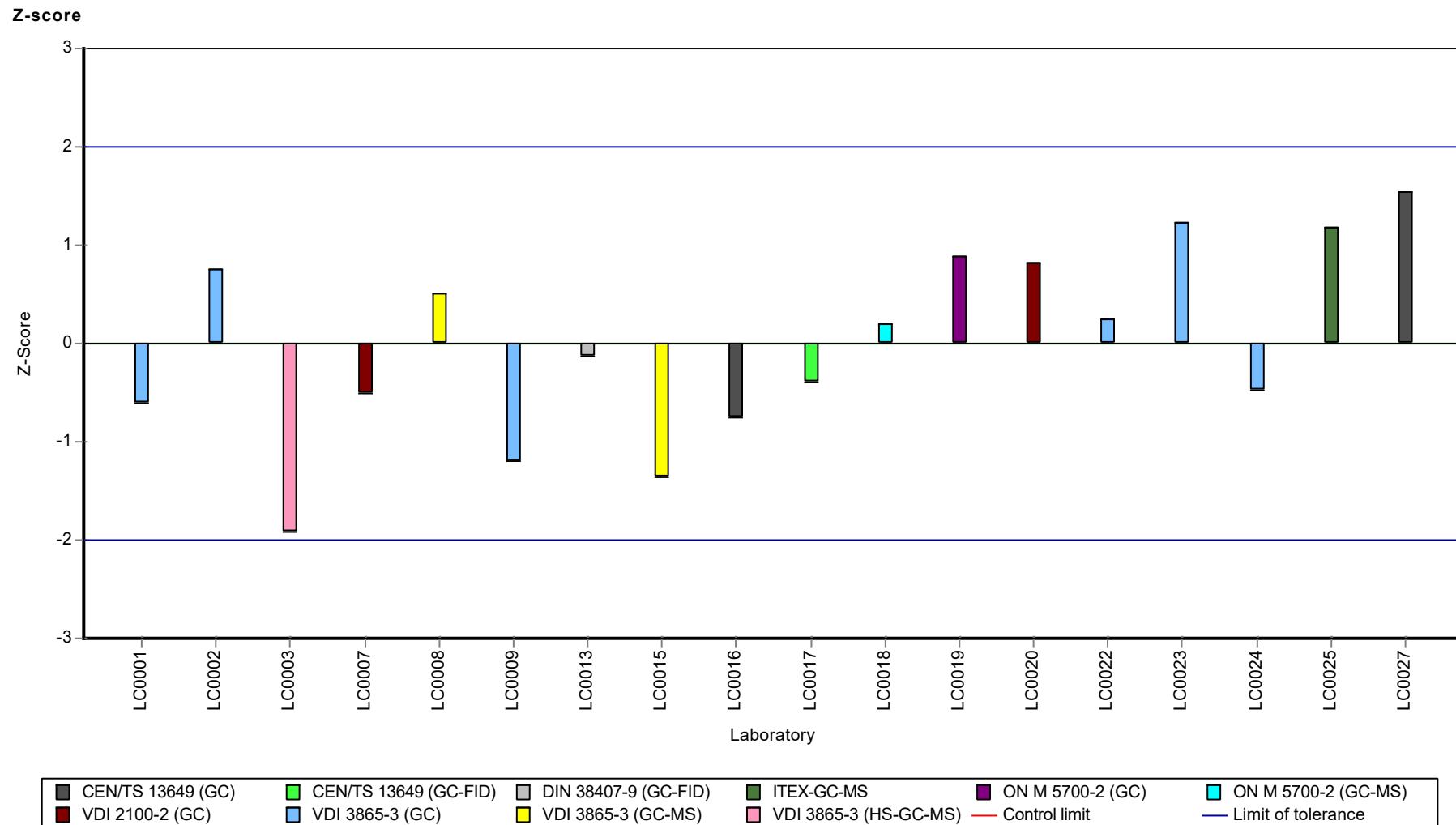
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Decane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Decane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Heptane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Heptane

Unit	µg/tube
Assigned value ± U (k=2)	6.87 ± 0.338
Criterion	0.756 (11 %)
Minimum - Maximum	5.34 - 8.27
Control test value ± U (k=2)	5.23 ± 1.46

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.18	1.39	89.9	-0.92	
LC0002	7.38	1.85	107	0.67	
LC0003	7.18	1.44	104	0.41	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	7.372	0.754	107	0.66	
LC0008	7.77	0.777	113	1.19	
LC0009	5.34	0.55	77.7	-2.03	
LC0010	7.52	1.13	109	0.86	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	6.58	0.31	95.7	-0.39	
LC0014	-	-	-	-	
LC0015	6.41	0.64	93.3	-0.61	
LC0016	7.62	1.524	111	0.99	
LC0017	6.803	0.51	99	-0.09	
LC0018	8.25	1.7	120	1.82	
LC0019	8.27	1.24	120	1.85	
LC0020	6.678	0.99	97.2	-0.26	
LC0022	6.56	2.6	95.4	-0.41	
LC0023	7.344	0.918	107	0.62	
LC0024	6.464	0.646	94	-0.54	
LC0025	7.08	1.8	103	0.27	
LC0026	-	-	-	-	
LC0027	7.88	0.79	115	1.33	
LC0028	-	-	-	-	

Characteristics of parameter

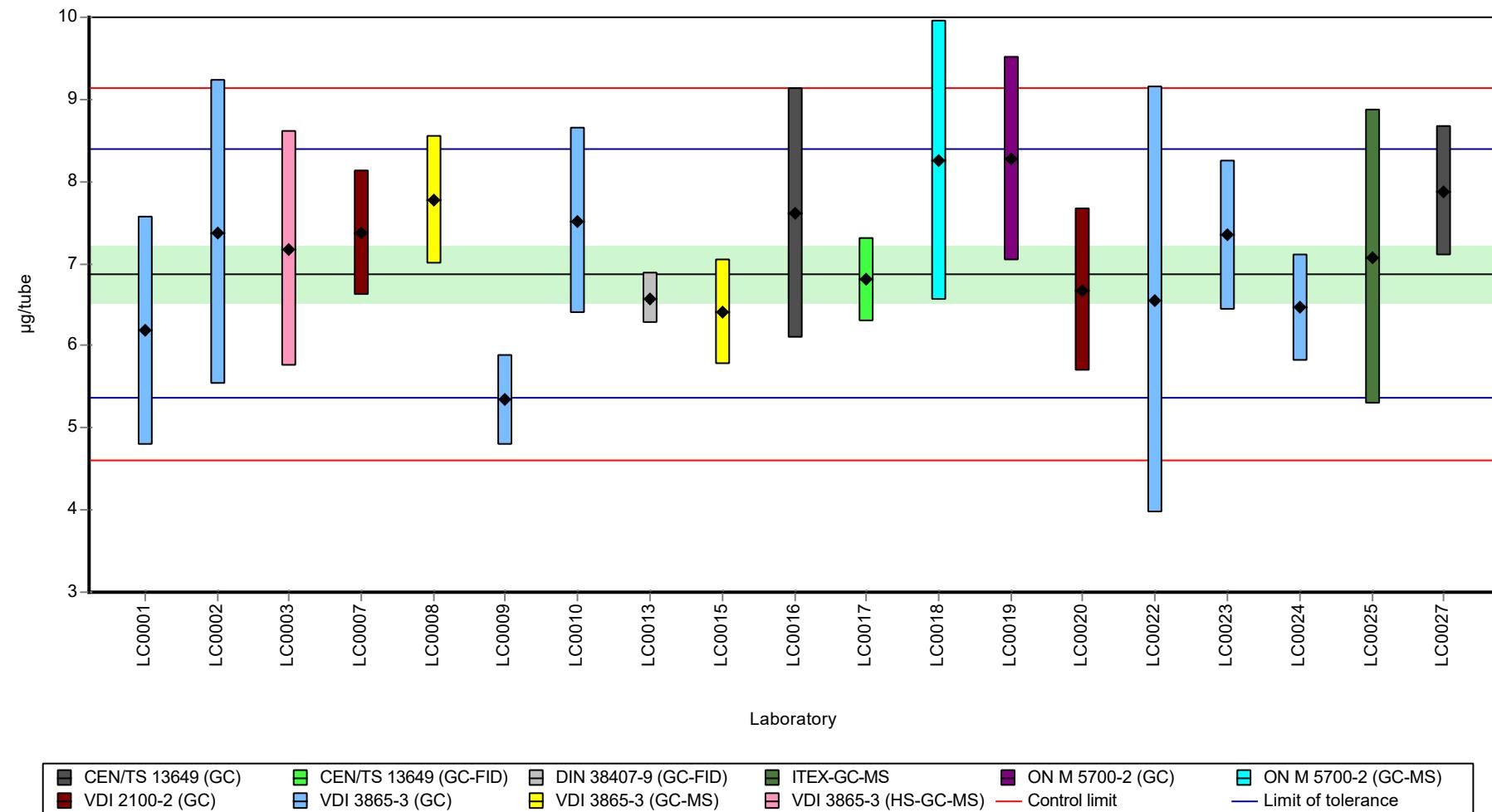
	all results	without outliers	Unit
Mean ± CI (99%)	7.09 ± 0.515	7.09 ± 0.515	µg/tube
Minimum	5.34	5.34	µg/tube
Maximum	8.27	8.27	µg/tube
Standard deviation	0.748	0.748	µg/tube
rel. standard deviation	10.5	10.5	%
n	19	19	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Heptane

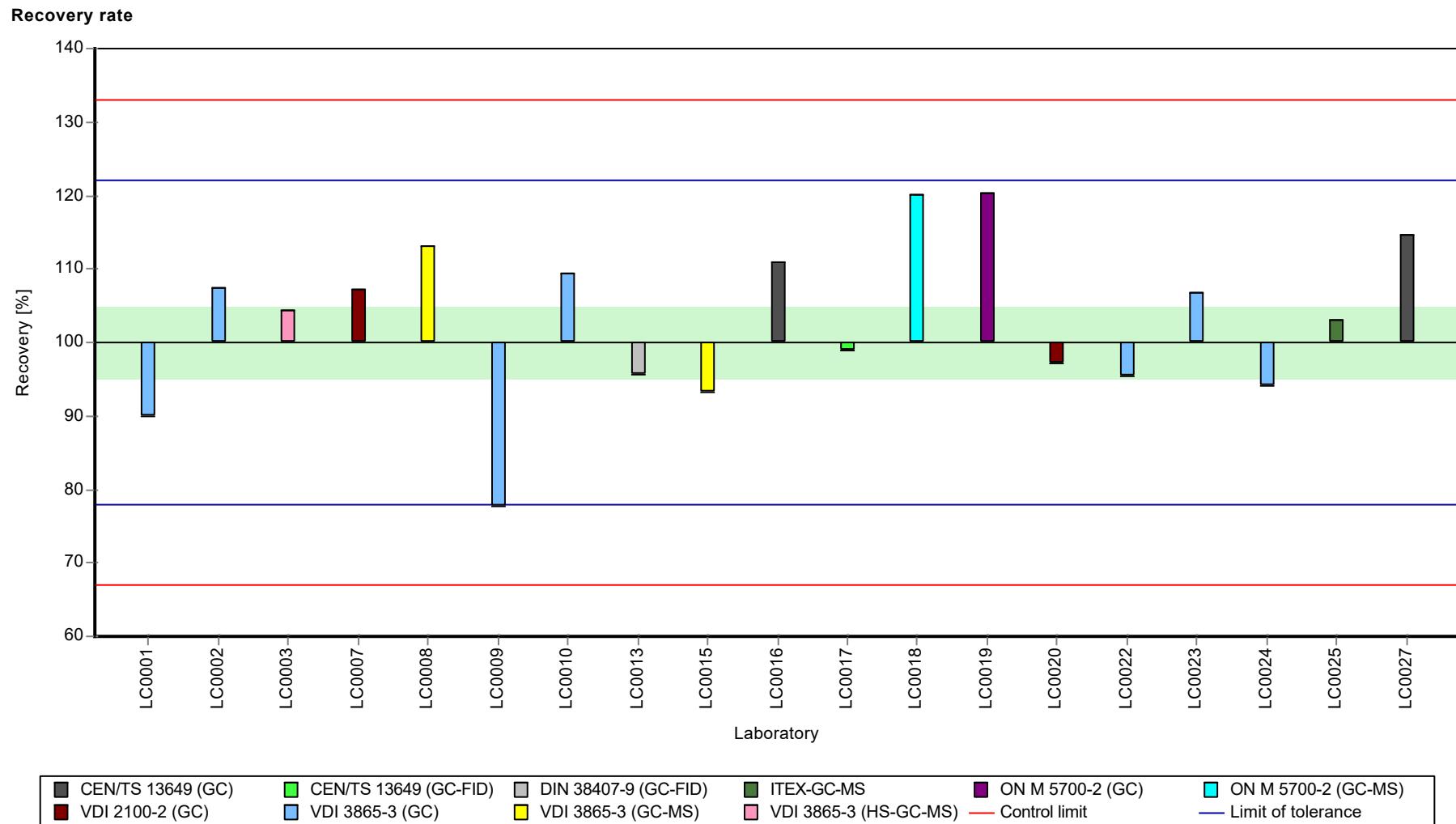
Graphical presentation of results

Results



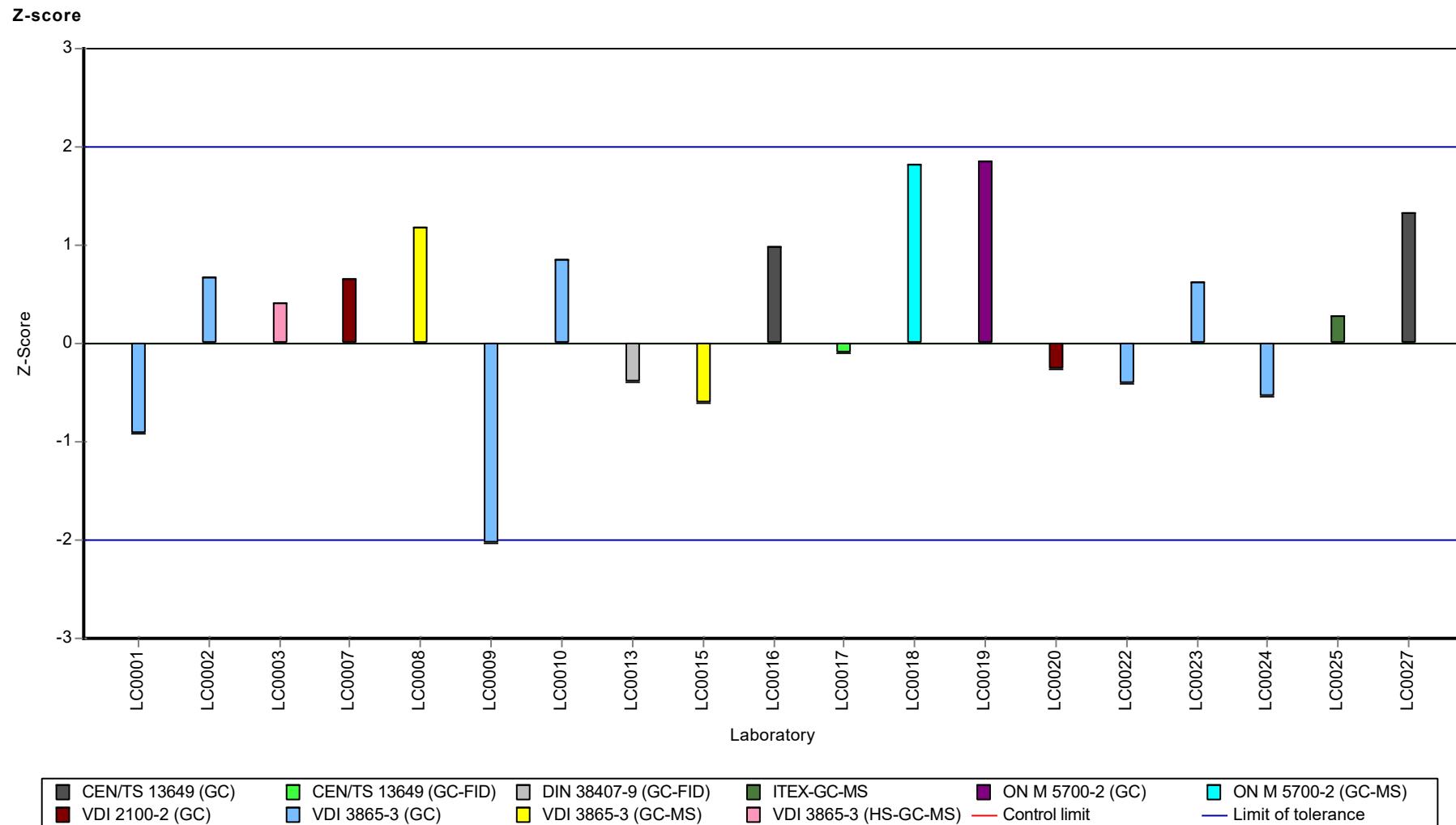
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Heptane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Heptane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Hexane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Hexane

Unit	µg/tube
Assigned value ± U (k=2)	6.79 ± 0.283
Criterion	0.679 (10 %)
Minimum - Maximum	6.13 - 8.29
Control test value ± U (k=2)	5.10 ± 1.84

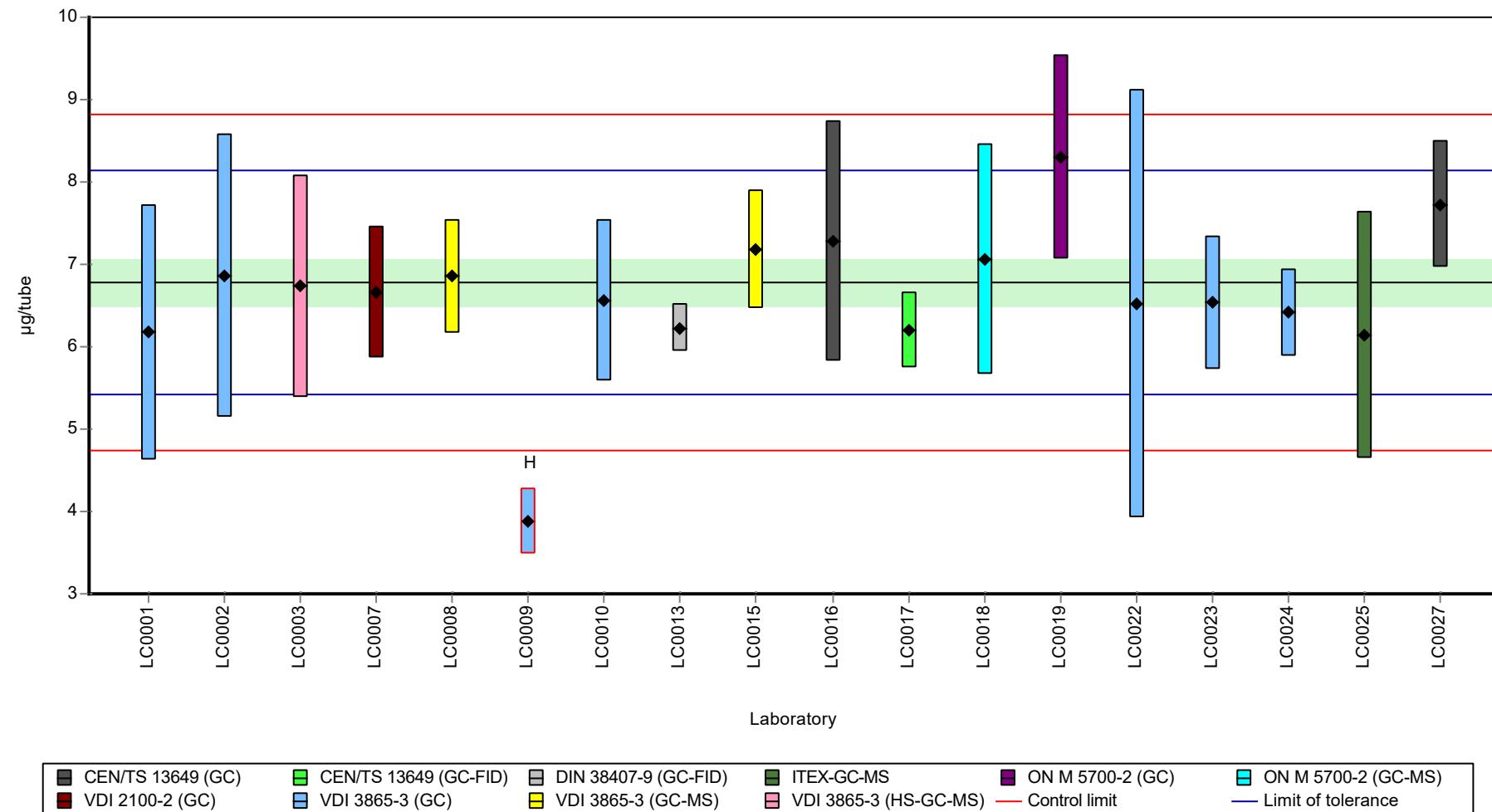
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.17	1.55	90.9	-0.91	
LC0002	6.86	1.72	101	0.11	
LC0003	6.73	1.35	99.2	-0.08	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	6.652	0.799	98	-0.2	
LC0008	6.85	0.685	101	0.1	
LC0009	3.87	0.4	57	-4.3	H
LC0010	6.56	0.98	96.7	-0.33	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	6.22	0.29	91.7	-0.83	
LC0014	-	-	-	-	
LC0015	7.18	0.72	106	0.58	
LC0016	7.28	1.456	107	0.73	
LC0017	6.194	0.46	91.3	-0.87	
LC0018	7.06	1.4	104	0.4	
LC0019	8.29	1.24	122	2.22	
LC0020	-	-	-	-	
LC0022	6.51	2.6	95.9	-0.41	
LC0023	6.531	0.816	96.3	-0.37	
LC0024	6.412	0.526	94.5	-0.55	
LC0025	6.13	1.5	90.3	-0.97	
LC0026	-	-	-	-	
LC0027	7.72	0.77	114	1.38	
LC0028	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	6.62 ± 0.63	6.79 ± 0.425	µg/tube
Minimum	3.87	6.13	µg/tube
Maximum	8.29	8.29	µg/tube
Standard deviation	0.89	0.584	µg/tube
rel. standard deviation	13.4	8.6	%
n	18	17	-

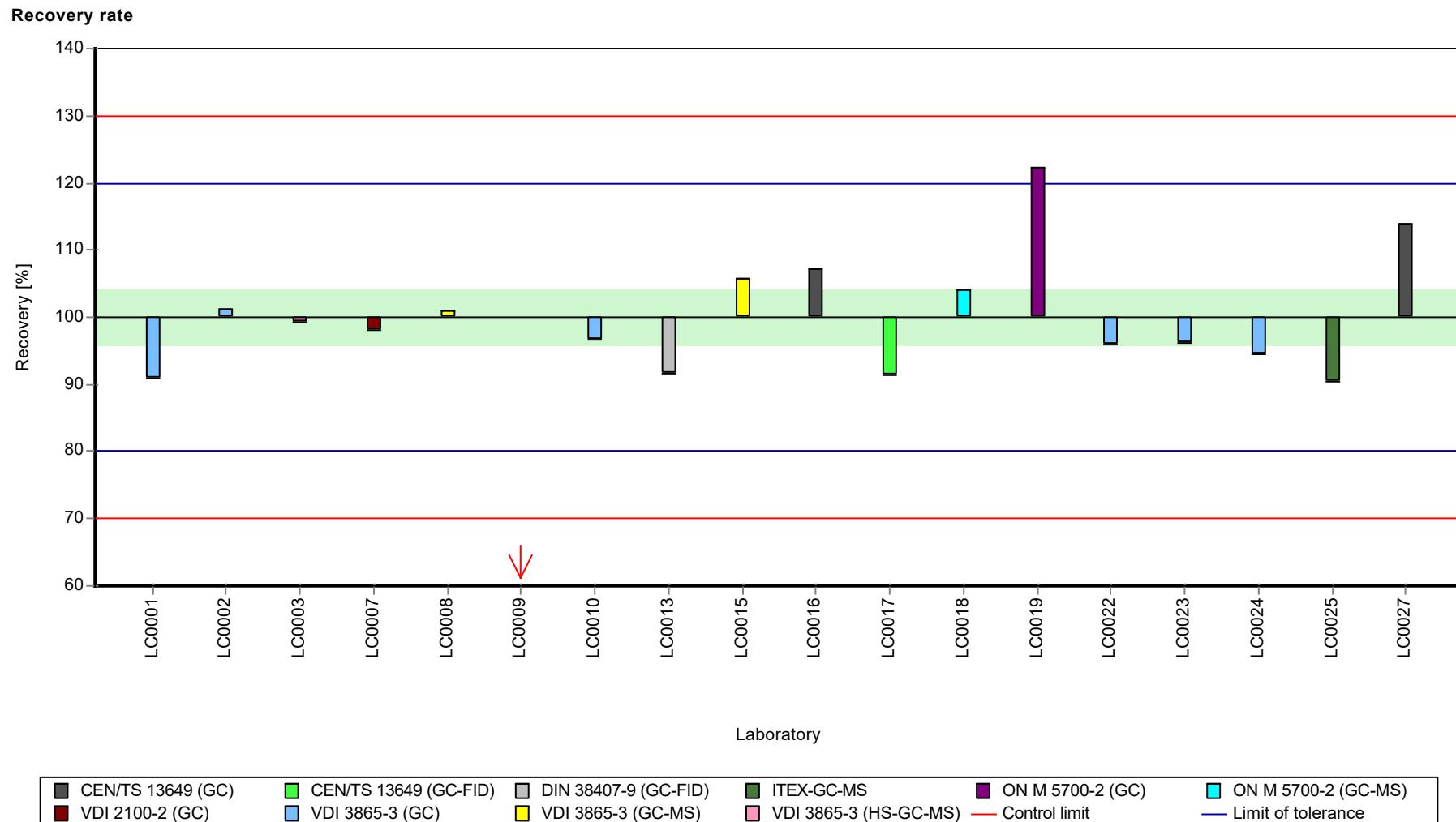
Graphical presentation of results

Results



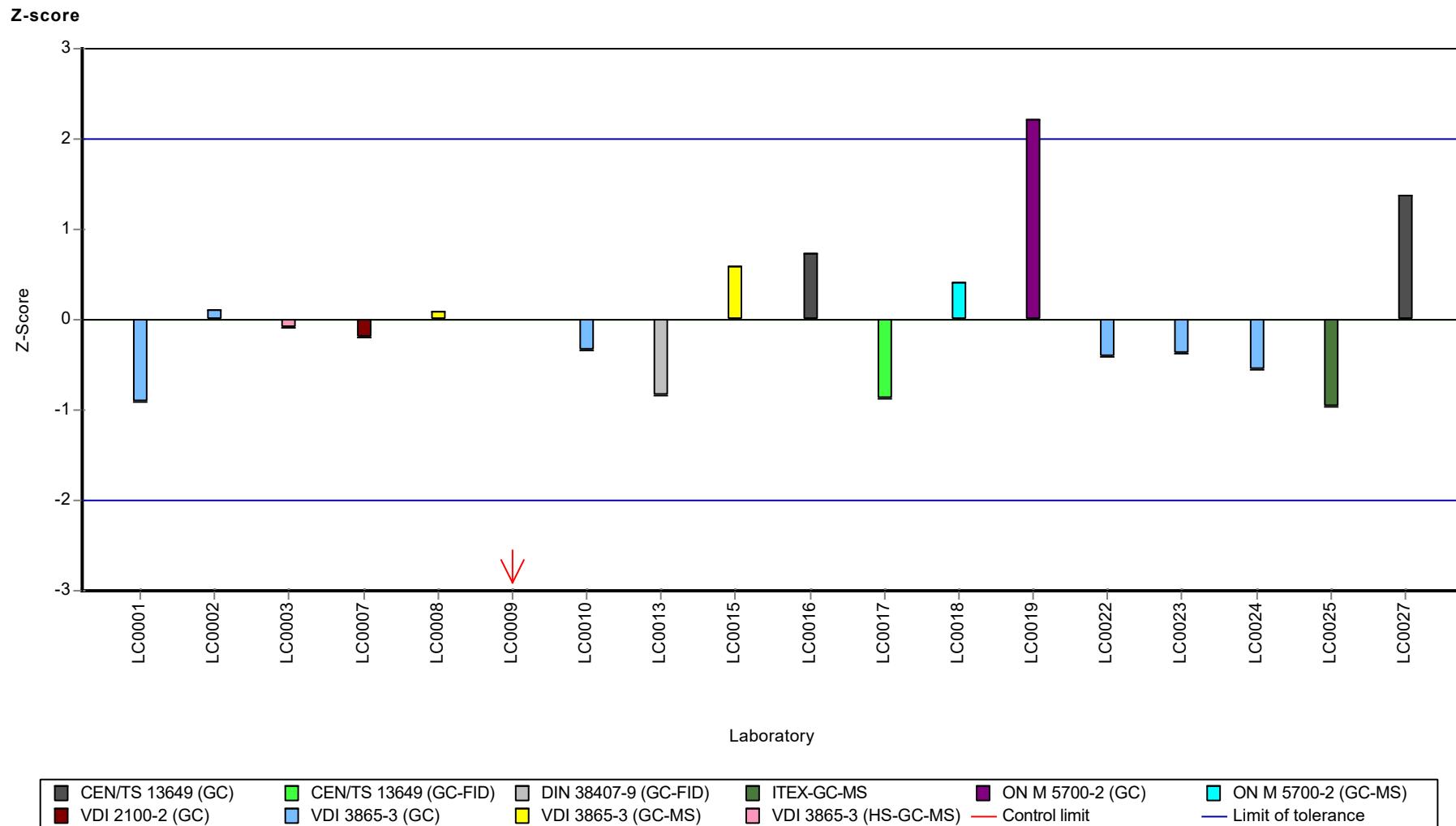
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Hexane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Hexane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Nonane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Nonane

Unit	µg/tube
Assigned value ± U (k=2)	5.54 ± 0.448
Criterion	0.886 (16 %)
Minimum - Maximum	4.14 - 6.79
Control test value ± U (k=2)	3.66 ± 1.02

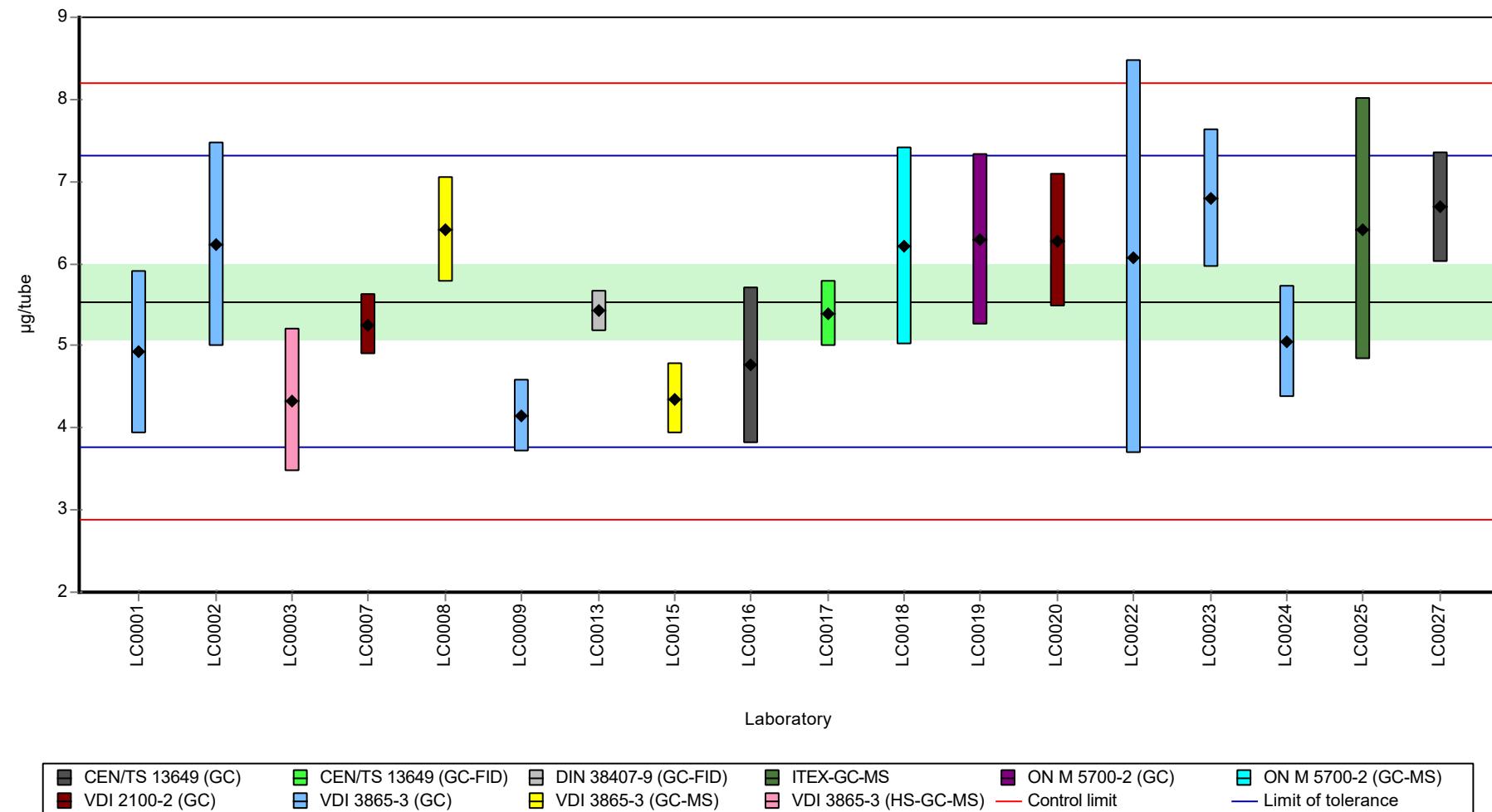
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.92	0.99	88.9	-0.69	
LC0002	6.23	1.25	113	0.78	
LC0003	4.33	0.87	78.2	-1.36	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	5.256	0.367	95	-0.32	
LC0008	6.41	0.641	116	0.99	
LC0009	4.14	0.44	74.8	-1.58	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	5.42	0.25	97.9	-0.13	
LC0014	-	-	-	-	
LC0015	4.35	0.43	78.6	-1.34	
LC0016	4.76	0.952	86	-0.88	
LC0017	5.391	0.4	97.4	-0.16	
LC0018	6.21	1.2	112	0.76	
LC0019	6.29	1.04	114	0.85	
LC0020	6.28	0.82	113	0.84	
LC0022	6.08	2.4	110	0.62	
LC0023	6.791	0.849	123	1.42	
LC0024	5.045	0.681	91.1	-0.55	
LC0025	6.42	1.6	116	1	
LC0026	-	-	-	-	
LC0027	6.69	0.67	121	1.3	
LC0028	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.61 ± 0.615	5.61 ± 0.615	µg/tube
Minimum	4.14	4.14	µg/tube
Maximum	6.79	6.79	µg/tube
Standard deviation	0.869	0.869	µg/tube
rel. standard deviation	15.5	15.5	%
n	18	18	-

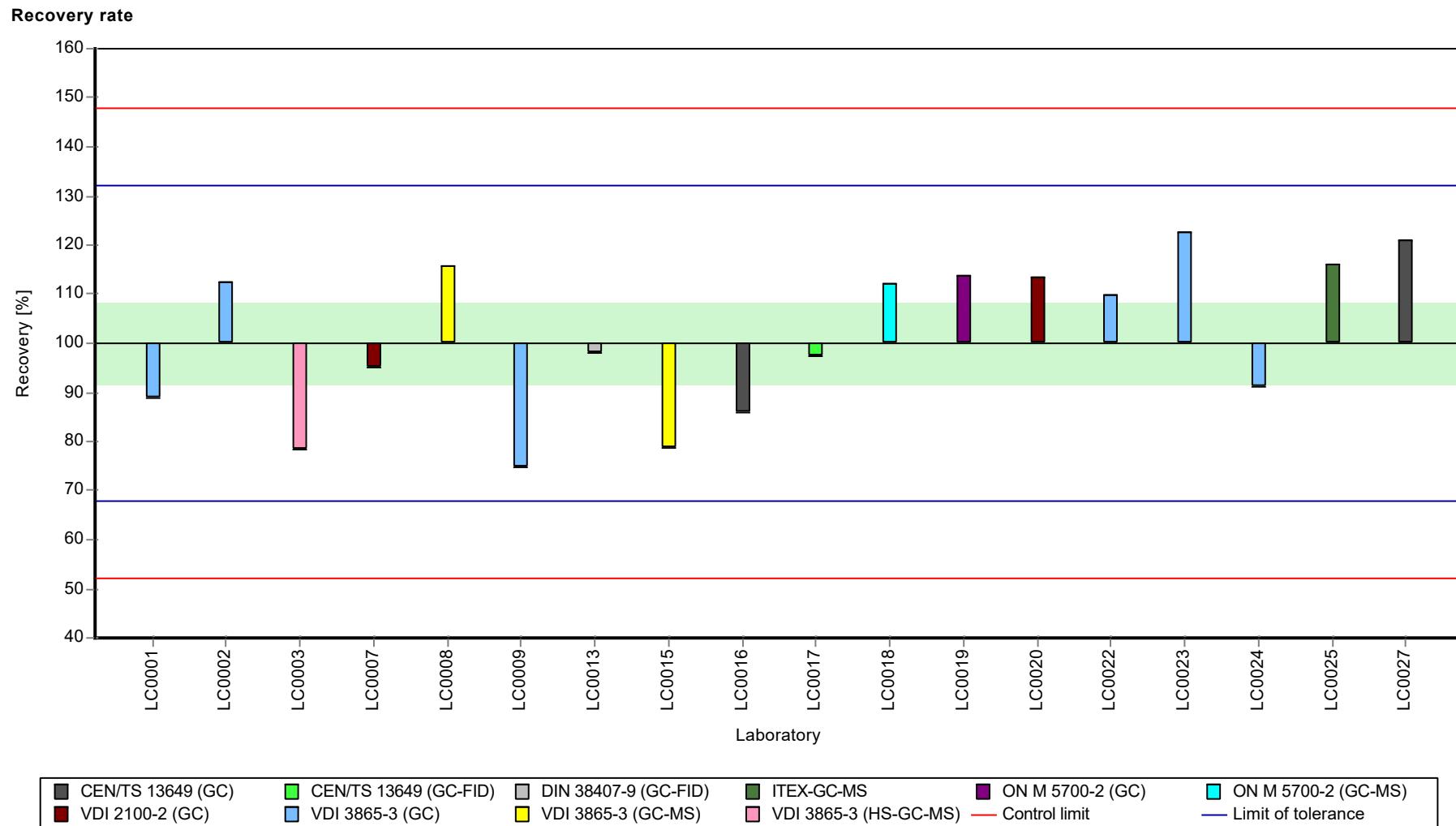
Graphical presentation of results

Results



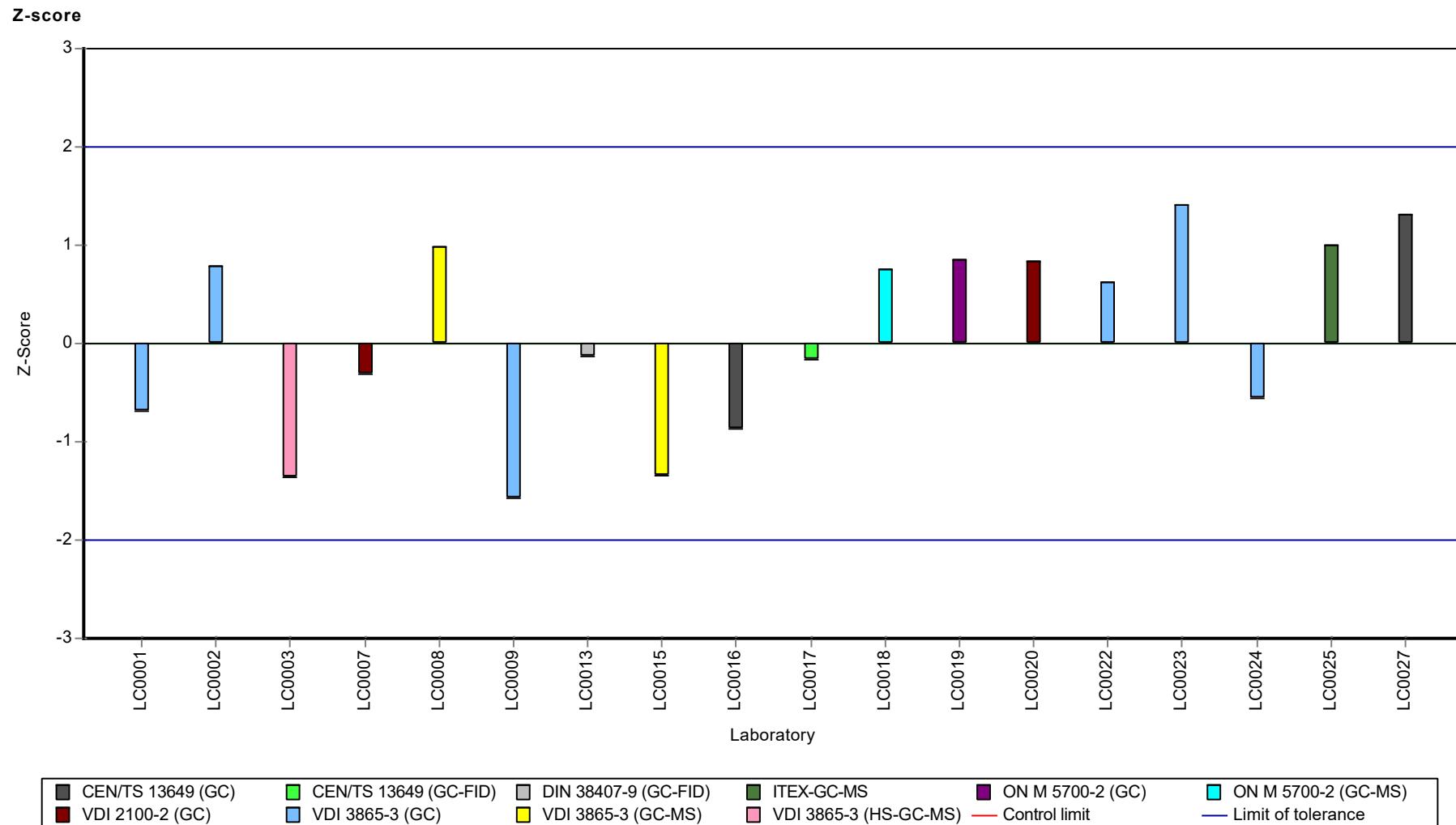
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Nonane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Nonane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Octane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Octane

Unit	µg/tube
Assigned value ± U (k=2)	6.62 ± 0.317
Criterion	0.729 (11 %)
Minimum - Maximum	5.24 - 8.13
Control test value ± U (k=2)	4.52 ± 1.63

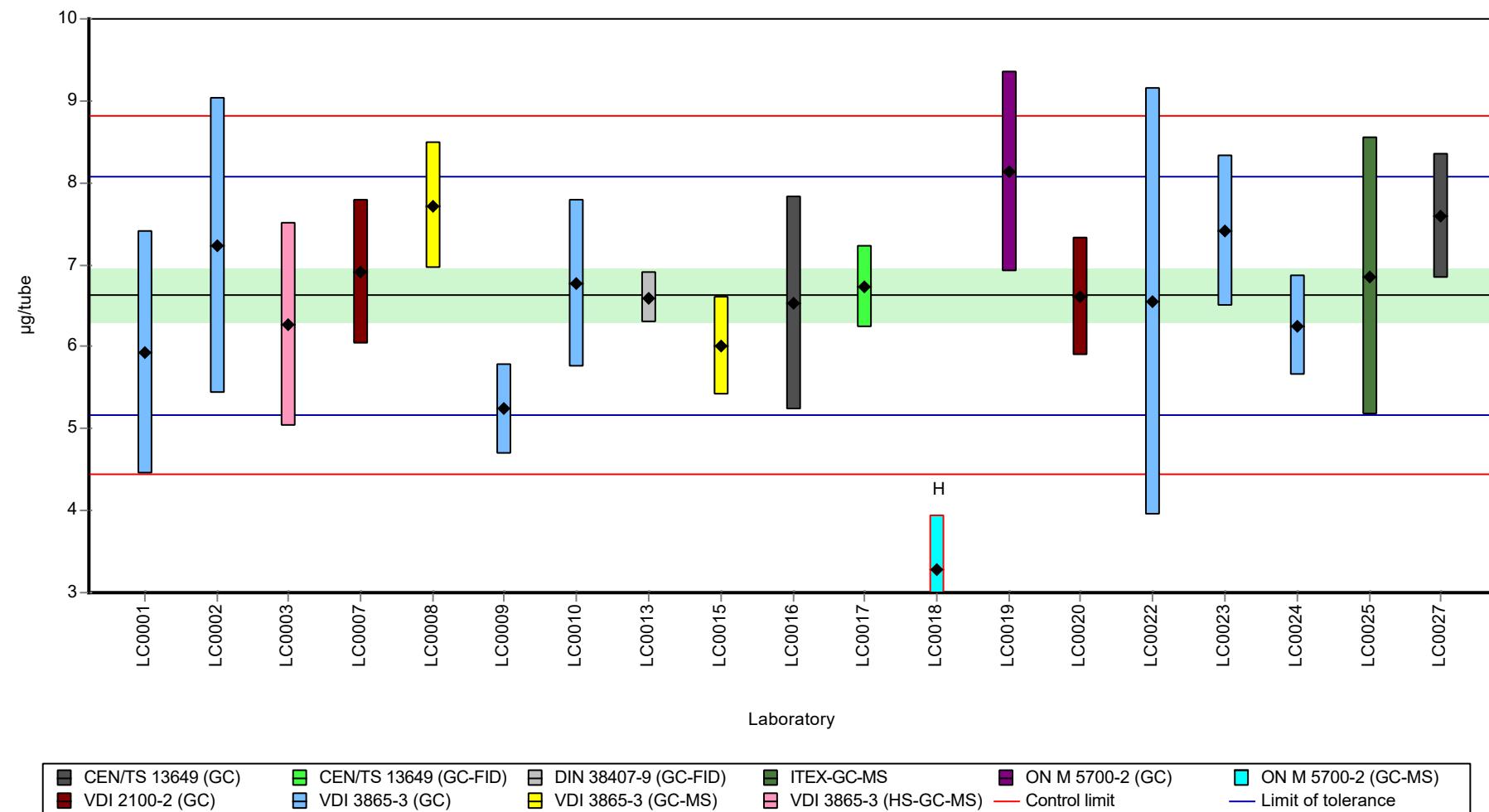
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.93	1.49	89.5	-0.95	
LC0002	7.23	1.81	109	0.83	
LC0003	6.27	1.25	94.7	-0.49	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	6.91	0.875	104	0.39	
LC0008	7.72	0.772	117	1.5	
LC0009	5.24	0.55	79.1	-1.9	
LC0010	6.77	1.02	102	0.2	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	6.6	0.31	99.6	-0.03	
LC0014	-	-	-	-	
LC0015	6.01	0.6	90.7	-0.84	
LC0016	6.53	1.306	98.6	-0.13	
LC0017	6.731	0.5	102	0.15	
LC0018	3.29	0.66	49.7	-4.58	H
LC0019	8.13	1.22	123	2.07	
LC0020	6.608	0.72	99.8	-0.02	
LC0022	6.55	2.6	98.9	-0.1	
LC0023	7.415	0.927	112	1.09	
LC0024	6.259	0.62	94.5	-0.5	
LC0025	6.86	1.7	104	0.32	
LC0026	-	-	-	-	
LC0027	7.6	0.76	115	1.34	
LC0028	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	6.56 ± 0.72	6.74 ± 0.496	µg/tube
Minimum	3.29	5.24	µg/tube
Maximum	8.13	8.13	µg/tube
Standard deviation	1.05	0.702	µg/tube
rel. standard deviation	15.9	10.4	%
n	19	18	-

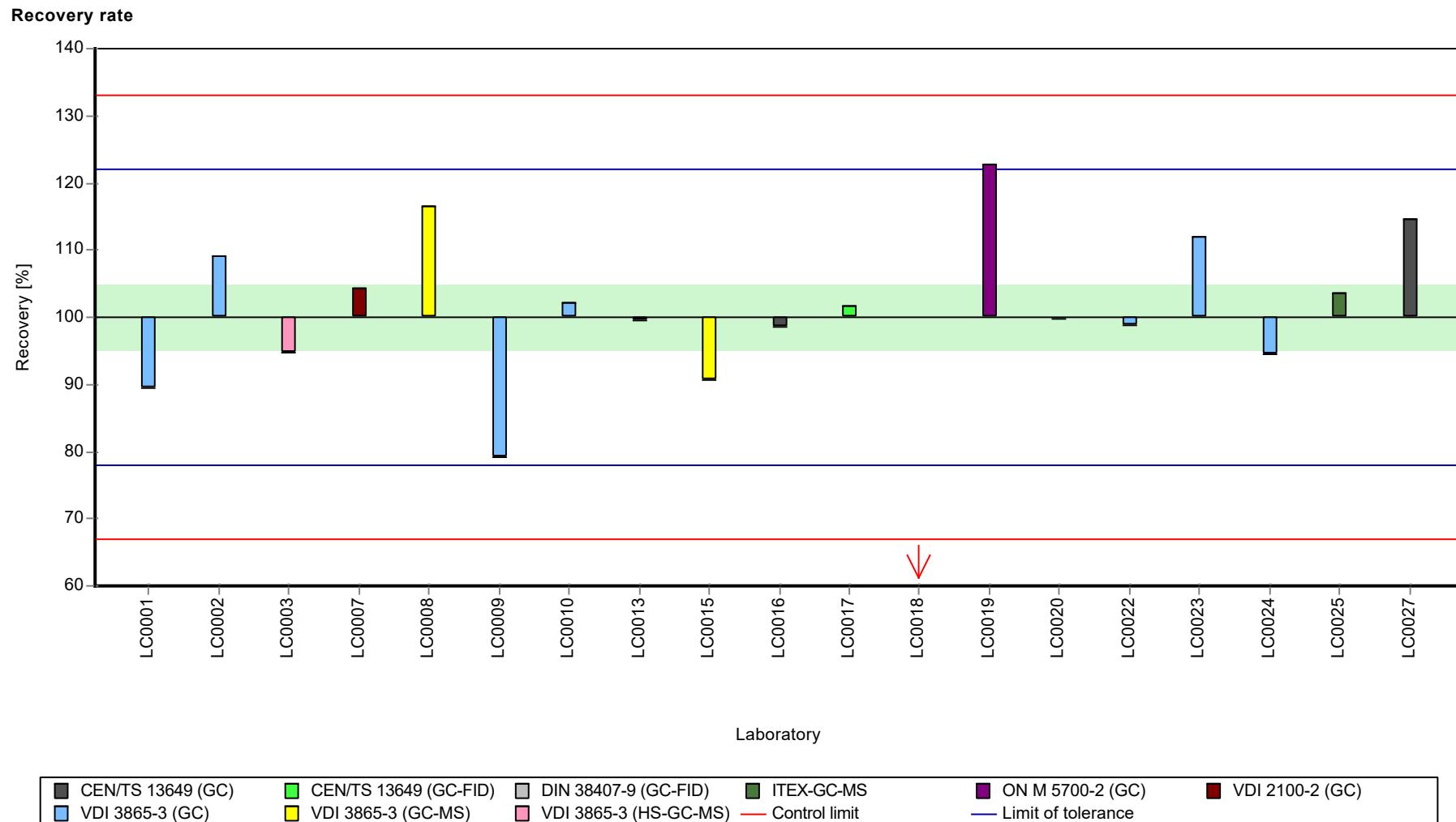
Graphical presentation of results

Results



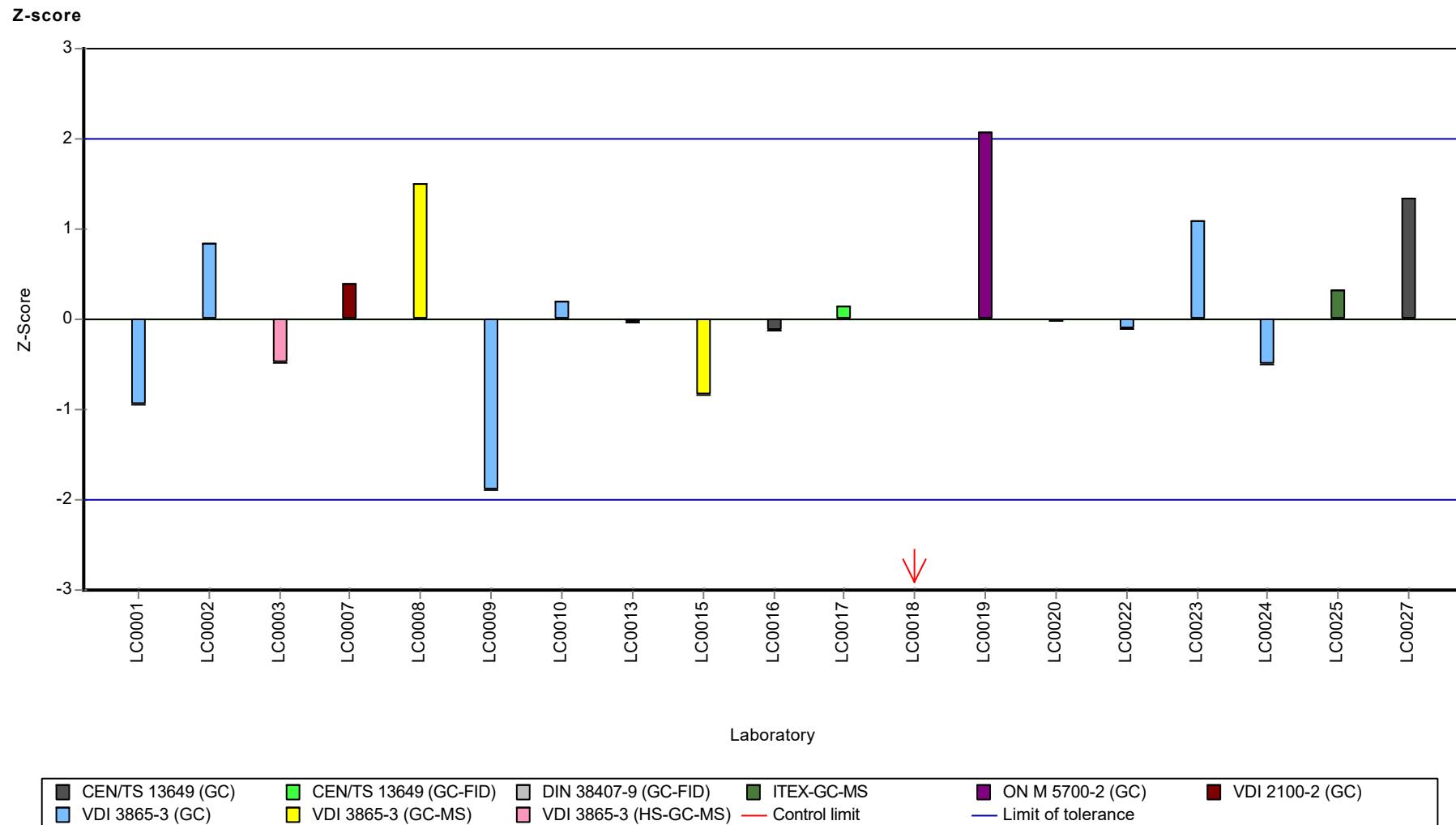
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Octane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Octane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: n-Pentane

Parameter oriented report

BL10 - BTEX & C5-C10

n-Pentane

Unit	µg/tube
Assigned value ± U (k=2)	6.29 ± 0.338
Criterion	0.629 (10 %)
Minimum - Maximum	5.65 - 7.82
Control test value ± U (k=2)	4.62 ± 2.03

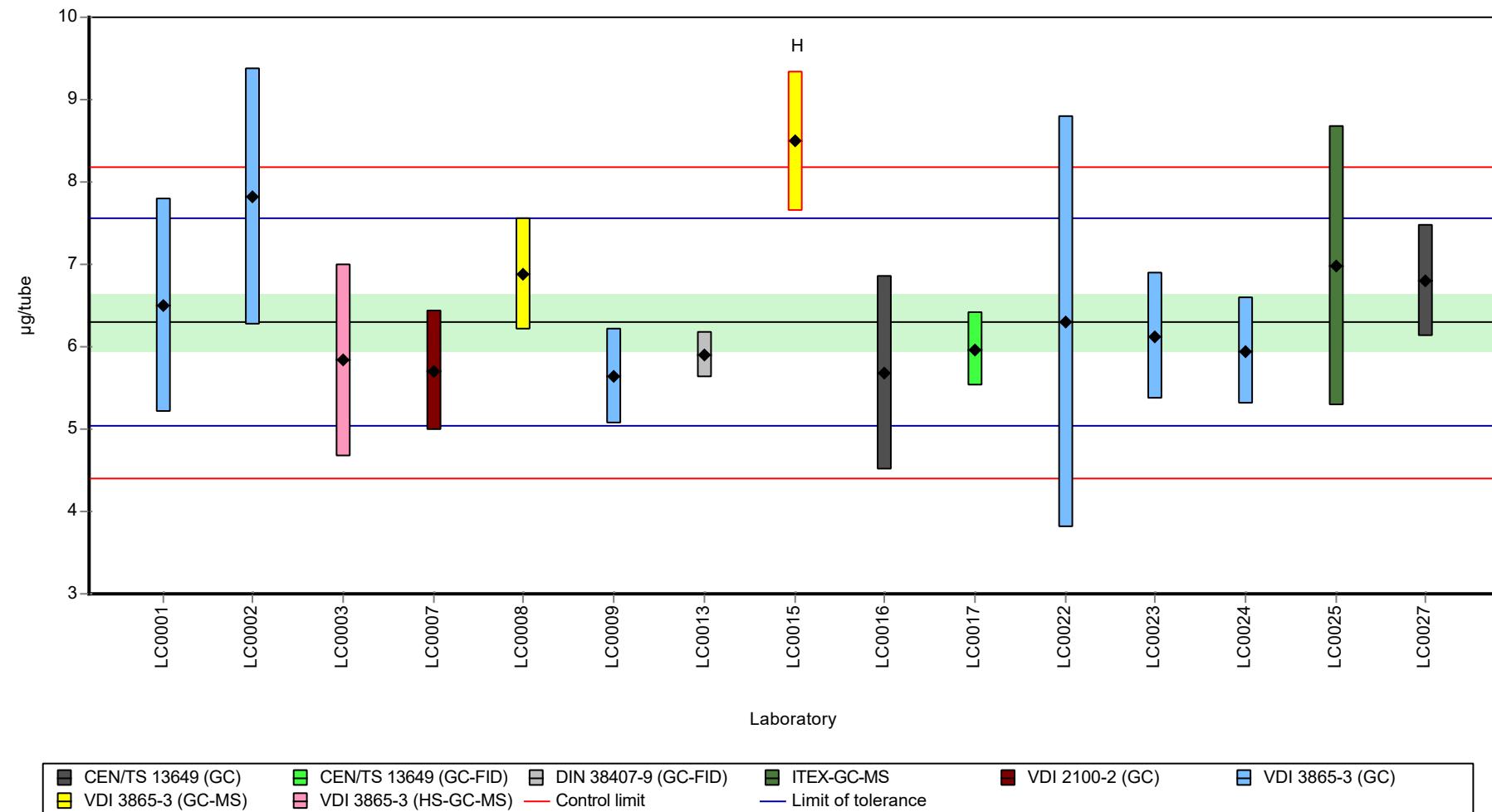
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.5	1.3	103	0.33	
LC0002	7.82	1.56	124	2.42	
LC0003	5.84	1.17	92.8	-0.72	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	5.708	0.726	90.7	-0.93	
LC0008	6.88	0.688	109	0.93	
LC0009	5.65	0.58	89.8	-1.02	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	5.91	0.28	93.9	-0.61	
LC0014	-	-	-	-	
LC0015	8.5	0.85	135	3.5	H
LC0016	5.68	1.172	90.2	-0.98	
LC0017	5.966	0.45	94.8	-0.52	
LC0018	-	-	-	-	
LC0019	-	-	-	-	
LC0020	-	-	-	-	
LC0022	6.3	2.5	100	0.01	
LC0023	6.127	0.766	97.3	-0.27	
LC0024	5.948	0.654	94.5	-0.55	
LC0025	6.98	1.7	111	1.09	
LC0026	-	-	-	-	
LC0027	6.81	0.68	108	0.82	
LC0028	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	6.44 ± 0.646	6.29 ± 0.507	µg/tube
Minimum	5.65	5.65	µg/tube
Maximum	8.5	7.82	µg/tube
Standard deviation	0.834	0.632	µg/tube
rel. standard deviation	12.9	10 %	
n	15	14	-

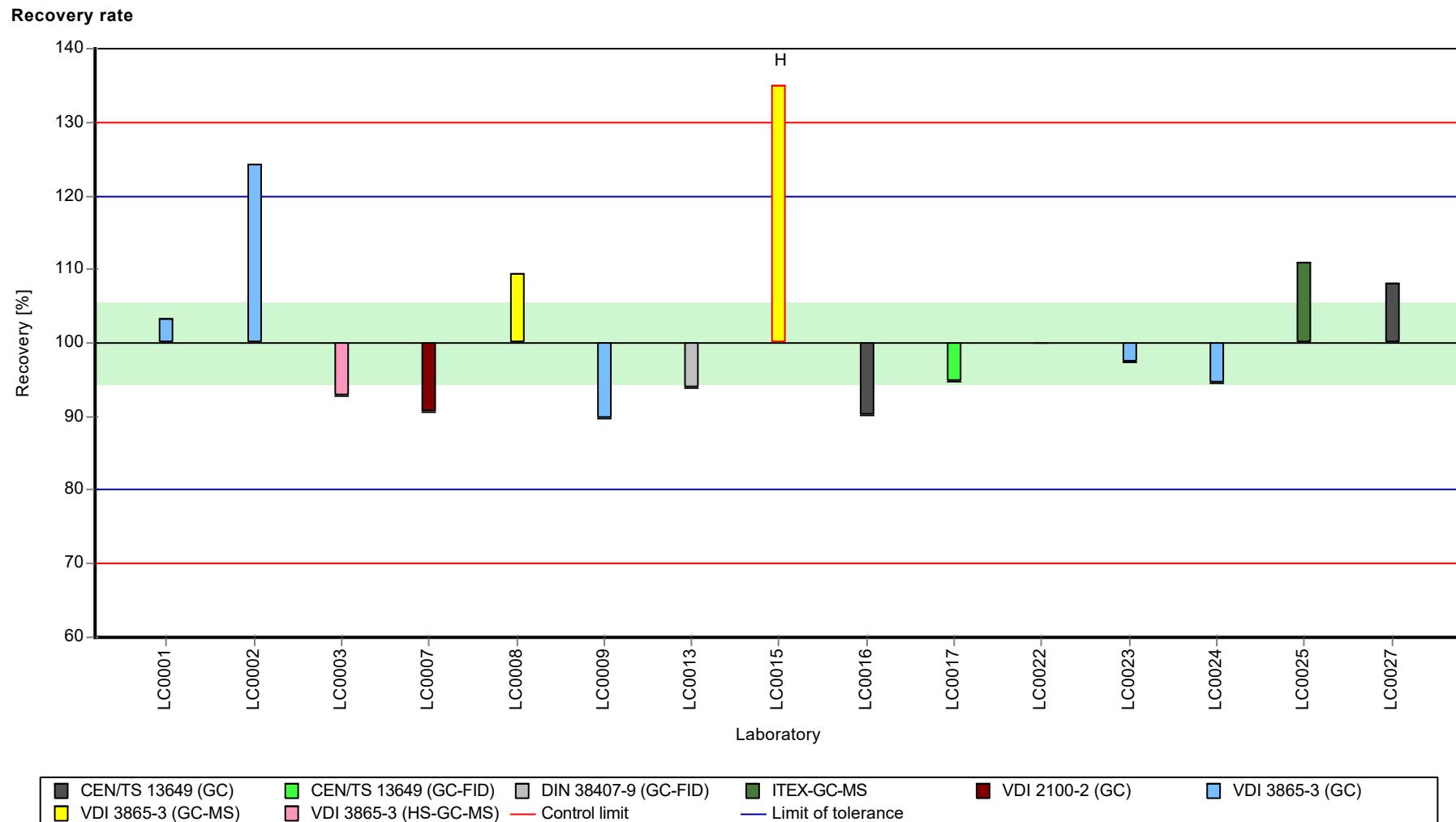
Graphical presentation of results

Results



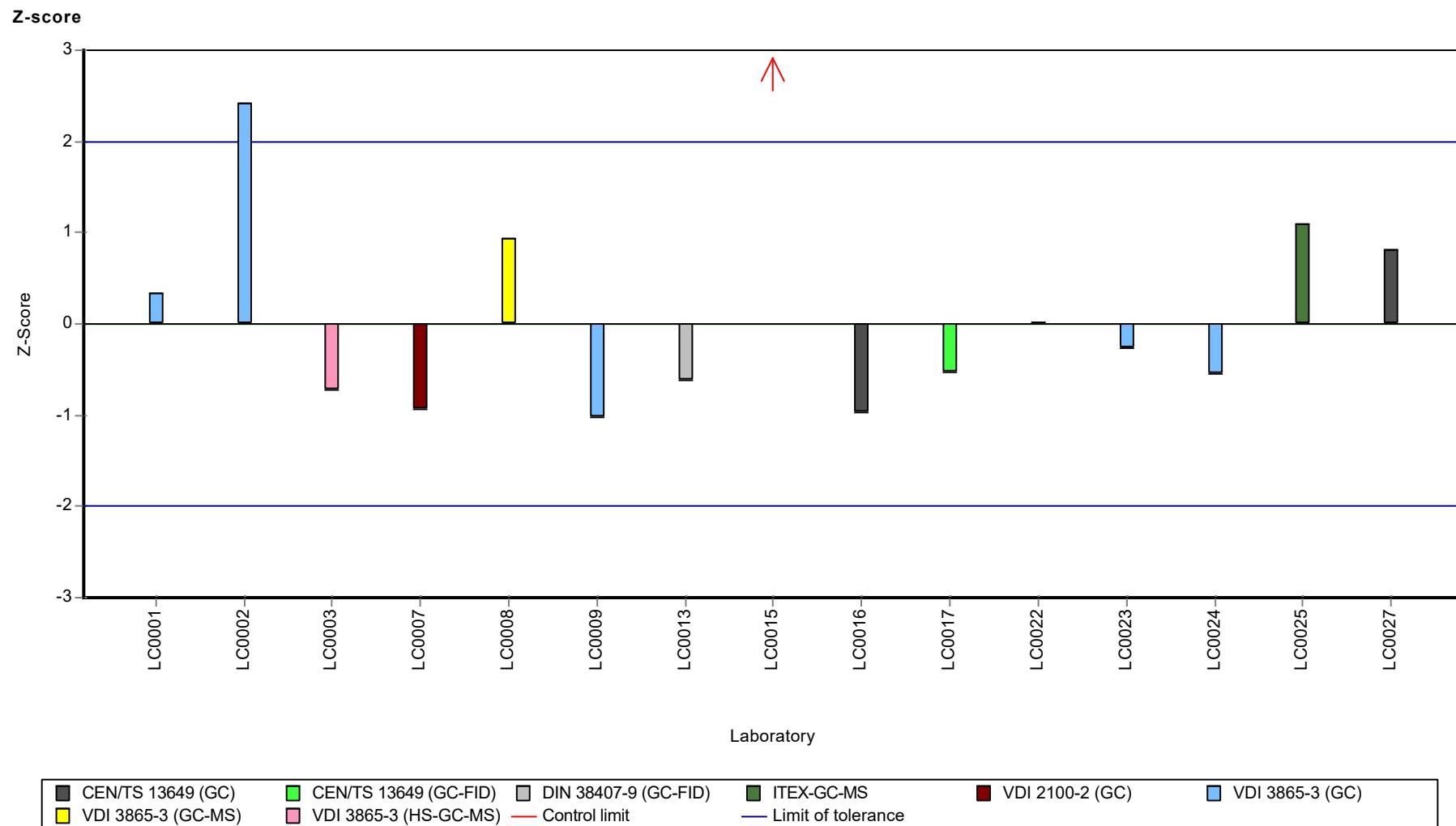
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Pentane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: n-Pentane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: o-Xylene

Parameter oriented report

BL10 - BTEX & C5-C10

o-Xylene

Unit	µg/tube
Assigned value ± U (k=2)	5.11 ± 0.48
Criterion	1.28 (25 %)
Minimum - Maximum	1.66 - 7.87
Control test value ± U (k=2)	4.42 ± 1.02

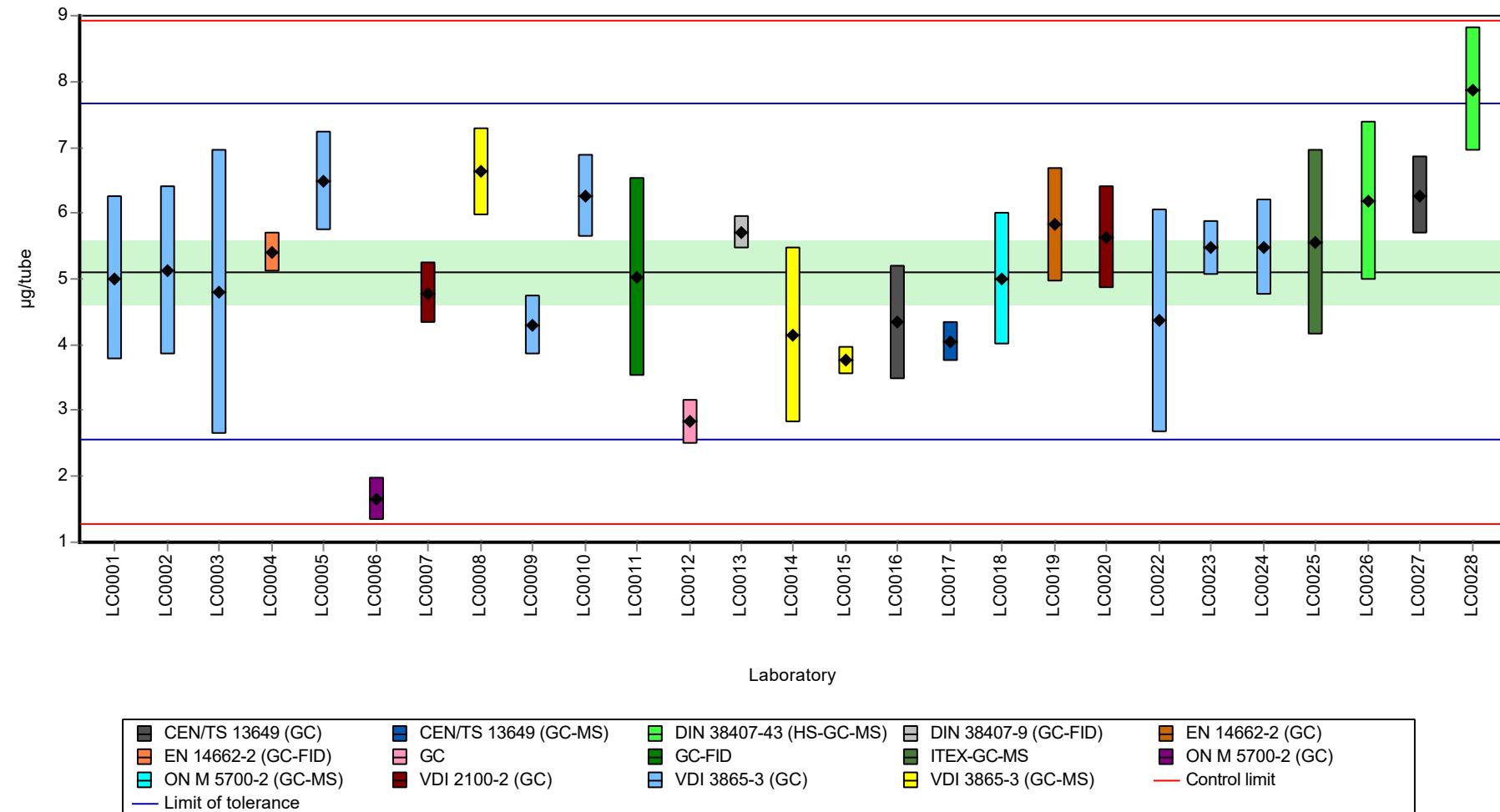
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.01	1.25	98.1	-0.07	
LC0002	5.12	1.28	100	0.01	
LC0003	4.79	2.16	93.8	-0.25	
LC0004	5.392	0.3	106	0.22	
LC0005	6.49	0.76	127	1.08	
LC0006	1.66	0.33	32.5	-2.7	
LC0007	4.776	0.466	93.5	-0.26	
LC0008	6.63	0.663	130	1.19	
LC0009	4.3	0.45	84.2	-0.63	
LC0010	6.26	0.63	123	0.9	
LC0011	5.02	1.51	98.3	-0.07	
LC0012	2.824	0.339	55.3	-1.79	
LC0013	5.7	0.25	112	0.47	
LC0014	4.141	1.33	81.1	-0.76	
LC0015	3.76	0.22	73.6	-1.05	
LC0016	4.34	0.868	85	-0.6	
LC0017	4.037	0.3	79.1	-0.84	
LC0018	5	1	97.9	-0.08	
LC0019	5.82	0.87	114	0.56	
LC0020	5.618	0.78	110	0.4	
LC0022	4.36	1.7	85.4	-0.58	
LC0023	5.466	0.41	107	0.28	
LC0024	5.468	0.727	107	0.28	
LC0025	5.55	1.4	109	0.35	
LC0026	6.18	1.2	121	0.84	
LC0027	6.27	0.58	123	0.91	
LC0028	7.87	0.943	154	2.17	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.11 ± 0.72	5.11 ± 0.72	µg/tube
Minimum	1.66	1.66	µg/tube
Maximum	7.87	7.87	µg/tube
Standard deviation	1.25	1.25	µg/tube
rel. standard deviation	24.4	24.4	%
n	27	27	-

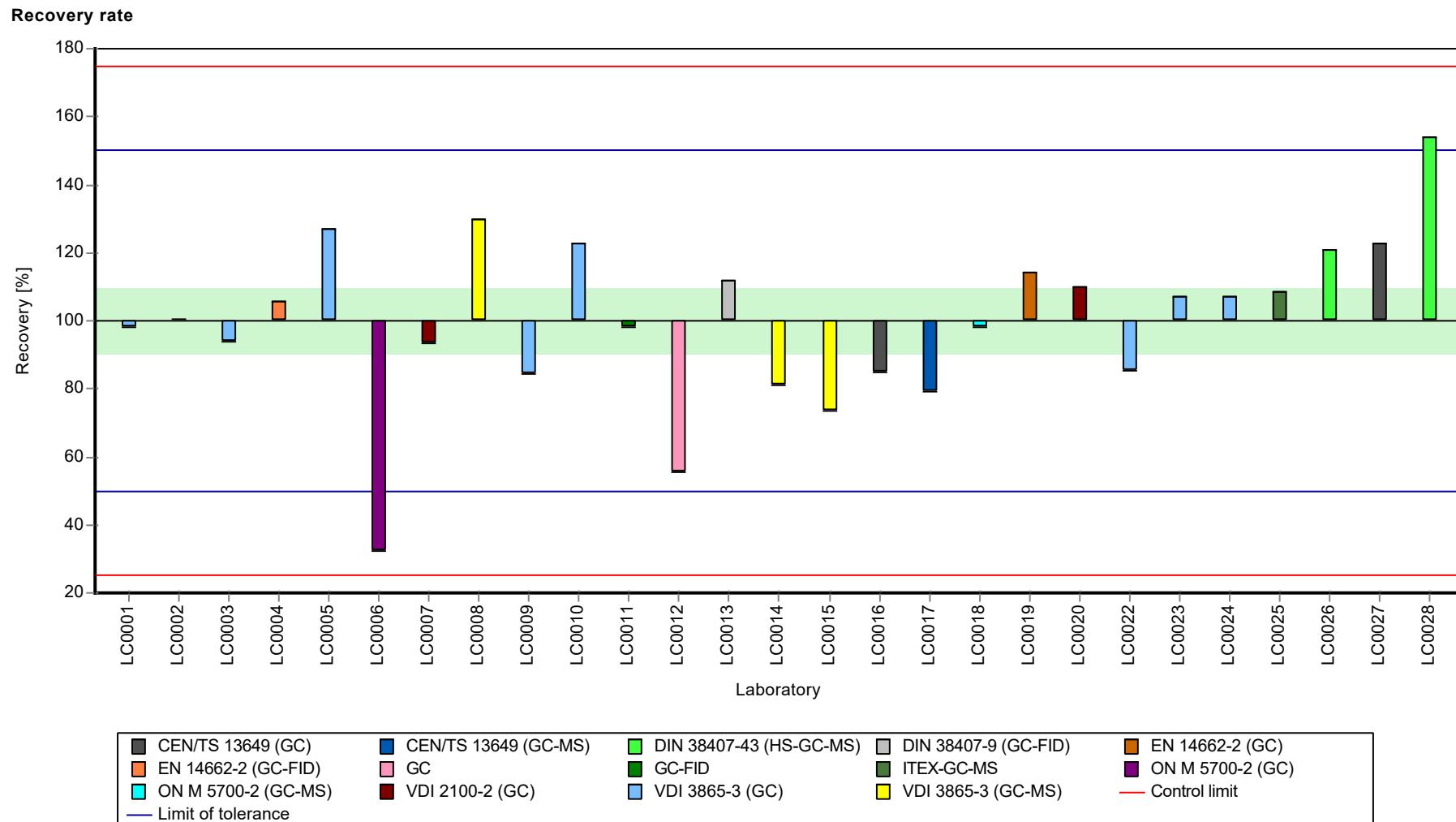
Graphical presentation of results

Results



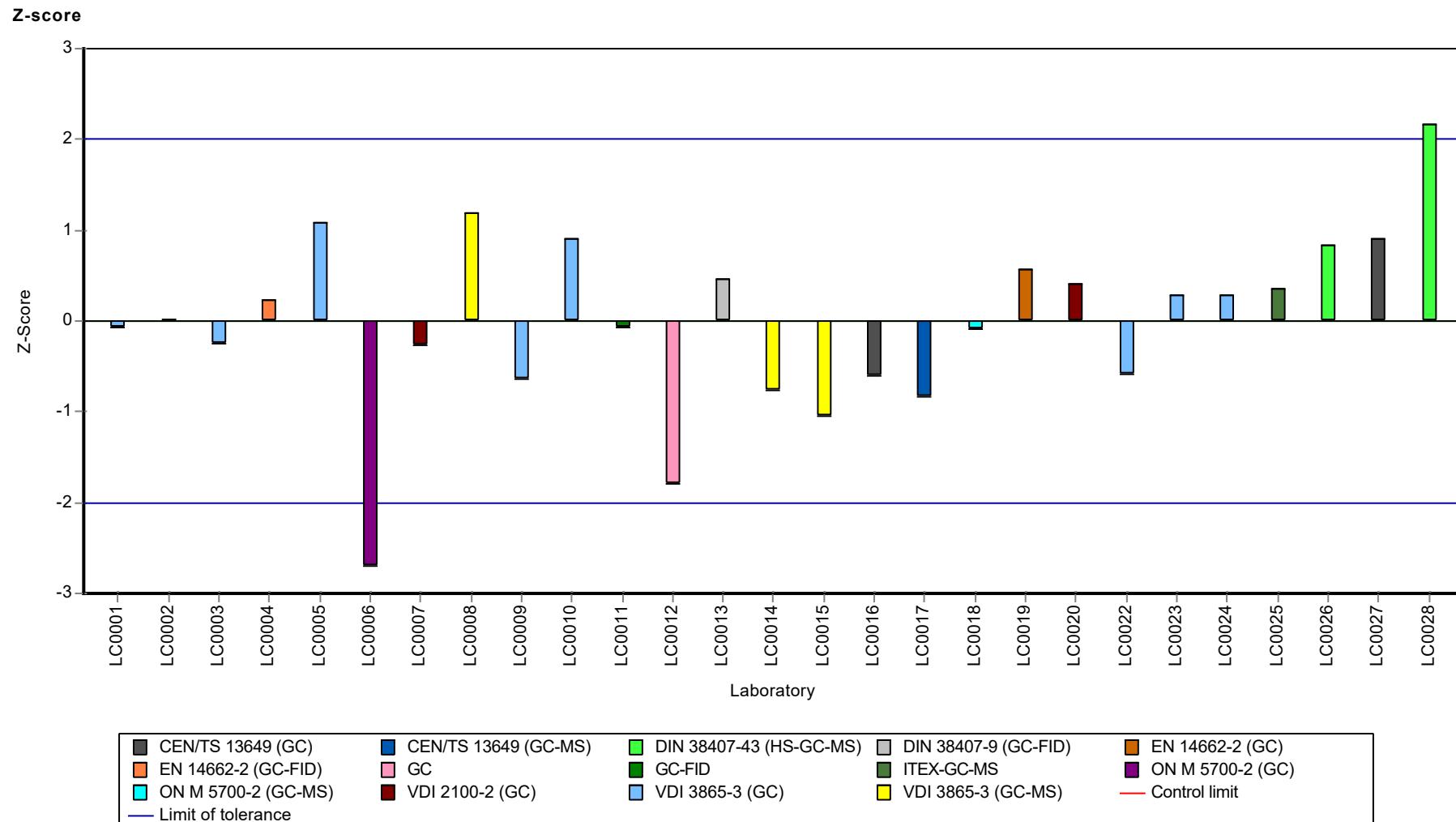
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: o-Xylene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: o-Xylene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: Sum of m-Xylene and p-Xylene

Parameter oriented report

BL10 - BTEX & C5-C10

Sum of m-Xylene and p-Xylene

Unit	µg/tube
Assigned value ± U (k=2)	10.7 ± 0.86
Criterion	2.24 (21 %)
Minimum - Maximum	4.94 - 14.2
Control test value ± U (k=2)	9.03 ± 1.81

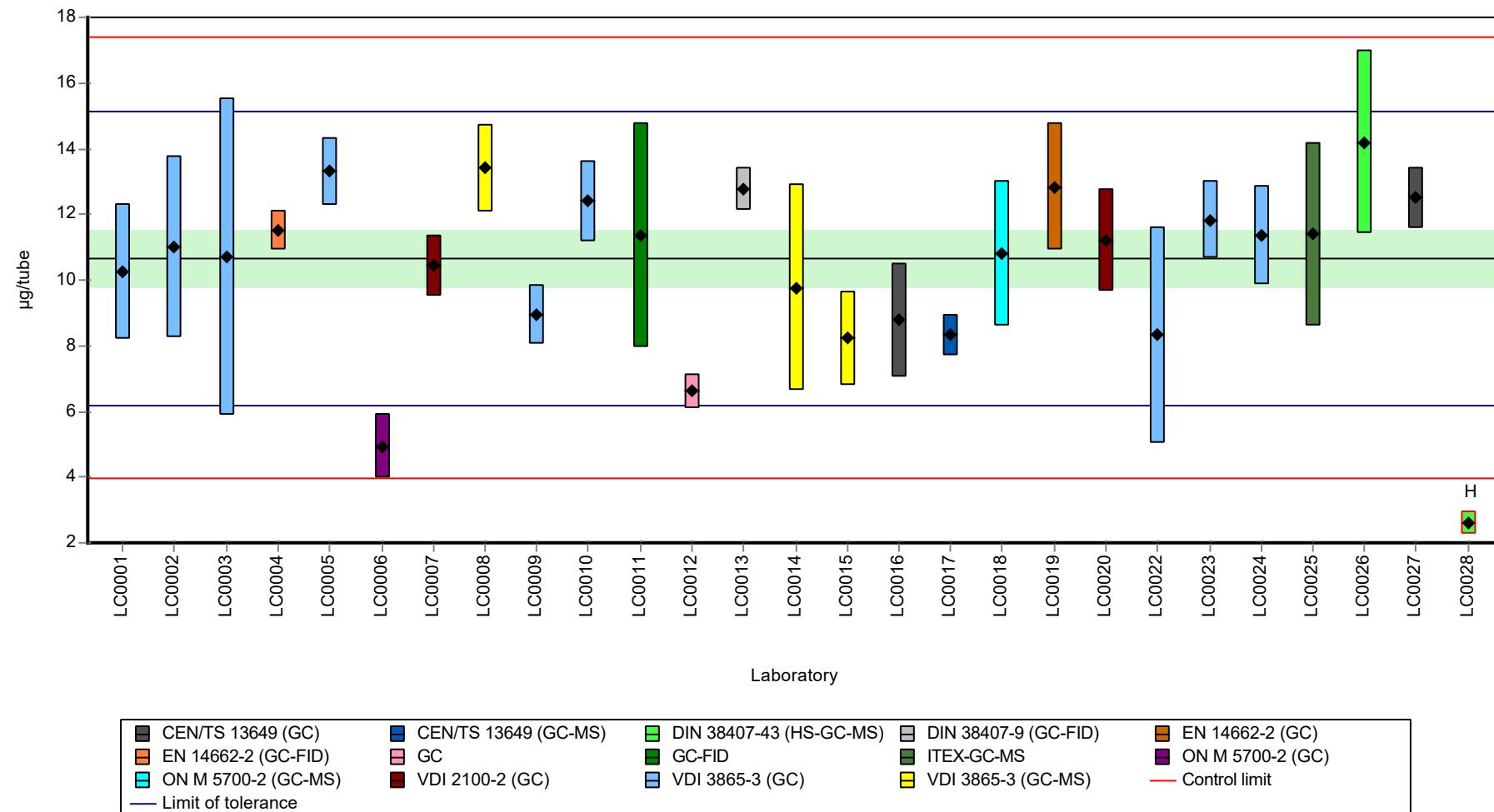
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.27	2.06	96.3	-0.18	
LC0002	11	2.75	103	0.15	
LC0003	10.7	4.82	100	0.02	
LC0004	11.522	0.6	108	0.38	
LC0005	13.3	1.05	125	1.18	
LC0006	4.94	0.99	46.3	-2.56	
LC0007	10.442	0.938	97.9	-0.1	
LC0008	13.4	1.34	126	1.22	
LC0009	8.96	0.9	84	-0.76	
LC0010	12.4	1.24	116	0.78	
LC0011	11.35	3.41	106	0.31	
LC0012	6.607	0.533	62	-1.81	
LC0013	12.78	0.66	120	0.95	
LC0014	9.765	3.13	91.6	-0.4	
LC0015	8.22	1.43	77.1	-1.09	
LC0016	8.77	1.754	82.2	-0.85	
LC0017	8.337	0.63	78.2	-1.04	
LC0018	10.8	2.2	101	0.06	
LC0019	12.84	1.93	120	0.97	
LC0020	11.22	1.55	105	0.25	
LC0022	8.32	3.3	78	-1.05	
LC0023	11.819	1.182	111	0.52	
LC0024	11.37	1.512	107	0.32	
LC0025	11.39	2.8	107	0.32	
LC0026	14.2	2.8	133	1.58	
LC0027	12.51	0.93	117	0.82	
LC0028	2.62	0.353	24.6	-3.59	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	10.4 ± 1.53	10.7 ± 1.29	µg/tube
Minimum	2.62	4.94	µg/tube
Maximum	14.2	14.2	µg/tube
Standard deviation	2.65	2.19	µg/tube
rel. standard deviation	25.6	20.6	%
n	27	26	-

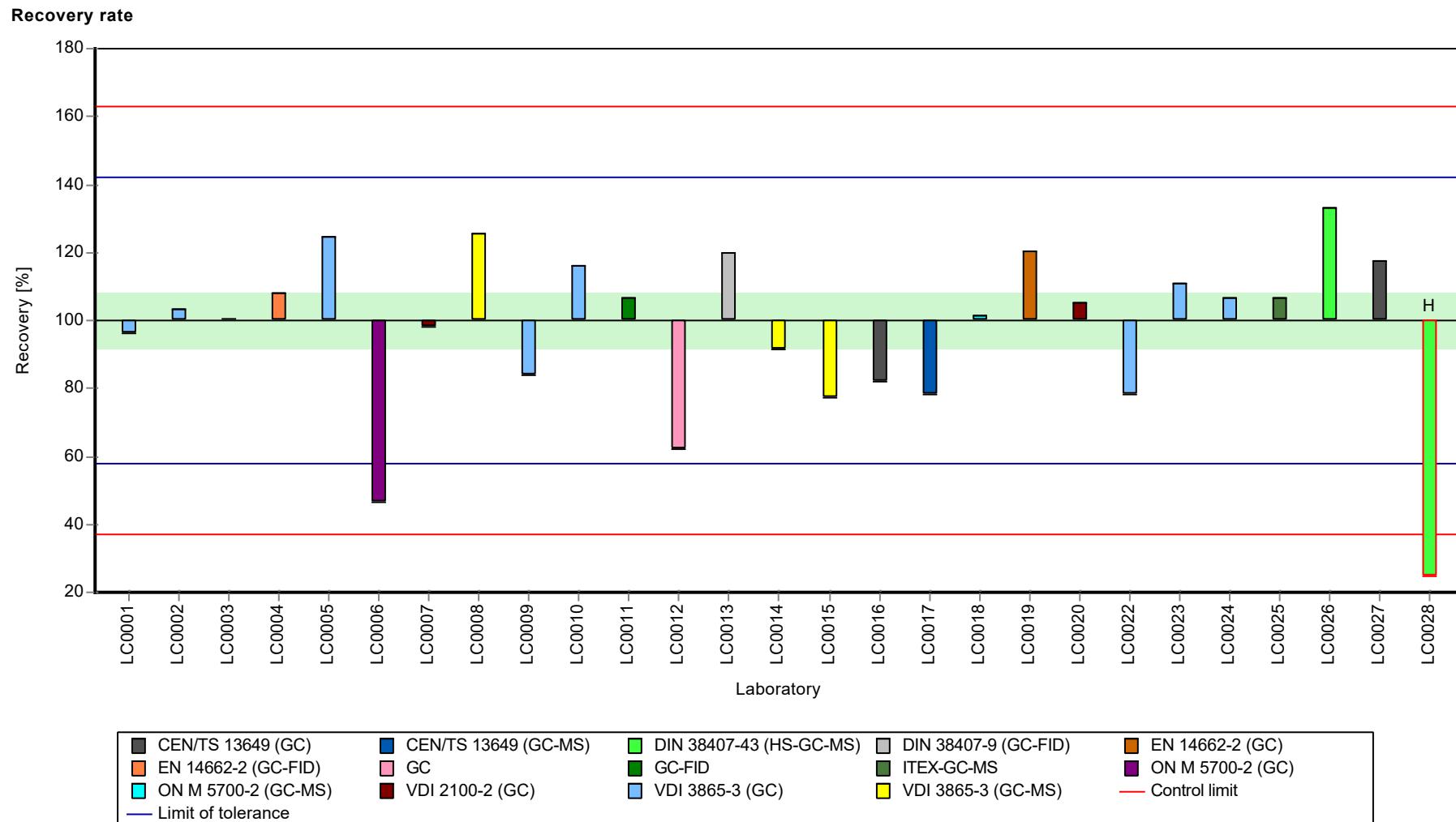
Graphical presentation of results

Results



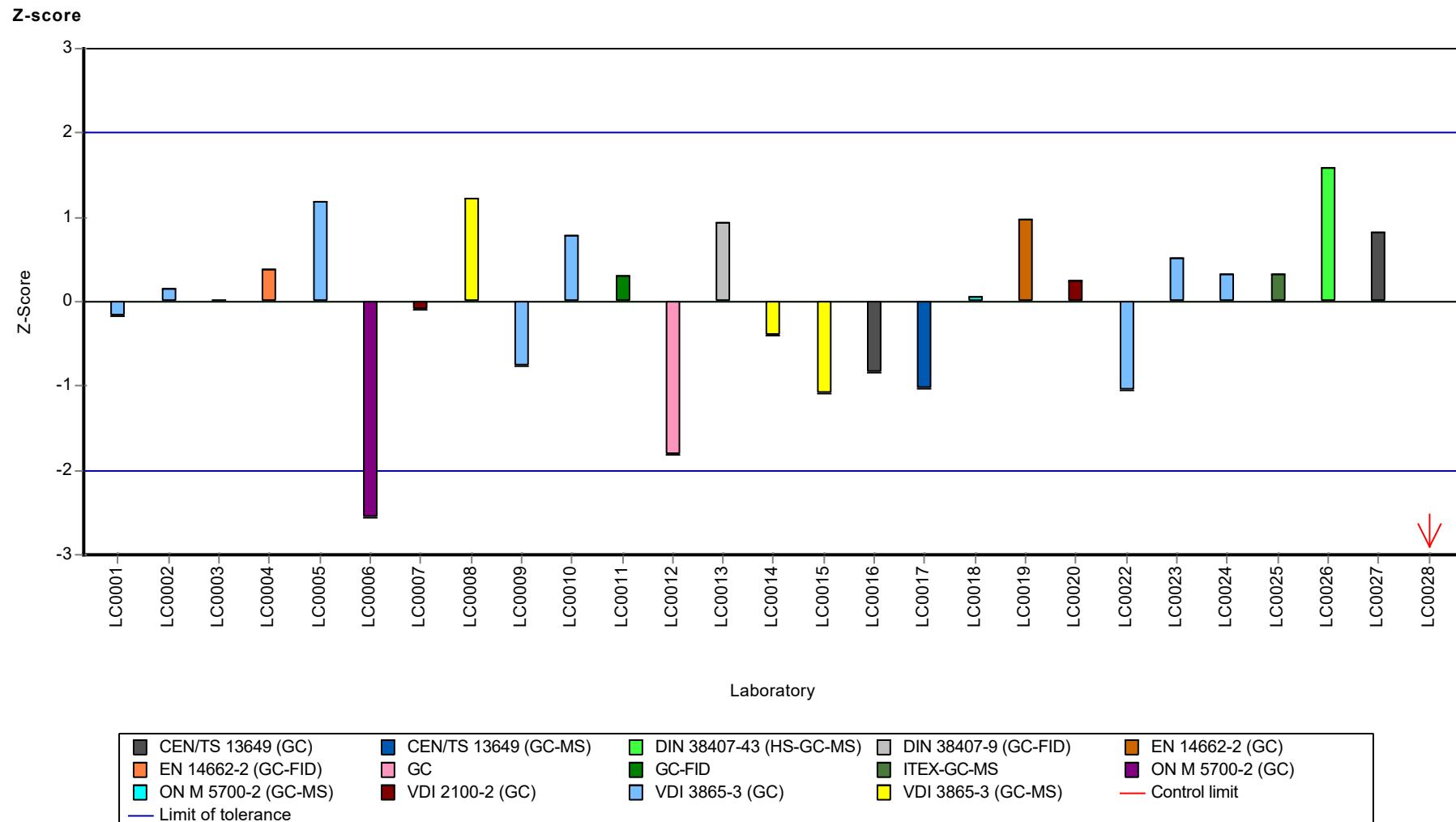
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Sum of m-Xylene and p-Xylene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Sum of m-Xylene and p-Xylene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: Tetrachloroethene

Parameter oriented report

CL09 - CHC

Tetrachloroethene

Unit	µg/tube
Assigned value ± U (k=2)	2.69 ± 0.588
Criterion	1.21 (45 %)
Minimum - Maximum	0.703 - 5.51
Control test value ± U (k=2)	2.38 ± 0.524

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.79	0.42	104	0.08	
LC0002	3.39	0.85	126	0.58	
LC0003	3.59	1.08	133	0.74	
LC0005	5.51	0.55	205	2.33	
LC0006	2.68	0.54	99.5	-0.01	
LC0007	3.26	0.251	121	0.47	
LC0008	6.93	0.693	257	3.5	H
LC0009	1.82	0.2	67.6	-0.72	
LC0010	2.49	0.32	92.5	-0.17	
LC0013	2.63	0.36	97.7	-0.05	
LC0014	1.312	0.59	48.7	-1.14	
LC0015	3.67	0.28	136	0.81	
LC0021	5.879	0.88	218	2.63	H
LC0022	2.75	1.1	102	0.05	
LC0023	0.703	0.053	26.1	-1.64	
LC0024	3.481	0.714	129	0.65	
LC0025	1.3	0.3	48.3	-1.15	
LC0026	1.33	0.3	49.4	-1.12	
LC0028	1.7	0.323	63.1	-0.82	

Characteristics of parameter

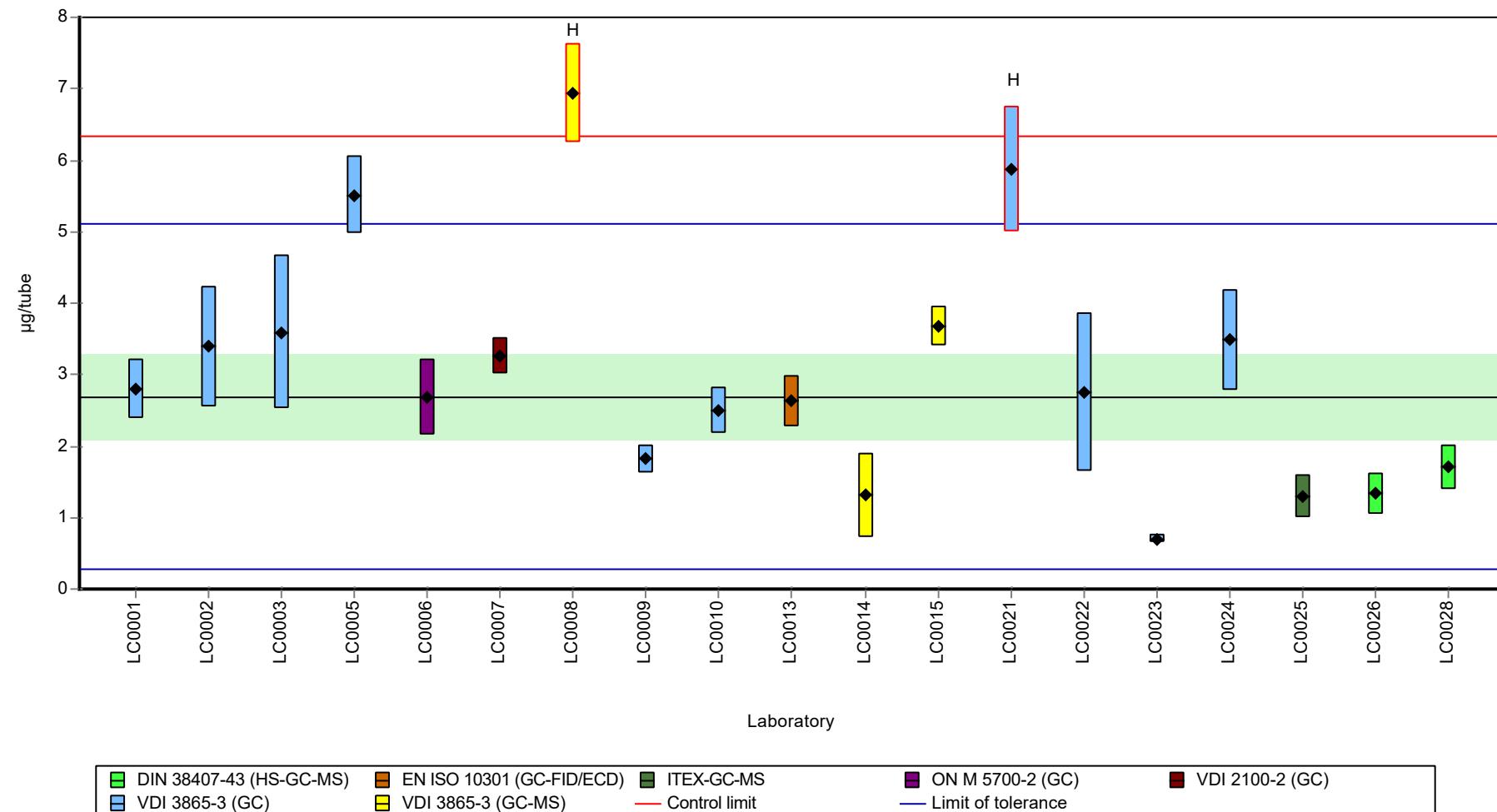
	all results	without outliers	Unit
Mean ± CI (99%)	3.01 ± 1.13	2.61 ± 0.863	µg/tube
Minimum	0.703	0.703	µg/tube
Maximum	6.93	5.51	µg/tube
Standard deviation	1.65	1.19	µg/tube
rel. standard deviation	54.7	45.4	%
n	19	17	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloroethene

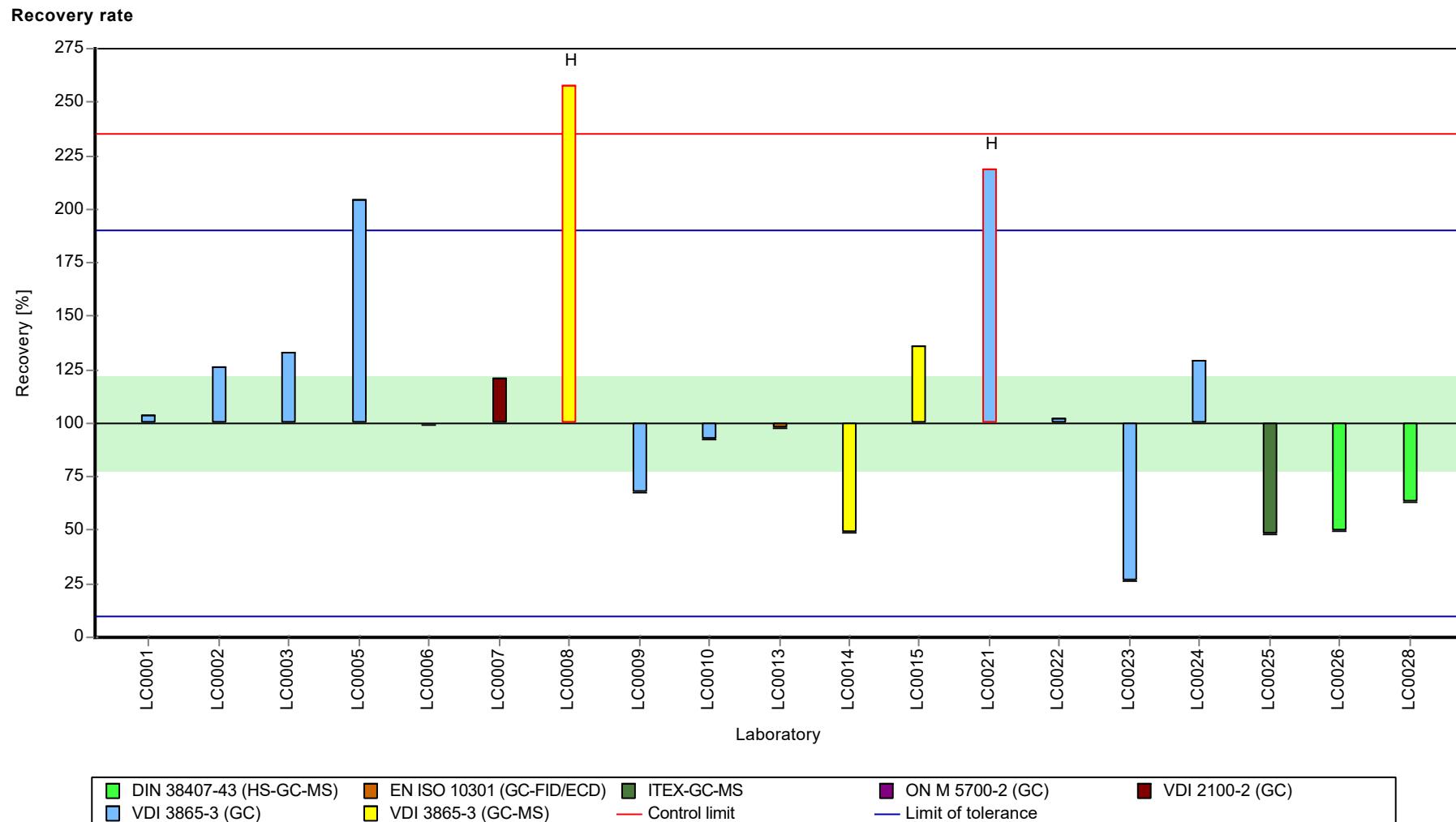
Graphical presentation of results

Results



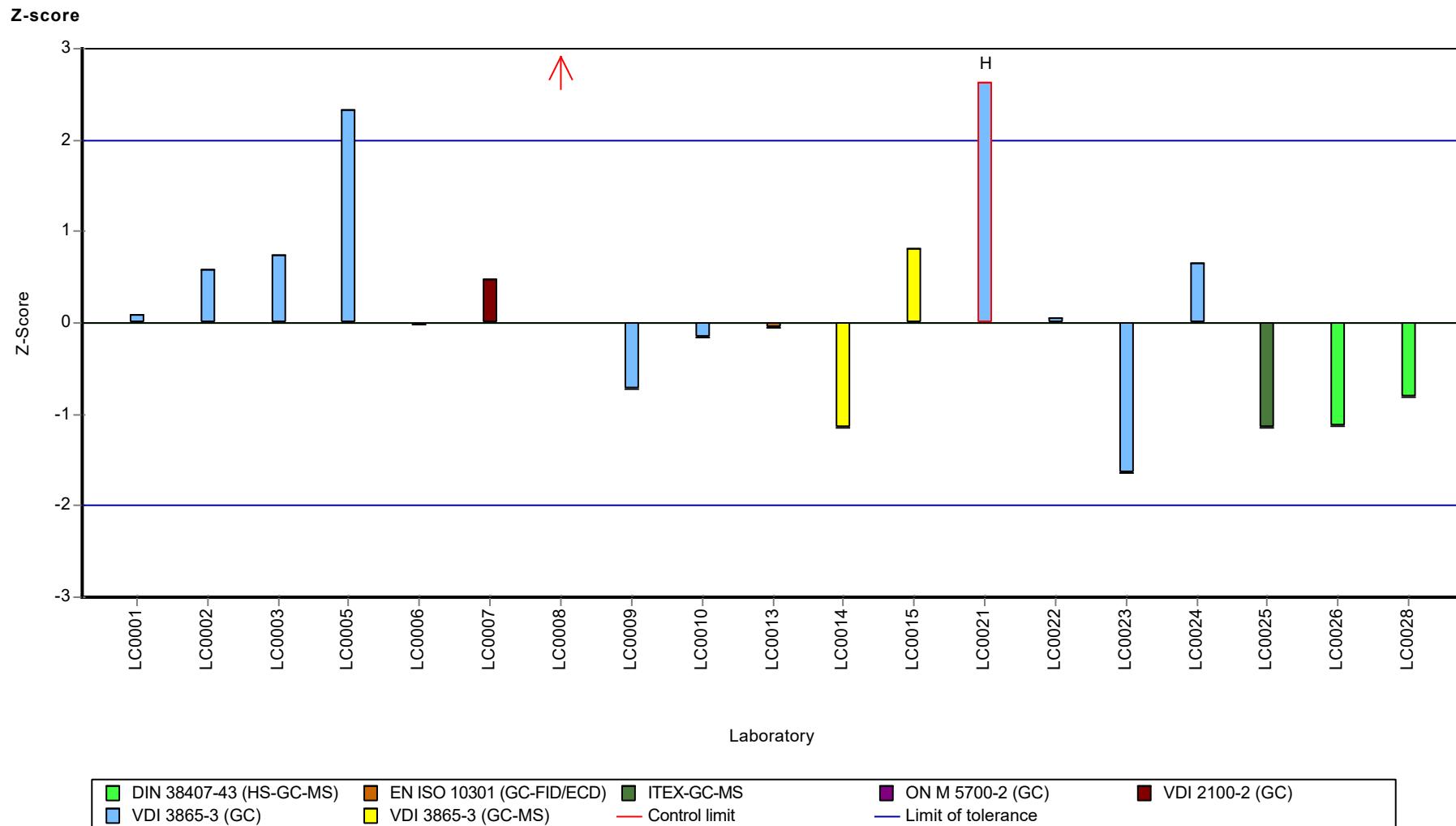
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloroethene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloroethene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: Tetrachloromethane

Parameter oriented report

CL09 - CHC

Tetrachloromethane

Unit	µg/tube
Assigned value ± U (k=2)	3.75 ± 0.464
Criterion	0.901 (24 %)
Minimum - Maximum	1.73 - 4.85
Control test value ± U (k=2)	4.27 ± 0.897

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.38	0.55	117	0.69	
LC0002	4.53	0.91	121	0.86	
LC0003	3.87	1.16	103	0.13	
LC0005	13.2	0.83	352	10.48	H
LC0006	4.26	0.85	113	0.56	
LC0007	3.998	0.331	106	0.27	
LC0008	9.92	1.21	264	6.84	H
LC0009	4.55	0.45	121	0.88	
LC0010	3.79	0.3	101	0.04	
LC0013	7.11	0.69	189	3.72	H
LC0014	3.978	1.79	106	0.25	
LC0015	4.85	0.32	129	1.22	
LC0021	10.902	1.64	290	7.93	H
LC0022	1.73	0.7	46.1	-2.25	
LC0023	2.131	0.16	56.8	-1.8	
LC0024	4.375	0.809	117	0.69	
LC0025	3.49	0.9	92.9	-0.29	
LC0026	2.81	0.6	74.8	-1.05	
LC0028	3.58	0.585	95.3	-0.19	

Characteristics of parameter

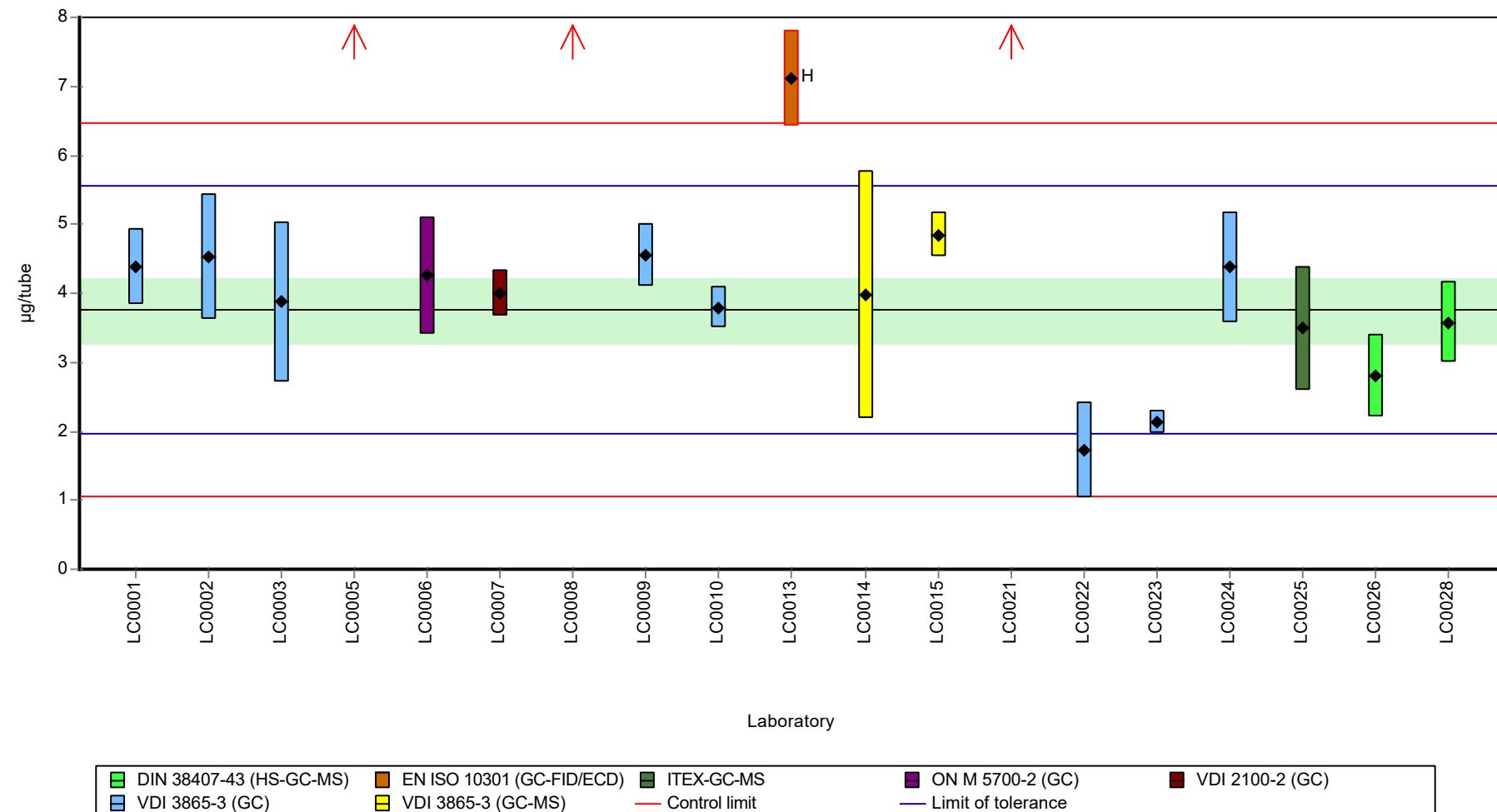
	all results	without outliers	Unit
Mean ± CI (99%)	5.13 ± 2.08	3.75 ± 0.696	µg/tube
Minimum	1.73	1.73	µg/tube
Maximum	13.2	4.85	µg/tube
Standard deviation	3.03	0.899	µg/tube
rel. standard deviation	59	23.9 %	
n	19	15	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloromethane

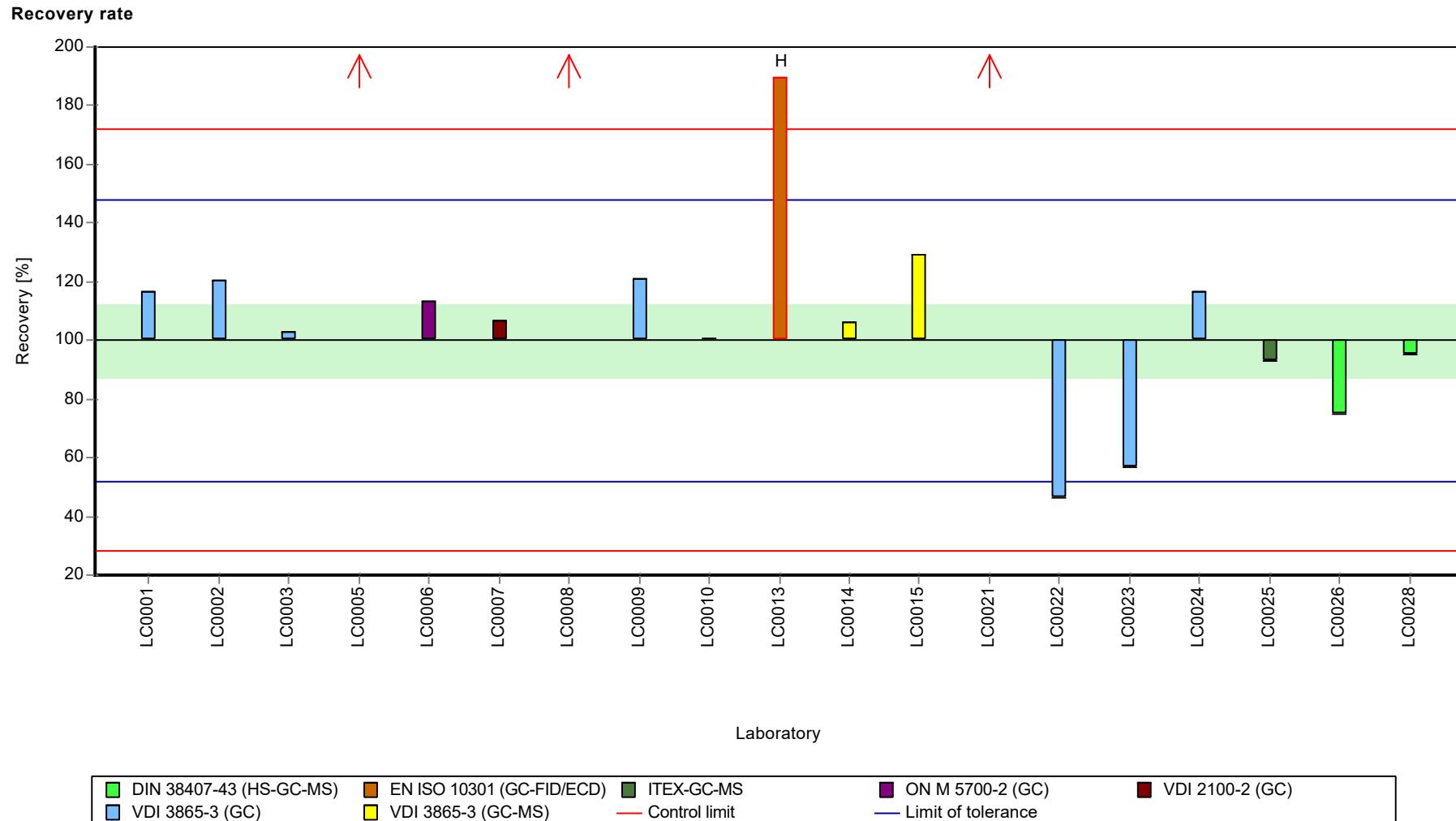
Graphical presentation of results

Results



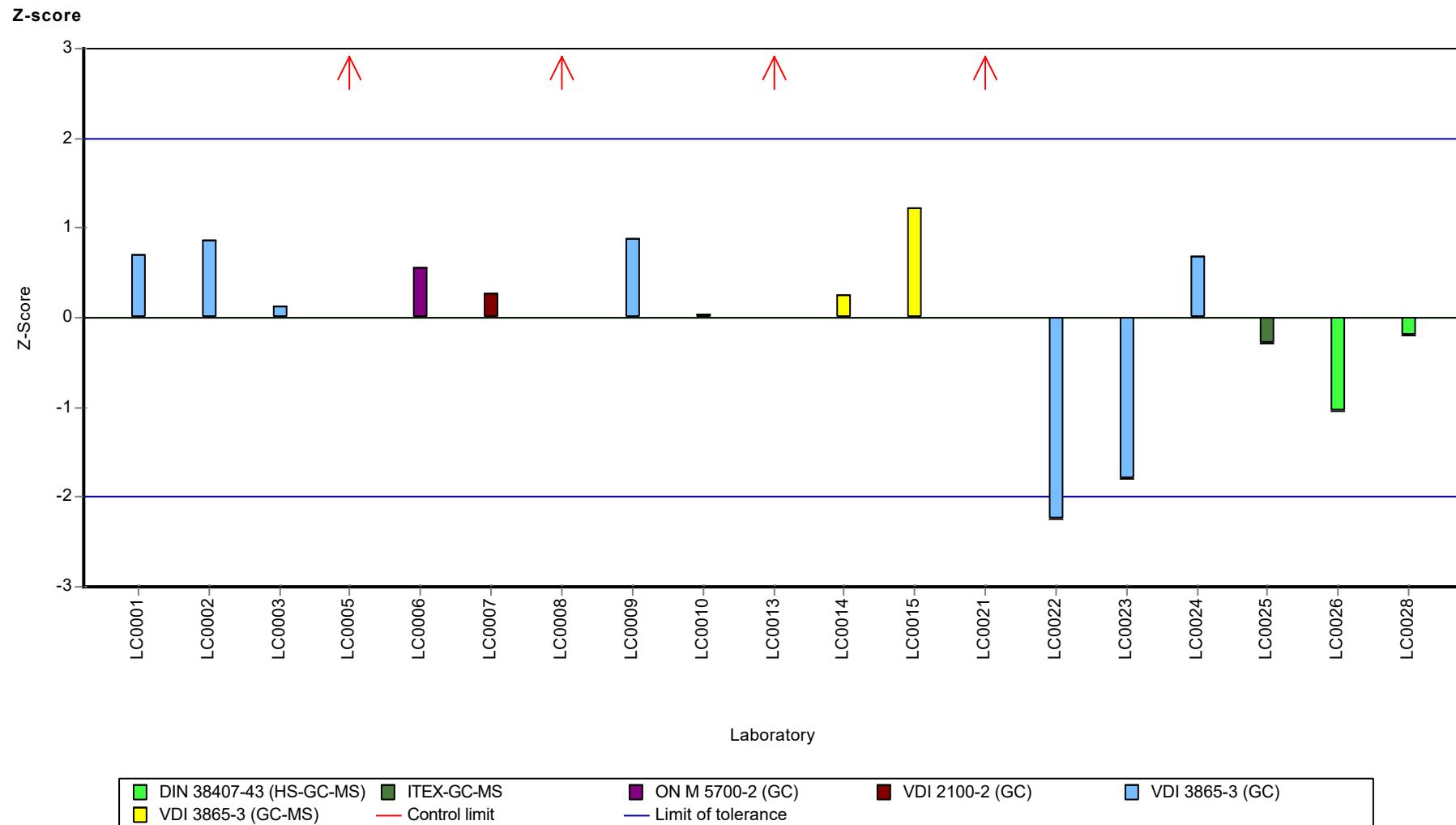
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloromethane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Tetrachloromethane



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: BL10, Parameter: Toluene

Parameter oriented report

BL10 - BTEX & C5-C10

Toluene

Unit	µg/tube
Assigned value ± U (k=2)	5.75 ± 0.323
Criterion	0.862 (15 %)
Minimum - Maximum	4.15 - 7.04
Control test value ± U (k=2)	6.33 ± 1.45

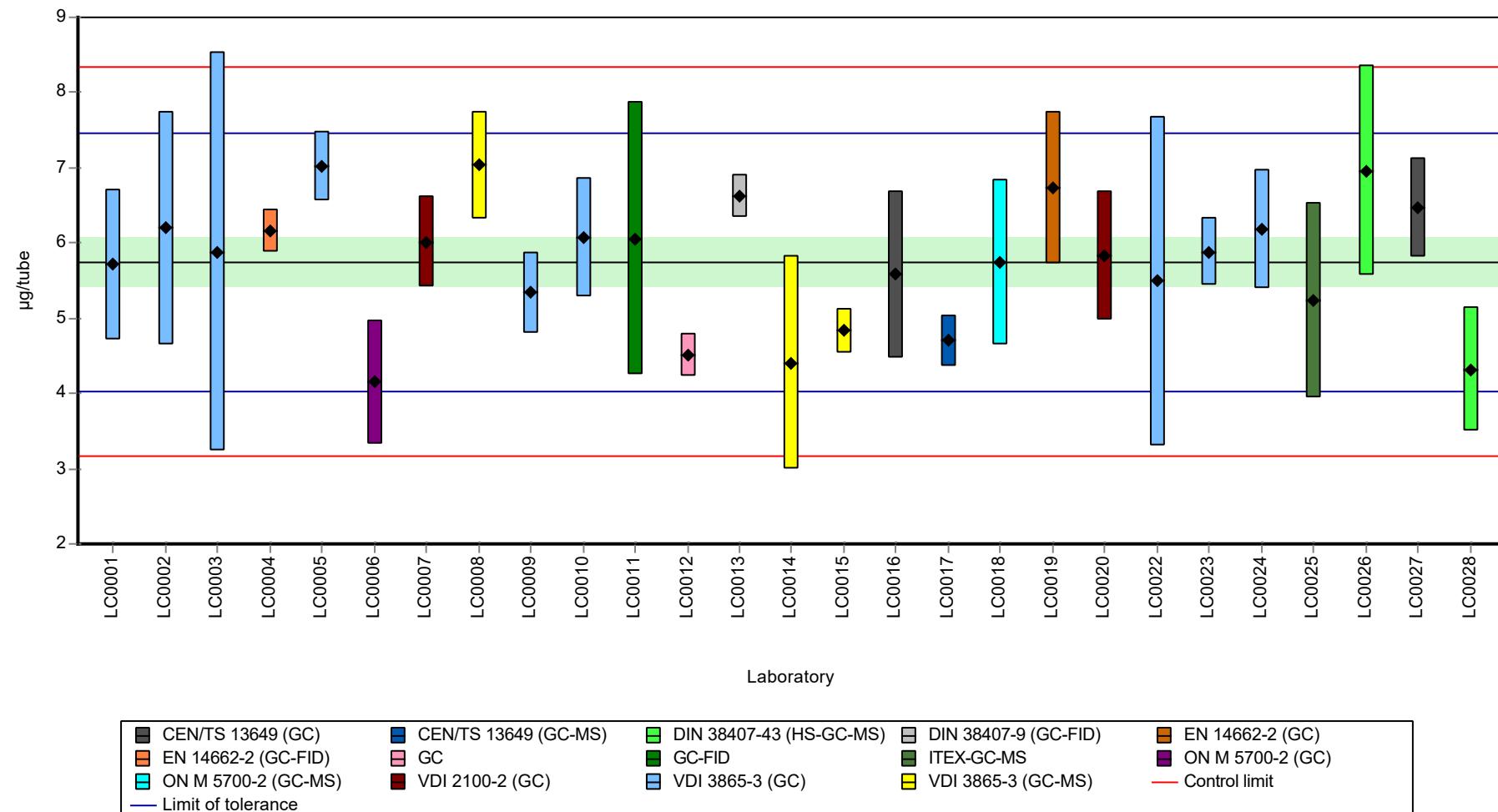
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.71	1	99.4	-0.04	
LC0002	6.2	1.55	108	0.53	
LC0003	5.88	2.65	102	0.16	
LC0004	6.162	0.29	107	0.48	
LC0005	7.02	0.46	122	1.48	
LC0006	4.15	0.83	72.2	-1.85	
LC0007	6.012	0.605	105	0.31	
LC0008	7.04	0.715	123	1.5	
LC0009	5.34	0.54	92.9	-0.47	
LC0010	6.08	0.79	106	0.39	
LC0011	6.06	1.82	105	0.36	
LC0012	4.507	0.292	78.4	-1.44	
LC0013	6.62	0.29	115	1.01	
LC0014	4.41	1.41	76.7	-1.55	
LC0015	4.83	0.29	84.1	-1.06	
LC0016	5.58	1.116	97.1	-0.19	
LC0017	4.697	0.35	81.7	-1.22	
LC0018	5.74	1.1	99.9	-0.01	
LC0019	6.74	1.01	117	1.15	
LC0020	5.835	0.86	102	0.1	
LC0022	5.49	2.2	95.5	-0.3	
LC0023	5.885	0.441	102	0.16	
LC0024	6.18	0.784	108	0.5	
LC0025	5.23	1.3	91	-0.6	
LC0026	6.96	1.4	121	1.41	
LC0027	6.47	0.66	113	0.84	
LC0028	4.32	0.832	75.2	-1.65	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.75 ± 0.484	5.75 ± 0.484	µg/tube
Minimum	4.15	4.15	µg/tube
Maximum	7.04	7.04	µg/tube
Standard deviation	0.839	0.839	µg/tube
rel. standard deviation	14.6	14.6	%
n	27	27	-

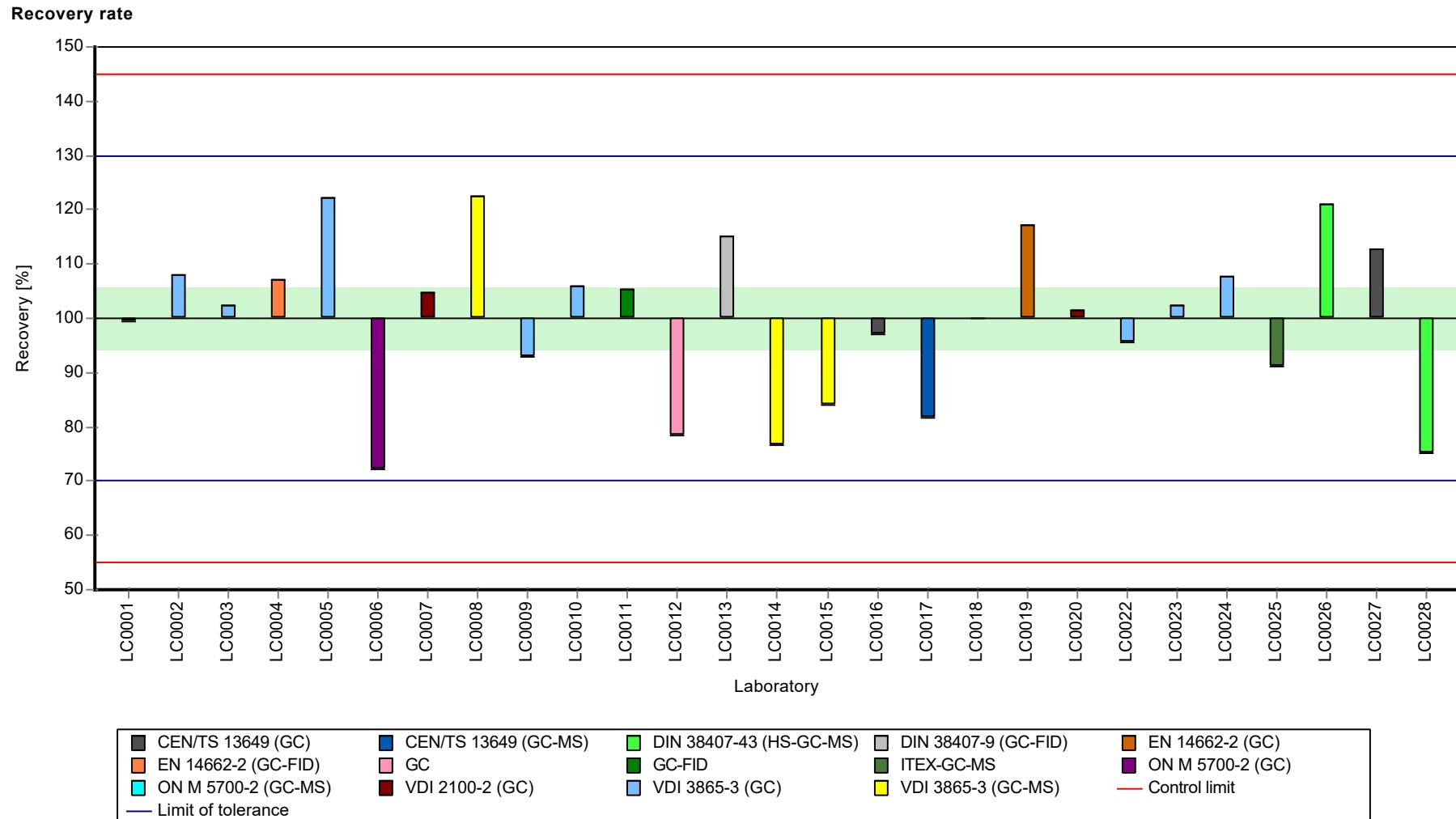
Graphical presentation of results

Results



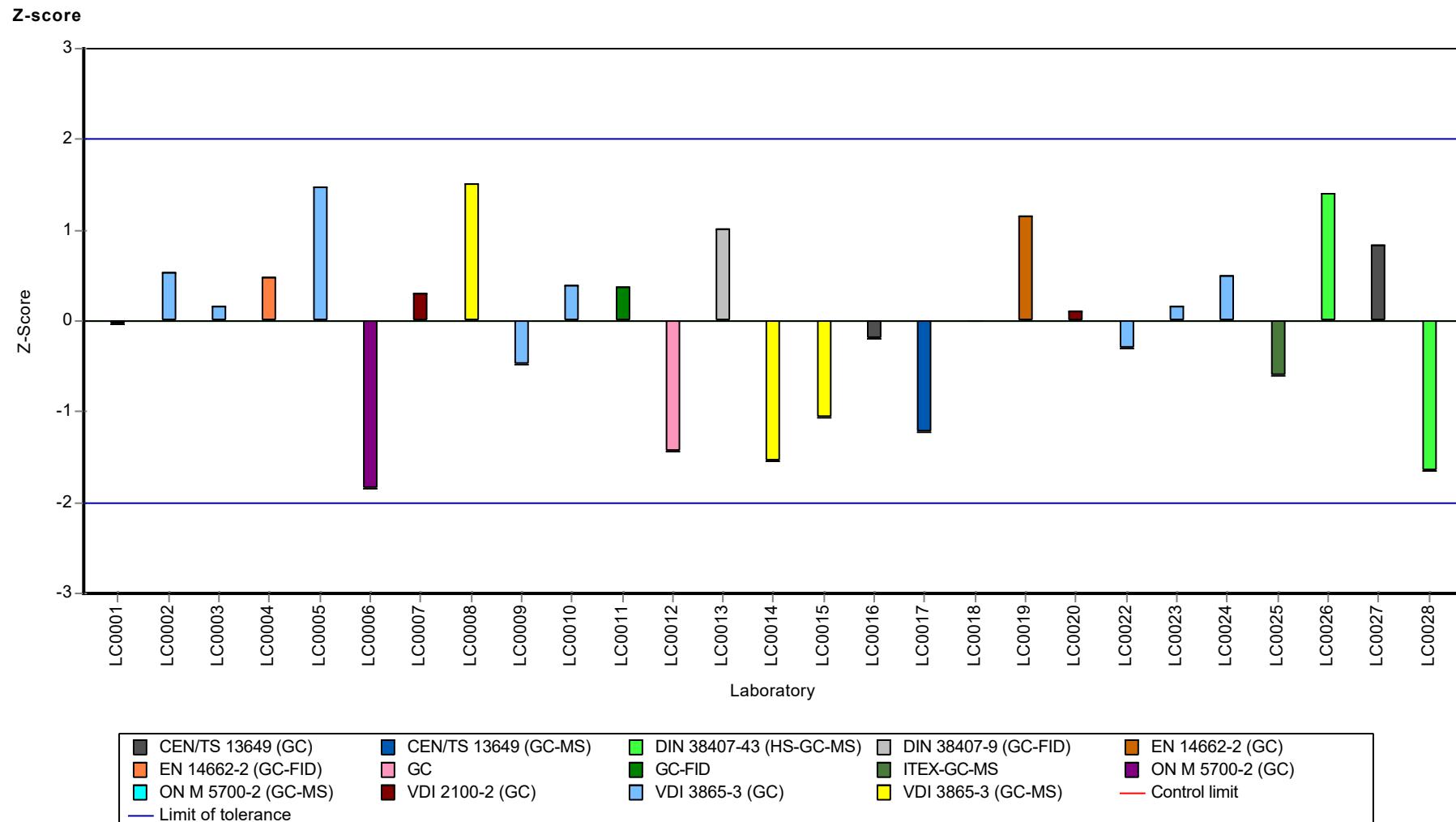
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Toluene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: BL10, Parameter: Toluene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: trans-1,2-Dichloroethene

Parameter oriented report

CL09 - CHC

trans-1,2-Dichloroethene

Unit $\mu\text{g}/\text{tube}$

Assigned value $\pm U$ ($k=2$) -

Criterion -

Minimum - Maximum -

Control test value $\pm U$ ($k=2$) 2.69 ± 0.537

Information zur Auswertung: Die Streuung der ausreißerbereinigten Messergebnisse der akkreditierten, teilnehmenden Labore lag bei $>50\%$. Aus diesem Grund konnte kein zugewiesener Wert festgelegt werden. Für diesen Parameter empfehlen wir einen Vergleich mit dem rein informativen Mittelwert aus der Gruppe der akkreditierten Laborergebnisse ohne Ausreißer (H95, H99): $2.033 \pm 1.24 \text{ U}(k=2) \mu\text{g}/\text{Röhrchen}$

Information for evaluation: The relative reproducibility standard deviation of the results within group of accredited participating laboratories after outlier elimination was $>50\%$. Therefore, no assigned value could be defined.

For this parameter, we recommend the comparison with the informative mean value from the group of accredited participating laboratories without outliers (H95,H99): $2.033 \pm 1.24 \text{ U}(k=2) \mu\text{g}/\text{tube}$

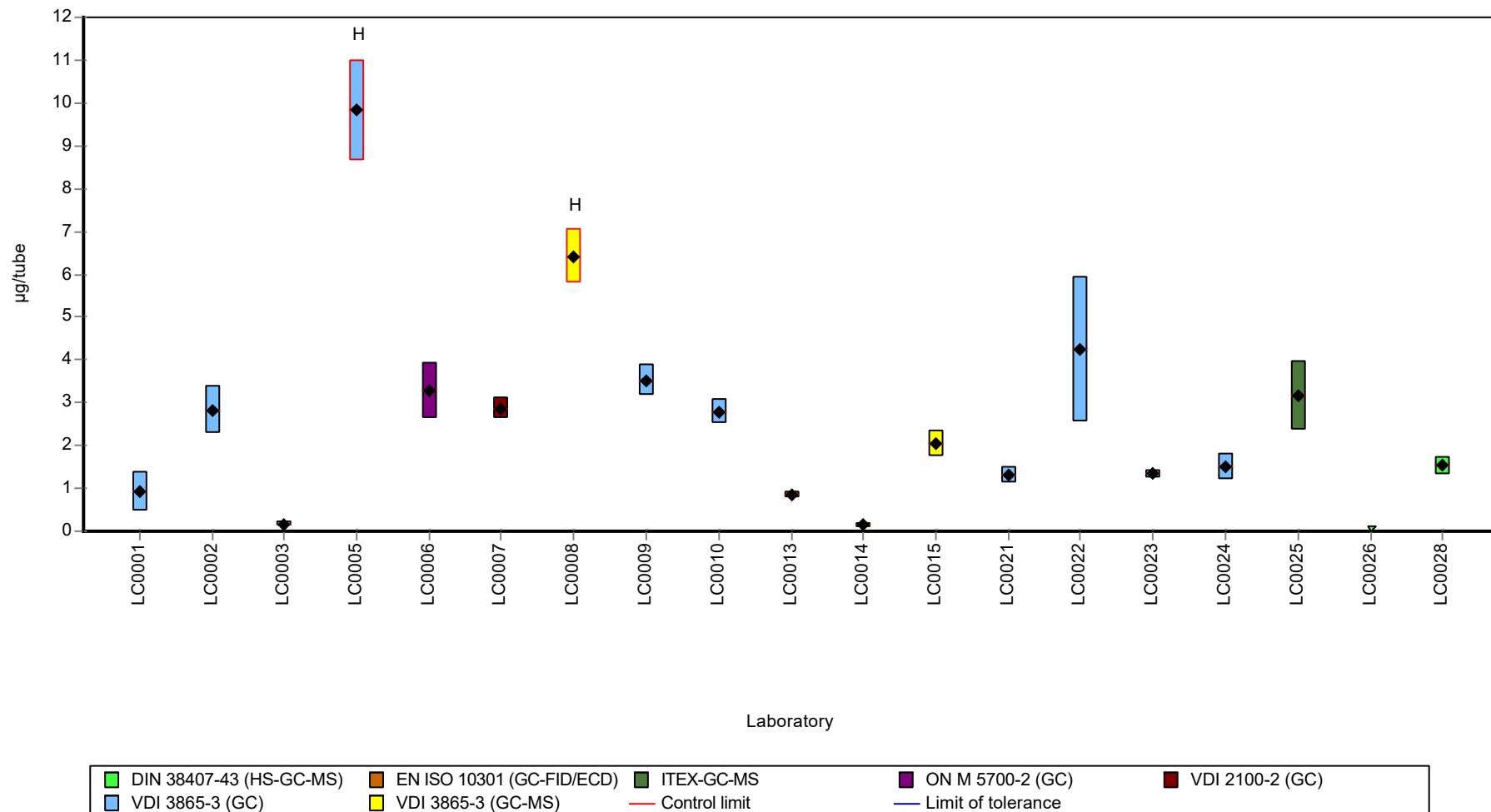
Labcode	Result	$\pm U$	Recovery [%]	z-score	Comments
LC0001	0.932	0.47	-	-	
LC0002	2.82	0.56	-	-	
LC0003	0.17	0.05	-	-	
LC0005	9.83	1.18	-	-	H
LC0006	3.29	0.66	-	-	
LC0007	2.864	0.247	-	-	
LC0008	6.41	0.641	-	-	H
LC0009	3.53	0.35	-	-	
LC0010	2.79	0.28	-	-	
LC0013	0.839	0.082	-	-	
LC0014	0.136	0.061	-	-	
LC0015	2.04	0.31	-	-	
LC0021	1.314	0.2	-	-	
LC0022	4.26	1.7	-	-	
LC0023	1.338	0.1	-	-	
LC0024	1.511	0.31	-	-	
LC0025	3.16	0.8	-	-	
LC0026	< 0.1 (LOQ)	-	-	-	
LC0028	1.54	0.215	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean $\pm CI$ (99%)	2.71 ± 1.67	-	$\mu\text{g}/\text{tube}$
Minimum	0.136	-	$\mu\text{g}/\text{tube}$
Maximum	9.83	-	$\mu\text{g}/\text{tube}$
Standard deviation	2.36	-	$\mu\text{g}/\text{tube}$
rel. standard deviation	87.2	-	%
n	18	-	-

Graphical presentation of results

Results



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: Trichloroethene

Parameter oriented report

CL09 - CHC

Trichloroethene

Unit	µg/tube
Assigned value ± U (k=2)	2.56 ± 0.411
Criterion	0.846 (33 %)
Minimum - Maximum	0.995 - 3.7
Control test value ± U (k=2)	2.83 ± 0.567

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.39	0.43	132	0.98	
LC0002	3.5	0.88	137	1.11	
LC0003	2.98	0.89	116	0.49	
LC0005	7.14	0.44	279	5.41	H
LC0006	2.85	0.57	111	0.34	
LC0007	3.134	0.293	122	0.67	
LC0008	7.44	0.744	290	5.76	H
LC0009	2.22	0.23	86.6	-0.41	
LC0010	2.71	0.41	106	0.17	
LC0013	3.32	0.23	130	0.89	
LC0014	0.995	0.44	38.8	-1.85	
LC0015	3.7	0.45	144	1.34	
LC0021	1.203	0.18	46.9	-1.61	
LC0022	2.68	1.1	105	0.14	
LC0023	1.291	0.097	50.4	-1.5	
LC0024	3.346	0.686	131	0.93	
LC0025	2.28	0.6	88.9	-0.34	
LC0026	1.87	0.4	72.9	-0.82	
LC0028	2.11	0.288	82.3	-0.54	

Characteristics of parameter

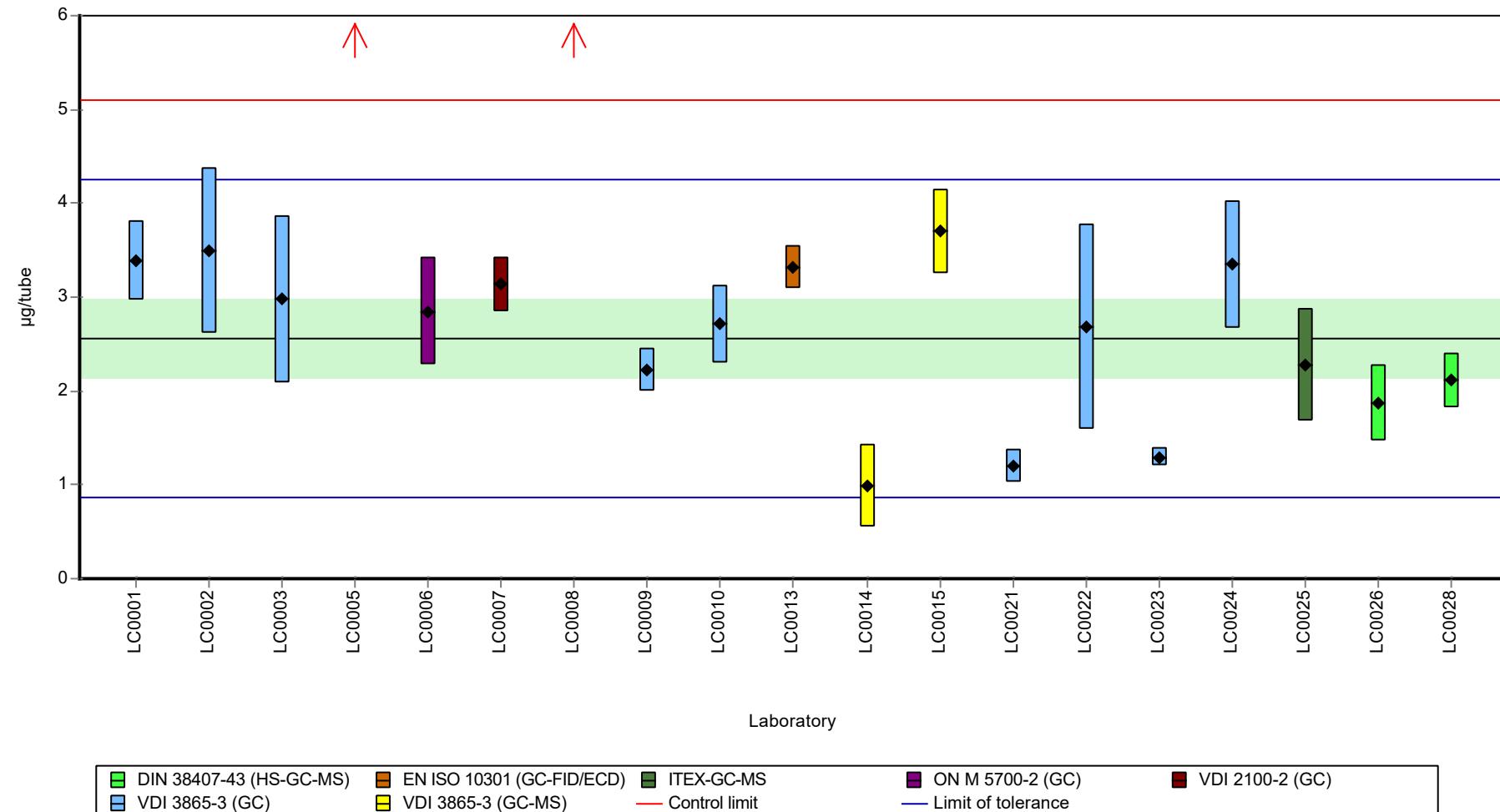
	all results	without outliers	Unit
Mean ± CI (99%)	3.06 ± 1.16	2.56 ± 0.616	µg/tube
Minimum	0.995	0.995	µg/tube
Maximum	7.44	3.7	µg/tube
Standard deviation	1.69	0.847	µg/tube
rel. standard deviation	55.3	33 %	
n	19	17	-

Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Trichloroethene

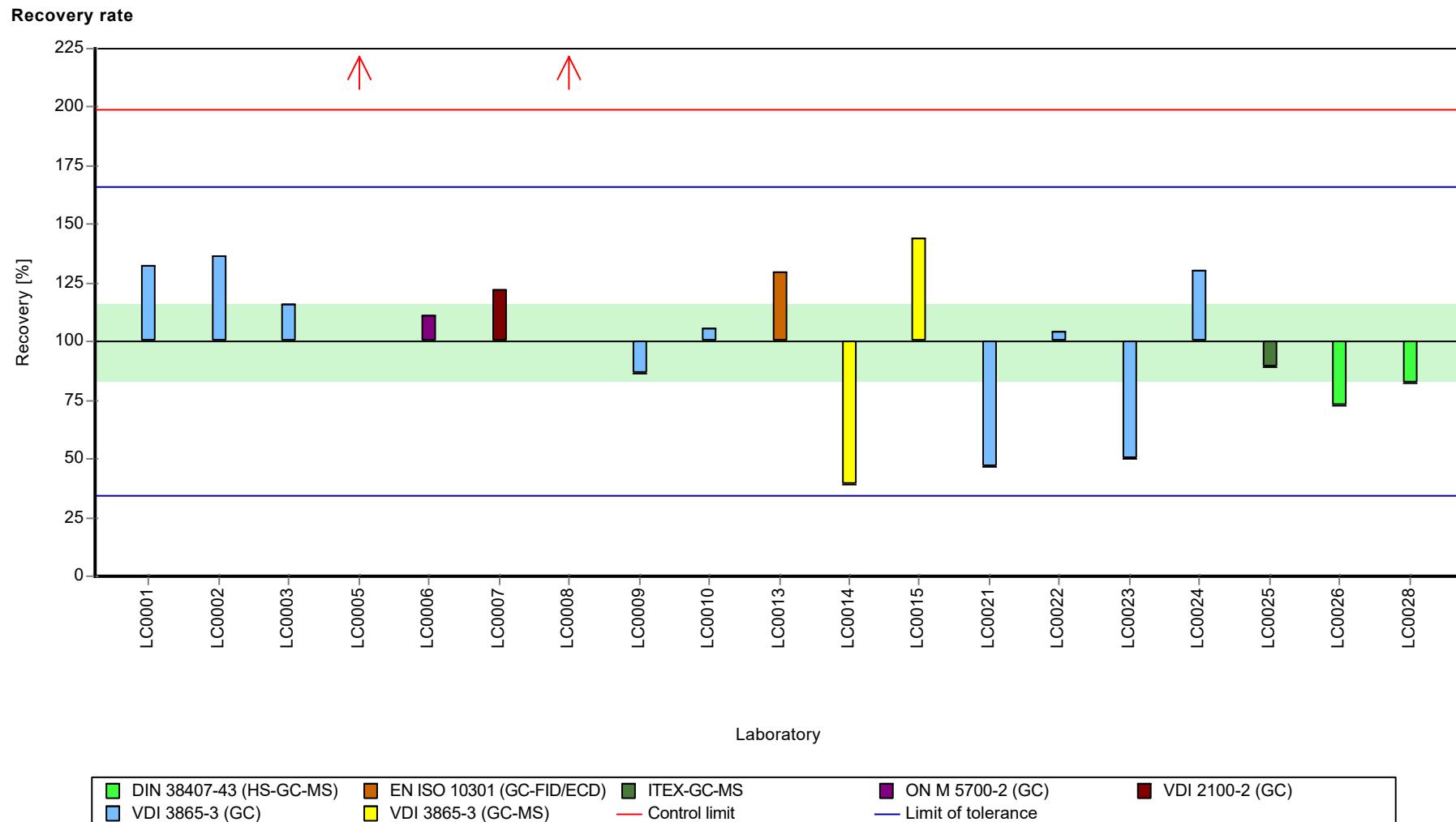
Graphical presentation of results

Results



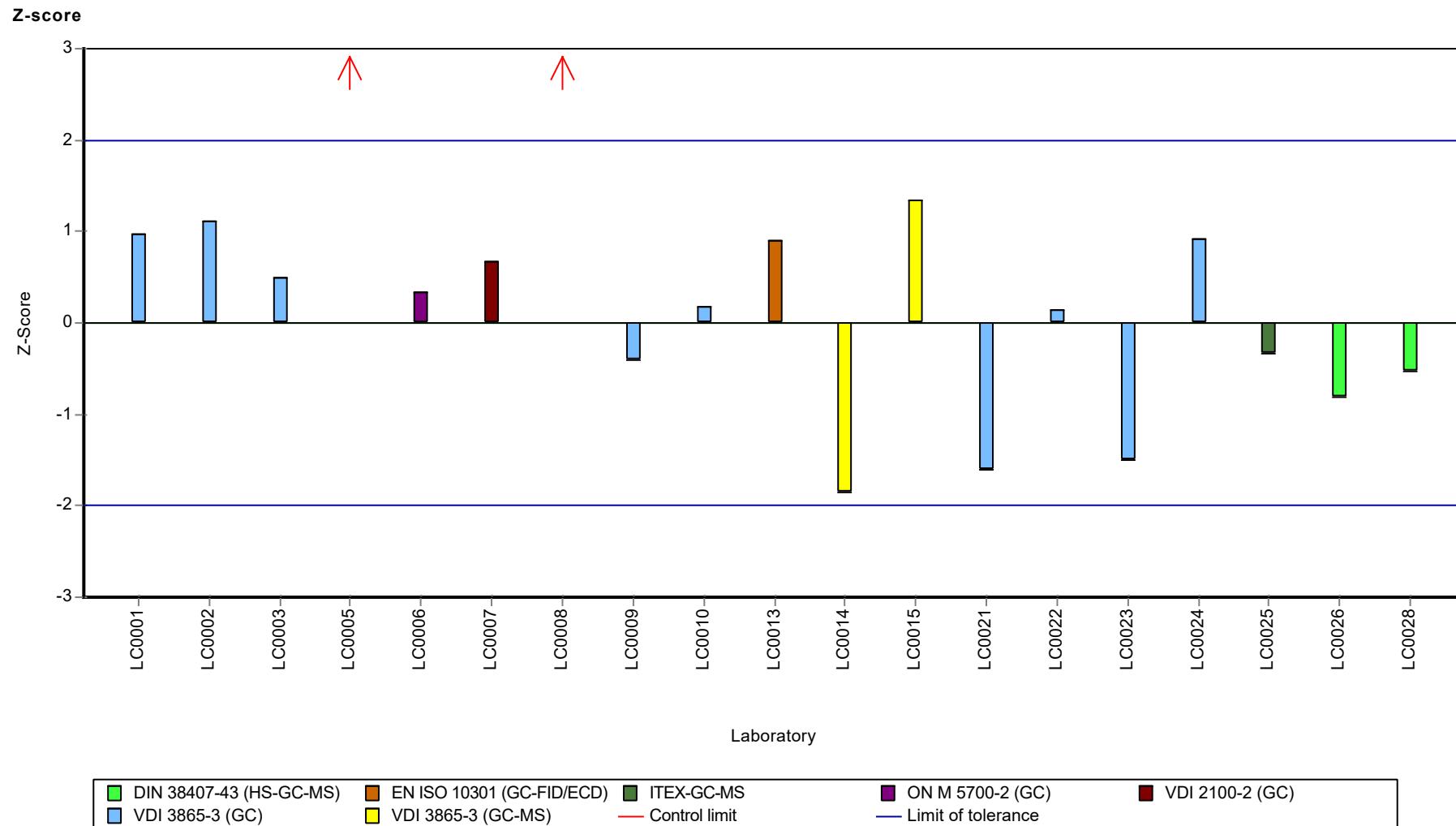
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Trichloroethene



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Trichloroethene



Parameter oriented report CHC and BTEX & C5-C10 -
CBL08

Sample: CL09, Parameter: Trichloromethane

Parameter oriented report

CL09 - CHC

Trichloromethane

Unit	µg/tube
Assigned value ± U (k=2)	3.14 ± 0.257
Criterion	0.503 (16 %)
Minimum - Maximum	2.19 - 4
Control test value ± U (k=2)	3.66 ± 0.988

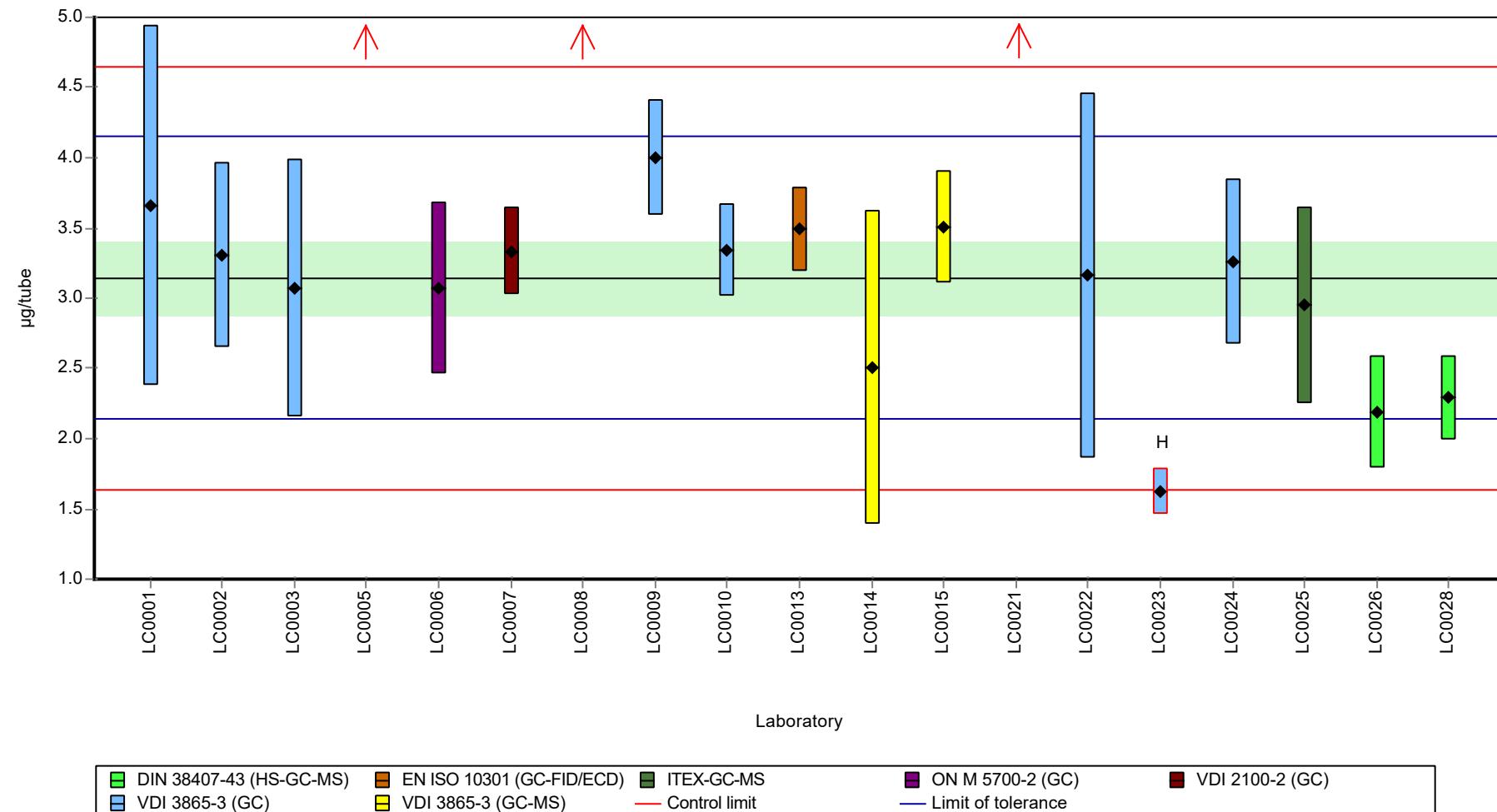
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.66	1.28	116	1.03	
LC0002	3.31	0.66	105	0.33	
LC0003	3.07	0.92	97.7	-0.14	
LC0005	7.78	0.51	248	9.22	H
LC0006	3.07	0.61	97.7	-0.14	
LC0007	3.334	0.311	106	0.38	
LC0008	7.35	0.735	234	8.37	H
LC0009	4	0.41	127	1.7	
LC0010	3.34	0.33	106	0.39	
LC0013	3.49	0.3	111	0.69	
LC0014	2.507	1.12	79.8	-1.26	
LC0015	3.51	0.4	112	0.73	
LC0021	5.429	0.81	173	4.55	H
LC0022	3.16	1.3	101	0.03	
LC0023	1.627	0.163	51.8	-3.01	H
LC0024	3.26	0.587	104	0.23	
LC0025	2.95	0.7	93.9	-0.38	
LC0026	2.19	0.4	69.7	-1.89	
LC0028	2.29	0.298	72.9	-1.7	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	3.65 ± 1.09	3.14 ± 0.385	µg/tube
Minimum	1.63	2.19	µg/tube
Maximum	7.78	4	µg/tube
Standard deviation	1.59	0.497	µg/tube
rel. standard deviation	43.5	15.8	%
n	19	15	-

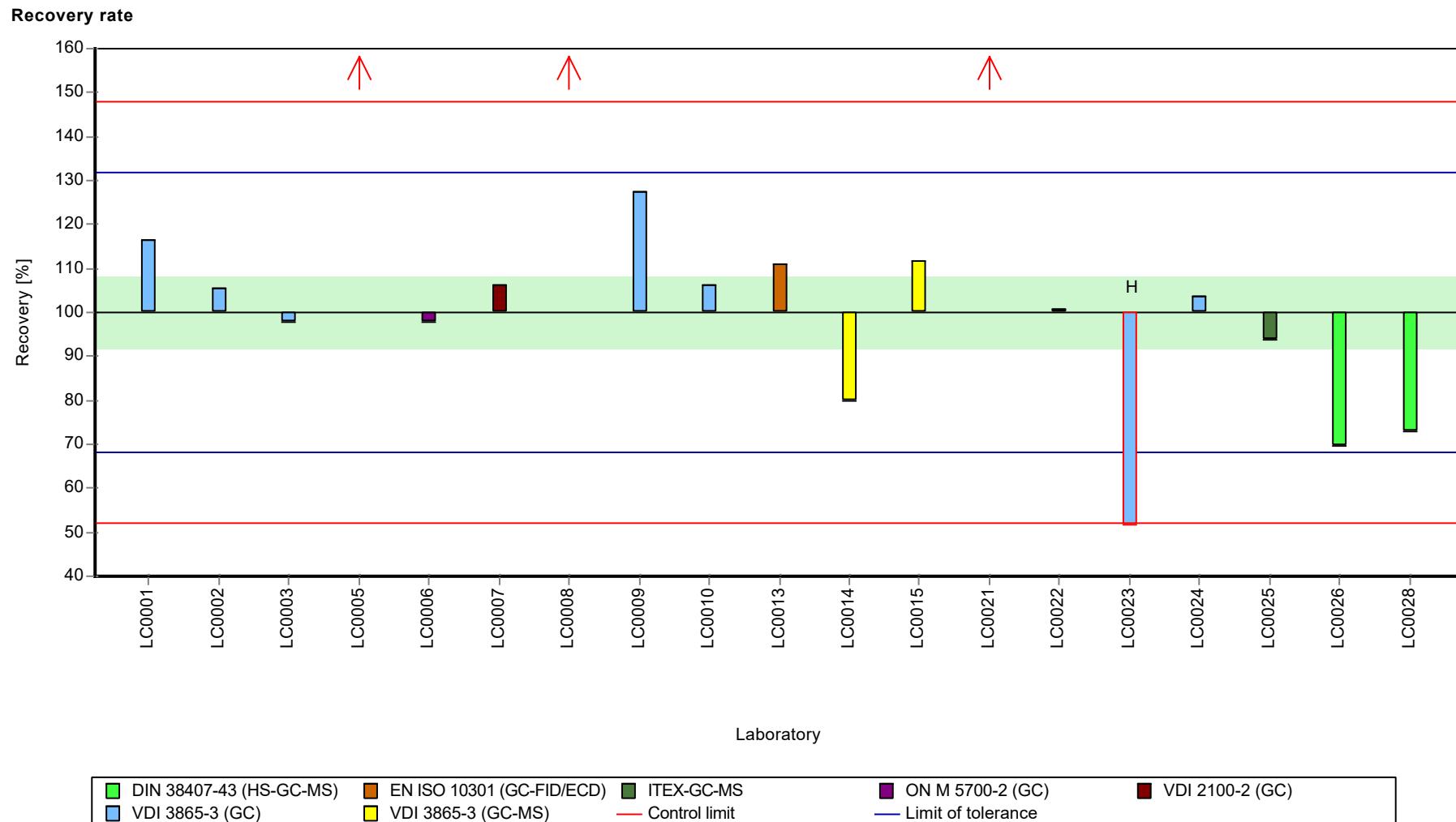
Graphical presentation of results

Results



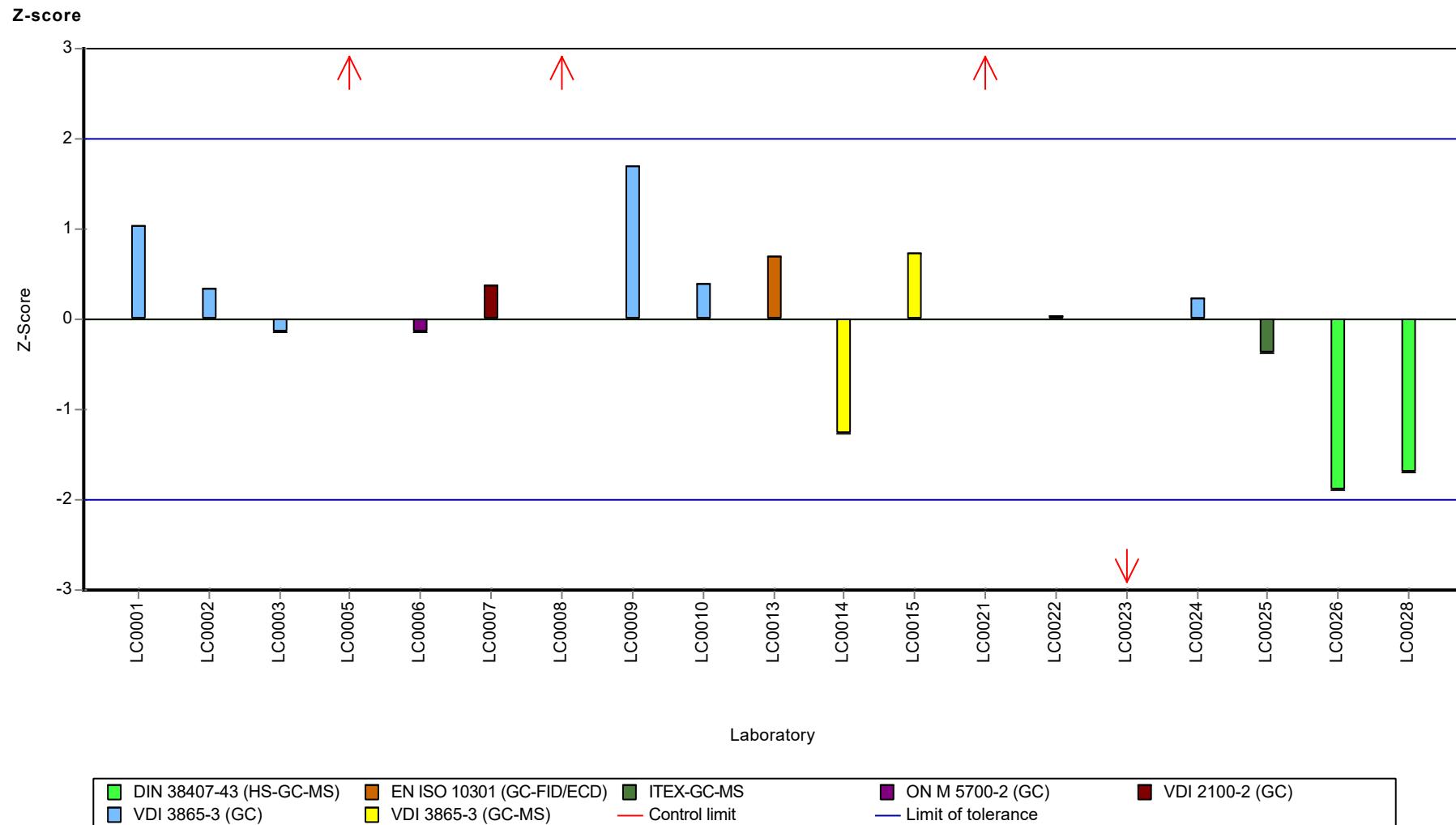
Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Trichloromethane



Parameter oriented report CHC and BTEX & C5-C10 - CBL08

Sample: CL09, Parameter: Trichloromethane



E8. Labororientierte Auswertung / Laboratory oriented report

Die Labororientierte Auswertung ist nach dem Laborcode sortiert.

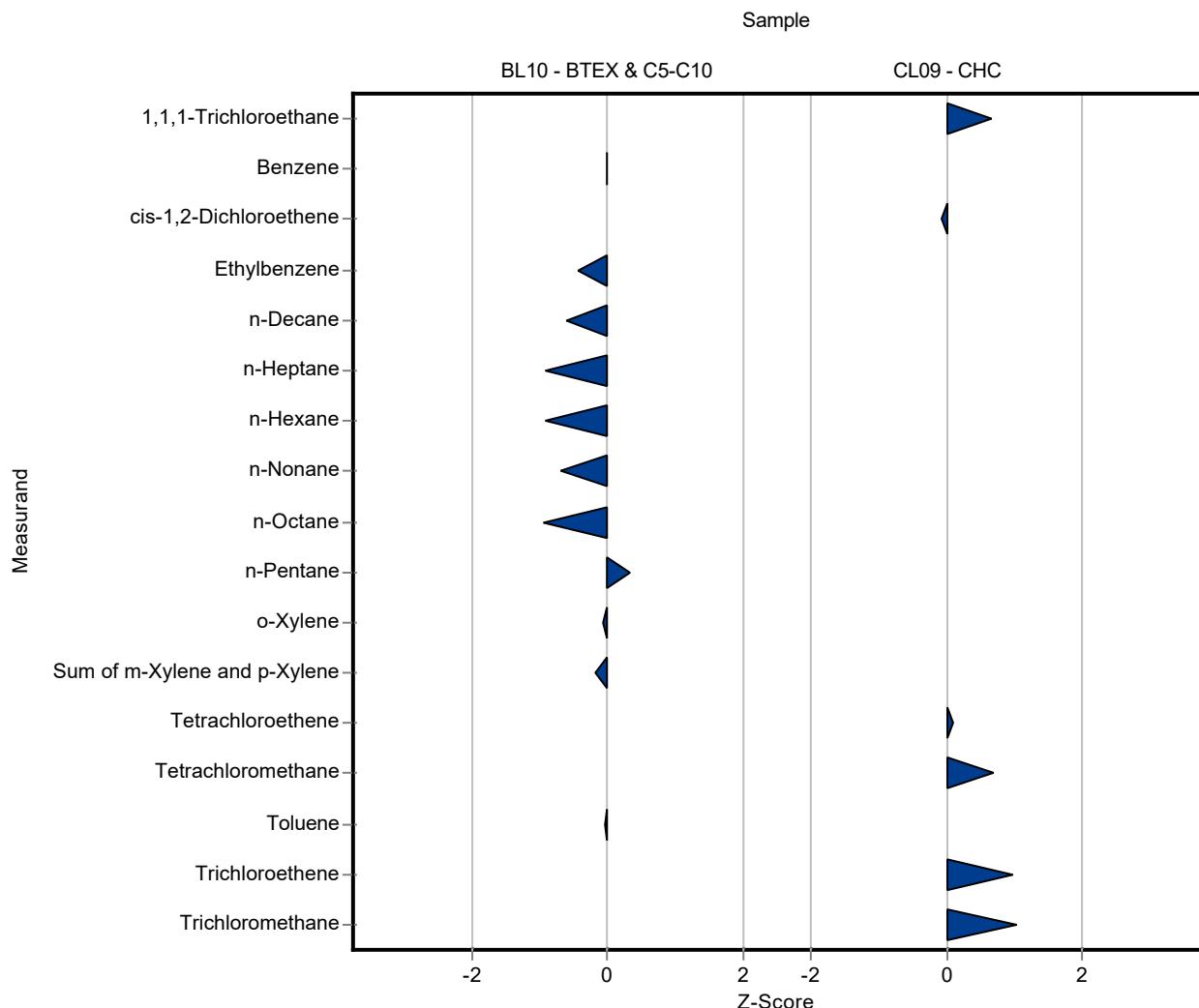
The laboratory oriented report is sorted by laboratory code.

Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.51 ± 1.1	0.829	99.8	-0.02
Ethylbenzene	µg/tube	5.71 ± 0.32	5.26 ± 1.32	1.03	92.2	-0.44
n-Decane	µg/tube	3.5 ± 0.468	2.88 ± 1.01	1.01	82.3	-0.61
n-Heptane	µg/tube	6.87 ± 0.338	6.18 ± 1.39	0.756	89.9	-0.92
n-Hexane	µg/tube	6.79 ± 0.283	6.17 ± 1.55	0.679	90.9	-0.91
n-Nonane	µg/tube	5.54 ± 0.448	4.92 ± 0.99	0.886	88.9	-0.69
n-Octane	µg/tube	6.62 ± 0.317	5.93 ± 1.49	0.729	89.5	-0.95
n-Pentane	µg/tube	6.29 ± 0.338	6.5 ± 1.3	0.629	103	0.33
o-Xylene	µg/tube	5.11 ± 0.48	5.01 ± 1.25	1.28	98.1	-0.07
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.27 ± 2.06	2.24	96.3	-0.18
Toluene	µg/tube	5.75 ± 0.323	5.71 ± 1	0.862	99.4	-0.04

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.84 ± 0.58	0.708	114	0.66
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.09 ± 0.84	0.906	96.9	-0.07
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.79 ± 0.42	1.21	104	0.08
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.38 ± 0.55	0.901	117	0.69
trans-1,2-Dichloroethene	µg/tube	- ± -	0.932 ± 0.47	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.39 ± 0.43	0.846	132	0.98
Trichloromethane	µg/tube	3.14 ± 0.257	3.66 ± 1.28	0.503	116	1.03

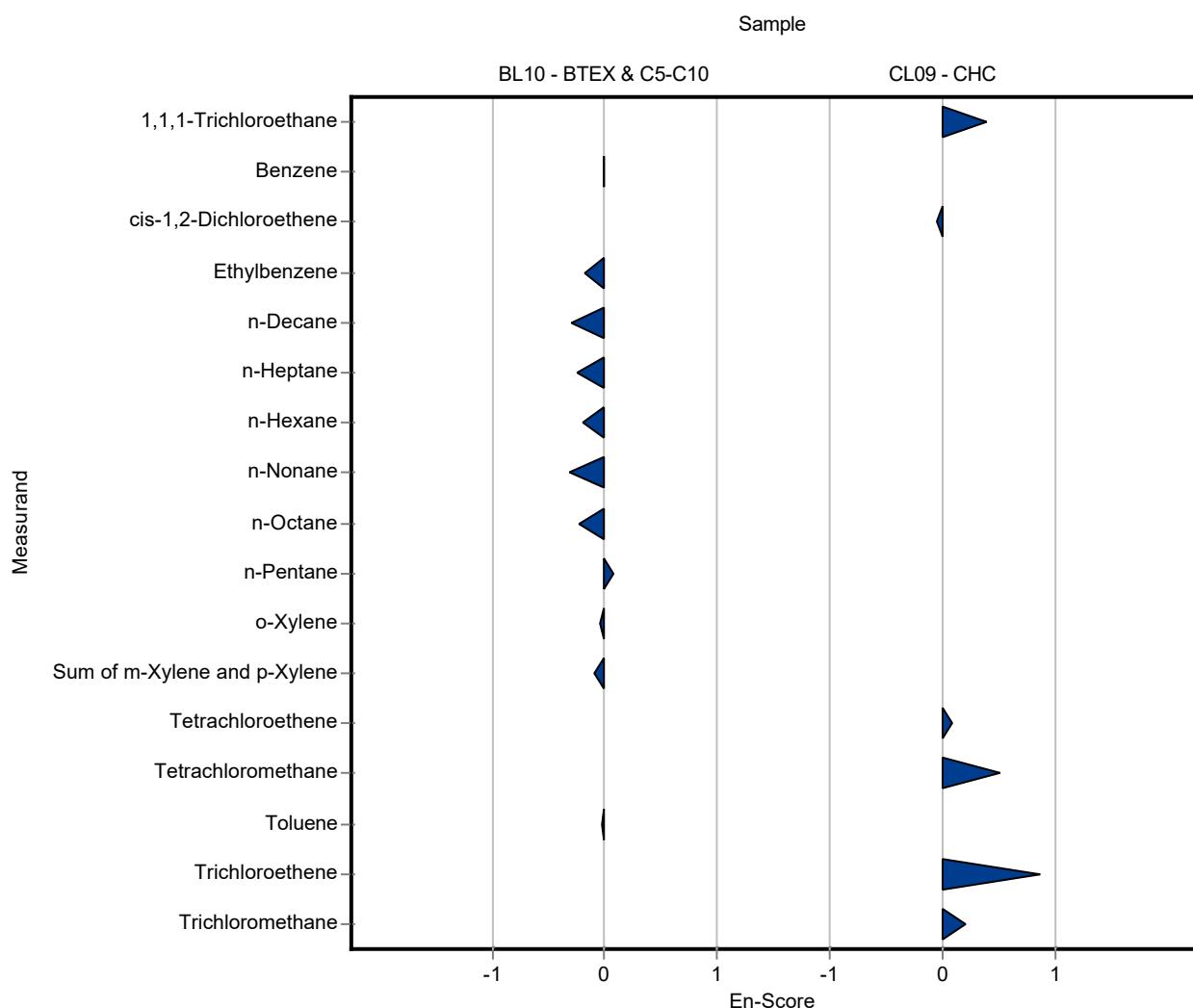


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.51 ± 1.1	0.829	99.8	-0.01
Ethylbenzene	µg/tube	5.71 ± 0.32	5.26 ± 1.32	1.03	92.2	-0.17
n-Decane	µg/tube	3.5 ± 0.468	2.88 ± 1.01	1.01	82.3	-0.30
n-Heptane	µg/tube	6.87 ± 0.338	6.18 ± 1.39	0.756	89.9	-0.25
n-Hexane	µg/tube	6.79 ± 0.283	6.17 ± 1.55	0.679	90.9	-0.20
n-Nonane	µg/tube	5.54 ± 0.448	4.92 ± 0.99	0.886	88.9	-0.30
n-Octane	µg/tube	6.62 ± 0.317	5.93 ± 1.49	0.729	89.5	-0.23
n-Pentane	µg/tube	6.29 ± 0.338	6.5 ± 1.3	0.629	103	0.08
o-Xylene	µg/tube	5.11 ± 0.48	5.01 ± 1.25	1.28	98.1	-0.04
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.27 ± 2.06	2.24	96.3	-0.09
Toluene	µg/tube	5.75 ± 0.323	5.71 ± 1	0.862	99.4	-0.02

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.84 ± 0.58	0.708	114	0.39
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.09 ± 0.84	0.906	96.9	-0.04
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.79 ± 0.42	1.21	104	0.10
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.38 ± 0.55	0.901	117	0.52
trans-1,2-Dichloroethene	µg/tube	- ± -	0.932 ± 0.47	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.39 ± 0.43	0.846	132	0.87
Trichloromethane	µg/tube	3.14 ± 0.257	3.66 ± 1.28	0.503	116	0.20

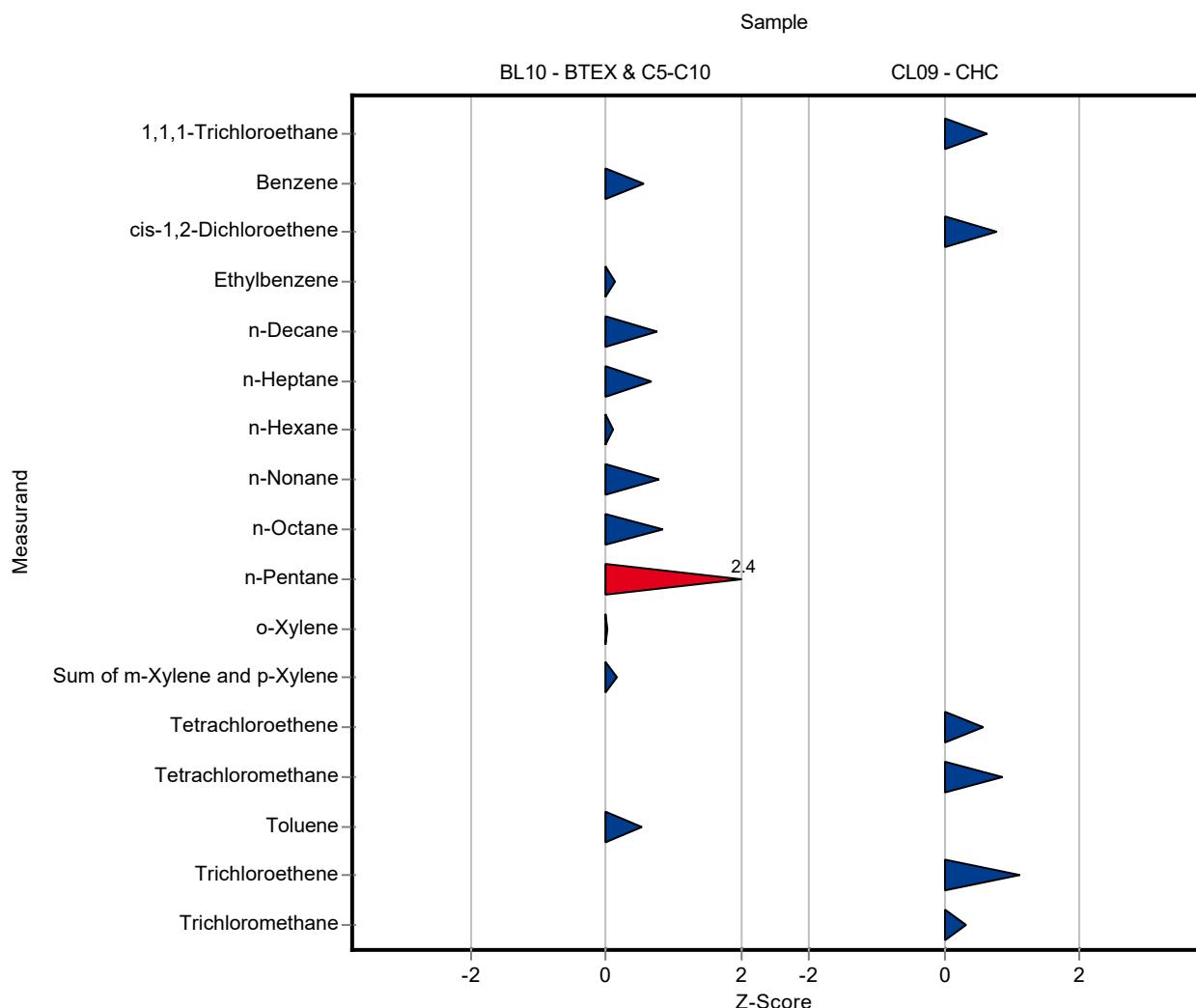


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.99 ± 0.9	0.829	108	0.56
Ethylbenzene	µg/tube	5.71 ± 0.32	5.85 ± 1.17	1.03	102	0.14
n-Decane	µg/tube	3.5 ± 0.468	4.26 ± 0.85	1.01	122	0.75
n-Heptane	µg/tube	6.87 ± 0.338	7.38 ± 1.85	0.756	107	0.67
n-Hexane	µg/tube	6.79 ± 0.283	6.86 ± 1.72	0.679	101	0.11
n-Nonane	µg/tube	5.54 ± 0.448	6.23 ± 1.25	0.886	113	0.78
n-Octane	µg/tube	6.62 ± 0.317	7.23 ± 1.81	0.729	109	0.83
n-Pentane	µg/tube	6.29 ± 0.338	7.82 ± 1.56	0.629	124	2.42
o-Xylene	µg/tube	5.11 ± 0.48	5.12 ± 1.28	1.28	100	0.01
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11 ± 2.75	2.24	103	0.15
Toluene	µg/tube	5.75 ± 0.323	6.2 ± 1.55	0.862	108	0.53

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.81 ± 0.76	0.708	113	0.62
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.87 ± 0.57	0.906	133	0.79
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.39 ± 0.85	1.21	126	0.58
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.53 ± 0.91	0.901	121	0.86
trans-1,2-Dichloroethene	µg/tube	- ± -	2.82 ± 0.56	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.5 ± 0.88	0.846	137	1.11
Trichloromethane	µg/tube	3.14 ± 0.257	3.31 ± 0.66	0.503	105	0.33

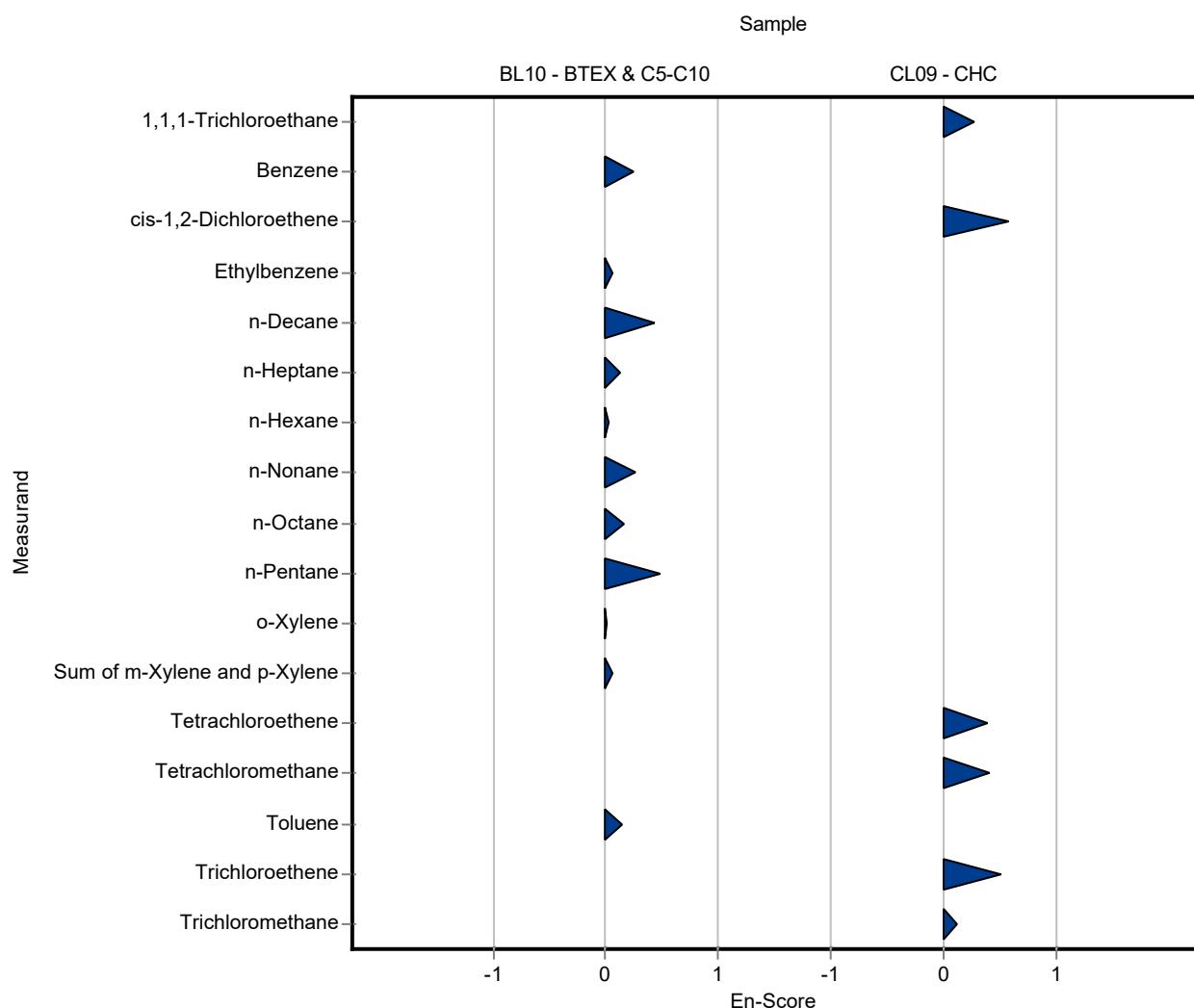


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.99 ± 0.9	0.829	108	0.26
Ethylbenzene	µg/tube	5.71 ± 0.32	5.85 ± 1.17	1.03	102	0.06
n-Decane	µg/tube	3.5 ± 0.468	4.26 ± 0.85	1.01	122	0.43
n-Heptane	µg/tube	6.87 ± 0.338	7.38 ± 1.85	0.756	107	0.14
n-Hexane	µg/tube	6.79 ± 0.283	6.86 ± 1.72	0.679	101	0.02
n-Nonane	µg/tube	5.54 ± 0.448	6.23 ± 1.25	0.886	113	0.27
n-Octane	µg/tube	6.62 ± 0.317	7.23 ± 1.81	0.729	109	0.17
n-Pentane	µg/tube	6.29 ± 0.338	7.82 ± 1.56	0.629	124	0.49
o-Xylene	µg/tube	5.11 ± 0.48	5.12 ± 1.28	1.28	100	0.01
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11 ± 2.75	2.24	103	0.06
Toluene	µg/tube	5.75 ± 0.323	6.2 ± 1.55	0.862	108	0.15

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.81 ± 0.76	0.708	113	0.28
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.87 ± 0.57	0.906	133	0.59
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.39 ± 0.85	1.21	126	0.39
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.53 ± 0.91	0.901	121	0.41
trans-1,2-Dichloroethene	µg/tube	- ± -	2.82 ± 0.56	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.5 ± 0.88	0.846	137	0.52
Trichloromethane	µg/tube	3.14 ± 0.257	3.31 ± 0.66	0.503	105	0.12

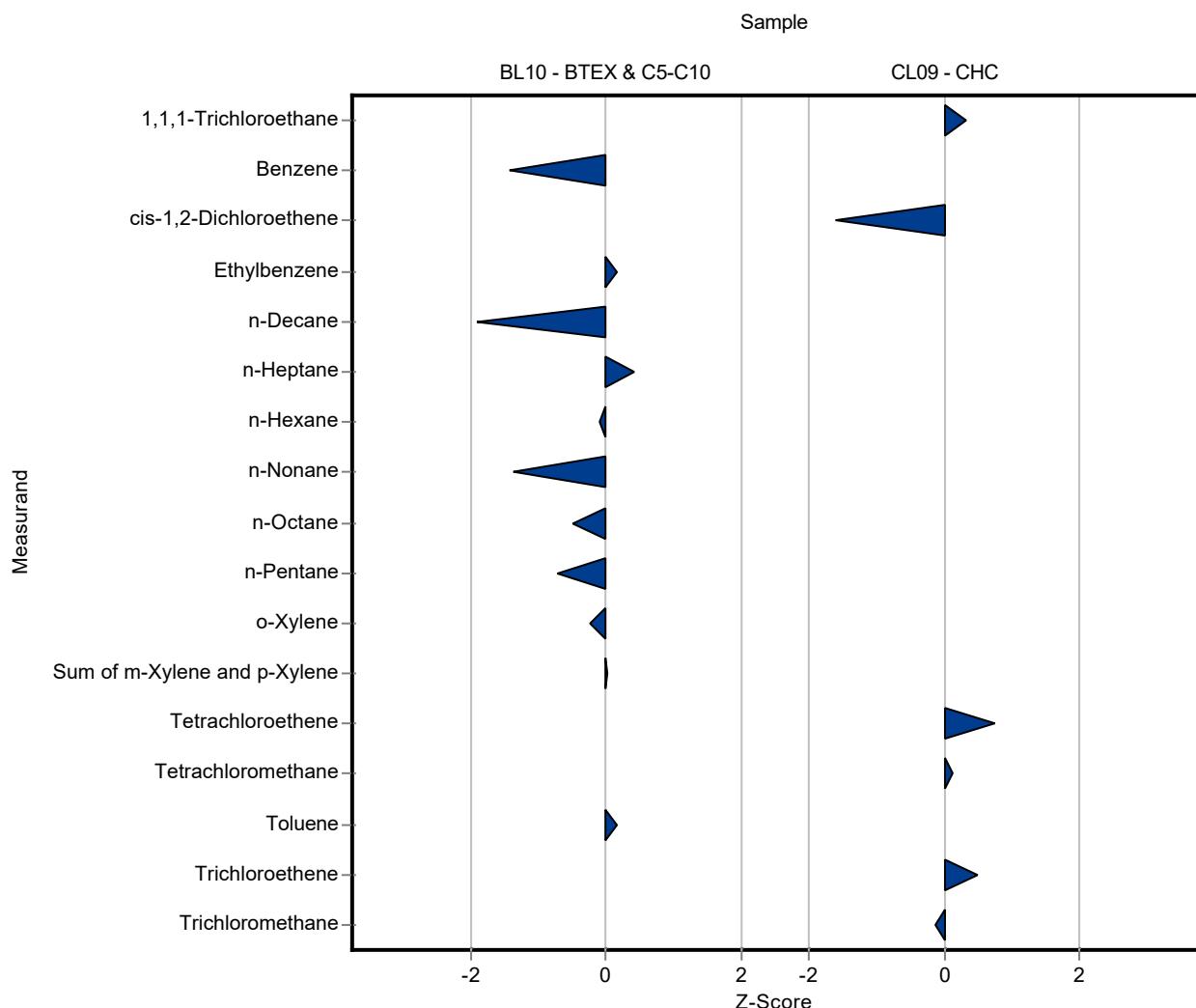


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	4.35 ± 1.96	0.829	78.8	-1.42
Ethylbenzene	µg/tube	5.71 ± 0.32	5.87 ± 2.64	1.03	103	0.16
n-Decane	µg/tube	3.5 ± 0.468	1.55 ± 0.31	1.01	44.3	-1.92
n-Heptane	µg/tube	6.87 ± 0.338	7.18 ± 1.44	0.756	104	0.41
n-Hexane	µg/tube	6.79 ± 0.283	6.73 ± 1.35	0.679	99.2	-0.08
n-Nonane	µg/tube	5.54 ± 0.448	4.33 ± 0.87	0.886	78.2	-1.36
n-Octane	µg/tube	6.62 ± 0.317	6.27 ± 1.25	0.729	94.7	-0.49
n-Pentane	µg/tube	6.29 ± 0.338	5.84 ± 1.17	0.629	92.8	-0.72
o-Xylene	µg/tube	5.11 ± 0.48	4.79 ± 2.16	1.28	93.8	-0.25
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.7 ± 4.82	2.24	100	0.02
Toluene	µg/tube	5.75 ± 0.323	5.88 ± 2.65	0.862	102	0.16

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.6 ± 1.08	0.708	107	0.33
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.71 ± 0.21	0.906	32.9	-1.60
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.59 ± 1.08	1.21	133	0.74
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.87 ± 1.16	0.901	103	0.13
trans-1,2-Dichloroethene	µg/tube	- ± -	0.17 ± 0.05	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.98 ± 0.89	0.846	116	0.49
Trichloromethane	µg/tube	3.14 ± 0.257	3.07 ± 0.92	0.503	97.7	-0.14

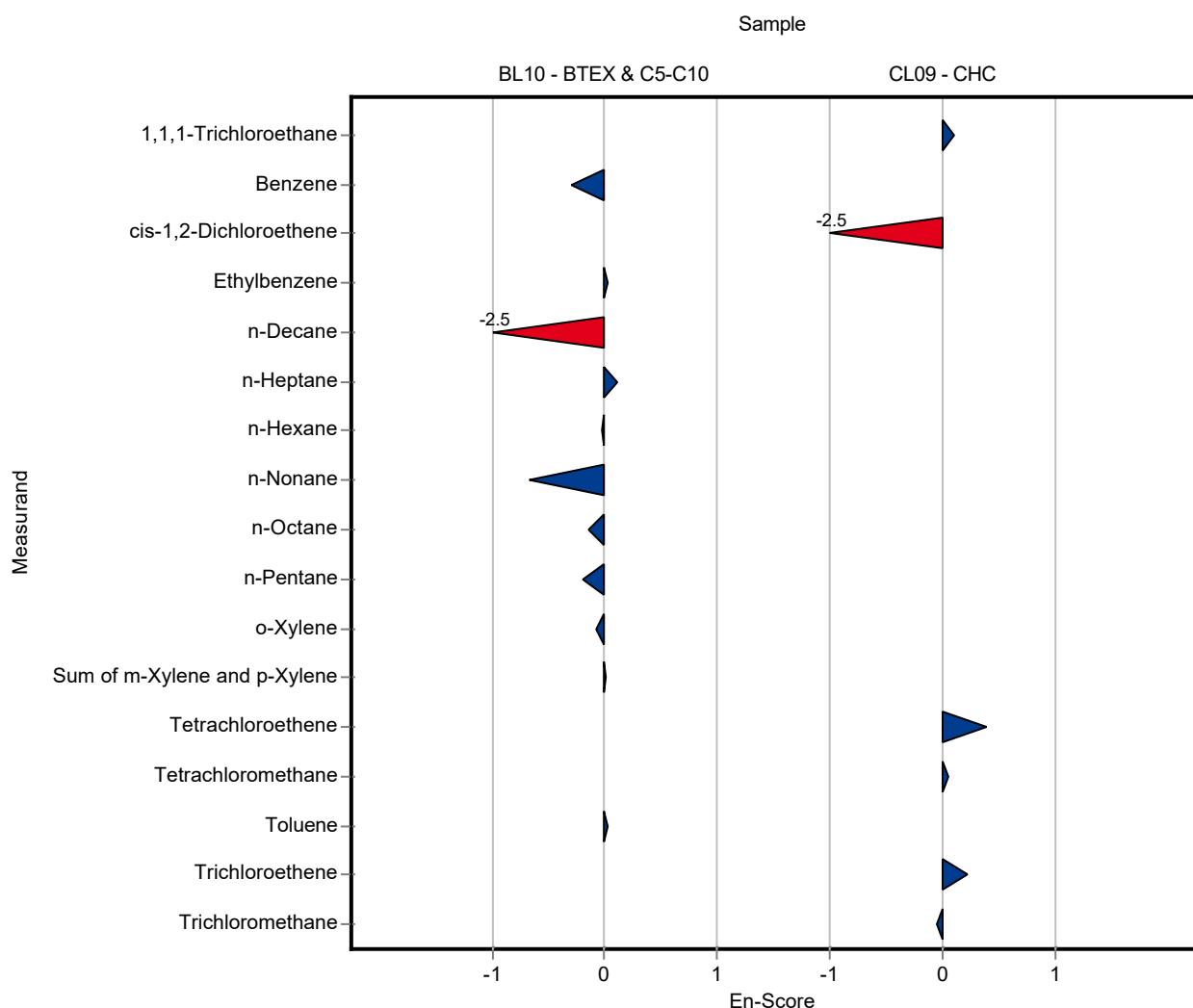


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	4.35 ± 1.96	0.829	78.8	-0.30
Ethylbenzene	µg/tube	5.71 ± 0.32	5.87 ± 2.64	1.03	103	0.03
n-Decane	µg/tube	3.5 ± 0.468	1.55 ± 0.31	1.01	44.3	-2.51
n-Heptane	µg/tube	6.87 ± 0.338	7.18 ± 1.44	0.756	104	0.11
n-Hexane	µg/tube	6.79 ± 0.283	6.73 ± 1.35	0.679	99.2	-0.02
n-Nonane	µg/tube	5.54 ± 0.448	4.33 ± 0.87	0.886	78.2	-0.67
n-Octane	µg/tube	6.62 ± 0.317	6.27 ± 1.25	0.729	94.7	-0.14
n-Pentane	µg/tube	6.29 ± 0.338	5.84 ± 1.17	0.629	92.8	-0.19
o-Xylene	µg/tube	5.11 ± 0.48	4.79 ± 2.16	1.28	93.8	-0.07
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.7 ± 4.82	2.24	100	0.00
Toluene	µg/tube	5.75 ± 0.323	5.88 ± 2.65	0.862	102	0.03

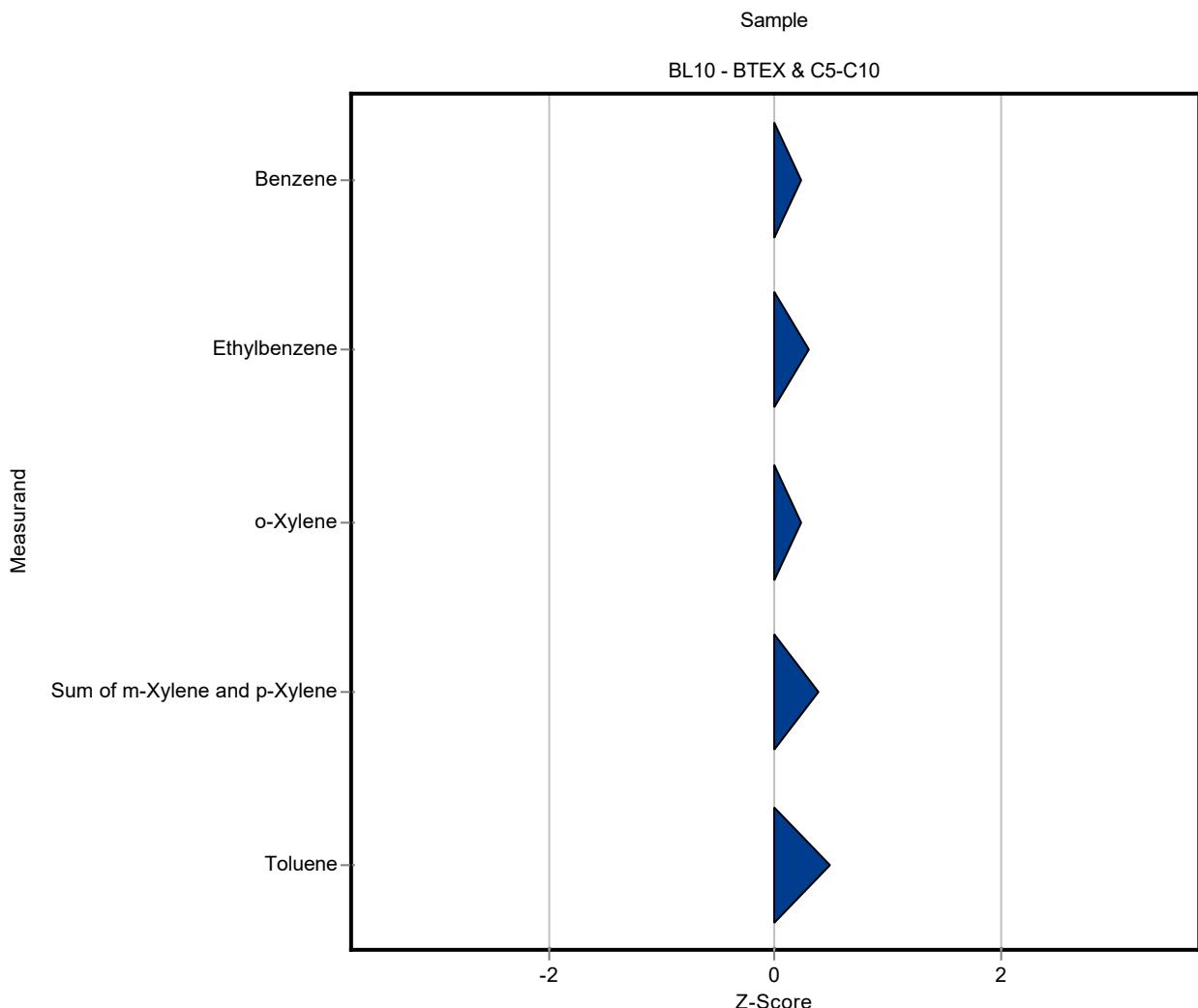
Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.6 ± 1.08	0.708	107	0.11
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.71 ± 0.21	0.906	32.9	-2.47
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.59 ± 1.08	1.21	133	0.40
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.87 ± 1.16	0.901	103	0.05
trans-1,2-Dichloroethene	µg/tube	- ± -	0.17 ± 0.05	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.98 ± 0.89	0.846	116	0.23
Trichloromethane	µg/tube	3.14 ± 0.257	3.07 ± 0.92	0.503	97.7	-0.04



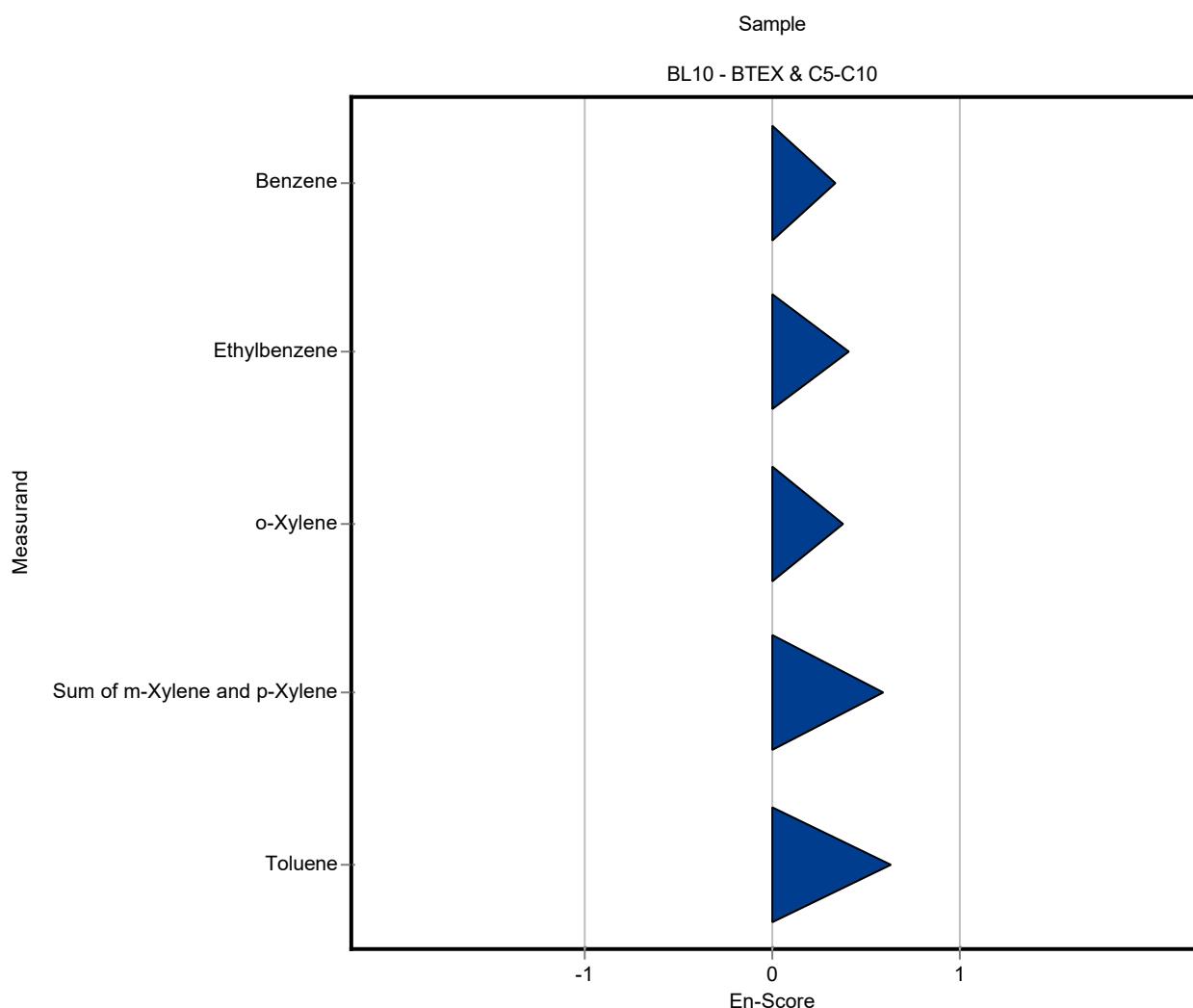
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.716 ± 0.25	0.829	103	0.23
Ethylbenzene	µg/tube	5.71 ± 0.32	6.011 ± 0.34	1.03	105	0.30
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.392 ± 0.3	1.28	106	0.22
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.522 ± 0.6	2.24	108	0.38
Toluene	µg/tube	5.75 ± 0.323	6.162 ± 0.29	0.862	107	0.48



Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.716 ± 0.25	0.829	103	0.33
Ethylbenzene	µg/tube	5.71 ± 0.32	6.011 ± 0.34	1.03	105	0.40
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.392 ± 0.3	1.28	106	0.37
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.522 ± 0.6	2.24	108	0.58
Toluene	µg/tube	5.75 ± 0.323	6.162 ± 0.29	0.862	107	0.63

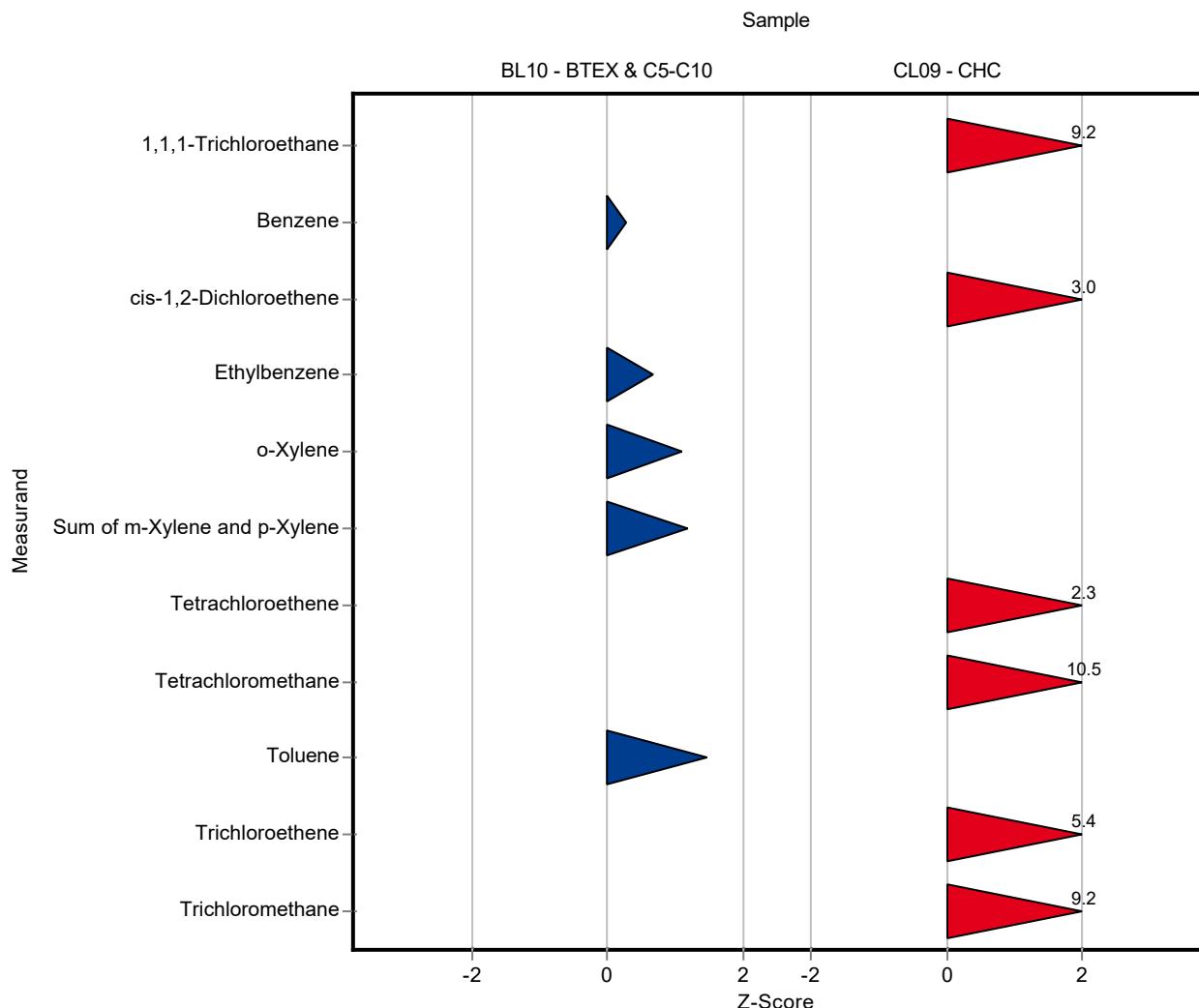


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.74 ± 0.47	0.829	104	0.26
Ethylbenzene	µg/tube	5.71 ± 0.32	6.4 ± 0.62	1.03	112	0.67
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.49 ± 0.76	1.28	127	1.08
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	13.3 ± 1.05	2.24	125	1.18
Toluene	µg/tube	5.75 ± 0.323	7.02 ± 0.46	0.862	122	1.48

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	9.85 ± 0.62	0.708	292	9.16
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	4.88 ± 0.54	0.906	226	3.01
Tetrachloroethene	µg/tube	2.69 ± 0.588	5.51 ± 0.55	1.21	205	2.33
Tetrachloromethane	µg/tube	3.75 ± 0.464	13.2 ± 0.83	0.901	352	10.48
trans-1,2-Dichloroethene	µg/tube	- ± -	9.83 ± 1.18	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	7.14 ± 0.44	0.846	279	5.41
Trichloromethane	µg/tube	3.14 ± 0.257	7.78 ± 0.51	0.503	248	9.22

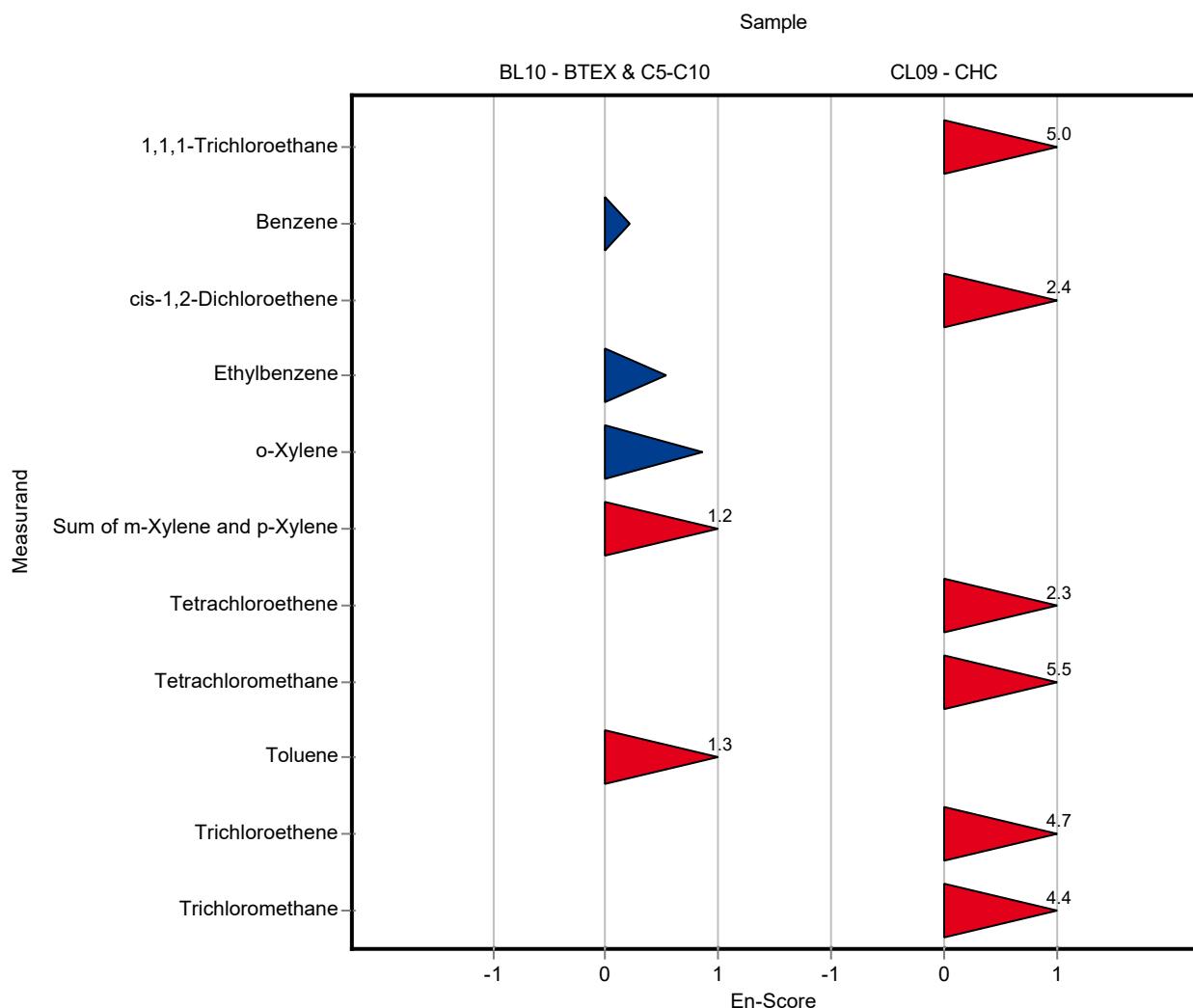


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.74 ± 0.47	0.829	104	0.22
Ethylbenzene	µg/tube	5.71 ± 0.32	6.4 ± 0.62	1.03	112	0.54
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.49 ± 0.76	1.28	127	0.87
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	13.3 ± 1.05	2.24	125	1.16
Toluene	µg/tube	5.75 ± 0.323	7.02 ± 0.46	0.862	122	1.31

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	9.85 ± 0.62	0.708	292	5.03
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	4.88 ± 0.54	0.906	226	2.36
Tetrachloroethene	µg/tube	2.69 ± 0.588	5.51 ± 0.55	1.21	205	2.26
Tetrachloromethane	µg/tube	3.75 ± 0.464	13.2 ± 0.83	0.901	352	5.48
trans-1,2-Dichloroethene	µg/tube	- ± -	9.83 ± 1.18	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	7.14 ± 0.44	0.846	279	4.71
Trichloromethane	µg/tube	3.14 ± 0.257	7.78 ± 0.51	0.503	248	4.41

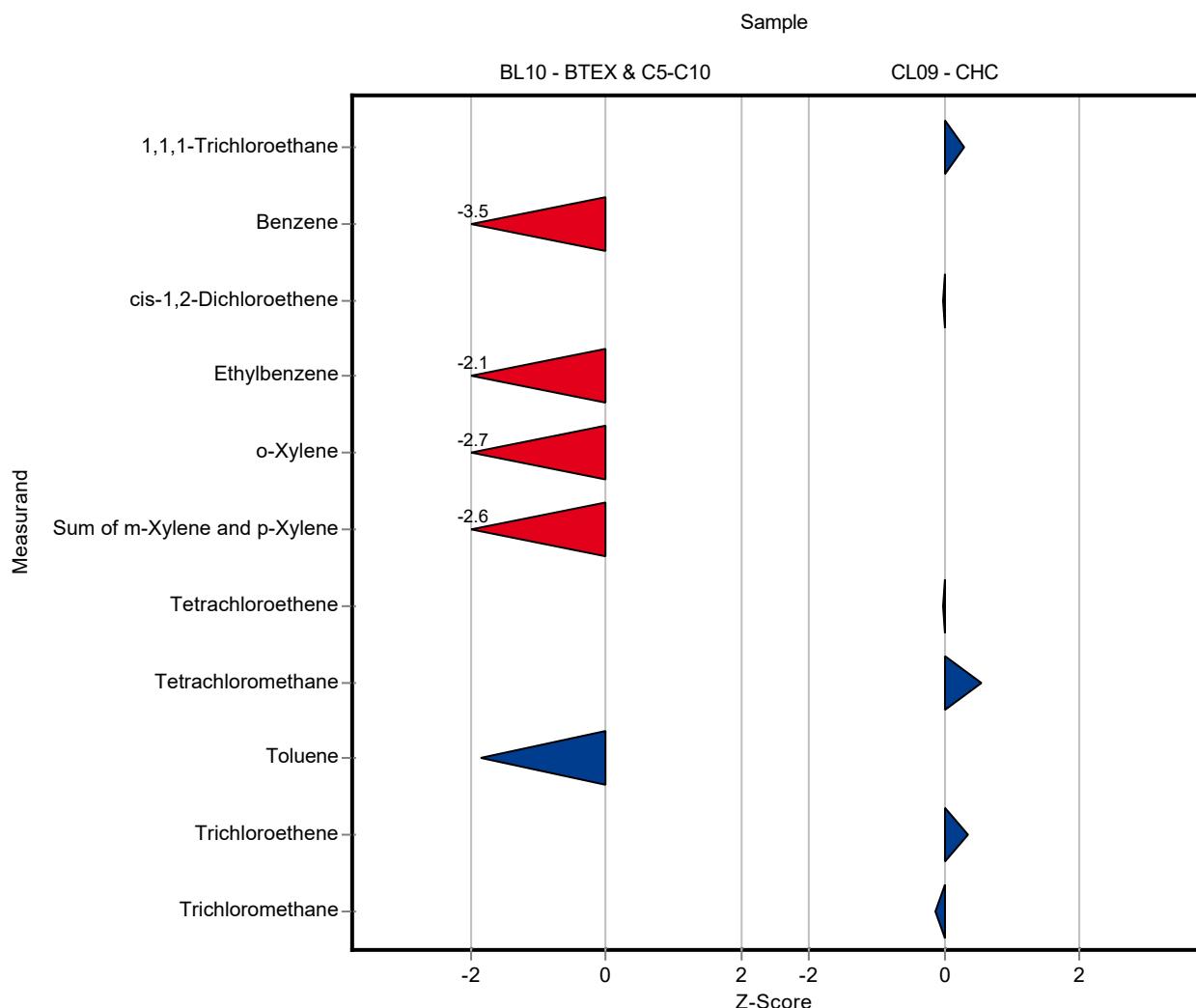


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	2.66 ± 0.53	0.829	48.2	-3.46
Ethylbenzene	µg/tube	5.71 ± 0.32	3.55 ± 0.71	1.03	62.2	-2.10
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	1.66 ± 0.33	1.28	32.5	-2.70
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	4.94 ± 0.99	2.24	46.3	-2.56
Toluene	µg/tube	5.75 ± 0.323	4.15 ± 0.83	0.862	72.2	-1.85

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.57 ± 0.71	0.708	106	0.28
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.13 ± 0.43	0.906	98.7	-0.03
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.68 ± 0.54	1.21	99.5	-0.01
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.26 ± 0.85	0.901	113	0.56
trans-1,2-Dichloroethene	µg/tube	- ± -	3.29 ± 0.66	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.85 ± 0.57	0.846	111	0.34
Trichloromethane	µg/tube	3.14 ± 0.257	3.07 ± 0.61	0.503	97.7	-0.14

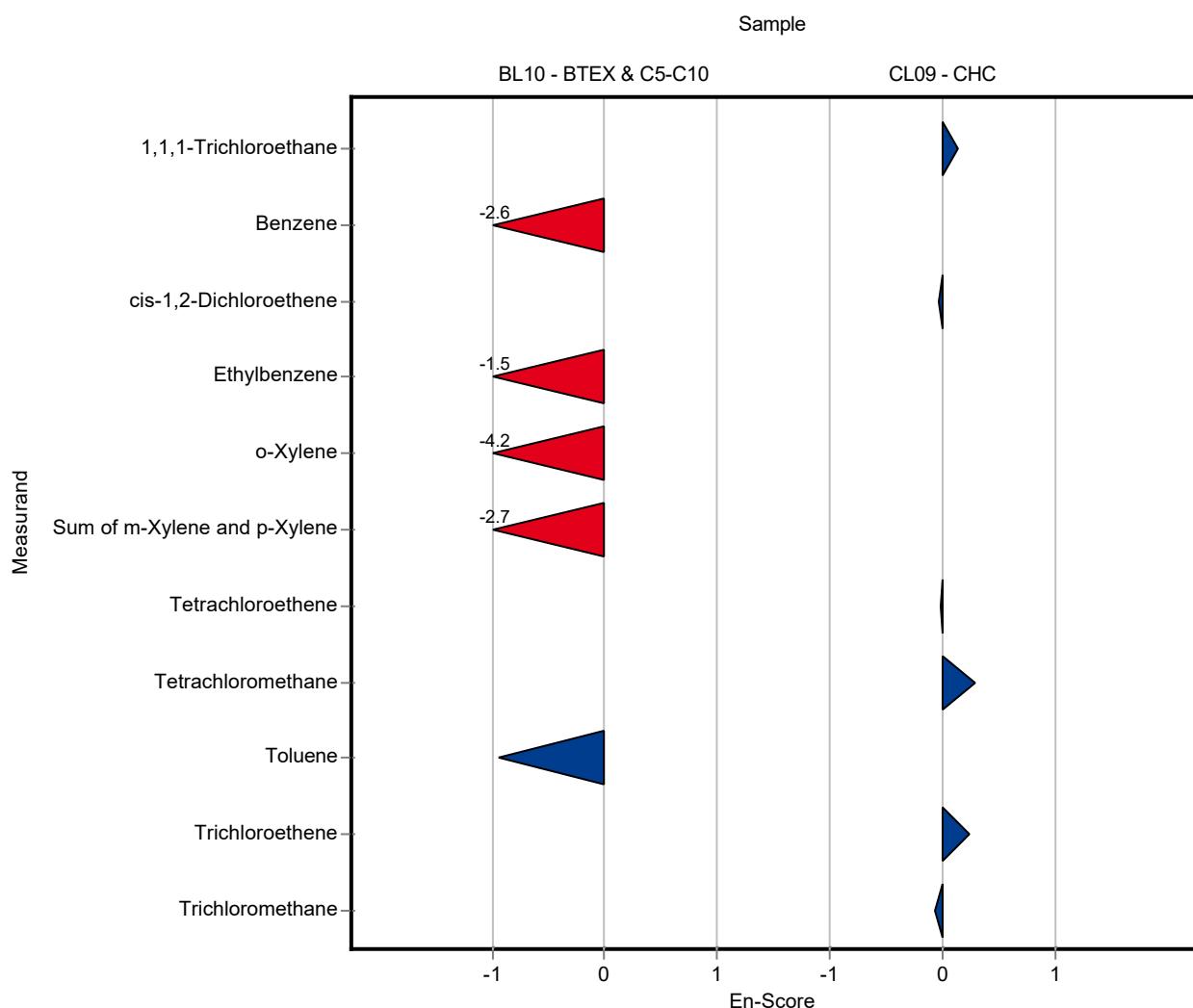


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	2.66 ± 0.53	0.829	48.2	-2.60
Ethylbenzene	µg/tube	5.71 ± 0.32	3.55 ± 0.71	1.03	62.2	-1.48
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	1.66 ± 0.33	1.28	32.5	-4.22
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	4.94 ± 0.99	2.24	46.3	-2.65
Toluene	µg/tube	5.75 ± 0.323	4.15 ± 0.83	0.862	72.2	-0.94

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.57 ± 0.71	0.708	106	0.14
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.13 ± 0.43	0.906	98.7	-0.03
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.68 ± 0.54	1.21	99.5	-0.01
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.26 ± 0.85	0.901	113	0.29
trans-1,2-Dichloroethene	µg/tube	- ± -	3.29 ± 0.66	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.85 ± 0.57	0.846	111	0.24
Trichloromethane	µg/tube	3.14 ± 0.257	3.07 ± 0.61	0.503	97.7	-0.06

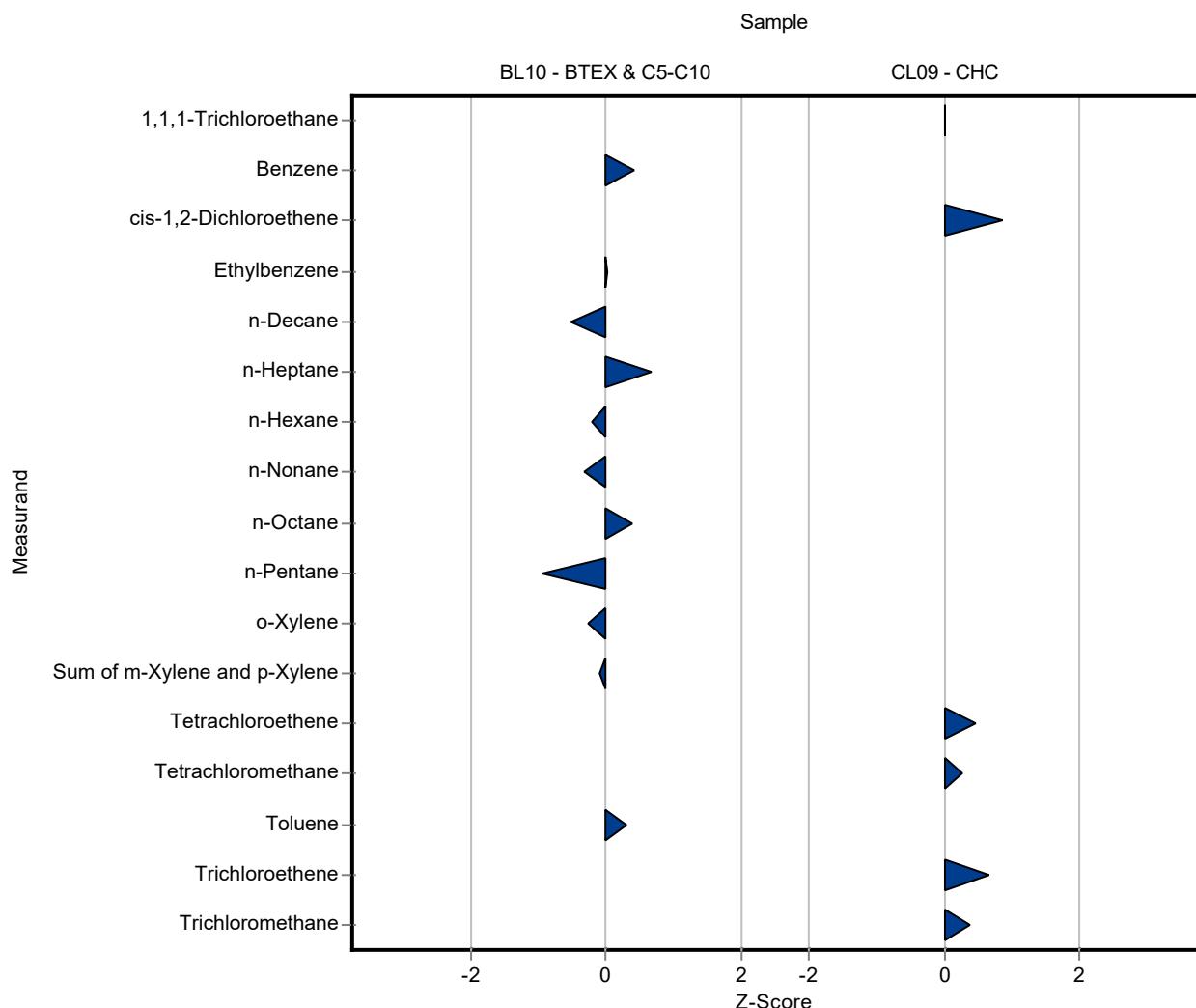


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.86 ± 0.537	0.829	106	0.41
Ethylbenzene	µg/tube	5.71 ± 0.32	5.72 ± 0.537	1.03	100	0.01
n-Decane	µg/tube	3.5 ± 0.468	2.98 ± 0.233	1.01	85.2	-0.51
n-Heptane	µg/tube	6.87 ± 0.338	7.372 ± 0.754	0.756	107	0.66
n-Hexane	µg/tube	6.79 ± 0.283	6.652 ± 0.799	0.679	98	-0.20
n-Nonane	µg/tube	5.54 ± 0.448	5.256 ± 0.367	0.886	95	-0.32
n-Octane	µg/tube	6.62 ± 0.317	6.91 ± 0.875	0.729	104	0.39
n-Pentane	µg/tube	6.29 ± 0.338	5.708 ± 0.726	0.629	90.7	-0.93
o-Xylene	µg/tube	5.11 ± 0.48	4.776 ± 0.466	1.28	93.5	-0.26
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.442 ± 0.938	2.24	97.9	-0.10
Toluene	µg/tube	5.75 ± 0.323	6.012 ± 0.605	0.862	105	0.31

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.38 ± 0.283	0.708	100	0.01
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.934 ± 0.239	0.906	136	0.86
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.26 ± 0.251	1.21	121	0.47
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.998 ± 0.331	0.901	106	0.27
trans-1,2-Dichloroethene	µg/tube	- ± -	2.864 ± 0.247	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.134 ± 0.293	0.846	122	0.67
Trichloromethane	µg/tube	3.14 ± 0.257	3.334 ± 0.311	0.503	106	0.38

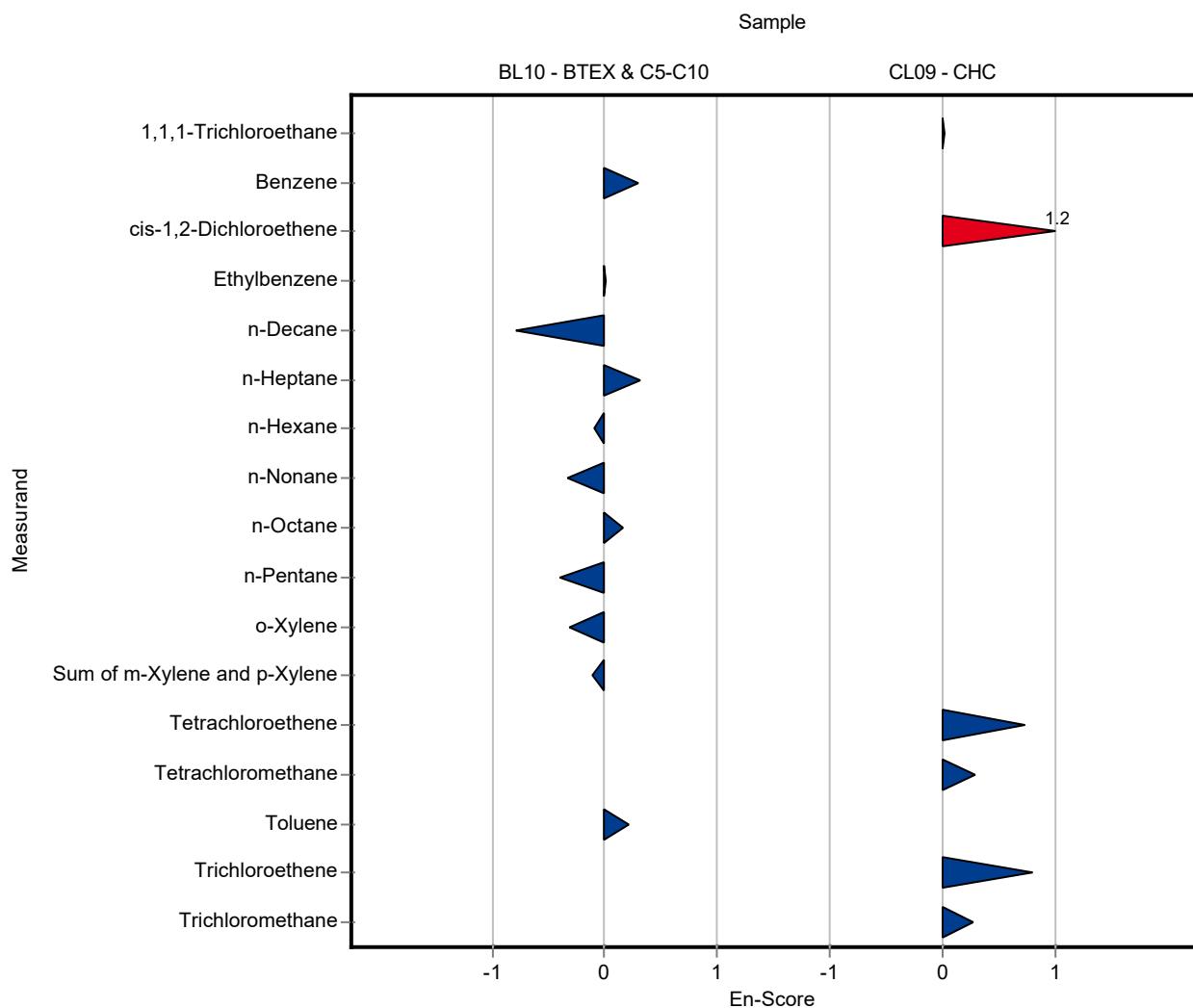


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.86 ± 0.537	0.829	106	0.30
Ethylbenzene	µg/tube	5.71 ± 0.32	5.72 ± 0.537	1.03	100	0.01
n-Decane	µg/tube	3.5 ± 0.468	2.98 ± 0.233	1.01	85.2	-0.79
n-Heptane	µg/tube	6.87 ± 0.338	7.372 ± 0.754	0.756	107	0.32
n-Hexane	µg/tube	6.79 ± 0.283	6.652 ± 0.799	0.679	98	-0.08
n-Nonane	µg/tube	5.54 ± 0.448	5.256 ± 0.367	0.886	95	-0.32
n-Octane	µg/tube	6.62 ± 0.317	6.91 ± 0.875	0.729	104	0.16
n-Pentane	µg/tube	6.29 ± 0.338	5.708 ± 0.726	0.629	90.7	-0.39
o-Xylene	µg/tube	5.11 ± 0.48	4.776 ± 0.466	1.28	93.5	-0.31
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.442 ± 0.938	2.24	97.9	-0.11
Toluene	µg/tube	5.75 ± 0.323	6.012 ± 0.605	0.862	105	0.21

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.38 ± 0.283	0.708	100	0.02
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.934 ± 0.239	0.906	136	1.24
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.26 ± 0.251	1.21	121	0.73
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.998 ± 0.331	0.901	106	0.30
trans-1,2-Dichloroethene	µg/tube	- ± -	2.864 ± 0.247	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.134 ± 0.293	0.846	122	0.80
Trichloromethane	µg/tube	3.14 ± 0.257	3.334 ± 0.311	0.503	106	0.28

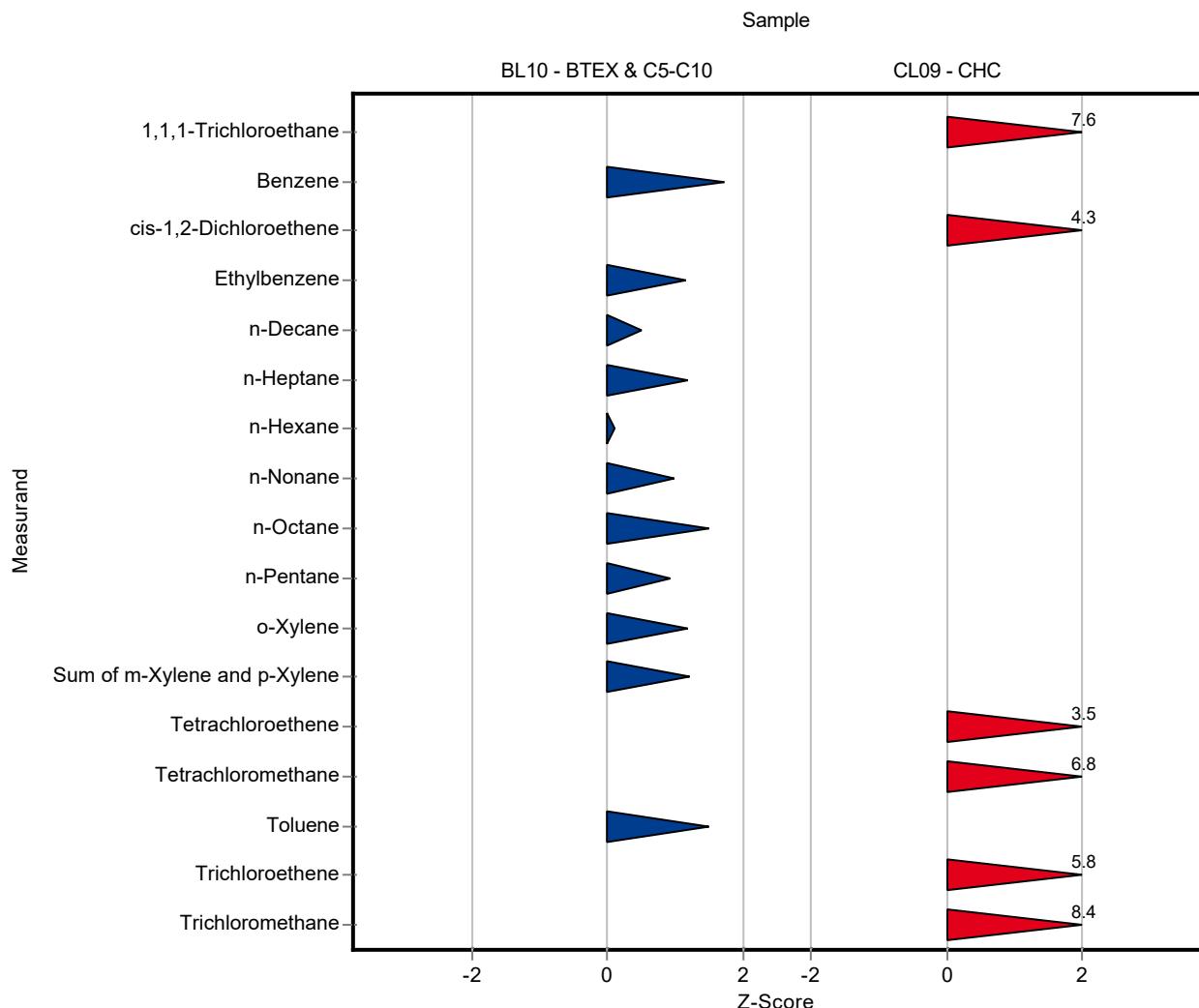


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	6.95 ± 0.758	0.829	126	1.72
Ethylbenzene	µg/tube	5.71 ± 0.32	6.9 ± 0.69	1.03	121	1.16
n-Decane	µg/tube	3.5 ± 0.468	4.02 ± 0.402	1.01	115	0.51
n-Heptane	µg/tube	6.87 ± 0.338	7.77 ± 0.777	0.756	113	1.19
n-Hexane	µg/tube	6.79 ± 0.283	6.85 ± 0.685	0.679	101	0.10
n-Nonane	µg/tube	5.54 ± 0.448	6.41 ± 0.641	0.886	116	0.99
n-Octane	µg/tube	6.62 ± 0.317	7.72 ± 0.772	0.729	117	1.50
n-Pentane	µg/tube	6.29 ± 0.338	6.88 ± 0.688	0.629	109	0.93
o-Xylene	µg/tube	5.11 ± 0.48	6.63 ± 0.663	1.28	130	1.19
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	13.4 ± 1.34	2.24	126	1.22
Toluene	µg/tube	5.75 ± 0.323	7.04 ± 0.715	0.862	123	1.50

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	8.78 ± 0.878	0.708	261	7.64
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	6.02 ± 0.602	0.906	279	4.26
Tetrachloroethene	µg/tube	2.69 ± 0.588	6.93 ± 0.693	1.21	257	3.50
Tetrachloromethane	µg/tube	3.75 ± 0.464	9.92 ± 1.21	0.901	264	6.84
trans-1,2-Dichloroethene	µg/tube	- ± -	6.41 ± 0.641	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	7.44 ± 0.744	0.846	290	5.76
Trichloromethane	µg/tube	3.14 ± 0.257	7.35 ± 0.735	0.503	234	8.37

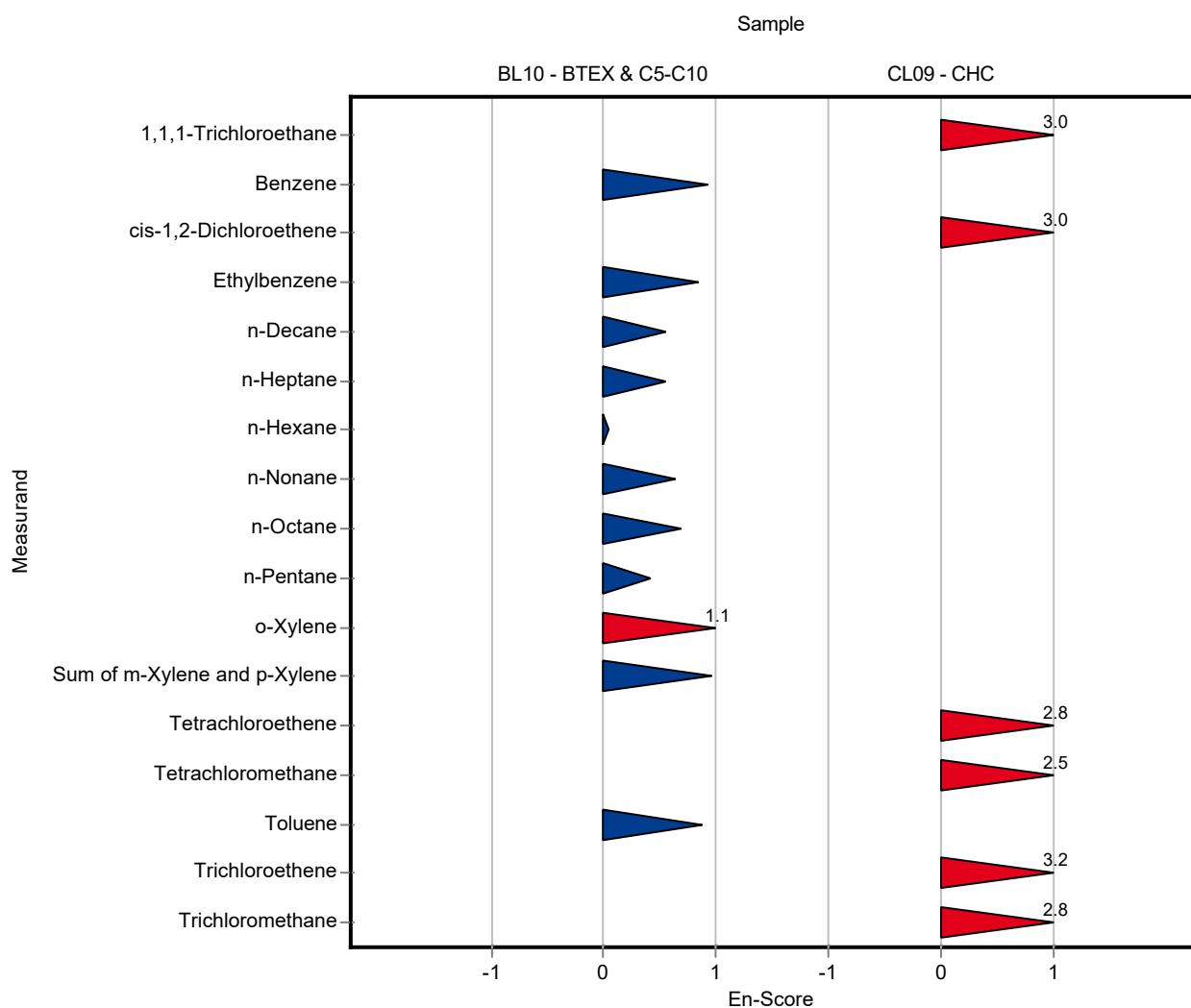


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	6.95 ± 0.758	0.829	126	0.92
Ethylbenzene	µg/tube	5.71 ± 0.32	6.9 ± 0.69	1.03	121	0.84
n-Decane	µg/tube	3.5 ± 0.468	4.02 ± 0.402	1.01	115	0.56
n-Heptane	µg/tube	6.87 ± 0.338	7.77 ± 0.777	0.756	113	0.56
n-Hexane	µg/tube	6.79 ± 0.283	6.85 ± 0.685	0.679	101	0.05
n-Nonane	µg/tube	5.54 ± 0.448	6.41 ± 0.641	0.886	116	0.64
n-Octane	µg/tube	6.62 ± 0.317	7.72 ± 0.772	0.729	117	0.70
n-Pentane	µg/tube	6.29 ± 0.338	6.88 ± 0.688	0.629	109	0.41
o-Xylene	µg/tube	5.11 ± 0.48	6.63 ± 0.663	1.28	130	1.08
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	13.4 ± 1.34	2.24	126	0.97
Toluene	µg/tube	5.75 ± 0.323	7.04 ± 0.715	0.862	123	0.88

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	8.78 ± 0.878	0.708	261	3.02
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	6.02 ± 0.602	0.906	279	3.04
Tetrachloroethene	µg/tube	2.69 ± 0.588	6.93 ± 0.693	1.21	257	2.81
Tetrachloromethane	µg/tube	3.75 ± 0.464	9.92 ± 1.21	0.901	264	2.50
trans-1,2-Dichloroethene	µg/tube	- ± -	6.41 ± 0.641	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	7.44 ± 0.744	0.846	290	3.16
Trichloromethane	µg/tube	3.14 ± 0.257	7.35 ± 0.735	0.503	234	2.82

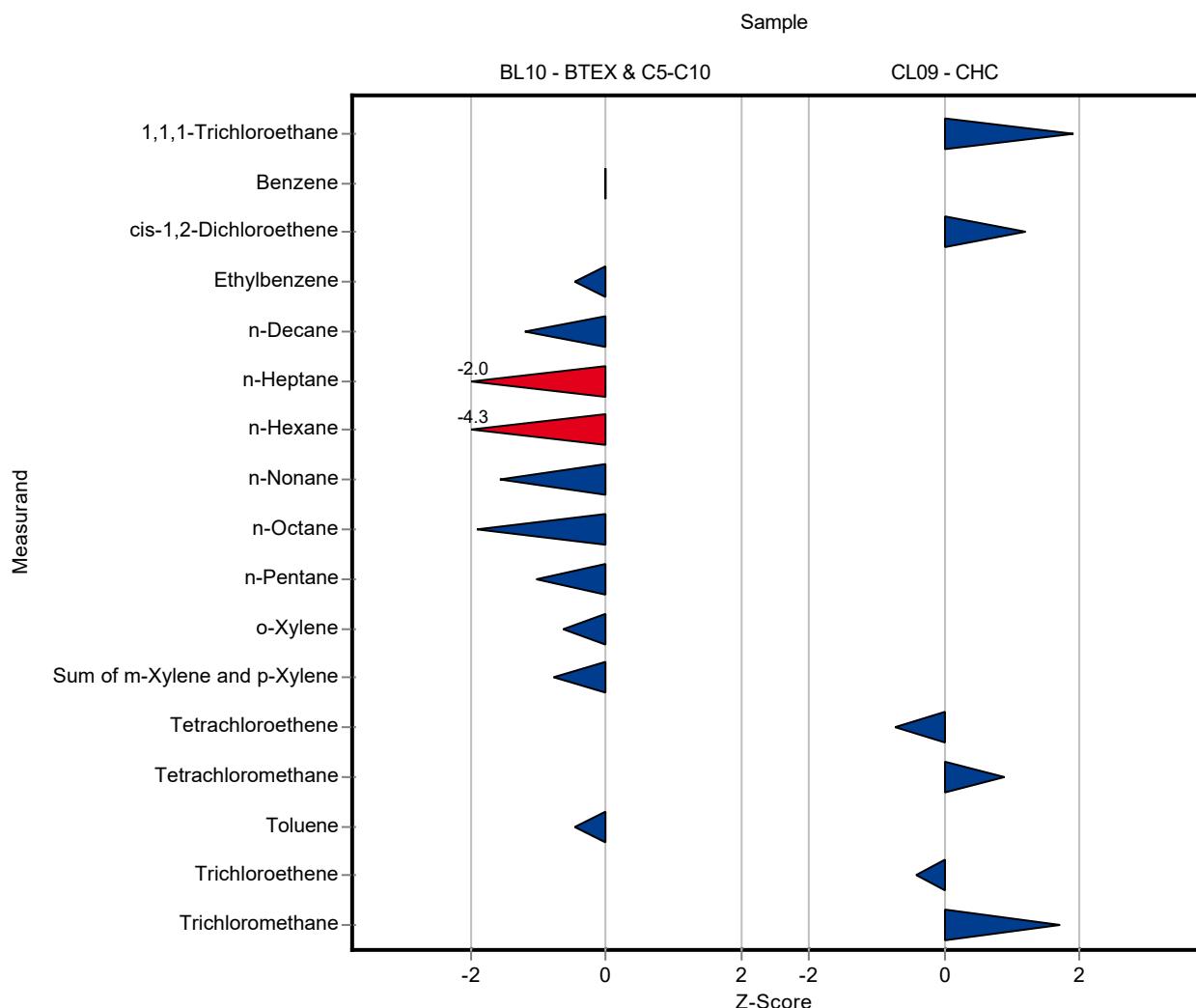


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.51 ± 0.42	0.829	99.8	-0.02
Ethylbenzene	µg/tube	5.71 ± 0.32	5.23 ± 0.53	1.03	91.6	-0.46
n-Decane	µg/tube	3.5 ± 0.468	2.28 ± 0.24	1.01	65.2	-1.20
n-Heptane	µg/tube	6.87 ± 0.338	5.34 ± 0.55	0.756	77.7	-2.03
n-Hexane	µg/tube	6.79 ± 0.283	3.87 ± 0.4	0.679	57	-4.30
n-Nonane	µg/tube	5.54 ± 0.448	4.14 ± 0.44	0.886	74.8	-1.58
n-Octane	µg/tube	6.62 ± 0.317	5.24 ± 0.55	0.729	79.1	-1.90
n-Pentane	µg/tube	6.29 ± 0.338	5.65 ± 0.58	0.629	89.8	-1.02
o-Xylene	µg/tube	5.11 ± 0.48	4.3 ± 0.45	1.28	84.2	-0.63
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.96 ± 0.9	2.24	84	-0.76
Toluene	µg/tube	5.75 ± 0.323	5.34 ± 0.54	0.862	92.9	-0.47

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	4.71 ± 0.48	0.708	140	1.89
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	3.24 ± 0.33	0.906	150	1.20
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.82 ± 0.2	1.21	67.6	-0.72
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.55 ± 0.45	0.901	121	0.88
trans-1,2-Dichloroethene	µg/tube	- ± -	3.53 ± 0.35	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.22 ± 0.23	0.846	86.6	-0.41
Trichloromethane	µg/tube	3.14 ± 0.257	4 ± 0.41	0.503	127	1.70

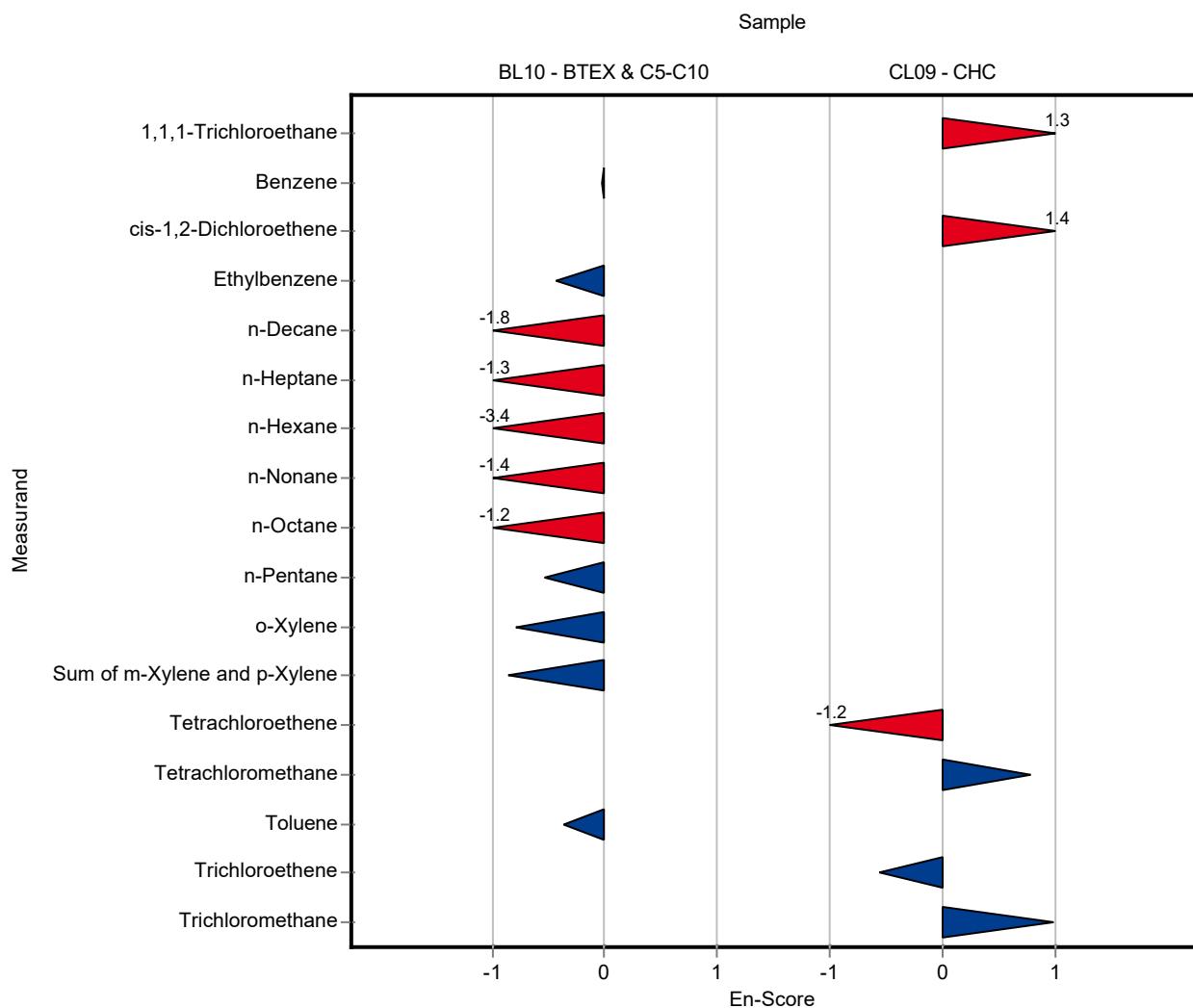


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.51 ± 0.42	0.829	99.8	-0.02
Ethylbenzene	µg/tube	5.71 ± 0.32	5.23 ± 0.53	1.03	91.6	-0.43
n-Decane	µg/tube	3.5 ± 0.468	2.28 ± 0.24	1.01	65.2	-1.82
n-Heptane	µg/tube	6.87 ± 0.338	5.34 ± 0.55	0.756	77.7	-1.33
n-Hexane	µg/tube	6.79 ± 0.283	3.87 ± 0.4	0.679	57	-3.44
n-Nonane	µg/tube	5.54 ± 0.448	4.14 ± 0.44	0.886	74.8	-1.41
n-Octane	µg/tube	6.62 ± 0.317	5.24 ± 0.55	0.729	79.1	-1.21
n-Pentane	µg/tube	6.29 ± 0.338	5.65 ± 0.58	0.629	89.8	-0.53
o-Xylene	µg/tube	5.11 ± 0.48	4.3 ± 0.45	1.28	84.2	-0.79
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.96 ± 0.9	2.24	84	-0.85
Toluene	µg/tube	5.75 ± 0.323	5.34 ± 0.54	0.862	92.9	-0.36

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	4.71 ± 0.48	0.708	140	1.31
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	3.24 ± 0.33	0.906	150	1.39
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.82 ± 0.2	1.21	67.6	-1.23
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.55 ± 0.45	0.901	121	0.79
trans-1,2-Dichloroethene	µg/tube	- ± -	3.53 ± 0.35	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.22 ± 0.23	0.846	86.6	-0.56
Trichloromethane	µg/tube	3.14 ± 0.257	4 ± 0.41	0.503	127	1.00

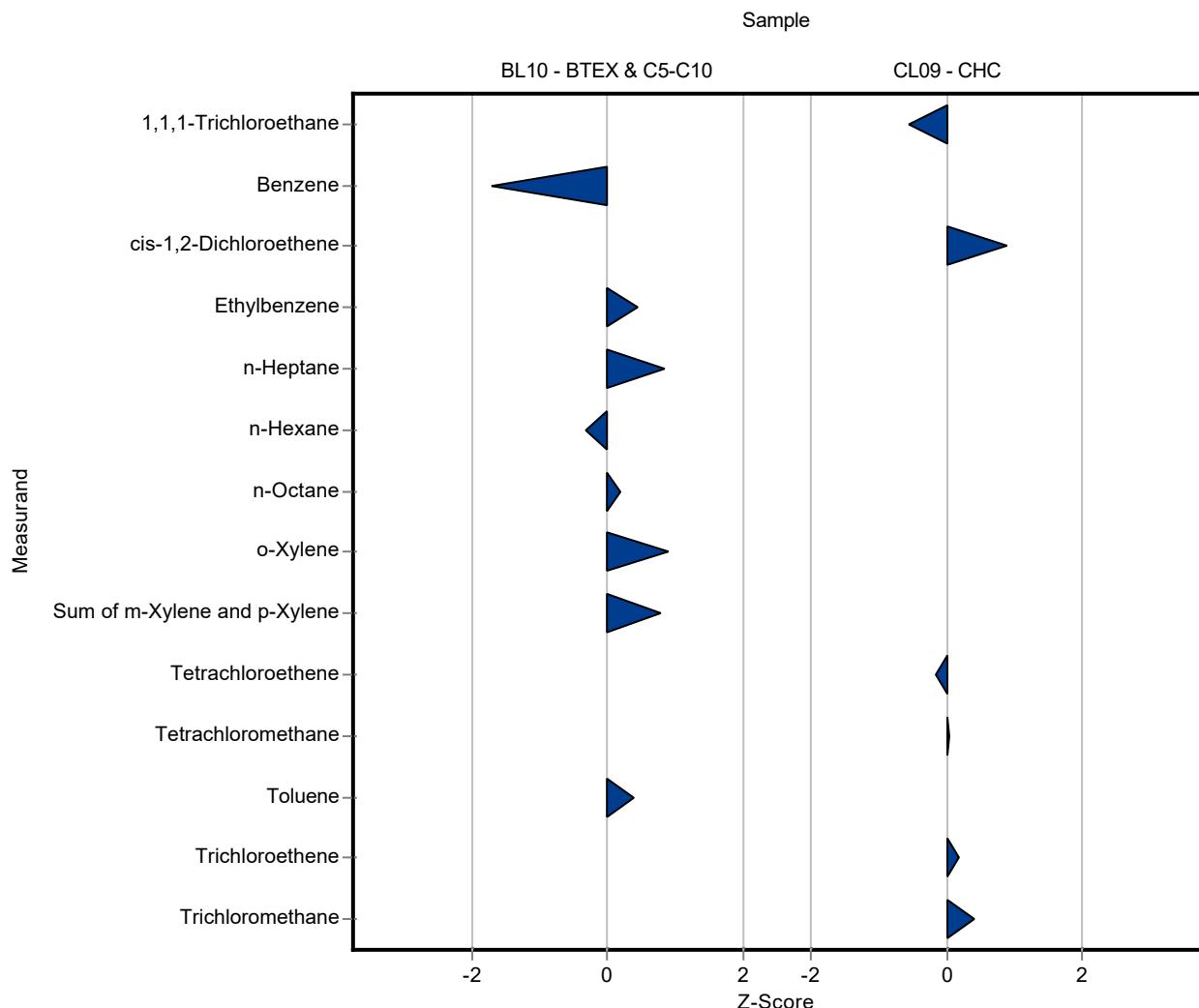


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	4.1 ± 0.62	0.829	74.2	-1.72
Ethylbenzene	µg/tube	5.71 ± 0.32	6.17 ± 0.8	1.03	108	0.45
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	7.52 ± 1.13	0.756	109	0.86
n-Hexane	µg/tube	6.79 ± 0.283	6.56 ± 0.98	0.679	96.7	-0.33
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	6.77 ± 1.02	0.729	102	0.20
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.26 ± 0.63	1.28	123	0.90
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.4 ± 1.24	2.24	116	0.78
Toluene	µg/tube	5.75 ± 0.323	6.08 ± 0.79	0.862	106	0.39

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.97 ± 0.24	0.708	88.1	-0.57
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.96 ± 0.24	0.906	137	0.89
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.49 ± 0.32	1.21	92.5	-0.17
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.79 ± 0.3	0.901	101	0.04
trans-1,2-Dichloroethene	µg/tube	- ± -	2.79 ± 0.28	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.71 ± 0.41	0.846	106	0.17
Trichloromethane	µg/tube	3.14 ± 0.257	3.34 ± 0.33	0.503	106	0.39

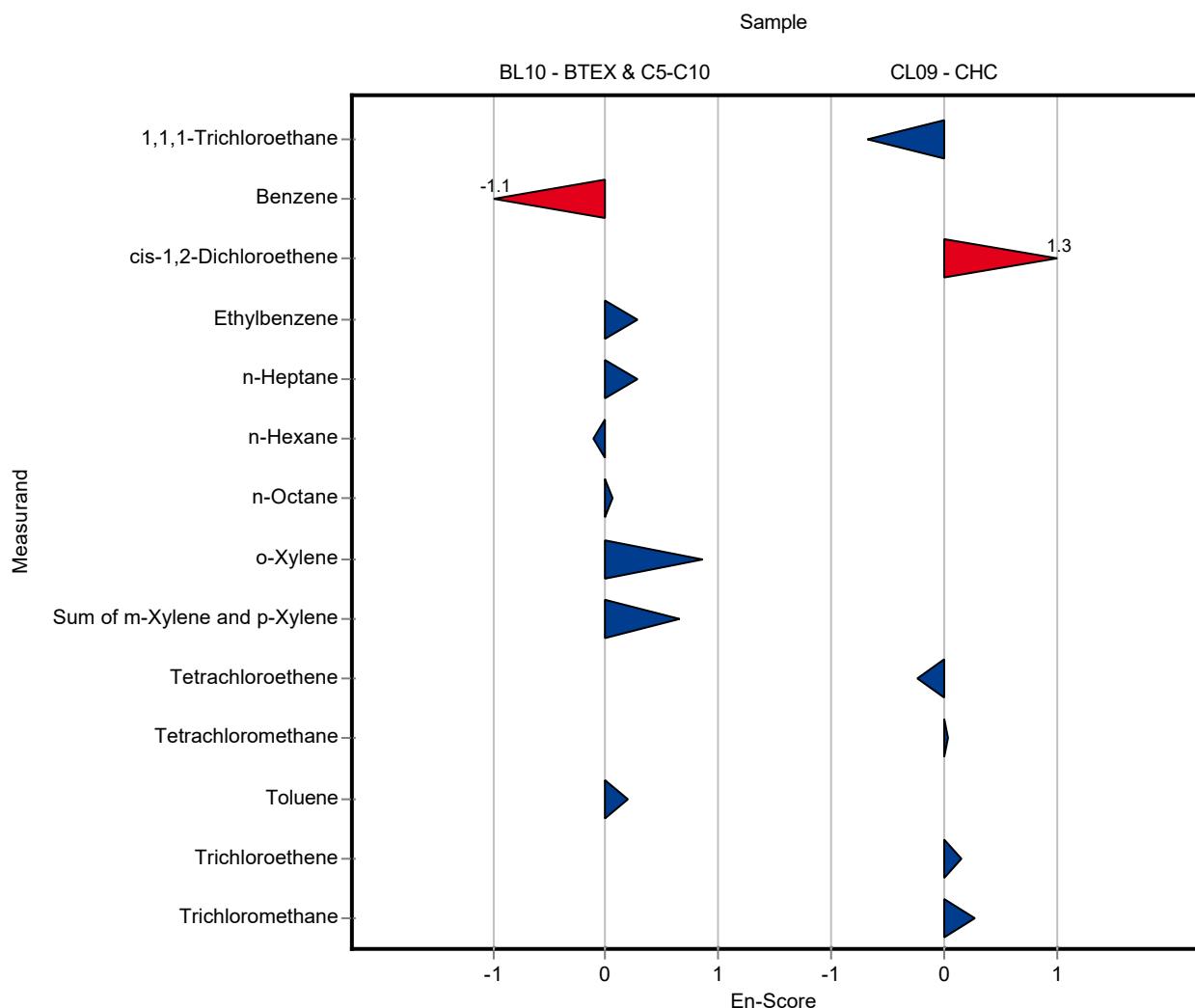


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	4.1 ± 0.62	0.829	74.2	-1.12
Ethylbenzene	µg/tube	5.71 ± 0.32	6.17 ± 0.8	1.03	108	0.28
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	7.52 ± 1.13	0.756	109	0.28
n-Hexane	µg/tube	6.79 ± 0.283	6.56 ± 0.98	0.679	96.7	-0.11
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	6.77 ± 1.02	0.729	102	0.07
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.26 ± 0.63	1.28	123	0.86
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.4 ± 1.24	2.24	116	0.66
Toluene	µg/tube	5.75 ± 0.323	6.08 ± 0.79	0.862	106	0.21

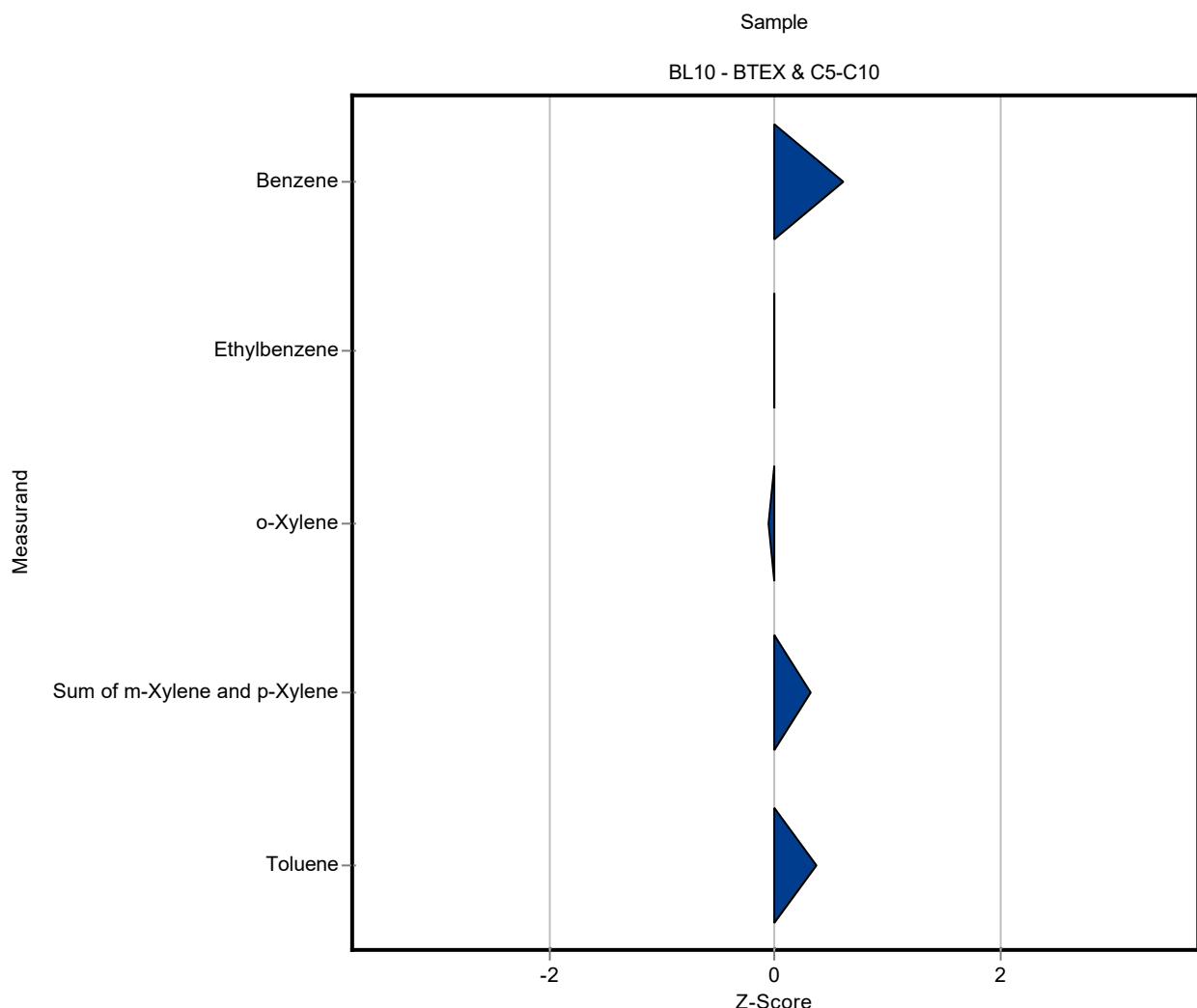
Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.97 ± 0.24	0.708	88.1	-0.68
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.96 ± 0.24	0.906	137	1.27
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.49 ± 0.32	1.21	92.5	-0.23
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.79 ± 0.3	0.901	101	0.05
trans-1,2-Dichloroethene	µg/tube	- ± -	2.79 ± 0.28	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.71 ± 0.41	0.846	106	0.16
Trichloromethane	µg/tube	3.14 ± 0.257	3.34 ± 0.33	0.503	106	0.28



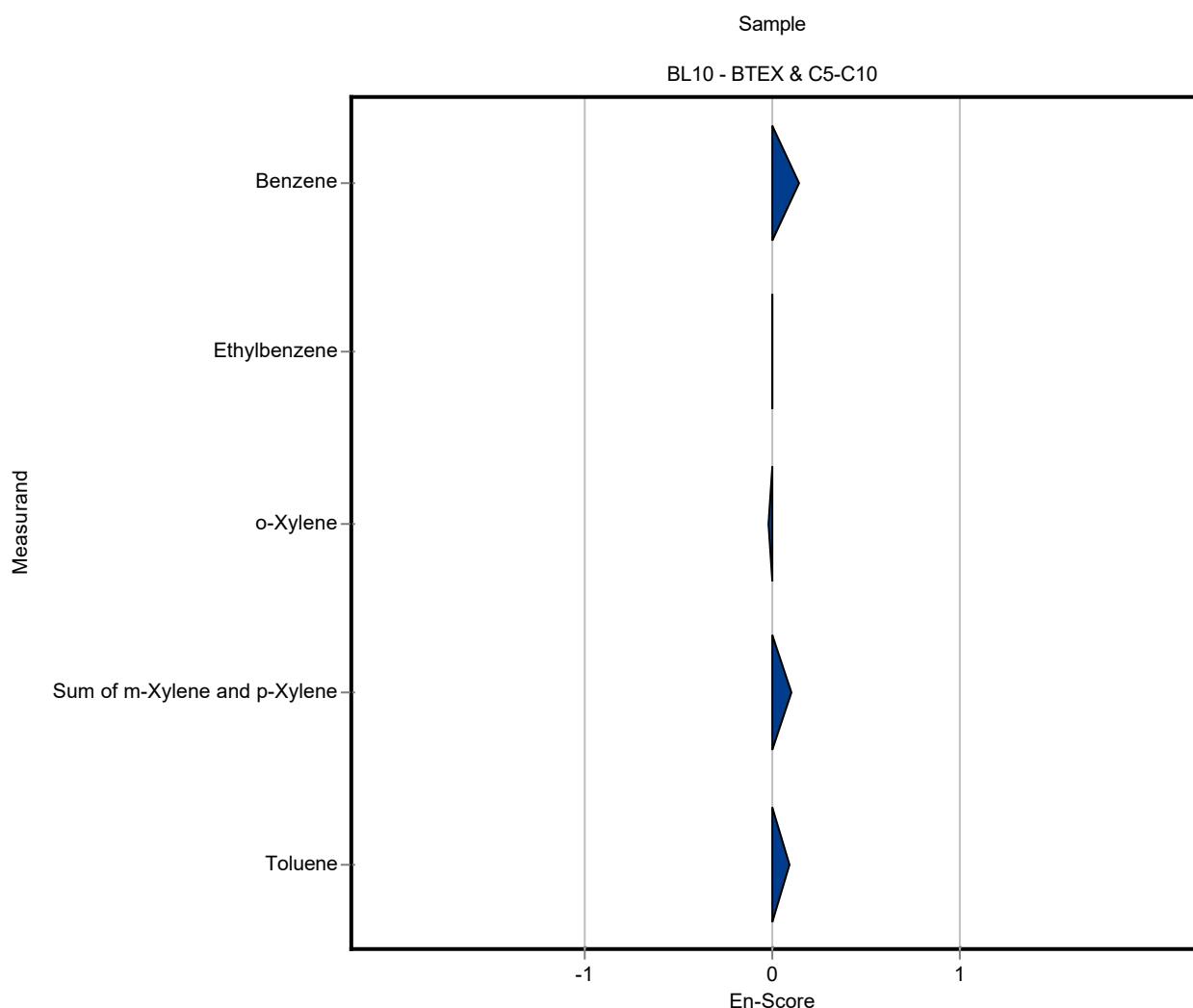
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	6.03 ± 1.81	0.829	109	0.61
Ethylbenzene	µg/tube	5.71 ± 0.32	5.7 ± 1.71	1.03	99.9	-0.01
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.02 ± 1.51	1.28	98.3	-0.07
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.35 ± 3.41	2.24	106	0.31
Toluene	µg/tube	5.75 ± 0.323	6.06 ± 1.82	0.862	105	0.36



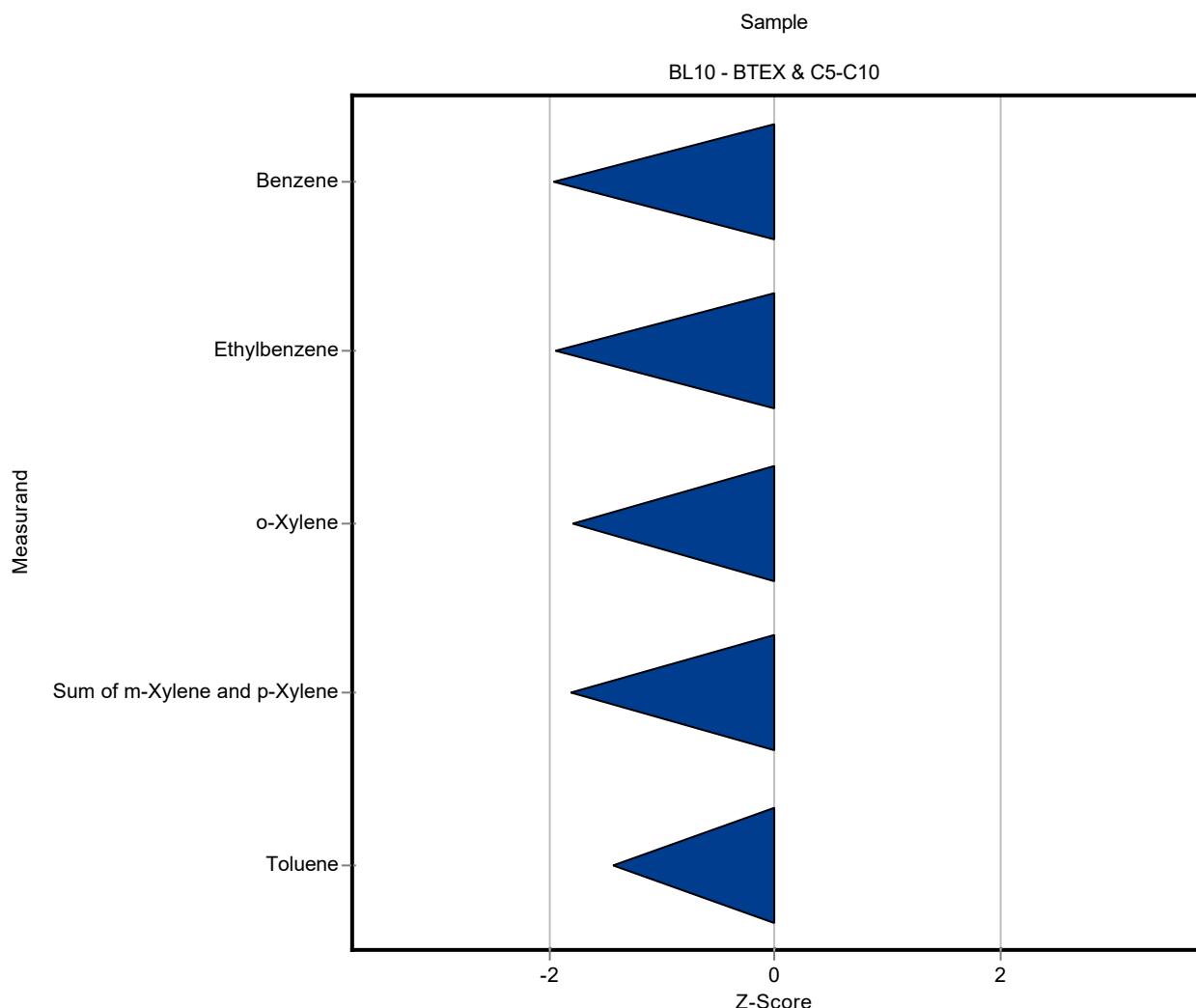
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	6.03 ± 1.81	0.829	109	0.14
Ethylbenzene	µg/tube	5.71 ± 0.32	5.7 ± 1.71	1.03	99.9	0.00
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.02 ± 1.51	1.28	98.3	-0.03
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.35 ± 3.41	2.24	106	0.10
Toluene	µg/tube	5.75 ± 0.323	6.06 ± 1.82	0.862	105	0.09



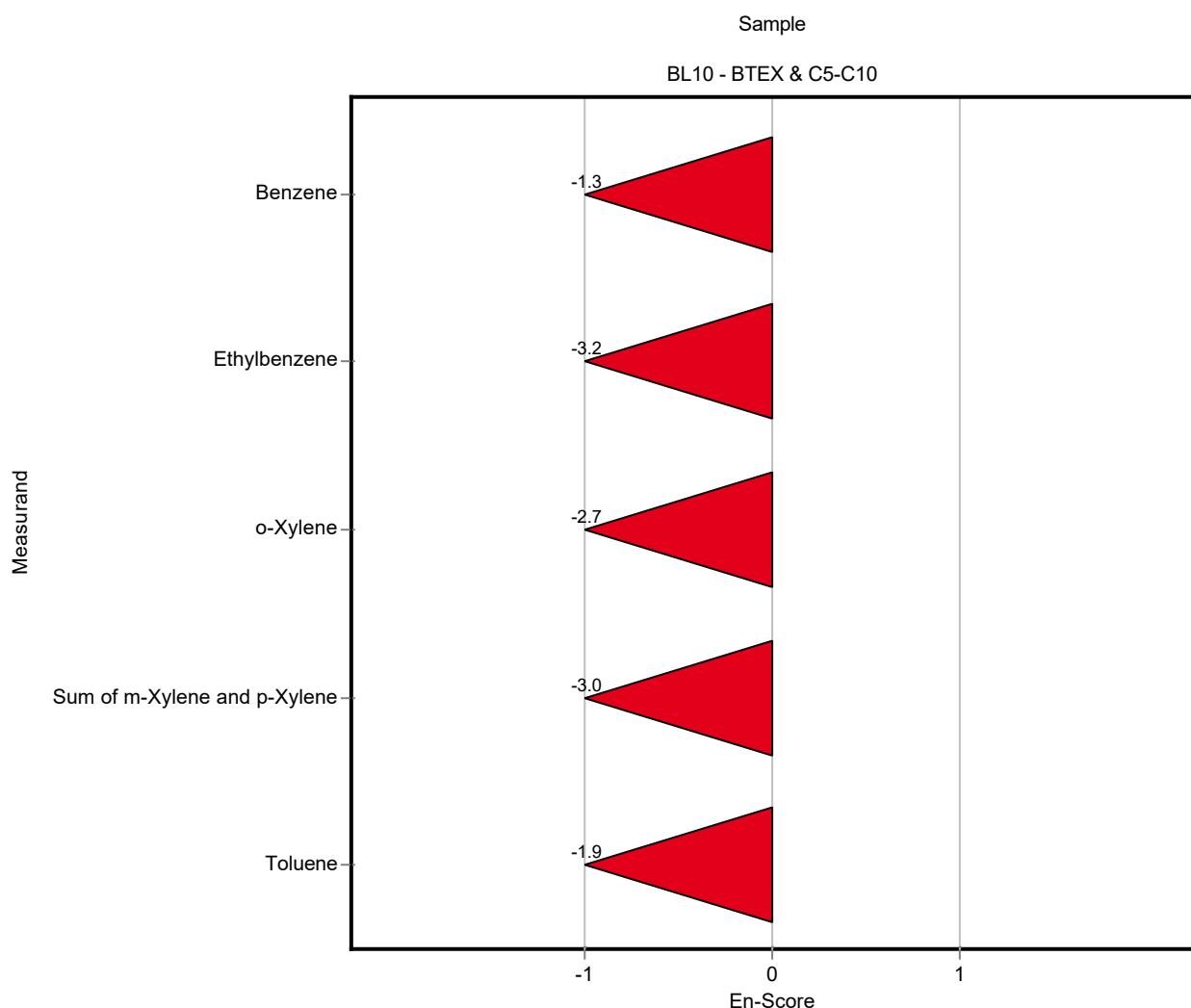
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	3.895 ± 0.619	0.829	70.5	-1.97
Ethylbenzene	µg/tube	5.71 ± 0.32	3.706 ± 0.267	1.03	64.9	-1.95
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	2.824 ± 0.339	1.28	55.3	-1.79
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	6.607 ± 0.533	2.24	62	-1.81
Toluene	µg/tube	5.75 ± 0.323	4.507 ± 0.292	0.862	78.4	-1.44



Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	3.895 ± 0.619	0.829	70.5	-1.28
Ethylbenzene	µg/tube	5.71 ± 0.32	3.706 ± 0.267	1.03	64.9	-3.22
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	2.824 ± 0.339	1.28	55.3	-2.75
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	6.607 ± 0.533	2.24	62	-2.96
Toluene	µg/tube	5.75 ± 0.323	4.507 ± 0.292	0.862	78.4	-1.86

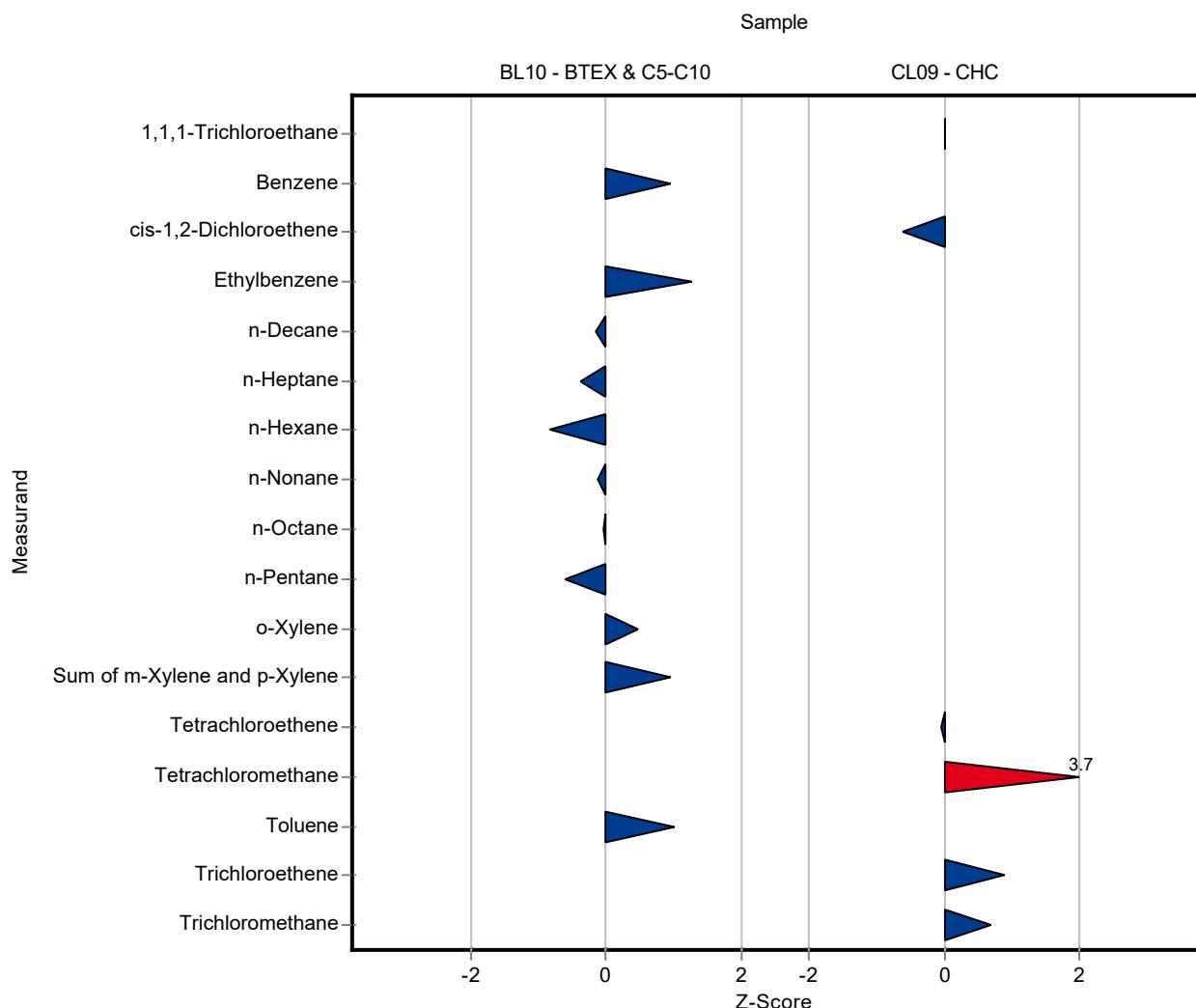


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	6.32 ± 0.31	0.829	114	0.96
Ethylbenzene	µg/tube	5.71 ± 0.32	7.02 ± 0.3	1.03	123	1.28
n-Decane	µg/tube	3.5 ± 0.468	3.36 ± 0.16	1.01	96	-0.14
n-Heptane	µg/tube	6.87 ± 0.338	6.58 ± 0.31	0.756	95.7	-0.39
n-Hexane	µg/tube	6.79 ± 0.283	6.22 ± 0.29	0.679	91.7	-0.83
n-Nonane	µg/tube	5.54 ± 0.448	5.42 ± 0.25	0.886	97.9	-0.13
n-Octane	µg/tube	6.62 ± 0.317	6.6 ± 0.31	0.729	99.6	-0.03
n-Pentane	µg/tube	6.29 ± 0.338	5.91 ± 0.28	0.629	93.9	-0.61
o-Xylene	µg/tube	5.11 ± 0.48	5.7 ± 0.25	1.28	112	0.47
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.78 ± 0.66	2.24	120	0.95
Toluene	µg/tube	5.75 ± 0.323	6.62 ± 0.29	0.862	115	1.01

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.38 ± 0.33	0.708	100	0.01
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.59 ± 0.16	0.906	73.7	-0.63
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.63 ± 0.36	1.21	97.7	-0.05
Tetrachloromethane	µg/tube	3.75 ± 0.464	7.11 ± 0.69	0.901	189	3.72
trans-1,2-Dichloroethene	µg/tube	- ± -	0.839 ± 0.082	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.32 ± 0.23	0.846	130	0.89
Trichloromethane	µg/tube	3.14 ± 0.257	3.49 ± 0.3	0.503	111	0.69

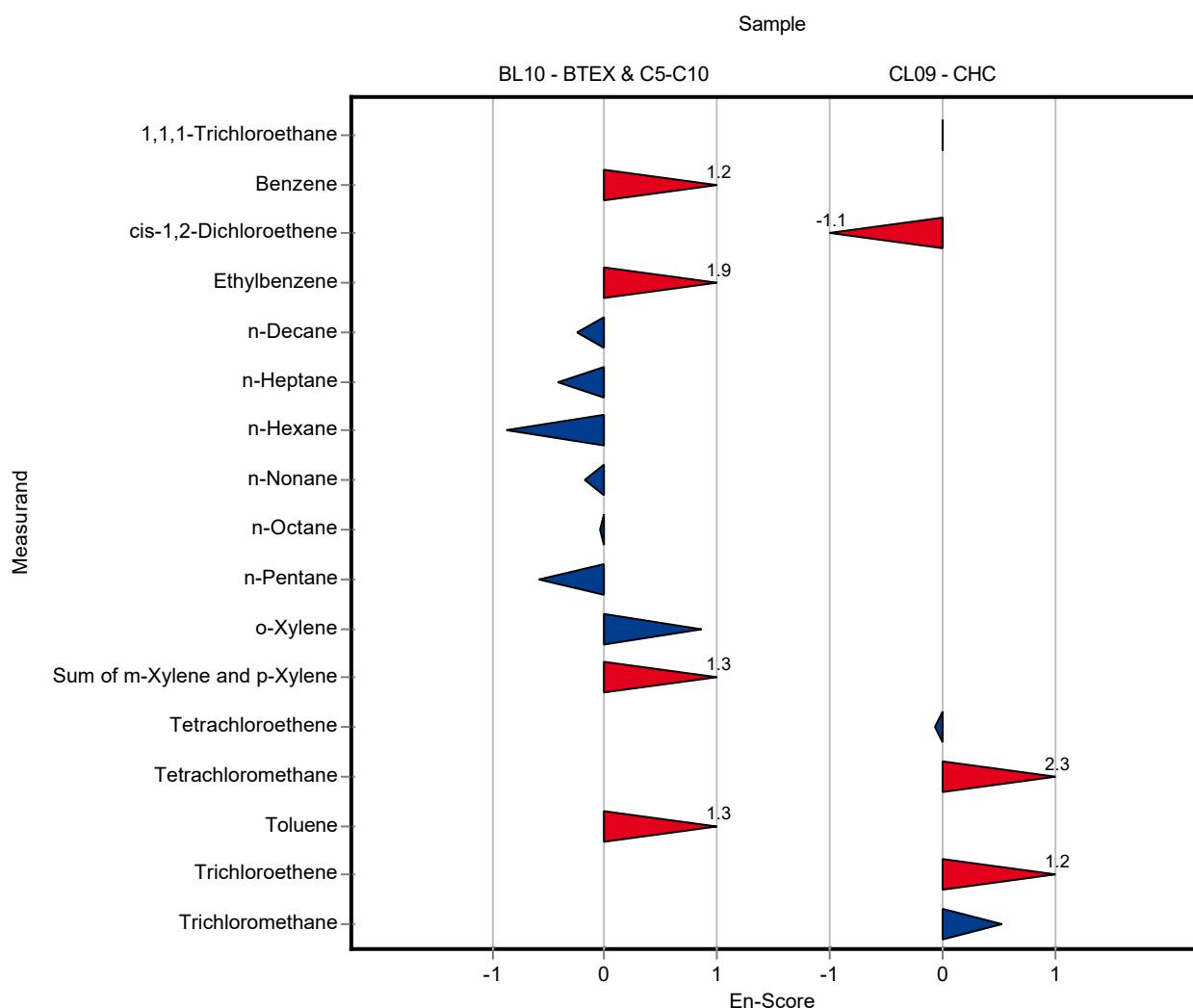


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	6.32 ± 0.31	0.829	114	1.16
Ethylbenzene	µg/tube	5.71 ± 0.32	7.02 ± 0.3	1.03	123	1.93
n-Decane	µg/tube	3.5 ± 0.468	3.36 ± 0.16	1.01	96	-0.24
n-Heptane	µg/tube	6.87 ± 0.338	6.58 ± 0.31	0.756	95.7	-0.42
n-Hexane	µg/tube	6.79 ± 0.283	6.22 ± 0.29	0.679	91.7	-0.88
n-Nonane	µg/tube	5.54 ± 0.448	5.42 ± 0.25	0.886	97.9	-0.17
n-Octane	µg/tube	6.62 ± 0.317	6.6 ± 0.31	0.729	99.6	-0.03
n-Pentane	µg/tube	6.29 ± 0.338	5.91 ± 0.28	0.629	93.9	-0.59
o-Xylene	µg/tube	5.11 ± 0.48	5.7 ± 0.25	1.28	112	0.86
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.78 ± 0.66	2.24	120	1.34
Toluene	µg/tube	5.75 ± 0.323	6.62 ± 0.29	0.862	115	1.32

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.38 ± 0.33	0.708	100	0.01
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.59 ± 0.16	0.906	73.7	-1.09
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.63 ± 0.36	1.21	97.7	-0.07
Tetrachloromethane	µg/tube	3.75 ± 0.464	7.11 ± 0.69	0.901	189	2.30
trans-1,2-Dichloroethene	µg/tube	- ± -	0.839 ± 0.082	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.32 ± 0.23	0.846	130	1.23
Trichloromethane	µg/tube	3.14 ± 0.257	3.49 ± 0.3	0.503	111	0.53

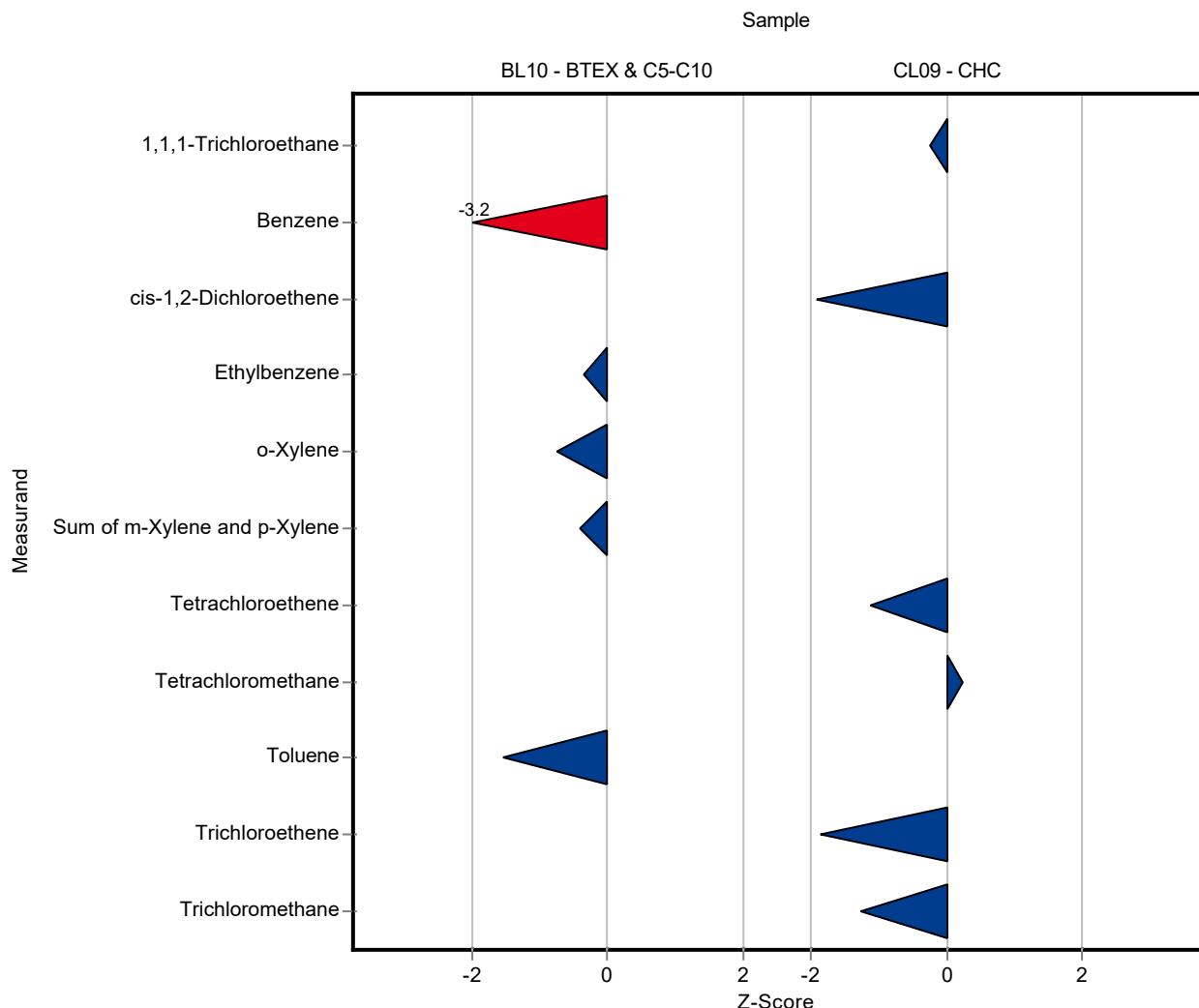


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	2.901 ± 0.93	0.829	52.5	-3.17
Ethylbenzene	µg/tube	5.71 ± 0.32	5.356 ± 1.71	1.03	93.8	-0.34
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	4.141 ± 1.33	1.28	81.1	-0.76
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	9.765 ± 3.13	2.24	91.6	-0.40
Toluene	µg/tube	5.75 ± 0.323	4.41 ± 1.41	0.862	76.7	-1.55

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.197 ± 1.44	0.708	94.9	-0.24
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.428 ± 0.19	0.906	19.8	-1.91
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.312 ± 0.59	1.21	48.7	-1.14
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.978 ± 1.79	0.901	106	0.25
trans-1,2-Dichloroethene	µg/tube	- ± -	0.136 ± 0.061	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	0.995 ± 0.44	0.846	38.8	-1.85
Trichloromethane	µg/tube	3.14 ± 0.257	2.507 ± 1.12	0.503	79.8	-1.26

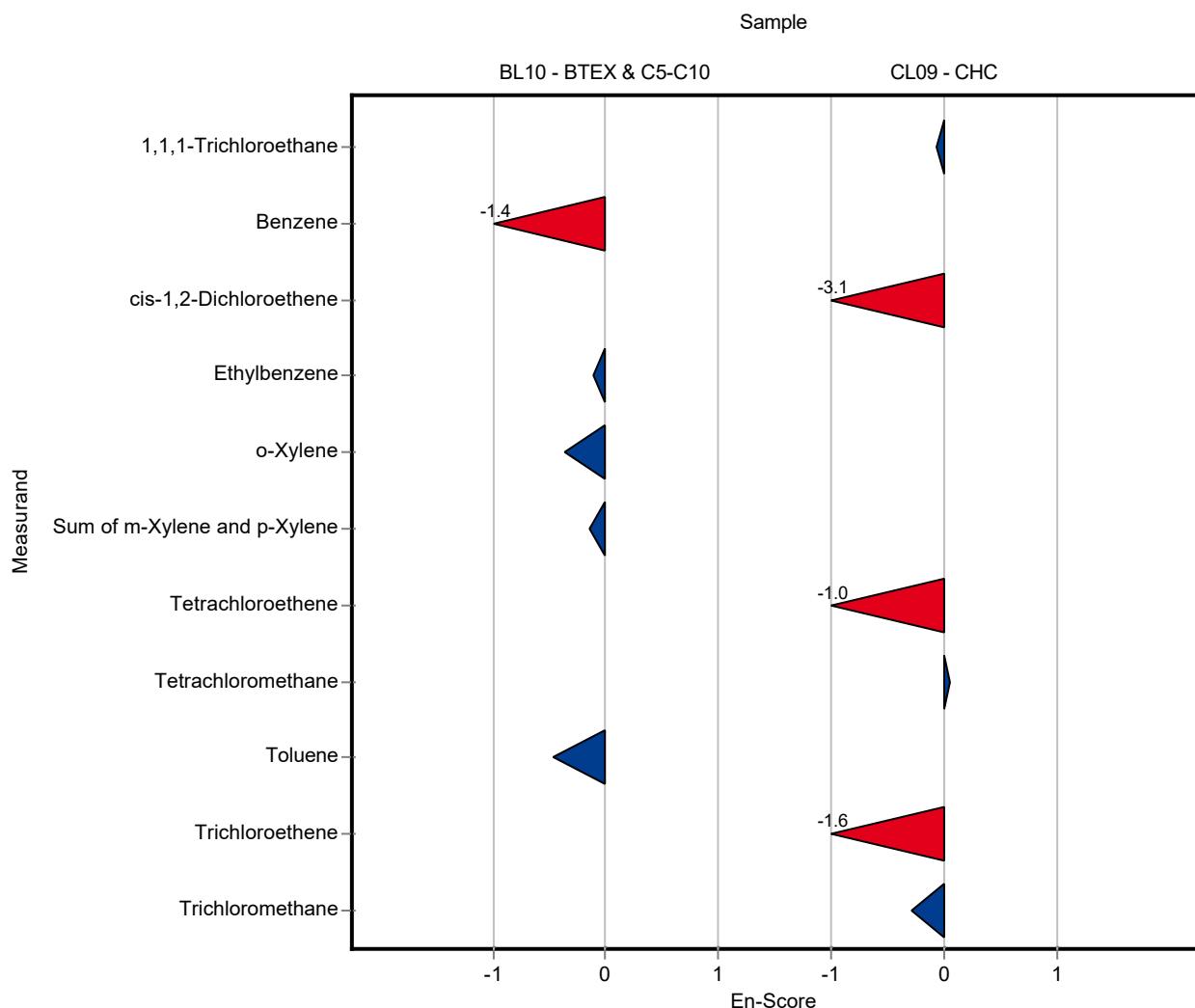


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	2.901 ± 0.93	0.829	52.5	-1.39
Ethylbenzene	µg/tube	5.71 ± 0.32	5.356 ± 1.71	1.03	93.8	-0.10
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	4.141 ± 1.33	1.28	81.1	-0.36
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	9.765 ± 3.13	2.24	91.6	-0.14
Toluene	µg/tube	5.75 ± 0.323	4.41 ± 1.41	0.862	76.7	-0.47

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.197 ± 1.44	0.708	94.9	-0.06
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.428 ± 0.19	0.906	19.8	-3.10
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.312 ± 0.59	1.21	48.7	-1.05
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.978 ± 1.79	0.901	106	0.06
trans-1,2-Dichloroethene	µg/tube	- ± -	0.136 ± 0.061	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	0.995 ± 0.44	0.846	38.8	-1.62
Trichloromethane	µg/tube	3.14 ± 0.257	2.507 ± 1.12	0.503	79.8	-0.28

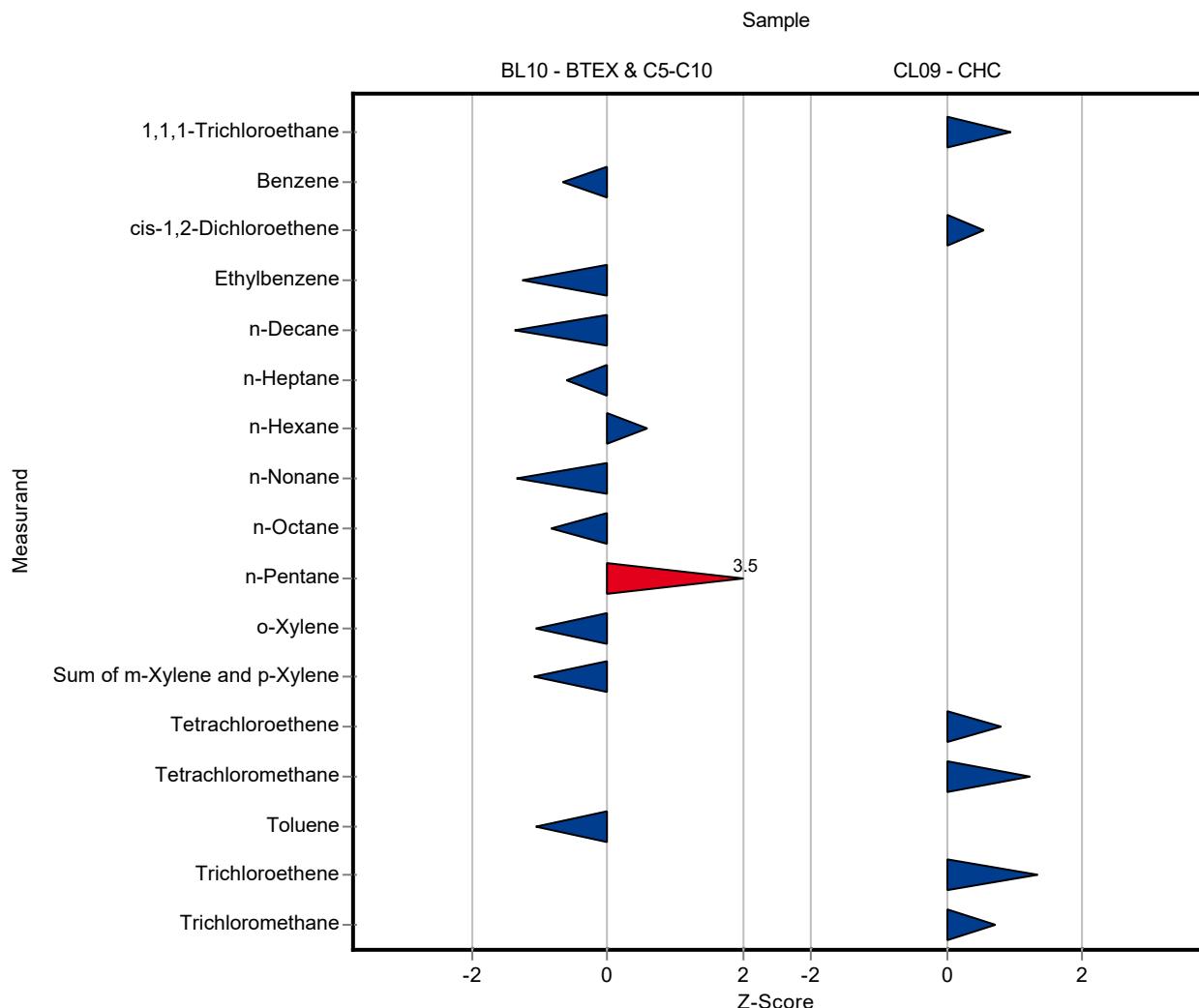


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	4.97 ± 0.32	0.829	90	-0.67
Ethylbenzene	µg/tube	5.71 ± 0.32	4.43 ± 0.55	1.03	77.6	-1.24
n-Decane	µg/tube	3.5 ± 0.468	2.11 ± 0.21	1.01	60.3	-1.37
n-Heptane	µg/tube	6.87 ± 0.338	6.41 ± 0.64	0.756	93.3	-0.61
n-Hexane	µg/tube	6.79 ± 0.283	7.18 ± 0.72	0.679	106	0.58
n-Nonane	µg/tube	5.54 ± 0.448	4.35 ± 0.43	0.886	78.6	-1.34
n-Octane	µg/tube	6.62 ± 0.317	6.01 ± 0.6	0.729	90.7	-0.84
n-Pentane	µg/tube	6.29 ± 0.338	8.5 ± 0.85	0.629	135	3.50
o-Xylene	µg/tube	5.11 ± 0.48	3.76 ± 0.22	1.28	73.6	-1.05
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.22 ± 1.43	2.24	77.1	-1.09
Toluene	µg/tube	5.75 ± 0.323	4.83 ± 0.29	0.862	84.1	-1.06

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	4.03 ± 0.46	0.708	120	0.93
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.66 ± 0.23	0.906	123	0.56
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.67 ± 0.28	1.21	136	0.81
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.85 ± 0.32	0.901	129	1.22
trans-1,2-Dichloroethene	µg/tube	- ± -	2.04 ± 0.31	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.7 ± 0.45	0.846	144	1.34
Trichloromethane	µg/tube	3.14 ± 0.257	3.51 ± 0.4	0.503	112	0.73

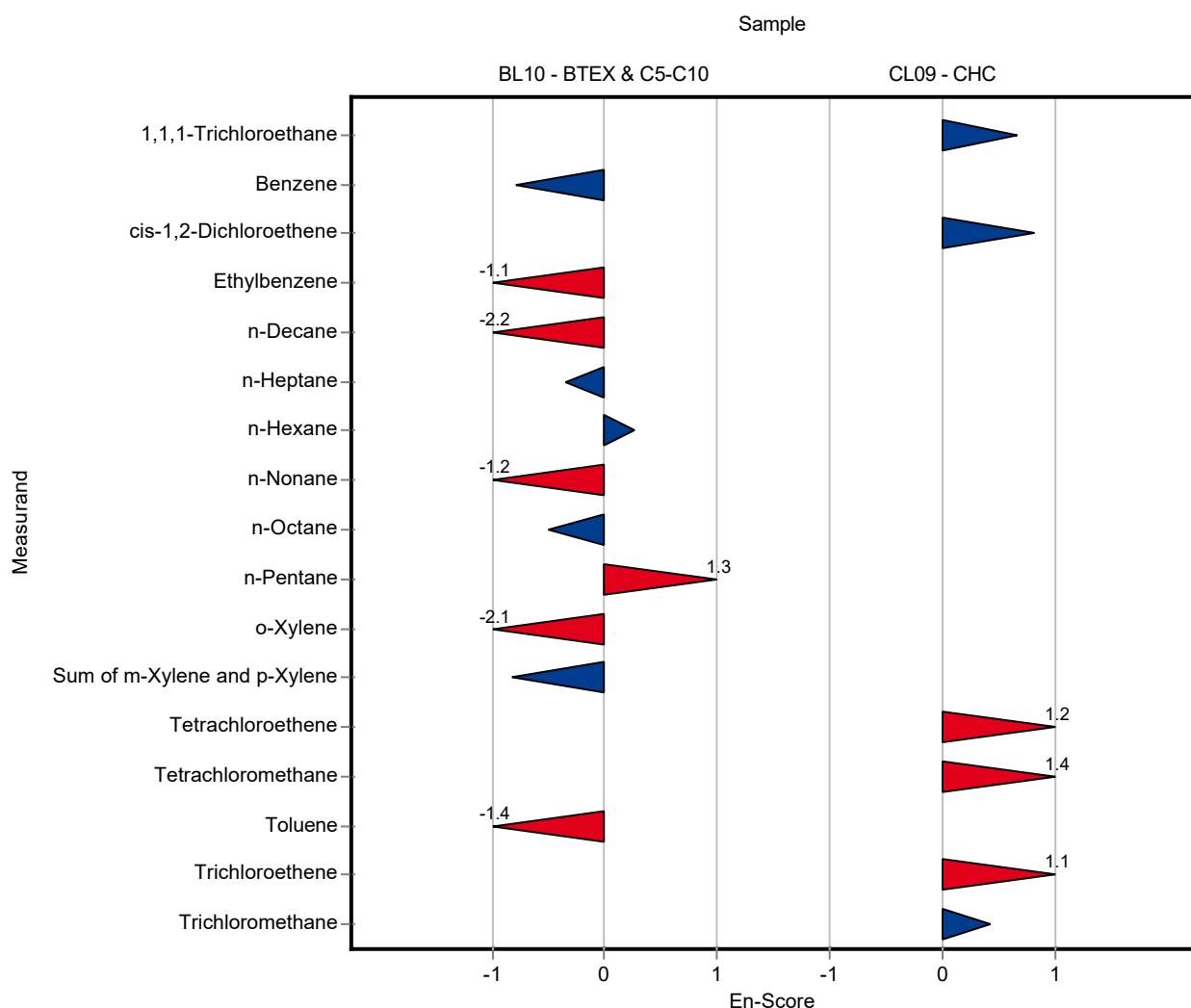


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	4.97 ± 0.32	0.829	90	-0.79
Ethylbenzene	µg/tube	5.71 ± 0.32	4.43 ± 0.55	1.03	77.6	-1.12
n-Decane	µg/tube	3.5 ± 0.468	2.11 ± 0.21	1.01	60.3	-2.21
n-Heptane	µg/tube	6.87 ± 0.338	6.41 ± 0.64	0.756	93.3	-0.35
n-Hexane	µg/tube	6.79 ± 0.283	7.18 ± 0.72	0.679	106	0.27
n-Nonane	µg/tube	5.54 ± 0.448	4.35 ± 0.43	0.886	78.6	-1.22
n-Octane	µg/tube	6.62 ± 0.317	6.01 ± 0.6	0.729	90.7	-0.49
n-Pentane	µg/tube	6.29 ± 0.338	8.5 ± 0.85	0.629	135	1.27
o-Xylene	µg/tube	5.11 ± 0.48	3.76 ± 0.22	1.28	73.6	-2.07
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.22 ± 1.43	2.24	77.1	-0.82
Toluene	µg/tube	5.75 ± 0.323	4.83 ± 0.29	0.862	84.1	-1.38

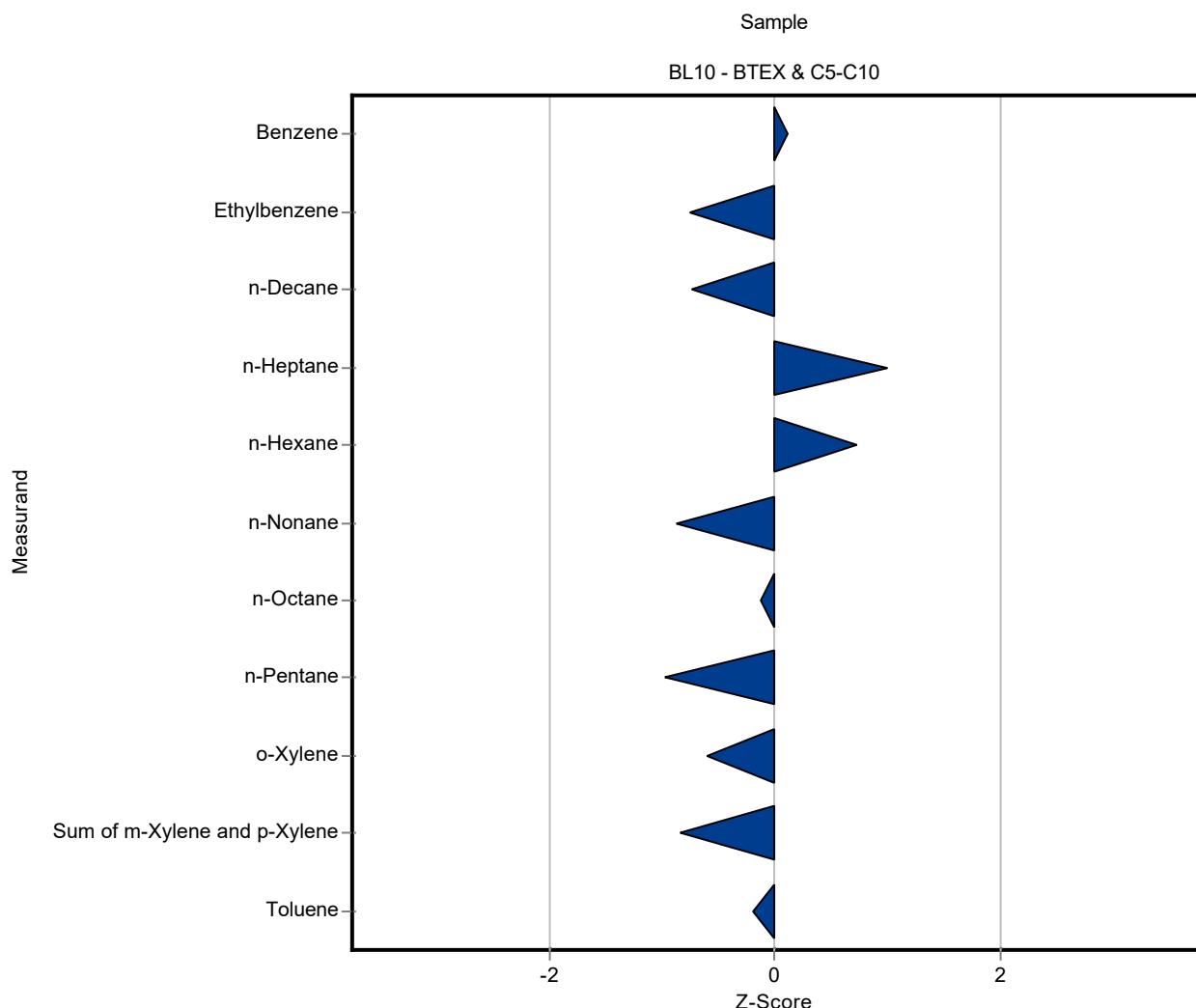
Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	4.03 ± 0.46	0.708	120	0.67
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.66 ± 0.23	0.906	123	0.82
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.67 ± 0.28	1.21	136	1.20
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.85 ± 0.32	0.901	129	1.39
trans-1,2-Dichloroethene	µg/tube	- ± -	2.04 ± 0.31	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.7 ± 0.45	0.846	144	1.15
Trichloromethane	µg/tube	3.14 ± 0.257	3.51 ± 0.4	0.503	112	0.44



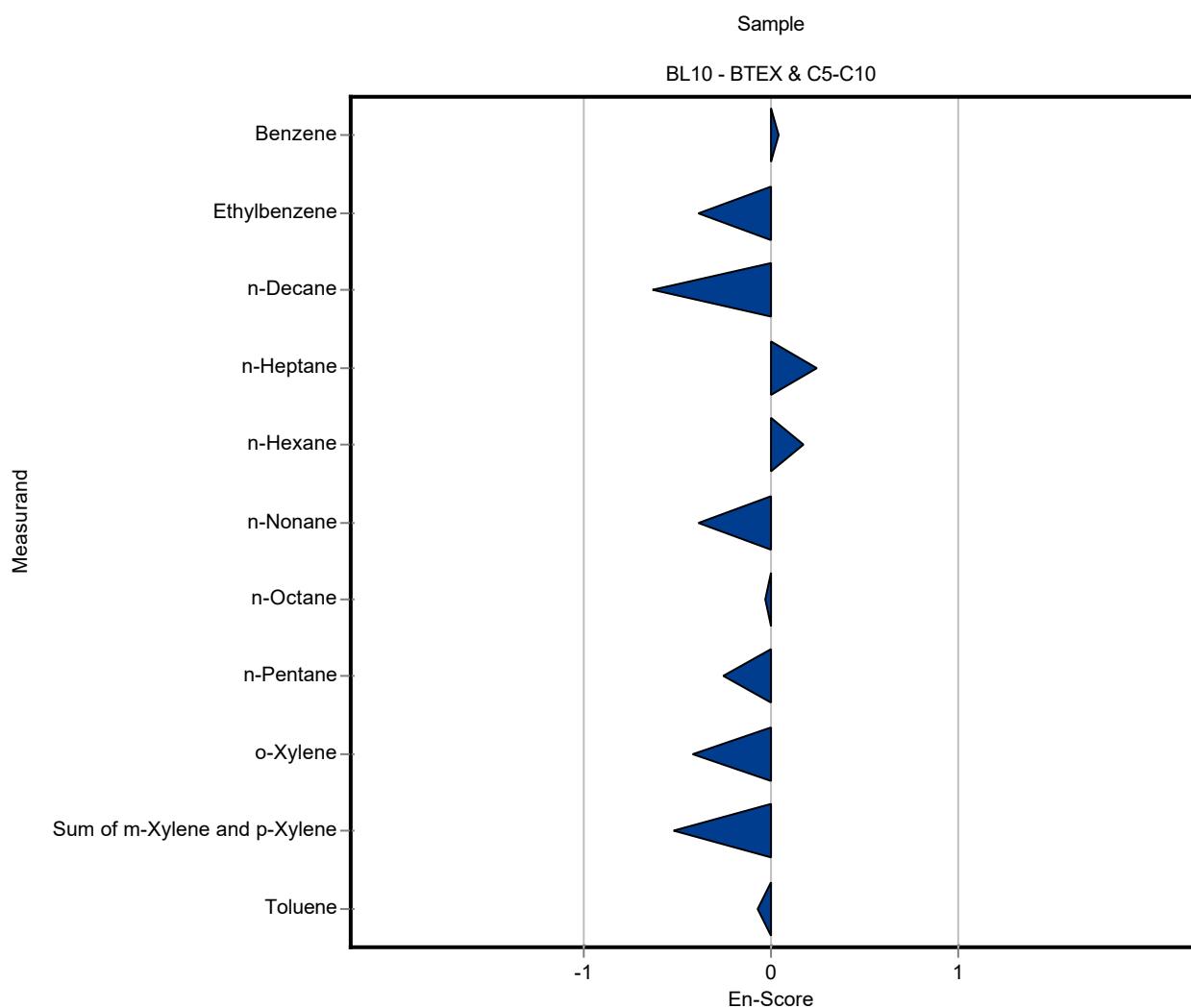
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.61 ± 1.122	0.829	102	0.10
Ethylbenzene	µg/tube	5.71 ± 0.32	4.93 ± 0.986	1.03	86.4	-0.76
n-Decane	µg/tube	3.5 ± 0.468	2.74 ± 0.548	1.01	78.3	-0.75
n-Heptane	µg/tube	6.87 ± 0.338	7.62 ± 1.524	0.756	111	0.99
n-Hexane	µg/tube	6.79 ± 0.283	7.28 ± 1.456	0.679	107	0.73
n-Nonane	µg/tube	5.54 ± 0.448	4.76 ± 0.952	0.886	86	-0.88
n-Octane	µg/tube	6.62 ± 0.317	6.53 ± 1.306	0.729	98.6	-0.13
n-Pentane	µg/tube	6.29 ± 0.338	5.68 ± 1.172	0.629	90.2	-0.98
o-Xylene	µg/tube	5.11 ± 0.48	4.34 ± 0.868	1.28	85	-0.60
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.77 ± 1.754	2.24	82.2	-0.85
Toluene	µg/tube	5.75 ± 0.323	5.58 ± 1.116	0.862	97.1	-0.19



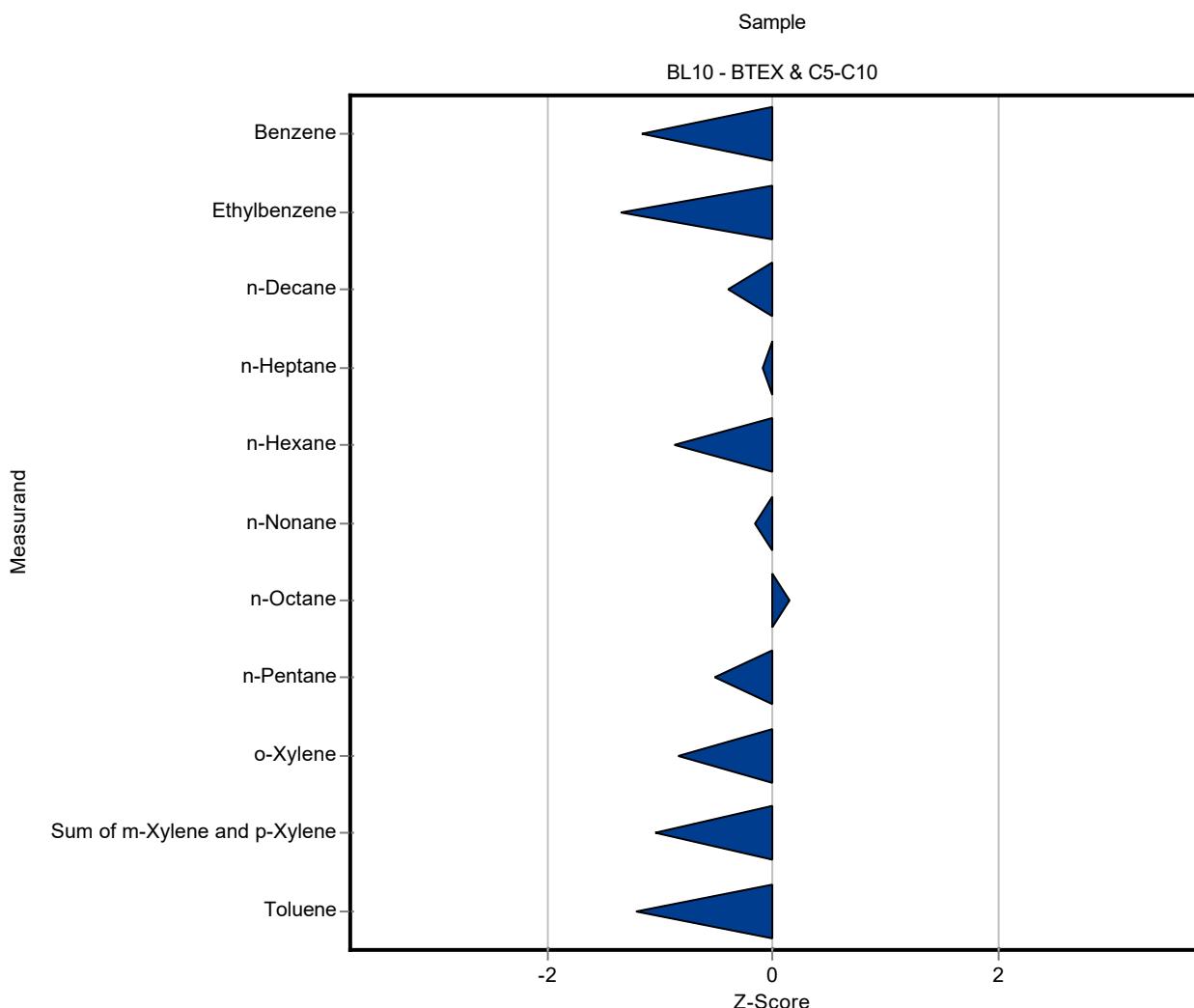
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.61 ± 1.122	0.829	102	0.04
Ethylbenzene	µg/tube	5.71 ± 0.32	4.93 ± 0.986	1.03	86.4	-0.39
n-Decane	µg/tube	3.5 ± 0.468	2.74 ± 0.548	1.01	78.3	-0.64
n-Heptane	µg/tube	6.87 ± 0.338	7.62 ± 1.524	0.756	111	0.24
n-Hexane	µg/tube	6.79 ± 0.283	7.28 ± 1.456	0.679	107	0.17
n-Nonane	µg/tube	5.54 ± 0.448	4.76 ± 0.952	0.886	86	-0.40
n-Octane	µg/tube	6.62 ± 0.317	6.53 ± 1.306	0.729	98.6	-0.04
n-Pentane	µg/tube	6.29 ± 0.338	5.68 ± 1.172	0.629	90.2	-0.26
o-Xylene	µg/tube	5.11 ± 0.48	4.34 ± 0.868	1.28	85	-0.43
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.77 ± 1.754	2.24	82.2	-0.52
Toluene	µg/tube	5.75 ± 0.323	5.58 ± 1.116	0.862	97.1	-0.07



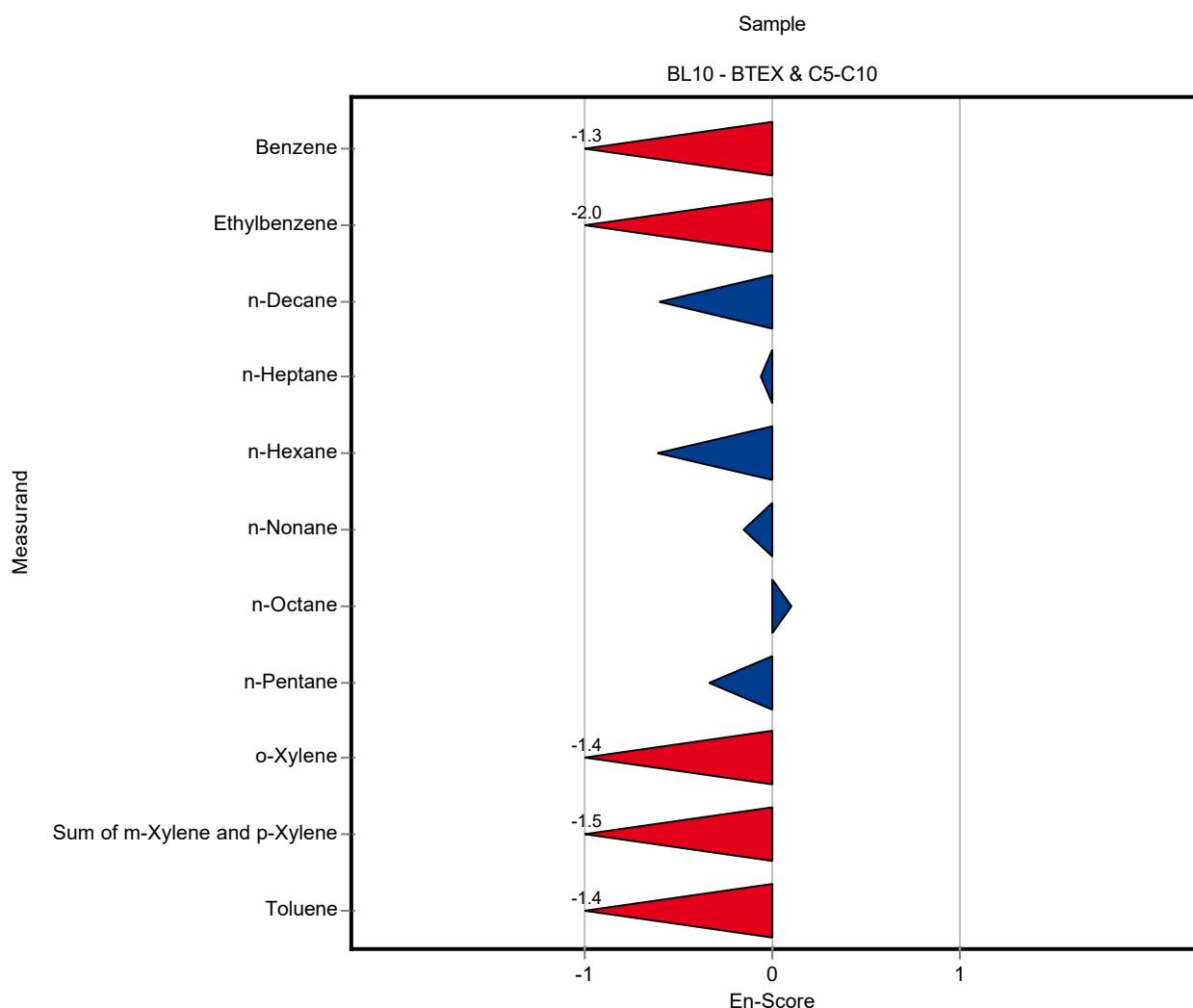
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	4.553 ± 0.34	0.829	82.4	-1.17
Ethylbenzene	µg/tube	5.71 ± 0.32	4.31 ± 0.32	1.03	75.5	-1.36
n-Decane	µg/tube	3.5 ± 0.468	3.101 ± 0.23	1.01	88.6	-0.39
n-Heptane	µg/tube	6.87 ± 0.338	6.803 ± 0.51	0.756	99	-0.09
n-Hexane	µg/tube	6.79 ± 0.283	6.194 ± 0.46	0.679	91.3	-0.87
n-Nonane	µg/tube	5.54 ± 0.448	5.391 ± 0.4	0.886	97.4	-0.16
n-Octane	µg/tube	6.62 ± 0.317	6.731 ± 0.5	0.729	102	0.15
n-Pentane	µg/tube	6.29 ± 0.338	5.966 ± 0.45	0.629	94.8	-0.52
o-Xylene	µg/tube	5.11 ± 0.48	4.037 ± 0.3	1.28	79.1	-0.84
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.337 ± 0.63	2.24	78.2	-1.04
Toluene	µg/tube	5.75 ± 0.323	4.697 ± 0.35	0.862	81.7	-1.22



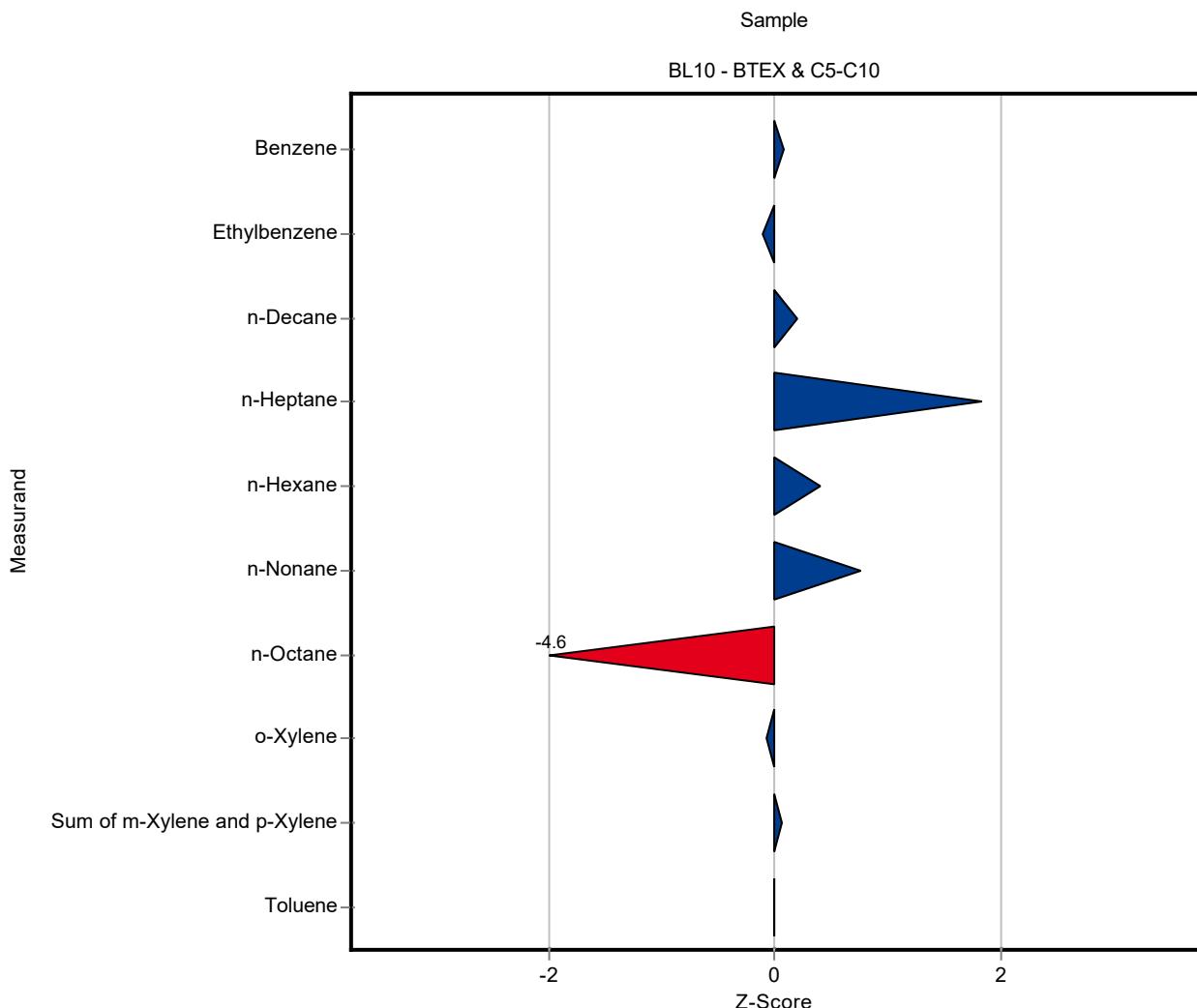
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	4.553 ± 0.34	0.829	82.4	-1.31
Ethylbenzene	µg/tube	5.71 ± 0.32	4.31 ± 0.32	1.03	75.5	-1.95
n-Decane	µg/tube	3.5 ± 0.468	3.101 ± 0.23	1.01	88.6	-0.61
n-Heptane	µg/tube	6.87 ± 0.338	6.803 ± 0.51	0.756	99	-0.07
n-Hexane	µg/tube	6.79 ± 0.283	6.194 ± 0.46	0.679	91.3	-0.61
n-Nonane	µg/tube	5.54 ± 0.448	5.391 ± 0.4	0.886	97.4	-0.16
n-Octane	µg/tube	6.62 ± 0.317	6.731 ± 0.5	0.729	102	0.10
n-Pentane	µg/tube	6.29 ± 0.338	5.966 ± 0.45	0.629	94.8	-0.34
o-Xylene	µg/tube	5.11 ± 0.48	4.037 ± 0.3	1.28	79.1	-1.39
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.337 ± 0.63	2.24	78.2	-1.52
Toluene	µg/tube	5.75 ± 0.323	4.697 ± 0.35	0.862	81.7	-1.36



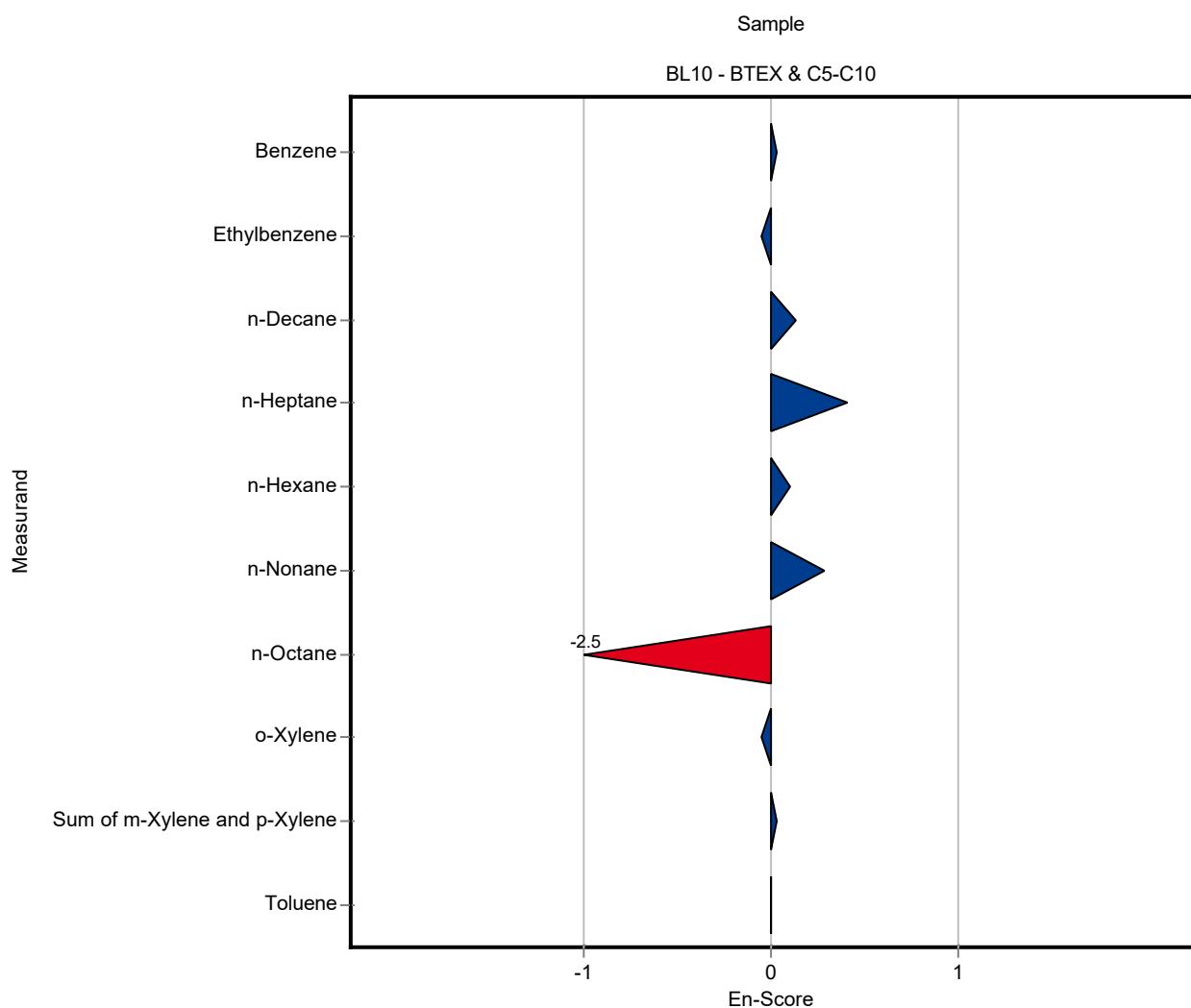
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.59 ± 1.1	0.829	101	0.08
Ethylbenzene	µg/tube	5.71 ± 0.32	5.59 ± 1.1	1.03	97.9	-0.11
n-Decane	µg/tube	3.5 ± 0.468	3.7 ± 0.74	1.01	106	0.20
n-Heptane	µg/tube	6.87 ± 0.338	8.25 ± 1.7	0.756	120	1.82
n-Hexane	µg/tube	6.79 ± 0.283	7.06 ± 1.4	0.679	104	0.40
n-Nonane	µg/tube	5.54 ± 0.448	6.21 ± 1.2	0.886	112	0.76
n-Octane	µg/tube	6.62 ± 0.317	3.29 ± 0.66	0.729	49.7	-4.58
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5 ± 1	1.28	97.9	-0.08
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.8 ± 2.2	2.24	101	0.06
Toluene	µg/tube	5.75 ± 0.323	5.74 ± 1.1	0.862	99.9	-0.01



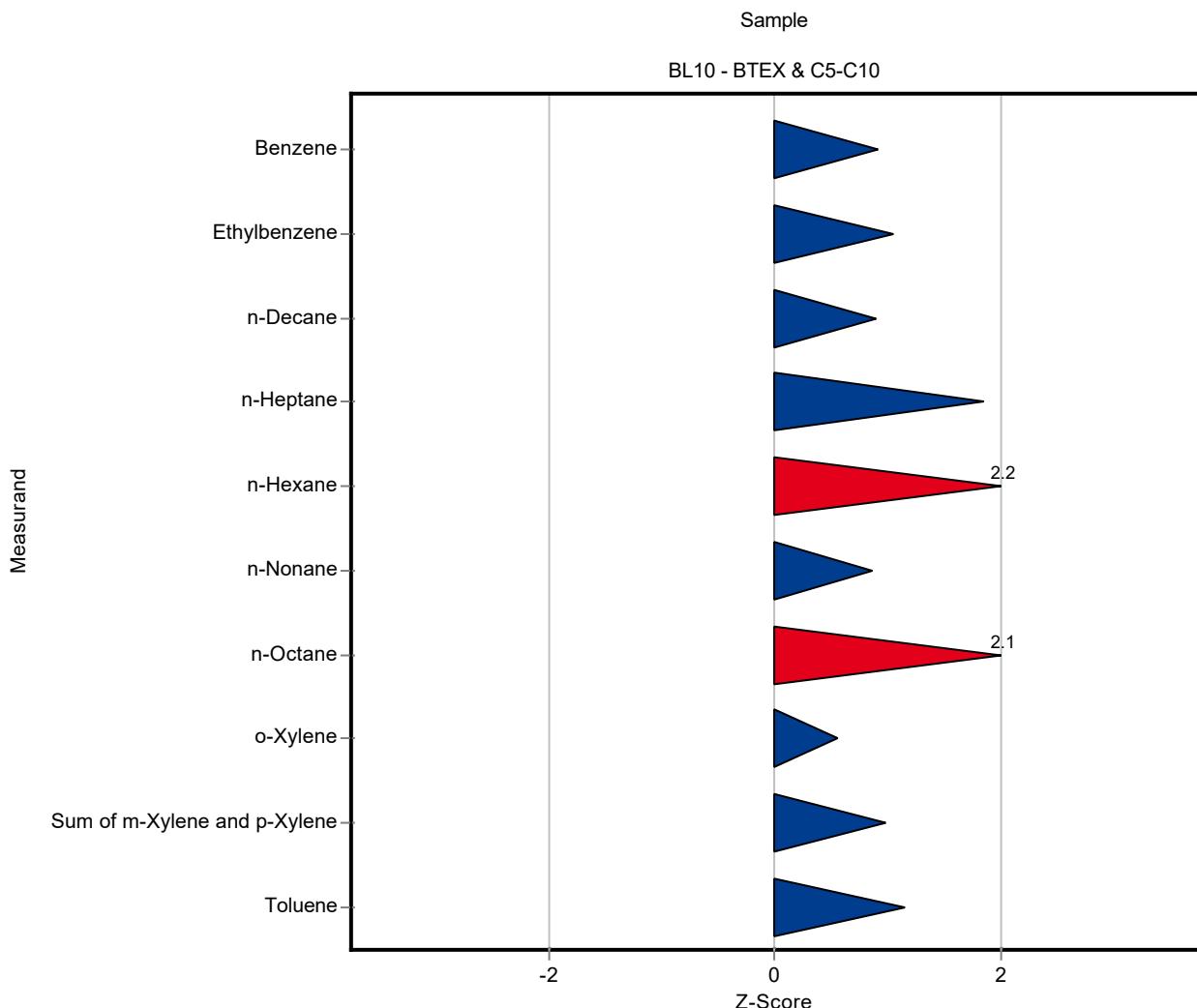
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.59 ± 1.1	0.829	101	0.03
Ethylbenzene	µg/tube	5.71 ± 0.32	5.59 ± 1.1	1.03	97.9	-0.05
n-Decane	µg/tube	3.5 ± 0.468	3.7 ± 0.74	1.01	106	0.13
n-Heptane	µg/tube	6.87 ± 0.338	8.25 ± 1.7	0.756	120	0.40
n-Hexane	µg/tube	6.79 ± 0.283	7.06 ± 1.4	0.679	104	0.10
n-Nonane	µg/tube	5.54 ± 0.448	6.21 ± 1.2	0.886	112	0.28
n-Octane	µg/tube	6.62 ± 0.317	3.29 ± 0.66	0.729	49.7	-2.46
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5 ± 1	1.28	97.9	-0.05
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	10.8 ± 2.2	2.24	101	0.03
Toluene	µg/tube	5.75 ± 0.323	5.74 ± 1.1	0.862	99.9	0.00



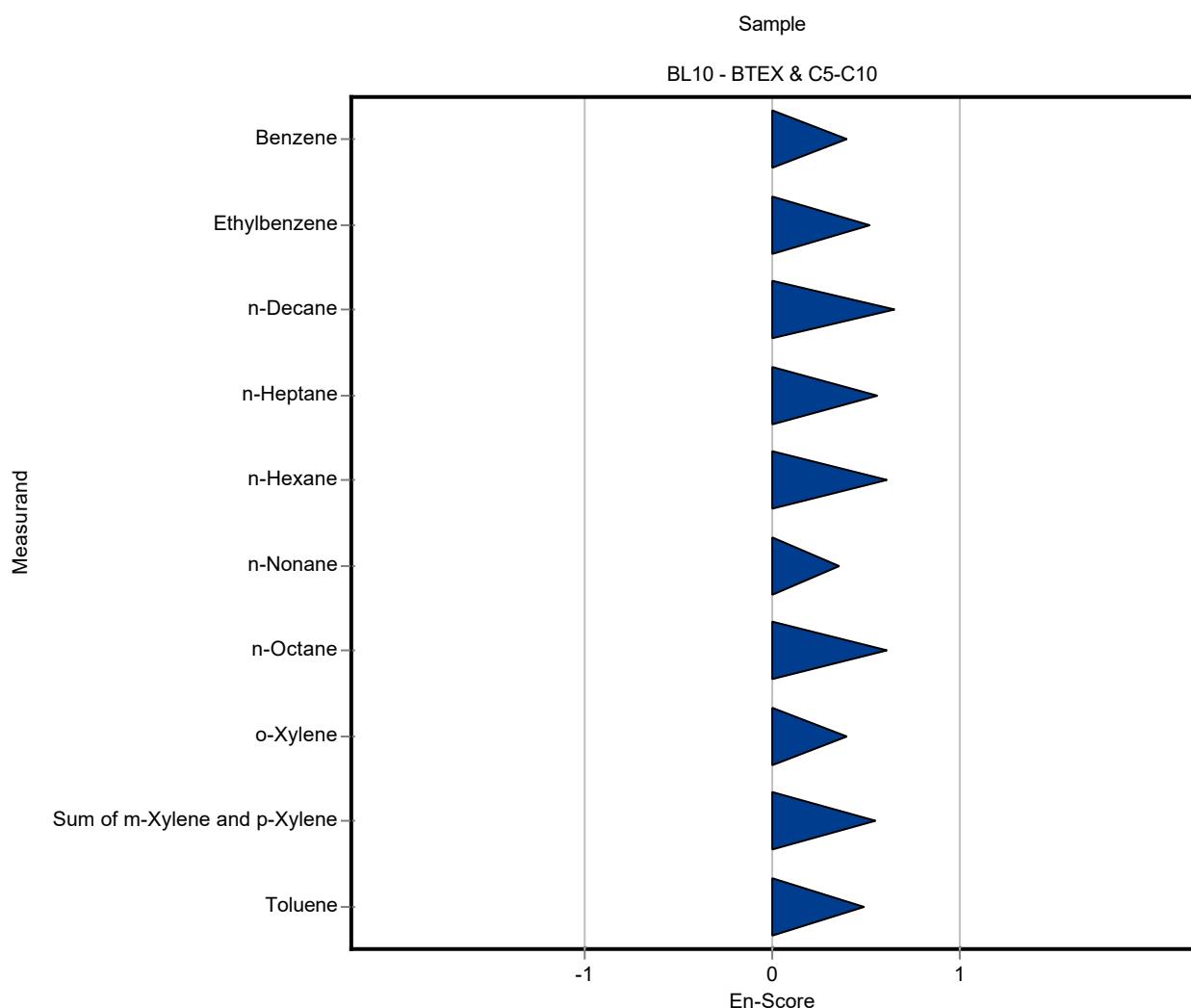
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	6.28 ± 0.94	0.829	114	0.91
Ethylbenzene	µg/tube	5.71 ± 0.32	6.78 ± 1.02	1.03	119	1.04
n-Decane	µg/tube	3.5 ± 0.468	4.4 ± 0.66	1.01	126	0.89
n-Heptane	µg/tube	6.87 ± 0.338	8.27 ± 1.24	0.756	120	1.85
n-Hexane	µg/tube	6.79 ± 0.283	8.29 ± 1.24	0.679	122	2.22
n-Nonane	µg/tube	5.54 ± 0.448	6.29 ± 1.04	0.886	114	0.85
n-Octane	µg/tube	6.62 ± 0.317	8.13 ± 1.22	0.729	123	2.07
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.82 ± 0.87	1.28	114	0.56
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.84 ± 1.93	2.24	120	0.97
Toluene	µg/tube	5.75 ± 0.323	6.74 ± 1.01	0.862	117	1.15



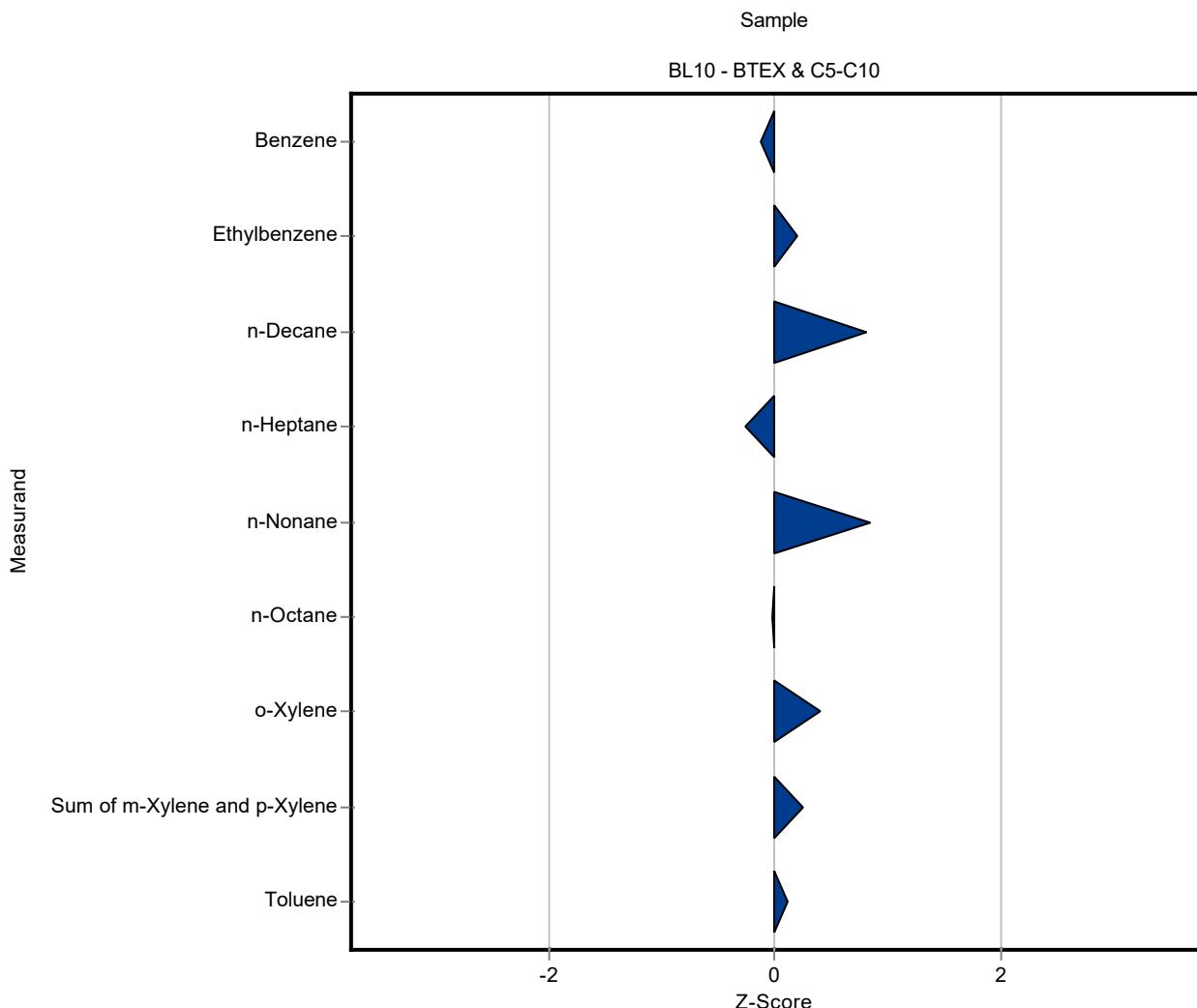
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	6.28 ± 0.94	0.829	114	0.40
Ethylbenzene	µg/tube	5.71 ± 0.32	6.78 ± 1.02	1.03	119	0.52
n-Decane	µg/tube	3.5 ± 0.468	4.4 ± 0.66	1.01	126	0.64
n-Heptane	µg/tube	6.87 ± 0.338	8.27 ± 1.24	0.756	120	0.56
n-Hexane	µg/tube	6.79 ± 0.283	8.29 ± 1.24	0.679	122	0.60
n-Nonane	µg/tube	5.54 ± 0.448	6.29 ± 1.04	0.886	114	0.35
n-Octane	µg/tube	6.62 ± 0.317	8.13 ± 1.22	0.729	123	0.61
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.82 ± 0.87	1.28	114	0.40
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.84 ± 1.93	2.24	120	0.55
Toluene	µg/tube	5.75 ± 0.323	6.74 ± 1.01	0.862	117	0.49



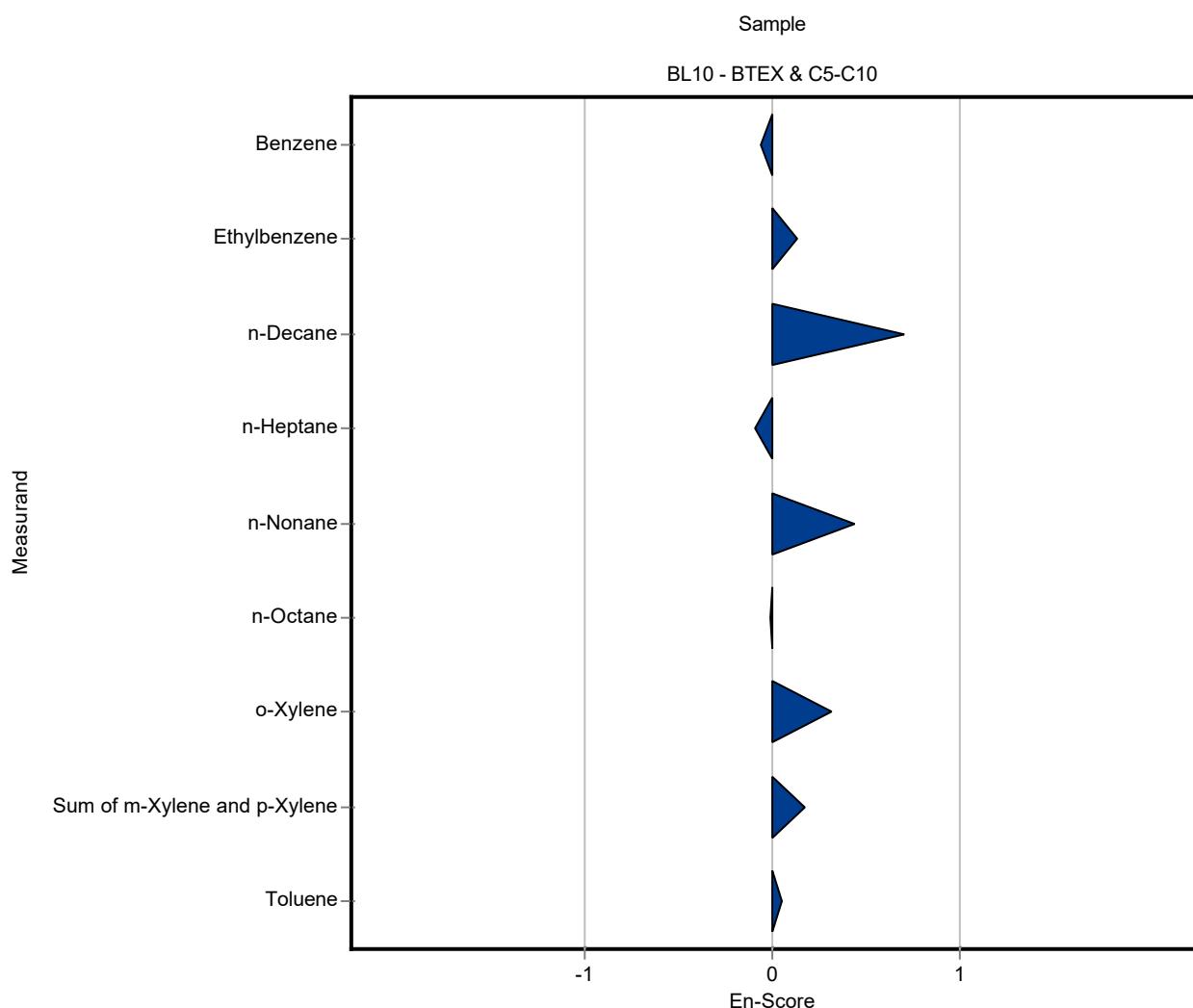
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.414 ± 0.79	0.829	98	-0.13
Ethylbenzene	µg/tube	5.71 ± 0.32	5.906 ± 0.78	1.03	103	0.19
n-Decane	µg/tube	3.5 ± 0.468	4.326 ± 0.54	1.01	124	0.82
n-Heptane	µg/tube	6.87 ± 0.338	6.678 ± 0.99	0.756	97.2	-0.26
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	6.28 ± 0.82	0.886	113	0.84
n-Octane	µg/tube	6.62 ± 0.317	6.608 ± 0.72	0.729	99.8	-0.02
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.618 ± 0.78	1.28	110	0.40
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.22 ± 1.55	2.24	105	0.25
Toluene	µg/tube	5.75 ± 0.323	5.835 ± 0.86	0.862	102	0.10



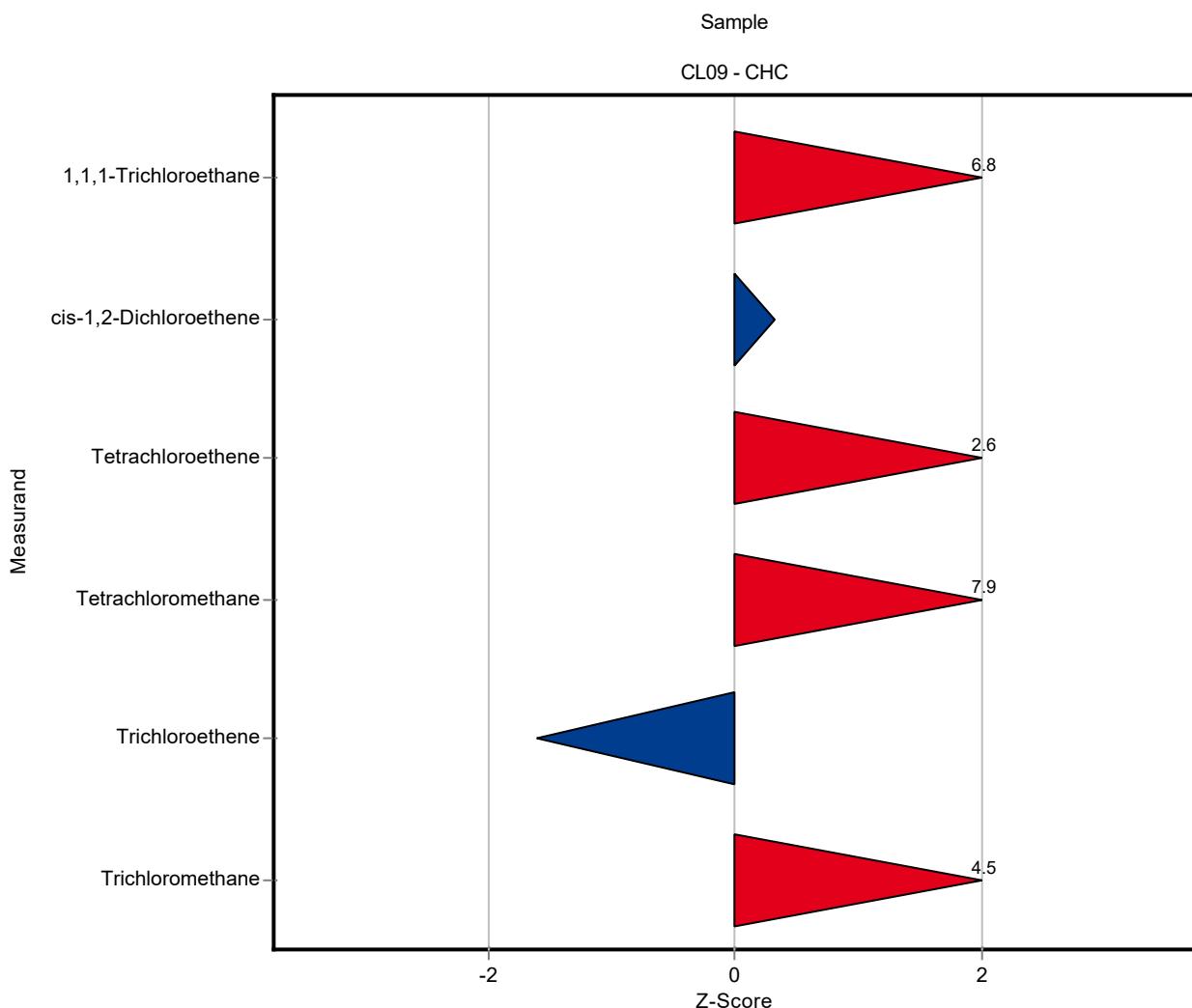
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.414 ± 0.79	0.829	98	-0.07
Ethylbenzene	µg/tube	5.71 ± 0.32	5.906 ± 0.78	1.03	103	0.12
n-Decane	µg/tube	3.5 ± 0.468	4.326 ± 0.54	1.01	124	0.70
n-Heptane	µg/tube	6.87 ± 0.338	6.678 ± 0.99	0.756	97.2	-0.10
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	6.28 ± 0.82	0.886	113	0.44
n-Octane	µg/tube	6.62 ± 0.317	6.608 ± 0.72	0.729	99.8	-0.01
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	5.618 ± 0.78	1.28	110	0.31
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.22 ± 1.55	2.24	105	0.17
Toluene	µg/tube	5.75 ± 0.323	5.835 ± 0.86	0.862	102	0.05



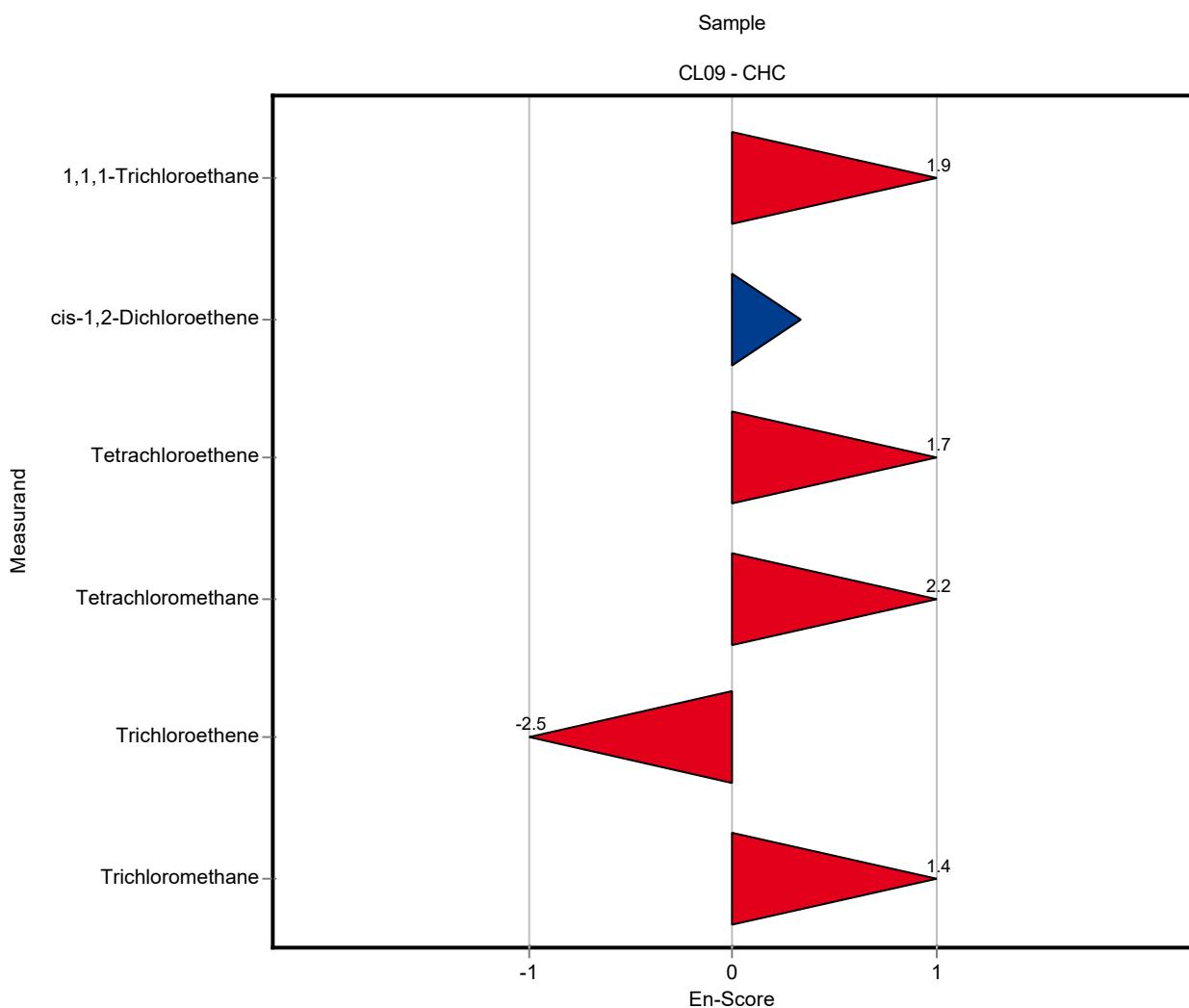
Sample: CL09

Parameter	Unit	Assigned value \pm U (k=2)	Result \pm U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	$\mu\text{g/tube}$	3.37 \pm 0.347	8.156 \pm 1.22	0.708	242	6.76
cis-1,2-Dichloroethene	$\mu\text{g/tube}$	2.16 \pm 0.409	2.441 \pm 0.37	0.906	113	0.31
Tetrachloroethene	$\mu\text{g/tube}$	2.69 \pm 0.588	5.879 \pm 0.88	1.21	218	2.63
Tetrachloromethane	$\mu\text{g/tube}$	3.75 \pm 0.464	10.902 \pm 1.64	0.901	290	7.93
trans-1,2-Dichloroethene	$\mu\text{g/tube}$	- \pm -	1.314 \pm 0.2	-	-	-
Trichloroethene	$\mu\text{g/tube}$	2.56 \pm 0.411	1.203 \pm 0.18	0.846	46.9	-1.61
Trichloromethane	$\mu\text{g/tube}$	3.14 \pm 0.257	5.429 \pm 0.81	0.503	173	4.55



Sample: CL09

Parameter	Unit	Assigned value \pm U (k=2)	Result \pm U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	$\mu\text{g/tube}$	3.37 \pm 0.347	8.156 \pm 1.22	0.708	242	1.94
cis-1,2-Dichloroethene	$\mu\text{g/tube}$	2.16 \pm 0.409	2.441 \pm 0.37	0.906	113	0.34
Tetrachloroethene	$\mu\text{g/tube}$	2.69 \pm 0.588	5.879 \pm 0.88	1.21	218	1.72
Tetrachloromethane	$\mu\text{g/tube}$	3.75 \pm 0.464	10.902 \pm 1.64	0.901	290	2.16
trans-1,2-Dichloroethene	$\mu\text{g/tube}$	- \pm -	1.314 \pm 0.2	-	-	-
Trichloroethene	$\mu\text{g/tube}$	2.56 \pm 0.411	1.203 \pm 0.18	0.846	46.9	-2.49
Trichloromethane	$\mu\text{g/tube}$	3.14 \pm 0.257	5.429 \pm 0.81	0.503	173	1.39

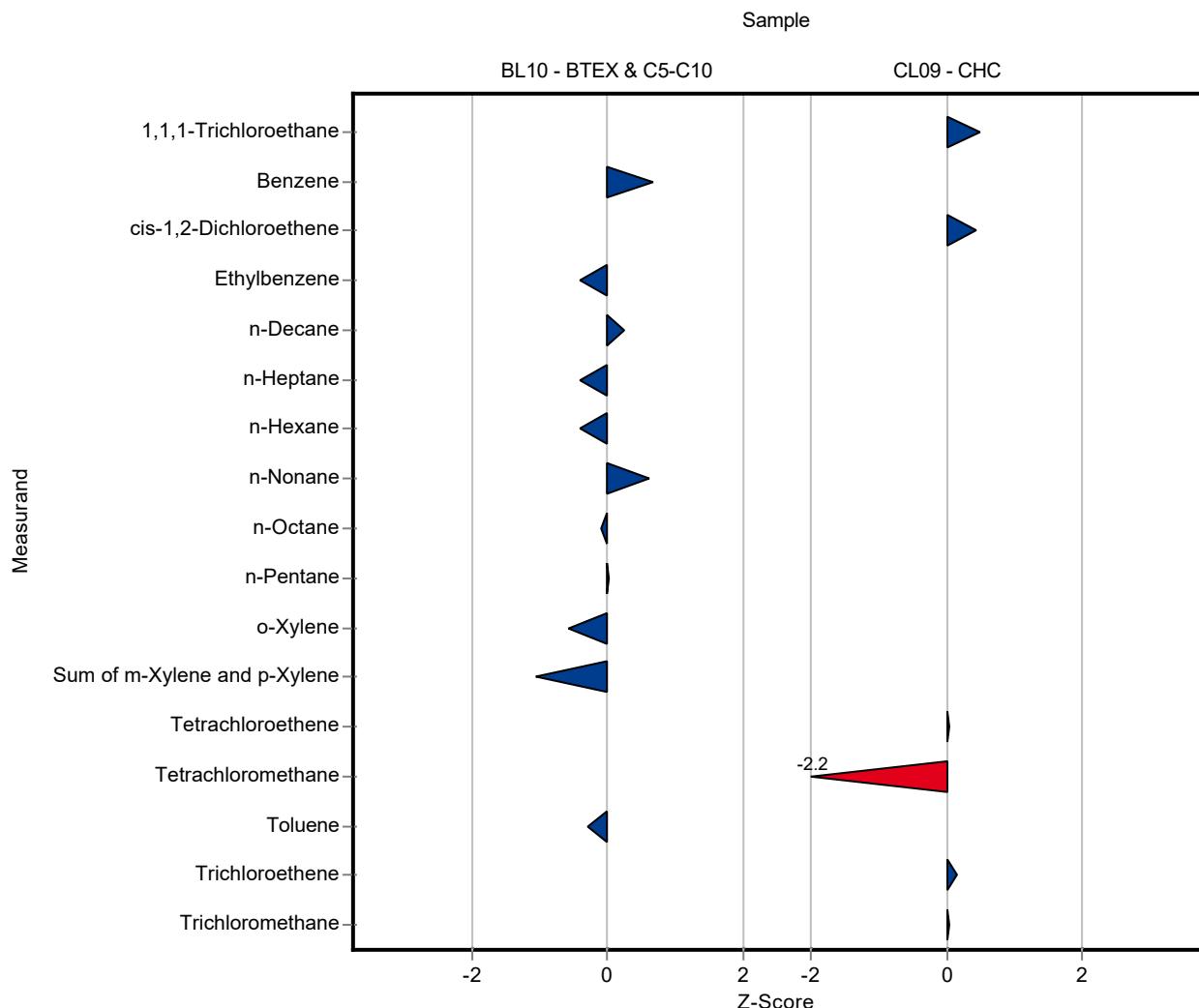


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	6.08 ± 2.4	0.829	110	0.67
Ethylbenzene	µg/tube	5.71 ± 0.32	5.29 ± 2.1	1.03	92.7	-0.41
n-Decane	µg/tube	3.5 ± 0.468	3.74 ± 1.5	1.01	107	0.24
n-Heptane	µg/tube	6.87 ± 0.338	6.56 ± 2.6	0.756	95.4	-0.41
n-Hexane	µg/tube	6.79 ± 0.283	6.51 ± 2.6	0.679	95.9	-0.41
n-Nonane	µg/tube	5.54 ± 0.448	6.08 ± 2.4	0.886	110	0.62
n-Octane	µg/tube	6.62 ± 0.317	6.55 ± 2.6	0.729	98.9	-0.10
n-Pentane	µg/tube	6.29 ± 0.338	6.3 ± 2.5	0.629	100	0.01
o-Xylene	µg/tube	5.11 ± 0.48	4.36 ± 1.7	1.28	85.4	-0.58
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.32 ± 3.3	2.24	78	-1.05
Toluene	µg/tube	5.75 ± 0.323	5.49 ± 2.2	0.862	95.5	-0.30

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.72 ± 1.5	0.708	110	0.49
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.56 ± 1	0.906	119	0.44
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.75 ± 1.1	1.21	102	0.05
Tetrachloromethane	µg/tube	3.75 ± 0.464	1.73 ± 0.7	0.901	46.1	-2.25
trans-1,2-Dichloroethene	µg/tube	- ± -	4.26 ± 1.7	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.68 ± 1.1	0.846	105	0.14
Trichloromethane	µg/tube	3.14 ± 0.257	3.16 ± 1.3	0.503	101	0.03

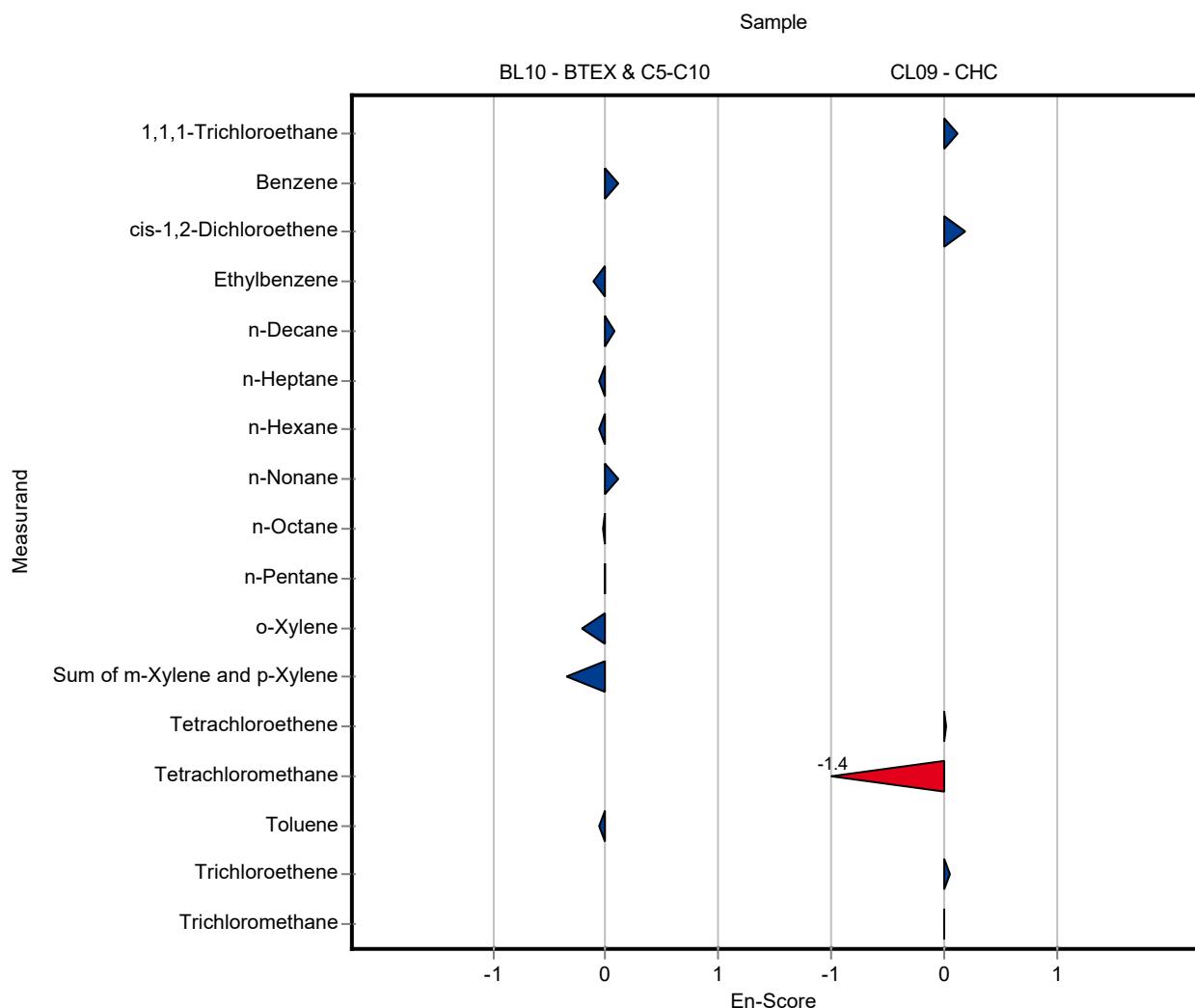


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	6.08 ± 2.4	0.829	110	0.12
Ethylbenzene	µg/tube	5.71 ± 0.32	5.29 ± 2.1	1.03	92.7	-0.10
n-Decane	µg/tube	3.5 ± 0.468	3.74 ± 1.5	1.01	107	0.08
n-Heptane	µg/tube	6.87 ± 0.338	6.56 ± 2.6	0.756	95.4	-0.06
n-Hexane	µg/tube	6.79 ± 0.283	6.51 ± 2.6	0.679	95.9	-0.05
n-Nonane	µg/tube	5.54 ± 0.448	6.08 ± 2.4	0.886	110	0.11
n-Octane	µg/tube	6.62 ± 0.317	6.55 ± 2.6	0.729	98.9	-0.01
n-Pentane	µg/tube	6.29 ± 0.338	6.3 ± 2.5	0.629	100	0.00
o-Xylene	µg/tube	5.11 ± 0.48	4.36 ± 1.7	1.28	85.4	-0.22
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	8.32 ± 3.3	2.24	78	-0.35
Toluene	µg/tube	5.75 ± 0.323	5.49 ± 2.2	0.862	95.5	-0.06

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.72 ± 1.5	0.708	110	0.12
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.56 ± 1	0.906	119	0.20
Tetrachloroethene	µg/tube	2.69 ± 0.588	2.75 ± 1.1	1.21	102	0.03
Tetrachloromethane	µg/tube	3.75 ± 0.464	1.73 ± 0.7	0.901	46.1	-1.37
trans-1,2-Dichloroethene	µg/tube	- ± -	4.26 ± 1.7	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.68 ± 1.1	0.846	105	0.05
Trichloromethane	µg/tube	3.14 ± 0.257	3.16 ± 1.3	0.503	101	0.01

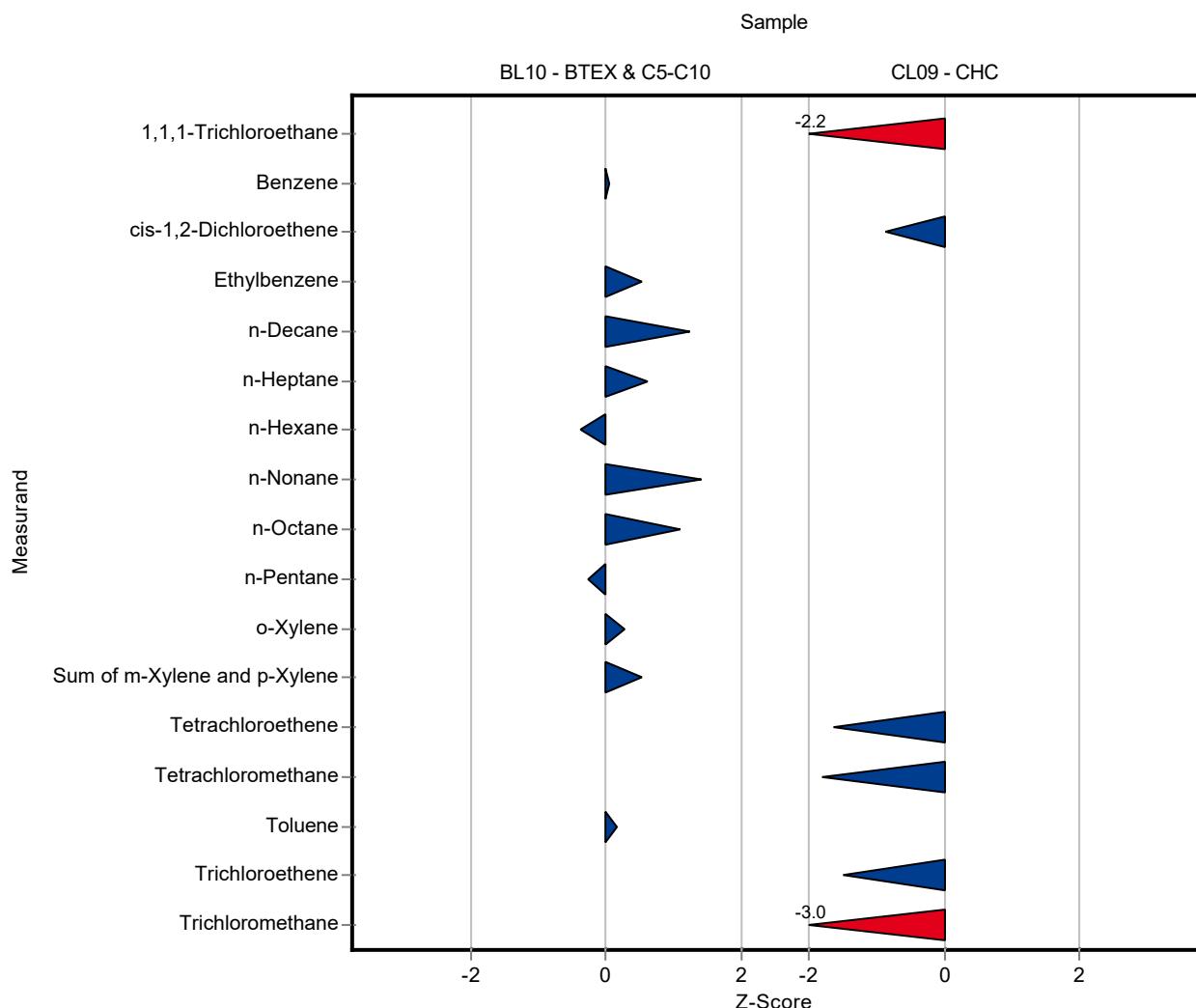


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.564 ± 0.417	0.829	101	0.05
Ethylbenzene	µg/tube	5.71 ± 0.32	6.251 ± 0.625	1.03	110	0.53
n-Decane	µg/tube	3.5 ± 0.468	4.747 ± 0.593	1.01	136	1.23
n-Heptane	µg/tube	6.87 ± 0.338	7.344 ± 0.918	0.756	107	0.62
n-Hexane	µg/tube	6.79 ± 0.283	6.531 ± 0.816	0.679	96.3	-0.37
n-Nonane	µg/tube	5.54 ± 0.448	6.791 ± 0.849	0.886	123	1.42
n-Octane	µg/tube	6.62 ± 0.317	7.415 ± 0.927	0.729	112	1.09
n-Pentane	µg/tube	6.29 ± 0.338	6.127 ± 0.766	0.629	97.3	-0.27
o-Xylene	µg/tube	5.11 ± 0.48	5.466 ± 0.41	1.28	107	0.28
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.819 ± 1.182	2.24	111	0.52
Toluene	µg/tube	5.75 ± 0.323	5.885 ± 0.441	0.862	102	0.16

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	1.825 ± 0.137	0.708	54.2	-2.18
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.356 ± 0.102	0.906	62.9	-0.88
Tetrachloroethene	µg/tube	2.69 ± 0.588	0.703 ± 0.053	1.21	26.1	-1.64
Tetrachloromethane	µg/tube	3.75 ± 0.464	2.131 ± 0.16	0.901	56.8	-1.80
trans-1,2-Dichloroethene	µg/tube	- ± -	1.338 ± 0.1	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	1.291 ± 0.097	0.846	50.4	-1.50
Trichloromethane	µg/tube	3.14 ± 0.257	1.627 ± 0.163	0.503	51.8	-3.01

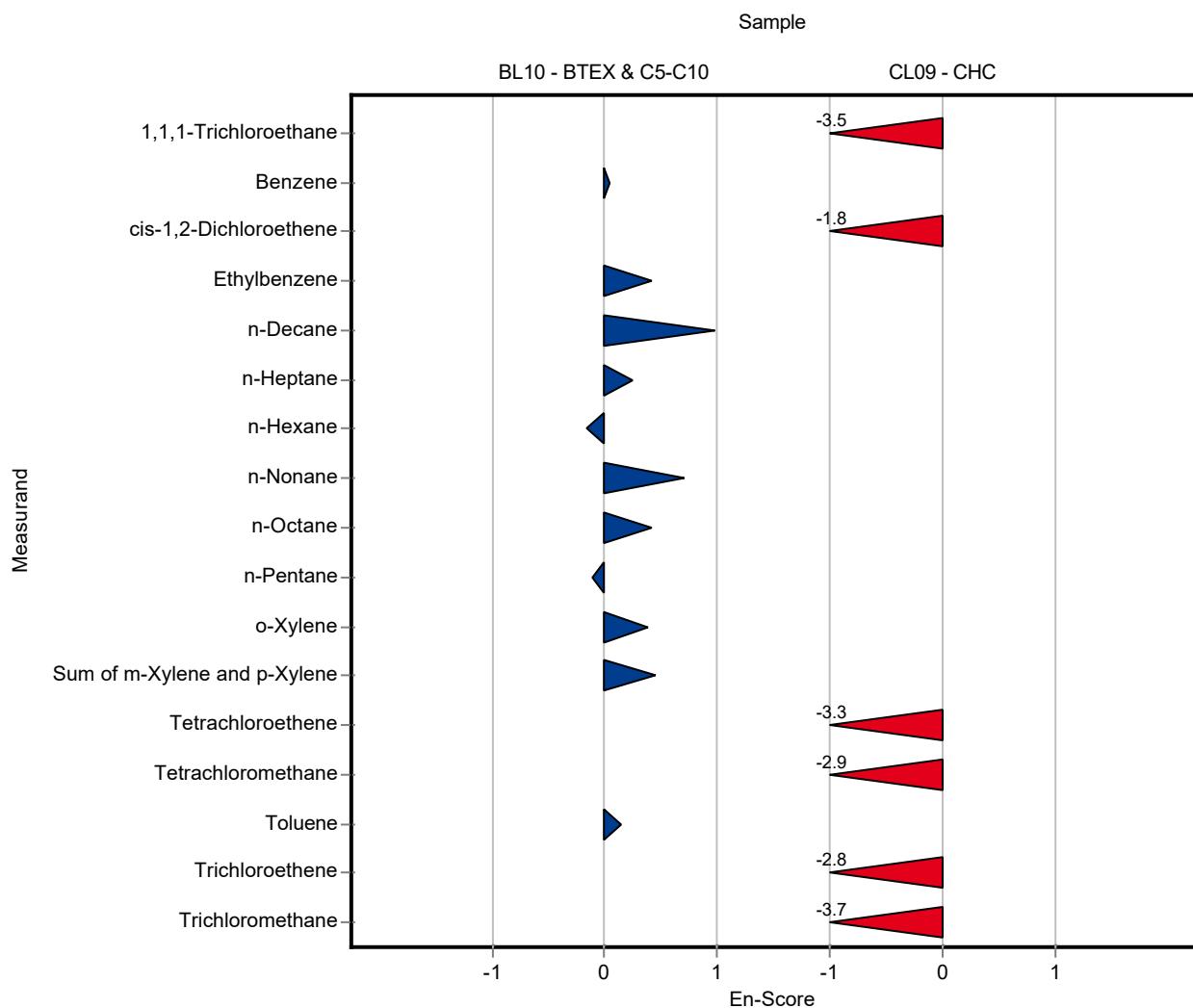


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.564 ± 0.417	0.829	101	0.05
Ethylbenzene	µg/tube	5.71 ± 0.32	6.251 ± 0.625	1.03	110	0.42
n-Decane	µg/tube	3.5 ± 0.468	4.747 ± 0.593	1.01	136	0.98
n-Heptane	µg/tube	6.87 ± 0.338	7.344 ± 0.918	0.756	107	0.25
n-Hexane	µg/tube	6.79 ± 0.283	6.531 ± 0.816	0.679	96.3	-0.15
n-Nonane	µg/tube	5.54 ± 0.448	6.791 ± 0.849	0.886	123	0.72
n-Octane	µg/tube	6.62 ± 0.317	7.415 ± 0.927	0.729	112	0.42
n-Pentane	µg/tube	6.29 ± 0.338	6.127 ± 0.766	0.629	97.3	-0.11
o-Xylene	µg/tube	5.11 ± 0.48	5.466 ± 0.41	1.28	107	0.38
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.819 ± 1.182	2.24	111	0.46
Toluene	µg/tube	5.75 ± 0.323	5.885 ± 0.441	0.862	102	0.15

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	1.825 ± 0.137	0.708	54.2	-3.49
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.356 ± 0.102	0.906	62.9	-1.75
Tetrachloroethene	µg/tube	2.69 ± 0.588	0.703 ± 0.053	1.21	26.1	-3.33
Tetrachloromethane	µg/tube	3.75 ± 0.464	2.131 ± 0.16	0.901	56.8	-2.88
trans-1,2-Dichloroethene	µg/tube	- ± -	1.338 ± 0.1	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	1.291 ± 0.097	0.846	50.4	-2.80
Trichloromethane	µg/tube	3.14 ± 0.257	1.627 ± 0.163	0.503	51.8	-3.65

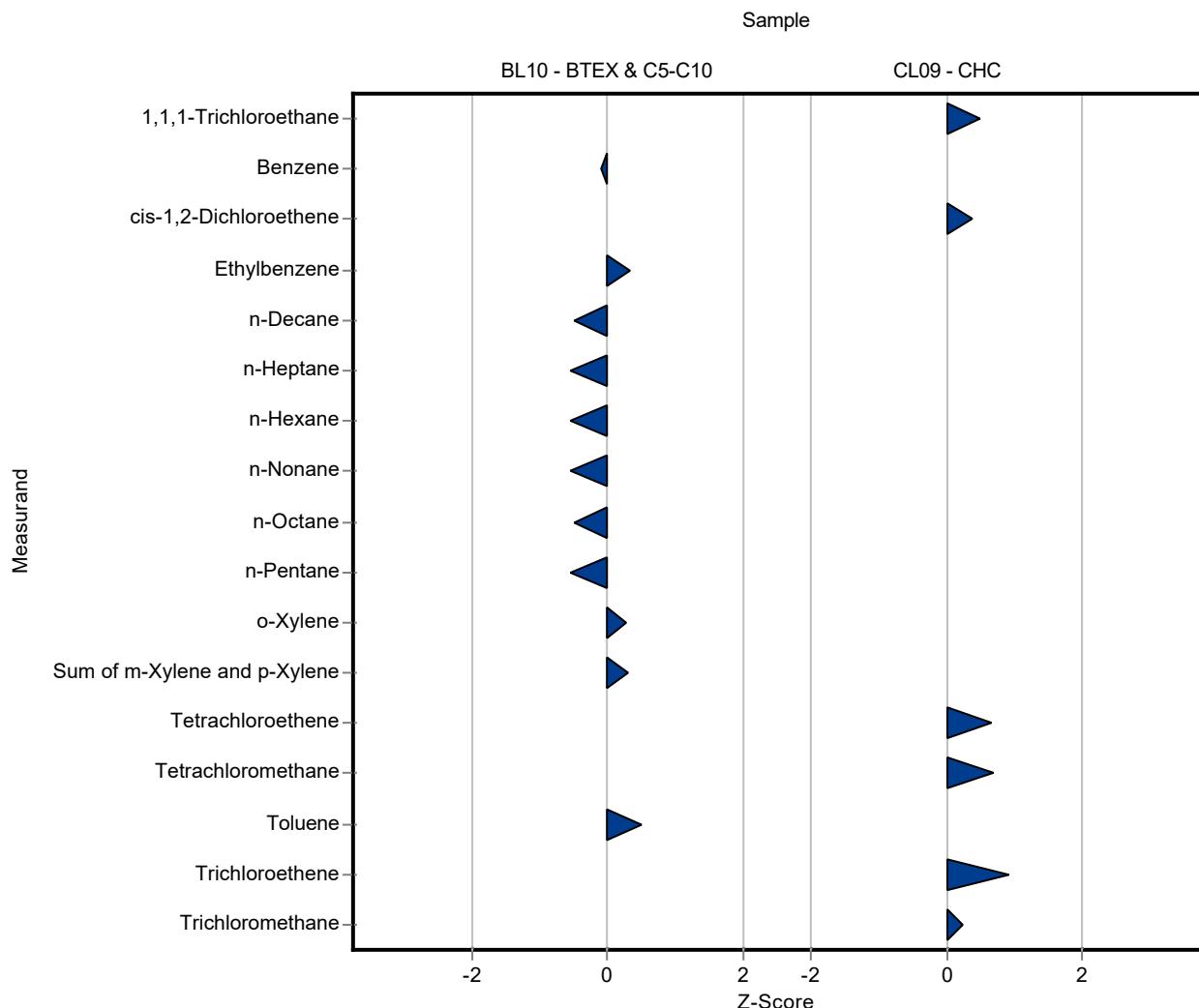


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.45 ± 0.691	0.829	98.7	-0.09
Ethylbenzene	µg/tube	5.71 ± 0.32	6.045 ± 0.767	1.03	106	0.33
n-Decane	µg/tube	3.5 ± 0.468	3.012 ± 0.575	1.01	86.1	-0.48
n-Heptane	µg/tube	6.87 ± 0.338	6.464 ± 0.646	0.756	94	-0.54
n-Hexane	µg/tube	6.79 ± 0.283	6.412 ± 0.526	0.679	94.5	-0.55
n-Nonane	µg/tube	5.54 ± 0.448	5.045 ± 0.681	0.886	91.1	-0.55
n-Octane	µg/tube	6.62 ± 0.317	6.259 ± 0.62	0.729	94.5	-0.50
n-Pentane	µg/tube	6.29 ± 0.338	5.948 ± 0.654	0.629	94.5	-0.55
o-Xylene	µg/tube	5.11 ± 0.48	5.468 ± 0.727	1.28	107	0.28
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.37 ± 1.512	2.24	107	0.32
Toluene	µg/tube	5.75 ± 0.323	6.18 ± 0.784	0.862	108	0.50

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.707 ± 0.675	0.708	110	0.48
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.504 ± 0.513	0.906	116	0.38
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.481 ± 0.714	1.21	129	0.65
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.375 ± 0.809	0.901	117	0.69
trans-1,2-Dichloroethene	µg/tube	- ± -	1.511 ± 0.31	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.346 ± 0.686	0.846	131	0.93
Trichloromethane	µg/tube	3.14 ± 0.257	3.26 ± 0.587	0.503	104	0.23

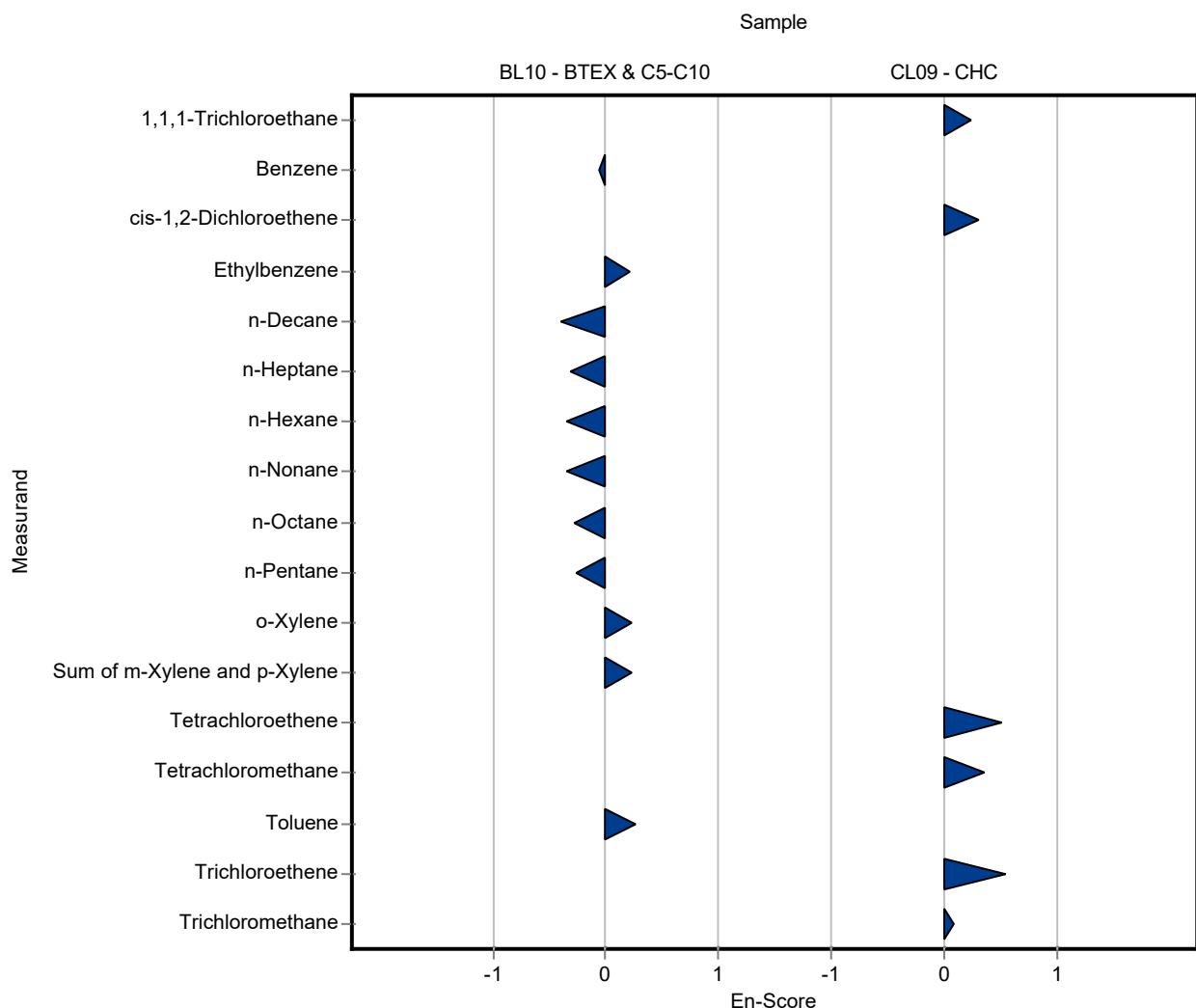


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.45 ± 0.691	0.829	98.7	-0.05
Ethylbenzene	µg/tube	5.71 ± 0.32	6.045 ± 0.767	1.03	106	0.22
n-Decane	µg/tube	3.5 ± 0.468	3.012 ± 0.575	1.01	86.1	-0.39
n-Heptane	µg/tube	6.87 ± 0.338	6.464 ± 0.646	0.756	94	-0.31
n-Hexane	µg/tube	6.79 ± 0.283	6.412 ± 0.526	0.679	94.5	-0.34
n-Nonane	µg/tube	5.54 ± 0.448	5.045 ± 0.681	0.886	91.1	-0.34
n-Octane	µg/tube	6.62 ± 0.317	6.259 ± 0.62	0.729	94.5	-0.29
n-Pentane	µg/tube	6.29 ± 0.338	5.948 ± 0.654	0.629	94.5	-0.26
o-Xylene	µg/tube	5.11 ± 0.48	5.468 ± 0.727	1.28	107	0.24
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.37 ± 1.512	2.24	107	0.22
Toluene	µg/tube	5.75 ± 0.323	6.18 ± 0.784	0.862	108	0.27

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.707 ± 0.675	0.708	110	0.24
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.504 ± 0.513	0.906	116	0.31
Tetrachloroethene	µg/tube	2.69 ± 0.588	3.481 ± 0.714	1.21	129	0.51
Tetrachloromethane	µg/tube	3.75 ± 0.464	4.375 ± 0.809	0.901	117	0.37
trans-1,2-Dichloroethene	µg/tube	- ± -	1.511 ± 0.31	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	3.346 ± 0.686	0.846	131	0.55
Trichloromethane	µg/tube	3.14 ± 0.257	3.26 ± 0.587	0.503	104	0.10

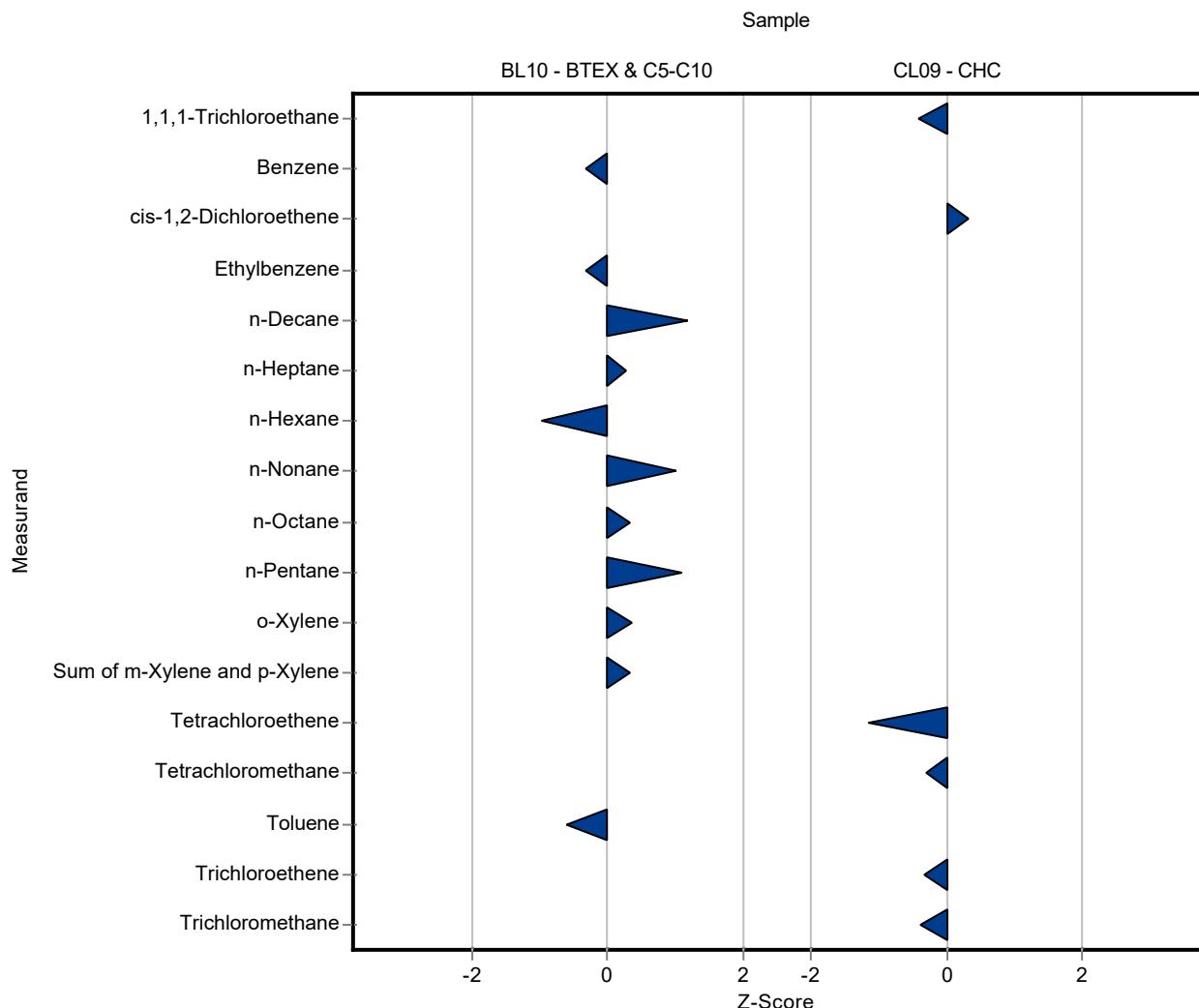


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.26 ± 1.3	0.829	95.2	-0.32
Ethylbenzene	µg/tube	5.71 ± 0.32	5.39 ± 1.3	1.03	94.4	-0.31
n-Decane	µg/tube	3.5 ± 0.468	4.7 ± 1.2	1.01	134	1.18
n-Heptane	µg/tube	6.87 ± 0.338	7.08 ± 1.8	0.756	103	0.27
n-Hexane	µg/tube	6.79 ± 0.283	6.13 ± 1.5	0.679	90.3	-0.97
n-Nonane	µg/tube	5.54 ± 0.448	6.42 ± 1.6	0.886	116	1.00
n-Octane	µg/tube	6.62 ± 0.317	6.86 ± 1.7	0.729	104	0.32
n-Pentane	µg/tube	6.29 ± 0.338	6.98 ± 1.7	0.629	111	1.09
o-Xylene	µg/tube	5.11 ± 0.48	5.55 ± 1.4	1.28	109	0.35
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.39 ± 2.8	2.24	107	0.32
Toluene	µg/tube	5.75 ± 0.323	5.23 ± 1.3	0.862	91	-0.60

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.08 ± 0.8	0.708	91.4	-0.41
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.46 ± 0.6	0.906	114	0.33
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.3 ± 0.3	1.21	48.3	-1.15
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.49 ± 0.9	0.901	92.9	-0.29
trans-1,2-Dichloroethene	µg/tube	- ± -	3.16 ± 0.8	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.28 ± 0.6	0.846	88.9	-0.34
Trichloromethane	µg/tube	3.14 ± 0.257	2.95 ± 0.7	0.503	93.9	-0.38

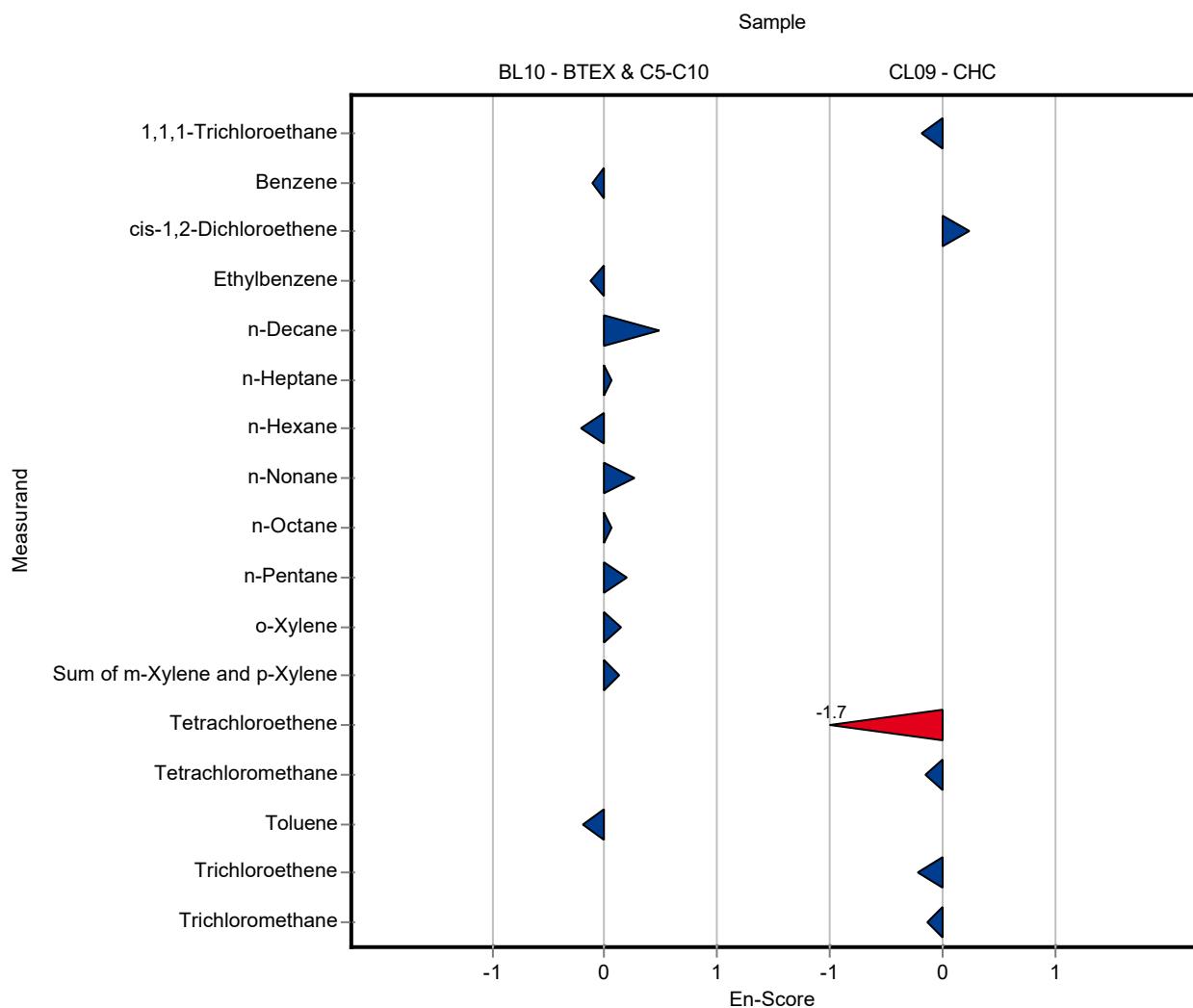


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.26 ± 1.3	0.829	95.2	-0.10
Ethylbenzene	µg/tube	5.71 ± 0.32	5.39 ± 1.3	1.03	94.4	-0.12
n-Decane	µg/tube	3.5 ± 0.468	4.7 ± 1.2	1.01	134	0.49
n-Heptane	µg/tube	6.87 ± 0.338	7.08 ± 1.8	0.756	103	0.06
n-Hexane	µg/tube	6.79 ± 0.283	6.13 ± 1.5	0.679	90.3	-0.22
n-Nonane	µg/tube	5.54 ± 0.448	6.42 ± 1.6	0.886	116	0.27
n-Octane	µg/tube	6.62 ± 0.317	6.86 ± 1.7	0.729	104	0.07
n-Pentane	µg/tube	6.29 ± 0.338	6.98 ± 1.7	0.629	111	0.20
o-Xylene	µg/tube	5.11 ± 0.48	5.55 ± 1.4	1.28	109	0.16
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	11.39 ± 2.8	2.24	107	0.13
Toluene	µg/tube	5.75 ± 0.323	5.23 ± 1.3	0.862	91	-0.20

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	3.08 ± 0.8	0.708	91.4	-0.18
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	2.46 ± 0.6	0.906	114	0.24
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.3 ± 0.3	1.21	48.3	-1.66
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.49 ± 0.9	0.901	92.9	-0.14
trans-1,2-Dichloroethene	µg/tube	- ± -	3.16 ± 0.8	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.28 ± 0.6	0.846	88.9	-0.22
Trichloromethane	µg/tube	3.14 ± 0.257	2.95 ± 0.7	0.503	93.9	-0.14

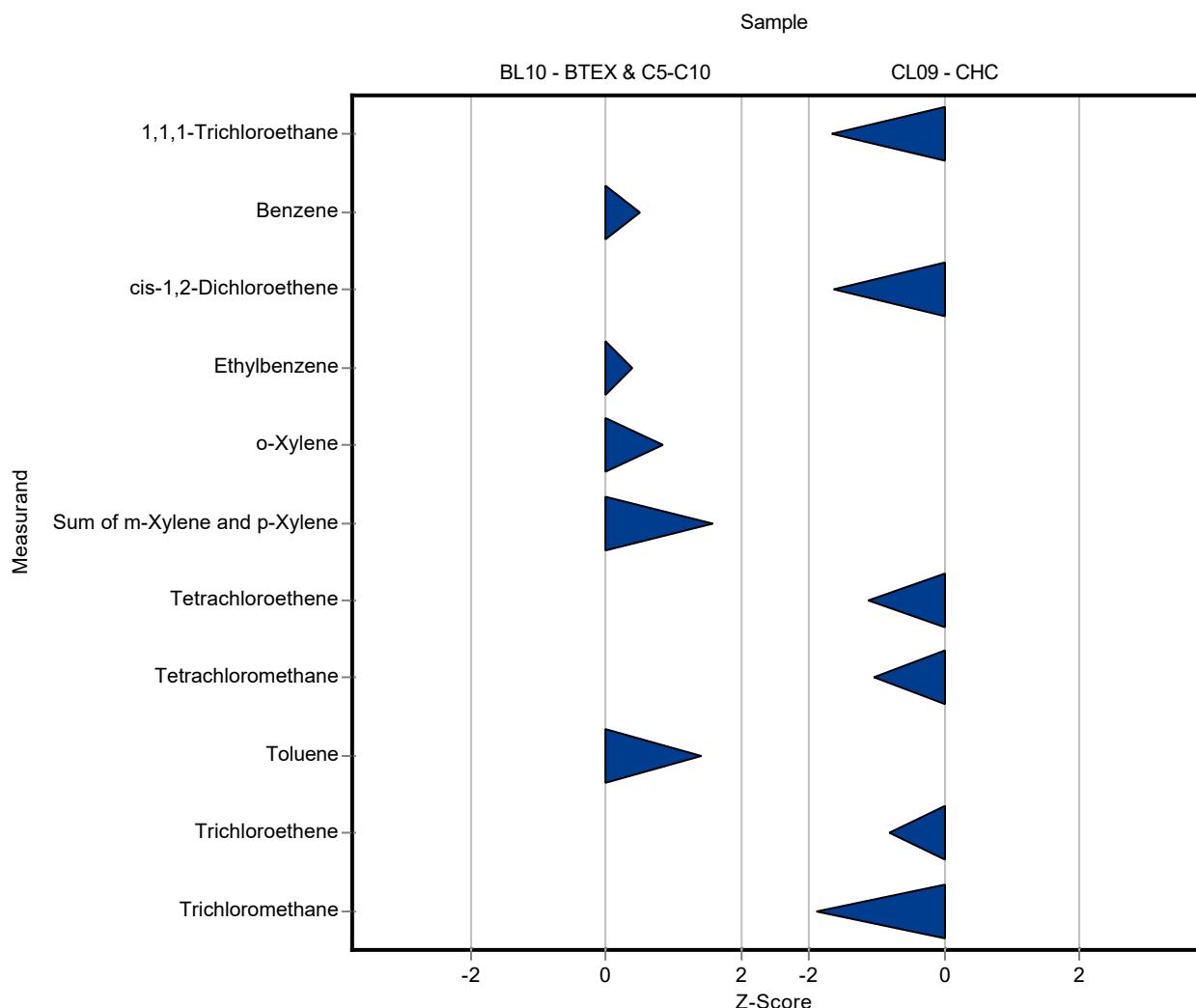


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.94 ± 1.2	0.829	108	0.50
Ethylbenzene	µg/tube	5.71 ± 0.32	6.1 ± 1.2	1.03	107	0.38
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.18 ± 1.2	1.28	121	0.84
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	14.2 ± 2.8	2.24	133	1.58
Toluene	µg/tube	5.75 ± 0.323	6.96 ± 1.4	0.862	121	1.41

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.2 ± 0.4	0.708	65.3	-1.65
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.67 ± 0.13	0.906	31.1	-1.64
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.33 ± 0.3	1.21	49.4	-1.12
Tetrachloromethane	µg/tube	3.75 ± 0.464	2.81 ± 0.6	0.901	74.8	-1.05
trans-1,2-Dichloroethene	µg/tube	- ± -	<0.1 (LOQ) ± -	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	1.87 ± 0.4	0.846	72.9	-0.82
Trichloromethane	µg/tube	3.14 ± 0.257	2.19 ± 0.4	0.503	69.7	-1.89

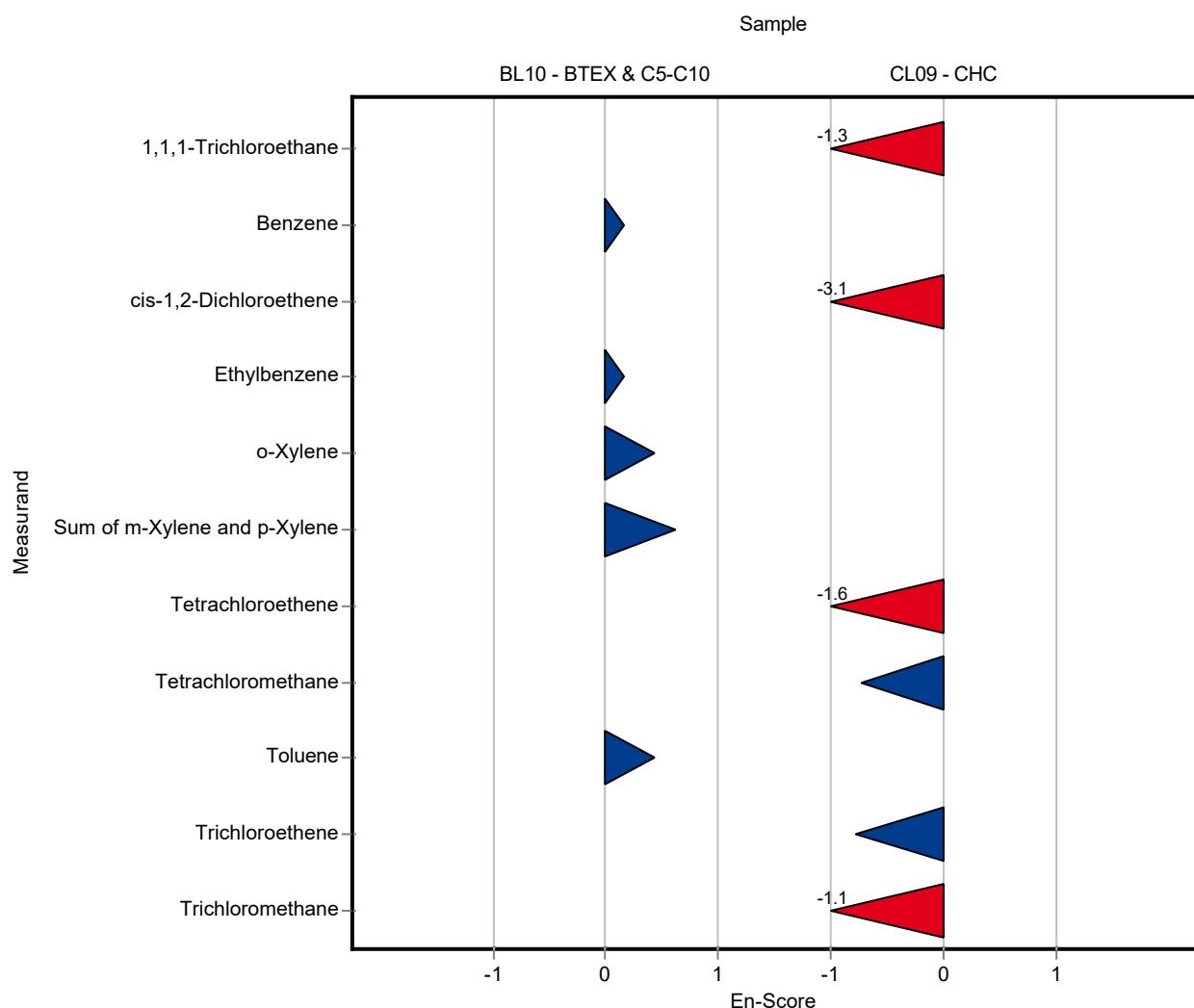


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.94 ± 1.2	0.829	108	0.17
Ethylbenzene	µg/tube	5.71 ± 0.32	6.1 ± 1.2	1.03	107	0.16
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	6.18 ± 1.2	1.28	121	0.44
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	14.2 ± 2.8	2.24	133	0.62
Toluene	µg/tube	5.75 ± 0.323	6.96 ± 1.4	0.862	121	0.43

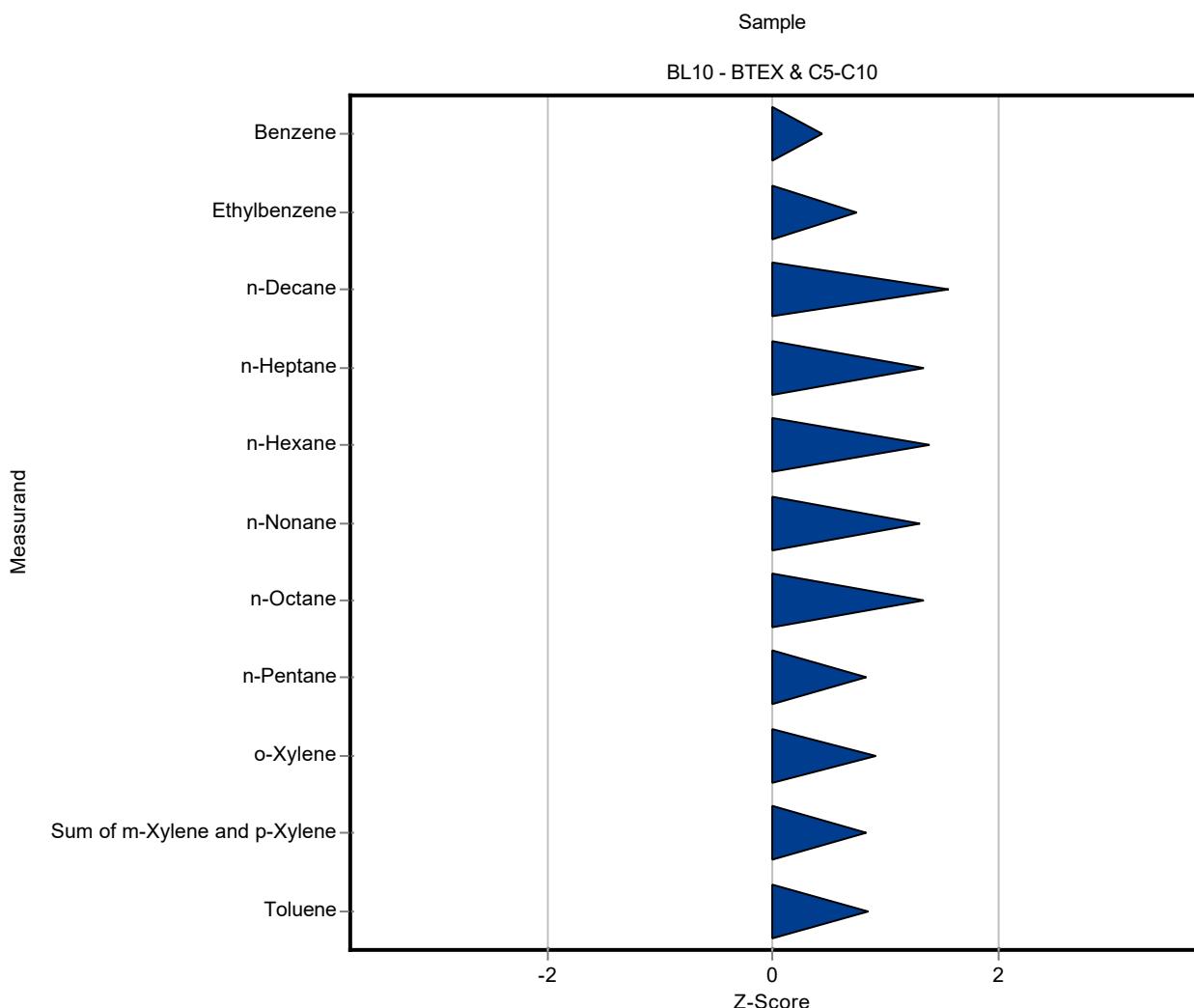
Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.2 ± 0.4	0.708	65.3	-1.34
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	0.67 ± 0.13	0.906	31.1	-3.07
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.33 ± 0.3	1.21	49.4	-1.62
Tetrachloromethane	µg/tube	3.75 ± 0.464	2.81 ± 0.6	0.901	74.8	-0.73
trans-1,2-Dichloroethene	µg/tube	- ± -	<0.1 (LOQ) ± -	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	1.87 ± 0.4	0.846	72.9	-0.77
Trichloromethane	µg/tube	3.14 ± 0.257	2.19 ± 0.4	0.503	69.7	-1.13



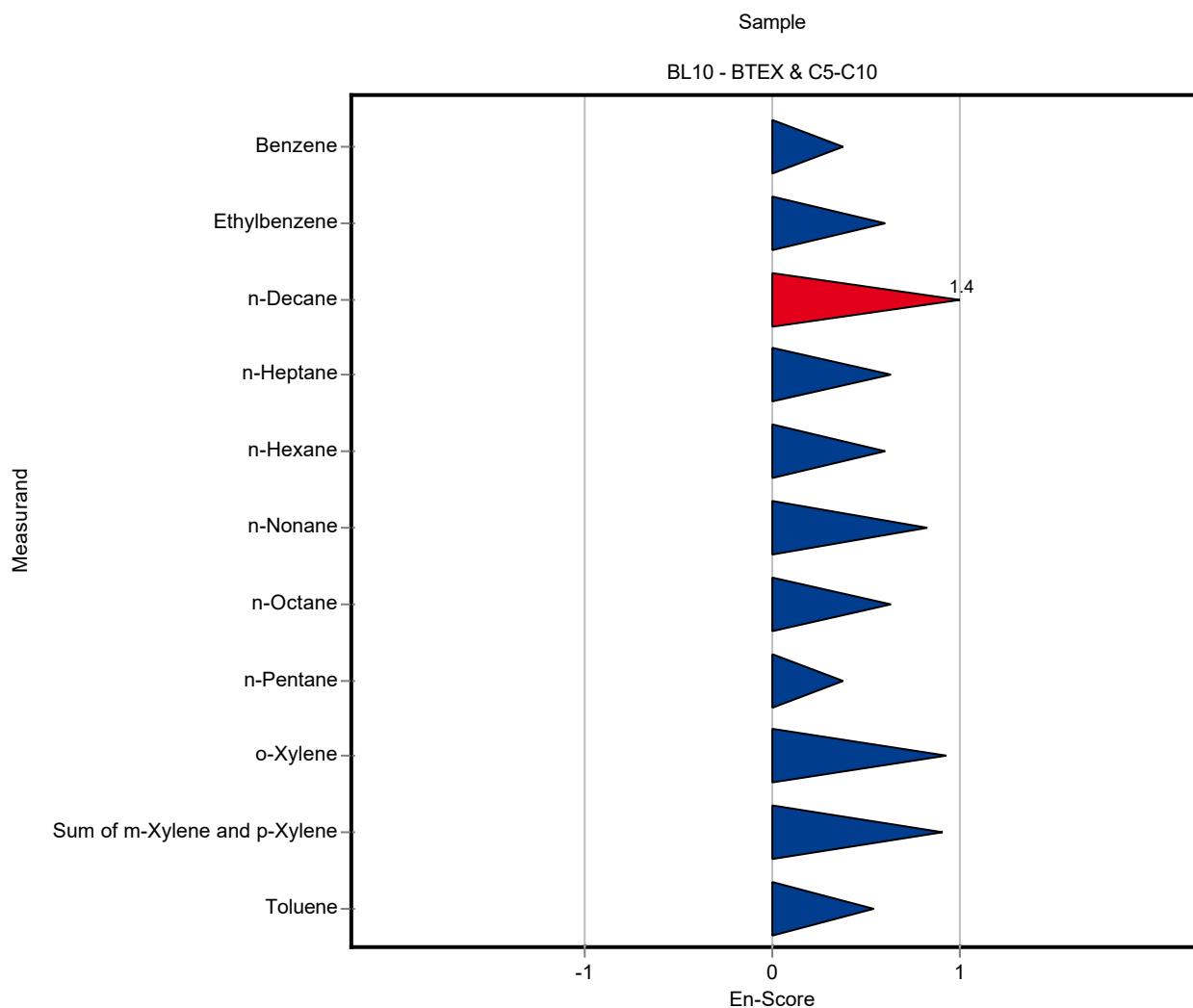
Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	5.88 ± 0.46	0.829	106	0.43
Ethylbenzene	µg/tube	5.71 ± 0.32	6.47 ± 0.62	1.03	113	0.74
n-Decane	µg/tube	3.5 ± 0.468	5.07 ± 0.51	1.01	145	1.55
n-Heptane	µg/tube	6.87 ± 0.338	7.88 ± 0.79	0.756	115	1.33
n-Hexane	µg/tube	6.79 ± 0.283	7.72 ± 0.77	0.679	114	1.38
n-Nonane	µg/tube	5.54 ± 0.448	6.69 ± 0.67	0.886	121	1.30
n-Octane	µg/tube	6.62 ± 0.317	7.6 ± 0.76	0.729	115	1.34
n-Pentane	µg/tube	6.29 ± 0.338	6.81 ± 0.68	0.629	108	0.82
o-Xylene	µg/tube	5.11 ± 0.48	6.27 ± 0.58	1.28	123	0.91
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.51 ± 0.93	2.24	117	0.82
Toluene	µg/tube	5.75 ± 0.323	6.47 ± 0.66	0.862	113	0.84



Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	5.88 ± 0.46	0.829	106	0.37
Ethylbenzene	µg/tube	5.71 ± 0.32	6.47 ± 0.62	1.03	113	0.60
n-Decane	µg/tube	3.5 ± 0.468	5.07 ± 0.51	1.01	145	1.40
n-Heptane	µg/tube	6.87 ± 0.338	7.88 ± 0.79	0.756	115	0.62
n-Hexane	µg/tube	6.79 ± 0.283	7.72 ± 0.77	0.679	114	0.60
n-Nonane	µg/tube	5.54 ± 0.448	6.69 ± 0.67	0.886	121	0.82
n-Octane	µg/tube	6.62 ± 0.317	7.6 ± 0.76	0.729	115	0.63
n-Pentane	µg/tube	6.29 ± 0.338	6.81 ± 0.68	0.629	108	0.37
o-Xylene	µg/tube	5.11 ± 0.48	6.27 ± 0.58	1.28	123	0.93
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	12.51 ± 0.93	2.24	117	0.90
Toluene	µg/tube	5.75 ± 0.323	6.47 ± 0.66	0.862	113	0.53

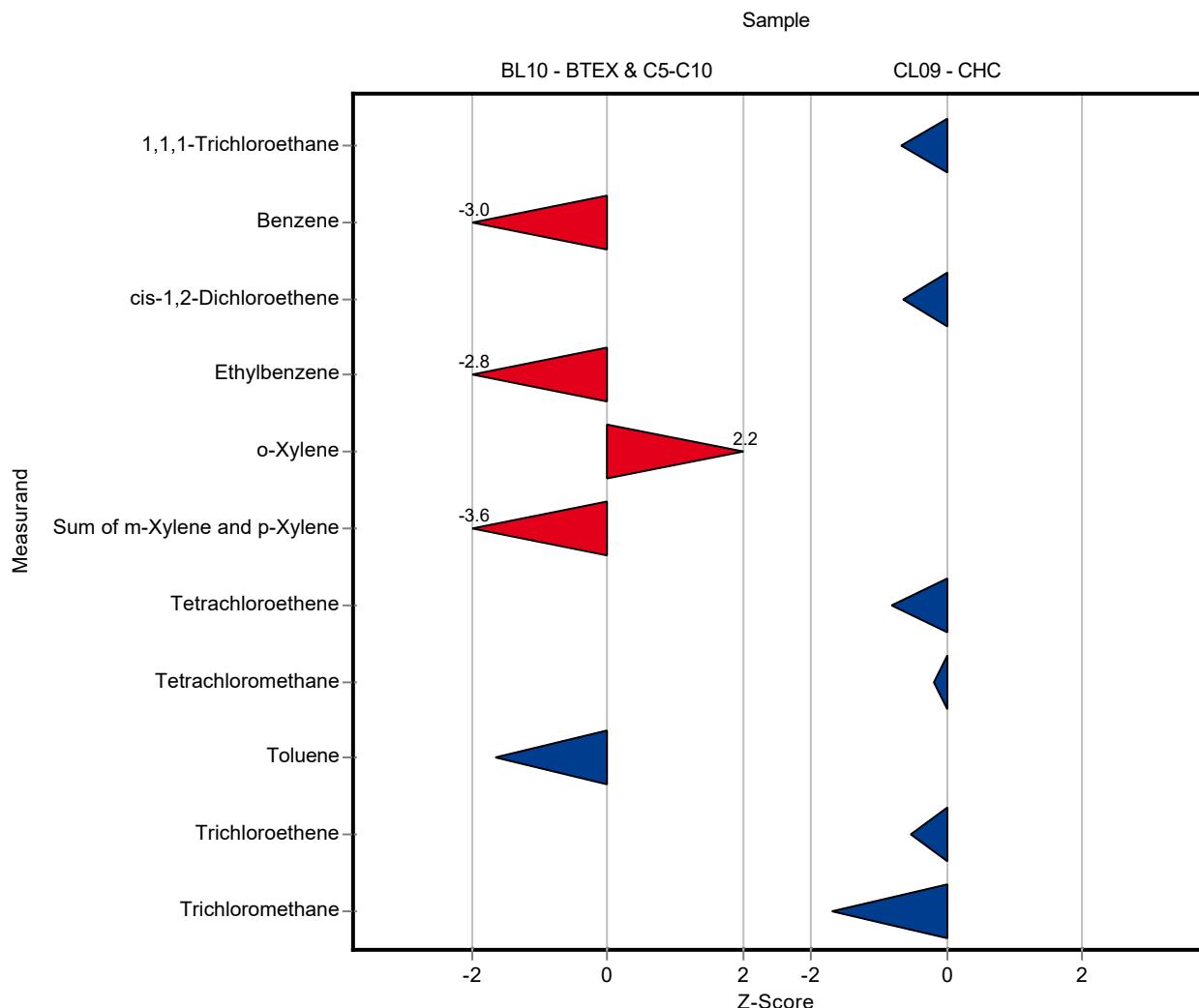


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Benzene	µg/tube	5.52 ± 0.294	3.01 ± 0.464	0.829	54.5	-3.03
Ethylbenzene	µg/tube	5.71 ± 0.32	2.86 ± 0.54	1.03	50.1	-2.77
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	7.87 ± 0.943	1.28	154	2.17
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	2.62 ± 0.353	2.24	24.6	-3.59
Toluene	µg/tube	5.75 ± 0.323	4.32 ± 0.832	0.862	75.2	-1.65

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.9 ± 0.318	0.708	86.1	-0.66
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.58 ± 0.263	0.906	73.2	-0.64
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.7 ± 0.323	1.21	63.1	-0.82
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.58 ± 0.585	0.901	95.3	-0.19
trans-1,2-Dichloroethene	µg/tube	- ± -	1.54 ± 0.215	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.11 ± 0.288	0.846	82.3	-0.54
Trichloromethane	µg/tube	3.14 ± 0.257	2.29 ± 0.298	0.503	72.9	-1.70

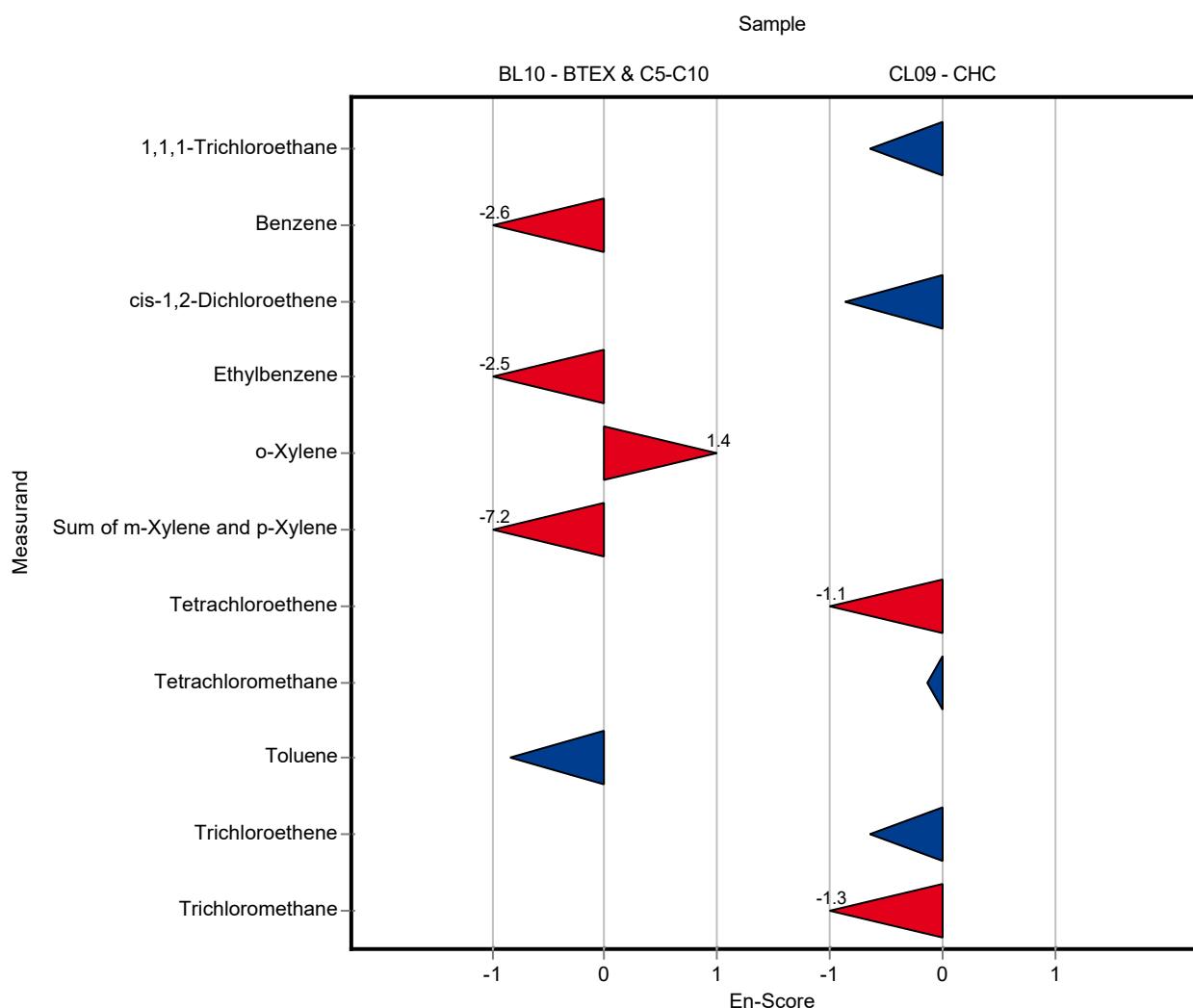


Sample: BL10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzene	µg/tube	5.52 ± 0.294	3.01 ± 0.464	0.829	54.5	-2.58
Ethylbenzene	µg/tube	5.71 ± 0.32	2.86 ± 0.54	1.03	50.1	-2.53
n-Decane	µg/tube	3.5 ± 0.468	- ± -	1.01	-	-
n-Heptane	µg/tube	6.87 ± 0.338	- ± -	0.756	-	-
n-Hexane	µg/tube	6.79 ± 0.283	- ± -	0.679	-	-
n-Nonane	µg/tube	5.54 ± 0.448	- ± -	0.886	-	-
n-Octane	µg/tube	6.62 ± 0.317	- ± -	0.729	-	-
n-Pentane	µg/tube	6.29 ± 0.338	- ± -	0.629	-	-
o-Xylene	µg/tube	5.11 ± 0.48	7.87 ± 0.943	1.28	154	1.42
Sum of m-Xylene and p-Xylene	µg/tube	10.7 ± 0.86	2.62 ± 0.353	2.24	24.6	-7.23
Toluene	µg/tube	5.75 ± 0.323	4.32 ± 0.832	0.862	75.2	-0.84

Sample: CL09

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/tube	3.37 ± 0.347	2.9 ± 0.318	0.708	86.1	-0.65
cis-1,2-Dichloroethene	µg/tube	2.16 ± 0.409	1.58 ± 0.263	0.906	73.2	-0.87
Tetrachloroethene	µg/tube	2.69 ± 0.588	1.7 ± 0.323	1.21	63.1	-1.14
Tetrachloromethane	µg/tube	3.75 ± 0.464	3.58 ± 0.585	0.901	95.3	-0.14
trans-1,2-Dichloroethene	µg/tube	- ± -	1.54 ± 0.215	-	-	-
Trichloroethene	µg/tube	2.56 ± 0.411	2.11 ± 0.288	0.846	82.3	-0.64
Trichloromethane	µg/tube	3.14 ± 0.257	2.29 ± 0.298	0.503	72.9	-1.31



E9. Methodenübersicht / Overview of methods

LabCode	Sample	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	Tetrachloromethane
LC0001	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0002	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0003	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0005	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0006	CL09	ON M 5700-2 (GC);			
LC0007	CL09	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);
LC0008	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0009	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0013	CL09	EN ISO 10301 (GC-FID/ECD); F4			
LC0014	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0015	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0021	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0022	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0023	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0024	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0025	CL09	ITEX-GC-MS; VDI Guidelines 2100			
LC0026	CL09	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);
LC0028	CL09	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);

LabCode	Sample	1,1,1-Trichloroethane	Trichloroethene	Trichloromethane
LC0001	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0002	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0003	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0005	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0006	CL09	ON M 5700-2 (GC);	ON M 5700-2 (GC);	ON M 5700-2 (GC);
LC0007	CL09	VDI 2100-2 (GC);	VDI 2100-2 (GC);	VDI 2100-2 (GC);
LC0008	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0009	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0010	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0013	CL09	EN ISO 10301 (GC-FID/ECD); F4	EN ISO 10301 (GC-FID/ECD); F4	EN ISO 10301 (GC-FID/ECD); F4
LC0014	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0015	CL09	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);	VDI 3865-3 (GC-MS);
LC0021	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0022	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0023	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0024	CL09	VDI 3865-3 (GC);	VDI 3865-3 (GC);	VDI 3865-3 (GC);
LC0025	CL09	ITEX-GC-MS; VDI Guidelines 2100	ITEX-GC-MS; VDI Guidelines 2100	ITEX-GC-MS; VDI Guidelines 2100
LC0026	CL09	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);
LC0028	CL09	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);	DIN 38407-43 (HS-GC-MS);

LabCode	Sample	Benzene	Toluene	Ethylbenzene	o-Xylene	Sum of m-Xylene and p-Xylene	n-Decane
LC0001	BL10	VDI 3865-3 (GC);					
LC0002	BL10	VDI 3865-3 (GC);					
LC0003	BL10	VDI 3865-3 (GC);	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)				
LC0004	BL10	EN 14662-2 (GC-FID);					
LC0005	BL10	VDI 3865-3 (GC);					
LC0006	BL10	ON M 5700-2 (GC);					
LC0007	BL10	VDI 2100-2 (GC);					
LC0008	BL10	VDI 3865-3 (GC-MS);					
LC0009	BL10	VDI 3865-3 (GC);					
LC0010	BL10	VDI 3865-3 (GC);					
LC0011	BL10	GC-FID; CS2 extraction					
LC0012	BL10	GC; SOP 05.016:2014-05 (VDI 3865-3, VDI 4300, VDI 2100-2)	GC; SOP 05.016:2014-05 (VDI 3865-3, VDI 4300, VDI 2100-2)	GC; SOP 05.016:2014-05 (VDI 3865-3, VDI 4300, VDI 2100-2)	GC; SOP 05.016:2014-05 (VDI 3865-3, VDI 4300, VDI 2100-2)	GC; SOP 05.016:2014-05 (VDI 3865-3, VDI 4300, VDI 2100-2)	
LC0013	BL10	DIN 38407-9 (GC-FID); F9-1	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)
LC0014	BL10	VDI 3865-3 (GC-MS);					
LC0015	BL10	VDI 3865-3 (GC-MS);					
LC0016	BL10	CEN/TS 13649 (GC);					
LC0017	BL10	CEN/TS 13649 (GC-MS);	CEN/TS 13649 (GC-FID);				
LC0018	BL10	ON M 5700-2 (GC-MS); solvent extraction					
LC0019	BL10	EN 14662-2 (GC);	ON M 5700-2 (GC);				
LC0020	BL10	EN 14662-2 (GC); VDI 2100-2	VDI 2100-2 (GC);				
LC0022	BL10	VDI 3865-3 (GC);					
LC0023	BL10	VDI 3865-3 (GC);					
LC0024	BL10	VDI 3865-3 (GC);					
LC0025	BL10	ITEX-GC-MS; VDI Guidelines 2100					
LC0026	BL10	DIN 38407-43 (HS-GC-MS);					
LC0027	BL10	CEN/TS 13649 (GC); AM 8003					
LC0028	BL10	DIN 38407-43 (HS-GC-MS);					

LabCode	Sample	n-Heptane	n-Hexane	n-Nonane	n-Octane	n-Pentane
LC0001	BL10	VDI 3865-3 (GC);				
LC0002	BL10	VDI 3865-3 (GC);				
LC0003	BL10	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)	VDI 3865-3 (HS-GC-MS); housemethod 327 acc. to VDI 3865-3 (modif: extraction with benzyl alcohol, headspace, GC-MS)
LC0004	BL10					
LC0005	BL10					
LC0006	BL10					
LC0007	BL10	VDI 2100-2 (GC);				
LC0008	BL10	VDI 3865-3 (GC-MS);				
LC0009	BL10	VDI 3865-3 (GC);				
LC0010	BL10	VDI 3865-3 (GC);	VDI 3865-3 (GC);		VDI 3865-3 (GC);	
LC0011	BL10					
LC0012	BL10					
LC0013	BL10	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)	DIN 38407-9 (GC-FID); F9-1; EN ISO 10301 (F4)
LC0014	BL10					
LC0015	BL10	VDI 3865-3 (GC-MS);				
LC0016	BL10	CEN/TS 13649 (GC);				
LC0017	BL10	CEN/TS 13649 (GC-FID);				
LC0018	BL10	ON M 5700-2 (GC-MS); solvent extraction				
LC0019	BL10	ON M 5700-2 (GC);				
LC0020	BL10	VDI 2100-2 (GC);		VDI 2100-2 (GC);	VDI 2100-2 (GC);	
LC0022	BL10	VDI 3865-3 (GC);				
LC0023	BL10	VDI 3865-3 (GC);				
LC0024	BL10	VDI 3865-3 (GC);				
LC0025	BL10	ITEX-GC-MS; VDI Guidelines 2100				
LC0026	BL10					
LC0027	BL10	CEN/TS 13649 (GC); AM 8003				
LC0028	BL10					