umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

Proficiency Testing Scheme für die Wasseranalytik - Realproben

C67 Leichtflüchtige halogenierte Kohlenwasserstoffe (LHKW)

Proficiency Testing Scheme for Water Analysis - natural water samples

C67 Volatile halogenated hydrocarbons (VHH)

BERICHT / REPORT

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D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 16
- Anzahl der übermittelten Datensätze: 15
- Probenversand: 31.05.2022
- Einsendeschluss der Daten: 28.06.2022

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

Die Probenahme von Grundwasser und Oberflächenwasser erfolgte am 24.05.2022. Das Probenmaterial umfasste:

- 1 Probe Grundwasser (C67 A)
- 1 Probe Oberflächenwasser (C67 B)

Alle Proben wurden anschließend bis zur weiteren Verarbeitung gekühlt gelagert (4 +/- 3°C). Die o.a. Proben wurden bei 40 µm filtriert und im Rührkessel zusätzlich mit einzelnen Substanzen dotiert.

Das Abfüllen der Proben erfolgte unter ständigem Rühren (Rührkessel). Die Stabilisierung erfolgte durch Kühlung.

Die homogenen Prüfgegenstände wurden am 31.05.2022 verschickt.

Jedes Teilnehmerlabor erhielt:

- 2 Proben zu je ca. 600 ml, abgefüllt in je 1 x 600 ml Aluminium-Flaschen

D1.3. Anweisungen für die Teilnehmenden

Aus Stabilitätsgründen wurde empfohlen bis spätestens 08.06.2022 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 die A- bzw. B-Probe jeweils n=5 Kontrollproben sowie n=1 undotierte Realprobe 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 parameterorientieren Auswertung (E7) in Form von Mittelwerten ± Messunsicherheit als Kontrollwert (control test value) ± U gelistet (jeweils angegeben als erweiterte Messunsicherheit, k=2).

D1.5. Trendtest zur Bewertung der Stabilität

Die Bewertung der Stabilität der Prüfgegenstände (Realproben) erfolgte auf Basis der Datenstatistik aus den vergangenen Runden für Realproben im Zeitraum 2013 bis 2021.

Um die ausreichende Stabilität der Prüfgegenstände der aktuellen Eignungsprüfungsrunde 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 Eignungsprüfungsrunde gilt die Stabilität der Prüfgegenstände im empfohlenen Zeitraum für die Analyse bis zum Abgabeschluss als gewährleistet.

D1.6. Ermittlung des zugewiesenen Wertes

Die Ergebnisse der Analysen mussten spätestens bis zum 28.06.2022 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, nummerischen Ergebnissen pro Parameter. Ergebnisse kleiner Bestimmungs- oder Nachweisgrenze wurden bei den Berechnungen nicht berücksichtigt.

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

Bei sehr hohen Streuungen der 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:

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

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
$\overline{X}$	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 reale Wasserproben der vorangegangenen Runden im Zeitraum 2013 bis 2021 (RSDpooled) bzw. aus den ausreißerbereinigten Ergebnissen der Teilnehmenden (sR) des aktuellen Ringversuchs (falls noch weniger als 6 vorangegangene Runden für A und B-Proben vorlagen). In begründeten Fällen (z.B. Ergebnisse Realproben nahe an Mindestbestimmungsgrenze oder regulatorischer Vorgaben) erfolgt die Festlegung nach Expertenbefund und die Vorgangsweise wird unter Punkt D4 des Berichts beschrieben.

D2.2. Leistungskriterium E_n-Score

Für die realen Wasserproben 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:

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

Dabei ist:

x_i	Messergebnis des teilnehmenden Labors
$\overline{X}$	zugewiesener Wert Sollwert für die Leistungsbewertung der 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-Score| ≤ 2.0 Ergebnis gut
- 2.0 < |z-Score| < 3.0 Ergebnis fragwürdig
- |z-Score| ≥ 3.0 Ergebnis nicht zufriedenstellend

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

Interpretation der E_n-Scores:

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

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

D3. Darstellung und Interpretation der Messergebnisse

In der parameterorientierten Auswertung ist eine tabellarische Übersicht mit den Messergebnissen inklusive der Unsicherheit (± U), der Wiederfindung zum zugewiesenen Wert und dem berechneten z-Score dargestellt. Weiterhin werden unter

Anmerkungen die Ausreißer gekennzeichnet. Die in der Tabelle angeführten Ergebnisse werden auch grafisch dargestellt.

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

Eine Erläuterung zu den Tabellen und Grafiken kann Punkt 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 Ergebnisstreuung dazu kommen kann, dass der Bereich z-Score - 2 bis z-Score + 2 einen ungewöhnlich hohen Wiederfindungsbereich abdeckt. Umgekehrt führt eine sehr geringe Streuung der 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 9 Eignungsprüfungsrunden (2013–2021) in Realproben wurden Kriterien (RSDpool) zur Ergebnisbewertung berechnet. Diese wurden im Zuge der Auswertung den relativen Vergleichs-standardabweichungen (vR) des aktuellen Ringversuchs gegenübergestellt.

Parameter 1,1-Dichlorethen; 1,1,1-Trichlorethan; 1,2-Dichlorethan; Bromdichlor-methan; Dibromchlormethan; Dichlormethan; Tribrommethan; Trichlormethan bei Probe C67 A und bei Probe C67 B: Bei diesen Parametern erfolgt die Berechnung der Scores nach D2.

Parameter cis-1,2-Dichlorethen; Tetrachlorethen; Tetrachlormethan; trans-1,2-Dichlorethen und Trichlorethen bei Probe C67 A und bei Probe C67 B: Für diese Parameter wurden aufgrund der hohen Streuungen und der niedrigen Anzahl an teilnehmenden Laboren die relativen Vergleichsstandardabweichungen der aktuellen

Ringversuchsrunde als Kriterium für die Bewertung gewählt (vR in %, aufgerundet auf 2 signifikante Stellen, siehe nachfolgende Tabelle).

Tabelle 1: Kriterien für die aktuelle Eignungsprüfungsrunde auf Basis der Statistik der Teilnehmenden (angegeben als vR, in %).

Parameter	Kriterium Probe C67 A	Kriterium Probe C67 B
cis-1,2-Dichlorethen	26 %	25 %
Tetrachlorethen	37 %	30 %
Tetrachlormethan	32 %	29 %
trans-1,2-Dichlorethen	37 %	30 %
Trichlorethen	25 %	30 %

D5. Erläuterung zu Tabellen und Grafiken

D5.1. Angaben und Abkürzungen in Tabellen

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

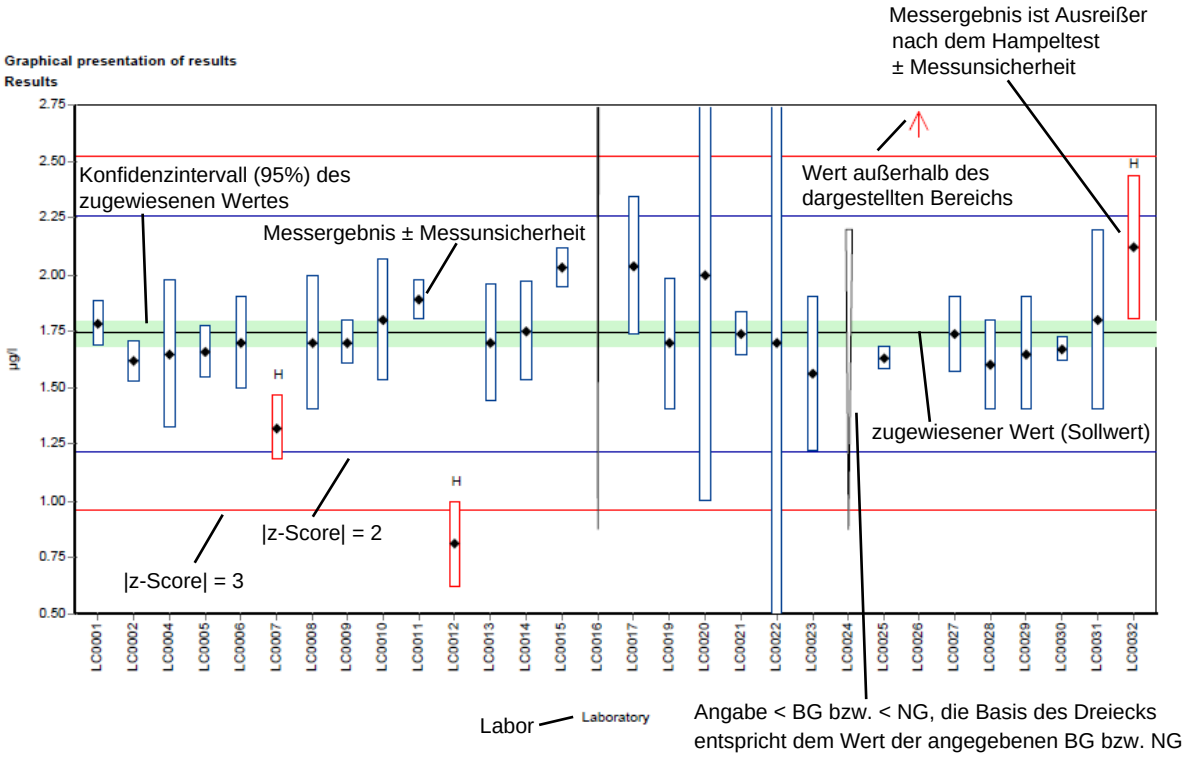
	aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)
Laborcode	anonymisierte, eindeutige Kennung des teilnehmenden Labors im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt). Bei Eignungsprüfungsrunden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmenden.
± U	kombinierte Messunsicherheit ohne Erweiterungsfaktor (k=1) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
BG	Bestimmungsgrenze
NG	Nachweisgrenze
WF	Wiederfindungsrate in %, bezogen auf den zugewiesenen Wert (angegeben auf 3 signifikante Stellen, dargestellt maximal 1 Nachkommastelle)
MW	Mittelwert
z-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches des Kriteriums (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen)
E_n-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches der kombinierten Messunsicherheiten, bestehend aus erweiterter Unsicherheit des zugewiesenen Wertes und der erweiterten Unsicherheit der Messergebnisse der Teilnehmenden (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim E_n-Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmenden.
-	Keine Daten übermittelt bzw. keine Berechnung möglich

Anmerkungen	Anmerkungen zum jeweiligen Messergebnis (z.B. H, FN, FP)
H	Ausreißer nach dem Hampel-Test
FN	Falsch negativ – Messergebnis kleiner Bestimmungs- bzw. Nachweisgrenze dessen Betrag die Bedingungen eines Ausreißers nach dem Hampeltest erfüllt.
FP	Falsch positiv – Falls aufgrund des geringen Analytgehalts kein zugewiesener Wert ermittelt werden kann (n < 6), wird der Median der Beträge der übermittelten Nachweis- bzw. Bestimmungsgrenzen ermittelt. Als falsch positiv wird ein Messergebnis bewertet, welches diesen Median um mehr als 100 % übersteigt.
Standardabweichung	Vergleichsstandardabweichung berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
rel. Standardabweichung	relative Vergleichsstandardabweichung in %, berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 3 signifikante Stellen)
n	Anzahl der Messergebnisse
*	Kennzeichnung für Hinweise zur Erläuterung
**	Kennzeichnung für Parameter außerhalb der Akkreditierung gemäß EN ISO/IEC 17043

D5.2. Graphische Darstellung der Ergebnisse

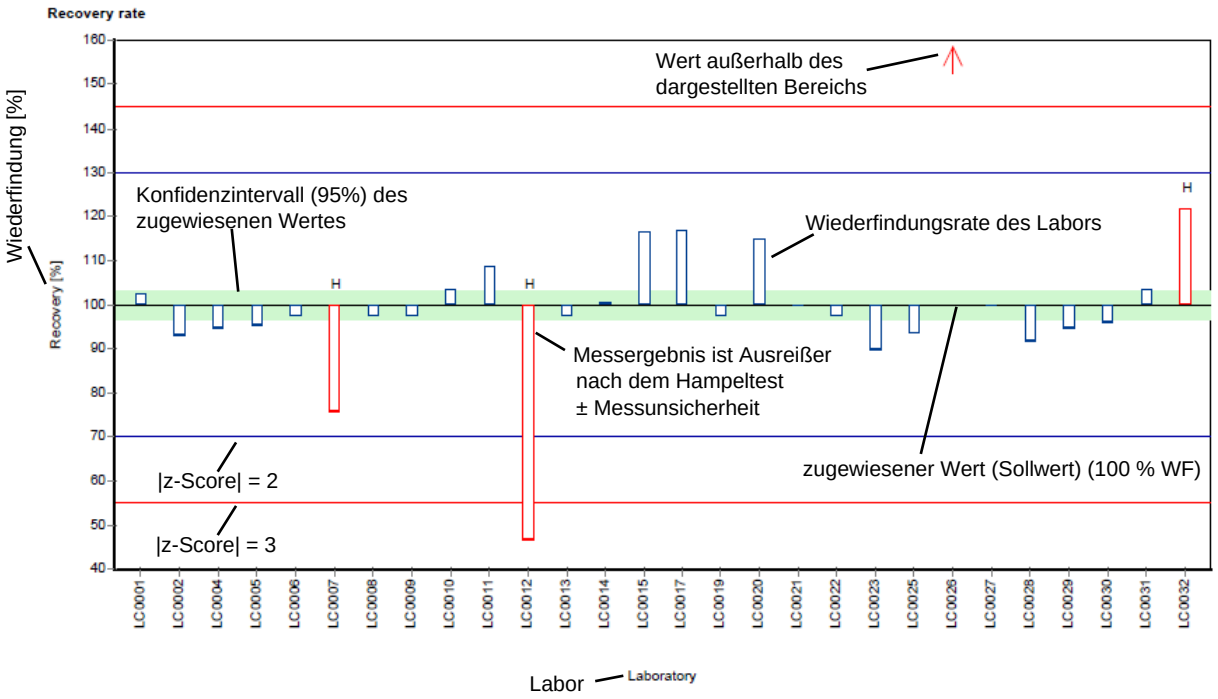
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

Beispieldiagramm: Messwerte



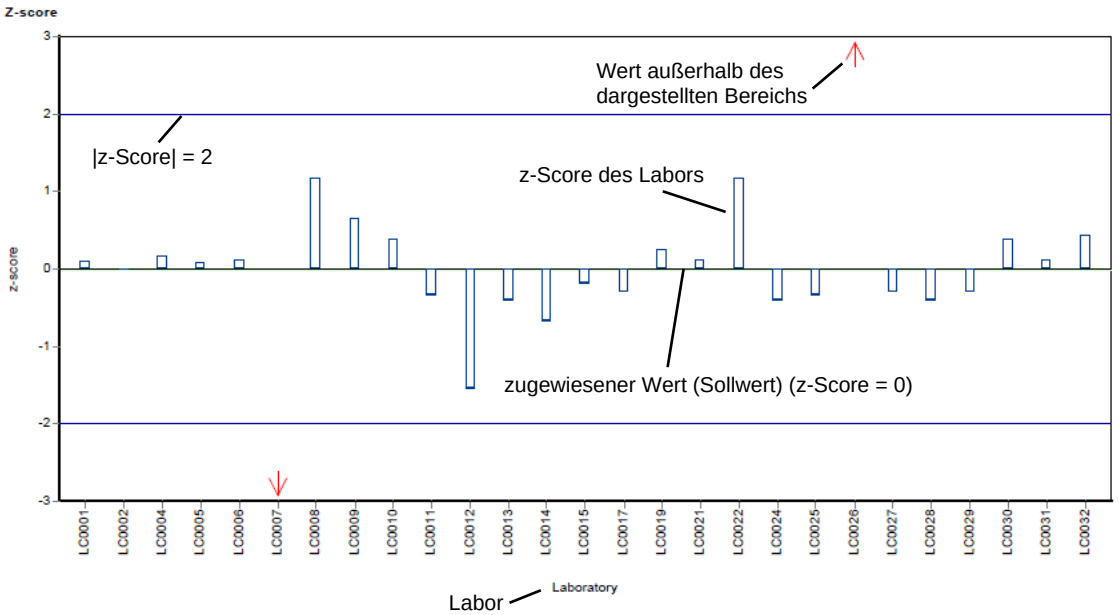
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



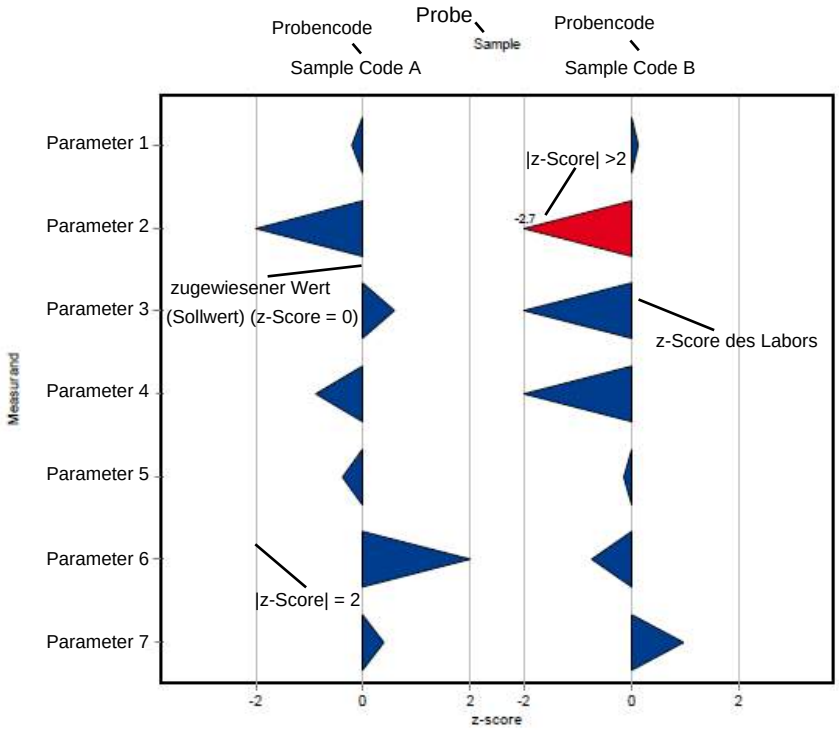
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score

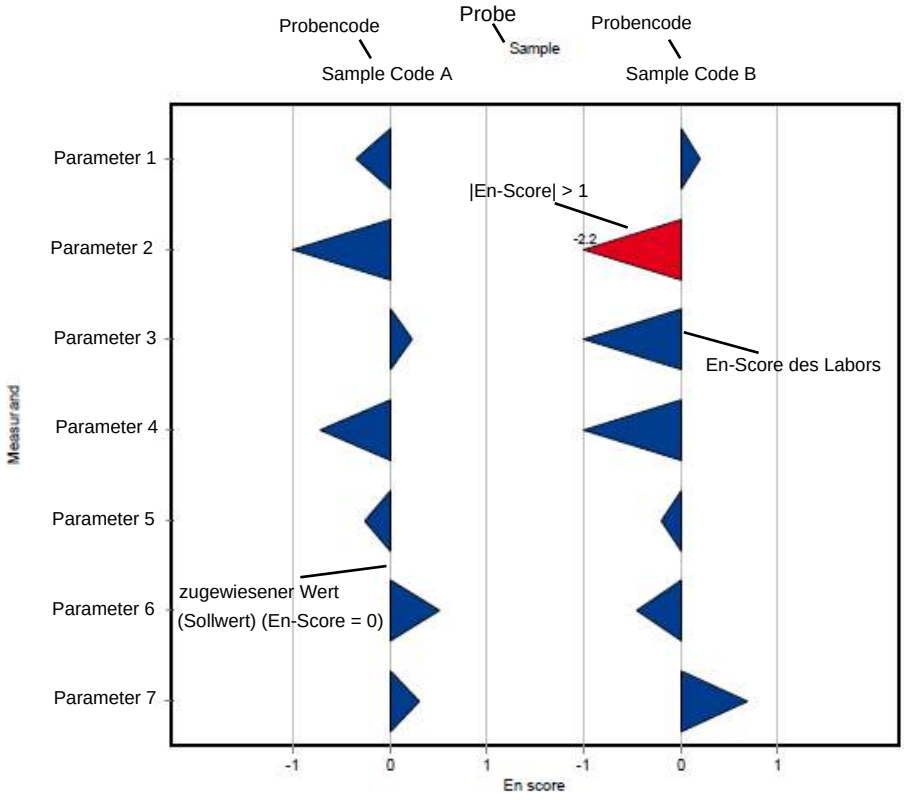


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score (laborientierte Auswertung)



Beispieldiagramm: En-Score (laborientierte Auswertung)



D6. Zusammenfassung

D6.1. Tabelle der zugewiesenen Werte

Parameter	Probe	Einheit	zugewiesener Wert	±	U (k=2)	Kriterium	Kriterium [%]
1,1,1-Trichlorethan	C67 A	µg/l	0.505	±	0.0458	0.0758	15
	C67 B	µg/l	9.89	±	1.34	1.48	15
1,1-Dichlorethen	C67 A	µg/l	0.39	±	0.0707	0.0663	17
	C67 B	µg/l	7.62	±	1.07	1.29	17
1,2-Dichlorethan	C67 A	µg/l	1.2	±	0.0662	0.156	13
	C67 B	µg/l	12.3	±	0.9	1.6	13
Bromdichlormethan	C67 A	µg/l	1.91	±	0.156	0.191	10
	C67 B	µg/l	12	±	0.981	1.2	10
cis-1,2-Dichlorethen	C67 A	µg/l	0.645	±	0.0937	0.168	26
	C67 B	µg/l	7.31	±	1.04	1.83	25
Dibromchlormethan	C67 A	µg/l	1.28	±	0.081	0.154	12
	C67 B	µg/l	14.8	±	0.934	1.78	12
Dichlormethan	C67 A	µg/l	1.33	±	0.152	0.173	13
	C67 B	µg/l	12.4	±	1.07	1.62	13
Tetrachlorethen	C67 A	µg/l	0.339	±	0.0674	0.125	37
	C67 B	µg/l	14.1	±	2.26	4.22	30
Tetrachlormethan	C67 A	µg/l	0.298	±	0.0514	0.0954	32
	C67 B	µg/l	10.6	±	1.69	3.07	29
trans-1,2-Dichlorethen	C67 A	µg/l	0.584	±	0.119	0.216	37
	C67 B	µg/l	6.53	±	1.18	1.96	30
Tribrommethan	C67 A	µg/l	1.52	±	0.118	0.182	12
	C67 B	µg/l	7.68	±	0.493	0.921	12
Trichlorethen	C67 A	µg/l	0.641	±	0.0838	0.16	25
	C67 B	µg/l	12.6	±	1.99	3.77	30
Trichlormethan	C67 A	µg/l	0.72	±	0.0914	0.0935	13
	C67 B	µg/l	13.8	±	1.33	1.79	13

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	C67 A	12	3	µg/l	0.505	± 0.0687	0.402	0.71	0.0793	16
	C67 B	12	2	µg/l	9.89	± 2.01	6.92	15.7	2.32	23
1,1-Dichlorethen	C67 A	10	3	µg/l	0.39	± 0.106	0.27	0.67	0.112	29
	C67 B	10	2	µg/l	7.62	± 1.61	5.94	10.5	1.69	22
1,2-Dichlorethan	C67 A	12	1	µg/l	1.2	± 0.0992	1.08	1.48	0.115	9.5
	C67 B	11	1	µg/l	12.3	± 1.35	10.6	15.8	1.49	12
Bromdichlormethan	C67 A	15	0	µg/l	1.91	± 0.234	1.43	2.39	0.302	16
	C67 B	13	1	µg/l	12	± 1.47	9.19	15.5	1.77	15
cis-1,2-Dichlorethen	C67 A	13	0	µg/l	0.645	± 0.141	0.461	0.998	0.169	26
	C67 B	12	0	µg/l	7.31	± 1.55	5.51	11.1	1.79	25
Dibromchlormethan	C67 A	15	0	µg/l	1.28	± 0.121	1	1.62	0.157	12
	C67 B	13	1	µg/l	14.8	± 1.4	11.8	17.9	1.68	11
Dichlormethan	C67 A	10	1	µg/l	1.33	± 0.227	1.03	1.91	0.24	18
	C67 B	10	2	µg/l	12.4	± 1.6	9.73	15.2	1.69	14
Tetrachlorethen	C67 A	14	1	µg/l	0.339	± 0.101	0.12	0.567	0.126	37
	C67 B	14	0	µg/l	14.1	± 3.39	9.18	24.1	4.22	30
Tetrachlormethan	C67 A	14	1	µg/l	0.298	± 0.0771	0.208	0.536	0.0962	32
	C67 B	13	1	µg/l	10.6	± 2.54	6.38	18.7	3.05	29
trans-1,2-Dichlorethen	C67 A	13	0	µg/l	0.584	± 0.178	0.344	1	0.214	37
	C67 B	11	1	µg/l	6.53	± 1.77	4.34	11	1.96	30
Tribrommethan	C67 A	15	0	µg/l	1.52	± 0.177	1.13	1.92	0.229	15
	C67 B	14	0	µg/l	7.68	± 0.739	6.06	9.3	0.922	12
Trichlorethen	C67 A	14	1	µg/l	0.641	± 0.126	0.448	0.974	0.157	24
	C67 B	14	0	µg/l	12.6	± 2.99	8.99	20.1	3.73	30
Trichlormethan	C67 A	15	0	µg/l	0.72	± 0.137	0.515	1.09	0.177	25
	C67 B	14	0	µg/l	13.8	± 2	10.5	19.9	2.49	18

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 16
- Number of submitted data records: 15
- Dispatch of samples: 31st May 2022
- Closing date for submission of data: 28th June 2022

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

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

E1.2. Description of the proficiency test items

The sampling of ground water and surface water was carried out on 24th May 2022. The following samples were made available:

- 1 sample ground water (C67 A)
- 1 sample surface water (C67 B)

Both samples were stored at 4 +/- 3°C until further processing. The samples were filtered (40 µm) and partly spiked with specific substances in the stirring vessel.

The samples were filled into bottles under continuous stirring (stirring vessel) and stabilized by cooling.

The homogeneous proficiency test items were dispatched on 31st May 2022.

Each participant received:

- 2 samples each 600 ml, filled in 600 ml aluminium bottles

E1.3. Instructions for the participants

For reasons of stability, it was recommended to start the analysis by the 08th June 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 A and B, n=5 control test samples and n=1 unspiked real water 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) 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 ± expanded measurement uncertainty as control test value ± U (expanded uncertainty, k=2).

E1.5. Trend test for stability evaluation

The evaluation of stability of the proficiency test items was performed using the data statistics of the results of previous proficiency testing rounds for real water samples of the period from 2013 to 2021.

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 for real water samples from 2013 to 2021 and based on the trend test evaluation of the current round, the stability of the test items for proficiency testing of real water 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 28th June 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 real water samples in some exceptional cases it might occur, that no assigned value based on participants' results can be calculated and no evaluation of the participants results can be made. E.g due to large variations in the participant results (vR > 50 %) and/or insufficient traceability of the calculated mean of all participants after outlier-clearing to the mean of control testing or if the number of results (without outliers) of the group of accredited testing laboratories is too low.

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

E2. Criteria of performance evaluation

E2.1. Performance criterion z-Score

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

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

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

In this context,

x_i	is the measurement value (result) of the participating laboratory;
$\overline{X}$	assigned value the target value for the assessment of the performance of the participants (3 significant digits), normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section E4
Criteria	is the reproducibility standard deviation calculated from previous rounds for proficiency testing for real water samples from 2013 to 2021 (as RSD pooled) or from the participants' results after removal of outliers (sR) in the current round (if less than 6 previous rounds for the parameters of real water samples A and B are available). Where justified (e.g. results for real water samples are close to minimum quantification limit or in case of regulatory requirements) the criteria is defined by expert judgement and the procedure is clearly described in section E4 of the report.

E2.2. Performance criterion E_n-Score

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

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

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

In this context,

x_i is the measurement value (result) of the participating laboratory

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

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

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

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

Interpretation of z-Scores:

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

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

Interpretation of E_n-Scores:

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

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

E3. Representation and interpretation of measurement results

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

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

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

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

E4. Explanatory notes

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

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

As a result of a long-term evaluation of 9 proficiency testing rounds (2013–2021) in real samples, evaluation criteria (RSDpool) were calculated. These criteria were compared with the relative reproducibility standard deviation (vR) of the current proficiency testing.

Parameters 1,1-Dichloroethene; 1,1,1-Trichloroethane; 1,2-Dichloroethane; Bromodichloromethane; Dibromochloromethane; Dichloromethane; Tribromomethane and Trichloromethane in sample C67 A and sample C67 B: Scores for all listed parameters were calculated according to E2.

Cis-1,2-Dichloroethene; Tetrachloroethene; Tetrachloromethane; trans-1,2-Dichloroethene and Trichloroethene in sample C67 A and sample C67 B: Due to the low number of participating laboratories and the observed high reproducibility standard deviations, the criteria for these parameters were set based on the relative reproducibility standard deviations (vR) of the actual round (vR in %, rounded up to two significant digits, see table below).

Table 1: Criteria for the actual proficiency testing round based on the relative reproducibility standard deviations of the participants (indicated as vR, in %).

Parameters	**criterion sample C67 A**	**critierion sample C67 B**
cis-1,2-Dichloroethene	26 %	25 %
Tetrachloroethene	37 %	30 %
Tetrachloromethane	32 %	29 %

trans-1,2-Dichloroethene	37 %	30 %
Trichloroethene	25 %	30 %

E5. Annotations on tables and charts

E5.1. Information and abbreviations in tables

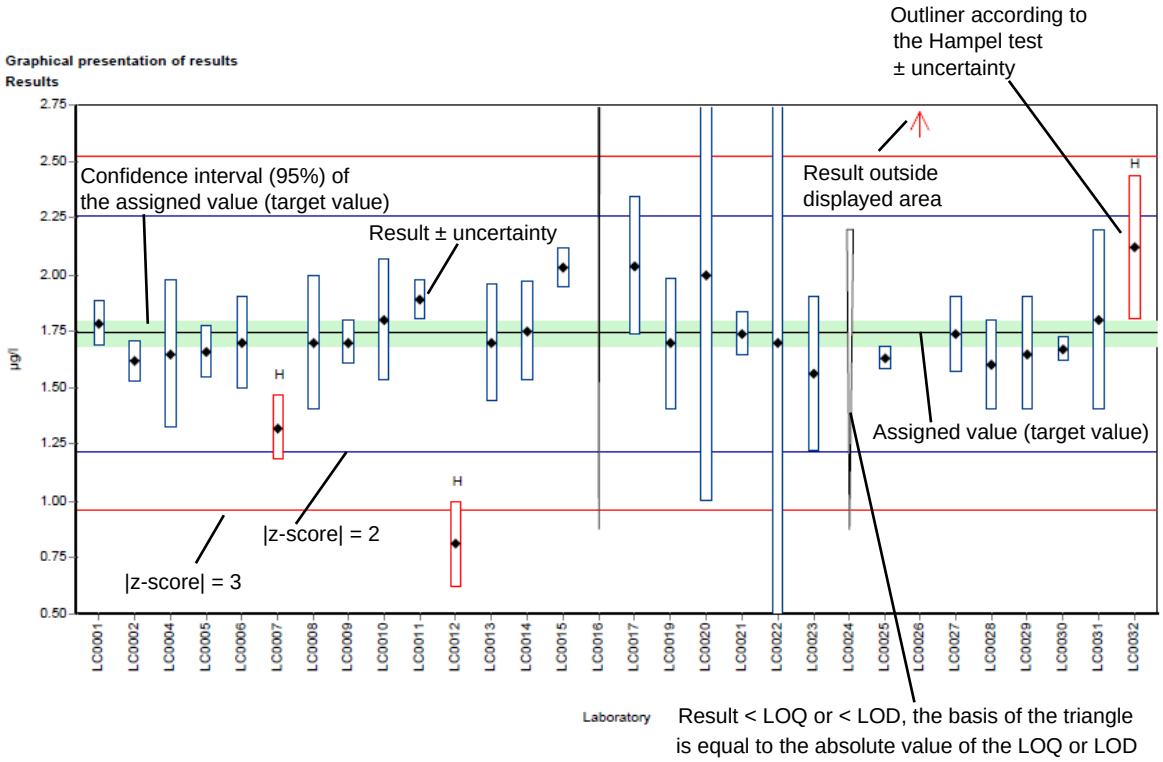
Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criteria	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criteria [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)
Mean	Mean of the participants results, without outliers (3 significant digits)
CI (99 %)	99 % confidence interval (3 significant digits)
Minimum	Minimum of all submitted results, after removal of outliers (3 significant digits)
Maximum	Maximum of all submitted results, after removal of outliers (3 significant digits)
SD	Reproducibility standard deviation, calculated from the participants results, after removal of outliers (3 significant digits)
RSD %	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, after removal of outliers (2 significant digits)
Control test value ± U (k=2)	Mean of control test value ± expanded measurement uncertainty (3 significant digits)
Labcode	Laboratory identifier (anonymized)
Result	Result as indicated by participant (max. 5 decimal places)
± U	combined measurement uncertainty without expansion factor (k=1), as indicated by participant (max. 5 decimal places)
LOQ	Limit of quantification
LOD	Limit of detection

Recovery	Recovery rate in % based on assigned value (target value) (3 significant digits, max. one decimal place given)
z-Score	Deviation of result based on the assigned value (target value) given as a multiple of the criteria (3 significant digits, max. 2 decimal places given)
E_n-Score	Deviation of result based on the assigned value (target value) given as a multiple of the combined expanded measurement uncertainty of the participant's results and expanded measurement uncertainty for the assigned value (3 significant digits, max. 2 decimal places given). Note: E_n-Score assessment takes into account the measurement uncertainty of the participants.
-	No data available or no calculation possible
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test
FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive – for parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results
*	mark for additional comments
**	mark for parameters outside the scope of accreditation according to EN ISO/IEC 17043

E5.2. Graphical presentation of results

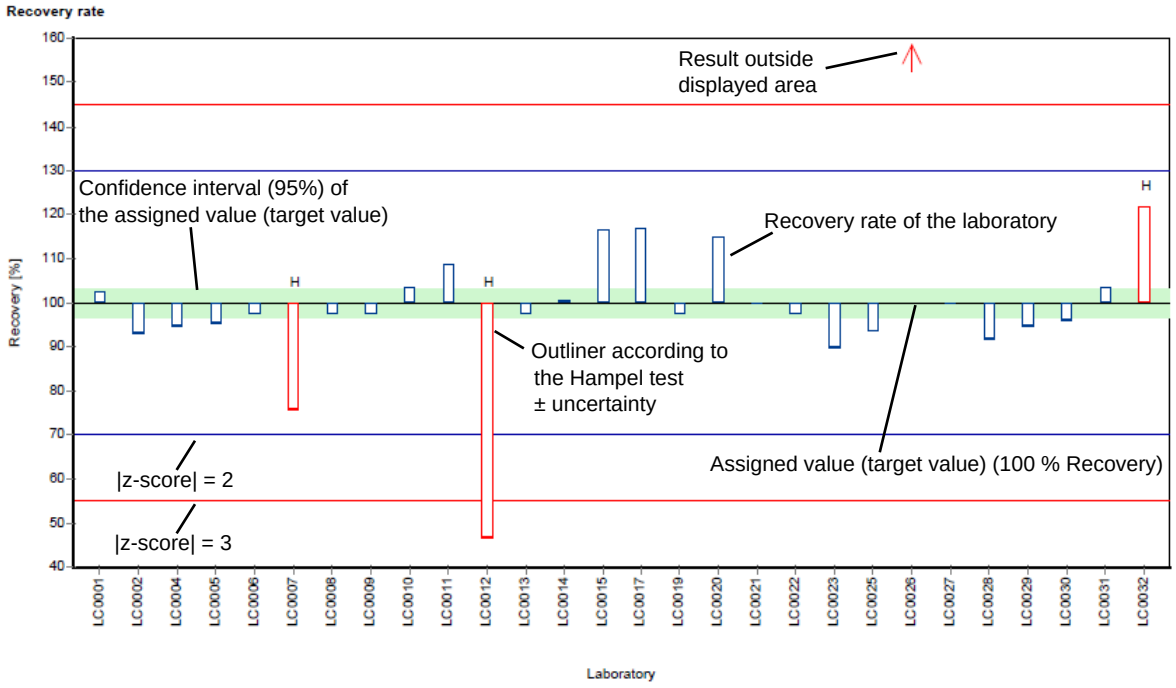
The graphic representation in the report is explained below by means of commented example diagrams:

Example chart: Results



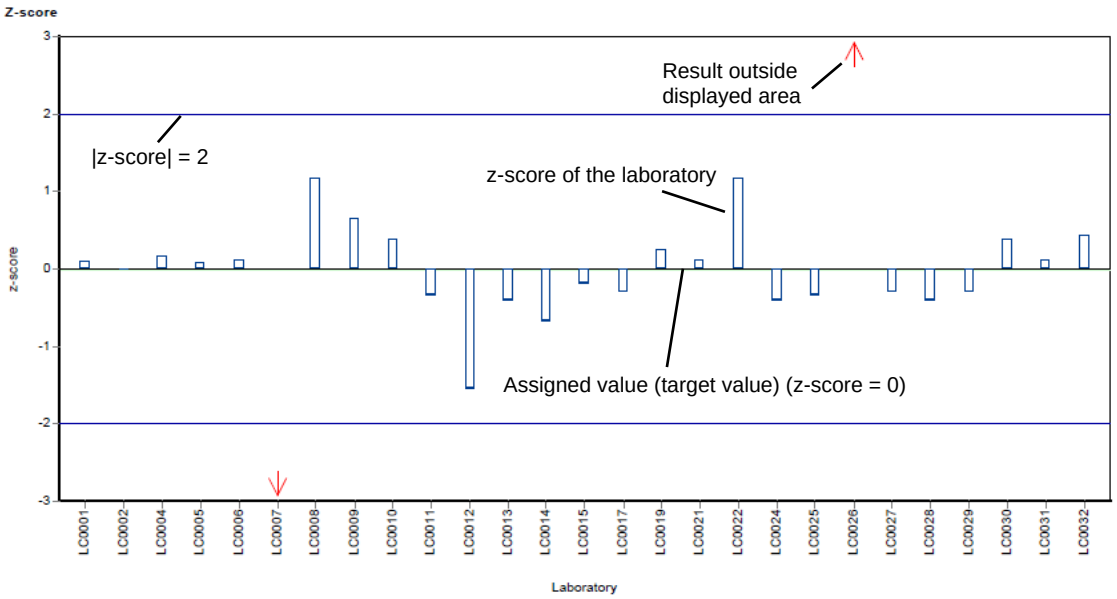
Different analysis methods are represented with different colors.

Example chart: Recovery



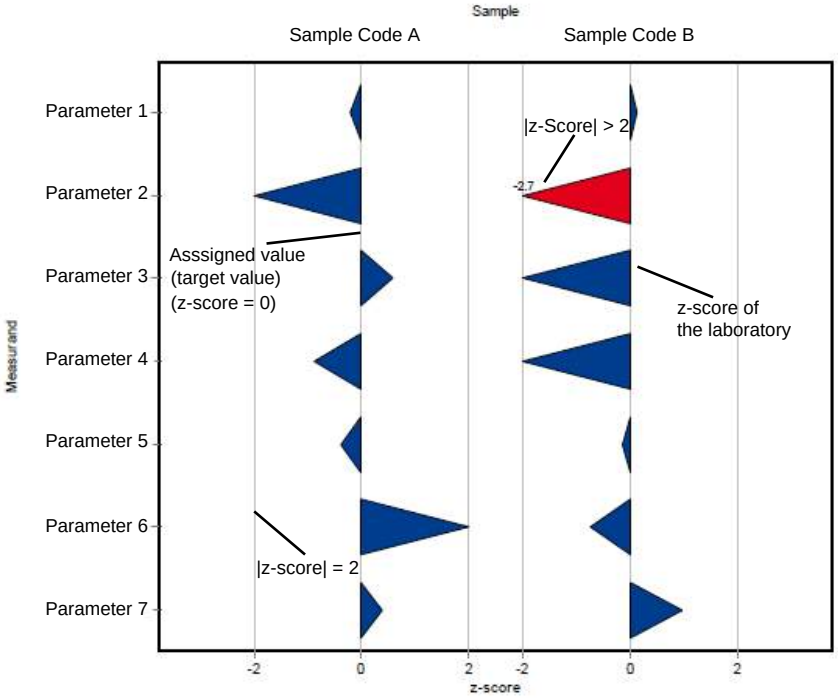
Different analysis methods are represented with different colors.

Example chart: z-score

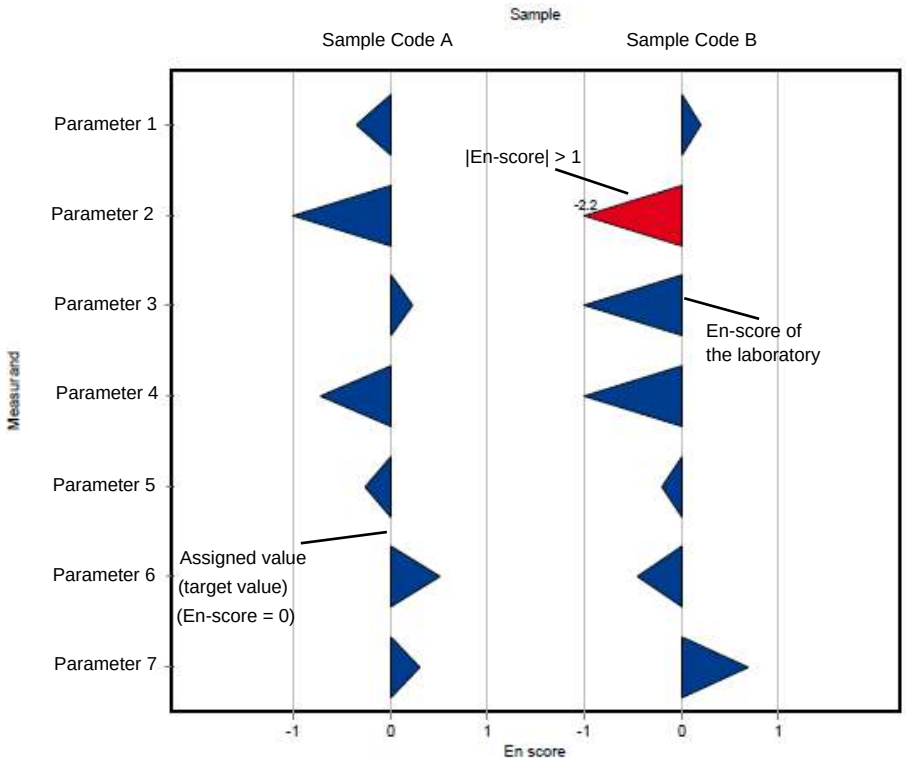


Different analysis methods are represented with different colors.

Example chart: z-score (laboratory oriented report)



Example chart: En-score (laboratory oriented report)



E6. Summary

E6.1. Table of assigned values

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
1,1,1-Trichloroethane	C67 A	µg/l	0.505	±	0.0458	0.0758	15
	C67 B	µg/l	9.89	±	1.34	1.48	15
1,1-Dichloroethene	C67 A	µg/l	0.39	±	0.0707	0.0663	17
	C67 B	µg/l	7.62	±	1.07	1.29	17
1,2-Dichloroethane	C67 A	µg/l	1.2	±	0.0662	0.156	13
	C67 B	µg/l	12.3	±	0.9	1.6	13
Bromodichloromethane	C67 A	µg/l	1.91	±	0.156	0.191	10
	C67 B	µg/l	12	±	0.981	1.2	10
cis-1,2-Dichloroethene	C67 A	µg/l	0.645	±	0.0937	0.168	26
	C67 B	µg/l	7.31	±	1.04	1.83	25
Dibromochloromethane	C67 A	µg/l	1.28	±	0.081	0.154	12
	C67 B	µg/l	14.8	±	0.934	1.78	12
Dichloromethane	C67 A	µg/l	1.33	±	0.152	0.173	13
	C67 B	µg/l	12.4	±	1.07	1.62	13
Tetrachloroethene	C67 A	µg/l	0.339	±	0.0674	0.125	37
	C67 B	µg/l	14.1	±	2.26	4.22	30
Tetrachloromethane	C67 A	µg/l	0.298	±	0.0514	0.0954	32
	C67 B	µg/l	10.6	±	1.69	3.07	29
trans-1,2-Dichloroethene	C67 A	µg/l	0.584	±	0.119	0.216	37
	C67 B	µg/l	6.53	±	1.18	1.96	30
Tribromomethane	C67 A	µg/l	1.52	±	0.118	0.182	12
	C67 B	µg/l	7.68	±	0.493	0.921	12
Trichloroethene	C67 A	µg/l	0.641	±	0.0838	0.16	25
	C67 B	µg/l	12.6	±	1.99	3.77	30
Trichloromethane	C67 A	µg/l	0.72	±	0.0914	0.0935	13
	C67 B	µg/l	13.8	±	1.33	1.79	13

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

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean	± CI (99%)	Minimum	Maximum	sR	vR [%]
1,1,1-Trichloroethane	C67 A	12	3	µg/l	0.505	± 0.0687	0.402	0.71	0.0793	16
	C67 B	12	2	µg/l	9.89	± 2.01	6.92	15.7	2.32	23
1,1-Dichloroethene	C67 A	10	3	µg/l	0.39	± 0.106	0.27	0.67	0.112	29
	C67 B	10	2	µg/l	7.62	± 1.61	5.94	10.5	1.69	22
1,2-Dichloroethane	C67 A	12	1	µg/l	1.2	± 0.0992	1.08	1.48	0.115	9.5
	C67 B	11	1	µg/l	12.3	± 1.35	10.6	15.8	1.49	12
Bromodichloromethane	C67 A	15	0	µg/l	1.91	± 0.234	1.43	2.39	0.302	16
	C67 B	13	1	µg/l	12	± 1.47	9.19	15.5	1.77	15
cis-1,2-Dichloroethene	C67 A	13	0	µg/l	0.645	± 0.141	0.461	0.998	0.169	26
	C67 B	12	0	µg/l	7.31	± 1.55	5.51	11.1	1.79	25
Dibromochloromethane	C67 A	15	0	µg/l	1.28	± 0.121	1	1.62	0.157	12
	C67 B	13	1	µg/l	14.8	± 1.4	11.8	17.9	1.68	11
Dichloromethane	C67 A	10	1	µg/l	1.33	± 0.227	1.03	1.91	0.24	18
	C67 B	10	2	µg/l	12.4	± 1.6	9.73	15.2	1.69	14
Tetrachloroethene	C67 A	14	1	µg/l	0.339	± 0.101	0.12	0.567	0.126	37
	C67 B	14	0	µg/l	14.1	± 3.39	9.18	24.1	4.22	30
Tetrachloromethane	C67 A	14	1	µg/l	0.298	± 0.0771	0.208	0.536	0.0962	32
	C67 B	13	1	µg/l	10.6	± 2.54	6.38	18.7	3.05	29
trans-1,2-Dichloroethene	C67 A	13	0	µg/l	0.584	± 0.178	0.344	1	0.214	37
	C67 B	11	1	µg/l	6.53	± 1.77	4.34	11	1.96	30
Tribromomethane	C67 A	15	0	µg/l	1.52	± 0.177	1.13	1.92	0.229	15
	C67 B	14	0	µg/l	7.68	± 0.739	6.06	9.3	0.922	12
Trichloroethene	C67 A	14	1	µg/l	0.641	± 0.126	0.448	0.974	0.157	24
	C67 B	14	0	µg/l	12.6	± 2.99	8.99	20.1	3.73	30
Trichloromethane	C67 A	15	0	µg/l	0.72	± 0.137	0.515	1.09	0.177	25
	C67 B	14	0	µg/l	13.8	± 2	10.5	19.9	2.49	18

E7. Parameterorientierte Auswertung / Parameter oriented report

Parameter oriented report

C67 A

1,1,1-Trichloroethane

Unit	µg/l
Assigned value ± U (k=2)	0.505 ± 0.0458
Criterion	0.0758 (15 %)
Minimum - Maximum	0.402 - 0.71
Control test value ± U (k=2)	0.536 ± 0.161

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.55	0.11	109	0.59	
LC0002	-	-	-	-	
LC0003	0.456	0.068	90.3	-0.65	
LC0004	0.402	0.091	79.6	-1.36	
LC0005	0.55	0.1	109	0.59	
LC0006	0.853	0.222	169	4.59	H
LC0007	1.055	0.158	209	7.26	H
LC0008	0.476	0.004	94.2	-0.38	
LC0009	0.495	0.082	98	-0.13	
LC0010	0.55	0.11	109	0.59	
LC0011	0.46	0.08	91.1	-0.6	
LC0012	0.929	0.18	184	5.6	H
LC0013	0.71	0.2	141	2.7	
LC0014	0.503	0.095	99.6	-0.03	
LC0015	0.449	0.08	88.9	-0.74	
LC0016	0.46	0.092	91.1	-0.6	

Characteristics of parameter

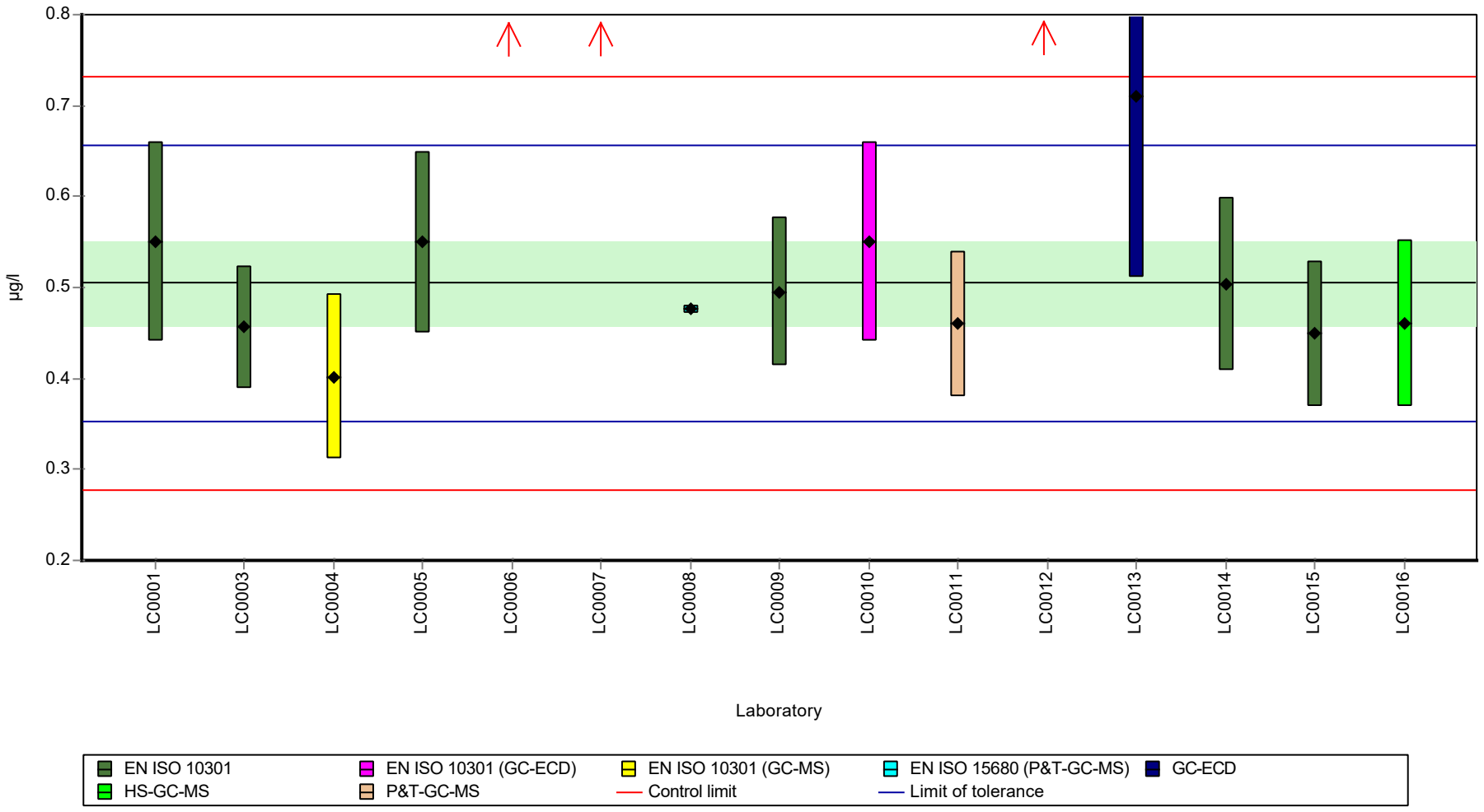
	all results	without outliers	Unit
Mean ± CI (99%)	0.593 ± 0.154	0.505 ± 0.0687	µg/l
Minimum	0.402	0.402	µg/l
Maximum	1.06	0.71	µg/l
Standard deviation	0.199	0.0793	µg/l
rel. standard deviation	33.6	15.7	%
n	15	12	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: 1,1,1-Trichloroethane

Graphical presentation of results

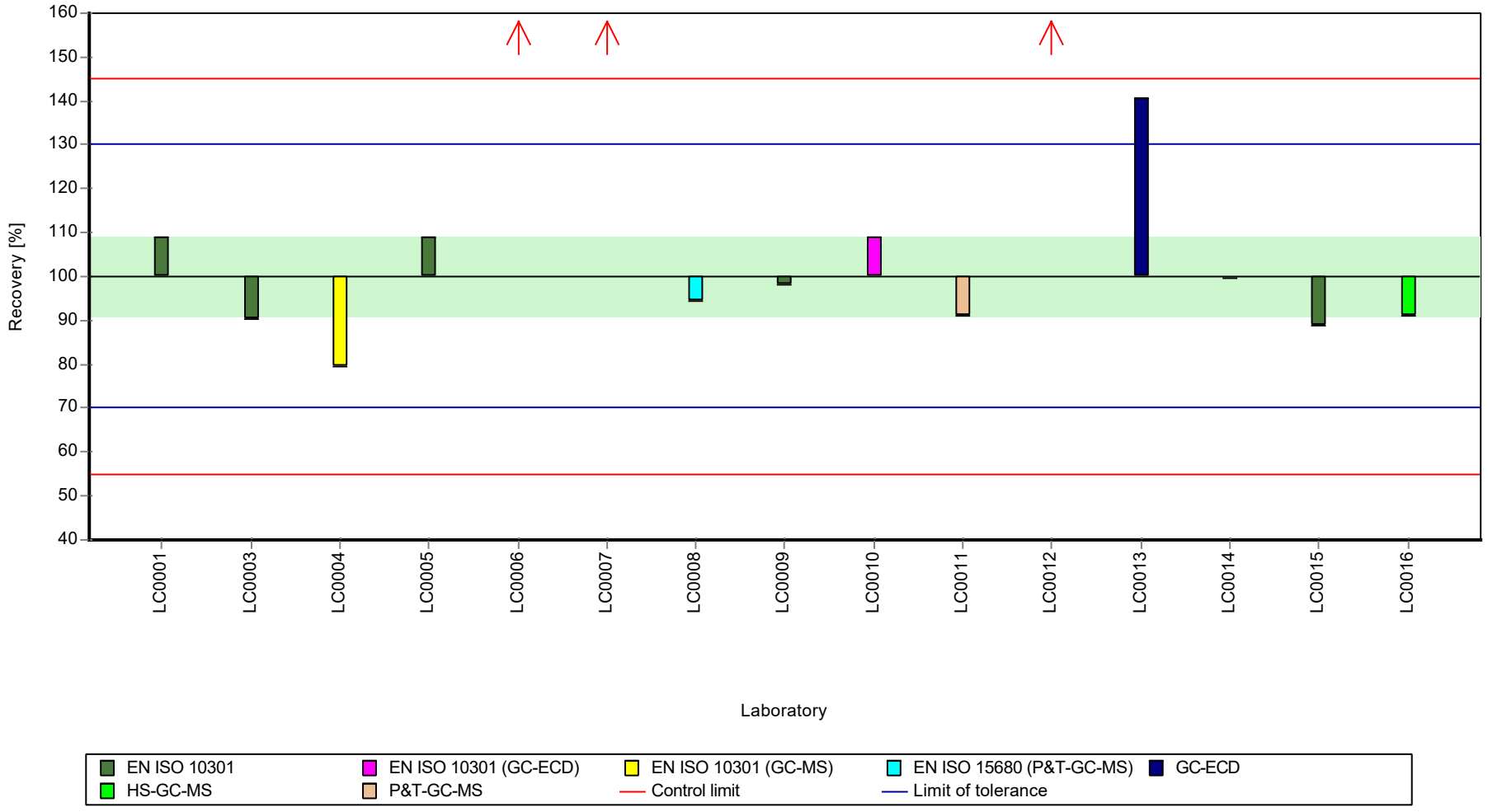
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

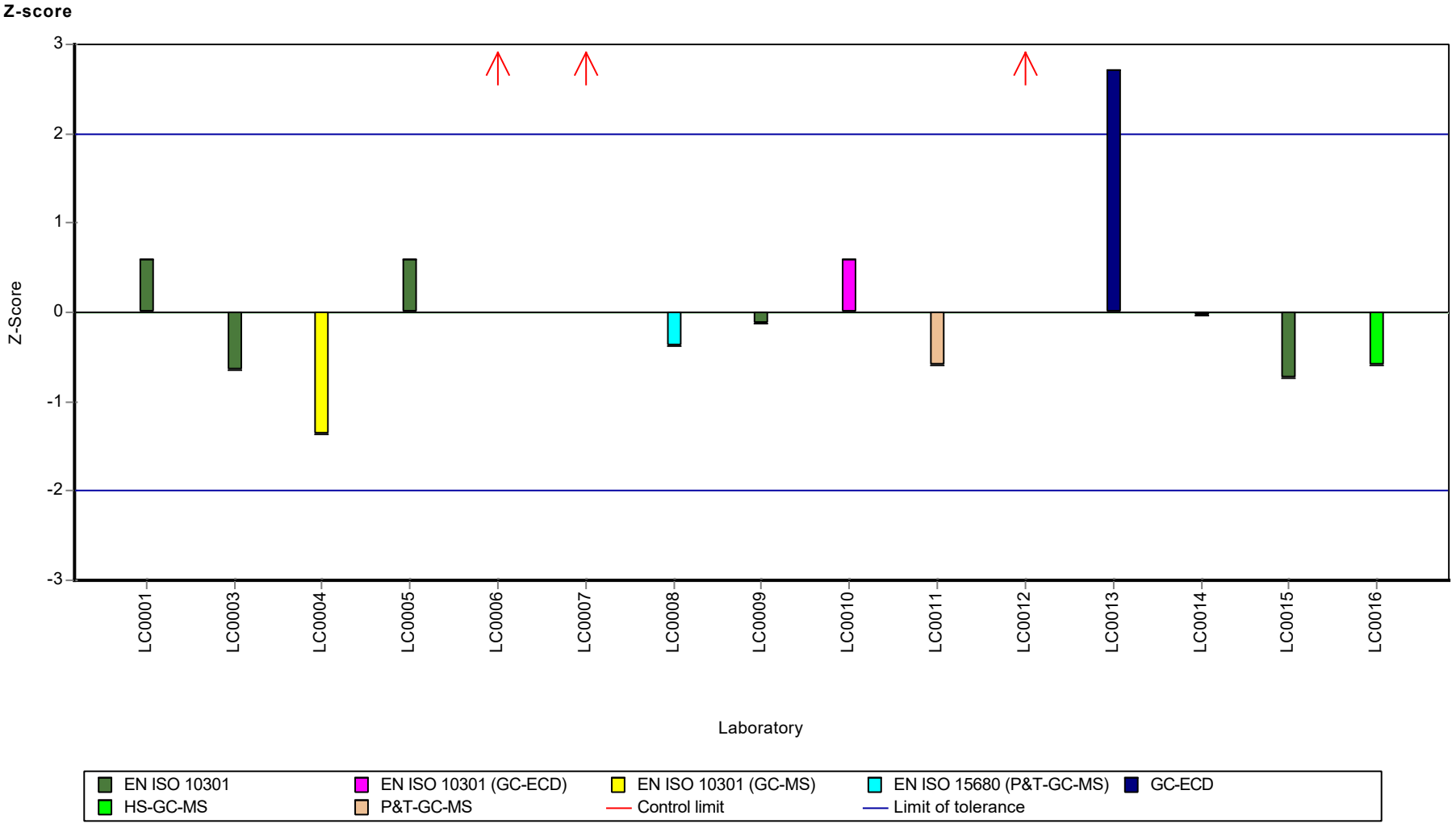
Sample: C67A, Parameter: 1,1,1-Trichloroethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: 1,1,1-Trichloroethane



Parameter oriented report

C67 B

1,1,1-Trichloroethane

Unit	µg/l
Assigned value ± U (k=2)	9.89 ± 1.34
Criterion	1.48 (15 %)
Minimum - Maximum	6.92 - 15.7
Control test value ± U (k=2)	9.240 ± 2.77

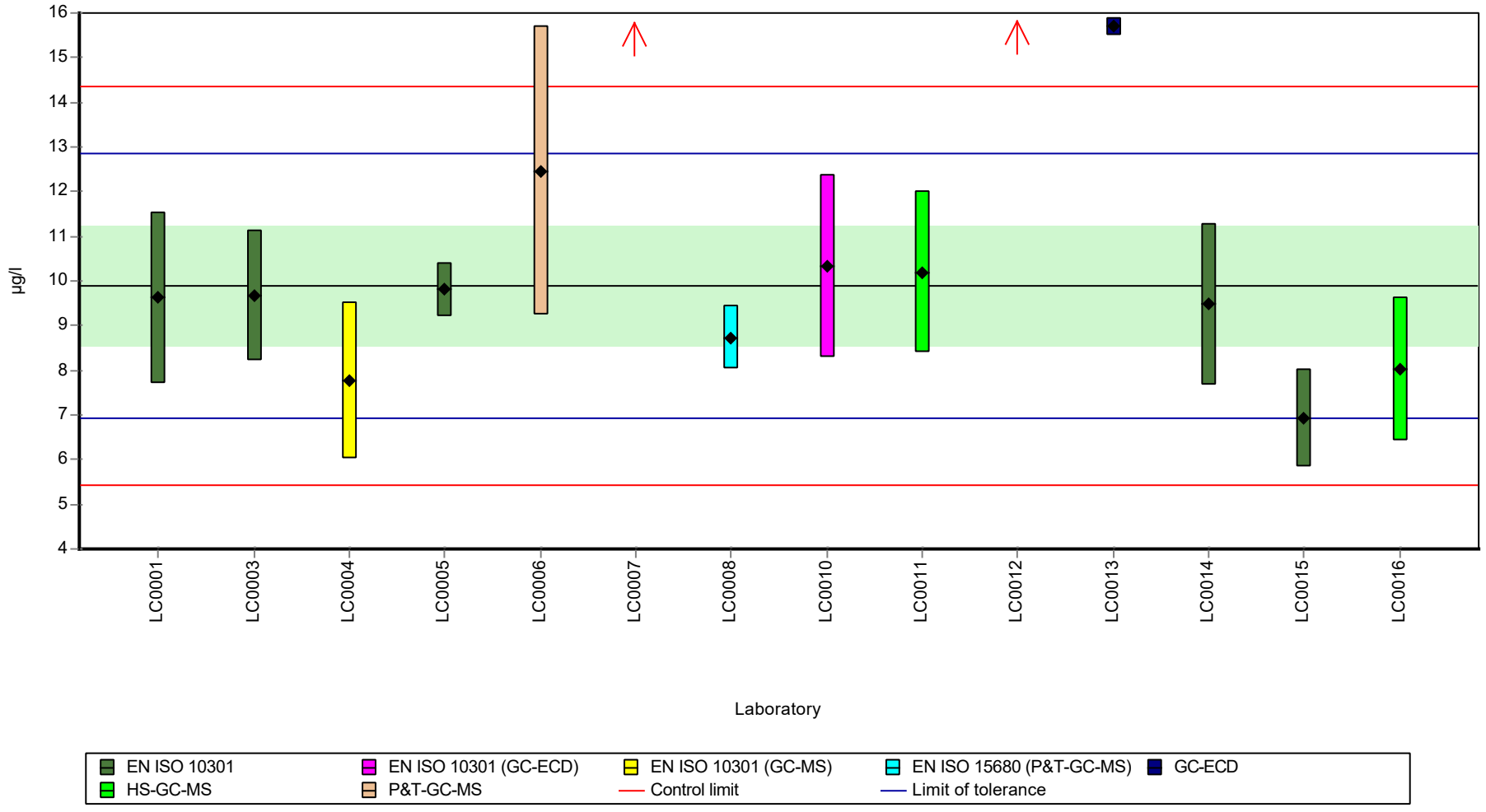
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	9.62	1.92	97.2	-0.18	
LC0002	-	-	-	-	
LC0003	9.67	1.45	97.8	-0.15	
LC0004	7.77	1.76	78.5	-1.43	
LC0005	9.8	0.6	99.1	-0.06	
LC0006	12.46	3.24	126	1.73	
LC0007	18.628	2.794	188	5.89	H
LC0008	8.73	0.721	88.2	-0.78	
LC0009	-	-	-	-	
LC0010	10.33	2.066	104	0.29	
LC0011	10.2	1.8	103	0.21	
LC0012	46.9	9.38	474	24.94	H
LC0013	15.7	0.2	159	3.91	
LC0014	9.47	1.8	95.7	-0.28	
LC0015	6.92	1.1	70	-2	
LC0016	8.04	1.608	81.3	-1.25	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	13.2 ± 8.19	9.89 ± 2.01	µg/l
Minimum	6.92	6.92	µg/l
Maximum	46.9	15.7	µg/l
Standard deviation	10.2	2.32	µg/l
rel. standard deviation	77.6	23.4	%
n	14	12	-

Graphical presentation of results

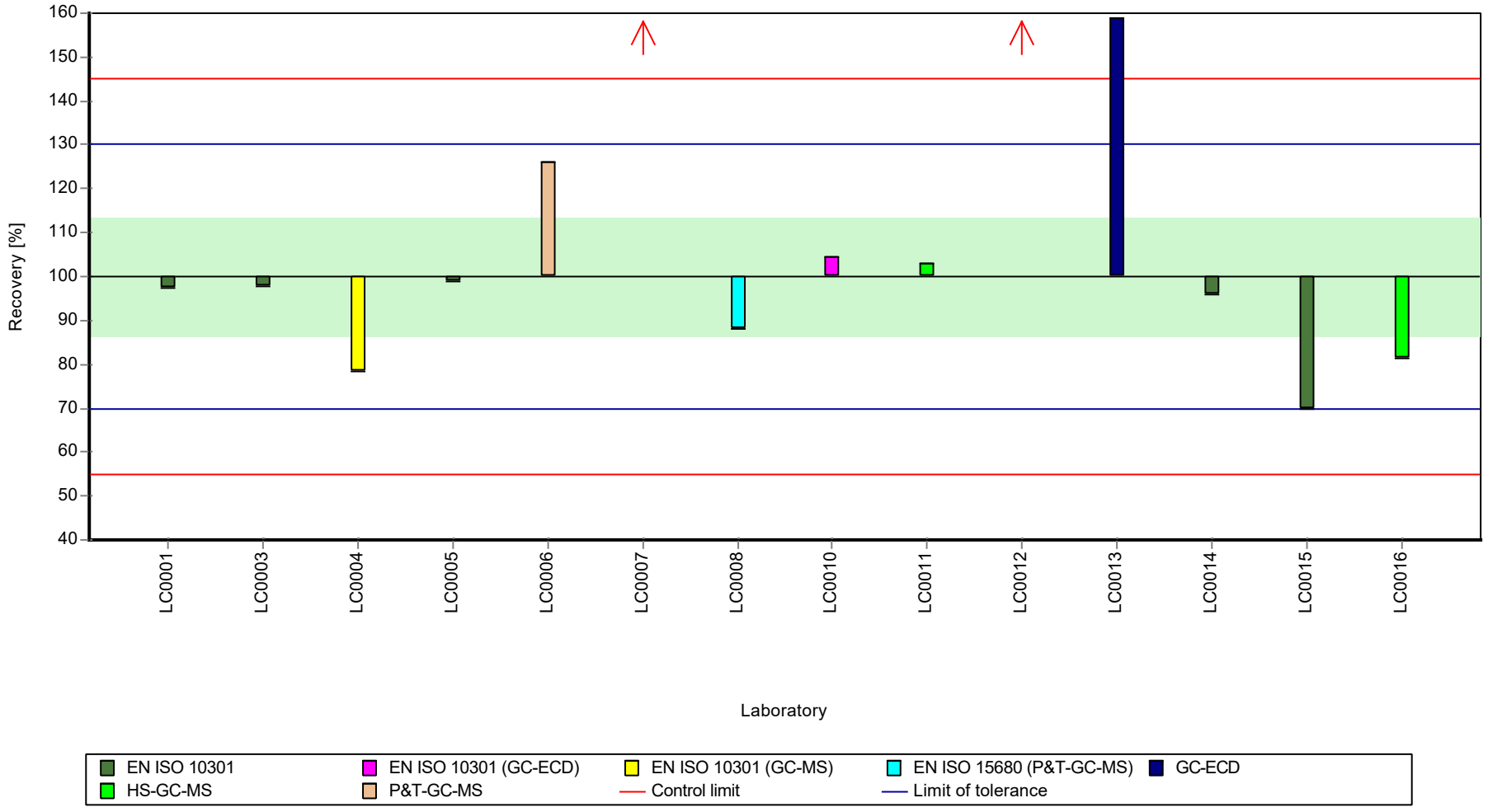
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

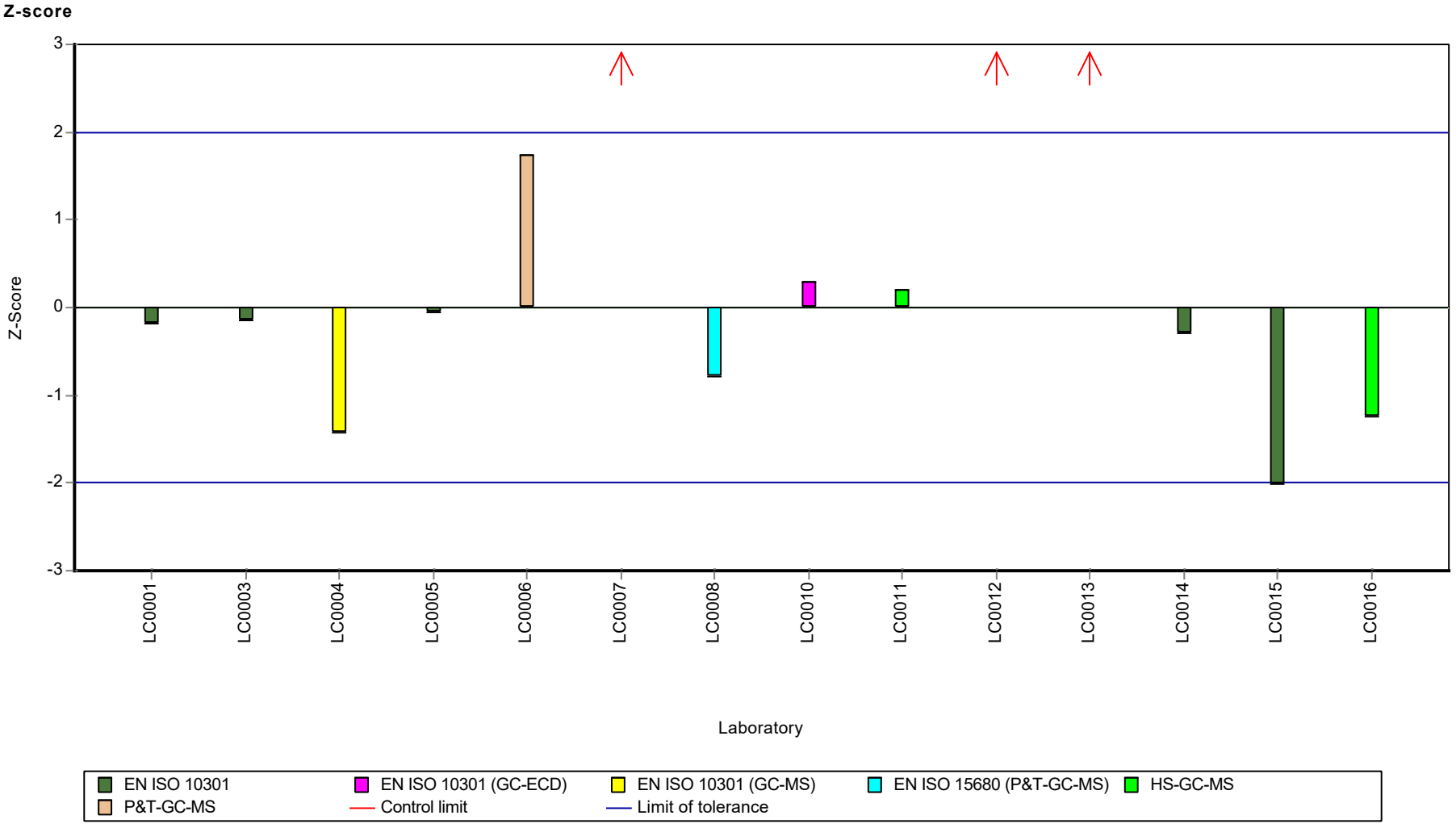
Sample: C67B, Parameter: 1,1,1-Trichloroethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: 1,1,1-Trichloroethane



Parameter oriented report

C67 A

1,1-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	0.39 ± 0.0707
Criterion	0.0663 (17 %)
Minimum - Maximum	0.27 - 0.67
Control test value ± U (k=2)	0.416 ± 0.125

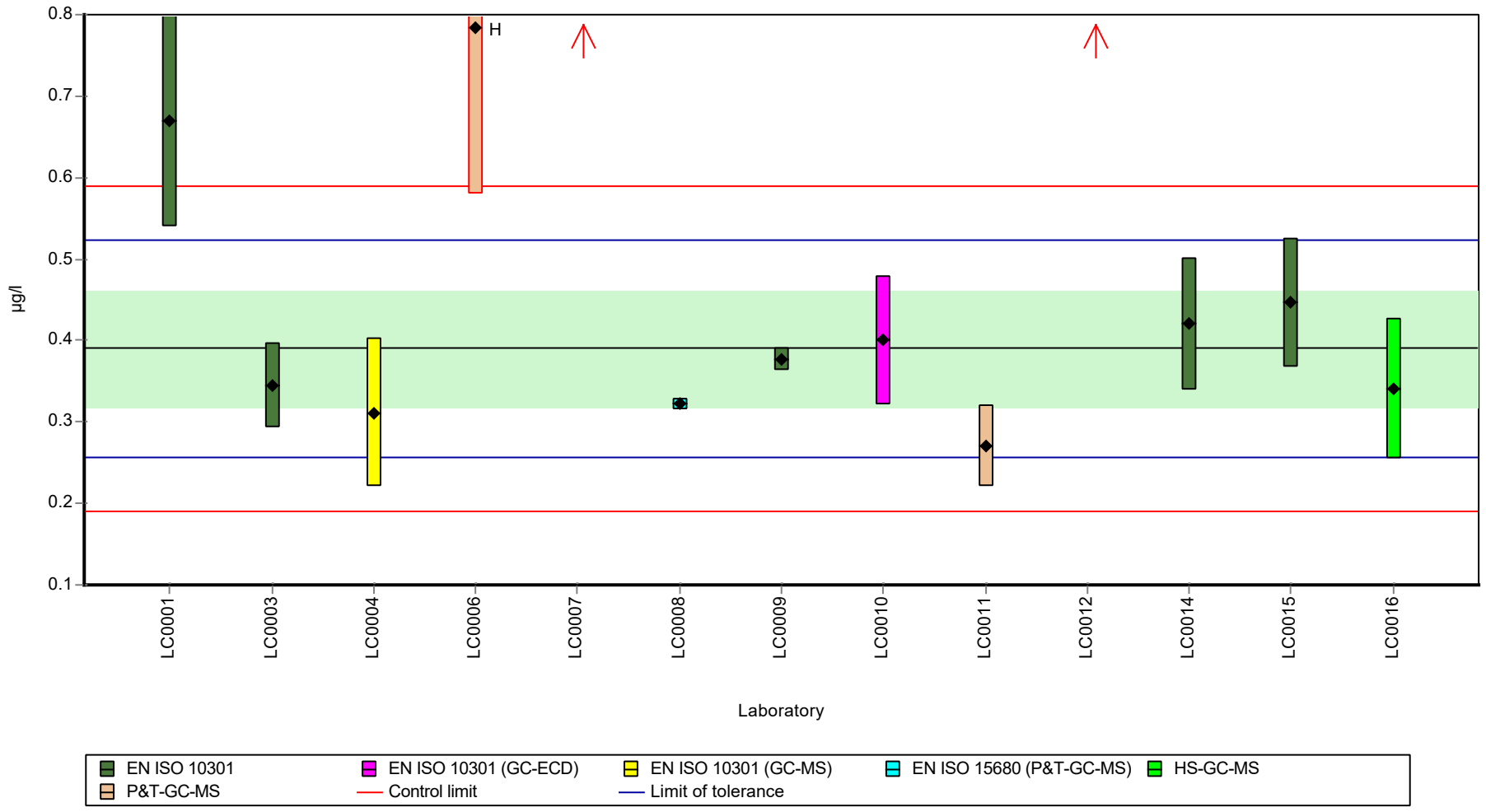
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.67	0.13	172	4.22	
LC0002	-	-	-	-	
LC0003	0.344	0.052	88.2	-0.69	
LC0004	0.311	0.091	79.7	-1.19	
LC0005	-	-	-	-	
LC0006	0.784	0.204	201	5.94	H
LC0007	1.057	0.38	271	10.06	H
LC0008	0.322	0.007	82.6	-1.03	
LC0009	0.377	0.014	96.7	-0.2	
LC0010	0.4	0.08	103	0.15	
LC0011	0.27	0.05	69.2	-1.81	
LC0012	0.911	0.18	234	7.86	H
LC0013	-	-	-	-	
LC0014	0.42	0.082	108	0.45	
LC0015	0.446	0.08	114	0.84	
LC0016	0.34	0.086	87.2	-0.75	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.512 ± 0.214	0.39 ± 0.106	µg/l
Minimum	0.27	0.27	µg/l
Maximum	1.06	0.67	µg/l
Standard deviation	0.257	0.112	µg/l
rel. standard deviation	50.2	28.7	%
n	13	10	-

Graphical presentation of results

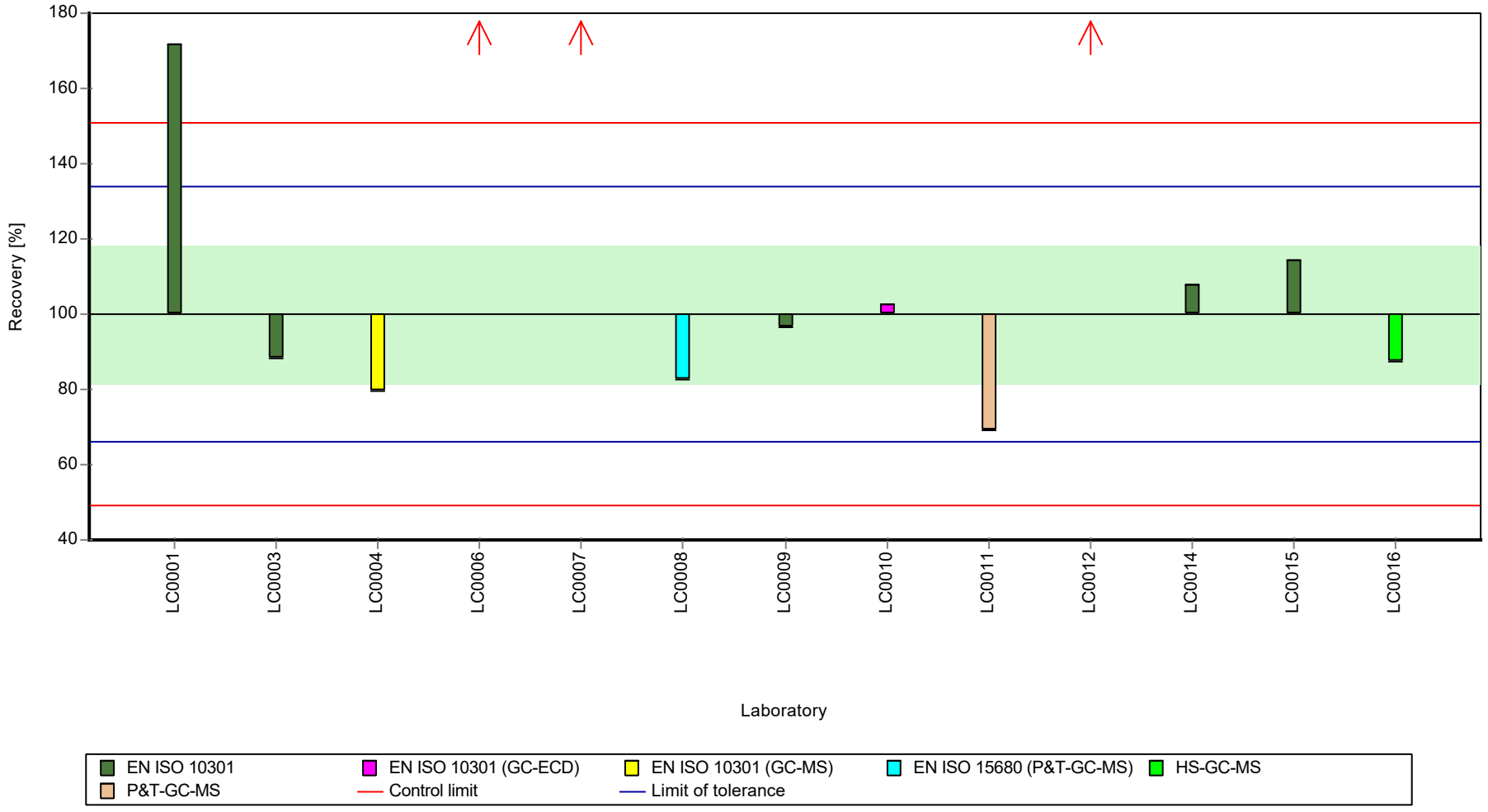
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

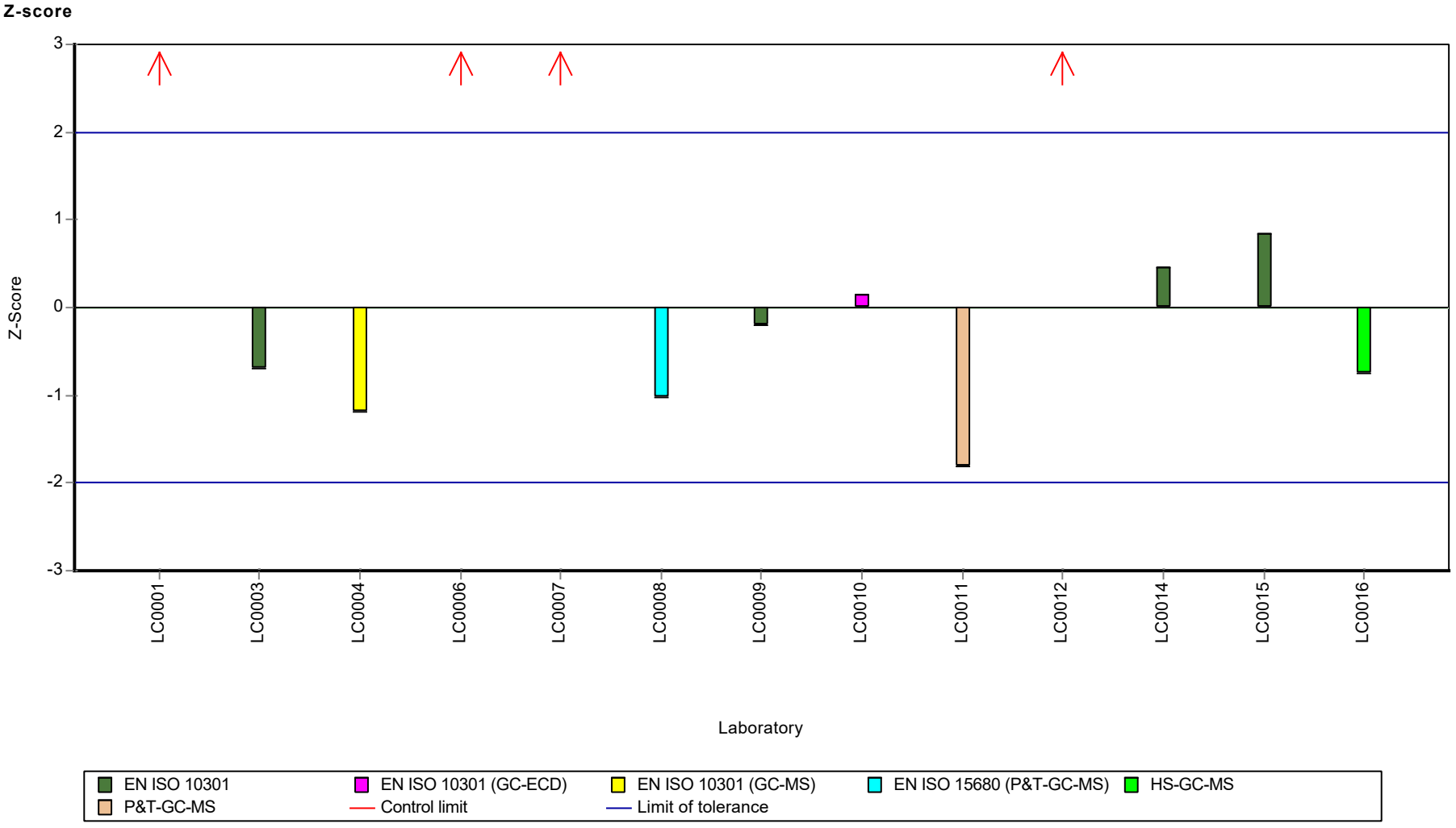
Sample: C67A, Parameter: 1,1-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: 1,1-Dichloroethene



Parameter oriented report

C67 B

1,1-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	7.62 ± 1.07
Criterion	1.29 (17 %)
Minimum - Maximum	5.94 - 10.5
Control test value ± U (k=2)	7.280 ± 2.18

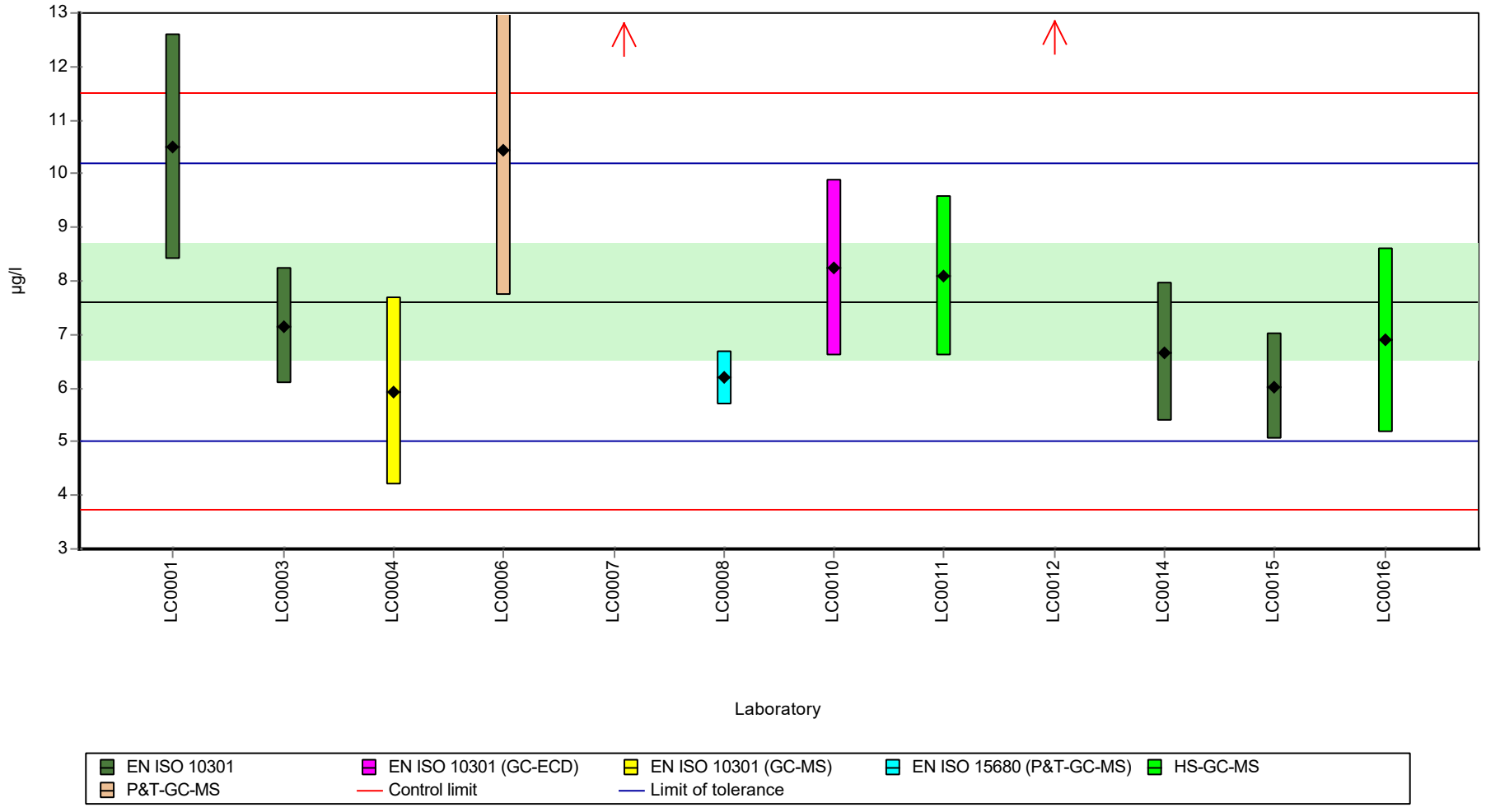
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.49	2.1	138	2.22	
LC0002	-	-	-	-	
LC0003	7.16	1.07	94	-0.35	
LC0004	5.94	1.75	78	-1.29	
LC0005	-	-	-	-	
LC0006	10.44	2.71	137	2.18	
LC0007	18.093	6.55	238	8.09	H
LC0008	6.2	0.502	81.4	-1.09	
LC0009	-	-	-	-	
LC0010	8.23	1.646	108	0.47	
LC0011	8.1	1.5	106	0.37	
LC0012	22.1	4.42	290	11.19	H
LC0013	-	-	-	-	
LC0014	6.67	1.3	87.6	-0.73	
LC0015	6.03	1	79.2	-1.22	
LC0016	6.9	1.724	90.6	-0.55	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	9.7 ± 4.47	7.62 ± 1.61	µg/l
Minimum	5.94	5.94	µg/l
Maximum	22.1	10.5	µg/l
Standard deviation	5.16	1.69	µg/l
rel. standard deviation	53.3	22.2	%
n	12	10	-

Graphical presentation of results

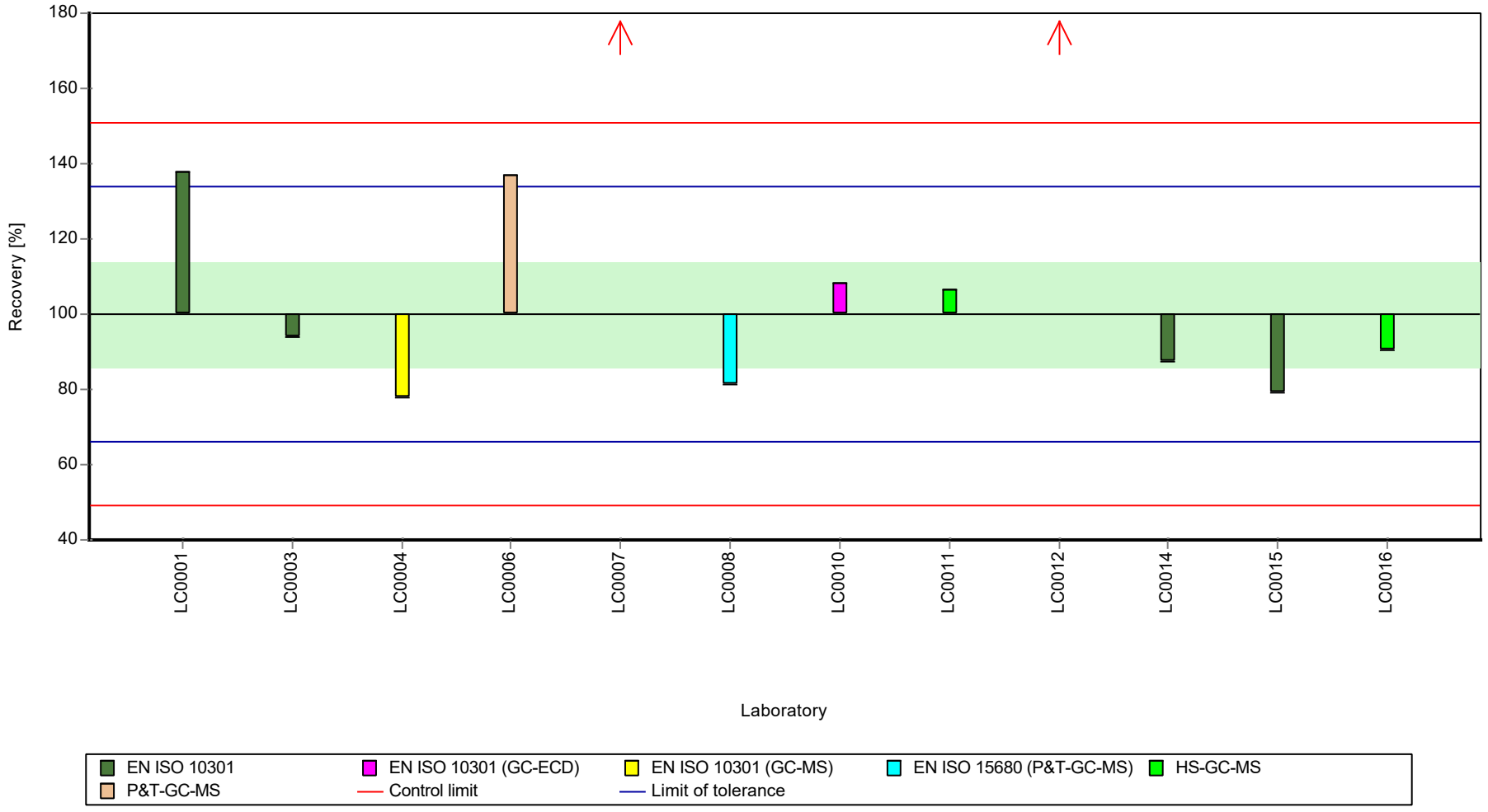
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

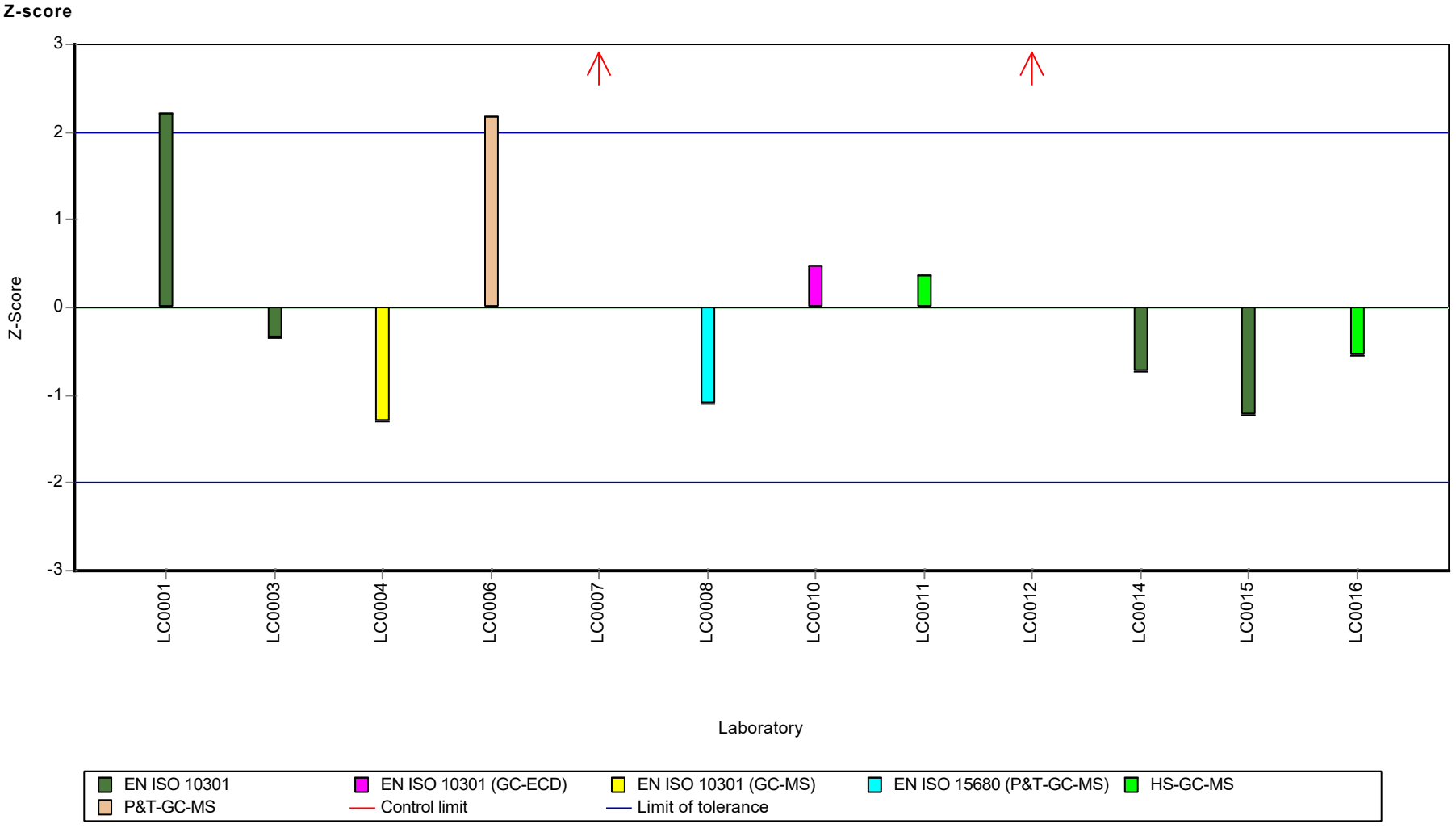
Sample: C67B, Parameter: 1,1-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: 1,1-Dichloroethene



Parameter oriented report

C67 A

1,2-Dichloroethane

Unit	µg/l
Assigned value ± U (k=2)	1.2 ± 0.0662
Criterion	0.156 (13 %)
Minimum - Maximum	1.08 - 1.48
Control test value ± U (k=2)	1.430 ± 0.429

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.18	0.24	98.3	-0.13	
LC0002	-	-	-	-	
LC0003	1.26	0.19	105	0.38	
LC0004	1.12	0.26	93.3	-0.52	
LC0005	-	-	-	-	
LC0006	1.476	0.384	123	1.76	
LC0007	1.774	0.639	148	3.67	H
LC0008	1.08	0.05	89.9	-0.77	
LC0009	1.11	0.121	92.4	-0.58	
LC0010	1.31	0.262	109	0.7	
LC0011	1.09	0.2	90.8	-0.71	
LC0012	1.124	0.22	93.6	-0.49	
LC0013	-	-	-	-	
LC0014	1.26	0.3	105	0.38	
LC0015	1.17	0.22	97.4	-0.2	
LC0016	1.23	0.306	102	0.19	

Characteristics of parameter

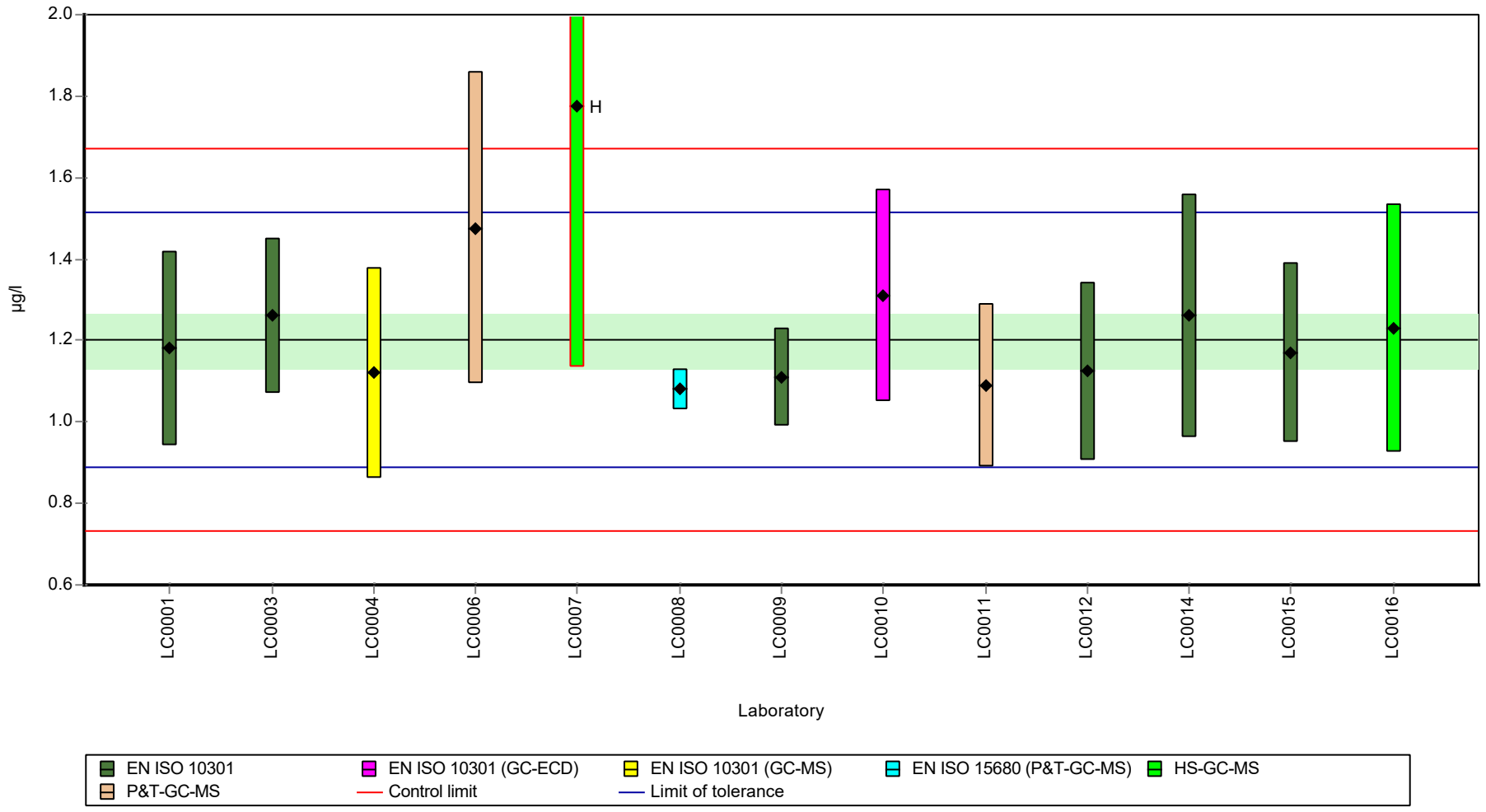
	all results	without outliers	Unit
Mean ± CI (99%)	1.24 ± 0.161	1.2 ± 0.0992	µg/l
Minimum	1.08	1.08	µg/l
Maximum	1.77	1.48	µg/l
Standard deviation	0.193	0.115	µg/l
rel. standard deviation	15.5	9.54	%
n	13	12	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: 1,2-Dichloroethane

Graphical presentation of results

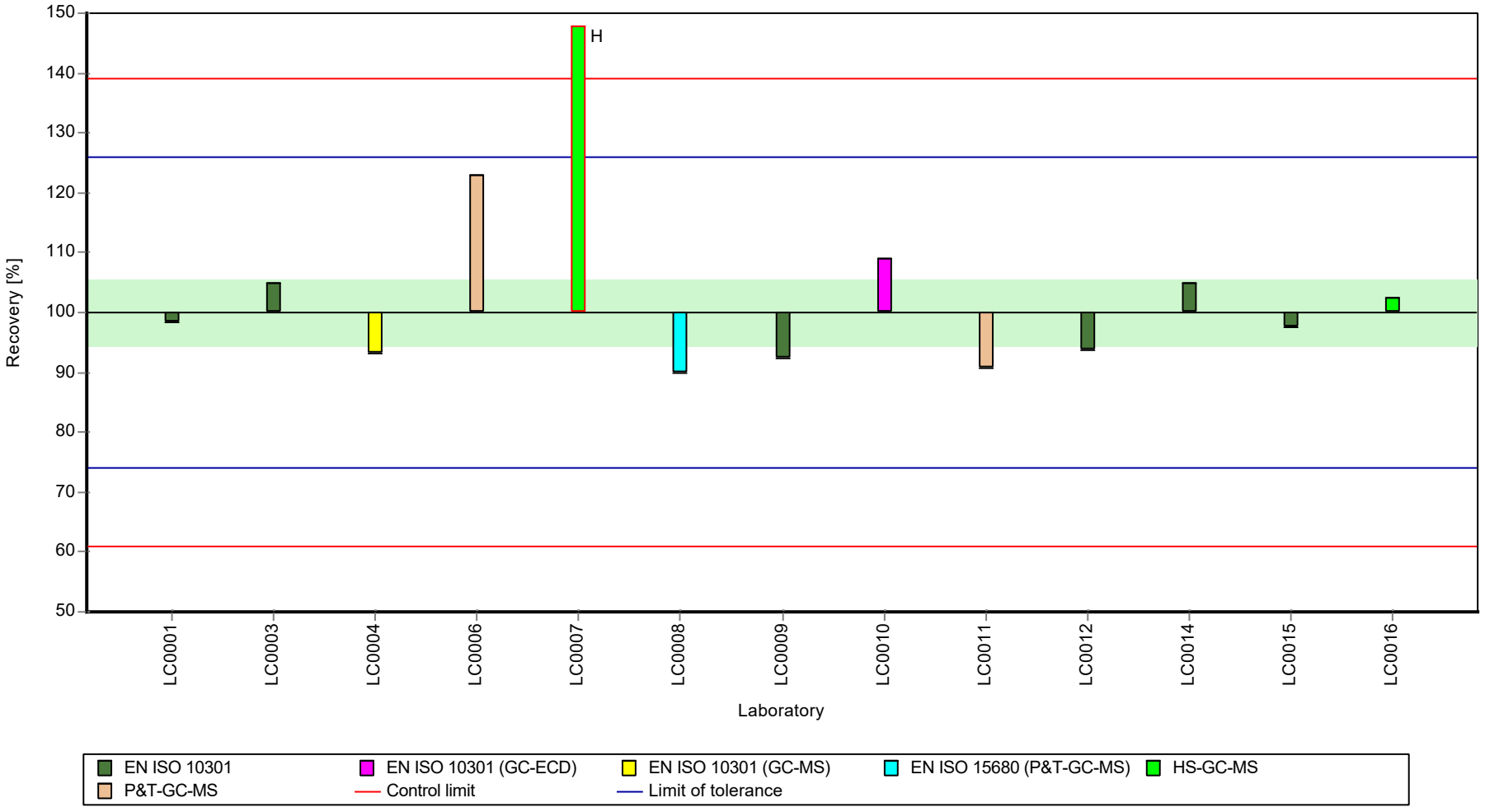
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

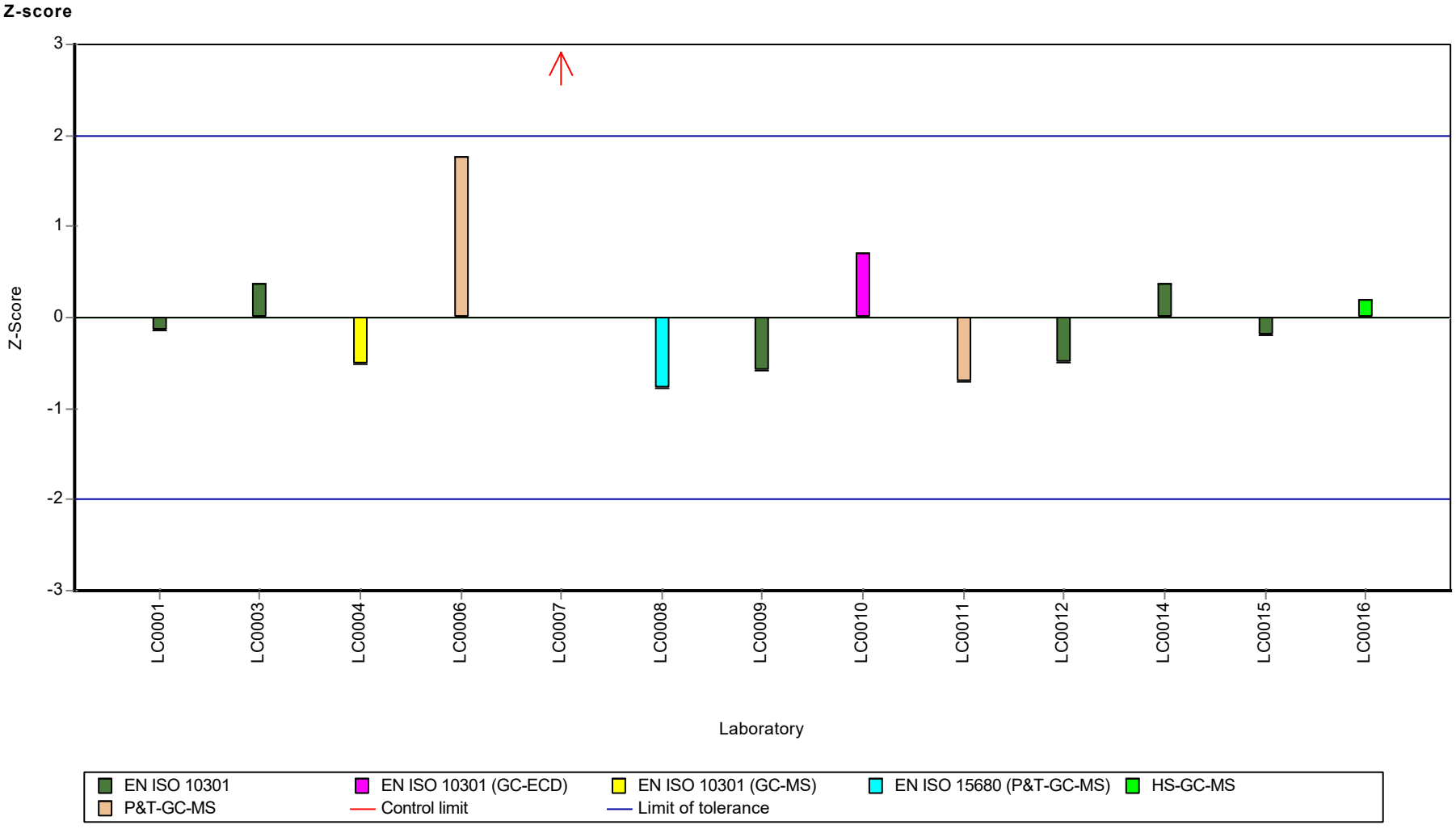
Sample: C67A, Parameter: 1,2-Dichloroethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: 1,2-Dichloroethane



Parameter oriented report

C67 B

1,2-Dichloroethane

Unit	µg/l
Assigned value ± U (k=2)	12.3 ± 0.9
Criterion	1.6 (13 %)
Minimum - Maximum	10.6 - 15.8
Control test value ± U (k=2)	12.600 ± 3.79

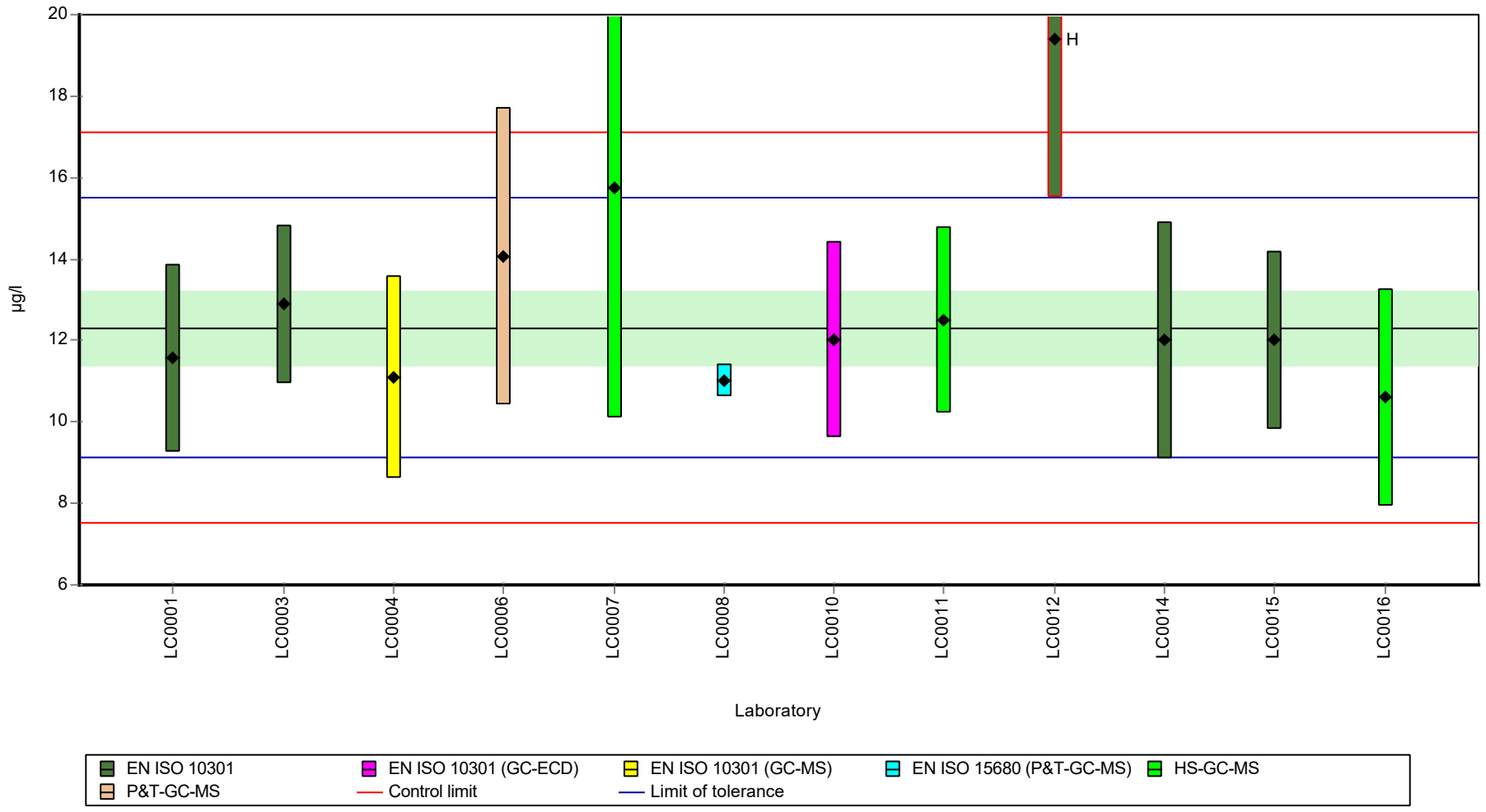
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	11.56	2.31	93.9	-0.47	
LC0002	-	-	-	-	
LC0003	12.88	1.93	105	0.35	
LC0004	11.1	2.5	90.1	-0.76	
LC0005	-	-	-	-	
LC0006	14.05	3.65	114	1.08	
LC0007	15.767	5.676	128	2.15	
LC0008	11	0.402	89.3	-0.82	
LC0009	-	-	-	-	
LC0010	12.03	2.406	97.7	-0.18	
LC0011	12.5	2.3	101	0.11	
LC0012	19.4	3.88	158	4.42	H
LC0013	-	-	-	-	
LC0014	12	2.9	97.4	-0.2	
LC0015	12	2.2	97.4	-0.2	
LC0016	10.6	2.66	86.1	-1.07	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	12.9 ± 2.16	12.3 ± 1.35	µg/l
Minimum	10.6	10.6	µg/l
Maximum	19.4	15.8	µg/l
Standard deviation	2.49	1.49	µg/l
rel. standard deviation	19.3	12.1	%
n	12	11	-

Graphical presentation of results

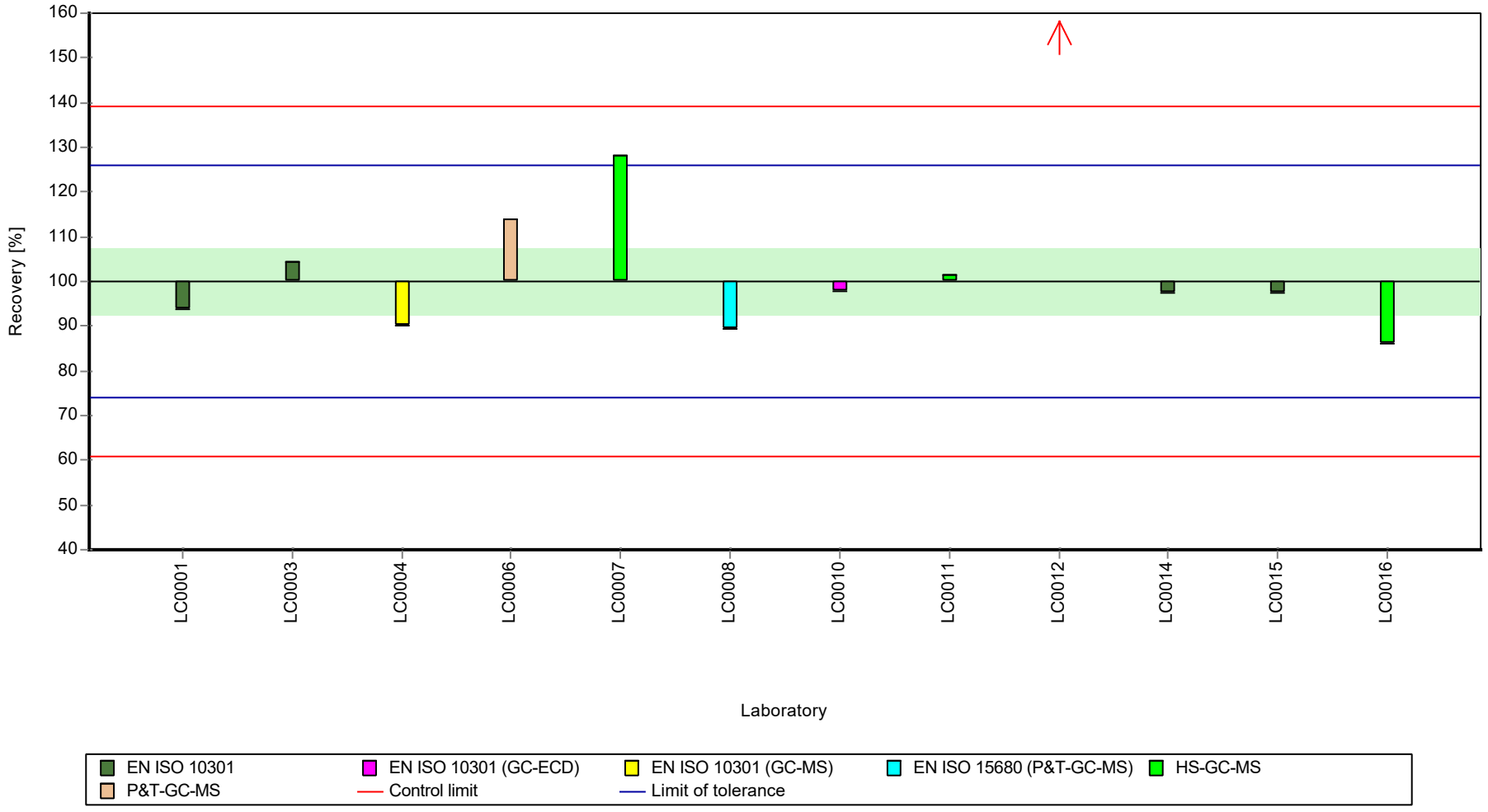
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

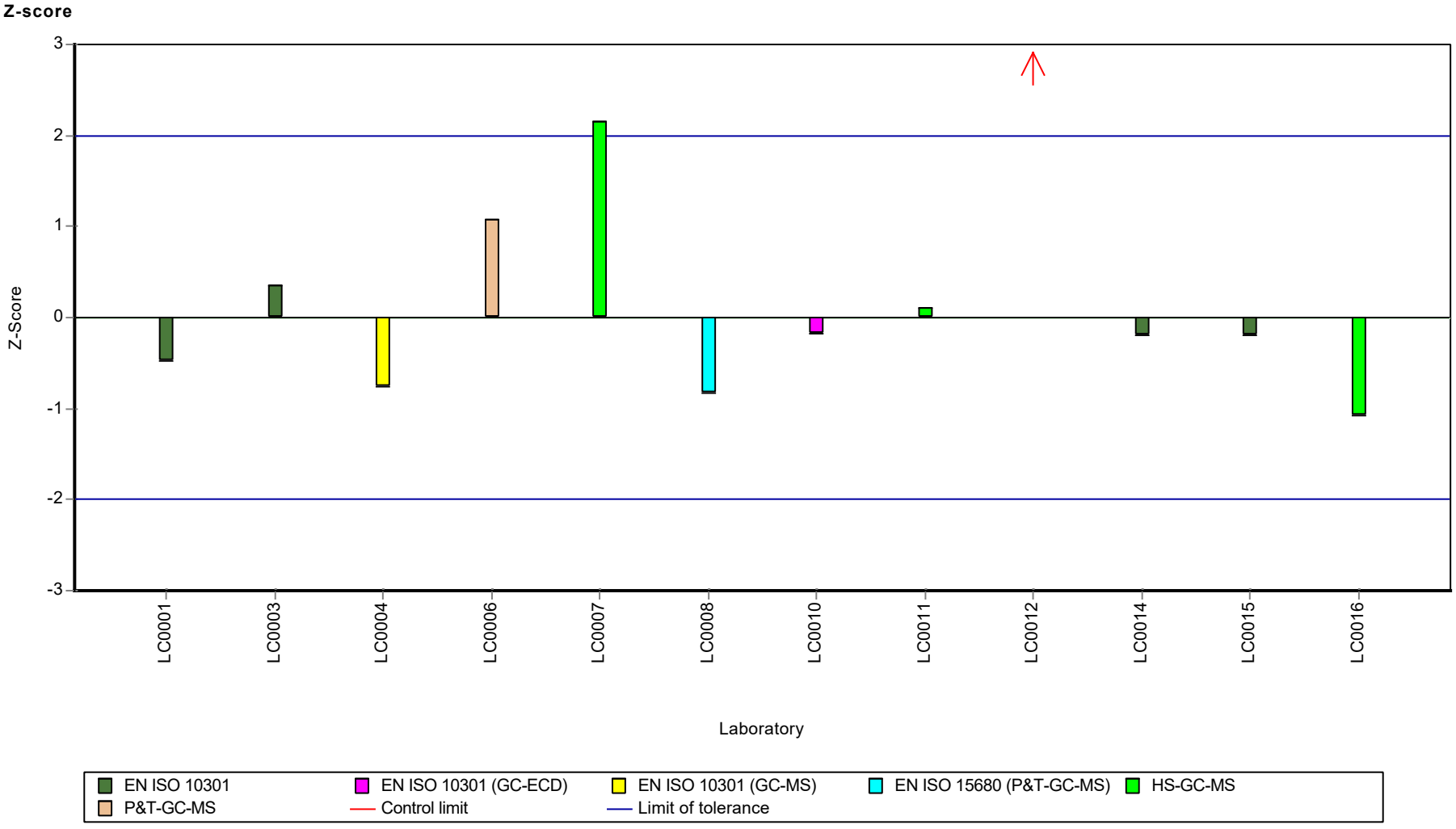
Sample: C67B, Parameter: 1,2-Dichloroethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: 1,2-Dichloroethane



Parameter oriented report

C67 A

Bromodichloromethane

Unit	µg/l
Assigned value ± U (k=2)	1.91 ± 0.156
Criterion	0.191 (10 %)
Minimum - Maximum	1.43 - 2.39
Control test value ± U (k=2)	1.950 ± 0.584

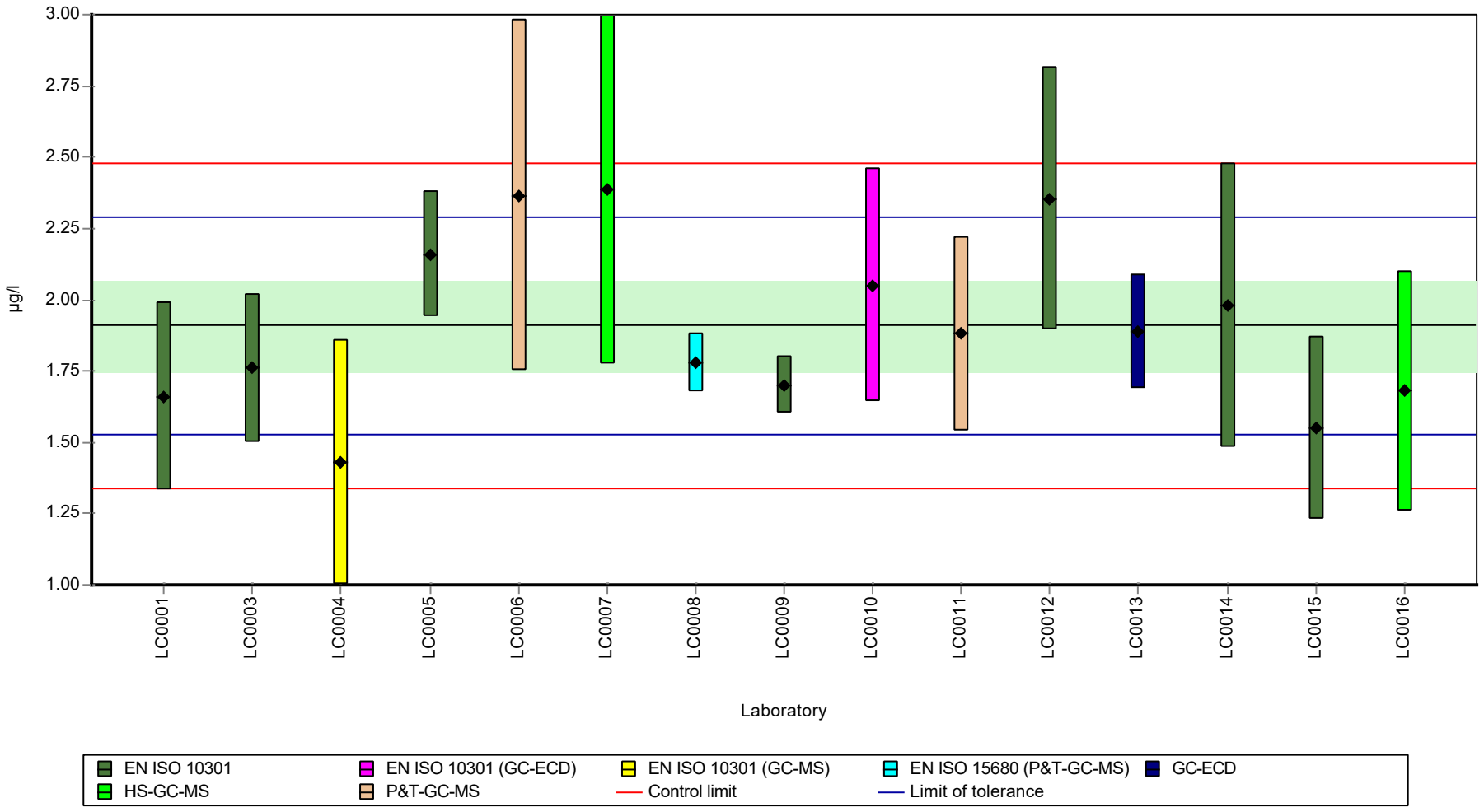
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.66	0.33	87	-1.3	
LC0002	-	-	-	-	
LC0003	1.76	0.26	92.2	-0.78	
LC0004	1.43	0.43	74.9	-2.51	
LC0005	2.16	0.22	113	1.32	
LC0006	2.365	0.615	124	2.39	
LC0007	2.387	0.613	125	2.51	
LC0008	1.78	0.101	93.3	-0.67	
LC0009	1.7	0.1	89.1	-1.09	
LC0010	2.05	0.41	107	0.74	
LC0011	1.88	0.34	98.5	-0.15	
LC0012	2.354	0.46	123	2.33	
LC0013	1.89	0.2	99	-0.1	
LC0014	1.98	0.5	104	0.38	
LC0015	1.55	0.32	81.2	-1.88	
LC0016	1.68	0.421	88	-1.2	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.91 ± 0.234	1.91 ± 0.234	µg/l
Minimum	1.43	1.43	µg/l
Maximum	2.39	2.39	µg/l
Standard deviation	0.302	0.302	µg/l
rel. standard deviation	15.8	15.8	%
n	15	15	-

Graphical presentation of results

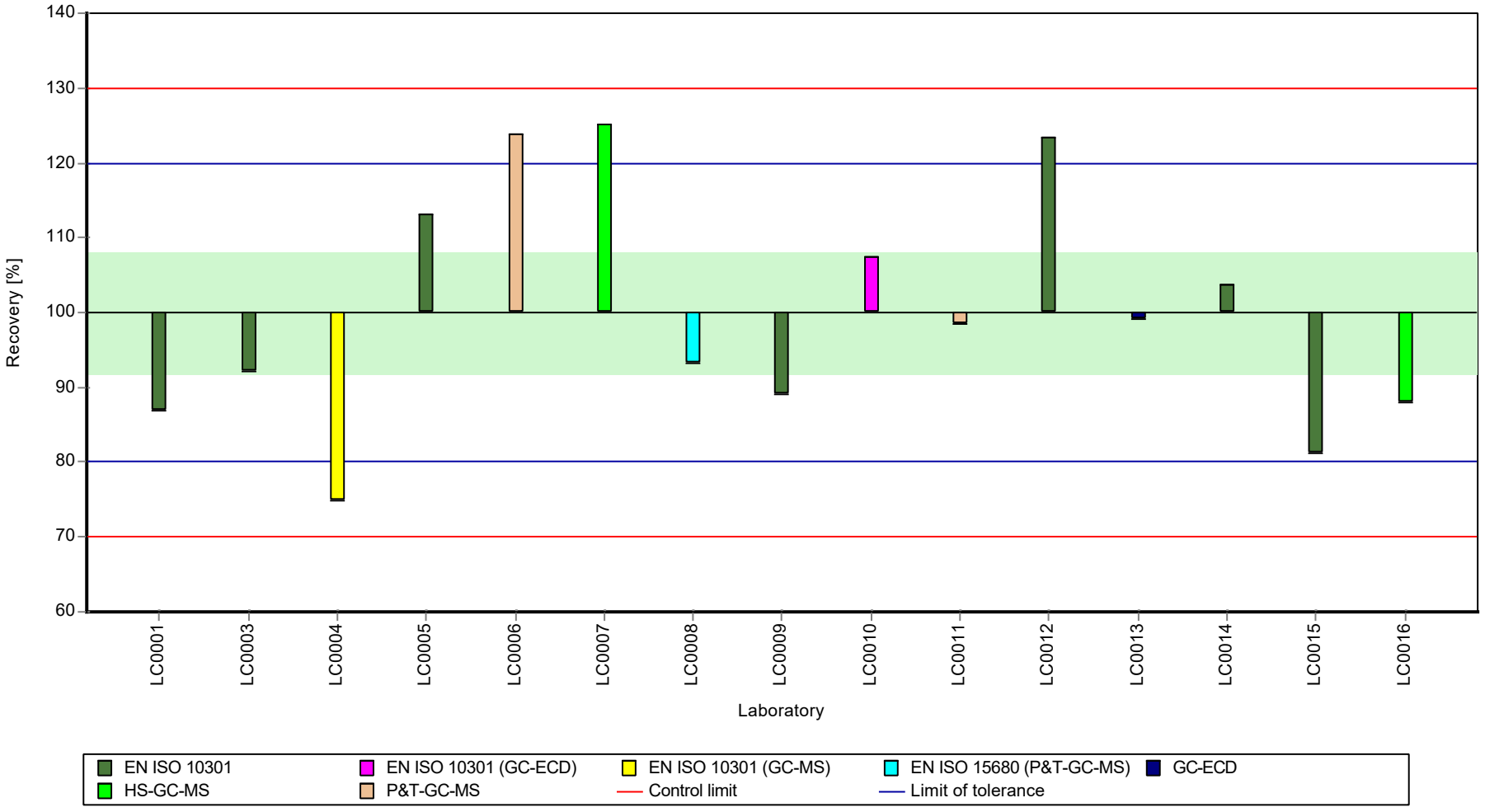
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

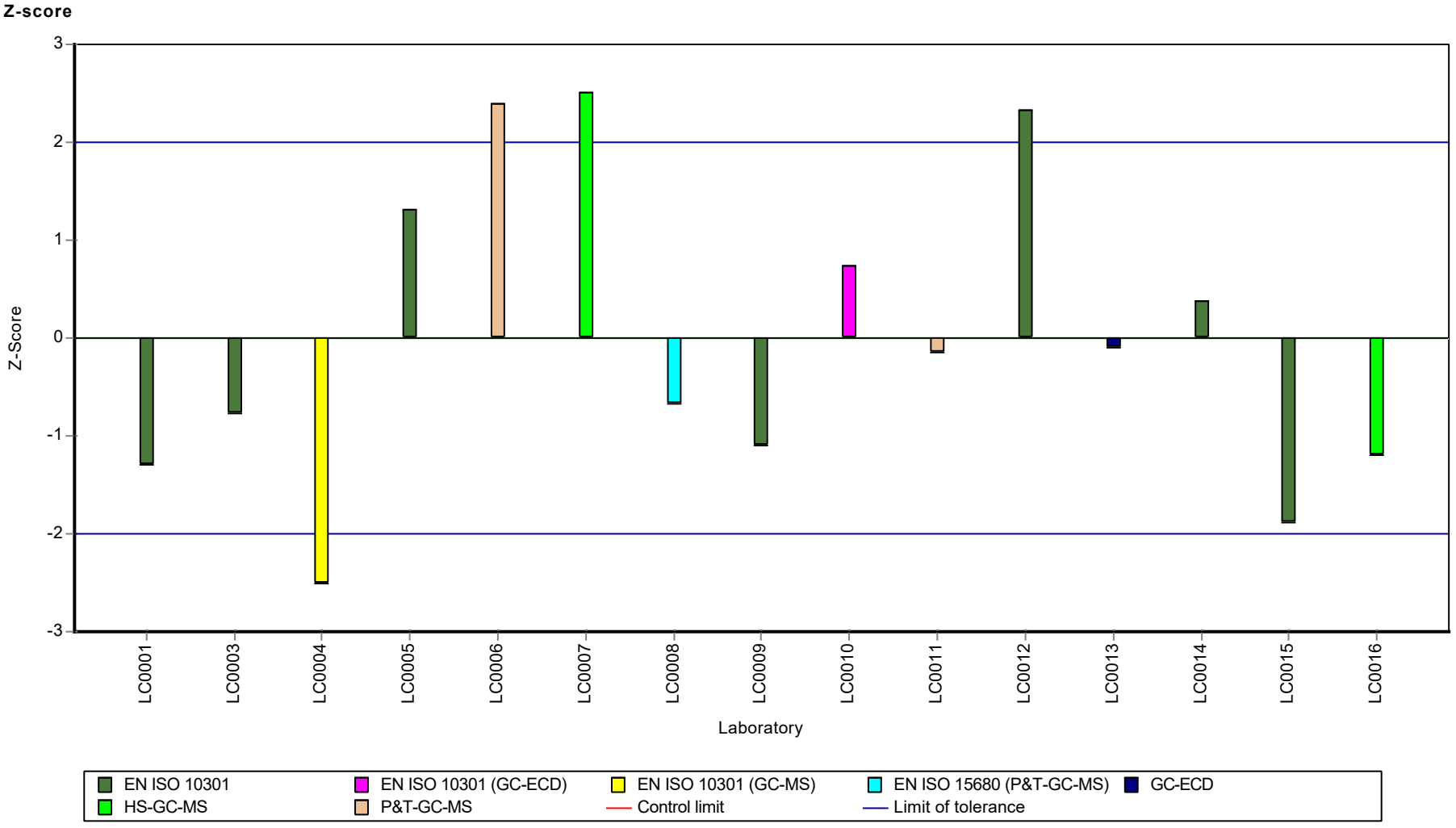
Sample: C67A, Parameter: Bromodichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Bromodichloromethane



Parameter oriented report

C67 B

Bromodichloromethane

Unit	µg/l
Assigned value ± U (k=2)	12 ± 0.981
Criterion	1.2 (10 %)
Minimum - Maximum	9.19 - 15.5
Control test value ± U (k=2)	12.200 ± 3.67

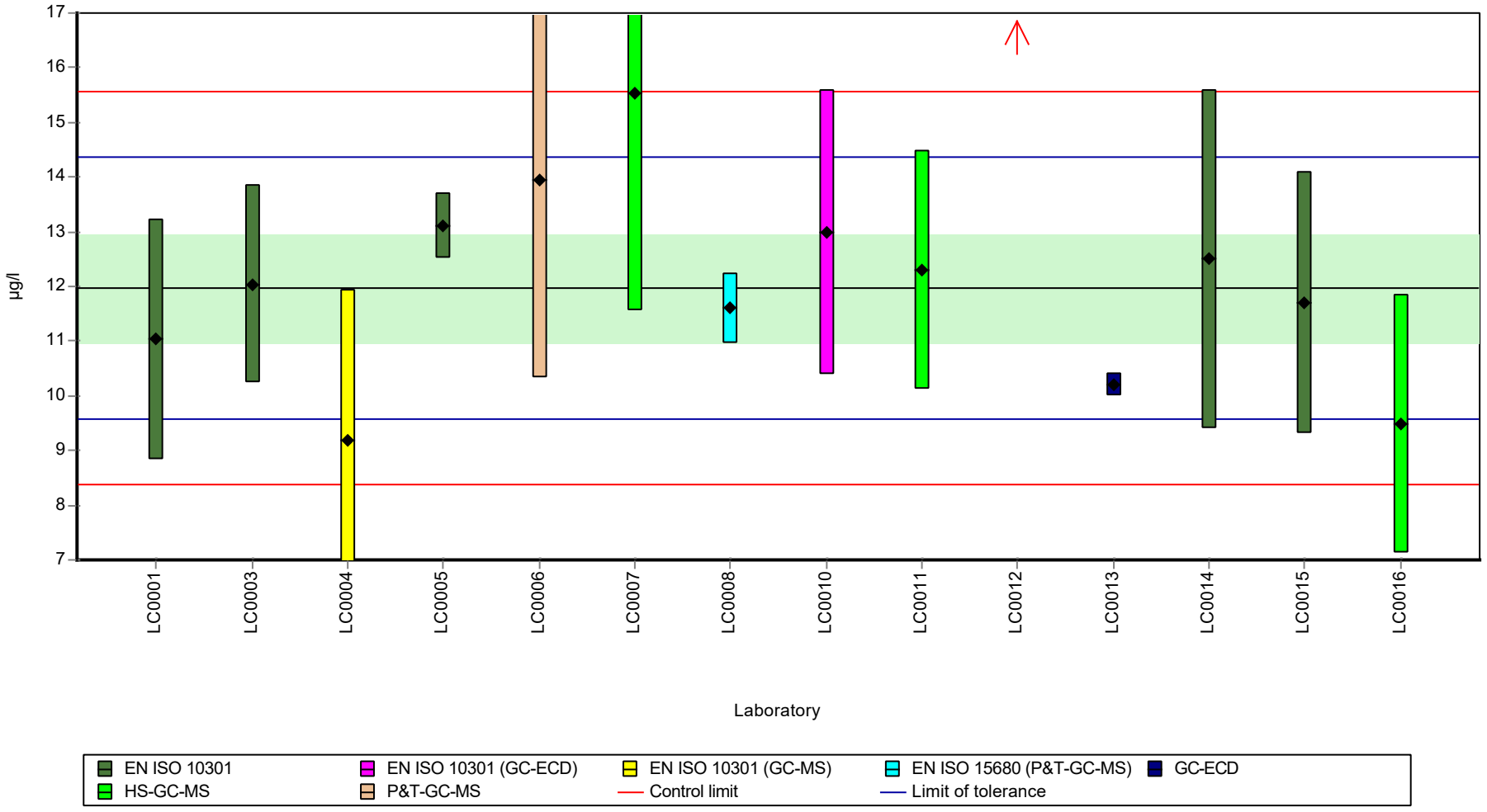
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	11.03	2.21	92.1	-0.79	
LC0002	-	-	-	-	
LC0003	12.04	1.81	101	0.06	
LC0004	9.19	2.76	76.8	-2.32	
LC0005	13.1	0.6	109	0.94	
LC0006	13.96	3.63	117	1.66	
LC0007	15.538	3.99	130	2.98	
LC0008	11.6	0.635	96.9	-0.31	
LC0009	-	-	-	-	
LC0010	12.99	2.598	109	0.85	
LC0011	12.3	2.2	103	0.27	
LC0012	45.5	9.1	380	28	H
LC0013	10.2	0.2	85.2	-1.48	
LC0014	12.5	3.1	104	0.44	
LC0015	11.7	2.4	97.7	-0.23	
LC0016	9.49	2.372	79.3	-2.07	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	14.4 ± 7.31	12 ± 1.47	µg/l
Minimum	9.19	9.19	µg/l
Maximum	45.5	15.5	µg/l
Standard deviation	9.12	1.77	µg/l
rel. standard deviation	63.5	14.8	%
n	14	13	-

Graphical presentation of results

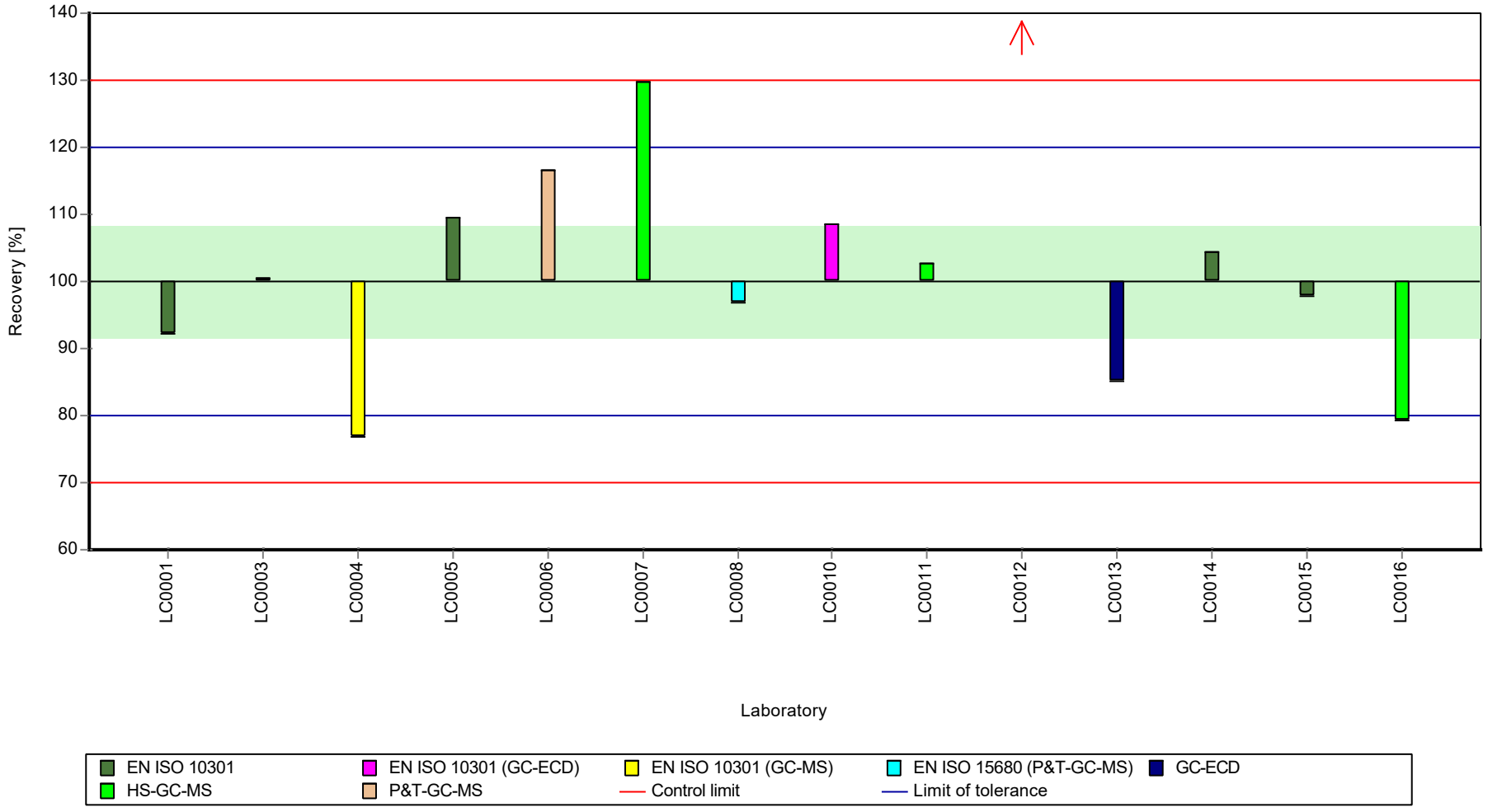
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

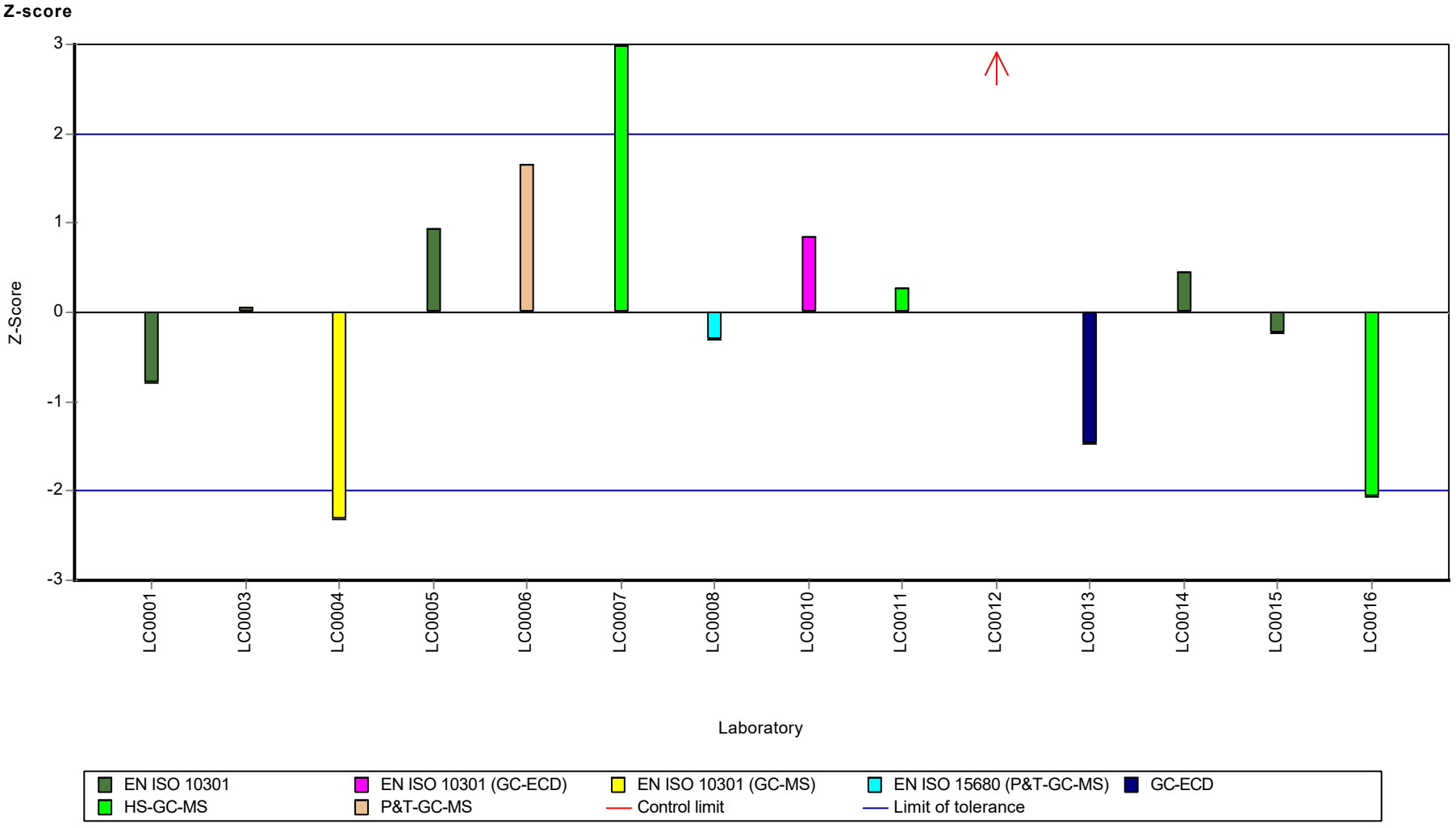
Sample: C67B, Parameter: Bromodichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Bromodichloromethane



Parameter oriented report

C67 A

cis-1,2-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	0.645 ± 0.0937
Criterion	0.168 (26 %)
Minimum - Maximum	0.461 - 0.998
Control test value ± U (k=2)	0.656 ± 0.197

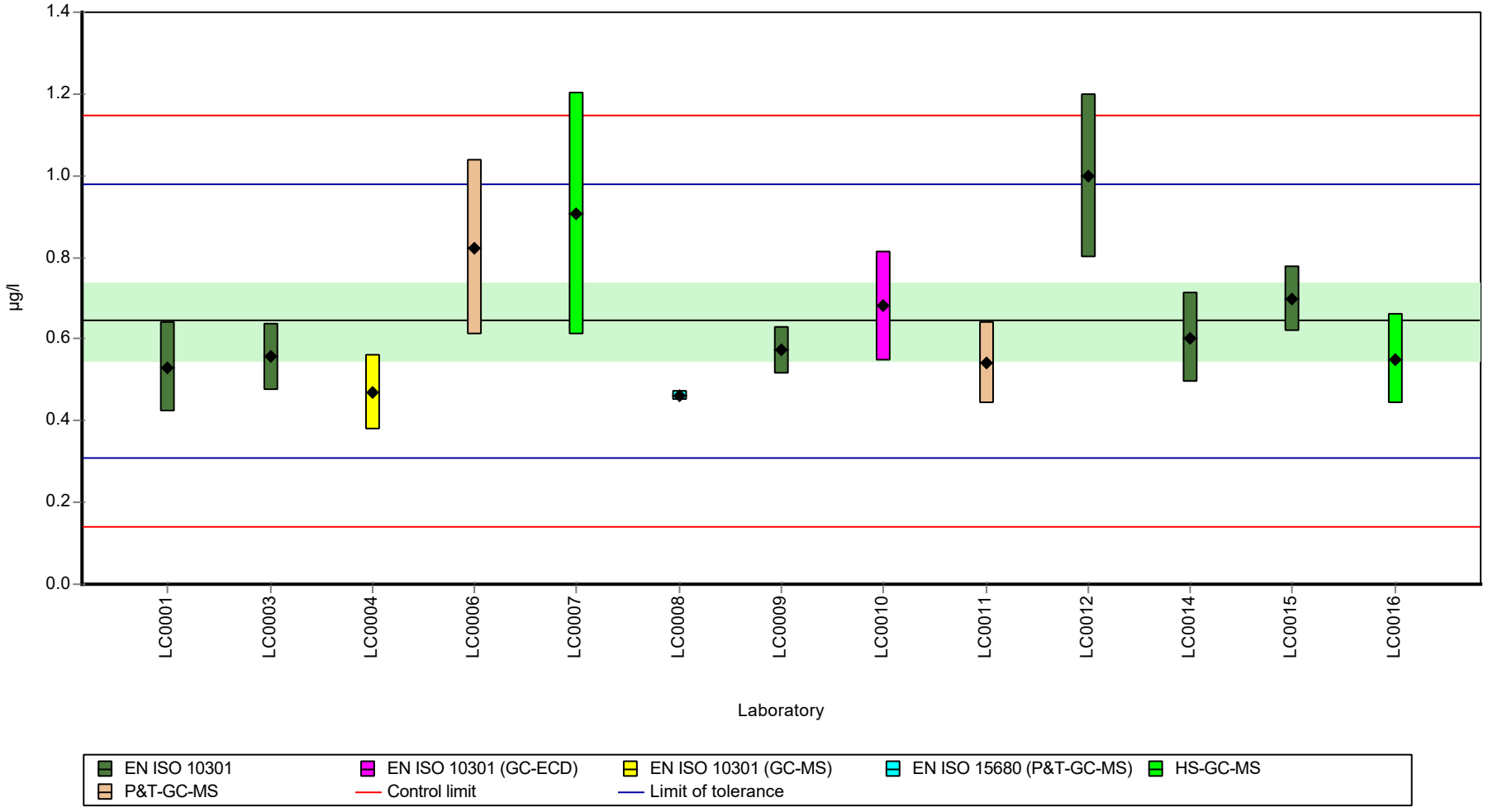
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.53	0.11	82.1	-0.69	
LC0002	-	-	-	-	
LC0003	0.556	0.083	86.2	-0.53	
LC0004	0.469	0.091	72.7	-1.05	
LC0005	-	-	-	-	
LC0006	0.823	0.214	128	1.06	
LC0007	0.907	0.296	141	1.56	
LC0008	0.461	0.012	71.4	-1.1	
LC0009	0.572	0.057	88.7	-0.44	
LC0010	0.68	0.136	105	0.21	
LC0011	0.54	0.1	83.7	-0.63	
LC0012	0.998	0.2	155	2.1	
LC0013	-	-	-	-	
LC0014	0.603	0.11	93.5	-0.25	
LC0015	0.699	0.08	108	0.32	
LC0016	0.55	0.11	85.2	-0.57	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.645 ± 0.141	0.645 ± 0.141	µg/l
Minimum	0.461	0.461	µg/l
Maximum	0.998	0.998	µg/l
Standard deviation	0.169	0.169	µg/l
rel. standard deviation	26.2	26.2	%
n	13	13	-

Graphical presentation of results

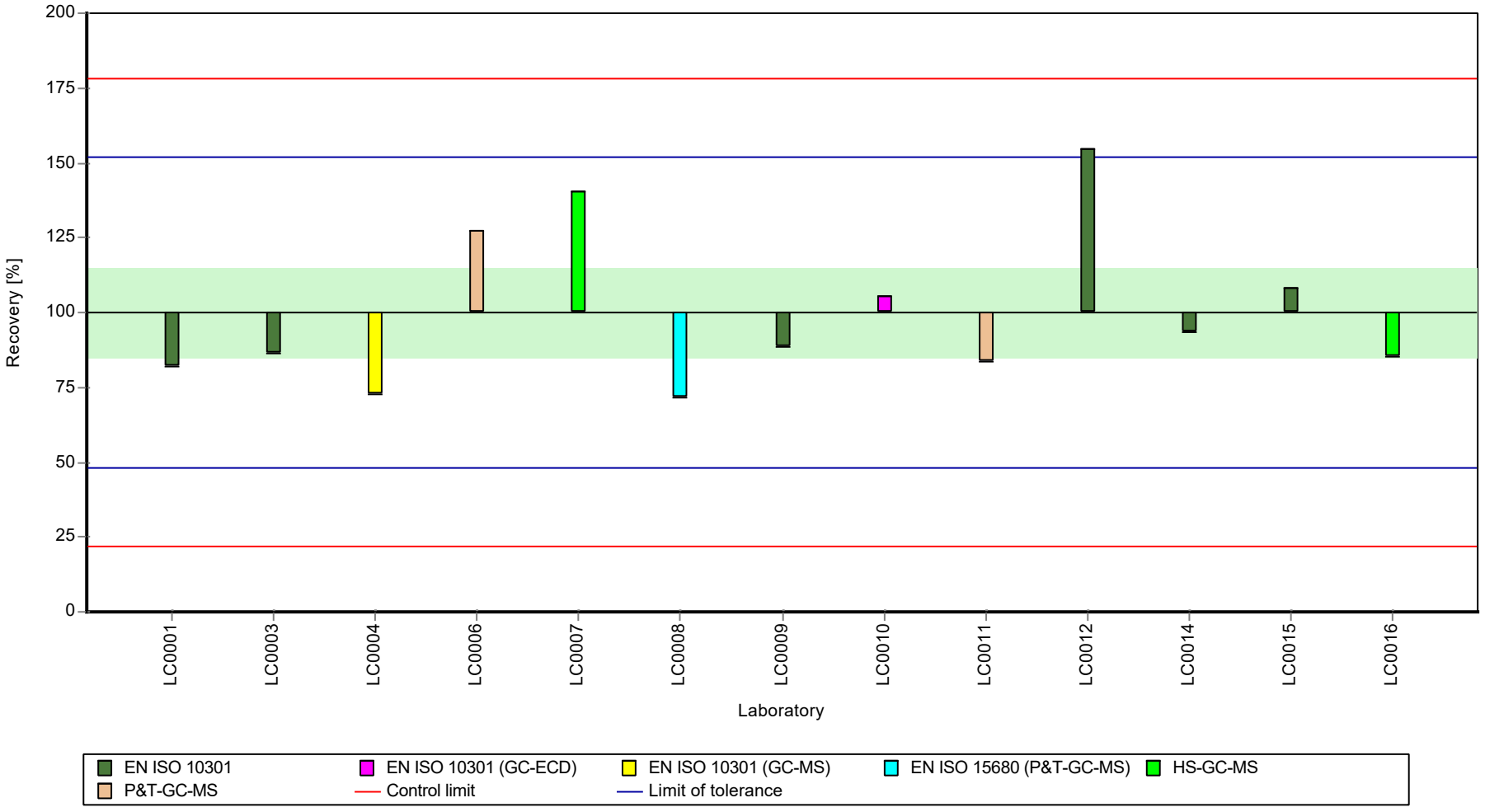
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

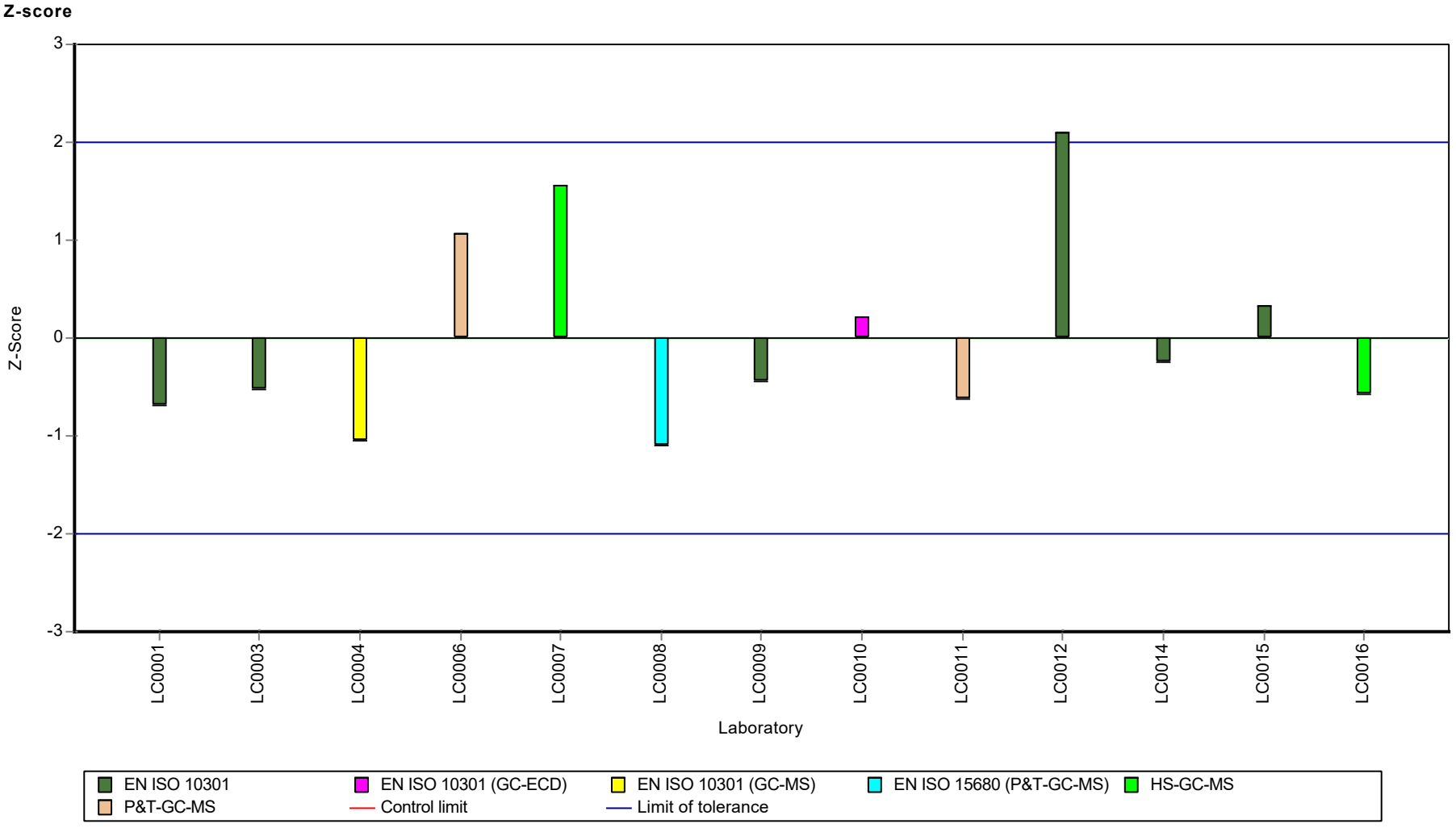
Sample: C67A, Parameter: cis-1,2-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: cis-1,2-Dichloroethene



Parameter oriented report

C67 B

cis-1,2-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	7.31 ± 1.04
Criterion	1.83 (25 %)
Minimum - Maximum	5.51 - 11.1
Control test value ± U (k=2)	7.060 ± 2.12

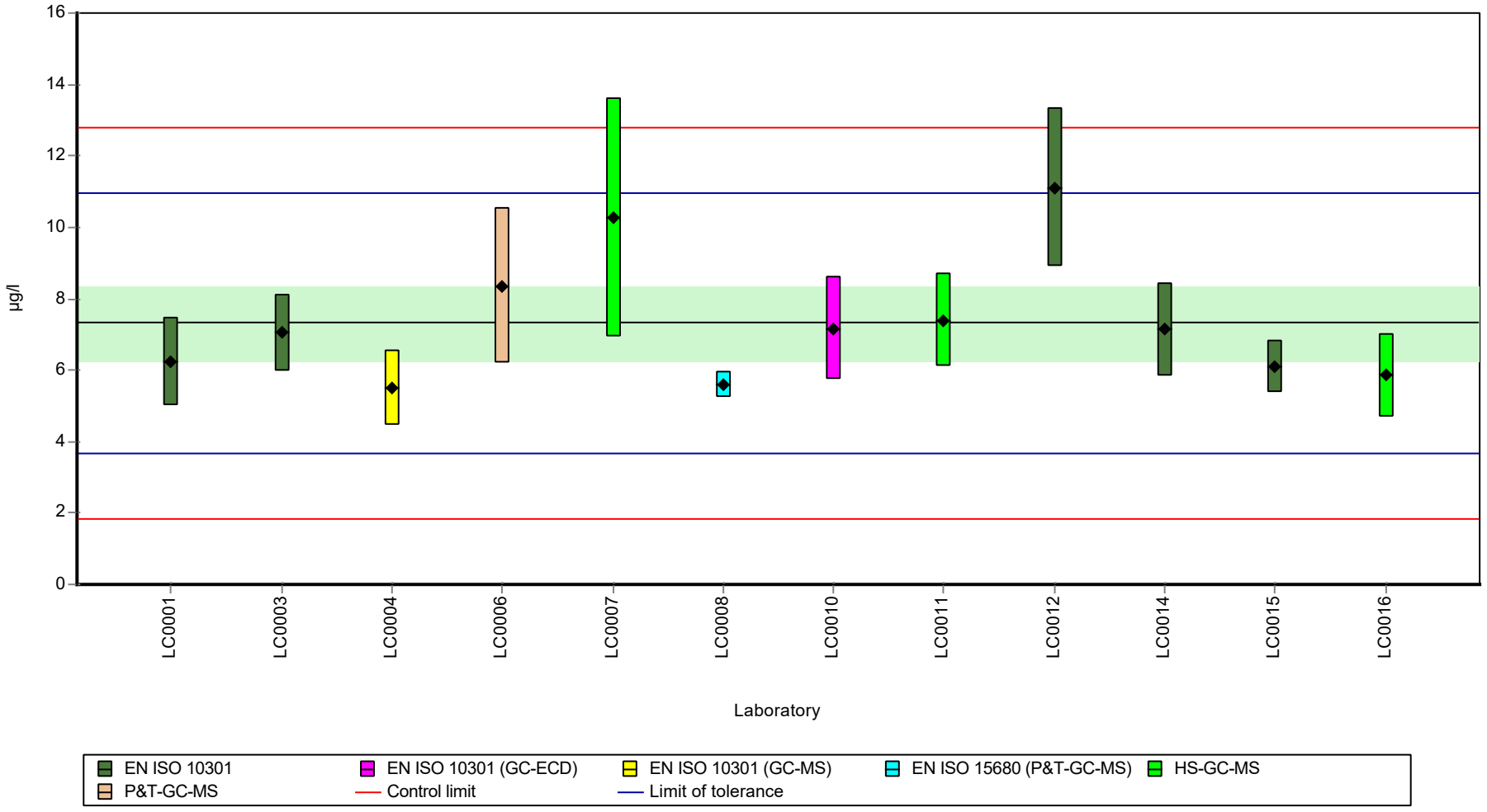
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.22	1.24	85.1	-0.6	
LC0002	-	-	-	-	
LC0003	7.04	1.06	96.3	-0.15	
LC0004	5.51	1.06	75.3	-0.99	
LC0005	-	-	-	-	
LC0006	8.36	2.17	114	0.57	
LC0007	10.283	3.352	141	1.62	
LC0008	5.58	0.361	76.3	-0.95	
LC0009	-	-	-	-	
LC0010	7.17	1.434	98	-0.08	
LC0011	7.4	1.3	101	0.05	
LC0012	11.1	2.22	152	2.07	
LC0013	-	-	-	-	
LC0014	7.13	1.3	97.5	-0.1	
LC0015	6.11	0.73	83.6	-0.66	
LC0016	5.85	1.17	80	-0.8	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	7.31 ± 1.55	7.31 ± 1.55	µg/l
Minimum	5.51	5.51	µg/l
Maximum	11.1	11.1	µg/l
Standard deviation	1.79	1.79	µg/l
rel. standard deviation	24.5	24.5	%
n	12	12	-

Graphical presentation of results

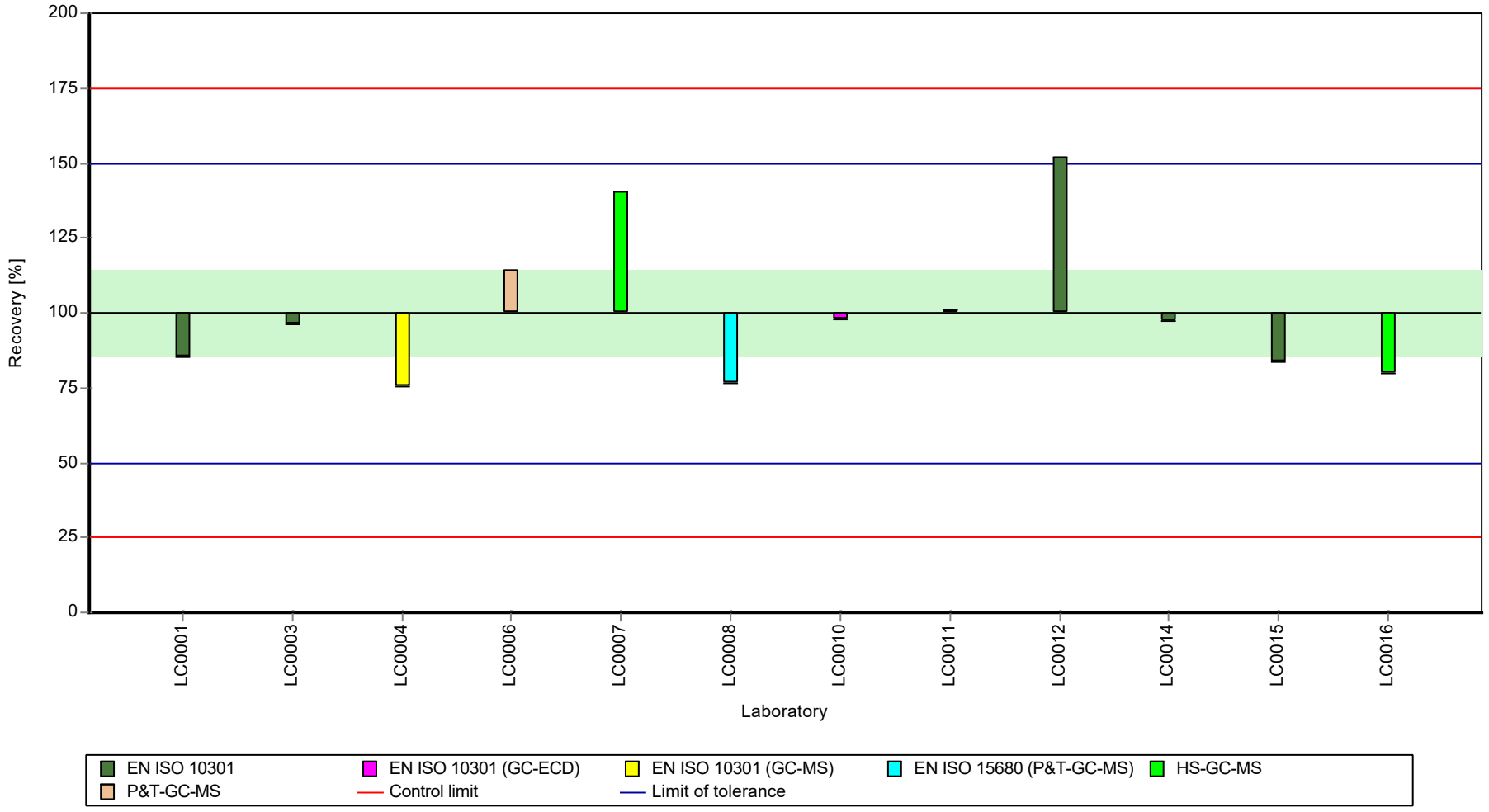
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

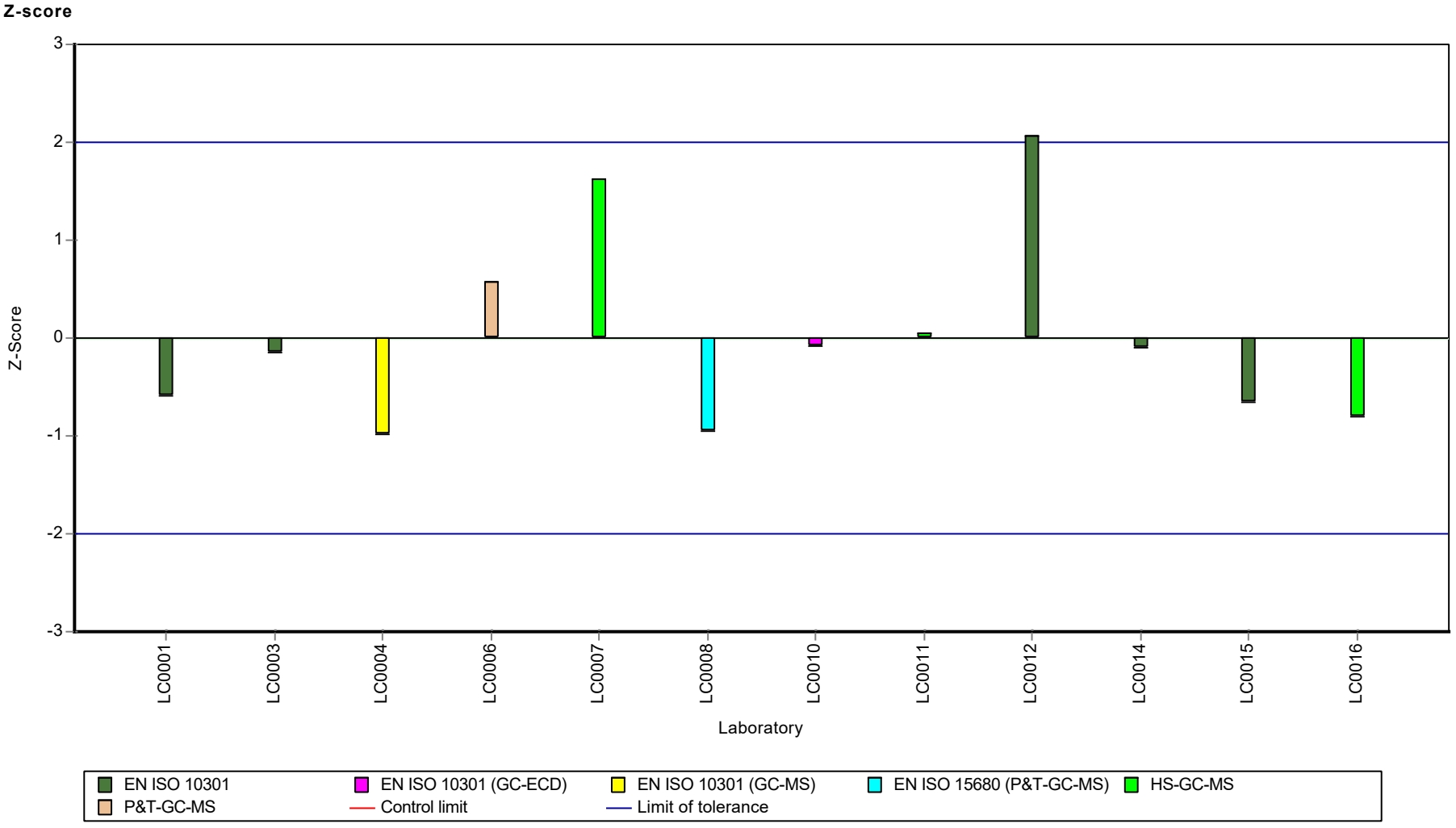
Sample: C67B, Parameter: cis-1,2-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: cis-1,2-Dichloroethene



Parameter oriented report

C67 A

Dibromochloromethane

Unit	µg/l
Assigned value ± U (k=2)	1.28 ± 0.081
Criterion	0.154 (12 %)
Minimum - Maximum	1 - 1.62
Control test value ± U (k=2)	1.330 ± 0.399

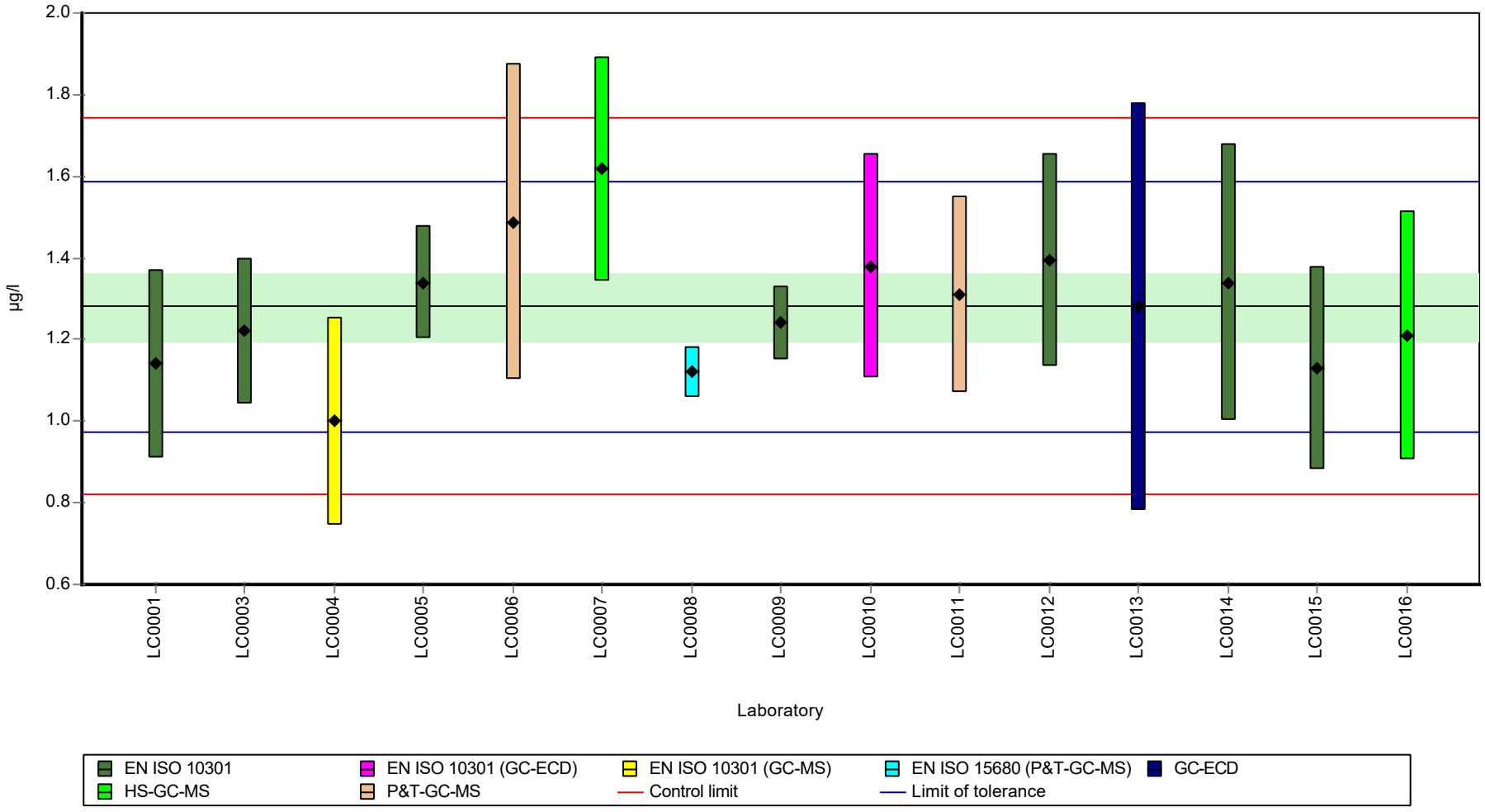
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.14	0.23	89	-0.91	
LC0002	-	-	-	-	
LC0003	1.22	0.18	95.3	-0.39	
LC0004	1	0.254	78.1	-1.83	
LC0005	1.34	0.14	105	0.39	
LC0006	1.487	0.387	116	1.34	
LC0007	1.618	0.275	126	2.2	
LC0008	1.12	0.061	87.5	-1.05	
LC0009	1.24	0.092	96.8	-0.26	
LC0010	1.38	0.276	108	0.65	
LC0011	1.31	0.24	102	0.19	
LC0012	1.394	0.26	109	0.74	
LC0013	1.28	0.5	100	0.00	
LC0014	1.34	0.34	105	0.39	
LC0015	1.13	0.25	88.2	-0.98	
LC0016	1.21	0.304	94.5	-0.46	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.28 ± 0.121	1.28 ± 0.121	µg/l
Minimum	1	1	µg/l
Maximum	1.62	1.62	µg/l
Standard deviation	0.157	0.157	µg/l
rel. standard deviation	12.2	12.2	%
n	15	15	-

Graphical presentation of results

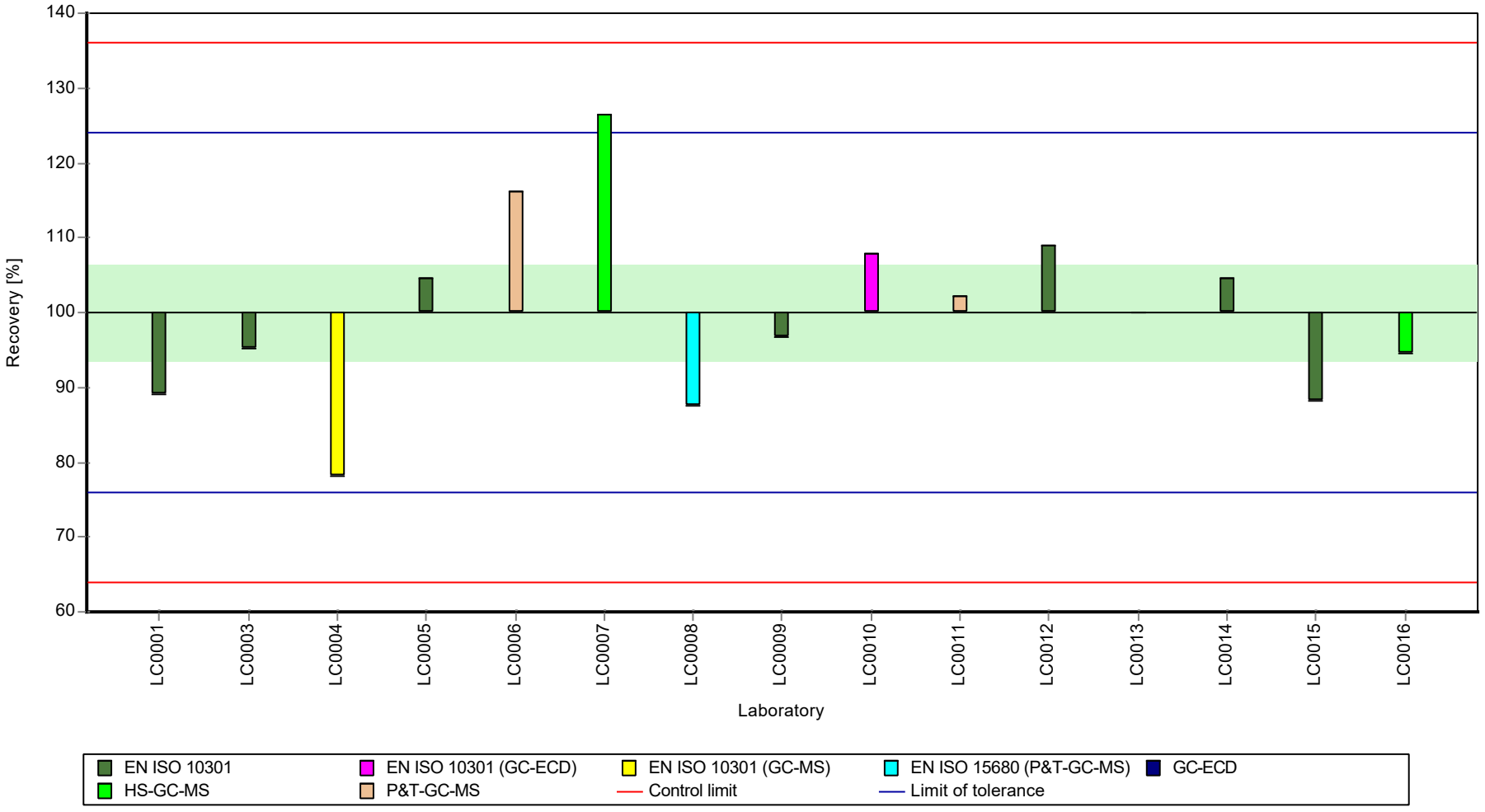
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

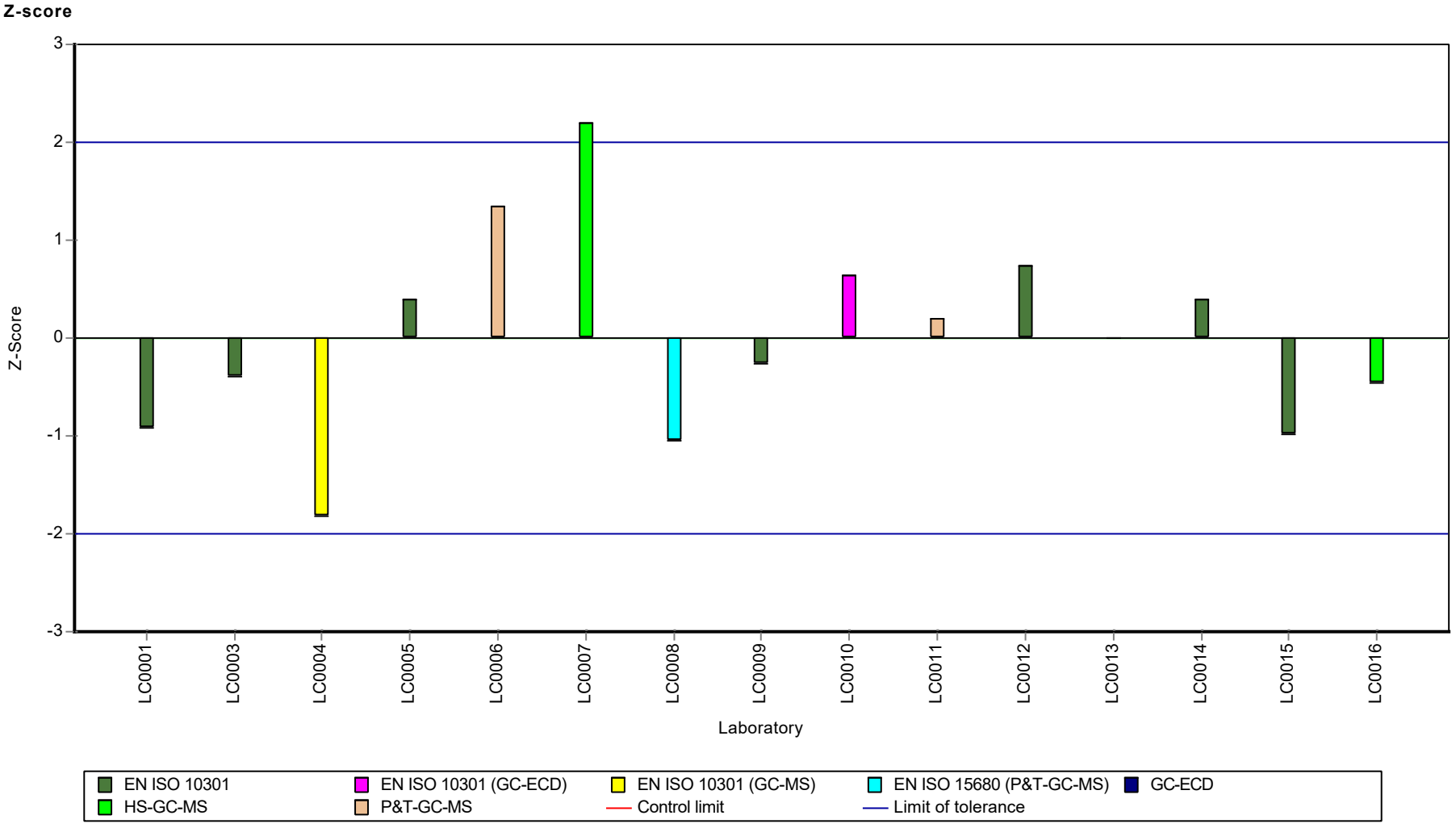
Sample: C67A, Parameter: Dibromochloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Dibromochloromethane



Parameter oriented report

C67 B

Dibromochloromethane

Unit	µg/l
Assigned value ± U (k=2)	14.8 ± 0.934
Criterion	1.78 (12 %)
Minimum - Maximum	11.8 - 17.9
Control test value ± U (k=2)	14.600 ± 4.37

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	13.92	2.78	93.8	-0.51	
LC0002	-	-	-	-	
LC0003	15.66	2.35	106	0.46	
LC0004	11.82	3	79.7	-1.69	
LC0005	14.4	1	97.1	-0.24	
LC0006	16.55	4.3	112	0.96	
LC0007	17.889	3.04	121	1.72	
LC0008	13.5	0.351	91	-0.75	
LC0009	-	-	-	-	
LC0010	15.8	3.16	107	0.54	
LC0011	16	2.9	108	0.66	
LC0012	15.3	3.06	103	0.26	
LC0013	22.76	0.5	153	4.45	H
LC0014	15.4	3.9	104	0.32	
LC0015	14.2	2.4	95.7	-0.36	
LC0016	12.4	3.097	83.6	-1.37	

Characteristics of parameter

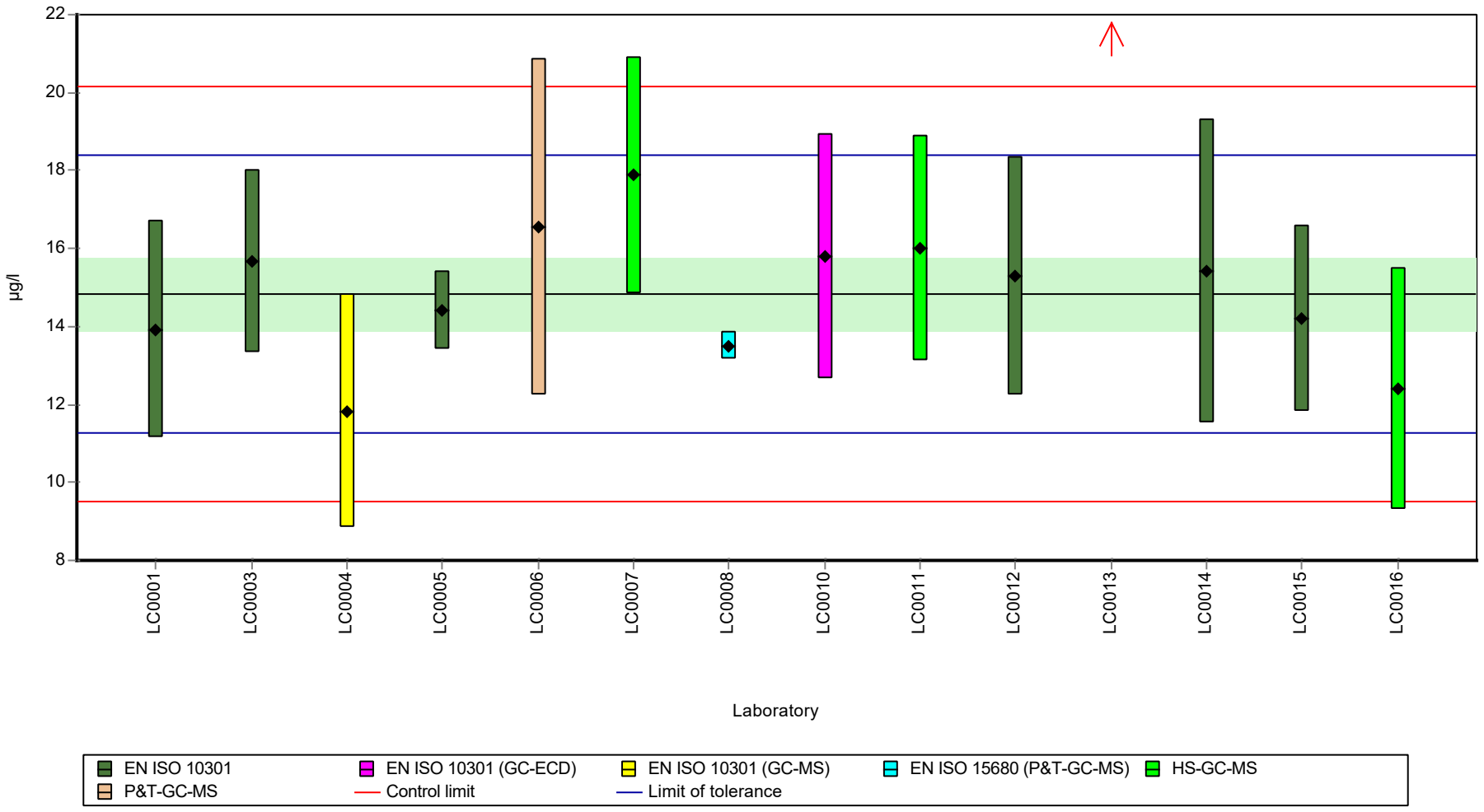
	all results	without outliers	Unit
Mean ± CI (99%)	15.4 ± 2.14	14.8 ± 1.4	µg/l
Minimum	11.8	11.8	µg/l
Maximum	22.8	17.9	µg/l
Standard deviation	2.67	1.68	µg/l
rel. standard deviation	17.3	11.3	%
n	14	13	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Dibromochloromethane

Graphical presentation of results

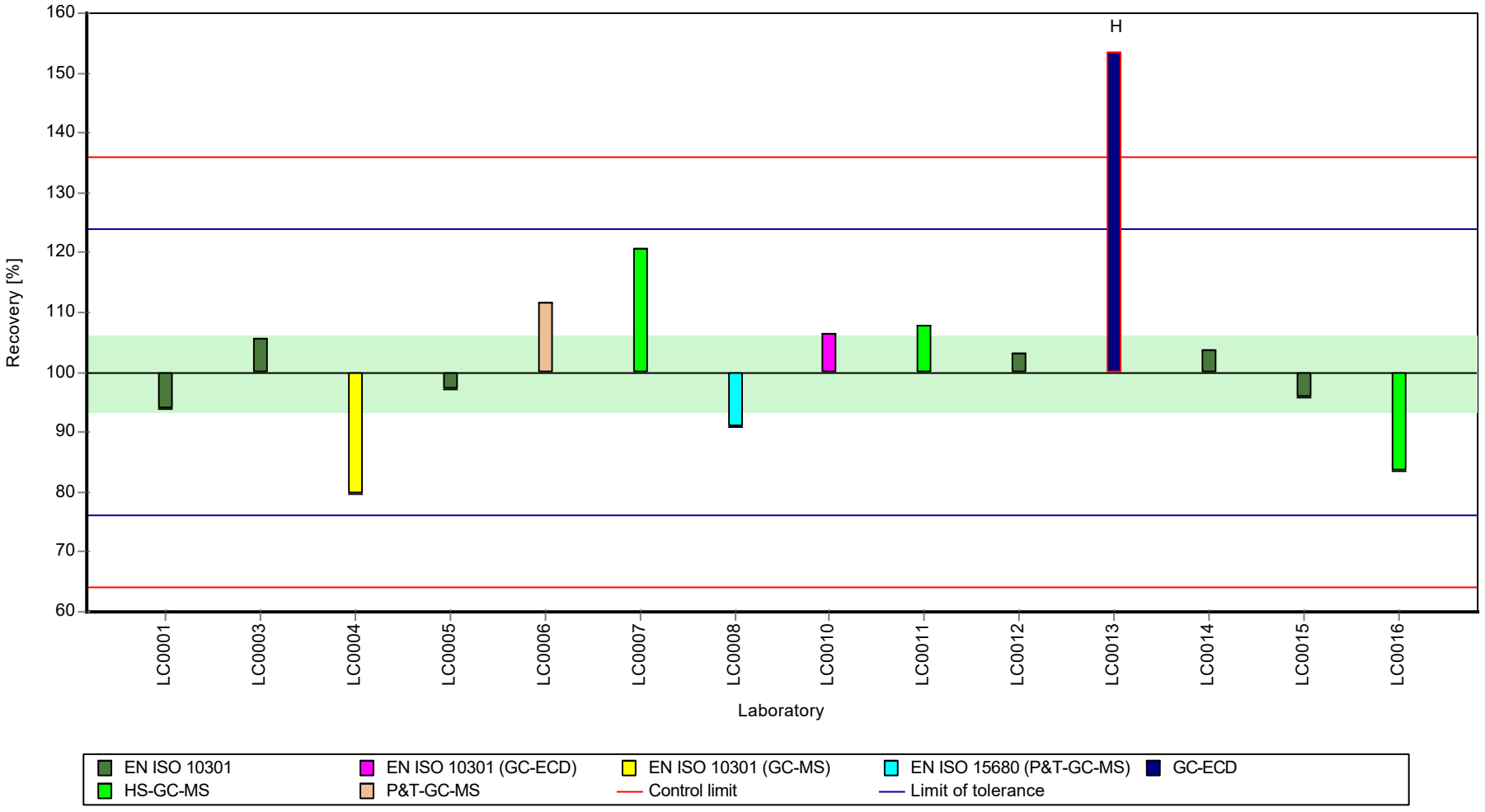
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

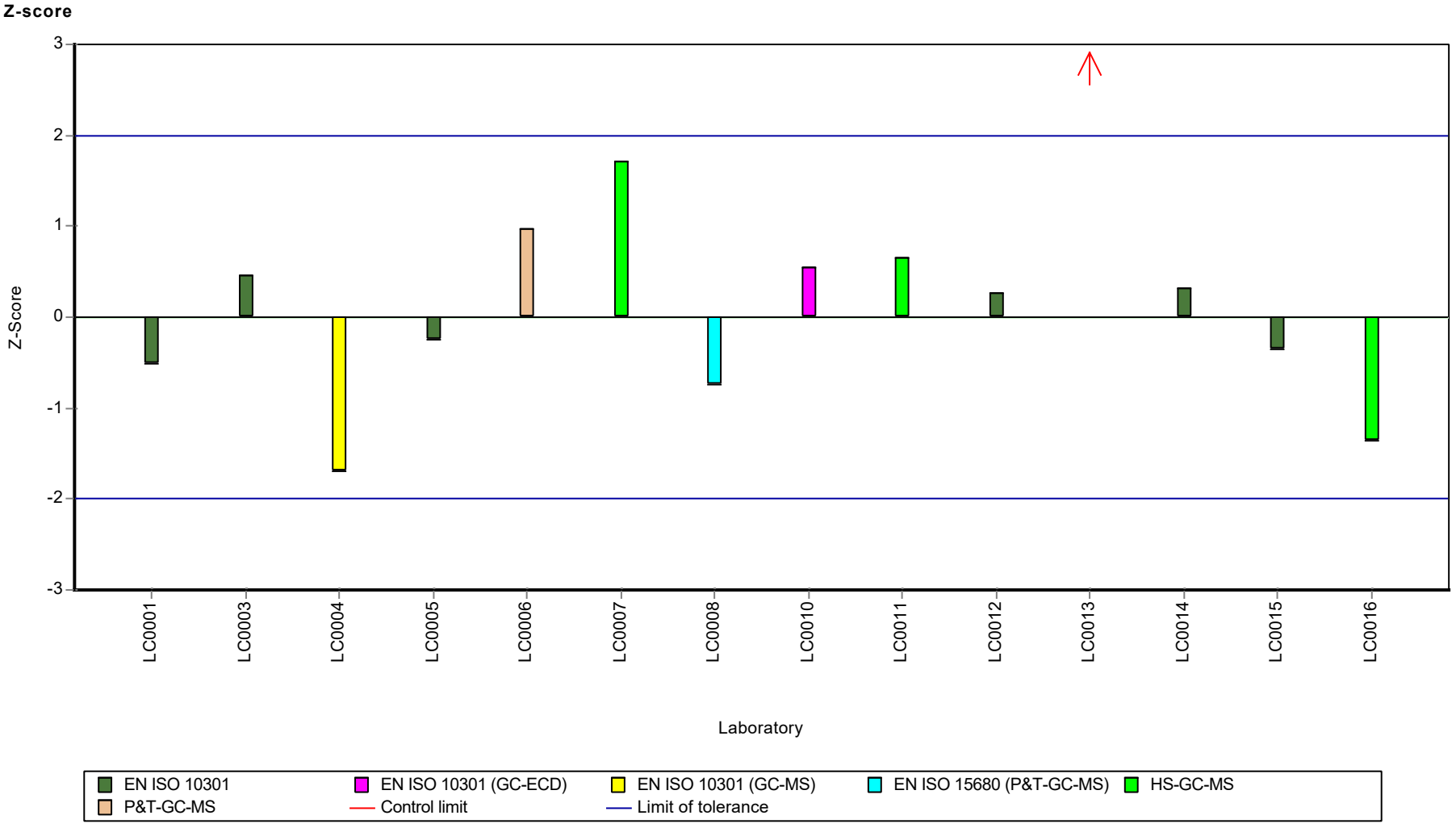
Sample: C67B, Parameter: Dibromochloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Dibromochloromethane



Parameter oriented report

C67 A

Dichloromethane

Unit	µg/l
Assigned value ± U (k=2)	1.33 ± 0.152
Criterion	0.173 (13 %)
Minimum - Maximum	1.03 - 1.91
Control test value ± U (k=2)	1.330 ± 0.398

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 2 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	1.44	0.22	108	0.65	
LC0004	1.03	0.27	77.6	-1.73	
LC0005	-	-	-	-	
LC0006	1.91	0.497	144	3.37	
LC0007	2.061	0.64	155	4.25	H
LC0008	1.17	0.114	88.1	-0.92	
LC0009	1.13	0.097	85.1	-1.15	
LC0010	1.41	0.282	106	0.47	
LC0011	1.33	0.24	100	0.01	
LC0012	< 5 (LOQ)	-	-	-	
LC0013	-	-	-	-	
LC0014	1.27	0.32	95.6	-0.34	
LC0015	1.28	0.31	96.4	-0.28	
LC0016	1.31	0.263	98.6	-0.1	

Characteristics of parameter

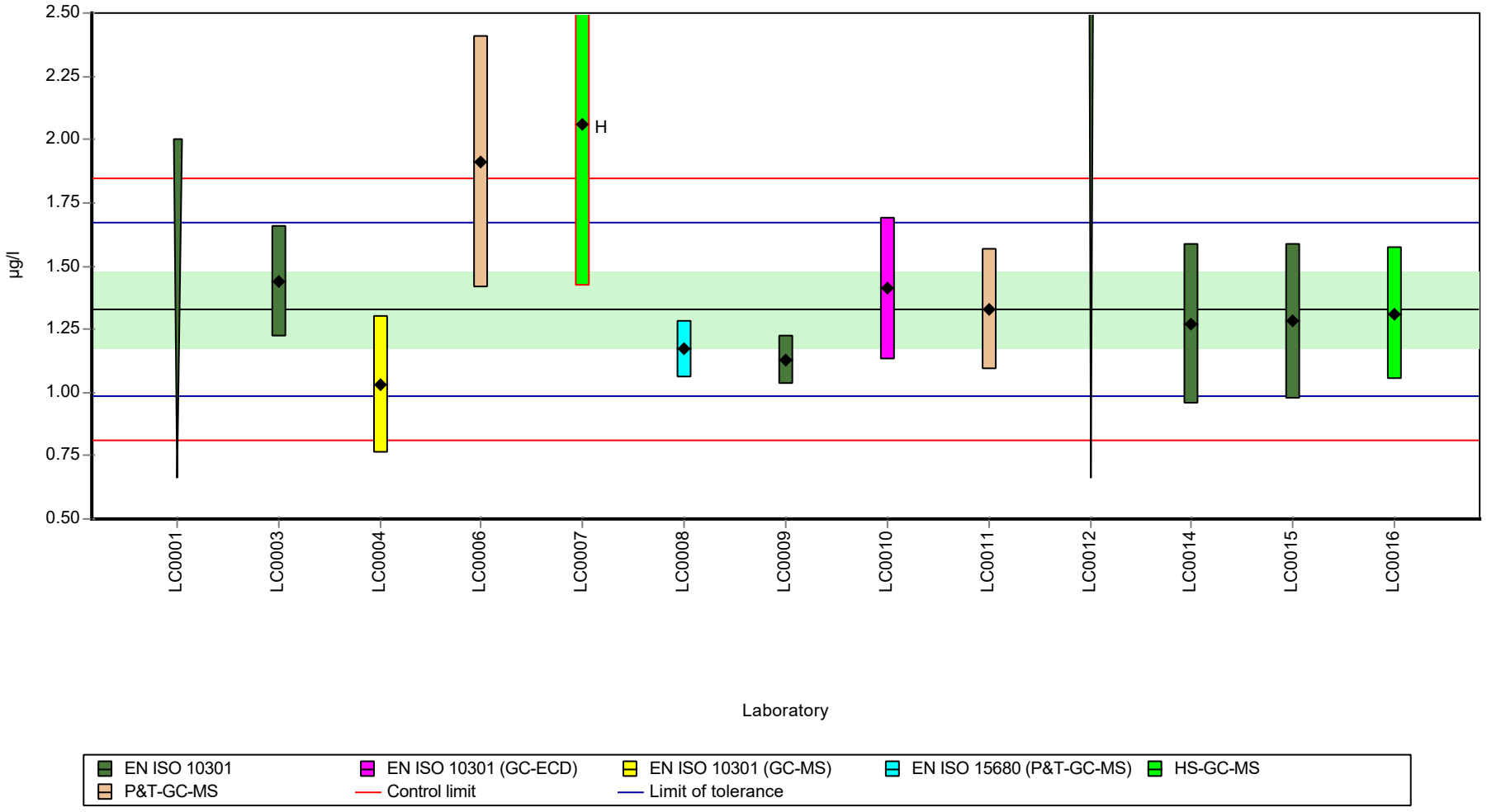
	all results	without outliers	Unit
Mean ± CI (99%)	1.39 ± 0.287	1.33 ± 0.227	µg/l
Minimum	1.03	1.03	µg/l
Maximum	2.06	1.91	µg/l
Standard deviation	0.317	0.24	µg/l
rel. standard deviation	22.7	18	%
n	11	10	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Dichloromethane

Graphical presentation of results

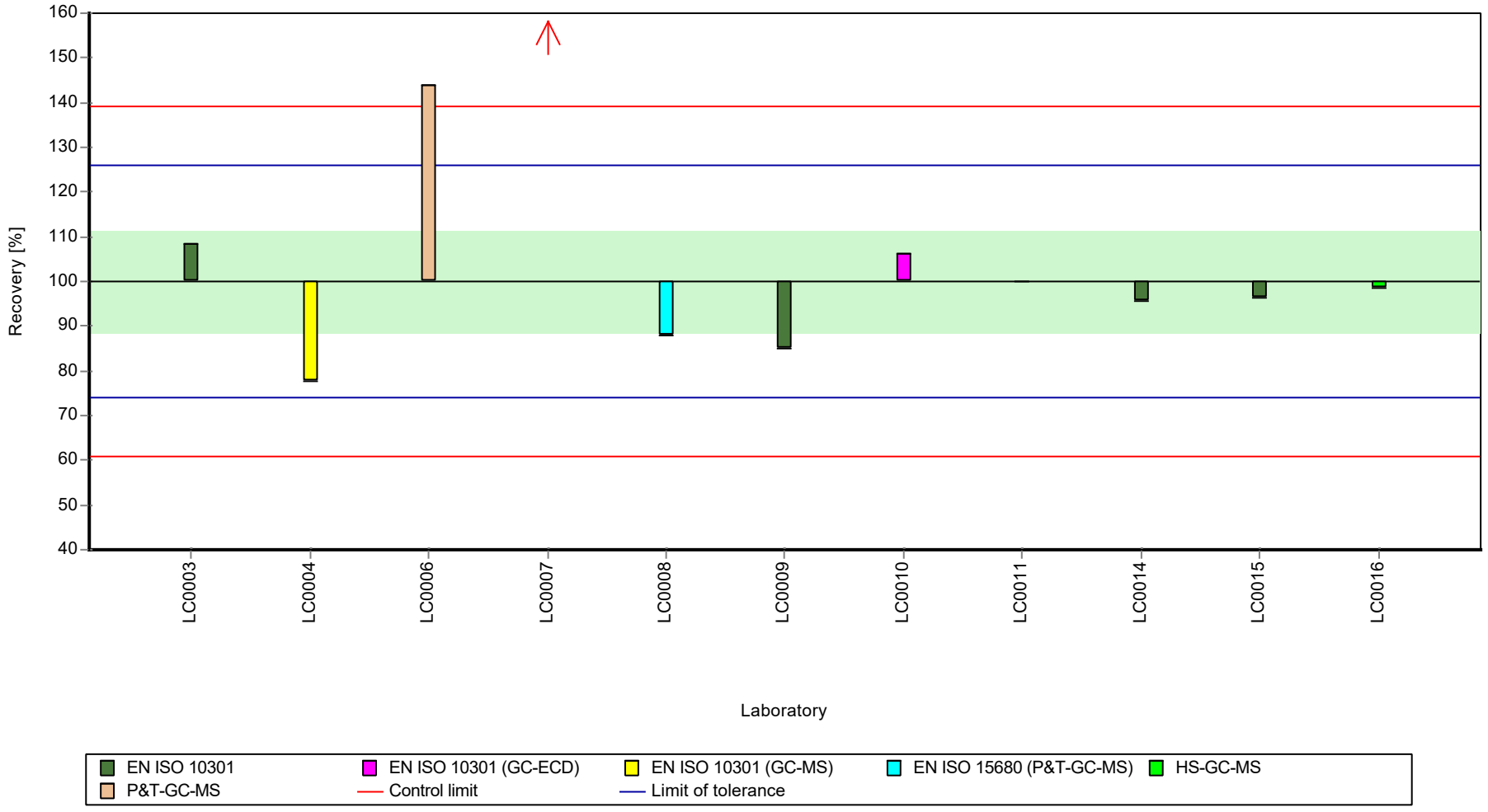
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

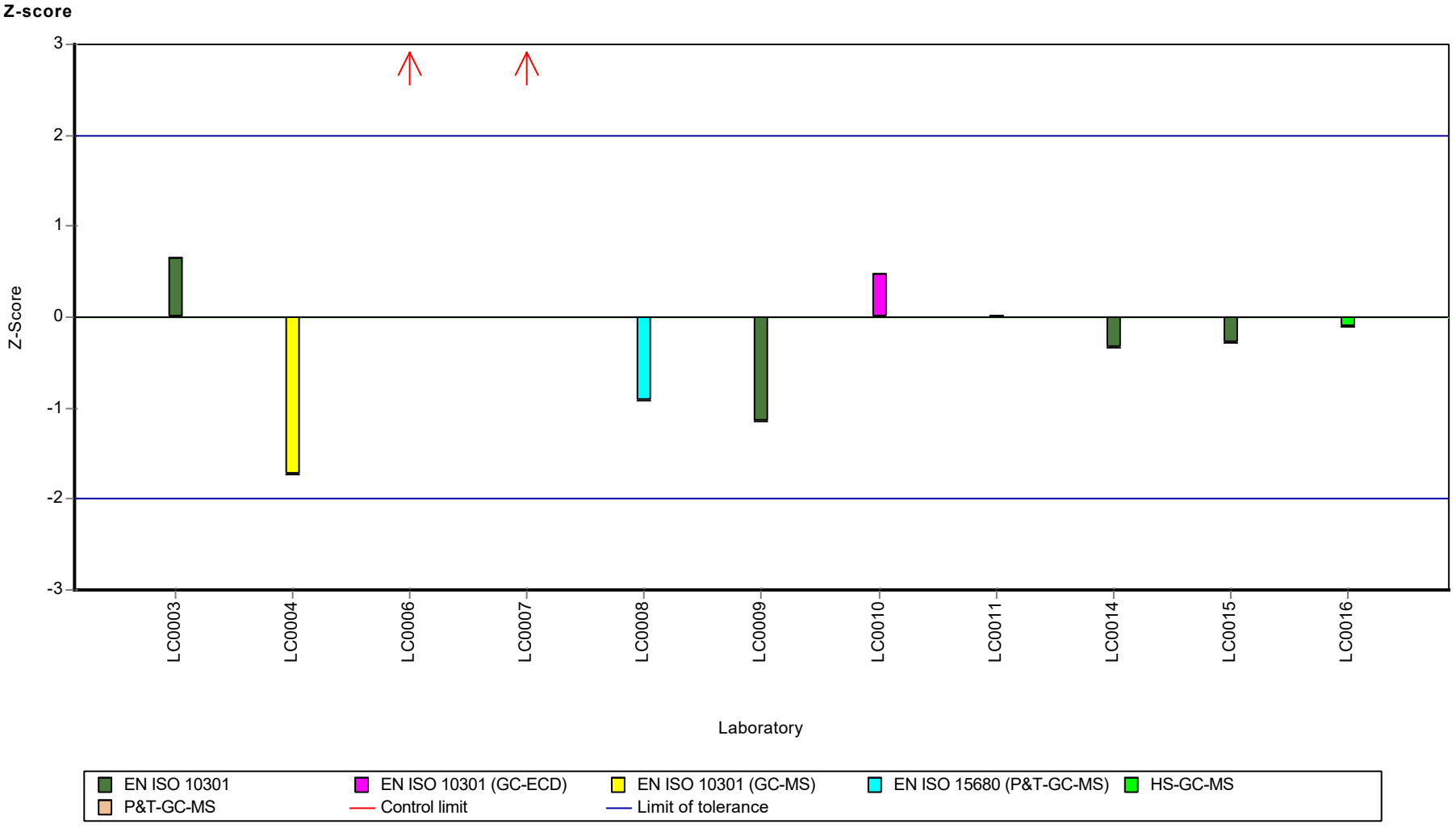
Sample: C67A, Parameter: Dichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Dichloromethane



Parameter oriented report

C67 B

Dichloromethane

Unit	µg/l
Assigned value ± U (k=2)	12.4 ± 1.07
Criterion	1.62 (13 %)
Minimum - Maximum	9.73 - 15.2
Control test value ± U (k=2)	12.200 ± 3.67

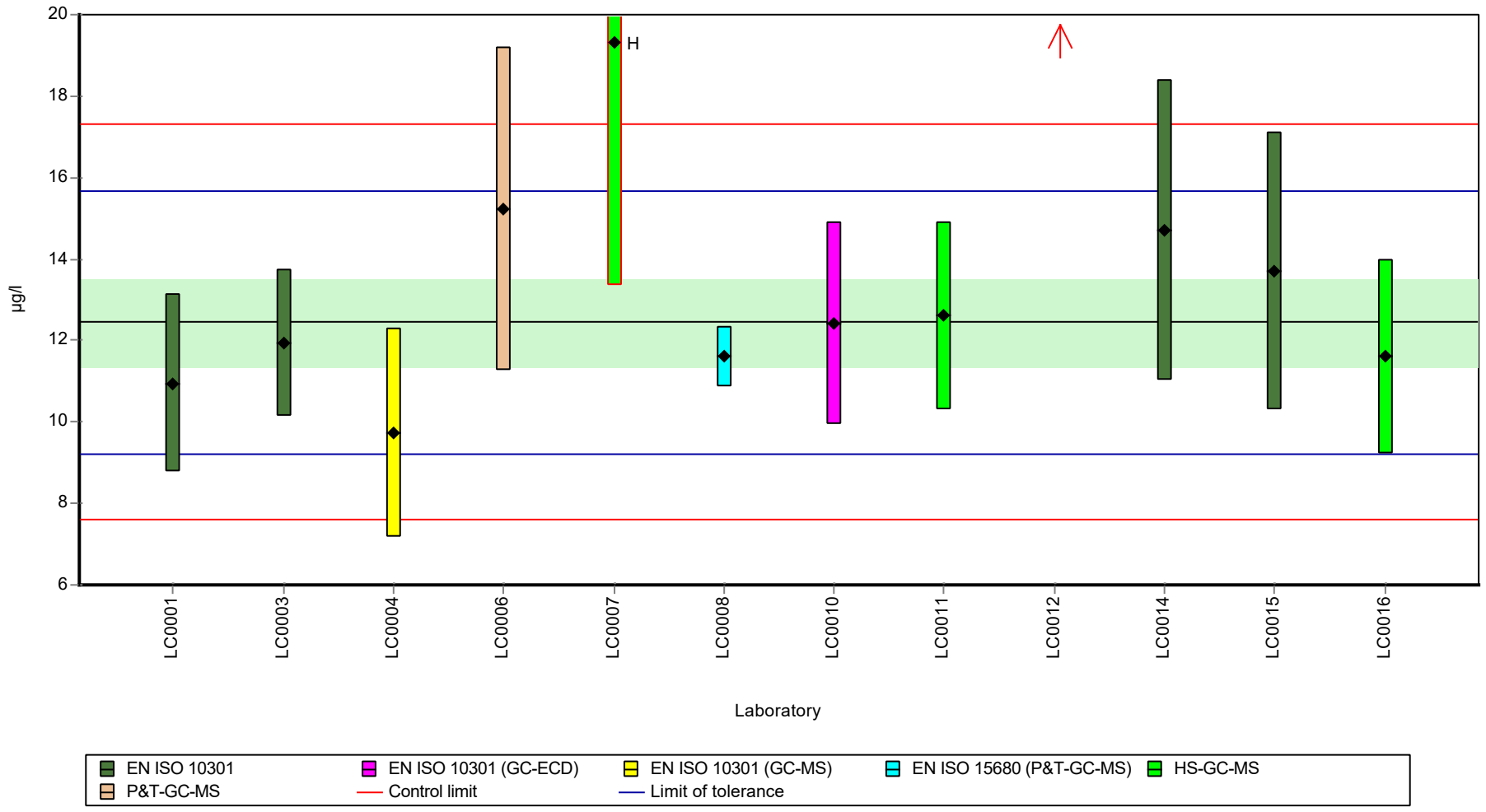
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.94	2.19	87.9	-0.93	
LC0002	-	-	-	-	
LC0003	11.94	1.79	95.9	-0.31	
LC0004	9.73	2.57	78.2	-1.68	
LC0005	-	-	-	-	
LC0006	15.23	3.96	122	1.72	
LC0007	19.316	5.988	155	4.25	H
LC0008	11.6	0.757	93.2	-0.52	
LC0009	-	-	-	-	
LC0010	12.43	2.486	99.9	-0.01	
LC0011	12.6	2.3	101	0.09	
LC0012	22.9	4.59	184	6.46	H
LC0013	-	-	-	-	
LC0014	14.7	3.7	118	1.39	
LC0015	13.7	3.4	110	0.77	
LC0016	11.6	2.371	93.2	-0.52	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	13.9 ± 3.27	12.4 ± 1.6	µg/l
Minimum	9.73	9.73	µg/l
Maximum	22.9	15.2	µg/l
Standard deviation	3.78	1.69	µg/l
rel. standard deviation	27.2	13.6	%
n	12	10	-

Graphical presentation of results

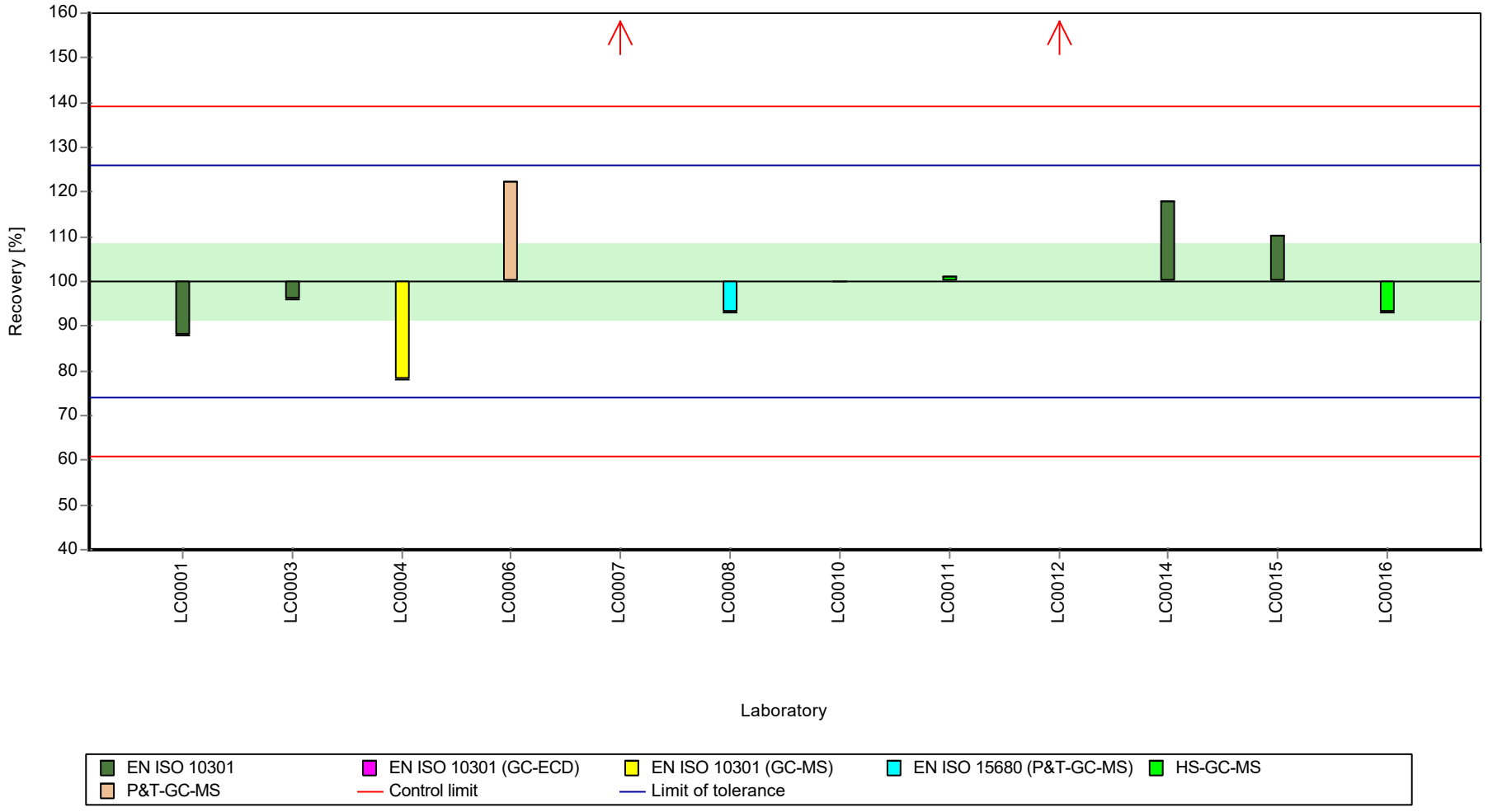
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

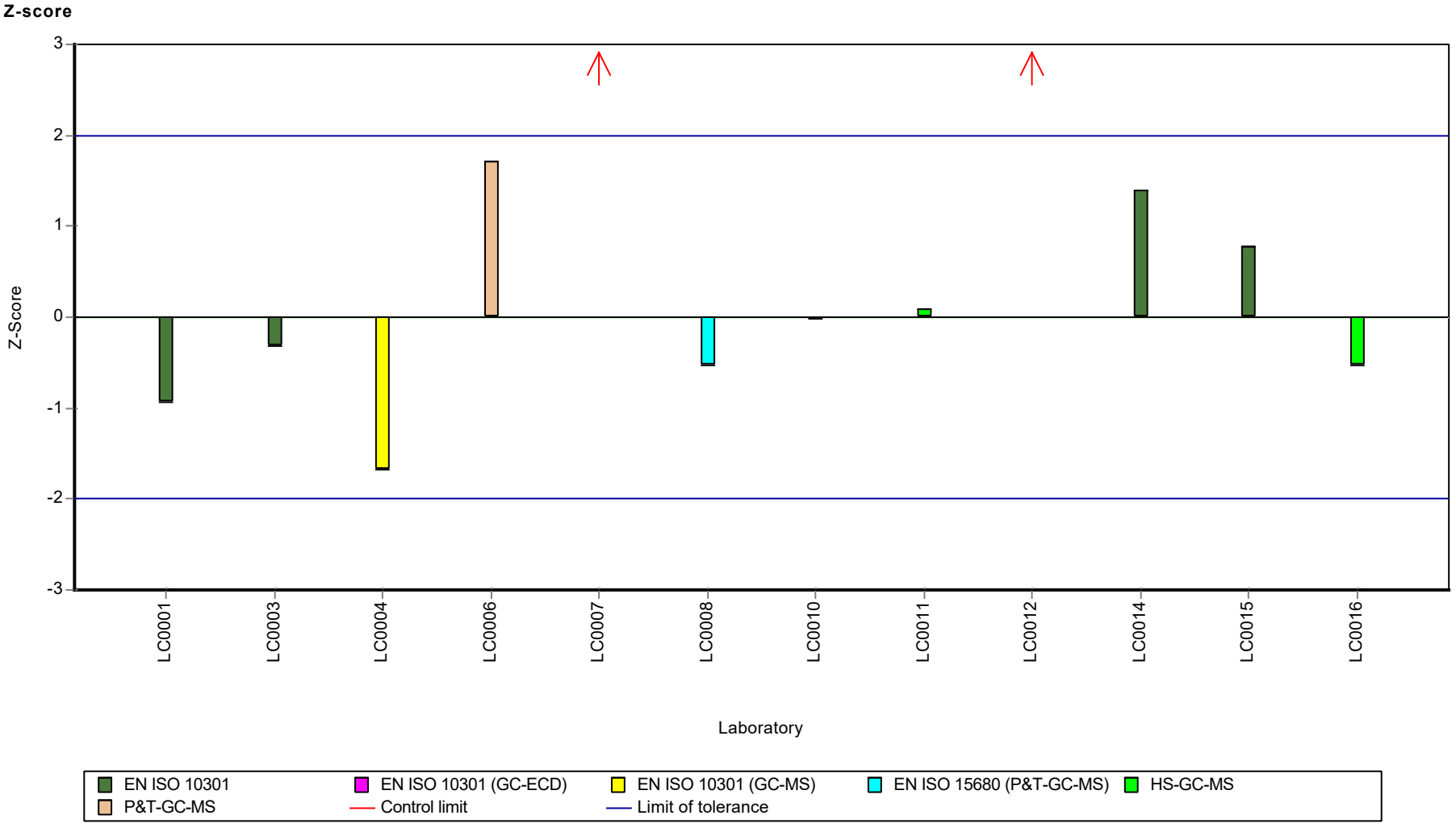
Sample: C67B, Parameter: Dichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Dichloromethane



Parameter oriented report

C67 A

Tetrachloroethene

Unit	µg/l
Assigned value ± U (k=2)	0.339 ± 0.0674
Criterion	0.125 (37 %)
Minimum - Maximum	0.12 - 0.567
Control test value ± U (k=2)	0.352 ± 0.106

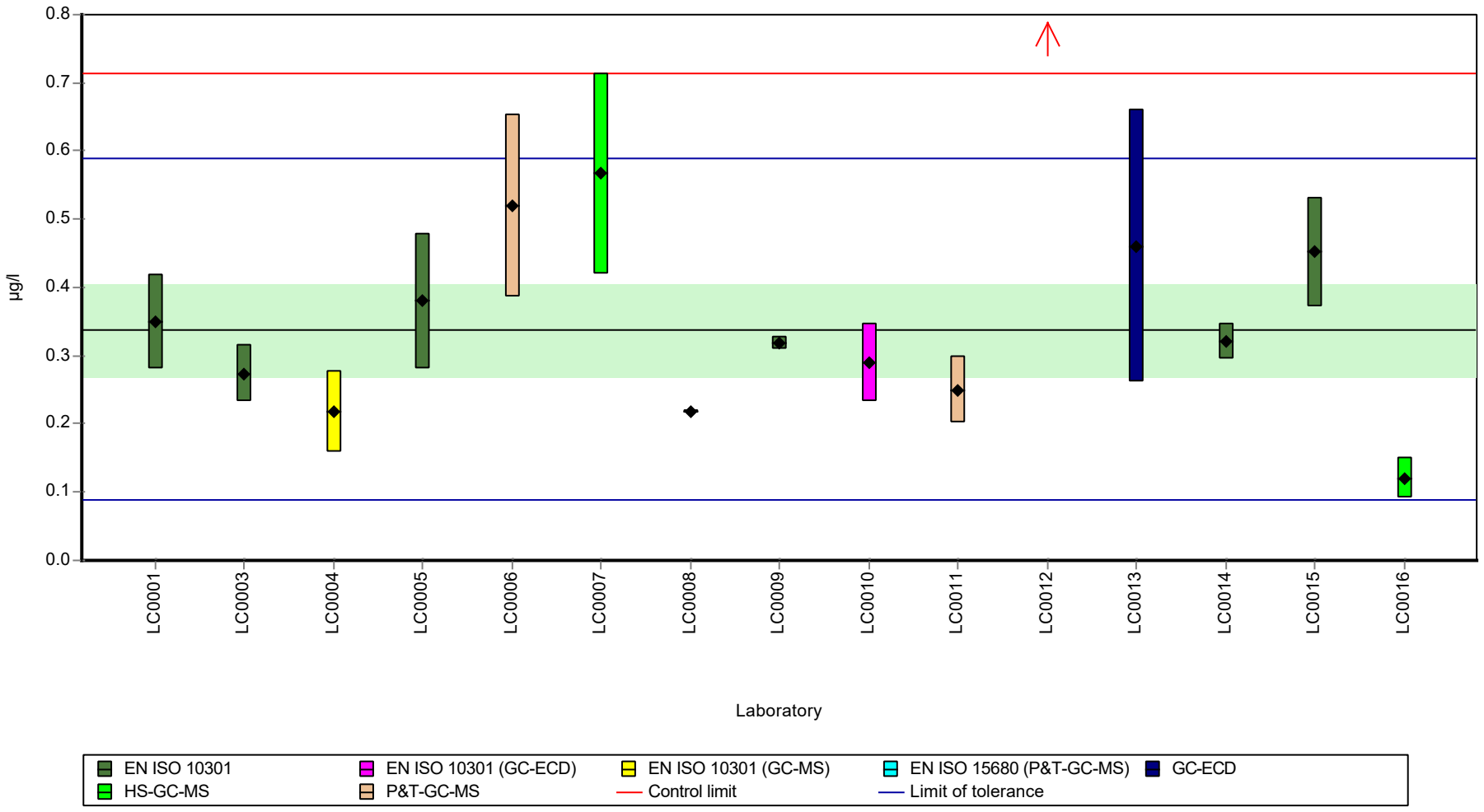
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.35	0.07	103	0.09	
LC0002	-	-	-	-	
LC0003	0.274	0.041	80.9	-0.51	
LC0004	0.218	0.061	64.4	-0.96	
LC0005	0.38	0.1	112	0.33	
LC0006	0.52	0.135	154	1.45	
LC0007	0.567	0.147	168	1.82	
LC0008	0.218	0.003	64.4	-0.96	
LC0009	0.319	0.009	94.2	-0.16	
LC0010	0.29	0.058	85.7	-0.39	
LC0011	0.25	0.05	73.9	-0.71	
LC0012	1.414	0.28	418	8.59	H
LC0013	0.46	0.2	136	0.97	
LC0014	0.321	0.027	94.8	-0.14	
LC0015	0.452	0.08	134	0.91	
LC0016	0.12	0.03	35.5	-1.74	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.41 ± 0.235	0.339 ± 0.101	µg/l
Minimum	0.12	0.12	µg/l
Maximum	1.41	0.567	µg/l
Standard deviation	0.303	0.126	µg/l
rel. standard deviation	73.9	37.2	%
n	15	14	-

Graphical presentation of results

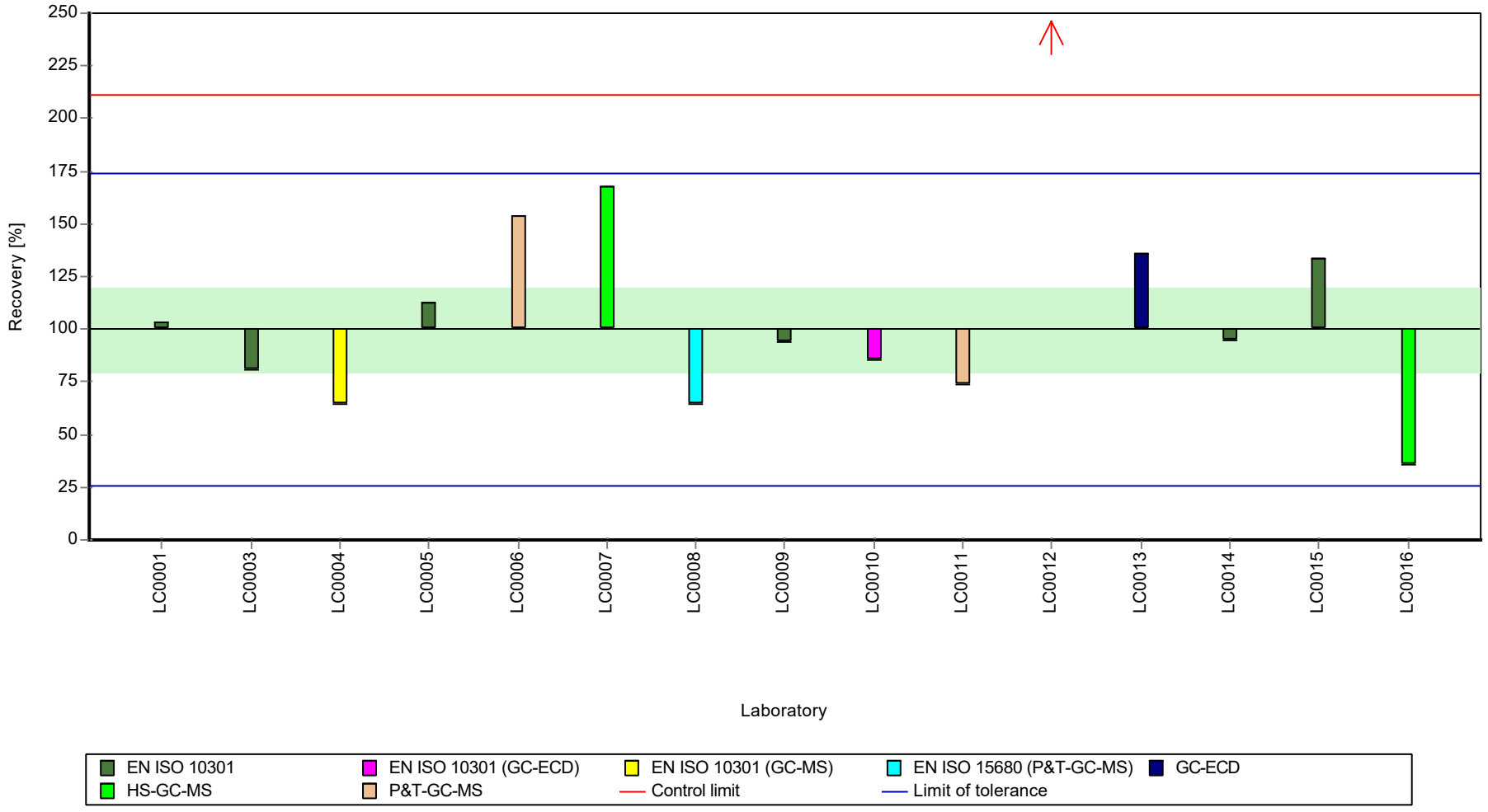
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

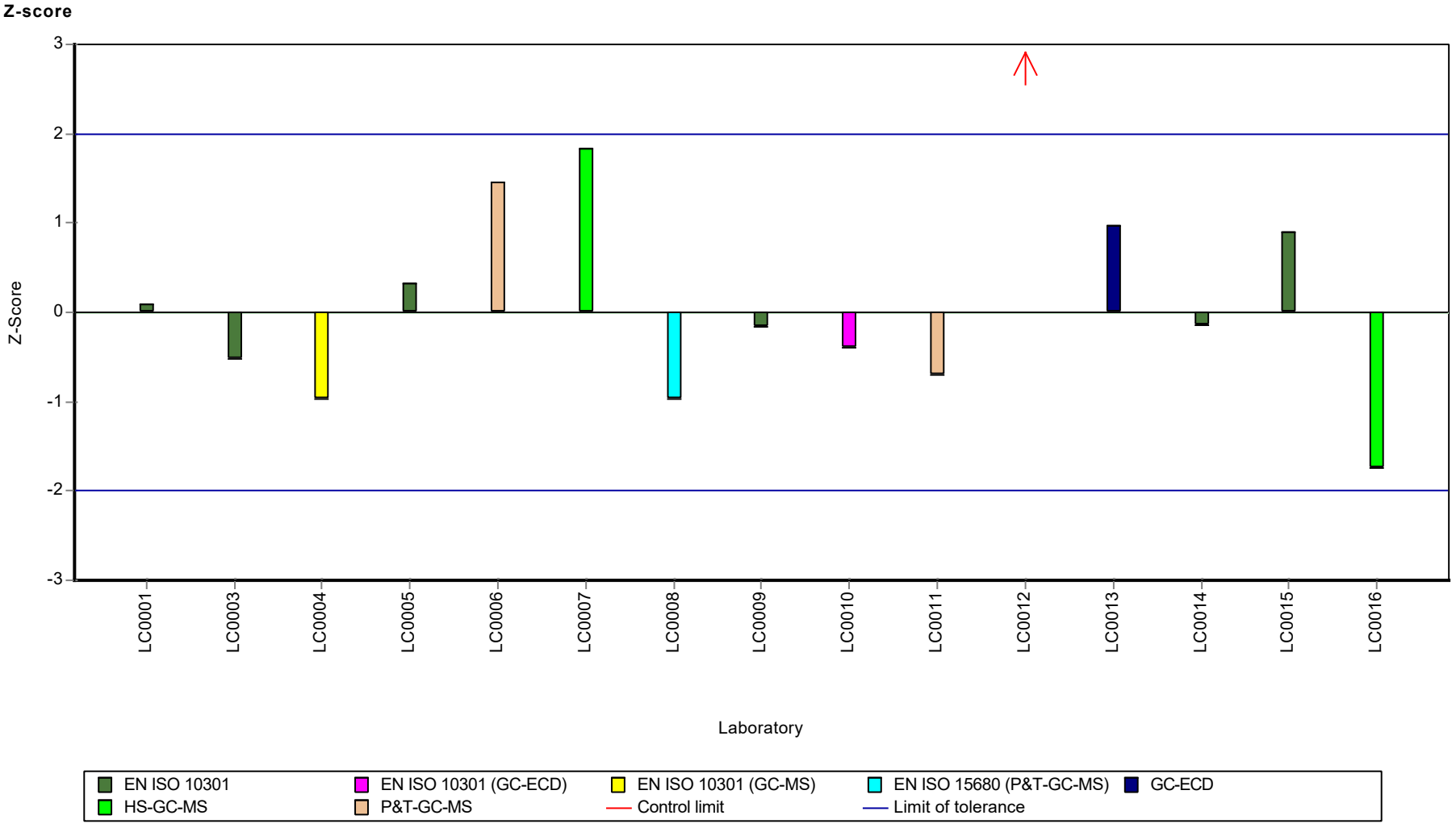
Sample: C67A, Parameter: Tetrachloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Tetrachloroethene



Parameter oriented report

C67 B

Tetrachloroethene

Unit	µg/l
Assigned value ± U (k=2)	14.1 ± 2.26
Criterion	4.22 (30 %)
Minimum - Maximum	9.18 - 24.1
Control test value ± U (k=2)	12.500 ± 3.76

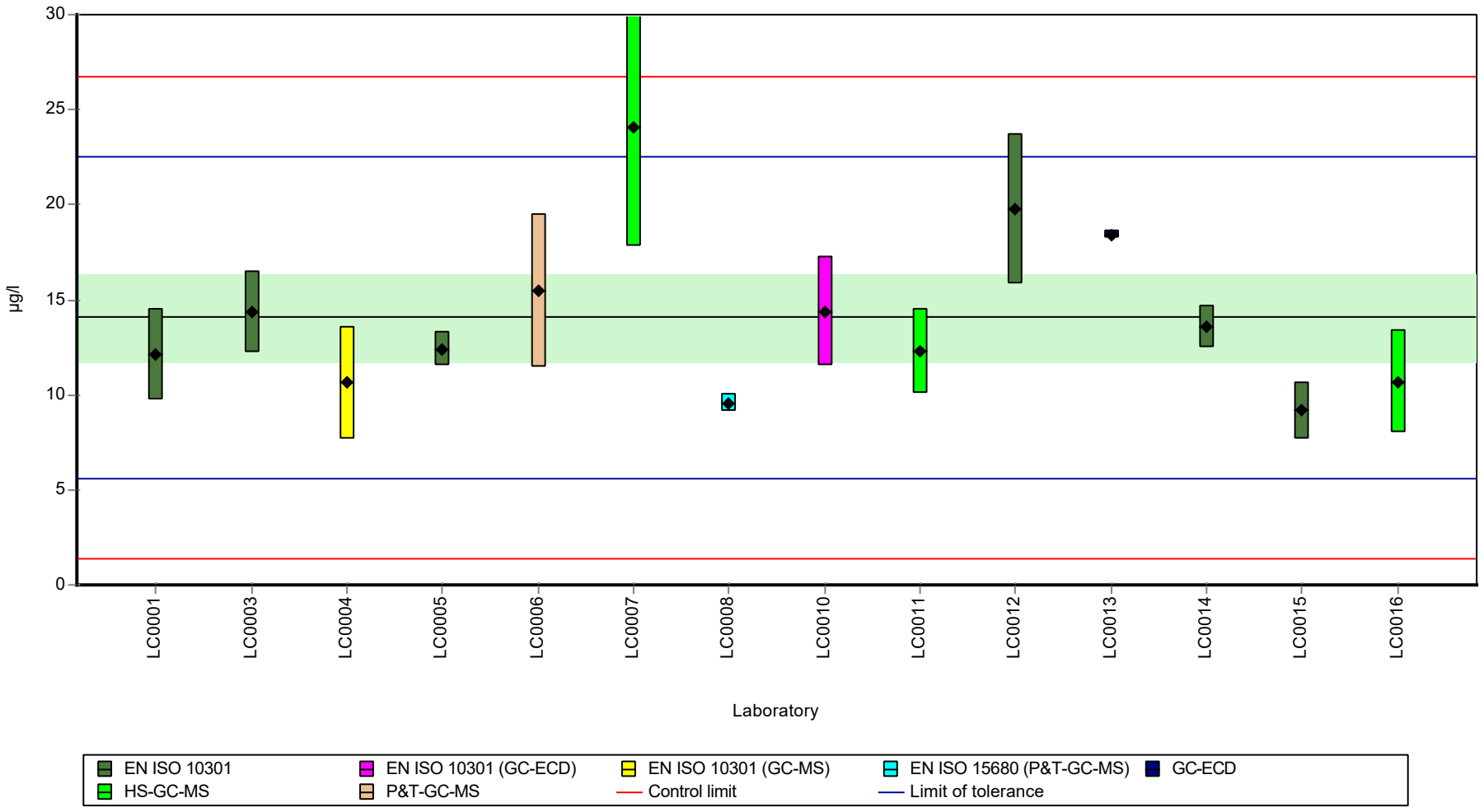
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	12.11	2.42	86.1	-0.46	
LC0002	-	-	-	-	
LC0003	14.35	2.15	102	0.07	
LC0004	10.62	2.98	75.5	-0.82	
LC0005	12.4	0.9	88.1	-0.4	
LC0006	15.48	4.03	110	0.33	
LC0007	24.092	6.264	171	2.37	
LC0008	9.55	0.471	67.9	-1.07	
LC0009	-	-	-	-	
LC0010	14.37	2.874	102	0.07	
LC0011	12.3	2.2	87.4	-0.42	
LC0012	19.8	3.96	141	1.36	
LC0013	18.43	0.2	131	1.03	
LC0014	13.6	1.1	96.7	-0.11	
LC0015	9.18	1.5	65.2	-1.16	
LC0016	10.7	2.67	76	-0.8	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	14.1 ± 3.39	14.1 ± 3.39	µg/l
Minimum	9.18	9.18	µg/l
Maximum	24.1	24.1	µg/l
Standard deviation	4.22	4.22	µg/l
rel. standard deviation	30	30	%
n	14	14	-

Graphical presentation of results

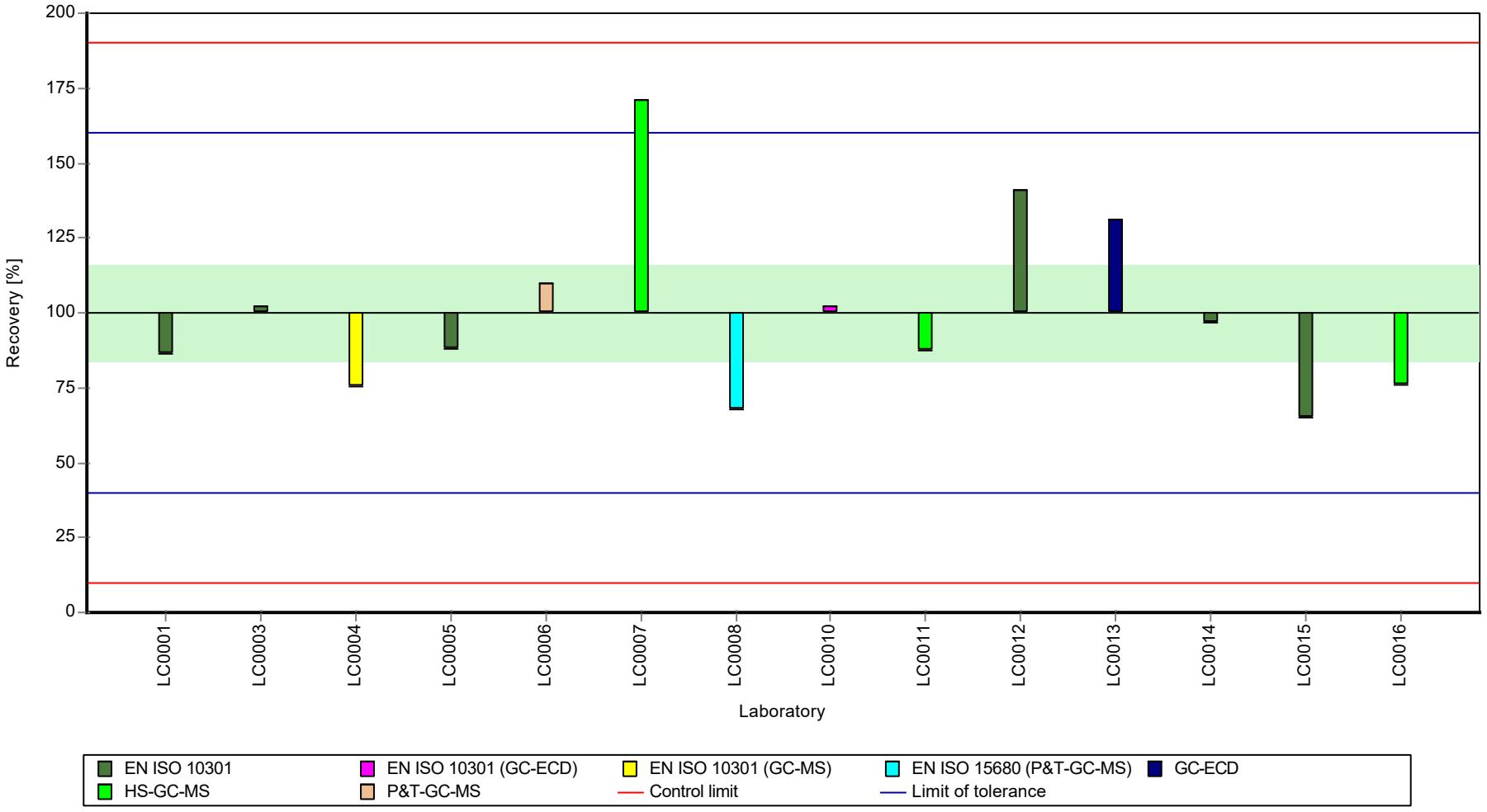
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

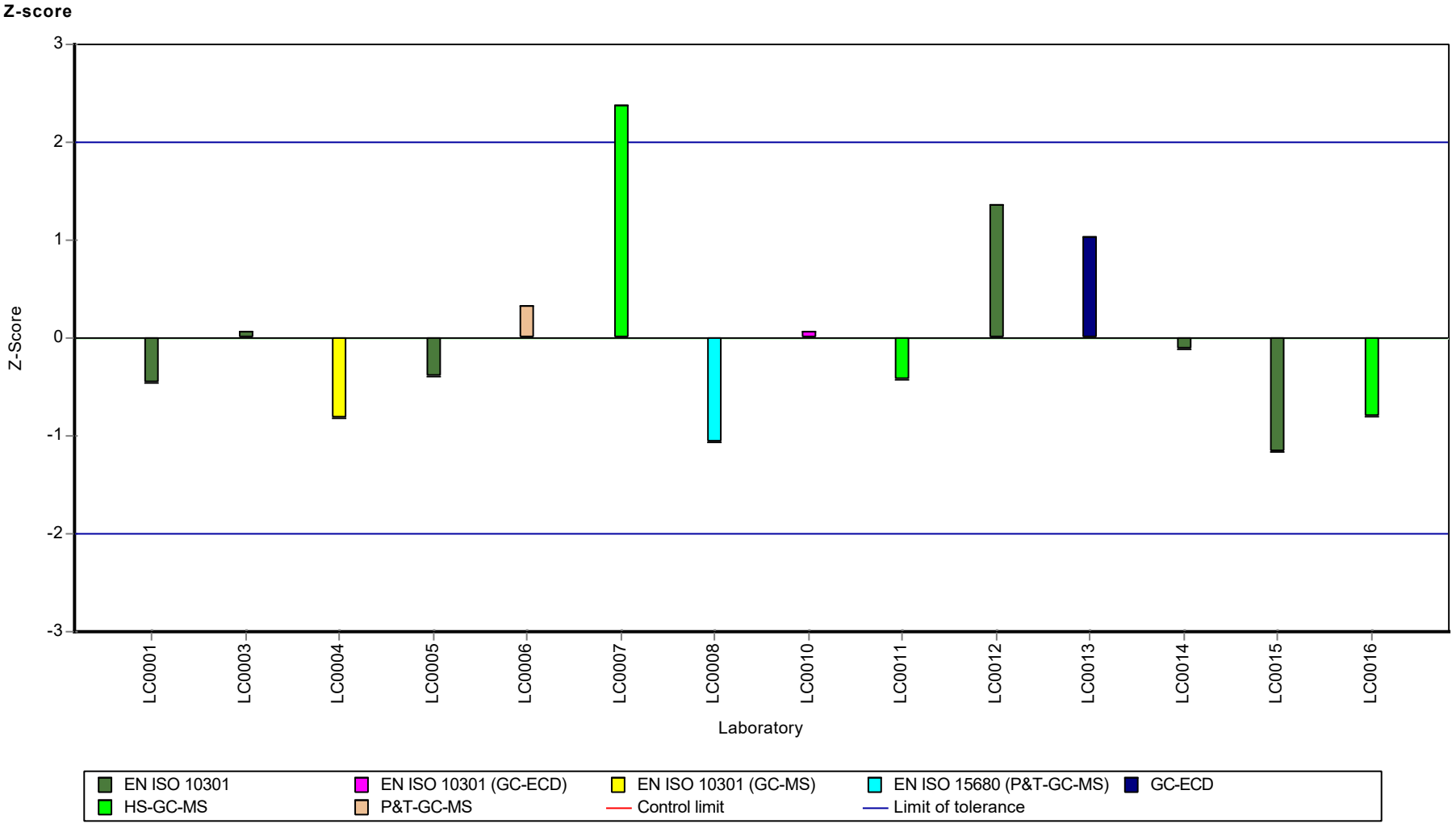
Sample: C67B, Parameter: Tetrachloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Tetrachloroethene



Parameter oriented report

C67 A

Tetrachloromethane

Unit	µg/l
Assigned value ± U (k=2)	0.298 ± 0.0514
Criterion	0.0954 (32 %)
Minimum - Maximum	0.208 - 0.536
Control test value ± U (k=2)	0.293 ± 0.088

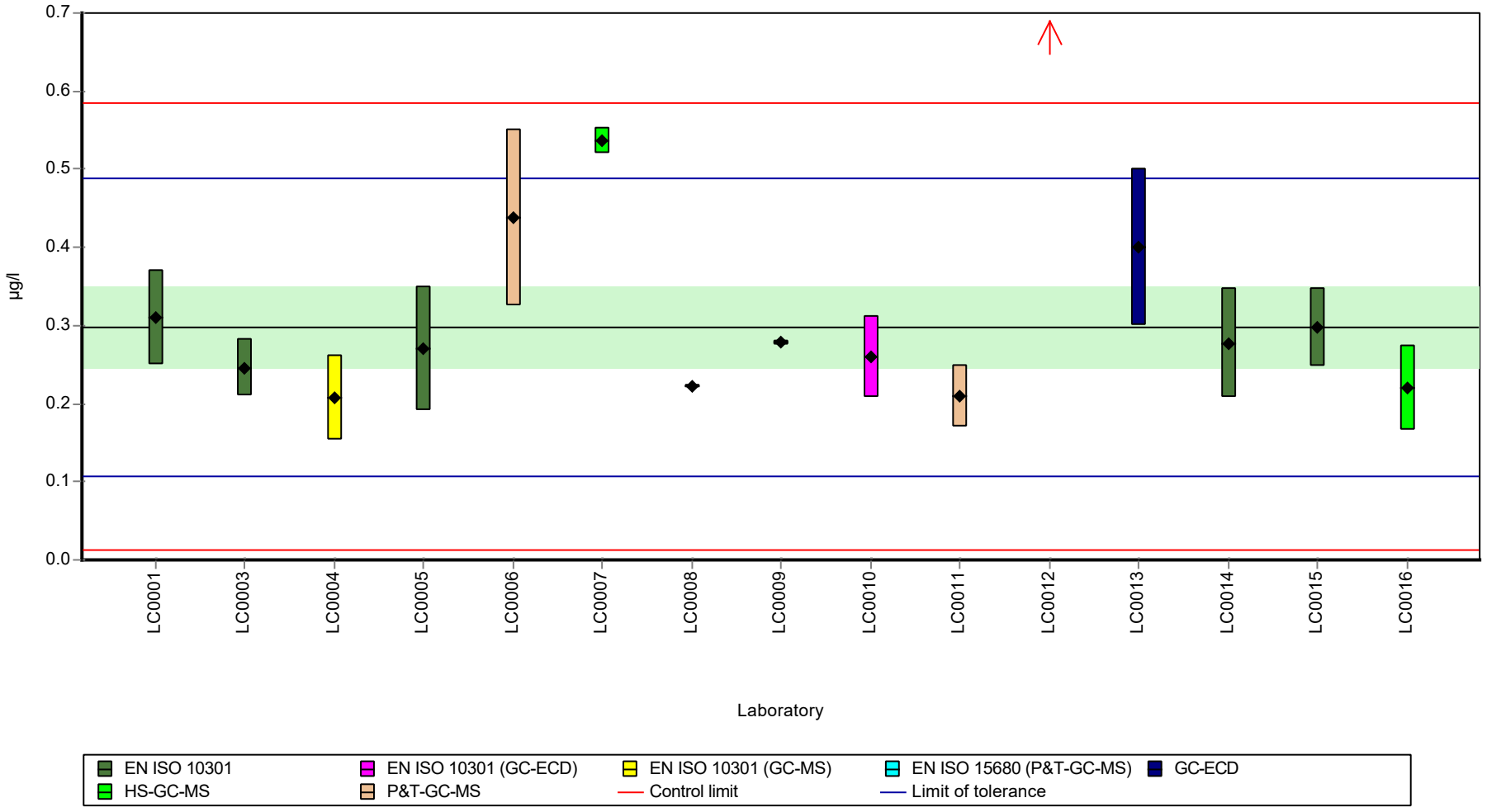
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.31	0.06	104	0.13	
LC0002	-	-	-	-	
LC0003	0.246	0.037	82.5	-0.55	
LC0004	0.208	0.055	69.8	-0.94	
LC0005	0.27	0.08	90.6	-0.29	
LC0006	0.438	0.114	147	1.47	
LC0007	0.536	0.017	180	2.49	
LC0008	0.222	0.002	74.5	-0.8	
LC0009	0.278	0.003	93.3	-0.21	
LC0010	0.26	0.052	87.2	-0.4	
LC0011	0.21	0.04	70.5	-0.92	
LC0012	1.561	0.3	524	13.24	H
LC0013	0.4	0.1	134	1.07	
LC0014	0.277	0.07	92.9	-0.22	
LC0015	0.298	0.05	100	0	
LC0016	0.22	0.054	73.8	-0.82	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.382 ± 0.263	0.298 ± 0.0771	µg/l
Minimum	0.208	0.208	µg/l
Maximum	1.56	0.536	µg/l
Standard deviation	0.339	0.0962	µg/l
rel. standard deviation	88.7	32.3	%
n	15	14	-

Graphical presentation of results

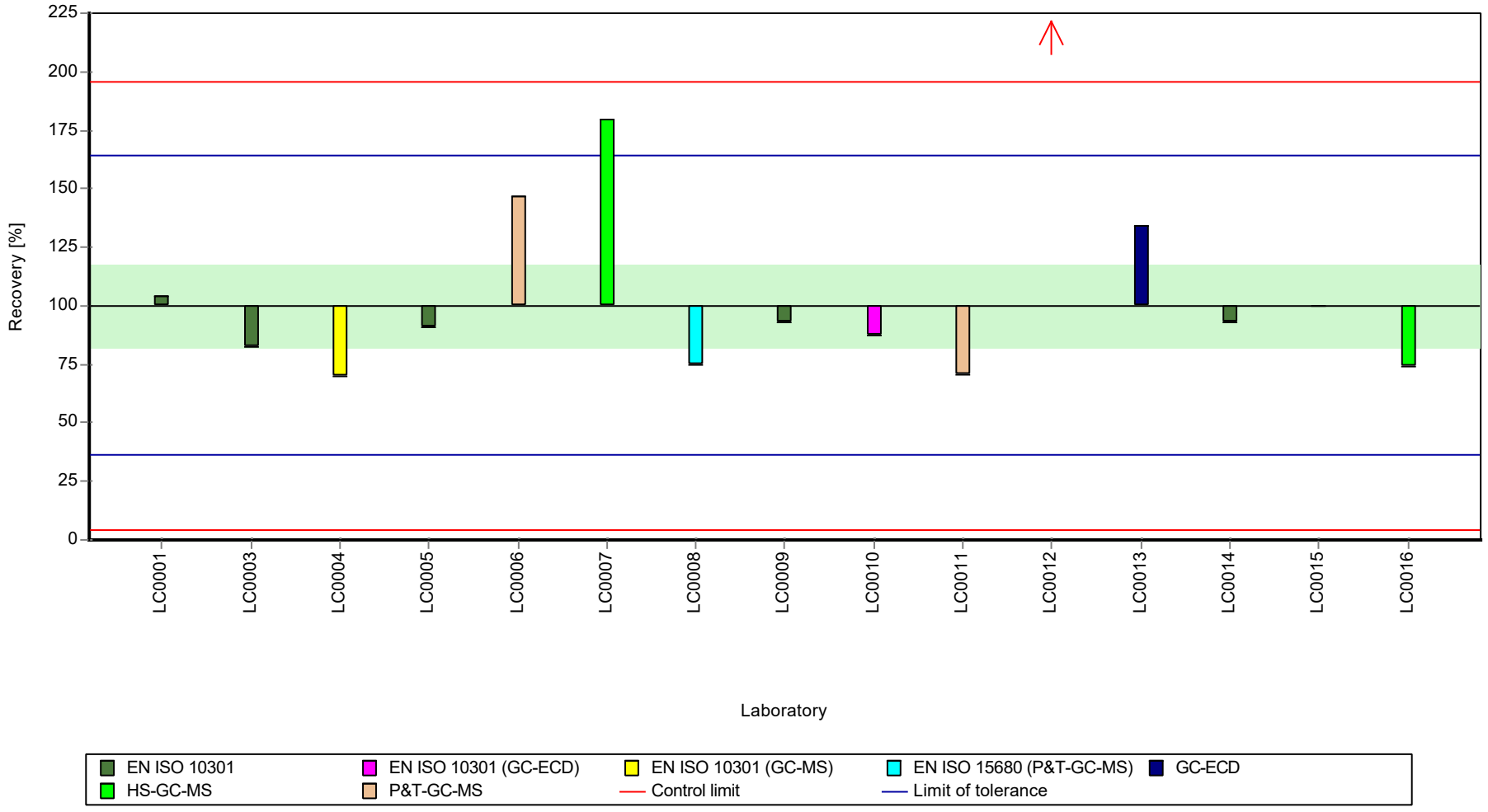
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

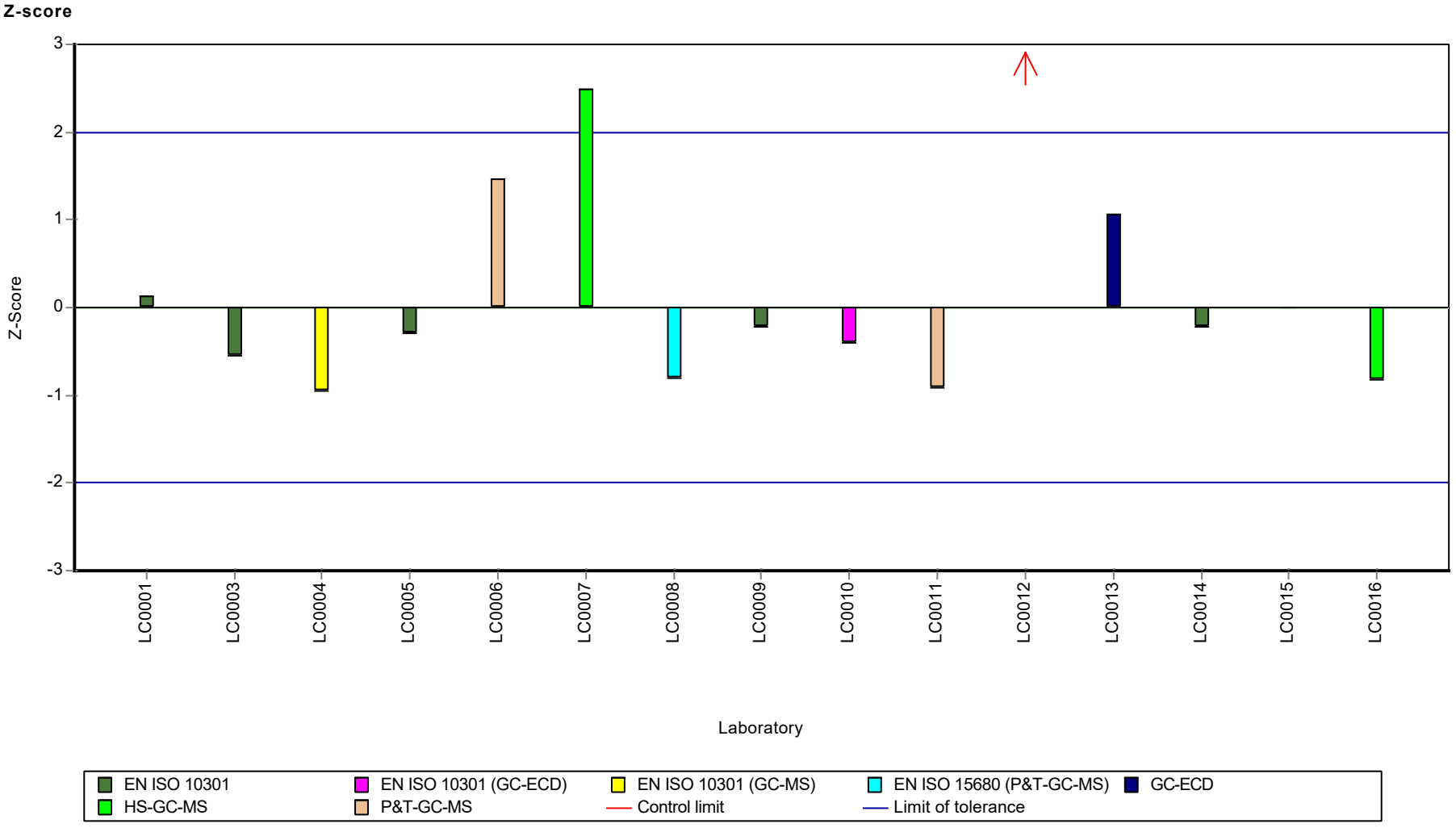
Sample: C67A, Parameter: Tetrachloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Tetrachloromethane



Parameter oriented report

C67 B

Tetrachloromethane

Unit	µg/l
Assigned value ± U (k=2)	10.6 ± 1.69
Criterion	3.07 (29 %)
Minimum - Maximum	6.38 - 18.7
Control test value ± U (k=2)	10.400 ± 3.11

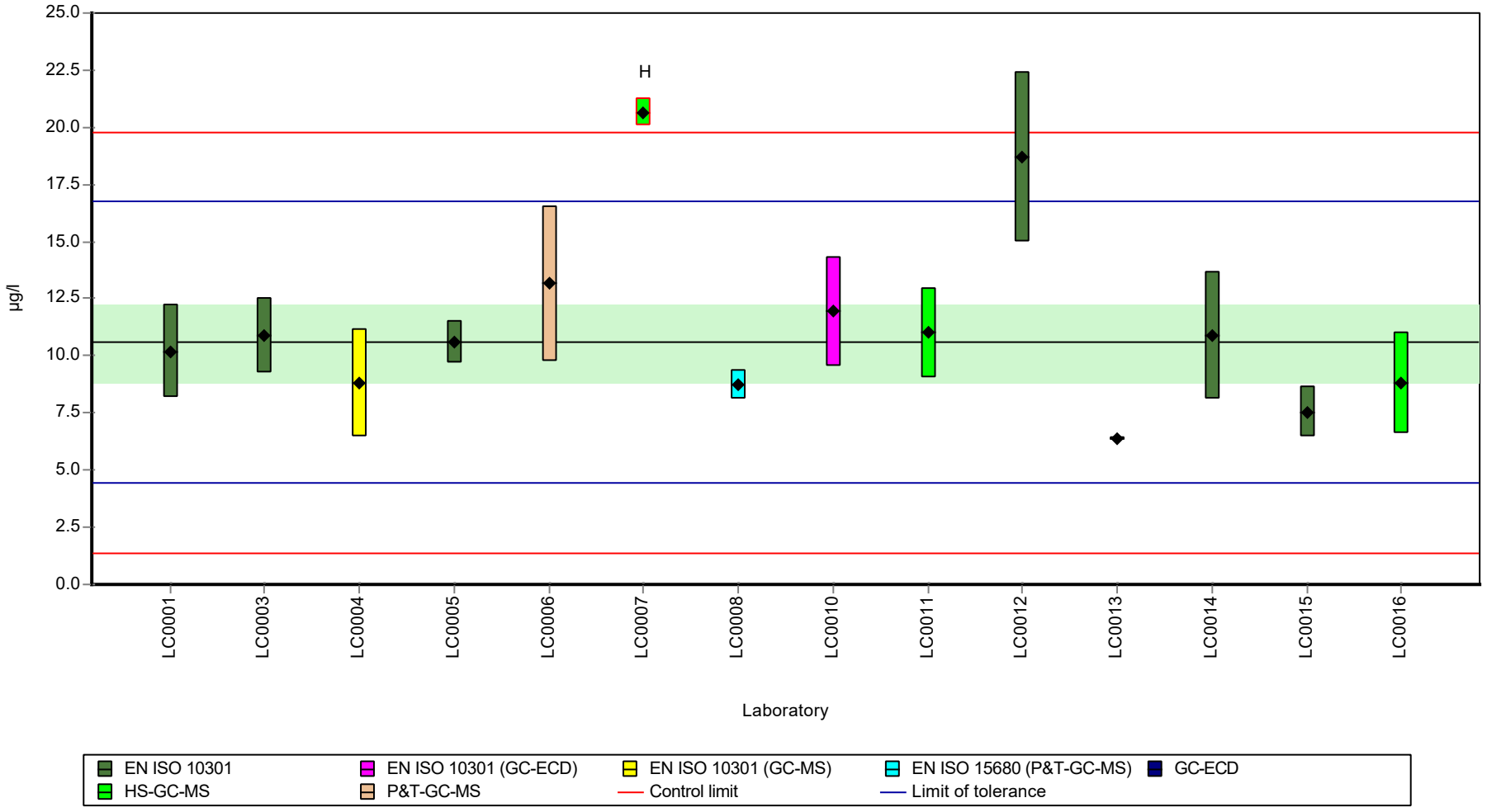
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.19	2.04	96.2	-0.13	
LC0002	-	-	-	-	
LC0003	10.87	1.63	103	0.09	
LC0004	8.81	2.34	83.2	-0.58	
LC0005	10.6	0.9	100	0.00	
LC0006	13.16	3.42	124	0.84	
LC0007	20.666	0.64	195	3.28	H
LC0008	8.74	0.642	82.5	-0.6	
LC0009	-	-	-	-	
LC0010	11.95	2.39	113	0.44	
LC0011	11	2	104	0.13	
LC0012	18.7	3.74	177	2.64	
LC0013	6.38	0.1	60.3	-1.37	
LC0014	10.9	2.8	103	0.1	
LC0015	7.54	1.1	71.2	-0.99	
LC0016	8.8	2.201	83.1	-0.58	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	11.3 ± 3.19	10.6 ± 2.54	µg/l
Minimum	6.38	6.38	µg/l
Maximum	20.7	18.7	µg/l
Standard deviation	3.98	3.05	µg/l
rel. standard deviation	35.2	28.8	%
n	14	13	-

Graphical presentation of results

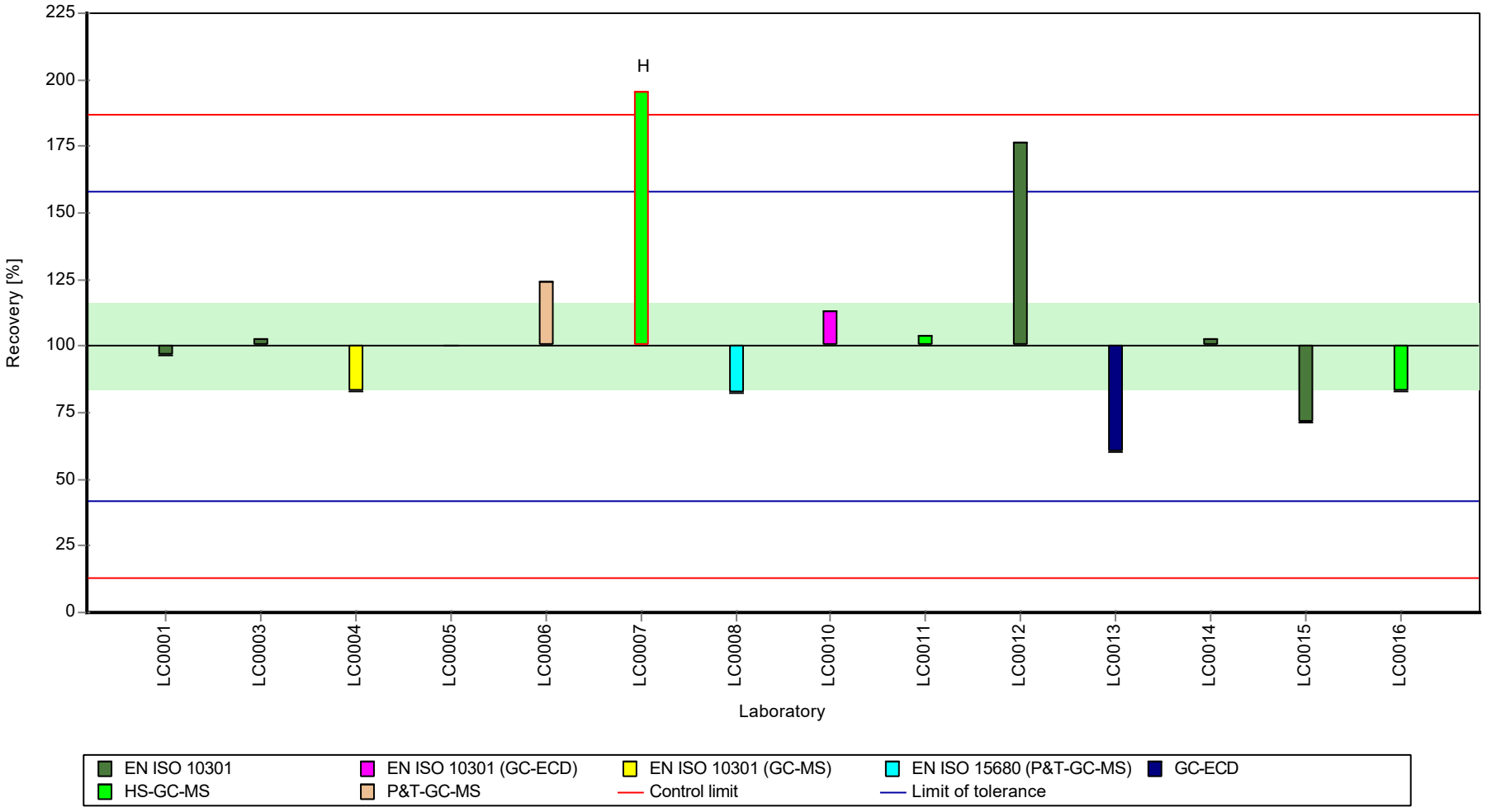
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

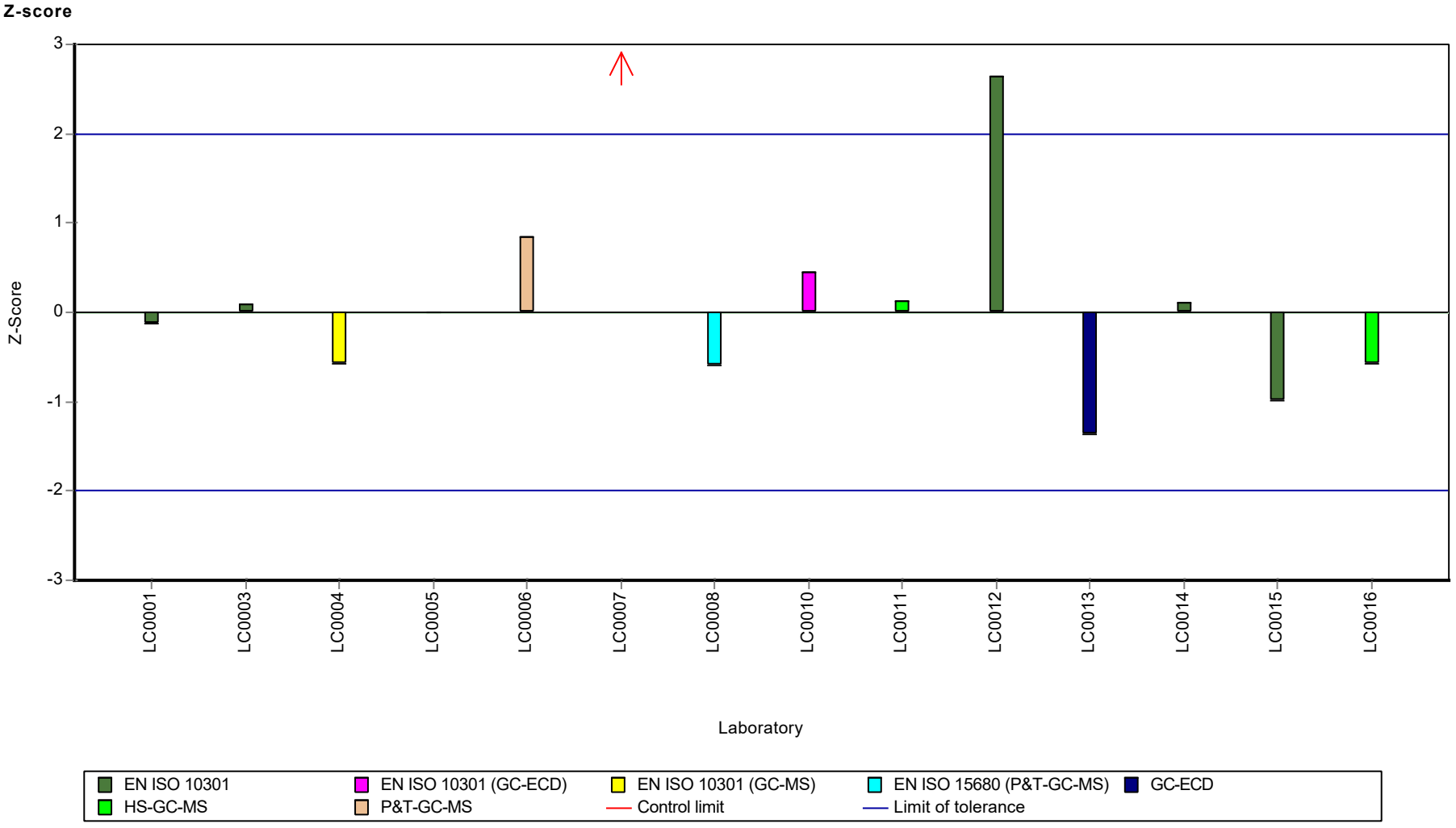
Sample: C67B, Parameter: Tetrachloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Tetrachloromethane



Parameter oriented report

C67 A

trans-1,2-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	0.584 ± 0.119
Criterion	0.216 (37 %)
Minimum - Maximum	0.344 - 1
Control test value ± U (k=2)	0.482 ± 0.145

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.68	0.14	116	0.44	
LC0002	-	-	-	-	
LC0003	0.487	0.073	83.4	-0.45	
LC0004	0.344	0.089	58.9	-1.11	
LC0005	-	-	-	-	
LC0006	0.817	0.212	140	1.08	
LC0007	1.001	0.24	171	1.93	
LC0008	0.388	0.005	66.4	-0.91	
LC0009	0.516	0.099	88.3	-0.32	
LC0010	0.49	0.098	83.9	-0.44	
LC0011	0.36	0.06	61.6	-1.04	
LC0012	0.919	0.18	157	1.55	
LC0013	-	-	-	-	
LC0014	0.531	0.11	90.9	-0.25	
LC0015	0.641	0.06	110	0.26	
LC0016	0.42	0.084	71.9	-0.76	

Characteristics of parameter

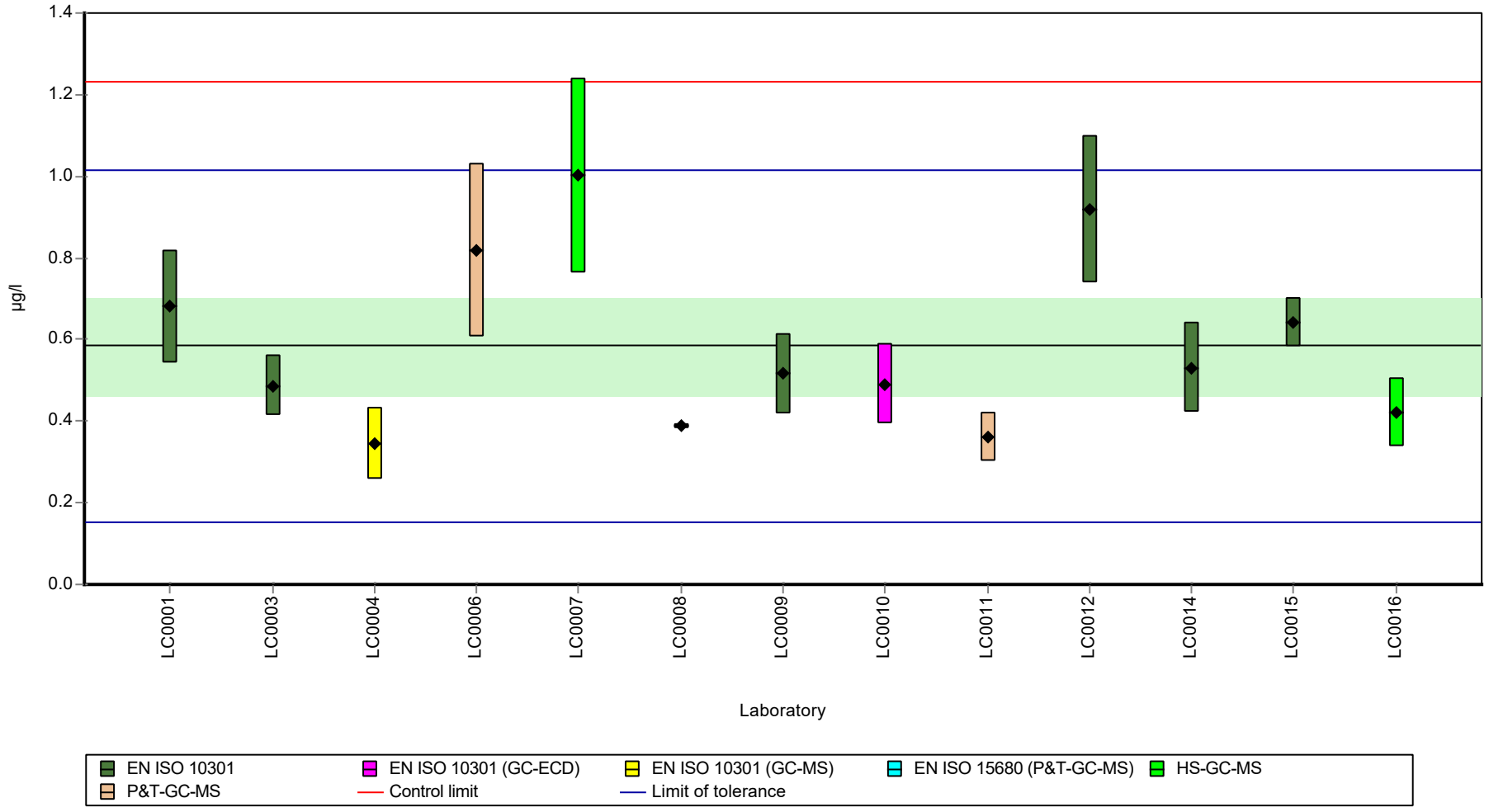
	all results	without outliers	Unit
Mean ± CI (99%)	0.584 ± 0.178	0.584 ± 0.178	µg/l
Minimum	0.344	0.344	µg/l
Maximum	1	1	µg/l
Standard deviation	0.214	0.214	µg/l
rel. standard deviation	36.7	36.7	%
n	13	13	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: trans-1,2-Dichloroethene

Graphical presentation of results

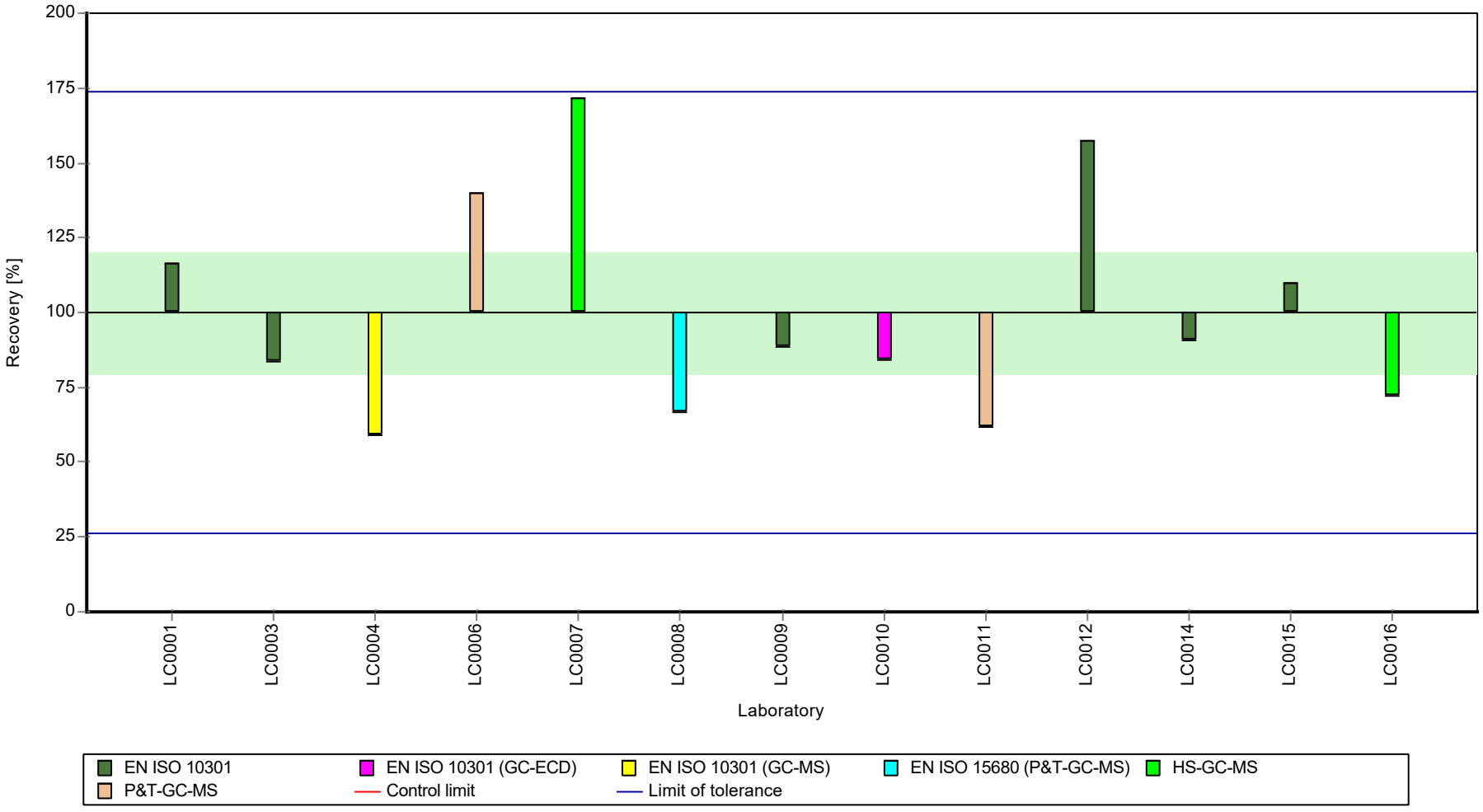
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

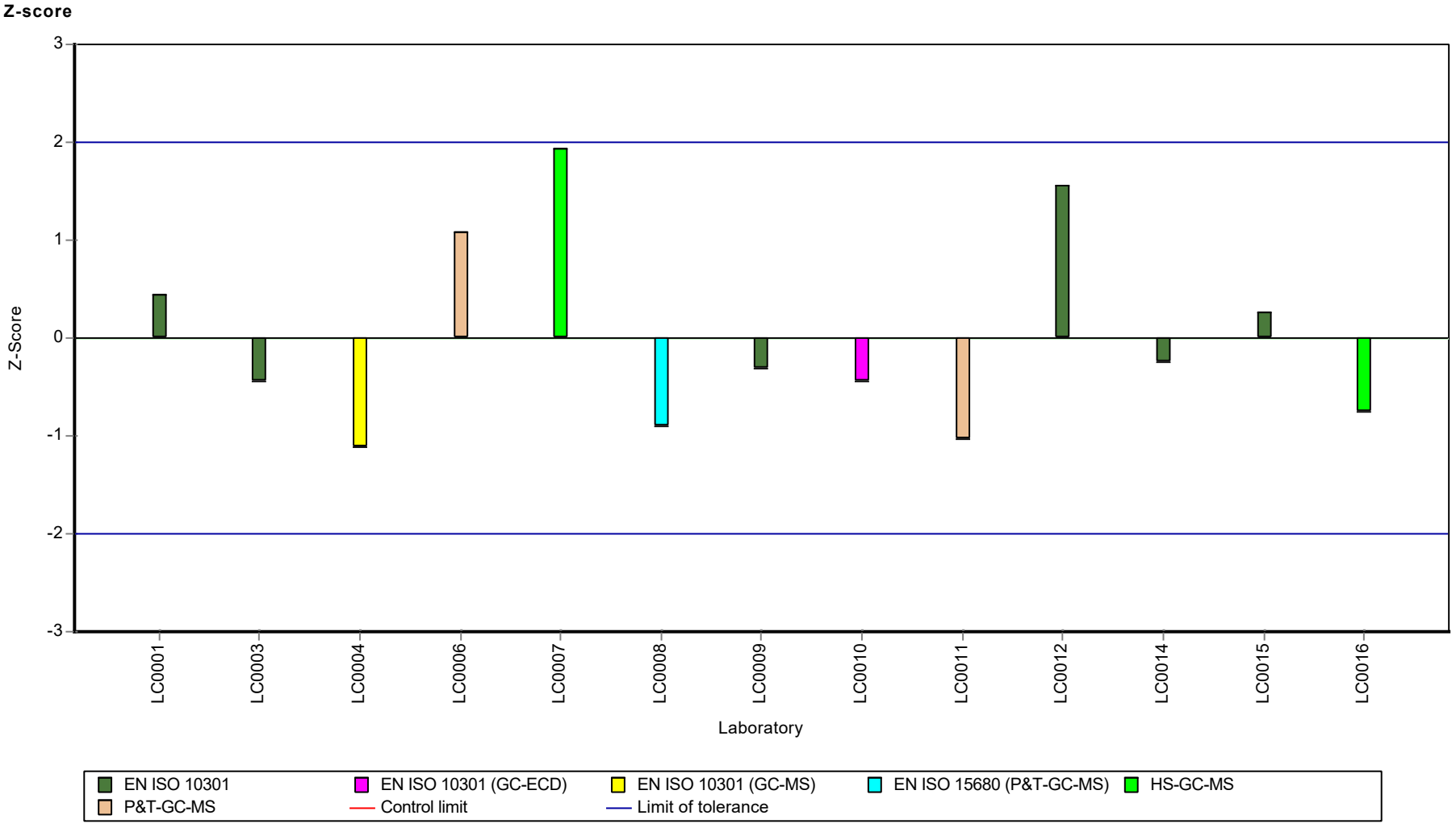
Sample: C67A, Parameter: trans-1,2-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: trans-1,2-Dichloroethene



Parameter oriented report

C67 B

trans-1,2-Dichloroethene

Unit	µg/l
Assigned value ± U (k=2)	6.53 ± 1.18
Criterion	1.96 (30 %)
Minimum - Maximum	4.34 - 11
Control test value ± U (k=2)	5.780 ± 1.73

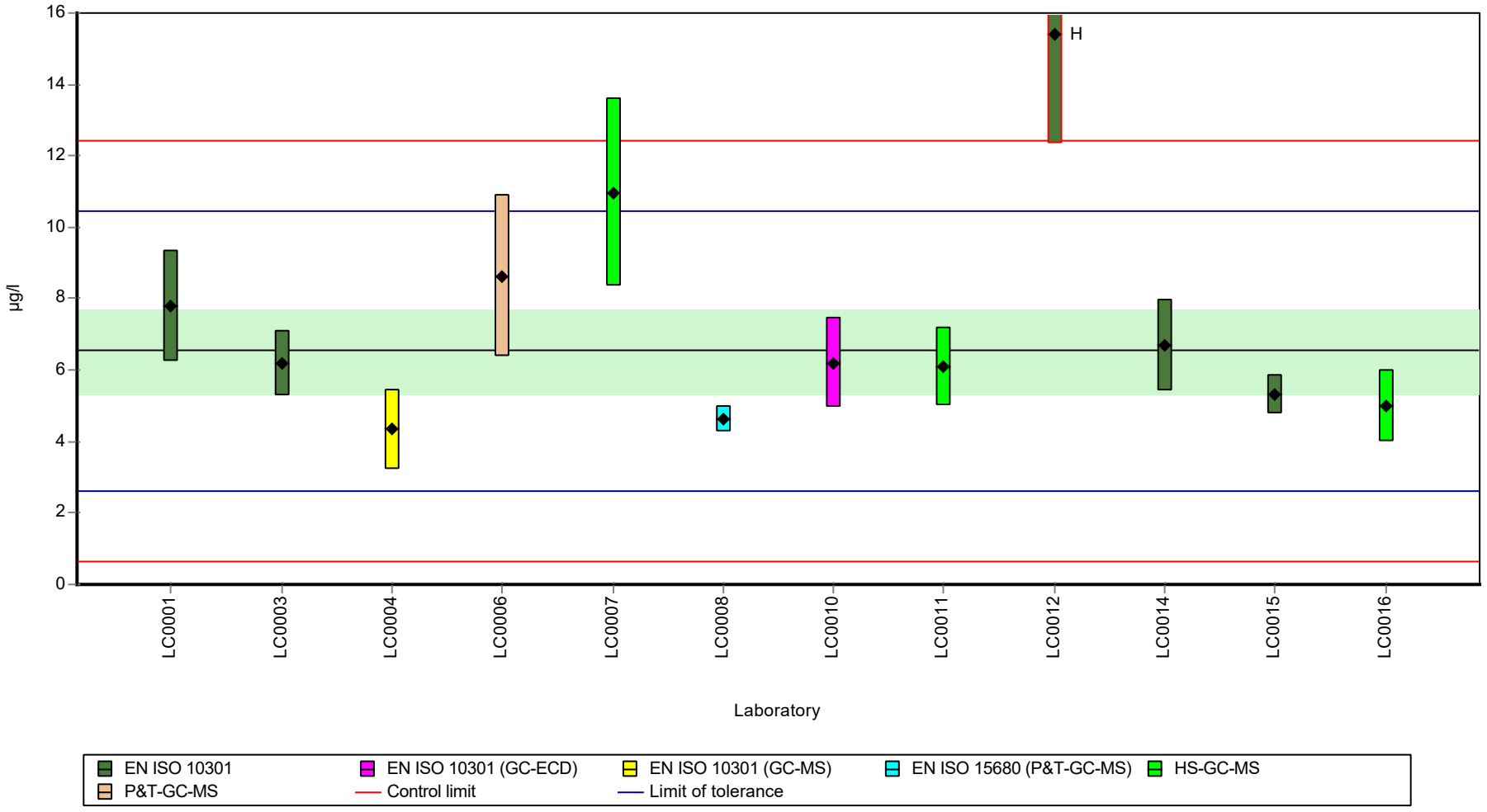
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.79	1.56	119	0.64	
LC0002	-	-	-	-	
LC0003	6.19	0.93	94.7	-0.18	
LC0004	4.34	1.12	66.4	-1.12	
LC0005	-	-	-	-	
LC0006	8.64	2.25	132	1.07	
LC0007	10.964	2.631	168	2.26	
LC0008	4.64	0.368	71	-0.97	
LC0009	-	-	-	-	
LC0010	6.21	1.242	95	-0.17	
LC0011	6.1	1.1	93.4	-0.22	
LC0012	15.4	3.08	236	4.52	H
LC0013	-	-	-	-	
LC0014	6.69	1.3	102	0.08	
LC0015	5.31	0.55	81.3	-0.62	
LC0016	5	1.001	76.5	-0.78	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	7.27 ± 2.74	6.53 ± 1.77	µg/l
Minimum	4.34	4.34	µg/l
Maximum	15.4	11	µg/l
Standard deviation	3.17	1.96	µg/l
rel. standard deviation	43.6	30	%
n	12	11	-

Graphical presentation of results

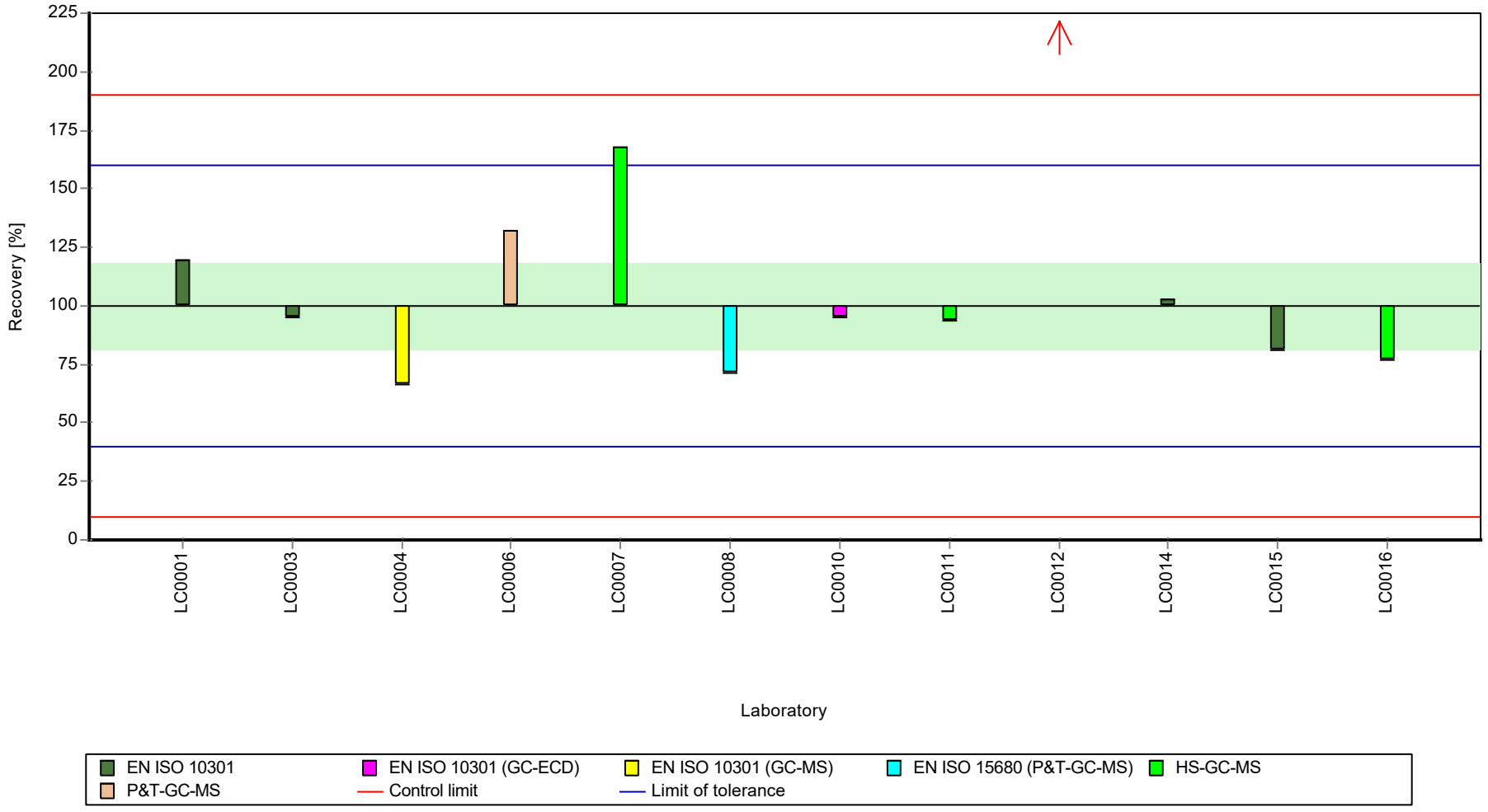
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

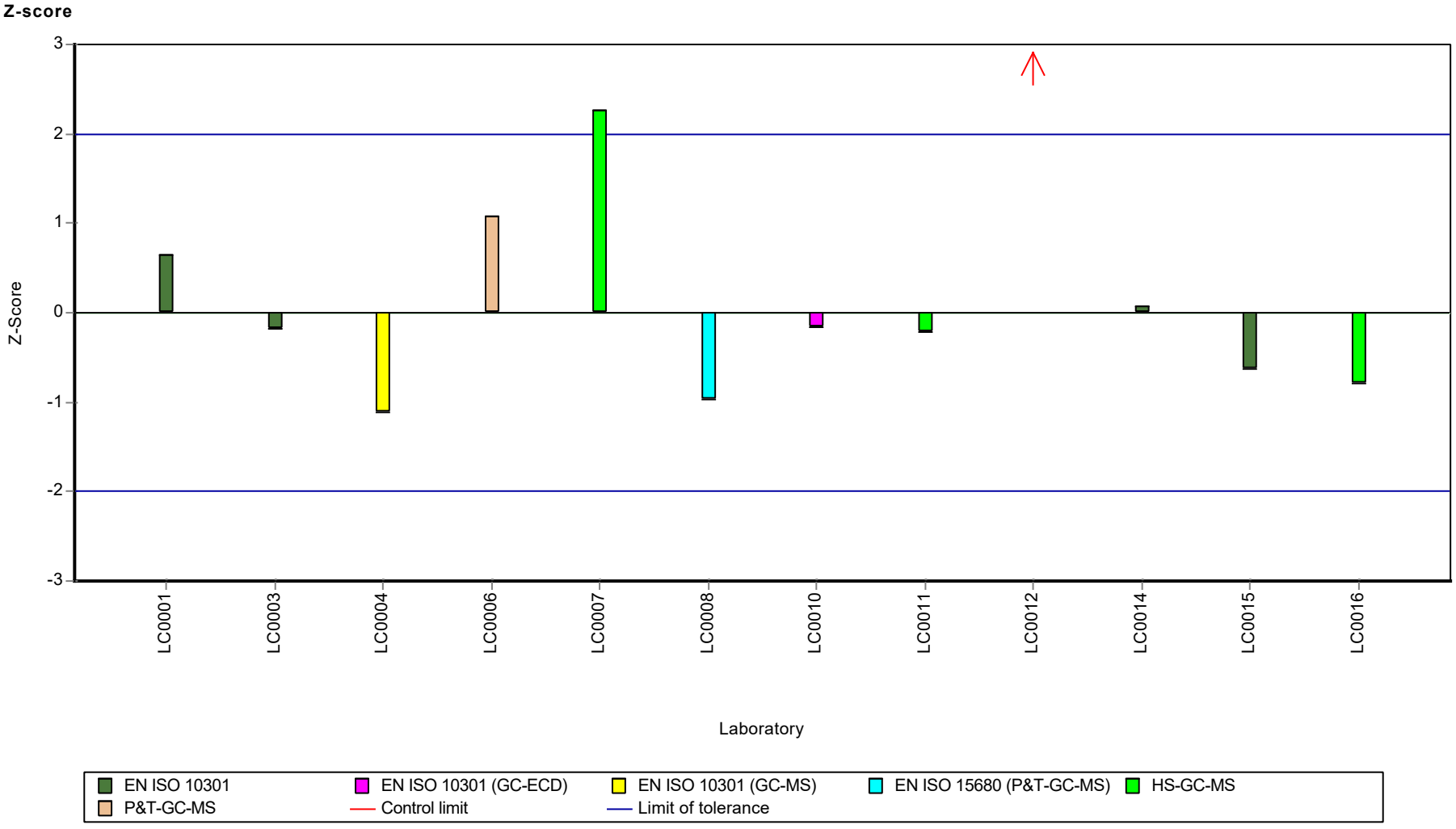
Sample: C67B, Parameter: trans-1,2-Dichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: trans-1,2-Dichloroethene



Parameter oriented report

C67 A

Tribromomethane

Unit	µg/l
Assigned value ± U (k=2)	1.52 ± 0.118
Criterion	0.182 (12 %)
Minimum - Maximum	1.13 - 1.92
Control test value ± U (k=2)	1.690 ± 0.507

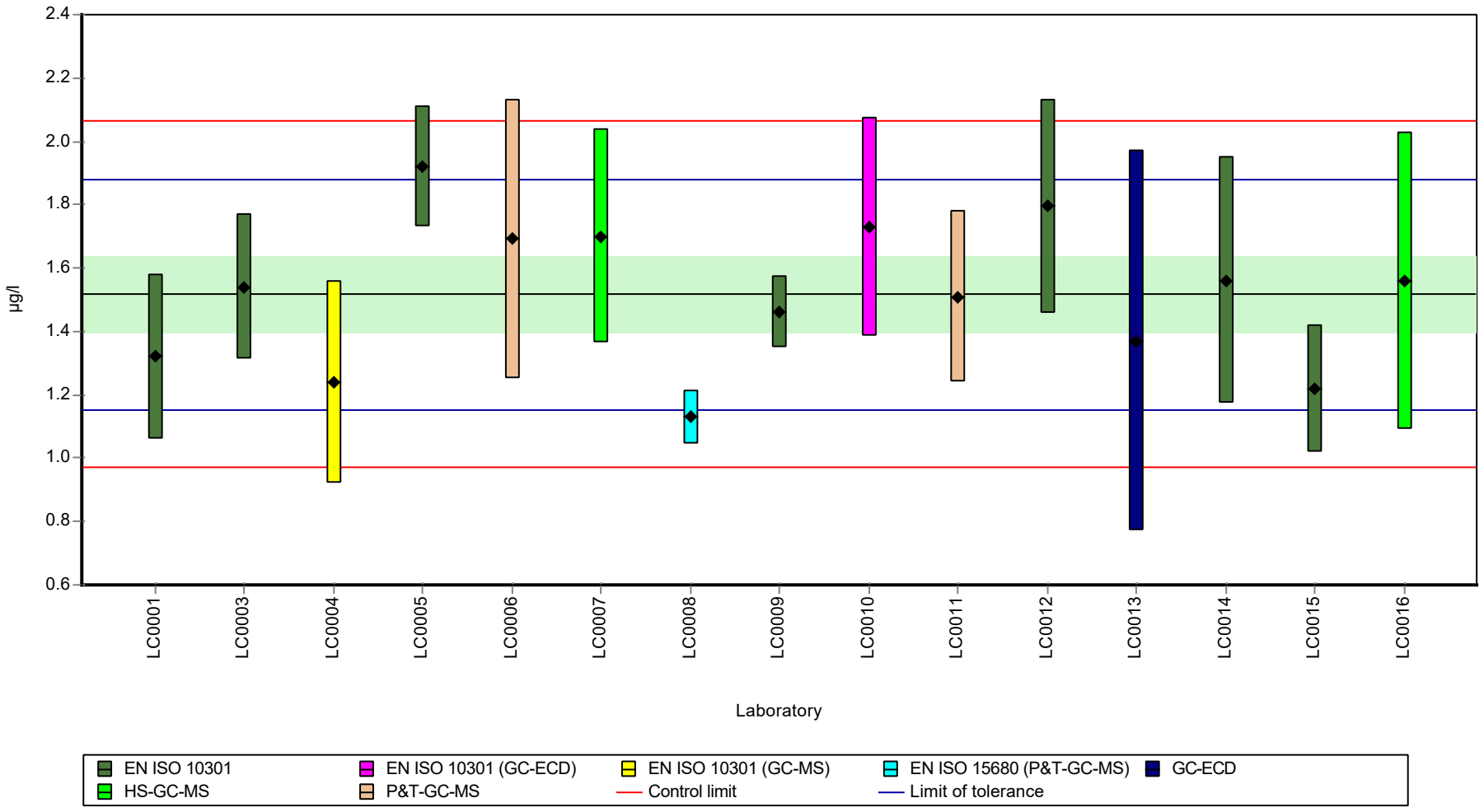
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.32	0.26	87	-1.08	
LC0002	-	-	-	-	
LC0003	1.54	0.23	102	0.13	
LC0004	1.24	0.32	81.8	-1.52	
LC0005	1.92	0.19	127	2.22	
LC0006	1.692	0.44	112	0.96	
LC0007	1.701	0.34	112	1.01	
LC0008	1.13	0.085	74.5	-2.12	
LC0009	1.46	0.113	96.3	-0.31	
LC0010	1.73	0.346	114	1.17	
LC0011	1.51	0.27	99.6	-0.04	
LC0012	1.794	0.34	118	1.53	
LC0013	1.37	0.6	90.3	-0.8	
LC0014	1.56	0.39	103	0.24	
LC0015	1.22	0.2	80.5	-1.63	
LC0016	1.56	0.469	103	0.24	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.52 ± 0.177	1.52 ± 0.177	µg/l
Minimum	1.13	1.13	µg/l
Maximum	1.92	1.92	µg/l
Standard deviation	0.229	0.229	µg/l
rel. standard deviation	15.1	15.1	%
n	15	15	-

Graphical presentation of results

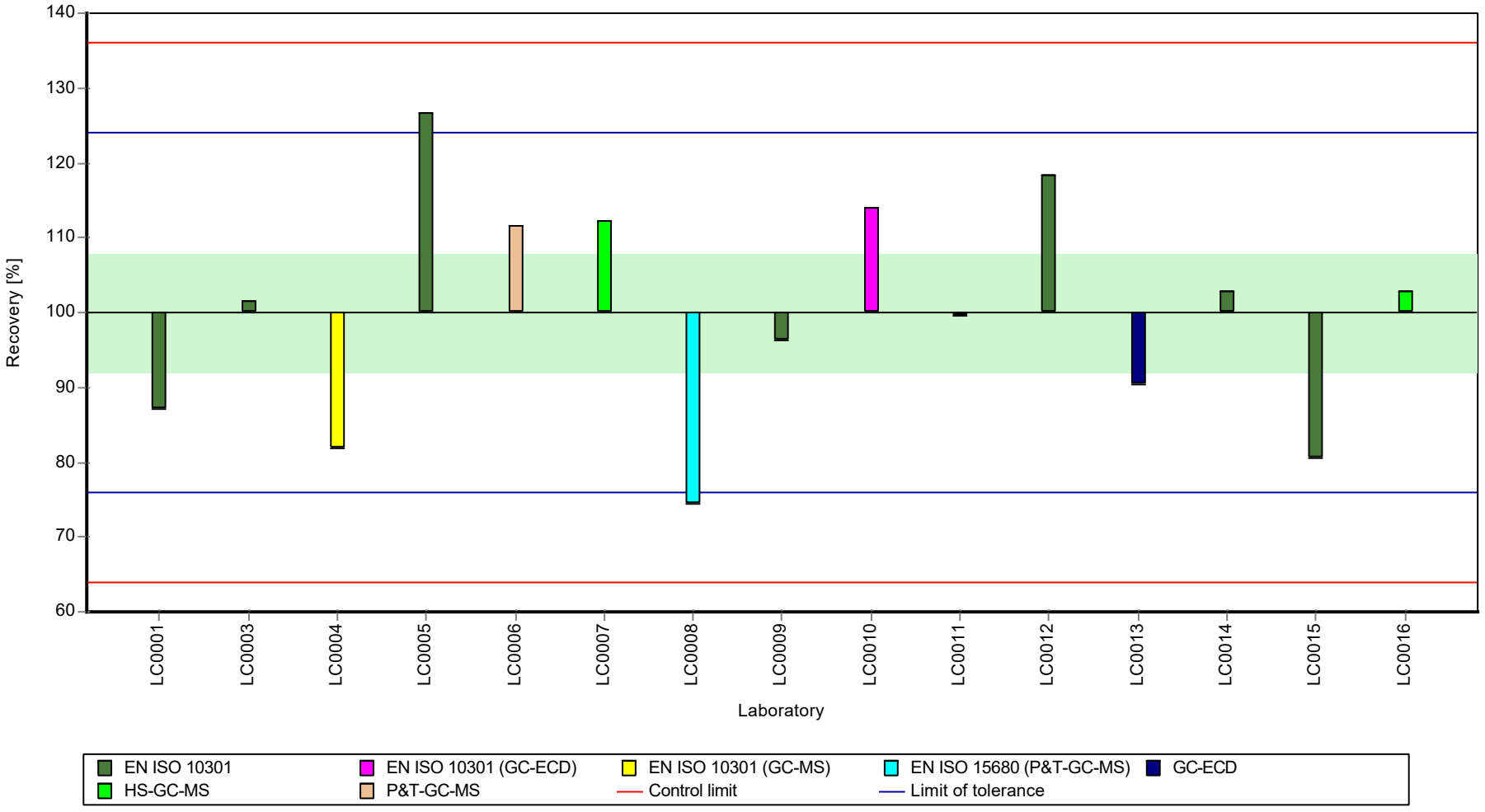
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

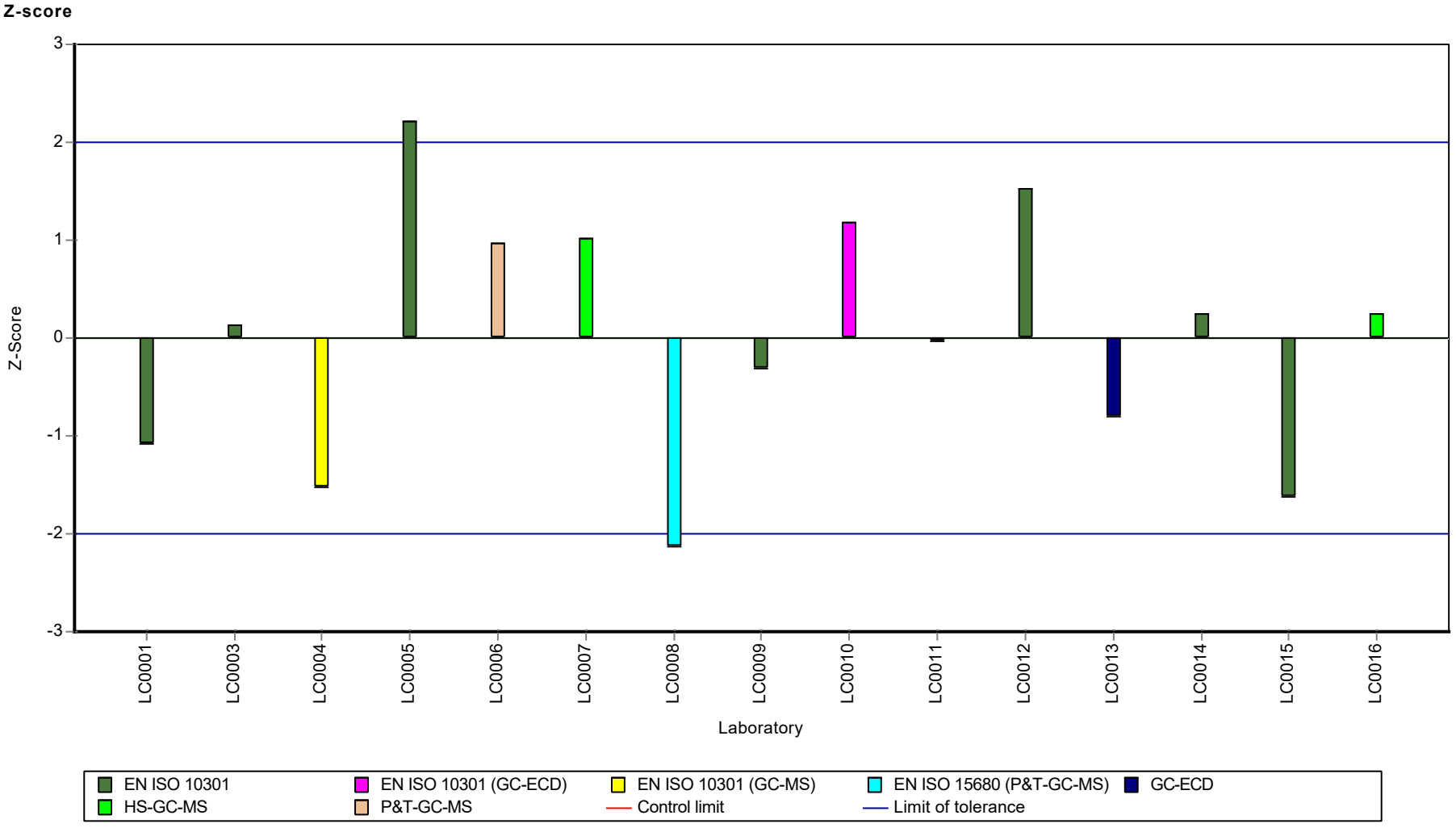
Sample: C67A, Parameter: Tribromomethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Tribromomethane



Parameter oriented report

C67 B

Tribromomethane

Unit	µg/l
Assigned value ± U (k=2)	7.68 ± 0.493
Criterion	0.921 (12 %)
Minimum - Maximum	6.06 - 9.3
Control test value ± U (k=2)	7.460 ± 2.24

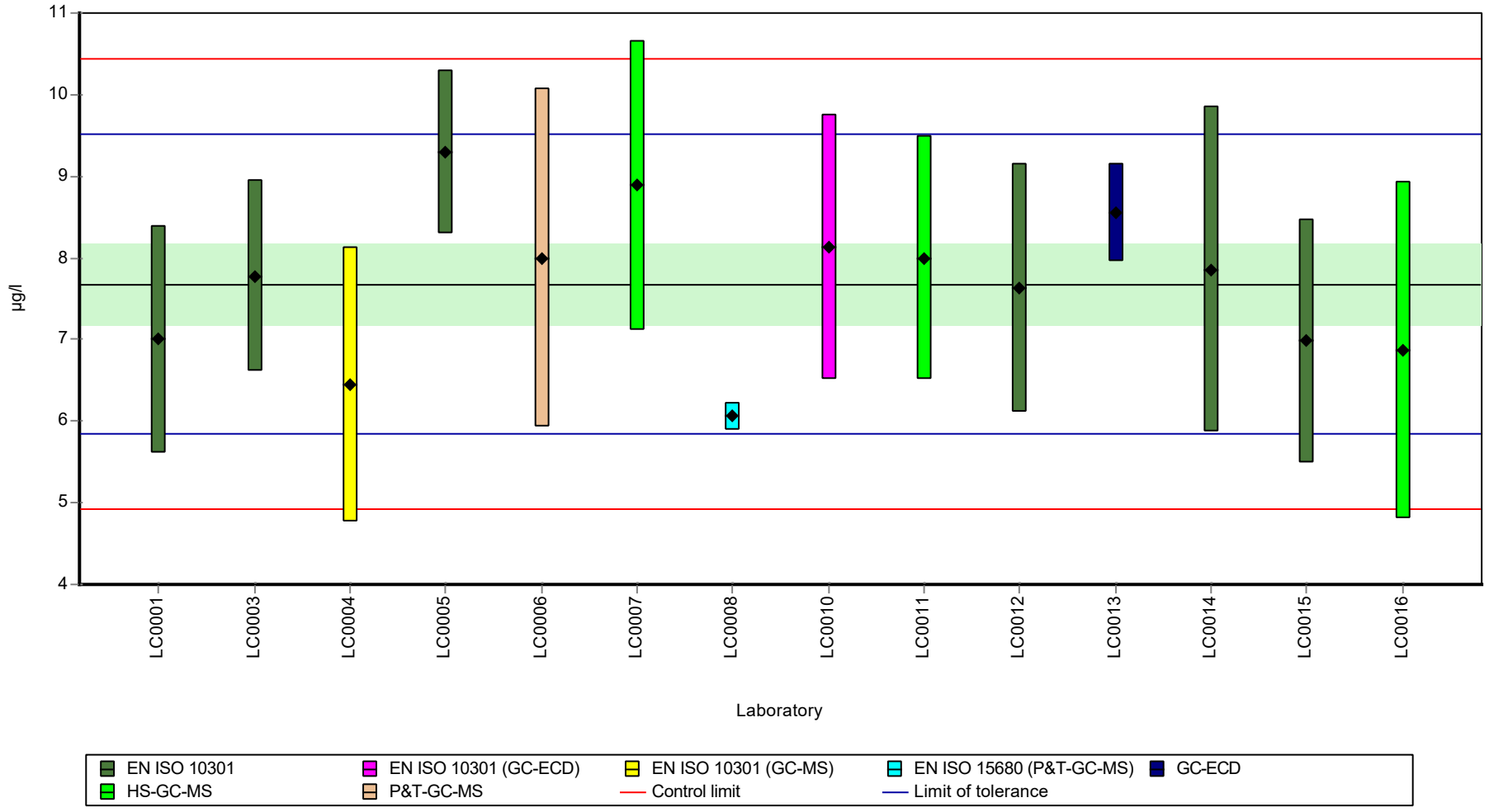
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7	1.4	91.2	-0.74	
LC0002	-	-	-	-	
LC0003	7.78	1.17	101	0.11	
LC0004	6.45	1.69	84	-1.33	
LC0005	9.3	1	121	1.76	
LC0006	8	2.08	104	0.35	
LC0007	8.889	1.778	116	1.31	
LC0008	6.06	0.169	78.9	-1.76	
LC0009	-	-	-	-	
LC0010	8.13	1.626	106	0.49	
LC0011	8	1.5	104	0.35	
LC0012	7.63	1.53	99.4	-0.05	
LC0013	8.55	0.6	111	0.95	
LC0014	7.86	2	102	0.2	
LC0015	6.98	1.5	90.9	-0.76	
LC0016	6.87	2.062	89.5	-0.88	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	7.68 ± 0.739	7.68 ± 0.739	µg/l
Minimum	6.06	6.06	µg/l
Maximum	9.3	9.3	µg/l
Standard deviation	0.922	0.922	µg/l
rel. standard deviation	12	12	%
n	14	14	-

Graphical presentation of results

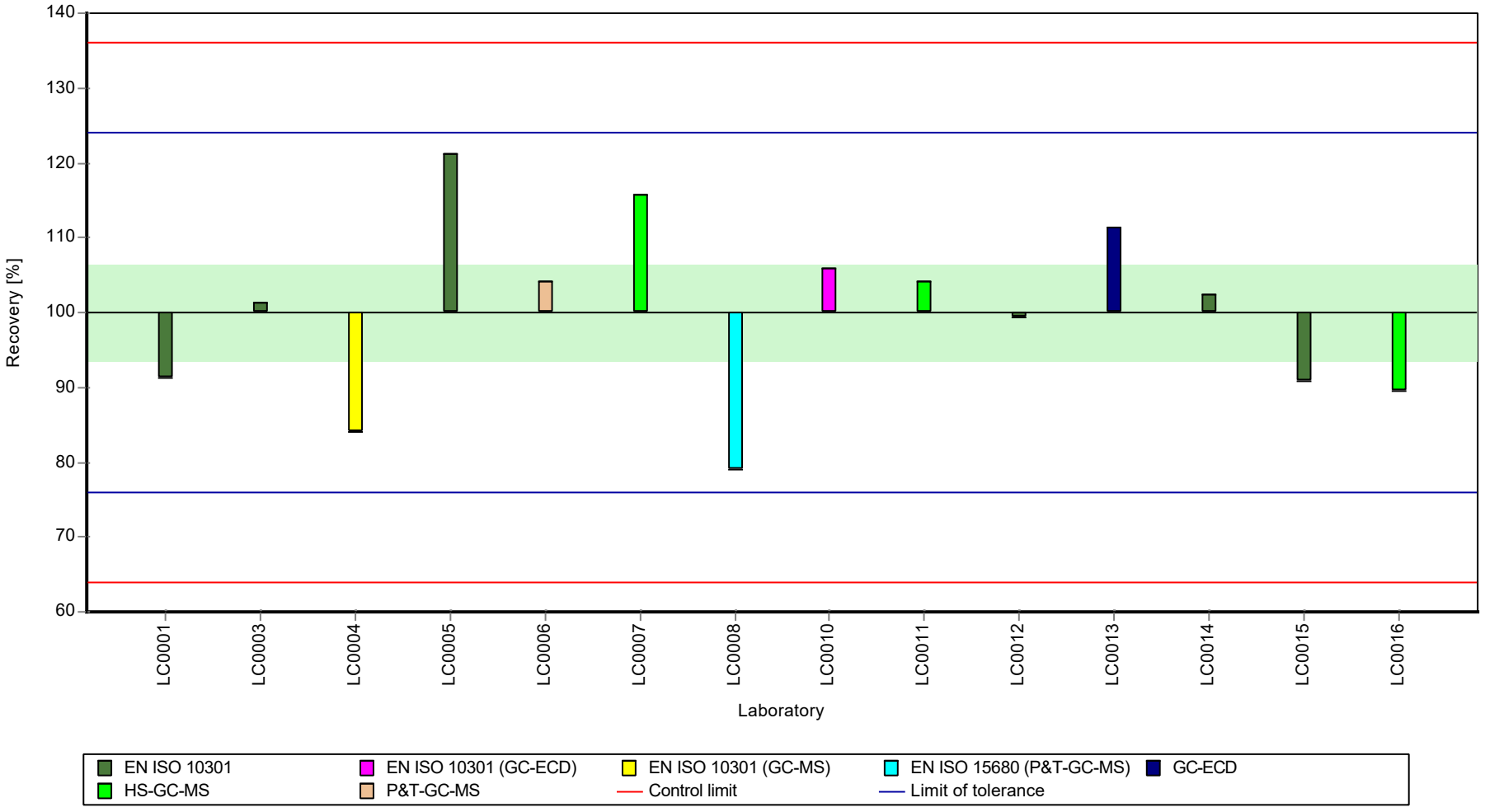
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

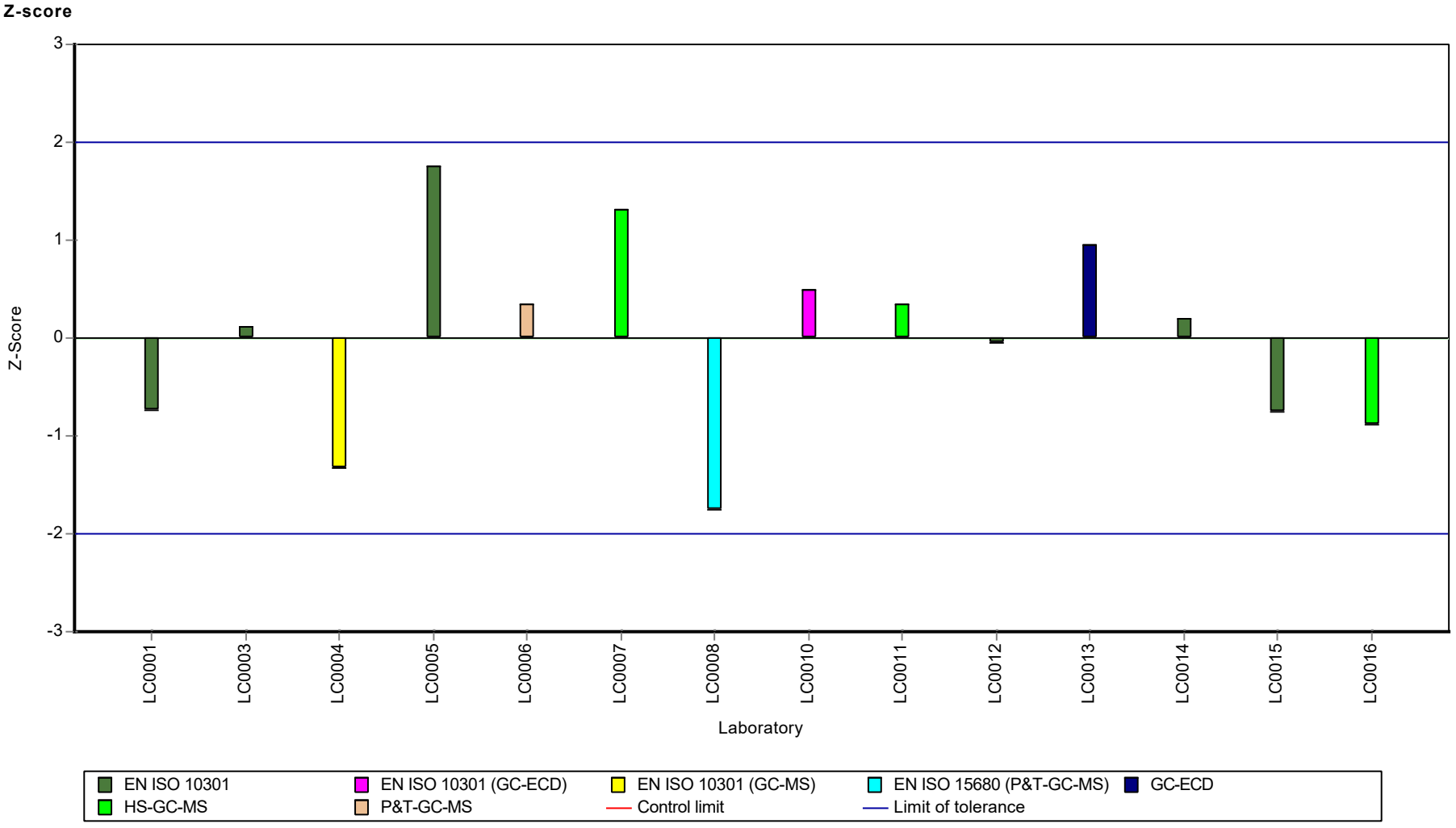
Sample: C67B, Parameter: Tribromomethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Tribromomethane



Parameter oriented report

C67 A

Trichloroethene

Unit	µg/l
Assigned value ± U (k=2)	0.641 ± 0.0838
Criterion	0.16 (25 %)
Minimum - Maximum	0.448 - 0.974
Control test value ± U (k=2)	0.606 ± 0.182

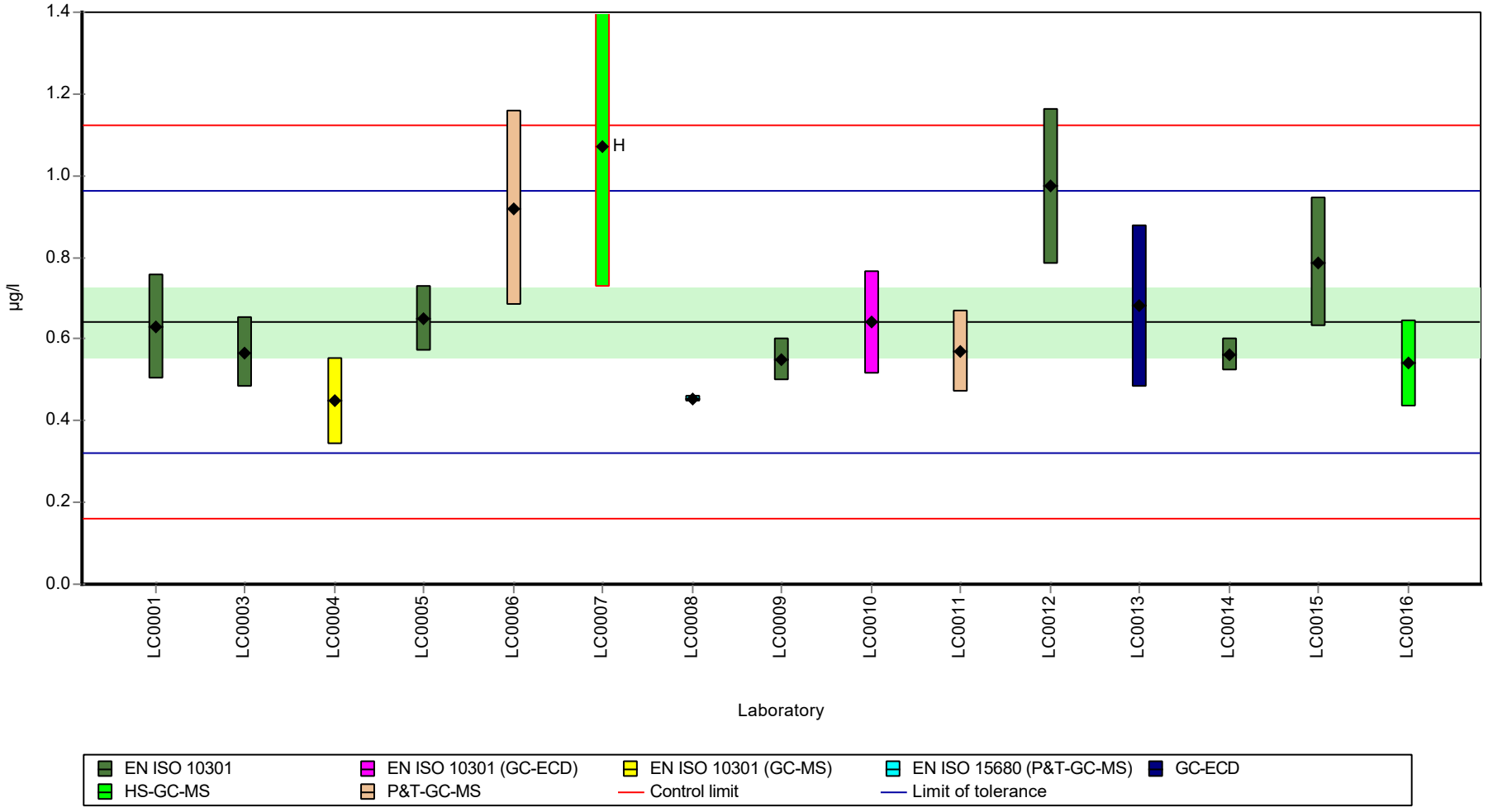
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.63	0.13	98.3	-0.07	
LC0002	-	-	-	-	
LC0003	0.567	0.085	88.5	-0.46	
LC0004	0.448	0.107	69.9	-1.2	
LC0005	0.65	0.08	101	0.06	
LC0006	0.919	0.239	143	1.74	
LC0007	1.07	0.343	167	2.68	H
LC0008	0.453	0.007	70.7	-1.17	
LC0009	0.55	0.052	85.8	-0.57	
LC0010	0.64	0.128	99.9	-0.01	
LC0011	0.57	0.1	88.9	-0.44	
LC0012	0.974	0.19	152	2.08	
LC0013	0.68	0.2	106	0.24	
LC0014	0.563	0.04	87.9	-0.49	
LC0015	0.788	0.16	123	0.92	
LC0016	0.54	0.107	84.3	-0.63	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.669 ± 0.145	0.641 ± 0.126	µg/l
Minimum	0.448	0.448	µg/l
Maximum	1.07	0.974	µg/l
Standard deviation	0.187	0.157	µg/l
rel. standard deviation	28	24.5	%
n	15	14	-

Graphical presentation of results

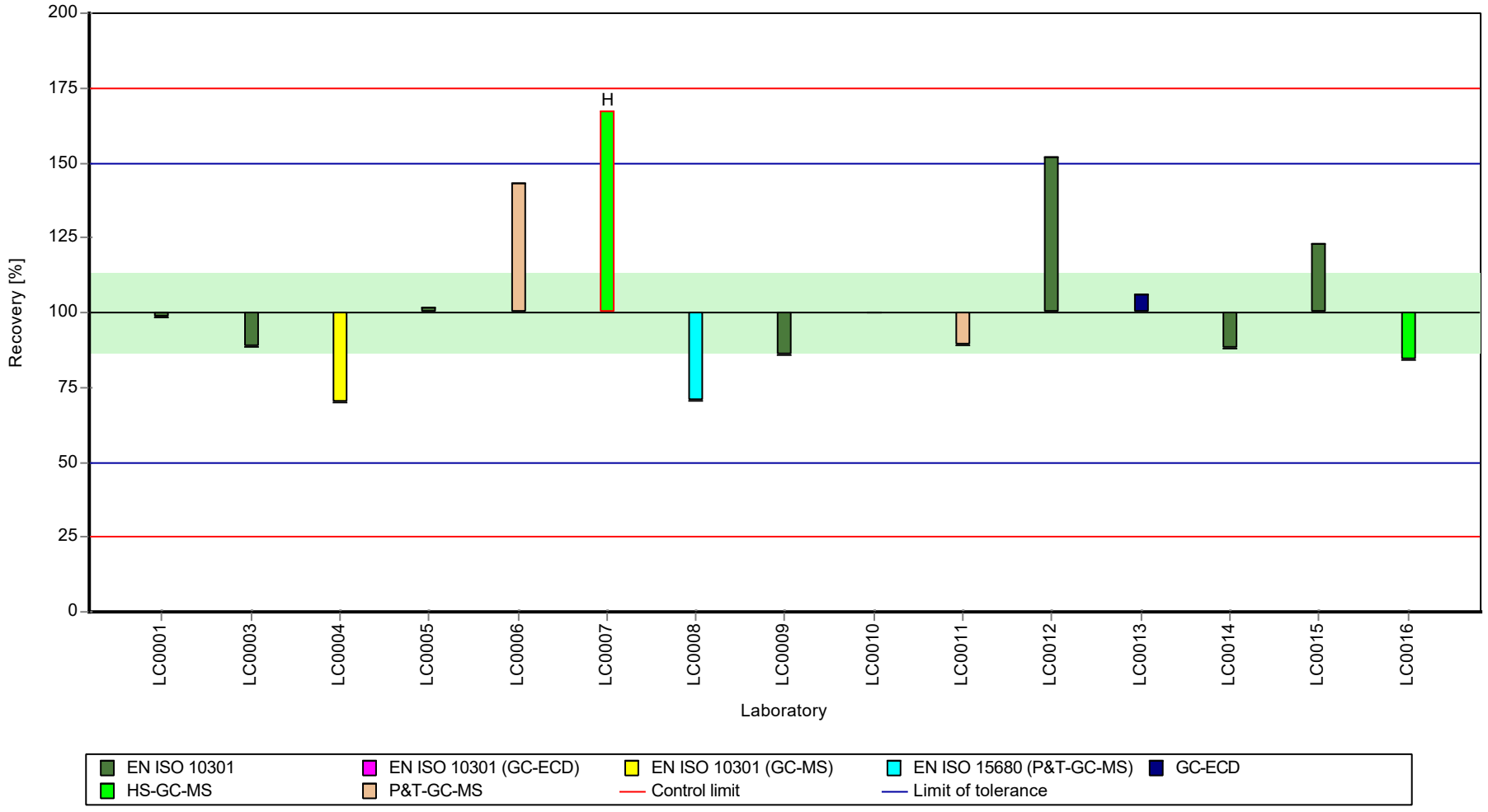
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

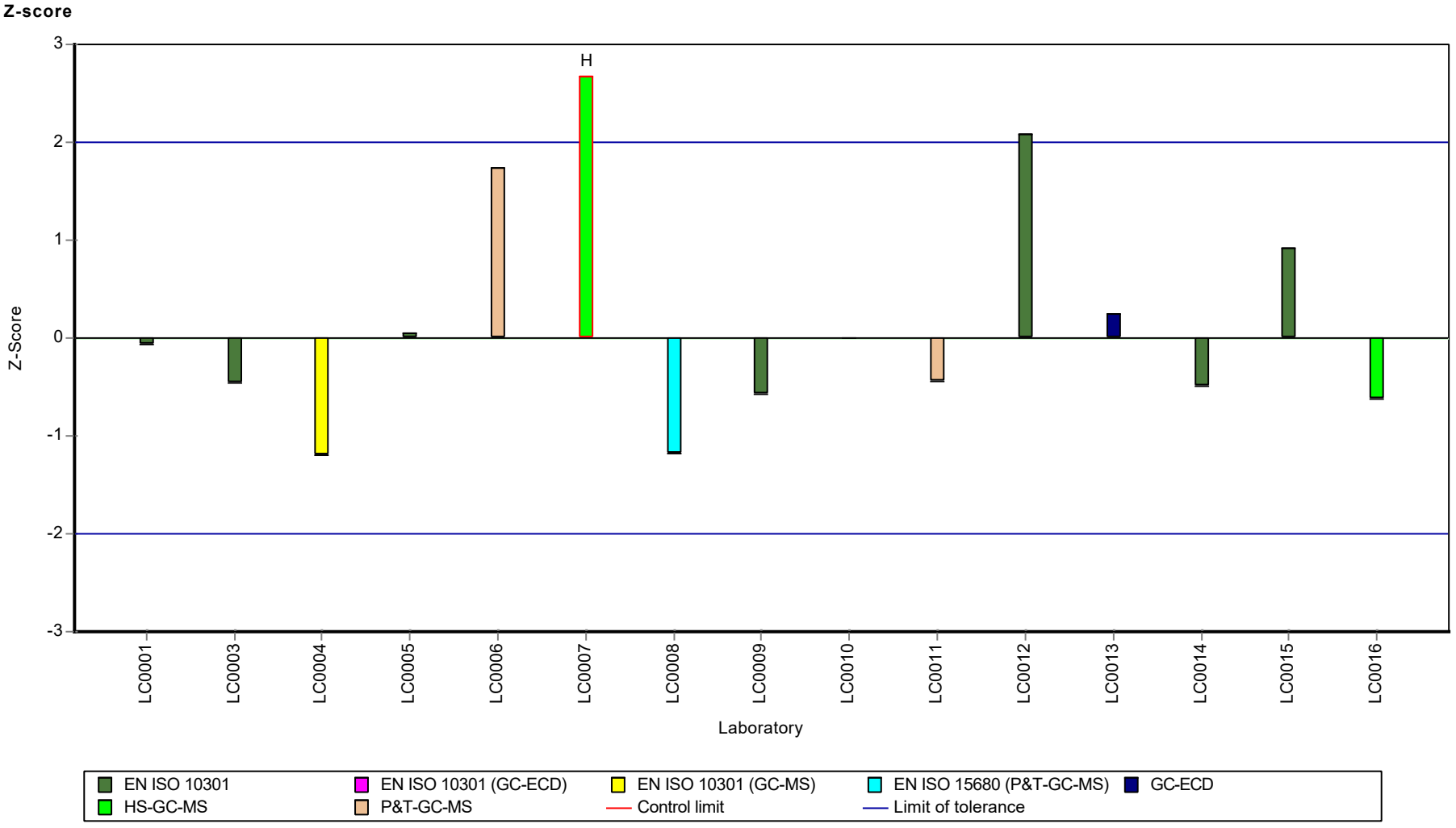
Sample: C67A, Parameter: Trichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Trichloroethene



Parameter oriented report

C67 B

Trichloroethene

Unit	µg/l
Assigned value ± U (k=2)	12.6 ± 1.99
Criterion	3.77 (30 %)
Minimum - Maximum	8.99 - 20.1
Control test value ± U (k=2)	10.900 ± 3.27

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	11.42	2.28	90.9	-0.3	
LC0002	-	-	-	-	
LC0003	11.78	1.77	93.8	-0.21	
LC0004	8.99	2.15	71.6	-0.95	
LC0005	10.2	0.8	81.2	-0.63	
LC0006	13.97	3.63	111	0.37	
LC0007	20.091	6.63	160	2	
LC0008	8.99	0.459	71.6	-0.95	
LC0009	-	-	-	-	
LC0010	12.05	2.41	95.9	-0.14	
LC0011	11.9	2.1	94.7	-0.18	
LC0012	19.7	3.94	157	1.89	
LC0013	16.68	0.2	133	1.09	
LC0014	11	0.79	87.6	-0.41	
LC0015	9.63	1.5	76.7	-0.78	
LC0016	9.48	1.896	75.5	-0.82	

Characteristics of parameter

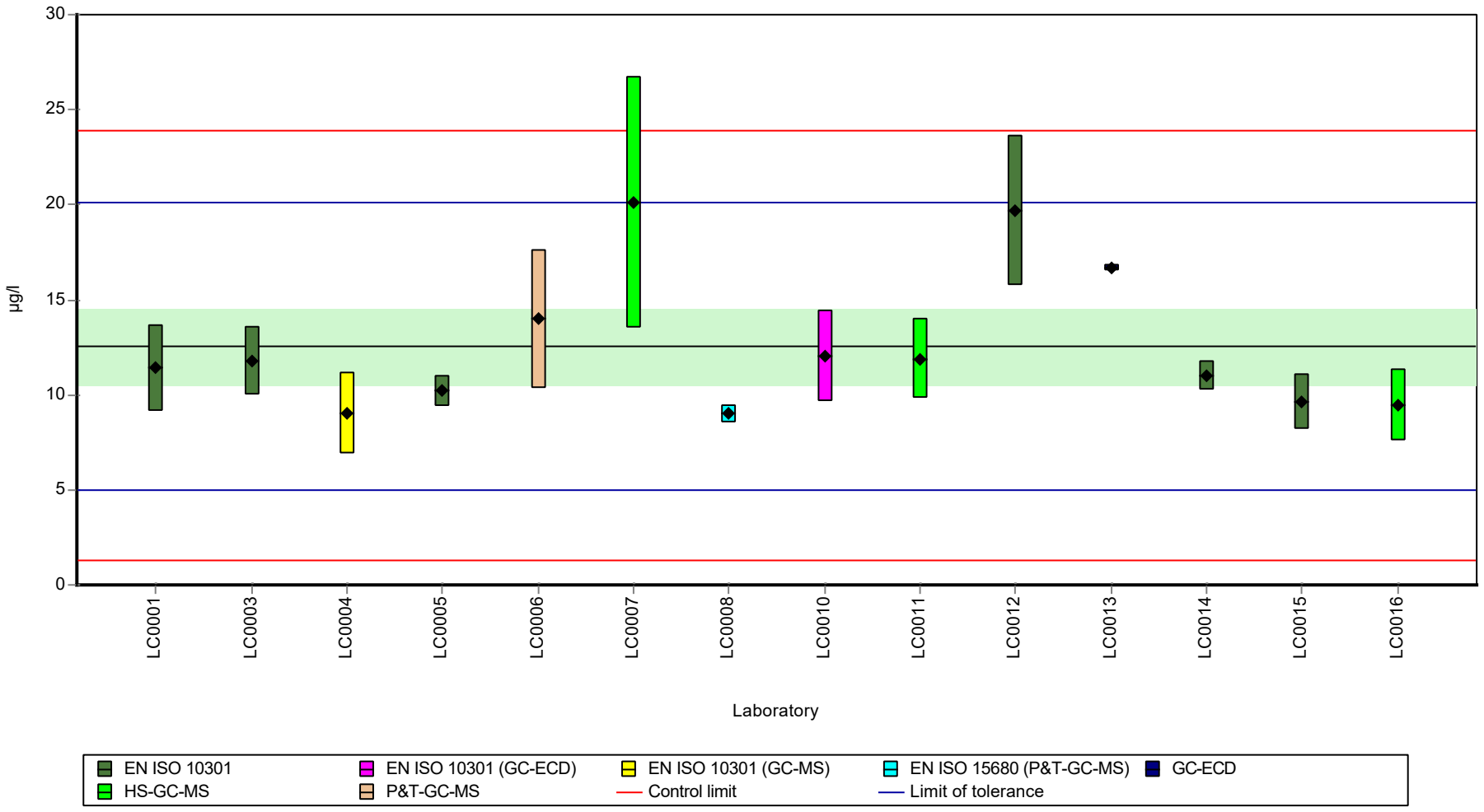
	all results	without outliers	Unit
Mean ± CI (99%)	12.6 ± 2.99	12.6 ± 2.99	µg/l
Minimum	8.99	8.99	µg/l
Maximum	20.1	20.1	µg/l
Standard deviation	3.73	3.73	µg/l
rel. standard deviation	29.7	29.7	%
n	14	14	-

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Trichloroethene

Graphical presentation of results

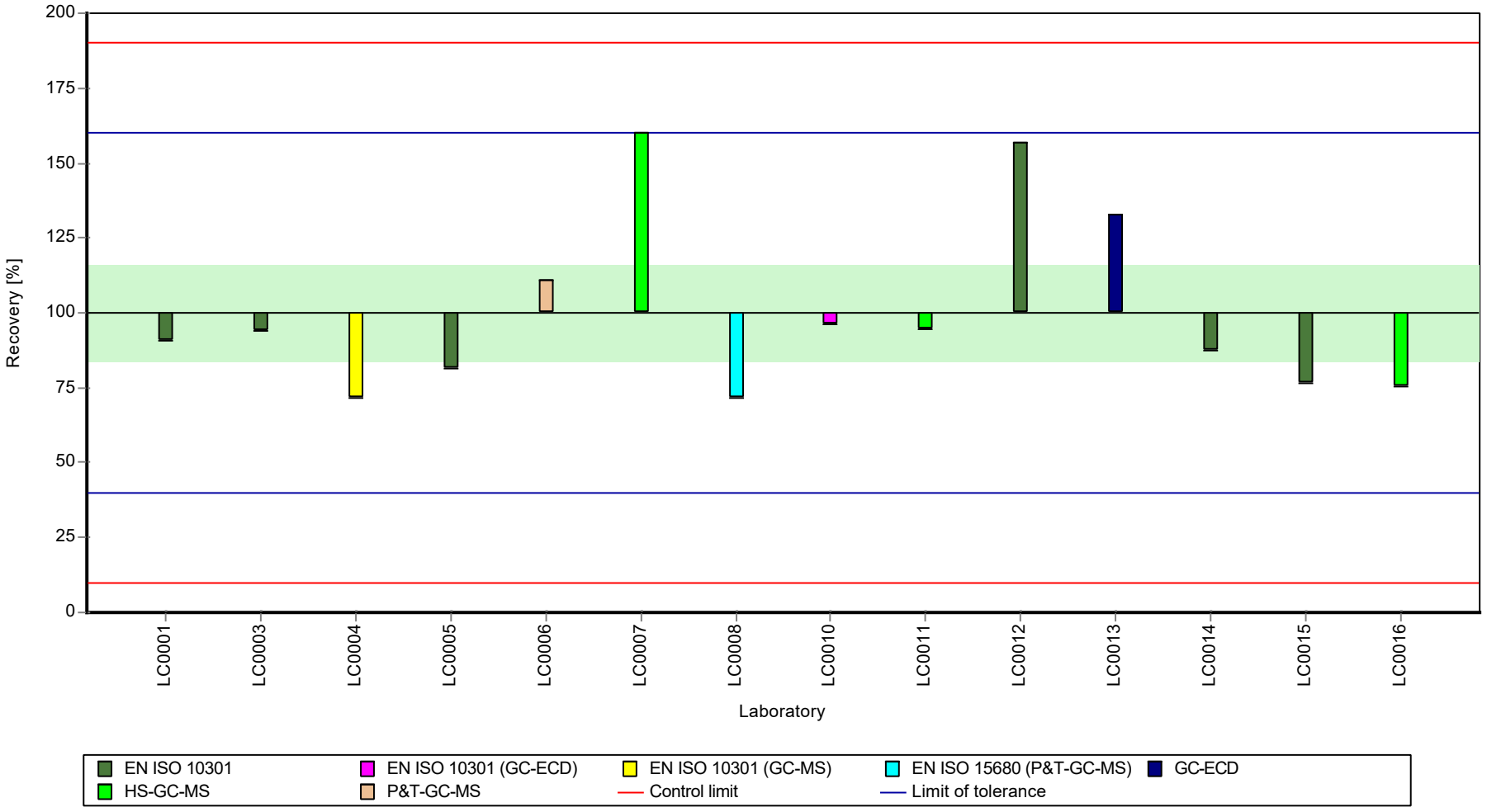
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

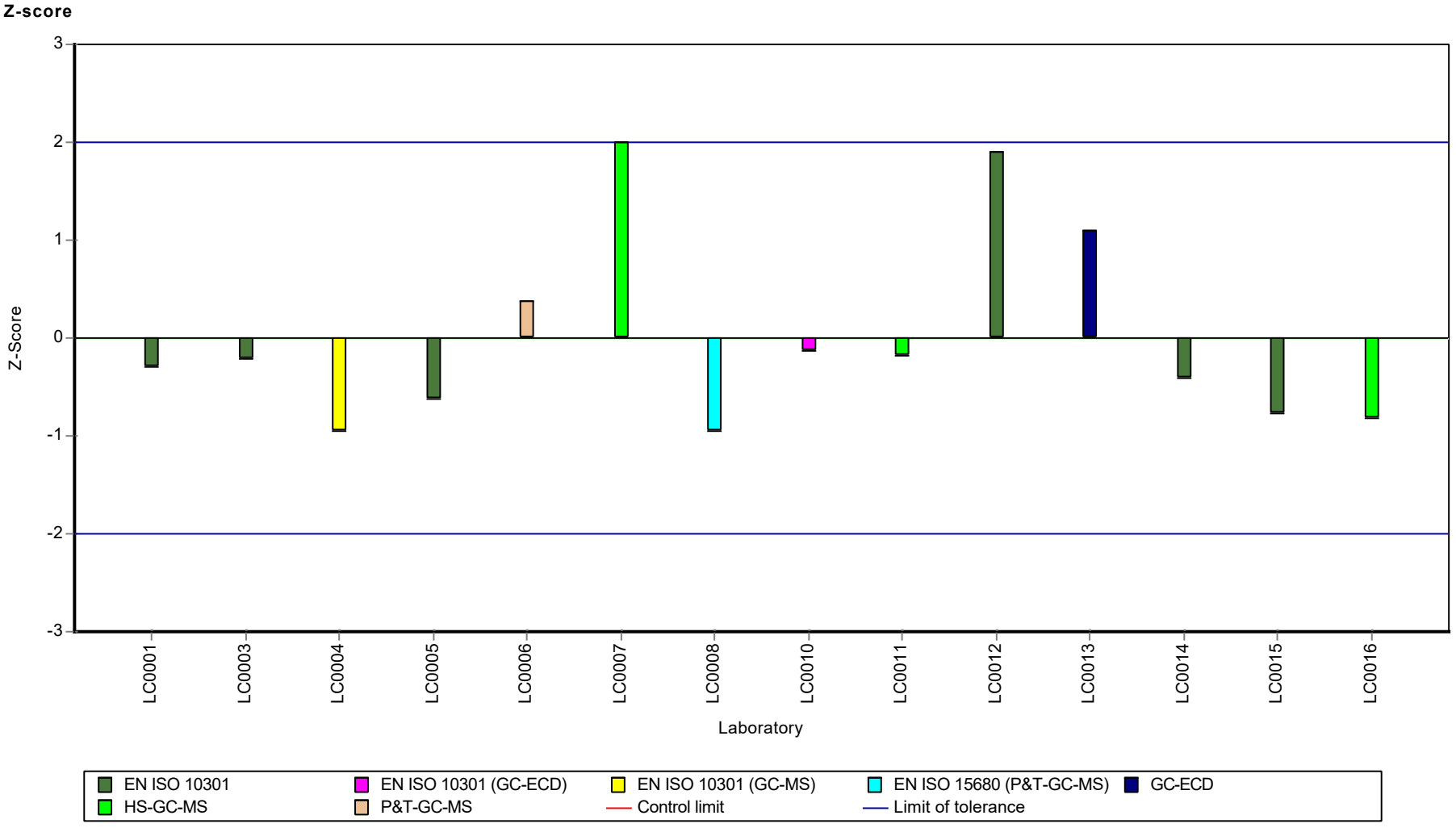
Sample: C67B, Parameter: Trichloroethene

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Trichloroethene



Parameter oriented report

C67 A

Trichloromethane

Unit	µg/l
Assigned value ± U (k=2)	0.72 ± 0.0914
Criterion	0.0935 (13 %)
Minimum - Maximum	0.515 - 1.09
Control test value ± U (k=2)	0.864 ± 0.259

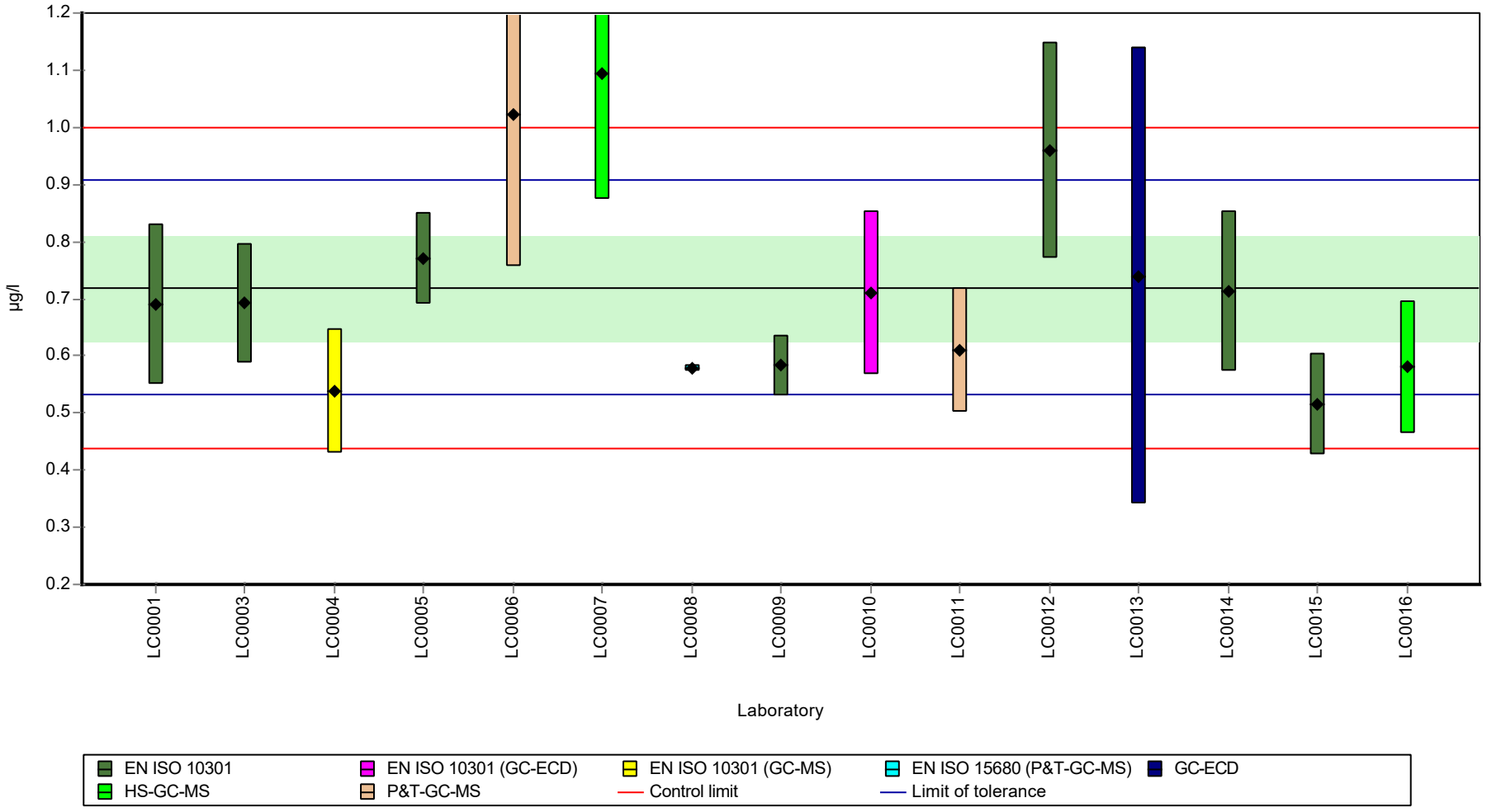
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.69	0.14	95.9	-0.32	
LC0002	-	-	-	-	
LC0003	0.692	0.104	96.2	-0.29	
LC0004	0.538	0.11	74.8	-1.94	
LC0005	0.77	0.08	107	0.54	
LC0006	1.023	0.266	142	3.24	
LC0007	1.093	0.219	152	3.99	
LC0008	0.578	0.005	80.3	-1.51	
LC0009	0.583	0.053	81	-1.46	
LC0010	0.71	0.142	98.7	-0.1	
LC0011	0.61	0.11	84.8	-1.17	
LC0012	0.959	0.19	133	2.56	
LC0013	0.74	0.4	103	0.22	
LC0014	0.712	0.14	99	-0.08	
LC0015	0.515	0.09	71.6	-2.19	
LC0016	0.58	0.115	80.6	-1.49	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.72 ± 0.137	0.72 ± 0.137	µg/l
Minimum	0.515	0.515	µg/l
Maximum	1.09	1.09	µg/l
Standard deviation	0.177	0.177	µg/l
rel. standard deviation	24.6	24.6	%
n	15	15	-

Graphical presentation of results

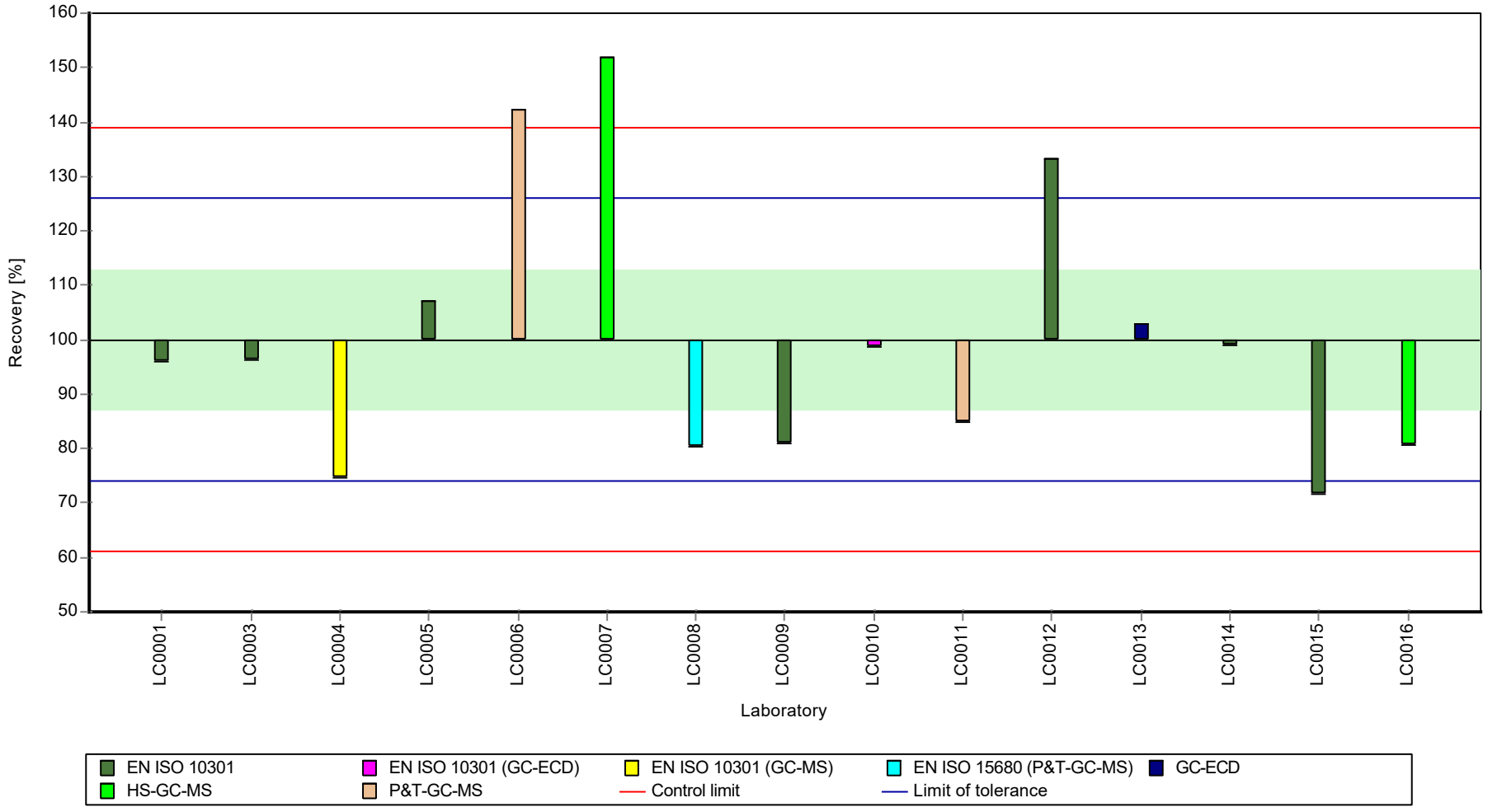
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

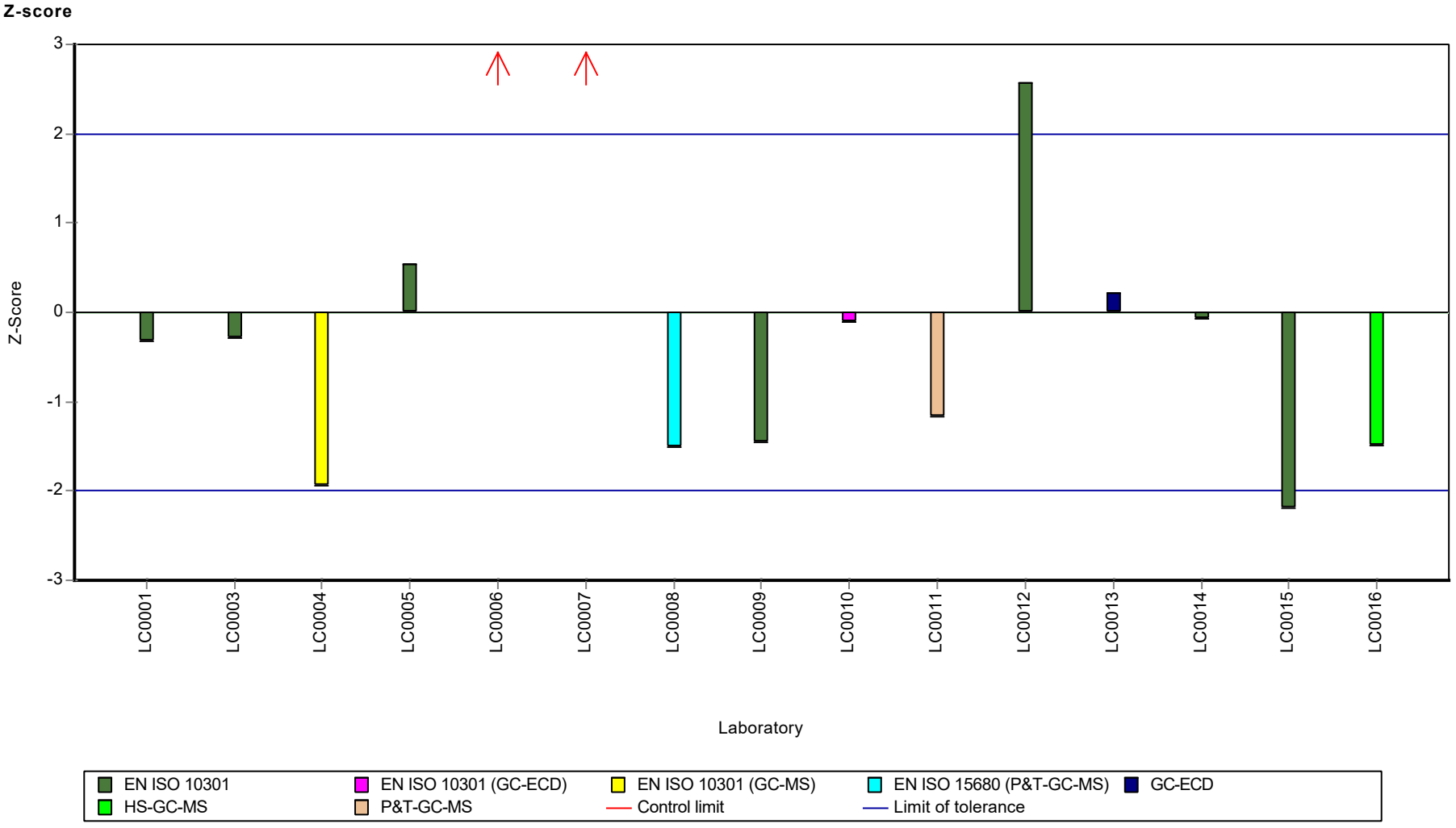
Sample: C67A, Parameter: Trichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67A, Parameter: Trichloromethane



Parameter oriented report

C67 B

Trichloromethane

Unit	µg/l
Assigned value ± U (k=2)	13.8 ± 1.33
Criterion	1.79 (13 %)
Minimum - Maximum	10.5 - 19.9
Control test value ± U (k=2)	14.100 ± 4.24

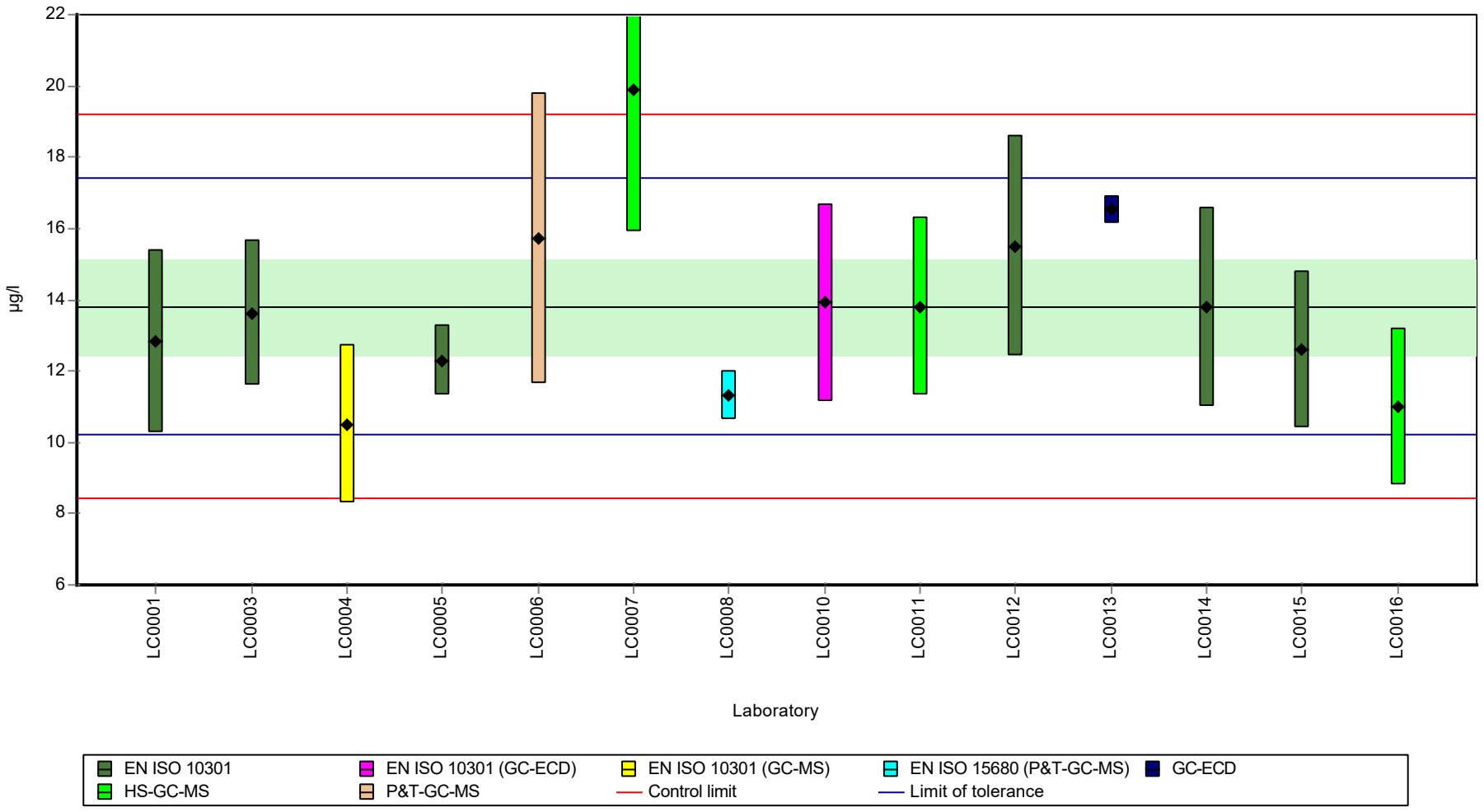
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	12.82	2.56	92.9	-0.55	
LC0002	-	-	-	-	
LC0003	13.63	2.04	98.7	-0.1	
LC0004	10.5	2.22	76	-1.84	
LC0005	12.3	1	89.1	-0.84	
LC0006	15.7	4.08	114	1.05	
LC0007	19.904	3.98	144	3.4	
LC0008	11.3	0.686	81.8	-1.4	
LC0009	-	-	-	-	
LC0010	13.91	2.782	101	0.06	
LC0011	13.8	2.5	100	0.00	
LC0012	15.5	3.1	112	0.94	
LC0013	16.53	0.4	120	1.52	
LC0014	13.8	2.8	100	0.00	
LC0015	12.6	2.2	91.3	-0.67	
LC0016	11	2.208	79.7	-1.56	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	13.8 ± 2	13.8 ± 2	µg/l
Minimum	10.5	10.5	µg/l
Maximum	19.9	19.9	µg/l
Standard deviation	2.49	2.49	µg/l
rel. standard deviation	18.1	18.1	%
n	14	14	-

Graphical presentation of results

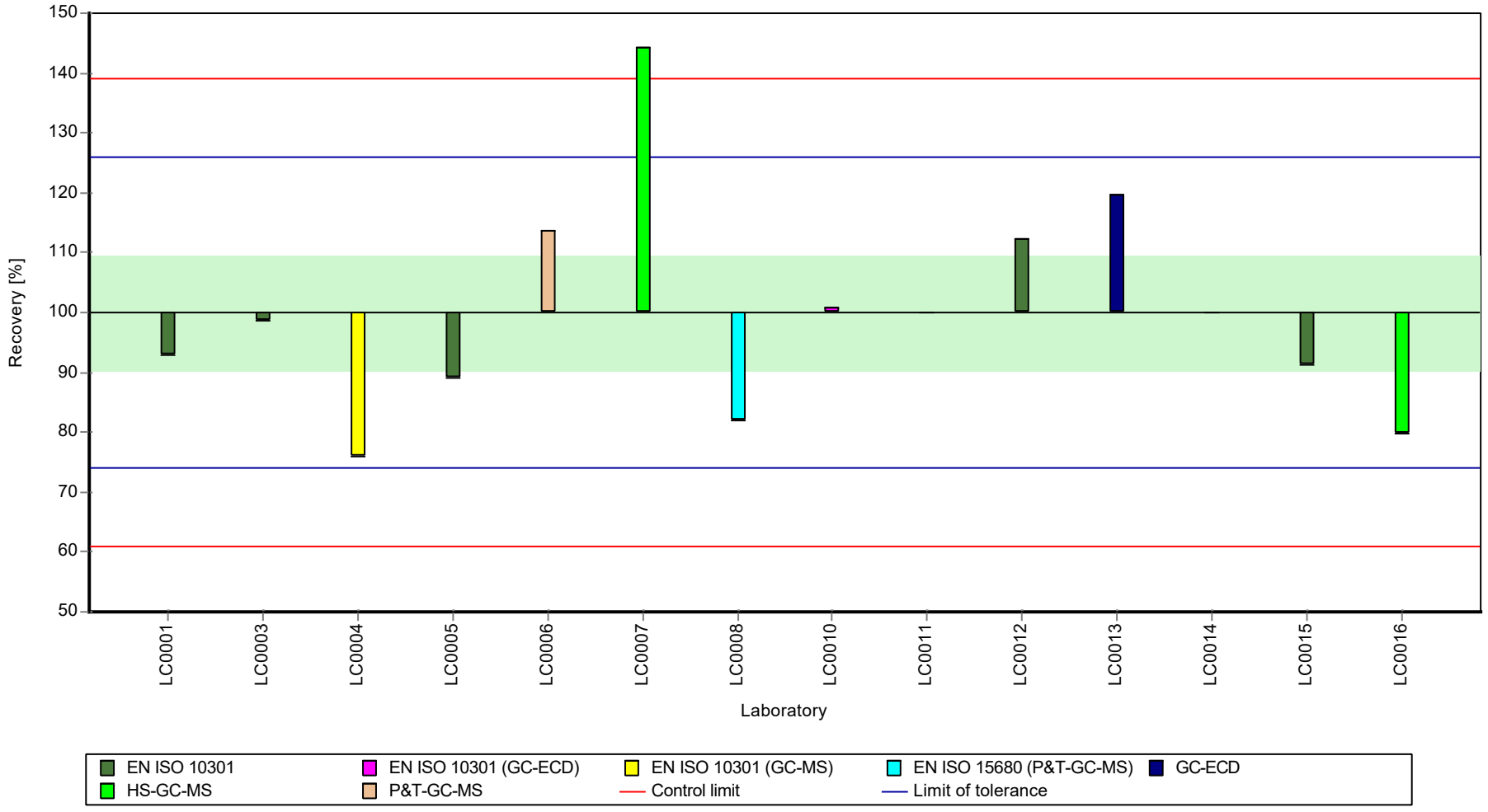
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

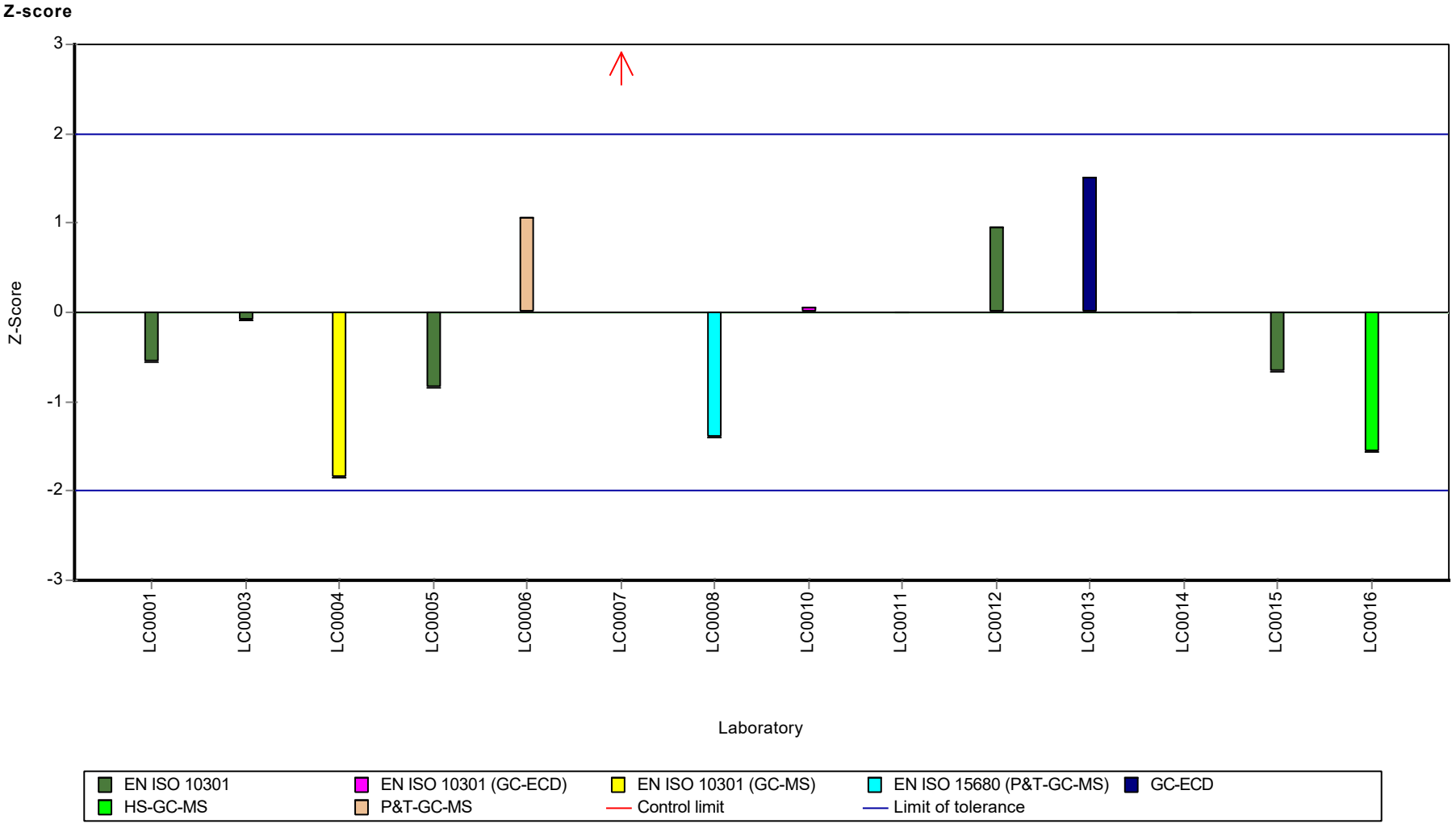
Sample: C67B, Parameter: Trichloromethane

Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C67

Sample: C67B, Parameter: Trichloromethane



E8. Laborорientierte Auswertung / Laboratory oriented report

Die Laborорientierte Auswertung ist nach dem Laborcode sortiert.

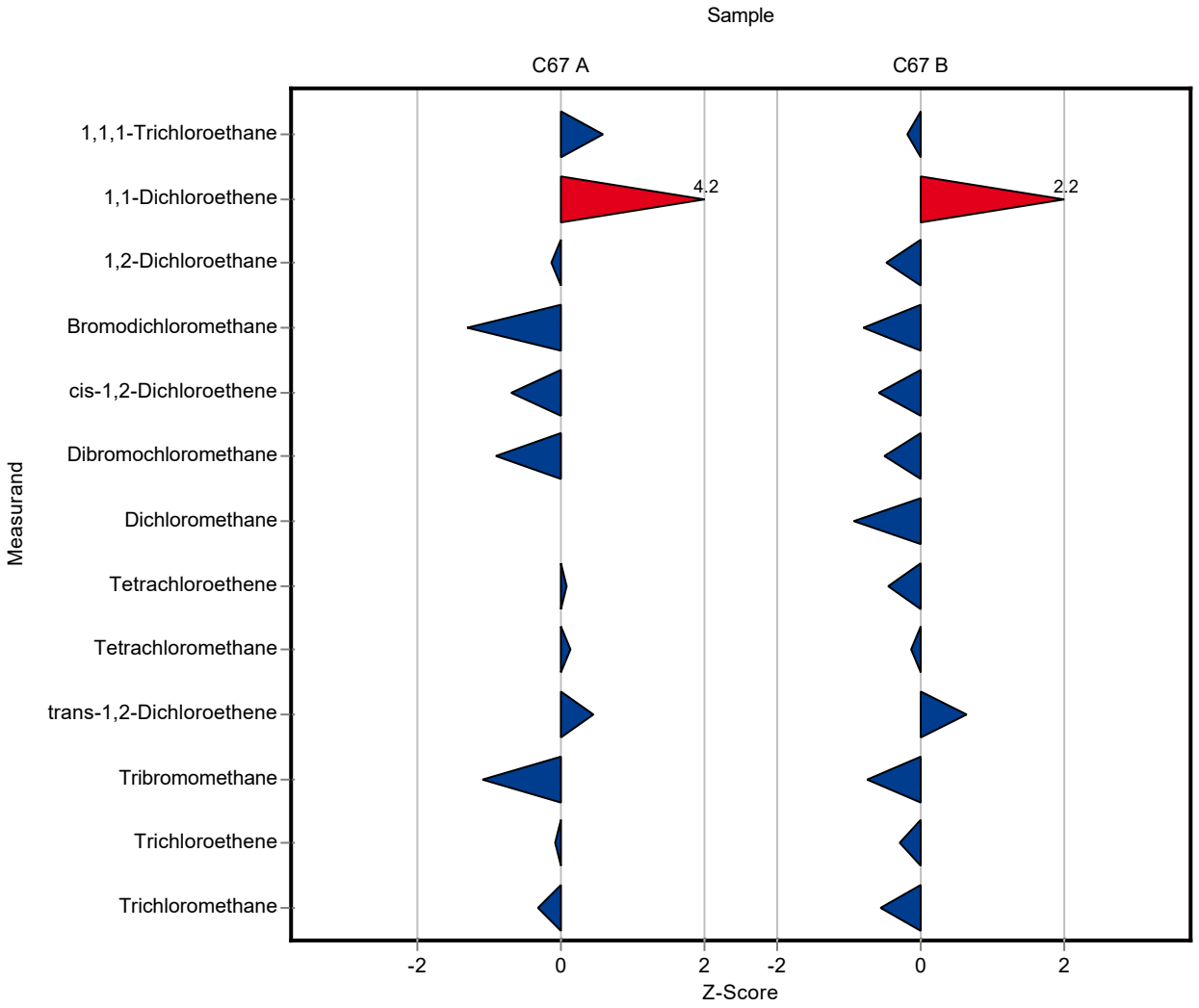
The laboratory oriented report is sorted by laboratory code.

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.11	0.0758	109	0.59
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.67 ± 0.13	0.0663	172	4.22
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.18 ± 0.24	0.156	98.3	-0.13
Bromodichloromethane	µg/l	1.91 ± 0.156	1.66 ± 0.33	0.191	87	-1.30
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.53 ± 0.11	0.168	82.1	-0.69
Dibromochloromethane	µg/l	1.28 ± 0.081	1.14 ± 0.23	0.154	89	-0.91
Dichloromethane	µg/l	1.33 ± 0.152	<2 (LOQ) ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.35 ± 0.07	0.125	103	0.09
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.31 ± 0.06	0.0954	104	0.13
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.68 ± 0.14	0.216	116	0.44
Tribromomethane	µg/l	1.52 ± 0.118	1.32 ± 0.26	0.182	87	-1.08
Trichloroethene	µg/l	0.641 ± 0.0838	0.63 ± 0.13	0.16	98.3	-0.07
Trichloromethane	µg/l	0.72 ± 0.0914	0.69 ± 0.14	0.0935	95.9	-0.32

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.62 ± 1.92	1.48	97.2	-0.18
1,1-Dichloroethene	µg/l	7.62 ± 1.07	10.49 ± 2.1	1.29	138	2.22
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11.56 ± 2.31	1.6	93.9	-0.47
Bromodichloromethane	µg/l	12 ± 0.981	11.03 ± 2.21	1.2	92.1	-0.79
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	6.22 ± 1.24	1.83	85.1	-0.60
Dibromochloromethane	µg/l	14.8 ± 0.934	13.92 ± 2.78	1.78	93.8	-0.51
Dichloromethane	µg/l	12.4 ± 1.07	10.94 ± 2.19	1.62	87.9	-0.93
Tetrachloroethene	µg/l	14.1 ± 2.26	12.11 ± 2.42	4.22	86.1	-0.46
Tetrachloromethane	µg/l	10.6 ± 1.69	10.19 ± 2.04	3.07	96.2	-0.13
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	7.79 ± 1.56	1.96	119	0.64
Tribromomethane	µg/l	7.68 ± 0.493	7 ± 1.4	0.921	91.2	-0.74
Trichloroethene	µg/l	12.6 ± 1.99	11.42 ± 2.28	3.77	90.9	-0.30
Trichloromethane	µg/l	13.8 ± 1.33	12.82 ± 2.56	1.79	92.9	-0.55


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
4.2
2.2
Measurand
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0001

Sample: C67A

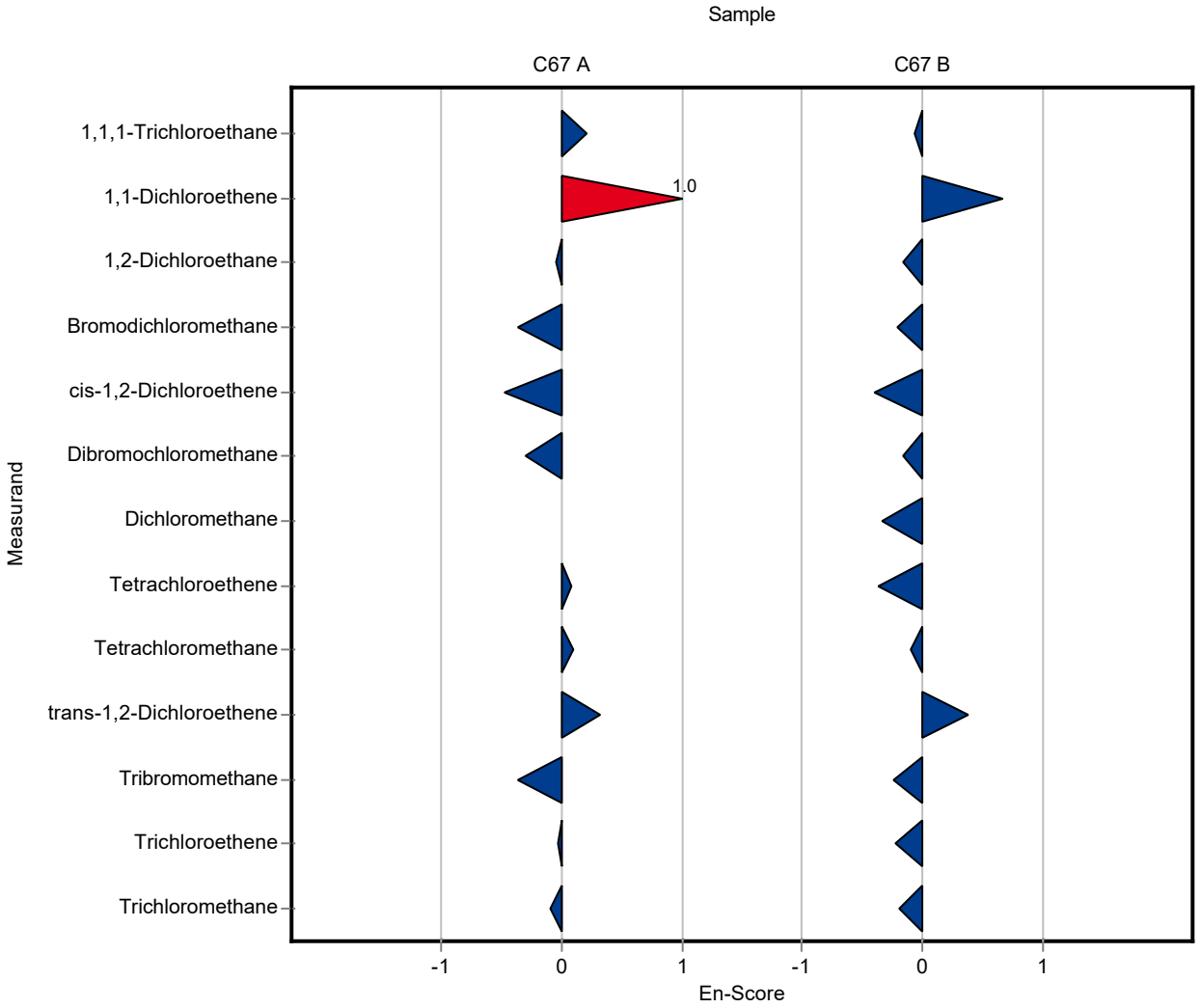
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.11	0.0758	109	0.20
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.67 ± 0.13	0.0663	172	1.04
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.18 ± 0.24	0.156	98.3	-0.04
Bromodichloromethane	µg/l	1.91 ± 0.156	1.66 ± 0.33	0.191	87	-0.37
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.53 ± 0.11	0.168	82.1	-0.48
Dibromochloromethane	µg/l	1.28 ± 0.081	1.14 ± 0.23	0.154	89	-0.30
Dichloromethane	µg/l	1.33 ± 0.152	<2 (LOQ) ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.35 ± 0.07	0.125	103	0.07
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.31 ± 0.06	0.0954	104	0.09
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.68 ± 0.14	0.216	116	0.32
Tribromomethane	µg/l	1.52 ± 0.118	1.32 ± 0.26	0.182	87	-0.37
Trichloroethene	µg/l	0.641 ± 0.0838	0.63 ± 0.13	0.16	98.3	-0.04
Trichloromethane	µg/l	0.72 ± 0.0914	0.69 ± 0.14	0.0935	95.9	-0.10

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.62 ± 1.92	1.48	97.2	-0.07
1,1-Dichloroethene	µg/l	7.62 ± 1.07	10.49 ± 2.1	1.29	138	0.66
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11.56 ± 2.31	1.6	93.9	-0.16
Bromodichloromethane	µg/l	12 ± 0.981	11.03 ± 2.21	1.2	92.1	-0.21
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	6.22 ± 1.24	1.83	85.1	-0.41
Dibromochloromethane	µg/l	14.8 ± 0.934	13.92 ± 2.78	1.78	93.8	-0.16
Dichloromethane	µg/l	12.4 ± 1.07	10.94 ± 2.19	1.62	87.9	-0.33
Tetrachloroethene	µg/l	14.1 ± 2.26	12.11 ± 2.42	4.22	86.1	-0.37
Tetrachloromethane	µg/l	10.6 ± 1.69	10.19 ± 2.04	3.07	96.2	-0.09
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	7.79 ± 1.56	1.96	119	0.38
Tribromomethane	µg/l	7.68 ± 0.493	7 ± 1.4	0.921	91.2	-0.24
Trichloroethene	µg/l	12.6 ± 1.99	11.42 ± 2.28	3.77	90.9	-0.23
Trichloromethane	µg/l	13.8 ± 1.33	12.82 ± 2.56	1.79	92.9	-0.19

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0001



Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	- ± -	0.0758	-	-
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	- ± -	0.191	-	-
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	- ± -	0.154	-	-
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	- ± -	0.125	-	-
Tetrachloromethane	µg/l	0.298 ± 0.0514	- ± -	0.0954	-	-
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	- ± -	0.182	-	-
Trichloroethene	µg/l	0.641 ± 0.0838	- ± -	0.16	-	-
Trichloromethane	µg/l	0.72 ± 0.0914	- ± -	0.0935	-	-

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	- ± -	1.48	-	-
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	- ± -	1.2	-	-
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	- ± -	1.78	-	-
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	- ± -	4.22	-	-
Tetrachloromethane	µg/l	10.6 ± 1.69	- ± -	3.07	-	-
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	- ± -	0.921	-	-
Trichloroethene	µg/l	12.6 ± 1.99	- ± -	3.77	-	-
Trichloromethane	µg/l	13.8 ± 1.33	- ± -	1.79	-	-

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	- ± -	0.0758	-	-
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	- ± -	0.191	-	-
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	- ± -	0.154	-	-
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	- ± -	0.125	-	-
Tetrachloromethane	µg/l	0.298 ± 0.0514	- ± -	0.0954	-	-
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	- ± -	0.182	-	-
Trichloroethene	µg/l	0.641 ± 0.0838	- ± -	0.16	-	-
Trichloromethane	µg/l	0.72 ± 0.0914	- ± -	0.0935	-	-

Sample: C67B

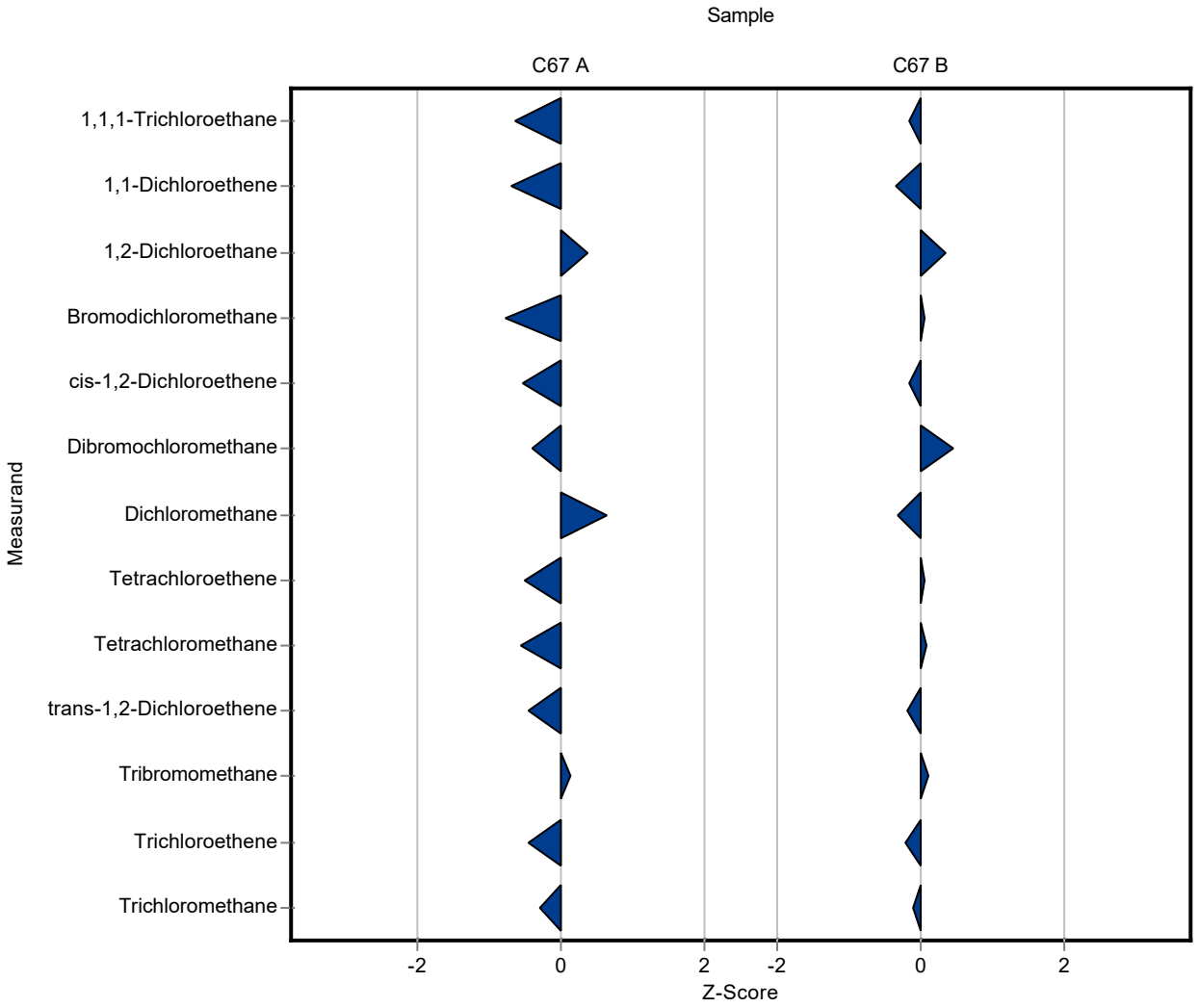
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	- ± -	1.48	-	-
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	- ± -	1.2	-	-
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	- ± -	1.78	-	-
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	- ± -	4.22	-	-
Tetrachloromethane	µg/l	10.6 ± 1.69	- ± -	3.07	-	-
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	- ± -	0.921	-	-
Trichloroethene	µg/l	12.6 ± 1.99	- ± -	3.77	-	-
Trichloromethane	µg/l	13.8 ± 1.33	- ± -	1.79	-	-

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.456 ± 0.068	0.0758	90.3	-0.65
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.344 ± 0.052	0.0663	88.2	-0.69
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.26 ± 0.19	0.156	105	0.38
Bromodichloromethane	µg/l	1.91 ± 0.156	1.76 ± 0.26	0.191	92.2	-0.78
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.556 ± 0.083	0.168	86.2	-0.53
Dibromochloromethane	µg/l	1.28 ± 0.081	1.22 ± 0.18	0.154	95.3	-0.39
Dichloromethane	µg/l	1.33 ± 0.152	1.44 ± 0.22	0.173	108	0.65
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.274 ± 0.041	0.125	80.9	-0.51
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.246 ± 0.037	0.0954	82.5	-0.55
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.487 ± 0.073	0.216	83.4	-0.45
Tribromomethane	µg/l	1.52 ± 0.118	1.54 ± 0.23	0.182	102	0.13
Trichloroethene	µg/l	0.641 ± 0.0838	0.567 ± 0.085	0.16	88.5	-0.46
Trichloromethane	µg/l	0.72 ± 0.0914	0.692 ± 0.104	0.0935	96.2	-0.29

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.67 ± 1.45	1.48	97.8	-0.15
1,1-Dichloroethene	µg/l	7.62 ± 1.07	7.16 ± 1.07	1.29	94	-0.35
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.88 ± 1.93	1.6	105	0.35
Bromodichloromethane	µg/l	12 ± 0.981	12.04 ± 1.81	1.2	101	0.06
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.04 ± 1.06	1.83	96.3	-0.15
Dibromochloromethane	µg/l	14.8 ± 0.934	15.66 ± 2.35	1.78	106	0.46
Dichloromethane	µg/l	12.4 ± 1.07	11.94 ± 1.79	1.62	95.9	-0.31
Tetrachloroethene	µg/l	14.1 ± 2.26	14.35 ± 2.15	4.22	102	0.07
Tetrachloromethane	µg/l	10.6 ± 1.69	10.87 ± 1.63	3.07	103	0.09
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.19 ± 0.93	1.96	94.7	-0.18
Tribromomethane	µg/l	7.68 ± 0.493	7.78 ± 1.17	0.921	101	0.11
Trichloroethene	µg/l	12.6 ± 1.99	11.78 ± 1.77	3.77	93.8	-0.21
Trichloromethane	µg/l	13.8 ± 1.33	13.63 ± 2.04	1.79	98.7	-0.10


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0003

Sample: C67A

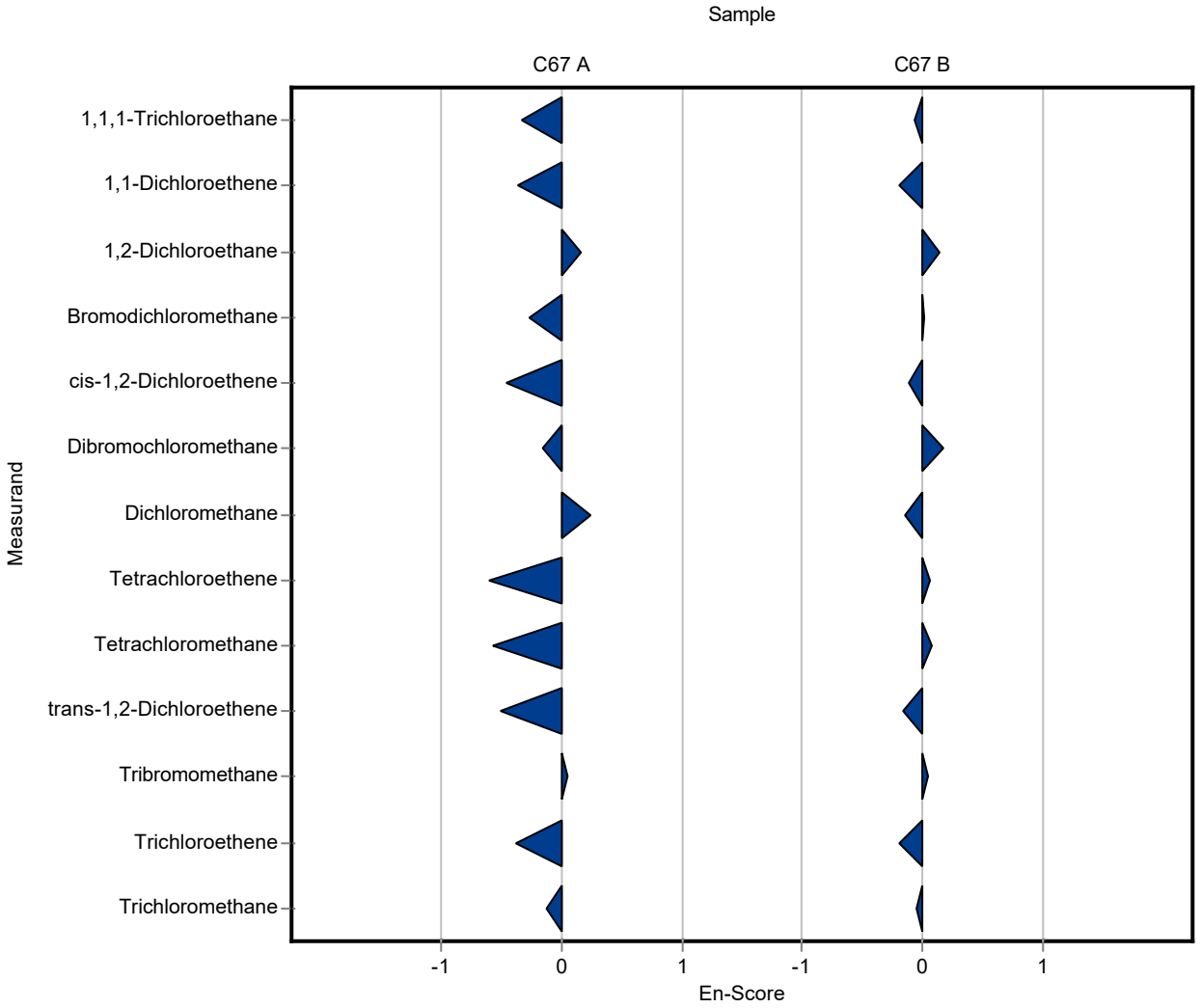
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.456 ± 0.068	0.0758	90.3	-0.34
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.344 ± 0.052	0.0663	88.2	-0.37
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.26 ± 0.19	0.156	105	0.15
Bromodichloromethane	µg/l	1.91 ± 0.156	1.76 ± 0.26	0.191	92.2	-0.27
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.556 ± 0.083	0.168	86.2	-0.47
Dibromochloromethane	µg/l	1.28 ± 0.081	1.22 ± 0.18	0.154	95.3	-0.16
Dichloromethane	µg/l	1.33 ± 0.152	1.44 ± 0.22	0.173	108	0.24
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.274 ± 0.041	0.125	80.9	-0.61
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.246 ± 0.037	0.0954	82.5	-0.58
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.487 ± 0.073	0.216	83.4	-0.52
Tribromomethane	µg/l	1.52 ± 0.118	1.54 ± 0.23	0.182	102	0.05
Trichloroethene	µg/l	0.641 ± 0.0838	0.567 ± 0.085	0.16	88.5	-0.39
Trichloromethane	µg/l	0.72 ± 0.0914	0.692 ± 0.104	0.0935	96.2	-0.12

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.67 ± 1.45	1.48	97.8	-0.07
1,1-Dichloroethene	µg/l	7.62 ± 1.07	7.16 ± 1.07	1.29	94	-0.19
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.88 ± 1.93	1.6	105	0.14
Bromodichloromethane	µg/l	12 ± 0.981	12.04 ± 1.81	1.2	101	0.02
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.04 ± 1.06	1.83	96.3	-0.12
Dibromochloromethane	µg/l	14.8 ± 0.934	15.66 ± 2.35	1.78	106	0.17
Dichloromethane	µg/l	12.4 ± 1.07	11.94 ± 1.79	1.62	95.9	-0.14
Tetrachloroethene	µg/l	14.1 ± 2.26	14.35 ± 2.15	4.22	102	0.06
Tetrachloromethane	µg/l	10.6 ± 1.69	10.87 ± 1.63	3.07	103	0.08
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.19 ± 0.93	1.96	94.7	-0.16
Tribromomethane	µg/l	7.68 ± 0.493	7.78 ± 1.17	0.921	101	0.04
Trichloroethene	µg/l	12.6 ± 1.99	11.78 ± 1.77	3.77	93.8	-0.19
Trichloromethane	µg/l	13.8 ± 1.33	13.63 ± 2.04	1.79	98.7	-0.04

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0003



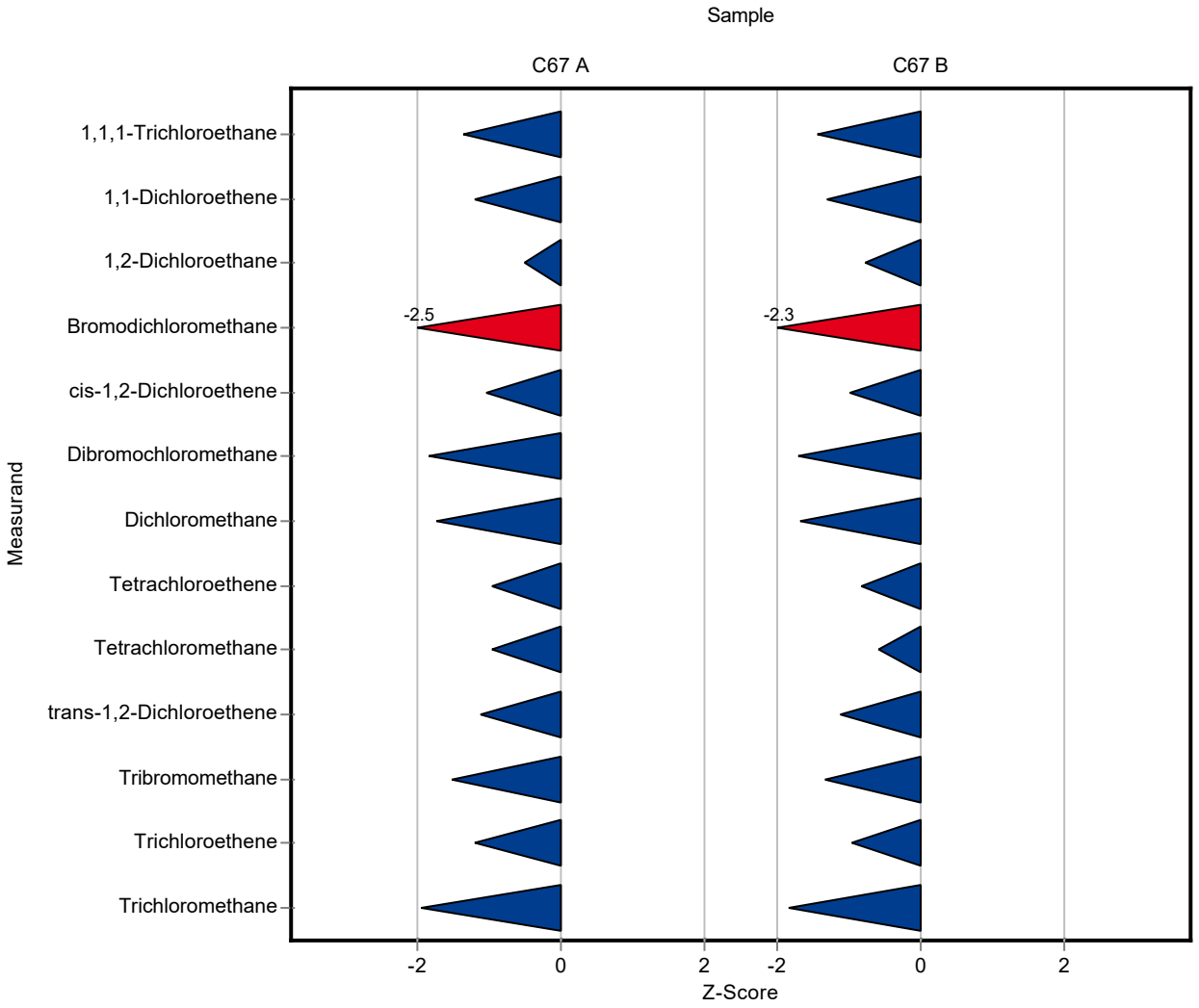
Summary of results Volatile halogenated hydrocarbons (VHH) - C67 Labcode: LC0004

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.402 ± 0.091	0.0758	79.6	-1.36
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.311 ± 0.091	0.0663	79.7	-1.19
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.12 ± 0.26	0.156	93.3	-0.52
Bromodichloromethane	µg/l	1.91 ± 0.156	1.43 ± 0.43	0.191	74.9	-2.51
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.469 ± 0.091	0.168	72.7	-1.05
Dibromochloromethane	µg/l	1.28 ± 0.081	1 ± 0.254	0.154	78.1	-1.83
Dichloromethane	µg/l	1.33 ± 0.152	1.03 ± 0.27	0.173	77.6	-1.73
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.218 ± 0.061	0.125	64.4	-0.96
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.208 ± 0.055	0.0954	69.8	-0.94
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.344 ± 0.089	0.216	58.9	-1.11
Tribromomethane	µg/l	1.52 ± 0.118	1.24 ± 0.32	0.182	81.8	-1.52
Trichloroethene	µg/l	0.641 ± 0.0838	0.448 ± 0.107	0.16	69.9	-1.20
Trichloromethane	µg/l	0.72 ± 0.0914	0.538 ± 0.11	0.0935	74.8	-1.94

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	7.77 ± 1.76	1.48	78.5	-1.43
1,1-Dichloroethene	µg/l	7.62 ± 1.07	5.94 ± 1.75	1.29	78	-1.29
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11.1 ± 2.5	1.6	90.1	-0.76
Bromodichloromethane	µg/l	12 ± 0.981	9.19 ± 2.76	1.2	76.8	-2.32
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.51 ± 1.06	1.83	75.3	-0.99
Dibromochloromethane	µg/l	14.8 ± 0.934	11.82 ± 3	1.78	79.7	-1.69
Dichloromethane	µg/l	12.4 ± 1.07	9.73 ± 2.57	1.62	78.2	-1.68
Tetrachloroethene	µg/l	14.1 ± 2.26	10.62 ± 2.98	4.22	75.5	-0.82
Tetrachloromethane	µg/l	10.6 ± 1.69	8.81 ± 2.34	3.07	83.2	-0.58
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	4.34 ± 1.12	1.96	66.4	-1.12
Tribromomethane	µg/l	7.68 ± 0.493	6.45 ± 1.69	0.921	84	-1.33
Trichloroethene	µg/l	12.6 ± 1.99	8.99 ± 2.15	3.77	71.6	-0.95
Trichloromethane	µg/l	13.8 ± 1.33	10.5 ± 2.22	1.79	76	-1.84


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2.5
-2.3
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0004

Sample: C67A

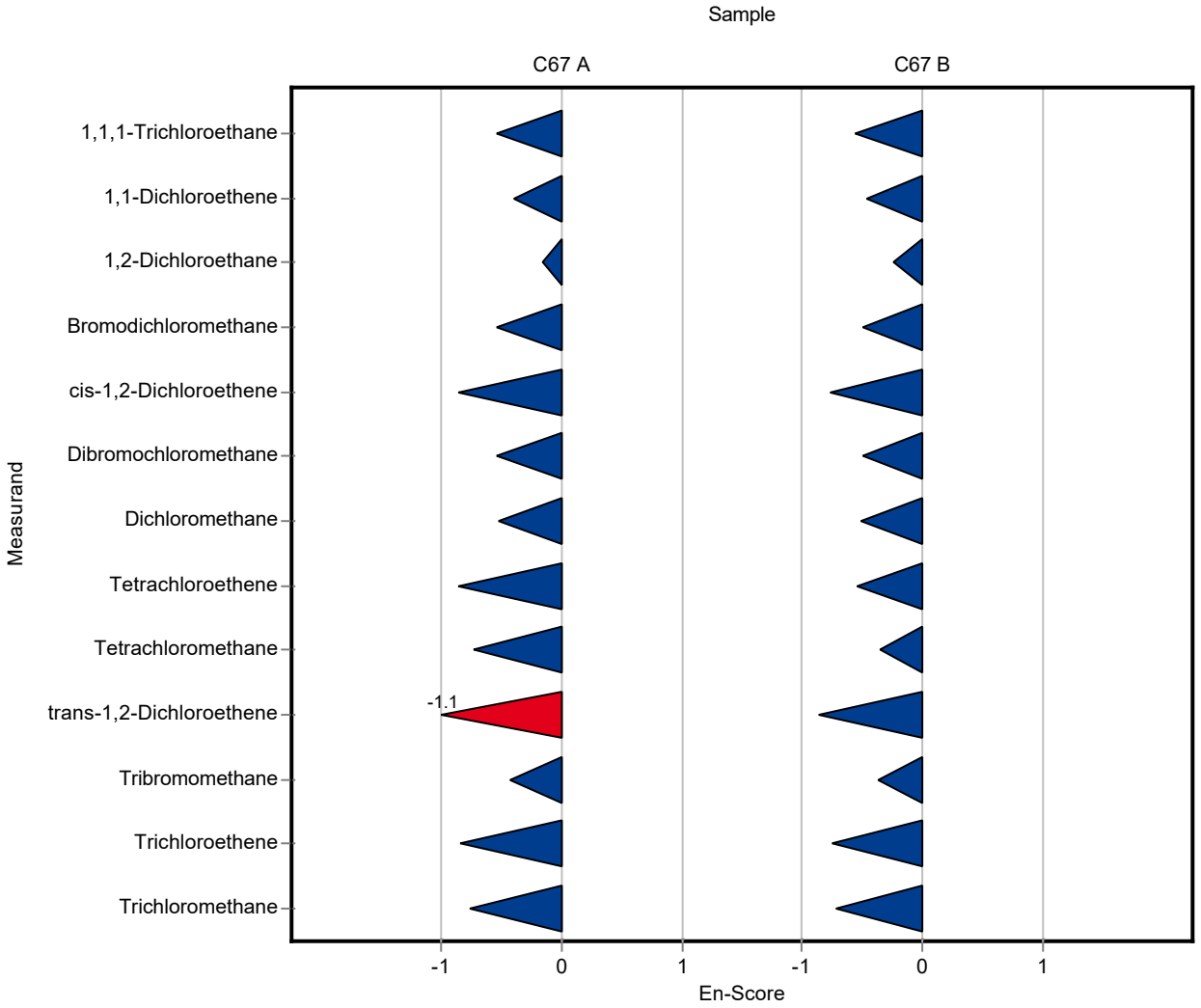
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.402 ± 0.091	0.0758	79.6	-0.55
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.311 ± 0.091	0.0663	79.7	-0.40
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.12 ± 0.26	0.156	93.3	-0.15
Bromodichloromethane	µg/l	1.91 ± 0.156	1.43 ± 0.43	0.191	74.9	-0.55
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.469 ± 0.091	0.168	72.7	-0.86
Dibromochloromethane	µg/l	1.28 ± 0.081	1 ± 0.254	0.154	78.1	-0.55
Dichloromethane	µg/l	1.33 ± 0.152	1.03 ± 0.27	0.173	77.6	-0.53
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.218 ± 0.061	0.125	64.4	-0.86
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.208 ± 0.055	0.0954	69.8	-0.74
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.344 ± 0.089	0.216	58.9	-1.12
Tribromomethane	µg/l	1.52 ± 0.118	1.24 ± 0.32	0.182	81.8	-0.42
Trichloroethene	µg/l	0.641 ± 0.0838	0.448 ± 0.107	0.16	69.9	-0.84
Trichloromethane	µg/l	0.72 ± 0.0914	0.538 ± 0.11	0.0935	74.8	-0.76

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	7.77 ± 1.76	1.48	78.5	-0.56
1,1-Dichloroethene	µg/l	7.62 ± 1.07	5.94 ± 1.75	1.29	78	-0.46
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11.1 ± 2.5	1.6	90.1	-0.24
Bromodichloromethane	µg/l	12 ± 0.981	9.19 ± 2.76	1.2	76.8	-0.50
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.51 ± 1.06	1.83	75.3	-0.76
Dibromochloromethane	µg/l	14.8 ± 0.934	11.82 ± 3	1.78	79.7	-0.50
Dichloromethane	µg/l	12.4 ± 1.07	9.73 ± 2.57	1.62	78.2	-0.52
Tetrachloroethene	µg/l	14.1 ± 2.26	10.62 ± 2.98	4.22	75.5	-0.54
Tetrachloromethane	µg/l	10.6 ± 1.69	8.81 ± 2.34	3.07	83.2	-0.36
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	4.34 ± 1.12	1.96	66.4	-0.87
Tribromomethane	µg/l	7.68 ± 0.493	6.45 ± 1.69	0.921	84	-0.36
Trichloroethene	µg/l	12.6 ± 1.99	8.99 ± 2.15	3.77	71.6	-0.75
Trichloromethane	µg/l	13.8 ± 1.33	10.5 ± 2.22	1.79	76	-0.71

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0004



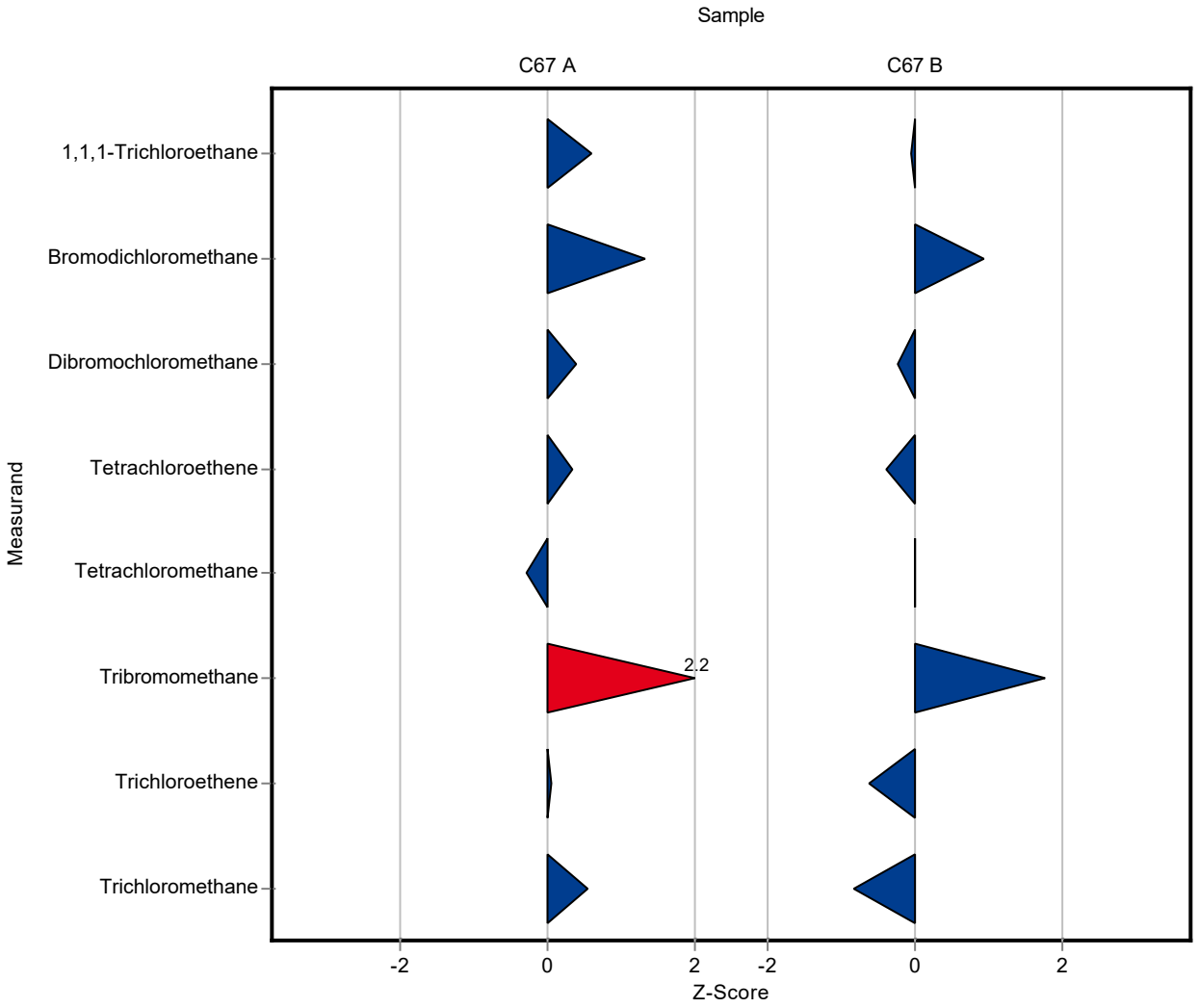
Summary of results Volatile halogenated hydrocarbons (VHH) - C67 Labcode: LC0005

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.1	0.0758	109	0.59
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	2.16 ± 0.22	0.191	113	1.32
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	1.34 ± 0.14	0.154	105	0.39
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.38 ± 0.1	0.125	112	0.33
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.27 ± 0.08	0.0954	90.6	-0.29
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	1.92 ± 0.19	0.182	127	2.22
Trichloroethene	µg/l	0.641 ± 0.0838	0.65 ± 0.08	0.16	101	0.06
Trichloromethane	µg/l	0.72 ± 0.0914	0.77 ± 0.08	0.0935	107	0.54

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.8 ± 0.6	1.48	99.1	-0.06
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	13.1 ± 0.6	1.2	109	0.94
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	14.4 ± 1	1.78	97.1	-0.24
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	12.4 ± 0.9	4.22	88.1	-0.40
Tetrachloromethane	µg/l	10.6 ± 1.69	10.6 ± 0.9	3.07	100	0.00
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	9.3 ± 1	0.921	121	1.76
Trichloroethene	µg/l	12.6 ± 1.99	10.2 ± 0.8	3.77	81.2	-0.63
Trichloromethane	µg/l	13.8 ± 1.33	12.3 ± 1	1.79	89.1	-0.84


Sample
C67 A
C67 B
1,1,1-Trichloroethane
Bromodichloromethane
Dibromochloromethane
Tetrachloroethene
Tetrachloromethane
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
2.2
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0005

Sample: C67A

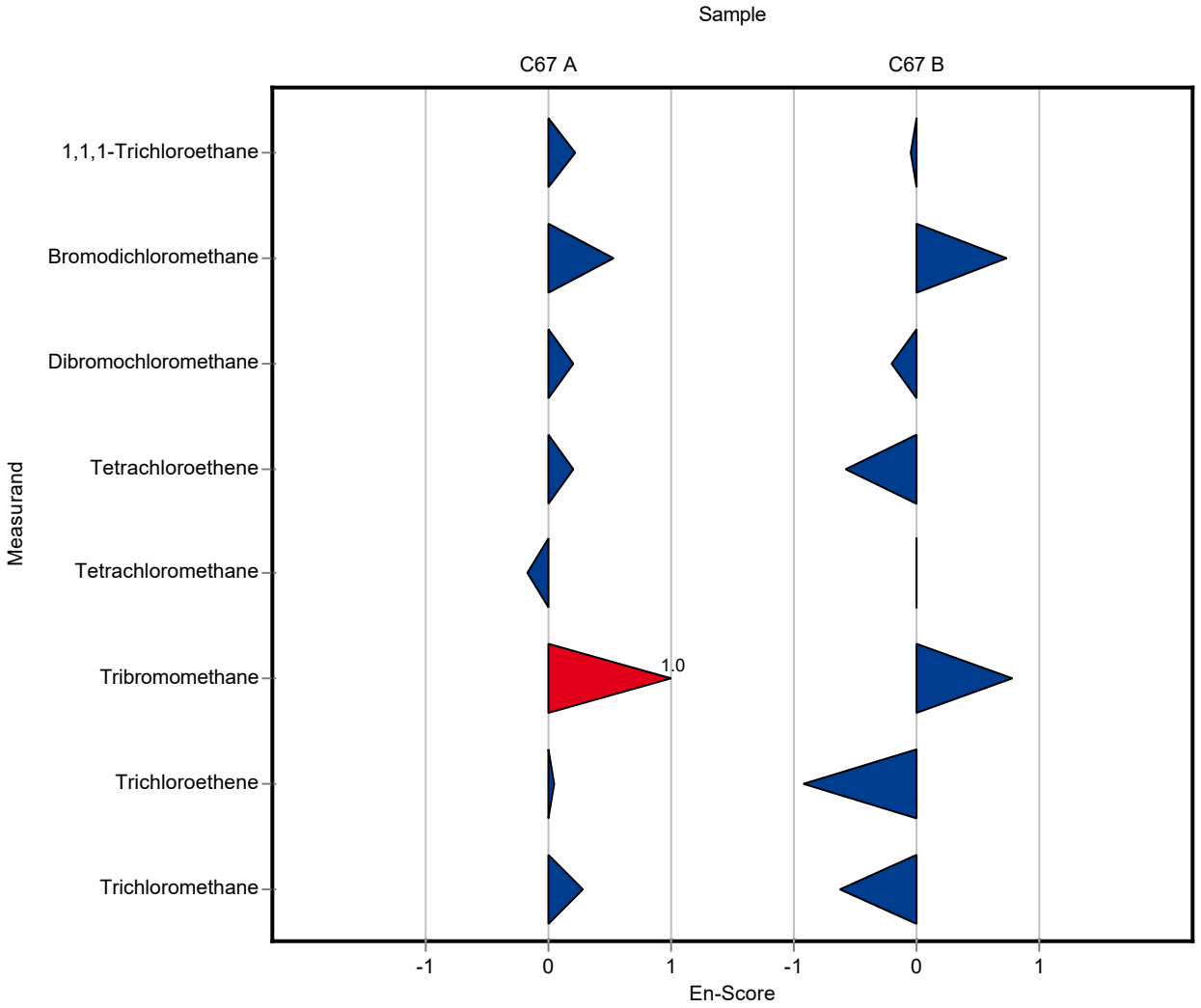
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.1	0.0758	109	0.22
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	2.16 ± 0.22	0.191	113	0.54
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	1.34 ± 0.14	0.154	105	0.20
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.38 ± 0.1	0.125	112	0.20
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.27 ± 0.08	0.0954	90.6	-0.17
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	1.92 ± 0.19	0.182	127	1.01
Trichloroethene	µg/l	0.641 ± 0.0838	0.65 ± 0.08	0.16	101	0.05
Trichloromethane	µg/l	0.72 ± 0.0914	0.77 ± 0.08	0.0935	107	0.27

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.8 ± 0.6	1.48	99.1	-0.05
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	13.1 ± 0.6	1.2	109	0.73
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	14.4 ± 1	1.78	97.1	-0.20
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	12.4 ± 0.9	4.22	88.1	-0.58
Tetrachloromethane	µg/l	10.6 ± 1.69	10.6 ± 0.9	3.07	100	0.00
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	9.3 ± 1	0.921	121	0.79
Trichloroethene	µg/l	12.6 ± 1.99	10.2 ± 0.8	3.77	81.2	-0.92
Trichloromethane	µg/l	13.8 ± 1.33	12.3 ± 1	1.79	89.1	-0.63

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0005

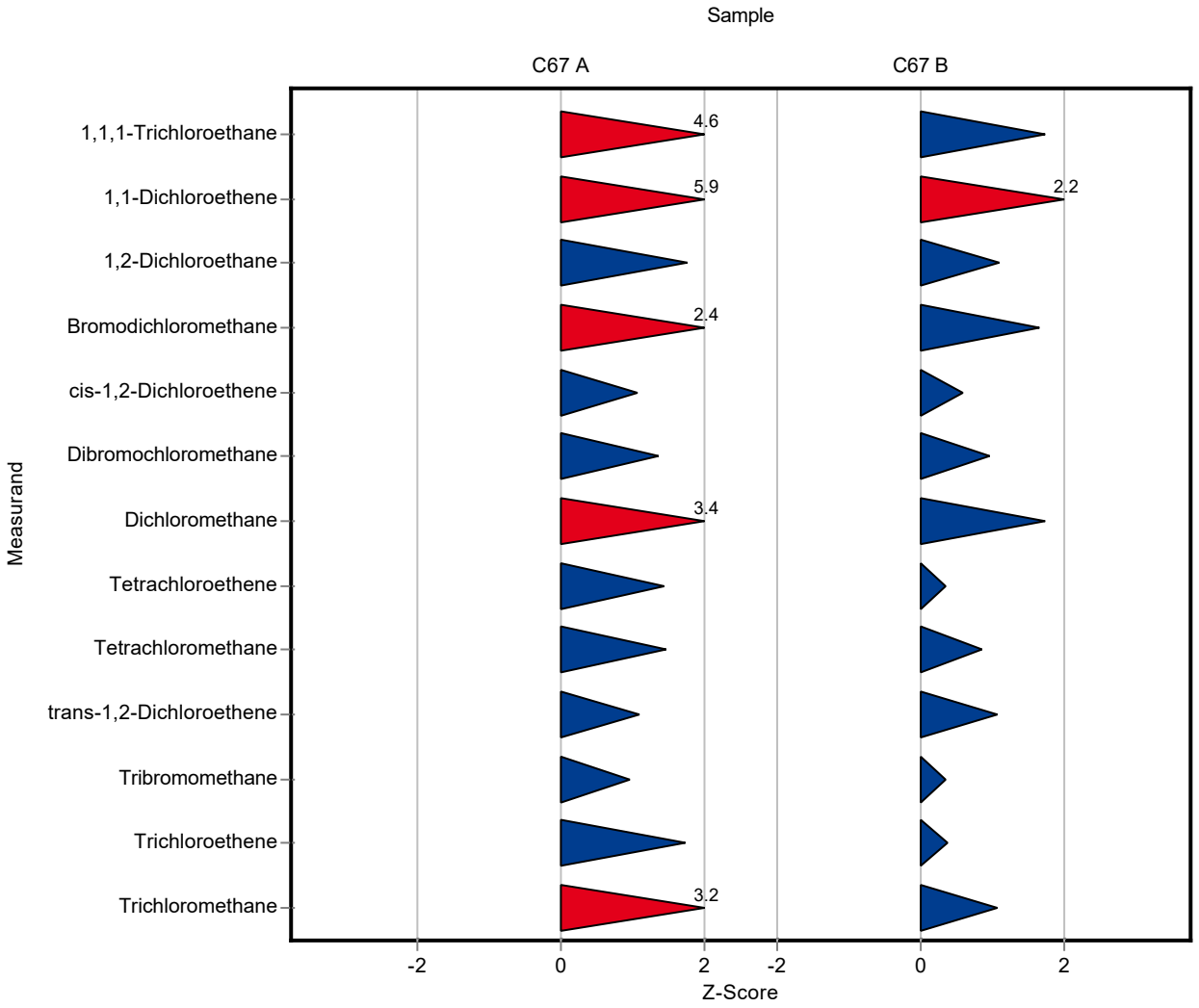


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.853 ± 0.222	0.0758	169	4.59
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.784 ± 0.204	0.0663	201	5.94
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.476 ± 0.384	0.156	123	1.76
Bromodichloromethane	µg/l	1.91 ± 0.156	2.365 ± 0.615	0.191	124	2.39
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.823 ± 0.214	0.168	128	1.06
Dibromochloromethane	µg/l	1.28 ± 0.081	1.487 ± 0.387	0.154	116	1.34
Dichloromethane	µg/l	1.33 ± 0.152	1.91 ± 0.497	0.173	144	3.37
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.52 ± 0.135	0.125	154	1.45
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.438 ± 0.114	0.0954	147	1.47
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.817 ± 0.212	0.216	140	1.08
Tribromomethane	µg/l	1.52 ± 0.118	1.692 ± 0.44	0.182	112	0.96
Trichloroethene	µg/l	0.641 ± 0.0838	0.919 ± 0.239	0.16	143	1.74
Trichloromethane	µg/l	0.72 ± 0.0914	1.023 ± 0.266	0.0935	142	3.24

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	12.46 ± 3.24	1.48	126	1.73
1,1-Dichloroethene	µg/l	7.62 ± 1.07	10.44 ± 2.71	1.29	137	2.18
1,2-Dichloroethane	µg/l	12.3 ± 0.9	14.05 ± 3.65	1.6	114	1.08
Bromodichloromethane	µg/l	12 ± 0.981	13.96 ± 3.63	1.2	117	1.66
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	8.36 ± 2.17	1.83	114	0.57
Dibromochloromethane	µg/l	14.8 ± 0.934	16.55 ± 4.3	1.78	112	0.96
Dichloromethane	µg/l	12.4 ± 1.07	15.23 ± 3.96	1.62	122	1.72
Tetrachloroethene	µg/l	14.1 ± 2.26	15.48 ± 4.03	4.22	110	0.33
Tetrachloromethane	µg/l	10.6 ± 1.69	13.16 ± 3.42	3.07	124	0.84
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	8.64 ± 2.25	1.96	132	1.07
Tribromomethane	µg/l	7.68 ± 0.493	8 ± 2.08	0.921	104	0.35
Trichloroethene	µg/l	12.6 ± 1.99	13.97 ± 3.63	3.77	111	0.37
Trichloromethane	µg/l	13.8 ± 1.33	15.7 ± 4.08	1.79	114	1.05


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
4.6
5.9
2.4
3.4
3.2
2.2
-2
0
2
-2
0
2
Z-Score

Sample: C67A

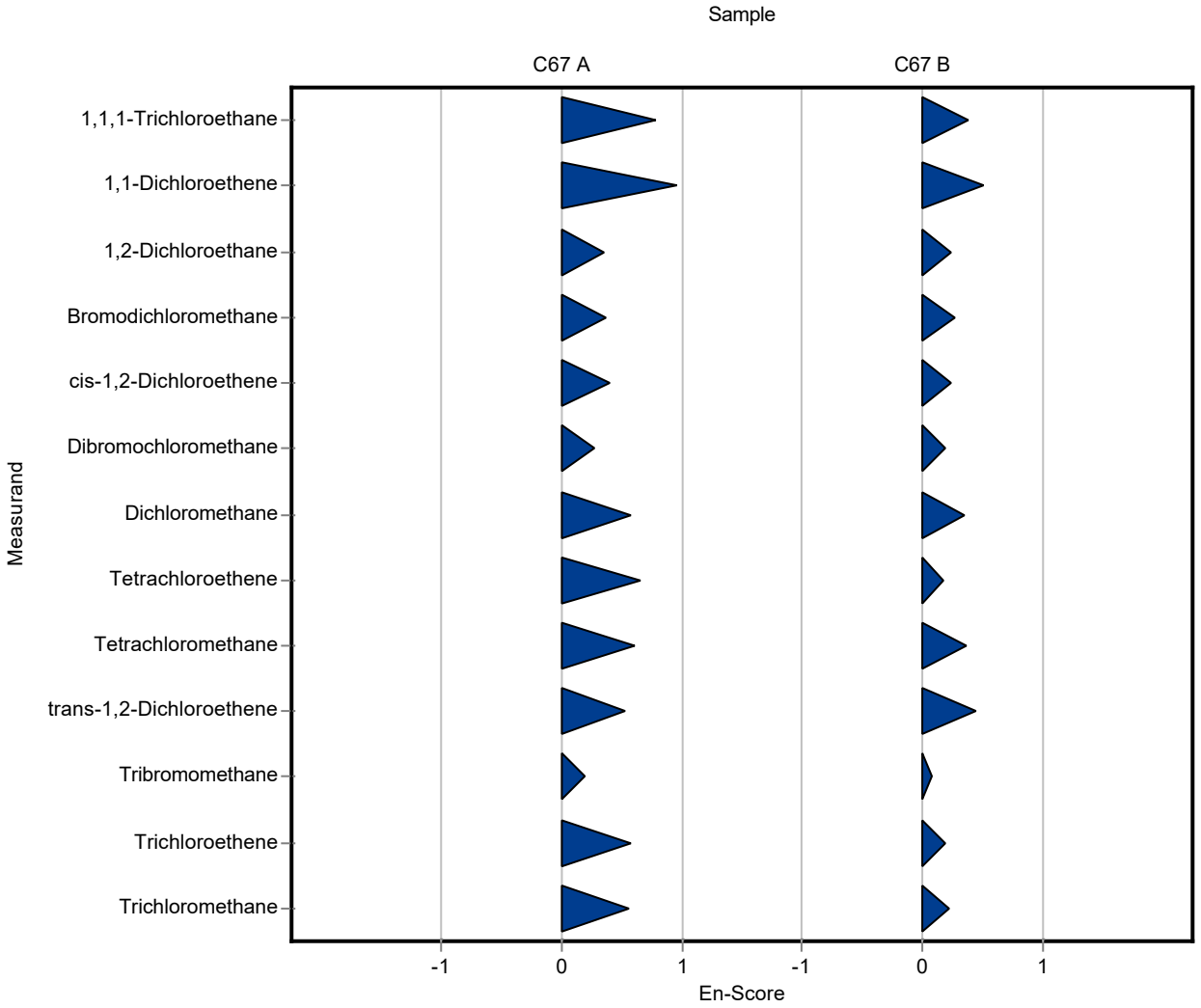
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.853 ± 0.222	0.0758	169	0.78
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.784 ± 0.204	0.0663	201	0.95
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.476 ± 0.384	0.156	123	0.36
Bromodichloromethane	µg/l	1.91 ± 0.156	2.365 ± 0.615	0.191	124	0.37
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.823 ± 0.214	0.168	128	0.41
Dibromochloromethane	µg/l	1.28 ± 0.081	1.487 ± 0.387	0.154	116	0.27
Dichloromethane	µg/l	1.33 ± 0.152	1.91 ± 0.497	0.173	144	0.58
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.52 ± 0.135	0.125	154	0.65
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.438 ± 0.114	0.0954	147	0.60
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.817 ± 0.212	0.216	140	0.53
Tribromomethane	µg/l	1.52 ± 0.118	1.692 ± 0.44	0.182	112	0.20
Trichloroethene	µg/l	0.641 ± 0.0838	0.919 ± 0.239	0.16	143	0.57
Trichloromethane	µg/l	0.72 ± 0.0914	1.023 ± 0.266	0.0935	142	0.56

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	12.46 ± 3.24	1.48	126	0.39
1,1-Dichloroethene	µg/l	7.62 ± 1.07	10.44 ± 2.71	1.29	137	0.51
1,2-Dichloroethane	µg/l	12.3 ± 0.9	14.05 ± 3.65	1.6	114	0.24
Bromodichloromethane	µg/l	12 ± 0.981	13.96 ± 3.63	1.2	117	0.27
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	8.36 ± 2.17	1.83	114	0.23
Dibromochloromethane	µg/l	14.8 ± 0.934	16.55 ± 4.3	1.78	112	0.20
Dichloromethane	µg/l	12.4 ± 1.07	15.23 ± 3.96	1.62	122	0.35
Tetrachloroethene	µg/l	14.1 ± 2.26	15.48 ± 4.03	4.22	110	0.17
Tetrachloromethane	µg/l	10.6 ± 1.69	13.16 ± 3.42	3.07	124	0.37
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	8.64 ± 2.25	1.96	132	0.45
Tribromomethane	µg/l	7.68 ± 0.493	8 ± 2.08	0.921	104	0.08
Trichloroethene	µg/l	12.6 ± 1.99	13.97 ± 3.63	3.77	111	0.19
Trichloromethane	µg/l	13.8 ± 1.33	15.7 ± 4.08	1.79	114	0.23

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0006

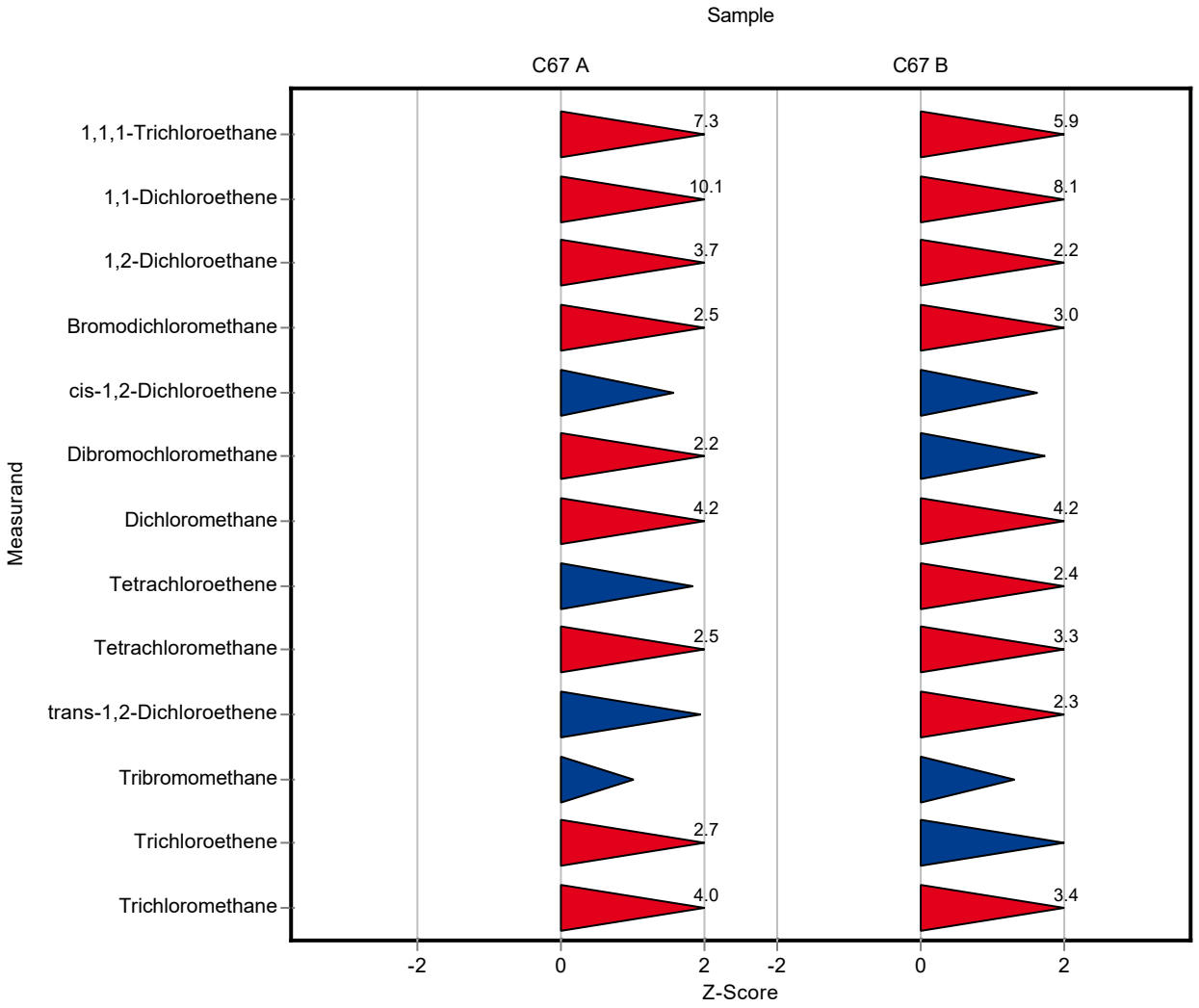


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	1.055 ± 0.158	0.0758	209	7.26
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	1.057 ± 0.38	0.0663	271	10.06
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.774 ± 0.639	0.156	148	3.67
Bromodichloromethane	µg/l	1.91 ± 0.156	2.387 ± 0.613	0.191	125	2.51
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.907 ± 0.296	0.168	141	1.56
Dibromochloromethane	µg/l	1.28 ± 0.081	1.618 ± 0.275	0.154	126	2.20
Dichloromethane	µg/l	1.33 ± 0.152	2.061 ± 0.64	0.173	155	4.25
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.567 ± 0.147	0.125	168	1.82
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.536 ± 0.017	0.0954	180	2.49
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	1.001 ± 0.24	0.216	171	1.93
Tribromomethane	µg/l	1.52 ± 0.118	1.701 ± 0.34	0.182	112	1.01
Trichloroethene	µg/l	0.641 ± 0.0838	1.07 ± 0.343	0.16	167	2.68
Trichloromethane	µg/l	0.72 ± 0.0914	1.093 ± 0.219	0.0935	152	3.99

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	18.628 ± 2.794	1.48	188	5.89
1,1-Dichloroethene	µg/l	7.62 ± 1.07	18.093 ± 6.55	1.29	238	8.09
1,2-Dichloroethane	µg/l	12.3 ± 0.9	15.767 ± 5.676	1.6	128	2.15
Bromodichloromethane	µg/l	12 ± 0.981	15.538 ± 3.99	1.2	130	2.98
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	10.283 ± 3.352	1.83	141	1.62
Dibromochloromethane	µg/l	14.8 ± 0.934	17.889 ± 3.04	1.78	121	1.72
Dichloromethane	µg/l	12.4 ± 1.07	19.316 ± 5.988	1.62	155	4.25
Tetrachloroethene	µg/l	14.1 ± 2.26	24.092 ± 6.264	4.22	171	2.37
Tetrachloromethane	µg/l	10.6 ± 1.69	20.666 ± 0.64	3.07	195	3.28
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	10.964 ± 2.631	1.96	168	2.26
Tribromomethane	µg/l	7.68 ± 0.493	8.889 ± 1.778	0.921	116	1.31
Trichloroethene	µg/l	12.6 ± 1.99	20.091 ± 6.63	3.77	160	2.00
Trichloromethane	µg/l	13.8 ± 1.33	19.904 ± 3.98	1.79	144	3.40


Sample
C67 A
C67 B
Measurand
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
7.3
10.1
3.7
2.5
2.2
4.2
2.5
2.7
4.0
5.9
8.1
2.2
3.0
4.2
2.4
3.3
2.3
3.4
-2
0
2
-2
0
2
Z-Score

Sample: C67A

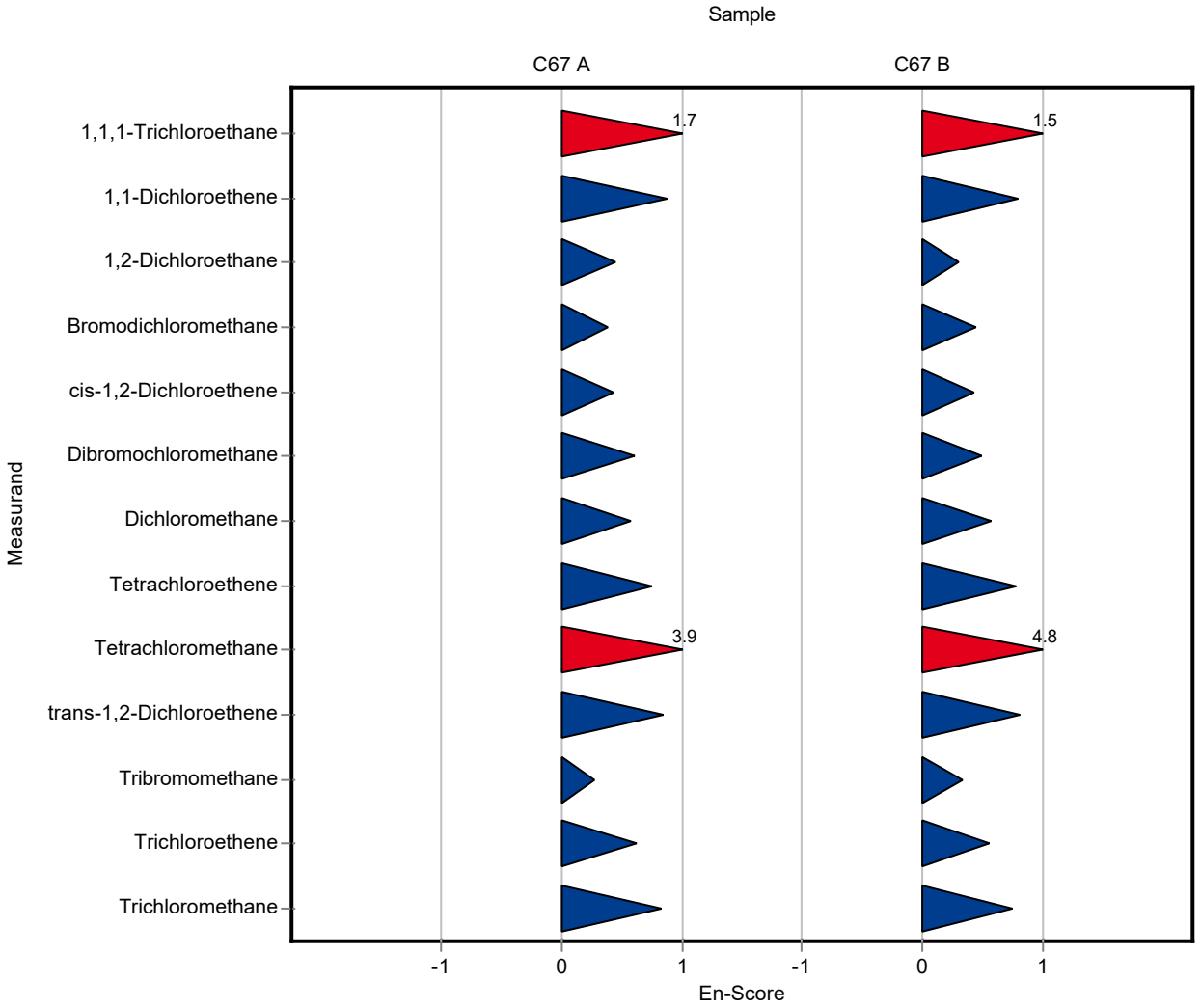
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	1.055 ± 0.158	0.0758	209	1.72
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	1.057 ± 0.38	0.0663	271	0.87
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.774 ± 0.639	0.156	148	0.45
Bromodichloromethane	µg/l	1.91 ± 0.156	2.387 ± 0.613	0.191	125	0.39
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.907 ± 0.296	0.168	141	0.44
Dibromochloromethane	µg/l	1.28 ± 0.081	1.618 ± 0.275	0.154	126	0.61
Dichloromethane	µg/l	1.33 ± 0.152	2.061 ± 0.64	0.173	155	0.57
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.567 ± 0.147	0.125	168	0.76
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.536 ± 0.017	0.0954	180	3.86
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	1.001 ± 0.24	0.216	171	0.84
Tribromomethane	µg/l	1.52 ± 0.118	1.701 ± 0.34	0.182	112	0.27
Trichloroethene	µg/l	0.641 ± 0.0838	1.07 ± 0.343	0.16	167	0.62
Trichloromethane	µg/l	0.72 ± 0.0914	1.093 ± 0.219	0.0935	152	0.83

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	18.628 ± 2.794	1.48	188	1.52
1,1-Dichloroethene	µg/l	7.62 ± 1.07	18.093 ± 6.55	1.29	238	0.80
1,2-Dichloroethane	µg/l	12.3 ± 0.9	15.767 ± 5.676	1.6	128	0.30
Bromodichloromethane	µg/l	12 ± 0.981	15.538 ± 3.99	1.2	130	0.44
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	10.283 ± 3.352	1.83	141	0.44
Dibromochloromethane	µg/l	14.8 ± 0.934	17.889 ± 3.04	1.78	121	0.50
Dichloromethane	µg/l	12.4 ± 1.07	19.316 ± 5.988	1.62	155	0.57
Tetrachloroethene	µg/l	14.1 ± 2.26	24.092 ± 6.264	4.22	171	0.79
Tetrachloromethane	µg/l	10.6 ± 1.69	20.666 ± 0.64	3.07	195	4.75
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	10.964 ± 2.631	1.96	168	0.82
Tribromomethane	µg/l	7.68 ± 0.493	8.889 ± 1.778	0.921	116	0.34
Trichloroethene	µg/l	12.6 ± 1.99	20.091 ± 6.63	3.77	160	0.56
Trichloromethane	µg/l	13.8 ± 1.33	19.904 ± 3.98	1.79	144	0.76

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0007

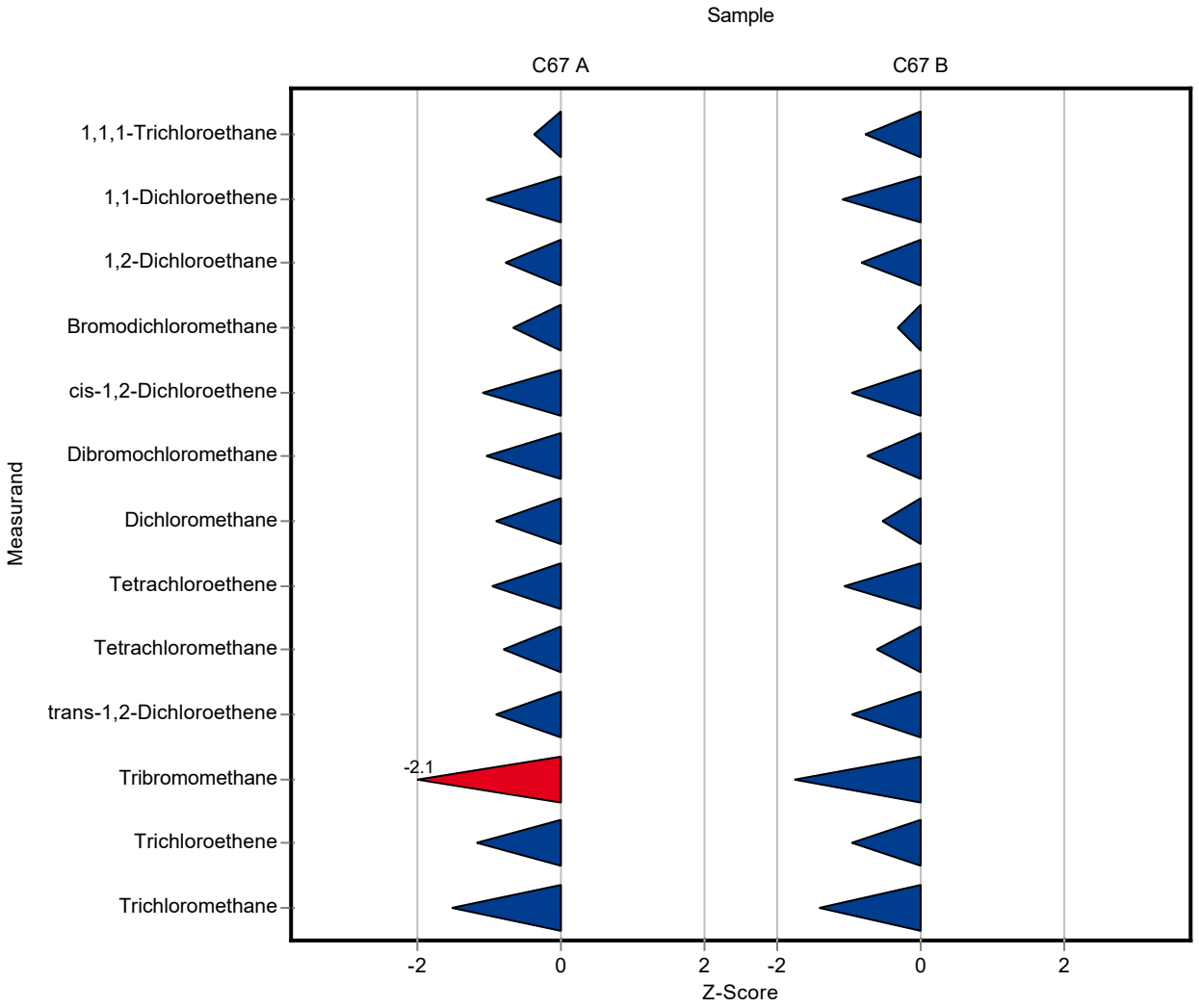


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.476 ± 0.004	0.0758	94.2	-0.38
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.322 ± 0.007	0.0663	82.6	-1.03
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.08 ± 0.05	0.156	89.9	-0.77
Bromodichloromethane	µg/l	1.91 ± 0.156	1.78 ± 0.101	0.191	93.3	-0.67
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.461 ± 0.012	0.168	71.4	-1.10
Dibromochloromethane	µg/l	1.28 ± 0.081	1.12 ± 0.061	0.154	87.5	-1.05
Dichloromethane	µg/l	1.33 ± 0.152	1.17 ± 0.114	0.173	88.1	-0.92
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.218 ± 0.003	0.125	64.4	-0.96
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.222 ± 0.002	0.0954	74.5	-0.80
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.388 ± 0.005	0.216	66.4	-0.91
Tribromomethane	µg/l	1.52 ± 0.118	1.13 ± 0.085	0.182	74.5	-2.12
Trichloroethene	µg/l	0.641 ± 0.0838	0.453 ± 0.007	0.16	70.7	-1.17
Trichloromethane	µg/l	0.72 ± 0.0914	0.578 ± 0.005	0.0935	80.3	-1.51

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	8.73 ± 0.721	1.48	88.2	-0.78
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.2 ± 0.502	1.29	81.4	-1.09
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11 ± 0.402	1.6	89.3	-0.82
Bromodichloromethane	µg/l	12 ± 0.981	11.6 ± 0.635	1.2	96.9	-0.31
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.58 ± 0.361	1.83	76.3	-0.95
Dibromochloromethane	µg/l	14.8 ± 0.934	13.5 ± 0.351	1.78	91	-0.75
Dichloromethane	µg/l	12.4 ± 1.07	11.6 ± 0.757	1.62	93.2	-0.52
Tetrachloroethene	µg/l	14.1 ± 2.26	9.55 ± 0.471	4.22	67.9	-1.07
Tetrachloromethane	µg/l	10.6 ± 1.69	8.74 ± 0.642	3.07	82.5	-0.60
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	4.64 ± 0.368	1.96	71	-0.97
Tribromomethane	µg/l	7.68 ± 0.493	6.06 ± 0.169	0.921	78.9	-1.76
Trichloroethene	µg/l	12.6 ± 1.99	8.99 ± 0.459	3.77	71.6	-0.95
Trichloromethane	µg/l	13.8 ± 1.33	11.3 ± 0.686	1.79	81.8	-1.40


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
-2.1
Measurand
-2
0
2
-2
0
2
Z-Score

Sample: C67A

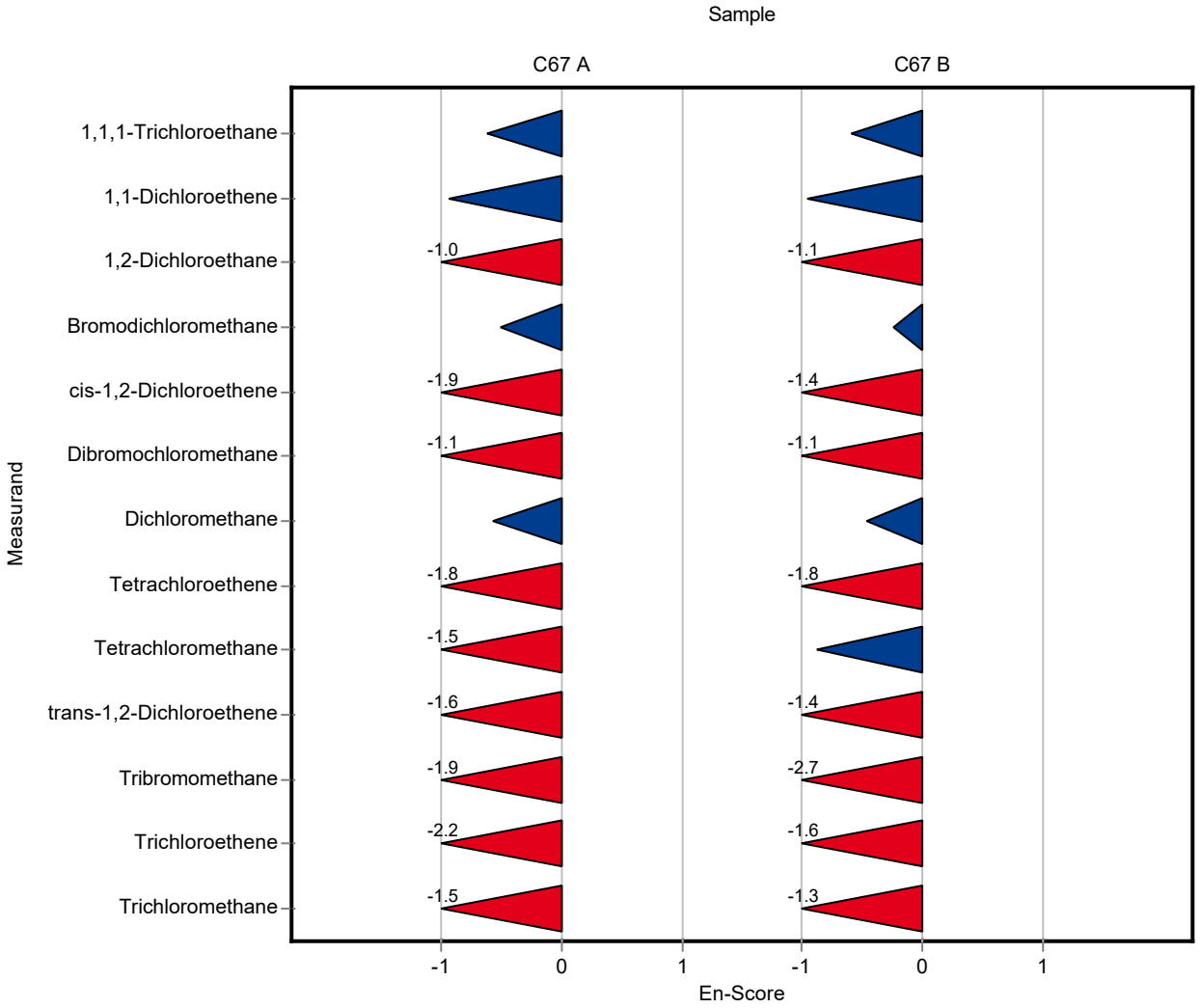
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.476 ± 0.004	0.0758	94.2	-0.63
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.322 ± 0.007	0.0663	82.6	-0.94
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.08 ± 0.05	0.156	89.9	-1.01
Bromodichloromethane	µg/l	1.91 ± 0.156	1.78 ± 0.101	0.191	93.3	-0.50
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.461 ± 0.012	0.168	71.4	-1.91
Dibromochloromethane	µg/l	1.28 ± 0.081	1.12 ± 0.061	0.154	87.5	-1.10
Dichloromethane	µg/l	1.33 ± 0.152	1.17 ± 0.114	0.173	88.1	-0.58
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.218 ± 0.003	0.125	64.4	-1.78
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.222 ± 0.002	0.0954	74.5	-1.48
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.388 ± 0.005	0.216	66.4	-1.64
Tribromomethane	µg/l	1.52 ± 0.118	1.13 ± 0.085	0.182	74.5	-1.87
Trichloroethene	µg/l	0.641 ± 0.0838	0.453 ± 0.007	0.16	70.7	-2.21
Trichloromethane	µg/l	0.72 ± 0.0914	0.578 ± 0.005	0.0935	80.3	-1.54

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	8.73 ± 0.721	1.48	88.2	-0.59
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.2 ± 0.502	1.29	81.4	-0.96
1,2-Dichloroethane	µg/l	12.3 ± 0.9	11 ± 0.402	1.6	89.3	-1.09
Bromodichloromethane	µg/l	12 ± 0.981	11.6 ± 0.635	1.2	96.9	-0.23
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.58 ± 0.361	1.83	76.3	-1.37
Dibromochloromethane	µg/l	14.8 ± 0.934	13.5 ± 0.351	1.78	91	-1.14
Dichloromethane	µg/l	12.4 ± 1.07	11.6 ± 0.757	1.62	93.2	-0.46
Tetrachloroethene	µg/l	14.1 ± 2.26	9.55 ± 0.471	4.22	67.9	-1.85
Tetrachloromethane	µg/l	10.6 ± 1.69	8.74 ± 0.642	3.07	82.5	-0.87
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	4.64 ± 0.368	1.96	71	-1.36
Tribromomethane	µg/l	7.68 ± 0.493	6.06 ± 0.169	0.921	78.9	-2.71
Trichloroethene	µg/l	12.6 ± 1.99	8.99 ± 0.459	3.77	71.6	-1.63
Trichloromethane	µg/l	13.8 ± 1.33	11.3 ± 0.686	1.79	81.8	-1.31

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0008

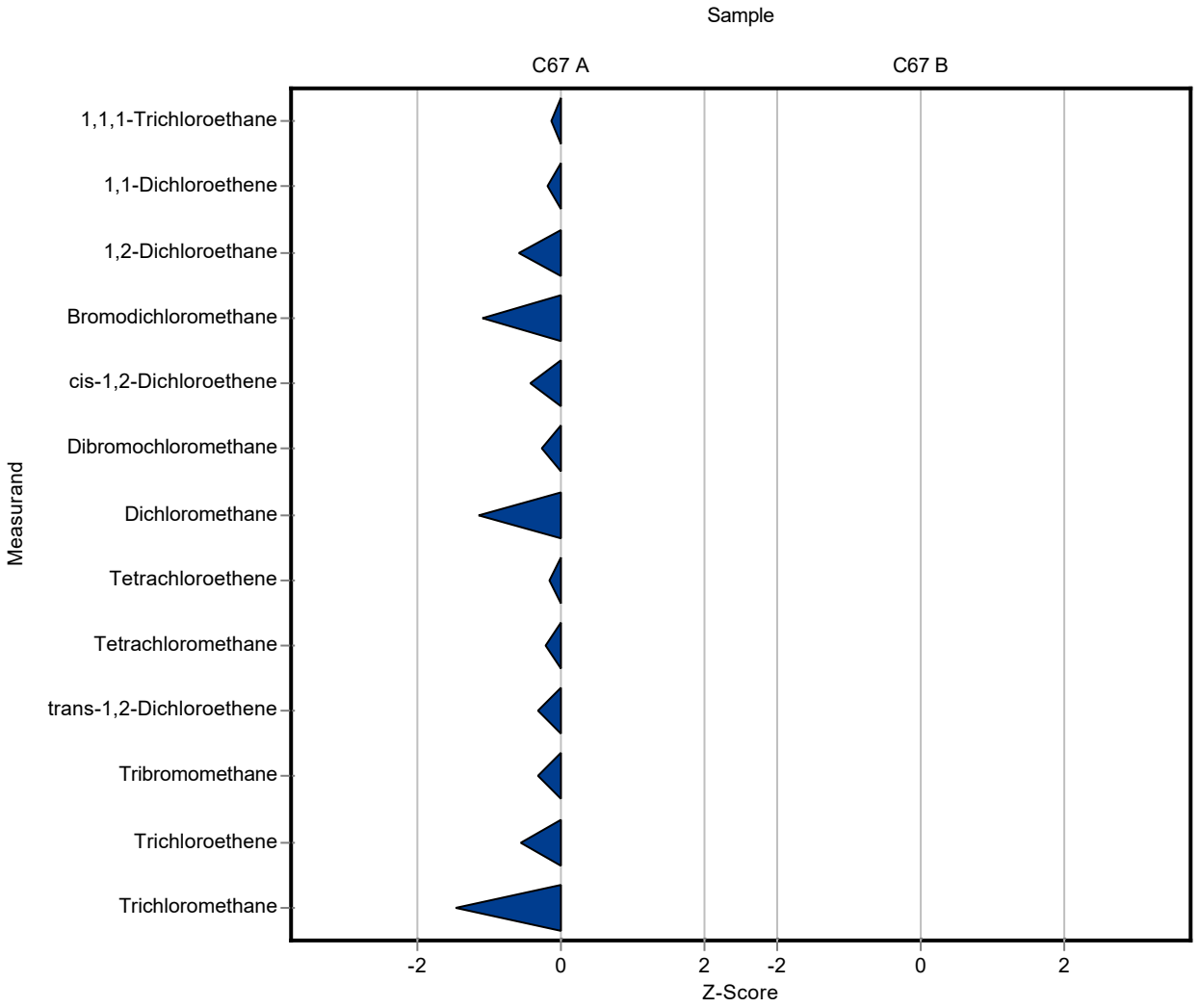


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.495 ± 0.082	0.0758	98	-0.13
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.377 ± 0.014	0.0663	96.7	-0.20
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.11 ± 0.121	0.156	92.4	-0.58
Bromodichloromethane	µg/l	1.91 ± 0.156	1.7 ± 0.1	0.191	89.1	-1.09
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.572 ± 0.057	0.168	88.7	-0.44
Dibromochloromethane	µg/l	1.28 ± 0.081	1.24 ± 0.092	0.154	96.8	-0.26
Dichloromethane	µg/l	1.33 ± 0.152	1.13 ± 0.097	0.173	85.1	-1.15
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.319 ± 0.009	0.125	94.2	-0.16
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.278 ± 0.003	0.0954	93.3	-0.21
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.516 ± 0.099	0.216	88.3	-0.32
Tribromomethane	µg/l	1.52 ± 0.118	1.46 ± 0.113	0.182	96.3	-0.31
Trichloroethene	µg/l	0.641 ± 0.0838	0.55 ± 0.052	0.16	85.8	-0.57
Trichloromethane	µg/l	0.72 ± 0.0914	0.583 ± 0.053	0.0935	81	-1.46

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	- ± -	1.48	-	-
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	- ± -	1.2	-	-
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	- ± -	1.78	-	-
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	- ± -	4.22	-	-
Tetrachloromethane	µg/l	10.6 ± 1.69	- ± -	3.07	-	-
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	- ± -	0.921	-	-
Trichloroethene	µg/l	12.6 ± 1.99	- ± -	3.77	-	-
Trichloromethane	µg/l	13.8 ± 1.33	- ± -	1.79	-	-


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0009

Sample: C67A

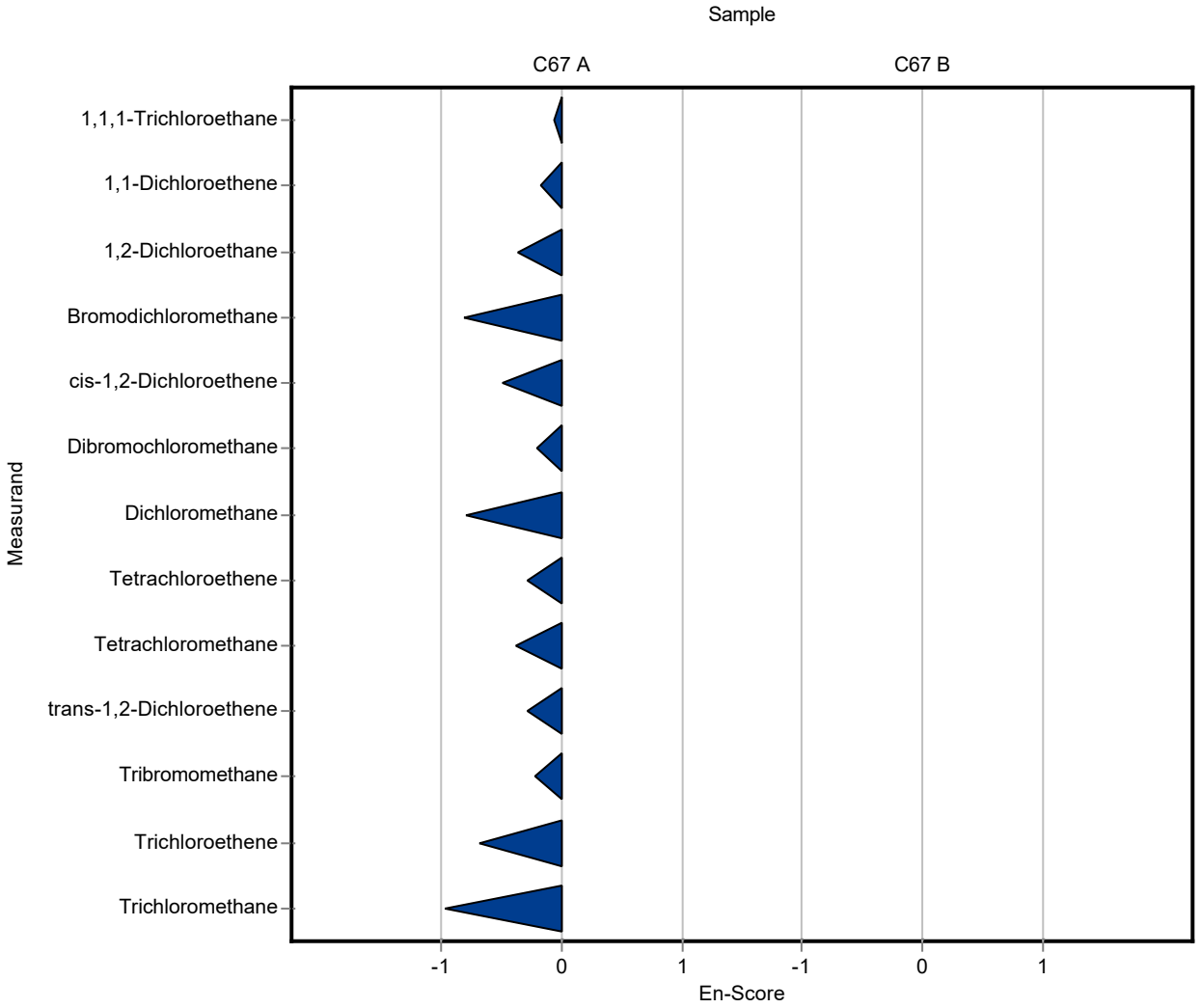
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.495 ± 0.082	0.0758	98	-0.06
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.377 ± 0.014	0.0663	96.7	-0.17
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.11 ± 0.121	0.156	92.4	-0.36
Bromodichloromethane	µg/l	1.91 ± 0.156	1.7 ± 0.1	0.191	89.1	-0.82
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.572 ± 0.057	0.168	88.7	-0.50
Dibromochloromethane	µg/l	1.28 ± 0.081	1.24 ± 0.092	0.154	96.8	-0.20
Dichloromethane	µg/l	1.33 ± 0.152	1.13 ± 0.097	0.173	85.1	-0.80
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.319 ± 0.009	0.125	94.2	-0.28
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.278 ± 0.003	0.0954	93.3	-0.39
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.516 ± 0.099	0.216	88.3	-0.30
Tribromomethane	µg/l	1.52 ± 0.118	1.46 ± 0.113	0.182	96.3	-0.22
Trichloroethene	µg/l	0.641 ± 0.0838	0.55 ± 0.052	0.16	85.8	-0.68
Trichloromethane	µg/l	0.72 ± 0.0914	0.583 ± 0.053	0.0935	81	-0.98

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	- ± -	1.48	-	-
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	- ± -	1.2	-	-
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	- ± -	1.78	-	-
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	- ± -	4.22	-	-
Tetrachloromethane	µg/l	10.6 ± 1.69	- ± -	3.07	-	-
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	- ± -	0.921	-	-
Trichloroethene	µg/l	12.6 ± 1.99	- ± -	3.77	-	-
Trichloromethane	µg/l	13.8 ± 1.33	- ± -	1.79	-	-

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0009

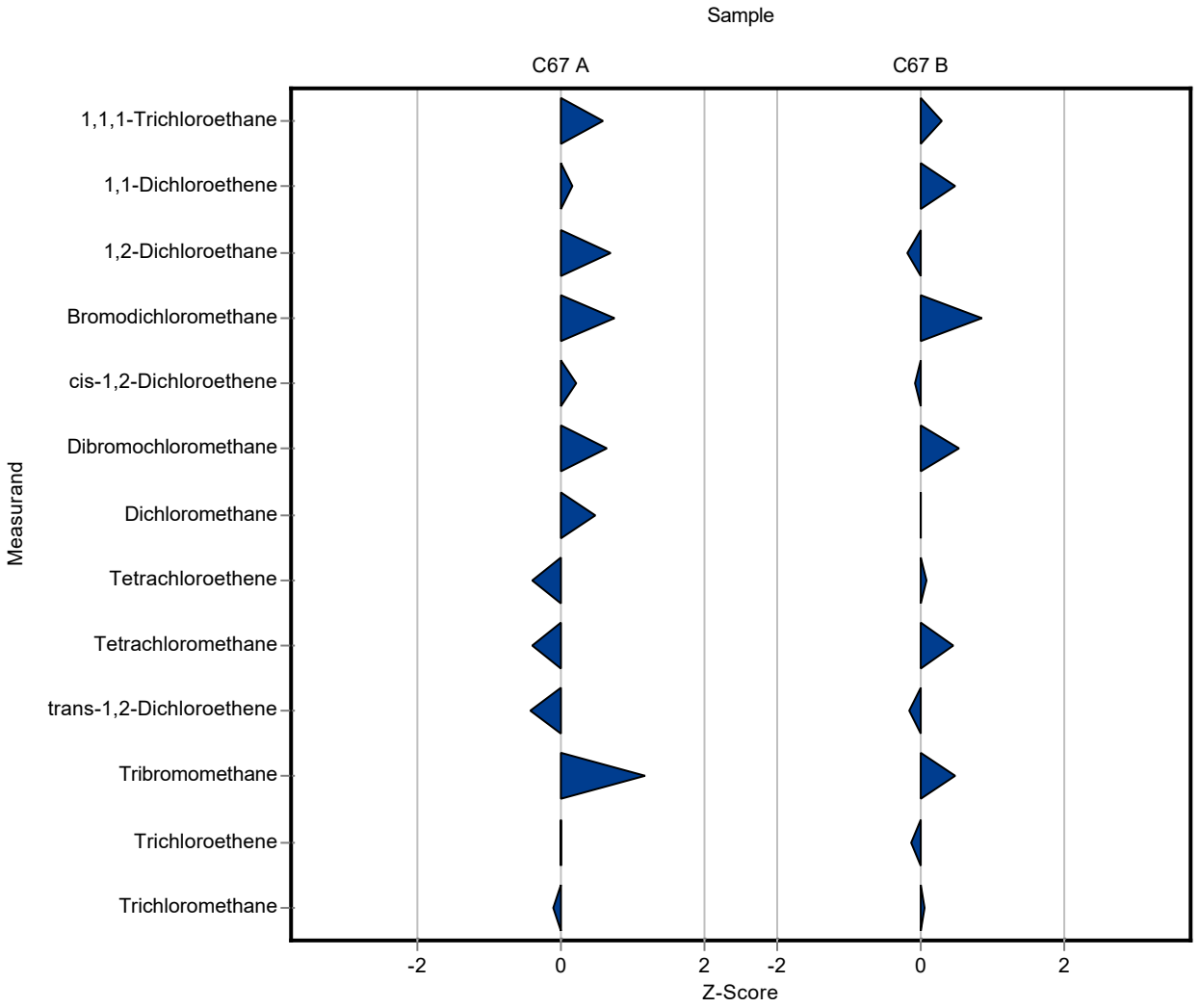


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.11	0.0758	109	0.59
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.4 ± 0.08	0.0663	103	0.15
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.31 ± 0.262	0.156	109	0.70
Bromodichloromethane	µg/l	1.91 ± 0.156	2.05 ± 0.41	0.191	107	0.74
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.68 ± 0.136	0.168	105	0.21
Dibromochloromethane	µg/l	1.28 ± 0.081	1.38 ± 0.276	0.154	108	0.65
Dichloromethane	µg/l	1.33 ± 0.152	1.41 ± 0.282	0.173	106	0.47
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.29 ± 0.058	0.125	85.7	-0.39
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.26 ± 0.052	0.0954	87.2	-0.40
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.49 ± 0.098	0.216	83.9	-0.44
Tribromomethane	µg/l	1.52 ± 0.118	1.73 ± 0.346	0.182	114	1.17
Trichloroethene	µg/l	0.641 ± 0.0838	0.64 ± 0.128	0.16	99.9	-0.01
Trichloromethane	µg/l	0.72 ± 0.0914	0.71 ± 0.142	0.0935	98.7	-0.10

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	10.33 ± 2.066	1.48	104	0.29
1,1-Dichloroethene	µg/l	7.62 ± 1.07	8.23 ± 1.646	1.29	108	0.47
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.03 ± 2.406	1.6	97.7	-0.18
Bromodichloromethane	µg/l	12 ± 0.981	12.99 ± 2.598	1.2	109	0.85
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.17 ± 1.434	1.83	98	-0.08
Dibromochloromethane	µg/l	14.8 ± 0.934	15.8 ± 3.16	1.78	107	0.54
Dichloromethane	µg/l	12.4 ± 1.07	12.43 ± 2.486	1.62	99.9	-0.01
Tetrachloroethene	µg/l	14.1 ± 2.26	14.37 ± 2.874	4.22	102	0.07
Tetrachloromethane	µg/l	10.6 ± 1.69	11.95 ± 2.39	3.07	113	0.44
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.21 ± 1.242	1.96	95	-0.17
Tribromomethane	µg/l	7.68 ± 0.493	8.13 ± 1.626	0.921	106	0.49
Trichloroethene	µg/l	12.6 ± 1.99	12.05 ± 2.41	3.77	95.9	-0.14
Trichloromethane	µg/l	13.8 ± 1.33	13.91 ± 2.782	1.79	101	0.06


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2
0
2
-2
0
2
Z-Score

Sample: C67A

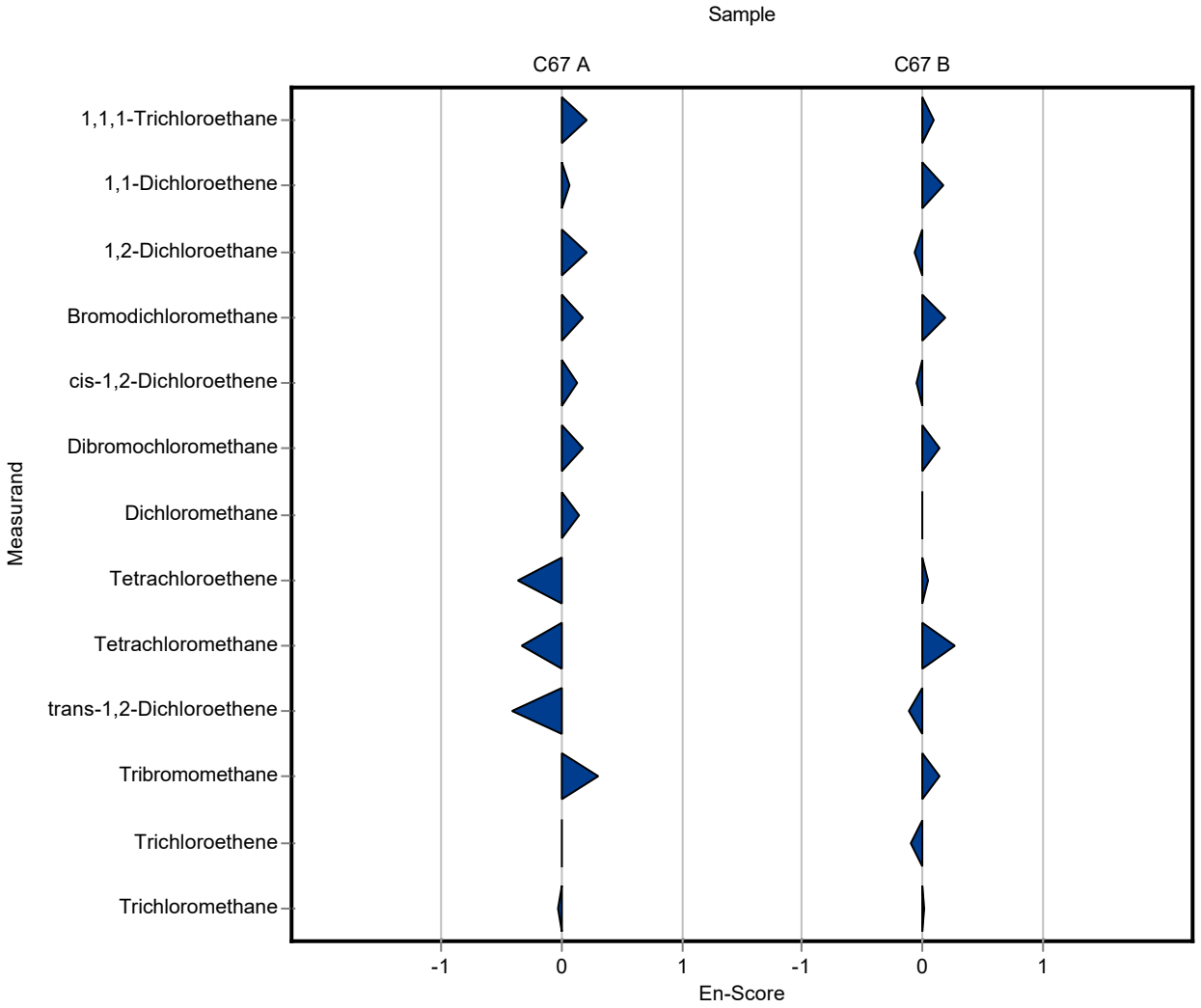
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.55 ± 0.11	0.0758	109	0.20
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.4 ± 0.08	0.0663	103	0.06
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.31 ± 0.262	0.156	109	0.21
Bromodichloromethane	µg/l	1.91 ± 0.156	2.05 ± 0.41	0.191	107	0.17
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.68 ± 0.136	0.168	105	0.12
Dibromochloromethane	µg/l	1.28 ± 0.081	1.38 ± 0.276	0.154	108	0.18
Dichloromethane	µg/l	1.33 ± 0.152	1.41 ± 0.282	0.173	106	0.14
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.29 ± 0.058	0.125	85.7	-0.36
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.26 ± 0.052	0.0954	87.2	-0.33
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.49 ± 0.098	0.216	83.9	-0.41
Tribromomethane	µg/l	1.52 ± 0.118	1.73 ± 0.346	0.182	114	0.30
Trichloroethene	µg/l	0.641 ± 0.0838	0.64 ± 0.128	0.16	99.9	0.00
Trichloromethane	µg/l	0.72 ± 0.0914	0.71 ± 0.142	0.0935	98.7	-0.03

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	10.33 ± 2.066	1.48	104	0.10
1,1-Dichloroethene	µg/l	7.62 ± 1.07	8.23 ± 1.646	1.29	108	0.18
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.03 ± 2.406	1.6	97.7	-0.06
Bromodichloromethane	µg/l	12 ± 0.981	12.99 ± 2.598	1.2	109	0.19
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.17 ± 1.434	1.83	98	-0.05
Dibromochloromethane	µg/l	14.8 ± 0.934	15.8 ± 3.16	1.78	107	0.15
Dichloromethane	µg/l	12.4 ± 1.07	12.43 ± 2.486	1.62	99.9	0.00
Tetrachloroethene	µg/l	14.1 ± 2.26	14.37 ± 2.874	4.22	102	0.05
Tetrachloromethane	µg/l	10.6 ± 1.69	11.95 ± 2.39	3.07	113	0.27
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.21 ± 1.242	1.96	95	-0.12
Tribromomethane	µg/l	7.68 ± 0.493	8.13 ± 1.626	0.921	106	0.14
Trichloroethene	µg/l	12.6 ± 1.99	12.05 ± 2.41	3.77	95.9	-0.10
Trichloromethane	µg/l	13.8 ± 1.33	13.91 ± 2.782	1.79	101	0.02

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0010

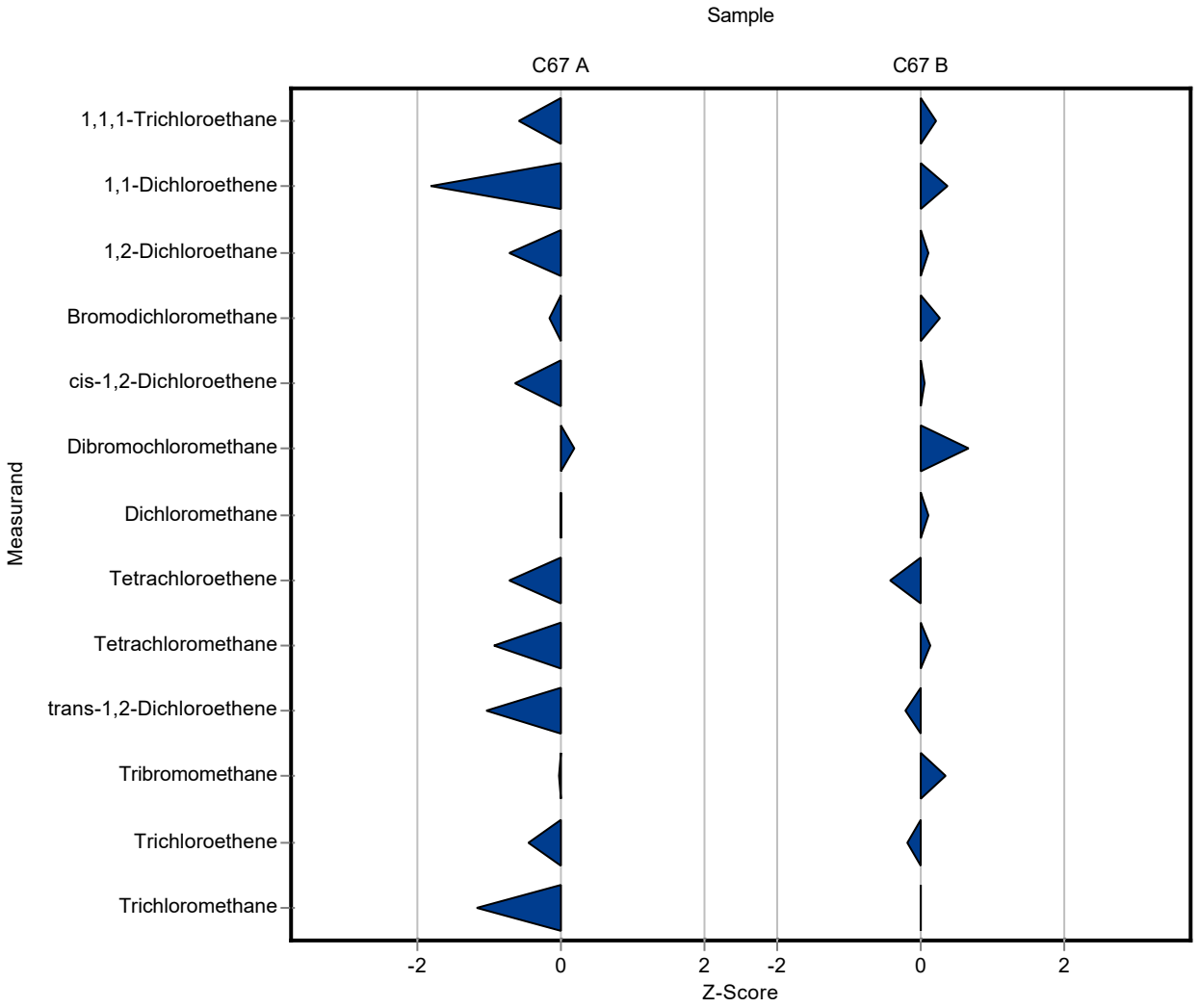


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.46 ± 0.08	0.0758	91.1	-0.60
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.27 ± 0.05	0.0663	69.2	-1.81
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.09 ± 0.2	0.156	90.8	-0.71
Bromodichloromethane	µg/l	1.91 ± 0.156	1.88 ± 0.34	0.191	98.5	-0.15
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.54 ± 0.1	0.168	83.7	-0.63
Dibromochloromethane	µg/l	1.28 ± 0.081	1.31 ± 0.24	0.154	102	0.19
Dichloromethane	µg/l	1.33 ± 0.152	1.33 ± 0.24	0.173	100	0.01
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.25 ± 0.05	0.125	73.9	-0.71
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.21 ± 0.04	0.0954	70.5	-0.92
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.36 ± 0.06	0.216	61.6	-1.04
Tribromomethane	µg/l	1.52 ± 0.118	1.51 ± 0.27	0.182	99.6	-0.04
Trichloroethene	µg/l	0.641 ± 0.0838	0.57 ± 0.1	0.16	88.9	-0.44
Trichloromethane	µg/l	0.72 ± 0.0914	0.61 ± 0.11	0.0935	84.8	-1.17

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	10.2 ± 1.8	1.48	103	0.21
1,1-Dichloroethene	µg/l	7.62 ± 1.07	8.1 ± 1.5	1.29	106	0.37
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.5 ± 2.3	1.6	101	0.11
Bromodichloromethane	µg/l	12 ± 0.981	12.3 ± 2.2	1.2	103	0.27
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.4 ± 1.3	1.83	101	0.05
Dibromochloromethane	µg/l	14.8 ± 0.934	16 ± 2.9	1.78	108	0.66
Dichloromethane	µg/l	12.4 ± 1.07	12.6 ± 2.3	1.62	101	0.09
Tetrachloroethene	µg/l	14.1 ± 2.26	12.3 ± 2.2	4.22	87.4	-0.42
Tetrachloromethane	µg/l	10.6 ± 1.69	11 ± 2	3.07	104	0.13
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.1 ± 1.1	1.96	93.4	-0.22
Tribromomethane	µg/l	7.68 ± 0.493	8 ± 1.5	0.921	104	0.35
Trichloroethene	µg/l	12.6 ± 1.99	11.9 ± 2.1	3.77	94.7	-0.18
Trichloromethane	µg/l	13.8 ± 1.33	13.8 ± 2.5	1.79	100	0.00


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

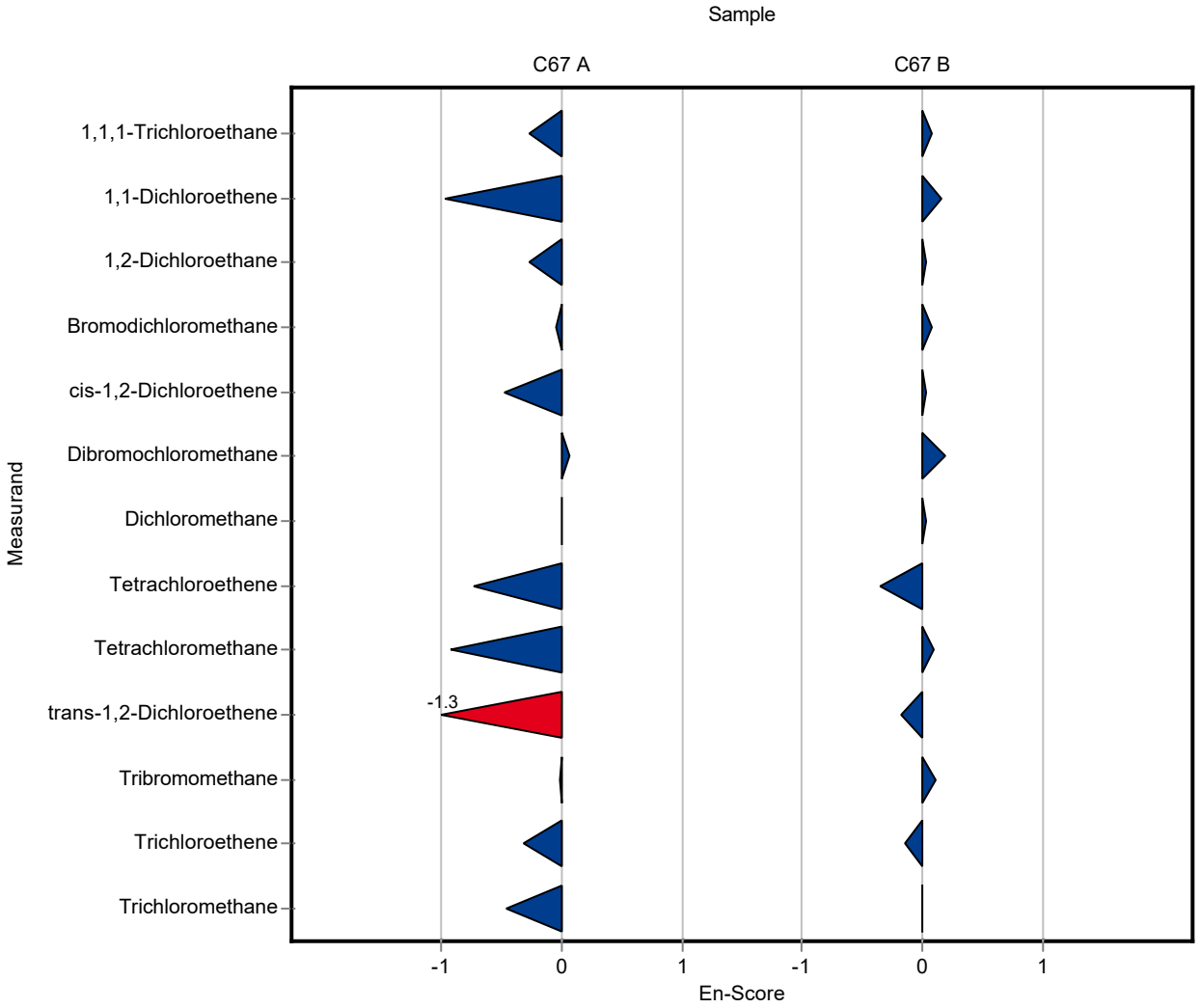
Labcode: LC0011

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.46 ± 0.08	0.0758	91.1	-0.27
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.27 ± 0.05	0.0663	69.2	-0.98
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.09 ± 0.2	0.156	90.8	-0.27
Bromodichloromethane	µg/l	1.91 ± 0.156	1.88 ± 0.34	0.191	98.5	-0.04
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.54 ± 0.1	0.168	83.7	-0.48
Dibromochloromethane	µg/l	1.28 ± 0.081	1.31 ± 0.24	0.154	102	0.06
Dichloromethane	µg/l	1.33 ± 0.152	1.33 ± 0.24	0.173	100	0.00
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.25 ± 0.05	0.125	73.9	-0.73
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.21 ± 0.04	0.0954	70.5	-0.93
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.36 ± 0.06	0.216	61.6	-1.33
Tribromomethane	µg/l	1.52 ± 0.118	1.51 ± 0.27	0.182	99.6	-0.01
Trichloroethene	µg/l	0.641 ± 0.0838	0.57 ± 0.1	0.16	88.9	-0.33
Trichloromethane	µg/l	0.72 ± 0.0914	0.61 ± 0.11	0.0935	84.8	-0.46

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	10.2 ± 1.8	1.48	103	0.08
1,1-Dichloroethene	µg/l	7.62 ± 1.07	8.1 ± 1.5	1.29	106	0.15
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12.5 ± 2.3	1.6	101	0.04
Bromodichloromethane	µg/l	12 ± 0.981	12.3 ± 2.2	1.2	103	0.07
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.4 ± 1.3	1.83	101	0.03
Dibromochloromethane	µg/l	14.8 ± 0.934	16 ± 2.9	1.78	108	0.20
Dichloromethane	µg/l	12.4 ± 1.07	12.6 ± 2.3	1.62	101	0.03
Tetrachloroethene	µg/l	14.1 ± 2.26	12.3 ± 2.2	4.22	87.4	-0.36
Tetrachloromethane	µg/l	10.6 ± 1.69	11 ± 2	3.07	104	0.09
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.1 ± 1.1	1.96	93.4	-0.17
Tribromomethane	µg/l	7.68 ± 0.493	8 ± 1.5	0.921	104	0.11
Trichloroethene	µg/l	12.6 ± 1.99	11.9 ± 2.1	3.77	94.7	-0.14
Trichloromethane	µg/l	13.8 ± 1.33	13.8 ± 2.5	1.79	100	0.00


Sample
C67 A
C67 B
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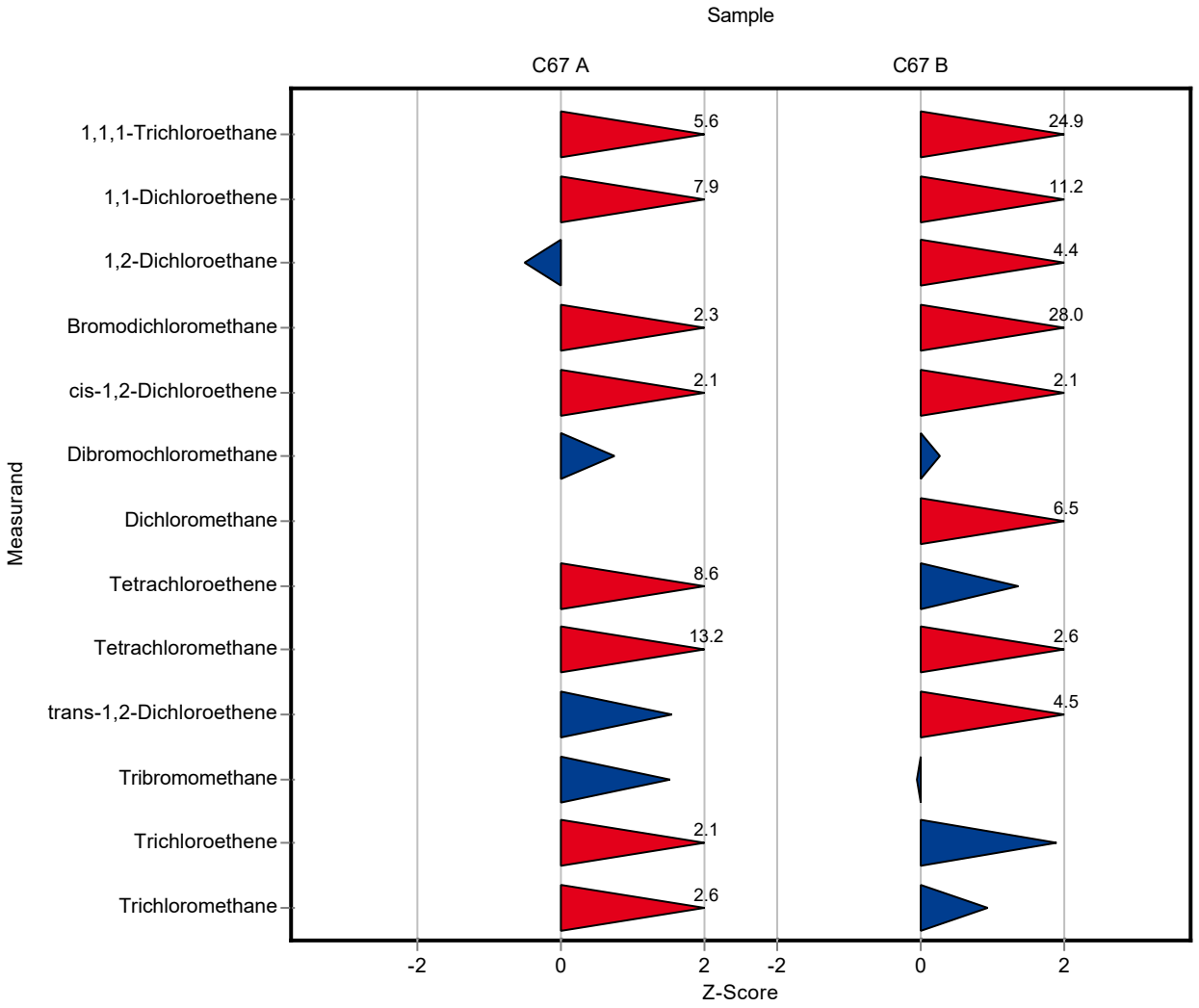
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-1.3
-1
0
1
-1
0
1
En-Score

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.929 ± 0.18	0.0758	184	5.60
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.911 ± 0.18	0.0663	234	7.86
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.124 ± 0.22	0.156	93.6	-0.49
Bromodichloromethane	µg/l	1.91 ± 0.156	2.354 ± 0.46	0.191	123	2.33
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.998 ± 0.2	0.168	155	2.10
Dibromochloromethane	µg/l	1.28 ± 0.081	1.394 ± 0.26	0.154	109	0.74
Dichloromethane	µg/l	1.33 ± 0.152	<5 (LOQ) ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	1.414 ± 0.28	0.125	418	8.59
Tetrachloromethane	µg/l	0.298 ± 0.0514	1.561 ± 0.3	0.0954	524	13.24
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.919 ± 0.18	0.216	157	1.55
Tribromomethane	µg/l	1.52 ± 0.118	1.794 ± 0.34	0.182	118	1.53
Trichloroethene	µg/l	0.641 ± 0.0838	0.974 ± 0.19	0.16	152	2.08
Trichloromethane	µg/l	0.72 ± 0.0914	0.959 ± 0.19	0.0935	133	2.56

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	46.9 ± 9.38	1.48	474	24.94
1,1-Dichloroethene	µg/l	7.62 ± 1.07	22.1 ± 4.42	1.29	290	11.19
1,2-Dichloroethane	µg/l	12.3 ± 0.9	19.4 ± 3.88	1.6	158	4.42
Bromodichloromethane	µg/l	12 ± 0.981	45.5 ± 9.1	1.2	380	28.00
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	11.1 ± 2.22	1.83	152	2.07
Dibromochloromethane	µg/l	14.8 ± 0.934	15.3 ± 3.06	1.78	103	0.26
Dichloromethane	µg/l	12.4 ± 1.07	22.9 ± 4.59	1.62	184	6.46
Tetrachloroethene	µg/l	14.1 ± 2.26	19.8 ± 3.96	4.22	141	1.36
Tetrachloromethane	µg/l	10.6 ± 1.69	18.7 ± 3.74	3.07	177	2.64
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	15.4 ± 3.08	1.96	236	4.52
Tribromomethane	µg/l	7.68 ± 0.493	7.63 ± 1.53	0.921	99.4	-0.05
Trichloroethene	µg/l	12.6 ± 1.99	19.7 ± 3.94	3.77	157	1.89
Trichloromethane	µg/l	13.8 ± 1.33	15.5 ± 3.1	1.79	112	0.94

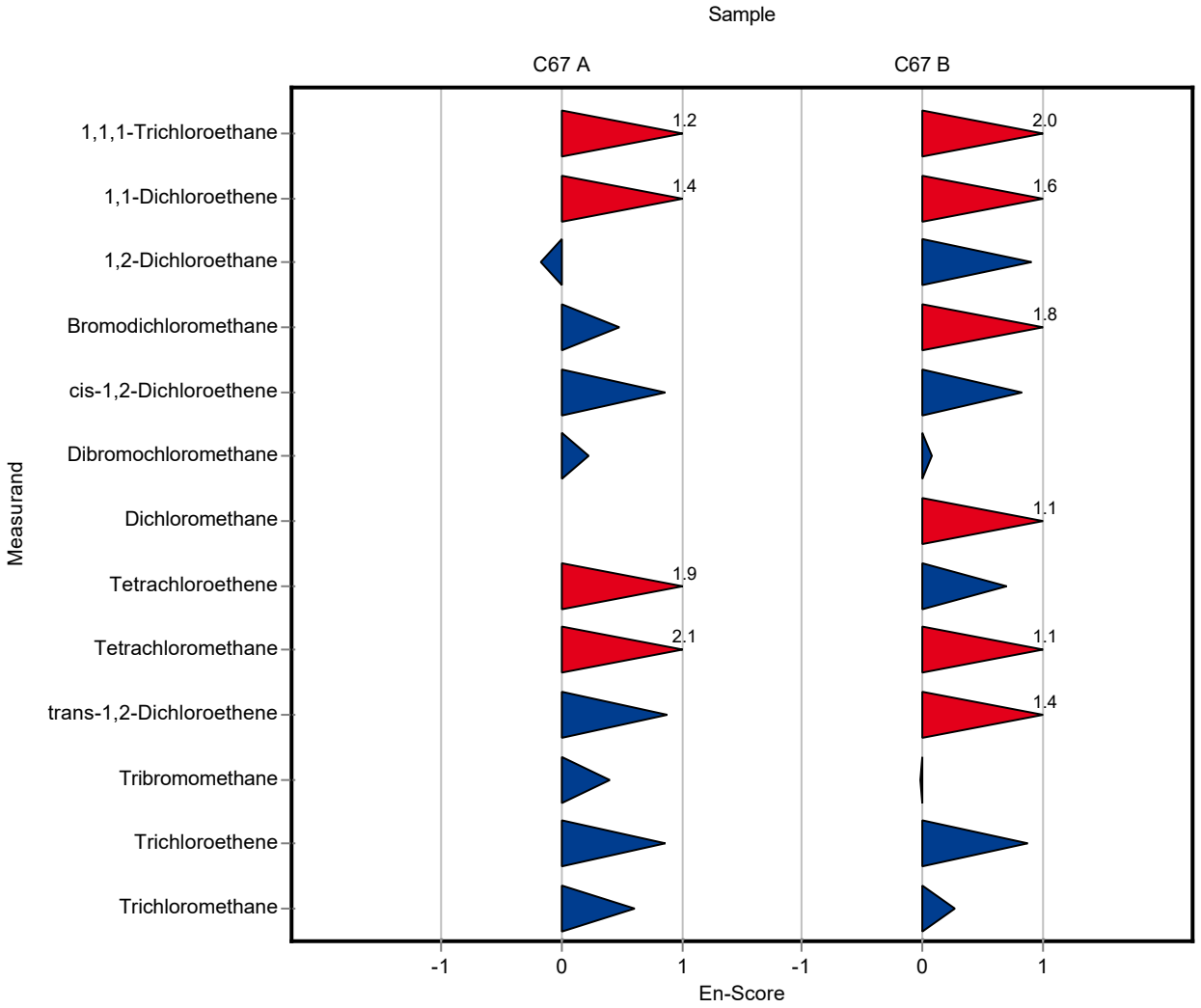

Sample
C67 A
C67 B
Measurand
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
5.6
7.9
2.3
2.1
8.6
13.2
2.1
2.6
24.9
11.2
4.4
28.0
2.1
6.5
2.6
4.5
-2
0
2
-2
0
2
Z-Score

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.929 ± 0.18	0.0758	184	1.17
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.911 ± 0.18	0.0663	234	1.42
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.124 ± 0.22	0.156	93.6	-0.17
Bromodichloromethane	µg/l	1.91 ± 0.156	2.354 ± 0.46	0.191	123	0.48
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.998 ± 0.2	0.168	155	0.86
Dibromochloromethane	µg/l	1.28 ± 0.081	1.394 ± 0.26	0.154	109	0.22
Dichloromethane	µg/l	1.33 ± 0.152	<5 (LOQ) ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	1.414 ± 0.28	0.125	418	1.91
Tetrachloromethane	µg/l	0.298 ± 0.0514	1.561 ± 0.3	0.0954	524	2.10
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.919 ± 0.18	0.216	157	0.88
Tribromomethane	µg/l	1.52 ± 0.118	1.794 ± 0.34	0.182	118	0.40
Trichloroethene	µg/l	0.641 ± 0.0838	0.974 ± 0.19	0.16	152	0.86
Trichloromethane	µg/l	0.72 ± 0.0914	0.959 ± 0.19	0.0935	133	0.61

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	46.9 ± 9.38	1.48	474	1.97
1,1-Dichloroethene	µg/l	7.62 ± 1.07	22.1 ± 4.42	1.29	290	1.63
1,2-Dichloroethane	µg/l	12.3 ± 0.9	19.4 ± 3.88	1.6	158	0.91
Bromodichloromethane	µg/l	12 ± 0.981	45.5 ± 9.1	1.2	380	1.84
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	11.1 ± 2.22	1.83	152	0.83
Dibromochloromethane	µg/l	14.8 ± 0.934	15.3 ± 3.06	1.78	103	0.08
Dichloromethane	µg/l	12.4 ± 1.07	22.9 ± 4.59	1.62	184	1.13
Tetrachloroethene	µg/l	14.1 ± 2.26	19.8 ± 3.96	4.22	141	0.70
Tetrachloromethane	µg/l	10.6 ± 1.69	18.7 ± 3.74	3.07	177	1.06
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	15.4 ± 3.08	1.96	236	1.41
Tribromomethane	µg/l	7.68 ± 0.493	7.63 ± 1.53	0.921	99.4	-0.02
Trichloroethene	µg/l	12.6 ± 1.99	19.7 ± 3.94	3.77	157	0.88
Trichloromethane	µg/l	13.8 ± 1.33	15.5 ± 3.1	1.79	112	0.27


Sample
C67 A
C67 B
Measurand
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
1.2
1.4
1.9
2.1
2.0
1.6
1.8
1.1
1.1
1.4
-1
0
1
-1
0
1
En-Score

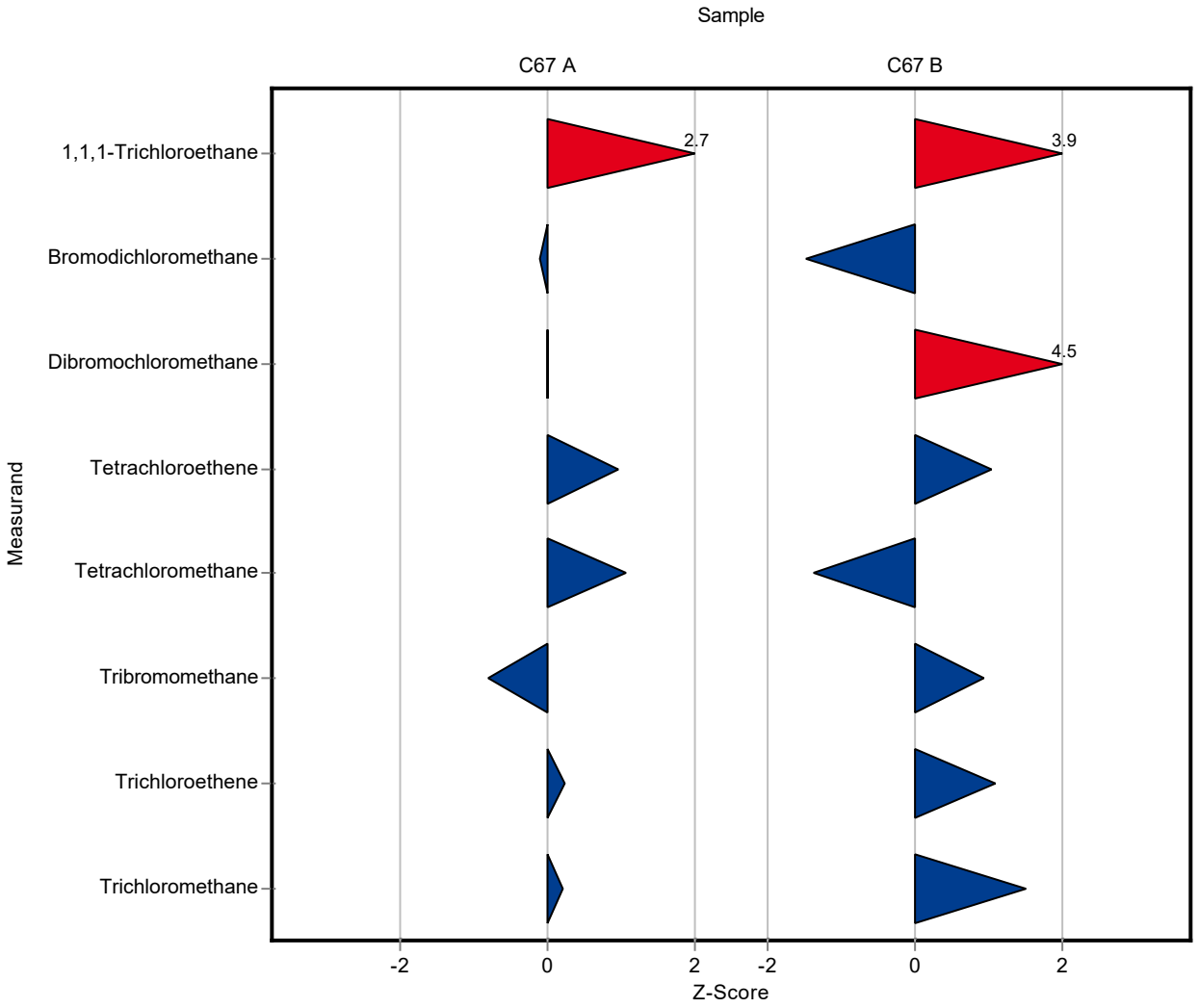
Summary of results Volatile halogenated hydrocarbons (VHH) - C67 Labcode: LC0013

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.71 ± 0.2	0.0758	141	2.70
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	1.89 ± 0.2	0.191	99	-0.10
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	1.28 ± 0.5	0.154	100	0.00
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.46 ± 0.2	0.125	136	0.97
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.4 ± 0.1	0.0954	134	1.07
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	1.37 ± 0.6	0.182	90.3	-0.80
Trichloroethene	µg/l	0.641 ± 0.0838	0.68 ± 0.2	0.16	106	0.24
Trichloromethane	µg/l	0.72 ± 0.0914	0.74 ± 0.4	0.0935	103	0.22

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	15.7 ± 0.2	1.48	159	3.91
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	10.2 ± 0.2	1.2	85.2	-1.48
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	22.76 ± 0.5	1.78	153	4.45
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	18.43 ± 0.2	4.22	131	1.03
Tetrachloromethane	µg/l	10.6 ± 1.69	6.38 ± 0.1	3.07	60.3	-1.37
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	8.55 ± 0.6	0.921	111	0.95
Trichloroethene	µg/l	12.6 ± 1.99	16.68 ± 0.2	3.77	133	1.09
Trichloromethane	µg/l	13.8 ± 1.33	16.53 ± 0.4	1.79	120	1.52


Sample
C67 A
C67 B
1,1,1-Trichloroethane
Bromodichloromethane
Dibromochloromethane
Tetrachloroethene
Tetrachloromethane
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
2.7
3.9
4.5
-2
0
2
-2
0
2
Z-Score

Sample: C67A

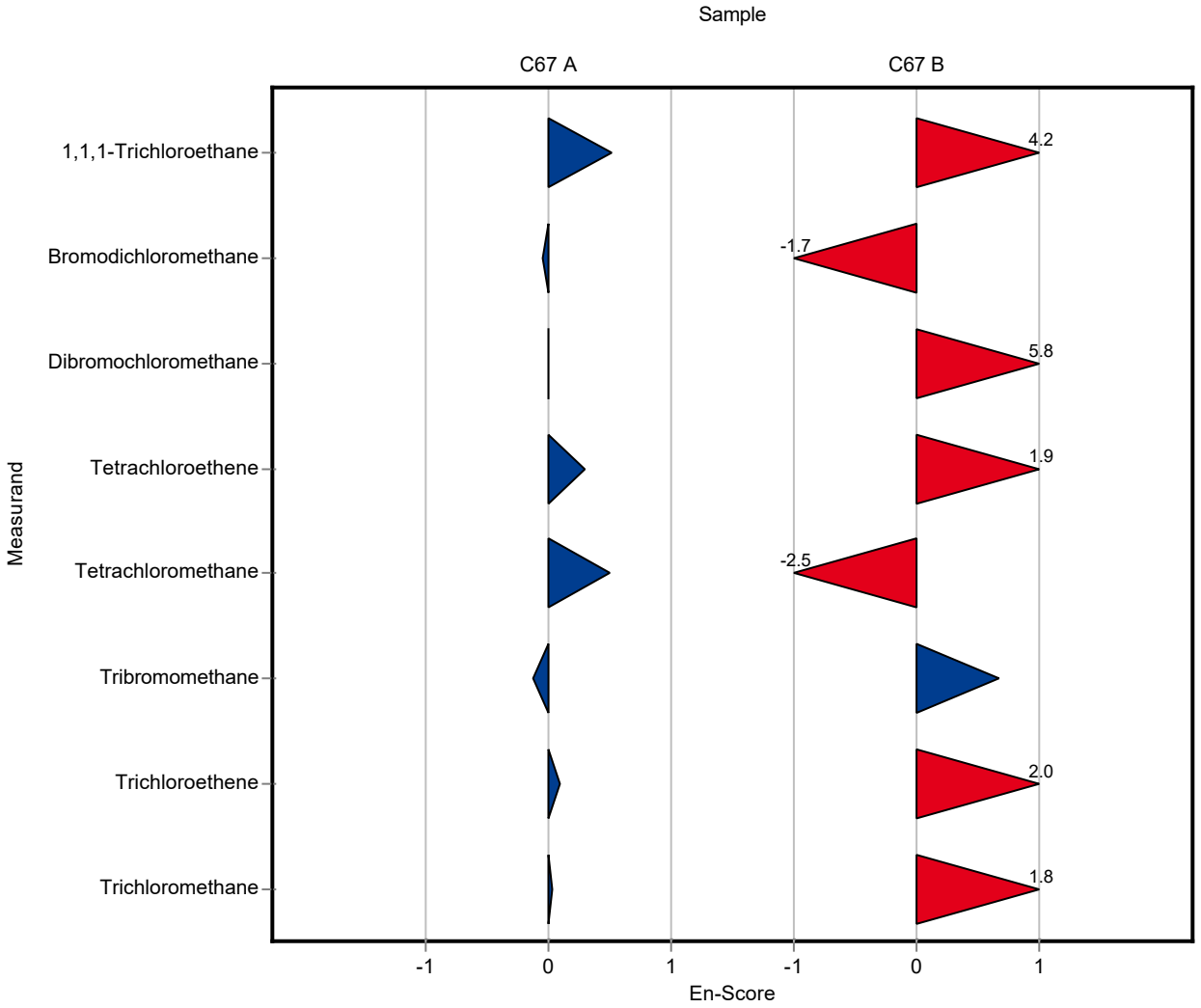
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.71 ± 0.2	0.0758	141	0.51
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	- ± -	0.0663	-	-
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	- ± -	0.156	-	-
Bromodichloromethane	µg/l	1.91 ± 0.156	1.89 ± 0.2	0.191	99	-0.04
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	- ± -	0.168	-	-
Dibromochloromethane	µg/l	1.28 ± 0.081	1.28 ± 0.5	0.154	100	0.00
Dichloromethane	µg/l	1.33 ± 0.152	- ± -	0.173	-	-
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.46 ± 0.2	0.125	136	0.30
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.4 ± 0.1	0.0954	134	0.49
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	- ± -	0.216	-	-
Tribromomethane	µg/l	1.52 ± 0.118	1.37 ± 0.6	0.182	90.3	-0.12
Trichloroethene	µg/l	0.641 ± 0.0838	0.68 ± 0.2	0.16	106	0.10
Trichloromethane	µg/l	0.72 ± 0.0914	0.74 ± 0.4	0.0935	103	0.03

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	15.7 ± 0.2	1.48	159	4.16
1,1-Dichloroethene	µg/l	7.62 ± 1.07	- ± -	1.29	-	-
1,2-Dichloroethane	µg/l	12.3 ± 0.9	- ± -	1.6	-	-
Bromodichloromethane	µg/l	12 ± 0.981	10.2 ± 0.2	1.2	85.2	-1.67
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	- ± -	1.83	-	-
Dibromochloromethane	µg/l	14.8 ± 0.934	22.76 ± 0.5	1.78	153	5.79
Dichloromethane	µg/l	12.4 ± 1.07	- ± -	1.62	-	-
Tetrachloroethene	µg/l	14.1 ± 2.26	18.43 ± 0.2	4.22	131	1.90
Tetrachloromethane	µg/l	10.6 ± 1.69	6.38 ± 0.1	3.07	60.3	-2.47
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	- ± -	1.96	-	-
Tribromomethane	µg/l	7.68 ± 0.493	8.55 ± 0.6	0.921	111	0.67
Trichloroethene	µg/l	12.6 ± 1.99	16.68 ± 0.2	3.77	133	2.02
Trichloromethane	µg/l	13.8 ± 1.33	16.53 ± 0.4	1.79	120	1.75

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0013

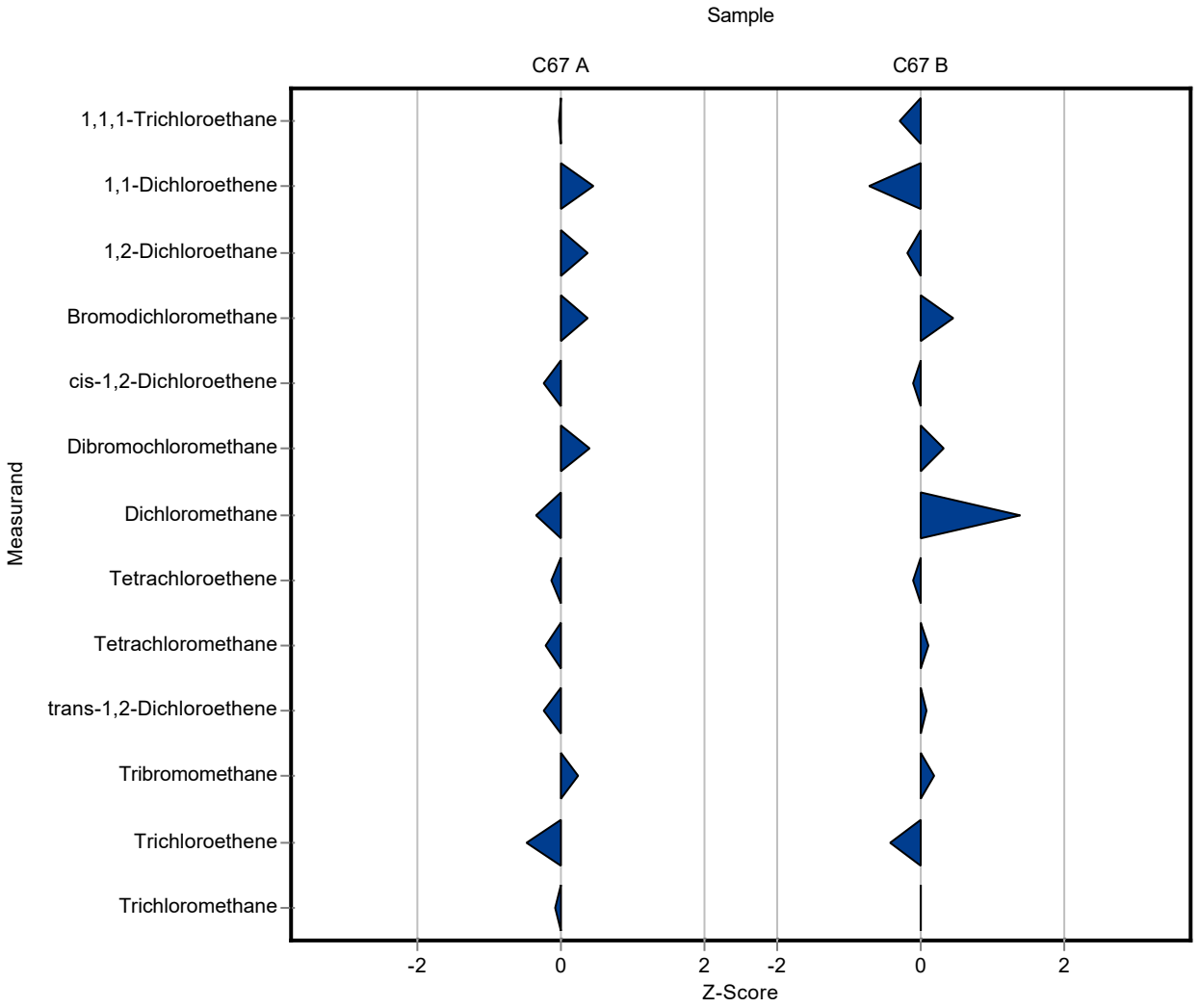


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.503 ± 0.095	0.0758	99.6	-0.03
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.42 ± 0.082	0.0663	108	0.45
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.26 ± 0.3	0.156	105	0.38
Bromodichloromethane	µg/l	1.91 ± 0.156	1.98 ± 0.5	0.191	104	0.38
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.603 ± 0.11	0.168	93.5	-0.25
Dibromochloromethane	µg/l	1.28 ± 0.081	1.34 ± 0.34	0.154	105	0.39
Dichloromethane	µg/l	1.33 ± 0.152	1.27 ± 0.32	0.173	95.6	-0.34
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.321 ± 0.027	0.125	94.8	-0.14
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.277 ± 0.07	0.0954	92.9	-0.22
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.531 ± 0.11	0.216	90.9	-0.25
Tribromomethane	µg/l	1.52 ± 0.118	1.56 ± 0.39	0.182	103	0.24
Trichloroethene	µg/l	0.641 ± 0.0838	0.563 ± 0.04	0.16	87.9	-0.49
Trichloromethane	µg/l	0.72 ± 0.0914	0.712 ± 0.14	0.0935	99	-0.08

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.47 ± 1.8	1.48	95.7	-0.28
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.67 ± 1.3	1.29	87.6	-0.73
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12 ± 2.9	1.6	97.4	-0.20
Bromodichloromethane	µg/l	12 ± 0.981	12.5 ± 3.1	1.2	104	0.44
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.13 ± 1.3	1.83	97.5	-0.10
Dibromochloromethane	µg/l	14.8 ± 0.934	15.4 ± 3.9	1.78	104	0.32
Dichloromethane	µg/l	12.4 ± 1.07	14.7 ± 3.7	1.62	118	1.39
Tetrachloroethene	µg/l	14.1 ± 2.26	13.6 ± 1.1	4.22	96.7	-0.11
Tetrachloromethane	µg/l	10.6 ± 1.69	10.9 ± 2.8	3.07	103	0.10
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.69 ± 1.3	1.96	102	0.08
Tribromomethane	µg/l	7.68 ± 0.493	7.86 ± 2	0.921	102	0.20
Trichloroethene	µg/l	12.6 ± 1.99	11 ± 0.79	3.77	87.6	-0.41
Trichloromethane	µg/l	13.8 ± 1.33	13.8 ± 2.8	1.79	100	0.00


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0014

Sample: C67A

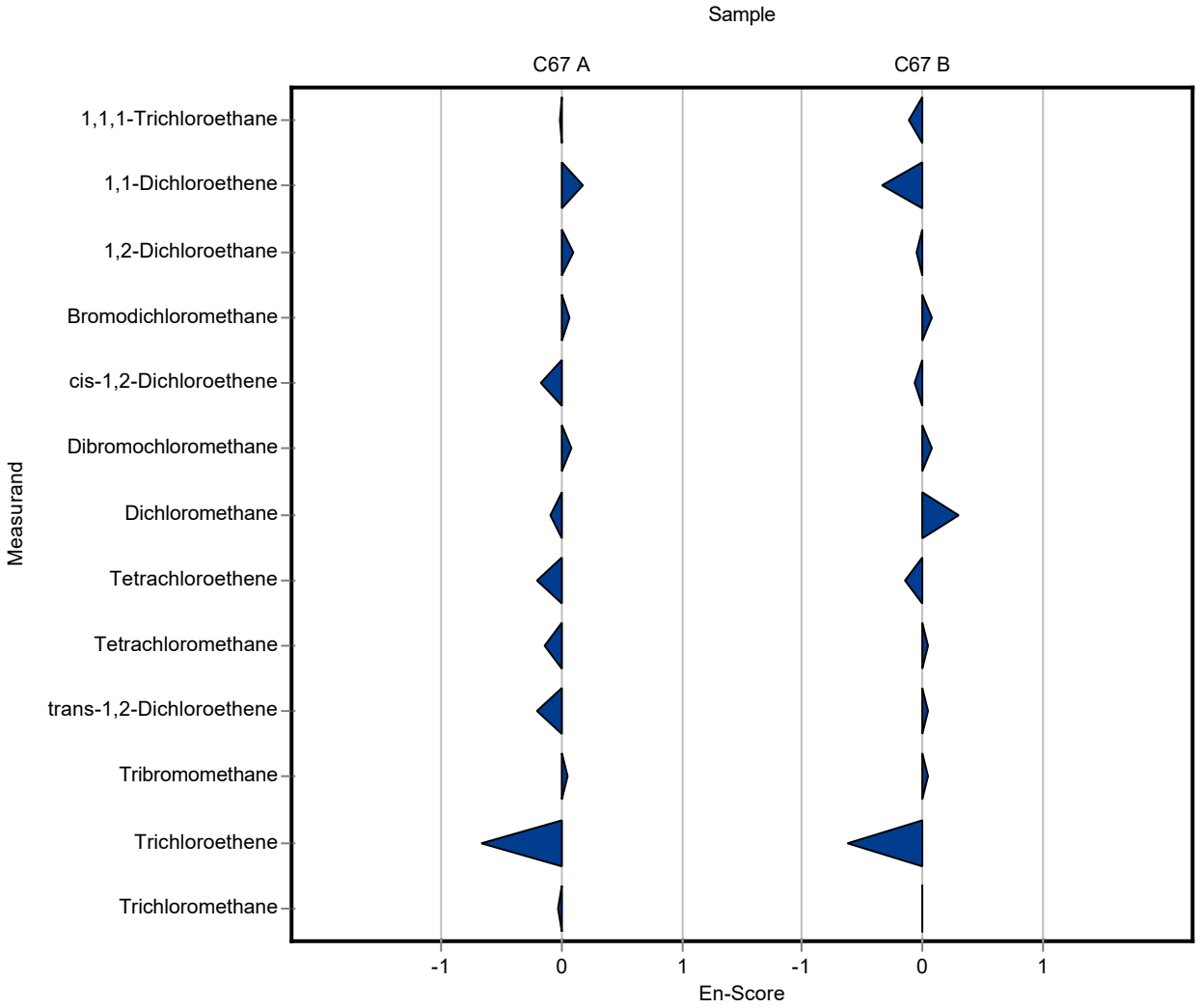
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.503 ± 0.095	0.0758	99.6	-0.01
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.42 ± 0.082	0.0663	108	0.17
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.26 ± 0.3	0.156	105	0.10
Bromodichloromethane	µg/l	1.91 ± 0.156	1.98 ± 0.5	0.191	104	0.07
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.603 ± 0.11	0.168	93.5	-0.18
Dibromochloromethane	µg/l	1.28 ± 0.081	1.34 ± 0.34	0.154	105	0.09
Dichloromethane	µg/l	1.33 ± 0.152	1.27 ± 0.32	0.173	95.6	-0.09
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.321 ± 0.027	0.125	94.8	-0.20
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.277 ± 0.07	0.0954	92.9	-0.14
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.531 ± 0.11	0.216	90.9	-0.21
Tribromomethane	µg/l	1.52 ± 0.118	1.56 ± 0.39	0.182	103	0.06
Trichloroethene	µg/l	0.641 ± 0.0838	0.563 ± 0.04	0.16	87.9	-0.67
Trichloromethane	µg/l	0.72 ± 0.0914	0.712 ± 0.14	0.0935	99	-0.03

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	9.47 ± 1.8	1.48	95.7	-0.11
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.67 ± 1.3	1.29	87.6	-0.34
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12 ± 2.9	1.6	97.4	-0.05
Bromodichloromethane	µg/l	12 ± 0.981	12.5 ± 3.1	1.2	104	0.08
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	7.13 ± 1.3	1.83	97.5	-0.07
Dibromochloromethane	µg/l	14.8 ± 0.934	15.4 ± 3.9	1.78	104	0.07
Dichloromethane	µg/l	12.4 ± 1.07	14.7 ± 3.7	1.62	118	0.30
Tetrachloroethene	µg/l	14.1 ± 2.26	13.6 ± 1.1	4.22	96.7	-0.15
Tetrachloromethane	µg/l	10.6 ± 1.69	10.9 ± 2.8	3.07	103	0.05
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	6.69 ± 1.3	1.96	102	0.05
Tribromomethane	µg/l	7.68 ± 0.493	7.86 ± 2	0.921	102	0.05
Trichloroethene	µg/l	12.6 ± 1.99	11 ± 0.79	3.77	87.6	-0.61
Trichloromethane	µg/l	13.8 ± 1.33	13.8 ± 2.8	1.79	100	0.00

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0014

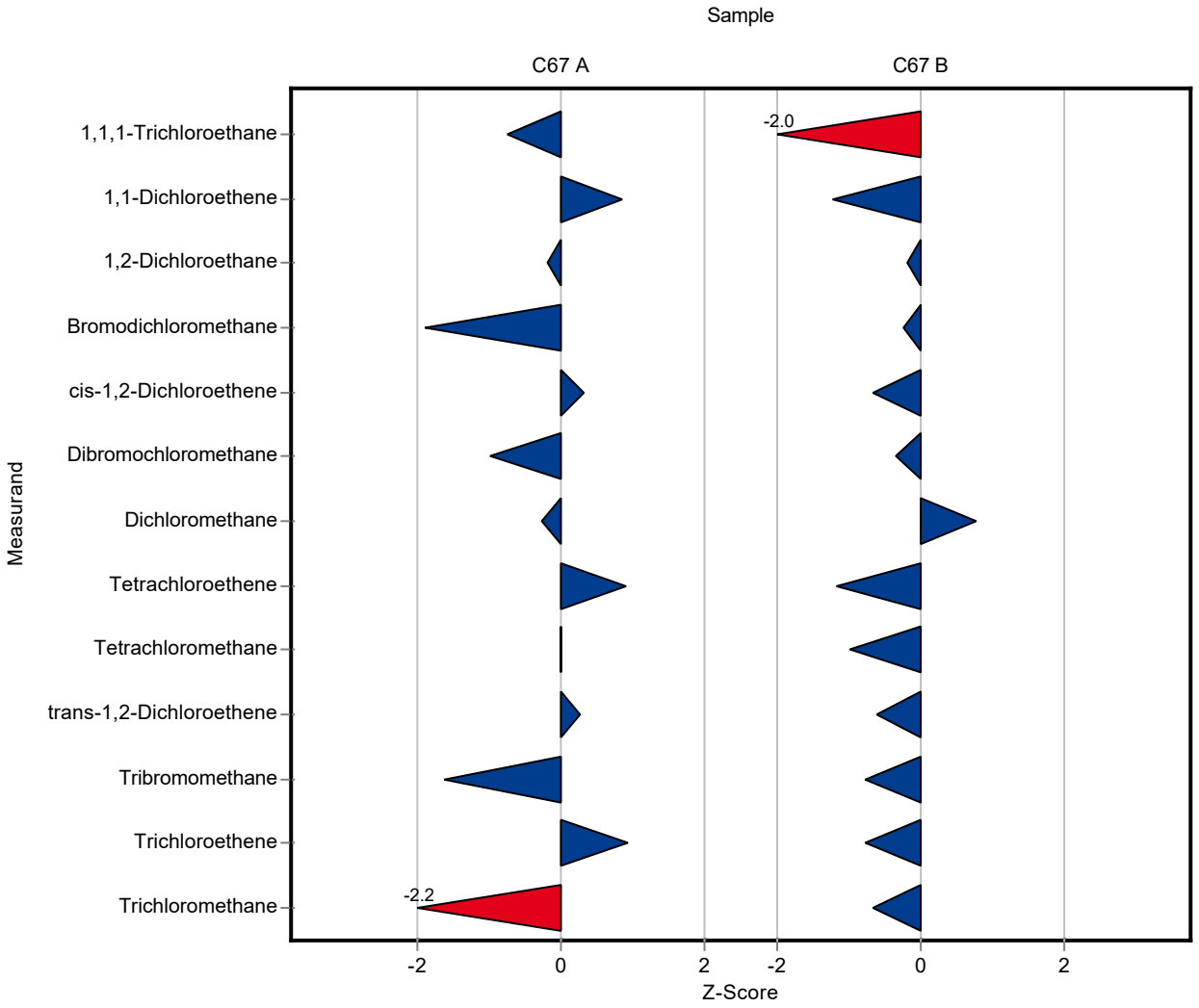


Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.449 ± 0.08	0.0758	88.9	-0.74
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.446 ± 0.08	0.0663	114	0.84
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.17 ± 0.22	0.156	97.4	-0.20
Bromodichloromethane	µg/l	1.91 ± 0.156	1.55 ± 0.32	0.191	81.2	-1.88
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.699 ± 0.08	0.168	108	0.32
Dibromochloromethane	µg/l	1.28 ± 0.081	1.13 ± 0.25	0.154	88.2	-0.98
Dichloromethane	µg/l	1.33 ± 0.152	1.28 ± 0.31	0.173	96.4	-0.28
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.452 ± 0.08	0.125	134	0.91
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.298 ± 0.05	0.0954	100	0.00
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.641 ± 0.06	0.216	110	0.26
Tribromomethane	µg/l	1.52 ± 0.118	1.22 ± 0.2	0.182	80.5	-1.63
Trichloroethene	µg/l	0.641 ± 0.0838	0.788 ± 0.16	0.16	123	0.92
Trichloromethane	µg/l	0.72 ± 0.0914	0.515 ± 0.09	0.0935	71.6	-2.19

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	6.92 ± 1.1	1.48	70	-2.00
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.03 ± 1	1.29	79.2	-1.22
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12 ± 2.2	1.6	97.4	-0.20
Bromodichloromethane	µg/l	12 ± 0.981	11.7 ± 2.4	1.2	97.7	-0.23
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	6.11 ± 0.73	1.83	83.6	-0.66
Dibromochloromethane	µg/l	14.8 ± 0.934	14.2 ± 2.4	1.78	95.7	-0.36
Dichloromethane	µg/l	12.4 ± 1.07	13.7 ± 3.4	1.62	110	0.77
Tetrachloroethene	µg/l	14.1 ± 2.26	9.18 ± 1.5	4.22	65.2	-1.16
Tetrachloromethane	µg/l	10.6 ± 1.69	7.54 ± 1.1	3.07	71.2	-0.99
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	5.31 ± 0.55	1.96	81.3	-0.62
Tribromomethane	µg/l	7.68 ± 0.493	6.98 ± 1.5	0.921	90.9	-0.76
Trichloroethene	µg/l	12.6 ± 1.99	9.63 ± 1.5	3.77	76.7	-0.78
Trichloromethane	µg/l	13.8 ± 1.33	12.6 ± 2.2	1.79	91.3	-0.67


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-2.0
-2.2
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

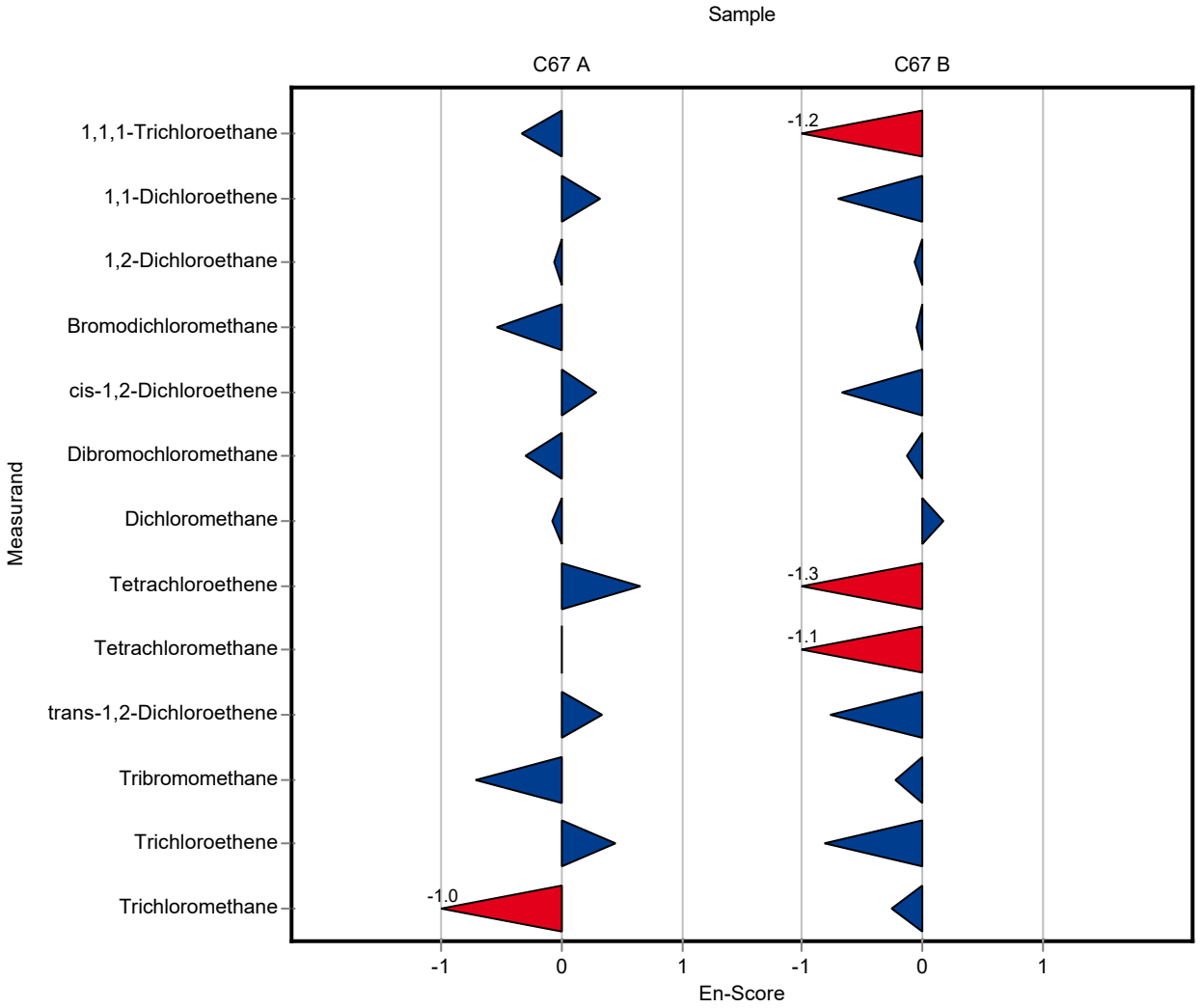
Labcode: LC0015

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.449 ± 0.08	0.0758	88.9	-0.34
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.446 ± 0.08	0.0663	114	0.32
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.17 ± 0.22	0.156	97.4	-0.07
Bromodichloromethane	µg/l	1.91 ± 0.156	1.55 ± 0.32	0.191	81.2	-0.54
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.699 ± 0.08	0.168	108	0.29
Dibromochloromethane	µg/l	1.28 ± 0.081	1.13 ± 0.25	0.154	88.2	-0.30
Dichloromethane	µg/l	1.33 ± 0.152	1.28 ± 0.31	0.173	96.4	-0.08
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.452 ± 0.08	0.125	134	0.65
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.298 ± 0.05	0.0954	100	0.00
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.641 ± 0.06	0.216	110	0.34
Tribromomethane	µg/l	1.52 ± 0.118	1.22 ± 0.2	0.182	80.5	-0.71
Trichloroethene	µg/l	0.641 ± 0.0838	0.788 ± 0.16	0.16	123	0.44
Trichloromethane	µg/l	0.72 ± 0.0914	0.515 ± 0.09	0.0935	71.6	-1.01

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	6.92 ± 1.1	1.48	70	-1.15
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.03 ± 1	1.29	79.2	-0.70
1,2-Dichloroethane	µg/l	12.3 ± 0.9	12 ± 2.2	1.6	97.4	-0.07
Bromodichloromethane	µg/l	12 ± 0.981	11.7 ± 2.4	1.2	97.7	-0.06
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	6.11 ± 0.73	1.83	83.6	-0.67
Dibromochloromethane	µg/l	14.8 ± 0.934	14.2 ± 2.4	1.78	95.7	-0.13
Dichloromethane	µg/l	12.4 ± 1.07	13.7 ± 3.4	1.62	110	0.18
Tetrachloroethene	µg/l	14.1 ± 2.26	9.18 ± 1.5	4.22	65.2	-1.30
Tetrachloromethane	µg/l	10.6 ± 1.69	7.54 ± 1.1	3.07	71.2	-1.10
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	5.31 ± 0.55	1.96	81.3	-0.76
Tribromomethane	µg/l	7.68 ± 0.493	6.98 ± 1.5	0.921	90.9	-0.23
Trichloroethene	µg/l	12.6 ± 1.99	9.63 ± 1.5	3.77	76.7	-0.81
Trichloromethane	µg/l	13.8 ± 1.33	12.6 ± 2.2	1.79	91.3	-0.26

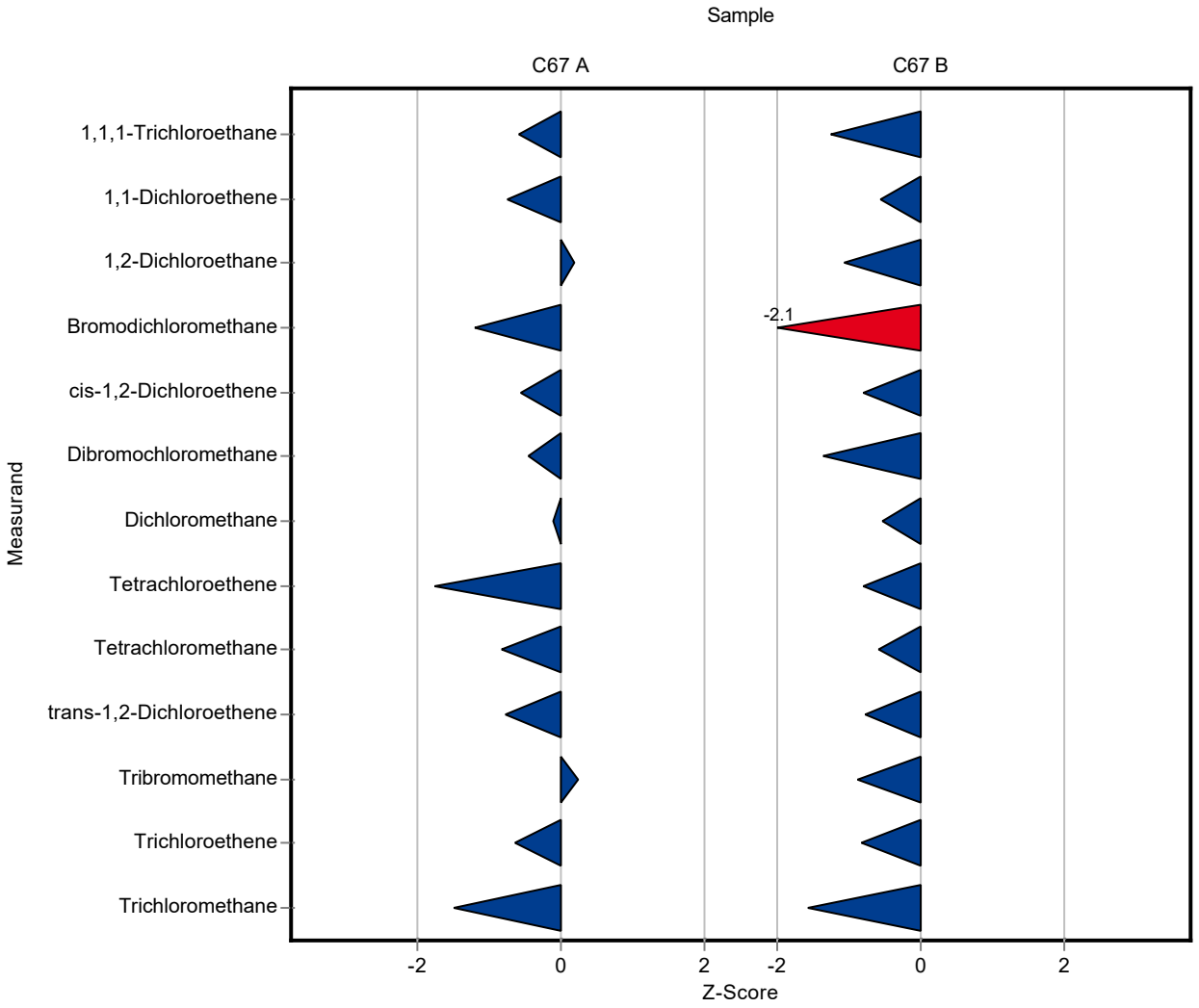

Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
Measurand
-1.2
-1.3
-1.1
-1.0
-1
0
1
En-Score

Sample: C67A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.46 ± 0.092	0.0758	91.1	-0.60
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.34 ± 0.086	0.0663	87.2	-0.75
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.23 ± 0.306	0.156	102	0.19
Bromodichloromethane	µg/l	1.91 ± 0.156	1.68 ± 0.421	0.191	88	-1.20
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.55 ± 0.11	0.168	85.2	-0.57
Dibromochloromethane	µg/l	1.28 ± 0.081	1.21 ± 0.304	0.154	94.5	-0.46
Dichloromethane	µg/l	1.33 ± 0.152	1.31 ± 0.263	0.173	98.6	-0.10
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.12 ± 0.03	0.125	35.5	-1.74
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.22 ± 0.054	0.0954	73.8	-0.82
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.42 ± 0.084	0.216	71.9	-0.76
Tribromomethane	µg/l	1.52 ± 0.118	1.56 ± 0.469	0.182	103	0.24
Trichloroethene	µg/l	0.641 ± 0.0838	0.54 ± 0.107	0.16	84.3	-0.63
Trichloromethane	µg/l	0.72 ± 0.0914	0.58 ± 0.115	0.0935	80.6	-1.49

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	8.04 ± 1.608	1.48	81.3	-1.25
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.9 ± 1.724	1.29	90.6	-0.55
1,2-Dichloroethane	µg/l	12.3 ± 0.9	10.6 ± 2.66	1.6	86.1	-1.07
Bromodichloromethane	µg/l	12 ± 0.981	9.49 ± 2.372	1.2	79.3	-2.07
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.85 ± 1.17	1.83	80	-0.80
Dibromochloromethane	µg/l	14.8 ± 0.934	12.4 ± 3.097	1.78	83.6	-1.37
Dichloromethane	µg/l	12.4 ± 1.07	11.6 ± 2.371	1.62	93.2	-0.52
Tetrachloroethene	µg/l	14.1 ± 2.26	10.7 ± 2.67	4.22	76	-0.80
Tetrachloromethane	µg/l	10.6 ± 1.69	8.8 ± 2.201	3.07	83.1	-0.58
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	5 ± 1.001	1.96	76.5	-0.78
Tribromomethane	µg/l	7.68 ± 0.493	6.87 ± 2.062	0.921	89.5	-0.88
Trichloroethene	µg/l	12.6 ± 1.99	9.48 ± 1.896	3.77	75.5	-0.82
Trichloromethane	µg/l	13.8 ± 1.33	11 ± 2.208	1.79	79.7	-1.56


Sample
C67 A
C67 B
1,1,1-Trichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
Bromodichloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Dichloromethane
Tetrachloroethene
Tetrachloromethane
trans-1,2-Dichloroethene
Tribromomethane
Trichloroethene
Trichloromethane
-2.1
Measurand
-2
0
2
-2
0
2
Z-Score

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0016

Sample: C67A

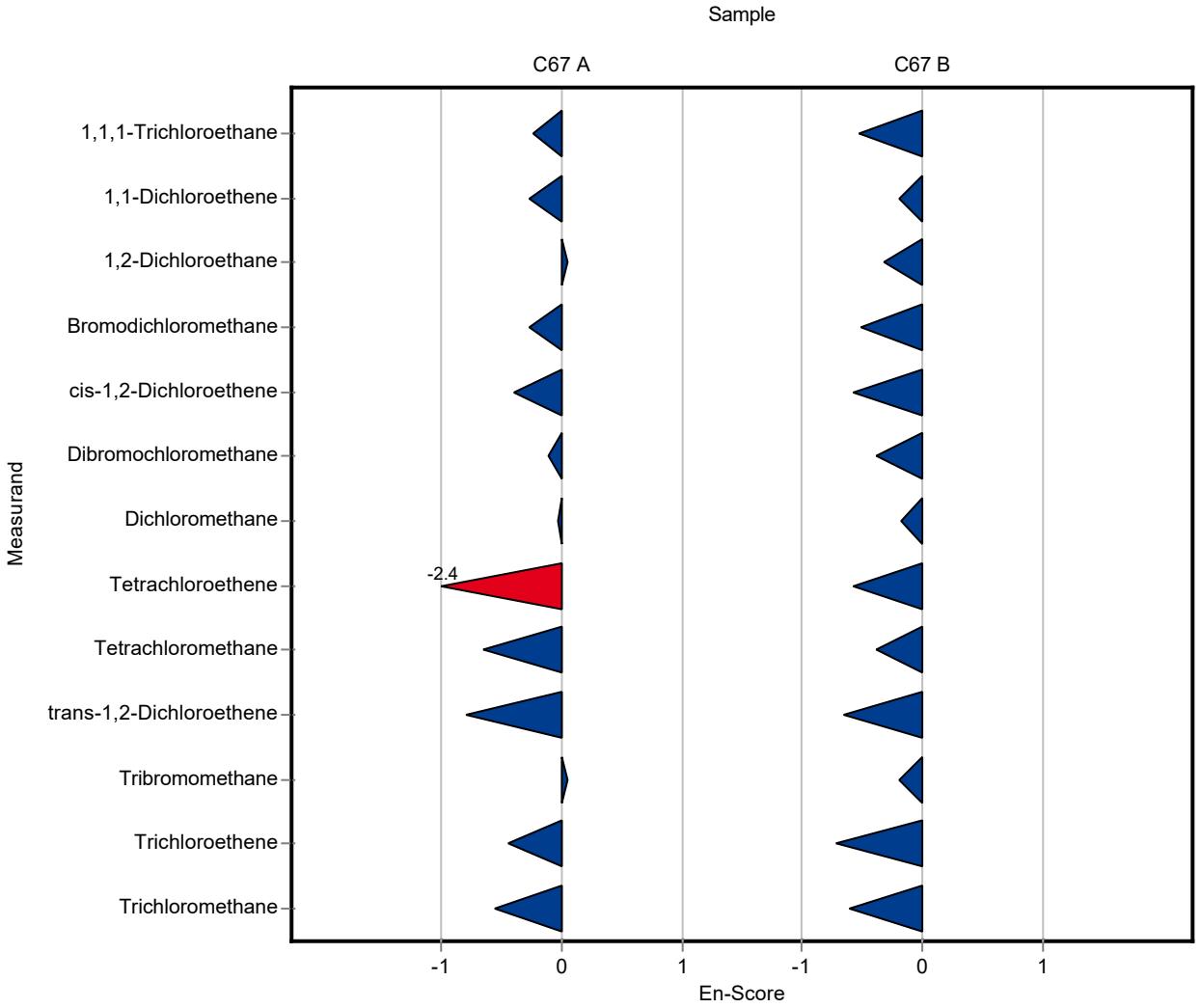
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	0.505 ± 0.0458	0.46 ± 0.092	0.0758	91.1	-0.24
1,1-Dichloroethene	µg/l	0.39 ± 0.0707	0.34 ± 0.086	0.0663	87.2	-0.27
1,2-Dichloroethane	µg/l	1.2 ± 0.0662	1.23 ± 0.306	0.156	102	0.05
Bromodichloromethane	µg/l	1.91 ± 0.156	1.68 ± 0.421	0.191	88	-0.27
cis-1,2-Dichloroethene	µg/l	0.645 ± 0.0937	0.55 ± 0.11	0.168	85.2	-0.40
Dibromochloromethane	µg/l	1.28 ± 0.081	1.21 ± 0.304	0.154	94.5	-0.12
Dichloromethane	µg/l	1.33 ± 0.152	1.31 ± 0.263	0.173	98.6	-0.03
Tetrachloroethene	µg/l	0.339 ± 0.0674	0.12 ± 0.03	0.125	35.5	-2.42
Tetrachloromethane	µg/l	0.298 ± 0.0514	0.22 ± 0.054	0.0954	73.8	-0.65
trans-1,2-Dichloroethene	µg/l	0.584 ± 0.119	0.42 ± 0.084	0.216	71.9	-0.80
Tribromomethane	µg/l	1.52 ± 0.118	1.56 ± 0.469	0.182	103	0.05
Trichloroethene	µg/l	0.641 ± 0.0838	0.54 ± 0.107	0.16	84.3	-0.44
Trichloromethane	µg/l	0.72 ± 0.0914	0.58 ± 0.115	0.0935	80.6	-0.56

Sample: C67B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
1,1,1-Trichloroethane	µg/l	9.89 ± 1.34	8.04 ± 1.608	1.48	81.3	-0.53
1,1-Dichloroethene	µg/l	7.62 ± 1.07	6.9 ± 1.724	1.29	90.6	-0.20
1,2-Dichloroethane	µg/l	12.3 ± 0.9	10.6 ± 2.66	1.6	86.1	-0.32
Bromodichloromethane	µg/l	12 ± 0.981	9.49 ± 2.372	1.2	79.3	-0.51
cis-1,2-Dichloroethene	µg/l	7.31 ± 1.04	5.85 ± 1.17	1.83	80	-0.57
Dibromochloromethane	µg/l	14.8 ± 0.934	12.4 ± 3.097	1.78	83.6	-0.39
Dichloromethane	µg/l	12.4 ± 1.07	11.6 ± 2.371	1.62	93.2	-0.17
Tetrachloroethene	µg/l	14.1 ± 2.26	10.7 ± 2.67	4.22	76	-0.58
Tetrachloromethane	µg/l	10.6 ± 1.69	8.8 ± 2.201	3.07	83.1	-0.38
trans-1,2-Dichloroethene	µg/l	6.53 ± 1.18	5 ± 1.001	1.96	76.5	-0.66
Tribromomethane	µg/l	7.68 ± 0.493	6.87 ± 2.062	0.921	89.5	-0.19
Trichloroethene	µg/l	12.6 ± 1.99	9.48 ± 1.896	3.77	75.5	-0.72
Trichloromethane	µg/l	13.8 ± 1.33	11 ± 2.208	1.79	79.7	-0.61

Summary of results Volatile halogenated hydrocarbons (VHH) - C67 - En-Score

Labcode: LC0016



E9. Methodenübersicht / Overview of methods

LabCode	Sample	Dibromochloromethane	Bromodichloromethane	1,2-Dichloroethane	cis-1,2-Dichloroethene
LC0001	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67A	-	-	-	-
LC0003	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67A	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67A	EN ISO 10301;	EN ISO 10301;	-	-
LC0006	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67A	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67A	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0010	C67A	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0012	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67A	GC-ECD;	GC-ECD;	-	-
LC0014	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67A	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43

LabCode	Sample	1,1-Dichloroethene	trans-1,2-Dichloroethene	Dichloromethane	Tetrachloroethene
LC0001	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67A	-	-	-	-
LC0003	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67A	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67A	-	-	-	EN ISO 10301;
LC0006	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67A	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67A	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0010	C67A	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0012	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67A	-	-	-	GC-ECD;
LC0014	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67A	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43

LabCode	Sample	Tetrachloromethane	Tribromomethane	1,1,1-Trichloroethane	Trichloroethene	Trichloromethane
LC0001	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67A	-	-	-	-	-
LC0003	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67A	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0006	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67A	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67A	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0010	C67A	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67A	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0012	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67A	GC-ECD;	GC-ECD;	GC-ECD;	GC-ECD;	GC-ECD;
LC0014	C67A	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67A	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67A	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43

LabCode	Sample	Dibromochloromethane	Bromodichloromethane	1,2-Dichloroethane	cis-1,2-Dichloroethene
LC0001	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67B	-	-	-	-
LC0003	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67B	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67B	EN ISO 10301;	EN ISO 10301;	-	-
LC0006	C67B	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67B	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67B	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67B	-	-	-	-
LC0010	C67B	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67B	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)
LC0012	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67B	GC-ECD;	GC-ECD;		
LC0014	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67B	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43

LabCode	Sample	Dibromochloromethane	Bromodichloromethane	1,2-Dichloroethane	cis-1,2-Dichloroethene
LC0001	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67B	-	-	-	-
LC0003	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67B	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67B	-	-	-	EN ISO 10301;
LC0006	C67B	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67B	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67B	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67B	-	-	-	-
LC0010	C67B	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67B	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)
LC0012	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67B	-	-	-	GC-ECD;
LC0014	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67B	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43

LabCode	Sample	Tetrachloromethane	Tribromomethane	1,1,1-Trichloroethane	Trichloroethene	Trichloromethane
LC0001	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0002	C67B	-	-	-	-	-
LC0003	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0004	C67B	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301	EN ISO 10301 (GC-MS); EN ISO 10301
LC0005	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0006	C67B	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)	P&T-GC-MS; (Purge & Trap)
LC0007	C67B	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43	HS-GC-MS; EN ISO 10301 (F4); DIN 38407-F43
LC0008	C67B	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680	EN ISO 15680 (P&T-GC-MS); EN ISO 15680
LC0009	C67B	-	-	-	-	-
LC0010	C67B	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD	EN ISO 10301 (GC-ECD); GC-ECD
LC0011	C67B	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)	HS-GC-MS; (Headspace)
LC0012	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0013	C67B	GC-ECD;	GC-ECD;	GC-ECD;	GC-ECD;	GC-ECD;
LC0014	C67B	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)	EN ISO 10301; (F4)
LC0015	C67B	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;	EN ISO 10301;
LC0016	C67B	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43	HS-GC-MS; DIN 38407-43