umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

Proficiency Testing Scheme für die Wasseranalytik - Realproben

P26 Polyzyklische Aromatische Kohlenwasserstoffe (PAK)

Proficiency Testing Scheme for Water Analysis - natural water samples

P26 Polycyclic aromatic hydrocarbons (PAH)

BERICHT / REPORT

Probenversand / Sample dispatch: 18.02.2025

Ausgabe/Edition 1: 24.03.2025

Dieser Report umfasst 230 Seiten.
This report comprises 230 pages.

Durchführung gemäß Verfahren VA_1006_PT_CA (2024-10-15).

In accordance with the procedure VA_1006_PT_CA (2024-10-15).

Akkreditierung Austria
0200
ISO/IEC 17043

Anbieter der Eignungsprüfung / Provider of the proficiency test:
Anschrift / Address: Umweltbundesamt GmbH
Spittelauer Lände 5
1090 Vienna/Austria
E-Mail: ringversuche@umweltbundesamt.at
Tel: +43 (0) 1 31304 4334

Website deutsch: www.umweltbundesamt.at/ringversuche
www.ifatest.at

Website english: https://www.umweltbundesamt.at/en/proficiency-testing
www.ifatest.eu

Koordination und technische Leitung Eignungsprüfungen / coordinator and technical management:
Dipl.-Ing. Monika Denner

Verantwortlich für die Durchführung der Eignungsprüfungsrunde / Responsible for the implementation of this proficiency test:
Dipl.-Ing. Johannes Urteil, Martha Schmid MSc unter Mitarbeit von Mag. Vito Satrapa
Tel.: +43 (0) 1 31304 4334

Verantwortlich für die Freigabe des Berichts / Responsible for authorizing the report:
Dipl.-Ing. Monika Denner
Leitung Eignungsprüfungen für den Bereich chemische Analytik / Management for proficiency tests for chemical analysis

umweltbundesamt	**Unterzeichner**	Monika Christine Denner
	Datum/Zeit-UTC	2025-03-24T13:13:47+01:00
Prüfinformation	Diese Unterschrift ist gemäß EU Verordnung Nr. 910/2014 (eIDAS) der handschriftlichen Unterschrift grundsätzlich rechtlich gleichgestellt. Prüfung unter: http://www.signaturpruefung.gv.at	

Inhaltsverzeichnis / Table of Contents

D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 13
- Anzahl der übermittelten Datensätze: 12
- Probenversand: 18.02.2025
- Einsendeschluss der Daten: 18.03.2025

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 Trinkwasser und Grundwasser erfolgte am 14.02.2025 bzw. am 12.02.2025. Das Probenmaterial umfasste:

- 1 Probe Trinkwasser (P26 A)
- 1 Probe Grundwasser (P26 B)

Alle Proben wurden bis zur weiteren Verarbeitung gekühlt gelagert (4 +/- 3°C).

Das Abfüllen der Proben erfolgte nach Filtration (40 µm) unter ständigem Rühren (Rührkessel). Anschließend wurden die Proben in den Flaschen mit einzelnen Substanzen dotiert und durch Schütteln homogenisiert. Die Stabilisierung erfolgte durch Kühlung.

Die homogenen Prüfgegenstände wurden am 18.02.2025 verschickt.

Jedes teilnehmende Labor erhielt:

- 2 Proben zu je ca. 2000 ml, abgefüllt in je 2 x 1000 ml Braunglasflaschen.

D1.3. Anweisungen für die Teilnehmenden

Aus Stabilitätsgründen wurde empfohlen bis spätestens 20.02.2025 mit den Analysen zu beginnen.

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

D1.4. Kontrollanalytik zur Bewertung der Homogenität

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

Alle Parameter wurden in der Prüfstelle am Umweltbundesamt (Prüfstelle für Umwelt-, GVO- & Treibstoffanalytik) zeitnah zum Probenversand analysiert.

Im Zuge der Auswertung wurde die relative Standardabweichung zwischen den Kontrollprobenabfüllungen bewertet und mit der Vergleichsstandardabweichung beim aktuellen Ringversuch verglichen.
Die Ergebnisse der Kontrollanalytik sind in der 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 2024.

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 18.03.2025 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 2024 (RSDpooled). 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 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 12 Eignungsprüfungsrunden (2013–2024) in Realproben wurden Kriterien (RSDpool) zur Ergebnisbewertung berechnet. Diese wurden im Zuge der Auswertung den relativen Vergleichs-standardabweichungen (vR) des aktuellen Ringversuchs gegenübergestellt.

Parameter Acenaphthen, Acenaphthylen, Benzo(a)anthracen, Benzo(g,h,i)perylen, Fluoren, Indeno(1,2,3-c,d)pyren, Naphthalin bei Probe P26 A und Parameter Acenaphthylen, Anthracen, Benzo(a)anthracen, Benzo(a)pyren, Chrysen, Indeno(1,2,3-c,d)pyren bei Probe P26 B: Bei diesen Parametern erfolgte die Berechnung der Scores nach D2.

Parameter Chrysen und Dibenzo(a,h)anthracen bei Probe P26 A: Die auf Basis der Ergebnisse der Teilnehmenden berechneten Sollwerte lagen außerhalb der Messunsicherheit des Kontrollwertes und es ist über das Kontrolllabor keine Rückführbarkeit möglich. Der zugewiesene Wert wurde daher über die ausreißerbereinigten Mittelwerte aus der Gruppe der akkreditierten Teilnehmenden berechnet.

Parameter Anthracen, Benzo(a)pyren, Benzo(b)fluoranthen, Benzo(k)fluoranthen, Fluoranthen, Phenantren und Pyren bei Probe P26 A und Parameter Acenaphthen, Benzo(b)fluoranthen, Benzo(g,h,i)perylen, Benzo(k)fluoranthen, Fluoranthen, Fluoren, Naphthalin, Phenantren und Pyren bei Probe P26 B: Für diese Parameter wurden die relativen Vergleichsstandardabweichungen (vR) der aktuellen Eignungsprüfungsrunde für die Bewertung gewählt.

Bei nachfolgenden Parametern und Proben wurden vor der Mittelwertbildung Ausreißer nach Hampel (H95) eliminiert: Benzo(a)anthracen (LC0005 H95) und Benzo(b)fluoranthen (LC0003 H95) bei Probe P26 A sowie Acenaphthen (LC0005 H95) bei Probe P26 B.

Parameter Dibenzo(a,h)anthracen bei Probe P26 B: Der auf Basis der Ergebnisse der Teilnehmenden berechnete Mittelwert lag außerhalb der Messunsicherheit des Kontrollwertes und die relative Vergleichsstandardabweichung zwischen den teilnehmenden Laboren betrug über 50 %. Aufgrund der hohen Streuung zwischen den Ergebnissen in der Gruppe der akkreditierten teilnehmenden Labore konnte kein zugewiesener Wert abgeleitet werden. Für diesen Parameter empfehlen wir einen Vergleich mit dem in D6.1 angeführten informativen Wert.

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. ng/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, ausreißer-bereinigt (angegeben auf 3 signifikante Stellen)
sR	Vergleichsstandardabweichung, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
vR	relative Vergleichsstandardabweichung in %, berechnet aus den ausreißerbereinigten Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)

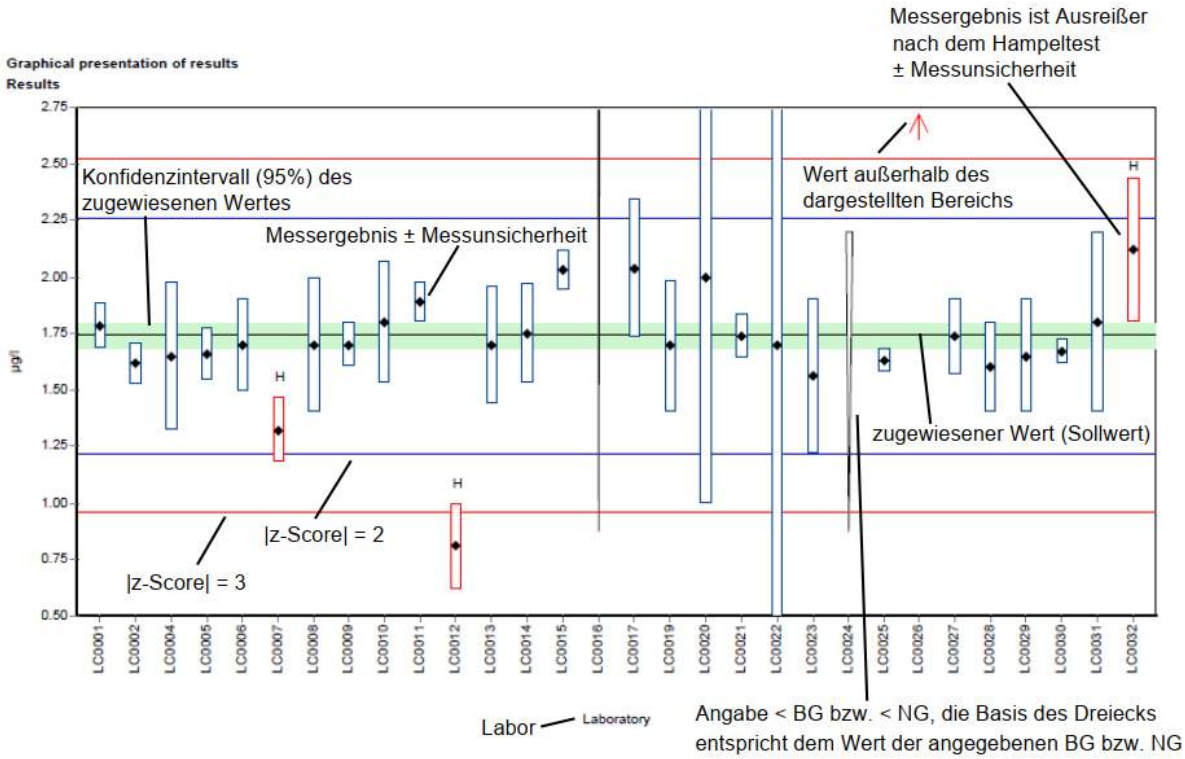
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)
Laborcode	anonymisierte, eindeutige Kennung des teilnehmenden Labors im jeweiligen Ringversuch
Messwert	einzelne(r) Messwert(e) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
Messergebnis	Für die Bewertung herangezogenes Ergebnis lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt). Bei Eignungsprüfungsrunden mit Vorgabe von unabhängigen Mehrfachbestimmungen, entspricht dies dem berechneten Mittelwert aus den einzelnen Messwerten der Teilnehmenden.
± U	kombinierte Messunsicherheit ohne Erweiterungsfaktor (k=1) lt. Angabe der Teilnehmenden (maximal 5 Nachkommastellen dargestellt)
BG	Bestimmungsgrenze
NG	Nachweisgrenze
WF	Wiederfindungsrate in %, bezogen auf den zugewiesenen Wert (angegeben auf 3 signifikante Stellen, dargestellt maximal 1 Nachkommastelle)
MW	Mittelwert
z-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches des Kriteriums (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen)
E_n-Score	Abweichung des Messergebnisses zum zugewiesenen Wert, ausgedrückt als Vielfaches der kombinierten Messunsicherheiten, bestehend aus erweiterter Unsicherheit des zugewiesenen Wertes und der erweiterten Unsicherheit der Messergebnisse der Teilnehmenden (angegeben auf 3 signifikante Stellen, dargestellt maximal 2 Nachkommastellen). Beim E_n-Score erfolgt die Berücksichtigung der Messunsicherheit der Teilnehmenden.
-	Keine Daten übermittelt bzw. keine Berechnung möglich
Anmerkungen	Anmerkungen zum jeweiligen Messergebnis (z.B. H, FN, FP)
H	Ausreißer nach dem Hampel-Test
FN	Falsch negativ – Messergebnis kleiner Bestimmungs- bzw. Nachweisgrenze dessen Betrag die Bedingungen eines Ausreißers nach dem Hampeltest erfüllt.

FP	Falsch positiv – Falls aufgrund des geringen Analytgehalts kein zugewiesener Wert ermittelt werden kann (n < 6), wird der Median der Beträge der übermittelten Nachweis- bzw. Bestimmungsgrenzen ermittelt. Als falsch positiv wird ein Messergebnis bewertet, welches diesen Median um mehr als 100 % übersteigt.
Standardabweichung	Vergleichsstandardabweichung berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs (angegeben auf 3 signifikante Stellen)
rel. Standardabweichung	relative Vergleichsstandardabweichung in %, berechnet aus den Ergebnissen der Teilnehmenden des aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 3 signifikante Stellen)
n	Anzahl der Messergebnisse
*	Kennzeichnung für Hinweise zur Erläuterung

D5.2. Graphische Darstellung der Ergebnisse

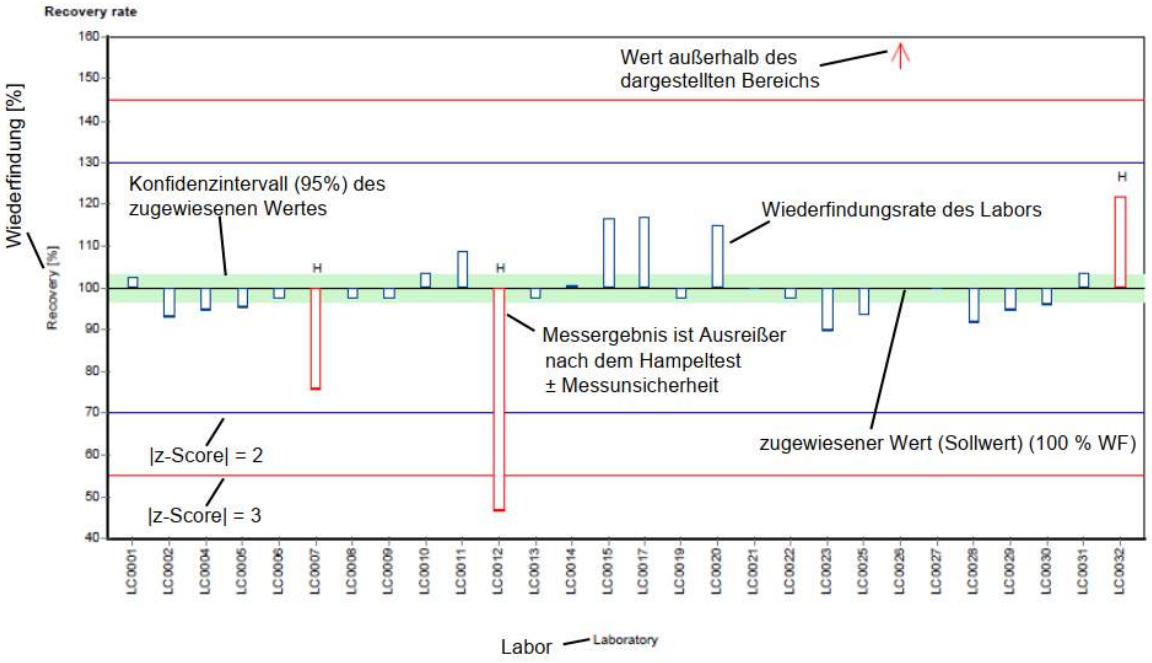
Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

Beispieldiagramm: Messwerte



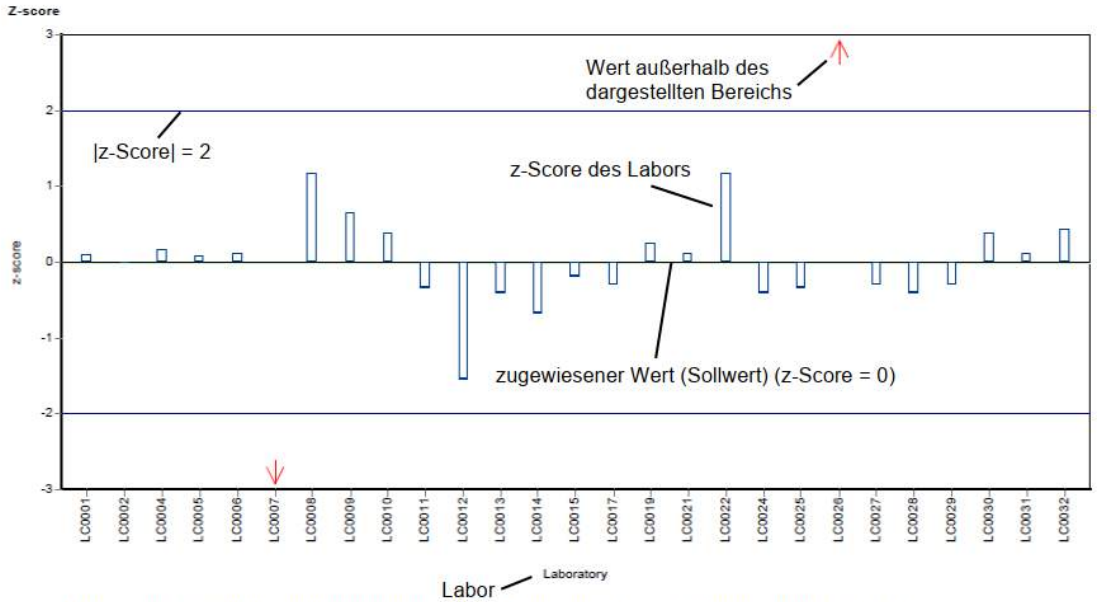
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: Wiederfindung zum zugewiesenen Wert



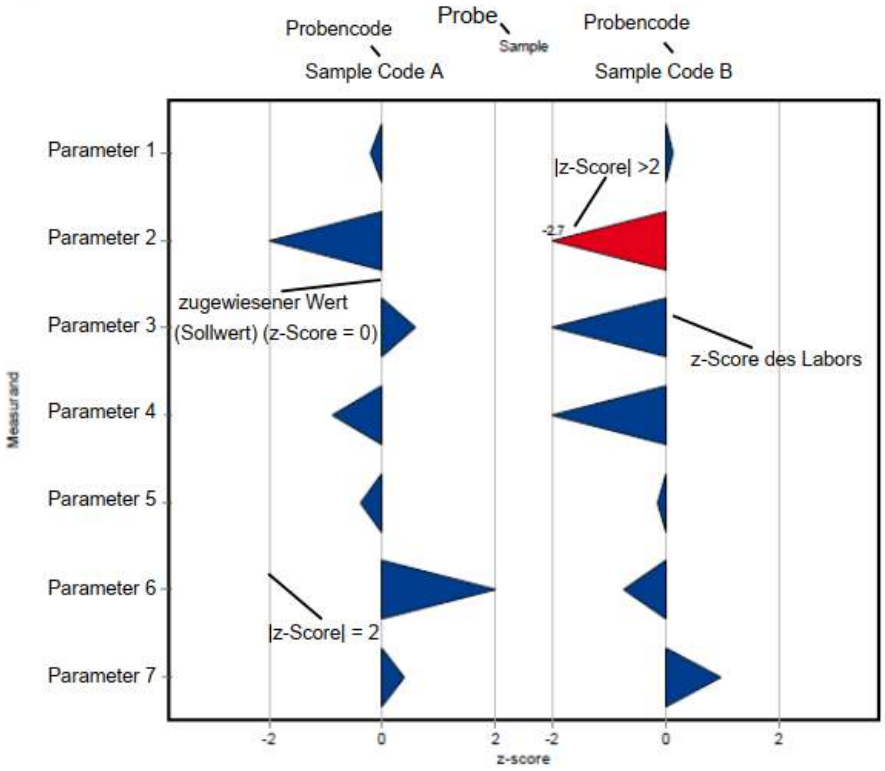
Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score

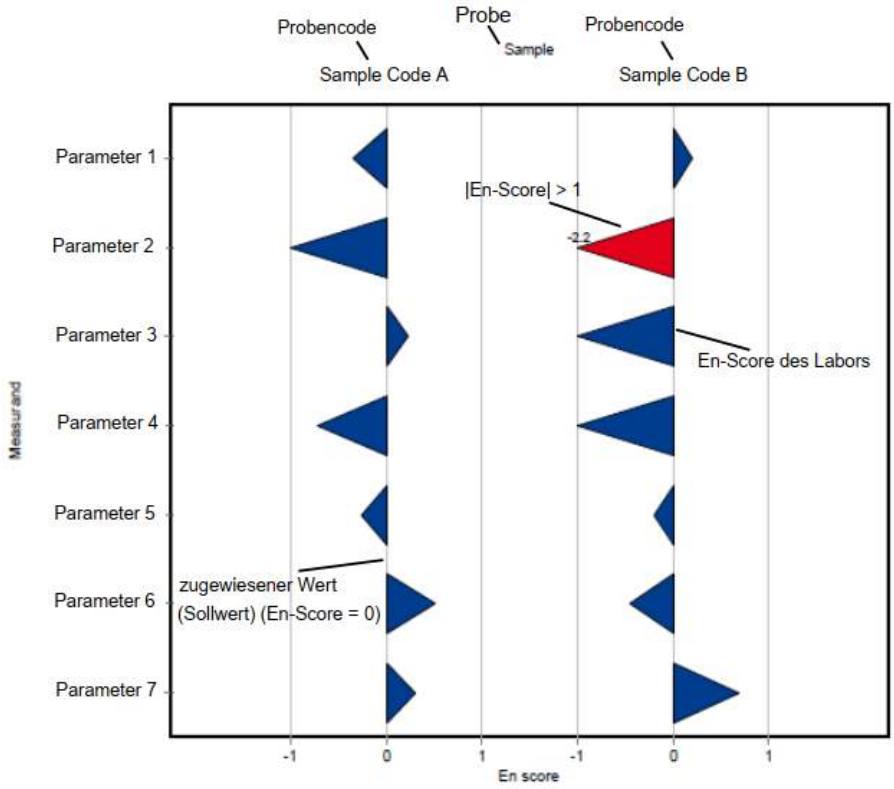


Unterschiedliche Analysenmethoden werden mit unterschiedlichen Farben kenntlich gemacht.

Beispieldiagramm: z-Score (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 [%]
Acenaphthen	P26 A	ng/l	17.8	±	1.91	3.38	19
	P26 B	ng/l	261	±	35.6	60.1	23
Acenaphthylen	P26 A	ng/l	25.7	±	2.71	6.16	24
	P26 B	ng/l	354	±	35	84.8	24
Anthracen	P26 A	ng/l	19.8	±	3.06	4.94	25
	P26 B	ng/l	260	±	30.9	54.7	21
Benzo[a]anthracen	P26 A	ng/l	19.7	±	2.56	4.13	21
	P26 B	ng/l	279	±	35.5	58.6	21
Benzo[a]pyren	P26 A	ng/l	16	±	2.75	4.32	27
	P26 B	ng/l	242	±	19.1	58.2	24
Benzo[b]fluoranthen	P26 A	ng/l	22.5	±	2.7	4.04	18
	P26 B	ng/l	277	±	43.5	69.3	25
Benzo[g,h,i]perylen	P26 A	ng/l	22.9	±	2.02	5.72	25
	P26 B	ng/l	205	±	52.3	86.2	42
Benzo[k]fluoranthen	P26 A	ng/l	23.1	±	4.05	6.48	28
	P26 B	ng/l	229	±	36.4	57.3	25
Chrysen	P26 A	ng/l	26	±	3.79	5.71	22
	P26 B	ng/l	227	±	16.7	50	22
Dibenzo[a,h]anthracen	P26 A	ng/l	21.6	±	4.39	6.49	30
	P26 B*	ng/l	-	±	-	-	-
Fluoranthen	P26 A	ng/l	26.7	±	3.54	5.61	21
	P26 B	ng/l	316	±	40.1	66.3	21
Fluoren	P26 A	ng/l	19.3	±	1.71	2.71	14
	P26 B	ng/l	320	±	40.2	70.5	22
Indeno[1,2,3-cd]pyren	P26 A	ng/l	25.1	±	3.29	6.27	25
	P26 B	ng/l	268	±	38.4	66.9	25
Naphthalin	P26 A	ng/l	32.6	±	3.85	6.84	21
	P26 B	ng/l	277	±	41.9	72.1	26
Phenanthren	P26 A	ng/l	31.6	±	3.47	5.36	17
	P26 B	ng/l	267	±	38.2	64.1	24
Pyren	P26 A	ng/l	22.2	±	2.83	4.45	20
	P26 B	ng/l	240	±	27	45.6	19

*Für nachfolgenden Parameter können keine zugewiesenen Werte ermittelt werden (Vergleichsstandardabweichung >50%). Daher ist zur Information der berechnete Mittelwert MW+/- SD(2s) über die Daten der akkreditierten Labore (n) nach Ausreißerbereinigung angeführt. Dieser kann zum Vergleich im Rahmen Ihrer internen QS-Maßnahmen herangezogen werden.

P26 B Dibenzo[a,h]anthracen: MW (n=6, akkr.) +/- SD(2s): 163 +/- 130 ng/l

D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse

Parameter	Probe	Anzahl Labors für	Anzahl Ausreißer	Einheit	Mittelwert	±	VB (99%)	Minimum	Maximum	sR	vR [%]
Acenaphthen	P26 A	9	2	ng/l	17.8	±	2.87	11.4	21.2	2.87	16
	P26 B	11	1	ng/l	261	±	53.4	134	336	59.1	23
Acenaphthylen	P26 A	7	2	ng/l	25.7	±	4.06	18.8	30.2	3.58	14
	P26 B	8	2	ng/l	354	±	52.5	264	400	49.5	14
Anthracen	P26 A	10	0	ng/l	19.8	±	4.59	11.3	27.4	4.84	24
	P26 B	10	0	ng/l	260	±	46.4	178	315	48.9	19
Benzo[a]anthracen	P26 A	9	1	ng/l	19.7	±	3.83	12.4	23.3	3.83	20
	P26 B	10	0	ng/l	279	±	53.3	180	366	56.1	20
Benzo[a]pyren	P26 A	10	0	ng/l	16	±	4.12	9.55	21.2	4.34	27
	P26 B	10	1	ng/l	242	±	28.6	184	290	30.2	12
Benzo[b]fluoranthen	P26 A	9	1	ng/l	22.5	±	4.06	15.6	29.2	4.06	18
	P26 B	10	0	ng/l	277	±	65.3	166	388	68.8	25
Benzo[g,h,i]perylen	P26 A	9	1	ng/l	22.9	±	3.04	17.5	27.1	3.04	13
	P26 B	11	0	ng/l	205	±	78.5	83.8	343	86.8	42
Benzo[k]fluoranthen	P26 A	10	0	ng/l	23.1	±	6.07	11.8	31.4	6.4	28

Parameter	Probe	Anzahl Labors für	Anzahl Ausreißer	Einheit	Mittelwert	±	VB (99%)	Minimum	Maximum	sR	vR [%]
Benzo[k]fluoranthen	P26 B	10	0	ng/l	229	±	54.6	133	323	57.6	25
Chrysen	P26 A	10	0	ng/l	25.5	±	5.06	15.2	31.8	5.33	21
	P26 B	9	1	ng/l	227	±	25.1	177	261	25.1	11
Dibenzo[a,h]anthracen	P26 A	10	0	ng/l	22.2	±	4.99	14.2	28.2	5.26	24
	P26 B	10	0	ng/l	249	±	124	91.3	495	130	52
Fluoranthen	P26 A	10	0	ng/l	26.7	±	5.32	15.5	33.7	5.61	21
	P26 B	11	0	ng/l	316	±	60.2	206	422	66.5	21
Fluoren	P26 A	10	1	ng/l	19.3	±	2.56	14.1	22.6	2.7	14
	P26 B	12	0	ng/l	320	±	60.3	171	400	69.6	22
Indeno[1,2,3-cd]pyren	P26 A	10	0	ng/l	25.1	±	4.94	15	31.8	5.21	21
	P26 B	10	0	ng/l	268	±	57.6	190	393	60.8	23
Naphthalin	P26 A	10	1	ng/l	32.6	±	5.77	20.6	41	6.09	19
	P26 B	12	0	ng/l	277	±	62.9	151	360	72.6	26
Phenanthren	P26 A	9	2	ng/l	31.6	±	5.21	21.6	41.1	5.21	17
	P26 B	11	0	ng/l	267	±	57.2	148	356	63.3	24
Pyren	P26 A	10	0	ng/l	22.2	±	4.24	13.1	28.3	4.47	20
	P26 B	11	0	ng/l	240	±	40.5	165	325	44.8	19

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 13
- Number of submitted data records: 12
- Dispatch of samples: February 18th, 2025
- Closing date for submission of data: March 18th, 2025

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 drinking water and ground water was carried out on February 14th, 2025 and on Feburary 12th, 2025.

The following samples were made available

- 1 sample drinking water (P26 A)
- 1 sample groundwater (P26 B)

Both samples were stored at 4 +/- 3°C until further processing. After filtration (40 µm), the samples were filled into bottles under continuous stirring (stirring vessel). Afterwards the samples were partly spiked in the bottles with specific substances and homogenized by shaking. The samples were stabilized by cooling.

The homogeneous proficiency test items were dispatched on the 18th of February 2025.

Each participant received:

- 2 samples each 2000 ml, filled in 2 x 1000 ml brown glass bottles

E1.3. Instructions for the participants

For reasons of stability, it was recommended to start the analysis by the 20th of February 2025 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.

All parameters were tested in the testing laboratory at the Environment Agency Austria (Prüfstelle für Umwelt-, GVO- & Treibstoffanalytik) close to the time of sample dispatch.

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

In the parameter-oriented evaluation (E7), the results of the control testing are given in the form of arithmetic means of the detected concentrations ± 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 2024.

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

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

According to data obtained from previous rounds and based on the trend test evaluation of the current round, the stability of the test items for proficiency testing of real 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 18th of March 2025. 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 2024 (as RSD pooled). 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

In addition, an 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 12 proficiency testing rounds (2013–2024 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 acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(g,h,i)-perylene, fluorene, indeno(1,2,3-cd)pyrene and naphthalene for sample P26 A and parameters acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene and indeno(1,2,3-cd)pyrene for sample P26 B: Scores for all listed parameters were calculated according to E2.

Parameters chrysene and dibenzo(a,h)anthracene for sample P26 A: The assigned values calculated based on the participants' results were outside of the measurement uncertainty of the control test value and thus traceability could not be proven by this procedure. Therefore, new assigned values were defined by the group of accredited participating laboratories after outlier-assessment.

Parameters anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluor-anthene, fluoranthene, phenanthrene and pyrene for sample P26 A and parameters acenaphthene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, fluoranthene, fluorene, naphthalene, phenanthrene and pyrene for sample P26 B: For these parameters the relative reproducibility standard deviations (vR) of the current proficiency testing round were chosen for assessment.

For the following parameters and samples outliers according to Hampel (H95) were eliminated before calculation of the overall mean: benzo(a)anthracene (LC0005 H95) and benzo(b)fluoranthene (LC0003 H95) for sample P26 A and parameter acenaphthene (LC0005 H95) for sample P26 B.

Parameter dibenzo(a,h)anthracene for sample P26 B: The mean value calculated based on the participants' results was outside the measurement uncertainty of the control value and the relative reproducibility standard deviation between the results of the participating laboratories was over 50 %. Due to the high variance between the results in the group of accredited participating laboratories, no assigned value could be derived. For this parameter, we recommend a comparison with the informative value listed in E6.1.

E5. Annotations on tables and charts

E5.1. Information and abbreviations in tables

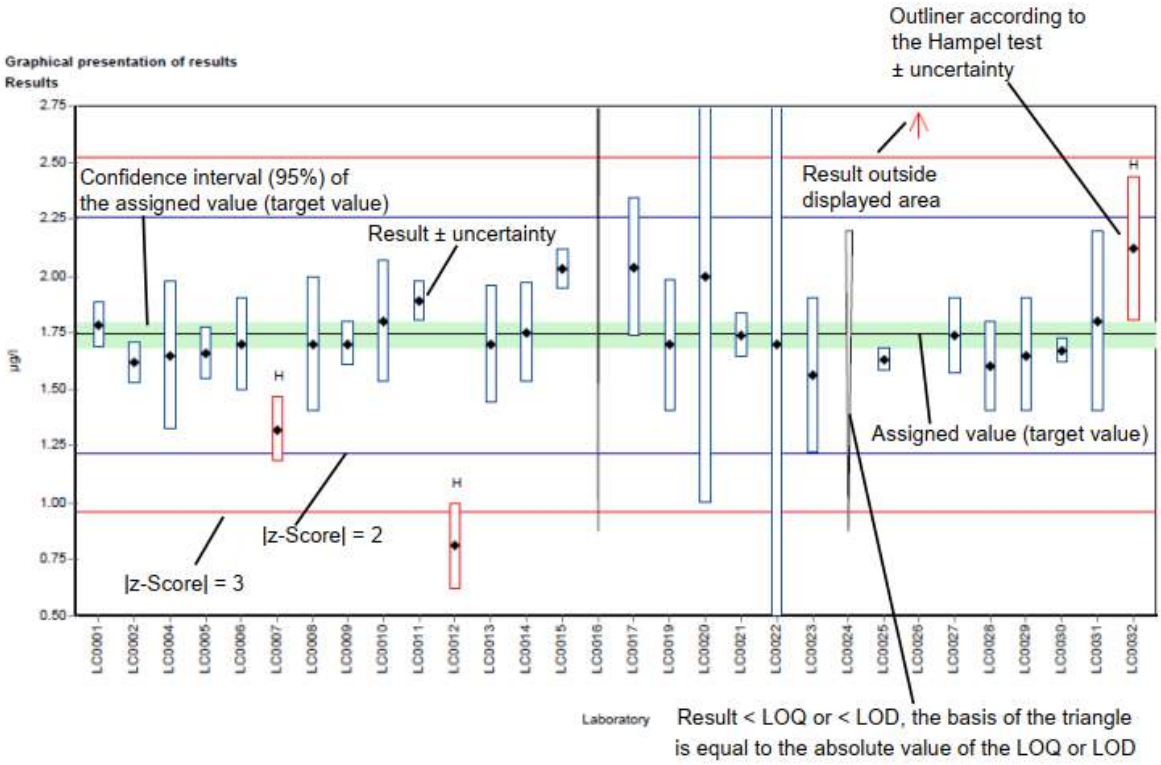
Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. ng/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criteria	Specified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

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

E5.2. Graphical presentation of results

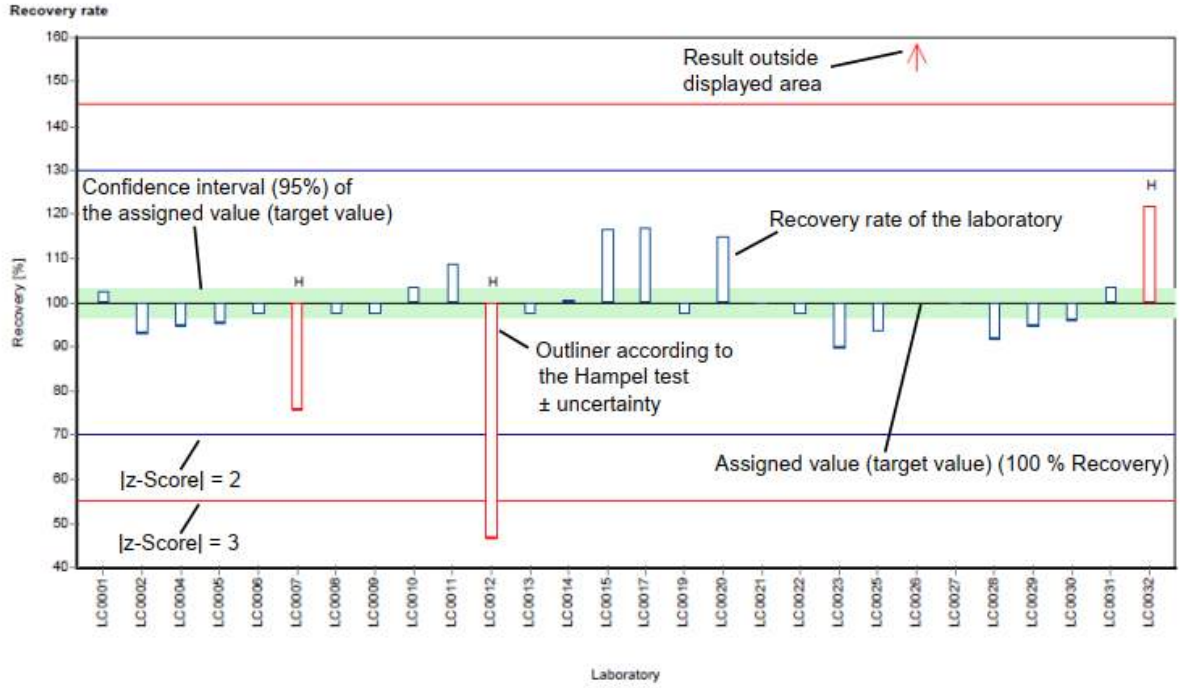
The graphic representation in the report is explained below by means of commented example diagrams:

Example chart: Results



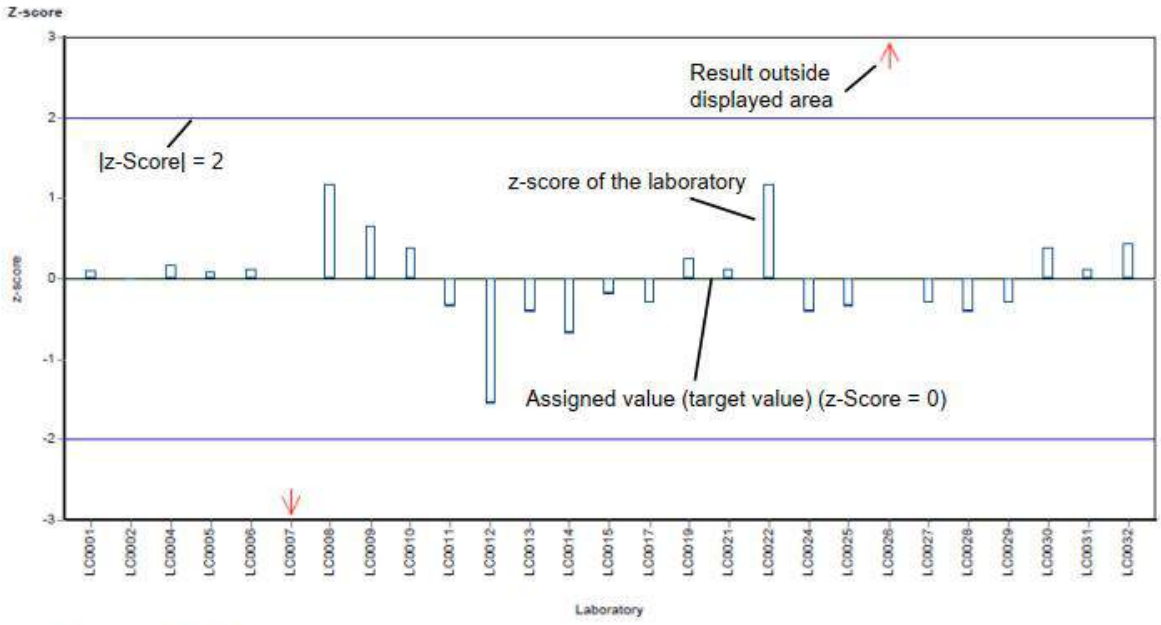
Different analysis methods are represented with different colors.

Example chart: Recovery



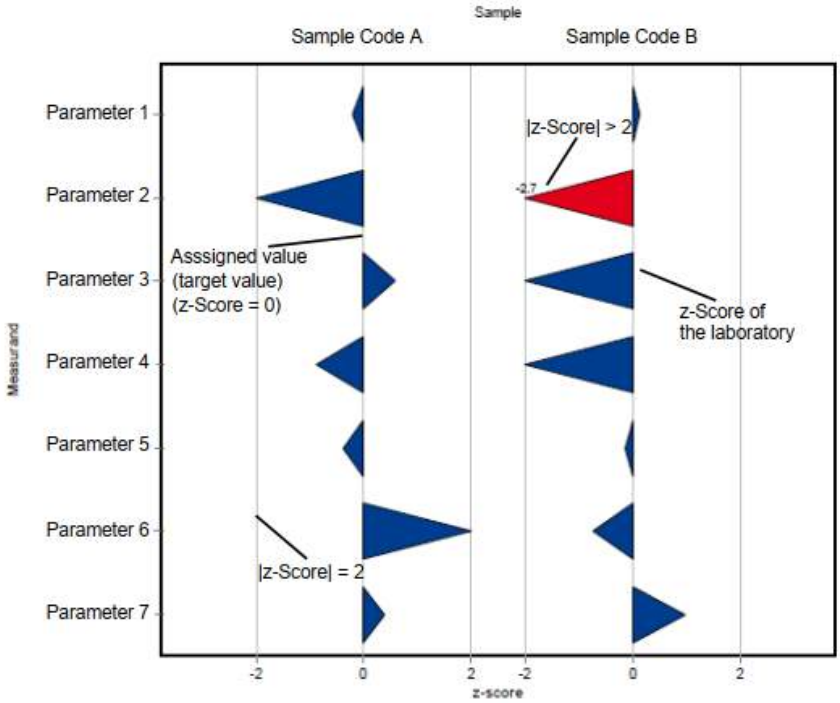
Different analysis methods are represented with different colors.

Example chart: z-Score

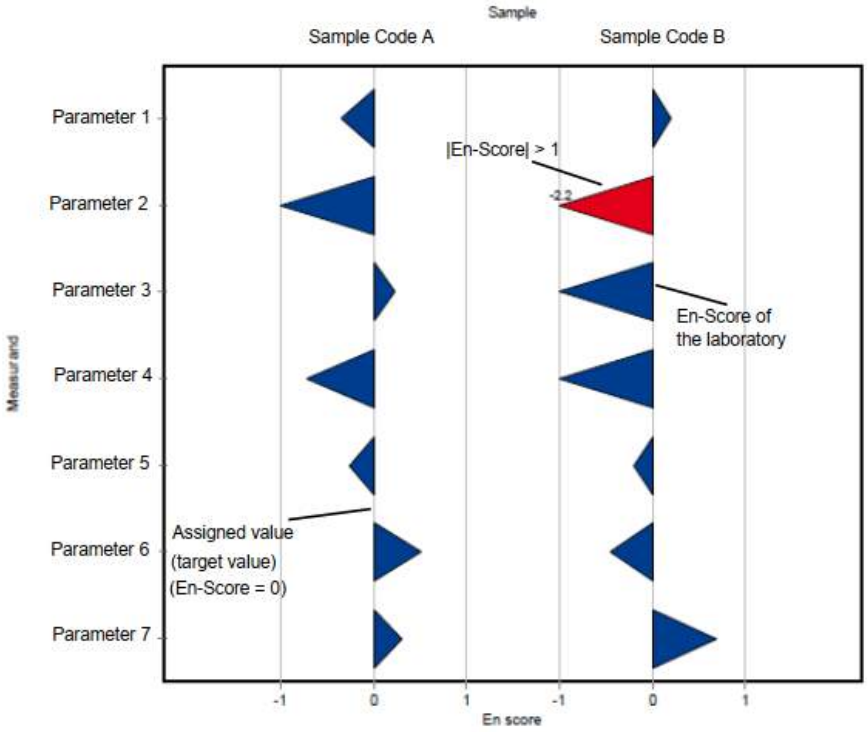


Different analysis methods are represented with different colors.

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 [%]
Acenaphthene	P26 A	ng/l	17.8	±	1.91	3.38	19
	P26 B	ng/l	261	±	35.6	60.1	23
Acenaphthylene	P26 A	ng/l	25.7	±	2.71	6.16	24
	P26 B	ng/l	354	±	35	84.8	24
Anthracene	P26 A	ng/l	19.8	±	3.06	4.94	25
	P26 B	ng/l	260	±	30.9	54.7	21
Benzo[a]anthracene	P26 A	ng/l	19.7	±	2.56	4.13	21
	P26 B	ng/l	279	±	35.5	58.6	21
Benzo[a]pyrene	P26 A	ng/l	16	±	2.75	4.32	27
	P26 B	ng/l	242	±	19.1	58.2	24
Benzo[b]fluoranthene	P26 A	ng/l	22.5	±	2.7	4.04	18
	P26 B	ng/l	277	±	43.5	69.3	25
Benzo[g,h,i]perylene	P26 A	ng/l	22.9	±	2.02	5.72	25
	P26 B	ng/l	205	±	52.3	86.2	42
Benzo[k]fluoranthene	P26 A	ng/l	23.1	±	4.05	6.48	28
	P26 B	ng/l	229	±	36.4	57.3	25
Chrysene	P26 A	ng/l	26	±	3.79	5.71	22
	P26 B	ng/l	227	±	16.7	50	22
Dibenzo[a,h]anthracene	P26 A	ng/l	21.6	±	4.39	6.49	30
	P26 B*	ng/l	-	±	-	-	-
Fluoranthene	P26 A	ng/l	26.7	±	3.54	5.61	21
	P26 B	ng/l	316	±	40.1	66.3	21
Fluorene	P26 A	ng/l	19.3	±	1.71	2.71	14
	P26 B	ng/l	320	±	40.2	70.5	22
Indeno[1,2,3-cd]pyrene	P26 A	ng/l	25.1	±	3.29	6.27	25
	P26 B	ng/l	268	±	38.4	66.9	25
Naphthalene	P26 A	ng/l	32.6	±	3.85	6.84	21

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Naphthalene	P26 B	ng/l	277	±	41.9	72.1	26
Phenanthrene	P26 A	ng/l	31.6	±	3.47	5.36	17
	P26 B	ng/l	267	±	38.2	64.1	24
Pyrene	P26 A	ng/l	22.2	±	2.83	4.45	20
	P26 B	ng/l	240	±	27	45.6	19

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

P26 B Dibenzo[a,h]anthracene: MV (n=6, accr.) +/- SD(2s): 163 +/- 130 ng/l

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

Parameter	Sample	Number of results for	Number of outliers	Unit	Mean	±	CI (99%)	Minimum	Maximum	sR	vR [%]
Acenaphthene	P26 A	9	2	ng/l	17.8	±	2.87	11.4	21.2	2.87	16
	P26 B	11	1	ng/l	261	±	53.4	134	336	59.1	23
Acenaphthylene	P26 A	7	2	ng/l	25.7	±	4.06	18.8	30.2	3.58	14
	P26 B	8	2	ng/l	354	±	52.5	264	400	49.5	14
Anthracene	P26 A	10	0	ng/l	19.8	±	4.59	11.3	27.4	4.84	24
	P26 B	10	0	ng/l	260	±	46.4	178	315	48.9	19
Benzo[a]anthracene	P26 A	9	1	ng/l	19.7	±	3.83	12.4	23.3	3.83	20
	P26 B	10	0	ng/l	279	±	53.3	180	366	56.1	20
Benzo[a]pyrene	P26 A	10	0	ng/l	16	±	4.12	9.55	21.2	4.34	27
	P26 B	10	1	ng/l	242	±	28.6	184	290	30.2	12
Benzo[b]fluoranthene	P26 A	9	1	ng/l	22.5	±	4.06	15.6	29.2	4.06	18
	P26 B	10	0	ng/l	277	±	65.3	166	388	68.8	25
Benzo[g,h,i]perylene	P26 A	9	1	ng/l	22.9	±	3.04	17.5	27.1	3.04	13
	P26 B	11	0	ng/l	205	±	78.5	83.8	343	86.8	42
Benzo[k]fluoranthene	P26 A	10	0	ng/l	23.1	±	6.07	11.8	31.4	6.4	28

Parameter	Sample	Number of results for	Number of outliers	Unit	Mean	±	CI (99%)	Minimum	Maximum	sR	vR [%]
Benzo[k]fluoranthene	P26 B	10	0	ng/l	229	±	54.6	133	323	57.6	25
Chrysene	P26 A	10	0	ng/l	25.5	±	5.06	15.2	31.8	5.33	21
	P26 B	9	1	ng/l	227	±	25.1	177	261	25.1	11
Dibenzo[a,h]anthracene	P26 A	10	0	ng/l	22.2	±	4.99	14.2	28.2	5.26	24
	P26 B	10	0	ng/l	249	±	124	91.3	495	130	52
Fluoranthene	P26 A	10	0	ng/l	26.7	±	5.32	15.5	33.7	5.61	21
	P26 B	11	0	ng/l	316	±	60.2	206	422	66.5	21
Fluorene	P26 A	10	1	ng/l	19.3	±	2.56	14.1	22.6	2.7	14
	P26 B	12	0	ng/l	320	±	60.3	171	400	69.6	22
Indeno[1,2,3-cd]pyrene	P26 A	10	0	ng/l	25.1	±	4.94	15	31.8	5.21	21
	P26 B	10	0	ng/l	268	±	57.6	190	393	60.8	23
Naphthalene	P26 A	10	1	ng/l	32.6	±	5.77	20.6	41	6.09	19
	P26 B	12	0	ng/l	277	±	62.9	151	360	72.6	26
Phenanthrene	P26 A	9	2	ng/l	31.6	±	5.21	21.6	41.1	5.21	17
	P26 B	11	0	ng/l	267	±	57.2	148	356	63.3	24
Pyrene	P26 A	10	0	ng/l	22.2	±	4.24	13.1	28.3	4.47	20
	P26 B	11	0	ng/l	240	±	40.5	165	325	44.8	19

E7. Parameterorientierte Auswertung / Parameter oriented report

Parameter oriented report

P26 A

Acenaphthene

Unit	ng/l
Assigned value ± U (k=2)	17.8 ± 1.91
Criterion	3.38 (19 %)
Minimum - Maximum	11.4 - 21.2
Control test value ± U (k=2)	21.5 ± 7.54

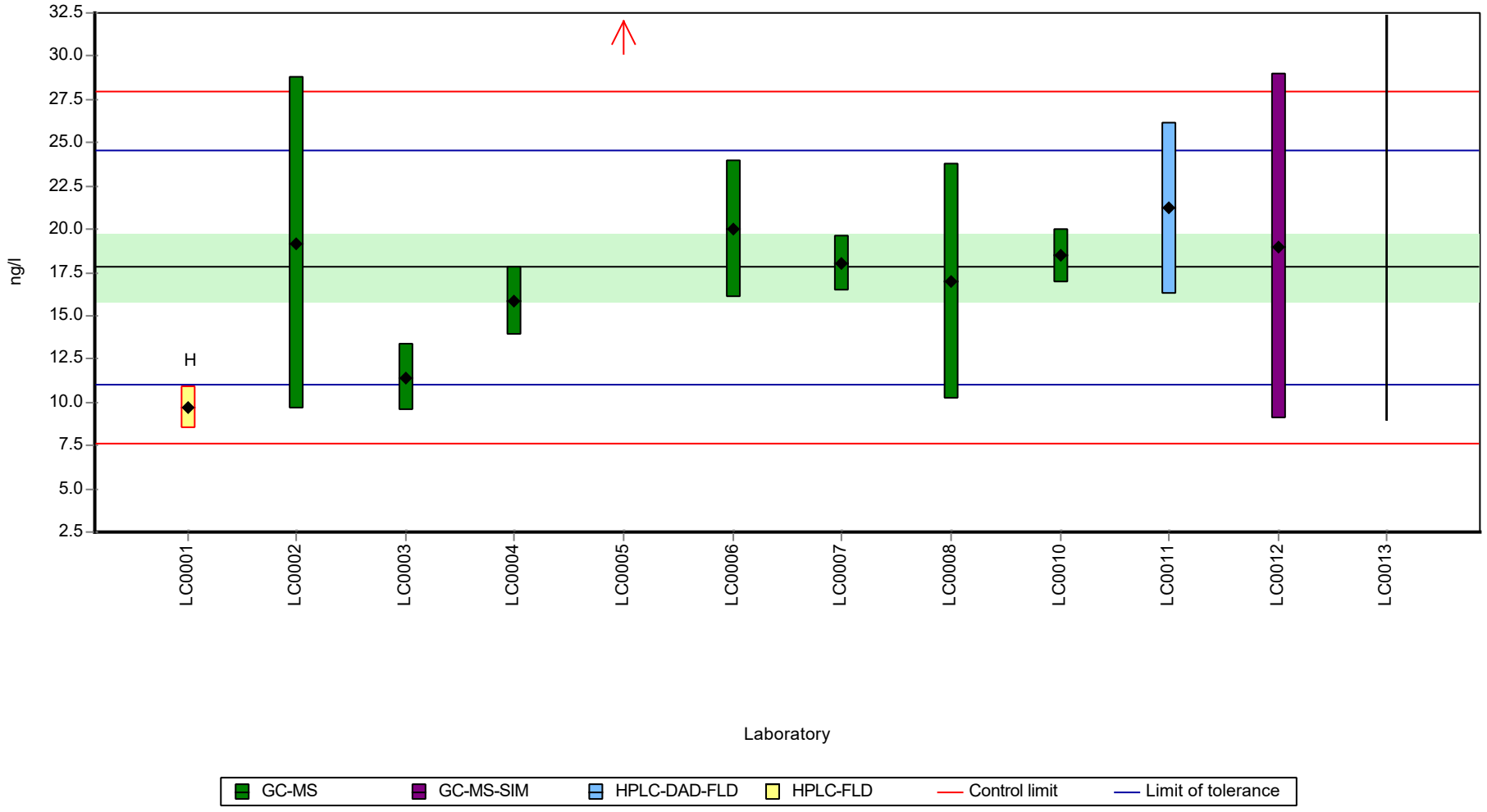
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	9.7	1.25	54.5	-2.39	H
LC0002	19.2	9.6	108	0.42	
LC0003	11.4	1.94	64.1	-1.89	
LC0004	15.85	2	89.1	-0.57	
LC0005	80.5	48.74	453	18.55	H
LC0006	20	4	112	0.65	
LC0007	18	1.6	101	0.06	
LC0008	17	6.79	95.6	-0.23	
LC0009	-	-	-	-	
LC0010	18.452	1.555	104	0.2	
LC0011	21.2	5	119	1.01	
LC0012	19	10	107	0.36	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	22.8 ± 17.6	17.8 ± 2.87	ng/l
Minimum	9.7	11.4	ng/l
Maximum	80.5	21.2	ng/l
Standard deviation	19.5	2.87	ng/l
rel. standard deviation	85.6	16.1	%
n	11	9	-

Graphical presentation of results

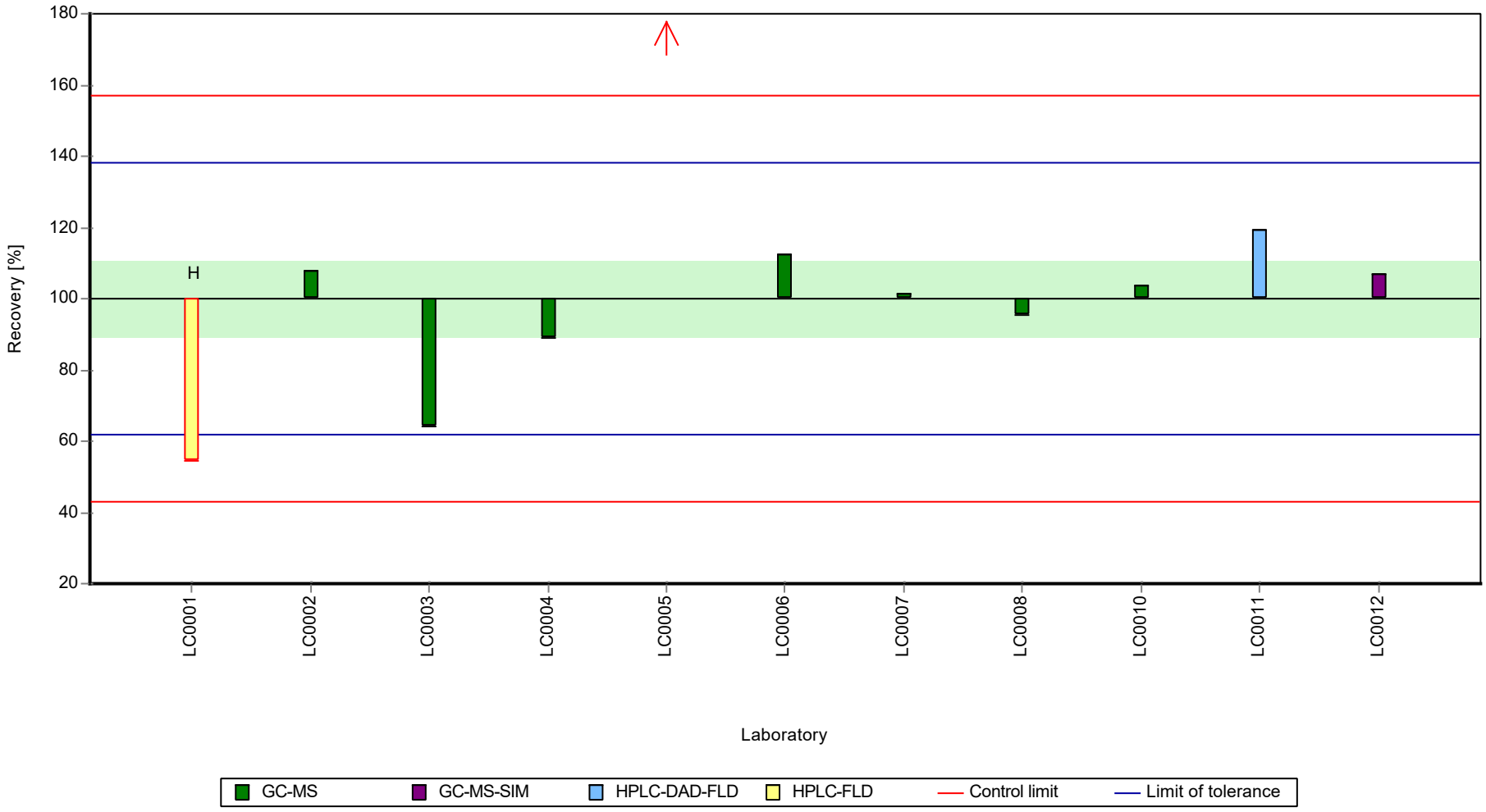
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

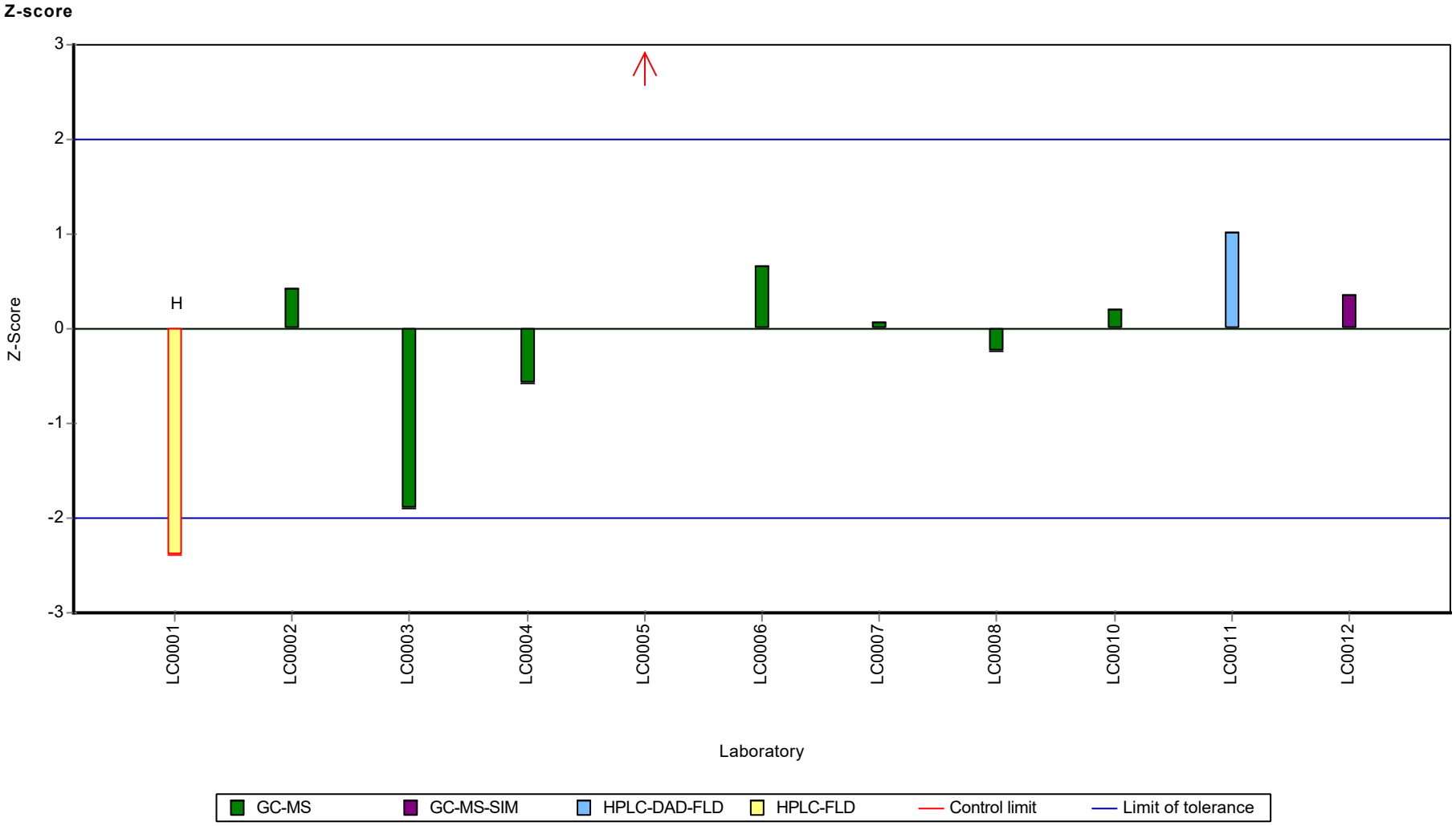
Sample: P26A, Parameter: Acenaphthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Acenaphthene



Parameter oriented report

P26 B

Acenaphthene

Unit	ng/l
Assigned value ± U (k=2)	261 ± 35.6
Criterion	60.1 (23 %)
Minimum - Maximum	134 - 336
Control test value ± U (k=2)	336 ± 118

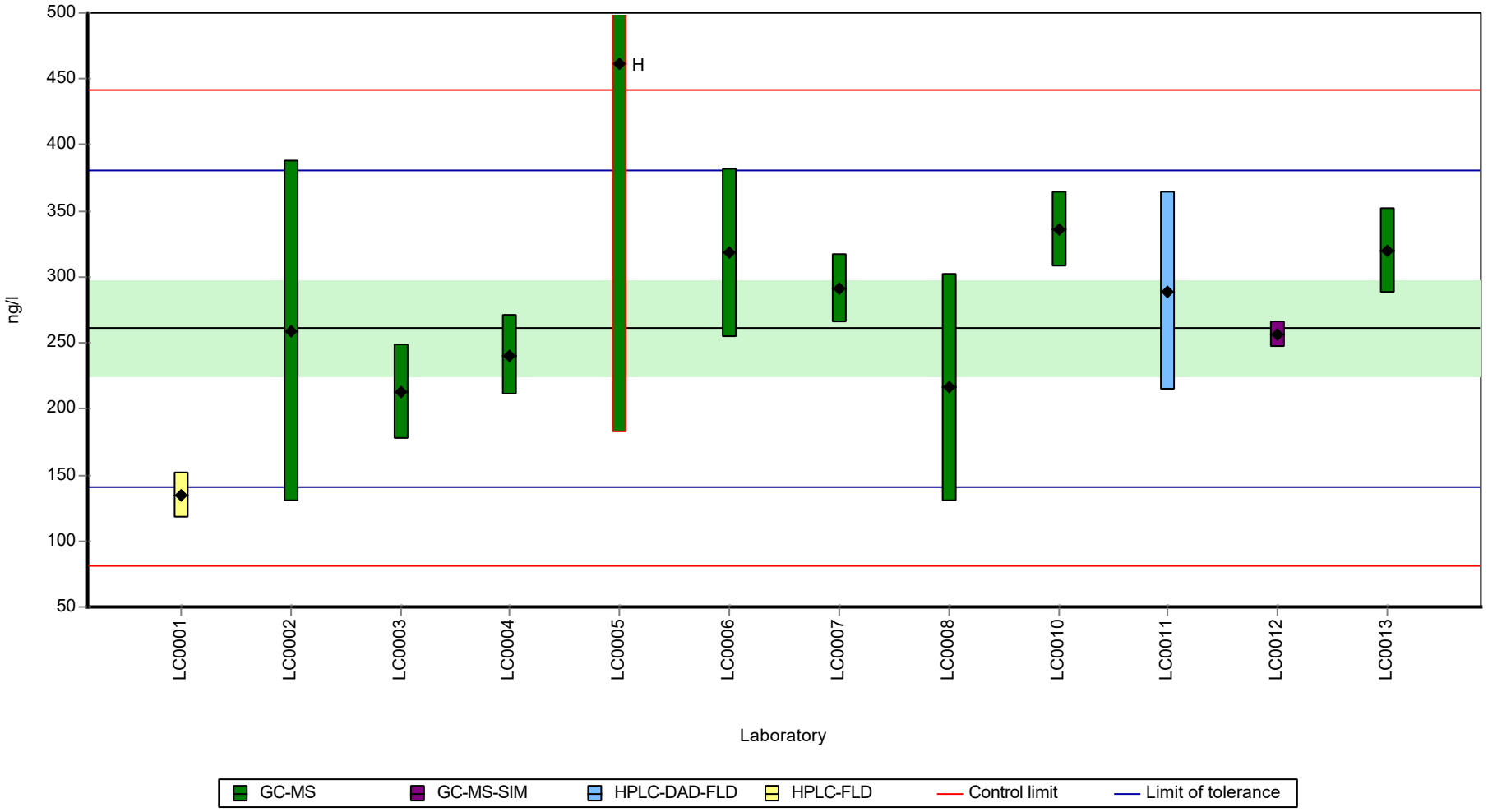
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	134.3	17.31	51.4	-2.11	
LC0002	259	129.5	99.2	-0.04	
LC0003	213	36.2	81.6	-0.8	
LC0004	240.3	30.4	92	-0.35	
LC0005	461.88	279.67	177	3.34	H
LC0006	318	64	122	0.95	
LC0007	291	26	111	0.5	
LC0008	216	86.5	82.7	-0.75	
LC0009	-	-	-	-	
LC0010	335.995	28.324	129	1.25	
LC0011	289	75	111	0.46	
LC0012	256	10	98	-0.09	
LC0013	320	32	123	0.98	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	278 ± 70	261 ± 53.4	ng/l
Minimum	134	134	ng/l
Maximum	462	336	ng/l
Standard deviation	80.8	59.1	ng/l
rel. standard deviation	29.1	22.6	%
n	12	11	-

Graphical presentation of results

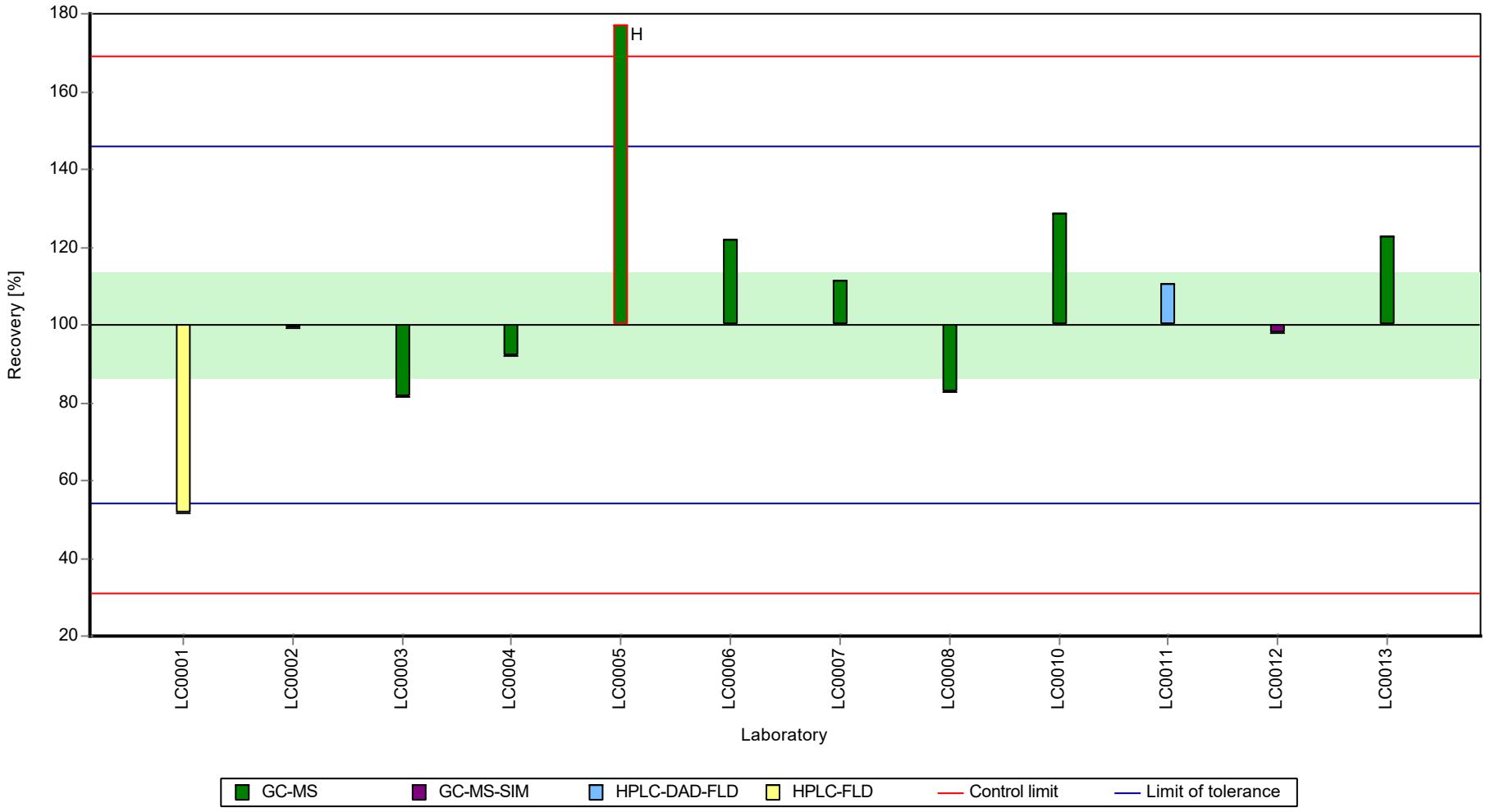
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

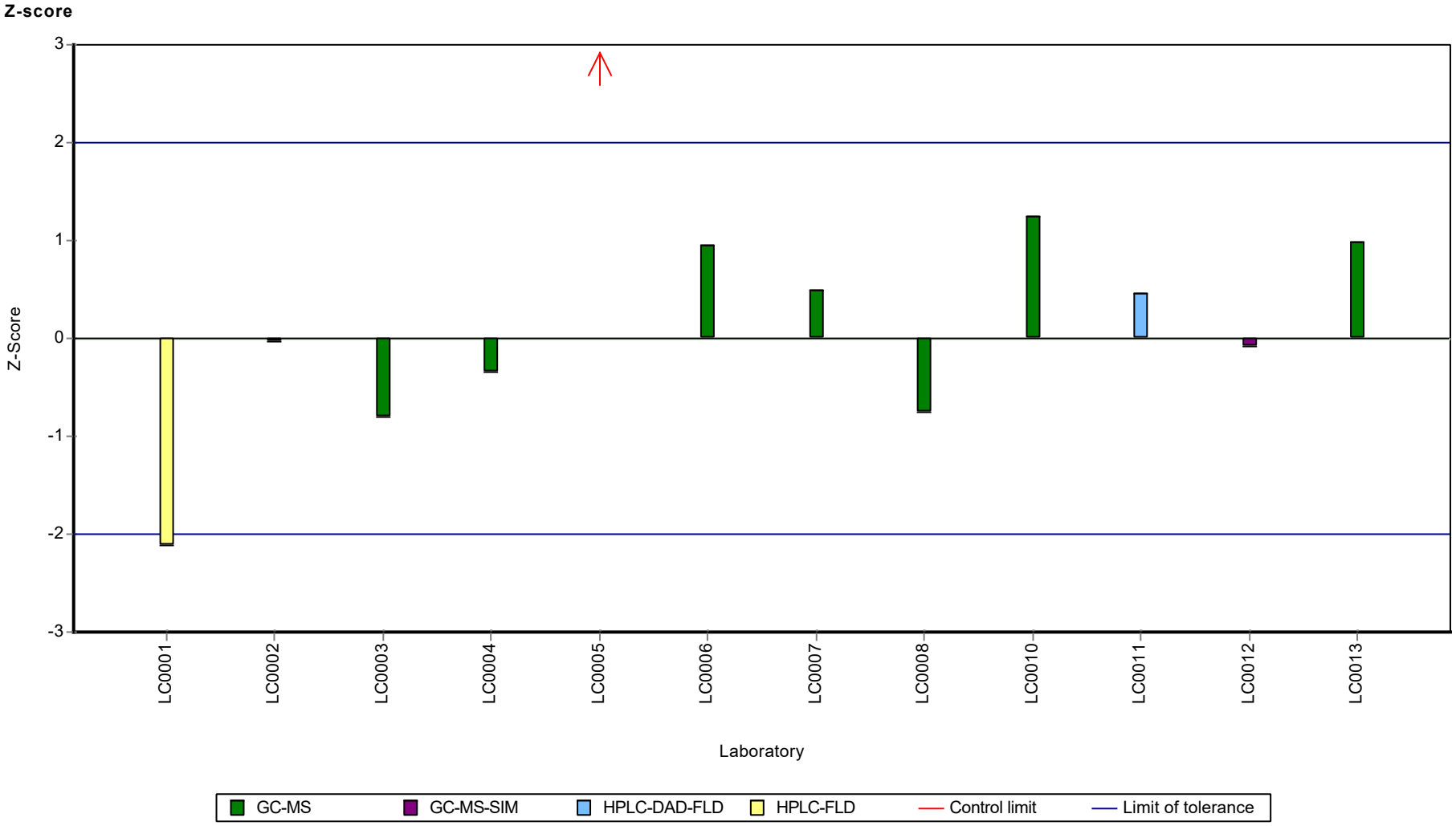
Sample: P26B, Parameter: Acenaphthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Acenaphthene



Parameter oriented report

P26 A

Acenaphthylene

Unit	ng/l
Assigned value ± U (k=2)	25.7 ± 2.71
Criterion	6.16 (24 %)
Minimum - Maximum	18.8 - 30.2
Control test value ± U (k=2)	29.1 ± 8.73

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	25.4	12.7	99	-0.04	
LC0003	15	2.85	58.4	-1.73	H
LC0004	26.19	3.35	102	0.08	
LC0005	73.85	58.84	288	7.82	H
LC0006	30.2	6	118	0.74	
LC0007	27.2	2.4	106	0.25	
LC0008	24.2	9.7	94.3	-0.24	
LC0009	-	-	-	-	
LC0010	18.787	2.224	73.2	-1.12	
LC0011	27.7	8	108	0.33	
LC0012	-	-	-	-	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

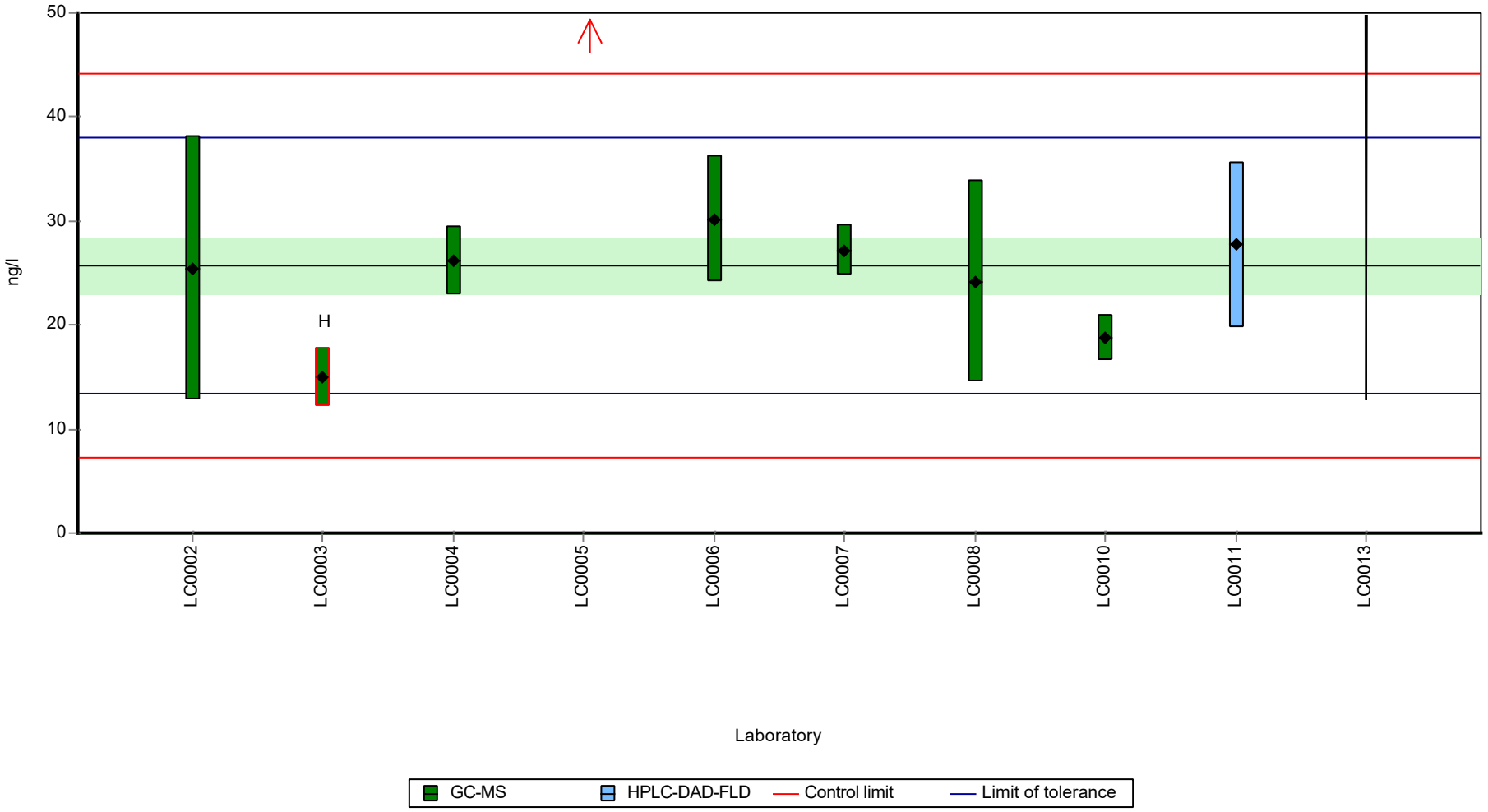
	all results	w ithout outliers	Unit
Mean ± CI (99%)	29.8 ± 17.2	25.7 ± 4.06	ng/l
Minimum	15	18.8	ng/l
Maximum	73.9	30.2	ng/l
Standard deviation	17.2	3.58	ng/l
rel. standard deviation	57.5	13.9	%
n	9	7	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Acenaphthylene

Graphical presentation of results

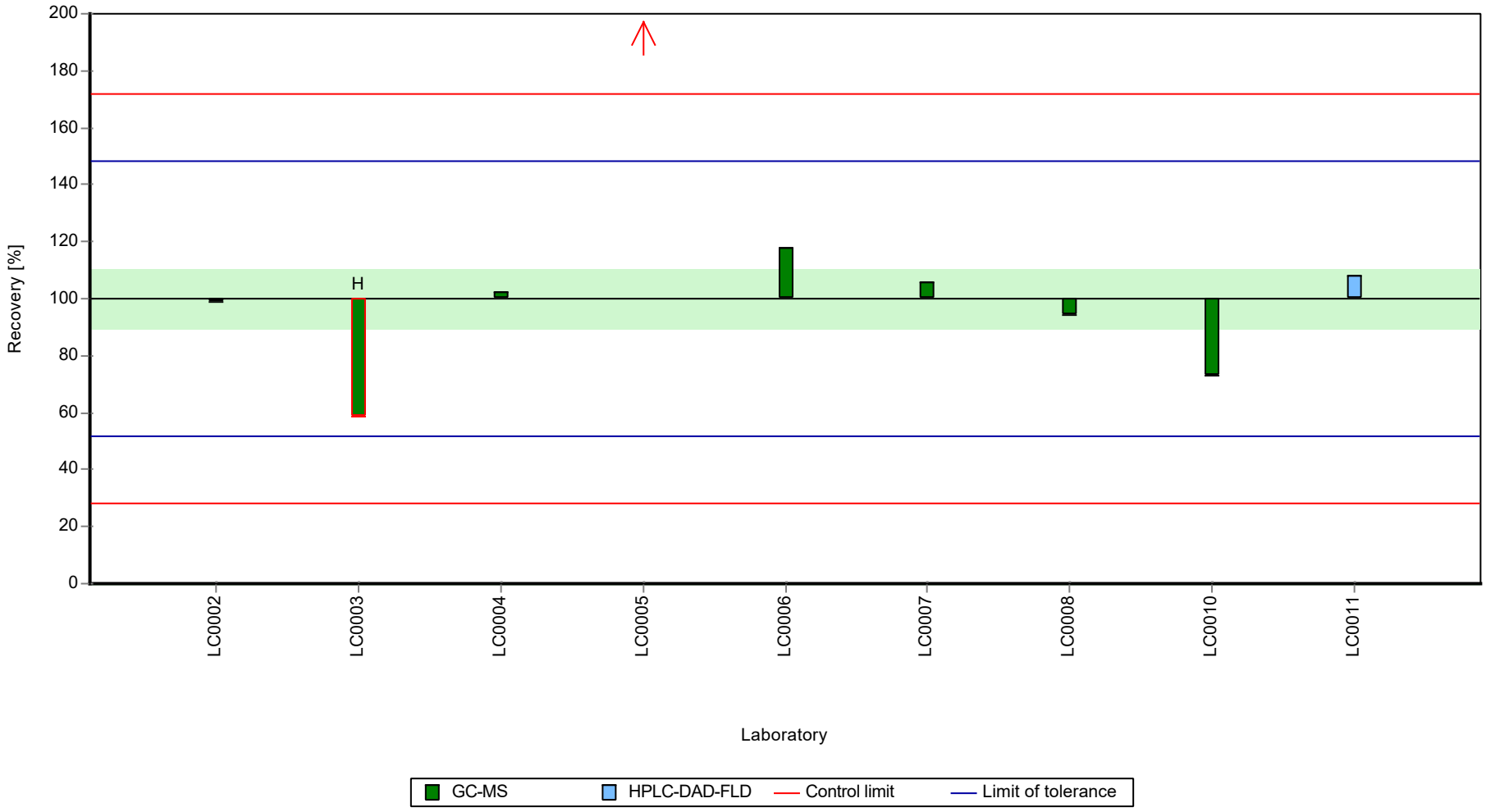
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

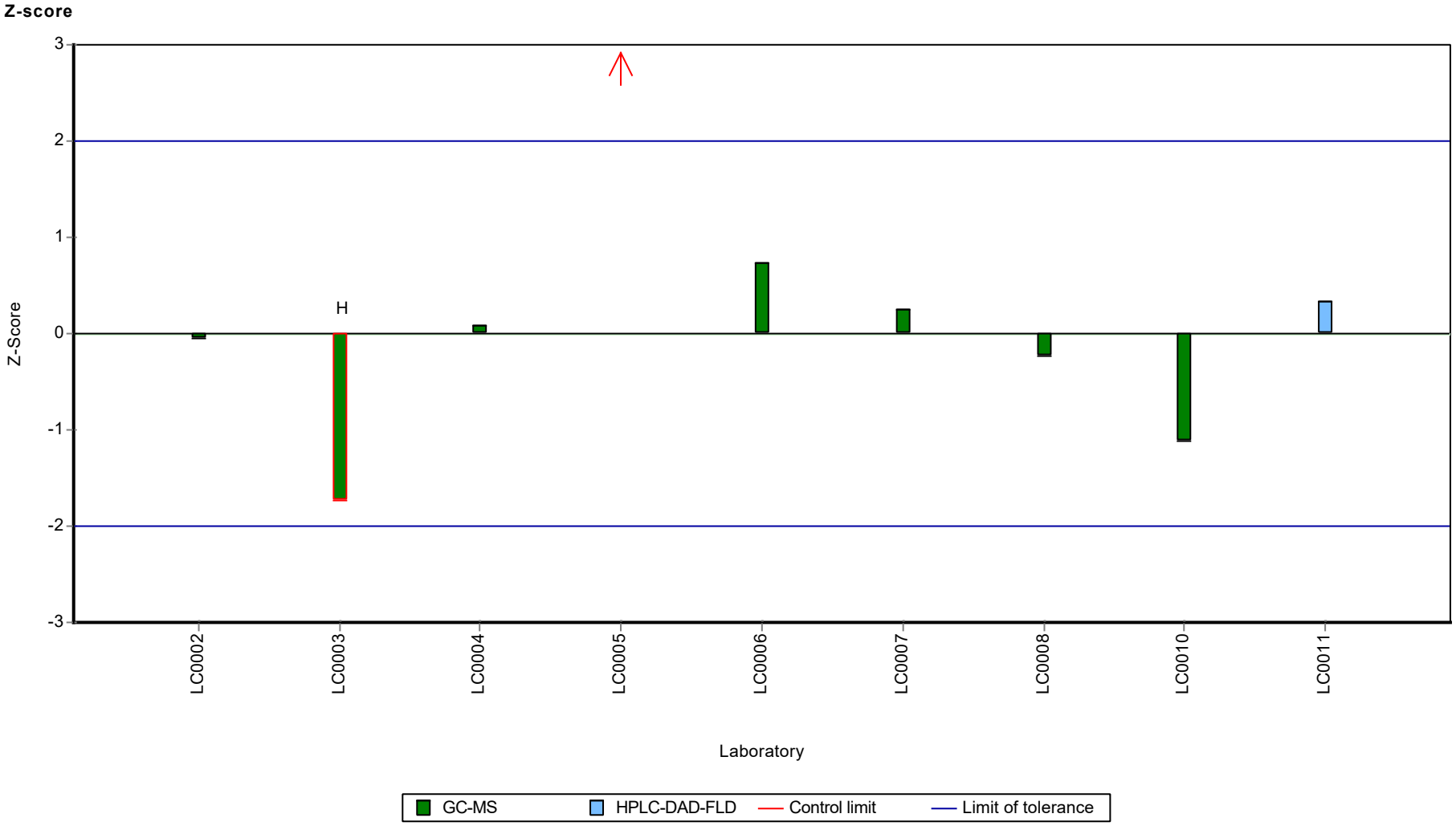
Sample: P26A, Parameter: Acenaphthylene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Acenaphthylene



Parameter oriented report

P26 B

Acenaphthylene

Unit	ng/l
Assigned value ± U (k=2)	354 ± 35
Criterion	84.8 (24 %)
Minimum - Maximum	264 - 400
Control test value ± U (k=2)	440 ± 132

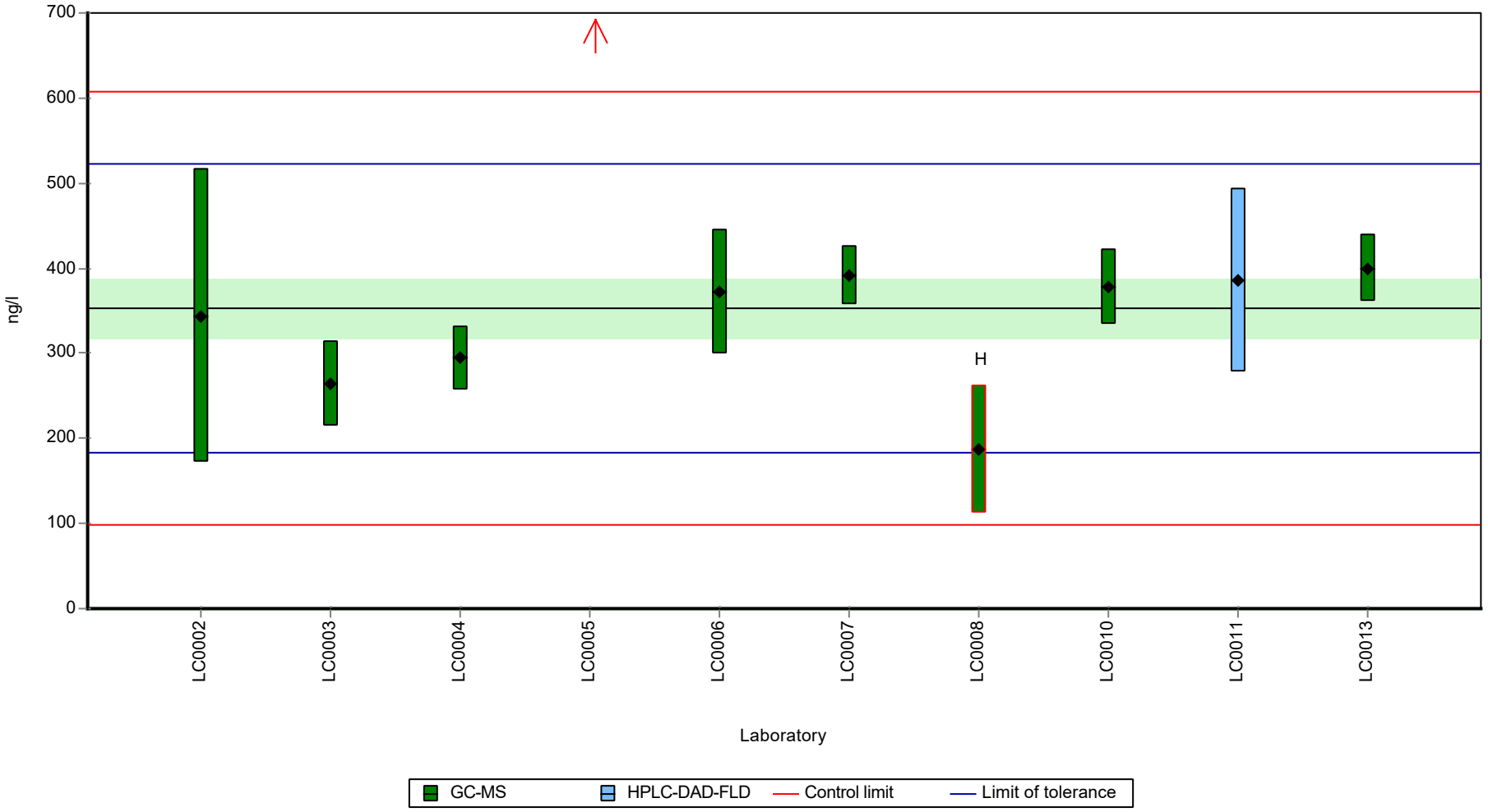
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	344	172	97.3	-0.11	
LC0003	264	50.2	74.7	-1.06	
LC0004	294.1	37.6	83.2	-0.7	
LC0005	1069.7	852.23	303	8.44	H
LC0006	372	74	105	0.22	
LC0007	391	35	111	0.44	
LC0008	188	75.2	53.2	-1.95	H
LC0009	-	-	-	-	
LC0010	378.05	44.761	107	0.29	
LC0011	385	108	109	0.37	
LC0012	-	-	-	-	
LC0013	400	40	113	0.55	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	409 ± 230	354 ± 52.5	ng/l
Minimum	188	264	ng/l
Maximum	1070	400	ng/l
Standard deviation	242	49.5	ng/l
rel. standard deviation	59.2	14	%
n	10	8	-

Graphical presentation of results

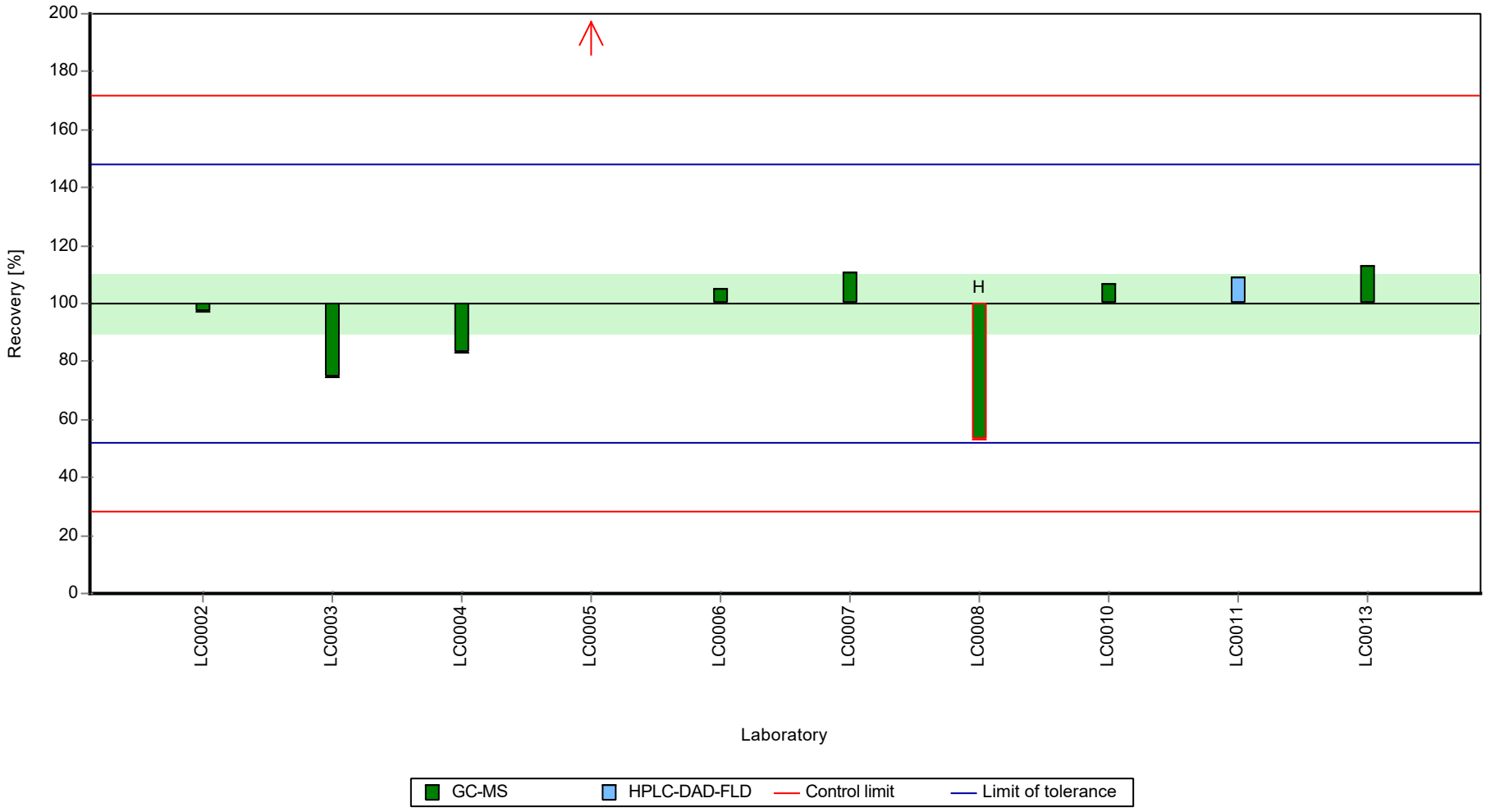
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

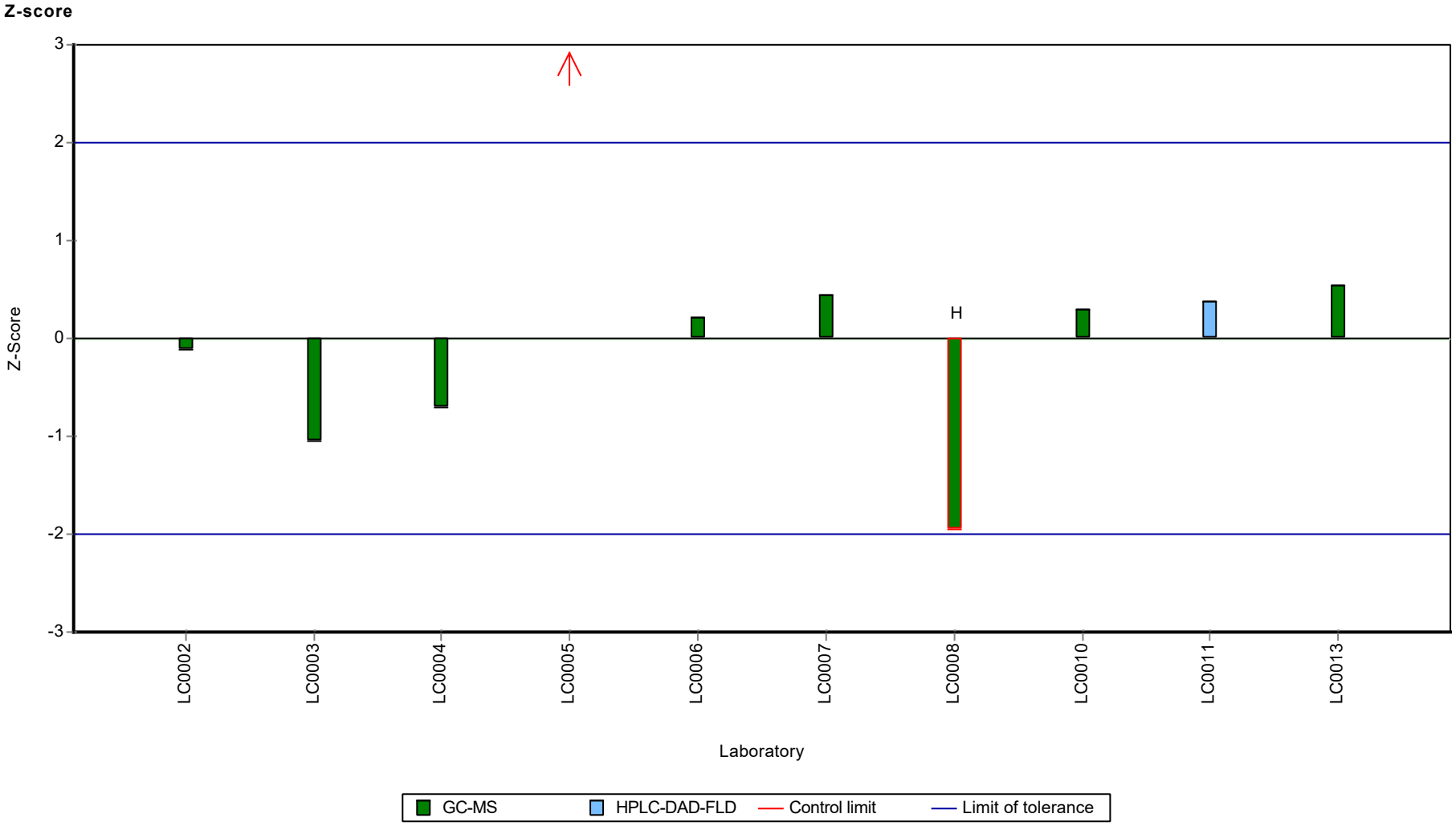
Sample: P26B, Parameter: Acenaphthylene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Acenaphthylene



Parameter oriented report

P26 A

Anthracene

Unit	ng/l
Assigned value ± U (k=2)	19.8 ± 3.06
Criterion	4.94 (25 %)
Minimum - Maximum	11.3 - 27.4
Control test value ± U (k=2)	23.7 ± 5.91

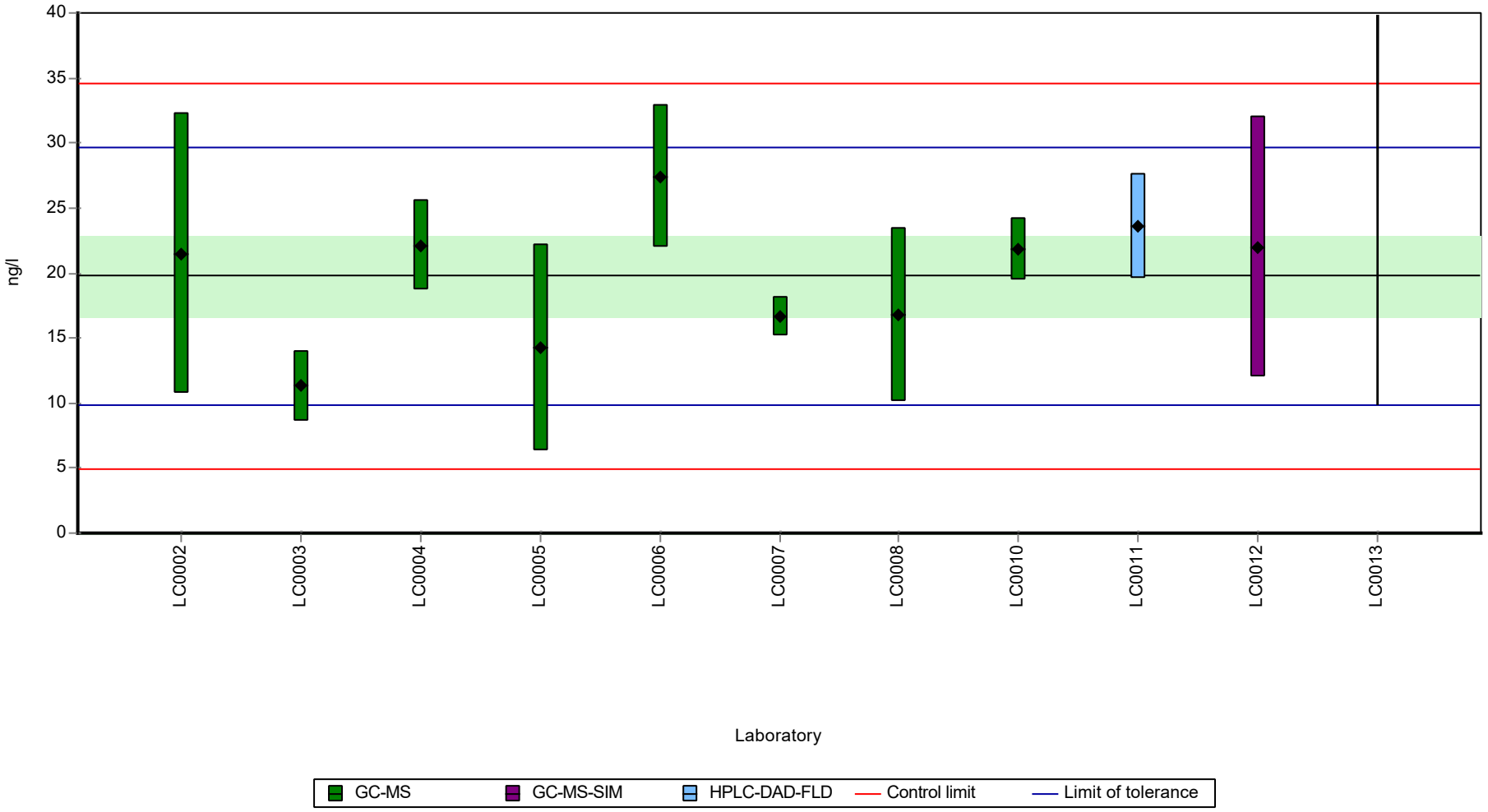
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	21.5	10.75	109	0.35	
LC0003	11.3	2.71	57.2	-1.71	
LC0004	22.1	3.48	112	0.47	
LC0005	14.3	7.93	72.4	-1.1	
LC0006	27.4	5.5	139	1.55	
LC0007	16.7	1.5	84.5	-0.62	
LC0008	16.8	6.72	85	-0.6	
LC0009	-	-	-	-	
LC0010	21.842	2.406	111	0.42	
LC0011	23.6	4	119	0.78	
LC0012	22	10	111	0.45	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	19.8 ± 4.59	19.8 ± 4.59	ng/l
Minimum	11.3	11.3	ng/l
Maximum	27.4	27.4	ng/l
Standard deviation	4.84	4.84	ng/l
rel. standard deviation	24.5	24.5	%
n	10	10	-

Graphical presentation of results

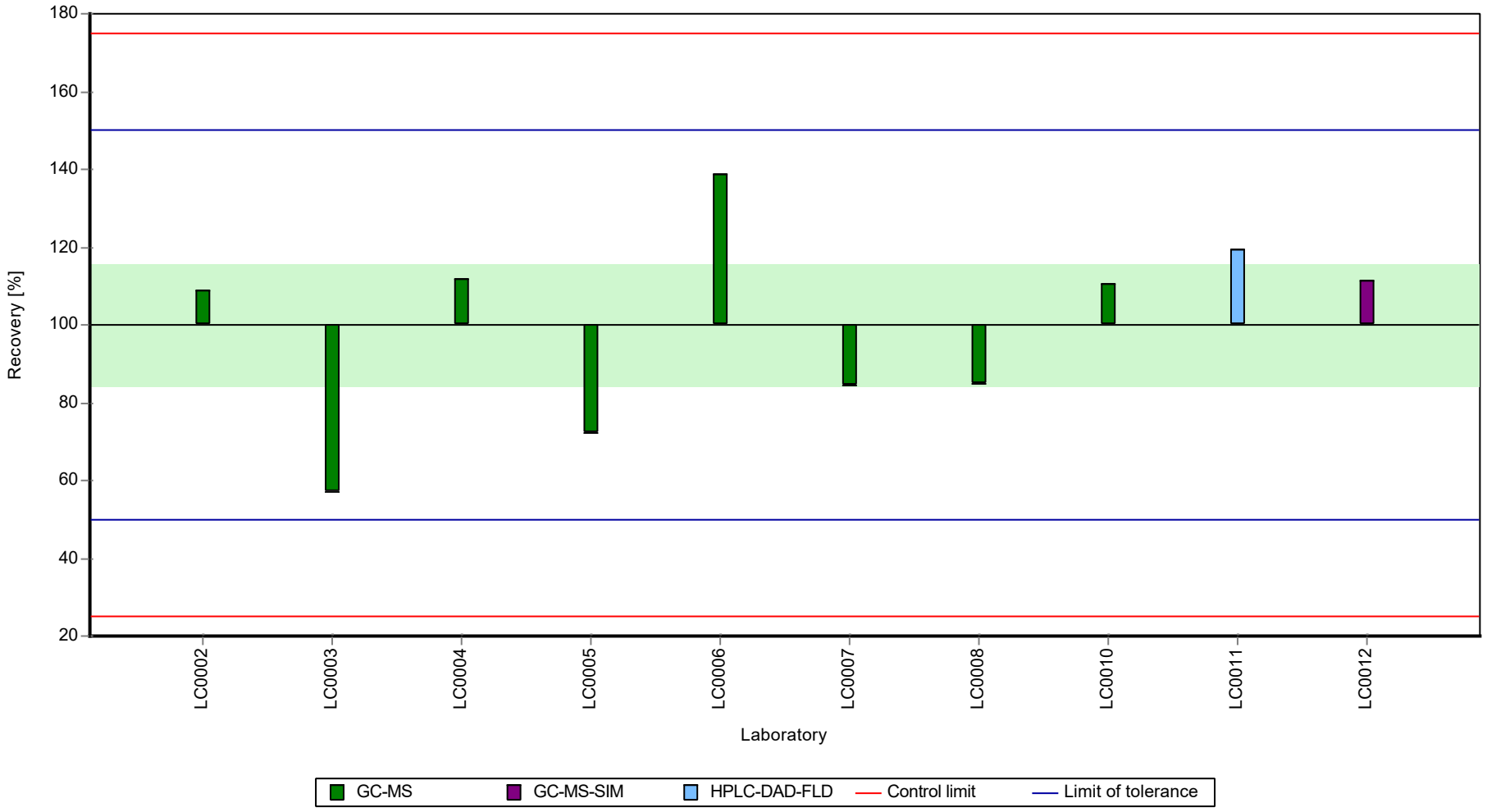
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

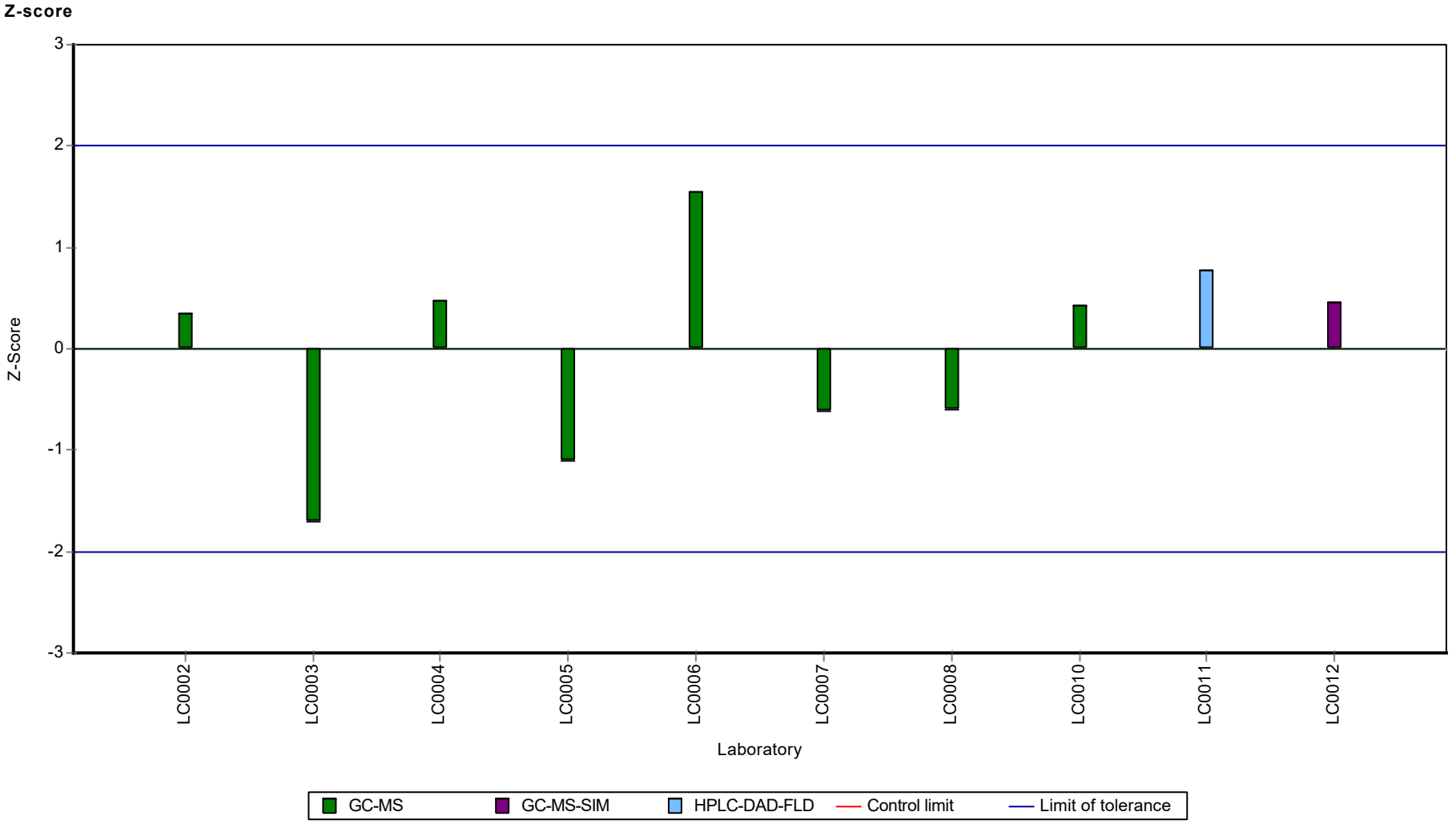
Sample: P26A, Parameter: Anthracene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Anthracene



Parameter oriented report

P26 B

Anthracene

Unit	ng/l
Assigned value ± U (k=2)	260 ± 30.9
Criterion	54.7 (21 %)
Minimum - Maximum	178 - 315
Control test value ± U (k=2)	316 ± 79.1

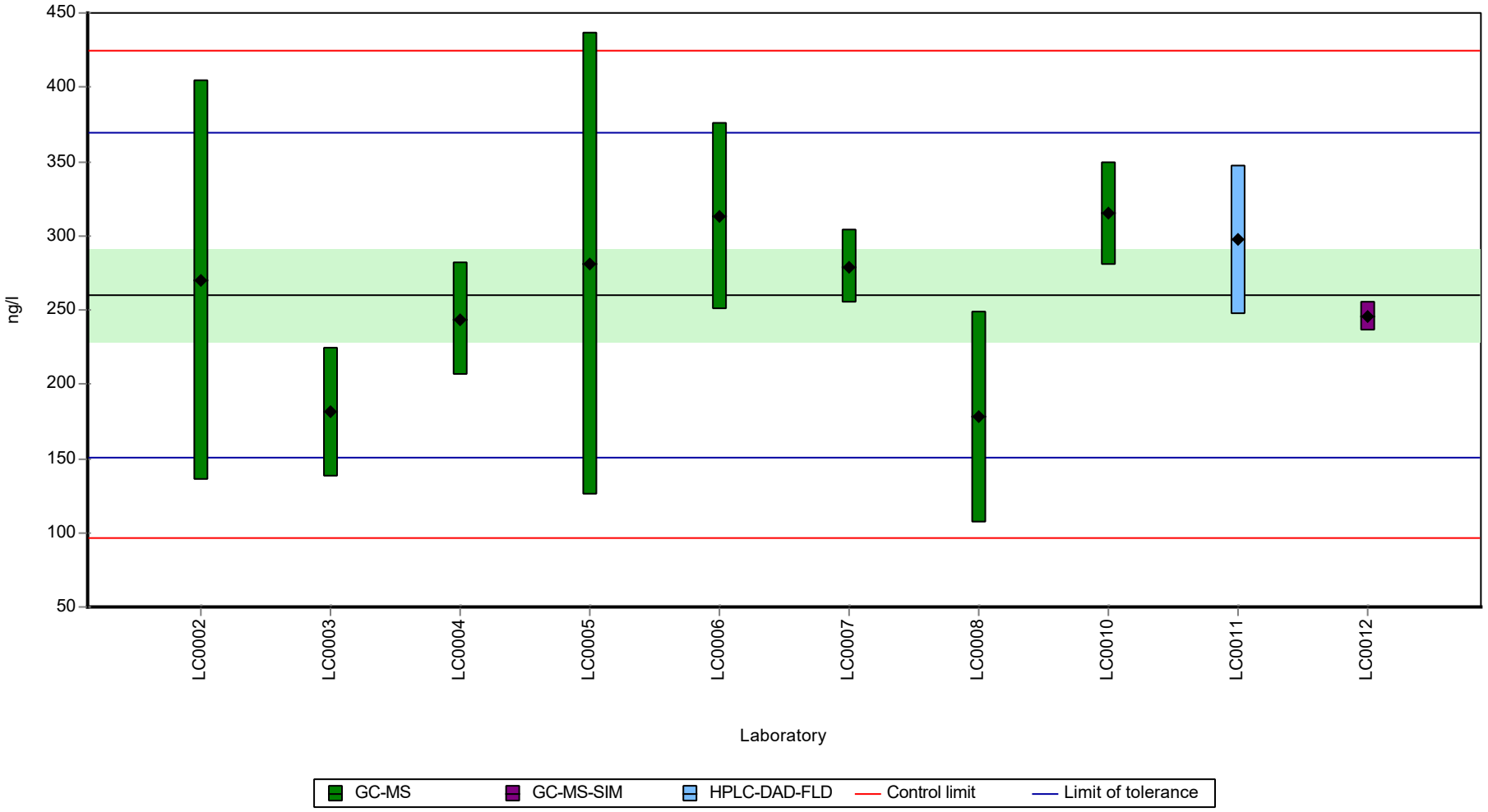
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	270	135	104	0.18	
LC0003	181	43.4	69.5	-1.45	
LC0004	243.6	38.3	93.6	-0.31	
LC0005	280.79	155.61	108	0.37	
LC0006	313	63	120	0.96	
LC0007	279	25	107	0.34	
LC0008	178	71.4	68.4	-1.51	
LC0009	-	-	-	-	
LC0010	314.831	34.679	121	1	
LC0011	297	50	114	0.67	
LC0012	246	10	94.5	-0.26	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	260 ± 46.4	260 ± 46.4	ng/l
Minimum	178	178	ng/l
Maximum	315	315	ng/l
Standard deviation	48.9	48.9	ng/l
rel. standard deviation	18.8	18.8	%
n	10	10	-

Graphical presentation of results

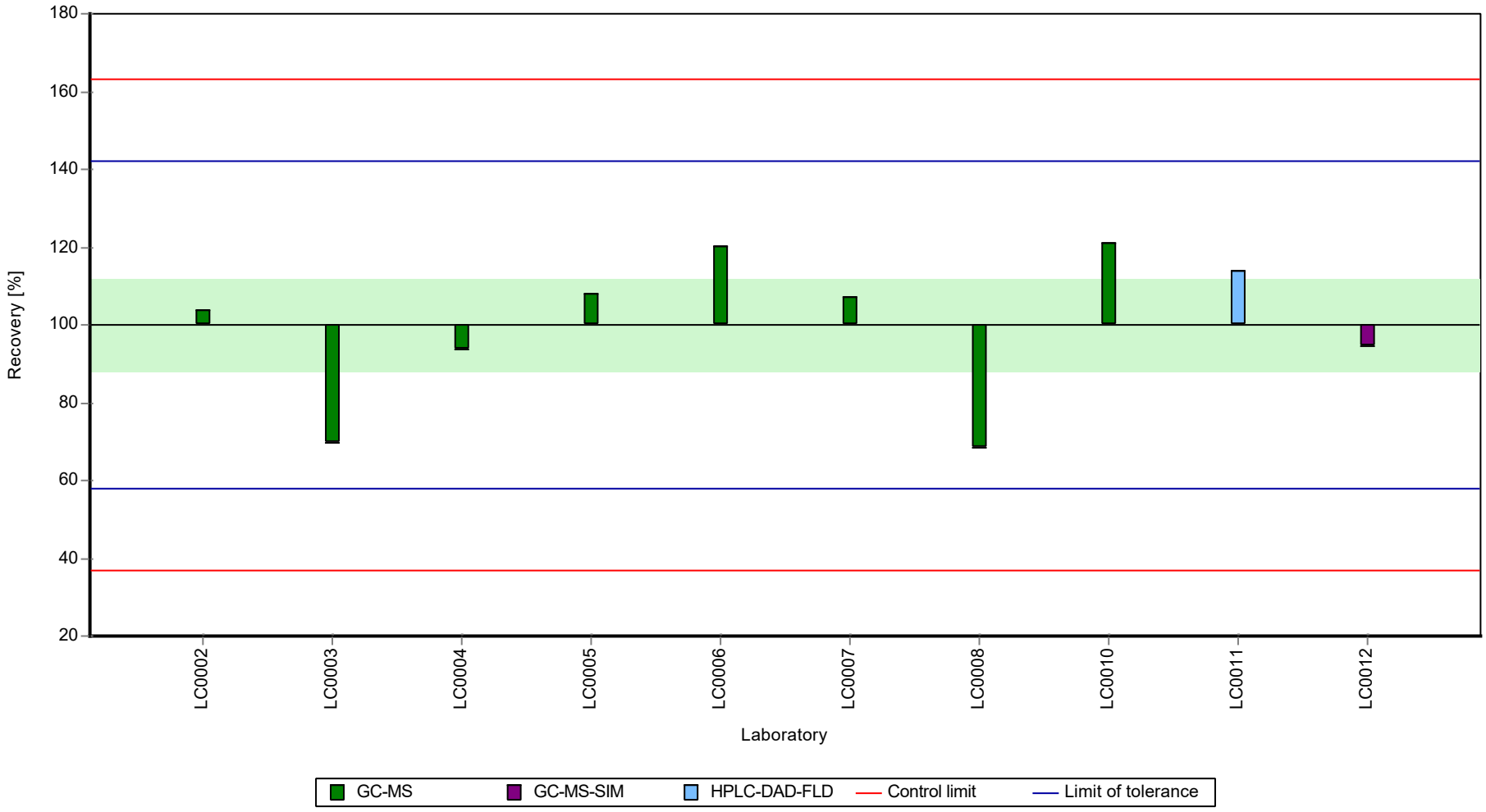
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

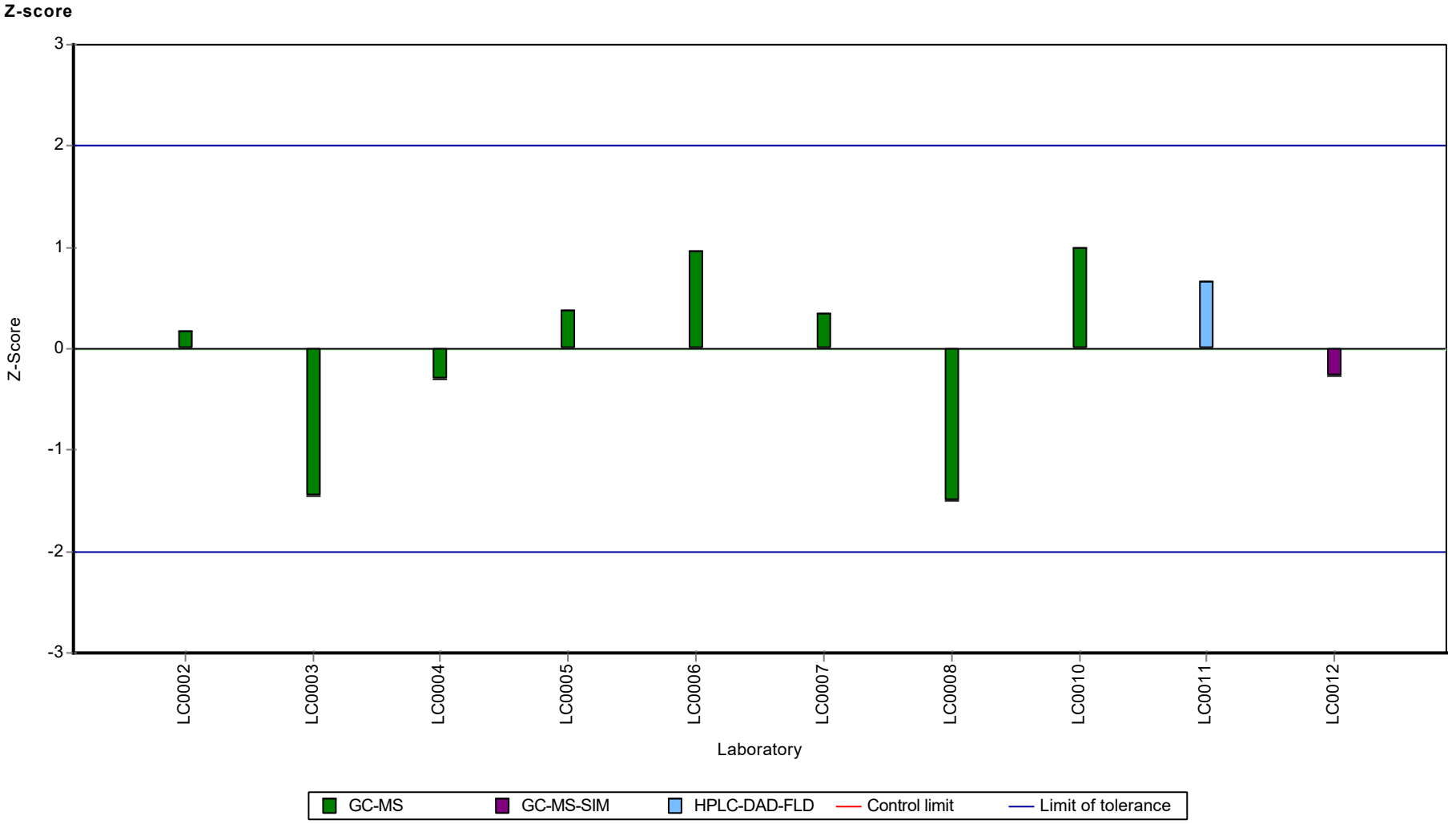
Sample: P26B, Parameter: Anthracene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Anthracene



Parameter oriented report

P26 A

Benzo[a]anthracene

Unit	ng/l
Assigned value ± U (k=2)	19.7 ± 2.56
Criterion	4.13 (21 %)
Minimum - Maximum	12.4 - 23.3
Control test value ± U (k=2)	22.9 ± 5.71

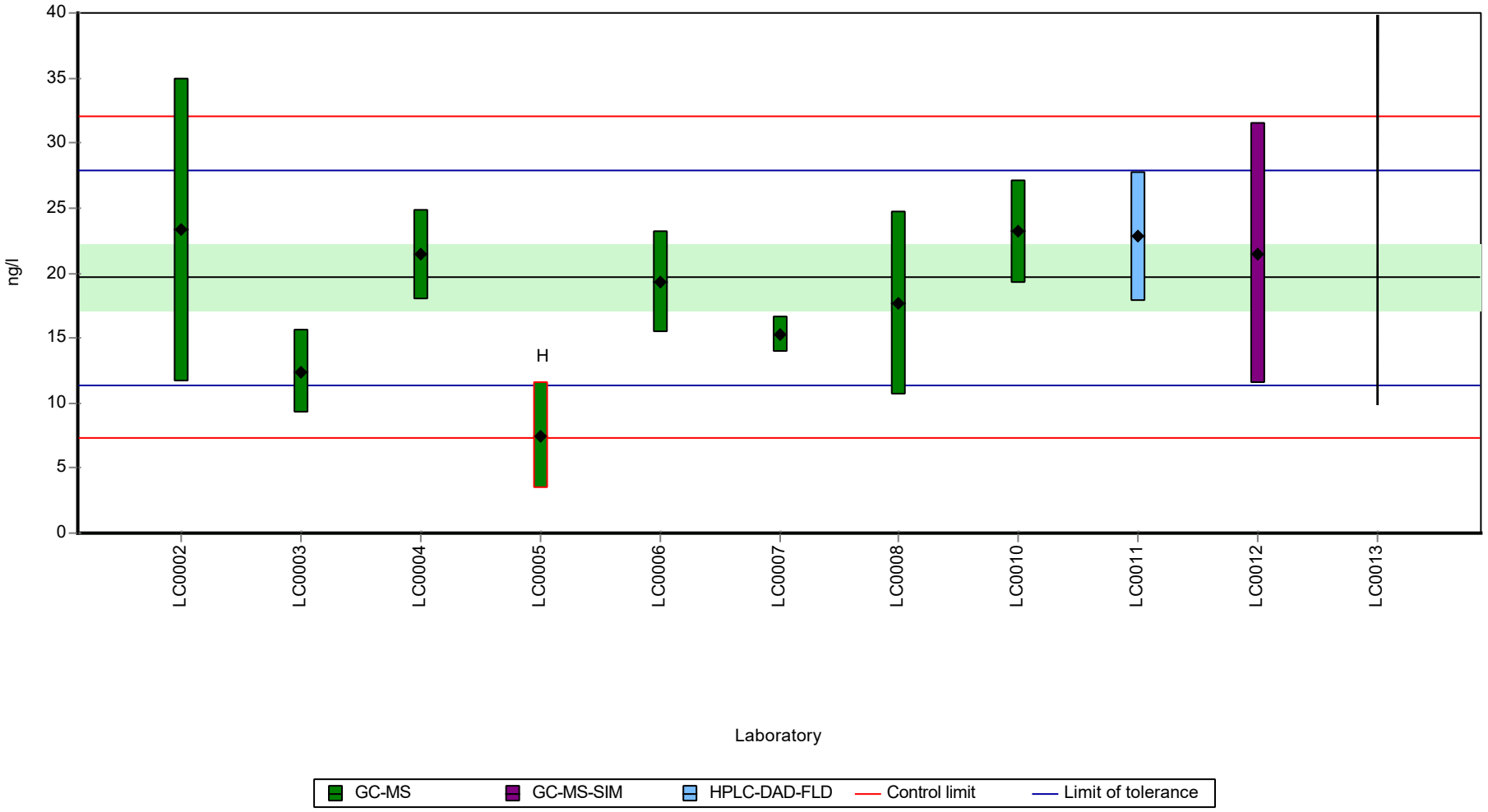
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	23.3	11.65	119	0.88	
LC0003	12.4	3.22	63.1	-1.76	
LC0004	21.42	3.47	109	0.43	
LC0005	7.45	4.1	37.9	-2.96	H
LC0006	19.3	3.9	98.2	-0.09	
LC0007	15.3	1.4	77.8	-1.06	
LC0008	17.7	7.08	90.1	-0.47	
LC0009	-	-	-	-	
LC0010	23.172	3.951	118	0.85	
LC0011	22.8	5	116	0.76	
LC0012	21.5	10	109	0.45	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	18.4 ± 5.02	19.7 ± 3.83	ng/l
Minimum	7.45	12.4	ng/l
Maximum	23.3	23.3	ng/l
Standard deviation	5.29	3.83	ng/l
rel. standard deviation	28.7	19.5	%
n	10	9	-

Graphical presentation of results

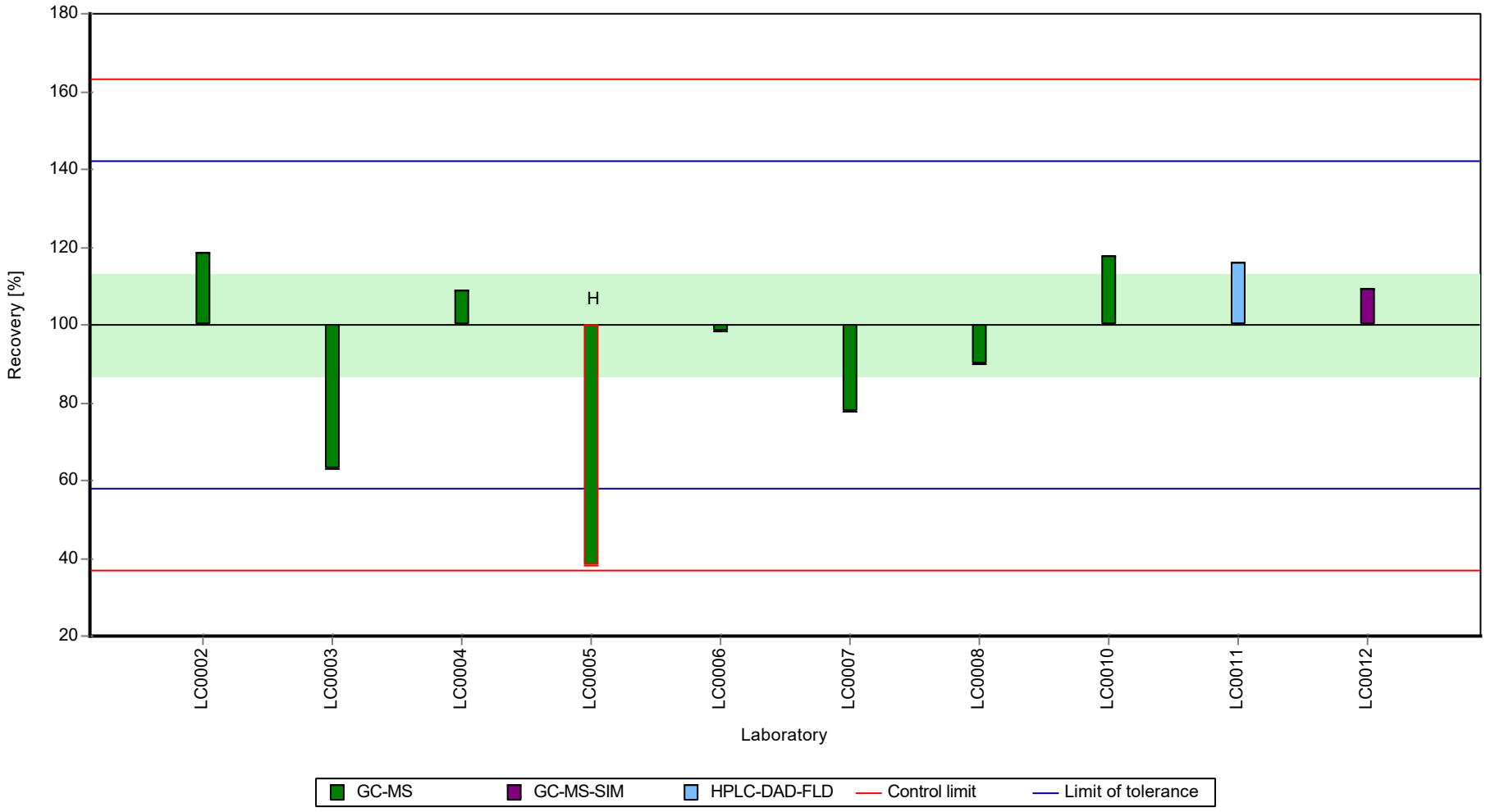
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

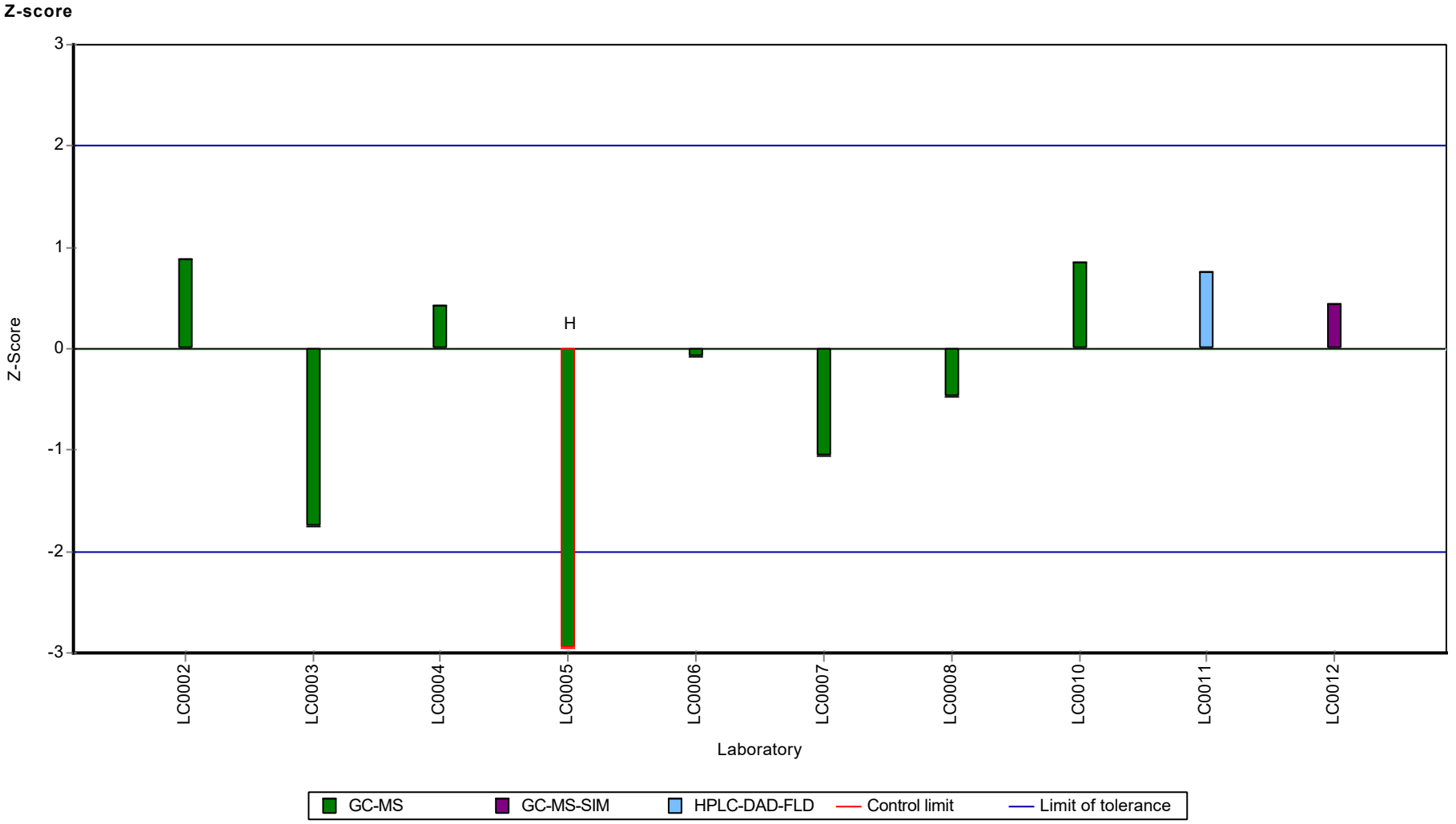
Sample: P26A, Parameter: Benzo[a]anthracene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Benzo[a]anthracene



Parameter oriented report

P26 B

Benzo[a]anthracene

Unit	ng/l
Assigned value ± U (k=2)	279 ± 35.5
Criterion	58.6 (21 %)
Minimum - Maximum	180 - 366
Control test value ± U (k=2)	322 ± 80.5

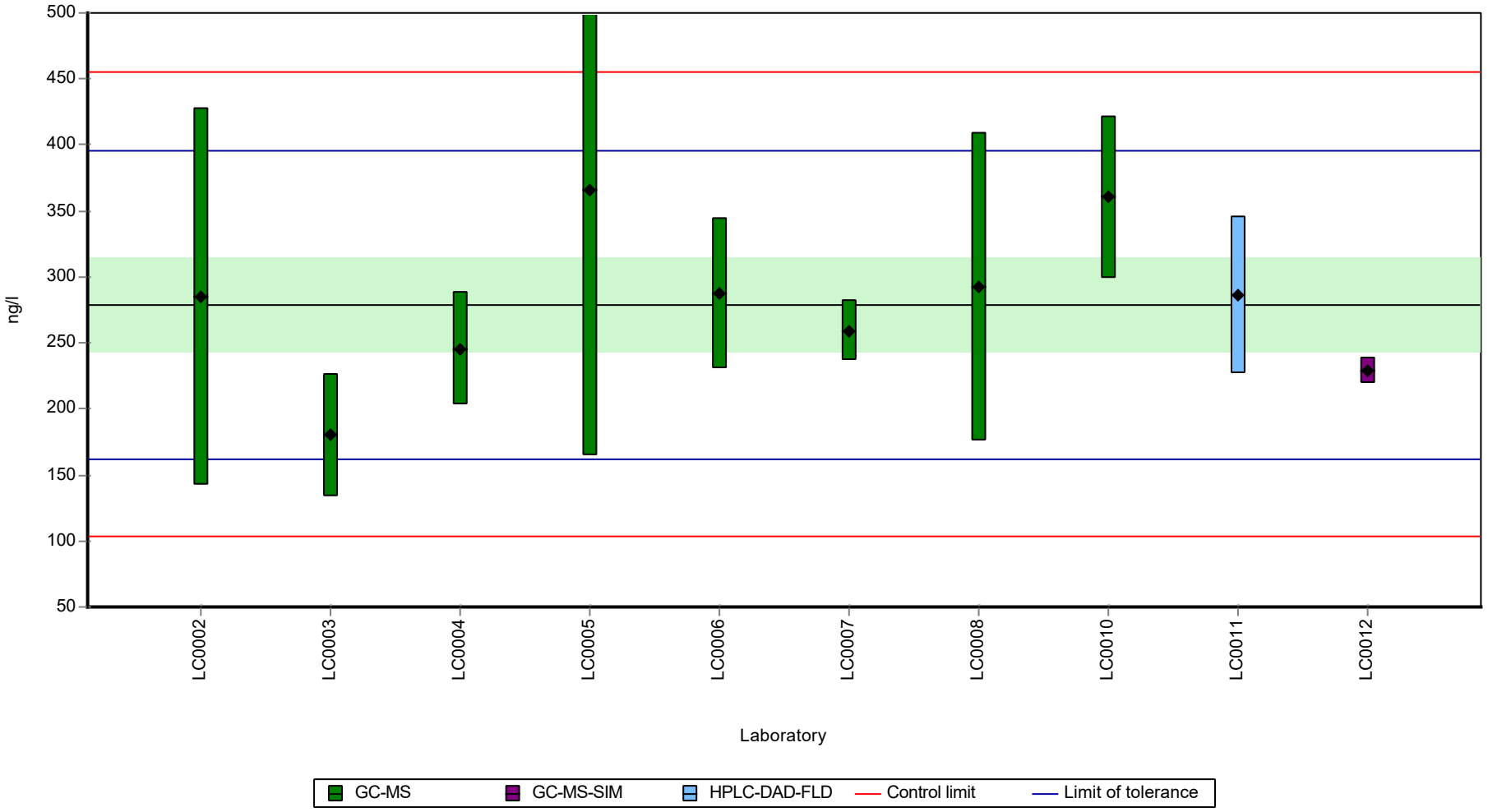
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	285	142.5	102	0.1	
LC0003	180	46.8	64.5	-1.69	
LC0004	245.4	42.8	88	-0.57	
LC0005	365.99	201.29	131	1.48	
LC0006	287	57	103	0.14	
LC0007	259	23	92.8	-0.34	
LC0008	292	117	105	0.22	
LC0009	-	-	-	-	
LC0010	360.512	61.467	129	1.39	
LC0011	286	60	103	0.12	
LC0012	229	10	82.1	-0.85	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	279 ± 53.3	279 ± 53.3	ng/l
Minimum	180	180	ng/l
Maximum	366	366	ng/l
Standard deviation	56.1	56.1	ng/l
rel. standard deviation	20.1	20.1	%
n	10	10	-

Graphical presentation of results

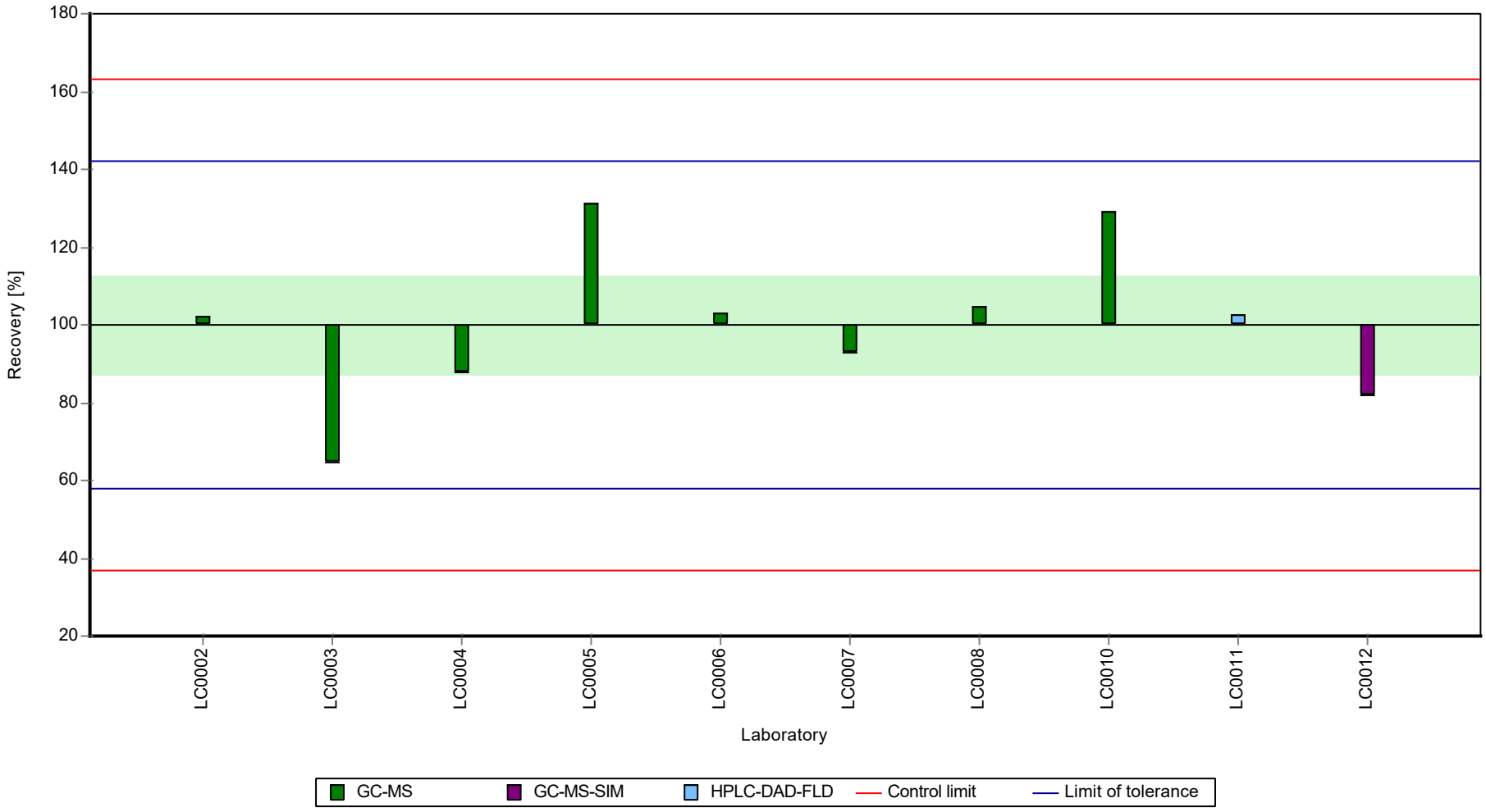
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

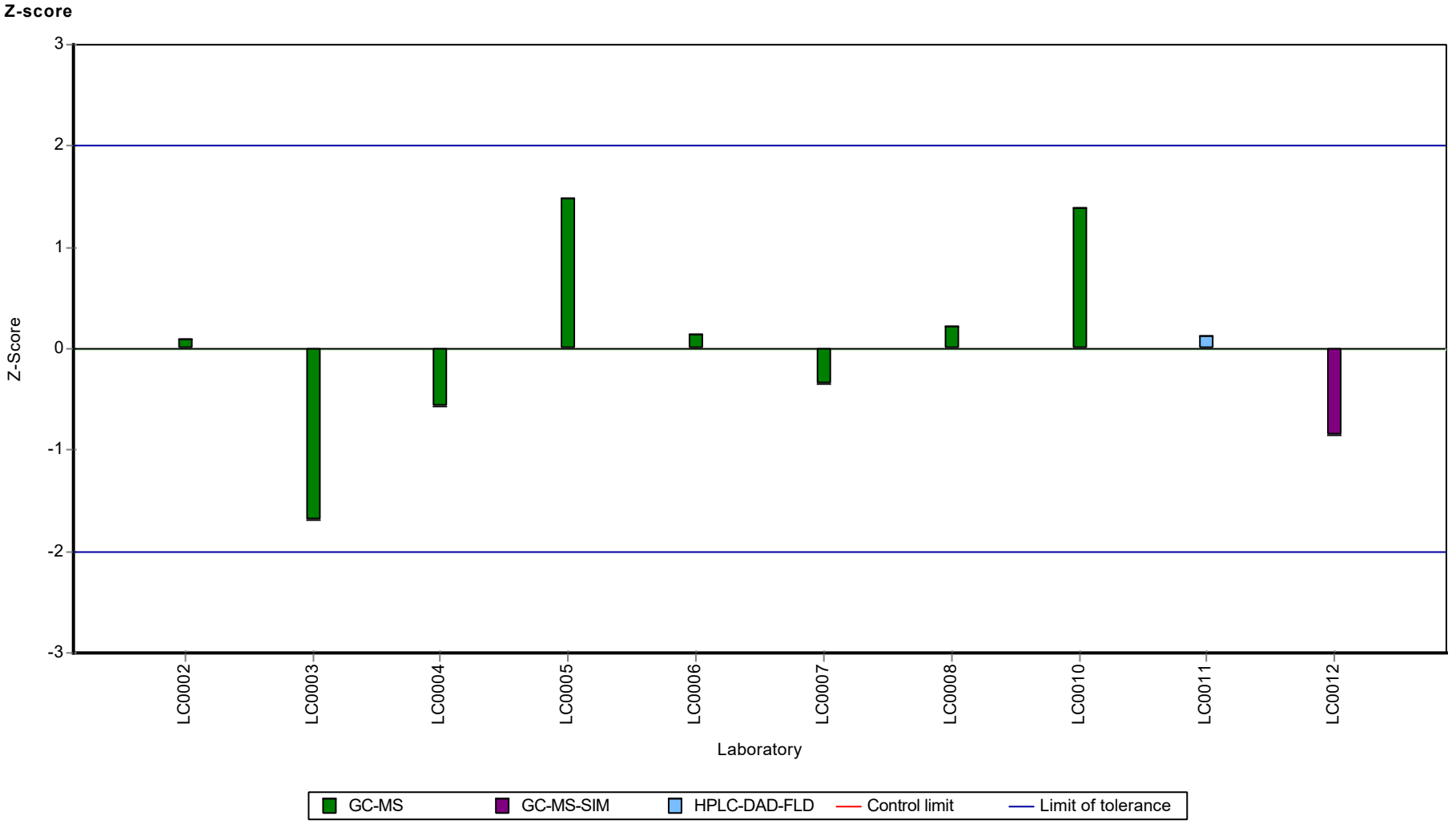
Sample: P26B, Parameter: Benzo[a]anthracene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[a]anthracene



Parameter oriented report

P26 A

Benzo[a]pyrene

Unit	ng/l
Assigned value ± U (k=2)	16 ± 2.75
Criterion	4.32 (27 %)
Minimum - Maximum	9.55 - 21.2
Control test value ± U (k=2)	21.4 ± 7.49

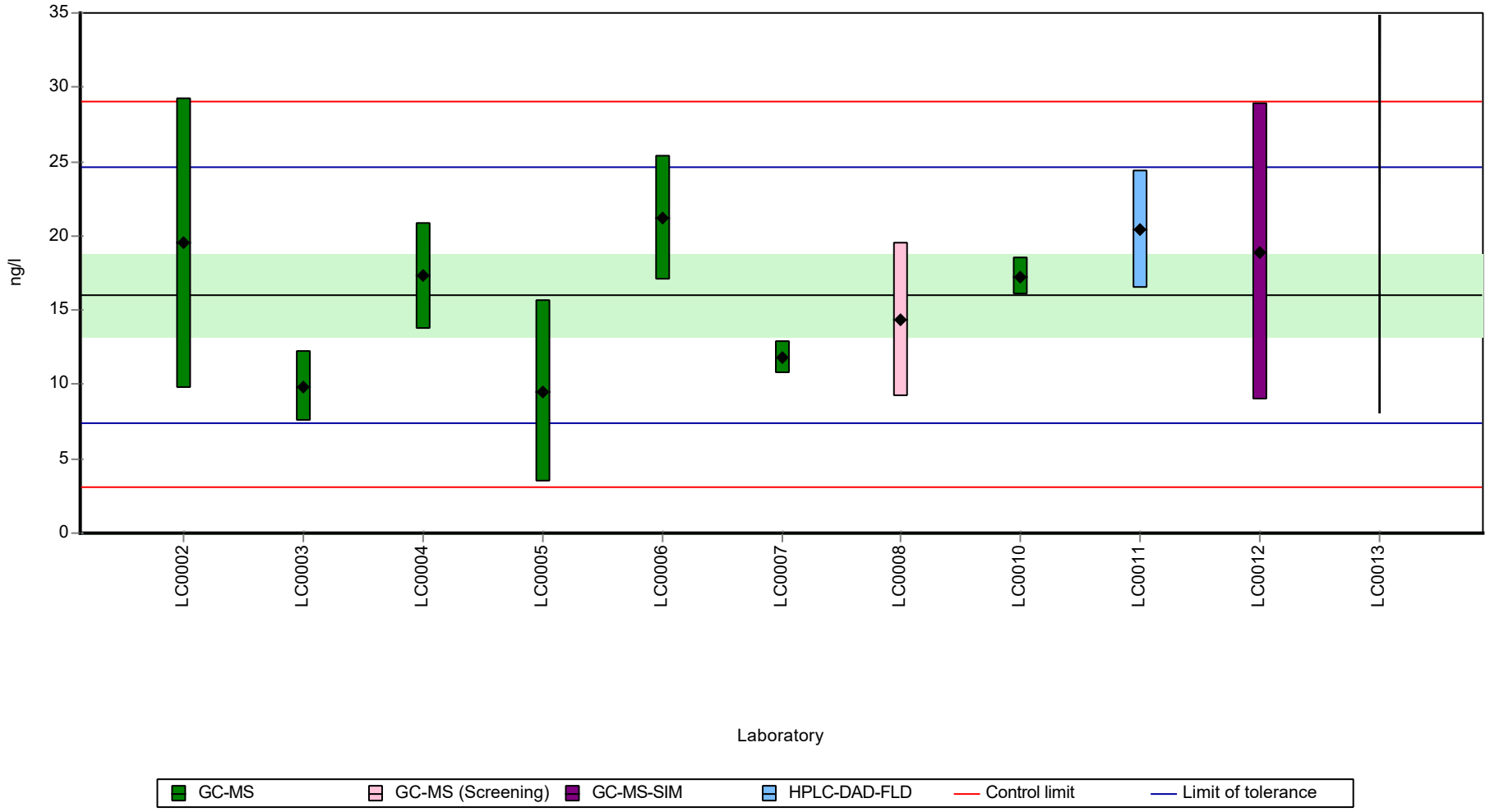
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	19.5	9.75	122	0.81	
LC0003	9.85	2.36	61.5	-1.43	
LC0004	17.28	3.55	108	0.29	
LC0005	9.55	6.1	59.6	-1.49	
LC0006	21.2	4.2	132	1.2	
LC0007	11.8	1.1	73.7	-0.97	
LC0008	14.4	5.19	89.9	-0.37	
LC0009	-	-	-	-	
LC0010	17.249	1.288	108	0.29	
LC0011	20.4	4	127	1.01	
LC0012	18.9	10	118	0.67	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	16 ± 4.12	16 ± 4.12	ng/l
Minimum	9.55	9.55	ng/l
Maximum	21.2	21.2	ng/l
Standard deviation	4.34	4.34	ng/l
rel. standard deviation	27.1	27.1	%
n	10	10	-

Graphical presentation of results

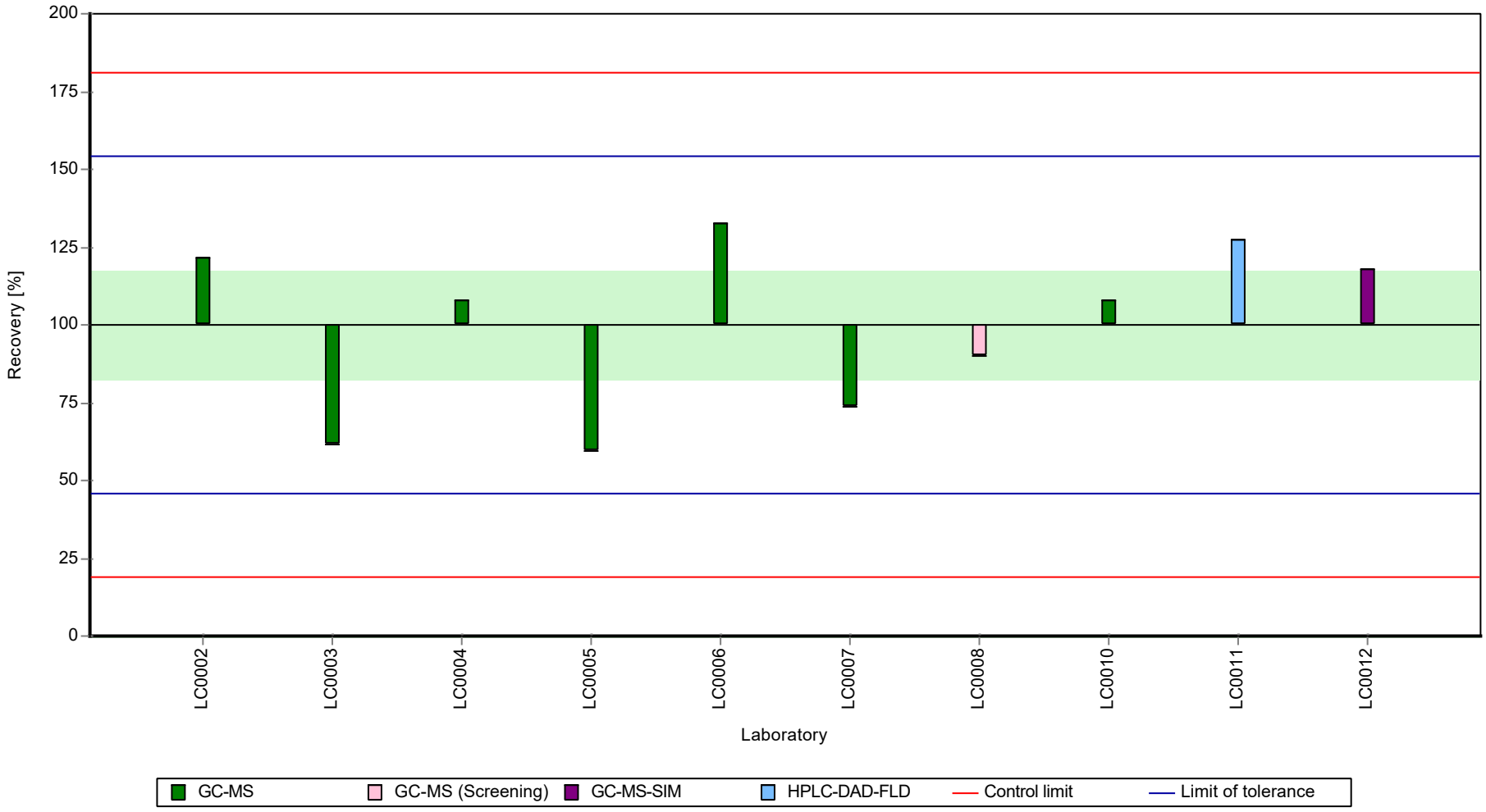
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

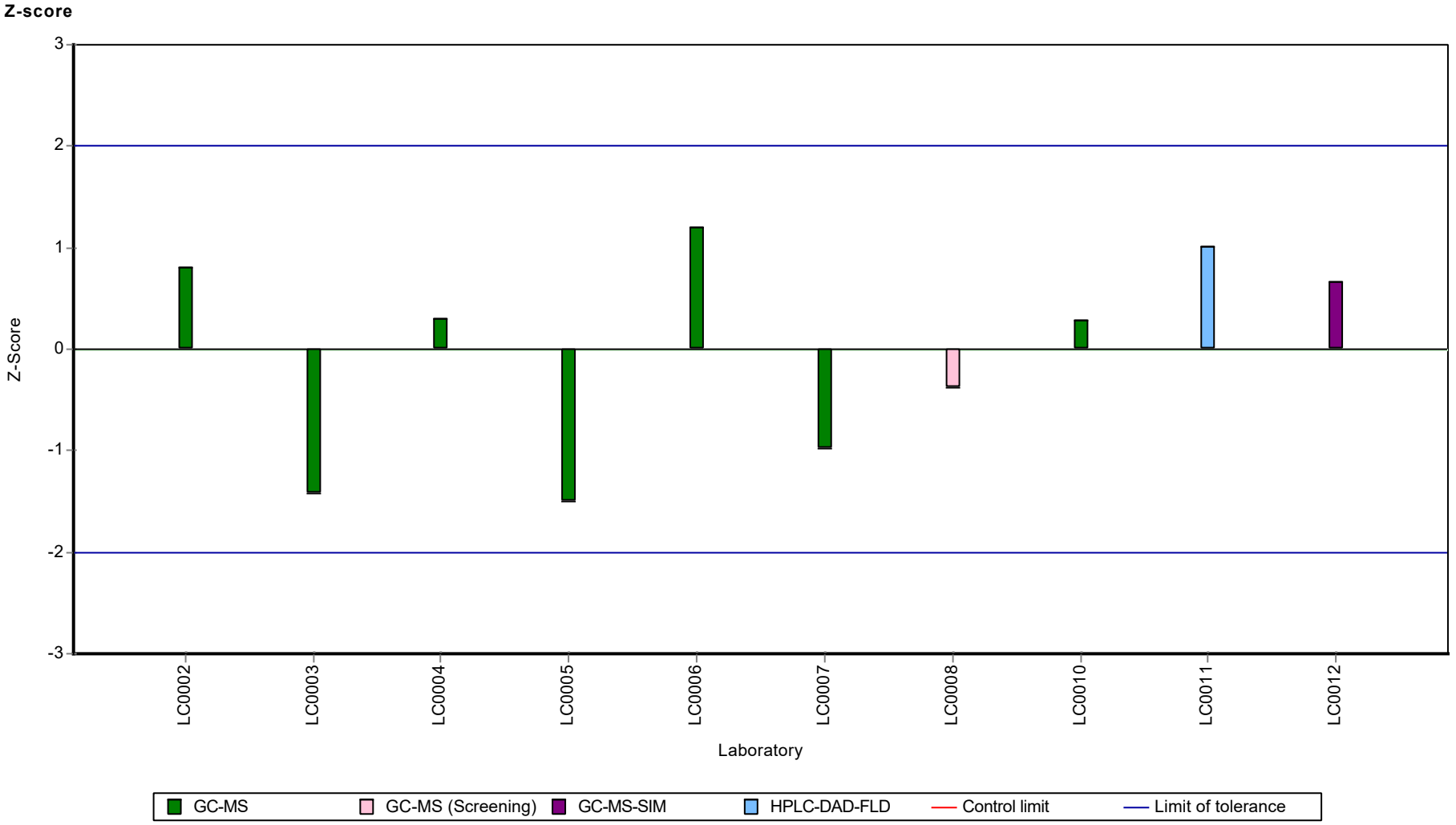
Sample: P26A, Parameter: Benzo[a]pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Benzo[a]pyrene



Parameter oriented report

P26 B

Benzo[a]pyrene

Unit	ng/l
Assigned value ± U (k=2)	242 ± 19.1
Criterion	58.2 (24 %)
Minimum - Maximum	184 - 290
Control test value ± U (k=2)	351 ± 123

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	250	125	103	0.13	
LC0003	184	44.2	75.9	-1	
LC0004	229	47.1	94.4	-0.23	
LC0005	374.56	239.15	154	2.27	H
LC0006	256	51	106	0.23	
LC0007	223	20	92	-0.33	
LC0008	219	87.6	90.3	-0.4	
LC0009	-	-	-	-	
LC0010	257.752	19.241	106	0.26	
LC0011	273	57	113	0.52	
LC0012	243	10	100	0.01	
LC0013	290	29	120	0.82	

Characteristics of parameter

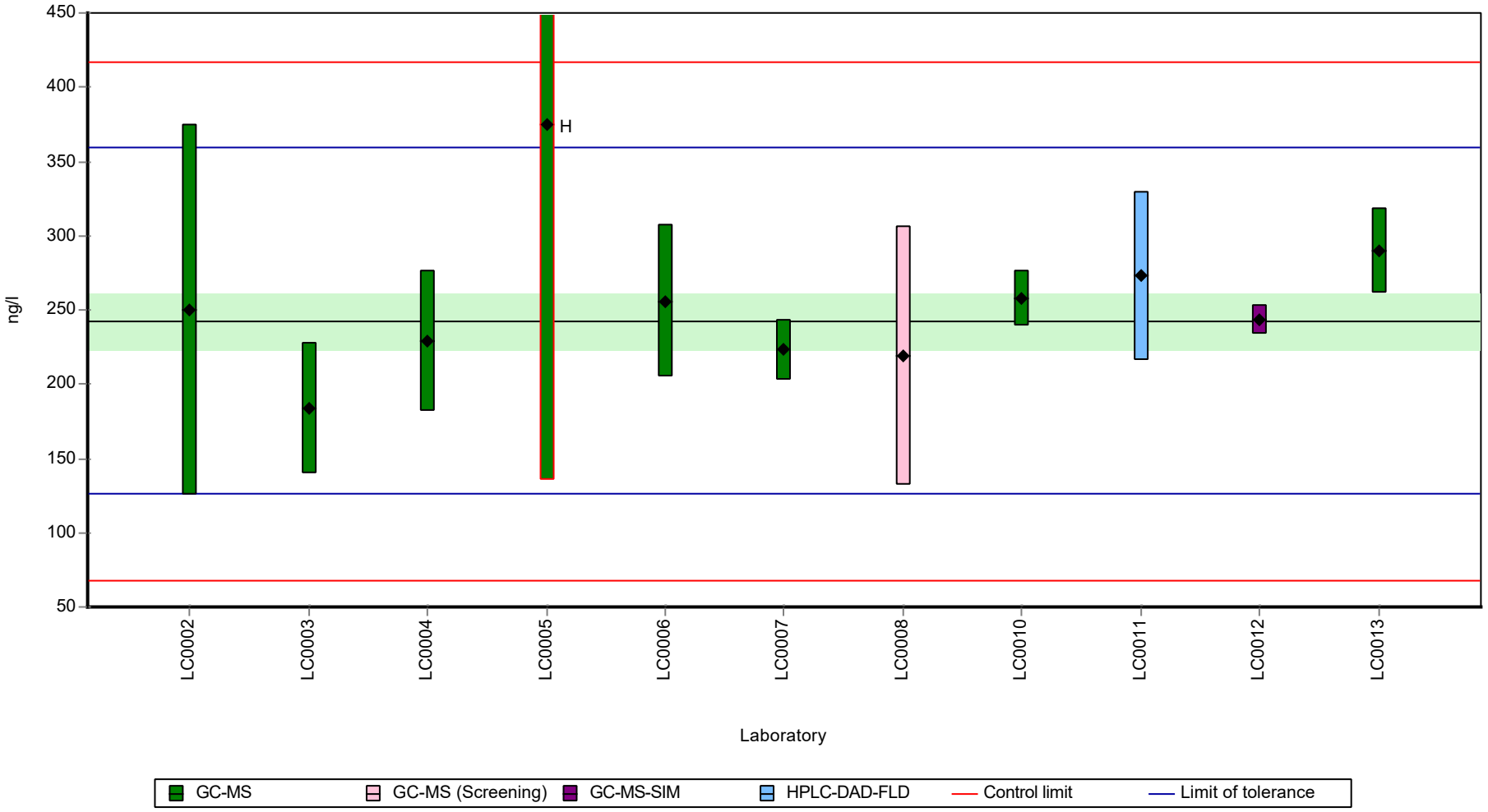
	all results	w ithout outliers	Unit
Mean ± CI (99%)	254 ± 44.4	242 ± 28.6	ng/l
Minimum	184	184	ng/l
Maximum	375	290	ng/l
Standard deviation	49	30.2	ng/l
rel. standard deviation	19.3	12.4	%
n	11	10	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[a]pyrene

Graphical presentation of results

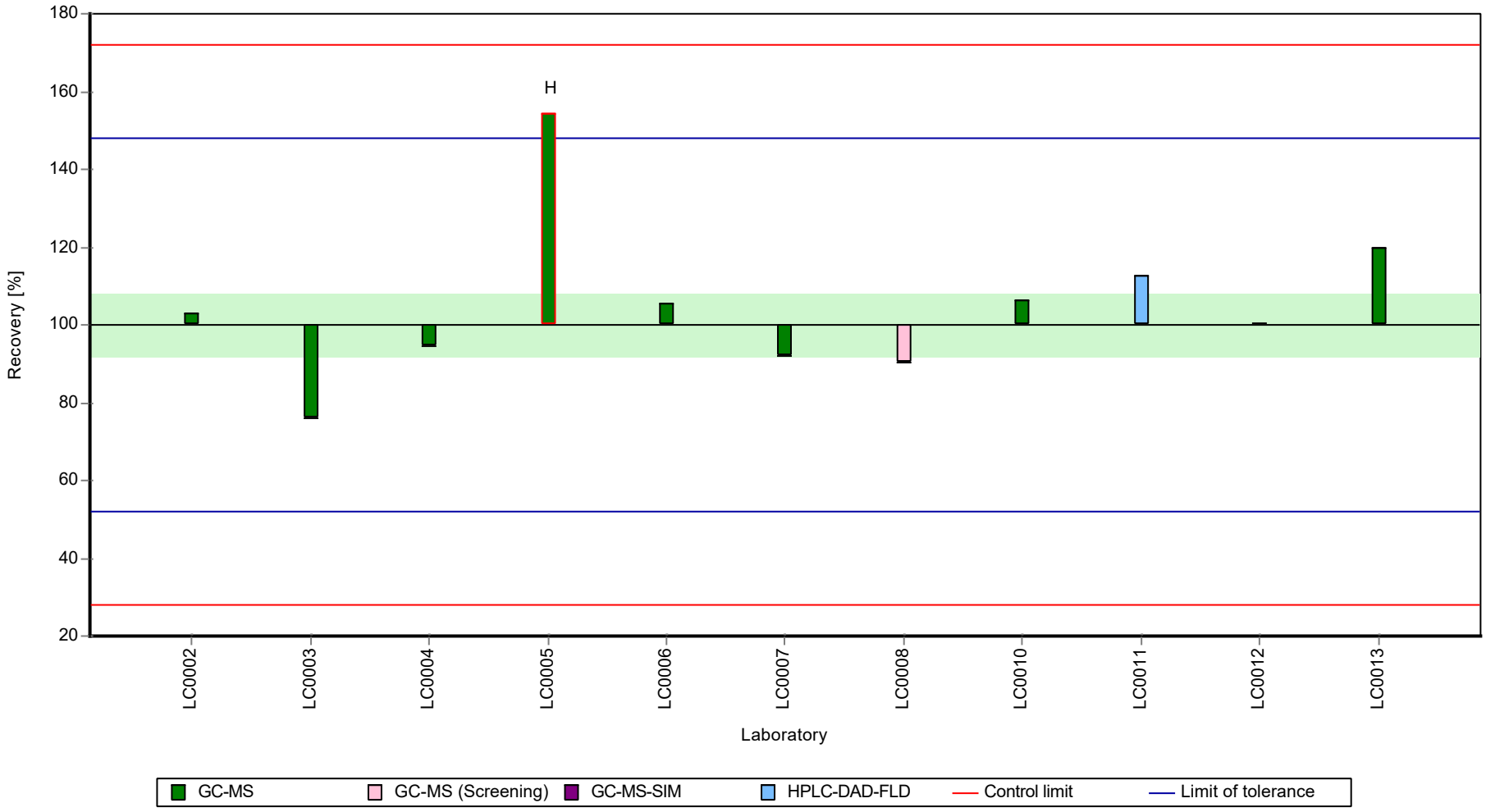
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

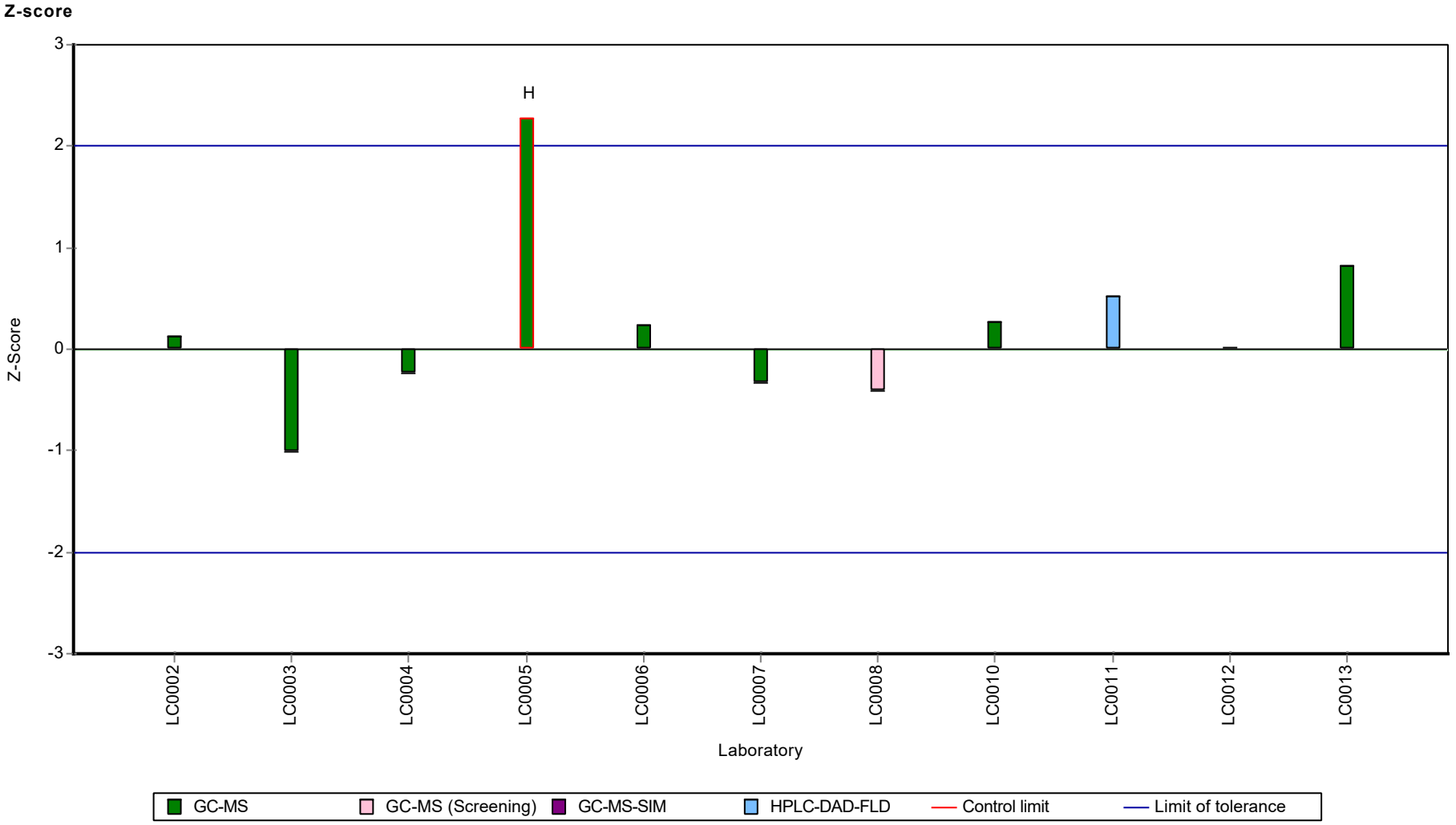
Sample: P26B, Parameter: Benzo[a]pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[a]pyrene



Parameter oriented report

P26 A

Benzo[b]fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	22.5 ± 2.7
Criterion	4.04 (18 %)
Minimum - Maximum	15.6 - 29.2
Control test value ± U (k=2)	25.2 ± 6.3

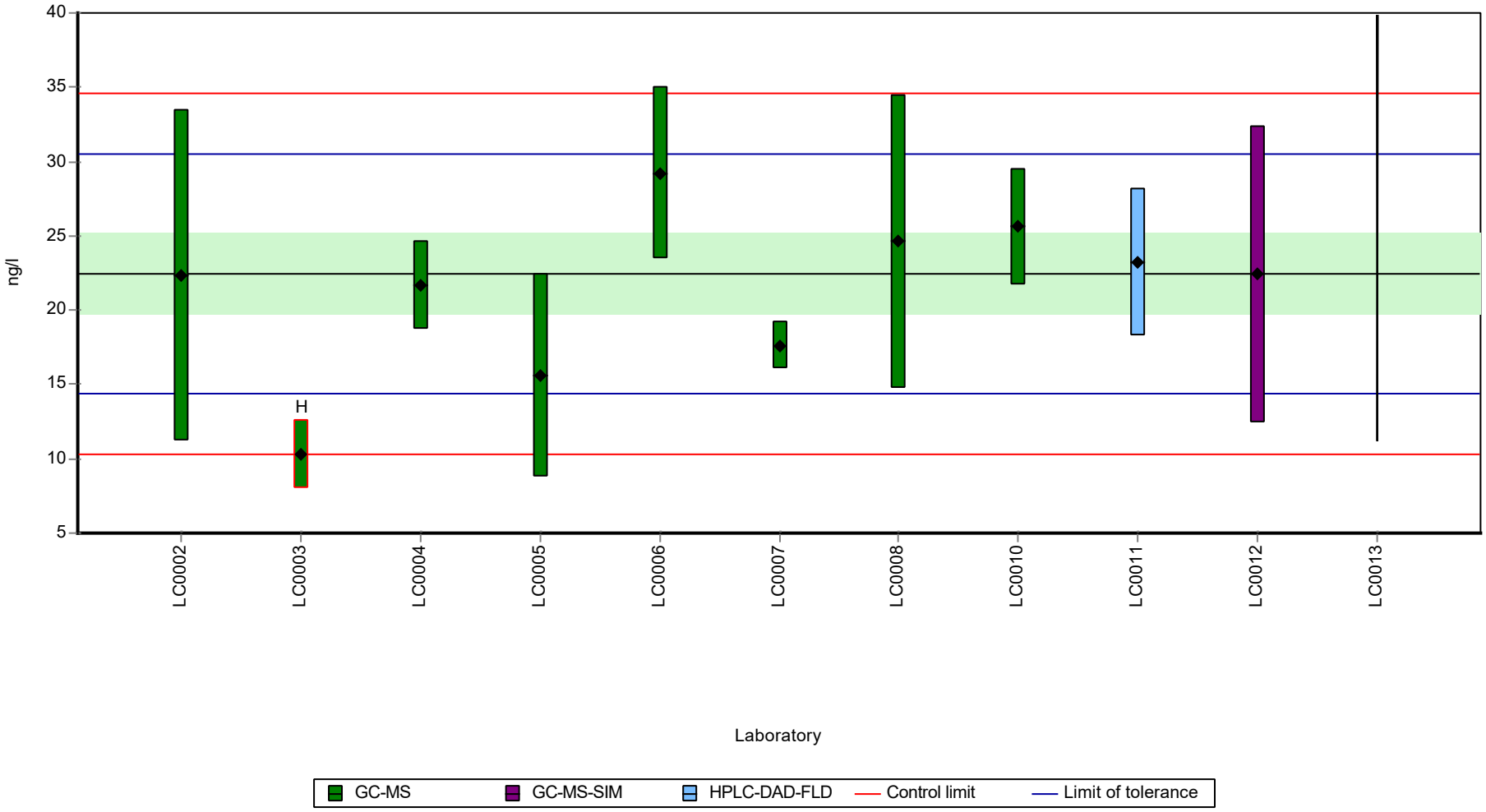
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	22.3	11.15	99.2	-0.04	
LC0003	10.3	2.37	45.8	-3.01	H
LC0004	21.7	2.99	96.6	-0.19	
LC0005	15.61	6.86	69.5	-1.7	
LC0006	29.2	5.8	130	1.66	
LC0007	17.6	1.6	78.3	-1.2	
LC0008	24.6	9.85	109	0.53	
LC0009	-	-	-	-	
LC0010	25.613	3.898	114	0.78	
LC0011	23.2	5	103	0.18	
LC0012	22.4	10	99.7	-0.02	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	21.3 ± 5.15	22.5 ± 4.06	ng/l
Minimum	10.3	15.6	ng/l
Maximum	29.2	29.2	ng/l
Standard deviation	5.43	4.06	ng/l
rel. standard deviation	25.5	18.1	%
n	10	9	-

Graphical presentation of results

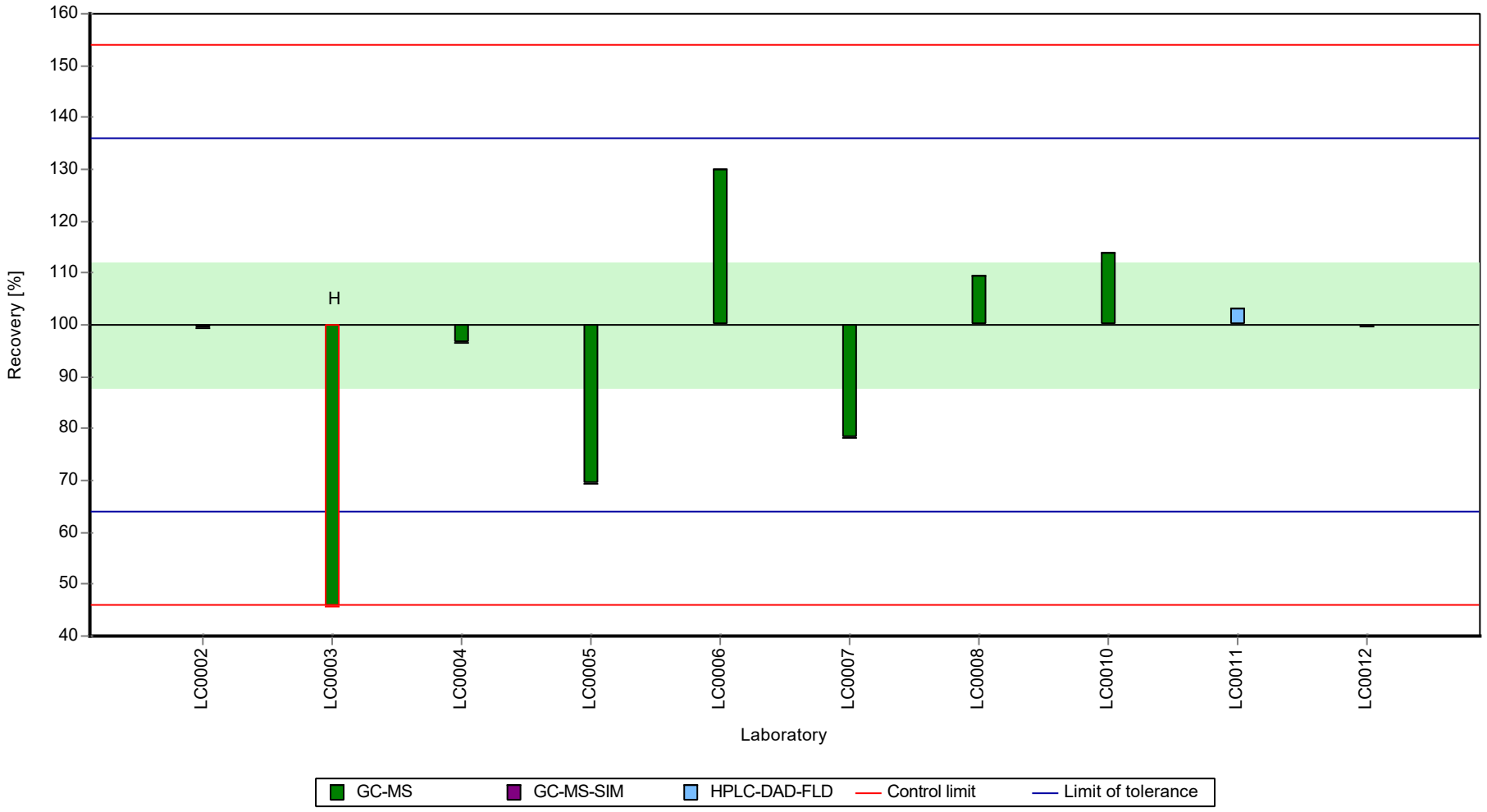
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

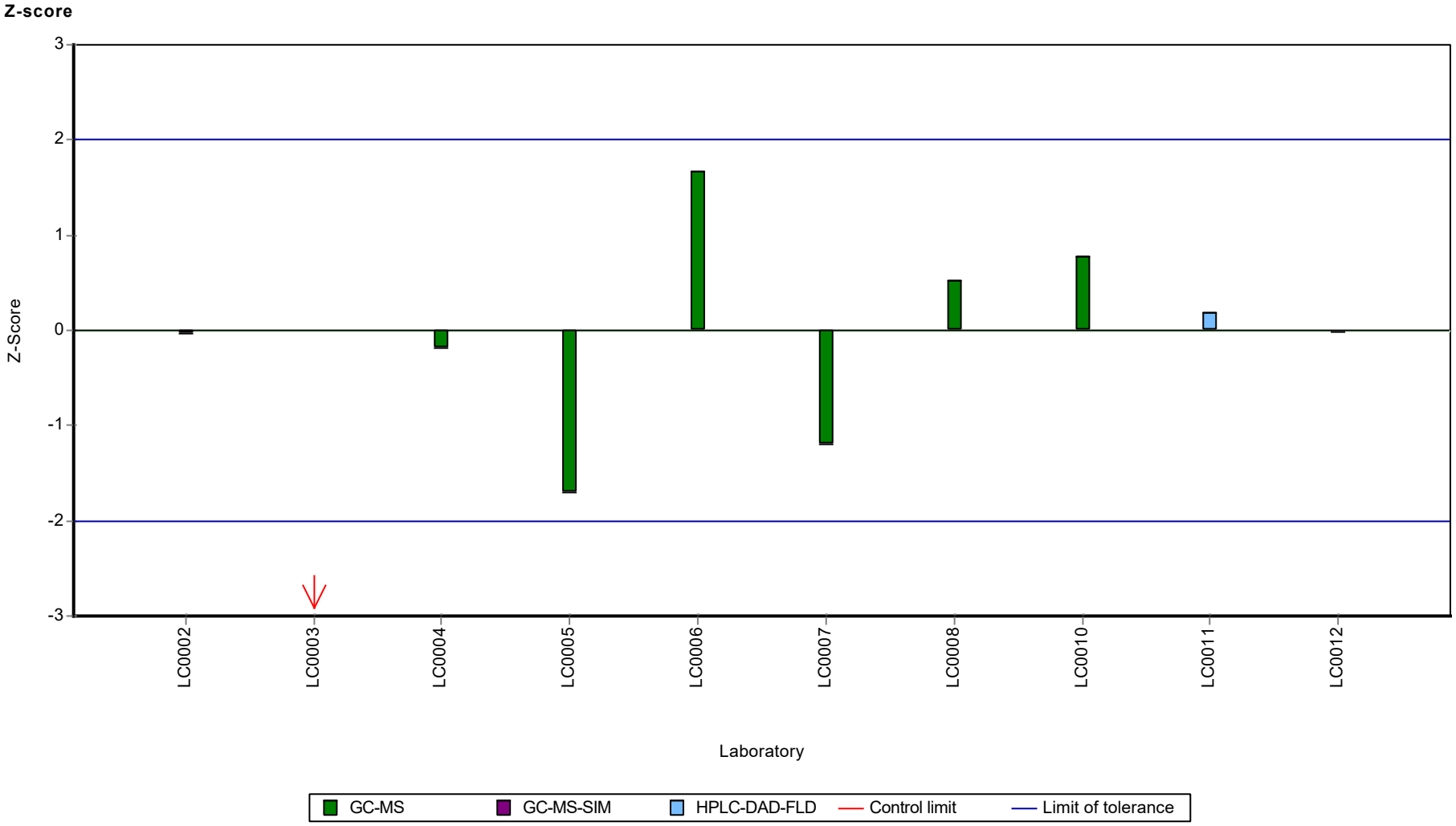
Sample: P26A, Parameter: Benzo[b]fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Benzo[b]fluoranthene



Parameter oriented report

P26 B

Benzo[b]fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	277 ± 43.5
Criterion	69.3 (25 %)
Minimum - Maximum	166 - 388
Control test value ± U (k=2)	337 ± 84.2

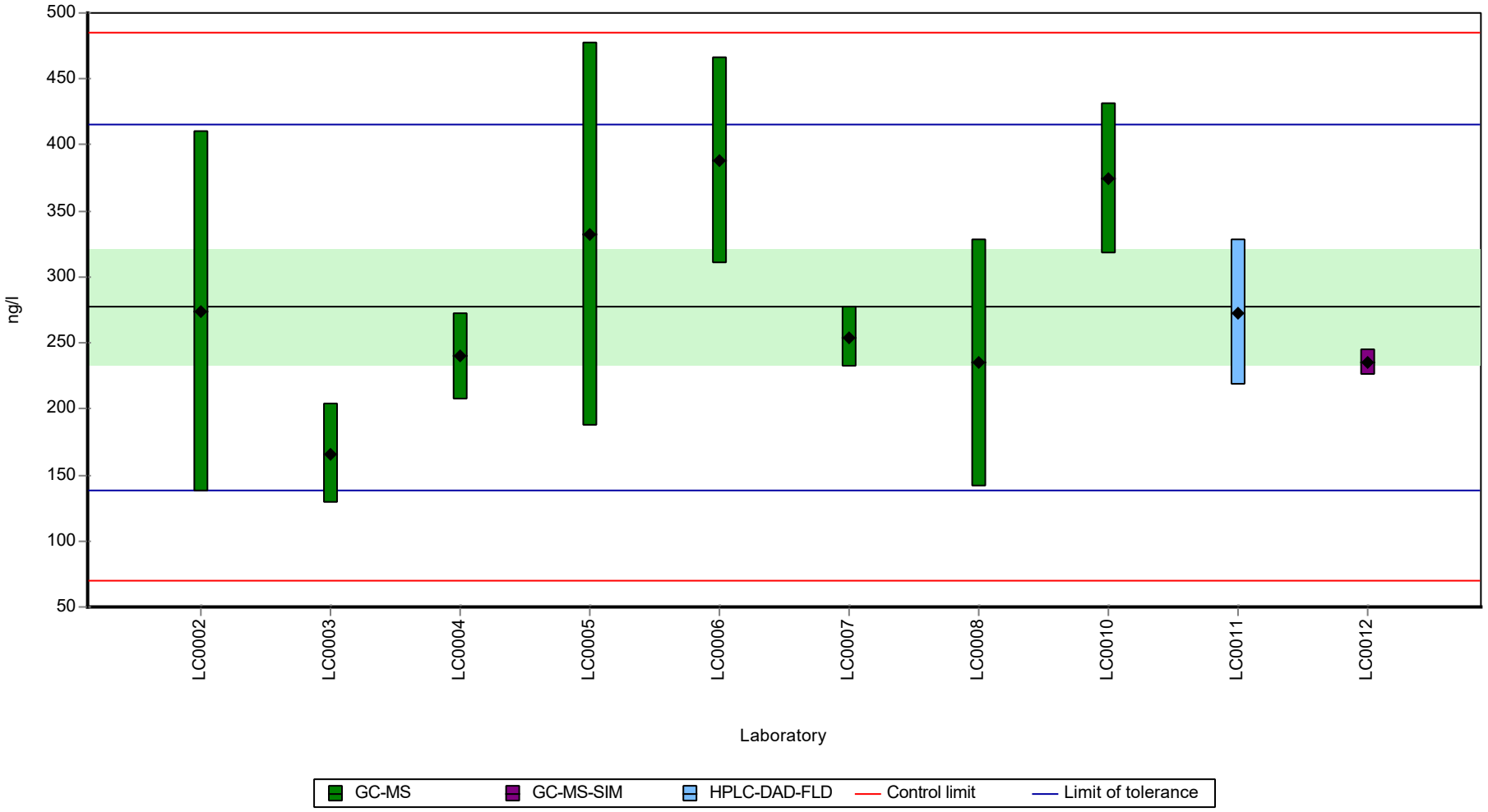
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	274	137	98.9	-0.05	
LC0003	166	38.2	59.9	-1.6	
LC0004	239.8	33.1	86.5	-0.54	
LC0005	332.09	145.95	120	0.79	
LC0006	388	78	140	1.6	
LC0007	254	23	91.7	-0.33	
LC0008	235	93.8	84.8	-0.61	
LC0009	-	-	-	-	
LC0010	374.307	56.969	135	1.4	
LC0011	273	55	98.5	-0.06	
LC0012	235	10	84.8	-0.61	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	277 ± 65.3	277 ± 65.3	ng/l
Minimum	166	166	ng/l
Maximum	388	388	ng/l
Standard deviation	68.8	68.8	ng/l
rel. standard deviation	24.8	24.8	%
n	10	10	-

Graphical presentation of results

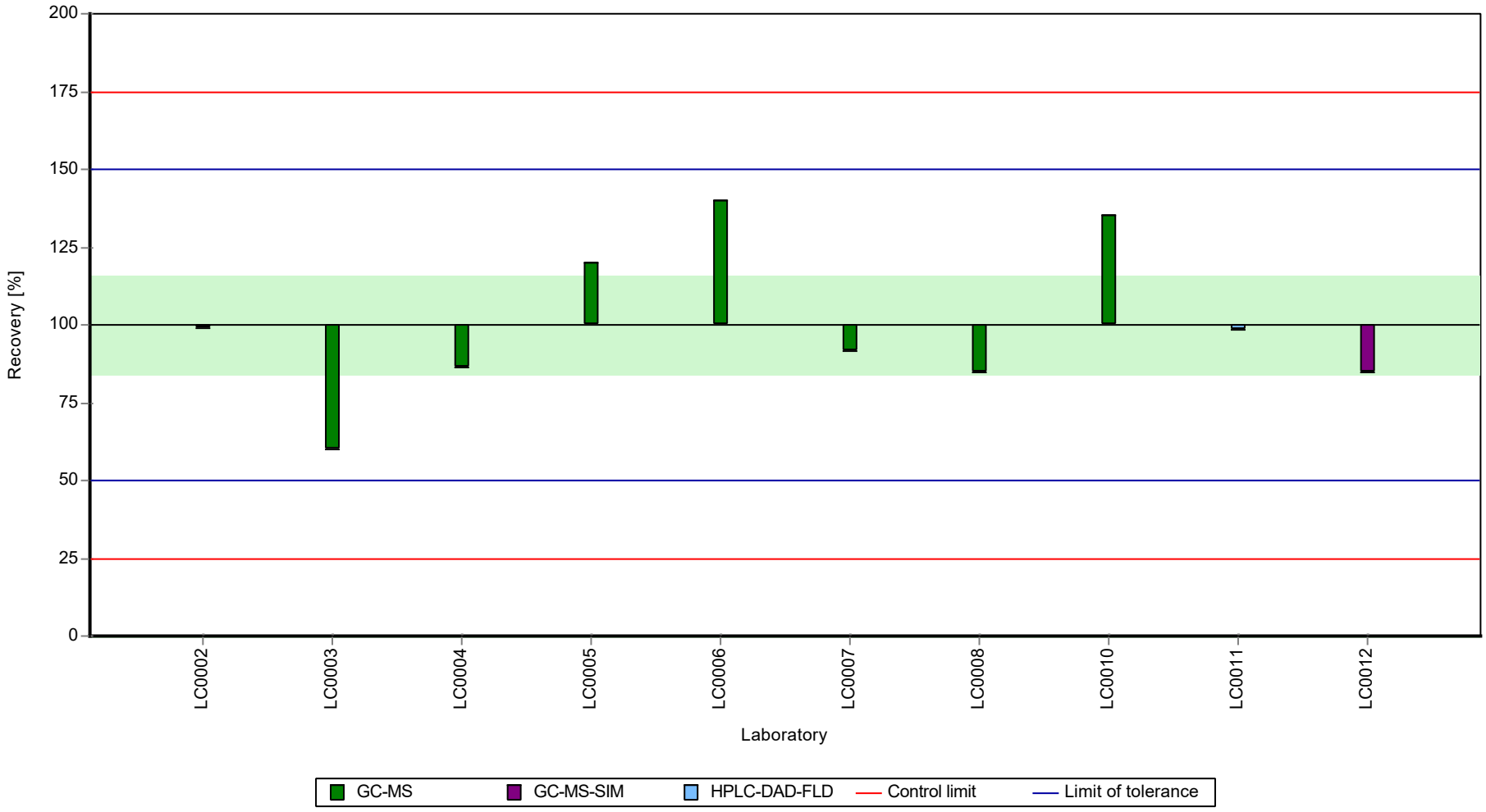
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

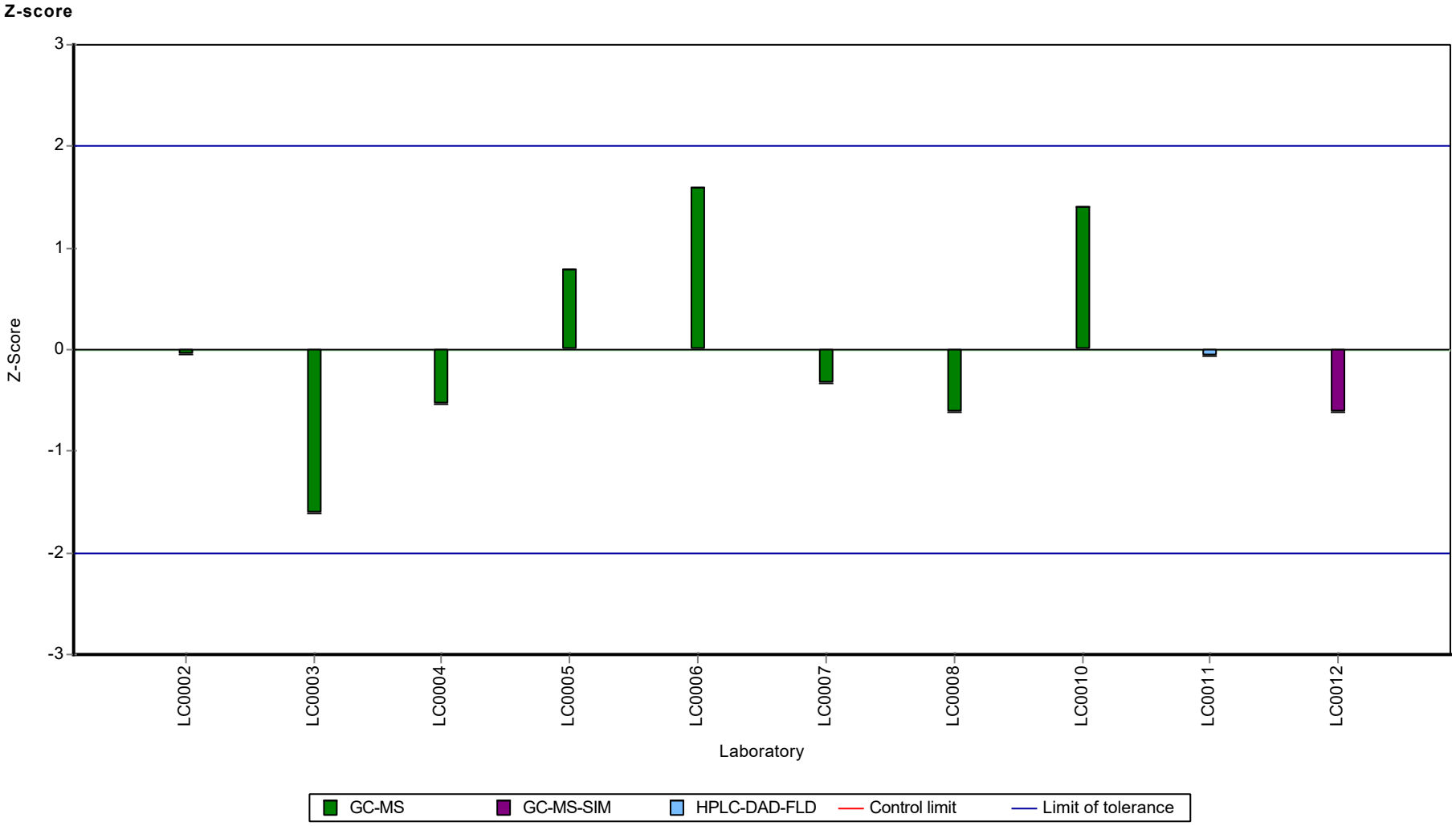
Sample: P26B, Parameter: Benzo[b]fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[b]fluoranthene



Parameter oriented report

P26 A

Benzo[g,h,i]perylene

Unit	ng/l
Assigned value ± U (k=2)	22.9 ± 2.02
Criterion	5.72 (25 %)
Minimum - Maximum	17.5 - 27.1
Control test value ± U (k=2)	29.7 ± 10.4

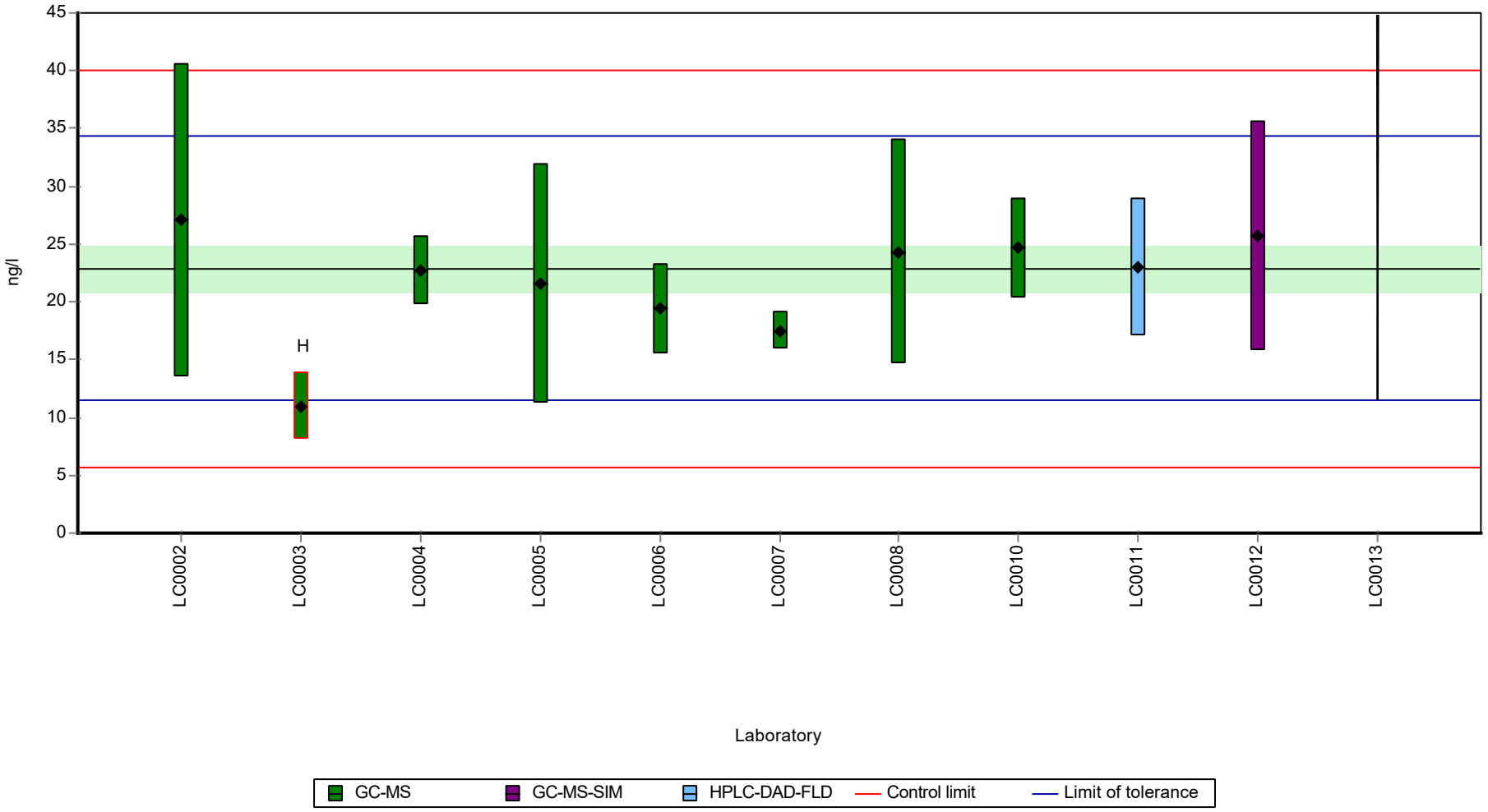
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	27.1	13.55	118	0.74	
LC0003	11	2.97	48.1	-2.08	H
LC0004	22.67	2.98	99.1	-0.04	
LC0005	21.61	10.33	94.4	-0.22	
LC0006	19.4	3.9	84.8	-0.61	
LC0007	17.5	1.6	76.5	-0.94	
LC0008	24.3	9.73	106	0.25	
LC0009	-	-	-	-	
LC0010	24.667	4.351	108	0.31	
LC0011	23	6	101	0.02	
LC0012	25.7	10	112	0.49	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	21.7 ± 4.48	22.9 ± 3.04	ng/l
Minimum	11	17.5	ng/l
Maximum	27.1	27.1	ng/l
Standard deviation	4.72	3.04	ng/l
rel. standard deviation	21.8	13.3	%
n	10	9	-

Graphical presentation of results

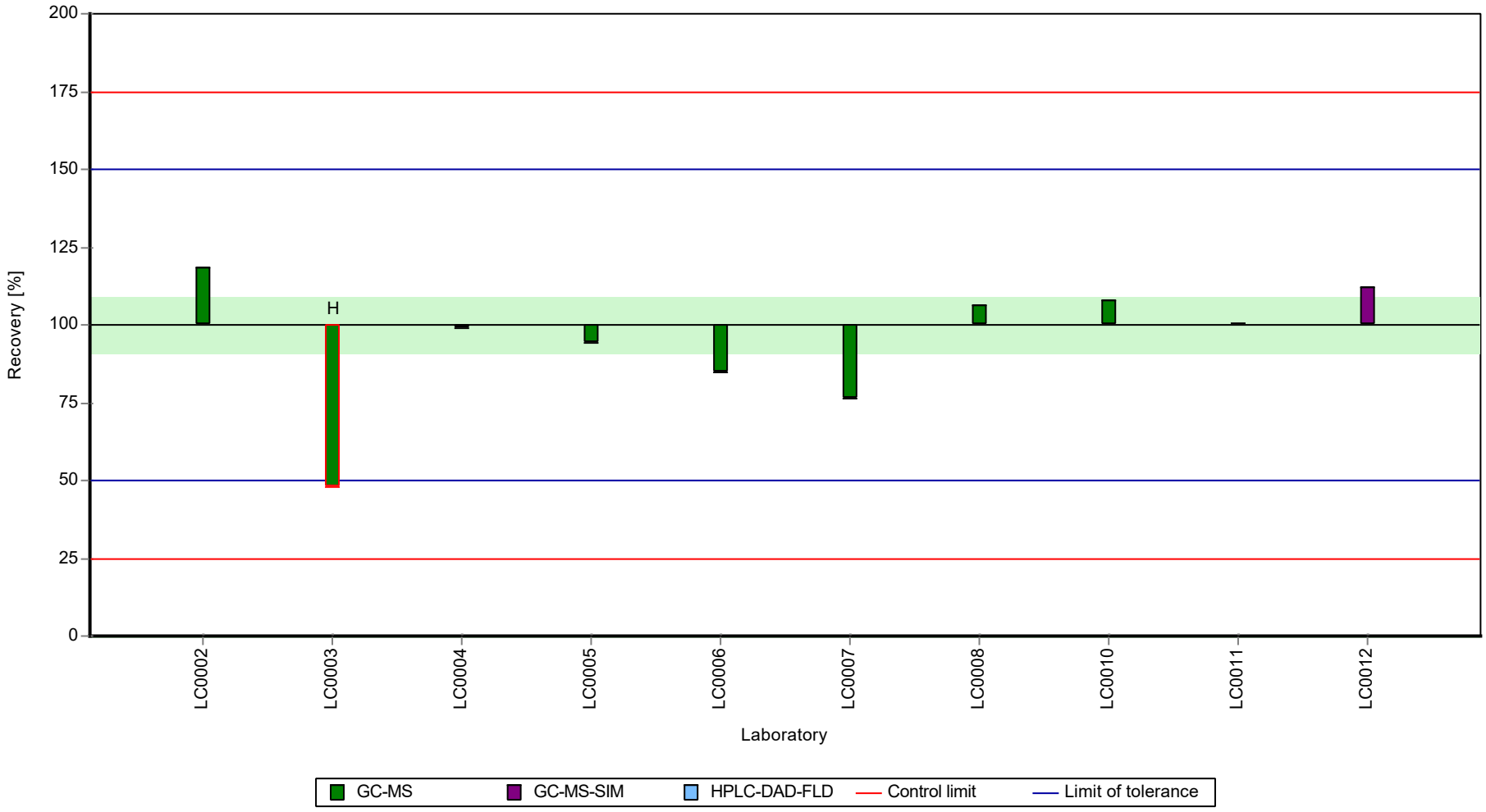
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

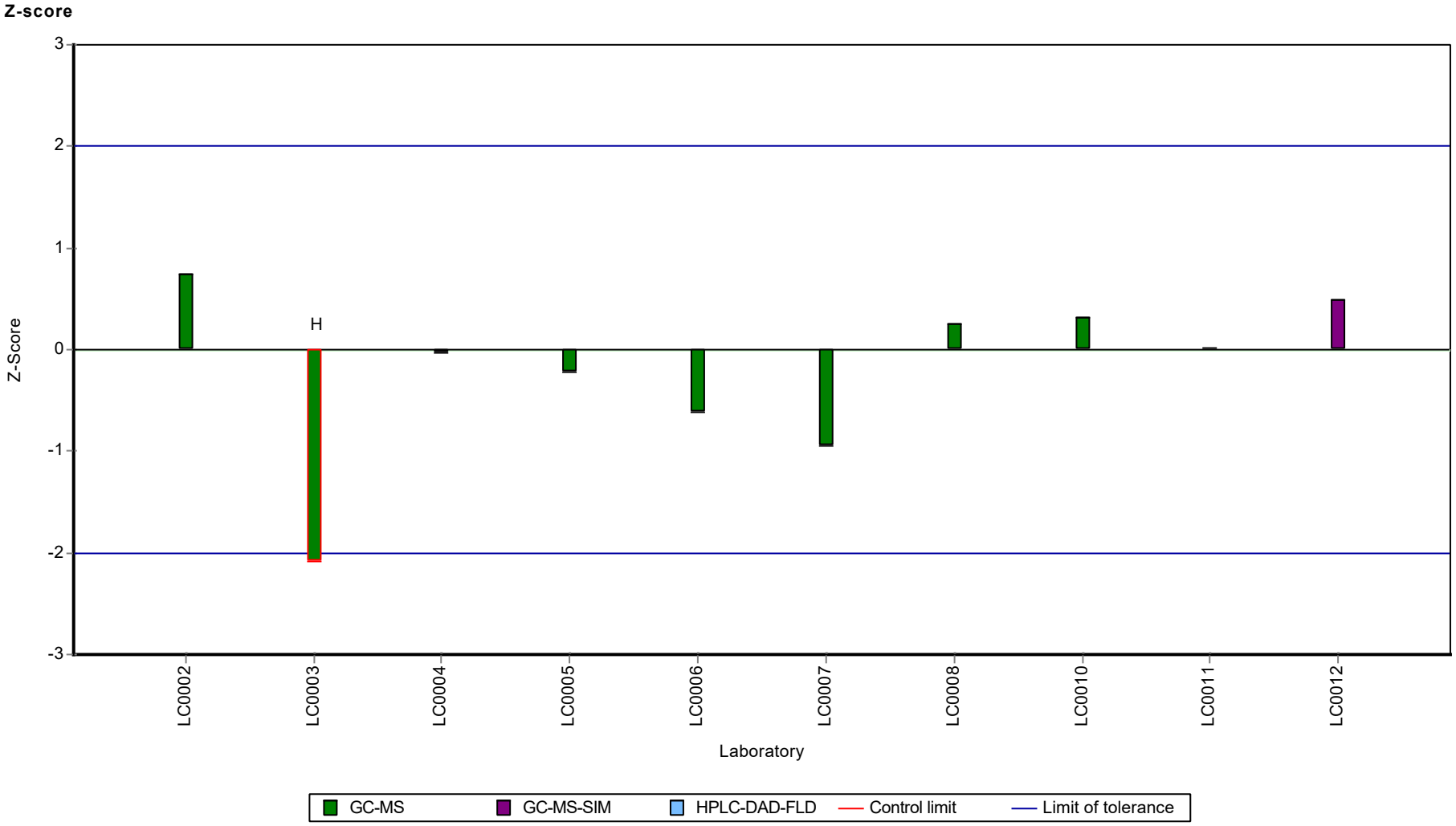
Sample: P26A, Parameter: Benzo[g,h,i]perylene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Benzo[g,h,i]perylene



Parameter oriented report

P26 B

Benzo[g,h,i]perylene

Unit	ng/l
Assigned value ± U (k=2)	205 ± 52.3
Criterion	86.2 (42 %)
Minimum - Maximum	83.8 - 343
Control test value ± U (k=2)	326 ± 114

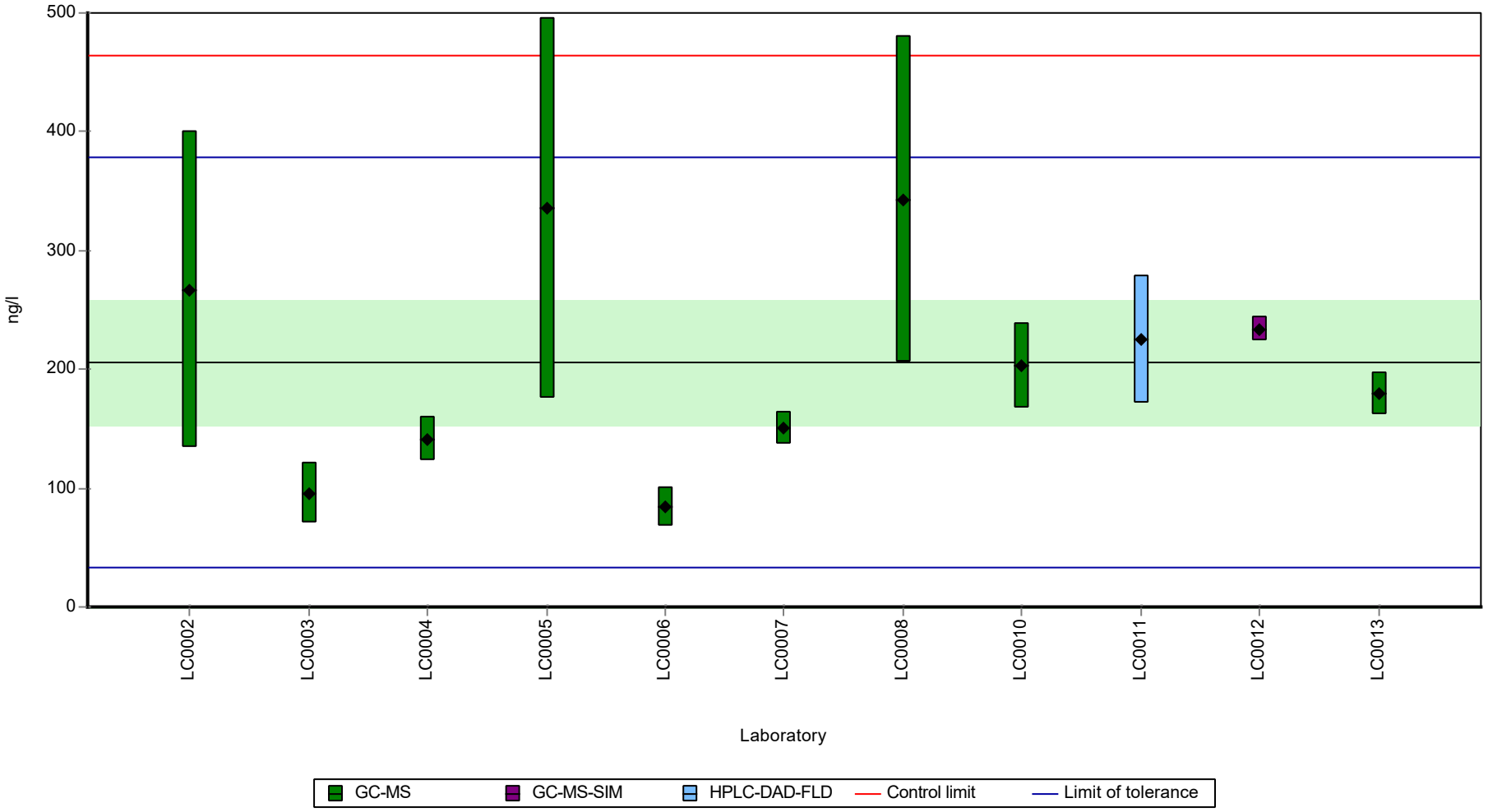
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	267	133.5	130	0.71	
LC0003	95.6	25.8	46.6	-1.27	
LC0004	141.4	18.6	68.9	-0.74	
LC0005	335.18	160.15	163	1.51	
LC0006	83.8	16.8	40.8	-1.41	
LC0007	151	14	73.5	-0.63	
LC0008	343	137.3	167	1.6	
LC0009	-	-	-	-	
LC0010	202.946	35.8	98.8	-0.03	
LC0011	225	54	110	0.23	
LC0012	234	10	114	0.33	
LC0013	180	18	87.7	-0.29	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	205 ± 78.5	205 ± 78.5	ng/l
Minimum	83.8	83.8	ng/l
Maximum	343	343	ng/l
Standard deviation	86.8	86.8	ng/l
rel. standard deviation	42.3	42.3	%
n	11	11	-

Graphical presentation of results

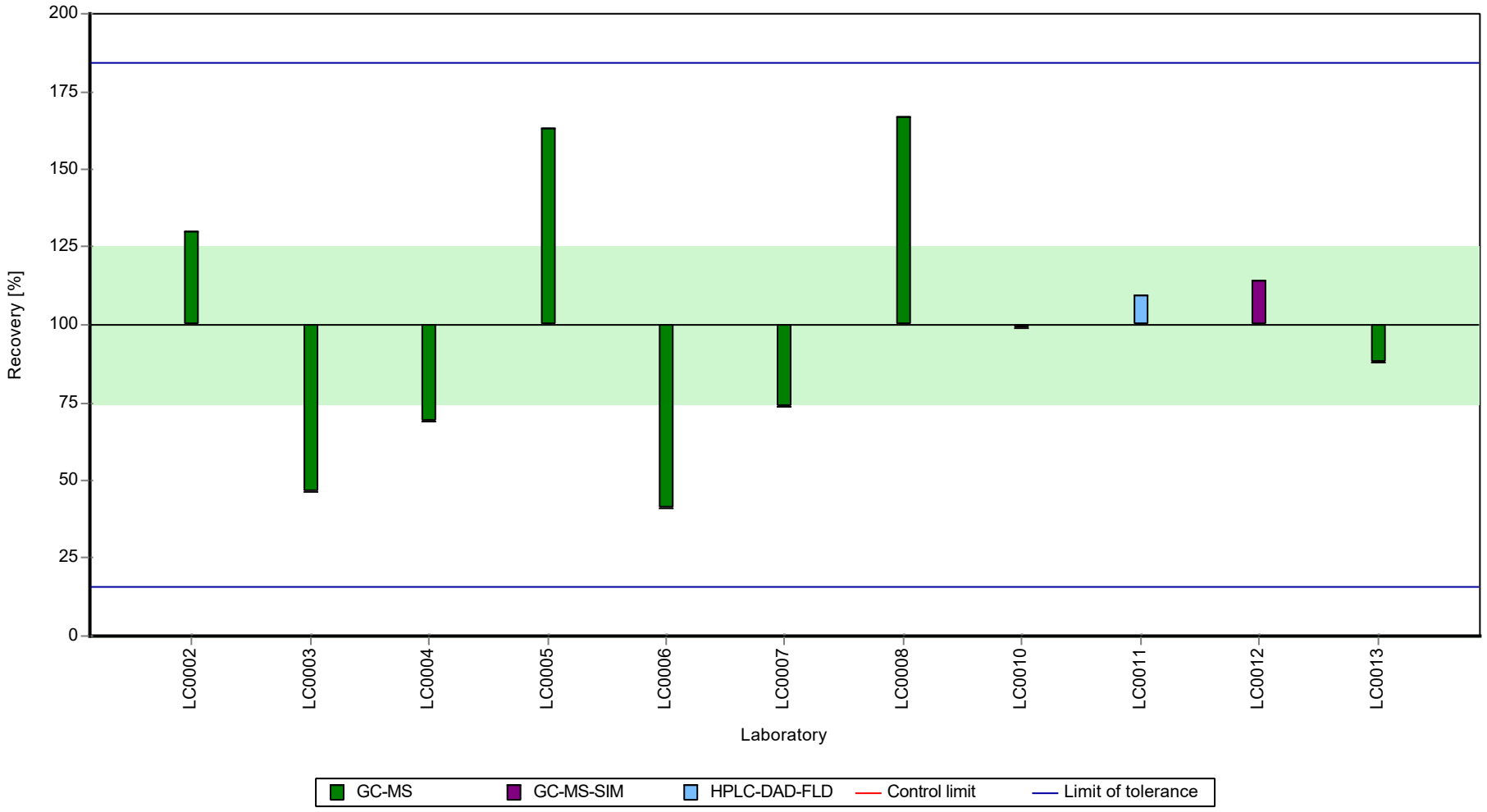
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

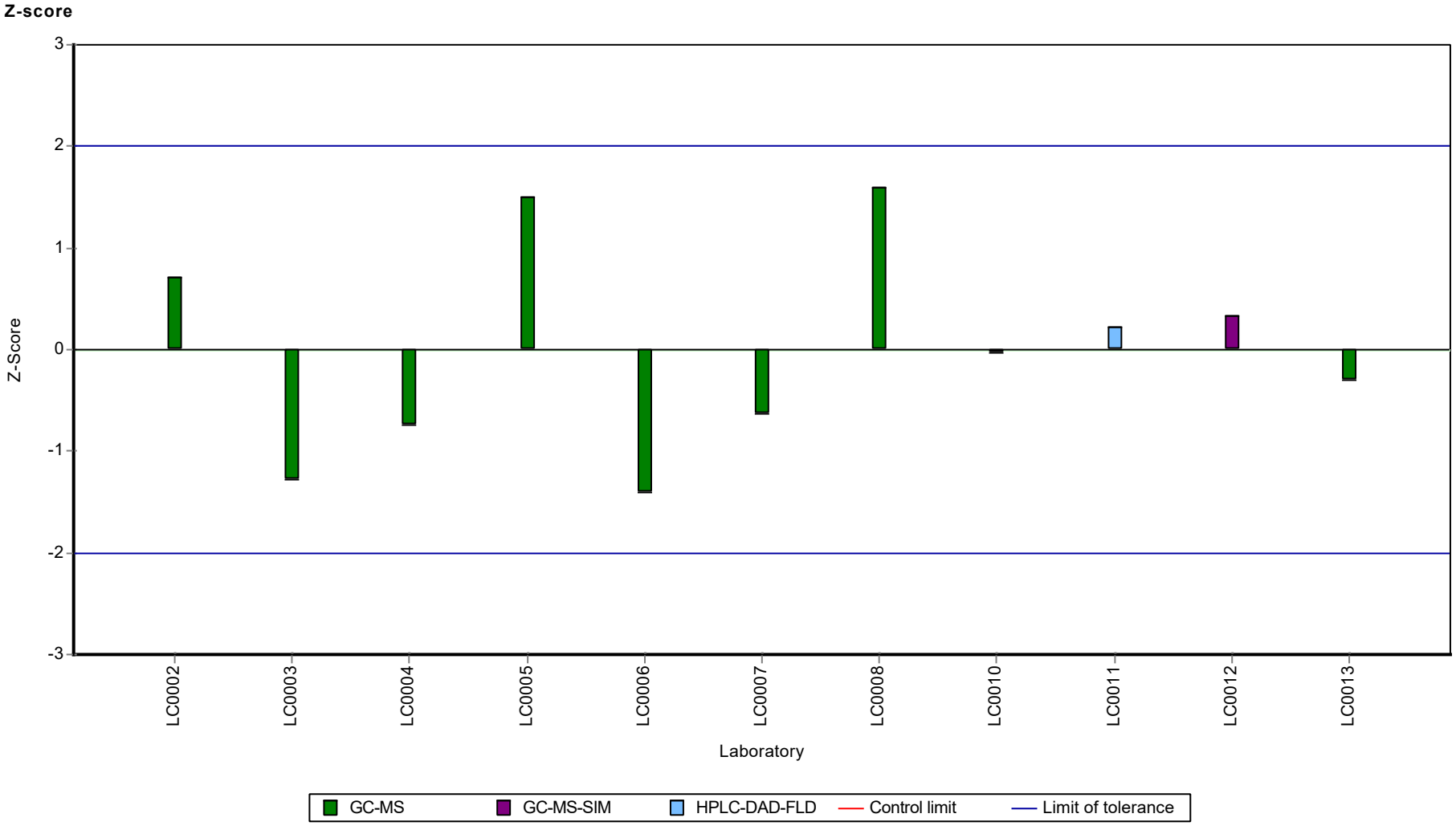
Sample: P26B, Parameter: Benzo[g,h,i]perylene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[g,h,i]perylene



Parameter oriented report

P26 A

Benzo[k]fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	23.1 ± 4.05
Criterion	6.48 (28 %)
Minimum - Maximum	11.8 - 31.4
Control test value ± U (k=2)	33.5 ± 10.1

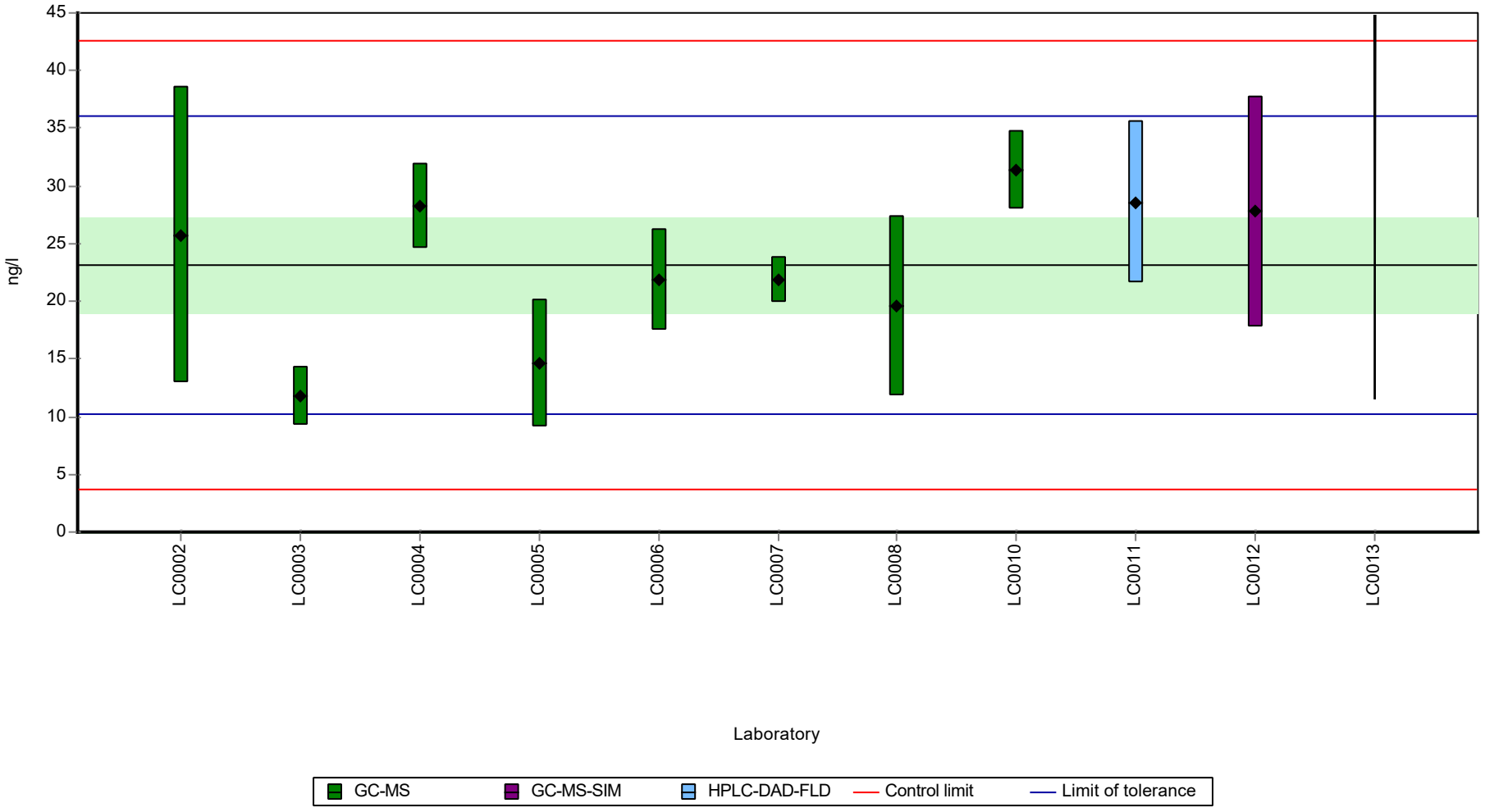
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	25.7	12.85	111	0.4	
LC0003	11.8	2.6	51	-1.75	
LC0004	28.22	3.72	122	0.78	
LC0005	14.6	5.55	63.1	-1.32	
LC0006	21.8	4.4	94.2	-0.21	
LC0007	21.9	2	94.6	-0.19	
LC0008	19.6	7.83	84.7	-0.55	
LC0009	-	-	-	-	
LC0010	31.363	3.439	136	1.27	
LC0011	28.6	7	124	0.84	
LC0012	27.8	10	120	0.72	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	23.1 ± 6.07	23.1 ± 6.07	ng/l
Minimum	11.8	11.8	ng/l
Maximum	31.4	31.4	ng/l
Standard deviation	6.4	6.4	ng/l
rel. standard deviation	27.7	27.7	%
n	10	10	-

Graphical presentation of results

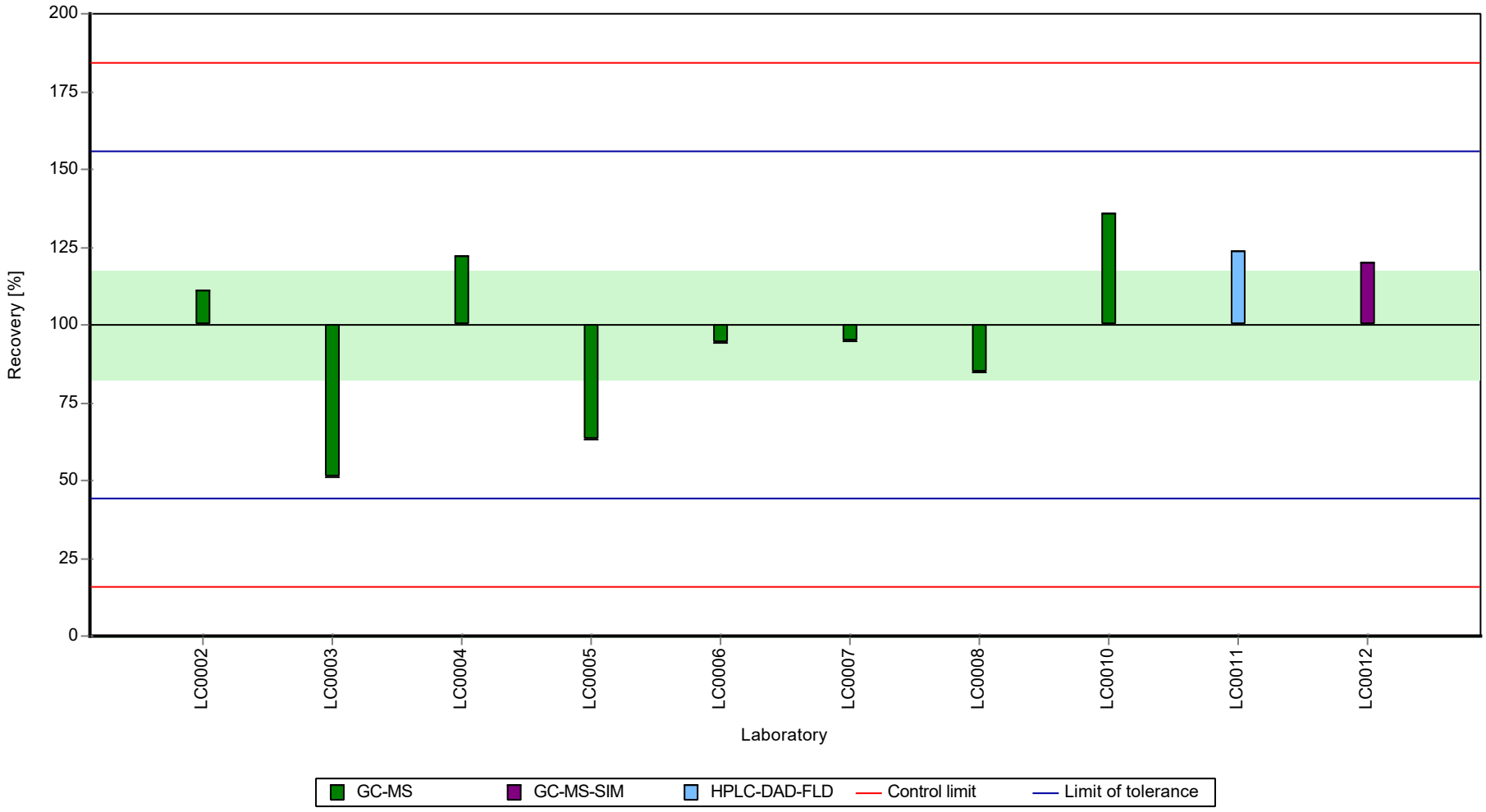
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

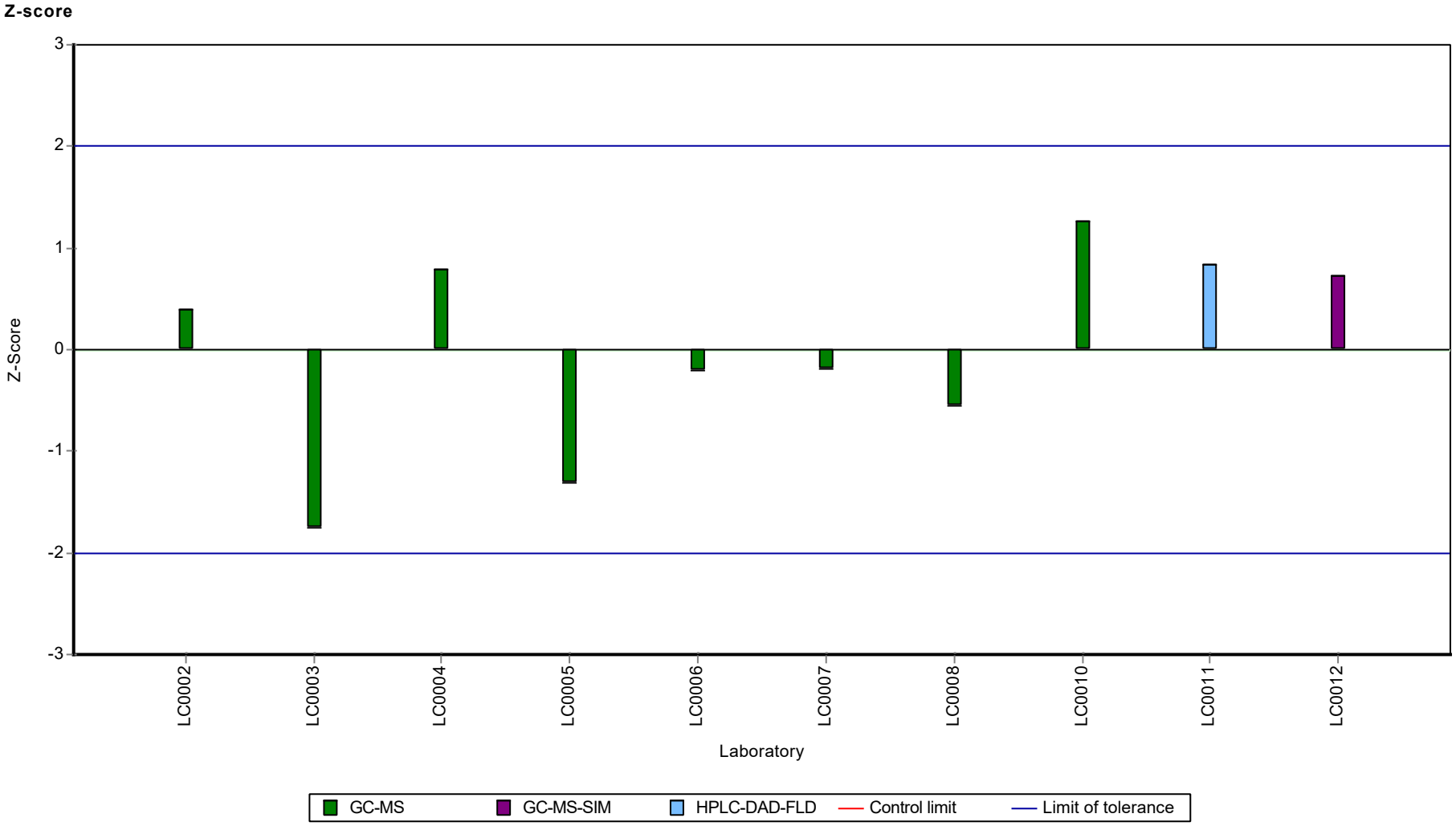
Sample: P26A, Parameter: Benzo[k]fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Benzo[k]fluoranthene



Parameter oriented report

P26 B

Benzo[k]fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	229 ± 36.4
Criterion	57.3 (25 %)
Minimum - Maximum	133 - 323
Control test value ± U (k=2)	278 ± 83.4

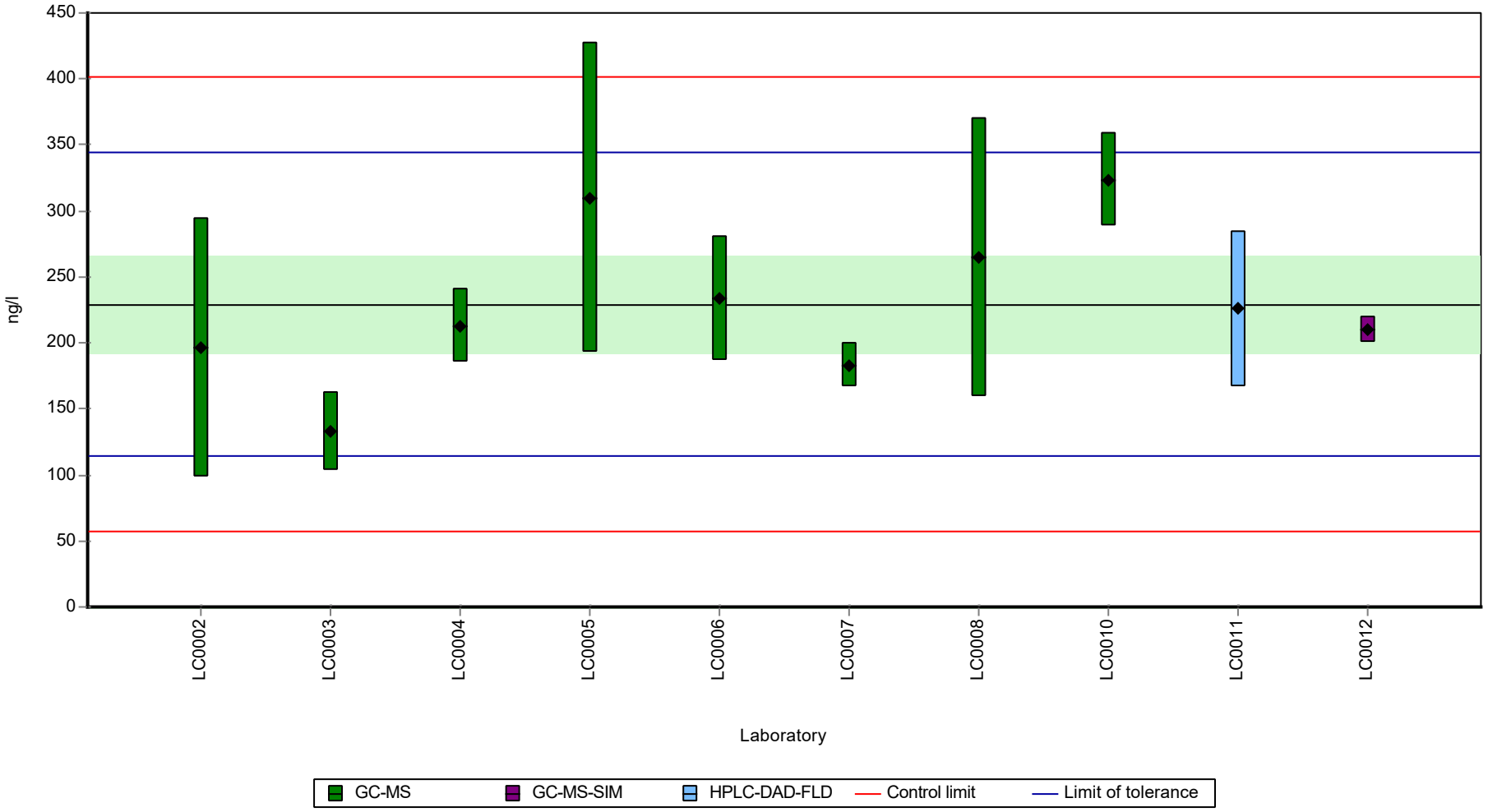
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	196	98	85.5	-0.58	
LC0003	133	29.3	58	-1.68	
LC0004	213.1	28.1	92.9	-0.28	
LC0005	310.05	117.85	135	1.41	
LC0006	234	47	102	0.08	
LC0007	183	17	79.8	-0.81	
LC0008	265	105.9	116	0.62	
LC0009	-	-	-	-	
LC0010	323.228	35.442	141	1.64	
LC0011	226	59	98.5	-0.06	
LC0012	210	10	91.6	-0.34	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	229 ± 54.6	229 ± 54.6	ng/l
Minimum	133	133	ng/l
Maximum	323	323	ng/l
Standard deviation	57.6	57.6	ng/l
rel. standard deviation	25.1	25.1	%
n	10	10	-

Graphical presentation of results

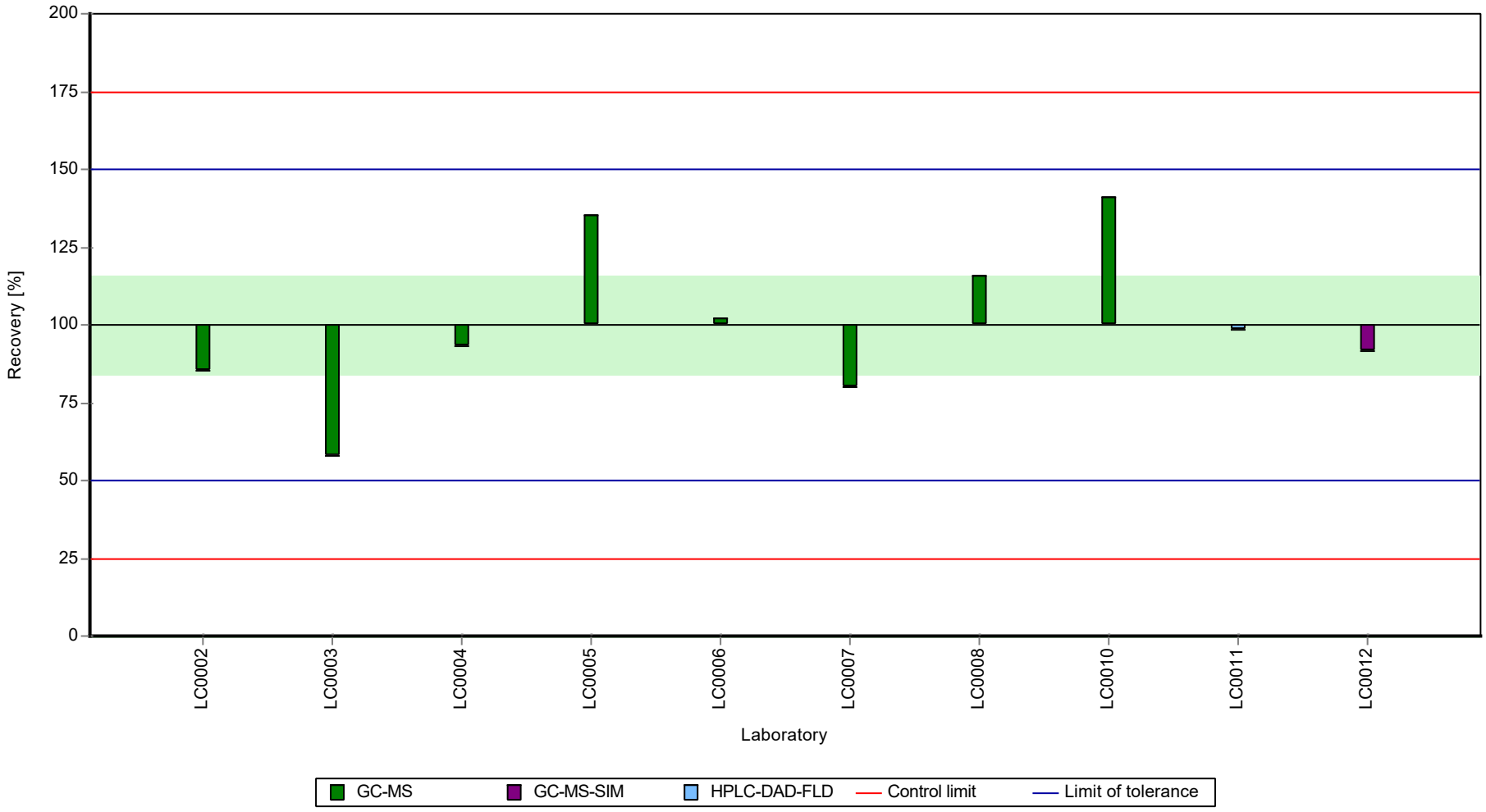
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

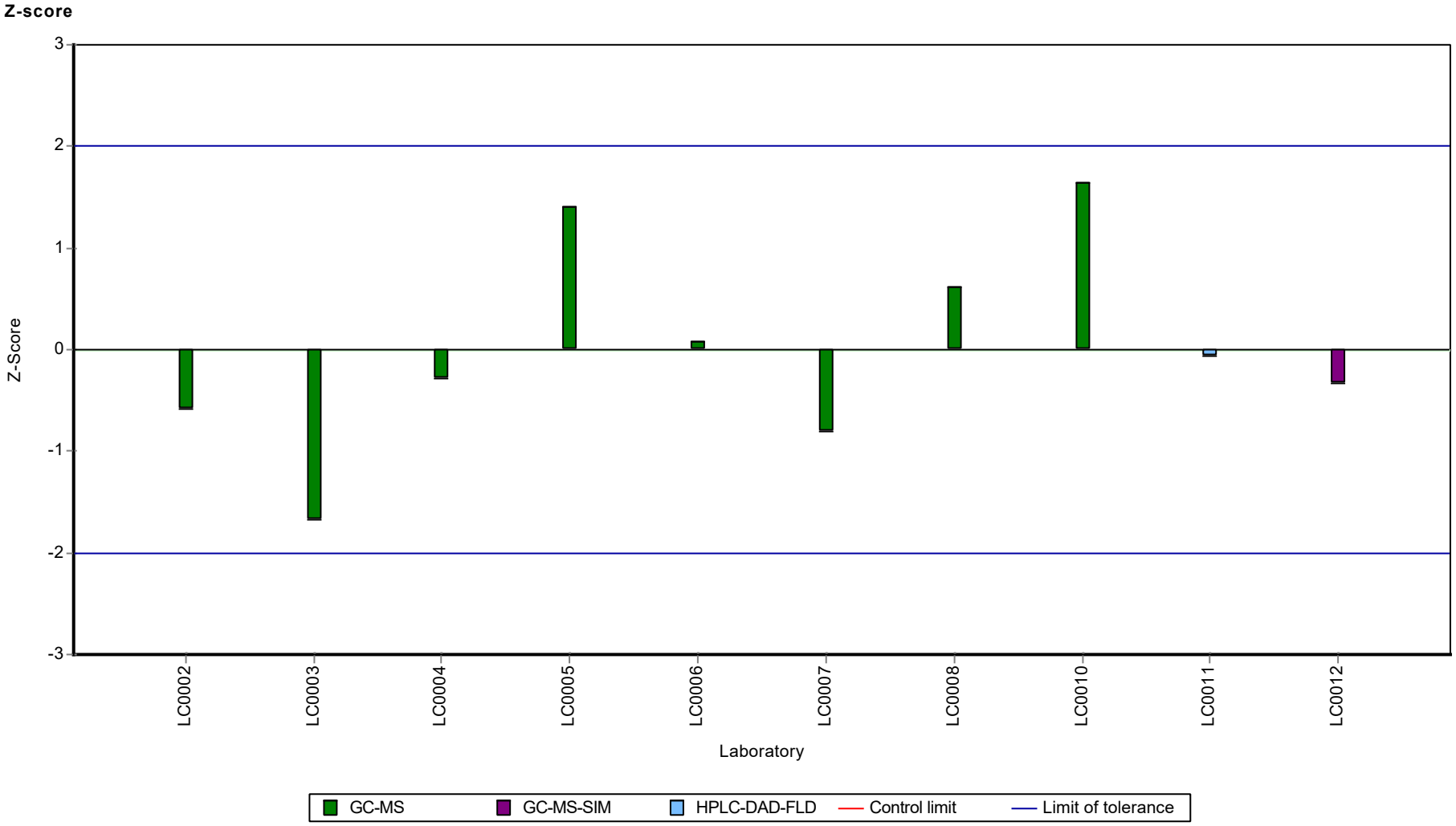
Sample: P26B, Parameter: Benzo[k]fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Benzo[k]fluoranthene



Parameter oriented report

P26 A

Chrysene

Unit	ng/l
Assigned value ± U (k=2)	26 ± 3.79
Criterion	5.71 (22 %)
Minimum - Maximum	15.2 - 31.8
Control test value ± U (k=2)	36.5 ± 9.13

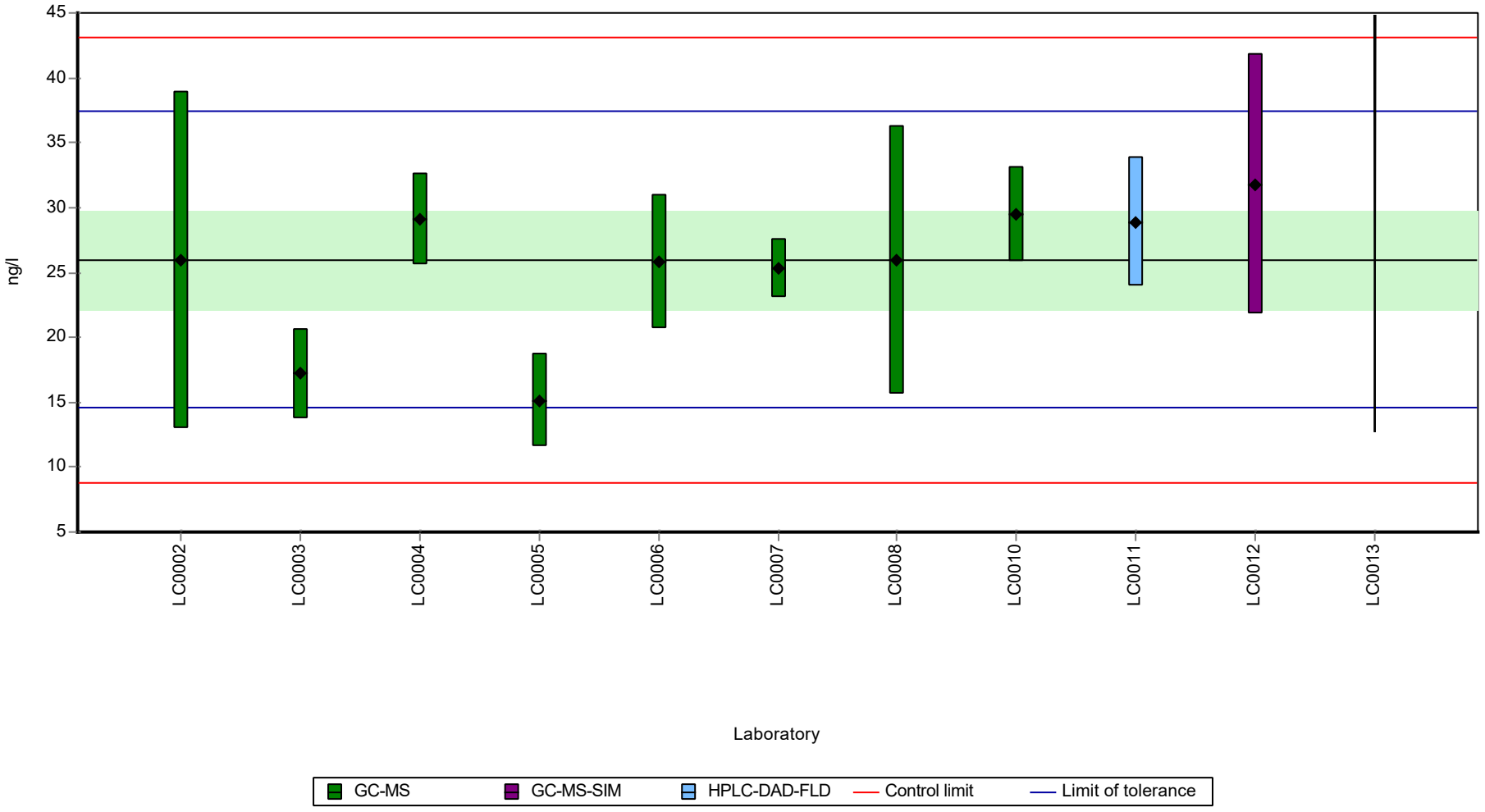
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	26	13	100	0.01	
LC0003	17.2	3.44	66.3	-1.53	
LC0004	29.07	3.54	112	0.55	
LC0005	15.15	3.65	58.4	-1.89	
LC0006	25.8	5.2	99.4	-0.03	
LC0007	25.3	2.3	97.5	-0.11	
LC0008	25.9	10.34	99.8	-0.01	
LC0009	-	-	-	-	
LC0010	29.451	3.649	113	0.61	
LC0011	28.9	5	111	0.52	
LC0012	31.8	10	123	1.02	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	25.5 ± 5.06	25.5 ± 5.06	ng/l
Minimum	15.2	15.2	ng/l
Maximum	31.8	31.8	ng/l
Standard deviation	5.33	5.33	ng/l
rel. standard deviation	21	21	%
n	10	10	-

Graphical presentation of results

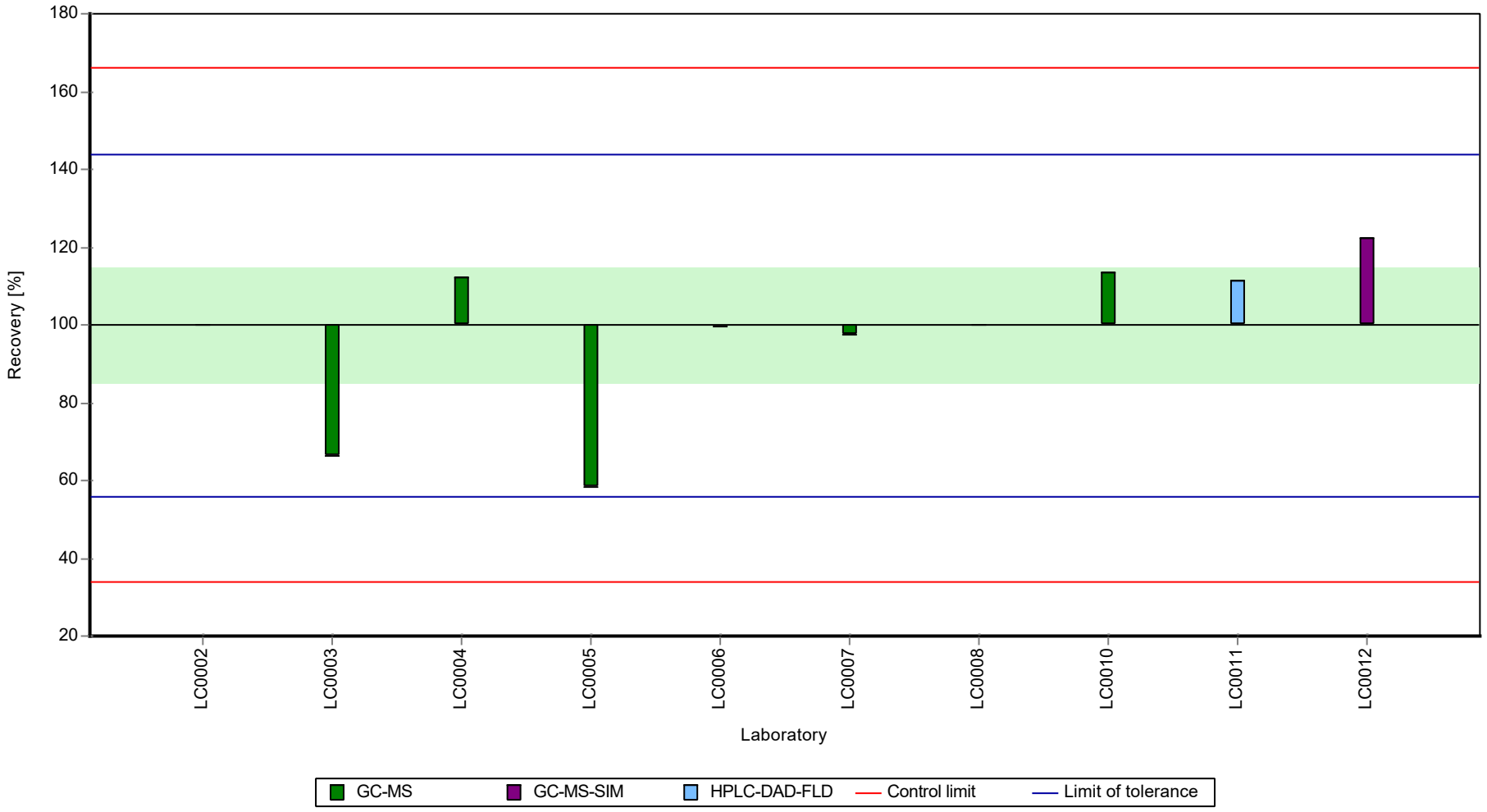
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

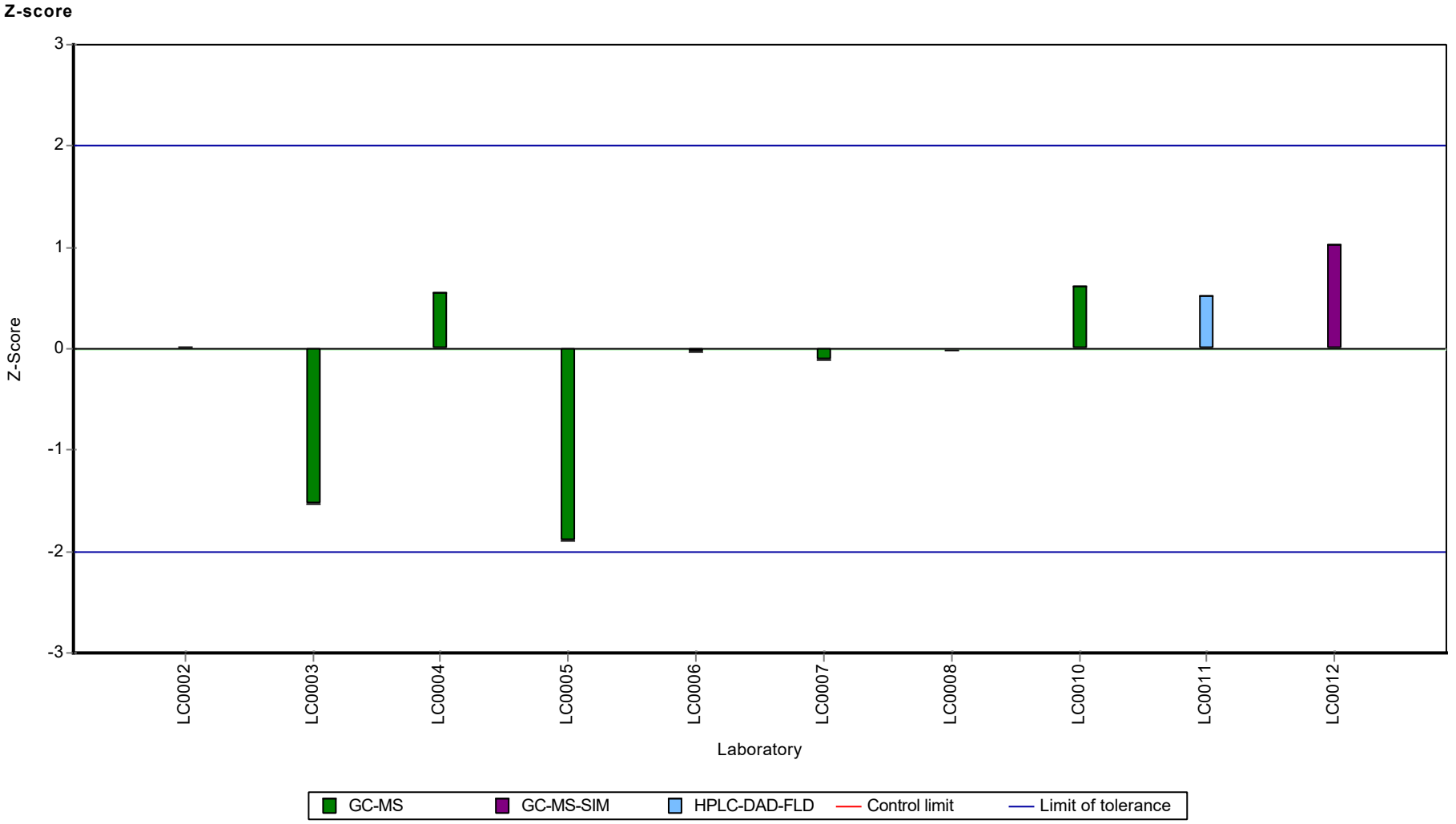
Sample: P26A, Parameter: Chrysene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Chrysene



Parameter oriented report

P26 B

Chrysene

Unit	ng/l
Assigned value ± U (k=2)	227 ± 16.7
Criterion	50 (22 %)
Minimum - Maximum	177 - 261
Control test value ± U (k=2)	302 ± 75.5

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	208	104	91.5	-0.39	
LC0003	177	35.4	77.8	-1.01	
LC0004	224.3	27.3	98.6	-0.06	
LC0005	520	125.73	229	5.85	H
LC0006	248	50	109	0.41	
LC0007	219	20	96.3	-0.17	
LC0008	249	99.5	110	0.43	
LC0009	-	-	-	-	
LC0010	261.166	32.358	115	0.68	
LC0011	231	41	102	0.07	
LC0012	229	10	101	0.03	
LC0013	-	-	-	-	

Characteristics of parameter

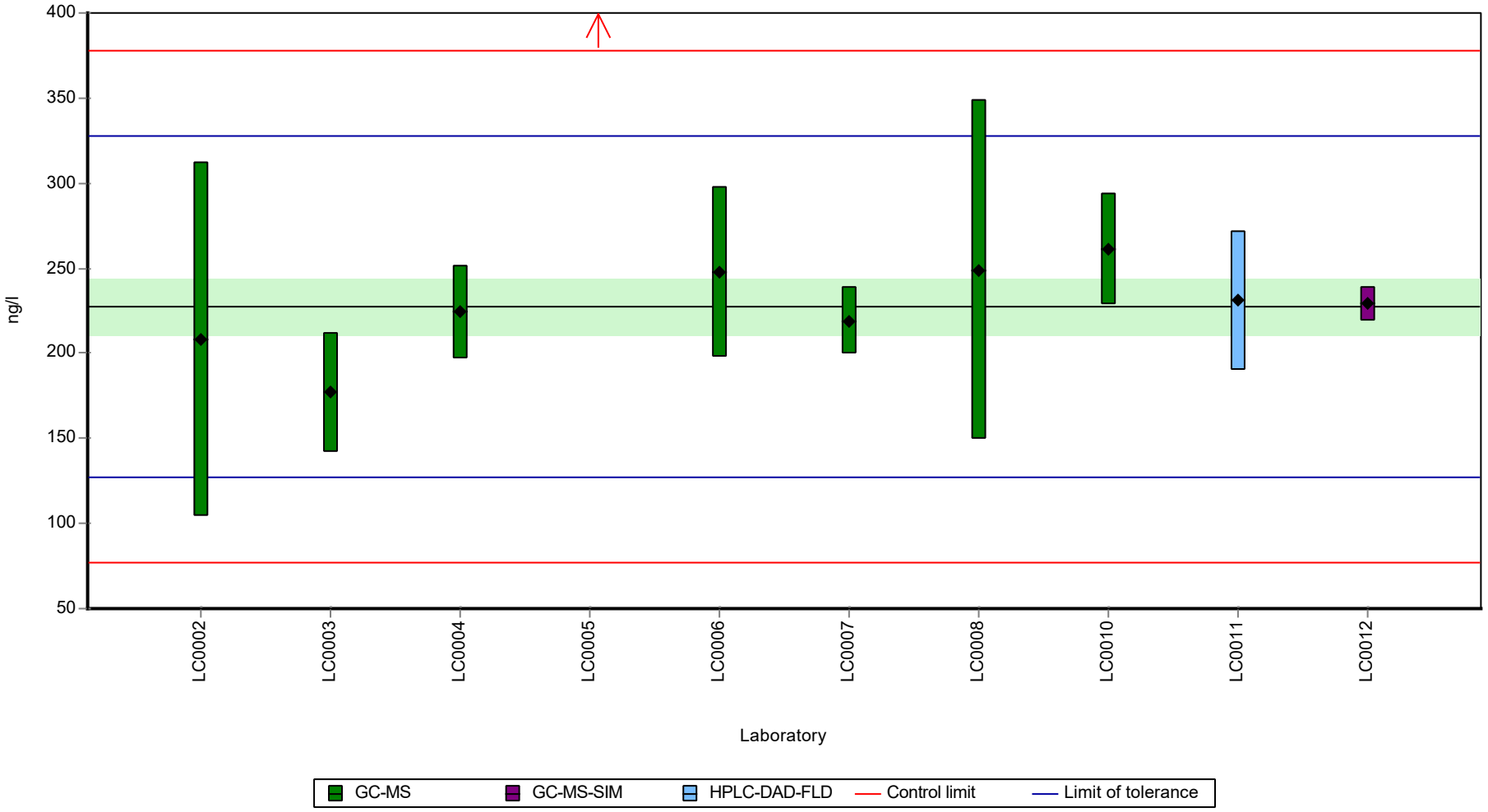
	all results	w ithout outliers	Unit
Mean ± CI (99%)	257 ± 90.6	227 ± 25.1	ng/l
Minimum	177	177	ng/l
Maximum	520	261	ng/l
Standard deviation	95.5	25.1	ng/l
rel. standard deviation	37.2	11	%
n	10	9	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Chrysene

Graphical presentation of results

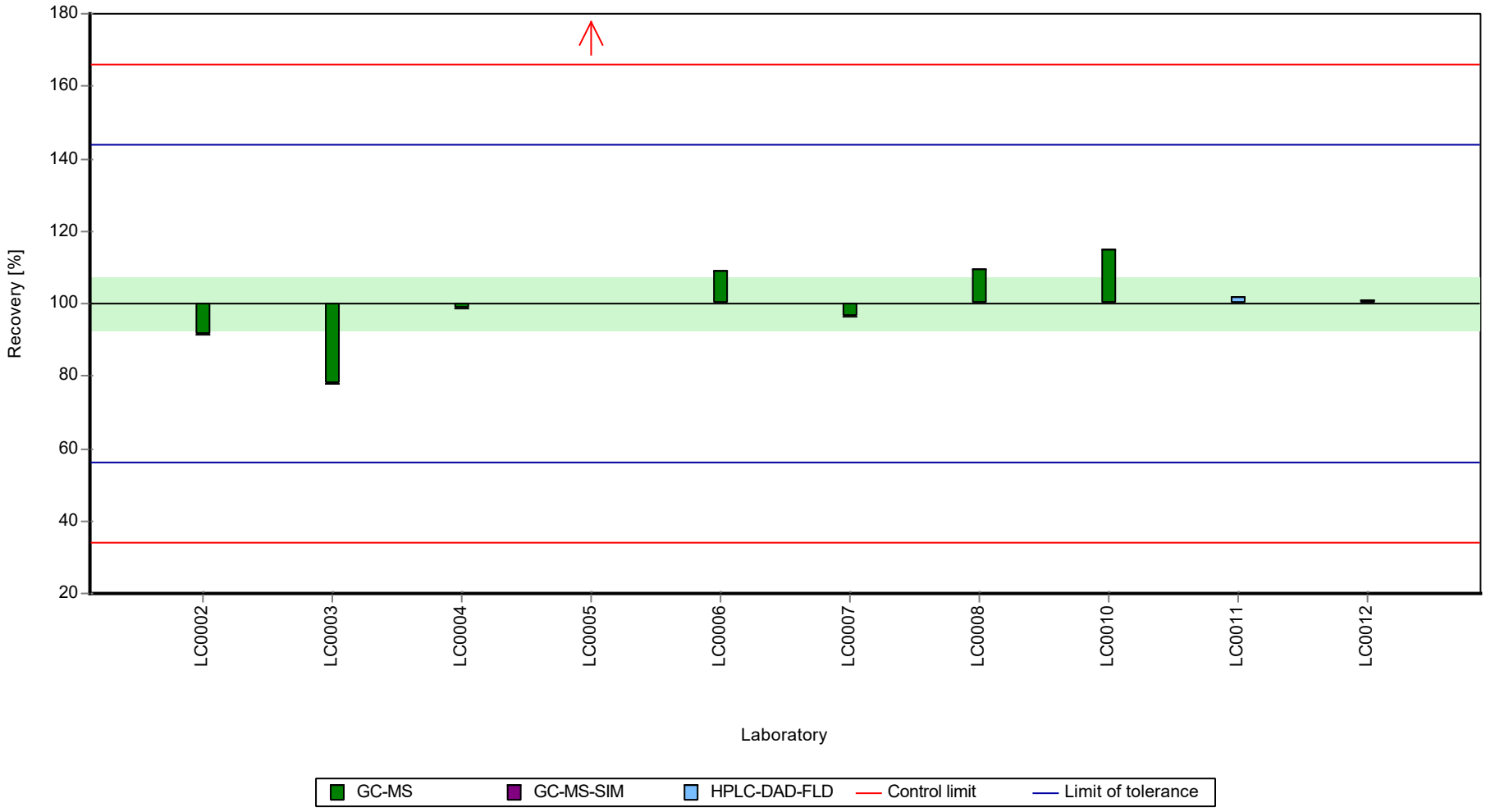
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

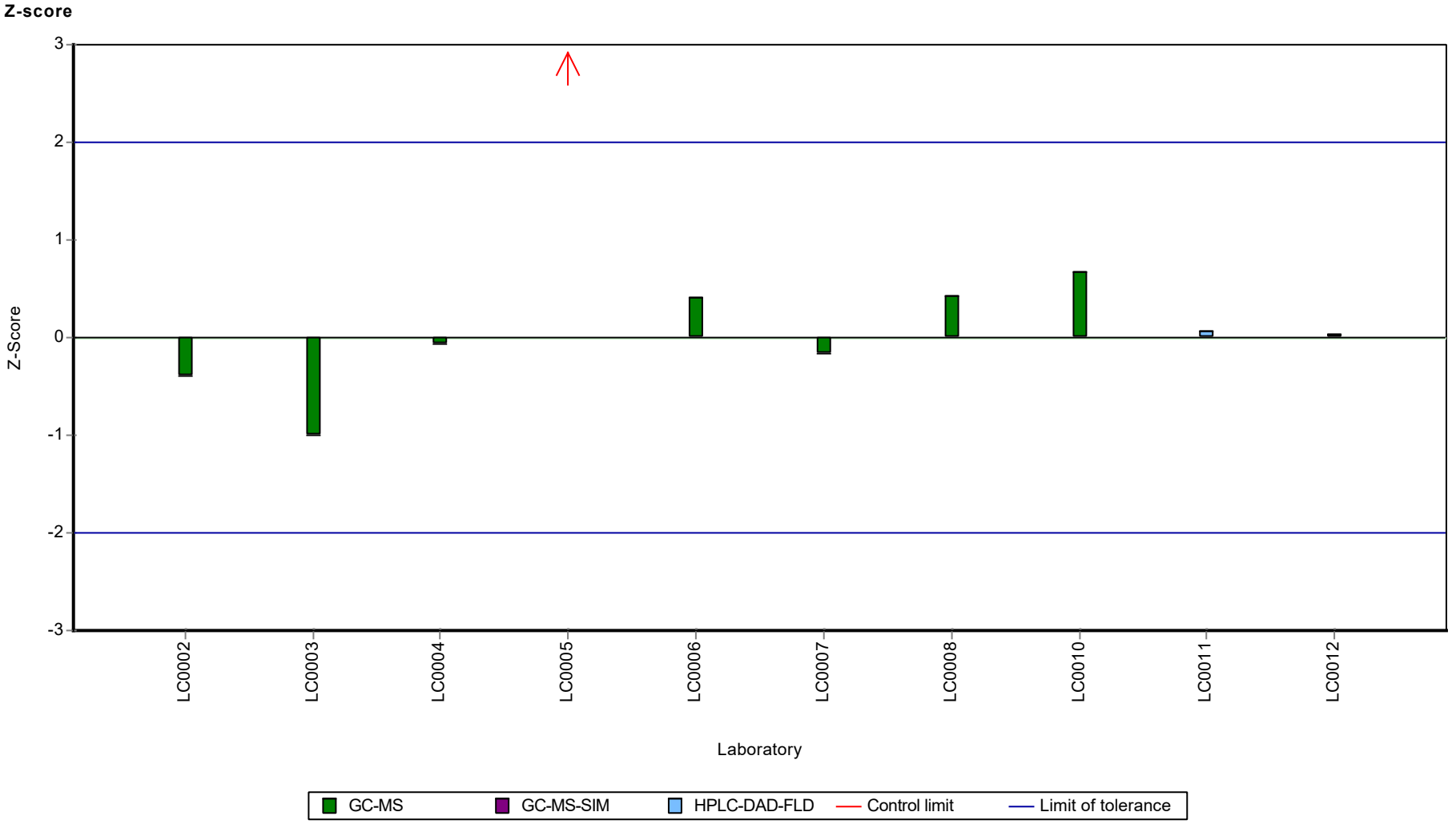
Sample: P26B, Parameter: Chrysene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Chrysene



Parameter oriented report

P26 A

Dibenzo[a,h]anthracene

Unit	ng/l
Assigned value ± U (k=2)	21.6 ± 4.39
Criterion	6.49 (30 %)
Minimum - Maximum	14.2 - 28.2
Control test value ± U (k=2)	39.8 ± 13.9

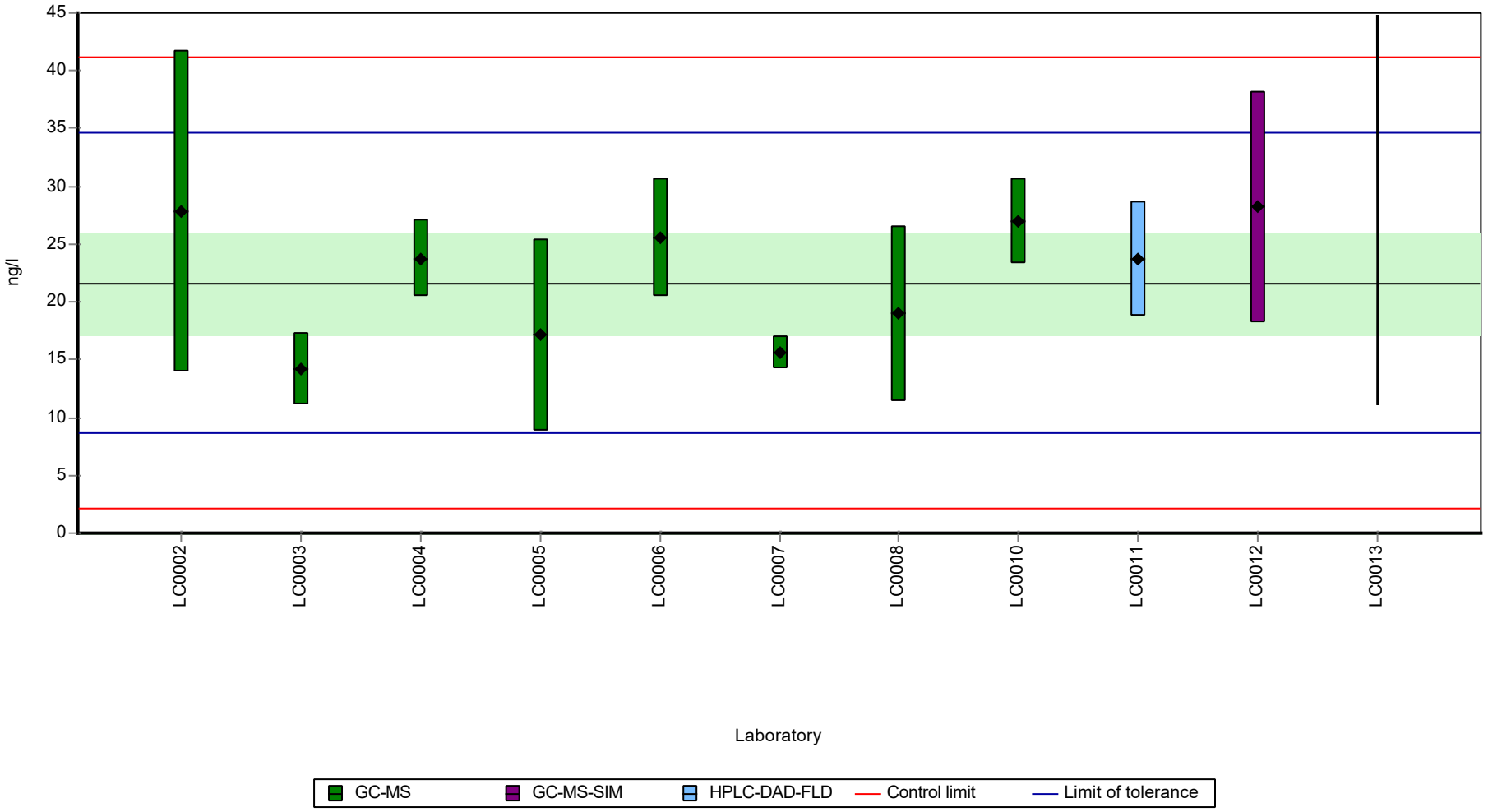
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	27.8	13.9	128	0.95	
LC0003	14.2	3.12	65.6	-1.15	
LC0004	23.75	3.32	110	0.33	
LC0005	17.16	8.29	79.3	-0.69	
LC0006	25.6	5.1	118	0.61	
LC0007	15.6	1.4	72.1	-0.93	
LC0008	19	7.59	87.8	-0.41	
LC0009	-	-	-	-	
LC0010	26.961	3.709	125	0.82	
LC0011	23.7	5	110	0.32	
LC0012	28.2	10	130	1.01	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	22.2 ± 4.99	22.2 ± 4.99	ng/l
Minimum	14.2	14.2	ng/l
Maximum	28.2	28.2	ng/l
Standard deviation	5.26	5.26	ng/l
rel. standard deviation	23.7	23.7	%
n	10	10	-

Graphical presentation of results

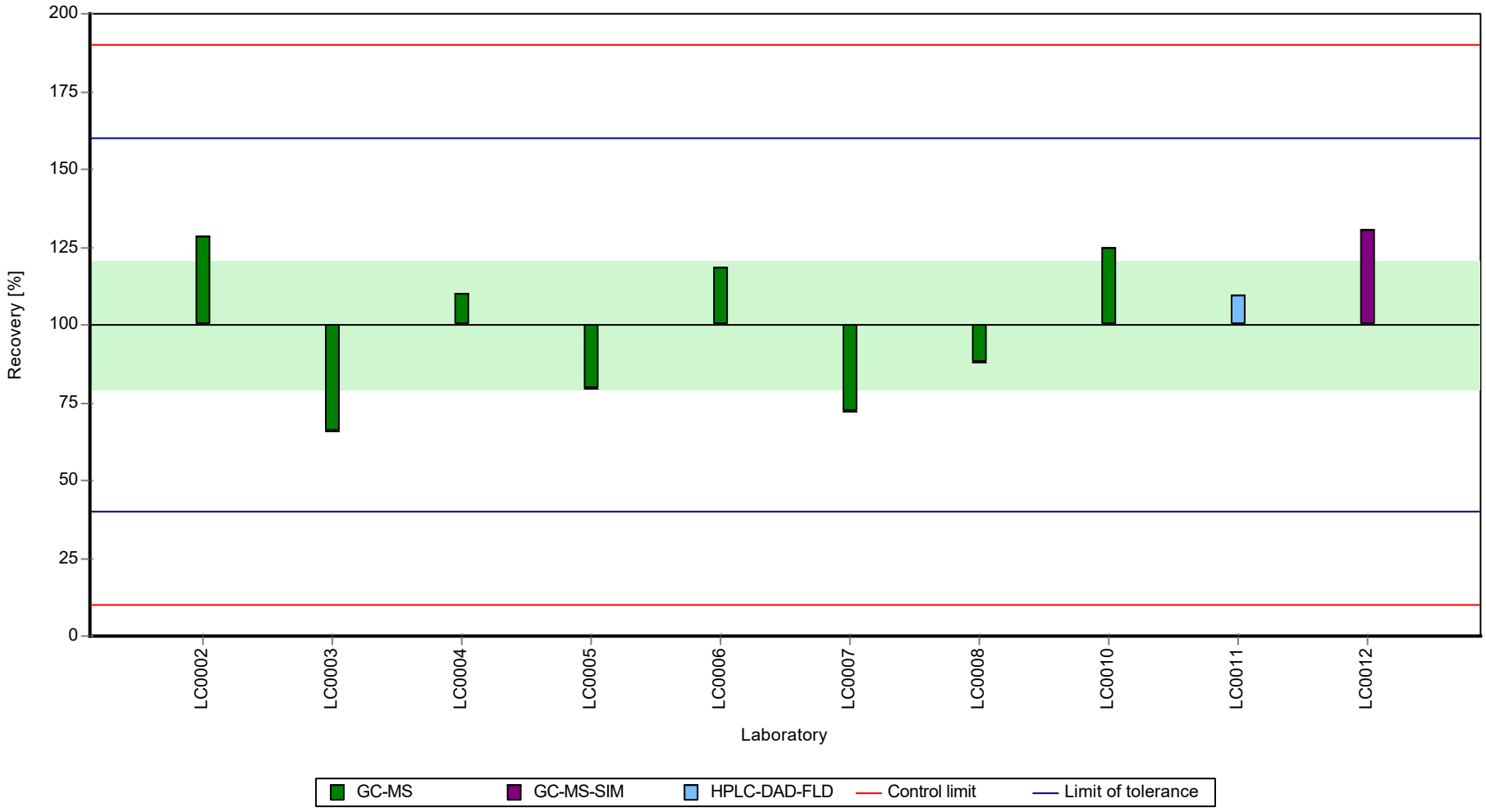
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

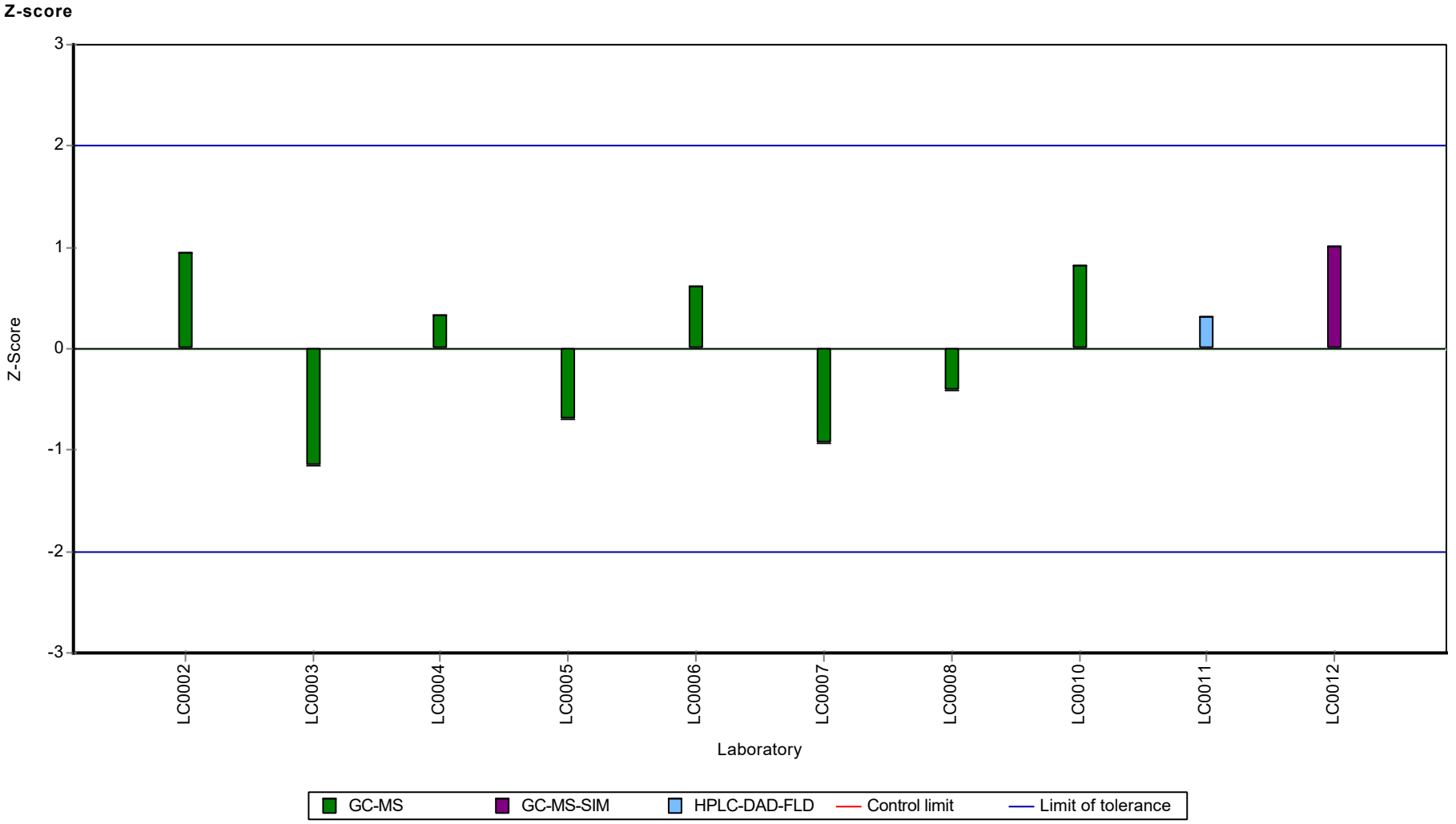
Sample: P26A, Parameter: Dibenzo[a,h]anthracene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Dibenzo[a,h]anthracene



Parameter oriented report

P26 B

Dibenzo[a,h]anthracene *

Unit	ng/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	91.3 - 495
Control test value ± U (k=2)	447 ± 156

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

P26 B Dibenzo[a,h]anthracene: MV (n=6, accr.) +/- SD(2s): 163 +/- 130 ng/l

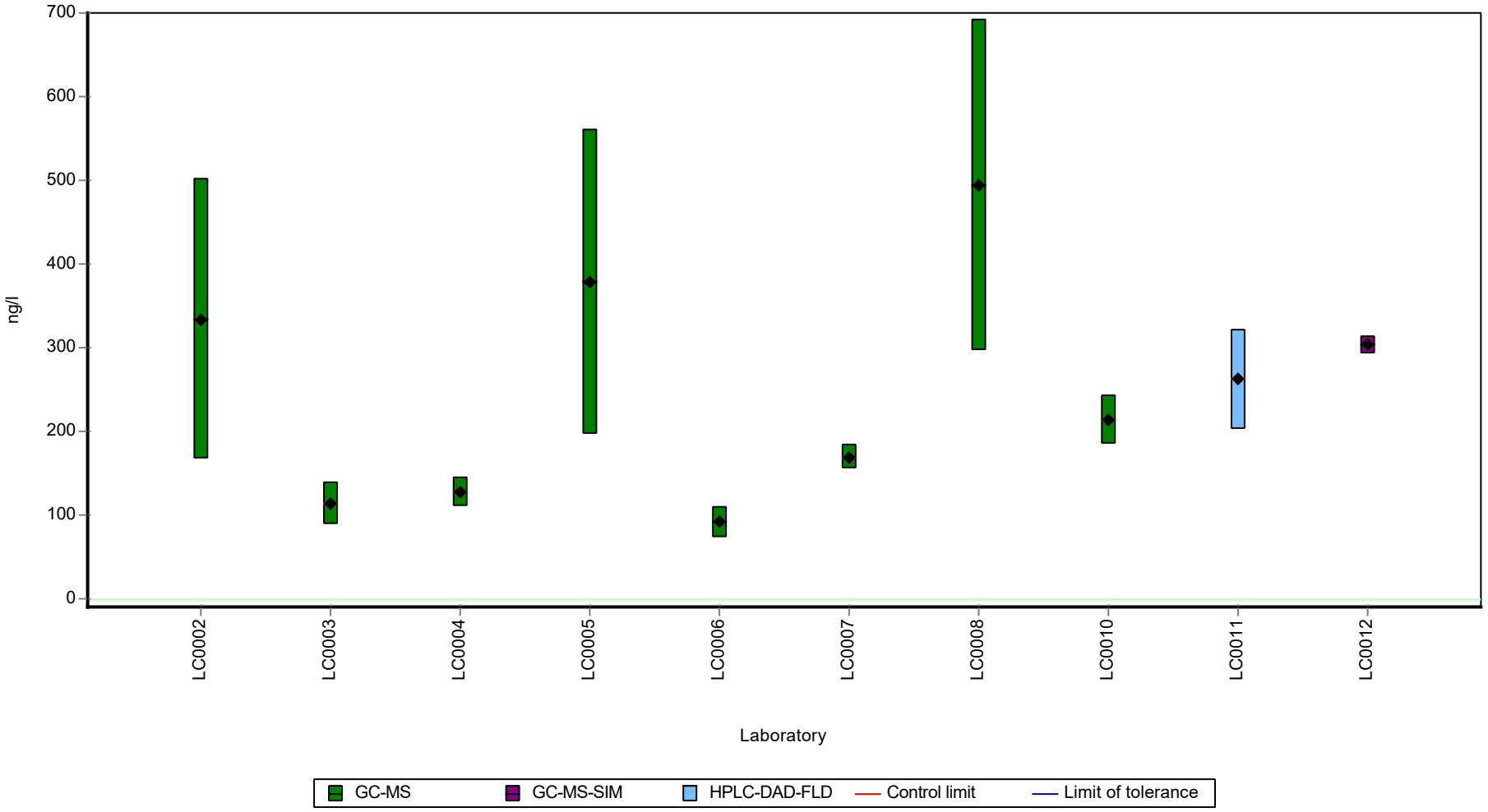
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	334	167	-	-	
LC0003	114	25.1	-	-	
LC0004	127.2	17.8	-	-	
LC0005	378.29	182.75	-	-	
LC0006	91.3	18.3	-	-	
LC0007	169	15	-	-	
LC0008	495	198.1	-	-	
LC0009	-	-	-	-	
LC0010	213.8	29.408	-	-	
LC0011	262	60	-	-	
LC0012	303	10	-	-	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	249 ± 124	249 ± 124	ng/l
Minimum	91.3	91.3	ng/l
Maximum	495	495	ng/l
Standard deviation	130	130	ng/l
rel. standard deviation	52.4	52.4	%
n	10	10	-

Graphical presentation of results

Results



Parameter oriented report

P26 A

Fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	26.7 ± 3.54
Criterion	5.61 (21 %)
Minimum - Maximum	15.5 - 33.7
Control test value ± U (k=2)	29.7 ± 7.43

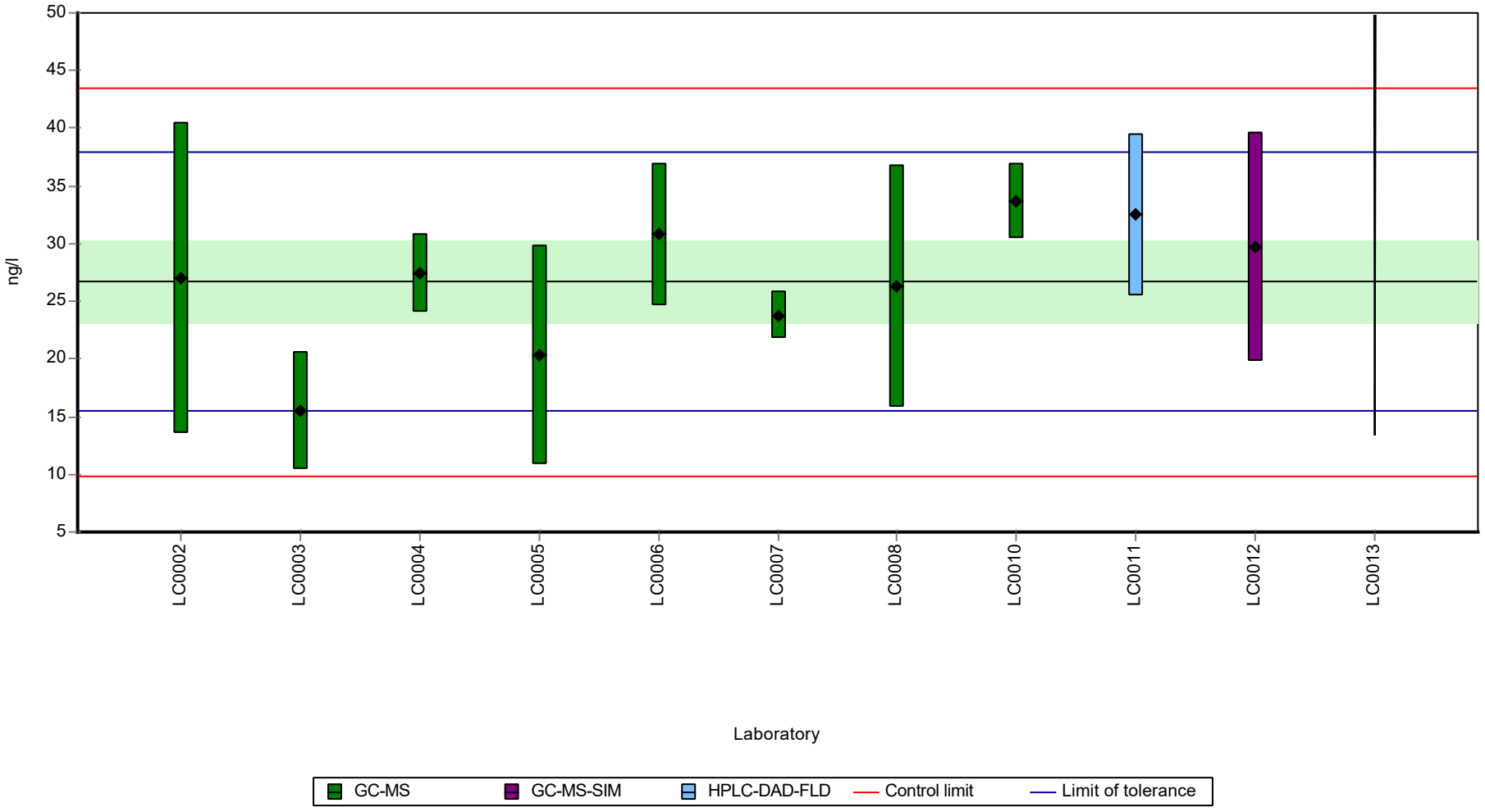
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	27	13.5	101	0.05	
LC0003	15.5	5.12	58	-2	
LC0004	27.44	3.35	103	0.13	
LC0005	20.39	9.52	76.3	-1.13	
LC0006	30.8	6.2	115	0.73	
LC0007	23.8	2.1	89.1	-0.52	
LC0008	26.3	10.5	98.5	-0.07	
LC0009	-	-	-	-	
LC0010	33.688	3.286	126	1.24	
LC0011	32.5	7	122	1.03	
LC0012	29.7	10	111	0.53	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	26.7 ± 5.32	26.7 ± 5.32	ng/l
Minimum	15.5	15.5	ng/l
Maximum	33.7	33.7	ng/l
Standard deviation	5.61	5.61	ng/l
rel. standard deviation	21	21	%
n	10	10	-

Graphical presentation of results

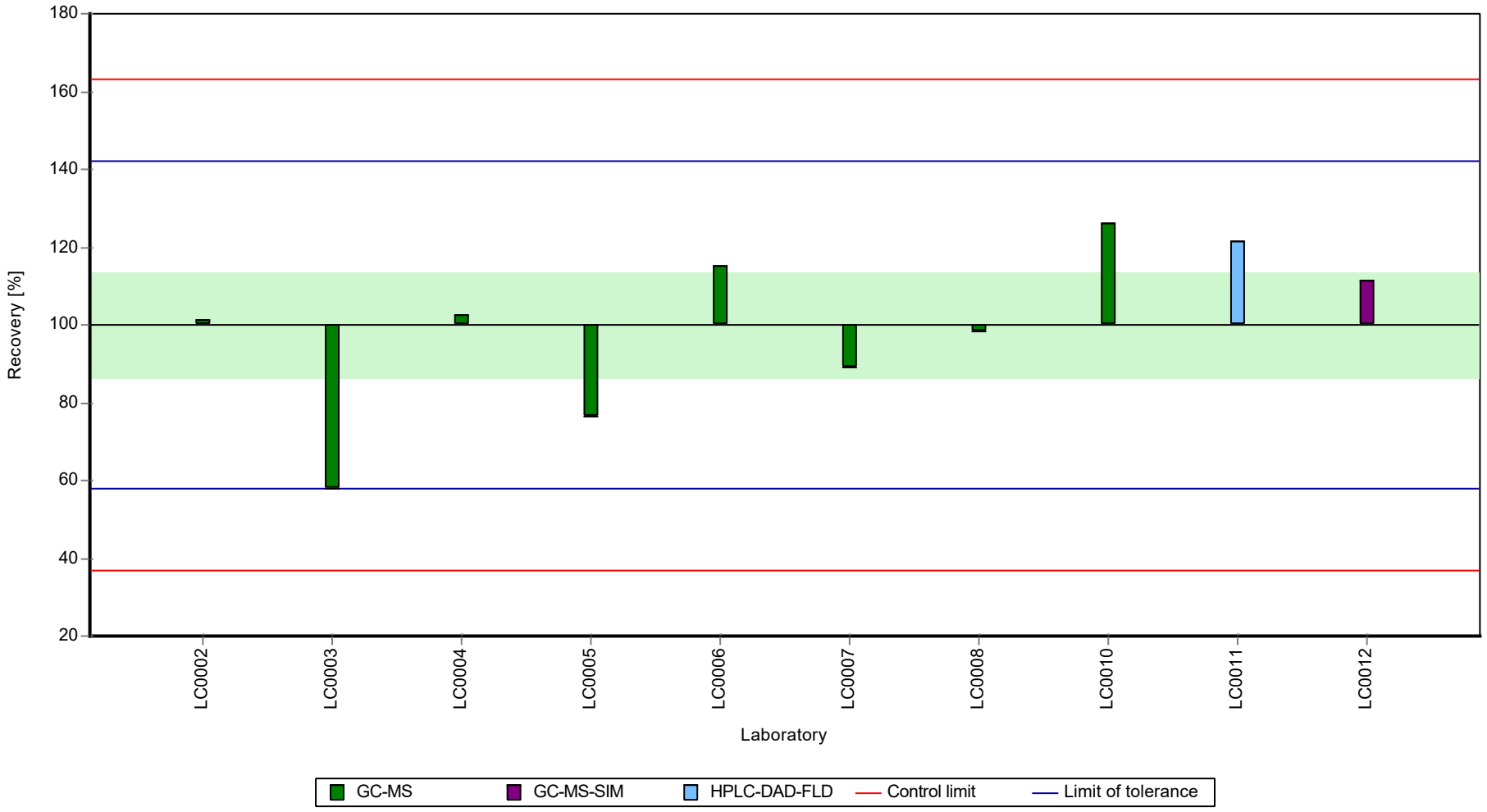
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

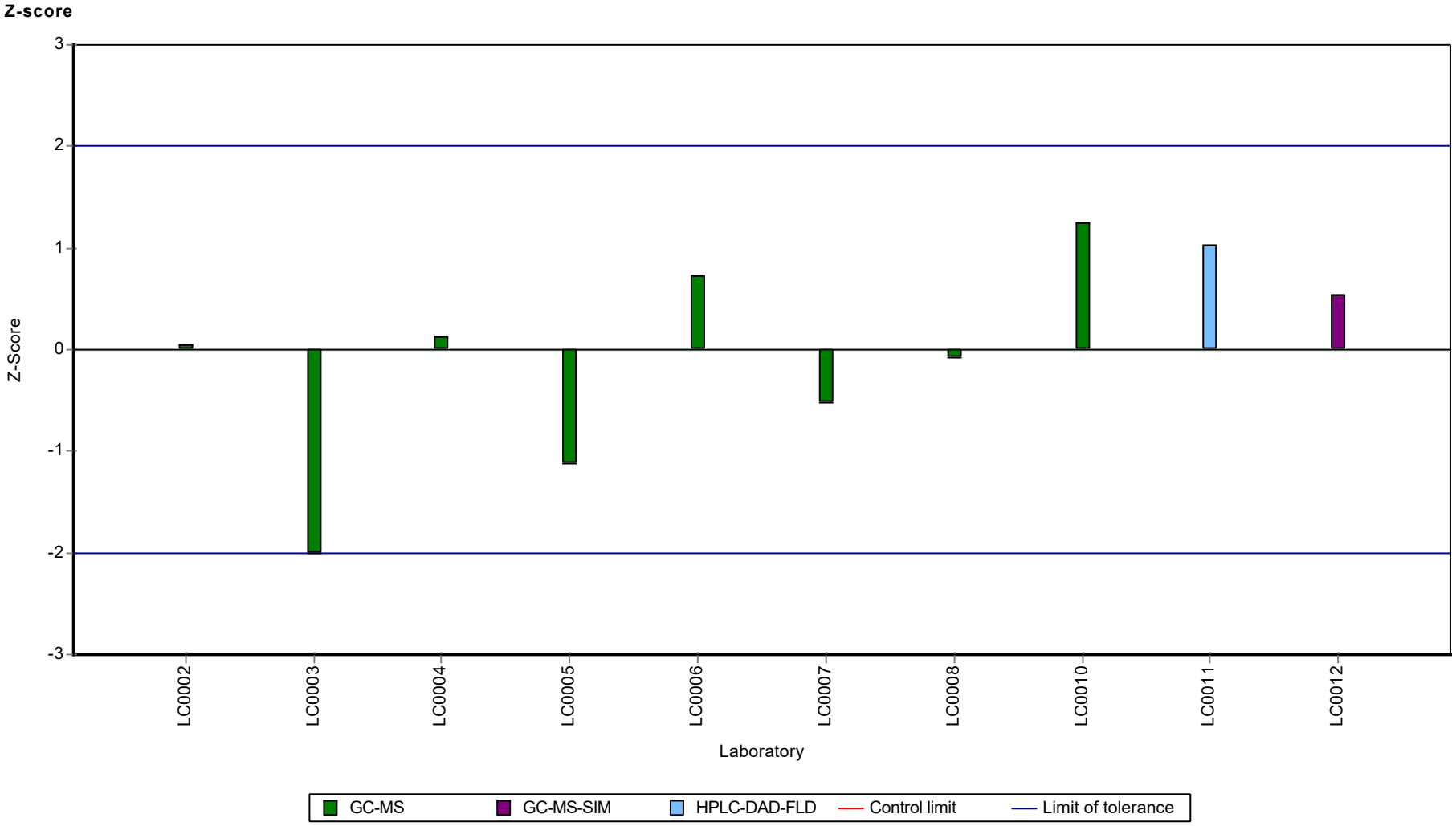
Sample: P26A, Parameter: Fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Fluoranthene



Parameter oriented report

P26 B

Fluoranthene

Unit	ng/l
Assigned value ± U (k=2)	316 ± 40.1
Criterion	66.3 (21 %)
Minimum - Maximum	206 - 422
Control test value ± U (k=2)	354 ± 88.5

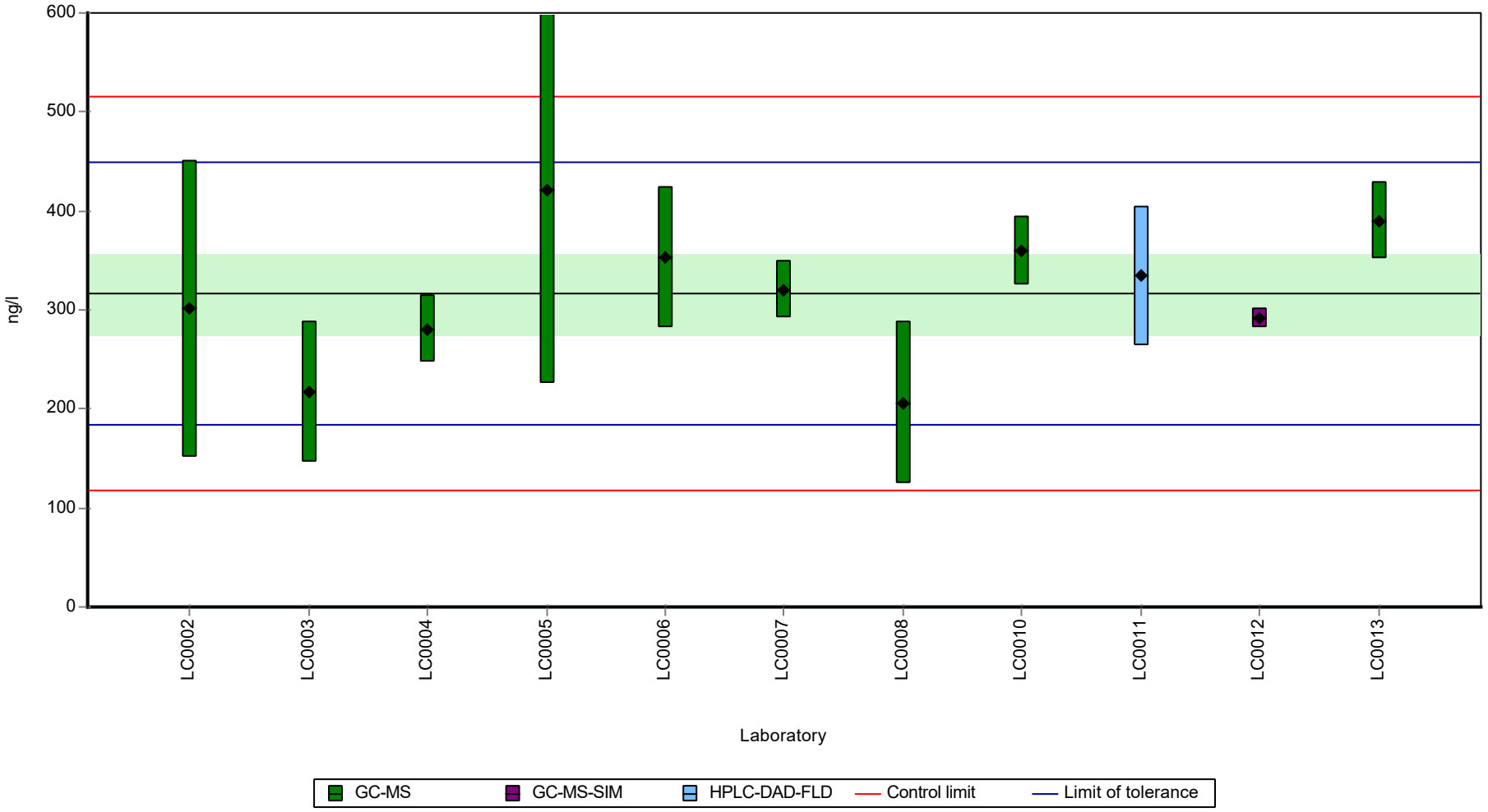
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	301	150.5	95.3	-0.22	
LC0003	217	71.6	68.7	-1.49	
LC0004	280.9	34.3	88.9	-0.53	
LC0005	421.7	196.93	134	1.6	
LC0006	353	71	112	0.56	
LC0007	320	29	101	0.06	
LC0008	206	82.3	65.2	-1.66	
LC0009	-	-	-	-	
LC0010	359.669	35.086	114	0.66	
LC0011	334	70	106	0.27	
LC0012	291	10	92.1	-0.37	
LC0013	390	39	123	1.12	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	316 ± 60.2	316 ± 60.2	ng/l
Minimum	206	206	ng/l
Maximum	422	422	ng/l
Standard deviation	66.5	66.5	ng/l
rel. standard deviation	21.1	21.1	%
n	11	11	-

Graphical presentation of results

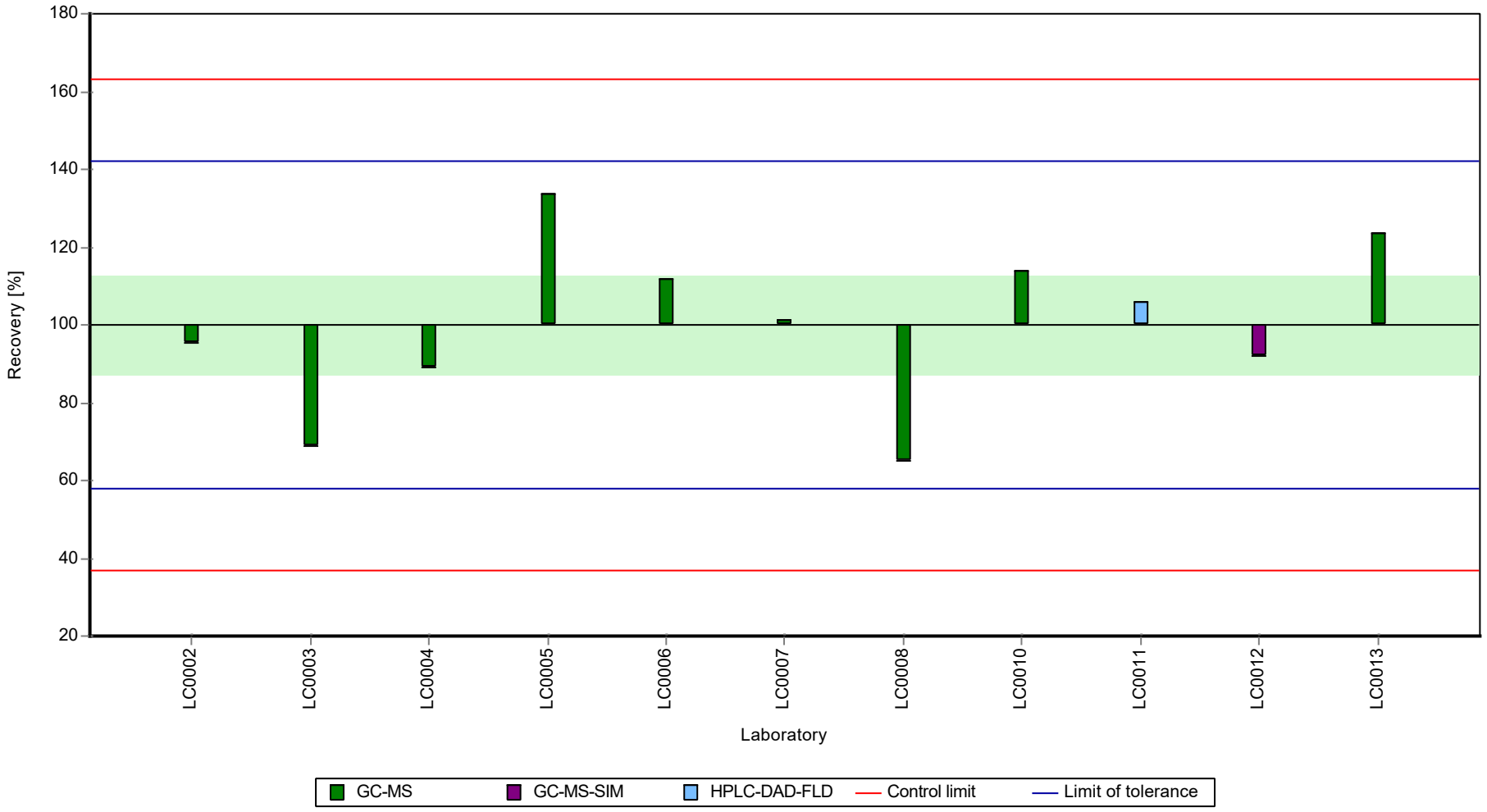
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

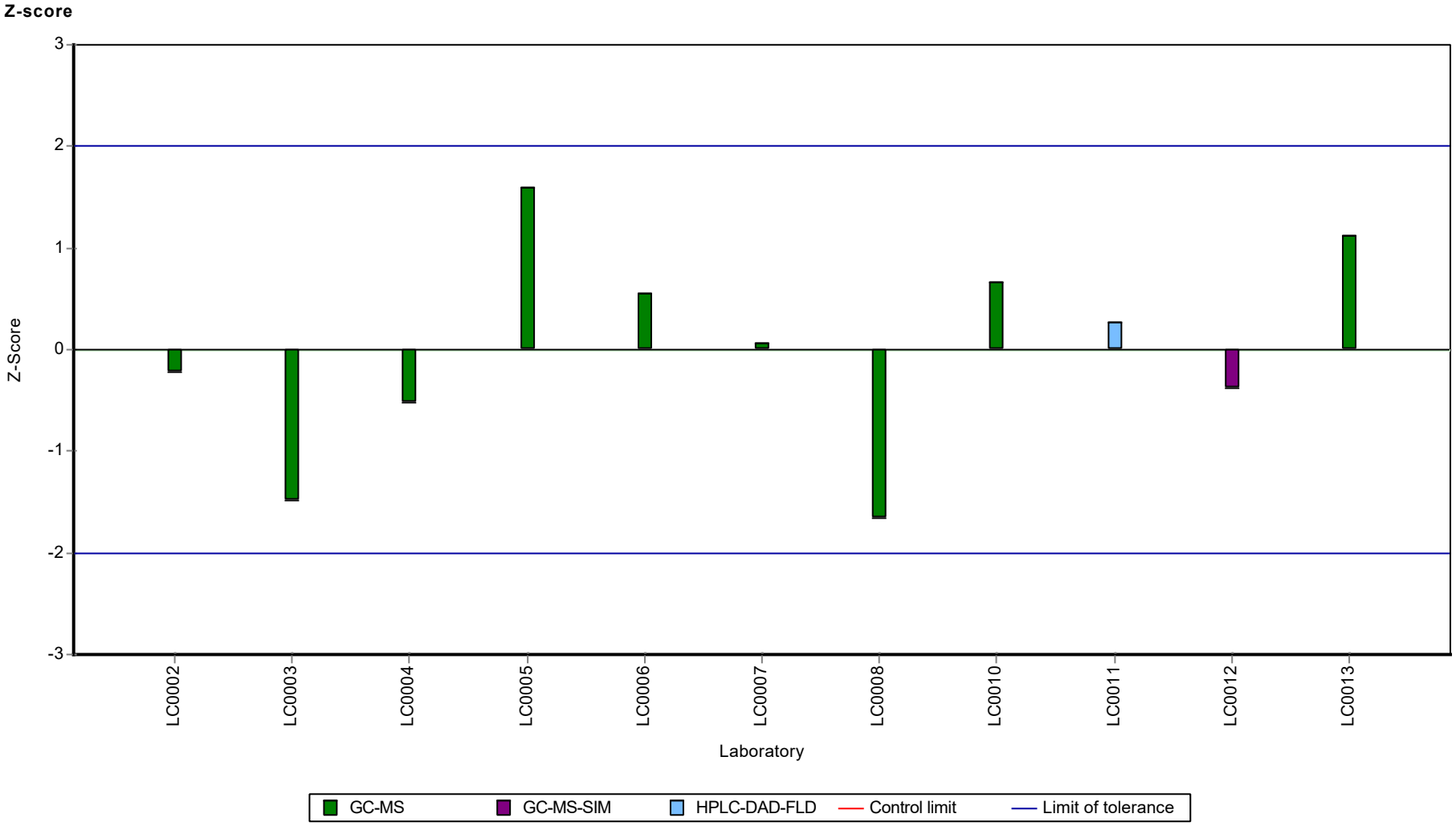
Sample: P26B, Parameter: Fluoranthene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Fluoranthene



Parameter oriented report

P26 A

Fluorene

Unit	ng/l
Assigned value ± U (k=2)	19.3 ± 1.71
Criterion	2.71 (14 %)
Minimum - Maximum	14.1 - 22.6
Control test value ± U (k=2)	22.1 ± 7.73

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	9.8	0.62	50.7	-3.52	H
LC0002	19.8	9.9	102	0.17	
LC0003	14.1	3.24	72.9	-1.93	
LC0004	21.15	2.57	109	0.67	
LC0005	16.48	7.03	85.2	-1.05	
LC0006	20.6	4.1	107	0.47	
LC0007	17	1.5	87.9	-0.86	
LC0008	18.9	7.54	97.7	-0.16	
LC0009	-	-	-	-	
LC0010	20.921	2.889	108	0.59	
LC0011	22.6	5	117	1.21	
LC0012	21.8	10	113	0.91	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

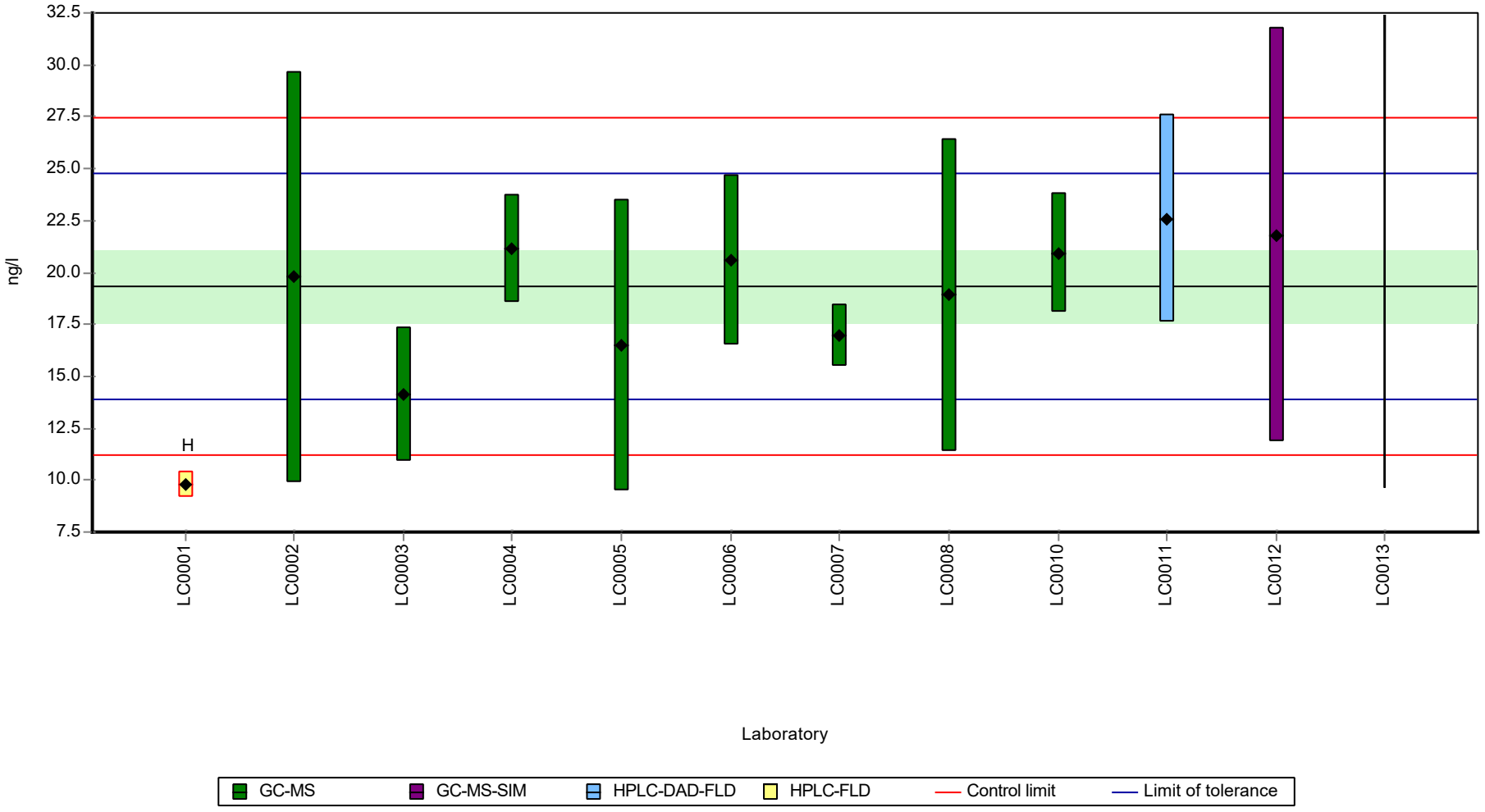
	all results	w ithout outliers	Unit
Mean ± CI (99%)	18.5 ± 3.48	19.3 ± 2.56	ng/l
Minimum	9.8	14.1	ng/l
Maximum	22.6	22.6	ng/l
Standard deviation	3.85	2.7	ng/l
rel. standard deviation	20.8	14	%
n	11	10	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Fluorene

Graphical presentation of results

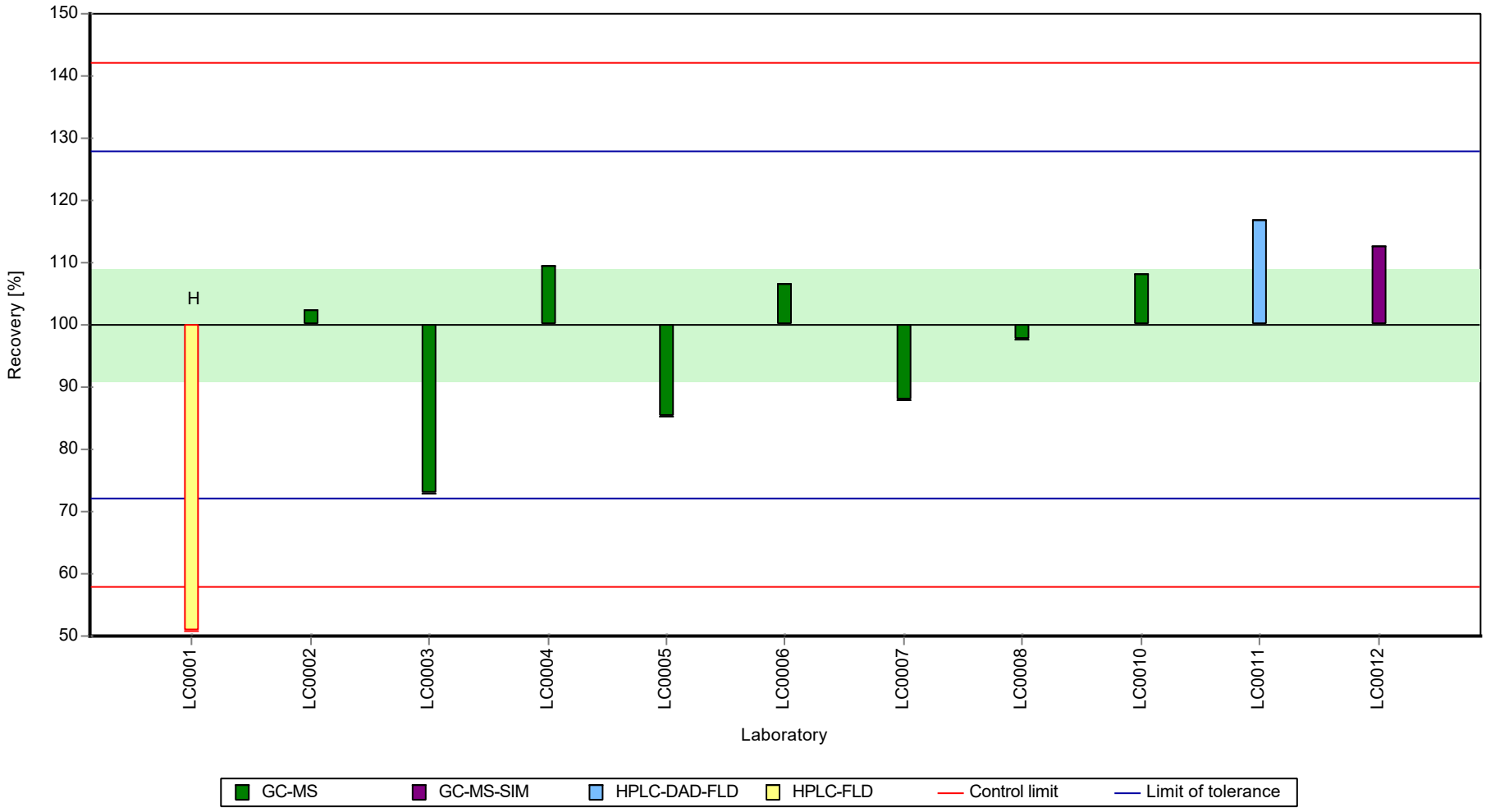
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

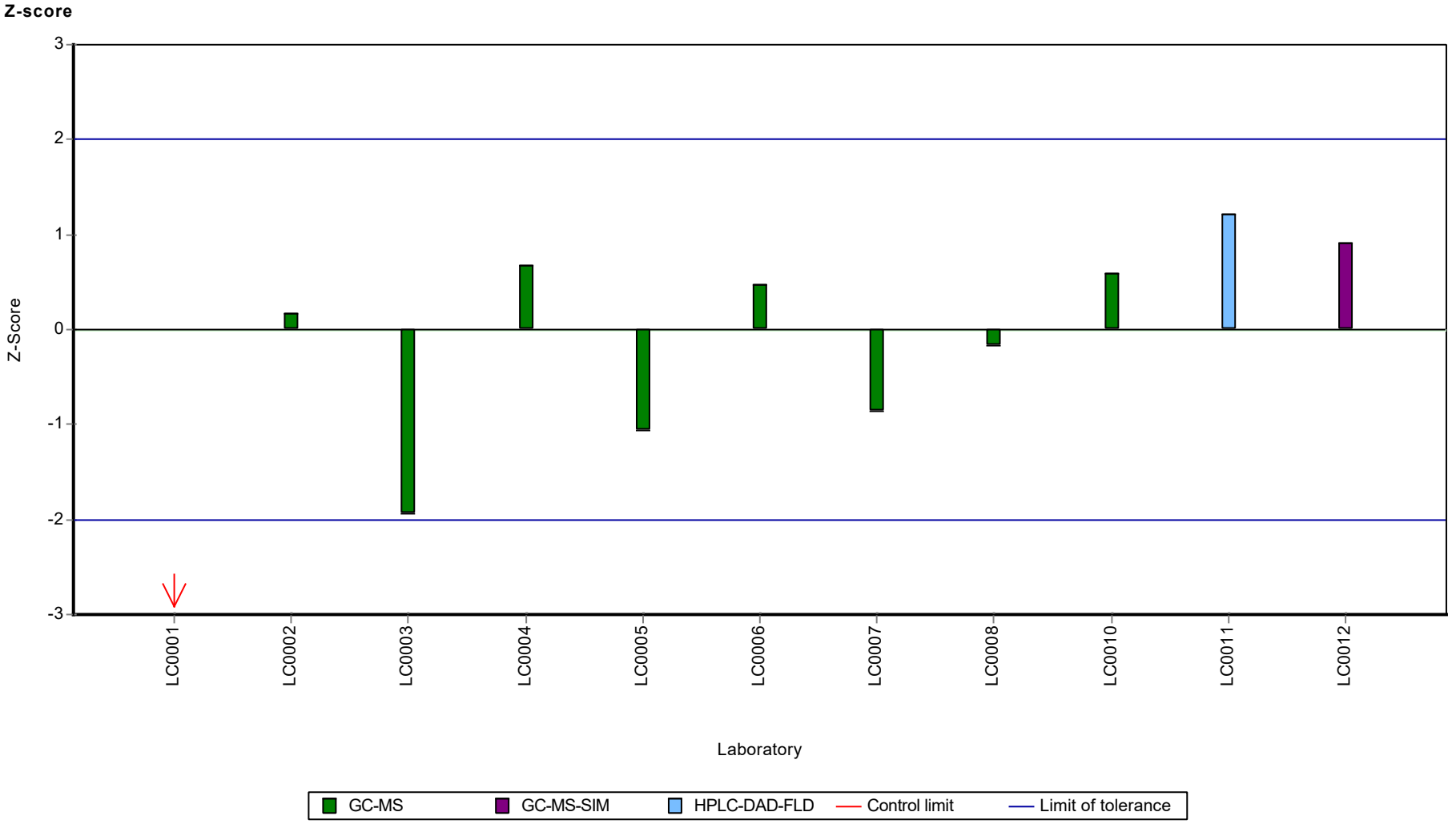
Sample: P26A, Parameter: Fluorene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Fluorene



Parameter oriented report

P26 B

Fluorene

Unit	ng/l
Assigned value ± U (k=2)	320 ± 40.2
Criterion	70.5 (22 %)
Minimum - Maximum	171 - 400
Control test value ± U (k=2)	398 ± 139

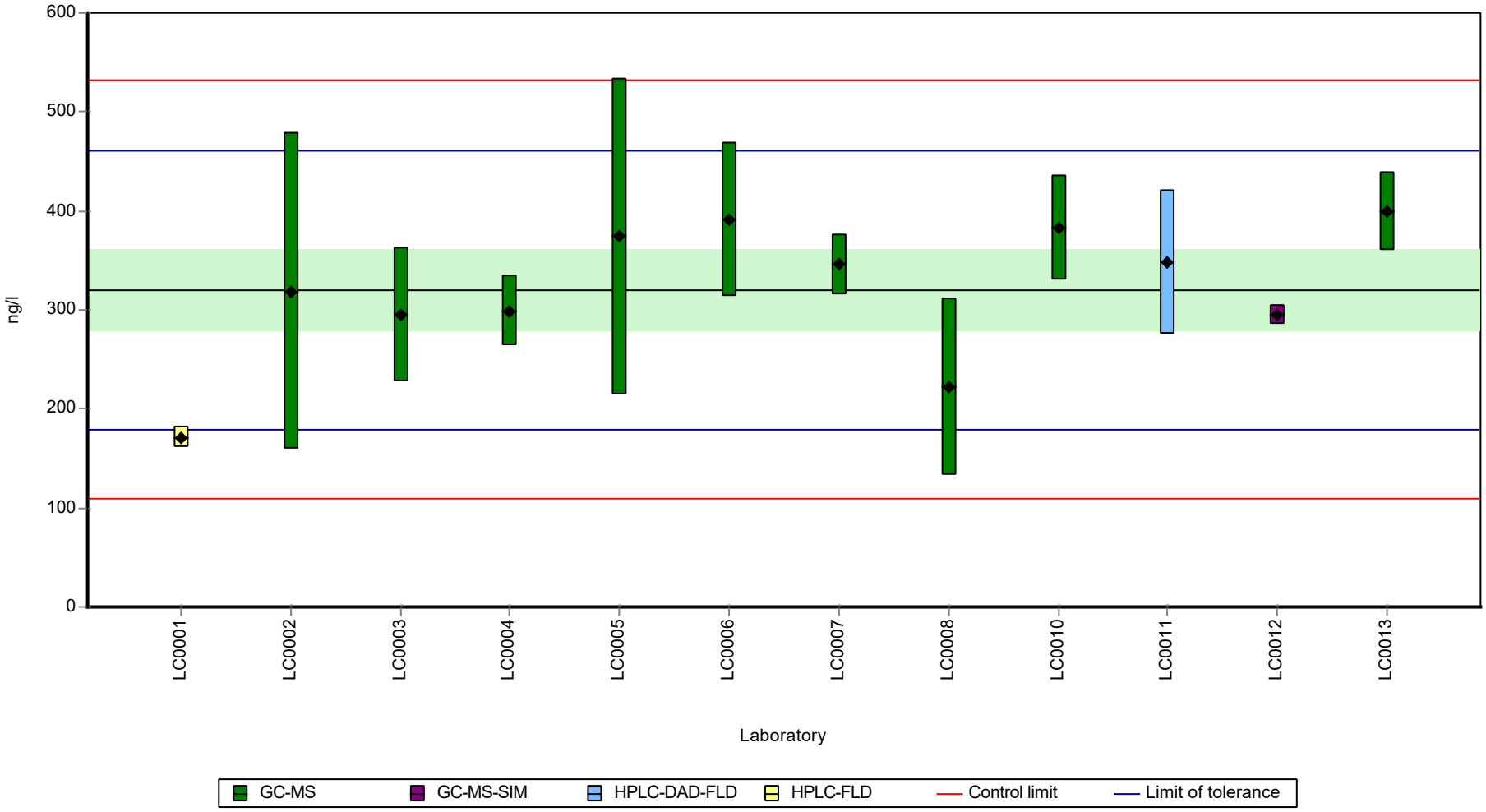
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	171.2	10.77	53.4	-2.12	
LC0002	319	159.5	99.6	-0.02	
LC0003	295	67.9	92.1	-0.36	
LC0004	299.1	36.3	93.4	-0.3	
LC0005	374.25	159.81	117	0.77	
LC0006	391	78	122	1	
LC0007	346	31	108	0.36	
LC0008	222	88.9	69.3	-1.4	
LC0009	-	-	-	-	
LC0010	383.282	52.931	120	0.89	
LC0011	348	73	109	0.39	
LC0012	295	10	92.1	-0.36	
LC0013	400	40	125	1.13	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	320 ± 60.3	320 ± 60.3	ng/l
Minimum	171	171	ng/l
Maximum	400	400	ng/l
Standard deviation	69.6	69.6	ng/l
rel. standard deviation	21.7	21.7	%
n	12	12	-

Graphical presentation of results

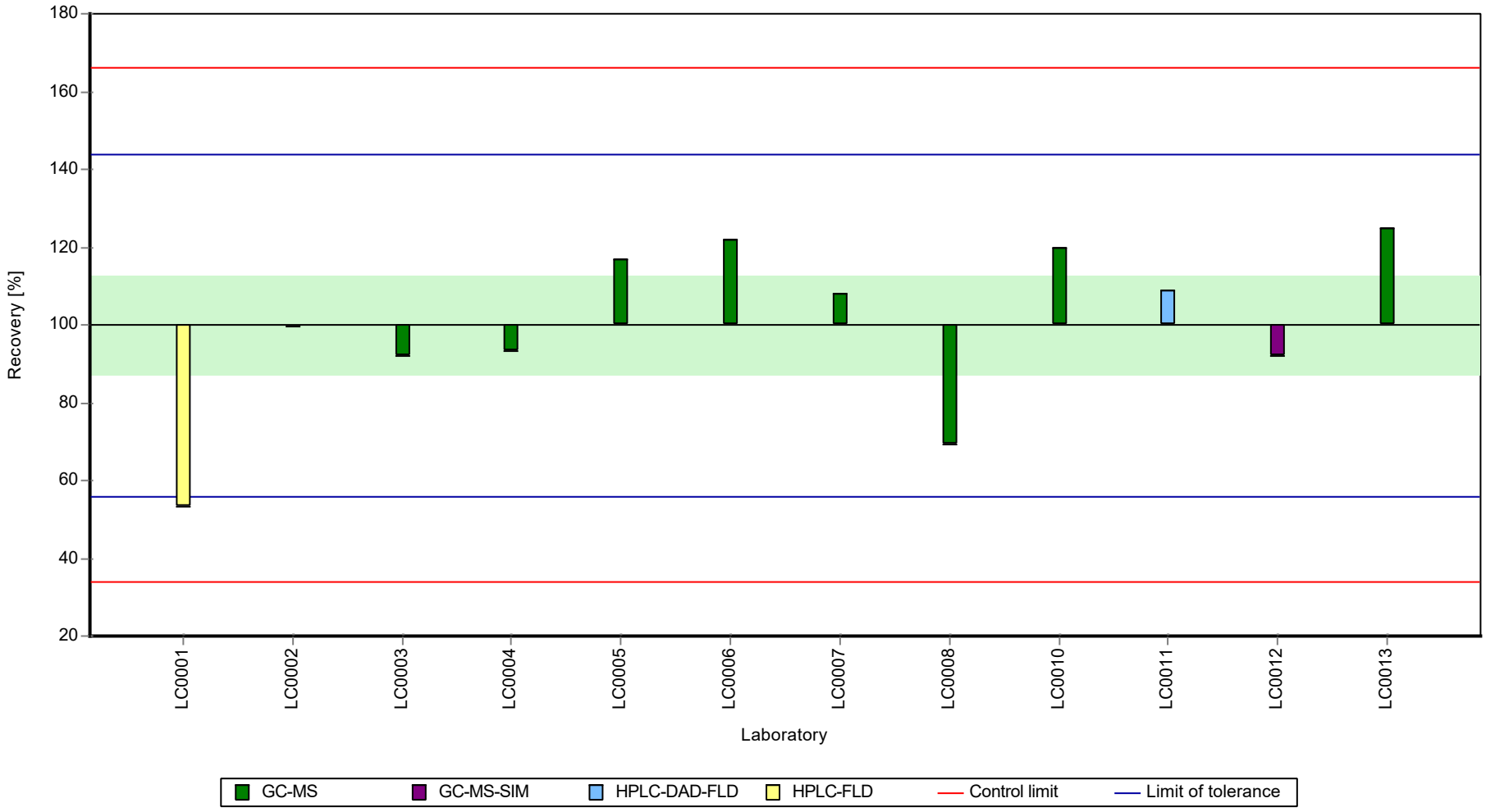
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

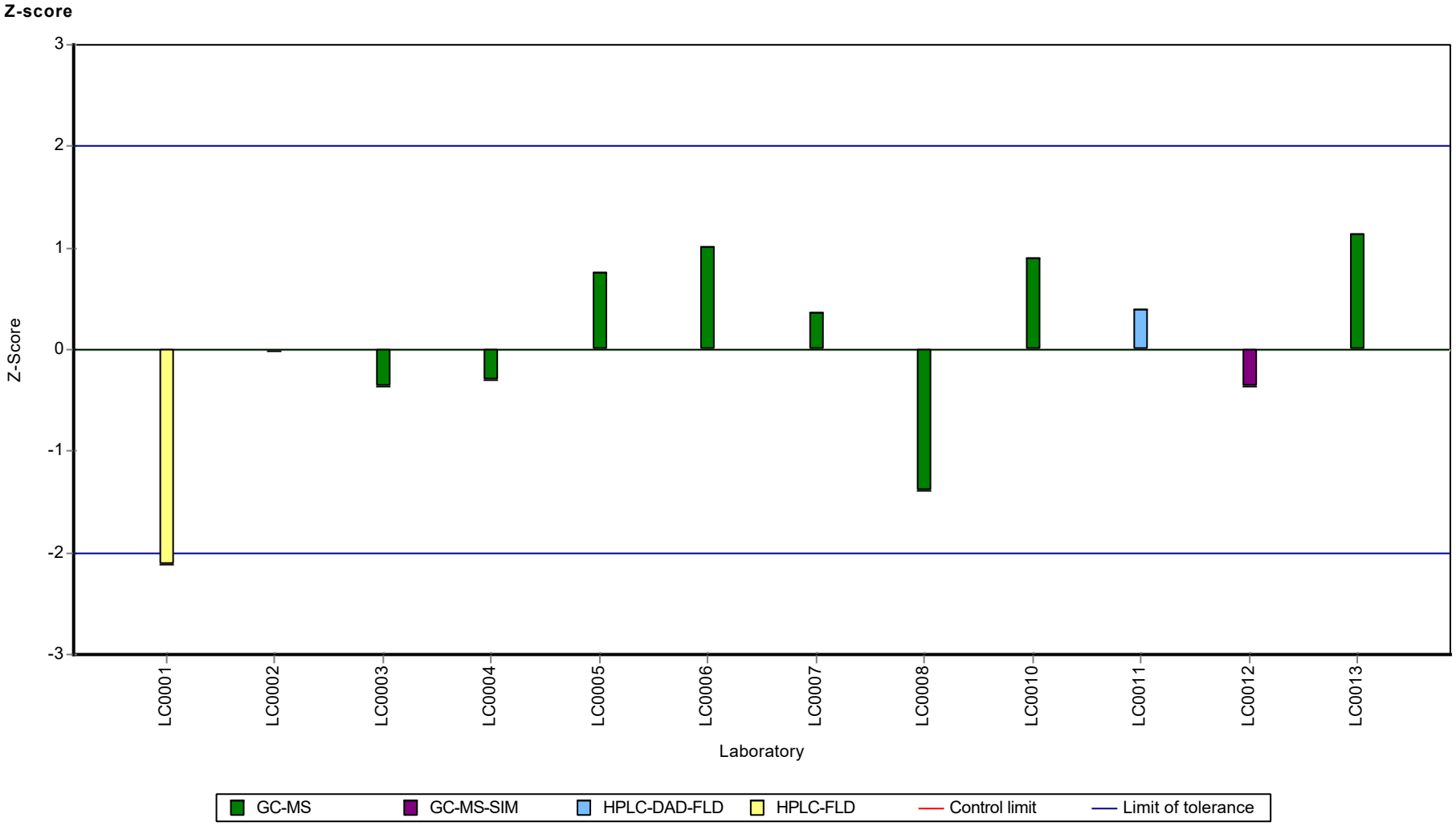
Sample: P26B, Parameter: Fluorene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Fluorene



Parameter oriented report

P26 A

Indeno[1,2,3-cd]pyrene

Unit	ng/l
Assigned value ± U (k=2)	25.1 ± 3.29
Criterion	6.27 (25 %)
Minimum - Maximum	15 - 31.8
Control test value ± U (k=2)	32.9 ± 11.5

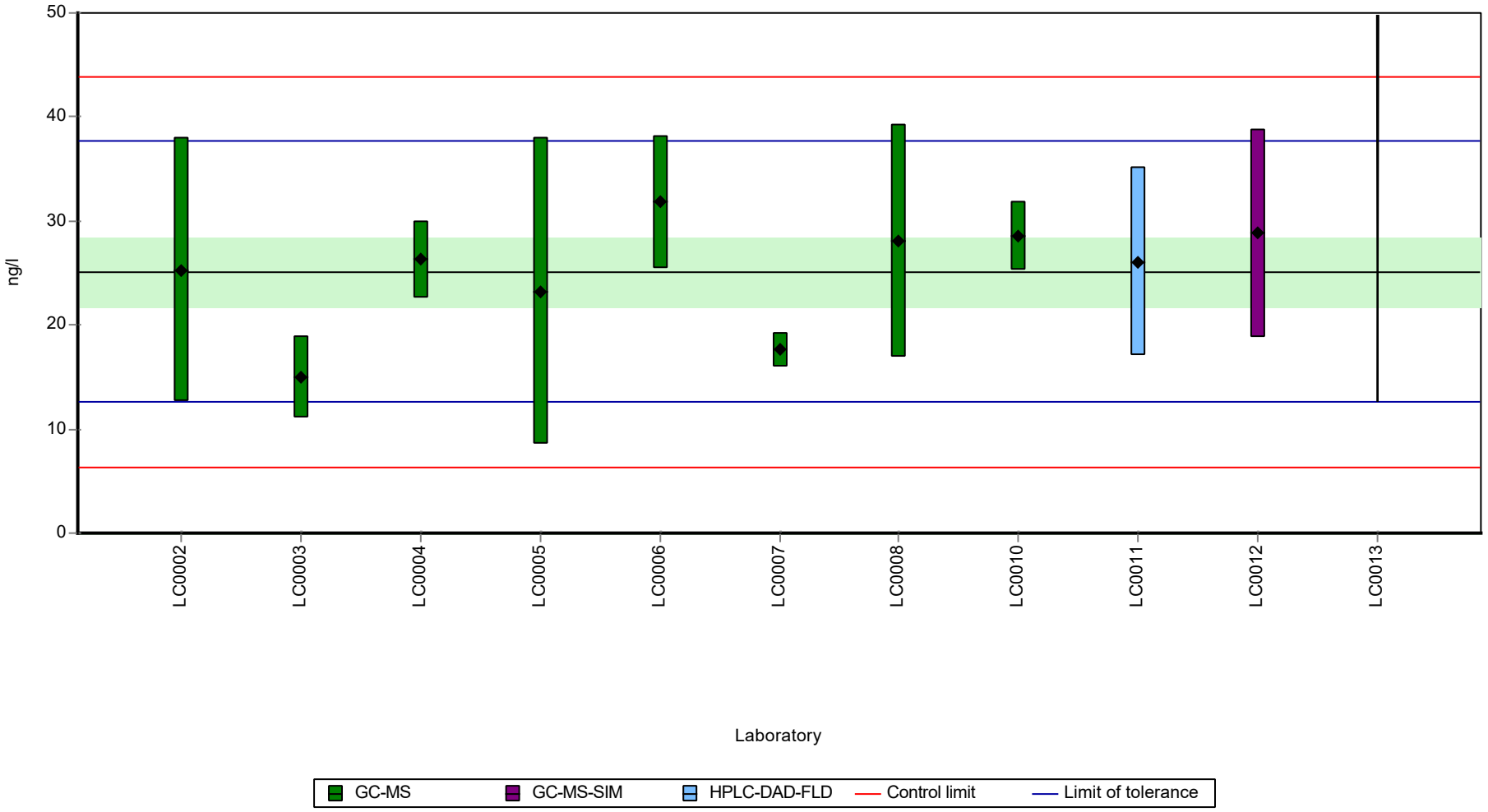
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	25.3	12.65	101	0.03	
LC0003	15	3.9	59.8	-1.61	
LC0004	26.31	3.68	105	0.2	
LC0005	23.23	14.74	92.6	-0.3	
LC0006	31.8	6.4	127	1.07	
LC0007	17.6	1.6	70.2	-1.19	
LC0008	28.1	11.22	112	0.48	
LC0009	-	-	-	-	
LC0010	28.581	3.287	114	0.56	
LC0011	26.1	9	104	0.16	
LC0012	28.8	10	115	0.59	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	25.1 ± 4.94	25.1 ± 4.94	ng/l
Minimum	15	15	ng/l
Maximum	31.8	31.8	ng/l
Standard deviation	5.21	5.21	ng/l
rel. standard deviation	20.8	20.8	%
n	10	10	-

Graphical presentation of results

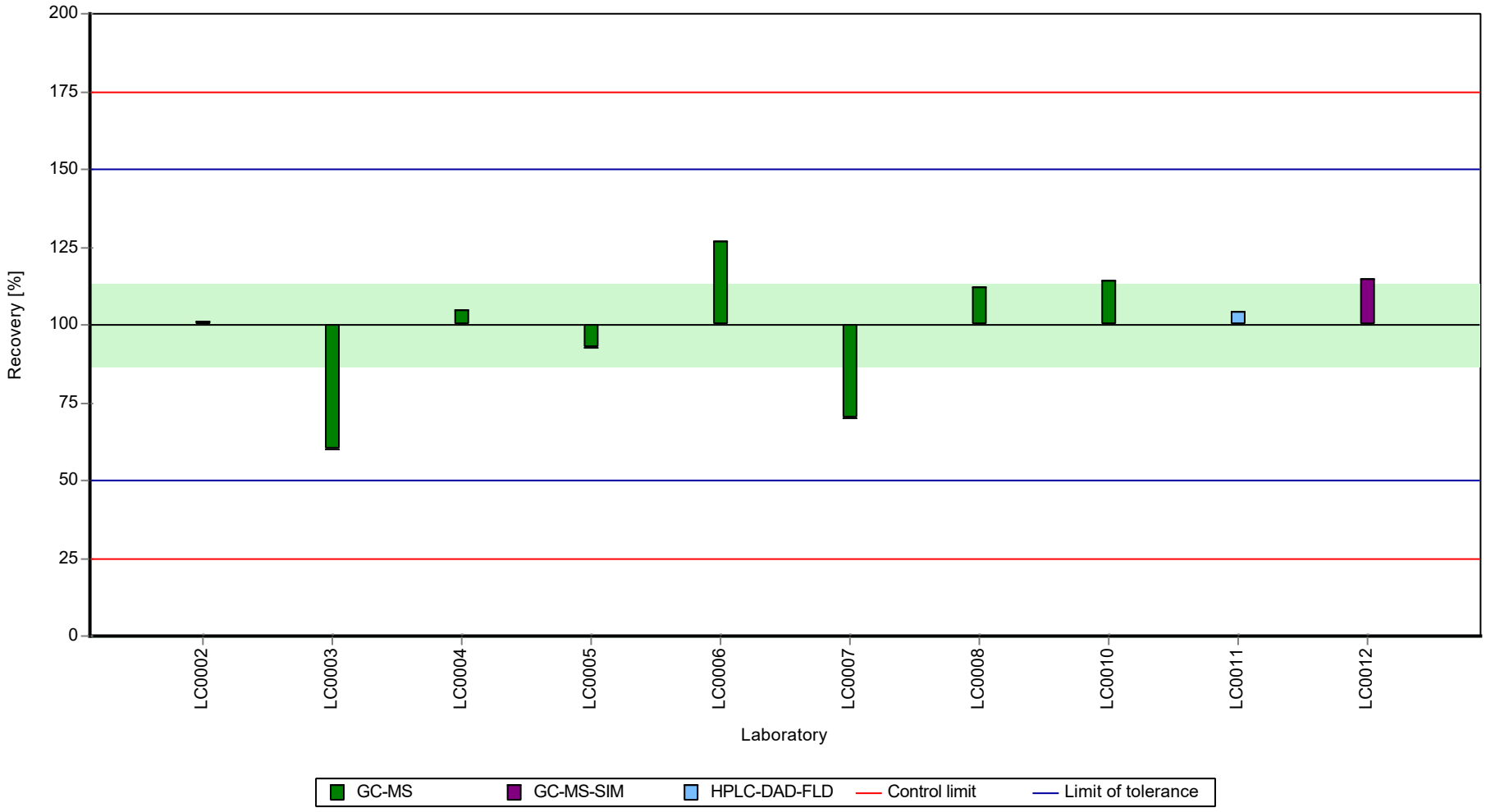
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

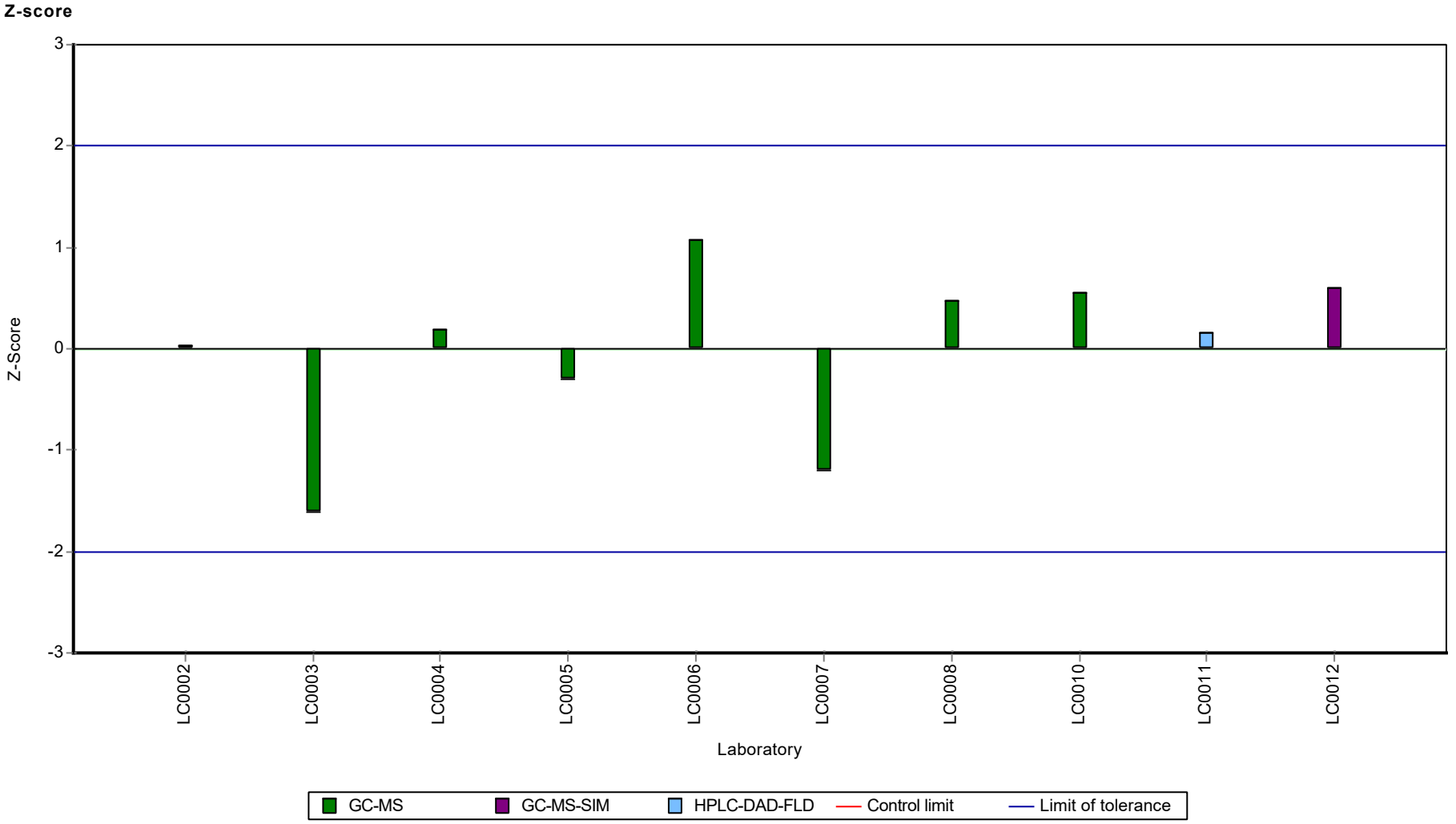
Sample: P26A, Parameter: Indeno[1,2,3-cd]pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Indeno[1,2,3-cd]pyrene



Parameter oriented report

P26 B

Indeno[1,2,3-cd]pyrene

Unit	ng/l
Assigned value ± U (k=2)	268 ± 38.4
Criterion	66.9 (25 %)
Minimum - Maximum	190 - 393
Control test value ± U (k=2)	364 ± 127

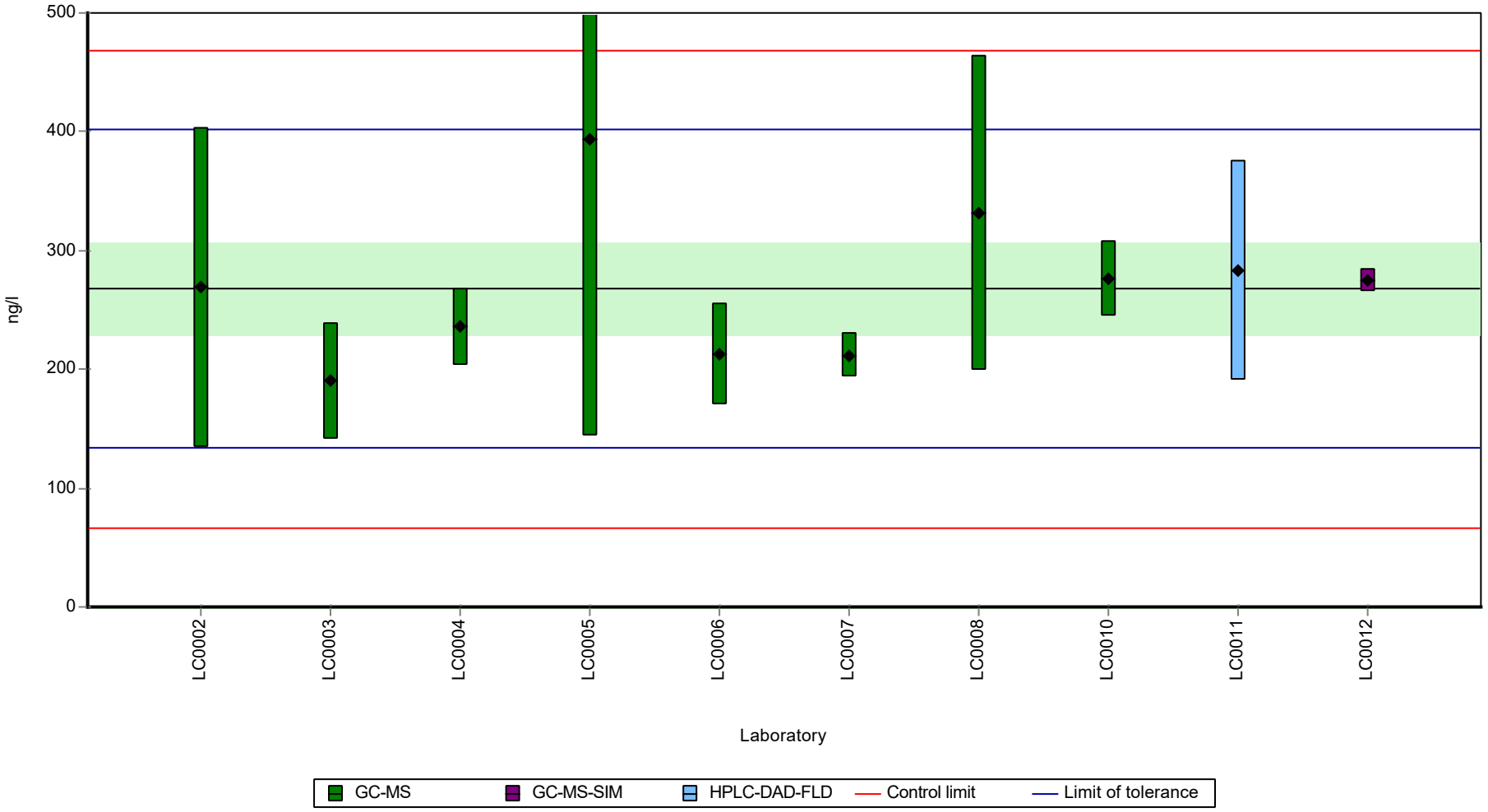
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	269	134.5	100	0.02	
LC0003	190	49.4	71	-1.16	
LC0004	235.5	33	88	-0.48	
LC0005	392.96	249.34	147	1.87	
LC0006	213	43	79.5	-0.82	
LC0007	212	19	79.2	-0.83	
LC0008	331	132.4	124	0.94	
LC0009	-	-	-	-	
LC0010	276.167	31.759	103	0.13	
LC0011	283	93	106	0.23	
LC0012	275	10	103	0.11	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	268 ± 57.6	268 ± 57.6	ng/l
Minimum	190	190	ng/l
Maximum	393	393	ng/l
Standard deviation	60.8	60.8	ng/l
rel. standard deviation	22.7	22.7	%
n	10	10	-

Graphical presentation of results

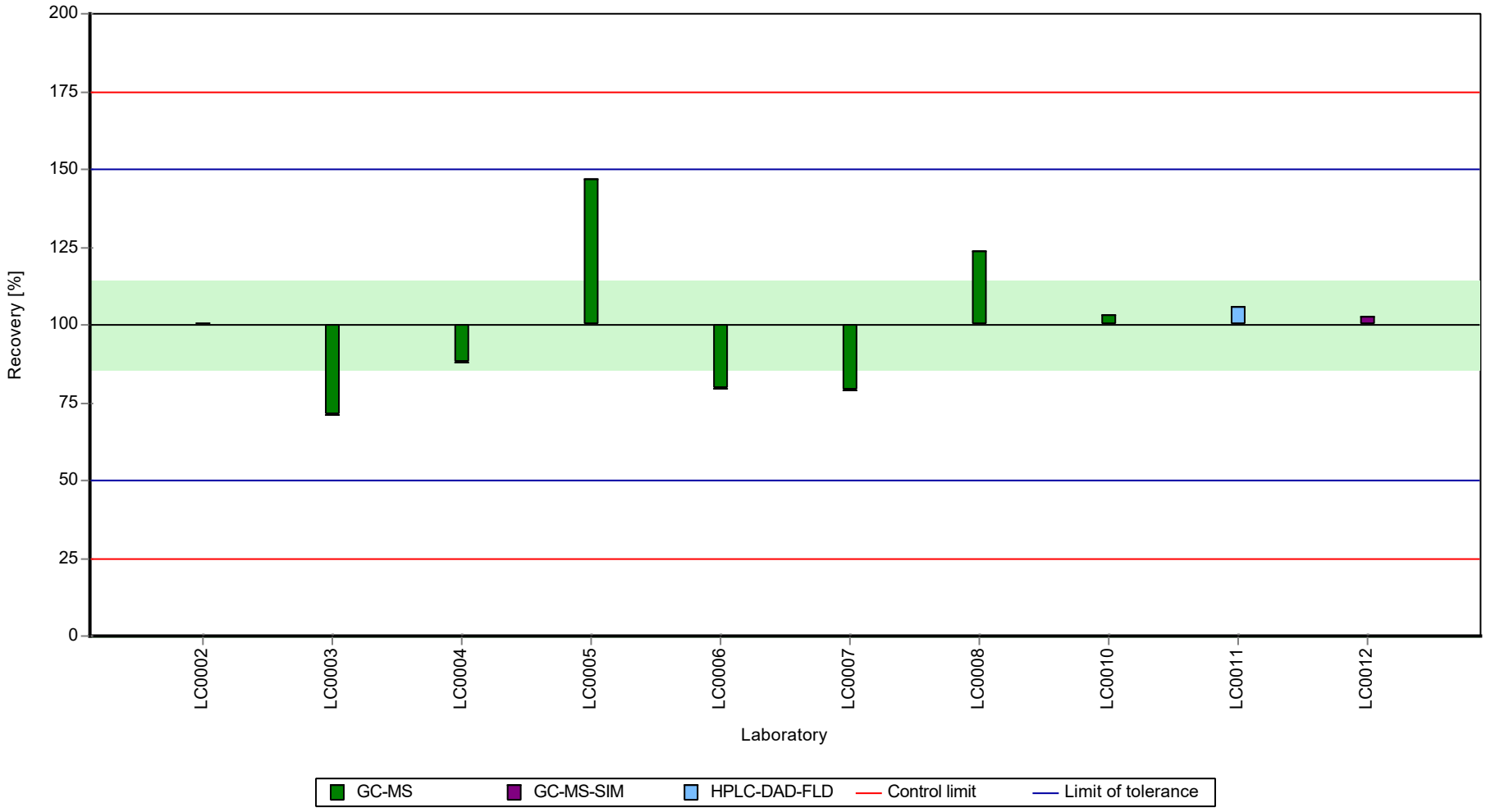
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

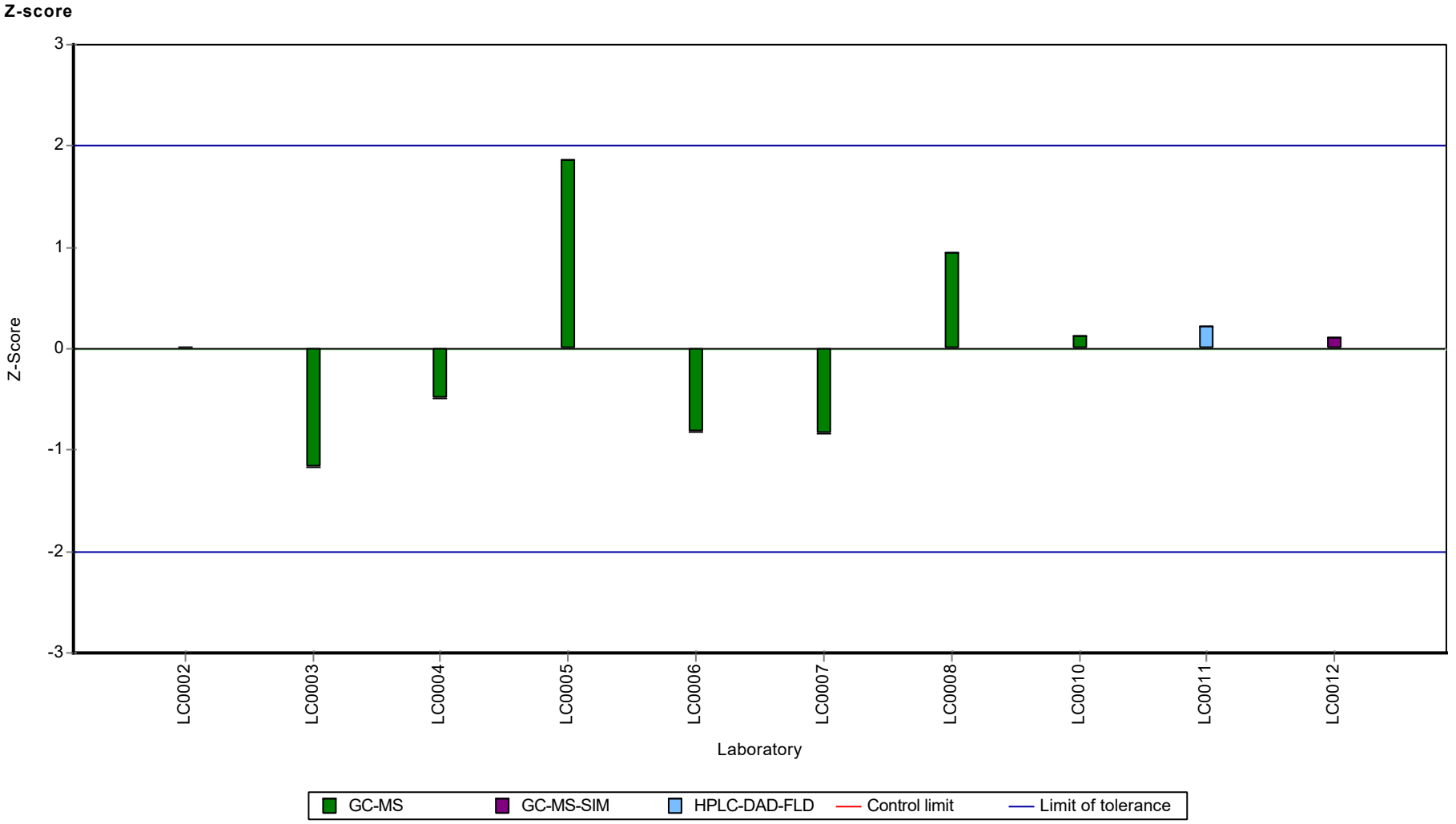
Sample: P26B, Parameter: Indeno[1,2,3-cd]pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Indeno[1,2,3-cd]pyrene



Parameter oriented report

P26 A

Naphthalene

Unit	ng/l
Assigned value ± U (k=2)	32.6 ± 3.85
Criterion	6.84 (21 %)
Minimum - Maximum	20.6 - 41
Control test value ± U (k=2)	38.8 ± 11.6

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	27.2	1.4	83.5	-0.79	
LC0002	31	15.5	95.1	-0.23	
LC0003	20.6	4.33	63.2	-1.75	
LC0004	34.3	4.44	105	0.25	
LC0005	51.97	26.53	160	2.83	H
LC0006	41	8.2	126	1.23	
LC0007	30.4	2.7	93.3	-0.32	
LC0008	30.9	12.36	94.8	-0.25	
LC0009	-	-	-	-	
LC0010	33.909	2.708	104	0.19	
LC0011	35.9	11	110	0.49	
LC0012	40.6	10	125	1.17	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

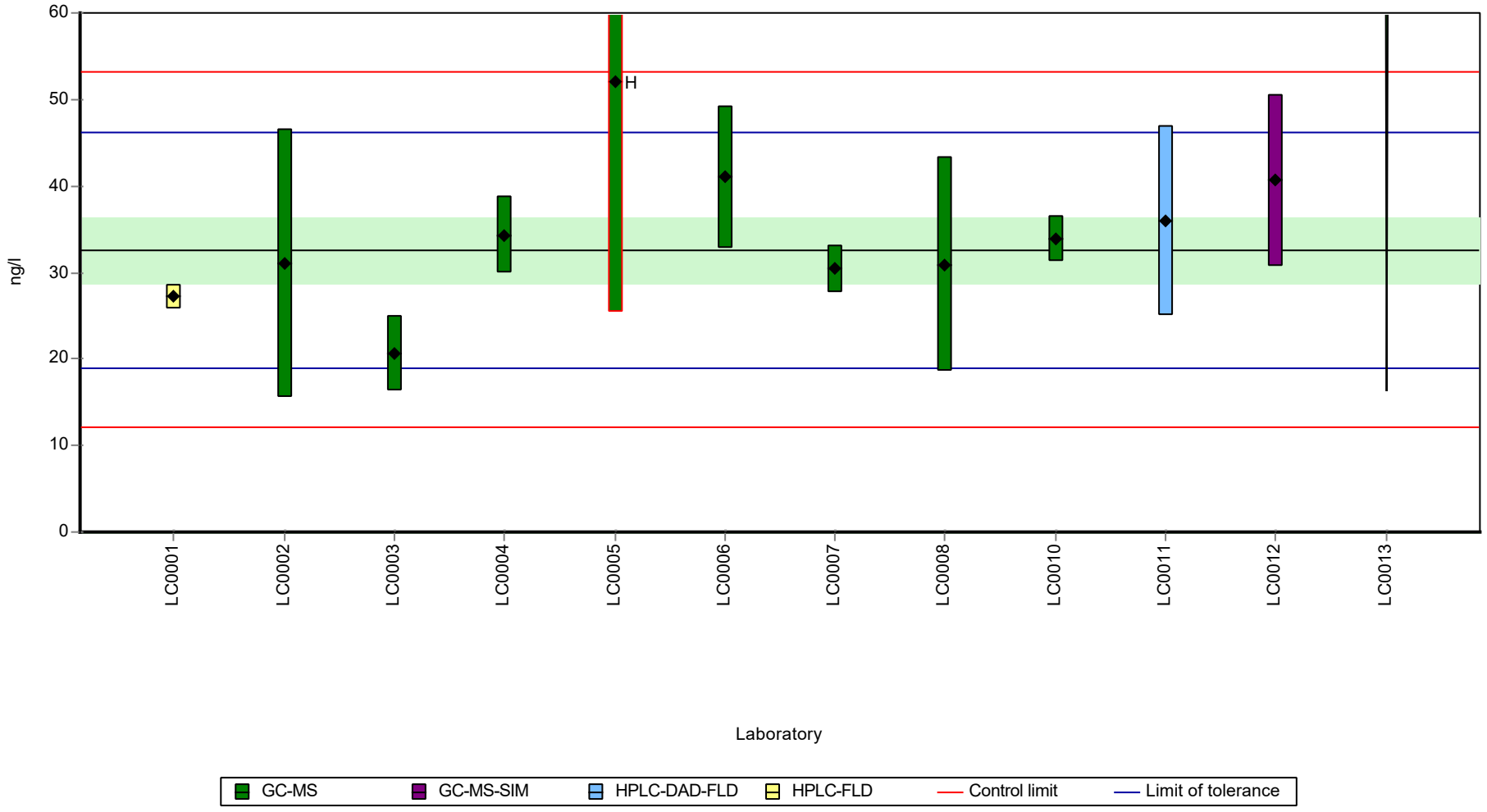
	all results	w ithout outliers	Unit
Mean ± CI (99%)	34.3 ± 7.43	32.6 ± 5.77	ng/l
Minimum	20.6	20.6	ng/l
Maximum	52	41	ng/l
Standard deviation	8.22	6.09	ng/l
rel. standard deviation	23.9	18.7	%
n	11	10	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Naphthalene

Graphical presentation of results

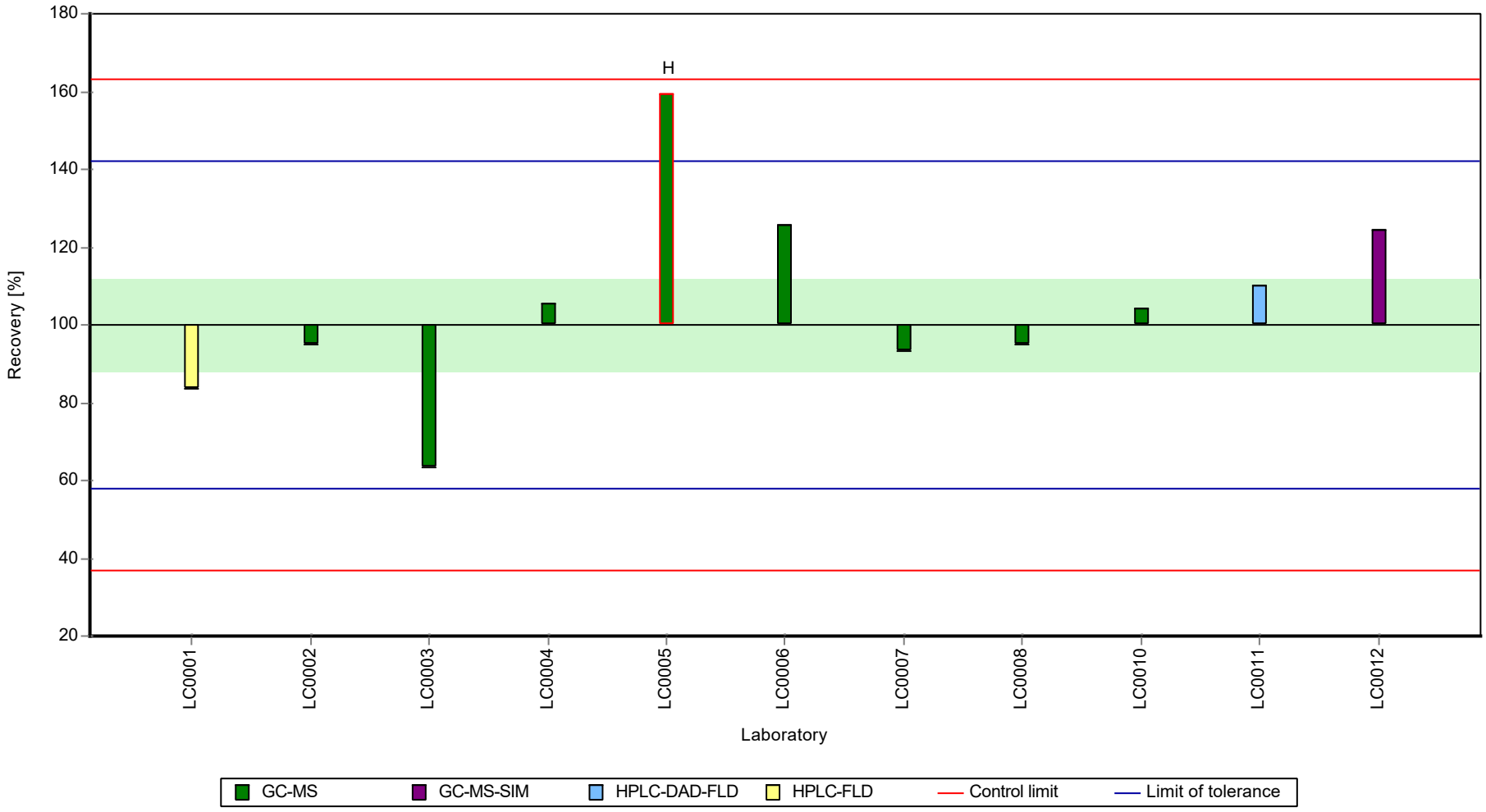
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

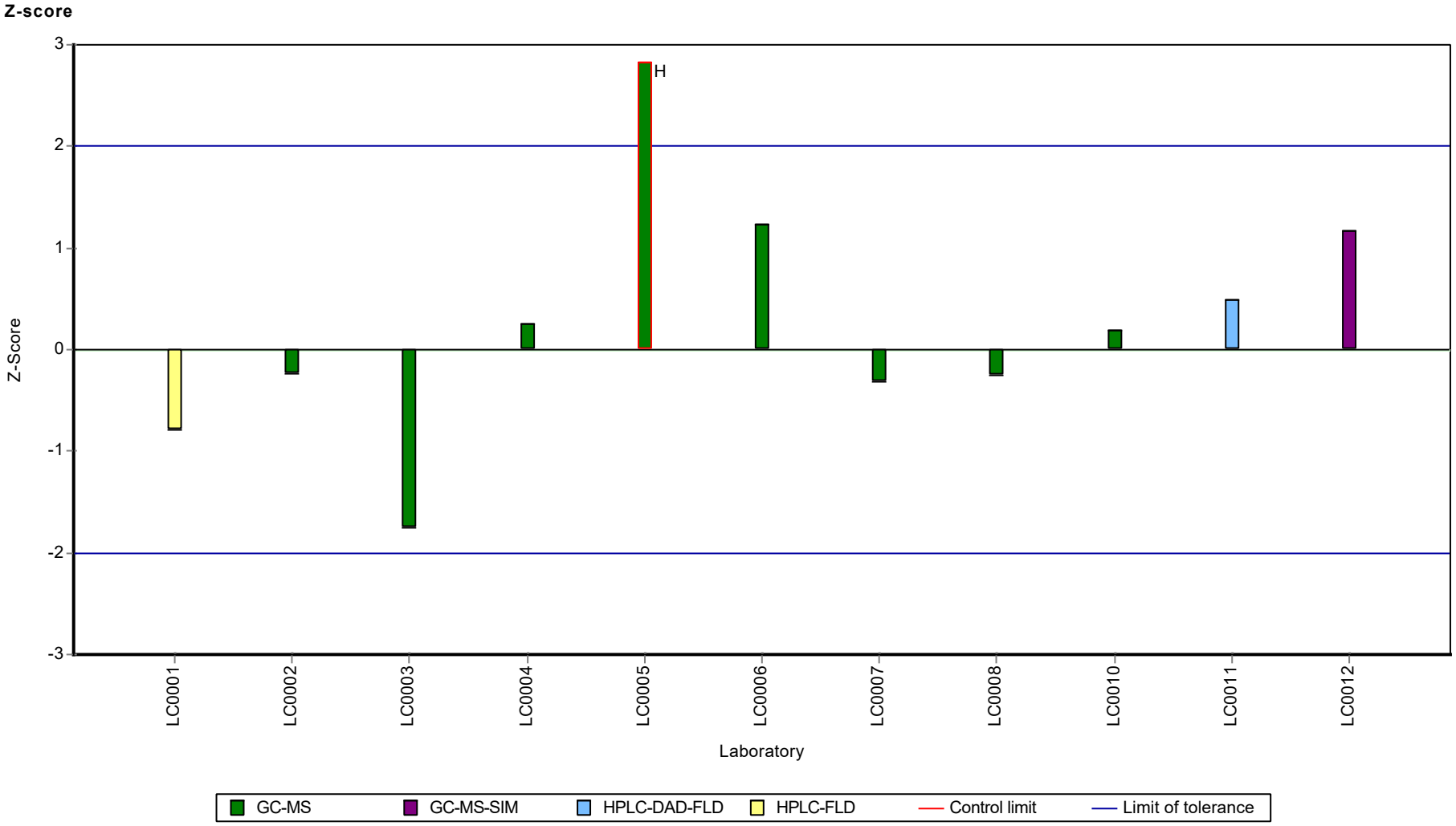
Sample: P26A, Parameter: Naphthalene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Naphthalene



Parameter oriented report

P26 B

Naphthalene

Unit	ng/l
Assigned value ± U (k=2)	277 ± 41.9
Criterion	72.1 (26 %)
Minimum - Maximum	151 - 360
Control test value ± U (k=2)	382 ± 115

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	150.5	7.72	54.3	-1.76	
LC0002	260	130	93.7	-0.24	
LC0003	217	45.6	78.2	-0.84	
LC0004	229.2	29.7	82.6	-0.67	
LC0005	354.59	181.02	128	1.07	
LC0006	326	65	118	0.67	
LC0007	315	28	114	0.52	
LC0008	160	64.1	57.7	-1.63	
LC0009	-	-	-	-	
LC0010	327.309	26.136	118	0.69	
LC0011	315	98	114	0.52	
LC0012	314	10	113	0.51	
LC0013	360	36	130	1.15	

Characteristics of parameter

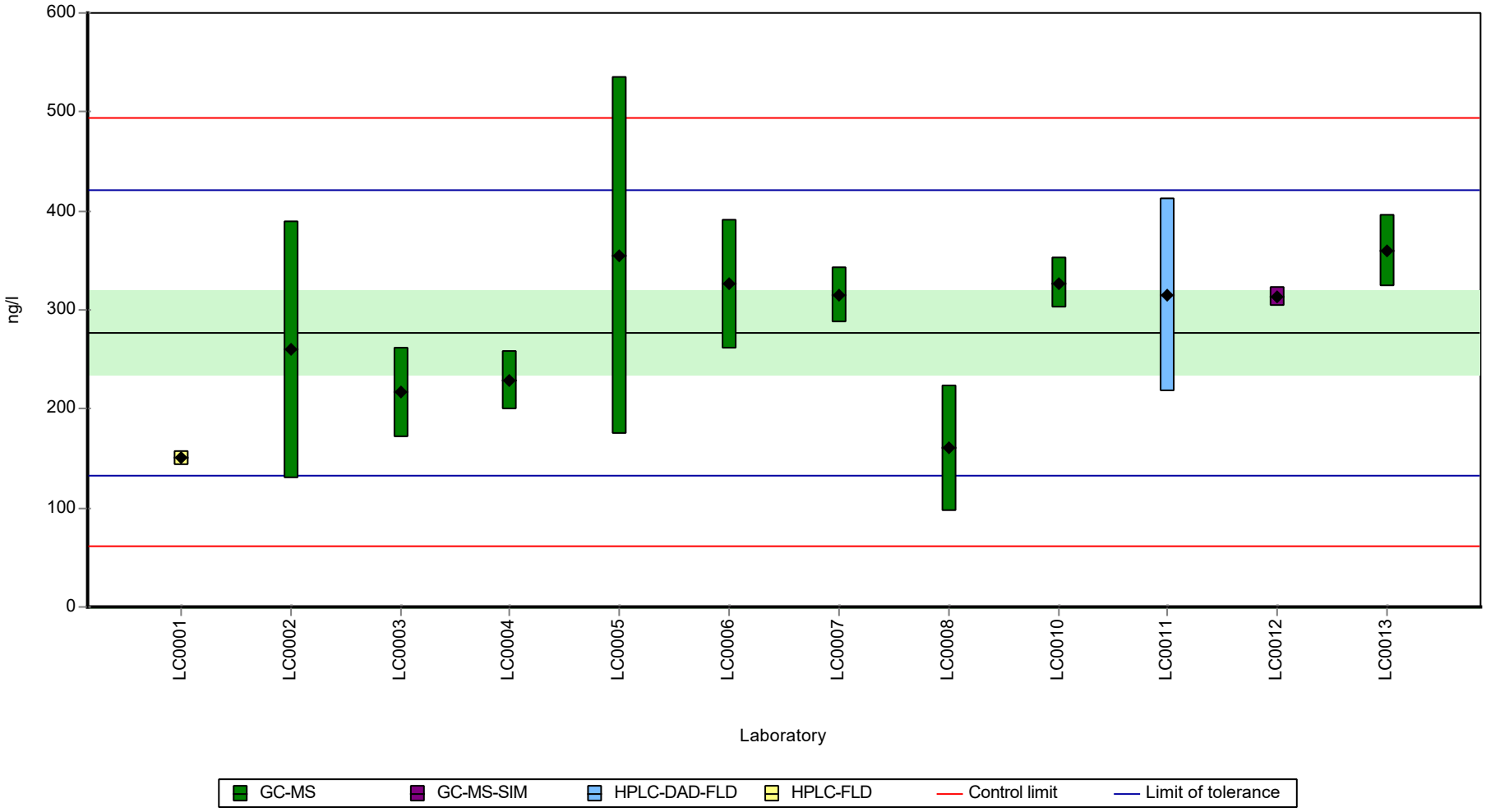
	all results	w ithout outliers	Unit
Mean ± CI (99%)	277 ± 62.9	277 ± 62.9	ng/l
Minimum	151	151	ng/l
Maximum	360	360	ng/l
Standard deviation	72.6	72.6	ng/l
rel. standard deviation	26.2	26.2	%
n	12	12	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Naphthalene

Graphical presentation of results

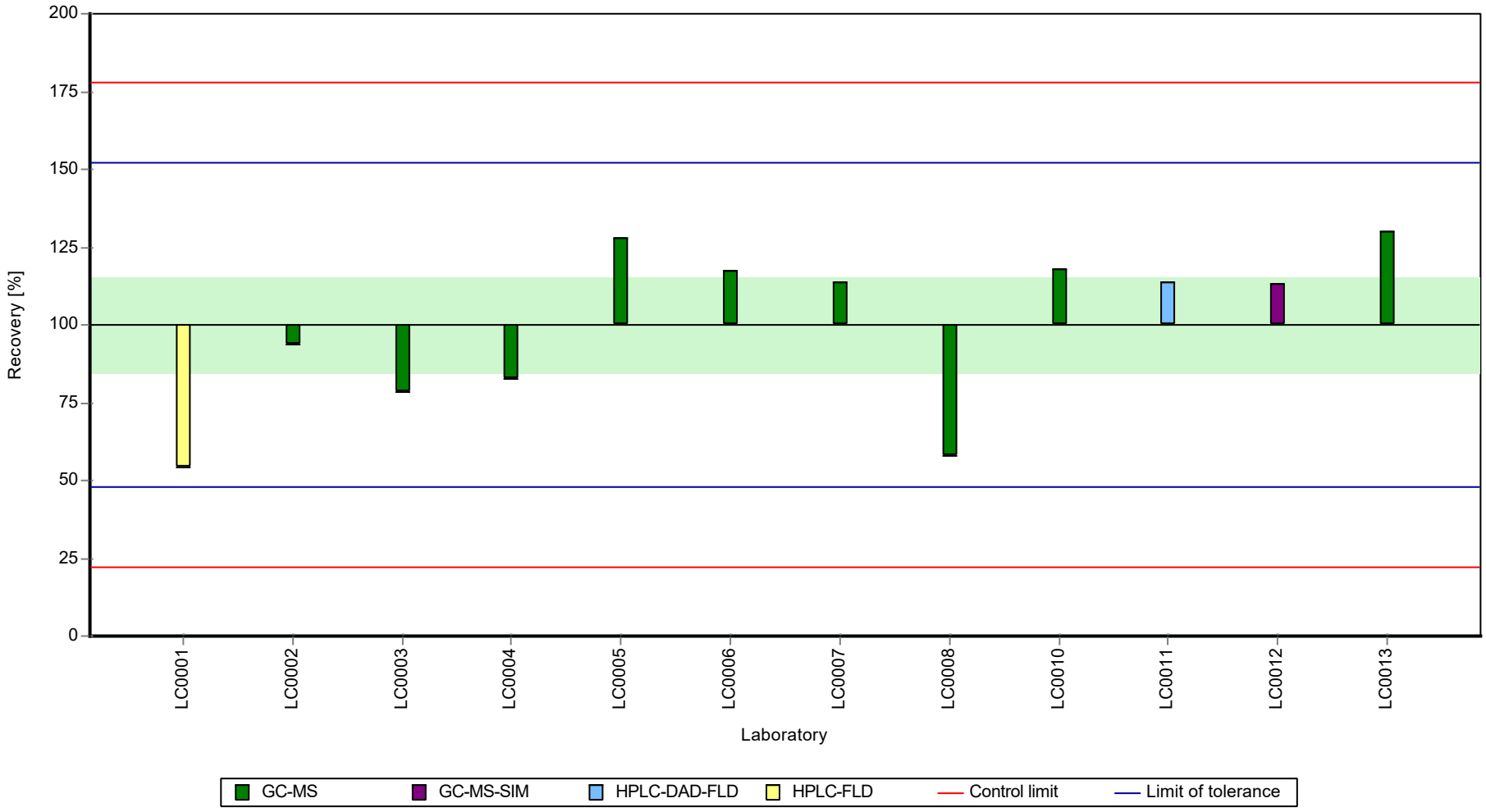
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

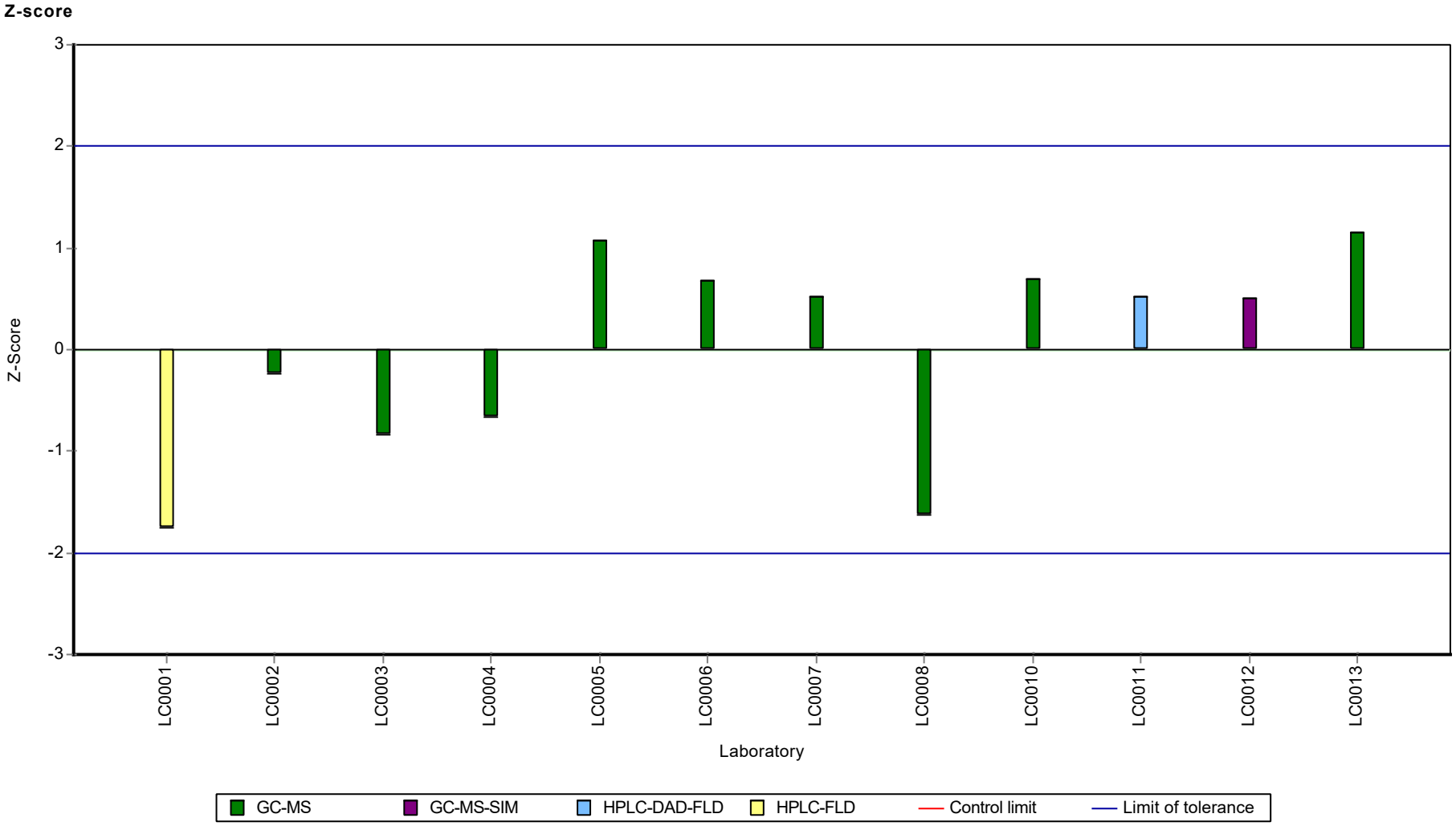
Sample: P26B, Parameter: Naphthalene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Naphthalene



Parameter oriented report

P26 A

Phenanthrene

Unit	ng/l
Assigned value ± U (k=2)	31.6 ± 3.47
Criterion	5.36 (17 %)
Minimum - Maximum	21.6 - 41.1
Control test value ± U (k=2)	34.0 ± 8.5

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	18.2	1.23	57.7	-2.49	H
LC0002	32.7	16.35	104	0.21	
LC0003	21.6	6.91	68.4	-1.86	
LC0004	31.99	4.11	101	0.08	
LC0005	16.48	3.45	52.2	-2.81	H
LC0006	31.3	6.3	99.2	-0.05	
LC0007	28.8	2.6	91.3	-0.51	
LC0008	29.8	11.93	94.4	-0.33	
LC0009	-	-	-	-	
LC0010	31.318	5.471	99.2	-0.04	
LC0011	41.1	12	130	1.78	
LC0012	35.4	10	112	0.72	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

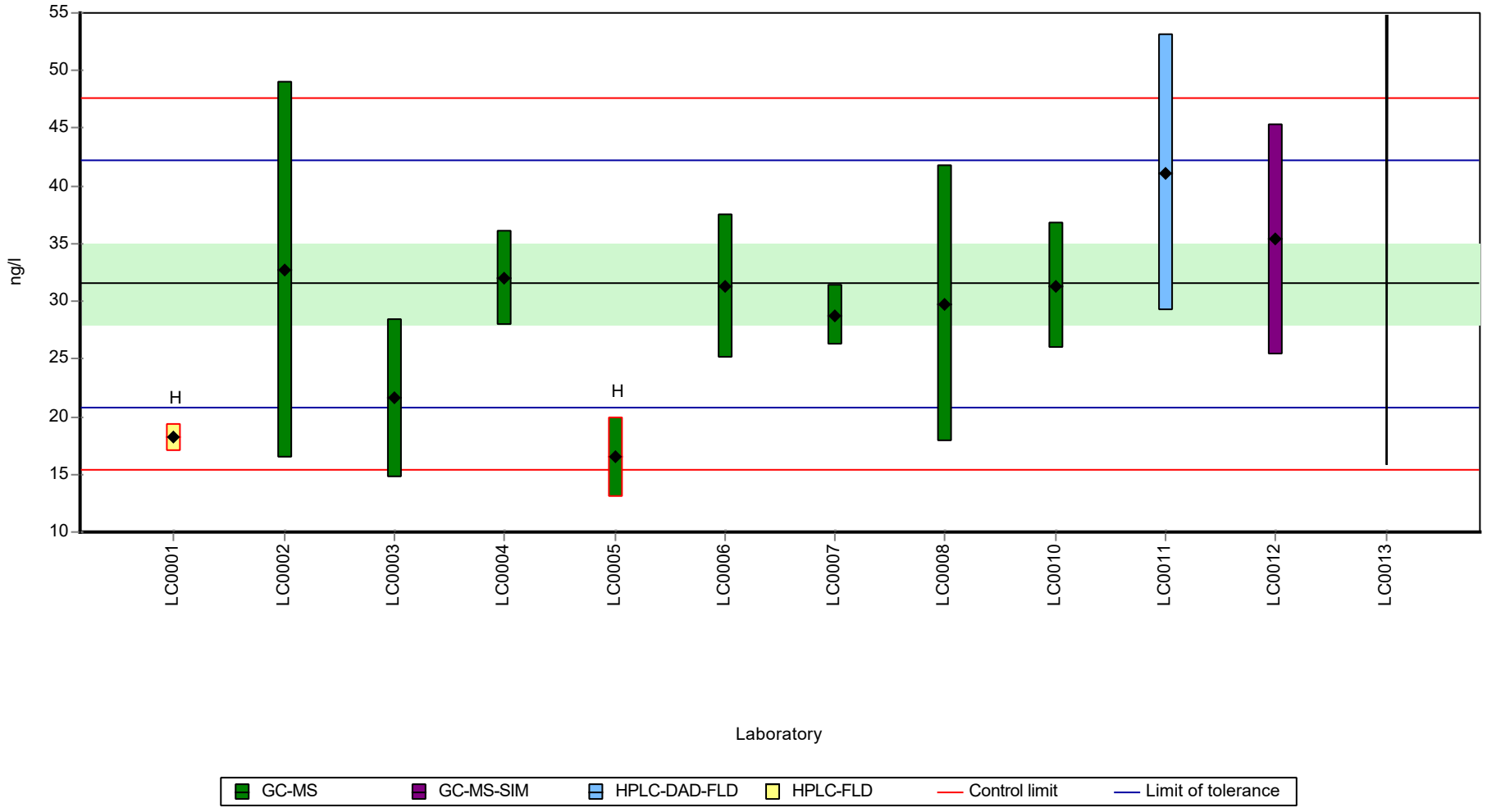
	all results	w ithout outliers	Unit
Mean ± CI (99%)	29 ± 6.71	31.6 ± 5.21	ng/l
Minimum	16.5	21.6	ng/l
Maximum	41.1	41.1	ng/l
Standard deviation	7.41	5.21	ng/l
rel. standard deviation	25.6	16.5	%
n	11	9	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Phenanthrene

Graphical presentation of results

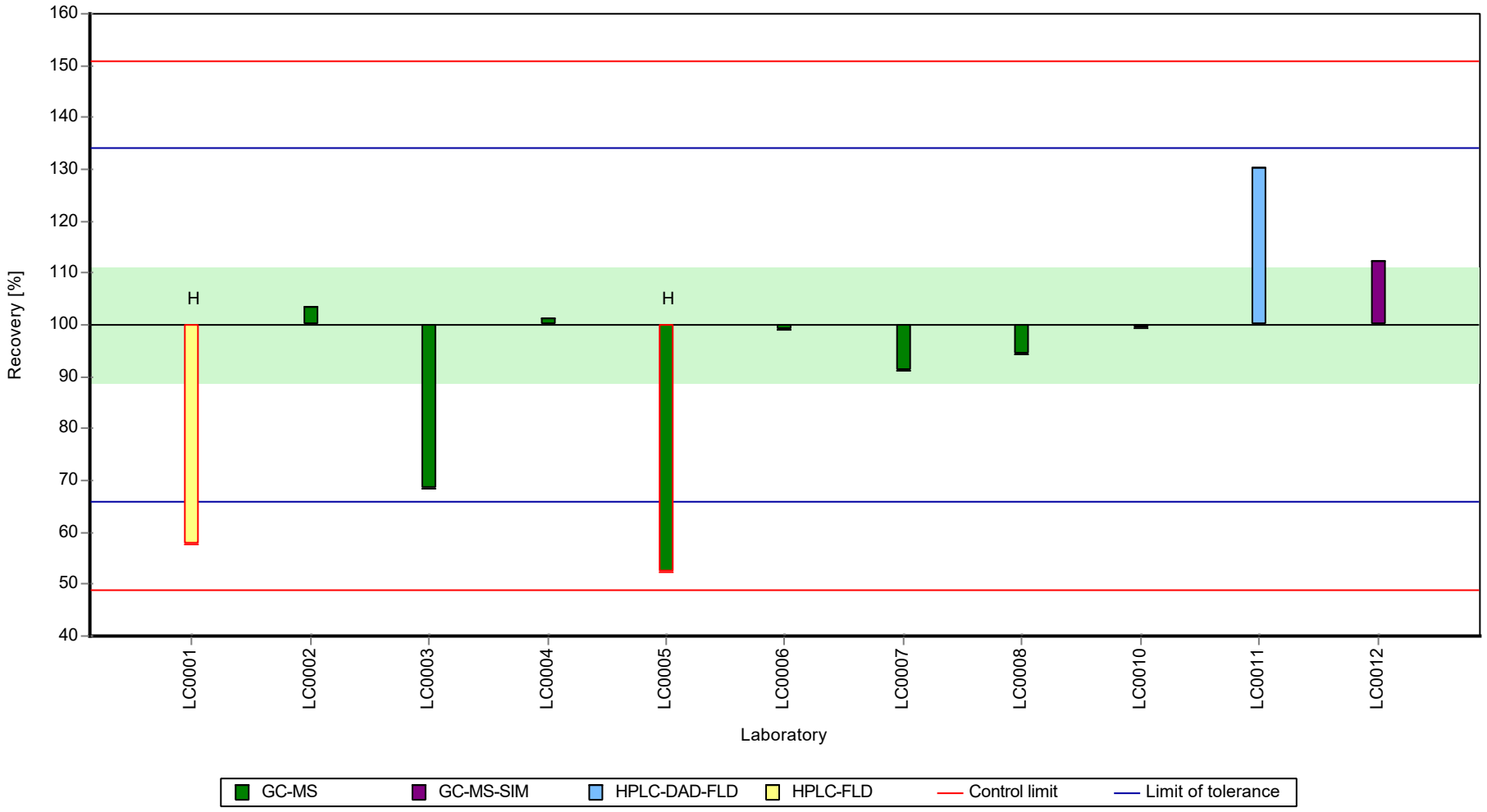
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

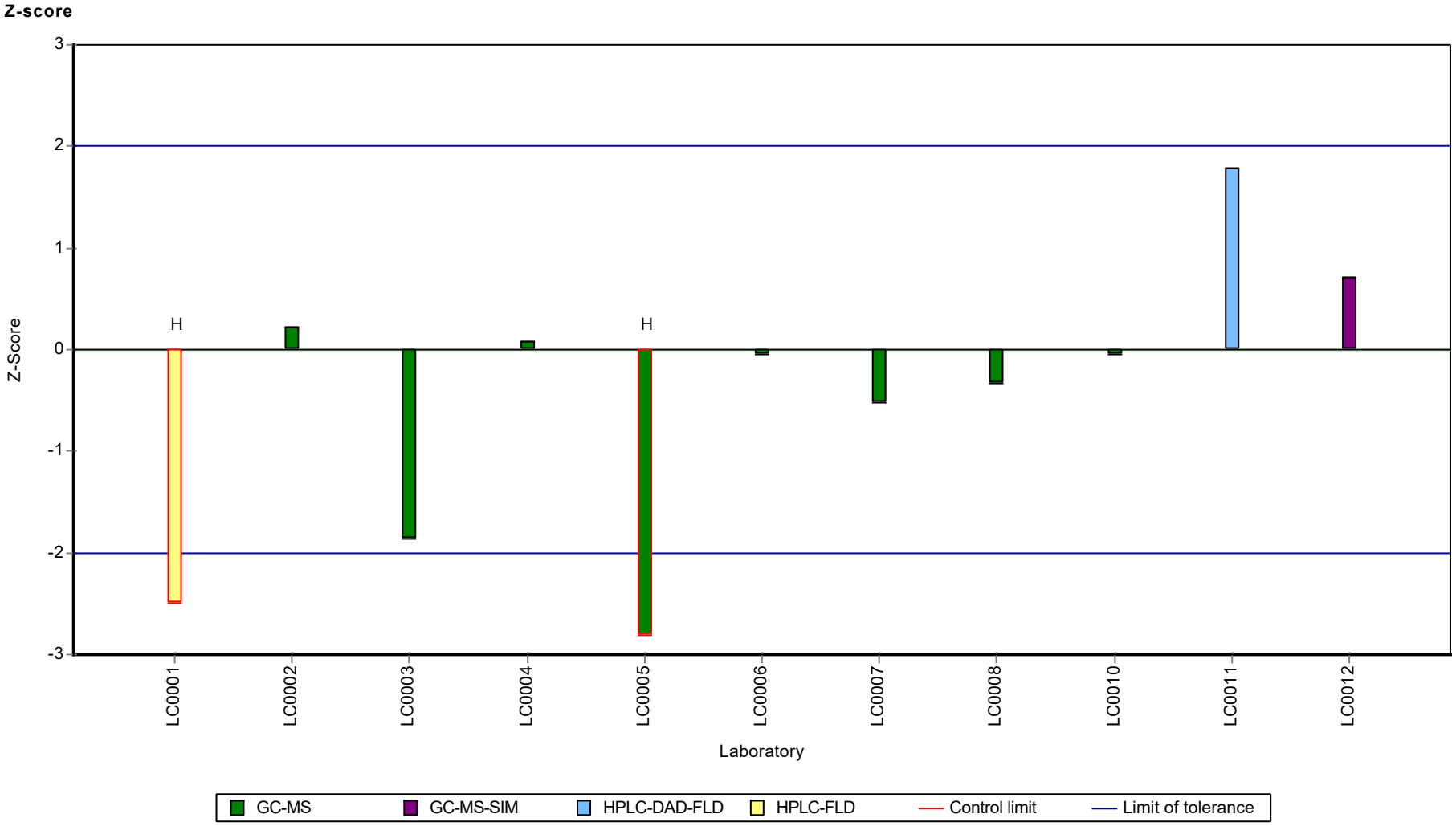
Sample: P26A, Parameter: Phenanthrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Phenanthrene



Parameter oriented report

P26 B

Phenanthrene

Unit	ng/l
Assigned value ± U (k=2)	267 ± 38.2
Criterion	64.1 (24 %)
Minimum - Maximum	148 - 356
Control test value ± U (k=2)	320 ± 80.1

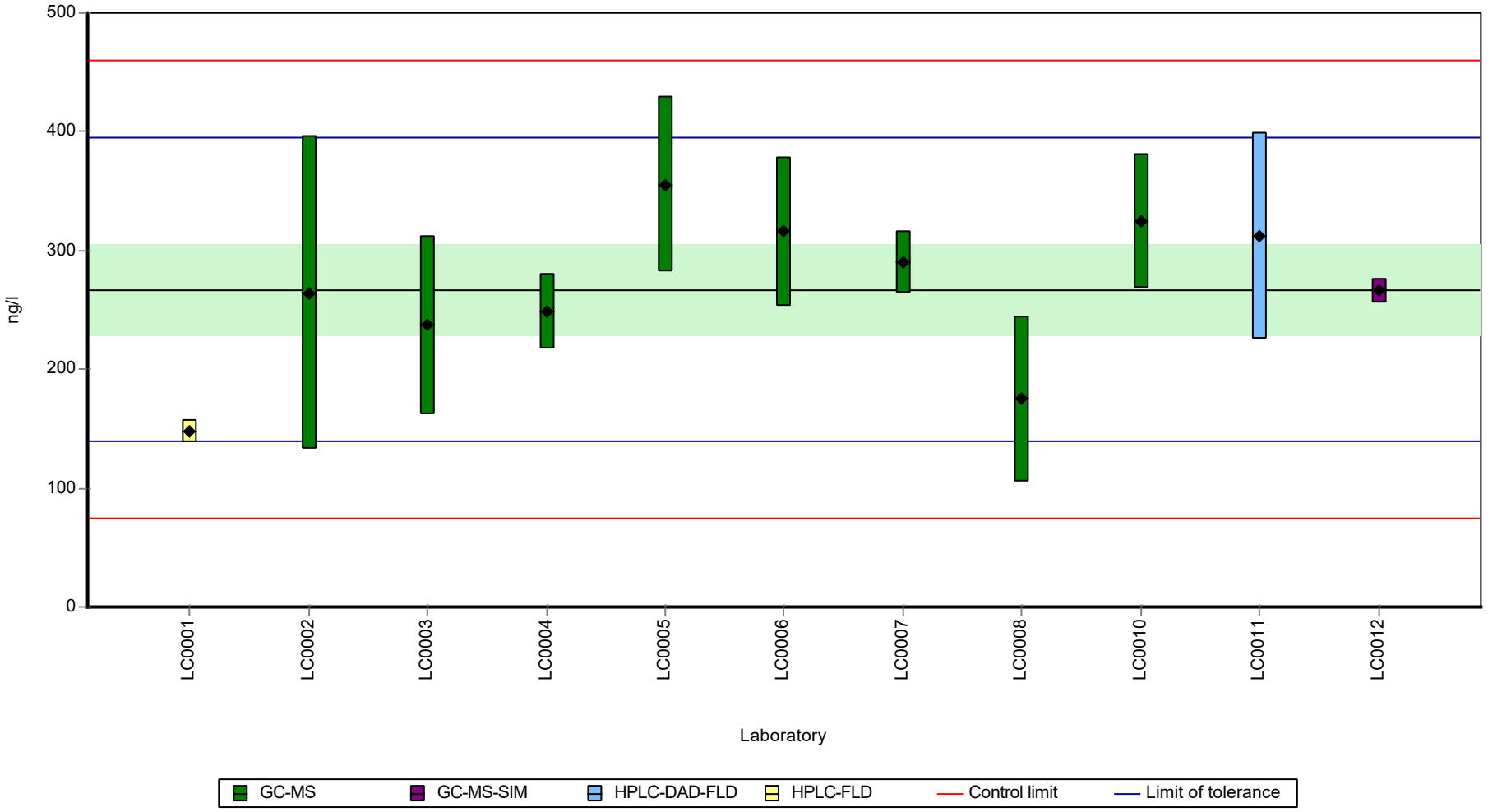
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	147.8	9.98	55.4	-1.86	
LC0002	264	132	98.9	-0.05	
LC0003	237	75.8	88.8	-0.47	
LC0004	249	32	93.3	-0.28	
LC0005	355.6	74.43	133	1.38	
LC0006	316	63	118	0.76	
LC0007	290	26	109	0.36	
LC0008	175	70	65.5	-1.44	
LC0009	-	-	-	-	
LC0010	324.785	56.74	122	0.9	
LC0011	312	87	117	0.7	
LC0012	266	10	99.6	-0.02	
LC0013	-	-	-	-	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	267 ± 57.2	267 ± 57.2	ng/l
Minimum	148	148	ng/l
Maximum	356	356	ng/l
Standard deviation	63.3	63.3	ng/l
rel. standard deviation	23.7	23.7	%
n	11	11	-

Graphical presentation of results

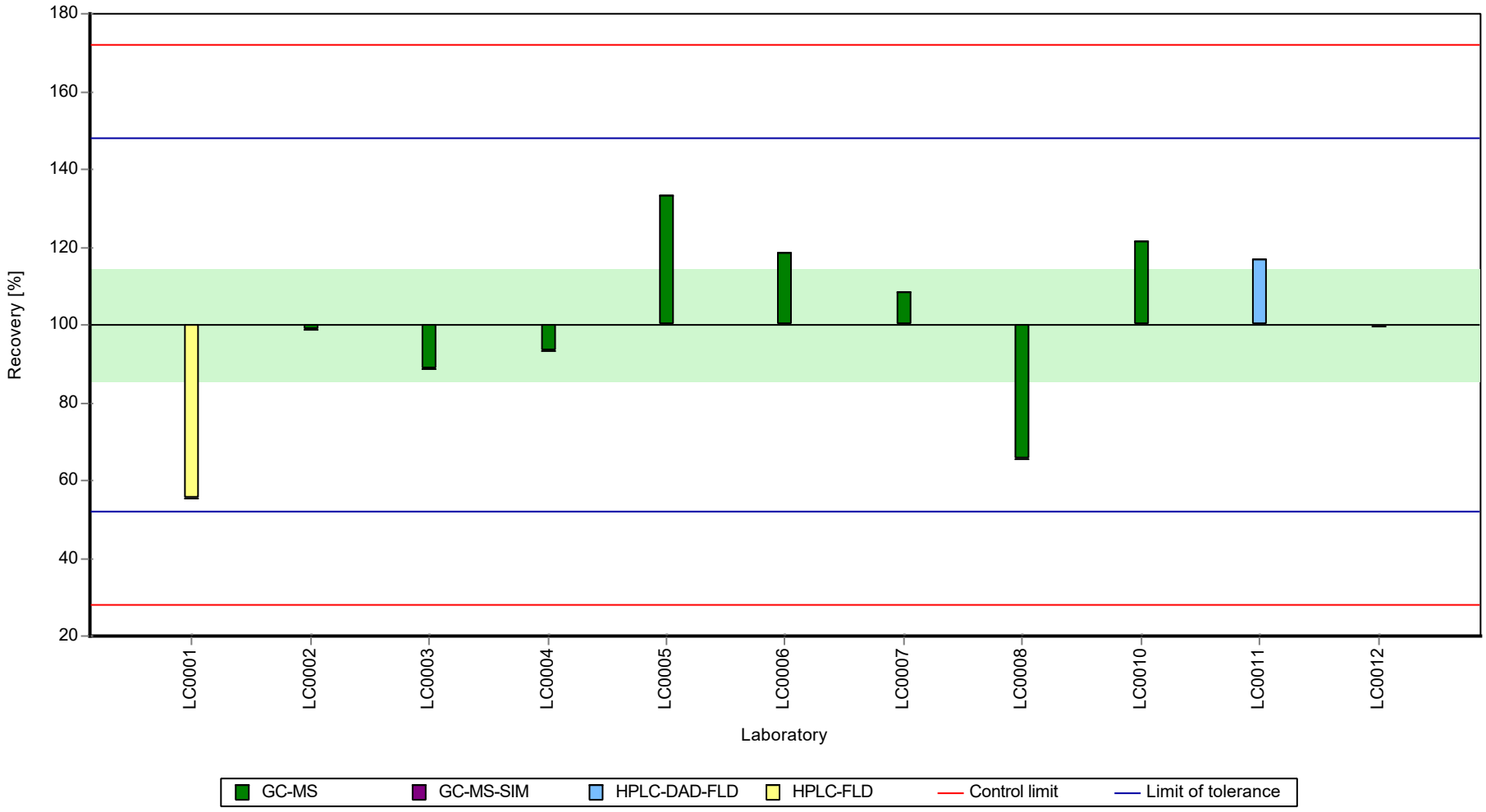
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

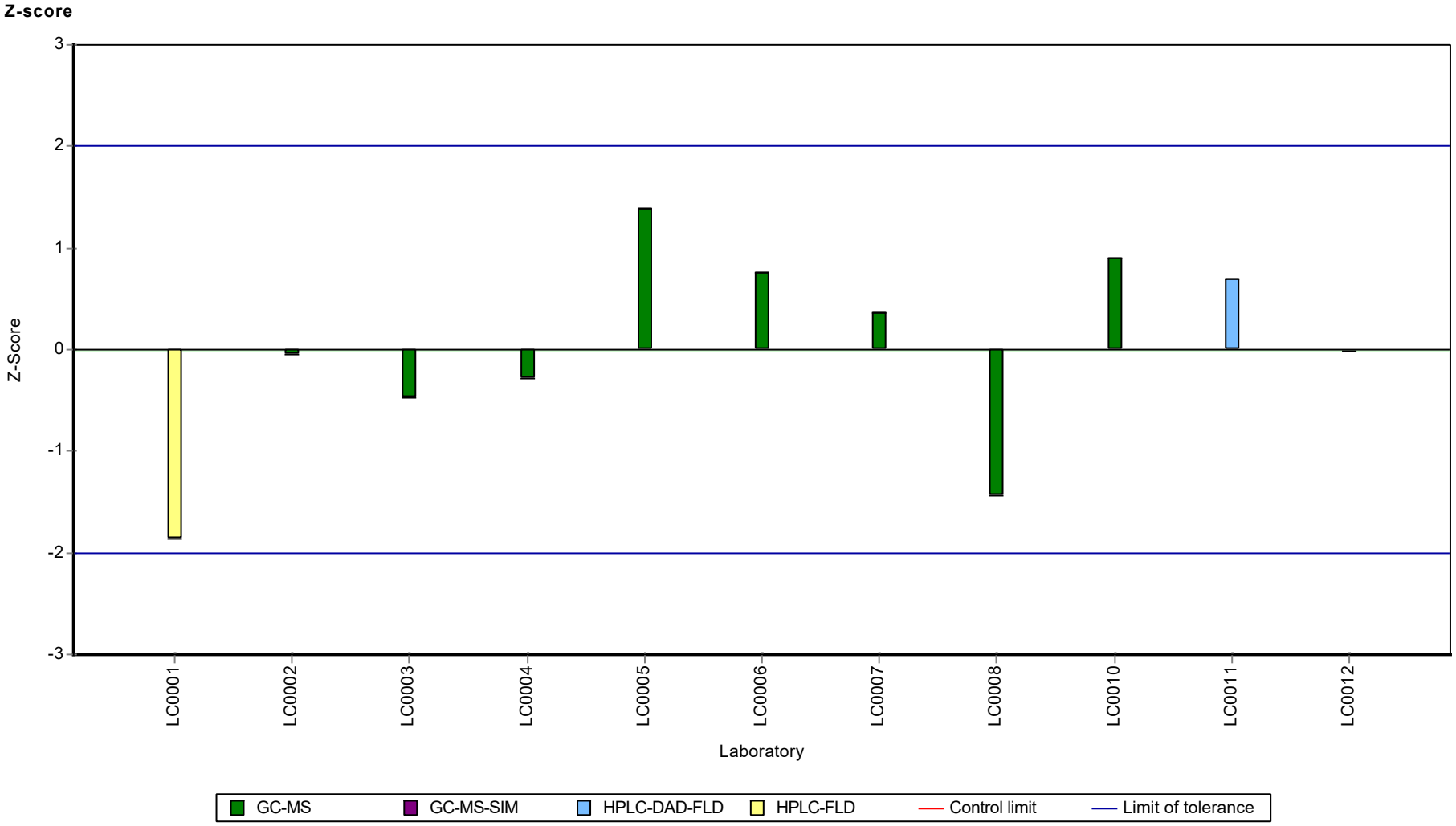
Sample: P26B, Parameter: Phenanthrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Phenanthrene



Parameter oriented report

P26 A

Pyrene

Unit	ng/l
Assigned value ± U (k=2)	22.2 ± 2.83
Criterion	4.45 (20 %)
Minimum - Maximum	13.1 - 28.3
Control test value ± U (k=2)	24.8 ± 6.2

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	25.1	12.55	113	0.64	
LC0003	13.1	4.59	58.9	-2.06	
LC0004	23.34	2.8	105	0.25	
LC0005	17.29	6.69	77.7	-1.11	
LC0006	22.4	4.5	101	0.03	
LC0007	20.6	1.9	92.6	-0.37	
LC0008	21.6	8.65	97.1	-0.15	
LC0009	-	-	-	-	
LC0010	28.349	3.372	127	1.37	
LC0011	26.5	5	119	0.96	
LC0012	24.2	10	109	0.44	
LC0013	< 200 (LOQ)	-	-	-	

Characteristics of parameter

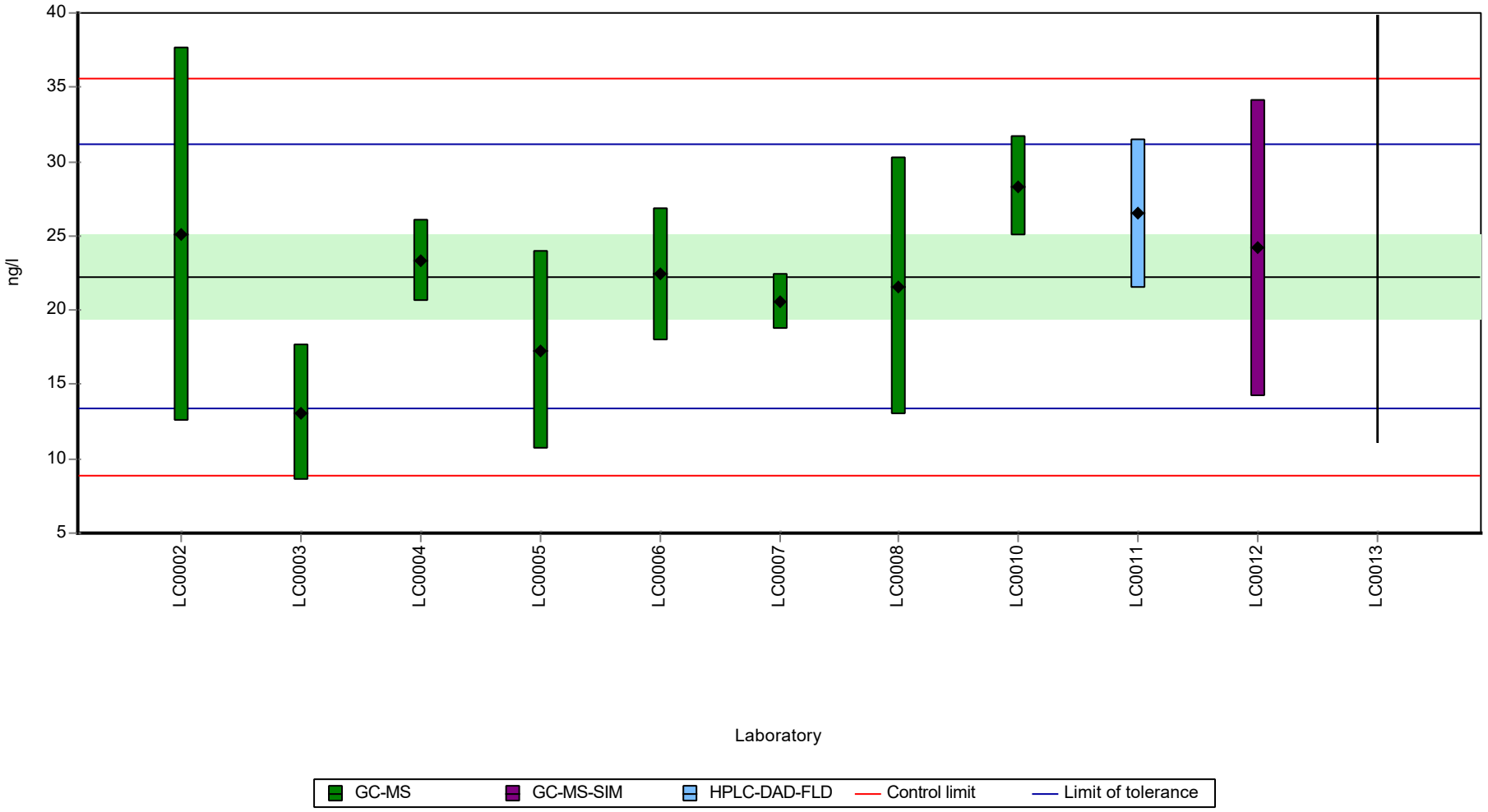
	all results	w ithout outliers	Unit
Mean ± CI (99%)	22.2 ± 4.24	22.2 ± 4.24	ng/l
Minimum	13.1	13.1	ng/l
Maximum	28.3	28.3	ng/l
Standard deviation	4.47	4.47	ng/l
rel. standard deviation	20.1	20.1	%
n	10	10	-

Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Pyrene

Graphical presentation of results

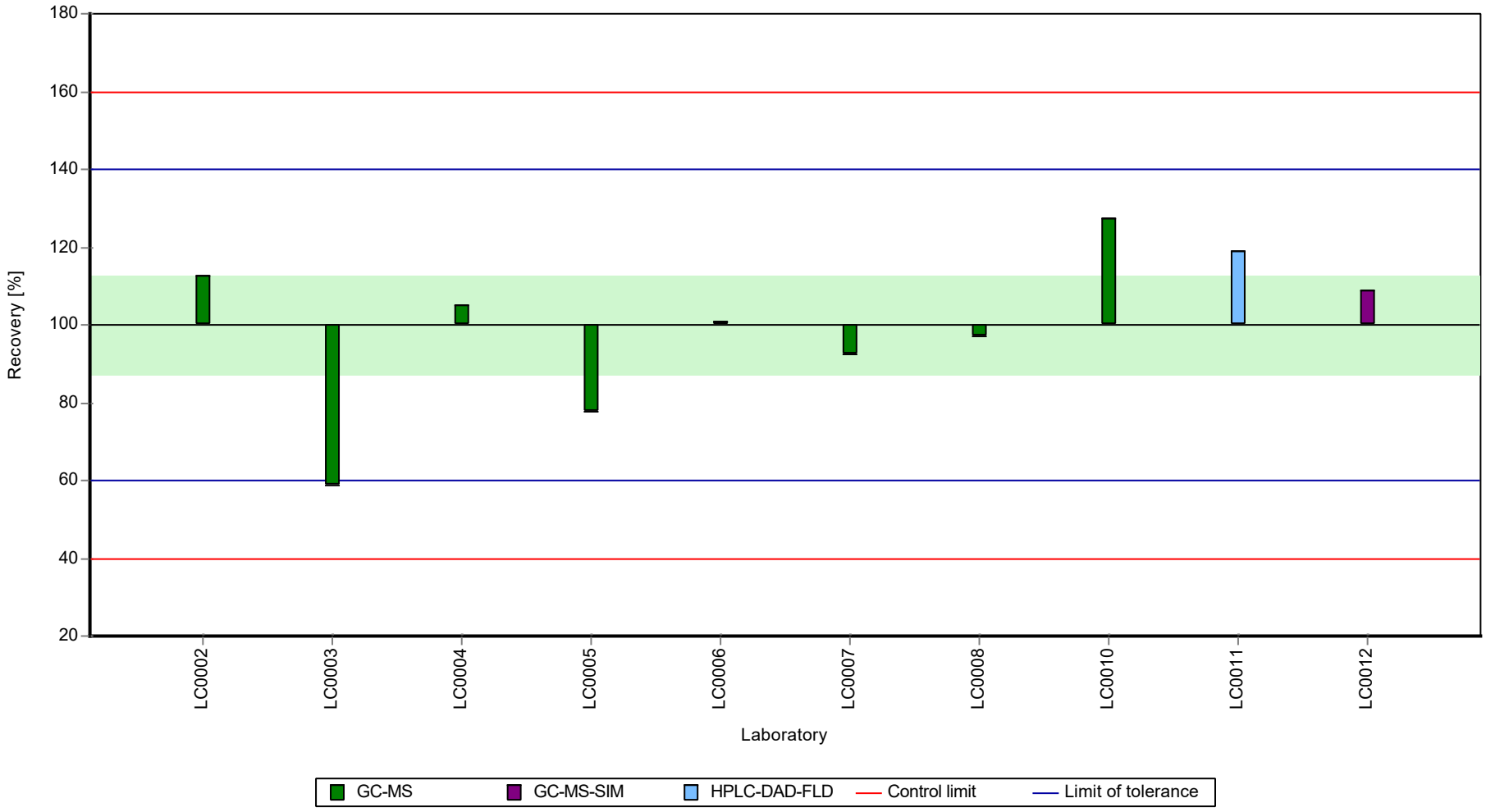
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

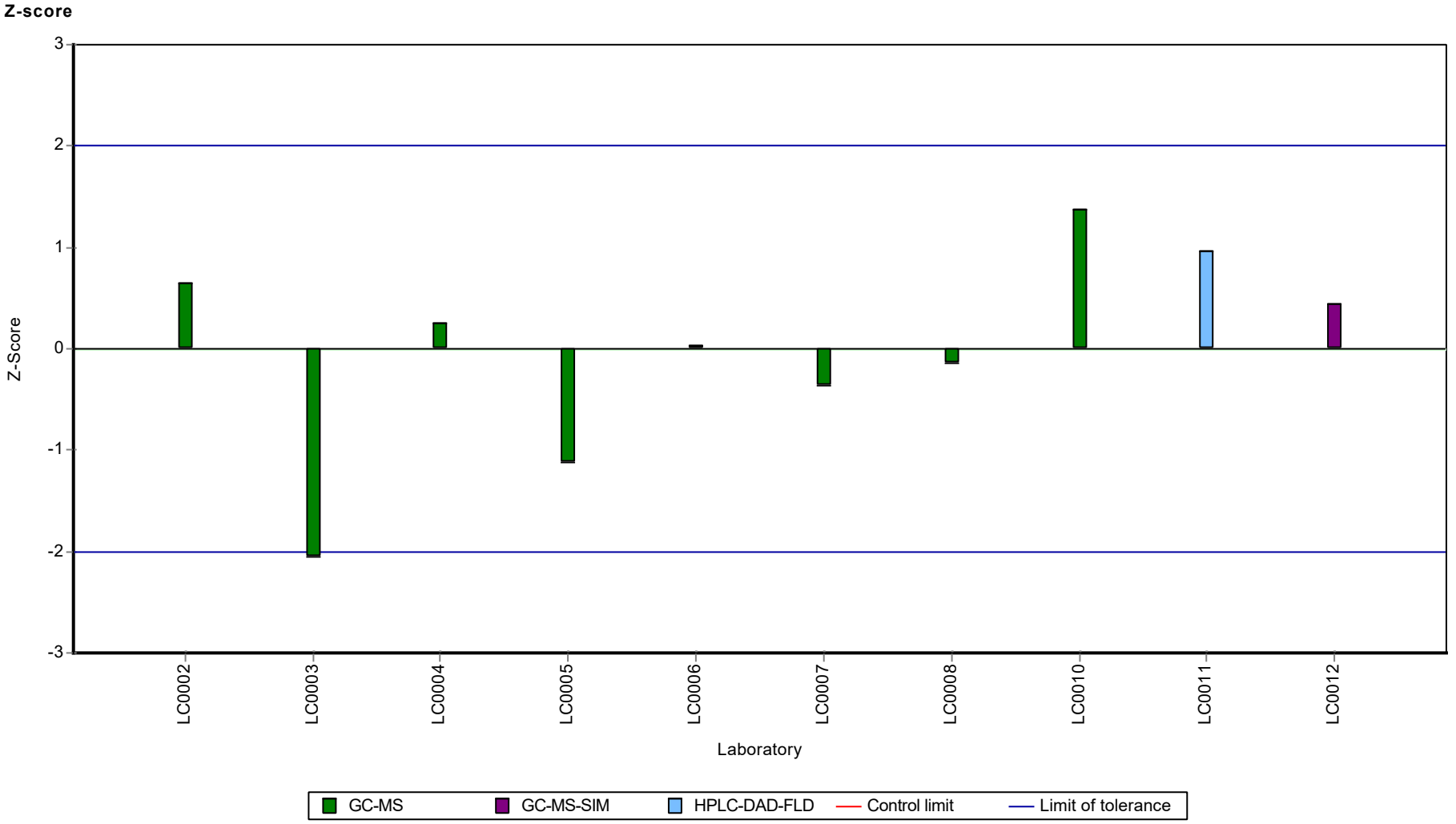
Sample: P26A, Parameter: Pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26A, Parameter: Pyrene



Parameter oriented report

P26 B

Pyrene

Unit	ng/l
Assigned value ± U (k=2)	240 ± 27
Criterion	45.6 (19 %)
Minimum - Maximum	165 - 325
Control test value ± U (k=2)	265 ± 66.3

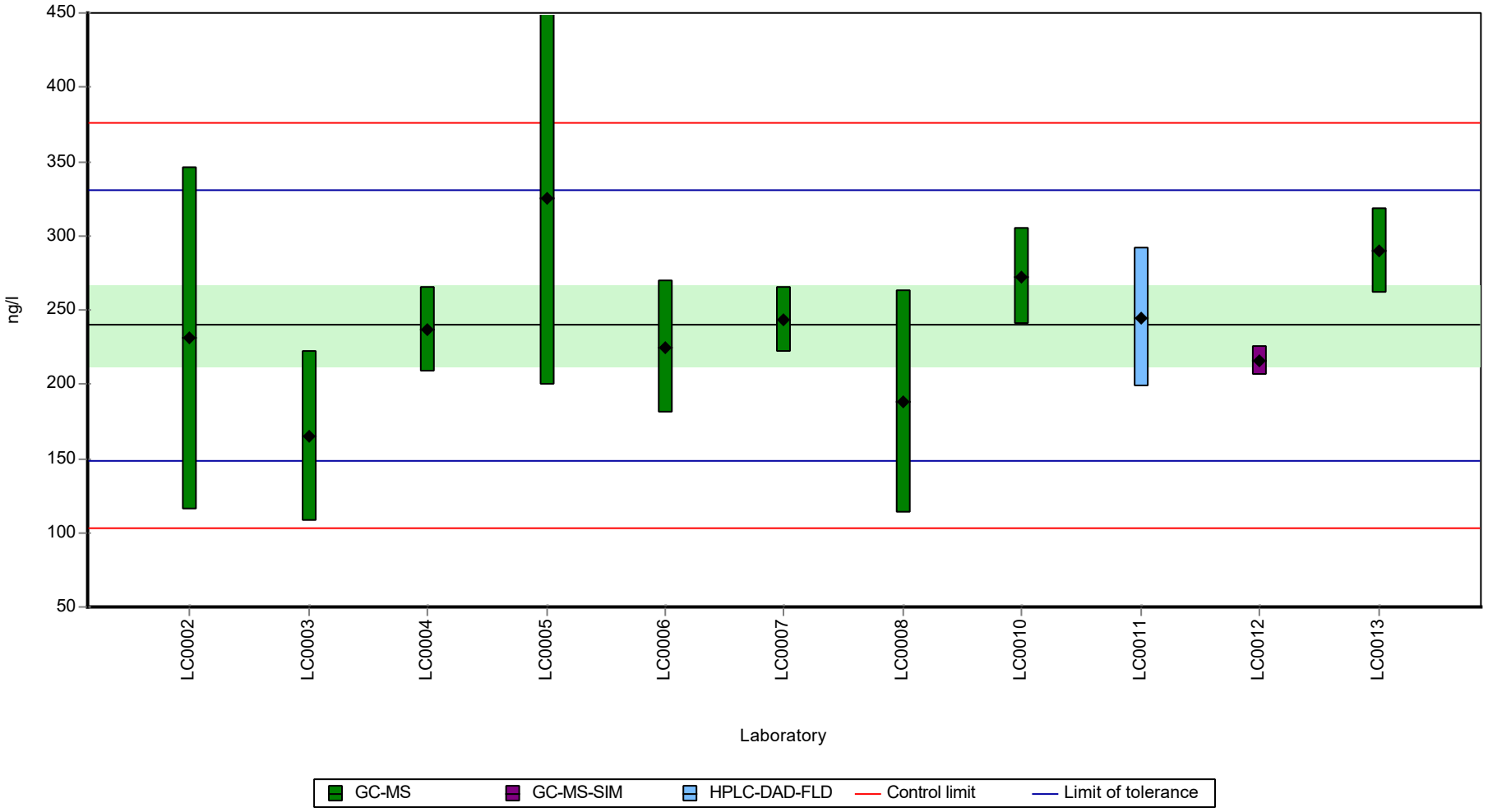
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	231	115.5	96.3	-0.19	
LC0003	165	57.8	68.8	-1.64	
LC0004	236.8	28.4	98.8	-0.07	
LC0005	325.19	125.72	136	1.87	
LC0006	225	45	93.8	-0.32	
LC0007	243	22	101	0.07	
LC0008	188	75	78.4	-1.14	
LC0009	-	-	-	-	
LC0010	272.587	32.424	114	0.72	
LC0011	245	47	102	0.11	
LC0012	216	10	90.1	-0.52	
LC0013	290	29	121	1.1	

Characteristics of parameter

	all results	w ithout outliers	Unit
Mean ± CI (99%)	240 ± 40.5	240 ± 40.5	ng/l
Minimum	165	165	ng/l
Maximum	325	325	ng/l
Standard deviation	44.8	44.8	ng/l
rel. standard deviation	18.7	18.7	%
n	11	11	-

Graphical presentation of results

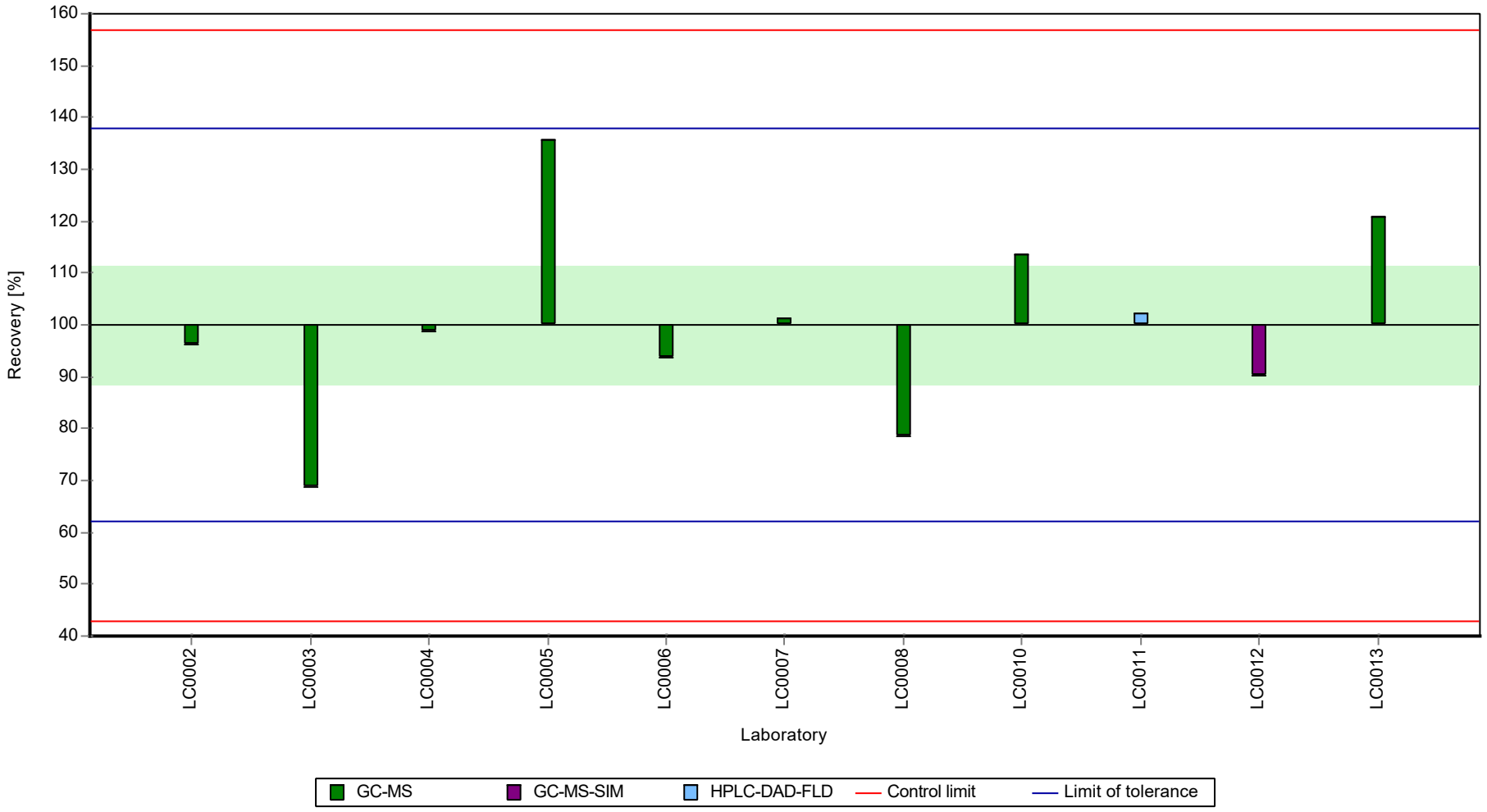
Results



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

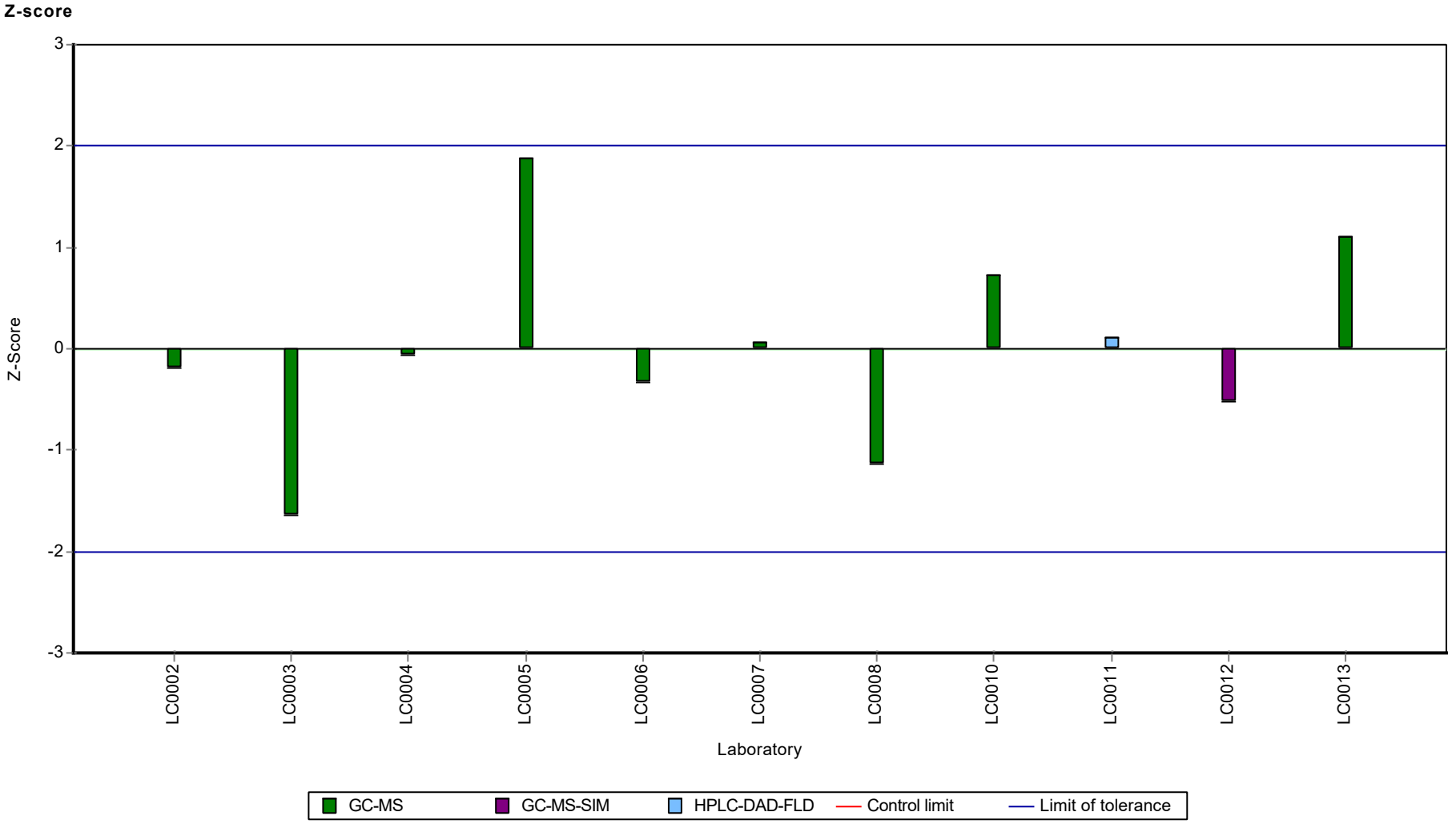
Sample: P26B, Parameter: Pyrene

Recovery rate



Parameter oriented report Polycyclic Aromatic Hydrocarbons P26

Sample: P26B, Parameter: Pyrene



E8. Laborientierte Auswertung / Laboratory oriented report

Die Laborientierte Auswertung ist nach dem Laborcode sortiert.

The laboratory oriented report is sorted by laboratory code.

Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0001

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	9.7 ± 1.25	3.38	54.5	-2.39
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	- ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	- ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	- ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	- ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	- ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	- ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	- ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	- ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	- ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	9.8 ± 0.62	2.71	50.7	-3.52
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	- ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	27.2 ± 1.4	6.84	83.5	-0.79
Phenanthrene	ng/l	31.6 ± 3.47	18.2 ± 1.23	5.36	57.7	-2.49
Pyrene	ng/l	22.2 ± 2.83	- ± -	4.45	-	-

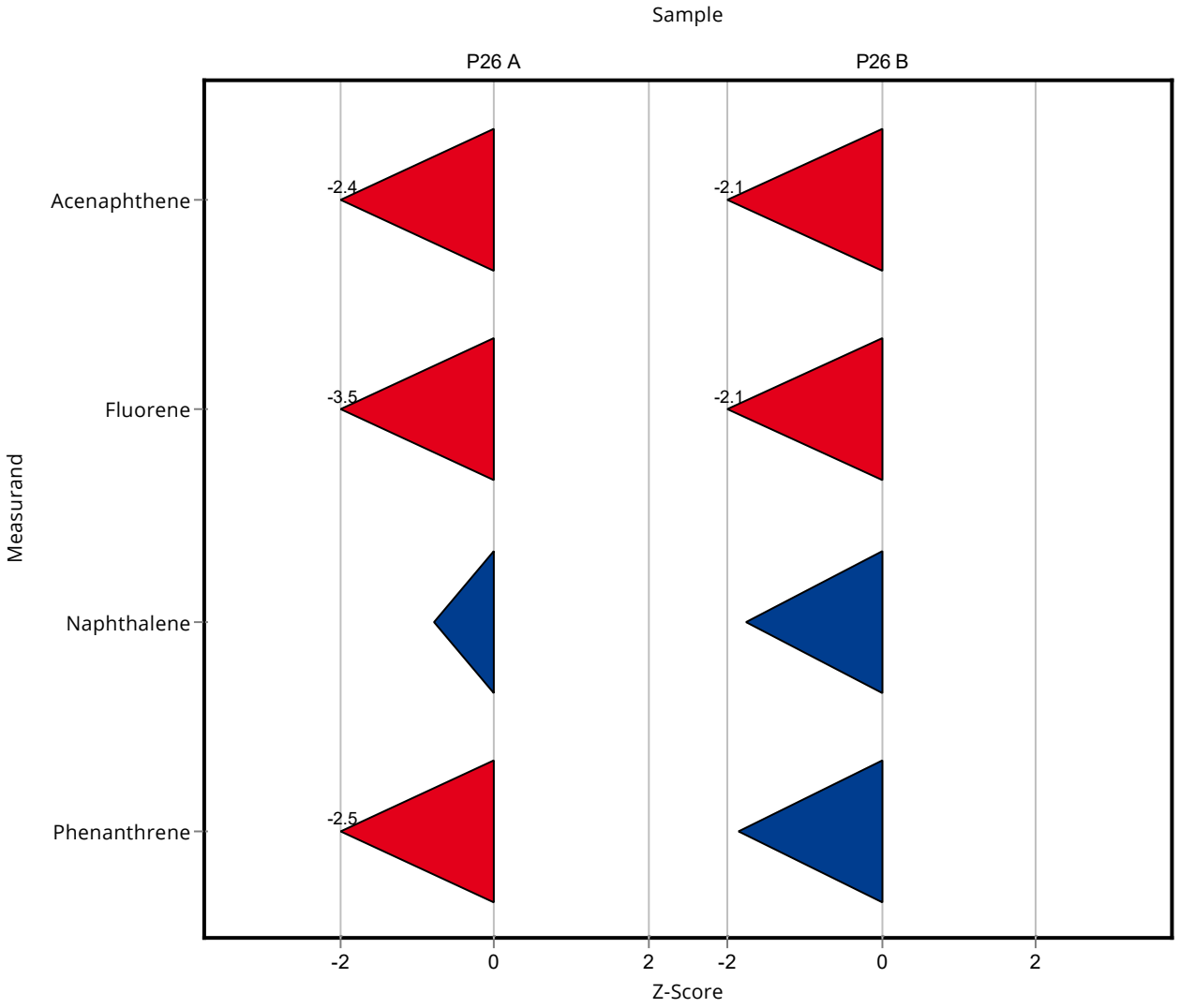
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	134.3 ± 17.31	60.1	51.4	-2.11
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-
Benzo[a]pyrene	ng/l	242 ± 19.1	- ± -	58.2	-	-
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	- ± -	86.2	-	-
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	- ± -	66.3	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0001

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	171.2 ± 10.77	70.5	53.4	-2.12
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	150.5 ± 7.72	72.1	54.3	-1.76
Phenanthrene	ng/l	267 ± 38.2	147.8 ± 9.98	64.1	55.4	-1.86
Pyrene	ng/l	240 ± 27	- ± -	45.6	-	-



Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	9.7 ± 1.25	3.38	54.5	-2.57
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	- ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	- ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	- ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	- ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	- ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	- ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	- ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	- ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	- ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	9.8 ± 0.62	2.71	50.7	-4.52
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	- ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	27.2 ± 1.4	6.84	83.5	-1.13
Phenanthrene	ng/l	31.6 ± 3.47	18.2 ± 1.23	5.36	57.7	-3.14
Pyrene	ng/l	22.2 ± 2.83	- ± -	4.45	-	-

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	134.3 ± 17.31	60.1	51.4	-2.55
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-

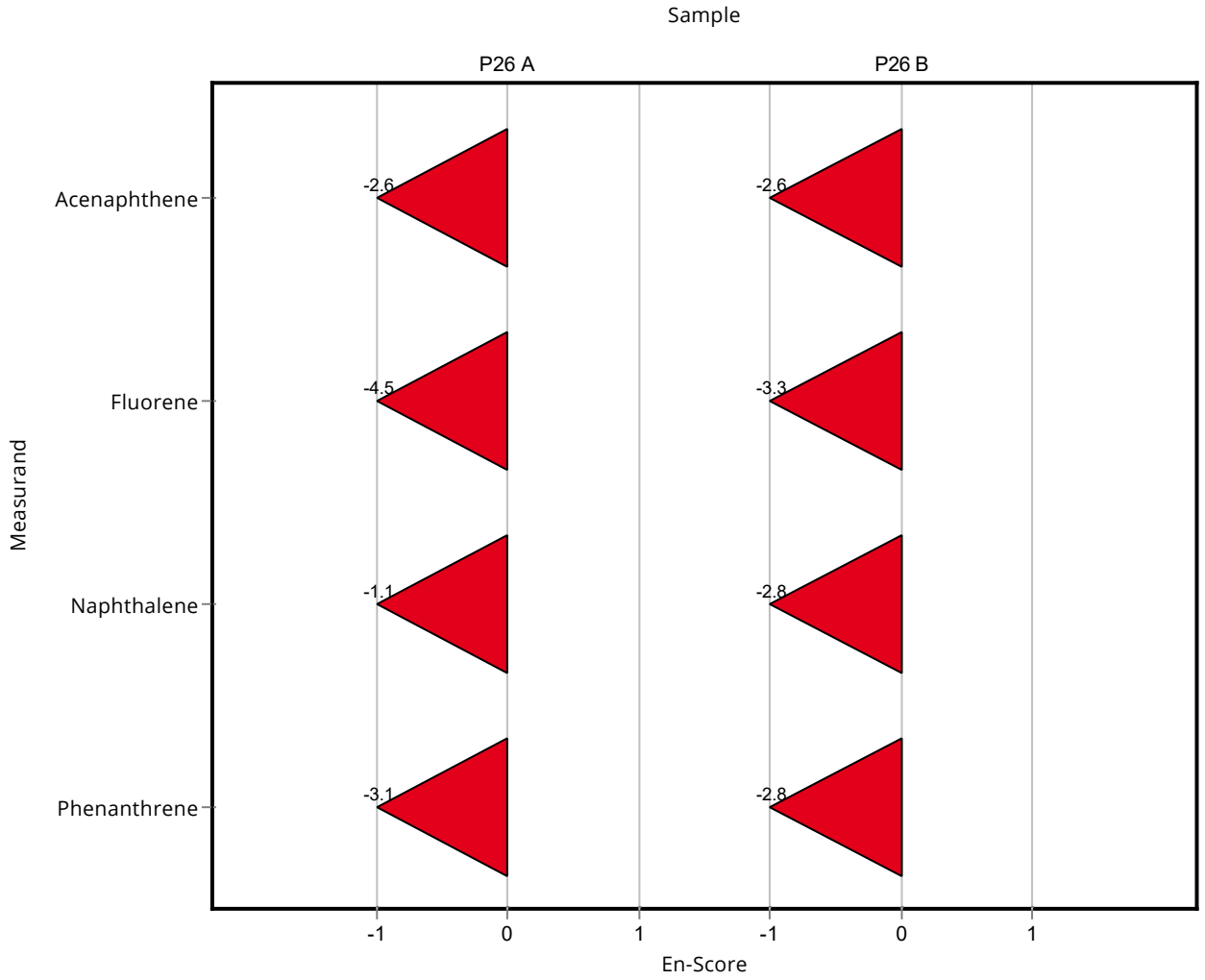
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0001

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	- ± -	58.2	-	-
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	- ± -	86.2	-	-
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	- ± -	66.3	-	-
Fluorene	ng/l	320 ± 40.2	171.2 ± 10.77	70.5	53.4	-3.27
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	150.5 ± 7.72	72.1	54.3	-2.84
Phenanthrene	ng/l	267 ± 38.2	147.8 ± 9.98	64.1	55.4	-2.77
Pyrene	ng/l	240 ± 27	- ± -	45.6	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0001



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0002

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	19.2 ± 9.6	3.38	108	0.42
Acenaphthylene	ng/l	25.7 ± 2.71	25.4 ± 12.7	6.16	99	-0.04
Anthracene	ng/l	19.8 ± 3.06	21.5 ± 10.75	4.94	109	0.35
Benzo[a]anthracene	ng/l	19.7 ± 2.56	23.3 ± 11.65	4.13	119	0.88
Benzo[a]pyrene	ng/l	16 ± 2.75	19.5 ± 9.75	4.32	122	0.81
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	22.3 ± 11.15	4.04	99.2	-0.04
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	27.1 ± 13.55	5.72	118	0.74
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	25.7 ± 12.85	6.48	111	0.40
Chrysene	ng/l	26 ± 3.79	26 ± 13	5.71	100	0.01
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	27.8 ± 13.9	6.49	128	0.95
Fluoranthene	ng/l	26.7 ± 3.54	27 ± 13.5	5.61	101	0.05
Fluorene	ng/l	19.3 ± 1.71	19.8 ± 9.9	2.71	102	0.17
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	25.3 ± 12.65	6.27	101	0.03
Naphthalene	ng/l	32.6 ± 3.85	31 ± 15.5	6.84	95.1	-0.23
Phenanthrene	ng/l	31.6 ± 3.47	32.7 ± 16.35	5.36	104	0.21
Pyrene	ng/l	22.2 ± 2.83	25.1 ± 12.55	4.45	113	0.64

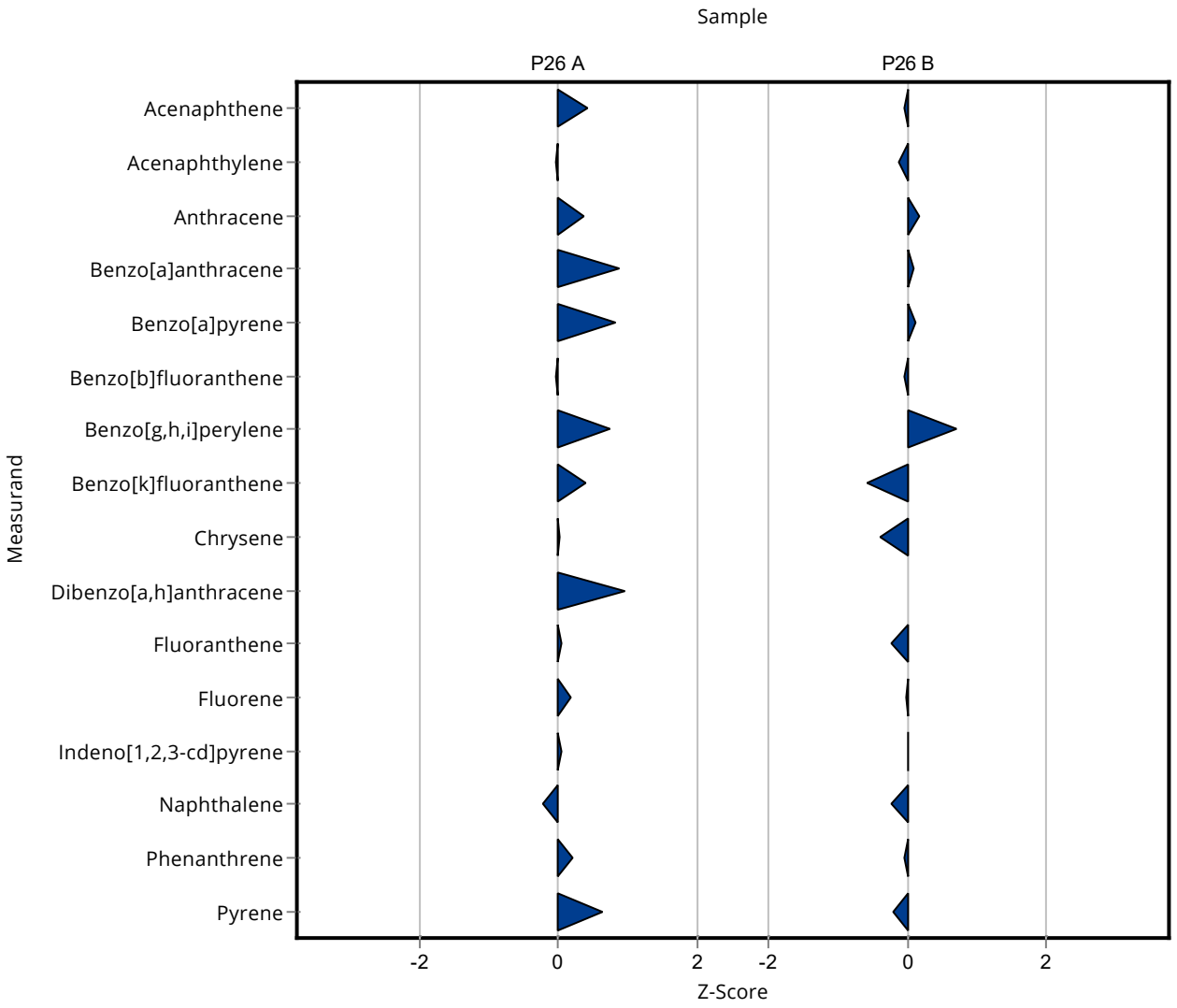
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	259 ± 129.5	60.1	99.2	-0.04
Acenaphthylene	ng/l	354 ± 35	344 ± 172	84.8	97.3	-0.11
Anthracene	ng/l	260 ± 30.9	270 ± 135	54.7	104	0.18
Benzo[a]anthracene	ng/l	279 ± 35.5	285 ± 142.5	58.6	102	0.10
Benzo[a]pyrene	ng/l	242 ± 19.1	250 ± 125	58.2	103	0.13
Benzo[b]fluoranthene	ng/l	277 ± 43.5	274 ± 137	69.3	98.9	-0.05
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	267 ± 133.5	86.2	130	0.71
Benzo[k]fluoranthene	ng/l	229 ± 36.4	196 ± 98	57.3	85.5	-0.58
Chrysene	ng/l	227 ± 16.7	208 ± 104	50	91.5	-0.39
Dibenzo[a,h]anthracene	ng/l	- ± -	334 ± 167	-	-	-
Fluoranthene	ng/l	316 ± 40.1	301 ± 150.5	66.3	95.3	-0.22

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0002

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	319 ± 159.5	70.5	99.6	-0.02
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	269 ± 134.5	66.9	100	0.02
Naphthalene	ng/l	277 ± 41.9	260 ± 130	72.1	93.7	-0.24
Phenanthrene	ng/l	267 ± 38.2	264 ± 132	64.1	98.9	-0.05
Pyrene	ng/l	240 ± 27	231 ± 115.5	45.6	96.3	-0.19



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0002

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	19.2 ± 9.6	3.38	108	0.07
Acenaphthylene	ng/l	25.7 ± 2.71	25.4 ± 12.7	6.16	99	-0.01
Anthracene	ng/l	19.8 ± 3.06	21.5 ± 10.75	4.94	109	0.08
Benzo[a]anthracene	ng/l	19.7 ± 2.56	23.3 ± 11.65	4.13	119	0.16
Benzo[a]pyrene	ng/l	16 ± 2.75	19.5 ± 9.75	4.32	122	0.18
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	22.3 ± 11.15	4.04	99.2	-0.01
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	27.1 ± 13.55	5.72	118	0.16
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	25.7 ± 12.85	6.48	111	0.10
Chrysene	ng/l	26 ± 3.79	26 ± 13	5.71	100	0.00
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	27.8 ± 13.9	6.49	128	0.22
Fluoranthene	ng/l	26.7 ± 3.54	27 ± 13.5	5.61	101	0.01
Fluorene	ng/l	19.3 ± 1.71	19.8 ± 9.9	2.71	102	0.02
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	25.3 ± 12.65	6.27	101	0.01
Naphthalene	ng/l	32.6 ± 3.85	31 ± 15.5	6.84	95.1	-0.05
Phenanthrene	ng/l	31.6 ± 3.47	32.7 ± 16.35	5.36	104	0.03
Pyrene	ng/l	22.2 ± 2.83	25.1 ± 12.55	4.45	113	0.11

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	259 ± 129.5	60.1	99.2	-0.01
Acenaphthylene	ng/l	354 ± 35	344 ± 172	84.8	97.3	-0.03
Anthracene	ng/l	260 ± 30.9	270 ± 135	54.7	104	0.04
Benzo[a]anthracene	ng/l	279 ± 35.5	285 ± 142.5	58.6	102	0.02

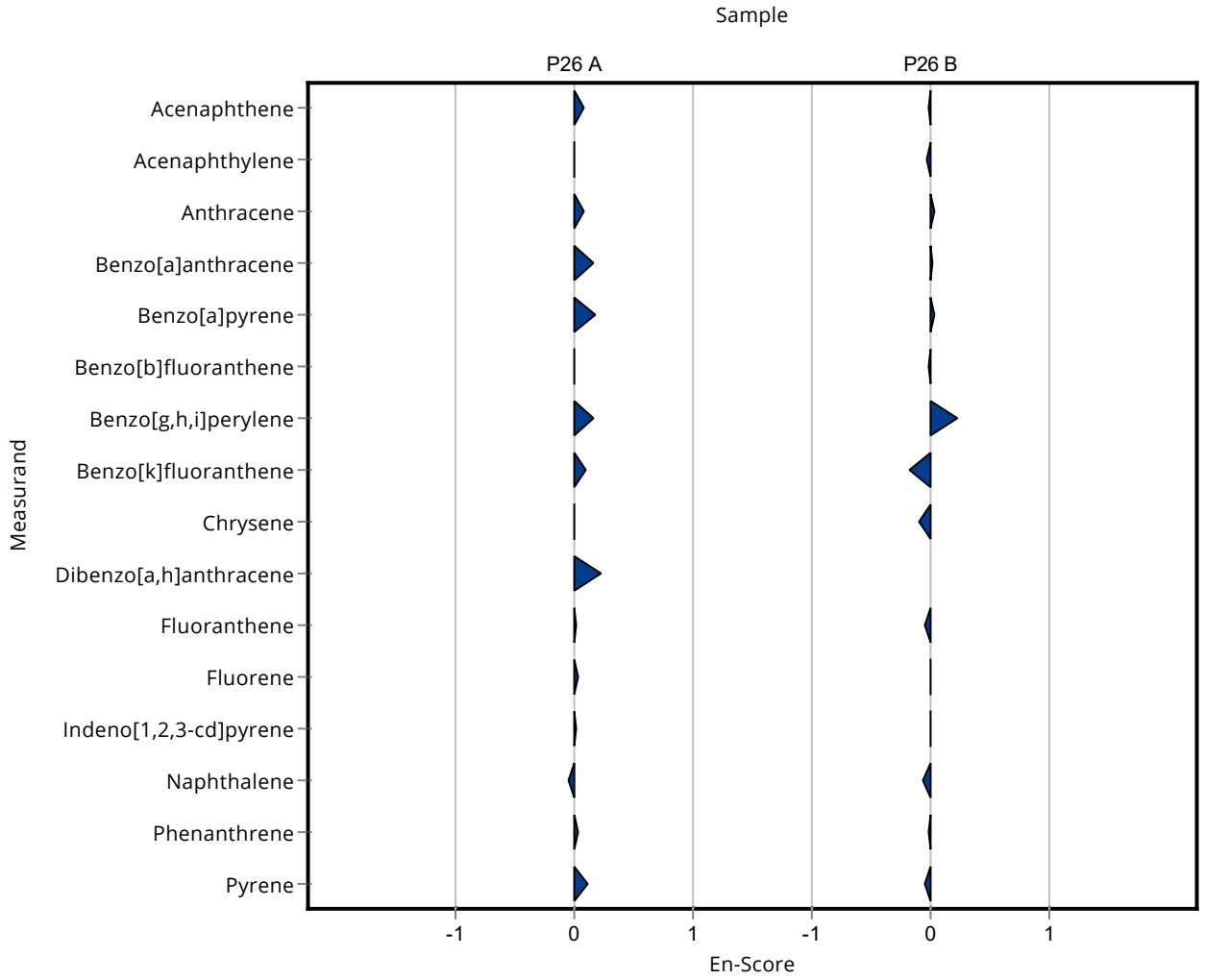
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0002

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	250 ± 125	58.2	103	0.03
Benzo[b]fluoranthene	ng/l	277 ± 43.5	274 ± 137	69.3	98.9	-0.01
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	267 ± 133.5	86.2	130	0.23
Benzo[k]fluoranthene	ng/l	229 ± 36.4	196 ± 98	57.3	85.5	-0.17
Chrysene	ng/l	227 ± 16.7	208 ± 104	50	91.5	-0.09
Dibenzo[a,h]anthracene	ng/l	- ± -	334 ± 167	-	-	-
Fluoranthene	ng/l	316 ± 40.1	301 ± 150.5	66.3	95.3	-0.05
Fluorene	ng/l	320 ± 40.2	319 ± 159.5	70.5	99.6	0.00
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	269 ± 134.5	66.9	100	0.00
Naphthalene	ng/l	277 ± 41.9	260 ± 130	72.1	93.7	-0.07
Phenanthrene	ng/l	267 ± 38.2	264 ± 132	64.1	98.9	-0.01
Pyrene	ng/l	240 ± 27	231 ± 115.5	45.6	96.3	-0.04

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0002



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0003

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	11.4 ± 1.94	3.38	64.1	-1.89
Acenaphthylene	ng/l	25.7 ± 2.71	15 ± 2.85	6.16	58.4	-1.73
Anthracene	ng/l	19.8 ± 3.06	11.3 ± 2.71	4.94	57.2	-1.71
Benzo[a]anthracene	ng/l	19.7 ± 2.56	12.4 ± 3.22	4.13	63.1	-1.76
Benzo[a]pyrene	ng/l	16 ± 2.75	9.85 ± 2.36	4.32	61.5	-1.43
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	10.3 ± 2.37	4.04	45.8	-3.01
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	11 ± 2.97	5.72	48.1	-2.08
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	11.8 ± 2.6	6.48	51	-1.75
Chrysene	ng/l	26 ± 3.79	17.2 ± 3.44	5.71	66.3	-1.53
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	14.2 ± 3.12	6.49	65.6	-1.15
Fluoranthene	ng/l	26.7 ± 3.54	15.5 ± 5.12	5.61	58	-2.00
Fluorene	ng/l	19.3 ± 1.71	14.1 ± 3.24	2.71	72.9	-1.93
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	15 ± 3.9	6.27	59.8	-1.61
Naphthalene	ng/l	32.6 ± 3.85	20.6 ± 4.33	6.84	63.2	-1.75
Phenanthrene	ng/l	31.6 ± 3.47	21.6 ± 6.91	5.36	68.4	-1.86
Pyrene	ng/l	22.2 ± 2.83	13.1 ± 4.59	4.45	58.9	-2.06

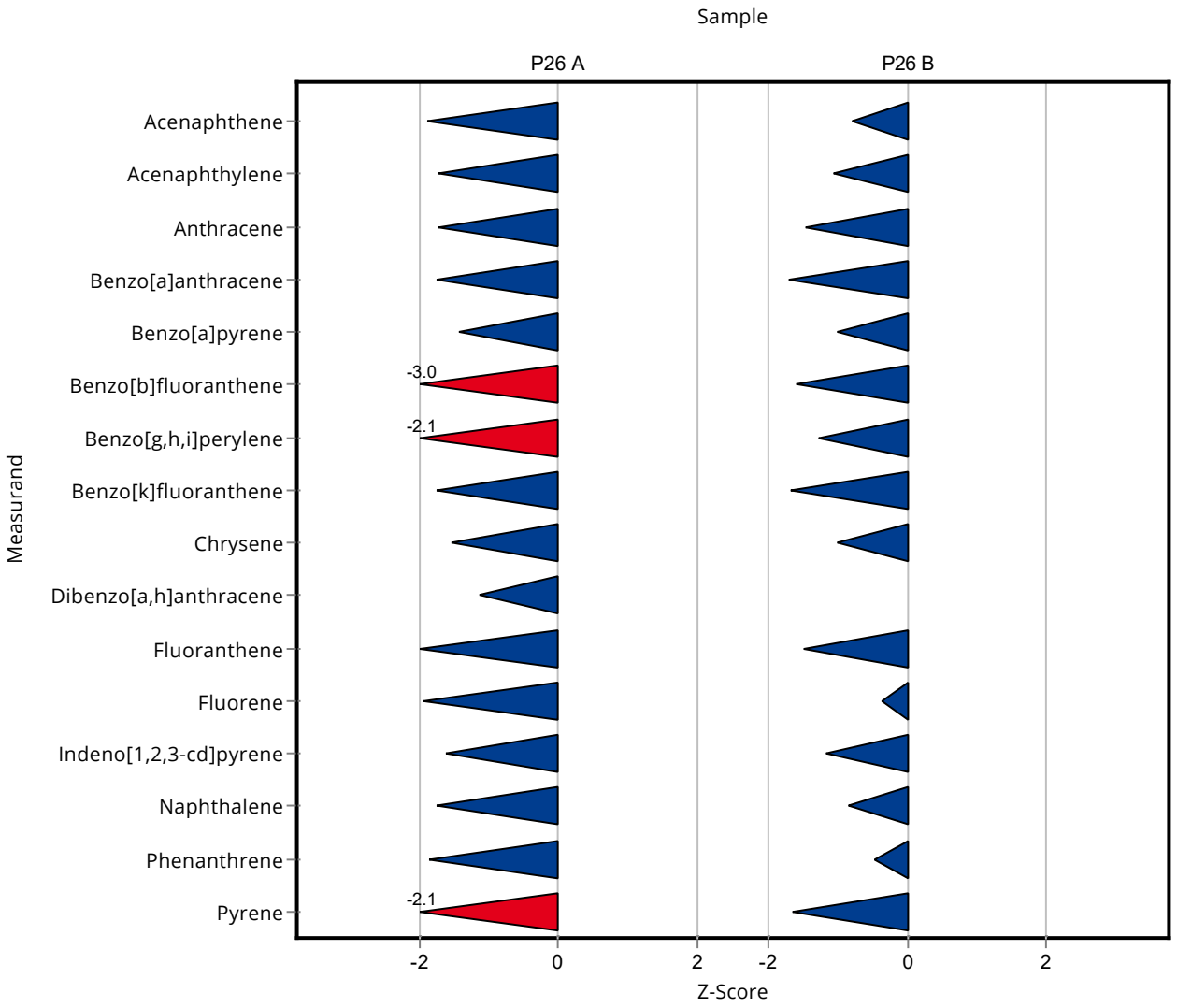
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	213 ± 36.2	60.1	81.6	-0.80
Acenaphthylene	ng/l	354 ± 35	264 ± 50.2	84.8	74.7	-1.06
Anthracene	ng/l	260 ± 30.9	181 ± 43.4	54.7	69.5	-1.45
Benzo[a]anthracene	ng/l	279 ± 35.5	180 ± 46.8	58.6	64.5	-1.69
Benzo[a]pyrene	ng/l	242 ± 19.1	184 ± 44.2	58.2	75.9	-1.00
Benzo[b]fluoranthene	ng/l	277 ± 43.5	166 ± 38.2	69.3	59.9	-1.60
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	95.6 ± 25.8	86.2	46.6	-1.27
Benzo[k]fluoranthene	ng/l	229 ± 36.4	133 ± 29.3	57.3	58	-1.68
Chrysene	ng/l	227 ± 16.7	177 ± 35.4	50	77.8	-1.01
Dibenzo[a,h]anthracene	ng/l	- ± -	114 ± 25.1	-	-	-
Fluoranthene	ng/l	316 ± 40.1	217 ± 71.6	66.3	68.7	-1.49

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0003

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	295 ± 67.9	70.5	92.1	-0.36
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	190 ± 49.4	66.9	71	-1.16
Naphthalene	ng/l	277 ± 41.9	217 ± 45.6	72.1	78.2	-0.84
Phenanthrene	ng/l	267 ± 38.2	237 ± 75.8	64.1	88.8	-0.47
Pyrene	ng/l	240 ± 27	165 ± 57.8	45.6	68.8	-1.64



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0003

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	11.4 ± 1.94	3.38	64.1	-1.48
Acenaphthylene	ng/l	25.7 ± 2.71	15 ± 2.85	6.16	58.4	-1.69
Anthracene	ng/l	19.8 ± 3.06	11.3 ± 2.71	4.94	57.2	-1.36
Benzo[a]anthracene	ng/l	19.7 ± 2.56	12.4 ± 3.22	4.13	63.1	-1.05
Benzo[a]pyrene	ng/l	16 ± 2.75	9.85 ± 2.36	4.32	61.5	-1.13
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	10.3 ± 2.37	4.04	45.8	-2.23
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	11 ± 2.97	5.72	48.1	-1.89
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	11.8 ± 2.6	6.48	51	-1.72
Chrysene	ng/l	26 ± 3.79	17.2 ± 3.44	5.71	66.3	-1.11
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	14.2 ± 3.12	6.49	65.6	-0.97
Fluoranthene	ng/l	26.7 ± 3.54	15.5 ± 5.12	5.61	58	-1.03
Fluorene	ng/l	19.3 ± 1.71	14.1 ± 3.24	2.71	72.9	-0.78
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	15 ± 3.9	6.27	59.8	-1.19
Naphthalene	ng/l	32.6 ± 3.85	20.6 ± 4.33	6.84	63.2	-1.26
Phenanthrene	ng/l	31.6 ± 3.47	21.6 ± 6.91	5.36	68.4	-0.70
Pyrene	ng/l	22.2 ± 2.83	13.1 ± 4.59	4.45	58.9	-0.95

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	213 ± 36.2	60.1	81.6	-0.60
Acenaphthylene	ng/l	354 ± 35	264 ± 50.2	84.8	74.7	-0.84
Anthracene	ng/l	260 ± 30.9	181 ± 43.4	54.7	69.5	-0.86
Benzo[a]anthracene	ng/l	279 ± 35.5	180 ± 46.8	58.6	64.5	-0.99

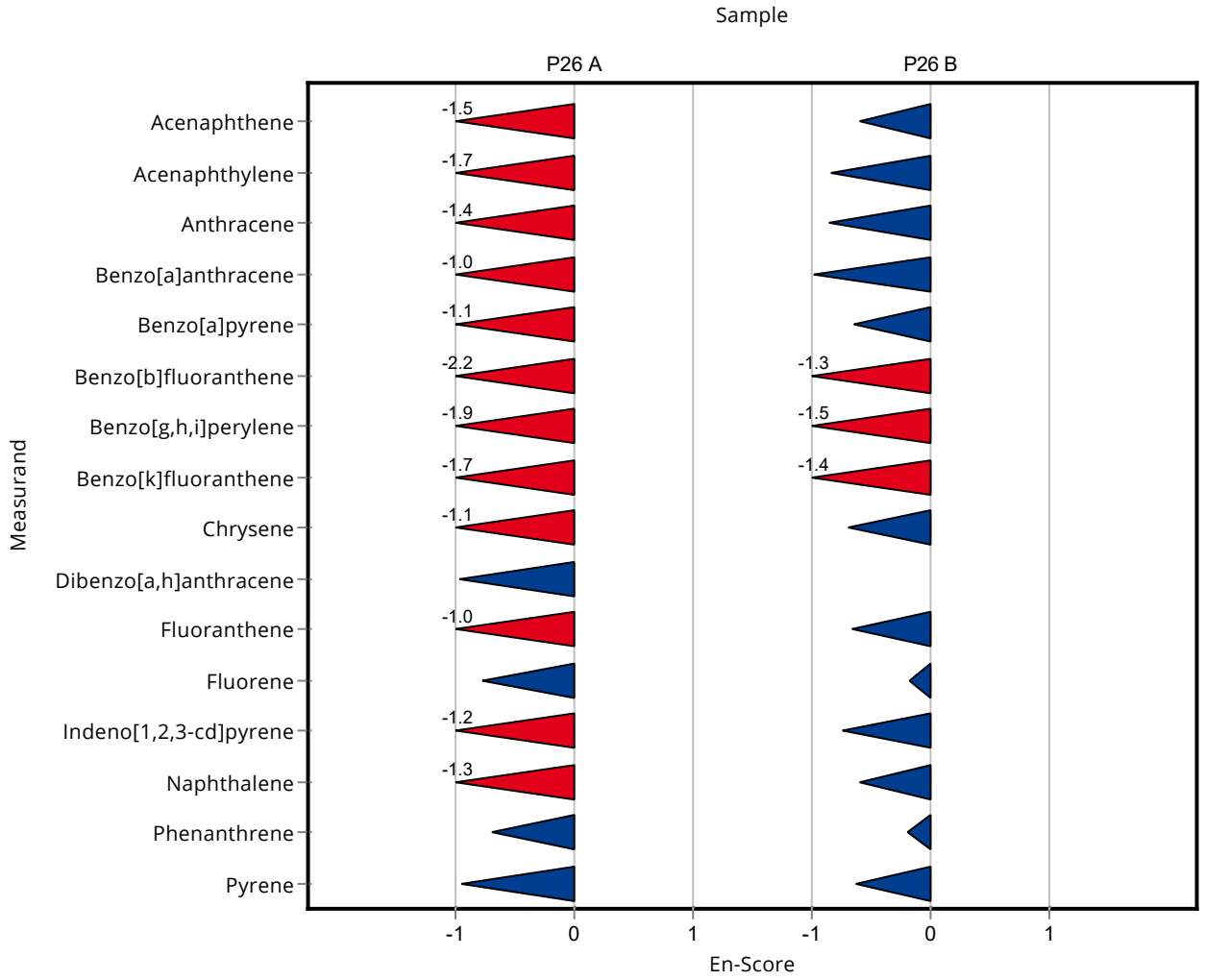
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0003

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	184 ± 44.2	58.2	75.9	-0.65
Benzo[b]fluoranthene	ng/l	277 ± 43.5	166 ± 38.2	69.3	59.9	-1.26
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	95.6 ± 25.8	86.2	46.6	-1.49
Benzo[k]fluoranthene	ng/l	229 ± 36.4	133 ± 29.3	57.3	58	-1.40
Chrysene	ng/l	227 ± 16.7	177 ± 35.4	50	77.8	-0.69
Dibenzo[a,h]anthracene	ng/l	- ± -	114 ± 25.1	-	-	-
Fluoranthene	ng/l	316 ± 40.1	217 ± 71.6	66.3	68.7	-0.66
Fluorene	ng/l	320 ± 40.2	295 ± 67.9	70.5	92.1	-0.18
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	190 ± 49.4	66.9	71	-0.73
Naphthalene	ng/l	277 ± 41.9	217 ± 45.6	72.1	78.2	-0.60
Phenanthrene	ng/l	267 ± 38.2	237 ± 75.8	64.1	88.8	-0.19
Pyrene	ng/l	240 ± 27	165 ± 57.8	45.6	68.8	-0.63

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0003



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0004

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	15.85 ± 2	3.38	89.1	-0.57
Acenaphthylene	ng/l	25.7 ± 2.71	26.19 ± 3.35	6.16	102	0.08
Anthracene	ng/l	19.8 ± 3.06	22.1 ± 3.48	4.94	112	0.47
Benzo[a]anthracene	ng/l	19.7 ± 2.56	21.42 ± 3.47	4.13	109	0.43
Benzo[a]pyrene	ng/l	16 ± 2.75	17.28 ± 3.55	4.32	108	0.29
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	21.7 ± 2.99	4.04	96.6	-0.19
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	22.67 ± 2.98	5.72	99.1	-0.04
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	28.22 ± 3.72	6.48	122	0.78
Chrysene	ng/l	26 ± 3.79	29.07 ± 3.54	5.71	112	0.55
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	23.75 ± 3.32	6.49	110	0.33
Fluoranthene	ng/l	26.7 ± 3.54	27.44 ± 3.35	5.61	103	0.13
Fluorene	ng/l	19.3 ± 1.71	21.15 ± 2.57	2.71	109	0.67
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	26.31 ± 3.68	6.27	105	0.20
Naphthalene	ng/l	32.6 ± 3.85	34.3 ± 4.44	6.84	105	0.25
Phenanthrene	ng/l	31.6 ± 3.47	31.99 ± 4.11	5.36	101	0.08
Pyrene	ng/l	22.2 ± 2.83	23.34 ± 2.8	4.45	105	0.25

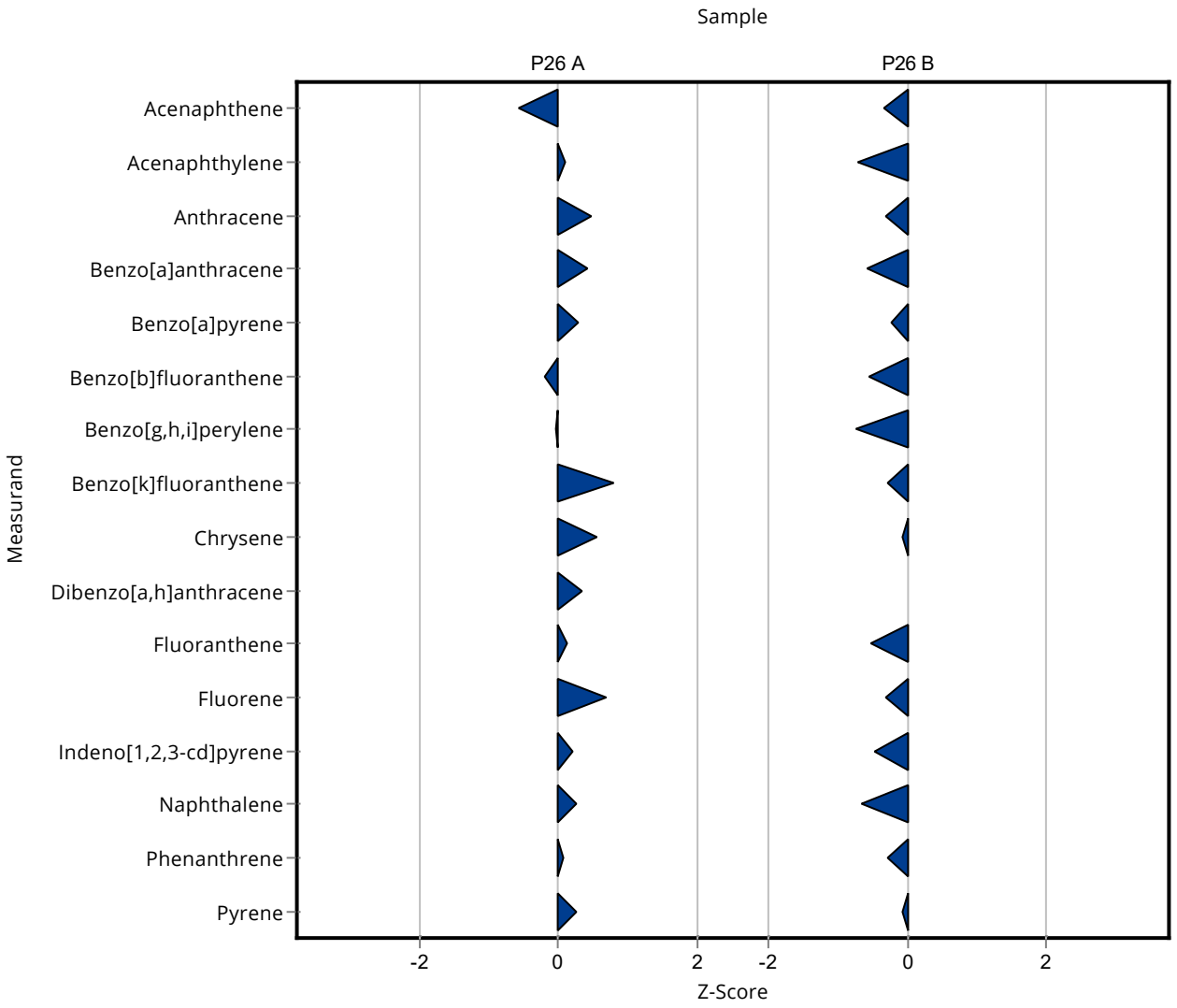
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	240.3 ± 30.4	60.1	92	-0.35
Acenaphthylene	ng/l	354 ± 35	294.1 ± 37.6	84.8	83.2	-0.70
Anthracene	ng/l	260 ± 30.9	243.6 ± 38.3	54.7	93.6	-0.31
Benzo[a]anthracene	ng/l	279 ± 35.5	245.4 ± 42.8	58.6	88	-0.57
Benzo[a]pyrene	ng/l	242 ± 19.1	229 ± 47.1	58.2	94.4	-0.23
Benzo[b]fluoranthene	ng/l	277 ± 43.5	239.8 ± 33.1	69.3	86.5	-0.54
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	141.4 ± 18.6	86.2	68.9	-0.74
Benzo[k]fluoranthene	ng/l	229 ± 36.4	213.1 ± 28.1	57.3	92.9	-0.28
Chrysene	ng/l	227 ± 16.7	224.3 ± 27.3	50	98.6	-0.06
Dibenzo[a,h]anthracene	ng/l	- ± -	127.2 ± 17.8	-	-	-
Fluoranthene	ng/l	316 ± 40.1	280.9 ± 34.3	66.3	88.9	-0.53

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0004

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	299.1 ± 36.3	70.5	93.4	-0.30
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	235.5 ± 33	66.9	88	-0.48
Naphthalene	ng/l	277 ± 41.9	229.2 ± 29.7	72.1	82.6	-0.67
Phenanthrene	ng/l	267 ± 38.2	249 ± 32	64.1	93.3	-0.28
Pyrene	ng/l	240 ± 27	236.8 ± 28.4	45.6	98.8	-0.07



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0004

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	15.85 ± 2	3.38	89.1	-0.44
Acenaphthylene	ng/l	25.7 ± 2.71	26.19 ± 3.35	6.16	102	0.07
Anthracene	ng/l	19.8 ± 3.06	22.1 ± 3.48	4.94	112	0.31
Benzo[a]anthracene	ng/l	19.7 ± 2.56	21.42 ± 3.47	4.13	109	0.24
Benzo[a]pyrene	ng/l	16 ± 2.75	17.28 ± 3.55	4.32	108	0.17
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	21.7 ± 2.99	4.04	96.6	-0.12
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	22.67 ± 2.98	5.72	99.1	-0.03
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	28.22 ± 3.72	6.48	122	0.60
Chrysene	ng/l	26 ± 3.79	29.07 ± 3.54	5.71	112	0.39
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	23.75 ± 3.32	6.49	110	0.27
Fluoranthene	ng/l	26.7 ± 3.54	27.44 ± 3.35	5.61	103	0.10
Fluorene	ng/l	19.3 ± 1.71	21.15 ± 2.57	2.71	109	0.34
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	26.31 ± 3.68	6.27	105	0.15
Naphthalene	ng/l	32.6 ± 3.85	34.3 ± 4.44	6.84	105	0.18
Phenanthrene	ng/l	31.6 ± 3.47	31.99 ± 4.11	5.36	101	0.05
Pyrene	ng/l	22.2 ± 2.83	23.34 ± 2.8	4.45	105	0.17

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	240.3 ± 30.4	60.1	92	-0.30
Acenaphthylene	ng/l	354 ± 35	294.1 ± 37.6	84.8	83.2	-0.72
Anthracene	ng/l	260 ± 30.9	243.6 ± 38.3	54.7	93.6	-0.20
Benzo[a]anthracene	ng/l	279 ± 35.5	245.4 ± 42.8	58.6	88	-0.36

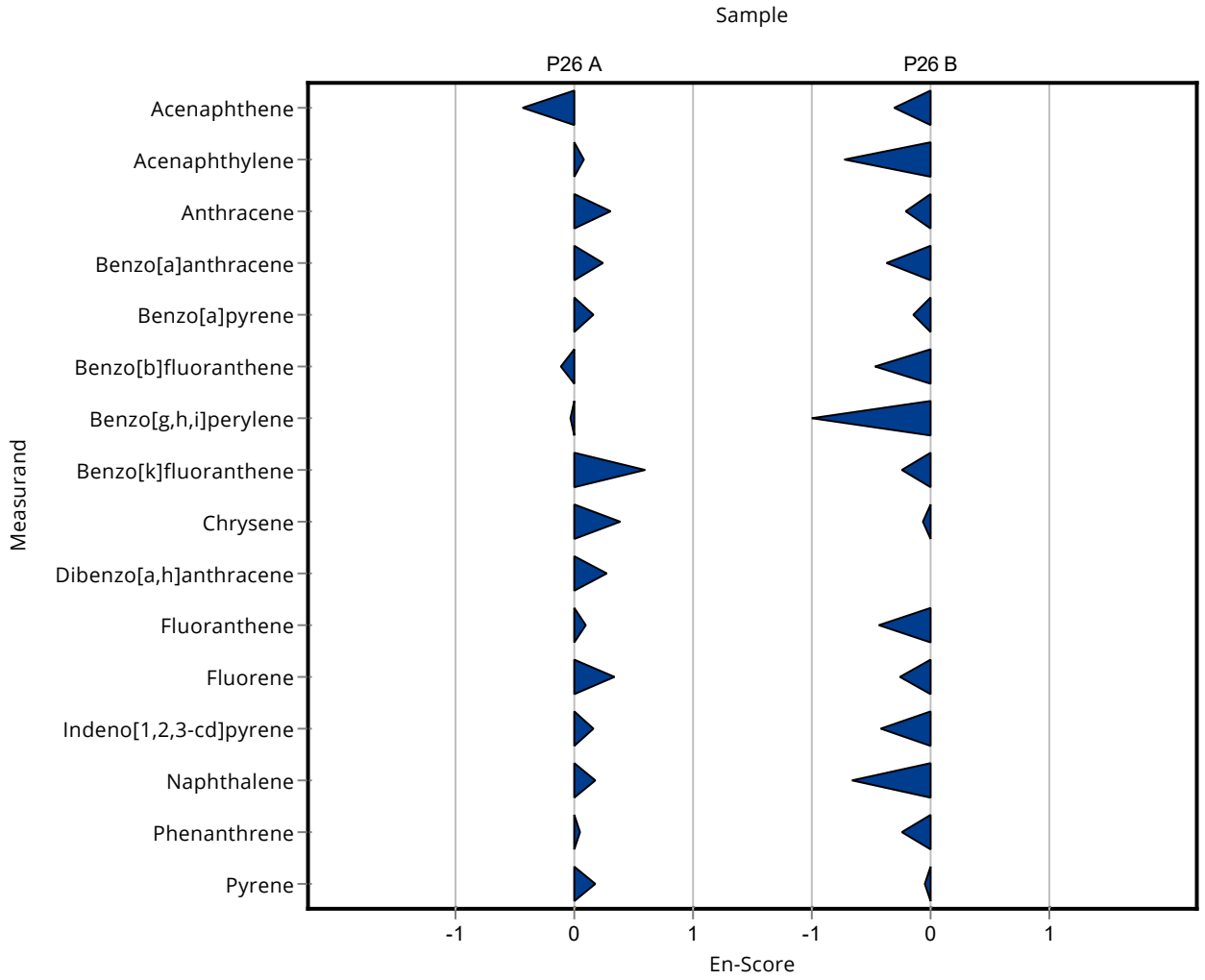
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0004

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	229 ± 47.1	58.2	94.4	-0.14
Benzo[b]fluoranthene	ng/l	277 ± 43.5	239.8 ± 33.1	69.3	86.5	-0.47
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	141.4 ± 18.6	86.2	68.9	-1.00
Benzo[k]fluoranthene	ng/l	229 ± 36.4	213.1 ± 28.1	57.3	92.9	-0.24
Chrysene	ng/l	227 ± 16.7	224.3 ± 27.3	50	98.6	-0.05
Dibenzo[a,h]anthracene	ng/l	- ± -	127.2 ± 17.8	-	-	-
Fluoranthene	ng/l	316 ± 40.1	280.9 ± 34.3	66.3	88.9	-0.44
Fluorene	ng/l	320 ± 40.2	299.1 ± 36.3	70.5	93.4	-0.26
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	235.5 ± 33	66.9	88	-0.42
Naphthalene	ng/l	277 ± 41.9	229.2 ± 29.7	72.1	82.6	-0.66
Phenanthrene	ng/l	267 ± 38.2	249 ± 32	64.1	93.3	-0.24
Pyrene	ng/l	240 ± 27	236.8 ± 28.4	45.6	98.8	-0.05

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0004



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0005

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	80.5 ± 48.74	3.38	453	18.55
Acenaphthylene	ng/l	25.7 ± 2.71	73.85 ± 58.84	6.16	288	7.82
Anthracene	ng/l	19.8 ± 3.06	14.3 ± 7.93	4.94	72.4	-1.10
Benzo[a]anthracene	ng/l	19.7 ± 2.56	7.45 ± 4.1	4.13	37.9	-2.96
Benzo[a]pyrene	ng/l	16 ± 2.75	9.55 ± 6.1	4.32	59.6	-1.49
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	15.61 ± 6.86	4.04	69.5	-1.70
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	21.61 ± 10.33	5.72	94.4	-0.22
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	14.6 ± 5.55	6.48	63.1	-1.32
Chrysene	ng/l	26 ± 3.79	15.15 ± 3.65	5.71	58.4	-1.89
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	17.16 ± 8.29	6.49	79.3	-0.69
Fluoranthene	ng/l	26.7 ± 3.54	20.39 ± 9.52	5.61	76.3	-1.13
Fluorene	ng/l	19.3 ± 1.71	16.48 ± 7.03	2.71	85.2	-1.05
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	23.23 ± 14.74	6.27	92.6	-0.30
Naphthalene	ng/l	32.6 ± 3.85	51.97 ± 26.53	6.84	160	2.83
Phenanthrene	ng/l	31.6 ± 3.47	16.48 ± 3.45	5.36	52.2	-2.81
Pyrene	ng/l	22.2 ± 2.83	17.29 ± 6.69	4.45	77.7	-1.11

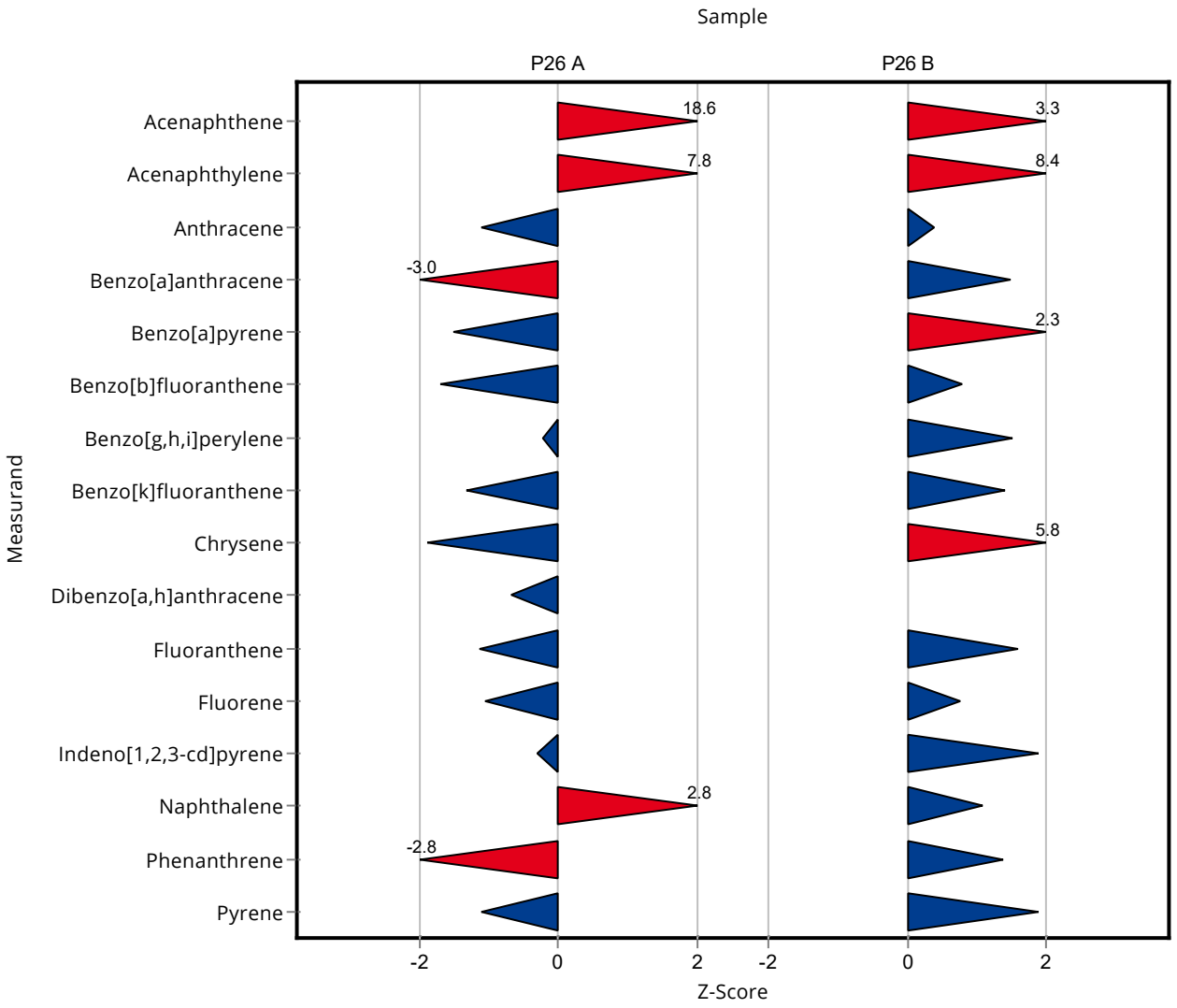
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	461.88 ± 279.67	60.1	177	3.34
Acenaphthylene	ng/l	354 ± 35	1069.7 ± 852.23	84.8	303	8.44
Anthracene	ng/l	260 ± 30.9	280.79 ± 155.61	54.7	108	0.37
Benzo[a]anthracene	ng/l	279 ± 35.5	365.99 ± 201.29	58.6	131	1.48
Benzo[a]pyrene	ng/l	242 ± 19.1	374.56 ± 239.15	58.2	154	2.27
Benzo[b]fluoranthene	ng/l	277 ± 43.5	332.09 ± 145.95	69.3	120	0.79
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	335.18 ± 160.15	86.2	163	1.51
Benzo[k]fluoranthene	ng/l	229 ± 36.4	310.05 ± 117.85	57.3	135	1.41
Chrysene	ng/l	227 ± 16.7	520 ± 125.73	50	229	5.85
Dibenzo[a,h]anthracene	ng/l	- ± -	378.29 ± 182.75	-	-	-
Fluoranthene	ng/l	316 ± 40.1	421.7 ± 196.93	66.3	134	1.60

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0005

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	374.25 ± 159.81	70.5	117	0.77
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	392.96 ± 249.34	66.9	147	1.87
Naphthalene	ng/l	277 ± 41.9	354.59 ± 181.02	72.1	128	1.07
Phenanthrene	ng/l	267 ± 38.2	355.6 ± 74.43	64.1	133	1.38
Pyrene	ng/l	240 ± 27	325.19 ± 125.72	45.6	136	1.87



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0005

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	80.5 ± 48.74	3.38	453	0.64
Acenaphthylene	ng/l	25.7 ± 2.71	73.85 ± 58.84	6.16	288	0.41
Anthracene	ng/l	19.8 ± 3.06	14.3 ± 7.93	4.94	72.4	-0.34
Benzo[a]anthracene	ng/l	19.7 ± 2.56	7.45 ± 4.1	4.13	37.9	-1.42
Benzo[a]pyrene	ng/l	16 ± 2.75	9.55 ± 6.1	4.32	59.6	-0.52
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	15.61 ± 6.86	4.04	69.5	-0.49
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	21.61 ± 10.33	5.72	94.4	-0.06
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	14.6 ± 5.55	6.48	63.1	-0.72
Chrysene	ng/l	26 ± 3.79	15.15 ± 3.65	5.71	58.4	-1.31
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	17.16 ± 8.29	6.49	79.3	-0.26
Fluoranthene	ng/l	26.7 ± 3.54	20.39 ± 9.52	5.61	76.3	-0.33
Fluorene	ng/l	19.3 ± 1.71	16.48 ± 7.03	2.71	85.2	-0.20
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	23.23 ± 14.74	6.27	92.6	-0.06
Naphthalene	ng/l	32.6 ± 3.85	51.97 ± 26.53	6.84	160	0.36
Phenanthrene	ng/l	31.6 ± 3.47	16.48 ± 3.45	5.36	52.2	-1.95
Pyrene	ng/l	22.2 ± 2.83	17.29 ± 6.69	4.45	77.7	-0.36

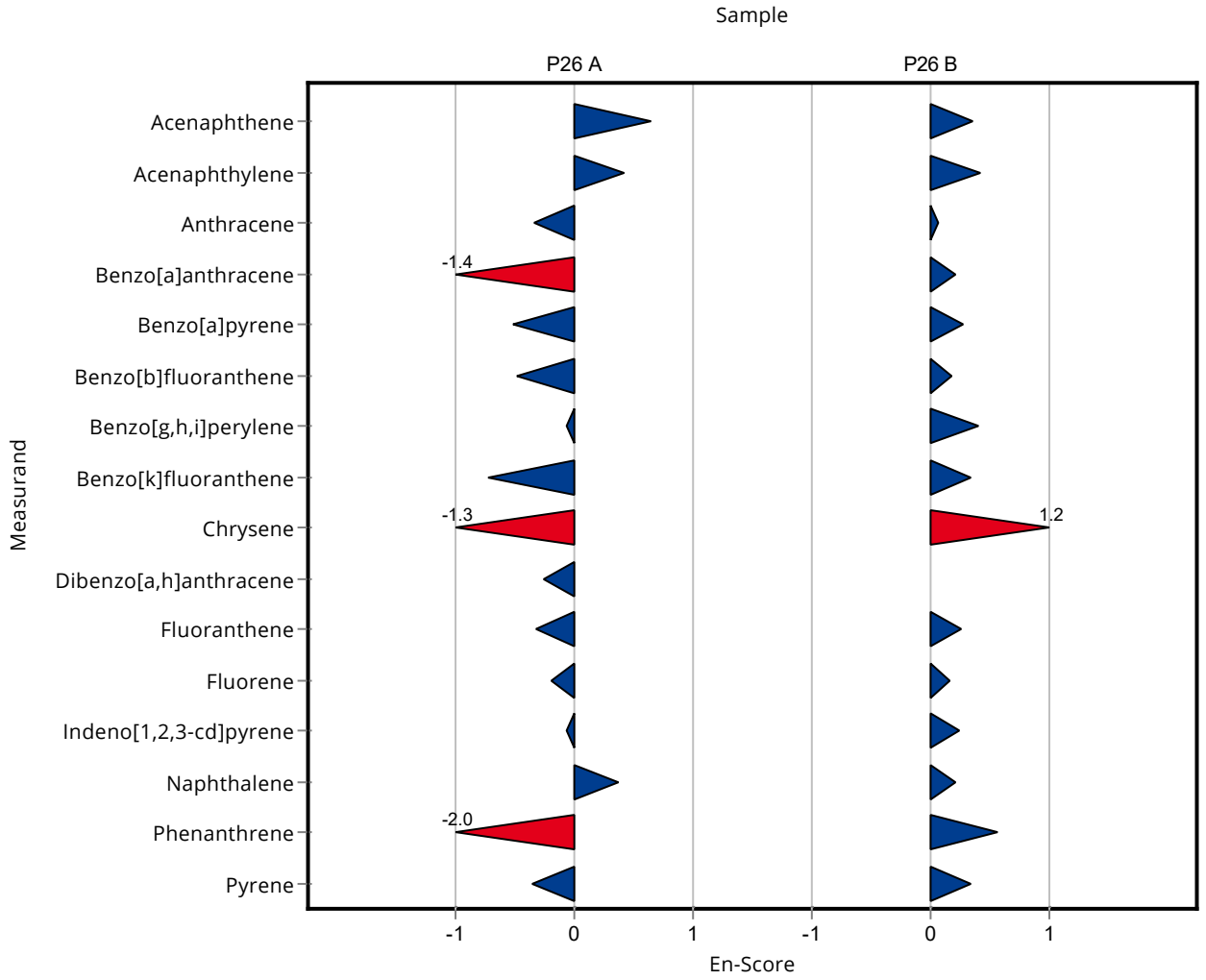
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	461.88 ± 279.67	60.1	177	0.36
Acenaphthylene	ng/l	354 ± 35	1069.7 ± 852.23	84.8	303	0.42
Anthracene	ng/l	260 ± 30.9	280.79 ± 155.61	54.7	108	0.07
Benzo[a]anthracene	ng/l	279 ± 35.5	365.99 ± 201.29	58.6	131	0.22

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0005

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	374.56 ± 239.15	58.2	154	0.28
Benzo[b]fluoranthene	ng/l	277 ± 43.5	332.09 ± 145.95	69.3	120	0.19
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	335.18 ± 160.15	86.2	163	0.40
Benzo[k]fluoranthene	ng/l	229 ± 36.4	310.05 ± 117.85	57.3	135	0.34
Chrysene	ng/l	227 ± 16.7	520 ± 125.73	50	229	1.16
Dibenzo[a,h]anthracene	ng/l	- ± -	378.29 ± 182.75	-	-	-
Fluoranthene	ng/l	316 ± 40.1	421.7 ± 196.93	66.3	134	0.27
Fluorene	ng/l	320 ± 40.2	374.25 ± 159.81	70.5	117	0.17
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	392.96 ± 249.34	66.9	147	0.25
Naphthalene	ng/l	277 ± 41.9	354.59 ± 181.02	72.1	128	0.21
Phenanthrene	ng/l	267 ± 38.2	355.6 ± 74.43	64.1	133	0.58
Pyrene	ng/l	240 ± 27	325.19 ± 125.72	45.6	136	0.34


Sample
P26 A
P26 B
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
Measurand
-1.4
-1.3
1.2
-2.0
-1
0
1
-1
0
1
En-Score

Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0006

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	20 ± 4	3.38	112	0.65
Acenaphthylene	ng/l	25.7 ± 2.71	30.2 ± 6	6.16	118	0.74
Anthracene	ng/l	19.8 ± 3.06	27.4 ± 5.5	4.94	139	1.55
Benzo[a]anthracene	ng/l	19.7 ± 2.56	19.3 ± 3.9	4.13	98.2	-0.09
Benzo[a]pyrene	ng/l	16 ± 2.75	21.2 ± 4.2	4.32	132	1.20
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	29.2 ± 5.8	4.04	130	1.66
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	19.4 ± 3.9	5.72	84.8	-0.61
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	21.8 ± 4.4	6.48	94.2	-0.21
Chrysene	ng/l	26 ± 3.79	25.8 ± 5.2	5.71	99.4	-0.03
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	25.6 ± 5.1	6.49	118	0.61
Fluoranthene	ng/l	26.7 ± 3.54	30.8 ± 6.2	5.61	115	0.73
Fluorene	ng/l	19.3 ± 1.71	20.6 ± 4.1	2.71	107	0.47
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	31.8 ± 6.4	6.27	127	1.07
Naphthalene	ng/l	32.6 ± 3.85	41 ± 8.2	6.84	126	1.23
Phenanthrene	ng/l	31.6 ± 3.47	31.3 ± 6.3	5.36	99.2	-0.05
Pyrene	ng/l	22.2 ± 2.83	22.4 ± 4.5	4.45	101	0.03

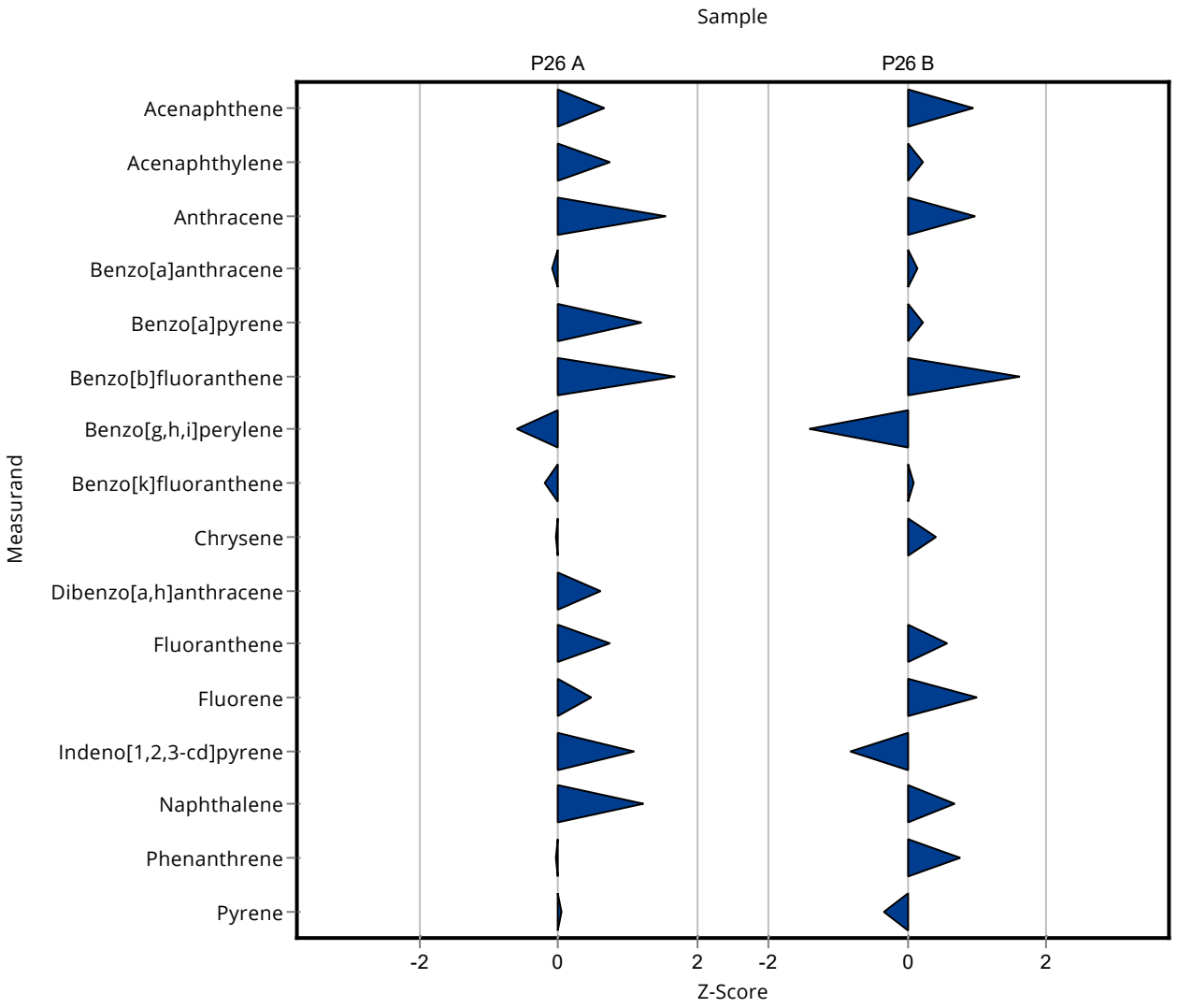
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	318 ± 64	60.1	122	0.95
Acenaphthylene	ng/l	354 ± 35	372 ± 74	84.8	105	0.22
Anthracene	ng/l	260 ± 30.9	313 ± 63	54.7	120	0.96
Benzo[a]anthracene	ng/l	279 ± 35.5	287 ± 57	58.6	103	0.14
Benzo[a]pyrene	ng/l	242 ± 19.1	256 ± 51	58.2	106	0.23
Benzo[b]fluoranthene	ng/l	277 ± 43.5	388 ± 78	69.3	140	1.60
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	83.8 ± 16.8	86.2	40.8	-1.41
Benzo[k]fluoranthene	ng/l	229 ± 36.4	234 ± 47	57.3	102	0.08
Chrysene	ng/l	227 ± 16.7	248 ± 50	50	109	0.41
Dibenzo[a,h]anthracene	ng/l	- ± -	91.3 ± 18.3	-	-	-
Fluoranthene	ng/l	316 ± 40.1	353 ± 71	66.3	112	0.56

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0006

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	391 ± 78	70.5	122	1.00
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	213 ± 43	66.9	79.5	-0.82
Naphthalene	ng/l	277 ± 41.9	326 ± 65	72.1	118	0.67
Phenanthrene	ng/l	267 ± 38.2	316 ± 63	64.1	118	0.76
Pyrene	ng/l	240 ± 27	225 ± 45	45.6	93.8	-0.32



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0006

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	20 ± 4	3.38	112	0.27
Acenaphthylene	ng/l	25.7 ± 2.71	30.2 ± 6	6.16	118	0.37
Anthracene	ng/l	19.8 ± 3.06	27.4 ± 5.5	4.94	139	0.67
Benzo[a]anthracene	ng/l	19.7 ± 2.56	19.3 ± 3.9	4.13	98.2	-0.04
Benzo[a]pyrene	ng/l	16 ± 2.75	21.2 ± 4.2	4.32	132	0.59
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	29.2 ± 5.8	4.04	130	0.57
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	19.4 ± 3.9	5.72	84.8	-0.43
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	21.8 ± 4.4	6.48	94.2	-0.14
Chrysene	ng/l	26 ± 3.79	25.8 ± 5.2	5.71	99.4	-0.01
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	25.6 ± 5.1	6.49	118	0.36
Fluoranthene	ng/l	26.7 ± 3.54	30.8 ± 6.2	5.61	115	0.32
Fluorene	ng/l	19.3 ± 1.71	20.6 ± 4.1	2.71	107	0.15
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	31.8 ± 6.4	6.27	127	0.51
Naphthalene	ng/l	32.6 ± 3.85	41 ± 8.2	6.84	126	0.50
Phenanthrene	ng/l	31.6 ± 3.47	31.3 ± 6.3	5.36	99.2	-0.02
Pyrene	ng/l	22.2 ± 2.83	22.4 ± 4.5	4.45	101	0.02

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	318 ± 64	60.1	122	0.43
Acenaphthylene	ng/l	354 ± 35	372 ± 74	84.8	105	0.12
Anthracene	ng/l	260 ± 30.9	313 ± 63	54.7	120	0.41
Benzo[a]anthracene	ng/l	279 ± 35.5	287 ± 57	58.6	103	0.07

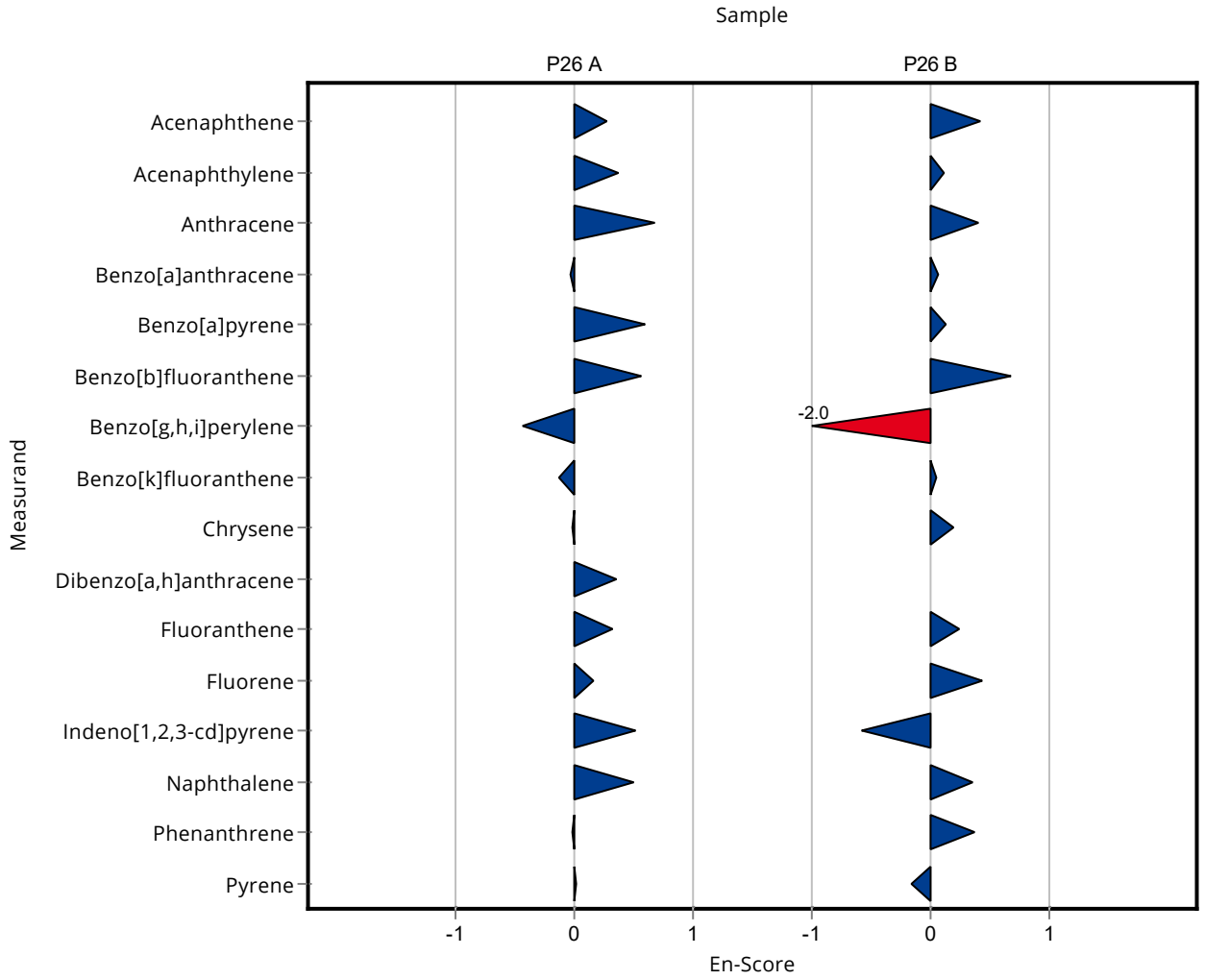
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0006

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	256 ± 51	58.2	106	0.13
Benzo[b]fluoranthene	ng/l	277 ± 43.5	388 ± 78	69.3	140	0.68
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	83.8 ± 16.8	86.2	40.8	-1.95
Benzo[k]fluoranthene	ng/l	229 ± 36.4	234 ± 47	57.3	102	0.05
Chrysene	ng/l	227 ± 16.7	248 ± 50	50	109	0.20
Dibenzo[a,h]anthracene	ng/l	- ± -	91.3 ± 18.3	-	-	-
Fluoranthene	ng/l	316 ± 40.1	353 ± 71	66.3	112	0.25
Fluorene	ng/l	320 ± 40.2	391 ± 78	70.5	122	0.44
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	213 ± 43	66.9	79.5	-0.58
Naphthalene	ng/l	277 ± 41.9	326 ± 65	72.1	118	0.36
Phenanthrene	ng/l	267 ± 38.2	316 ± 63	64.1	118	0.37
Pyrene	ng/l	240 ± 27	225 ± 45	45.6	93.8	-0.16

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0006



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0007

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	18 ± 1.6	3.38	101	0.06
Acenaphthylene	ng/l	25.7 ± 2.71	27.2 ± 2.4	6.16	106	0.25
Anthracene	ng/l	19.8 ± 3.06	16.7 ± 1.5	4.94	84.5	-0.62
Benzo[a]anthracene	ng/l	19.7 ± 2.56	15.3 ± 1.4	4.13	77.8	-1.06
Benzo[a]pyrene	ng/l	16 ± 2.75	11.8 ± 1.1	4.32	73.7	-0.97
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	17.6 ± 1.6	4.04	78.3	-1.20
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	17.5 ± 1.6	5.72	76.5	-0.94
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	21.9 ± 2	6.48	94.6	-0.19
Chrysene	ng/l	26 ± 3.79	25.3 ± 2.3	5.71	97.5	-0.11
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	15.6 ± 1.4	6.49	72.1	-0.93
Fluoranthene	ng/l	26.7 ± 3.54	23.8 ± 2.1	5.61	89.1	-0.52
Fluorene	ng/l	19.3 ± 1.71	17 ± 1.5	2.71	87.9	-0.86
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	17.6 ± 1.6	6.27	70.2	-1.19
Naphthalene	ng/l	32.6 ± 3.85	30.4 ± 2.7	6.84	93.3	-0.32
Phenanthrene	ng/l	31.6 ± 3.47	28.8 ± 2.6	5.36	91.3	-0.51
Pyrene	ng/l	22.2 ± 2.83	20.6 ± 1.9	4.45	92.6	-0.37

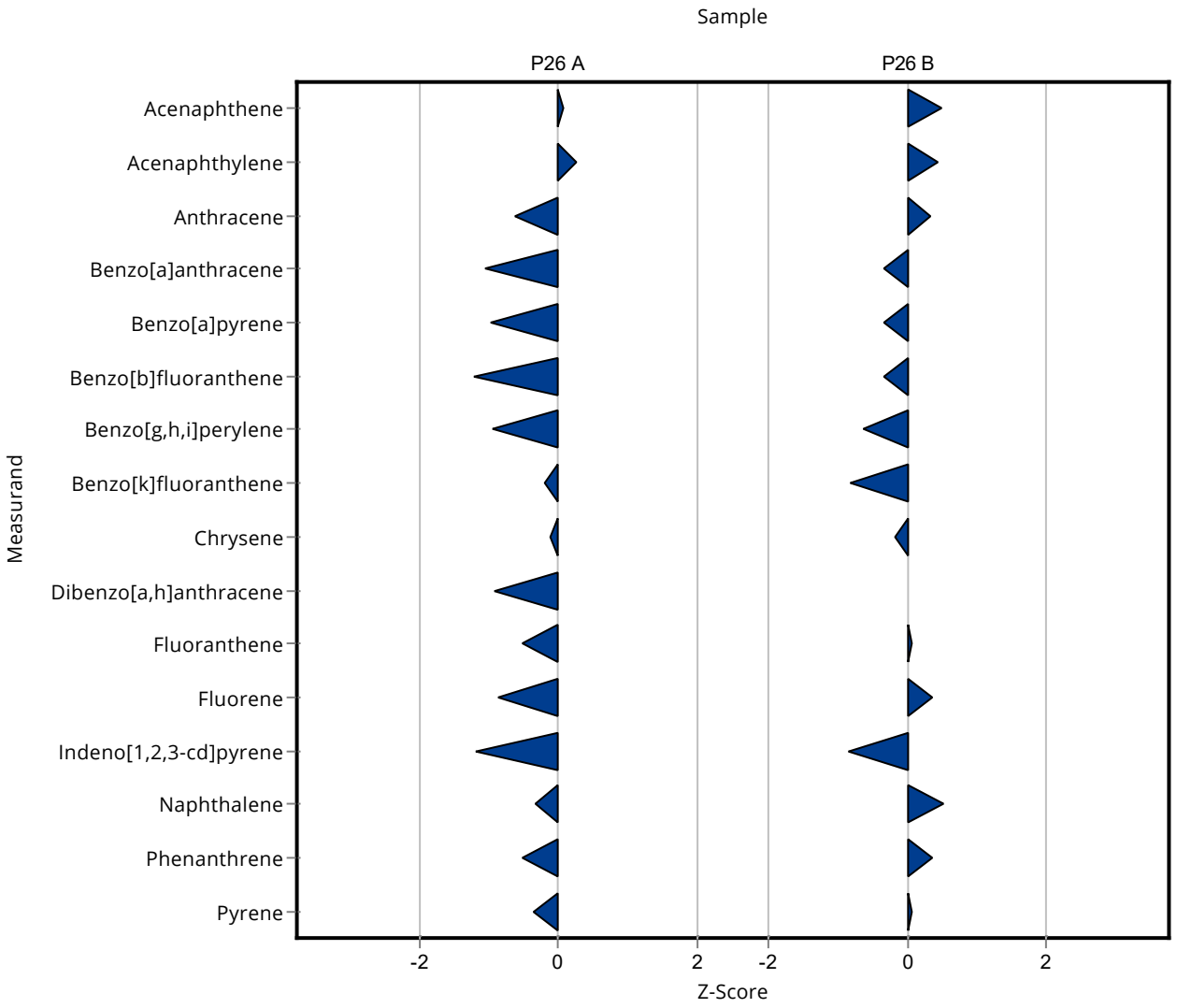
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	291 ± 26	60.1	111	0.50
Acenaphthylene	ng/l	354 ± 35	391 ± 35	84.8	111	0.44
Anthracene	ng/l	260 ± 30.9	279 ± 25	54.7	107	0.34
Benzo[a]anthracene	ng/l	279 ± 35.5	259 ± 23	58.6	92.8	-0.34
Benzo[a]pyrene	ng/l	242 ± 19.1	223 ± 20	58.2	92	-0.33
Benzo[b]fluoranthene	ng/l	277 ± 43.5	254 ± 23	69.3	91.7	-0.33
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	151 ± 14	86.2	73.5	-0.63
Benzo[k]fluoranthene	ng/l	229 ± 36.4	183 ± 17	57.3	79.8	-0.81
Chrysene	ng/l	227 ± 16.7	219 ± 20	50	96.3	-0.17
Dibenzo[a,h]anthracene	ng/l	- ± -	169 ± 15	-	-	-
Fluoranthene	ng/l	316 ± 40.1	320 ± 29	66.3	101	0.06

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0007

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	346 ± 31	70.5	108	0.36
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	212 ± 19	66.9	79.2	-0.83
Naphthalene	ng/l	277 ± 41.9	315 ± 28	72.1	114	0.52
Phenanthrene	ng/l	267 ± 38.2	290 ± 26	64.1	109	0.36
Pyrene	ng/l	240 ± 27	243 ± 22	45.6	101	0.07



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0007

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	18 ± 1.6	3.38	101	0.06
Acenaphthylene	ng/l	25.7 ± 2.71	27.2 ± 2.4	6.16	106	0.28
Anthracene	ng/l	19.8 ± 3.06	16.7 ± 1.5	4.94	84.5	-0.71
Benzo[a]anthracene	ng/l	19.7 ± 2.56	15.3 ± 1.4	4.13	77.8	-1.15
Benzo[a]pyrene	ng/l	16 ± 2.75	11.8 ± 1.1	4.32	73.7	-1.20
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	17.6 ± 1.6	4.04	78.3	-1.16
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	17.5 ± 1.6	5.72	76.5	-1.42
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	21.9 ± 2	6.48	94.6	-0.22
Chrysene	ng/l	26 ± 3.79	25.3 ± 2.3	5.71	97.5	-0.11
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	15.6 ± 1.4	6.49	72.1	-1.16
Fluoranthene	ng/l	26.7 ± 3.54	23.8 ± 2.1	5.61	89.1	-0.53
Fluorene	ng/l	19.3 ± 1.71	17 ± 1.5	2.71	87.9	-0.68
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	17.6 ± 1.6	6.27	70.2	-1.63
Naphthalene	ng/l	32.6 ± 3.85	30.4 ± 2.7	6.84	93.3	-0.33
Phenanthrene	ng/l	31.6 ± 3.47	28.8 ± 2.6	5.36	91.3	-0.44
Pyrene	ng/l	22.2 ± 2.83	20.6 ± 1.9	4.45	92.6	-0.35

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	291 ± 26	60.1	111	0.47
Acenaphthylene	ng/l	354 ± 35	391 ± 35	84.8	111	0.48
Anthracene	ng/l	260 ± 30.9	279 ± 25	54.7	107	0.32
Benzo[a]anthracene	ng/l	279 ± 35.5	259 ± 23	58.6	92.8	-0.34

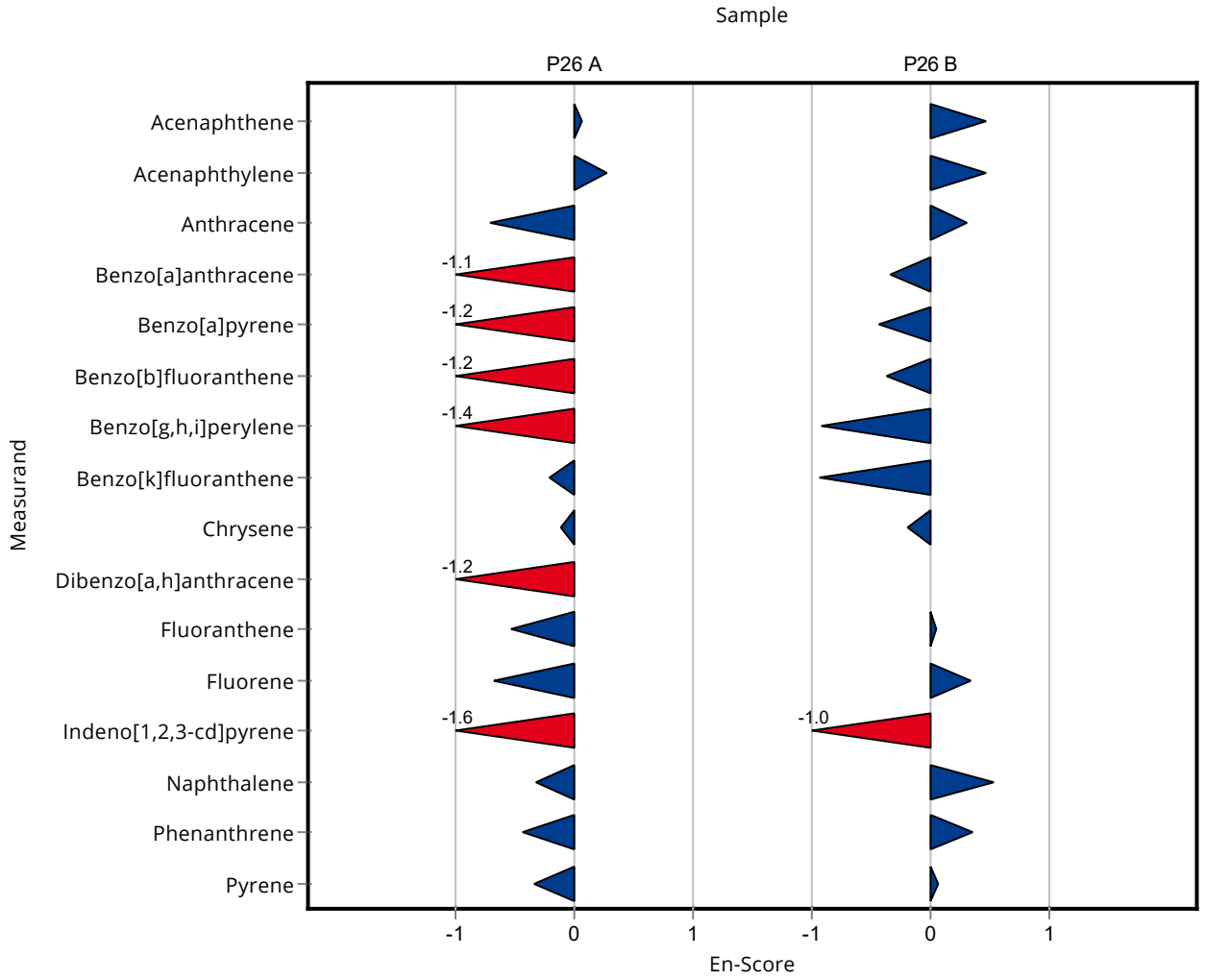
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0007

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	223 ± 20	58.2	92	-0.44
Benzo[b]fluoranthene	ng/l	277 ± 43.5	254 ± 23	69.3	91.7	-0.37
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	151 ± 14	86.2	73.5	-0.92
Benzo[k]fluoranthene	ng/l	229 ± 36.4	183 ± 17	57.3	79.8	-0.93
Chrysene	ng/l	227 ± 16.7	219 ± 20	50	96.3	-0.19
Dibenzo[a,h]anthracene	ng/l	- ± -	169 ± 15	-	-	-
Fluoranthene	ng/l	316 ± 40.1	320 ± 29	66.3	101	0.06
Fluorene	ng/l	320 ± 40.2	346 ± 31	70.5	108	0.35
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	212 ± 19	66.9	79.2	-1.03
Naphthalene	ng/l	277 ± 41.9	315 ± 28	72.1	114	0.54
Phenanthrene	ng/l	267 ± 38.2	290 ± 26	64.1	109	0.36
Pyrene	ng/l	240 ± 27	243 ± 22	45.6	101	0.06

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0007



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0008

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	17 ± 6.79	3.38	95.6	-0.23
Acenaphthylene	ng/l	25.7 ± 2.71	24.2 ± 9.7	6.16	94.3	-0.24
Anthracene	ng/l	19.8 ± 3.06	16.8 ± 6.72	4.94	85	-0.60
Benzo[a]anthracene	ng/l	19.7 ± 2.56	17.7 ± 7.08	4.13	90.1	-0.47
Benzo[a]pyrene	ng/l	16 ± 2.75	14.4 ± 5.19	4.32	89.9	-0.37
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	24.6 ± 9.85	4.04	109	0.53
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	24.3 ± 9.73	5.72	106	0.25
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	19.6 ± 7.83	6.48	84.7	-0.55
Chrysene	ng/l	26 ± 3.79	25.9 ± 10.34	5.71	99.8	-0.01
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	19 ± 7.59	6.49	87.8	-0.41
Fluoranthene	ng/l	26.7 ± 3.54	26.3 ± 10.5	5.61	98.5	-0.07
Fluorene	ng/l	19.3 ± 1.71	18.9 ± 7.54	2.71	97.7	-0.16
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.1 ± 11.22	6.27	112	0.48
Naphthalene	ng/l	32.6 ± 3.85	30.9 ± 12.36	6.84	94.8	-0.25
Phenanthrene	ng/l	31.6 ± 3.47	29.8 ± 11.93	5.36	94.4	-0.33
Pyrene	ng/l	22.2 ± 2.83	21.6 ± 8.65	4.45	97.1	-0.15

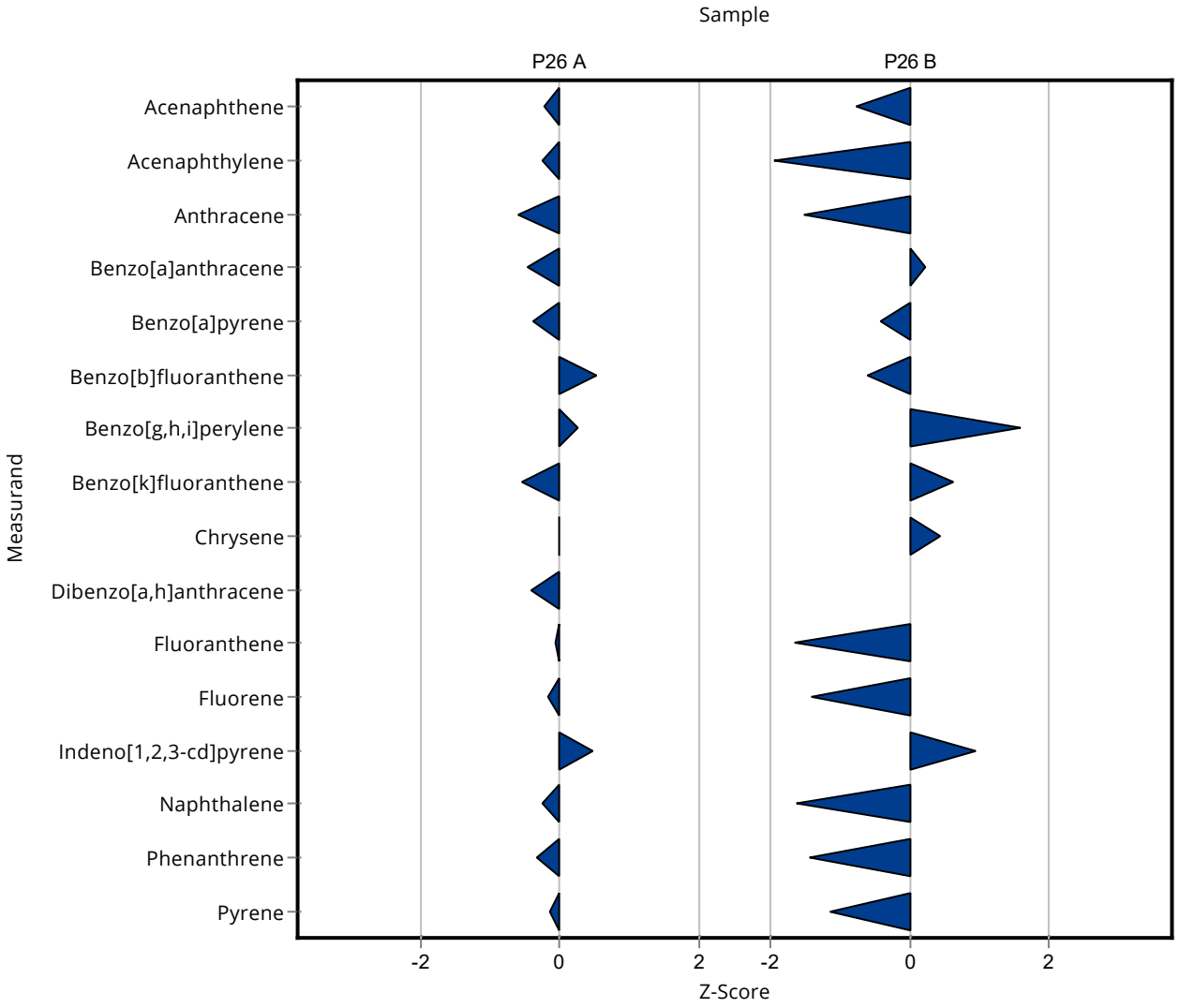
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	216 ± 86.5	60.1	82.7	-0.75
Acenaphthylene	ng/l	354 ± 35	188 ± 75.2	84.8	53.2	-1.95
Anthracene	ng/l	260 ± 30.9	178 ± 71.4	54.7	68.4	-1.51
Benzo[a]anthracene	ng/l	279 ± 35.5	292 ± 117	58.6	105	0.22
Benzo[a]pyrene	ng/l	242 ± 19.1	219 ± 87.6	58.2	90.3	-0.40
Benzo[b]fluoranthene	ng/l	277 ± 43.5	235 ± 93.8	69.3	84.8	-0.61
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	343 ± 137.3	86.2	167	1.60
Benzo[k]fluoranthene	ng/l	229 ± 36.4	265 ± 105.9	57.3	116	0.62
Chrysene	ng/l	227 ± 16.7	249 ± 99.5	50	110	0.43
Dibenzo[a,h]anthracene	ng/l	- ± -	495 ± 198.1	-	-	-
Fluoranthene	ng/l	316 ± 40.1	206 ± 82.3	66.3	65.2	-1.66

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0008

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	222 ± 88.9	70.5	69.3	-1.40
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	331 ± 132.4	66.9	124	0.94
Naphthalene	ng/l	277 ± 41.9	160 ± 64.1	72.1	57.7	-1.63
Phenanthrene	ng/l	267 ± 38.2	175 ± 70	64.1	65.5	-1.44
Pyrene	ng/l	240 ± 27	188 ± 75	45.6	78.4	-1.14



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0008

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	17 ± 6.79	3.38	95.6	-0.06
Acenaphthylene	ng/l	25.7 ± 2.71	24.2 ± 9.7	6.16	94.3	-0.07
Anthracene	ng/l	19.8 ± 3.06	16.8 ± 6.72	4.94	85	-0.21
Benzo[a]anthracene	ng/l	19.7 ± 2.56	17.7 ± 7.08	4.13	90.1	-0.14
Benzo[a]pyrene	ng/l	16 ± 2.75	14.4 ± 5.19	4.32	89.9	-0.15
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	24.6 ± 9.85	4.04	109	0.11
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	24.3 ± 9.73	5.72	106	0.07
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	19.6 ± 7.83	6.48	84.7	-0.22
Chrysene	ng/l	26 ± 3.79	25.9 ± 10.34	5.71	99.8	0.00
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	19 ± 7.59	6.49	87.8	-0.17
Fluoranthene	ng/l	26.7 ± 3.54	26.3 ± 10.5	5.61	98.5	-0.02
Fluorene	ng/l	19.3 ± 1.71	18.9 ± 7.54	2.71	97.7	-0.03
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.1 ± 11.22	6.27	112	0.13
Naphthalene	ng/l	32.6 ± 3.85	30.9 ± 12.36	6.84	94.8	-0.07
Phenanthrene	ng/l	31.6 ± 3.47	29.8 ± 11.93	5.36	94.4	-0.07
Pyrene	ng/l	22.2 ± 2.83	21.6 ± 8.65	4.45	97.1	-0.04

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	216 ± 86.5	60.1	82.7	-0.26
Acenaphthylene	ng/l	354 ± 35	188 ± 75.2	84.8	53.2	-1.07
Anthracene	ng/l	260 ± 30.9	178 ± 71.4	54.7	68.4	-0.56
Benzo[a]anthracene	ng/l	279 ± 35.5	292 ± 117	58.6	105	0.05

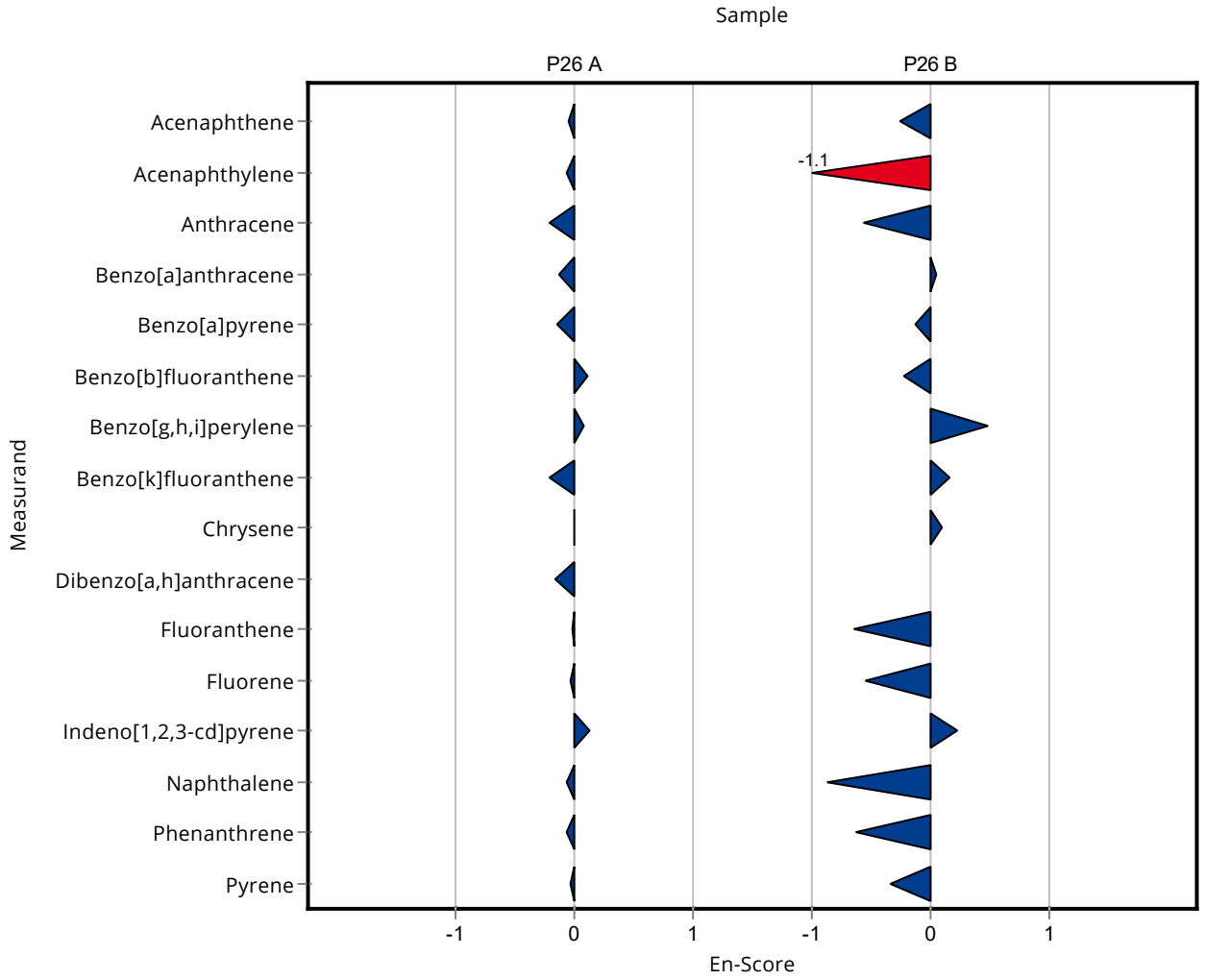
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0008

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	219 ± 87.6	58.2	90.3	-0.13
Benzo[b]fluoranthene	ng/l	277 ± 43.5	235 ± 93.8	69.3	84.8	-0.22
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	343 ± 137.3	86.2	167	0.49
Benzo[k]fluoranthene	ng/l	229 ± 36.4	265 ± 105.9	57.3	116	0.17
Chrysene	ng/l	227 ± 16.7	249 ± 99.5	50	110	0.11
Dibenzo[a,h]anthracene	ng/l	- ± -	495 ± 198.1	-	-	-
Fluoranthene	ng/l	316 ± 40.1	206 ± 82.3	66.3	65.2	-0.65
Fluorene	ng/l	320 ± 40.2	222 ± 88.9	70.5	69.3	-0.54
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	331 ± 132.4	66.9	124	0.24
Naphthalene	ng/l	277 ± 41.9	160 ± 64.1	72.1	57.7	-0.87
Phenanthrene	ng/l	267 ± 38.2	175 ± 70	64.1	65.5	-0.63
Pyrene	ng/l	240 ± 27	188 ± 75	45.6	78.4	-0.34

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0008



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0009

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	- ± -	3.38	-	-
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	- ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	- ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	- ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	- ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	- ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	- ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	- ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	- ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	- ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	- ± -	2.71	-	-
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	- ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	- ± -	6.84	-	-
Phenanthrene	ng/l	31.6 ± 3.47	- ± -	5.36	-	-
Pyrene	ng/l	22.2 ± 2.83	- ± -	4.45	-	-

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	- ± -	60.1	-	-
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-
Benzo[a]pyrene	ng/l	242 ± 19.1	- ± -	58.2	-	-
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	- ± -	86.2	-	-
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	- ± -	66.3	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0009

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	- ± -	70.5	-	-
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	- ± -	72.1	-	-
Phenanthrene	ng/l	267 ± 38.2	- ± -	64.1	-	-
Pyrene	ng/l	240 ± 27	- ± -	45.6	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0009

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	- ± -	3.38	-	-
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	- ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	- ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	- ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	- ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	- ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	- ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	- ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	- ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	- ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	- ± -	2.71	-	-
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	- ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	- ± -	6.84	-	-
Phenanthrene	ng/l	31.6 ± 3.47	- ± -	5.36	-	-
Pyrene	ng/l	22.2 ± 2.83	- ± -	4.45	-	-

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	- ± -	60.1	-	-
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0009

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	- ± -	58.2	-	-
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	- ± -	86.2	-	-
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	- ± -	66.3	-	-
Fluorene	ng/l	320 ± 40.2	- ± -	70.5	-	-
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	- ± -	72.1	-	-
Phenanthrene	ng/l	267 ± 38.2	- ± -	64.1	-	-
Pyrene	ng/l	240 ± 27	- ± -	45.6	-	-

Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0010

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	18.452 ± 1.555	3.38	104	0.20
Acenaphthylene	ng/l	25.7 ± 2.71	18.787 ± 2.224	6.16	73.2	-1.12
Anthracene	ng/l	19.8 ± 3.06	21.842 ± 2.406	4.94	111	0.42
Benzo[a]anthracene	ng/l	19.7 ± 2.56	23.172 ± 3.951	4.13	118	0.85
Benzo[a]pyrene	ng/l	16 ± 2.75	17.249 ± 1.288	4.32	108	0.29
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	25.613 ± 3.898	4.04	114	0.78
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	24.667 ± 4.351	5.72	108	0.31
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	31.363 ± 3.439	6.48	136	1.27
Chrysene	ng/l	26 ± 3.79	29.451 ± 3.649	5.71	113	0.61
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	26.961 ± 3.709	6.49	125	0.82
Fluoranthene	ng/l	26.7 ± 3.54	33.688 ± 3.286	5.61	126	1.24
Fluorene	ng/l	19.3 ± 1.71	20.921 ± 2.889	2.71	108	0.59
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.581 ± 3.287	6.27	114	0.56
Naphthalene	ng/l	32.6 ± 3.85	33.909 ± 2.708	6.84	104	0.19
Phenanthrene	ng/l	31.6 ± 3.47	31.318 ± 5.471	5.36	99.2	-0.04
Pyrene	ng/l	22.2 ± 2.83	28.349 ± 3.372	4.45	127	1.37

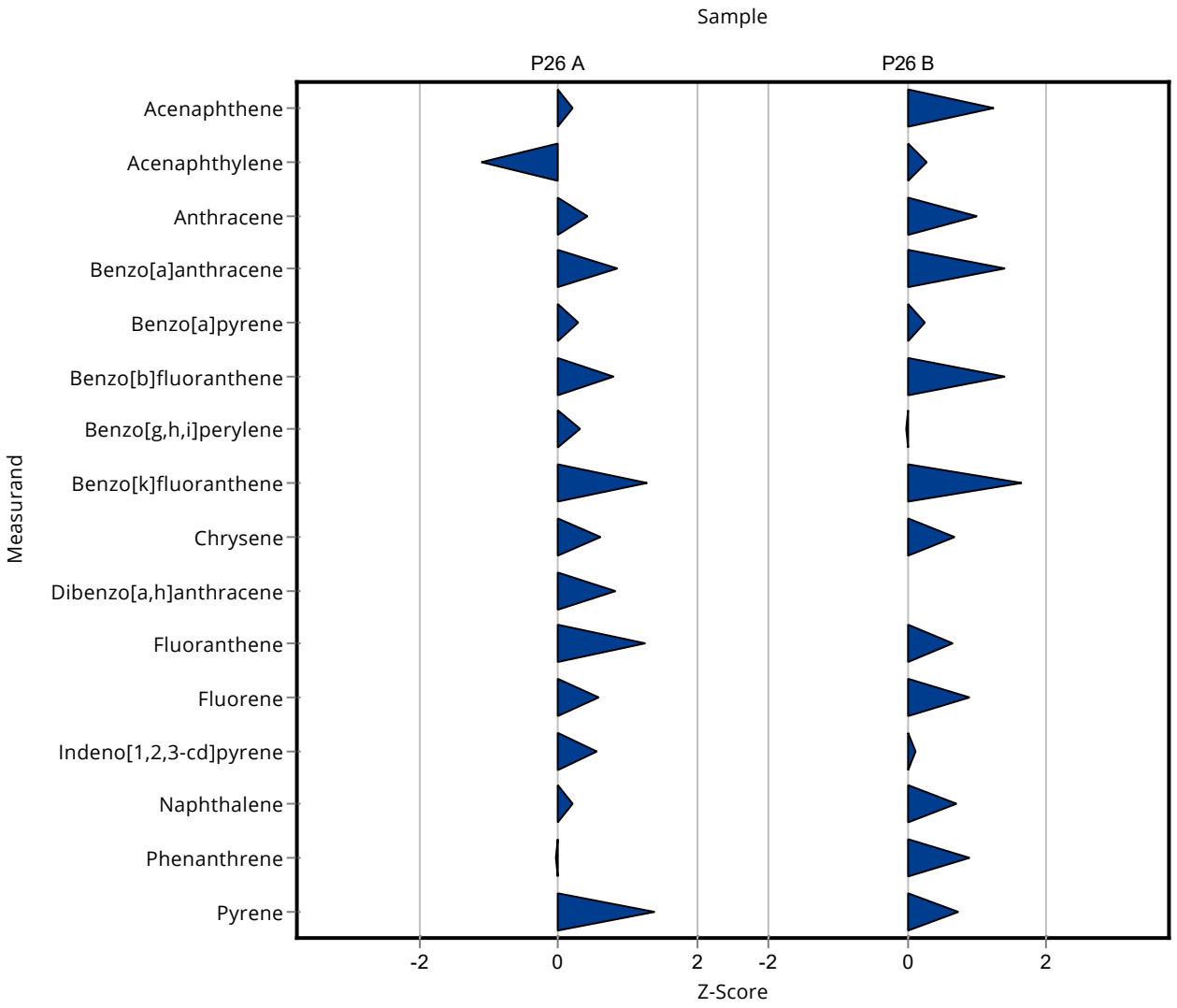
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	335.995 ± 28.324	60.1	129	1.25
Acenaphthylene	ng/l	354 ± 35	378.05 ± 44.761	84.8	107	0.29
Anthracene	ng/l	260 ± 30.9	314.831 ± 34.679	54.7	121	1.00
Benzo[a]anthracene	ng/l	279 ± 35.5	360.512 ± 61.467	58.6	129	1.39
Benzo[a]pyrene	ng/l	242 ± 19.1	257.752 ± 19.241	58.2	106	0.26
Benzo[b]fluoranthene	ng/l	277 ± 43.5	374.307 ± 56.969	69.3	135	1.40
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	202.946 ± 35.8	86.2	98.8	-0.03
Benzo[k]fluoranthene	ng/l	229 ± 36.4	323.228 ± 35.442	57.3	141	1.64
Chrysene	ng/l	227 ± 16.7	261.166 ± 32.358	50	115	0.68
Dibenzo[a,h]anthracene	ng/l	- ± -	213.8 ± 29.408	-	-	-
Fluoranthene	ng/l	316 ± 40.1	359.669 ± 35.086	66.3	114	0.66

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0010

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	383.282 ± 52.931	70.5	120	0.89
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	276.167 ± 31.759	66.9	103	0.13
Naphthalene	ng/l	277 ± 41.9	327.309 ± 26.136	72.1	118	0.69
Phenanthrene	ng/l	267 ± 38.2	324.785 ± 56.74	64.1	122	0.90
Pyrene	ng/l	240 ± 27	272.587 ± 32.424	45.6	114	0.72



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0010

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	18.452 ± 1.555	3.38	104	0.18
Acenaphthylene	ng/l	25.7 ± 2.71	18.787 ± 2.224	6.16	73.2	-1.32
Anthracene	ng/l	19.8 ± 3.06	21.842 ± 2.406	4.94	111	0.37
Benzo[a]anthracene	ng/l	19.7 ± 2.56	23.172 ± 3.951	4.13	118	0.42
Benzo[a]pyrene	ng/l	16 ± 2.75	17.249 ± 1.288	4.32	108	0.33
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	25.613 ± 3.898	4.04	114	0.38
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	24.667 ± 4.351	5.72	108	0.20
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	31.363 ± 3.439	6.48	136	1.03
Chrysene	ng/l	26 ± 3.79	29.451 ± 3.649	5.71	113	0.43
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	26.961 ± 3.709	6.49	125	0.62
Fluoranthene	ng/l	26.7 ± 3.54	33.688 ± 3.286	5.61	126	0.93
Fluorene	ng/l	19.3 ± 1.71	20.921 ± 2.889	2.71	108	0.26
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.581 ± 3.287	6.27	114	0.48
Naphthalene	ng/l	32.6 ± 3.85	33.909 ± 2.708	6.84	104	0.20
Phenanthrene	ng/l	31.6 ± 3.47	31.318 ± 5.471	5.36	99.2	-0.02
Pyrene	ng/l	22.2 ± 2.83	28.349 ± 3.372	4.45	127	0.83

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	335.995 ± 28.324	60.1	129	1.12
Acenaphthylene	ng/l	354 ± 35	378.05 ± 44.761	84.8	107	0.26
Anthracene	ng/l	260 ± 30.9	314.831 ± 34.679	54.7	121	0.72
Benzo[a]anthracene	ng/l	279 ± 35.5	360.512 ± 61.467	58.6	129	0.64

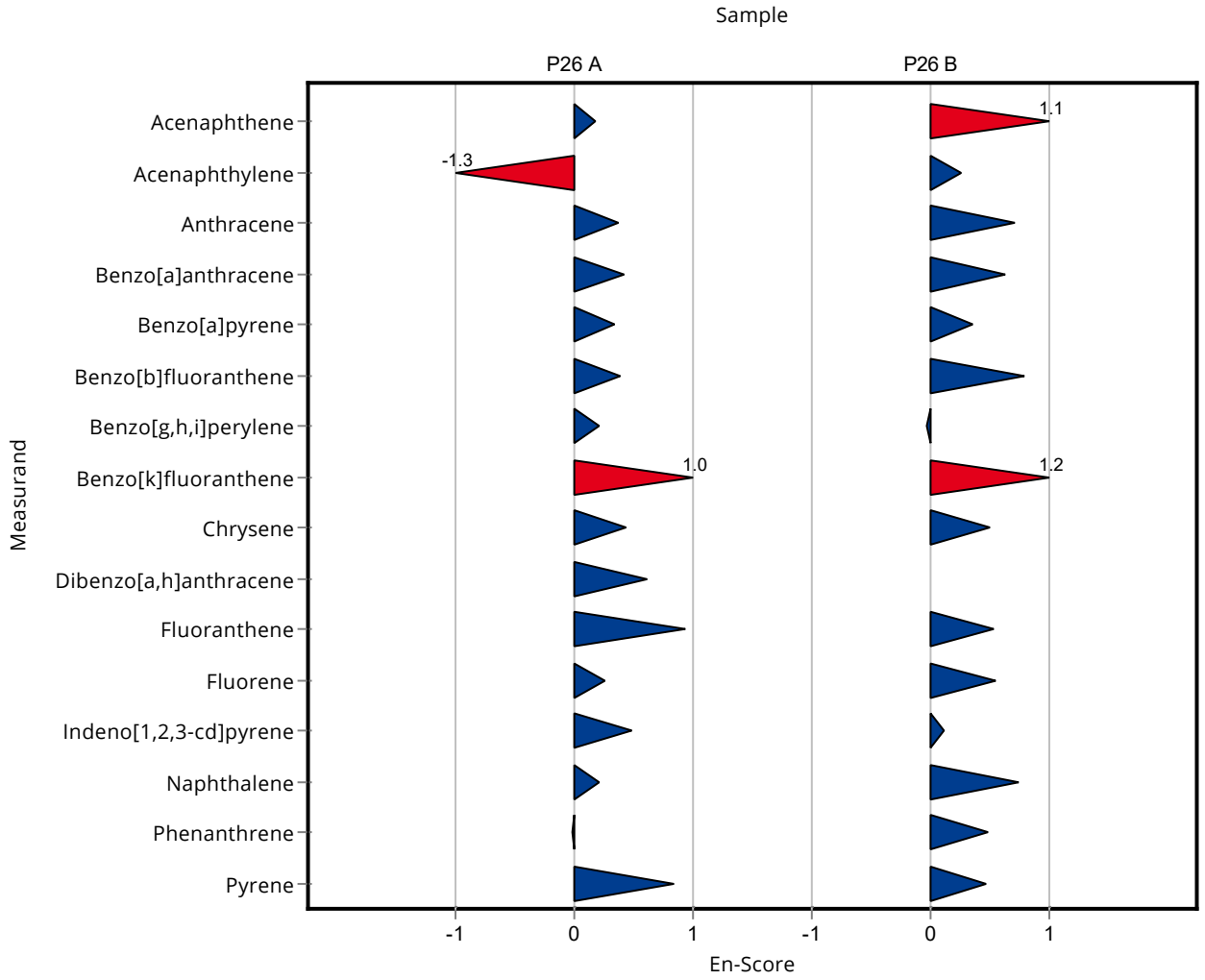
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0010

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	257.752 ± 19.241	58.2	106	0.36
Benzo[b]fluoranthene	ng/l	277 ± 43.5	374.307 ± 56.969	69.3	135	0.80
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	202.946 ± 35.8	86.2	98.8	-0.03
Benzo[k]fluoranthene	ng/l	229 ± 36.4	323.228 ± 35.442	57.3	141	1.18
Chrysene	ng/l	227 ± 16.7	261.166 ± 32.358	50	115	0.51
Dibenzo[a,h]anthracene	ng/l	- ± -	213.8 ± 29.408	-	-	-
Fluoranthene	ng/l	316 ± 40.1	359.669 ± 35.086	66.3	114	0.54
Fluorene	ng/l	320 ± 40.2	383.282 ± 52.931	70.5	120	0.56
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	276.167 ± 31.759	66.9	103	0.11
Naphthalene	ng/l	277 ± 41.9	327.309 ± 26.136	72.1	118	0.75
Phenanthrene	ng/l	267 ± 38.2	324.785 ± 56.74	64.1	122	0.48
Pyrene	ng/l	240 ± 27	272.587 ± 32.424	45.6	114	0.47

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0010



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0011

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	21.2 ± 5	3.38	119	1.01
Acenaphthylene	ng/l	25.7 ± 2.71	27.7 ± 8	6.16	108	0.33
Anthracene	ng/l	19.8 ± 3.06	23.6 ± 4	4.94	119	0.78
Benzo[a]anthracene	ng/l	19.7 ± 2.56	22.8 ± 5	4.13	116	0.76
Benzo[a]pyrene	ng/l	16 ± 2.75	20.4 ± 4	4.32	127	1.01
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	23.2 ± 5	4.04	103	0.18
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	23 ± 6	5.72	101	0.02
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	28.6 ± 7	6.48	124	0.84
Chrysene	ng/l	26 ± 3.79	28.9 ± 5	5.71	111	0.52
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	23.7 ± 5	6.49	110	0.32
Fluoranthene	ng/l	26.7 ± 3.54	32.5 ± 7	5.61	122	1.03
Fluorene	ng/l	19.3 ± 1.71	22.6 ± 5	2.71	117	1.21
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	26.1 ± 9	6.27	104	0.16
Naphthalene	ng/l	32.6 ± 3.85	35.9 ± 11	6.84	110	0.49
Phenanthrene	ng/l	31.6 ± 3.47	41.1 ± 12	5.36	130	1.78
Pyrene	ng/l	22.2 ± 2.83	26.5 ± 5	4.45	119	0.96

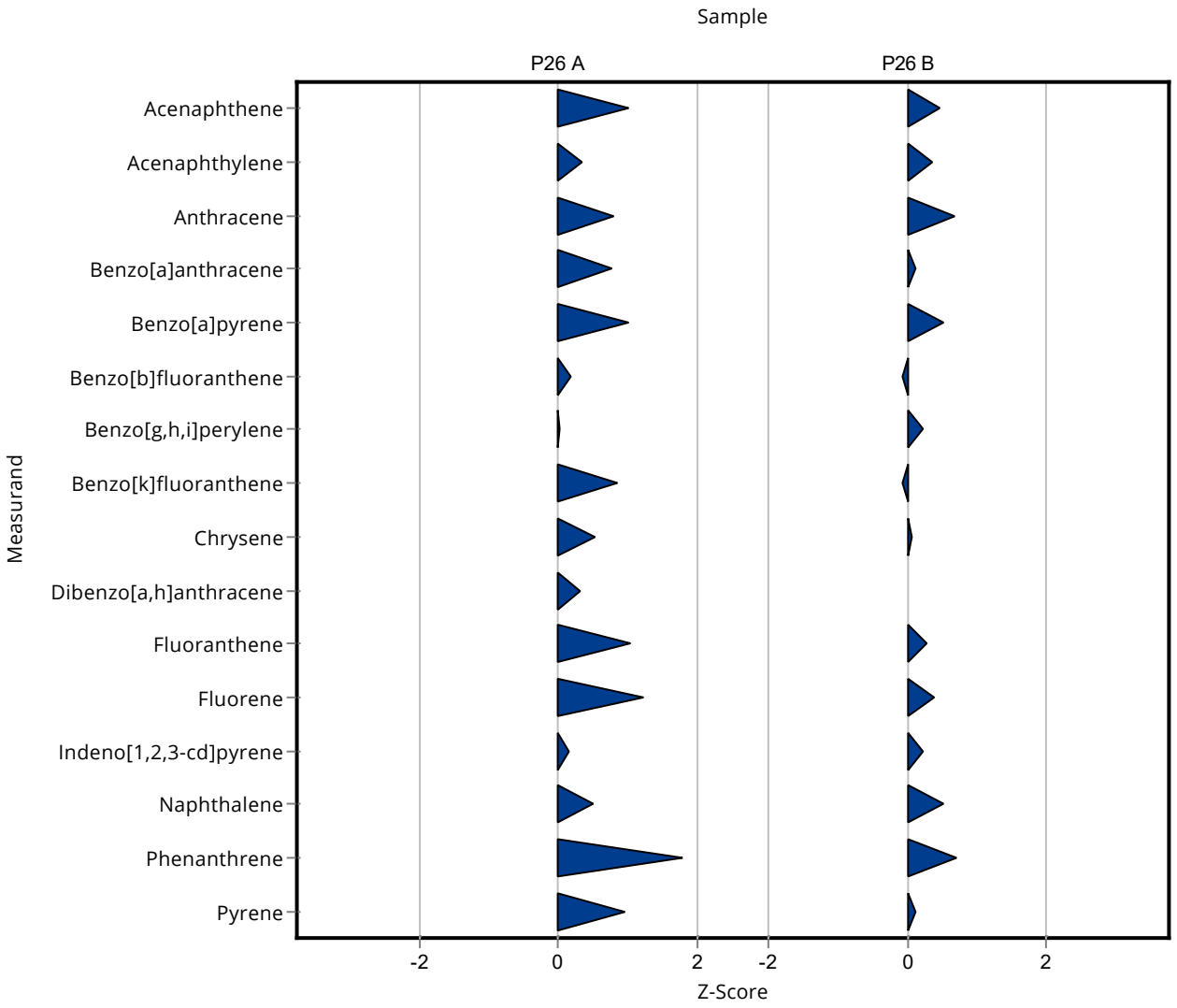
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	289 ± 75	60.1	111	0.46
Acenaphthylene	ng/l	354 ± 35	385 ± 108	84.8	109	0.37
Anthracene	ng/l	260 ± 30.9	297 ± 50	54.7	114	0.67
Benzo[a]anthracene	ng/l	279 ± 35.5	286 ± 60	58.6	103	0.12
Benzo[a]pyrene	ng/l	242 ± 19.1	273 ± 57	58.2	113	0.52
Benzo[b]fluoranthene	ng/l	277 ± 43.5	273 ± 55	69.3	98.5	-0.06
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	225 ± 54	86.2	110	0.23
Benzo[k]fluoranthene	ng/l	229 ± 36.4	226 ± 59	57.3	98.5	-0.06
Chrysene	ng/l	227 ± 16.7	231 ± 41	50	102	0.07
Dibenzo[a,h]anthracene	ng/l	- ± -	262 ± 60	-	-	-
Fluoranthene	ng/l	316 ± 40.1	334 ± 70	66.3	106	0.27

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0011

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	348 ± 73	70.5	109	0.39
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	283 ± 93	66.9	106	0.23
Naphthalene	ng/l	277 ± 41.9	315 ± 98	72.1	114	0.52
Phenanthrene	ng/l	267 ± 38.2	312 ± 87	64.1	117	0.70
Pyrene	ng/l	240 ± 27	245 ± 47	45.6	102	0.11



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0011

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	21.2 ± 5	3.38	119	0.34
Acenaphthylene	ng/l	25.7 ± 2.71	27.7 ± 8	6.16	108	0.13
Anthracene	ng/l	19.8 ± 3.06	23.6 ± 4	4.94	119	0.45
Benzo[a]anthracene	ng/l	19.7 ± 2.56	22.8 ± 5	4.13	116	0.30
Benzo[a]pyrene	ng/l	16 ± 2.75	20.4 ± 4	4.32	127	0.52
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	23.2 ± 5	4.04	103	0.07
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	23 ± 6	5.72	101	0.01
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	28.6 ± 7	6.48	124	0.37
Chrysene	ng/l	26 ± 3.79	28.9 ± 5	5.71	111	0.28
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	23.7 ± 5	6.49	110	0.19
Fluoranthene	ng/l	26.7 ± 3.54	32.5 ± 7	5.61	122	0.40
Fluorene	ng/l	19.3 ± 1.71	22.6 ± 5	2.71	117	0.32
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	26.1 ± 9	6.27	104	0.06
Naphthalene	ng/l	32.6 ± 3.85	35.9 ± 11	6.84	110	0.15
Phenanthrene	ng/l	31.6 ± 3.47	41.1 ± 12	5.36	130	0.39
Pyrene	ng/l	22.2 ± 2.83	26.5 ± 5	4.45	119	0.41

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	289 ± 75	60.1	111	0.18
Acenaphthylene	ng/l	354 ± 35	385 ± 108	84.8	109	0.14
Anthracene	ng/l	260 ± 30.9	297 ± 50	54.7	114	0.35
Benzo[a]anthracene	ng/l	279 ± 35.5	286 ± 60	58.6	103	0.06

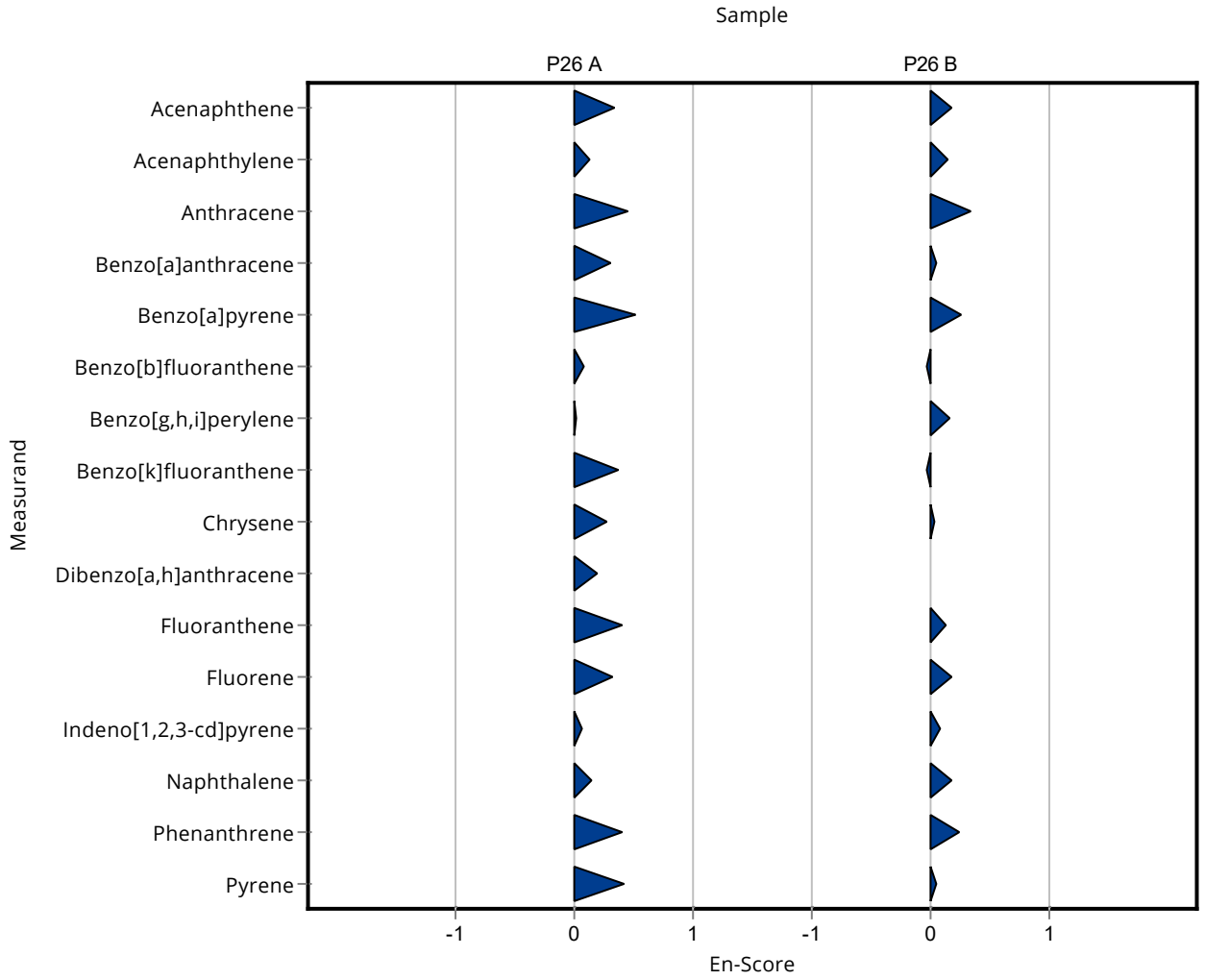
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0011

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	273 ± 57	58.2	113	0.26
Benzo[b]fluoranthene	ng/l	277 ± 43.5	273 ± 55	69.3	98.5	-0.03
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	225 ± 54	86.2	110	0.16
Benzo[k]fluoranthene	ng/l	229 ± 36.4	226 ± 59	57.3	98.5	-0.03
Chrysene	ng/l	227 ± 16.7	231 ± 41	50	102	0.04
Dibenzo[a,h]anthracene	ng/l	- ± -	262 ± 60	-	-	-
Fluoranthene	ng/l	316 ± 40.1	334 ± 70	66.3	106	0.12
Fluorene	ng/l	320 ± 40.2	348 ± 73	70.5	109	0.18
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	283 ± 93	66.9	106	0.08
Naphthalene	ng/l	277 ± 41.9	315 ± 98	72.1	114	0.19
Phenanthrene	ng/l	267 ± 38.2	312 ± 87	64.1	117	0.25
Pyrene	ng/l	240 ± 27	245 ± 47	45.6	102	0.05

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0011



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0012

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	19 ± 10	3.38	107	0.36
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	22 ± 10	4.94	111	0.45
Benzo[a]anthracene	ng/l	19.7 ± 2.56	21.5 ± 10	4.13	109	0.45
Benzo[a]pyrene	ng/l	16 ± 2.75	18.9 ± 10	4.32	118	0.67
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	22.4 ± 10	4.04	99.7	-0.02
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	25.7 ± 10	5.72	112	0.49
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	27.8 ± 10	6.48	120	0.72
Chrysene	ng/l	26 ± 3.79	31.8 ± 10	5.71	123	1.02
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	28.2 ± 10	6.49	130	1.01
Fluoranthene	ng/l	26.7 ± 3.54	29.7 ± 10	5.61	111	0.53
Fluorene	ng/l	19.3 ± 1.71	21.8 ± 10	2.71	113	0.91
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.8 ± 10	6.27	115	0.59
Naphthalene	ng/l	32.6 ± 3.85	40.6 ± 10	6.84	125	1.17
Phenanthrene	ng/l	31.6 ± 3.47	35.4 ± 10	5.36	112	0.72
Pyrene	ng/l	22.2 ± 2.83	24.2 ± 10	4.45	109	0.44

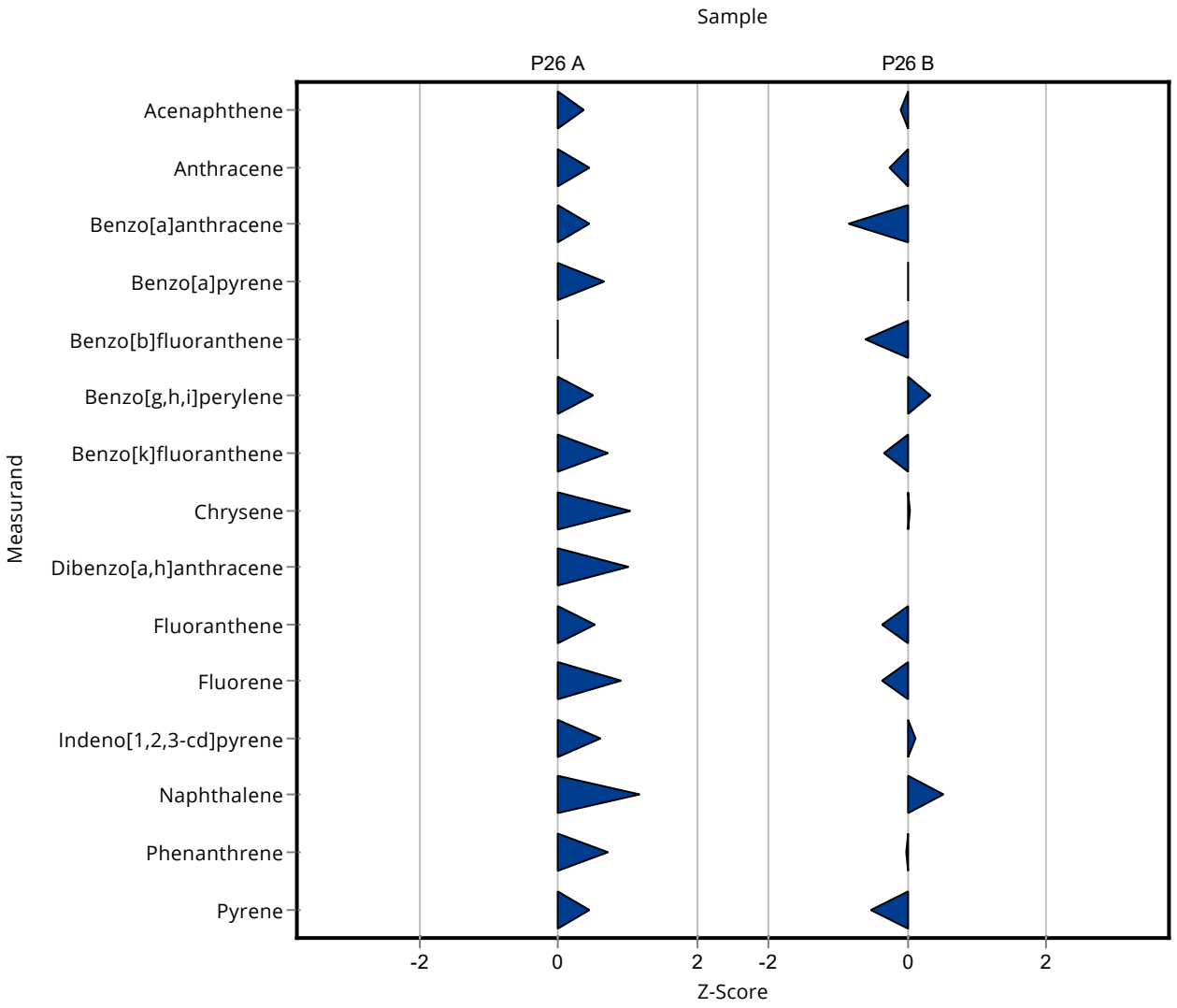
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	256 ± 10	60.1	98	-0.09
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	246 ± 10	54.7	94.5	-0.26
Benzo[a]anthracene	ng/l	279 ± 35.5	229 ± 10	58.6	82.1	-0.85
Benzo[a]pyrene	ng/l	242 ± 19.1	243 ± 10	58.2	100	0.01
Benzo[b]fluoranthene	ng/l	277 ± 43.5	235 ± 10	69.3	84.8	-0.61
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	234 ± 10	86.2	114	0.33
Benzo[k]fluoranthene	ng/l	229 ± 36.4	210 ± 10	57.3	91.6	-0.34
Chrysene	ng/l	227 ± 16.7	229 ± 10	50	101	0.03
Dibenzo[a,h]anthracene	ng/l	- ± -	303 ± 10	-	-	-
Fluoranthene	ng/l	316 ± 40.1	291 ± 10	66.3	92.1	-0.37

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0012

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	295 ± 10	70.5	92.1	-0.36
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	275 ± 10	66.9	103	0.11
Naphthalene	ng/l	277 ± 41.9	314 ± 10	72.1	113	0.51
Phenanthrene	ng/l	267 ± 38.2	266 ± 10	64.1	99.6	-0.02
Pyrene	ng/l	240 ± 27	216 ± 10	45.6	90.1	-0.52



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0012

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	19 ± 10	3.38	107	0.06
Acenaphthylene	ng/l	25.7 ± 2.71	- ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	22 ± 10	4.94	111	0.11
Benzo[a]anthracene	ng/l	19.7 ± 2.56	21.5 ± 10	4.13	109	0.09
Benzo[a]pyrene	ng/l	16 ± 2.75	18.9 ± 10	4.32	118	0.14
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	22.4 ± 10	4.04	99.7	0.00
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	25.7 ± 10	5.72	112	0.14
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	27.8 ± 10	6.48	120	0.23
Chrysene	ng/l	26 ± 3.79	31.8 ± 10	5.71	123	0.29
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	28.2 ± 10	6.49	130	0.32
Fluoranthene	ng/l	26.7 ± 3.54	29.7 ± 10	5.61	111	0.15
Fluorene	ng/l	19.3 ± 1.71	21.8 ± 10	2.71	113	0.12
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	28.8 ± 10	6.27	115	0.18
Naphthalene	ng/l	32.6 ± 3.85	40.6 ± 10	6.84	125	0.39
Phenanthrene	ng/l	31.6 ± 3.47	35.4 ± 10	5.36	112	0.19
Pyrene	ng/l	22.2 ± 2.83	24.2 ± 10	4.45	109	0.10

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	256 ± 10	60.1	98	-0.13
Acenaphthylene	ng/l	354 ± 35	- ± -	84.8	-	-
Anthracene	ng/l	260 ± 30.9	246 ± 10	54.7	94.5	-0.39
Benzo[a]anthracene	ng/l	279 ± 35.5	229 ± 10	58.6	82.1	-1.23

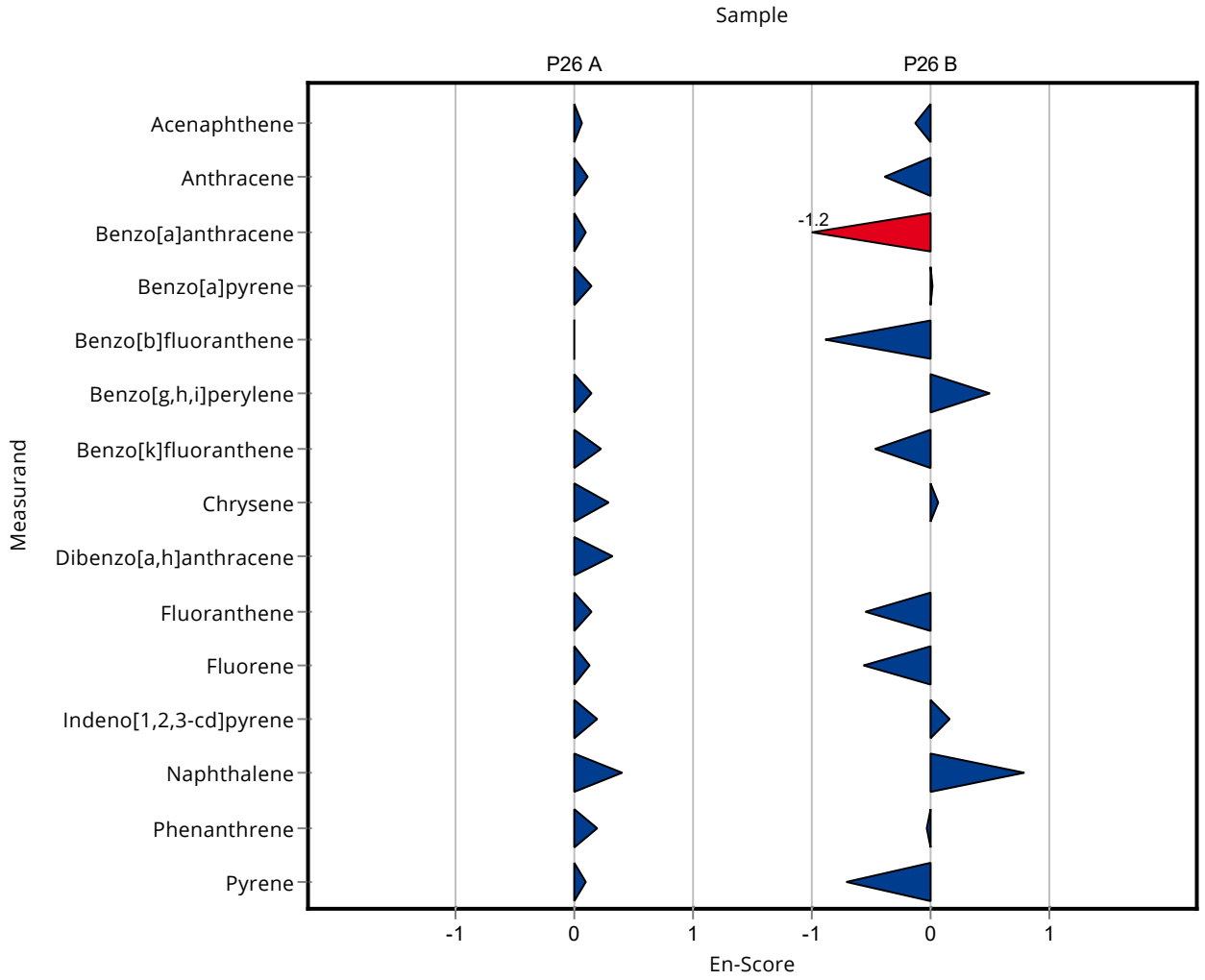
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0012

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	243 ± 10	58.2	100	0.02
Benzo[b]fluoranthene	ng/l	277 ± 43.5	235 ± 10	69.3	84.8	-0.88
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	234 ± 10	86.2	114	0.51
Benzo[k]fluoranthene	ng/l	229 ± 36.4	210 ± 10	57.3	91.6	-0.47
Chrysene	ng/l	227 ± 16.7	229 ± 10	50	101	0.06
Dibenzo[a,h]anthracene	ng/l	- ± -	303 ± 10	-	-	-
Fluoranthene	ng/l	316 ± 40.1	291 ± 10	66.3	92.1	-0.55
Fluorene	ng/l	320 ± 40.2	295 ± 10	70.5	92.1	-0.56
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	275 ± 10	66.9	103	0.17
Naphthalene	ng/l	277 ± 41.9	314 ± 10	72.1	113	0.79
Phenanthrene	ng/l	267 ± 38.2	266 ± 10	64.1	99.6	-0.02
Pyrene	ng/l	240 ± 27	216 ± 10	45.6	90.1	-0.71

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0012



Summary of results Polycyclic Aromatic Hydrocarbons P26 Labcode: LC0013

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	17.8 ± 1.91	<200 (LOQ) ± -	3.38	-	-
Acenaphthylene	ng/l	25.7 ± 2.71	<200 (LOQ) ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	<200 (LOQ) ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	<200 (LOQ) ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	<200 (LOQ) ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	<200 (LOQ) ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	<200 (LOQ) ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	<200 (LOQ) ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	<200 (LOQ) ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	<200 (LOQ) ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	<200 (LOQ) ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	<200 (LOQ) ± -	2.71	-	-
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	<200 (LOQ) ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	<200 (LOQ) ± -	6.84	-	-
Phenanthrene	ng/l	31.6 ± 3.47	<200 (LOQ) ± -	5.36	-	-
Pyrene	ng/l	22.2 ± 2.83	<200 (LOQ) ± -	4.45	-	-

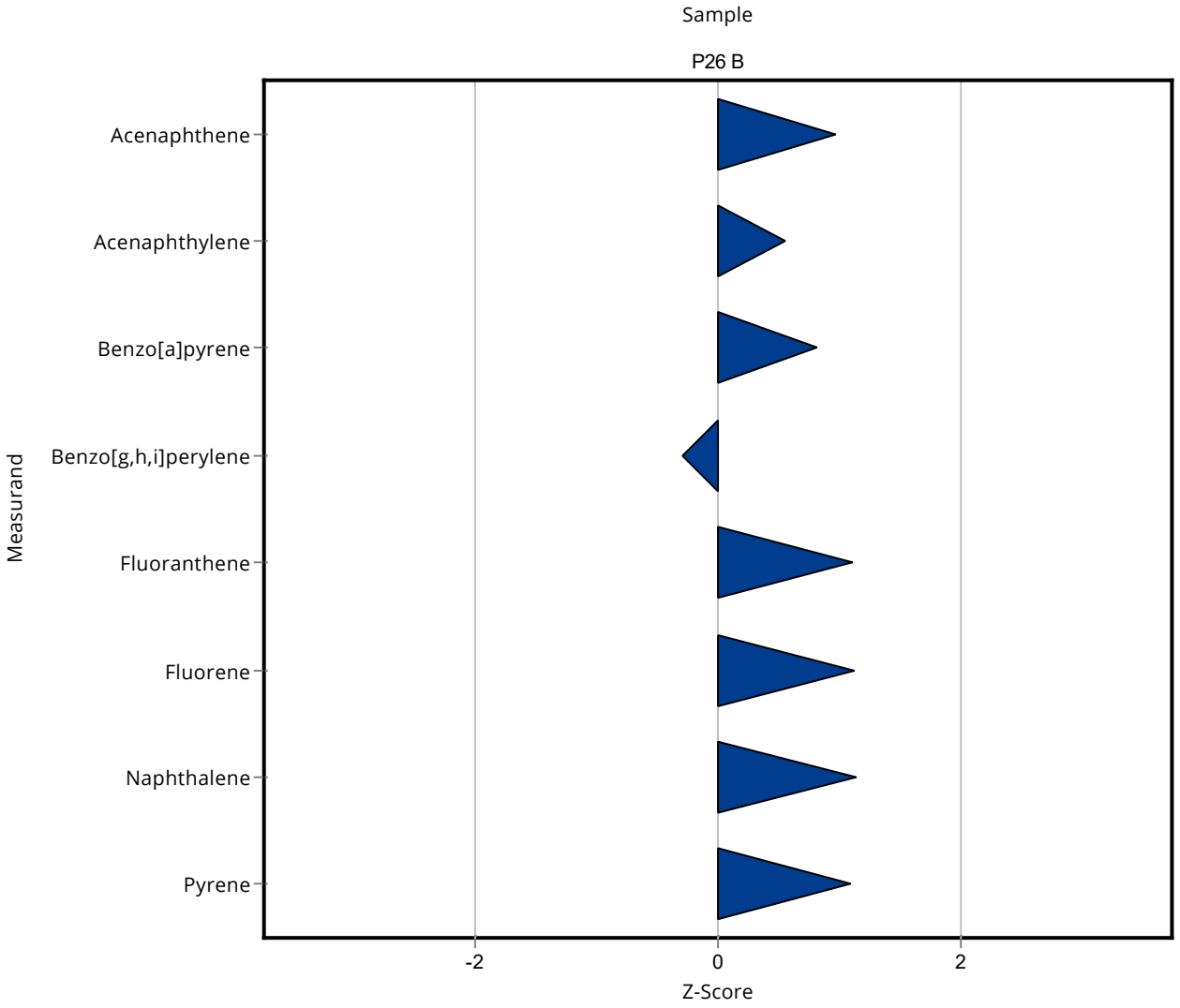
Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Acenaphthene	ng/l	261 ± 35.6	320 ± 32	60.1	123	0.98
Acenaphthylene	ng/l	354 ± 35	400 ± 40	84.8	113	0.55
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-
Benzo[a]pyrene	ng/l	242 ± 19.1	290 ± 29	58.2	120	0.82
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	180 ± 18	86.2	87.7	-0.29
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	390 ± 39	66.3	123	1.12

Summary of results Polycyclic Aromatic Hydrocarbons P26

Labcode: LC0013

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Fluorene	ng/l	320 ± 40.2	400 ± 40	70.5	125	1.13
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	360 ± 36	72.1	130	1.15
Phenanthrene	ng/l	267 ± 38.2	- ± -	64.1	-	-
Pyrene	ng/l	240 ± 27	290 ± 29	45.6	121	1.10



Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0013

Sample: P26A

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	17.8 ± 1.91	<200 (LOQ) ± -	3.38	-	-
Acenaphthylene	ng/l	25.7 ± 2.71	<200 (LOQ) ± -	6.16	-	-
Anthracene	ng/l	19.8 ± 3.06	<200 (LOQ) ± -	4.94	-	-
Benzo[a]anthracene	ng/l	19.7 ± 2.56	<200 (LOQ) ± -	4.13	-	-
Benzo[a]pyrene	ng/l	16 ± 2.75	<200 (LOQ) ± -	4.32	-	-
Benzo[b]fluoranthene	ng/l	22.5 ± 2.7	<200 (LOQ) ± -	4.04	-	-
Benzo[g,h,i]perylene	ng/l	22.9 ± 2.02	<200 (LOQ) ± -	5.72	-	-
Benzo[k]fluoranthene	ng/l	23.1 ± 4.05	<200 (LOQ) ± -	6.48	-	-
Chrysene	ng/l	26 ± 3.79	<200 (LOQ) ± -	5.71	-	-
Dibenzo[a,h]anthracene	ng/l	21.6 ± 4.39	<200 (LOQ) ± -	6.49	-	-
Fluoranthene	ng/l	26.7 ± 3.54	<200 (LOQ) ± -	5.61	-	-
Fluorene	ng/l	19.3 ± 1.71	<200 (LOQ) ± -	2.71	-	-
Indeno[1,2,3-cd]pyrene	ng/l	25.1 ± 3.29	<200 (LOQ) ± -	6.27	-	-
Naphthalene	ng/l	32.6 ± 3.85	<200 (LOQ) ± -	6.84	-	-
Phenanthrene	ng/l	31.6 ± 3.47	<200 (LOQ) ± -	5.36	-	-
Pyrene	ng/l	22.2 ± 2.83	<200 (LOQ) ± -	4.45	-	-

Sample: P26B

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Acenaphthene	ng/l	261 ± 35.6	320 ± 32	60.1	123	0.80
Acenaphthylene	ng/l	354 ± 35	400 ± 40	84.8	113	0.53
Anthracene	ng/l	260 ± 30.9	- ± -	54.7	-	-
Benzo[a]anthracene	ng/l	279 ± 35.5	- ± -	58.6	-	-

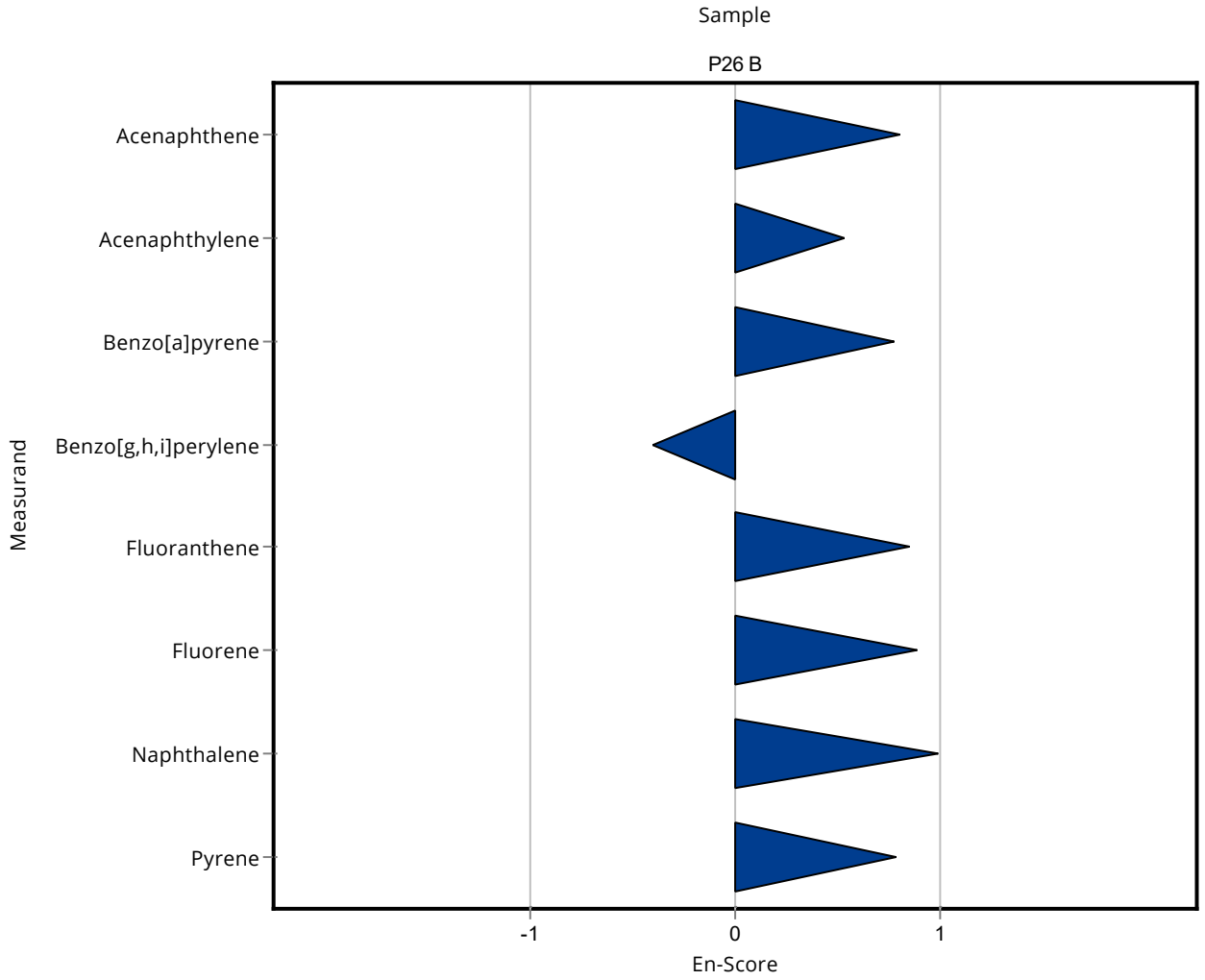
Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0013

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Benzo[a]pyrene	ng/l	242 ± 19.1	290 ± 29	58.2	120	0.78
Benzo[b]fluoranthene	ng/l	277 ± 43.5	- ± -	69.3	-	-
Benzo[g,h,i]perylene	ng/l	205 ± 52.3	180 ± 18	86.2	87.7	-0.40
Benzo[k]fluoranthene	ng/l	229 ± 36.4	- ± -	57.3	-	-
Chrysene	ng/l	227 ± 16.7	- ± -	50	-	-
Dibenzo[a,h]anthracene	ng/l	- ± -	- ± -	-	-	-
Fluoranthene	ng/l	316 ± 40.1	390 ± 39	66.3	123	0.85
Fluorene	ng/l	320 ± 40.2	400 ± 40	70.5	125	0.89
Indeno[1,2,3-cd]pyrene	ng/l	268 ± 38.4	- ± -	66.9	-	-
Naphthalene	ng/l	277 ± 41.9	360 ± 36	72.1	130	0.99
Phenanthrene	ng/l	267 ± 38.2	- ± -	64.1	-	-
Pyrene	ng/l	240 ± 27	290 ± 29	45.6	121	0.78

Summary of results Polycyclic Aromatic Hydrocarbons P26 - En-Score

Labcode: LC0013



E9. Methodenübersicht / Overview of methods

LabCode	Sample	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene
LC0001	**P26A**	HPLC-FLD; EN ISO 17993			
LC0002	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26A**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26A**				
LC0010	**P26A**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26A**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26A**	GC-MS-SIM;		GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26A**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene
LC0001	**P26A**				
LC0002	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26A**	GC-MS (Screening); screening BAFU	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26A**				
LC0010	**P26A**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26A**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26A**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26A**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene
LC0001	**P26A**				HPLC-FLD; EN ISO 17993
LC0002	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26A**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26A**				
LC0010	**P26A**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26A**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26A**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26A**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
LC0001	**P26A**		HPLC-FLD; EN ISO 17993	HPLC-FLD; EN ISO 17993	
LC0002	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26A**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26A**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26A**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26A**				
LC0010	**P26A**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26A**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26A**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26A**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene
LC0001	**P26B**	HPLC-FLD; EN ISO 17993			
LC0002	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26B**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26B**				
LC0010	**P26B**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26B**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26B**	GC-MS-SIM;		GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26B**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene
LC0001	**P26B**				
LC0002	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26B**	GC-MS (Screening); screening BAFU	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26B**				
LC0010	**P26B**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26B**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26B**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26B**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene
LC0001	**P26B**				HPLC-FLD; EN ISO 17993
LC0002	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26B**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26B**				
LC0010	**P26B**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26B**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26B**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26B**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181

LabCode	Sample	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
LC0001	**P26B**		HPLC-FLD; EN ISO 17993	HPLC-FLD; EN ISO 17993	
LC0002	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0003	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0004	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0005	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0006	**P26B**	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39	GC-MS; DIN 38407-39
LC0007	**P26B**	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540	GC-MS; ISO 28540
LC0008	**P26B**	GC-MS; house method	GC-MS; house method	GC-MS; house method	GC-MS; house method
LC0009	**P26B**				
LC0010	**P26B**	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40	GC-MS; ISO 28540; F40
LC0011	**P26B**	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18	HPLC-DAD-FLD; EN ISO 17993; F18
LC0012	**P26B**	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;	GC-MS-SIM;
LC0013	**P26B**	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181	GC-MS; EN 16181