Proficiency Testing Scheme für die Umweltanalytik

PFL01 Per- und polyfluorierte Alkylsubstanzen (Eluatherstellung und Analyse)

Proficiency Testing Scheme for Environmental Analysis

PFL01 Per- and polyfluoroalkyl substances (eluate preparation and analysis)

BERICHT / REPORT

Probenversand / Sample dispatch: 15.09.2026

Ausgabe/Edition 1 – 05.11.2026

Dieser Report umfasst 539 Seiten.
This report comprises 539 pages.

Anbieter der Eignungsprüfung / Provider of the proficiency test

Anschrift / Address Umweltbundesamt GmbH
Dorygasse 1/1
1030 Vienna/Austria

Location Proficiency testing
Spittelauer Lände 5
1090 Vienna/Austria
ringversuche@umweltbundesamt.at
Tel.: +43-(0)1-313 04 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.in Monika Denner

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

Dipl.-Ing. Johannes Urteil, Martha Schmid MSc und Dipl.-Ing. Matthias Schöpf unter Mitarbeit von Mag. Vito Satrapa und Ing.in Martina Wagner
Tel.: +43-(0)1-313 04 4334

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

Dipl.-Ing.in Monika Denner
Leitung Eignungsprüfungen für den Bereich chemische Analytik / Management for proficiency tests for chemical analysis

UMWELT BUNDES AMT	**Unterzeichner**	Monika Christine Denner
	Datum/Zeit-UTC	2026-11-05T12:02:53+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	

Impressum
Medieninhaber und Herausgeber: Umweltbundesamt GmbH
Dorygasse 1/1, 1030 Wien/Österreich
Standort Eignungsprüfungsstelle
Spittelauer Lände 5, 1090 Wien/Österreich
Tel.: +43-(0)1-313 04/4334
office@umweltbundesamt.at
Diese Publikation erscheint ausschließlich in elektronischer Form auf umweltbundesamt.at.
© Umweltbundesamt GmbH, Wien, 2026
Alle Rechte vorbehalten

Inhaltsverzeichnis / Table of Contents

D1. Beschreibung des Ringversuchs 5
D1.1. Ausgestaltung und Durchführung 5
D1.2. Beschreibung der Prüfgegenstände 5
D1.3. Anweisungen für die Teilnehmenden 5
D1.4. Kontrollanalytik zur Bewertung der Homogenität 8
D1.5. Trendtest zur Bewertung der Stabilität 8
D1.6. Ermittlung des zugewiesenen Wertes 8
D2. Kriterien der Leistungsbewertung 9
D2.1. Leistungskriterium z-Score 9
D2.2. Leistungskriterium E_n-Score 10
D2.3. Leistungsbewertung z-Score und E_n-Score 10
D3. Darstellung und Interpretation der Messergebnisse 11
D4. Anmerkungen zur Auswertung 11
D5. Erläuterung zu Tabellen und Grafiken 14
D5.1. Angaben und Abkürzungen in Tabellen 14
D5.2. Graphische Darstellung der Ergebnisse 17
D6. Zusammenfassung 20
D6.1. Tabelle der zugewiesenen Werte 20
D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse 25
E1. Description of the proficiency test 30
E1.1. Design and implementation 30
E1.2. Description of the proficiency test items 30
E1.3. Instructions for the participants 31
E1.4. Control testing for homogeneity evaluation 33
E1.5. Trend test for stability evaluation 33
E1.6. Determination of the assigned values 34
E2. Criteria of performance evaluation 35
E2.1. Performance criterion z-Score 35
E2.2. Performance criterion E_n-Score 35

E2.3. Performance evaluation z-Score and E_n-Score 36
E3. Representation and interpretation of measurement results 36
E4. Explanatory notes 37
E5. Annotations on tables and charts 39
E5.1. Information and abbreviations in tables 39
E5.2. Graphical presentation of results 41
E6. Summary 44
E6.1. Table of assigned values 44
E6.2. Summary of results, after removal of outliers 49
E7. Parameterorientierte Auswertung / Parameter-oriented report 54
E8. Laborientierte Auswertung / Laboratory-oriented report 333
E9. Methodenübersicht / Overview of methods 524

D1. Beschreibung des Ringversuchs

D1.1. Ausgestaltung und Durchführung

- Anzahl der Anmeldungen: 19
- Anzahl der übermittelten Datensätze: 19
- Probenversand: 15.09.2026
- Einsendeschluss der Daten: 13.10.2026

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

Bei den beiden Feststoffproben handelte es sich um Realproben mit natürlicher Belastung, die für den Ringversuch nach einem aufwändigen, mehrstufigen Konzept zur Probenhomogenisierung und Probenaufbereitung bearbeitet wurden.

Die Probe PFL01A bestand aus einer Mischung aus Bodenproben und Klärschlammkompost. Die Probe PFL01B stammte aus einem feldfrischen Bodenaushub mit PFAS-Belastung. Beide Proben wurden auf < 4mm abgesiebt und am 21. und 22.07.2026 mittels Fassmischer für 30 Minuten homogenisiert. Die Herstellung der Einzelabfüllungen erfolgte durch fraktioniertes Schaufeln (ca. 730 g PFL01A bzw. 715 g PFL01B).

Das Probenmaterial umfasste:

- 1 Probe Bodenmix/Klärschlammkompost < 4 mm, lufttrocken (PFL01A)
- 1 Probe Bodenaushub < 4 mm, feldfrisch (PFL01B)

Die Proben wurden bis zum Versand bei Raumtemperatur gelagert.
Die homogenen Prüfgegenstände wurden am 15.09.2026 verschickt.

Jedes teilnehmende Labor erhielt:

- 2 Proben zu je ca. 0,7 kg, abgefüllt in je 1000 ml HDPE-Dosen.

D1.3. Anweisungen für die Teilnehmenden

Aus Stabilitätsgründen wurde empfohlen bis spätestens 17.09.2026 mit der Probenvorbereitung zu beginnen.

Die Teilnehmenden erhielten im Zuge des Probenversand-E-Mails am 15.09.2026 nachfolgende Informationen.

Hinweise zur Probenhandhabung:

- Bestimmung der Trockenmasse bei 105°C (unabhängiges Aliquot, welches im Anschluss zu verwerfen war)
- Direkte Einwaage der errechneten Menge an homogenisierter Probe für die Eluatherstellung (keine Probenvorzerkleinerung, keine Probenvortrocknung)
- Empfehlung: Mindesteinwaage nicht unter 90 g
- Herstellung von wässrigen 24h-Überkopfschütteleluaten mit L/S=10 l/kg TM und mit L/S=2 l/kg TM von jeder Probe
    - Normen für L/S 10 l/kg TM: z.B. prEN 12457-2:2026 oder -4:2026
    - Normen für L/S 2 l/kg TM: z.B. DIN 19529:2023 oder prEN 12457-1:2026
- Durchführung von Blindwertkontrollen im Rahmen der qualitätssichernden Maßnahmen
- Hinweis, dass Blindwerte (Eluatblindprobe) normgemäß nicht von den Ergebnissen abzuziehen sind.
- Einheiten für die Ergebnisangabe: Trockenmasse in %; Eluatergebnisse in µg/l Eluat
- empfohlene Mindestbestimmungsgrenze (BG): 0,001 µg/l Eluat oder besser

Parameterumfang:

- Trockenmasse (105°C)
- im wässrigen 24 h Überkopfschüttel-Eluat L/S=10 l/kg TM sowie L/S=2 l/kg TM:
    - PF4C–PF13C
    - PF4S–PF13S
    - Summe PFAS (berechnete Summe von 20 Parametern PF4C–PF13C und PF4S–PF13S)

In der Versandbeilage wurde auf die E-Mail zur Kommunikation der wesentlichen Informationen verwiesen und die relevanten Probenhandhabungshinweise angeführt.

Anzugeben waren je Probe und untersuchten Parameter:

- Analysenergebnis (ungerundet, bzw. mind. 3 sign. Stellen)
- kombinierte Messunsicherheit des Ergebnisses ohne Erweiterungsfaktor (in der Einheit des Analysenergebnisses, d.h. k=1, MUabs in Einheit des Messwertes, mind. 2 sign. Stellen)
- Analysendatum (hier: Messdatum; das Datum der Eluatherstellung wurde gesondert abgefragt)

- Analysennorm bzw. die Methode (inkl. Kurzbezeichnung zum Messverfahren, z.B. LC-MS/MS)
- akkreditiert (ja/nein).

Zur fachlichen Bewertung sämtlicher Abgaben wurden ergänzende Fragen zur Eluatherstellung und PFAS-Analytik gestellt. Die Angaben der Teilnehmenden wurden vertraulich gehandhabt und in aggregierter Kurzform in die Methodenübersicht aufgenommen.

Angaben zur Eluatherstellung (jeweils für L/S=2 l/kg TM sowie L/S=10 l/kg TM):

- Norm bzw. Normentwurf
- Datum der Eluatherstellung
- Einwaage Probe in g
- Menge und Art des Elutionsmittels
- Eluatgefäße (Materialart und Volumen)
- Angaben zum Schüttelverfahren
- Trennschritte Flüssigkeit/Feststoff
- Zentrifugation (Angabe zum Gerät, Dauer, Bedingungen, ...)
- Volumen des zentrifugierten Eluats
- pH-Wert und el. Leitfähigkeit

Ergänzende Angaben zur PFAS-Analytik:

- Angaben zur Probenvorbehandlung
- Festphasenextraktion (SPE) ja/nein, Details
- Direktinjektion (DI) ja/nein, Details
- Kalibrierung mit externem Standard?
- Kalibrierung mit internem Standard?
- Wiederfindungskorrektur ja/nein?
- Blindwertabzug ja/nein?
- Sonstige Beobachtungen/Auffälligkeiten

Den Teilnehmenden stand die Wahl der Analysenmethode bzw. der verwendeten Norm frei, welche mit ihrem Routineverfahren übereinstimmen sollte.

Eine Übersicht der angewendeten Methoden und eine Kurzzusammenfassung über die ergänzenden Angaben findet sich unter E9.

D1.4. Kontrollanalytik zur Bewertung der Homogenität

Aus allen Abfüllungen der beiden Proben wurden über die Abfüllreihe regelmäßig verteilt jeweils 5 Aliquote pro Probe zur Kontrollanalytik entnommen und dem Labor zur Analyse übergeben.

Die Eluatherstellung und Bestimmung aller Parameter wurde in der Prüfstelle am Umweltbundesamt (Prüfstelle für Umwelt-, GVO- & Treibstoffanalytik) zeitnah zum Probenversand durchgeführt.

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

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 13.10.2026 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 Stunden 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 gleicher 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 Expert:innenbefund). 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 n=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. Die Prüfung auf Rückführbarkeit des zugewiesenen Wertes erfolgt durch Vergleich mit dem Mittelwert des Kontrolllabores.

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:

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

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 ausreißerbereinigten Ergebnissen der Teilnehmenden (sR) des aktuellen Ringversuchs. In begründeten Fällen (z.B. Ergebnisse Realproben nahe an Mindestbestimmungsgrenze oder regulatorischer Vorgaben) erfolgt die Festlegung nach Expertenbefund und die Vorgangsweise wird unter Punkt D4 des Berichts beschrieben.

D2.2. Leistungskriterium E_n-Score

Für die realen Proben 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:

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

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:

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

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

Interpretation der E_n-Scores:

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

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

D3. Darstellung und Interpretation der Messergebnisse

In der parameterorientierten Auswertung ist eine tabellarische Übersicht mit den Messergebnissen inklusive der Unsicherheit (± 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.

Bei den nachfolgenden Proben und Parametern erfolgte die Berechnung der Scores nach D2:

- PFL01A02: Parameter PF4C, PF5C, PF7C, PF8C, PF10C, PF4S, lineare PF6S, total PF6S, lineare PF8S, total PF8S, Summe PFAS und Trockenmasse
- PFL01B02: PF4S, PF5S, lineare PF6S, total PF6S, PF7S, total PF8S und Trockenmasse
- PFL01A10: PF4C, PF5C, PF7C, PF8C, PF9C, PF10C, PF4S, lineare PF6S, total PF6S, lineare PF8S, total PF8S und Summe PFAS
- PFL01B10: PF4S, PF5S, lineare PF6S, total PF6S, PF7S, lineare PF8S, total PF8S und Summe PFAS.

Für folgende Proben und Parameter deuten die von den akkreditierten Stellen berichteten Ergebnisse trotz der großen Bandbreite konsistent auf Konzentrationen unterhalb bzw. nahe der Bestimmungsgrenzen hin. Aufgrund dieser Befundlage konnte ein hinreichend belastbarer Schätzwert abgeleitet werden, der als „<“ Informationswert zum Vergleich in D6.1 angeführt wird:

- PFL01A02: PF9C PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S und PF13S
- PFL01B02: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S und PF13S
- PFL01A10: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S und PF13S
- PFL01B10: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S und PF13S.

Für folgende Proben und Parameter lagen die auf Basis der Ergebnisse der Teilnehmenden berechneten Sollwerte 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:

- PFL01A02: PF6C, PF5S und PF7S
- PFL01A10: PF6C, PF5S und PF7S.

Für die folgenden Proben und Parameter wurden nach Prüfung und statistischen Ausreißertests Messergebnisse der angeführten Labore als Hampelausreißer eliminiert:

- PFL01A02: PF9C (LC0010 H95)
- PFL01B02: PF4C (LC0001 H95 und LC0004 H95), PF5C (LC0001 H95, LC0004 H95 und LC0019 H95), PF6C (LC0001 H95, LC0004 H95 und LC0019 H95) und PF7C (LC0001 H99, LC0004 H99 und LC0014 H99).

Die relative Vergleichsstandardabweichung lag für folgende Probe und Parameter über 50 %. Für diese Parameter empfehlen wir einen Vergleich mit den in D6.1 angeführten informativen Werten (Mittelwert über akkreditierte Labore):

- PFL01B02: PF4C, PF5C, PF6C, PF7C, PF8C, PF9C, PF10C, lineare PF8S und Summe PFAS.

Aufgrund der hohen Streuung der Ergebnisse kann für folgende Parameter in Probe PFL01B10 keine belastbare Zuweisung festgelegter Werte erfolgen (analog PFL01B02). Da eine statistische Bereinigung der Daten durch Eliminierung der zahlreichen Ausreißer fachlich nicht vertretbar erscheint, empfehlen wir einen Vergleich mit den in D6.1 angeführten informativen Werten (Mittelwert über akkreditierte Labore):

- PFL01B10: PF4C, PF5C, PF6C, PF7C, PF8C, PF9C, PF10C.

Die Kriterien für die Bewertung wurden für die Proben PFL01A und PFL01B jeweils auf Grundlage eines Expert:innenbefunds unter Berücksichtigung der jeweiligen Probenmatrix definiert (siehe D6.1). Zur Gewährleistung einer konsistenten Bewertung beider Proben wurden die Kriterien bewusst konservativ gewählt und gegebenenfalls aufgerundet.

Fachliches Fazit

Als potenziell relevante Einflussfaktoren auf die beobachtete Variabilität der Ergebnisse kommen insbesondere Filtration, Zentrifugation, die gewählte Aufarbeitungsstrategie (z.B. SPE oder DI), Verdünnungsschritte sowie Matrixeffekte während der LC-MS/MS-Analyse in Betracht. Innerhalb des untersuchten pH-Bereichs konnte kein signifikanter Einfluss des pH-Wertes auf die berichteten PFAS-Konzentrationen festgestellt werden.

Die Daten weisen darauf hin, dass matrixspezifische Effekte eine wesentliche Rolle spielen. Die größten Abweichungen wurden bei den L/S=2l/kg TM Eluaten der Probe PFL01A

beobachtet, während die Ergebnisse der entsprechenden Eluate der Probe PFL01B insgesamt deutlich konsistenter waren.

Insgesamt zeigen die Ergebnisse, dass die PFAS-Konzentrationen in den Eluaten durch das Zusammenwirken von Probenmatrix, Probenvorbehandlung und analytischer Methodik beeinflusst werden.

Zusammenfassend erscheinen matrixabhängige Effekte der Probenvorbereitung und Analytik die dominierenden Ursachen der beobachteten Variabilität zu sein (erhöhte Ionenstärke und damit verbundene analytische Matrixeffekte, vgl. ibes. PFL01A).

D5. Erläuterung zu Tabellen und Grafiken

D5.1. Angaben und Abkürzungen in Tabellen

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

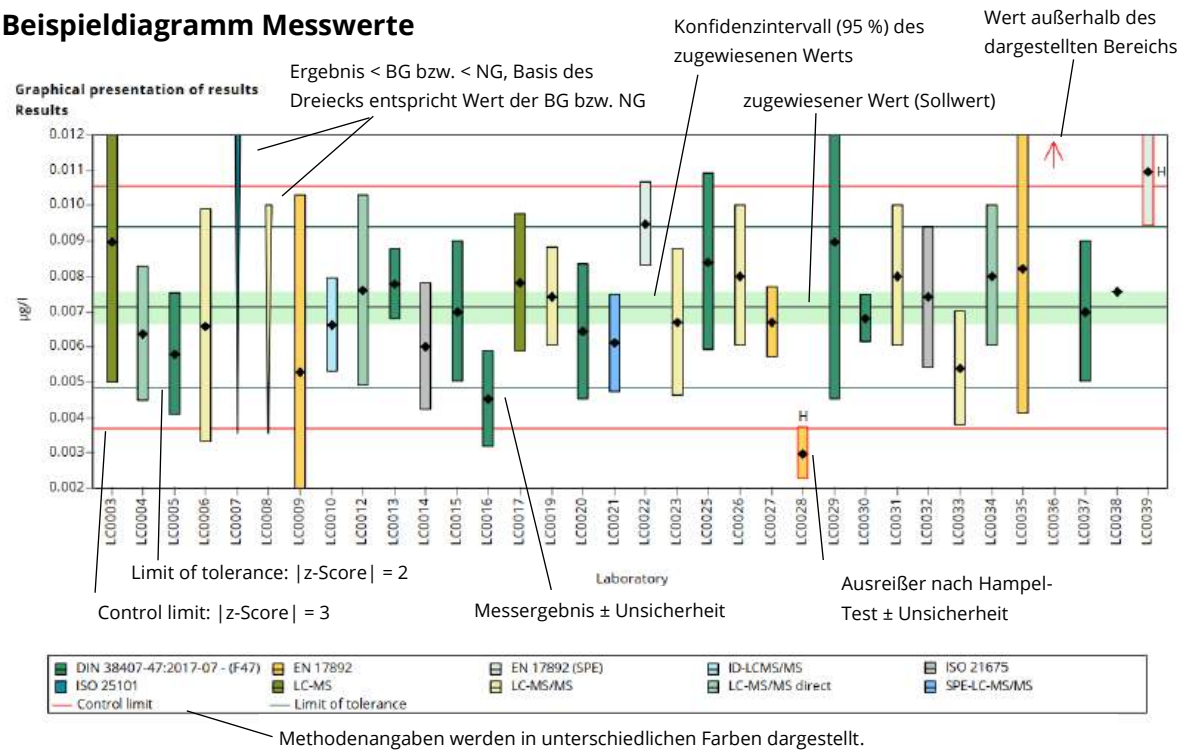
	aktuellen Ringversuchs bezogen auf den Mittelwert (angegeben auf 2 signifikante Stellen)
Kontrollwert ± U (k=2)	Mittelwert der Kontrollmessungen des Veranstalters ± erweiterte Ergebnisunsicherheit des Kontrollwertes (jeweils angegeben auf 3 signifikante Stellen)
Laborcode	anonymisierte, eindeutige Kennung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

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

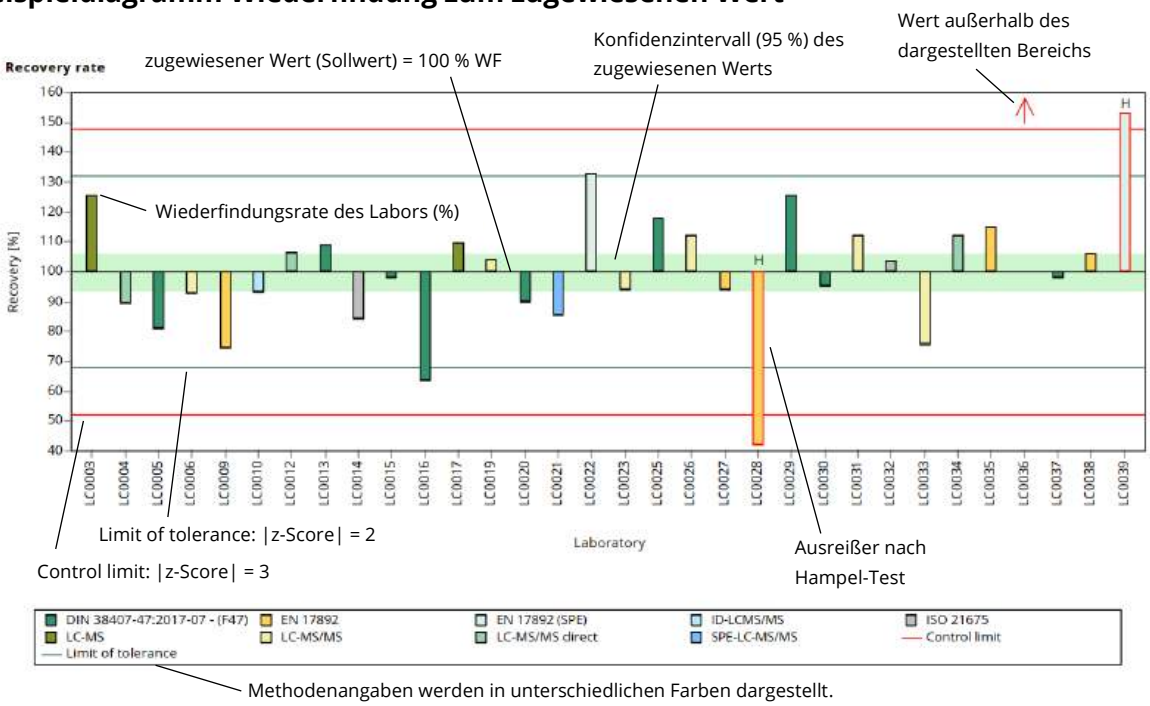
D5.2. Graphische Darstellung der Ergebnisse

Nachfolgend wird die graphische Darstellung anhand von kommentierten Beispieldiagrammen erläutert.

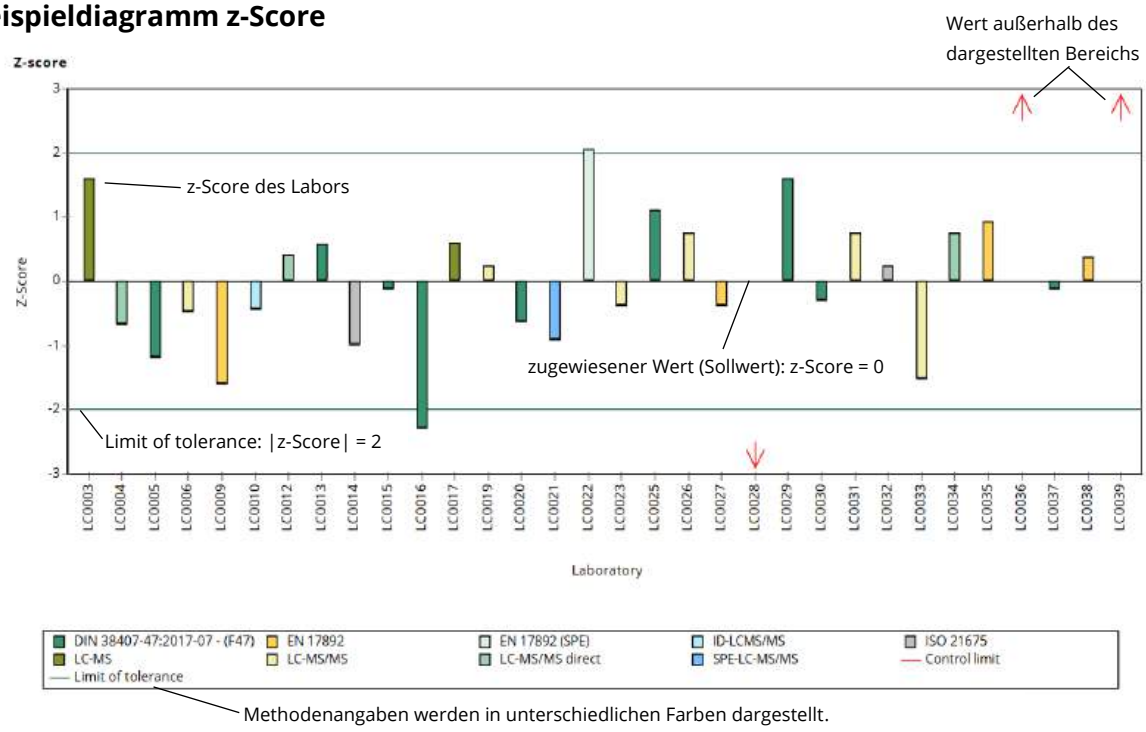
Beispieldiagramm Messwerte



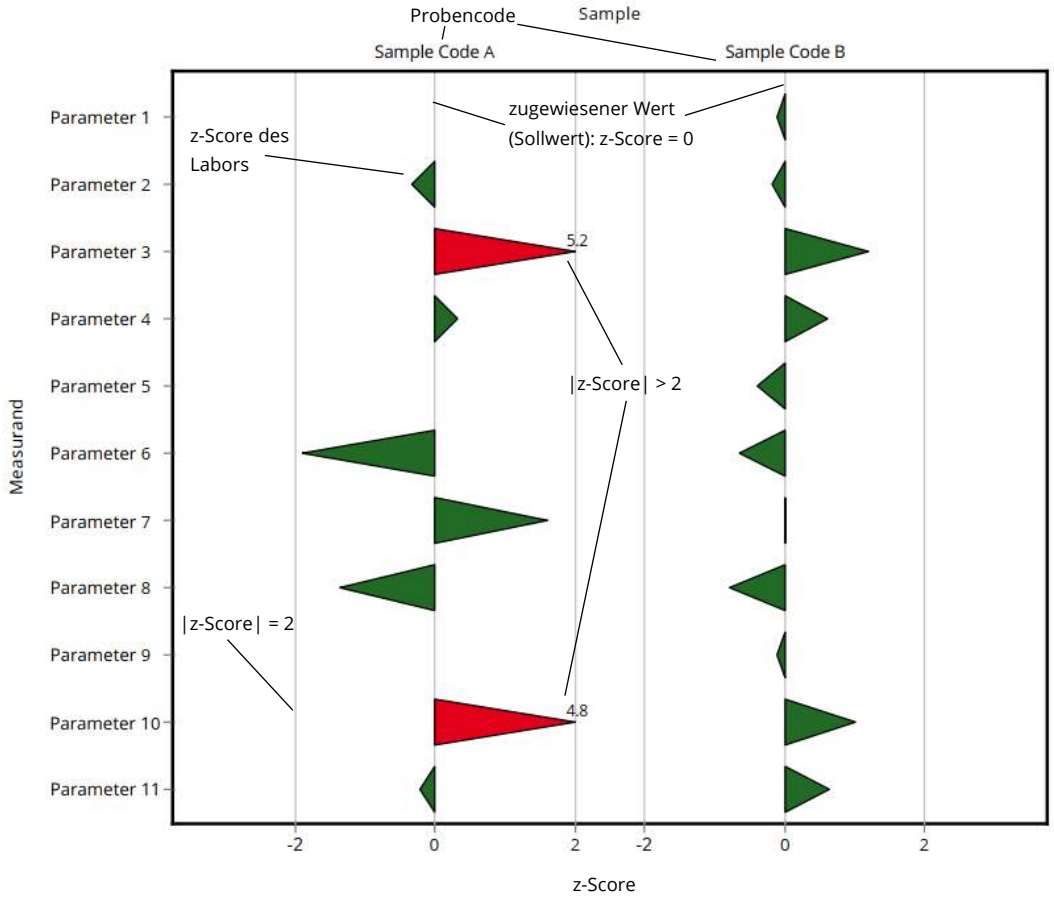
Beispieldiagramm Wiederfindung zum zugewiesenen Wert



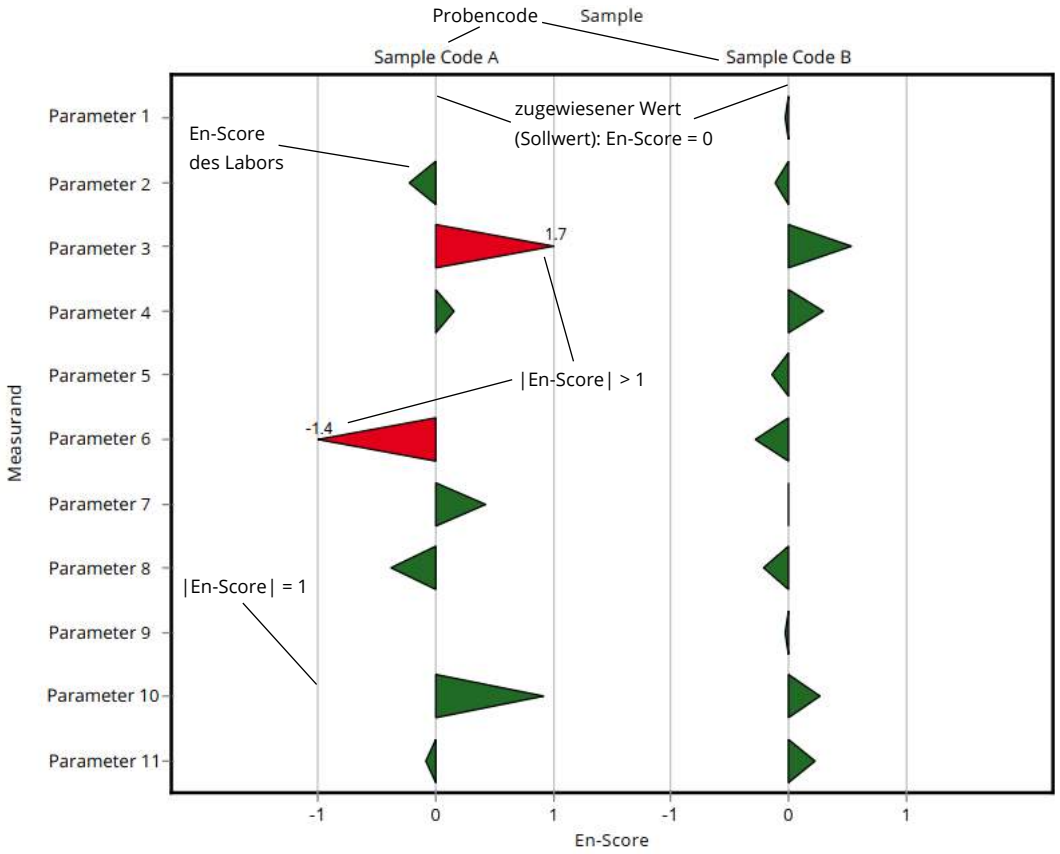
Beispieldiagramm z-Score



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 [%]
Trockenmasse	PFL01A02	%	93.2 ± 0.25	1.4	1.5
	PFL01B02	%	85.3 ± 0.0796	1.28	1.5
Perfluorbutansäure (PFBA) - PF4C	PFL01A02	µg/l	0.658 ± 0.146	0.296	45
	PFL01A10	µg/l	0.115 ± 0.019	0.0368	32
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorpentansäure (PFPeA) - PF5C	PFL01A02	µg/l	1.5 ± 0.267	0.583	39
	PFL01A10	µg/l	0.347 ± 0.0611	0.132	38
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorhexansäure (PFHxA) - PF6C	PFL01A02	µg/l	2.68 ± 0.199	0.589	22
	PFL01A10	µg/l	0.591 ± 0.0749	0.13	22
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorheptansäure (PFHpA) - PF7C	PFL01A02	µg/l	0.145 ± 0.0149	0.0319	22
	PFL01A10	µg/l	0.0503 ± 0.00511	0.0111	22
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluoroctansäure (PFOA) - PF8C	PFL01A02	µg/l	0.112 ± 0.0115	0.0291	26
	PFL01A10	µg/l	0.0684 ± 0.00803	0.0178	26
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluornonansäure (PFNA) - PF9C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10	µg/l	0.0101 ± 0.00112	0.00252	25
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluordecansäure (PFDA) - PF10C	PFL01A02	µg/l	0.00471 ± 0.00151	0.00184	39
	PFL01A10	µg/l	0.00546 ± 0.00134	0.00213	39
	PFL01B02 *	µg/l	- ± -	-	-

Parameter	Probe	Einheit	zugewiesener Wert ± U (k=2)	Kriterium	Kriterium [%]
Perfluordecansäure (PFDA) - PF10C	PFL01B10 **	µg/l	- ± -	-	-
Perfluorundecansäure (PFUnDA) - PF11C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluordodecansäure (PFDoDA) - PF12C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluortridecansäure (PFTrDA) - PF13C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluorbutansulfonsäure (PFBS) - PF4S	PFL01A02	µg/l	0.658 ± 0.0733	0.151	23
	PFL01A10	µg/l	0.167 ± 0.0149	0.0335	20
	PFL01B02	µg/l	0.0269 ± 0.0035	0.00753	28
	PFL01B10	µg/l	0.00661 ± 0.000357	0.00185	28
Perfluorpentansulfonsäure (PFPeS) - PF5S	PFL01A02	µg/l	0.0273 ± 0.00901	0.0117	43
	PFL01A10	µg/l	0.0114 ± 0.00376	0.00456	40
	PFL01B02	µg/l	0.0219 ± 0.00268	0.00547	25
	PFL01B10	µg/l	0.00581 ± 0.00043	0.00145	25
lineare Perfluorhexansulfonsäure (n-PFHxS)	PFL01A02	µg/l	0.0644 ± 0.0102	0.0161	25
	PFL01A10	µg/l	0.0414 ± 0.00506	0.00827	20
	PFL01B02	µg/l	0.137 ± 0.0354	0.0534	39
	PFL01B10	µg/l	0.0488 ± 0.00781	0.0122	25
Total PFHxS	PFL01A02	µg/l	0.0788 ± 0.00997	0.0197	25
	PFL01A10	µg/l	0.0477 ± 0.00435	0.00954	20
	PFL01B02	µg/l	0.167 ± 0.0151	0.0417	25
	PFL01B10	µg/l	0.0548 ± 0.00416	0.0137	25

Parameter	Probe	Einheit	zugewiesener Wert	± U (k=2)	Kriterium	Kriterium [%]
Perfluorheptansulfonsäure (PFHpS) - PF7S	PFL01A02	µg/l	0.00939	± 0.0028	0.00432	46
	PFL01A10	µg/l	0.00931	± 0.0016	0.00289	31
	PFL01B02	µg/l	0.00678	± 0.00106	0.00169	25
	PFL01B10	µg/l	0.00337	± 0.000539	0.000943	28
lineare Perfluoroctansulfonsäure (n-PFOS)	PFL01A02	µg/l	0.0407	± 0.0102	0.0142	35
	PFL01A10	µg/l	0.0485	± 0.00662	0.0121	25
	PFL01B02 *	µg/l	-	± -	-	-
	PFL01B10	µg/l	0.228	± 0.0456	0.0639	28
Total PFOS	PFL01A02	µg/l	0.0645	± 0.0148	0.029	45
	PFL01A10	µg/l	0.0871	± 0.00981	0.0218	25
	PFL01B02	µg/l	0.327	± 0.0649	0.131	40
	PFL01B10	µg/l	0.282	± 0.037	0.079	28
Perfluornonansulfonsäure (PFNS) - PF9S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluordecansulfonsäure (PFDS) - PF10S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluorundecansulfonsäure (PFUnDS) - PF11S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluordodecansulfonsäure (PFDoS) - PF12S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluortridecansulfonsäure (PFTrDS) - PF13S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-

Parameter	Probe	Einheit	zugewiesener Wert ± U (k=2)	Kriterium	Kriterium [%]
Perfluortridecansulfonsäure (PFTrDS) - PF13S	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Summe PFAS	PFL01A02	µg/l	6.49 ± 0.695	1.49	23
	PFL01A10	µg/l	1.57 ± 0.194	0.36	23
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10	µg/l	0.554 ± 0.107	0.216	39

* Für nachfolgende Parameter können keine zugewiesenen Werte ermittelt werden (Vergleichsstandardabweichung >50%). Daher sind zur Information die berechneten Mittelwerte MW ± U(k=2) über die Daten der akkreditierten Labore (n) nach Ausreißerbereinigung angeführt.

Diese Angaben dienen zum Vergleich im Rahmen Ihrer internen QS-Maßnahmen.

Probe PFL01B02:
PF4C: MW (n=11, akkr.) ± U(k=2): 0.064 ± 0.0273 µg/l
PF5C: MW (n=10, akkr.) ± U(k=2): 0.073 ± 0.0363 µg/l
PF6C: MW (n=10, akkr.) ± U(k=2): 0.046 ± 0.0199 µg/l
PF7C: MW (n=10, akkr.) ± U(k=2): 0.037 ± 0.0119 µg/l
PF8C: MW (n=10, akkr.) ± U(k=2): 0.043 ± 0.0160 µg/l
PF9C: MW (n=9, akkr.) ± U(k=2): 0.027 ± 0.0130 µg/l
PF10C: MW (n=6, akkr.) ± U(k=2): 0.0099 ± 0.00714 µg/l
n-PFOS: MW (n=4, akkr.) ± U(k=2): 0.27 ± 0.222 µg/l
Summe PFAS: MW (n=11, akkr.) ± U(k=2): 1.1 ± 0.376 µg/l

** Aufgrund der hohen Streuung der Ergebnisse kann für folgende Parameter keine belastbare Zuweisung festgelegter Werte erfolgen (analog PFL01B02). Da eine statistische Bereinigung der Daten durch Eliminierung der zahlreichen Ausreißer fachlich nicht vertretbar erscheint, werden ausschließlich Informationswerte ausgewiesen.

Diese Angaben dienen zum Vergleich im Rahmen Ihrer internen QS-Maßnahmen.

Probe PFL01B10:
PF4C: MW (n=10, akkr.) ± U(k=2): 0.020 ± 0.00426 µg/l
PF5C: MW (n=10, akkr.) ± U(k=2): 0.026 ± 0.00771 µg/l
PF6C: MW (n=10, akkr.) ± U(k=2): 0.018 ± 0.00326 µg/l
PF7C: MW (n=10, akkr.) ± U(k=2): 0.019 ± 0.00351 µg/l
PF8C: MW (n=9, akkr.) ± U(k=2): 0.020 ± 0.00150 µg/l
PF9C: MW (n=9, akkr.) ± U(k=2): 0.015 ± 0.00249 µg/l
PF10C: MW (n=6, akkr.) ± U(k=2): 0.0052 ± 0.000306 µg/l

*** Trotz der großen Bandbreite deuten die von den akkreditierten Stellen berichteten Ergebnisse konsistent auf Konzentrationen unterhalb bzw. nahe der Bestimmungsgrenzen hin.
Aufgrund dieser Befundlage konnte ein hinreichend belastbarer Schätzwert abgeleitet werden, der als „<“ Informationswert angegeben wird.

Probe PFL01A02:
PF9C: MW (n=12, akkr.): < 0.015 µg/l
PF11C: MW (n=12, akkr.): < 0.01 µg/l
PF12C: MW (n=12, akkr.): < 0.01 µg/l
PF13C: MW (n=11, akkr.): < 0.01 µg/l
PF9S: MW (n=11, akkr.): < 0.01 µg/l
PF10S: MW (n=12, akkr.): < 0.01 µg/l
PF11S: MW (n=12, akkr.): < 0.01 µg/l
PF12S: MW (n=11, akkr.): < 0.01 µg/l
PF13S: MW (n=11, akkr.): < 0.01 µg/l

Probe PFL01B02:
PF11C: MW (n=11, akkr.): < 0.01 µg/l
PF12C: MW (n=12, akkr.): < 0.01 µg/l
PF13C: MW (n=12, akkr.): < 0.01 µg/l
PF9S: MW (n=12, akkr.): < 0.01 µg/l
PF10S: MW (n=12, akkr.): < 0.01 µg/l
PF11S: MW (n=11, akkr.): < 0.01 µg/l
PF12S: MW (n=12, akkr.): < 0.01 µg/l
PF13S: MW (n=11, akkr.): < 0.01 µg/l

Probe PFL01A10:
PF11C: MW (n=12, akkr.): < 0.01 µg/l
PF12C: MW (n=12, akkr.): < 0.01 µg/l
PF13C: MW (n=12, akkr.): < 0.01 µg/l
PF9S: MW (n=11, akkr.): < 0.01 µg/l
PF10S: MW (n=11, akkr.): < 0.01 µg/l
PF11S: MW (n=10, akkr.): < 0.01 µg/l
PF12S: MW (n=11, akkr.): < 0.01 µg/l
PF13S: MW (n=10, akkr.): < 0.01 µg/l

Probe PFL01B10:
PF11C: MW (n=11, akkr.): < 0.01 µg/l
PF12C: MW (n=12, akkr.): < 0.01 µg/l
PF13C: MW (n=12, akkr.): < 0.01 µg/l
PF9S: MW (n=12, akkr.): < 0.01 µg/l
PF10S: MW (n=12, akkr.): < 0.01 µg/l
PF11S: MW (n=11, akkr.): < 0.01 µg/l
PF12S: MW (n=12, akkr.): < 0.01 µg/l
PF13S: MW (n=11, akkr.): < 0.01 µg/l

D6.2. Zusammenfassung der ausreißerbereinigten Ringversuchsergebnisse

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert ± VB (99%)	Minimum	Maximum	sR	vR [%]
Trockenmasse	PFL01A02	18	1	%	93.2 ± 0.375	92.3	94	0.53	0.57
	PFL01B02	17	2	%	85.3 ± 0.119	85.1	85.7	0.164	0.19
Perfluorbutansäure (PFBA) - PF4C	PFL01A02	16	2	µg/l	0.658 ± 0.219	0.261	1.5	0.292	44
	PFL01A10	15	3	µg/l	0.115 ± 0.0286	0.05	0.177	0.0369	32
	PFL01B02	17	2	µg/l	0.0745 ± 0.0346	0.021	0.154	0.0476	64
	PFL01B10	16	3	µg/l	0.0228 ± 0.00583	0.013	0.0356	0.00777	34
Perfluorpentansäure (PFPeA) - PF5C	PFL01A02	19	0	µg/l	1.5 ± 0.401	0.401	2.69	0.583	39
	PFL01A10	19	0	µg/l	0.347 ± 0.0917	0.0773	0.549	0.133	38
	PFL01B02	16	3	µg/l	0.089 ± 0.0468	0.025	0.192	0.0624	70
	PFL01B10	16	3	µg/l	0.0285 ± 0.00856	0.015	0.0548	0.0114	40
Perfluorhexansäure (PFHxA) - PF6C	PFL01A02	17	2	µg/l	2.63 ± 0.273	1.93	3.24	0.375	14
	PFL01A10	18	1	µg/l	0.578 ± 0.0856	0.311	0.772	0.121	21
	PFL01B02	16	3	µg/l	0.0541 ± 0.0249	0.0215	0.116	0.0331	61
	PFL01B10	16	3	µg/l	0.0189 ± 0.00402	0.012	0.0298	0.00536	28
Perfluorheptansäure (PFHpA) - PF7C	PFL01A02	18	0	µg/l	0.145 ± 0.0224	0.066	0.197	0.0316	22
	PFL01A10	19	0	µg/l	0.0503 ± 0.00767	0.0317	0.0674	0.0111	22
	PFL01B02	16	3	µg/l	0.0488 ± 0.0206	0.0229	0.105	0.0275	56
	PFL01B10	16	3	µg/l	0.0205 ± 0.00437	0.013	0.0333	0.00582	28
Perfluoroctansäure (PFOA) - PF8C	PFL01A02	17	1	µg/l	0.112 ± 0.0172	0.0726	0.165	0.0236	21
	PFL01A10	19	0	µg/l	0.0684 ± 0.012	0.044	0.101	0.0175	26
	PFL01B02	16	2	µg/l	0.0475 ± 0.0187	0.021	0.095	0.0249	52
	PFL01B10	14	5	µg/l	0.0213 ± 0.0033	0.015	0.0322	0.00411	19

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert ± VB (99%)	Minimum	Maximum	sR	vR [%]
Perfluornonansäure (PFNA) - PF9C	PFL01A02	10	1	µg/l	0.0091 ± 0.00346	0.0048	0.017	0.00365	40
	PFL01A10	13	2	µg/l	0.0101 ± 0.00169	0.00598	0.013	0.00203	20
	PFL01B02	14	1	µg/l	0.0271 ± 0.0127	0.0107	0.064	0.0159	58
	PFL01B10	14	3	µg/l	0.0157 ± 0.00297	0.012	0.0245	0.0037	24
Perfluordecansäure (PFDA) - PF10C	PFL01A02	6	1	µg/l	0.00471 ± 0.00226	0.0025	0.00744	0.00184	39
	PFL01A10	8	0	µg/l	0.00546 ± 0.00201	0.0016	0.00766	0.00189	35
	PFL01B02	9	2	µg/l	0.00974 ± 0.00694	0.0047	0.027	0.00694	71
	PFL01B10	9	4	µg/l	0.006 ± 0.00137	0.0048	0.00878	0.00137	23
Perfluorundecansäure (PFUnDA) - PF11C	PFL01A02	4	0	µg/l	- ± -	0.000223	0.0048	-	-
	PFL01A10	2	0	µg/l	- ± -	0.0011	0.0026	-	-
	PFL01B02	6	1	µg/l	0.00225 ± 0.00184	0.001	0.0051	0.0015	67
	PFL01B10	5	1	µg/l	- ± -	0.00117	0.00259	-	-
Perfluordodecansäure (PFDoDA) - PF12C	PFL01A02	2	0	µg/l	- ± -	0.00165	0.0024	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0021	0.0021	-	-
	PFL01B02	4	0	µg/l	- ± -	0.00073	0.0038	-	-
	PFL01B10	1	0	µg/l	- ± -	0.0017	0.0017	-	-
Perfluortridecansäure (PFTrDA) - PF13C	PFL01A02	1	0	µg/l	- ± -	0.0018	0.0018	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0017	0.0017	-	-
	PFL01B02	1	0	µg/l	- ± -	0.0024	0.0024	-	-
	PFL01B10	1	0	µg/l	- ± -	0.0016	0.0016	-	-
Perfluorbutansulfonsäure (PFBS) - PF4S	PFL01A02	17	2	µg/l	0.658 ± 0.11	0.298	0.847	0.151	23
	PFL01A10	17	2	µg/l	0.167 ± 0.0224	0.116	0.204	0.0307	18
	PFL01B02	18	1	µg/l	0.0269 ± 0.00525	0.014	0.039	0.00743	28

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert	± VB (99%)	Minimum	Maximum	sR	vR [%]
Perfluorbutansulfonsäure (PFBS) - PF4S	PFL01B10	11	3	µg/l	0.00661	± 0.000536	0.00565	0.0078	0.000592	9
Perfluorpentansulfonsäure (PFPeS) - PF5S	PFL01A02	12	1	µg/l	0.0283	± 0.0106	0.016	0.053	0.0123	43
	PFL01A10	12	0	µg/l	0.0118	± 0.0035	0.0059	0.0183	0.00405	34
	PFL01B02	17	0	µg/l	0.0219	± 0.00401	0.0103	0.0313	0.00552	25
	PFL01B10	13	1	µg/l	0.00581	± 0.000645	0.00466	0.007	0.000775	13
lineare Perfluorhexansulfonsäure (n-PFHxS)	PFL01A02	8	1	µg/l	0.0644	± 0.0153	0.0389	0.0856	0.0144	22
	PFL01A10	8	1	µg/l	0.0414	± 0.00759	0.031	0.0487	0.00715	17
	PFL01B02	9	0	µg/l	0.137	± 0.053	0.032	0.196	0.053	39
	PFL01B10	9	0	µg/l	0.0488	± 0.0117	0.028	0.0622	0.0117	24
Total PFHxS	PFL01A02	15	1	µg/l	0.0788	± 0.015	0.0551	0.124	0.0193	24
	PFL01A10	16	0	µg/l	0.0477	± 0.00653	0.0349	0.0627	0.0087	18
	PFL01B02	16	0	µg/l	0.167	± 0.0226	0.119	0.216	0.0301	18
	PFL01B10	17	0	µg/l	0.0548	± 0.00624	0.0378	0.0673	0.00858	16
Perfluorheptansulfonsäure (PFHpS) - PF7S	PFL01A02	10	1	µg/l	0.0097	± 0.00419	0.00355	0.017	0.00441	45
	PFL01A10	12	0	µg/l	0.0081	± 0.00215	0.00455	0.012	0.00248	31
	PFL01B02	10	2	µg/l	0.00678	± 0.00159	0.004	0.00926	0.00168	25
	PFL01B10	12	1	µg/l	0.00337	± 0.000809	0.00156	0.005	0.000934	28
lineare Perfluoroctansulfonsäure (n-PFOS)	PFL01A02	8	1	µg/l	0.0407	± 0.0152	0.0204	0.067	0.0144	35
	PFL01A10	7	2	µg/l	0.0485	± 0.00993	0.0358	0.0589	0.00875	18
	PFL01B02	9	0	µg/l	0.281	± 0.158	0.0342	0.569	0.158	56
	PFL01B10	8	1	µg/l	0.228	± 0.0684	0.145	0.323	0.0645	28
Total PFOS	PFL01A02	15	1	µg/l	0.0645	± 0.0222	0.0143	0.125	0.0287	45

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert ± VB (99%)	Minimum	Maximum	sR	vR [%]
Total PFOS	PFL01A10	16	0	µg/l	0.0871 ± 0.0147	0.062	0.119	0.0196	23
	PFL01B02	16	0	µg/l	0.327 ± 0.0973	0.165	0.582	0.13	40
	PFL01B10	17	0	µg/l	0.282 ± 0.0555	0.156	0.454	0.0762	27
Perfluornonansulfonsäure (PFNS) - PF9S	PFL01A02	1	0	µg/l	- ± -	0.0327	0.0327	-	-
	PFL01A10	2	0	µg/l	- ± -	0.0017	0.0293	-	-
	PFL01B02	8	0	µg/l	0.00382 ± 0.0021	0.000568	0.00654	0.00198	52
	PFL01B10	8	0	µg/l	0.00385 ± 0.00196	0.0006	0.00629	0.00185	48
Perfluordecansulfonsäure (PFDS) - PF10S	PFL01A02	0	0	µg/l	- ± -	-	-	-	-
	PFL01A10	0	0	µg/l	- ± -	-	-	-	-
	PFL01B02	4	0	µg/l	- ± -	0.00292	0.0046	-	-
	PFL01B10	4	0	µg/l	- ± -	0.0029	0.00493	-	-
Perfluorundecansulfonsäure (PFUnDS) - PF11S	PFL01A02	0	0	µg/l	- ± -	-	-	-	-
	PFL01A10	0	0	µg/l	- ± -	-	-	-	-
	PFL01B02	3	0	µg/l	- ± -	0.00211	0.00478	-	-
	PFL01B10	3	0	µg/l	- ± -	0.00147	0.0023	-	-
Perfluordodecansulfonsäure (PFDoS) - PF12S	PFL01A02	1	0	µg/l	- ± -	0.0158	0.0158	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0026	0.0026	-	-
	PFL01B02	1	0	µg/l	- ± -	0.005	0.005	-	-
	PFL01B10	0	0	µg/l	- ± -	-	-	-	-
Perfluortridecansulfonsäure (PFTrDS) - PF13S	PFL01A02	1	0	µg/l	- ± -	0.0099	0.0099	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0029	0.0029	-	-

Parameter	Probe	Anzahl Labors für Berechnung	Anzahl Ausreißer Labors	Einheit	Mittelwert ± VB (99%)	Minimum	Maximum	sR	vR [%]
Perfluortridecansulfonsäure (PFTrDS) - PF13S	PFL01B02	1	0	µg/l	- ± -	0.0052	0.0052	-	-
	PFL01B10	0	0	µg/l	- ± -	-	-	-	-
Summe PFAS	PFL01A02	15	0	µg/l	6.49 ± 1.04	4.5	9.33	1.35	21
	PFL01A10	14	1	µg/l	1.57 ± 0.291	0.789	2.14	0.363	23
	PFL01B02	16	0	µg/l	1.06 ± 0.429	0.338	2.35	0.573	54
	PFL01B10	16	0	µg/l	0.554 ± 0.161	0.307	0.964	0.214	39

E1. Description of the proficiency test

E1.1. Design and implementation

- Number of registrations: 19
- Number of submitted data records: 19
- Dispatch of samples: September 15th, 2026
- Closing date for submission of data: October 13th, 2026

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 two solid samples were real-world samples with native contamination and were processed for the proficiency test following a comprehensive, multi-stage sample homogenization and preparation procedure.

Sample PFL01A consisted of a mixture of soil samples and sewage sludge compost. Sample PFL01B originated from freshly excavated soil contaminated with PFAS.

Both samples were sieved to < 4 mm and homogenized on 21 and 22 July 2026, respectively, using a drum mixer for 30 minutes. Individual test portions were then prepared by fractional shovelling, resulting in subsamples of approximately 730 g for PFL01A and 715 g for PFL01B.

The following samples were made available:

- 1 sample of soil/sewage sludge compost mixture, < 4 mm, air-dried (PFL01A)
- 1 sample of excavated soil, < 4 mm, field-moist (PFL01B)

The samples were stored at room temperature until shipment.

The homogeneous proficiency test items were dispatched on 15th of September 2026.

Each participating laboratory received:

- 2 samples of approximately 0.7 kg each, filled in 1000 ml HDPE-vessels.

E1.3. Instructions for the participants

For reasons of stability, it was recommended to start the analysis by September 17th, 2026, at the latest.

The participants received the following information in the sample dispatch email on September 15th, 2026:

Sample handling instructions:

- Determination of dry matter content at 105°C using a separate aliquot, which was to be discarded after analysis.
- Direct weighing of the calculated amount of homogenized sample for eluate preparation (without any further particle size reduction or pre-drying).
- Recommended minimum sample intake (eluate): not less than 90 g
- Preparation of 24-hour aqueous end-over-end eluates at L/S = 10 l/kg dry matter (DM) and L/S = 10 l/kg DM for each sample.
    - standards for L/S = 10 l/kg DM: e.g. prEN 12457-2:2026 or prEN 12457-4:2026
    - standards for L/S = 2 l/kg DM: e.g. DIN 19529:2023 or prEN 12457-1:2026
- Performance of blank value controls as part of quality control measures.
  Note that, in accordance with the relevant standards, blank values (eluate blanks) were not to be subtracted from the reported results.
- Units for reporting:
    - dry matter content: in %
    - eluate results: in µg/L eluate
- recommended minimum limit of quantification (LOQ) of 0.001 µg/L or lower.

Parameters to be determined

- dry matter content (105°C)

in the 24-hour aqueous end-over-end eluates at L/S = 10 l/kg DM and L/S = 2 l/kg DM

- PF4C–PF13C
- PF4S–PF13S
- total PFAS (calculated sum of the 20 parameters PF4C–PF13C and PF4S–PF13S)

The shipment documentation referred participants to the accompanying e-mail containing the key information and summarized the relevant sample handling instructions.

Information to be reported for each sample and analyte

- result of analysis (unrounded or with at least three significant digits)
- combined measurement uncertainty of the result without expansion factor (i.e. k = 1, absolute uncertainty in the same unit as the analytical result, with at least two significant digits)
- analysis date (the date of eluate preparation was requested separately)
- the applied standard or method (including a short description of the measurement technique, e.g. LC-MS/MS)
- accreditation status (yes/no)

To support the technical evaluation of all submissions, participants were asked to provide supplementary information on eluate preparation and PFAS analysis. The information provided by the participants was treated confidentially and incorporated into the method overview in aggregated and summarized form.

Information on eluate preparation (for both L/S 2 and L/S 10)

- Standard or draft standard applied
- Date of eluate preparation
- Sample test portion (g)
- Volume and type of elution medium
- Eluate vessels (material and volume)
- Details of the shaking procedure
- Liquid/solid separation steps
- Centrifugation details (equipment, duration, conditions, etc.)
- Volume of the centrifuged eluate
- pH value and electrical conductivity

additional information on PFAS analysis

- Details of sample pre-treatment
- Solid-phase extraction (SPE): (yes/no), including details
- Direct injection (DI): (yes/no), including details
- Calibration using external standards?
- Calibration using internal standards?
- Recovery correction applied (yes/no)?
- Blank correction applied (yes/no)?

- Other observations or noteworthy findings.

The participants were expected to use the test method or measurement method of their choice, which should be consistent with their routine procedures.

An overview of the methods applied and a summary of the supplementary information provided are presented in section E9.

E1.4. Control testing for homogeneity evaluation

From all fillings of the two samples, 5 aliquots in regular intervals per sample were selected and submitted to the laboratory for control testing.

The eluate preparation and the determination of all parameters was conducted 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 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 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 October 13th, 2026. Any values received at later date were not considered.

During 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 prompt feedback within 24 hours.

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 n=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. The traceability of the assigned value is checked by comparing it with the mean value of the control testing laboratory.

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

In this case, a clear statement in section E7 of the report is made and all statistical data provided is 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 based on the following formula:

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

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
Criterion	is the reproducibility standard deviation calculated from the participants' results after removal of outliers (sR) in the current round Where justified (e.g. results for real samples are close to minimum quantification limit or in case of regulatory requirements) the criterion 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 samples is performed. This additional assessment considers 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 based on the following formula:

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

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 considered. 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 considered. 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.

Scores were calculated in accordance with E2 for the following samples and parameters:

- PFL01A02: parameters PF4C, PF5C, PF7C, PF8C, PF10C, PF4S, linear PF6S, total PF6S, linear PF8S, total PF8S, sum PFAS and dry mass
- PFL01B02: PF4S, PF5S, linear PF6S, total PF6S, PF7S, total PF8S and dry mass
- PFL01A10: PF4C, PF5C, PF7C, PF8C, PF9C, PF10C, PF4S, linear PF6S, total PF6S, linear PF8S, total PF8S and sum PFAS
- PFL01B10: PF4S, PF5S, linear PF6S, total PF6S, PF7S, linear PF8S, total PF8S and sum PFAS.

For the following samples and parameters, the results reported by the accredited laboratories consistently indicated concentrations below or close to the LOQs, despite the wide range of reported values. Based on this evidence, a sufficiently robust estimated value could be derived, which is reported in section E6.1 as a '<' informational value for comparison purposes:

- PFL01A02: PF9C PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S and PF13S
- PFL01B02: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S and PF13S
- PFL01A10: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S and PF13S
- PFL01B10: PF11C, PF12C, PF13C, PF9S, PF10S, PF11S, PF12S and PF13S.

For the following samples and parameters, 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.

- PFL01A02: PF6C, PF5S and PF7S
- PFL01A10: PF6C, PF5S and PF7S.

For the following samples and parameters, measurement results reported by the laboratories listed below were excluded as Hampel outliers following data review and statistical outlier testing:

- PFL01A02: PF9C (LC0010 H95);
- PFL01B02: PF4C (LC0001 H95 and LC0004 H95), PF5C (LC0001 H95, LC0004 H95 and LC0019 H95), PF6C (LC0001 H95, LC0004 H95 and LC0019 H95) and PF7C (LC0001 H99, LC0004 H99 and LC0014 H99).

The relative reproducibility standard deviation in the current proficiency testing was more than 50 % for the following sample and parameters. For these parameters, comparison with the informative values reported in section E6.1 (mean values derived from the accredited laboratories) is recommended:

- PFL01B02: PF4C, PF5C, PF6C, PF7C, PF8C, PF9C, PF10C, linear PF8S and sum PFAS.

Due to the high variability of the reported results, no robust assigned value could be derived for the following parameters in sample PFL01B10 (analogous to PFL01B02). Since a statistical correction of the data by excluding numerous outliers was not considered scientifically justifiable, comparison with the informative values reported in section E6.1 (mean values derived from the accredited laboratories) is recommended:

- PFL01B10: PF4C, PF5C, PF6C, PF7C, PF8C, PF9C, PF10C.

The assessment criteria for samples PFL01A and PFL01B were established on the basis of expert judgement, taking into account the characteristics of the respective sample matrices (see E6.1). To ensure a consistent evaluation of both samples, the criteria were deliberately defined in a conservative manner and, where appropriate, rounded upward.

Conclusion

Potential factors contributing to the observed variability of the results include filtration, centrifugation, the selected sample preparation strategy (e.g. SPE or DI), dilution steps, and matrix effects during LC-MS/MS analysis. Within the investigated pH range, no significant influence of pH on the reported PFAS concentrations could be identified.

The data indicate that matrix-specific effects play a major role. The largest deviations were observed for the L/S 2l/kg DM eluates of sample PFL01A, whereas the results obtained for the corresponding eluates of sample PFL01B were generally much more consistent.

Overall, the results demonstrate that PFAS concentrations in the eluates are influenced by combined effects of sample matrix, sample pre-treatment, and analytical methodology.

In summary, matrix-dependent effects associated with sample preparation and analytical measurement appear to be the dominant sources of the observed variability. This is particularly evident for PFL01A, where elevated ionic strength and the resulting analytical matrix effects are considered likely contributors to the increased dispersion of the reported results.

E5. Annotations on tables and charts

E5.1. Information and abbreviations in tables

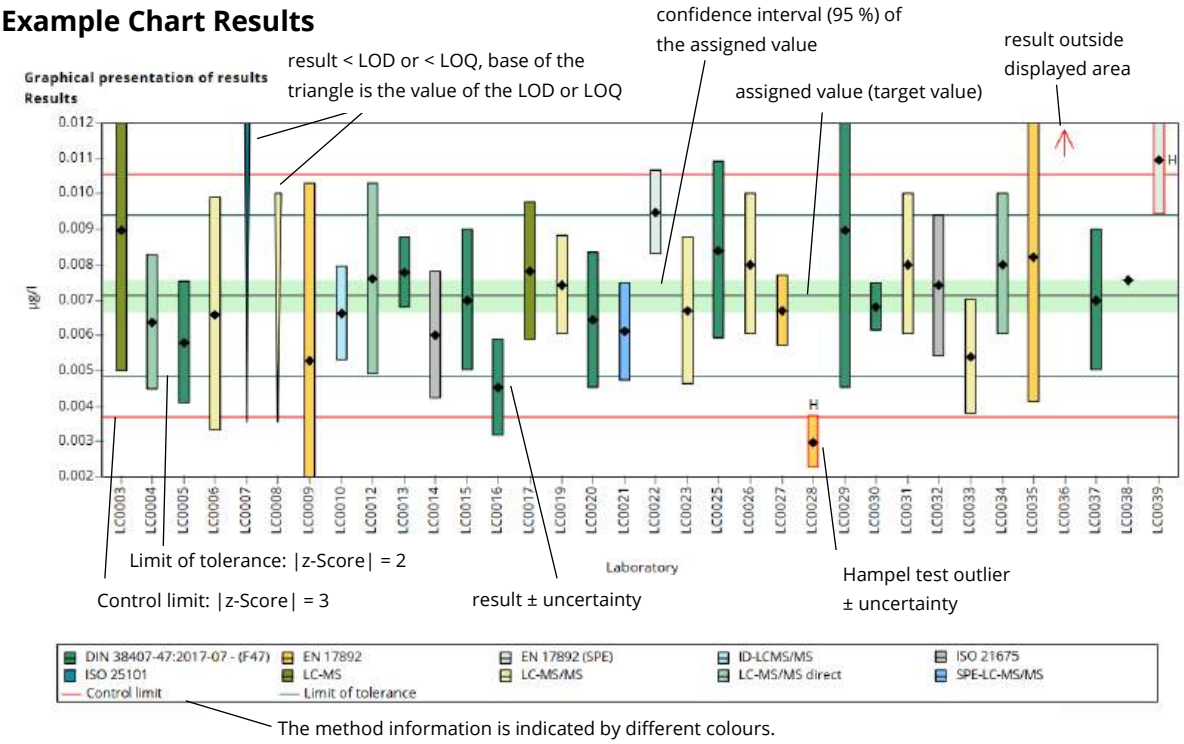
Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criteria	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criteria [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)
Mean	Mean of the results of the participants, 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 considers the measurement uncertainty of the participants.
-	No data available or no calculation possible
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test
FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive; for parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results
*	mark for additional comments

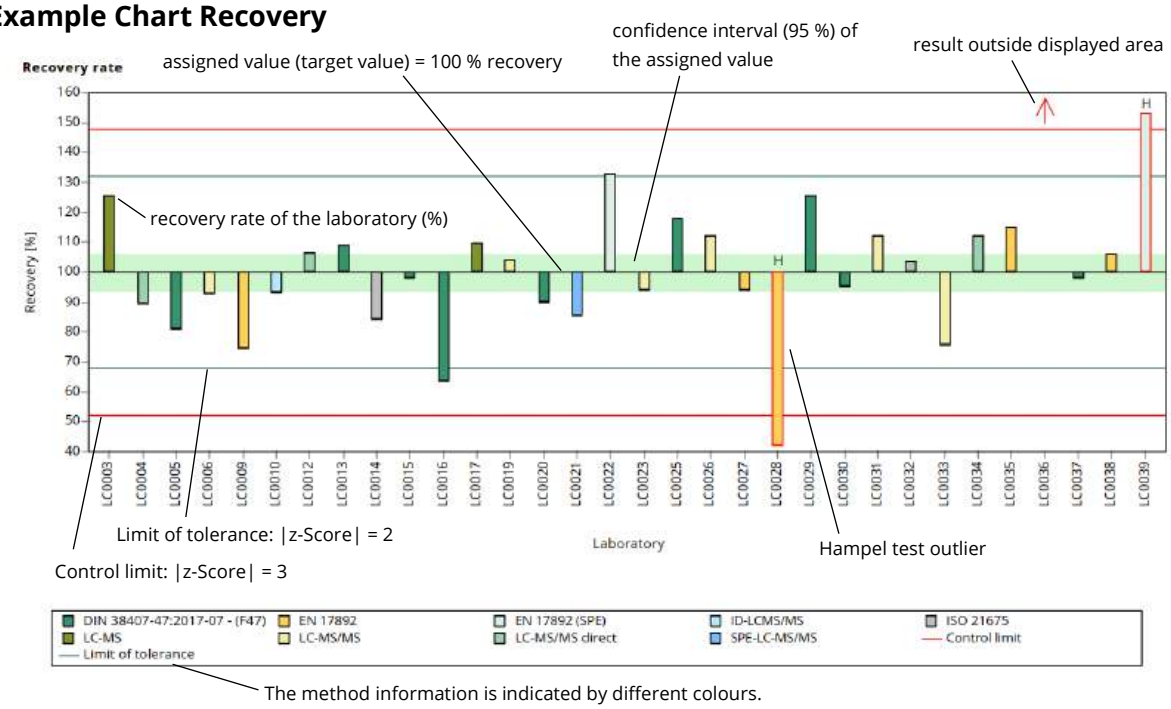
E5.2. Graphical presentation of results

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

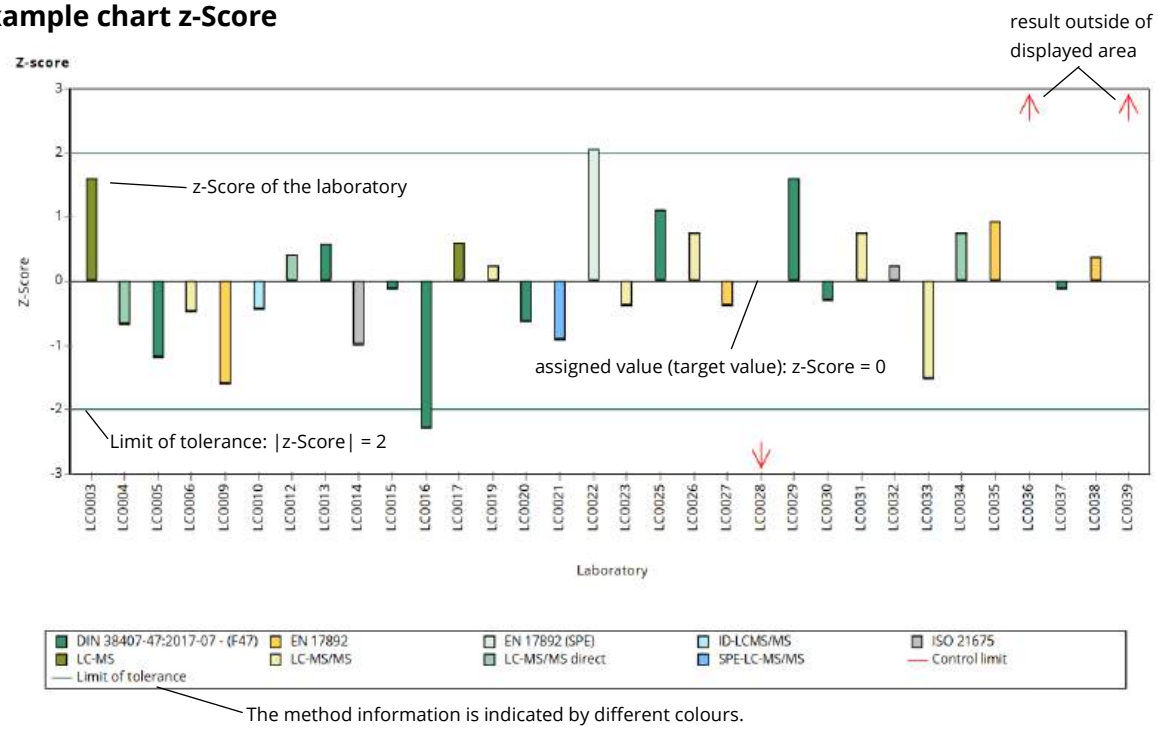
Example Chart Results



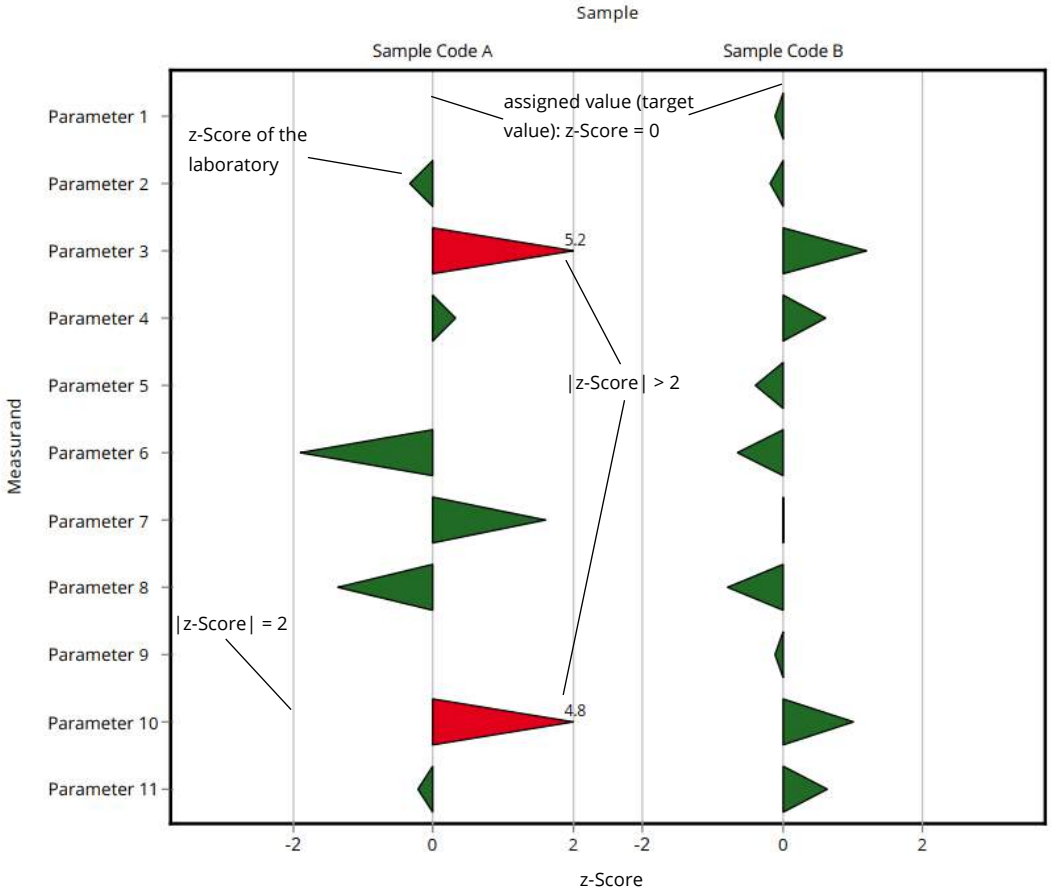
Example Chart Recovery



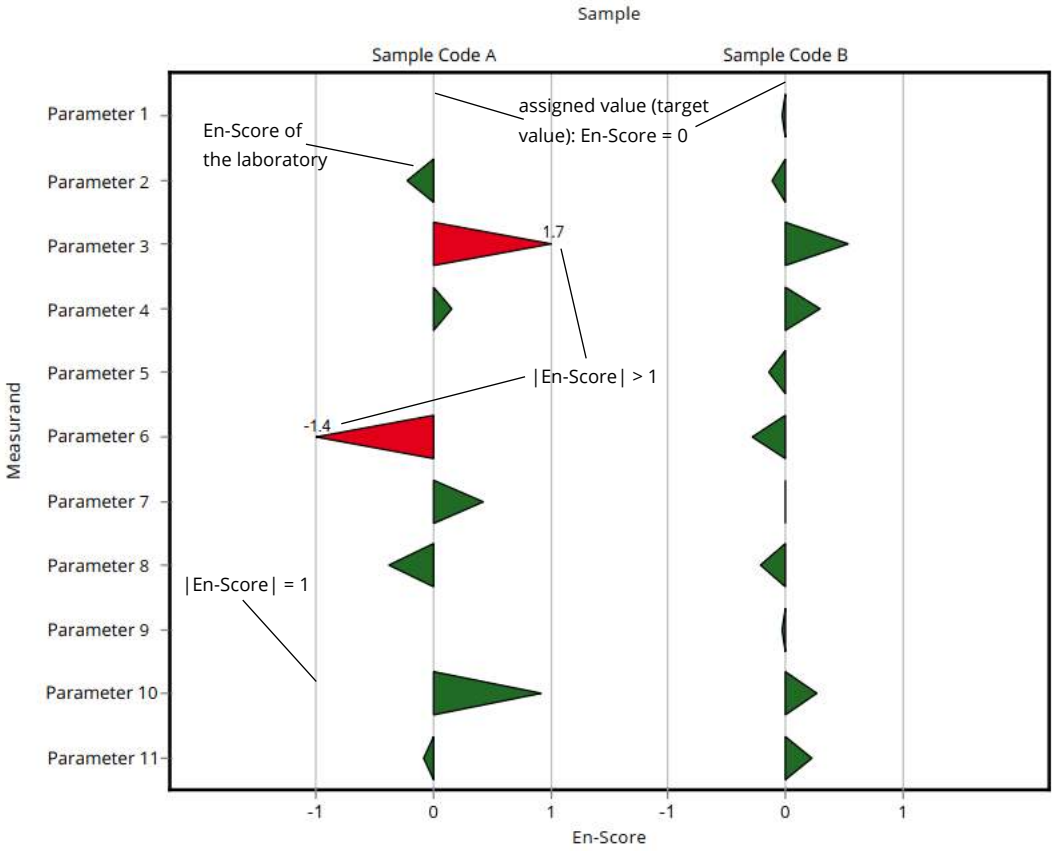
Example chart z-Score



Example chart z-Score (laboratory-oriented report)



Example chart En-Score (laboratory-oriented report)



E6. Summary

E6.1. Table of assigned values

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Dry mass	PFL01A02	%	93.2 ± 0.25	1.4	1.5
	PFL01B02	%	85.3 ± 0.0796	1.28	1.5
Perfluorobutanoic acid (PFBA) - PF4C	PFL01A02	µg/l	0.658 ± 0.146	0.296	45
	PFL01A10	µg/l	0.115 ± 0.019	0.0368	32
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	PFL01A02	µg/l	1.5 ± 0.267	0.583	39
	PFL01A10	µg/l	0.347 ± 0.0611	0.132	38
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	PFL01A02	µg/l	2.68 ± 0.199	0.589	22
	PFL01A10	µg/l	0.591 ± 0.0749	0.13	22
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	PFL01A02	µg/l	0.145 ± 0.0149	0.0319	22
	PFL01A10	µg/l	0.0503 ± 0.00511	0.0111	22
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorooctanoic acid (PFOA) - PF8C	PFL01A02	µg/l	0.112 ± 0.0115	0.0291	26
	PFL01A10	µg/l	0.0684 ± 0.00803	0.0178	26
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorononanoic acid (PFNA) - PF9C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10	µg/l	0.0101 ± 0.00112	0.00252	25
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluorodecanoic acid (PFDA) - PF10C	PFL01A02	µg/l	0.00471 ± 0.00151	0.00184	39
	PFL01A10	µg/l	0.00546 ± 0.00134	0.00213	39

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Perfluorodecanoic acid (PFDA) - PF10C	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10 **	µg/l	- ± -	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	PFL01A02 ***	µg/l	- ± -	-	-
	PFL01A10 ***	µg/l	- ± -	-	-
	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	PFL01A02	µg/l	0.658 ± 0.0733	0.151	23
	PFL01A10	µg/l	0.167 ± 0.0149	0.0335	20
	PFL01B02	µg/l	0.0269 ± 0.0035	0.00753	28
	PFL01B10	µg/l	0.00661 ± 0.000357	0.00185	28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PFL01A02	µg/l	0.0273 ± 0.00901	0.0117	43
	PFL01A10	µg/l	0.0114 ± 0.00376	0.00456	40
	PFL01B02	µg/l	0.0219 ± 0.00268	0.00547	25
	PFL01B10	µg/l	0.00581 ± 0.00043	0.00145	25
linear Perfluorohexane sulfonic acid (n-PFHxS)	PFL01A02	µg/l	0.0644 ± 0.0102	0.0161	25
	PFL01A10	µg/l	0.0414 ± 0.00506	0.00827	20
	PFL01B02	µg/l	0.137 ± 0.0354	0.0534	39
	PFL01B10	µg/l	0.0488 ± 0.00781	0.0122	25
Total PFHxS	PFL01A02	µg/l	0.0788 ± 0.00997	0.0197	25
	PFL01A10	µg/l	0.0477 ± 0.00435	0.00954	20
	PFL01B02	µg/l	0.167 ± 0.0151	0.0417	25
	PFL01B10	µg/l	0.0548 ± 0.00416	0.0137	25

Parameter	Sample	Unit	Assigned value	± U (k=2)	Criterion	Criterion [%]
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PFL01A02	µg/l	0.00939	± 0.0028	0.00432	46
	PFL01A10	µg/l	0.00931	± 0.0016	0.00289	31
	PFL01B02	µg/l	0.00678	± 0.00106	0.00169	25
	PFL01B10	µg/l	0.00337	± 0.000539	0.000943	28
linear Perfluorooctane sulfonic acid (n-PFOS)	PFL01A02	µg/l	0.0407	± 0.0102	0.0142	35
	PFL01A10	µg/l	0.0485	± 0.00662	0.0121	25
	PFL01B02 *	µg/l	-	± -	-	-
	PFL01B10	µg/l	0.228	± 0.0456	0.0639	28
Total PFOS	PFL01A02	µg/l	0.0645	± 0.0148	0.029	45
	PFL01A10	µg/l	0.0871	± 0.00981	0.0218	25
	PFL01B02	µg/l	0.327	± 0.0649	0.131	40
	PFL01B10	µg/l	0.282	± 0.037	0.079	28
Perfluorononane sulfonic acid (PFNS) - PF9S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-
	PFL01B02 ***	µg/l	-	± -	-	-
	PFL01B10 ***	µg/l	-	± -	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PFL01A02 ***	µg/l	-	± -	-	-
	PFL01A10 ***	µg/l	-	± -	-	-

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PFL01B02 ***	µg/l	- ± -	-	-
	PFL01B10 ***	µg/l	- ± -	-	-
Sum PFAS	PFL01A02	µg/l	6.49 ± 0.695	1.49	23
	PFL01A10	µg/l	1.57 ± 0.194	0.36	23
	PFL01B02 *	µg/l	- ± -	-	-
	PFL01B10	µg/l	0.554 ± 0.107	0.216	39

* Due to the high reproducibility standard deviation (>50%) for the following parameters, no assigned values could be established. For information purposes, the calculated mean values MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal are provided.

This data can be used for comparison as part of your internal QA measures.

Sample PFL01B02:
PF4C: MV (n=11, accr.) ± U(k=2): 0.064 ± 0.0273 µg/l
PF5C: MV (n=10, accr.) ± U(k=2): 0.073 ± 0.0363 µg/l
PF6C: MV (n=10, accr.) ± U(k=2): 0.046 ± 0.0199 µg/l
PF7C: MV (n=10, accr.) ± U(k=2): 0.037 ± 0.0119 µg/l
PF8C: MV (n=10, accr.) ± U(k=2): 0.043 ± 0.0160 µg/l
PF9C: MV (n=9, accr.) ± U(k=2): 0.027 ± 0.0130 µg/l
PF10C: MV (n=6, accr.) ± U(k=2): 0.0099 ± 0.00714 µg/l
n-PFOS: MV (n=4, accr.) ± U(k=2): 0.27 ± 0.222 µg/l
Summe PFAS: MV (n=11, accr.) ± U(k=2): 1.1 ± 0.376 µg/l

** Due to the high variability of the results, a robust assignment of designated values is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

Sample PFL01B10:
PF4C: MV (n=10, accr.) ± U(k=2): 0.020 ± 0.00426 µg/l
PF5C: MV (n=10, accr.) ± U(k=2): 0.026 ± 0.00771 µg/l
PF6C: MV (n=10, accr.) ± U(k=2): 0.018 ± 0.00326 µg/l
PF7C: MV (n=10, accr.) ± U(k=2): 0.019 ± 0.00351 µg/l
PF8C: MV (n=9, accr.) ± U(k=2): 0.020 ± 0.00150 µg/l
PF9C: MV (n=9, accr.) ± U(k=2): 0.015 ± 0.00249 µg/l
PF10C: MV (n=6, accr.) ± U(k=2): 0.0052 ± 0.000306 µg/l

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

Sample PFL01A02:
PF9C: MV (n=12, accr.): < 0.015 µg/l
PF11C: MV (n=12, accr.): < 0.01 µg/l
PF12C: MV (n=12, accr.): < 0.01 µg/l
PF13C: MV (n=11, accr.): < 0.01 µg/l
PF9S: MV (n=11, accr.): < 0.01 µg/l
PF10S: MV (n=12, accr.): < 0.01 µg/l
PF11S: MV (n=12, accr.): < 0.01 µg/l
PF12S: MV (n=11, accr.): < 0.01 µg/l
PF13S: MV (n=11, accr.): < 0.01 µg/l

Sample PFL01B02:
PF11C: MV (n=11, accr.): < 0.01 µg/l
PF12C: MV (n=12, accr.): < 0.01 µg/l
PF13C: MV (n=12, accr.): < 0.01 µg/l
PF9S: MV (n=12, accr.): < 0.01 µg/l
PF10S: MV (n=12, accr.): < 0.01 µg/l
PF11S: MV (n=11, accr.): < 0.01 µg/l
PF12S: MV (n=12, accr.): < 0.01 µg/l
PF13S: MV (n=11, accr.): < 0.01 µg/l

Sample PFL01A10:
PF11C: MV (n=12, accr.): < 0.01 µg/l
PF12C: MV (n=12, accr.): < 0.01 µg/l
PF13C: MV (n=12, accr.): < 0.01 µg/l
PF9S: MV (n=11, accr.): < 0.01 µg/l
PF10S: MV (n=11, accr.): < 0.01 µg/l
PF11S: MV (n=10, accr.): < 0.01 µg/l
PF12S: MV (n=11, accr.): < 0.01 µg/l
PF13S: MV (n=10, accr.): < 0.01 µg/l

Sample PFL01B10:
PF11C: MV (n=11, accr.): < 0.01 µg/l
PF12C: MV (n=12, accr.): < 0.01 µg/l
PF13C: MV (n=12, accr.): < 0.01 µg/l
PF9S: MV (n=12, accr.): < 0.01 µg/l
PF10S: MV (n=12, accr.): < 0.01 µg/l
PF11S: MV (n=11, accr.): < 0.01 µg/l
PF12S: MV (n=12, accr.): < 0.01 µg/l
PF13S: MV (n=11, accr.): < 0.01 µg/l

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

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean ± CI (99%)	Minimum	Maximum	sR	vR [%]
Dry mass	PFL01A02	18	1	%	93.2 ± 0.375	92.3	94	0.53	0.57
	PFL01B02	17	2	%	85.3 ± 0.119	85.1	85.7	0.164	0.19
Perfluorobutanoic acid (PFBA) - PF4C	PFL01A02	16	2	µg/l	0.658 ± 0.219	0.261	1.5	0.292	44
	PFL01A10	15	3	µg/l	0.115 ± 0.0286	0.05	0.177	0.0369	32
	PFL01B02	17	2	µg/l	0.0745 ± 0.0346	0.021	0.154	0.0476	64
	PFL01B10	16	3	µg/l	0.0228 ± 0.00583	0.013	0.0356	0.00777	34
Perfluoropentanoic acid (PFPeA) - PF5C	PFL01A02	19	0	µg/l	1.5 ± 0.401	0.401	2.69	0.583	39
	PFL01A10	19	0	µg/l	0.347 ± 0.0917	0.0773	0.549	0.133	38
	PFL01B02	16	3	µg/l	0.089 ± 0.0468	0.025	0.192	0.0624	70
	PFL01B10	16	3	µg/l	0.0285 ± 0.00856	0.015	0.0548	0.0114	40
Perfluorohexanoic acid (PFHxA) - PF6C	PFL01A02	17	2	µg/l	2.63 ± 0.273	1.93	3.24	0.375	14
	PFL01A10	18	1	µg/l	0.578 ± 0.0856	0.311	0.772	0.121	21
	PFL01B02	16	3	µg/l	0.0541 ± 0.0249	0.0215	0.116	0.0331	61
	PFL01B10	16	3	µg/l	0.0189 ± 0.00402	0.012	0.0298	0.00536	28
Perfluoroheptanoic acid (PFHpA) - PF7C	PFL01A02	18	0	µg/l	0.145 ± 0.0224	0.066	0.197	0.0316	22
	PFL01A10	19	0	µg/l	0.0503 ± 0.00767	0.0317	0.0674	0.0111	22
	PFL01B02	16	3	µg/l	0.0488 ± 0.0206	0.0229	0.105	0.0275	56
	PFL01B10	16	3	µg/l	0.0205 ± 0.00437	0.013	0.0333	0.00582	28
Perfluorooctanoic acid (PFOA) - PF8C	PFL01A02	17	1	µg/l	0.112 ± 0.0172	0.0726	0.165	0.0236	21
	PFL01A10	19	0	µg/l	0.0684 ± 0.012	0.044	0.101	0.0175	26
	PFL01B02	16	2	µg/l	0.0475 ± 0.0187	0.021	0.095	0.0249	52
	PFL01B10	14	5	µg/l	0.0213 ± 0.0033	0.015	0.0322	0.00411	19

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean ± CI (99%)	Minimum	Maximum	sR	vR [%]
Perfluorononanoic acid (PFNA) - PF9C	PFL01A02	10	1	µg/l	0.0091 ± 0.00346	0.0048	0.017	0.00365	40
	PFL01A10	13	2	µg/l	0.0101 ± 0.00169	0.00598	0.013	0.00203	20
	PFL01B02	14	1	µg/l	0.0271 ± 0.0127	0.0107	0.064	0.0159	58
	PFL01B10	14	3	µg/l	0.0157 ± 0.00297	0.012	0.0245	0.0037	24
Perfluorodecanoic acid (PFDA) - PF10C	PFL01A02	6	1	µg/l	0.00471 ± 0.00226	0.0025	0.00744	0.00184	39
	PFL01A10	8	0	µg/l	0.00546 ± 0.00201	0.0016	0.00766	0.00189	35
	PFL01B02	9	2	µg/l	0.00974 ± 0.00694	0.0047	0.027	0.00694	71
	PFL01B10	9	4	µg/l	0.006 ± 0.00137	0.0048	0.00878	0.00137	23
Perfluoroundecanoic acid (PFUnDA) - PF11C	PFL01A02	4	0	µg/l	- ± -	0.000223	0.0048	-	-
	PFL01A10	2	0	µg/l	- ± -	0.0011	0.0026	-	-
	PFL01B02	6	1	µg/l	0.00225 ± 0.00184	0.001	0.0051	0.0015	67
	PFL01B10	5	1	µg/l	- ± -	0.00117	0.00259	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	PFL01A02	2	0	µg/l	- ± -	0.00165	0.0024	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0021	0.0021	-	-
	PFL01B02	4	0	µg/l	- ± -	0.00073	0.0038	-	-
	PFL01B10	1	0	µg/l	- ± -	0.0017	0.0017	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	PFL01A02	1	0	µg/l	- ± -	0.0018	0.0018	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0017	0.0017	-	-
	PFL01B02	1	0	µg/l	- ± -	0.0024	0.0024	-	-
	PFL01B10	1	0	µg/l	- ± -	0.0016	0.0016	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	PFL01A02	17	2	µg/l	0.658 ± 0.11	0.298	0.847	0.151	23

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean ± CI (99%)	Minimum	Maximum	sR	vR [%]
Perfluorobutane sulfonic acid (PFBS) - PF4S	PFL01A10	17	2	µg/l	0.167 ± 0.0224	0.116	0.204	0.0307	18
	PFL01B02	18	1	µg/l	0.0269 ± 0.00525	0.014	0.039	0.00743	28
	PFL01B10	11	3	µg/l	0.00661 ± 0.000536	0.00565	0.0078	0.000592	9
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PFL01A02	12	1	µg/l	0.0283 ± 0.0106	0.016	0.053	0.0123	43
	PFL01A10	12	0	µg/l	0.0118 ± 0.0035	0.0059	0.0183	0.00405	34
	PFL01B02	17	0	µg/l	0.0219 ± 0.00401	0.0103	0.0313	0.00552	25
	PFL01B10	13	1	µg/l	0.00581 ± 0.000645	0.00466	0.007	0.000775	13
linear Perfluorohexane sulfonic acid (n-PFHxS)	PFL01A02	8	1	µg/l	0.0644 ± 0.0153	0.0389	0.0856	0.0144	22
	PFL01A10	8	1	µg/l	0.0414 ± 0.00759	0.031	0.0487	0.00715	17
	PFL01B02	9	0	µg/l	0.137 ± 0.053	0.032	0.196	0.053	39
	PFL01B10	9	0	µg/l	0.0488 ± 0.0117	0.028	0.0622	0.0117	24
Total PFHxS	PFL01A02	15	1	µg/l	0.0788 ± 0.015	0.0551	0.124	0.0193	24
	PFL01A10	16	0	µg/l	0.0477 ± 0.00653	0.0349	0.0627	0.0087	18
	PFL01B02	16	0	µg/l	0.167 ± 0.0226	0.119	0.216	0.0301	18
	PFL01B10	17	0	µg/l	0.0548 ± 0.00624	0.0378	0.0673	0.00858	16
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PFL01A02	10	1	µg/l	0.0097 ± 0.00419	0.00355	0.017	0.00441	45
	PFL01A10	12	0	µg/l	0.0081 ± 0.00215	0.00455	0.012	0.00248	31
	PFL01B02	10	2	µg/l	0.00678 ± 0.00159	0.004	0.00926	0.00168	25
	PFL01B10	12	1	µg/l	0.00337 ± 0.000809	0.00156	0.005	0.000934	28
linear Perfluorooctane sulfonic acid (n-PFOS)	PFL01A02	8	1	µg/l	0.0407 ± 0.0152	0.0204	0.067	0.0144	35

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean ± CI (99%)	Minimum	Maximum	sR	vR [%]
linear Perfluorooctane sulfonic acid (n-PFOS)	PFL01A10	7	2	µg/l	0.0485 ± 0.00993	0.0358	0.0589	0.00875	18
	PFL01B02	9	0	µg/l	0.281 ± 0.158	0.0342	0.569	0.158	56
	PFL01B10	8	1	µg/l	0.228 ± 0.0684	0.145	0.323	0.0645	28
Total PFOS	PFL01A02	15	1	µg/l	0.0645 ± 0.0222	0.0143	0.125	0.0287	45
	PFL01A10	16	0	µg/l	0.0871 ± 0.0147	0.062	0.119	0.0196	23
	PFL01B02	16	0	µg/l	0.327 ± 0.0973	0.165	0.582	0.13	40
	PFL01B10	17	0	µg/l	0.282 ± 0.0555	0.156	0.454	0.0762	27
Perfluorononane sulfonic acid (PFNS) - PF9S	PFL01A02	1	0	µg/l	- ± -	0.0327	0.0327	-	-
	PFL01A10	2	0	µg/l	- ± -	0.0017	0.0293	-	-
	PFL01B02	8	0	µg/l	0.00382 ± 0.0021	0.000568	0.00654	0.00198	52
	PFL01B10	8	0	µg/l	0.00385 ± 0.00196	0.0006	0.00629	0.00185	48
Perfluorodecane sulfonic acid (PFDS) - PF10S	PFL01A02	0	0	µg/l	- ± -	-	-	-	-
	PFL01A10	0	0	µg/l	- ± -	-	-	-	-
	PFL01B02	4	0	µg/l	- ± -	0.00292	0.0046	-	-
	PFL01B10	4	0	µg/l	- ± -	0.0029	0.00493	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PFL01A02	0	0	µg/l	- ± -	-	-	-	-
	PFL01A10	0	0	µg/l	- ± -	-	-	-	-
	PFL01B02	3	0	µg/l	- ± -	0.00211	0.00478	-	-
	PFL01B10	3	0	µg/l	- ± -	0.00147	0.0023	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PFL01A02	1	0	µg/l	- ± -	0.0158	0.0158	-	-

Parameter	Sample	Number of results for calculation	Number of outliers	Unit	Mean ± CI (99%)	Minimum	Maximum	sR	vR [%]
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PFL01A10	1	0	µg/l	- ± -	0.0026	0.0026	-	-
	PFL01B02	1	0	µg/l	- ± -	0.005	0.005	-	-
	PFL01B10	0	0	µg/l	- ± -	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PFL01A02	1	0	µg/l	- ± -	0.0099	0.0099	-	-
	PFL01A10	1	0	µg/l	- ± -	0.0029	0.0029	-	-
	PFL01B02	1	0	µg/l	- ± -	0.0052	0.0052	-	-
	PFL01B10	0	0	µg/l	- ± -	-	-	-	-
Sum PFAS	PFL01A02	15	0	µg/l	6.49 ± 1.04	4.5	9.33	1.35	21
	PFL01A10	14	1	µg/l	1.57 ± 0.291	0.789	2.14	0.363	23
	PFL01B02	16	0	µg/l	1.06 ± 0.429	0.338	2.35	0.573	54
	PFL01B10	16	0	µg/l	0.554 ± 0.161	0.307	0.964	0.214	39

E7. Parameterorientierte Auswertung / Parameter oriented report

Dry mass 55
Perfluorobutanoic acid (PFBA) - PF4C 63
Perfluoropentanoic acid (PFPeA) - PF5C 75
Perfluorohexanoic acid (PFHxA) - PF6C 87
Perfluoroheptanoic acid (PFHpA) - PF7C 99
Perfluorooctanoic acid (PFOA) - PF8C 111
Perfluorononanoic acid (PFNA) - PF9C 123
Perfluorodecanoic acid (PFDA) - PF10C 133
Perfluoroundecanoic acid (PFUnDA) - PF11C 145
Perfluorododecanoic acid (PFDoDA) - PF12C 153
Perfluorotridecanoic acid (PFTrDA) - PF13C 161
Perfluorobutane sulfonic acid (PFBS) - PF4S 169
Perfluoropentane sulfonic acid (PFPeS) - PF5S 185
linear Perfluorohexane sulfonic acid (n-PFHxS) 201
Total PFHxS 217
Perfluoroheptane sulfonic acid (PFHpS) - PF7S 233
linear Perfluorooctane sulfonic acid (n-PFOS) 249
Total PFOS 263
Perfluorononane sulfonic acid (PFNS) - PF9S 279
Perfluorodecane sulfonic acid (PFDS) - PF10S 287
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S 295
Perfluorododecane sulfonic acid (PFDoS) - PF12S 303
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S 311
Sum PFAS 319

Parameter oriented report

PFL01A02

Dry mass

Unit	%
Assigned value ± U (k=2)	93.2 ± 0.25
Criterion	1.4 (1.5 %)
Minimum - Maximum	92.3 - 94
Control test value ± U (k=2)	93.2 ± 0.28

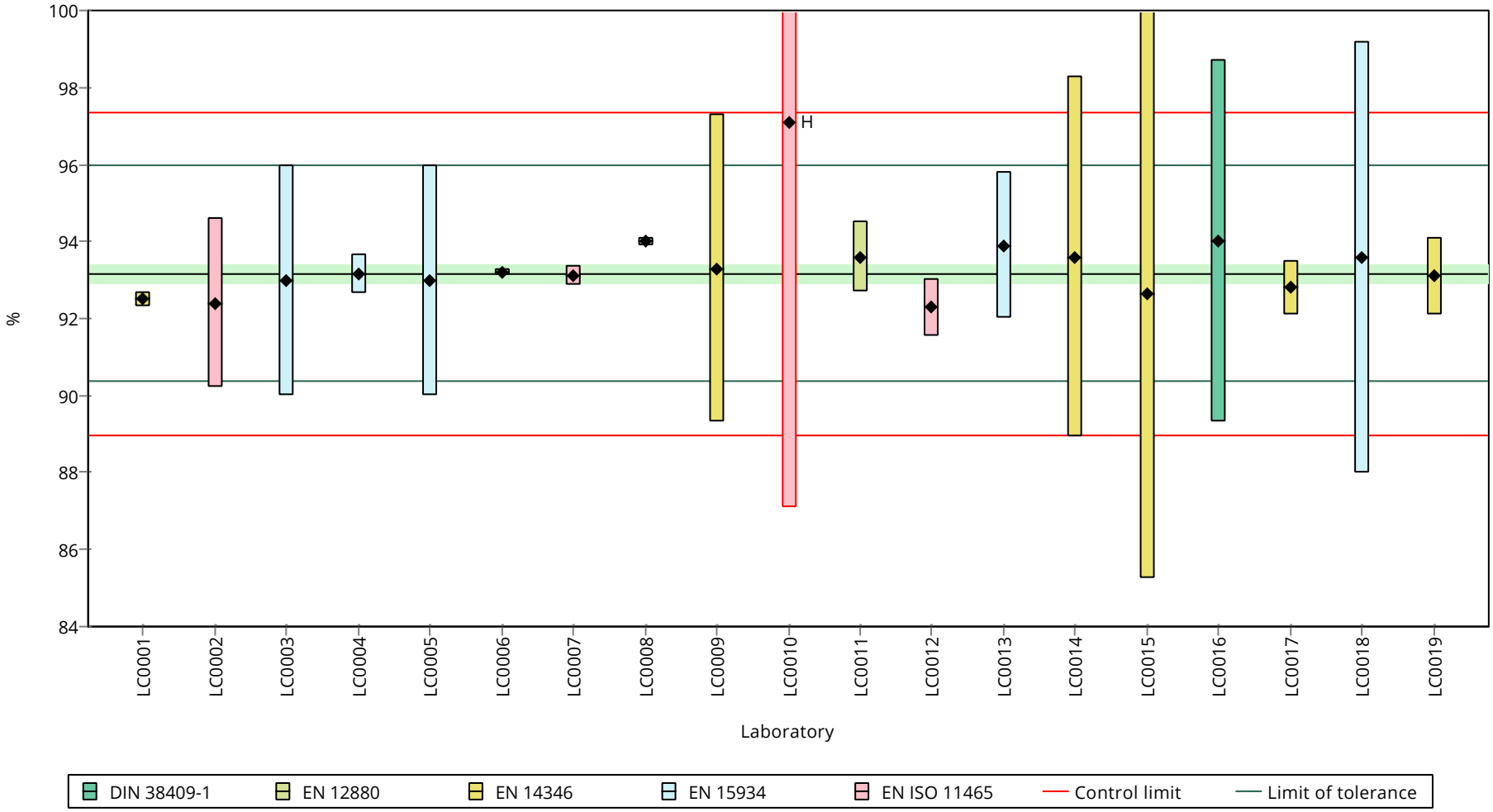
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	92.5 ± 0.2	99.3	-0.48	
LC0002	92.4 ± 2.2	99.2	-0.56	
LC0003	93 ± 3	99.8	-0.13	
LC0004	93.16 ± 0.5	100	-0.01	
LC0005	93 ± 3	99.8	-0.13	
LC0006	93.2 ± 0.1	100	0.02	
LC0007	93.1 ± 0.25	99.9	-0.05	
LC0008	94 ± 0.1	101	0.59	
LC0009	93.3 ± 4	100	0.09	
LC0010	97.1 ± 10	104	2.81	H
LC0011	93.6 ± 0.936	100	0.3	
LC0012	92.28 ± 0.76	99	-0.64	
LC0013	93.9 ± 1.9	101	0.52	
LC0014	93.6 ± 4.7	100	0.3	
LC0015	92.65 ± 7.4	99.4	-0.38	
LC0016	94 ± 4.7	101	0.59	
LC0017	92.8 ± 0.7	99.6	-0.27	
LC0018	93.58 ± 5.6148	100	0.29	
LC0019	93.1 ± 1	99.9	-0.05	

Characteristics of parameter

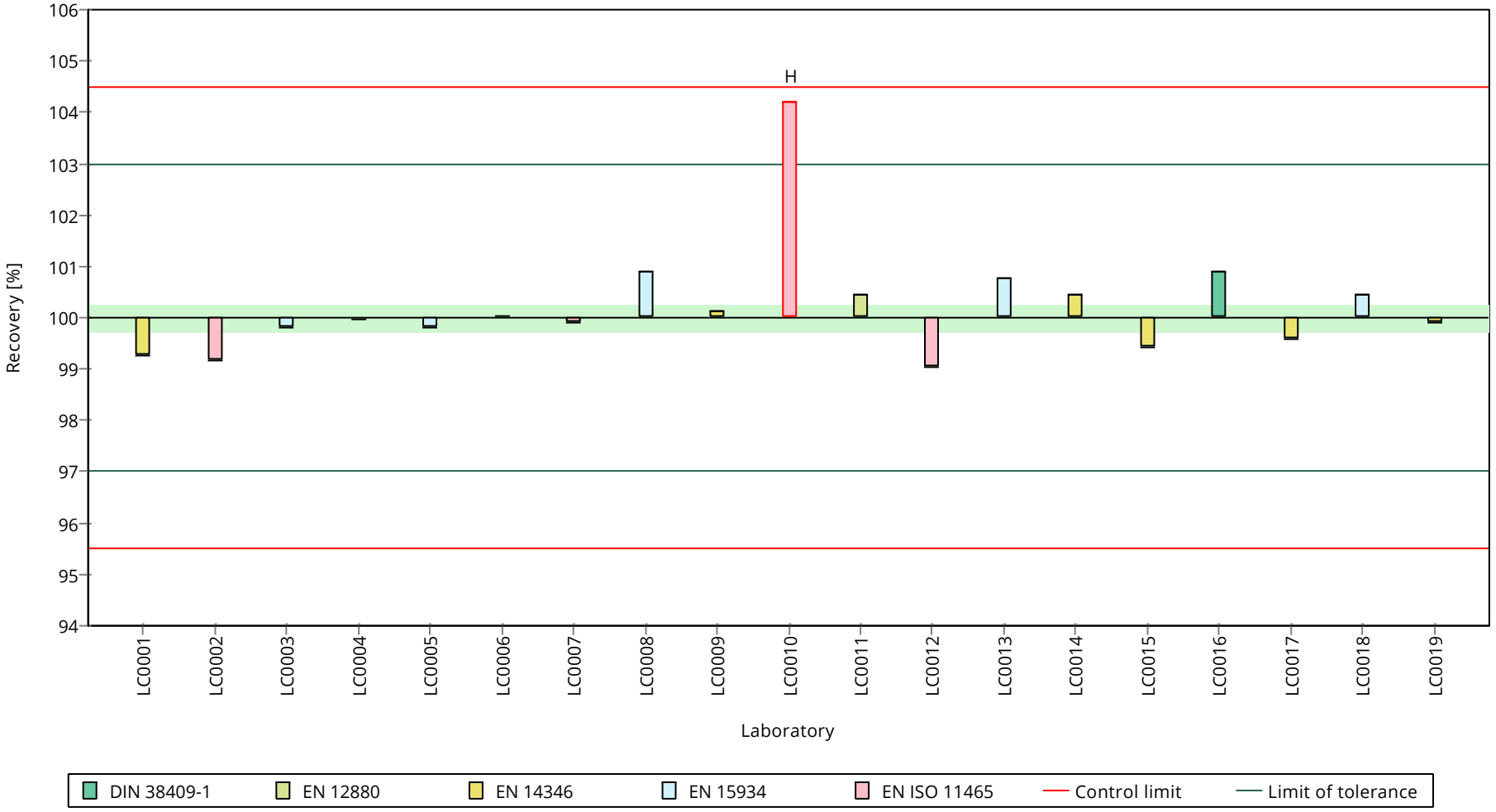
	all results	without outliers	Unit
Mean ± Cl (99%)	93.4 ± 0.714	93.2 ± 0.375	%
Minimum	92.3	92.3	%
Maximum	97.1	94	%
Standard deviation	1.04	0.53	%
rel. standard deviation	1.11	0.569	%
n	19	18	-

Graphical presentation of results

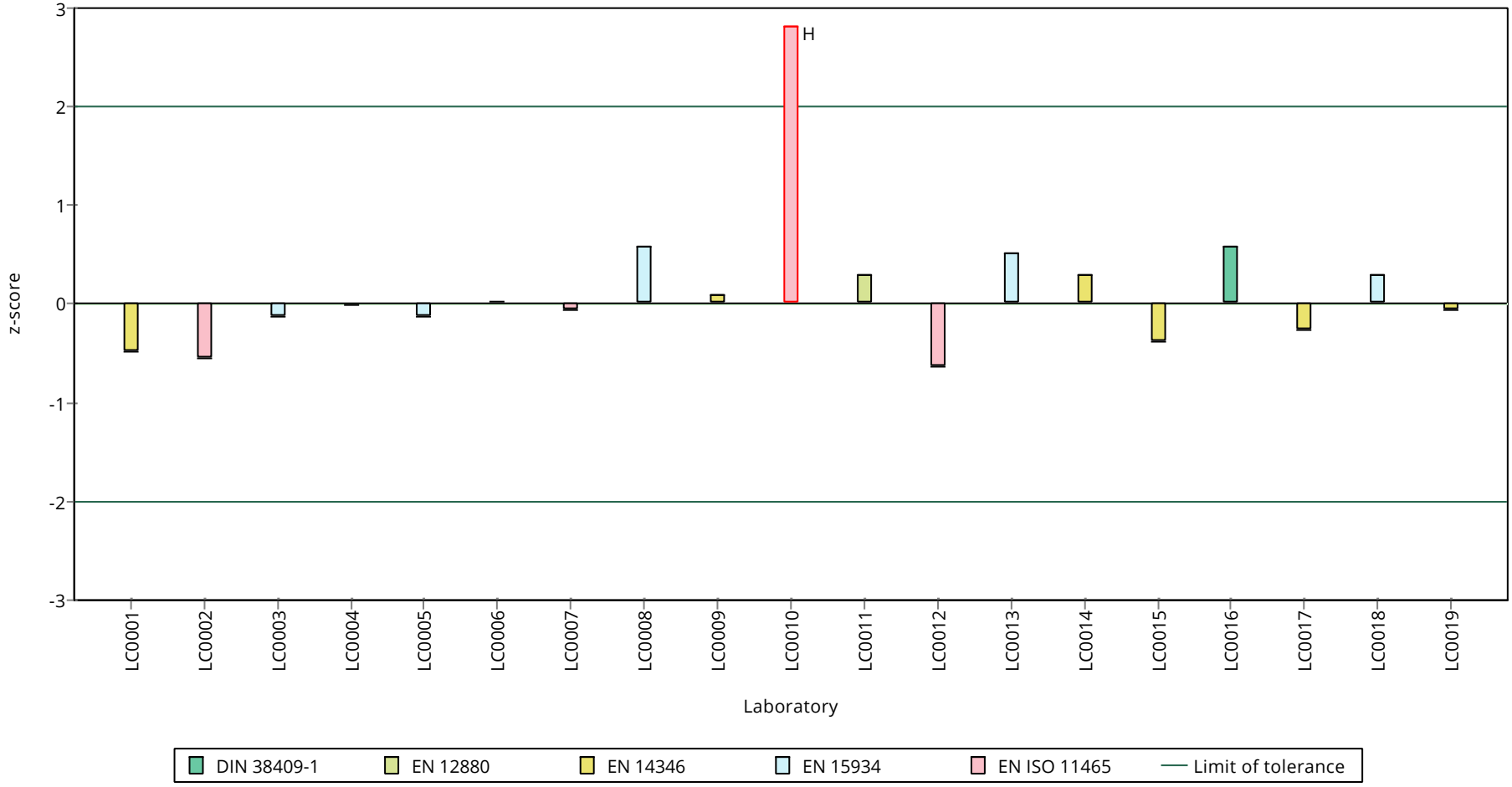
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38409-1
EN 12880
EN 14346
EN 15934
EN ISO 11465
Limit of tolerance

Parameter oriented report

PFL01B02

Dry mass

Unit	%
Assigned value ± U (k=2)	85.3 ± 0.0796
Criterion	1.28 (1.5 %)
Minimum - Maximum	85.1 - 85.7
Control test value ± U (k=2)	85.5 ± 0.257

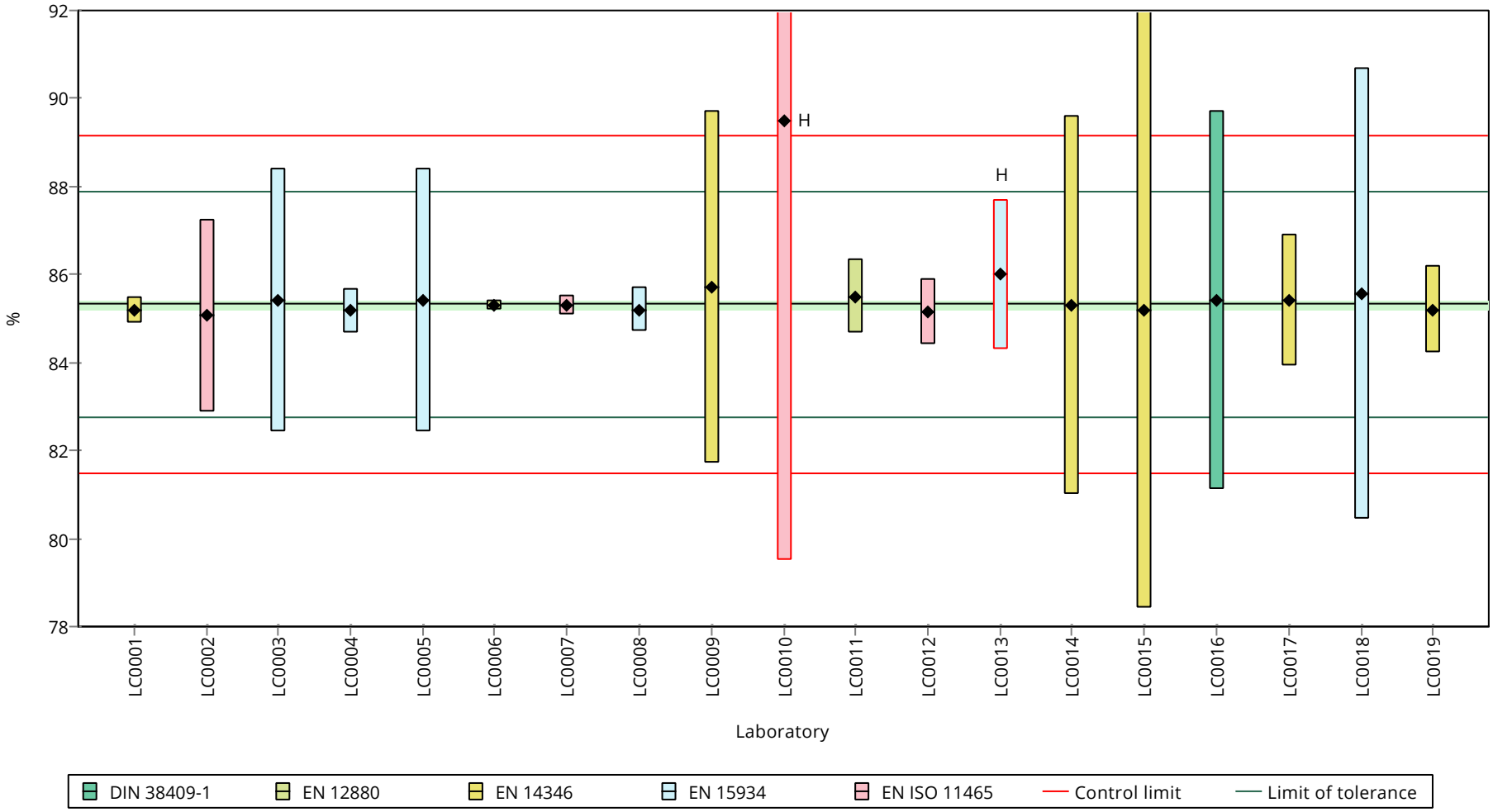
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	85.2 ± 0.3	99.9	-0.09	
LC0002	85.06 ± 2.2	99.7	-0.2	
LC0003	85.4 ± 3	100	0.06	
LC0004	85.18 ± 0.5	99.8	-0.11	
LC0005	85.4 ± 3	100	0.06	
LC0006	85.3 ± 0.1	100	-0.02	
LC0007	85.3 ± 0.23	100	-0.02	
LC0008	85.2 ± 0.5	99.9	-0.09	
LC0009	85.7 ± 4	100	0.3	
LC0010	89.5 ± 10	105	3.27	H
LC0011	85.5 ± 0.855	100	0.14	
LC0012	85.15 ± 0.76	99.8	-0.13	
LC0013	86 ± 1.7	101	0.53	H
LC0014	85.3 ± 4.3	100	-0.02	
LC0015	85.2 ± 6.8	99.9	-0.09	
LC0016	85.4 ± 4.3	100	0.06	
LC0017	85.4 ± 1.5	100	0.06	
LC0018	85.55 ± 5.133	100	0.18	
LC0019	85.2 ± 1	99.9	-0.09	

Characteristics of parameter

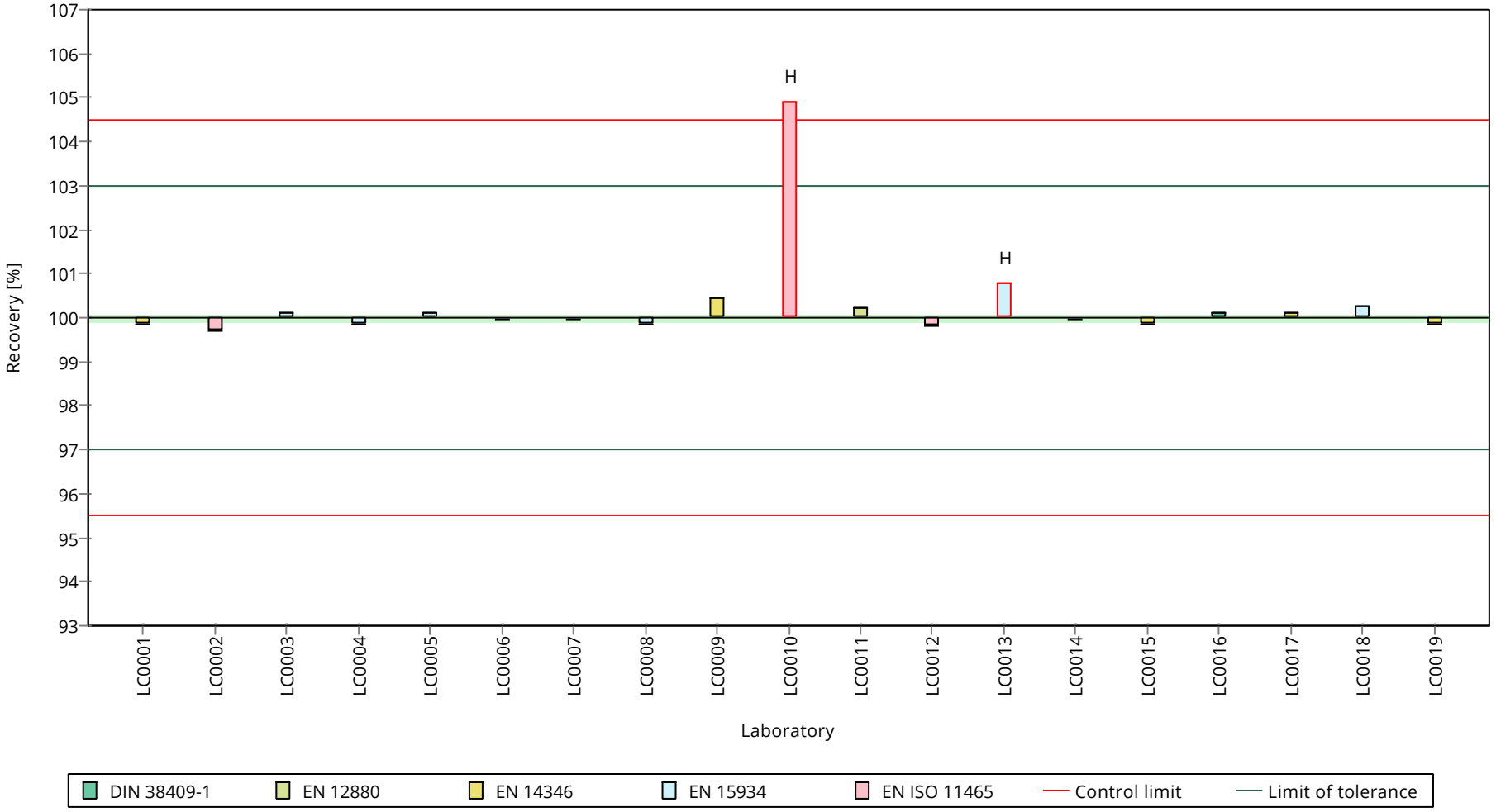
	all results	without outliers	Unit
Mean ± Cl (99%)	85.6 ± 0.671	85.3 ± 0.119	%
Minimum	85.1	85.1	%
Maximum	89.5	85.7	%
Standard deviation	0.975	0.164	%
rel. standard deviation	1.14	0.192	%
n	19	17	-

Graphical presentation of results

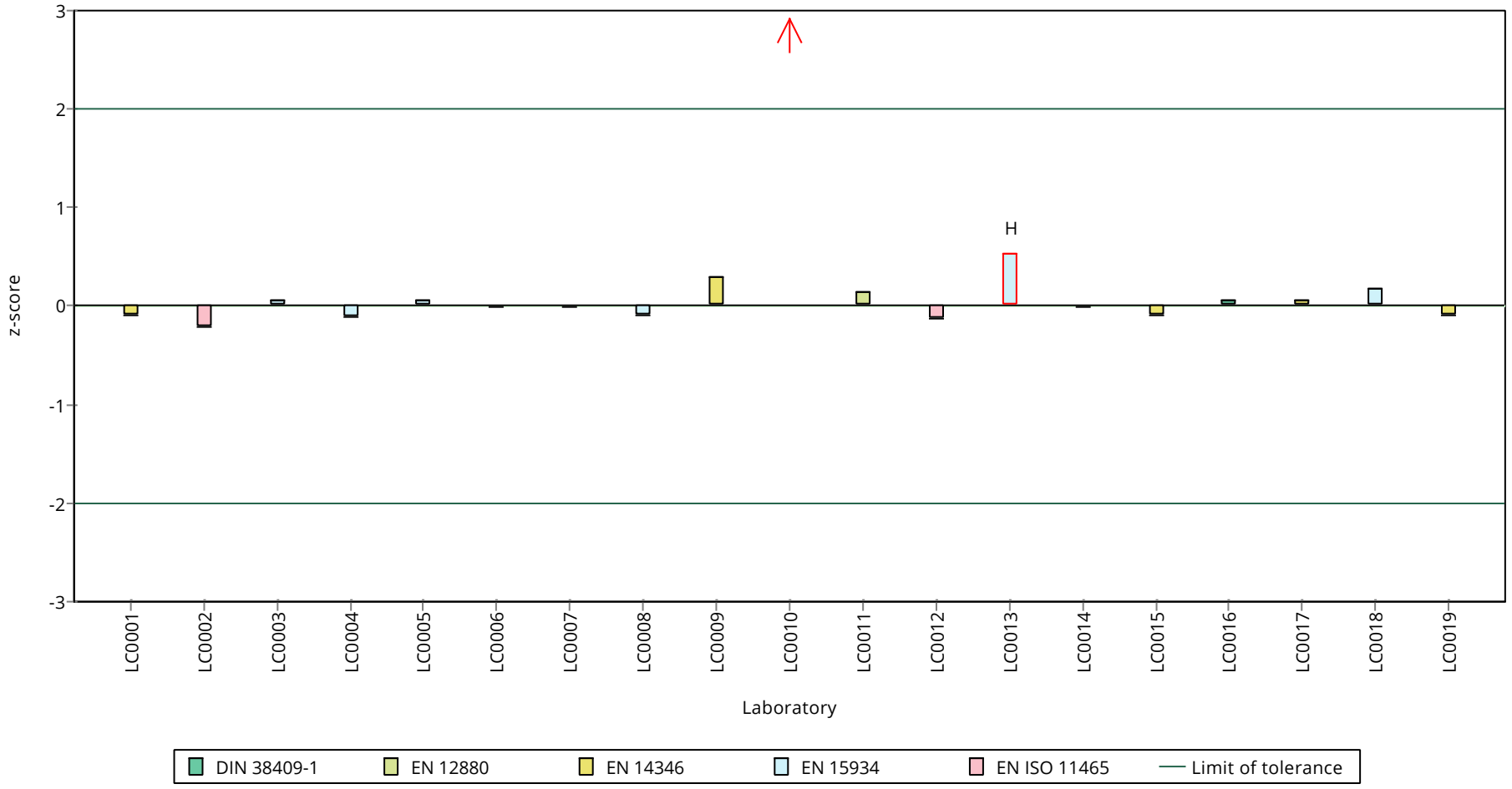
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38409-1
EN 12880
EN 14346
EN 15934
EN ISO 11465
Limit of tolerance

Parameter oriented report

PFL01A02

Perfluorobutanoic acid (PFBA) - PF4C

Unit	µg/l
Assigned value ± U (k=2)	0.658 ± 0.146
Criterion	0.296 (45 %)
Minimum - Maximum	0.261 - 1.5
Control test value ± U (k=2)	0.469 ± 0.211

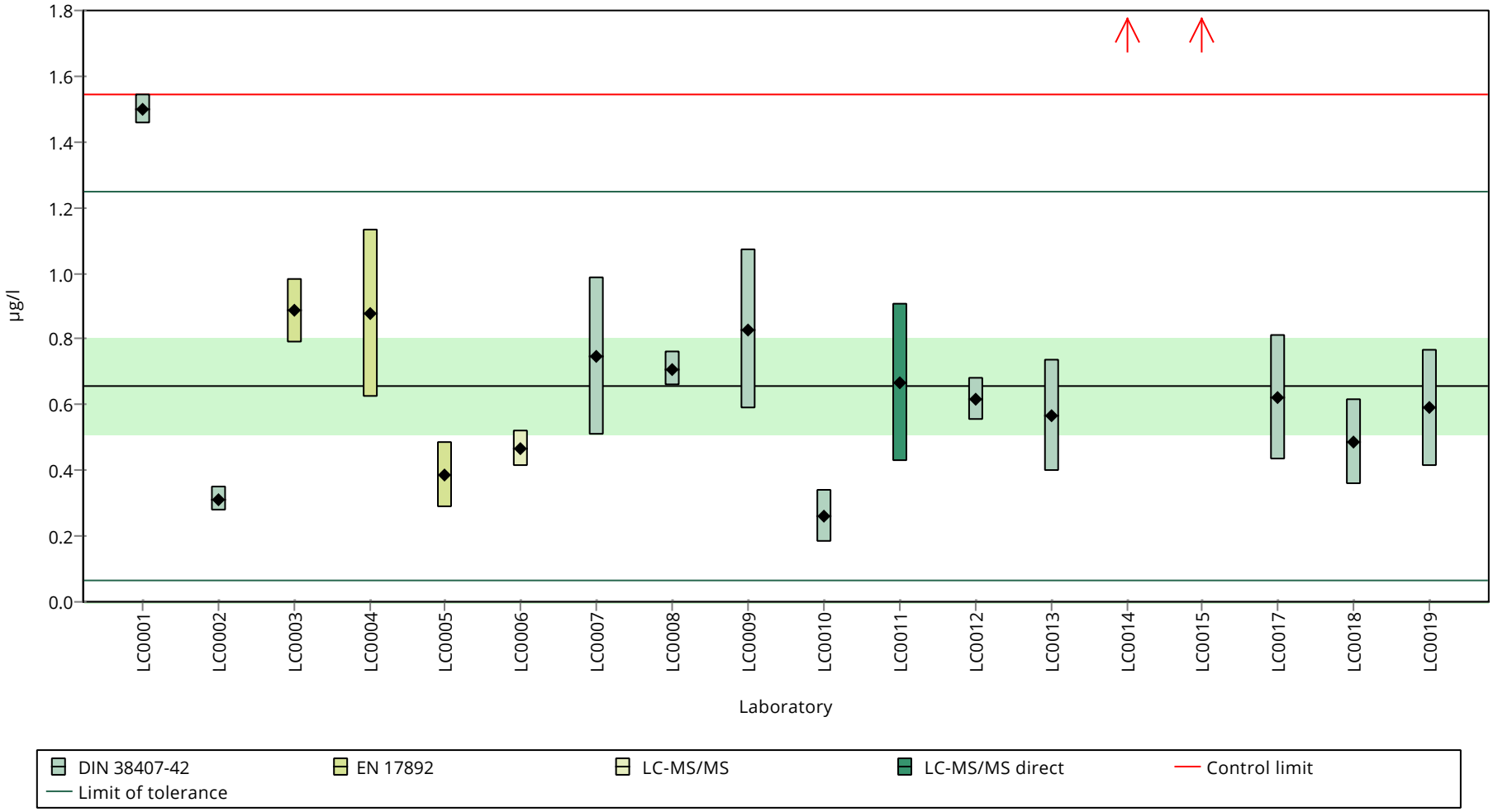
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	1.5 ± 0.046	228	2.85	
LC0002	0.313 ± 0.0359	47.6	-1.16	
LC0003	0.885 ± 0.1	135	0.77	
LC0004	0.878 ± 0.256	134	0.75	
LC0005	0.386 ± 0.1	58.7	-0.92	
LC0006	0.465 ± 0.056	70.7	-0.65	
LC0007	0.7467 ± 0.2389	114	0.3	
LC0008	0.709 ± 0.0511	108	0.17	
LC0009	0.8289 ± 0.24382	126	0.58	
LC0010	0.261 ± 0.0785	39.7	-1.34	
LC0011	0.6671 ± 0.2402	101	0.03	
LC0012	0.618 ± 0.066	94	-0.13	
LC0013	0.567 ± 0.17	86.2	-0.31	
LC0014	2.99 ± 0.6	455	7.88	H
LC0015	1.88 ± 0.51	286	4.13	H
LC0016	- ± -	-	-	
LC0017	0.62 ± 0.19	94.3	-0.13	
LC0018	0.486 ± 0.1313	73.9	-0.58	
LC0019	0.59 ± 0.177	89.7	-0.23	

Characteristics of parameter

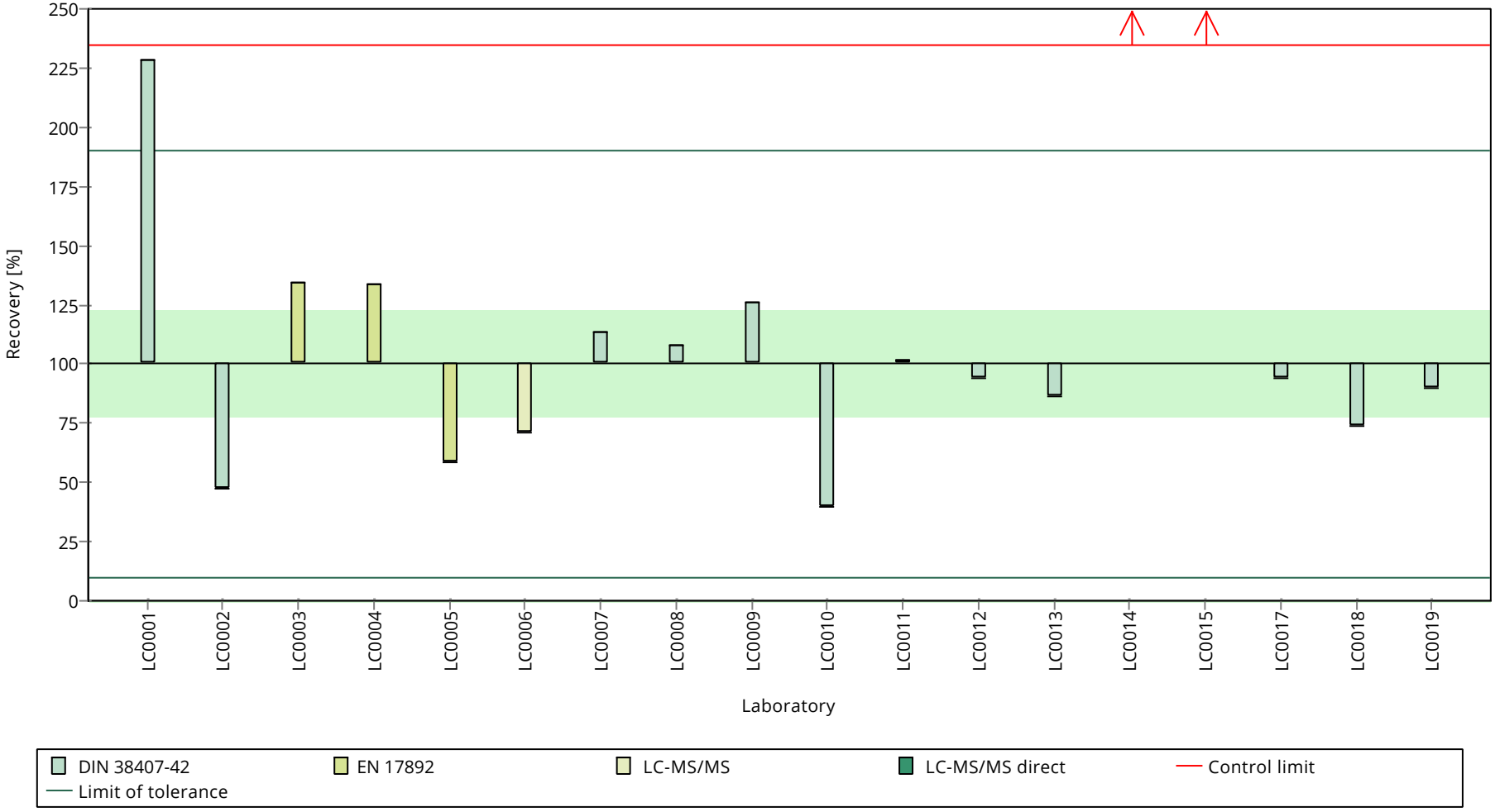
	all results	without outliers	Unit
Mean ± Cl (99%)	0.855 ± 0.47	0.658 ± 0.219	µg/l
Minimum	0.261	0.261	µg/l
Maximum	2.99	1.5	µg/l
Standard deviation	0.665	0.292	µg/l
rel. standard deviation	77.8	44.5	%
n	18	16	-

Graphical presentation of results

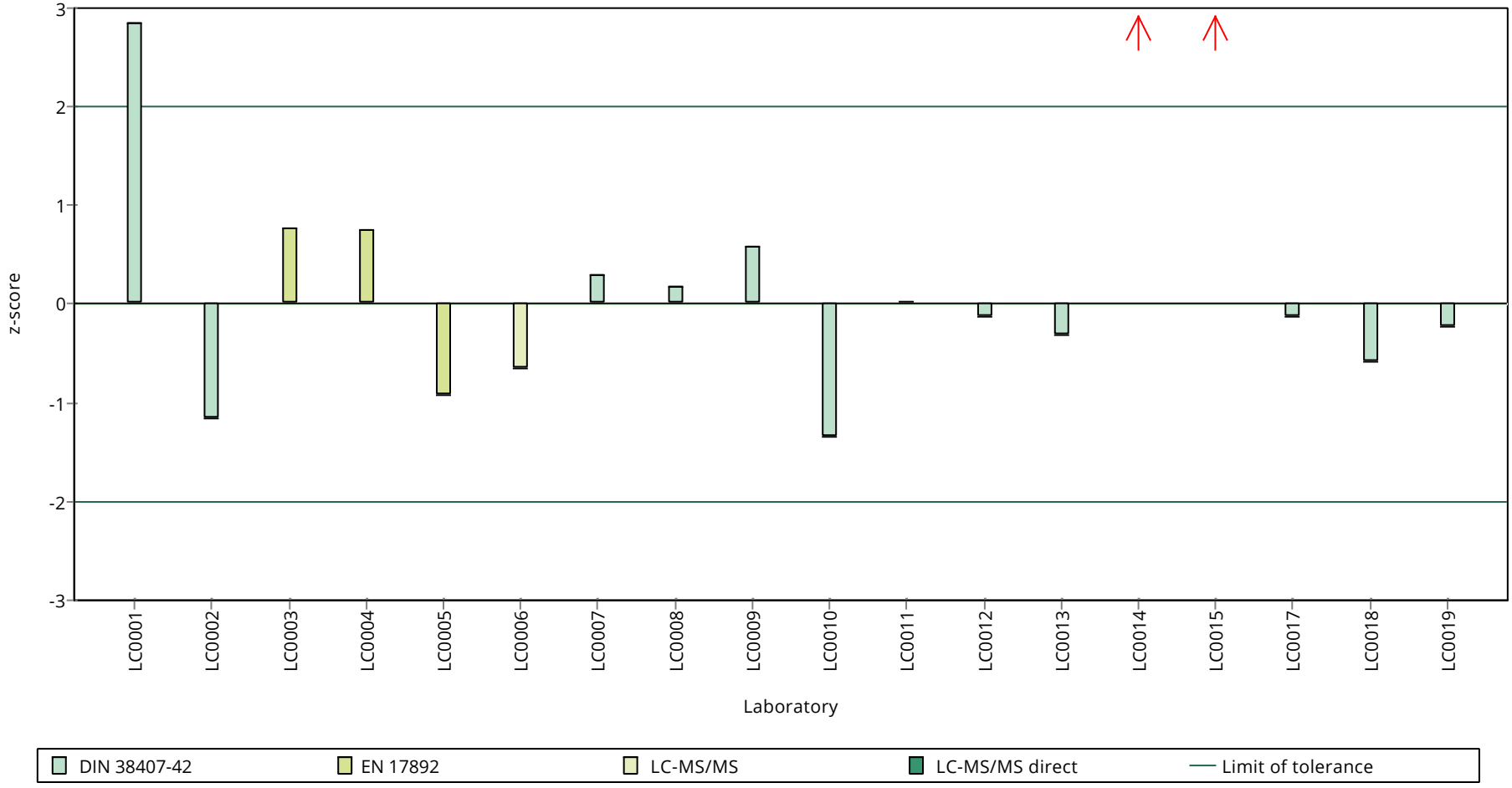
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluorobutanoic acid (PFBA) - PF4C

Unit	µg/l
Assigned value ± U (k=2)	0.115 ± 0.019
Criterion	0.0368 (32 %)
Minimum - Maximum	0.05 - 0.177
Control test value ± U (k=2)	0.118 ± 0.0533

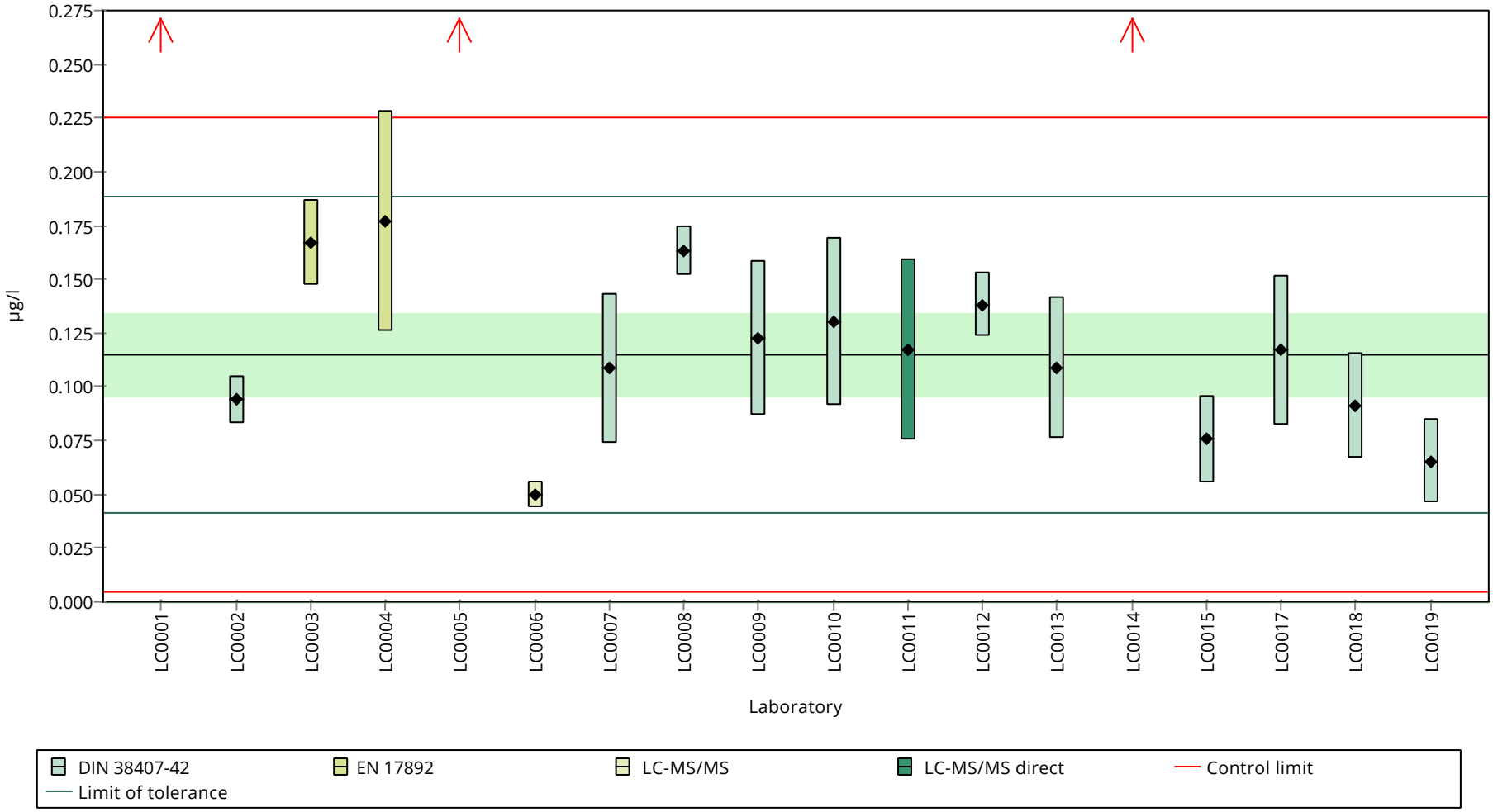
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.318 ± 0.006	276	5.51	H
LC0002	0.094 ± 0.0109	81.7	-0.57	
LC0003	0.167 ± 0.02	145	1.41	
LC0004	0.177 ± 0.0516	154	1.68	
LC0005	12.8 ± 3	11100	344.62	H
LC0006	0.05 ± 0.006	43.5	-1.77	
LC0007	0.1087 ± 0.0348	94.5	-0.17	
LC0008	0.163 ± 0.0117	142	1.3	
LC0009	0.1228 ± 0.03612	107	0.21	
LC0010	0.13 ± 0.039	113	0.41	
LC0011	0.1172 ± 0.0422	102	0.06	
LC0012	0.138 ± 0.015	120	0.62	
LC0013	0.109 ± 0.033	94.8	-0.16	
LC0014	0.573 ± 0.115	498	12.44	H
LC0015	0.0755 ± 0.02	65.6	-1.07	
LC0016	- ± -	-	-	
LC0017	0.117 ± 0.035	102	0.05	
LC0018	0.091 ± 0.0247	79.1	-0.65	
LC0019	0.0652 ± 0.0196	56.7	-1.35	

Characteristics of parameter

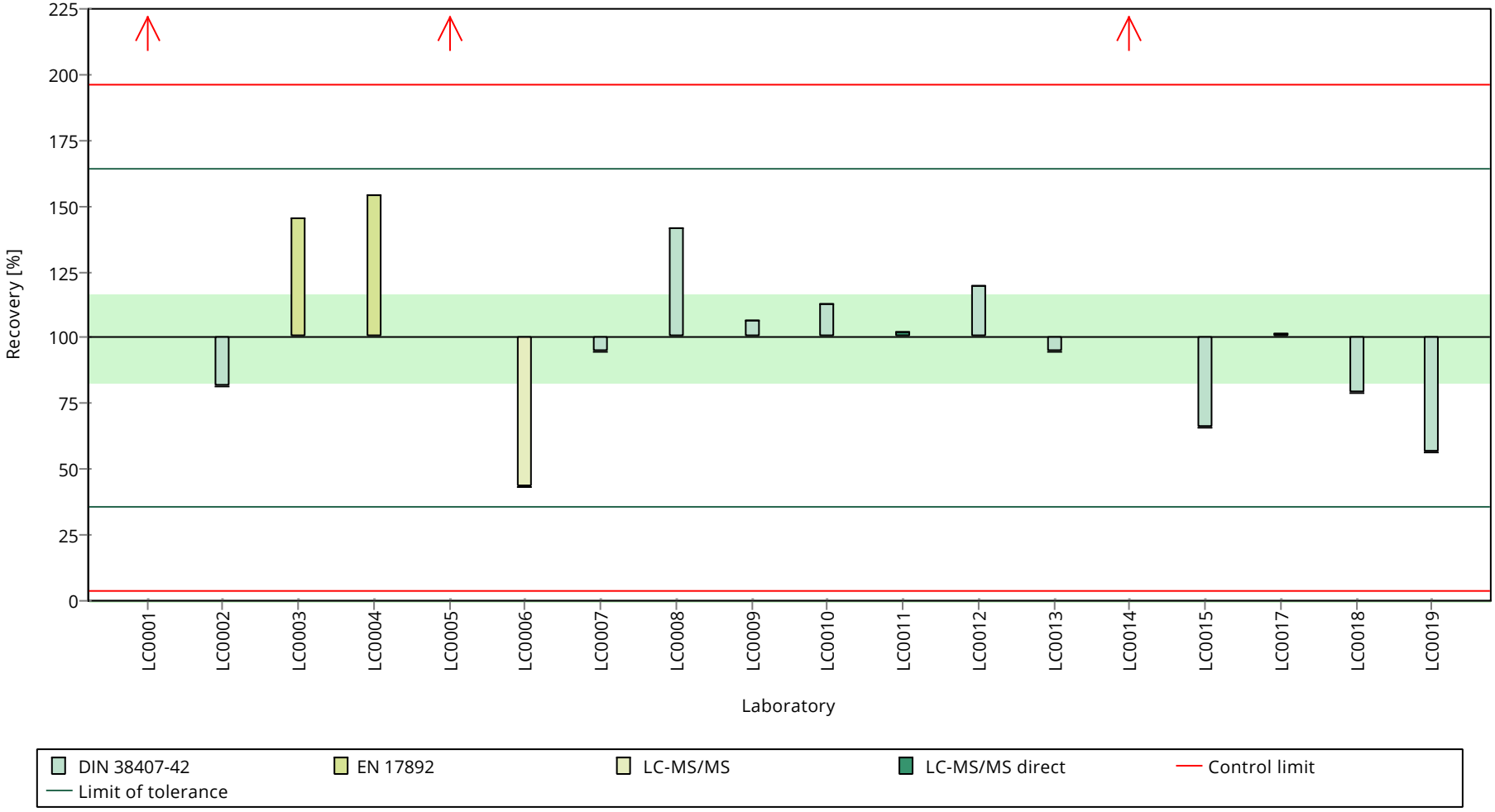
	all results	without outliers	Unit
Mean ± Cl (99%)	0.856 ± 2.11	0.115 ± 0.0286	µg/l
Minimum	0.05	0.05	µg/l
Maximum	12.8	0.177	µg/l
Standard deviation	2.98	0.0369	µg/l
rel. standard deviation	348	32.1	%
n	18	15	-

Graphical presentation of results

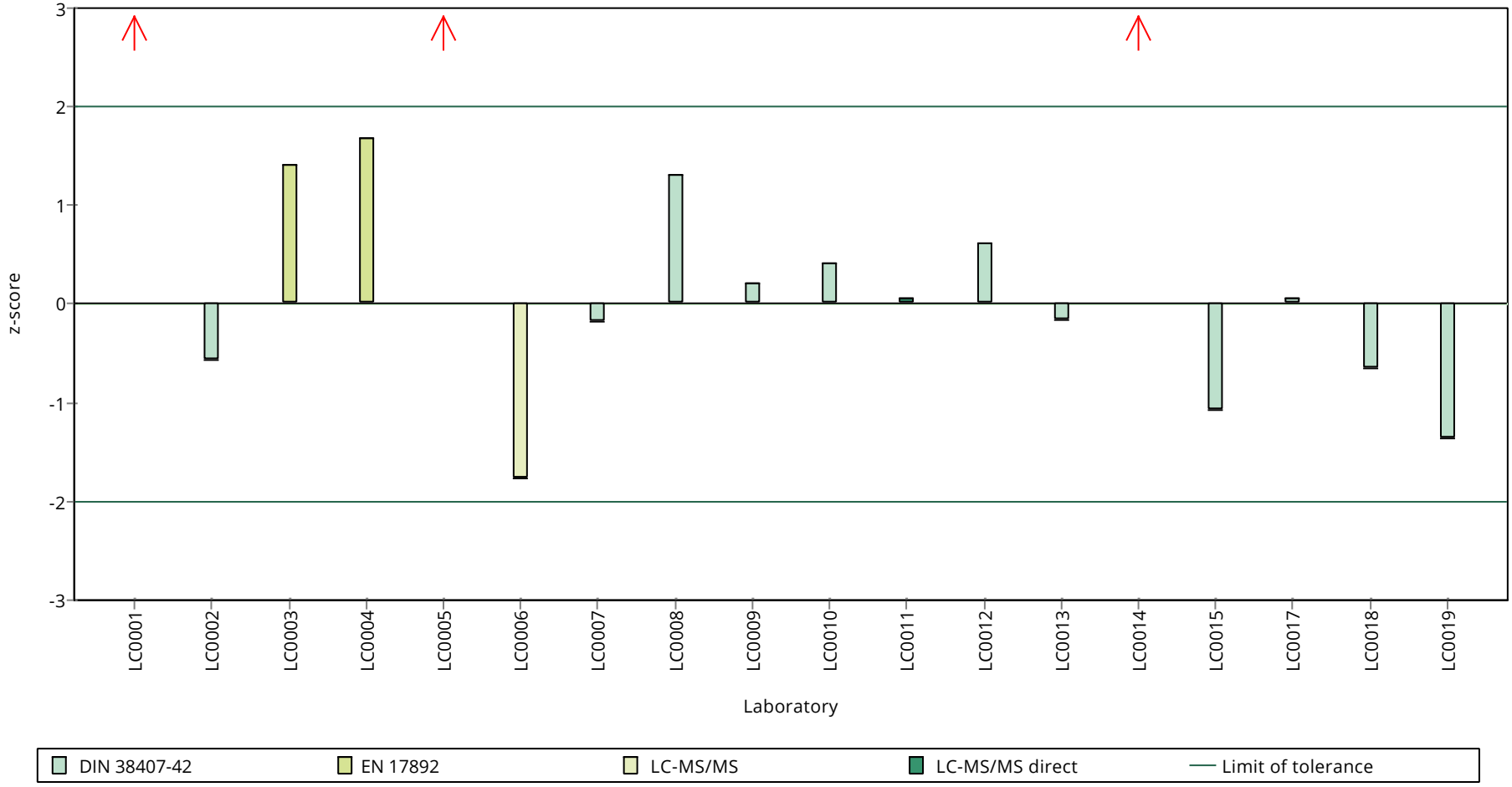
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorobutanoic acid (PFBA) - PF4C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.021 - 0.154
Control test value ± U (k=2)	0.0620 ± 0.0279

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=11, accr.) ± U(k=2): 0.064 ± 0.0273 µg/l

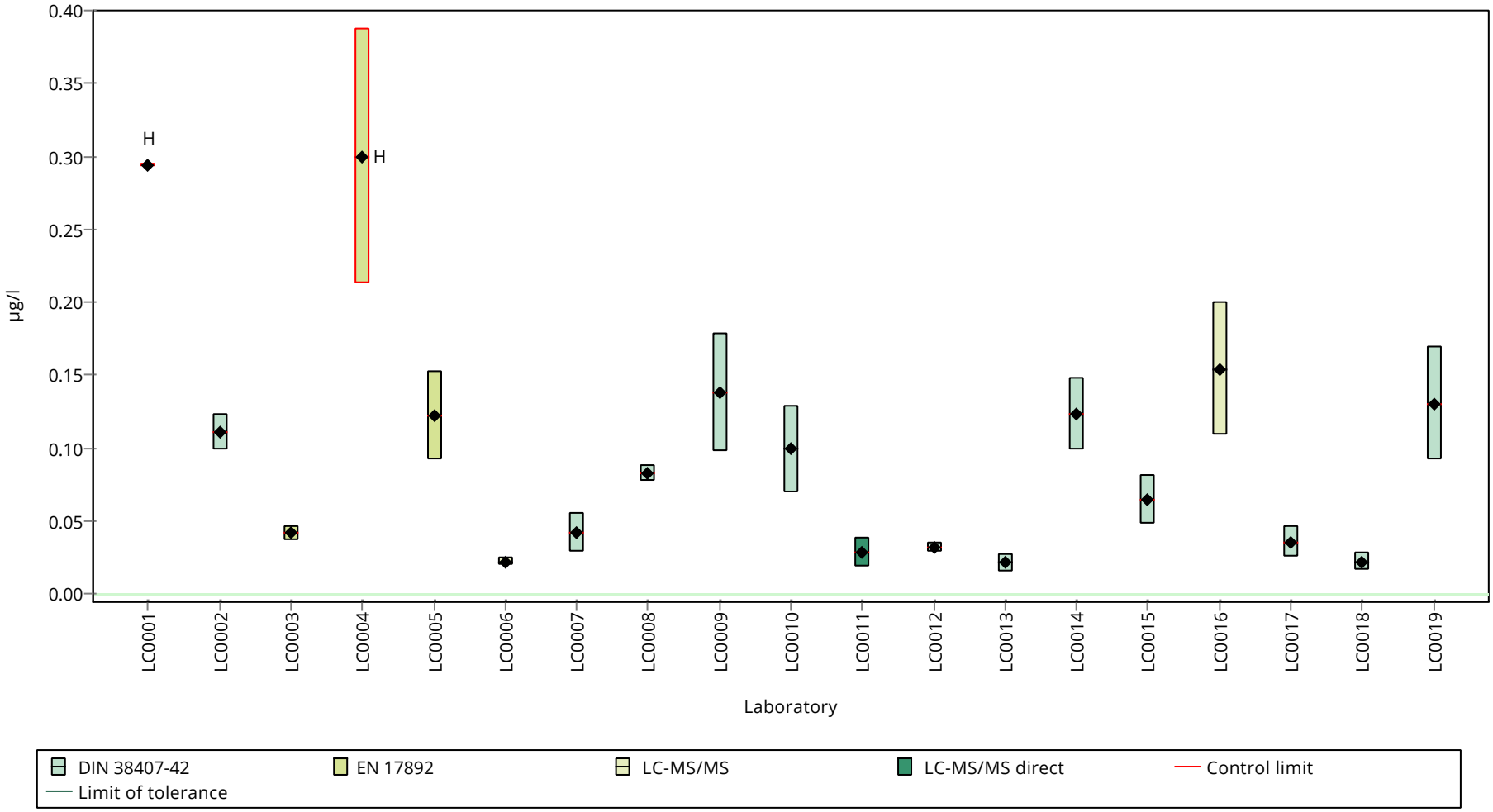
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.294 ± 0.001	-	-	H
LC0002	0.111 ± 0.0127	-	-	
LC0003	0.0413 ± 0.005	-	-	
LC0004	0.3 ± 0.0873	-	-	H
LC0005	0.122 ± 0.03	-	-	
LC0006	0.022 ± 0.003	-	-	
LC0007	0.0418 ± 0.0134	-	-	
LC0008	0.0823 ± 0.00593	-	-	
LC0009	0.1383 ± 0.04068	-	-	
LC0010	0.099 ± 0.0299	-	-	
LC0011	0.028 ± 0.0101	-	-	
LC0012	0.0314 ± 0.0034	-	-	
LC0013	0.021 ± 0.0063	-	-	
LC0014	0.123 ± 0.025	-	-	
LC0015	0.0644 ± 0.017	-	-	
LC0016	0.154 ± 0.046	-	-	
LC0017	0.0352 ± 0.0106	-	-	
LC0018	0.022 ± 0.006	-	-	
LC0019	0.13 ± 0.039	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0979 ± 0.0573	0.0745 ± 0.0346	µg/l
Minimum	0.021	0.021	µg/l
Maximum	0.3	0.154	µg/l
Standard deviation	0.0833	0.0476	µg/l
rel. standard deviation	85.1	63.9	%
n	19	17	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorobutanoic acid (PFBA) - PF4C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.013 - 0.0356
Control test value ± U (k=2)	0.0154 ± 0.00693

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.020 ± 0.00426 µg/l

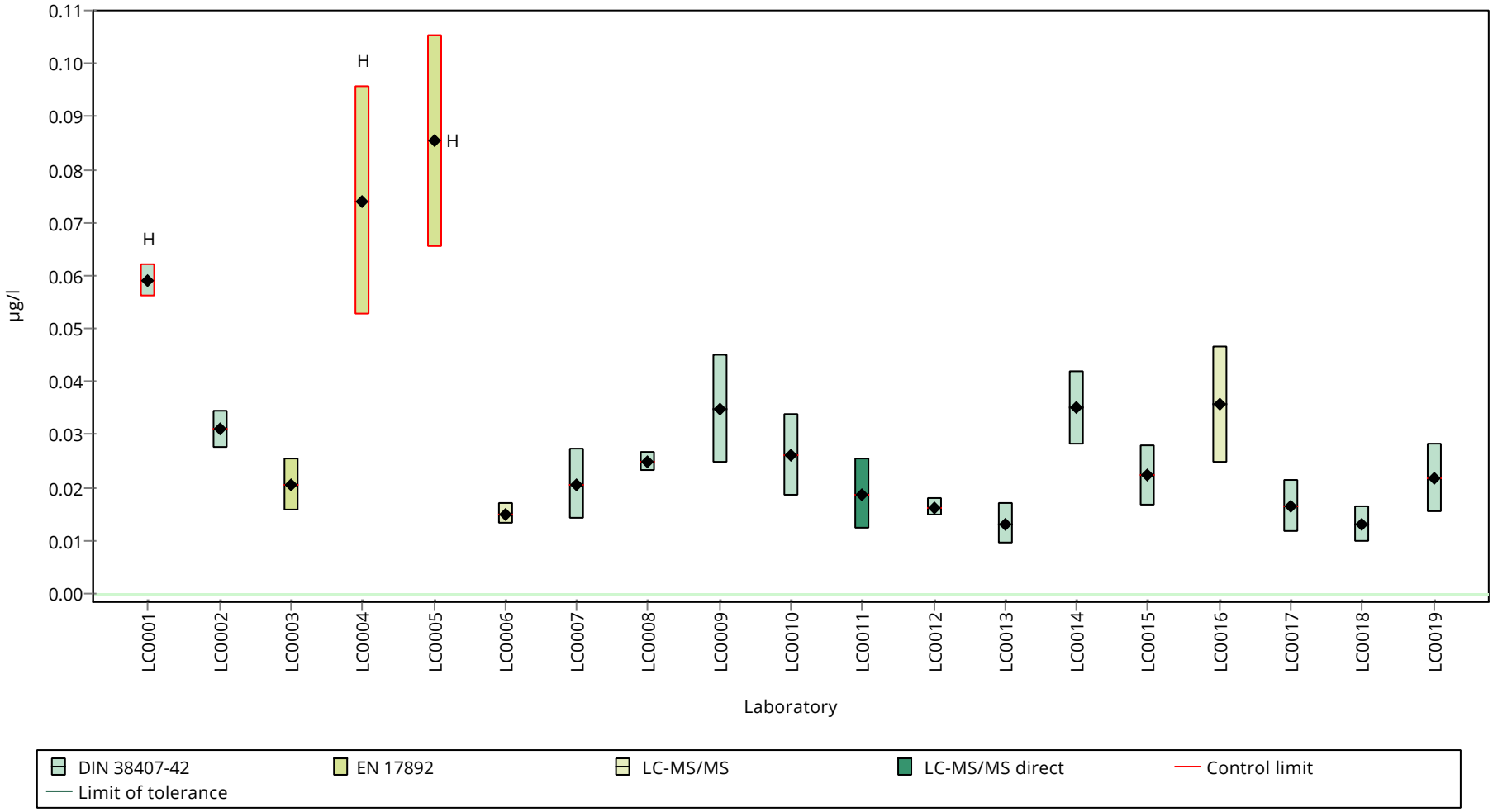
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.059 ± 0.003	-	-	H
LC0002	0.031 ± 0.0036	-	-	
LC0003	0.0205 ± 0.005	-	-	
LC0004	0.074 ± 0.0216	-	-	H
LC0005	0.0854 ± 0.02	-	-	H
LC0006	0.015 ± 0.002	-	-	
LC0007	0.0206 ± 0.0066	-	-	
LC0008	0.0249 ± 0.00179	-	-	
LC0009	0.03493 ± 0.01027	-	-	
LC0010	0.026 ± 0.0078	-	-	
LC0011	0.0187 ± 0.0067	-	-	
LC0012	0.0163 ± 0.0017	-	-	
LC0013	0.0131 ± 0.0039	-	-	
LC0014	0.0351 ± 0.007	-	-	
LC0015	0.0223 ± 0.0058	-	-	
LC0016	0.0356 ± 0.011	-	-	
LC0017	0.0165 ± 0.005	-	-	
LC0018	0.013 ± 0.0034	-	-	
LC0019	0.0218 ± 0.0065	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0307 ± 0.0141	0.0228 ± 0.00583	µg/l
Minimum	0.013	0.013	µg/l
Maximum	0.0854	0.0356	µg/l
Standard deviation	0.0205	0.00777	µg/l
rel. standard deviation	66.7	34.0	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluoropentanoic acid (PFPeA) - PF5C

Unit	µg/l
Assigned value ± U (k=2)	1.5 ± 0.267
Criterion	0.583 (39 %)
Minimum - Maximum	0.401 - 2.69
Control test value ± U (k=2)	1.34 ± 0.603

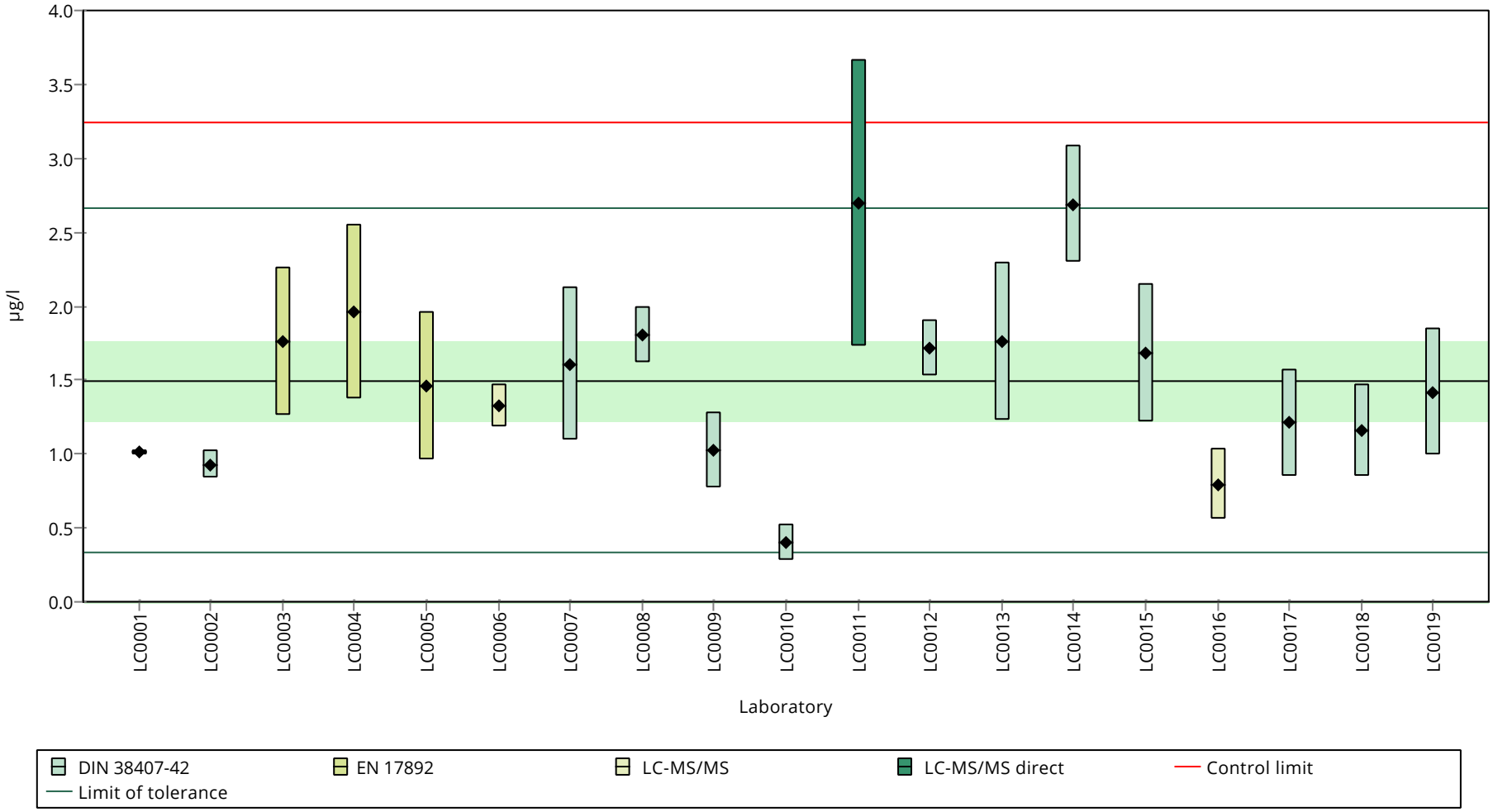
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	1.009 ± 0.02	67.5	-0.83	
LC0002	0.927 ± 0.0927	62	-0.97	
LC0003	1.76 ± 0.5	118	0.45	
LC0004	1.96 ± 0.59	131	0.8	
LC0005	1.46 ± 0.5	97.6	-0.06	
LC0006	1.33 ± 0.146	88.9	-0.28	
LC0007	1.61 ± 0.5152	108	0.2	
LC0008	1.81 ± 0.19	121	0.54	
LC0009	1.025 ± 0.25492	68.5	-0.81	
LC0010	0.401 ± 0.1203	26.8	-1.88	
LC0011	2.6928 ± 0.9694	180	2.05	
LC0012	1.72 ± 0.19	115	0.38	
LC0013	1.76 ± 0.53	118	0.45	
LC0014	2.69 ± 0.4	180	2.05	
LC0015	1.68 ± 0.47	112	0.32	
LC0016	0.795 ± 0.24	53.2	-1.2	
LC0017	1.21 ± 0.36	80.9	-0.49	
LC0018	1.159 ± 0.3128	77.5	-0.58	
LC0019	1.42 ± 0.43	94.9	-0.13	

Characteristics of parameter

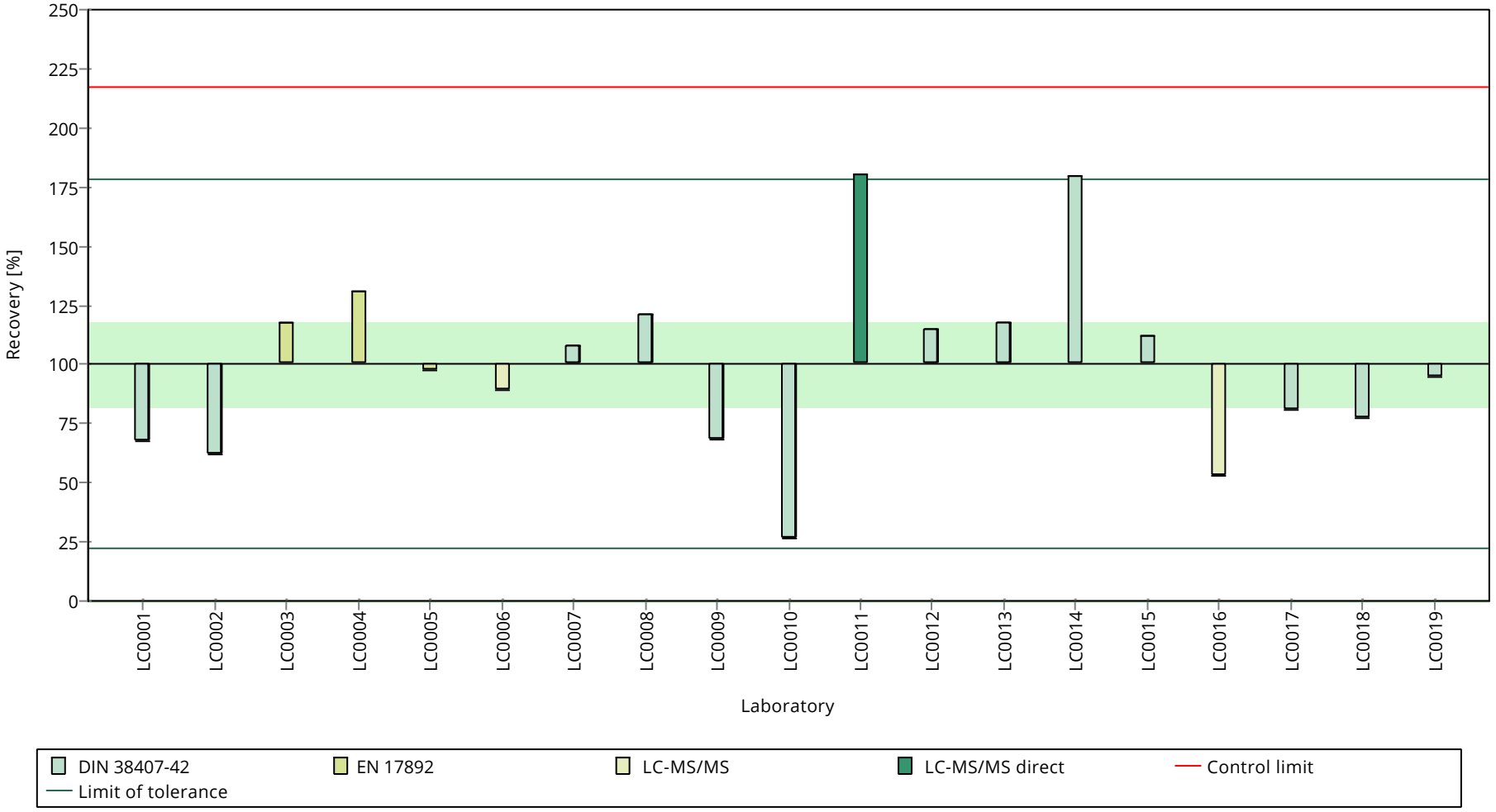
	all results	without outliers	Unit
Mean ± Cl (99%)	1.5 ± 0.401	1.5 ± 0.401	µg/l
Minimum	0.401	0.401	µg/l
Maximum	2.69	2.69	µg/l
Standard deviation	0.583	0.583	µg/l
rel. standard deviation	39	39	%
n	19	19	-

Graphical presentation of results

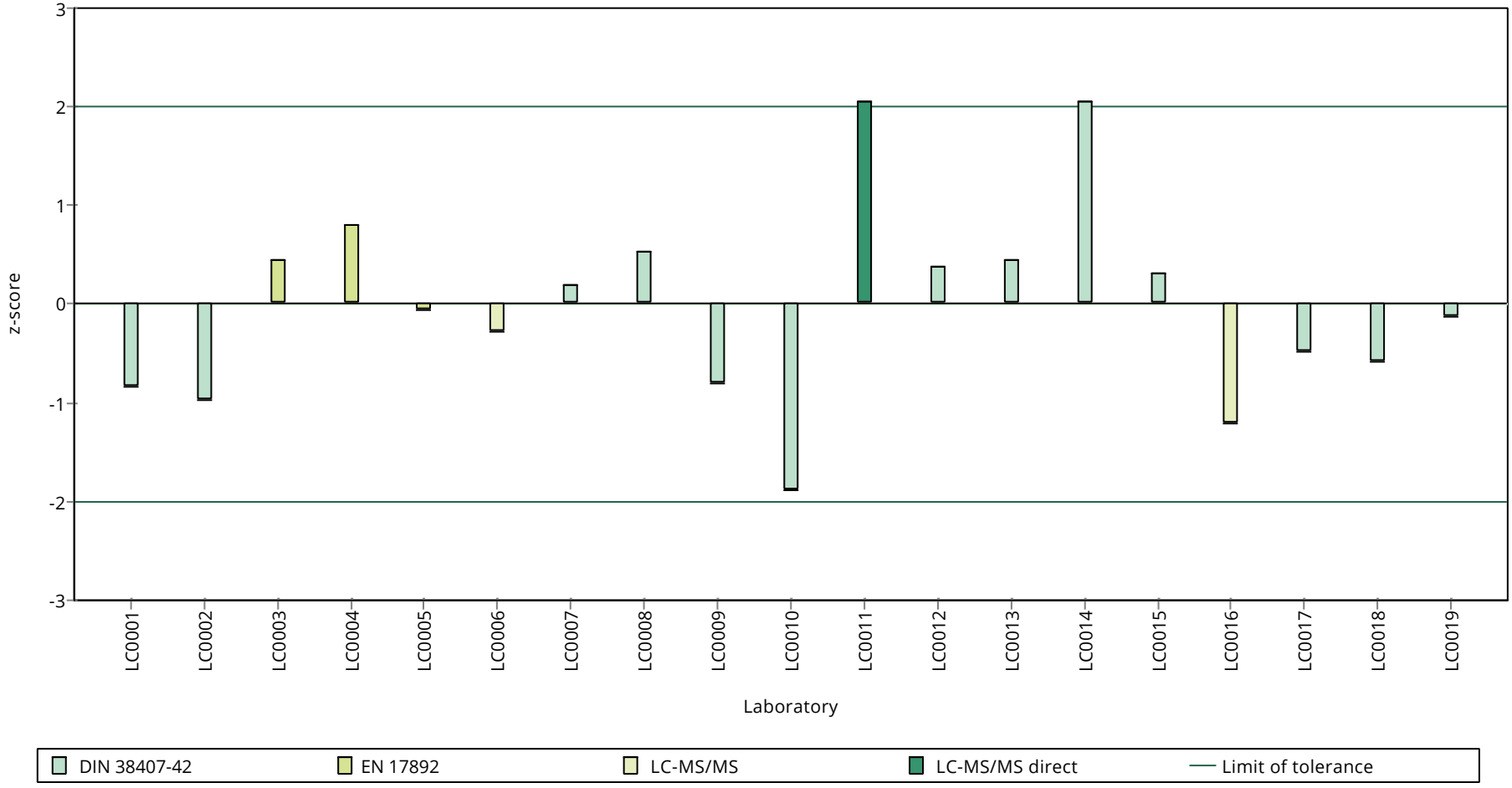
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluoropentanoic acid (PFPeA) - PF5C

Unit	µg/l
Assigned value ± U (k=2)	0.347 ± 0.0611
Criterion	0.132 (38 %)
Minimum - Maximum	0.0773 - 0.549
Control test value ± U (k=2)	0.322 ± 0.145

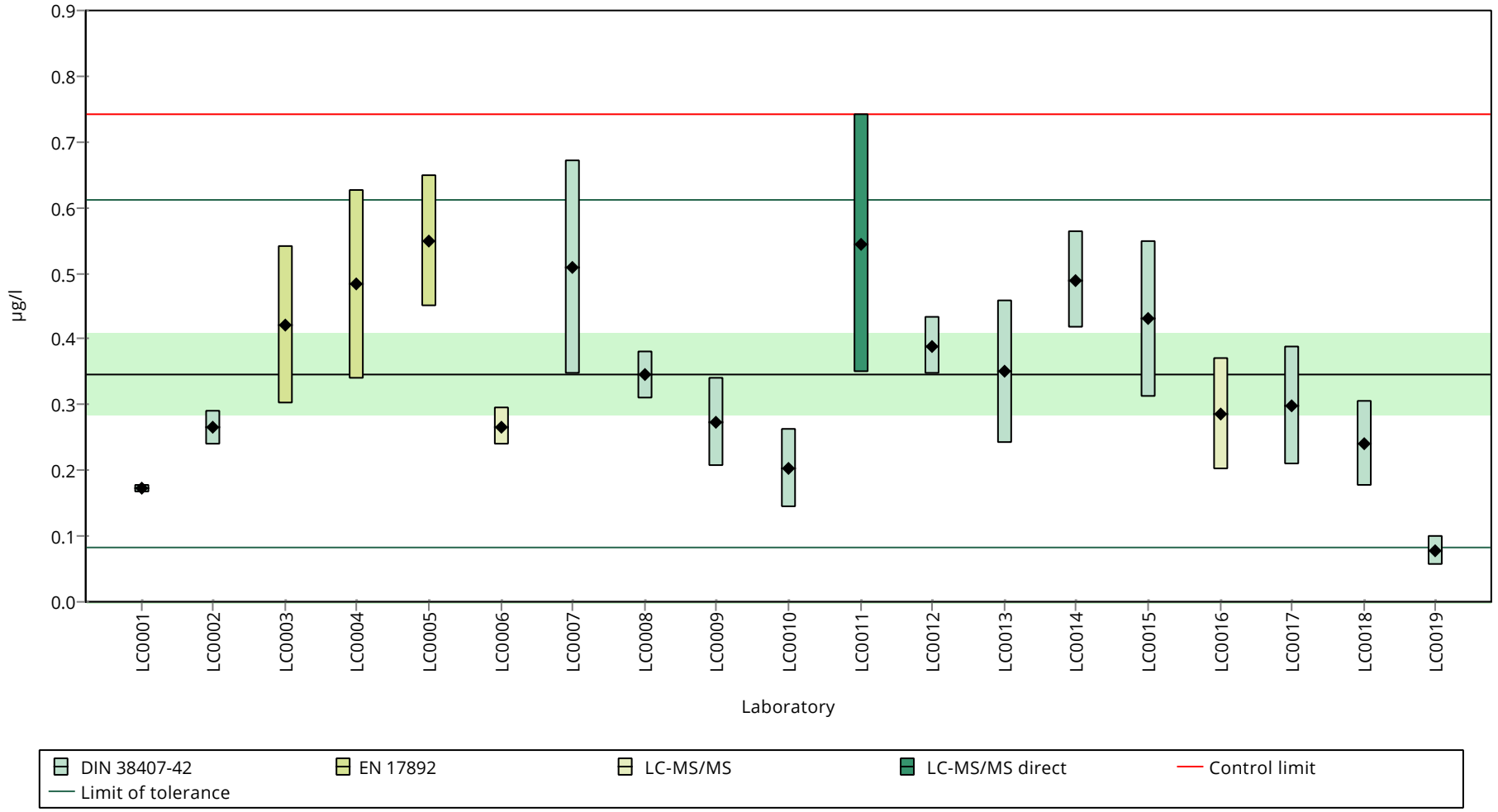
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.172 ± 0.006	49.6	-1.33	
LC0002	0.265 ± 0.0265	76.4	-0.62	
LC0003	0.421 ± 0.12	121	0.56	
LC0004	0.483 ± 0.145	139	1.03	
LC0005	0.549 ± 0.1	158	1.53	
LC0006	0.266 ± 0.029	76.6	-0.61	
LC0007	0.5087 ± 0.1628	147	1.23	
LC0008	0.345 ± 0.0362	99.4	-0.02	
LC0009	0.2739 ± 0.06812	78.9	-0.55	
LC0010	0.203 ± 0.0611	58.5	-1.09	
LC0011	0.545 ± 0.1962	157	1.5	
LC0012	0.389 ± 0.044	112	0.32	
LC0013	0.35 ± 0.11	101	0.02	
LC0014	0.49 ± 0.073	141	1.08	
LC0015	0.43 ± 0.12	124	0.63	
LC0016	0.286 ± 0.086	82.4	-0.46	
LC0017	0.299 ± 0.09	86.2	-0.36	
LC0018	0.241 ± 0.0651	69.4	-0.8	
LC0019	0.0773 ± 0.0232	22.3	-2.05	

Characteristics of parameter

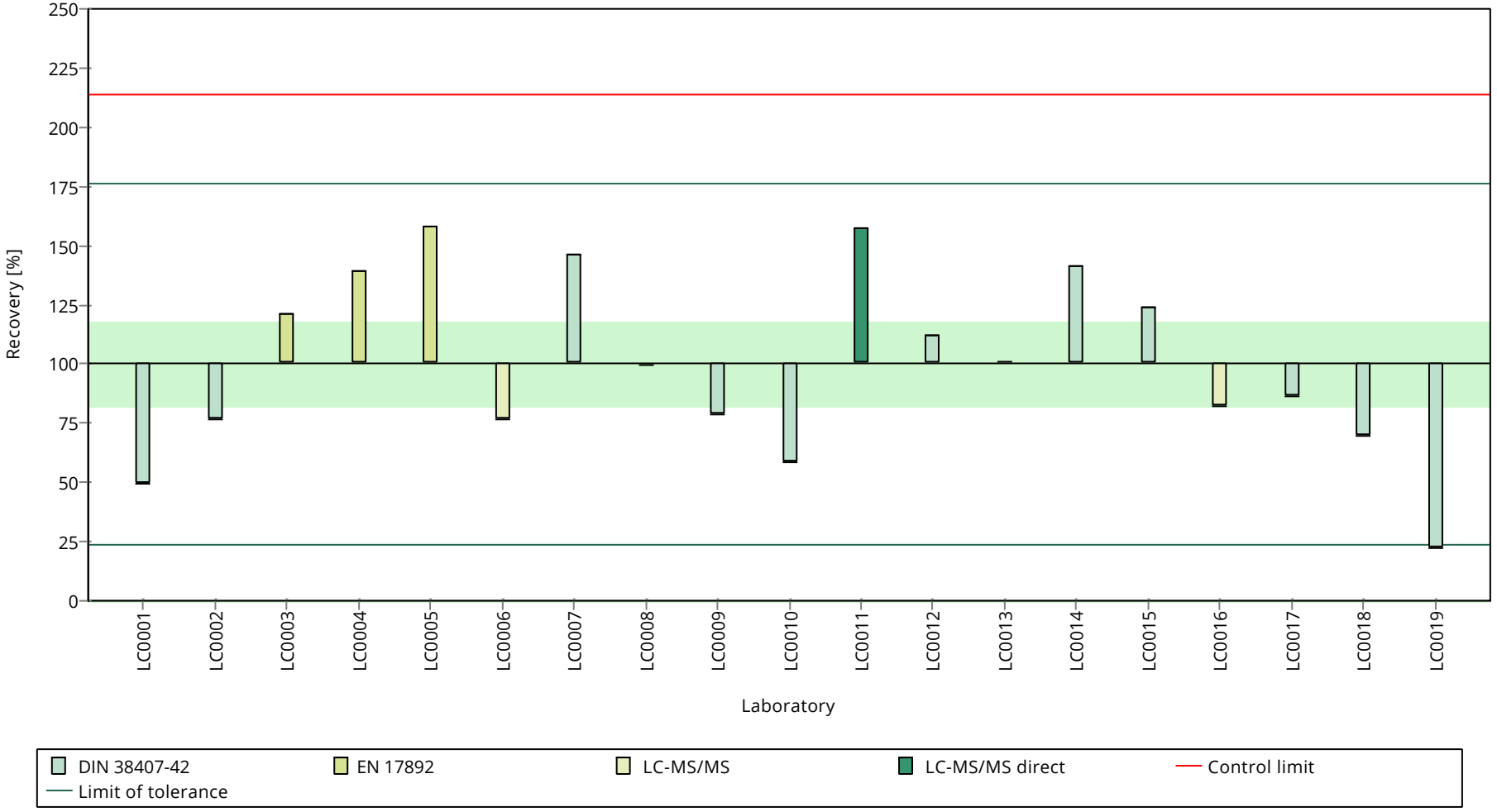
	all results	without outliers	Unit
Mean ± Cl (99%)	0.347 ± 0.0917	0.347 ± 0.0917	µg/l
Minimum	0.0773	0.0773	µg/l
Maximum	0.549	0.549	µg/l
Standard deviation	0.133	0.133	µg/l
rel. standard deviation	38.4	38.4	%
n	19	19	-

Graphical presentation of results

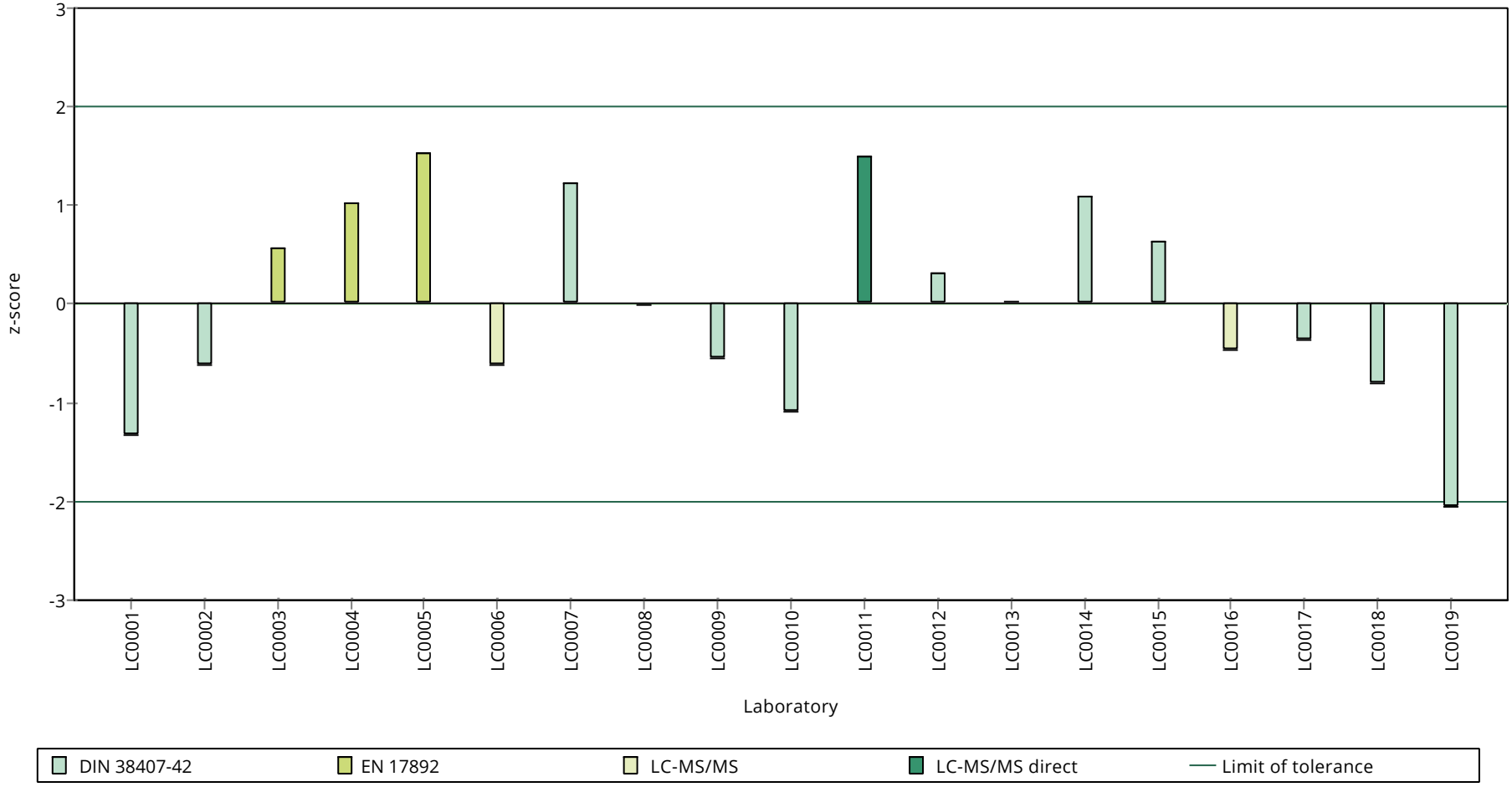
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluoropentanoic acid (PFPeA) - PF5C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.025 - 0.192
Control test value ± U (k=2)	0.0728 ± 0.0328

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.073 ± 0.0363 µg/l

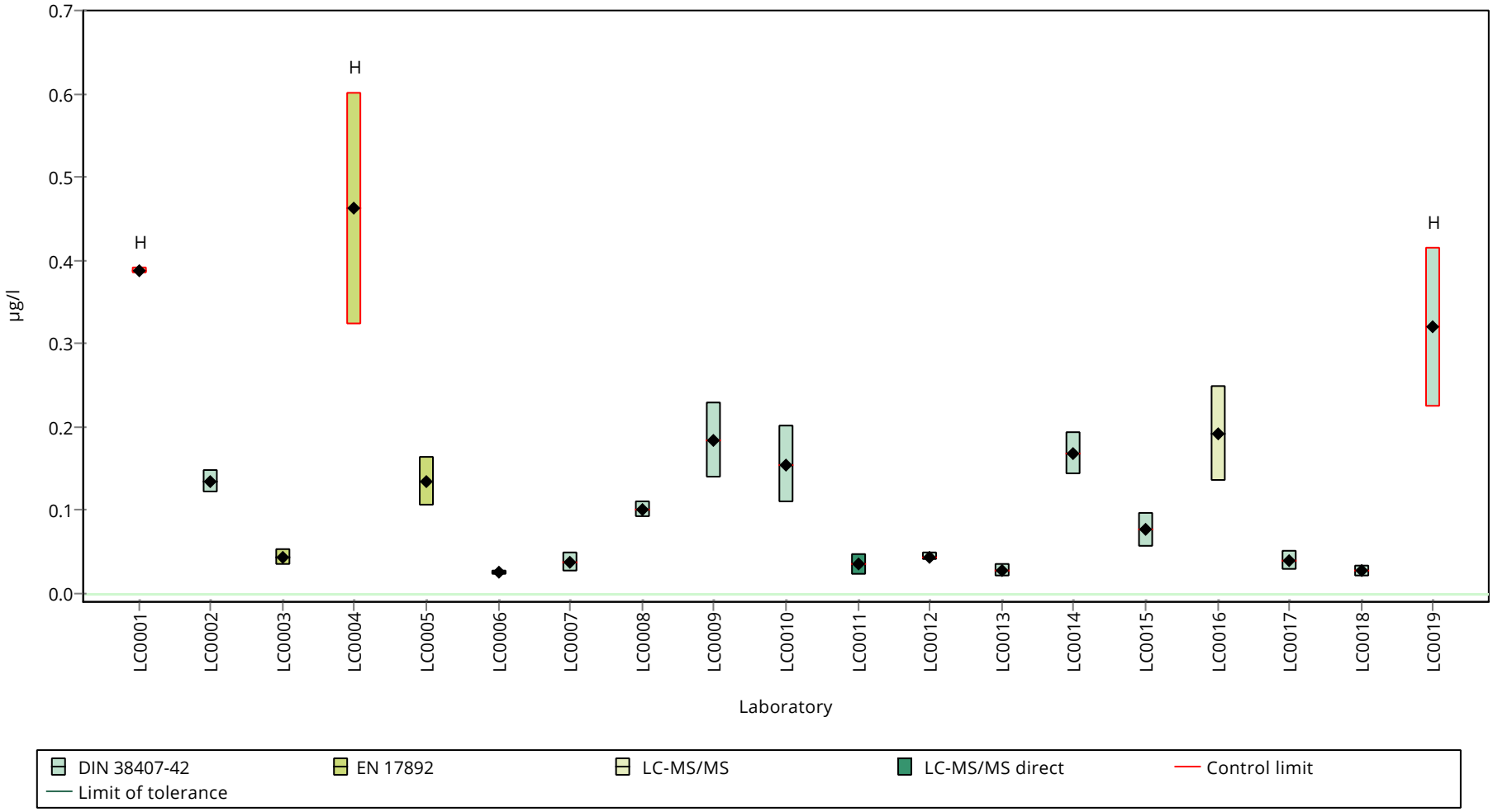
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.388 ± 0.004	-	-	H
LC0002	0.134 ± 0.0134	-	-	
LC0003	0.0427 ± 0.01	-	-	
LC0004	0.462 ± 0.139	-	-	H
LC0005	0.135 ± 0.03	-	-	
LC0006	0.025 ± 0.003	-	-	
LC0007	0.0376 ± 0.012	-	-	
LC0008	0.101 ± 0.0106	-	-	
LC0009	0.1836 ± 0.04566	-	-	
LC0010	0.155 ± 0.0467	-	-	
LC0011	0.035 ± 0.0126	-	-	
LC0012	0.0443 ± 0.005	-	-	
LC0013	0.0268 ± 0.008	-	-	
LC0014	0.168 ± 0.025	-	-	
LC0015	0.0764 ± 0.021	-	-	
LC0016	0.192 ± 0.058	-	-	
LC0017	0.0403 ± 0.0121	-	-	
LC0018	0.027 ± 0.0073	-	-	
LC0019	0.32 ± 0.096	-	-	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.137 ± 0.0885	0.089 ± 0.0468	µg/l
Minimum	0.025	0.025	µg/l
Maximum	0.462	0.192	µg/l
Standard deviation	0.129	0.0624	µg/l
rel. standard deviation	94.2	70.2	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluoropentanoic acid (PFPeA) - PF5C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.015 - 0.0548
Control test value ± U (k=2)	0.0165 ± 0.00743

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.026 ± 0.00771 µg/l

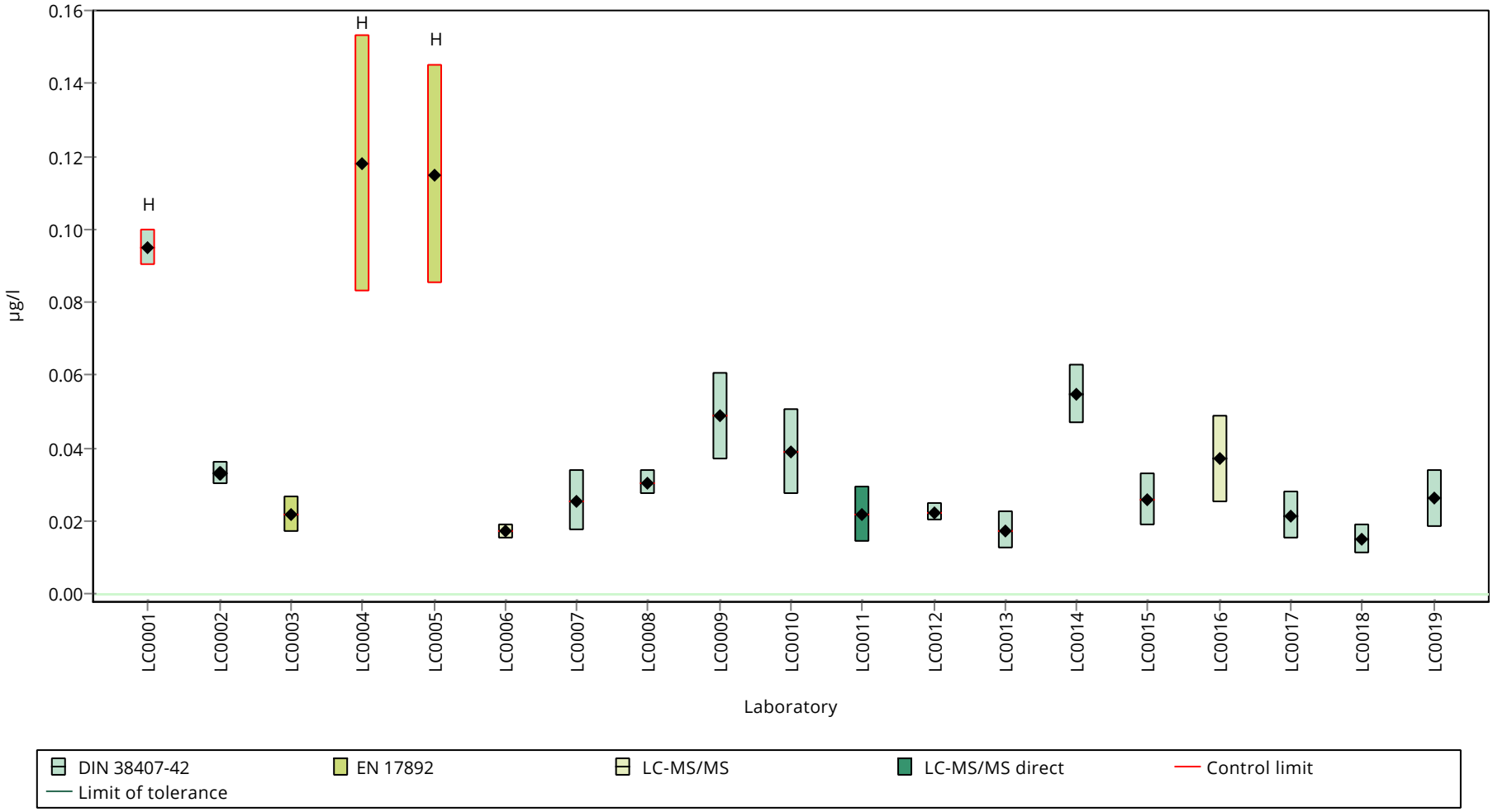
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.095 ± 0.005	-	-	H
LC0002	0.033 ± 0.0033	-	-	
LC0003	0.0215 ± 0.005	-	-	
LC0004	0.118 ± 0.0354	-	-	H
LC0005	0.115 ± 0.03	-	-	H
LC0006	0.017 ± 0.002	-	-	
LC0007	0.0255 ± 0.0082	-	-	
LC0008	0.0305 ± 0.0032	-	-	
LC0009	0.04865 ± 0.0121	-	-	
LC0010	0.039 ± 0.0118	-	-	
LC0011	0.0215 ± 0.0077	-	-	
LC0012	0.0223 ± 0.0025	-	-	
LC0013	0.0173 ± 0.0052	-	-	
LC0014	0.0548 ± 0.0082	-	-	
LC0015	0.0256 ± 0.0072	-	-	
LC0016	0.037 ± 0.012	-	-	
LC0017	0.0214 ± 0.00642	-	-	
LC0018	0.015 ± 0.0042	-	-	
LC0019	0.026 ± 0.0078	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0413 ± 0.0222	0.0285 ± 0.00856	µg/l
Minimum	0.015	0.015	µg/l
Maximum	0.118	0.0548	µg/l
Standard deviation	0.0323	0.0114	µg/l
rel. standard deviation	78.3	40.1	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorohexanoic acid (PFHxA) - PF6C

Unit	µg/l
Assigned value ± U (k=2)	2.68 ± 0.199
Criterion	0.589 (22 %)
Minimum - Maximum	1.93 - 3.24
Control test value ± U (k=2)	2.03 ± 0.406

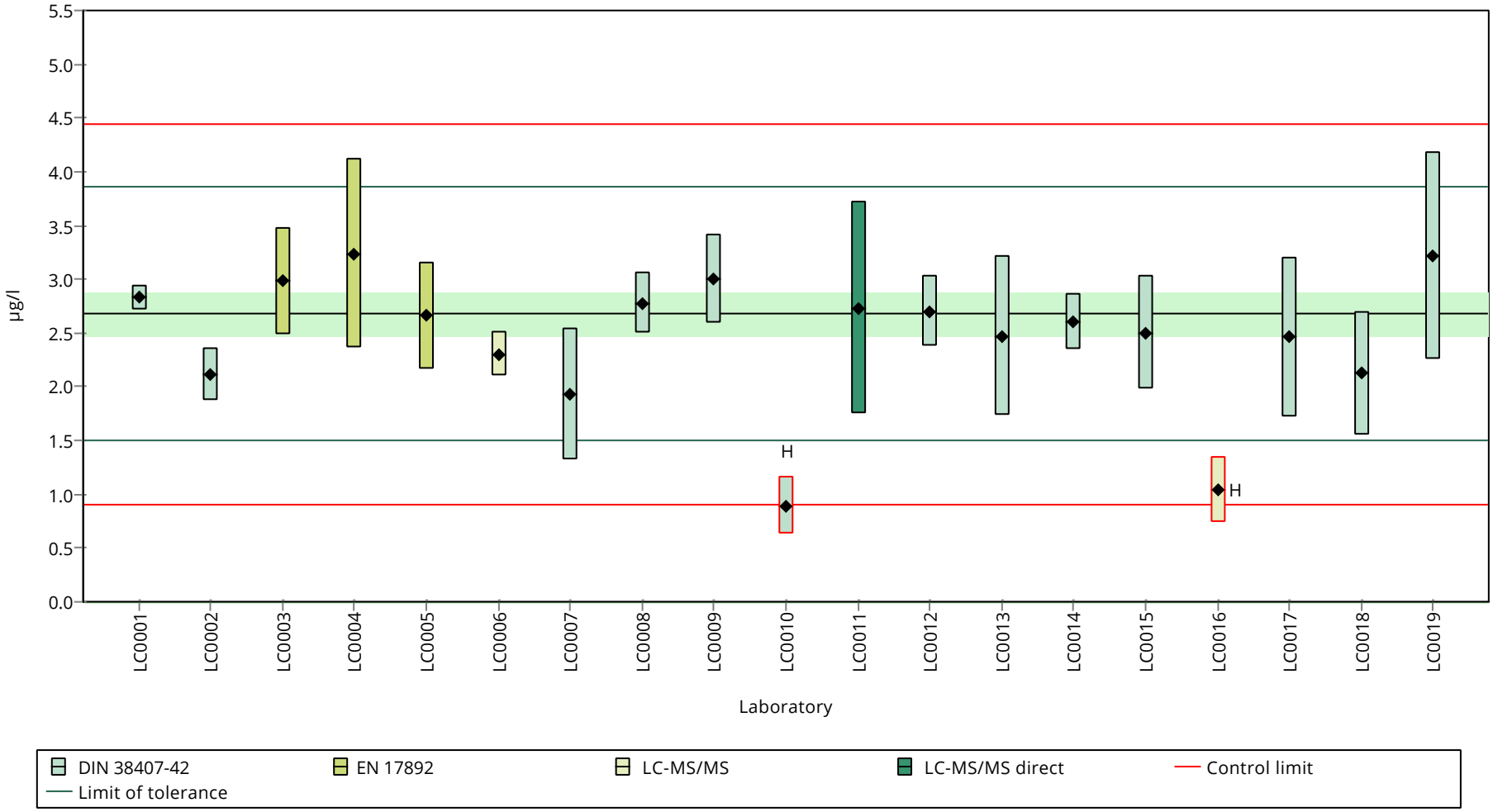
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	2.827 ± 0.112	106	0.26	
LC0002	2.118 ± 0.2435	79.1	-0.95	
LC0003	2.98 ± 0.5	111	0.52	
LC0004	3.24 ± 0.881	121	0.96	
LC0005	2.66 ± 0.5	99.4	-0.03	
LC0006	2.3 ± 0.207	85.9	-0.64	
LC0007	1.9268 ± 0.6166	72	-1.27	
LC0008	2.78 ± 0.281	104	0.18	
LC0009	2.998 ± 0.41627	112	0.55	
LC0010	0.892 ± 0.2677	33.3	-3.03	H
LC0011	2.7329 ± 0.9839	102	0.1	
LC0012	2.7 ± 0.33	101	0.04	
LC0013	2.47 ± 0.74	92.3	-0.35	
LC0014	2.6 ± 0.26	97.2	-0.13	
LC0015	2.5 ± 0.53	93.4	-0.3	
LC0016	1.04 ± 0.312	38.9	-2.78	H
LC0017	2.46 ± 0.74	91.9	-0.37	
LC0018	2.125 ± 0.5736	79.4	-0.94	
LC0019	3.22 ± 0.97	120	0.92	

Characteristics of parameter

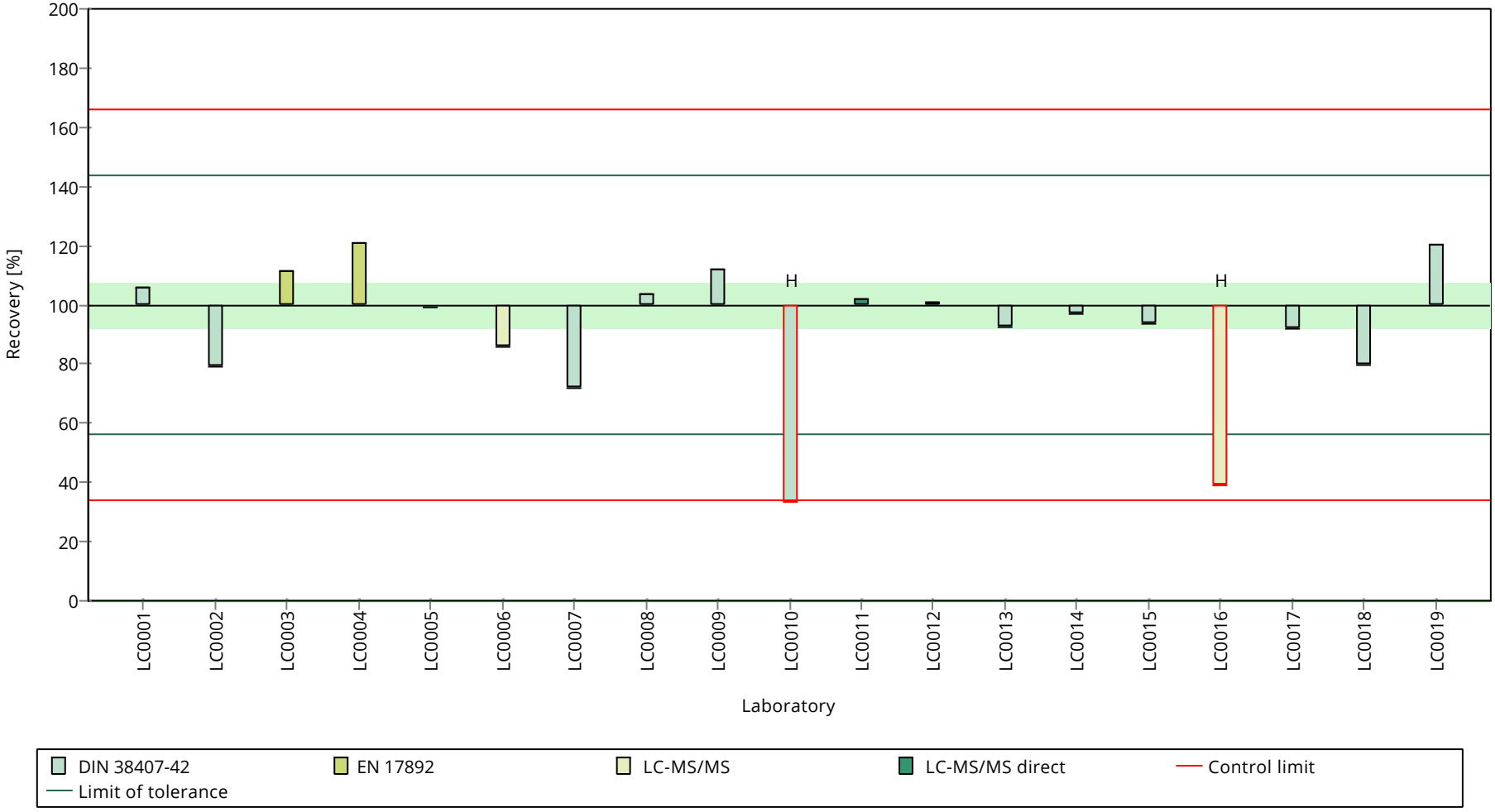
	all results	without outliers	Unit
Mean ± Cl (99%)	2.45 ± 0.435	2.63 ± 0.273	µg/l
Minimum	0.892	1.93	µg/l
Maximum	3.24	3.24	µg/l
Standard deviation	0.632	0.375	µg/l
rel. standard deviation	25.8	14.3	%
n	19	17	-

Graphical presentation of results

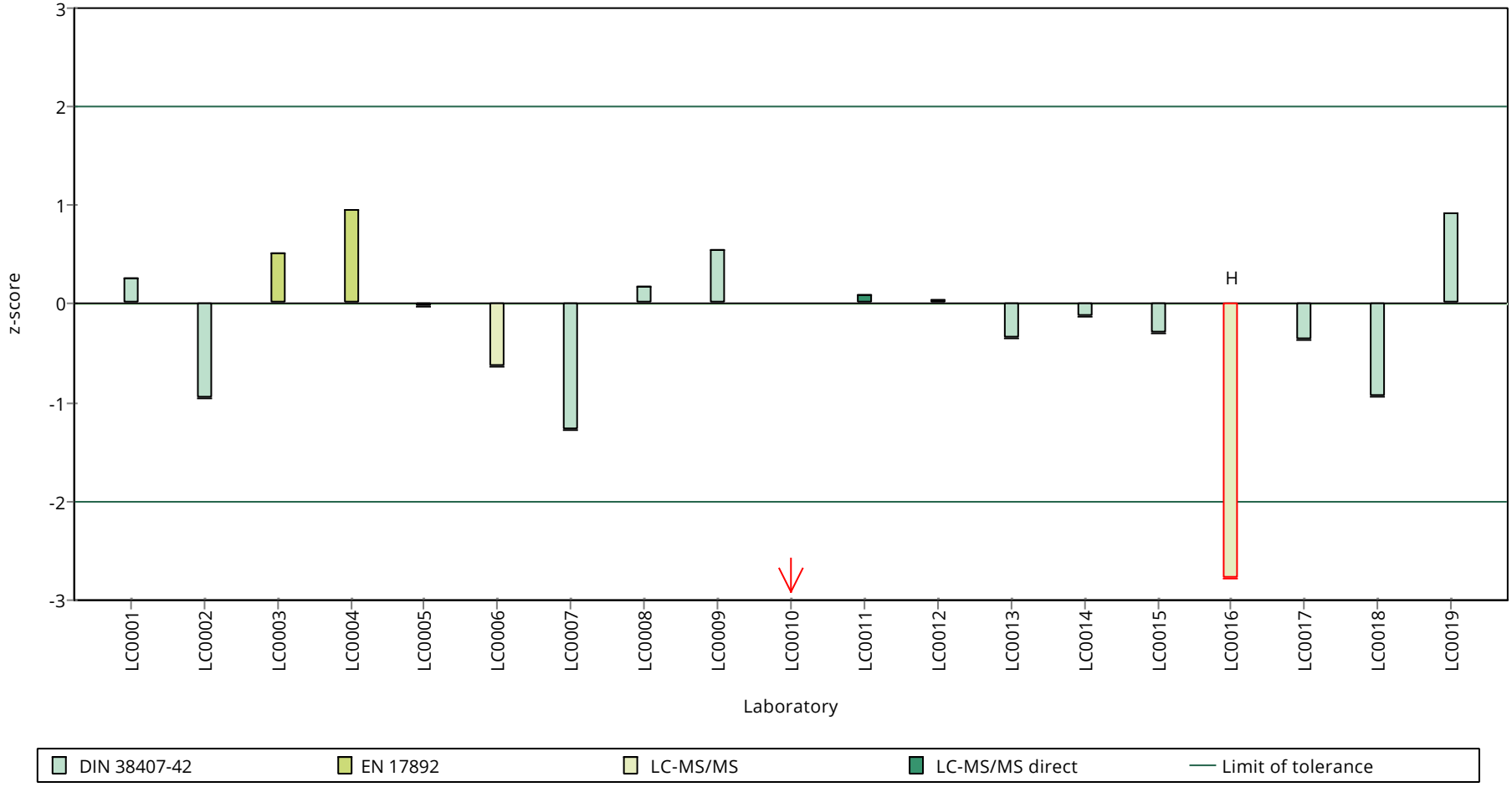
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluorohexanoic acid (PFHxA) - PF6C

Unit	µg/l
Assigned value ± U (k=2)	0.591 ± 0.0749
Criterion	0.13 (22 %)
Minimum - Maximum	0.311 - 0.772
Control test value ± U (k=2)	0.466 ± 0.0932

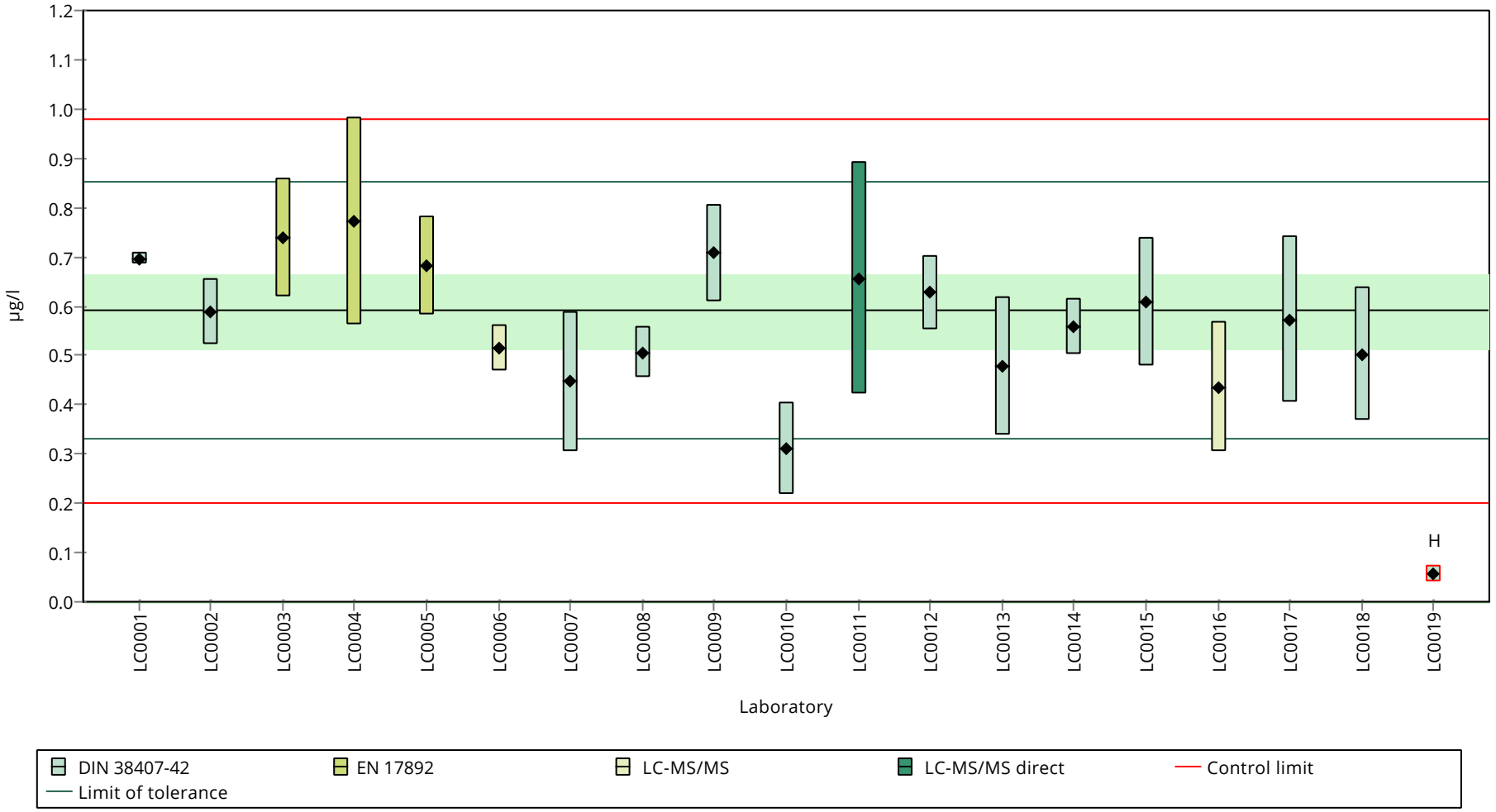
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.696 ± 0.011	118	0.81	
LC0002	0.589 ± 0.0677	99.7	-0.02	
LC0003	0.74 ± 0.12	125	1.15	
LC0004	0.772 ± 0.21	131	1.39	
LC0005	0.681 ± 0.1	115	0.69	
LC0006	0.515 ± 0.046	87.1	-0.58	
LC0007	0.4463 ± 0.1428	75.5	-1.11	
LC0008	0.506 ± 0.0511	85.6	-0.65	
LC0009	0.7074 ± 0.09822	120	0.9	
LC0010	0.311 ± 0.0935	52.6	-2.15	
LC0011	0.6567 ± 0.2364	111	0.51	
LC0012	0.627 ± 0.076	106	0.28	
LC0013	0.478 ± 0.14	80.9	-0.87	
LC0014	0.559 ± 0.056	94.6	-0.25	
LC0015	0.608 ± 0.13	103	0.13	
LC0016	0.436 ± 0.131	73.8	-1.19	
LC0017	0.573 ± 0.17	97	-0.14	
LC0018	0.502 ± 0.1354	84.9	-0.68	
LC0019	0.0566 ± 0.017	9.6	-4.11	H

Characteristics of parameter

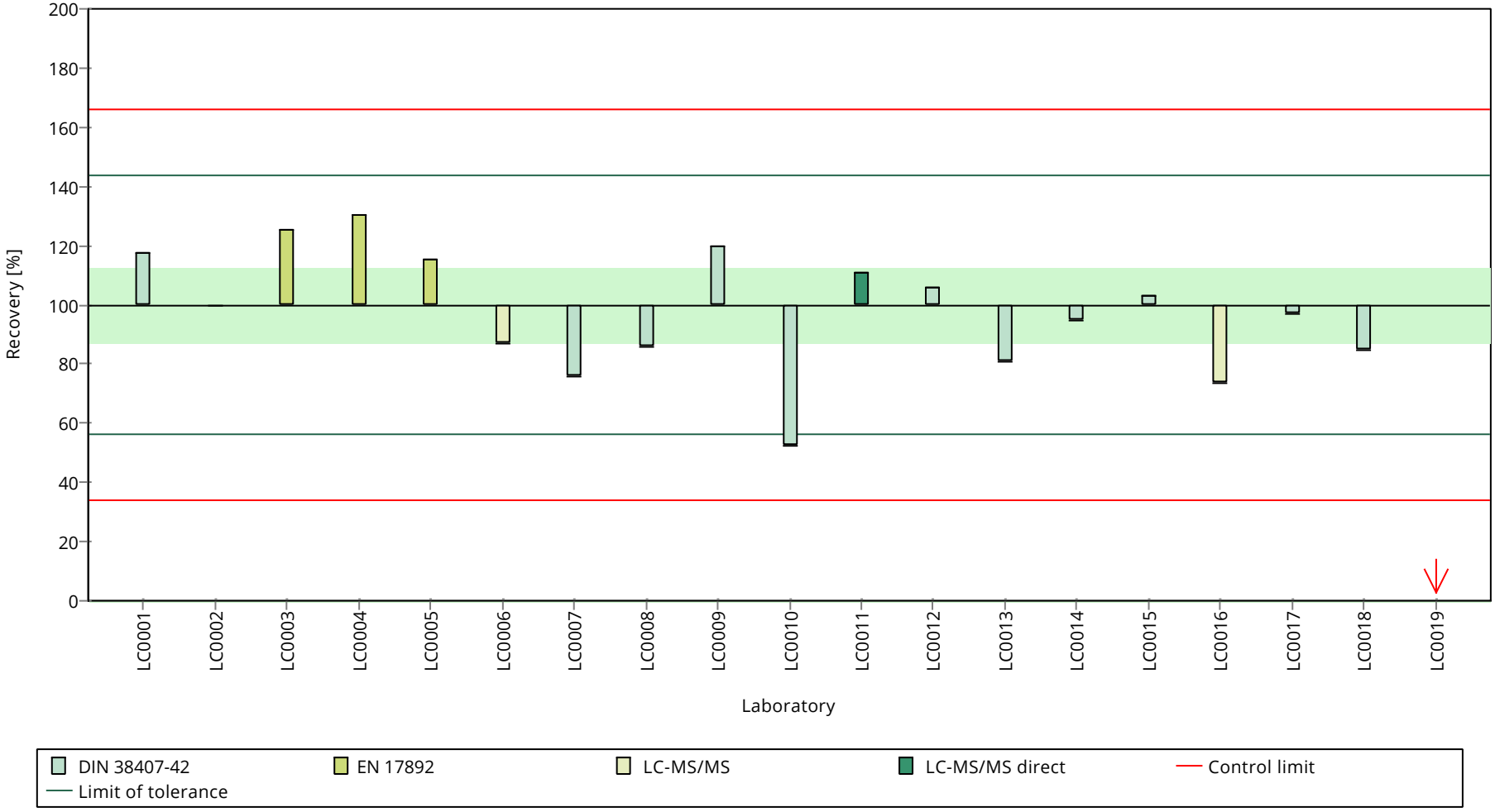
	all results	without outliers	Unit
Mean ± Cl (99%)	0.551 ± 0.115	0.578 ± 0.0856	µg/l
Minimum	0.0566	0.311	µg/l
Maximum	0.772	0.772	µg/l
Standard deviation	0.168	0.121	µg/l
rel. standard deviation	30.5	20.9	%
n	19	18	-

Graphical presentation of results

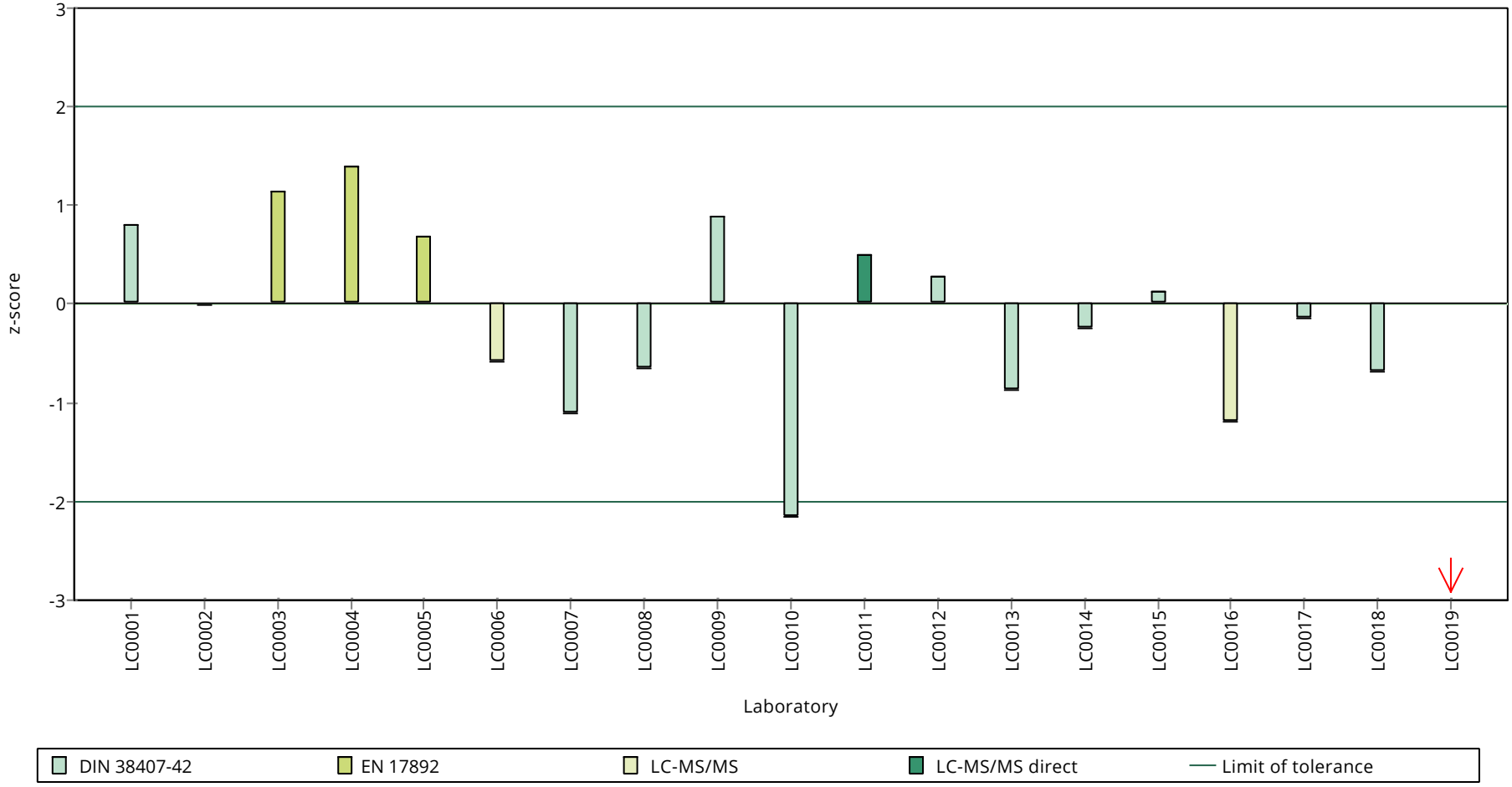
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorohexanoic acid (PFHxA) - PF6C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0215 - 0.116
Control test value ± U (k=2)	0.0551 ± 0.011

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.046 ± 0.0199 µg/l

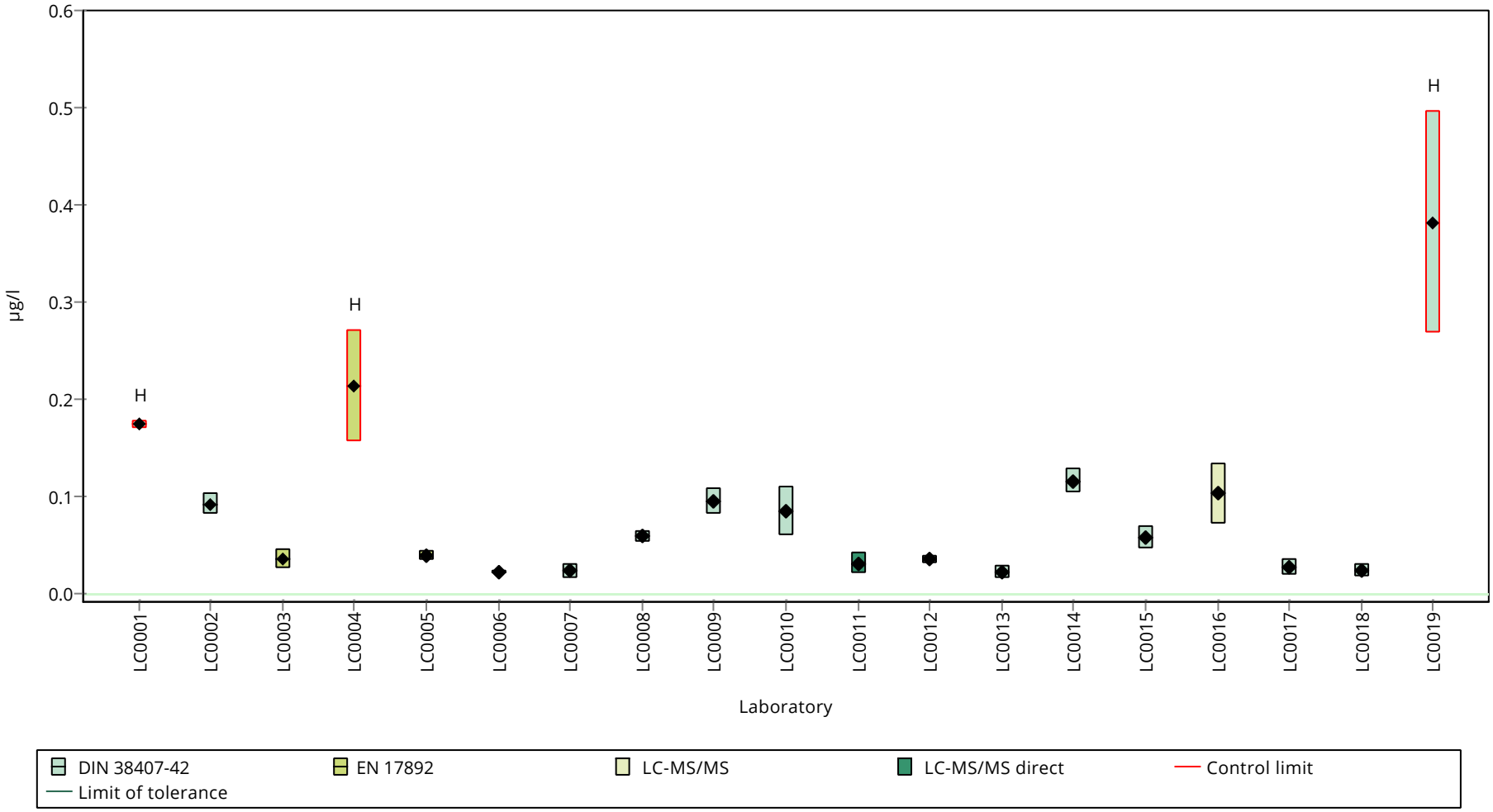
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.174 ± 0.004	-	-	H
LC0002	0.092 ± 0.0106	-	-	
LC0003	0.0358 ± 0.01	-	-	
LC0004	0.213 ± 0.0578	-	-	H
LC0005	0.0383 ± 0.005	-	-	
LC0006	0.022 ± 0.002	-	-	
LC0007	0.0229 ± 0.0073	-	-	
LC0008	0.059 ± 0.00596	-	-	
LC0009	0.09514 ± 0.01321	-	-	
LC0010	0.085 ± 0.0257	-	-	
LC0011	0.031 ± 0.0112	-	-	
LC0012	0.035 ± 0.0042	-	-	
LC0013	0.0215 ± 0.0065	-	-	
LC0014	0.116 ± 0.012	-	-	
LC0015	0.057 ± 0.012	-	-	
LC0016	0.103 ± 0.031	-	-	
LC0017	0.0277 ± 0.0083	-	-	
LC0018	0.024 ± 0.0065	-	-	
LC0019	0.382 ± 0.115	-	-	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.086 ± 0.0616	0.0541 ± 0.0249	µg/l
Minimum	0.0215	0.0215	µg/l
Maximum	0.382	0.116	µg/l
Standard deviation	0.0895	0.0331	µg/l
rel. standard deviation	104	61.3	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorohexanoic acid (PFHxA) - PF6C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.012 - 0.0298
Control test value ± U (k=2)	0.0121 ± 0.00243

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.018 ± 0.00326 µg/l

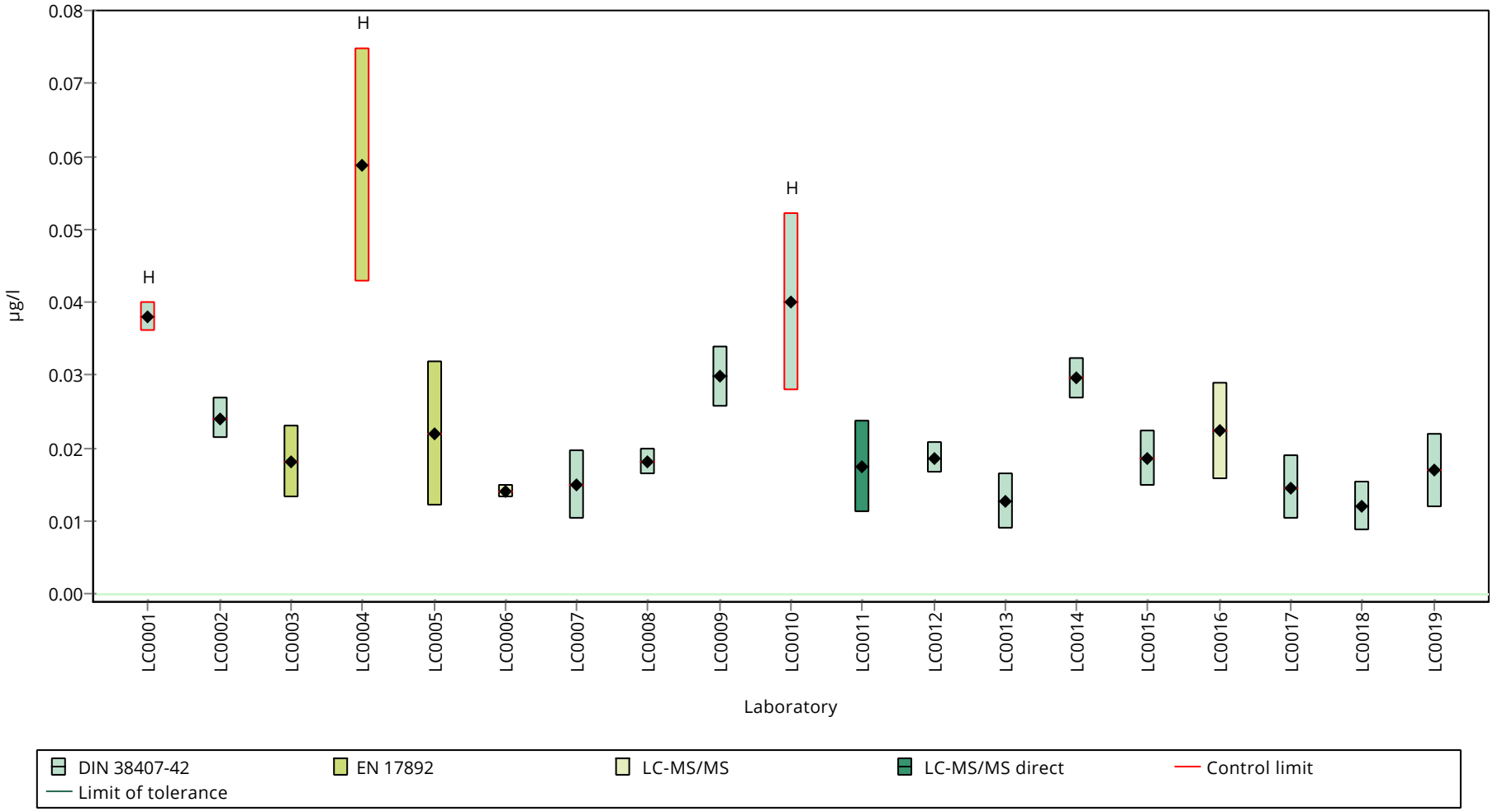
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.038 ± 0.002	-	-	H
LC0002	0.024 ± 0.0028	-	-	
LC0003	0.018 ± 0.005	-	-	
LC0004	0.0588 ± 0.016	-	-	H
LC0005	0.0219 ± 0.01	-	-	
LC0006	0.014 ± 0.001	-	-	
LC0007	0.0149 ± 0.0048	-	-	
LC0008	0.0181 ± 0.00183	-	-	
LC0009	0.02978 ± 0.00413	-	-	
LC0010	0.04 ± 0.0121	-	-	H
LC0011	0.0174 ± 0.0063	-	-	
LC0012	0.0186 ± 0.0022	-	-	
LC0013	0.0127 ± 0.0038	-	-	
LC0014	0.0295 ± 0.0029	-	-	
LC0015	0.0185 ± 0.0039	-	-	
LC0016	0.0223 ± 0.0067	-	-	
LC0017	0.0145 ± 0.0044	-	-	
LC0018	0.012 ± 0.0033	-	-	
LC0019	0.0169 ± 0.0051	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0232 ± 0.00809	0.0189 ± 0.00402	µg/l
Minimum	0.012	0.012	µg/l
Maximum	0.0588	0.0298	µg/l
Standard deviation	0.0118	0.00536	µg/l
rel. standard deviation	50.8	28.3	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluoroheptanoic acid (PFHpA) - PF7C

Unit	µg/l
Assigned value ± U (k=2)	0.145 ± 0.0149
Criterion	0.0319 (22 %)
Minimum - Maximum	0.066 - 0.197
Control test value ± U (k=2)	0.179 ± 0.0357

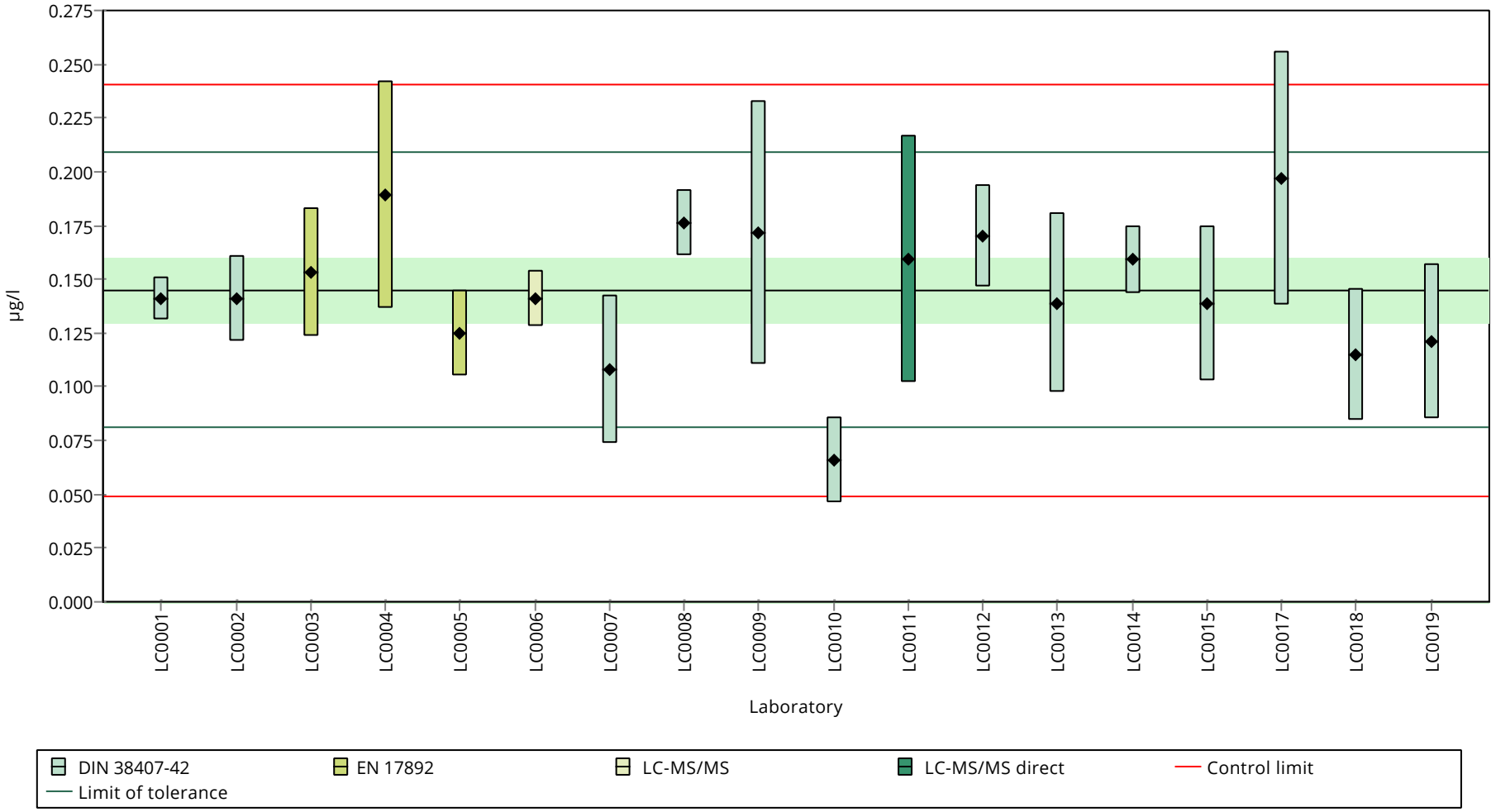
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.141 ± 0.01	97.2	-0.13	
LC0002	0.141 ± 0.0198	97.2	-0.13	
LC0003	0.153 ± 0.03	105	0.25	
LC0004	0.189 ± 0.053	130	1.38	
LC0005	0.125 ± 0.02	86.2	-0.63	
LC0006	0.141 ± 0.013	97.2	-0.13	
LC0007	0.1082 ± 0.0346	74.6	-1.16	
LC0008	0.176 ± 0.0152	121	0.97	
LC0009	0.1716 ± 0.06144	118	0.83	
LC0010	0.066 ± 0.0198	45.5	-2.48	
LC0011	0.1593 ± 0.0573	110	0.45	
LC0012	0.17 ± 0.024	117	0.78	
LC0013	0.139 ± 0.042	95.8	-0.19	
LC0014	0.159 ± 0.016	110	0.44	
LC0015	0.139 ± 0.036	95.8	-0.19	
LC0016	- ± -	-	-	
LC0017	0.197 ± 0.059	136	1.63	
LC0018	0.115 ± 0.0309	79.3	-0.94	
LC0019	0.121 ± 0.036	83.4	-0.75	

Characteristics of parameter

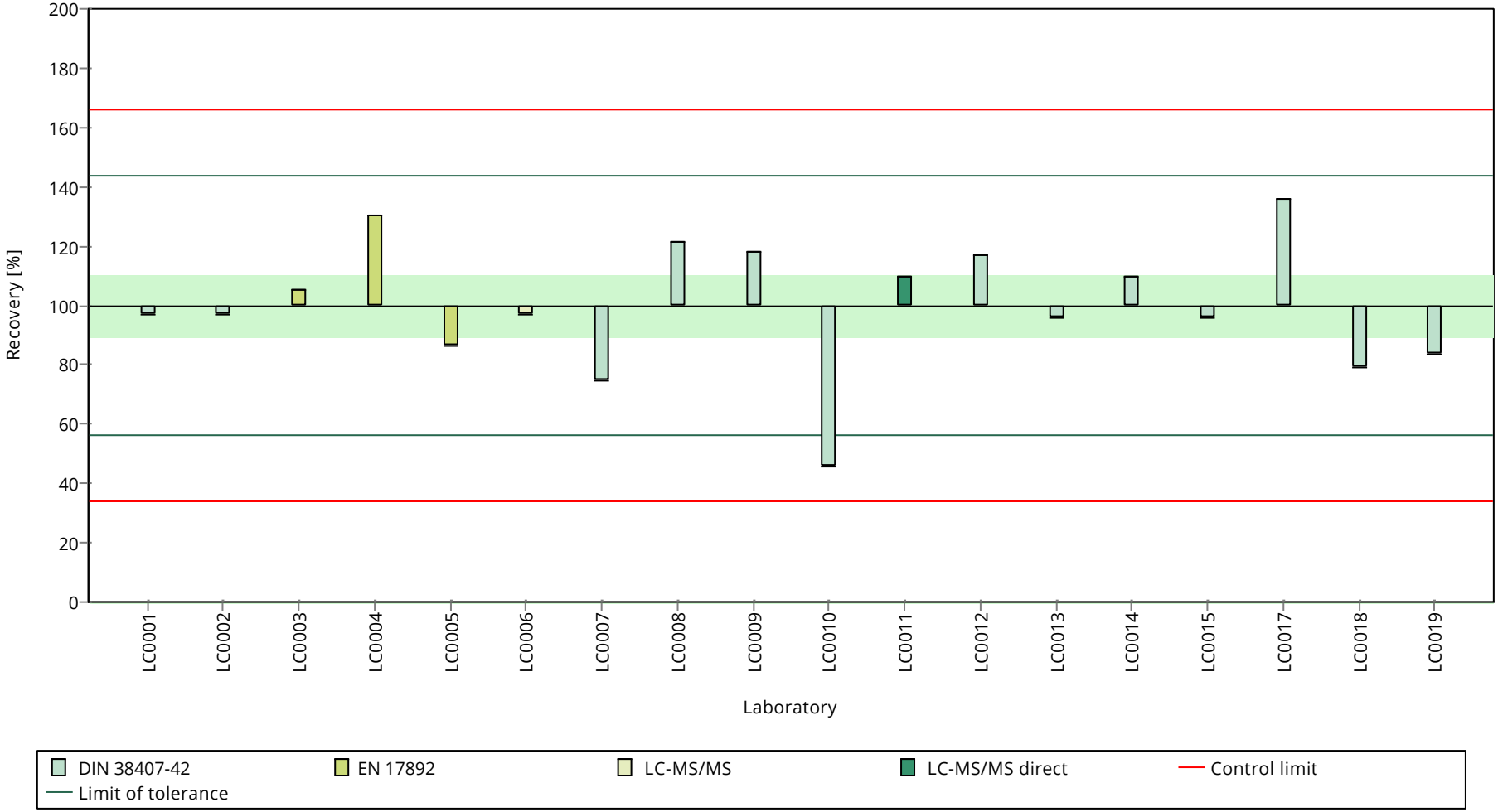
	all results	without outliers	Unit
Mean ± Cl (99%)	0.145 ± 0.0224	0.145 ± 0.0224	µg/l
Minimum	0.066	0.066	µg/l
Maximum	0.197	0.197	µg/l
Standard deviation	0.0316	0.0316	µg/l
rel. standard deviation	21.8	21.8	%
n	18	18	-

Graphical presentation of results

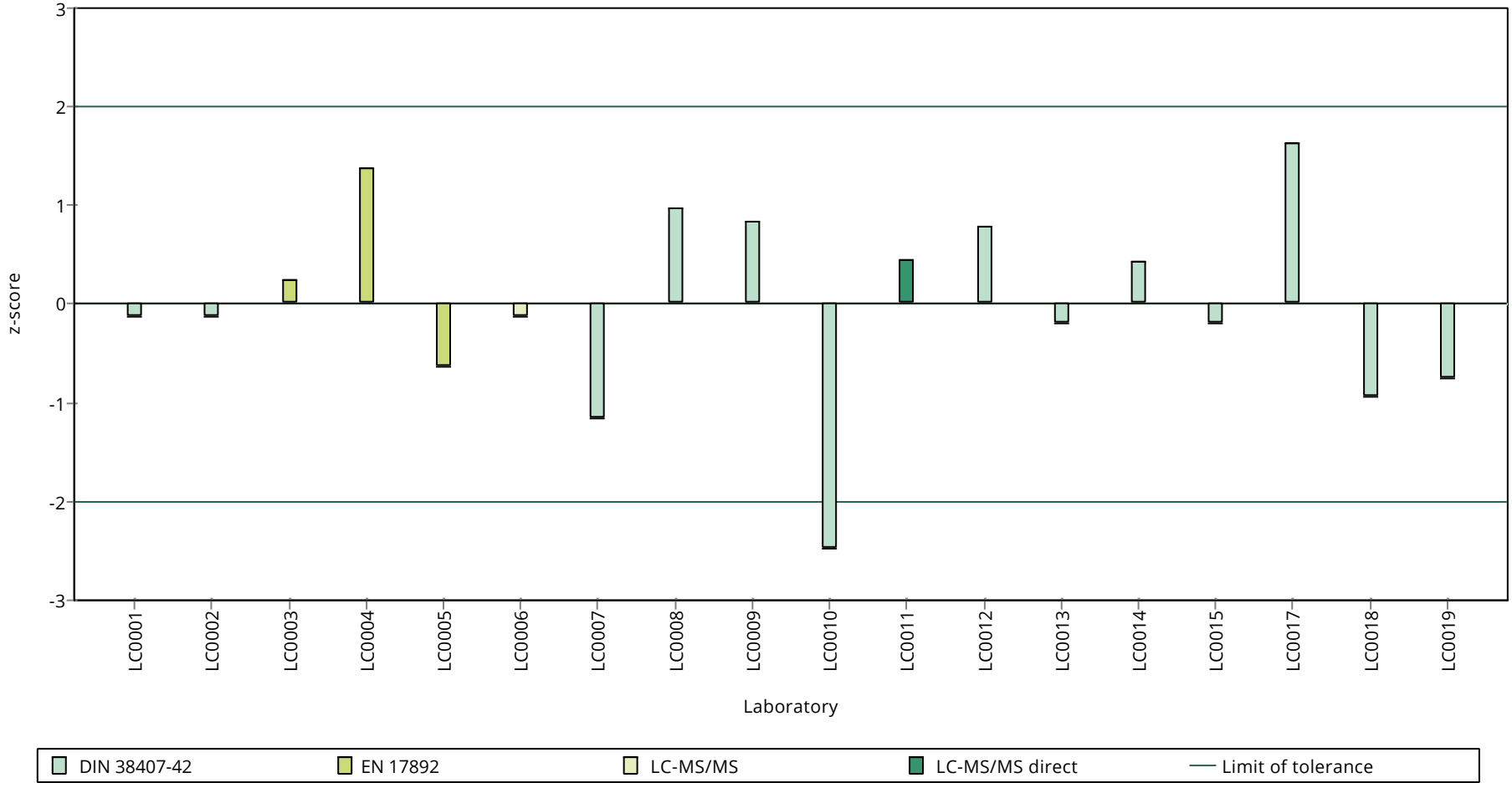
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluoroheptanoic acid (PFHpA) - PF7C

Unit	µg/l
Assigned value ± U (k=2)	0.0503 ± 0.00511
Criterion	0.0111 (22 %)
Minimum - Maximum	0.0317 - 0.0674
Control test value ± U (k=2)	0.0498 ± 0.00996

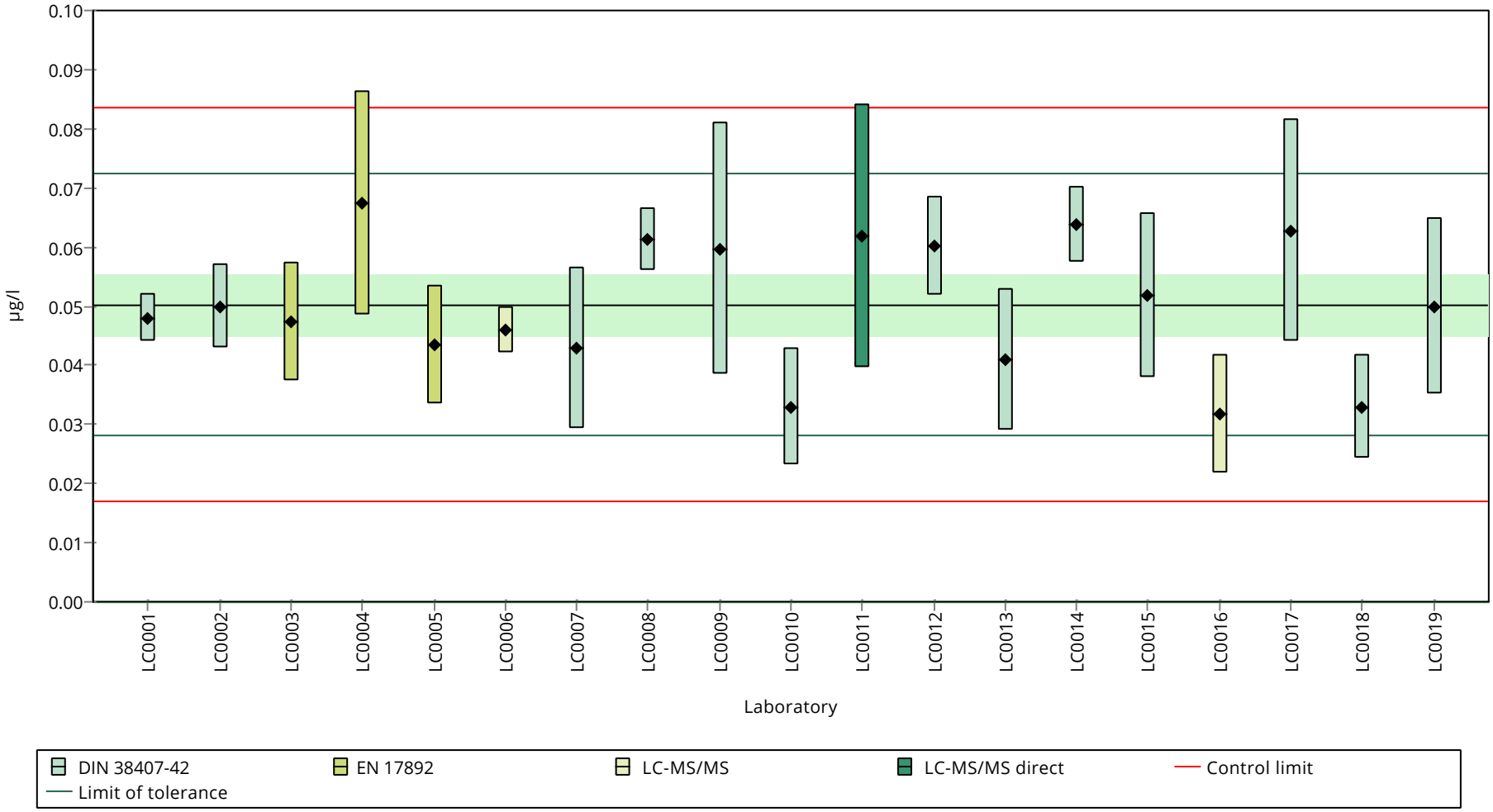
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.048 ± 0.004	95.5	-0.2	
LC0002	0.05 ± 0.007	99.5	-0.02	
LC0003	0.0473 ± 0.01	94.1	-0.27	
LC0004	0.0674 ± 0.0189	134	1.55	
LC0005	0.0434 ± 0.01	86.4	-0.62	
LC0006	0.046 ± 0.004	91.5	-0.39	
LC0007	0.0429 ± 0.0137	85.4	-0.67	
LC0008	0.0612 ± 0.00527	122	0.99	
LC0009	0.05971 ± 0.02138	119	0.85	
LC0010	0.033 ± 0.01	65.7	-1.56	
LC0011	0.0618 ± 0.0222	123	1.04	
LC0012	0.0602 ± 0.0083	120	0.9	
LC0013	0.041 ± 0.012	81.6	-0.84	
LC0014	0.0638 ± 0.0064	127	1.22	
LC0015	0.0518 ± 0.014	103	0.14	
LC0016	0.0317 ± 0.01	63.1	-1.68	
LC0017	0.0627 ± 0.0188	125	1.13	
LC0018	0.033 ± 0.0088	65.7	-1.56	
LC0019	0.05 ± 0.015	99.5	-0.02	

Characteristics of parameter

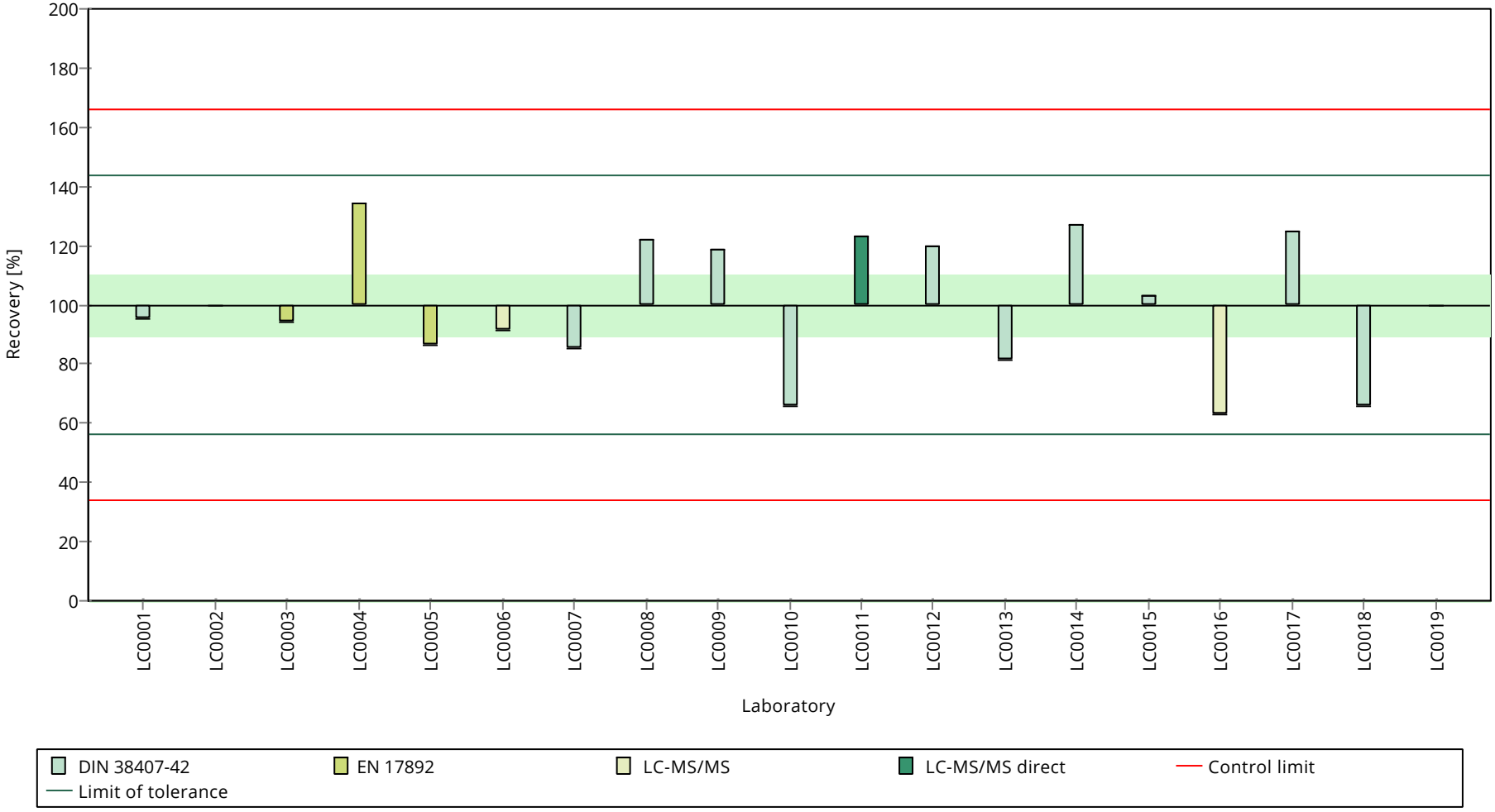
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0503 ± 0.00767	0.0503 ± 0.00767	µg/l
Minimum	0.0317	0.0317	µg/l
Maximum	0.0674	0.0674	µg/l
Standard deviation	0.0111	0.0111	µg/l
rel. standard deviation	22.2	22.2	%
n	19	19	-

Graphical presentation of results

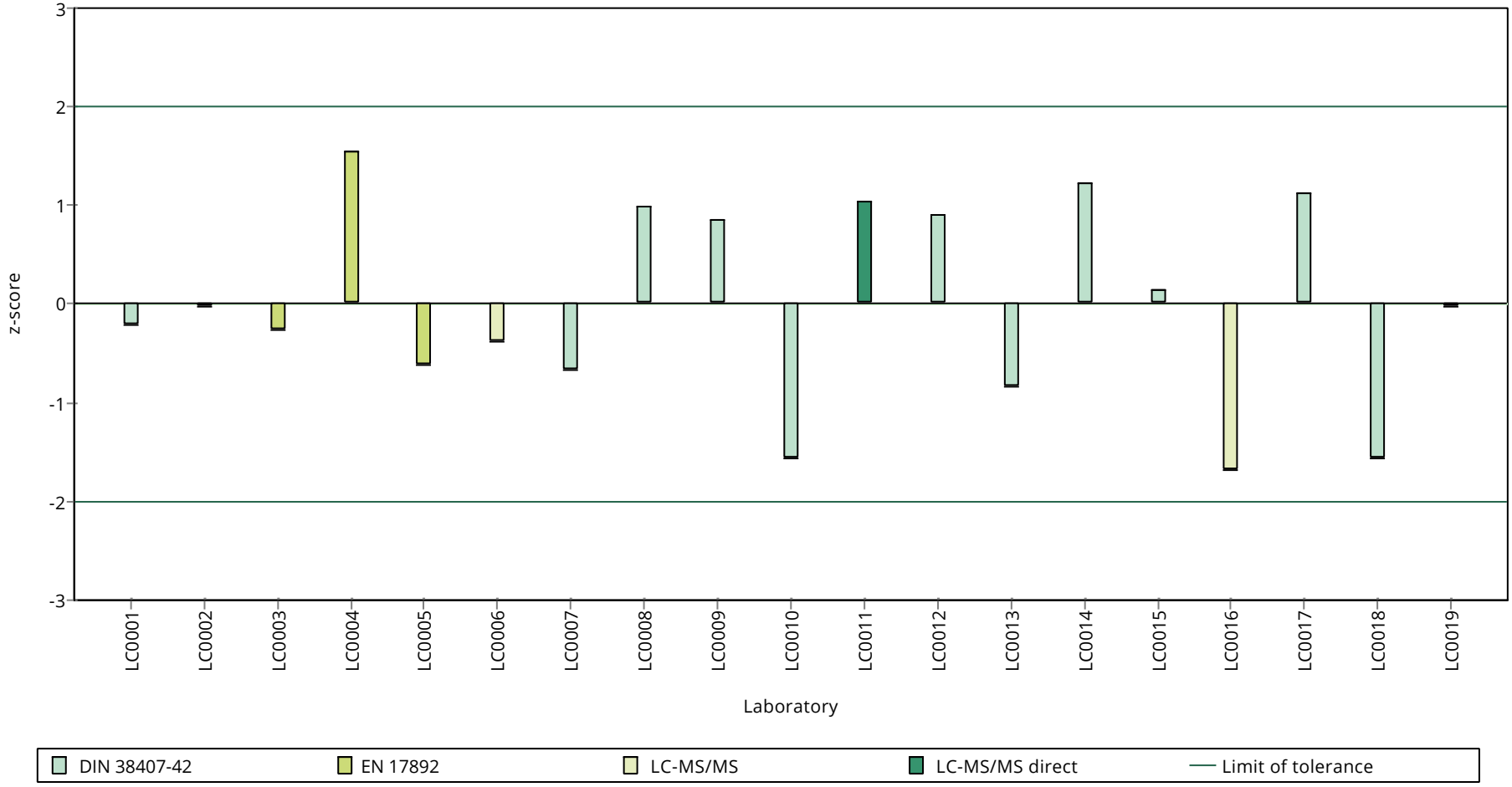
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluoroheptanoic acid (PFHpA) - PF7C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0229 - 0.105
Control test value ± U (k=2)	0.0548 ± 0.011

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.037 ± 0.0119 µg/l

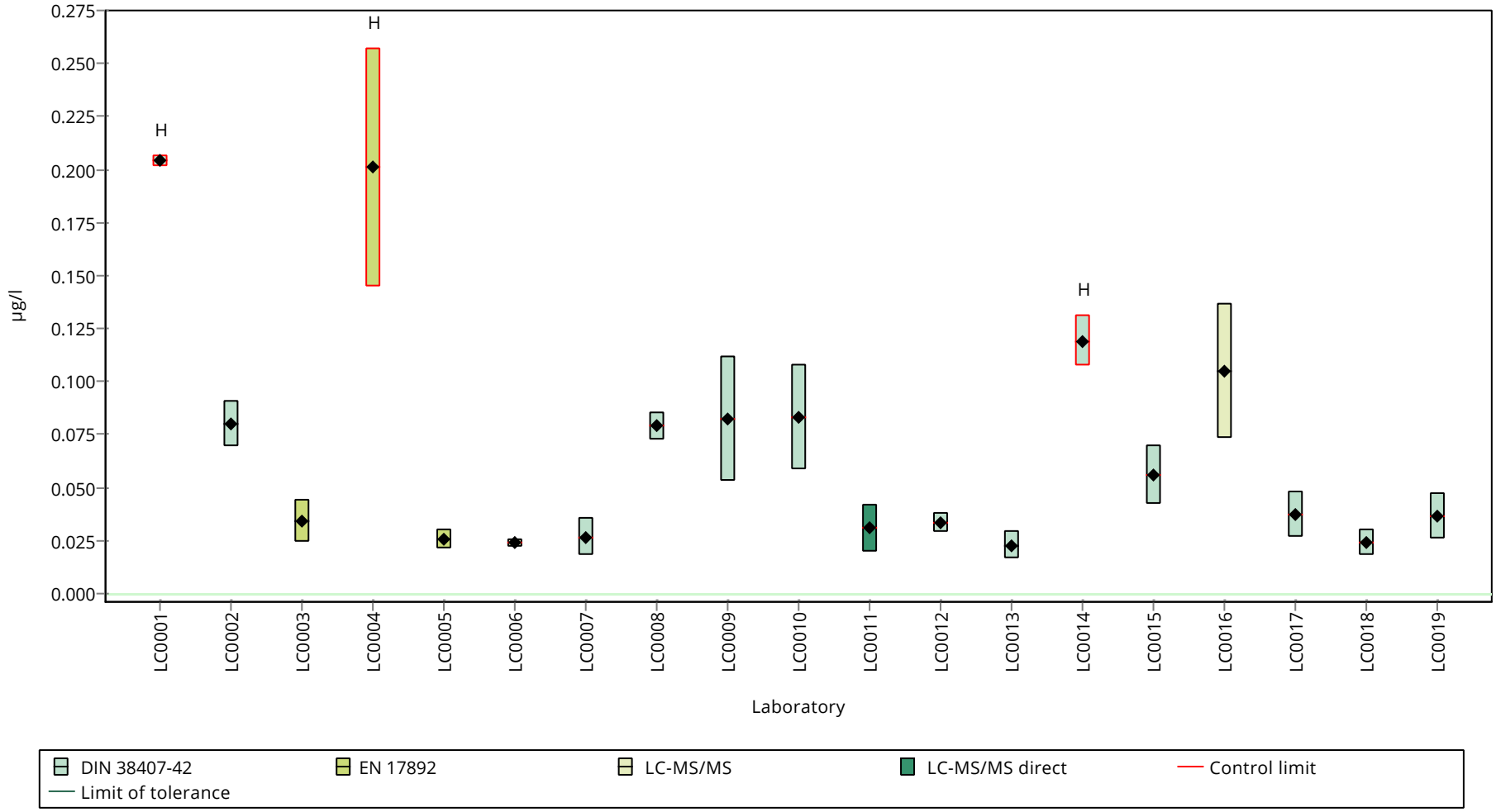
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.204 ± 0.003	-	-	H
LC0002	0.08 ± 0.0112	-	-	
LC0003	0.0344 ± 0.01	-	-	
LC0004	0.201 ± 0.0562	-	-	H
LC0005	0.0256 ± 0.005	-	-	
LC0006	0.024 ± 0.002	-	-	
LC0007	0.0268 ± 0.0086	-	-	
LC0008	0.0789 ± 0.00679	-	-	
LC0009	0.08262 ± 0.02958	-	-	
LC0010	0.083 ± 0.0251	-	-	
LC0011	0.0308 ± 0.0111	-	-	
LC0012	0.0335 ± 0.0046	-	-	
LC0013	0.0229 ± 0.0069	-	-	
LC0014	0.119 ± 0.012	-	-	H
LC0015	0.0556 ± 0.014	-	-	
LC0016	0.105 ± 0.032	-	-	
LC0017	0.0373 ± 0.0112	-	-	
LC0018	0.024 ± 0.0064	-	-	
LC0019	0.0367 ± 0.011	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0687 ± 0.0384	0.0488 ± 0.0206	µg/l
Minimum	0.0229	0.0229	µg/l
Maximum	0.204	0.105	µg/l
Standard deviation	0.0558	0.0275	µg/l
rel. standard deviation	81.2	56.4	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluoroheptanoic acid (PFHpA) - PF7C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.013 - 0.0333
Control test value ± U (k=2)	0.0147 ± 0.00293

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.019 ± 0.00351 µg/l

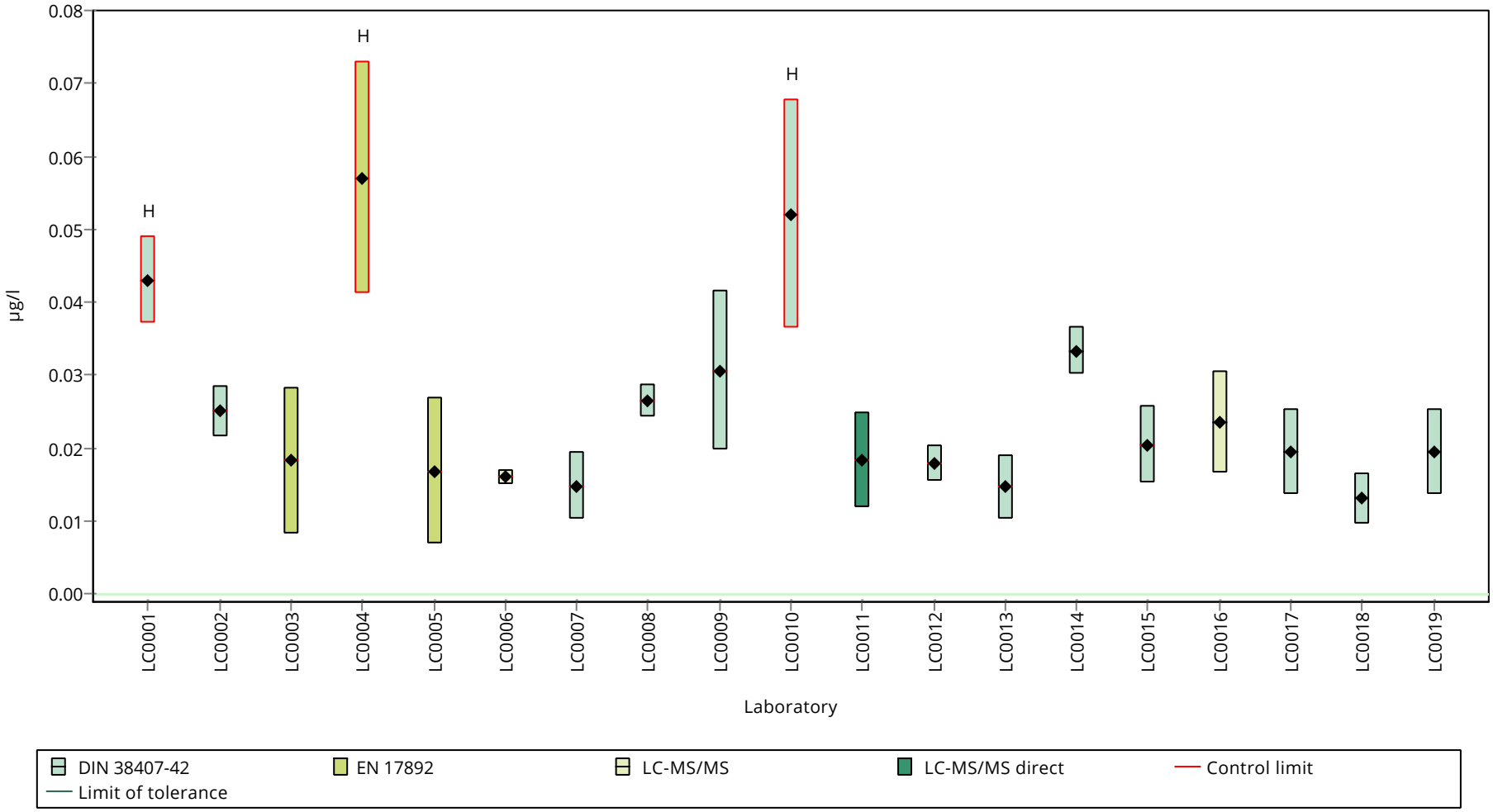
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.043 ± 0.006	-	-	H
LC0002	0.025 ± 0.0035	-	-	
LC0003	0.0182 ± 0.01	-	-	
LC0004	0.057 ± 0.0159	-	-	H
LC0005	0.0168 ± 0.01	-	-	
LC0006	0.016 ± 0.001	-	-	
LC0007	0.0148 ± 0.0047	-	-	
LC0008	0.0265 ± 0.00228	-	-	
LC0009	0.0306 ± 0.01096	-	-	
LC0010	0.052 ± 0.0157	-	-	H
LC0011	0.0183 ± 0.0066	-	-	
LC0012	0.0179 ± 0.0025	-	-	
LC0013	0.0146 ± 0.0044	-	-	
LC0014	0.0333 ± 0.0033	-	-	
LC0015	0.0204 ± 0.0053	-	-	
LC0016	0.0236 ± 0.007	-	-	
LC0017	0.0194 ± 0.0058	-	-	
LC0018	0.013 ± 0.0035	-	-	
LC0019	0.0195 ± 0.0059	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0253 ± 0.00875	0.0205 ± 0.00437	µg/l
Minimum	0.013	0.013	µg/l
Maximum	0.057	0.0333	µg/l
Standard deviation	0.0127	0.00582	µg/l
rel. standard deviation	50.3	28.4	%
n	19	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorooctanoic acid (PFOA) - PF8C

Unit	µg/l
Assigned value ± U (k=2)	0.112 ± 0.0115
Criterion	0.0291 (26 %)
Minimum - Maximum	0.0726 - 0.165
Control test value ± U (k=2)	0.126 ± 0.0316

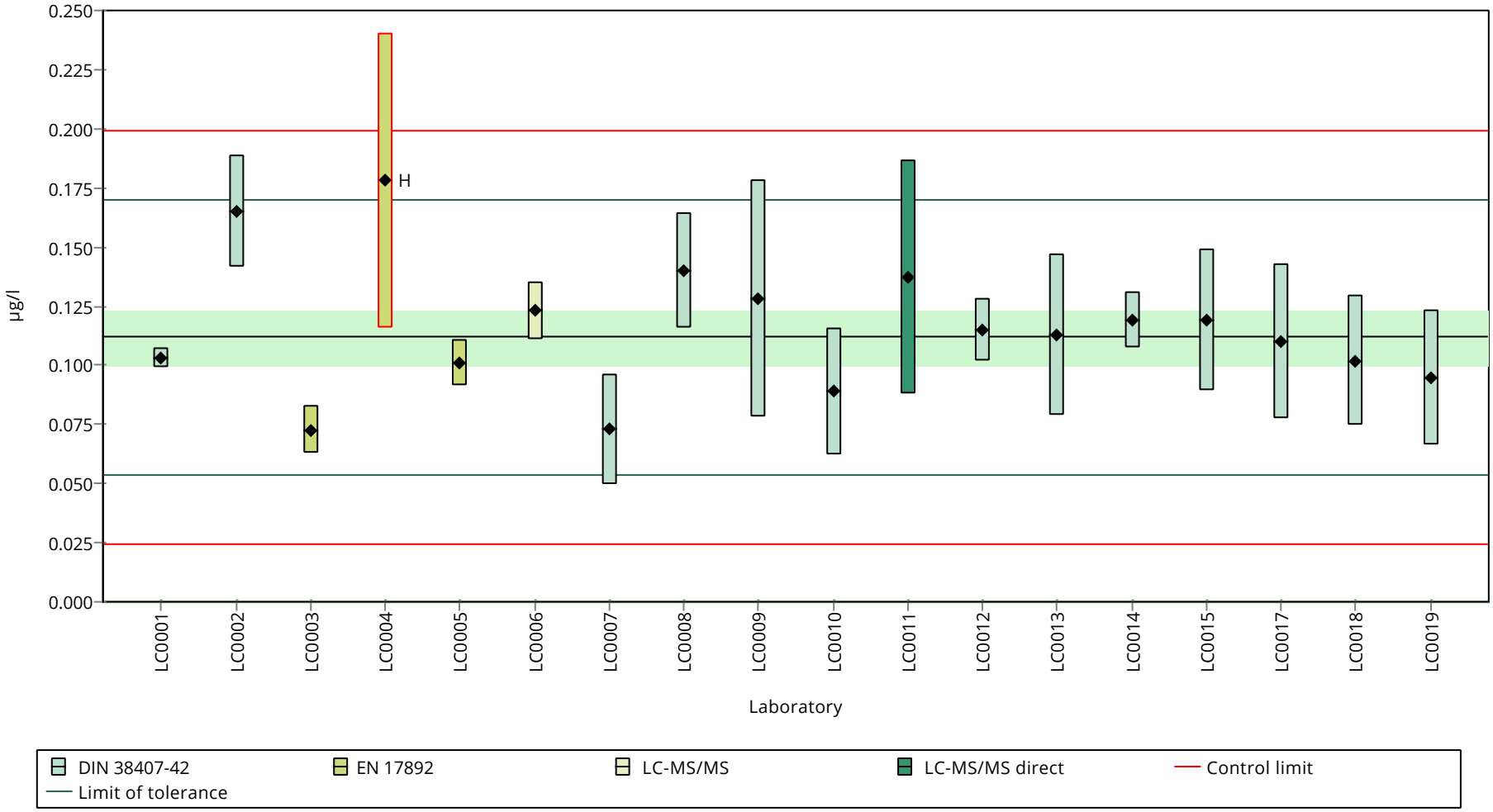
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.103 ± 0.004	92	-0.31	
LC0002	0.165 ± 0.0239	147	1.82	
LC0003	0.0726 ± 0.01	64.8	-1.35	
LC0004	0.178 ± 0.0622	159	2.27	H
LC0005	0.101 ± 0.01	90.2	-0.38	
LC0006	0.123 ± 0.012	110	0.38	
LC0007	0.0728 ± 0.0233	65	-1.35	
LC0008	0.14 ± 0.0243	125	0.96	
LC0009	0.128 ± 0.04999	114	0.55	
LC0010	0.089 ± 0.0267	79.5	-0.79	
LC0011	0.137 ± 0.0493	122	0.86	
LC0012	0.115 ± 0.013	103	0.1	
LC0013	0.113 ± 0.034	101	0.03	
LC0014	0.119 ± 0.012	106	0.24	
LC0015	0.119 ± 0.03	106	0.24	
LC0016	- ± -	-	-	
LC0017	0.11 ± 0.033	98.2	-0.07	
LC0018	0.102 ± 0.0276	91.1	-0.34	
LC0019	0.0948 ± 0.0284	84.6	-0.59	

Characteristics of parameter

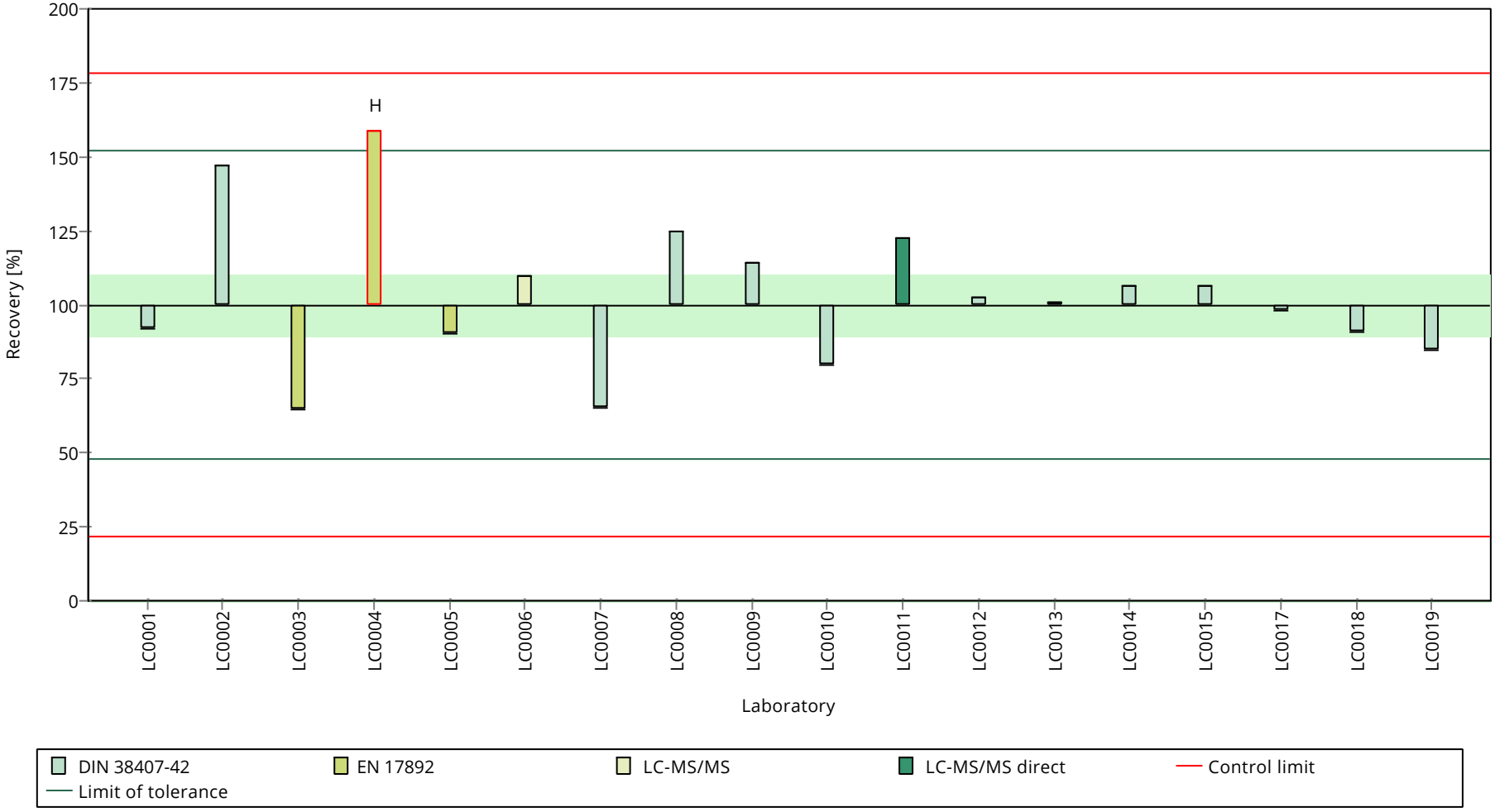
	all results	without outliers	Unit
Mean ± Cl (99%)	0.116 ± 0.0196	0.112 ± 0.0172	µg/l
Minimum	0.0726	0.0726	µg/l
Maximum	0.178	0.165	µg/l
Standard deviation	0.0277	0.0236	µg/l
rel. standard deviation	23.9	21.1	%
n	18	17	-

Graphical presentation of results

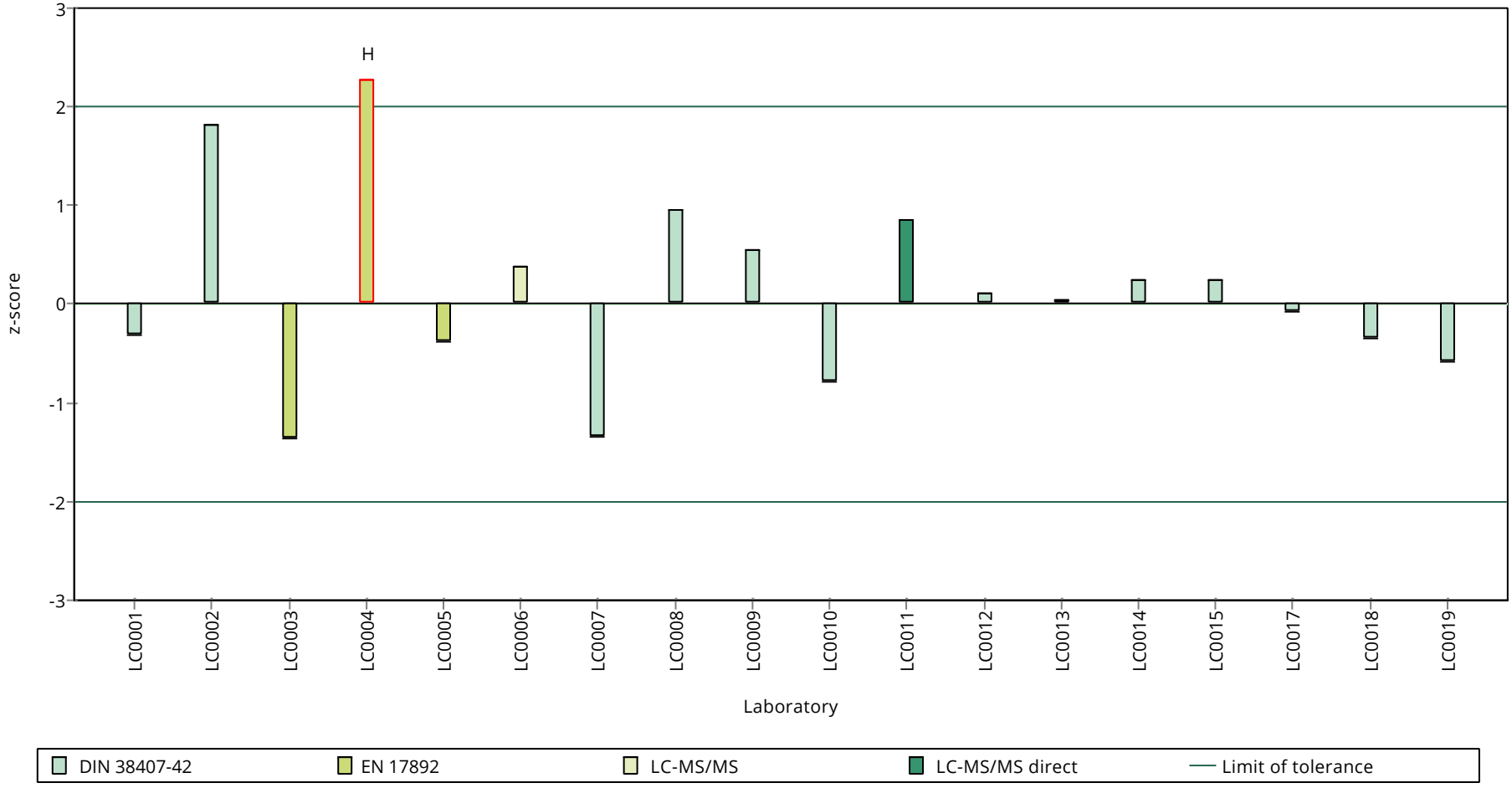
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluorooctanoic acid (PFOA) - PF8C

Unit	µg/l
Assigned value ± U (k=2)	0.0684 ± 0.00803
Criterion	0.0178 (26 %)
Minimum - Maximum	0.044 - 0.101
Control test value ± U (k=2)	0.0776 ± 0.0194

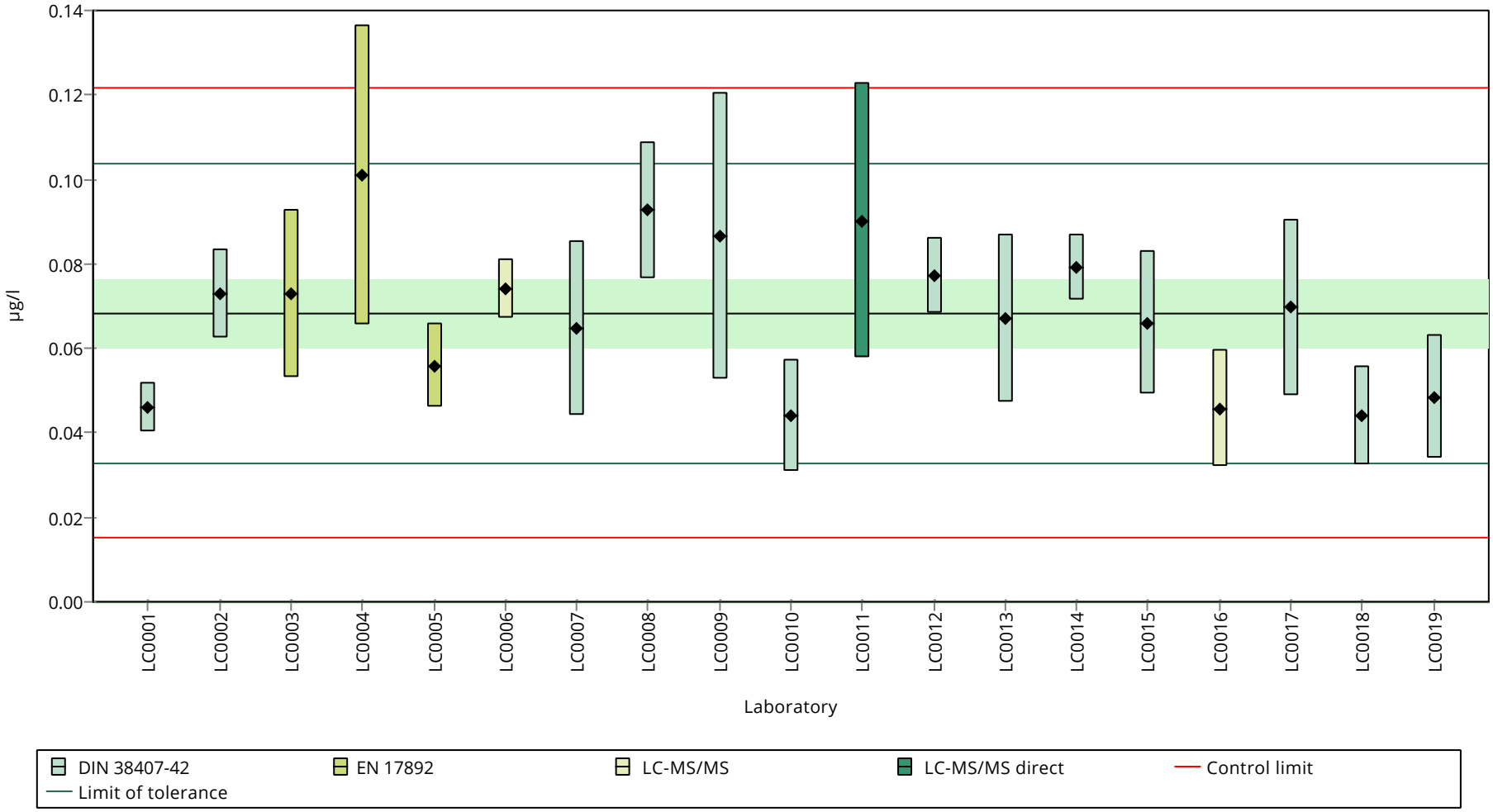
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.046 ± 0.006	67.3	-1.26	
LC0002	0.073 ± 0.0105	107	0.26	
LC0003	0.073 ± 0.02	107	0.26	
LC0004	0.101 ± 0.0355	148	1.84	
LC0005	0.0559 ± 0.01	81.8	-0.7	
LC0006	0.074 ± 0.007	108	0.32	
LC0007	0.0648 ± 0.0207	94.8	-0.2	
LC0008	0.0927 ± 0.0161	136	1.37	
LC0009	0.0867 ± 0.03386	127	1.03	
LC0010	0.044 ± 0.0133	64.4	-1.37	
LC0011	0.0902 ± 0.0325	132	1.23	
LC0012	0.0772 ± 0.0088	113	0.5	
LC0013	0.067 ± 0.02	98	-0.08	
LC0014	0.0792 ± 0.0079	116	0.61	
LC0015	0.0661 ± 0.017	96.7	-0.13	
LC0016	0.0458 ± 0.0137	67	-1.27	
LC0017	0.0697 ± 0.0209	102	0.08	
LC0018	0.044 ± 0.0118	64.4	-1.37	
LC0019	0.0485 ± 0.0146	71	-1.12	

Characteristics of parameter

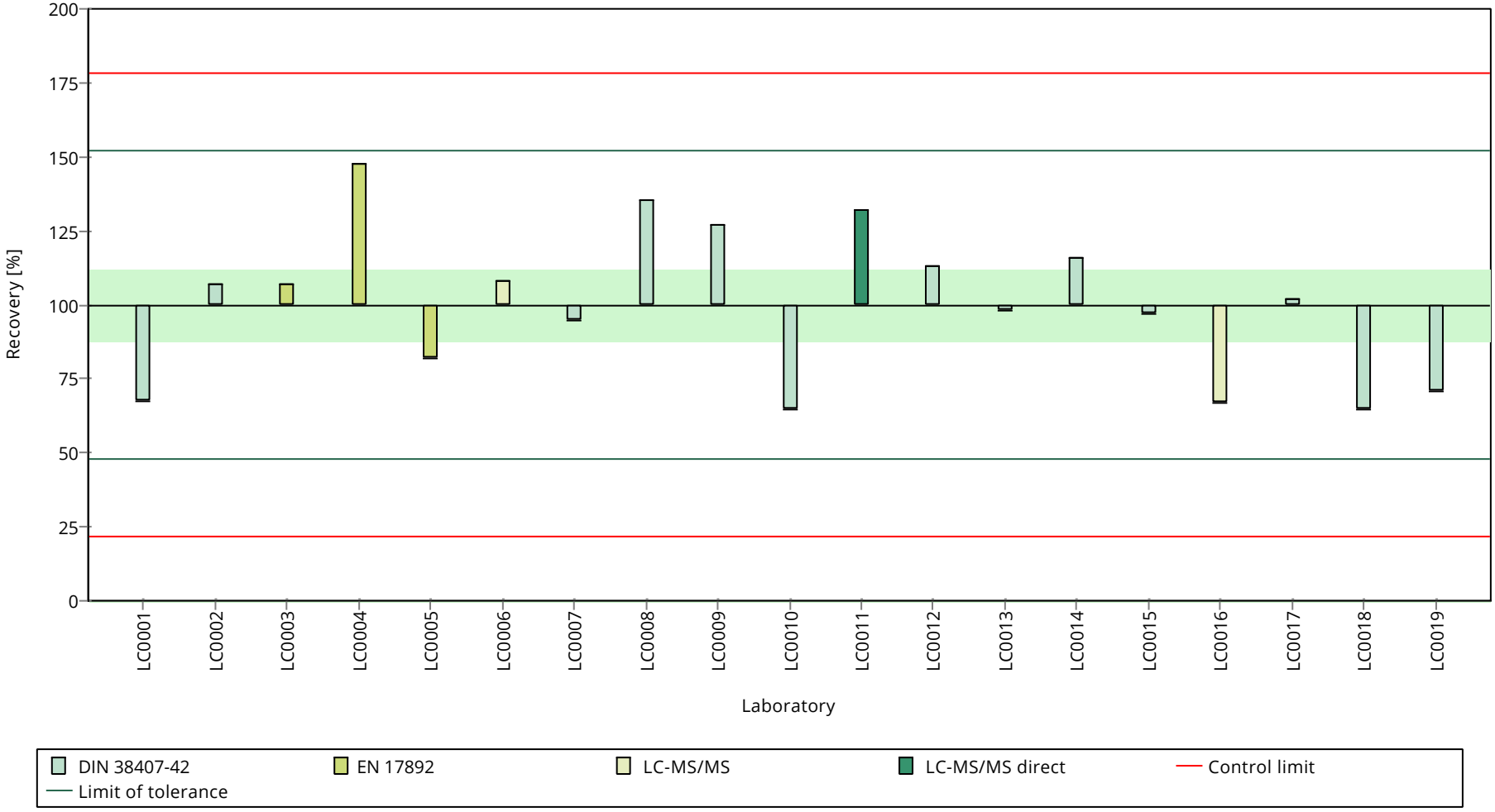
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0684 ± 0.012	0.0684 ± 0.012	µg/l
Minimum	0.044	0.044	µg/l
Maximum	0.101	0.101	µg/l
Standard deviation	0.0175	0.0175	µg/l
rel. standard deviation	25.6	25.6	%
n	19	19	-

Graphical presentation of results

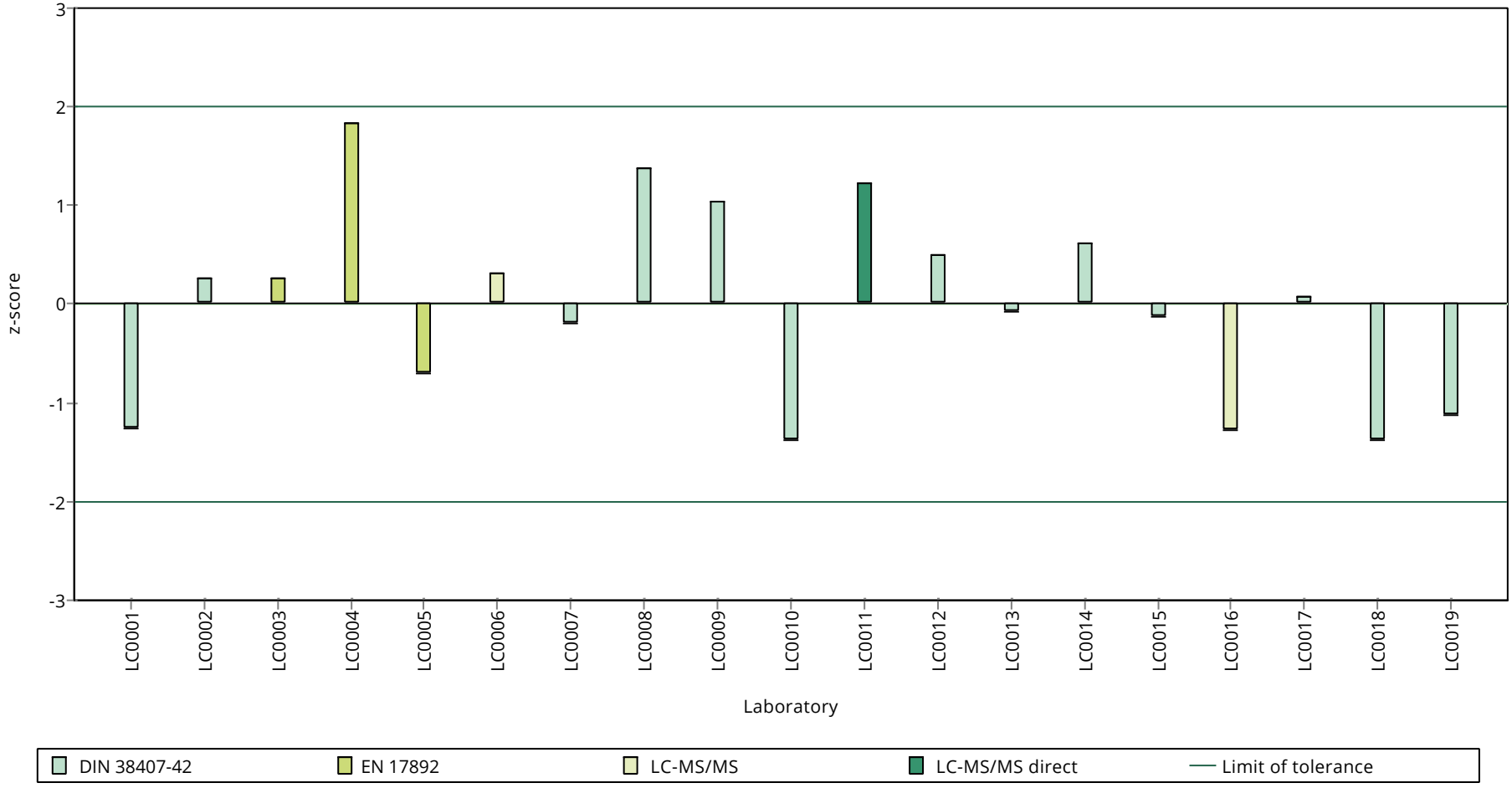
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorooctanoic acid (PFOA) - PF8C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.021 - 0.095
Control test value ± U (k=2)	0.0413 ± 0.0103

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=10, accr.) ± U(k=2): 0.043 ± 0.0160 µg/l

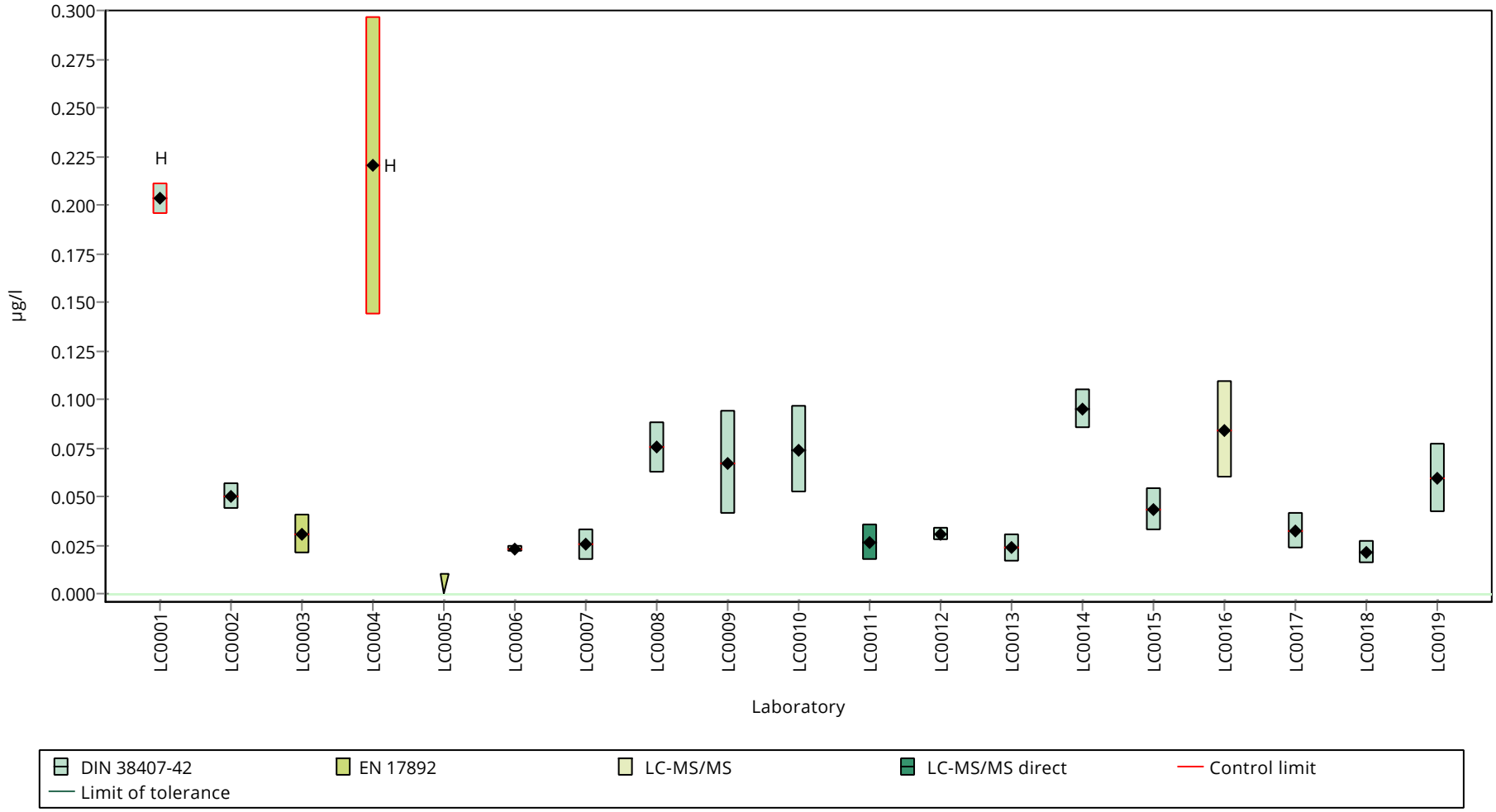
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.203 ± 0.008	-	-	H
LC0002	0.05 ± 0.0072	-	-	
LC0003	0.0304 ± 0.01	-	-	
LC0004	0.22 ± 0.077	-	-	H
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.023 ± 0.002	-	-	
LC0007	0.0251 ± 0.008	-	-	
LC0008	0.0753 ± 0.0131	-	-	
LC0009	0.06736 ± 0.02631	-	-	
LC0010	0.074 ± 0.0222	-	-	
LC0011	0.0263 ± 0.0095	-	-	
LC0012	0.0301 ± 0.0034	-	-	
LC0013	0.0235 ± 0.0071	-	-	
LC0014	0.095 ± 0.01	-	-	
LC0015	0.0433 ± 0.011	-	-	
LC0016	0.0839 ± 0.025	-	-	
LC0017	0.0322 ± 0.0097	-	-	
LC0018	0.021 ± 0.0057	-	-	
LC0019	0.0596 ± 0.0179	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0657 ± 0.041	0.0475 ± 0.0187	µg/l
Minimum	0.021	0.021	µg/l
Maximum	0.22	0.095	µg/l
Standard deviation	0.058	0.0249	µg/l
rel. standard deviation	88.3	52.4	%
n	18	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorooctanoic acid (PFOA) - PF8C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.015 - 0.0322
Control test value ± U (k=2)	0.0157 ± 0.00392

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=9, accr.) ± U(k=2): 0.020 ± 0.00150 µg/l

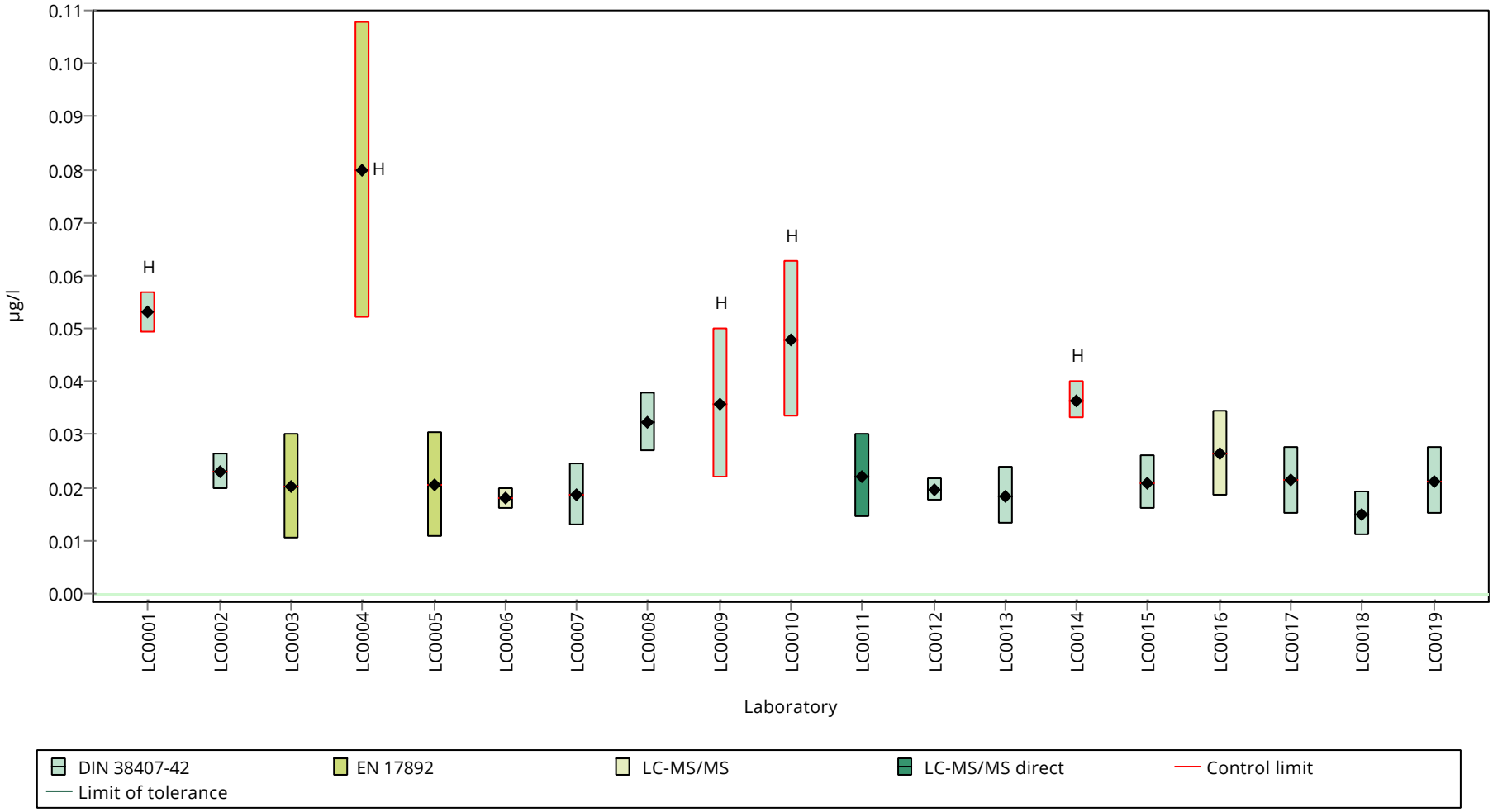
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.053 ± 0.004	-	-	H
LC0002	0.023 ± 0.0033	-	-	
LC0003	0.0202 ± 0.01	-	-	
LC0004	0.0798 ± 0.028	-	-	H
LC0005	0.0205 ± 0.01	-	-	
LC0006	0.018 ± 0.002	-	-	
LC0007	0.0186 ± 0.0059	-	-	
LC0008	0.0322 ± 0.0056	-	-	
LC0009	0.03589 ± 0.01402	-	-	H
LC0010	0.048 ± 0.0147	-	-	H
LC0011	0.0222 ± 0.008	-	-	
LC0012	0.0196 ± 0.0022	-	-	
LC0013	0.0184 ± 0.0055	-	-	
LC0014	0.0364 ± 0.0036	-	-	H
LC0015	0.0209 ± 0.0052	-	-	
LC0016	0.0264 ± 0.008	-	-	
LC0017	0.0214 ± 0.0064	-	-	
LC0018	0.015 ± 0.0042	-	-	
LC0019	0.0212 ± 0.0064	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.029 ± 0.0111	0.0213 ± 0.0033	µg/l
Minimum	0.015	0.015	µg/l
Maximum	0.0798	0.0322	µg/l
Standard deviation	0.0161	0.00411	µg/l
rel. standard deviation	55.6	19.3	%
n	19	14	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorononanoic acid (PFNA) - PF9C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0048 - 0.017
Control test value ± U (k=2)	0.00668 ± 0.00134

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.015 µg/l

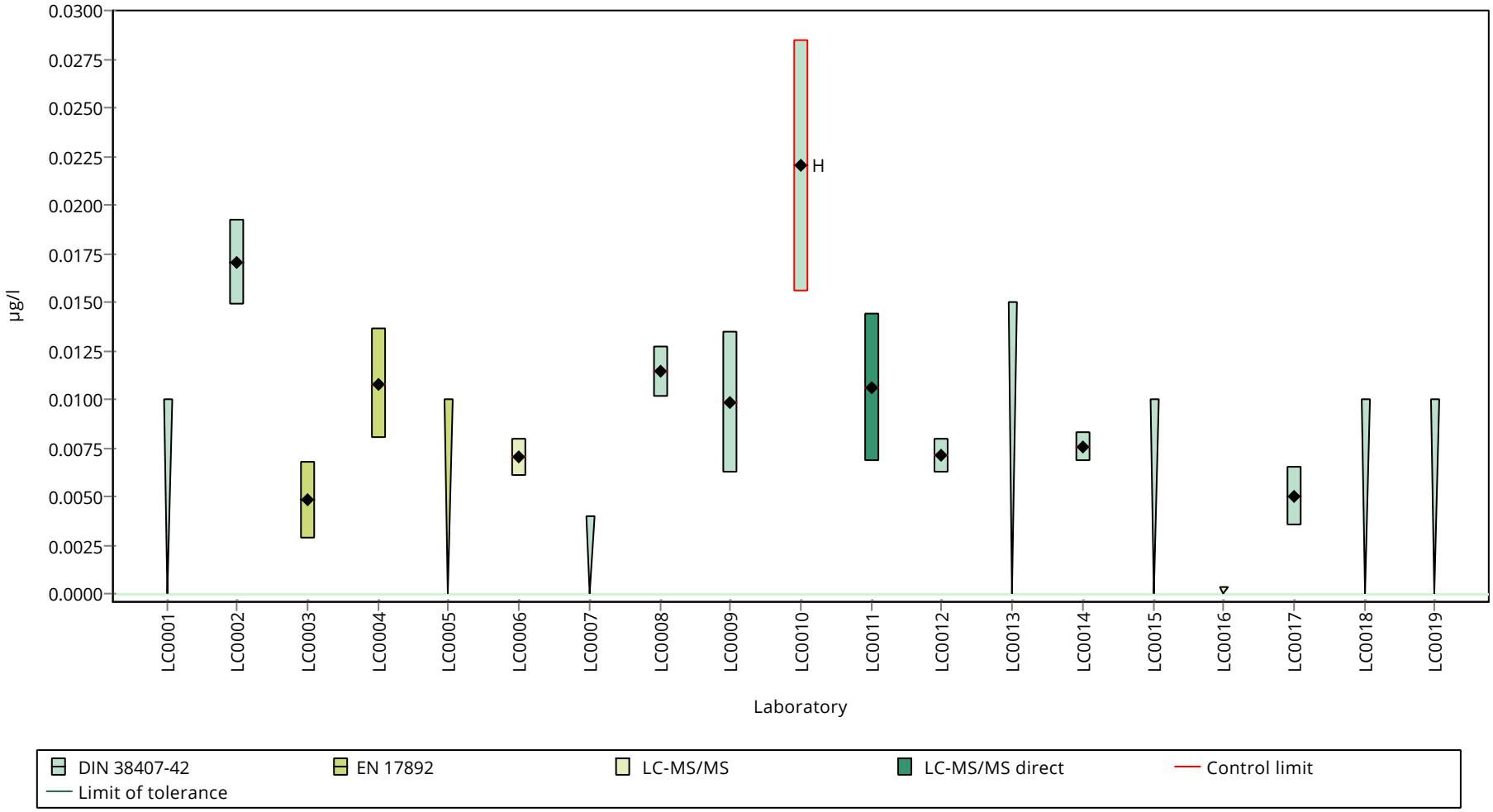
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.017 ± 0.0022	-	-	
LC0003	0.0048 ± 0.002	-	-	
LC0004	0.0108 ± 0.00287	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.007 ± 0.001	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0114 ± 0.00134	-	-	
LC0009	0.00985 ± 0.00363	-	-	
LC0010	0.022 ± 0.0065	-	-	H
LC0011	0.0106 ± 0.0038	-	-	
LC0012	0.00708 ± 0.00091	-	-	
LC0013	< 0.015 (LOQ) ± -	-	-	
LC0014	0.00753 ± 0.00075	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	0.00499 ± 0.0015	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0103 ± 0.00471	0.0091 ± 0.00346	µg/l
Minimum	0.0048	0.0048	µg/l
Maximum	0.022	0.017	µg/l
Standard deviation	0.0052	0.00365	µg/l
rel. standard deviation	50.6	40.1	%
n	11	10	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorononanoic acid (PFNA) - PF9C

Unit	µg/l
Assigned value ± U (k=2)	0.0101 ± 0.00112
Criterion	0.00252 (25 %)
Minimum - Maximum	0.00598 - 0.013
Control test value ± U (k=2)	0.00845 ± 0.00169

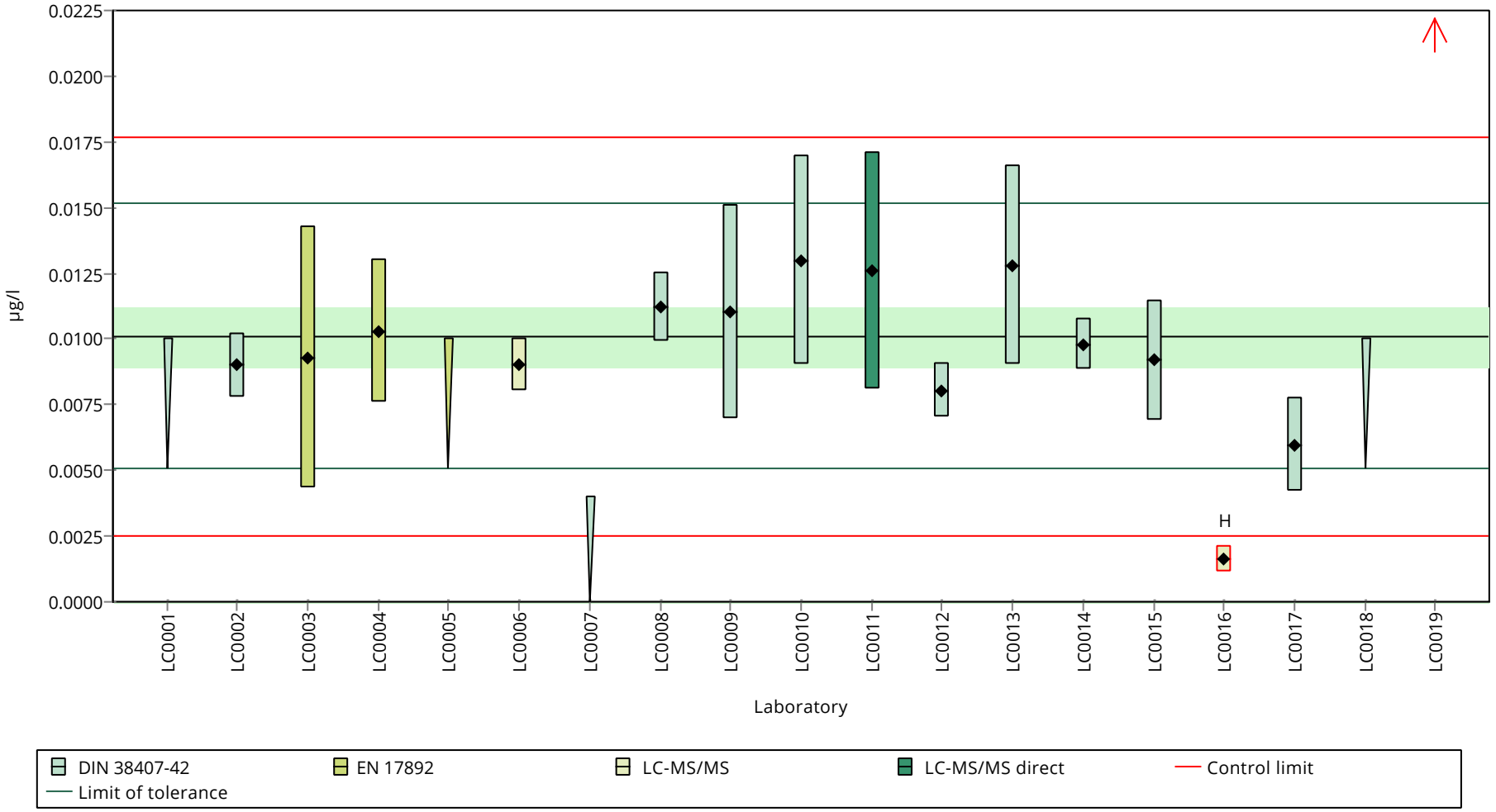
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.009 ± 0.0012	89.1	-0.44	
LC0003	0.0093 ± 0.005	92.1	-0.32	
LC0004	0.0103 ± 0.00272	102	0.08	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.009 ± 0.001	89.1	-0.44	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0112 ± 0.00132	111	0.44	
LC0009	0.01105 ± 0.00407	109	0.38	
LC0010	0.013 ± 0.004	129	1.15	
LC0011	0.0126 ± 0.0045	125	0.99	
LC0012	0.00805 ± 0.00103	79.7	-0.81	
LC0013	0.0128 ± 0.0038	127	1.07	
LC0014	0.0098 ± 0.00098	97	-0.12	
LC0015	0.0092 ± 0.0023	91.1	-0.36	
LC0016	0.0016 ± 0.0005	15.8	-3.37	H
LC0017	0.00598 ± 0.00179	59.2	-1.63	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	0.0225 ± 0.0068	223	4.91	H

Characteristics of parameter

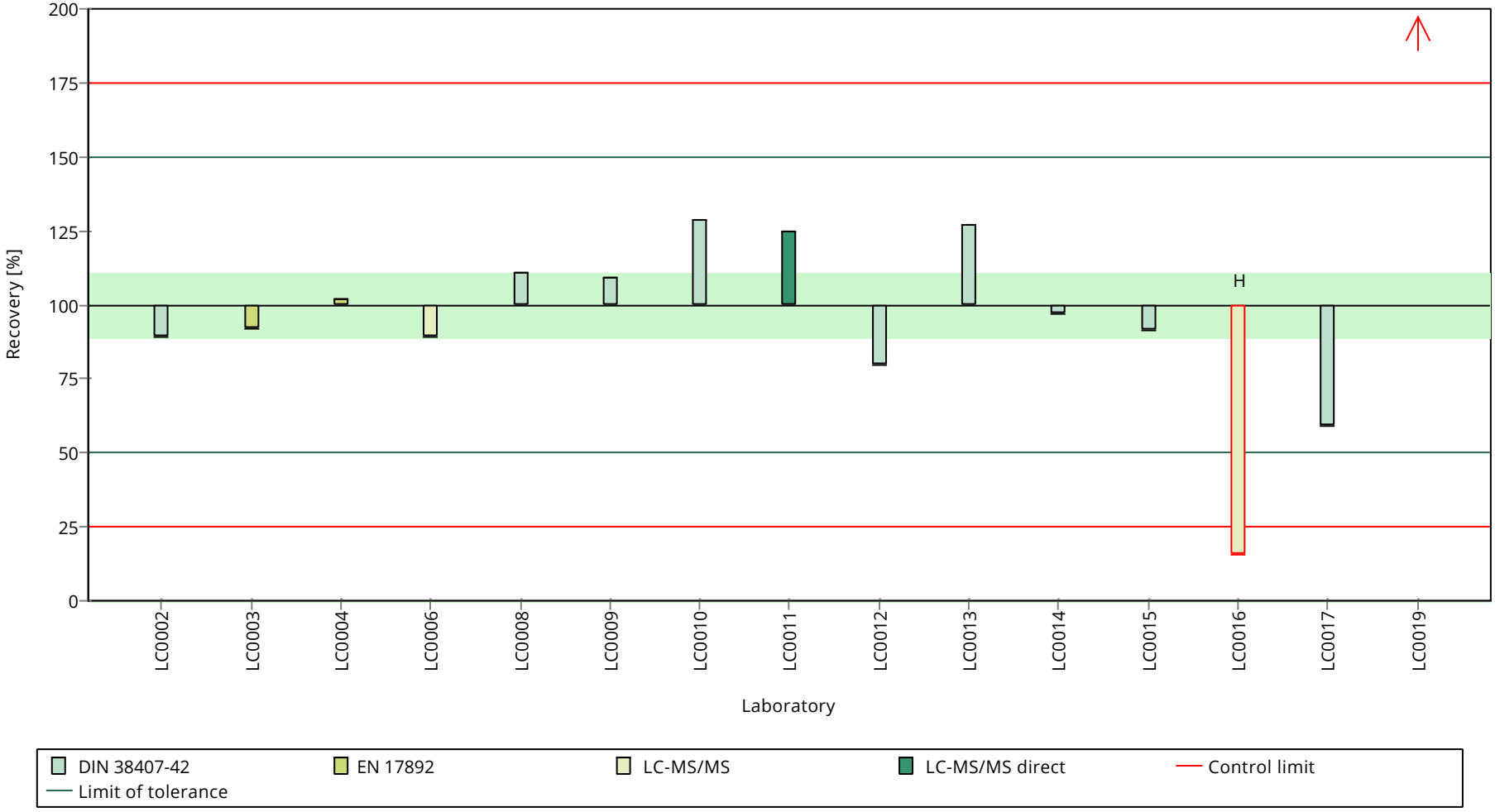
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0104 ± 0.00343	0.0101 ± 0.00169	µg/l
Minimum	0.0016	0.00598	µg/l
Maximum	0.0225	0.013	µg/l
Standard deviation	0.00443	0.00203	µg/l
rel. standard deviation	42.7	20.1	%
n	15	13	-

Graphical presentation of results

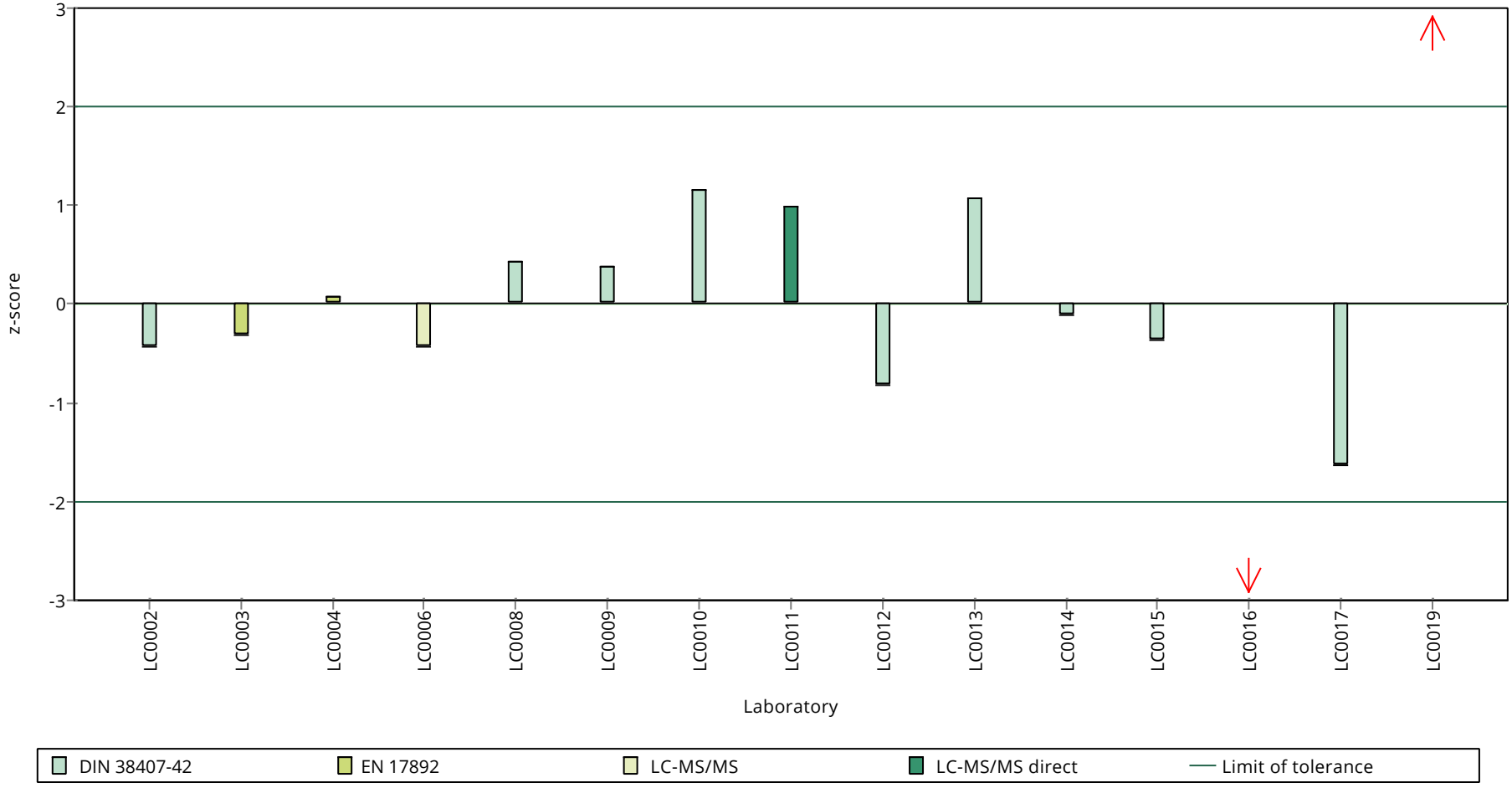
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0003
LC0004
LC0006
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorononanoic acid (PFNA) - PF9C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0107 - 0.064
Control test value ± U (k=2)	0.0209 ± 0.00417

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=9, accr.) ± U(k=2): 0.027 ± 0.0130 µg/l

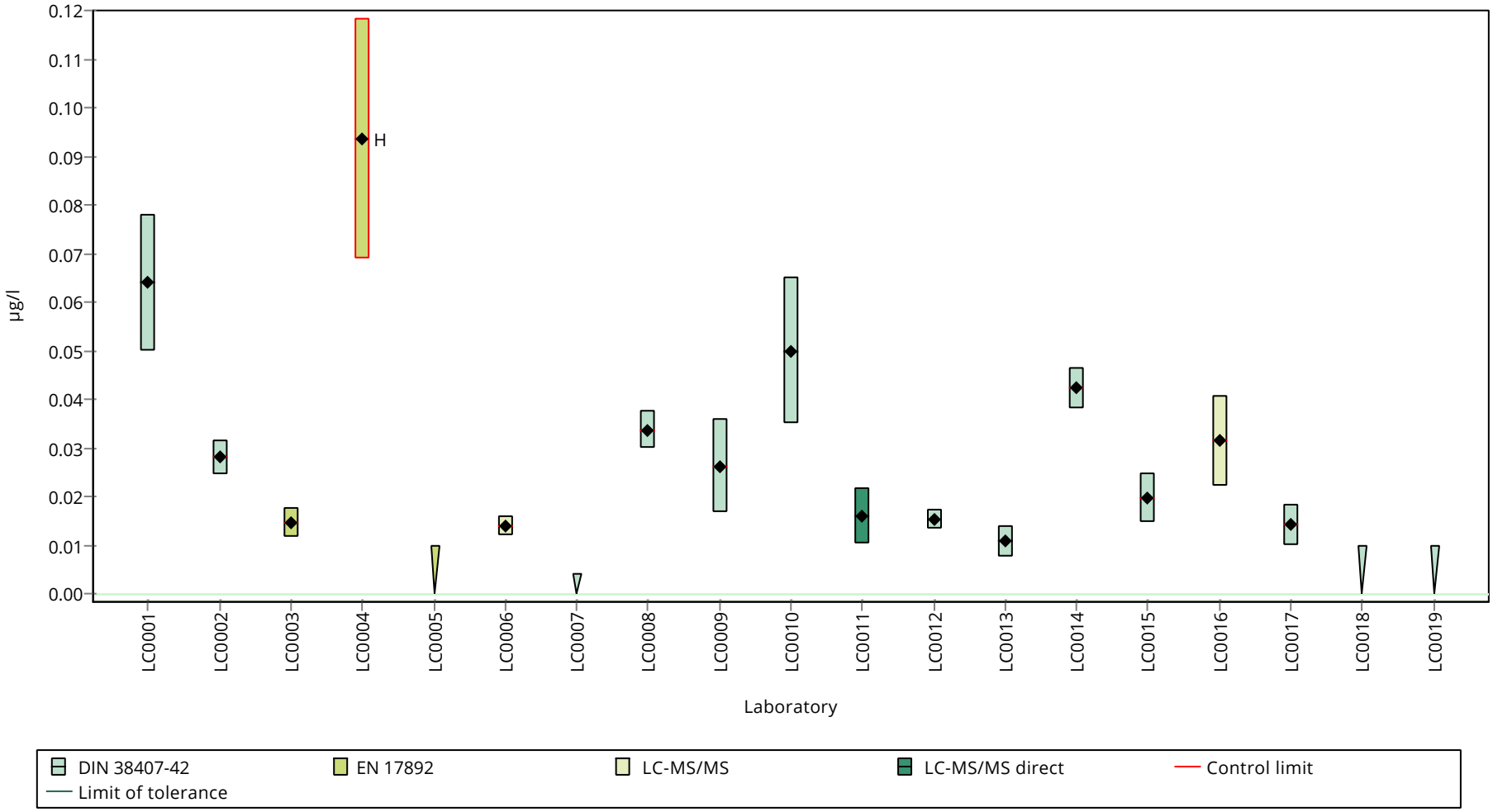
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.064 ± 0.014	-	-	
LC0002	0.028 ± 0.0036	-	-	
LC0003	0.0146 ± 0.003	-	-	
LC0004	0.0935 ± 0.0248	-	-	H
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.014 ± 0.002	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0337 ± 0.00397	-	-	
LC0009	0.02617 ± 0.00965	-	-	
LC0010	0.05 ± 0.0152	-	-	
LC0011	0.0159 ± 0.0057	-	-	
LC0012	0.0153 ± 0.002	-	-	
LC0013	0.0107 ± 0.0032	-	-	
LC0014	0.0423 ± 0.0042	-	-	
LC0015	0.0196 ± 0.005	-	-	
LC0016	0.0314 ± 0.0094	-	-	
LC0017	0.0141 ± 0.0042	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0316 ± 0.0178	0.0271 ± 0.0127	µg/l
Minimum	0.0107	0.0107	µg/l
Maximum	0.0935	0.064	µg/l
Standard deviation	0.023	0.0159	µg/l
rel. standard deviation	72.8	58.4	%
n	15	14	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorononanoic acid (PFNA) - PF9C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.012 - 0.0245
Control test value ± U (k=2)	0.0115 ± 0.00229

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=9, accr.) ± U(k=2): 0.015 ± 0.00249 µg/l

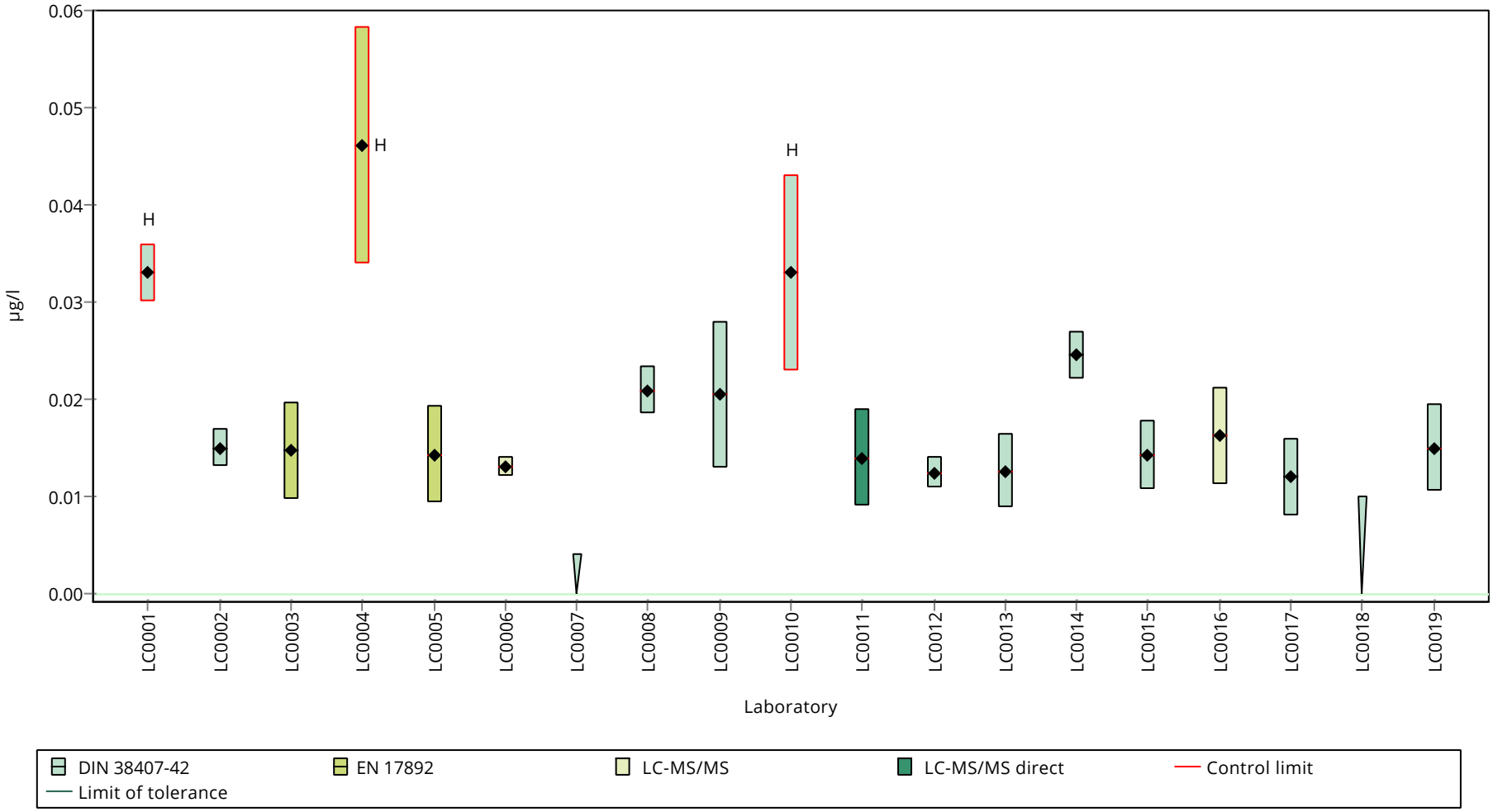
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.033 ± 0.003	-	-	H
LC0002	0.015 ± 0.002	-	-	
LC0003	0.0147 ± 0.005	-	-	
LC0004	0.0461 ± 0.0122	-	-	H
LC0005	0.0143 ± 0.005	-	-	
LC0006	0.013 ± 0.001	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0209 ± 0.00247	-	-	
LC0009	0.02045 ± 0.00754	-	-	
LC0010	0.033 ± 0.0101	-	-	H
LC0011	0.0139 ± 0.005	-	-	
LC0012	0.0124 ± 0.0016	-	-	
LC0013	0.0126 ± 0.0038	-	-	
LC0014	0.0245 ± 0.0024	-	-	
LC0015	0.0142 ± 0.0036	-	-	
LC0016	0.0162 ± 0.005	-	-	
LC0017	0.012 ± 0.004	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	0.015 ± 0.0045	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0195 ± 0.00694	0.0157 ± 0.00297	µg/l
Minimum	0.012	0.012	µg/l
Maximum	0.0461	0.0245	µg/l
Standard deviation	0.00954	0.0037	µg/l
rel. standard deviation	49	23.7	%
n	17	14	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorodecanoic acid (PFDA) - PF10C

Unit	µg/l
Assigned value ± U (k=2)	0.00471 ± 0.00151
Criterion	0.00184 (39 %)
Minimum - Maximum	0.0025 - 0.00744
Control test value ± U (k=2)	0.00422 ± 0.00105

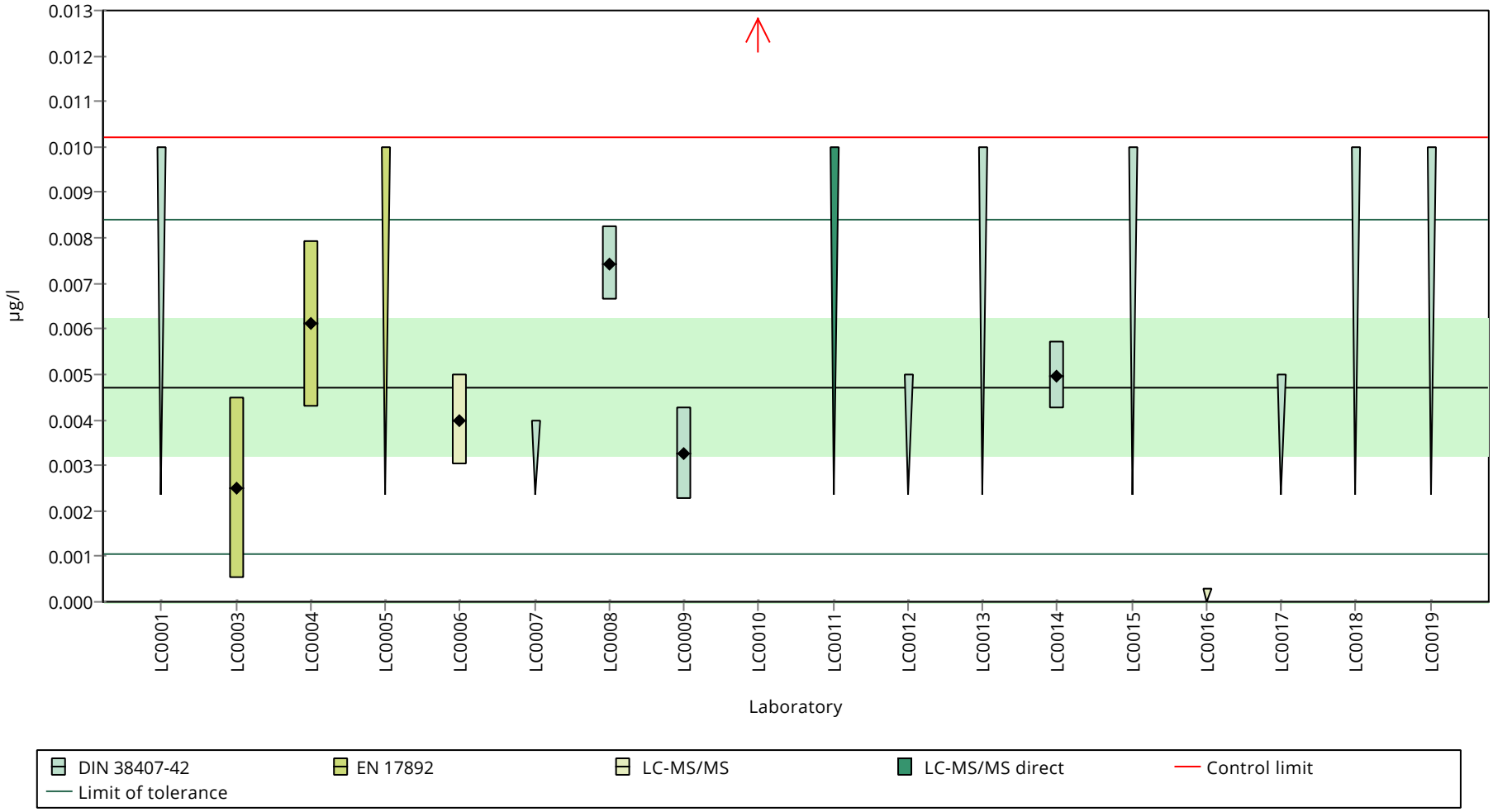
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0025	±	0.002	53.1	-1.2	
LC0004	0.00611	±	0.00182	130	0.76	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.004	±	0.001	84.9	-0.39	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00744	±	0.0008	158	1.48	
LC0009	0.00325	±	0.00101	69	-0.8	
LC0010	0.021	±	0.0064	446	8.86	H
LC0011	< 0.01 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.00497	±	0.00074	105	0.14	
LC0015	< 0.01 (LOQ)	±	-	-	-	
LC0016	<0.0003 (LOD)	±	-	-	-	
LC0017	< 0.005 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

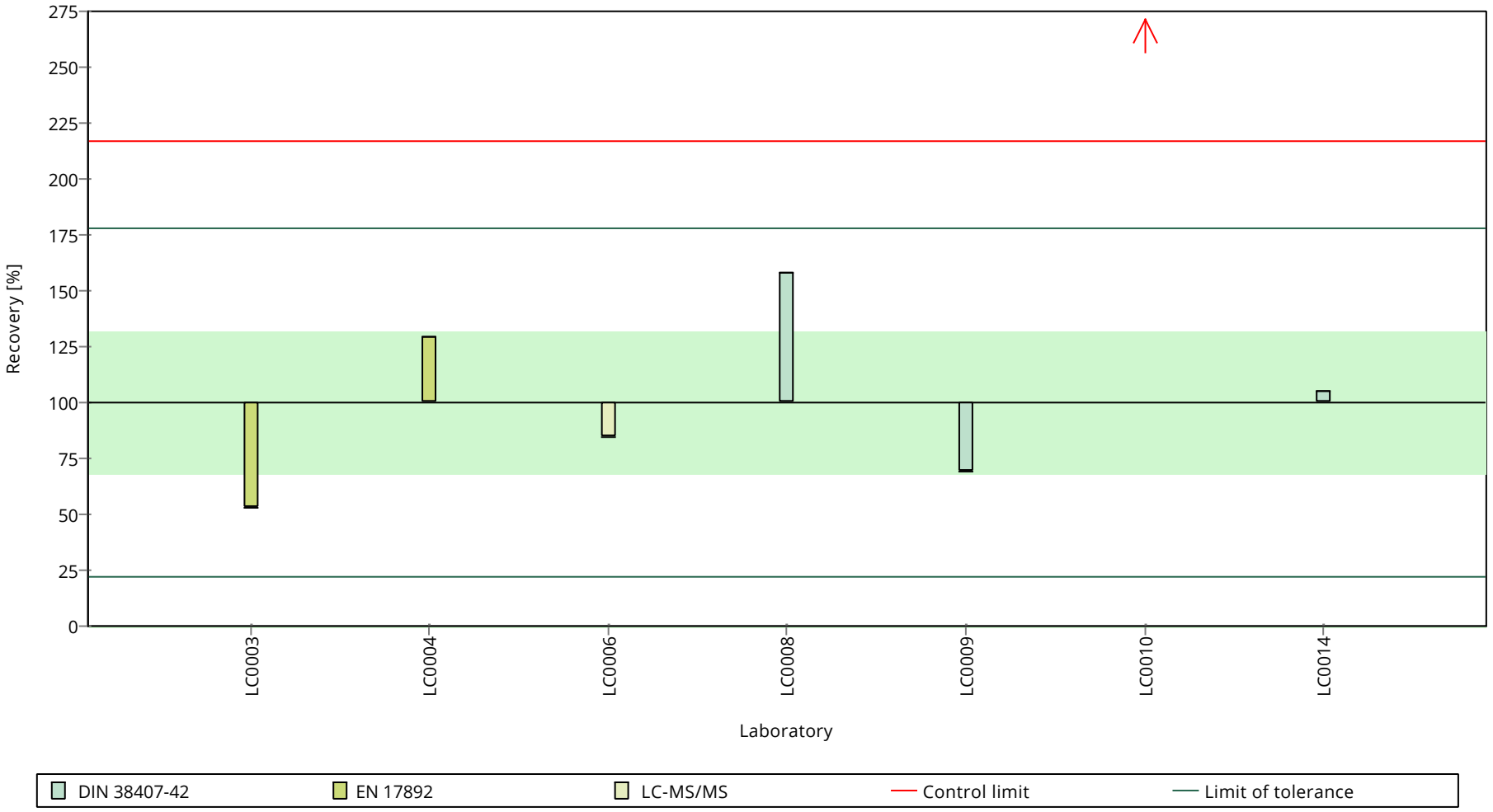
	all results	without outliers	Unit
Mean ± Cl (99%)	0.00704 ± 0.00724	0.00471 ± 0.00226	µg/l
Minimum	0.0025	0.0025	µg/l
Maximum	0.021	0.00744	µg/l
Standard deviation	0.00638	0.00184	µg/l
rel. standard deviation	90.7	39.1	%
n	7	6	-

Graphical presentation of results

Results

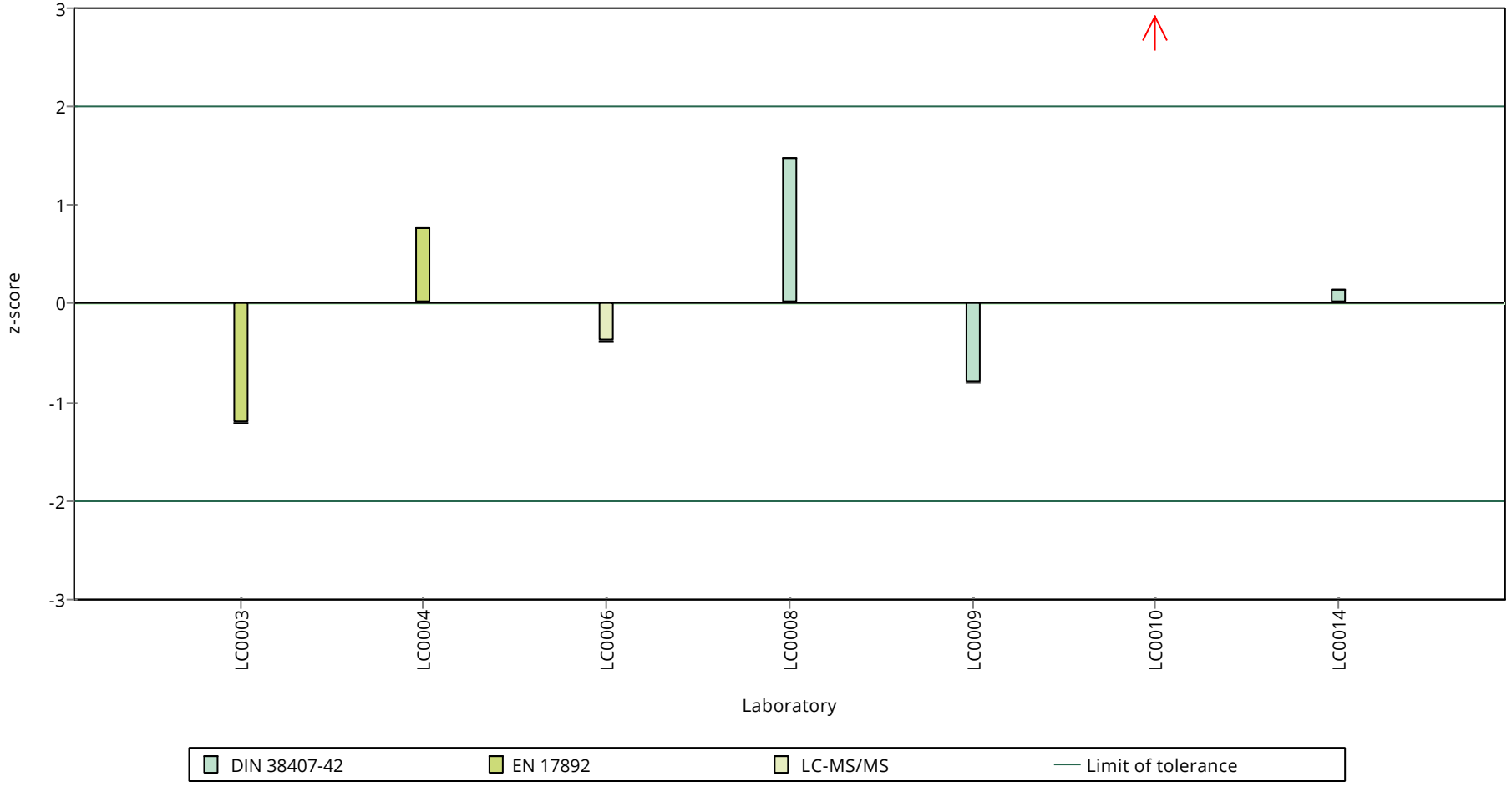


Recovery rate



Sample: PFL01A02, Parameter: Perfluorodecanoic acid (PFDA) - PF10C

z-Score



Parameter oriented report

PFL01A10

Perfluorodecanoic acid (PFDA) - PF10C

Unit	µg/l
Assigned value ± U (k=2)	0.00546 ± 0.00134
Criterion	0.00213 (39 %)
Minimum - Maximum	0.0016 - 0.00766
Control test value ± U (k=2)	0.00494 ± 0.00124

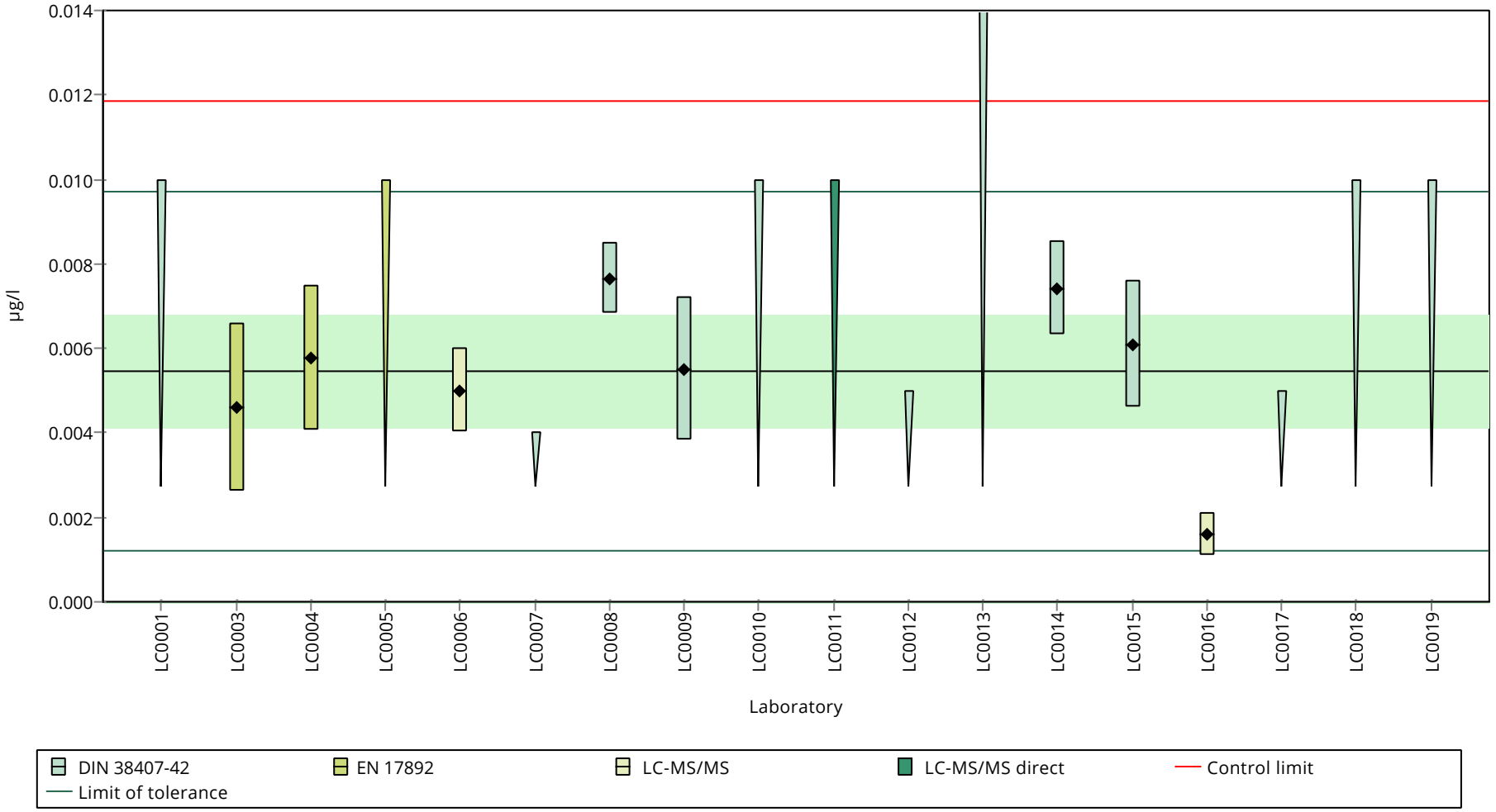
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0046	±	0.002	84.3	-0.4	
LC0004	0.00577	±	0.00172	106	0.15	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.005	±	0.001	91.6	-0.22	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00766	±	0.00083	140	1.03	
LC0009	0.00551	±	0.00171	101	0.03	
LC0010	< 0.01 (LOQ)	±	-	-	-	
LC0011	< 0.01 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.015 (LOQ)	±	-	-	-	
LC0014	0.00742	±	0.00111	136	0.92	
LC0015	0.0061	±	0.0015	112	0.3	
LC0016	0.0016	±	0.0005	29.3	-1.81	
LC0017	< 0.00498 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

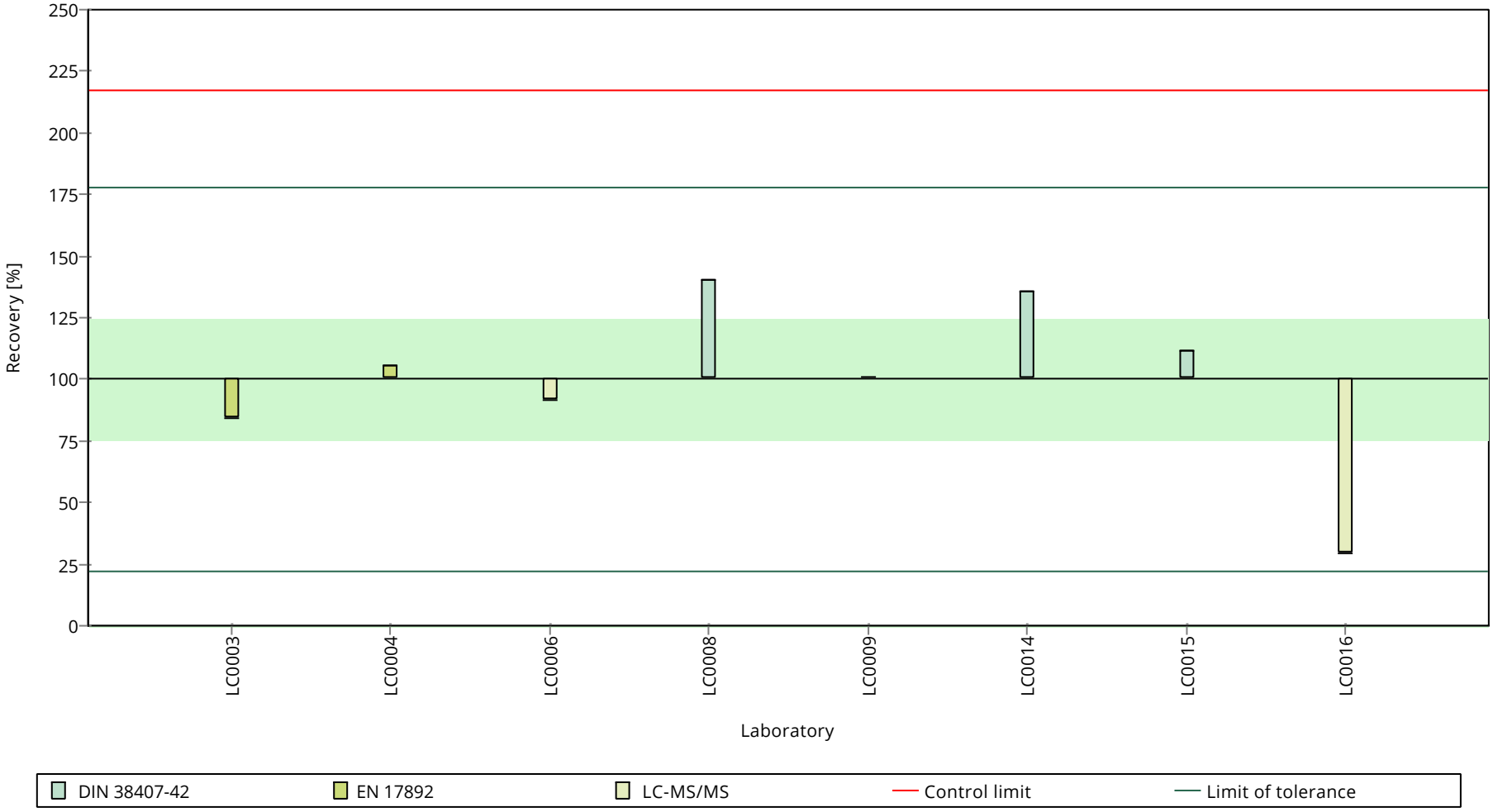
	all results	without outliers	Unit
Mean ± Cl (99%)	0.00546 ± 0.00201	0.00546 ± 0.00201	µg/l
Minimum	0.0016	0.0016	µg/l
Maximum	0.00766	0.00766	µg/l
Standard deviation	0.00189	0.00189	µg/l
rel. standard deviation	34.7	34.7	%
n	8	8	-

Graphical presentation of results

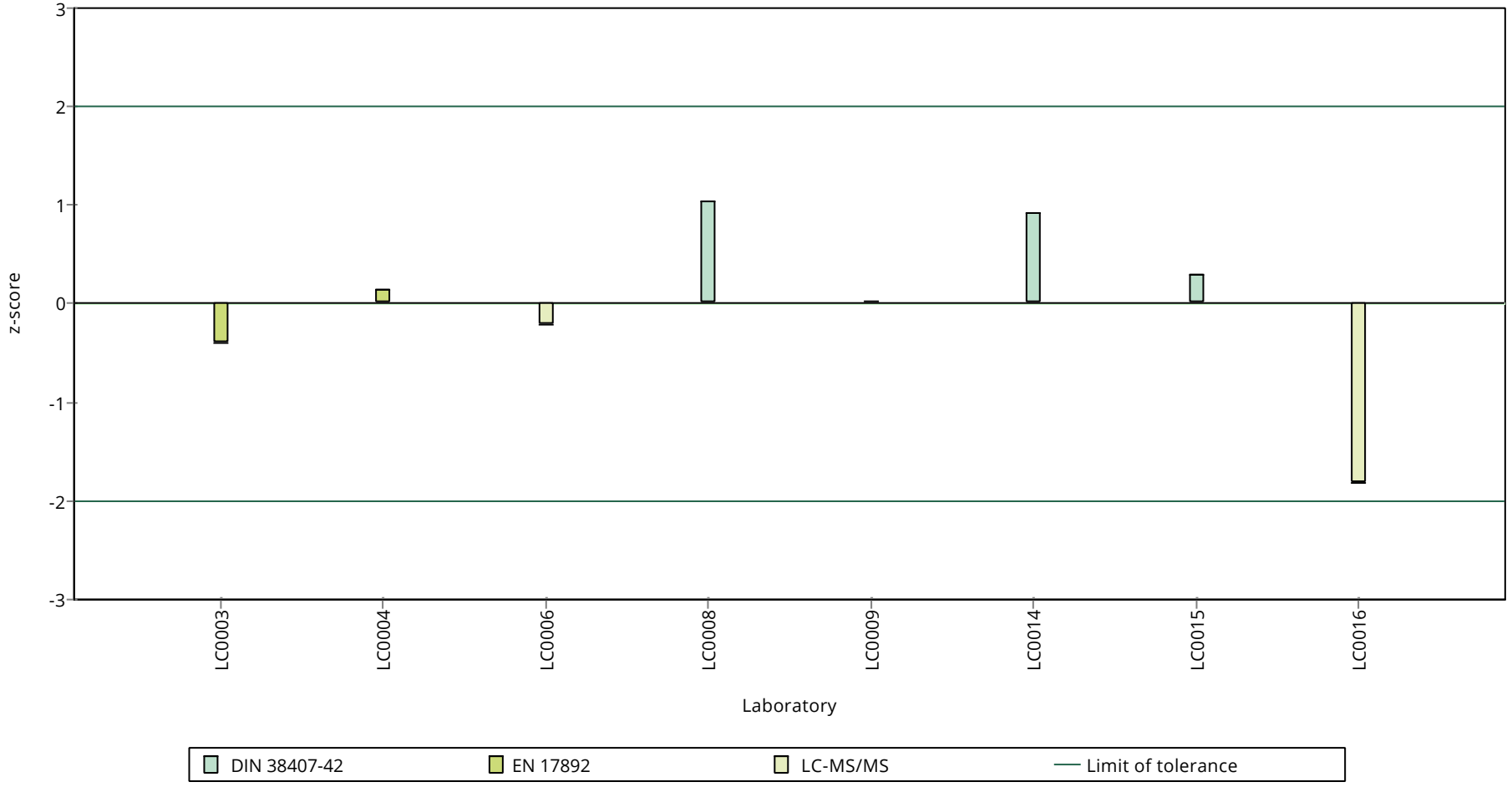
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0003
LC0004
LC0006
LC0008
LC0009
LC0014
LC0015
LC0016
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorodecanoic acid (PFDA) - PF10C *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0047 - 0.027
Control test value ± U (k=2)	0.00597 ± 0.00149

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=6, accr.) ± U(k=2): 0.0099 ± 0.00714 µg/l

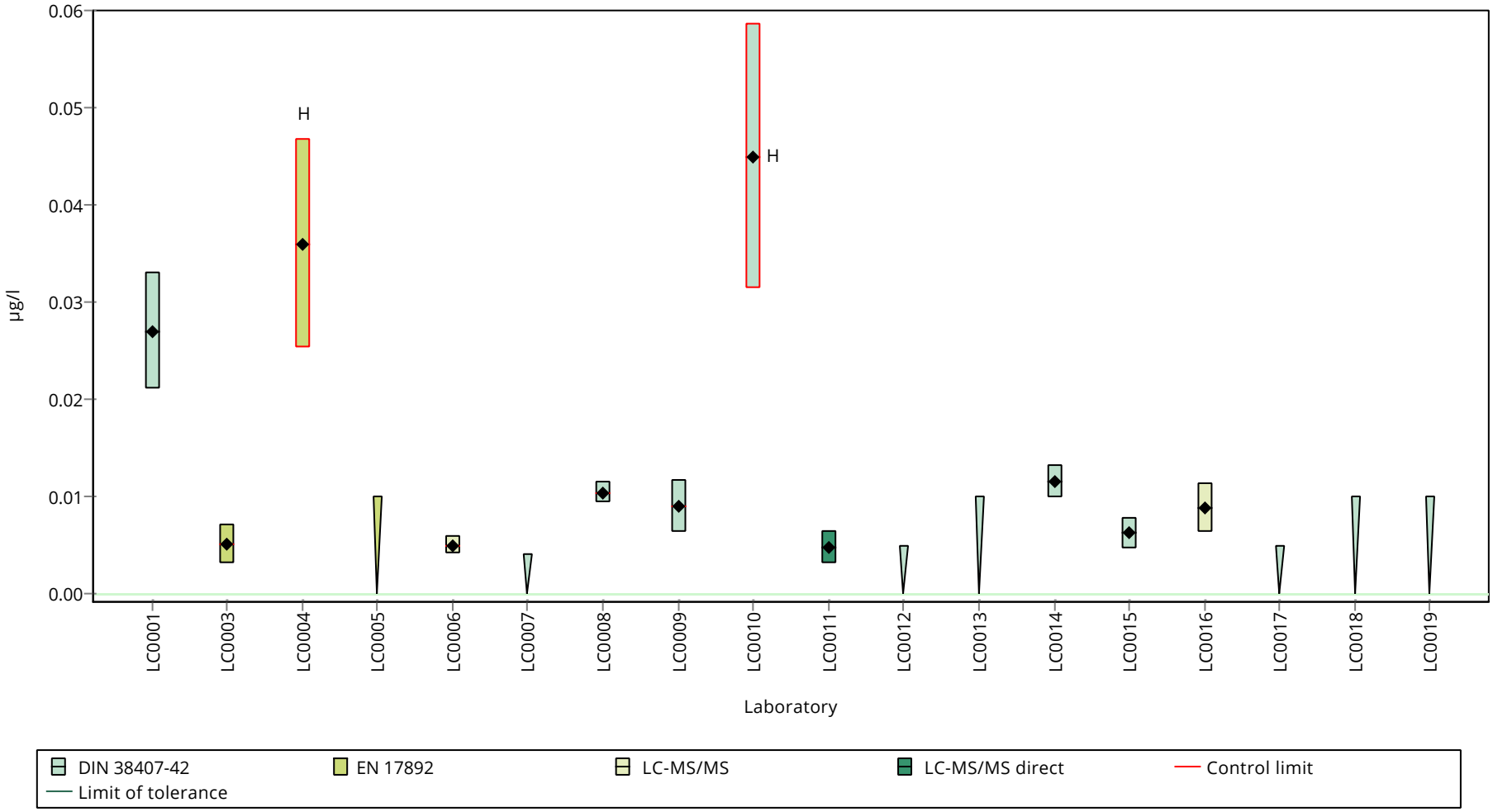
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	0.027	±	0.006	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0051	±	0.002	-	-	
LC0004	0.036	±	0.0107	-	-	H
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.005	±	0.001	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.0104	±	0.00112	-	-	
LC0009	0.00899	±	0.00279	-	-	
LC0010	0.045	±	0.0137	-	-	H
LC0011	0.0047	±	0.0017	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.0115	±	0.0017	-	-	
LC0015	0.0062	±	0.0016	-	-	
LC0016	0.0088	±	0.0026	-	-	
LC0017	< 0.005 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0153 ± 0.0127	0.00974 ± 0.00694	µg/l
Minimum	0.0047	0.0047	µg/l
Maximum	0.045	0.027	µg/l
Standard deviation	0.014	0.00694	µg/l
rel. standard deviation	91.6	71.2	%
n	11	9	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorodecanoic acid (PFDA) - PF10C **

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0048 - 0.00878
Control test value ± U (k=2)	0.00445 ± 0.00111

** Due to the high variability of the results, a robust assignment of a designated value is not possible (consistent with PFL01B02).
As a statistical adjustment of the data through the exclusion of outliers does not appear to be scientifically justified, only information values are reported.

This data can be used for comparison as part of your internal QA measures.

MV (n=6, accr.) ± U(k=2): 0.0052 ± 0.000306 µg/l

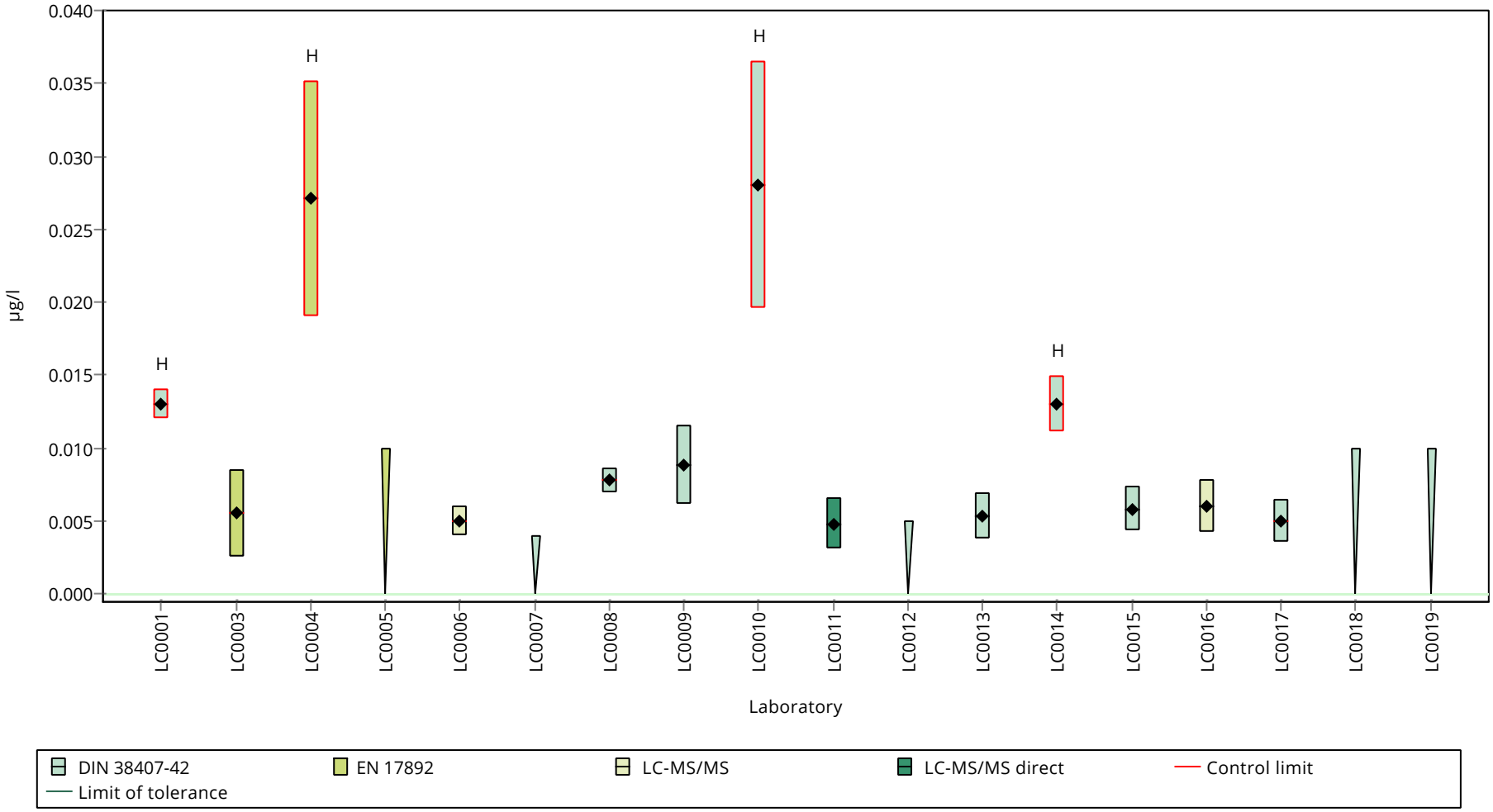
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	0.013	±	0.001	-	-	H
LC0002	-	±	-	-	-	
LC0003	0.0055	±	0.003	-	-	
LC0004	0.0271	±	0.00809	-	-	H
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.005	±	0.001	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00778	±	0.00084	-	-	
LC0009	0.00878	±	0.00272	-	-	
LC0010	0.028	±	0.0085	-	-	H
LC0011	0.0048	±	0.0017	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	0.00533	±	0.0016	-	-	
LC0014	0.013	±	0.0019	-	-	H
LC0015	0.0058	±	0.0015	-	-	
LC0016	0.006	±	0.0018	-	-	
LC0017	0.00499	±	0.0015	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0104 ± 0.00676	0.006 ± 0.00137	µg/l
Minimum	0.0048	0.0048	µg/l
Maximum	0.028	0.00878	µg/l
Standard deviation	0.00812	0.00137	µg/l
rel. standard deviation	78.2	22.9	%
n	13	9	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluoroundecanoic acid (PFUnDA) - PF11C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.000223 - 0.0048
Control test value ± U (k=2)	0.00111 ± 0.000444

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

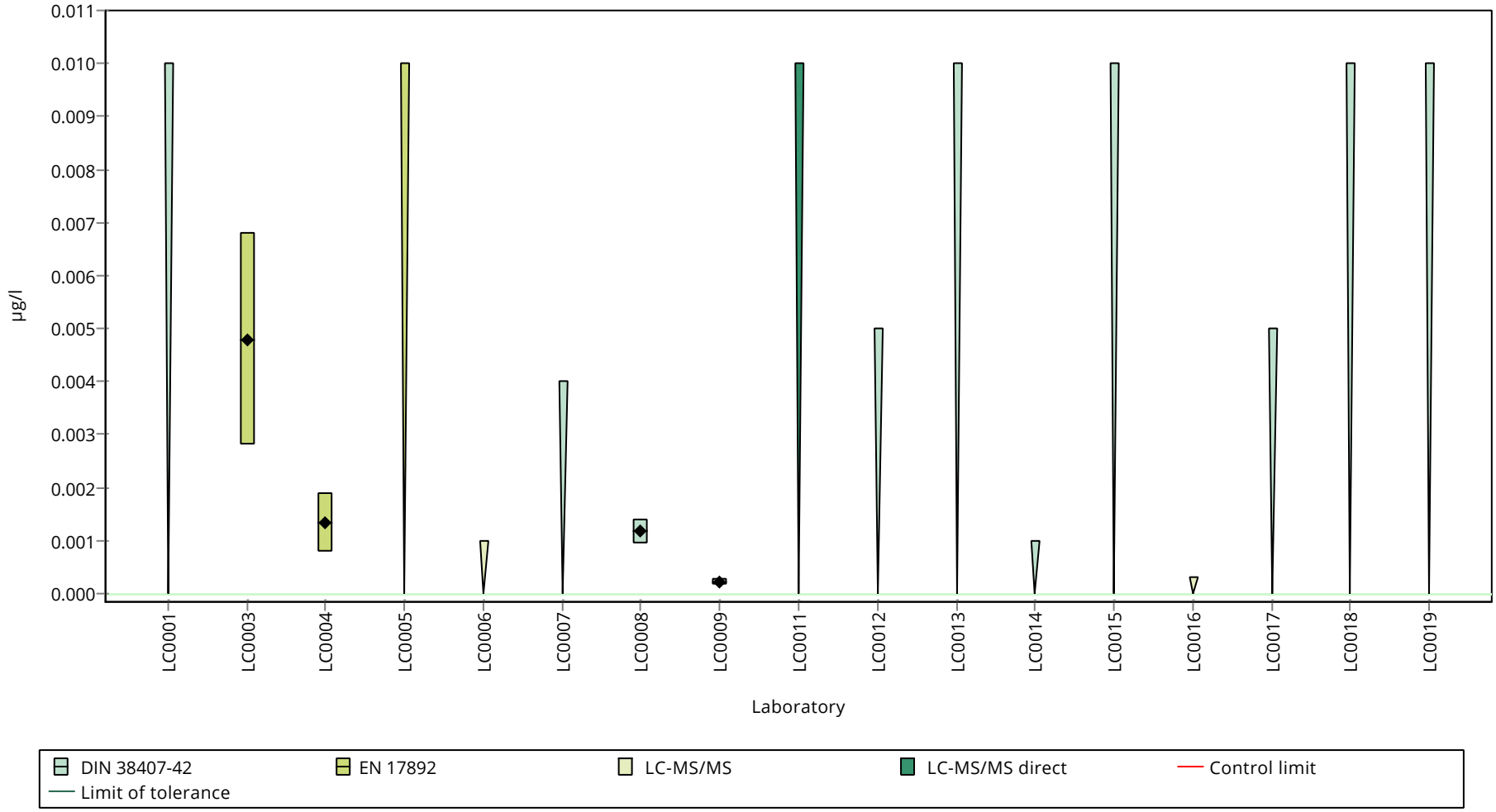
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0048 ± 0.002	-	-	
LC0004	0.00134 ± 0.00055	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.00117 ± 0.00023	-	-	
LC0009	0.00022 ± 0.00007	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.005 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00188 ± 0.00301	-	µg/l
Minimum	0.000223	0.000223	µg/l
Maximum	0.0048	0.0048	µg/l
Standard deviation	0.00201	-	µg/l
rel. standard deviation	106	-	%
n	4	4	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluoroundecanoic acid (PFUnDA) - PF11C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0011 - 0.0026
Control test value ± U (k=2)	0.000708 ± 0.000283

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

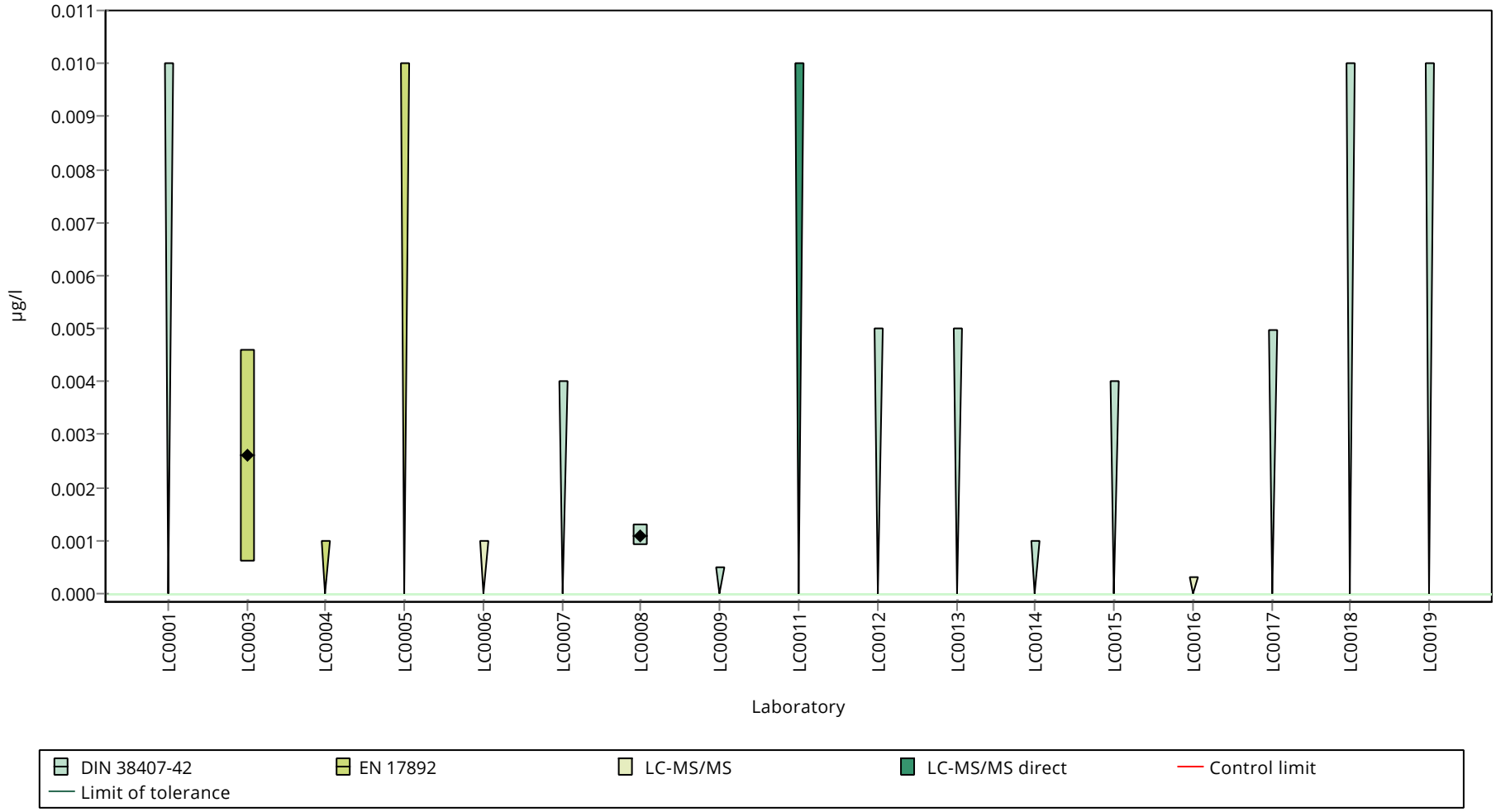
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0026 ± 0.002	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0011 ± 0.00021	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.005 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.00498 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00185 ± 0.00225	-	µg/l
Minimum	0.0011	0.0011	µg/l
Maximum	0.0026	0.0026	µg/l
Standard deviation	0.00106	-	µg/l
rel. standard deviation	57.3	-	%
n	2	2	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluoroundecanoic acid (PFUnDA) - PF11C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00119 - 0.0051
Control test value ± U (k=2)	0.00117 ± 0.000469

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

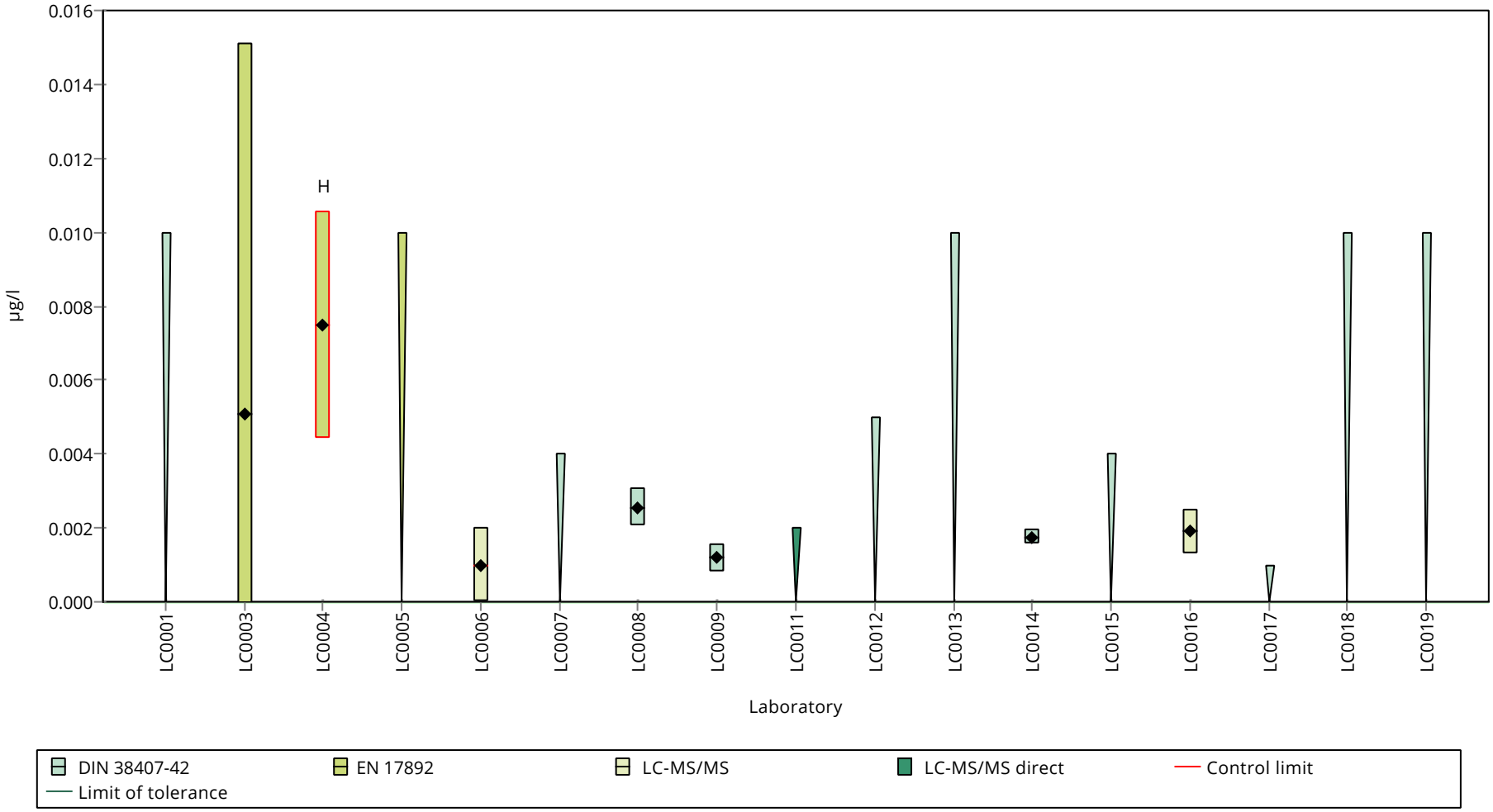
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0051	±	0.01	-	-	
LC0004	0.0075	±	0.00307	-	-	H
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.001	±	0.001	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00256	±	0.0005	-	-	
LC0009	0.00119	±	0.00037	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.00176	±	0.00018	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	0.0019	±	0.0006	-	-	
LC0017	< 0.001 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.003 ± 0.00273	0.00225 ± 0.00184	µg/l
Minimum	0.001	0.001	µg/l
Maximum	0.0075	0.0051	µg/l
Standard deviation	0.00241	0.0015	µg/l
rel. standard deviation	80.3	66.7	%
n	7	6	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluoroundecanoic acid (PFUnDA) - PF11C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00117 - 0.00259
Control test value ± U (k=2)	0.0007 ± 0.00028

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

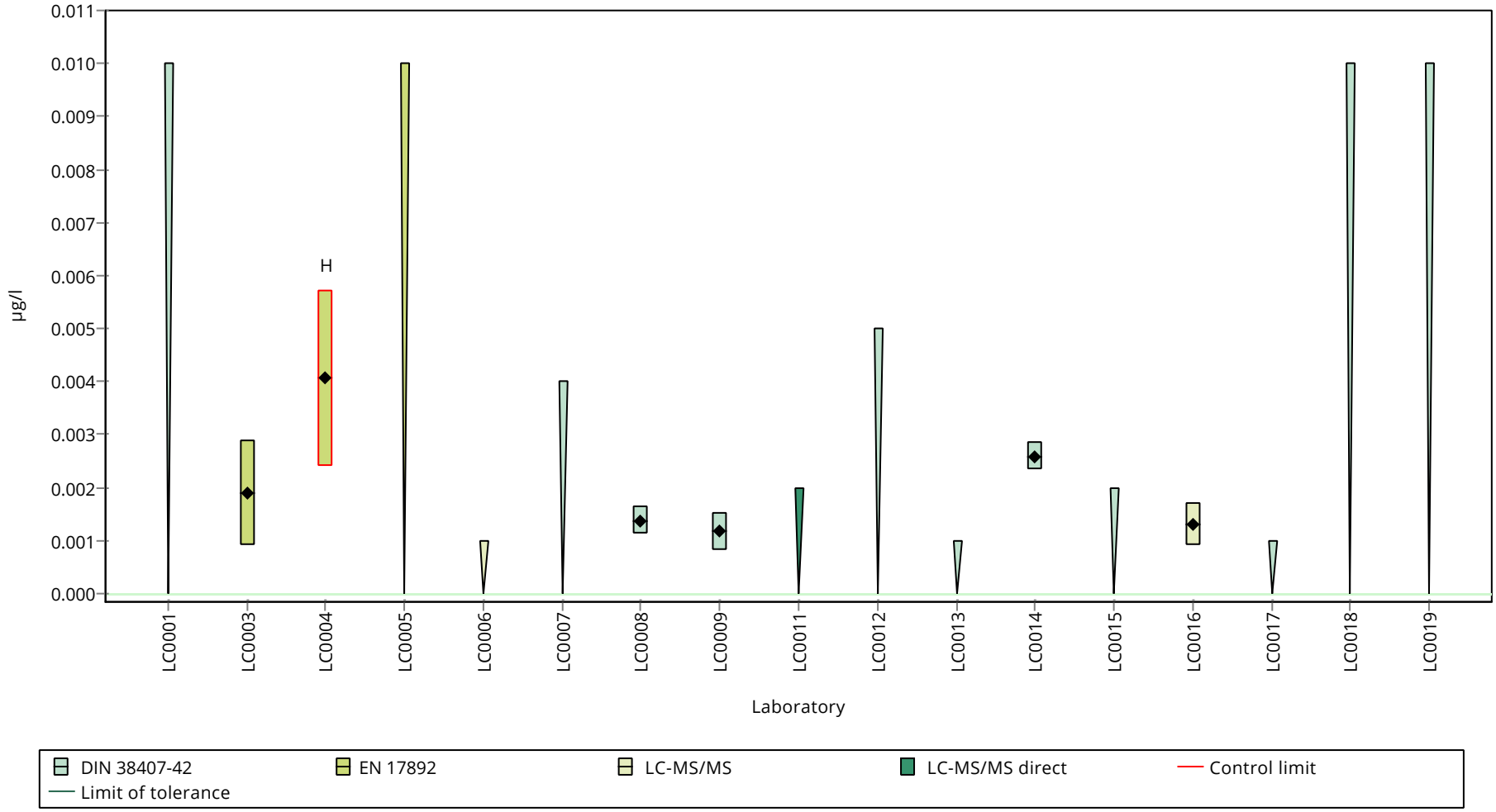
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0019	±	0.001	-	-	
LC0004	0.00406	±	0.00166	-	-	H
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00138	±	0.00027	-	-	
LC0009	0.00117	±	0.00036	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.001 (LOQ)	±	-	-	-	
LC0014	0.00259	±	0.00026	-	-	
LC0015	< 0.002 (LOQ)	±	-	-	-	
LC0016	0.0013	±	0.0004	-	-	
LC0017	< 0.001 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00207 ± 0.00136	-	µg/l
Minimum	0.00117	0.00117	µg/l
Maximum	0.00406	0.00259	µg/l
Standard deviation	0.00111	-	µg/l
rel. standard deviation	53.6	-	%
n	6	5	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorododecanoic acid (PFDoDA) - PF12C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00165 - 0.0024
Control test value ± U (k=2)	0.000709 ± 0.000283

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

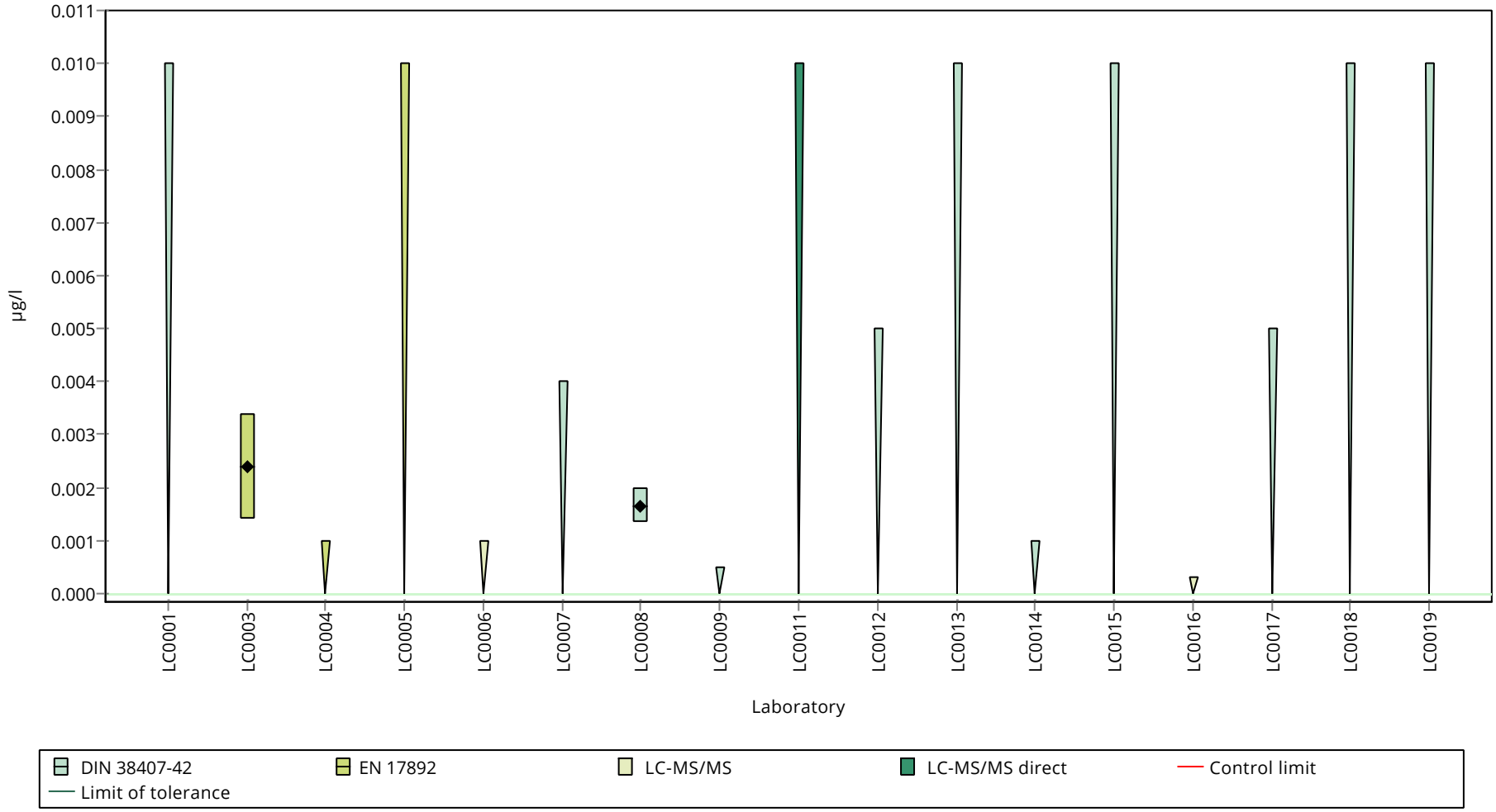
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0024 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.00165 ± 0.00032	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.005 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00202 ± 0.00112	-	µg/l
Minimum	0.00165	0.00165	µg/l
Maximum	0.0024	0.0024	µg/l
Standard deviation	0.00053	-	µg/l
rel. standard deviation	26.2	-	%
n	2	2	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorododecanoic acid (PFDoDA) - PF12C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0021 - 0.0021
Control test value ± U (k=2)	<0.00025 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

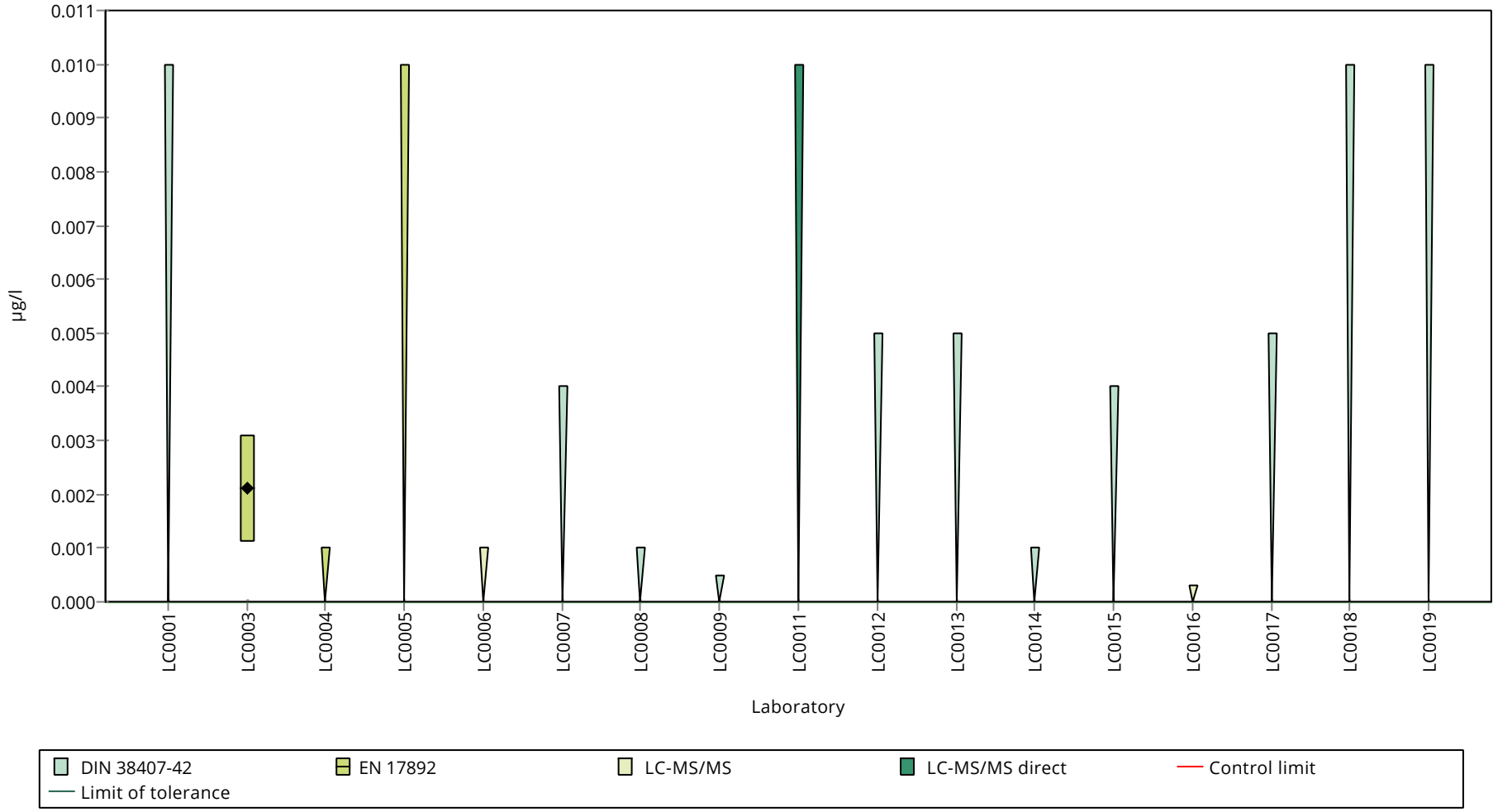
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0021 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.005 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.00498 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0021	0.0021	µg/l
Maximum	0.0021	0.0021	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorododecanoic acid (PFDoDA) - PF12C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00073 - 0.0038
Control test value ± U (k=2)	<0.00025 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

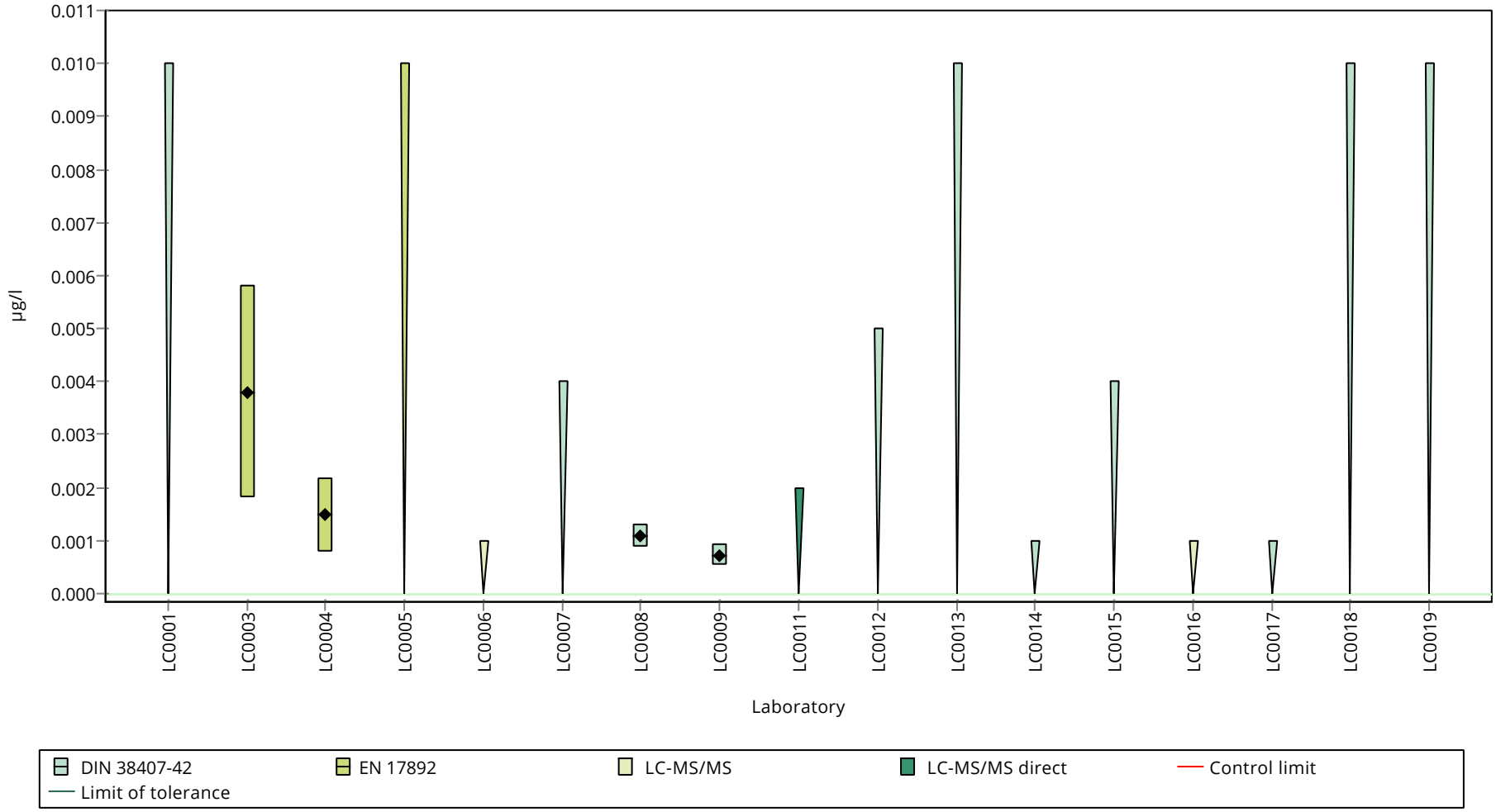
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0038	±	0.002	-	-	
LC0004	0.00148	±	0.00069	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.0011	±	0.00022	-	-	
LC0009	0.00073	±	0.00019	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	< 0.001 (LOQ)	±	-	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	< 0.001 (LOQ)	±	-	-	-	
LC0017	< 0.001 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00178 ± 0.00207	-	µg/l
Minimum	0.00073	0.00073	µg/l
Maximum	0.0038	0.0038	µg/l
Standard deviation	0.00138	-	µg/l
rel. standard deviation	77.8	-	%
n	4	4	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorododecanoic acid (PFDoDA) - PF12C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0017 - 0.0017
Control test value ± U (k=2)	<0.00025 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

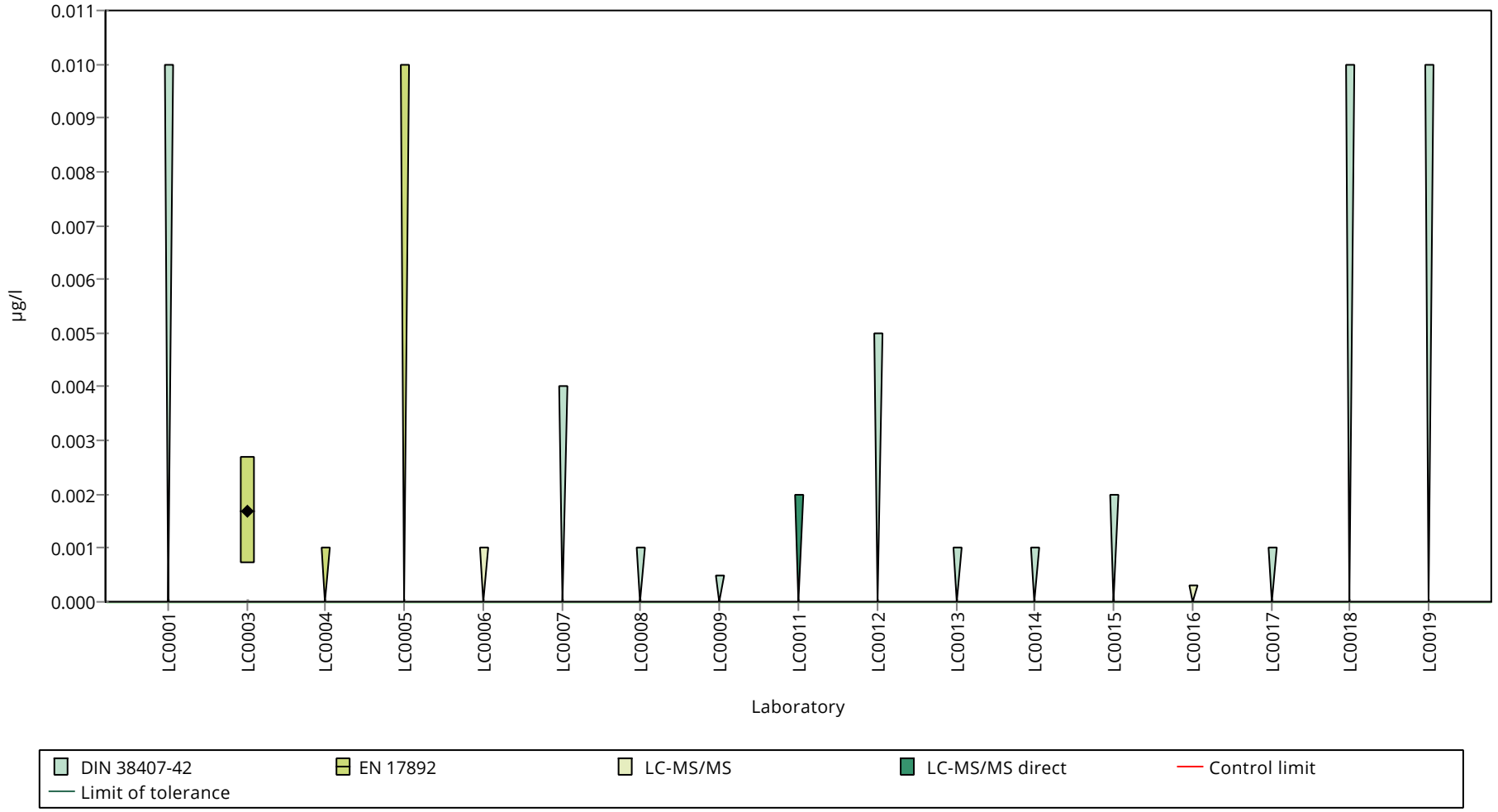
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0017 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.001 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.002 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0017	0.0017	µg/l
Maximum	0.0017	0.0017	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorotridecanoic acid (PFTrDA) - PF13C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0018 - 0.0018
Control test value ± U (k=2)	<0.001 (LOQ)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

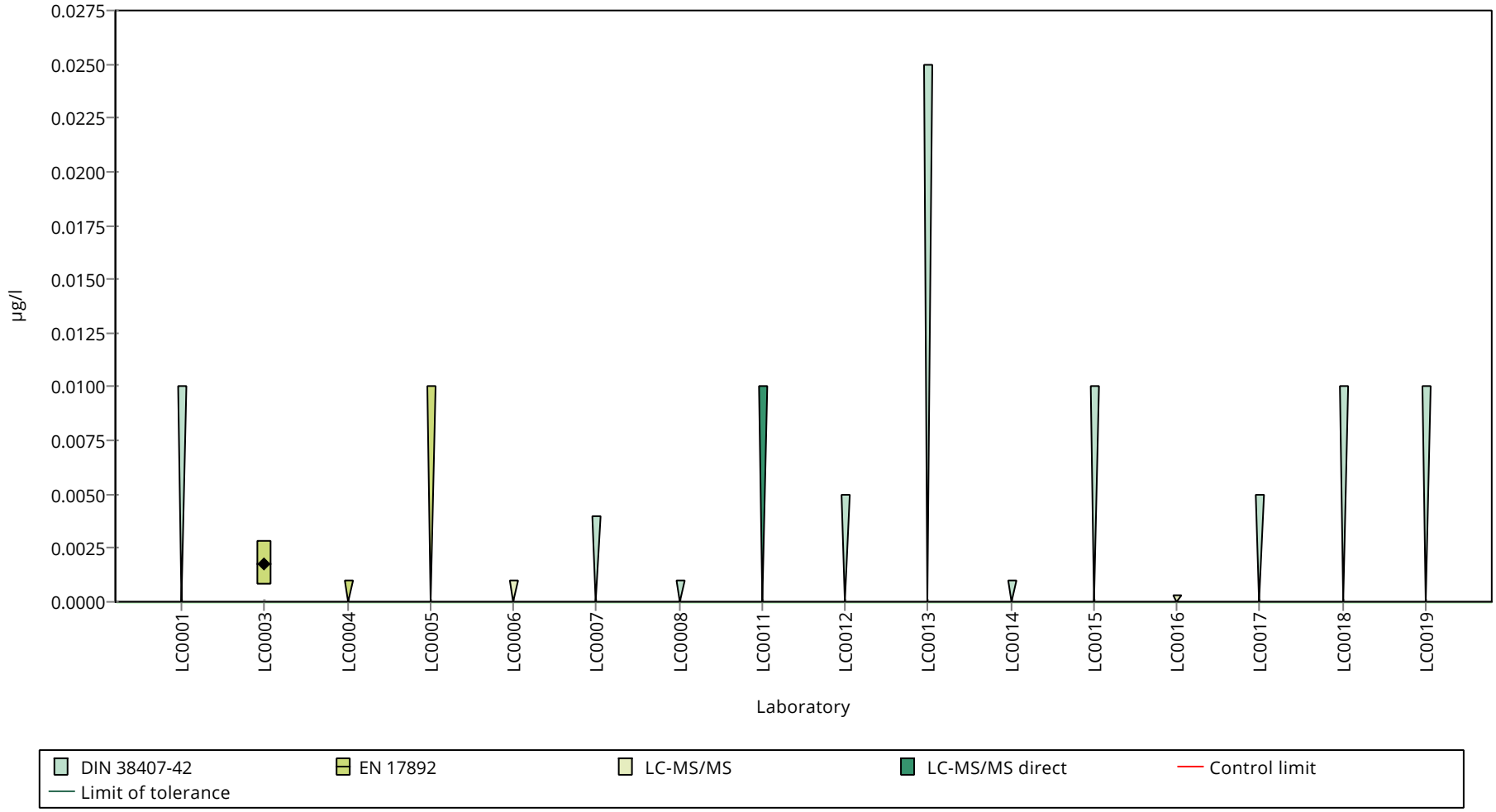
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0018 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.025 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.005 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0018	0.0018	µg/l
Maximum	0.0018	0.0018	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorotridecanoic acid (PFTrDA) - PF13C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0017 - 0.0017
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

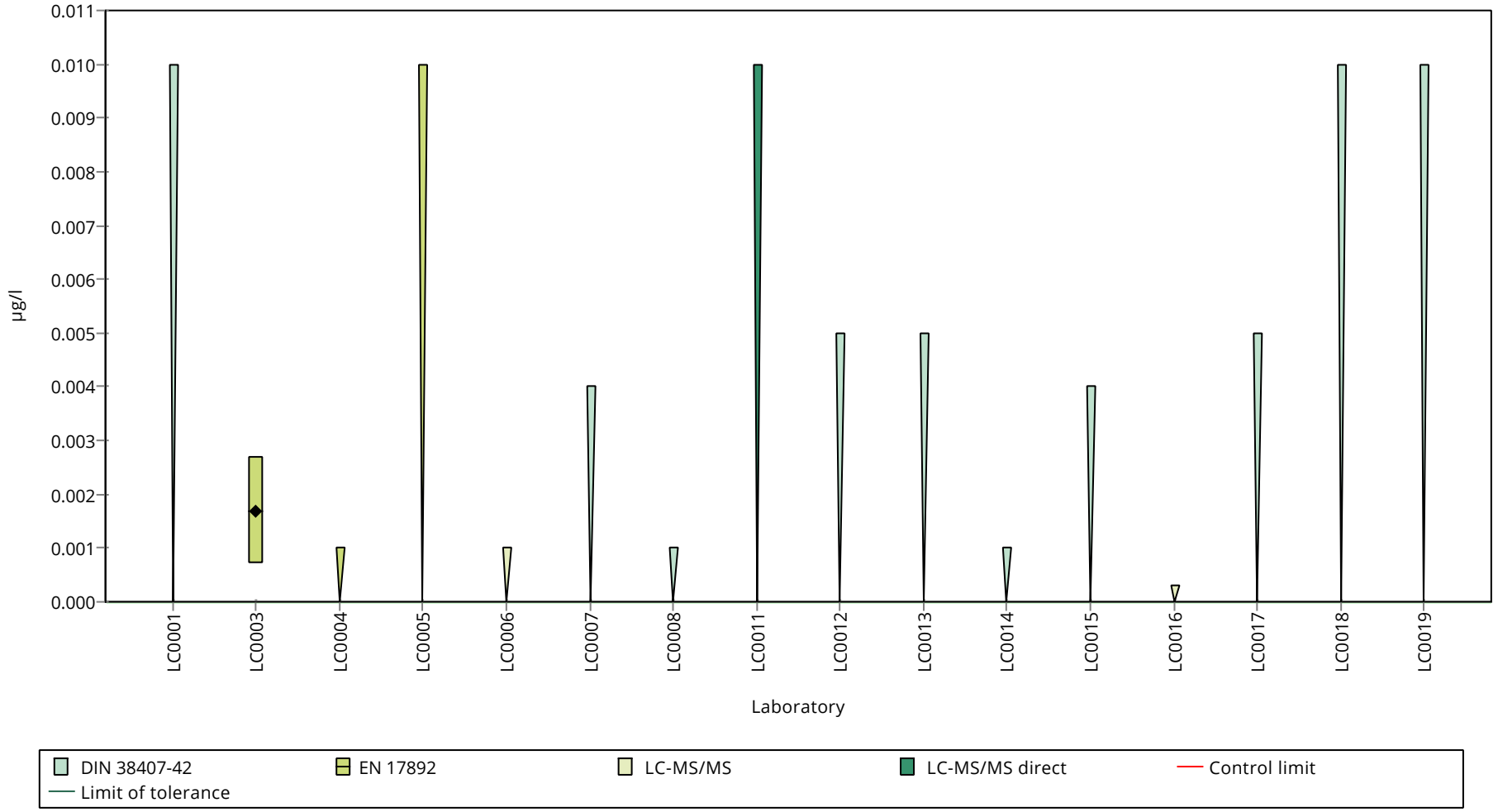
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0017 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.005 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.00498 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0017	0.0017	µg/l
Maximum	0.0017	0.0017	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorotridecanoic acid (PFTrDA) - PF13C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0024 - 0.0024
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

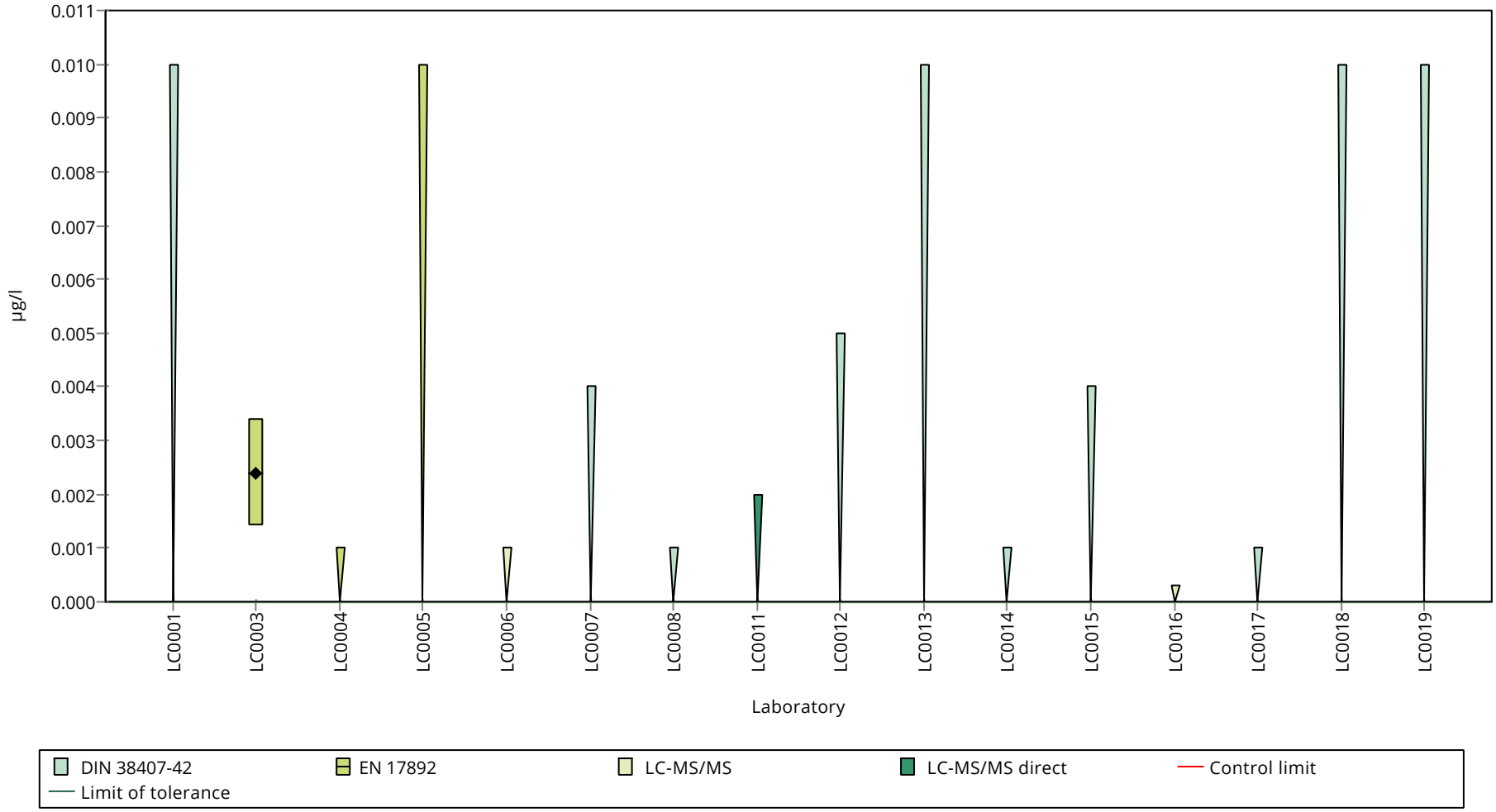
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0024 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0024	0.0024	µg/l
Maximum	0.0024	0.0024	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorotridecanoic acid (PFTrDA) - PF13C ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0016 - 0.0016
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

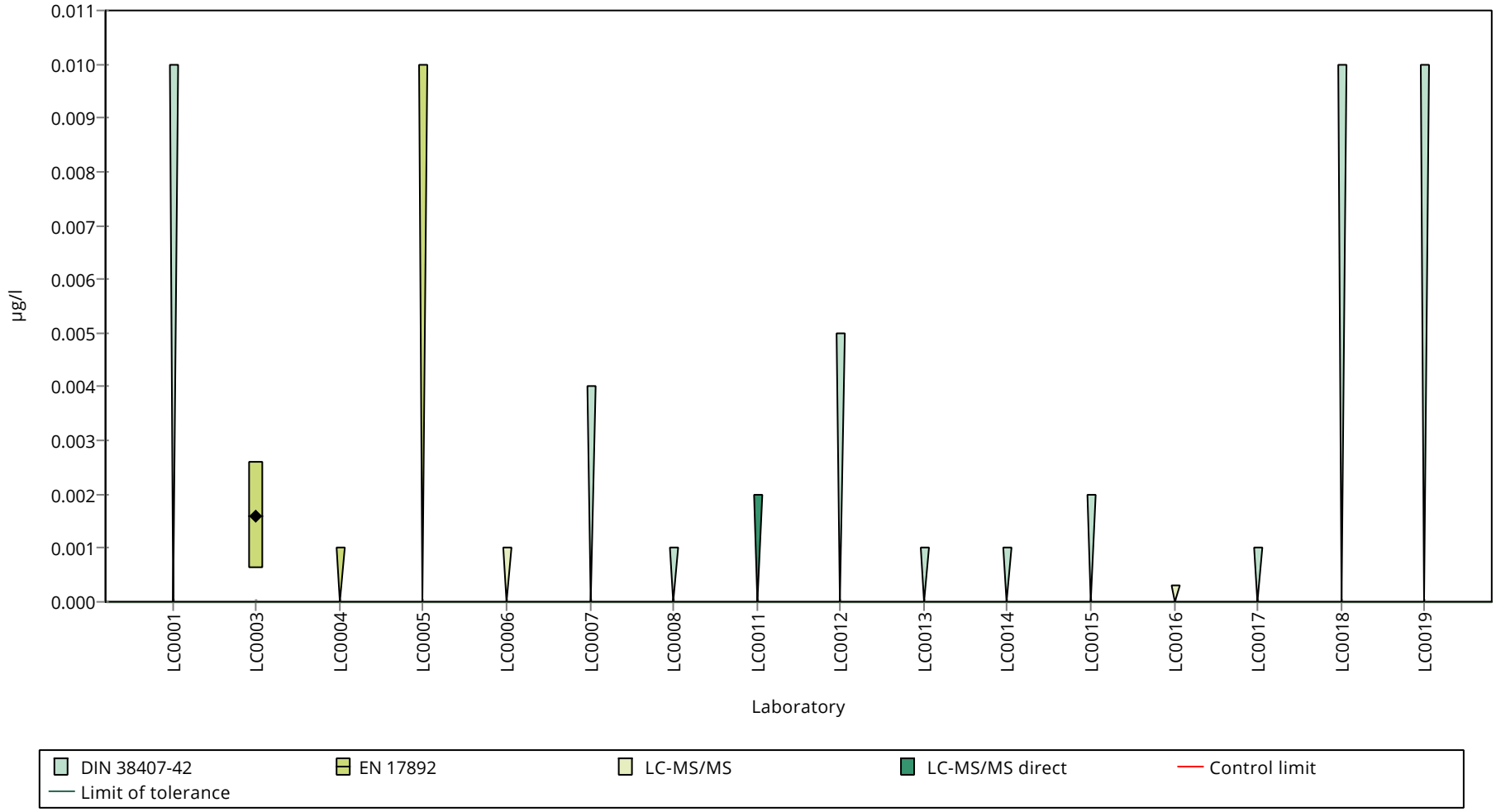
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0016 ± 0.001	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.001 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.002 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0016	0.0016	µg/l
Maximum	0.0016	0.0016	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorobutane sulfonic acid (PFBS) - PF4S

Unit	µg/l
Assigned value ± U (k=2)	0.658 ± 0.0733
Criterion	0.151 (23 %)
Minimum - Maximum	0.298 - 0.847
Control test value ± U (k=2)	0.646 ± 0.226

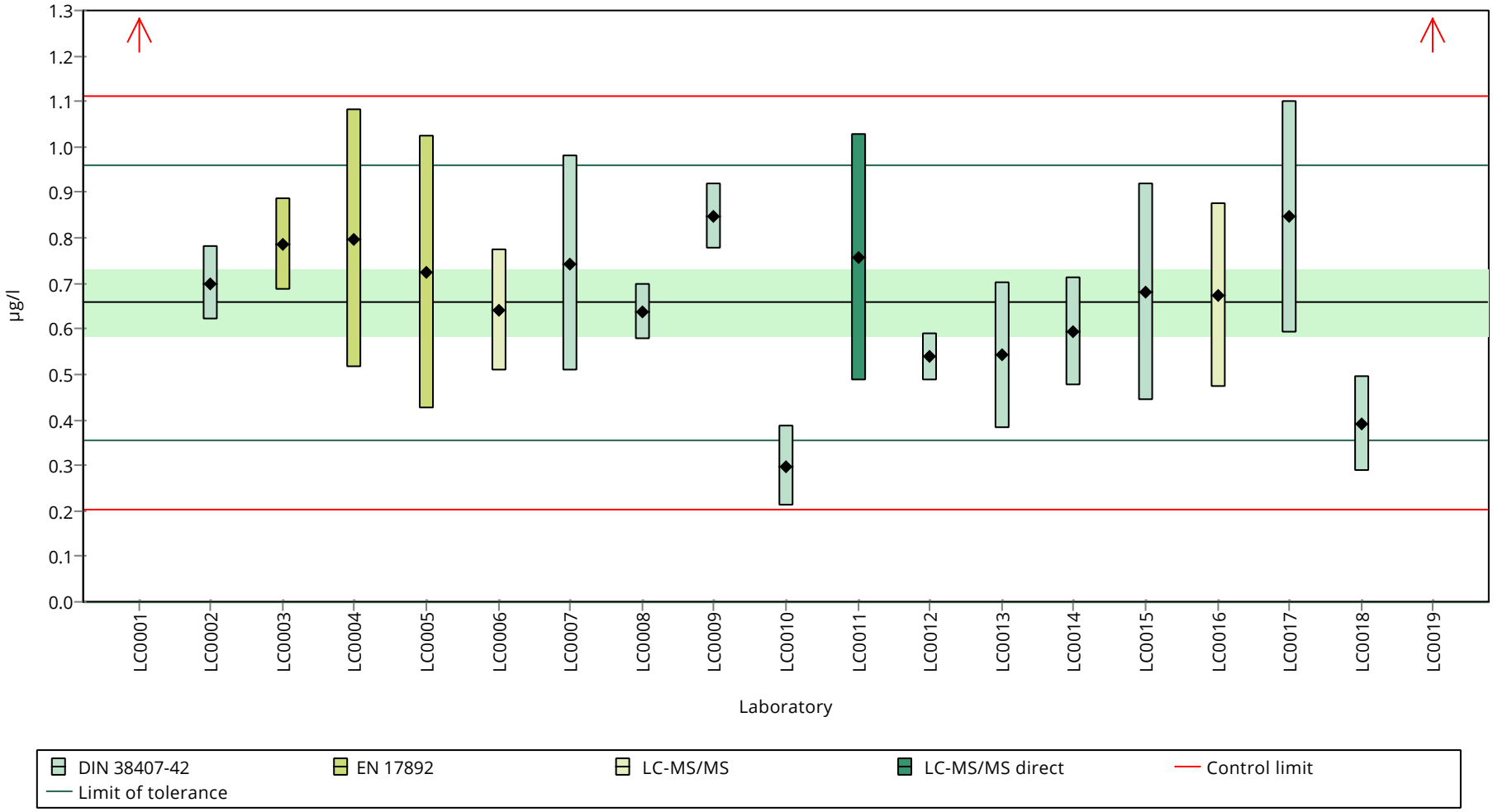
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	2.027 ± 0.105	308	9.04	H
LC0002	0.7 ± 0.0805	106	0.28	
LC0003	0.786 ± 0.1	119	0.84	
LC0004	0.798 ± 0.285	121	0.92	
LC0005	0.723 ± 0.3	110	0.43	
LC0006	0.64 ± 0.134	97.2	-0.12	
LC0007	0.7437 ± 0.238	113	0.56	
LC0008	0.636 ± 0.0611	96.6	-0.15	
LC0009	0.8465 ± 0.07153	129	1.24	
LC0010	0.298 ± 0.0895	45.3	-2.38	
LC0011	0.7562 ± 0.2722	115	0.65	
LC0012	0.538 ± 0.052	81.7	-0.79	
LC0013	0.542 ± 0.16	82.3	-0.77	
LC0014	0.593 ± 0.119	90.1	-0.43	
LC0015	0.681 ± 0.24	103	0.15	
LC0016	0.673 ± 0.202	102	0.1	
LC0017	0.846 ± 0.254	129	1.24	
LC0018	0.39 ± 0.1053	59.2	-1.77	
LC0019	1.97 ± 0.59	299	8.66	H

Characteristics of parameter

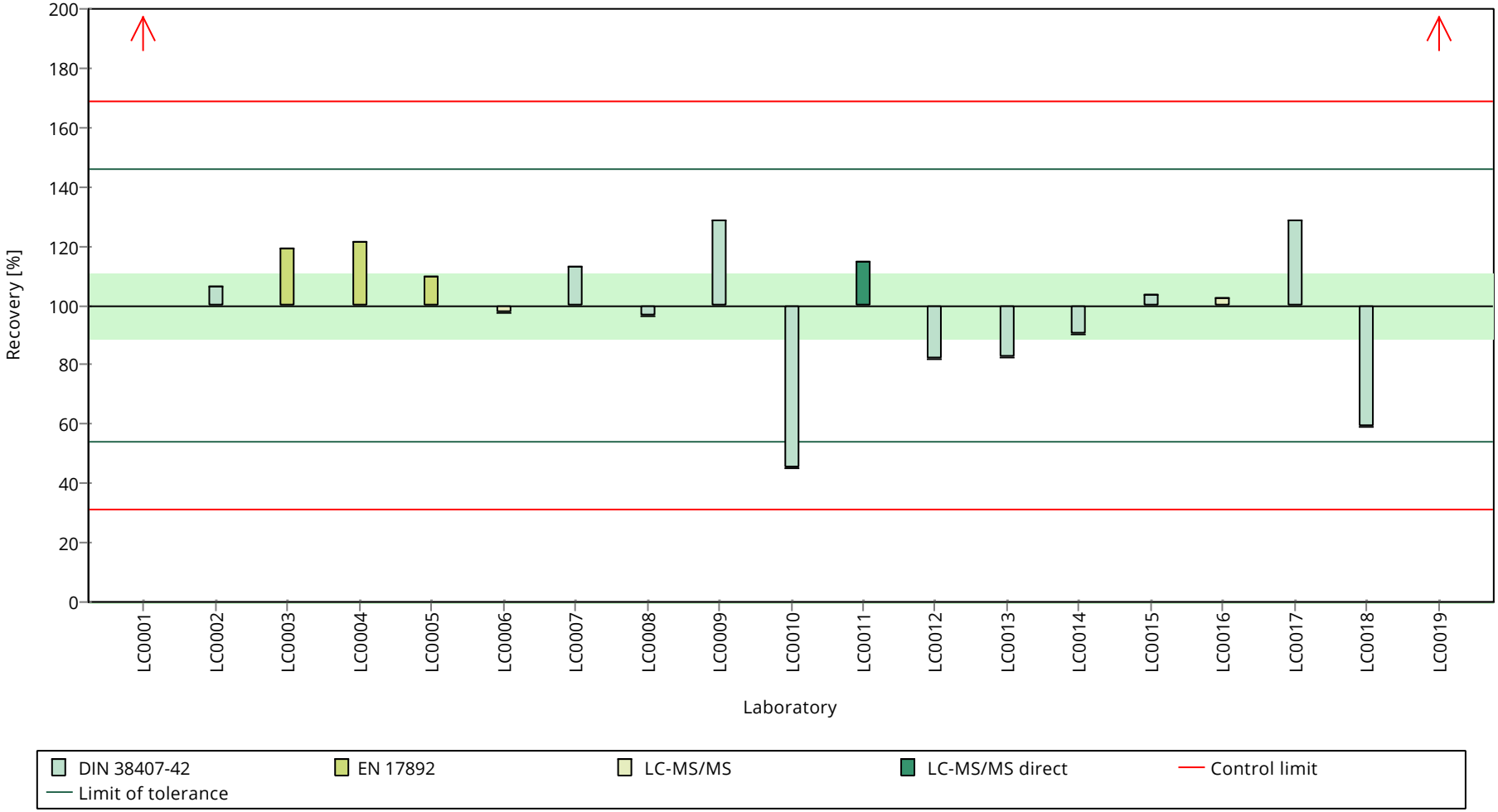
	all results	without outliers	Unit
Mean ± Cl (99%)	0.799 ± 0.307	0.658 ± 0.11	µg/l
Minimum	0.298	0.298	µg/l
Maximum	2.03	0.847	µg/l
Standard deviation	0.446	0.151	µg/l
rel. standard deviation	55.8	22.9	%
n	19	17	-

Graphical presentation of results

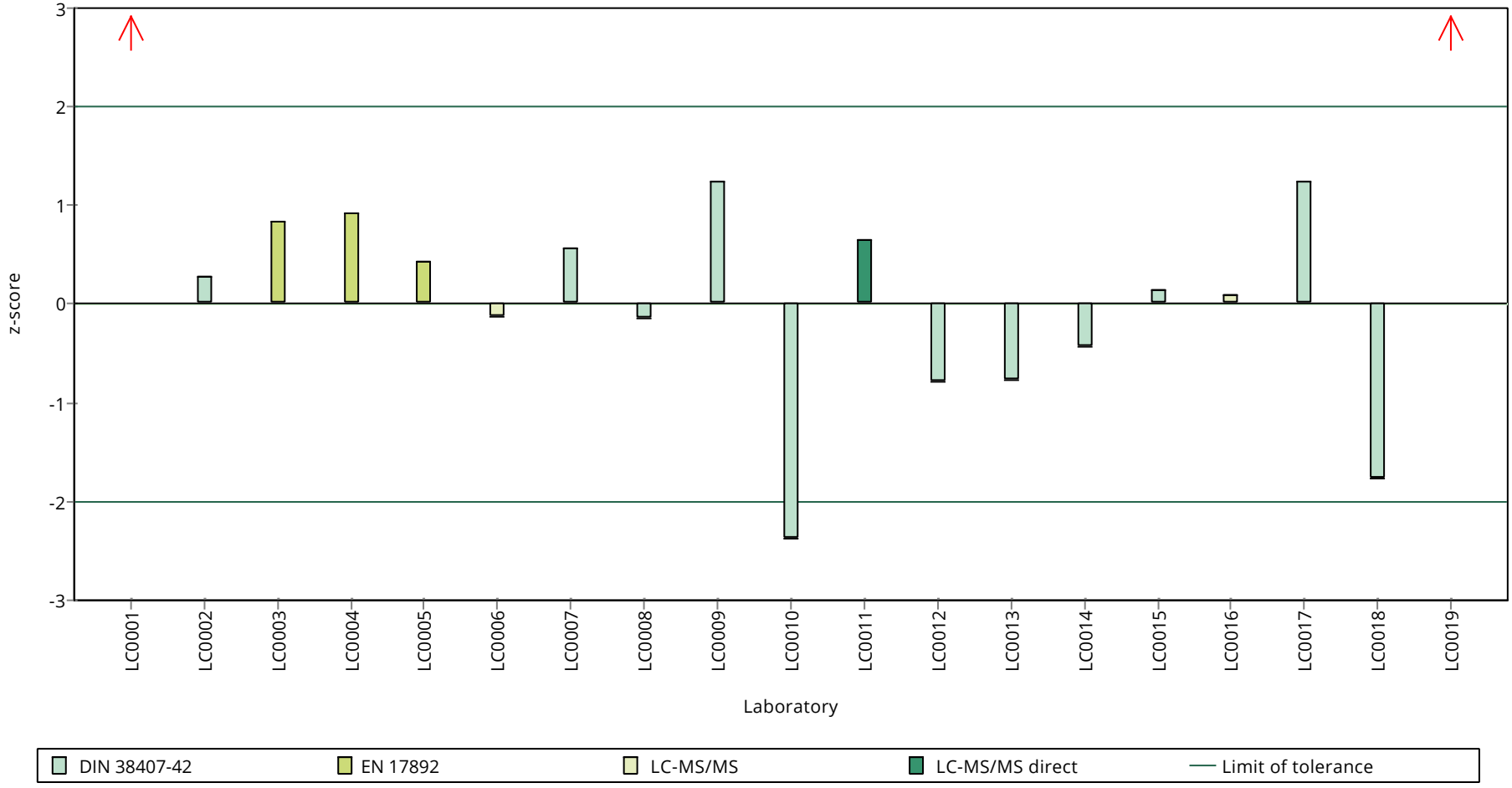
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluorobutane sulfonic acid (PFBS) - PF4S

Unit	µg/l
Assigned value ± U (k=2)	0.167 ± 0.0149
Criterion	0.0335 (20 %)
Minimum - Maximum	0.116 - 0.204
Control test value ± U (k=2)	0.186 ± 0.0651

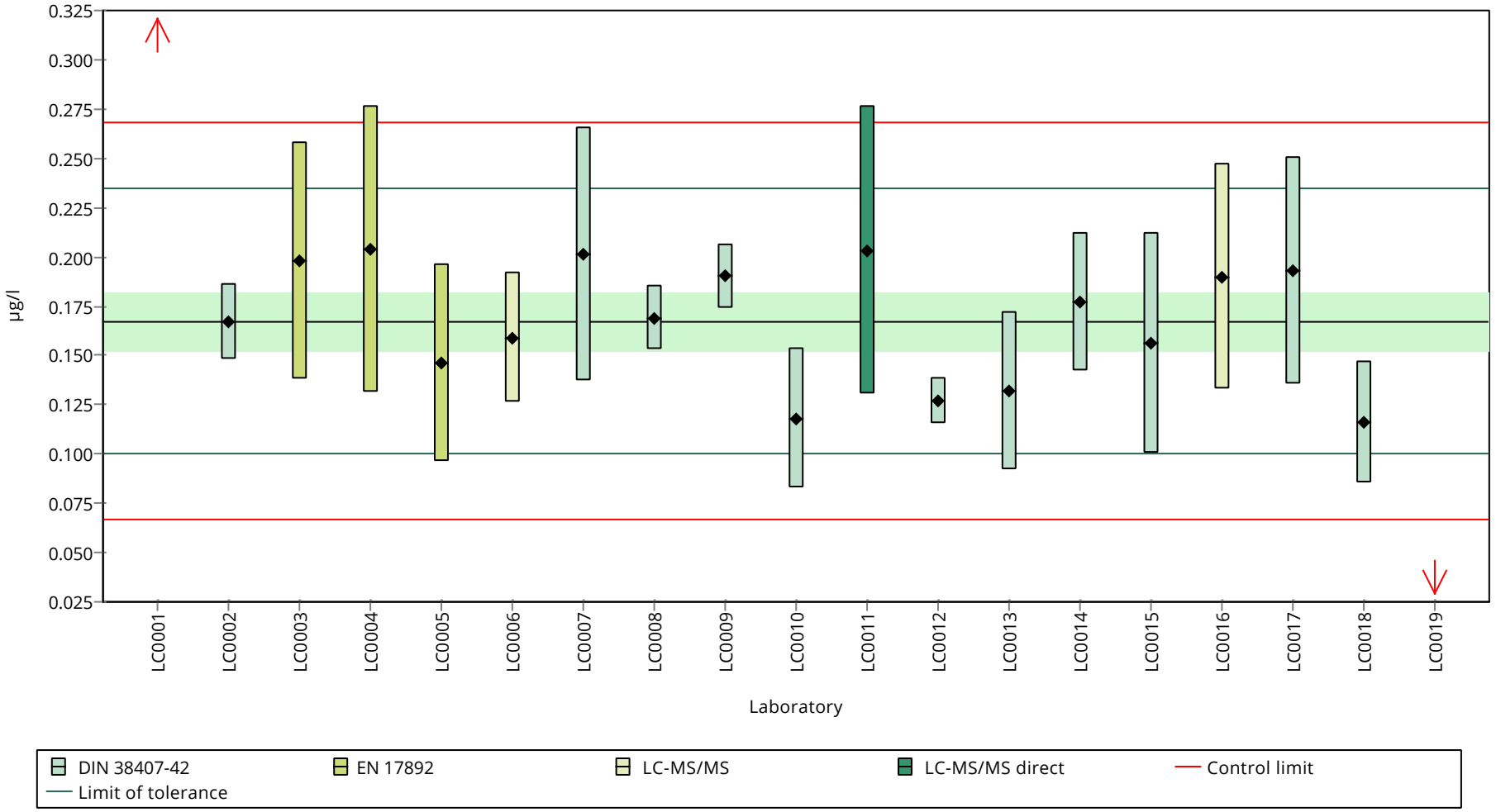
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.331 ± 0.032	198	4.88	H
LC0002	0.167 ± 0.0192	99.7	-0.01	
LC0003	0.198 ± 0.06	118	0.91	
LC0004	0.204 ± 0.0727	122	1.09	
LC0005	0.146 ± 0.05	87.2	-0.64	
LC0006	0.159 ± 0.033	94.9	-0.25	
LC0007	0.2014 ± 0.0644	120	1.01	
LC0008	0.169 ± 0.0162	101	0.05	
LC0009	0.1901 ± 0.01606	114	0.68	
LC0010	0.118 ± 0.0355	70.5	-1.48	
LC0011	0.2033 ± 0.0732	121	1.07	
LC0012	0.127 ± 0.012	75.8	-1.21	
LC0013	0.132 ± 0.04	78.8	-1.06	
LC0014	0.177 ± 0.035	106	0.28	
LC0015	0.156 ± 0.056	93.2	-0.34	
LC0016	0.19 ± 0.057	113	0.67	
LC0017	0.193 ± 0.058	115	0.76	
LC0018	0.116 ± 0.0312	69.3	-1.54	
LC0019	0.0183 ± 0.0055	10.9	-4.45	H

Characteristics of parameter

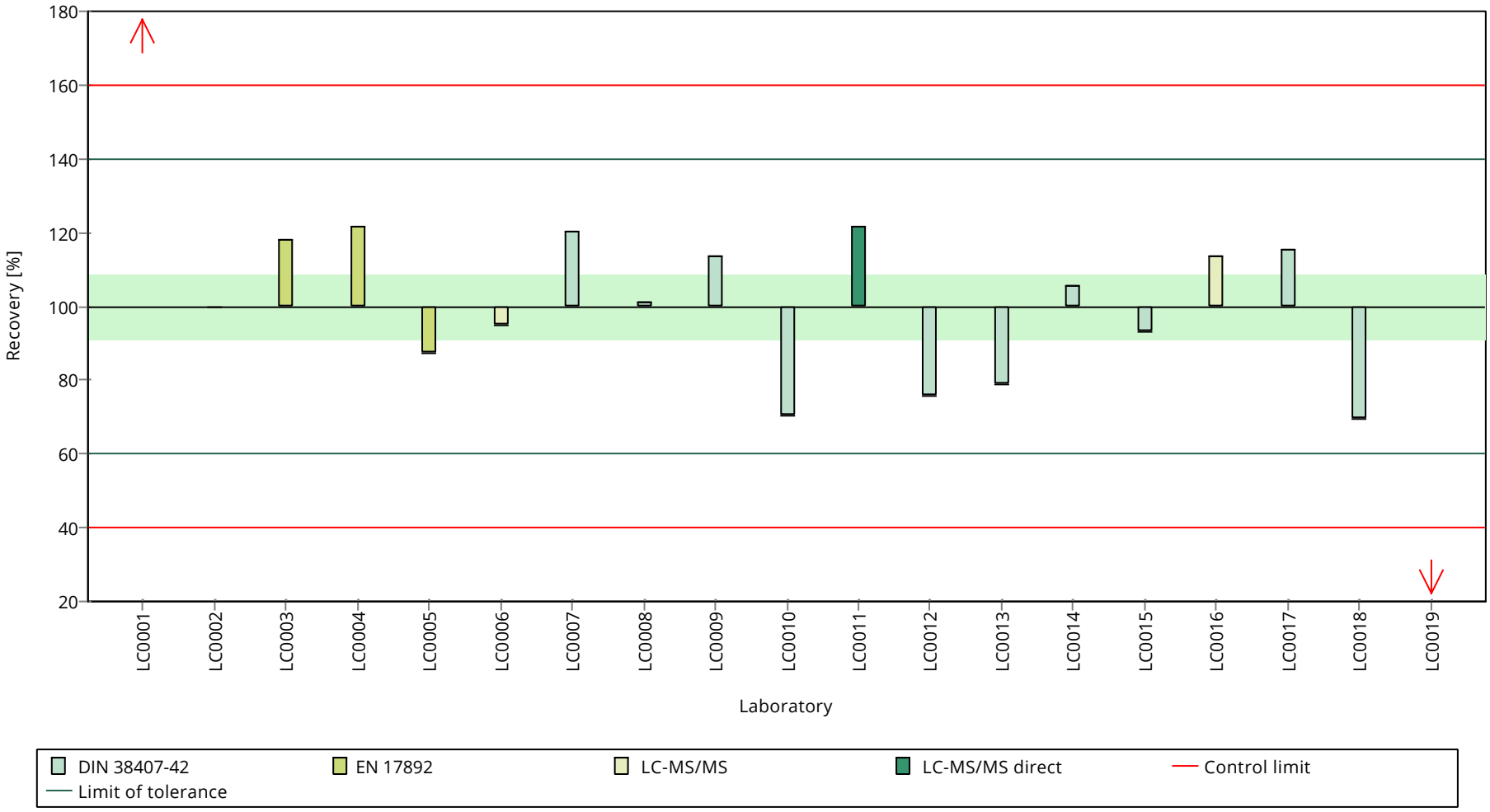
	all results	without outliers	Unit
Mean ± Cl (99%)	0.168 ± 0.0411	0.167 ± 0.0224	µg/l
Minimum	0.0183	0.116	µg/l
Maximum	0.331	0.204	µg/l
Standard deviation	0.0597	0.0307	µg/l
rel. standard deviation	35.5	18.4	%
n	19	17	-

Graphical presentation of results

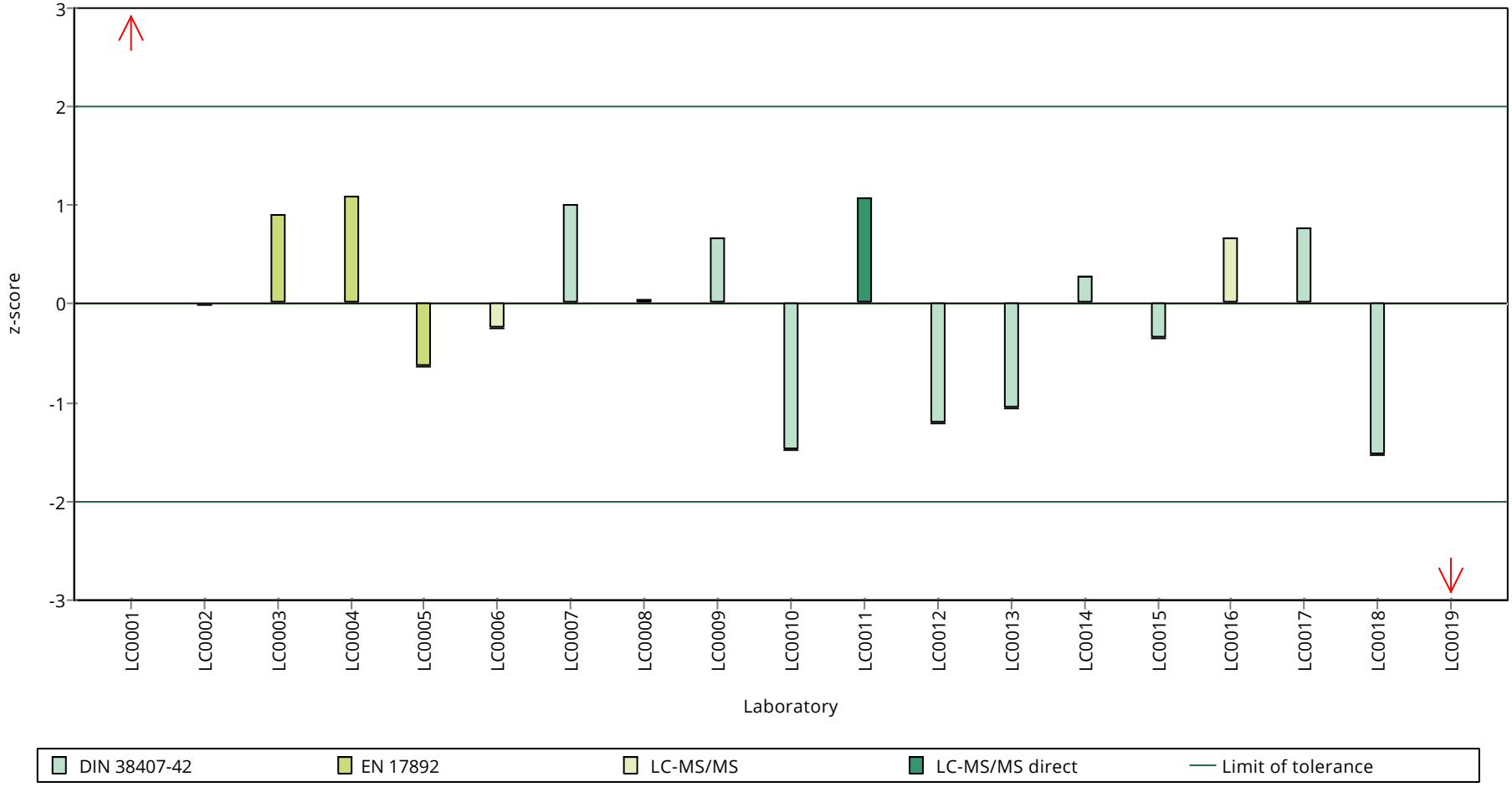
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluorobutane sulfonic acid (PFBS) - PF4S

Unit	µg/l
Assigned value ± U (k=2)	0.0269 ± 0.0035
Criterion	0.00753 (28 %)
Minimum - Maximum	0.014 - 0.039
Control test value ± U (k=2)	0.0326 ± 0.0114

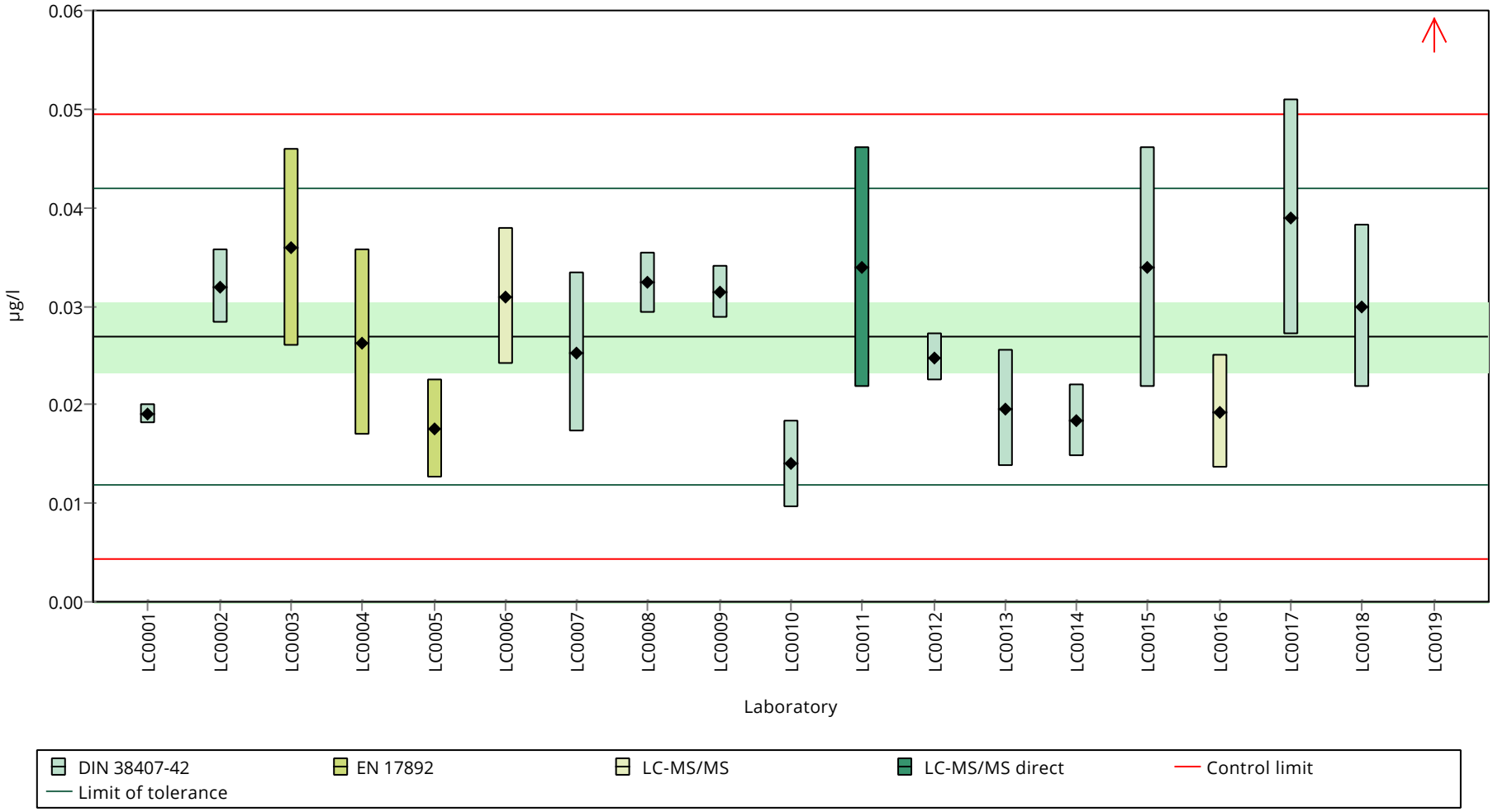
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.019 ± 0.001	70.7	-1.05	
LC0002	0.032 ± 0.0037	119	0.68	
LC0003	0.0359 ± 0.01	134	1.2	
LC0004	0.0263 ± 0.0094	97.8	-0.08	
LC0005	0.0175 ± 0.005	65.1	-1.25	
LC0006	0.031 ± 0.007	115	0.55	
LC0007	0.0253 ± 0.0081	94.1	-0.21	
LC0008	0.0324 ± 0.00311	121	0.73	
LC0009	0.03144 ± 0.00266	117	0.61	
LC0010	0.014 ± 0.0044	52.1	-1.71	
LC0011	0.034 ± 0.0122	126	0.95	
LC0012	0.0248 ± 0.0024	92.3	-0.28	
LC0013	0.0196 ± 0.0059	72.9	-0.97	
LC0014	0.0184 ± 0.0037	68.5	-1.13	
LC0015	0.0339 ± 0.0122	126	0.93	
LC0016	0.0193 ± 0.0058	71.8	-1.01	
LC0017	0.039 ± 0.012	145	1.61	
LC0018	0.03 ± 0.0082	112	0.41	
LC0019	0.128 ± 0.038	476	13.44	H

Characteristics of parameter

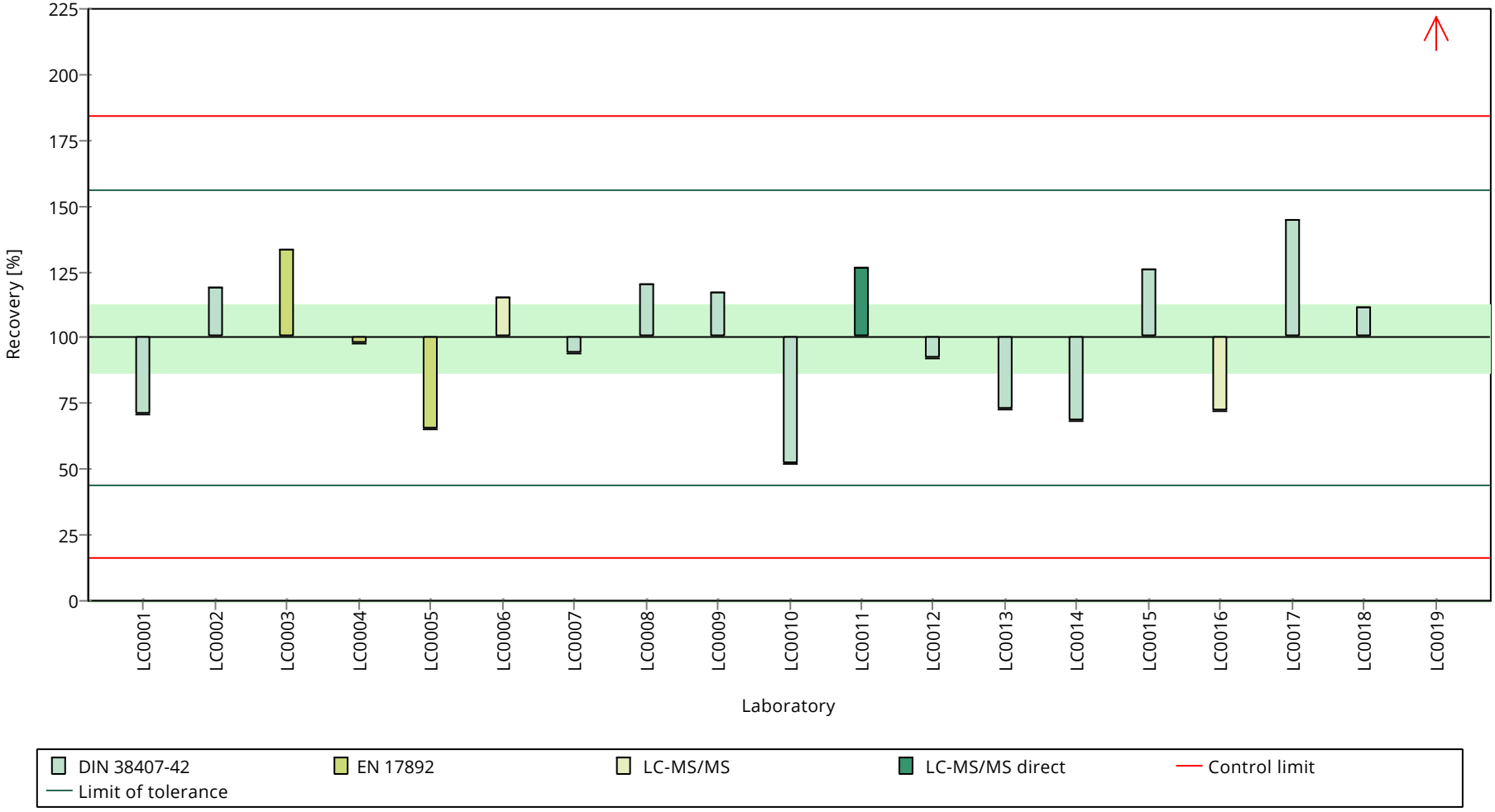
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0322 ± 0.0167	0.0269 ± 0.00525	µg/l
Minimum	0.014	0.014	µg/l
Maximum	0.128	0.039	µg/l
Standard deviation	0.0243	0.00743	µg/l
rel. standard deviation	75.4	27.6	%
n	19	18	-

Graphical presentation of results

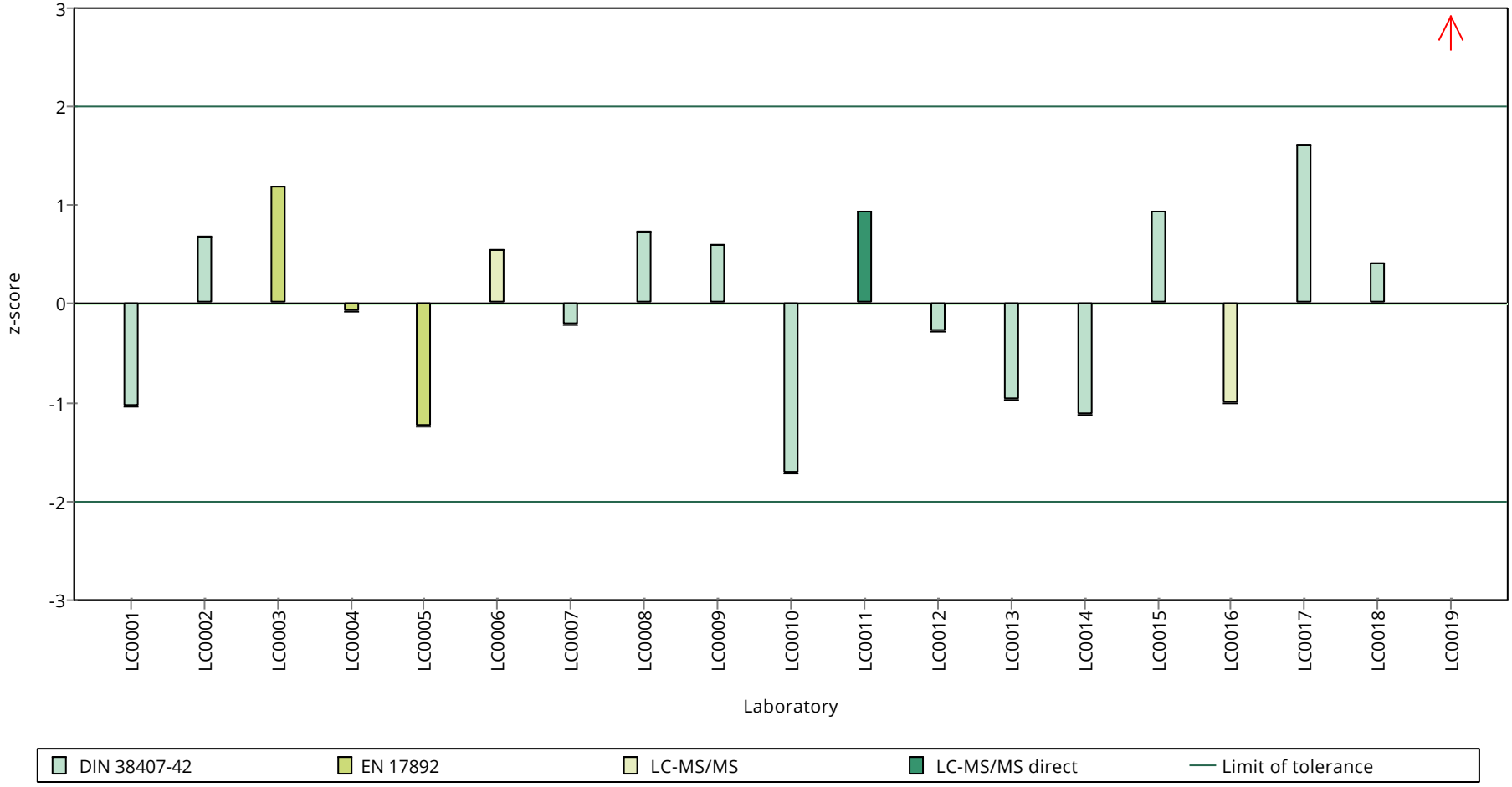
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B10

Perfluorobutane sulfonic acid (PFBS) - PF4S

Unit	µg/l
Assigned value ± U (k=2)	0.00661 ± 0.000357
Criterion	0.00185 (28 %)
Minimum - Maximum	0.00565 - 0.0078
Control test value ± U (k=2)	0.00678 ± 0.00237

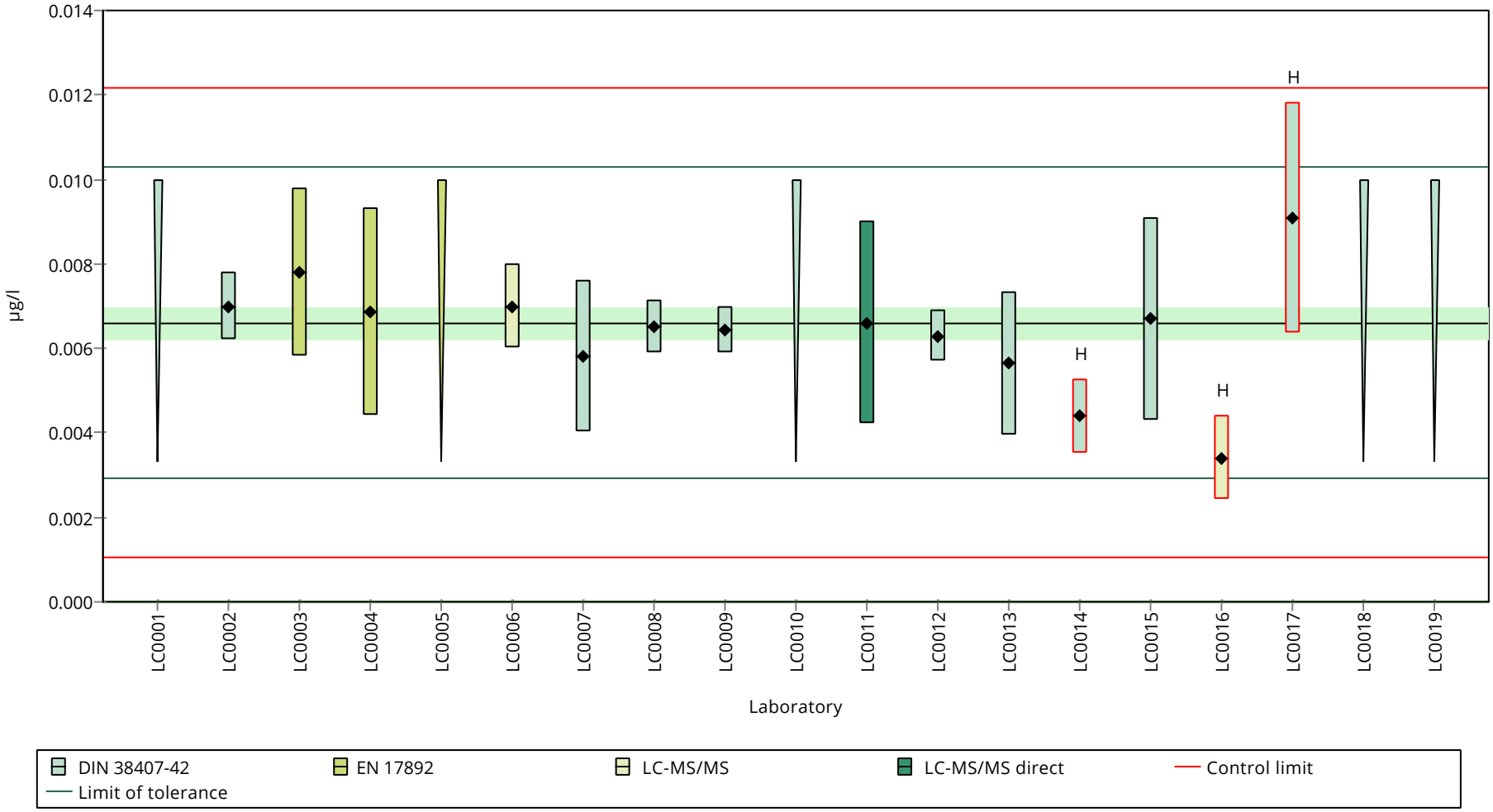
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.007 ± 0.0008	106	0.21	
LC0003	0.0078 ± 0.002	118	0.65	
LC0004	0.00686 ± 0.00245	104	0.14	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.007 ± 0.001	106	0.21	
LC0007	0.0058 ± 0.0018	87.8	-0.44	
LC0008	0.00652 ± 0.00063	98.7	-0.05	
LC0009	0.00644 ± 0.00054	97.5	-0.09	
LC0010	< 0.01 (LOQ) ± -	-	-	
LC0011	0.0066 ± 0.0024	99.9	0.00	
LC0012	0.00629 ± 0.00061	95.2	-0.17	
LC0013	0.00565 ± 0.0017	85.5	-0.52	
LC0014	0.00439 ± 0.00088	66.5	-1.2	H
LC0015	0.0067 ± 0.0024	101	0.05	
LC0016	0.0034 ± 0.001	51.5	-1.73	H
LC0017	0.00908 ± 0.00272	137	1.34	H
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

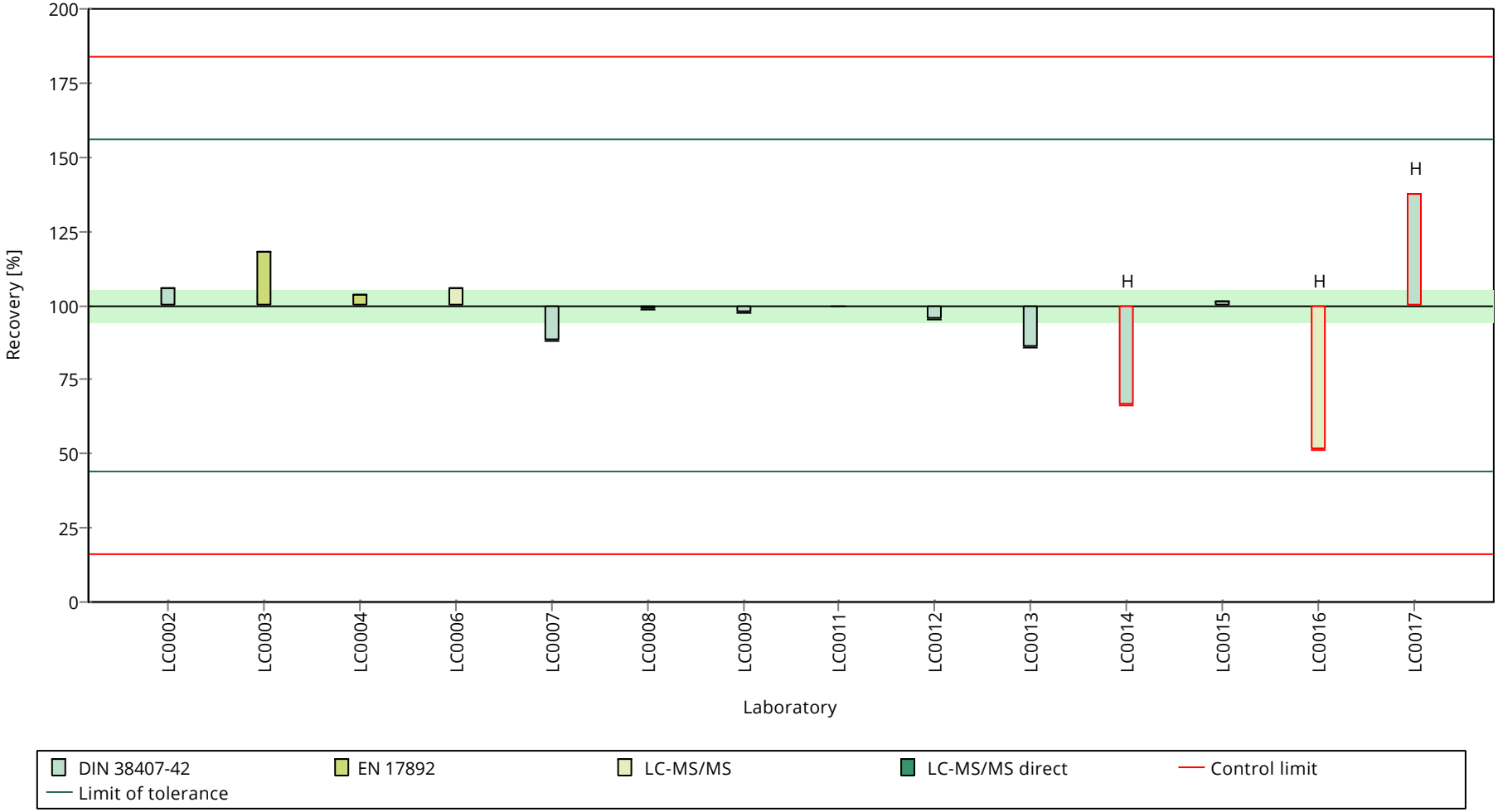
	all results	without outliers	Unit
Mean ± Cl (99%)	0.00639 ± 0.00109	0.00661 ± 0.000536	µg/l
Minimum	0.0034	0.00565	µg/l
Maximum	0.00908	0.0078	µg/l
Standard deviation	0.00136	0.000592	µg/l
rel. standard deviation	21.3	8.97	%
n	14	11	-

Graphical presentation of results

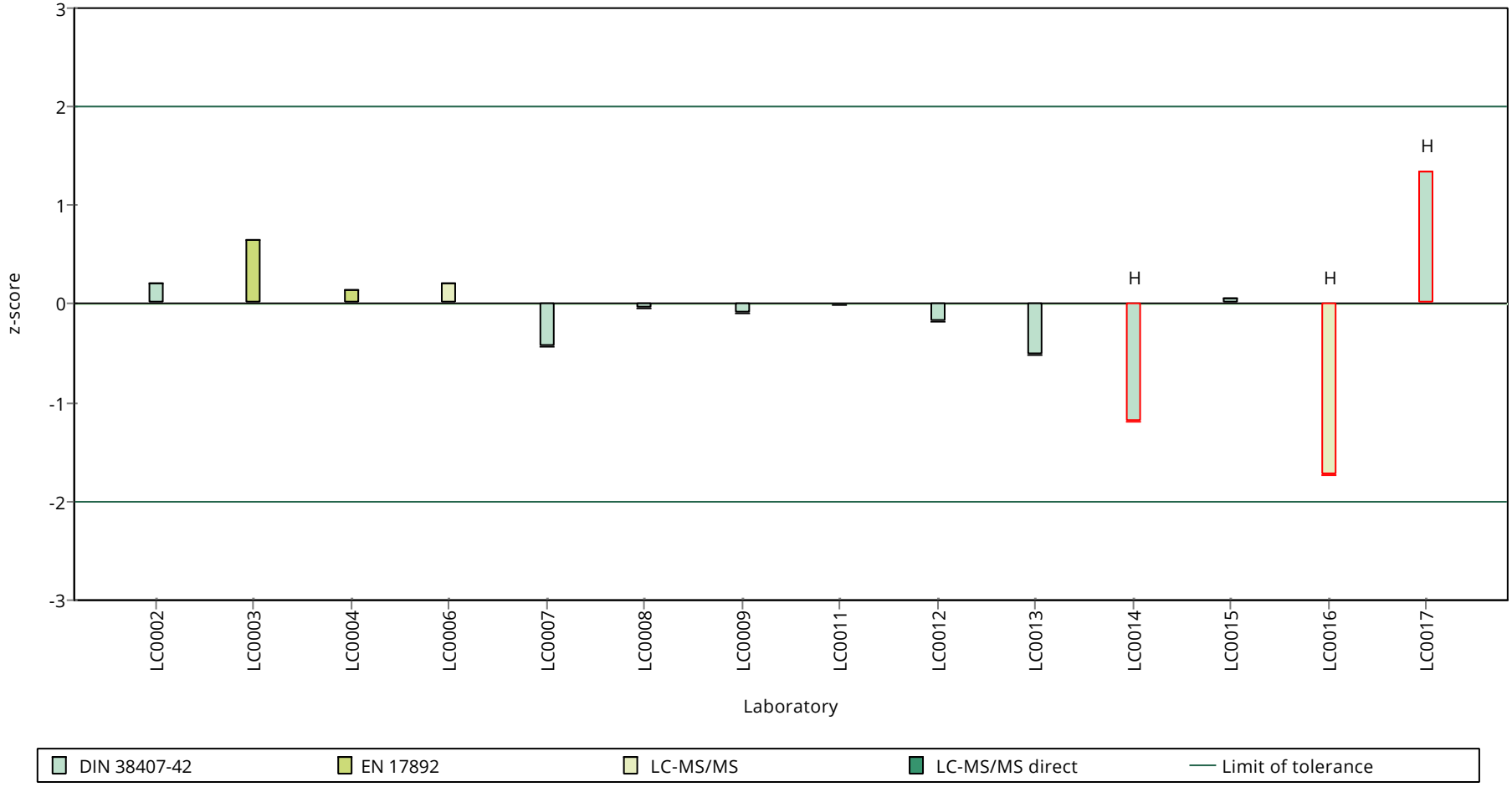
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
H
H
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A02

Perfluoropentane sulfonic acid (PFPeS) - PF5S

Unit	µg/l
Assigned value ± U (k=2)	0.0273 ± 0.00901
Criterion	0.0117 (43 %)
Minimum - Maximum	0.016 - 0.053
Control test value ± U (k=2)	0.0178 ± 0.00535

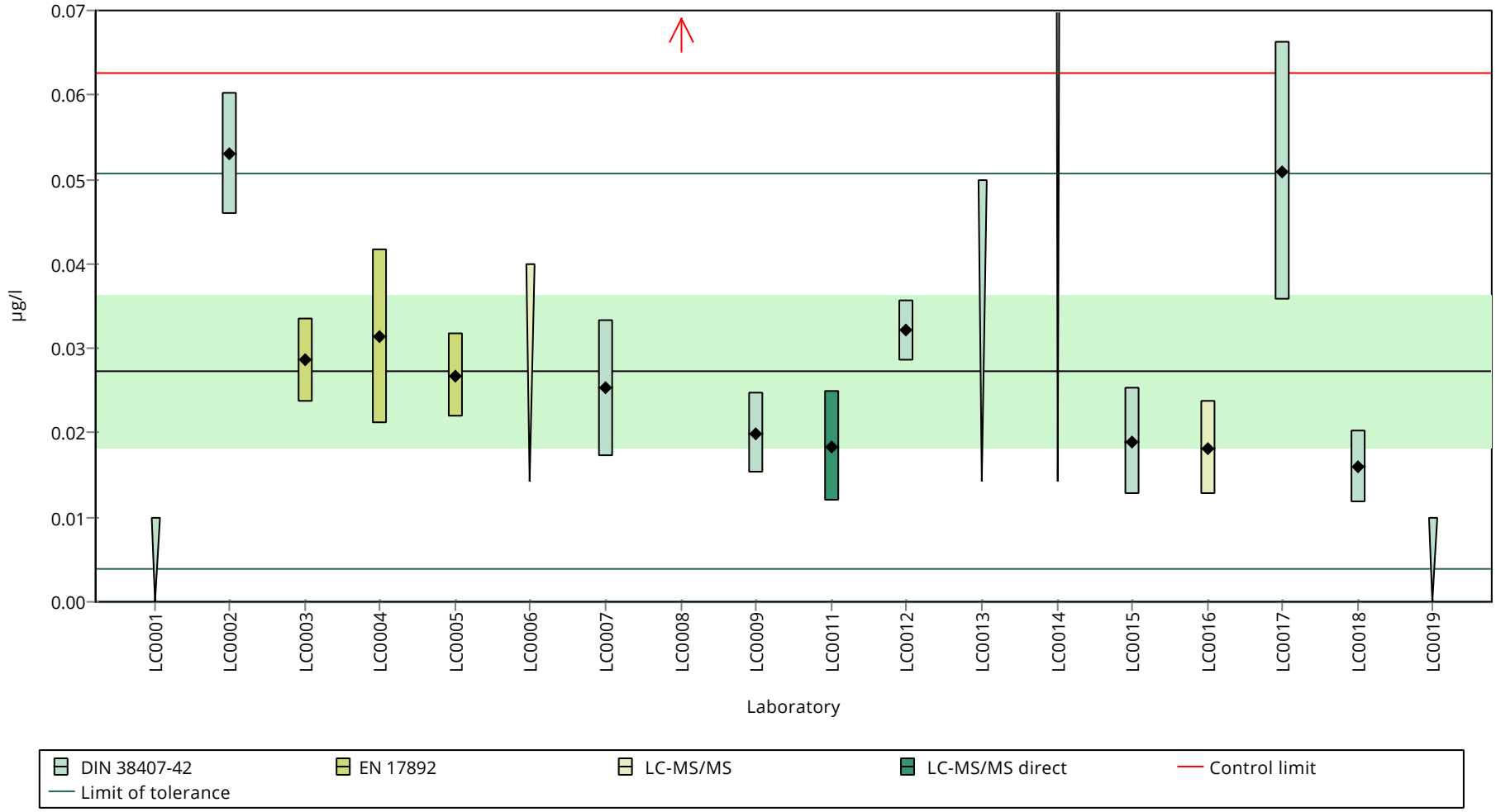
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	0.053	±	0.0072	194	2.19	
LC0003	0.0286	±	0.005	105	0.11	
LC0004	0.0314	±	0.0104	115	0.35	
LC0005	0.0268	±	0.005	98.2	-0.04	
LC0006	< 0.04 (LOQ)	±	-	-	-	
LC0007	0.0253	±	0.0081	92.7	-0.17	
LC0008	0.0864	±	0.00916	316	5.03	H
LC0009	0.01997	±	0.00472	73.2	-0.62	
LC0010	-	±	-	-	-	
LC0011	0.0184	±	0.0066	67.4	-0.76	
LC0012	0.0321	±	0.0036	118	0.41	
LC0013	< 0.05 (LOQ)	±	-	-	-	
LC0014	< 0.2 (LOQ)	±	-	-	-	
LC0015	0.019	±	0.0063	69.6	-0.71	
LC0016	0.0182	±	0.0055	66.7	-0.78	
LC0017	0.0509	±	0.0153	186	2.01	
LC0018	0.016	±	0.0043	58.6	-0.96	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

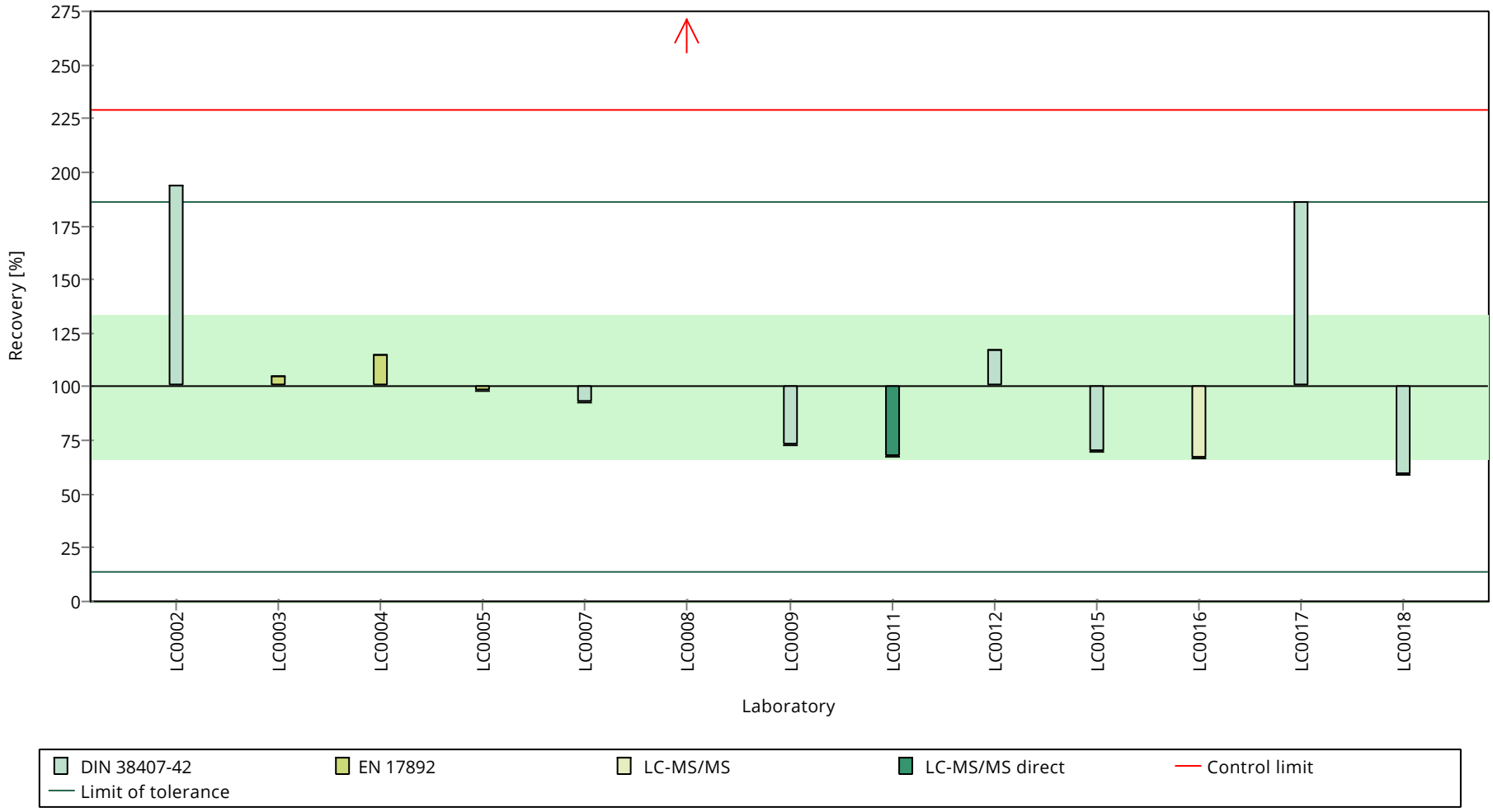
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0328 ± 0.0166	0.0283 ± 0.0106	µg/l
Minimum	0.016	0.016	µg/l
Maximum	0.0864	0.053	µg/l
Standard deviation	0.02	0.0123	µg/l
rel. standard deviation	60.9	43.4	%
n	13	12	-

Graphical presentation of results

Results

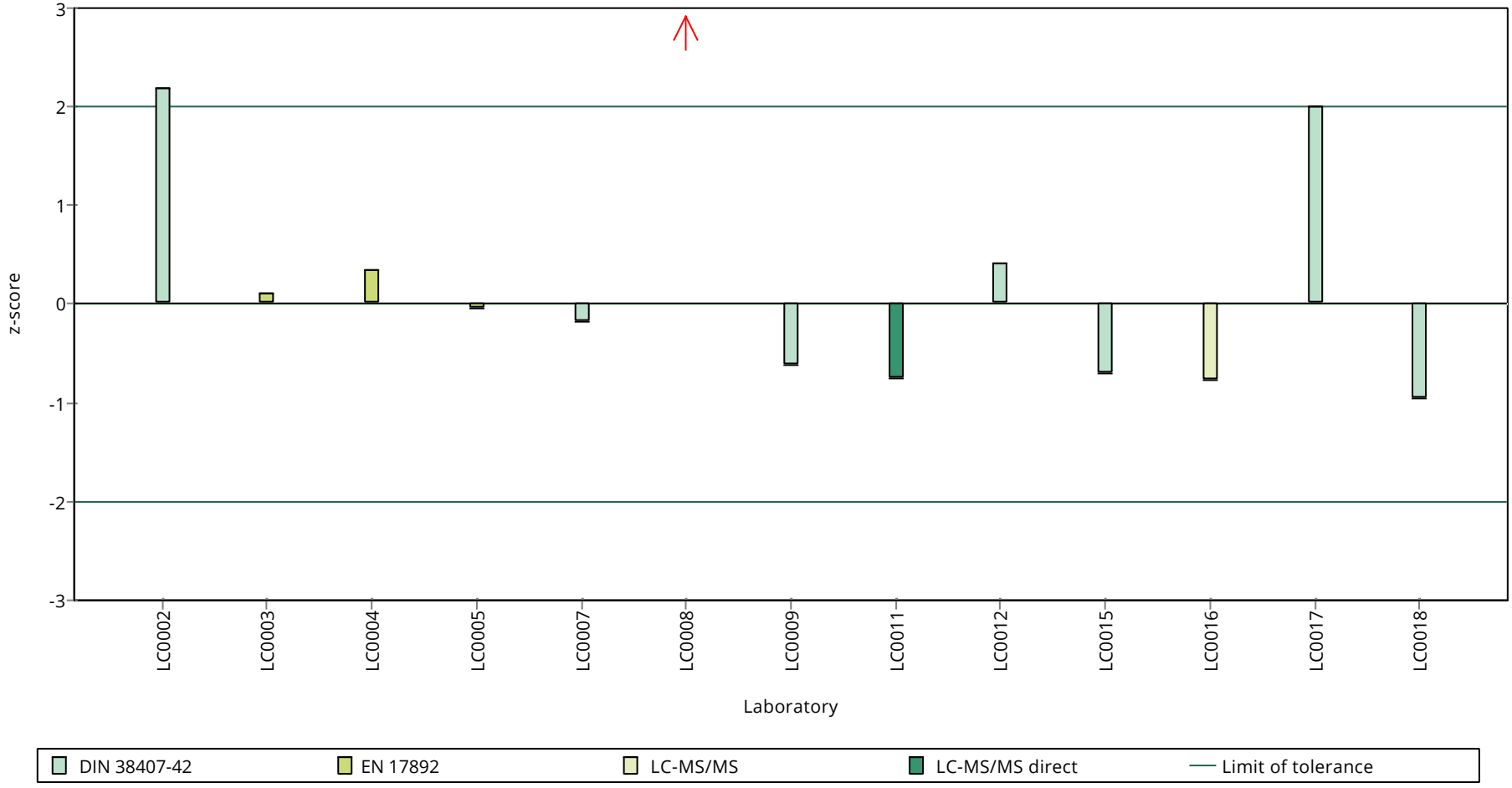


Recovery rate



Sample: PFL01A02, Parameter: Perfluoropentane sulfonic acid (PFPeS) - PF5S

z-Score



Parameter oriented report

PFL01A10

Perfluoropentane sulfonic acid (PFPeS) - PF5S

Unit	µg/l
Assigned value ± U (k=2)	0.0114 ± 0.00376
Criterion	0.00456 (40 %)
Minimum - Maximum	0.0059 - 0.0183
Control test value ± U (k=2)	0.00703 ± 0.00211

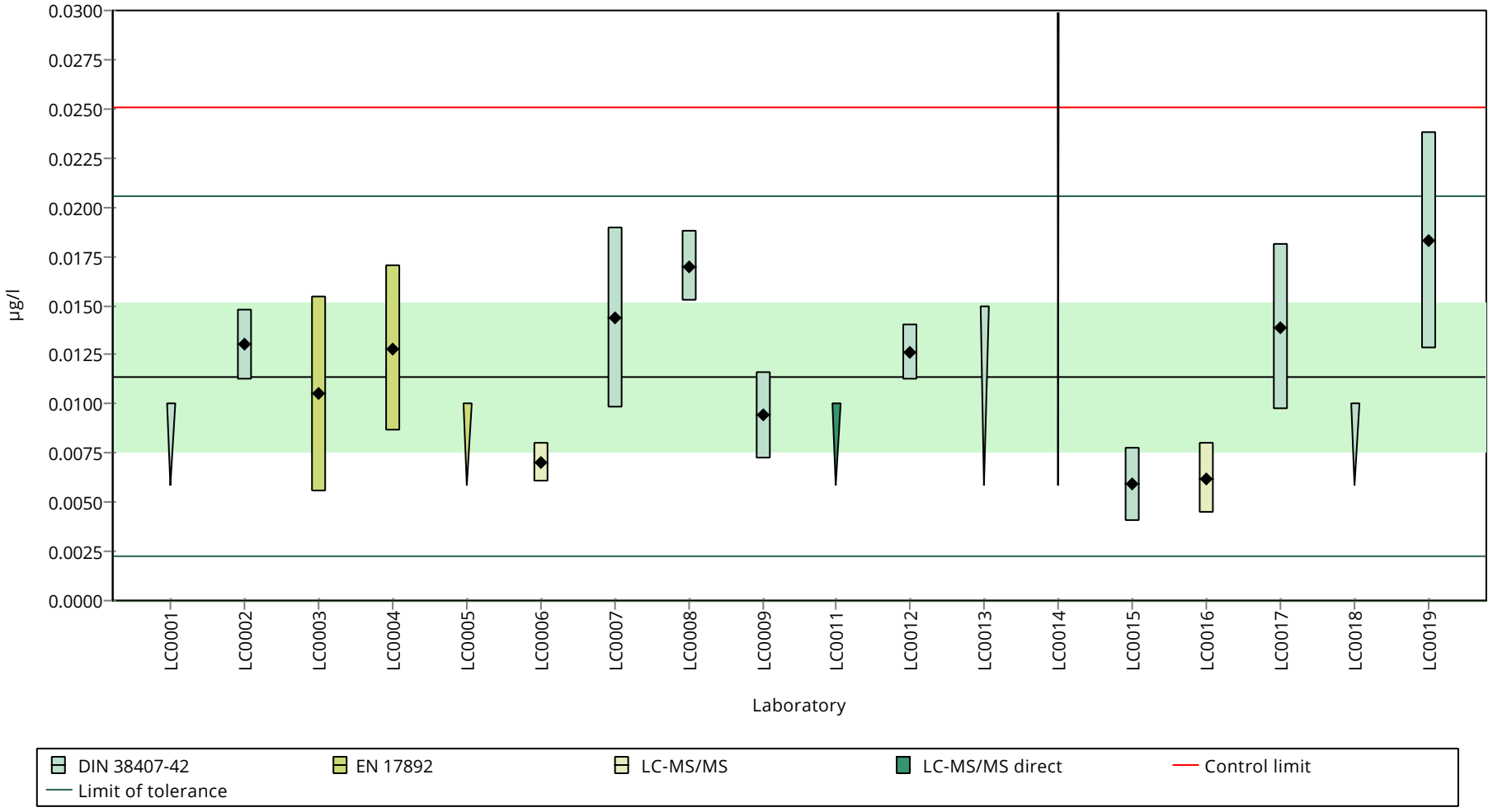
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.013 ± 0.0018	114	0.35	
LC0003	0.0105 ± 0.005	92.1	-0.2	
LC0004	0.0128 ± 0.00423	112	0.31	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.007 ± 0.001	61.4	-0.96	
LC0007	0.0144 ± 0.0046	126	0.66	
LC0008	0.017 ± 0.0018	149	1.23	
LC0009	0.00941 ± 0.00222	82.6	-0.44	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	0.0126 ± 0.0014	111	0.26	
LC0013	< 0.015 (LOQ) ± -	-	-	
LC0014	< 0.2 (LOQ) ± -	-	-	
LC0015	0.0059 ± 0.0019	51.8	-1.21	
LC0016	0.0062 ± 0.0018	54.4	-1.14	
LC0017	0.0139 ± 0.0042	122	0.55	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	0.0183 ± 0.0055	161	1.51	

Characteristics of parameter

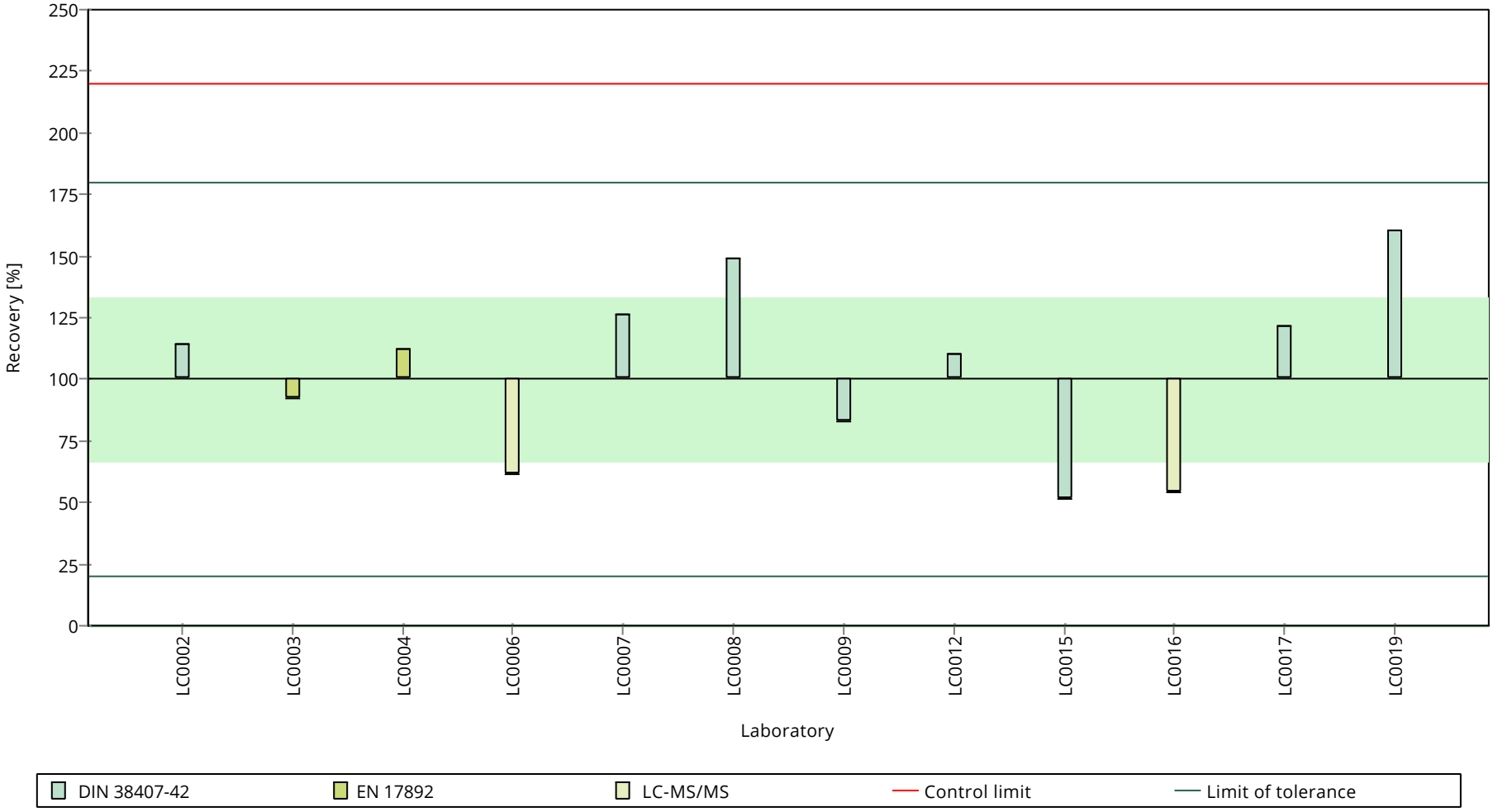
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0118 ± 0.0035	0.0118 ± 0.0035	µg/l
Minimum	0.0059	0.0059	µg/l
Maximum	0.0183	0.0183	µg/l
Standard deviation	0.00405	0.00405	µg/l
rel. standard deviation	34.4	34.4	%
n	12	12	-

Graphical presentation of results

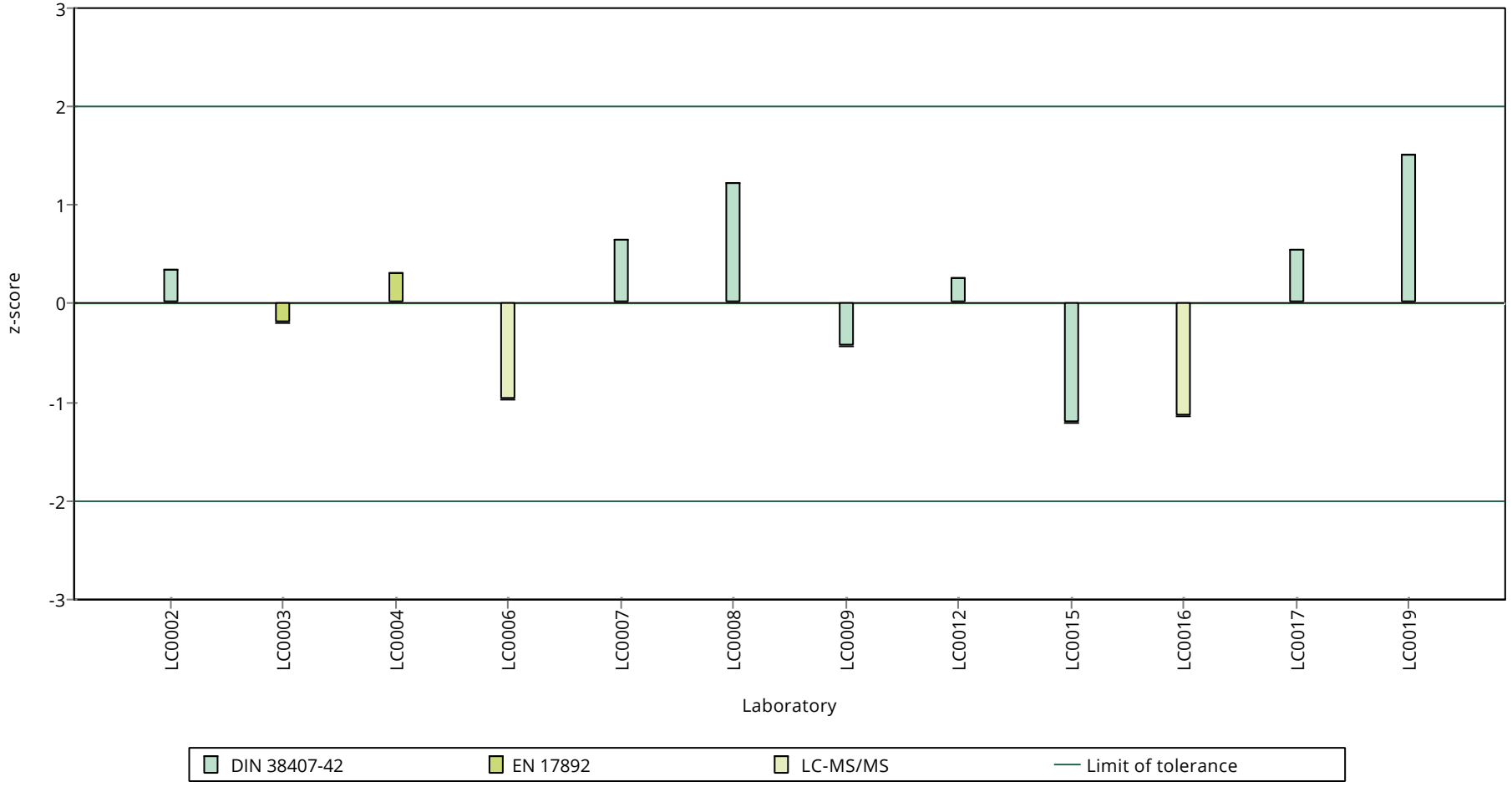
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0012
LC0015
LC0016
LC0017
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluoropentane sulfonic acid (PFPeS) - PF5S

Unit	µg/l
Assigned value ± U (k=2)	0.0219 ± 0.00268
Criterion	0.00547 (25 %)
Minimum - Maximum	0.0103 - 0.0313
Control test value ± U (k=2)	0.0215 ± 0.00646

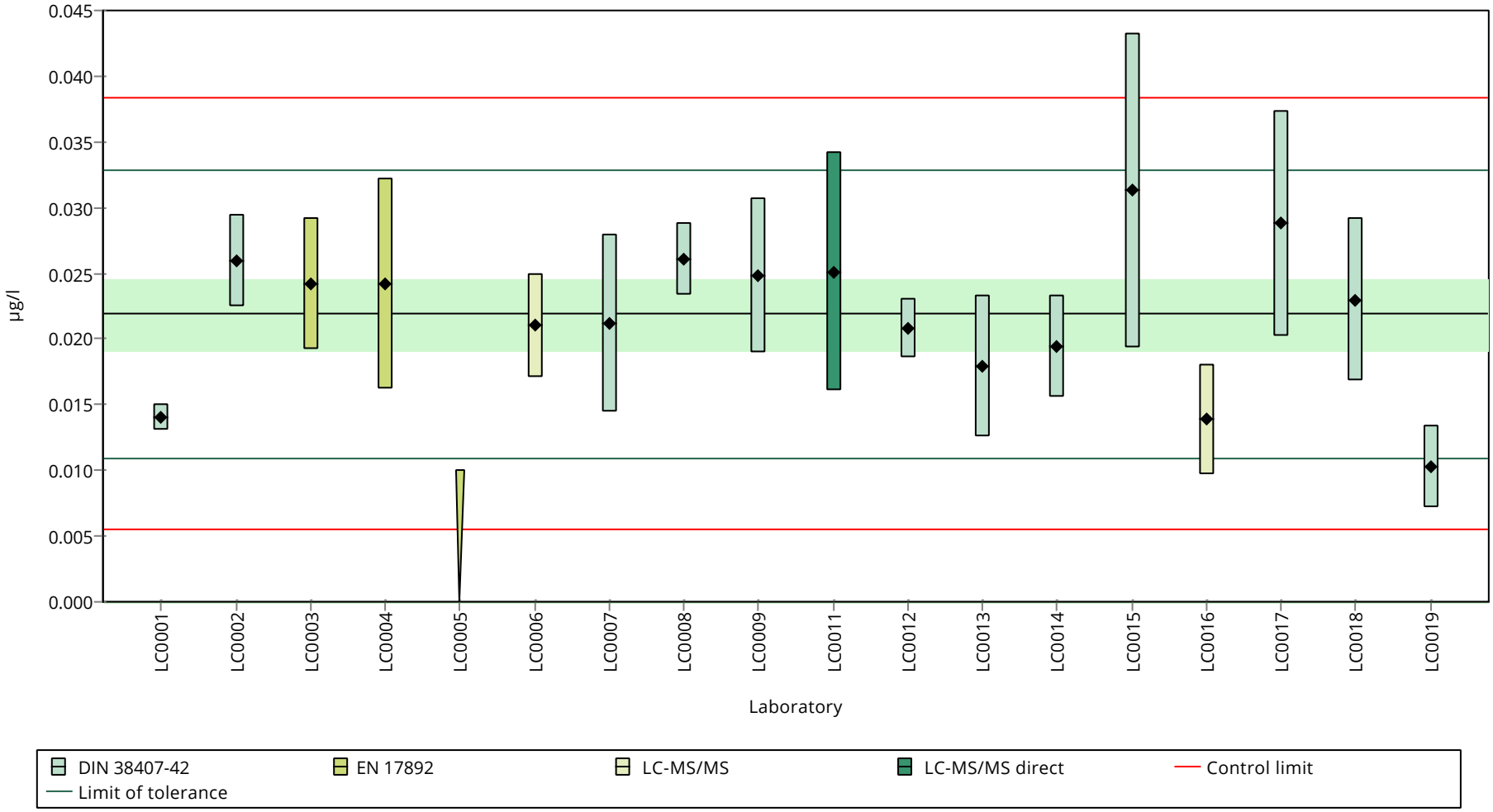
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.014 ± 0.001	64	-1.44	
LC0002	0.026 ± 0.0035	119	0.75	
LC0003	0.0242 ± 0.005	111	0.42	
LC0004	0.0242 ± 0.00804	111	0.42	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.021 ± 0.004	96	-0.16	
LC0007	0.0212 ± 0.0068	96.9	-0.13	
LC0008	0.0261 ± 0.00277	119	0.77	
LC0009	0.02486 ± 0.00587	114	0.54	
LC0010	- ± -	-	-	
LC0011	0.0251 ± 0.0091	115	0.59	
LC0012	0.0208 ± 0.0023	95	-0.2	
LC0013	0.0179 ± 0.0054	81.8	-0.73	
LC0014	0.0194 ± 0.0039	88.6	-0.45	
LC0015	0.0313 ± 0.012	143	1.72	
LC0016	0.0139 ± 0.0042	63.5	-1.46	
LC0017	0.0288 ± 0.0086	132	1.26	
LC0018	0.023 ± 0.0062	105	0.2	
LC0019	0.0103 ± 0.0031	47.1	-2.12	

Characteristics of parameter

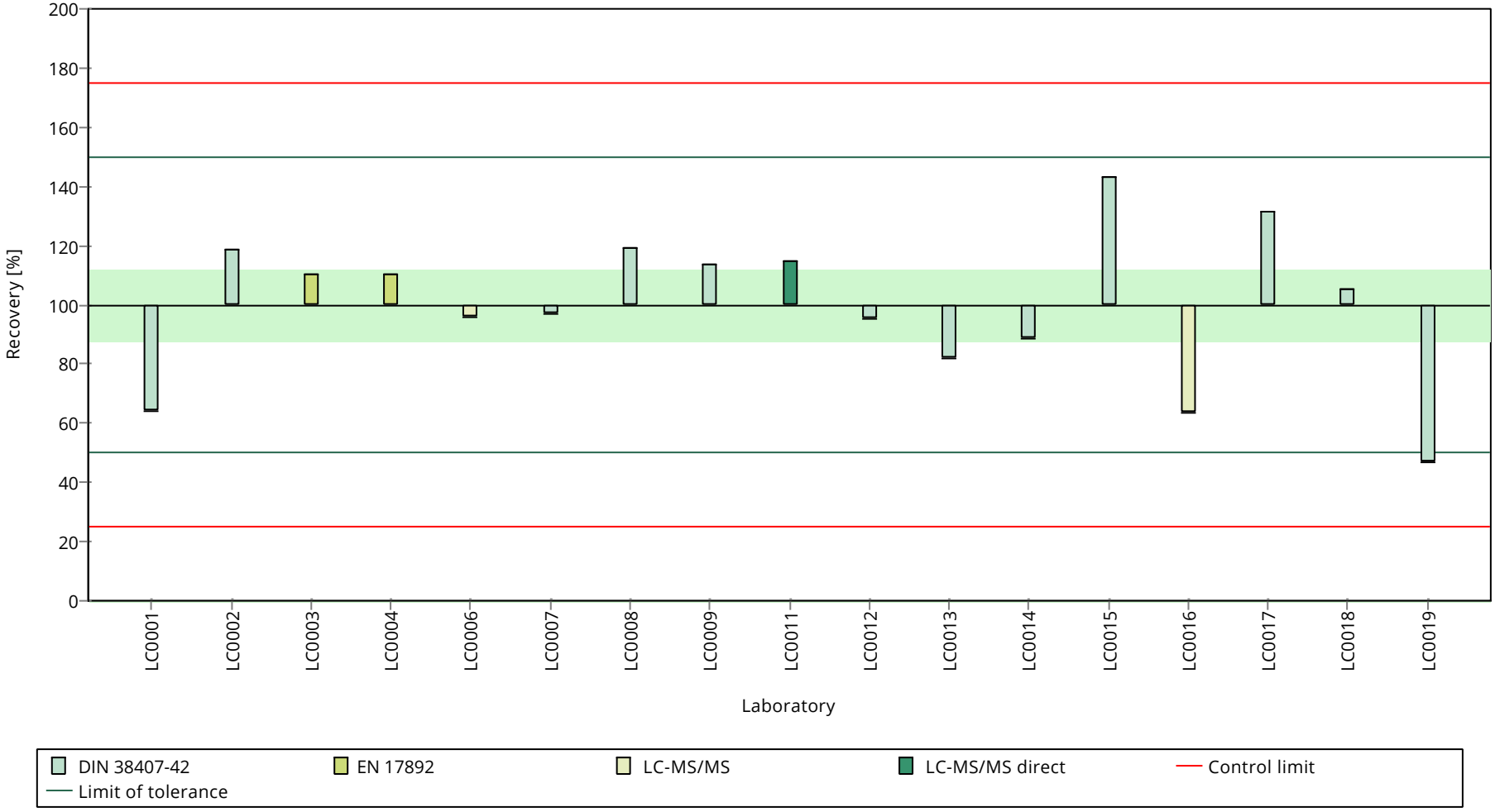
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0219 ± 0.00401	0.0219 ± 0.00401	µg/l
Minimum	0.0103	0.0103	µg/l
Maximum	0.0313	0.0313	µg/l
Standard deviation	0.00552	0.00552	µg/l
rel. standard deviation	25.2	25.2	%
n	17	17	-

Graphical presentation of results

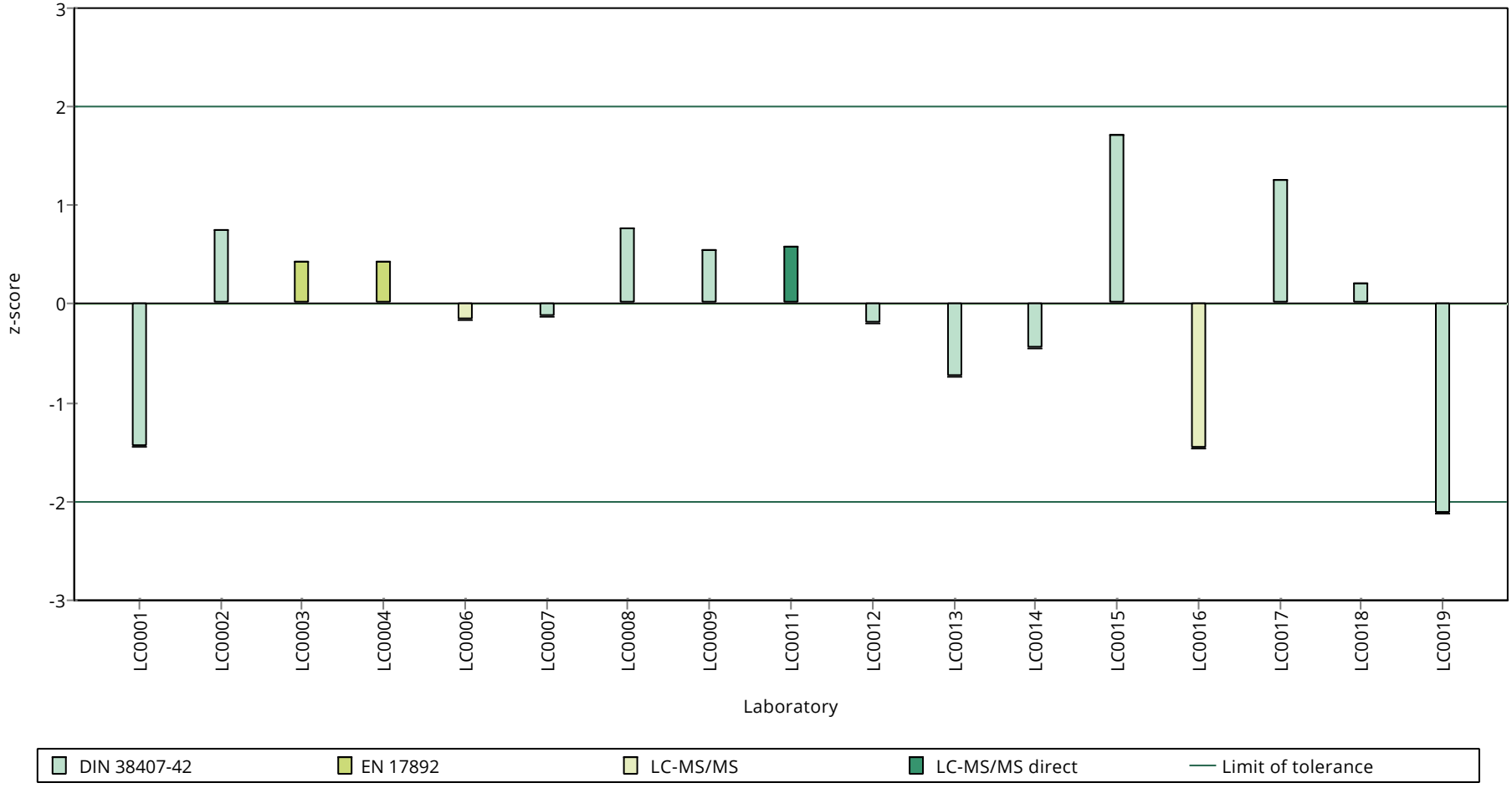
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B10

Perfluoropentane sulfonic acid (PFPeS) - PF5S

Unit	µg/l
Assigned value ± U (k=2)	0.00581 ± 0.00043
Criterion	0.00145 (25 %)
Minimum - Maximum	0.00466 - 0.007
Control test value ± U (k=2)	0.00510 ± 0.00153

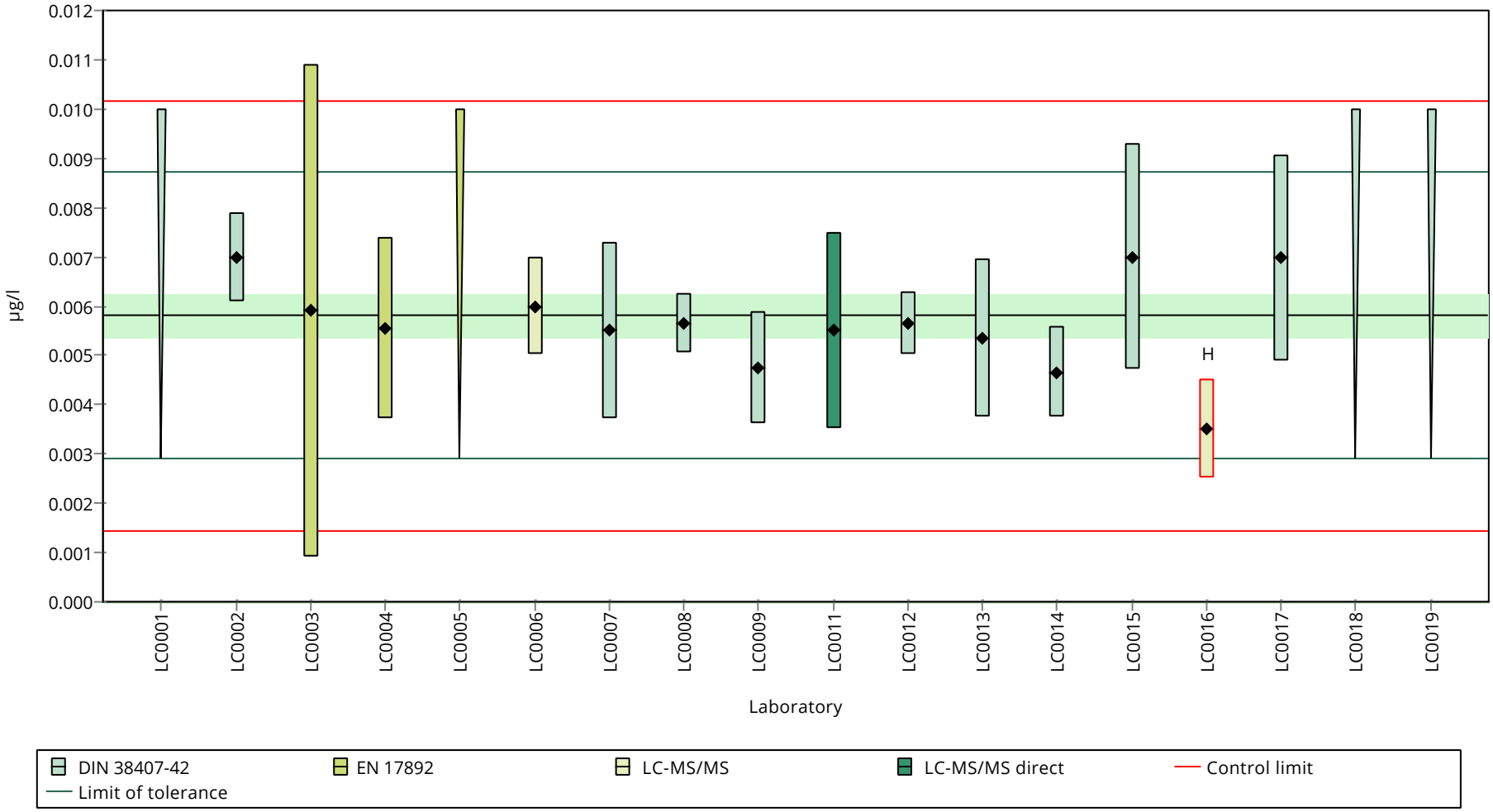
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	0.007	±	0.0009	121	0.82	
LC0003	0.0059	±	0.005	102	0.06	
LC0004	0.00555	±	0.00184	95.6	-0.18	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.006	±	0.001	103	0.13	
LC0007	0.0055	±	0.0018	94.7	-0.21	
LC0008	0.00564	±	0.0006	97.1	-0.11	
LC0009	0.00475	±	0.00112	81.8	-0.73	
LC0010	-	±	-	-	-	
LC0011	0.0055	±	0.002	94.7	-0.21	
LC0012	0.00565	±	0.00063	97.3	-0.11	
LC0013	0.00536	±	0.0016	92.3	-0.31	
LC0014	0.00466	±	0.00093	80.3	-0.79	
LC0015	0.007	±	0.0023	121	0.82	
LC0016	0.0035	±	0.001	60.3	-1.59	H
LC0017	0.00698	±	0.00209	120	0.81	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

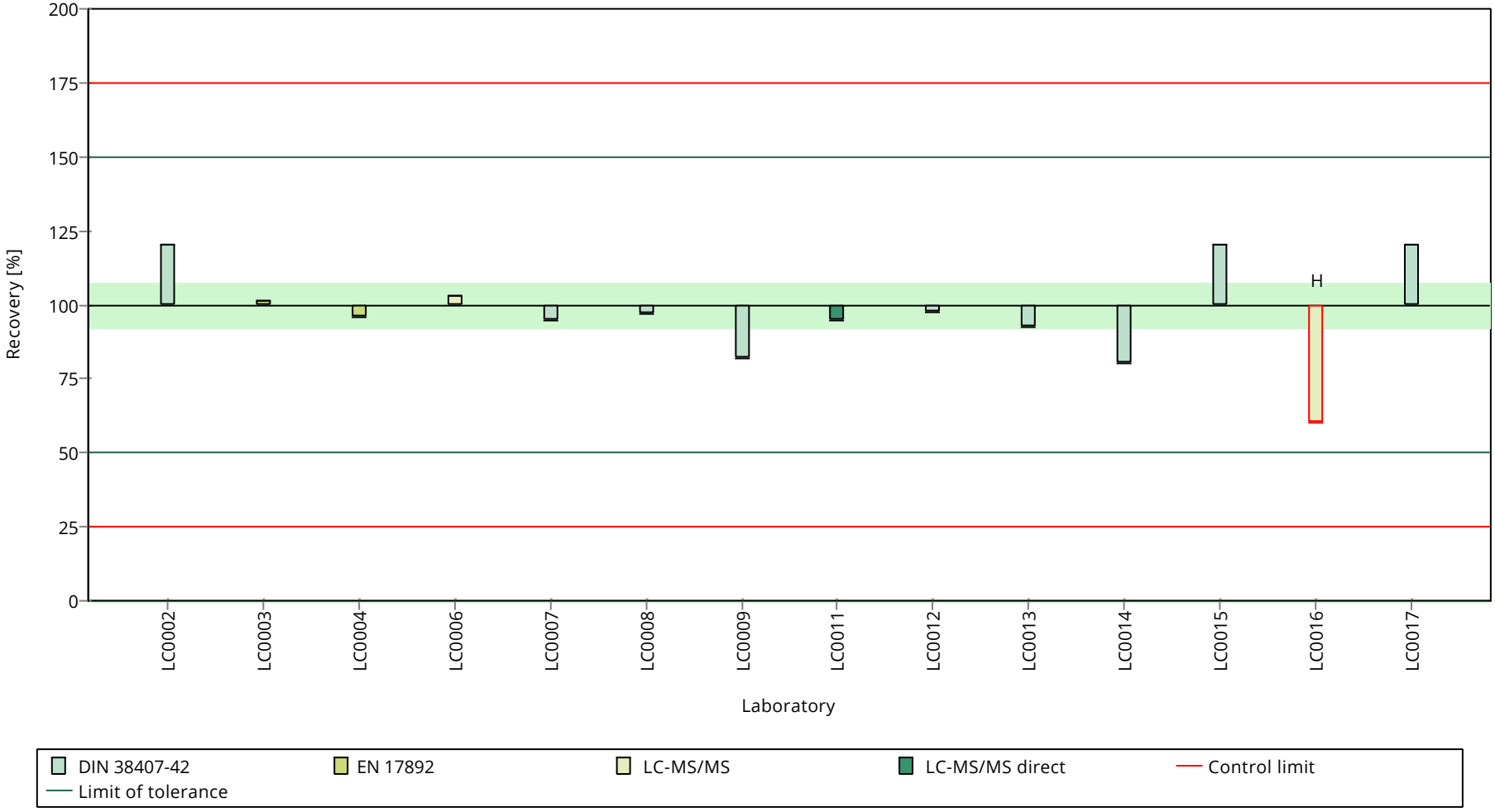
	all results	without outliers	Unit
Mean ± Cl (99%)	0.00564 ± 0.000775	0.00581 ± 0.000645	µg/l
Minimum	0.0035	0.00466	µg/l
Maximum	0.007	0.007	µg/l
Standard deviation	0.000967	0.000775	µg/l
rel. standard deviation	17.1	13.4	%
n	14	13	-

Graphical presentation of results

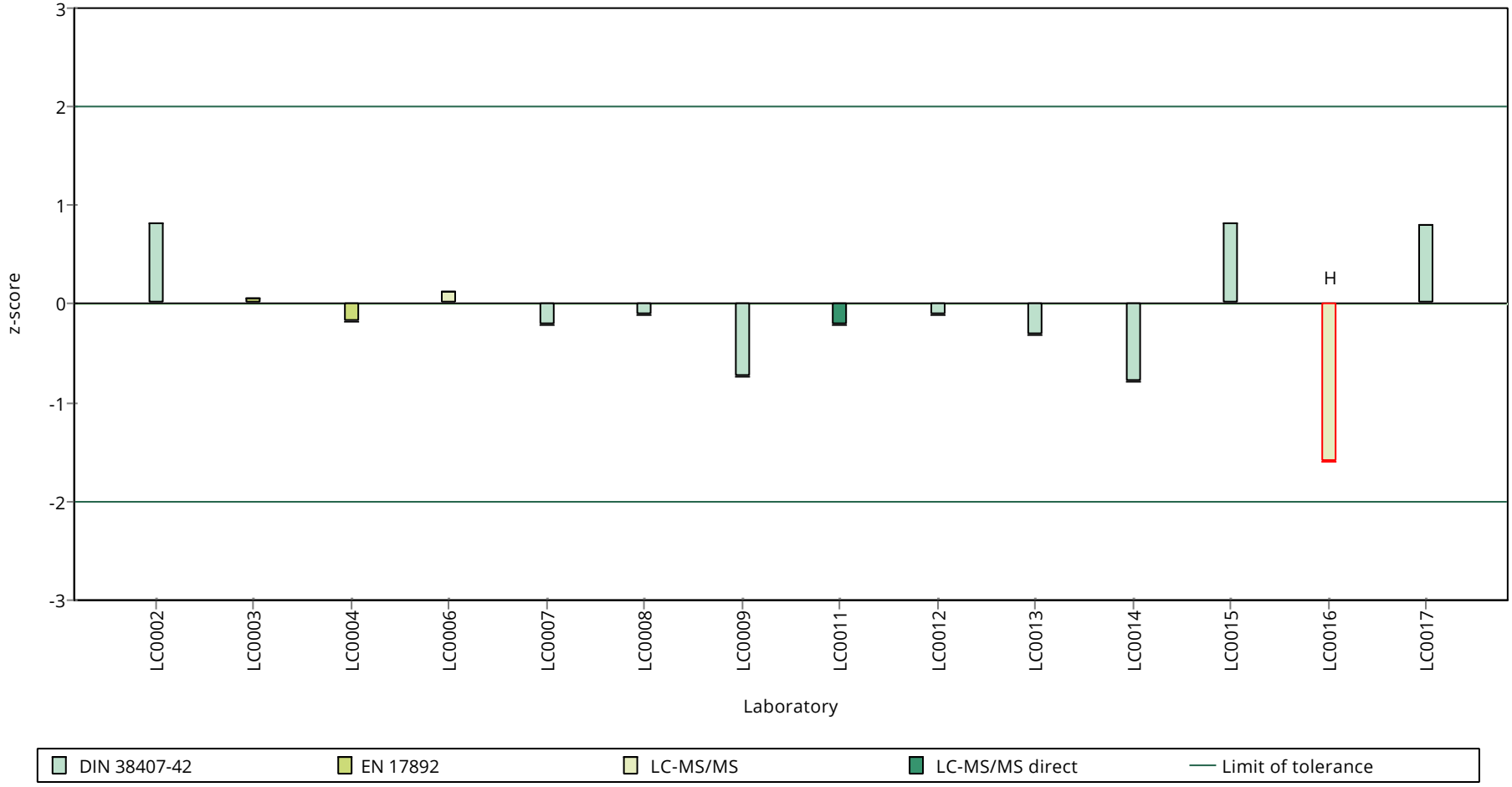
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A02

linear Perfluorohexane sulfonic acid (n-PFHxS)

Unit	µg/l
Assigned value ± U (k=2)	0.0644 ± 0.0102
Criterion	0.0161 (25 %)
Minimum - Maximum	0.0389 - 0.0856
Control test value ± U (k=2)	0.0540 ± 0.0162

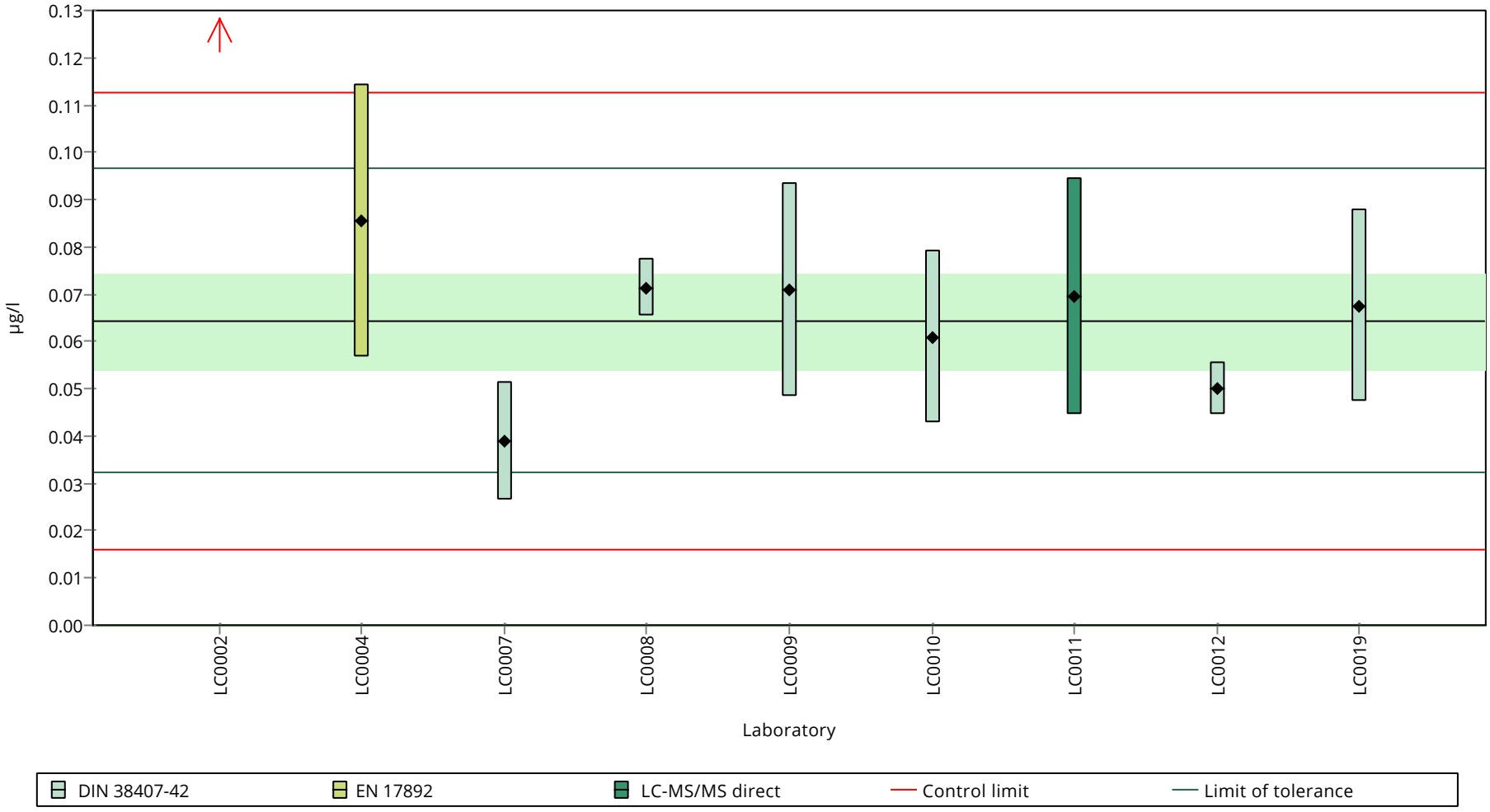
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.13 ± 0.0117	202	4.08	H
LC0003	- ± -	-	-	
LC0004	0.0856 ± 0.0289	133	1.32	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.0389 ± 0.0124	60.4	-1.58	
LC0008	0.0714 ± 0.006	111	0.44	
LC0009	0.071 ± 0.02265	110	0.41	
LC0010	0.061 ± 0.0184	94.7	-0.21	
LC0011	0.0696 ± 0.0251	108	0.32	
LC0012	0.05 ± 0.0055	77.7	-0.89	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.0676 ± 0.0203	105	0.2	

Characteristics of parameter

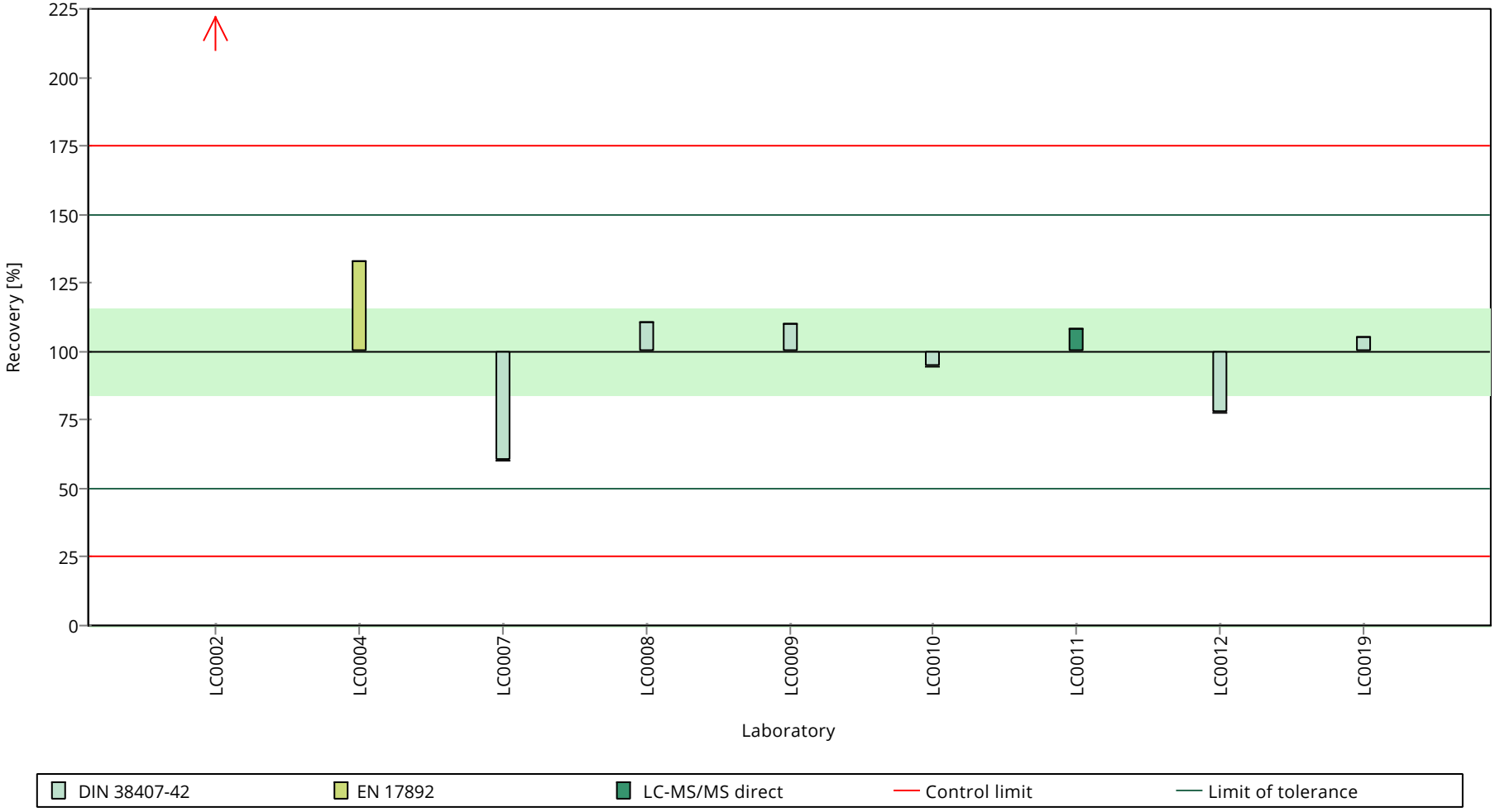
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0717 ± 0.0257	0.0644 ± 0.0153	µg/l
Minimum	0.0389	0.0389	µg/l
Maximum	0.13	0.0856	µg/l
Standard deviation	0.0257	0.0144	µg/l
rel. standard deviation	35.8	22.3	%
n	9	8	-

Graphical presentation of results

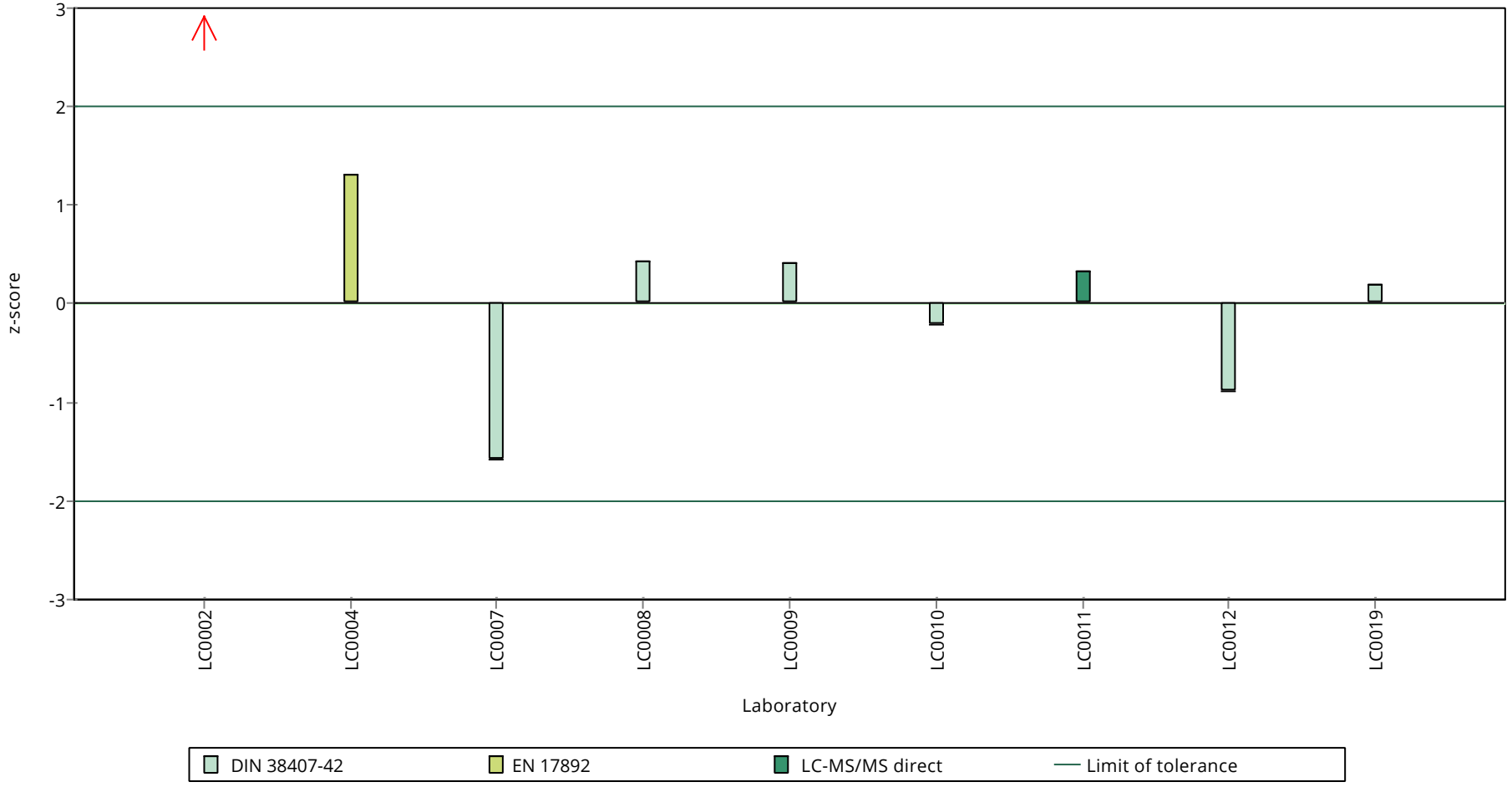
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0004
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

linear Perfluorohexane sulfonic acid (n-PFHxS)

Unit	µg/l
Assigned value ± U (k=2)	0.0414 ± 0.00506
Criterion	0.00827 (20 %)
Minimum - Maximum	0.031 - 0.0487
Control test value ± U (k=2)	0.0360 ± 0.0108

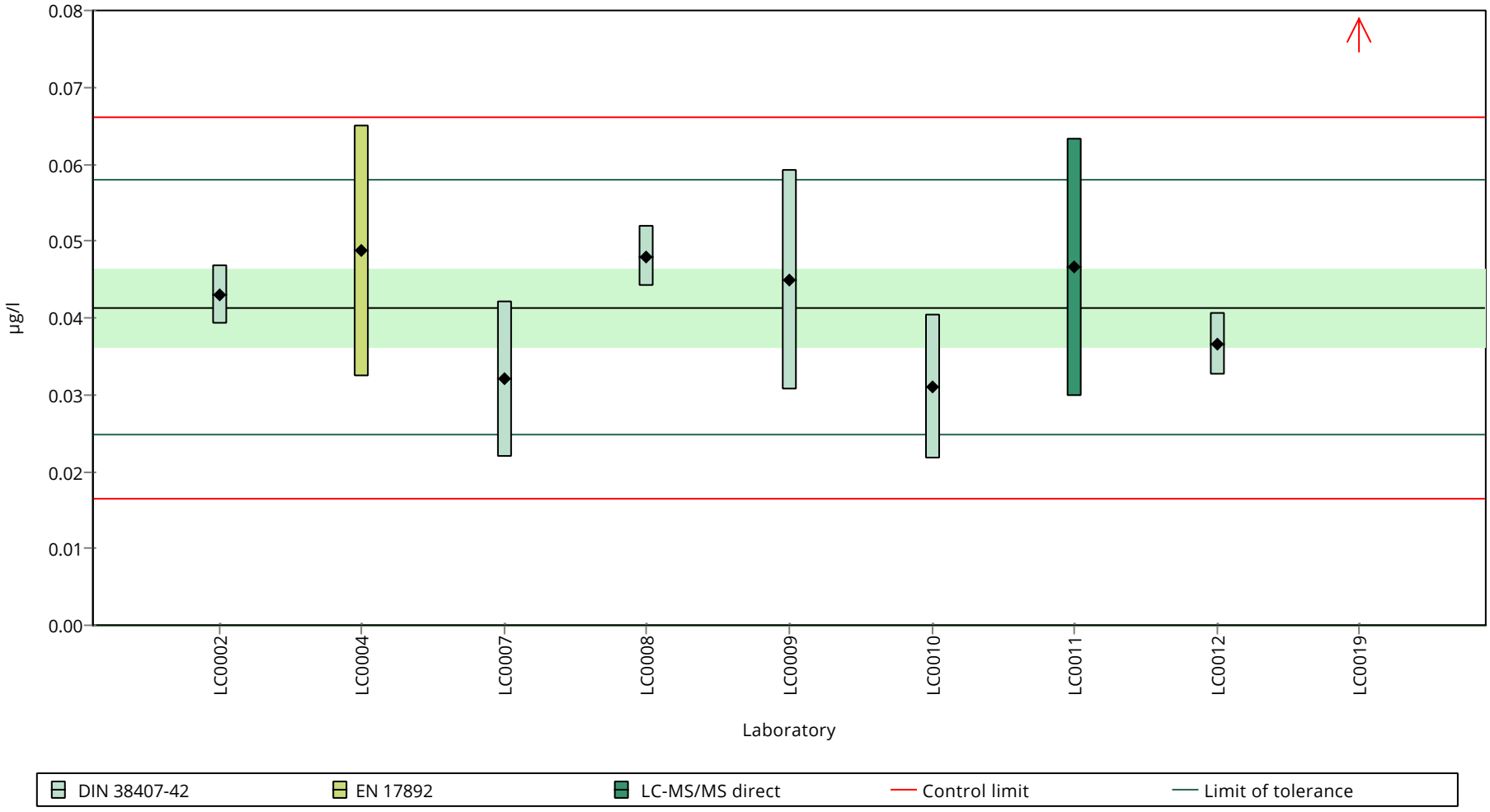
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.043 ± 0.0039	104	0.2	
LC0003	- ± -	-	-	
LC0004	0.0487 ± 0.0164	118	0.89	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.032 ± 0.0102	77.4	-1.13	
LC0008	0.048 ± 0.00404	116	0.8	
LC0009	0.04491 ± 0.01433	109	0.43	
LC0010	0.031 ± 0.0095	75	-1.25	
LC0011	0.0466 ± 0.0168	113	0.63	
LC0012	0.0366 ± 0.004	88.5	-0.57	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.104 ± 0.031	252	7.58	H

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0483 ± 0.0219	0.0414 ± 0.00759	µg/l
Minimum	0.031	0.031	µg/l
Maximum	0.104	0.0487	µg/l
Standard deviation	0.0219	0.00715	µg/l
rel. standard deviation	45.4	17.3	%
n	9	8	-

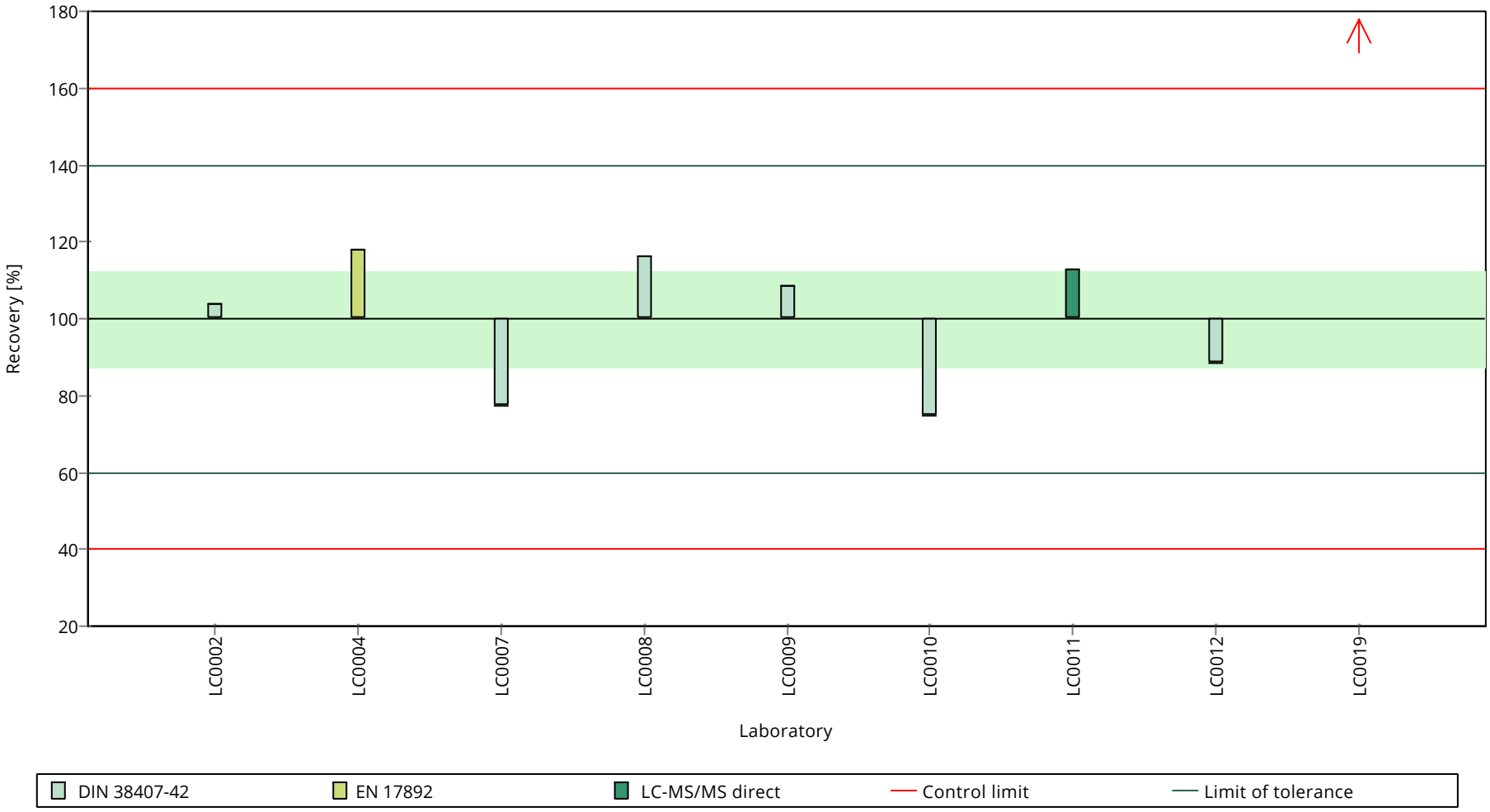
Graphical presentation of results

Results

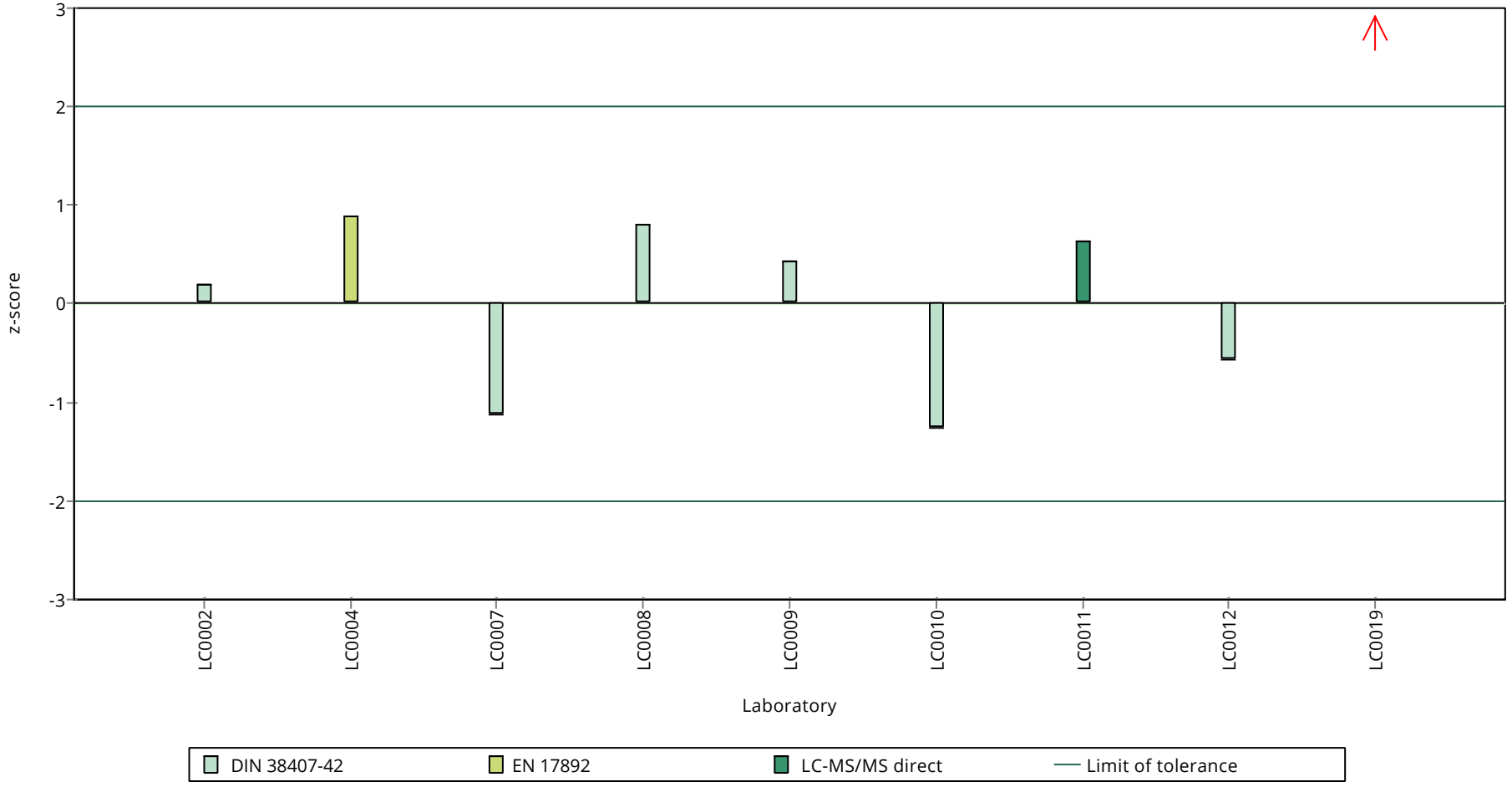


Sample: PFL01A10, Parameter: linear Perfluorohexane sulfonic acid (n-PFHxS)

Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0004
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

linear Perfluorohexane sulfonic acid (n-PFHxS)

Unit	µg/l
Assigned value ± U (k=2)	0.137 ± 0.0354
Criterion	0.0534 (39 %)
Minimum - Maximum	0.032 - 0.196
Control test value ± U (k=2)	0.158 ± 0.0475

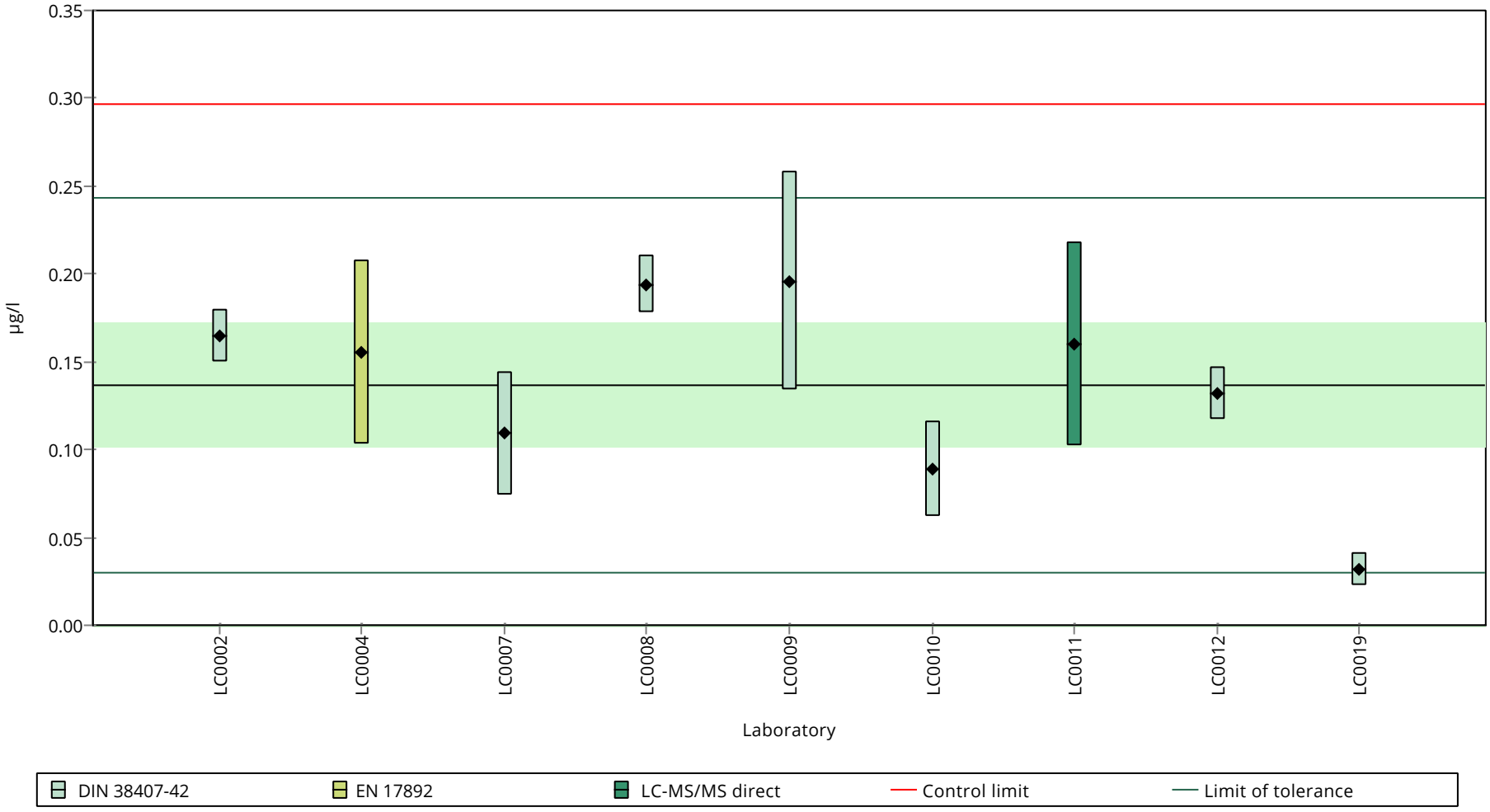
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.165 ± 0.0149	121	0.53	
LC0003	- ± -	-	-	
LC0004	0.155 ± 0.0524	113	0.34	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.1092 ± 0.0349	79.8	-0.52	
LC0008	0.194 ± 0.0163	142	1.07	
LC0009	0.196 ± 0.06253	143	1.11	
LC0010	0.089 ± 0.0269	65	-0.9	
LC0011	0.16 ± 0.0576	117	0.43	
LC0012	0.132 ± 0.015	96.4	-0.09	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.032 ± 0.0096	23.4	-1.96	

Characteristics of parameter

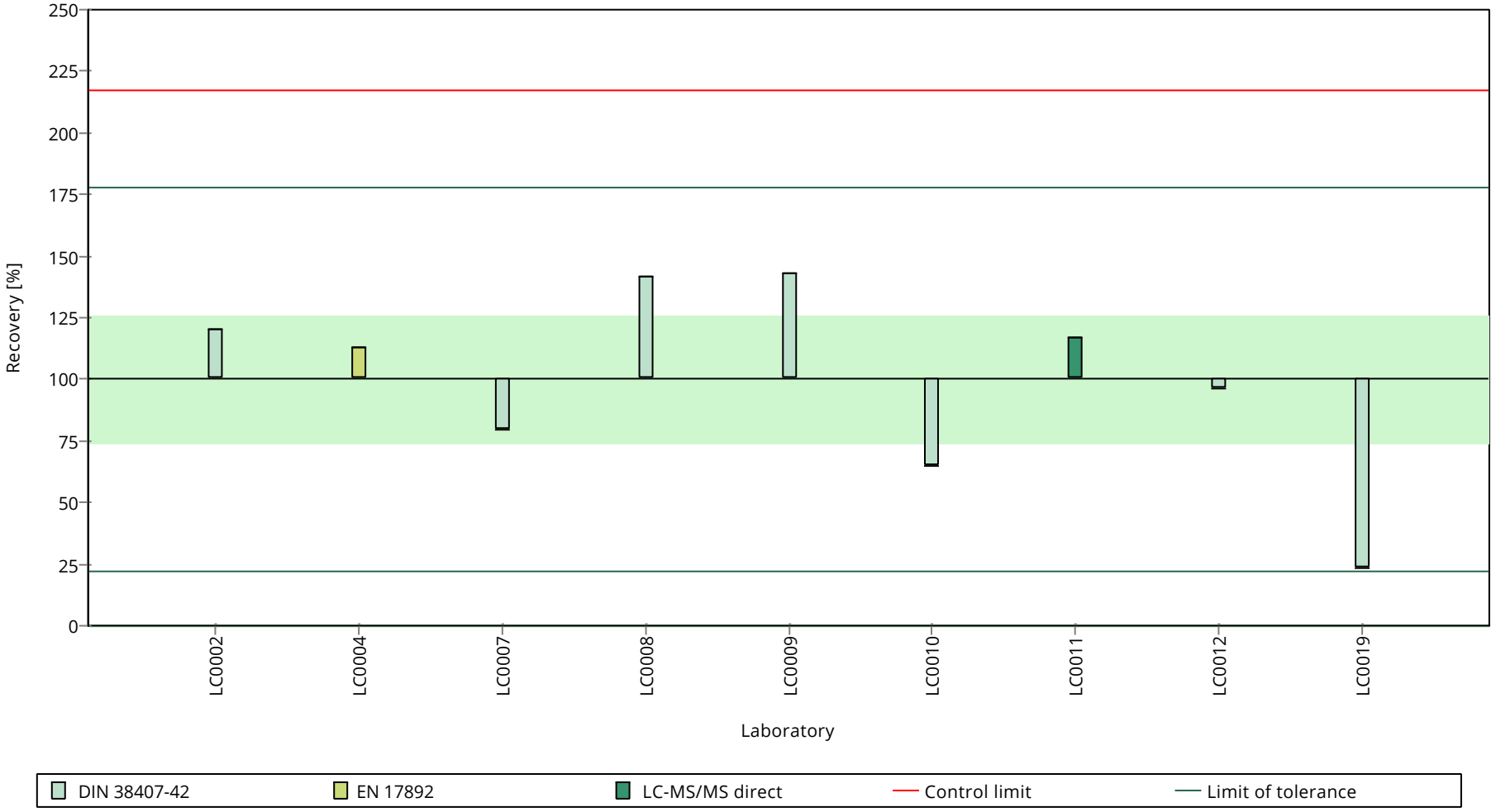
	all results	without outliers	Unit
Mean ± Cl (99%)	0.137 ± 0.053	0.137 ± 0.053	µg/l
Minimum	0.032	0.032	µg/l
Maximum	0.196	0.196	µg/l
Standard deviation	0.053	0.053	µg/l
rel. standard deviation	38.7	38.7	%
n	9	9	-

Graphical presentation of results

Results

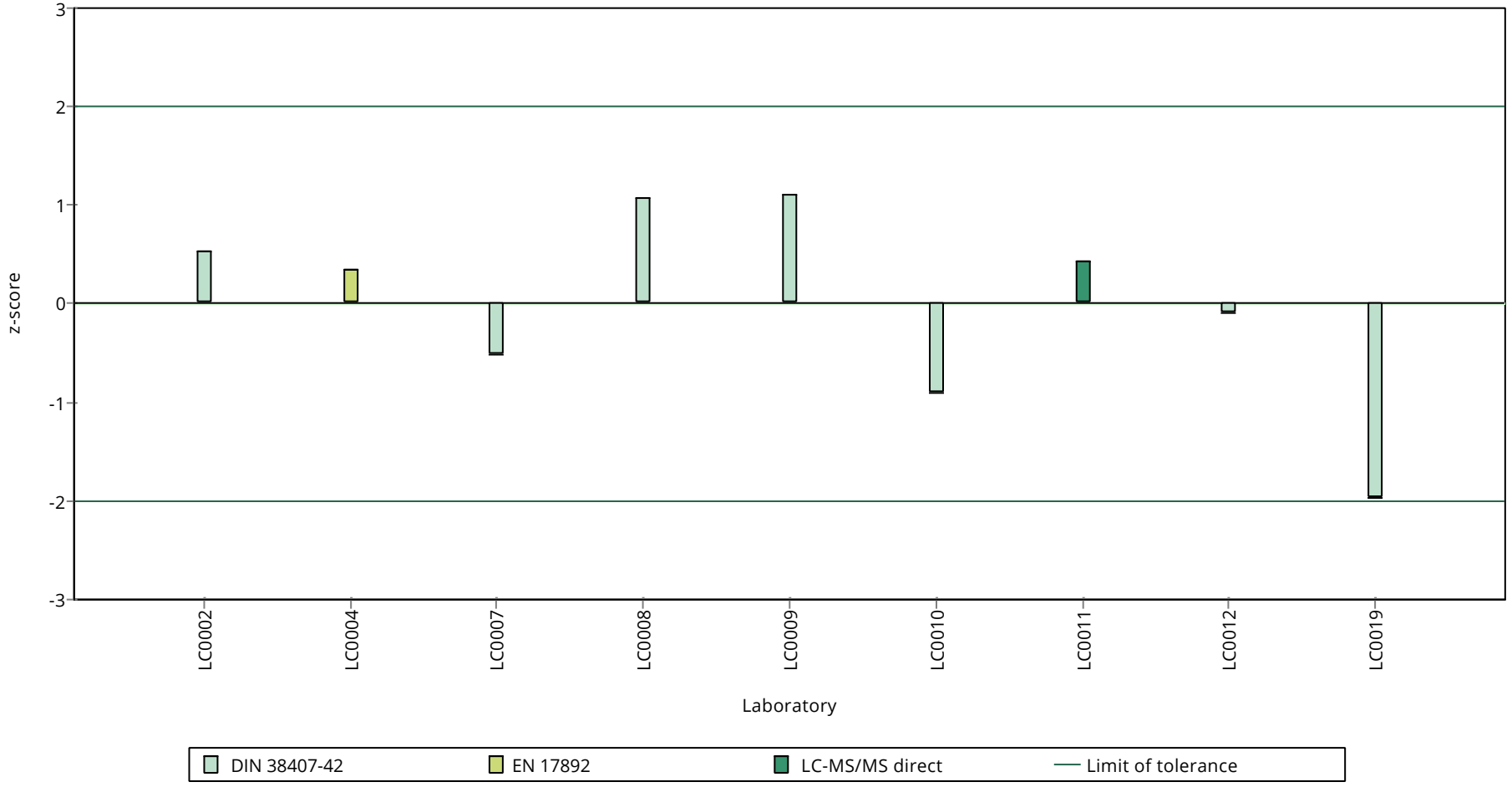


Recovery rate



Sample: PFL01B02, Parameter: linear Perfluorohexane sulfonic acid (n-PFHxS)

z-Score



Parameter oriented report

PFL01B10

linear Perfluorohexane sulfonic acid (n-PFHxS)

Unit	µg/l
Assigned value ± U (k=2)	0.0488 ± 0.00781
Criterion	0.0122 (25 %)
Minimum - Maximum	0.028 - 0.0622
Control test value ± U (k=2)	0.0509 ± 0.0153

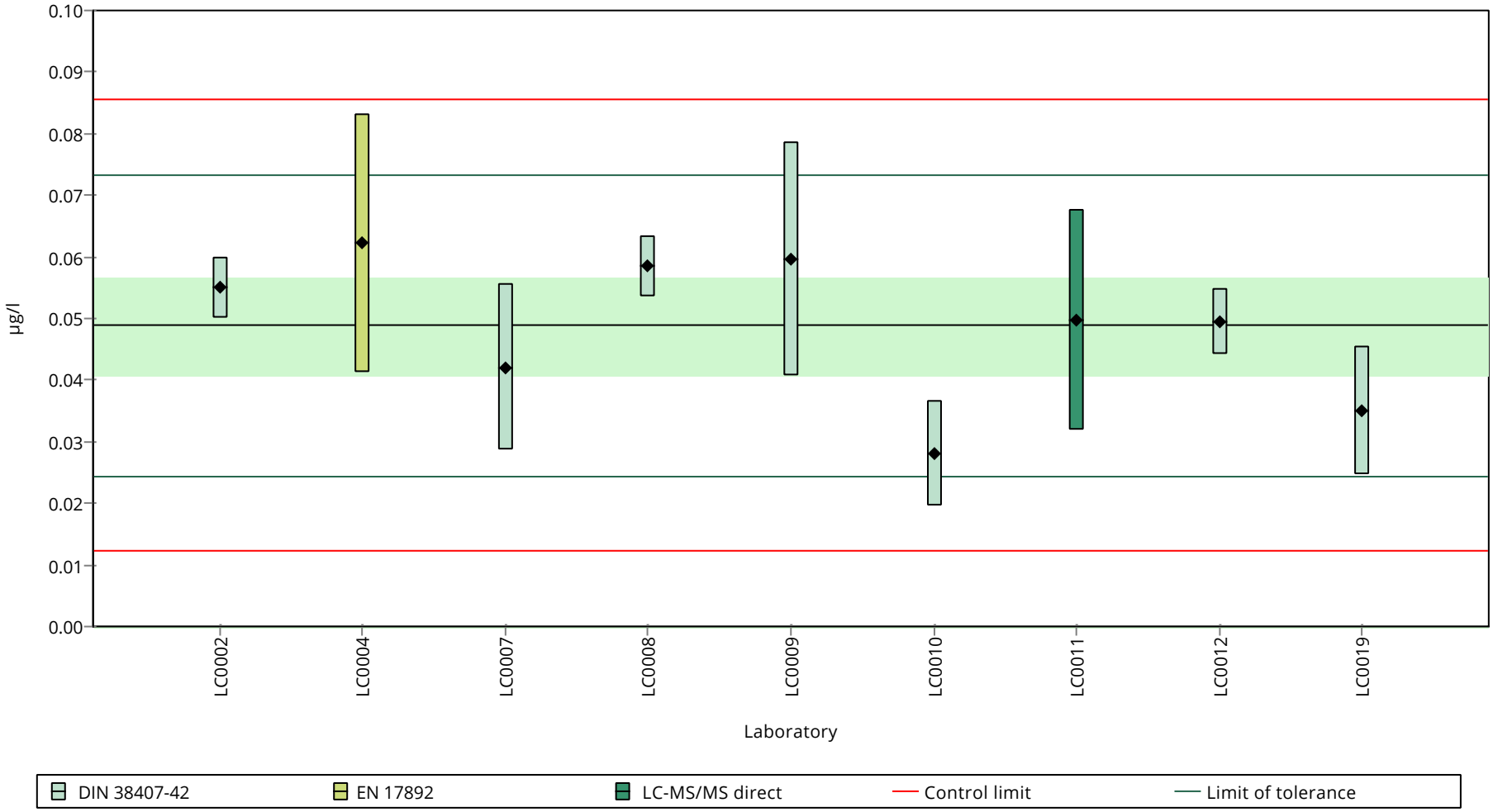
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.055 ± 0.0049	113	0.51	
LC0003	- ± -	-	-	
LC0004	0.0622 ± 0.021	127	1.1	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.0421 ± 0.0135	86.2	-0.55	
LC0008	0.0585 ± 0.00492	120	0.79	
LC0009	0.05956 ± 0.019	122	0.88	
LC0010	0.028 ± 0.0086	57.3	-1.71	
LC0011	0.0497 ± 0.0179	102	0.07	
LC0012	0.0494 ± 0.0054	101	0.05	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.035 ± 0.0105	71.7	-1.13	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0488 ± 0.0117	0.0488 ± 0.0117	µg/l
Minimum	0.028	0.028	µg/l
Maximum	0.0622	0.0622	µg/l
Standard deviation	0.0117	0.0117	µg/l
rel. standard deviation	24	24	%
n	9	9	-

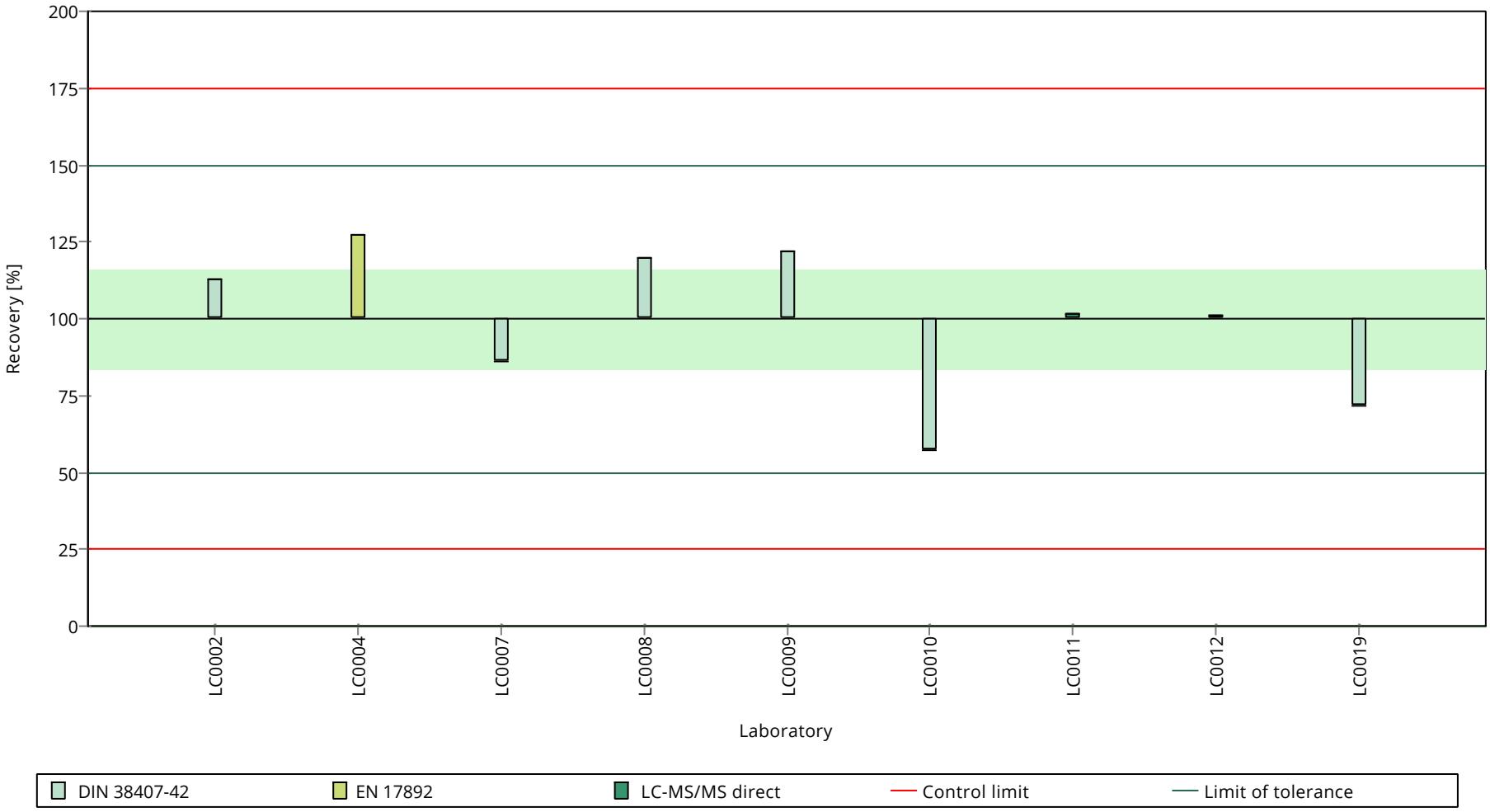
Graphical presentation of results

Results



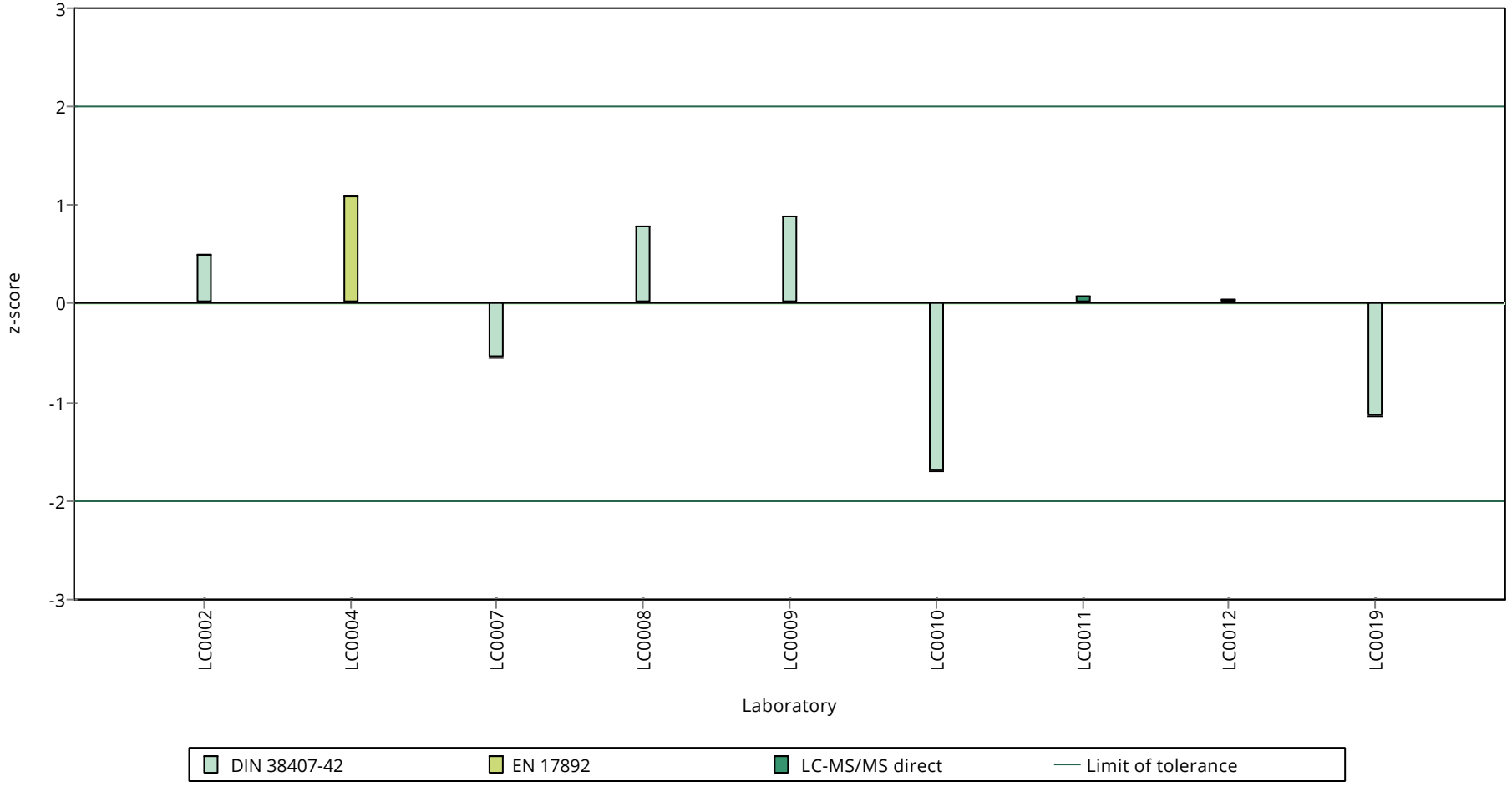
Sample: PFL01B10, Parameter: linear Perfluorohexane sulfonic acid (n-PFHxS)

Recovery rate



Sample: PFL01B10, Parameter: linear Perfluorohexane sulfonic acid (n-PFHxS)

z-Score



Parameter oriented report

PFL01A02

Total PFHxS

Unit	µg/l
Assigned value ± U (k=2)	0.0788 ± 0.00997
Criterion	0.0197 (25 %)
Minimum - Maximum	0.0551 - 0.124
Control test value ± U (k=2)	0.0757 ± 0.0378

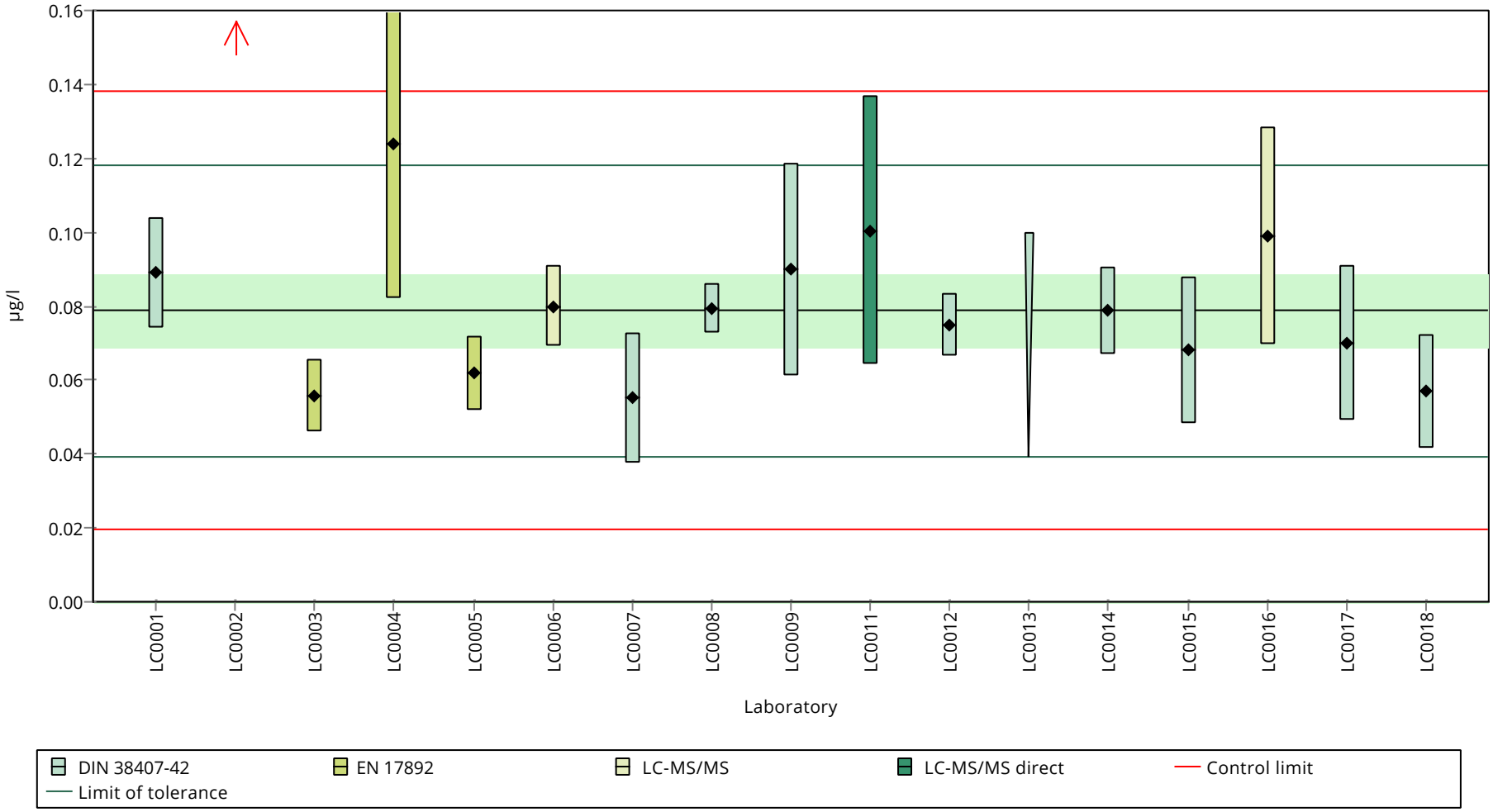
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.089 ± 0.015	113	0.52	
LC0002	0.165 ± 0.0149	209	4.37	H
LC0003	0.0557 ± 0.01	70.6	-1.17	
LC0004	0.124 ± 0.0418	157	2.29	
LC0005	0.0618 ± 0.01	78.4	-0.86	
LC0006	0.08 ± 0.011	101	0.06	
LC0007	0.0551 ± 0.0176	69.9	-1.2	
LC0008	0.0794 ± 0.00667	101	0.03	
LC0009	0.08996 ± 0.0287	114	0.56	
LC0010	- ± -	-	-	
LC0011	0.1005 ± 0.0362	127	1.1	
LC0012	0.0749 ± 0.0083	95	-0.2	
LC0013	< 0.1 (LOQ) ± -	-	-	
LC0014	0.0787 ± 0.0118	99.8	-0.01	
LC0015	0.068 ± 0.02	86.2	-0.55	
LC0016	0.0988 ± 0.0294	125	1.01	
LC0017	0.0698 ± 0.0209	88.5	-0.46	
LC0018	0.057 ± 0.0154	72.3	-1.11	
LC0019	- ± -	-	-	

Characteristics of parameter

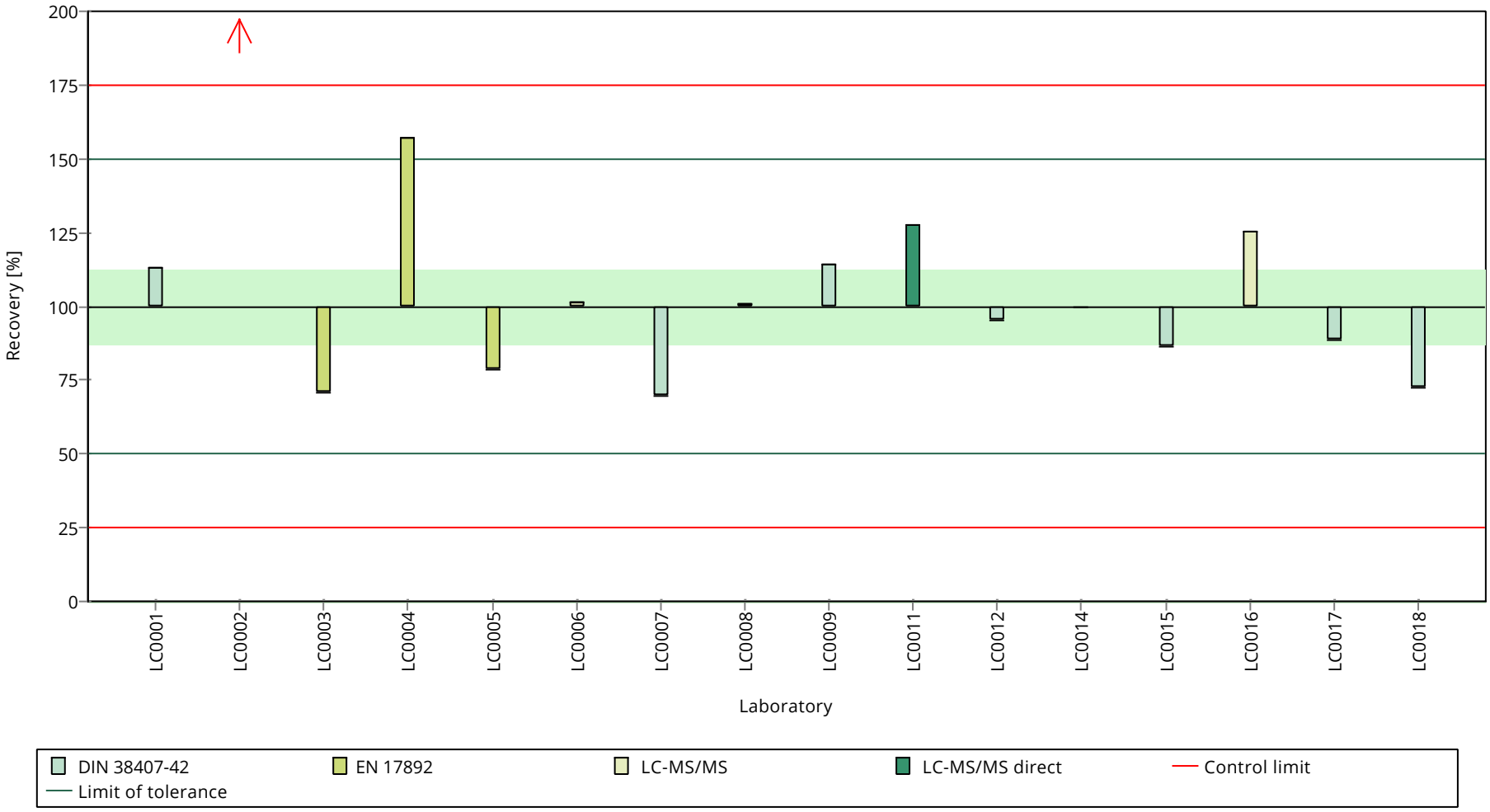
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0842 ± 0.0214	0.0788 ± 0.015	µg/l
Minimum	0.0551	0.0551	µg/l
Maximum	0.165	0.124	µg/l
Standard deviation	0.0285	0.0193	µg/l
rel. standard deviation	33.8	24.5	%
n	16	15	-

Graphical presentation of results

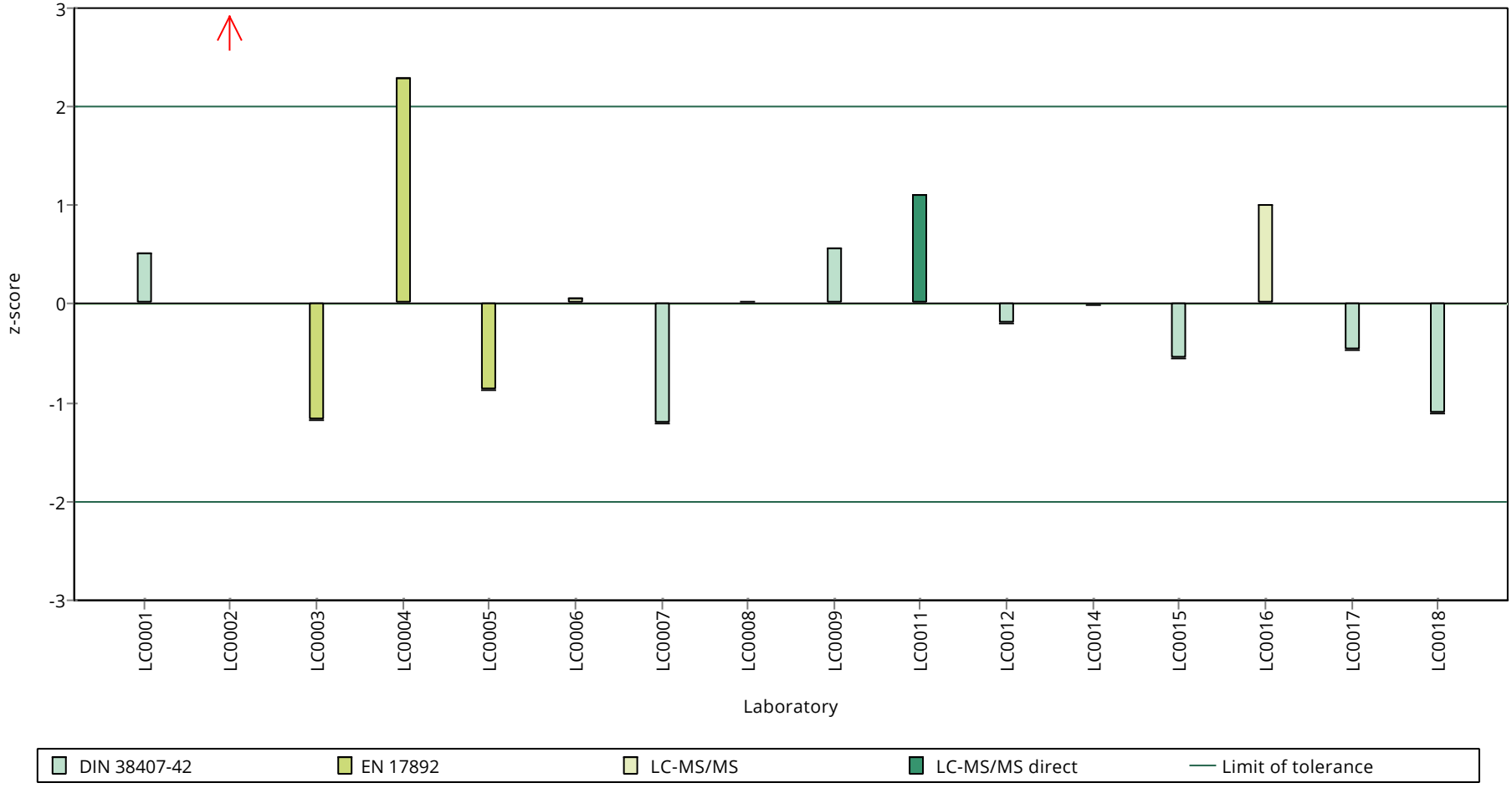
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Total PFHxS

Unit	µg/l
Assigned value ± U (k=2)	0.0477 ± 0.00435
Criterion	0.00954 (20 %)
Minimum - Maximum	0.0349 - 0.0627
Control test value ± U (k=2)	0.047 ± 0.0216

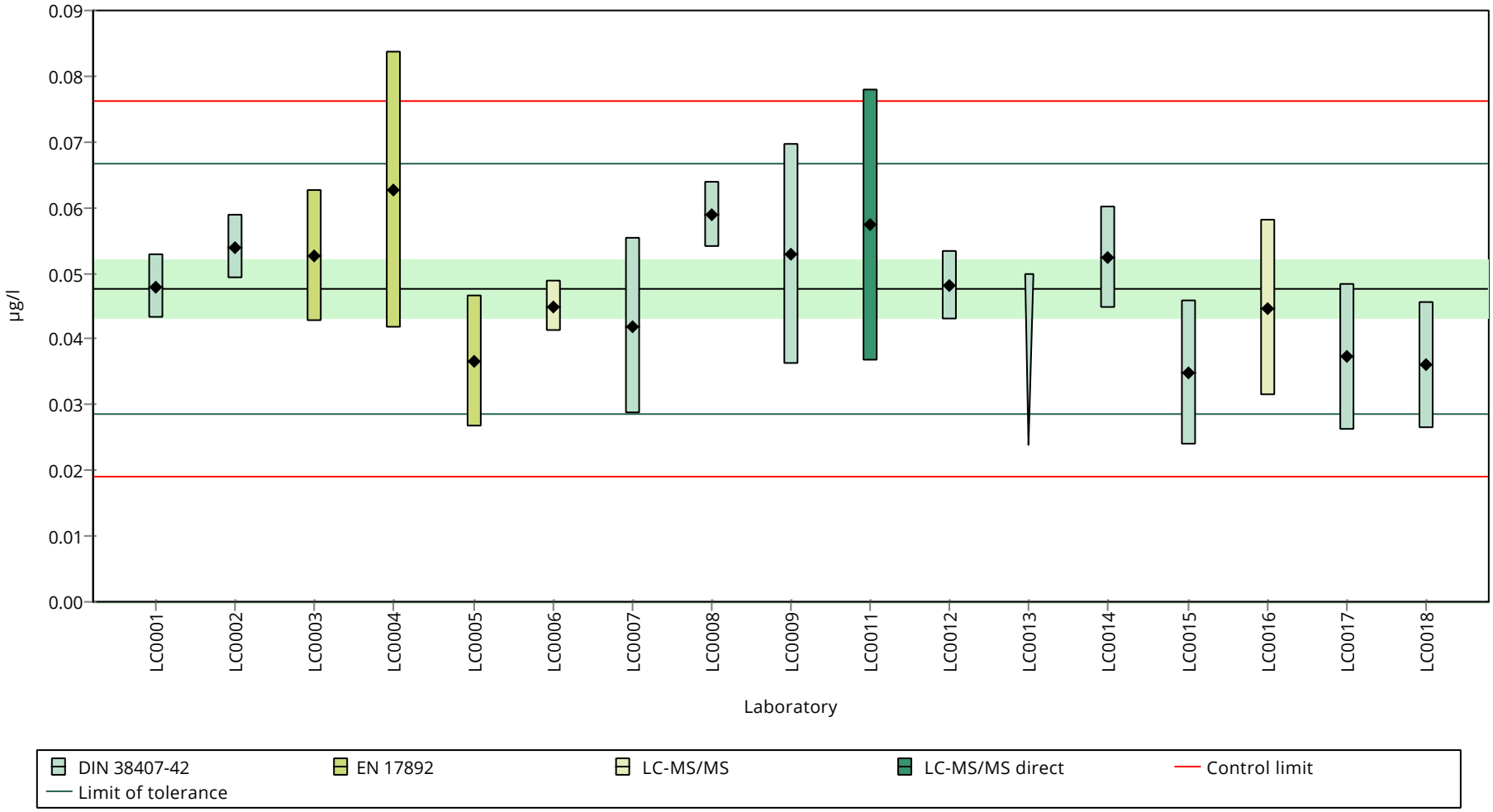
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.048 ± 0.005	101	0.03	
LC0002	0.054 ± 0.0049	113	0.66	
LC0003	0.0526 ± 0.01	110	0.51	
LC0004	0.0627 ± 0.0211	131	1.57	
LC0005	0.0366 ± 0.01	76.7	-1.16	
LC0006	0.045 ± 0.004	94.3	-0.28	
LC0007	0.0419 ± 0.0134	87.8	-0.61	
LC0008	0.0589 ± 0.00495	123	1.17	
LC0009	0.05286 ± 0.01686	111	0.54	
LC0010	- ± -	-	-	
LC0011	0.0573 ± 0.0206	120	1.01	
LC0012	0.0481 ± 0.0053	101	0.04	
LC0013	< 0.05 (LOQ) ± -	-	-	
LC0014	0.0523 ± 0.0078	110	0.48	
LC0015	0.0349 ± 0.011	73.2	-1.34	
LC0016	0.0447 ± 0.0134	93.7	-0.31	
LC0017	0.0373 ± 0.0112	78.2	-1.09	
LC0018	0.036 ± 0.0096	75.5	-1.23	
LC0019	- ± -	-	-	

Characteristics of parameter

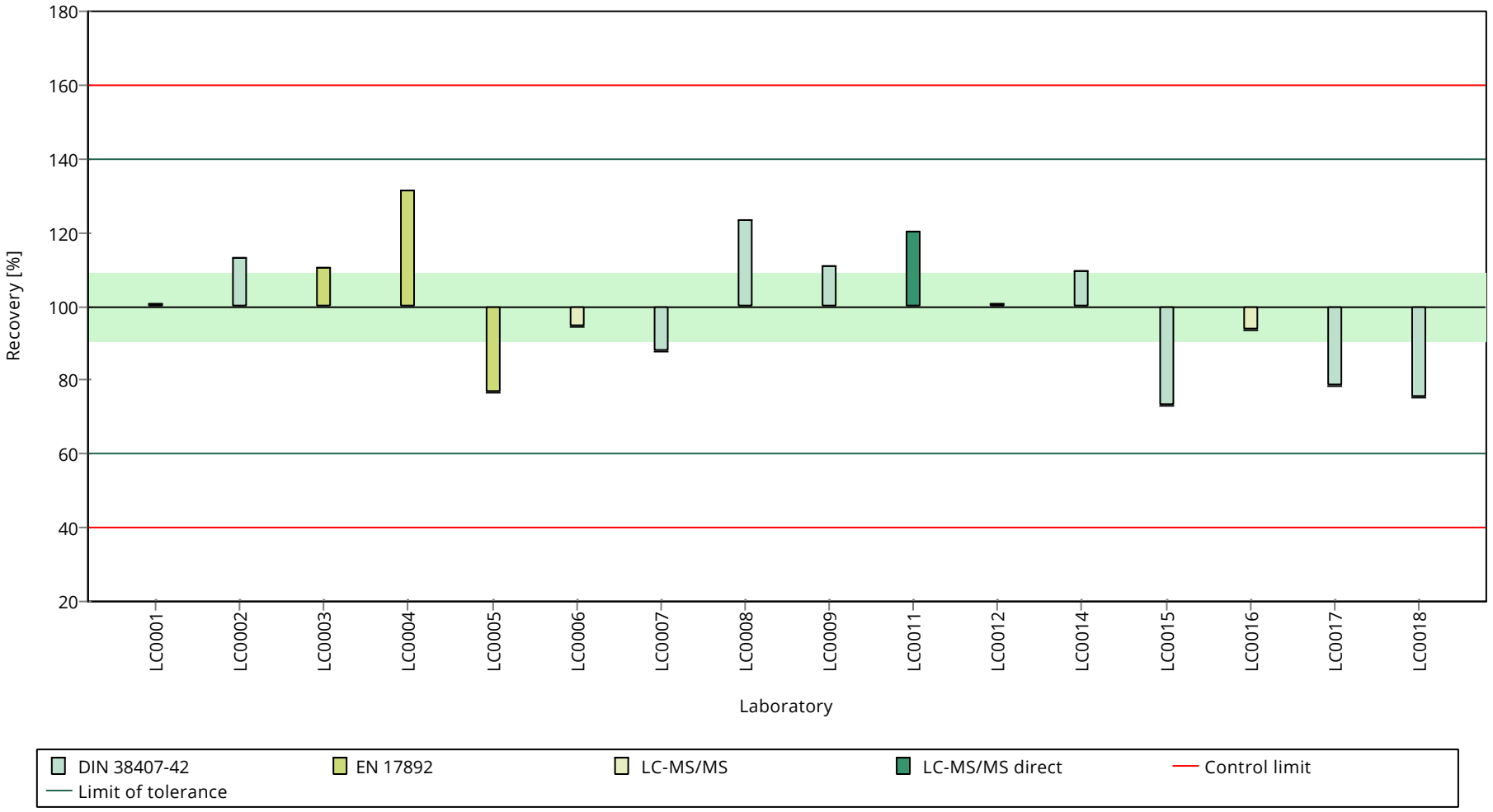
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0477 ± 0.00653	0.0477 ± 0.00653	µg/l
Minimum	0.0349	0.0349	µg/l
Maximum	0.0627	0.0627	µg/l
Standard deviation	0.0087	0.0087	µg/l
rel. standard deviation	18.2	18.2	%
n	16	16	-

Graphical presentation of results

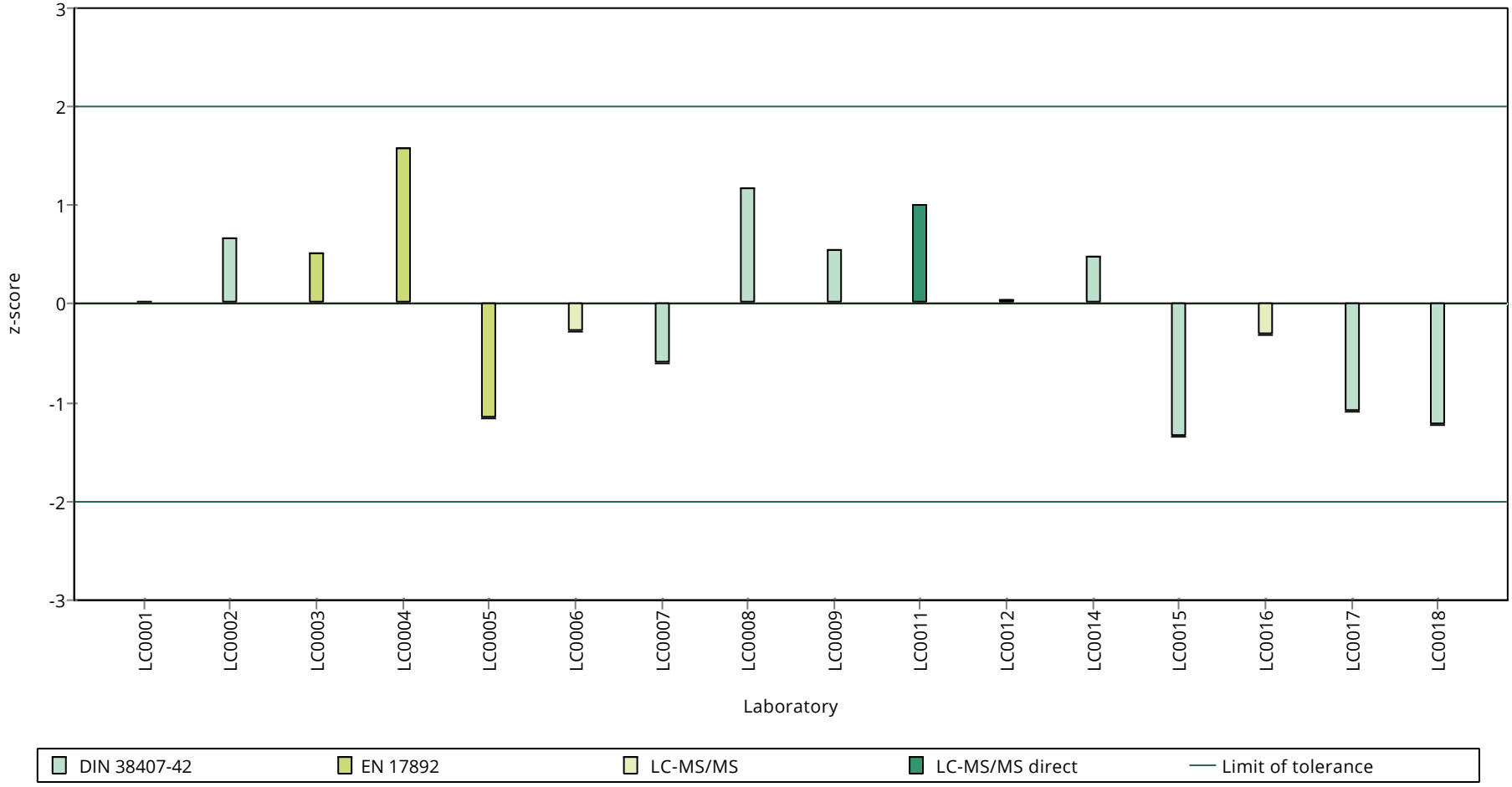
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Total PFHxS

Unit	µg/l
Assigned value ± U (k=2)	0.167 ± 0.0151
Criterion	0.0417 (25 %)
Minimum - Maximum	0.119 - 0.216
Control test value ± U (k=2)	0.174 ± 0.0627

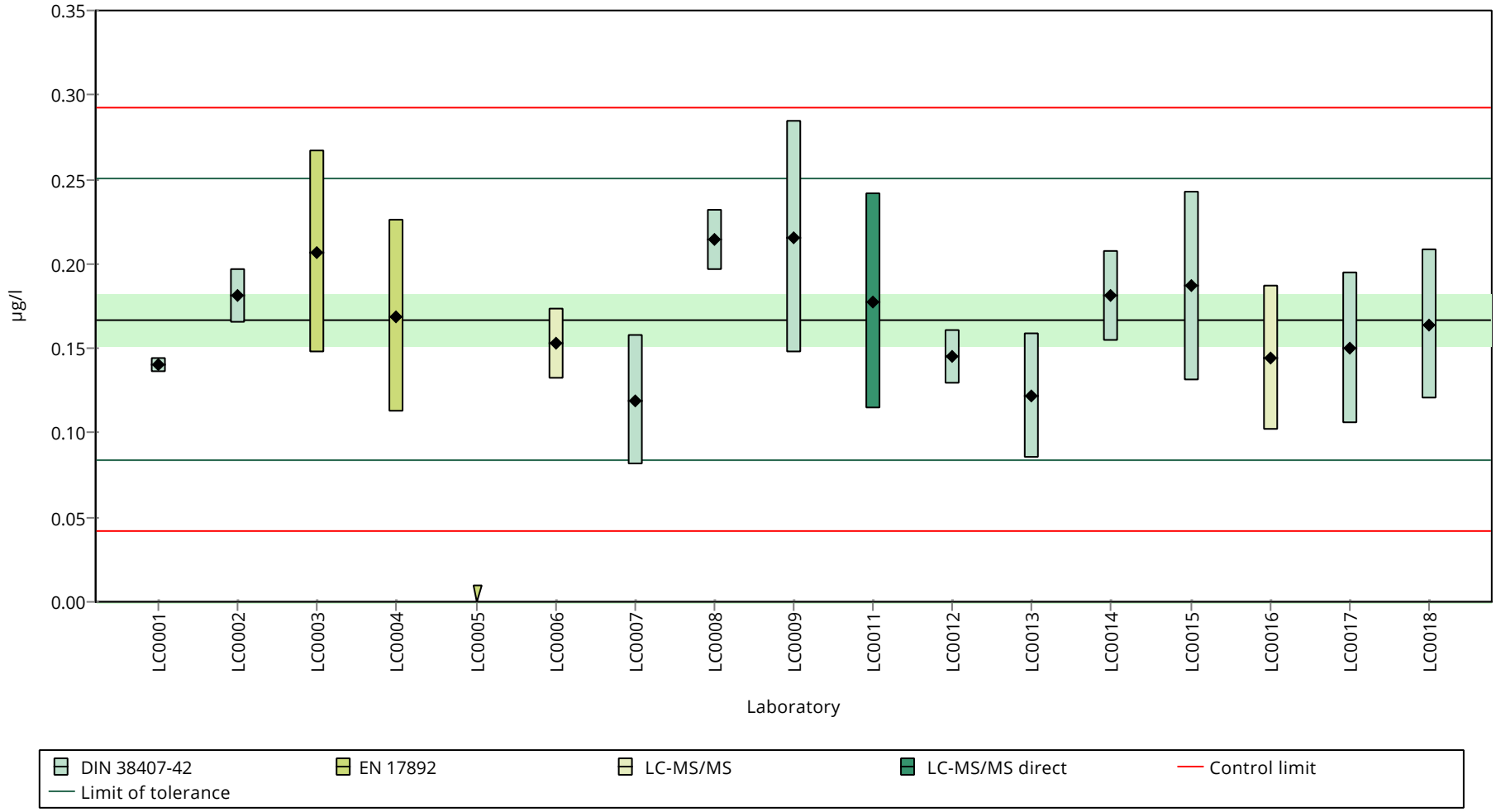
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.14 ± 0.004	83.9	-0.64	
LC0002	0.181 ± 0.0163	108	0.34	
LC0003	0.207 ± 0.06	124	0.96	
LC0004	0.169 ± 0.0568	101	0.05	
LC0005	< 0.01 (LOQ) ± -	-	-	FN
LC0006	0.153 ± 0.021	91.7	-0.33	
LC0007	0.1193 ± 0.0382	71.5	-1.14	
LC0008	0.214 ± 0.0179	128	1.13	
LC0009	0.21566 ± 0.06881	129	1.17	
LC0010	- ± -	-	-	
LC0011	0.1778 ± 0.064	107	0.26	
LC0012	0.145 ± 0.016	86.9	-0.52	
LC0013	0.122 ± 0.037	73.1	-1.08	
LC0014	0.181 ± 0.027	108	0.34	
LC0015	0.187 ± 0.056	112	0.48	
LC0016	0.144 ± 0.043	86.3	-0.55	
LC0017	0.15 ± 0.045	89.9	-0.4	
LC0018	0.164 ± 0.0442	98.3	-0.07	
LC0019	- ± -	-	-	

Characteristics of parameter

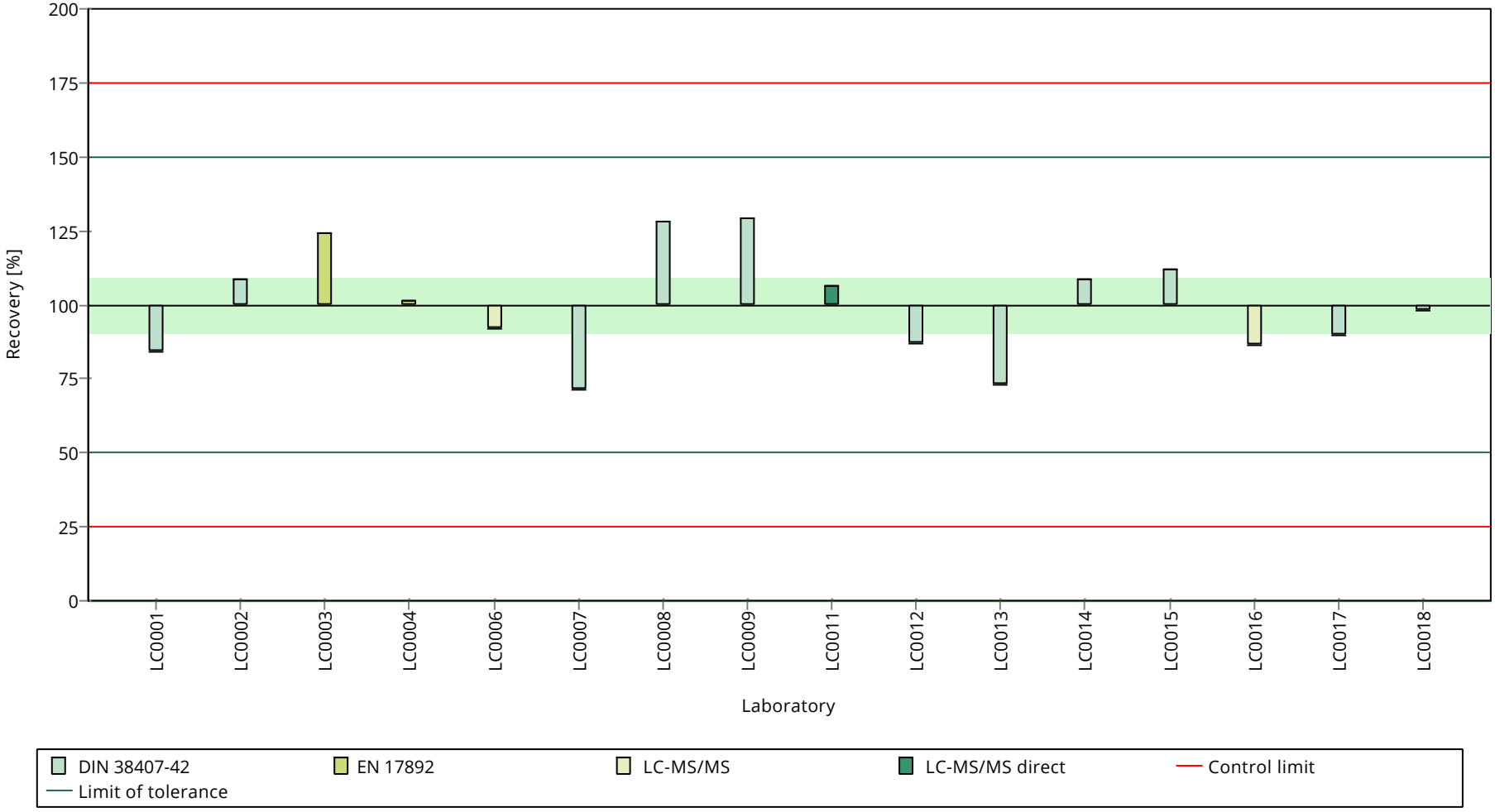
	all results	without outliers	Unit
Mean ± Cl (99%)	0.167 ± 0.0226	0.167 ± 0.0226	µg/l
Minimum	0.119	0.119	µg/l
Maximum	0.216	0.216	µg/l
Standard deviation	0.0301	0.0301	µg/l
rel. standard deviation	18.1	18.1	%
n	16	16	-

Graphical presentation of results

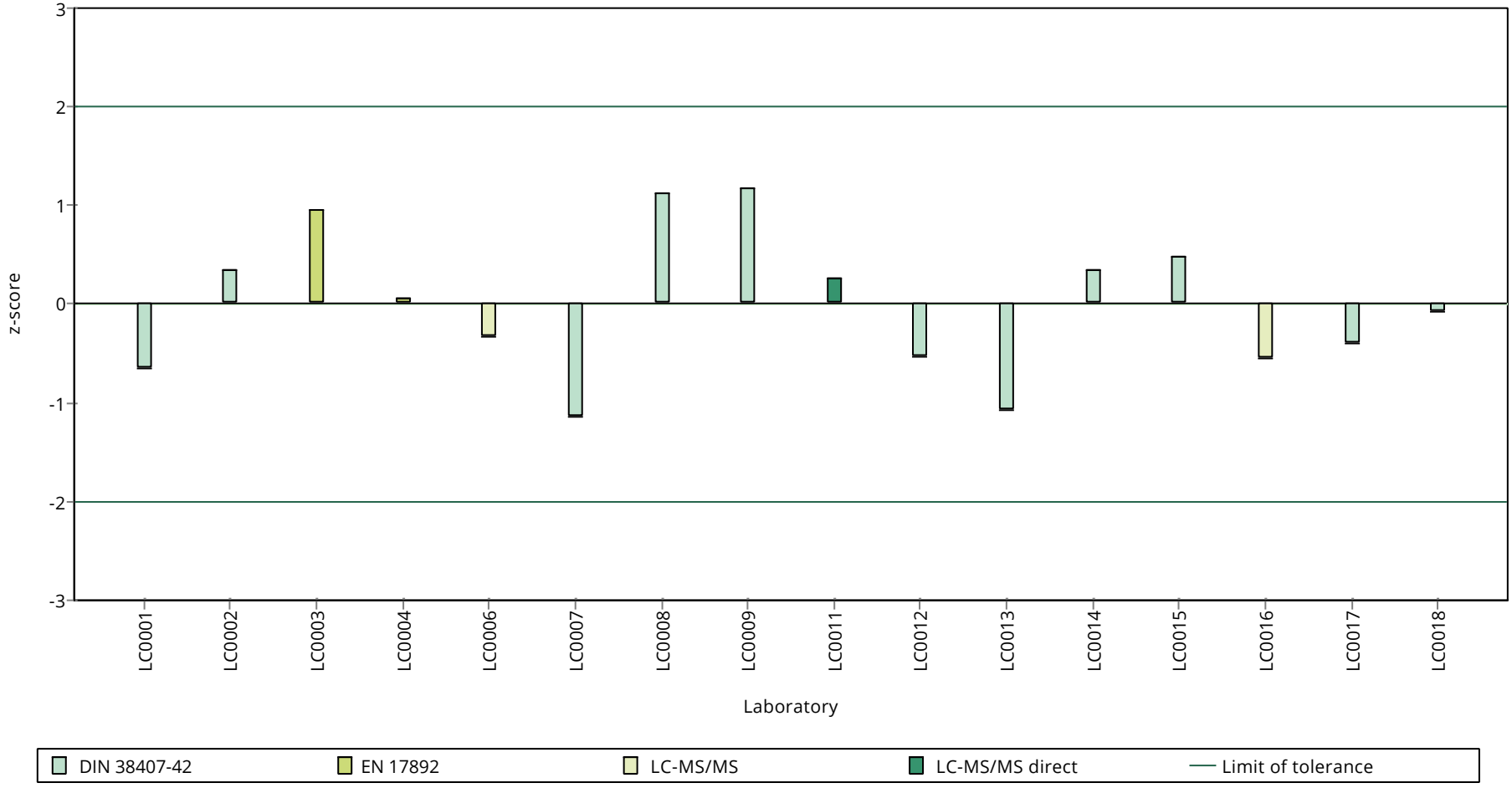
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B10

Total PFHxS

Unit	µg/l
Assigned value ± U (k=2)	0.0548 ± 0.00416
Criterion	0.0137 (25 %)
Minimum - Maximum	0.0378 - 0.0673
Control test value ± U (k=2)	0.055 ± 0.0192

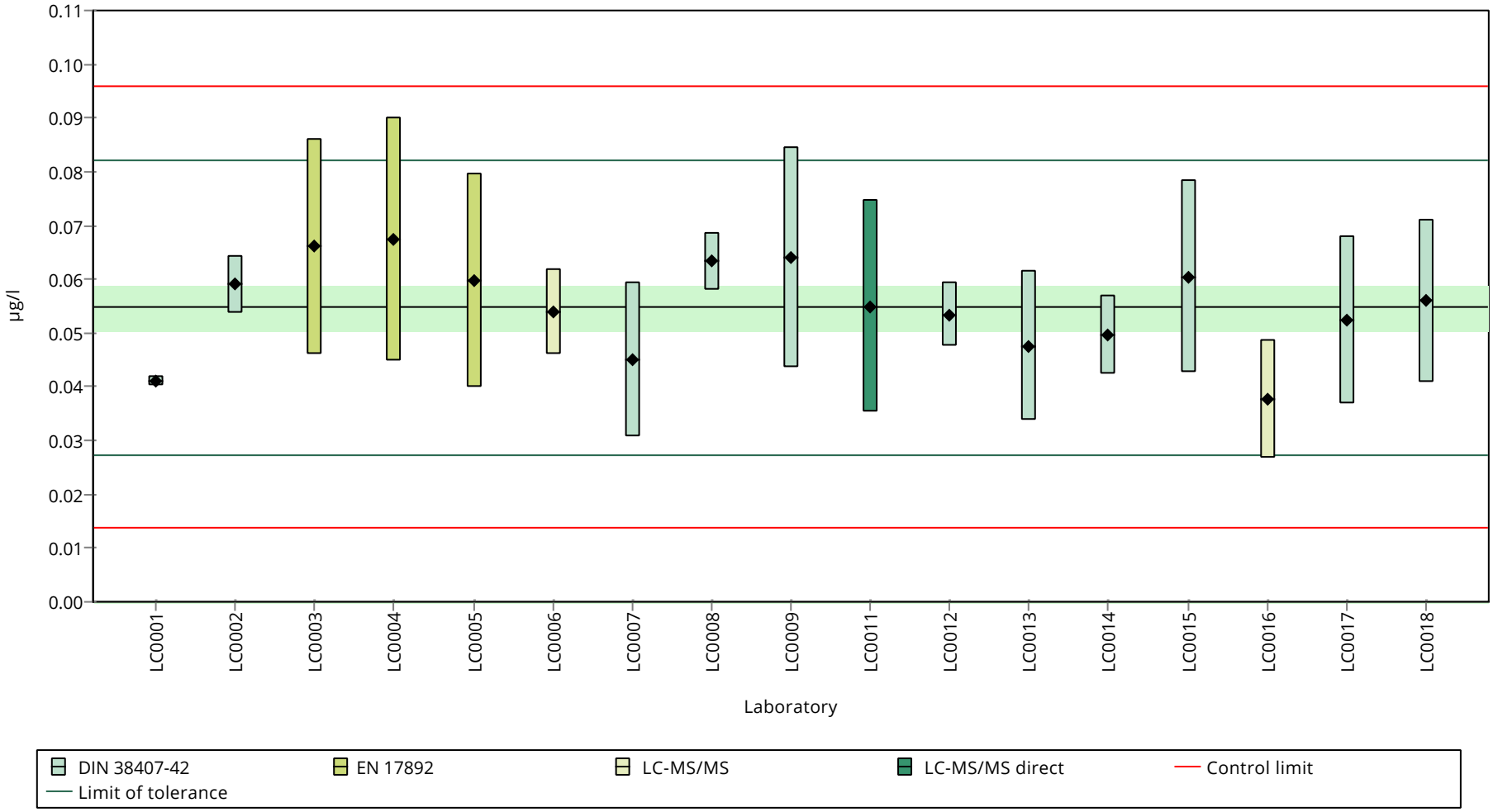
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.041 ± 0.001	74.8	-1.01	
LC0002	0.059 ± 0.0053	108	0.31	
LC0003	0.0661 ± 0.02	121	0.82	
LC0004	0.0673 ± 0.0227	123	0.91	
LC0005	0.0597 ± 0.02	109	0.36	
LC0006	0.054 ± 0.008	98.5	-0.06	
LC0007	0.0451 ± 0.0144	82.3	-0.71	
LC0008	0.0633 ± 0.00531	115	0.62	
LC0009	0.06408 ± 0.02044	117	0.68	
LC0010	- ± -	-	-	
LC0011	0.0549 ± 0.0198	100	0.01	
LC0012	0.0534 ± 0.0059	97.4	-0.1	
LC0013	0.0476 ± 0.014	86.8	-0.53	
LC0014	0.0496 ± 0.0074	90.5	-0.38	
LC0015	0.0605 ± 0.018	110	0.42	
LC0016	0.0378 ± 0.011	69	-1.24	
LC0017	0.0524 ± 0.0157	95.6	-0.18	
LC0018	0.056 ± 0.01519	102	0.09	
LC0019	- ± -	-	-	

Characteristics of parameter

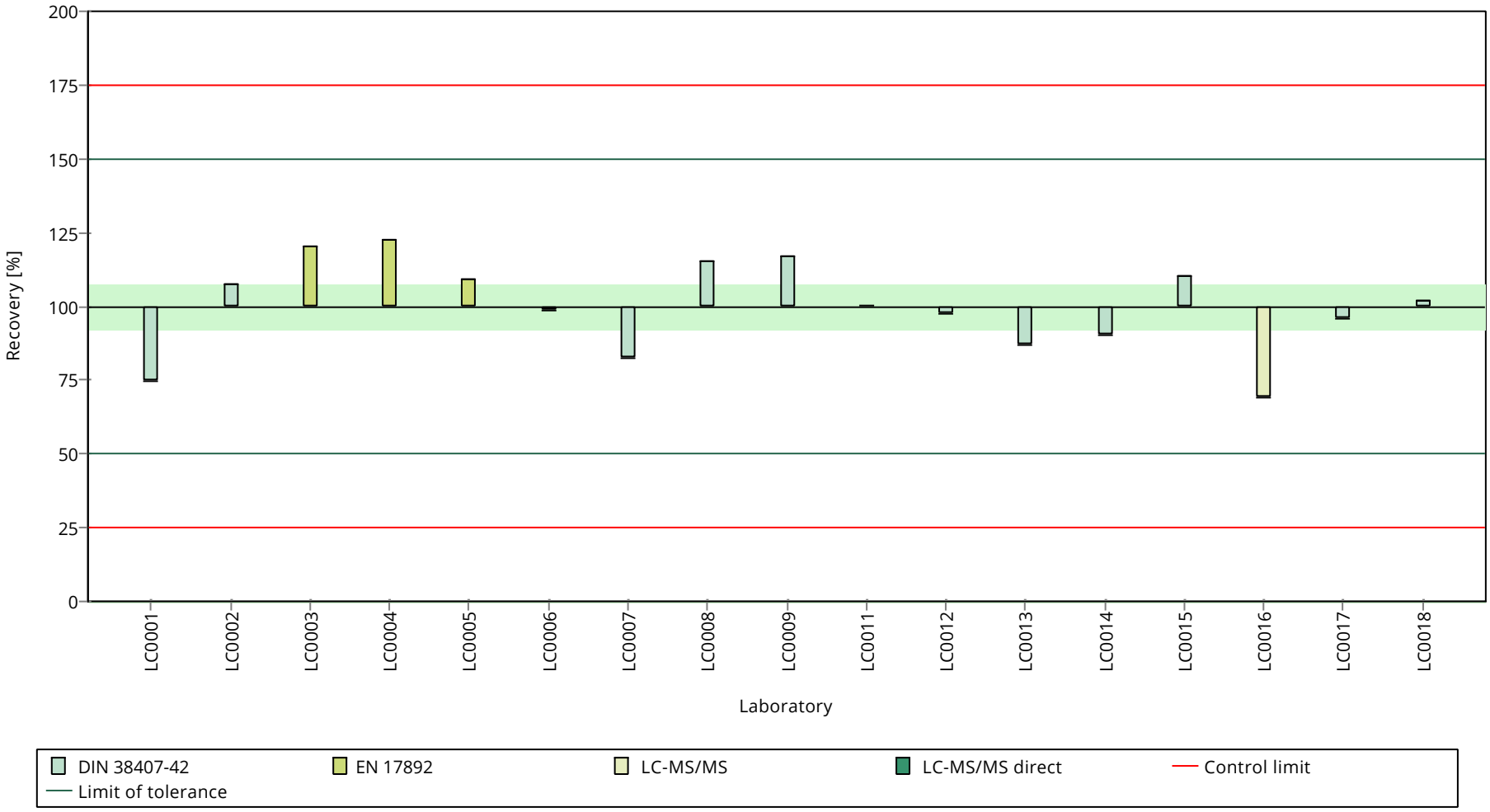
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0548 ± 0.00624	0.0548 ± 0.00624	µg/l
Minimum	0.0378	0.0378	µg/l
Maximum	0.0673	0.0673	µg/l
Standard deviation	0.00858	0.00858	µg/l
rel. standard deviation	15.7	15.7	%
n	17	17	-

Graphical presentation of results

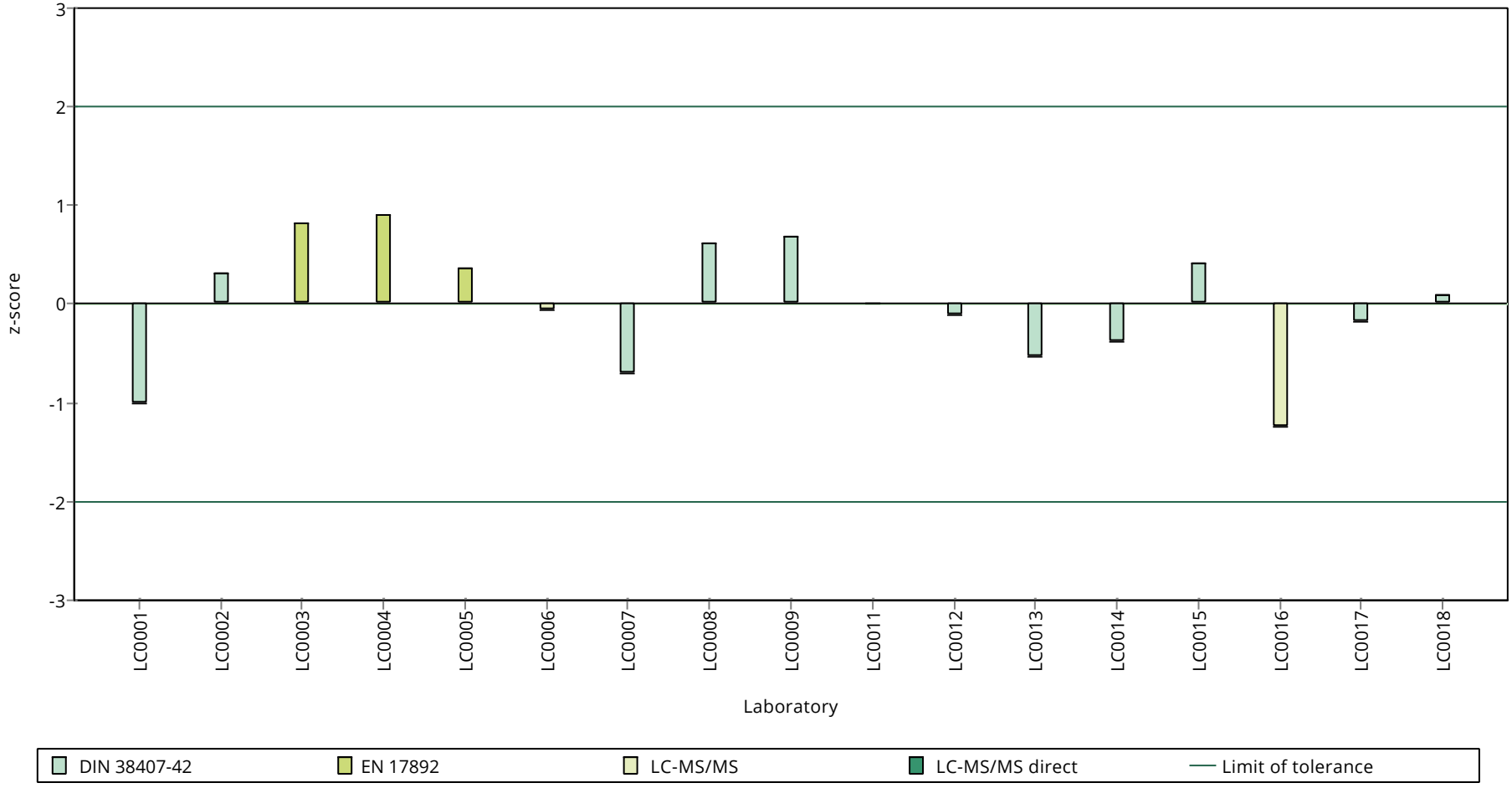
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A02

Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Unit	µg/l
Assigned value ± U (k=2)	0.00939 ± 0.0028
Criterion	0.00432 (46 %)
Minimum - Maximum	0.00355 - 0.017
Control test value ± U (k=2)	0.00367 ± 0.00165

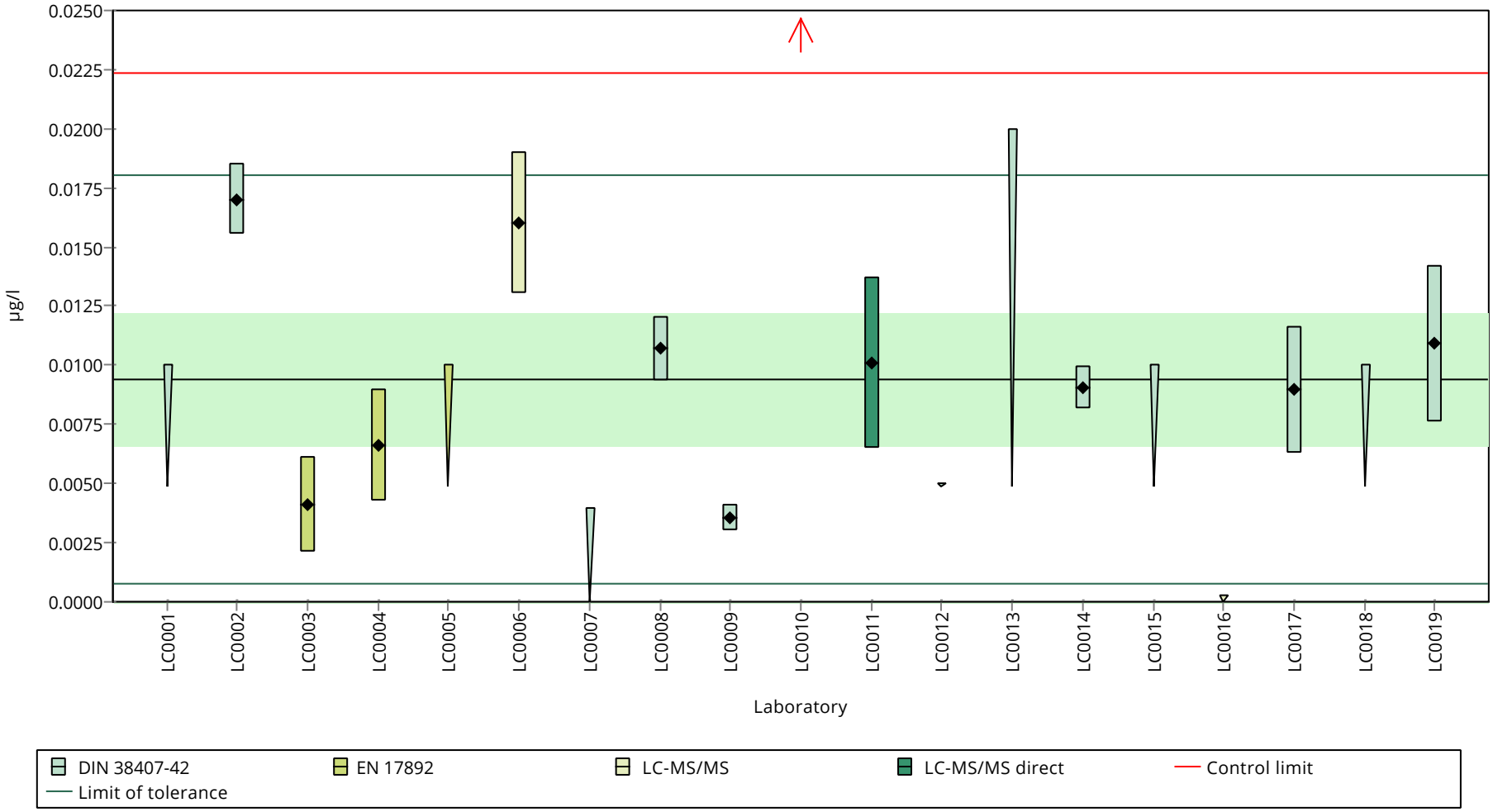
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.017 ± 0.0015	181	1.76	
LC0003	0.0041 ± 0.002	43.7	-1.22	
LC0004	0.00661 ± 0.00235	70.4	-0.64	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.016 ± 0.003	170	1.53	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.0107 ± 0.00138	114	0.3	
LC0009	0.00355 ± 0.00056	37.8	-1.35	
LC0010	0.035 ± 0.0107	373	5.93	H
LC0011	0.0101 ± 0.0036	108	0.16	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.02 (LOQ) ± -	-	-	
LC0014	0.00907 ± 0.00091	96.6	-0.07	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	0.00897 ± 0.00269	95.5	-0.1	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	0.0109 ± 0.0033	116	0.35	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.012 ± 0.00787	0.0097 ± 0.00419	µg/l
Minimum	0.00355	0.00355	µg/l
Maximum	0.035	0.017	µg/l
Standard deviation	0.0087	0.00441	µg/l
rel. standard deviation	72.5	45.5	%
n	11	10	-

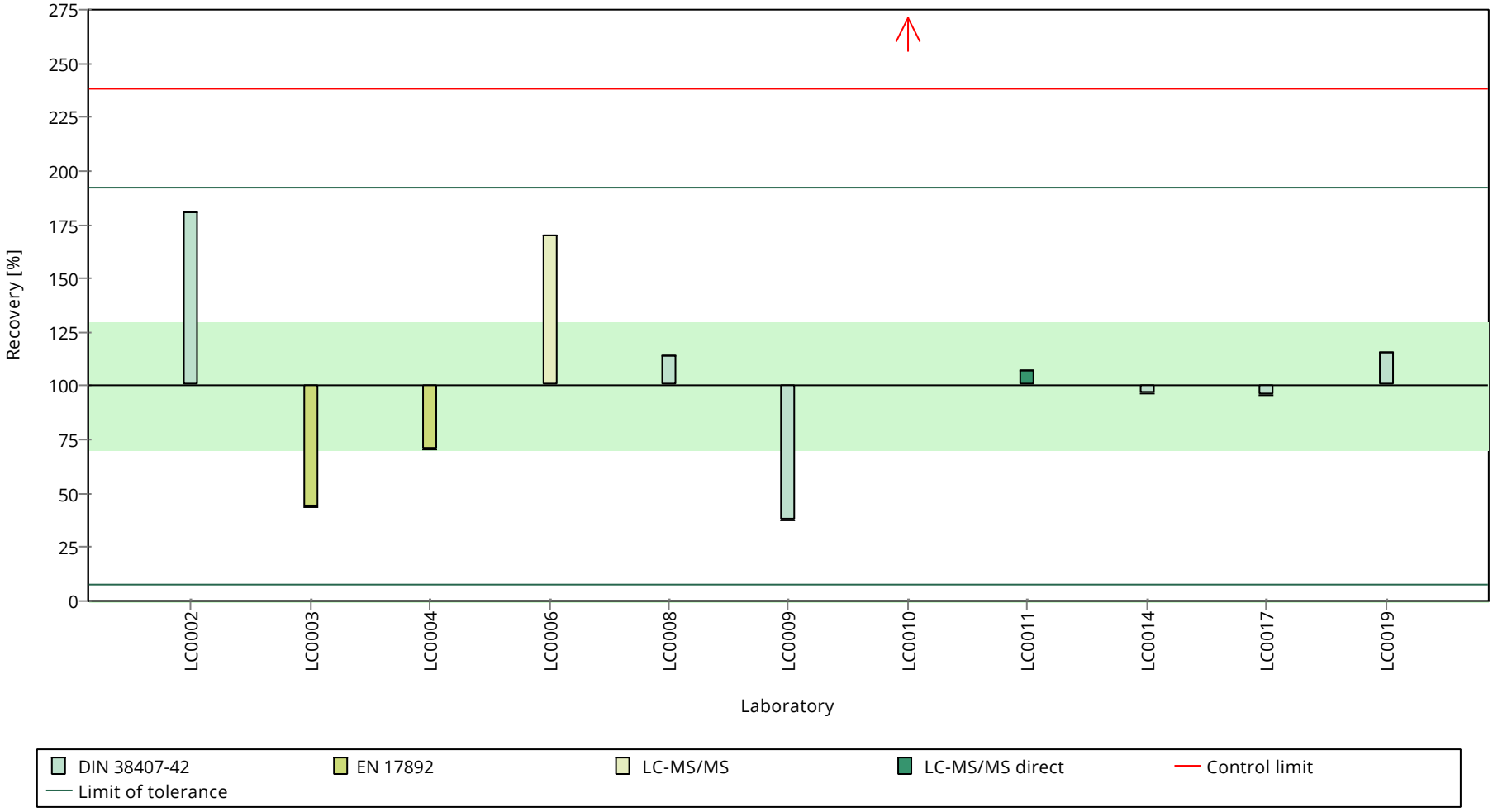
Graphical presentation of results

Results

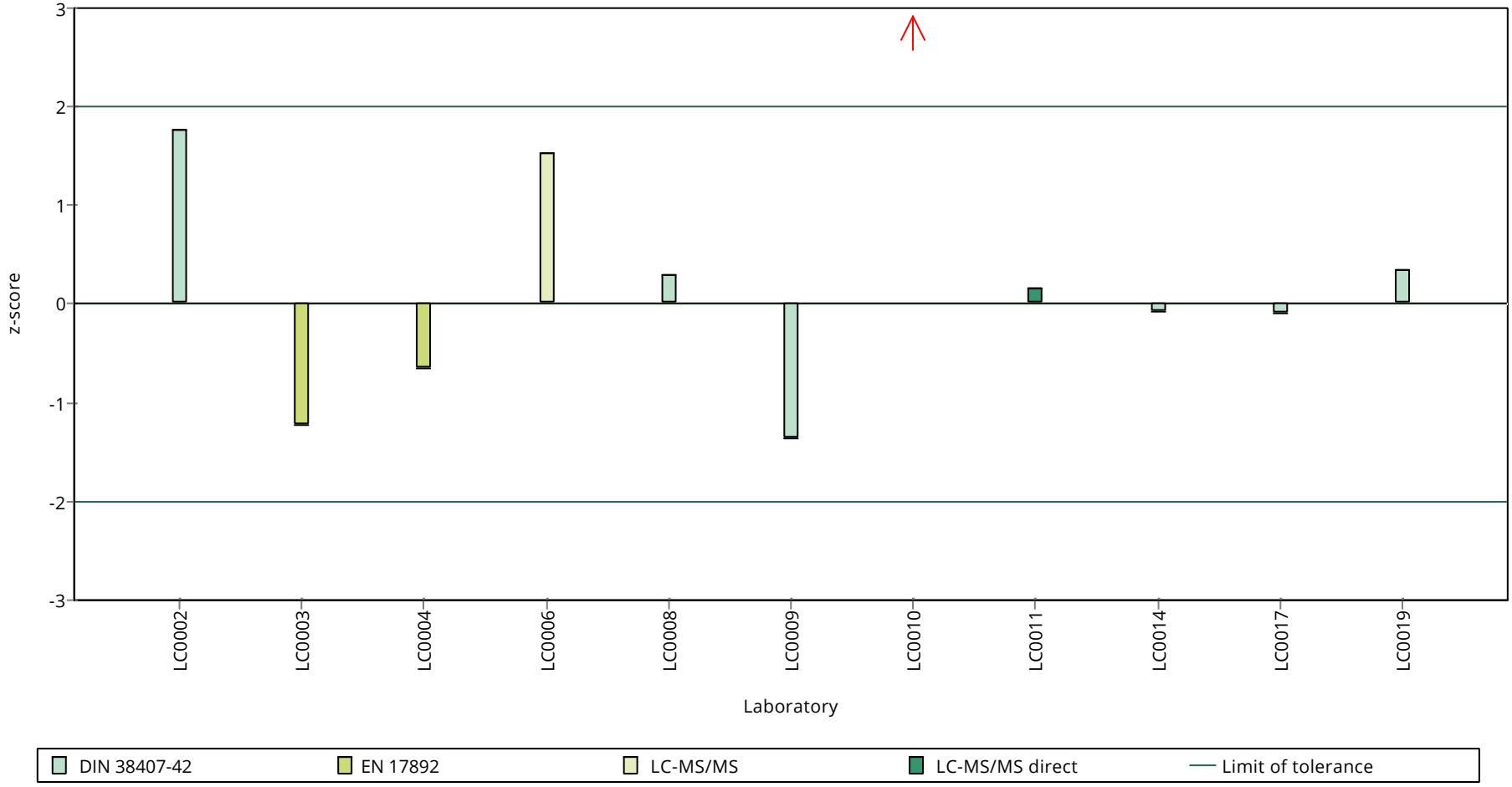


Sample: PFL01A02, Parameter: Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0003
LC0004
LC0006
LC0008
LC0009
LC0010
LC0011
LC0014
LC0017
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Unit	µg/l
Assigned value ± U (k=2)	0.00931 ± 0.0016
Criterion	0.00289 (31 %)
Minimum - Maximum	0.00455 - 0.012
Control test value ± U (k=2)	0.00475 ± 0.00214

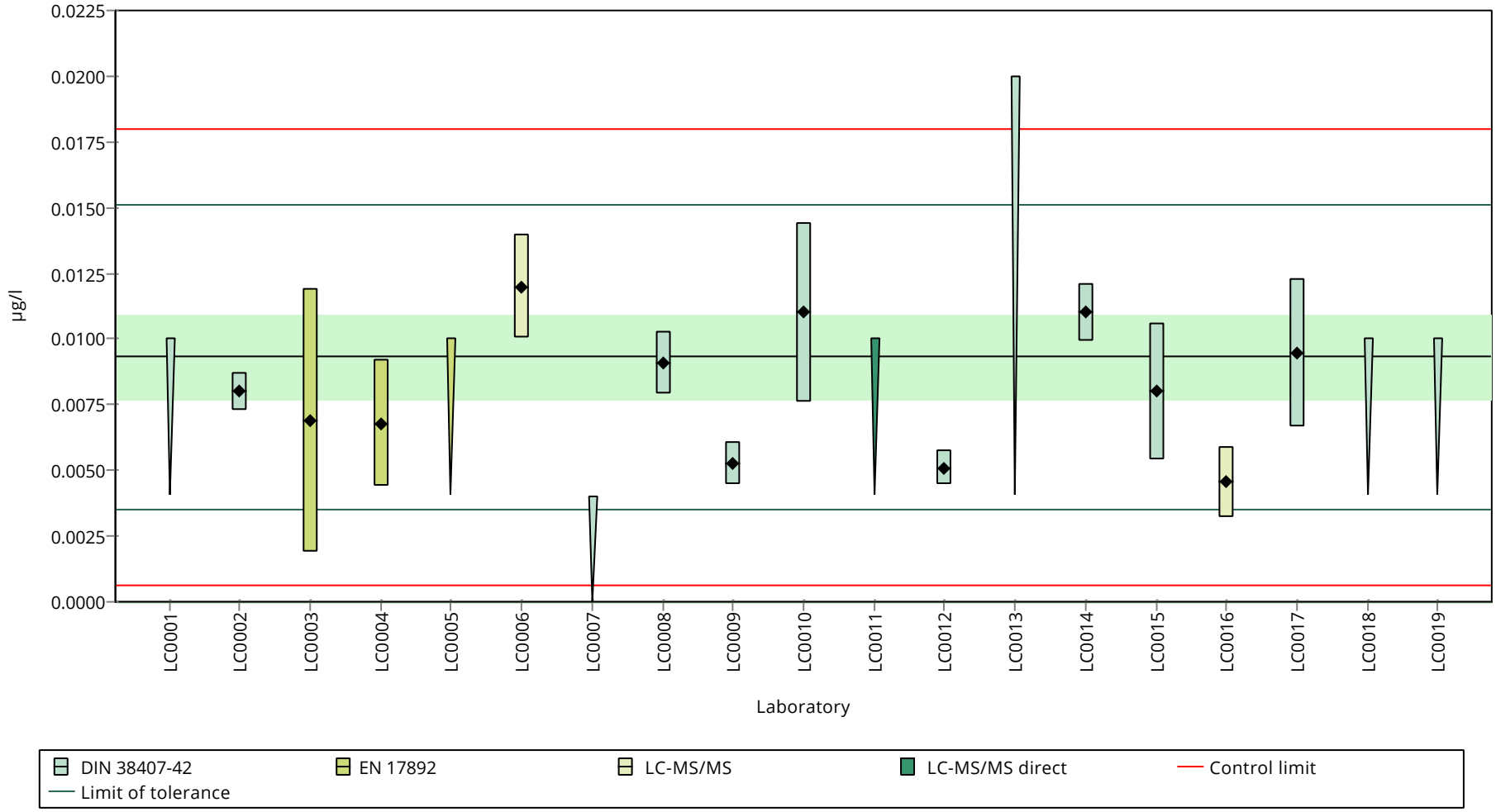
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.008 ± 0.0007	85.9	-0.45	
LC0003	0.0069 ± 0.005	74.1	-0.83	
LC0004	0.0068 ± 0.00242	73.1	-0.87	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.012 ± 0.002	129	0.93	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.00909 ± 0.00117	97.7	-0.08	
LC0009	0.00525 ± 0.00083	56.4	-1.41	
LC0010	0.011 ± 0.0034	118	0.59	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	0.0051 ± 0.00065	54.8	-1.46	
LC0013	< 0.02 (LOQ) ± -	-	-	
LC0014	0.011 ± 0.0011	118	0.59	
LC0015	0.008 ± 0.0026	85.9	-0.45	
LC0016	0.00455 ± 0.00136	48.9	-1.65	
LC0017	0.00946 ± 0.00284	102	0.05	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

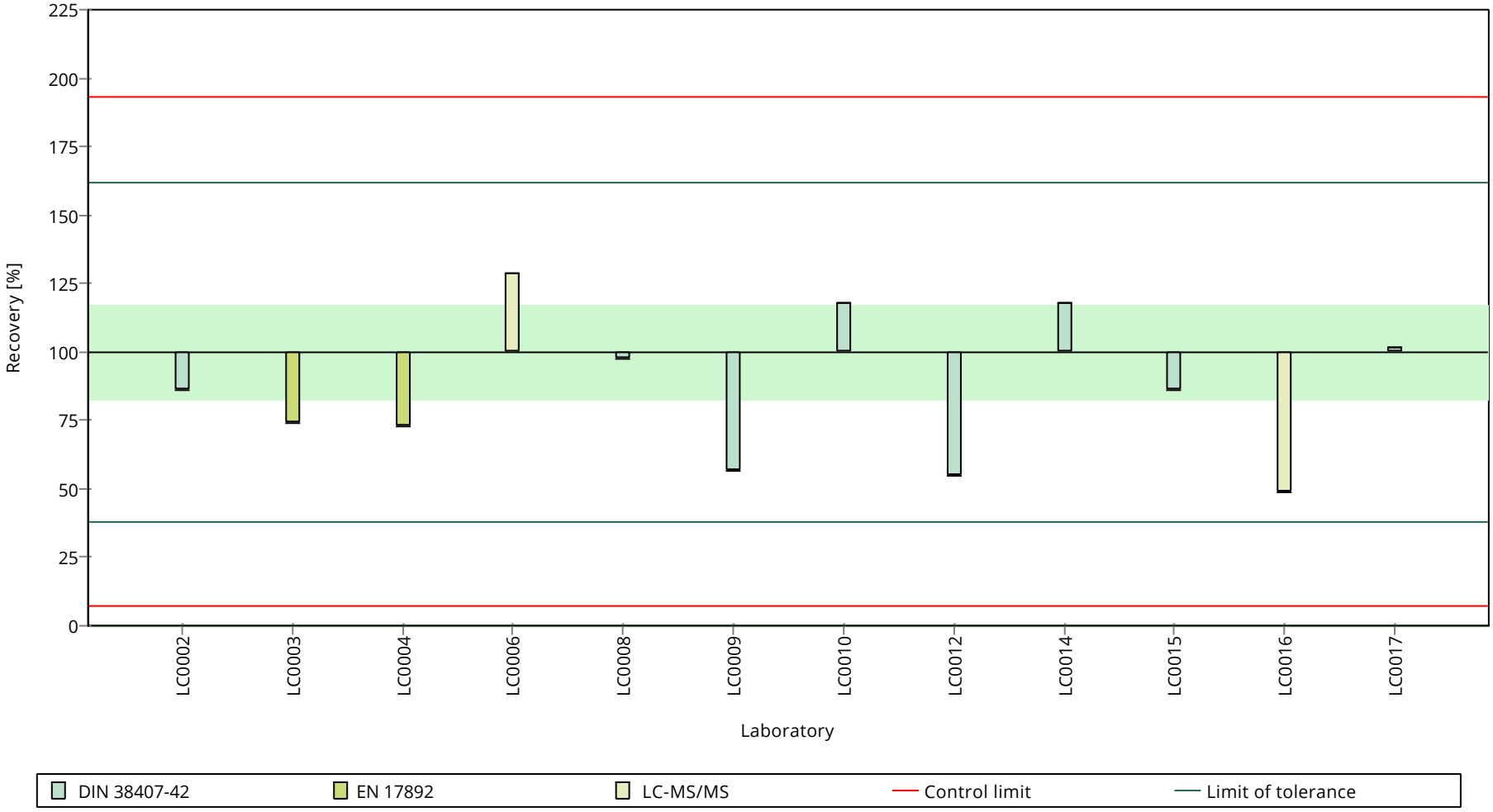
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0081 ± 0.00215	0.0081 ± 0.00215	µg/l
Minimum	0.00455	0.00455	µg/l
Maximum	0.012	0.012	µg/l
Standard deviation	0.00248	0.00248	µg/l
rel. standard deviation	30.7	30.7	%
n	12	12	-

Graphical presentation of results

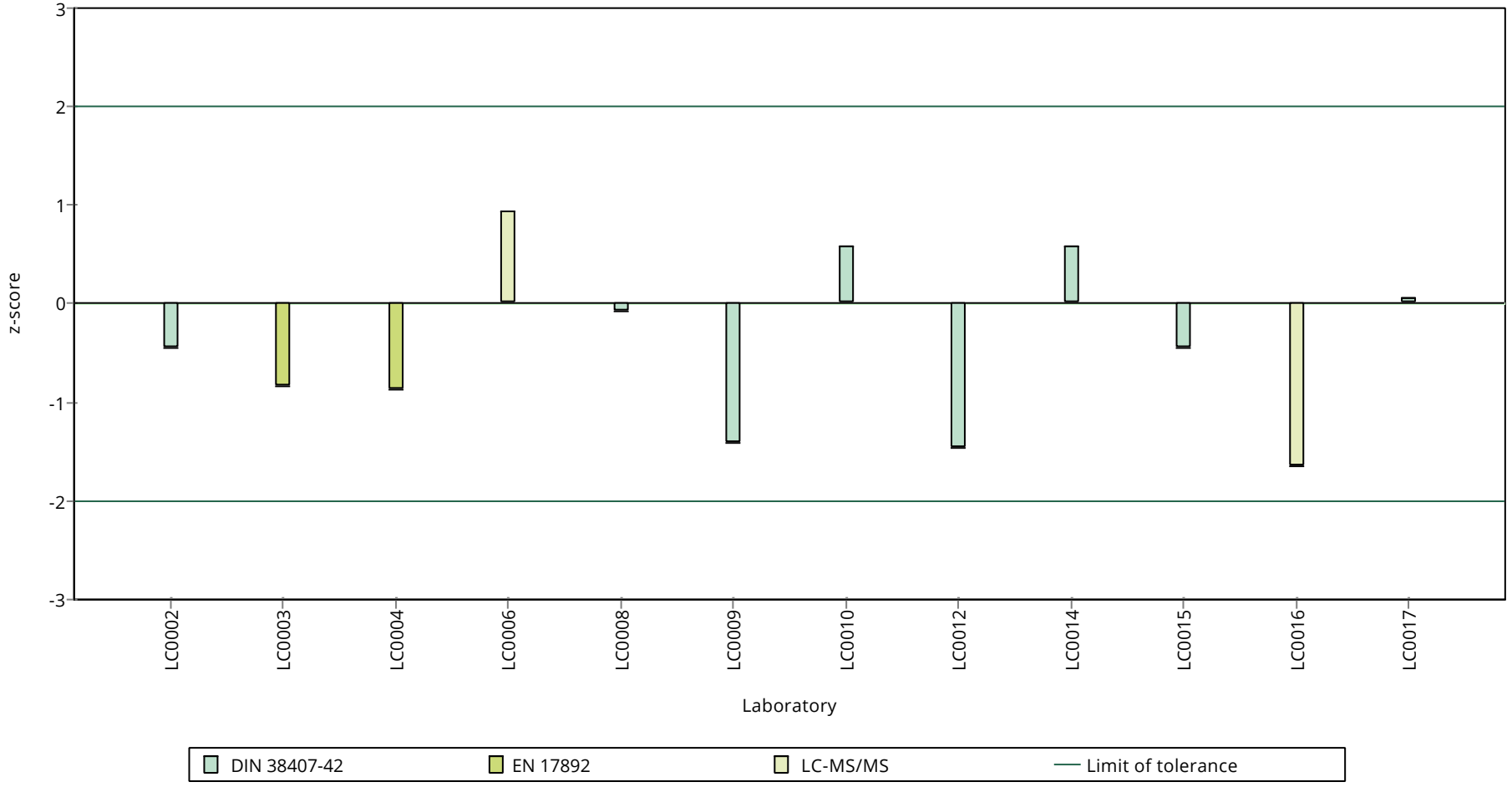
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0003
LC0004
LC0006
LC0008
LC0009
LC0010
LC0012
LC0014
LC0015
LC0016
LC0017
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
Limit of tolerance

Parameter oriented report

PFL01B02

Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Unit	µg/l
Assigned value ± U (k=2)	0.00678 ± 0.00106
Criterion	0.00169 (25 %)
Minimum - Maximum	0.004 - 0.00926
Control test value ± U (k=2)	0.00536 ± 0.00241

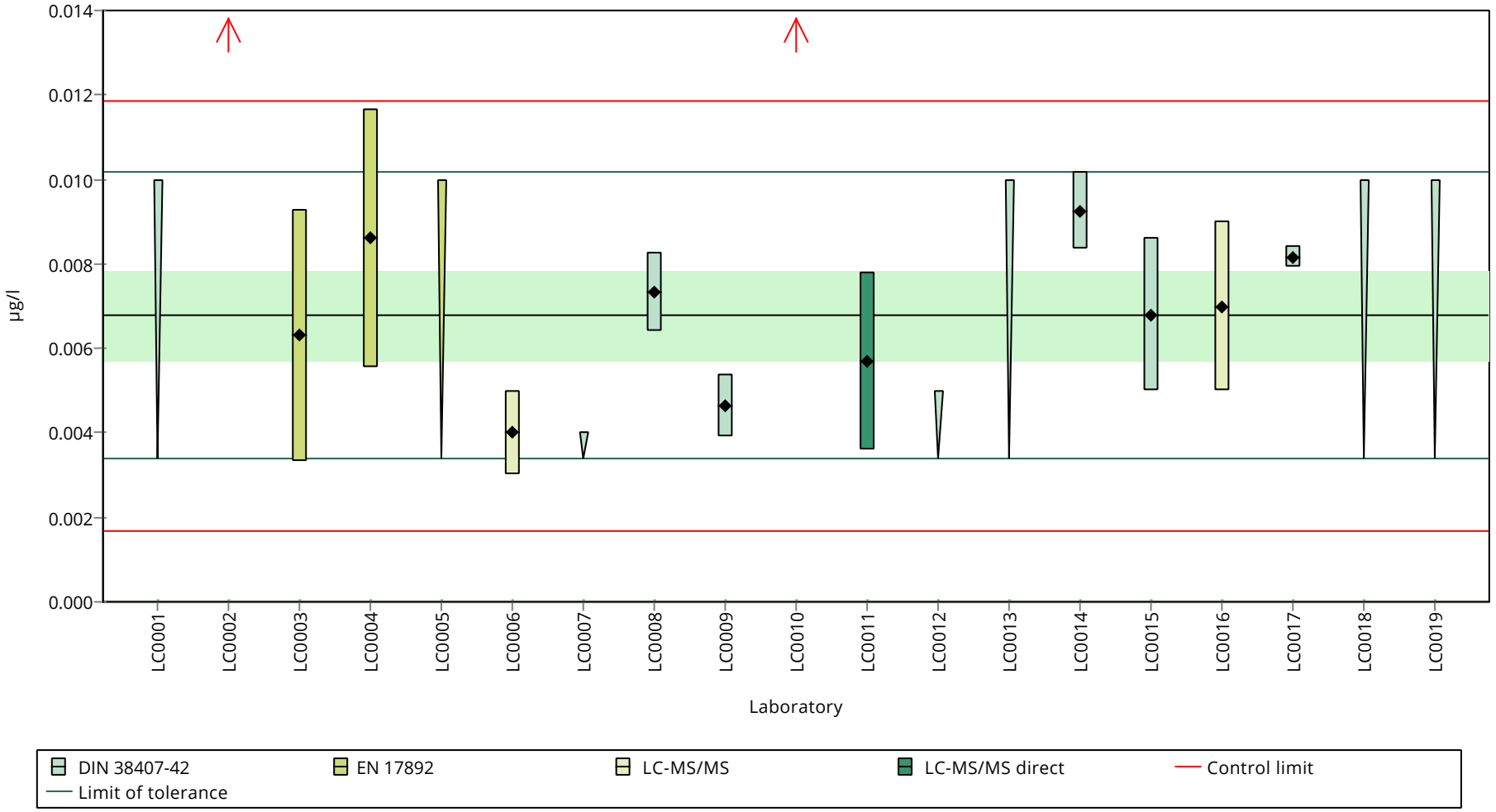
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	0.015	±	0.0013	221	4.85	H
LC0003	0.0063	±	0.003	92.9	-0.28	
LC0004	0.0086	±	0.00305	127	1.07	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	0.004	±	0.001	59	-1.64	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00733	±	0.00094	108	0.33	
LC0009	0.00464	±	0.00073	68.4	-1.26	
LC0010	0.041	±	0.0124	605	20.19	H
LC0011	0.0057	±	0.0021	84.1	-0.64	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.00926	±	0.00093	137	1.46	
LC0015	0.0068	±	0.0018	100	0.01	
LC0016	0.007	±	0.002	103	0.13	
LC0017	0.00816	±	0.00024	120	0.82	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0103 ± 0.00872	0.00678 ± 0.00159	µg/l
Minimum	0.004	0.004	µg/l
Maximum	0.041	0.00926	µg/l
Standard deviation	0.0101	0.00168	µg/l
rel. standard deviation	97.6	24.8	%
n	12	10	-

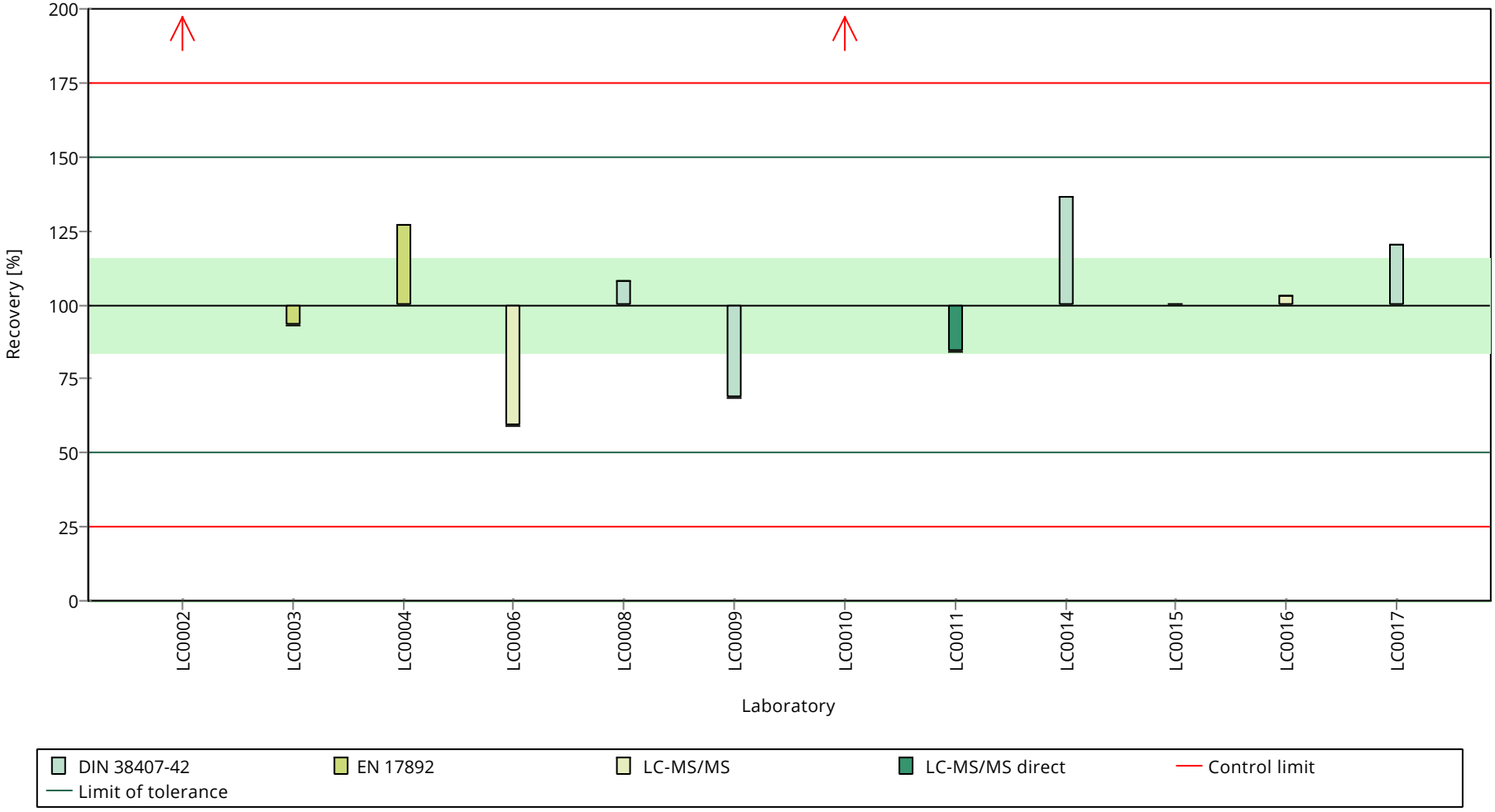
Graphical presentation of results

Results

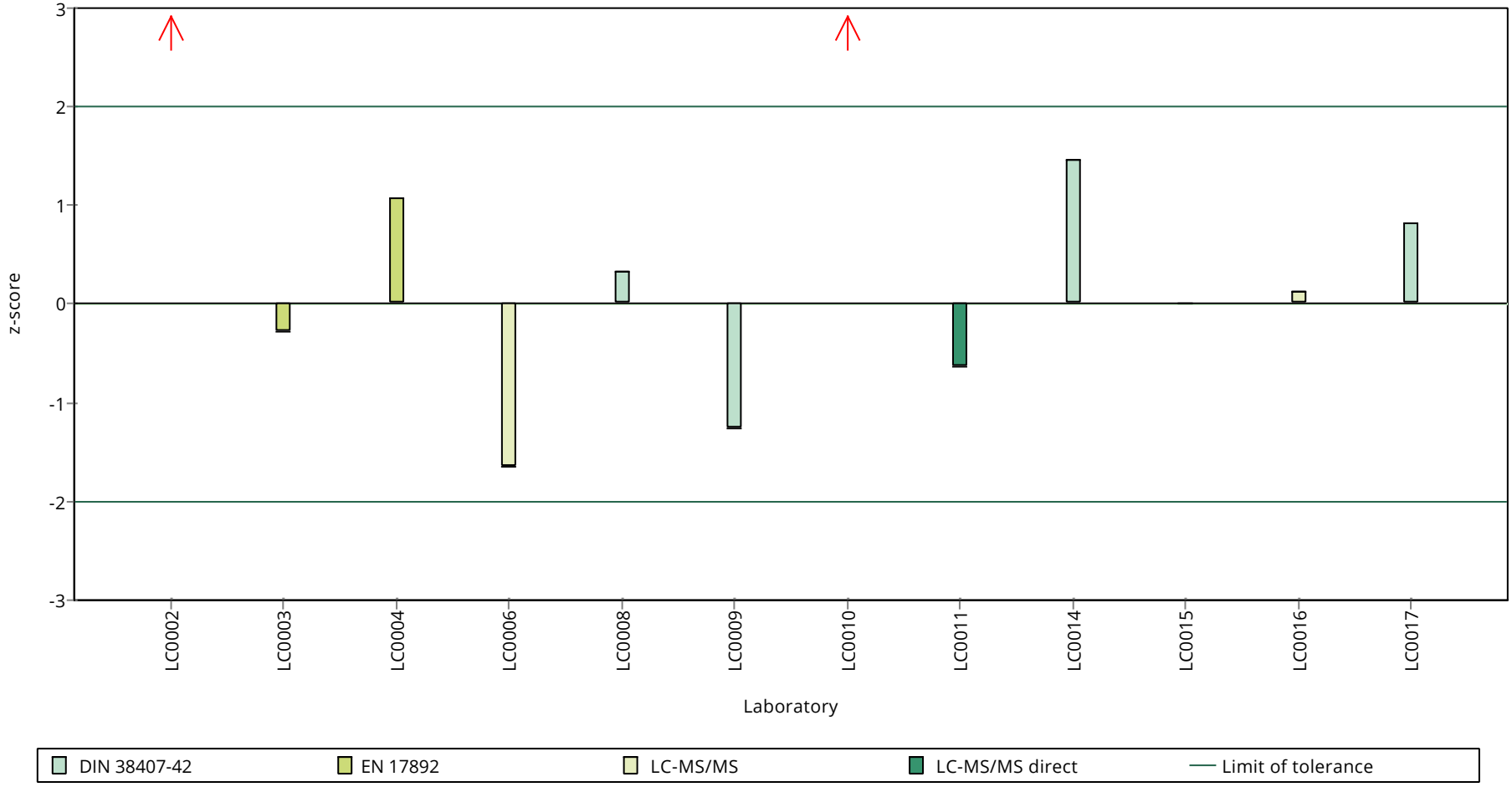


Sample: PFL01B02, Parameter: Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0002
LC0003
LC0004
LC0006
LC0008
LC0009
LC0010
LC0011
LC0014
LC0015
LC0016
LC0017
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B10

Perfluoroheptane sulfonic acid (PFHpS) - PF7S

Unit	µg/l
Assigned value ± U (k=2)	0.00337 ± 0.000539
Criterion	0.000943 (28 %)
Minimum - Maximum	0.00156 - 0.005
Control test value ± U (k=2)	0.00262 ± 0.00118

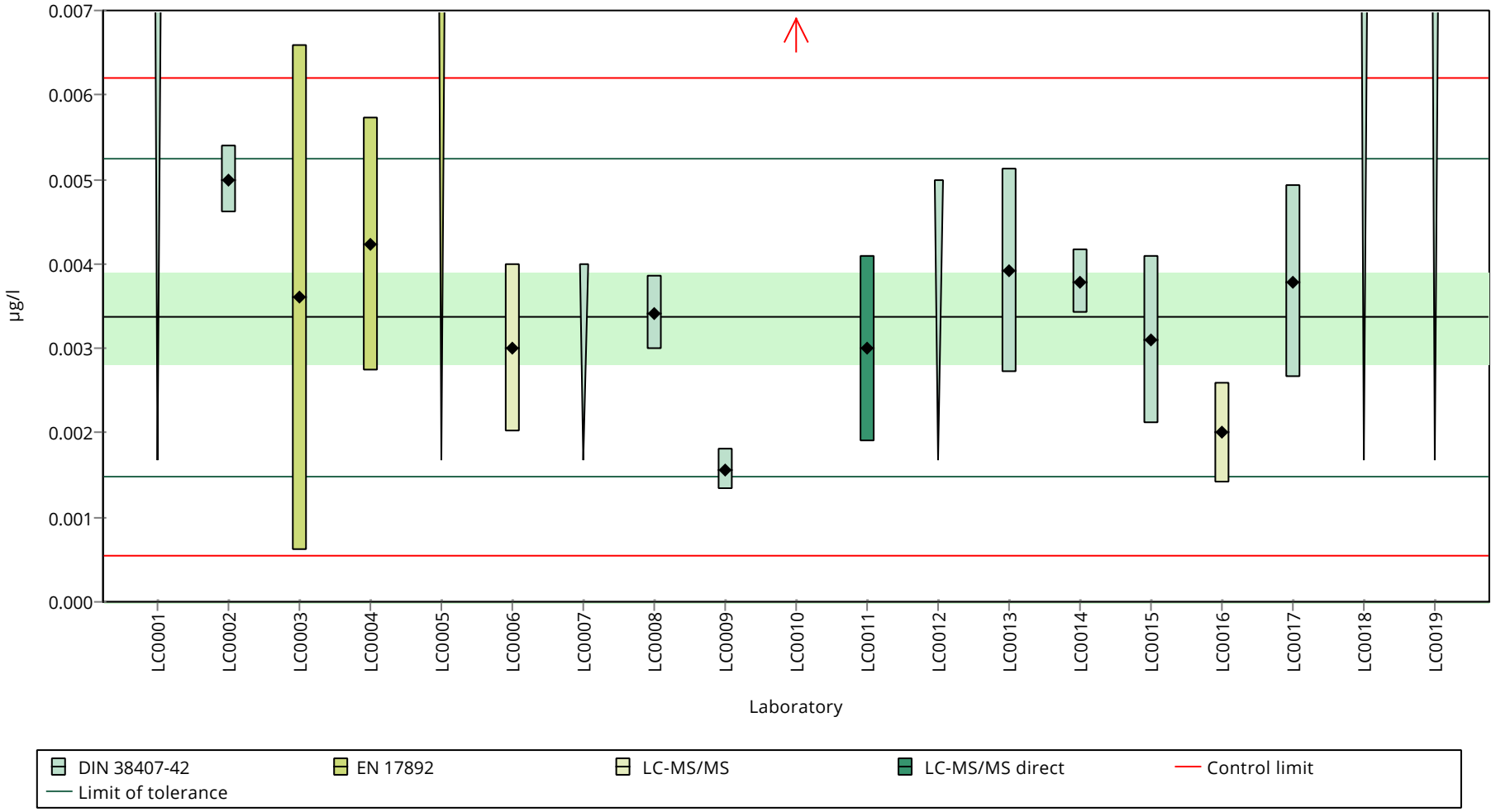
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	0.005 ± 0.0004	148	1.73	
LC0003	0.0036 ± 0.003	107	0.25	
LC0004	0.00423 ± 0.0015	126	0.91	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.003 ± 0.001	89.1	-0.39	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	0.00342 ± 0.00044	102	0.06	
LC0009	0.00156 ± 0.00025	46.4	-1.91	
LC0010	0.026 ± 0.0078	772	24	H
LC0011	0.003 ± 0.0011	89.1	-0.39	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	0.00392 ± 0.0012	116	0.59	
LC0014	0.00379 ± 0.00038	113	0.45	
LC0015	0.0031 ± 0.001	92	-0.28	
LC0016	0.002 ± 0.0006	59.4	-1.45	
LC0017	0.00379 ± 0.00114	113	0.45	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

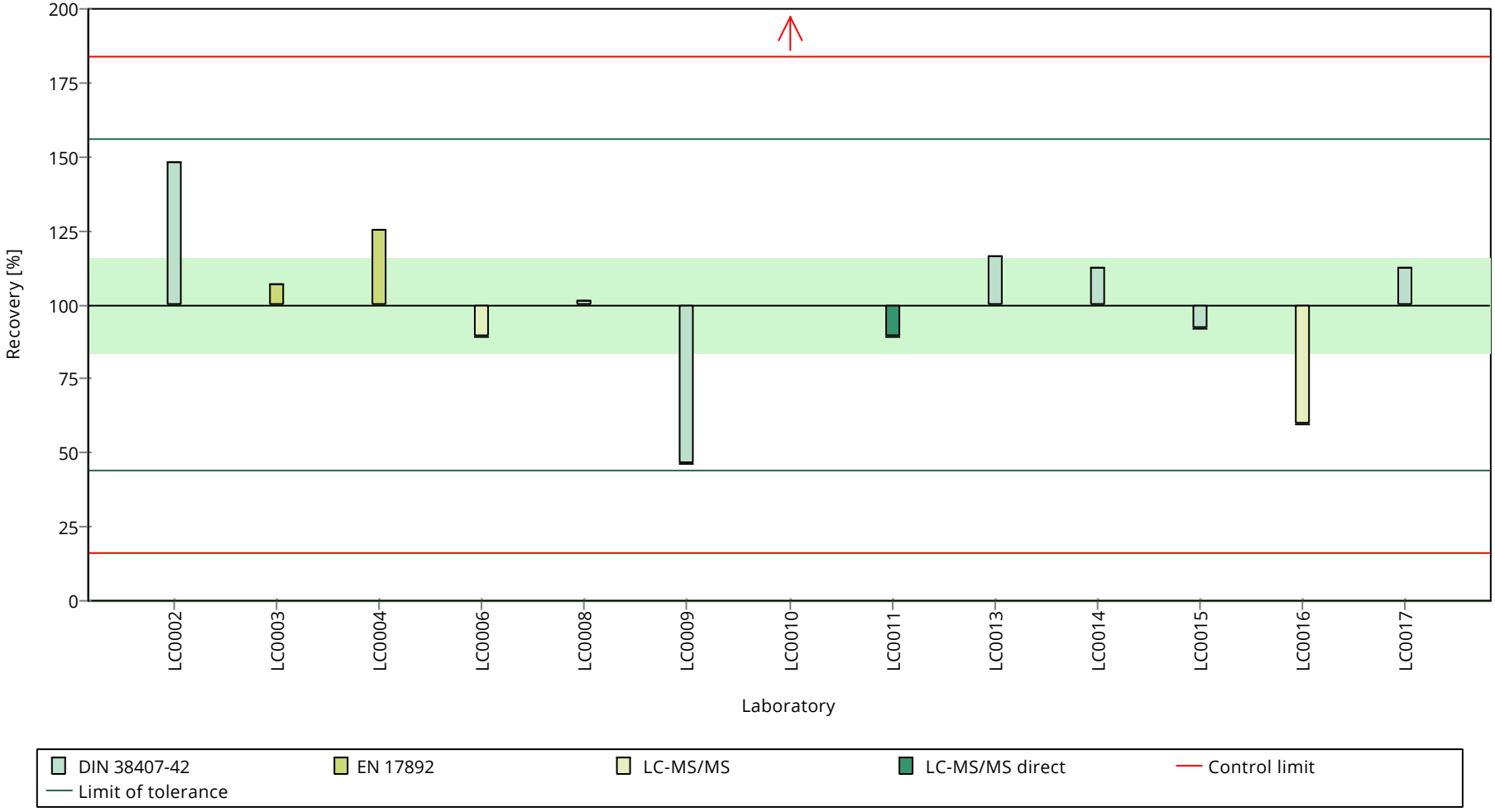
	all results	without outliers	Unit
Mean ± Cl (99%)	0.00511 ± 0.00528	0.00337 ± 0.000809	µg/l
Minimum	0.00156	0.00156	µg/l
Maximum	0.026	0.005	µg/l
Standard deviation	0.00634	0.000934	µg/l
rel. standard deviation	124	27.7	%
n	13	12	-

Graphical presentation of results

Results

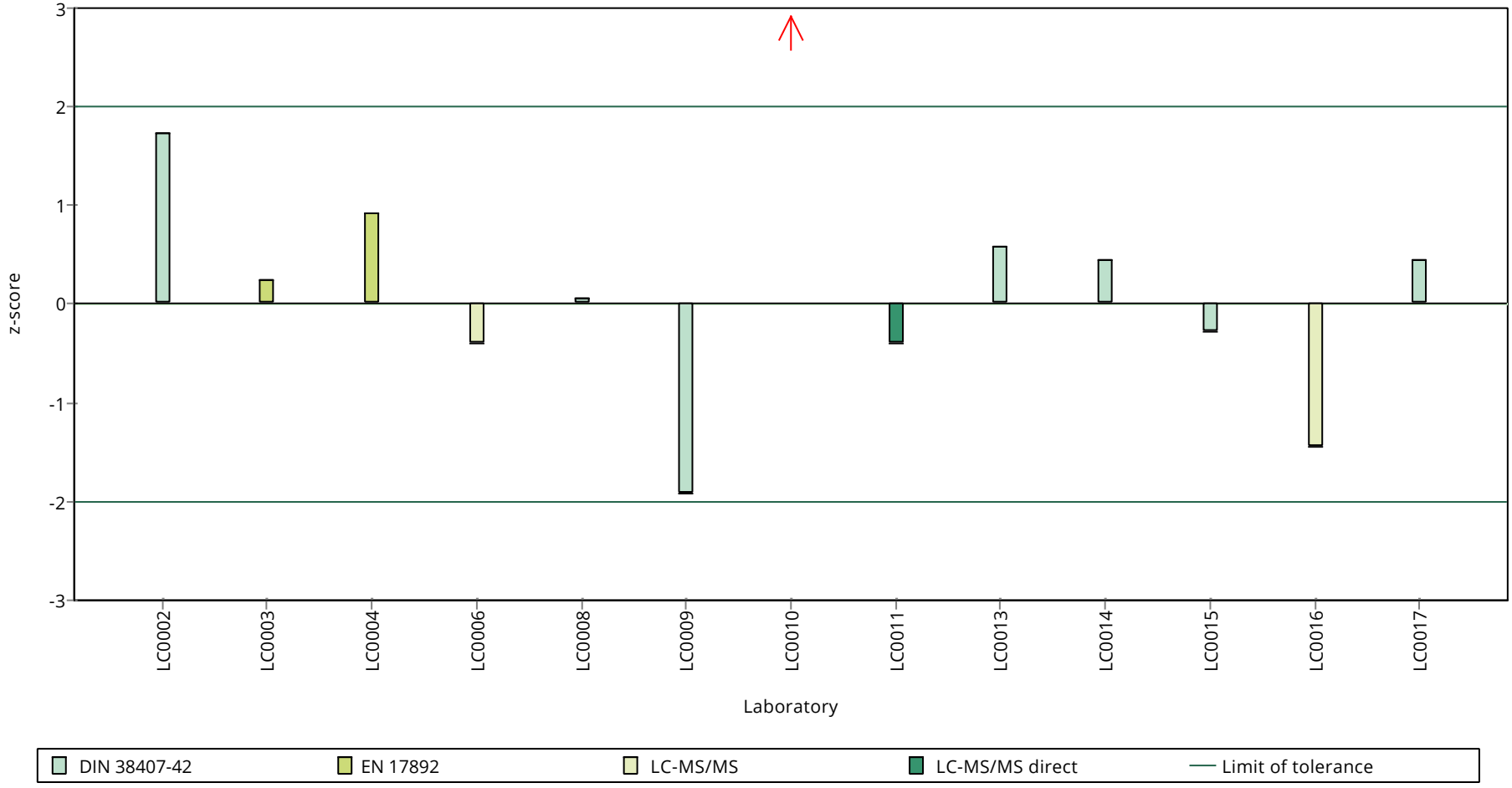


Recovery rate



Sample: PFL01B10, Parameter: Perfluoroheptane sulfonic acid (PFHpS) - PF7S

z-Score



Parameter oriented report

PFL01A02

linear Perfluorooctane sulfonic acid (n-PFOS)

Unit	µg/l
Assigned value ± U (k=2)	0.0407 ± 0.0102
Criterion	0.0142 (35 %)
Minimum - Maximum	0.0204 - 0.067
Control test value ± U (k=2)	0.0399 ± 0.016

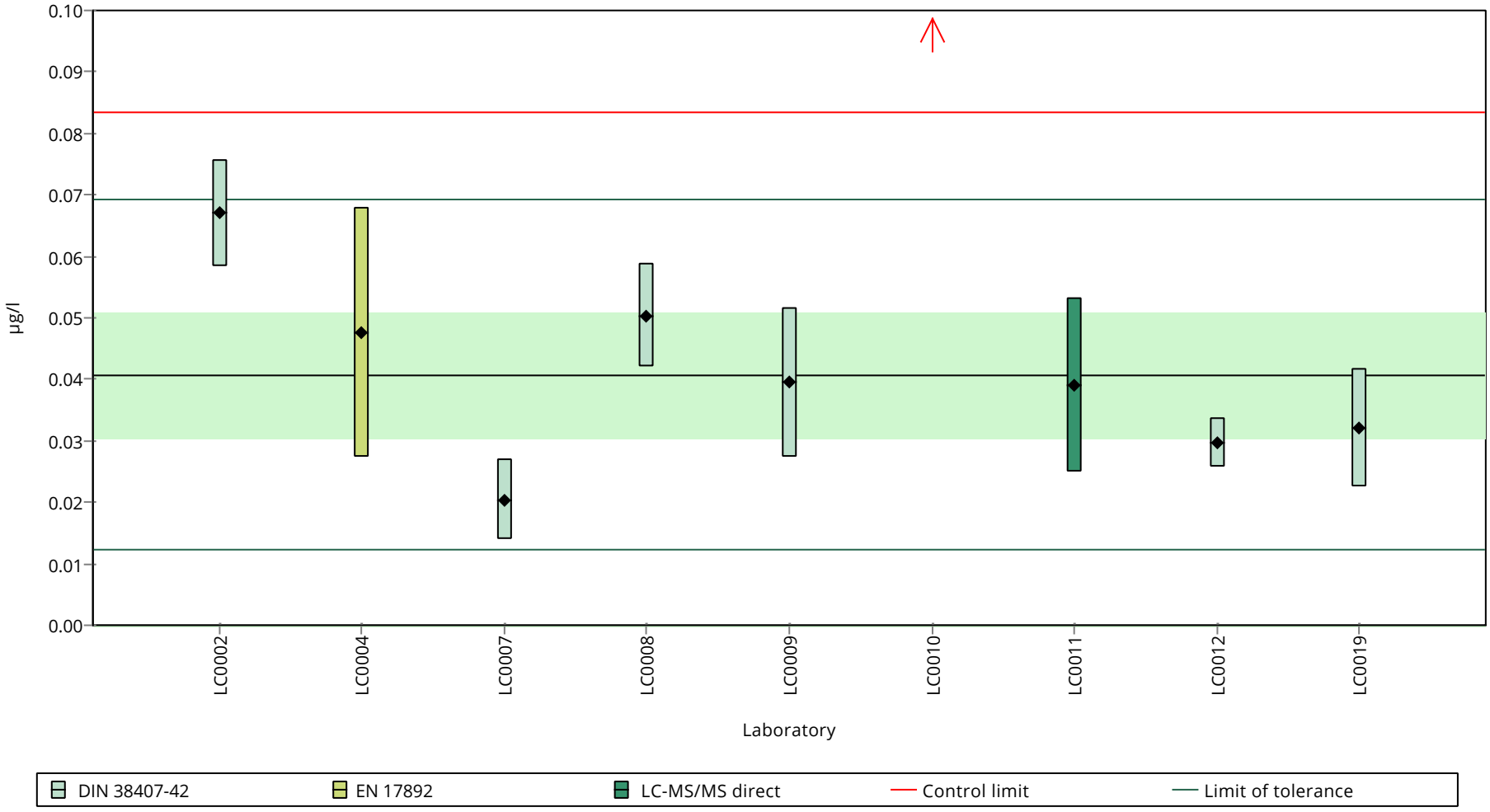
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.067 ± 0.0087	165	1.85	
LC0003	- ± -	-	-	
LC0004	0.04763 ± 0.0204	117	0.49	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.0204 ± 0.0065	50.1	-1.42	
LC0008	0.0503 ± 0.00845	124	0.67	
LC0009	0.03945 ± 0.01215	96.9	-0.09	
LC0010	0.267 ± 0.0802	656	15.89	H
LC0011	0.0391 ± 0.0141	96.1	-0.11	
LC0012	0.0297 ± 0.0039	73	-0.77	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.032 ± 0.0096	78.6	-0.61	

Characteristics of parameter

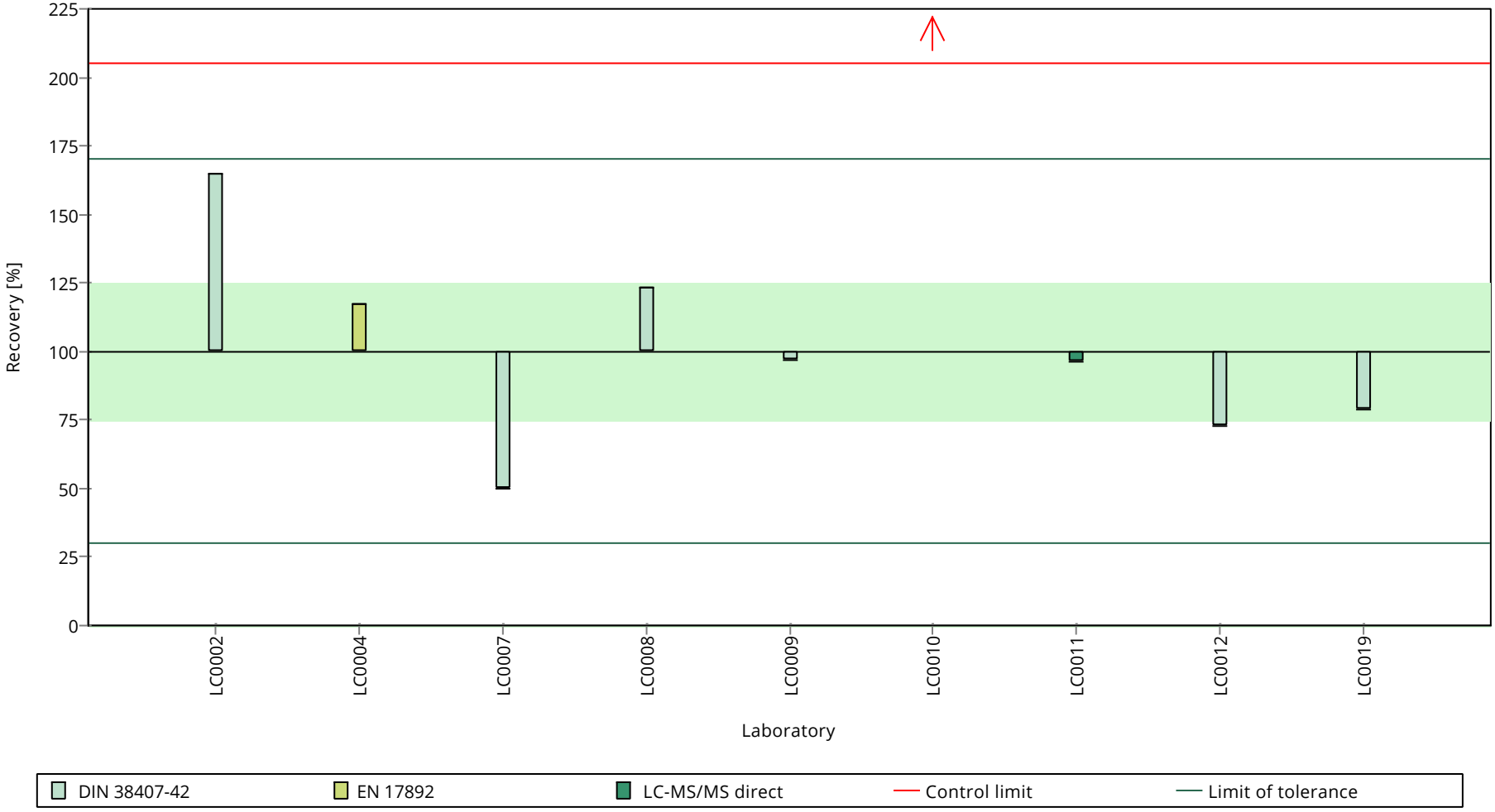
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0658 ± 0.0766	0.0407 ± 0.0152	µg/l
Minimum	0.0204	0.0204	µg/l
Maximum	0.267	0.067	µg/l
Standard deviation	0.0766	0.0144	µg/l
rel. standard deviation	116	35.3	%
n	9	8	-

Graphical presentation of results

Results

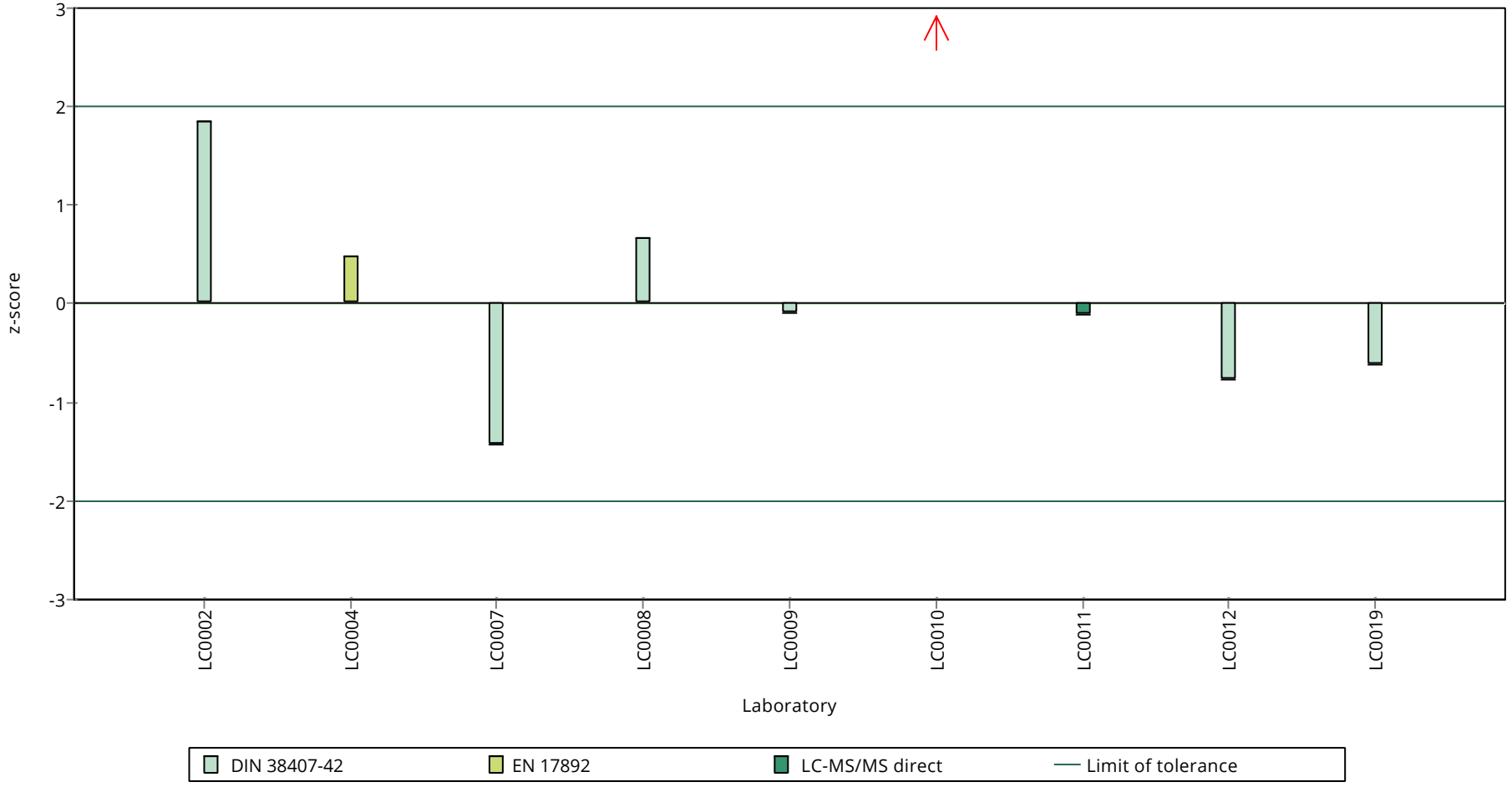


Recovery rate



Sample: PFL01A02, Parameter: linear Perfluorooctane sulfonic acid (n-PFOS)

z-Score



Parameter oriented report

PFL01A10

linear Perfluorooctane sulfonic acid (n-PFOS)

Unit	µg/l
Assigned value ± U (k=2)	0.0485 ± 0.00662
Criterion	0.0121 (25 %)
Minimum - Maximum	0.0358 - 0.0589
Control test value ± U (k=2)	0.0435 ± 0.0174

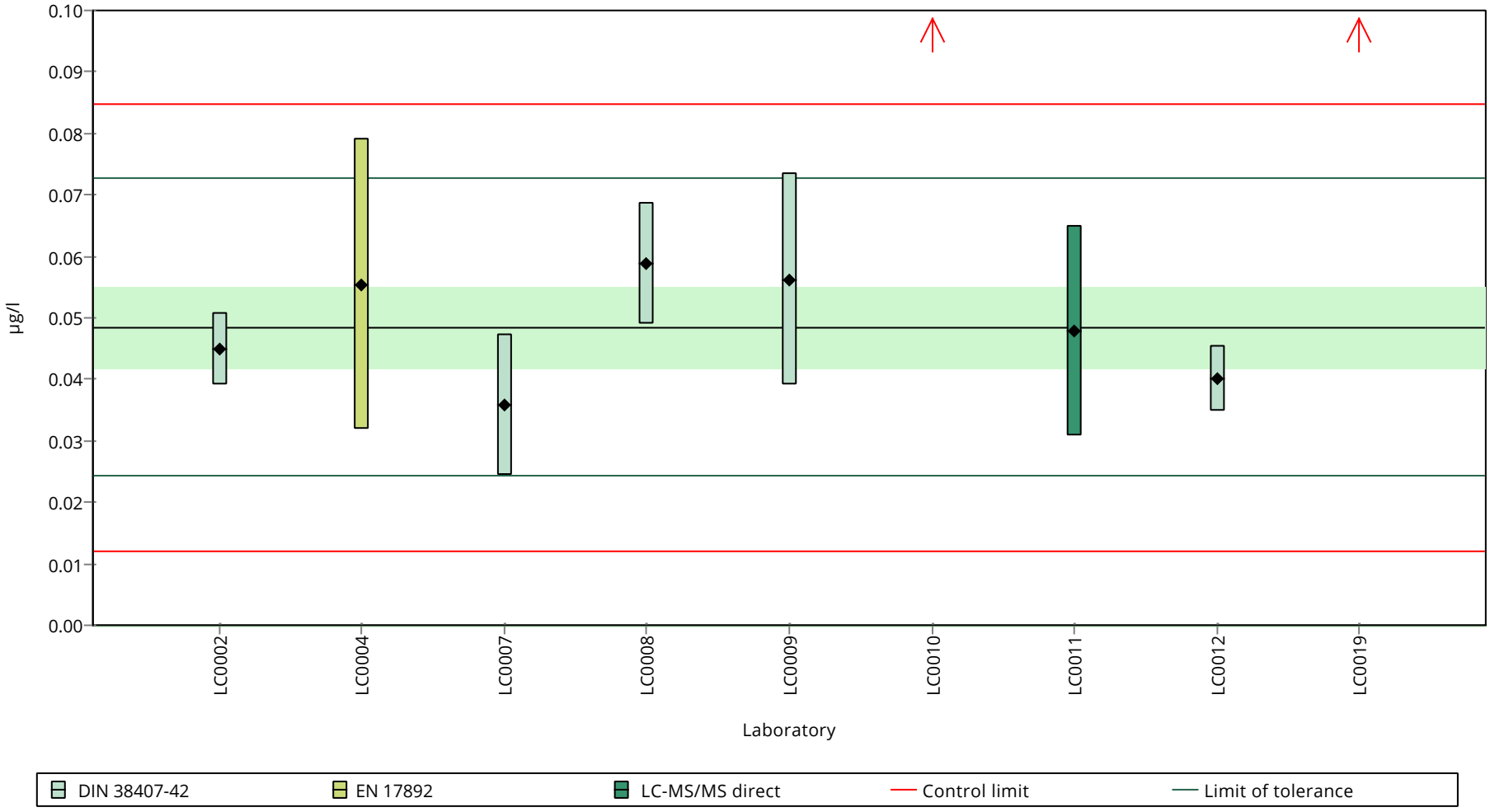
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.045 ± 0.0059	92.8	-0.29	
LC0003	- ± -	-	-	
LC0004	0.0554 ± 0.0237	114	0.57	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.0358 ± 0.0115	73.9	-1.05	
LC0008	0.0589 ± 0.0099	122	0.86	
LC0009	0.05622 ± 0.01732	116	0.64	
LC0010	0.157 ± 0.0472	324	8.96	H
LC0011	0.0479 ± 0.0172	98.8	-0.05	
LC0012	0.0401 ± 0.0053	82.7	-0.69	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.328 ± 0.098	677	23.07	H

Characteristics of parameter

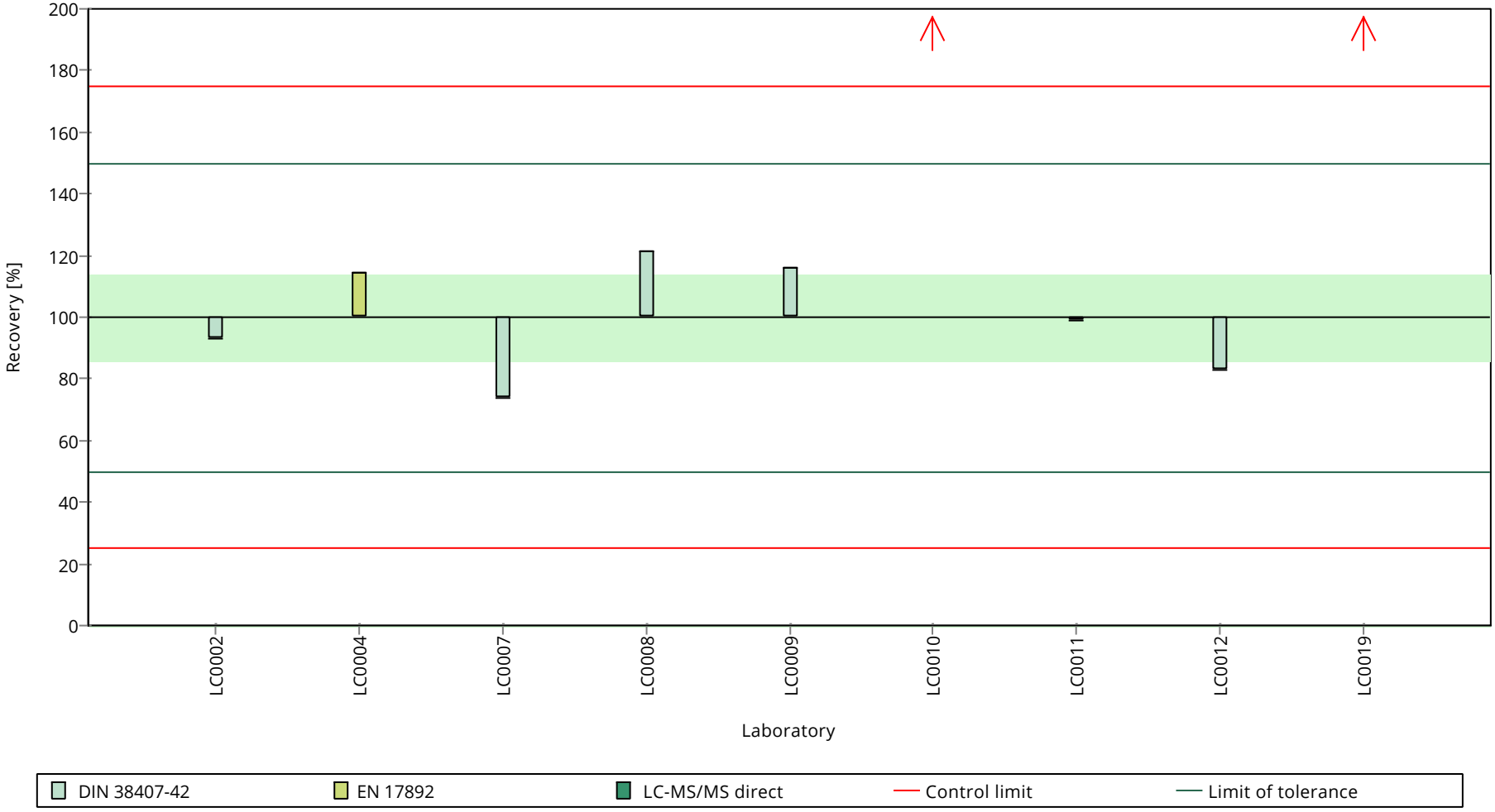
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0916 ± 0.0959	0.0485 ± 0.00993	µg/l
Minimum	0.0358	0.0358	µg/l
Maximum	0.328	0.0589	µg/l
Standard deviation	0.0959	0.00875	µg/l
rel. standard deviation	105	18.1	%
n	9	7	-

Graphical presentation of results

Results

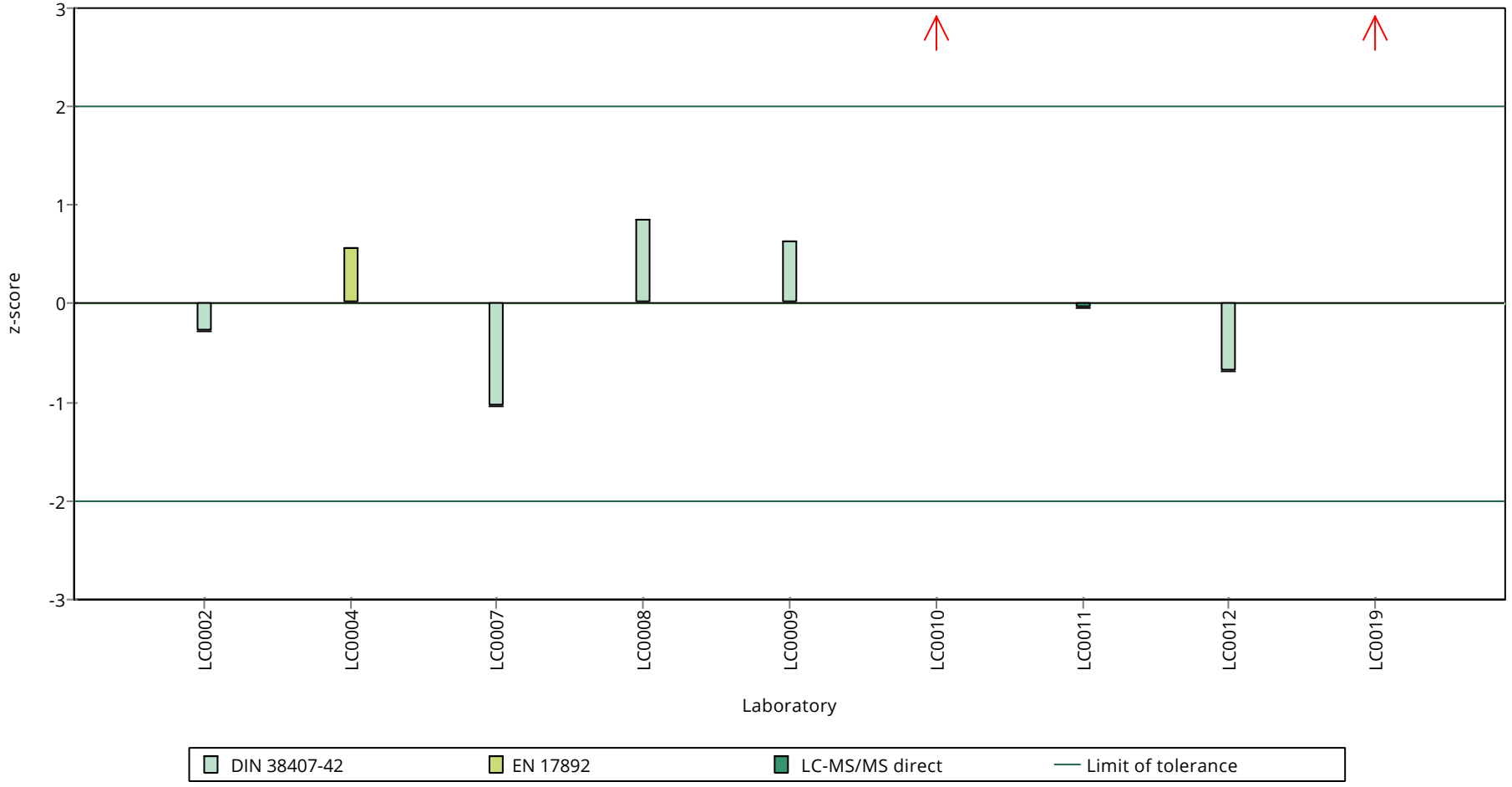


Recovery rate



Sample: PFL01A10, Parameter: linear Perfluorooctane sulfonic acid (n-PFOS)

z-Score



Parameter oriented report

PFL01B02

linear Perfluorooctane sulfonic acid (n-PFOS) *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0342 - 0.569
Control test value ± U (k=2)	0.283 ± 0.113

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=4, accr.) ± U(k=2): 0.27 ± 0.222 µg/l

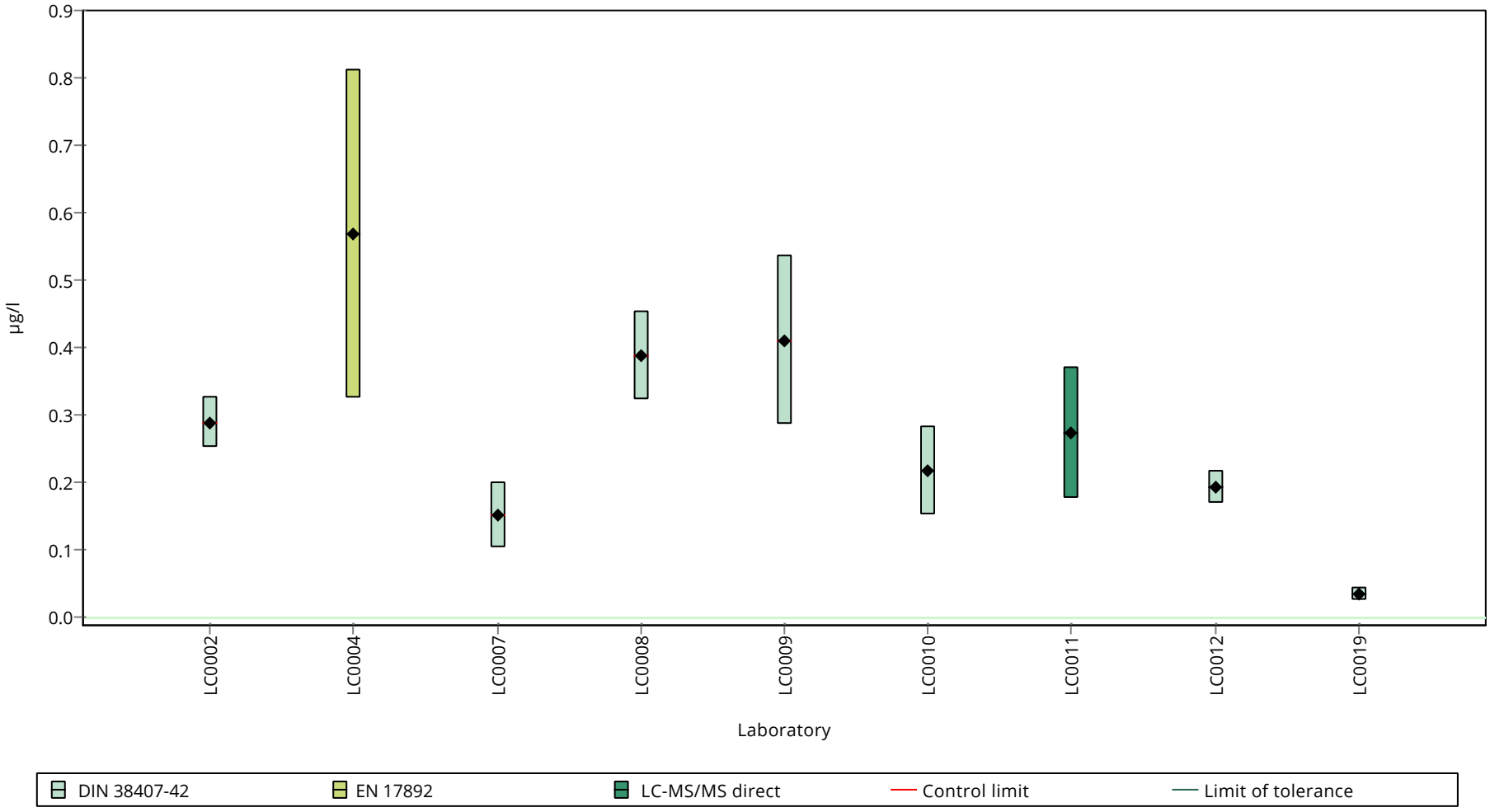
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.289 ± 0.0375	-	-	
LC0003	- ± -	-	-	
LC0004	0.569 ± 0.244	-	-	
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.1522 ± 0.0487	-	-	
LC0008	0.388 ± 0.0651	-	-	
LC0009	0.4109 ± 0.12656	-	-	
LC0010	0.217 ± 0.0652	-	-	
LC0011	0.2732 ± 0.0983	-	-	
LC0012	0.193 ± 0.025	-	-	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.0342 ± 0.0103	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.281 ± 0.158	0.281 ± 0.158	µg/l
Minimum	0.0342	0.0342	µg/l
Maximum	0.569	0.569	µg/l
Standard deviation	0.158	0.158	µg/l
rel. standard deviation	56.4	56.4	%
n	9	9	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

linear Perfluorooctane sulfonic acid (n-PFOS)

Unit	µg/l
Assigned value ± U (k=2)	0.228 ± 0.0456
Criterion	0.0639 (28 %)
Minimum - Maximum	0.145 - 0.323
Control test value ± U (k=2)	0.215 ± 0.0858

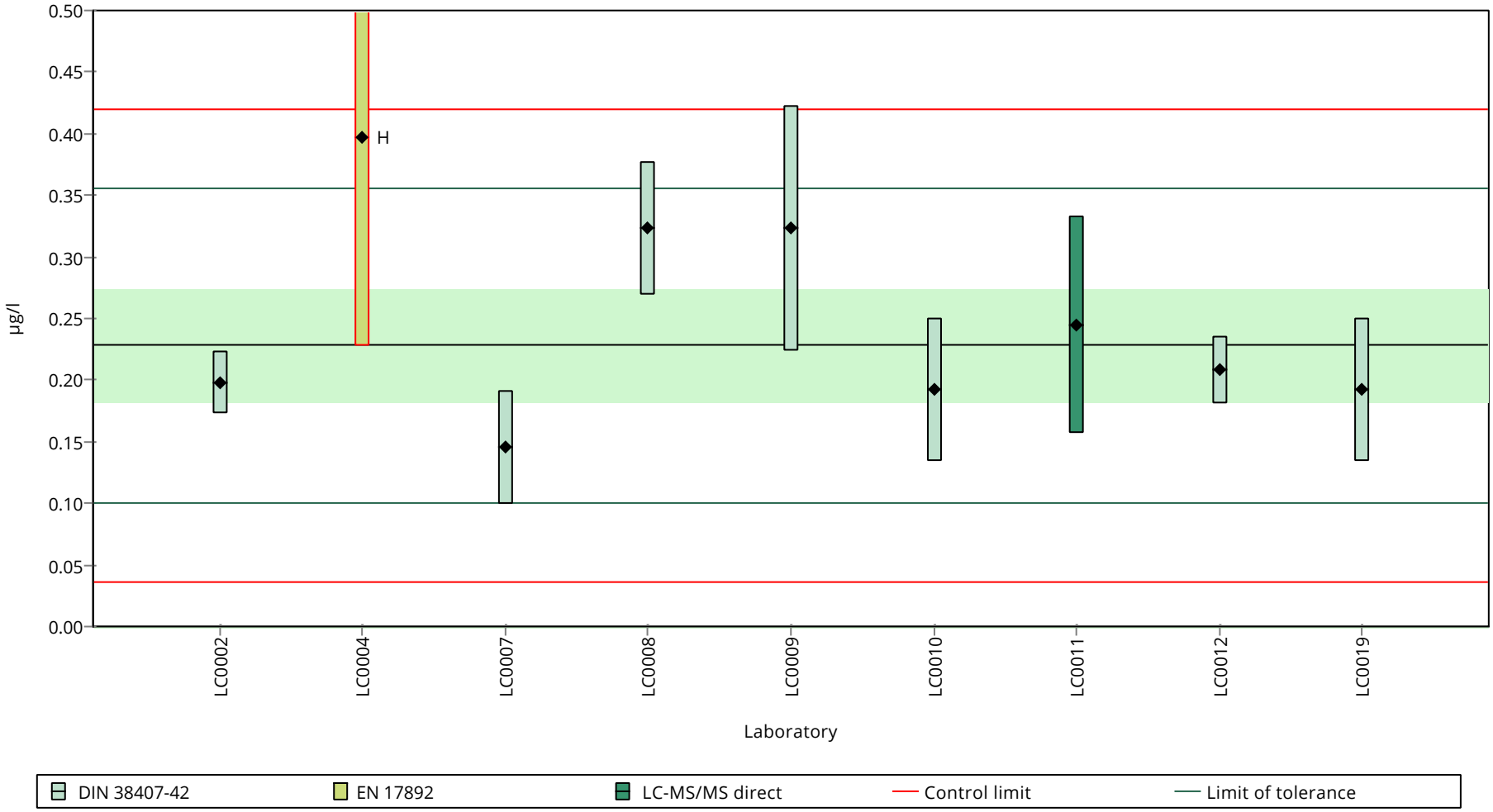
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	- ± -	-	-	
LC0002	0.198 ± 0.0257	86.7	-0.47	
LC0003	- ± -	-	-	
LC0004	0.397 ± 0.17	174	2.64	H
LC0005	- ± -	-	-	
LC0006	- ± -	-	-	
LC0007	0.1452 ± 0.0465	63.6	-1.3	
LC0008	0.323 ± 0.0543	141	1.48	
LC0009	0.3233 ± 0.09958	142	1.49	
LC0010	0.192 ± 0.0578	84.1	-0.57	
LC0011	0.2448 ± 0.0881	107	0.26	
LC0012	0.208 ± 0.027	91.1	-0.32	
LC0013	- ± -	-	-	
LC0014	- ± -	-	-	
LC0015	- ± -	-	-	
LC0016	- ± -	-	-	
LC0017	- ± -	-	-	
LC0018	- ± -	-	-	
LC0019	0.192 ± 0.058	84.1	-0.57	

Characteristics of parameter

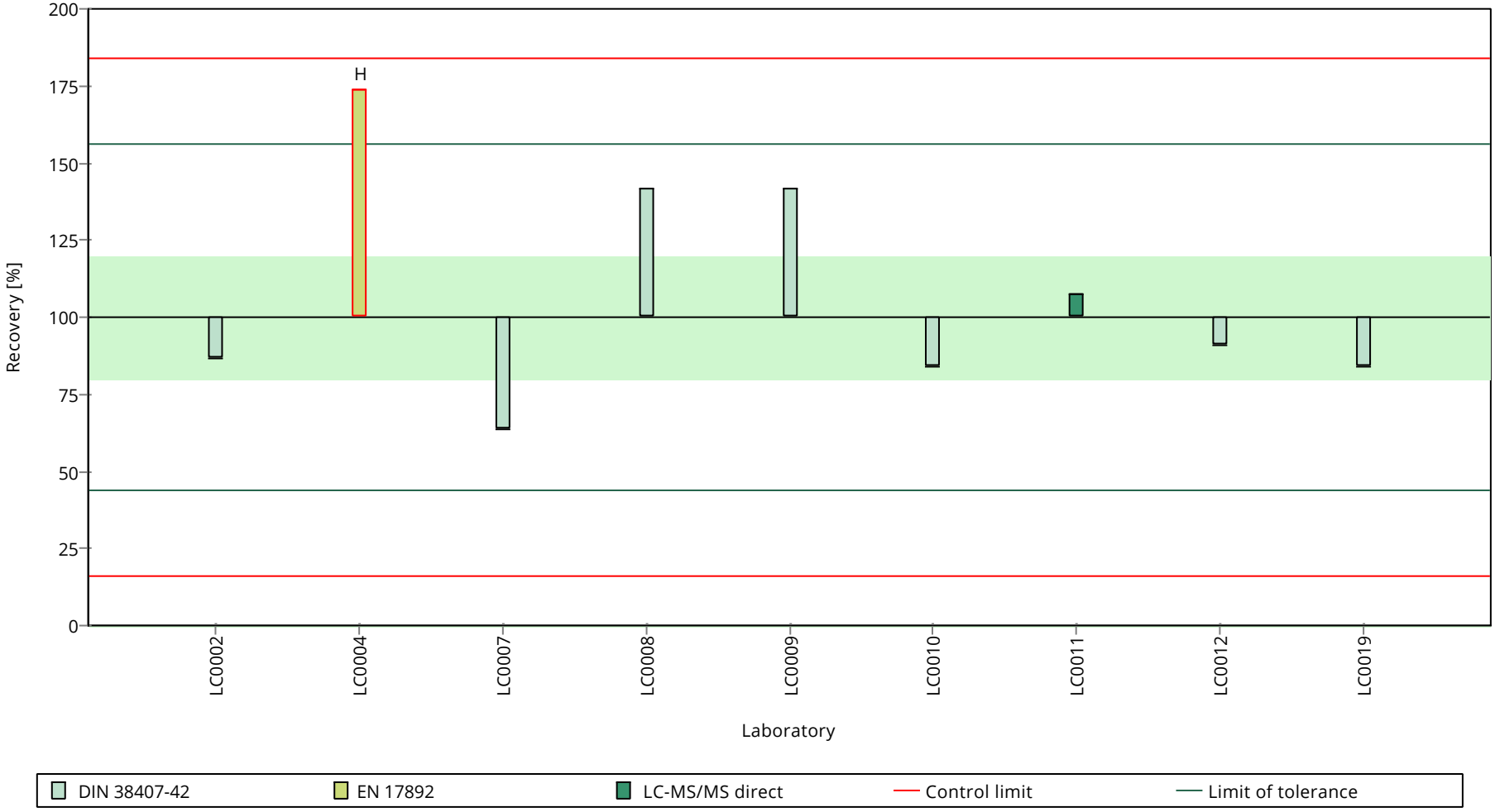
	all results	without outliers	Unit
Mean ± Cl (99%)	0.247 ± 0.0825	0.228 ± 0.0684	µg/l
Minimum	0.145	0.145	µg/l
Maximum	0.397	0.323	µg/l
Standard deviation	0.0825	0.0645	µg/l
rel. standard deviation	33.4	28.3	%
n	9	8	-

Graphical presentation of results

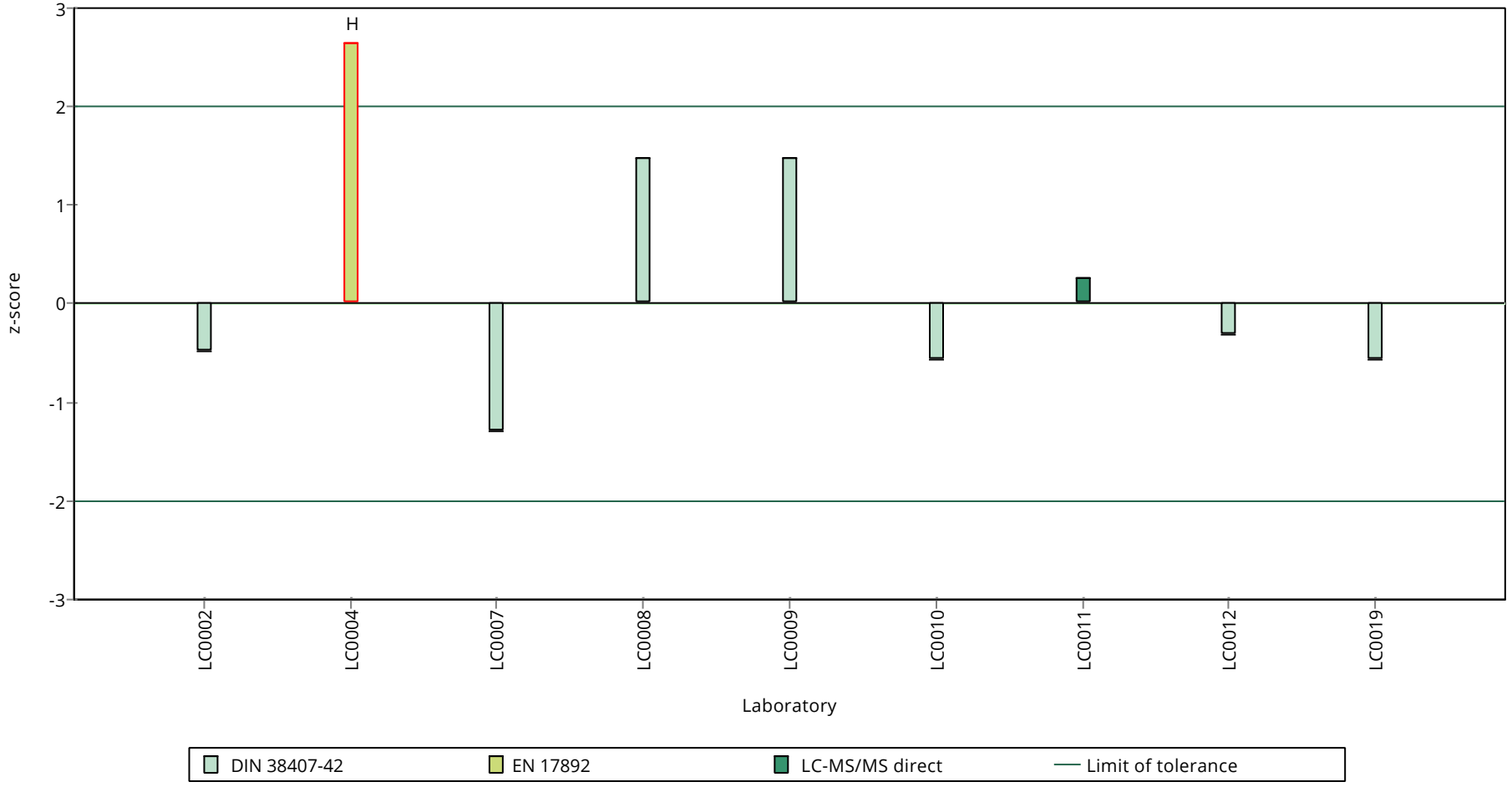
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
H
LC0002
LC0004
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0019
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A02

Total PFOS

Unit	µg/l
Assigned value ± U (k=2)	0.0645 ± 0.0148
Criterion	0.029 (45 %)
Minimum - Maximum	0.0143 - 0.125
Control test value ± U (k=2)	0.0922 ± 0.0682

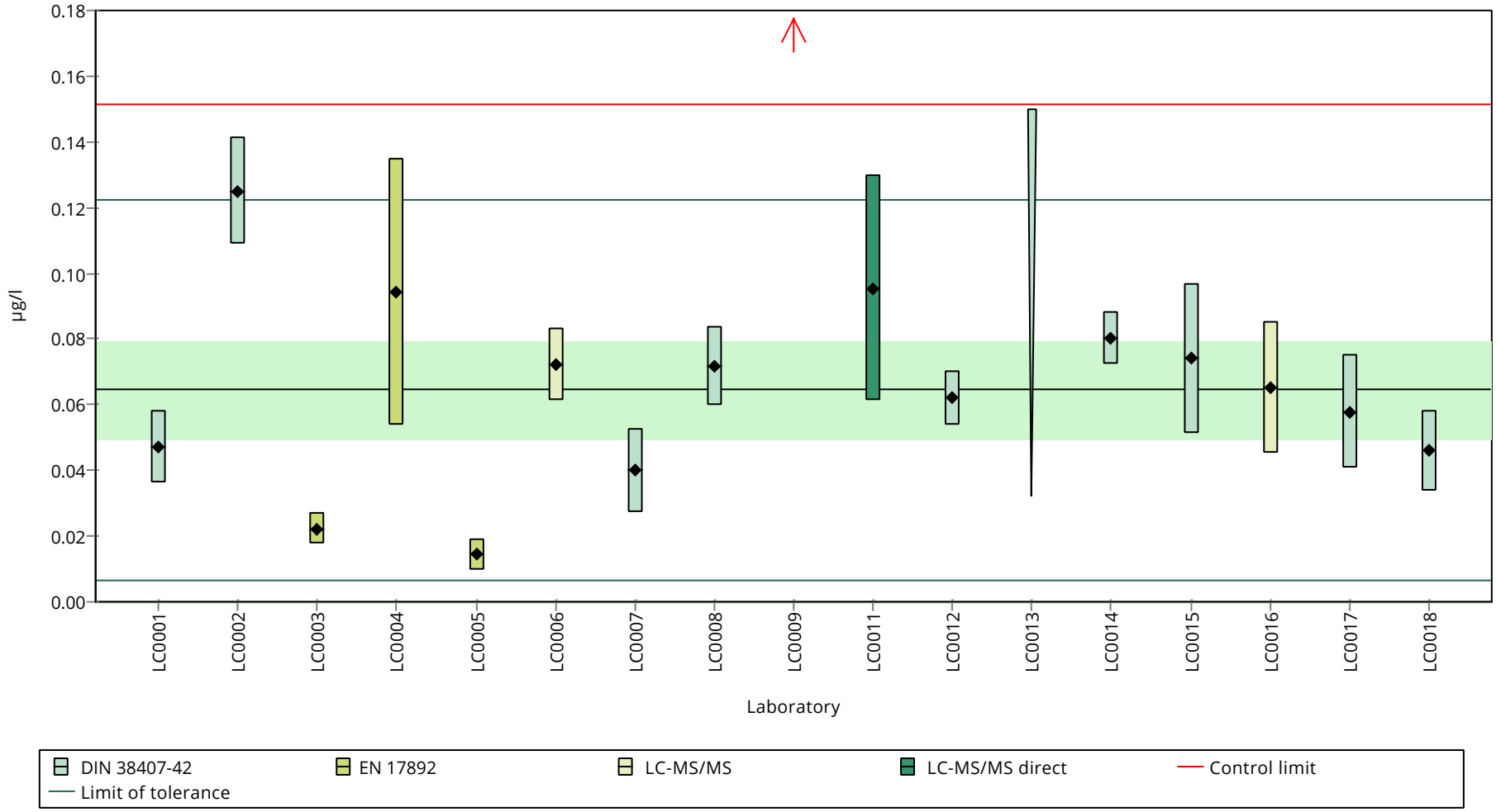
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.047 ± 0.011	72.9	-0.6	
LC0002	0.125 ± 0.0162	194	2.09	
LC0003	0.0223 ± 0.005	34.6	-1.45	
LC0004	0.0943 ± 0.0404	146	1.03	
LC0005	0.0143 ± 0.005	22.2	-1.73	
LC0006	0.072 ± 0.011	112	0.26	
LC0007	0.0399 ± 0.0128	61.9	-0.85	
LC0008	0.0715 ± 0.012	111	0.24	
LC0009	0.9046 ± 0.27862	1400	28.97	H
LC0010	- ± -	-	-	
LC0011	0.0954 ± 0.0343	148	1.07	
LC0012	0.062 ± 0.0082	96.2	-0.08	
LC0013	< 0.15 (LOQ) ± -	-	-	
LC0014	0.08 ± 0.008	124	0.54	
LC0015	0.074 ± 0.023	115	0.33	
LC0016	0.0653 ± 0.02	101	0.03	
LC0017	0.0578 ± 0.0173	89.7	-0.23	
LC0018	0.046 ± 0.0123	71.4	-0.64	
LC0019	- ± -	-	-	

Characteristics of parameter

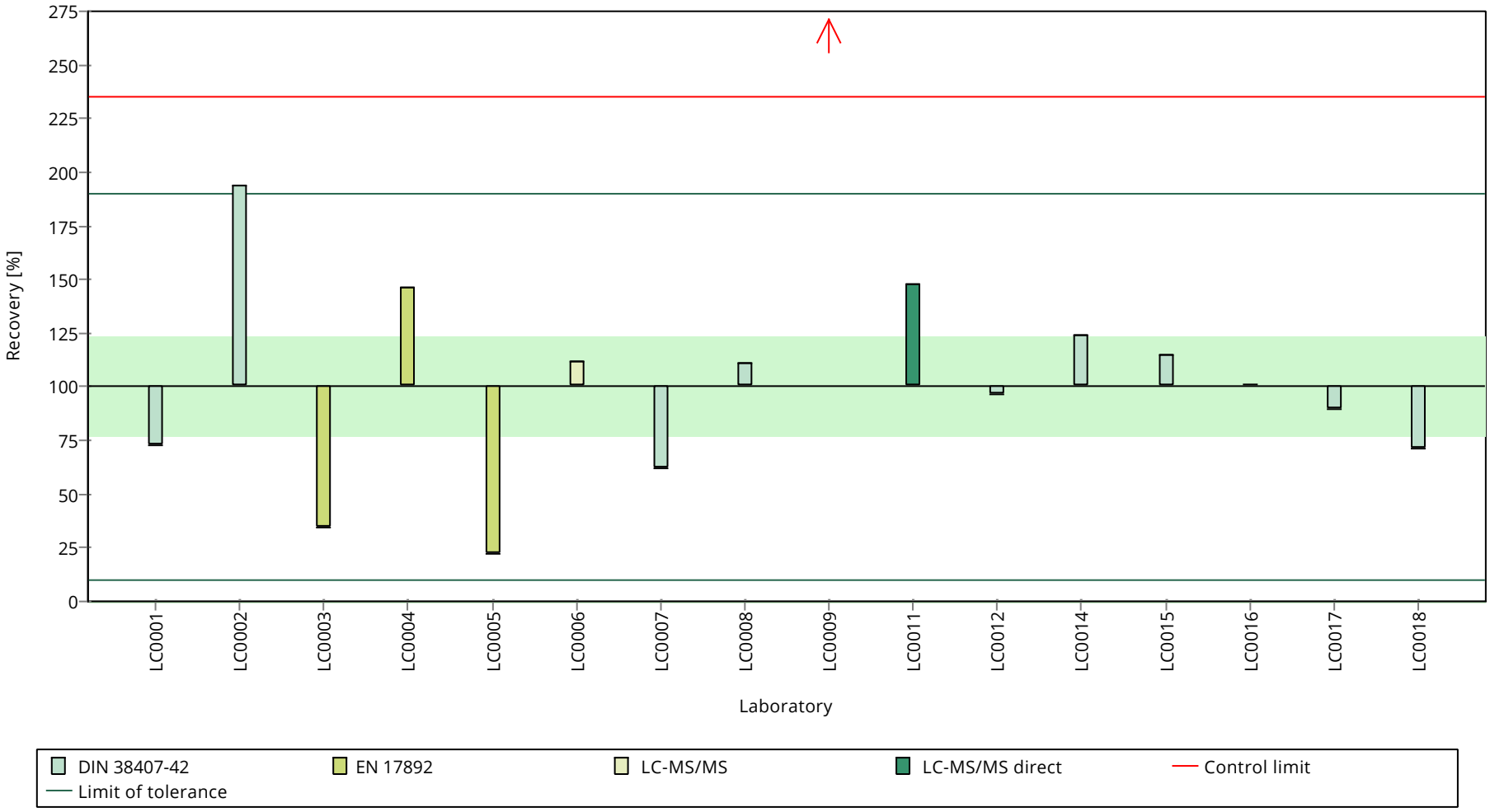
	all results	without outliers	Unit
Mean ± Cl (99%)	0.117 ± 0.159	0.0645 ± 0.0222	µg/l
Minimum	0.0143	0.0143	µg/l
Maximum	0.905	0.125	µg/l
Standard deviation	0.212	0.0287	µg/l
rel. standard deviation	181	44.6	%
n	16	15	-

Graphical presentation of results

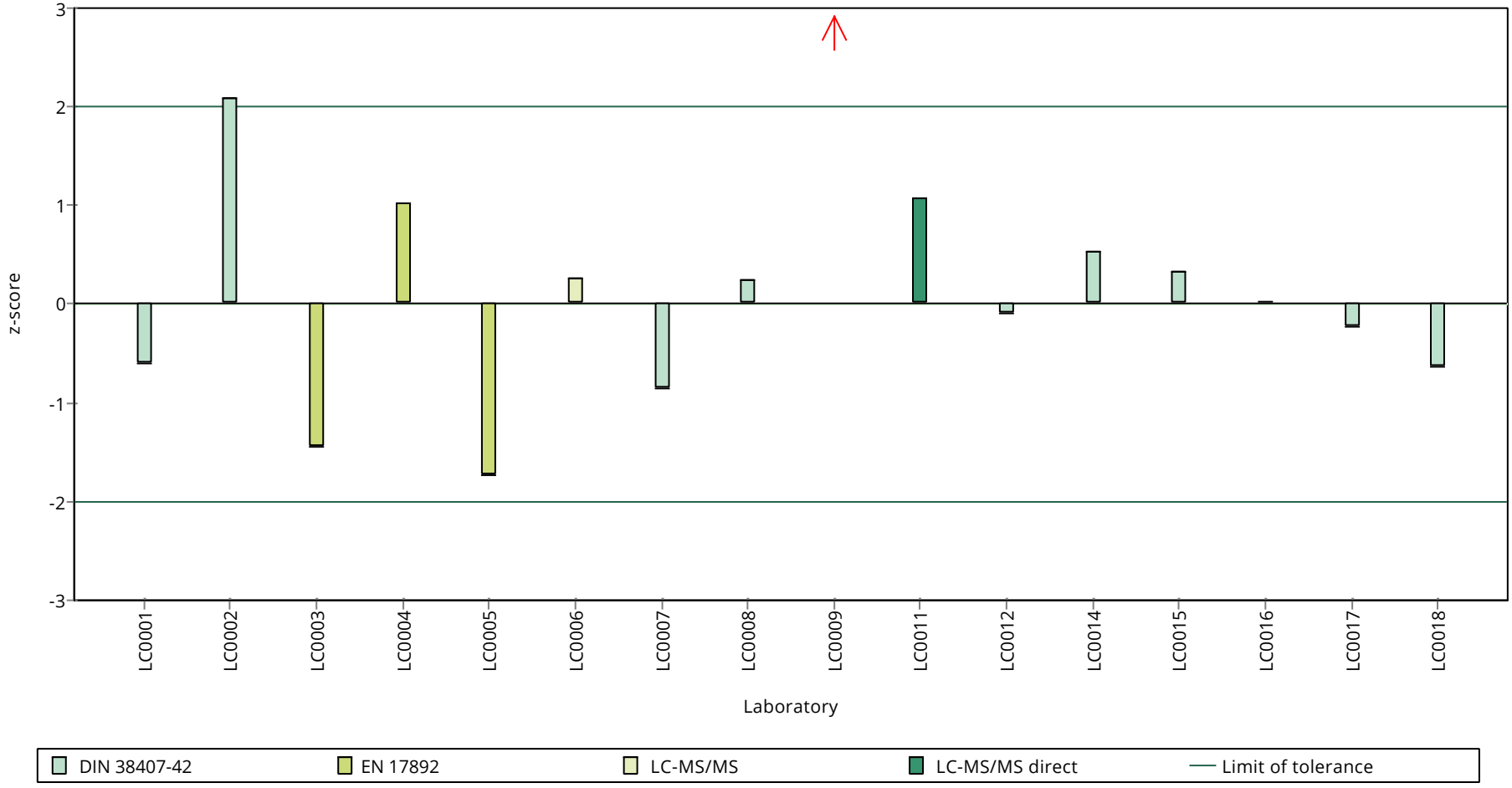
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Total PFOS

Unit	µg/l
Assigned value ± U (k=2)	0.0871 ± 0.00981
Criterion	0.0218 (25 %)
Minimum - Maximum	0.062 - 0.119
Control test value ± U (k=2)	0.101 ± 0.0744

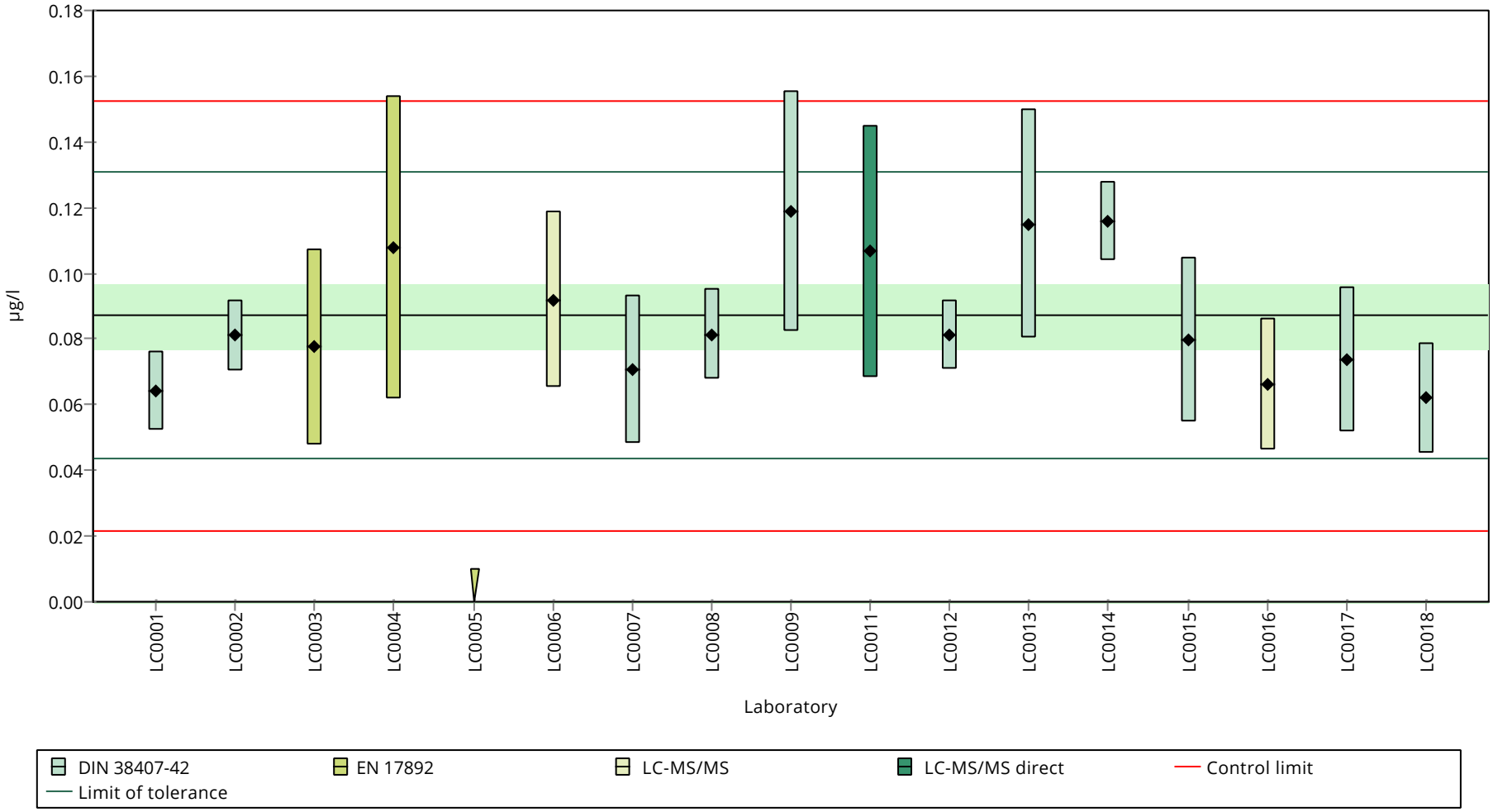
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.064 ± 0.012	73.5	-1.06	
LC0002	0.081 ± 0.0106	93	-0.28	
LC0003	0.0775 ± 0.03	89	-0.44	
LC0004	0.108 ± 0.0461	124	0.96	
LC0005	< 0.01 (LOQ) ± -	-	-	FN
LC0006	0.092 ± 0.027	106	0.22	
LC0007	0.0706 ± 0.0226	81	-0.76	
LC0008	0.0814 ± 0.0137	93.4	-0.26	
LC0009	0.11897 ± 0.03664	137	1.46	
LC0010	- ± -	-	-	
LC0011	0.1066 ± 0.0384	122	0.89	
LC0012	0.0813 ± 0.0107	93.3	-0.27	
LC0013	0.115 ± 0.035	132	1.28	
LC0014	0.116 ± 0.012	133	1.33	
LC0015	0.0797 ± 0.025	91.5	-0.34	
LC0016	0.0661 ± 0.02	75.9	-0.96	
LC0017	0.0737 ± 0.0221	84.6	-0.62	
LC0018	0.062 ± 0.0167	71.2	-1.15	
LC0019	- ± -	-	-	

Characteristics of parameter

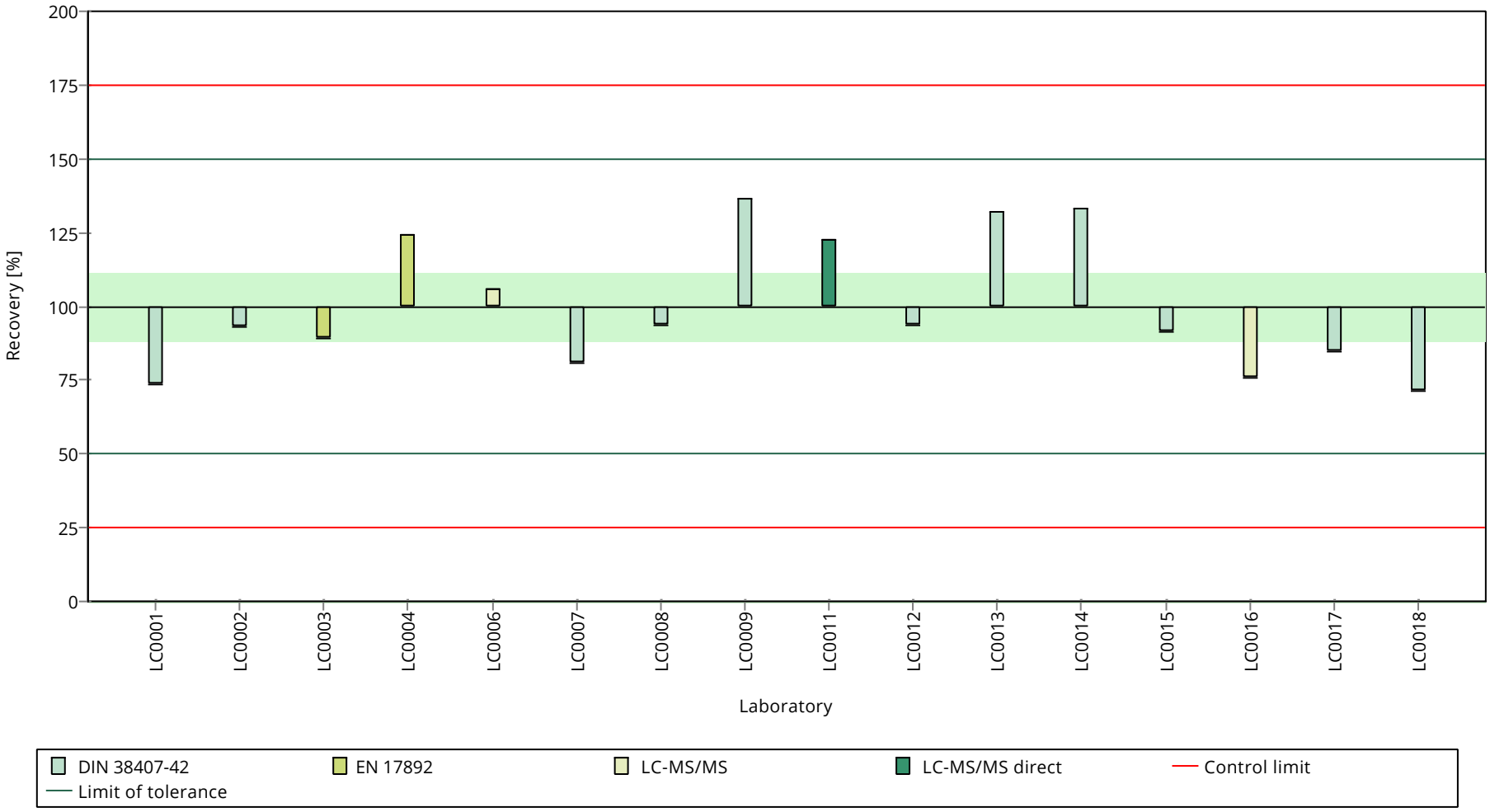
	all results	without outliers	Unit
Mean ± Cl (99%)	0.0871 ± 0.0147	0.0871 ± 0.0147	µg/l
Minimum	0.062	0.062	µg/l
Maximum	0.119	0.119	µg/l
Standard deviation	0.0196	0.0196	µg/l
rel. standard deviation	22.5	22.5	%
n	16	16	-

Graphical presentation of results

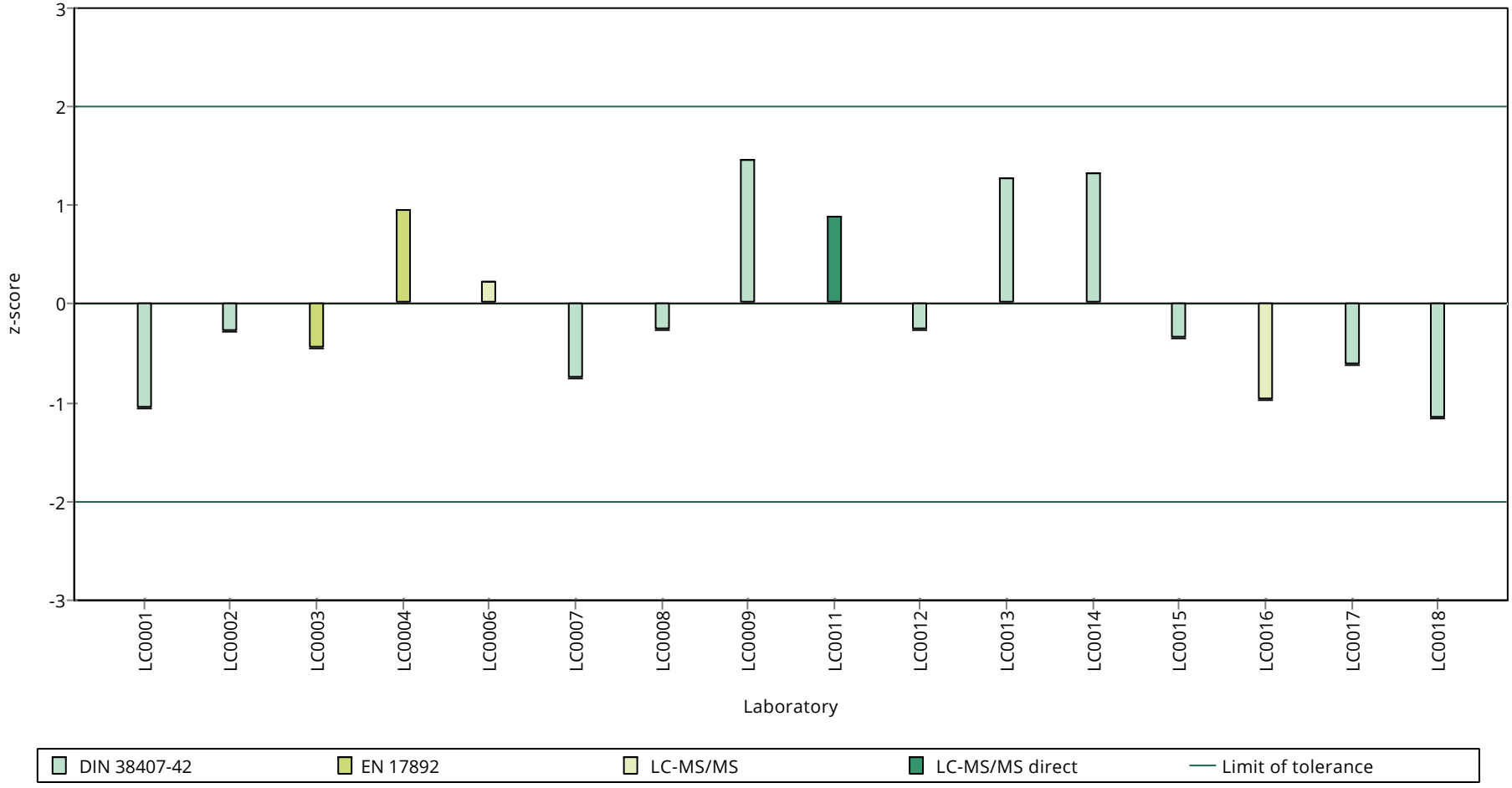
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Total PFOS

Unit	µg/l
Assigned value ± U (k=2)	0.327 ± 0.0649
Criterion	0.131 (40 %)
Minimum - Maximum	0.165 - 0.582
Control test value ± U (k=2)	0.334 ± 0.163

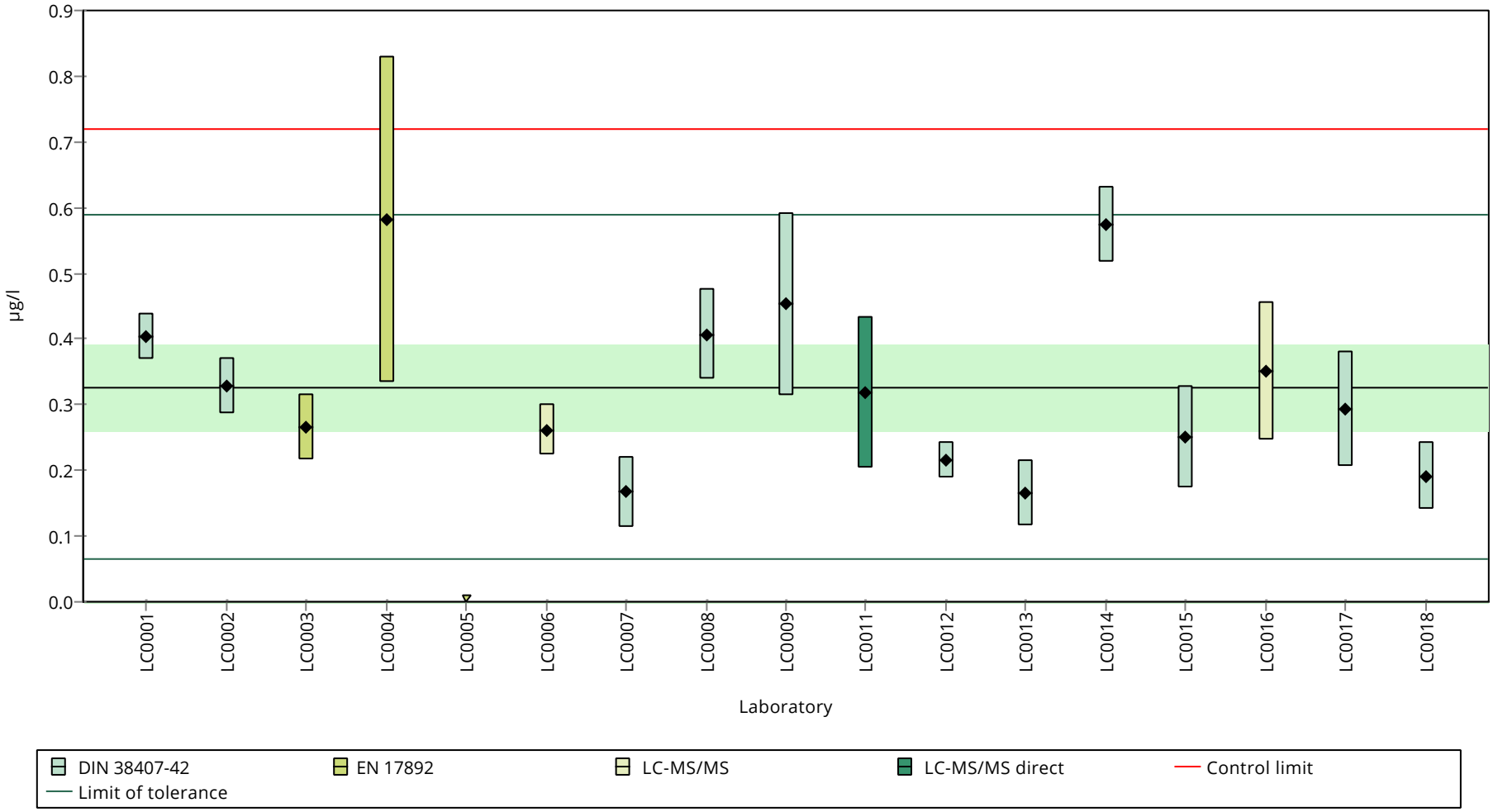
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.404 ± 0.035	124	0.59	
LC0002	0.328 ± 0.0426	100	0.01	
LC0003	0.266 ± 0.05	81.4	-0.46	
LC0004	0.582 ± 0.249	178	1.95	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	0.261 ± 0.039	79.9	-0.5	
LC0007	0.1668 ± 0.0534	51.1	-1.22	
LC0008	0.407 ± 0.0683	125	0.61	
LC0009	0.45262 ± 0.13941	139	0.96	
LC0010	- ± -	-	-	
LC0011	0.3191 ± 0.1149	97.7	-0.06	
LC0012	0.216 ± 0.028	66.1	-0.85	
LC0013	0.165 ± 0.05	50.5	-1.24	
LC0014	0.574 ± 0.057	176	1.89	
LC0015	0.2502 ± 0.078	76.6	-0.59	
LC0016	0.351 ± 0.105	107	0.19	
LC0017	0.293 ± 0.088	89.7	-0.26	
LC0018	0.191 ± 0.0517	58.5	-1.04	
LC0019	- ± -	-	-	

Characteristics of parameter

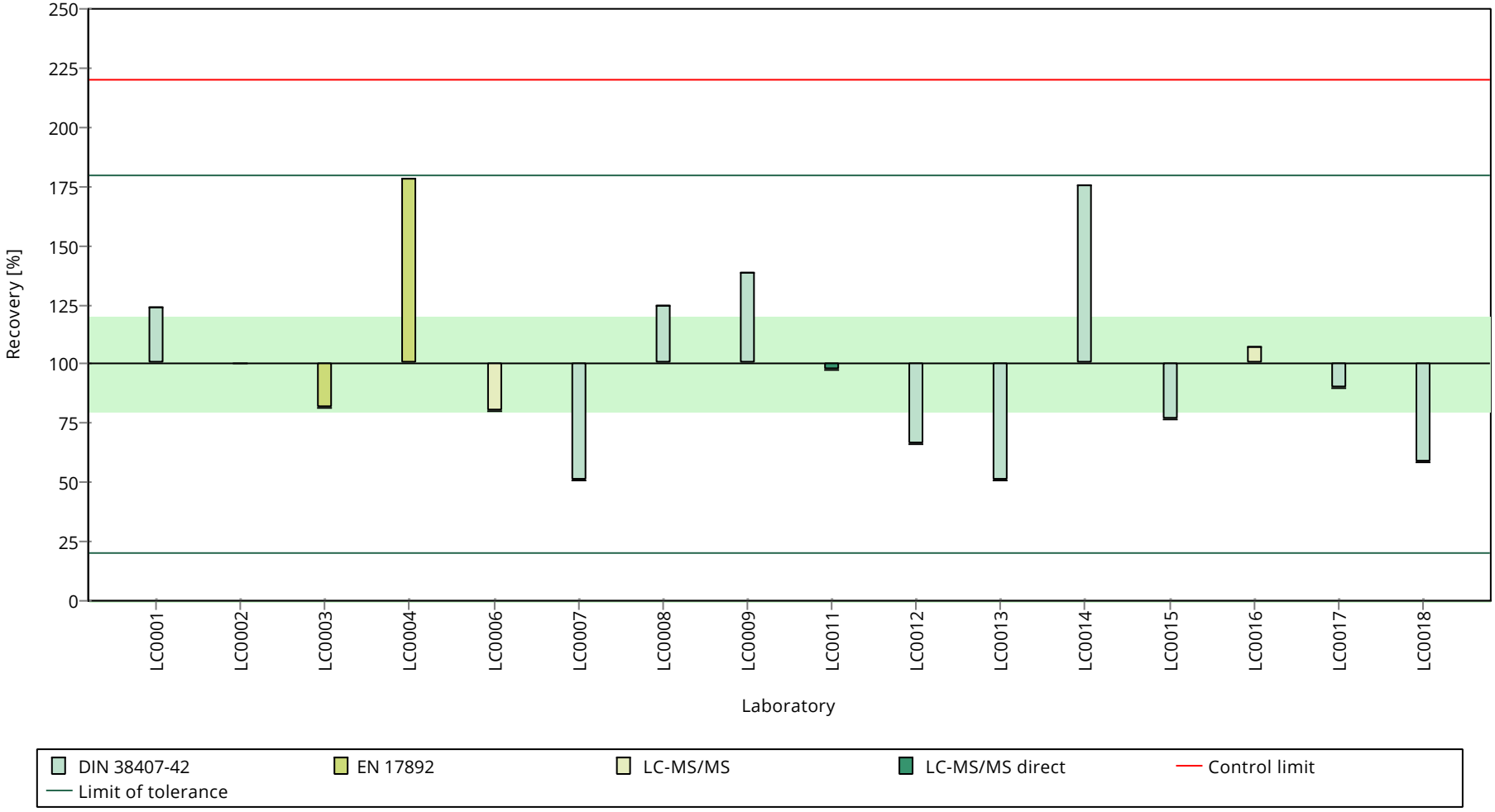
	all results	without outliers	Unit
Mean ± Cl (99%)	0.327 ± 0.0973	0.327 ± 0.0973	µg/l
Minimum	0.165	0.165	µg/l
Maximum	0.582	0.582	µg/l
Standard deviation	0.13	0.13	µg/l
rel. standard deviation	39.7	39.7	%
n	16	16	-

Graphical presentation of results

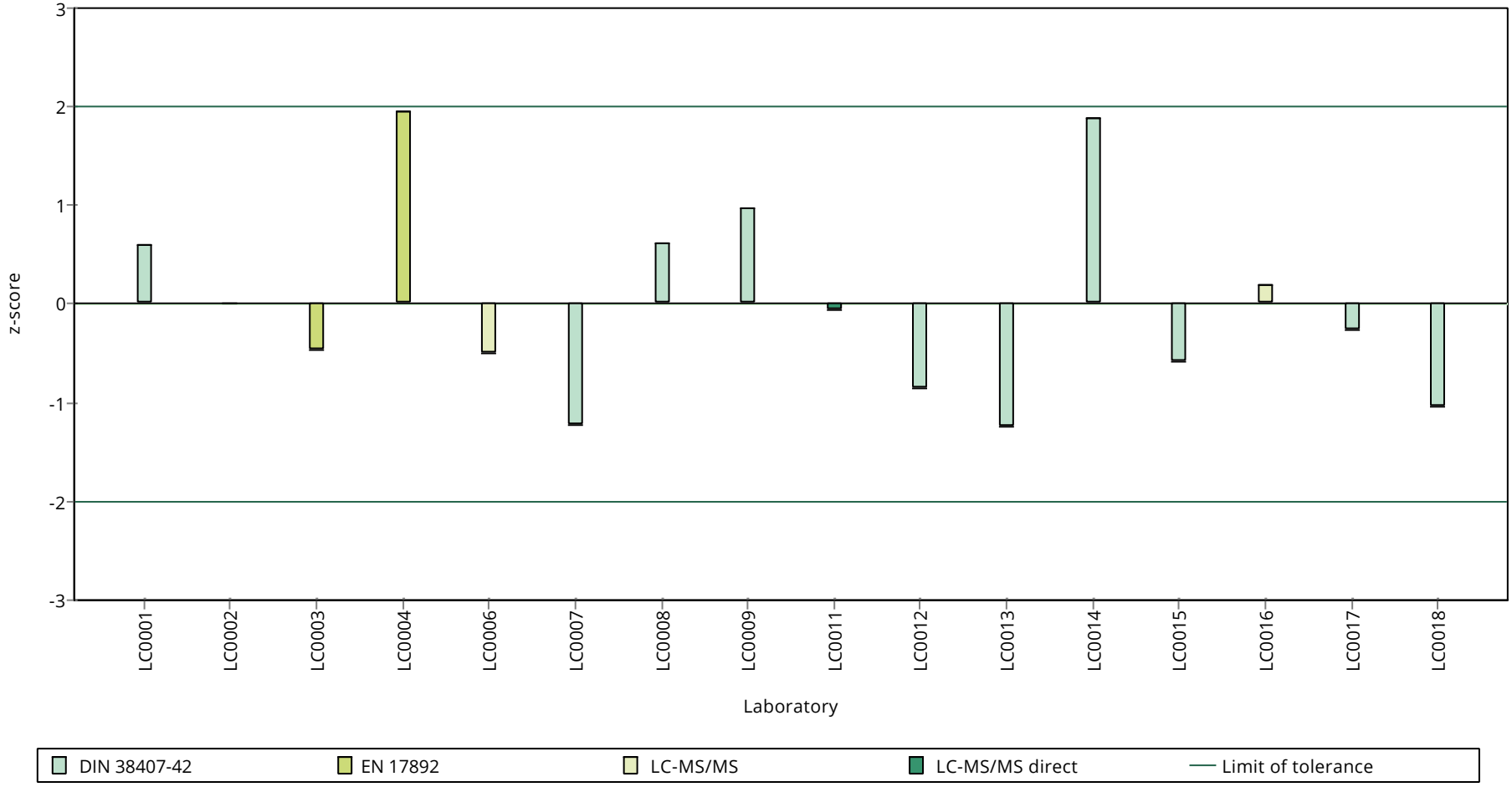
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B10

Total PFOS

Unit	µg/l
Assigned value ± U (k=2)	0.282 ± 0.037
Criterion	0.079 (28 %)
Minimum - Maximum	0.156 - 0.454
Control test value ± U (k=2)	0.239 ± 0.11

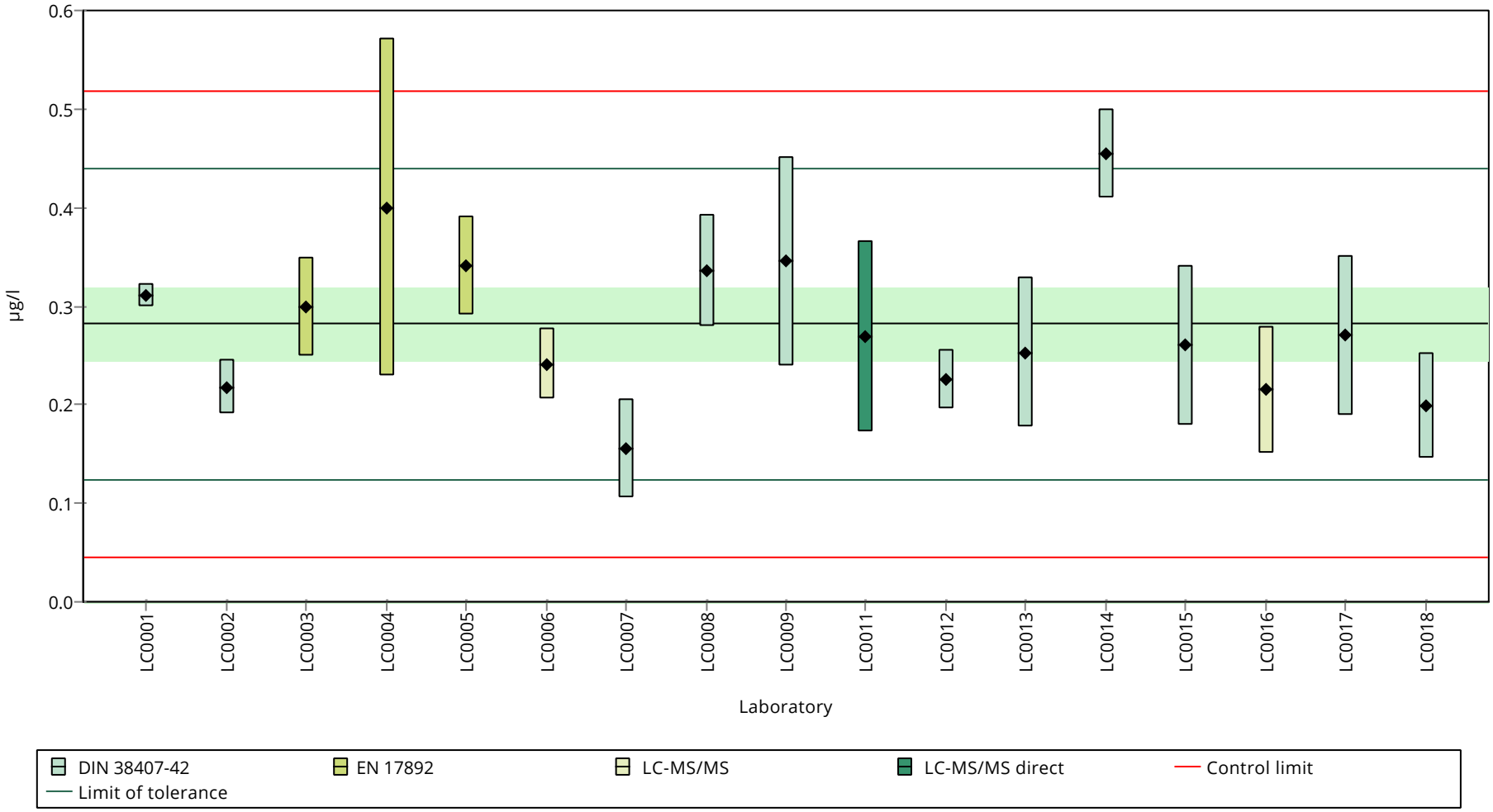
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.311 ± 0.012	110	0.37	
LC0002	0.218 ± 0.0283	77.3	-0.81	
LC0003	0.299 ± 0.05	106	0.22	
LC0004	0.4 ± 0.171	142	1.49	
LC0005	0.341 ± 0.05	121	0.75	
LC0006	0.241 ± 0.036	85.5	-0.52	
LC0007	0.1557 ± 0.0498	55.2	-1.6	
LC0008	0.336 ± 0.0565	119	0.68	
LC0009	0.34555 ± 0.10643	123	0.8	
LC0010	- ± -	-	-	
LC0011	0.2696 ± 0.0971	95.6	-0.16	
LC0012	0.226 ± 0.03	80.1	-0.71	
LC0013	0.253 ± 0.076	89.7	-0.37	
LC0014	0.454 ± 0.045	161	2.18	
LC0015	0.26 ± 0.081	92.2	-0.28	
LC0016	0.215 ± 0.0645	76.2	-0.85	
LC0017	0.27 ± 0.081	95.7	-0.15	
LC0018	0.199 ± 0.05366	70.6	-1.05	
LC0019	- ± -	-	-	

Characteristics of parameter

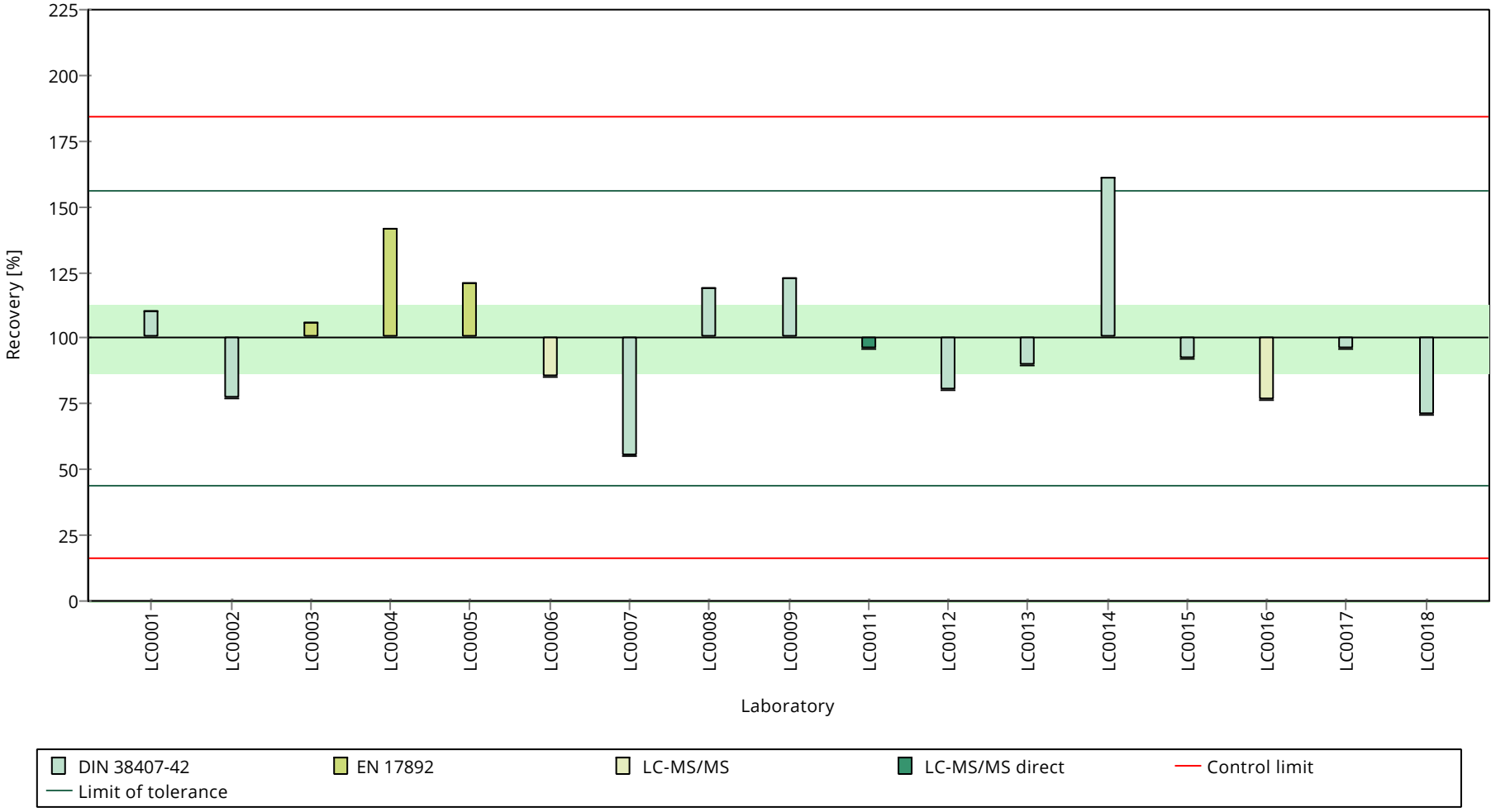
	all results	without outliers	Unit
Mean ± Cl (99%)	0.282 ± 0.0555	0.282 ± 0.0555	µg/l
Minimum	0.156	0.156	µg/l
Maximum	0.454	0.454	µg/l
Standard deviation	0.0762	0.0762	µg/l
rel. standard deviation	27	27	%
n	17	17	-

Graphical presentation of results

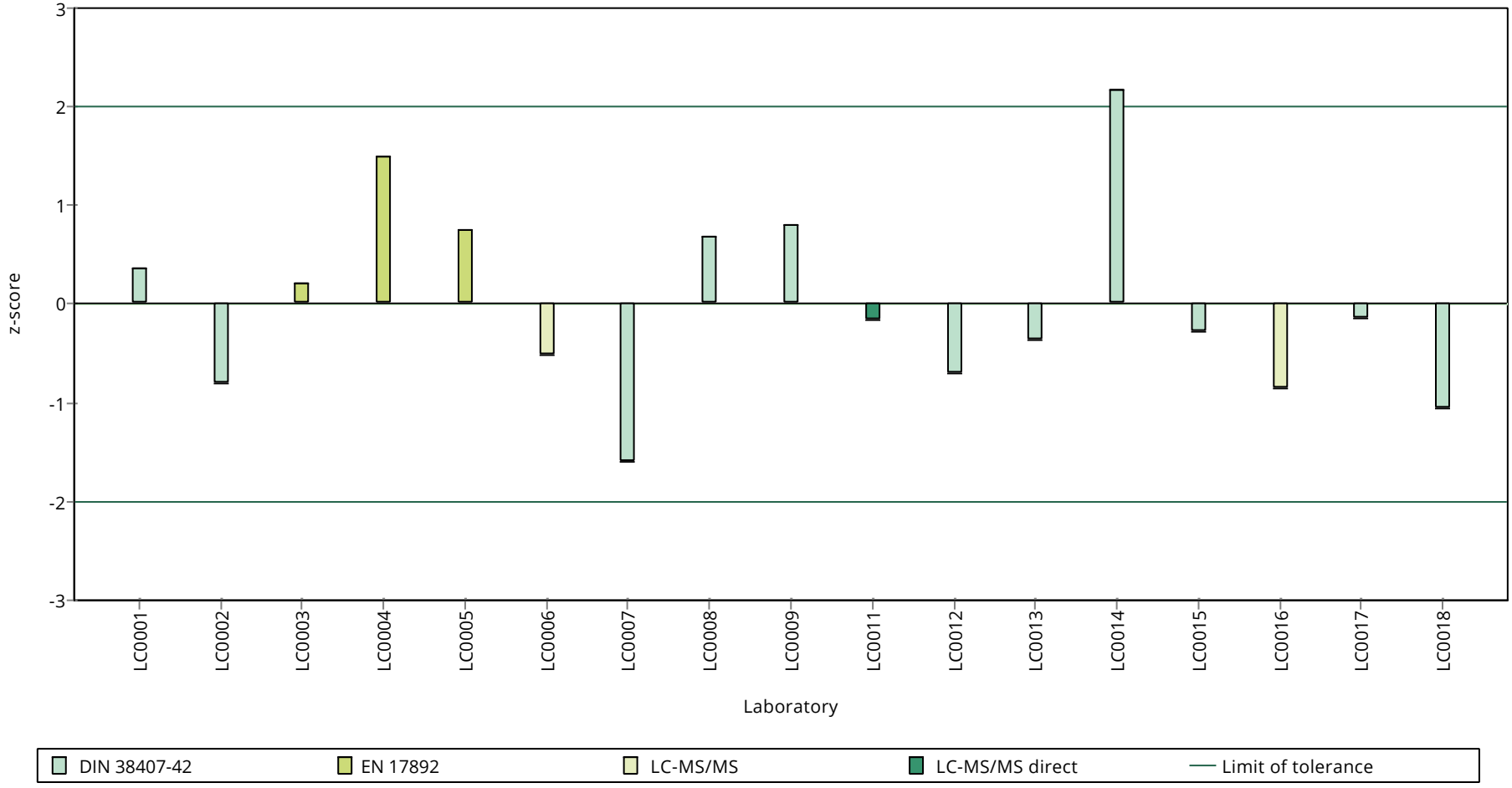
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0011
LC0012
LC0013
LC0014
LC0015
LC0016
LC0017
LC0018
Laboratory
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A02

Perfluorononane sulfonic acid (PFNS) - PF9S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0327 - 0.0327
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

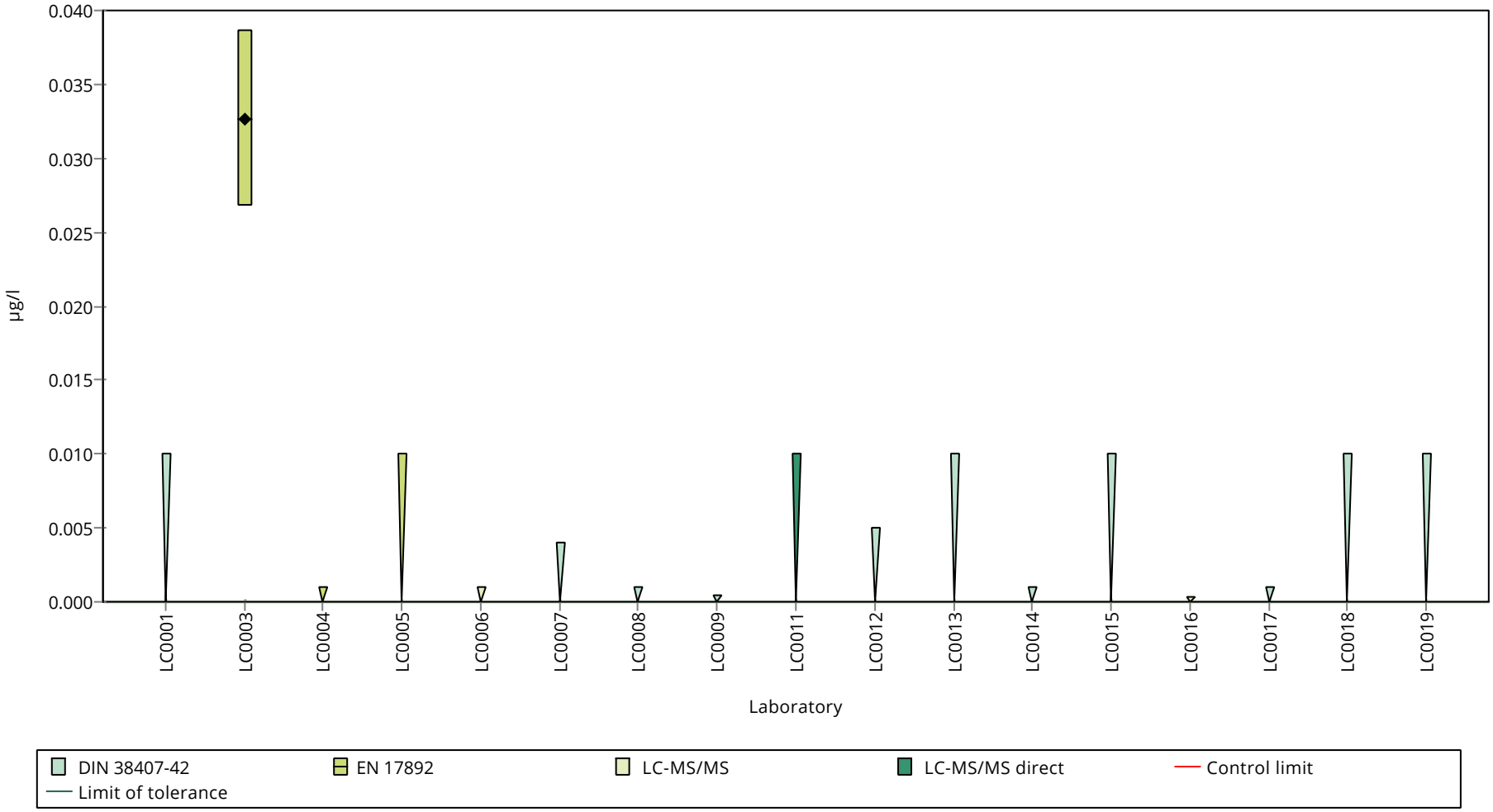
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0327	±	0.006	-	-	FP
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	< 0.001 (LOQ)	±	-	-	-	
LC0009	<0.0005 (LOD)	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.01 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	< 0.001 (LOQ)	±	-	-	-	
LC0015	< 0.01 (LOQ)	±	-	-	-	
LC0016	<0.0003 (LOD)	±	-	-	-	
LC0017	< 0.001 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0327	0.0327	µg/l
Maximum	0.0327	0.0327	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorononane sulfonic acid (PFNS) - PF9S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0017 - 0.0293
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

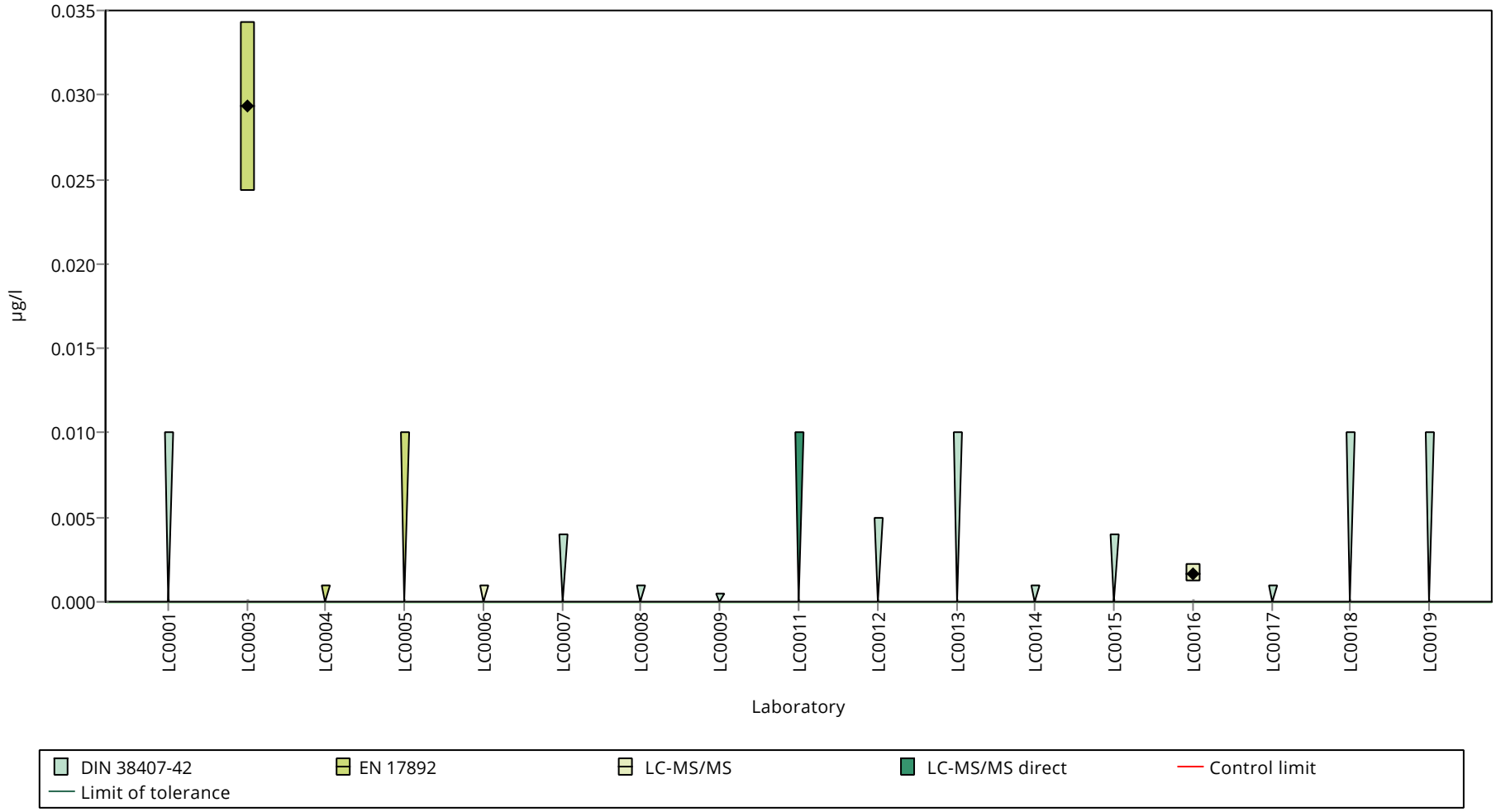
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0293	±	0.005	-	-	FP
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	< 0.001 (LOQ)	±	-	-	-	
LC0009	<0.0005 (LOD)	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.01 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	< 0.001 (LOQ)	±	-	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	0.0017	±	0.0005	-	-	
LC0017	< 0.000996 (LOQ)	±	-	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.0155 ± 0.0414	-	µg/l
Minimum	0.0017	0.0017	µg/l
Maximum	0.0293	0.0293	µg/l
Standard deviation	0.0195	-	µg/l
rel. standard deviation	126	-	%
n	2	2	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorononane sulfonic acid (PFNS) - PF9S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.000568 - 0.00654
Control test value ± U (k=2)	<0.001 (LOQ)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

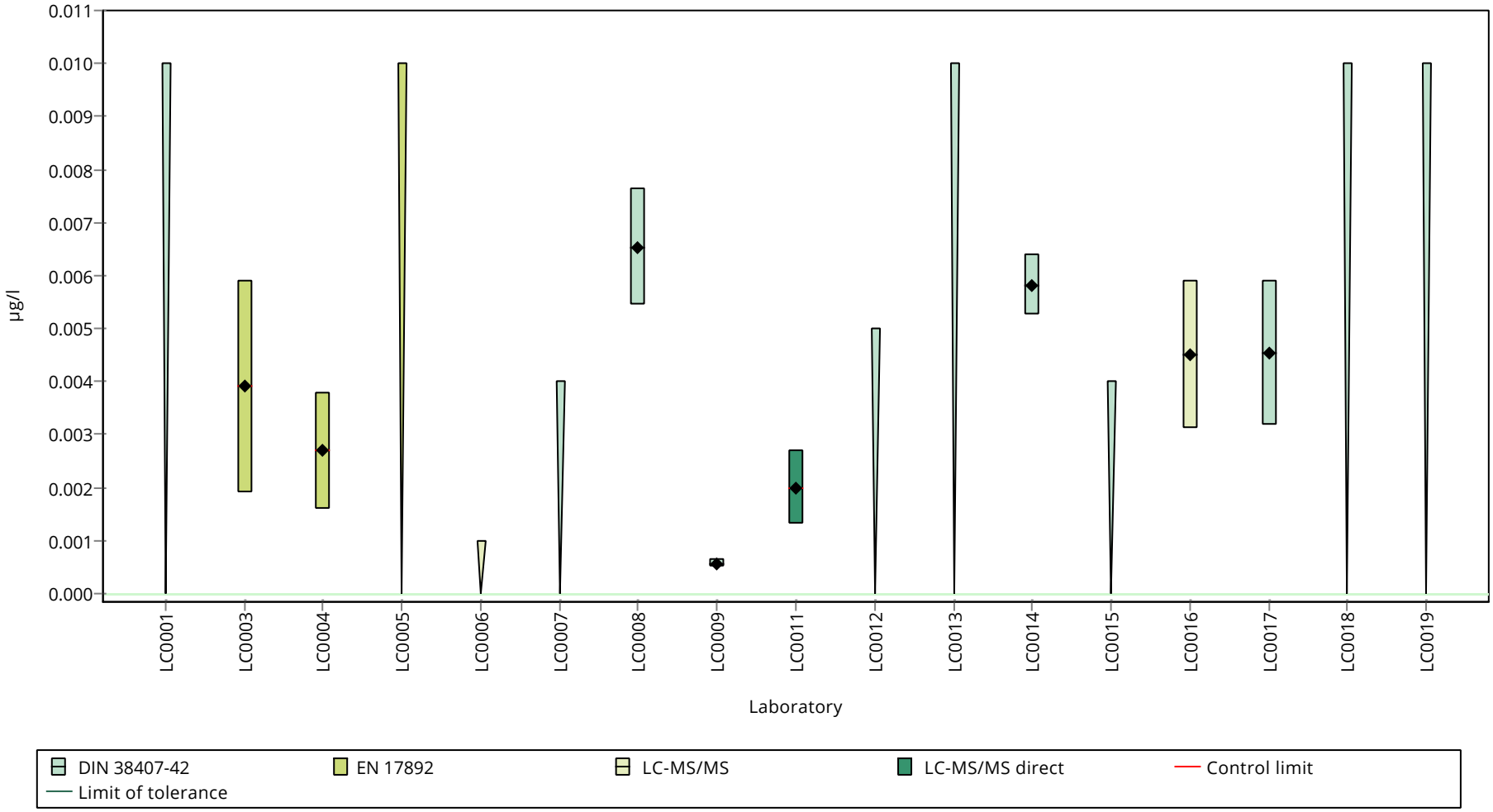
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0039	±	0.002	-	-	
LC0004	0.00269	±	0.00109	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00654	±	0.00111	-	-	
LC0009	0.00057	±	0.00008	-	-	
LC0010	-	±	-	-	-	
LC0011	0.002	±	0.0007	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.00582	±	0.00058	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	0.0045	±	0.0014	-	-	
LC0017	0.00453	±	0.00136	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00382 ± 0.0021	0.00382 ± 0.0021	µg/l
Minimum	0.000568	0.000568	µg/l
Maximum	0.00654	0.00654	µg/l
Standard deviation	0.00198	0.00198	µg/l
rel. standard deviation	51.9	51.9	%
n	8	8	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorononane sulfonic acid (PFNS) - PF9S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0006 - 0.00629
Control test value ± U (k=2)	<0.001 (LOQ)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

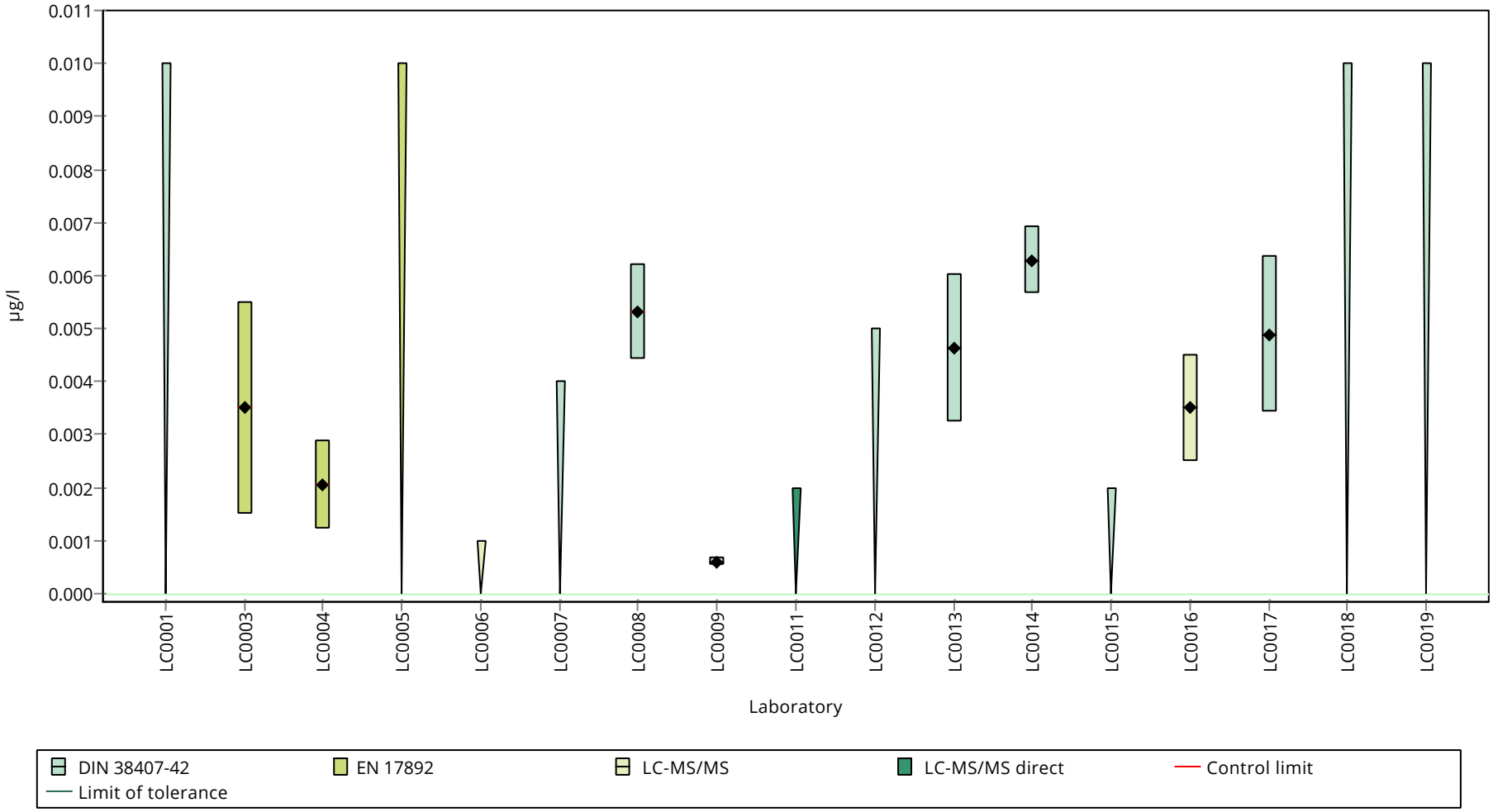
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	0.0035	±	0.002	-	-	
LC0004	0.00206	±	0.00084	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00532	±	0.0009	-	-	
LC0009	0.0006	±	0.00009	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	0.00464	±	0.0014	-	-	
LC0014	0.00629	±	0.00063	-	-	
LC0015	< 0.002 (LOQ)	±	-	-	-	
LC0016	0.0035	±	0.001	-	-	
LC0017	0.00489	±	0.00147	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00385 ± 0.00196	0.00385 ± 0.00196	µg/l
Minimum	0.0006	0.0006	µg/l
Maximum	0.00629	0.00629	µg/l
Standard deviation	0.00185	0.00185	µg/l
rel. standard deviation	47.9	47.9	%
n	8	8	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorodecane sulfonic acid (PFDS) - PF10S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

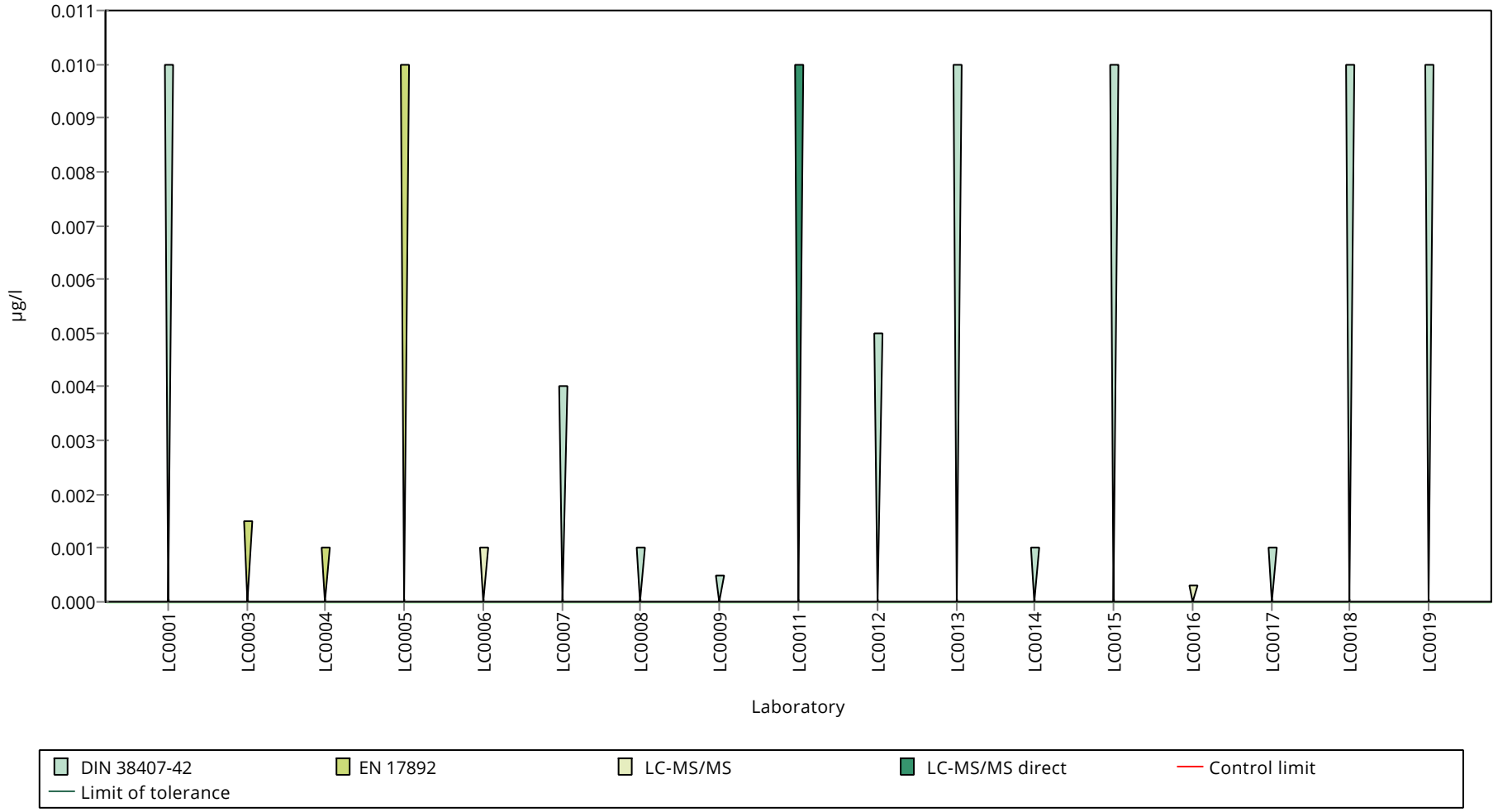
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorodecane sulfonic acid (PFDS) - PF10S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

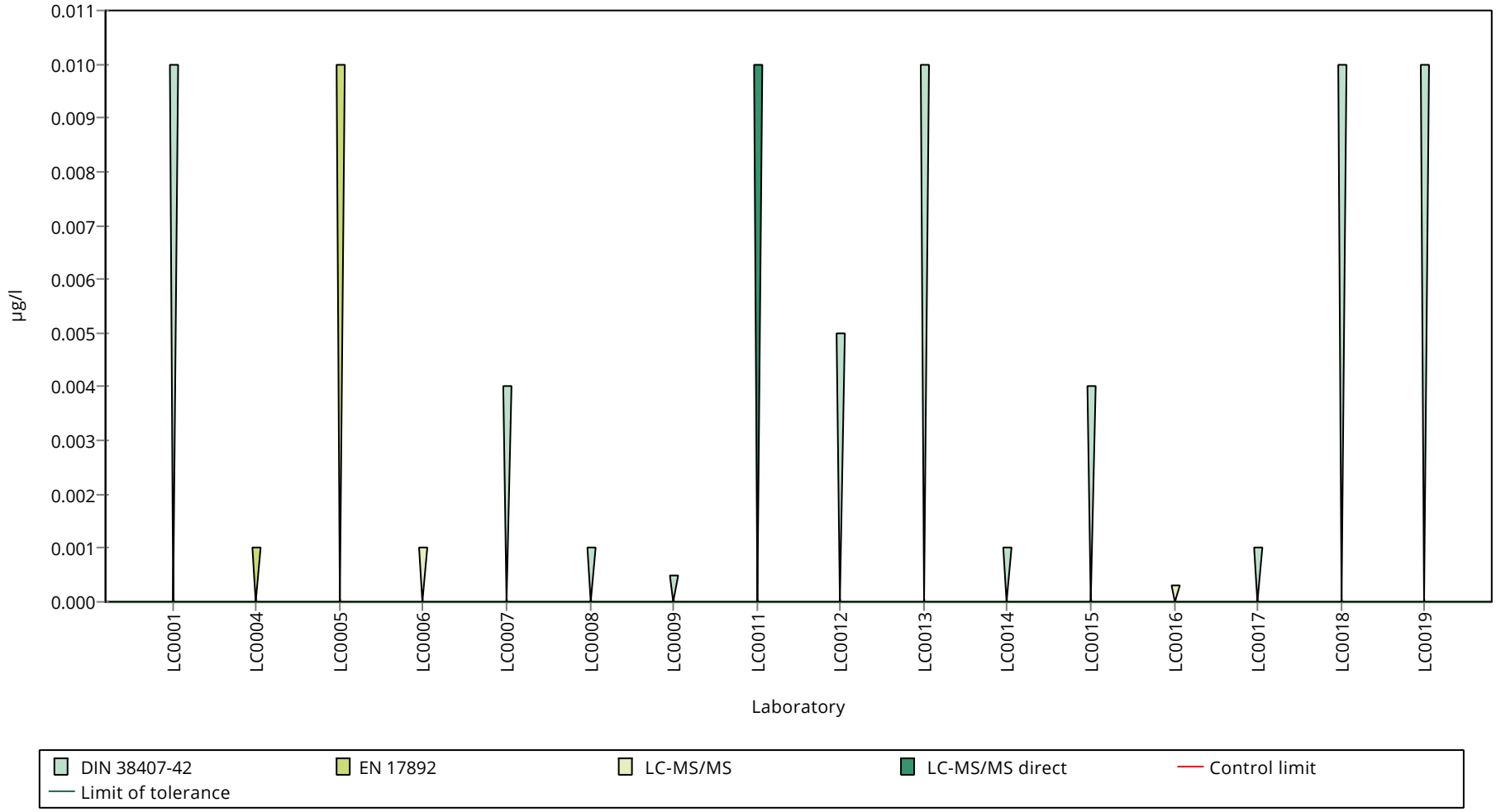
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	- ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	<0.0005 (LOD) ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.000996 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorodecane sulfonic acid (PFDS) - PF10S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00292 - 0.0046
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

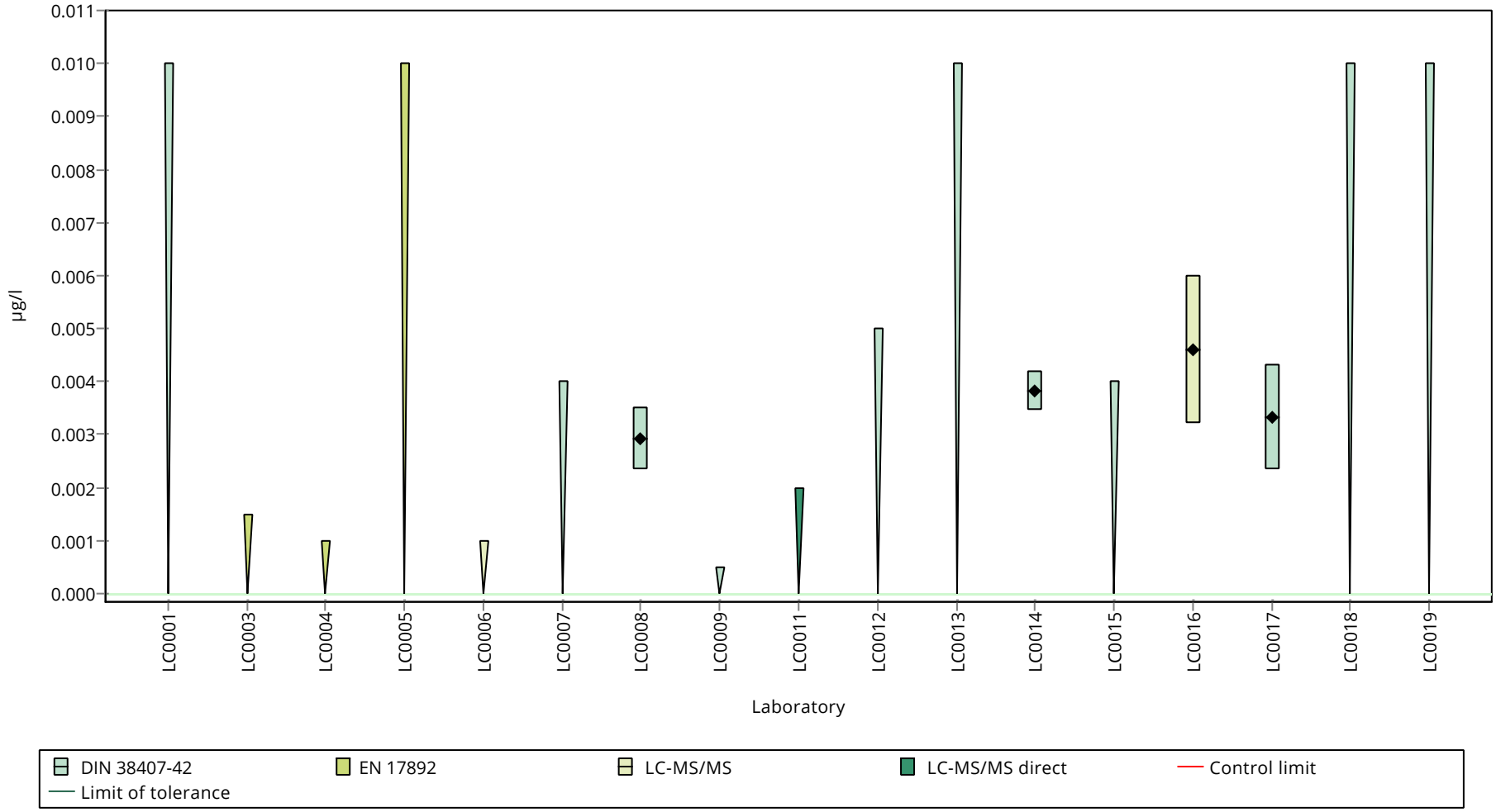
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	< 0.0015 (LOQ)	±	-	-	-	
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00292	±	0.00059	-	-	
LC0009	<0.0005 (LOD)	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	0.00382	±	0.00038	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	0.0046	±	0.0014	-	-	
LC0017	0.00332	±	0.001	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00366 ± 0.00109	-	µg/l
Minimum	0.00292	0.00292	µg/l
Maximum	0.0046	0.0046	µg/l
Standard deviation	0.000724	-	µg/l
rel. standard deviation	19.8	-	%
n	4	4	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorodecane sulfonic acid (PFDS) - PF10S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0029 - 0.00493
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

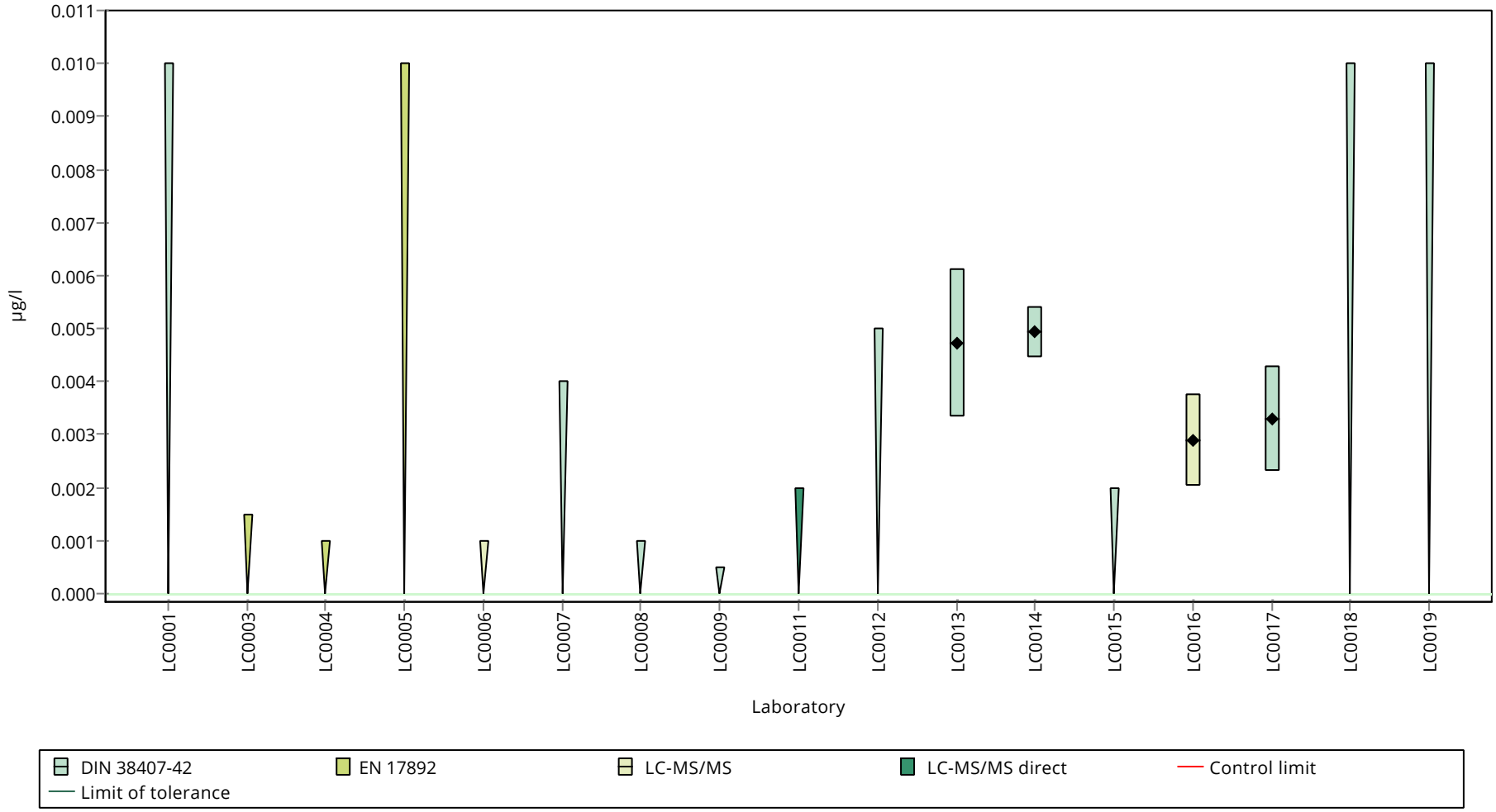
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	< 0.0015 (LOQ)	±	-	-	-	
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	< 0.001 (LOQ)	±	-	-	-	
LC0009	< 0.0005 (LOQ)	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	0.00472	±	0.0014	-	-	
LC0014	0.00493	±	0.00049	-	-	
LC0015	< 0.002 (LOQ)	±	-	-	-	
LC0016	0.0029	±	0.00087	-	-	
LC0017	0.00329	±	0.00099	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00396 ± 0.00152	-	µg/l
Minimum	0.0029	0.0029	µg/l
Maximum	0.00493	0.00493	µg/l
Standard deviation	0.00102	-	µg/l
rel. standard deviation	25.6	-	%
n	4	4	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluoroundecane sulfonic acid (PFUnDS) - PF11S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

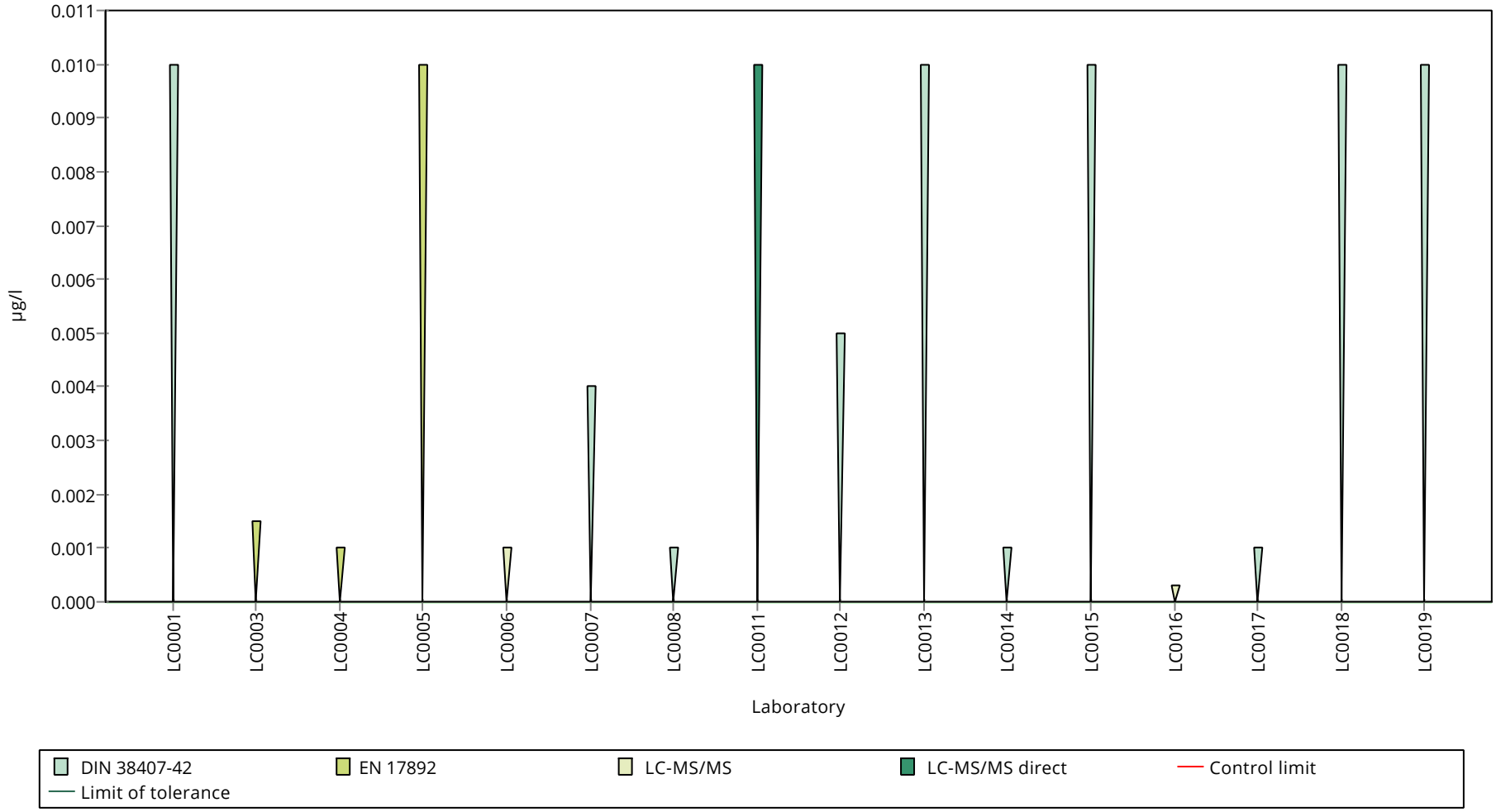
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluoroundecane sulfonic acid (PFUnDS) - PF11S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=10, accr.): < 0.01 µg/l

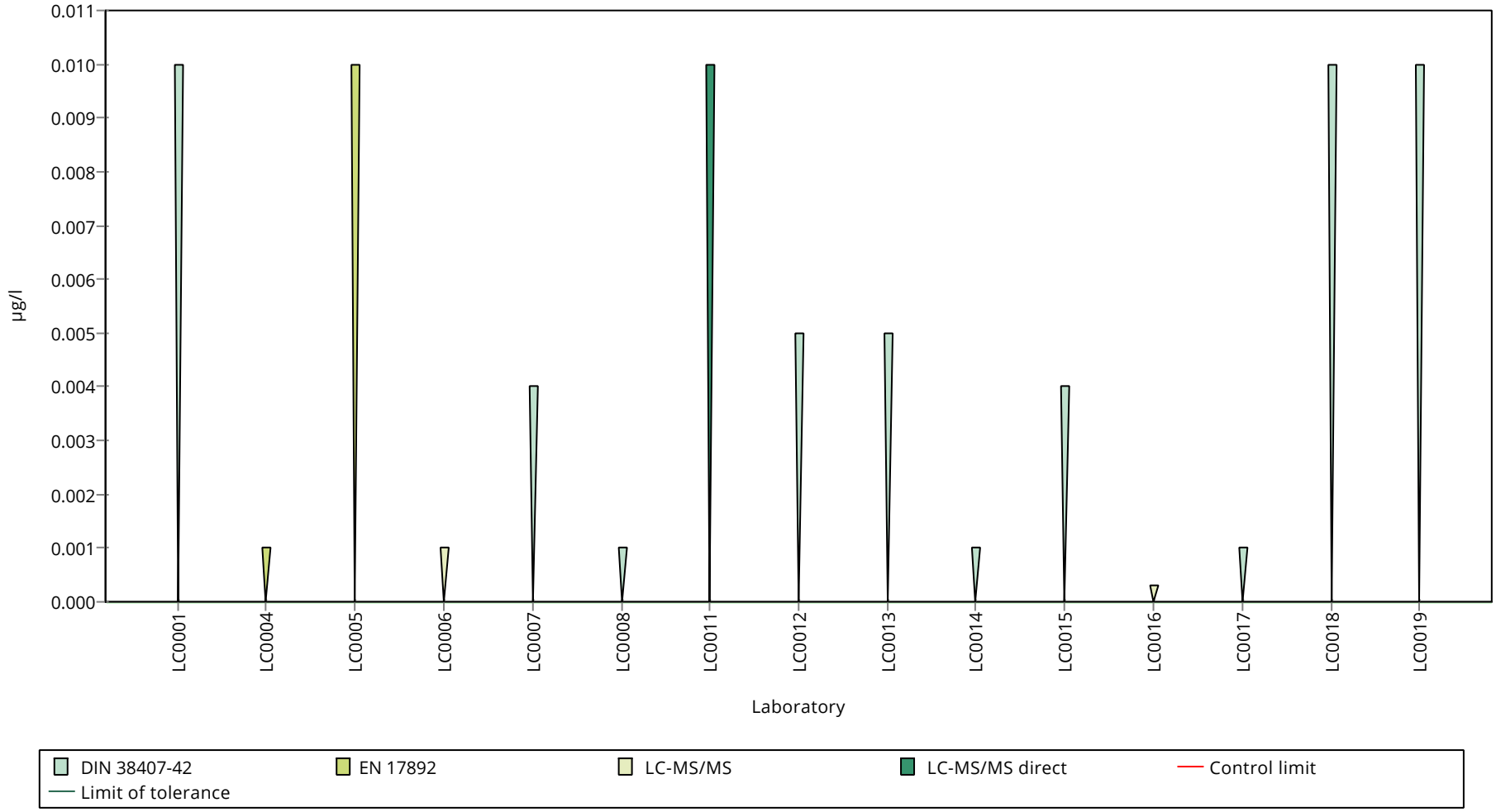
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	- ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.005 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.000996 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluoroundecane sulfonic acid (PFUnDS) - PF11S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00211 - 0.00478
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

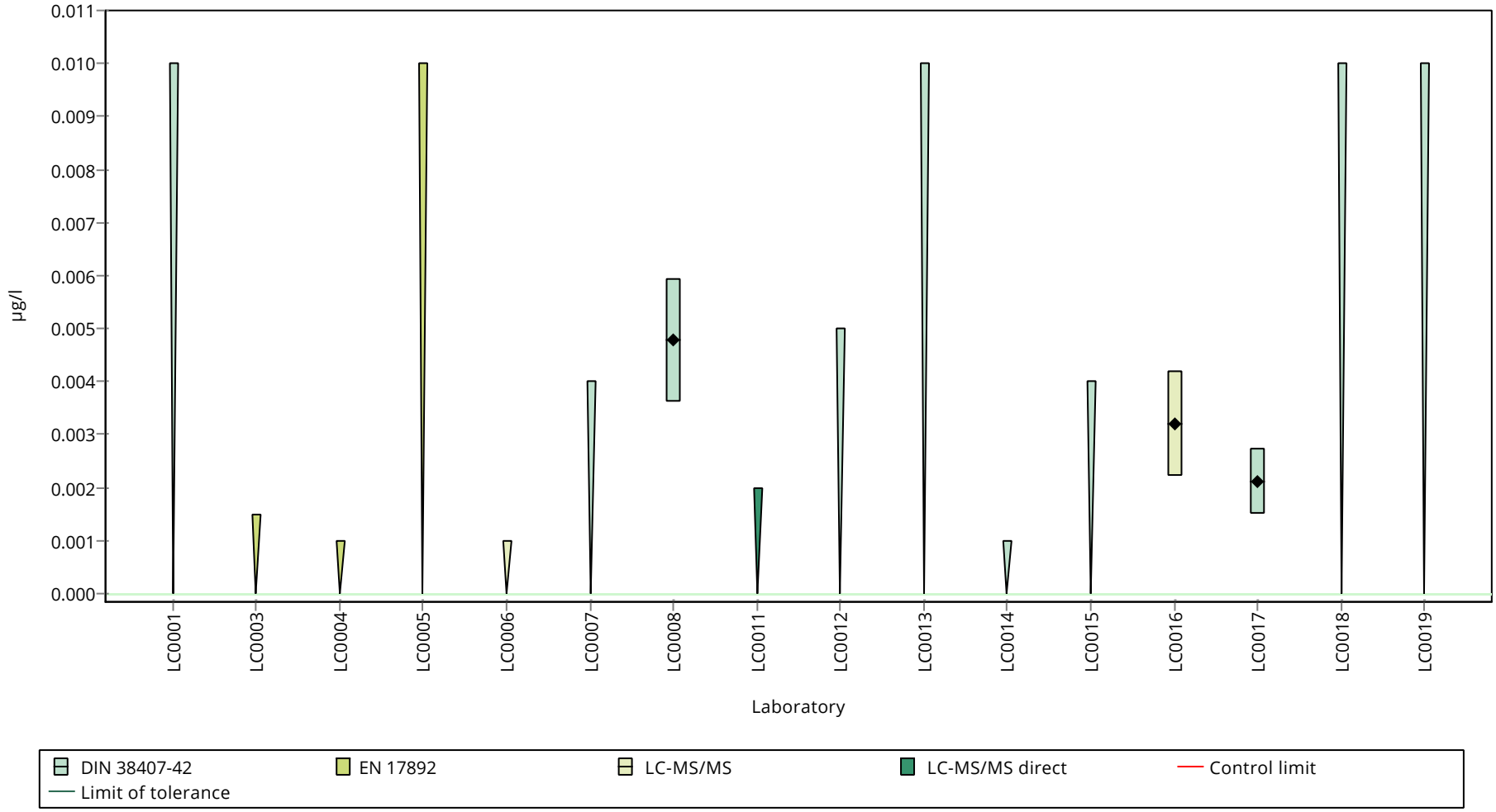
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	< 0.0015 (LOQ)	±	-	-	-	
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	0.00478	±	0.00117	-	-	
LC0009	-	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.01 (LOQ)	±	-	-	-	
LC0014	< 0.001 (LOQ)	±	-	-	-	
LC0015	< 0.004 (LOQ)	±	-	-	-	
LC0016	0.0032	±	0.001	-	-	
LC0017	0.00211	±	0.00063	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00336 ± 0.00233	-	µg/l
Minimum	0.00211	0.00211	µg/l
Maximum	0.00478	0.00478	µg/l
Standard deviation	0.00134	-	µg/l
rel. standard deviation	39.9	-	%
n	3	3	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluoroundecane sulfonic acid (PFUnDS) - PF11S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.00147 - 0.0023
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

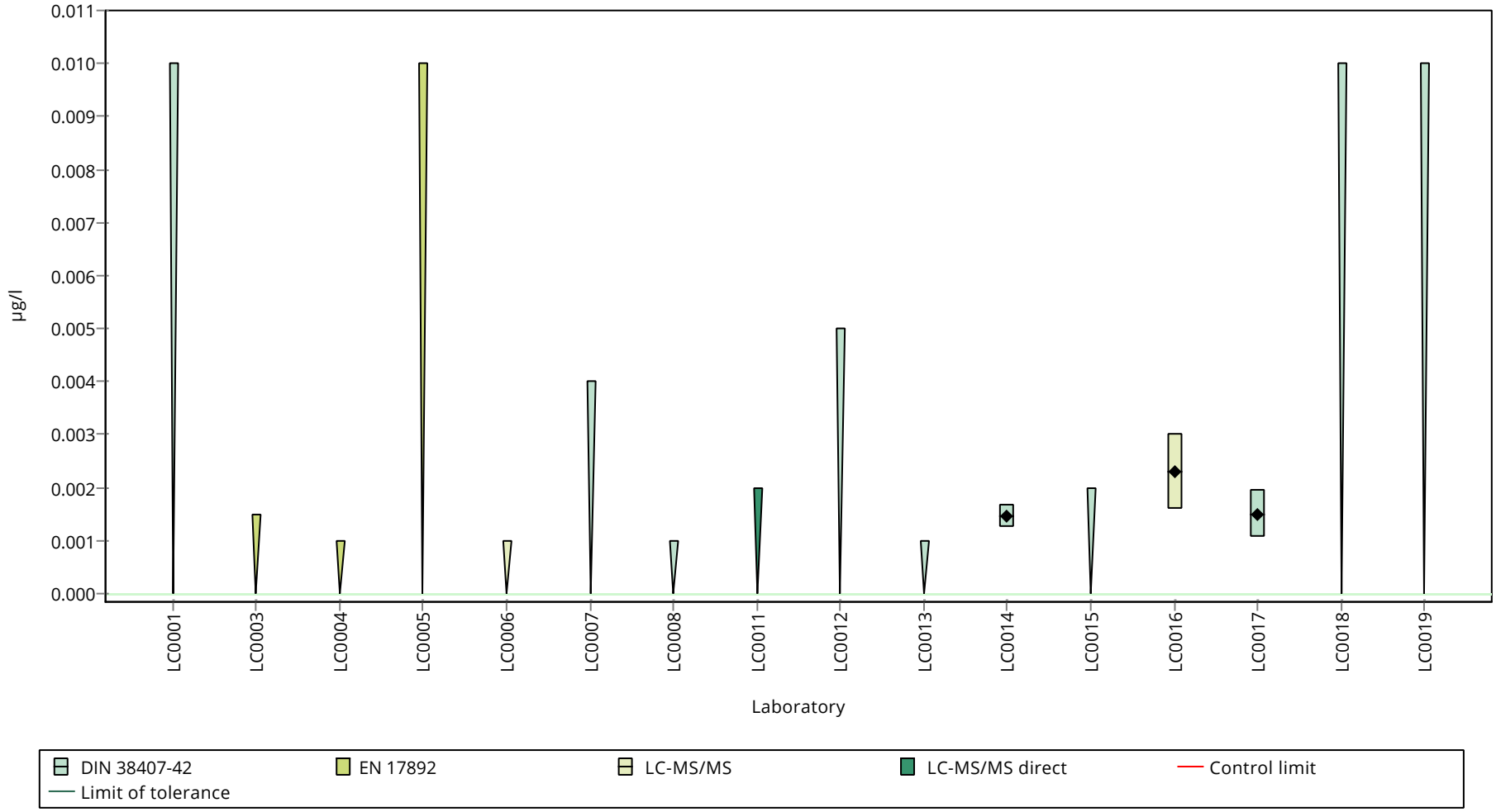
Labcode	Result	±	U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ)	±	-	-	-	
LC0002	-	±	-	-	-	
LC0003	< 0.0015 (LOQ)	±	-	-	-	
LC0004	< 0.001 (LOQ)	±	-	-	-	
LC0005	< 0.01 (LOQ)	±	-	-	-	
LC0006	< 0.001 (LOQ)	±	-	-	-	
LC0007	< 0.004 (LOQ)	±	-	-	-	
LC0008	< 0.001 (LOQ)	±	-	-	-	
LC0009	-	±	-	-	-	
LC0010	-	±	-	-	-	
LC0011	< 0.002 (LOQ)	±	-	-	-	
LC0012	< 0.005 (LOQ)	±	-	-	-	
LC0013	< 0.001 (LOQ)	±	-	-	-	
LC0014	0.00147	±	0.00022	-	-	
LC0015	< 0.002 (LOQ)	±	-	-	-	
LC0016	0.0023	±	0.0007	-	-	
LC0017	0.0015	±	0.00045	-	-	
LC0018	< 0.01 (LOQ)	±	-	-	-	
LC0019	< 0.01 (LOQ)	±	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	0.00176 ± 0.000815	-	µg/l
Minimum	0.00147	0.00147	µg/l
Maximum	0.0023	0.0023	µg/l
Standard deviation	0.000471	-	µg/l
rel. standard deviation	26.8	-	%
n	3	3	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorododecane sulfonic acid (PFDoS) - PF12S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0158 - 0.0158
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

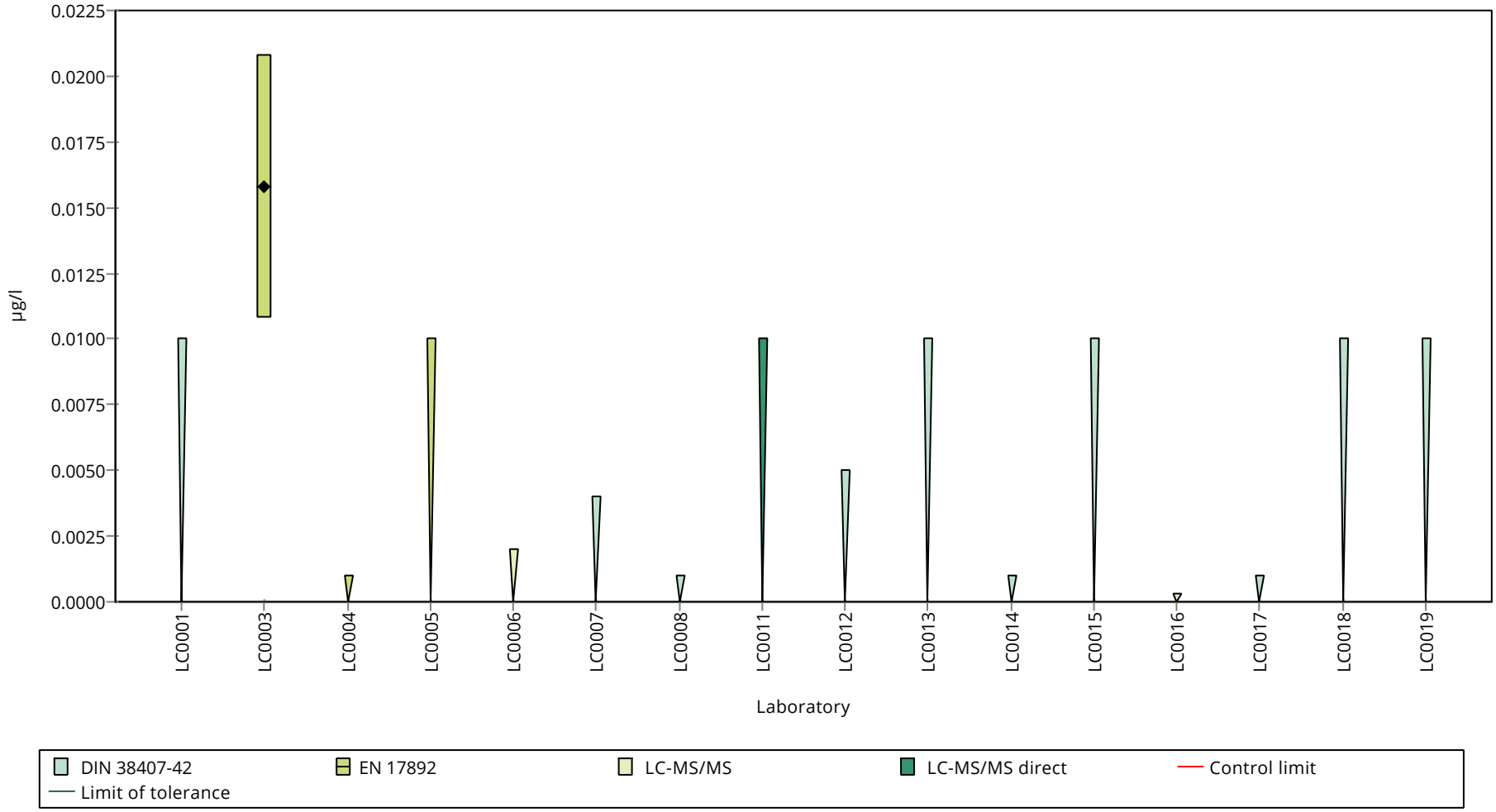
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0158 ± 0.005	-	-	FP
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.002 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0158	0.0158	µg/l
Maximum	0.0158	0.0158	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorododecane sulfonic acid (PFDoS) - PF12S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0026 - 0.0026
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

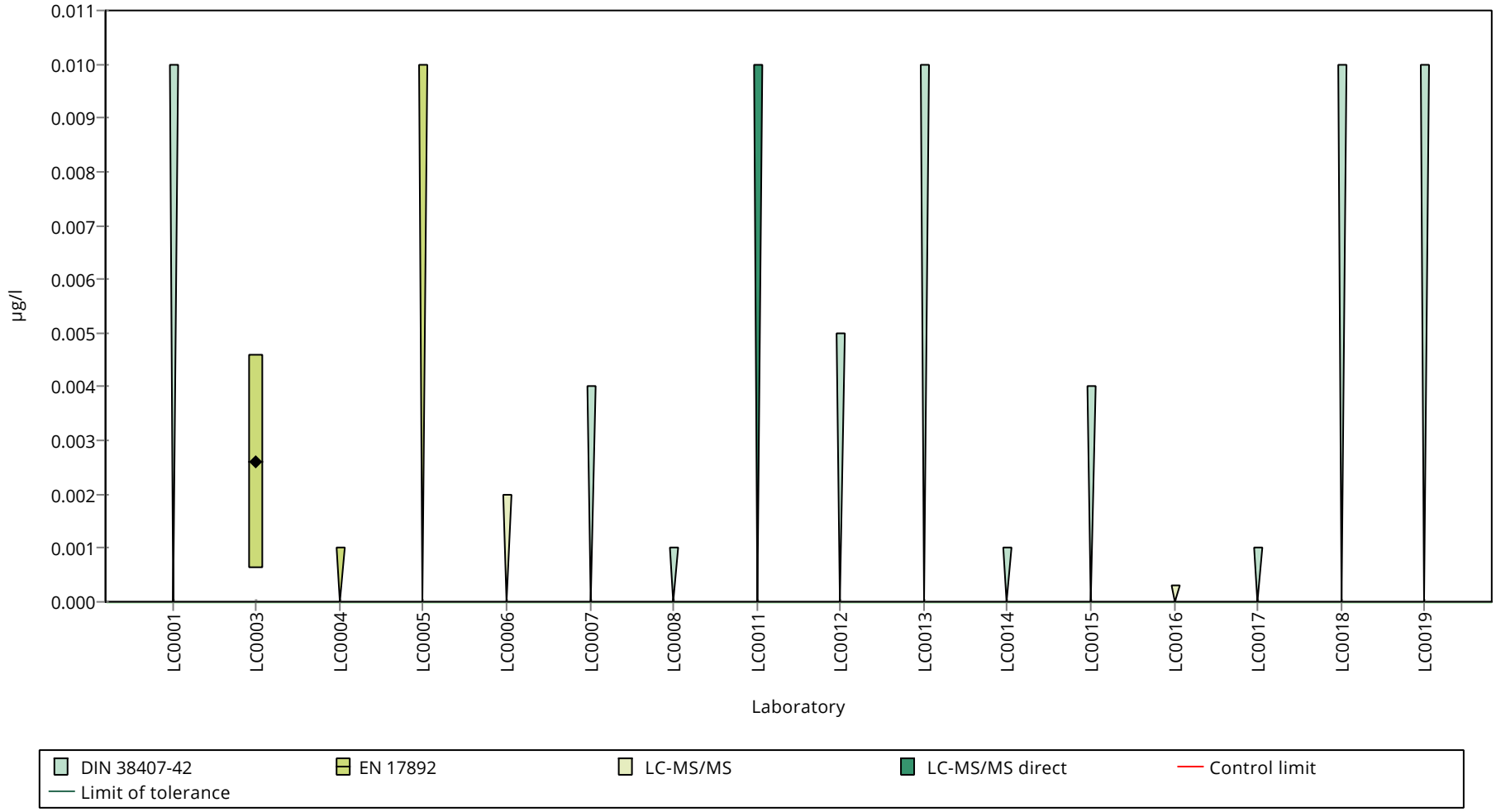
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0026 ± 0.002	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.002 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.000996 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0026	0.0026	µg/l
Maximum	0.0026	0.0026	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorododecane sulfonic acid (PFDoS) - PF12S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.005 - 0.005
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

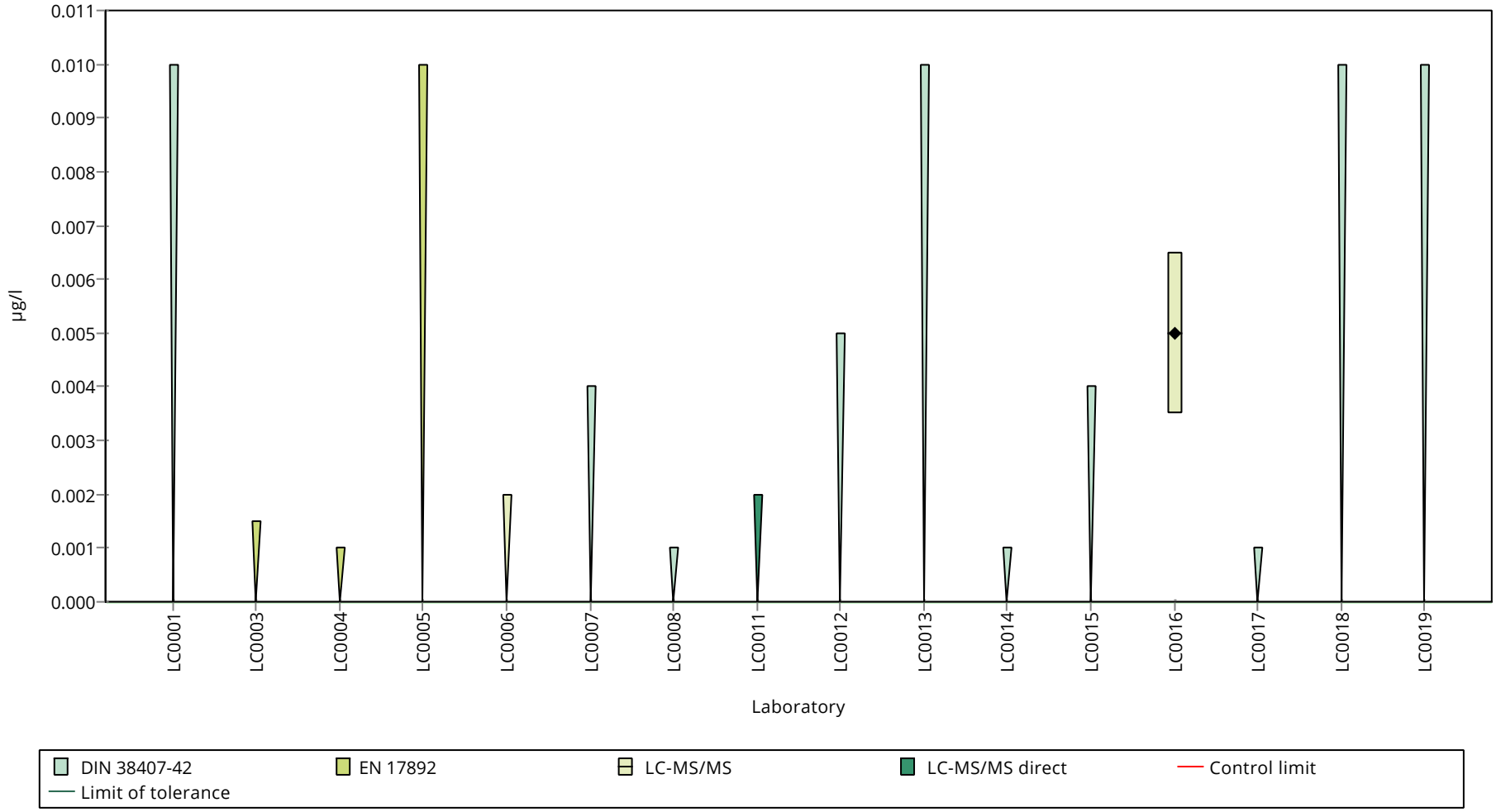
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.002 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	0.005 ± 0.0015	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.005	0.005	µg/l
Maximum	0.005	0.005	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorododecane sulfonic acid (PFDoS) - PF12S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=12, accr.): < 0.01 µg/l

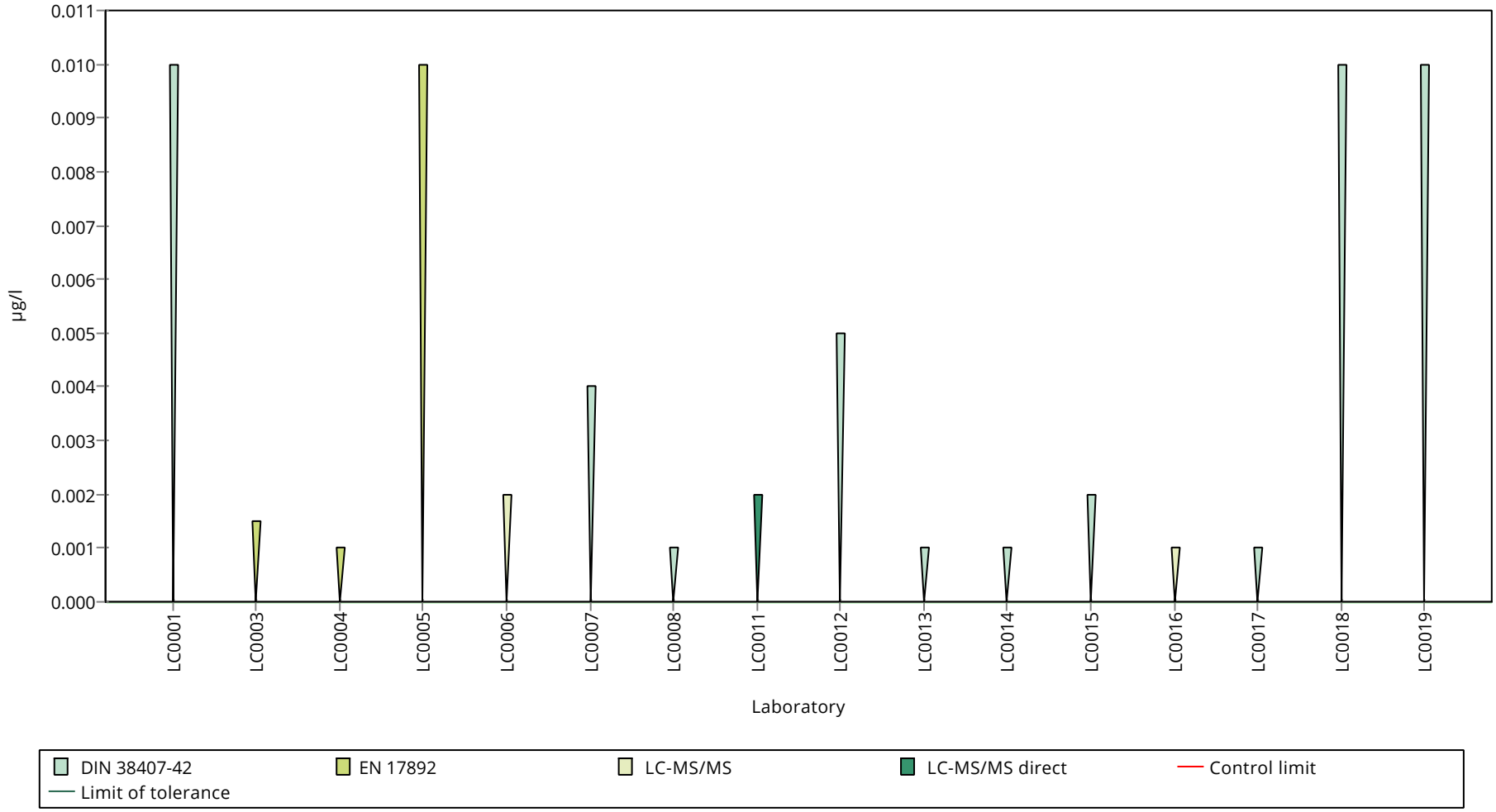
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.002 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.001 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.002 (LOQ) ± -	-	-	
LC0016	< 0.001 (LOQ) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0099 - 0.0099
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

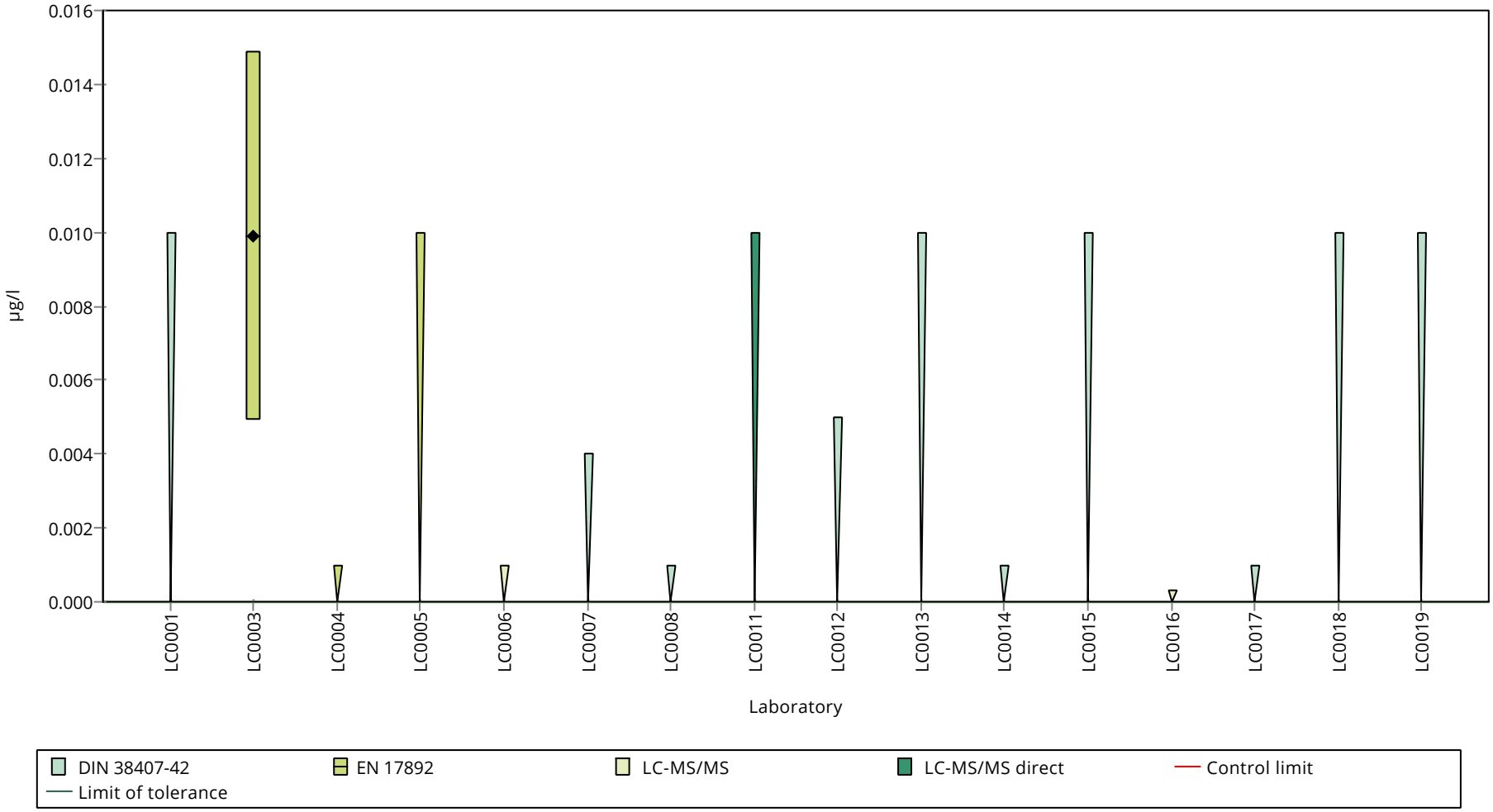
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0099 ± 0.005	-	-	FP
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.01 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0099	0.0099	µg/l
Maximum	0.0099	0.0099	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A10

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0029 - 0.0029
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=10, accr.): < 0.01 µg/l

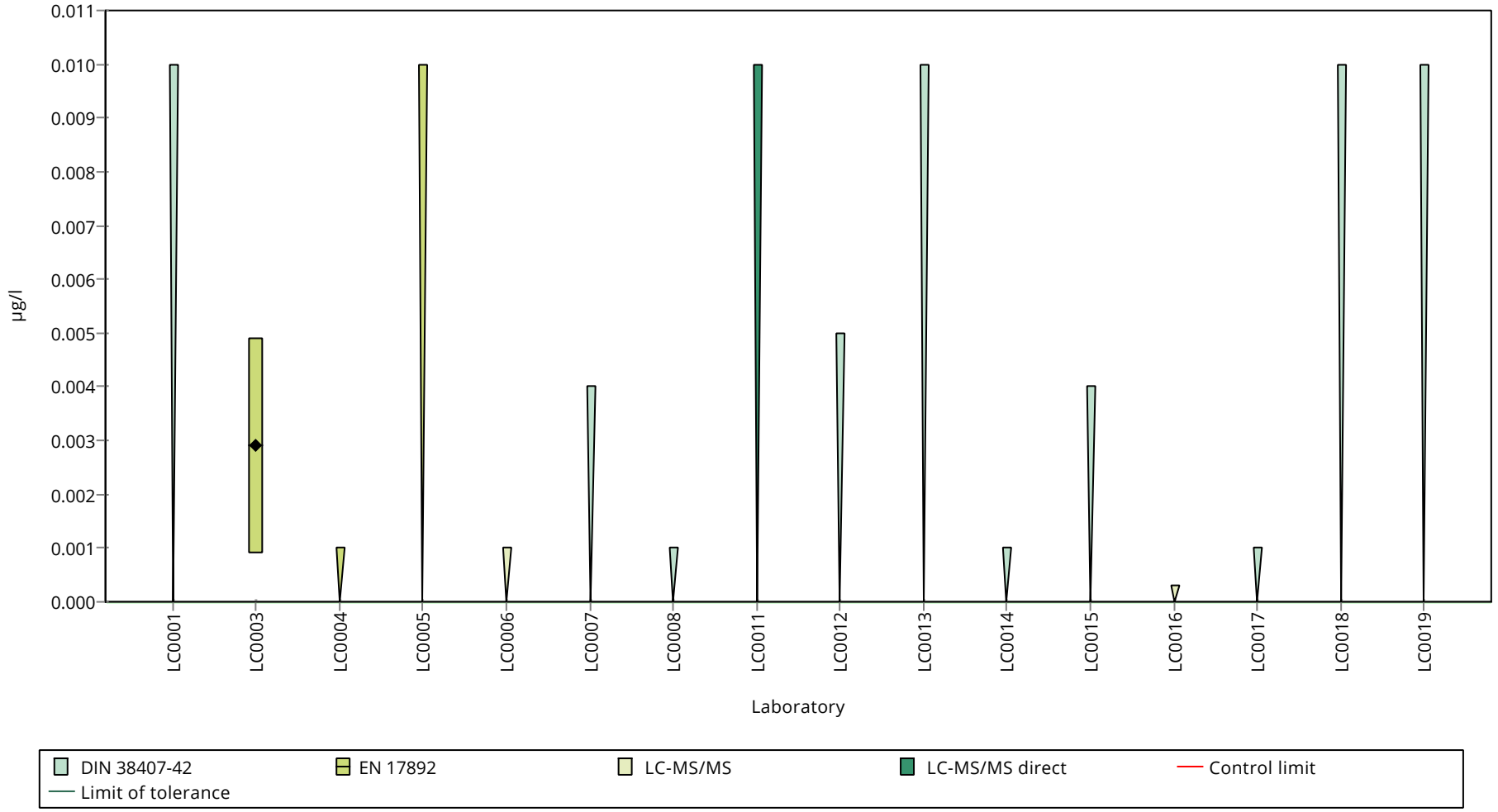
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	0.0029 ± 0.002	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.01 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.000996 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0029	0.0029	µg/l
Maximum	0.0029	0.0029	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B02

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.0052 - 0.0052
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

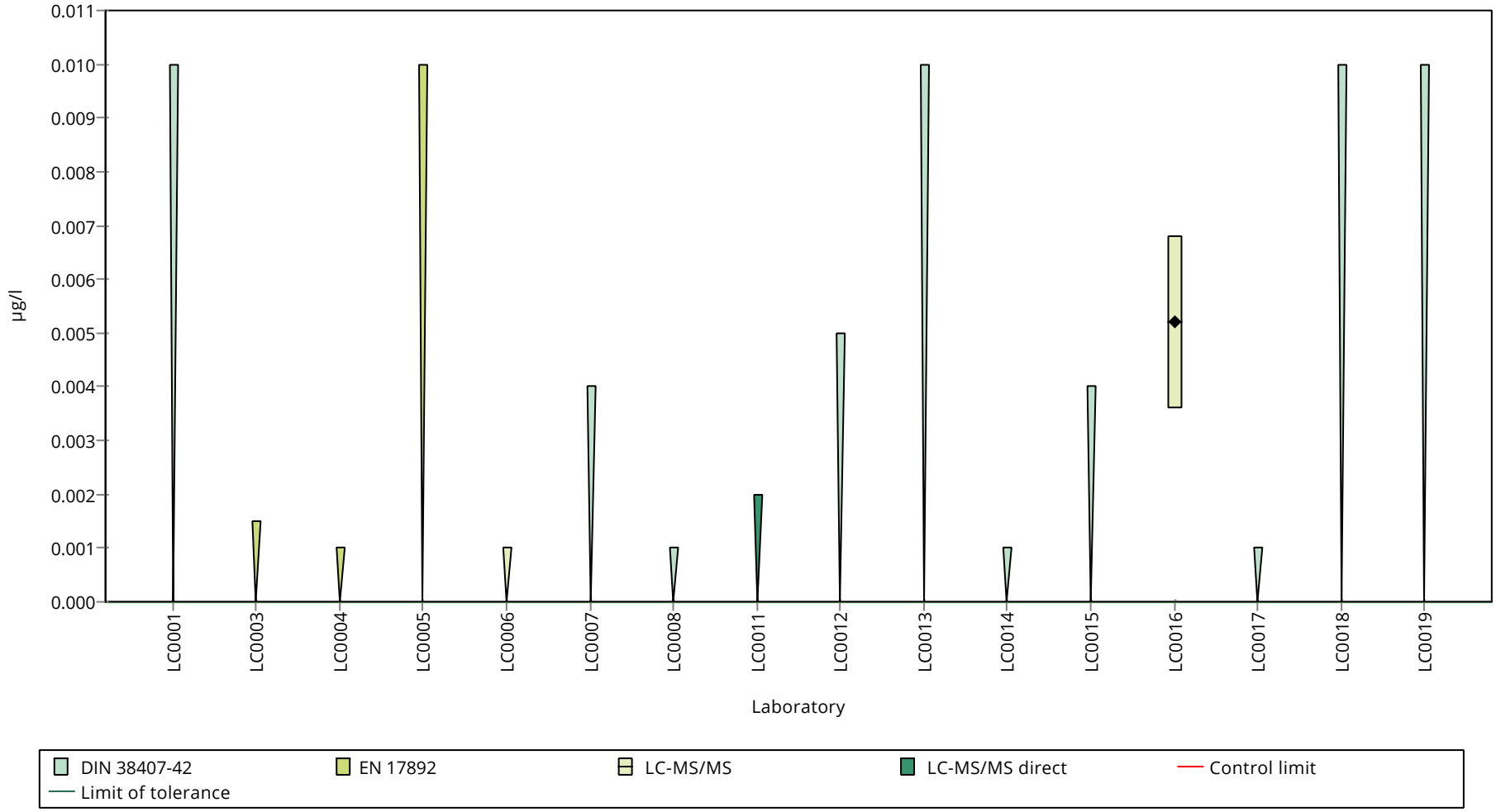
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.01 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.004 (LOQ) ± -	-	-	
LC0016	0.0052 ± 0.0016	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	0.0052	0.0052	µg/l
Maximum	0.0052	0.0052	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S ***

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	-
Control test value ± U (k=2)	<0.0005 (LOD)

*** Despite the wide range of reported data, the results submitted by the accredited laboratories consistently indicate concentrations below or close to the quantification limits.
Therefore, a sufficiently robust estimate could be derived and is reported as a '<' information value.

MV (n=11, accr.): < 0.01 µg/l

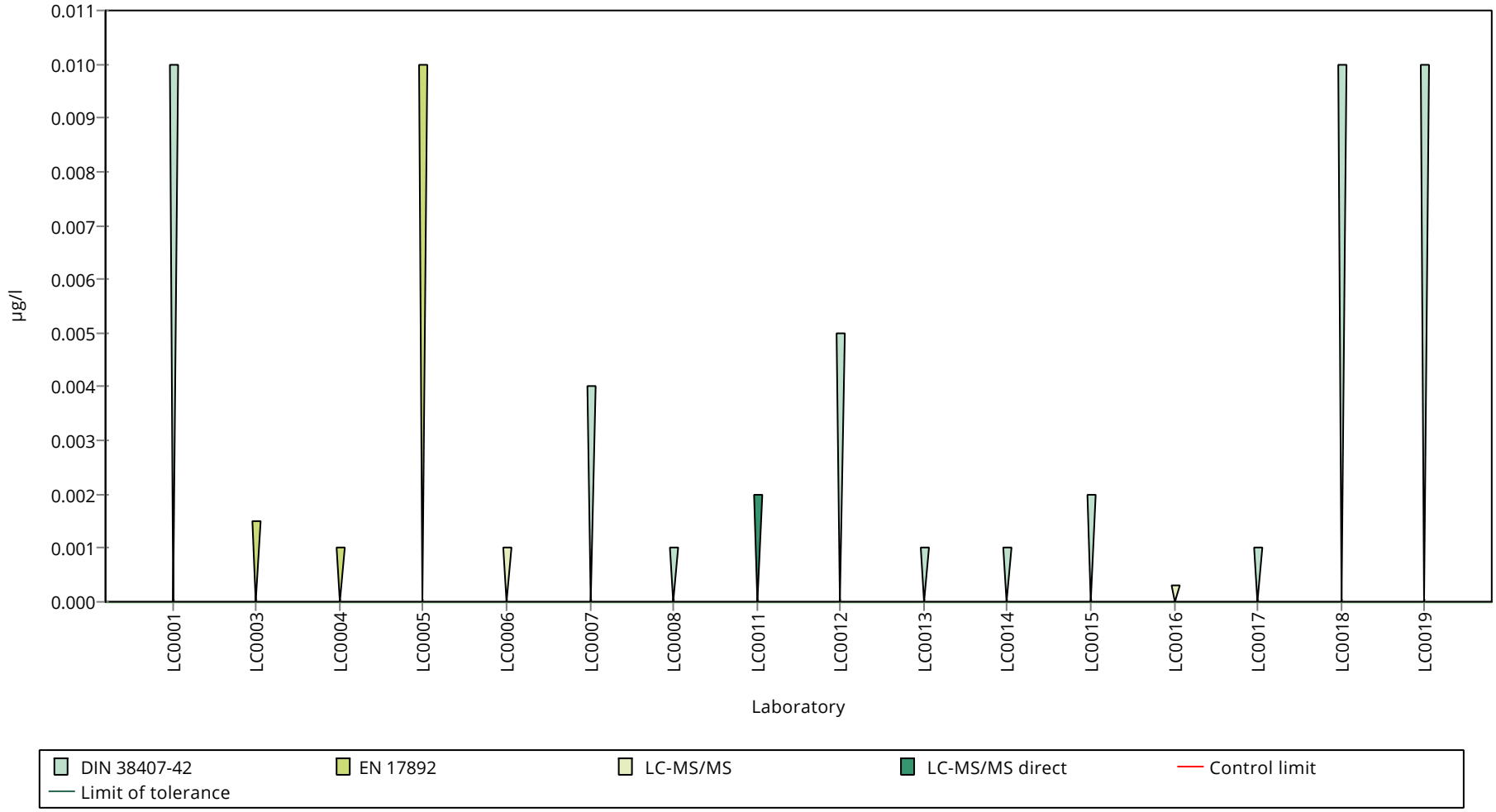
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	< 0.01 (LOQ) ± -	-	-	
LC0002	- ± -	-	-	
LC0003	< 0.0015 (LOQ) ± -	-	-	
LC0004	< 0.001 (LOQ) ± -	-	-	
LC0005	< 0.01 (LOQ) ± -	-	-	
LC0006	< 0.001 (LOQ) ± -	-	-	
LC0007	< 0.004 (LOQ) ± -	-	-	
LC0008	< 0.001 (LOQ) ± -	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	< 0.002 (LOQ) ± -	-	-	
LC0012	< 0.005 (LOQ) ± -	-	-	
LC0013	< 0.001 (LOQ) ± -	-	-	
LC0014	< 0.001 (LOQ) ± -	-	-	
LC0015	< 0.002 (LOQ) ± -	-	-	
LC0016	<0.0003 (LOD) ± -	-	-	
LC0017	< 0.001 (LOQ) ± -	-	-	
LC0018	< 0.01 (LOQ) ± -	-	-	
LC0019	< 0.01 (LOQ) ± -	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	-	-	µg/l
Minimum	-	-	µg/l
Maximum	-	-	µg/l
Standard deviation	-	-	µg/l
rel. standard deviation	-	-	%
n	0	0	-

Graphical presentation of results

Results



Parameter oriented report

PFL01A02

Sum PFAS

Unit	µg/l
Assigned value ± U (k=2)	6.49 ± 0.695
Criterion	1.49 (23 %)
Minimum - Maximum	4.5 - 9.33
Control test value ± U (k=2)	4.99 ± 1.65

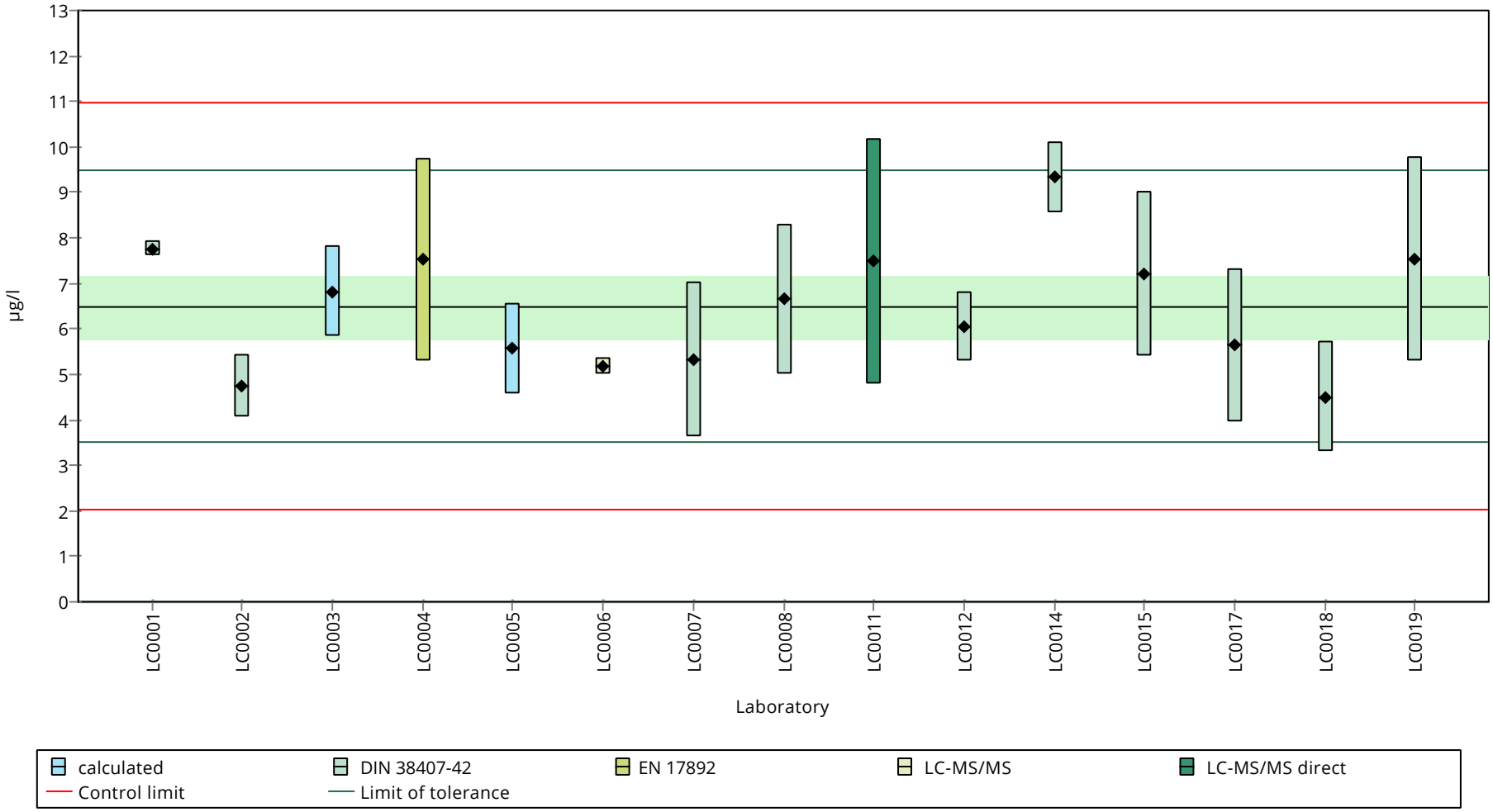
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	7.767 ± 0.153	120	0.86	
LC0002	4.742 ± 0.6876	73.1	-1.17	
LC0003	6.822 ± 1	105	0.22	
LC0004	7.519 ± 2.2273	116	0.69	
LC0005	5.5636 ± 1	85.8	-0.62	
LC0006	5.18 ± 0.192	79.9	-0.88	
LC0007	5.3286 ± 1.7052	82.2	-0.78	
LC0008	6.65 ± 1.66	103	0.11	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	7.489 ± 2.696	115	0.67	
LC0012	6.04 ± 0.771	93.1	-0.3	
LC0013	- ± -	-	-	
LC0014	9.33 ± 0.78	144	1.91	
LC0015	7.2 ± 1.8	111	0.48	
LC0016	- ± -	-	-	
LC0017	5.64 ± 1.69	87	-0.57	
LC0018	4.495 ± 1.2137	69.3	-1.33	
LC0019	7.53 ± 2.26	116	0.7	

Characteristics of parameter

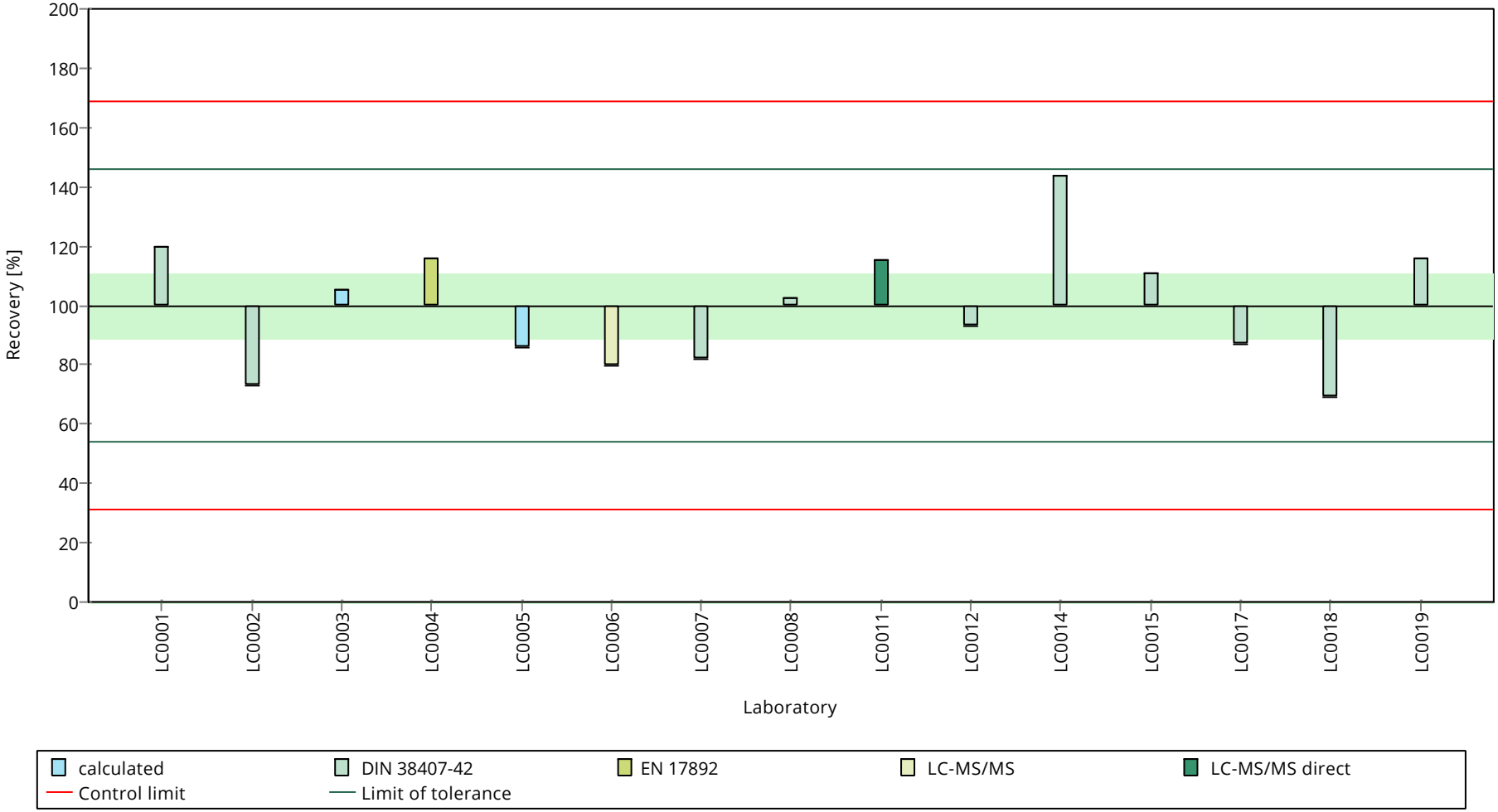
	all results	without outliers	Unit
Mean ± Cl (99%)	6.49 ± 1.04	6.49 ± 1.04	µg/l
Minimum	4.5	4.5	µg/l
Maximum	9.33	9.33	µg/l
Standard deviation	1.35	1.35	µg/l
rel. standard deviation	20.7	20.7	%
n	15	15	-

Graphical presentation of results

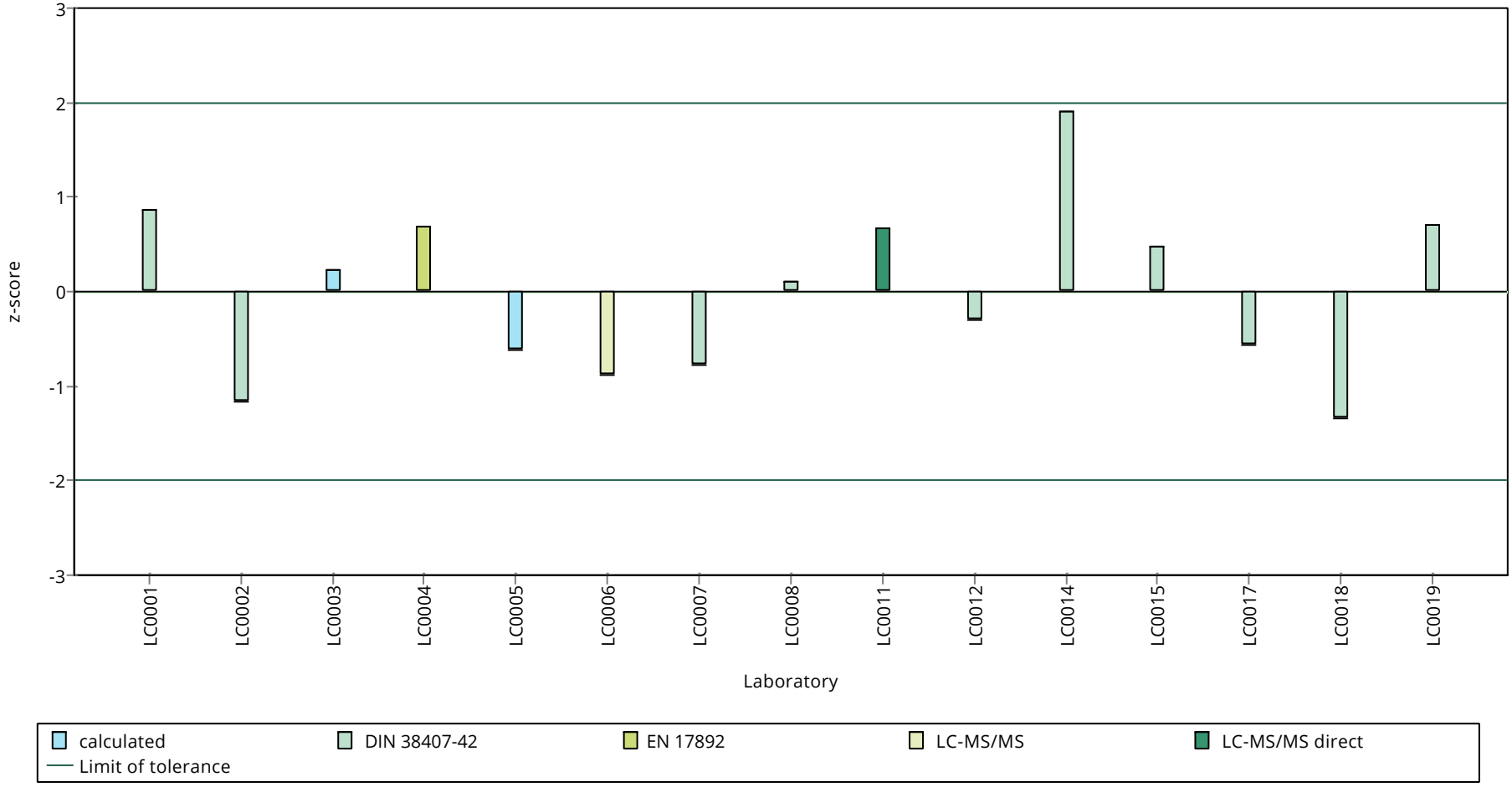
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0011
LC0012
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
calculated
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01A10

Sum PFAS

Unit	µg/l
Assigned value ± U (k=2)	1.57 ± 0.194
Criterion	0.36 (23 %)
Minimum - Maximum	0.789 - 2.14
Control test value ± U (k=2)	1.39 ± 0.488

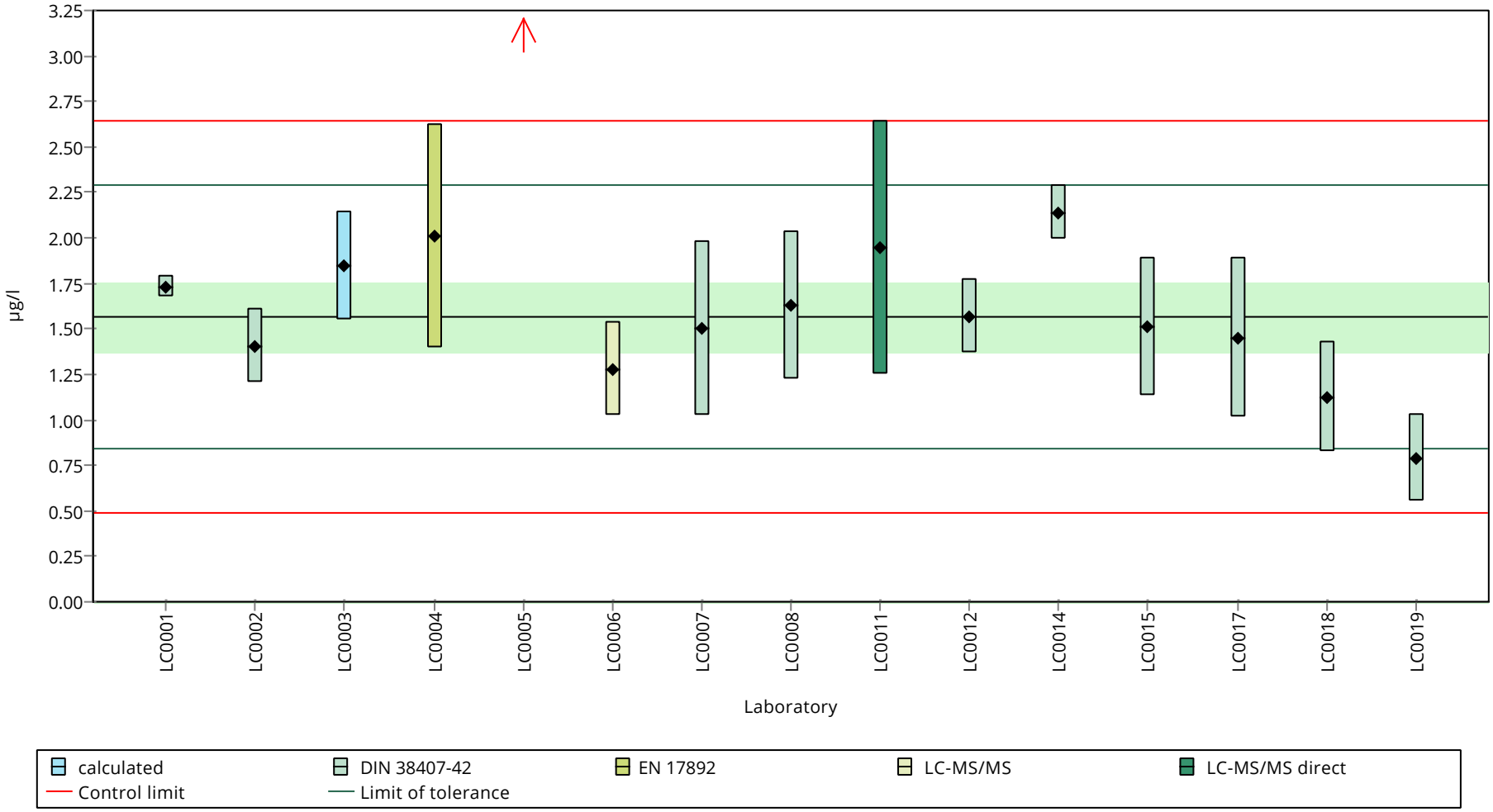
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	1.733 ± 0.058	111	0.46	
LC0002	1.404 ± 0.2036	89.6	-0.45	
LC0003	1.8496 ± 0.3	118	0.78	
LC0004	2.01 ± 0.61215	128	1.23	
LC0005	14.33 ± 3	915	35.42	H
LC0006	1.28 ± 0.256	81.7	-0.8	
LC0007	1.4998 ± 0.4799	95.7	-0.19	
LC0008	1.63 ± 0.408	104	0.18	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	1.9452 ± 0.7003	124	1.05	
LC0012	1.57 ± 0.2	100	0.01	
LC0013	- ± -	-	-	
LC0014	2.14 ± 0.15	137	1.59	
LC0015	1.51 ± 0.38	96.4	-0.16	
LC0016	- ± -	-	-	
LC0017	1.45 ± 0.44	92.5	-0.32	
LC0018	1.124 ± 0.3034	71.7	-1.23	
LC0019	0.789 ± 0.24	50.4	-2.16	

Characteristics of parameter

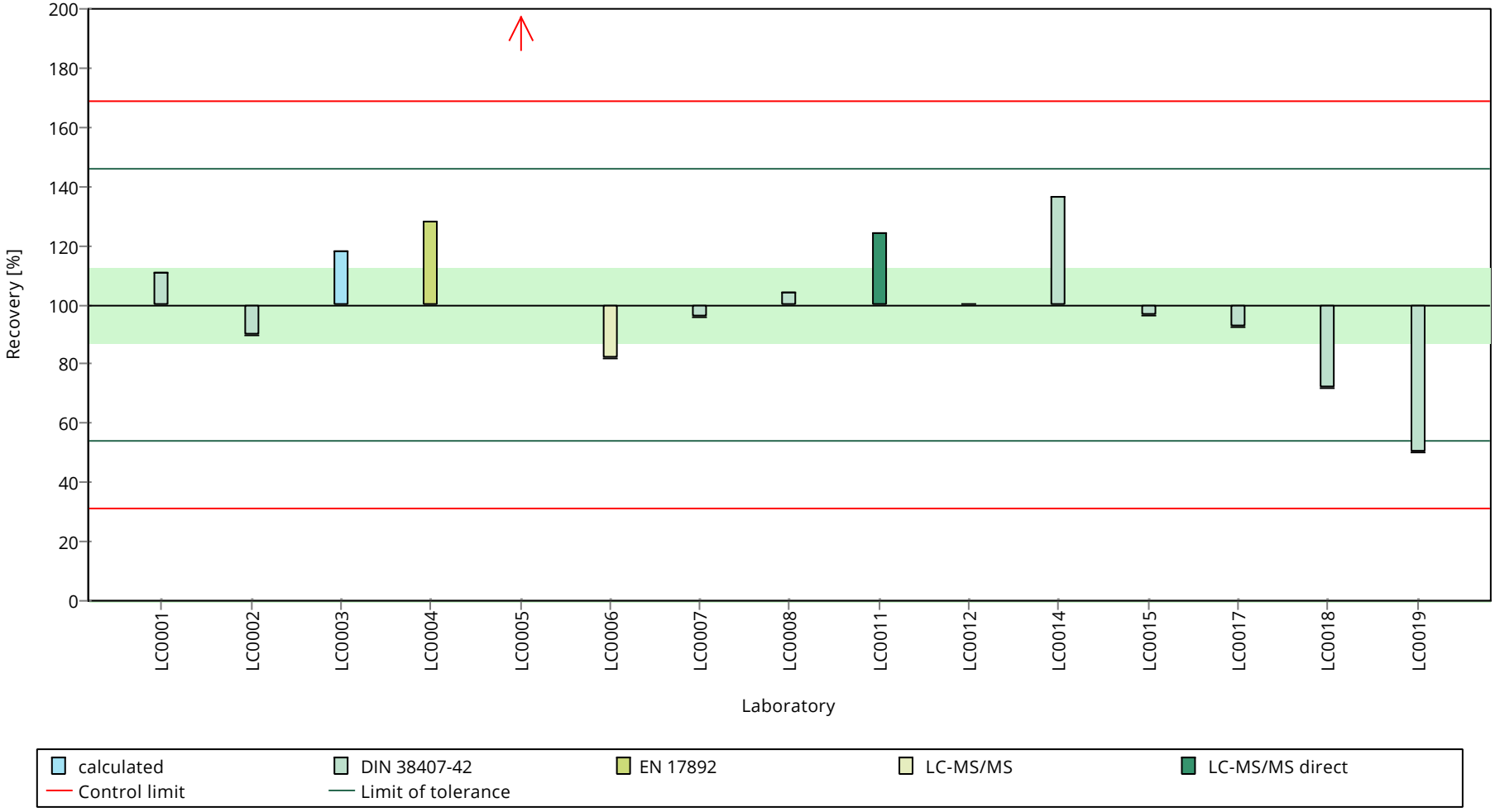
	all results	without outliers	Unit
Mean ± Cl (99%)	2.42 ± 2.57	1.57 ± 0.291	µg/l
Minimum	0.789	0.789	µg/l
Maximum	14.3	2.14	µg/l
Standard deviation	3.31	0.363	µg/l
rel. standard deviation	137	23.2	%
n	15	14	-

Graphical presentation of results

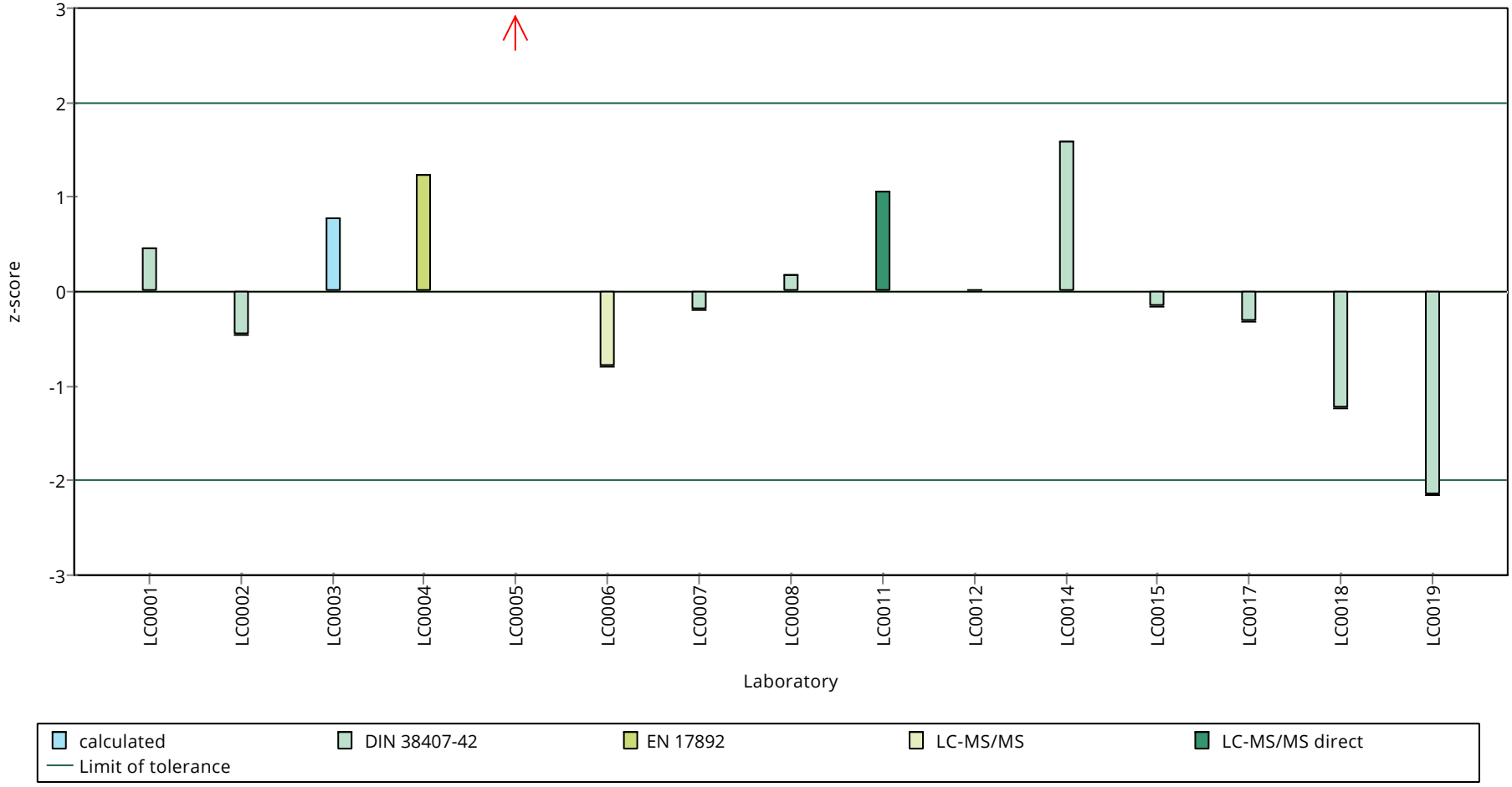
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0011
LC0012
LC0014
LC0015
LC0017
LC0018
LC0019
Laboratory
calculated
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

Parameter oriented report

PFL01B02

Sum PFAS *

Unit	µg/l
Assigned value ± U (k=2)	-
Criterion	-
Minimum - Maximum	0.338 - 2.35
Control test value ± U (k=2)	0.882 ± 0.344

* Due to the high reproducibility standard deviation (>50%), no assigned value could be established. For information purposes, the calculated mean value MV ± U(k=2) based on the results of the accredited laboratories (n) after outlier removal is provided.

This data can be used for comparison as part of your internal QA measures.

MV (n=11, accr.) ± U(k=2): 1.1 ± 0.376 µg/l

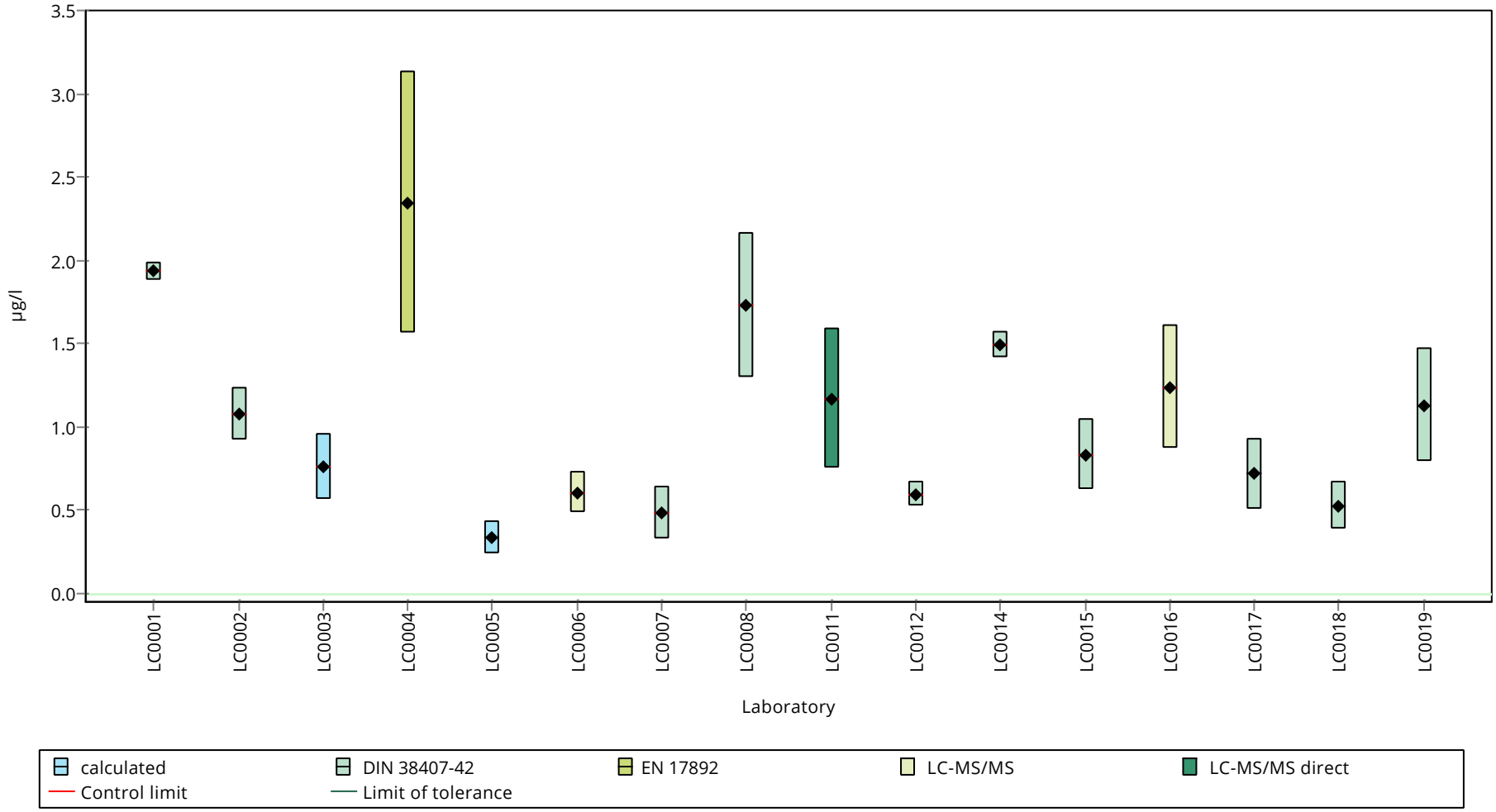
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	1.933 ± 0.058	-	-	
LC0002	1.077 ± 0.1561	-	-	
LC0003	0.7588 ± 0.2	-	-	
LC0004	2.347 ± 0.78457	-	-	
LC0005	0.338 ± 0.1	-	-	
LC0006	0.606 ± 0.121	-	-	
LC0007	0.4868 ± 0.1558	-	-	
LC0008	1.73 ± 0.432	-	-	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	1.1687 ± 0.4207	-	-	
LC0012	0.596 ± 0.076	-	-	
LC0013	- ± -	-	-	
LC0014	1.49 ± 0.08	-	-	
LC0015	0.834 ± 0.21	-	-	
LC0016	1.24 ± 0.37	-	-	
LC0017	0.717 ± 0.215	-	-	
LC0018	0.527 ± 0.1422	-	-	
LC0019	1.13 ± 0.34	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± Cl (99%)	1.06 ± 0.429	1.06 ± 0.429	µg/l
Minimum	0.338	0.338	µg/l
Maximum	2.35	2.35	µg/l
Standard deviation	0.573	0.573	µg/l
rel. standard deviation	53.9	53.9	%
n	16	16	-

Graphical presentation of results

Results



Parameter oriented report

PFL01B10

Sum PFAS

Unit	µg/l
Assigned value ± U (k=2)	0.554 ± 0.107
Criterion	0.216 (39 %)
Minimum - Maximum	0.307 - 0.964
Control test value ± U (k=2)	0.4 ± 0.164

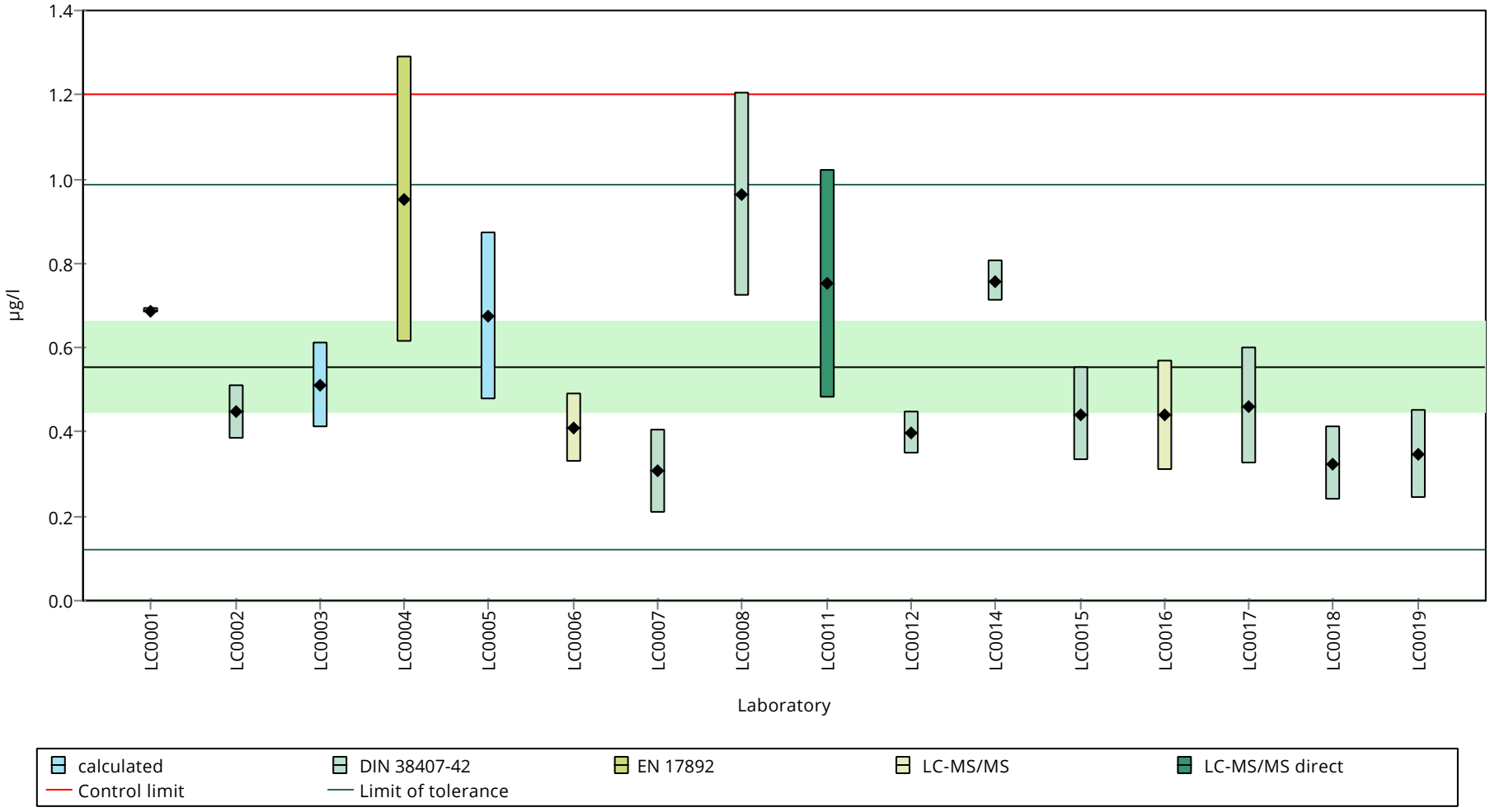
Labcode	Result ± U	Recovery [%]	z-Score	Comments
LC0001	0.687 ± 0.006	124	0.61	
LC0002	0.447 ± 0.0649	80.6	-0.5	
LC0003	0.5109 ± 0.1	92.2	-0.2	
LC0004	0.95 ± 0.33933	171	1.83	
LC0005	0.6747 ± 0.2	122	0.56	
LC0006	0.409 ± 0.082	73.8	-0.67	
LC0007	0.3065 ± 0.0981	55.3	-1.15	
LC0008	0.964 ± 0.241	174	1.89	
LC0009	- ± -	-	-	
LC0010	- ± -	-	-	
LC0011	0.7509 ± 0.2703	135	0.91	
LC0012	0.398 ± 0.051	71.8	-0.72	
LC0013	- ± -	-	-	
LC0014	0.758 ± 0.048	137	0.94	
LC0015	0.442 ± 0.111	79.7	-0.52	
LC0016	0.439 ± 0.132	79.2	-0.53	
LC0017	0.462 ± 0.139	83.3	-0.43	
LC0018	0.324 ± 0.0875	58.4	-1.07	
LC0019	0.347 ± 0.104	62.6	-0.96	

Characteristics of parameter

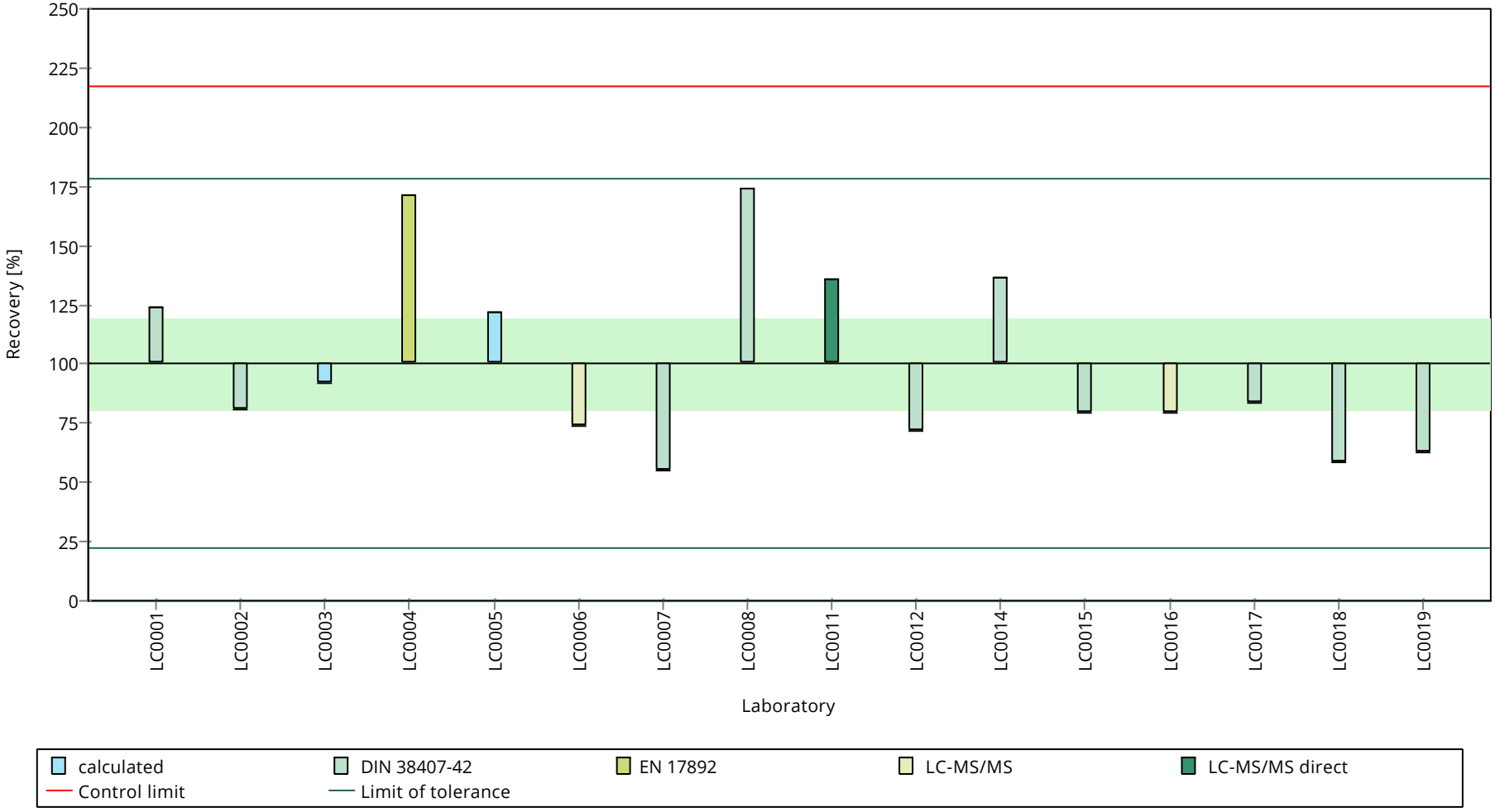
	all results	without outliers	Unit
Mean ± Cl (99%)	0.554 ± 0.161	0.554 ± 0.161	µg/l
Minimum	0.307	0.307	µg/l
Maximum	0.964	0.964	µg/l
Standard deviation	0.214	0.214	µg/l
rel. standard deviation	38.6	38.6	%
n	16	16	-

Graphical presentation of results

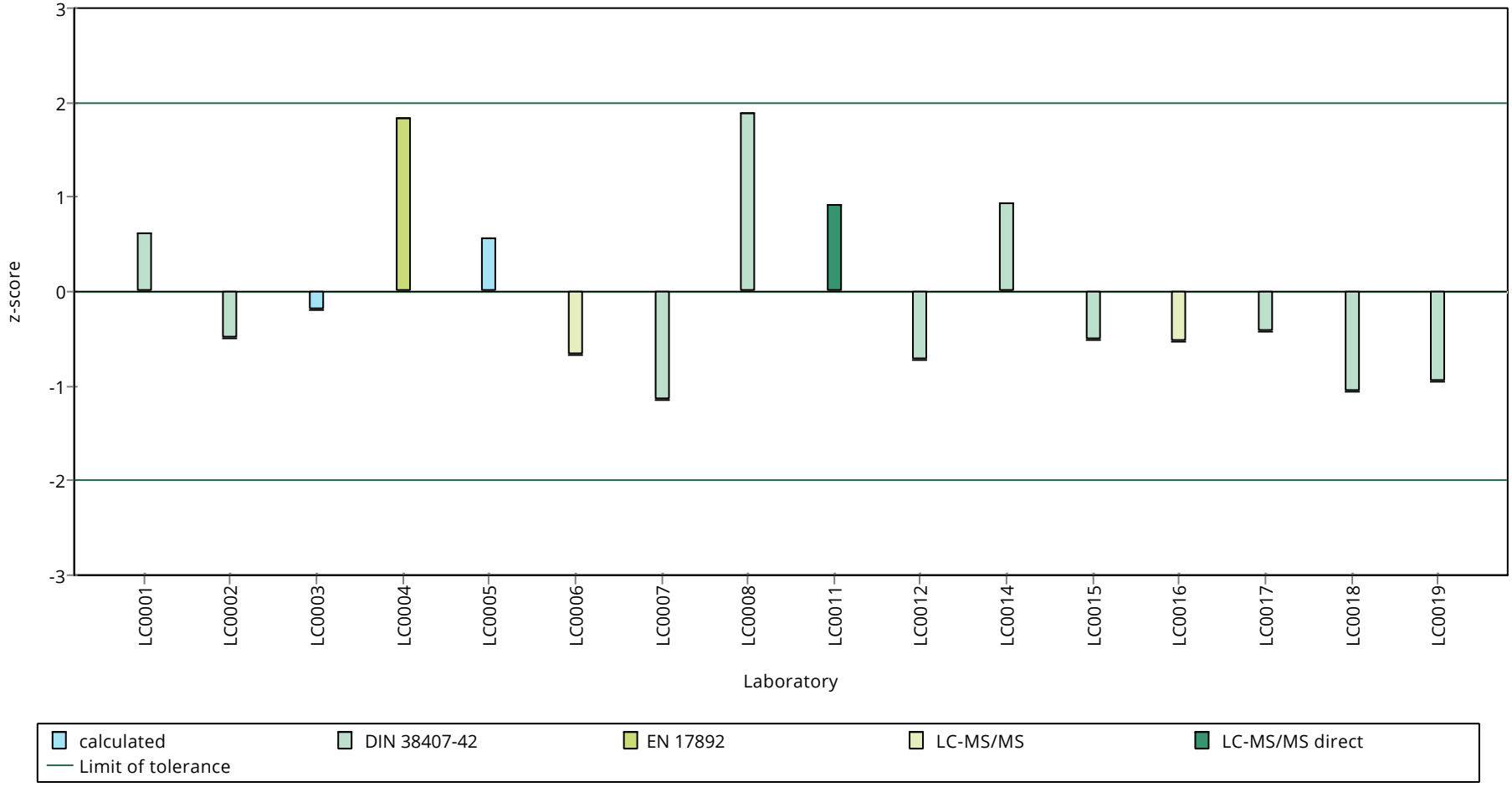
Results



Recovery rate



z-Score


3
2
1
0
-1
-2
-3
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0011
LC0012
LC0014
LC0015
LC0016
LC0017
LC0018
LC0019
Laboratory
calculated
DIN 38407-42
EN 17892
LC-MS/MS
LC-MS/MS direct
Limit of tolerance

E8. Laborientierte Auswertung / Laboratory oriented report

Die Laborientierte Auswertung ist nach dem Laborcode sortiert.

The laboratory oriented report is sorted by laboratory code.

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	92.5 ± 0.2	1.4	99.3	-0.48
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	1.5 ± 0.046	0.296	228	2.85
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.009 ± 0.02	0.583	67.5	-0.83
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.827 ± 0.112	0.589	106	0.26
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.01	0.0319	97.2	-0.13
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.103 ± 0.004	0.0291	92	-0.31
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	2.027 ± 0.105	0.151	308	9.04
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.01 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.089 ± 0.015	0.0197	113	0.52
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.047 ± 0.011	0.029	72.9	-0.60
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.767 ± 0.153	1.49	120	0.86

Sample: PFL01A10

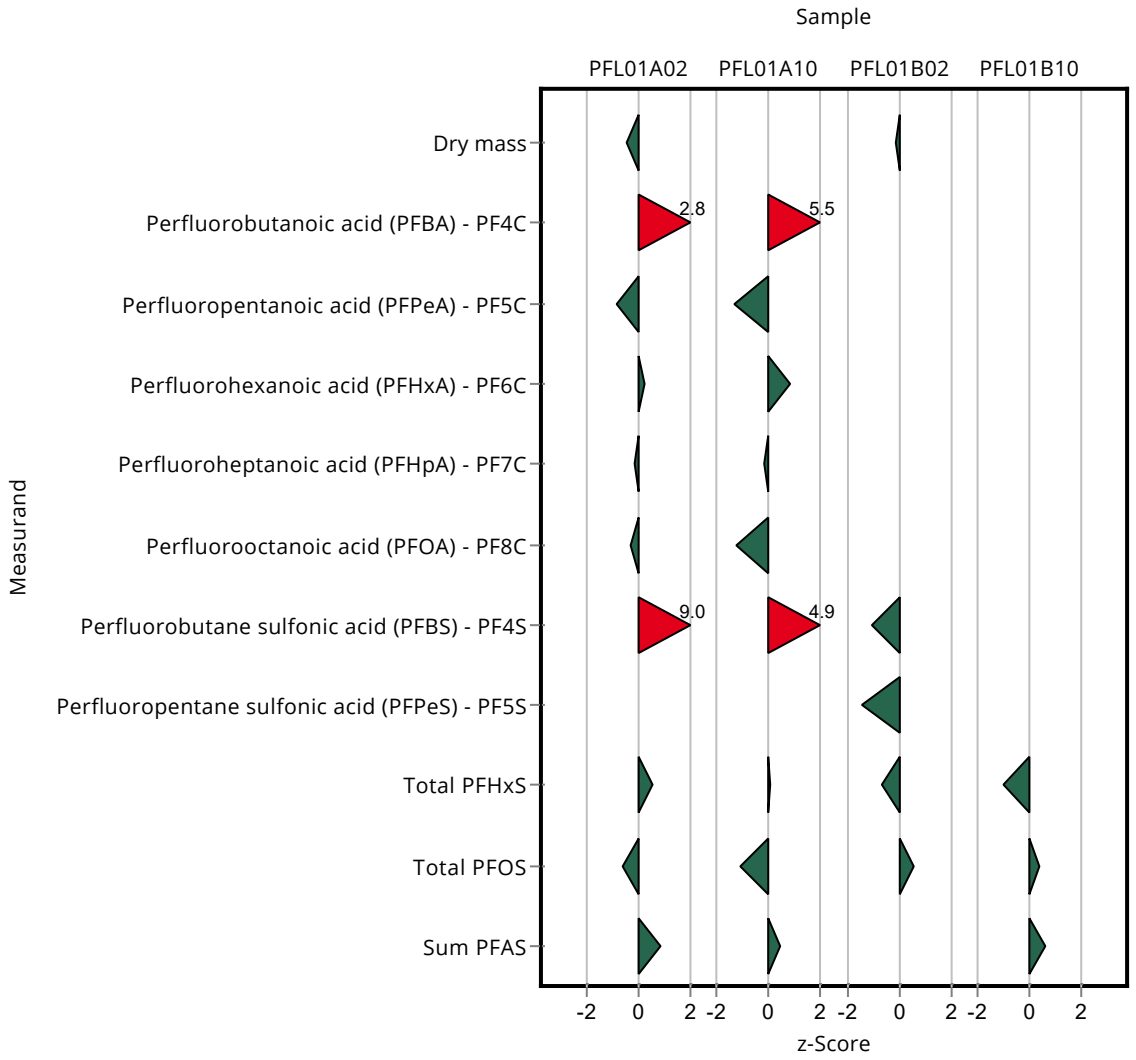
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.318 ± 0.006	0.0368	276	5.51
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.172 ± 0.006	0.132	49.6	-1.33
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.696 ± 0.011	0.13	118	0.81
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.048 ± 0.004	0.0111	95.5	-0.20
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.046 ± 0.006	0.0178	67.3	-1.26
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.331 ± 0.032	0.0335	198	4.88
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.048 ± 0.005	0.00954	101	0.03
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.064 ± 0.012	0.0218	73.5	-1.06
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.733 ± 0.058	0.36	111	0.46

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.2 ± 0.3	1.28	99.9	-0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.294 ± 0.001	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.388 ± 0.004	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.174 ± 0.004	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.204 ± 0.003	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.203 ± 0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.064 ± 0.014	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.027 ± 0.006	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.019 ± 0.001	0.00753	70.7	-1.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.014 ± 0.001	0.00547	64	-1.44
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.14 ± 0.004	0.0417	83.9	-0.64
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.404 ± 0.035	0.131	124	0.59
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.933 ± 0.058	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.059 ± 0.003	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.095 ± 0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.038 ± 0.002	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.043 ± 0.006	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.053 ± 0.004	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.033 ± 0.003	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.013 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.041 ± 0.001	0.0137	74.8	-1.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.311 ± 0.012	0.079	110	0.37
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.687 ± 0.006	0.216	124	0.61


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
2.8
5.5
9.0
4.9
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	92.5 ± 0.2	1.4	99.3	-1.43
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	1.5 ± 0.046	0.296	228	4.88
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.009 ± 0.02	0.583	67.5	-1.80
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.827 ± 0.112	0.589	106	0.50
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.01	0.0319	97.2	-0.16
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.103 ± 0.004	0.0291	92	-0.64
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	2.027 ± 0.105	0.151	308	6.15
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.01 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.089 ± 0.015	0.0197	113	0.32
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.047 ± 0.011	0.029	72.9	-0.66
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.767 ± 0.153	1.49	120	1.69

Sample: PFL01A10

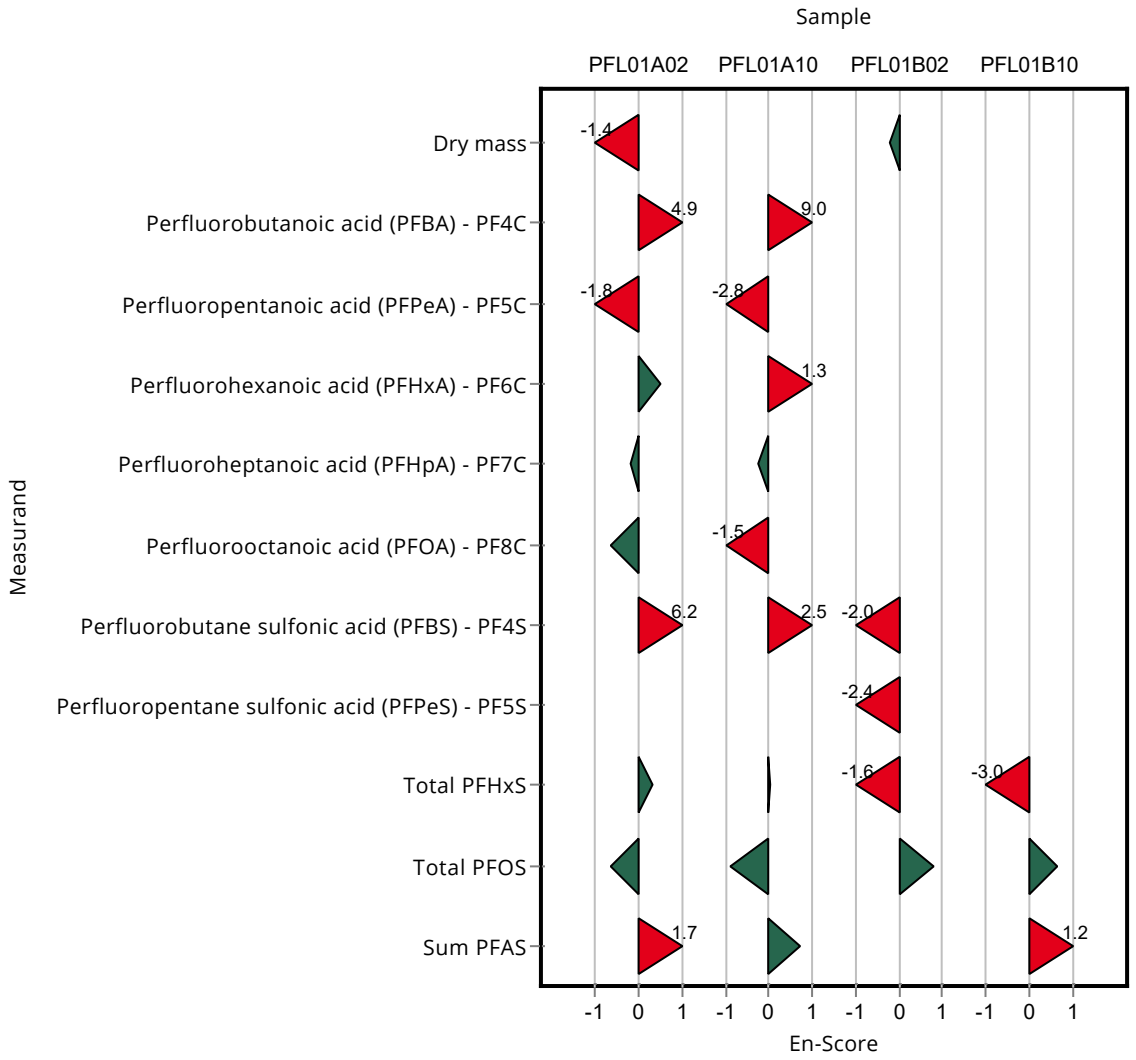
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.318 ± 0.006	0.0368	276	9.02
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.172 ± 0.006	0.132	49.6	-2.81
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.696 ± 0.011	0.13	118	1.35
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.048 ± 0.004	0.0111	95.5	-0.24
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.046 ± 0.006	0.0178	67.3	-1.55
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.331 ± 0.032	0.0335	198	2.49
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.048 ± 0.005	0.00954	101	0.03
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.064 ± 0.012	0.0218	73.5	-0.89
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.733 ± 0.058	0.36	111	0.74

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.2	±	0.3	1.28	99.9	-0.20
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.294	±	0.001	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.388	±	0.004	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.174	±	0.004	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.204	±	0.003	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.203	±	0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.064	±	0.014	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.027	±	0.006	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.019	±	0.001	0.00753	70.7	-1.95
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.014	±	0.001	0.00547	64	-2.36
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	-	±	-	0.0534	-	-
Total PFHxS	µg/l	0.167	±	0.0151	0.14	±	0.004	0.0417	83.9	-1.57
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	<0.01 (LOQ)	±	-	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	-	±	-	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.404	±	0.035	0.131	124	0.81
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	1.933	±	0.058	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.059 ± 0.003	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.095 ± 0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.038 ± 0.002	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.043 ± 0.006	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.053 ± 0.004	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.033 ± 0.003	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.013 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.041 ± 0.001	0.0137	74.8	-2.99
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.311 ± 0.012	0.079	110	0.66
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.687 ± 0.006	0.216	124	1.23


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
-1.4
4.9
9.0
-1.8
-2.8
1.3
-1.5
6.2
2.5
-2.0
-2.4
-1.6
-3.0
1.7
1.2
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	92.4 ± 2.2	1.4	99.2	-0.56
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.313 ± 0.0359	0.296	47.6	-1.16
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.927 ± 0.0927	0.583	62	-0.97
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.118 ± 0.2435	0.589	79.1	-0.95
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.0198	0.0319	97.2	-0.13
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.165 ± 0.0239	0.0291	147	1.82
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.017 ± 0.0022	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	- ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7 ± 0.0805	0.151	106	0.28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.053 ± 0.0072	0.0117	194	2.19
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.13 ± 0.0117	0.0161	202	4.08
Total PFHxS	µg/l	0.0788 ± 0.00997	0.165 ± 0.0149	0.0197	209	4.37
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.017 ± 0.0015	0.00432	181	1.76
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.067 ± 0.0087	0.0142	165	1.85
Total PFOS	µg/l	0.0645 ± 0.0148	0.125 ± 0.0162	0.029	194	2.09
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	4.742 ± 0.6876	1.49	73.1	-1.17

Sample: PFL01A10

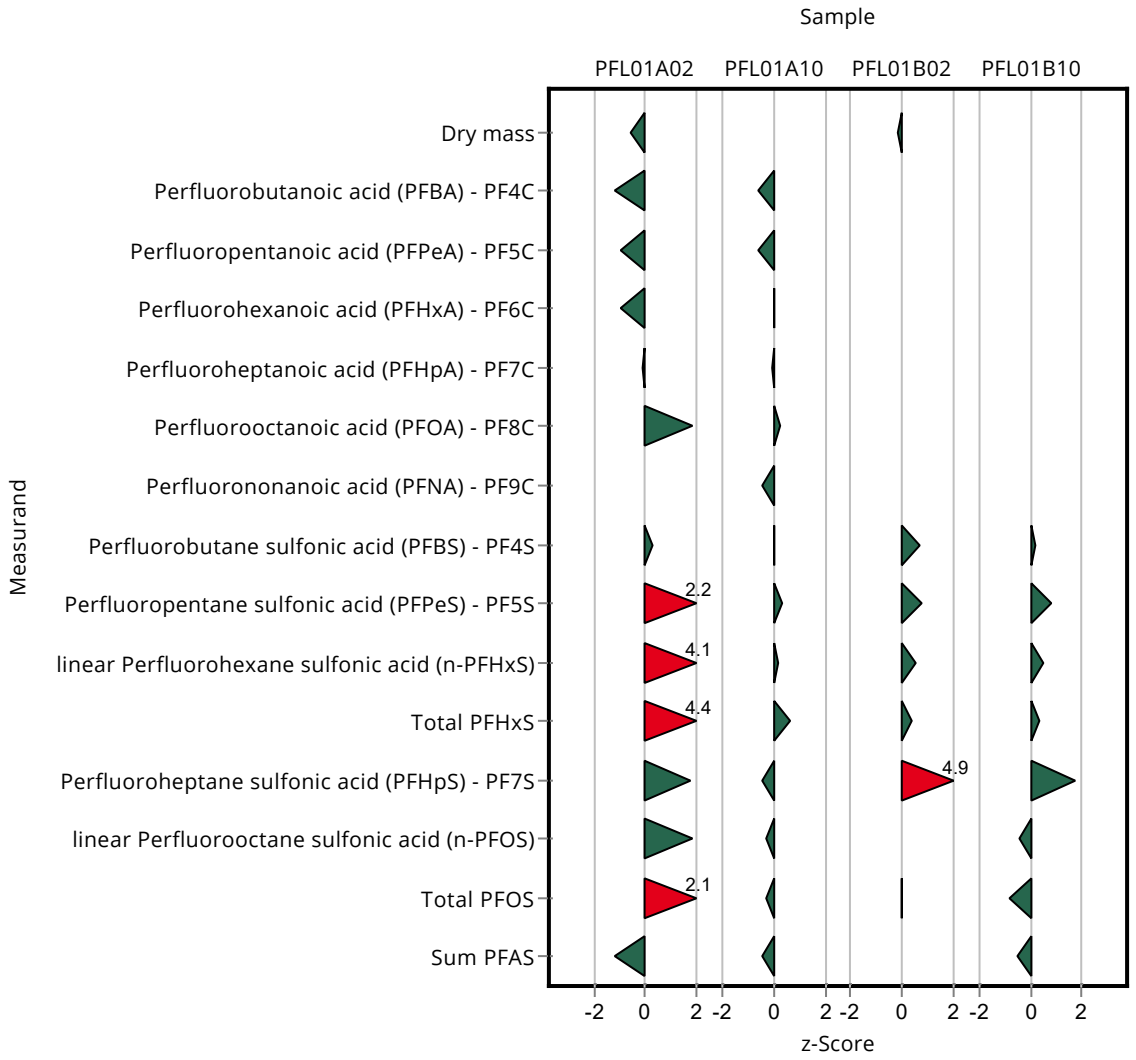
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.094 ± 0.0109	0.0368	81.7	-0.57
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.265 ± 0.0265	0.132	76.4	-0.62
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.589 ± 0.0677	0.13	99.7	-0.02
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.05 ± 0.007	0.0111	99.5	-0.02
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.073 ± 0.0105	0.0178	107	0.26
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.009 ± 0.0012	0.00252	89.1	-0.44
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	- ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.167 ± 0.0192	0.0335	99.7	-0.01
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.013 ± 0.0018	0.00456	114	0.35
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.043 ± 0.0039	0.00827	104	0.20
Total PFHxS	µg/l	0.0477 ± 0.00435	0.054 ± 0.0049	0.00954	113	0.66
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.008 ± 0.0007	0.00289	85.9	-0.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.045 ± 0.0059	0.0121	92.8	-0.29
Total PFOS	µg/l	0.0871 ± 0.00981	0.081 ± 0.0106	0.0218	93	-0.28
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.404 ± 0.2036	0.36	89.6	-0.45

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.06 ± 2.2	1.28	99.7	-0.20
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.111 ± 0.0127	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.134 ± 0.0134	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.092 ± 0.0106	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.08 ± 0.0112	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.05 ± 0.0072	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.028 ± 0.0036	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.032 ± 0.0037	0.00753	119	0.68
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.026 ± 0.0035	0.00547	119	0.75
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.165 ± 0.0149	0.0534	121	0.53
Total PFHxS	µg/l	0.167 ± 0.0151	0.181 ± 0.0163	0.0417	108	0.34
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.015 ± 0.0013	0.00169	221	4.85
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.289 ± 0.0375	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.328 ± 0.0426	0.131	100	0.01
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.077 ± 0.1561	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.031 ± 0.0036	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.033 ± 0.0033	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.024 ± 0.0028	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.025 ± 0.0035	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.023 ± 0.0033	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.015 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.007 ± 0.0008	0.00185	106	0.21
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.007 ± 0.0009	0.00145	121	0.82
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.055 ± 0.0049	0.0122	113	0.51
Total PFHxS	µg/l	0.0548 ± 0.00416	0.059 ± 0.0053	0.0137	108	0.31
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.005 ± 0.0004	0.000943	148	1.73
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.198 ± 0.0257	0.0639	86.7	-0.47
Total PFOS	µg/l	0.282 ± 0.037	0.218 ± 0.0283	0.079	77.3	-0.81
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.447 ± 0.0649	0.216	80.6	-0.50


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
2.2
4.1
4.4
4.9
2.1
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	92.4 ± 2.2	1.4	99.2	-0.18
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.313 ± 0.0359	0.296	47.6	-2.12
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.927 ± 0.0927	0.583	62	-1.75
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.118 ± 0.2435	0.589	79.1	-1.06
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.0198	0.0319	97.2	-0.10
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.165 ± 0.0239	0.0291	147	1.08
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.017 ± 0.0022	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	- ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7 ± 0.0805	0.151	106	0.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.053 ± 0.0072	0.0117	194	1.51
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.13 ± 0.0117	0.0161	202	2.57
Total PFHxS	µg/l	0.0788 ± 0.00997	0.165 ± 0.0149	0.0197	209	2.74
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.017 ± 0.0015	0.00432	181	1.85
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.067 ± 0.0087	0.0142	165	1.31
Total PFOS	µg/l	0.0645 ± 0.0148	0.125 ± 0.0162	0.029	194	1.70
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	4.742 ± 0.6876	1.49	73.1	-1.13

Sample: PFL01A10

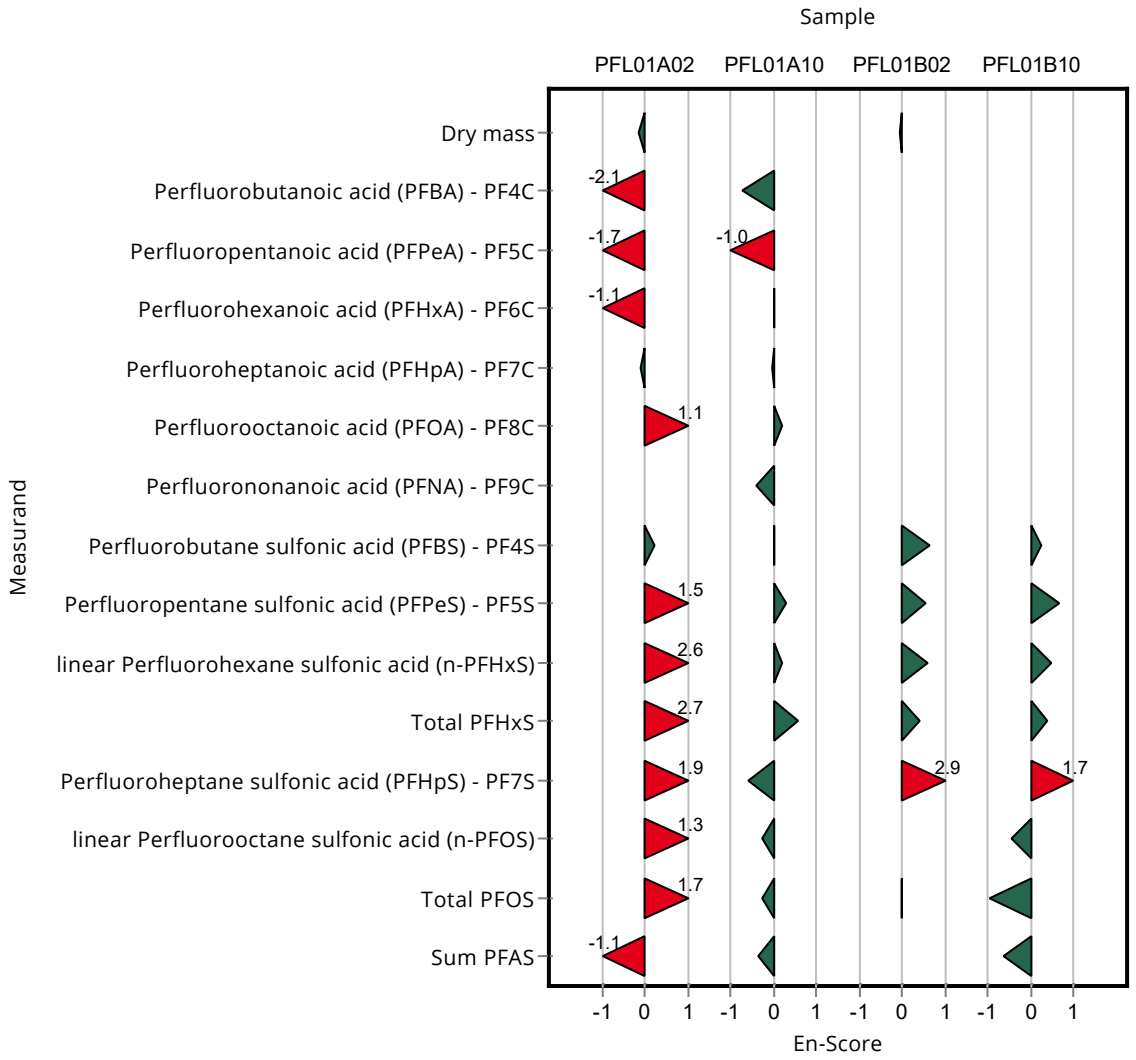
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.094 ± 0.0109	0.0368	81.7	-0.73
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.265 ± 0.0265	0.132	76.4	-1.01
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.589 ± 0.0677	0.13	99.7	-0.01
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.05 ± 0.007	0.0111	99.5	-0.02
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.073 ± 0.0105	0.0178	107	0.21
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.009 ± 0.0012	0.00252	89.1	-0.41
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	- ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.167 ± 0.0192	0.0335	99.7	-0.01
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.013 ± 0.0018	0.00456	114	0.31
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.043 ± 0.0039	0.00827	104	0.18
Total PFHxS	µg/l	0.0477 ± 0.00435	0.054 ± 0.0049	0.00954	113	0.59
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.008 ± 0.0007	0.00289	85.9	-0.62
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.045 ± 0.0059	0.0121	92.8	-0.26
Total PFOS	µg/l	0.0871 ± 0.00981	0.081 ± 0.0106	0.0218	93	-0.26
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.404 ± 0.2036	0.36	89.6	-0.36

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.06 ± 2.2	1.28	99.7	-0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.111 ± 0.0127	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.134 ± 0.0134	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.092 ± 0.0106	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.08 ± 0.0112	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.05 ± 0.0072	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.028 ± 0.0036	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.032 ± 0.0037	0.00753	119	0.63
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.026 ± 0.0035	0.00547	119	0.55
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.165 ± 0.0149	0.0534	121	0.61
Total PFHxS	µg/l	0.167 ± 0.0151	0.181 ± 0.0163	0.0417	108	0.39
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.015 ± 0.0013	0.00169	221	2.93
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.289 ± 0.0375	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.328 ± 0.0426	0.131	100	0.01
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.077 ± 0.1561	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.031 ± 0.0036	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.033 ± 0.0033	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.024 ± 0.0028	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.025 ± 0.0035	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.023 ± 0.0033	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.015 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.007 ± 0.0008	0.00185	106	0.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.007 ± 0.0009	0.00145	121	0.64
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.055 ± 0.0049	0.0122	113	0.49
Total PFHxS	µg/l	0.0548 ± 0.00416	0.059 ± 0.0053	0.0137	108	0.37
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.005 ± 0.0004	0.000943	148	1.69
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.198 ± 0.0257	0.0639	86.7	-0.44
Total PFOS	µg/l	0.282 ± 0.037	0.218 ± 0.0283	0.079	77.3	-0.95
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.447 ± 0.0649	0.216	80.6	-0.64


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-2.1
-1.7
-1.0
-1.1
1.1
1.5
2.6
2.7
1.9
2.9
1.7
1.3
1.7
-1.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93 ± 3	1.4	99.8	-0.13
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.885 ± 0.1	0.296	135	0.77
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.76 ± 0.5	0.583	118	0.45
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.98 ± 0.5	0.589	111	0.52
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.153 ± 0.03	0.0319	105	0.25
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0726 ± 0.01	0.0291	64.8	-1.35
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0048 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.0025 ± 0.002	0.00184	53.1	-1.20
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0048 ± 0.002	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0024 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0018 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.786 ± 0.1	0.151	119	0.84
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0286 ± 0.005	0.0117	105	0.11
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0557 ± 0.01	0.0197	70.6	-1.17
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0041 ± 0.002	0.00432	43.7	-1.22
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0223 ± 0.005	0.029	34.6	-1.45
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0327 ± 0.006	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	0.0158 ± 0.005	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	0.0099 ± 0.005	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	6.822 ± 1	1.49	105	0.22

Sample: PFL01A10

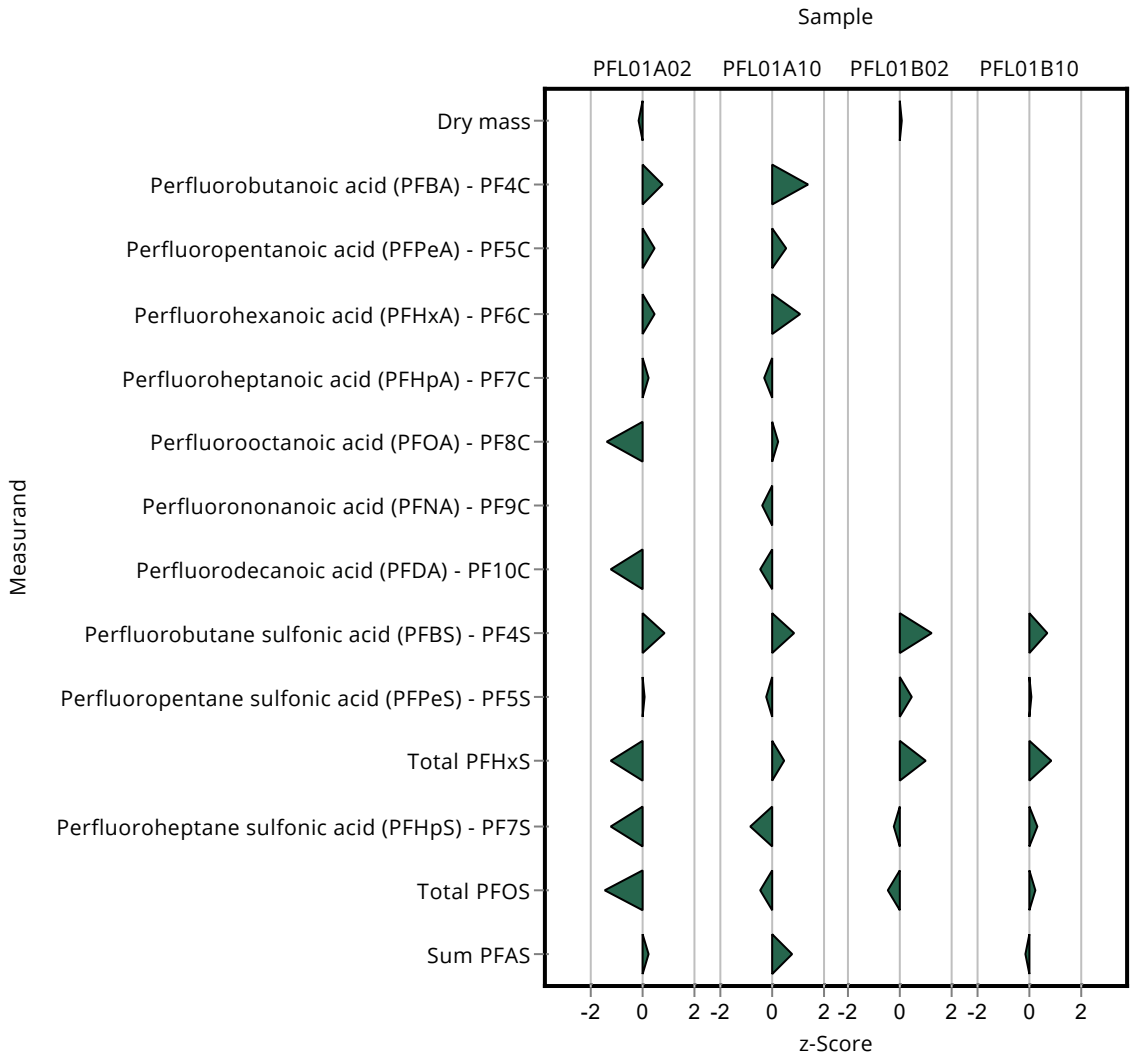
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.167 ± 0.02	0.0368	145	1.41
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.421 ± 0.12	0.132	121	0.56
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.74 ± 0.12	0.13	125	1.15
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0473 ± 0.01	0.0111	94.1	-0.27
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.073 ± 0.02	0.0178	107	0.26
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0093 ± 0.005	0.00252	92.1	-0.32
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0046 ± 0.002	0.00213	84.3	-0.40
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0026 ± 0.002	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0021 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0017 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.198 ± 0.06	0.0335	118	0.91
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0105 ± 0.005	0.00456	92.1	-0.20
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0526 ± 0.01	0.00954	110	0.51
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.0069 ± 0.005	0.00289	74.1	-0.83
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0775 ± 0.03	0.0218	89	-0.44
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0293 ± 0.005	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	0.0026 ± 0.002	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	0.0029 ± 0.002	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.8496 ± 0.3	0.36	118	0.78

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 3	1.28	100	0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0413 ± 0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0427 ± 0.01	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0358 ± 0.01	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0344 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0304 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0146 ± 0.003	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0051 ± 0.002	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0051 ± 0.01	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0038 ± 0.002	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0024 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0359 ± 0.01	0.00753	134	1.20
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0242 ± 0.005	0.00547	111	0.42
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.207 ± 0.06	0.0417	124	0.96
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0063 ± 0.003	0.00169	92.9	-0.28
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.266 ± 0.05	0.131	81.4	-0.46
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0039 ± 0.002	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0015 ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.7588 ± 0.2	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0205 ± 0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0215 ± 0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.018 ± 0.005	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0182 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0202 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0147 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0055 ± 0.003	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0019 ± 0.001	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0017 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0016 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0078 ± 0.002	0.00185	118	0.65
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0059 ± 0.005	0.00145	102	0.06
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0661 ± 0.02	0.0137	121	0.82
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.0036 ± 0.003	0.000943	107	0.25
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.299 ± 0.05	0.079	106	0.22
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0035 ± 0.002	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0015 ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.5109 ± 0.1	0.216	92.2	-0.20


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93 ± 3	1.4	99.8	-0.03
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.885 ± 0.1	0.296	135	0.92
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.76 ± 0.5	0.583	118	0.26
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.98 ± 0.5	0.589	111	0.30
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.153 ± 0.03	0.0319	105	0.13
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0726 ± 0.01	0.0291	64.8	-1.71
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0048 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.0025 ± 0.002	0.00184	53.1	-0.52
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0048 ± 0.002	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0024 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0018 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.786 ± 0.1	0.151	119	0.60
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0286 ± 0.005	0.0117	105	0.10
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0557 ± 0.01	0.0197	70.6	-1.04
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0041 ± 0.002	0.00432	43.7	-1.08
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0223 ± 0.005	0.029	34.6	-2.36
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0327 ± 0.006	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	0.0158 ± 0.005	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	0.0099 ± 0.005	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	6.822 ± 1	1.49	105	0.16

Sample: PFL01A10

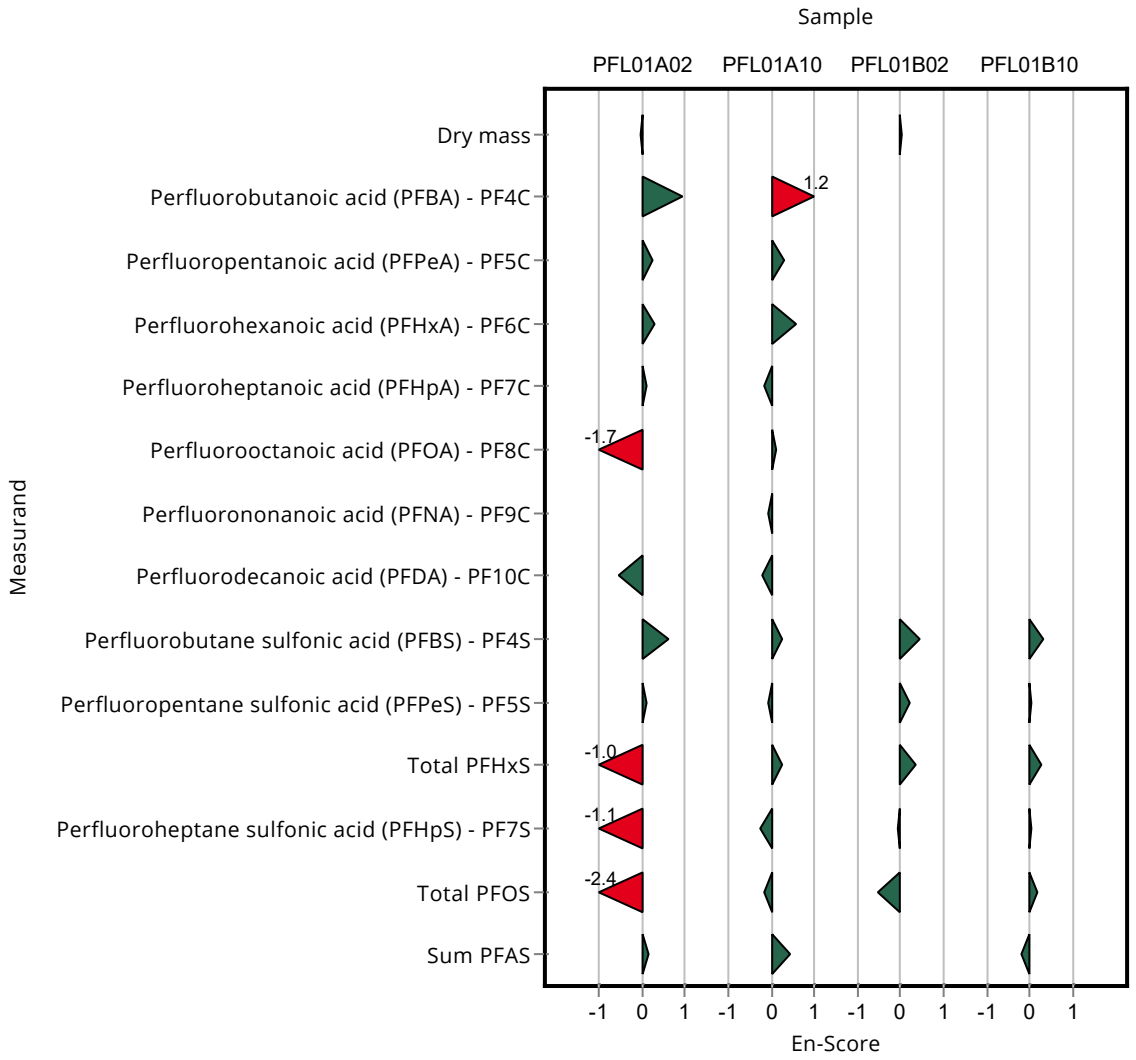
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.167 ± 0.02	0.0368	145	1.17
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.421 ± 0.12	0.132	121	0.30
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.74 ± 0.12	0.13	125	0.59
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0473 ± 0.01	0.0111	94.1	-0.14
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.073 ± 0.02	0.0178	107	0.11
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0093 ± 0.005	0.00252	92.1	-0.08
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0046 ± 0.002	0.00213	84.3	-0.20
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0026 ± 0.002	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0021 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0017 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.198 ± 0.06	0.0335	118	0.25
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0105 ± 0.005	0.00456	92.1	-0.08
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0526 ± 0.01	0.00954	110	0.24
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.0069 ± 0.005	0.00289	74.1	-0.24
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0775 ± 0.03	0.0218	89	-0.16
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0293 ± 0.005	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	0.0026 ± 0.002	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	0.0029 ± 0.002	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.8496 ± 0.3	0.36	118	0.45

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 3	1.28	100	0.01
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0413 ± 0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0427 ± 0.01	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0358 ± 0.01	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0344 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0304 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0146 ± 0.003	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0051 ± 0.002	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0051 ± 0.01	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0038 ± 0.002	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0024 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0359 ± 0.01	0.00753	134	0.44
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0242 ± 0.005	0.00547	111	0.22
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.207 ± 0.06	0.0417	124	0.33
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0063 ± 0.003	0.00169	92.9	-0.08
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.266 ± 0.05	0.131	81.4	-0.51
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0039 ± 0.002	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0015 ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.7588 ± 0.2	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0205 ± 0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0215 ± 0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.018 ± 0.005	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0182 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0202 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0147 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0055 ± 0.003	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0019 ± 0.001	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.0017 ± 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	0.0016 ± 0.001	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0078 ± 0.002	0.00185	118	0.30
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0059 ± 0.005	0.00145	102	0.01
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0661 ± 0.02	0.0137	121	0.28
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.0036 ± 0.003	0.000943	107	0.04
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.299 ± 0.05	0.079	106	0.16
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0035 ± 0.002	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0015 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0015 ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.5109 ± 0.1	0.216	92.2	-0.19


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
1.2
-1.7
-1.0
-1.1
-2.4
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.16 ± 0.5	1.4	100	-0.01
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.878 ± 0.256	0.296	134	0.75
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.96 ± 0.59	0.583	131	0.80
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	3.24 ± 0.881	0.589	121	0.96
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.189 ± 0.053	0.0319	130	1.38
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.178 ± 0.0622	0.0291	159	2.27
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0108 ± 0.00287	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00611 ± 0.00182	0.00184	130	0.76
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00134 ± 0.00055	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.798 ± 0.285	0.151	121	0.92
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0314 ± 0.0104	0.0117	115	0.35
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0856 ± 0.0289	0.0161	133	1.32
Total PFHxS	µg/l	0.0788 ± 0.00997	0.124 ± 0.0418	0.0197	157	2.29
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00661 ± 0.00235	0.00432	70.4	-0.64
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.04763 ± 0.0204	0.0142	117	0.49
Total PFOS	µg/l	0.0645 ± 0.0148	0.0943 ± 0.0404	0.029	146	1.03
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.519 ± 2.2273	1.49	116	0.69

Sample: PFL01A10

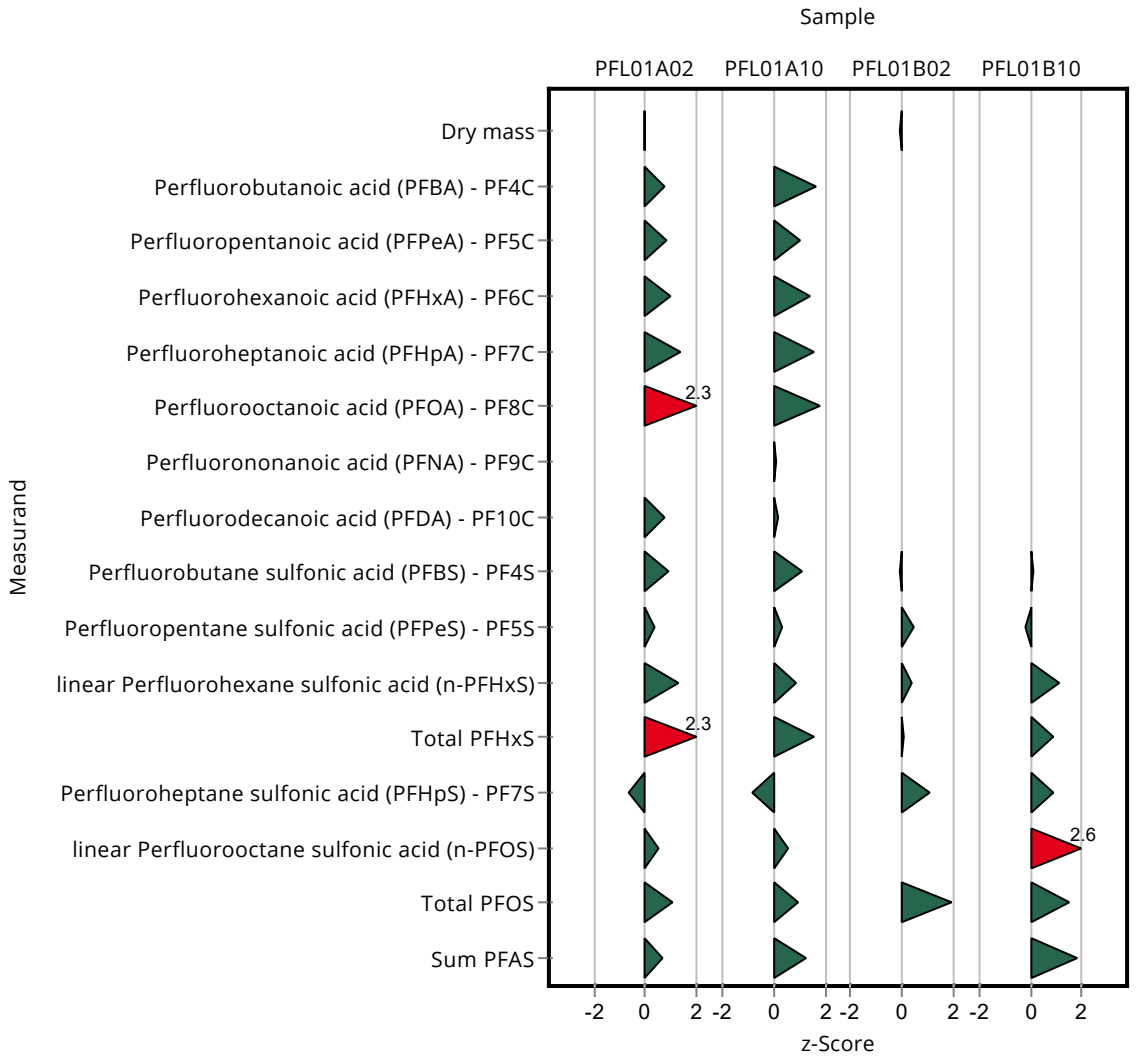
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.177	±	0.0516	0.0368	154	1.68
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.483	±	0.145	0.132	139	1.03
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.772	±	0.21	0.13	131	1.39
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0674	±	0.0189	0.0111	134	1.55
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.101	±	0.0355	0.0178	148	1.84
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0103	±	0.00272	0.00252	102	0.08
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.00577	±	0.00172	0.00213	106	0.15
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.204	±	0.0727	0.0335	122	1.09
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0128	±	0.00423	0.00456	112	0.31
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.0487	±	0.0164	0.00827	118	0.89
Total PFHxS	µg/l	0.0477	±	0.00435	0.0627	±	0.0211	0.00954	131	1.57
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.0068	±	0.00242	0.00289	73.1	-0.87
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0554	±	0.0237	0.0121	114	0.57
Total PFOS	µg/l	0.0871	±	0.00981	0.108	±	0.0461	0.0218	124	0.96
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	2.01	±	0.61215	0.36	128	1.23

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.18 ± 0.5	1.28	99.8	-0.11
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.3 ± 0.0873	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.462 ± 0.139	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.213 ± 0.0578	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.201 ± 0.0562	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.22 ± 0.077	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0935 ± 0.0248	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.036 ± 0.0107	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0075 ± 0.00307	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.00148 ± 0.000688	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0263 ± 0.0094	0.00753	97.8	-0.08
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0242 ± 0.00804	0.00547	111	0.42
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.155 ± 0.0524	0.0534	113	0.34
Total PFHxS	µg/l	0.167 ± 0.0151	0.169 ± 0.0568	0.0417	101	0.05
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0086 ± 0.00305	0.00169	127	1.07
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.569 ± 0.244	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.582 ± 0.249	0.131	178	1.95
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00269 ± 0.00109	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	2.347 ± 0.78457	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.074	±	0.0216	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.118	±	0.0354	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0588	±	0.016	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.057	±	0.0159	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0798	±	0.028	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0461	±	0.0122	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.0271	±	0.00809	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00406	±	0.00166	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00686	±	0.00245	0.00185	104	0.14
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00555	±	0.00184	0.00145	95.6	-0.18
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0622	±	0.021	0.0122	127	1.10
Total PFHxS	µg/l	0.0548	±	0.00416	0.0673	±	0.0227	0.0137	123	0.91
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00423	±	0.0015	0.000943	126	0.91
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.397	±	0.17	0.0639	174	2.64
Total PFOS	µg/l	0.282	±	0.037	0.4	±	0.171	0.079	142	1.49
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00206	±	0.000835	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.95	±	0.33933	0.216	171	1.83


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
2.3
2.3
2.6
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.16 ± 0.5	1.4	100	-0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.878 ± 0.256	0.296	134	0.41
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.96 ± 0.59	0.583	131	0.38
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	3.24 ± 0.881	0.589	121	0.32
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.189 ± 0.053	0.0319	130	0.41
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.178 ± 0.0622	0.0291	159	0.53
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0108 ± 0.00287	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00611 ± 0.00182	0.00184	130	0.35
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00134 ± 0.00055	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.798 ± 0.285	0.151	121	0.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0314 ± 0.0104	0.0117	115	0.18
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0856 ± 0.0289	0.0161	133	0.36
Total PFHxS	µg/l	0.0788 ± 0.00997	0.124 ± 0.0418	0.0197	157	0.54
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00661 ± 0.00235	0.00432	70.4	-0.51
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.04763 ± 0.0204	0.0142	117	0.16
Total PFOS	µg/l	0.0645 ± 0.0148	0.0943 ± 0.0404	0.029	146	0.36
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.519 ± 2.2273	1.49	116	0.23

Sample: PFL01A10

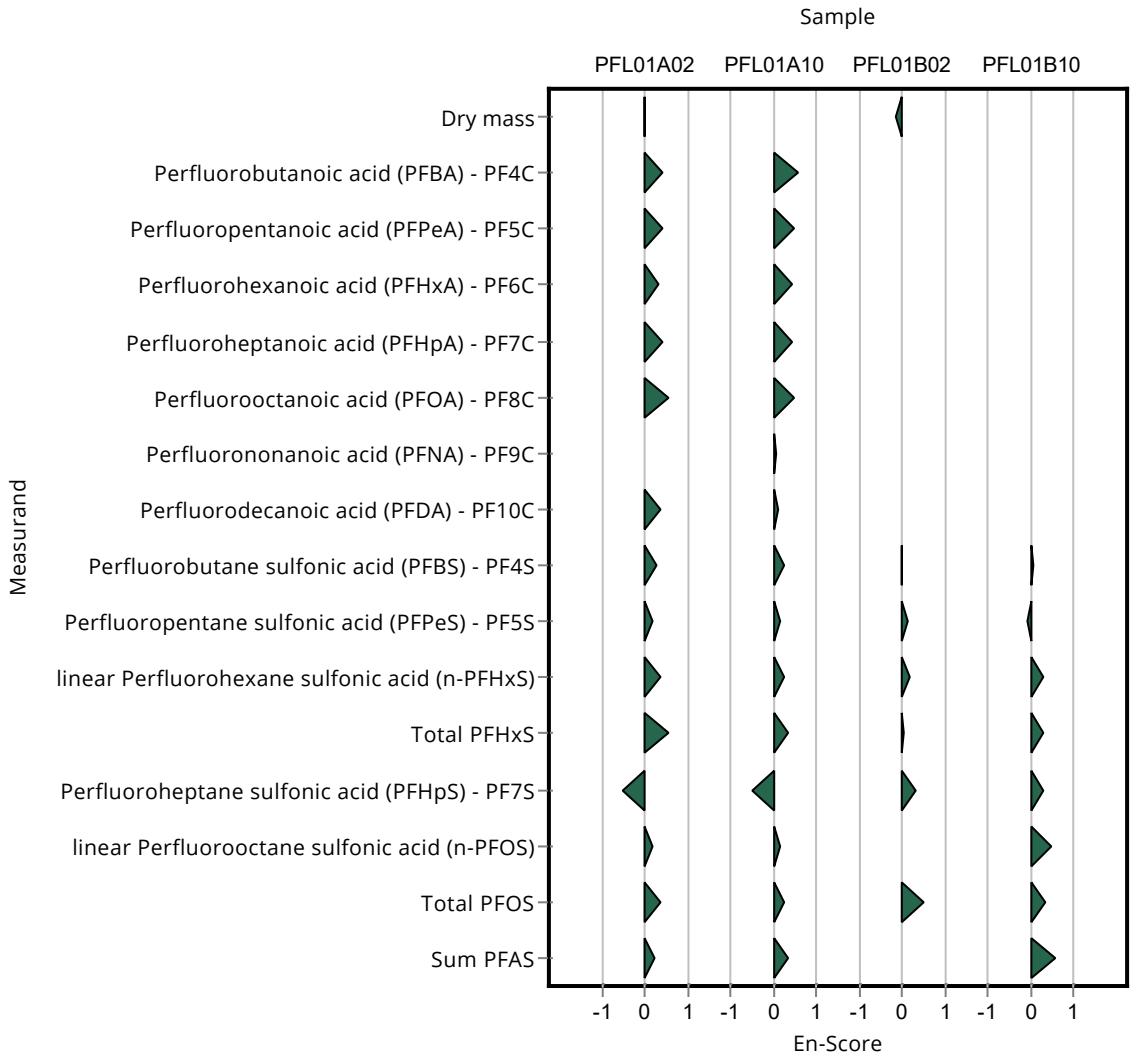
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.177	±	0.0516	0.0368	154	0.59
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.483	±	0.145	0.132	139	0.46
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.772	±	0.21	0.13	131	0.42
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0674	±	0.0189	0.0111	134	0.45
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.101	±	0.0355	0.0178	148	0.46
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0103	±	0.00272	0.00252	102	0.04
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.00577	±	0.00172	0.00213	106	0.08
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.204	±	0.0727	0.0335	122	0.25
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0128	±	0.00423	0.00456	112	0.15
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.0487	±	0.0164	0.00827	118	0.22
Total PFHxS	µg/l	0.0477	±	0.00435	0.0627	±	0.0211	0.00954	131	0.35
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.0068	±	0.00242	0.00289	73.1	-0.49
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0554	±	0.0237	0.0121	114	0.14
Total PFOS	µg/l	0.0871	±	0.00981	0.108	±	0.0461	0.0218	124	0.23
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	2.01	±	0.61215	0.36	128	0.36

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.18	±	0.5	1.28	99.8	-0.14
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.3	±	0.0873	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.462	±	0.139	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.213	±	0.0578	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.201	±	0.0562	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.22	±	0.077	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0935	±	0.0248	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.036	±	0.0107	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.0075	±	0.00307	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	0.00148	±	0.000688	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0263	±	0.0094	0.00753	97.8	-0.03
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0242	±	0.00804	0.00547	111	0.14
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.155	±	0.0524	0.0534	113	0.16
Total PFHxS	µg/l	0.167	±	0.0151	0.169	±	0.0568	0.0417	101	0.02
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	0.0086	±	0.00305	0.00169	127	0.29
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.569	±	0.244	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.582	±	0.249	0.131	178	0.51
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00269	±	0.00109	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	2.347	±	0.78457	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.074	±	0.0216	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.118	±	0.0354	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0588	±	0.016	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.057	±	0.0159	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0798	±	0.028	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0461	±	0.0122	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.0271	±	0.00809	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00406	±	0.00166	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00686	±	0.00245	0.00185	104	0.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00555	±	0.00184	0.00145	95.6	-0.07
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0622	±	0.021	0.0122	127	0.31
Total PFHxS	µg/l	0.0548	±	0.00416	0.0673	±	0.0227	0.0137	123	0.27
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00423	±	0.0015	0.000943	126	0.28
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.397	±	0.17	0.0639	174	0.49
Total PFOS	µg/l	0.282	±	0.037	0.4	±	0.171	0.079	142	0.34
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00206	±	0.000835	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.95	±	0.33933	0.216	171	0.58


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93 ± 3	1.4	99.8	-0.13
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.386 ± 0.1	0.296	58.7	-0.92
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.46 ± 0.5	0.583	97.6	-0.06
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.66 ± 0.5	0.589	99.4	-0.03
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.125 ± 0.02	0.0319	86.2	-0.63
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.101 ± 0.01	0.0291	90.2	-0.38
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.723 ± 0.3	0.151	110	0.43
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0268 ± 0.005	0.0117	98.2	-0.04
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0618 ± 0.01	0.0197	78.4	-0.86
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0143 ± 0.005	0.029	22.2	-1.73
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.5636 ± 1	1.49	85.8	-0.62

Sample: PFL01A10

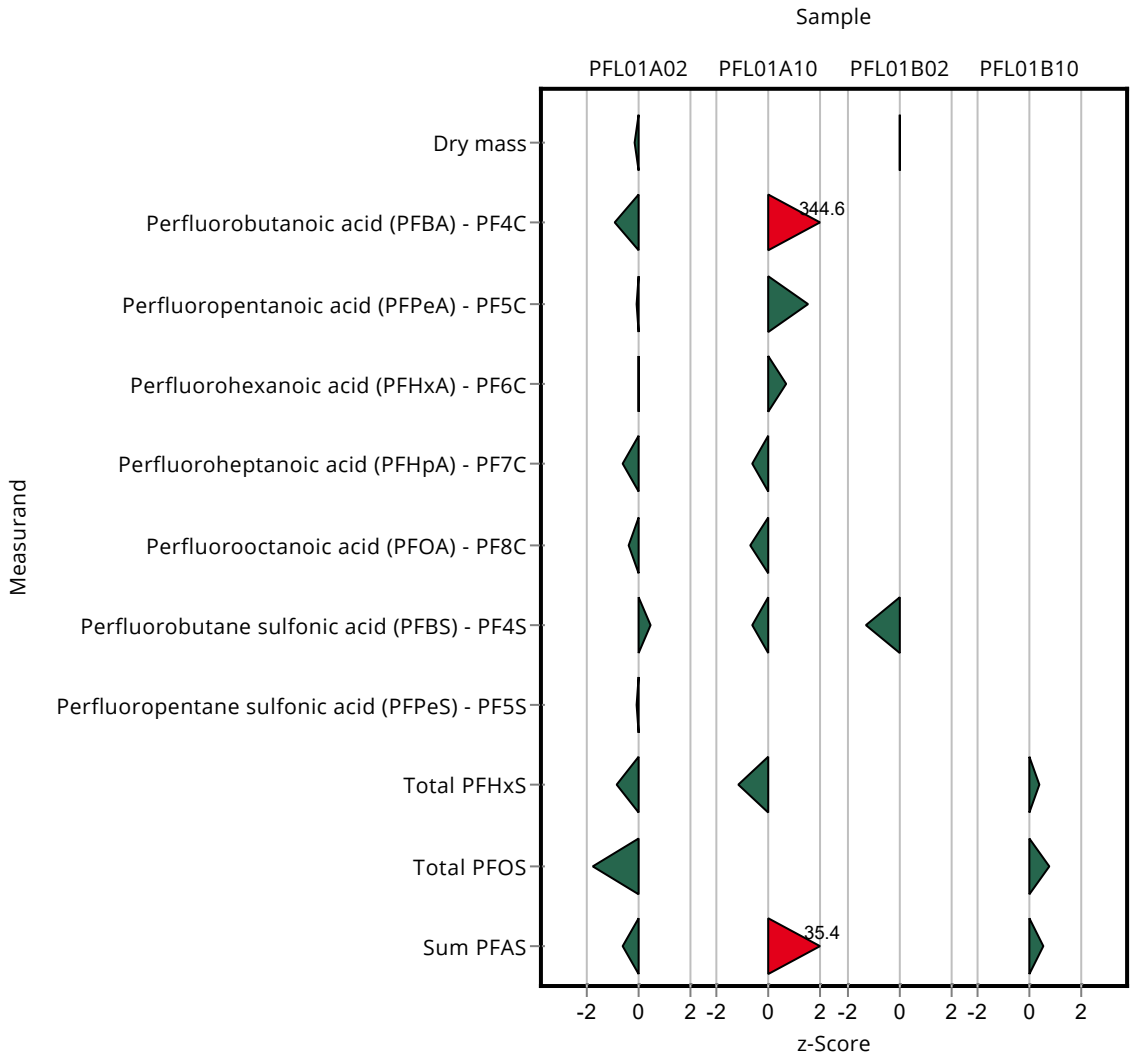
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	12.8 ± 3	0.0368	1110	344.62
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.549 ± 0.1	0.132	158	1.53
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.681 ± 0.1	0.13	115	0.69
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0434 ± 0.01	0.0111	86.4	-0.62
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0559 ± 0.01	0.0178	81.8	-0.70
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.146 ± 0.05	0.0335	87.2	-0.64
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0366 ± 0.01	0.00954	76.7	-1.16
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	<0.01 (LOQ) ± -	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	14.33 ± 3	0.36	915	35.42

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 3	1.28	100	0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.122 ± 0.03	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.135 ± 0.03	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0383 ± 0.005	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0256 ± 0.005	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0175 ± 0.005	0.00753	65.1	-1.25
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	<0.01 (LOQ) ± -	0.00547	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	<0.01 (LOQ) ± -	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	<0.01 (LOQ) ± -	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.338 ± 0.1	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0854 ± 0.02	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.115 ± 0.03	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0219 ± 0.01	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0168 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0205 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0143 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0597 ± 0.02	0.0137	109	0.36
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.341 ± 0.05	0.079	121	0.75
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.6747 ± 0.2	0.216	122	0.56


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
344.6
35.4
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93 ± 3	1.4	99.8	-0.03
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.386 ± 0.1	0.296	58.7	-1.10
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.46 ± 0.5	0.583	97.6	-0.03
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.66 ± 0.5	0.589	99.4	-0.02
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.125 ± 0.02	0.0319	86.2	-0.47
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.101 ± 0.01	0.0291	90.2	-0.48
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.723 ± 0.3	0.151	110	0.11
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0268 ± 0.005	0.0117	98.2	-0.04
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0618 ± 0.01	0.0197	78.4	-0.76
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0143 ± 0.005	0.029	22.2	-2.80
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.5636 ± 1	1.49	85.8	-0.44

Sample: PFL01A10

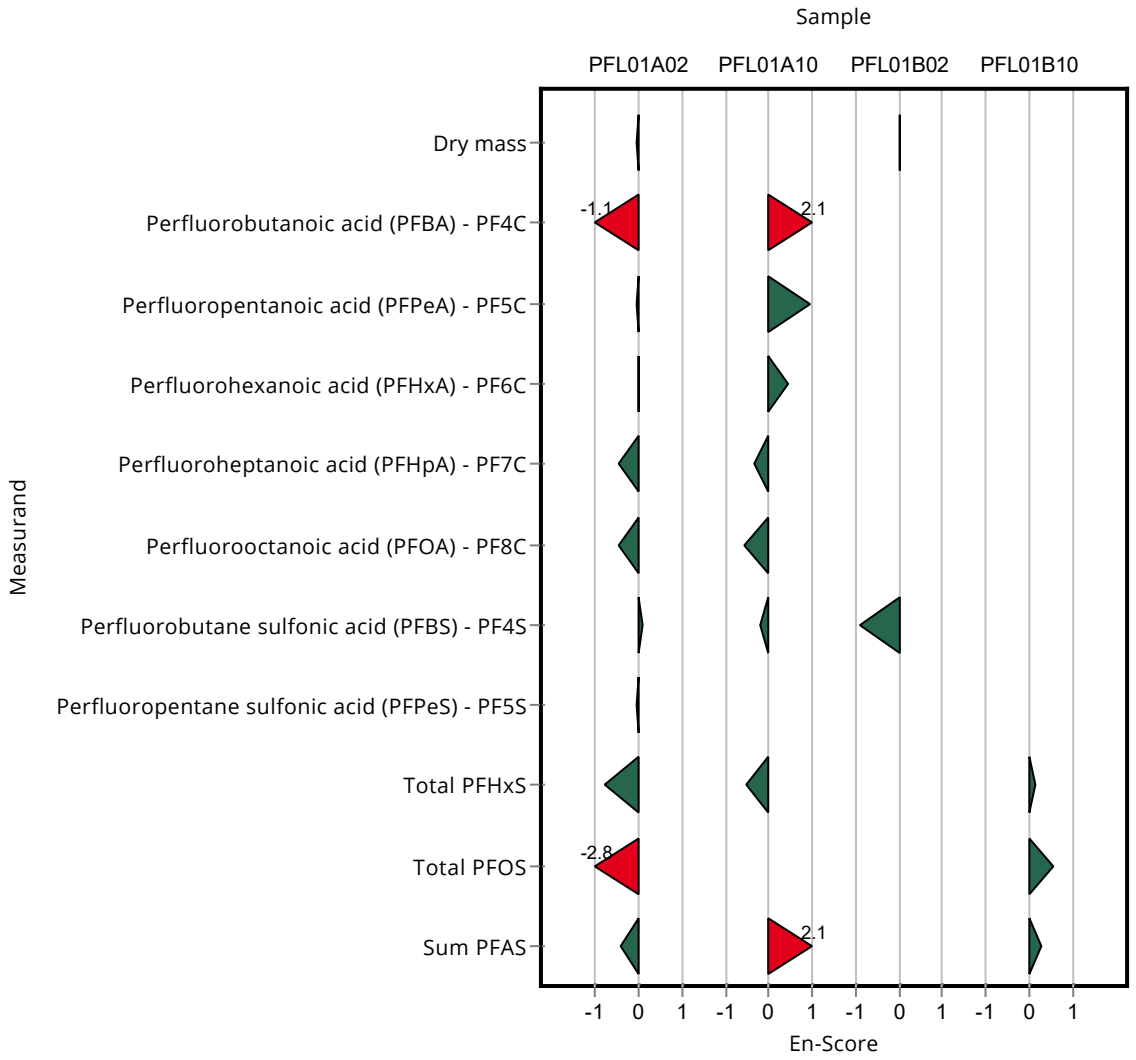
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	12.8 ± 3	0.0368	1110	2.11
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.549 ± 0.1	0.132	158	0.97
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.681 ± 0.1	0.13	115	0.42
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0434 ± 0.01	0.0111	86.4	-0.33
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0559 ± 0.01	0.0178	81.8	-0.58
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.146 ± 0.05	0.0335	87.2	-0.21
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0366 ± 0.01	0.00954	76.7	-0.54
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	<0.01 (LOQ) ± -	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	14.33 ± 3	0.36	915	2.13

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.4	±	3	1.28	100	0.01
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.122	±	0.03	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.135	±	0.03	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0383	±	0.005	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0256	±	0.005	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0175	±	0.005	0.00753	65.1	-0.89
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	<0.01 (LOQ)	±	-	0.00547	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	-	±	-	0.0534	-	-
Total PFHxS	µg/l	0.167	±	0.0151	<0.01 (LOQ)	±	-	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	<0.01 (LOQ)	±	-	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	-	±	-	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	<0.01 (LOQ)	±	-	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	0.338	±	0.1	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0854 ± 0.02	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.115 ± 0.03	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0219 ± 0.01	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0168 ± 0.01	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0205 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0143 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0597 ± 0.02	0.0137	109	0.12
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.341 ± 0.05	0.079	121	0.55
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.6747 ± 0.2	0.216	122	0.29


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
-1.1
2.1
-2.8
2.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.2 ± 0.1	1.4	100	0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.465 ± 0.056	0.296	70.7	-0.65
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.33 ± 0.146	0.583	88.9	-0.28
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.3 ± 0.207	0.589	85.9	-0.64
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.013	0.0319	97.2	-0.13
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.123 ± 0.012	0.0291	110	0.38
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.007 ± 0.001	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.004 ± 0.001	0.00184	84.9	-0.39
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.64 ± 0.134	0.151	97.2	-0.12
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.04 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.08 ± 0.011	0.0197	101	0.06
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.016 ± 0.003	0.00432	170	1.53
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.072 ± 0.011	0.029	112	0.26
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.18 ± 0.192	1.49	79.9	-0.88

Sample: PFL01A10

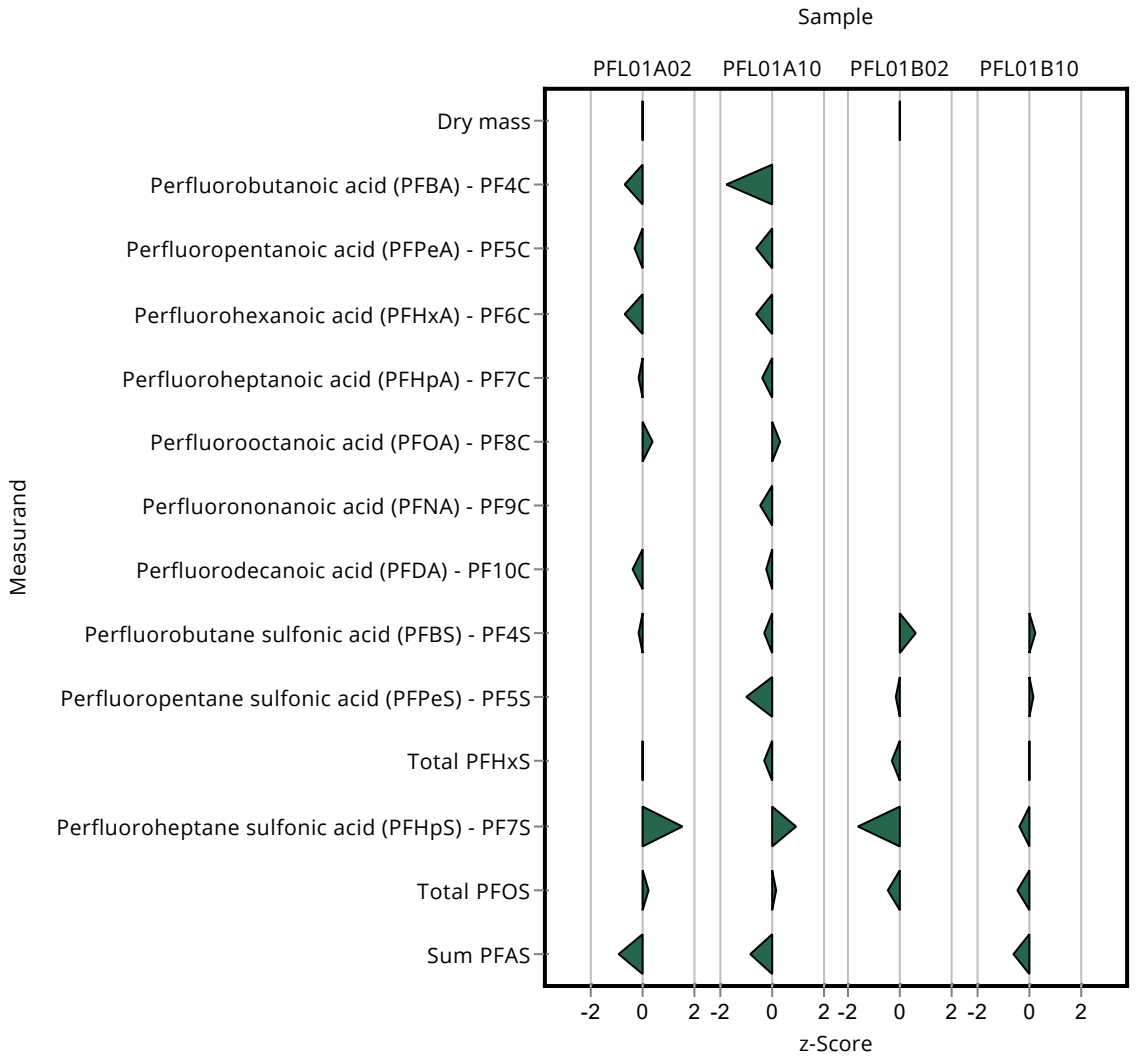
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.05 ± 0.006	0.0368	43.5	-1.77
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.266 ± 0.029	0.132	76.6	-0.61
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.515 ± 0.046	0.13	87.1	-0.58
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.046 ± 0.004	0.0111	91.5	-0.39
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.074 ± 0.007	0.0178	108	0.32
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.009 ± 0.001	0.00252	89.1	-0.44
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.005 ± 0.001	0.00213	91.6	-0.22
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.159 ± 0.033	0.0335	94.9	-0.25
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.007 ± 0.001	0.00456	61.4	-0.96
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.045 ± 0.004	0.00954	94.3	-0.28
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.012 ± 0.002	0.00289	129	0.93
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.092 ± 0.027	0.0218	106	0.22
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.28 ± 0.256	0.36	81.7	-0.80

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.3 ± 0.1	1.28	100	-0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.022 ± 0.003	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.025 ± 0.003	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.022 ± 0.002	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.024 ± 0.002	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.023 ± 0.002	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.014 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.005 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.001 ± 0.001	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.031 ± 0.007	0.00753	115	0.55
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.021 ± 0.004	0.00547	96	-0.16
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.153 ± 0.021	0.0417	91.7	-0.33
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.004 ± 0.001	0.00169	59	-1.64
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.261 ± 0.039	0.131	79.9	-0.50
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.606 ± 0.121	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.015 ± 0.002	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.017 ± 0.002	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.014 ± 0.001	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.016 ± 0.001	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.018 ± 0.002	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.013 ± 0.001	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.005 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.007 ± 0.001	0.00185	106	0.21
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.006 ± 0.001	0.00145	103	0.13
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.054 ± 0.008	0.0137	98.5	-0.06
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.003 ± 0.001	0.000943	89.1	-0.39
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.241 ± 0.036	0.079	85.5	-0.52
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.409 ± 0.082	0.216	73.8	-0.67


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.2 ± 0.1	1.4	100	0.07
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.465 ± 0.056	0.296	70.7	-1.05
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.33 ± 0.146	0.583	88.9	-0.42
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.3 ± 0.207	0.589	85.9	-0.82
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.141 ± 0.013	0.0319	97.2	-0.14
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.123 ± 0.012	0.0291	110	0.41
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.007 ± 0.001	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.004 ± 0.001	0.00184	84.9	-0.28
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.64 ± 0.134	0.151	97.2	-0.07
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.04 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.08 ± 0.011	0.0197	101	0.05
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.016 ± 0.003	0.00432	170	1.00
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.072 ± 0.011	0.029	112	0.28
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.18 ± 0.192	1.49	79.9	-1.65

Sample: PFL01A10

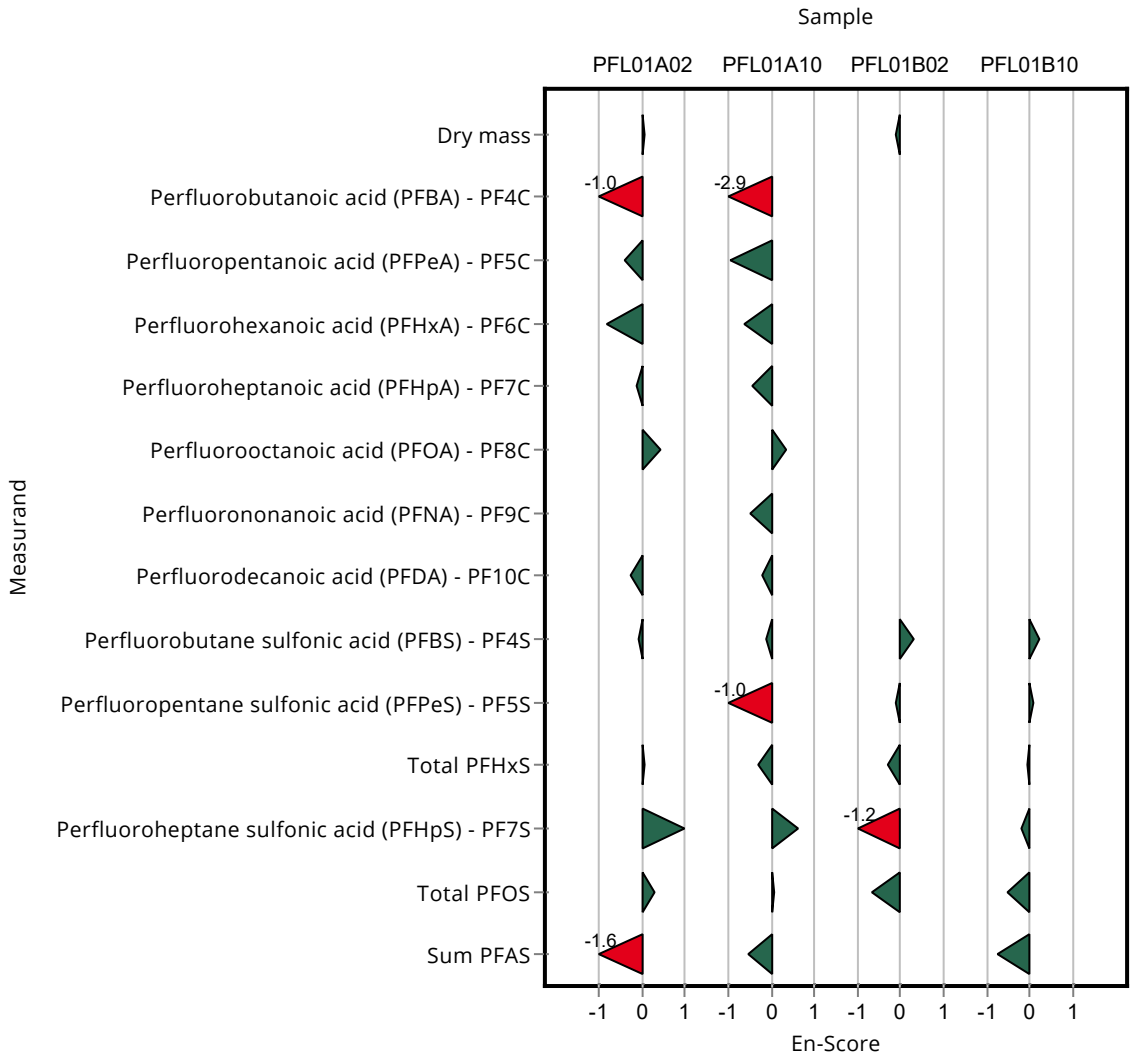
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.05 ± 0.006	0.0368	43.5	-2.89
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.266 ± 0.029	0.132	76.6	-0.96
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.515 ± 0.046	0.13	87.1	-0.64
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.046 ± 0.004	0.0111	91.5	-0.45
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.074 ± 0.007	0.0178	108	0.35
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.009 ± 0.001	0.00252	89.1	-0.48
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.005 ± 0.001	0.00213	91.6	-0.19
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.159 ± 0.033	0.0335	94.9	-0.13
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.007 ± 0.001	0.00456	61.4	-1.03
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.045 ± 0.004	0.00954	94.3	-0.30
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.012 ± 0.002	0.00289	129	0.62
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.092 ± 0.027	0.0218	106	0.09
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.28 ± 0.256	0.36	81.7	-0.52

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.3 ± 0.1	1.28	100	-0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.022 ± 0.003	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.025 ± 0.003	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.022 ± 0.002	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.024 ± 0.002	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.023 ± 0.002	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.014 ± 0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.005 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.001 ± 0.001	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.031 ± 0.007	0.00753	115	0.29
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.021 ± 0.004	0.00547	96	-0.11
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.153 ± 0.021	0.0417	91.7	-0.31
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.004 ± 0.001	0.00169	59	-1.23
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.261 ± 0.039	0.131	79.9	-0.65
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.606 ± 0.121	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.015 ± 0.002	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.017 ± 0.002	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.014 ± 0.001	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.016 ± 0.001	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.018 ± 0.002	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.013 ± 0.001	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.005 ± 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.007 ± 0.001	0.00185	106	0.19
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.006 ± 0.001	0.00145	103	0.09
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.054 ± 0.008	0.0137	98.5	-0.05
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.003 ± 0.001	0.000943	89.1	-0.18
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.241 ± 0.036	0.079	85.5	-0.51
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.409 ± 0.082	0.216	73.8	-0.74


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-1.0
-2.9
-1.0
-1.2
-1.6
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.1 ± 0.25	1.4	99.9	-0.05
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.7467 ± 0.2389	0.296	114	0.30
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.61 ± 0.5152	0.583	108	0.20
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	1.9268 ± 0.6166	0.589	72	-1.27
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1082 ± 0.0346	0.0319	74.6	-1.16
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0728 ± 0.0233	0.0291	65	-1.35
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.004 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7437 ± 0.238	0.151	113	0.56
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0253 ± 0.0081	0.0117	92.7	-0.17
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0389 ± 0.0124	0.0161	60.4	-1.58
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0551 ± 0.0176	0.0197	69.9	-1.20
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.004 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0204 ± 0.0065	0.0142	50.1	-1.42
Total PFOS	µg/l	0.0645 ± 0.0148	0.0399 ± 0.0128	0.029	61.9	-0.85
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.3286 ± 1.7052	1.49	82.2	-0.78

Sample: PFL01A10

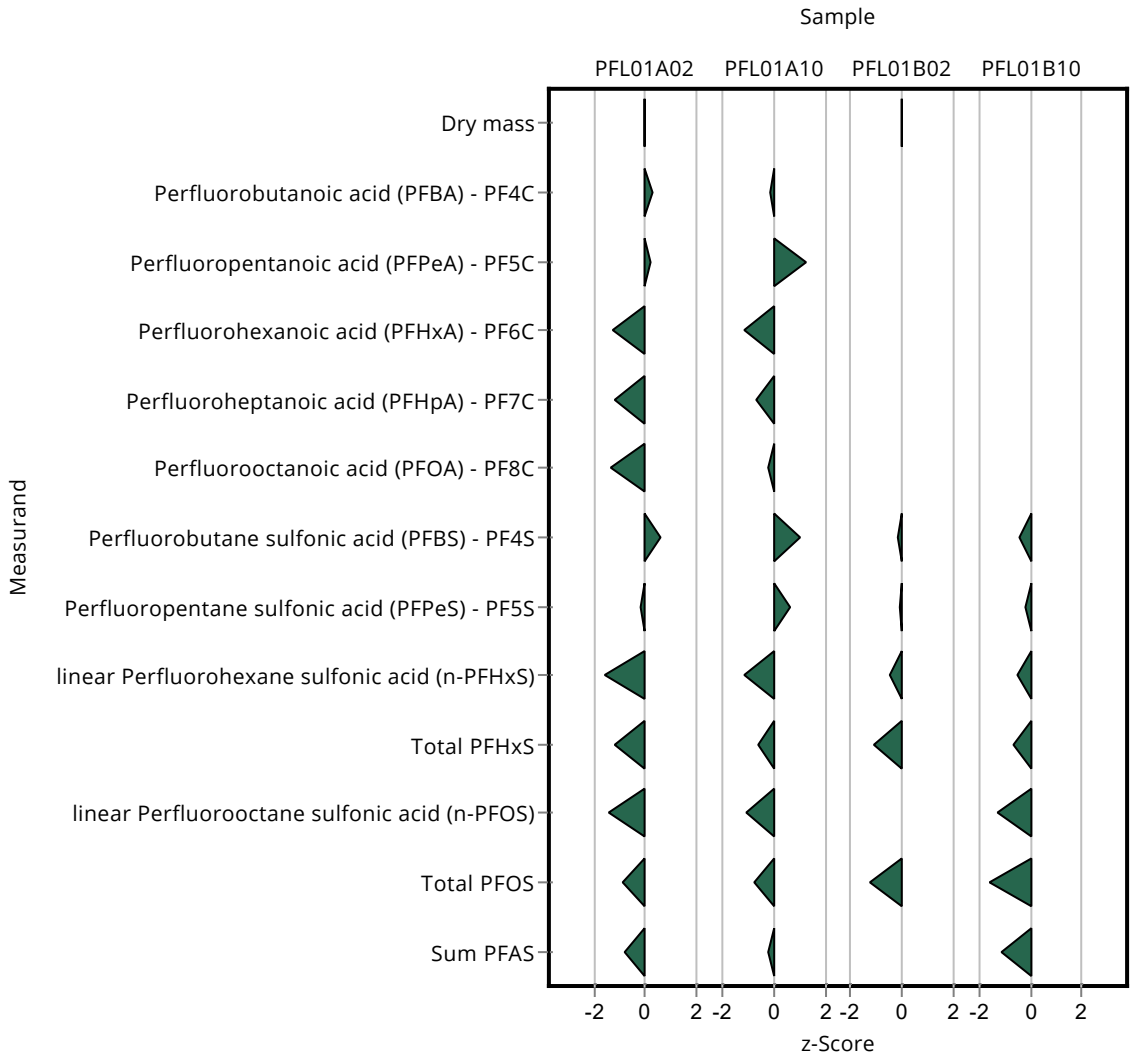
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.1087	±	0.0348	0.0368	94.5	-0.17
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.5087	±	0.1628	0.132	147	1.23
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.4463	±	0.1428	0.13	75.5	-1.11
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0429	±	0.0137	0.0111	85.4	-0.67
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0648	±	0.0207	0.0178	94.8	-0.20
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	<0.004 (LOQ)	±	-	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.004 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.2014	±	0.0644	0.0335	120	1.01
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0144	±	0.0046	0.00456	126	0.66
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.032	±	0.0102	0.00827	77.4	-1.13
Total PFHxS	µg/l	0.0477	±	0.00435	0.0419	±	0.0134	0.00954	87.8	-0.61
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	<0.004 (LOQ)	±	-	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0358	±	0.0115	0.0121	73.9	-1.05
Total PFOS	µg/l	0.0871	±	0.00981	0.0706	±	0.0226	0.0218	81	-0.76
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	1.4998	±	0.4799	0.36	95.7	-0.19

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.3 ± 0.23	1.28	100	-0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0418 ± 0.0134	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0376 ± 0.012	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0229 ± 0.0073	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0268 ± 0.0086	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0251 ± 0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0253 ± 0.0081	0.00753	94.1	-0.21
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0212 ± 0.0068	0.00547	96.9	-0.13
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.1092 ± 0.0349	0.0534	79.8	-0.52
Total PFHxS	µg/l	0.167 ± 0.0151	0.1193 ± 0.0382	0.0417	71.5	-1.14
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.004 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.1522 ± 0.0487	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.1668 ± 0.0534	0.131	51.1	-1.22
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.4868 ± 0.1558	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0206	±	0.0066	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0255	±	0.0082	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0149	±	0.0048	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0148	±	0.0047	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0186	±	0.0059	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.0058	±	0.0018	0.00185	87.8	-0.44
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.0055	±	0.0018	0.00145	94.7	-0.21
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0421	±	0.0135	0.0122	86.2	-0.55
Total PFHxS	µg/l	0.0548	±	0.00416	0.0451	±	0.0144	0.0137	82.3	-0.71
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	<0.004 (LOQ)	±	-	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.1452	±	0.0465	0.0639	63.6	-1.30
Total PFOS	µg/l	0.282	±	0.037	0.1557	±	0.0498	0.079	55.2	-1.60
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.3065	±	0.0981	0.216	55.3	-1.15


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.1 ± 0.25	1.4	99.9	-0.14
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.7467 ± 0.2389	0.296	114	0.18
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.61 ± 0.5152	0.583	108	0.11
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	1.9268 ± 0.6166	0.589	72	-0.60
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1082 ± 0.0346	0.0319	74.6	-0.52
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0728 ± 0.0233	0.0291	65	-0.82
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.004 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7437 ± 0.238	0.151	113	0.18
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0253 ± 0.0081	0.0117	92.7	-0.11
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0389 ± 0.0124	0.0161	60.4	-0.95
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0551 ± 0.0176	0.0197	69.9	-0.65
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.004 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0204 ± 0.0065	0.0142	50.1	-1.23
Total PFOS	µg/l	0.0645 ± 0.0148	0.0399 ± 0.0128	0.029	61.9	-0.83
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.3286 ± 1.7052	1.49	82.2	-0.33

Sample: PFL01A10

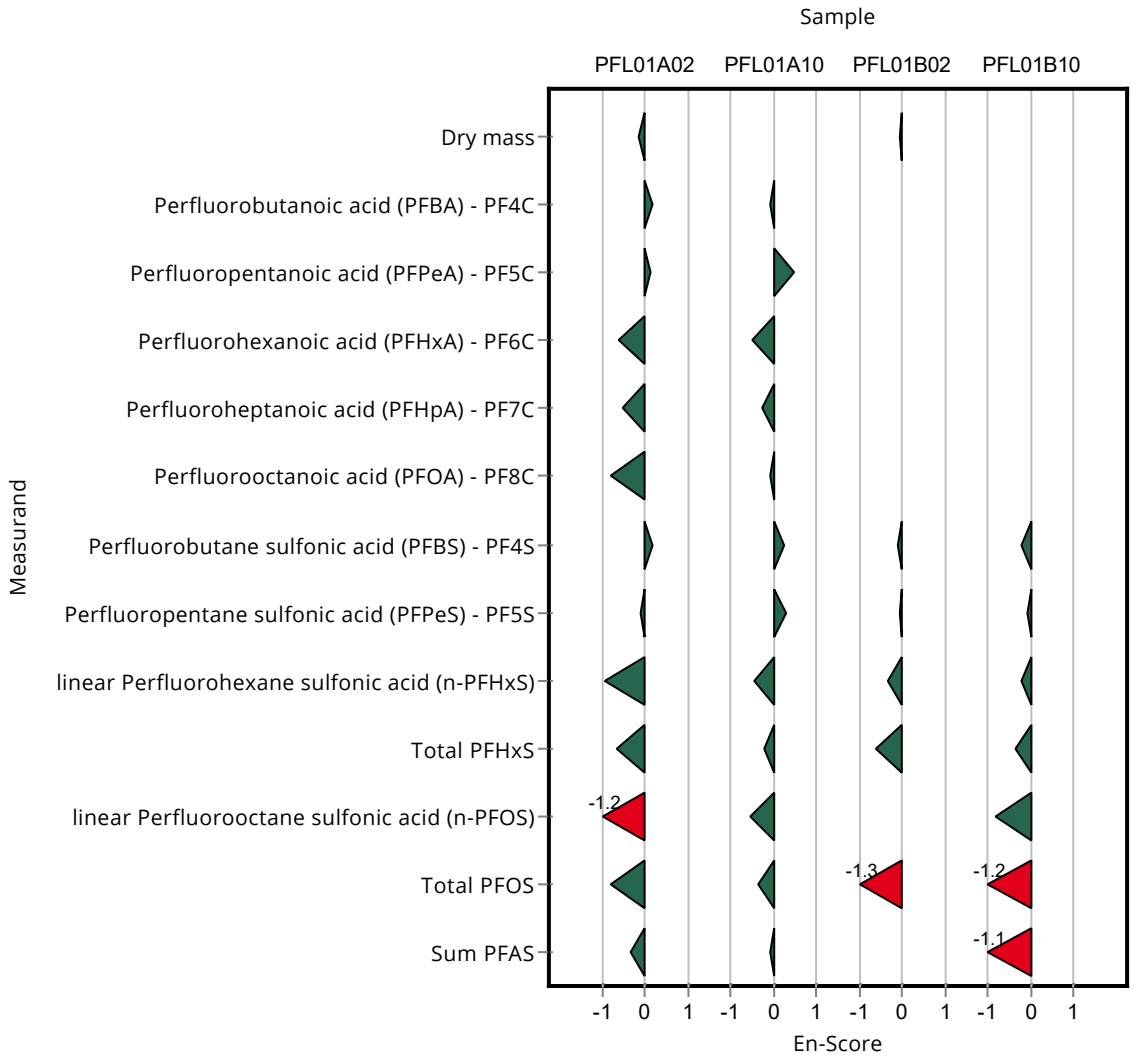
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.1087	±	0.0348	0.0368	94.5	-0.09
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.5087	±	0.1628	0.132	147	0.49
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.4463	±	0.1428	0.13	75.5	-0.49
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0429	±	0.0137	0.0111	85.4	-0.26
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0648	±	0.0207	0.0178	94.8	-0.08
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	<0.004 (LOQ)	±	-	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.004 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.2014	±	0.0644	0.0335	120	0.26
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0144	±	0.0046	0.00456	126	0.30
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.032	±	0.0102	0.00827	77.4	-0.44
Total PFHxS	µg/l	0.0477	±	0.00435	0.0419	±	0.0134	0.00954	87.8	-0.21
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	<0.004 (LOQ)	±	-	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0358	±	0.0115	0.0121	73.9	-0.53
Total PFOS	µg/l	0.0871	±	0.00981	0.0706	±	0.0226	0.0218	81	-0.36
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	1.4998	±	0.4799	0.36	95.7	-0.07

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.3	±	0.23	1.28	100	-0.04
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0418	±	0.0134	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0376	±	0.012	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0229	±	0.0073	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0268	±	0.0086	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0251	±	0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0253	±	0.0081	0.00753	94.1	-0.10
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0212	±	0.0068	0.00547	96.9	-0.05
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.1092	±	0.0349	0.0534	79.8	-0.35
Total PFHxS	µg/l	0.167	±	0.0151	0.1193	±	0.0382	0.0417	71.5	-0.61
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	<0.004 (LOQ)	±	-	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.1522	±	0.0487	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.1668	±	0.0534	0.131	51.1	-1.28
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.004 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	0.4868	±	0.1558	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0206 ± 0.0066	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0255 ± 0.0082	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0149 ± 0.0048	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0148 ± 0.0047	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0186 ± 0.0059	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0058 ± 0.0018	0.00185	87.8	-0.22
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0055 ± 0.0018	0.00145	94.7	-0.08
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.0421 ± 0.0135	0.0122	86.2	-0.24
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0451 ± 0.0144	0.0137	82.3	-0.33
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.004 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.1452 ± 0.0465	0.0639	63.6	-0.80
Total PFOS	µg/l	0.282 ± 0.037	0.1557 ± 0.0498	0.079	55.2	-1.19
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.3065 ± 0.0981	0.216	55.3	-1.11


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-1.2
-1.3
-1.2
-1.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	94 ± 0.1	1.4	101	0.59
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.709 ± 0.0511	0.296	108	0.17
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.81 ± 0.19	0.583	121	0.54
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.78 ± 0.281	0.589	104	0.18
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.176 ± 0.0152	0.0319	121	0.97
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.14 ± 0.0243	0.0291	125	0.96
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0114 ± 0.00134	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00744 ± 0.000804	0.00184	158	1.48
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00117 ± 0.000227	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.00165 ± 0.000324	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.636 ± 0.0611	0.151	96.6	-0.15
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0864 ± 0.00916	0.0117	316	5.03
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0714 ± 0.006	0.0161	111	0.44
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0794 ± 0.00667	0.0197	101	0.03
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0107 ± 0.00138	0.00432	114	0.30
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0503 ± 0.00845	0.0142	124	0.67
Total PFOS	µg/l	0.0645 ± 0.0148	0.0715 ± 0.012	0.029	111	0.24
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	6.65 ± 1.66	1.49	103	0.11

Sample: PFL01A10

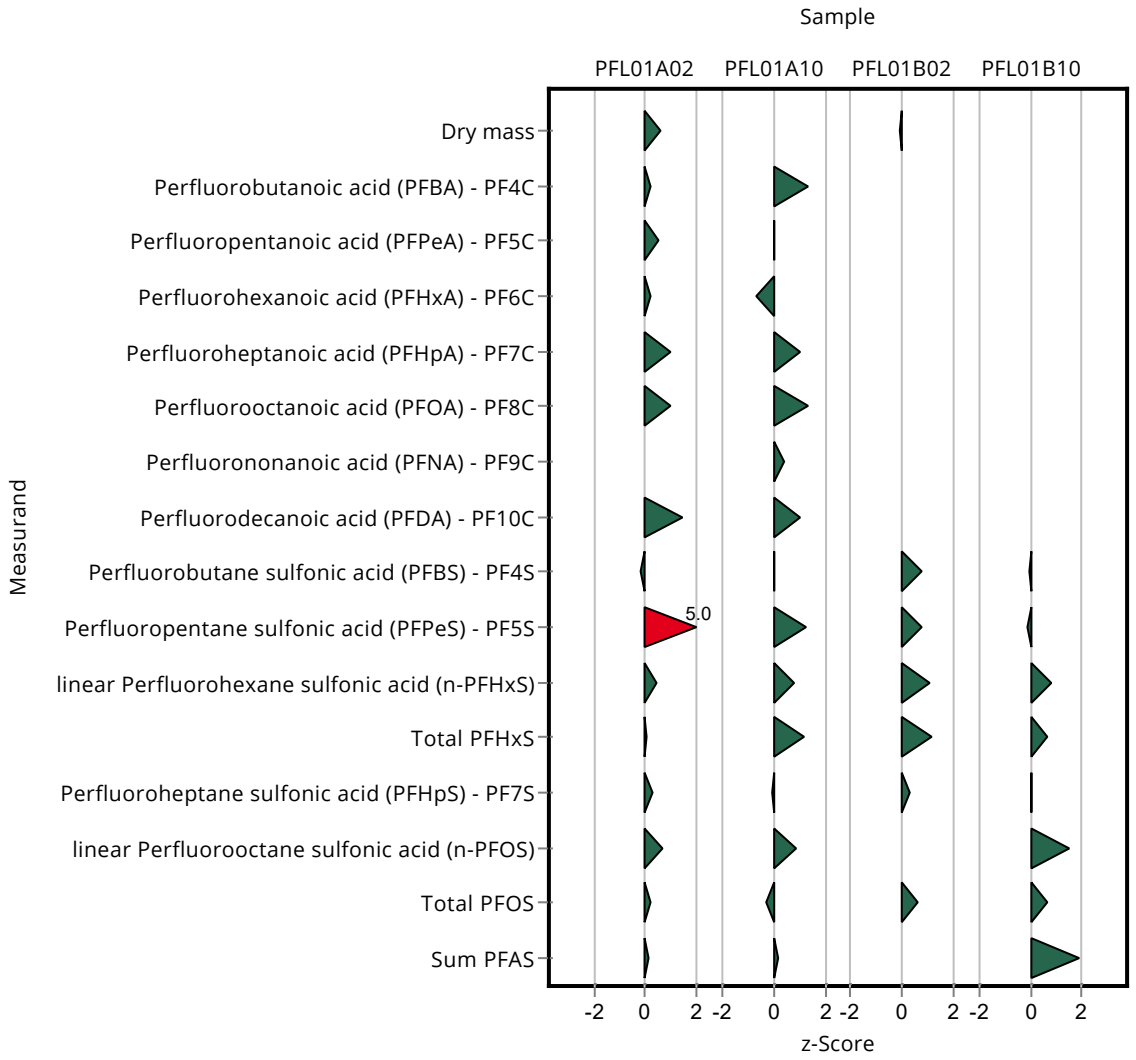
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.163 ± 0.0117	0.0368	142	1.30
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.345 ± 0.0362	0.132	99.4	-0.02
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.506 ± 0.0511	0.13	85.6	-0.65
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0612 ± 0.00527	0.0111	122	0.99
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0927 ± 0.0161	0.0178	136	1.37
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0112 ± 0.00132	0.00252	111	0.44
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.00766 ± 0.000828	0.00213	140	1.03
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0011 ± 0.000213	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.169 ± 0.0162	0.0335	101	0.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.017 ± 0.0018	0.00456	149	1.23
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.048 ± 0.00404	0.00827	116	0.80
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0589 ± 0.00495	0.00954	123	1.17
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00909 ± 0.00117	0.00289	97.7	-0.08
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.0589 ± 0.0099	0.0121	122	0.86
Total PFOS	µg/l	0.0871 ± 0.00981	0.0814 ± 0.0137	0.0218	93.4	-0.26
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.63 ± 0.408	0.36	104	0.18

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3	±	0.0796	85.2	±	0.5	1.28	99.9	-0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0823	±	0.00593	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.101	±	0.0106	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.059	±	0.00596	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0789	±	0.00679	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0753	±	0.0131	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0337	±	0.00397	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.0104	±	0.00112	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00256	±	0.000497	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	0.0011	±	0.000217	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0324	±	0.00311	0.00753	121	0.73
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0261	±	0.00277	0.00547	119	0.77
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.194	±	0.0163	0.0534	142	1.07
Total PFHxS	µg/l	0.167	±	0.0151	0.214	±	0.0179	0.0417	128	1.13
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	0.00733	±	0.000945	0.00169	108	0.33
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.388	±	0.0651	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.407	±	0.0683	0.131	125	0.61
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00654	±	0.00111	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00292	±	0.000593	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.00478	±	0.00117	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	1.73	±	0.432	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0249	±	0.00179	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0305	±	0.0032	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0181	±	0.00183	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0265	±	0.00228	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0322	±	0.0056	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0209	±	0.00247	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00778	±	0.00084	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00138	±	0.000267	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00652	±	0.000626	0.00185	98.7	-0.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00564	±	0.000598	0.00145	97.1	-0.11
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0585	±	0.00492	0.0122	120	0.79
Total PFHxS	µg/l	0.0548	±	0.00416	0.0633	±	0.00531	0.0137	115	0.62
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00342	±	0.000441	0.000943	102	0.06
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.323	±	0.0543	0.0639	141	1.48
Total PFOS	µg/l	0.282	±	0.037	0.336	±	0.0565	0.079	119	0.68
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00532	±	0.0009	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.964	±	0.241	0.216	174	1.89


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
5.0
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2	±	0.25	94	±	0.1	1.4	101	2.57
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658	±	0.146	0.709	±	0.0511	0.296	108	0.29
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5	±	0.267	1.81	±	0.19	0.583	121	0.68
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68	±	0.199	2.78	±	0.281	0.589	104	0.17
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145	±	0.0149	0.176	±	0.0152	0.0319	121	0.91
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112	±	0.0115	0.14	±	0.0243	0.0291	125	0.56
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0114	±	0.00134	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471	±	0.00151	0.00744	±	0.000804	0.00184	158	1.24
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00117	±	0.000227	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	0.00165	±	0.000324	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658	±	0.0733	0.636	±	0.0611	0.151	96.6	-0.16
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273	±	0.00901	0.0864	±	0.00916	0.0117	316	2.90
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644	±	0.0102	0.0714	±	0.006	0.0161	111	0.45
Total PFHxS	µg/l	0.0788	±	0.00997	0.0794	±	0.00667	0.0197	101	0.03
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939	±	0.0028	0.0107	±	0.00138	0.00432	114	0.33
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407	±	0.0102	0.0503	±	0.00845	0.0142	124	0.49
Total PFOS	µg/l	0.0645	±	0.0148	0.0715	±	0.012	0.029	111	0.25
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	6.49	±	0.695	6.65	±	1.66	1.49	103	0.05

Sample: PFL01A10

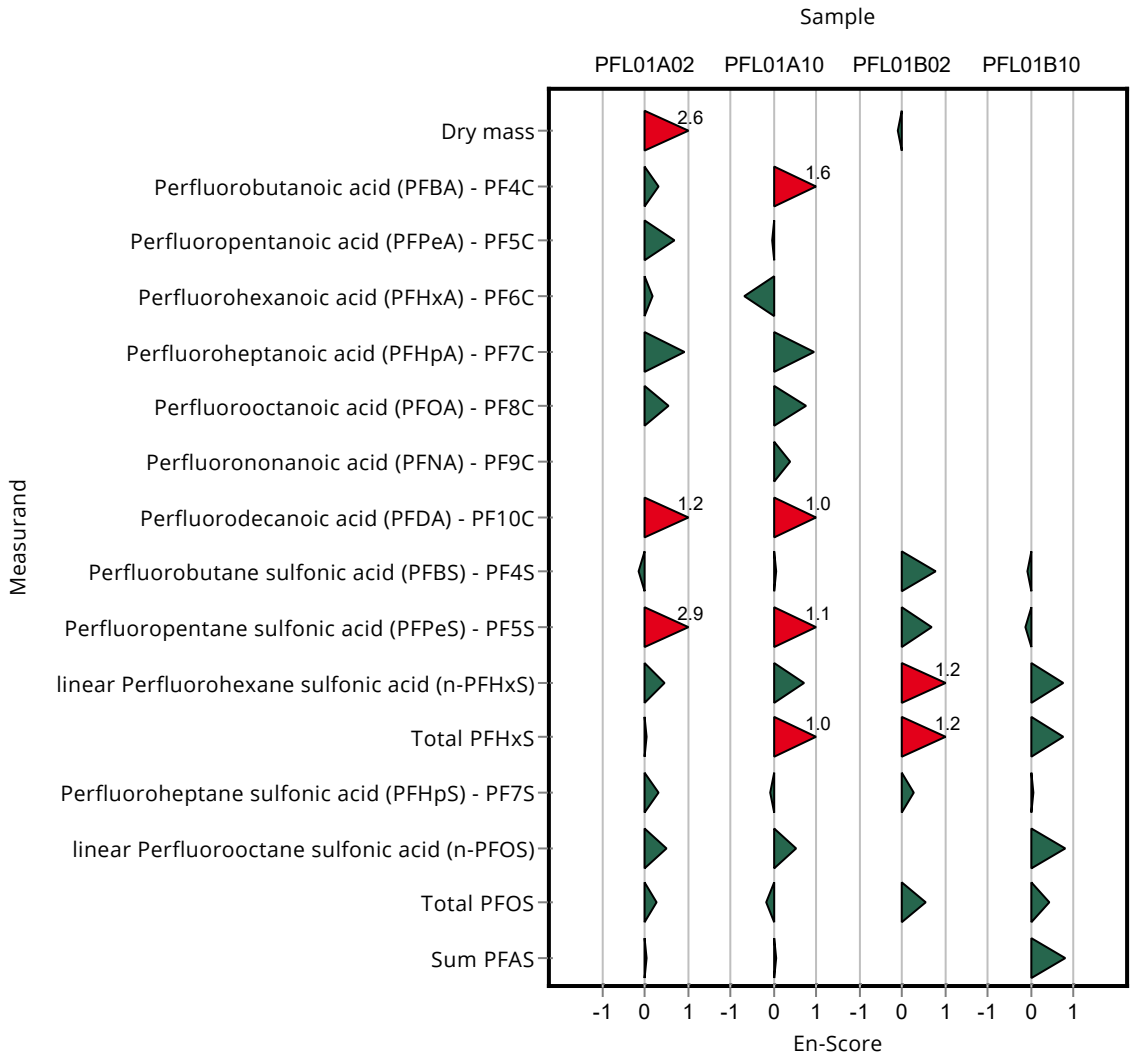
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.163 ± 0.0117	0.0368	142	1.59
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.345 ± 0.0362	0.132	99.4	-0.02
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.506 ± 0.0511	0.13	85.6	-0.67
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0612 ± 0.00527	0.0111	122	0.93
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0927 ± 0.0161	0.0178	136	0.73
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0112 ± 0.00132	0.00252	111	0.38
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.00766 ± 0.000828	0.00213	140	1.03
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0011 ± 0.000213	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.169 ± 0.0162	0.0335	101	0.04
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.017 ± 0.0018	0.00456	149	1.08
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.048 ± 0.00404	0.00827	116	0.70
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0589 ± 0.00495	0.00954	123	1.04
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00909 ± 0.00117	0.00289	97.7	-0.08
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.0589 ± 0.0099	0.0121	122	0.50
Total PFOS	µg/l	0.0871 ± 0.00981	0.0814 ± 0.0137	0.0218	93.4	-0.20
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.63 ± 0.408	0.36	104	0.08

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.2	±	0.5	1.28	99.9	-0.12
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0823	±	0.00593	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.101	±	0.0106	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.059	±	0.00596	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0789	±	0.00679	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0753	±	0.0131	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0337	±	0.00397	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.0104	±	0.00112	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00256	±	0.000497	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	0.0011	±	0.000217	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0324	±	0.00311	0.00753	121	0.77
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0261	±	0.00277	0.00547	119	0.68
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.194	±	0.0163	0.0534	142	1.19
Total PFHxS	µg/l	0.167	±	0.0151	0.214	±	0.0179	0.0417	128	1.21
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	0.00733	±	0.000945	0.00169	108	0.25
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.388	±	0.0651	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.407	±	0.0683	0.131	125	0.53
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00654	±	0.00111	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00292	±	0.000593	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.00478	±	0.00117	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	1.73	±	0.432	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0249	±	0.00179	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0305	±	0.0032	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0181	±	0.00183	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0265	±	0.00228	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0322	±	0.0056	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0209	±	0.00247	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00778	±	0.00084	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00138	±	0.000267	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00652	±	0.000626	0.00185	98.7	-0.07
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00564	±	0.000598	0.00145	97.1	-0.13
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0585	±	0.00492	0.0122	120	0.77
Total PFHxS	µg/l	0.0548	±	0.00416	0.0633	±	0.00531	0.0137	115	0.74
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00342	±	0.000441	0.000943	102	0.05
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.323	±	0.0543	0.0639	141	0.80
Total PFOS	µg/l	0.282	±	0.037	0.336	±	0.0565	0.079	119	0.45
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00532	±	0.0009	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.964	±	0.241	0.216	174	0.83


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
2.6
1.6
1.2
1.0
2.9
1.1
1.2
1.0
1.2
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.3 ± 4	1.4	100	0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.8289 ± 0.243821	0.296	126	0.58
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.025 ± 0.254918	0.583	68.5	-0.81
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.998 ± 0.416272	0.589	112	0.55
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1716 ± 0.061441	0.0319	118	0.83
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.128 ± 0.04999	0.0291	114	0.55
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.009849 ± 0.003631	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00325 ± 0.001007	0.00184	69	-0.80
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.000223 ± 0.000069	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.8465 ± 0.071529	0.151	129	1.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.01997 ± 0.004716	0.0117	73.2	-0.62
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.071 ± 0.022653	0.0161	110	0.41
Total PFHxS	µg/l	0.0788 ± 0.00997	0.08996 ± 0.028702	0.0197	114	0.56
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00355 ± 0.00056	0.00432	37.8	-1.35
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.03945 ± 0.012151	0.0142	96.9	-0.09
Total PFOS	µg/l	0.0645 ± 0.0148	0.9046 ± 0.278617	0.029	1400	28.97
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

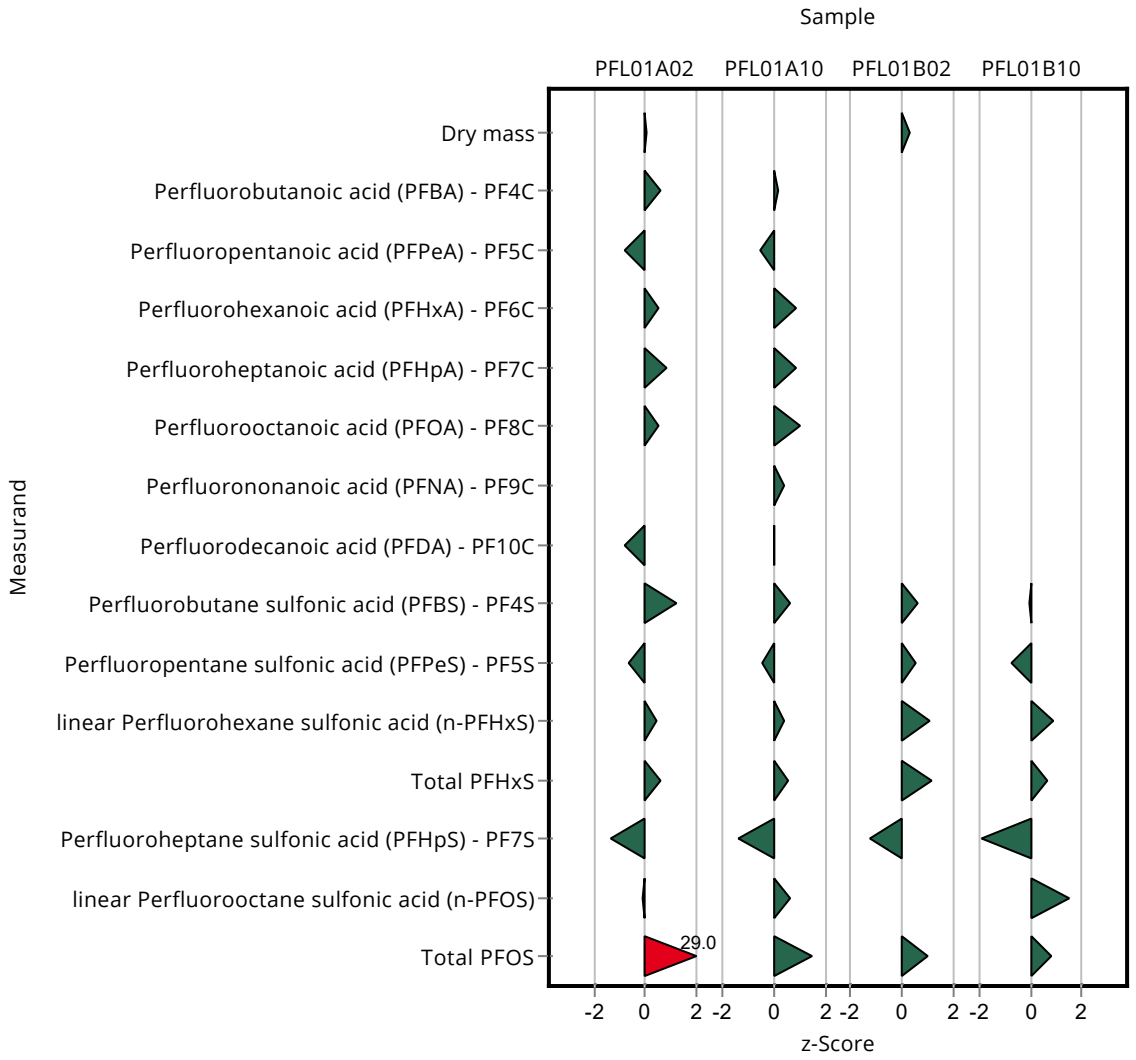
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.1228	±	0.036122	0.0368	107	0.21
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.2739	±	0.068119	0.132	78.9	-0.55
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.7074	±	0.098222	0.13	120	0.90
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.05971	±	0.021379	0.0111	119	0.85
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0867	±	0.033861	0.0178	127	1.03
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.01105	±	0.004074	0.00252	109	0.38
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.005512	±	0.001708	0.00213	101	0.03
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.1901	±	0.016063	0.0335	114	0.68
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.009414	±	0.002223	0.00456	82.6	-0.44
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.04491	±	0.014329	0.00827	109	0.43
Total PFHxS	µg/l	0.0477	±	0.00435	0.05286	±	0.016865	0.00954	111	0.54
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.00525	±	0.000828	0.00289	56.4	-1.41
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.05622	±	0.017316	0.0121	116	0.64
Total PFOS	µg/l	0.0871	±	0.00981	0.11897	±	0.036643	0.0218	137	1.46
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	-	±	-	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.7 ± 4	1.28	100	0.30
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.1383 ± 0.040681	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.1836 ± 0.045661	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.09514 ± 0.01321	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.08262 ± 0.029582	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.06736 ± 0.026307	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.02617 ± 0.009648	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.00899 ± 0.002785	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00119 ± 0.000366	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	0.00073 ± 0.000188	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.03144 ± 0.002657	0.00753	117	0.61
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.02486 ± 0.005871	0.00547	114	0.54
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.196 ± 0.062534	0.0534	143	1.11
Total PFHxS	µg/l	0.167 ± 0.0151	0.21566 ± 0.068806	0.0417	129	1.17
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.004637 ± 0.000732	0.00169	68.4	-1.26
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.4109 ± 0.126557	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.45262 ± 0.139407	0.131	139	0.96
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0005677 ± 0.000081	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	- ± -	- ± -	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.03493	±	0.010275	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.04865	±	0.012099	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.02978	±	0.004135	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0306	±	0.010956	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.03589	±	0.014017	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.02045	±	0.007539	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.008778	±	0.002719	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00117	±	0.00036	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00644	±	0.000544	0.00185	97.5	-0.09
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.004747	±	0.001121	0.00145	81.8	-0.73
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.05956	±	0.019003	0.0122	122	0.88
Total PFHxS	µg/l	0.0548	±	0.00416	0.06408	±	0.020445	0.0137	117	0.68
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.001564	±	0.000247	0.000943	46.4	-1.91
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.3233	±	0.099576	0.0639	142	1.49
Total PFOS	µg/l	0.282	±	0.037	0.34555	±	0.106429	0.079	123	0.80
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.0006	±	0.000085	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	-	±	-	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
29.0
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.3 ± 4	1.4	100	0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.8289 ± 0.243821	0.296	126	0.34
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.025 ± 0.254918	0.583	68.5	-0.82
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.998 ± 0.416272	0.589	112	0.38
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1716 ± 0.061441	0.0319	118	0.21
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.128 ± 0.04999	0.0291	114	0.16
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.009849 ± 0.003631	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00325 ± 0.001007	0.00184	69	-0.58
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.000223 ± 0.000069	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.8465 ± 0.071529	0.151	129	1.17
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.01997 ± 0.004716	0.0117	73.2	-0.56
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.071 ± 0.022653	0.0161	110	0.14
Total PFHxS	µg/l	0.0788 ± 0.00997	0.08996 ± 0.028702	0.0197	114	0.19
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00355 ± 0.00056	0.00432	37.8	-1.94
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.03945 ± 0.012151	0.0142	96.9	-0.05
Total PFOS	µg/l	0.0645 ± 0.0148	0.9046 ± 0.278617	0.029	1400	1.51
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0005 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

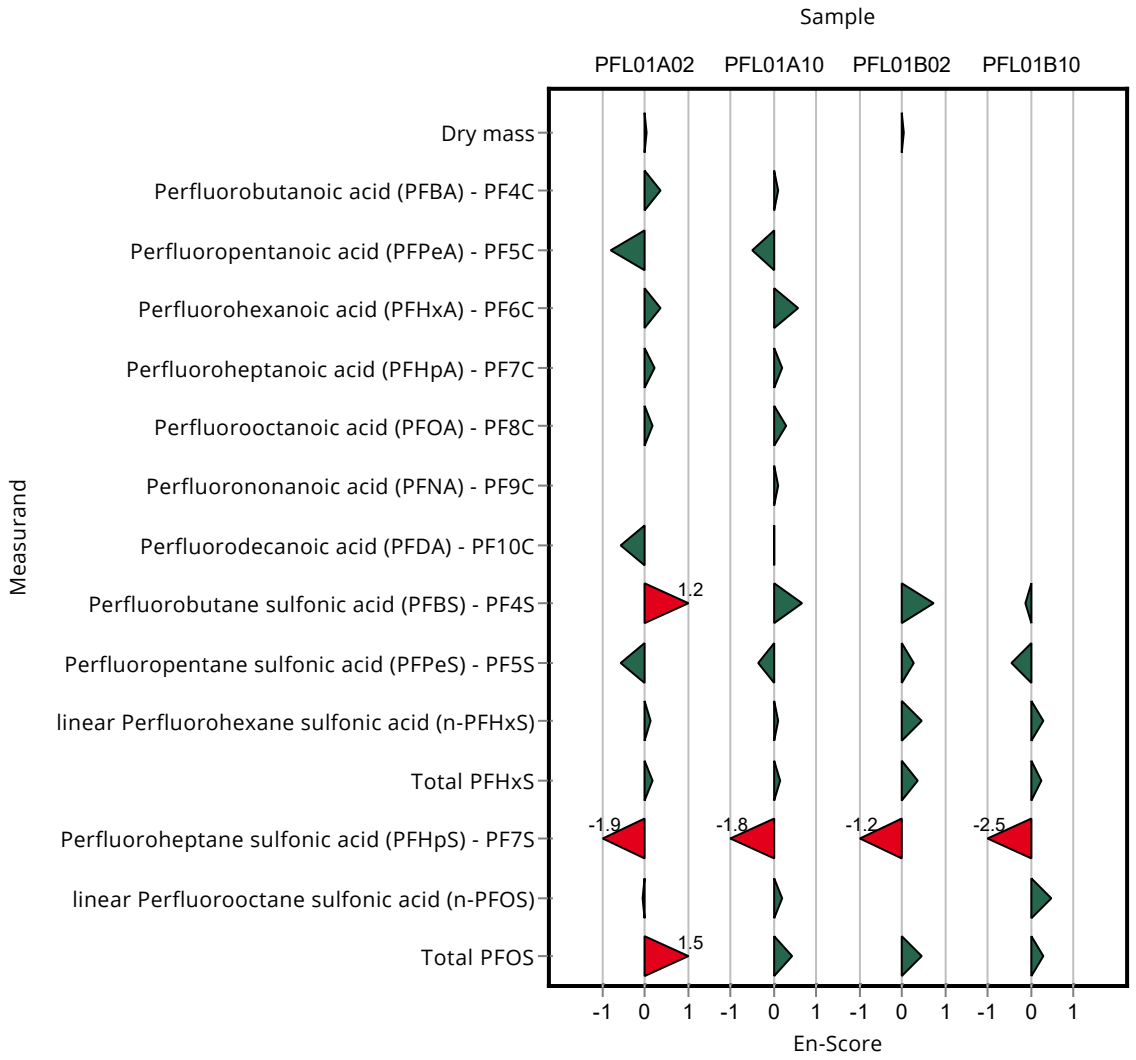
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.1228	±	0.036122	0.0368	107	0.10
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.2739	±	0.068119	0.132	78.9	-0.49
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.7074	±	0.098222	0.13	120	0.55
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.05971	±	0.021379	0.0111	119	0.22
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0867	±	0.033861	0.0178	127	0.27
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.01105	±	0.004074	0.00252	109	0.12
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.005512	±	0.001708	0.00213	101	0.01
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.1901	±	0.016063	0.0335	114	0.64
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.009414	±	0.002223	0.00456	82.6	-0.34
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.04491	±	0.014329	0.00827	109	0.12
Total PFHxS	µg/l	0.0477	±	0.00435	0.05286	±	0.016865	0.00954	111	0.15
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.00525	±	0.000828	0.00289	56.4	-1.76
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.05622	±	0.017316	0.0121	116	0.22
Total PFOS	µg/l	0.0871	±	0.00981	0.11897	±	0.036643	0.0218	137	0.43
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	-	±	-	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.7	±	4	1.28	100	0.05
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.1383	±	0.040681	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.1836	±	0.045661	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.09514	±	0.01321	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.08262	±	0.029582	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.06736	±	0.026307	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.02617	±	0.009648	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00899	±	0.002785	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00119	±	0.000366	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	0.00073	±	0.000188	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.03144	±	0.002657	0.00753	117	0.72
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.02486	±	0.005871	0.00547	114	0.25
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.196	±	0.062534	0.0534	143	0.45
Total PFHxS	µg/l	0.167	±	0.0151	0.21566	±	0.068806	0.0417	129	0.35
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	0.004637	±	0.000732	0.00169	68.4	-1.18
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.4109	±	0.126557	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.45262	±	0.139407	0.131	139	0.44
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.0005677	±	0.000081	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	-	±	-	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.03493	±	0.010275	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.04865	±	0.012099	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.02978	±	0.004135	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0306	±	0.010956	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.03589	±	0.014017	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.02045	±	0.007539	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.008778	±	0.002719	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00117	±	0.00036	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00644	±	0.000544	0.00185	97.5	-0.14
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.004747	±	0.001121	0.00145	81.8	-0.46
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.05956	±	0.019003	0.0122	122	0.28
Total PFHxS	µg/l	0.0548	±	0.00416	0.06408	±	0.020445	0.0137	117	0.23
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.001564	±	0.000247	0.000943	46.4	-2.47
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.3233	±	0.099576	0.0639	142	0.47
Total PFOS	µg/l	0.282	±	0.037	0.34555	±	0.106429	0.079	123	0.29
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.0006	±	0.000085	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.0005	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	-	±	-	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
1.2
-1.9
-1.8
-1.2
-2.5
1.5
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	97.1 ± 10	1.4	104	2.81
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.261 ± 0.0785	0.296	39.7	-1.34
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.401 ± 0.1203	0.583	26.8	-1.88
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	0.892 ± 0.2677	0.589	33.3	-3.03
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.066 ± 0.0198	0.0319	45.5	-2.48
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.089 ± 0.0267	0.0291	79.5	-0.79
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.022 ± 0.0065	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.021 ± 0.0064	0.00184	446	8.86
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.298 ± 0.0895	0.151	45.3	-2.38
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	- ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.061 ± 0.0184	0.0161	94.7	-0.21
Total PFHxS	µg/l	0.0788 ± 0.00997	- ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.035 ± 0.0107	0.00432	373	5.93
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.267 ± 0.0802	0.0142	656	15.89
Total PFOS	µg/l	0.0645 ± 0.0148	- ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

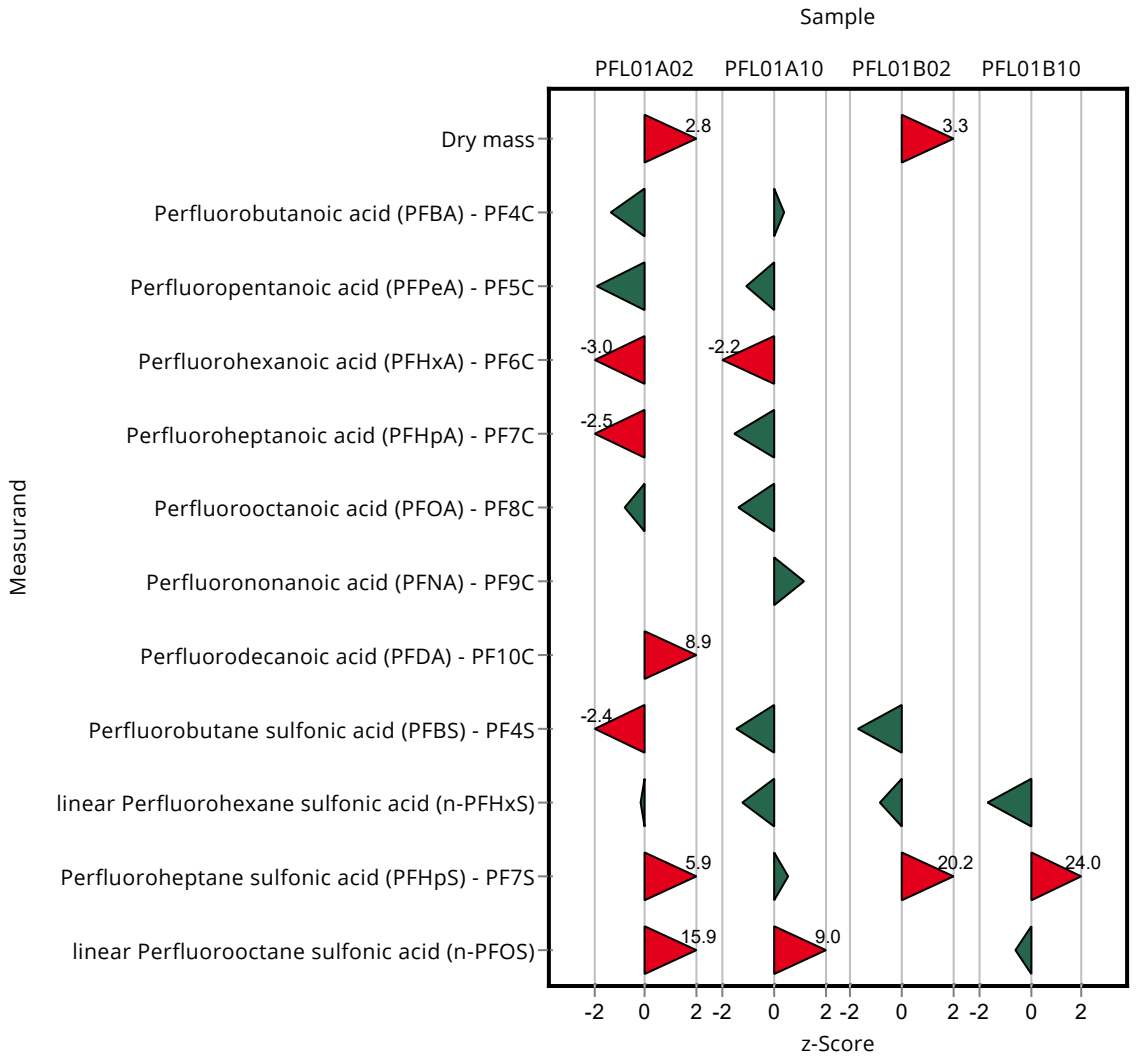
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.13 ± 0.039	0.0368	113	0.41
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.203 ± 0.0611	0.132	58.5	-1.09
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.311 ± 0.0935	0.13	52.6	-2.15
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.033 ± 0.01	0.0111	65.7	-1.56
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.044 ± 0.0133	0.0178	64.4	-1.37
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.013 ± 0.004	0.00252	129	1.15
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.118 ± 0.0355	0.0335	70.5	-1.48
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	- ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.031 ± 0.0095	0.00827	75	-1.25
Total PFHxS	µg/l	0.0477 ± 0.00435	- ± -	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.011 ± 0.0034	0.00289	118	0.59
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.157 ± 0.0472	0.0121	324	8.96
Total PFOS	µg/l	0.0871 ± 0.00981	- ± -	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	- ± -	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	89.5 ± 10	1.28	105	3.27
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.099 ± 0.0299	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.155 ± 0.0467	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.085 ± 0.0257	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.083 ± 0.0251	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.074 ± 0.0222	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.05 ± 0.0152	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.045 ± 0.0137	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.014 ± 0.0044	0.00753	52.1	-1.71
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	- ± -	0.00547	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.089 ± 0.0269	0.0534	65	-0.90
Total PFHxS	µg/l	0.167 ± 0.0151	- ± -	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.041 ± 0.0124	0.00169	605	20.19
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.217 ± 0.0652	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	- ± -	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	- ± -	- ± -	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.026 ± 0.0078	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.039 ± 0.0118	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.04 ± 0.0121	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.052 ± 0.0157	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.048 ± 0.0147	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.033 ± 0.0101	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.028 ± 0.0085	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	- ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.028 ± 0.0086	0.0122	57.3	-1.71
Total PFHxS	µg/l	0.0548 ± 0.00416	- ± -	0.0137	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.026 ± 0.0078	0.000943	772	24.00
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.192 ± 0.0578	0.0639	84.1	-0.57
Total PFOS	µg/l	0.282 ± 0.037	- ± -	0.079	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	- ± -	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
2.8
3.3
-3.0
-2.2
-2.5
8.9
-2.4
5.9
20.2
24.0
15.9
9.0
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	97.1 ± 10	1.4	104	0.20
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.261 ± 0.0785	0.296	39.7	-1.85
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.401 ± 0.1203	0.583	26.8	-3.04
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	0.892 ± 0.2677	0.589	33.3	-3.12
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.066 ± 0.0198	0.0319	45.5	-1.87
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.089 ± 0.0267	0.0291	79.5	-0.42
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.022 ± 0.0065	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.021 ± 0.0064	0.00184	446	1.26
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.298 ± 0.0895	0.151	45.3	-1.86
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	- ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.061 ± 0.0184	0.0161	94.7	-0.09
Total PFHxS	µg/l	0.0788 ± 0.00997	- ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.035 ± 0.0107	0.00432	373	1.19
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.267 ± 0.0802	0.0142	656	1.41
Total PFOS	µg/l	0.0645 ± 0.0148	- ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

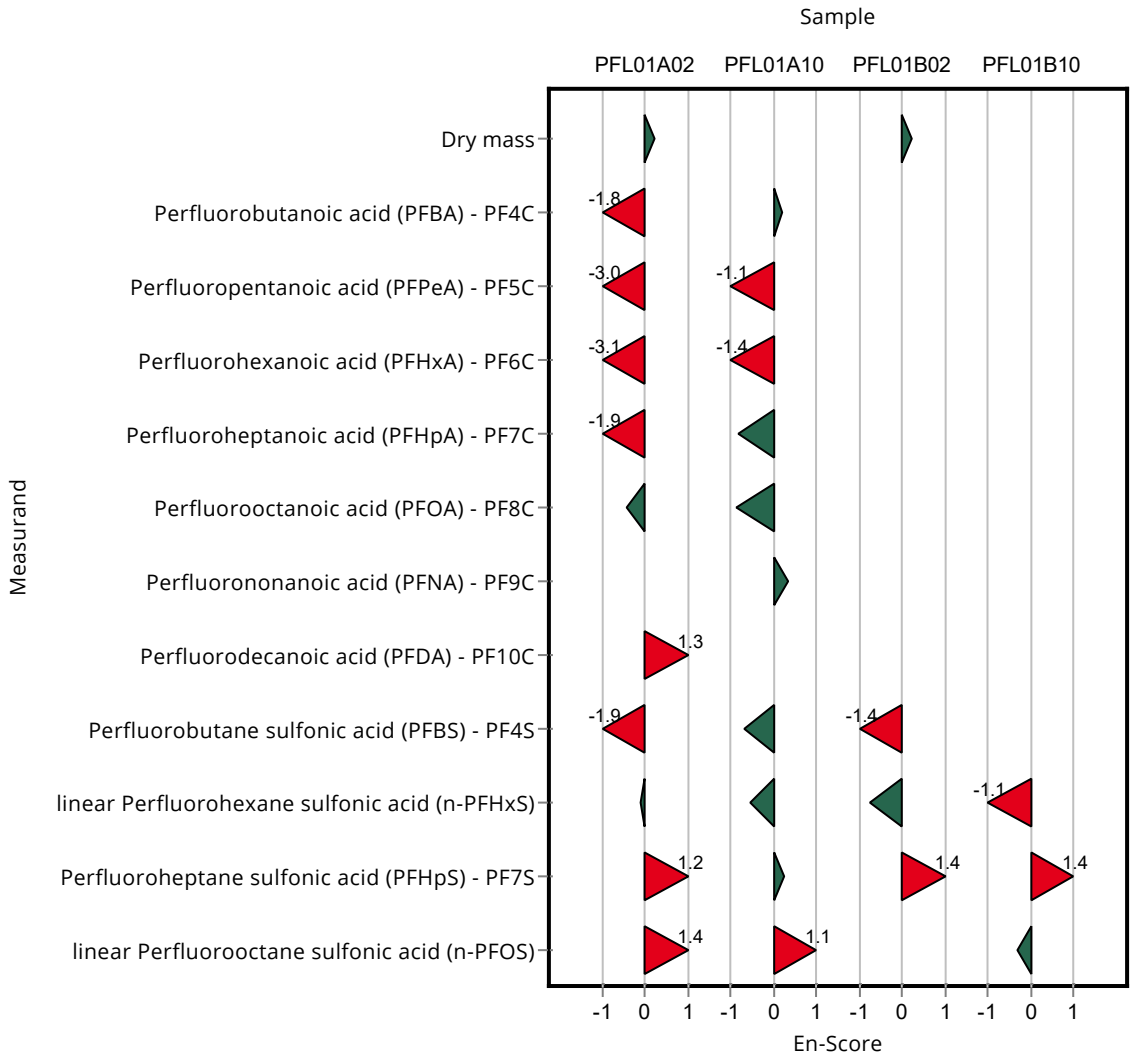
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.13	±	0.039	0.0368	113	0.19
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.203	±	0.0611	0.132	58.5	-1.05
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.311	±	0.0935	0.13	52.6	-1.39
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.033	±	0.01	0.0111	65.7	-0.84
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.044	±	0.0133	0.0178	64.4	-0.88
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.013	±	0.004	0.00252	129	0.36
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.01 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	-	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.118	±	0.0355	0.0335	70.5	-0.68
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	-	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.031	±	0.0095	0.00827	75	-0.53
Total PFHxS	µg/l	0.0477	±	0.00435	-	±	-	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.011	±	0.0034	0.00289	118	0.24
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.157	±	0.0472	0.0121	324	1.15
Total PFOS	µg/l	0.0871	±	0.00981	-	±	-	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	-	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	-	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	-	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	-	±	-	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	89.5 ± 10	1.28	105	0.21
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.099 ± 0.0299	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.155 ± 0.0467	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.085 ± 0.0257	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.083 ± 0.0251	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.074 ± 0.0222	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.05 ± 0.0152	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.045 ± 0.0137	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.014 ± 0.0044	0.00753	52.1	-1.36
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	- ± -	0.00547	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.089 ± 0.0269	0.0534	65	-0.74
Total PFHxS	µg/l	0.167 ± 0.0151	- ± -	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.041 ± 0.0124	0.00169	605	1.38
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.217 ± 0.0652	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	- ± -	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	- ± -	- ± -	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.026 ± 0.0078	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.039 ± 0.0118	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.04 ± 0.0121	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.052 ± 0.0157	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.048 ± 0.0147	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.033 ± 0.0101	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.028 ± 0.0085	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	- ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	- ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	- ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.028 ± 0.0086	0.0122	57.3	-1.10
Total PFHxS	µg/l	0.0548 ± 0.00416	- ± -	0.0137	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.026 ± 0.0078	0.000943	772	1.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.192 ± 0.0578	0.0639	84.1	-0.29
Total PFOS	µg/l	0.282 ± 0.037	- ± -	0.079	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	- ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	- ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	- ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	- ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	- ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	- ± -	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
-1.8
-3.0
-1.1
-3.1
-1.4
-1.9
1.3
-1.9
-1.4
-1.1
1.2
1.4
1.4
1.4
1.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.6 ± 0.936	1.4	100	0.30
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.6671 ± 0.2402	0.296	101	0.03
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	2.6928 ± 0.9694	0.583	180	2.05
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.7329 ± 0.9839	0.589	102	0.10
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1593 ± 0.0573	0.0319	110	0.45
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.137 ± 0.0493	0.0291	122	0.86
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0106 ± 0.0038	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7562 ± 0.2722	0.151	115	0.65
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0184 ± 0.0066	0.0117	67.4	-0.76
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0696 ± 0.0251	0.0161	108	0.32
Total PFHxS	µg/l	0.0788 ± 0.00997	0.1005 ± 0.0362	0.0197	127	1.10
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0101 ± 0.0036	0.00432	108	0.16
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0391 ± 0.0141	0.0142	96.1	-0.11
Total PFOS	µg/l	0.0645 ± 0.0148	0.0954 ± 0.0343	0.029	148	1.07
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.489 ± 2.696	1.49	115	0.67

Sample: PFL01A10

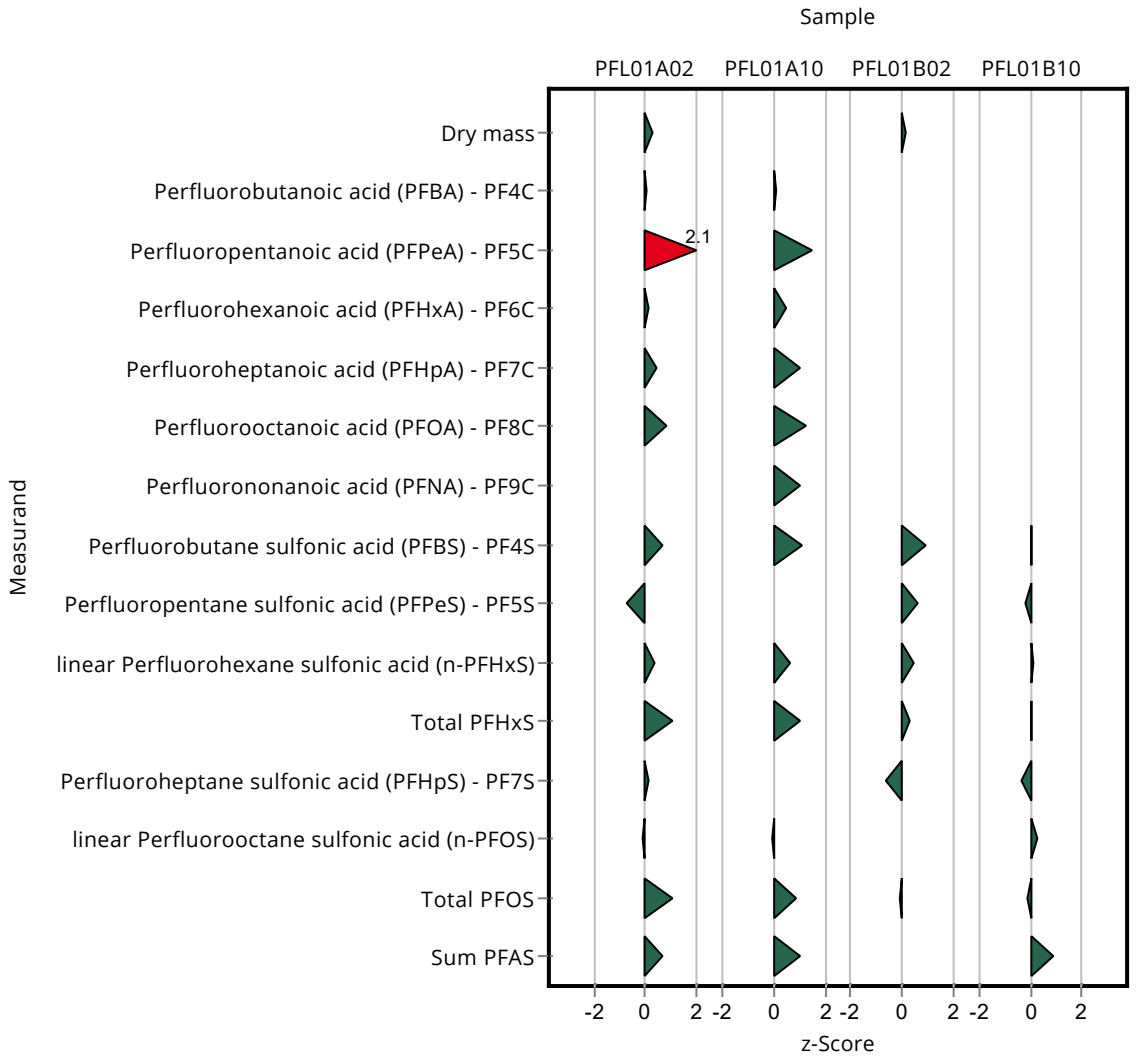
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.1172 ± 0.0422	0.0368	102	0.06
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.545 ± 0.1962	0.132	157	1.50
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.6567 ± 0.2364	0.13	111	0.51
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0618 ± 0.0222	0.0111	123	1.04
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0902 ± 0.0325	0.0178	132	1.23
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0126 ± 0.0045	0.00252	125	0.99
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.2033 ± 0.0732	0.0335	121	1.07
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.0466 ± 0.0168	0.00827	113	0.63
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0573 ± 0.0206	0.00954	120	1.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.0479 ± 0.0172	0.0121	98.8	-0.05
Total PFOS	µg/l	0.0871 ± 0.00981	0.1066 ± 0.0384	0.0218	122	0.89
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.9452 ± 0.7003	0.36	124	1.05

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.5 ± 0.855	1.28	100	0.14
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.028 ± 0.0101	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.035 ± 0.0126	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.031 ± 0.0112	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0308 ± 0.0111	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0263 ± 0.0095	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0159 ± 0.0057	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0047 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.034 ± 0.0122	0.00753	126	0.95
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0251 ± 0.0091	0.00547	115	0.59
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.16 ± 0.0576	0.0534	117	0.43
Total PFHxS	µg/l	0.167 ± 0.0151	0.1778 ± 0.064	0.0417	107	0.26
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0057 ± 0.0021	0.00169	84.1	-0.64
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.2732 ± 0.0983	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.3191 ± 0.1149	0.131	97.7	-0.06
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.002 ± 0.0007	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.1687 ± 0.4207	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0187 ± 0.0067	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0215 ± 0.0077	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0174 ± 0.0063	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0183 ± 0.0066	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0222 ± 0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0139 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0048 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0066 ± 0.0024	0.00185	99.9	0.00
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0055 ± 0.002	0.00145	94.7	-0.21
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.0497 ± 0.0179	0.0122	102	0.07
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0549 ± 0.0198	0.0137	100	0.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.003 ± 0.0011	0.000943	89.1	-0.39
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.2448 ± 0.0881	0.0639	107	0.26
Total PFOS	µg/l	0.282 ± 0.037	0.2696 ± 0.0971	0.079	95.6	-0.16
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.7509 ± 0.2703	0.216	135	0.91


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
2.1
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.6 ± 0.936	1.4	100	0.22
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.6671 ± 0.2402	0.296	101	0.02
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	2.6928 ± 0.9694	0.583	180	0.61
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.7329 ± 0.9839	0.589	102	0.03
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.1593 ± 0.0573	0.0319	110	0.12
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.137 ± 0.0493	0.0291	122	0.25
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0106 ± 0.0038	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.7562 ± 0.2722	0.151	115	0.18
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0184 ± 0.0066	0.0117	67.4	-0.56
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0696 ± 0.0251	0.0161	108	0.10
Total PFHxS	µg/l	0.0788 ± 0.00997	0.1005 ± 0.0362	0.0197	127	0.30
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0101 ± 0.0036	0.00432	108	0.09
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0391 ± 0.0141	0.0142	96.1	-0.05
Total PFOS	µg/l	0.0645 ± 0.0148	0.0954 ± 0.0343	0.029	148	0.44
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.489 ± 2.696	1.49	115	0.18

Sample: PFL01A10

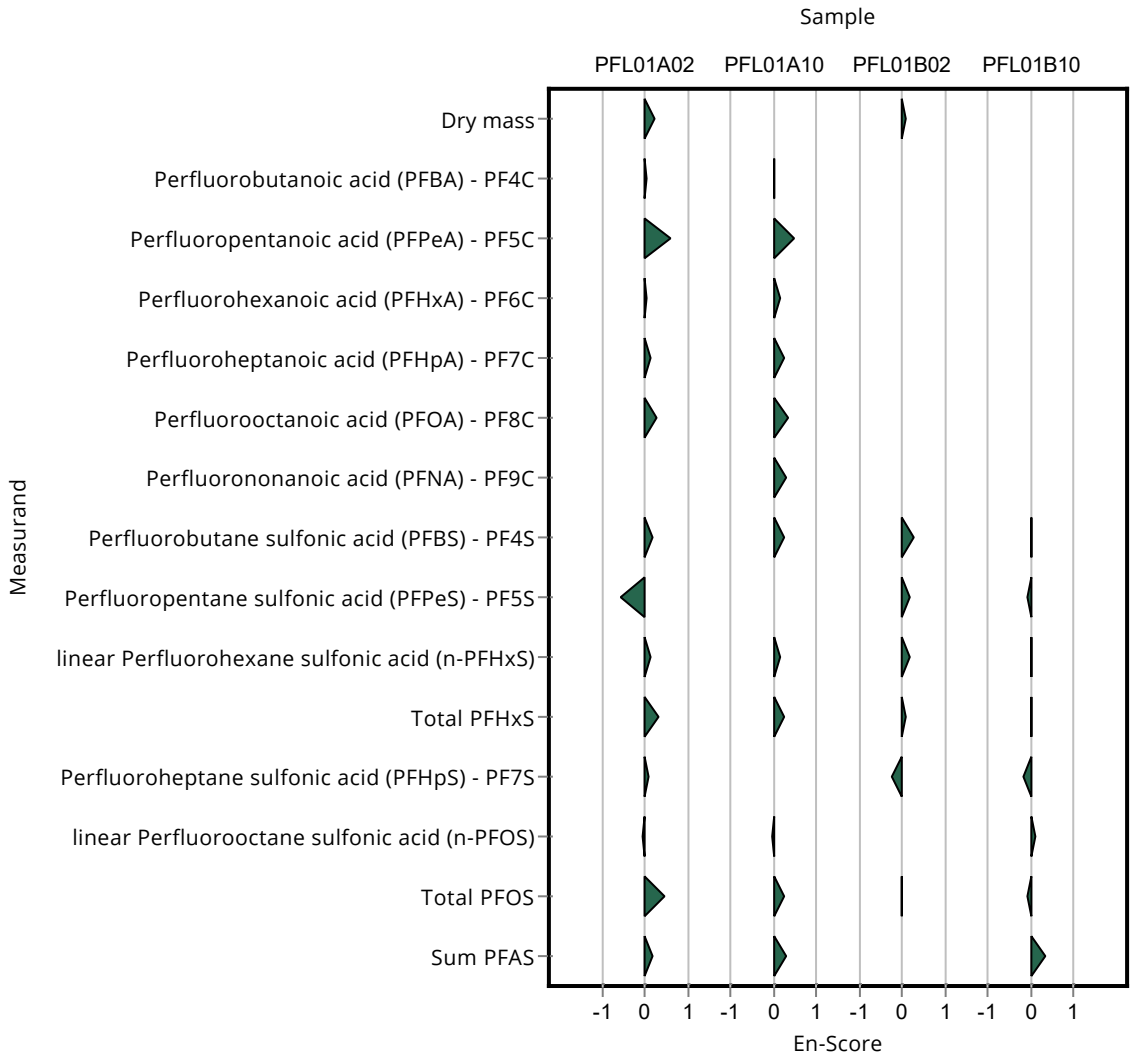
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.1172	±	0.0422	0.0368	102	0.03
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.545	±	0.1962	0.132	157	0.50
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.6567	±	0.2364	0.13	111	0.14
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0618	±	0.0222	0.0111	123	0.26
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0902	±	0.0325	0.0178	132	0.33
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0126	±	0.0045	0.00252	125	0.28
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.01 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.2033	±	0.0732	0.0335	121	0.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	<0.01 (LOQ)	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.0466	±	0.0168	0.00827	113	0.15
Total PFHxS	µg/l	0.0477	±	0.00435	0.0573	±	0.0206	0.00954	120	0.23
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	<0.01 (LOQ)	±	-	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0479	±	0.0172	0.0121	98.8	-0.02
Total PFOS	µg/l	0.0871	±	0.00981	0.1066	±	0.0384	0.0218	122	0.25
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	1.9452	±	0.7003	0.36	124	0.27

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.5 ± 0.855	1.28	100	0.11
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.028 ± 0.0101	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.035 ± 0.0126	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.031 ± 0.0112	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0308 ± 0.0111	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0263 ± 0.0095	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0159 ± 0.0057	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0047 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.034 ± 0.0122	0.00753	126	0.29
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0251 ± 0.0091	0.00547	115	0.17
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.16 ± 0.0576	0.0534	117	0.19
Total PFHxS	µg/l	0.167 ± 0.0151	0.1778 ± 0.064	0.0417	107	0.08
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0057 ± 0.0021	0.00169	84.1	-0.25
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.2732 ± 0.0983	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.3191 ± 0.1149	0.131	97.7	-0.03
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.002 ± 0.0007	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.1687 ± 0.4207	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0187 ± 0.0067	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0215 ± 0.0077	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0174 ± 0.0063	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0183 ± 0.0066	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0222 ± 0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0139 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0048 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0066 ± 0.0024	0.00185	99.9	0.00
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0055 ± 0.002	0.00145	94.7	-0.08
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.0497 ± 0.0179	0.0122	102	0.02
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0549 ± 0.0198	0.0137	100	0.00
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.003 ± 0.0011	0.000943	89.1	-0.16
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.2448 ± 0.0881	0.0639	107	0.09
Total PFOS	µg/l	0.282 ± 0.037	0.2696 ± 0.0971	0.079	95.6	-0.06
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.7509 ± 0.2703	0.216	135	0.36


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	92.28 ± 0.76	1.4	99	-0.64
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.618 ± 0.066	0.296	94	-0.13
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.72 ± 0.19	0.583	115	0.38
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.7 ± 0.33	0.589	101	0.04
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.17 ± 0.024	0.0319	117	0.78
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.115 ± 0.013	0.0291	103	0.10
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00708 ± 0.00091	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.005 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.538 ± 0.052	0.151	81.7	-0.79
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0321 ± 0.0036	0.0117	118	0.41
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.05 ± 0.0055	0.0161	77.7	-0.89
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0749 ± 0.0083	0.0197	95	-0.20
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.005 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0297 ± 0.0039	0.0142	73	-0.77
Total PFOS	µg/l	0.0645 ± 0.0148	0.062 ± 0.0082	0.029	96.2	-0.08
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	6.04 ± 0.771	1.49	93.1	-0.30

Sample: PFL01A10

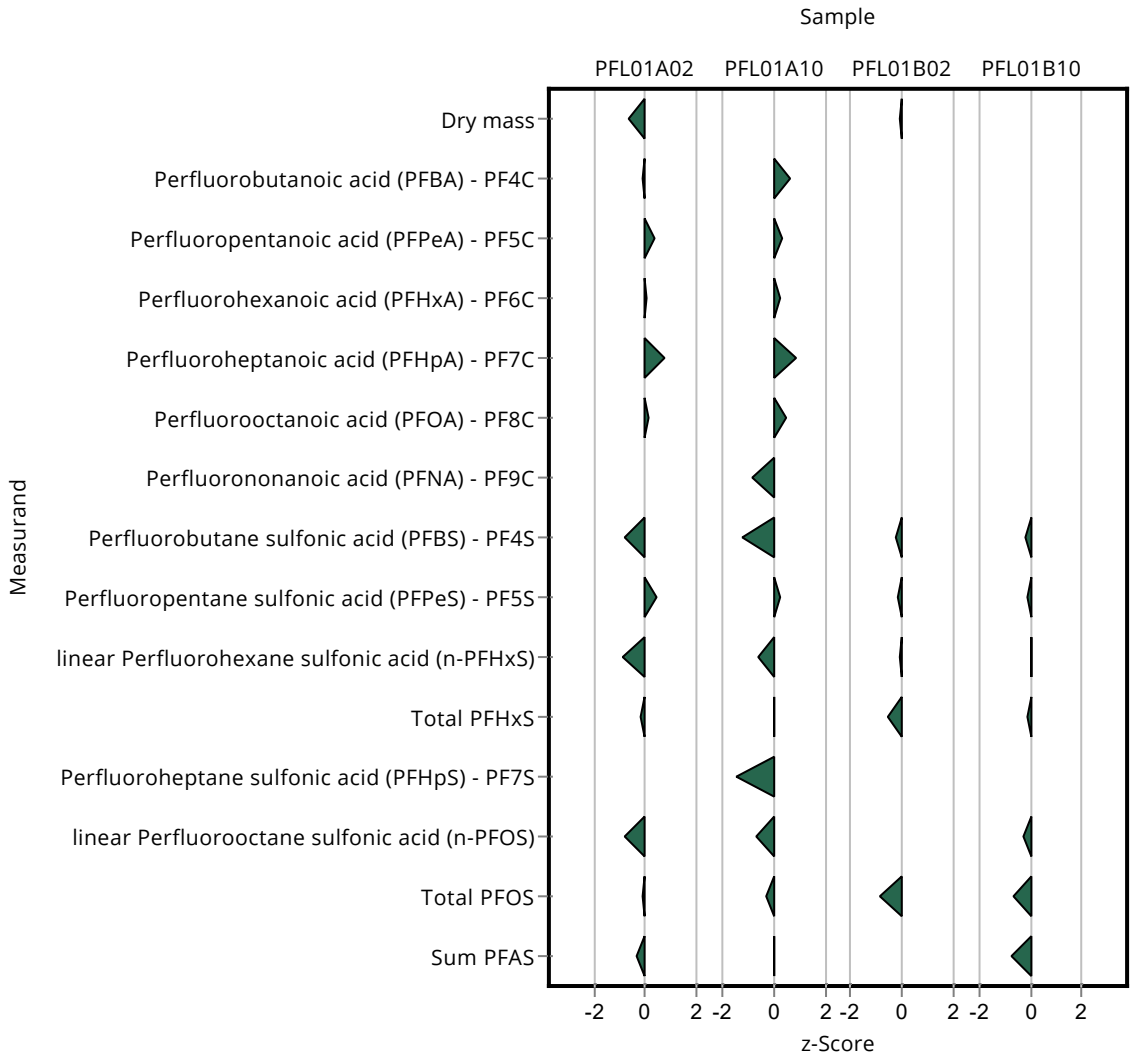
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.138	±	0.015	0.0368	120	0.62
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.389	±	0.044	0.132	112	0.32
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.627	±	0.076	0.13	106	0.28
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0602	±	0.0083	0.0111	120	0.90
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0772	±	0.0088	0.0178	113	0.50
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.00805	±	0.00103	0.00252	79.7	-0.81
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.005 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.127	±	0.012	0.0335	75.8	-1.21
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0126	±	0.0014	0.00456	111	0.26
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.0366	±	0.004	0.00827	88.5	-0.57
Total PFHxS	µg/l	0.0477	±	0.00435	0.0481	±	0.0053	0.00954	101	0.04
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.0051	±	0.00065	0.00289	54.8	-1.46
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0401	±	0.0053	0.0121	82.7	-0.69
Total PFOS	µg/l	0.0871	±	0.00981	0.0813	±	0.0107	0.0218	93.3	-0.27
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	1.57	±	0.2	0.36	100	0.01

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3	±	0.0796	85.15	±	0.76	1.28	99.8	-0.13
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0314	±	0.0034	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0443	±	0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.035	±	0.0042	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0335	±	0.0046	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0301	±	0.0034	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0153	±	0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0248	±	0.0024	0.00753	92.3	-0.28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0208	±	0.0023	0.00547	95	-0.20
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.132	±	0.015	0.0534	96.4	-0.09
Total PFHxS	µg/l	0.167	±	0.0151	0.145	±	0.016	0.0417	86.9	-0.52
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	<0.005 (LOQ)	±	-	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.193	±	0.025	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.216	±	0.028	0.131	66.1	-0.85
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	0.596	±	0.076	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0163 ± 0.0017	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0223 ± 0.0025	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0186 ± 0.0022	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0179 ± 0.0025	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0196 ± 0.0022	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0124 ± 0.0016	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.00629 ± 0.00061	0.00185	95.2	-0.17
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.00565 ± 0.00063	0.00145	97.3	-0.11
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.0494 ± 0.0054	0.0122	101	0.05
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0534 ± 0.0059	0.0137	97.4	-0.10
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.005 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.208 ± 0.027	0.0639	91.1	-0.32
Total PFOS	µg/l	0.282 ± 0.037	0.226 ± 0.03	0.079	80.1	-0.71
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.398 ± 0.051	0.216	71.8	-0.72


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	92.28 ± 0.76	1.4	99	-0.58
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.618 ± 0.066	0.296	94	-0.20
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.72 ± 0.19	0.583	115	0.48
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.7 ± 0.33	0.589	101	0.03
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.17 ± 0.024	0.0319	117	0.50
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.115 ± 0.013	0.0291	103	0.11
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00708 ± 0.00091	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.005 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.538 ± 0.052	0.151	81.7	-0.95
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0321 ± 0.0036	0.0117	118	0.42
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.05 ± 0.0055	0.0161	77.7	-0.96
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0749 ± 0.0083	0.0197	95	-0.20
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.005 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.0297 ± 0.0039	0.0142	73	-0.86
Total PFOS	µg/l	0.0645 ± 0.0148	0.062 ± 0.0082	0.029	96.2	-0.11
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	6.04 ± 0.771	1.49	93.1	-0.26

Sample: PFL01A10

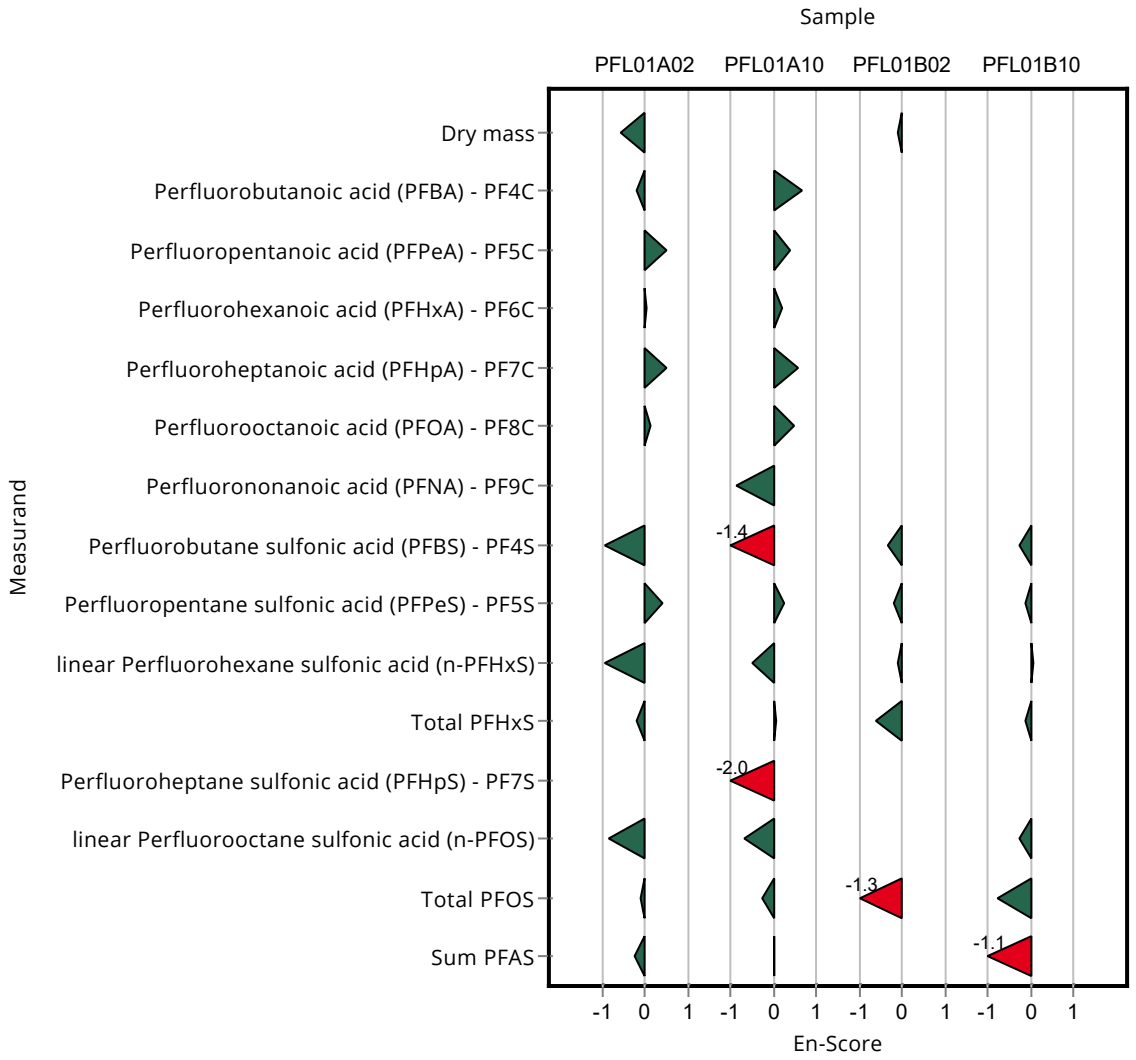
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.138	±	0.015	0.0368	120	0.65
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.389	±	0.044	0.132	112	0.39
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.627	±	0.076	0.13	106	0.21
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0602	±	0.0083	0.0111	120	0.57
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0772	±	0.0088	0.0178	113	0.46
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.00805	±	0.00103	0.00252	79.7	-0.87
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.005 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.127	±	0.012	0.0335	75.8	-1.43
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	0.0126	±	0.0014	0.00456	111	0.26
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	0.0366	±	0.004	0.00827	88.5	-0.50
Total PFHxS	µg/l	0.0477	±	0.00435	0.0481	±	0.0053	0.00954	101	0.04
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.0051	±	0.00065	0.00289	54.8	-2.04
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	0.0401	±	0.0053	0.0121	82.7	-0.67
Total PFOS	µg/l	0.0871	±	0.00981	0.0813	±	0.0107	0.0218	93.3	-0.25
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	1.57	±	0.2	0.36	100	0.01

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.15	±	0.76	1.28	99.8	-0.11
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0314	±	0.0034	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0443	±	0.005	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.035	±	0.0042	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0335	±	0.0046	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0301	±	0.0034	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0153	±	0.002	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0248	±	0.0024	0.00753	92.3	-0.35
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0208	±	0.0023	0.00547	95	-0.20
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	0.132	±	0.015	0.0534	96.4	-0.11
Total PFHxS	µg/l	0.167	±	0.0151	0.145	±	0.016	0.0417	86.9	-0.62
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	<0.005 (LOQ)	±	-	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	0.193	±	0.025	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.216	±	0.028	0.131	66.1	-1.29
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	-	±	-	0.596	±	0.076	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0163	±	0.0017	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0223	±	0.0025	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0186	±	0.0022	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0179	±	0.0025	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0196	±	0.0022	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0124	±	0.0016	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00629	±	0.00061	0.00185	95.2	-0.25
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00565	±	0.00063	0.00145	97.3	-0.12
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	0.0494	±	0.0054	0.0122	101	0.04
Total PFHxS	µg/l	0.0548	±	0.00416	0.0534	±	0.0059	0.0137	97.4	-0.11
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	<0.005 (LOQ)	±	-	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	0.208	±	0.027	0.0639	91.1	-0.29
Total PFOS	µg/l	0.282	±	0.037	0.226	±	0.03	0.079	80.1	-0.79
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.398	±	0.051	0.216	71.8	-1.06


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Total PFOS
Sum PFAS
-1.4
-2.0
-1.3
-1.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.9 ± 1.9	1.4	101	0.52
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.567 ± 0.17	0.296	86.2	-0.31
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.76 ± 0.53	0.583	118	0.45
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.47 ± 0.74	0.589	92.3	-0.35
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.139 ± 0.042	0.0319	95.8	-0.19
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.113 ± 0.034	0.0291	101	0.03
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.015 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.025 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.542 ± 0.16	0.151	82.3	-0.77
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.05 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	<0.1 (LOQ) ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.02 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	<0.15 (LOQ) ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

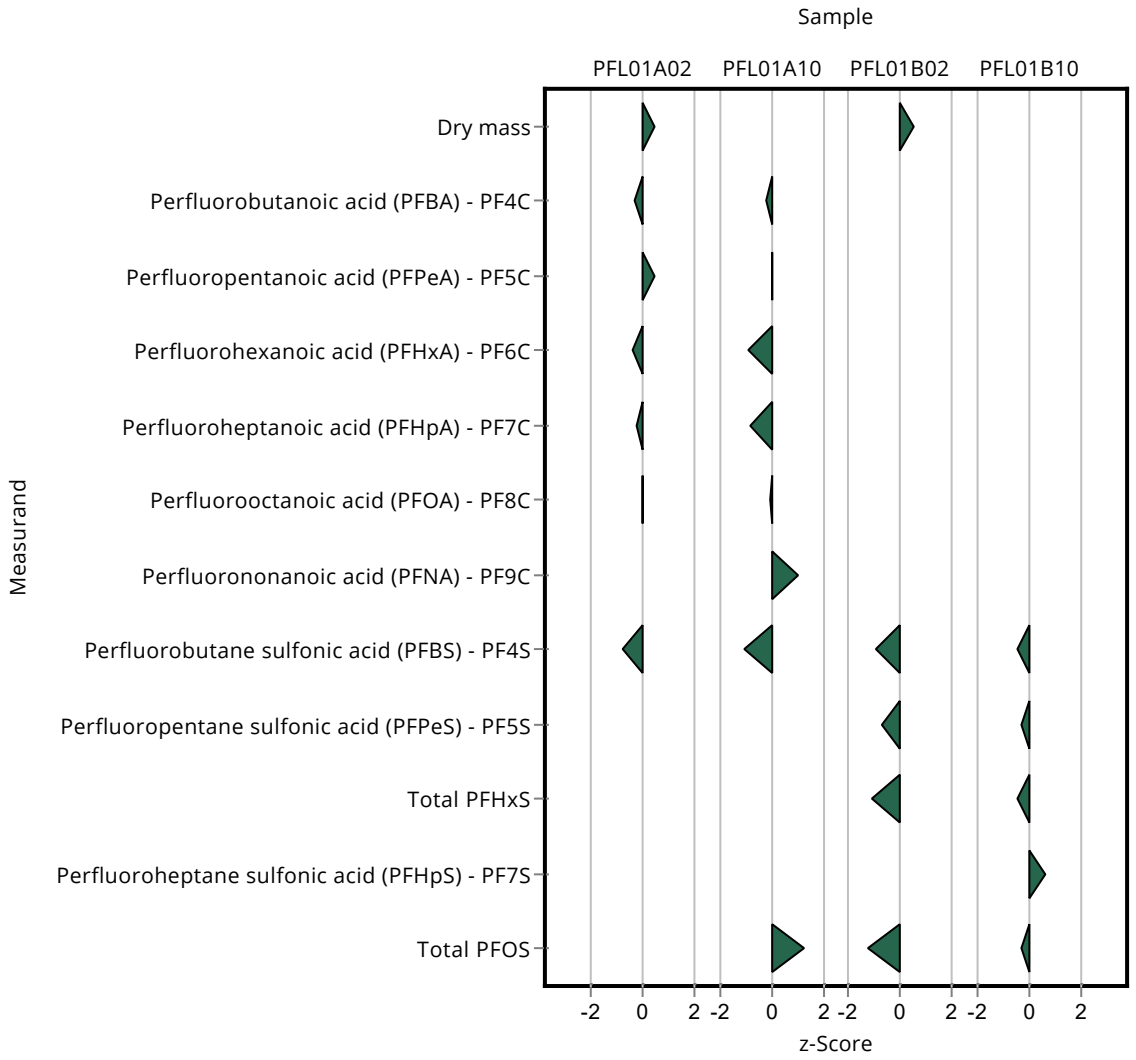
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.109	±	0.033	0.0368	94.8	-0.16
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.35	±	0.11	0.132	101	0.02
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.478	±	0.14	0.13	80.9	-0.87
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.041	±	0.012	0.0111	81.6	-0.84
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.067	±	0.02	0.0178	98	-0.08
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0128	±	0.0038	0.00252	127	1.07
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.015 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.132	±	0.04	0.0335	78.8	-1.06
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	<0.015 (LOQ)	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	-	±	-	0.00827	-	-
Total PFHxS	µg/l	0.0477	±	0.00435	<0.05 (LOQ)	±	-	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	<0.02 (LOQ)	±	-	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	-	±	-	0.0121	-	-
Total PFOS	µg/l	0.0871	±	0.00981	0.115	±	0.035	0.0218	132	1.28
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	-	±	-	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	86 ± 1.7	1.28	101	0.53
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.021 ± 0.0063	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0268 ± 0.008	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0215 ± 0.0065	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0229 ± 0.0069	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0235 ± 0.0071	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0107 ± 0.0032	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0196 ± 0.0059	0.00753	72.9	-0.97
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0179 ± 0.0054	0.00547	81.8	-0.73
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.122 ± 0.037	0.0417	73.1	-1.08
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.165 ± 0.05	0.131	50.5	-1.24
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	- ± -	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0131 ± 0.0039	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0173 ± 0.0052	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0127 ± 0.0038	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0146 ± 0.0044	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0184 ± 0.0055	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0126 ± 0.0038	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.00533 ± 0.0016	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.00565 ± 0.0017	0.00185	85.5	-0.52
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.00536 ± 0.0016	0.00145	92.3	-0.31
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0476 ± 0.014	0.0137	86.8	-0.53
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.00392 ± 0.0012	0.000943	116	0.59
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.253 ± 0.076	0.079	89.7	-0.37
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00464 ± 0.0014	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00472 ± 0.0014	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	- ± -	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.9 ± 1.9	1.4	101	0.19
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.567 ± 0.17	0.296	86.2	-0.24
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.76 ± 0.53	0.583	118	0.24
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.47 ± 0.74	0.589	92.3	-0.14
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.139 ± 0.042	0.0319	95.8	-0.07
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.113 ± 0.034	0.0291	101	0.01
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.015 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.025 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.542 ± 0.16	0.151	82.3	-0.35
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.05 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	<0.1 (LOQ) ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.02 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	<0.15 (LOQ) ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

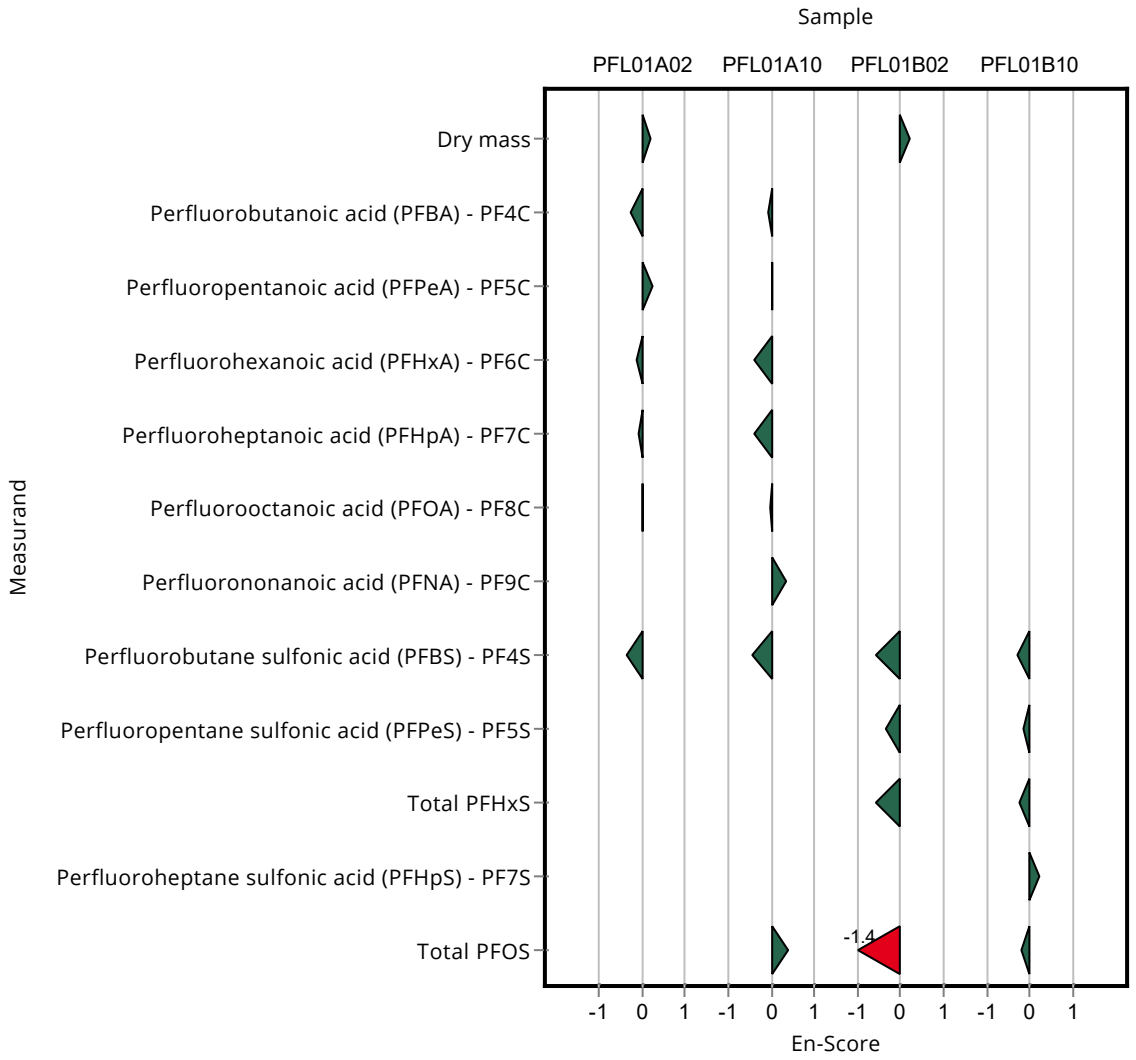
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.109	±	0.033	0.0368	94.8	-0.09
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.35	±	0.11	0.132	101	0.01
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.478	±	0.14	0.13	80.9	-0.39
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.041	±	0.012	0.0111	81.6	-0.38
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.067	±	0.02	0.0178	98	-0.03
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0128	±	0.0038	0.00252	127	0.35
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	<0.015 (LOQ)	±	-	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.132	±	0.04	0.0335	78.8	-0.44
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	<0.015 (LOQ)	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	-	±	-	0.00827	-	-
Total PFHxS	µg/l	0.0477	±	0.00435	<0.05 (LOQ)	±	-	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	<0.02 (LOQ)	±	-	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	-	±	-	0.0121	-	-
Total PFOS	µg/l	0.0871	±	0.00981	0.115	±	0.035	0.0218	132	0.39
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.005 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	-	±	-	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	86 ± 1.7	1.28	101	0.20
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.021 ± 0.0063	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0268 ± 0.008	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0215 ± 0.0065	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0229 ± 0.0069	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0235 ± 0.0071	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0107 ± 0.0032	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0196 ± 0.0059	0.00753	72.9	-0.59
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0179 ± 0.0054	0.00547	81.8	-0.36
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.122 ± 0.037	0.0417	73.1	-0.59
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.165 ± 0.05	0.131	50.5	-1.36
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	- ± -	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0131	±	0.0039	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0173	±	0.0052	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0127	±	0.0038	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0146	±	0.0044	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0184	±	0.0055	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0126	±	0.0038	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00533	±	0.0016	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00565	±	0.0017	0.00185	85.5	-0.28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00536	±	0.0016	0.00145	92.3	-0.14
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.0476	±	0.014	0.0137	86.8	-0.25
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00392	±	0.0012	0.000943	116	0.22
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.253	±	0.076	0.079	89.7	-0.19
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00464	±	0.0014	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00472	±	0.0014	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	-	±	-	0.216	-	-


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
-1.4
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.6 ± 4.7	1.4	100	0.30
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	2.99 ± 0.6	0.296	455	7.88
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	2.69 ± 0.4	0.583	180	2.05
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.6 ± 0.26	0.589	97.2	-0.13
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.159 ± 0.016	0.0319	110	0.44
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.119 ± 0.012	0.0291	106	0.24
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00753 ± 0.00075	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00497 ± 0.00074	0.00184	105	0.14
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.593 ± 0.119	0.151	90.1	-0.43
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.2 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0787 ± 0.0118	0.0197	99.8	-0.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00907 ± 0.00091	0.00432	96.6	-0.07
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.08 ± 0.008	0.029	124	0.54
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	9.33 ± 0.78	1.49	144	1.91

Sample: PFL01A10

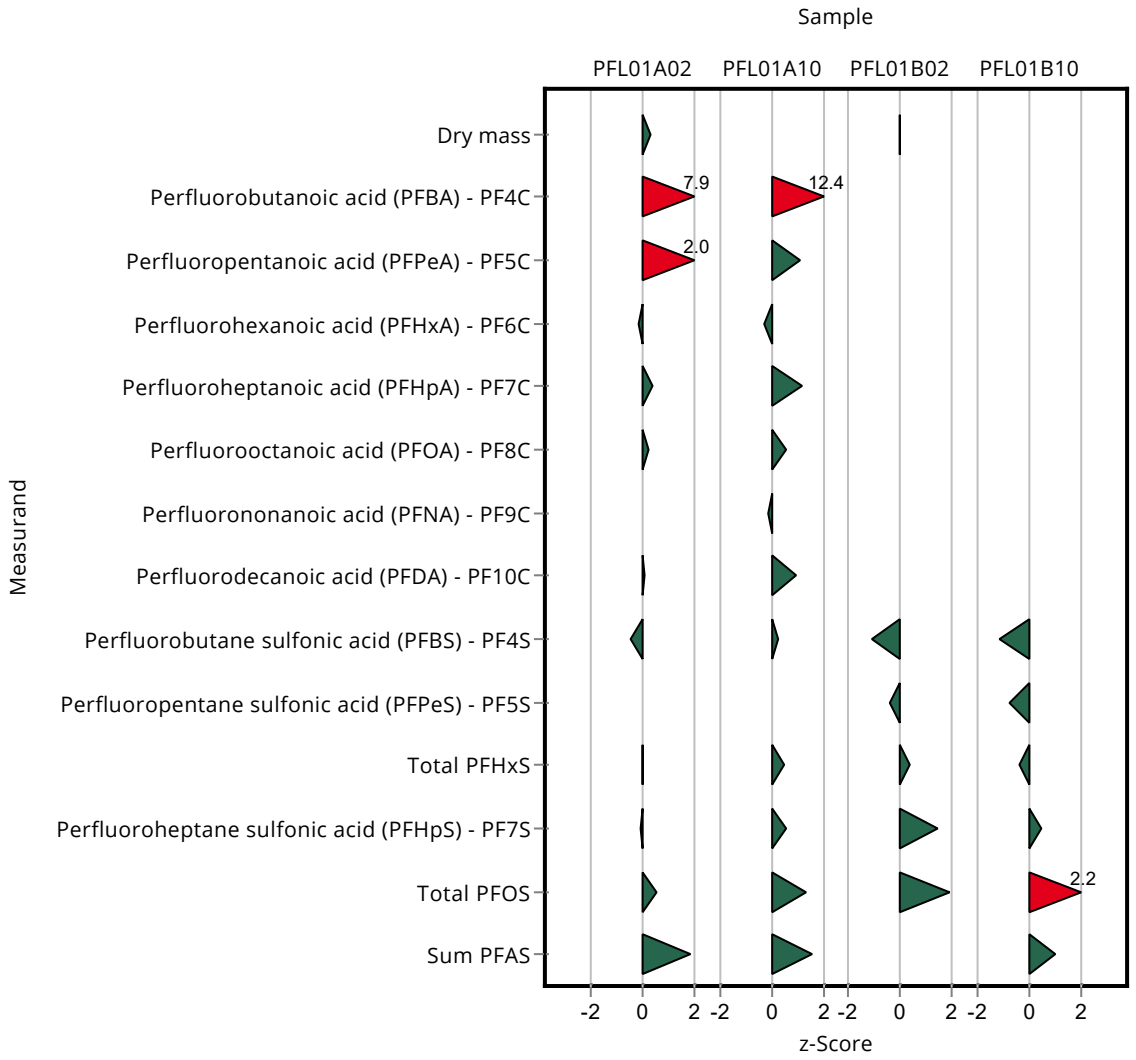
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.573	±	0.115	0.0368	498	12.44
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.49	±	0.073	0.132	141	1.08
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.559	±	0.056	0.13	94.6	-0.25
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0638	±	0.0064	0.0111	127	1.22
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0792	±	0.0079	0.0178	116	0.61
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0098	±	0.00098	0.00252	97	-0.12
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.00742	±	0.00111	0.00213	136	0.92
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.177	±	0.035	0.0335	106	0.28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	<0.2 (LOQ)	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	-	±	-	0.00827	-	-
Total PFHxS	µg/l	0.0477	±	0.00435	0.0523	±	0.0078	0.00954	110	0.48
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.011	±	0.0011	0.00289	118	0.59
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	-	±	-	0.0121	-	-
Total PFOS	µg/l	0.0871	±	0.00981	0.116	±	0.012	0.0218	133	1.33
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	2.14	±	0.15	0.36	137	1.59

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.3 ± 4.3	1.28	100	-0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.123 ± 0.025	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.168 ± 0.025	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.116 ± 0.012	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.119 ± 0.012	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.095 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0423 ± 0.0042	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0115 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00176 ± 0.00018	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0184 ± 0.0037	0.00753	68.5	-1.13
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0194 ± 0.0039	0.00547	88.6	-0.45
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.181 ± 0.027	0.0417	108	0.34
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.00926 ± 0.00093	0.00169	137	1.46
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.574 ± 0.057	0.131	176	1.89
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00582 ± 0.00058	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00382 ± 0.00038	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.49 ± 0.08	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0351	±	0.007	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0548	±	0.0082	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0295	±	0.0029	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0333	±	0.0033	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0364	±	0.0036	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0245	±	0.0024	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.013	±	0.0019	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.00259	±	0.00026	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00439	±	0.00088	0.00185	66.5	-1.20
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00466	±	0.00093	0.00145	80.3	-0.79
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.0496	±	0.0074	0.0137	90.5	-0.38
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00379	±	0.00038	0.000943	113	0.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.454	±	0.045	0.079	161	2.18
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00629	±	0.00063	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00493	±	0.00049	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.00147	±	0.00022	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.758	±	0.048	0.216	137	0.94


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
7.9
12.4
2.0
2.2
-2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.6 ± 4.7	1.4	100	0.05
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	2.99 ± 0.6	0.296	455	1.93
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	2.69 ± 0.4	0.583	180	1.42
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.6 ± 0.26	0.589	97.2	-0.14
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.159 ± 0.016	0.0319	110	0.39
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.119 ± 0.012	0.0291	106	0.26
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00753 ± 0.00075	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	0.00497 ± 0.00074	0.00184	105	0.12
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.593 ± 0.119	0.151	90.1	-0.26
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.2 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0787 ± 0.0118	0.0197	99.8	-0.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00907 ± 0.00091	0.00432	96.6	-0.10
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.08 ± 0.008	0.029	124	0.71
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	9.33 ± 0.78	1.49	144	1.67

Sample: PFL01A10

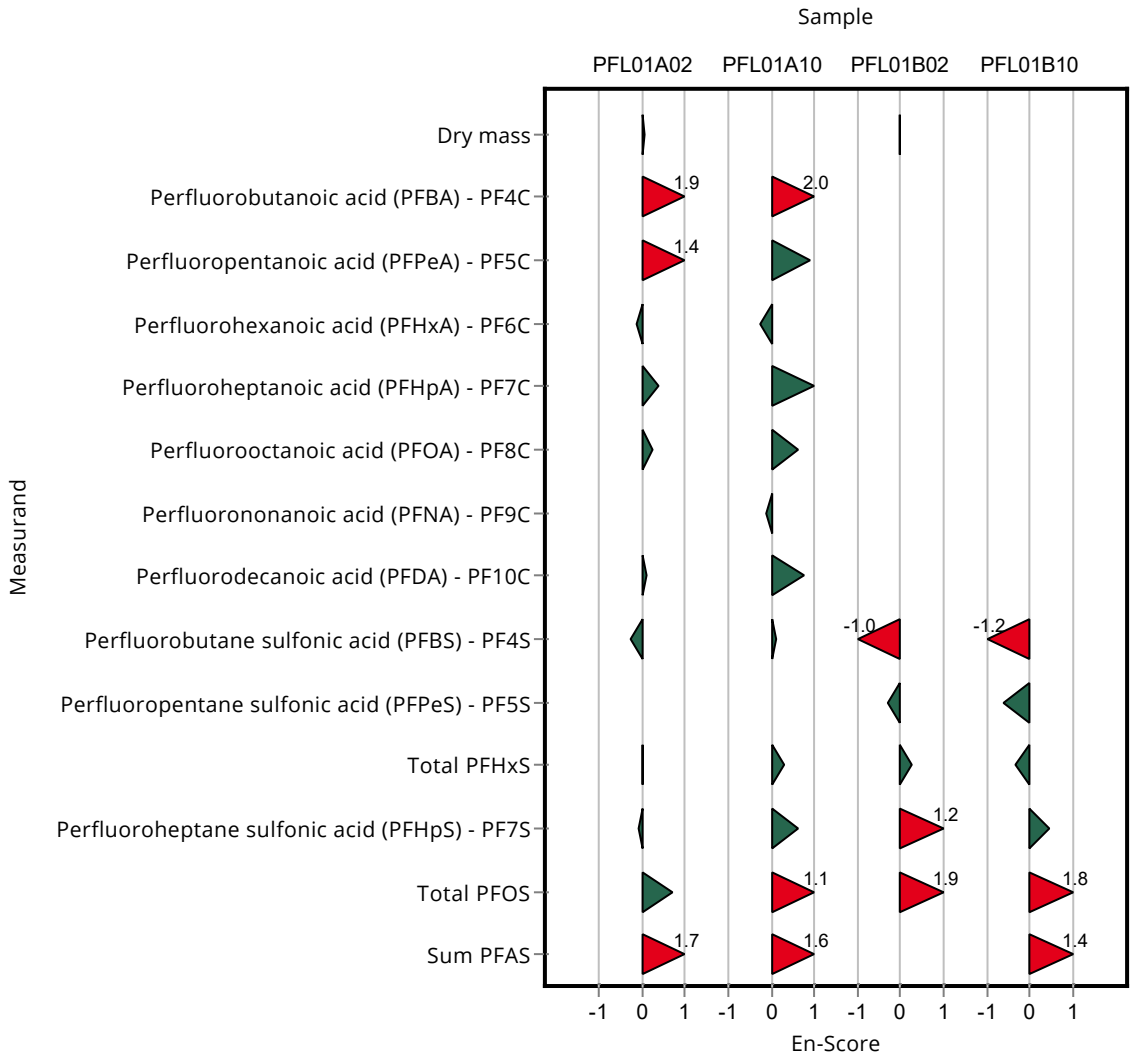
Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115	±	0.019	0.573	±	0.115	0.0368	498	1.98
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347	±	0.0611	0.49	±	0.073	0.132	141	0.90
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591	±	0.0749	0.559	±	0.056	0.13	94.6	-0.24
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503	±	0.00511	0.0638	±	0.0064	0.0111	127	0.98
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684	±	0.00803	0.0792	±	0.0079	0.0178	116	0.61
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101	±	0.00112	0.0098	±	0.00098	0.00252	97	-0.13
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546	±	0.00134	0.00742	±	0.00111	0.00213	136	0.76
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167	±	0.0149	0.177	±	0.035	0.0335	106	0.13
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114	±	0.00376	<0.2 (LOQ)	±	-	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414	±	0.00506	-	±	-	0.00827	-	-
Total PFHxS	µg/l	0.0477	±	0.00435	0.0523	±	0.0078	0.00954	110	0.28
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931	±	0.0016	0.011	±	0.0011	0.00289	118	0.62
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485	±	0.00662	-	±	-	0.0121	-	-
Total PFOS	µg/l	0.0871	±	0.00981	0.116	±	0.012	0.0218	133	1.11
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	1.57	±	0.194	2.14	±	0.15	0.36	137	1.60

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.3 ± 4.3	1.28	100	0.00
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.123 ± 0.025	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.168 ± 0.025	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.116 ± 0.012	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.119 ± 0.012	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.095 ± 0.01	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0423 ± 0.0042	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0115 ± 0.0017	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00176 ± 0.00018	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0184 ± 0.0037	0.00753	68.5	-1.04
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0194 ± 0.0039	0.00547	88.6	-0.30
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.181 ± 0.027	0.0417	108	0.25
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.00926 ± 0.00093	0.00169	137	1.16
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.574 ± 0.057	0.131	176	1.89
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00582 ± 0.00058	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00382 ± 0.00038	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.49 ± 0.08	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0351 ± 0.007	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0548 ± 0.0082	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0295 ± 0.0029	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0333 ± 0.0033	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0364 ± 0.0036	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0245 ± 0.0024	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.013 ± 0.0019	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.00259 ± 0.00026	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.00439 ± 0.00088	0.00185	66.5	-1.23
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.00466 ± 0.00093	0.00145	80.3	-0.60
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0496 ± 0.0074	0.0137	90.5	-0.34
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.00379 ± 0.00038	0.000943	113	0.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.454 ± 0.045	0.079	161	1.77
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00629 ± 0.00063	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00493 ± 0.00049	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	0.00147 ± 0.00022	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.758 ± 0.048	0.216	137	1.42


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
1.9
2.0
1.4
-1.0
-1.2
1.2
1.1
1.9
1.8
1.7
1.6
1.4
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	92.65 ± 7.4	1.4	99.4	-0.38
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	1.88 ± 0.51	0.296	286	4.13
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.68 ± 0.47	0.583	112	0.32
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.5 ± 0.53	0.589	93.4	-0.30
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.139 ± 0.036	0.0319	95.8	-0.19
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.119 ± 0.03	0.0291	106	0.24
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.681 ± 0.24	0.151	103	0.15
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.019 ± 0.0063	0.0117	69.6	-0.71
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.068 ± 0.02	0.0197	86.2	-0.55
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.074 ± 0.023	0.029	115	0.33
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.2 ± 1.8	1.49	111	0.48

Sample: PFL01A10

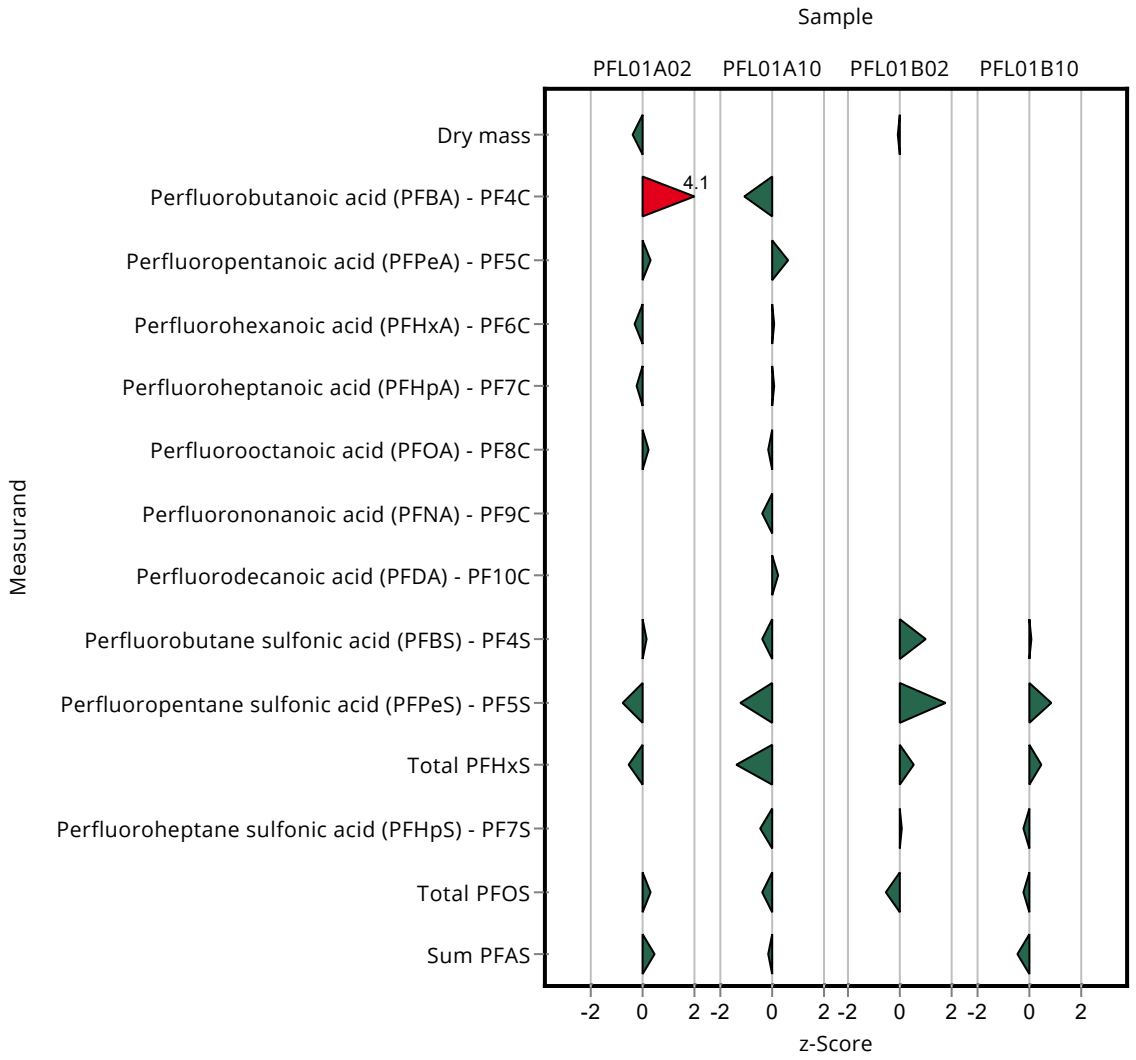
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.0755 ± 0.02	0.0368	65.6	-1.07
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.43 ± 0.12	0.132	124	0.63
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.608 ± 0.13	0.13	103	0.13
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0518 ± 0.014	0.0111	103	0.14
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0661 ± 0.017	0.0178	96.7	-0.13
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0092 ± 0.0023	0.00252	91.1	-0.36
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0061 ± 0.0015	0.00213	112	0.30
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.156 ± 0.056	0.0335	93.2	-0.34
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0059 ± 0.0019	0.00456	51.8	-1.21
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0349 ± 0.011	0.00954	73.2	-1.34
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.008 ± 0.0026	0.00289	85.9	-0.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0797 ± 0.025	0.0218	91.5	-0.34
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.51 ± 0.38	0.36	96.4	-0.16

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.2 ± 6.8	1.28	99.9	-0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0644 ± 0.017	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0764 ± 0.021	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.057 ± 0.012	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0556 ± 0.014	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0433 ± 0.011	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0196 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0062 ± 0.0016	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0339 ± 0.0122	0.00753	126	0.93
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0313 ± 0.012	0.00547	143	1.72
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.187 ± 0.056	0.0417	112	0.48
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0068 ± 0.0018	0.00169	100	0.01
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.2502 ± 0.078	0.131	76.6	-0.59
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.834 ± 0.21	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0223 ± 0.0058	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0256 ± 0.0072	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0185 ± 0.0039	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0204 ± 0.0053	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0209 ± 0.0052	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0142 ± 0.0036	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0058 ± 0.0015	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0067 ± 0.0024	0.00185	101	0.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.007 ± 0.0023	0.00145	121	0.82
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0605 ± 0.018	0.0137	110	0.42
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.0031 ± 0.001	0.000943	92	-0.28
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.26 ± 0.081	0.079	92.2	-0.28
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.442 ± 0.111	0.216	79.7	-0.52


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
4.1
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	92.65 ± 7.4	1.4	99.4	-0.04
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	1.88 ± 0.51	0.296	286	1.19
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.68 ± 0.47	0.583	112	0.19
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.5 ± 0.53	0.589	93.4	-0.16
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.139 ± 0.036	0.0319	95.8	-0.08
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.119 ± 0.03	0.0291	106	0.11
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.681 ± 0.24	0.151	103	0.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.019 ± 0.0063	0.0117	69.6	-0.54
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.068 ± 0.02	0.0197	86.2	-0.26
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.074 ± 0.023	0.029	115	0.20
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.2 ± 1.8	1.49	111	0.19

Sample: PFL01A10

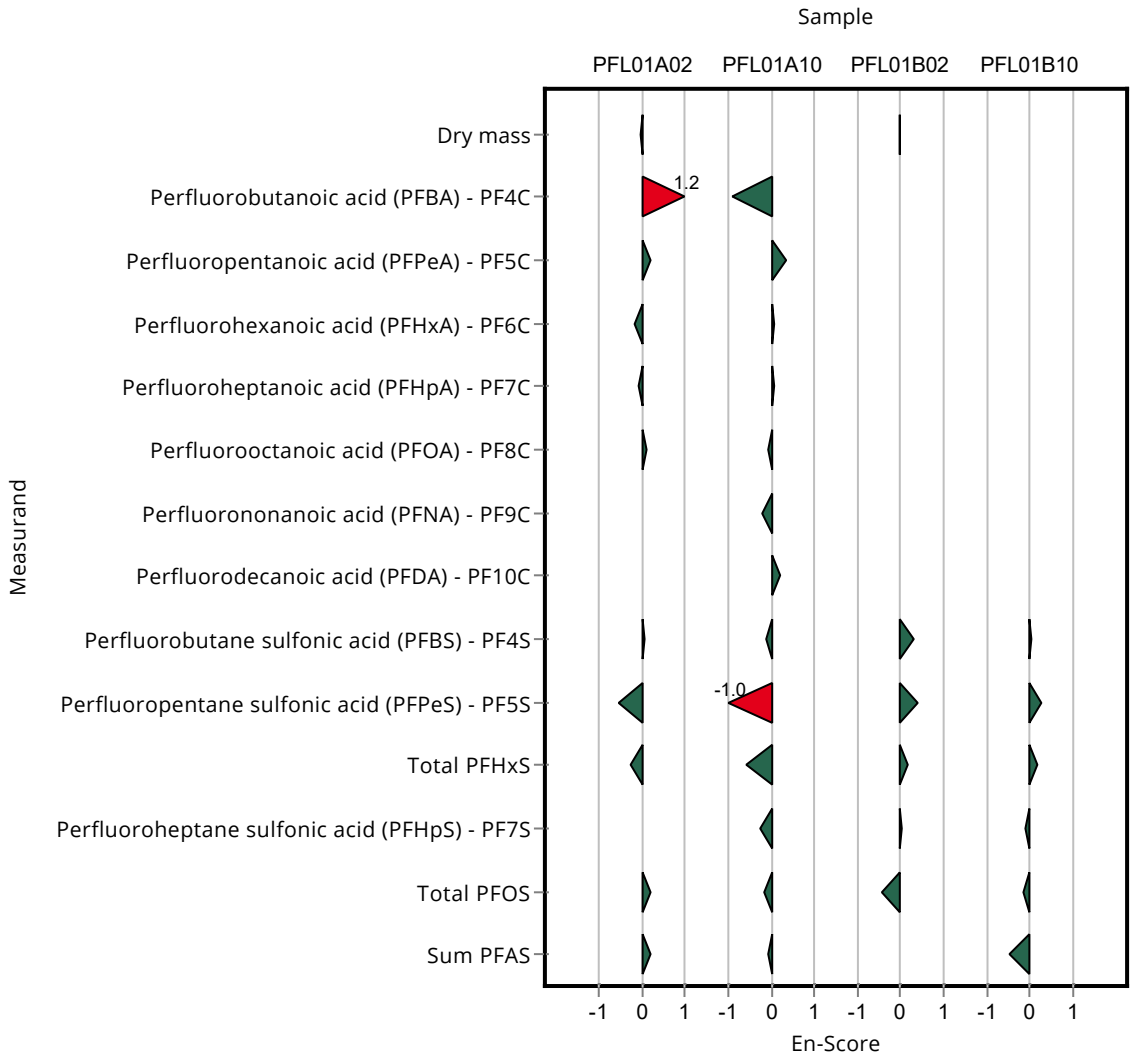
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.0755 ± 0.02	0.0368	65.6	-0.89
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.43 ± 0.12	0.132	124	0.33
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.608 ± 0.13	0.13	103	0.06
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0518 ± 0.014	0.0111	103	0.05
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0661 ± 0.017	0.0178	96.7	-0.06
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0092 ± 0.0023	0.00252	91.1	-0.19
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0061 ± 0.0015	0.00213	112	0.20
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.156 ± 0.056	0.0335	93.2	-0.10
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0059 ± 0.0019	0.00456	51.8	-1.03
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0349 ± 0.011	0.00954	73.2	-0.57
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.008 ± 0.0026	0.00289	85.9	-0.24
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0797 ± 0.025	0.0218	91.5	-0.15
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.51 ± 0.38	0.36	96.4	-0.07

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.2 ± 6.8	1.28	99.9	-0.01
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0644 ± 0.017	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0764 ± 0.021	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.057 ± 0.012	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0556 ± 0.014	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0433 ± 0.011	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0196 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0062 ± 0.0016	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0339 ± 0.0122	0.00753	126	0.28
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0313 ± 0.012	0.00547	143	0.39
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.187 ± 0.056	0.0417	112	0.18
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.0068 ± 0.0018	0.00169	100	0.01
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.2502 ± 0.078	0.131	76.6	-0.45
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.004 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.834 ± 0.21	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0223 ± 0.0058	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0256 ± 0.0072	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0185 ± 0.0039	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0204 ± 0.0053	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0209 ± 0.0052	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0142 ± 0.0036	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0058 ± 0.0015	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0067 ± 0.0024	0.00185	101	0.02
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.007 ± 0.0023	0.00145	121	0.26
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0605 ± 0.018	0.0137	110	0.16
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.0031 ± 0.001	0.000943	92	-0.13
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.26 ± 0.081	0.079	92.2	-0.13
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.002 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.442 ± 0.111	0.216	79.7	-0.46


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
1.2
-1.0
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	94 ± 4.7	1.4	101	0.59
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	- ± -	0.296	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.795 ± 0.24	0.583	53.2	-1.20
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	1.04 ± 0.312	0.589	38.9	-2.78
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	- ± -	0.0319	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	- ± -	0.0291	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.0003 ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.673 ± 0.202	0.151	102	0.10
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0182 ± 0.0055	0.0117	66.7	-0.78
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0988 ± 0.0294	0.0197	125	1.01
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.0003 ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0653 ± 0.02	0.029	101	0.03
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0003 ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

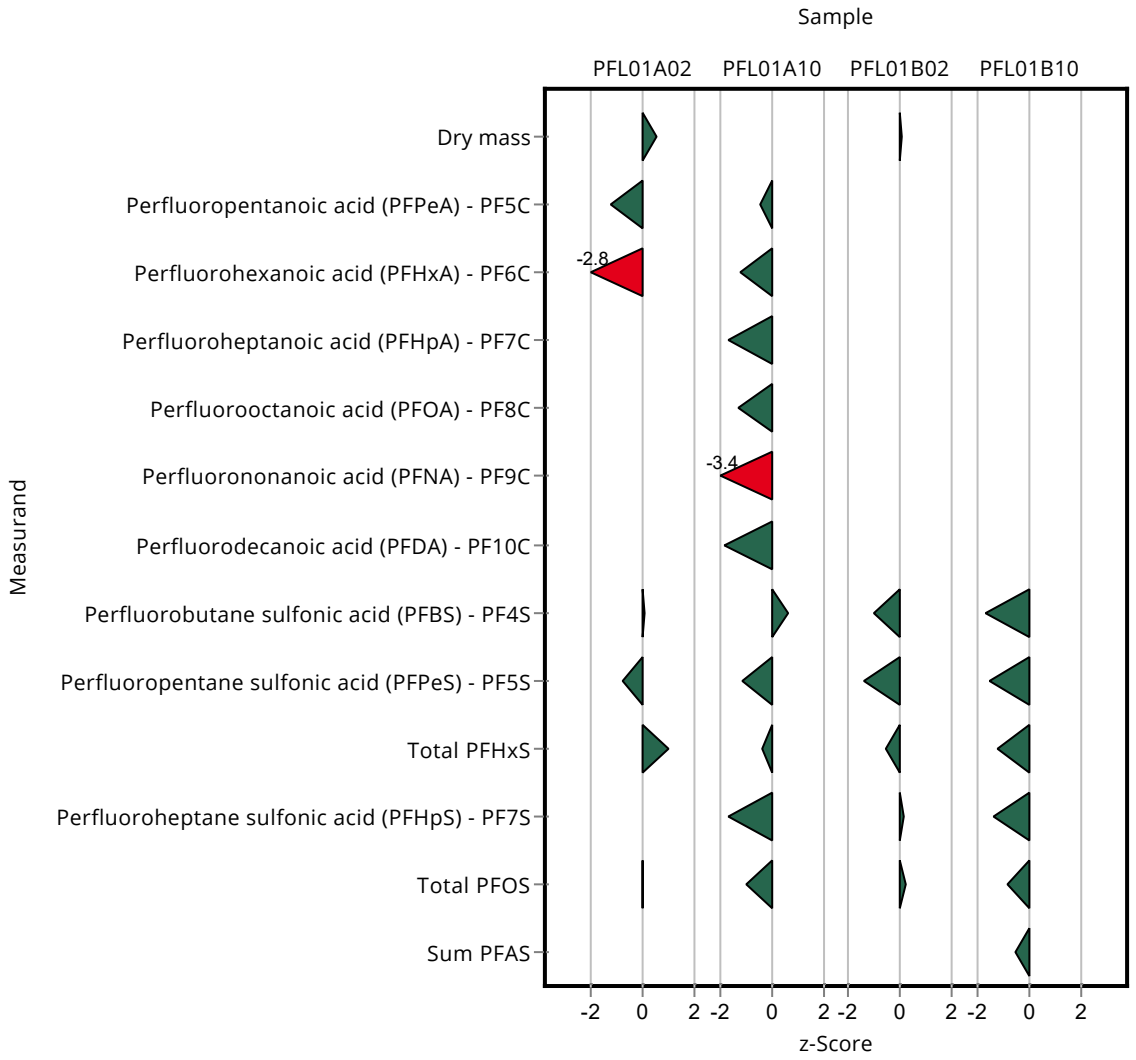
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	- ± -	0.0368	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.286 ± 0.086	0.132	82.4	-0.46
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.436 ± 0.131	0.13	73.8	-1.19
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0317 ± 0.01	0.0111	63.1	-1.68
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0458 ± 0.0137	0.0178	67	-1.27
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0016 ± 0.0005	0.00252	15.8	-3.37
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0016 ± 0.0005	0.00213	29.3	-1.81
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.19 ± 0.057	0.0335	113	0.67
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0062 ± 0.0018	0.00456	54.4	-1.14
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0447 ± 0.0134	0.00954	93.7	-0.31
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00455 ± 0.00136	0.00289	48.9	-1.65
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0661 ± 0.02	0.0218	75.9	-0.96
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0017 ± 0.0005	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0003 ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	- ± -	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 4.3	1.28	100	0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.154 ± 0.046	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.192 ± 0.058	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.103 ± 0.031	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.105 ± 0.032	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0839 ± 0.025	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0314 ± 0.0094	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.0088 ± 0.0026	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0019 ± 0.0006	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.0193 ± 0.0058	0.00753	71.8	-1.01
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0139 ± 0.0042	0.00547	63.5	-1.46
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.144 ± 0.043	0.0417	86.3	-0.55
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.007 ± 0.002	0.00169	103	0.13
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.351 ± 0.105	0.131	107	0.19
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0045 ± 0.0014	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.0046 ± 0.0014	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	0.0032 ± 0.001	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	0.005 ± 0.0015	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	0.0052 ± 0.0016	-	-	-
Sum PFAS	µg/l	- ± -	1.24 ± 0.37	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0356	±	0.011	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.037	±	0.012	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0223	±	0.0067	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0236	±	0.007	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0264	±	0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0162	±	0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.006	±	0.0018	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.0013	±	0.0004	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.0003	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.0003	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.0034	±	0.001	0.00185	51.5	-1.73
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.0035	±	0.001	0.00145	60.3	-1.59
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.0378	±	0.011	0.0137	69	-1.24
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.002	±	0.0006	0.000943	59.4	-1.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.215	±	0.0645	0.079	76.2	-0.85
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.0035	±	0.001	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.0029	±	0.00087	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.0023	±	0.0007	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.0003	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.439	±	0.132	0.216	79.2	-0.53


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
-2.8
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
-3.4
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	94 ± 4.7	1.4	101	0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	- ± -	0.296	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	0.795 ± 0.24	0.583	53.2	-1.28
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	1.04 ± 0.312	0.589	38.9	-2.50
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	- ± -	0.0319	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	- ± -	0.0291	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.0003 ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.673 ± 0.202	0.151	102	0.04
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0182 ± 0.0055	0.0117	66.7	-0.64
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0988 ± 0.0294	0.0197	125	0.33
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.0003 ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0653 ± 0.02	0.029	101	0.02
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0003 ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	- ± -	1.49	-	-

Sample: PFL01A10

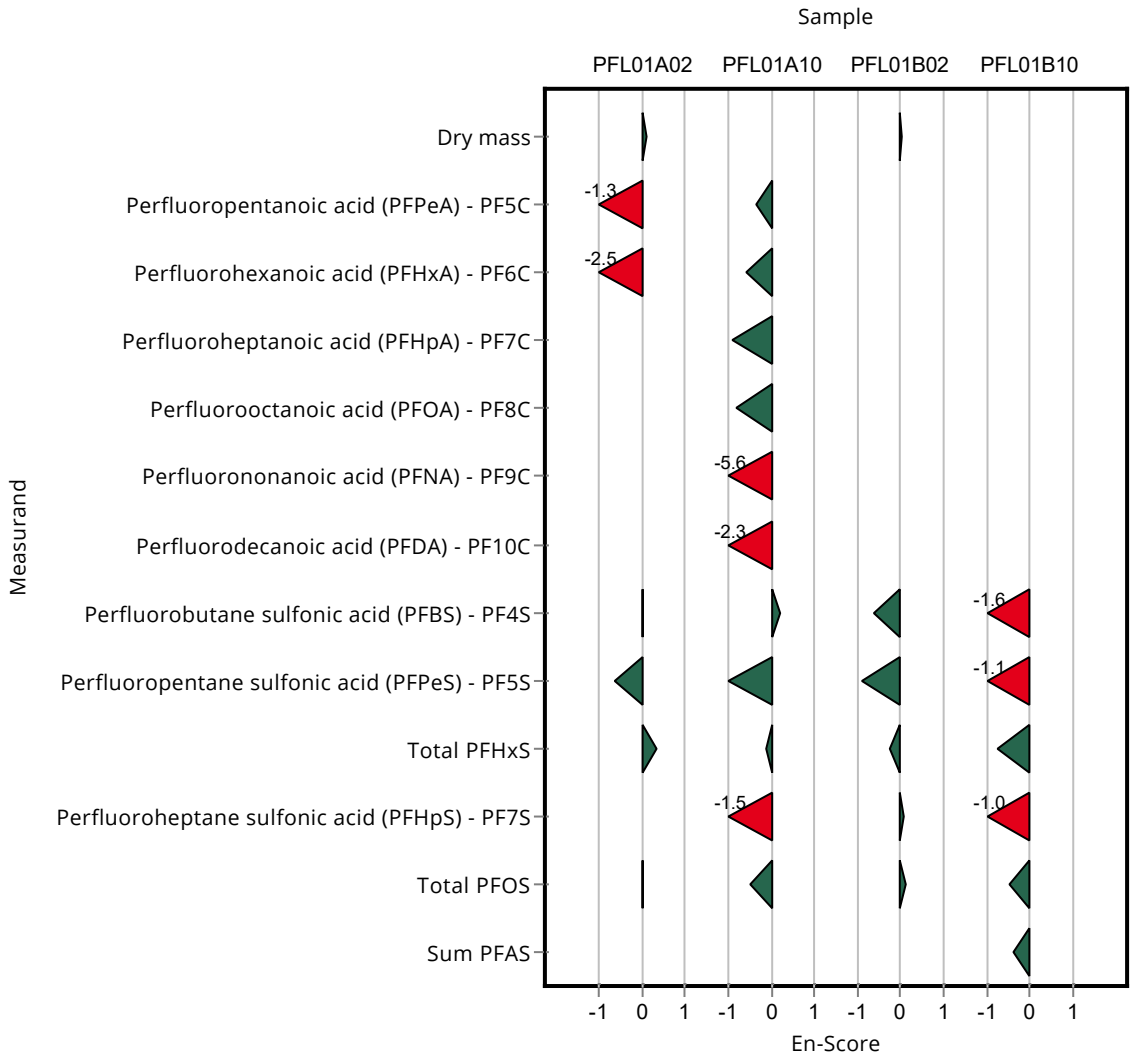
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	- ± -	0.0368	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.286 ± 0.086	0.132	82.4	-0.33
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.436 ± 0.131	0.13	73.8	-0.57
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0317 ± 0.01	0.0111	63.1	-0.90
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0458 ± 0.0137	0.0178	67	-0.79
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0016 ± 0.0005	0.00252	15.8	-5.65
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	0.0016 ± 0.0005	0.00213	29.3	-2.31
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.19 ± 0.057	0.0335	113	0.20
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0062 ± 0.0018	0.00456	54.4	-1.00
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0447 ± 0.0134	0.00954	93.7	-0.11
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00455 ± 0.00136	0.00289	48.9	-1.51
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0661 ± 0.02	0.0218	75.9	-0.51
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0017 ± 0.0005	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0003 ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	- ± -	0.36	-	-

Sample: PFL01B02

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3	±	0.0796	85.4	±	4.3	1.28	100	0.01
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.154	±	0.046	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.192	±	0.058	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.103	±	0.031	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.105	±	0.032	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0839	±	0.025	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.0314	±	0.0094	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.0088	±	0.0026	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	0.0019	±	0.0006	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.0003	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269	±	0.0035	0.0193	±	0.0058	0.00753	71.8	-0.63
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219	±	0.00268	0.0139	±	0.0042	0.00547	63.5	-0.91
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137	±	0.0354	-	±	-	0.0534	-	-
Total PFHxS	µg/l	0.167	±	0.0151	0.144	±	0.043	0.0417	86.3	-0.26
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678	±	0.00106	0.007	±	0.002	0.00169	103	0.05
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	-	±	-	-	±	-	-	-	-
Total PFOS	µg/l	0.327	±	0.0649	0.351	±	0.105	0.131	107	0.11
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.0045	±	0.0014	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.0046	±	0.0014	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.0032	±	0.001	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	0.005	±	0.0015	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	0.0052	±	0.0016	-	-	-
Sum PFAS	µg/l	-	±	-	1.24	±	0.37	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0356 ± 0.011	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.037 ± 0.012	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0223 ± 0.0067	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0236 ± 0.007	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0264 ± 0.008	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0162 ± 0.005	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	0.006 ± 0.0018	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	0.0013 ± 0.0004	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.0003 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	0.0034 ± 0.001	0.00185	51.5	-1.58
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	0.0035 ± 0.001	0.00145	60.3	-1.13
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.0378 ± 0.011	0.0137	69	-0.76
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	0.002 ± 0.0006	0.000943	59.4	-1.04
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.215 ± 0.0645	0.079	76.2	-0.50
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.0035 ± 0.001	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.0029 ± 0.00087	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	0.0023 ± 0.0007	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.0003 ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.439 ± 0.132	0.216	79.2	-0.41


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorodecanoic acid (PFDA) - PF10C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-1.3
-2.5
-5.6
-2.3
-1.6
-1.1
-1.5
-1.0
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	92.8 ± 0.7	1.4	99.6	-0.27
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.62 ± 0.19	0.296	94.3	-0.13
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.21 ± 0.36	0.583	80.9	-0.49
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.46 ± 0.74	0.589	91.9	-0.37
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.197 ± 0.059	0.0319	136	1.63
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.11 ± 0.033	0.0291	98.2	-0.07
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00499 ± 0.0015	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.005 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.846 ± 0.254	0.151	129	1.24
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0509 ± 0.0153	0.0117	186	2.01
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0698 ± 0.0209	0.0197	88.5	-0.46
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00897 ± 0.00269	0.00432	95.5	-0.10
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0578 ± 0.0173	0.029	89.7	-0.23
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.64 ± 1.69	1.49	87	-0.57

Sample: PFL01A10

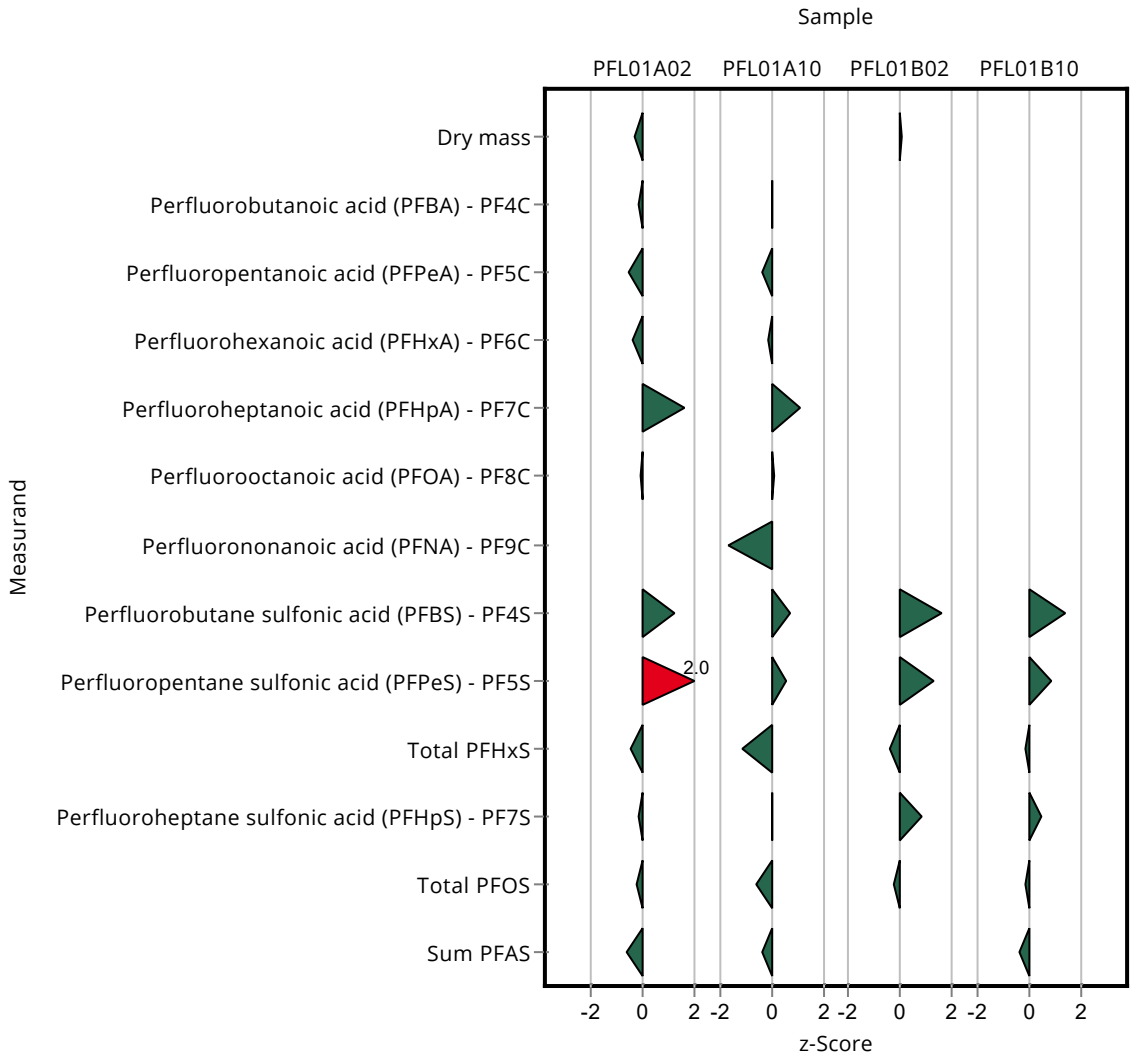
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.117 ± 0.035	0.0368	102	0.05
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.299 ± 0.09	0.132	86.2	-0.36
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.573 ± 0.17	0.13	97	-0.14
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0627 ± 0.0188	0.0111	125	1.13
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0697 ± 0.0209	0.0178	102	0.08
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.00598 ± 0.00179	0.00252	59.2	-1.63
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.00498 ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.193 ± 0.058	0.0335	115	0.76
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0139 ± 0.0042	0.00456	122	0.55
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0373 ± 0.0112	0.00954	78.2	-1.09
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00946 ± 0.00284	0.00289	102	0.05
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0737 ± 0.0221	0.0218	84.6	-0.62
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.000996 ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.45 ± 0.44	0.36	92.5	-0.32

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 1.5	1.28	100	0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0352 ± 0.0106	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0403 ± 0.0121	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0277 ± 0.0083	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0373 ± 0.0112	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0322 ± 0.0097	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0141 ± 0.0042	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.039 ± 0.012	0.00753	145	1.61
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0288 ± 0.0086	0.00547	132	1.26
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.15 ± 0.045	0.0417	89.9	-0.40
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.00816 ± 0.000245	0.00169	120	0.82
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.293 ± 0.088	0.131	89.7	-0.26
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00453 ± 0.00136	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00332 ± 0.001	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	0.00211 ± 0.00063	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.717 ± 0.215	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0165	±	0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0214	±	0.00642	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0145	±	0.0044	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0194	±	0.0058	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0214	±	0.0064	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.012	±	0.004	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00499	±	0.0015	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00908	±	0.00272	0.00185	137	1.34
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00698	±	0.00209	0.00145	120	0.81
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.0524	±	0.0157	0.0137	95.6	-0.18
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00379	±	0.00114	0.000943	113	0.45
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.27	±	0.081	0.079	95.7	-0.15
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00489	±	0.00147	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00329	±	0.00099	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.0015	±	0.00045	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.462	±	0.139	0.216	83.3	-0.43


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
2.0
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	92.8 ± 0.7	1.4	99.6	-0.26
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.62 ± 0.19	0.296	94.3	-0.09
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.21 ± 0.36	0.583	80.9	-0.37
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.46 ± 0.74	0.589	91.9	-0.14
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.197 ± 0.059	0.0319	136	0.44
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.11 ± 0.033	0.0291	98.2	-0.03
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.00499 ± 0.0015	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.005 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.846 ± 0.254	0.151	129	0.37
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.0509 ± 0.0153	0.0117	186	0.74
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.0698 ± 0.0209	0.0197	88.5	-0.21
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.00897 ± 0.00269	0.00432	95.5	-0.07
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.0578 ± 0.0173	0.029	89.7	-0.18
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	5.64 ± 1.69	1.49	87	-0.25

Sample: PFL01A10

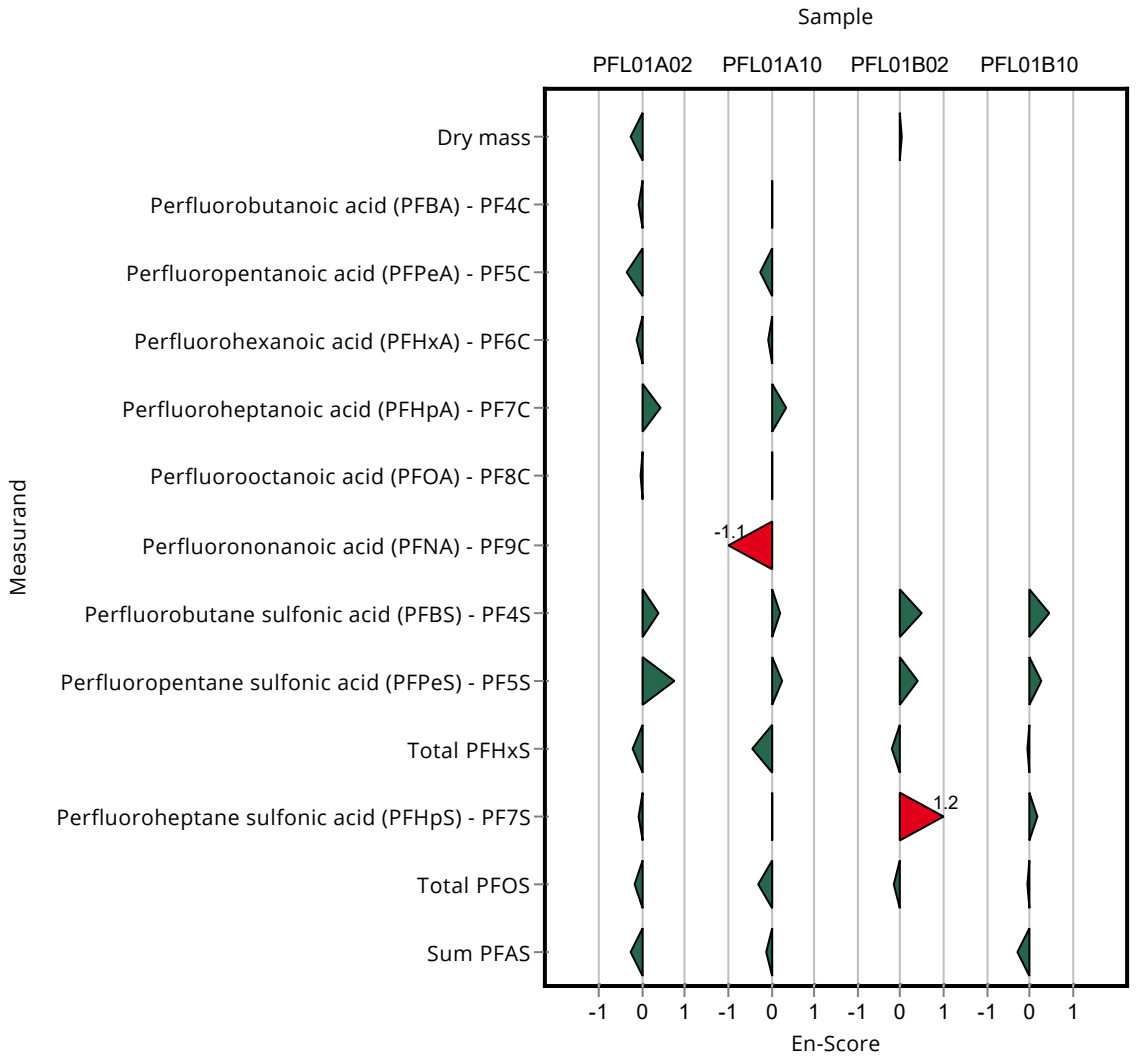
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.117 ± 0.035	0.0368	102	0.03
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.299 ± 0.09	0.132	86.2	-0.25
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.573 ± 0.17	0.13	97	-0.05
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.0627 ± 0.0188	0.0111	125	0.33
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0697 ± 0.0209	0.0178	102	0.03
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.00598 ± 0.00179	0.00252	59.2	-1.10
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.00498 ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.00498 ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.193 ± 0.058	0.0335	115	0.22
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0139 ± 0.0042	0.00456	122	0.27
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.0373 ± 0.0112	0.00954	78.2	-0.46
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	0.00946 ± 0.00284	0.00289	102	0.03
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.0737 ± 0.0221	0.0218	84.6	-0.30
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.000996 ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.000996 ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.45 ± 0.44	0.36	92.5	-0.13

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.4 ± 1.5	1.28	100	0.03
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0352 ± 0.0106	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.0403 ± 0.0121	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0277 ± 0.0083	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0373 ± 0.0112	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0322 ± 0.0097	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.0141 ± 0.0042	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.005 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.039 ± 0.012	0.00753	145	0.50
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0288 ± 0.0086	0.00547	132	0.40
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.15 ± 0.045	0.0417	89.9	-0.18
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	0.00816 ± 0.000245	0.00169	120	1.18
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.293 ± 0.088	0.131	89.7	-0.18
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	0.00453 ± 0.00136	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	0.00332 ± 0.001	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	0.00211 ± 0.00063	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.001 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.717 ± 0.215	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.0165	±	0.005	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.0214	±	0.00642	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.0145	±	0.0044	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.0194	±	0.0058	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.0214	±	0.0064	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	0.012	±	0.004	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	0.00499	±	0.0015	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	0.00908	±	0.00272	0.00185	137	0.45
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	0.00698	±	0.00209	0.00145	120	0.28
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.0524	±	0.0157	0.0137	95.6	-0.08
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	0.00379	±	0.00114	0.000943	113	0.18
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.27	±	0.081	0.079	95.7	-0.07
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	0.00489	±	0.00147	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	0.00329	±	0.00099	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	0.0015	±	0.00045	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.001 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.462	±	0.139	0.216	83.3	-0.31


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
Total PFOS
Sum PFAS
-1.1
1.2
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.58 ± 5.6148	1.4	100	0.29
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.486 ± 0.1313	0.296	73.9	-0.58
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.159 ± 0.3128	0.583	77.5	-0.58
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.125 ± 0.5736	0.589	79.4	-0.94
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.115 ± 0.0309	0.0319	79.3	-0.94
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.102 ± 0.0276	0.0291	91.1	-0.34
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.39 ± 0.1053	0.151	59.2	-1.77
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.016 ± 0.0043	0.0117	58.6	-0.96
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.057 ± 0.0154	0.0197	72.3	-1.11
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.046 ± 0.0123	0.029	71.4	-0.64
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	4.495 ± 1.2137	1.49	69.3	-1.33

Sample: PFL01A10

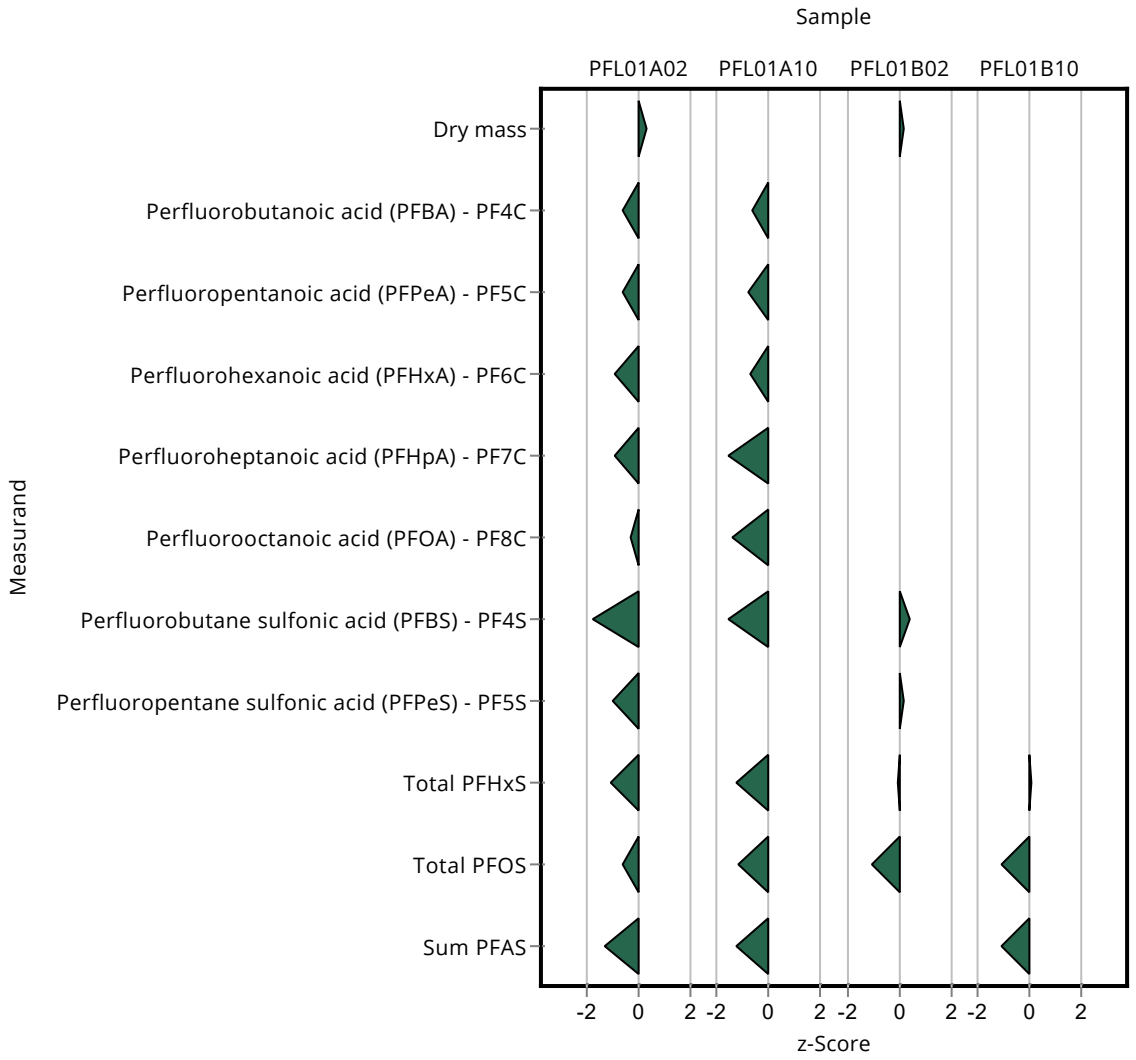
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.091 ± 0.0247	0.0368	79.1	-0.65
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.241 ± 0.0651	0.132	69.4	-0.80
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.502 ± 0.1354	0.13	84.9	-0.68
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.033 ± 0.0088	0.0111	65.7	-1.56
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.044 ± 0.0118	0.0178	64.4	-1.37
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.116 ± 0.0312	0.0335	69.3	-1.54
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.036 ± 0.0096	0.00954	75.5	-1.23
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.062 ± 0.0167	0.0218	71.2	-1.15
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.124 ± 0.3034	0.36	71.7	-1.23

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.55 ± 5.133	1.28	100	0.18
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.022 ± 0.006	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.027 ± 0.0073	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.024 ± 0.0065	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.024 ± 0.0064	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.021 ± 0.0057	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.03 ± 0.0082	0.00753	112	0.41
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.023 ± 0.0062	0.00547	105	0.20
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.164 ± 0.0442	0.0417	98.3	-0.07
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.191 ± 0.0517	0.131	58.5	-1.04
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.527 ± 0.1422	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.013 ± 0.0034	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.015 ± 0.0042	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.012 ± 0.0033	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.013 ± 0.0035	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.015 ± 0.0042	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	- ± -	0.0122	-	-
Total PFHxS	µg/l	0.0548 ± 0.00416	0.056 ± 0.01519	0.0137	102	0.09
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	- ± -	0.0639	-	-
Total PFOS	µg/l	0.282 ± 0.037	0.199 ± 0.05366	0.079	70.6	-1.05
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.324 ± 0.0875	0.216	58.4	-1.07


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.58 ± 5.6148	1.4	100	0.04
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.486 ± 0.1313	0.296	73.9	-0.57
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.159 ± 0.3128	0.583	77.5	-0.49
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	2.125 ± 0.5736	0.589	79.4	-0.47
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.115 ± 0.0309	0.0319	79.3	-0.47
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.102 ± 0.0276	0.0291	91.1	-0.18
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	0.39 ± 0.1053	0.151	59.2	-1.20
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	0.016 ± 0.0043	0.0117	58.6	-0.91
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	- ± -	0.0161	-	-
Total PFHxS	µg/l	0.0788 ± 0.00997	0.057 ± 0.0154	0.0197	72.3	-0.67
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	<0.01 (LOQ) ± -	0.00432	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	- ± -	0.0142	-	-
Total PFOS	µg/l	0.0645 ± 0.0148	0.046 ± 0.0123	0.029	71.4	-0.64
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	4.495 ± 1.2137	1.49	69.3	-0.79

Sample: PFL01A10

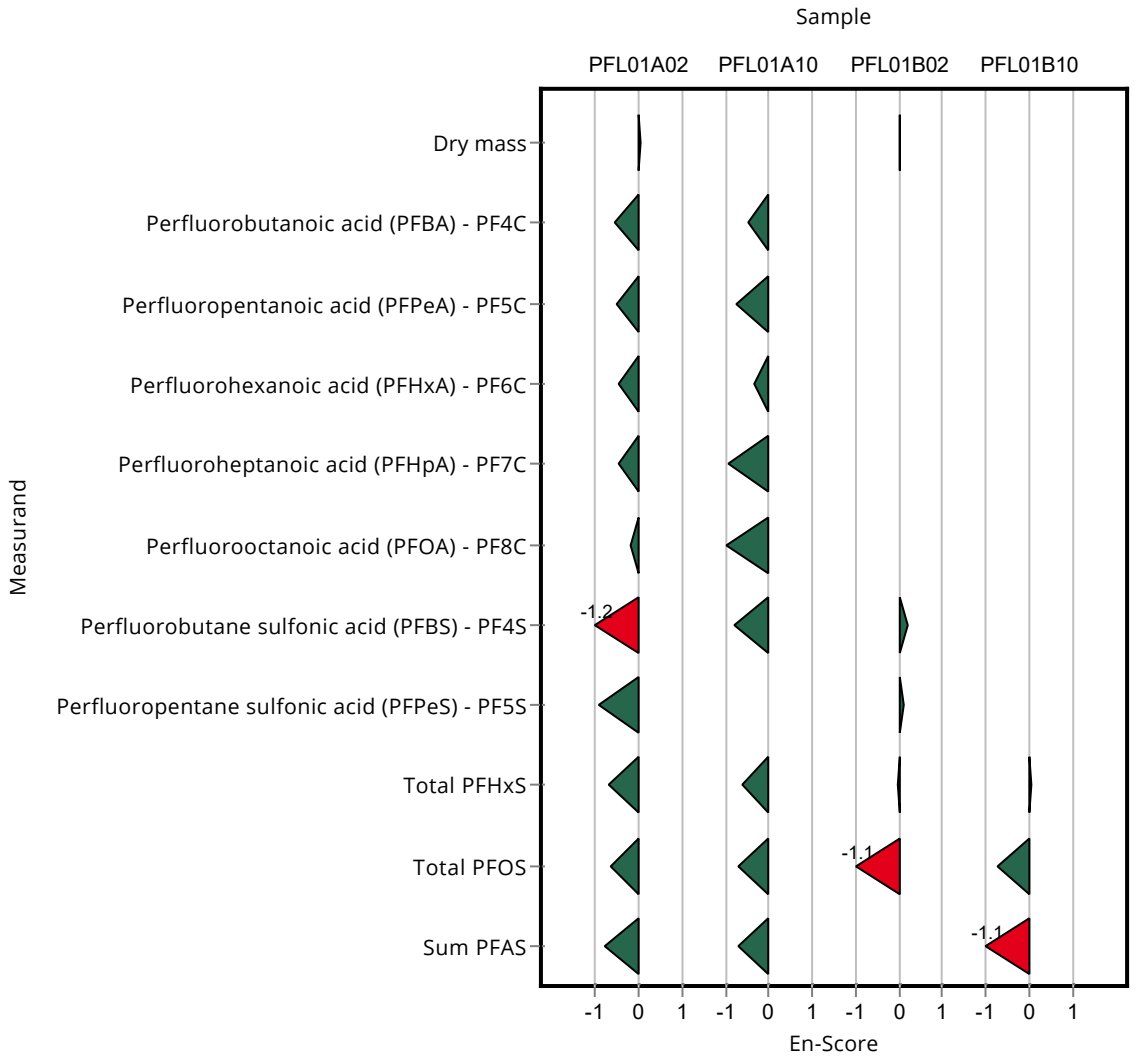
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.091 ± 0.0247	0.0368	79.1	-0.45
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.241 ± 0.0651	0.132	69.4	-0.74
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.502 ± 0.1354	0.13	84.9	-0.32
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.033 ± 0.0088	0.0111	65.7	-0.94
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.044 ± 0.0118	0.0178	64.4	-0.98
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	<0.01 (LOQ) ± -	0.00252	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.116 ± 0.0312	0.0335	69.3	-0.80
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	<0.01 (LOQ) ± -	0.00456	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	- ± -	0.00827	-	-
Total PFHxS	µg/l	0.0477 ± 0.00435	0.036 ± 0.0096	0.00954	75.5	-0.59
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	- ± -	0.0121	-	-
Total PFOS	µg/l	0.0871 ± 0.00981	0.062 ± 0.0167	0.0218	71.2	-0.72
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	1.124 ± 0.3034	0.36	71.7	-0.70

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.55 ± 5.133	1.28	100	0.02
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.022 ± 0.006	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.027 ± 0.0073	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.024 ± 0.0065	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.024 ± 0.0064	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.021 ± 0.0057	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.03 ± 0.0082	0.00753	112	0.19
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.023 ± 0.0062	0.00547	105	0.09
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	- ± -	0.0534	-	-
Total PFHxS	µg/l	0.167 ± 0.0151	0.164 ± 0.0442	0.0417	98.3	-0.03
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	- ± -	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	0.191 ± 0.0517	0.131	58.5	-1.11
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	0.527 ± 0.1422	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value	±	U (k=2)	Result	±	U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	-	±	-	0.013	±	0.0034	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	-	±	-	0.015	±	0.0042	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	-	±	-	0.012	±	0.0033	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	-	±	-	0.013	±	0.0035	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	-	±	-	0.015	±	0.0042	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661	±	0.000357	<0.01 (LOQ)	±	-	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581	±	0.00043	<0.01 (LOQ)	±	-	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488	±	0.00781	-	±	-	0.0122	-	-
Total PFHxS	µg/l	0.0548	±	0.00416	0.056	±	0.01519	0.0137	102	0.04
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337	±	0.000539	<0.01 (LOQ)	±	-	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228	±	0.0456	-	±	-	0.0639	-	-
Total PFOS	µg/l	0.282	±	0.037	0.199	±	0.05366	0.079	70.6	-0.73
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	-	±	-	<0.01 (LOQ)	±	-	-	-	-
Sum PFAS	µg/l	0.554	±	0.107	0.324	±	0.0875	0.216	58.4	-1.12


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
Total PFHxS
Total PFOS
Sum PFAS
-1.2
-1.1
-1.1
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	93.2 ± 0.25	93.1 ± 1	1.4	99.9	-0.05
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.59 ± 0.177	0.296	89.7	-0.23
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.42 ± 0.43	0.583	94.9	-0.13
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	3.22 ± 0.97	0.589	120	0.92
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.121 ± 0.036	0.0319	83.4	-0.75
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0948 ± 0.0284	0.0291	84.6	-0.59
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	1.97 ± 0.59	0.151	299	8.66
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.01 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0676 ± 0.0203	0.0161	105	0.20
Total PFHxS	µg/l	0.0788 ± 0.00997	- ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0109 ± 0.0033	0.00432	116	0.35
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.032 ± 0.0096	0.0142	78.6	-0.61
Total PFOS	µg/l	0.0645 ± 0.0148	- ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.53 ± 2.26	1.49	116	0.70

Sample: PFL01A10

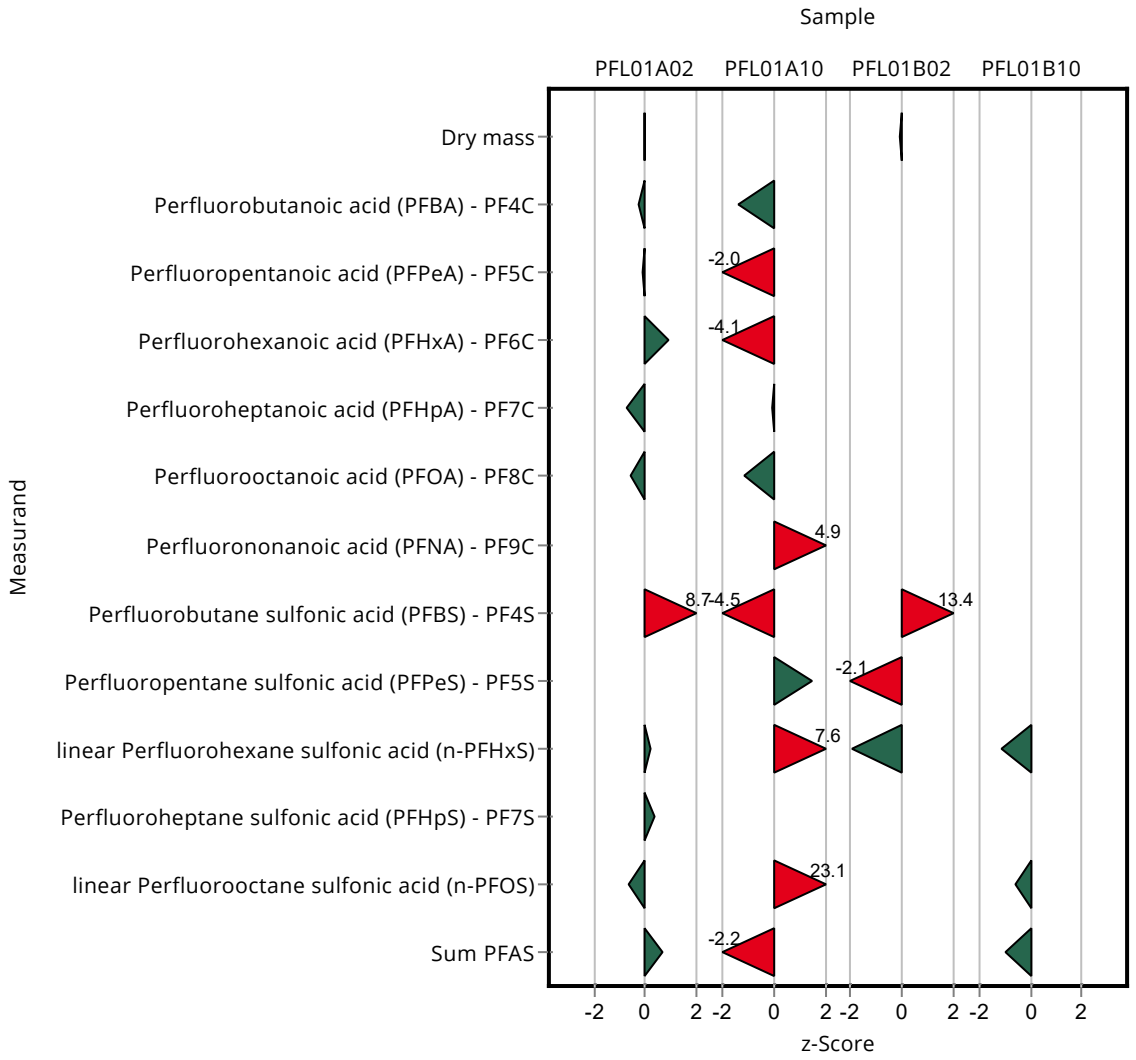
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.0652 ± 0.0196	0.0368	56.7	-1.35
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.0773 ± 0.0232	0.132	22.3	-2.05
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.0566 ± 0.017	0.13	9.58	-4.11
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.05 ± 0.015	0.0111	99.5	-0.02
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0485 ± 0.0146	0.0178	71	-1.12
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0225 ± 0.0068	0.00252	223	4.91
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.0183 ± 0.0055	0.0335	10.9	-4.45
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0183 ± 0.0055	0.00456	161	1.51
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.104 ± 0.031	0.00827	252	7.58
Total PFHxS	µg/l	0.0477 ± 0.00435	- ± -	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.328 ± 0.098	0.0121	677	23.07
Total PFOS	µg/l	0.0871 ± 0.00981	- ± -	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	0.789 ± 0.24	0.36	50.4	-2.16

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Dry mass	%	85.3 ± 0.0796	85.2 ± 1	1.28	99.9	-0.09
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.13 ± 0.039	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.32 ± 0.096	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.382 ± 0.115	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0367 ± 0.011	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0596 ± 0.0179	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.128 ± 0.038	0.00753	476	13.44
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0103 ± 0.0031	0.00547	47.1	-2.12
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.032 ± 0.0096	0.0534	23.4	-1.96
Total PFHxS	µg/l	0.167 ± 0.0151	- ± -	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.0342 ± 0.0103	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	- ± -	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.13 ± 0.34	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	z-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0218 ± 0.0065	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.026 ± 0.0078	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0169 ± 0.0051	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0195 ± 0.0059	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0212 ± 0.0064	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.015 ± 0.0045	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.035 ± 0.0105	0.0122	71.7	-1.13
Total PFHxS	µg/l	0.0548 ± 0.00416	- ± -	0.0137	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.192 ± 0.058	0.0639	84.1	-0.57
Total PFOS	µg/l	0.282 ± 0.037	- ± -	0.079	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.347 ± 0.104	0.216	62.6	-0.96


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Sum PFAS
-2.0
-4.1
4.9
8.7
-4.5
13.4
-2.1
7.6
23.1
-2.2
-2 0 2 -2 0 2 -2 0 2 -2 0 2
z-Score

Sample: PFL01A02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	93.2 ± 0.25	93.1 ± 1	1.4	99.9	-0.04
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.658 ± 0.146	0.59 ± 0.177	0.296	89.7	-0.18
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	1.5 ± 0.267	1.42 ± 0.43	0.583	94.9	-0.08
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	2.68 ± 0.199	3.22 ± 0.97	0.589	120	0.28
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.145 ± 0.0149	0.121 ± 0.036	0.0319	83.4	-0.33
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.112 ± 0.0115	0.0948 ± 0.0284	0.0291	84.6	-0.30
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00471 ± 0.00151	<0.01 (LOQ) ± -	0.00184	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.658 ± 0.0733	1.97 ± 0.59	0.151	299	1.11
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0273 ± 0.00901	<0.01 (LOQ) ± -	0.0117	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0644 ± 0.0102	0.0676 ± 0.0203	0.0161	105	0.08
Total PFHxS	µg/l	0.0788 ± 0.00997	- ± -	0.0197	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00939 ± 0.0028	0.0109 ± 0.0033	0.00432	116	0.21
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0407 ± 0.0102	0.032 ± 0.0096	0.0142	78.6	-0.40
Total PFOS	µg/l	0.0645 ± 0.0148	- ± -	0.029	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	6.49 ± 0.695	7.53 ± 2.26	1.49	116	0.23

Sample: PFL01A10

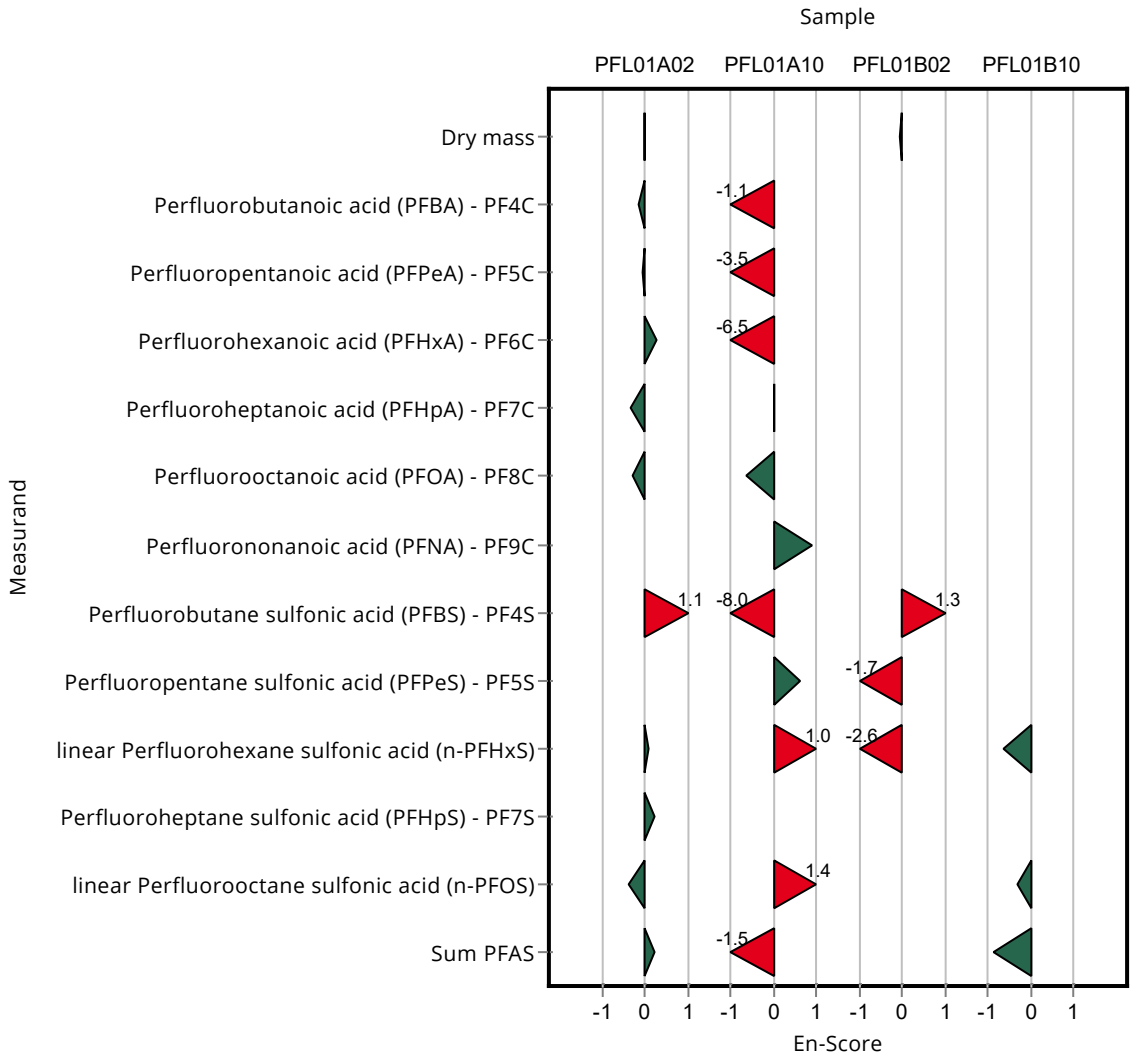
Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	0.115 ± 0.019	0.0652 ± 0.0196	0.0368	56.7	-1.14
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	0.347 ± 0.0611	0.0773 ± 0.0232	0.132	22.3	-3.52
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	0.591 ± 0.0749	0.0566 ± 0.017	0.13	9.58	-6.50
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	0.0503 ± 0.00511	0.05 ± 0.015	0.0111	99.5	-0.01
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	0.0684 ± 0.00803	0.0485 ± 0.0146	0.0178	71	-0.66
Perfluorononanoic acid (PFNA) - PF9C	µg/l	0.0101 ± 0.00112	0.0225 ± 0.0068	0.00252	223	0.91
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	0.00546 ± 0.00134	<0.01 (LOQ) ± -	0.00213	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.167 ± 0.0149	0.0183 ± 0.0055	0.0335	10.9	-8.05
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0114 ± 0.00376	0.0183 ± 0.0055	0.00456	161	0.59
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0414 ± 0.00506	0.104 ± 0.031	0.00827	252	1.01
Total PFHxS	µg/l	0.0477 ± 0.00435	- ± -	0.00954	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00931 ± 0.0016	<0.01 (LOQ) ± -	0.00289	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.0485 ± 0.00662	0.328 ± 0.098	0.0121	677	1.43
Total PFOS	µg/l	0.0871 ± 0.00981	- ± -	0.0218	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	1.57 ± 0.194	0.789 ± 0.24	0.36	50.4	-1.50

Sample: PFL01B02

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Dry mass	%	85.3 ± 0.0796	85.2 ± 1	1.28	99.9	-0.06
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.13 ± 0.039	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.32 ± 0.096	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.382 ± 0.115	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0367 ± 0.011	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0596 ± 0.0179	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.0269 ± 0.0035	0.128 ± 0.038	0.00753	476	1.33
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.0219 ± 0.00268	0.0103 ± 0.0031	0.00547	47.1	-1.72
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.137 ± 0.0354	0.032 ± 0.0096	0.0534	23.4	-2.61
Total PFHxS	µg/l	0.167 ± 0.0151	- ± -	0.0417	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00678 ± 0.00106	<0.01 (LOQ) ± -	0.00169	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	- ± -	0.0342 ± 0.0103	-	-	-
Total PFOS	µg/l	0.327 ± 0.0649	- ± -	0.131	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	- ± -	1.13 ± 0.34	-	-	-

Sample: PFL01B10

Parameter	Unit	Assigned value ± U (k=2)	Result ± U	Criterion	Recovery [%]	En-Score
Perfluorobutanoic acid (PFBA) - PF4C	µg/l	- ± -	0.0218 ± 0.0065	-	-	-
Perfluoropentanoic acid (PFPeA) - PF5C	µg/l	- ± -	0.026 ± 0.0078	-	-	-
Perfluorohexanoic acid (PFHxA) - PF6C	µg/l	- ± -	0.0169 ± 0.0051	-	-	-
Perfluoroheptanoic acid (PFHpA) - PF7C	µg/l	- ± -	0.0195 ± 0.0059	-	-	-
Perfluorooctanoic acid (PFOA) - PF8C	µg/l	- ± -	0.0212 ± 0.0064	-	-	-
Perfluorononanoic acid (PFNA) - PF9C	µg/l	- ± -	0.015 ± 0.0045	-	-	-
Perfluorodecanoic acid (PFDA) - PF10C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecanoic acid (PFUnDA) - PF11C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecanoic acid (PFDoDA) - PF12C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecanoic acid (PFTrDA) - PF13C	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	µg/l	0.00661 ± 0.000357	<0.01 (LOQ) ± -	0.00185	-	-
Perfluoropentane sulfonic acid (PFPeS) - PF5S	µg/l	0.00581 ± 0.00043	<0.01 (LOQ) ± -	0.00145	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	µg/l	0.0488 ± 0.00781	0.035 ± 0.0105	0.0122	71.7	-0.62
Total PFHxS	µg/l	0.0548 ± 0.00416	- ± -	0.0137	-	-
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	µg/l	0.00337 ± 0.000539	<0.01 (LOQ) ± -	0.000943	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	µg/l	0.228 ± 0.0456	0.192 ± 0.058	0.0639	84.1	-0.29
Total PFOS	µg/l	0.282 ± 0.037	- ± -	0.079	-	-
Perfluorononane sulfonic acid (PFNS) - PF9S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorodecane sulfonic acid (PFDS) - PF10S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	µg/l	- ± -	<0.01 (LOQ) ± -	-	-	-
Sum PFAS	µg/l	0.554 ± 0.107	0.347 ± 0.104	0.216	62.6	-0.89


Sample
PFL01A02
PFL01A10
PFL01B02
PFL01B10
Measurand
Dry mass
Perfluorobutanoic acid (PFBA) - PF4C
Perfluoropentanoic acid (PFPeA) - PF5C
Perfluorohexanoic acid (PFHxA) - PF6C
Perfluoroheptanoic acid (PFHpA) - PF7C
Perfluorooctanoic acid (PFOA) - PF8C
Perfluorononanoic acid (PFNA) - PF9C
Perfluorobutane sulfonic acid (PFBS) - PF4S
Perfluoropentane sulfonic acid (PFPeS) - PF5S
linear Perfluorohexane sulfonic acid (n-PFHxS)
Perfluoroheptane sulfonic acid (PFHpS) - PF7S
linear Perfluorooctane sulfonic acid (n-PFOS)
Sum PFAS
-1.1
-3.5
-6.5
1.1
-8.0
1.3
-1.7
1.0
-2.6
1.4
-1.5
-1 0 1 -1 0 1 -1 0 1 -1 0 1
En-Score

E9. Methodenübersicht / Overview of methods

LabCode	Sample	additional method details (citation here: sample preparation method SPE or DI)	dry mass
LC0001	**PFL01A02**	SPE: no; centrifuge: n/a; filtration: yes; DI: yes; recovery correction: yes	EN 14346; A
LC0002	**PFL01A02**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no	EN ISO 11465;
LC0003	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0004	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0005	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0006	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 12880;
LC0007	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN ISO 11465;
LC0008	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 15934;
LC0009	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: n/a; DI: no; recovery correction: yes	EN 14346;
LC0010	**PFL01A02**	SPE: yes; centrifuge: no; filtration: yes; DI: no; recovery correction: no	EN ISO 11465;
LC0011	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 12880;
LC0012	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes	EN ISO 11465;
LC0013	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 15934;
LC0014	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: no	EN 14346;
LC0015	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 14346;
LC0016	**PFL01A02**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no	DIN 38409-1;
LC0017	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 14346;
LC0018	**PFL01A02**	SPE: yes; centrifuge: yes; filtration: yes; DI: no; recovery correction: yes	EN 15934;
LC0019	**PFL01A02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes	EN 14346;

LabCode	Sample	Perfluorobutanoic acid (PFBA) - PF4C	Perfluoropentanoic acid (PFPeA) - PF5C	Perfluorohexanoic acid (PFHxA) - PF6C	Perfluoroheptanoic acid (PFHpA) - PF7C
LC0001	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A02**		LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorooctanoic acid (PFOA) - PF8C	Perfluorononanoic acid (PFNA) - PF9C	Perfluorodecanoic acid (PFDA) - PF10C	Perfluoroundecanoic acid (PFUnDA) - PF11C
LC0001	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A02**	DIN 38407-42;	DIN 38407-42;		
LC0003	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A02**		LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecanoic acid (PFDoDA) - PF12C	Perfluorotridecanoic acid (PFTrDA) - PF13C	Perfluorobutane sulfonic acid (PFBS) - PF4S	Perfluoropentane sulfonic acid (PFPeS) - PF5S
LC0001	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A02**			DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**			DIN 38407-42;	
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	linear Perfluorohexane sulfonic acid (n-PFHxS)	Total PFHxS	Perfluoroheptane sulfonic acid (PFHpS) - PF7S	linear Perfluorooctane sulfonic acid (n-PFOS)
LC0001	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	
LC0002	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01A02**		EN 17892;	EN 17892;	
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**		EN 17892;	EN 17892;	
LC0006	**PFL01A02**		LC-MS/MS;	LC-MS/MS;	
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01A02**		DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	
LC0015	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	
LC0016	**PFL01A02**		LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	
LC0018	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	
LC0019	**PFL01A02**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Total PFOS	Perfluorononane sulfonic acid (PFNS) - PF9S	Perfluorodecane sulfonic acid (PFDS) - PF10S	Perfluoroundecane sulfonic acid (PFUnDS) - PF11S
LC0001	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A02**	DIN 38407-42;			
LC0003	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**				
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A02**		DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecane sulfonic acid (PFDoS) - PF12S	Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	Sum PFAS
LC0001	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A02**			DIN 38407-42;
LC0003	**PFL01A02**	EN 17892;	EN 17892;	calculated;
LC0004	**PFL01A02**	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A02**	EN 17892;	EN 17892;	calculated;
LC0006	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A02**			
LC0011	**PFL01A02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01A02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A02**	LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	additional method details (citation here: sample preparation method SPE or DI)	dry mass
LC0001	**PFL01B02**	SPE: no; centrifuge: n/a; filtration: yes; DI: yes; recovery correction: yes	EN 14346; A
LC0002	**PFL01B02**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no	EN ISO 11465;
LC0003	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0004	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0005	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 15934;
LC0006	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 12880;
LC0007	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN ISO 11465;
LC0008	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 15934;
LC0009	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: n/a; DI: no; recovery correction: yes	EN 14346;
LC0010	**PFL01B02**	SPE: yes; centrifuge: no; filtration: yes; DI: no; recovery correction: no	EN ISO 11465;
LC0011	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no	EN 12880;
LC0012	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes	EN ISO 11465;
LC0013	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 15934;
LC0014	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: no	EN 14346;
LC0015	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 14346;
LC0016	**PFL01B02**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no	DIN 38409-1;
LC0017	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes	EN 14346;
LC0018	**PFL01B02**	SPE: yes; centrifuge: yes; filtration: yes; DI: no; recovery correction: yes	EN 15934;
LC0019	**PFL01B02**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes	EN 14346;

LabCode	Sample	Perfluorobutanoic acid (PFBA) - PF4C	Perfluoropentanoic acid (PFPeA) - PF5C	Perfluorohexanoic acid (PFHxA) - PF6C	Perfluoroheptanoic acid (PFHpA) - PF7C
LC0001	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorooctanoic acid (PFOA) - PF8C	Perfluorononanoic acid (PFNA) - PF9C	Perfluorodecanoic acid (PFDA) - PF10C	Perfluoroundecanoic acid (PFUnDA) - PF11C
LC0001	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B02**	DIN 38407-42;	DIN 38407-42;		
LC0003	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecanoic acid (PFDoDA) - PF12C	Perfluorotridecanoic acid (PFTrDA) - PF13C	Perfluorobutane sulfonic acid (PFBS) - PF4S	Perfluoropentane sulfonic acid (PFPeS) - PF5S
LC0001	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B02**			DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**			DIN 38407-42;	
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;

LC0017	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	linear Perfluorohexane sulfonic acid (n-PFHxS)	Total PFHxS	Perfluoroheptane sulfonic acid (PFHpS) - PF7S	linear Perfluorooctane sulfonic acid (n-PFOS)
LC0001	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	
LC0002	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B02**		EN 17892;	EN 17892;	
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**		EN 17892;	EN 17892;	
LC0006	**PFL01B02**		LC-MS/MS;	LC-MS/MS;	
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01B02**		DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	
LC0015	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	
LC0016	**PFL01B02**		LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	
LC0018	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	
LC0019	**PFL01B02**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Total PFOS	Perfluorononane sulfonic acid (PFNS) - PF9S	Perfluorodecane sulfonic acid (PFDS) - PF10S	Perfluoroundecane sulfonic acid (PFUnDS) - PF11S
LC0001	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B02**	DIN 38407-42;			
LC0003	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**				
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS

LC0013	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B02**		DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecane sulfonic acid (PFDoS) - PF12S	Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	Sum PFAS
LC0001	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B02**			DIN 38407-42;
LC0003	**PFL01B02**	EN 17892;	EN 17892;	calculated;
LC0004	**PFL01B02**	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B02**	EN 17892;	EN 17892;	calculated;
LC0006	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B02**			
LC0011	**PFL01B02**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B02**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01B02**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B02**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B02**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	additional method details (citation here: sample preparation method SPE or DI)
LC0001	PFL01A10	SPE: no; centrifuge: n/a; filtration: yes; DI: yes; recovery correction: yes
LC0002	PFL01A10	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no
LC0003	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0004	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0005	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0006	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0007	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0008	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0009	PFL01A10	SPE: yes; centrifuge: yes; filtration: n/a; DI: no; recovery correction: yes
LC0010	PFL01A10	SPE: yes; centrifuge: no; filtration: yes; DI: no; recovery correction: no
LC0011	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0012	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes
LC0013	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0014	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: no
LC0015	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0016	PFL01A10	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no
LC0017	PFL01A10	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0018	PFL01A10	SPE: yes; centrifuge: yes; filtration: yes; DI: no; recovery correction: yes
LC0019	PFL01A10	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes

LabCode	Sample	Perfluorobutanoic acid (PFBA) - PF4C	Perfluoropentanoic acid (PFPeA) - PF5C	Perfluorohexanoic acid (PFHxA) - PF6C	Perfluoroheptanoic acid (PFHpA) - PF7C
LC0001	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	PFL01A10	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	PFL01A10	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	PFL01A10	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	PFL01A10	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	PFL01A10	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0011	PFL01A10	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	PFL01A10	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	PFL01A10	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	PFL01A10		LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorooctanoic acid (PFOA) - PF8C	Perfluorononanoic acid (PFNA) - PF9C	Perfluorodecanoic acid (PFDA) - PF10C	Perfluoroundecanoic acid (PFUnDA) - PF11C
LC0001	PFL01A10	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	PFL01A10	DIN 38407-42;	DIN 38407-42;		

LC0003	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	
LC0011	**PFL01A10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecanoic acid (PFDoDA) - PF12C	Perfluorotridecanoic acid (PFTrDA) - PF13C	Perfluorobutane sulfonic acid (PFBS) - PF4S	Perfluoropentane sulfonic acid (PFPeS) - PF5S
LC0001	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A10**			DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A10**			DIN 38407-42;	
LC0011	**PFL01A10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	linear Perfluorooctane sulfonic acid (n-PFOS)	Total PFHxS	Perfluoroheptane sulfonic acid (PFHpS) - PF7S	linear Perfluorohexane sulfonic acid (n-PFHxS)
LC0001	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	
LC0002	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01A10**		EN 17892;	EN 17892;	

LC0004	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A10**		EN 17892;	EN 17892;	
LC0006	**PFL01A10**		LC-MS/MS;	LC-MS/MS;	
LC0007	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A10**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01A10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01A10**		DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	
LC0015	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	
LC0016	**PFL01A10**		LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	
LC0018	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	
LC0019	**PFL01A10**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Total PFOS	Perfluorononane sulfonic acid (PFNS) - PF9S	Perfluorodecane sulfonic acid (PFDS) - PF10S	Perfluoroundecane sulfonic acid (PFUnDS) - PF11S
LC0001	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A10**	DIN 38407-42;			
LC0003	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A10**				
LC0011	**PFL01A10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01A10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A10**		DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecane sulfonic acid (PFDoS) - PF12S	Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	Sum PFAS
LC0001	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01A10**			DIN 38407-42;
LC0003	**PFL01A10**	EN 17892;	EN 17892;	calculated;
LC0004	**PFL01A10**	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01A10**	EN 17892;	EN 17892;	calculated;

LC0006	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01A10**			
LC0011	**PFL01A10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01A10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01A10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01A10**	LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01A10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	additional method details (citation here: sample preparation method SPE or DI)
LC0001	**PFL01B10**	SPE: no; centrifuge: n/a; filtration: yes; DI: yes; recovery correction: yes
LC0002	**PFL01B10**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no
LC0003	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0004	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0005	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0006	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0007	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0008	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0009	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: n/a; DI: no; recovery correction: yes
LC0010	**PFL01B10**	SPE: yes; centrifuge: no; filtration: yes; DI: no; recovery correction: no
LC0011	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: no
LC0012	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes
LC0013	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0014	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: no
LC0015	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0016	**PFL01B10**	SPE: no; centrifuge: yes; filtration: yes; DI: yes; recovery correction: no
LC0017	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: no; DI: no; recovery correction: yes
LC0018	**PFL01B10**	SPE: yes; centrifuge: yes; filtration: yes; DI: no; recovery correction: yes
LC0019	**PFL01B10**	SPE: no; centrifuge: yes; filtration: no; DI: yes; recovery correction: yes

LabCode	Sample	Perfluorobutanoic acid (PFBA) - PF4C	Perfluoropentanoic acid (PFPeA) - PF5C	Perfluorohexanoic acid (PFHxA) - PF6C	Perfluoroheptanoic acid (PFHpA) - PF7C
LC0001	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorooctanoic acid (PFOA) - PF8C	Perfluorononanoic acid (PFNA) - PF9C	Perfluorodecanoic acid (PFDA) - PF10C	Perfluoroundecanoic acid (PFUnDA) - PF11C
LC0001	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B10**	DIN 38407-42;	DIN 38407-42;		
LC0003	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecanoic acid (PFDoDA) - PF12C	Perfluorotridecanoic acid (PFTrDA) - PF13C	Perfluorobutane sulfonic acid (PFBS) - PF4S	Perfluoropentane sulfonic acid (PFPeS) - PF5S
LC0001	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B10**			DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**			DIN 38407-42;	
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;

LC0017	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	linear Perfluorooctane sulfonic acid (n-PFOS)	Total PFHxS	Perfluoroheptane sulfonic acid (PFHpS) - PF7S	linear Perfluorohexane sulfonic acid (n-PFHxS)
LC0001	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	
LC0002	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0003	**PFL01B10**		EN 17892;	EN 17892;	
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**		EN 17892;	EN 17892;	
LC0006	**PFL01B10**		LC-MS/MS;	LC-MS/MS;	
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01B10**		DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	
LC0015	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	
LC0016	**PFL01B10**		LC-MS/MS;	LC-MS/MS;	
LC0017	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	
LC0018	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	
LC0019	**PFL01B10**	DIN 38407-42;		DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Total PFOS	Perfluorononane sulfonic acid (PFNS) - PF9S	Perfluorodecane sulfonic acid (PFDS) - PF10S	Perfluoroundecane sulfonic acid (PFUnDS) - PF11S
LC0001	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B10**	DIN 38407-42;			
LC0003	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;	EN 17892;
LC0006	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**				
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS

LC0013	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0014	**PFL01B10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B10**		DIN 38407-42;	DIN 38407-42;	DIN 38407-42;

LabCode	Sample	Perfluorododecane sulfonic acid (PFDoS) - PF12S	Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	Sum PFAS
LC0001	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0002	**PFL01B10**			DIN 38407-42;
LC0003	**PFL01B10**	EN 17892;	EN 17892;	calculated;
LC0004	**PFL01B10**	EN 17892;	EN 17892;	EN 17892;
LC0005	**PFL01B10**	EN 17892;	EN 17892;	calculated;
LC0006	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0007	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0008	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0009	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0010	**PFL01B10**			
LC0011	**PFL01B10**	LC-MS/MS direct;	LC-MS/MS direct;	LC-MS/MS direct;
LC0012	**PFL01B10**	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS	DIN 38407-42; LC-MS/MS
LC0013	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	
LC0014	**PFL01B10**	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42	DIN 38407-42; LC-MS/MS; F42
LC0015	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0016	**PFL01B10**	LC-MS/MS;	LC-MS/MS;	LC-MS/MS;
LC0017	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0018	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;
LC0019	**PFL01B10**	DIN 38407-42;	DIN 38407-42;	DIN 38407-42;