

Worldwide open Proficiency Test for nuclear and related analytical techniques laboratories

PTNATIAEA22

**Determination of major, minor and
trace elements in a clay sample and
in a plant sample**

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FOREWORD

The IAEA assists its Member States laboratories to continuously improve their analytical performance by producing reference materials, by developing standardized analytical methods, and by conducting interlaboratory comparisons and proficiency tests. To ensure a reliable worldwide, rapid and consistent response, the IAEA Nuclear Science and Instrumentation Laboratory in Seibersdorf, Austria, coordinates proficiency tests for Member States laboratories.

This summary report presents the results of the worldwide proficiency test PTNATIAEA22 on the determination of major, minor and trace elements in a clay sample and in a plant sample. Methodologies, statistical analysis, and evaluation of results (for each element and for each laboratory) are also reported. The test was carried out within the IAEA project Nuclear Instrumentation, under the Accelerators and Nuclear Spectrometry Subprogram, Nuclear Science Program. The main objective of the project is to enhance capability of interested Member States in effective utilization of nuclear spectrometry and analytical services in agriculture, monitoring an evaluation of the environment and other disciplines.

This proficiency test was designed to identify potential analytical problems, to support IAEA Member States laboratories to improve the quality of their analytical results, to maintain their accreditation and to provide a regular forum for discussion and technology transfer in this topic.

The coordinator of the proficiency test and responsible for this publication was Mr. A. Migliori of the IAEA Nuclear Science and Instrumentation Laboratory, Department of Nuclear Sciences and Applications. The IAEA acknowledges the valuable contribution of the international expert Mr. P. Bode (Netherlands). Acknowledgments go also to Mr. M. Klausz (Hungary) for the maintenance and upgrades to the PT-NSIL website.

1. INTRODUCTION

The PTNATIAEA22 proficiency test was aimed at nuclear and related analytical techniques laboratories. The participants were requested to use their established and proven analytical procedures for the determination of major, minor and trace elements in a clay sample and in a plant sample.

Clay samples and plant samples with ascertained homogeneity and well characterized known target values of the mass fractions of measurands (e.g., chemical elements) were distributed to the laboratories that accepted the invitation to the test. The laboratories were requested to analyse the samples using established techniques following their analytical procedures. Based on the results of the proficiency test presented in this report, each participating laboratory should assess its analytical performance by using the specified criteria, to identify potential discrepancies, and to correct relevant analytical procedures.

The proficiency test was announced on 24 February 2025. The clay samples and plant samples were distributed to the participating laboratories by the end of April 2025. The deadline for submission of the results was 31 October 2025; the deadline was then postponed one week, to 7 November 2025 following the request of some of the participating laboratories. The proficiency test was implemented exploiting a web based platform [1] to facilitate and improve the processes and actions required for the organization and functionality of the test for the participants and the coordinator. Detailed instructions for analysts were also available on the website.

The previous PTNATIAEA tests were already organized according to the recommendations stated in the ISO/IEC 17043:2010 “Conformity assessment – General requirements for proficiency testing” [2]; the current test followed the updated version of this standard, ISO/IEC 17043:2023. For what concerns the statistical methods for data treatment, the procedures applied in this test adhere to the recommendations reported in the ISO 13528:2022 “Statistical methods for use in proficiency testing by interlaboratory comparison” [3].

The submitted results were processed, grouped versus measurands/participants and compared with the measurand’s assigned values, that were based on either the values of the mass fractions certified by the external provider of the proficiency test items or the consensus values of the participants’ results (when no assigned value from the external provider was available and the distribution of results justified considering the consensus value as the assigned one). In some cases the determination of consensus values from participants’ results was not feasible.

The values of z - or z' -score as well as *zeta*-scores and R -scores were calculated on basis of the assigned values. For the definitions of the z -, z' -, *zeta*- and R -scores please see Section 3.4.

The obtained results as well as the description of the data evaluation procedures are illustrated in this report. Each laboratory was assigned a code, the link between the laboratory code and the laboratory name is known only to the organizers of the proficiency test and to the laboratory itself. Therefore, full anonymity of the presented results is guaranteed.

2. DESCRIPTION OF THE TEST SAMPLE

The test materials were a clay sample and a plant sample prepared and tested by external providers through an independent interlaboratory survey. The powdered, homogenized, and dried materials were distributed to 124 participants in plastic bottles (PPCO with PP screw cap, very good chemical resistance¹), each containing around 10 grams of the clay sample and around 7.5 grams of the plant sample. The participants were asked to conduct the determination of the mass fractions of chemical elements constituting the samples according to their routine analytical procedures. They were also instructed to determine the moisture content of the material by using a separate sample and to report the results on a dry-weight basis. Only one result per element could be submitted and each result should have been accompanied by an estimate of its uncertainty expressed as one standard deviation. No restriction on the number of the reported elements was imposed.

3. DETAILS OF THE PROFICIENCY TEST

3.1. TERMS AND DEFINITIONS OF PARAMETERS USED IN THE TEST

Terminology and symbols are defined by ISO 13528:2022. The most important are reported below, and are, where appropriate, clarified for the PTNATIAEA test.

assigned value x_{pt} : is the value attributed to a particular property of the PTNATIAEA proficiency test item (in the case of this test, the elemental mass fraction). Assigned values x_{pt} can be obtained by formulation (i.e., by mixing materials with different known levels of a property in specified proportions, or by adding a specified proportion of a substance to a base material), using a certified reference material, as results from one laboratory, as consensus values from expert laboratories or as consensus values from participant results.

In the case of this test, assigned values were available as the ones certified by the external provider of the proficiency test items through an independent interlaboratory survey organized by the external provider itself. When not available, for some elements they could be determined as consensus values of the results of the participants in the PTNATIAEA test, through the application of robust statistic methods (see Section 3.2 for more details).

standard deviation of the assigned value SD : is the standard deviation of the certified property values, as declared by the external provider of the proficiency test items. When not available, it can be determined as standard deviation of the results of the participants in the PTNATIAEA test, through the application of robust statistic methods (s^* , see below).

uncertainty of the assigned value $u(x_{pt})$: is the combined standard uncertainty of the assigned value. It is composed of the following contributions:

$$u(x_{pt}) = \sqrt{u_{char}^2 + u_{hom}^2 + u_{trans}^2 + u_{stab}^2} \quad (1)$$

¹ PPCO: Polypropylene Copolymer; PP: Polypropylene.

Where u_{char} is the uncertainty due to characterization, u_{hom} is related to the homogeneity between items (covering both the between-bottle and within-bottle inhomogeneity), u_{trans} is due to instability under transport conditions and u_{stab} is related to the stability of the material in the period during the test.

Typically, the first one, u_{char} , is obtained from the external provider of the proficiency test items. The value may sometimes already include estimates of the other contributions to the uncertainty of the assigned value, especially u_{hom} and u_{stab} . If the external provider has characterized its material on the basis of its independent interlaboratory study, it is assumed that the standard deviation SD of the certified property values cover u_{hom} , u_{trans} and u_{stab} . If the property values have been declared as “certified” by the external provider, obtained through such an independent interlaboratory survey, $u(x_{pt})$ is determined as the standard deviation of the mean, i.e., the standard deviation of the certified property value SD divided by the square root of the number N of participants in that interlaboratory survey that were accounted for in establishing the certified value: $u(x_{pt}) = SD/\sqrt{N}$.

When certified values are not available from the external provider of the proficiency test items, $u(x_{pt})$ can be obtained from the results of the participants of the proficiency test, through the application of robust statistic methods (see Section 3.2 for more details). The value of $u(x_{pt})$ is determined in this case as:

$$u(x_{pt}) = 1.25 \cdot \frac{s^*}{\sqrt{p}} \quad (2)$$

with s^* = participant standard deviation (see below) and p = number of results for that element in this test.

consensus value x^* : is the value derived from a collection of results in the PTNATIAEA interlaboratory comparison. It is obtained from robust statistics of the submitted results (see Section 3.2 for more details). It can be used as assigned value for elements that are not certified by the external provider of the proficiency test items.

participant standard deviation s^* : is the estimate of the participant standard deviation derived from a collection of results in the PTNATIAEA interlaboratory comparison. It is obtained from robust statistics of the submitted results (see Section 3.2 for more details).

standard deviation for proficiency assessment σ_{pt} : is a measure of dispersion used in the evaluation of results of the PTNATIAEA proficiency testing. In the data treatment of this test, the standard deviation for proficiency assessment σ_{pt} is determined from the assigned values (either available from the external provider of the proficiency test items or obtained as consensus values from the submitted results) using a modified Horwitz function (σ_R), which is defined [3,4] as (please note that x_{pt} and σ_{pt} are considered as mass fractions [g/g]):

$$\sigma_{pt} = \sigma_R = \begin{cases} 0.22x_{pt} & \text{when } x_{pt} < 1.2 \cdot 10^{-7} \\ 0.02(x_{pt})^{0.8495} & \text{when } 1.2 \cdot 10^{-7} \leq x_{pt} \leq 0.138 \\ 0.01\sqrt{x_{pt}} & \text{when } x_{pt} > 0.138 \end{cases} \quad (3)$$

The relative value of the standard deviation for proficiency assessment ($\frac{\sigma_{pt}}{x_{pt}} \cdot 100$) as a function of the assigned mass fraction of the measurand, x_{pt} , is shown in Figure 1.

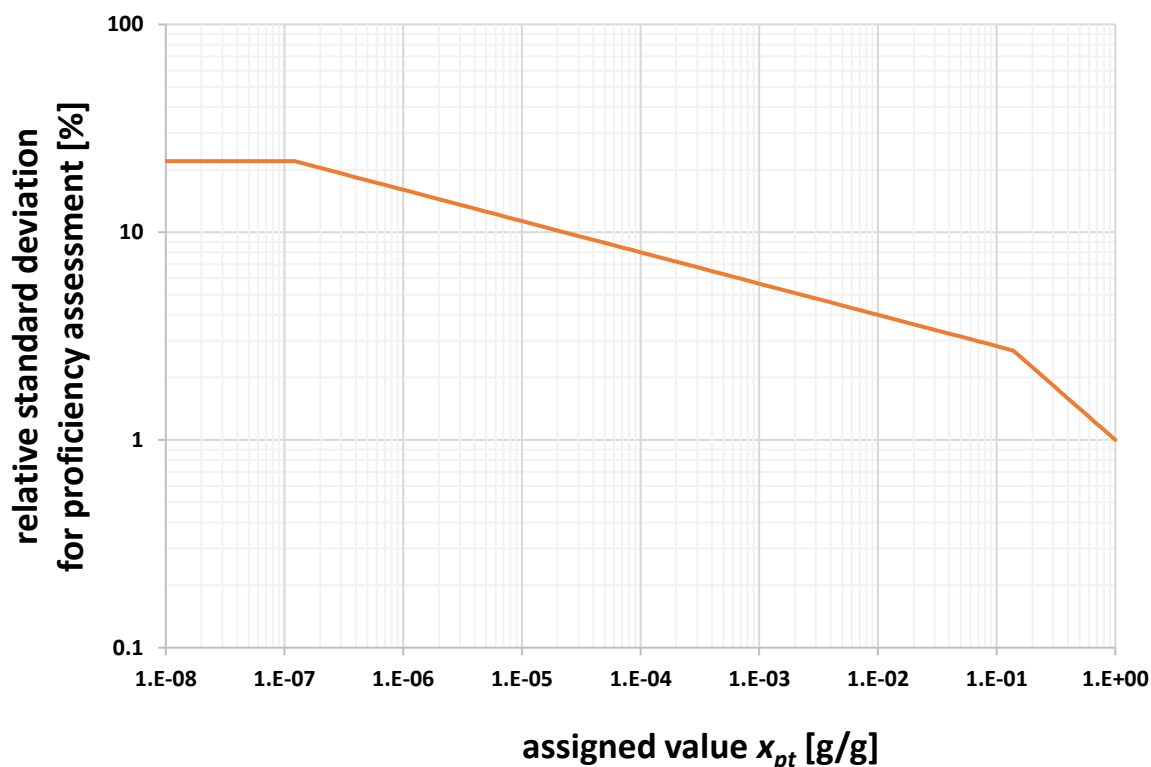


FIG. 1. Relative value of the standard deviation for proficiency assessment, as a function of the assigned mass fraction of the measurand, calculated by using a modified Horwitz function, Eqn. (3).

This approach gives a general model for the reproducibility of analytical methods. The Horwitz model is empirical, based on observations from collaborative trials of many parameters over an extended time period. The σ_R values are the expected upper limits of interlaboratory variability when the collaborative trial had no significant problems. Therefore, a comparison of σ_R with s^* gives indications about the variability of the results in the test. Furthermore, it is also worth comparing σ_R with the standard deviation SD of the distributions obtained by the external provider of the proficiency test items from its independent interlaboratory survey. Preferably, this standard deviation of the distribution should be of the same order of magnitude as σ_R .

3.2. ROBUST STATISTICS

No limits were set to the number of measurands (chemical element) to be reported. Participants were asked to report only one measurement value for each measurand, also if they have made measurements in replicates.

After receiving the results from the participants, the median of the distribution was determined for every element. Those results that differed more than an order of magnitude from the median were considered as “blunder outliers” (later on, “blunders”) and were not further considered in the application of robust statistics.

For those elements having 5 or more reported valid (i.e., “no-blunder”) results, the consensus values x^* and the participant standard deviations s^* were determined using the Algorithm A approach of the ISO 13528:2022, described below.

The results submitted (total number $p \geq 5$) are sorted into increasing order:

$$x_1, x_2, \dots, x_p$$

the initial values of robust average and robust standard deviation of these data are denoted by x_I^* and s_I^* , respectively. They are determined from the set of p values as:

$$x_I^* = \text{median}$$

$$s_I^* = 1.483 \cdot \text{MAD} = \text{MADe}$$

where MAD is the median absolute deviation and MADe the scaled median absolute deviation. The following quantity is then defined:

$$\delta_I = 1.5 \cdot s_I^* \quad (4)$$

Each x_i is replaced by x'_i according to the rules below:

$$x'_i = \begin{cases} x_I^* - \delta_I & \text{when } x_i < x_I^* - \delta_I \\ x_I^* + \delta_I & \text{when } x_i > x_I^* + \delta_I \\ x_i & \text{otherwise} \end{cases} \quad (5)$$

The new values of robust average and robust standard deviation are denoted by x_{II}^* and s_{II}^* , respectively, and are determined as:

$$x_{II}^* = \frac{\sum_{i=1}^p x'_i}{p} \quad (6)$$

$$s_{II}^* = 1.134 \sqrt{\frac{\sum_{i=1}^p (x'_i - x_{II}^*)^2}{(p-1)}} \quad (7)$$

The final robust estimates are then derived by an iterative calculation, i.e., by updating the values of x^* and s^* several times using equations (4) to (7) until the process converges. Convergence is assumed when there is no change from one iteration to the next in the third significant figures of the robust mean and robust standard deviation. Those two quantities are finally considered as consensus value (x^*) and participant standard deviation (s^*) of the distribution.

The consensus value x^* and participant standard deviation s^* have not been determined if the number of valid submitted results was less than 5. It should be noted that, in case of assigned values based on certified values by the external provider, the z -, z' -, zeta - and R -scores were calculated independently by the number of results.

For elements without an assigned value from the external provider and for which the total number of submitted results – after blunders removal – was equal or above 5, the consensus values from the submitted results was considered as assigned value in case the distribution of results was not too broad. The latter condition was defined by a more objective method to assess such cases: the standard deviation of the distribution s^* was compared with the value $0.3 \cdot x^*$ and if $s^* \geq 0.3 \cdot x^*$, the consensus value was not considered as assigned value [5]. In such cases the results from the test were considered inconclusive. As stated below in Section 3.3, outliers were not calculated for these elements, whereas blunders were determined.

3.3. DETERMINATION OF OUTLIERS

As stated in the previous Section, blunders are those values that differ more than an order of magnitude from the median of the submitted results and are not further considered in the application of robust statistics.

Assigned values are the ones determined by the external provider of the proficiency test items or, when not available, those obtained through robust statistic methods as consensus values of the results of the participants (when the number of valid submitted results is at least 5 and the distribution of results is not too broad), as described in Sections 3.1 and 3.2. Outliers are defined as the values that differ more than 4.5 standard deviations from the assigned value. This means that for assigned values determined by the external provider of the proficiency test items, the standard deviation SD is the one declared by the external provider itself, so $(x_i)_{outlier-} < x_{pt} - 4.5 \cdot SD$ and $(x_i)_{outlier+} > x_{pt} + 4.5 \cdot SD$. For assigned values obtained through robust statistic methods as consensus values of the results of the participants, the value s^* is considered: $(x_i)_{outlier-} < x_{pt} - 4.5 \cdot s^*$ and $(x_i)_{outlier+} > x_{pt} + 4.5 \cdot s^*$.

Please note that outliers, differently from the blunders, are taken into account for the determination of x^* and s^* through robust statistics. Since removal of blunders may still lead to a multi-modal distribution of the remaining results of some elements, also the values of x^* and s^* after outlier removal are shown for every element, in order to get indications on how deeply outliers affect the results of robust statistics (see Table 3).

Outliers were not calculated for those elements having at least 5 valid (no-blunder) results and for which the assigned values were neither determined by the external provider of the proficiency test items nor calculated from the submitted results (see Section 4). In such cases, only blunders were determined.

3.4. PERFORMANCE INDICATORS

All reported mass fractions of measurands (including those identified as blunders and outliers) were compared with the assigned values, when available (see Section 3.1) by using different performance indicators.

In case $u(x_{pt}) \leq 0.3\sigma_{pt}$, for every result a z -score was calculated, defined as:

$$z_i = \frac{(x_i - x_{pt})}{\sigma_{pt}} \quad (8)$$

in which the term x_i denotes the reported mass fraction of the measurand. The z -scores show how many standard deviations of the expected distribution the reported value deviates from the assigned value.

If $u(x_{pt}) > 0.3\sigma_{pt}$, for every result a z' -score was instead calculated, defined as:

$$z'_i = \frac{(x_i - x_{pt})}{\sqrt{\sigma_{pt}^2 + u^2(x_{pt})}} \quad (9)$$

The conventional interpretation of z - or z' -scores is as follows (see also ISO/IEC 17043:2023, B.4.1.1):

- $|z, z'| \leq 2$ the result is considered acceptable
- $2 < |z, z'| < 3$ the result is considered to give a warning signal
- $|z, z'| \geq 3$ the result is considered unacceptable (or to give an action signal)

Generally speaking, any z - or z' -score for an element outside the range $|z, z'| \leq 2$ should be examined by the analyst and all steps of the analytical procedure verified to identify the source(s) of the analytical bias.

The reported results were accompanied by the standard uncertainty estimate made by the participant. These values were used to calculate the *zeta*-scores:

$$\zeta_i = \frac{x_i - x_{pt}}{\sqrt{u^2(x_i) + u^2(x_{pt})}} \quad (10)$$

Where $u(x_i)$ is the participant's own estimate of the standard uncertainty of its result x_i . The *zeta*-scores show how far from the assigned value is the reported value taking into account both uncertainties. Please note that this definition differs from the one of u -scores, as for *zeta*-scores $u(x_{pt})$ replaces σ_{pt} . In principle, the same interpretation as described in the above for the z - and z' -scores may be applied to *zeta*-scores.

In order to provide a performance indicator having an easier and more intuitive interpretation than z - and z' -scores, the values of the ratios R_i are also reported:

$$R_i = \frac{x_i}{x_{pt}} \quad (11)$$

Although this parameter is not defined and included in the ISO 13528:2022, its values can provide to the participant an additional feedback on the data submitted.

4. RESULTS

The invitation to participate to the proficiency test PTNATIAEA22 was accepted by 124 laboratories, out of the which, 101 (from 60 Member States) participated in the test by submitting in total 2014 and 1315 individual results for 67 and 61 chemical elements for the clay sample and the plant sample, respectively. All submitted results have been evaluated. The list of the participating laboratories is presented at the end of this report.

When uploading their results, participants were asked first to select which technique was used for sample preparation and analysis from a list of options. In principle, a participant could submit results obtained with different techniques for different elements. The analytical techniques used by the participants, their codes and abbreviations and corresponding number of results are listed in Table 1.

Figures 2 and 3 show the proportion of results submitted according to the analytical techniques used for the clay sample and the plant sample, respectively. Most of the analyses were carried out either by Neutron Activation Analysis (50.3% and 44.2%, reddish shades) or by X-Ray Fluorescence spectrometry (39.3% and 42.1%, bluish shades). Particle Induced X-ray Emission results account for 0.8% and 0.4% of the total number of results (yellowish shades), Atomic Absorption Spectrometry techniques for 2.3% and 1.8% (greenish shades), Inductively Coupled Plasma Spectrometry techniques for 6.6% and 10.6% (brownish shades) and X-ray microprobe attached to Scanning Electron Microscope for 0.5% and 0.2% (purple shades).

TABLE 1. THE CODING, DESCRIPTION AND THE ABBREVIATED NAMES OF THE ANALYTICAL TECHNIQUES USED BY PARTICIPANTS OF THE PROFICIENCY TEST AND THEIR CORRESPONDING NUMBER OF RESULTS.

Code	Description	Abbreviation	Results	Blunders	Percent	Outliers	Percent	Results	Blunders	Percent	Outliers	Percent
			Clay sample					Plant sample				
1.0	Energy dispersive X-ray fluorescence	EDXRF	202	19	9.4	56	27.7	154	35	22.7	48	31.2
1.1	EDXRF, radioisotope excitation	EDXRF-ISO						10	1	10.0	1	10.0
1.11	EDXRF, radioisotope excitation, ²⁴¹ Am	EDXRFISO-AM	4	-	-	-	-	2	1	50.0	-	-
1.13	EDXRF, radioisotope excitation, ¹⁰⁹ Cd	EDXRFISO-CD	13	-	-	2	15.4					
1.16	EDXRF, radioisotope excitation and secondary targets	EDXRFISO-ST	28	-	-	3	10.7					
1.2	EDXRF, X-ray tube excitation	EDXRFTUBE	10	-	-	3	30.0	9	1	11.1	1	11.1
1.21	EDXRF, X-ray tube direct excitation	EDXRFTUBE-DIRECT	62	3	4.8	29	46.8	20	-	-	6	30.0
1.22	EDXRF, X-ray tube and filter	EDXRFTUBE-FILTERS	75	3	4.0	17	22.7	48	1	2.1	10	20.8
1.23	EDXRF, X-ray tube and secondary targets	EDXRFTUBE-ST	13	-	-	5	38.5	33	-	-	6	18.2
1.3	Total reflection X-ray fluorescence	TXRF	86	16	18.6	32	37.2	108	1	0.9	15	13.9
1.32	TXRF with monochromator	TXRF-MON	70	6	8.6	21	30.0	25	-	-	3	12.0
1.4	EDXR, Synchrotron beam	SXRF	18	-	-	3	16.7	15	-	-	1	6.7
1.51	Micro-XRF, x-ray tube and focusing lens	uXRF-LNS	31	1	3.2	16	51.6	28	2	7.1	8	28.6
2.0	Wavelength dispersive X-ray fluorescence	WDXRF	180	4	2.2	53	29.4	101	16	15.8	33	32.7
3.0	X-ray microprobe attached to Scanning Electron Microscope	SEM-EDS	11	-	-	7	63.6	11	1	9.1	6	54.5
4.2	PIXE, vacuum chamber	PIXE-VAC	10	-	-	6	60.0					
4.32	Micro-PIXE, vacuum chamber	uPIXE-VAC	6	-	-	5	83.3	5	-	-	5	100.0

Code	Description	Abbreviation	Results	Blunders	Percent	Outliers	Percent	Results	Blunders	Percent	Outliers	Percent
			Clay sample					Plant sample				
5.0	Neutron Activation Analysis	NAA	285	3	1.1	16	5.6	161	5	3.1	12	7.5
5.1	k0 Neutron Activation Analysis	k0 NAA	441	5	1.1	11	2.5	257	4	1.6	10	3.9
5.2	Neutron Activation Analysis using comparators or reference materials for calibration	CNAA	277	7	2.5	22	7.9	157	5	3.2	10	6.4
5.4	Prompt Gamma Ray Activation Analysis	PGAA	10	-	-	-	-	6	-	-	-	-
6.0	Atomic absorption spectroscopy	AAS	19	2	10.5	1	5.3	1	-	-	-	-
6.1	Flame AAS	FAAS	18	-	-	4	22.2	19	2	10.5	4	21.1
6.2	Graphite furnace- AAS	GFAAS	7	1	14.3	1	14.3	4	-	-	1	25.0
6.3	Hydride generation AAS	HGAAS	1	-	-	-	-					
6.4	Cold vapor AAS	CVAAS	2	-	-	1	50.0					
7.1	ICP - optical emission spectrometry	ICP-OES	49	4	8.2	6	12.2	50	7	14.0	2	4.0
7.2	Inductively Coupled Plasma Mass Spectrometry	ICP-MS	83	1	1.2	6	7.2	89	3	3.4	-	-
10.0	Other analytical technique	OTHER	3	-	-	-	-	2	-	-	-	-

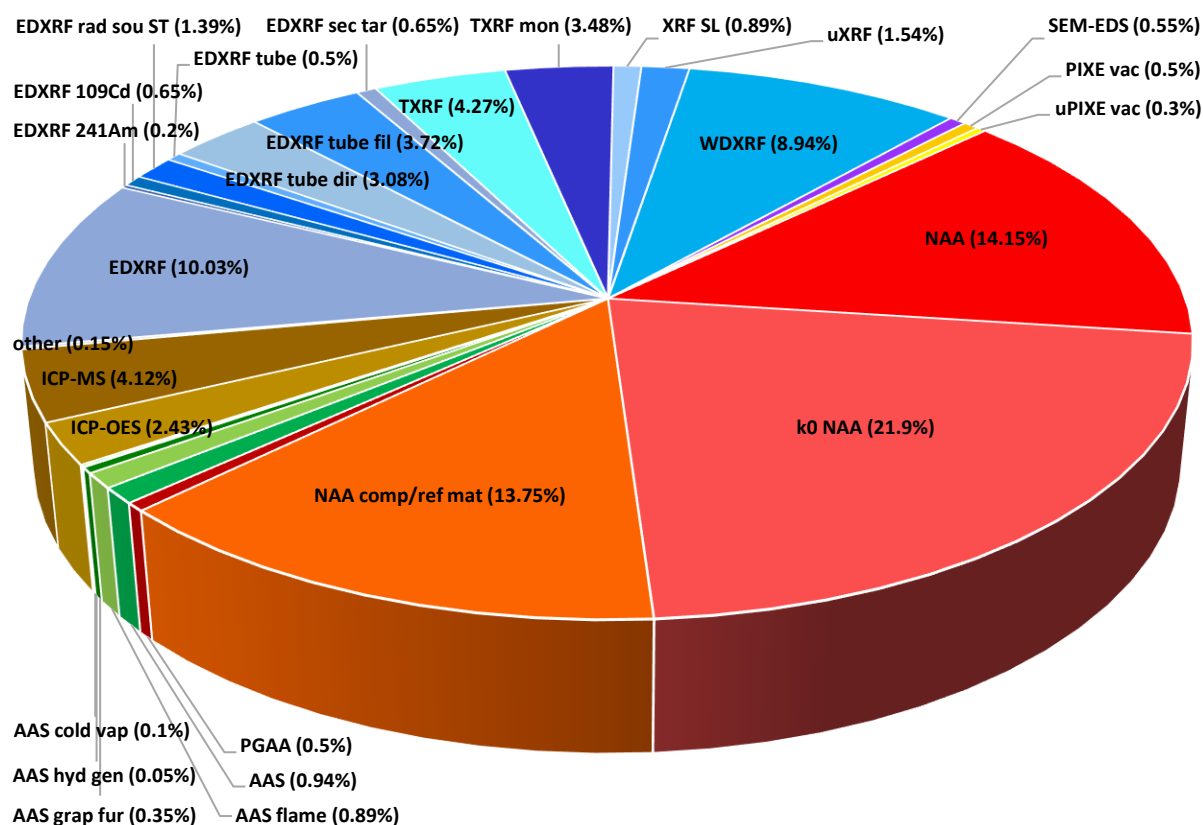


FIG. 2. Utilization of analytical techniques for the clay sample. For each analytical technique the number of submitted results is shown. The percent values relate to the total number of 2014 submitted results.

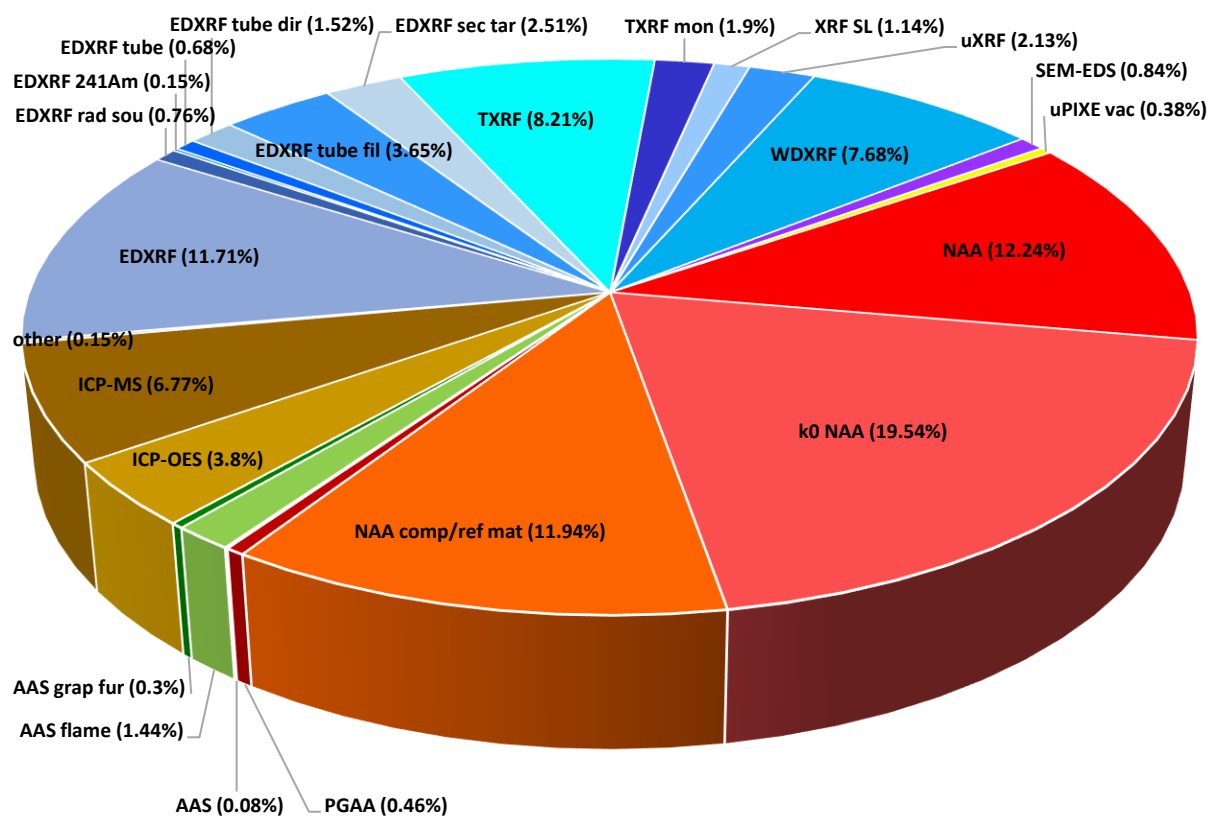


FIG. 3. Utilization of analytical techniques for the plant sample. For each analytical technique the number of submitted results is shown. The percent values relate to the total number of 1315 submitted results.

For the clay sample, assigned (“certified”) values by the external provider of the proficiency test items were available for 25 (26 including also nitrogen, which wasn’t reported by any laboratory) of the 67 elements reported by the participants; for the plant samples, such assigned (certified) values were available for 29 (30 including also iodine, that wasn’t reported by any laboratory) of the 61 elements reported by the participants. In addition, the external provider made available indicative values for 15 elements in the clay sample and 7 in the plant sample. These indicative values were not considered as assigned values for the test and are reported in brackets in Tables 2 and 3.

In the case of the clay sample, for 17 elements (As, Br, Cs, Dy, Eu, Hf, I, Lu, Nd, Sb, Sc, Sm, Ta, Tb, Th, W, Yb) the consensus values from the submitted results was considered as assigned value; for the plant sample, for 3 elements (Br, La, Sc) the consensus value was considered as assigned value. These elements are reported in italic type in the tables.

For both samples, if the distribution of results was too broad, according to the rule mentioned in Section 3.2, the assigned value could not be determined from the consensus value with a sufficient level of confidence. Nevertheless, for all elements having at least 5 valid results, the consensus value of all results as well as the ones obtained separately by all XRF laboratories and all NAA laboratories are shown individually (Tables 3a and 3b), allowing for a self-assessment of performance.

All the data submitted by the participants and those obtained from the external provider of the proficiency test items are reported with the original number of significant digits. Data calculated by our system (x^* , s^* , $u(x_{pt})$, σ_{pt}) were processed keeping significant digits up to the third one after the decimal point, but, for reporting in the tables, were subsequently rounded to the greatest decimal unit (...10, 1, 0.1, 0.01...) which doesn’t exceed half of the value of the corresponding uncertainty (for x^* the value $1.25 \cdot s^* / \sqrt{p}$ was used) [6]. The values of z , z' , $zeta$ were processed keeping significant digits up to the third one after the decimal point, but in the tables are shown up to the first digit after the decimal point. The same approach was used for the R -scores, but these were finally reported in the tables up to the second digit after the decimal point. The performance indicators could therefore be very slightly affected when calculated using the rounded data reported in the tables.

For every element the following parameters are reported in Tables 2a and 2b for the clay sample and the plant sample, respectively:

- Certified property value from the external provider of the proficiency test items. In this column also the indicative values from the external provider are reported in brackets
- Standard deviation SD from the external provider (only for the plant sample)
- Consensus value x^*
- Participant standard deviation s^*
- Assigned value x_{pt} . This is the certified property value from external provider or the consensus values x^* of the submitted results, when the distribution of data is good enough to justify the procedure (see Section 3.2). When x^* was considered as x_{pt} , the data are reported in italic type
- Uncertainty of the assigned value $u(x_{pt})$
- Standard deviation for proficiency assessment σ_{pt}
- Number of results

- Number of blunders
- Number of outliers

Please note that the values used for the determination of the performance indicator (equations (8), (9) and (10)) are x_{pt} , σ_{pt} and $u(x_{pt})$.

Tables 3a and 3b (clay sample and plant sample, respectively) show for every element the consensus value x^* and the participant standard deviation s^* , as obtained (after removal of blunders) from the whole set of results, after removing the outliers and similarly for XRF results only and for NAA results only. The values of x^* have been rounded to the correspondent value of uncertainty, determined as $1.25 \cdot s^* / \sqrt{p}$.

TABLE 2a. CERTIFIED (PROVIDER) VALUES OF MEASURANDS, CONSENSUS VALUES, PROFICIENCY TEST PARAMETERS, TOTAL NUMBER OF RESULTS, NUMBER OF BLUNDERS AND NUMBER OF OUTLIERS FOR THE CLAY SAMPLE.

Measurand symbol	Value from external provider	SD from external provider	x^*	s^*	x_{pt}	$u(x_{pt})$	σ_{pt}	Number of results	Number of blunders	Number of outliers
[%]										
Al	1.63	0.054	1.90	0.7	1.63	0.008	0.06	62	1	34
C	6.87	0.189	-	-	6.87	0.03	0.2	3	0	0
Ca	22.1	0.76	23.3	5	22.1	0.12	0.5	75	2	31
Fe	0.848	0.054	0.86	0.15	0.848	0.008	0.04	90	4	21
K	0.599	0.03	0.65	0.2	0.599	0.005	0.03	83	2	31
Mg	0.486	0.053	0.59	0.20	0.486	0.008	0.02	50	1	12
Na	0.134	0.018	0.139	0.02	0.134	0.003	0.007	54	0	6
Si	17	0.71	13.6	5	17	0.13	0.4	39	1	25
[mg/kg]										
Ag	-	-	-	-	-	-	-	4	0	0
As	(6.76)	(1.834)	7.1	1.7	7.1	0.3	0.9	60	2	5
B	-	-	-	-	-	-	-	1	0	0
Ba	159	17.6	152	40	159	3	12	53	0	9
Be	(0.696)	(0.2285)	-	-	-	-	-	1	0	0
Bi	-	-	-	-	-	-	-	2	0	0
Br	(6.51)	(0.599)	6.2	1.0	6.2	0.2	0.8	40	1	2
Cd	(0.0738)	(0.0317)	5	6	-	-	-	8	2	0
Ce	31.4	4.76	27.8	5	31.4	1.2	3	42	0	3
Cl	-	-	170	120	-	-	-	19	0	0
Co	3.68	0.464	4.03	0.6	3.68	0.09	0.5	45	2	5
Cr	19	2.95	24	13	19	0.5	2.0	62	1	17
Cs	(1.94)	(0.941)	2.23	0.3	2.23	0.05	0.3	37	0	1
Cu	(5.01)	(1.777)	7.8	5	-	-	-	35	4	0
Dy	-	-	1.81	0.5	1.81	0.16	0.3	14	0	0
Eu	-	-	0.440	0.06	0.440	0.014	0.08	32	1	3
Ga	(4.99)	(1.484)	4.5	1.8	-	-	-	22	2	0
Gd	-	-	-	-	-	-	-	5	1	0
Hf	-	-	4.46	0.6	4.46	0.13	0.6	31	2	0
Ho	-	-	-	-	-	-	-	3	0	0
I	(11.6)	(0.70)	12.2	2.0	12.2	0.9	1.3	8	1	0
La	15.5	3.5	13.4	2	15.5	0.8	1.6	46	1	1
Li	-	-	-	-	-	-	-	4	0	0
Lu	-	-	0.169	0.05	0.169	0.013	0.04	24	1	0
Mn	79.4	9.25	83	30	79.4	1.4	7	75	2	15

Measurand symbol	Value from external provider	SD from external provider	x^*	s^*	x_{pt}	$u(x_{pt})$	σ_{pt}	Number of results	Number of bunders	Number of outliers
Mo	0.477	0.076	2.2	1.8	0.477	0.019	0.09	9	1	6
Nb	(4.78)	(2.054)	5.0	1.9	-	-	-	9	2	0
Nd	(12.8)	(3.81)	13.1	3	13.1	0.7	1.4	29	0	2
Ni	(8.12)	(2.264)	16	14	-	-	-	31	2	0
P	162	21.8	320	200	162	4	12	25	4	10
Pb	7.46	1.703	10.0	6	7.46	0.3	0.9	34	2	5
Pd	-	-	-	-	-	-	-	1	0	0
Pr	-	-	2.9	1.6	-	-	-	5	0	0
Rb	31.6	2.47	32.4	5	31.6	0.5	3	73	1	9
Ru	-	-	-	-	-	-	-	1	0	0
S	(444)	(197.9)	730	300	-	-	-	28	0	0
Sb	(0.736)	(0.1974)	0.82	0.15	0.82	0.03	0.14	36	3	5
Sc	-	-	2.54	0.2	2.54	0.04	0.4	44	5	4
Se	-	-	1.6	1.7	-	-	-	8	2	0
Sm	-	-	2.34	0.3	2.34	0.08	0.3	31	0	1
Sn	-	-	1.6	1.5	-	-	-	8	3	0
Sr	588	31.6	604	90	588	6	40	72	3	12
Ta	-	-	0.43	0.10	0.43	0.03	0.08	25	0	0
Tb	-	-	0.313	0.08	0.313	0.019	0.06	25	1	1
Te	-	-	-	-	-	-	-	2	0	0
Th	(4.83)	(0.656)	4.72	0.7	4.72	0.13	0.6	44	1	0
Ti	1390	88	1310	400	1390	15	70	64	3	21
Tl	-	-	-	-	-	-	-	3	0	0
Tm	-	-	-	-	-	-	-	4	0	0
U	(1.31)	(0.252)	1.44	0.5	-	-	-	38	0	0
V	20.2	3.25	22.3	7	20.2	0.5	2	48	2	7
W	-	-	0.92	0.2	0.92	0.08	0.15	17	1	0
Y	9.25	1.492	12.5	6	9.25	0.4	1.1	15	0	4
Yb	-	-	1.04	0.19	1.04	0.05	0.17	27	0	1
Zn	17	3.15	20.7	7	17	0.5	1.8	71	2	10
Zr	164	24.4	175	50	164	5	12	46	1	4
[ug/kg]										
Au	-	-	-	-	-	-	-	2	0	0
Hg	7.2	1	10.1	4	7.2	0.2	1.6	9	2	3
Ir	-	-	-	-	-	-	-	1	0	0

TABLE 2b. CERTIFIED (PROVIDER) VALUES OF MEASURANDS, CONSENSUS VALUES, PROFICIENCY TEST PARAMETERS, TOTAL NUMBER OF RESULTS, NUMBER OF BLUNDERS AND NUMBER OF OUTLIERS FOR THE PLANT SAMPLE.

Measurand symbol	Value from external provider	SD from external provider	x^*	s^*	x_{pt}	$u(x_{pt})$	σ_{pt}	Number of results	Number of blunders	Number of outliers
[%]										
C	38	1.22	-	-	38	0.09	0.6	3	0	0
Ca	0.326	0.034	0.341	0.07	0.326	0.001	0.015	70	3	11
Cl	0.415	0.032	0.41	0.11	0.415	0.003	0.019	42	2	10
K	1.6	0.172	1.66	0.3	1.6	0.007	0.06	80	3	11
Mg	0.115	0.013	0.136	0.04	0.115	0.001	0.006	42	1	9
N	0.959	0.059	-	-	0.959	0.004	0.04	1	0	0
Si	7.601	0.571	10.0	5	7.601	0.17	0.2	26	3	10
[mg/kg]										
Al	119	35.7	360	300	119	5	9	42	5	18
As	1.565	0.255	1.64	0.3	1.565	0.02	0.2	49	1	4
B	11.8	3.93	-	-	11.8	0.2	1.3	3	0	0
Ba	24.5	1.85	24.6	4	24.5	0.3	2	33	0	6
Cr	9.661	3.433	12.1	4	9.661	0.3	1.1	60	2	1
Cu	2.94	0.718	4.5	3	2.94	0.03	0.4	35	5	9
Fe	176	30.2	214	50	176	1.4	13	77	4	8
Li	(0.0917)	(0.0236)	-	-	-	-	-	1	0	0
Mn	342	47.8	363	70	342	2	20	73	3	9
Mo	2.215	0.393	2.5	0.7	2.215	0.03	0.3	14	1	0
Na	84	23.2	96	20	84	1.4	7	44	1	4
Ni	6.215	1.626	6.9	3	6.215	0.15	0.8	34	3	2
P	785	72	870	400	785	3	50	28	3	9
Rb	15.481	1.22	15.6	2	15.481	0.3	1.6	62	2	9
S	816	82	1020	500	816	5	50	25	1	10
Sr	12.4	1.03	14.0	4	12.4	0.14	1.4	57	4	14
Ti	(6.95)	(1.90)	16	11	-	-	-	22	1	0
Zn	17.1	3.1	18.8	4	17.1	0.14	1.8	70	4	6
[ug/kg]										
Ag	-	-	-	-	-	-	-	1	0	0
Bi	-	-	-	-	-	-	-	2	0	0
Br	(10600)	(3190)	9500	1600	9500	300	1100	49	6	1
Cd	(9.92)	(6.27)	-	-	-	-	-	5	3	0
Ce	-	-	130	70	-	-	-	12	2	0
Co	205	39.1	226	40	205	4	40	30	1	2

Measurand symbol	Value from external provider	SD from external provider	x^*	s^*	x_{pt}	$u(x_{pt})$	σ_{pt}	Number of results	Number of bunders	Number of outliers
Cs	56.2	5.7	60	8	56.2	1.8	12	20	0	0
Dy	-	-	-	-	-	-	-	2	0	0
Er	-	-	-	-	-	-	-	1	0	0
Eu	-	-	3.9	1.4	-	-	-	9	0	0
Ga	(38.5)	(8.42)	-	-	-	-	-	4	0	0
Gd	-	-	-	-	-	-	-	2	0	0
Hf	-	-	8.9	3	-	-	-	8	1	0
Hg	626	54	490	300	626	6	110	14	0	5
Ho	-	-	-	-	-	-	-	1	0	0
<i>La</i>	-	-	<i>51</i>	<i>11</i>	<i>51</i>	<i>3</i>	<i>11</i>	25	2	<i>1</i>
Lu	-	-	-	-	-	-	-	2	0	0
Nd	-	-	-	-	-	-	-	3	0	0
Pb	336	125	1500	1100	336	11	60	14	3	7
Pr	-	-	-	-	-	-	-	1	0	0
Ru	-	-	-	-	-	-	-	1	0	0
Sb	(5.98)	(6.62)	19	10	-	-	-	13	4	0
<i>Sc</i>	-	-	<i>42</i>	<i>9</i>	<i>42</i>	<i>2</i>	<i>9</i>	<i>30</i>	<i>2</i>	<i>1</i>
Se	35.4	11.7	-	-	35.4	1.6	8	3	0	0
Sm	-	-	10	3	-	-	-	19	2	0
Sn	(36.4)	(32.7)	-	-	-	-	-	3	0	0
Te	-	-	-	-	-	-	-	1	0	0
Th	-	-	17	7	-	-	-	14	4	0
Tl	-	-	-	-	-	-	-	1	0	0
Tm	-	-	-	-	-	-	-	1	0	0
U	-	-	60	80	-	-	-	8	2	0
V	322	64.5	530	300	322	10	60	16	1	5
W	-	-	-	-	-	-	-	1	0	0
Y	-	-	-	-	-	-	-	2	0	0
Yb	-	-	-	-	-	-	-	2	0	0
Zr	-	-	-	-	-	-	-	2	0	0

TABLE 3a. CONSENSUS VALUE x^* AND PARTICIPANT STANDARD DEVIATION s^* FOR THE WHOLE SET OF RESULTS, AFTER REMOVING THE OUTLIERS AND ONLY FOR XRF RESULTS AND ONLY FOR NAA RESULTS (CLAY SAMPLE).

Measurand symbol	Value from external provider	SD from external provider	RESULTS AND ONE-STEP FOR MEASUREMENTS (CERT. SAMPLES)							
			Total		No outliers		XRF		NAA	
			x^*	s^*	x^*	s^*	x^*	s^*	x^*	s^*
[%]										
Al	1.63	0.054	1.90	0.7	1.66	0.1	2.1	0.9	1.71	0.20
C	6.87	0.189	-	-	-	-	-	-	-	-
Ca	22.1	0.76	23.3	5	21.7	1.6	25.9	7	20.4	2
Fe	0.848	0.054	0.86	0.15	0.846	0.08	0.86	0.3	0.867	0.06
K	0.599	0.03	0.65	0.2	0.597	0.06	0.70	0.3	0.608	0.06
Mg	0.486	0.053	0.59	0.20	0.53	0.11	0.62	0.16	0.57	0.2
Na	0.134	0.018	0.139	0.02	0.137	0.016	0.16	0.06	0.139	0.014
Si	17	0.71	13.6	5	16.8	1.3	13.5	5	-	-
[mg/kg]										
As	(6.76)	(1.834)	7.1	1.7	6.9	1.3	10	8	7.02	0.8
Ba	159	17.6	152	40	151	20	160	80	155	30
Br	(6.51)	(0.599)	6.2	1.1	6.22	1.0	6.7	4	6.22	0.7
Cd	(0.0738)	(0.0317)	5	6	5	6	-	-	-	-
Ce	31.4	4.76	27.8	5	27.5	4	29	10	27.7	5
Cl	-	-	170	120	130	70	270	200	84	10
Co	3.68	0.46	4.03	0.6	3.90	0.4	4.63	3.06	3.97	0.4
Cr	19	2.95	24	13	19.9	6	45.4	40	21.6	4
Cs	(1.94)	(0.941)	2.23	0.3	2.22	0.3	-	-	2.25	0.2
Cu	(5.01)	(1.777)	7.8	5	6.9	4	8.9	6	-	-
Dy	-	-	1.81	0.5	1.81	0.5	-	-	1.81	0.5
Eu	-	-	0.440	0.06	0.423	0.04	-	-	0.440	0.06
Ga	(4.99)	(1.484)	4.5	1.8	4.4	1.5	5.5	3	4.0	0.6
Hf	-	-	4.46	0.6	4.46	0.6	-	-	4.46	0.6
I	(11.6)	(0.70)	12.2	2.0	12.2	2.0	-	-	12.9	1.0
La	15.5	3.5	13.5	2	13.4	2.0	14	8	13.6	1.8
Lu	-	-	0.169	0.05	0.169	0.05	-	-	0.169	0.05
Mn	79.4	9.25	83	30	77	16	91	50	82.0	7
Mo	0.48	0.08	2.2	1.8	-	-	-	-	-	-
Nb	(4.78)	(2.054)	5.0	1.9	5.0	1.9	4.7	1.4	-	-
Nd	(12.8)	(3.81)	13.2	3	12.7	3	20	13	13.0	3
Ni	(8.12)	(2.264)	16	14	15	12	19	20	-	-
P	162	21.8	320	200	176	40	300	180	-	-
Pb	7.46	1.7	10.0	6	8.4	4	11.9	7	-	-

Measurand symbol	Value from external provider	SD from external provider	Total		No outliers		XRF		NAA	
			x^*	s^*	x^*	s^*	x^*	s^*	x^*	s^*
Pr	-	-	2.9	1.6	2.9	1.6	-	-	-	-
Rb	31.6	2.47	32.4	5	31.8	4	32.8	8	32.6	3
S	(444)	(197.9)	730	300	710	300	730	300	-	-
Sb	(0.736)	(0.1974)	0.82	0.15	0.770	0.07	-	-	0.80	0.11
Sc	-	-	2.54	0.2	2.54	0.18	-	-	2.53	0.19
Se	-	-	1.6	1.7	1.6	1.7	-	-	-	-
Sm	-	-	2.34	0.3	2.32	0.3	-	-	2.34	0.3
Sn	-	-	1.6	1.5	1.6	1.5	-	-	-	-
Sr	588	31.6	604	90	604	70	610	120	595	80
Ta	-	-	0.43	0.1	0.43	0.10	-	-	0.42	0.09
Tb	-	-	0.313	0.08	0.307	0.07	-	-	0.32	0.08
Th	(4.83)	(0.656)	4.72	0.7	4.72	0.7	5.4	1.3	4.68	0.5
Ti	1390	88	1310	400	1360	180	1350	600	1400	160
U	(1.31)	(0.252)	1.44	0.5	1.38	0.4	3.7	4	1.47	0.3
V	20.2	3.25	22.3	7	20.3	3	32	20	21.5	3
W	-	-	0.92	0.3	0.92	0.3	-	-	0.88	0.1
Y	9.25	1.49	12.5	6	9.7	3	13.1	6	-	-
Yb	-	-	1.04	0.19	1.03	0.17	-	-	1.03	0.17
Zn	17	3.15	20.7	7	18.8	5	23	10	20.0	5
Zr	164	24.4	175	50	166	40	172	60	180	40
[ug/kg]										
Hg	7.2	1	10.1	4	-	-	-	-	-	-

TABLE 3b. CONSENSUS VALUE x^* AND PARTICIPANT STANDARD DEVIATION s^* FOR THE WHOLE SET OF RESULTS, AFTER REMOVING THE OUTLIERS AND ONLY FOR XRF RESULTS AND ONLY FOR NAA RESULTS (PLANT SAMPLE).

Measurand symbol	Value from external provider	SD from external provider	RESULTS AND UNCERTAINTY FOR PARTICLES (PERCENT SAMPLE)							
			Total		No outliers		XRF		NAA	
			x^*	s^*	x^*	s^*	x^*	s^*	x^*	s^*
[%]										
C	38	1.22	-	-	-	-	-	-	-	-
Ca	0.326	0.034	0.341	0.07	0.332	0.05	0.35	0.11	0.334	0.04
Cl	0.415	0.032	0.41	0.11	0.400	0.06	0.41	0.16	0.404	0.06
K	1.6	0.172	1.66	0.3	1.62	0.3	1.62	0.6	1.72	0.12
Mg	0.115	0.013	0.136	0.04	0.128	0.02	0.15	0.08	0.133	0.018
N	0.959	0.059	-	-	-	-	-	-	-	-
Si	7.601	0.571	10.0	5	7.5	1.6	10.9	6	6.9	1.0
[mg/kg]										
Al	119	35.7	360	300	159	70	380	400	440	200
As	1.57	0.26	1.64	0.3	1.59	0.3	1.8	1.2	1.68	0.2
B	11.8	3.93	-	-	-	-	-	-	-	-
Ba	24.5	1.85	24.6	4	25.1	3	18	8	25.8	4
Cr	9.66	3.43	12.1	4	11.9	4	14	8	12.1	3
Cu	2.94	0.72	4.5	3	3.1	0.9	5.2	3	-	-
Fe	176	30.2	214	50	207	40	240	110	213	30
Mn	342	47.8	363	70	355	50	360	130	383	30
Mo	2.22	0.39	2.5	0.7	2.5	0.7	-	-	2.8	0.5
Na	84	23.2	96	20	92	20	160	150	96	15
Ni	6.22	1.63	6.9	3	6.5	2	7.4	4	-	-
P	785	72	870	400	810	200	880	500	-	-
Rb	15.48	1.22	15.7	2	15.4	1.4	16.3	5	15.6	1.2
S	816	82	1020	500	840	190	1050	600	-	-
Sr	12.4	1.03	14.0	4	12.8	1.8	14.7	6	14.2	2
Ti	(6.95)	(1.90)	16	11	13	8	17	11	-	-
Zn	17.1	3.1	18.8	4	18.0	3	21.8	7	17.2	3
[ug/kg]										
Br	(10600)	(3190)	9500	1600	9400	1500	9500	3000	9500	900
Ce	-	-	130	70	104	40	-	-	130	50
Co	205	39.1	226	40	220	40	-	-	231	60
Cs	56.2	5.7	60	8	60	8	-	-	61	8
Eu	-	-	3.9	1.4	3.9	1.4	-	-	3.5	1.2
Hf	-	-	8.9	3	8.9	3	-	-	8.9	3
Hg	626	54	490	300	580	140	-	-	400	200

Measurand symbol	Value from external provider	SD from external provider	Total		No outliers		XRF		NAA	
			x^*	s^*	x^*	s^*	x^*	s^*	x^*	s^*
<i>La</i>	-	-	51	11	50	10	-	-	52	10
Pb	336	125	1500	1100	-	-	1600	1100	-	-
Sb	(5.98)	(6.62)	19	10	19	10	-	-	21	8
<i>Sc</i>	-	-	42	9	41.3	8	-	-	42	10
Se	35.4	11.7	-	-	-	-	-	-	-	-
Sm	-	-	10.0	3	9.6	2	-	-	10.3	3
Th	-	-	17	7	17	7	-	-	18	8
U	-	-	60	80	60	80	-	-	-	-
V	322	64.5	530	300	400	120	-	-	510	160

The correlation between the values from the external provider of the proficiency test items and the consensus values x^* (for those elements with enough results, including outliers, to allow the calculation of the consensus value) is shown in Figures 4 and 5 for the clay sample and the plant sample, respectively. Figures 6 and 7 show the same correlations as obtained only by XRF laboratories (see Tables 3a and 3b). Analogously, Figures 8 and 9 show the correlations as obtained only by NAA laboratories. Please note that some elements might not be present in Figures 6-9 due to the fact that the total number of valid results is less than 5.

Participants submitted results obtained with different nuclear and related analytical techniques (as shown in Table 1). The most used techniques, even if including a variety of “sub-techniques”, were X-Ray Fluorescence, XRF (codes 1.0, 1.1, 1.11, 1.13, 1.16, 1.2, 1.21, 1.22, 1.23, 1.3, 1.32, 1.4, 1.51, 2.0) and Neutron Activation Analysis, NAA (codes 5.0, 5.1, 5.2, 5.4). Most of the graphs, like density distributions, are presented highlighting the data in different colors depending on whether they were obtained by XRF (labelled blue), NAA (labelled red) or other analytical techniques (labelled grey).

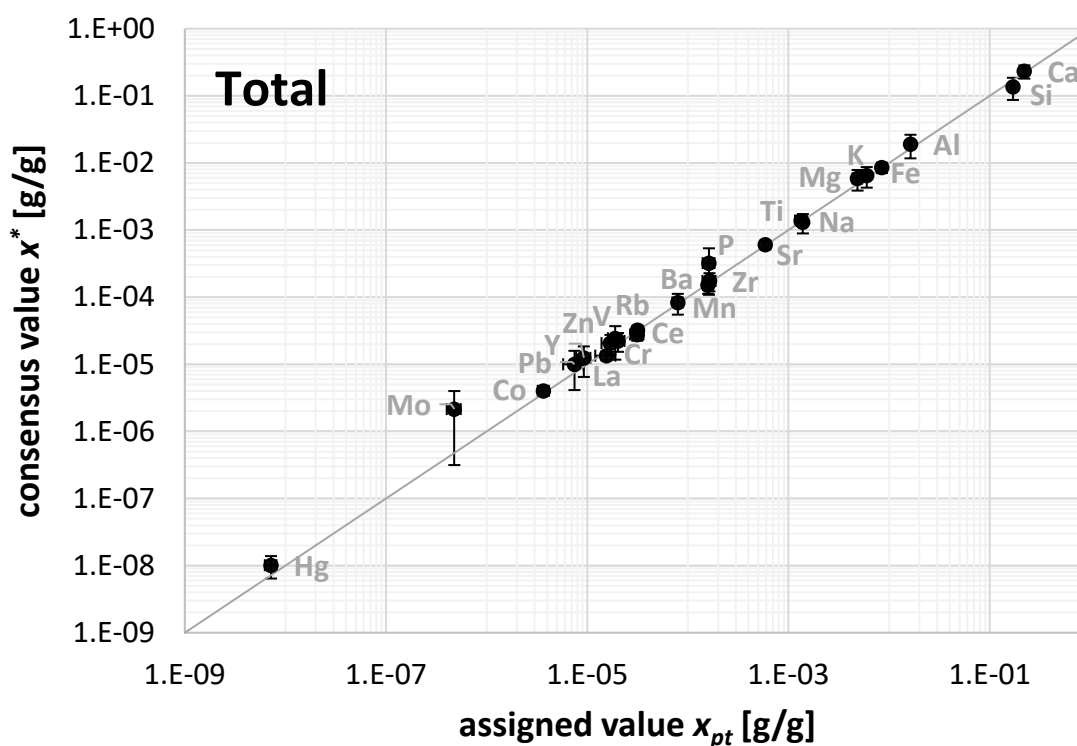


FIG. 4. Correlation between the values from external provider and the consensus values x^* . The error bars are the standard deviations from the external provider SD and the participant standard deviations s^* (clay sample).

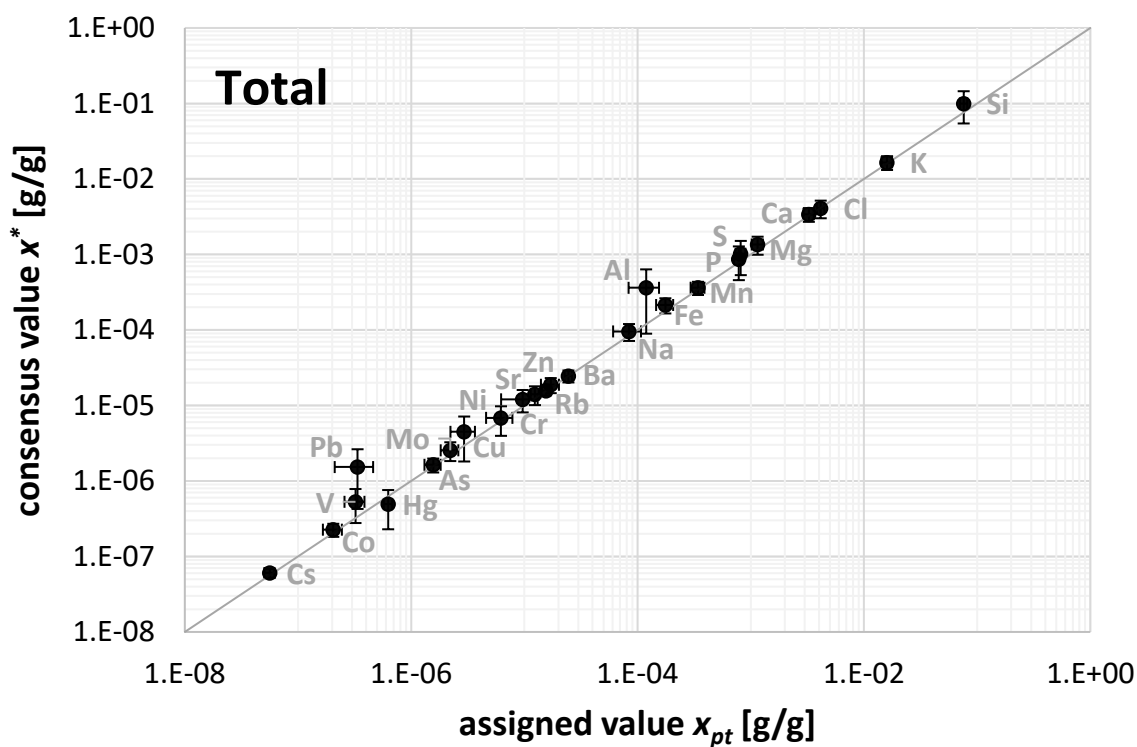


FIG. 5. Correlation between the values from external provider and the consensus values x^* . The error bars are the standard deviations from the external provider SD and the participant standard deviations s^* (plant sample).

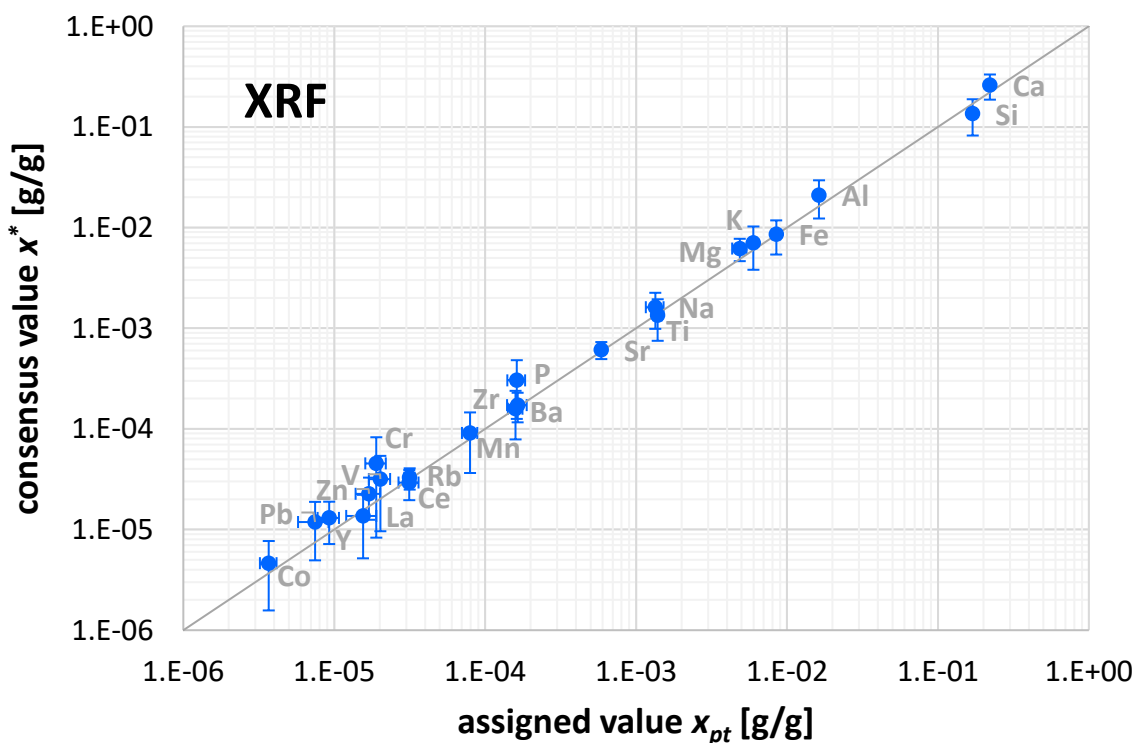


FIG. 6. Correlation between the values from external provider and the consensus values x^* for the XRF laboratories only. The error bars are the standard deviations from the external provider SD and the participant standard deviations s^* (clay sample).

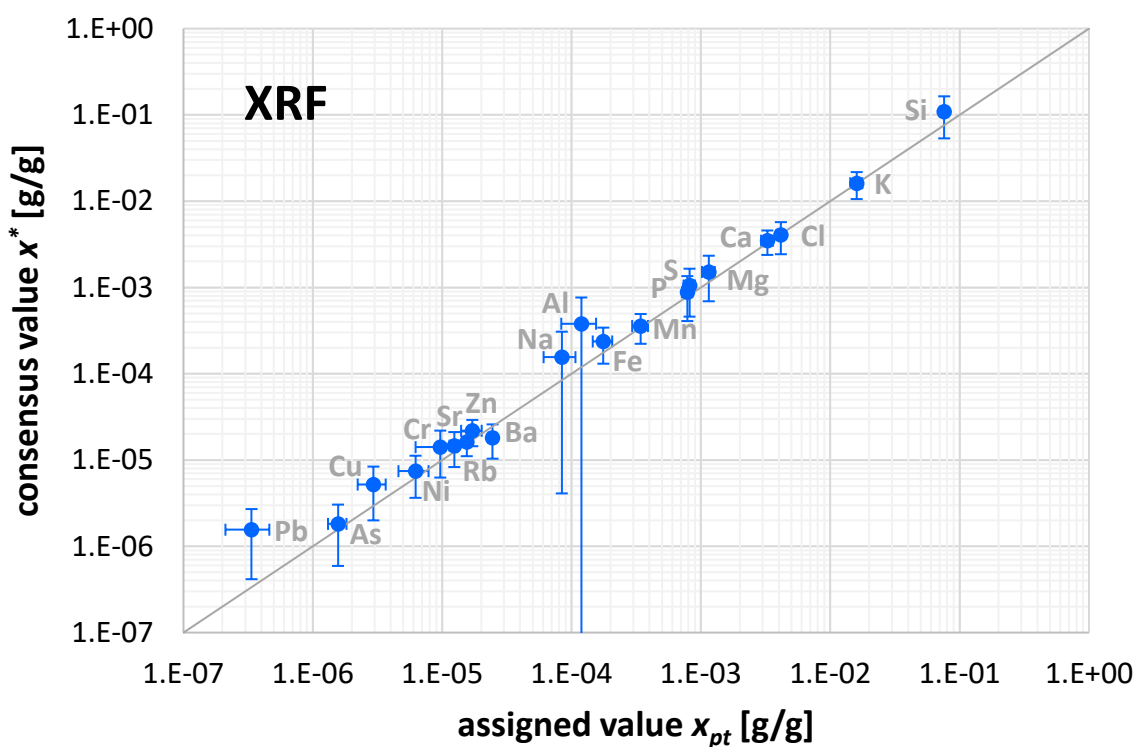


FIG. 7. Correlation between the values from external provider and the consensus values x^* for the XRF laboratories only. The error bars are the standard deviations from the external provider SD and the participant standard deviations s^* (plant sample).

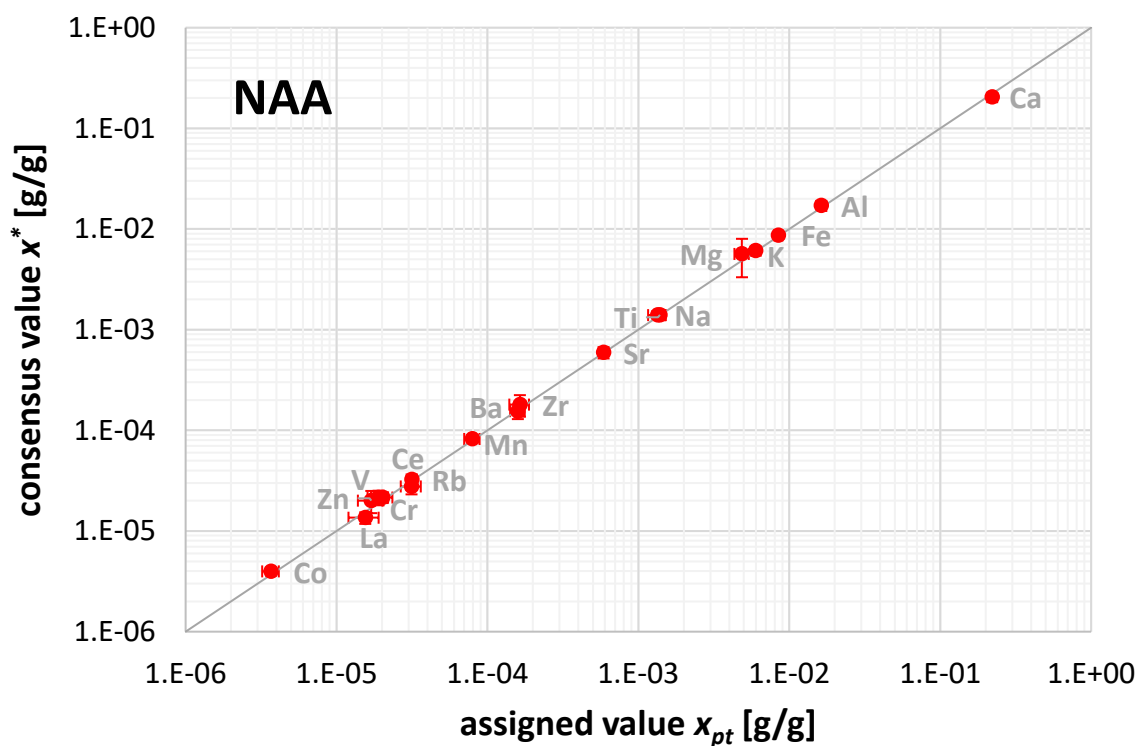


FIG. 8. Correlation between the values from external provider and the consensus values x^* for the NAA laboratories only. The error bars are the standard deviations from the external provider SD and the participant standard deviation s^* (clay sample).

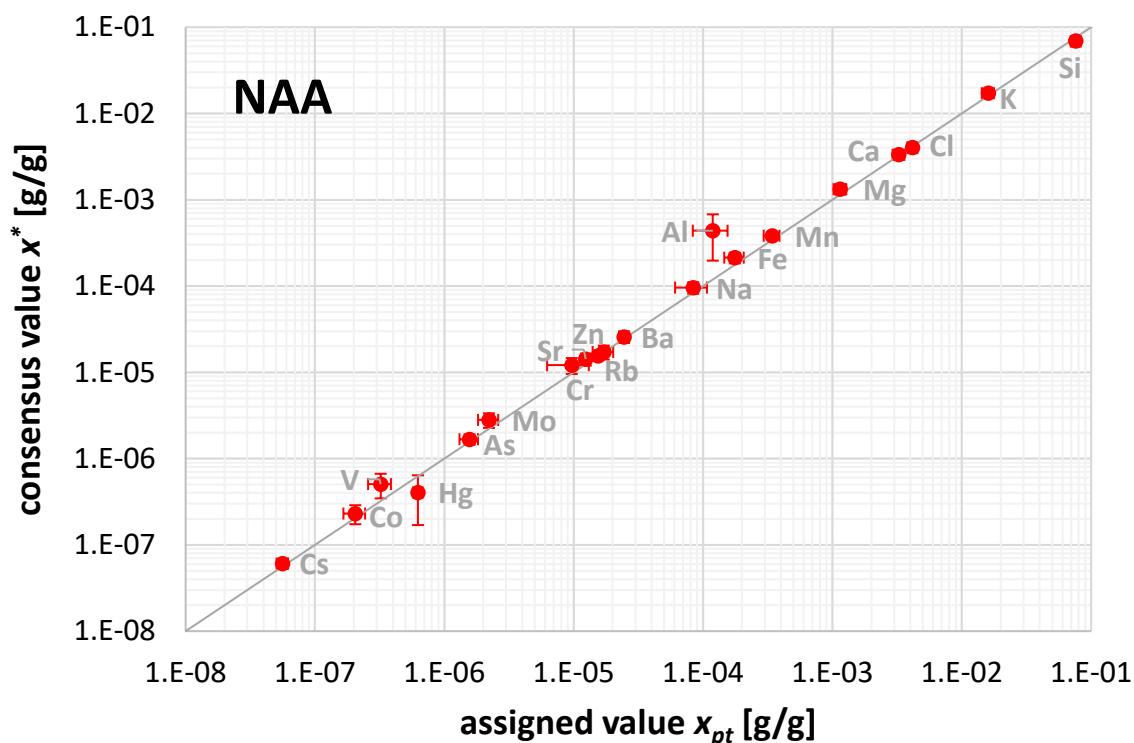


FIG. 9. Correlation between the values from external provider and the consensus values x^* for the NAA laboratories only. The error bars are the standard deviations from the external provider SD and the participant standard deviation s^* (plant sample).

Tables 4a and 4b list, for every element, the values submitted by each participants (measurand mass fraction and standard deviation) and their corresponding calculated performance indicators, i.e., z - or z' -scores, η -scores and R -scores for the clay sample and the plant sample, respectively. In brackets, next to the element symbol, the parameters used to determine the performance indicators are shown: the assigned value of the element mass fraction x_{pt} , the standard deviation for proficiency assessment σ_{pt} and the uncertainty of the assigned value $u(x_{pt})$. The results that were identified as blunder are marked with “***” and the outliers with “*” in the “Measurand mass fraction” column. Please note that, if the number of valid results was less than 5, the performance indicators could be obtained only if the assigned value was available by the external provider of the proficiency test items. In Tables 4a and 4b the elements are listed in the same order as in Tables 2a and 2b.

Figures 10-110 present the distributions of the proficiency test results for the elements having at least 5 valid (no-blunder) results for the clay. Analogously, Figures 111-182 show the distributions for the plant sample. A more detailed explanation of the distribution graphs is given below, where the numbers of the Figures refer to the clay sample; the equivalent numbers of the Figures referring to the plant sample are indicated in brackets.

In Figures 10-50 (111-138 for the plant sample) the individual results are marked with filled circles, in blue for XRF, in red for NAA and in grey for the other analytical techniques. Blunders are not shown in these graphs. The density distribution line for all results (excluding the blunders) is shown by the solid black line. The vertical dotted black lines show the range of non-outlier results. The assigned value x_{pt} is shown as vertical solid green line. In case $u(x_{pt}) \leq$

$0.3\sigma_{pt}$, the range $\pm 3\sigma_{pt}$ is also shown by vertical dotted green lines. When $u(x_{pt}) > 0.3\sigma_{pt}$, the range shown is calculated with $\sqrt{\sigma_{pt}^2 + u^2(x_{pt})}$ instead of σ_{pt} (see definition of z - and z' -scores in Section 3.4).

Figures 51-59 (139-146 for the plant sample) show the density distributions for those element having more than 5 valid results but for which an assigned value was not available by the external provider and could not be determined as consensus value of the results.

Figures 60-101 (147-174 for the plant sample) show the bar chart distributions of results for the measurands with at least 5 submitted results. The results are sorted in ascending order versus participant/technique code. The bar charts show the distance between the reported and the assigned values of the measurand. The submitted results are accompanied by uncertainty bars.

As for the density distribution graphs, the range of three times σ_{pt} or $\sqrt{\sigma_{pt}^2 + u^2(x_{pt})}$ is also shown by the horizontal dotted green lines. The codes of the labs are shown in the bottom horizontal axis whereas the techniques codes (including the relative colours employed already in this report, blue for XRF, red for NAA and grey for the other analytical techniques) are shown in the top horizontal axis.

For those element having more than 5 valid results but for which an assigned value was not available and could not be determined, in Figures 102-110 (175-182 for the plant sample) a bar chart is shown reporting the results of the laboratories. The colour of the columns follows again the rules established for previous graphs.

For every participating laboratory its overall performance is presented in Figures 183-372. These plots show the absolute values of *zeta*-scores and z - or z' -scores calculated for each laboratory. Each result is marked as a circle, the different colour depending on whether z - or z' -score was considered. Also reported are the lines for $|zeta| = 3$ and $|z|$ or $|z'| = 3$. They divide the plot area in four quadrants. The well performing laboratories would have more points located in the lower-left quadrant of the plot. If there are many points located in the upper-right quadrant, it suggests that these results do not fall in the defined range of acceptable results and, therefore, action should be taken to improve the performance of the analysis. For each laboratory, the separated plots for the clay sample and the plant sample are reported in the same page at the top and the bottom, respectively. When a laboratory submitted results only for one sample, the corresponding page reports just the related plot. Please note that the plot is not shown if the results for a specific laboratory and sample are all blunders.

Tables 5a and 5b summarizes for every participant the performance indicators for the clay sample and the plant sample, respectively. The number of results for which the absolute values of the performance indicators z - or z' -scores as well as *zeta*-scores are less than 3 are shown. The number of results for which the same indicators are equal or above 3 are also shown. Please note that the sum of results derived from these columns can be lower than the total number of results submitted by the participant (second column) since for some elements the assigned value was not available and no performance indicator could be determined.

The overall performance for each participant is shown graphically in Figures 373-380, reporting the box-and-whisker plots (defined below) for the z - and z' -scores and for the R -scores. For the

clay sample, the box-and-whisker plots for the z - and z' -scores are shown in Figures 373 and 374, the latter with the vertical scale reduced to the range $-5 \div 5$. The box-and-whisker plots for the R -scores are reported in Figures 375 and 376, the latter with the vertical scale reduced to the range $0 \div 2$. Analogously, for the plant sample the box-and-whisker plots for the z - and z' -scores are shown in Figures 377 and 378, the plots for the R -scores are reported in Figures 379 and 380. Please note that some data might not been shown in Figures 373-380 since they lie out of the range of the scale reported in the graphs. The code of the participant is reported in the horizontal axis.

Given a set of data, a box-and-whisker plot is generated defining the following parameters:

- Median of the data set Q_2
- First quartile (Q_1), the median of the lower half of the data set, including the median
- Third quartile (Q_3), the median of the upper half of the data set, including the median

The quantity “interquartile range” (IQR) is defined as $IQR = Q_3 - Q_1$. A data is considered an outlier (please note that this is a different definition of outlier from the one given in Section 3.3, and it is used only in this context for the box-and-whisker plots) when either it exceeds a distance of 1.5 times the IQR below the first quartile ($Q_1 - 1.5 \cdot IQR$) or 1.5 times the IQR above the third quartile ($Q_3 + 1.5 \cdot IQR$). In the graphs, the box represents the data in the range between Q_1 and Q_3 , whereas the median is shown as a horizontal line. The whiskers (vertical lines) extend from the ends of the box to the minimum value and maximum value that are not outliers. The single points out of the whiskers represent the outliers of the dataset.

The drawing below summarizes all the different parameters calculated for the creation of a box-and-whisker plot.

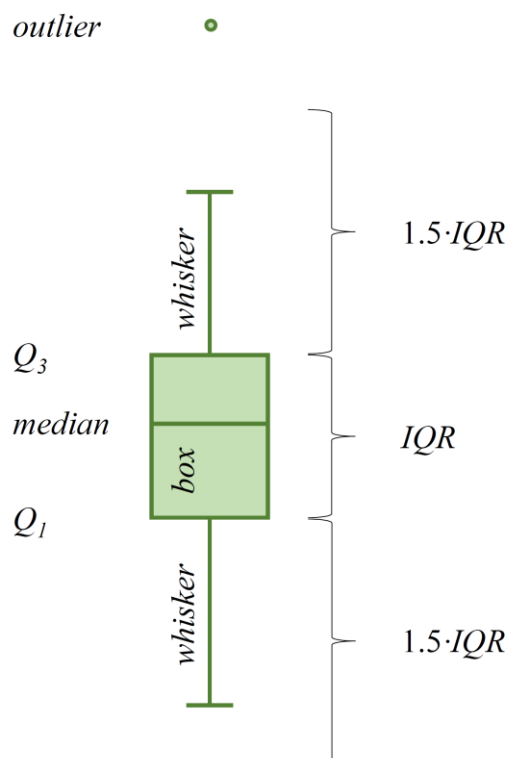


TABLE 4a. SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE *Zeta*-SCORES AND THE *R*-SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	<i>Zeta</i> -score	<i>R</i> -score
Al ($x_{pt} = 1.63$, $\sigma_{pt} = 0.06$, $u(x_{pt}) = 0.008$) [%]								
77	1	0.172**	0.002	1.16	-24.1	-	-170.1	0.11
255	1.32	0.306*	0.006	1.96	-21.9	-	-128.9	0.19
167	5	0.401*	0.003	0.75	-20.3	-	-138.8	0.25
273	7.1	0.517*	0.093	17.99	-18.4	-	-11.9	0.32
154	7.1	0.691*	0.025	3.62	-15.5	-	-35.6	0.42
145	2	0.825*	0.03	3.64	-13.3	-	-25.9	0.51
105	1.32	0.918*	0.021	2.29	-11.8	-	-31.5	0.56
306	2	0.95*	0.04	4.21	-11.2	-	-16.6	0.58
235	1	1*	0.03	3.00	-10.4	-	-20.2	0.61
151	7.2	1.185*	0.112	9.45	-7.3	-	-4.0	0.73
194	5.1	1.387	0.028	2.02	-4.0	-	-8.3	0.85
203	5	1.41	0.023	1.63	-3.6	-	-9.0	0.87
309	7.2	1.524	0.033	2.17	-1.7	-	-3.1	0.93
176	5.2	1.57	0.03	1.91	-1.0	-	-1.9	0.96
199	5.1	1.578	0.073	4.63	-0.9	-	-0.7	0.97
259	7.1	1.58	0.34	21.52	-0.8	-	-0.1	0.97
197	5.1	1.58	0.08	5.06	-0.8	-	-0.6	0.97
257	5	1.6	0.1	6.25	-0.5	-	-0.3	0.98
182	5.1	1.612	0.19	11.79	-0.3	-	-0.1	0.99
237	5.1	1.62	0.08	4.94	-0.2	-	-0.1	0.99
271	2	1.63	0.03	1.84	0.0	-	0.0	1.00
261	5.2	1.642	0.011	0.67	0.2	-	0.9	1.01
258	1	1.642	0.05	3.05	0.2	-	0.2	1.01
250	2	1.647	0.102	6.19	0.3	-	0.2	1.01
215	5.1	1.67	0.11	6.59	0.7	-	0.4	1.02
183	5.4	1.67	0.03	1.80	0.7	-	1.3	1.02
65	1.16	1.69	0.1	5.92	1.0	-	0.6	1.04
126	1	1.69	0.34	20.12	1.0	-	0.2	1.04
282	5.2	1.7	0.02	1.18	1.2	-	3.2	1.04
220	5.1	1.707	0.125	7.32	1.3	-	0.6	1.05
195	5.2	1.736	0.256	14.75	1.7	-	0.4	1.07
279	5	1.75	0.1	5.71	2.0	-	1.2	1.07
295	2	1.75	0.17	9.71	2.0	-	0.7	1.07
152	5.2	1.771	0.04	2.26	2.3	-	3.5	1.09
247	5.2	1.797	0.057	3.17	2.8	-	2.9	1.10
55	5.2	1.8	0.04	2.22	2.8	-	4.2	1.10
221	5	1.82	0.09	4.95	3.1	-	2.1	1.12
130	2	1.874*	0.346	18.46	4.0	-	0.7	1.15
202	5.1	1.92*	0.13	6.77	4.8	-	2.2	1.18
262	5	1.93*	0.052	2.69	5.0	-	5.7	1.18
281	5	1.97*	0.008	0.41	5.6	-	29.4	1.21
314	2	2*	0.1	5.00	6.1	-	3.7	1.23
244	2	2.161*	0.134	6.20	8.8	-	4.0	1.33
94	1.22	2.2*	0.03	1.36	9.4	-	18.3	1.35
322	1	2.36*	0.054	2.29	12.1	-	13.4	1.45
113	2	2.364*	0.089	3.76	12.1	-	8.2	1.45

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
35	1.51	2.4*	0.12	5.00	12.7	-	6.4	1.47
206	1.22	2.428*	0.06	2.47	13.2	-	13.2	1.49
305	1.3	2.464*	0.003	0.12	13.8	-	94.2	1.51
155	4.2	2.643*	0.132	4.99	16.7	-	7.7	1.62
308	1.51	2.689*	0.188	6.99	17.5	-	5.6	1.65
303	1	2.703*	0.128	4.74	17.7	-	8.4	1.66
102	1.23	2.706*	1.091	40.32	17.8	-	1.0	1.66
304	1	2.747*	0.21	7.64	18.4	-	5.3	1.69
216	4.32	2.839*	0.2	7.04	20.0	-	6.0	1.74
75	1	2.936*	0.18	6.13	21.6	-	7.2	1.80
116	1.32	3.17*	0.51	16.09	25.4	-	3.0	1.94
205	5	3.334*	0.023	0.69	28.1	-	69.7	2.05
67	3	4.84*	0.24	4.96	53.0	-	13.4	2.97
267	2	5.44*	0.07	1.29	62.9	-	54.0	3.34
204	1.21	7.362*	0.092	1.25	94.6	-	62.1	4.52
248	5	16.2*	0.32	1.98	240.5	-	45.5	9.94
$C (x_{pt} = 6.87, \sigma_{pt} = 0.2, u(x_{pt}) = 0.03) [\%]$								
267	2	3.25	0.02	0.62	-17.6	-	-111.1	0.47
67	3	6	0.98	16.33	-4.2	-	-0.9	0.87
183	5.4	6.5	0.3	4.62	-1.8	-	-1.2	0.95
$Ca (x_{pt} = 22.1, \sigma_{pt} = 0.5, u(x_{pt}) = 0.12) [\%]$								
312	1.3	1.1**	0.05	4.55	-44.7	-	-166.4	0.05
77	1	2.141**	0.037	1.73	-42.5	-	-164.1	0.10
279	5	2.3*	0.23	10.00	-42.1	-	-76.9	0.10
95	1.3	8.566*	0.981	11.45	-28.8	-	-13.7	0.39
105	1.32	11.976*	0.201	1.68	-21.5	-	-43.6	0.54
199	5.1	12.343*	1.195	9.68	-20.8	-	-8.1	0.56
311	1.3	13.999*	2.708	19.34	-17.2	-	-3.0	0.63
193	5.2	14.17*	0.038	0.27	-16.9	-	-65.0	0.64
194	5.1	15.481*	1.454	9.39	-14.1	-	-4.5	0.70
255	1.32	18.07*	0.033	0.18	-8.6	-	-33.4	0.82
236	1.21	18.4*	0.2	1.09	-7.9	-	-16.0	0.83
261	5.1	18.969	0.539	2.84	-6.7	-	-5.7	0.86
283	5.1	19	1	5.26	-6.6	-	-3.1	0.86
281	5	19.1	0.516	2.70	-6.4	-	-5.7	0.86
263	5.1	19.4	0.97	5.00	-5.7	-	-2.8	0.88
152	5.2	19.507	0.445	2.28	-5.5	-	-5.6	0.88
183	5.1	19.64	0.37	1.88	-5.2	-	-6.3	0.89
282	5.2	20.1	0.58	2.89	-4.3	-	-3.4	0.91
302	5.1	20.25	0.365	1.80	-3.9	-	-4.8	0.92
262	5	20.3	0.707	3.48	-3.8	-	-2.5	0.92
40	5.1	20.5	1.3	6.34	-3.4	-	-1.2	0.93
176	5.2	20.5	0.5	2.44	-3.4	-	-3.1	0.93
65	1.16	20.91	1.84	8.80	-2.5	-	-0.6	0.95
309	7.2	20.972	1.738	8.29	-2.4	-	-0.6	0.95
171	5.1	21.2	1.3	6.13	-1.9	-	-0.7	0.96
132	7.1	21.25	0.1	0.47	-1.8	-	-5.6	0.96
237	5.1	21.3	1.1	5.16	-1.7	-	-0.7	0.96

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
259	7.1	21.41	0.01	0.05	-1.5	-	-5.9	0.97
126	1	21.5	2.1	9.77	-1.3	-	-0.3	0.97
116	1.32	21.57	0.707	3.28	-1.1	-	-0.7	0.98
322	1	21.721	0.441	2.03	-0.8	-	-0.8	0.98
203	5	21.8	0.74	3.39	-0.6	-	-0.4	0.99
202	5.1	21.8	3.2	14.68	-0.6	-	-0.1	0.99
295	2	21.9	0.5	2.28	-0.4	-	-0.4	0.99
220	5.1	22.034	2.034	9.23	-0.1	-	0.0	1.00
248	5	22.2	0.18	0.81	0.2	-	0.5	1.00
55	5.2	22.4	0.5	2.23	0.6	-	0.6	1.01
250	2	22.407	1.291	5.76	0.7	-	0.2	1.01
271	2	22.43	0.27	1.20	0.7	-	1.1	1.01
151	7.2	22.698	2.986	13.16	1.3	-	0.2	1.03
238	1.13	22.7	2.2	9.69	1.3	-	0.3	1.03
303	1	22.833	0.657	2.88	1.6	-	1.1	1.03
154	7.1	22.9	1.1	4.80	1.7	-	0.7	1.04
221	5	23	1.2	5.22	1.9	-	0.7	1.04
61	5.1	23	3	13.04	1.9	-	0.3	1.04
215	5.1	23	1.4	6.09	1.9	-	0.6	1.04
235	1	23.09	0.28	1.21	2.1	-	3.3	1.04
234	5	23.2	3.5	15.09	2.3	-	0.3	1.05
258	1	23.539	0.05	0.21	3.1	-	11.4	1.07
209	1.4	23.77	0.88	3.70	3.6	-	1.9	1.08
244	2	24.383	0.206	0.84	4.9	-	9.7	1.10
137	6	24.7	4.8	19.43	5.5	-	0.5	1.12
206	1.22	24.95	0.026	0.10	6.1	-	24.0	1.13
314	2	25.6*	0.8	3.13	7.4	-	4.3	1.16
278	1.22	25.678*	0.929	3.62	7.6	-	3.8	1.16
113	2	25.84*	0.431	1.67	8.0	-	8.4	1.17
73	1.2	25.866*	0.371	1.43	8.0	-	9.7	1.17
130	2	26.525*	2.358	8.89	9.4	-	1.9	1.20
75	1	26.67*	0.087	0.33	9.7	-	31.5	1.21
306	2	26.74*	0.22	0.82	9.9	-	18.7	1.21
102	1.23	27.683*	1.865	6.74	11.9	-	3.0	1.25
310	1.3	28.276*	0.018	0.06	13.1	-	52.7	1.28
308	1.51	28.902*	2.023	7.00	14.5	-	3.4	1.31
204	1.21	29.941*	0.221	0.74	16.7	-	31.4	1.35
145	2	30.786*	0.985	3.20	18.5	-	8.8	1.39
155	4.2	33.61*	0.11	0.33	24.5	-	72.0	1.52
54	1	36.39*	4.74	13.03	30.4	-	3.0	1.65
307	1	38.73*	0.2	0.52	35.4	-	71.9	1.75
67	3	41*	1.05	2.56	40.2	-	17.9	1.86
35	1.51	43.94*	0.5	1.14	46.5	-	42.6	1.99
225	1	44.23*	1.62	3.66	47.1	-	13.6	2.00
216	4.32	44.873*	0.31	0.69	48.4	-	68.8	2.03
304	1	47.807*	3.58	7.49	54.7	-	7.2	2.16
267	2	58.134*	0.1	0.17	76.7	-	235.4	2.63
305	1.3	77.614*	0.088	0.11	118.1	-	381.5	3.51

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
Fe ($x_{pt} = 0.848$, $\sigma_{pt} = 0.04$, $u(x_{pt}) = 0.008$) [%]								
312	1.3	0.049**	0.004	8.16	-23.0	-	-88.9	0.06
77	1	0.065**	0.002	3.08	-22.5	-	-94.4	0.08
167	5	0.078**	0.003	3.85	-22.1	-	-89.6	0.09
130	2	0.083**	0.008	9.64	-22.0	-	-67.4	0.10
105	1.32	0.286*	0.007	2.45	-16.2	-	-52.7	0.34
258	1	0.364*	0.05	13.74	-13.9	-	-9.6	0.43
278	1.22	0.453*	0.199	43.93	-11.4	-	-2.0	0.53
95	1.3	0.488*	0.067	13.73	-10.4	-	-5.3	0.58
307	1	0.49*	0.2	40.82	-10.3	-	-1.8	0.58
65	1.16	0.54*	0.038	7.04	-8.9	-	-7.9	0.64
204	1.21	0.579*	0.062	10.71	-7.7	-	-4.3	0.68
102	1.23	0.595*	0.038	6.39	-7.3	-	-6.5	0.70
272	5.2	0.63	0.04	6.35	-6.3	-	-5.3	0.74
308	1.51	0.65	0.08	12.31	-5.7	-	-2.5	0.77
255	1.32	0.65	0.001	0.15	-5.7	-	-24.4	0.77
311	1.3	0.682	0.152	22.29	-4.8	-	-1.1	0.80
320	1.3	0.689	0.027	3.92	-4.6	-	-5.6	0.81
73	1.2	0.705	0.006	0.85	-4.1	-	-14.2	0.83
54	1	0.737	0.042	5.70	-3.2	-	-2.6	0.87
322	1	0.744	0.002	0.27	-3.0	-	-12.5	0.88
259	7.1	0.76	0.01	1.32	-2.5	-	-6.9	0.90
137	6	0.76	0.11	14.47	-2.5	-	-0.8	0.90
234	5	0.762	0.042	5.51	-2.5	-	-2.0	0.90
154	7.1	0.764	0.018	2.36	-2.4	-	-4.3	0.90
194	5.1	0.767	0.084	10.95	-2.3	-	-1.0	0.90
268	6.1	0.772	0.075	9.72	-2.2	-	-1.0	0.91
273	7.1	0.784	0.115	14.67	-1.8	-	-0.6	0.92
132	7.1	0.785	0.006	0.76	-1.8	-	-6.3	0.93
263	5.1	0.8	0.04	5.00	-1.4	-	-1.2	0.94
309	7.2	0.801	0.034	4.24	-1.4	-	-1.3	0.94
78	1	0.807	0.054	6.69	-1.2	-	-0.8	0.95
237	5.1	0.81	0.04	4.94	-1.1	-	-0.9	0.96
183	5.1	0.815	0.019	2.33	-0.9	-	-1.6	0.96
248	5	0.816	0.007	0.86	-0.9	-	-3.0	0.96
151	7.2	0.82	0.044	5.37	-0.8	-	-0.6	0.97
281	5	0.824	0.015	1.82	-0.7	-	-1.4	0.97
40	5.1	0.83	0.05	6.02	-0.5	-	-0.4	0.98
205	5	0.832	0.129	15.50	-0.5	-	-0.1	0.98
302	5.1	0.838	0.075	8.95	-0.3	-	-0.1	0.99
170	5.2	0.839	0.038	4.53	-0.3	-	-0.2	0.99
209	1.4	0.84	0.06	7.14	-0.2	-	-0.1	0.99
195	5.2	0.845	0.134	15.86	-0.1	-	0.0	1.00
155	4.2	0.849	0.03	3.53	0.0	-	0.0	1.00
262	5	0.851	0.02	2.35	0.1	-	0.1	1.00
171	5.1	0.854	0.032	3.75	0.2	-	0.2	1.01
176	5.2	0.86	0.013	1.51	0.3	-	0.8	1.01
283	5.1	0.86	0.026	3.02	0.3	-	0.4	1.01
220	5.1	0.865	0.044	5.09	0.5	-	0.4	1.02

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
126	1	0.865	0.086	9.94	0.5	-	0.2	1.02
235	1	0.869	0.002	0.23	0.6	-	2.5	1.02
279	5	0.874	0.1	11.44	0.7	-	0.3	1.03
244	2	0.874	0.008	0.92	0.7	-	2.3	1.03
116	1.32	0.874	0.018	2.06	0.7	-	1.3	1.03
295	2	0.874	0.056	6.41	0.7	-	0.5	1.03
215	5.1	0.876	0.053	6.05	0.8	-	0.5	1.03
261	5.1	0.879	0.015	1.71	0.9	-	1.8	1.04
61	5.2	0.88	0.07	7.95	0.9	-	0.5	1.04
203	5	0.884	0.032	3.62	1.0	-	1.1	1.04
202	5.1	0.884	0.023	2.60	1.0	-	1.5	1.04
257	5	0.89	0.06	6.74	1.2	-	0.7	1.05
238	1.13	0.894	0.08	8.95	1.3	-	0.6	1.05
55	5.2	0.896	0.13	14.51	1.4	-	0.4	1.06
271	2	0.9	0.02	2.22	1.5	-	2.4	1.06
113	2	0.906	0.035	3.86	1.7	-	1.6	1.07
250	2	0.909	0.257	28.27	1.8	-	0.2	1.07
282	5.2	0.91	0.02	2.20	1.8	-	2.9	1.07
303	1	0.913	0.009	0.99	1.9	-	5.4	1.08
199	5.1	0.915	0.036	3.93	1.9	-	1.8	1.08
247	5.2	0.925	0.031	3.35	2.2	-	2.4	1.09
206	1.22	0.928	0.003	0.32	2.3	-	9.3	1.09
94	1.22	0.94	0.01	1.06	2.6	-	7.2	1.11
265	1.22	0.942	0.066	7.01	2.7	-	1.4	1.11
182	5.1	0.952	0.043	4.52	3.0	-	2.4	1.12
314	2	0.96	0.05	5.21	3.2	-	2.2	1.13
152	5.2	0.976	0.05	5.12	3.7	-	2.5	1.15
221	5	0.98	0.06	6.12	3.8	-	2.2	1.16
313	6.1	0.983	0.098	9.97	3.9	-	1.4	1.16
193	5.2	1.172*	0.002	0.17	9.3	-	39.1	1.38
75	1	1.177*	0.023	1.95	9.5	-	13.5	1.39
225	1	1.25*	0.07	5.60	11.6	-	5.7	1.47
310	1.3	1.401*	0.001	0.07	15.9	-	68.2	1.65
145	2	1.464*	0.073	4.99	17.7	-	8.4	1.73
216	4.32	1.554*	0.26	16.73	20.3	-	2.7	1.83
67	3	1.74*	0.09	5.17	25.7	-	9.9	2.05
35	1.51	1.785*	0.087	4.87	26.9	-	10.7	2.10
304	1	2.179*	0.16	7.34	38.3	-	8.3	2.57
236	1.21	2.46*	0.03	1.22	46.4	-	51.9	2.90
267	2	2.973*	0.05	1.68	61.1	-	42.0	3.51
285	6.2	4.69*	0.004	0.09	110.5	-	427.4	5.53
191	5.2	8.4*	0.1	1.19	217.2	-	75.3	9.91
$K(x_{pt} = 0.599, \sigma_{pt} = 0.03, u(x_{pt}) = 0.005) [\%]$								
312	1.3	0.032**	0.002	6.25	-21.9	-	-114.7	0.05
77	1	0.049**	0.001	2.04	-21.3	-	-118.7	0.08
132	7.1	0.136*	0.001	0.74	-17.9	-	-100.0	0.23
154	7.1	0.167*	0.008	4.79	-16.7	-	-47.0	0.28
255	1.32	0.208*	0.001	0.48	-15.1	-	-84.4	0.35
105	1.32	0.235*	0.003	1.28	-14.1	-	-67.1	0.39

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
95	1.3	0.251*	0.022	8.76	-13.4	-	-15.5	0.42
311	1.3	0.257*	0.076	29.57	-13.2	-	-4.5	0.43
306	2	0.268*	0.013	4.85	-12.8	-	-24.0	0.45
137	6	0.313*	0.061	19.49	-11.1	-	-4.7	0.52
151	7.2	0.334*	0.043	12.87	-10.2	-	-6.1	0.56
235	1	0.422*	0.011	2.61	-6.8	-	-14.9	0.70
130	2	0.475	0.077	16.21	-4.8	-	-1.6	0.79
309	7.2	0.496	0.078	15.73	-4.0	-	-1.3	0.83
263	5.1	0.5	0.03	6.00	-3.8	-	-3.3	0.83
126	1	0.528	0.08	15.15	-2.7	-	-0.9	0.88
116	1.32	0.529	0.019	3.59	-2.7	-	-3.6	0.88
303	1	0.53	0.012	2.26	-2.7	-	-5.4	0.88
194	5.1	0.531	0.058	10.92	-2.6	-	-1.2	0.89
205	5	0.537	0.067	12.48	-2.4	-	-0.9	0.90
183	5.1	0.537	0.011	2.05	-2.4	-	-5.2	0.90
197	5.1	0.54	0.03	5.56	-2.3	-	-1.9	0.90
248	5	0.544	0.011	2.02	-2.1	-	-4.6	0.91
261	5.1	0.556	0.005	0.90	-1.7	-	-6.4	0.93
281	5	0.558	0.005	0.90	-1.6	-	-6.1	0.93
283	5.1	0.56	0.02	3.57	-1.5	-	-1.9	0.93
258	1	0.562	0.05	8.90	-1.4	-	-0.7	0.94
234	5	0.565	0.041	7.26	-1.3	-	-0.8	0.94
276	7.2	0.565	0.057	10.09	-1.3	-	-0.6	0.94
278	1.22	0.567	0.292	51.50	-1.2	-	-0.1	0.95
40	5.1	0.57	0.035	6.14	-1.1	-	-0.8	0.95
215	5.1	0.575	0.041	7.13	-0.9	-	-0.6	0.96
199	5.1	0.578	0.06	10.38	-0.8	-	-0.3	0.96
209	1.4	0.58	0.04	6.90	-0.7	-	-0.5	0.97
268	6.1	0.585	0.055	9.40	-0.5	-	-0.3	0.98
206	1.22	0.588	0.004	0.68	-0.4	-	-1.8	0.98
237	5.1	0.59	0.03	5.08	-0.3	-	-0.3	0.98
176	5.2	0.59	0.01	1.69	-0.3	-	-0.8	0.98
250	2	0.595	0.057	9.58	-0.2	-	-0.1	0.99
113	2	0.604	0.011	1.82	0.2	-	0.4	1.01
220	5.1	0.607	0.034	5.60	0.3	-	0.2	1.01
182	5.1	0.608	0.128	21.05	0.3	-	0.1	1.02
271	2	0.61	0.01	1.64	0.4	-	1.0	1.02
171	5.1	0.614	0.052	8.47	0.6	-	0.3	1.03
195	5.2	0.616	0.082	13.31	0.7	-	0.2	1.03
279	5	0.635	0.08	12.60	1.4	-	0.4	1.06
262	5	0.64	0.003	0.47	1.6	-	7.6	1.07
202	5.1	0.647	0.044	6.80	1.9	-	1.1	1.08
203	5	0.648	0.026	4.01	1.9	-	1.9	1.08
75	1	0.649	0.014	2.16	1.9	-	3.4	1.08
221	5	0.65	0.03	4.62	2.0	-	1.7	1.09
295	2	0.655	0.049	7.48	2.2	-	1.1	1.09
167	5	0.659	0.022	3.34	2.3	-	2.7	1.10
61	5.1	0.66	0.16	24.24	2.4	-	0.4	1.10
282	5.2	0.66	0.01	1.52	2.4	-	5.6	1.10
94	1.22	0.66	0.03	4.55	2.4	-	2.0	1.10

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
55	5.2	0.66	0.1	15.15	2.4	-	0.6	1.10
244	2	0.665	0.007	1.05	2.6	-	7.9	1.11
314	2	0.67	0.03	4.48	2.7	-	2.3	1.12
102	1.23	0.674	0.056	8.31	2.9	-	1.3	1.13
193	5.2	0.685	0.057	8.32	3.3	-	1.5	1.14
73	1.2	0.733	0.017	2.32	5.2	-	7.6	1.22
313	6.1	0.746*	0.075	10.05	5.7	-	2.0	1.25
238	1.13	0.753*	0.08	10.62	6.0	-	1.9	1.26
152	5.2	0.755*	0.034	4.50	6.0	-	4.5	1.26
155	4.2	0.821*	0.034	4.14	8.6	-	6.5	1.37
308	1.51	0.855*	0.06	7.02	9.9	-	4.3	1.43
265	1.22	0.904*	0.025	2.77	11.8	-	12.0	1.51
225	1	0.92*	0.09	9.78	12.4	-	3.6	1.54
216	4.32	0.944*	0.053	5.61	13.3	-	6.5	1.58
322	1	0.947*	0.004	0.42	13.4	-	57.6	1.58
35	1.51	0.95*	0.15	15.79	13.6	-	2.3	1.59
307	1	0.98*	0.2	20.41	14.7	-	1.9	1.64
304	1	0.985*	0.074	7.51	14.9	-	5.2	1.64
310	1.3	1.006*	0.091	9.05	15.7	-	4.5	1.68
67	3	1.02*	0.06	5.88	16.3	-	7.0	1.70
204	1.21	1.148*	0.069	6.01	21.2	-	7.9	1.92
145	2	1.19*	0.038	3.19	22.8	-	15.4	1.99
267	2	1.226*	0.03	2.45	24.2	-	20.7	2.05
54	1	1.339*	0.251	18.75	28.6	-	2.9	2.24
170	5.2	2.245*	0.14	6.24	63.6	-	11.8	3.75
272	5.2	2.29*	0.23	10.04	65.3	-	7.4	3.82
236	1.21	4.1*	0.05	1.22	135.3	-	69.7	6.84
Mg ($x_{pt} = 0.486$, $\sigma_{pt} = 0.02$, $u(x_{pt}) = 0.008$) [%]								
77	1	0.039**	0.001	2.56	-	-19.2	-52.3	0.08
105	1.32	0.09*	0.023	25.56	-	-17.0	-16.2	0.19
304	1	0.187*	0.062	33.16	-	-12.8	-4.8	0.38
167	5	0.302	0.012	3.97	-	-7.9	-12.5	0.62
282	5.2	0.4	0.03	7.50	-	-3.7	-2.8	0.82
154	7.1	0.428	0.015	3.50	-	-2.5	-3.4	0.88
281	5	0.432	0.049	11.34	-	-2.3	-1.1	0.89
132	7.1	0.438	0.004	0.91	-	-2.1	-5.1	0.90
261	5.2	0.438	0.021	4.79	-	-2.1	-2.1	0.90
152	5.2	0.446	0.037	8.30	-	-1.7	-1.1	0.92
65	1.16	0.45	0.021	4.67	-	-1.5	-1.6	0.93
276	7.2	0.456	0.046	10.09	-	-1.3	-0.6	0.94
237	5.1	0.46	0.024	5.22	-	-1.1	-1.0	0.95
176	5.2	0.46	0.03	6.52	-	-1.1	-0.8	0.95
262	5	0.463	0.035	7.56	-	-1.0	-0.6	0.95
258	1	0.469	0.05	10.66	-	-0.7	-0.3	0.97
248	5	0.47	0.024	5.11	-	-0.7	-0.6	0.97
309	7.2	0.475	0.053	11.16	-	-0.5	-0.2	0.98
259	7.1	0.48	0.02	4.17	-	-0.3	-0.3	0.99
215	5.1	0.483	0.03	6.21	-	-0.1	-0.1	0.99
305	1.3	0.488	0.007	1.43	-	0.1	0.2	1.00

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
151	7.2	0.489	0.055	11.25	-	0.1	0.1	1.01
183	5.4	0.5	0.04	8.00	-	0.6	0.3	1.03
295	2	0.502	0.024	4.78	-	0.7	0.6	1.03
220	5.1	0.508	0.048	9.45	-	0.9	0.5	1.05
271	2	0.52	0.04	7.69	-	1.5	0.8	1.07
130	2	0.566	0.098	17.31	-	3.4	0.8	1.16
268	6.1	0.581	0.025	4.30	-	4.1	3.6	1.20
126	1	0.583	0.116	19.90	-	4.2	0.8	1.20
250	2	0.593	0.063	10.62	-	4.6	1.7	1.22
221	5	0.609	0.025	4.11	-	5.3	4.7	1.25
314	2	0.62	0.03	4.84	-	5.8	4.3	1.28
94	1.22	0.62	0.03	4.84	-	5.8	4.3	1.28
113	2	0.638	0.03	4.70	-	6.5	4.9	1.31
267	2	0.656	0.02	3.05	-	7.3	7.8	1.35
206	1.22	0.667	0.007	1.05	-	7.8	16.5	1.37
244	2	0.686	0.055	8.02	-	8.6	3.6	1.41
204	1.21	0.687	0.039	5.68	-	8.6	5.0	1.41
306	2	0.696	0.03	4.31	-	9.0	6.7	1.43
35	1.51	0.7	0.081	11.57	-	9.2	2.6	1.44
75	1	0.763*	0.441	57.80	-	11.9	0.6	1.57
313	6.1	0.872*	0.087	9.98	-	16.6	4.4	1.79
194	5.1	0.896*	0.026	2.90	-	17.6	15.0	1.84
322	1	0.944*	0.006	0.64	-	19.7	44.1	1.94
205	5	0.946*	0.045	4.76	-	19.8	10.0	1.95
67	3	1.01*	0.09	8.91	-	22.5	5.8	2.08
303	1	1.113*	0.107	9.61	-	26.9	5.8	2.29
197	5.1	1.57*	0.08	5.10	-	46.6	13.5	3.23
191	5.2	1.8*	0.2	11.11	-	56.5	6.6	3.70
145	2	2.411*	0.164	6.80	-	82.7	11.7	4.96
Na ($x_{pt} = 0.134$, $\sigma_{pt} = 0.007$, $u(x_{pt}) = 0.003$) [%]								
35	1.51	0.043*	0.004	9.30	-	-11.6	-18.1	0.32
151	7.2	0.047*	0.006	12.77	-	-11.1	-12.9	0.35
132	7.1	0.059	0.004	6.78	-	-9.5	-14.9	0.44
276	7.2	0.061	0.006	9.84	-	-9.3	-10.9	0.46
263	5.1	0.1	0.01	10.00	-	-4.3	-3.3	0.75
281	5	0.106	0.001	0.94	-	-3.6	-8.7	0.79
271	2	0.119	0.001	0.84	-	-1.9	-4.7	0.89
145	2	0.12	0.009	7.50	-	-1.8	-1.5	0.90
309	7.2	0.121	0.011	9.09	-	-1.7	-1.1	0.90
113	2	0.122	0.011	9.02	-	-1.5	-1.1	0.91
182	5.1	0.124	0.002	1.61	-	-1.3	-2.7	0.93
199	5.1	0.125	0.005	4.00	-	-1.1	-1.5	0.93
61	5.2	0.125	0.013	10.40	-	-1.1	-0.7	0.93
194	5.1	0.126	0.006	4.76	-	-1.0	-1.2	0.94
183	5.1	0.127	0.002	1.57	-	-0.9	-1.9	0.95
197	5.1	0.13	0.007	5.38	-	-0.5	-0.5	0.97
67	3	0.13	0.04	30.77	-	-0.5	-0.1	0.97
283	5.1	0.13	0.004	3.08	-	-0.5	-0.8	0.97
262	5	0.131	0.003	2.29	-	-0.4	-0.7	0.98

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
267	2	0.131	0.01	7.63	-	-0.4	-0.3	0.98
248	5	0.133	0.001	0.75	-	-0.1	-0.3	0.99
247	5.2	0.135	0.011	8.15	-	0.1	0.1	1.01
40	5.1	0.135	0.008	5.93	-	0.1	0.1	1.01
268	6.1	0.135	0.004	2.96	-	0.1	0.2	1.01
171	5.1	0.136	0.007	5.15	-	0.3	0.3	1.01
202	5.1	0.137	0.006	4.38	-	0.4	0.4	1.02
176	5.2	0.138	0.002	1.45	-	0.5	1.1	1.03
302	5.1	0.138	0.046	33.33	-	0.5	0.1	1.03
237	5.1	0.138	0.007	5.07	-	0.5	0.5	1.03
220	5.1	0.139	0.01	7.19	-	0.6	0.5	1.04
282	5.2	0.14	0.001	0.71	-	0.8	1.9	1.04
55	5.2	0.14	0.002	1.43	-	0.8	1.6	1.04
215	5.1	0.141	0.01	7.09	-	0.9	0.7	1.05
167	5	0.142	0.002	1.41	-	1.0	2.2	1.06
195	5.2	0.142	0.015	10.56	-	1.0	0.5	1.06
193	5.2	0.143	0.001	0.70	-	1.1	2.8	1.07
244	2	0.144	0.018	12.50	-	1.3	0.5	1.07
261	5.1	0.146	0.002	1.37	-	1.5	3.3	1.09
279	5	0.148	0.015	10.14	-	1.8	0.9	1.10
257	5	0.148	0.007	4.73	-	1.8	1.8	1.10
65	1.16	0.15	0.011	7.33	-	2.0	1.4	1.12
221	5	0.153	0.008	5.23	-	2.4	2.2	1.14
234	5	0.155	0.008	5.16	-	2.7	2.5	1.16
203	5	0.16	0.003	1.88	-	3.3	6.1	1.19
314	2	0.16	0.02	12.50	-	3.3	1.3	1.19
152	5.2	0.163	0.005	3.07	-	3.7	5.0	1.22
235	5	0.163	0.025	15.34	-	3.7	1.2	1.22
126	1	0.179	0.6	335.20	-	5.7	0.1	1.34
206	1.22	0.18	0.012	6.67	-	5.8	3.7	1.34
272	5.2	0.2	0.04	20.00	-	8.4	1.6	1.49
130	2	0.218*	0.078	35.78	-	10.7	1.1	1.63
204	1.21	0.356*	0.043	12.08	-	28.2	5.1	2.66
170	5.2	0.434*	0.08	18.43	-	38.1	3.7	3.24
322	1	0.454*	0.007	1.54	-	40.7	41.9	3.39
Si ($x_{pt} = 17$, $\sigma_{pt} = 0.4$, $u(x_{pt}) = 0.13$) [%]								
273	7.1	0.017**	0.004	23.53	-	-39.4	-133.1	0.00
235	1	5.508*	0.123	2.23	-	-26.6	-64.9	0.32
105	1.32	5.519*	0.172	3.12	-	-26.6	-53.6	0.32
73	1.2	7.359*	0.092	1.25	-	-22.3	-61.3	0.43
145	2	7.904*	0.152	1.92	-	-21.1	-45.8	0.46
113	2	8.154*	0.231	2.83	-	-20.5	-33.5	0.48
126	1	8.26*	1.2	14.53	-	-20.3	-7.2	0.49
67	3	9.38*	0.37	3.94	-	-17.7	-19.5	0.55
238	1.13	9.7*	1	10.31	-	-16.9	-7.2	0.57
304	1	9.783*	0.73	7.46	-	-16.7	-9.7	0.58
75	1	9.796*	0.155	1.58	-	-16.7	-35.9	0.58
206	1.22	10.88*	0.01	0.09	-	-14.2	-47.8	0.64
130	2	11.167*	1.023	9.16	-	-13.5	-5.7	0.66

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
306	2	11.48*	0.12	1.05	-	-12.8	-31.5	0.68
308	1.51	11.485*	0.804	7.00	-	-12.8	-6.8	0.68
303	1	11.667*	0.521	4.47	-	-12.4	-9.9	0.69
305	1.3	12.1*	0.034	0.28	-	-11.4	-37.1	0.71
314	2	12.2*	0.4	3.28	-	-11.1	-11.4	0.72
204	1.21	12.57*	0.516	4.11	-	-10.3	-8.3	0.74
244	2	13.027*	0.325	2.49	-	-9.2	-11.4	0.77
216	4.32	13.194*	0.132	1.00	-	-8.8	-20.7	0.78
35	1.51	13.25*	0.062	0.47	-	-8.7	-26.4	0.78
65	1.16	14.51	1.1	7.58	-	-5.8	-2.2	0.85
155	4.2	14.99	0.45	3.00	-	-4.7	-4.3	0.88
220	2	15.444	0.719	4.66	-	-3.6	-2.1	0.91
278	1.22	15.972	2.71	16.97	-	-2.4	-0.4	0.94
271	2	16.94	0.2	1.18	-	-0.1	-0.3	1.00
295	2	17	1	5.88	-	0.0	0.0	1.00
102	1.23	17.17	1.709	9.95	-	0.4	0.1	1.01
234	5	17.4	0.9	5.17	-	0.9	0.4	1.02
183	5.4	17.4	0.3	1.72	-	0.9	1.2	1.02
250	2	17.524	0.582	3.32	-	1.2	0.9	1.03
258	1	17.678	0.05	0.28	-	1.6	4.9	1.04
225	1	17.92	0.92	5.13	-	2.1	1.0	1.05
322	1	18.247	0.035	0.19	-	2.9	9.4	1.07
116	1.32	25.6*	2.25	8.79	-	19.9	3.8	1.51
267	2	26.96*	0.1	0.37	-	23.1	61.5	1.59
77	1	28*	2.2	7.86	-	25.5	5.0	1.65
236	1.21	33*	1	3.03	-	37.1	15.9	1.94
Ag [mg/kg]								
151	7.2	0.325	0.033	10.15	-	-	-	-
303	1	9	1.155	12.83	-	-	-	-
259	7.1	15	0.11	0.73	-	-	-	-
126	1	15.6	1.56	10.00	-	-	-	-
$As (x_{pt} = 7.1, \sigma_{pt} = 0.9, u(x_{pt}) = 0.3) [mg/kg]$								
312	1.3	0.44**	0.03	6.82	-	-7.5	-24.3	0.06
204	1.21	1.535	0.268	17.46	-	-6.3	-14.6	0.21
286	6.3	2.012	0.002	0.10	-	-5.7	-18.7	0.28
105	1.32	3.3	0.14	4.24	-	-4.3	-12.5	0.46
126	1	4.22	0.4	9.48	-	-3.3	-6.0	0.59
65	1.16	4.77	0.26	5.45	-	-2.7	-6.3	0.67
314	1.3	5.1	0.5	9.80	-	-2.3	-3.6	0.71
197	5.1	5.26	0.28	5.32	-	-2.1	-4.8	0.74
209	1.4	5.5	0.3	5.45	-	-1.8	-4.0	0.77
132	7.1	5.538	0.024	0.43	-	-1.8	-5.8	0.78
322	1	5.72	0.381	6.66	-	-1.6	-3.0	0.80
309	7.2	6	0.53	8.83	-	-1.3	-1.9	0.84
272	5.2	6	0.4	6.67	-	-1.3	-2.4	0.84
61	5.2	6.3	0.6	9.52	-	-0.9	-1.3	0.88
220	5.1	6.34	0.372	5.87	-	-0.9	-1.7	0.89
202	5.1	6.37	0.16	2.51	-	-0.9	-2.4	0.89

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
283	5.1	6.38	0.21	3.29	-	-0.9	-2.2	0.89
263	5.1	6.4	0.32	5.00	-	-0.8	-1.8	0.90
191	5.2	6.4	0.6	9.38	-	-0.8	-1.1	0.90
237	5.1	6.49	0.33	5.08	-	-0.7	-1.5	0.91
183	5.1	6.51	0.15	2.30	-	-0.7	-2.0	0.91
176	5.2	6.53	0.11	1.68	-	-0.7	-2.1	0.91
248	5	6.56	0.13	1.98	-	-0.7	-1.9	0.92
182	5.1	6.566	1.05	15.99	-	-0.6	-0.5	0.92
199	5.1	6.62	0.51	7.70	-	-0.6	-0.9	0.93
235	1	6.68	1.74	26.05	-	-0.5	-0.3	0.94
279	5	6.76	0.68	10.06	-	-0.4	-0.5	0.95
40	5.1	6.87	0.43	6.26	-	-0.3	-0.5	0.96
234	5	6.91	0.41	5.93	-	-0.3	-0.5	0.97
215	5.1	6.92	0.55	7.95	-	-0.2	-0.4	0.97
171	5.1	6.93	0.64	9.24	-	-0.2	-0.3	0.97
282	5.2	6.98	0.13	1.86	-	-0.2	-0.5	0.98
262	5	6.98	0.367	5.26	-	-0.2	-0.4	0.98
206	1.22	7.01	1.6	22.82	-	-0.1	-0.1	0.98
281	5	7.1	0.064	0.90	-	0.0	-0.1	0.99
151	7.2	7.105	0.452	6.36	-	0.0	-0.1	0.99
303	1	7.333	0.667	9.10	-	0.2	0.3	1.03
205	5	7.343	0.671	9.14	-	0.2	0.3	1.03
152	5.2	7.396	0.687	9.29	-	0.3	0.3	1.04
221	5	7.6	0.3	3.95	-	0.5	1.1	1.06
170	5.2	7.71	0.55	7.13	-	0.6	0.9	1.08
247	5.2	7.73	0.22	2.85	-	0.7	1.7	1.08
193	5.2	7.765	0.011	0.14	-	0.7	2.3	1.09
55	5.2	7.78	1.1	14.14	-	0.7	0.6	1.09
203	5	7.9	0.55	6.96	-	0.9	1.2	1.11
229	6.2	7.98	0.1	1.25	-	0.9	2.9	1.12
302	5.1	8.46	0.09	1.06	-	1.5	4.6	1.18
261	5.1	8.541	0.253	2.96	-	1.6	3.8	1.20
116	1.32	8.8	0.89	10.11	-	1.9	1.8	1.23
167	5	9.079	0.119	1.31	-	2.2	6.5	1.27
252	2	9.5	1.63	17.16	-	2.6	1.4	1.33
307	1	10.38	2.08	20.04	-	3.6	1.5	1.45
75	1	11	8	72.73	-	4.3	0.5	1.54
194	5.1	11.774	1.928	16.38	-	5.2	2.4	1.65
77	1	15.42*	1.32	8.56	-	9.3	6.1	2.16
308	1.51	23*	5	21.74	-	17.8	3.2	3.22
310	1.3	24.607*	0.084	0.34	-	19.6	61.0	3.45
236	1.21	30*	4	13.33	-	25.6	5.7	4.20
305	1.3	46.9*	0.068	0.14	-	44.5	140.9	6.57
270	6	204.88**	2	0.98	-	221.5	98.0	28.69
B [mg/kg]								
183	5.4	36.9	0.3	0.81	-	-	-	-
Ba ($x_{pt} = 159$, $\sigma_{pt} = 12$, $u(x_{pt}) = 3$) [mg/kg]								
255	1.32	51.13*	6.653	13.01	-9.1	-	-14.7	0.32

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
320	1.3	54.02*	6.48	12.00	-8.9	-	-14.6	0.34
273	7.1	71.663*	8.299	11.58	-7.4	-	-9.9	0.45
262	5	74.8*	17.4	23.26	-7.1	-	-4.8	0.47
197	5.1	85.75	4.71	5.49	-6.2	-	-13.0	0.54
271	2	92	16	17.39	-5.6	-	-4.1	0.58
75	1	97	54.67	56.36	-5.2	-	-1.1	0.61
204	1.21	109.942	19.668	17.89	-4.1	-	-2.5	0.69
65	1.16	110.16	10.55	9.58	-4.1	-	-4.4	0.69
151	7.2	112.465	11.068	9.84	-3.9	-	-4.1	0.71
194	5.1	118.867	10.422	8.77	-3.4	-	-3.7	0.75
281	5	122	9.516	7.80	-3.1	-	-3.7	0.77
167	5	125.577	5.789	4.61	-2.8	-	-5.1	0.79
234	5	127	11	8.66	-2.7	-	-2.8	0.80
183	5.1	140	5	3.57	-1.6	-	-3.2	0.88
137	6	142	27	19.01	-1.4	-	-0.6	0.89
191	5.2	144	1	0.69	-1.3	-	-4.7	0.91
309	7.2	145	17	11.72	-1.2	-	-0.8	0.91
283	5.1	148	11	7.43	-0.9	-	-1.0	0.93
276	7.2	149	15	10.07	-0.8	-	-0.7	0.94
259	7.1	149	5	3.36	-0.8	-	-1.7	0.94
203	5	149	13	8.72	-0.8	-	-0.7	0.94
126	1.11	150.1	15	9.99	-0.8	-	-0.6	0.94
248	5	151	4.5	2.98	-0.7	-	-1.5	0.95
307	1	152.41	30.48	20.00	-0.6	-	-0.2	0.96
237	5.1	154	8	5.19	-0.4	-	-0.6	0.97
303	1	154.667	8.743	5.65	-0.4	-	-0.5	0.97
206	1.22	156	5.3	3.40	-0.3	-	-0.5	0.98
215	5.1	157	13	8.28	-0.2	-	-0.1	0.99
176	5.2	157	7	4.46	-0.2	-	-0.3	0.99
205	5	158.06	2.986	1.89	-0.1	-	-0.2	0.99
282	5.2	159	19.6	12.33	0.0	-	0.0	1.00
238	1.13	160	16	10.00	0.1	-	0.1	1.01
247	5.2	161	18	11.18	0.2	-	0.1	1.01
145	2	161	12	7.45	0.2	-	0.2	1.01
220	5.1	161.629	16.182	10.01	0.2	-	0.2	1.02
279	5	162	32	19.75	0.3	-	0.1	1.02
252	2	164	17	10.37	0.4	-	0.3	1.03
302	5.1	167.9	1.8	1.07	0.8	-	2.5	1.06
40	5.1	168	70.9	42.20	0.8	-	0.1	1.06
263	5.1	168	8.4	5.00	0.8	-	1.0	1.06
61	5.1	170	30	17.65	0.9	-	0.4	1.07
199	5.1	172.638	3.96	2.29	1.1	-	2.7	1.09
78	1	174	8	4.60	1.3	-	1.8	1.09
221	5	182.5	10.6	5.81	2.0	-	2.1	1.15
261	5.1	194.166	9.802	5.05	3.0	-	3.4	1.22
193	5.2	232.93	0.154	0.07	6.2	-	24.1	1.46
306	2	234	69	29.49	6.3	-	1.1	1.47
152	5.2	267.147*	27.351	10.24	9.1	-	3.9	1.68
155	4.2	343*	200	58.31	15.5	-	0.9	2.16
267	2	395*	60	15.19	19.9	-	3.9	2.48

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
130	2	527*	55	10.44	31.0	-	6.7	3.31
236	1.21	652*	109	16.72	41.6	-	4.5	4.10
Be [mg/kg]								
309	7.2	0.652	0.059	9.05	-	-	-	-
Bi [mg/kg]								
309	7.2	0.121	0.009	7.44	-	-	-	-
105	1.32	0.85	0.049	5.76	-	-	-	-
$Br (x_{pt} = 6.2, \sigma_{pt} = 0.8, u(x_{pt}) = 0.2) [mg/kg]$								
312	1.3	0.46**	0.03	6.52	-7.6	-	-27.2	0.07
105	1.32	0.88*	0.12	13.64	-7.1	-	-22.1	0.14
204	1.21	3.825	0.389	10.17	-3.2	-	-5.4	0.61
65	1.16	4.11	0.25	6.08	-2.8	-	-6.5	0.66
263	5.1	4.9	0.25	5.10	-1.8	-	-4.1	0.79
197	5.1	4.93	0.27	5.48	-1.7	-	-3.8	0.79
262	5	5.21	0.306	5.87	-1.3	-	-2.7	0.84
281	5	5.23	0.141	2.70	-1.3	-	-3.9	0.84
209	1.4	5.3	0.2	3.77	-1.2	-	-3.2	0.85
137	6	5.46	0.5	9.16	-1.0	-	-1.4	0.88
183	5.1	5.61	0.12	2.14	-0.8	-	-2.6	0.90
307	1	5.69	1.14	20.04	-0.7	-	-0.5	0.91
206	1.22	5.76	0.62	10.76	-0.6	-	-0.7	0.93
194	5.1	5.765	0.548	9.51	-0.6	-	-0.8	0.93
283	5.1	5.82	0.2	3.44	-0.5	-	-1.4	0.93
237	5.1	5.89	0.29	4.92	-0.4	-	-0.9	0.95
191	5.2	6.1	0.2	3.28	-0.2	-	-0.4	0.98
199	5.1	6.12	0.28	4.58	-0.1	-	-0.3	0.98
176	5.2	6.17	0.1	1.62	-0.1	-	-0.2	0.99
220	5.1	6.202	0.334	5.39	0.0	-	-0.1	1.00
40	5.1	6.22	0.4	6.43	0.0	-	0.0	1.00
248	5	6.26	0.13	2.08	0.0	-	0.1	1.01
215	5.1	6.36	0.39	6.13	0.2	-	0.3	1.02
202	5.1	6.37	0.63	9.89	0.2	-	0.2	1.02
261	5.1	6.471	0.193	2.98	0.3	-	0.9	1.04
61	5.1	6.5	0.9	13.85	0.4	-	0.3	1.04
171	5.1	6.51	0.39	5.99	0.4	-	0.6	1.05
55	5.2	6.57	0.3	4.57	0.5	-	0.9	1.06
282	5.2	6.58	0.18	2.74	0.5	-	1.3	1.06
279	5	6.63	0.89	13.42	0.5	-	0.4	1.06
203	5	6.65	0.47	7.07	0.6	-	0.8	1.07
302	5.1	6.68	0.02	0.30	0.6	-	2.2	1.07
221	5	7.2	0.4	5.56	1.3	-	2.2	1.16
54	1	7.37	1.04	14.11	1.5	-	1.1	1.18
152	5.2	7.532	0.439	5.83	1.7	-	2.7	1.21
195	5.2	7.6	0.66	8.68	1.8	-	2.0	1.22
310	1.3	8.618	0.054	0.63	3.2	-	11.1	1.38
303	1	9.333	1.333	14.28	4.1	-	2.3	1.50
236	1.21	10	1	10.00	5.0	-	3.7	1.61

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
267	2	13*	10	76.92	9.0	-	0.7	2.09
Cd [mg/kg]								
151	7.2	0.063**	0.012	19.05	-	-	-	-
285	6.2	0.107**	0.007	6.54	-	-	-	-
270	6	0.21	2.5	1190.48	-	-	-	-
286	6.1	0.667	0.00001	0.15	-	-	-	-
206	1.22	3.3	0.854	25.88	-	-	-	-
130	2	6	2	33.33	-	-	-	-
204	1.21	8.103	1.045	12.90	-	-	-	-
259	7.1	14	0.2	1.43	-	-	-	-
Ce ($x_{pt} = 31.4$, $\sigma_{pt} = 3$, $u(x_{pt}) = 1.2$) [mg/kg]								
167	5	9.384*	0.33	3.52	-	-6.9	-18.3	0.30
194	5.1	17.417	2.118	12.16	-	-4.4	-5.8	0.55
105	1.32	19	3.4	17.89	-	-3.9	-3.5	0.61
206	1.22	19.33	1.6	8.28	-	-3.8	-6.1	0.62
281	5	22	0.704	3.20	-	-2.9	-7.0	0.70
234	5	23	2.3	10.00	-	-2.6	-3.3	0.73
309	7.2	23	1.6	6.96	-	-2.6	-4.3	0.73
183	5.1	23.6	0.8	3.39	-	-2.4	-5.6	0.75
261	5.1	24.101	0.337	1.40	-	-2.3	-6.1	0.77
205	5	24.664	1.098	4.45	-	-2.1	-4.2	0.79
195	5.2	24.74	4.46	18.03	-	-2.1	-1.4	0.79
176	5.2	24.8	1.1	4.44	-	-2.1	-4.1	0.79
55	5.2	25	1.2	4.80	-	-2.0	-3.8	0.80
191	5.2	25.01	0.08	0.32	-	-2.0	-5.5	0.80
279	5	25.8	2.5	9.69	-	-1.7	-2.0	0.82
238	1.13	25.9	2.6	10.04	-	-1.7	-1.9	0.82
262	5	26	0.242	0.93	-	-1.7	-4.6	0.83
237	5.1	26.9	1.3	4.83	-	-1.4	-2.6	0.86
202	5.1	26.9	0.5	1.86	-	-1.4	-3.6	0.86
215	5.1	27.05	1.72	6.36	-	-1.4	-2.1	0.86
126	1.11	27.1	3.4	12.55	-	-1.3	-1.2	0.86
203	5	27.48	0.62	2.26	-	-1.2	-3.0	0.88
199	5.1	27.996	2.098	7.49	-	-1.1	-1.4	0.89
272	5.2	28	2	7.14	-	-1.1	-1.5	0.89
248	5	28.3	0.37	1.31	-	-1.0	-2.6	0.90
40	5.1	28.6	1.7	5.94	-	-0.9	-1.4	0.91
171	5.1	28.6	2.4	8.39	-	-0.9	-1.1	0.91
151	7.2	28.784	1.703	5.92	-	-0.8	-1.3	0.92
247	5.2	29.42	0.75	2.55	-	-0.6	-1.4	0.94
307	1	29.95	5.99	20.00	-	-0.5	-0.2	0.95
61	5.2	31	2	6.45	-	-0.1	-0.2	0.99
257	5	31	2	6.45	-	-0.1	-0.2	0.99
220	5.1	31.117	2.404	7.73	-	-0.1	-0.1	0.99
65	1.16	31.38	1.65	5.26	-	0.0	0.0	1.00
302	5.1	32.65	0.5	1.53	-	0.4	1.0	1.04
170	5.2	32.97	1.84	5.58	-	0.5	0.7	1.05
283	5.1	36.8	1.1	2.99	-	1.7	3.4	1.17

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
252	2	38	6.7	17.63	-	2.1	1.0	1.21
193	5.2	38.55	0.013	0.03	-	2.2	6.2	1.23
263	5.1	40.7	2.04	5.01	-	2.9	4.0	1.30
152	5.2	54.947*	2.439	4.44	-	7.3	8.7	1.75
204	1.21	71.58*	8.508	11.89	-	12.5	4.7	2.28
Cl [mg/kg]								
261	5.2	73.471	3.127	4.26	-	-	-	-
215	5.1	77.4	8.3	10.72	-	-	-	-
237	5.1	79	4	5.06	-	-	-	-
220	5.1	84.289	7.316	8.68	-	-	-	-
126	1	85.4	17	19.91	-	-	-	-
183	5.4	86.8	1.9	2.19	-	-	-	-
113	2	88	8.4	9.55	-	-	-	-
248	5	90	18	20.00	-	-	-	-
105	1.32	131	19	14.50	-	-	-	-
137	6	140	29	20.71	-	-	-	-
303	1	158	4.619	2.92	-	-	-	-
314	2	183	27	14.75	-	-	-	-
204	1.21	198	22	11.11	-	-	-	-
67	3	200	100	50.00	-	-	-	-
65	1.16	222.77	18.75	8.42	-	-	-	-
304	1	397	29.71	7.48	-	-	-	-
267	2	874	90	10.30	-	-	-	-
197	5.1	917	50	5.45	-	-	-	-
75	1	1354.33	212	15.65	-	-	-	-
Co ($x_{pt} = 3.68$, $\sigma_{pt} = 0.5$, $u(x_{pt}) = 0.09$) [mg/kg]								
307	1	1.9	0.38	20.00	-3.7	-	-4.6	0.52
265	1.22	1.993	0.24	12.04	-3.5	-	-6.6	0.54
206	1.22	2.54	0.57	22.44	-2.4	-	-2.0	0.69
194	5.1	3.235	0.42	12.98	-0.9	-	-1.0	0.88
309	7.2	3.45	0.2	5.80	-0.5	-	-1.1	0.94
183	5.1	3.56	0.08	2.25	-0.2	-	-1.0	0.97
237	5.1	3.62	0.18	4.97	-0.1	-	-0.3	0.98
176	5.2	3.7	0.06	1.62	0.0	-	0.2	1.01
263	5.1	3.7	0.19	5.14	0.0	-	0.1	1.01
281	5	3.71	0.174	4.69	0.1	-	0.2	1.01
40	5.1	3.71	0.23	6.20	0.1	-	0.1	1.01
272	5.2	3.72	0.16	4.30	0.1	-	0.2	1.01
248	5	3.72	0.074	1.99	0.1	-	0.4	1.01
171	5.1	3.74	0.15	4.01	0.1	-	0.3	1.02
199	5.1	3.741	0.363	9.70	0.1	-	0.2	1.02
302	5.1	3.75	0.05	1.33	0.1	-	0.7	1.02
191	5.2	3.76	0.05	1.33	0.2	-	0.8	1.02
167	5	3.796	0.106	2.79	0.2	-	0.9	1.03
261	5.1	3.801	0.072	1.89	0.3	-	1.1	1.03
220	5.2	3.821	0.085	2.22	0.3	-	1.2	1.04
279	5	3.83	0.52	13.58	0.3	-	0.3	1.04
170	5.2	3.87	0.29	7.49	0.4	-	0.6	1.05

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
282	5.2	3.88	0.29	7.47	0.4	-	0.7	1.05
203	5	3.9	0.11	2.82	0.5	-	1.6	1.06
61	5.2	4.1	0.5	12.20	0.9	-	0.8	1.11
55	5.2	4.1	0.4	9.76	0.9	-	1.0	1.11
202	5.1	4.12	0.13	3.16	0.9	-	2.8	1.12
262	5	4.13	0.105	2.54	0.9	-	3.3	1.12
195	5.2	4.16	0.51	12.26	1.0	-	0.9	1.13
151	7.2	4.161	0.261	6.27	1.0	-	1.8	1.13
247	5.2	4.22	0.16	3.79	1.1	-	3.0	1.15
234	5	4.4	0.32	7.27	1.5	-	2.2	1.20
215	5.1	4.4	0.27	6.14	1.5	-	2.5	1.20
205	5	4.53	0.869	19.18	1.8	-	1.0	1.23
182	5.1	4.554	0.438	9.62	1.8	-	2.0	1.24
283	5.1	4.62	0.15	3.25	1.9	-	5.5	1.26
252	2	4.77	1.4	29.35	2.3	-	0.8	1.30
193	5.2	5.244	0.005	0.10	3.2	-	18.4	1.43
271	2	6*	1	16.67	4.8	-	2.3	1.63
105	1.32	6*	0.51	8.50	4.8	-	4.5	1.63
152	5.2	7.398*	0.477	6.45	7.7	-	7.7	2.01
259	7.1	29*	0.3	1.03	52.3	-	81.2	7.88
209	1.4	35.9*	0.7	1.95	66.6	-	45.7	9.76
303	1	60**	2	3.33	116.4	-	28.1	16.30
304	1	105**	7.86	7.49	209.4	-	12.9	28.53
Cr ($x_{pt} = 19.0$, $\sigma_{pt} = 2.0$, $u(x_{pt}) = 0.5$) [mg/kg]								
286	6.1	3.333*	0.00001	0.03	-8.0	-	-32.3	0.18
126	1	3.7*	0.74	20.00	-7.8	-	-17.3	0.19
270	6	6.69	2	29.90	-6.3	-	-6.0	0.35
105	1.32	8.4	0.58	6.90	-5.4	-	-14.0	0.44
154	7.1	8.84	0.23	2.60	-5.2	-	-18.9	0.47
320	1.3	9.25	0.58	6.27	-5.0	-	-12.9	0.49
273	7.1	9.494	1.264	13.31	-4.9	-	-7.0	0.50
132	7.1	9.535	0.173	1.81	-4.9	-	-18.4	0.50
255	1.32	13.59	0.332	2.44	-2.8	-	-9.2	0.72
259	7.1	14	0.8	5.71	-2.6	-	-5.3	0.74
167	5	14.437	0.286	1.98	-2.3	-	-8.1	0.76
195	5.2	15.63	2.56	16.38	-1.7	-	-1.3	0.82
194	5.1	16.463	2.608	15.84	-1.3	-	-1.0	0.87
116	1.32	17.03	3.42	20.08	-1.0	-	-0.6	0.90
145	2	18	2.39	13.28	-0.5	-	-0.4	0.95
281	5	18.3	0.988	5.40	-0.4	-	-0.6	0.96
199	5.1	18.589	1.78	9.58	-0.2	-	-0.2	0.98
276	7.2	19.2	2	10.42	0.1	-	0.1	1.01
183	5.1	19.3	0.4	2.07	0.2	-	0.5	1.02
170	5.2	19.41	2.34	12.06	0.2	-	0.2	1.02
237	5.1	19.5	1.3	6.67	0.3	-	0.4	1.03
248	5	20.1	0.4	1.99	0.6	-	1.7	1.06
220	5.2	20.577	1.384	6.73	0.8	-	1.1	1.08
191	5.2	20.58	0.1	0.49	0.8	-	3.2	1.08
151	7.2	20.698	1.932	9.33	0.9	-	0.9	1.09

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
176	5.2	20.7	0.8	3.86	0.9	-	1.8	1.09
262	5	20.8	0.371	1.78	0.9	-	2.9	1.09
202	5.1	21.4	2	9.35	1.2	-	1.2	1.13
279	5	21.5	0.5	2.33	1.3	-	3.6	1.13
305	1.3	21.8	0.046	0.21	1.4	-	5.7	1.15
263	5.1	21.8	1.09	5.00	1.4	-	2.3	1.15
215	5.1	21.9	1.5	6.85	1.5	-	1.8	1.15
55	5.2	22.3	2.2	9.87	1.7	-	1.5	1.17
171	5.1	22.5	3.2	14.22	1.8	-	1.1	1.18
282	5.2	22.5	2.18	9.69	1.8	-	1.6	1.18
247	5.2	22.87	0.96	4.20	2.0	-	3.6	1.20
61	5.2	23	2	8.70	2.0	-	1.9	1.21
261	5.1	23.715	0.443	1.87	2.4	-	7.2	1.25
78	1	24	2	8.33	2.6	-	2.4	1.26
311	1.3	24.133	6.68	27.68	2.6	-	0.8	1.27
283	5.1	25.9	1.019	3.93	3.5	-	6.1	1.36
252	2	27	4.9	18.15	4.1	-	1.6	1.42
102	1.23	27.345	3.2	11.70	4.3	-	2.6	1.44
40	5.1	28.2	1.7	6.03	4.7	-	5.2	1.48
205	5	29.084	12.987	44.65	5.2	-	0.8	1.53
152	5.2	32.094	2.553	7.95	6.7	-	5.0	1.69
307	1	33.13*	6.63	20.01	7.2	-	2.1	1.74
313	6.1	33.64*	3.364	10.00	7.5	-	4.3	1.77
308	1.51	34*	5	14.71	7.7	-	3.0	1.79
310	1.3	37.88*	0.33	0.87	9.7	-	32.2	1.99
206	1.22	40.83*	1.7	4.16	11.2	-	12.3	2.15
193	5.2	47.82*	0.015	0.03	14.8	-	59.4	2.52
314	1.3	58*	9	15.52	20.0	-	4.3	3.05
130	2	60*	6	10.00	21.0	-	6.8	3.16
236	1.21	78*	32	41.03	30.2	-	1.8	4.11
271	2	81*	37	45.68	31.8	-	1.7	4.26
303	1	81.333*	5.457	6.71	31.9	-	11.4	4.28
209	1.4	89*	12	13.48	35.9	-	5.8	4.68
204	1.21	133.233*	24.199	18.16	58.5	-	4.7	7.01
267	2	163*	40	24.54	73.8	-	3.6	8.58
94	1.22	207*	35	16.91	96.3	-	5.4	10.89
304	1	310**	23.2	7.48	149.1	-	12.5	16.32
Cs ($x_{pt} = 2.23$, $\sigma_{pt} = 0.3$, $u(x_{pt}) = 0.05$) [mg/kg]								
281	5	1.69	0.12	7.10	-1.7	-	-4.1	0.76
302	5.1	1.78	0.01	0.56	-1.4	-	-8.2	0.80
262	5	1.8	0.068	3.78	-1.4	-	-5.0	0.81
204	1.21	1.835	0.314	17.11	-1.3	-	-1.2	0.82
151	7.2	1.865	0.14	7.51	-1.2	-	-2.4	0.84
194	5.1	1.89	0.238	12.59	-1.1	-	-1.4	0.85
234	5	2.05	0.19	9.27	-0.6	-	-0.9	0.92
309	7.2	2.06	0.25	12.14	-0.5	-	-0.7	0.92
261	5.1	2.083	0.038	1.82	-0.5	-	-2.2	0.93
171	5.1	2.16	0.15	6.94	-0.2	-	-0.5	0.97
199	5.1	2.167	0.19	8.77	-0.2	-	-0.3	0.97

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
237	5.1	2.17	0.11	5.07	-0.2	-	-0.5	0.97
170	5.2	2.17	0.53	24.42	-0.2	-	-0.1	0.97
248	5	2.17	0.043	1.98	-0.2	-	-0.9	0.97
183	5.1	2.17	0.04	1.84	-0.2	-	-0.9	0.97
220	5.1	2.195	0.113	5.15	-0.1	-	-0.3	0.98
263	5.1	2.2	0.11	5.00	-0.1	-	-0.3	0.99
257	5	2.2	0.2	9.09	-0.1	-	-0.2	0.99
176	5.2	2.21	0.04	1.81	-0.1	-	-0.3	0.99
152	5.2	2.211	0.189	8.55	-0.1	-	-0.1	0.99
283	5.1	2.221	0.095	4.28	0.0	-	-0.1	1.00
215	5.1	2.23	0.14	6.28	0.0	-	0.0	1.00
167	5	2.283	0.063	2.76	0.2	-	0.6	1.02
61	5.2	2.3	0.4	17.39	0.2	-	0.2	1.03
202	5.1	2.31	0.08	3.46	0.2	-	0.8	1.03
203	5	2.353	0.026	1.10	0.4	-	2.0	1.05
40	5.1	2.36	0.15	6.36	0.4	-	0.8	1.06
247	5.2	2.39	0.1	4.18	0.5	-	1.4	1.07
279	5	2.39	0.24	10.04	0.5	-	0.6	1.07
191	5.2	2.46	0.07	2.85	0.7	-	2.6	1.10
282	5.2	2.47	0.28	11.34	0.8	-	0.8	1.11
195	5.2	2.5	0.45	18.00	0.8	-	0.6	1.12
182	5.1	2.522	0.337	13.36	0.9	-	0.8	1.13
55	5.2	2.6	0.2	7.69	1.2	-	1.8	1.16
221	5	2.79	0.17	6.09	1.8	-	3.1	1.25
193	5.2	3.189	0.005	0.16	3.0	-	17.5	1.43
206	1.22	5.2*	0.46	8.85	9.4	-	6.4	2.33
Cu [mg/kg]								
105	1.32	1.8	0.055	3.06	-	-	-	-
286	6.1	2.5	0.033	1.32	-	-	-	-
252	2	3.22	1.07	33.23	-	-	-	-
255	1.32	3.247	0.089	2.74	-	-	-	-
314	1.3	3.3	0.3	9.09	-	-	-	-
311	1.3	3.365	0.931	27.67	-	-	-	-
285	6.2	3.48	0.06	1.72	-	-	-	-
154	7.1	4.14	0.12	2.90	-	-	-	-
278	1.22	4.19	17.61	420.29	-	-	-	-
132	7.1	4.268	0.081	1.90	-	-	-	-
309	7.2	4.55	0.19	4.18	-	-	-	-
126	1	5.1	0.51	10.00	-	-	-	-
209	1.4	5.1	0.2	3.92	-	-	-	-
151	7.2	5.13	0.449	8.75	-	-	-	-
116	1.32	5.7	0.7	12.28	-	-	-	-
145	2	6	0.66	11.00	-	-	-	-
313	6.1	6.5	0.65	10.00	-	-	-	-
320	1.3	6.8	0.545	8.01	-	-	-	-
271	2	8	2	25.00	-	-	-	-
310	1.3	9.28	0.1	1.08	-	-	-	-
307	1	9.29	1.86	20.02	-	-	-	-
75	1	9.33	6.67	71.49	-	-	-	-

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
206	1.22	9.36	1.4	14.96	-	-	-	-
73	1.2	10.415	1.041	10.00	-	-	-	-
35	1.51	14	2	14.29	-	-	-	-
322	1	14.083	0.012	0.09	-	-	-	-
303	1	21	1.155	5.50	-	-	-	-
244	2	21.367	4.172	19.53	-	-	-	-
130	2	22	4	18.18	-	-	-	-
236	1.21	34	5	14.71	-	-	-	-
259	7.1	62	0.85	1.37	-	-	-	-
204	1.21	84.618**	8.737	10.33	-	-	-	-
267	2	98**	30	30.61	-	-	-	-
302	5.1	154.4**	5.1	3.30	-	-	-	-
54	1	318.634**	18.728	5.88	-	-	-	-
<i>Dy ($x_{pt} = 1.81$, $\sigma_{pt} = 0.3$, $u(x_{pt}) = 0.16$) [mg/kg]</i>								
152	5.2	0.899	0.087	9.68	-	-2.9	-5.0	0.50
191	5.2	1.1	0.8	72.73	-	-2.3	-0.9	0.61
279	5	1.6	0.48	30.00	-	-0.7	-0.4	0.88
262	5	1.63	0.167	10.25	-	-0.6	-0.8	0.90
220	5.1	1.645	0.096	5.84	-	-0.5	-0.9	0.91
237	5.1	1.73	0.09	5.20	-	-0.3	-0.5	0.95
215	5.1	1.746	0.231	13.23	-	-0.2	-0.2	0.96
202	5.1	1.77	0.22	12.43	-	-0.1	-0.2	0.98
248	5	1.86	0.093	5.00	-	0.1	0.2	1.03
55	5.2	2.01	0.2	9.95	-	0.6	0.8	1.11
167	5	2.029	0.037	1.82	-	0.7	1.3	1.12
176	5.2	2.1	0.13	6.19	-	0.9	1.4	1.16
281	5	3.21	0.343	10.69	-	4.5	3.7	1.77
193	5.2	3.42	0.02	0.58	-	5.2	9.8	1.89
<i>Eu ($x_{pt} = 0.440$, $\sigma_{pt} = 0.08$, $u(x_{pt}) = 0.014$) [mg/kg]</i>								
183	5.1	0.372	0.007	1.88	-0.9	-	-4.3	0.85
283	5.1	0.38	0.018	4.74	-0.8	-	-2.6	0.86
237	5.1	0.38	0.019	5.00	-0.8	-	-2.5	0.86
220	5.1	0.382	0.033	8.64	-0.7	-	-1.6	0.87
302	5.1	0.384	0.002	0.52	-0.7	-	-3.9	0.87
194	5.1	0.385	0.061	15.84	-0.7	-	-0.9	0.88
272	5.2	0.4	0.03	7.50	-0.5	-	-1.2	0.91
263	5.1	0.4	0.02	5.00	-0.5	-	-1.6	0.91
279	5	0.401	0.049	12.22	-0.5	-	-0.8	0.91
261	5.1	0.405	0.015	3.70	-0.4	-	-1.7	0.92
262	5	0.409	0.016	3.91	-0.4	-	-1.5	0.93
191	5.2	0.41	0.04	9.76	-0.4	-	-0.7	0.93
199	5.1	0.412	0.038	9.22	-0.4	-	-0.7	0.94
248	5	0.413	0.008	1.94	-0.3	-	-1.7	0.94
61	5.2	0.42	0.06	14.29	-0.3	-	-0.3	0.95
40	5.1	0.42	0.03	7.14	-0.3	-	-0.6	0.95
203	5	0.423	0.022	5.20	-0.2	-	-0.6	0.96
215	5.1	0.423	0.033	7.80	-0.2	-	-0.5	0.96
176	5.2	0.427	0.012	2.81	-0.2	-	-0.7	0.97

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
257	5	0.43	0.03	6.98	-0.1	-	-0.3	0.98
167	5	0.448	0.012	2.68	0.1	-	0.4	1.02
202	5.1	0.452	0.028	6.19	0.2	-	0.4	1.03
247	5.2	0.453	0.035	7.73	0.2	-	0.3	1.03
281	5	0.5	0.026	5.20	0.8	-	2.0	1.14
171	5.1	0.5	0.19	38.00	0.8	-	0.3	1.14
55	5.2	0.532	0.105	19.74	1.2	-	0.9	1.21
193	5.2	0.56	0.004	0.71	1.5	-	8.2	1.27
195	5.2	0.67	0.12	17.91	2.9	-	1.9	1.52
182	5.1	0.871*	0.108	12.40	5.4	-	4.0	1.98
152	5.2	1.275*	0.13	10.20	10.5	-	6.4	2.90
282	5.2	1.56*	0.23	14.74	14.1	-	4.9	3.55
197	5.1	682**	37.5	5.50	8557.8	-	18.2	1550.00
Ga [mg/kg]								
105	1.32	1.8	0.069	3.83	-	-	-	-
152	5.2	2.477	0.383	15.46	-	-	-	-
126	1	3.28	0.328	10.00	-	-	-	-
206	1.22	3.29	0.91	27.66	-	-	-	-
215	5.1	3.59	0.55	15.32	-	-	-	-
40	5.1	3.8	1	26.32	-	-	-	-
320	1.3	3.8	0.162	4.26	-	-	-	-
237	5.1	3.84	0.2	5.21	-	-	-	-
197	5.1	3.85	0.21	5.45	-	-	-	-
151	7.2	3.939	0.178	4.52	-	-	-	-
252	2	4.14	0.88	21.26	-	-	-	-
279	5	4.4	0.15	3.41	-	-	-	-
182	5.1	4.439	0.528	11.89	-	-	-	-
221	5	4.7	0.4	8.51	-	-	-	-
65	1.16	4.88	0.26	5.33	-	-	-	-
265	1.22	6.35	0.74	11.65	-	-	-	-
137	6	6.59	0.65	9.86	-	-	-	-
303	1	8.333	0.667	8.00	-	-	-	-
204	1.21	9.005	2.356	26.16	-	-	-	-
54	1	33.06	3.03	9.17	-	-	-	-
35	1.51	60**	9	15.00	-	-	-	-
310	1.3	387.6**	0.44	0.11	-	-	-	-
Gd [mg/kg]								
215	5.1	1.77	0.36	20.34	-	-	-	-
183	5.4	1.99	0.14	7.04	-	-	-	-
220	5.1	2.35	0.276	11.74	-	-	-	-
237	5.1	2.5	0.15	6.00	-	-	-	-
283	5.1	52.15**	1.86	3.57	-	-	-	-
$Hf(x_{pt} = 4.46, \sigma_{pt} = 0.6, u(x_{pt}) = 0.13)$ [mg/kg]								
234	5	0.137**	0.021	15.33	-7.6	-	-32.5	0.03
105	1.32	0.39**	0.098	25.13	-7.1	-	-24.8	0.09
199	5.1	3.592	0.168	4.68	-1.5	-	-4.1	0.81
262	5	3.63	0.093	2.56	-1.5	-	-5.2	0.81

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
261	5.1	3.677	0.048	1.31	-1.4	-	-5.6	0.82
194	5.1	3.86	0.443	11.48	-1.1	-	-1.3	0.87
281	5	3.86	0.112	2.90	-1.1	-	-3.5	0.87
167	5	4.029	0.102	2.53	-0.8	-	-2.6	0.90
183	5.1	4.05	0.1	2.47	-0.7	-	-2.5	0.91
220	5.1	4.06	0.321	7.91	-0.7	-	-1.2	0.91
247	5.2	4.2	0.75	17.86	-0.5	-	-0.3	0.94
202	5.1	4.26	0.35	8.22	-0.4	-	-0.5	0.95
61	5.2	4.3	0.9	20.93	-0.3	-	-0.2	0.96
237	5.1	4.3	0.22	5.12	-0.3	-	-0.6	0.96
195	5.2	4.33	0.5	11.55	-0.2	-	-0.3	0.97
55	5.2	4.4	0.8	18.18	-0.1	-	-0.1	0.99
176	5.2	4.44	0.4	9.01	0.0	-	-0.1	1.00
171	5.1	4.47	0.85	19.02	0.0	-	0.0	1.00
203	5	4.6	1	21.74	0.2	-	0.1	1.03
272	5.2	4.7	0.3	6.38	0.4	-	0.7	1.05
40	5.1	4.7	0.29	6.17	0.4	-	0.7	1.05
191	5.2	4.7	0.7	14.89	0.4	-	0.3	1.05
263	5.1	4.7	0.24	5.11	0.4	-	0.9	1.05
283	5.1	4.75	0.15	3.16	0.5	-	1.4	1.06
215	5.1	4.77	0.29	6.08	0.5	-	1.0	1.07
282	5.2	4.97	0.3	6.04	0.9	-	1.6	1.11
279	5	5.03	0.51	10.14	1.0	-	1.1	1.13
248	5	5.06	0.005	0.10	1.0	-	4.5	1.13
152	5.2	5.539	0.299	5.40	1.9	-	3.3	1.24
302	5.1	5.54	0.16	2.89	1.9	-	5.2	1.24
193	5.2	6.616	0.007	0.11	3.8	-	16.4	1.48
Ho [mg/kg]								
194	5.1	0.37	0.042	11.35	-	-	-	-
215	5.1	0.393	0.038	9.67	-	-	-	-
221	5	0.47	0.05	10.64	-	-	-	-
$I(x_{pt} = 12.2, \sigma_{pt} = 1.3, u(x_{pt}) = 0.9)$ [mg/kg]								
234	5	0.138**	0.047	34.06	-	-7.4	-12.9	0.01
126	1	3.4	0.34	10.00	-	-5.4	-8.9	0.28
221	5	10.3	0.8	7.77	-	-1.2	-1.5	0.84
220	5.1	12.333	1.22	9.89	-	0.1	0.1	1.01
237	5.1	13.1	0.7	5.34	-	0.6	0.8	1.07
215	5.1	13.2	2	15.15	-	0.6	0.5	1.08
248	5	13.4	0.54	4.03	-	0.7	1.1	1.10
197	5.1	13.8	0.76	5.51	-	1.0	1.3	1.13
$La(x_{pt} = 15.5, \sigma_{pt} = 1.6, u(x_{pt}) = 0.8)$ [mg/kg]								
105	1.32	2.1	0.96	45.71	-	-7.4	-10.8	0.14
126	1.11	7.9	1.6	20.25	-	-4.2	-4.3	0.51
281	5	9	0.072	0.80	-	-3.6	-8.3	0.58
195	5.2	10.78	2.42	22.45	-	-2.6	-1.9	0.70
130	2	11	3	27.27	-	-2.5	-1.5	0.71
309	7.2	11.1	0.6	5.41	-	-2.4	-4.5	0.72

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
194	5.1	11.281	1.72	15.25	-	-2.3	-2.2	0.73
234	5	11.3	1.2	10.62	-	-2.3	-2.9	0.73
183	5.1	11.32	0.21	1.86	-	-2.3	-5.2	0.73
262	5	11.8	0.261	2.21	-	-2.0	-4.5	0.76
302	5.1	11.94	0.17	1.42	-	-2.0	-4.4	0.77
215	5.1	12.41	0.75	6.04	-	-1.7	-2.9	0.80
205	5	12.498	2.087	16.70	-	-1.7	-1.3	0.81
248	5	12.59	0.088	0.70	-	-1.6	-3.7	0.81
238	1.13	12.8	1.2	9.38	-	-1.5	-1.9	0.83
61	5.2	12.8	1.3	10.16	-	-1.5	-1.8	0.83
279	5	13	1.9	14.62	-	-1.4	-1.2	0.84
272	5.2	13	0.3	2.31	-	-1.4	-3.0	0.84
237	5.1	13.1	0.7	5.34	-	-1.3	-2.3	0.85
171	5.1	13.12	0.6	4.57	-	-1.3	-2.4	0.85
197	5.1	13.14	0.72	5.48	-	-1.3	-2.2	0.85
40	5.1	13.14	0.8	6.09	-	-1.3	-2.1	0.85
221	5	13.2	0.7	5.30	-	-1.3	-2.2	0.85
202	5.1	13.35	0.38	2.85	-	-1.2	-2.5	0.86
220	5.1	13.677	0.982	7.18	-	-1.0	-1.5	0.88
252	2	13.8	5.2	37.68	-	-0.9	-0.3	0.89
182	5.1	13.83	0.45	3.25	-	-0.9	-1.8	0.89
261	5.1	13.902	0.304	2.19	-	-0.9	-1.9	0.90
307	1	14.2	2.84	20.00	-	-0.7	-0.4	0.92
176	5.2	14.2	0.2	1.41	-	-0.7	-1.6	0.92
167	5	14.209	0.18	1.27	-	-0.7	-1.6	0.92
282	5.2	14.3	0.13	0.91	-	-0.7	-1.5	0.92
151	7.2	14.412	0.796	5.52	-	-0.6	-1.0	0.93
199	5.1	14.79	0.34	2.30	-	-0.4	-0.8	0.95
247	5.2	14.91	0.49	3.29	-	-0.3	-0.6	0.96
257	5	15	1	6.67	-	-0.3	-0.4	0.97
283	5.1	15.53	0.473	3.05	-	0.0	0.0	1.00
170	5.2	15.55	0.36	2.32	-	0.0	0.1	1.00
152	5.2	15.6	1.2	7.69	-	0.1	0.1	1.01
203	5	15.62	0.39	2.50	-	0.1	0.1	1.01
55	5.2	16	1.1	6.88	-	0.3	0.4	1.03
263	5.1	16.3	0.82	5.03	-	0.4	0.7	1.05
193	5.2	19.82	0.011	0.06	-	2.4	5.5	1.28
204	1.21	21.057	2.248	10.68	-	3.1	2.3	1.36
206	1.22	36.46*	3.5	9.60	-	11.5	5.8	2.35
191	5.2	2301**	24	1.04	-	1256.8	95.2	148.45
Li [mg/kg]								
273	7.1	9.178	2.294	24.99	-	-	-	-
154	7.1	11.4	0.4	3.51	-	-	-	-
309	7.2	15.7	1.7	10.83	-	-	-	-
276	7.2	19.5	2	10.26	-	-	-	-
$Lu (x_{pt} = 0.169, \sigma_{pt} = 0.04, u(x_{pt}) = 0.013) [mg/kg]$								
194	5.1	0.054	0.006	11.11	-	-3.1	-8.1	0.32
262	5	0.057	0.005	8.77	-	-3.0	-8.2	0.34

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
248	5	0.131	0.008	6.11	-	-1.0	-2.5	0.78
234	5	0.137	0.021	15.33	-	-0.9	-1.3	0.81
40	5.1	0.14	0.01	7.14	-	-0.8	-1.8	0.83
247	5.2	0.144	0.01	6.94	-	-0.7	-1.5	0.85
171	5.1	0.144	0.013	9.03	-	-0.7	-1.4	0.85
281	5	0.146	0.008	5.48	-	-0.6	-1.5	0.86
167	5	0.151	0.004	2.65	-	-0.5	-1.3	0.89
176	5.2	0.154	0.004	2.60	-	-0.4	-1.1	0.91
61	5.2	0.16	0.04	25.00	-	-0.2	-0.2	0.95
195	5.2	0.16	0.04	25.00	-	-0.2	-0.2	0.95
279	5	0.161	0.033	20.50	-	-0.2	-0.2	0.95
215	5.1	0.163	0.014	8.59	-	-0.2	-0.3	0.96
257	5	0.17	0.01	5.88	-	0.0	0.1	1.01
203	5	0.17	0.017	10.00	-	0.0	0.0	1.01
55	5.2	0.19	0.02	10.53	-	0.6	0.9	1.12
272	5.2	0.2	0.03	15.00	-	0.8	1.0	1.18
193	5.2	0.207	0.006	2.90	-	1.0	2.7	1.22
152	5.2	0.245	0.021	8.57	-	2.0	3.1	1.45
220	5.1	0.251	0.033	13.15	-	2.2	2.3	1.49
283	5.1	0.29	0.007	2.41	-	3.2	8.3	1.72
263	5.1	0.3	0.02	6.67	-	3.5	5.5	1.78
191	5.2	15.1**	0.9	5.96	-	397.5	16.6	89.35
Mn ($x_{pt} = 79.4$, $\sigma_{pt} = 7$, $u(x_{pt}) = 1.4$) [mg/kg]								
278	1.22	0.8**	155.76	19470.00	-12.0	-	-0.5	0.01
312	1.3	3.72**	0.46	12.37	-11.5	-	-49.9	0.05
77	1	10.74*	1.01	9.40	-10.4	-	-39.0	0.14
105	1.32	30*	1.1	3.67	-7.5	-	-27.2	0.38
102	1.23	34.407*	3	8.72	-6.8	-	-13.5	0.43
308	1.51	38	6	15.79	-6.3	-	-6.7	0.48
65	1.16	42.75	2.72	6.36	-5.6	-	-11.9	0.54
311	1.3	45	12.806	28.46	-5.2	-	-2.7	0.57
314	1.3	48	3	6.25	-4.8	-	-9.4	0.60
94	1.22	49	8	16.33	-4.6	-	-3.7	0.62
95	1.3	52	5	9.62	-4.2	-	-5.3	0.65
307	1	54.21	10.84	20.00	-3.8	-	-2.3	0.68
320	1.3	54.6	4.11	7.53	-3.8	-	-5.7	0.69
255	1.32	57.83	0.597	1.03	-3.3	-	-13.8	0.73
322	1	61.767	1.594	2.58	-2.7	-	-8.2	0.78
286	6.1	62.992	0.333	0.53	-2.5	-	-11.1	0.79
206	1.22	64.16	3.8	5.92	-2.3	-	-3.7	0.81
273	7.1	64.383	9.509	14.77	-2.3	-	-1.6	0.81
116	1.32	66.6	2.4	3.60	-1.9	-	-4.6	0.84
154	7.1	69.5	2	2.88	-1.5	-	-4.0	0.88
195	5.2	70.53	9.65	13.68	-1.3	-	-0.9	0.89
130	2	71	8	11.27	-1.3	-	-1.0	0.89
279	5	71.7	8.5	11.85	-1.2	-	-0.9	0.90
194	5.1	72.087	5.382	7.47	-1.1	-	-1.3	0.91
151	7.2	72.205	4.304	5.96	-1.1	-	-1.6	0.91
309	7.2	72.7	7.2	9.90	-1.0	-	-0.9	0.92

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
244	2	73.05	1.485	2.03	-1.0	-	-3.1	0.92
197	5.1	74.35	4.08	5.49	-0.8	-	-1.2	0.94
199	5.1	75	7	9.33	-0.7	-	-0.6	0.94
276	7.2	75.3	8	10.62	-0.6	-	-0.5	0.95
247	5.2	75.83	6.67	8.80	-0.5	-	-0.5	0.96
220	5.1	77.726	4.818	6.20	-0.3	-	-0.3	0.98
126	1	77.8	0.78	1.00	-0.2	-	-1.0	0.98
176	5.2	78	2	2.56	-0.2	-	-0.6	0.98
248	5	79.5	1.6	2.01	0.0	-	0.0	1.00
209	1.4	79.6	5	6.28	0.0	-	0.0	1.00
262	5	79.9	0.42	0.53	0.1	-	0.3	1.01
113	2	80	6	7.50	0.1	-	0.1	1.01
221	5	80	5	6.25	0.1	-	0.1	1.01
268	6.1	80.16	5.25	6.55	0.1	-	0.1	1.01
215	5.1	80.6	5.4	6.70	0.2	-	0.2	1.02
182	5.1	81.008	20.751	25.62	0.2	-	0.1	1.02
152	5.2	81.088	7.277	8.97	0.3	-	0.2	1.02
203	5	81.7	5.2	6.36	0.3	-	0.4	1.03
191	5.2	81.8	0.5	0.61	0.4	-	1.6	1.03
237	5.1	83	4	4.82	0.5	-	0.8	1.05
235	7.1	84.311	11.136	13.21	0.7	-	0.4	1.06
252	2	84.4	10.4	12.32	0.8	-	0.5	1.06
167	5	84.799	1.728	2.04	0.8	-	2.4	1.07
193	5.2	85.7	0.032	0.04	1.0	-	4.4	1.08
234	5	86.9	6.2	7.13	1.1	-	1.2	1.09
261	5.2	87.013	0.801	0.92	1.2	-	4.6	1.10
202	5.1	87.9	7.4	8.42	1.3	-	1.1	1.11
282	5.2	88.1	1.5	1.70	1.3	-	4.2	1.11
55	5.2	90.6	5	5.52	1.7	-	2.2	1.14
183	5.4	95	4	4.21	2.4	-	3.7	1.20
75	1	95.67	40.67	42.51	2.5	-	0.4	1.20
313	6.1	100	10	10.00	3.1	-	2.0	1.26
78	1	104	3	2.88	3.7	-	7.4	1.31
132	7.1	106.393	0.843	0.79	4.1	-	16.1	1.34
238	1.13	110	10	9.09	4.7	-	3.0	1.39
281	5	116	1.972	1.70	5.6	-	15.0	1.46
303	1	120	3.055	2.55	6.2	-	12.0	1.51
310	1.3	121.43*	0.38	0.31	6.4	-	28.1	1.53
225	1	123.31*	24.99	20.27	6.7	-	1.8	1.55
145	2	125*	12.86	10.29	6.9	-	3.5	1.57
35	1.51	130*	50	38.46	7.7	-	1.0	1.64
304	1	141*	10.55	7.48	9.4	-	5.8	1.78
271	2	170*	42.4	24.94	13.8	-	2.1	2.14
54	1	195.178*	14.595	7.48	17.6	-	7.9	2.46
305	1.3	225.6*	0.15	0.07	22.2	-	100.7	2.84
204	1.21	227*	24.786	10.92	22.4	-	5.9	2.86
205	5	244.561*	3.4	1.39	25.1	-	44.7	3.08
236	1.21	266*	37	13.91	28.4	-	5.0	3.35
267	2	278*	50	17.99	30.2	-	4.0	3.50

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
Mo ($x_{pt} = 0.477$, $\sigma_{pt} = 0.09$, $u(x_{pt}) = 0.019$) [mg/kg]								
309	7.2	0.341	0.027	7.92	-1.6	-	-4.1	0.71
151	7.2	0.441	0.051	11.56	-0.4	-	-0.7	0.92
279	5	0.87*	0.16	18.39	4.6	-	2.4	1.82
283	5.1	1.93*	0.191	9.90	17.0	-	7.6	4.05
204	1.21	2.303*	0.561	24.36	21.4	-	3.3	4.83
206	1.22	2.65*	0.25	9.43	25.5	-	8.7	5.56
215	5.1	3.78*	1.17	30.95	38.7	-	2.8	7.92
263	5.1	4.9*	0.25	5.10	51.9	-	17.6	10.27
310	1.3	296.6**	6	2.02	3471.7	-	49.4	621.80
Nb [mg/kg]								
126	1	3.3	0.33	10.00	-	-	-	-
309	7.2	3.69	0.08	2.17	-	-	-	-
206	1.22	3.777	2.1	55.60	-	-	-	-
204	1.21	4.176	0.571	13.67	-	-	-	-
271	2	6	1	16.67	-	-	-	-
209	1.4	6	2	33.33	-	-	-	-
199	5.1	8.297	0.836	10.08	-	-	-	-
310	1.3	143.8**	8.9	6.19	-	-	-	-
283	5.1	4026.19**	409	10.16	-	-	-	-
Nd ($x_{pt} = 13.1$, $\sigma_{pt} = 1.4$, $u(x_{pt}) = 0.7$) [mg/kg]								
281	5	8.55	1.026	12.00	-	-2.9	-3.6	0.65
65	1.16	8.74	0.79	9.04	-	-2.7	-4.1	0.66
183	5.1	9.3	0.3	3.23	-	-2.4	-4.9	0.71
309	7.2	10.5	0.8	7.62	-	-1.7	-2.4	0.80
202	5.1	11.01	1.56	14.17	-	-1.3	-1.2	0.84
247	5.2	11.23	1.19	10.60	-	-1.2	-1.4	0.85
307	1	11.41	2.28	19.98	-	-1.1	-0.7	0.87
248	5	11.7	0.59	5.04	-	-0.9	-1.5	0.89
176	5.2	11.9	0.2	1.68	-	-0.8	-1.6	0.91
193	5.2	11.98	0.017	0.14	-	-0.7	-1.6	0.91
237	5.1	12.1	0.7	5.79	-	-0.7	-1.0	0.92
171	5.1	12.1	2.9	23.97	-	-0.7	-0.3	0.92
167	5	12.161	0.3	2.47	-	-0.6	-1.2	0.93
205	5	12.175	1.345	11.05	-	-0.6	-0.6	0.93
40	5.1	12.2	1.2	9.84	-	-0.6	-0.7	0.93
199	5.1	12.396	1.14	9.20	-	-0.5	-0.6	0.94
215	5.1	12.7	1.4	11.02	-	-0.3	-0.3	0.97
234	5	12.7	1.7	13.39	-	-0.3	-0.2	0.97
279	5	12.8	2.4	18.75	-	-0.2	-0.1	0.97
302	5.1	13.14	0.4	3.04	-	0.0	0.0	1.00
252	2	14	3.5	25.00	-	0.5	0.2	1.06
203	5	15.03	0.7	4.66	-	1.2	1.9	1.14
61	5.1	16	3	18.75	-	1.8	0.9	1.22
220	5.1	16.536	1.365	8.25	-	2.1	2.2	1.26
283	5.1	17.46	0.811	4.64	-	2.7	4.0	1.33
263	5.1	17.9	0.89	4.97	-	3.0	4.1	1.36

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
152	5.2	25.916	3.944	15.22	-	8.0	3.2	1.97
204	1.21	28.683*	1.957	6.82	-	9.7	7.4	2.18
206	1.22	35.3*	1.9	5.38	-	13.8	10.9	2.69
Ni [mg/kg]								
270	6	0.08**	3	3750.00	-	-	-	-
312	1.3	1.87	0.11	5.88	-	-	-	-
255	1.32	3.823	0.1	2.62	-	-	-	-
154	7.1	4.81	0.16	3.33	-	-	-	-
126	1	6.3	0.63	10.00	-	-	-	-
265	1.22	6.668	1.9	28.49	-	-	-	-
252	2	7.02	1.56	22.22	-	-	-	-
320	1.3	7.4	0.425	5.74	-	-	-	-
145	2	8	0.94	11.75	-	-	-	-
130	2	8	1	12.50	-	-	-	-
309	7.2	8.2	0.89	10.85	-	-	-	-
273	7.1	8.303	1.89	22.76	-	-	-	-
271	2	9	2	22.22	-	-	-	-
322	1	9.377	0.172	1.83	-	-	-	-
151	7.2	9.816	0.242	2.47	-	-	-	-
314	1.3	9.9	1	10.10	-	-	-	-
199	5.1	10.155	0.855	8.42	-	-	-	-
65	1.16	11.44	1.02	8.92	-	-	-	-
75	1	12.33	6.67	54.10	-	-	-	-
105	1.32	13	1.9	14.62	-	-	-	-
276	7.2	15.9	2	12.58	-	-	-	-
206	1.22	20.83	2.2	10.56	-	-	-	-
193	5.2	26.862	0.046	0.17	-	-	-	-
259	7.1	32	0.5	1.56	-	-	-	-
209	1.4	32	2.6	8.13	-	-	-	-
102	1.23	44.02	4.5	10.22	-	-	-	-
303	1	51	1.155	2.26	-	-	-	-
204	1.21	57.433	7.586	13.21	-	-	-	-
35	1.51	62	9	14.52	-	-	-	-
305	1.3	89.1	0.094	0.11	-	-	-	-
304	1	112**	8.38	7.48	-	-	-	-
P ($x_{pt} = 162$, $\sigma_{pt} = 12$, $u(x_{pt}) = 4$) [mg/kg]								
305	1.3	0.349**	0.006	1.72	-	-12.8	-41.3	0.00
77	1	14.16**	1.02	7.20	-	-11.7	-36.5	0.09
105	1.32	127	21	16.54	-	-2.8	-1.6	0.78
309	7.2	135	27	20.00	-	-2.1	-1.0	0.83
206	1.22	150.63	2.1	1.39	-	-0.9	-2.6	0.93
271	2	160	21.78	13.61	-	-0.2	-0.1	0.99
126	1	166	25	15.06	-	0.3	0.2	1.02
250	2	170	53	31.18	-	0.6	0.2	1.05
35	1.51	180	50	27.78	-	1.4	0.4	1.11
113	2	184	10	5.43	-	1.7	2.0	1.14
130	2	212.5	32	15.06	-	4.0	1.6	1.31
244	2	217	23.259	10.72	-	4.3	2.3	1.34

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
145	2	236	23.3	9.87	-	5.8	3.1	1.46
314	2	297*	45	15.15	-	10.7	3.0	1.83
306	2	319*	16	5.02	-	12.4	9.5	1.97
65	1.16	327.89*	26.27	8.01	-	13.1	6.2	2.02
75	1	370*	36	9.73	-	16.4	5.7	2.28
295	2	408*	34	8.33	-	19.4	7.2	2.52
303	1	535.333*	11.566	2.16	-	29.5	30.6	3.30
204	1.21	639*	54	8.45	-	37.6	8.8	3.94
67	3	800*	100	12.50	-	50.4	6.4	4.94
267	2	1011*	100	9.89	-	67.0	8.5	6.24
116	1.32	1926*	16.3	0.85	-	139.2	105.2	11.89
225	1	6300**	900	14.29	-	484.4	6.8	38.89
235	7.1	7543.07**	624.449	8.28	-	582.5	11.8	46.56
Pb ($x_{pt} = 7.46$, $\sigma_{pt} = 0.9$, $u(x_{pt}) = 0.3$) [mg/kg]								
312	1.3	0.641**	0.067	10.45	-	-7.3	-22.8	0.09
255	1.32	3.392	1.269	37.41	-	-4.4	-3.1	0.45
206	1.22	3.86	0.37	9.59	-	-3.9	-7.6	0.52
105	1.32	4.4	0.65	14.77	-	-3.3	-4.3	0.59
273	7.1	4.571	1.89	41.35	-	-3.1	-1.5	0.61
151	7.2	4.762	0.408	8.57	-	-2.9	-5.4	0.64
285	6.2	4.86	0.27	5.56	-	-2.8	-6.5	0.65
270	6	5.19	2.5	48.17	-	-2.4	-0.9	0.70
314	1.3	5.8	0.6	10.34	-	-1.8	-2.5	0.78
286	6.1	5.999	0.00001	0.02	-	-1.6	-5.0	0.80
259	7.1	6	0.5	8.33	-	-1.6	-2.5	0.80
65	1.16	6.1	0.34	5.57	-	-1.5	-3.0	0.82
116	1.32	6.1	0.43	7.05	-	-1.5	-2.6	0.82
132	7.1	6.111	0.092	1.51	-	-1.5	-4.4	0.82
309	7.2	7.14	0.71	9.94	-	-0.3	-0.4	0.96
252	2	7.39	0.26	3.52	-	-0.1	-0.2	0.99
322	1	8.18	0.4	4.89	-	0.8	1.5	1.10
265	1.22	8.37	1.28	15.29	-	1.0	0.7	1.12
137	6	9.2	1.6	17.39	-	1.9	1.1	1.23
126	1	9.9	0.99	10.00	-	2.6	2.4	1.33
278	1.22	11.24	3.57	31.76	-	4.1	1.1	1.51
303	1	12.333	0.667	5.41	-	5.2	6.7	1.65
102	1.23	12.601	2.1	16.67	-	5.5	2.4	1.69
78	1	14	1	7.14	-	7.0	6.3	1.88
204	1.21	14.521	0.582	4.01	-	7.6	10.8	1.95
54	1	14.59	2.2	15.08	-	7.7	3.2	1.96
209	1.4	15	2	13.33	-	8.1	3.7	2.01
229	6.2	15.01	0.6	4.00	-	8.1	11.3	2.01
271	2	18*	2	11.11	-	11.3	5.2	2.41
307	1	18.78*	3.76	20.02	-	12.2	3.0	2.52
305	1.3	31.6*	0.056	0.18	-	26.0	81.2	4.24
236	1.21	36*	5	13.89	-	30.7	5.7	4.83
225	1	51.24*	8.47	16.53	-	47.1	5.2	6.87
130	2	89**	32	35.96	-	87.8	2.5	11.93

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
Pd [mg/kg]								
320	6	6.89	0.218	3.16	-	-	-	-
Pr [mg/kg]								
126	1.11	0.54	0.18	33.33	-	-	-	-
309	7.2	2.66	0.26	9.77	-	-	-	-
237	5.1	3.04	0.23	7.57	-	-	-	-
176	5.2	3.8	0.6	15.79	-	-	-	-
215	5.1	4.21	1.56	37.05	-	-	-	-
Rb ($x_{pt} = 31.6$, $\sigma_{pt} = 3$, $u(x_{pt}) = 0.5$) [mg/kg]								
312	1.3	1.92**	0.24	12.50	-9.9	-	-56.5	0.06
304	1	8*	0.6	7.50	-7.9	-	-31.0	0.25
105	1.32	16*	0.71	4.44	-5.2	-	-18.4	0.51
151	7.2	20.854	2.443	11.71	-3.6	-	-4.3	0.66
152	5.2	22.985	14.074	61.23	-2.9	-	-0.6	0.73
255	1.32	23.07	0.158	0.68	-2.8	-	-17.3	0.73
204	1.21	23.417	2.462	10.51	-2.7	-	-3.3	0.74
314	1.3	24.5	2	8.16	-2.4	-	-3.5	0.78
95	1.3	25	6	24.00	-2.2	-	-1.1	0.79
65	1.16	25.4	1.73	6.81	-2.1	-	-3.5	0.80
102	1.23	25.751	1.454	5.65	-1.9	-	-3.8	0.81
262	5	26.2	5.91	22.56	-1.8	-	-0.9	0.83
272	5.2	28	5	17.86	-1.2	-	-0.7	0.89
309	7.2	28.1	2.9	10.32	-1.2	-	-1.2	0.89
167	5	28.119	1.09	3.88	-1.2	-	-2.9	0.89
206	1.22	28.654	1	3.49	-1.0	-	-2.7	0.91
244	2	28.933	1.848	6.39	-0.9	-	-1.4	0.92
130	2	29	5	17.24	-0.9	-	-0.5	0.92
209	1.4	29.1	1.7	5.84	-0.8	-	-1.4	0.92
276	7.2	29.1	3	10.31	-0.8	-	-0.8	0.92
183	5.1	30	0.9	3.00	-0.5	-	-1.6	0.95
194	5.1	30.382	3.846	12.66	-0.4	-	-0.3	0.96
235	1	30.667	0.577	1.88	-0.3	-	-1.3	0.97
199	5.1	30.781	1.581	5.14	-0.3	-	-0.5	0.97
263	5.1	30.9	1.54	4.98	-0.2	-	-0.4	0.98
261	5.1	30.969	0.889	2.87	-0.2	-	-0.6	0.98
257	5	31	3	9.68	-0.2	-	-0.2	0.98
278	1.22	31.24	7.31	23.40	-0.1	-	0.0	0.99
73	1.2	31.252	3.74	11.97	-0.1	-	-0.1	0.99
281	5	31.3	2.222	7.10	-0.1	-	-0.1	0.99
203	5	31.5	2.9	9.21	0.0	-	0.0	1.00
126	1	31.6	3.16	10.00	0.0	-	0.0	1.00
237	5.1	31.8	1.7	5.35	0.1	-	0.1	1.01
40	5.1	31.8	1	3.14	0.1	-	0.2	1.01
75	1	32	6	18.75	0.1	-	0.1	1.01
195	5.2	32.03	4.74	14.80	0.1	-	0.1	1.01
248	5	32.2	0.64	1.99	0.2	-	0.8	1.02
176	5.2	32.5	0.7	2.15	0.3	-	1.1	1.03

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
307	1	32.69	6.54	20.01	0.4	-	0.2	1.03
116	1.32	32.8	2.7	8.23	0.4	-	0.4	1.04
94	1.22	33	2	6.06	0.5	-	0.7	1.04
234	5	33	6.3	19.09	0.5	-	0.2	1.04
61	5.2	33	9	27.27	0.5	-	0.2	1.04
202	5.1	33.2	1.5	4.52	0.5	-	1.0	1.05
54	1	33.23	1.88	5.66	0.5	-	0.8	1.05
220	5.1	33.247	1.745	5.25	0.5	-	0.9	1.05
182	5.1	33.325	2.387	7.16	0.6	-	0.7	1.05
171	5.1	33.9	2.9	8.55	0.8	-	0.8	1.07
193	5.2	34.115	0.028	0.08	0.8	-	5.4	1.08
215	5.1	34.3	2.2	6.41	0.9	-	1.2	1.09
252	2	34.4	2.6	7.56	0.9	-	1.1	1.09
302	5.1	34.56	0.45	1.30	1.0	-	4.6	1.09
283	5.1	34.67	1.49	4.30	1.0	-	2.0	1.10
247	5.2	34.88	1.27	3.64	1.1	-	2.4	1.10
78	1	35	1	2.86	1.1	-	3.1	1.11
113	2	35	1.2	3.43	1.1	-	2.6	1.11
221	5	35.5	2.1	5.92	1.3	-	1.8	1.12
279	5	35.6	3.5	9.83	1.3	-	1.1	1.13
311	1.3	35.623	8.625	24.21	1.3	-	0.5	1.13
238	1.13	36.4	3.6	9.89	1.6	-	1.3	1.15
205	5	37.284	2.907	7.80	1.9	-	1.9	1.18
265	1.22	37.368	1.53	4.09	1.9	-	3.6	1.18
308	1.51	39	6	15.38	2.5	-	1.2	1.23
271	2	39	0.094	0.24	2.5	-	15.5	1.23
267	2	39	20	51.28	2.5	-	0.4	1.23
170	5.2	42.03	9.33	22.20	3.5	-	1.1	1.33
282	5.2	45.1*	5.6	12.42	4.5	-	2.4	1.43
155	4.2	50*	10	20.00	6.1	-	1.8	1.58
306	2	53*	6	11.32	7.1	-	3.6	1.68
310	1.3	67.66*	0.14	0.21	12.0	-	74.0	2.14
35	1.51	82*	0.1	0.12	16.8	-	105.6	2.59
322	1	91.877*	1.482	1.61	20.1	-	38.8	2.91
236	1.21	134*	1	0.75	34.1	-	92.8	4.24
Ru [mg/kg]								
77	1	10.36	0.516	4.98	-	-	-	-
S [mg/kg]								
278	1.22	177	77.11	43.56	-	-	-	-
105	1.32	243	137	56.38	-	-	-	-
307	1	319.38	63.88	20.00	-	-	-	-
309	7.2	403	71	17.62	-	-	-	-
183	5.4	422	28	6.64	-	-	-	-
308	1.51	495	35	7.07	-	-	-	-
126	1	506	75	14.82	-	-	-	-
65	1.16	523.39	32.38	6.19	-	-	-	-
94	1.22	550	8	1.45	-	-	-	-
206	1.22	565.73	5.1	0.90	-	-	-	-

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
116	1.32	567.2	16.6	2.93	-	-	-	-
322	1	585.053	4.111	0.70	-	-	-	-
75	1	681.67	204	29.93	-	-	-	-
67	3	700	300	42.86	-	-	-	-
314	2	745	45	6.04	-	-	-	-
113	2	761	31	4.07	-	-	-	-
244	2	776	48.073	6.19	-	-	-	-
204	1.21	839	99.7	11.88	-	-	-	-
304	1	892	66.75	7.48	-	-	-	-
236	1.21	915	145	15.85	-	-	-	-
305	1.3	982.9	0.321	0.03	-	-	-	-
145	2	1030	116	11.26	-	-	-	-
306	2	1030	52	5.05	-	-	-	-
303	1	1053.333	43.716	4.15	-	-	-	-
216	4.32	1092	61.15	5.60	-	-	-	-
132	7.1	1175.631	19.575	1.67	-	-	-	-
35	1.51	1700	100	5.88	-	-	-	-
267	2	2722	200	7.35	-	-	-	-
<i>Sb ($x_{pt} = 0.82$, $\sigma_{pt} = 0.14$, $u(x_{pt}) = 0.03$) [mg/kg]</i>								
151	7.2	0.285	0.045	15.79	-4.0	-	-9.7	0.35
237	5.1	0.66	0.04	6.06	-1.2	-	-3.1	0.80
282	5.2	0.69	0.07	10.14	-1.0	-	-1.7	0.84
176	5.2	0.697	0.012	1.72	-0.9	-	-3.6	0.85
183	5.1	0.698	0.014	2.01	-0.9	-	-3.5	0.85
215	5.1	0.703	0.047	6.69	-0.9	-	-2.1	0.85
261	5.1	0.711	0.025	3.52	-0.8	-	-2.7	0.86
40	5.1	0.72	0.06	8.33	-0.8	-	-1.5	0.87
279	5	0.73	0.11	15.07	-0.7	-	-0.8	0.89
199	5.1	0.753	0.076	10.09	-0.5	-	-0.8	0.91
171	5.1	0.753	0.074	9.83	-0.5	-	-0.9	0.91
220	5.1	0.754	0.045	5.97	-0.5	-	-1.2	0.92
182	5.1	0.767	0.085	11.08	-0.4	-	-0.6	0.93
61	5.2	0.77	0.07	9.09	-0.4	-	-0.7	0.94
248	5	0.77	0.015	1.95	-0.4	-	-1.5	0.94
194	5.1	0.776	0.151	19.46	-0.3	-	-0.3	0.94
221	5	0.78	0.05	6.41	-0.3	-	-0.7	0.95
283	5.1	0.79	0.039	4.94	-0.2	-	-0.6	0.96
302	5.1	0.79	0.01	1.27	-0.2	-	-1.0	0.96
203	5	0.799	0.045	5.63	-0.2	-	-0.4	0.97
263	5.1	0.8	0.04	5.00	-0.2	-	-0.4	0.97
247	5.2	0.81	0.065	8.02	-0.1	-	-0.2	0.98
234	5	0.821	0.079	9.62	0.0	-	0.0	1.00
202	5.1	0.836	0.064	7.66	0.1	-	0.2	1.02
281	5	0.93	0.029	3.12	0.8	-	2.4	1.13
205	5	0.958	0.104	10.86	1.0	-	1.2	1.16
195	5.2	1	0.1	10.00	1.3	-	1.7	1.22
193	5.2	1.23	0.007	0.57	3.0	-	12.1	1.49
309	7.2	1.51*	0.2	13.25	5.1	-	3.4	1.83
167	5	1.66*	0.05	3.01	6.2	-	14.0	2.02

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
206	1.22	1.93*	0.173	8.96	8.2	-	6.3	2.35
152	5.2	2.539*	0.387	15.24	12.7	-	4.4	3.09
235	5	5.596*	0.302	5.40	35.2	-	15.7	6.80
303	1	12.667**	2.667	21.05	87.4	-	4.4	15.39
204	1.21	32.797**	3.557	10.85	235.8	-	9.0	39.85
305	1.3	97.4**	0.098	0.10	712.4	-	934.4	118.35
$Sc(x_{pt} = 2.54, \sigma_{pt} = 0.4, u(x_{pt}) = 0.04) [mg/kg]$								
191	5.2	0.32*	0.04	12.50	-6.3	-	-37.4	0.13
305	1.3	0.322*	0.005	1.55	-6.3	-	-50.3	0.13
263	5.1	2.2	0.11	5.00	-1.0	-	-2.9	0.87
194	5.1	2.27	0.305	13.44	-0.8	-	-0.9	0.89
167	5	2.321	0.017	0.73	-0.6	-	-4.7	0.91
279	5	2.34	0.2	8.55	-0.6	-	-1.0	0.92
183	5.1	2.38	0.05	2.10	-0.5	-	-2.4	0.94
234	5	2.39	0.16	6.69	-0.4	-	-0.9	0.94
237	5.1	2.4	0.12	5.00	-0.4	-	-1.1	0.94
272	5.2	2.4	0.1	4.17	-0.4	-	-1.3	0.94
261	5.1	2.402	0.036	1.50	-0.4	-	-2.5	0.95
195	5.2	2.42	0.24	9.92	-0.3	-	-0.5	0.95
176	5.2	2.42	0.04	1.65	-0.3	-	-2.0	0.95
235	5	2.458	0.099	4.03	-0.2	-	-0.8	0.97
40	5.1	2.48	0.15	6.05	-0.2	-	-0.4	0.98
199	5.1	2.488	0.102	4.10	-0.2	-	-0.5	0.98
203	5	2.495	0.058	2.32	-0.1	-	-0.6	0.98
61	5.2	2.51	0.14	5.58	-0.1	-	-0.2	0.99
170	5.2	2.51	0.05	1.99	-0.1	-	-0.5	0.99
248	5	2.52	0.02	0.79	-0.1	-	-0.4	0.99
171	5.1	2.53	0.1	3.95	0.0	-	-0.1	1.00
202	5.1	2.535	0.007	0.28	0.0	-	-0.1	1.00
220	5.1	2.552	0.131	5.13	0.0	-	0.1	1.00
193	5.2	2.56	0.002	0.08	0.1	-	0.4	1.01
281	5	2.58	0.028	1.09	0.1	-	0.7	1.02
55	5.2	2.59	0.11	4.25	0.1	-	0.4	1.02
215	5.1	2.61	0.16	6.13	0.2	-	0.4	1.03
302	5.1	2.62	0.005	0.19	0.2	-	1.8	1.03
247	5.2	2.64	0.08	3.03	0.3	-	1.1	1.04
283	5.1	2.64	0.076	2.88	0.3	-	1.1	1.04
205	5	2.727	0.871	31.94	0.5	-	0.2	1.07
282	5.2	2.76	0.06	2.17	0.6	-	2.9	1.09
257	5	2.8	0.2	7.14	0.7	-	1.3	1.10
182	5.1	2.819	0.532	18.87	0.8	-	0.5	1.11
262	5	2.83	0.01	0.35	0.8	-	6.4	1.11
221	5	2.91	0.17	5.84	1.0	-	2.1	1.15
152	5.2	3.133	0.113	3.61	1.7	-	4.9	1.23
151	7.2	4.104*	0.393	9.58	4.4	-	4.0	1.62
322	1	6.61*	0.229	3.46	11.5	-	17.5	2.60
252	2	30.4**	4	13.16	78.9	-	7.0	11.96
204	1.21	61.9**	4.2	6.79	168.0	-	14.1	24.36
105	1.32	207**	23	11.11	578.8	-	8.9	81.46

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
255	1.32	239.4**	7.188	3.00	670.5	-	33.0	94.21
304	1	1934**	144.72	7.48	5467.7	-	13.3	761.12
Se [mg/kg]								
105	1.32	0.093**	0.055	59.14	-	-	-	-
126	1	0.3	0.1	33.33	-	-	-	-
311	1.3	0.375	0.099	26.40	-	-	-	-
193	5.2	0.598	0.09	15.05	-	-	-	-
204	1.21	1.748	0.641	36.67	-	-	-	-
151	7.2	2.693	0.396	14.70	-	-	-	-
307	1	4	0.8	20.00	-	-	-	-
191	5.2	12.1**	0.9	7.44	-	-	-	-
$Sm (x_{pt} = 2.34, \sigma_{pt} = 0.3, u(x_{pt}) = 0.08) [mg/kg]$								
281	5	1	0.005	0.50	-4.1	-	-17.9	0.43
262	5	1.04	0.011	1.06	-4.0	-	-17.2	0.44
191	5.2	1.2	0.3	25.00	-3.5	-	-3.7	0.51
183	5.1	2.02	0.05	2.48	-1.0	-	-3.6	0.86
283	5.1	2.06	0.059	2.86	-0.9	-	-3.0	0.88
151	7.2	2.069	0.174	8.41	-0.8	-	-1.4	0.88
309	7.2	2.09	0.19	9.09	-0.8	-	-1.2	0.89
215	5.1	2.09	0.15	7.18	-0.8	-	-1.5	0.89
202	5.1	2.133	0.035	1.64	-0.6	-	-2.5	0.91
195	5.2	2.14	0.32	14.95	-0.6	-	-0.6	0.91
220	5.1	2.21	0.263	11.90	-0.4	-	-0.5	0.94
237	5.1	2.24	0.11	4.91	-0.3	-	-0.8	0.96
197	5.1	2.27	0.12	5.29	-0.2	-	-0.5	0.97
61	5.2	2.3	0.2	8.70	-0.1	-	-0.2	0.98
272	5.2	2.35	0.07	2.98	0.0	-	0.1	1.00
279	5	2.36	0.33	13.98	0.1	-	0.1	1.01
302	5.1	2.37	0.09	3.80	0.1	-	0.2	1.01
194	5.1	2.392	0.376	15.72	0.2	-	0.1	1.02
152	5.2	2.398	0.162	6.76	0.2	-	0.3	1.02
234	5	2.41	0.2	8.30	0.2	-	0.3	1.03
40	5.1	2.42	0.15	6.20	0.2	-	0.5	1.03
176	5.2	2.44	0.04	1.64	0.3	-	1.2	1.04
248	5	2.46	0.049	1.99	0.4	-	1.3	1.05
171	5.1	2.57	0.29	11.28	0.7	-	0.8	1.10
261	5.1	2.601	0.041	1.58	0.8	-	3.0	1.11
203	5	2.703	0.05	1.85	1.1	-	4.0	1.15
55	5.2	2.71	0.14	5.17	1.1	-	2.3	1.16
282	5.2	2.74	0.02	0.73	1.2	-	5.1	1.17
247	5.2	2.84	0.41	14.44	1.5	-	1.2	1.21
167	5	3.165	0.015	0.47	2.5	-	10.8	1.35
204	1.21	3.974*	0.548	13.79	5.0	-	3.0	1.70
Sn [mg/kg]								
151	7.2	0.296	0.019	6.42	-	-	-	-
309	7.2	1.02	0.13	12.75	-	-	-	-
65	1.16	1.03	0.08	7.77	-	-	-	-

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
126	1	2.2	0.44	20.00	-	-	-	-
206	1.22	3.62	0.462	12.76	-	-	-	-
303	1	91.667**	3.333	3.64	-	-	-	-
305	1.3	372.981**	0.193	0.05	-	-	-	-
116	1.32	1005.1**	20.5	2.04	-	-	-	-
Sr ($x_{pt} = 588$, $\sigma_{pt} = 40$, $u(x_{pt}) = 6$) [mg/kg]								
258	1	1.147**	0.05	4.36	-16.3	-	-103.4	0.00
191	5.2	11.2**	0.7	6.25	-16.0	-	-100.9	0.02
312	1.3	39.21**	1.82	4.64	-15.2	-	-92.1	0.07
77	1	138.14*	8.201	5.94	-12.5	-	-45.1	0.23
105	1.32	302*	18	5.96	-7.9	-	-15.2	0.51
262	5	351*	15.4	4.39	-6.6	-	-14.4	0.60
199	5.1	370.103*	27.32	7.38	-6.0	-	-7.8	0.63
278	1.22	433.51*	23.61	5.45	-4.3	-	-6.4	0.74
311	1.3	444.315*	89.276	20.09	-4.0	-	-1.6	0.76
194	5.1	476.213	25.313	5.32	-3.1	-	-4.3	0.81
261	5.1	488.224	38.221	7.83	-2.8	-	-2.6	0.83
236	1.21	501	10	2.00	-2.4	-	-7.6	0.85
255	1.32	502.6	1.252	0.25	-2.4	-	-14.7	0.85
55	5.2	504.91	76	15.05	-2.3	-	-1.1	0.86
65	1.16	514.56	34.54	6.71	-2.0	-	-2.1	0.88
95	1.3	518	21	4.05	-1.9	-	-3.2	0.88
314	1.3	534	32	5.99	-1.5	-	-1.7	0.91
221	5	540	40	7.41	-1.3	-	-1.2	0.92
320	1.3	541	28.2	5.21	-1.3	-	-1.6	0.92
322	1	550.513	1.895	0.34	-1.0	-	-6.3	0.94
309	7.2	554	52	9.39	-0.9	-	-0.6	0.94
102	1.23	555.648	42.474	7.64	-0.9	-	-0.8	0.94
283	5.1	558.35	33	5.91	-0.8	-	-0.9	0.95
204	1.21	560.714	21.489	3.83	-0.8	-	-1.2	0.95
209	1.4	567	11	1.94	-0.6	-	-1.7	0.96
307	1	567.52	113.5	20.00	-0.6	-	-0.2	0.97
171	5.1	569	46	8.08	-0.5	-	-0.4	0.97
73	1.2	576	2.6	0.45	-0.3	-	-1.9	0.98
145	2	579	48.7	8.41	-0.2	-	-0.2	0.98
183	5.1	584	16	2.74	-0.1	-	-0.2	0.99
252	2	586	15	2.56	-0.1	-	-0.1	1.00
235	1	588.333	3.055	0.52	0.0	-	0.1	1.00
75	1	592.33	18	3.04	0.1	-	0.2	1.01
276	7.2	596	60	10.07	0.2	-	0.1	1.01
237	5.1	598	31	5.18	0.3	-	0.3	1.02
176	5.2	599	11	1.84	0.3	-	0.9	1.02
137	6	600	46	7.67	0.3	-	0.3	1.02
279	5	600	110	18.33	0.3	-	0.1	1.02
116	1.32	601.4	13.8	2.29	0.4	-	0.9	1.02
193	5.2	608	0.163	0.03	0.6	-	3.5	1.03
220	5.1	611.867	31.204	5.10	0.7	-	0.8	1.04
203	5	612	28	4.58	0.7	-	0.8	1.04
244	2	614.333	6.429	1.05	0.7	-	3.1	1.04

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
263	5.1	614.4	30.72	5.00	0.7	-	0.8	1.04
40	5.1	621	39	6.28	0.9	-	0.8	1.06
78	1	623	34	5.46	1.0	-	1.0	1.06
248	5	632	7.6	1.20	1.2	-	4.6	1.07
126	1	632.8	63	9.96	1.2	-	0.7	1.08
215	5.1	633	42	6.64	1.2	-	1.1	1.08
54	1	635.78	25.87	4.07	1.3	-	1.8	1.08
308	1.51	638	64	10.03	1.4	-	0.8	1.09
151	7.2	638.695	73.828	11.56	1.4	-	0.7	1.09
206	1.22	645.9	4	0.62	1.6	-	8.3	1.10
197	5.1	660.88	36.34	5.50	2.0	-	2.0	1.12
281	5	663	41.106	6.20	2.1	-	1.8	1.13
61	5.1	670	160	23.88	2.3	-	0.5	1.14
234	5	675	64	9.48	2.4	-	1.4	1.15
282	5.2	688	66.7	9.69	2.8	-	1.5	1.17
303	1	689	12.22	1.77	2.8	-	7.5	1.17
265	1.22	692	41	5.92	2.9	-	2.5	1.18
238	1.13	697	67	9.61	3.0	-	1.6	1.19
302	5.1	697.7	6.3	0.90	3.0	-	12.9	1.19
271	2	699	12.75	1.82	3.1	-	8.0	1.19
113	2	704	27	3.84	3.2	-	4.2	1.20
94	1.22	723	4	0.55	3.7	-	19.4	1.23
130	2	728	120	16.48	3.9	-	1.2	1.24
155	4.2	820*	10	1.22	6.4	-	20.2	1.39
306	2	1170*	59	5.04	16.2	-	9.8	1.99
310	1.3	1179.27*	0.97	0.08	16.4	-	102.7	2.01
267	2	1558*	100	6.42	26.9	-	9.7	2.65
304	1	1663*	124.44	7.48	29.8	-	8.6	2.83
35	1.51	1800*	300	16.67	33.6	-	4.0	3.06
$Ta (x_{pt} = 0.43, \sigma_{pt} = 0.08, u(x_{pt}) = 0.03) [mg/kg]$								
262	5	0.234	0.029	12.39	-	-2.4	-5.1	0.55
202	5.1	0.291	0.028	9.62	-	-1.7	-3.7	0.68
167	5	0.313	0.021	6.71	-	-1.4	-3.5	0.73
261	5.1	0.349	0.014	4.01	-	-1.0	-2.8	0.82
220	5.1	0.374	0.02	5.35	-	-0.7	-1.7	0.88
237	5.1	0.375	0.02	5.33	-	-0.6	-1.6	0.88
203	5	0.38	0.008	2.11	-	-0.6	-1.8	0.89
194	5.1	0.388	0.104	26.80	-	-0.5	-0.4	0.91
283	5.1	0.39	0.037	9.49	-	-0.5	-0.8	0.91
199	5.1	0.397	0.025	6.30	-	-0.4	-0.9	0.93
302	5.1	0.4	0.017	4.25	-	-0.3	-0.9	0.94
40	5.1	0.4	0.03	7.50	-	-0.3	-0.7	0.94
171	5.1	0.4	0.14	35.00	-	-0.3	-0.2	0.94
183	5.1	0.413	0.011	2.66	-	-0.2	-0.5	0.97
215	5.1	0.416	0.027	6.49	-	-0.1	-0.3	0.97
248	5	0.42	0.017	4.05	-	-0.1	-0.2	0.98
61	5.1	0.43	0.08	18.60	-	0.0	0.0	1.01
234	5	0.434	0.078	17.97	-	0.1	0.1	1.02
247	5.2	0.507	0.103	20.32	-	1.0	0.8	1.19

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
193	5.2	0.51	0.004	0.78	-	1.0	3.3	1.19
221	5	0.54	0.04	7.41	-	1.4	2.4	1.26
279	5	0.549	0.061	11.11	-	1.5	1.9	1.29
195	5.2	0.6	0.07	11.67	-	2.1	2.3	1.41
204	1.21	0.828	0.223	26.93	-	4.9	1.8	1.94
152	5.2	0.858	0.086	10.02	-	5.3	4.8	2.01
262	5	0.234	0.029	12.39	-	-2.4	-5.1	0.55
202	5.1	0.291	0.028	9.62	-	-1.7	-3.7	0.68
167	5	0.313	0.021	6.71	-	-1.4	-3.5	0.73
261	5.1	0.349	0.014	4.01	-	-1.0	-2.8	0.82
220	5.1	0.374	0.02	5.35	-	-0.7	-1.7	0.88
237	5.1	0.375	0.02	5.33	-	-0.6	-1.6	0.88
203	5	0.38	0.008	2.11	-	-0.6	-1.8	0.89
194	5.1	0.388	0.104	26.80	-	-0.5	-0.4	0.91
283	5.1	0.39	0.037	9.49	-	-0.5	-0.8	0.91
199	5.1	0.397	0.025	6.30	-	-0.4	-0.9	0.93
302	5.1	0.4	0.017	4.25	-	-0.3	-0.9	0.94
40	5.1	0.4	0.03	7.50	-	-0.3	-0.7	0.94
171	5.1	0.4	0.14	35.00	-	-0.3	-0.2	0.94
183	5.1	0.413	0.011	2.66	-	-0.2	-0.5	0.97
215	5.1	0.416	0.027	6.49	-	-0.1	-0.3	0.97
248	5	0.42	0.017	4.05	-	-0.1	-0.2	0.98
61	5.1	0.43	0.08	18.60	-	0.0	0.0	1.01
234	5	0.434	0.078	17.97	-	0.1	0.1	1.02
247	5.2	0.507	0.103	20.32	-	1.0	0.8	1.19
193	5.2	0.51	0.004	0.78	-	1.0	3.3	1.19
221	5	0.54	0.04	7.41	-	1.4	2.4	1.26
279	5	0.549	0.061	11.11	-	1.5	1.9	1.29
195	5.2	0.6	0.07	11.67	-	2.1	2.3	1.41
204	1.21	0.828	0.223	26.93	-	4.9	1.8	1.94
152	5.2	0.858	0.086	10.02	-	5.3	4.8	2.01
<i>Tb ($x_{pt} = 0.313$, $\sigma_{pt} = 0.06$, $u(x_{pt}) = 0.019$) [mg/kg]</i>								
194	5.1	0.186	0.017	9.14	-	-2.0	-4.9	0.59
262	5	0.211	0.029	13.74	-	-1.6	-2.9	0.67
309	7.2	0.236	0.01	4.24	-	-1.2	-3.5	0.75
261	5.1	0.25	0.008	3.20	-	-1.0	-3.0	0.80
204	1.21	0.266	0.048	18.05	-	-0.7	-0.9	0.85
183	5.1	0.274	0.006	2.19	-	-0.6	-1.9	0.88
171	5.1	0.276	0.028	10.14	-	-0.6	-1.1	0.88
167	5	0.276	0.015	5.43	-	-0.6	-1.5	0.88
215	5.1	0.284	0.018	6.34	-	-0.5	-1.1	0.91
199	5.1	0.286	0.025	8.74	-	-0.4	-0.9	0.91
176	5.2	0.293	0.011	3.75	-	-0.3	-0.9	0.94
283	5.1	0.3	0.036	12.00	-	-0.2	-0.3	0.96
61	5.1	0.3	0.07	23.33	-	-0.2	-0.2	0.96
203	5	0.305	0.008	2.62	-	-0.1	-0.4	0.97
220	5.1	0.307	0.022	7.17	-	-0.1	-0.2	0.98
247	5.2	0.309	0.06	19.42	-	-0.1	-0.1	0.99
40	5.1	0.31	0.03	9.68	-	0.0	-0.1	0.99

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
302	5.1	0.36	0.004	1.11	-	0.7	2.4	1.15
237	5.1	0.387	0.02	5.17	-	1.2	2.7	1.24
221	5	0.4	0.04	10.00	-	1.4	2.0	1.28
263	5.1	0.4	0.02	5.00	-	1.4	3.1	1.28
152	5.2	0.439	0.069	15.72	-	2.0	1.8	1.40
281	5	0.518	0.096	18.53	-	3.3	2.1	1.65
193	5.2	0.703*	0.005	0.71	-	6.2	19.5	2.25
191	5.2	121**	14	11.57	-	1924.6	8.6	386.58
Te [mg/kg]								
303	1	45.333	4.667	10.29	-	-	-	-
305	1.3	277.9	0.166	0.06	-	-	-	-
$Th (x_{pt} = 4.72, \sigma_{pt} = 0.6, u(x_{pt}) = 0.13) [mg/kg]$								
105	1.32	0.2**	0.087	43.50	-7.6	-	-28.3	0.04
194	5.1	3.307	0.086	2.60	-2.4	-	-8.9	0.70
151	7.2	3.435	0.562	16.36	-2.1	-	-2.2	0.73
309	7.2	3.58	0.31	8.66	-1.9	-	-3.4	0.76
65	1.16	3.63	0.18	4.96	-1.8	-	-4.8	0.77
199	5.1	3.844	0.266	6.92	-1.5	-	-2.9	0.82
183	5.1	3.94	0.08	2.03	-1.3	-	-5.0	0.84
167	5	4.105	0.047	1.14	-1.0	-	-4.3	0.87
205	5	4.159	0.791	19.02	-0.9	-	-0.7	0.88
195	5.2	4.17	0.68	16.31	-0.9	-	-0.8	0.88
237	5.1	4.23	0.21	4.96	-0.8	-	-2.0	0.90
281	5	4.24	0.081	1.91	-0.8	-	-3.0	0.90
176	5.2	4.26	0.17	3.99	-0.8	-	-2.1	0.90
202	5.1	4.43	0.4	9.03	-0.5	-	-0.7	0.94
262	5	4.44	0.105	2.36	-0.5	-	-1.6	0.94
215	5.1	4.49	0.27	6.01	-0.4	-	-0.8	0.95
248	5	4.51	0.045	1.00	-0.3	-	-1.5	0.96
234	5	4.54	0.31	6.83	-0.3	-	-0.5	0.96
170	5.2	4.57	0.37	8.10	-0.2	-	-0.4	0.97
40	5.1	4.57	0.23	5.03	-0.2	-	-0.5	0.97
279	5	4.58	0.45	9.83	-0.2	-	-0.3	0.97
182	5.1	4.616	0.407	8.82	-0.2	-	-0.2	0.98
307	1	4.64	0.93	20.04	-0.1	-	-0.1	0.98
171	5.1	4.68	0.28	5.98	-0.1	-	-0.1	0.99
261	5.1	4.72	0.073	1.55	0.0	-	0.0	1.00
61	5.2	4.8	0.5	10.42	0.1	-	0.2	1.02
257	5	4.9	0.3	6.12	0.3	-	0.6	1.04
272	5.2	5	0.3	6.00	0.5	-	0.9	1.06
271	2	5	0.942	18.84	0.5	-	0.3	1.06
221	5	5	0.26	5.20	0.5	-	1.0	1.06
263	5.1	5	0.25	5.00	0.5	-	1.0	1.06
203	5	5.01	0.3	5.99	0.5	-	0.9	1.06
220	5.1	5.014	0.29	5.78	0.5	-	0.9	1.06
283	5.1	5.16	0.16	3.10	0.7	-	2.1	1.09
126	1	5.2	0.52	10.00	0.8	-	0.9	1.10
282	5.2	5.26	0.21	3.99	0.9	-	2.2	1.12

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
302	5.1	5.3	0.04	0.75	1.0	-	4.2	1.12
247	5.2	5.31	0.21	3.95	1.0	-	2.4	1.13
204	1.21	5.597	0.935	16.71	1.5	-	0.9	1.19
55	5.2	5.9	0.4	6.78	2.0	-	2.8	1.25
152	5.2	6.045	0.234	3.87	2.2	-	4.9	1.28
252	2	6.5	1.05	16.15	3.0	-	1.7	1.38
193	5.2	6.713	0.005	0.07	3.3	-	14.9	1.42
206	1.22	6.87	0.9	13.10	3.6	-	2.4	1.46
Ti ($x_{pt} = 1390$, $\sigma_{pt} = 70$, $u(x_{pt}) = 15$) [mg/kg]								
322	1	0.125**	0.004	3.20	-18.6	-	-93.4	0.00
154	7.1	57.8**	2.3	3.98	-17.8	-	-88.5	0.04
77	1	68.13**	0.87	1.28	-17.7	-	-88.7	0.05
151	7.2	262.601*	6.648	2.53	-15.1	-	-69.2	0.19
105	1.32	392*	7.8	1.99	-13.3	-	-59.4	0.28
255	1.32	497*	2.683	0.54	-11.9	-	-59.1	0.36
95	1.3	626*	200	31.95	-10.2	-	-3.8	0.45
320	1.3	709*	79.3	11.18	-9.1	-	-8.4	0.51
167	5	750.806*	50.341	6.70	-8.5	-	-12.2	0.54
130	2	759*	79	10.41	-8.4	-	-7.8	0.55
262	5	772*	58	7.51	-8.3	-	-10.3	0.56
65	1.16	807.93*	60.18	7.45	-7.8	-	-9.4	0.58
102	1.23	854*	68.5	8.02	-7.2	-	-7.6	0.61
258	1	854.487*	0.05	0.01	-7.2	-	-36.0	0.61
278	1.22	855.71*	238.77	27.90	-7.1	-	-2.2	0.62
306	2	967*	48	4.96	-5.7	-	-8.4	0.70
307	1	1001.17	200.23	20.00	-5.2	-	-1.9	0.72
204	1.21	1020	35	3.43	-4.9	-	-9.7	0.73
308	1.51	1079	108	10.01	-4.2	-	-2.9	0.78
54	1	1085.619	73.279	6.75	-4.1	-	-4.1	0.78
155	4.2	1100	70	6.36	-3.9	-	-4.1	0.79
137	6	1117	263	23.55	-3.6	-	-1.0	0.80
282	5.2	1176	203	17.26	-2.9	-	-1.1	0.85
116	1.32	1200.7	148.4	12.36	-2.5	-	-1.3	0.86
309	7.2	1248	27	2.16	-1.9	-	-4.6	0.90
191	5.2	1251	224	17.91	-1.9	-	-0.6	0.90
126	1	1254.7	125	9.96	-1.8	-	-1.1	0.90
311	1.3	1258.023	341.375	27.14	-1.8	-	-0.4	0.91
238	1.13	1270	130	10.24	-1.6	-	-0.9	0.91
295	2	1280	345	26.95	-1.5	-	-0.3	0.92
303	1	1310	30.551	2.33	-1.1	-	-2.4	0.94
176	5.2	1320	120	9.09	-0.9	-	-0.6	0.95
202	5.1	1354	98	7.24	-0.5	-	-0.4	0.97
244	2	1365.333	43.73	3.20	-0.3	-	-0.5	0.98
215	5.1	1372	116	8.45	-0.2	-	-0.2	0.99
199	5.1	1375	108	7.85	-0.2	-	-0.1	0.99
237	5.1	1380	70	5.07	-0.1	-	-0.1	0.99
220	5.1	1389.826	110.2	7.93	0.0	-	0.0	1.00
197	5.1	1400	77	5.50	0.1	-	0.1	1.01
55	5.2	1415	283	20.00	0.3	-	0.1	1.02

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED *z*- or *z'*-SCORES, THE *zeta*-SCORES AND THE *R*-SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	<i>z</i> -score	<i>z'</i> -score	<i>Zeta</i> -score	<i>R</i> -score
250	2	1427	570	39.94	0.5	-	0.1	1.03
247	5.2	1430	74	5.17	0.5	-	0.5	1.03
271	2	1438	0.57	0.04	0.6	-	3.2	1.03
182	5.1	1443	173	11.99	0.7	-	0.3	1.04
113	2	1474	35	2.37	1.1	-	2.2	1.06
314	2	1480	74	5.00	1.2	-	1.2	1.06
35	1.51	1500	300	20.00	1.5	-	0.4	1.08
183	5.4	1508	33	2.19	1.6	-	3.3	1.08
221	5	1530	70	4.58	1.9	-	2.0	1.10
234	5	1540	220	14.29	2.0	-	0.7	1.11
206	1.22	1565.66	51	3.26	2.3	-	3.3	1.13
75	1	1570.33	86.67	5.52	2.4	-	2.1	1.13
152	5.2	1579.444	73.399	4.65	2.5	-	2.5	1.14
225	1	1600	100	6.25	2.8	-	2.1	1.15
203	5	1600	81	5.06	2.8	-	2.5	1.15
279	5	1710	150	8.77	4.3	-	2.1	1.23
209	1.4	1876*	506	26.97	6.5	-	1.0	1.35
310	1.3	2050*	2.5	0.12	8.8	-	43.8	1.47
145	2	2100*	106	5.05	9.5	-	6.6	1.51
265	1.22	2605*	166	6.37	16.2	-	7.3	1.87
304	1	2667*	199.57	7.48	17.1	-	6.4	1.92
73	1.2	2770*	165.169	5.96	18.4	-	8.3	1.99
236	1.21	2800*	200	7.14	18.8	-	7.0	2.01
267	2	4589*	200	4.36	42.8	-	16.0	3.30
Tl [mg/kg]								
309	7.2	0.159	0.011	6.92	-	-	-	-
204	1.21	0.328	0.061	18.60	-	-	-	-
105	1.32	0.33	0.033	10.00	-	-	-	-
Tm [mg/kg]								
167	5	0.066	0.003	4.55	-	-	-	-
302	5.1	0.27	0.015	5.56	-	-	-	-
215	5.1	0.767	0.067	8.74	-	-	-	-
262	5	5.08	0.05	0.98	-	-	-	-
U [mg/kg]								
204	1.21	0.466	0.063	13.52	-	-	-	-
151	7.2	0.581	0.082	14.11	-	-	-	-
126	1	0.6	0.2	33.33	-	-	-	-
105	1.32	0.65	0.26	40.00	-	-	-	-
194	5.1	0.687	0.163	23.73	-	-	-	-
272	5.2	0.78	0.13	16.67	-	-	-	-
263	5.1	1.1	0.05	4.55	-	-	-	-
281	5	1.12	0.209	18.66	-	-	-	-
309	7.2	1.17	0.12	10.26	-	-	-	-
65	1.16	1.17	0.07	5.98	-	-	-	-
199	5.1	1.24	0.09	7.26	-	-	-	-
283	5.1	1.31	0.1	7.63	-	-	-	-
237	5.1	1.33	0.07	5.26	-	-	-	-

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
183	5.1	1.34	0.05	3.73	-	-	-	-
171	5.1	1.36	0.46	33.82	-	-	-	-
220	5.1	1.371	0.198	14.44	-	-	-	-
61	5.2	1.4	0.4	28.57	-	-	-	-
193	5.2	1.4	0.013	0.93	-	-	-	-
234	5	1.41	0.1	7.09	-	-	-	-
176	5.2	1.41	0.06	4.26	-	-	-	-
215	5.1	1.487	0.115	7.73	-	-	-	-
248	5	1.5	0.15	10.00	-	-	-	-
203	5	1.545	0.081	5.24	-	-	-	-
247	5.2	1.55	0.1	6.45	-	-	-	-
167	5	1.561	0.056	3.59	-	-	-	-
40	5.1	1.57	0.29	18.47	-	-	-	-
221	5	1.6	0.1	6.25	-	-	-	-
269	10	1.635	0.066	4.04	-	-	-	-
279	5	1.67	0.2	11.98	-	-	-	-
152	5.2	1.68	0.103	6.13	-	-	-	-
202	5.1	1.9	0.13	6.84	-	-	-	-
282	5.2	1.91	0.022	1.15	-	-	-	-
205	5	1.99	0.765	38.44	-	-	-	-
182	5.1	2.046	0.251	12.27	-	-	-	-
252	2	2.74	0.28	10.22	-	-	-	-
206	1.22	5.9	0.483	8.19	-	-	-	-
307	1	7.82	1.56	19.95	-	-	-	-
303	1	13.667	0.667	4.88	-	-	-	-
$V(x_{pt} = 20.2, \sigma_{pt} = 2, u(x_{pt}) = 0.5)$ [mg/kg]								
312	1.3	1.24**	0.15	12.10	-9.2	-	-33.3	0.06
206	1.22	1.69**	0.006	0.36	-9.0	-	-33.7	0.08
167	5	8.435	0.359	4.26	-5.7	-	-17.9	0.42
273	7.1	9.084	2.271	25.00	-5.4	-	-4.8	0.45
320	1.3	11	3.06	27.82	-4.5	-	-3.0	0.54
105	1.32	12	0.35	2.92	-4.0	-	-12.6	0.59
65	1.16	15.83	1.29	8.15	-2.1	-	-3.1	0.78
194	5.1	16.127	1.184	7.34	-2.0	-	-3.1	0.80
195	5.2	17.14	4.12	24.04	-1.5	-	-0.7	0.85
151	7.2	17.14	1.535	8.96	-1.5	-	-1.9	0.85
307	1	17.79	3.56	20.01	-1.2	-	-0.7	0.88
234	5	17.9	1.8	10.06	-1.1	-	-1.2	0.89
322	1	18.43	1.218	6.61	-0.9	-	-1.3	0.91
255	1.32	18.56	0.595	3.21	-0.8	-	-2.0	0.92
309	7.2	18.8	1.6	8.51	-0.7	-	-0.8	0.93
130	2	20	3	15.00	-0.1	-	-0.1	0.99
262	5	20.2	1.17	5.79	0.0	-	0.0	1.00
276	7.2	20.3	2	9.85	0.0	-	0.0	1.00
279	5	20.3	3	14.78	0.0	-	0.0	1.00
282	5.2	20.4	1.67	8.19	0.1	-	0.1	1.01
176	5.2	20.6	0.9	4.37	0.2	-	0.4	1.02
116	1.32	20.6	0.85	4.13	0.2	-	0.4	1.02
252	2	20.7	4.5	21.74	0.2	-	0.1	1.02

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
237	5.1	20.9	1	4.78	0.3	-	0.6	1.03
55	5.2	20.97	1.8	8.58	0.4	-	0.4	1.04
203	5	21.7	1.4	6.45	0.7	-	1.0	1.07
215	5.1	21.8	1.4	6.42	0.8	-	1.1	1.08
182	5.1	21.958	0.9	4.10	0.9	-	1.7	1.09
247	5.2	21.96	1.94	8.83	0.9	-	0.9	1.09
199	5.1	22	2	9.09	0.9	-	0.9	1.09
271	2	22	7.48	34.00	0.9	-	0.2	1.09
202	5.1	22.1	1.7	7.69	0.9	-	1.1	1.09
248	5	22.7	0.91	4.01	1.2	-	2.4	1.12
152	5.2	22.72	1.313	5.78	1.2	-	1.8	1.12
220	5.1	22.87	1.946	8.51	1.3	-	1.3	1.13
221	5	22.9	1.4	6.11	1.3	-	1.8	1.13
261	5.2	23.005	0.66	2.87	1.4	-	3.3	1.14
137	6	25.7	5.3	20.62	2.7	-	1.0	1.27
281	5	27.1	2.466	9.10	3.4	-	2.7	1.34
191	5.2	33	3	9.09	6.2	-	4.2	1.63
265	1.22	34.5	2.73	7.91	7.0	-	5.1	1.71
304	1	36*	2.69	7.47	7.7	-	5.8	1.78
126	1	42.7*	4.27	10.00	10.9	-	5.2	2.11
310	1.3	55.41*	0.45	0.81	17.1	-	49.6	2.74
236	1.21	97*	6	6.19	37.4	-	12.7	4.80
204	1.21	99.6*	12.8	12.85	38.6	-	6.2	4.93
305	1.3	175*	0.132	0.08	75.3	-	274.0	8.66
197	5.1	207.75*	11.42	5.50	91.2	-	16.4	10.28
$W(x_{pt} = 0.92, \sigma_{pt} = 0.15, u(x_{pt}) = 0.08) [mg/kg]$								
105	1.32	0.19	0.1	52.63	-	-4.4	-5.8	0.21
234	5	0.629	0.107	17.01	-	-1.7	-2.2	0.68
279	5	0.804	0.099	12.31	-	-0.7	-0.9	0.87
237	5.1	0.81	0.04	4.94	-	-0.7	-1.3	0.88
248	5	0.82	0.041	5.00	-	-0.6	-1.2	0.89
220	5.1	0.85	0.064	7.53	-	-0.4	-0.7	0.92
176	5.2	0.86	0.07	8.14	-	-0.4	-0.6	0.93
221	5	0.86	0.09	10.47	-	-0.4	-0.5	0.93
203	5	0.86	0.16	18.60	-	-0.4	-0.4	0.93
183	5.1	0.87	0.12	13.79	-	-0.3	-0.4	0.94
215	5.1	0.926	0.088	9.50	-	0.0	0.0	1.00
40	5.1	0.97	0.13	13.40	-	0.3	0.3	1.05
194	5.1	1.07	0.005	0.47	-	0.9	1.9	1.16
126	1	1.3	0.26	20.00	-	2.2	1.4	1.41
191	5.2	1.4	0.03	2.14	-	2.8	5.7	1.52
206	1.22	1.63	0.57	34.97	-	4.2	1.2	1.77
302	5.1	9**	0.3	3.33	-	48.0	26.1	9.75
$Y(x_{pt} = 9.25, \sigma_{pt} = 1.1, u(x_{pt}) = 0.4) [mg/kg]$								
309	7.2	5.21	0.66	12.67	-	-3.6	-5.4	0.56
65	1.16	6.59	0.46	6.98	-	-2.4	-4.6	0.71
126	1	8.06	0.806	10.00	-	-1.1	-1.4	0.87
252	2	8.89	1.07	12.04	-	-0.3	-0.3	0.96

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
209	1.4	9	0.9	10.00	-	-0.2	-0.3	0.97
206	1.22	9.315	1.4	15.03	-	0.1	0.0	1.01
204	1.21	10.122	2.067	20.42	-	0.8	0.4	1.09
307	1	11.34	2.27	20.02	-	1.9	0.9	1.23
265	1.22	12.171	1.92	15.78	-	2.6	1.5	1.32
310	1.3	12.83	0.12	0.94	-	3.2	9.6	1.39
75	1	13	7	53.85	-	3.4	0.5	1.41
303	1	18.667*	0.667	3.57	-	8.4	12.5	2.02
267	2	19*	70	368.42	-	8.7	0.1	2.05
236	1.21	25*	22	88.00	-	14.1	0.7	2.70
271	2	25*	2.49	9.96	-	14.1	6.3	2.70
309	7.2	5.21	0.66	12.67	-	-3.6	-5.4	0.56
65	1.16	6.59	0.46	6.98	-	-2.4	-4.6	0.71
126	1	8.06	0.806	10.00	-	-1.1	-1.4	0.87
252	2	8.89	1.07	12.04	-	-0.3	-0.3	0.96
209	1.4	9	0.9	10.00	-	-0.2	-0.3	0.97
206	1.22	9.315	1.4	15.03	-	0.1	0.0	1.01
204	1.21	10.122	2.067	20.42	-	0.8	0.4	1.09
307	1	11.34	2.27	20.02	-	1.9	0.9	1.23
265	1.22	12.171	1.92	15.78	-	2.6	1.5	1.32
310	1.3	12.83	0.12	0.94	-	3.2	9.6	1.39
75	1	13	7	53.85	-	3.4	0.5	1.41
303	1	18.667*	0.667	3.57	-	8.4	12.5	2.02
267	2	19*	70	368.42	-	8.7	0.1	2.05
236	1.21	25*	22	88.00	-	14.1	0.7	2.70
271	2	25*	2.49	9.96	-	14.1	6.3	2.70
Yb ($x_{pt} = 1.04$, $\sigma_{pt} = 0.17$, $u(x_{pt}) = 0.05$) [mg/kg]								
262	5	0.695	0.118	16.98	-2.1	-	-2.7	0.67
203	5	0.78	0.1	12.82	-1.6	-	-2.4	0.75
194	5.1	0.811	0.058	7.15	-1.4	-	-3.1	0.78
199	5.1	0.813	0.072	8.86	-1.4	-	-2.7	0.78
282	5.2	0.85	0.12	14.12	-1.2	-	-1.5	0.81
215	5.1	0.9	0.08	8.89	-0.9	-	-1.6	0.86
234	5	0.945	0.246	26.03	-0.6	-	-0.4	0.91
183	5.1	0.96	0.023	2.40	-0.5	-	-1.6	0.92
248	5	0.977	0.013	1.33	-0.4	-	-1.4	0.94
283	5.1	0.99	0.057	5.76	-0.3	-	-0.7	0.95
257	5	1	0.08	8.00	-0.3	-	-0.5	0.96
272	5.2	1	0.1	10.00	-0.3	-	-0.4	0.96
61	5.1	1.01	0.15	14.85	-0.2	-	-0.2	0.97
167	5	1.015	0.036	3.55	-0.2	-	-0.5	0.97
279	5	1.05	0.21	20.00	0.0	-	0.0	1.01
40	5.1	1.07	0.07	6.54	0.2	-	0.3	1.03
263	5.1	1.1	0.06	5.45	0.3	-	0.8	1.05
176	5.2	1.1	0.03	2.73	0.3	-	1.0	1.05
171	5.1	1.1	0.07	6.36	0.3	-	0.7	1.05
247	5.2	1.11	0.2	18.02	0.4	-	0.3	1.06
220	5.1	1.138	0.131	11.51	0.6	-	0.7	1.09
281	5	1.19	0.081	6.81	0.9	-	1.6	1.14

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
237	5.1	1.19	0.06	5.04	0.9	-	1.9	1.14
302	5.1	1.39	0.026	1.87	2.1	-	6.6	1.33
193	5.2	1.513	0.012	0.79	2.8	-	9.9	1.45
204	1.21	1.523	0.228	14.97	2.9	-	2.1	1.46
152	5.2	3.853*	0.341	8.85	16.9	-	8.2	3.69
Zn ($x_{pt} = 17.0$, $\sigma_{pt} = 1.8$, $u(x_{pt}) = 0.5$) [mg/kg]								
278	1.22	1.66**	6.97	419.88	-8.6	-	-2.2	0.10
65	1.16	7.14	0.49	6.86	-5.6	-	-14.3	0.42
154	7.1	11.4	0.6	5.26	-3.2	-	-7.3	0.67
314	1.3	11.5	0.9	7.83	-3.1	-	-5.4	0.68
105	1.32	12	2.8	23.33	-2.8	-	-1.8	0.71
262	5	13	0.9	6.92	-2.3	-	-3.9	0.76
281	5	13.3	0.944	7.10	-2.1	-	-3.5	0.78
206	1.22	13.46	0.8	5.94	-2.0	-	-3.8	0.79
132	7.1	13.746	0.049	0.36	-1.8	-	-6.7	0.81
312	1.3	13.8	0.6	4.35	-1.8	-	-4.1	0.81
311	1.3	14.08	3.801	27.00	-1.6	-	-0.8	0.83
209	1.4	14.3	0.5	3.50	-1.5	-	-3.9	0.84
255	1.32	14.73	0.569	3.86	-1.3	-	-3.0	0.87
194	5.1	15.1	1.433	9.49	-1.1	-	-1.3	0.89
309	7.2	15.4	1.2	7.79	-0.9	-	-1.2	0.91
265	1.22	15.783	3.45	21.86	-0.7	-	-0.3	0.93
320	1.3	16.2	1.96	12.10	-0.5	-	-0.4	0.95
183	5.1	16.5	0.8	4.85	-0.3	-	-0.5	0.97
195	5.2	16.8	3.66	21.79	-0.1	-	-0.1	0.99
176	5.2	17	0.7	4.12	0.0	-	0.0	1.00
199	5.1	17.108	1.356	7.93	0.1	-	0.1	1.01
203	5	17.15	0.67	3.91	0.1	-	0.2	1.01
252	2	17.2	1.8	10.47	0.1	-	0.1	1.01
268	6.1	17.24	1.352	7.84	0.1	-	0.2	1.01
248	5	17.7	0.71	4.01	0.4	-	0.8	1.04
237	5.1	17.7	1.3	7.34	0.4	-	0.5	1.04
102	1.23	18.38	0.9	4.90	0.8	-	1.3	1.08
220	5.2	18.547	0.949	5.12	0.9	-	1.5	1.09
73	1.2	18.579	1.876	10.10	0.9	-	0.8	1.09
40	5.1	18.6	1.3	6.99	0.9	-	1.2	1.09
75	1	18.67	6	32.14	0.9	-	0.3	1.10
215	5.1	18.9	1.4	7.41	1.1	-	1.3	1.11
167	5	18.905	1.143	6.05	1.1	-	1.5	1.11
94	1.22	19	2	10.53	1.1	-	1.0	1.12
238	1.13	19.1	2	10.47	1.2	-	1.0	1.12
151	7.2	19.578	3.582	18.30	1.5	-	0.7	1.15
285	6.2	19.63	0.93	4.74	1.5	-	2.5	1.15
322	1	19.647	1.758	8.95	1.5	-	1.5	1.16
61	5.1	20	4	20.00	1.7	-	0.7	1.18
137	6	20.2	1.5	7.43	1.8	-	2.0	1.19
171	5.1	20.3	2.1	10.34	1.9	-	1.5	1.19
116	1.32	20.3	0.67	3.30	1.9	-	4.0	1.19
307	1	20.88	4.18	20.02	2.2	-	0.9	1.23

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
279	5	21	0.51	2.43	2.3	-	5.7	1.24
247	5.2	21.49	0.96	4.47	2.5	-	4.2	1.26
261	5.1	21.973	0.981	4.46	2.8	-	4.5	1.29
113	2	22	2	9.09	2.8	-	2.4	1.29
145	2	22	2.14	9.73	2.8	-	2.3	1.29
303	1	22.667	0.667	2.94	3.2	-	6.9	1.33
276	7.2	22.9	2	8.73	3.3	-	2.9	1.35
193	5.2	23.54	0.02	0.08	3.7	-	13.4	1.38
54	1	23.626	1.999	8.46	3.7	-	3.2	1.39
130	2	24	4	16.67	3.9	-	1.7	1.41
78	1	25	1	4.00	4.5	-	7.2	1.47
271	2	26	0.009	0.03	5.1	-	18.5	1.53
272	5.2	26	3	11.54	5.1	-	3.0	1.53
302	5.1	27.7	1.5	5.42	6.0	-	6.8	1.63
313	6.1	28.5	2.85	10.00	6.5	-	4.0	1.68
244	2	28.767	5.689	19.78	6.6	-	2.1	1.69
152	5.2	30.156	2.706	8.97	7.4	-	4.8	1.77
282	5.2	32.3*	7.3	22.60	8.6	-	2.1	1.90
95	1.3	33*	5	15.15	9.0	-	3.2	1.94
304	1	34*	2.54	7.47	9.6	-	6.6	2.00
55	5.2	42.2*	7.9	18.72	14.2	-	3.2	2.48
267	2	52*	20	38.46	19.7	-	1.7	3.06
310	1.3	56.13*	0.14	0.25	22.0	-	77.4	3.30
236	1.21	78*	4	5.13	34.4	-	15.1	4.59
204	1.21	99.471*	11.961	12.02	46.5	-	6.9	5.85
35	1.51	118*	50	42.37	56.9	-	2.0	6.94
305	1.3	146.2*	0.121	0.08	72.8	-	257.9	8.60
259	7.1	314**	3	0.96	167.3	-	97.7	18.47
Zr ($x_{pt} = 164$, $\sigma_{pt} = 12$, $u(x_{pt}) = 5$) [mg/kg]								
191	5.2	1.36**	0.06	4.41	-	-12.3	-31.3	0.01
281	5	86.9	15.642	18.00	-	-5.8	-4.7	0.53
220	5.1	97.103	9.314	9.59	-	-5.1	-6.3	0.59
35	1.51	100	60	60.00	-	-4.8	-1.1	0.61
65	1.16	100.04	12.75	12.74	-	-4.8	-4.6	0.61
206	1.22	112.953	3	2.66	-	-3.9	-8.5	0.69
308	1.51	123	25	20.33	-	-3.1	-1.6	0.75
278	1.22	129.22	14.71	11.38	-	-2.6	-2.2	0.79
252	2	131	14	10.69	-	-2.5	-2.2	0.80
73	1.2	138.483	19.482	14.07	-	-1.9	-1.3	0.84
54	1	138.9	11.19	8.06	-	-1.9	-2.0	0.85
235	1	141	1	0.71	-	-1.7	-4.3	0.86
204	1.21	143.4	14.909	10.40	-	-1.6	-1.3	0.87
113	2	144	5	3.47	-	-1.5	-2.8	0.88
295	2	148	11	7.43	-	-1.2	-1.3	0.90
145	2	151	14.1	9.34	-	-1.0	-0.9	0.92
262	5	152	16.7	10.99	-	-0.9	-0.7	0.93
199	5.1	157.452	13.26	8.42	-	-0.5	-0.5	0.96
307	1	158.12	31.62	20.00	-	-0.4	-0.2	0.96
126	1	158.7	15.9	10.02	-	-0.4	-0.3	0.97

TABLE 4a (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE CLAY SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
236	1.21	159	5	3.14	-	-0.4	-0.7	0.97
183	5.1	159	5	3.14	-	-0.4	-0.7	0.97
271	2	167	5.73	3.43	-	0.2	0.4	1.02
237	5.1	167	9	5.39	-	0.2	0.3	1.02
238	1.13	169	17	10.06	-	0.4	0.3	1.03
94	1.22	171	4	2.34	-	0.5	1.1	1.04
209	1.4	175	60	34.29	-	0.8	0.2	1.07
279	5	183	20	10.93	-	1.4	0.9	1.12
40	5.1	183	29	15.85	-	1.4	0.6	1.12
194	5.1	183.075	29.425	16.07	-	1.4	0.6	1.12
248	5	192	5.8	3.02	-	2.1	3.6	1.17
203	5	197	37	18.78	-	2.5	0.9	1.20
215	5.1	197	16	8.12	-	2.5	2.0	1.20
105	1.32	200	59	29.50	-	2.7	0.6	1.22
155	4.2	206	15	7.28	-	3.2	2.6	1.26
302	5.1	212.4	12.7	5.98	-	3.7	3.5	1.30
130	2	216	32	14.81	-	3.9	1.6	1.32
304	1	216	16.16	7.48	-	3.9	3.1	1.32
258	1	240.312	0.05	0.02	-	5.8	14.7	1.47
306	2	241	12	4.98	-	5.8	5.9	1.47
152	5.2	244.662	9.177	3.75	-	6.1	7.6	1.49
244	2	269.333	16.773	6.23	-	8.0	6.0	1.64
75	1	306.33*	20.67	6.75	-	10.7	6.7	1.87
193	5.2	403.02*	0.2	0.05	-	18.1	45.9	2.46
267	2	476*	70	14.71	-	23.6	4.4	2.90
305	1.3	637.3*	0.252	0.04	-	35.7	90.9	3.89
Au [ug/kg]								
279	5	1.6	0.25	15.63	-	-	-	-
248	5	1.9	0.25	13.16	-	-	-	-
Hg ($x_{pt} = 7.19$, $\sigma_{pt} = 1.6$, $u(x_{pt}) = 0.19$) [ug/kg]								
55	6.4	6.8	1.1	16.18	-0.2	-	-0.3	0.95
137	6	7.2	0.79	10.97	0.0	-	0.0	1.00
276	10	8.3	0.3	3.61	0.7	-	3.1	1.15
284	10	8.639	2.011	23.28	0.9	-	0.7	1.20
105	1.32	12*	0.77	6.42	3.0	-	6.1	1.67
286	6.4	12.3*	2.5	20.33	3.2	-	2.0	1.71
206	1.22	19.122*	1.4	7.32	7.5	-	8.4	2.66
193	5.2	304**	0.005	0.00	187.6	-	1590.8	42.28
126	1	570**	190	33.33	355.8	-	3.0	79.28
Ir [ug/kg]								
255	1.32	4253	114	2.68	-	-	-	-

TABLE 4b. SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE *Zeta*-SCORES AND THE *R*-SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	<i>Zeta</i> -score	<i>R</i> -score
C ($x_{pt} = 38$, $\sigma_{pt} = 0.6$, $u(x_{pt}) = 0.09$) [%]								
267	2	6.281	0.07	1.11	-51.5	-	-271.4	0.17
183	5.4	37.2	1.2	3.23	-1.3	-	-0.7	0.98
67	3	46.42	3.76	8.10	13.7	-	2.2	1.22
Ca ($x_{pt} = 0.326$, $\sigma_{pt} = 0.015$, $u(x_{pt}) = 0.001$) [%]								
77	1	0.037*	0.012	32.43	-18.7	-	-23.9	0.11
282	5.2	0.089*	0.007	7.87	-15.4	-	-33.1	0.27
108	1.3	0.126*	0.029	23.02	-13.0	-	-6.9	0.39
308	1.51	0.206	0.021	10.19	-7.8	-	-5.7	0.63
310	1.3	0.218	0.001	0.46	-7.0	-	-60.0	0.67
194	5.1	0.228	0.064	28.07	-6.3	-	-1.5	0.70
322	1	0.256	0.024	9.38	-4.5	-	-2.9	0.79
312	1.3	0.257	0.014	5.45	-4.5	-	-4.9	0.79
281	5	0.257	0.017	6.61	-4.5	-	-4.0	0.79
311	1.3	0.265	0.002	0.75	-4.0	-	-24.4	0.81
94	1.22	0.265	0.002	0.75	-4.0	-	-24.4	0.81
95	1.3	0.269	0.025	9.29	-3.7	-	-2.3	0.83
283	5.1	0.27	0.024	8.89	-3.6	-	-2.3	0.83
206	1.22	0.28	0.004	1.43	-3.0	-	-10.8	0.86
54	1.2	0.298	0.024	8.05	-1.8	-	-1.2	0.91
272	5.2	0.3	0.01	3.33	-1.7	-	-2.6	0.92
203	5	0.302	0.021	6.95	-1.6	-	-1.1	0.93
65	1.23	0.31	0.014	4.52	-1.0	-	-1.1	0.95
263	5.1	0.31	0.02	6.45	-1.0	-	-0.8	0.95
255	1.32	0.311	0.001	0.32	-1.0	-	-8.3	0.95
40	5.1	0.314	0.02	6.37	-0.8	-	-0.6	0.96
257	5	0.32	0.02	6.25	-0.4	-	-0.3	0.98
279	5	0.321	0.45	140.19	-0.3	-	0.0	0.98
183	5.1	0.322	0.013	4.04	-0.3	-	-0.3	0.99
132	7.1	0.323	0.009	2.79	-0.2	-	-0.3	0.99
238	1.1	0.33	0.03	9.09	0.3	-	0.1	1.01
259	7.1	0.33	0.021	6.36	0.3	-	0.2	1.01
151	7.2	0.331	0.036	10.88	0.3	-	0.1	1.02
221	5	0.331	0.019	5.74	0.3	-	0.3	1.02
204	1.21	0.334	0.042	12.57	0.5	-	0.2	1.02
154	7.1	0.336	0.011	3.27	0.6	-	0.9	1.03
35	1.51	0.34	0.23	67.65	0.9	-	0.1	1.04
309	7.2	0.34	0.024	7.06	0.9	-	0.6	1.04
55	5.2	0.34	0.02	5.88	0.9	-	0.7	1.04
105	1.3	0.341	0.008	2.35	1.0	-	1.8	1.05
171	5.1	0.343	0.083	24.20	1.1	-	0.2	1.05
302	5.1	0.344	0.002	0.58	1.2	-	7.2	1.06
295	2	0.345	0.1	28.99	1.2	-	0.2	1.06
252	7.2	0.347	0.014	4.03	1.4	-	1.5	1.06
176	5.2	0.349	0.008	2.29	1.5	-	2.8	1.07
248	5	0.35	0.011	3.14	1.6	-	2.2	1.07

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
199	5.1	0.357	0.032	8.96	2.0	-	1.0	1.10
116	1.32	0.358	0.024	6.70	2.1	-	1.3	1.10
73	1	0.358	0.004	1.12	2.1	-	7.5	1.10
237	5.1	0.36	0.021	5.83	2.2	-	1.6	1.10
61	5.1	0.36	0.05	13.89	2.2	-	0.7	1.10
234	5	0.362	0.072	19.89	2.3	-	0.5	1.11
193	5.2	0.368	0.005	1.36	2.7	-	8.0	1.13
130	2	0.376	0.001	0.27	3.2	-	27.8	1.15
152	5.2	0.376	0.002	0.53	3.2	-	20.0	1.15
314	2	0.38	0.02	5.26	3.5	-	2.7	1.17
261	5.1	0.381	0.013	3.41	3.6	-	4.2	1.17
278	1.22	0.385	0.156	40.52	3.8	-	0.4	1.18
215	5.1	0.39	0.024	6.15	4.1	-	2.7	1.20
113	2	0.394	0.003	0.76	4.4	-	20.3	1.21
303	1	0.413	0.009	2.18	5.6	-	9.5	1.27
102	1.23	0.419	0.028	6.68	6.0	-	3.3	1.29
145	2	0.423	0.014	3.31	6.3	-	6.9	1.30
75	1	0.43	0.012	2.79	6.7	-	8.6	1.32
306	2	0.523*	0.026	4.97	12.8	-	7.6	1.60
244	2	0.747*	0.02	2.68	27.3	-	21.0	2.29
202	5.1	0.92*	0.08	8.70	38.5	-	7.4	2.82
307	1	1.07*	0.21	19.63	48.2	-	3.5	3.28
209	1.4	1.65*	0.12	7.27	85.8	-	11.0	5.06
67	3	1.78*	0.07	3.93	94.2	-	20.8	5.46
216	4.32	2.654*	0.284	10.70	150.8	-	8.2	8.14
304	1	3.1*	0.23	7.42	179.7	-	12.1	9.51
267	2	4.292**	0.06	1.40	256.9	-	66.1	13.17
235	1	7.213**	0.096	1.33	446.2	-	71.7	22.13
126	1	21.5**	0.22	1.02	1371.8	-	96.2	65.95
CI ($x_{pt} = 0.415$, $\sigma_{pt} = 0.019$, $u(x_{pt}) = 0.003$) [%]								
310	1.3	0.126*	0.001	0.79	-15.3	-	-83.0	0.30
204	1.21	0.242*	0.025	10.33	-9.1	-	-6.9	0.58
35	1.51	0.26*	0.05	19.23	-8.2	-	-3.1	0.63
261	5.2	0.267*	0.003	1.12	-7.8	-	-33.0	0.64
203	5	0.272	0.013	4.78	-7.5	-	-10.7	0.66
105	1.3	0.287	0.014	4.88	-6.8	-	-8.9	0.69
225	1	0.29	0.04	13.79	-6.6	-	-3.1	0.70
234	5	0.326	0.101	30.98	-4.7	-	-0.9	0.79
65	1.23	0.33	0.028	8.48	-4.5	-	-3.0	0.80
194	5.1	0.33	0.009	2.73	-4.5	-	-8.9	0.80
281	5	0.349	0.001	0.29	-3.5	-	-18.9	0.84
94	1.22	0.363	0.002	0.55	-2.7	-	-13.4	0.87
279	5	0.378	0.04	10.58	-2.0	-	-0.9	0.91
113	2	0.38	0.003	0.79	-1.8	-	-7.8	0.92
206	1.22	0.39	0.008	2.05	-1.3	-	-2.9	0.94
183	5.4	0.391	0.011	2.81	-1.3	-	-2.1	0.94
126	1	0.393	0.078	19.85	-1.2	-	-0.3	0.95
193	5.2	0.397	0.3	75.57	-0.9	-	-0.1	0.96

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
202	5.1	0.4	0.006	1.50	-0.8	-	-2.2	0.96
282	5.2	0.407	0.006	1.47	-0.4	-	-1.2	0.98
257	5	0.41	0.02	4.88	-0.3	-	-0.2	0.99
220	5.1	0.424	0.035	8.25	0.5	-	0.3	1.02
176	5.2	0.425	0.007	1.65	0.5	-	1.3	1.02
55	5.2	0.43	0.1	23.26	0.8	-	0.1	1.04
308	1.51	0.44	0.062	14.09	1.3	-	0.4	1.06
152	5.2	0.441	0.015	3.40	1.4	-	1.7	1.06
262	5	0.442	0.009	2.04	1.4	-	2.8	1.07
221	5	0.449	0.029	6.46	1.8	-	1.2	1.08
237	5.1	0.45	0.023	5.11	1.8	-	1.5	1.08
215	5.1	0.451	0.027	5.99	1.9	-	1.3	1.09
248	5	0.451	0.005	1.11	1.9	-	6.0	1.09
303	1	0.457	0.011	2.41	2.2	-	3.7	1.10
238	1.1	0.458	0.05	10.92	2.3	-	0.9	1.10
199	5.1	0.52	0.024	4.62	5.5	-	4.3	1.25
314	2	0.56*	0.03	5.36	7.7	-	4.8	1.35
67	3	0.58*	0.05	8.62	8.7	-	3.3	1.40
306	2	0.604*	0.03	4.97	10.0	-	6.3	1.46
244	2	0.881*	0.038	4.31	24.6	-	12.2	2.12
216	4.32	2.867*	0.188	6.56	129.4	-	13.0	6.91
304	1	3.366*	0.25	7.43	155.7	-	11.8	8.11
267	2	8.889**	0.09	1.01	447.2	-	94.1	21.42
191	5.2	13.8**	0.5	3.62	706.4	-	26.8	33.25
K ($x_{pt} = 1.60$, $\sigma_{pt} = 0.06$, $u(x_{pt}) = 0.007$) [%]								
77	1	0.177*	0.023	12.99	-23.9	-	-58.8	0.11
313	6.1	0.23*	0.023	10.00	-23.0	-	-56.6	0.14
95	1.3	0.465*	0.028	6.02	-19.0	-	-39.2	0.29
310	1.3	1.015	0.001	0.10	-9.8	-	-77.5	0.63
130	2	1.038	0.021	2.02	-9.4	-	-25.2	0.65
265	1.22	1.12	0.112	10.00	-8.1	-	-4.3	0.70
108	1.3	1.147	0.213	18.57	-7.6	-	-2.1	0.72
322	1	1.169	0.059	5.05	-7.2	-	-7.2	0.73
204	1.21	1.196	0.092	7.69	-6.8	-	-4.4	0.75
132	7.1	1.286	0.018	1.40	-5.3	-	-16.1	0.80
278	1.22	1.303	0.199	15.27	-5.0	-	-1.5	0.81
255	1.32	1.304	0.003	0.23	-5.0	-	-36.7	0.82
225	1	1.31	0.09	6.87	-4.9	-	-3.2	0.82
206	1.22	1.325	0.013	0.98	-4.6	-	-18.3	0.83
65	1.23	1.35	0.086	6.37	-4.2	-	-2.9	0.84
311	1.3	1.351	0.009	0.67	-4.2	-	-21.3	0.84
73	1	1.359	0.016	1.18	-4.0	-	-13.6	0.85
145	2	1.36	0.044	3.24	-4.0	-	-5.4	0.85
94	1.22	1.36	0.03	2.21	-4.0	-	-7.8	0.85
295	2	1.45	0.2	13.79	-2.5	-	-0.7	0.91
308	1.51	1.484	0.21	14.15	-1.9	-	-0.6	0.93
197	5.1	1.52	0.08	5.26	-1.3	-	-1.0	0.95
209	1.4	1.54	0.08	5.19	-1.0	-	-0.7	0.96

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
283	5.1	1.55	0.03	1.94	-0.8	-	-1.6	0.97
279	5	1.57	0.2	12.74	-0.5	-	-0.1	0.98
151	7.2	1.576	0.041	2.60	-0.4	-	-0.6	0.99
312	1.3	1.59	0.09	5.66	-0.2	-	-0.1	0.99
302	5.1	1.592	0.01	0.63	-0.1	-	-0.6	1.00
154	7.1	1.6	0.04	2.50	0.0	-	0.0	1.00
281	5	1.6	0.003	0.19	0.0	-	0.0	1.00
261	5.1	1.605	0.021	1.31	0.1	-	0.2	1.00
252	7.2	1.61	0.08	4.97	0.2	-	0.1	1.01
309	7.2	1.618	0.121	7.48	0.3	-	0.1	1.01
248	5	1.63	0.021	1.29	0.5	-	1.3	1.02
220	5.1	1.655	0.095	5.74	0.9	-	0.6	1.03
262	5	1.66	0.032	1.93	1.0	-	1.8	1.04
171	5.1	1.66	0.17	10.24	1.0	-	0.4	1.04
263	5.1	1.67	0.08	4.79	1.2	-	0.9	1.04
105	1.3	1.675	0.05	2.99	1.3	-	1.5	1.05
234	5	1.69	0.14	8.28	1.5	-	0.6	1.06
199	5.1	1.693	0.043	2.54	1.6	-	2.1	1.06
183	5.1	1.699	0.032	1.88	1.7	-	3.0	1.06
257	5	1.7	0.1	5.88	1.7	-	1.0	1.06
167	5	1.707	0.044	2.58	1.8	-	2.4	1.07
203	5	1.72	0.1	5.81	2.0	-	1.2	1.08
237	5.1	1.72	0.09	5.23	2.0	-	1.3	1.08
194	5.1	1.72	0.307	17.85	2.0	-	0.4	1.08
152	5.2	1.736	0.045	2.59	2.3	-	3.0	1.09
176	5.2	1.74	0.03	1.72	2.3	-	4.5	1.09
116	1.32	1.752	0.124	7.08	2.5	-	1.2	1.10
202	5.1	1.76	0.07	3.98	2.7	-	2.3	1.10
54	1.2	1.768	0.121	6.84	2.8	-	1.4	1.11
282	5.2	1.78	0.013	0.73	3.0	-	12.0	1.11
102	1.23	1.81	0.151	8.34	3.5	-	1.4	1.13
193	5.2	1.811	0.005	0.28	3.5	-	23.5	1.13
205	5	1.826	0.543	29.74	3.8	-	0.4	1.14
55	5.2	1.83	0.09	4.92	3.9	-	2.5	1.14
215	5.1	1.849	0.111	6.00	4.2	-	2.2	1.16
238	1.1	1.87	0.18	9.63	4.5	-	1.5	1.17
268	6.1	1.885	0.25	13.26	4.8	-	1.1	1.18
303	1	1.89	0.031	1.64	4.9	-	9.1	1.18
314	2	1.89	0.09	4.76	4.9	-	3.2	1.18
61	5.2	1.9	0.3	15.79	5.0	-	1.0	1.19
113	2	1.9	0.008	0.42	5.0	-	27.4	1.19
195	5.2	1.915	0.473	24.70	5.3	-	0.7	1.20
170	5.2	1.916	0.069	3.60	5.3	-	4.6	1.20
126	1	1.99	0.2	10.05	6.5	-	1.9	1.24
306	2	2.27	0.08	3.52	11.2	-	8.3	1.42
35	1.51	2.37	1.1	46.41	12.9	-	0.7	1.48
221	5	2.42*	0.16	6.61	13.8	-	5.1	1.51
75	1	2.57*	0.171	6.65	16.3	-	5.7	1.61
244	2	3.149*	0.078	2.48	26.0	-	19.8	1.97

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
235	1	3.379*	0.071	2.10	29.8	-	24.9	2.11
67	3	3.53*	0.11	3.12	32.4	-	17.5	2.21
307	1	3.76*	0.75	19.95	36.2	-	2.9	2.35
304	1	13.203*	0.99	7.50	194.6	-	11.7	8.25
216	4.32	14.665*	0.328	2.24	219.1	-	39.8	9.17
267	2	17.285**	0.1	0.58	263.1	-	156.4	10.80
305	1	34.335**	5.85	17.04	549.0	-	5.6	21.46
258	1	50.54**	0.05	0.10	820.8	-	968.0	31.59
Mg ($x_{pt} = 0.115$, $\sigma_{pt} = 0.006$, $u(x_{pt}) = 0.001$) [%]								
77	1	0.013*	0.001	7.69	-16.0	-	-88.8	0.11
94	1.22	0.056*	0.001	1.79	-9.3	-	-51.4	0.49
152	5.2	0.066	0.008	12.12	-7.7	-	-6.1	0.57
221	5	0.088	0.006	6.82	-4.2	-	-4.5	0.77
35	1.51	0.095	0.03	31.58	-3.1	-	-0.7	0.83
105	1.3	0.105	0.022	20.95	-1.6	-	-0.5	0.91
306	2	0.11	0.005	4.55	-0.8	-	-1.0	0.96
309	7.2	0.112	0.014	12.50	-0.5	-	-0.2	0.97
130	2	0.114	0.005	4.39	-0.2	-	-0.2	0.99
126	1	0.116	0.023	19.83	0.2	-	0.0	1.01
154	7.1	0.117	0.004	3.42	0.3	-	0.5	1.02
151	7.2	0.118	0.002	1.69	0.5	-	1.4	1.03
259	7.1	0.12	0.003	2.50	0.8	-	1.6	1.04
244	2	0.12	0.015	12.50	0.8	-	0.3	1.04
237	5.1	0.12	0.007	5.83	0.8	-	0.7	1.04
113	2	0.121	0.003	2.48	0.9	-	2.0	1.05
279	5	0.122	0.024	19.67	1.1	-	0.3	1.06
194	5.1	0.123	0.025	20.33	1.3	-	0.3	1.07
252	7.2	0.124	0.004	3.23	1.4	-	2.2	1.08
281	5	0.125	0.014	11.20	1.6	-	0.7	1.09
176	5.2	0.126	0.006	4.76	1.7	-	1.8	1.10
248	5	0.132	0.007	5.30	2.7	-	2.4	1.15
313	6.1	0.134	0.013	9.70	3.0	-	1.5	1.17
132	7.1	0.138	0.001	0.72	3.6	-	20.0	1.20
193	5.2	0.141	0.037	26.24	4.1	-	0.7	1.23
55	5.2	0.142	0.03	21.13	4.2	-	0.9	1.23
220	5.1	0.148	0.011	7.43	5.2	-	3.0	1.29
170	5.2	0.15	0.022	14.67	5.5	-	1.6	1.30
282	5.2	0.15	0.007	4.67	5.5	-	5.0	1.30
314	2	0.15	0.09	60.00	5.5	-	0.4	1.30
215	5.1	0.151	0.015	9.93	5.7	-	2.4	1.31
261	5.2	0.151	0.008	5.30	5.7	-	4.5	1.31
322	1	0.159	0.013	8.18	6.9	-	3.4	1.38
65	1.23	0.17	0.011	6.47	8.6	-	5.0	1.48
268	6.1	0.183*	0.015	8.20	10.7	-	4.5	1.59
204	1.21	0.21*	0.011	5.24	14.9	-	8.6	1.83
303	1	0.224*	0.013	5.80	17.1	-	8.4	1.95
75	1	0.244*	0.133	54.51	20.3	-	1.0	2.12
67	3	0.29*	0.04	13.79	27.5	-	4.4	2.52

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
304	1	0.439*	0.033	7.52	50.9	-	9.8	3.82
206	1.22	0.5*	0.02	4.00	60.4	-	19.2	4.35
267	2	3.318**	0.1	3.01	502.9	-	32.0	28.85
N ($x_{pt} = 0.959$, $\sigma_{pt} = 0.04$, $u(x_{pt}) = 0.004$) [%]								
113	2	0.756	0.071	9.39	-5.3	-	-2.9	0.79
Si ($x_{pt} = 7.601$, $\sigma_{pt} = 0.2$, $u(x_{pt}) = 0.17$) [%]								
77	1	0.005**	0.001	20.00	-	-26.9	-44.1	0.00
273	7.1	0.035**	0.009	25.71	-	-26.8	-43.9	0.00
258	1	0.169**	0.05	29.59	-	-26.3	-41.5	0.02
308	1.51	4.607*	0.461	10.01	-	-10.6	-6.1	0.61
306	2	5.52	0.12	2.17	-	-7.4	-9.9	0.73
221	5	5.9	0.4	6.78	-	-6.0	-3.9	0.78
105	1.3	6.231	0.73	11.72	-	-4.8	-1.8	0.82
234	5	6.24	0.39	6.25	-	-4.8	-3.2	0.82
238	1.1	6.99	0.7	10.01	-	-2.2	-0.8	0.92
176	5.2	7.1	0.8	11.27	-	-1.8	-0.6	0.93
183	5.4	7.39	0.24	3.25	-	-0.7	-0.7	0.97
35	1.51	7.51	1.9	25.30	-	-0.3	0.0	0.99
314	2	7.9	0.4	5.06	-	1.1	0.7	1.04
248	5	8	1.6	20.00	-	1.4	0.2	1.05
113	2	8.74	0.013	0.15	-	4.0	6.6	1.15
244	2	9.855	0.59	5.99	-	8.0	3.7	1.30
65	1.23	10.13	1.05	10.37	-	9.0	2.4	1.33
303	1	10.767*	0.291	2.70	-	11.2	9.4	1.42
235	1	10.976*	0.362	3.30	-	11.9	8.4	1.44
67	3	11.24*	0.33	2.94	-	12.9	9.8	1.48
126	1	12.26*	2.5	20.39	-	16.5	1.9	1.61
145	2	15.1*	0.12	0.79	-	26.5	35.7	1.99
304	1	33.538*	2.51	7.48	-	91.8	10.3	4.41
216	4.32	35.206*	0.412	1.17	-	97.7	61.8	4.63
305	1	46.501*	6.81	14.64	-	137.7	5.7	6.12
267	2	55.766*	0.1	0.18	-	170.5	241.9	7.34
Al ($x_{pt} = 119$, $\sigma_{pt} = 9$, $u(x_{pt}) = 5$) [mg/kg]								
205	5	1.011**	0.867	85.76	-	-11.2	-23.5	0.01
145	2	16**	0.59	3.69	-	-9.8	-20.7	0.13
77	1	17.59**	1.5	8.53	-	-9.6	-19.6	0.15
306	2	68	16	23.53	-	-4.9	-3.0	0.57
126	1	73.2	14.6	19.95	-	-4.4	-3.0	0.62
204	1.21	73.905	8.597	11.63	-	-4.3	-4.5	0.62
154	7.1	93.9	2.53	2.69	-	-2.4	-4.5	0.79
105	1.3	98	8.2	8.37	-	-2.0	-2.2	0.82
151	7.2	120.012	17.581	14.65	-	0.1	0.1	1.01
206	1.22	132.21	5.41	4.09	-	1.3	1.8	1.11
273	7.1	141.129	23.374	16.56	-	2.1	0.9	1.19
259	7.1	153	5	3.27	-	3.2	4.8	1.29
314	2	162	16	9.88	-	4.1	2.6	1.36

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
220	5.1	169.174	17.428	10.30	-	4.8	2.8	1.42
176	5.2	180	30	16.67	-	5.8	2.0	1.51
248	5	180	36	20.00	-	5.8	1.7	1.51
215	5.1	211	22	10.43	-	8.8	4.1	1.77
113	2	222	7	3.15	-	9.8	12.0	1.87
252	7.2	226.4	22.9	10.11	-	10.2	4.6	1.90
281	5	232	2.784	1.20	-	10.8	19.9	1.95
282	5.2	242	5	2.07	-	11.7	17.5	2.03
244	2	247.33	48.43	19.58	-	12.2	2.6	2.08
237	5.1	291*	15	5.15	-	16.4	10.9	2.45
35	1.51	380*	180	47.37	-	24.8	1.4	3.19
261	5.2	435.34*	8.23	1.89	-	30.1	32.9	3.66
167	5	461.25*	8.609	1.87	-	32.6	34.5	3.88
262	5	463*	8.57	1.85	-	32.7	34.8	3.89
195	5.2	476*	84	17.65	-	34.0	4.2	4.00
65	1.23	481.43*	23.47	4.88	-	34.5	15.1	4.05
55	5.2	490*	25	5.10	-	35.3	14.6	4.12
199	5.1	541*	29.5	5.45	-	40.1	14.1	4.55
193	5.2	554*	0.116	0.02	-	41.4	87.8	4.66
94	1.22	577*	12	2.08	-	43.6	35.3	4.85
221	5	630*	30	4.76	-	48.6	16.8	5.29
194	5.1	737.075*	25.963	3.52	-	58.8	23.4	6.19
152	5.2	782.593*	63.474	8.11	-	63.1	10.4	6.58
303	1	898.333*	32.049	3.57	-	74.1	24.0	7.55
267	2	1400*	100	7.14	-	121.9	12.8	11.76
202	5.1	1629*	95	5.83	-	143.7	15.9	13.69
304	1	2248*	168.22	7.48	-	202.5	12.7	18.89
67	3	4400**	600	13.64	-	407.3	7.1	36.97
308	1.51	4935.4**	493.5	10.00	-	458.2	9.8	41.47
As ($x_{pt} = 1.565$, $\sigma_{pt} = 0.2$, $u(x_{pt}) = 0.02$) [mg/kg]								
322	1	0.43	0.02	4.65	-4.8	-	-36.3	0.27
261	5.1	0.892	0.019	2.13	-2.9	-	-22.0	0.57
314	1.3	1	0.1	10.00	-2.4	-	-5.5	0.64
126	1	1.1	0.2	18.18	-2.0	-	-2.3	0.70
209	1.4	1.14	0.1	8.77	-1.8	-	-4.1	0.73
262	5	1.18	0.032	2.71	-1.6	-	-9.6	0.75
105	1.3	1.3	0.068	5.23	-1.1	-	-3.7	0.83
312	1.3	1.3	0.06	4.62	-1.1	-	-4.1	0.83
191	5.2	1.3	0.1	7.69	-1.1	-	-2.6	0.83
197	5.1	1.32	0.07	5.30	-1.0	-	-3.3	0.84
132	7.1	1.374	0.072	5.24	-0.8	-	-2.5	0.88
152	5.2	1.412	0.048	3.40	-0.7	-	-2.9	0.90
282	5.2	1.43	0.05	3.50	-0.6	-	-2.4	0.91
151	7.2	1.482	0.042	2.83	-0.4	-	-1.7	0.95
309	7.2	1.49	0.14	9.40	-0.3	-	-0.5	0.95
283	5.1	1.49	0.05	3.36	-0.3	-	-1.4	0.95
194	5.1	1.494	0.26	17.40	-0.3	-	-0.3	0.95
279	5	1.57	0.18	11.46	0.0	-	0.0	1.00

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
220	5.1	1.575	0.1	6.35	0.0	-	0.1	1.01
206	1.22	1.601	0.07	4.37	0.2	-	0.5	1.02
234	5	1.61	0.13	8.07	0.2	-	0.3	1.03
252	7.2	1.65	0.08	4.85	0.4	-	1.0	1.05
281	5	1.66	0.021	1.27	0.4	-	3.0	1.06
303	1	1.667	0.667	40.01	0.4	-	0.2	1.07
257	5	1.7	0.1	5.88	0.6	-	1.3	1.09
176	5.2	1.71	0.03	1.75	0.6	-	3.8	1.09
202	5.1	1.72	0.23	13.37	0.7	-	0.7	1.10
237	5.1	1.72	0.09	5.23	0.7	-	1.7	1.10
263	5.1	1.73	0.087	5.03	0.7	-	1.8	1.11
248	5	1.74	0.017	0.98	0.7	-	6.0	1.11
40	5.1	1.74	0.12	6.90	0.7	-	1.4	1.11
55	5.2	1.75	0.1	5.71	0.8	-	1.8	1.12
116	1.32	1.76	0.07	3.98	0.8	-	2.6	1.12
203	5	1.768	0.077	4.36	0.9	-	2.5	1.13
199	5.1	1.77	0.13	7.34	0.9	-	1.6	1.13
183	5.1	1.77	0.04	2.26	0.9	-	4.4	1.13
171	5.1	1.81	0.15	8.29	1.0	-	1.6	1.16
167	5	1.813	1.134	62.55	1.1	-	0.2	1.16
170	5.2	1.85	0.17	9.19	1.2	-	1.7	1.18
215	5.1	1.89	0.12	6.35	1.4	-	2.7	1.21
61	5.1	1.9	0.3	15.79	1.4	-	1.1	1.21
205	5	1.985	0.543	27.36	1.8	-	0.8	1.27
302	5.1	2.18	0.002	0.09	2.6	-	25.5	1.39
221	5	2.31	0.15	6.49	3.2	-	4.9	1.48
102	1.23	3.23*	0.48	14.86	7.1	-	3.5	2.06
130	2	4.4*	0.5	11.36	12.1	-	5.7	2.81
307	1	5.63*	1.13	20.07	17.4	-	3.6	3.60
229	6.2	6.35*	0.56	8.82	20.4	-	8.5	4.06
270	6.1	160.33**	2	1.25	678.4	-	79.4	102.45
B ($x_{pt} = 11.8$, $\sigma_{pt} = 1.3$, $u(x_{pt}) = 0.2$) [mg/kg]								
154	7.1	14.9	0.3	2.01	2.4	-	8.5	1.26
183	5.4	17.9	0.5	2.79	4.7	-	11.3	1.52
113	2	3618	246	6.80	2769.8	-	14.7	306.61
Ba ($x_{pt} = 24.5$, $\sigma_{pt} = 2$, $u(x_{pt}) = 0.3$) [mg/kg]								
204	1.21	11.171*	3.342	29.92	-5.5	-	-4.0	0.46
320	1.3	13.2*	1.16	8.79	-4.7	-	-9.5	0.54
105	1.3	15*	1.5	10.00	-3.9	-	-6.2	0.61
206	1.22	16.166*	1.6	9.90	-3.4	-	-5.1	0.66
272	5.2	20	1	5.00	-1.9	-	-4.4	0.82
283	5.1	20.6	1	4.85	-1.6	-	-3.8	0.84
273	7.1	21.372	2.475	11.58	-1.3	-	-1.3	0.87
220	5.1	21.605	1.154	5.34	-1.2	-	-2.4	0.88
203	5	22.4	1.9	8.48	-0.9	-	-1.1	0.91
199	5.1	22.6	1.36	6.02	-0.8	-	-1.4	0.92
151	7.2	22.768	0.818	3.59	-0.7	-	-2.0	0.93

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
309	7.2	23.2	0.7	3.02	-0.5	-	-1.7	0.95
154	7.1	23.5	0.91	3.87	-0.4	-	-1.1	0.96
263	5.1	24.05	1.2	4.99	-0.2	-	-0.4	0.98
281	5	24.2	3.703	15.30	-0.1	-	-0.1	0.99
302	5.1	24.4	0.2	0.82	0.0	-	-0.3	1.00
176	5.2	24.7	0.8	3.24	0.1	-	0.2	1.01
183	5.1	24.7	0.6	2.43	0.1	-	0.3	1.01
237	5.1	25.1	1.4	5.58	0.2	-	0.4	1.02
307	1	25.23	5.05	20.02	0.3	-	0.1	1.03
279	5	25.3	6.5	25.69	0.3	-	0.1	1.03
191	5.2	26	3	11.54	0.6	-	0.5	1.06
252	7.2	26.4	1.1	4.17	0.8	-	1.7	1.08
40	5.1	27.1	2.9	10.70	1.1	-	0.9	1.11
215	5.1	27.8	1.8	6.47	1.4	-	1.8	1.13
126	1.11	28	2.8	10.00	1.4	-	1.2	1.14
248	5	28.7	1.4	4.88	1.7	-	2.9	1.17
259	7.1	29	2	6.90	1.9	-	2.2	1.18
152	5.2	29.134	1.516	5.20	1.9	-	3.0	1.19
193	5.2	29.837	0.064	0.21	2.2	-	19.6	1.22
261	5.1	30.394	1.385	4.56	2.4	-	4.2	1.24
221	5	33*	3	9.09	3.5	-	2.8	1.35
205	5	42.234*	1.87	4.43	7.3	-	9.4	1.72
Cr ($x_{pt} = 9.661$, $\sigma_{pt} = 1.1$, $u(x_{pt}) = 0.3$) [mg/kg]								
261	5.1	1.098**	0.019	1.73	-7.8	-	-27.0	0.11
193	5.2	1.262	0.003	0.24	-7.6	-	-26.6	0.13
204	1.21	2.304	0.384	16.67	-6.7	-	-14.8	0.24
154	7.1	2.59	0.11	4.25	-6.4	-	-21.1	0.27
322	1	4.06	0.06	1.48	-5.1	-	-17.4	0.42
65	1.23	5.14	0.35	6.81	-4.1	-	-9.6	0.53
205	5	5.865	0.985	16.79	-3.5	-	-3.7	0.61
170	5.2	6.44	0.26	4.04	-2.9	-	-7.9	0.67
259	7.1	8	0.5	6.25	-1.5	-	-2.8	0.83
152	5.2	8.117	0.229	2.82	-1.4	-	-4.0	0.84
308	1.51	8.7	3	34.48	-0.9	-	-0.3	0.90
270	6.1	8.86	2	22.57	-0.7	-	-0.4	0.92
273	7.1	9.14	1.32	14.44	-0.5	-	-0.4	0.95
313	6.1	9.6	0.96	10.00	-0.1	-	-0.1	0.99
126	1	9.64	0.96	9.96	0.0	-	0.0	1.00
320	1.3	9.73	3.72	38.23	0.1	-	0.0	1.01
281	5	9.86	0.315	3.19	0.2	-	0.4	1.02
108	1.3	10.261	4.179	40.73	0.5	-	0.1	1.06
311	1.3	10.622	0.111	1.05	0.9	-	2.9	1.10
262	5	10.7	0.149	1.39	0.9	-	3.0	1.11
191	5.2	11	1	9.09	1.2	-	1.3	1.14
314	1.3	11	1	9.09	1.2	-	1.3	1.14
55	5.2	11.1	0.7	6.31	1.3	-	1.9	1.15
272	5.2	11.32	1.03	9.10	1.5	-	1.5	1.17
199	5.1	11.331	0.935	8.25	1.5	-	1.7	1.17

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
283	5.1	11.4	0.23	2.02	1.6	-	4.4	1.18
167	5	11.488	0.252	2.19	1.7	-	4.5	1.19
116	1.32	11.6	0.55	4.74	1.8	-	3.1	1.20
40	5.1	11.68	0.72	6.16	1.8	-	2.6	1.21
132	7.1	11.777	0.009	0.08	1.9	-	6.7	1.22
78	1.3	11.778	1.66	14.09	1.9	-	1.3	1.22
105	1.3	12	0.92	7.67	2.1	-	2.4	1.24
151	7.2	12.32	0.646	5.24	2.4	-	3.7	1.28
220	5.2	12.509	0.468	3.74	2.6	-	5.0	1.29
229	6.2	12.58	0.44	3.50	2.7	-	5.4	1.30
237	5.1	12.6	1.1	8.73	2.7	-	2.6	1.30
257	5	12.7	0.9	7.09	2.8	-	3.2	1.31
202	5.1	12.9	1.01	7.83	2.9	-	3.1	1.34
263	5.1	12.96	0.65	5.02	3.0	-	4.6	1.34
183	5.1	13.05	0.25	1.92	3.1	-	8.4	1.35
248	5	13.2	0.16	1.21	3.2	-	10.0	1.37
171	5.1	13.4	1.3	9.70	3.4	-	2.8	1.39
255	1.32	13.83	0.235	1.70	3.8	-	10.6	1.43
279	5	14	3	21.43	3.9	-	1.4	1.45
130	2	14.4	0.5	3.47	4.3	-	8.0	1.49
194	5.1	14.76	1.556	10.54	4.6	-	3.2	1.53
215	5.1	14.9	1	6.71	4.8	-	5.0	1.54
61	5.1	15	2	13.33	4.9	-	2.6	1.55
303	1	15.333	0.667	4.35	5.2	-	7.7	1.59
302	5.1	15.75	0.28	1.78	5.5	-	14.4	1.63
252	7.2	16.1	0.5	3.11	5.9	-	10.9	1.67
195	5.2	17.2	2.798	16.27	6.9	-	2.7	1.78
310	1.3	19.04	0.11	0.58	8.5	-	28.0	1.97
209	1.4	21.5	0.2	0.93	10.8	-	31.7	2.23
307	1	22.09	4.42	20.01	11.3	-	2.8	2.29
113	2	23	5	21.74	12.1	-	2.7	2.38
206	1.22	23.8	1.2	5.04	12.9	-	11.4	2.46
312	1.3	24.4	4.3	17.62	13.4	-	3.4	2.53
304	1	101*	7.56	7.49	83.1	-	12.1	10.45
305	1	553.7**	23.5	4.24	495.2	-	23.1	57.31
Cu ($x_{pt} = 2.94$, $\sigma_{pt} = 0.4$, $u(x_{pt}) = 0.03$) [mg/kg]								
65	1.23	1.25	0.11	8.80	-4.2	-	-14.7	0.43
314	1.3	2	0.2	10.00	-2.4	-	-4.6	0.68
313	6.1	2.17	0.217	10.00	-1.9	-	-3.5	0.74
108	1.3	2.21	0.42	19.00	-1.8	-	-1.7	0.75
154	7.1	2.44	0.07	2.87	-1.3	-	-6.5	0.83
312	1.3	2.5	0.2	8.00	-1.1	-	-2.2	0.85
255	1.32	2.803	0.059	2.10	-0.3	-	-2.0	0.95
132	7.1	2.867	0.032	1.12	-0.2	-	-1.6	0.98
309	7.2	2.9	0.25	8.62	-0.1	-	-0.2	0.99
105	1.3	2.9	0.29	10.00	-0.1	-	-0.1	0.99
193	5.2	2.94	0.01	0.34	0.0	-	0.0	1.00
151	7.2	3.013	0.056	1.86	0.2	-	1.1	1.02

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
252	7.2	3.08	0.11	3.57	0.4	-	1.2	1.05
206	1.22	3.24	0.28	8.64	0.8	-	1.1	1.10
116	1.32	3.37	0.12	3.56	1.1	-	3.5	1.15
320	1.3	3.56	0.143	4.02	1.6	-	4.2	1.21
311	1.3	3.61	0.062	1.72	1.7	-	9.5	1.23
209	1.4	3.9	0.2	5.13	2.4	-	4.7	1.33
102	1.23	4.29	0.24	5.59	3.4	-	5.6	1.46
126	1	4.4	0.44	10.00	3.7	-	3.3	1.50
229	6.2	4.71	0.56	11.89	4.4	-	3.2	1.60
204	1.21	6.424*	1.094	17.03	8.7	-	3.2	2.19
113	2	7*	2	28.57	10.2	-	2.0	2.38
130	2	7.2*	1.2	16.67	10.7	-	3.5	2.45
303	1	7.333*	0.667	9.10	11.0	-	6.6	2.49
73	1	8.206*	0.199	2.43	13.2	-	26.1	2.79
310	1.3	8.593*	0.041	0.48	14.1	-	107.2	2.92
307	1	9.74*	1.95	20.02	17.0	-	3.5	3.31
75	1	9.788*	3.365	34.38	17.1	-	2.0	3.33
95	1.3	16*	6	37.50	32.7	-	2.2	5.44
259	7.1	41**	0.5	1.22	95.2	-	76.0	13.95
244	2	74.67**	8.08	10.82	179.4	-	8.9	25.40
54	1.2	115.5**	4.6	3.98	281.5	-	24.5	39.29
305	1	116.8**	10.807	9.25	284.8	-	10.5	39.73
267	2	280**	50	17.86	692.9	-	5.5	95.24
Fe ($x_{pt} = 176$, $\sigma_{pt} = 13$, $u(x_{pt}) = 1.4$) [mg/kg]								
258	1	0.014**	0.05	357.14	-13.6	-	-127.6	0.00
205	5	15.759**	2.908	18.45	-12.4	-	-49.8	0.09
77	1	21.14*	1.1	5.20	-12.0	-	-87.8	0.12
308	1.51	96	20	20.83	-6.2	-	-4.0	0.55
67	3	100	200	200.00	-5.9	-	-0.4	0.57
95	1.3	116	8	6.90	-4.6	-	-7.4	0.66
204	1.21	136	14.142	10.40	-3.1	-	-2.8	0.77
322	1	142.383	2.043	1.43	-2.6	-	-13.6	0.81
206	1.22	146.37	0.88	0.60	-2.3	-	-18.1	0.83
154	7.1	160	6	3.75	-1.2	-	-2.6	0.91
132	7.1	163.37	2.331	1.43	-1.0	-	-4.7	0.93
170	5.2	167.2	2.6	1.56	-0.7	-	-3.0	0.95
65	1.23	167.26	6.82	4.08	-0.7	-	-1.3	0.95
152	5.2	175.159	20.468	11.69	-0.1	-	0.0	1.00
255	1.32	175.5	0.786	0.45	0.0	-	-0.3	1.00
273	7.1	179.541	26.5	14.76	0.3	-	0.1	1.02
195	5.2	182	38	20.88	0.5	-	0.2	1.03
203	5	182	6.1	3.35	0.5	-	1.0	1.03
313	6.1	183	18.3	10.00	0.5	-	0.4	1.04
40	5.1	183.6	11.7	6.37	0.6	-	0.6	1.04
199	5.1	183.62	12.43	6.77	0.6	-	0.6	1.04
309	7.2	185	8	4.32	0.7	-	1.1	1.05
279	5	188	20	10.64	0.9	-	0.6	1.07
193	5.2	190	0.08	0.04	1.1	-	10.1	1.08

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
108	1.3	191.55	55.1	28.77	1.2	-	0.3	1.09
191	5.2	192	12	6.25	1.2	-	1.3	1.09
311	1.3	195.09	0.44	0.23	1.5	-	13.2	1.11
262	5	196	1	0.51	1.5	-	11.7	1.11
259	7.1	197	3	1.52	1.6	-	6.4	1.12
105	1.3	198	4.4	2.22	1.7	-	4.8	1.13
94	1.22	200	5	2.50	1.9	-	4.6	1.14
283	5.1	202	4	1.98	2.0	-	6.1	1.15
151	7.2	203.466	27.73	13.63	2.1	-	1.0	1.16
281	5	204	22.64	11.10	2.2	-	1.2	1.16
78	1.3	205.617	9.36	4.55	2.3	-	3.1	1.17
167	5	205.912	13.86	6.73	2.3	-	2.1	1.17
220	5.1	206.153	12.228	5.93	2.3	-	2.5	1.17
302	5.1	206.7	0.83	0.40	2.4	-	19.1	1.17
130	2	210	40	19.05	2.6	-	0.8	1.19
263	5.1	210.29	10.51	5.00	2.7	-	3.2	1.19
171	5.1	212	15	7.08	2.8	-	2.4	1.20
320	1.3	213.8	61.38	28.71	2.9	-	0.6	1.21
272	5.2	214	35	16.36	2.9	-	1.1	1.22
116	1.32	214.7	19.7	9.18	3.0	-	2.0	1.22
176	5.2	216	4	1.85	3.1	-	9.5	1.23
252	7.2	216.1	6.1	2.82	3.1	-	6.4	1.23
61	5.1	220	30	13.64	3.4	-	1.5	1.25
237	5.1	221	13	5.88	3.5	-	3.4	1.26
126	1	222	22	9.91	3.6	-	2.1	1.26
183	5.1	225	4	1.78	3.8	-	11.6	1.28
257	5	230	22	9.57	4.2	-	2.4	1.31
238	1.1	230	23	10.00	4.2	-	2.3	1.31
268	6.1	230.58	45.275	19.64	4.2	-	1.2	1.31
202	5.1	232	24	10.34	4.3	-	2.3	1.32
102	1.23	234.23	14.78	6.31	4.5	-	3.9	1.33
194	5.1	244.375	52.275	21.39	5.3	-	1.3	1.39
248	5	246	4.9	1.99	5.4	-	13.8	1.40
113	2	246	7	2.85	5.4	-	9.8	1.40
261	5.1	248.538	9.828	3.95	5.6	-	7.3	1.41
55	5.2	252.2	25	9.91	5.9	-	3.0	1.43
303	1	254.333	2.404	0.95	6.1	-	28.3	1.45
145	2	257	12.8	4.98	6.3	-	6.3	1.46
209	1.4	258	2	0.78	6.3	-	33.8	1.47
215	5.1	270	17	6.30	7.3	-	5.5	1.53
314	2	271	14	5.17	7.3	-	6.8	1.54
282	5.2	286	40	13.99	8.5	-	2.7	1.63
234	5	304	64	21.05	9.9	-	2.0	1.73
312	1.3	309	16	5.18	10.3	-	8.3	1.76
35	1.51	420*	280	66.67	18.9	-	0.9	2.39
54	1.2	460.15*	22.35	4.86	22.0	-	12.7	2.61
235	1	497.333*	6.807	1.37	24.9	-	46.3	2.83
278	1.22	506.58*	13.53	2.67	25.6	-	24.3	2.88
244	2	826.67*	8.74	1.06	50.3	-	73.5	4.70

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
310	1.3	1357.46*	0.91	0.07	91.4	-	715.3	7.71
216	4.32	1691*	548	32.41	117.2	-	2.8	9.61
304	1	2463**	184.31	7.48	176.9	-	12.4	13.99
267	2	3580**	200	5.59	263.3	-	17.0	20.34
Li [mg/kg]								
154	7.1	0.272	0.018	6.62	-	-	-	-
Mn ($x_{pt} = 342$, $\sigma_{pt} = 20$, $u(x_{pt}) = 2$) [mg/kg]								
191	5.2	35.7**	0.8	2.24	-13.5	-	-133.1	0.10
77	1	39.32*	2	5.09	-13.3	-	-102.9	0.11
75	1	68.826*	10.663	15.49	-12.0	-	-25.1	0.20
225	1	204.54	12.05	5.89	-6.0	-	-11.2	0.60
204	1.21	223.944	14.318	6.39	-5.2	-	-8.2	0.65
278	1.22	234.6	20.63	8.79	-4.7	-	-5.2	0.69
145	2	236	17.6	7.46	-4.7	-	-6.0	0.69
322	1	249.2	1.59	0.64	-4.1	-	-34.6	0.73
308	1.51	250	37.5	15.00	-4.0	-	-2.4	0.73
206	1.22	267.45	1.4	0.52	-3.3	-	-29.0	0.78
108	1.3	269.12	26.31	9.78	-3.2	-	-2.8	0.79
95	1.3	270	30	11.11	-3.2	-	-2.4	0.79
255	1.32	303.4	1.211	0.40	-1.7	-	-15.6	0.89
78	1.3	307.409	25.44	8.28	-1.5	-	-1.4	0.90
194	5.1	309.8	31.44	10.15	-1.4	-	-1.0	0.91
273	7.1	314.62	46.469	14.77	-1.2	-	-0.6	0.92
132	7.1	318.99	3.587	1.12	-1.0	-	-5.5	0.93
94	1.22	323	5	1.55	-0.8	-	-3.5	0.94
313	6.1	326	32.6	10.00	-0.7	-	-0.5	0.95
54	1.2	336	27	8.04	-0.3	-	-0.2	0.98
309	7.2	337	26	7.72	-0.2	-	-0.2	0.99
154	7.1	342	12	3.51	0.0	-	0.0	1.00
282	5.2	343	1	0.29	0.0	-	0.4	1.00
65	1.23	343.8	27.03	7.86	0.1	-	0.1	1.01
279	5	345	35	10.14	0.1	-	0.1	1.01
195	5.2	345	41	11.88	0.1	-	0.1	1.01
261	5.2	345.319	1.165	0.34	0.1	-	1.4	1.01
281	5	346	1.038	0.30	0.2	-	1.7	1.01
259	7.1	347	0.8	0.23	0.2	-	2.2	1.01
314	1.3	347	21	6.05	0.2	-	0.2	1.01
209	1.4	350	5	1.43	0.4	-	1.5	1.02
310	1.3	351.21	0.37	0.11	0.4	-	4.2	1.03
320	1.3	354	22.61	6.39	0.5	-	0.5	1.04
151	7.2	355.638	30.25	8.51	0.6	-	0.4	1.04
197	5.1	358	19	5.31	0.7	-	0.8	1.05
238	1.1	361	30	8.31	0.8	-	0.6	1.06
105	1.3	362	6.3	1.74	0.9	-	3.0	1.06
116	1.32	365.2	15.6	4.27	1.0	-	1.5	1.07
252	7.2	368.3	11.7	3.18	1.2	-	2.2	1.08
152	5.2	369.617	6.256	1.69	1.2	-	4.2	1.08

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
167	5	371.139	5.911	1.59	1.3	-	4.6	1.09
311	1.3	372.642	1.366	0.37	1.3	-	12.0	1.09
203	5	374	13	3.48	1.4	-	2.4	1.09
234	5	376	26	6.91	1.5	-	1.3	1.10
202	5.1	376	19	5.05	1.5	-	1.8	1.10
221	5	377	21	5.57	1.5	-	1.7	1.10
220	5.1	384.568	19.68	5.12	1.9	-	2.2	1.12
268	6.1	388.5	30.45	7.84	2.0	-	1.5	1.14
248	5	390	4.3	1.10	2.1	-	10.0	1.14
176	5.2	390	6	1.54	2.1	-	7.5	1.14
55	5.2	394.6	12	3.04	2.3	-	4.3	1.15
312	1.3	396	2	0.51	2.4	-	18.4	1.16
237	5.1	397	21	5.29	2.4	-	2.6	1.16
257	5	397	18	4.53	2.4	-	3.0	1.16
183	5.4	402	13	3.23	2.6	-	4.6	1.18
170	5.2	405	3.3	0.81	2.8	-	16.0	1.18
215	5.1	414.5	25.2	6.08	3.2	-	2.9	1.21
262	5	415	7.71	1.86	3.2	-	9.1	1.21
113	2	416	12	2.88	3.3	-	6.1	1.22
102	1.23	427.73	36.93	8.63	3.8	-	2.3	1.25
303	1	436	5.033	1.15	4.1	-	17.2	1.27
193	5.2	436.06	0.072	0.02	4.1	-	43.6	1.28
199	5.1	461.37	21.43	4.64	5.3	-	5.5	1.35
126	1	486	49	10.08	6.3	-	2.9	1.42
244	2	776*	48.08	6.20	19.1	-	9.0	2.27
35	1.51	855*	700	81.87	22.6	-	0.7	2.50
130	2	871.4*	130	14.92	23.3	-	4.1	2.55
235	1	872*	15.524	1.78	23.3	-	33.8	2.55
307	1	1030.03*	206.01	20.00	30.3	-	3.3	3.01
205	5	1489.986*	67.905	4.56	50.5	-	16.9	4.36
306	2	2520*	1000	39.68	95.8	-	2.2	7.37
304	1	3995**	298.95	7.48	160.7	-	12.2	11.68
267	2	6080**	200	3.29	252.4	-	28.7	17.78
Mo ($x_{pt} = 2.215$, $\sigma_{pt} = 0.3$, $u(x_{pt}) = 0.03$) [mg/kg]								
126	1	0.7	0.2	28.57	-4.8	-	-7.5	0.32
65	1.23	1.3	0.11	8.46	-2.9	-	-8.0	0.59
279	5	2.14	0.31	14.49	-0.2	-	-0.2	0.97
199	5.1	2.3	0.14	6.09	0.3	-	0.6	1.04
176	5.2	2.35	0.1	4.26	0.4	-	1.3	1.06
151	7.2	2.409	0.135	5.60	0.6	-	1.4	1.09
309	7.2	2.45	0.1	4.08	0.7	-	2.2	1.11
283	5.1	2.78	0.11	3.96	1.8	-	4.9	1.26
248	5	2.9	0.09	3.10	2.2	-	7.2	1.31
215	5.1	2.91	0.25	8.59	2.2	-	2.8	1.31
263	5.1	3.07	0.15	4.89	2.7	-	5.6	1.39
40	5.1	3.2	1.3	40.63	3.1	-	0.8	1.44
302	5.1	3.633	0.15	4.13	4.5	-	9.2	1.64
310	1.3	183.2**	1.9	1.04	575.7	-	95.2	82.71

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
Na ($x_{pt} = 84.0$, $\sigma_{pt} = 7$, $u(x_{pt}) = 1.4$) [mg/kg]								
145	2	30	2.4	8.00	-7.8	-	-19.4	0.36
205	5	43.256	7.021	16.23	-5.9	-	-5.7	0.51
261	5.1	44.381	0.691	1.56	-5.7	-	-25.1	0.53
281	5	50.8	0.152	0.30	-4.8	-	-23.3	0.60
206	1.22	61.8	0.06	0.10	-3.2	-	-15.7	0.74
193	5.2	63	0.042	0.07	-3.0	-	-14.8	0.75
309	7.2	64.8	3.8	5.86	-2.8	-	-4.7	0.77
151	7.2	64.891	16.098	24.81	-2.8	-	-1.2	0.77
262	5	70	1.46	2.09	-2.0	-	-6.9	0.83
194	5.1	84.403	12.13	14.37	0.1	-	0.0	1.00
40	5.1	88.1	5.5	6.24	0.6	-	0.7	1.05
282	5.2	88.5	0.71	0.80	0.7	-	2.8	1.05
170	5.2	89.3	1.1	1.23	0.8	-	3.0	1.06
283	5.1	89.9	1.28	1.42	0.9	-	3.1	1.07
171	5.1	91.8	6.9	7.52	1.1	-	1.1	1.09
167	5	92.031	3.056	3.32	1.2	-	2.4	1.10
302	5.1	94.2	1.4	1.49	1.5	-	5.1	1.12
113	2	95	19	20.00	1.6	-	0.6	1.13
248	5	96.2	0.96	1.00	1.8	-	7.1	1.15
176	5.2	96.2	1.5	1.56	1.8	-	5.9	1.15
199	5.1	96.51	8.21	8.51	1.8	-	1.5	1.15
237	5.1	97	5	5.15	1.9	-	2.5	1.15
154	7.1	98	5.1	5.20	2.0	-	2.6	1.17
183	5.1	99.8	1.9	1.90	2.3	-	6.7	1.19
263	5.1	100.45	5.02	5.00	2.4	-	3.2	1.20
55	5.2	100.6	1.2	1.19	2.4	-	8.9	1.20
257	5	102	9	8.82	2.6	-	2.0	1.21
252	7.2	102.27	4.95	4.84	2.6	-	3.5	1.22
268	6.1	104	10.15	9.76	2.9	-	2.0	1.24
203	5	104.5	6.7	6.41	3.0	-	3.0	1.24
152	5.2	104.542	2.506	2.40	3.0	-	7.1	1.24
220	5.1	106.001	10.073	9.50	3.2	-	2.2	1.26
234	5	107	7	6.54	3.3	-	3.2	1.27
195	5.2	107	20	18.69	3.3	-	1.1	1.27
197	5.1	109.4	6	5.48	3.7	-	4.1	1.30
61	5.2	110	9	8.18	3.8	-	2.9	1.31
215	5.1	113.8	6.99	6.14	4.3	-	4.2	1.35
202	5.1	122	8	6.56	5.5	-	4.7	1.45
221	5	143	11	7.69	8.6	-	5.3	1.70
67	3	200*	200	100.00	16.8	-	0.6	2.38
130	2	251.6*	54	21.46	24.3	-	3.1	3.00
267	2	340*	50	14.71	37.1	-	5.1	4.05
132	7.1	397.901*	21.304	5.35	45.5	-	14.7	4.74
126	1	1228**	367	29.89	165.9	-	3.1	14.62
Ni ($x_{pt} = 6.215$, $\sigma_{pt} = 0.8$, $u(x_{pt}) = 0.15$) [mg/kg]								
270	6.1	0.075**	3	4000.00	-8.1	-	-2.0	0.01

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
204	1.21	1.621	0.17	10.49	-6.1	-	-20.5	0.26
154	7.1	1.91	0.08	4.19	-5.7	-	-25.9	0.31
65	1.23	2.54	0.15	5.91	-4.9	-	-17.6	0.41
206	1.22	2.98	0.03	1.01	-4.3	-	-21.7	0.48
314	1.3	4	0.5	12.50	-2.9	-	-4.3	0.64
320	1.3	5.03	0.434	8.63	-1.6	-	-2.6	0.81
151	7.2	5.046	1.243	24.63	-1.5	-	-0.9	0.81
229	6.2	5.06	0.27	5.34	-1.5	-	-3.8	0.81
199	5.1	5.48	0.54	9.85	-1.0	-	-1.3	0.88
279	5	5.5	1.1	20.00	-0.9	-	-0.6	0.88
108	1.3	5.68	1.65	29.05	-0.7	-	-0.3	0.91
209	1.4	5.7	0.1	1.75	-0.7	-	-2.9	0.92
273	7.1	6.572	0.86	13.09	0.5	-	0.4	1.06
105	1.3	6.7	0.36	5.37	0.6	-	1.2	1.08
102	1.23	6.84	0.7	10.23	0.8	-	0.9	1.10
252	7.2	7.05	0.13	1.84	1.1	-	4.3	1.13
255	1.32	7.084	0.094	1.33	1.2	-	5.0	1.14
309	7.2	7.12	0.6	8.43	1.2	-	1.5	1.15
248	5	7.2	1.4	19.44	1.3	-	0.7	1.16
176	5.2	7.4	0.6	8.11	1.6	-	1.9	1.19
307	1	7.84	1.57	20.03	2.2	-	1.0	1.26
116	1.32	7.85	0.49	6.24	2.2	-	3.2	1.26
78	1.3	8.13	0.86	10.58	2.5	-	2.2	1.31
278	1.22	8.19	2.01	24.54	2.6	-	1.0	1.32
126	1	8.45	0.84	9.94	3.0	-	2.6	1.36
259	7.1	9	0.5	5.56	3.7	-	5.3	1.45
310	1.3	10.219	0.048	0.47	5.3	-	26.0	1.64
312	1.3	11.4	2.2	19.30	6.9	-	2.4	1.83
113	2	12	2	16.67	7.7	-	2.9	1.93
303	1	26*	0.001	0.00	26.2	-	135.5	4.18
244	2	63.33*	4.04	6.38	75.6	-	14.1	10.19
267	2	240**	50	20.83	309.6	-	4.7	38.62
305	1	287.4**	16.952	5.90	372.3	-	16.6	46.24
P ($x_{pt} = 785$, $\sigma_{pt} = 50$, $u(x_{pt}) = 3$) [mg/kg]								
258	1	0.177**	0.05	28.25	-17.0	-	-250.7	0.00
77	1	85.63**	1.7	1.99	-15.2	-	-196.3	0.11
130	2	106.8*	20	18.73	-14.7	-	-33.5	0.14
35	1.51	250*	100	40.00	-11.6	-	-5.3	0.32
308	1.51	287.7*	28.8	10.01	-10.8	-	-17.2	0.37
94	1.22	478	8	1.67	-6.7	-	-35.7	0.61
206	1.22	500	8.9	1.78	-6.2	-	-30.2	0.64
235	1	550.667	61.027	11.08	-5.1	-	-3.8	0.70
65	1.23	614.44	36.03	5.86	-3.7	-	-4.7	0.78
102	1.23	760	71	9.34	-0.5	-	-0.4	0.97
309	7.2	763	43	5.64	-0.5	-	-0.5	0.97
306	2	778	39	5.01	-0.2	-	-0.2	0.99
67	3	800	300	37.50	0.3	-	0.0	1.02
265	1.22	843	102	12.10	1.3	-	0.6	1.07

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
73	1	892.329	25.829	2.89	2.3	-	4.1	1.14
113	2	896	9	1.00	2.4	-	11.6	1.14
126	1	940	94	10.00	3.4	-	1.6	1.20
314	2	985	59	5.99	4.3	-	3.4	1.25
154	7.1	989	34	3.44	4.4	-	6.0	1.26
303	1	1018	24	2.36	5.1	-	9.6	1.30
204	1.21	1083	68.966	6.37	6.5	-	4.3	1.38
105	1.3	1120*	53	4.73	7.3	-	6.3	1.43
116	1.32	1134*	98	8.64	7.6	-	3.6	1.44
244	2	1306.33*	82.73	6.33	11.3	-	6.3	1.66
75	1	2189.22*	132.22	6.04	30.5	-	10.6	2.79
145	2	2871*	274	9.54	45.3	-	7.6	3.66
304	1	4899*	366.59	7.48	89.3	-	11.2	6.24
267	2	17190**	400	2.33	356.2	-	41.0	21.90
Rb ($x_{pt} = 15.481$, $\sigma_{pt} = 1.6$, $u(x_{pt}) = 0.3$) [mg/kg]								
126	1	7.86*	0.79	10.05	-4.6	-	-9.2	0.51
130	2	8*	0.8	10.00	-4.6	-	-8.9	0.52
102	1.23	8.26*	0.47	5.69	-4.4	-	-13.5	0.53
105	1.3	12	0.27	2.25	-2.1	-	-9.4	0.78
209	1.4	12.2	0.5	4.10	-2.0	-	-5.8	0.79
152	5.2	12.224	0.329	2.69	-2.0	-	-7.8	0.79
78	1.3	13.153	1.76	13.38	-1.4	-	-1.3	0.85
225	1	13.69	3.37	24.62	-1.1	-	-0.5	0.88
262	5	13.8	0.59	4.28	-1.0	-	-2.6	0.89
65	1.23	13.97	1.32	9.45	-0.9	-	-1.1	0.90
257	5	14	1	7.14	-0.9	-	-1.4	0.90
195	5.2	14.16	1.73	12.22	-0.8	-	-0.8	0.91
151	7.2	14.214	1.093	7.69	-0.8	-	-1.1	0.92
265	1.22	14.253	1.188	8.34	-0.7	-	-1.0	0.92
309	7.2	14.3	1.4	9.79	-0.7	-	-0.8	0.92
261	5.1	14.33	0.259	1.81	-0.7	-	-3.2	0.93
203	5	14.4	1.4	9.72	-0.7	-	-0.8	0.93
167	5	14.546	0.716	4.92	-0.6	-	-1.2	0.94
199	5.1	14.65	0.84	5.73	-0.5	-	-0.9	0.95
204	1.21	14.838	2.054	13.84	-0.4	-	-0.3	0.96
283	5.1	14.9	0.49	3.29	-0.4	-	-1.1	0.96
314	1.3	15	1	6.67	-0.3	-	-0.5	0.97
202	5.1	15.03	1.01	6.72	-0.3	-	-0.4	0.97
320	1.3	15.2	0.75	4.93	-0.2	-	-0.4	0.98
170	5.2	15.26	0.57	3.74	-0.1	-	-0.4	0.99
272	5.2	15.3	0.4	2.61	-0.1	-	-0.4	0.99
220	5.1	15.33	0.854	5.57	-0.1	-	-0.2	0.99
206	1.22	15.382	0.31	2.02	-0.1	-	-0.2	0.99
252	7.2	15.4	0.6	3.90	0.0	-	-0.1	0.99
234	5	15.4	2.9	18.83	0.0	-	0.0	0.99
205	5	15.75	0.876	5.56	0.2	-	0.3	1.02
279	5	15.8	3.1	19.62	0.2	-	0.1	1.02
40	5.1	15.8	0.98	6.20	0.2	-	0.3	1.02

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
302	5.1	15.84	0.17	1.07	0.2	-	1.2	1.02
248	5	15.9	0.32	2.01	0.3	-	1.0	1.03
193	5.2	15.96	0.02	0.13	0.3	-	1.9	1.03
278	1.22	16	1.04	6.50	0.3	-	0.5	1.03
263	5.1	16.14	0.81	5.02	0.4	-	0.8	1.04
311	1.3	16.166	0.116	0.72	0.4	-	2.5	1.04
183	5.1	16.2	0.3	1.85	0.4	-	1.8	1.05
54	1.2	16.275	1.025	6.30	0.5	-	0.8	1.05
171	5.1	16.3	1.4	8.59	0.5	-	0.6	1.05
237	5.1	16.4	1.2	7.32	0.6	-	0.7	1.06
176	5.2	16.4	0.3	1.83	0.6	-	2.3	1.06
281	5	16.9	0.913	5.40	0.9	-	1.5	1.09
108	1.3	16.9	2.03	12.01	0.9	-	0.7	1.09
55	5.2	16.92	0.9	5.32	0.9	-	1.5	1.09
61	5.2	17	2	11.76	0.9	-	0.8	1.10
113	2	17	2	11.76	0.9	-	0.8	1.10
312	1.3	17.1	0.7	4.09	1.0	-	2.2	1.10
215	5.1	18.2	1.13	6.21	1.7	-	2.3	1.18
310	1.3	18.225	0.045	0.25	1.7	-	10.6	1.18
116	1.32	18.6	0.4	2.15	1.9	-	6.6	1.20
35	1.51	20	5	25.00	2.8	-	0.9	1.29
238	1.1	21.8*	2	9.17	3.9	-	3.1	1.41
221	5	22.7*	2	8.81	4.4	-	3.6	1.47
94	1.22	45*	2	4.44	18.0	-	14.6	2.91
75	1	50.518*	5.242	10.38	21.4	-	6.7	3.26
306	2	60*	8	13.33	27.2	-	5.6	3.88
244	2	106*	8.66	8.17	55.2	-	10.4	6.85
267	2	170**	30	17.65	94.2	-	5.2	10.98
304	1	335**	25.07	7.48	194.9	-	12.7	21.64
$S(x_{pt} = 816, \sigma_{pt} = 50, u(x_{pt}) = 5) \text{ [mg/kg]}$								
204	1.21	108.612*	5.534	5.10	-14.9	-	-97.5	0.13
102	1.23	305*	31	10.16	-10.7	-	-16.3	0.37
225	1	600.21	112.91	18.81	-4.5	-	-1.9	0.74
65	1.23	639.09	35.83	5.61	-3.7	-	-4.9	0.78
308	1.51	667.9	85	12.73	-3.1	-	-1.7	0.82
145	2	668	75.4	11.29	-3.1	-	-2.0	0.82
183	5.4	749	36	4.81	-1.4	-	-1.8	0.92
105	1.3	773	23	2.98	-0.9	-	-1.8	0.95
309	7.2	793	83	10.47	-0.5	-	-0.3	0.97
73	1	796.946	0.391	0.05	-0.4	-	-4.0	0.98
113	2	929	9	0.97	2.4	-	11.1	1.14
126	1	965	193	20.00	3.1	-	0.8	1.18
35	1.51	1000	200	20.00	3.9	-	0.9	1.23
314	2	1003	50	4.99	3.9	-	3.7	1.23
116	1.32	1067	95	8.90	5.3	-	2.6	1.31
67	3	1100	200	18.18	6.0	-	1.4	1.35
306	2	1230*	62	5.04	8.7	-	6.7	1.51
132	7.1	1244.162*	95.933	7.71	9.0	-	4.5	1.52

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
303	1	1283.333*	29.059	2.26	9.8	-	15.9	1.57
244	2	1578.67*	44.74	2.83	16.0	-	17.0	1.93
206	1.22	1583*	6.5	0.41	16.1	-	95.7	1.94
75	1	3071.54*	92.53	3.01	47.4	-	24.3	3.76
94	1.22	4174*	50	1.20	70.6	-	66.9	5.12
304	1	5121*	383.2	7.48	90.5	-	11.2	6.28
267	2	12000**	300	2.50	235.0	-	37.3	14.71
Sr ($x_{pt} = 12.4$, $\sigma_{pt} = 1.4$, $u(x_{pt}) = 0.14$) [mg/kg]								
258	1	0.003**	0.05	1666.67	-9.1	-	-81.9	0.00
77	1	5.34*	0.2	3.75	-5.2	-	-28.7	0.43
108	1.3	5.92*	1.25	21.11	-4.8	-	-5.2	0.48
126	1	6.59*	0.66	10.02	-4.3	-	-8.6	0.53
105	1.3	9.5	0.24	2.53	-2.1	-	-10.4	0.77
314	1.3	10.5	1	9.52	-1.4	-	-1.9	0.85
255	1.32	10.52	0.08	0.76	-1.4	-	-11.5	0.85
209	1.4	10.6	0.5	4.72	-1.3	-	-3.5	0.85
199	5.1	11.127	1.1	9.89	-0.9	-	-1.1	0.90
309	7.2	11.3	1.2	10.62	-0.8	-	-0.9	0.91
204	1.21	11.494	1.607	13.98	-0.7	-	-0.6	0.93
312	1.3	11.5	0.5	4.35	-0.7	-	-1.7	0.93
154	7.1	11.6	0.4	3.45	-0.6	-	-1.9	0.94
151	7.2	11.609	0.867	7.47	-0.6	-	-0.9	0.94
102	1.23	11.68	0.89	7.62	-0.5	-	-0.8	0.94
65	1.23	11.75	1.02	8.68	-0.5	-	-0.6	0.95
302	5.1	11.83	0.18	1.52	-0.4	-	-2.5	0.95
320	1.3	11.9	0.46	3.87	-0.4	-	-1.0	0.96
220	5.1	11.949	0.892	7.47	-0.3	-	-0.5	0.96
113	2	12	2	16.67	-0.3	-	-0.2	0.97
265	1.22	12.416	0.789	6.35	0.0	-	0.0	1.00
78	1.3	12.43	0.96	7.72	0.0	-	0.0	1.00
310	1.3	12.464	0.048	0.39	0.0	-	0.4	1.01
116	1.32	12.6	0.47	3.73	0.1	-	0.4	1.02
176	5.2	12.7	0.5	3.94	0.2	-	0.6	1.02
206	1.22	12.81	0.38	2.97	0.3	-	1.0	1.03
248	5	12.9	1.3	10.08	0.4	-	0.4	1.04
311	1.3	12.992	0.055	0.42	0.4	-	3.9	1.05
40	5.1	13.4	1.4	10.45	0.7	-	0.7	1.08
279	5	13.5	1.9	14.07	0.8	-	0.6	1.09
238	1.1	13.9	1	7.19	1.1	-	1.5	1.12
278	1.22	13.92	3.75	26.94	1.1	-	0.4	1.12
303	1	14	0.001	0.01	1.2	-	11.2	1.13
145	2	14.119	1.189	8.42	1.3	-	1.4	1.14
215	5.1	14.4	2.1	14.58	1.5	-	1.0	1.16
261	5.1	14.498	0.349	2.41	1.5	-	5.6	1.17
252	7.2	14.5	0.7	4.83	1.5	-	2.9	1.17
55	5.2	14.9	3	20.13	1.8	-	0.8	1.20
183	5.1	15.1	1.1	7.28	2.0	-	2.4	1.22
54	1.2	15.35	1.36	8.86	2.2	-	2.2	1.24

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
193	5.2	15.82	0.04	0.25	2.5	-	23.1	1.28
35	1.51	16	4	25.00	2.7	-	0.9	1.29
61	5.1	16	4	25.00	2.7	-	0.9	1.29
203	5	18.4*	2.5	13.59	4.4	-	2.4	1.48
73	1	19.661*	0.49	2.49	5.3	-	14.2	1.59
307	1	19.87*	3.97	19.98	5.5	-	1.9	1.60
75	1	22.131*	4.426	20.00	7.2	-	2.2	1.78
272	5.2	30*	3	10.00	13.0	-	5.9	2.42
95	1.3	32*	2	6.25	14.4	-	9.8	2.58
306	2	47*	9	19.15	25.5	-	3.8	3.79
94	1.22	50*	3	6.00	27.7	-	12.5	4.03
130	2	53.4*	8	14.98	30.2	-	5.1	4.31
244	2	107.67*	5.51	5.12	70.2	-	17.3	8.68
267	2	120*	30	25.00	79.2	-	3.6	9.68
263	5.1	168.22**	8.41	5.00	114.7	-	18.5	13.57
305	1	273.8**	16.546	6.04	192.5	-	15.8	22.08
304	1	381**	28.51	7.48	271.4	-	12.9	30.73
Ti [mg/kg]								
204	1.21	4.042	1.123	27.78	-	-	-	-
154	7.1	4.66	0.13	2.79	-	-	-	-
145	2	4.726	0.239	5.06	-	-	-	-
65	1.23	4.73	0.32	6.77	-	-	-	-
308	1.51	7.4	2.5	33.78	-	-	-	-
314	1.3	9.9	1	10.10	-	-	-	-
320	1.3	10.2	5.63	55.20	-	-	-	-
151	7.2	11.738	3.108	26.48	-	-	-	-
255	1.32	12.11	0.46	3.80	-	-	-	-
312	1.3	12.68	1.17	9.23	-	-	-	-
306	2	13	2	15.38	-	-	-	-
105	1.3	16	3.9	24.38	-	-	-	-
311	1.3	17.148	0.071	0.41	-	-	-	-
116	1.32	19.3	2.1	10.88	-	-	-	-
303	1	20	2	10.00	-	-	-	-
209	1.4	22.6	0.8	3.54	-	-	-	-
126	1	24.9	0.25	1.00	-	-	-	-
35	1.51	27	23	85.19	-	-	-	-
310	1.3	94.13	0.26	0.28	-	-	-	-
235	1	118.667	14.224	11.99	-	-	-	-
304	1	121	9.05	7.48	-	-	-	-
305	1	772.9**	27.8	3.60	-	-	-	-
Zn ($x_{pt} = 17.1$, $\sigma_{pt} = 1.8$, $u(x_{pt}) = 0.14$) [mg/kg]								
263	5.1	5.91	0.3	5.08	-6.3	-	-33.8	0.35
308	1.51	11.2	2.6	23.21	-3.3	-	-2.3	0.65
191	5.2	12	2	16.67	-2.9	-	-2.5	0.70
262	5	12.4	0.941	7.59	-2.6	-	-4.9	0.73
152	5.2	13.009	0.735	5.65	-2.3	-	-5.5	0.76
302	5.1	13.18	0.21	1.59	-2.2	-	-15.5	0.77

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
195	5.2	13.3	3	22.56	-2.1	-	-1.3	0.78
94	1.22	15	1	6.67	-1.2	-	-2.1	0.88
204	1.21	15.169	2.673	17.62	-1.1	-	-0.7	0.89
261	5.1	15.457	0.23	1.49	-0.9	-	-6.1	0.90
206	1.22	15.54	0.36	2.32	-0.9	-	-4.0	0.91
309	7.2	15.8	1.2	7.59	-0.7	-	-1.1	0.92
311	1.3	16.06	0.053	0.33	-0.6	-	-6.9	0.94
205	5	16.174	1.097	6.78	-0.5	-	-0.8	0.95
154	7.1	16.3	0.4	2.45	-0.4	-	-1.9	0.95
132	7.1	16.383	0.079	0.48	-0.4	-	-4.4	0.96
126	1	16.4	1.6	9.76	-0.4	-	-0.4	0.96
199	5.1	16.473	1.588	9.64	-0.4	-	-0.4	0.96
65	1.23	16.56	0.1	0.60	-0.3	-	-3.1	0.97
40	5.1	16.6	1.1	6.63	-0.3	-	-0.5	0.97
78	1.3	16.69	0.86	5.15	-0.2	-	-0.5	0.98
209	1.4	16.7	0.1	0.60	-0.2	-	-2.3	0.98
193	5.2	16.77	0.016	0.10	-0.2	-	-2.3	0.98
108	1.3	16.87	8.64	51.22	-0.1	-	0.0	0.99
272	5.2	17	1	5.88	-0.1	-	-0.1	0.99
278	1.22	17.24	5.8	33.64	0.1	-	0.0	1.01
203	5	17.37	0.92	5.30	0.2	-	0.3	1.02
176	5.2	17.5	0.3	1.71	0.2	-	1.2	1.02
102	1.23	17.52	0.87	4.97	0.2	-	0.5	1.02
252	7.2	17.6	1.2	6.82	0.3	-	0.4	1.03
281	5	17.6	1.074	6.10	0.3	-	0.5	1.03
151	7.2	17.655	0.804	4.55	0.3	-	0.7	1.03
220	5.2	17.716	0.443	2.50	0.3	-	1.3	1.04
183	5.1	18.2	0.4	2.20	0.6	-	2.6	1.06
320	1.3	18.4	0.919	4.99	0.7	-	1.4	1.08
167	5	18.534	1.134	6.12	0.8	-	1.3	1.08
248	5	19	0.38	2.00	1.1	-	4.7	1.11
105	1.3	19	1.5	7.89	1.1	-	1.3	1.11
61	5.1	19	3	15.79	1.1	-	0.6	1.11
314	1.3	19	2	10.53	1.1	-	0.9	1.11
171	5.1	19.1	2	10.47	1.1	-	1.0	1.12
303	1	19.667	0.667	3.39	1.4	-	3.8	1.15
237	5.1	19.7	1.2	6.09	1.5	-	2.2	1.15
279	5	20	2.5	12.50	1.6	-	1.2	1.17
194	5.1	20.08	3.733	18.59	1.7	-	0.8	1.17
55	5.2	20.1	1.4	6.97	1.7	-	2.1	1.18
215	5.1	20.35	1.27	6.24	1.8	-	2.5	1.19
313	6.1	20.36	2.036	10.00	1.8	-	1.6	1.19
322	1	20.507	0.44	2.15	1.9	-	7.4	1.20
170	5.2	20.73	0.068	0.33	2.0	-	23.2	1.21
95	1.3	21	2	9.52	2.2	-	1.9	1.23
116	1.32	21.6	1.6	7.41	2.5	-	2.8	1.26
238	1.1	23.1	2	8.66	3.4	-	3.0	1.35
282	5.2	23.2	2.9	12.50	3.4	-	2.1	1.36
307	1	23.3	4.66	20.00	3.5	-	1.3	1.36

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
54	1.2	23.7	1.9	8.02	3.7	-	3.5	1.39
113	2	25	2	8.00	4.4	-	3.9	1.46
268	6.1	25.68	3.523	13.72	4.8	-	2.4	1.50
73	1	26.959	0.297	1.10	5.5	-	30.0	1.58
75	1	28.8	4.966	17.24	6.6	-	2.4	1.68
312	1.3	31.6*	0.6	1.90	8.1	-	23.5	1.85
35	1.51	32*	10	31.25	8.4	-	1.5	1.87
145	2	33*	2.89	8.76	8.9	-	5.5	1.93
255	1.32	43.19*	0.834	1.93	14.6	-	30.8	2.53
310	1.3	47.576*	0.077	0.16	17.1	-	190.1	2.78
244	2	125.67*	13.58	10.81	60.8	-	8.0	7.35
259	7.1	209**	3	1.44	107.6	-	63.9	12.22
304	1	217**	16.24	7.48	112.0	-	12.3	12.69
267	2	230**	50	21.74	119.3	-	4.3	13.45
306	2	5000**	700	14.00	2792.7	-	7.1	292.40
Ag [ug/kg]								
259	7.1	82	3	3.66	-	-	-	-
Bi [ug/kg]								
209	1.4	1140	30	2.63	-	-	-	-
126	1	1400	140	10.00	-	-	-	-
$Br (x_{pt} = 9500, \sigma_{pt} = 1100, u(x_{pt}) = 300) [ug/kg]$								
238	1.1	12.5**	1.2	9.60	-8.8	-	-30.2	0.00
35	1.51	18**	5	27.78	-8.8	-	-30.2	0.00
94	1.22	27**	4	14.81	-8.7	-	-30.2	0.00
205	5	4755	0.987	0.02	-4.4	-	-15.1	0.50
126	1	6527	653	10.00	-2.8	-	-4.1	0.69
65	1.23	6862.23	458.96	6.69	-2.4	-	-4.8	0.72
54	1.2	6900	350	5.07	-2.4	-	-5.6	0.73
272	5.2	7300	200	2.74	-2.0	-	-5.9	0.77
278	1.22	7310	1540	21.07	-2.0	-	-1.4	0.77
209	1.4	7850	200	2.55	-1.5	-	-4.5	0.83
283	5.1	8250.65	244.2	2.96	-1.2	-	-3.2	0.87
262	5	8650	167	1.93	-0.8	-	-2.4	0.91
95	1.3	8700	660	7.59	-0.7	-	-1.1	0.91
108	1.3	8700.015	1050.78	12.08	-0.7	-	-0.7	0.91
204	1.21	8815	1857	21.07	-0.6	-	-0.4	0.93
220	5.1	8835.407	485.192	5.49	-0.6	-	-1.2	0.93
197	5.1	8850	486	5.49	-0.6	-	-1.1	0.93
55	5.2	9130	250	2.74	-0.4	-	-1.0	0.96
202	5.1	9139	196	2.14	-0.3	-	-1.0	0.96
282	5.2	9140	90	0.98	-0.3	-	-1.1	0.96
279	5	9170	950	10.36	-0.3	-	-0.3	0.96
237	5.1	9200	460	5.00	-0.3	-	-0.6	0.97
263	5.1	9226.84	461.34	5.00	-0.3	-	-0.5	0.97
203	5	9360	760	8.12	-0.1	-	-0.2	0.98
193	5.2	9402.06	0.01	0.00	-0.1	-	-0.4	0.99

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
176	5.2	9460	150	1.59	0.0	-	-0.1	0.99
248	5	9640	67	0.70	0.1	-	0.4	1.01
281	5	9720	68	0.70	0.2	-	0.6	1.02
183	5.1	9740	180	1.85	0.2	-	0.6	1.02
171	5.1	9820	630	6.42	0.3	-	0.4	1.03
310	1.3	9869	32	0.32	0.3	-	1.1	1.04
302	5.1	9926	169	1.70	0.4	-	1.2	1.04
40	5.1	9932	607	6.11	0.4	-	0.6	1.04
307	1	10057	2011.4	20.00	0.5	-	0.3	1.06
199	5.1	10090	190	1.88	0.5	-	1.6	1.06
61	5.1	10100	1400	13.86	0.5	-	0.4	1.06
215	5.1	10310	620	6.01	0.7	-	1.1	1.08
312	1.3	10900	500	4.59	1.3	-	2.3	1.15
113	2	11000	2000	18.18	1.4	-	0.7	1.16
195	5.2	11402	2630	23.07	1.7	-	0.7	1.20
303	1	12000	0.001	0.00	2.3	-	7.9	1.26
221	5	14200	800	5.63	4.3	-	5.5	1.49
152	5.2	14240	191	1.34	4.4	-	12.9	1.50
308	1.51	15560	3110	19.99	5.6	-	1.9	1.64
194	5.1	15908	2846.4	17.89	5.9	-	2.2	1.67
105	1.3	18000*	2200	12.22	7.8	-	3.8	1.89
244	2	107333.3**	16441.82	15.32	90.2	-	5.9	11.28
304	1	187000**	13993.21	7.48	163.7	-	12.7	19.66
305	1	301400**	17360	5.76	269.2	-	16.8	31.69
Cd [ug/kg]								
259	7.1	1**	0.2	20.00	-	-	-	-
252	7.2	6.1**	0.6	9.84	-	-	-	-
126	1	100	50	50.00	-	-	-	-
270	6.1	280	2.5	0.89	-	-	-	-
322	1	142253.3**	5745.523	4.04	-	-	-	-
Ce [ug/kg]								
151	7.2	64.924	15.61	24.04	-	-	-	-
309	7.2	71.5	3.9	5.45	-	-	-	-
199	5.1	76.235	3.298	4.33	-	-	-	-
279	5	91.4	18	19.69	-	-	-	-
272	5.2	110	10	9.09	-	-	-	-
203	5	128	14	10.94	-	-	-	-
215	5.1	138.8	25.3	18.23	-	-	-	-
263	5.1	152.68	7.63	5.00	-	-	-	-
204	1.21	523.4	241.2	46.08	-	-	-	-
193	5.2	526.02	0.004	0.00	-	-	-	-
126	1.11	1610**	482	29.94	-	-	-	-
307	1	6874**	1374.8	20.00	-	-	-	-
Co ($x_{pt} = 205$, $\sigma_{pt} = 40$, $u(x_{pt}) = 4$) [ug/kg]								
259	7.1	3**	0.3	10.00	-4.9	-	-53.8	0.01
193	5.2	81	0.001	0.00	-3.0	-	-33.1	0.40

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
261	5.1	106.762	4.958	4.64	-2.4	-	-15.8	0.52
281	5	173	20.587	11.90	-0.8	-	-1.5	0.84
202	5.1	188	11	5.85	-0.4	-	-1.5	0.92
272	5.2	190	10	5.26	-0.4	-	-1.4	0.93
279	5	199	32	16.08	-0.1	-	-0.2	0.97
302	5.1	199	0.004	0.00	-0.1	-	-1.6	0.97
199	5.1	202.165	19.053	9.42	-0.1	-	-0.1	0.99
152	5.2	206	8	3.88	0.0	-	0.1	1.00
309	7.2	210	25	11.90	0.1	-	0.2	1.02
40	5.1	212	14	6.60	0.2	-	0.5	1.03
151	7.2	212.565	4.335	2.04	0.2	-	1.3	1.04
206	1.22	214	3.8	1.78	0.2	-	1.7	1.04
171	5.1	217	22	10.14	0.3	-	0.5	1.06
176	5.2	220	5	2.27	0.4	-	2.4	1.07
252	7.2	220.3	6.2	2.81	0.4	-	2.1	1.07
167	5	220.381	22.26	10.10	0.4	-	0.7	1.08
203	5	222	15	6.76	0.4	-	1.1	1.08
170	5.2	223	15	6.73	0.4	-	1.2	1.09
248	5	232	11.6	5.00	0.6	-	2.2	1.13
237	5.1	248	14	5.65	1.0	-	3.0	1.21
61	5.1	250	30	12.00	1.1	-	1.5	1.22
55	5.2	260	30	11.54	1.3	-	1.8	1.27
183	5.1	268	7	2.61	1.5	-	7.9	1.31
215	5.1	285.1	18.2	6.38	1.9	-	4.3	1.39
220	5.2	322.879	18.224	5.64	2.8	-	6.3	1.58
283	5.1	346.09	10.79	3.12	3.4	-	12.4	1.69
262	5	435*	16.3	3.75	5.5	-	13.8	2.12
263	5.1	480.48*	24.02	5.00	6.6	-	11.3	2.34
Cs ($x_{pt} = 56.2$, $\sigma_{pt} = 12$, $u(x_{pt}) = 1.8$) [ug/kg]								
261	5.1	45.061	2.576	5.72	-0.9	-	-3.5	0.80
272	5.2	47	7	14.89	-0.7	-	-1.3	0.84
283	5.1	50.906	7.12	13.99	-0.4	-	-0.7	0.91
248	5	51	10.2	20.00	-0.4	-	-0.5	0.91
151	7.2	51.319	3.101	6.04	-0.4	-	-1.4	0.91
203	5	57.4	4.1	7.14	0.1	-	0.3	1.02
199	5.1	58.461	5.127	8.77	0.2	-	0.4	1.04
176	5.2	60	3	5.00	0.3	-	1.1	1.07
40	5.1	61	5	8.20	0.4	-	0.9	1.09
263	5.1	61.72	3.09	5.01	0.4	-	1.5	1.10
252	7.2	62.3	9.8	15.73	0.5	-	0.6	1.11
279	5	63.2	6.9	10.92	0.6	-	1.0	1.12
302	5.1	63.7	0.8	1.26	0.6	-	3.8	1.13
183	5.1	65	3	4.62	0.7	-	2.5	1.16
55	5.2	65	8	12.31	0.7	-	1.1	1.16
215	5.1	65.8	5.4	8.21	0.8	-	1.7	1.17
171	5.1	66	16	24.24	0.8	-	0.6	1.17
170	5.2	67.7	4.5	6.65	0.9	-	2.4	1.20
237	5.1	68	5.5	8.09	1.0	-	2.0	1.21

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
61	5.2	72	20	27.78	1.3	-	0.8	1.28
Dy [ug/kg]								
252	7.2	9.4	1.6	17.02	-	-	-	-
152	5.2	183	27	14.75	-	-	-	-
Er [ug/kg]								
252	7.2	5.1	1	19.61	-	-	-	-
Eu [ug/kg]								
279	5	2.27	0.61	26.87	-	-	-	-
263	5.1	2.27	0.11	4.85	-	-	-	-
283	5.1	2.971	3.58	120.50	-	-	-	-
215	5.1	3.9	0.6	15.38	-	-	-	-
248	5	3.9	1.2	30.77	-	-	-	-
199	5.1	4.221	0.521	12.34	-	-	-	-
151	7.2	4.732	0.749	15.83	-	-	-	-
152	5.2	5	1	20.00	-	-	-	-
252	7.2	7	1.2	17.14	-	-	-	-
Ga [ug/kg]								
252	7.2	46.9	1.9	4.05	-	-	-	-
151	7.2	50.765	5.17	10.18	-	-	-	-
126	1	224	100	44.64	-	-	-	-
310	1.3	401610	290	0.07	-	-	-	-
Gd [ug/kg]								
252	7.2	11	1.9	17.27	-	-	-	-
283	5.1	385.647	75.7	19.63	-	-	-	-
Hf [ug/kg]								
263	5.1	6.27	0.31	4.94	-	-	-	-
279	5	7.08	2	28.25	-	-	-	-
199	5.1	7.412	0.621	8.38	-	-	-	-
40	5.1	8	2	25.00	-	-	-	-
283	5.1	9.439	4.611	48.85	-	-	-	-
176	5.2	11.2	1.4	12.50	-	-	-	-
215	5.1	14	2.2	15.71	-	-	-	-
126	1	1400**	140	10.00	-	-	-	-
Hg ($x_{pt} = 626$, $\sigma_{pt} = 110$, $u(x_{pt}) = 6$) [ug/kg]								
272	5.2	101*	12	11.88	-4.9	-	-39.5	0.16
302	5.1	139*	0.6	0.43	-4.5	-	-85.1	0.22
283	5.1	278.25*	12.23	4.40	-3.2	-	-25.8	0.44
279	5	311*	45	14.47	-2.9	-	-6.9	0.50
203	5	393	23	5.85	-2.2	-	-9.8	0.63
261	5.1	402.149	18.677	4.64	-2.1	-	-11.5	0.64
220	5.1	449.177	44.01	9.80	-1.6	-	-4.0	0.72
263	5.1	610.42	30.52	5.00	-0.1	-	-0.5	0.98

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
137	6	611	33	5.40	-0.1	-	-0.4	0.98
276	10	650	20	3.08	0.2	-	1.2	1.04
183	5.1	664	14	2.11	0.4	-	2.5	1.06
215	5.1	701	44	6.28	0.7	-	1.7	1.12
284	10	707.525	2.011	0.28	0.8	-	13.5	1.13
126	1	1522*	152	9.99	8.3	-	5.9	2.43
Ho [ug/kg]								
252	7.2	2.1	0.5	23.81	-	-	-	-
$La (x_{pt} = 51, \sigma_{pt} = 11, u(x_{pt}) = 3) [ug/kg]$								
151	7.2	34.071	0.178	0.52	-1.5	-	-5.9	0.67
309	7.2	36.4	1.8	4.95	-1.3	-	-4.3	0.72
279	5	39.5	4.5	11.39	-1.0	-	-2.1	0.78
283	5.1	40.366	2.415	5.98	-0.9	-	-2.8	0.80
40	5.1	41	3	7.32	-0.9	-	-2.3	0.81
152	5.2	44	6	13.64	-0.6	-	-1.0	0.87
237	5.1	47	3.5	7.45	-0.3	-	-0.8	0.93
176	5.2	47.2	1.5	3.18	-0.3	-	-1.1	0.93
263	5.1	47.22	2.36	5.00	-0.3	-	-0.9	0.93
61	5.1	48	11	22.92	-0.2	-	-0.2	0.95
199	5.1	48.155	12.213	25.36	-0.2	-	-0.2	0.95
272	5.2	50	10	20.00	-0.1	-	-0.1	0.99
248	5	51	3.1	6.08	0.0	-	0.1	1.01
205	5	51	0.983	1.93	0.0	-	0.1	1.01
183	5.1	51	4	7.84	0.0	-	0.1	1.01
252	7.2	52.5	8	15.24	0.2	-	0.2	1.04
55	5.2	53	10	18.87	0.2	-	0.2	1.05
215	5.1	56.6	7.6	13.43	0.5	-	0.7	1.12
203	5	61	2.7	4.43	0.9	-	2.7	1.21
171	5.1	64	28	43.75	1.2	-	0.5	1.27
282	5.2	80	8.1	10.13	2.6	-	3.4	1.58
281	5	85.8	15.358	17.90	3.2	-	2.3	1.70
302	5.1	184*	3.3	1.79	12.0	-	30.8	3.64
193	5.2	732.76**	0.004	0.00	61.3	-	243.0	14.49
307	1	6941**	1388.2	20.00	619.2	-	5.0	137.21
Lu [ug/kg]								
252	7.2	1	0.2	20.00	-	-	-	-
215	5.1	1.2	0.3	25.00	-	-	-	-
Nd [ug/kg]								
309	7.2	35.1	1.3	3.70	-	-	-	-
252	7.2	45.1	6.3	13.97	-	-	-	-
307	1	725	145	20.00	-	-	-	-
$Pb (x_{pt} = 336, \sigma_{pt} = 60, u(x_{pt}) = 11) [ug/kg]$								
132	7.1	0.548**	0.077	14.05	-5.3	-	-29.5	0.00
259	7.1	24**	1	4.17	-4.9	-	-27.4	0.07

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
309	7.2	273	50	18.32	-1.0	-	-1.2	0.81
312	1.3	415	87	20.96	1.2	-	0.9	1.24
278	1.22	490	3110	634.69	2.4	-	0.0	1.46
105	1.3	590	91	15.42	4.0	-	2.8	1.76
126	1	1516*	152	10.03	18.6	-	7.7	4.51
270	6.1	1680*	2	0.12	21.2	-	116.5	5.00
206	1.22	1800*	17	0.94	23.1	-	71.6	5.36
322	1	1896.667*	219.621	11.58	24.6	-	7.1	5.64
313	6.1	2378*	238	10.01	32.2	-	8.6	7.08
65	1.23	2722.54*	185.46	6.81	37.7	-	12.8	8.10
108	1.3	3039.46*	470.6	15.48	42.7	-	5.7	9.05
304	1	561000**	41979.63	7.48	8852.1	-	13.4	1669.64
Pr [ug/kg]								
252	7.2	11.2	1.7	15.18	-	-	-	-
Ru [ug/kg]								
77	1	6550	1000	15.27	-	-	-	-
Sb [ug/kg]								
151	7.2	5.851	0.432	7.38	-	-	-	-
40	5.1	14	1	7.14	-	-	-	-
215	5.1	15.9	4	25.16	-	-	-	-
199	5.1	16.215	0.925	5.70	-	-	-	-
283	5.1	17.756	2.865	16.14	-	-	-	-
279	5	19.7	2.4	12.18	-	-	-	-
221	5	21.6	2.2	10.19	-	-	-	-
55	5.2	30	5	16.67	-	-	-	-
152	5.2	61	6	9.84	-	-	-	-
302	5.1	219.5**	0.6	0.27	-	-	-	-
193	5.2	1170**	0.006	0.00	-	-	-	-
303	1	7000**	1154.701	16.50	-	-	-	-
305	1	108700**	329.696	0.30	-	-	-	-
$Sc(x_{pt} = 42, \sigma_{pt} = 9, u(x_{pt}) = 2)$ [ug/kg]								
205	5	0.052**	0.098	188.46	-4.5	-	-19.5	0.00
191	5.2	6	1	16.67	-3.9	-	-15.2	0.14
152	5.2	26	2	7.69	-1.7	-	-5.5	0.62
261	5.1	33.516	0.904	2.70	-0.9	-	-3.7	0.80
279	5	34.6	3.5	10.12	-0.8	-	-1.8	0.82
203	5	34.69	0.67	1.93	-0.8	-	-3.3	0.82
262	5	35.3	1.03	2.92	-0.7	-	-2.9	0.84
40	5.1	36	2	5.56	-0.7	-	-2.1	0.85
272	5.2	37	1	2.70	-0.6	-	-2.2	0.88
199	5.1	37.235	2.104	5.65	-0.5	-	-1.6	0.88
193	5.2	39.16	0.001	0.00	-0.3	-	-1.4	0.93
171	5.1	39.4	3.9	9.90	-0.3	-	-0.6	0.93
195	5.2	39.73	10.22	25.72	-0.3	-	-0.2	0.94
167	5	40.234	2.041	5.07	-0.2	-	-0.6	0.95

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
283	5.1	40.69	1.276	3.14	-0.2	-	-0.6	0.97
220	5.1	41.089	3.681	8.96	-0.1	-	-0.2	0.97
176	5.2	41.5	1.2	2.89	-0.1	-	-0.3	0.98
281	5	42	2.772	6.60	0.0	-	0.0	1.00
263	5.1	42.11	2.11	5.01	0.0	-	0.0	1.00
252	7.2	43	5.1	11.86	0.1	-	0.2	1.02
183	5.1	44	0.9	2.05	0.2	-	0.8	1.04
61	5.1	47	6	12.77	0.5	-	0.8	1.12
248	5	47.1	0.94	2.00	0.5	-	2.1	1.12
237	5.1	49.4	3.2	6.48	0.8	-	1.9	1.17
215	5.1	55.18	3.35	6.07	1.4	-	3.3	1.31
55	5.2	56	2.2	3.93	1.5	-	4.5	1.33
194	5.1	58.89	0.57	0.97	1.8	-	7.5	1.40
282	5.2	71	14	19.72	3.1	-	2.0	1.68
302	5.1	166*	3.8	2.29	13.4	-	28.3	3.94
151	7.2	2613.51**	393.124	15.04	277.3	-	6.5	62.00
Se ($x_{pt} = 35.4$, $\sigma_{pt} = 8$, $u(x_{pt}) = 1.6$) [ug/kg]								
252	7.2	30.8	3	9.74	-0.6	-	-1.4	0.87
126	1	627	200	31.90	76.0	-	3.0	17.71
307	1	1699	339.8	20.00	213.6	-	4.9	47.99
Sm [ug/kg]								
272	5.2	6	2	33.33	-	-	-	-
151	7.2	6.959	0.556	7.99	-	-	-	-
199	5.1	7.115	0.652	9.16	-	-	-	-
283	5.1	8.114	0.333	4.10	-	-	-	-
176	5.2	8.3	0.6	7.23	-	-	-	-
279	5	8.67	0.95	10.96	-	-	-	-
183	5.1	8.9	0.7	7.87	-	-	-	-
40	5.1	9	1	11.11	-	-	-	-
203	5	9.13	0.69	7.56	-	-	-	-
61	5.1	10	1.7	17.00	-	-	-	-
252	7.2	10.4	1.9	18.27	-	-	-	-
248	5	11	1.54	14.00	-	-	-	-
215	5.1	11.2	1	8.93	-	-	-	-
55	5.2	12	3	25.00	-	-	-	-
302	5.1	15	0.1	0.67	-	-	-	-
167	5	15.235	0.908	5.96	-	-	-	-
205	5	26	0.032	0.12	-	-	-	-
262	5	130**	2.94	2.26	-	-	-	-
193	5.2	770.6**	0.013	0.00	-	-	-	-
Sn [ug/kg]								
105	1.3	14000	5100	36.43	-	-	-	-
303	1	63333.333	3333.333	5.26	-	-	-	-
305	1	394560	19863	5.03	-	-	-	-

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED z - or z' -SCORES, THE $zeta$ -SCORES AND THE R -SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	z -score	z' -score	$Zeta$ -score	R -score
Te [ug/kg]								
303	1	30333.333	1763.834	5.81	-	-	-	-
Th [ug/kg]								
151	7.2	9.864	2.22	22.51	-	-	-	-
272	5.2	10	2	20.00	-	-	-	-
309	7.2	10.6	1.9	17.92	-	-	-	-
199	5.1	13.212	1.321	10.00	-	-	-	-
279	5	14	4.2	30.00	-	-	-	-
176	5.2	16.3	1.5	9.20	-	-	-	-
248	5	18	3.6	20.00	-	-	-	-
252	7.2	22.6	3.5	15.49	-	-	-	-
215	5.1	25	5.9	23.60	-	-	-	-
261	5.1	34.928	0.074	0.21	-	-	-	-
126	1	288**	96	33.33	-	-	-	-
283	5.1	665.03**	33.86	5.09	-	-	-	-
307	1	2977**	595.4	20.00	-	-	-	-
205	5	6920**	45.097	0.65	-	-	-	-
Tl [ug/kg]								
126	1	900	100	11.11	-	-	-	-
Tm [ug/kg]								
252	7.2	0.9	0.3	33.33	-	-	-	-
U [ug/kg]								
151	7.2	2.942**	0.355	12.07	-	-	-	-
309	7.2	3.5	0.5	14.29	-	-	-	-
252	7.2	4.8	0.7	14.58	-	-	-	-
283	5.1	28.691	4.445	15.49	-	-	-	-
263	5.1	31.8	1.59	5.00	-	-	-	-
152	5.2	121	12	9.92	-	-	-	-
126	1	165	83	50.30	-	-	-	-
303	1	3666.667**	666.667	18.18	-	-	-	-
$V(x_{pt} = 322, \sigma_{pt} = 60, u(x_{pt}) = 10)$ [ug/kg]								
206	1.22	217.75	7.3	3.35	-1.7	-	-8.4	0.68
281	5	278	38.92	14.00	-0.7	-	-1.1	0.86
309	7.2	325	27	8.31	0.0	-	0.1	1.01
151	7.2	344.107	26.522	7.71	0.4	-	0.8	1.07
252	7.2	391.9	53.4	13.63	1.1	-	1.3	1.22
237	5.1	408	36	8.82	1.4	-	2.3	1.27
199	5.1	441.01	42.839	9.71	1.9	-	2.7	1.37
152	5.2	494	58	11.74	2.8	-	2.9	1.53
215	5.1	523	132	25.24	3.3	-	1.5	1.62
194	5.1	530.125	87.625	16.53	3.4	-	2.4	1.65
248	5	630*	63	10.00	5.0	-	4.8	1.96
282	5.2	750*	180	24.00	7.0	-	2.4	2.33

TABLE 4b (cont.). SUMMARY OF THE REPORTED RESULTS, THE CALCULATED *z*- or *z*'-SCORES, THE *zeta*-SCORES AND THE *R*-SCORES FOR THE PLANT SAMPLE.

Participant code	Technique code	Measurand mass fraction	Standard deviation	Relative std. dev., [%]	<i>z</i> -score	<i>z</i> '-score	<i>Zeta</i> -score	<i>R</i> -score
204	1.21	795*	218	27.42	7.7	-	2.2	2.47
65	1.23	2161.28*	128.54	5.95	30.1	-	14.3	6.71
116	1.32	3870*	420	10.85	58.1	-	8.4	12.02
126	1	11300**	1130	10.00	179.7	-	9.7	35.09
W [ug/kg]								
126	1	300	100	33.33	-	-	-	-
Y [ug/kg]								
310	1.3	385	64	16.62	-	-	-	-
307	1	5523	1104.6	20.00	-	-	-	-
Yb [ug/kg]								
252	7.2	5.6	0.8	14.29	-	-	-	-
215	5.1	6.4	1.7	26.56	-	-	-	-
Zr [ug/kg]								
209	1.4	460	40	8.70	-	-	-	-
307	1	102063	20412.6	20.00	-	-	-	-

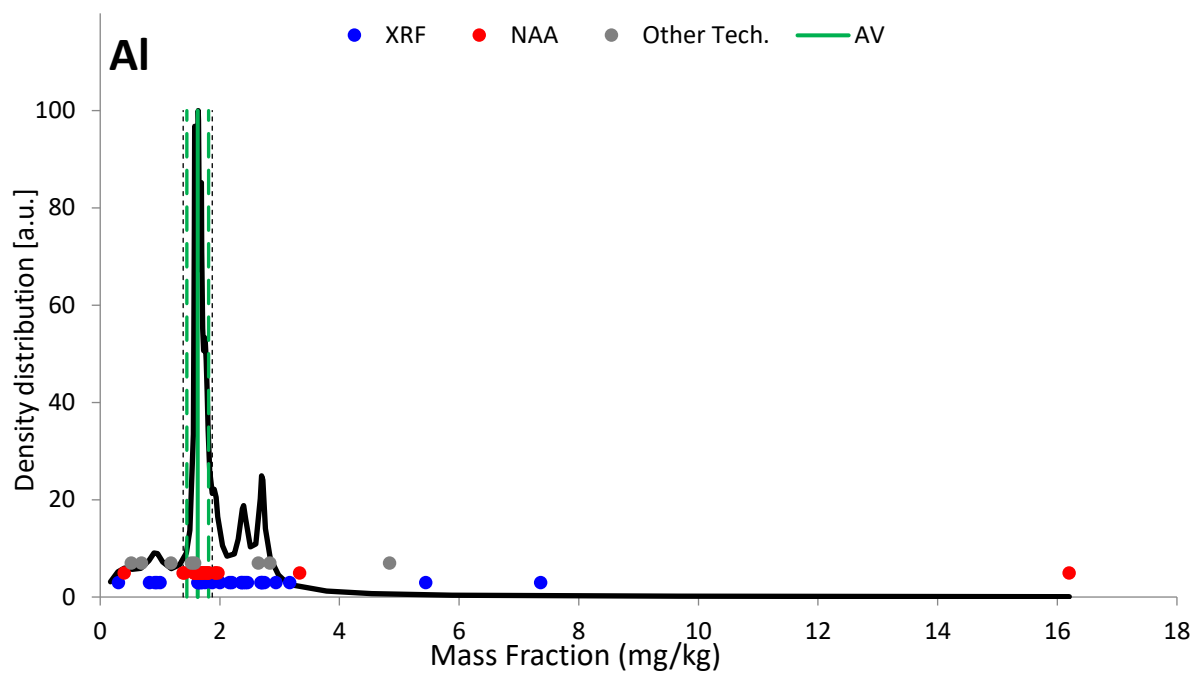


FIG. 10. Density distribution function for the measurand Al (Clay sample).

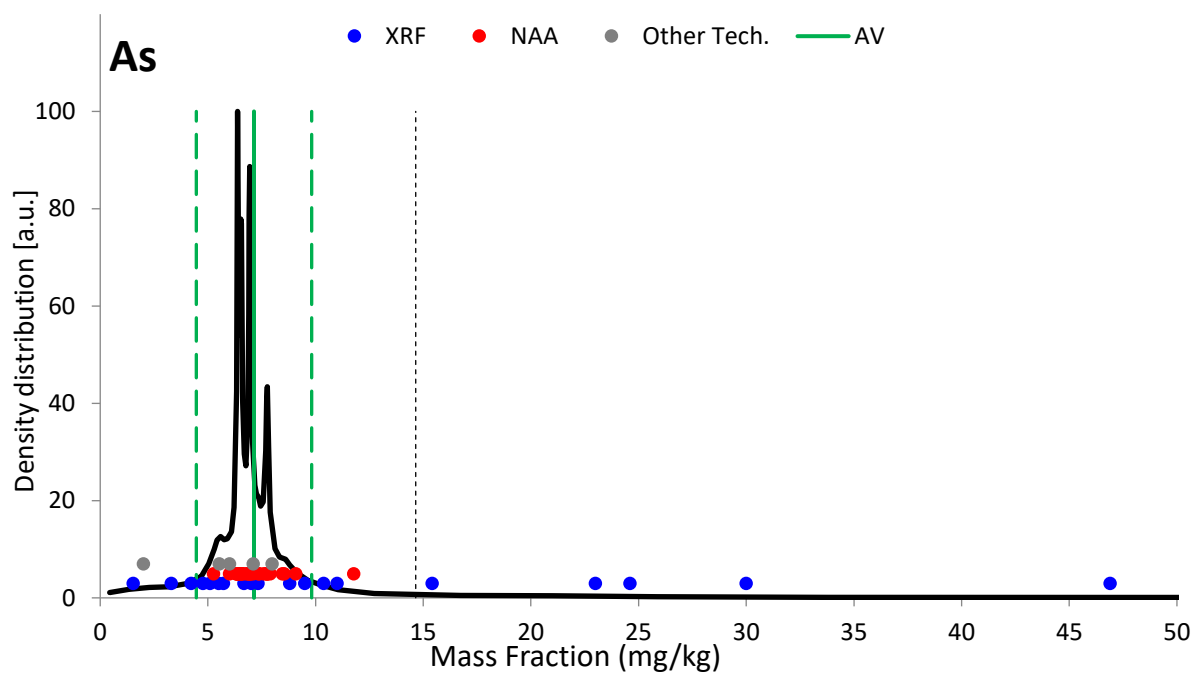


FIG. 11. Density distribution function for the measurand As (Clay sample).

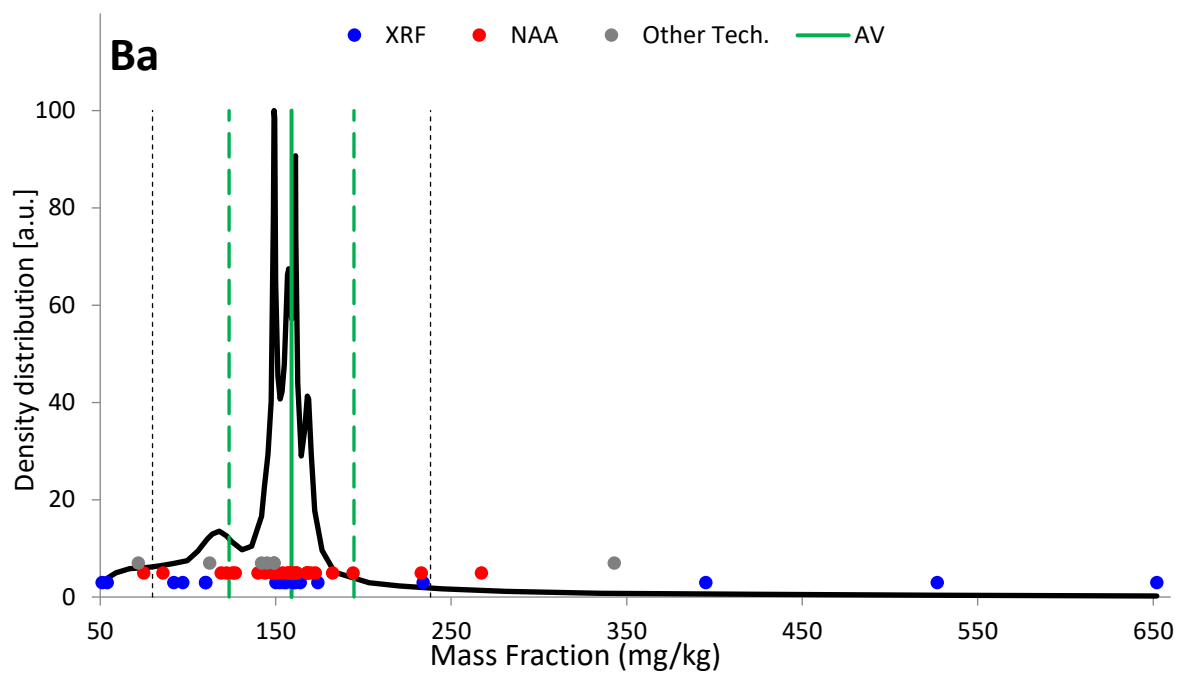


FIG. 12. Density distribution function for the measurand Ba (Clay sample).

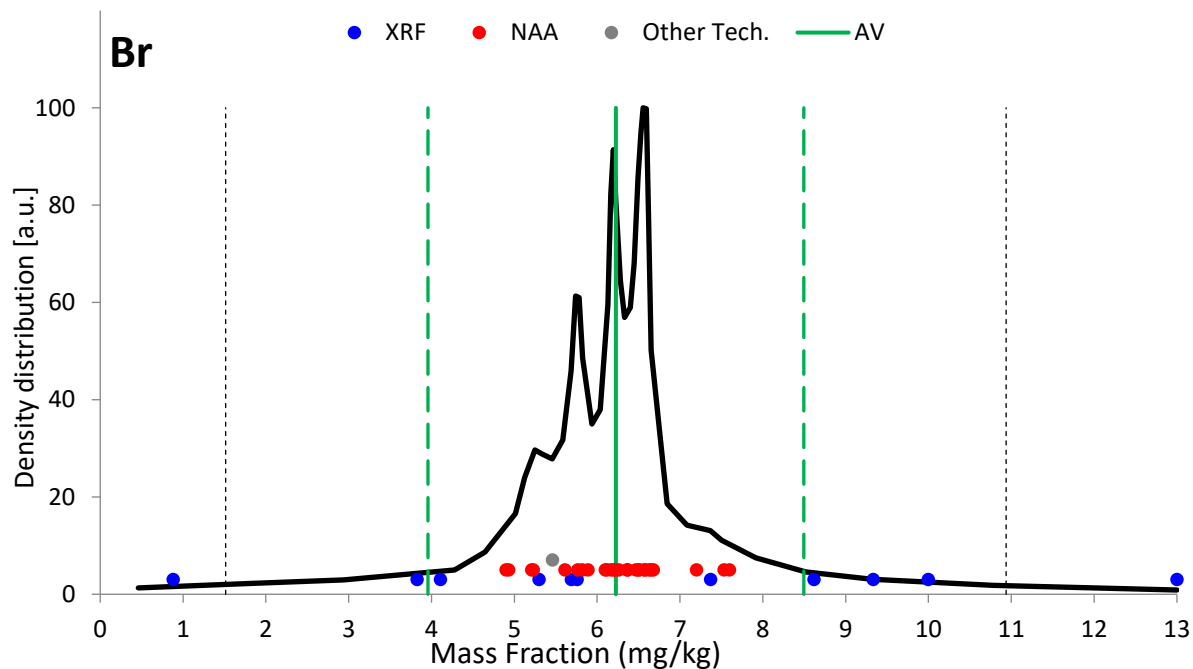


FIG. 13. Density distribution function for the measurand Br (Clay sample).

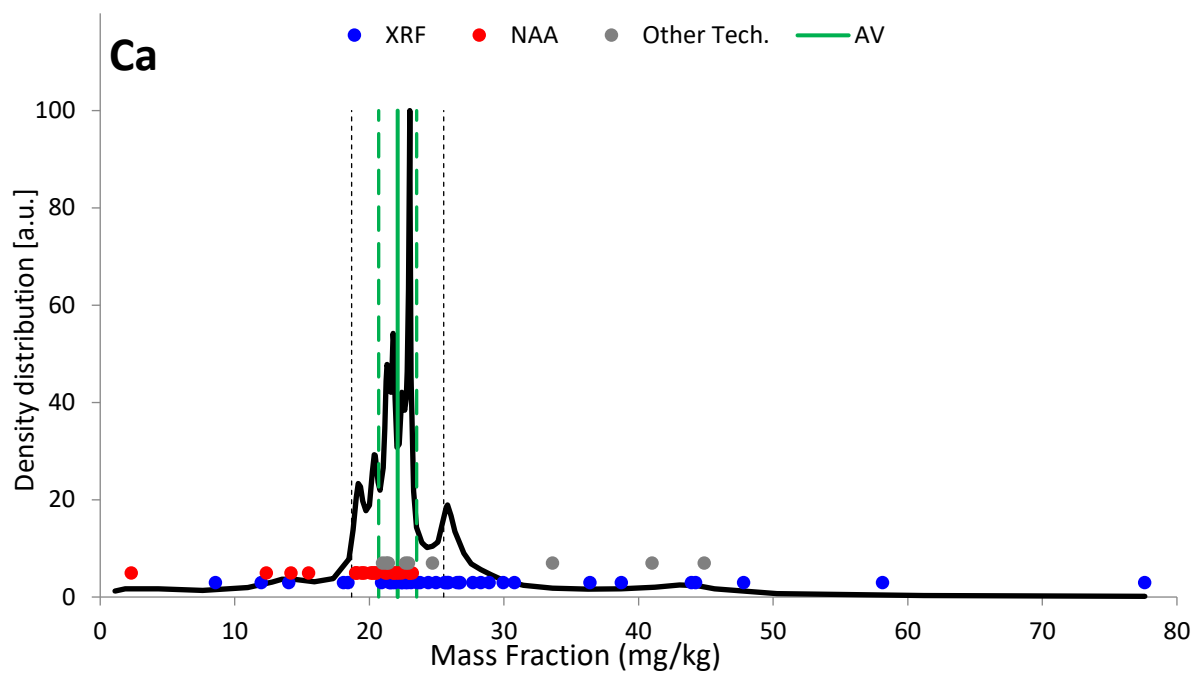


FIG. 14. Density distribution function for the measurand Ca (Clay sample).

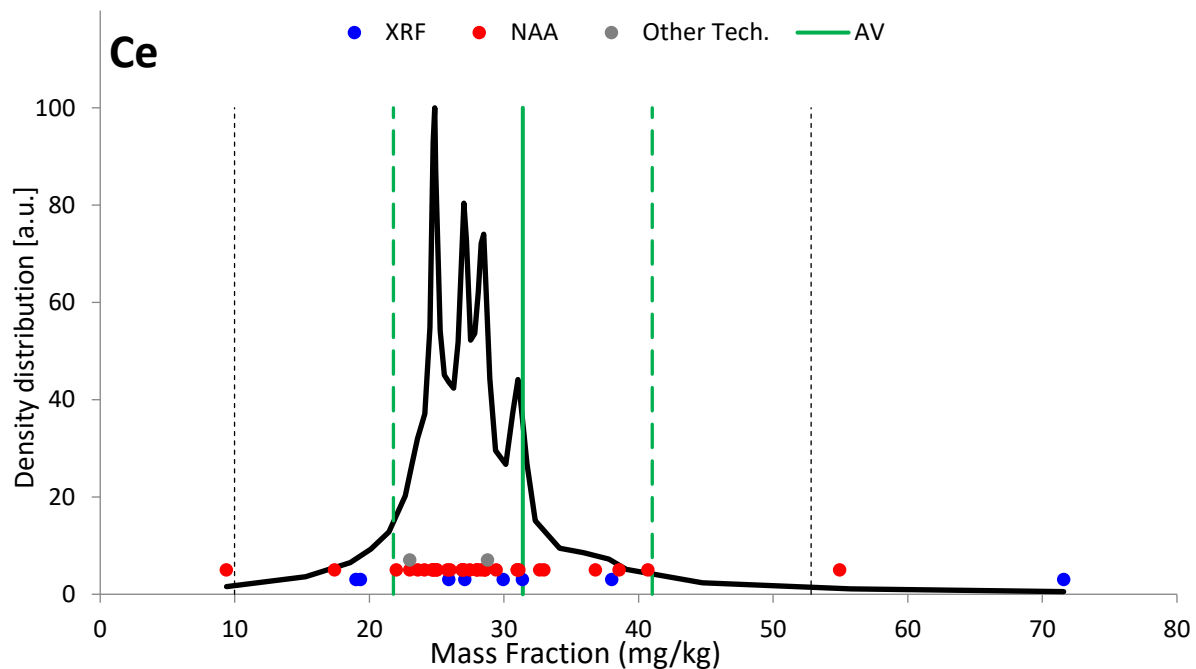


FIG. 15. Density distribution function for the measurand Ce (Clay sample).

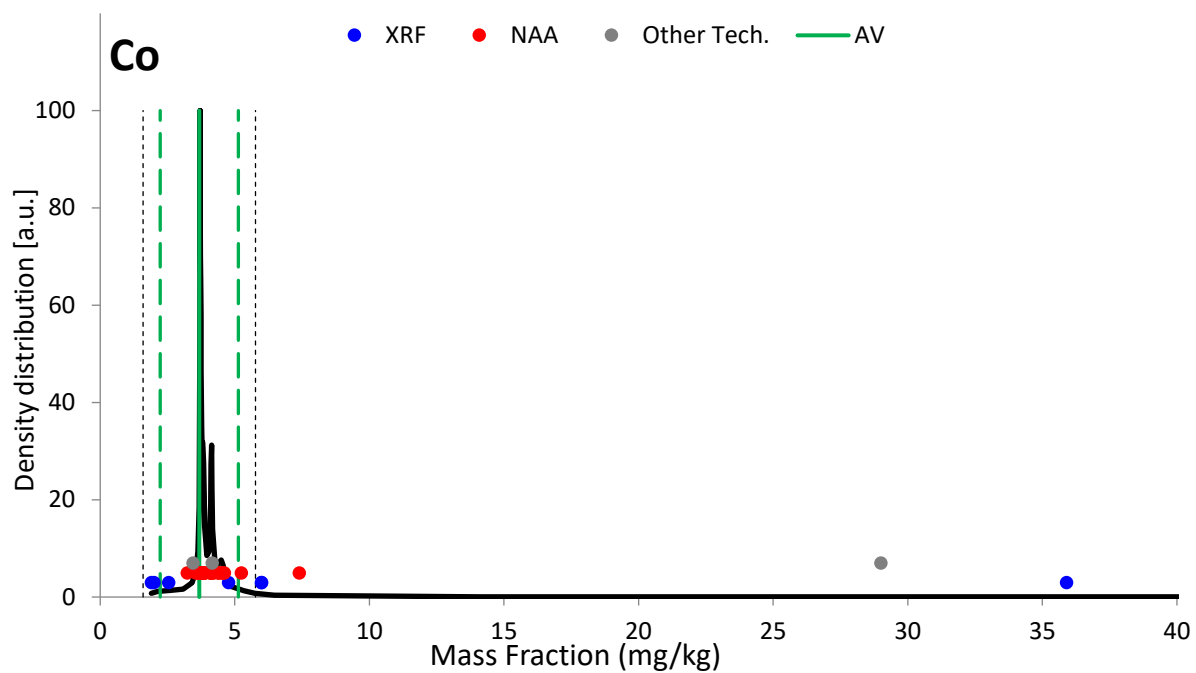


FIG. 16. Density distribution function for the measurand Co (Clay sample).

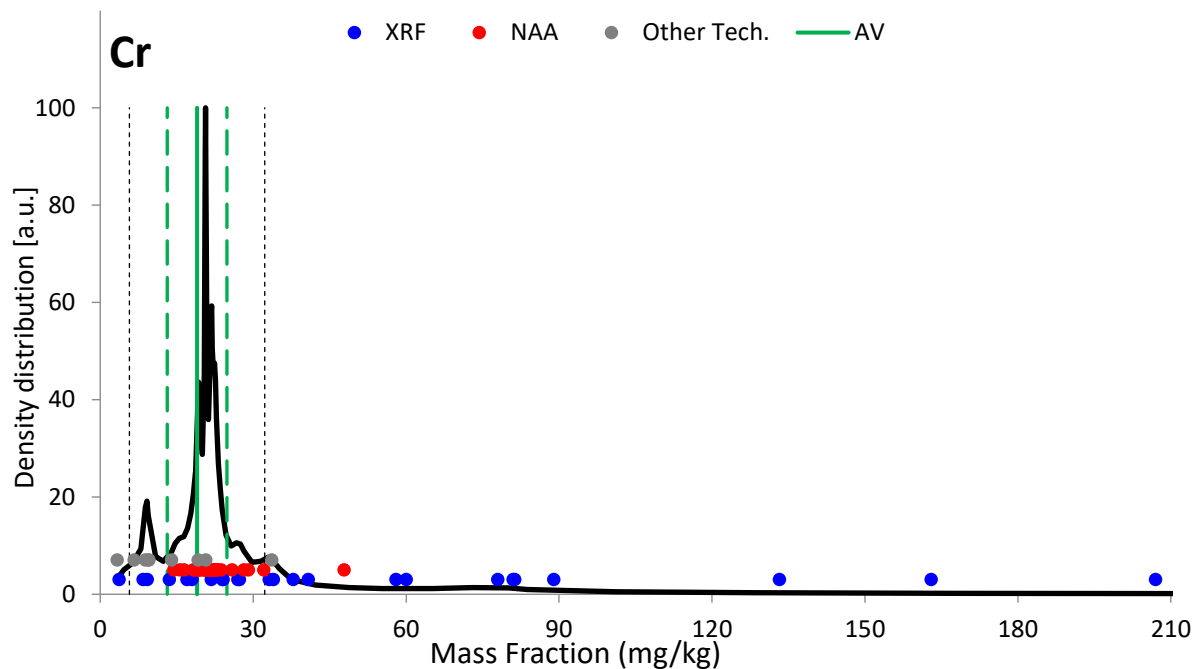


FIG. 17. Density distribution function for the measurand Cr (Clay sample).

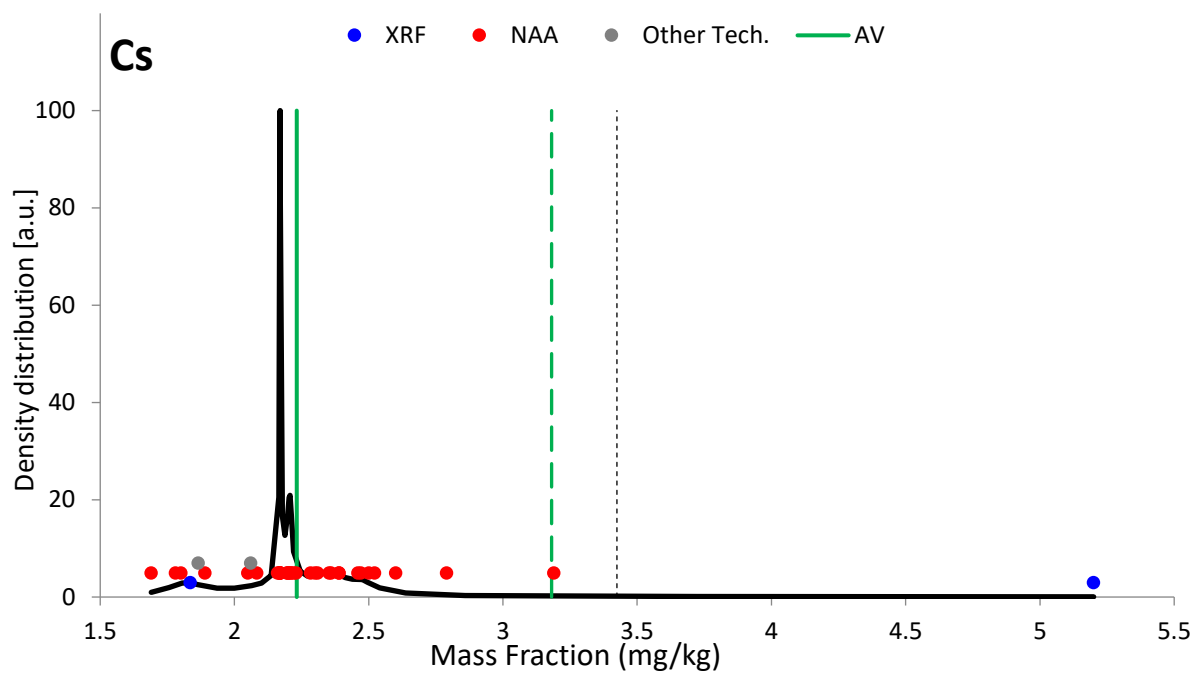


FIG. 18. Density distribution function for the measurand Cs (Clay sample).

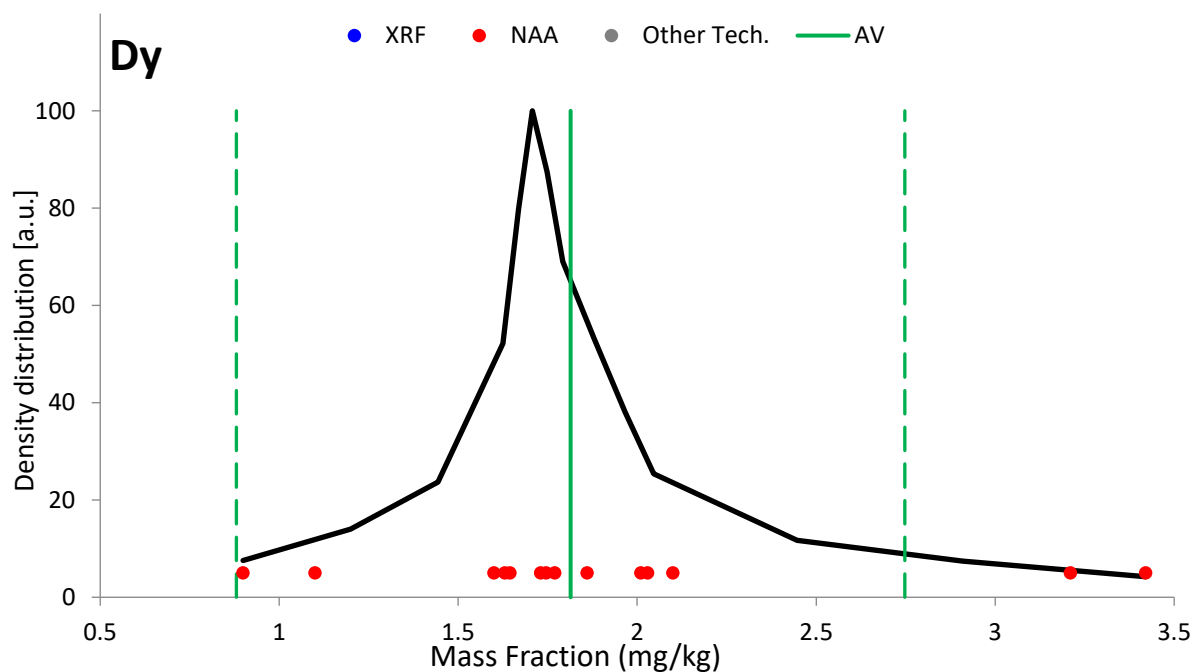


FIG. 19. Density distribution function for the measurand Dy (Clay sample).

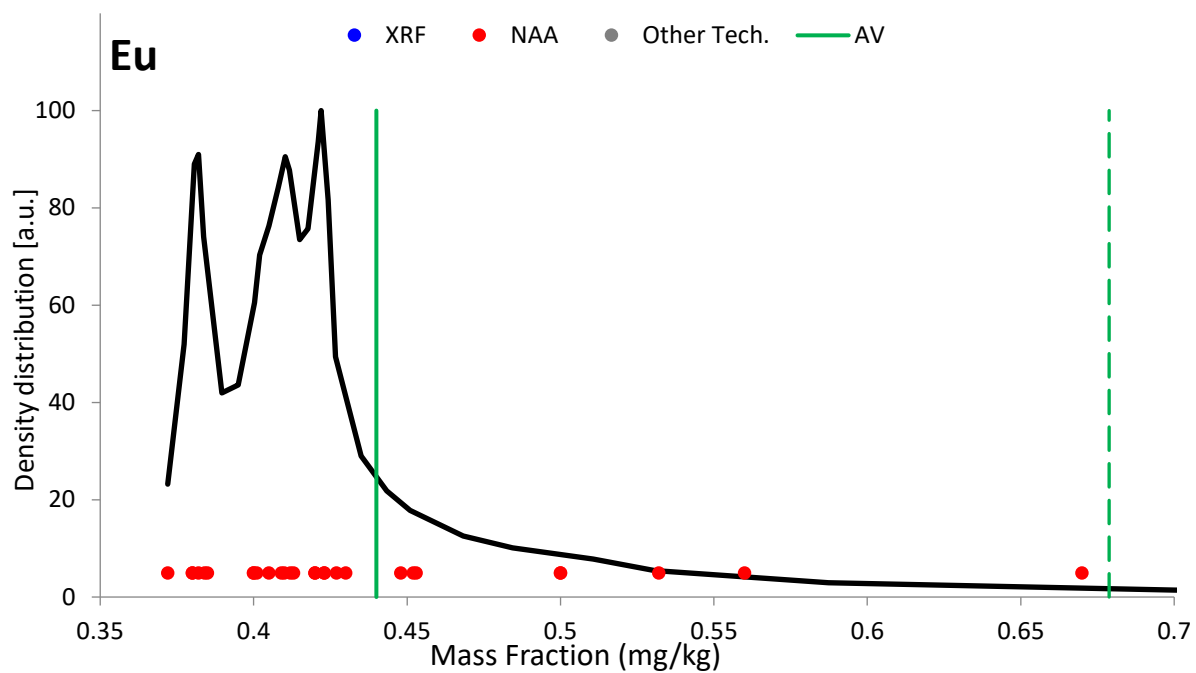


FIG. 20. Density distribution function for the measurand Eu (Clay sample).

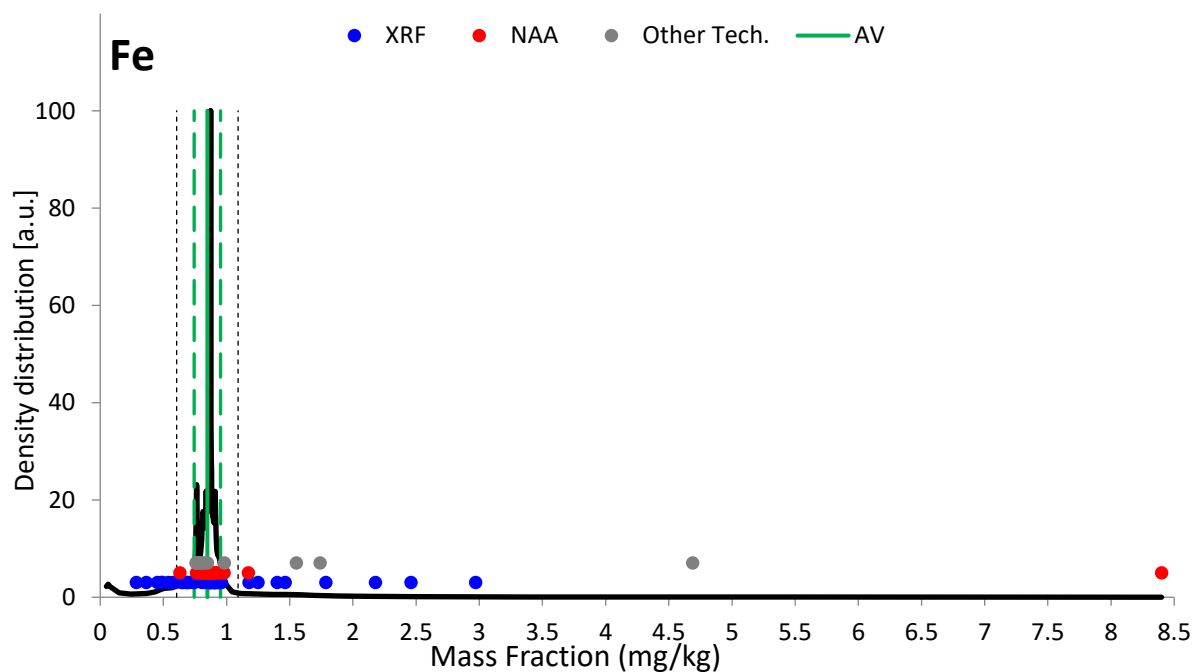


FIG. 21. Density distribution function for the measurand Fe (Clay sample).

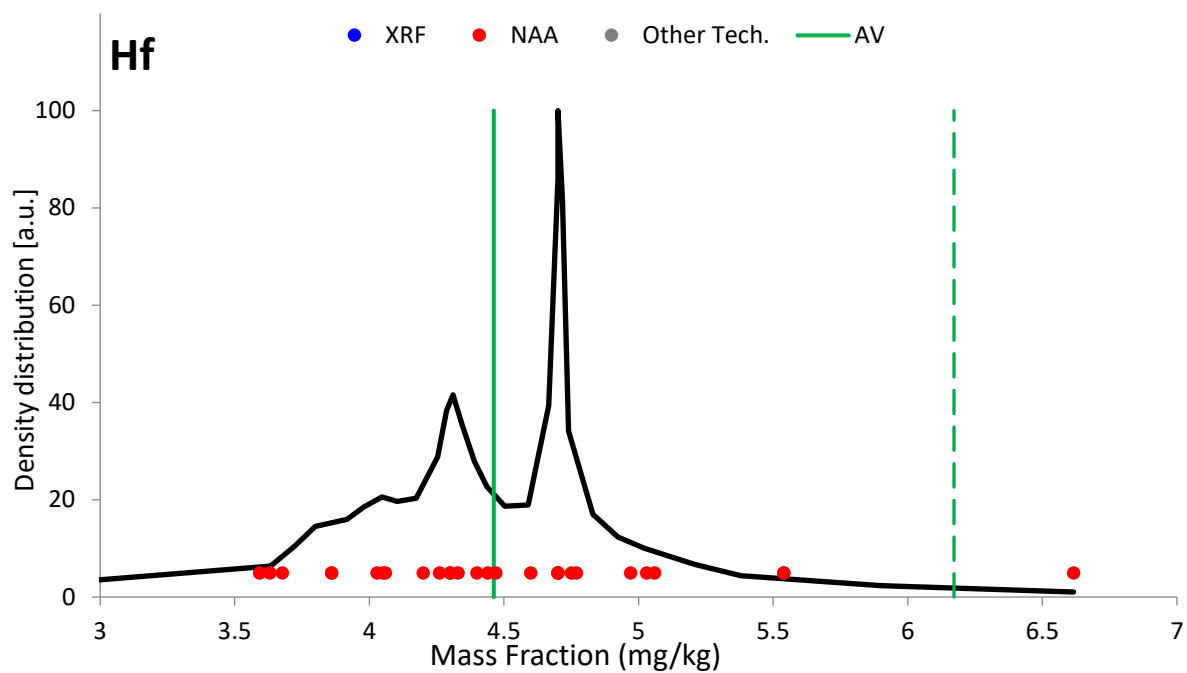


FIG. 22. Density distribution function for the measurand Hf (Clay sample).

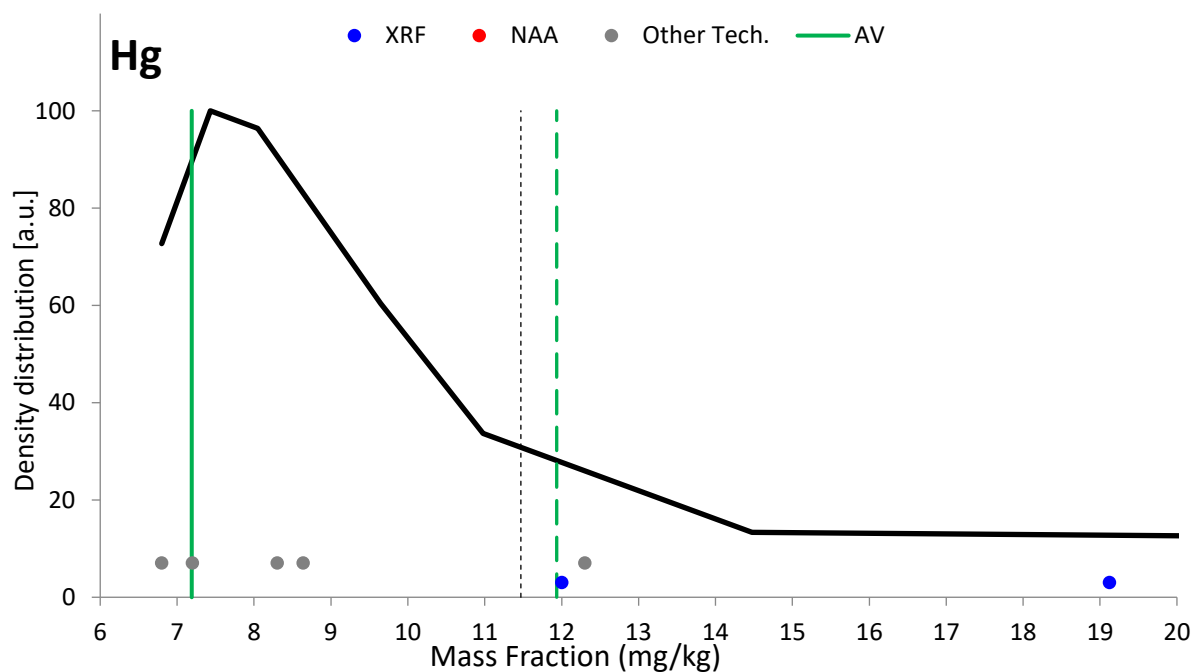


FIG. 23. Density distribution function for the measurand Hg (Clay sample).

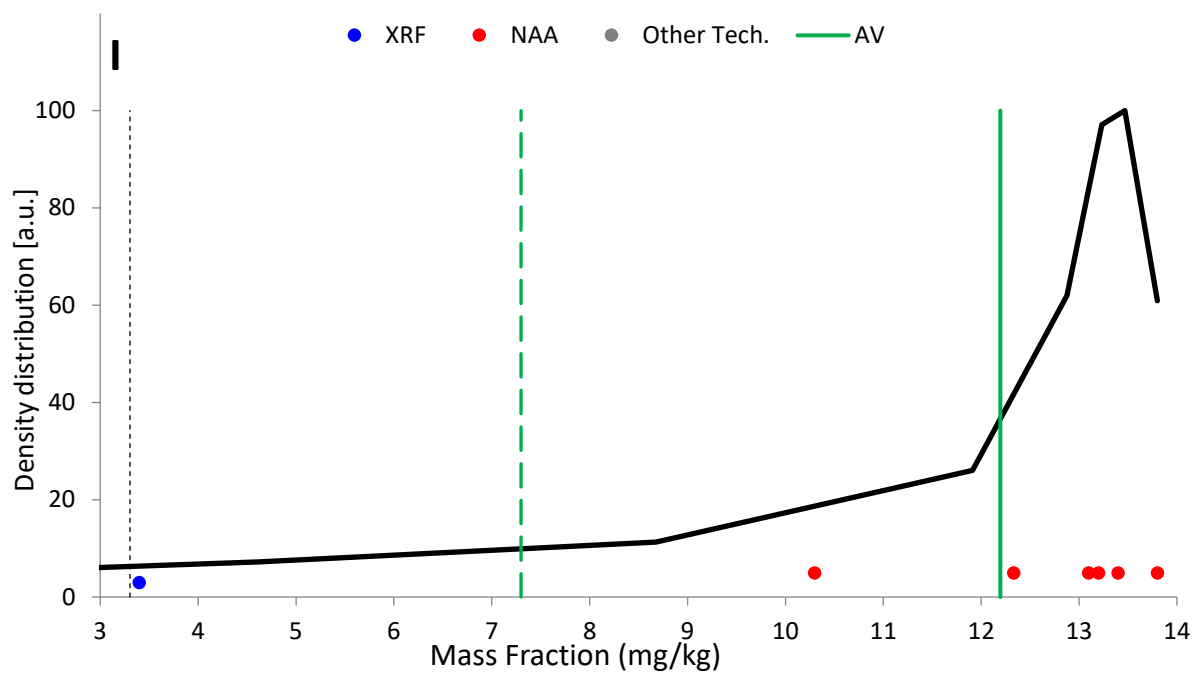


FIG. 24. Density distribution function for the measurand I (Clay sample).

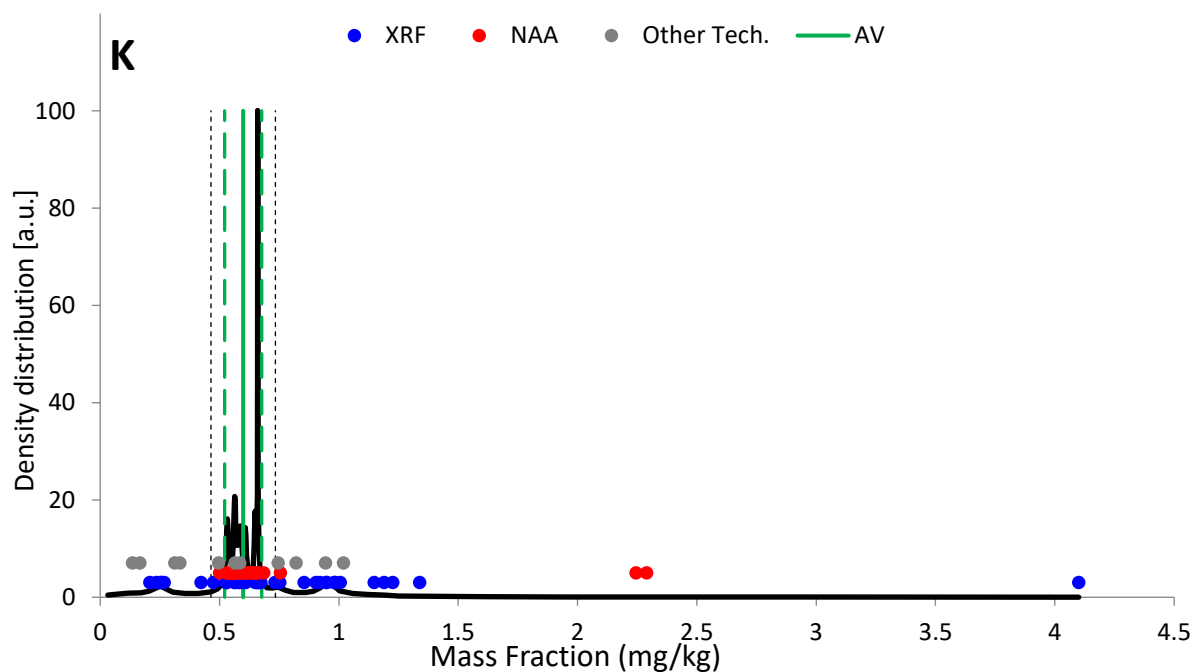


FIG. 25. Density distribution function for the measurand K (Clay sample).

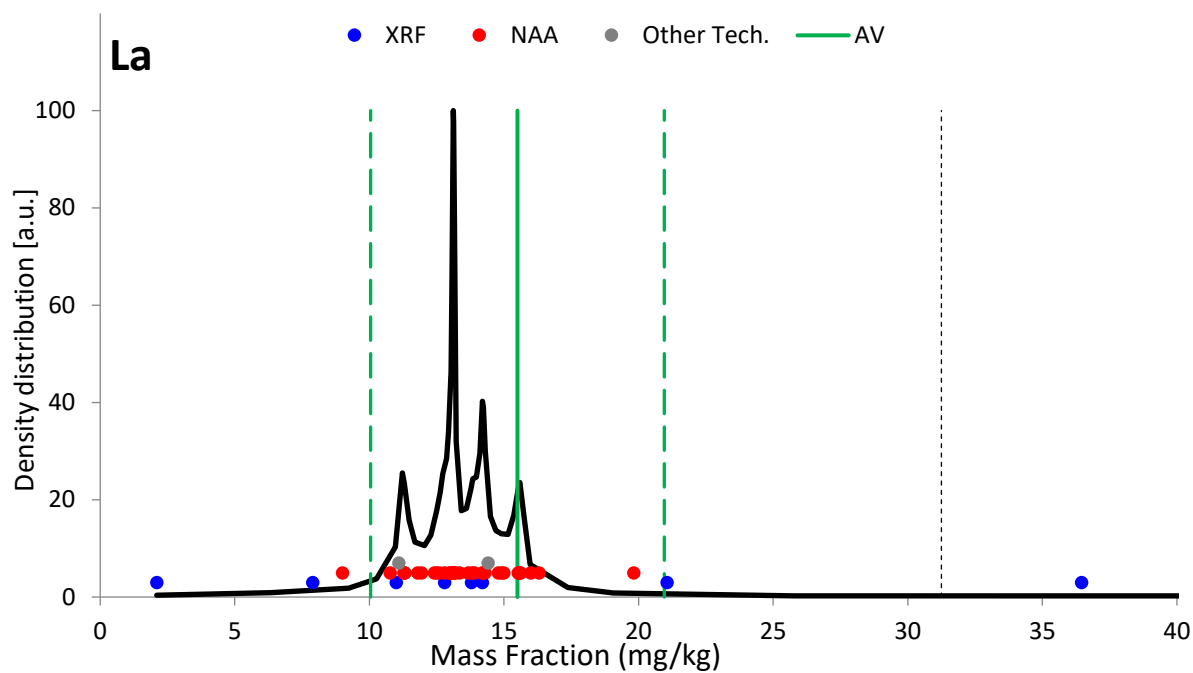


FIG. 26. Density distribution function for the measurand La (Clay sample).

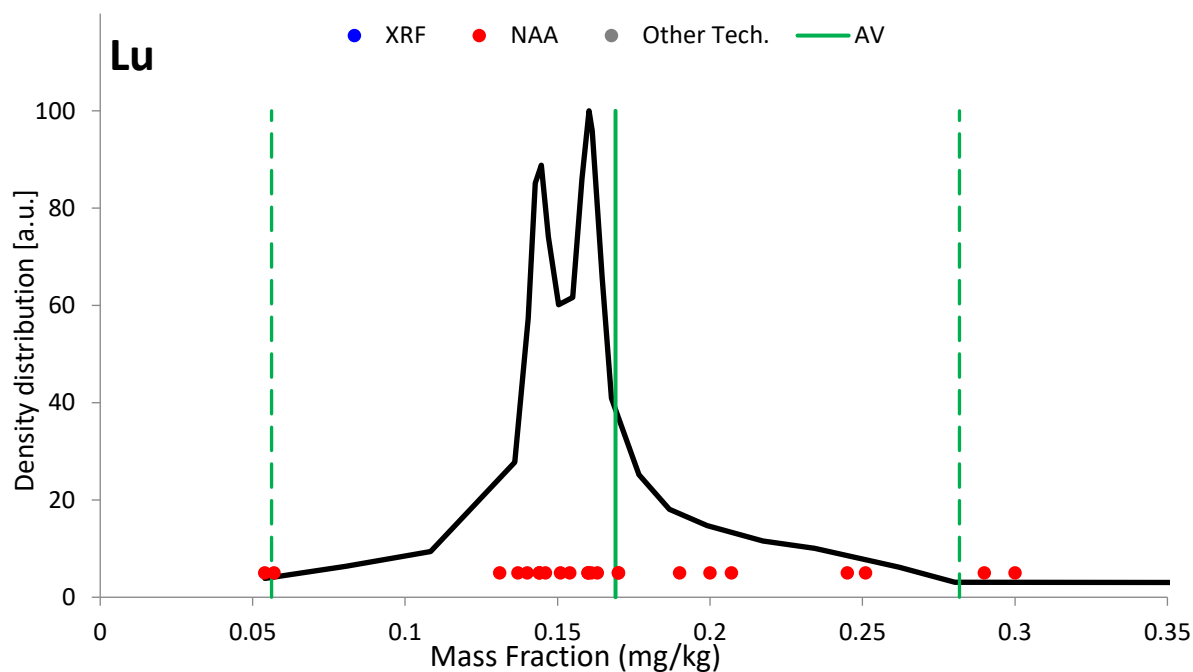


FIG. 27. Density distribution function for the measurand Lu (Clay sample).

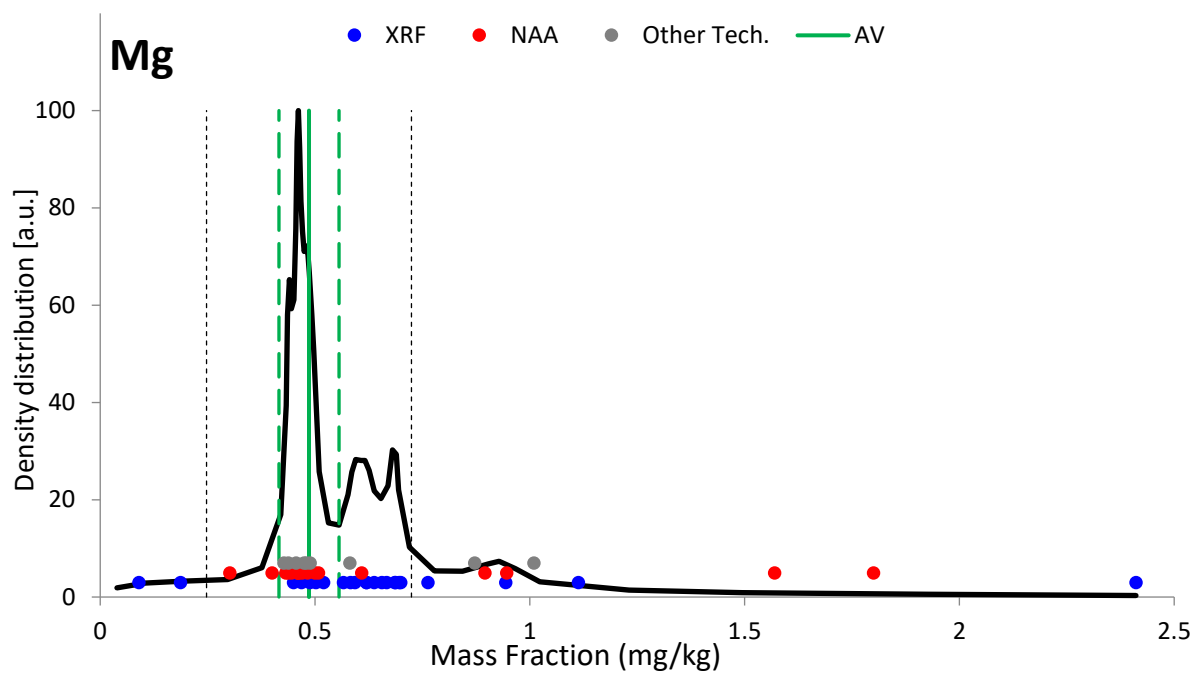


FIG. 28. Density distribution function for the measurand Mg (Clay sample).

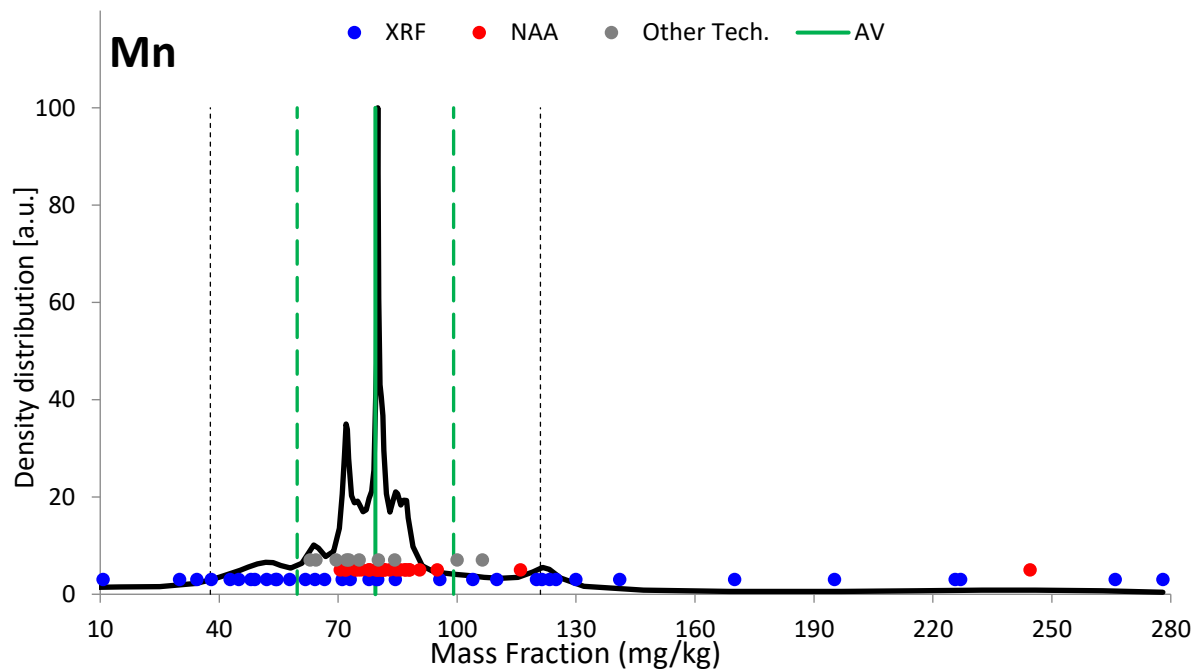


FIG. 29. Density distribution function for the measurand Mn (Clay sample).

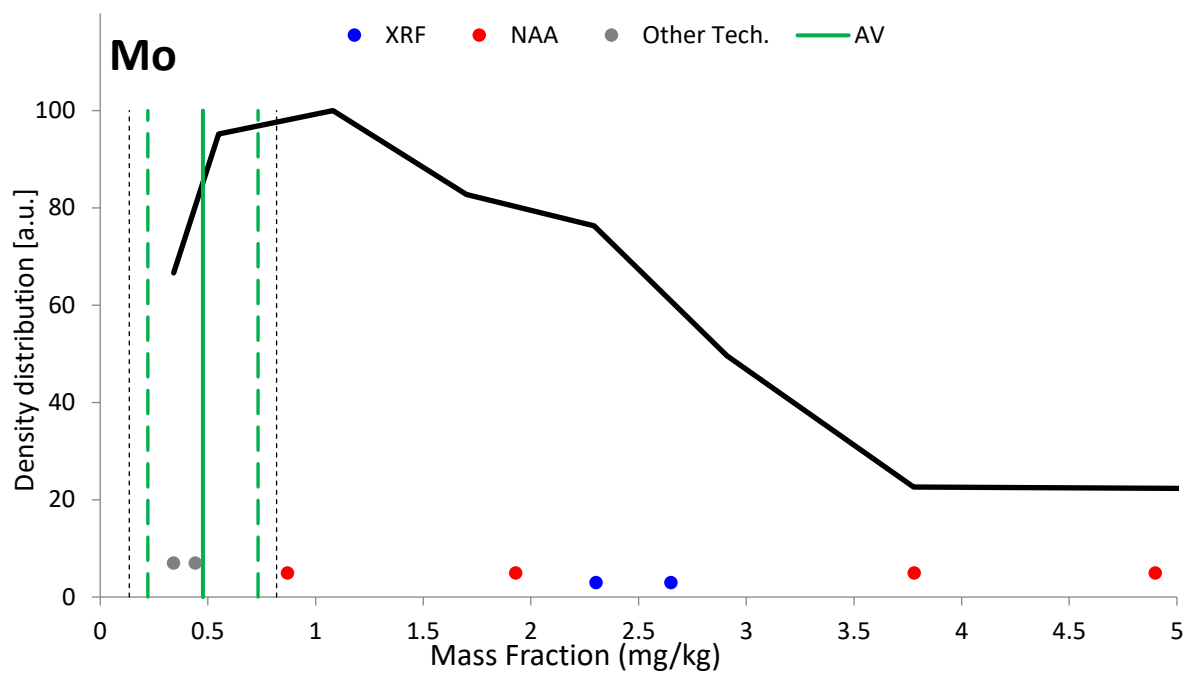


FIG. 30. Density distribution function for the measurand Mo (Clay sample).

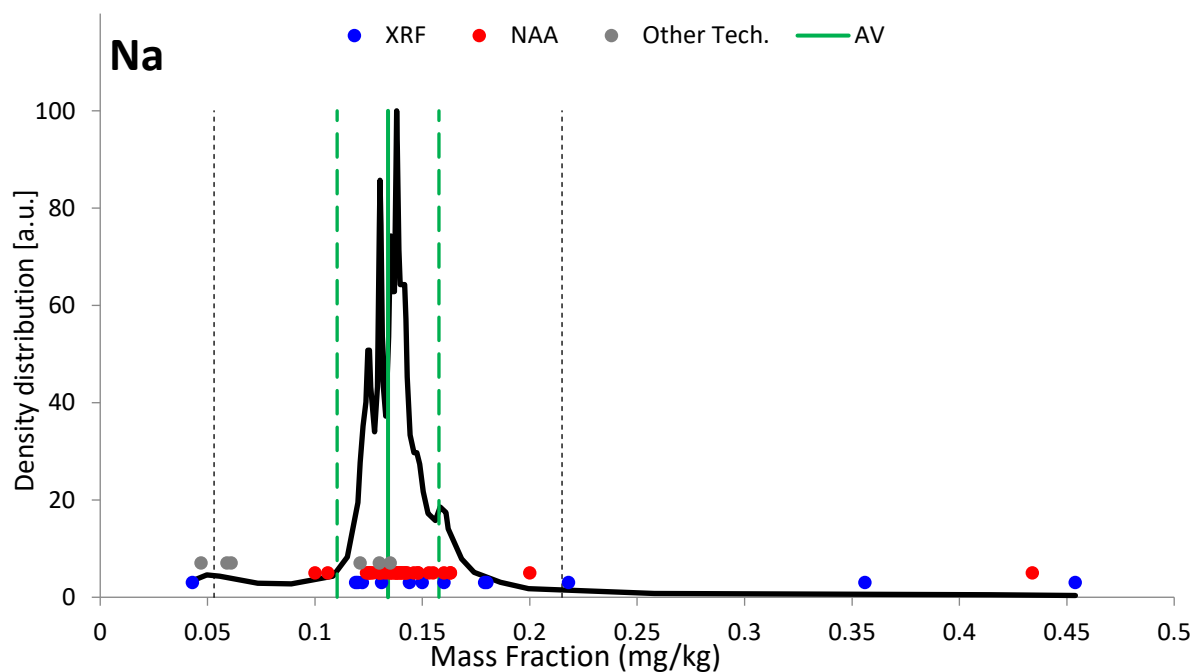


FIG. 31. Density distribution function for the measurand Na (Clay sample).

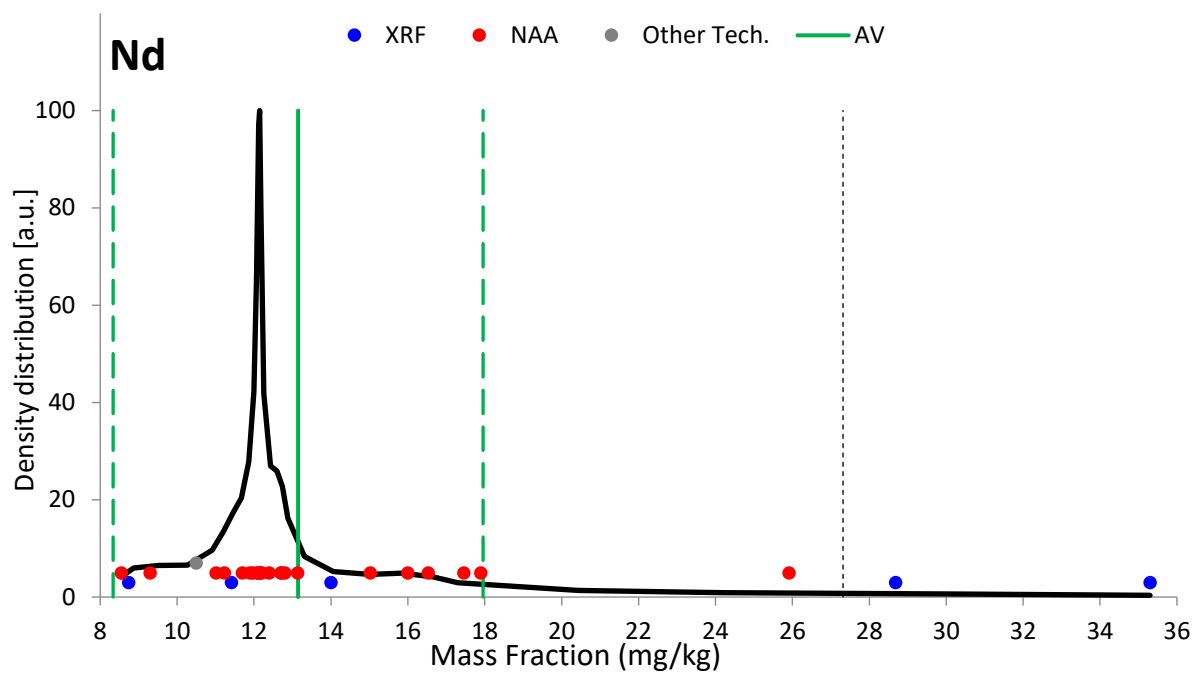


FIG. 32. Density distribution function for the measurand Nd (Clay sample).

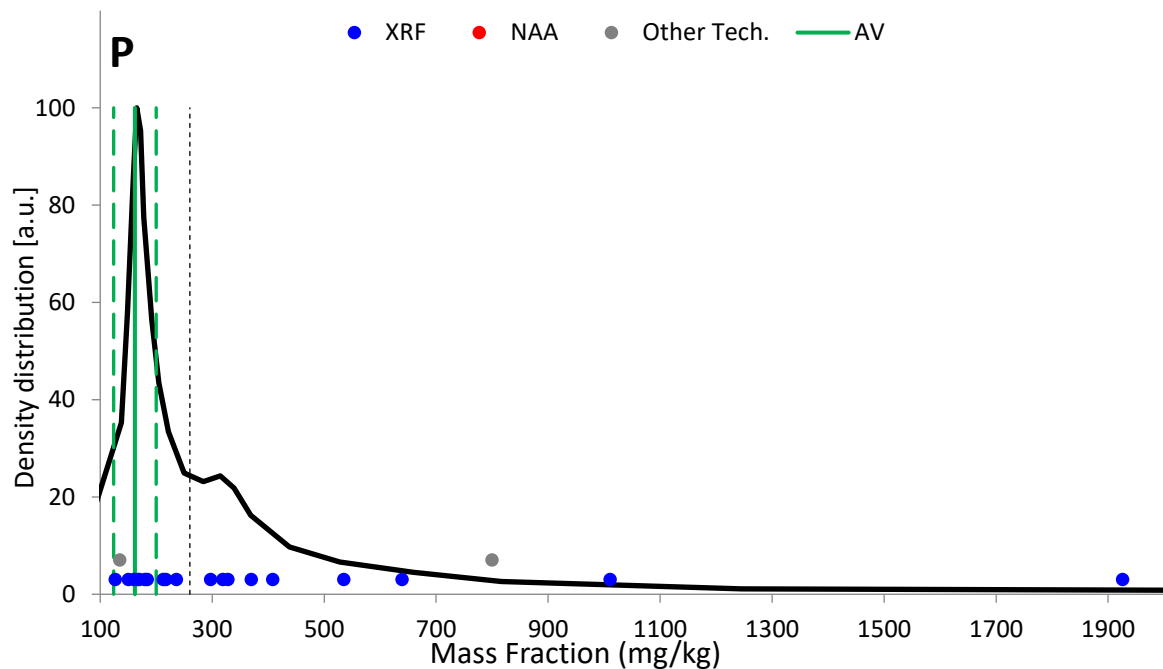


FIG. 33. Density distribution function for the measurand P (Clay sample).

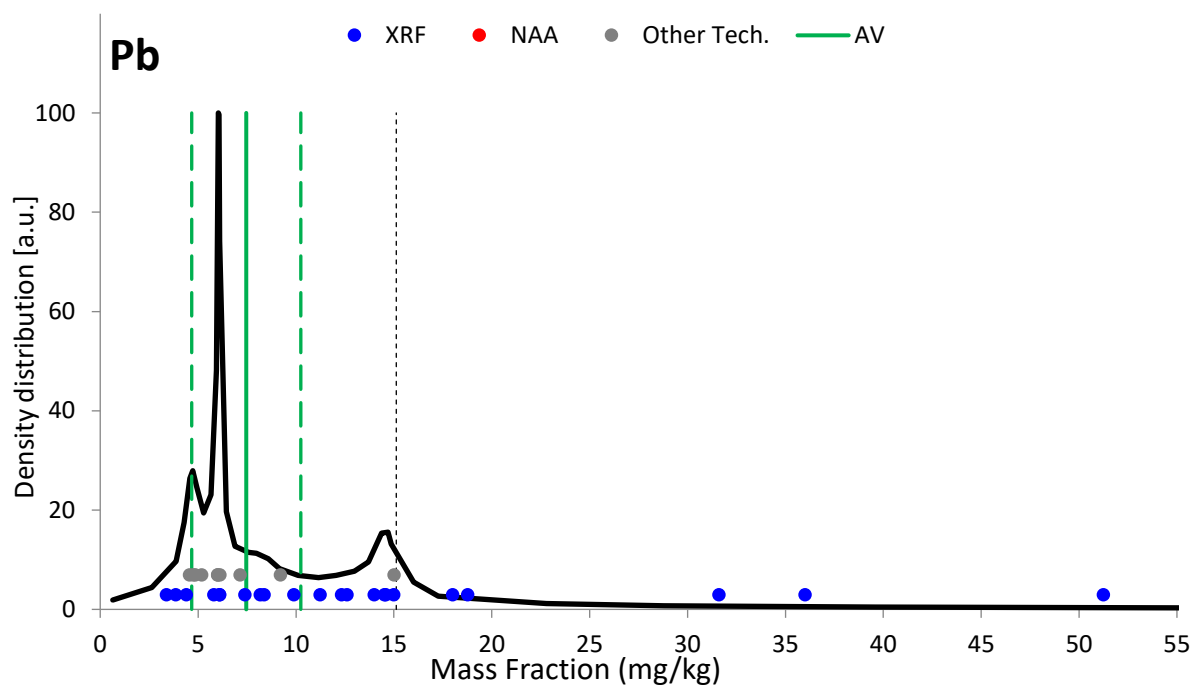


FIG. 34. Density distribution function for the measurand Pb (Clay sample).

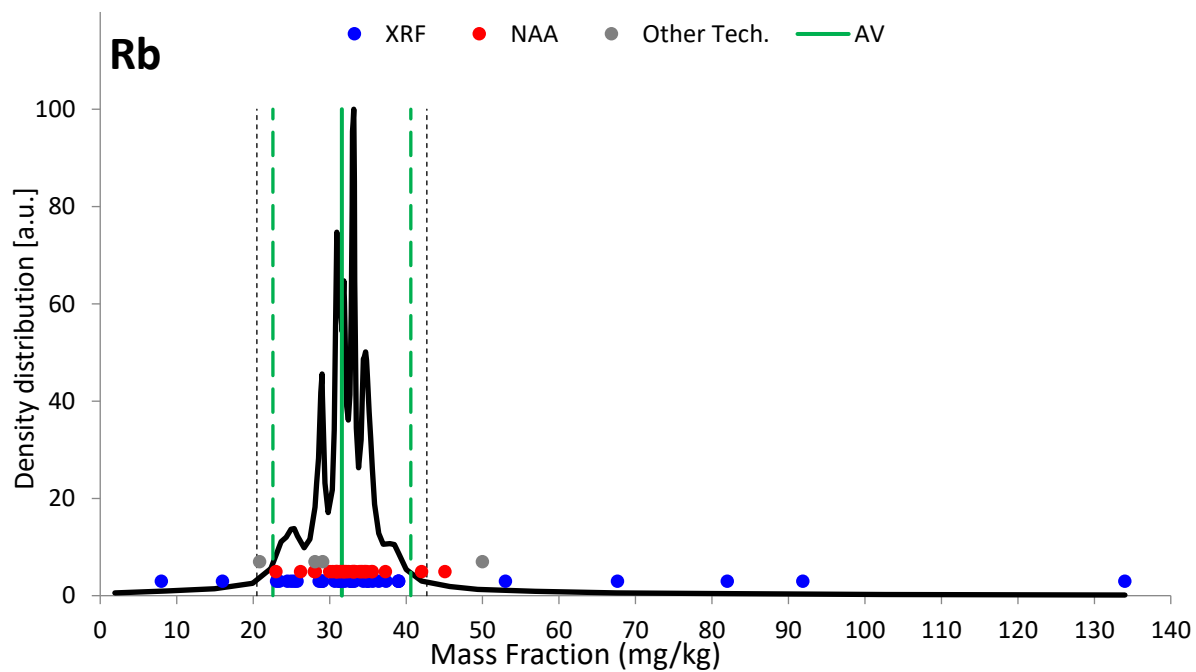


FIG. 35. Density distribution function for the measurand Rb (Clay sample).

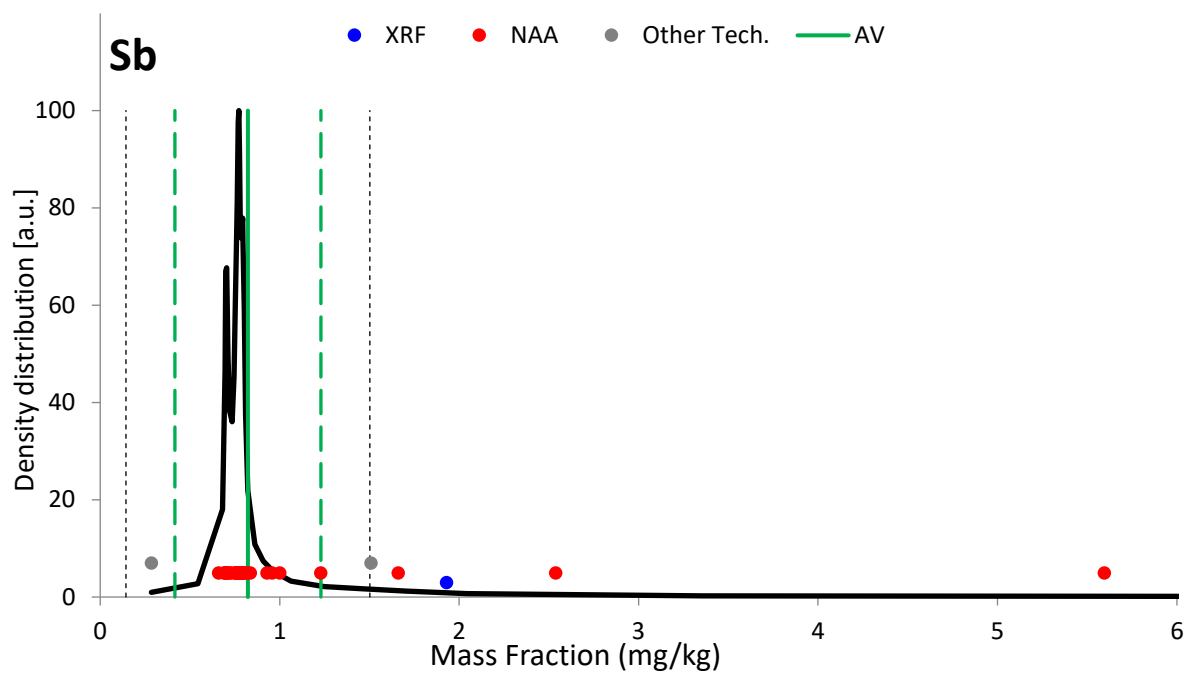


FIG. 36. Density distribution function for the measurand Sb (Clay sample).

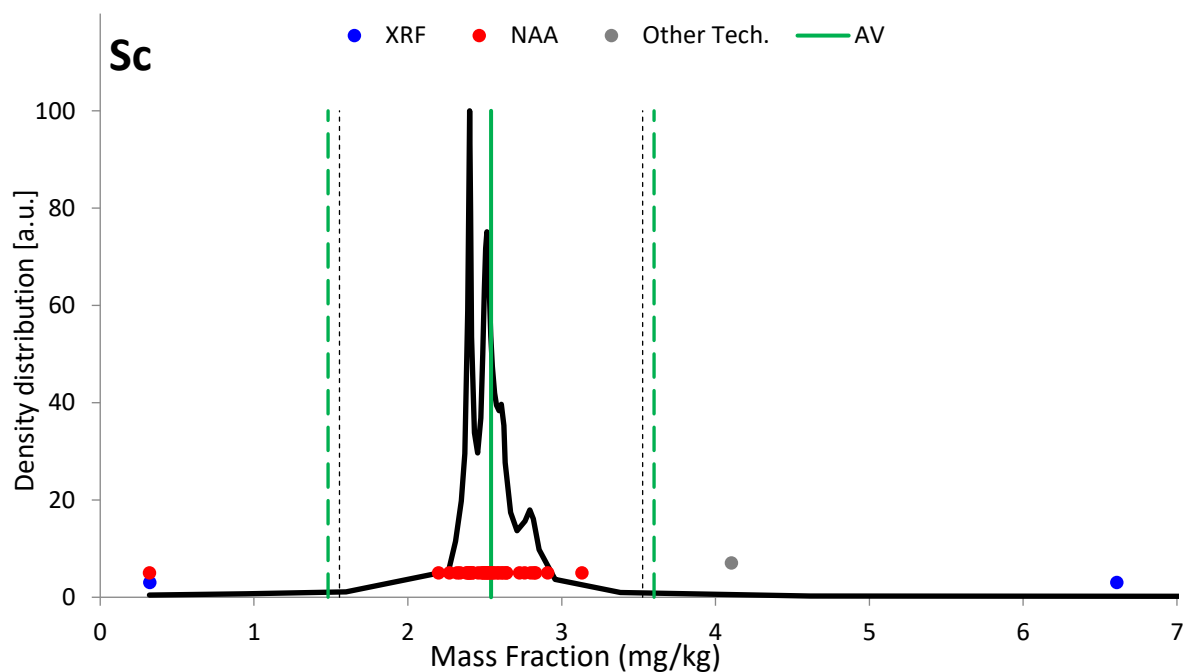


FIG. 37. Density distribution function for the measurand Sc (Clay sample).

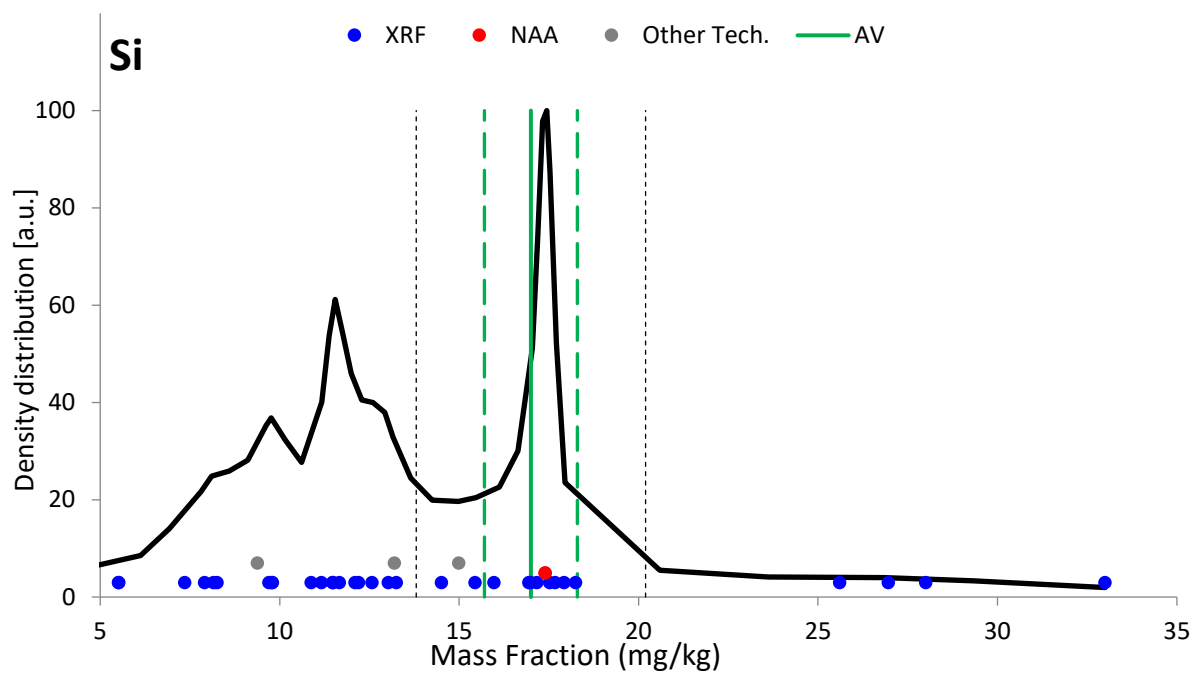


FIG. 38. Density distribution function for the measurand Si (Clay sample).

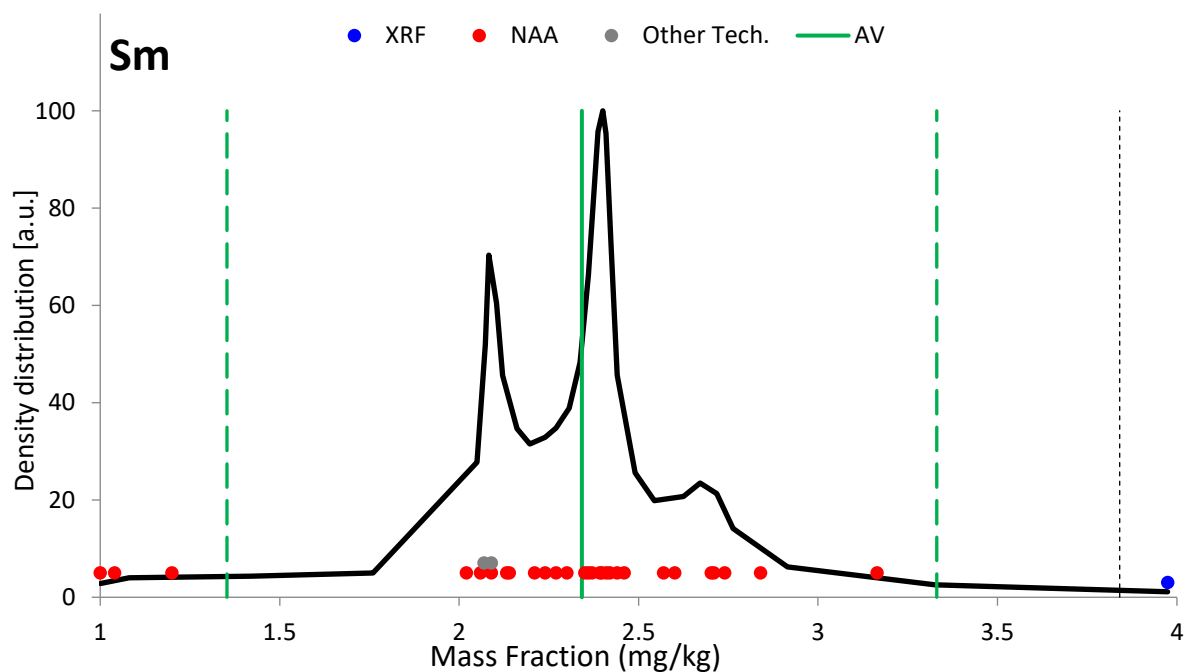


FIG. 39. Density distribution function for the measurand Sm (Clay sample).

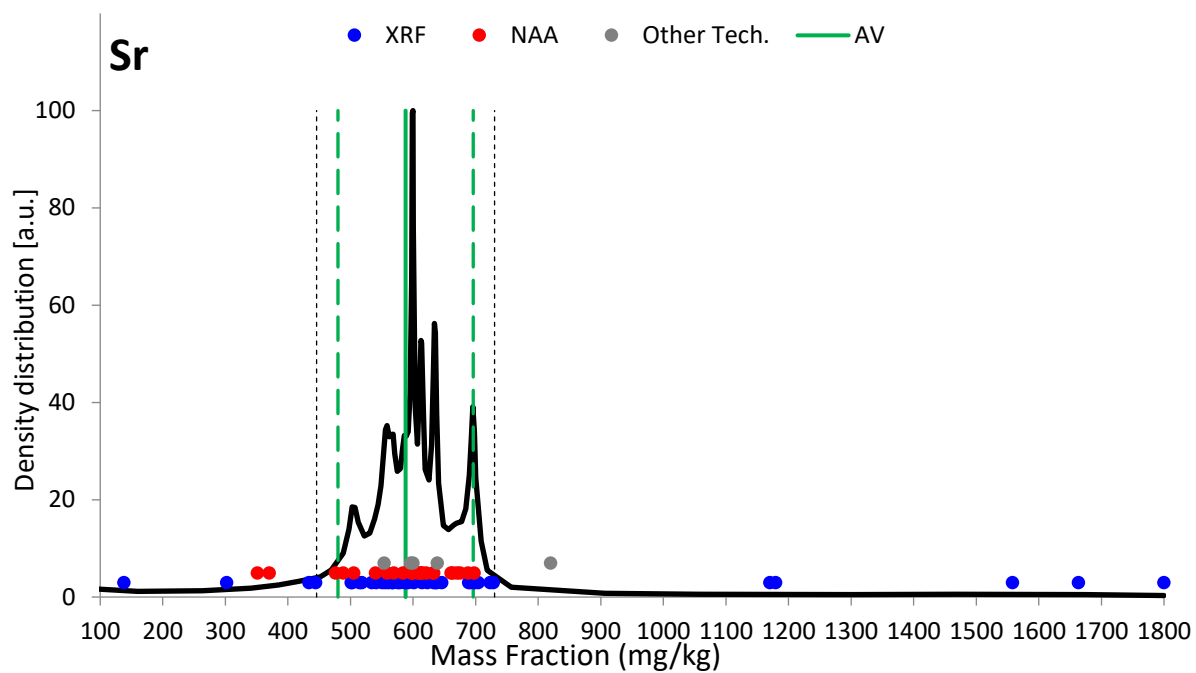


FIG. 40. Density distribution function for the measurand Sr (Clay sample).

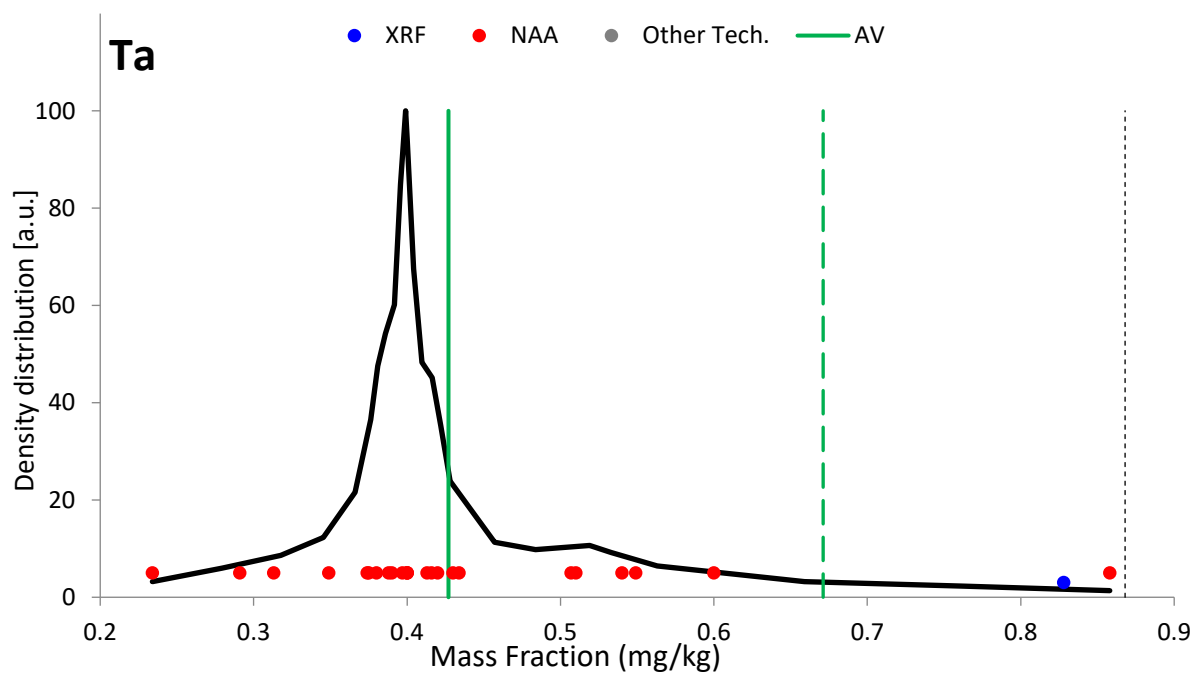


FIG. 41. Density distribution function for the measurand Ta (Clay sample).

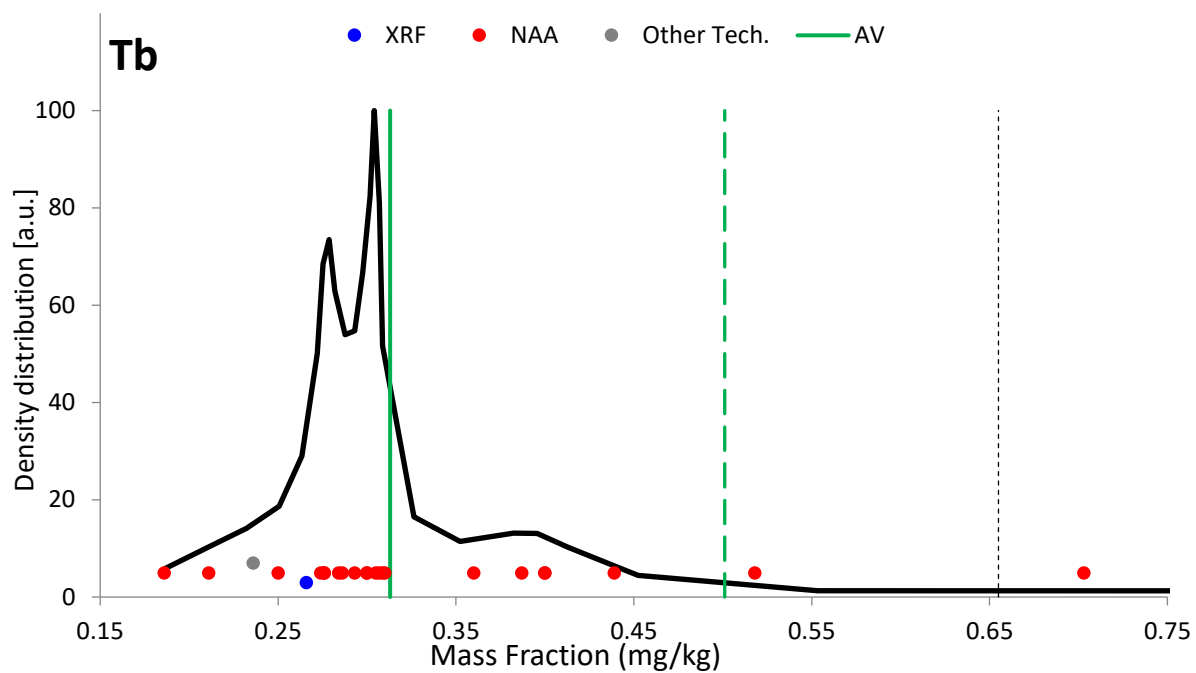


FIG. 42. Density distribution function for the measurand Tb (Clay sample).

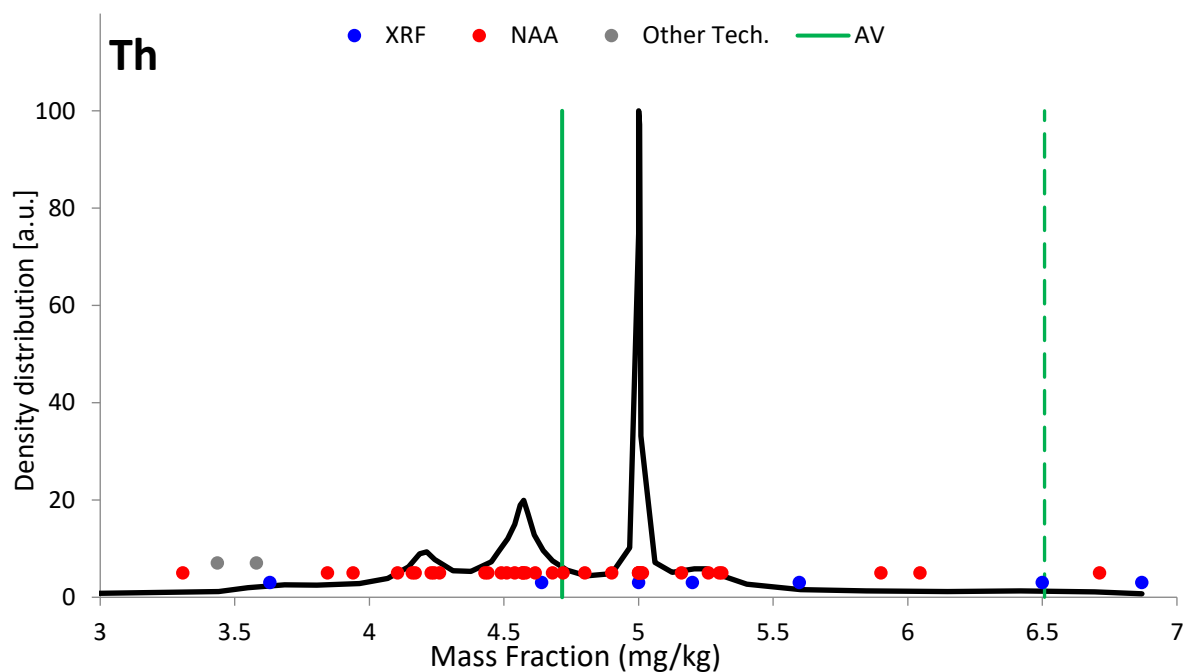


FIG. 43. Density distribution function for the measurand Th (Clay sample).

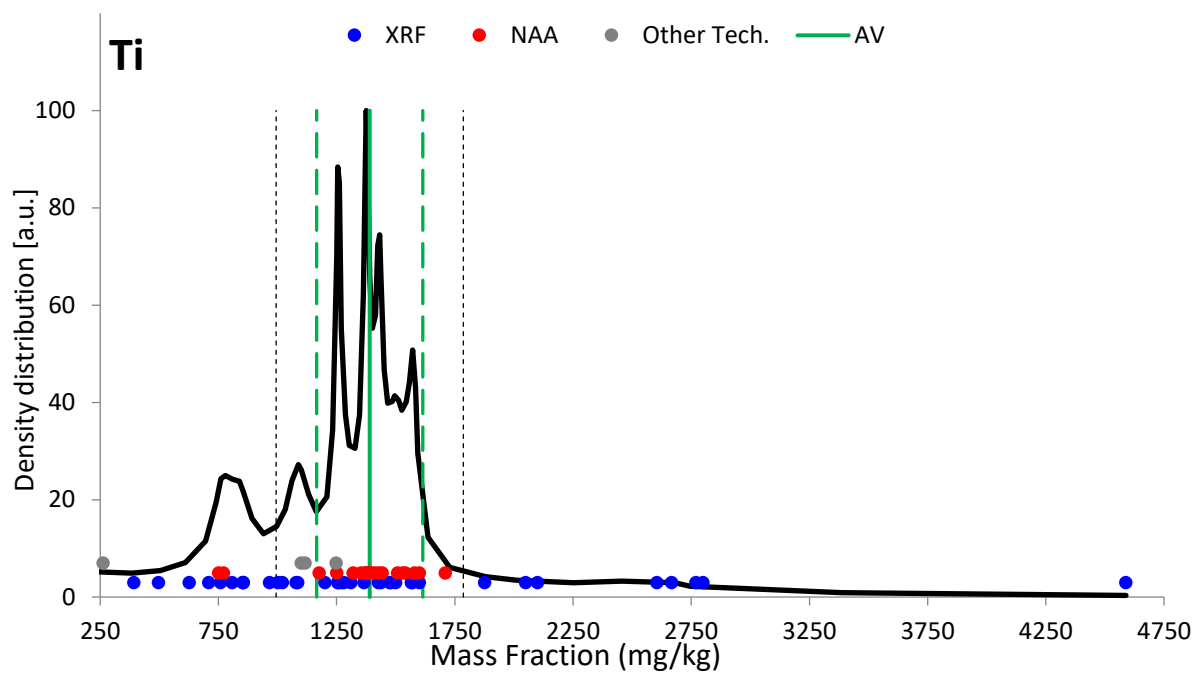


FIG. 44. Density distribution function for the measurand Ti (Clay sample).

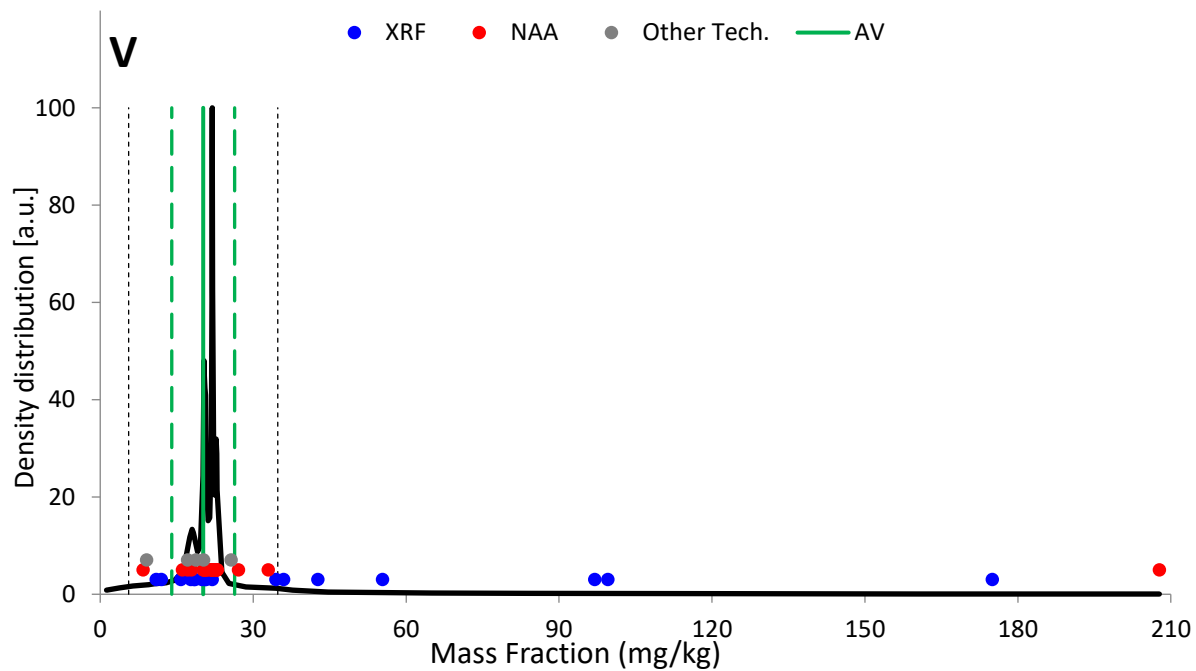


FIG. 45. Density distribution function for the measurand V (Clay sample).

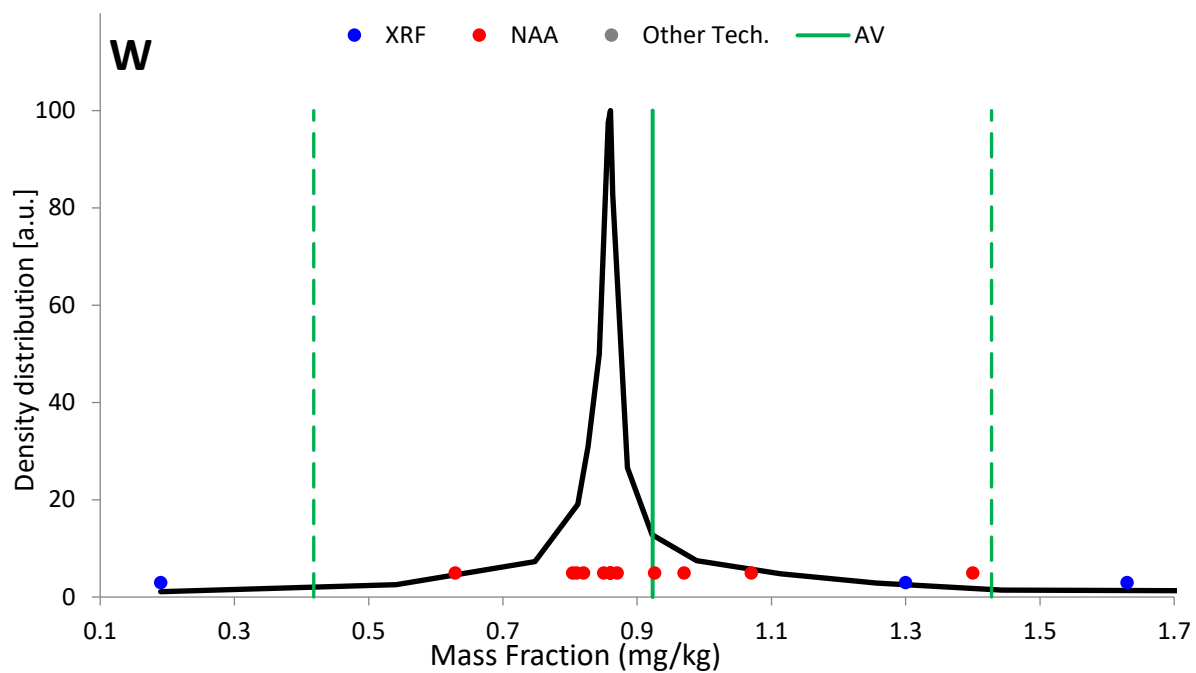


FIG. 46. Density distribution function for the measurand W (Clay sample).

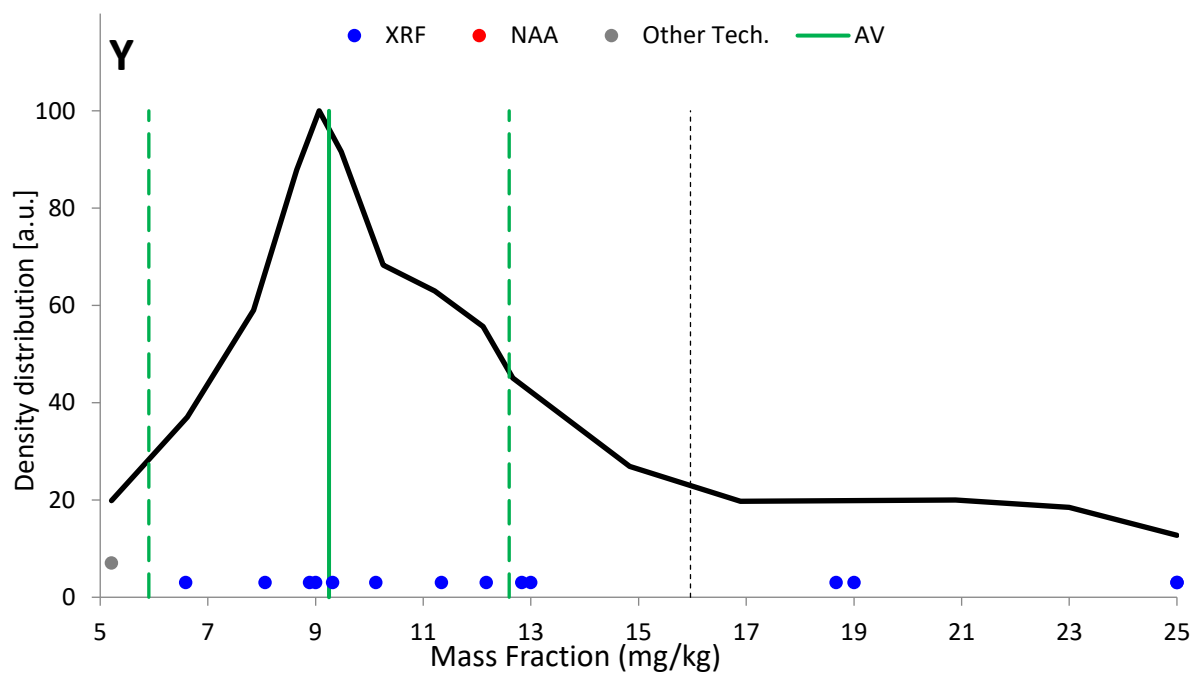


FIG. 47. Density distribution function for the measurand Y (Clay sample).

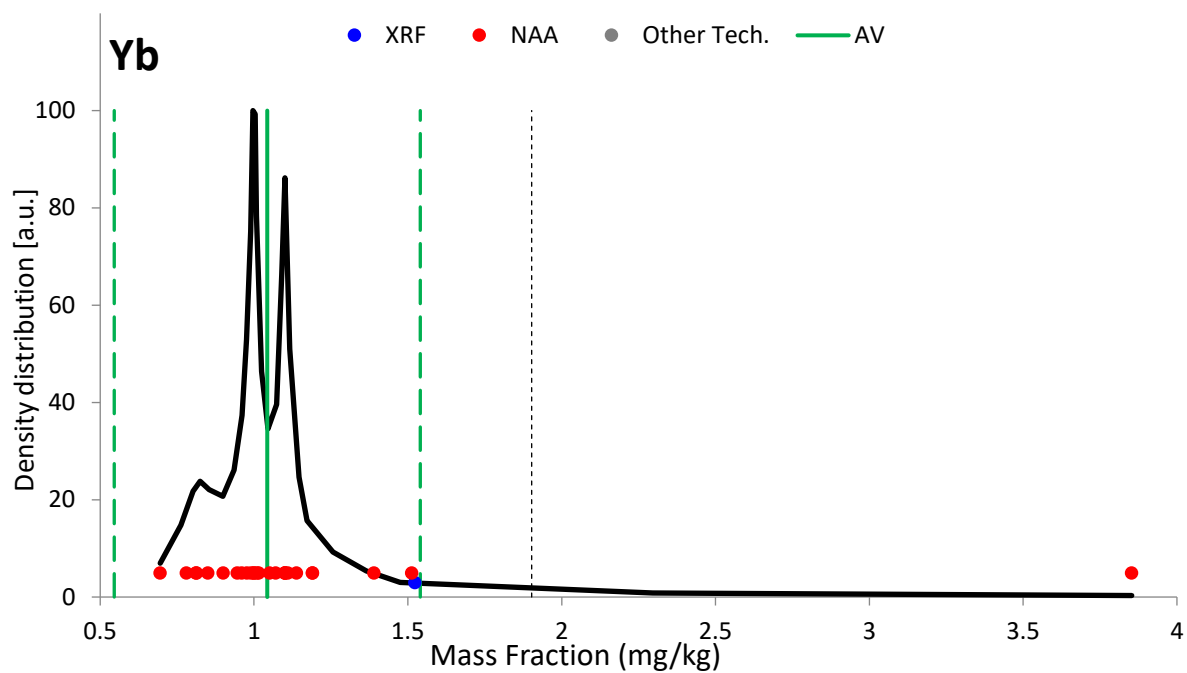


FIG. 48. Density distribution function for the measurand Yb (Clay sample).

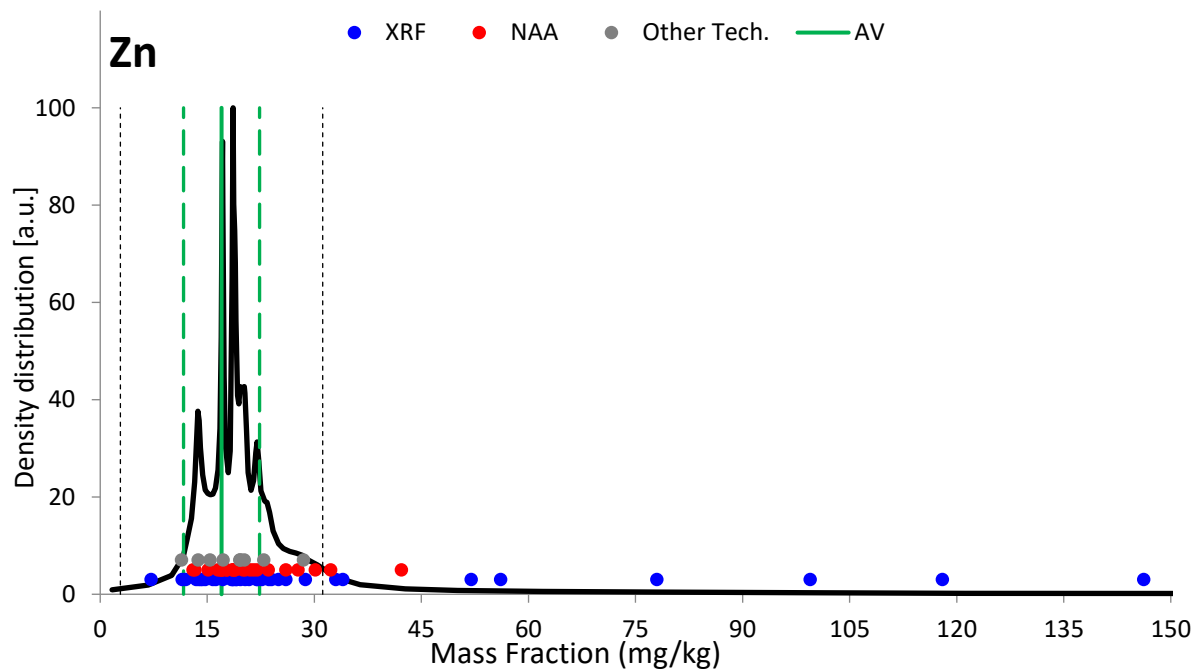


FIG. 49. Density distribution function for the measurand Zn (Clay sample).

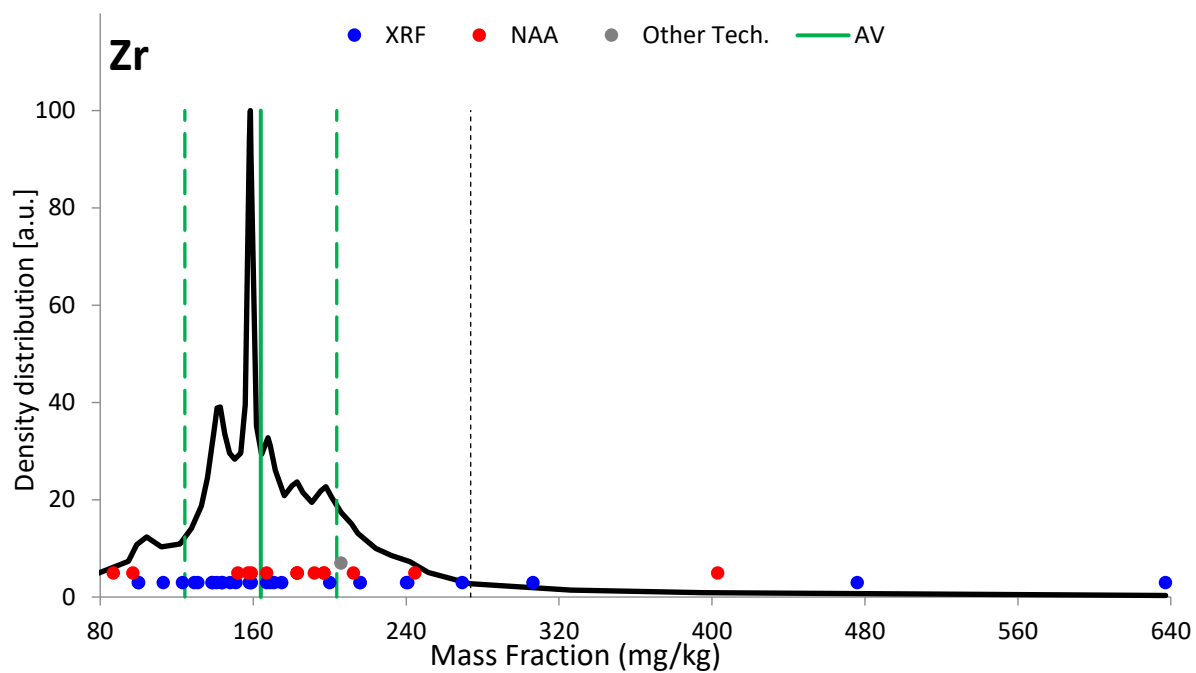


FIG. 50. Density distribution function for the measurand Zr (Clay sample).

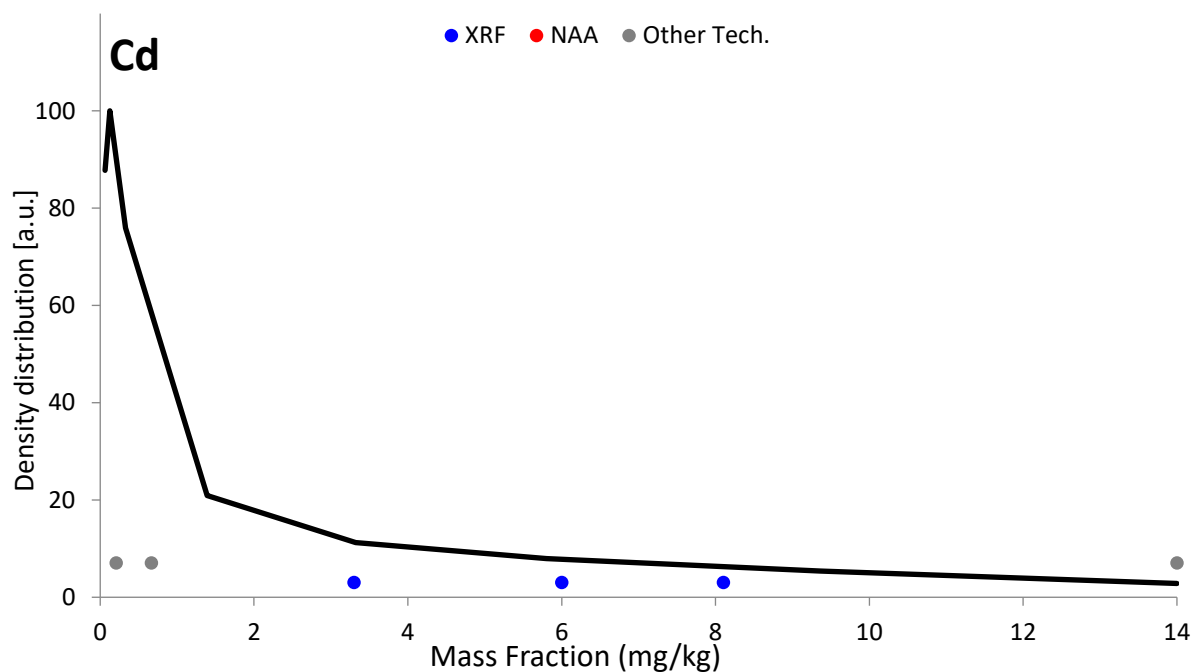


FIG. 51. Density distribution function for the measurand Cd (Clay sample).

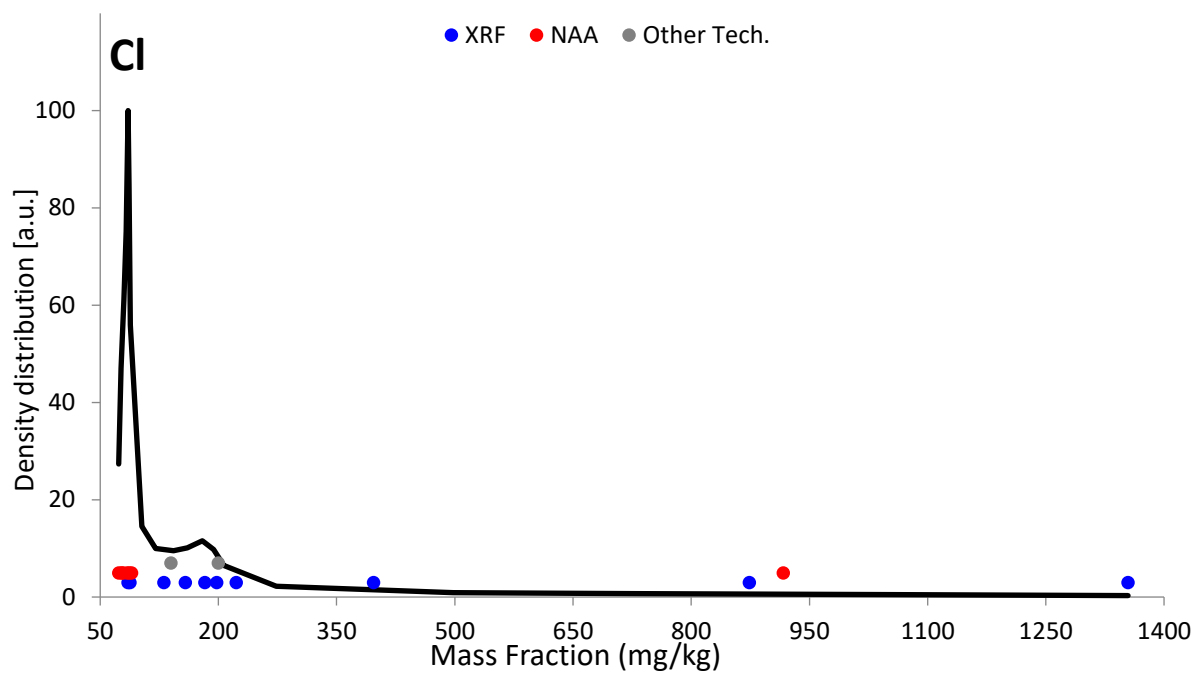


FIG. 52. Density distribution function for the measurand Cl (Clay sample).

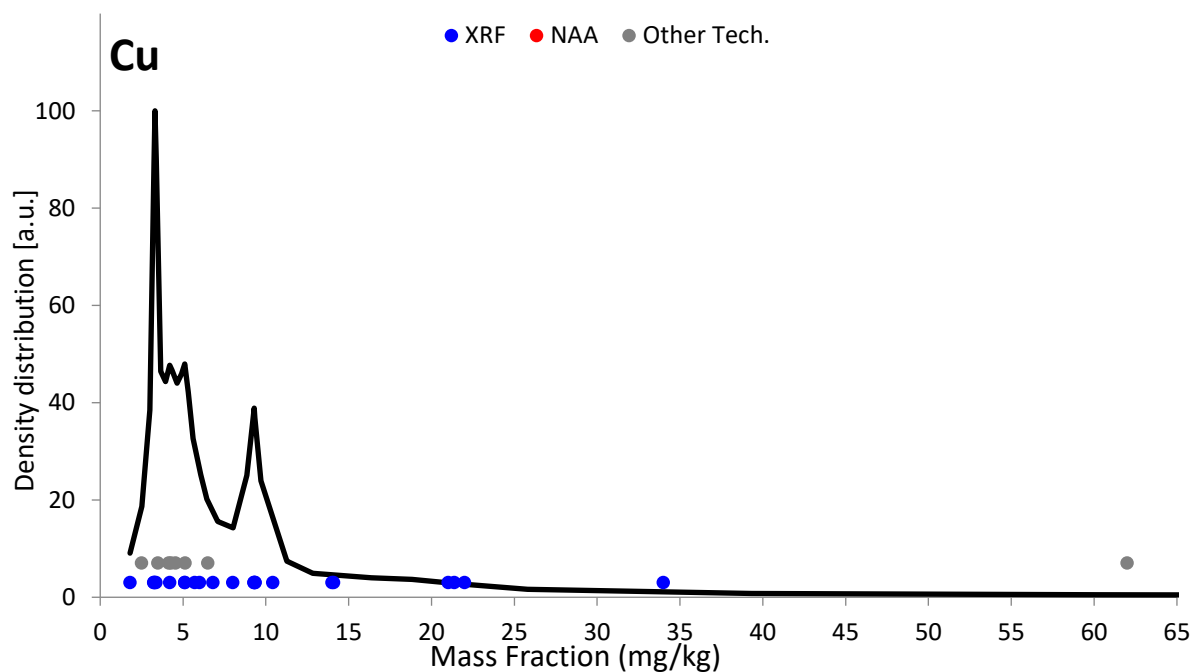


FIG. 53. Density distribution function for the measurand Cu (Clay sample).

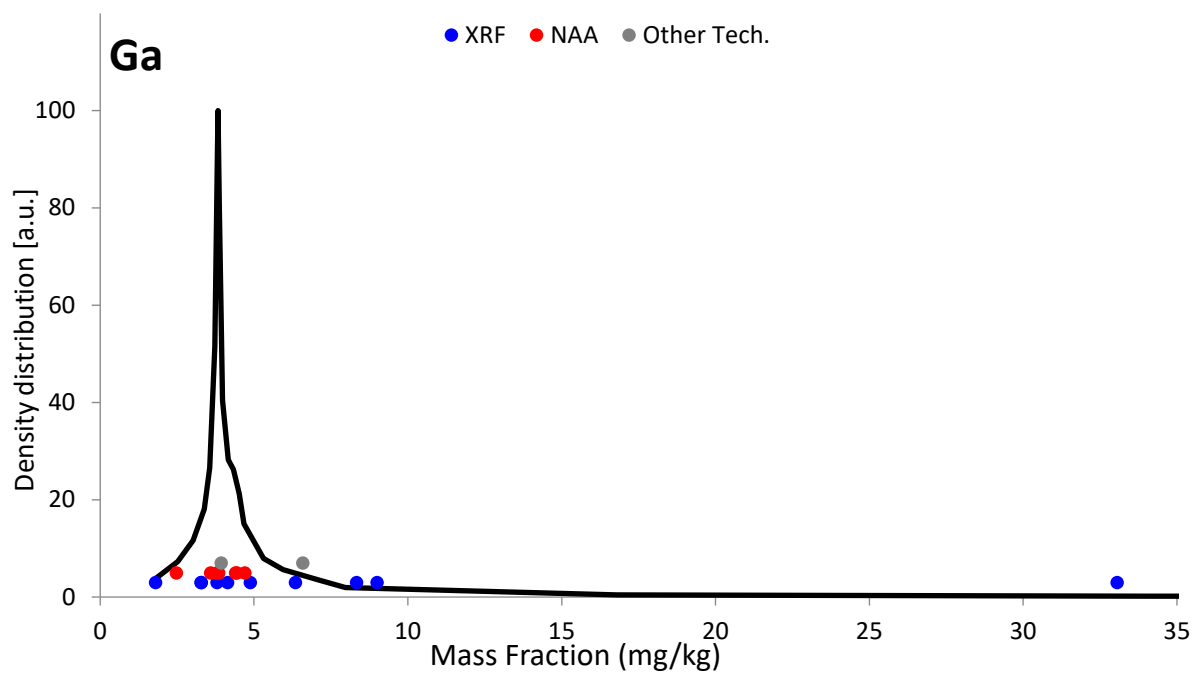


FIG. 54. Density distribution function for the measurand Ga (Clay sample).

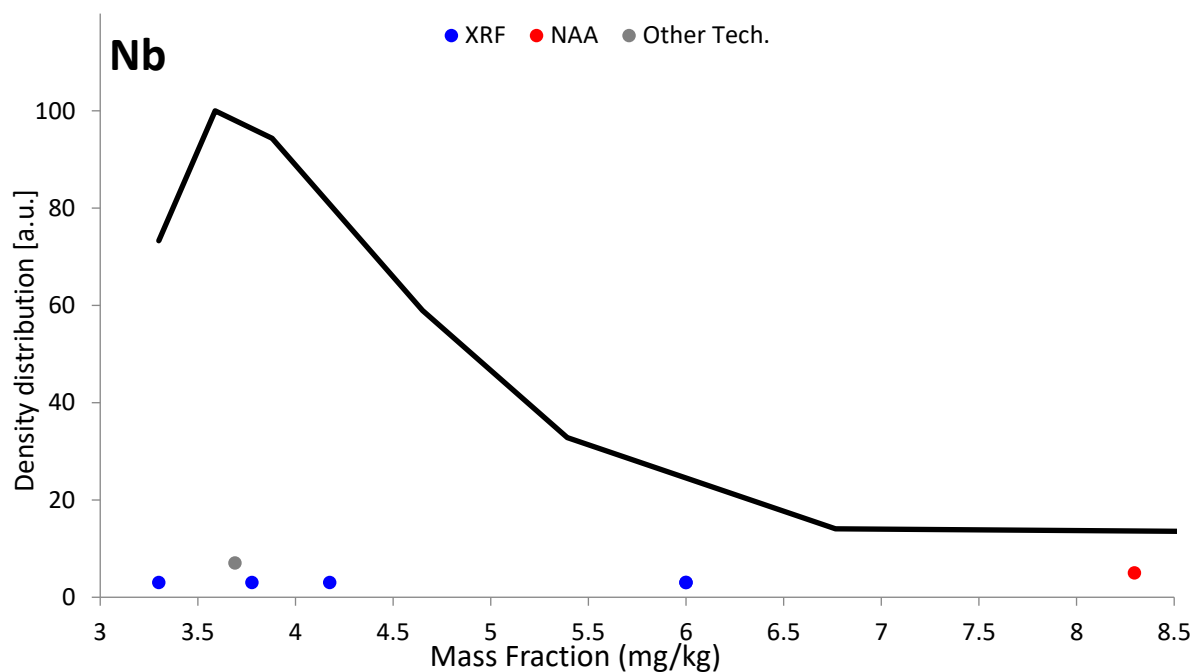


FIG. 55. Density distribution function for the measurand Nb (Clay sample).

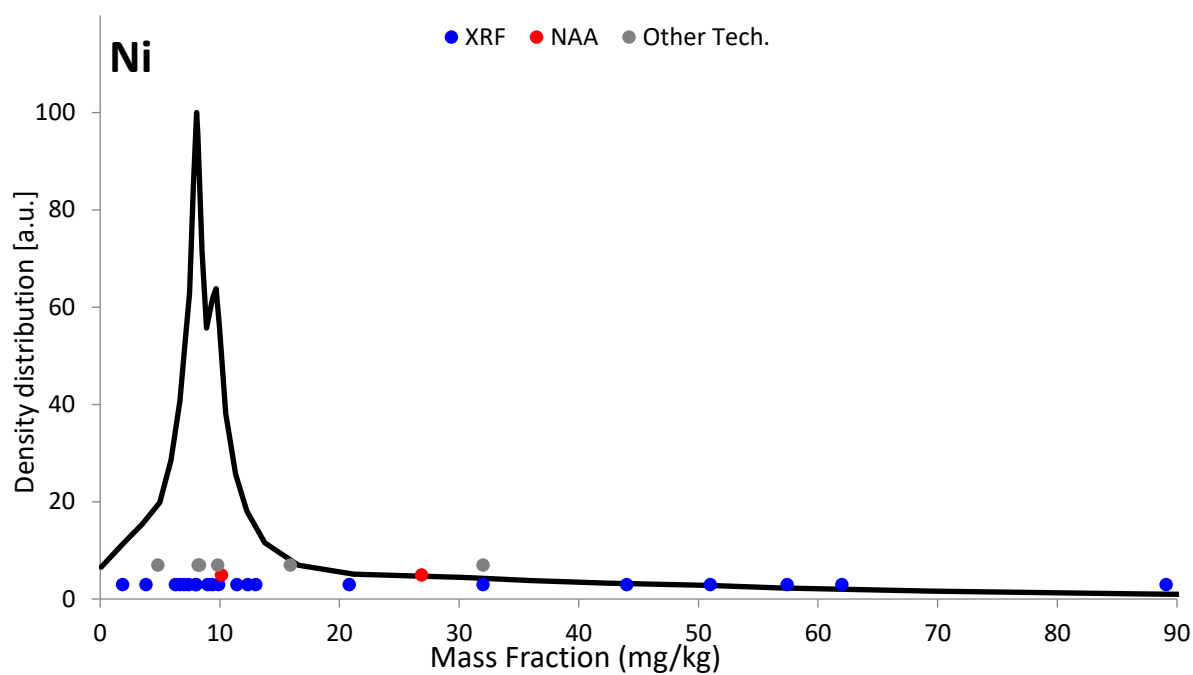


FIG. 56. Density distribution function for the measurand Ni (Clay sample).

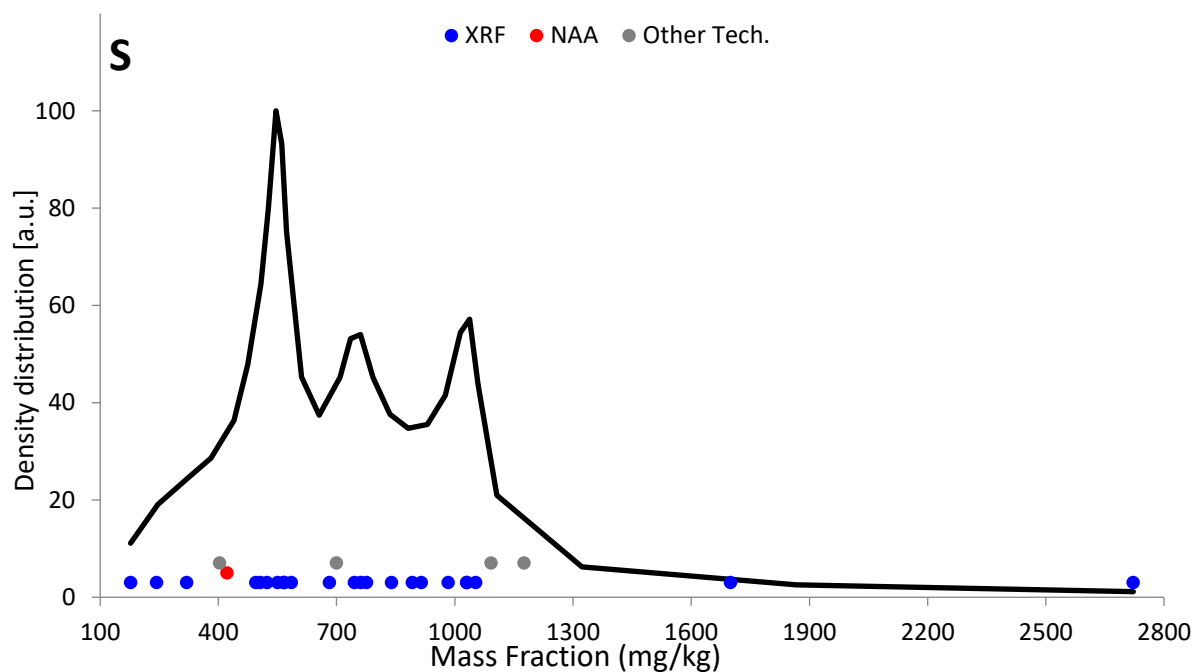


FIG. 57. Density distribution function for the measurand S (Clay sample).

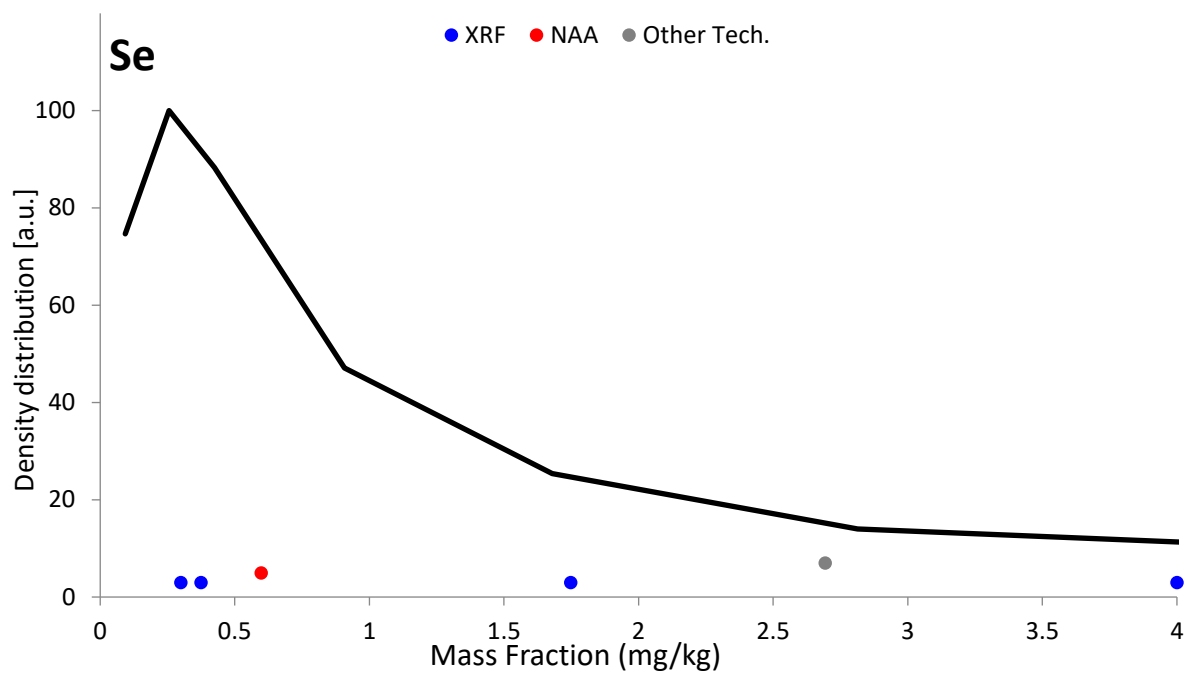


FIG. 58. Density distribution function for the measurand Se (Clay sample).

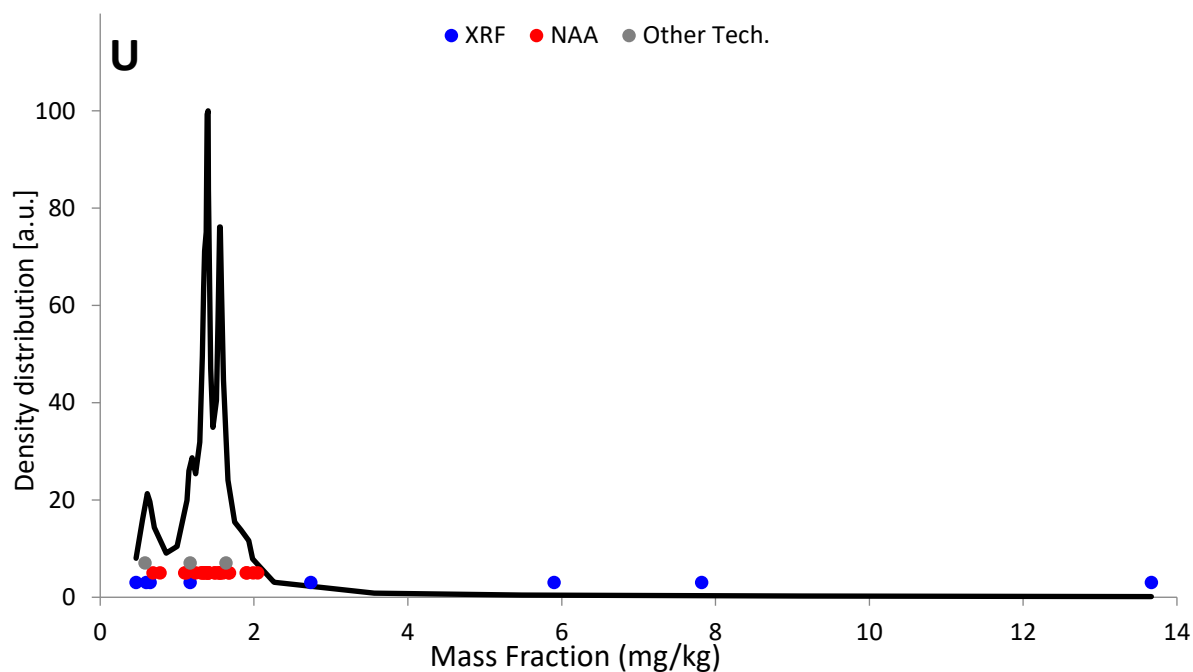


FIG. 59. Density distribution function for the measurand U (Clay sample).

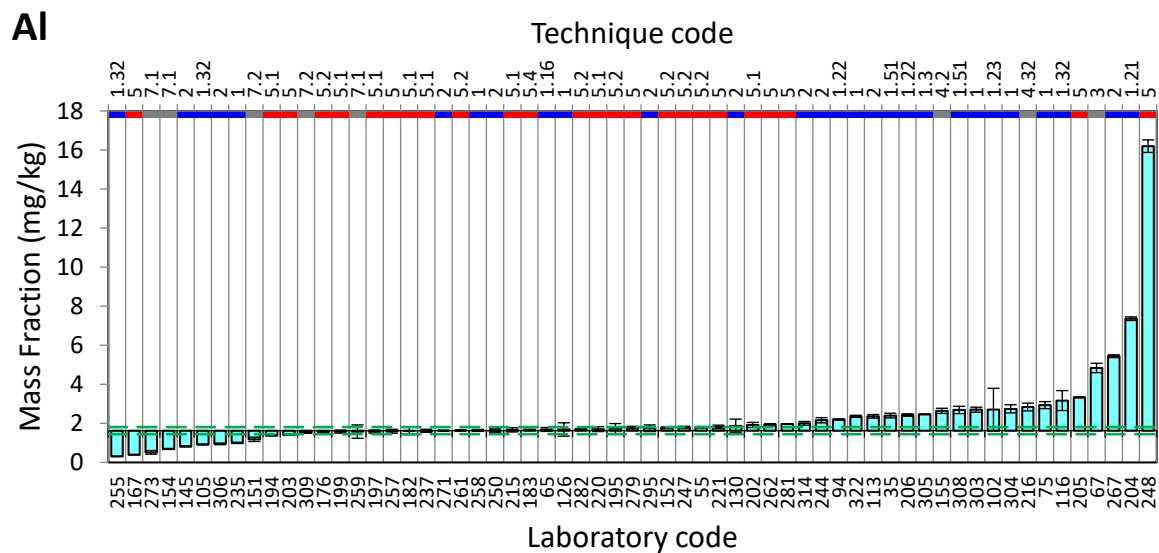


FIG. 60. Bar chart distributions of results for measurand AI (Clay sample).

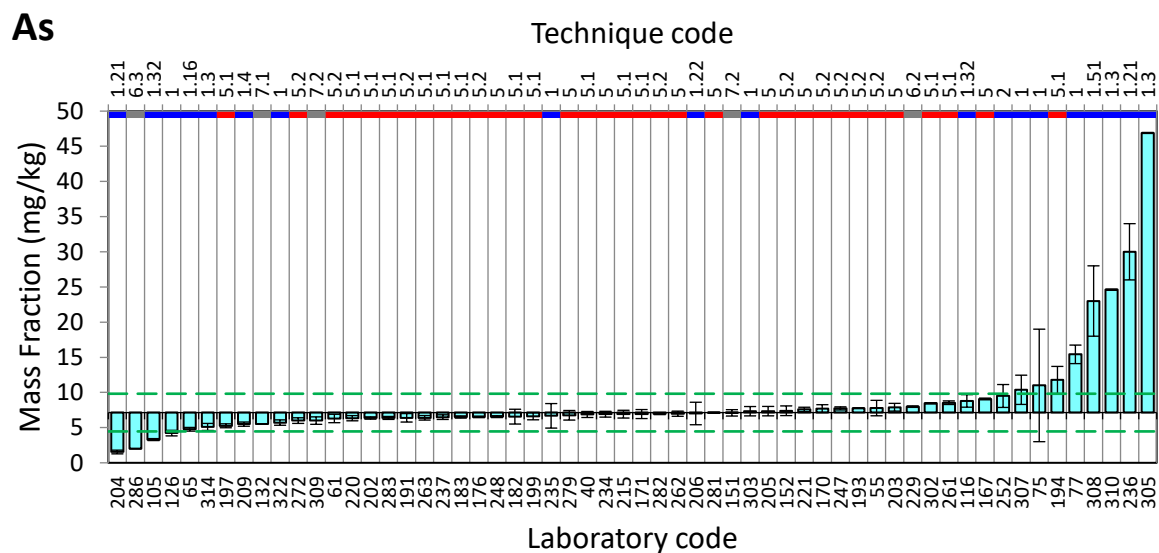


FIG. 61. Bar chart distributions of results for measurand As (Clay sample).

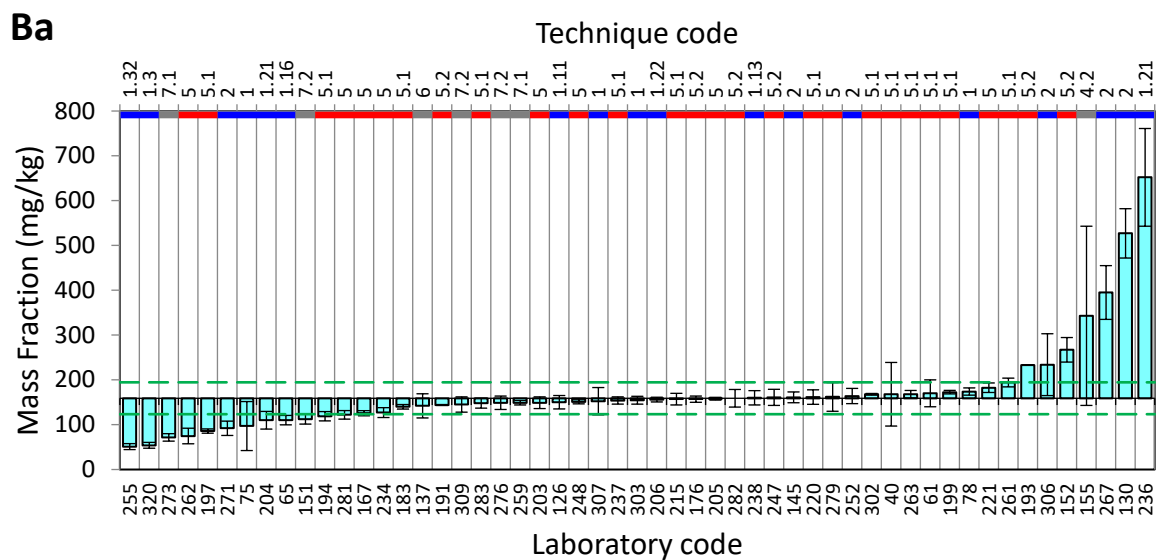


FIG. 62. Bar chart distributions of results for measurand Ba (Clay sample).

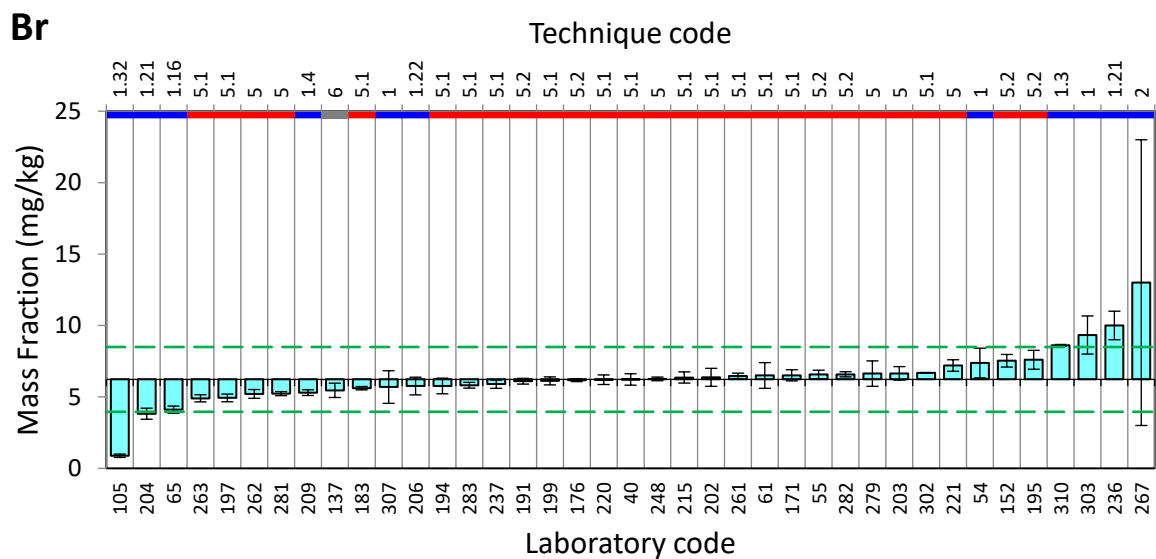


FIG. 63. Bar chart distributions of results for measurand Br (Clay sample).

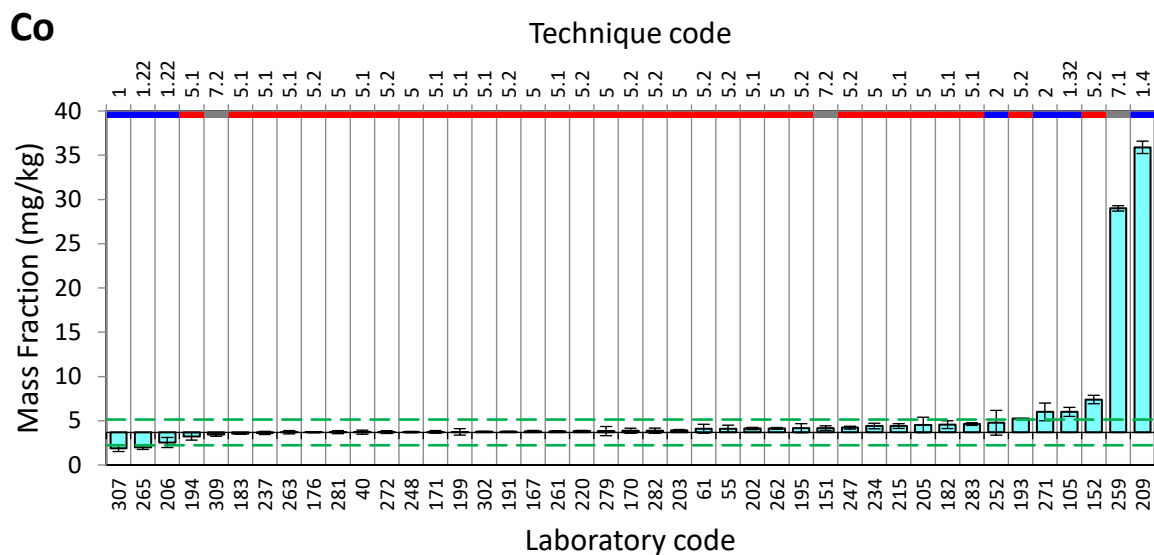


FIG. 66. Bar chart distributions of results for measurand Co (Clay sample).

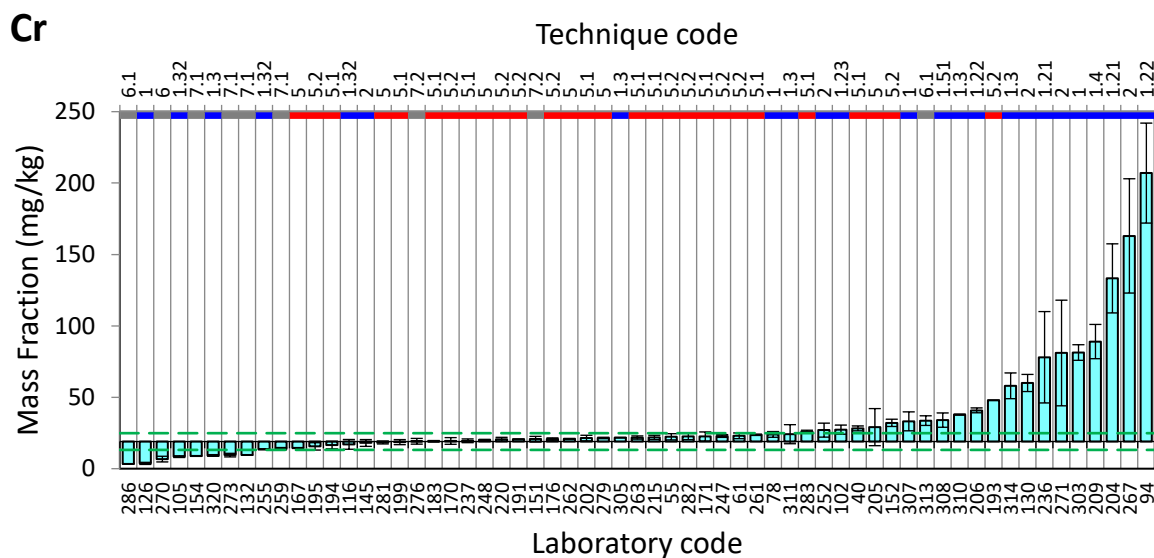


FIG. 67. Bar chart distributions of results for measurand Cr (Clay sample).

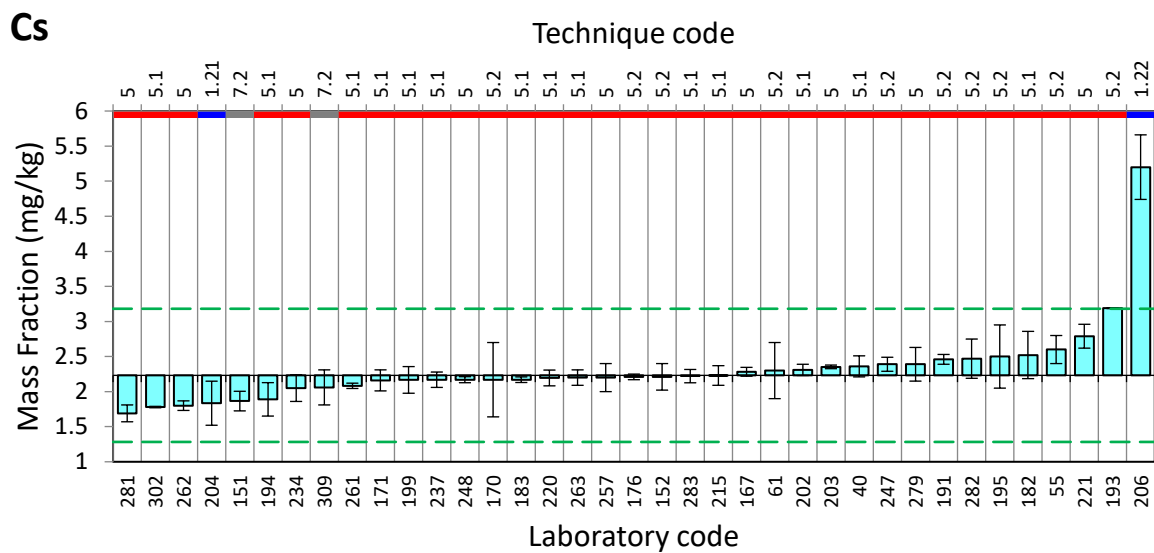


FIG. 68. Bar chart distributions of results for measurand Cs (Clay sample).

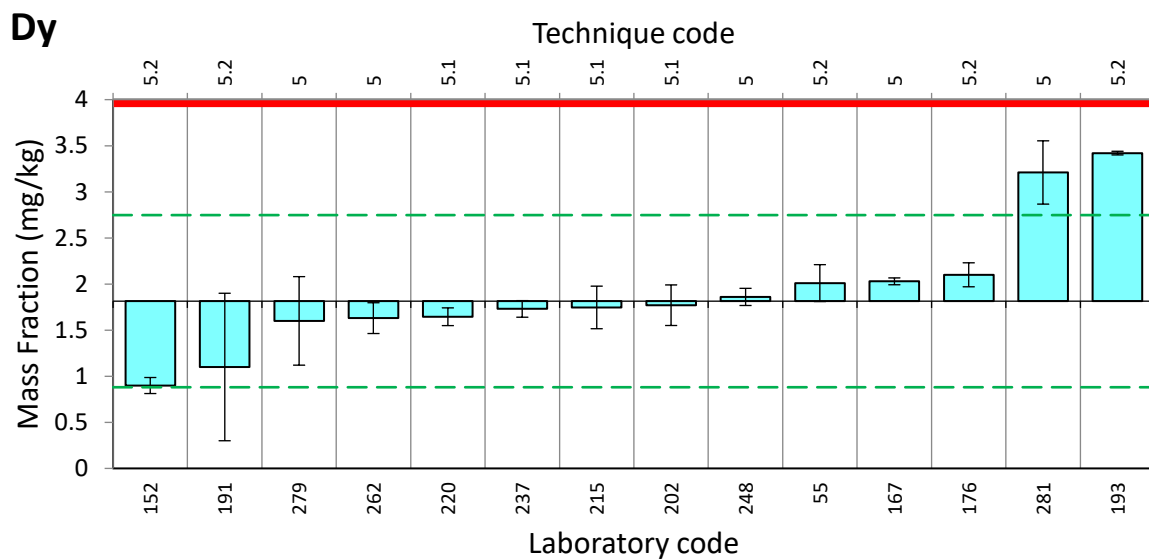


FIG. 69. Bar chart distributions of results for measurand Dy (Clay sample).

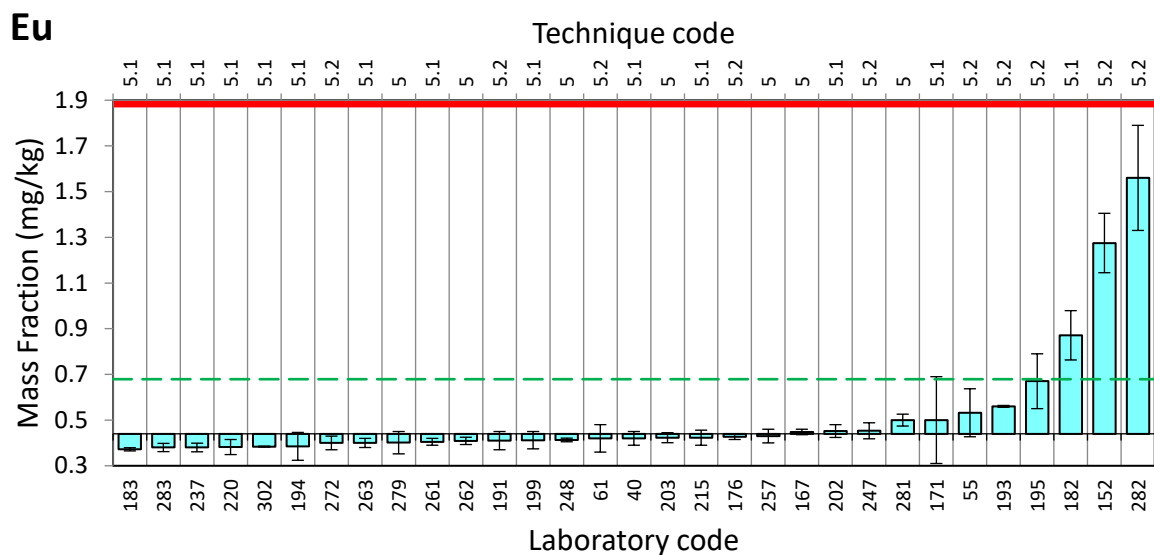


FIG. 70. Bar chart distributions of results for measurand Eu (Clay sample).

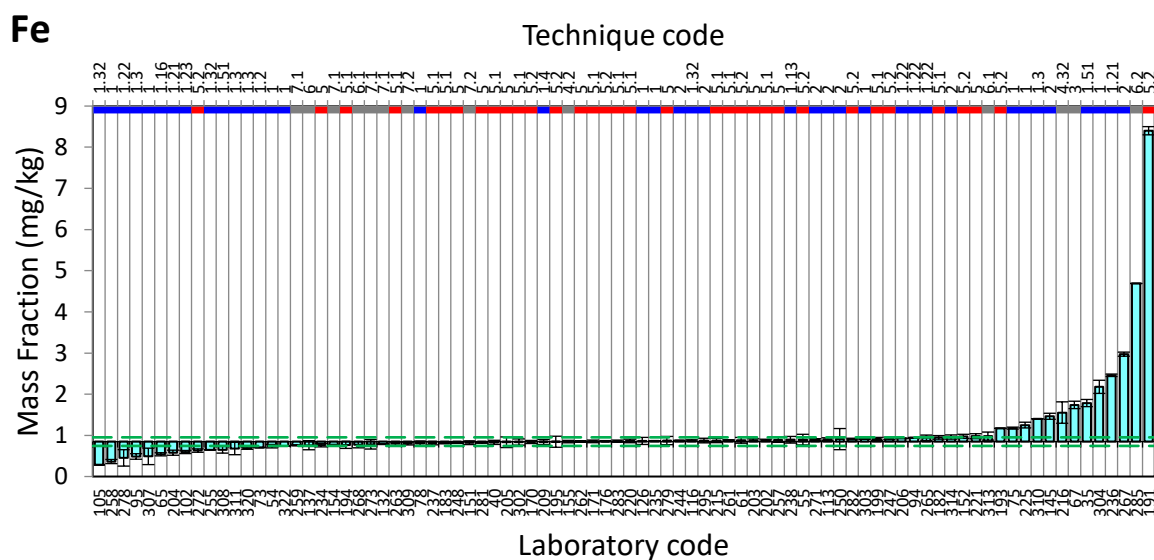


FIG. 71. Bar chart distributions of results for measurand Fe (Clay sample).

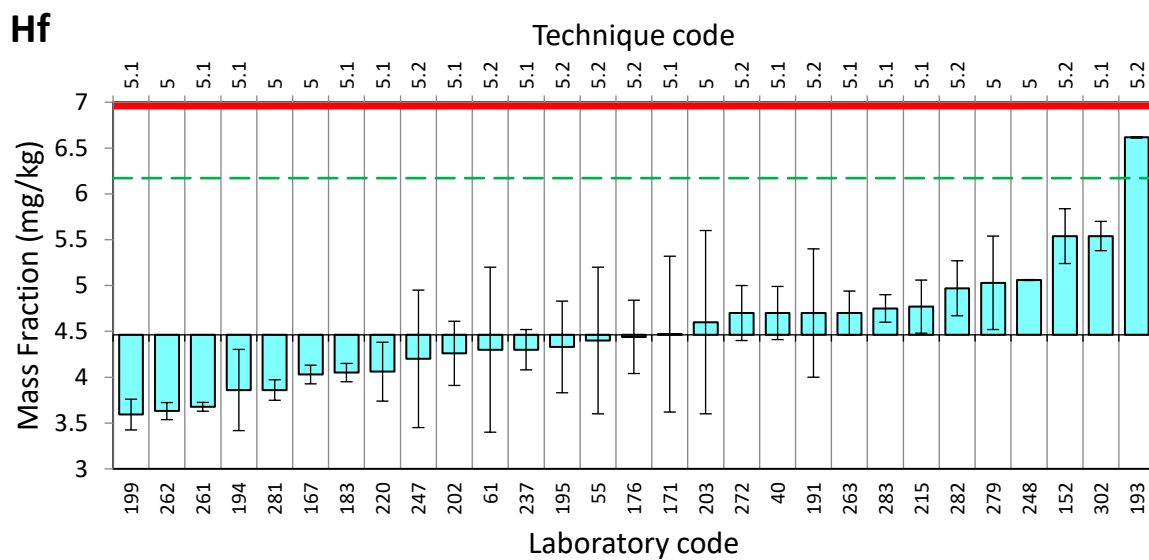


FIG. 72. Bar chart distributions of results for measurand Hf (Clay sample).

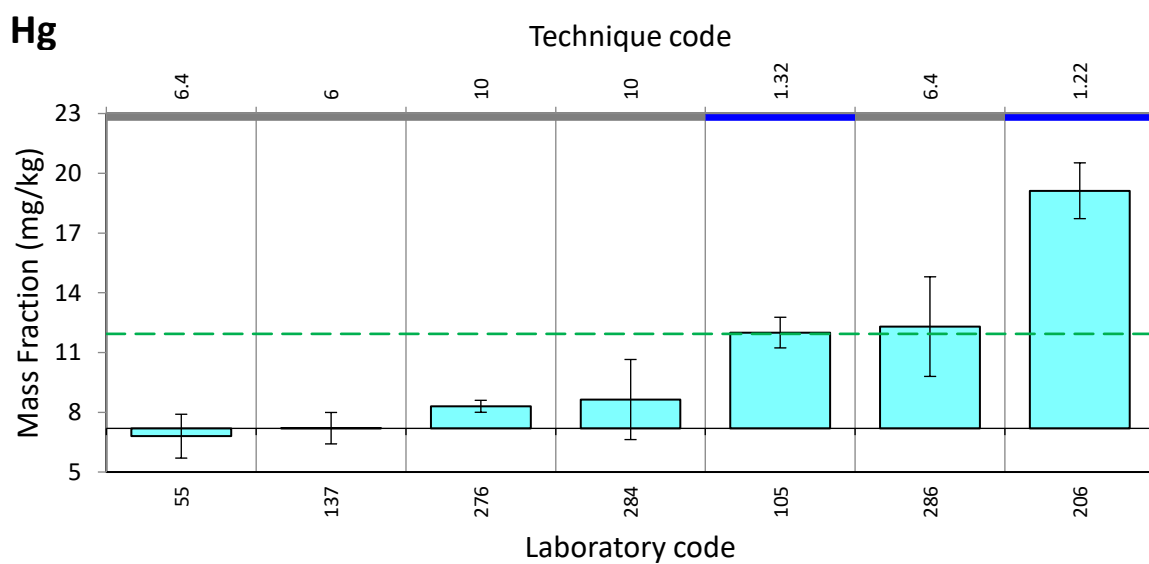


FIG. 73. Bar chart distributions of results for measurand Hg (Clay sample).

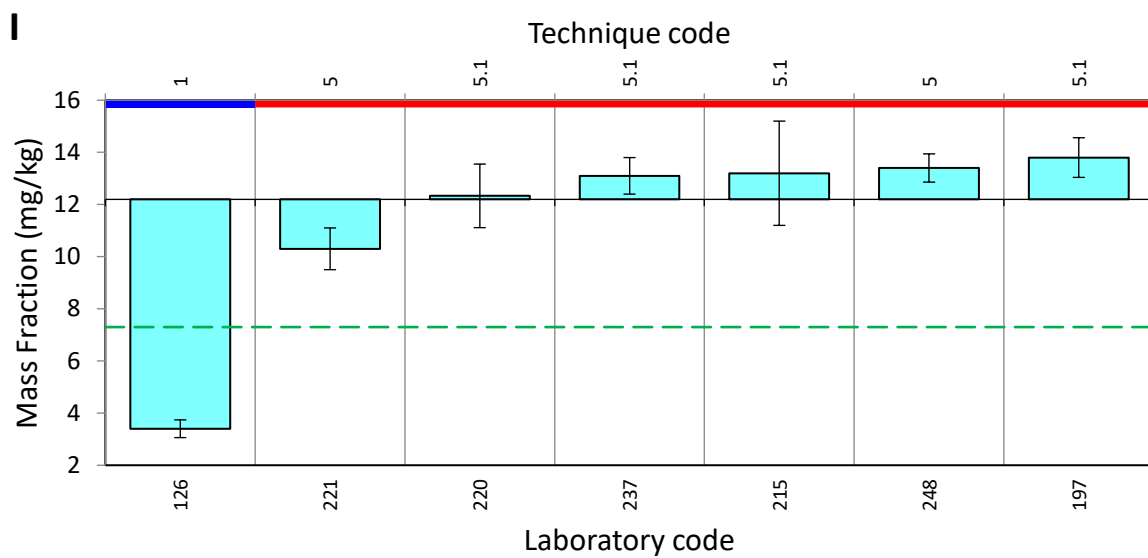


FIG. 74. Bar chart distributions of results for measurand I (Clay sample).

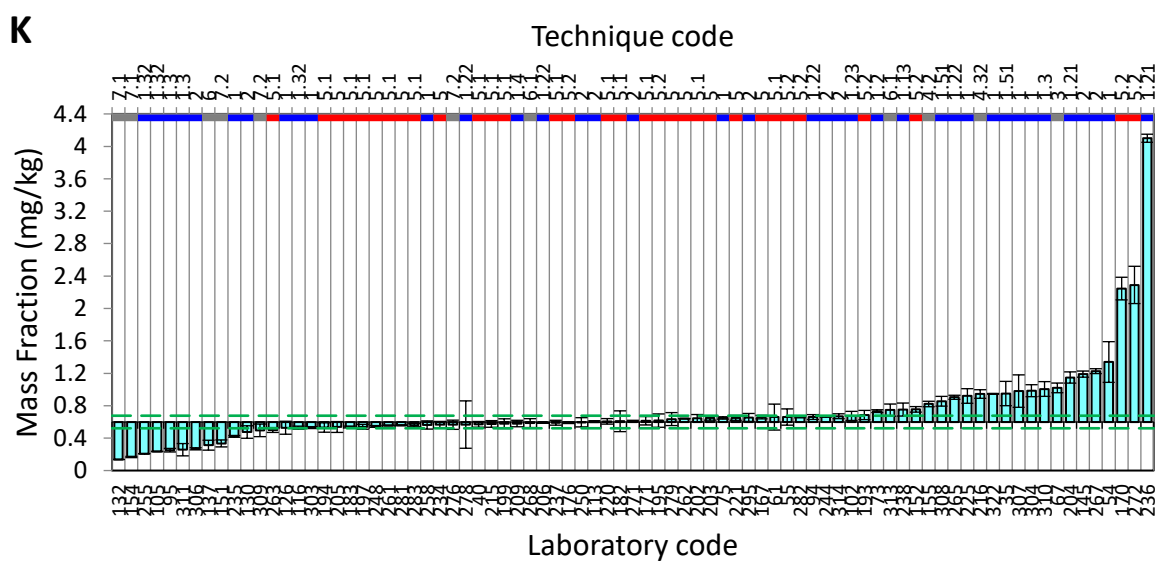


FIG. 75. Bar chart distributions of results for measurand K (Clay sample).

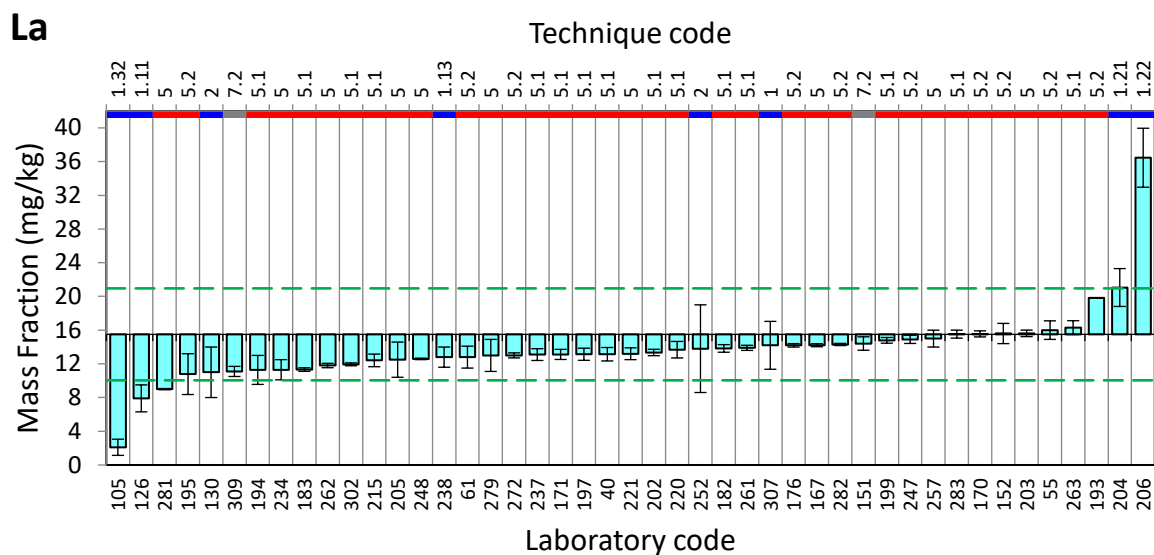


FIG. 76. Bar chart distributions of results for measurand La (Clay sample).

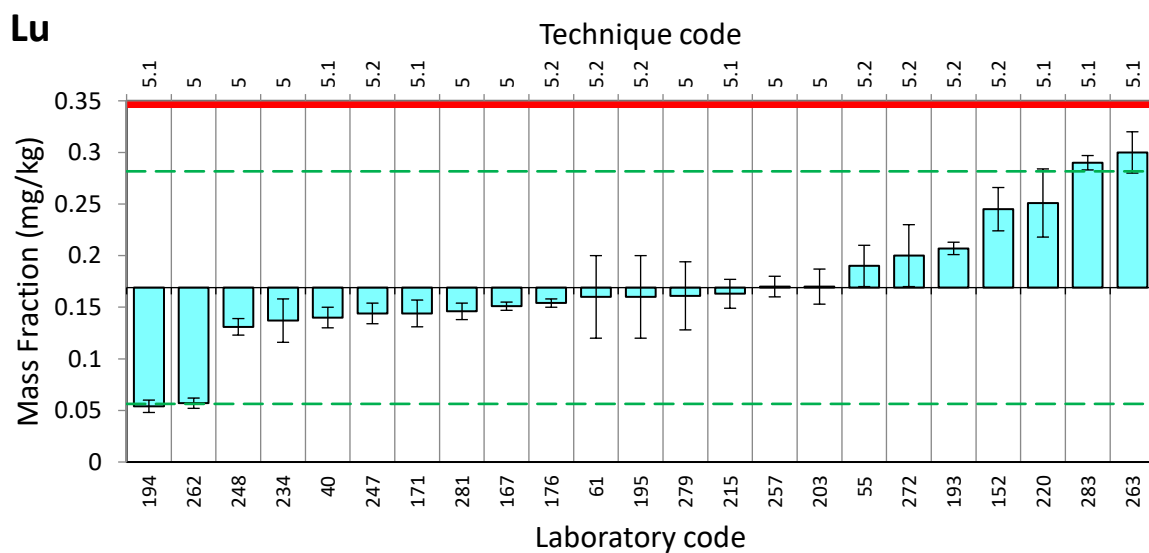


FIG. 77. Bar chart distributions of results for measurand Lu (Clay sample).

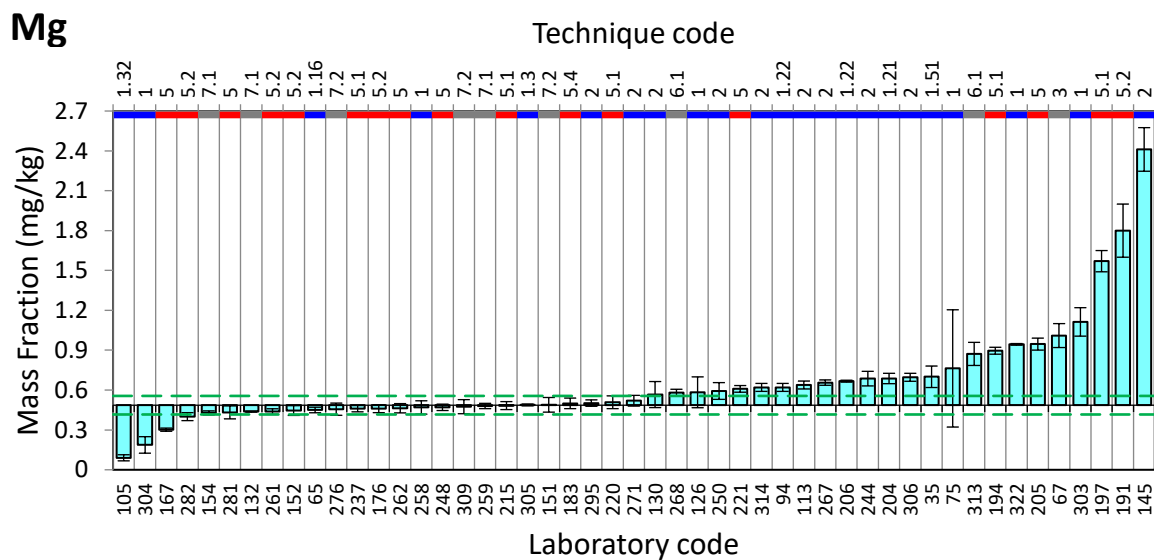


FIG. 78. Bar chart distributions of results for measurand Mg (Clay sample).

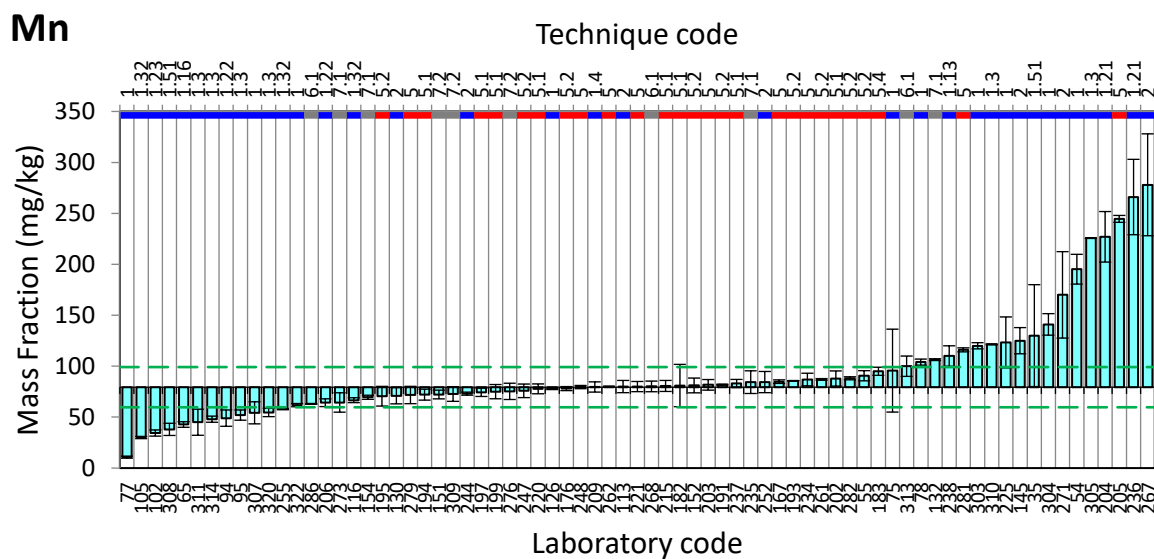


FIG. 79. Bar chart distributions of results for measurand Mn (Clay sample).

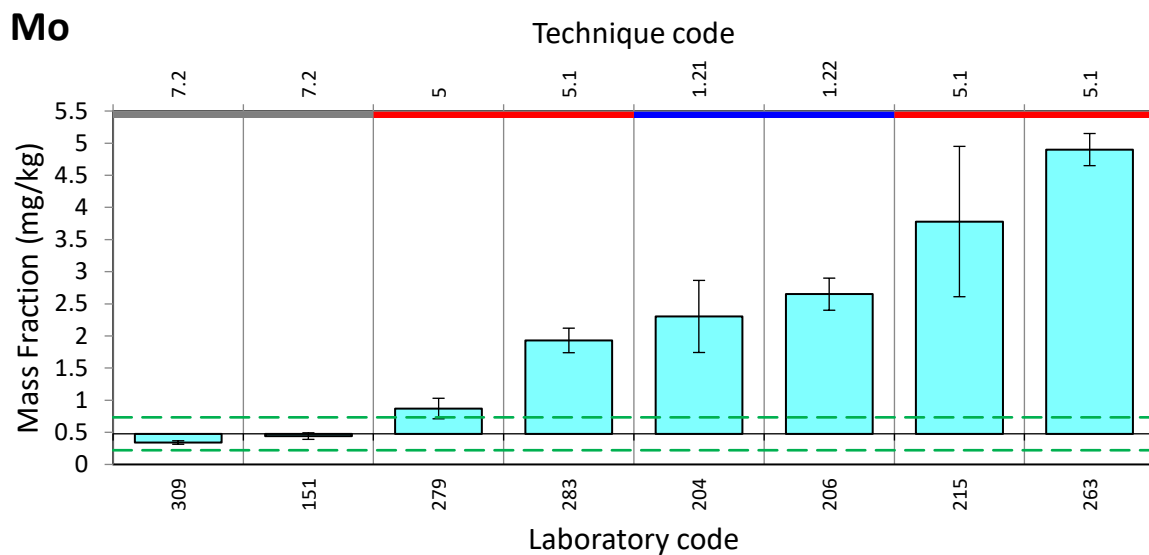


FIG. 80. Bar chart distributions of results for measurand Mo (Clay sample).

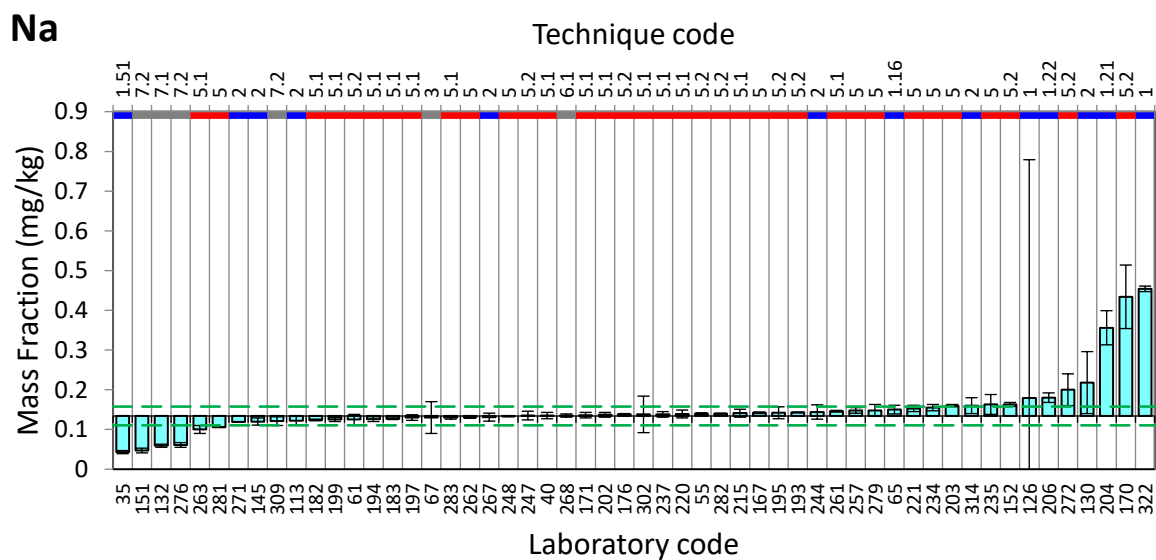


FIG. 81. Bar chart distributions of results for measurand Na (Clay sample).

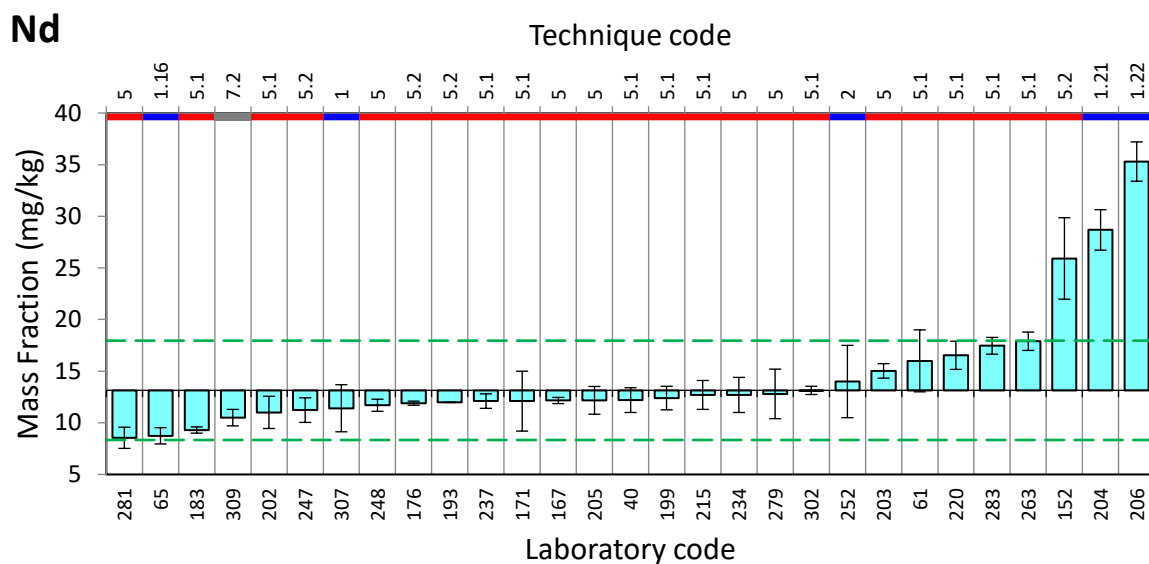


FIG. 82. Bar chart distributions of results for measurand Nd (Clay sample).

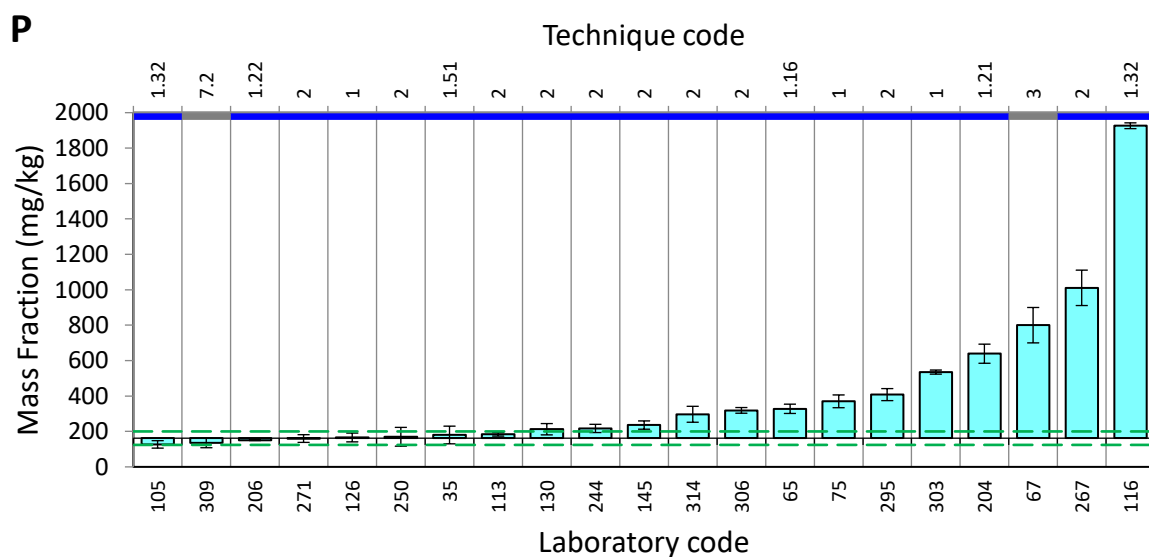


FIG. 83. Bar chart distributions of results for measurand P (Clay sample).

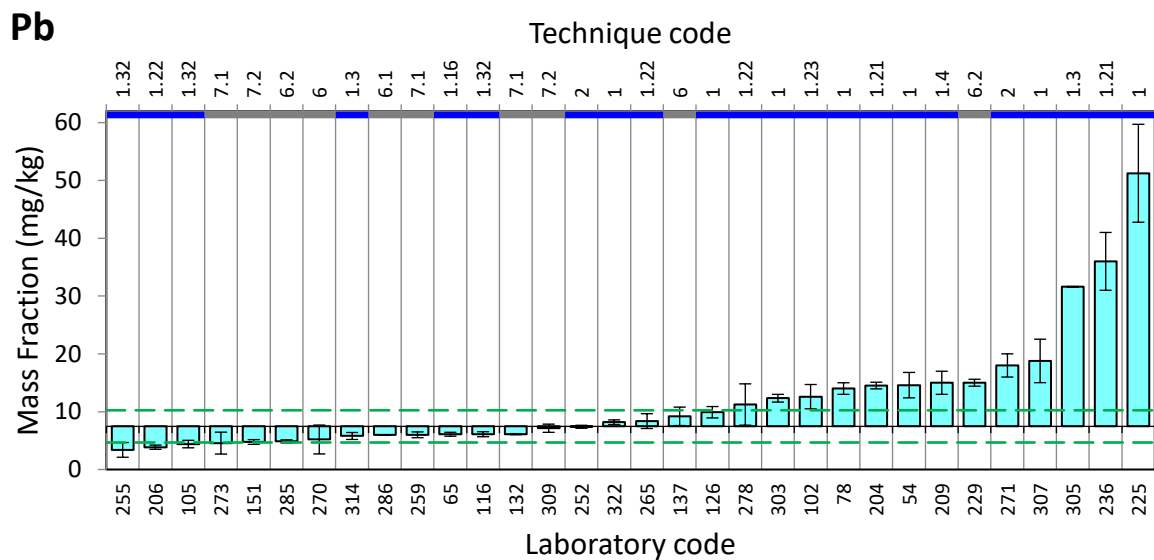


FIG. 84. Bar chart distributions of results for measurand Pb (Clay sample).

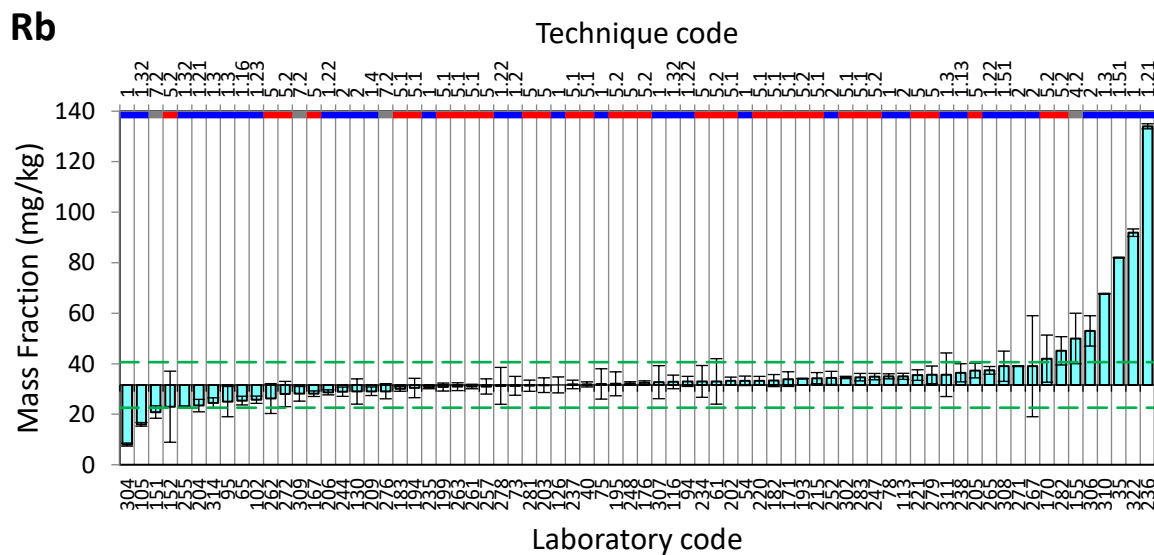


FIG. 85. Bar chart distributions of results for measurand Rb (Clay sample).

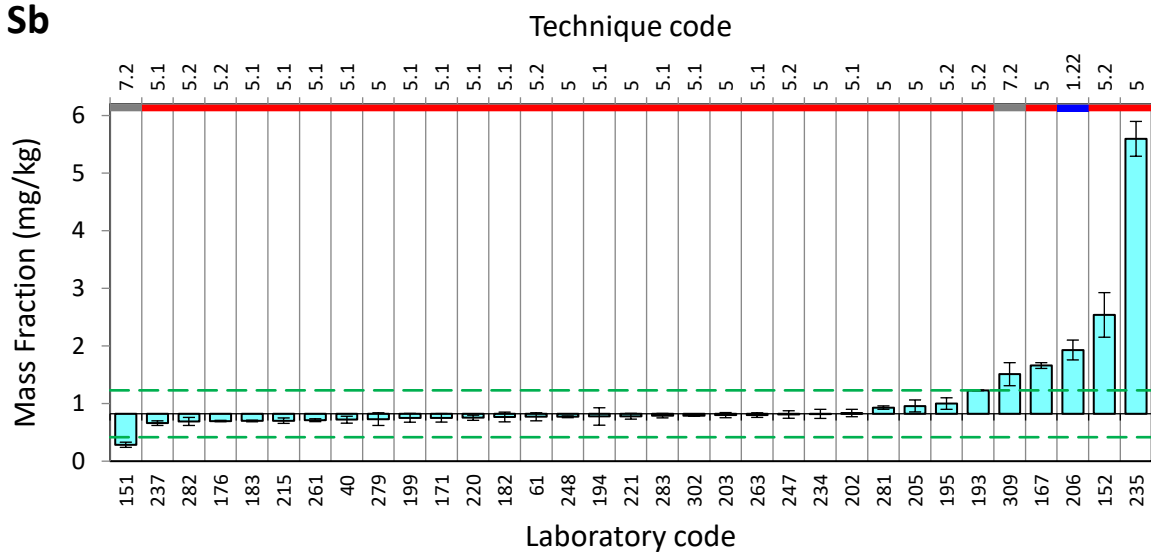
Sb

FIG. 86. Bar chart distributions of results for measurand Sb (Clay sample).

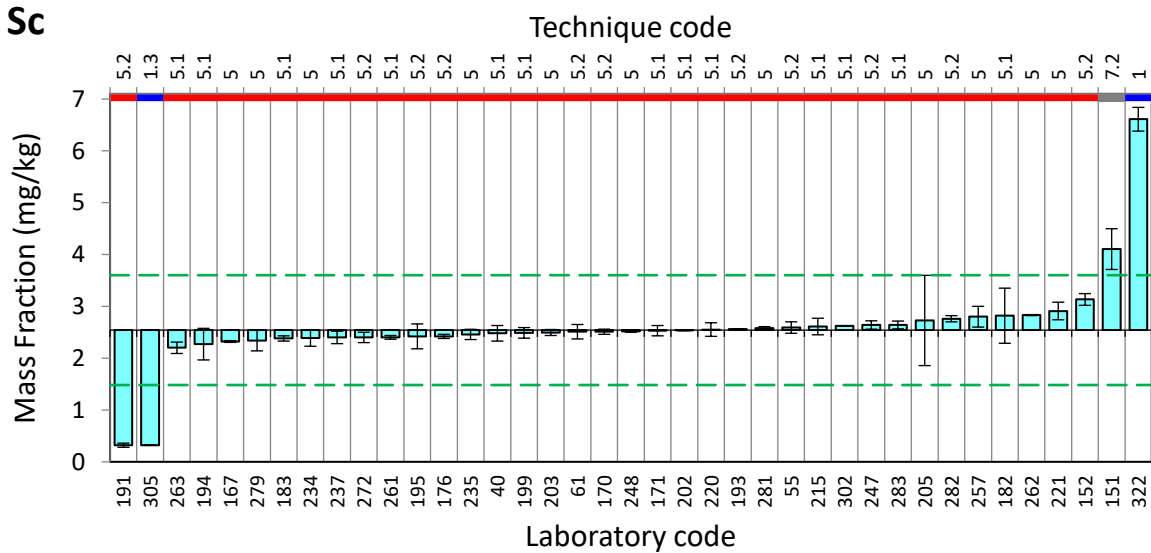
Sc

FIG. 87. Bar chart distributions of results for measurand Sc (Clay sample).

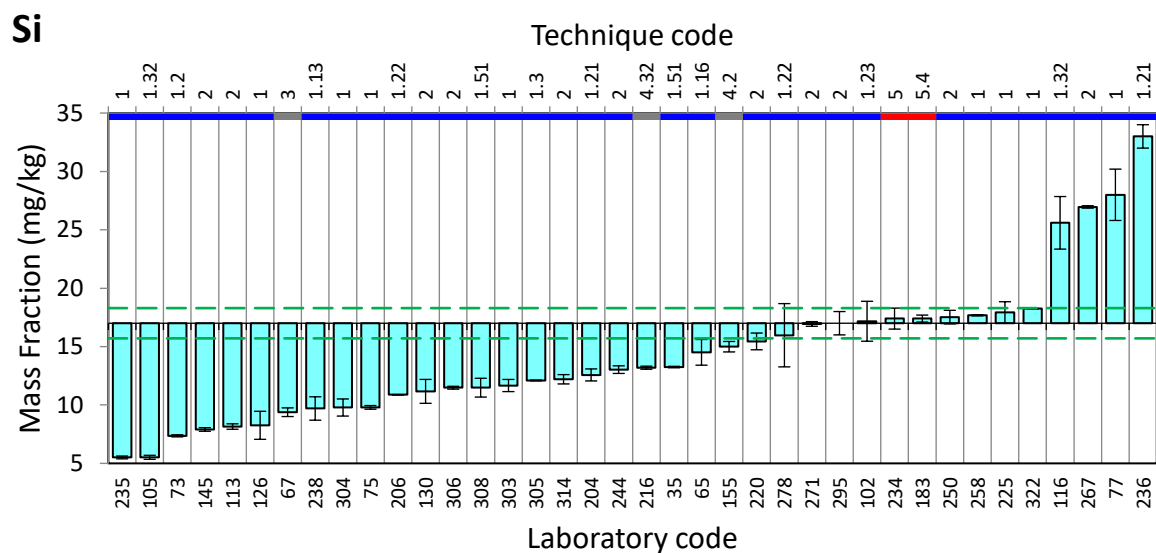


FIG. 88. Bar chart distributions of results for measurand Si (Clay sample).

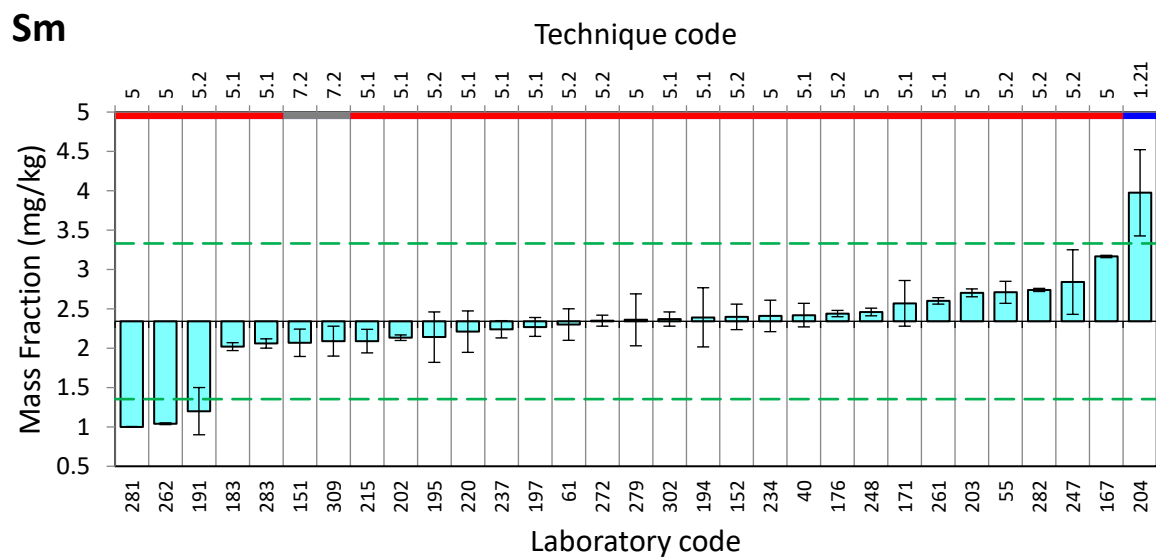


FIG. 89. Bar chart distributions of results for measurand Sm (Clay sample).

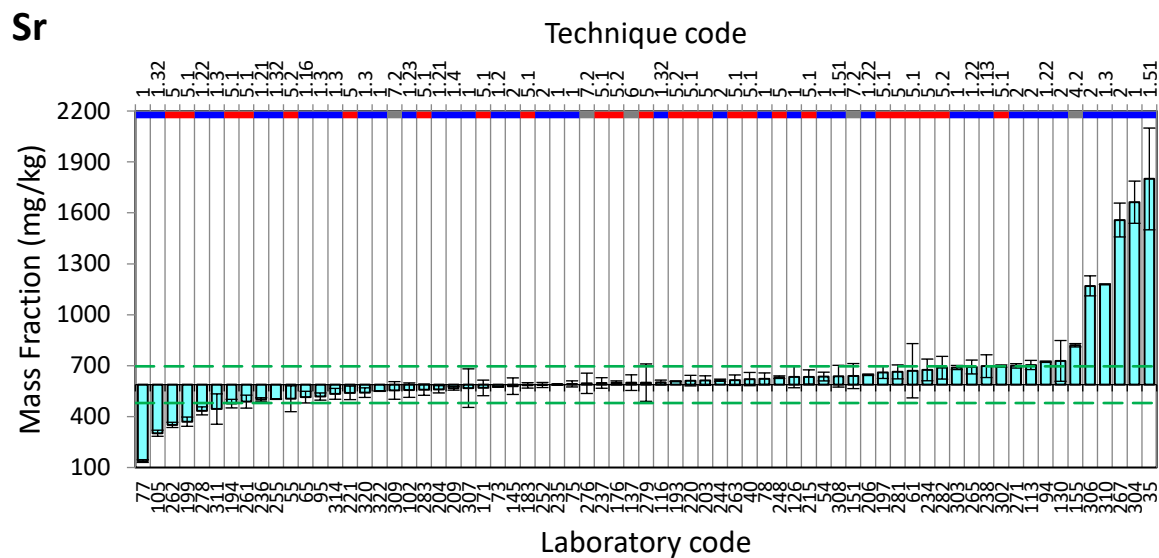


FIG. 90. Bar chart distributions of results for measurand Sr (Clay sample).

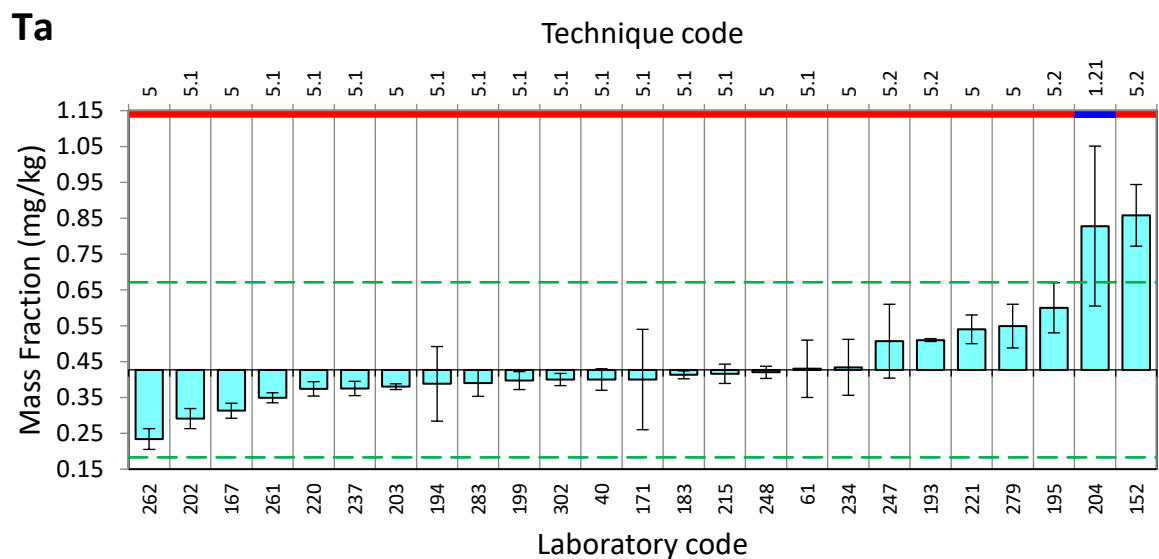


FIG. 91. Bar chart distributions of results for measurand Ta (Clay sample).

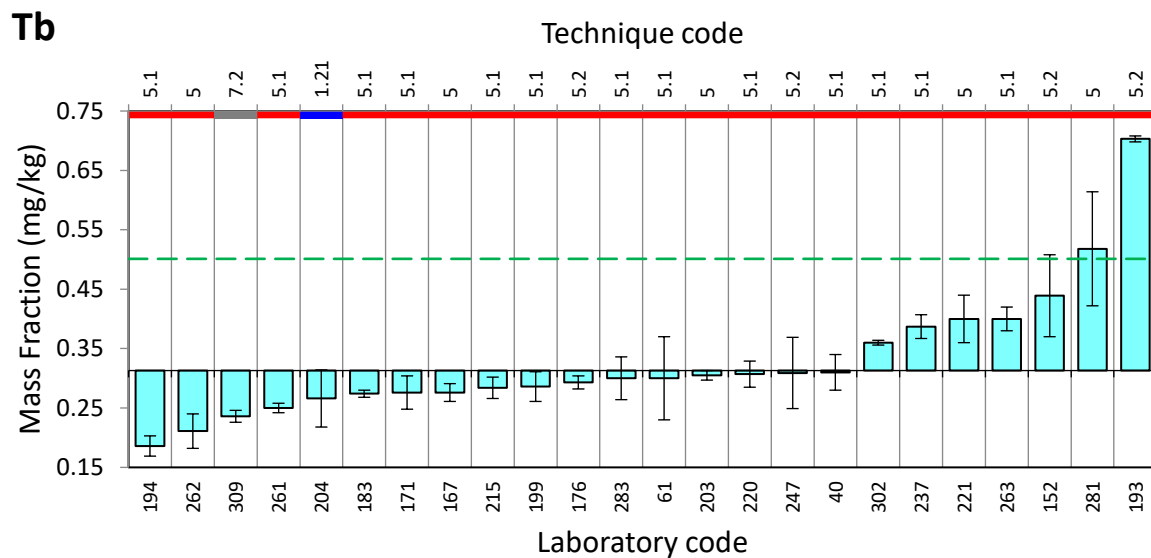


FIG. 92. Bar chart distributions of results for measurand Tb (Clay sample).

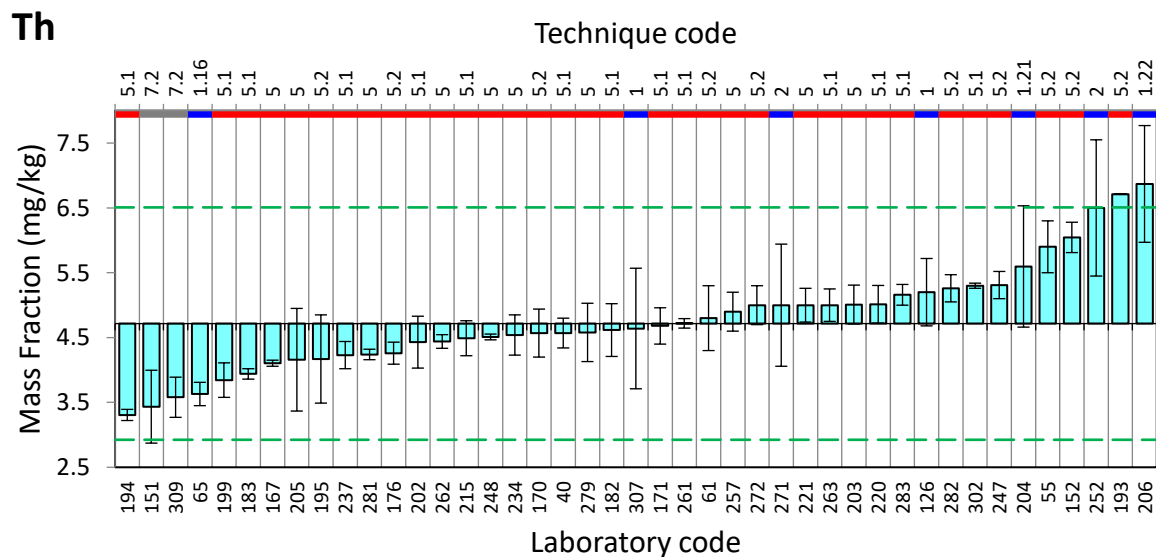


FIG. 93. Bar chart distributions of results for measurand Th (Clay sample).

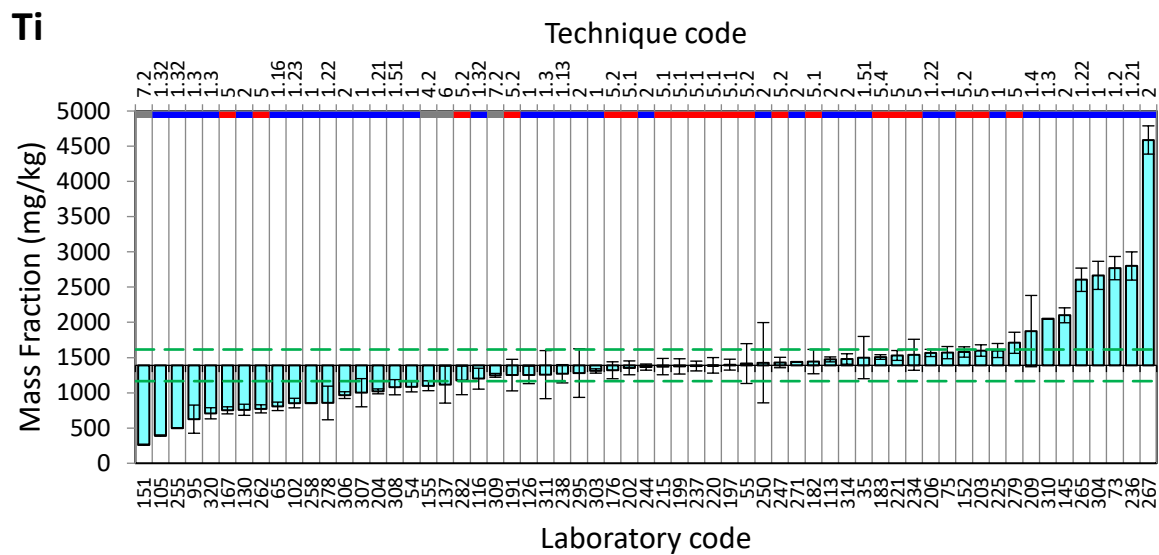


FIG. 94. Bar chart distributions of results for measurand Ti (Clay sample).

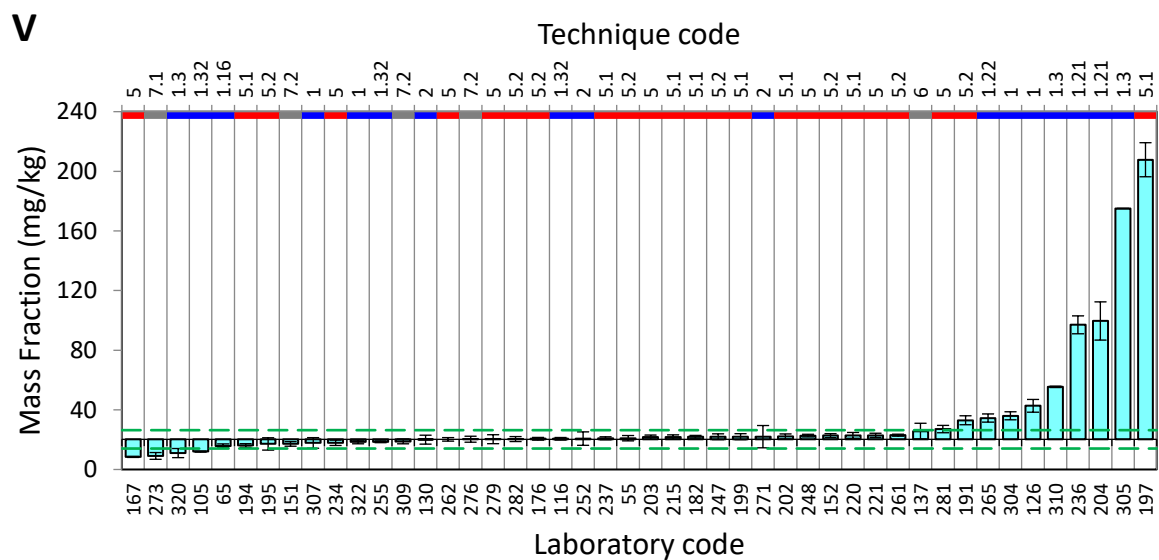


FIG. 95. Bar chart distributions of results for measurand V (Clay sample).

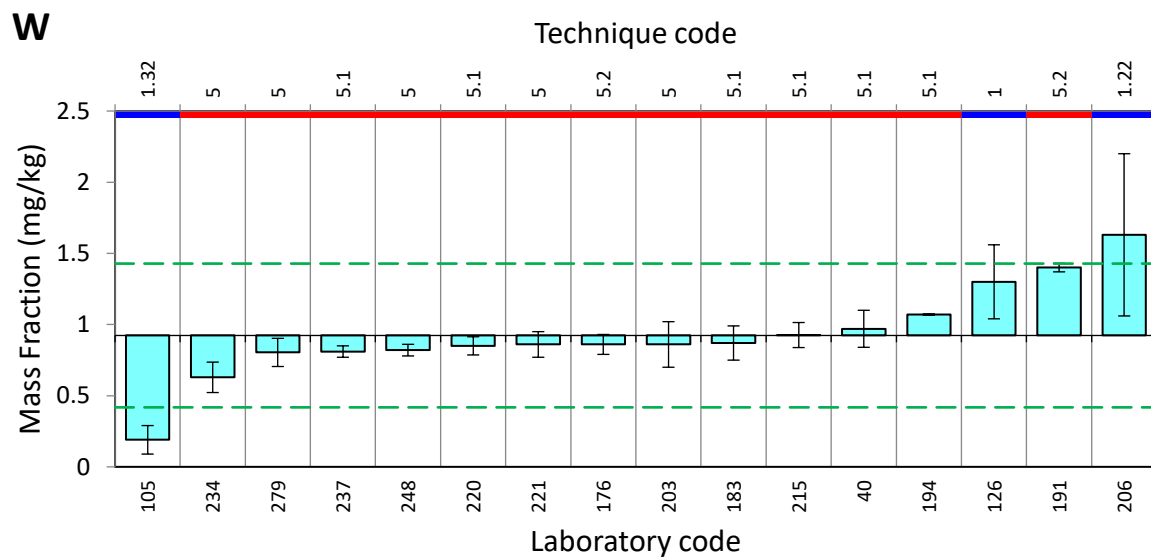


FIG. 97. Bar chart distributions of results for measurand W (Clay sample).

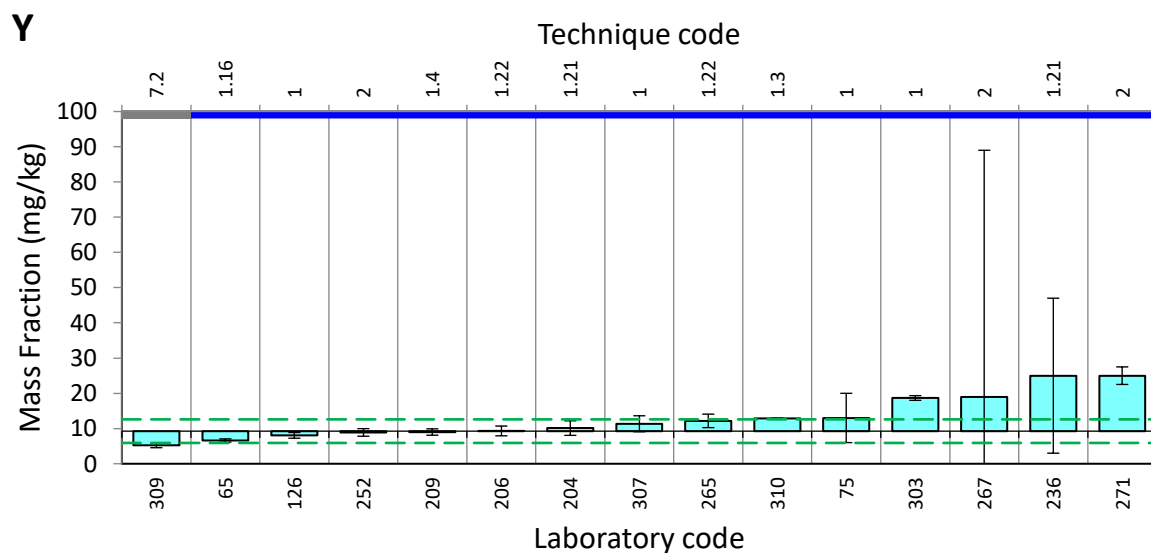


FIG. 98. Bar chart distributions of results for measurand Y (Clay sample).

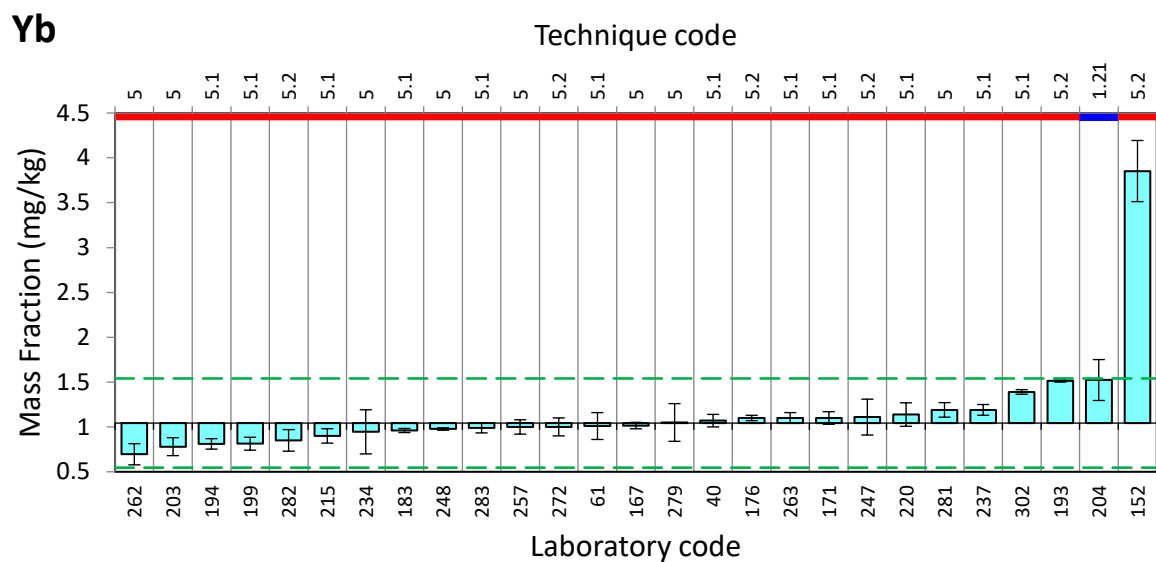


FIG. 99. Bar chart distributions of results for measurand Yb (Clay sample).

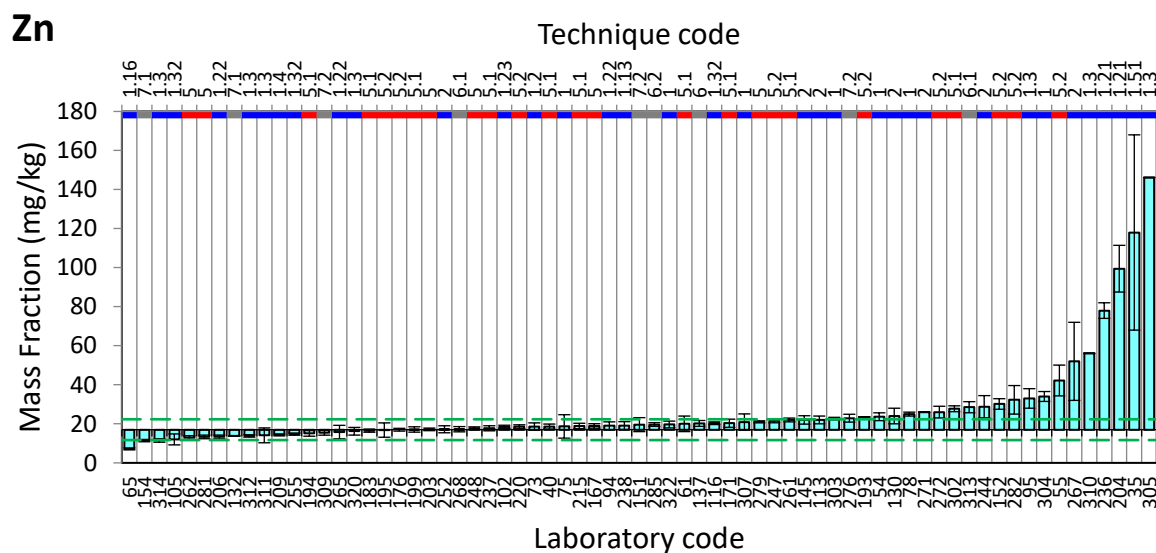


FIG. 100. Bar chart distributions of results for measurand Zn (Clay sample).

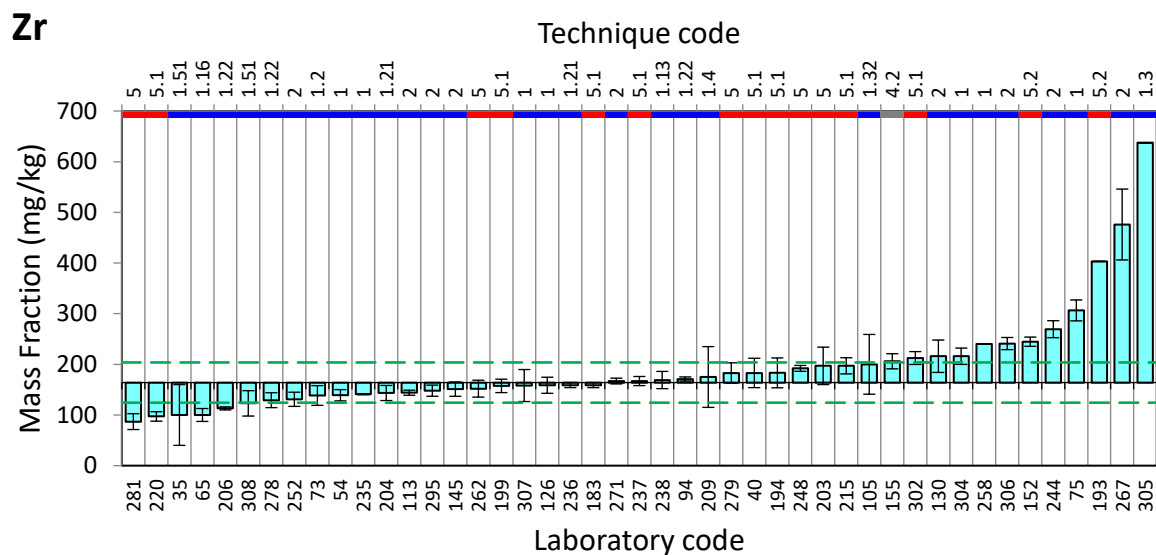


FIG. 101. Bar chart distributions of results for measurand Zr (Clay sample).

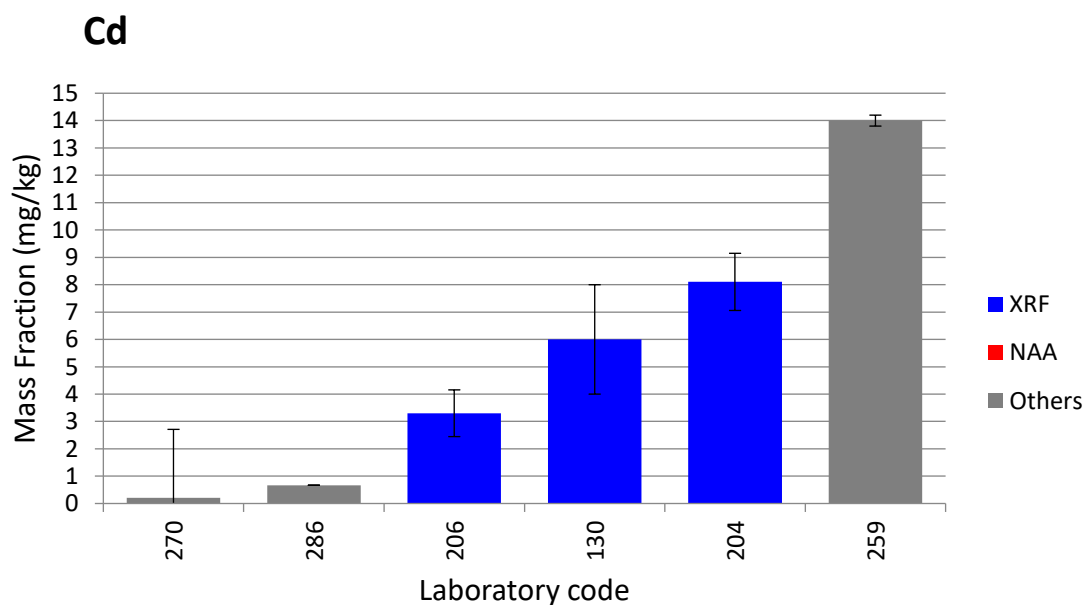


FIG. 102. Bar chart distributions of results for measurand Cd (Clay sample).

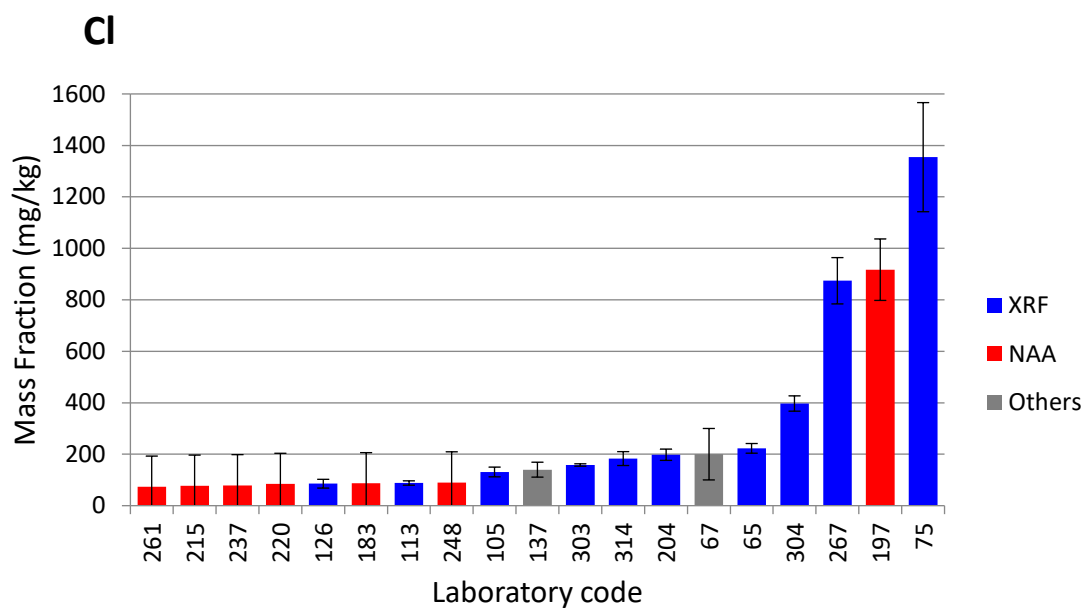


FIG. 103. Bar chart distributions of results for measurand Cl (Clay sample).

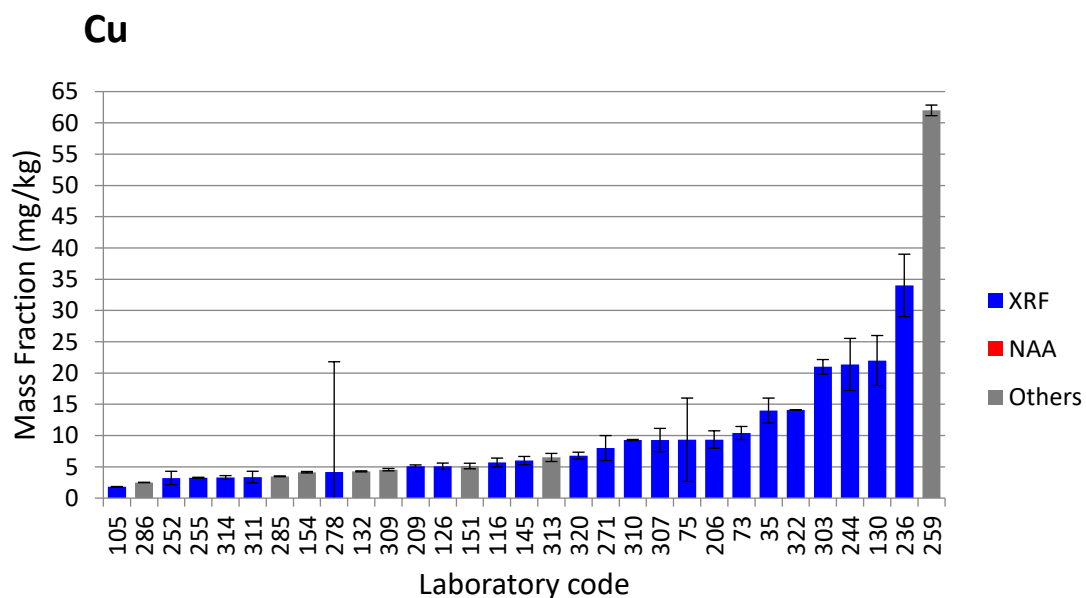


FIG. 104. Bar chart distributions of results for measurand Cu (Clay sample).

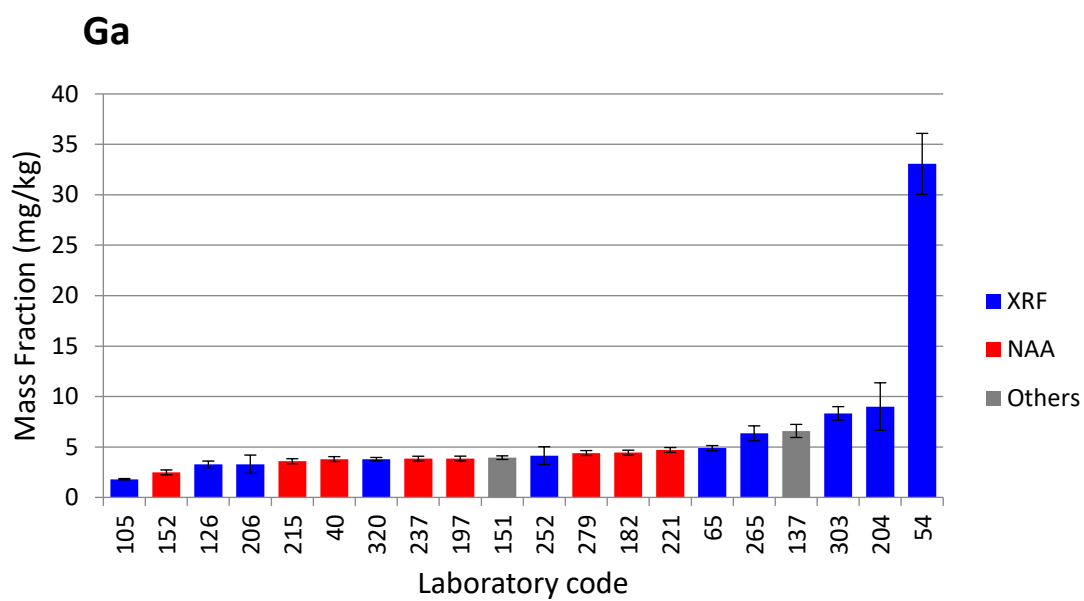


FIG. 105. Bar chart distributions of results for measurand Ga (Clay sample).

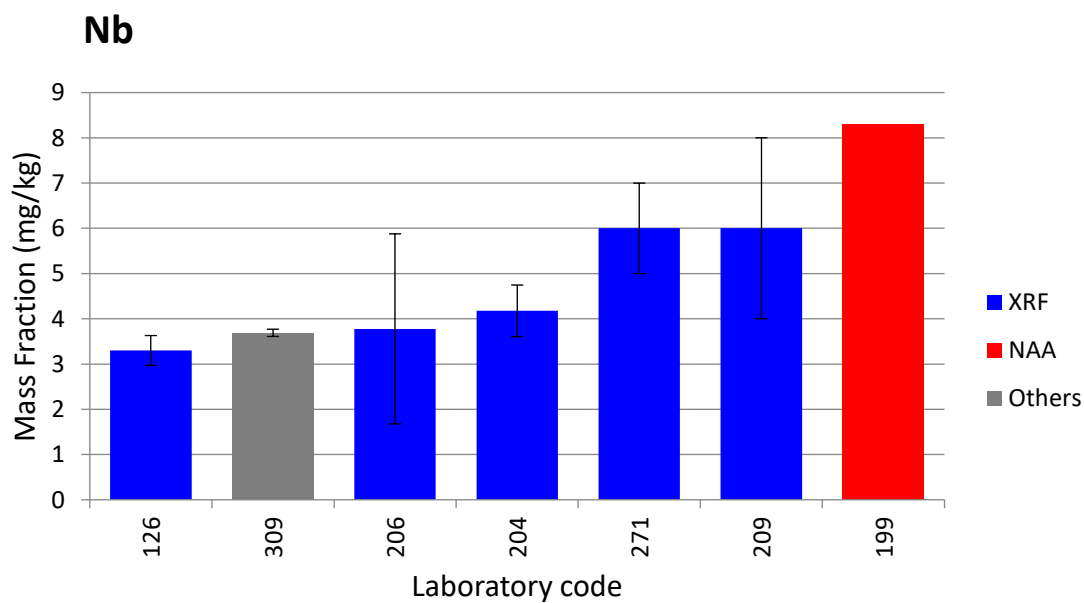


FIG. 106. Bar chart distributions of results for measurand Nb (Clay sample).

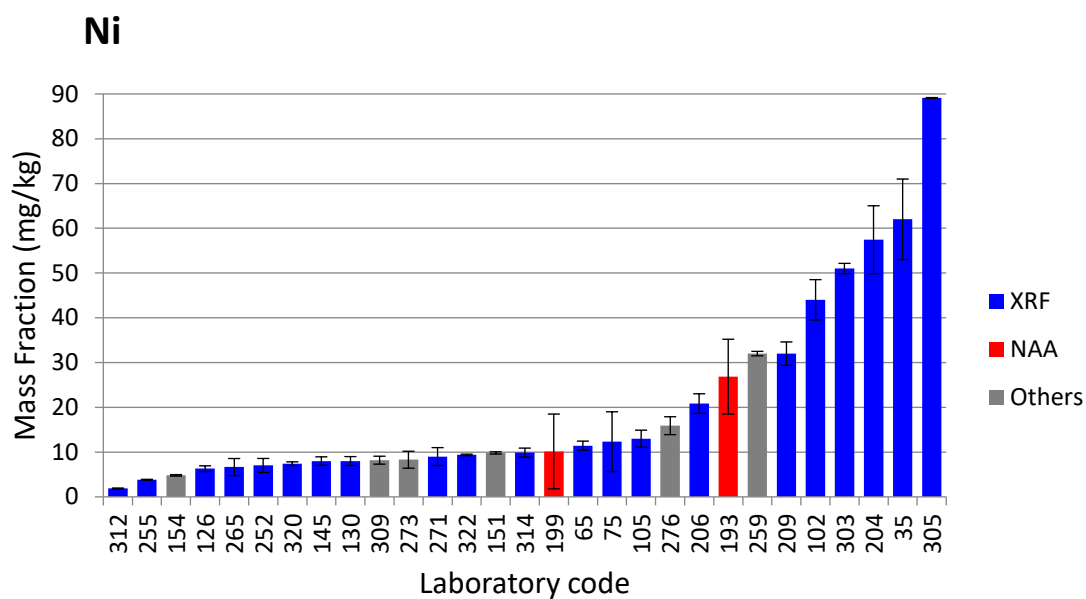


FIG. 107. Bar chart distributions of results for measurand Ni (Clay sample).

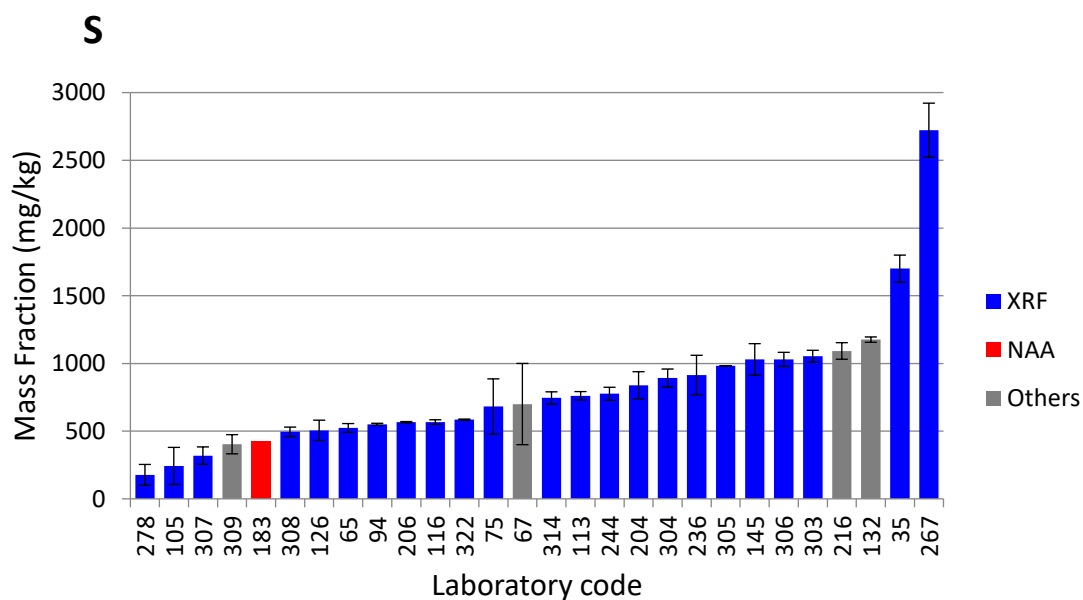


FIG. 108. Bar chart distributions of results for measurand S (Clay sample).

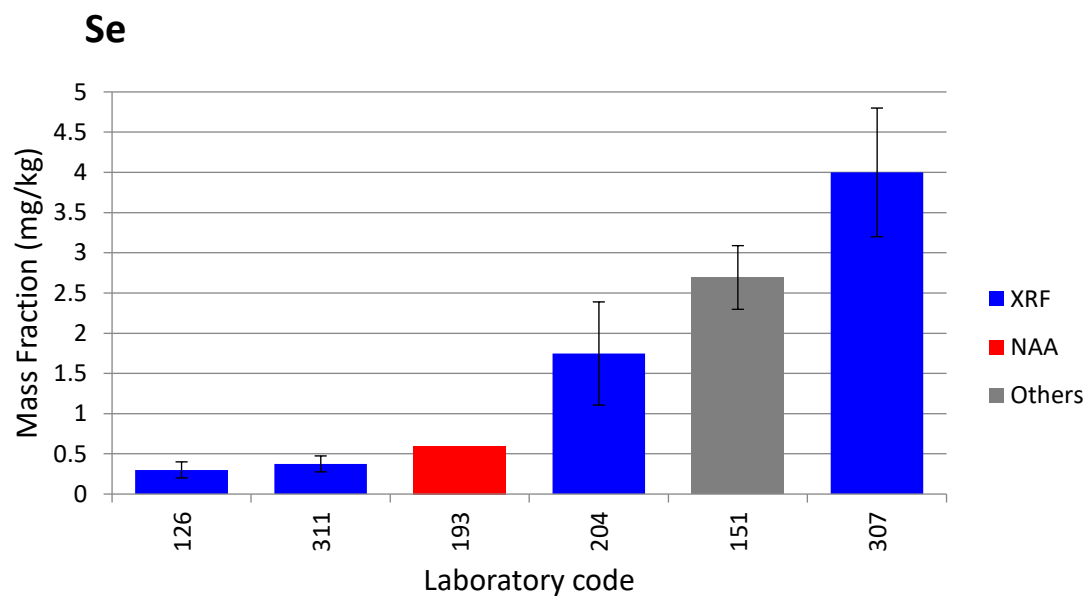


FIG. 109. Bar chart distributions of results for measurand Se (Clay sample).

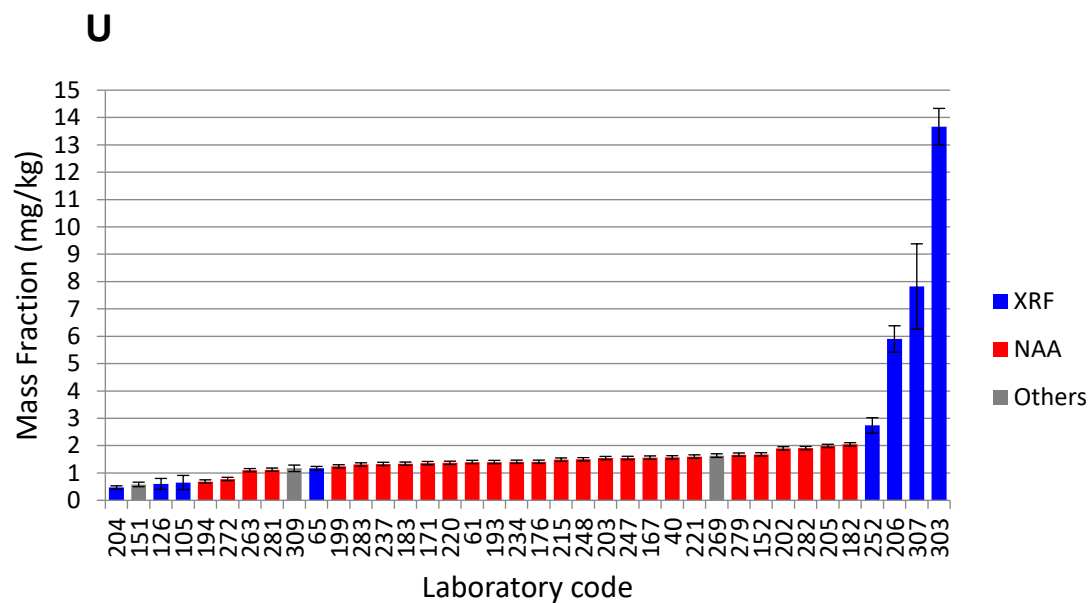


FIG. 110. Bar chart distributions of results for measurand U (Clay sample).

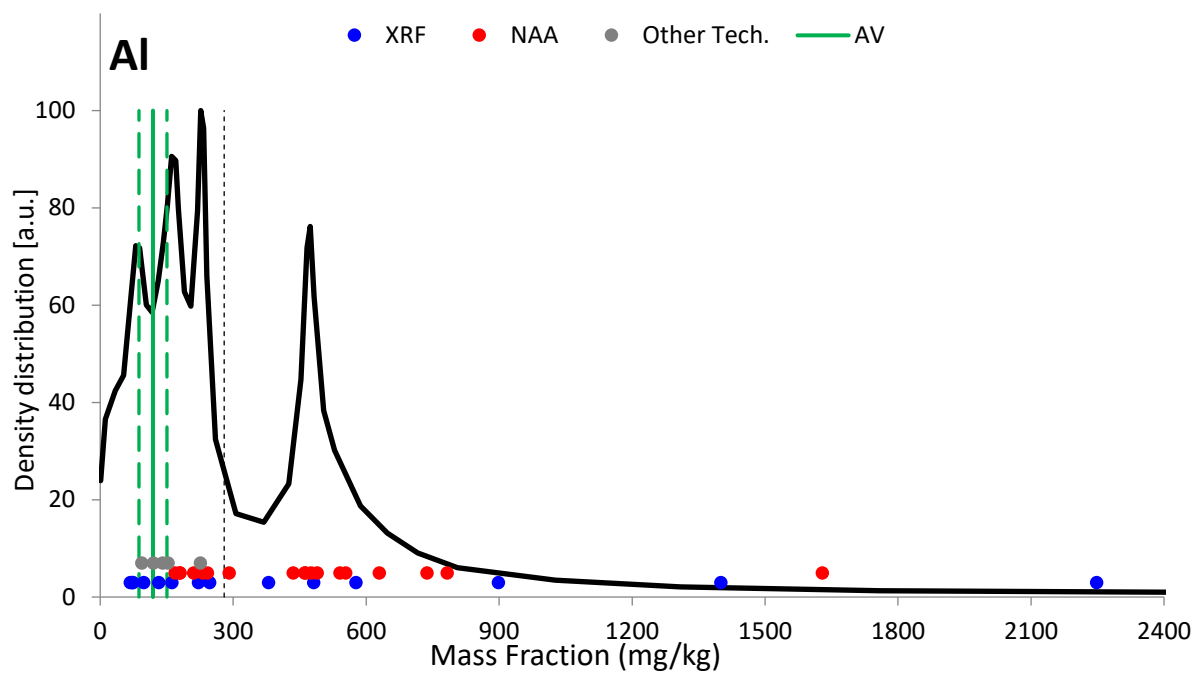


FIG.111. Density distribution function for the measurand Al (Plant sample).

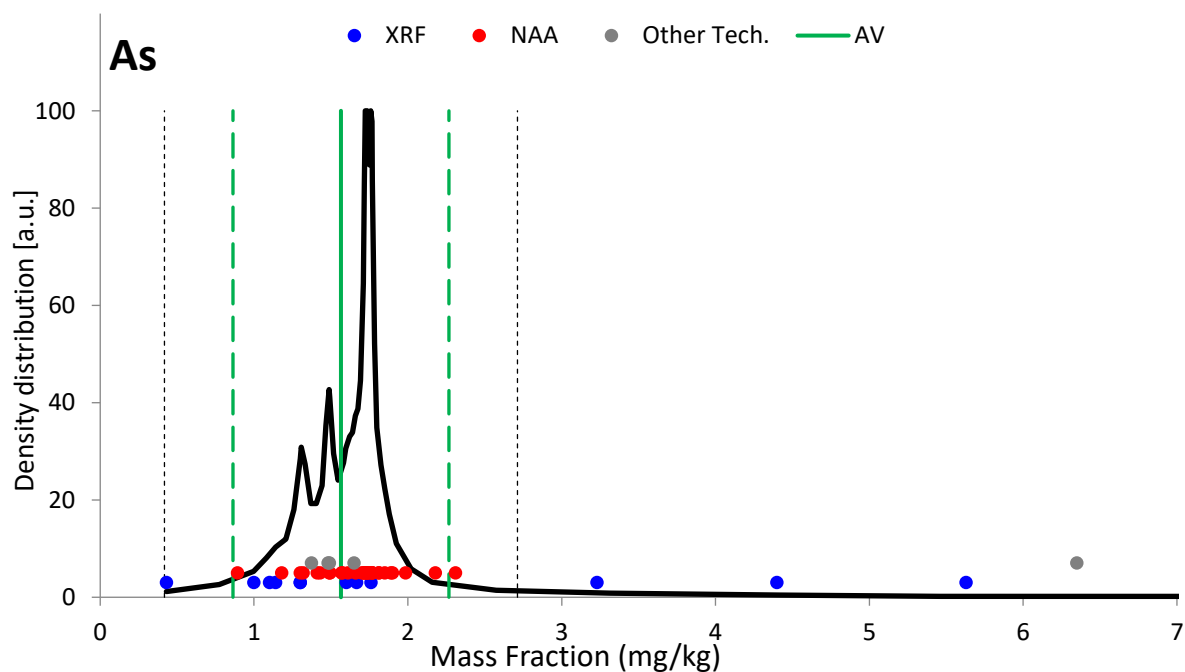


FIG.112. Density distribution function for the measurand As (Plant sample).

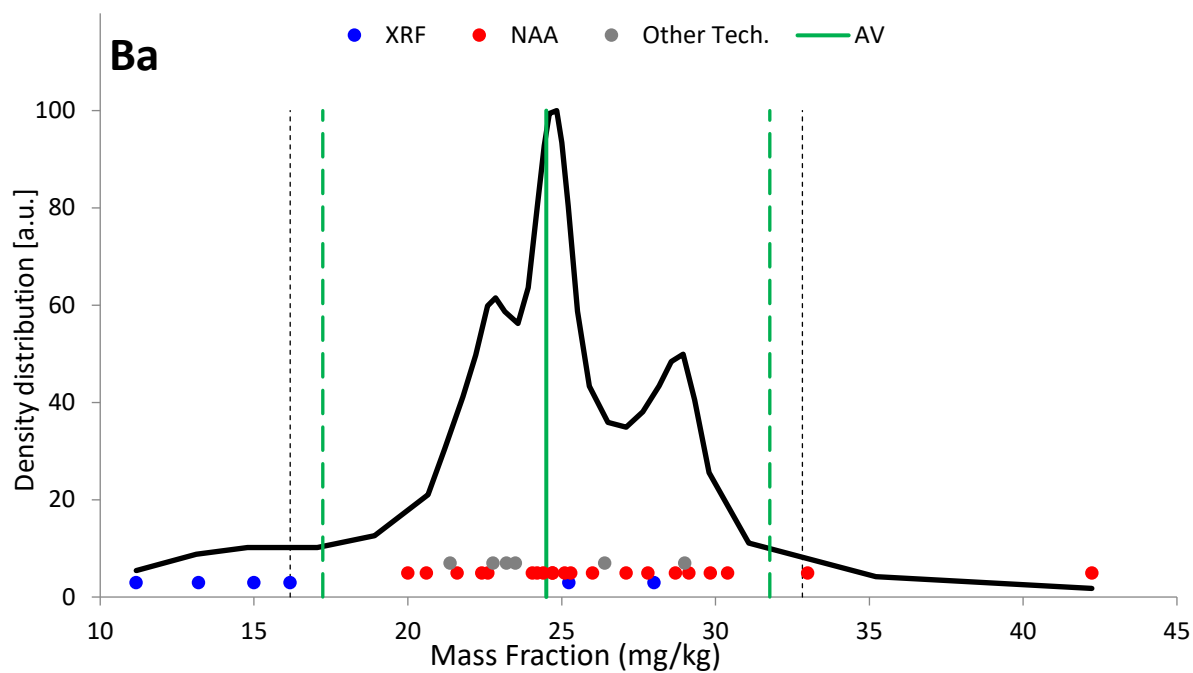


FIG.113. Density distribution function for the measurand Ba (Plant sample).

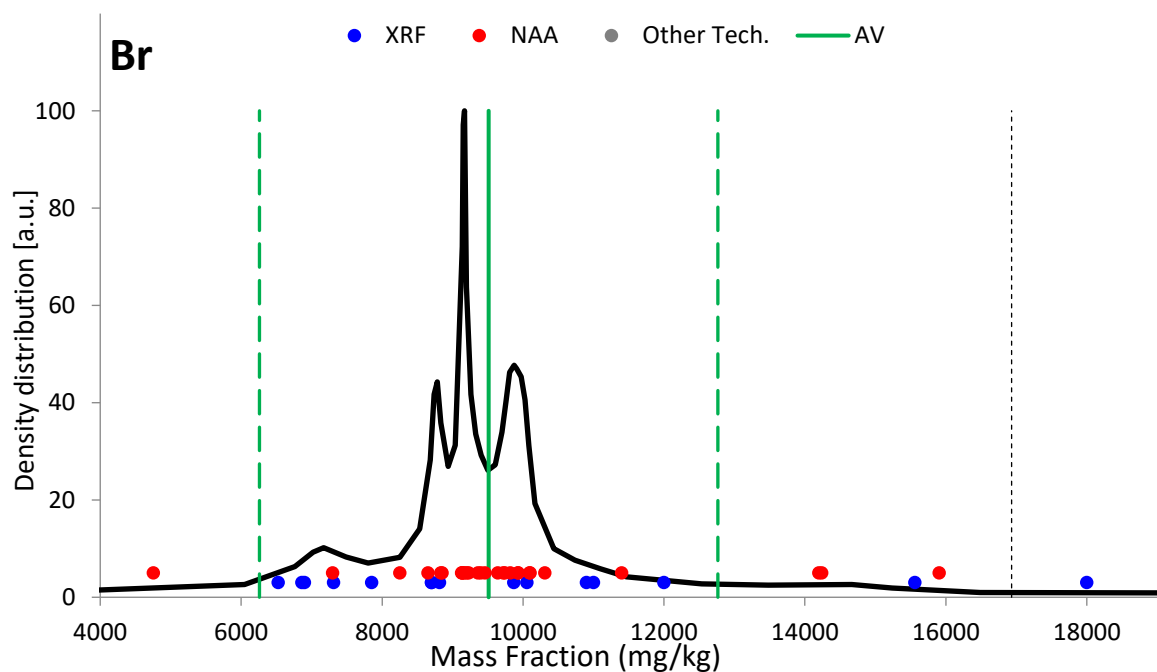


FIG.114. Density distribution function for the measurand Br (Plant sample).

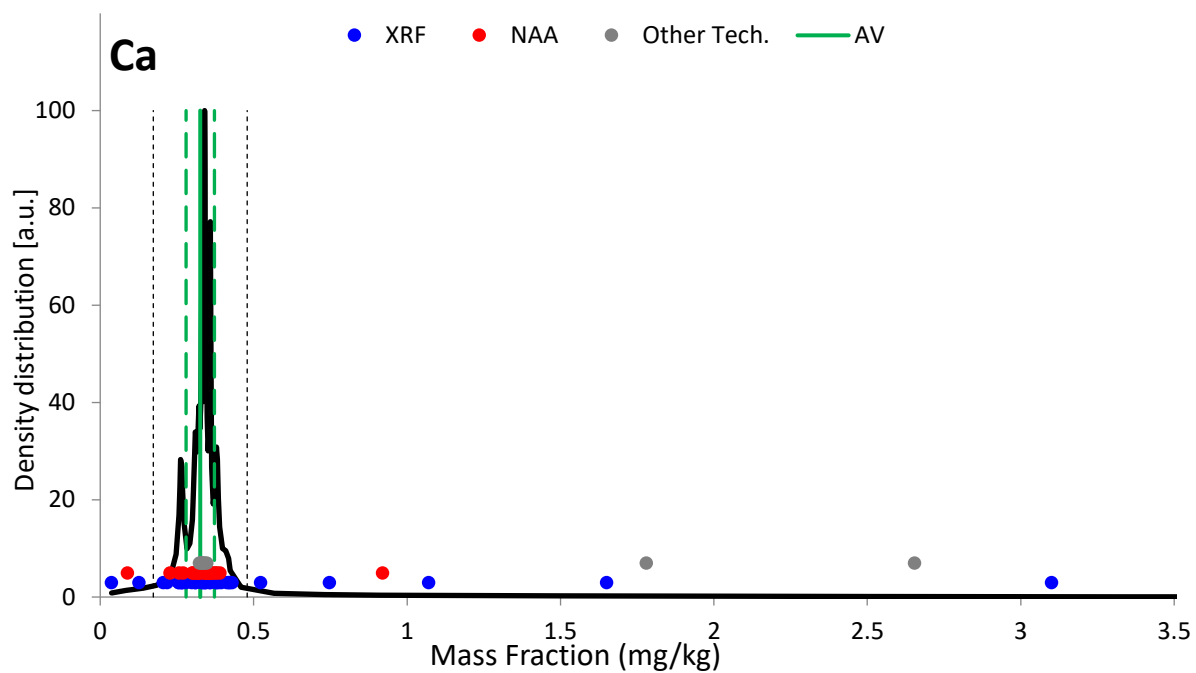


FIG.115. Density distribution function for the measurand Ca (Plant sample).

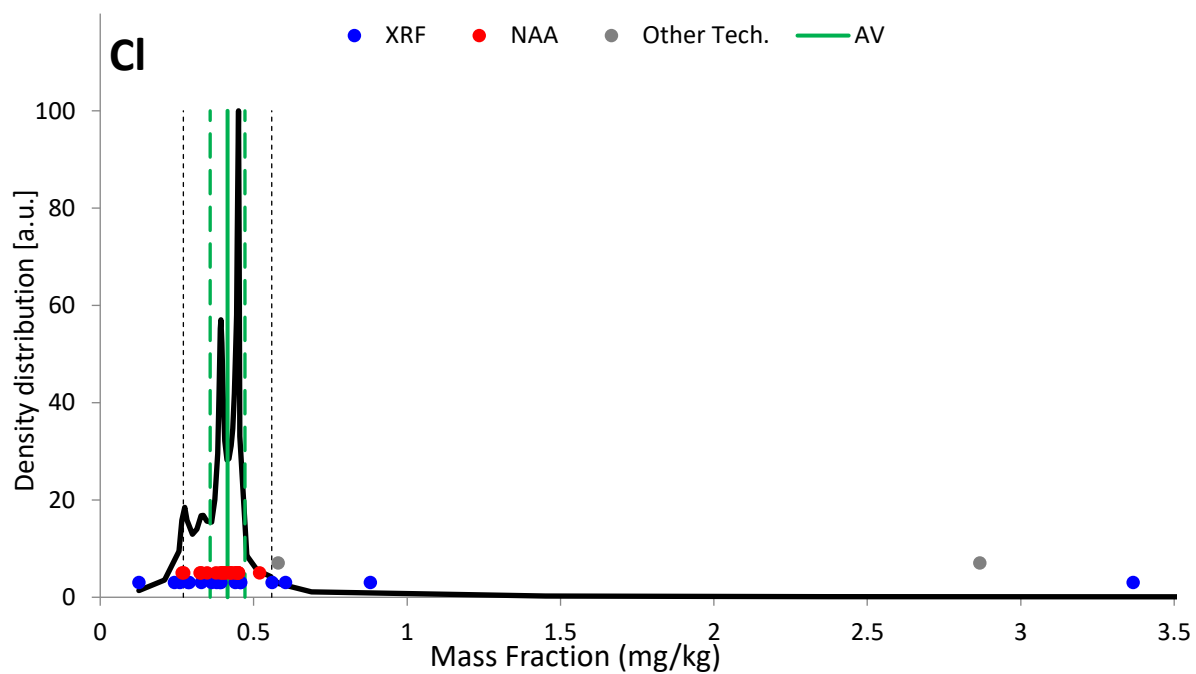


FIG.116. Density distribution function for the measurand Cl (Plant sample).

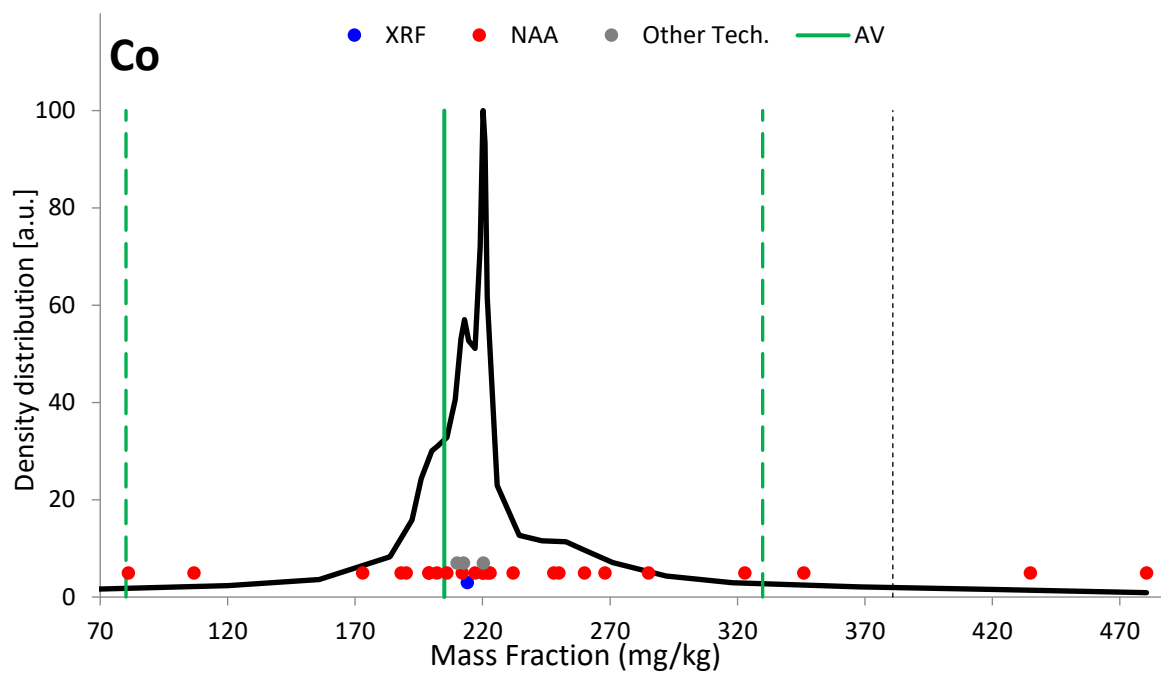


FIG.117. Density distribution function for the measurand Co (Plant sample).

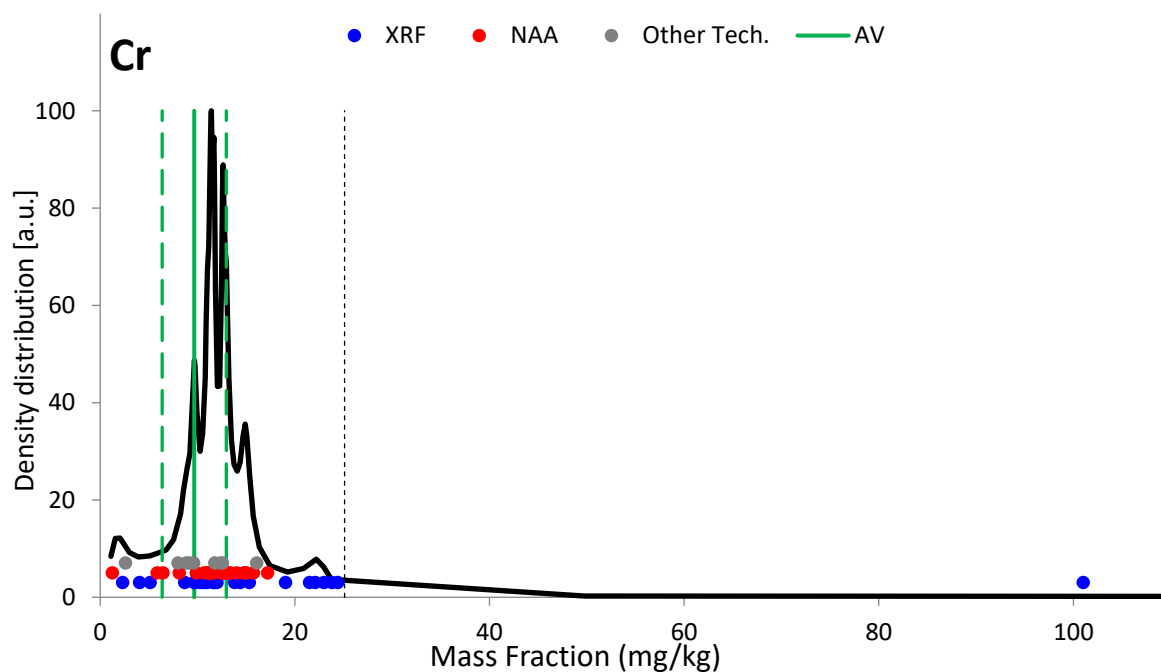


FIG.118. Density distribution function for the measurand Cr (Plant sample).

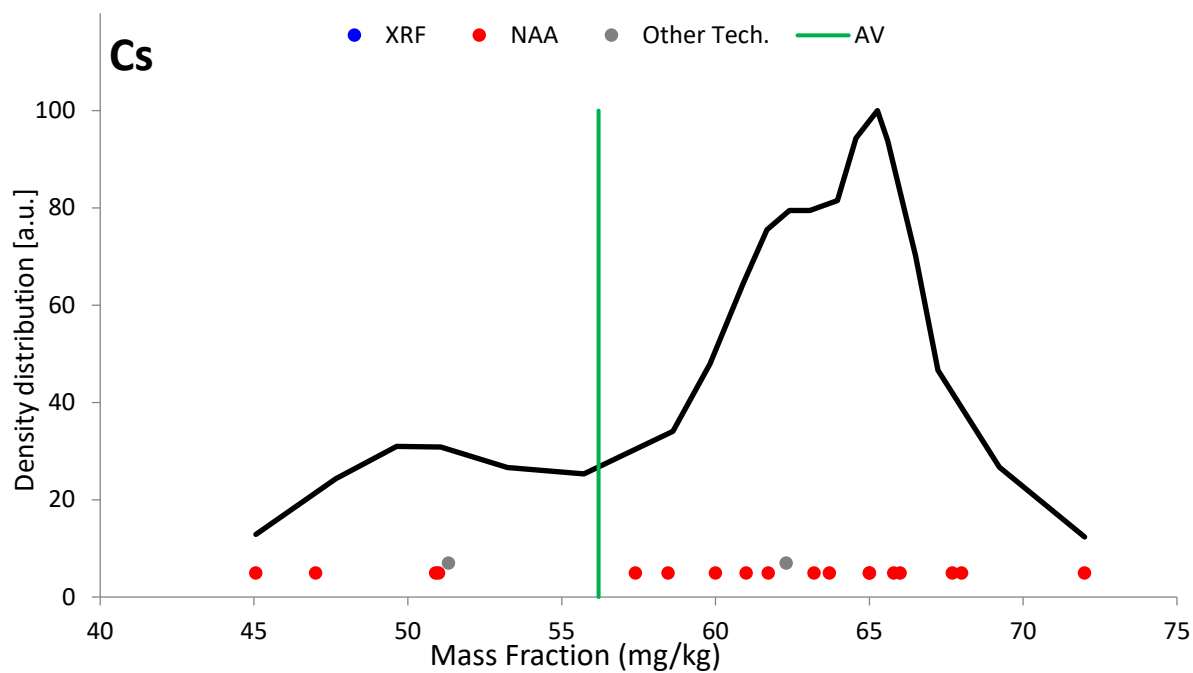


FIG.119. Density distribution function for the measurand Cs (Plant sample).

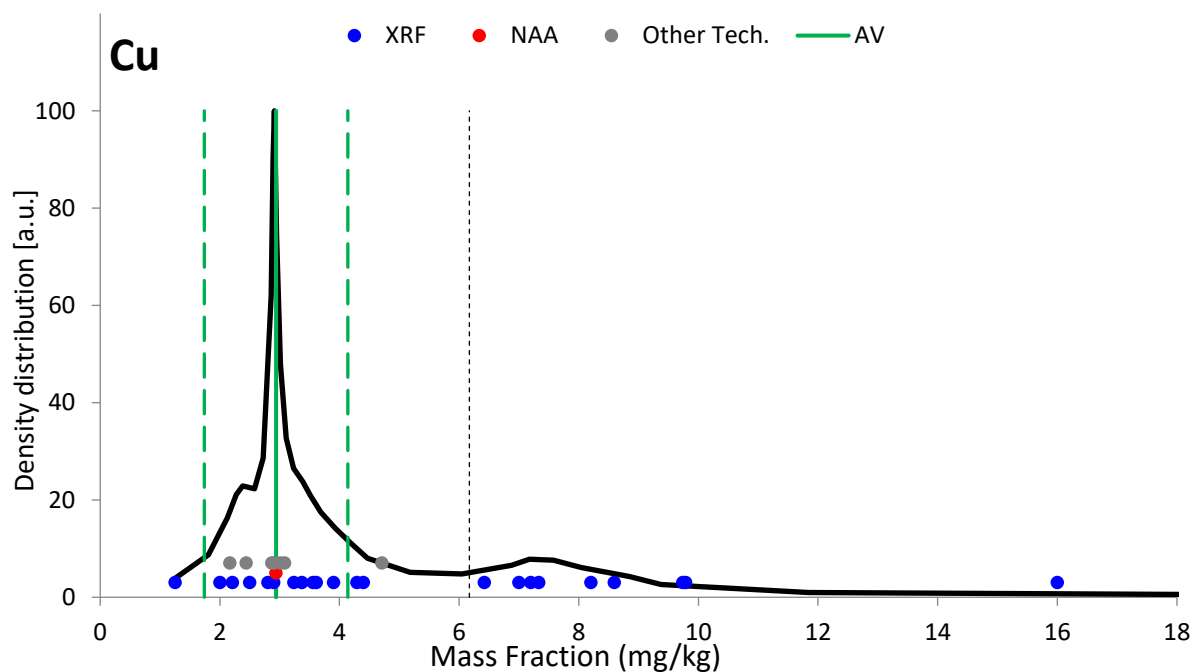


FIG.120. Density distribution function for the measurand Cu (Plant sample).

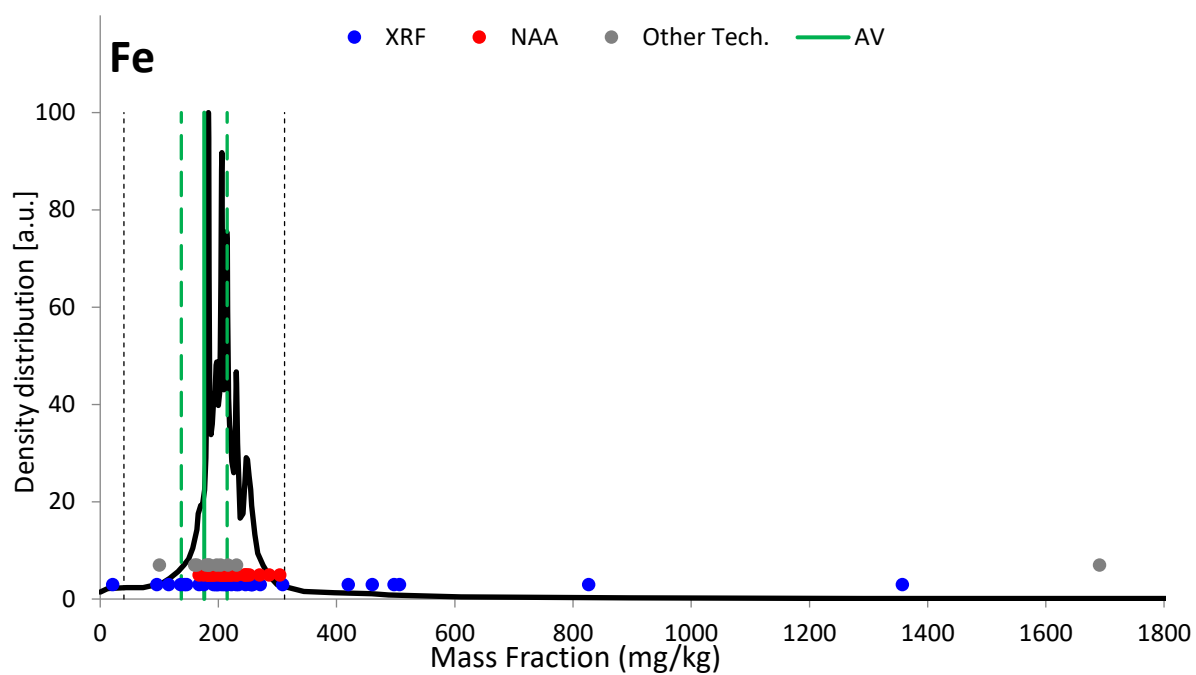


FIG.121. Density distribution function for the measurand Fe (Plant sample).

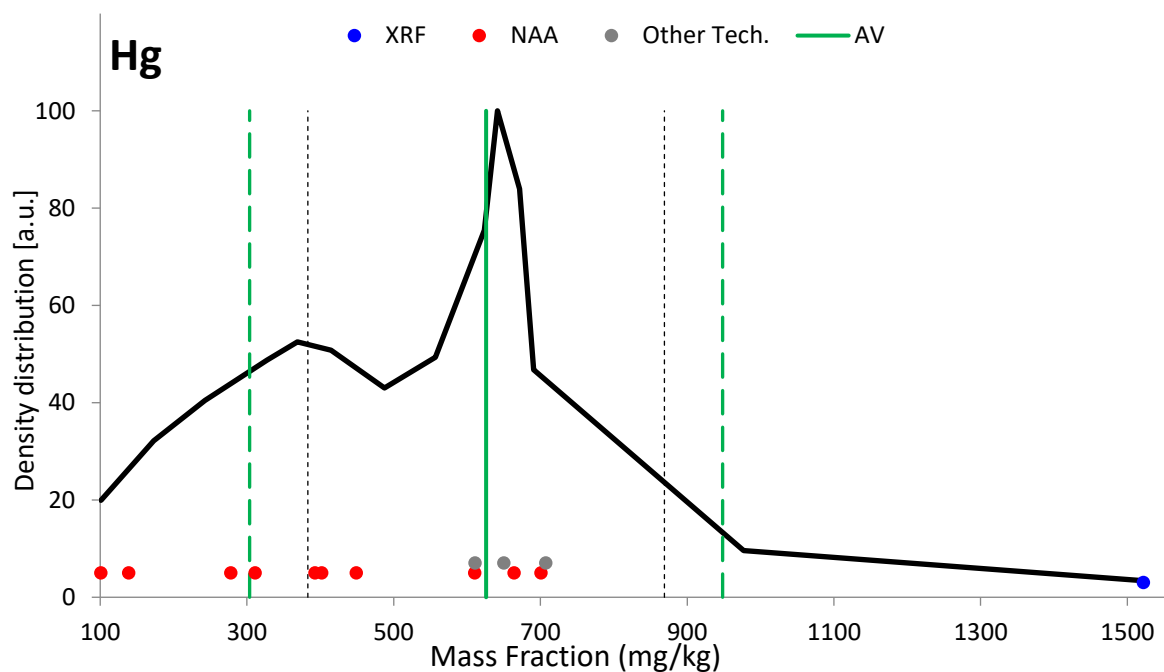


FIG.122. Density distribution function for the measurand Hg (Plant sample).

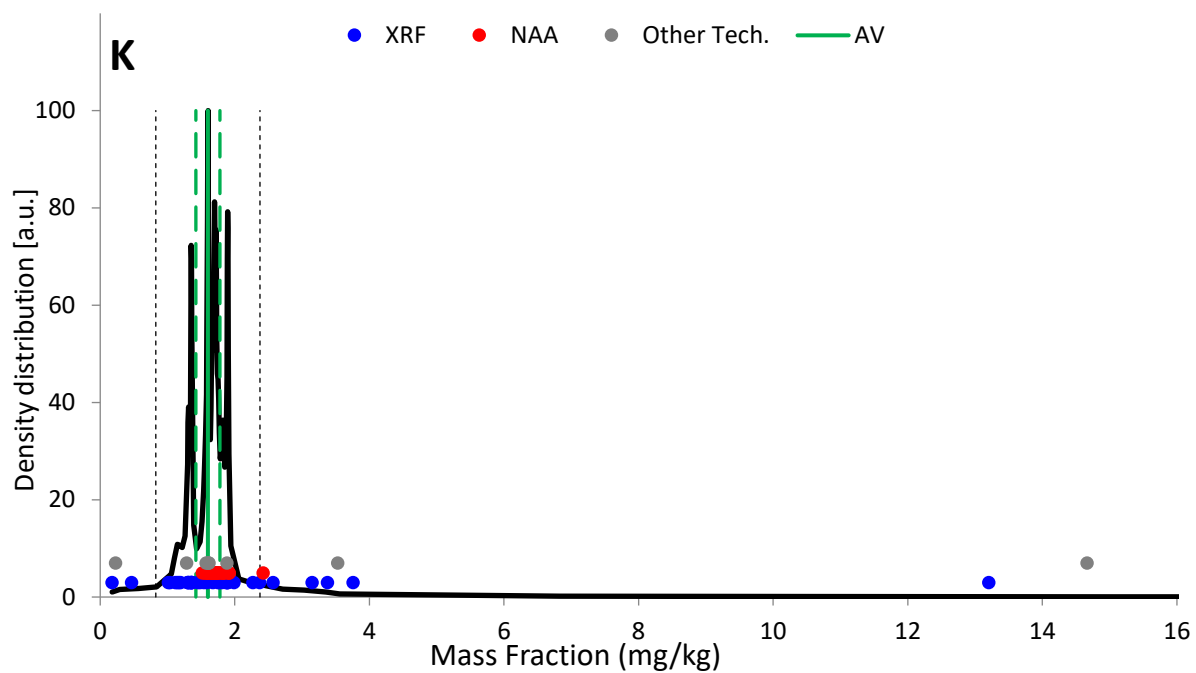


FIG.123. Density distribution function for the measurand K (Plant sample).

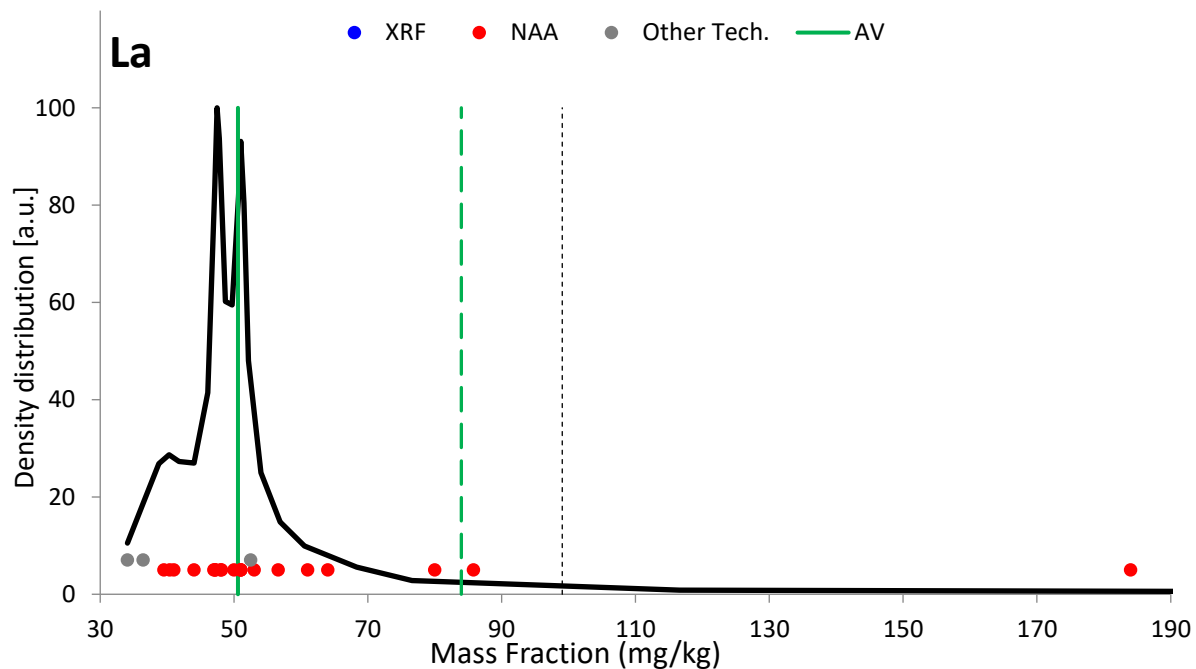


FIG.124. Density distribution function for the measurand La (Plant sample).

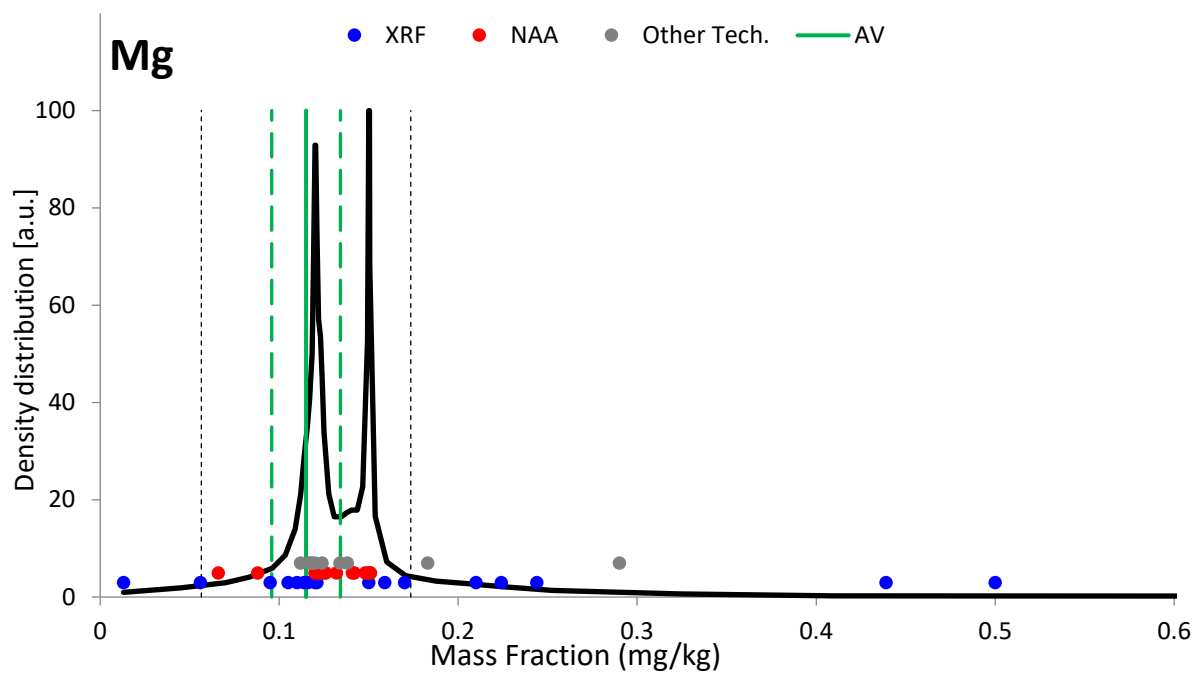


FIG.125. Density distribution function for the measurand Mg (Plant sample).

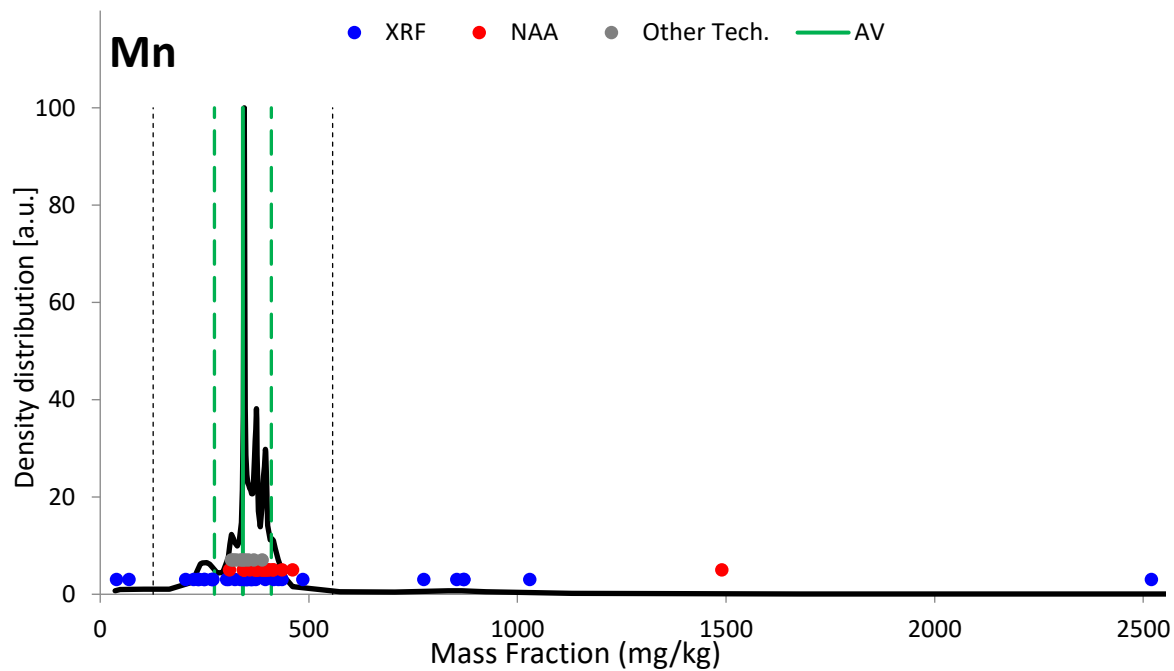


FIG.126. Density distribution function for the measurand Mn (Plant sample).

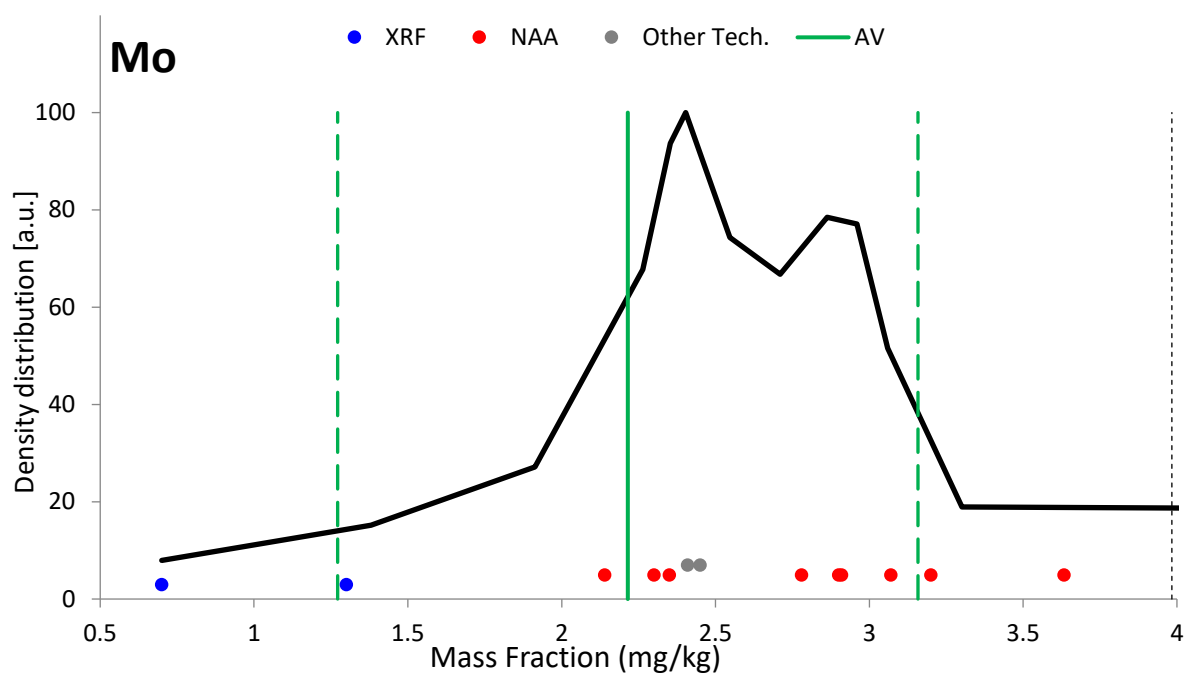


FIG.127. Density distribution function for the measurand Mo (Plant sample).

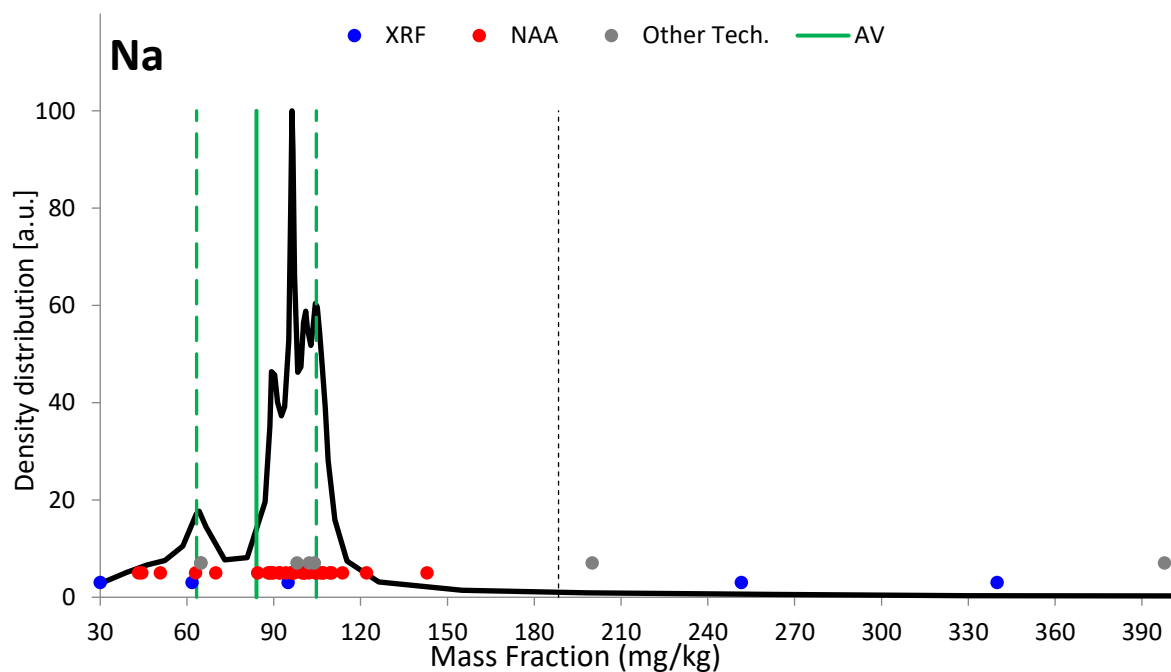


FIG.128. Density distribution function for the measurand Na (Plant sample).

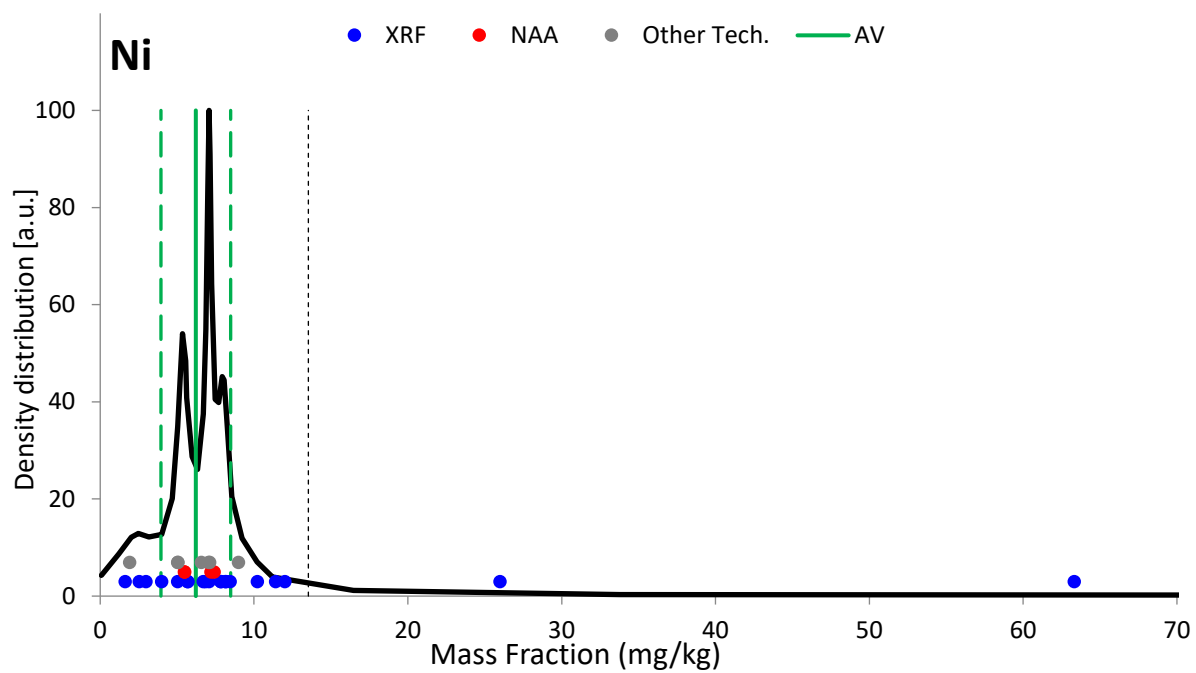


FIG.129. Density distribution function for the measurand Ni (Plant sample).

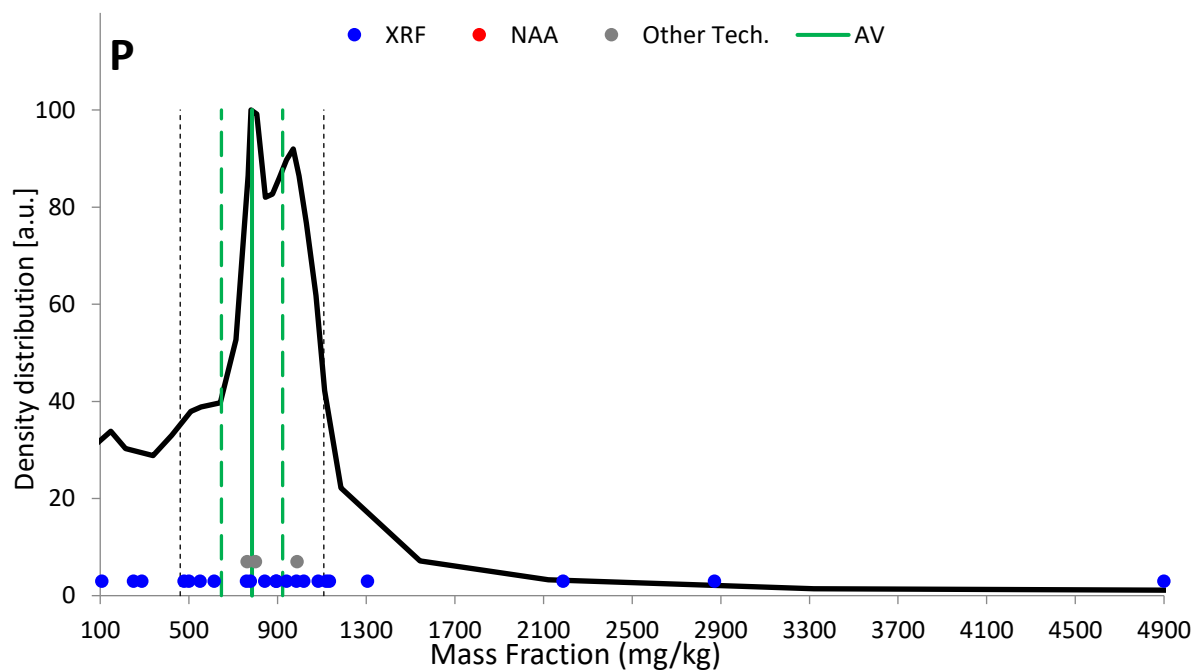


FIG.130. Density distribution function for the measurand P (Plant sample).

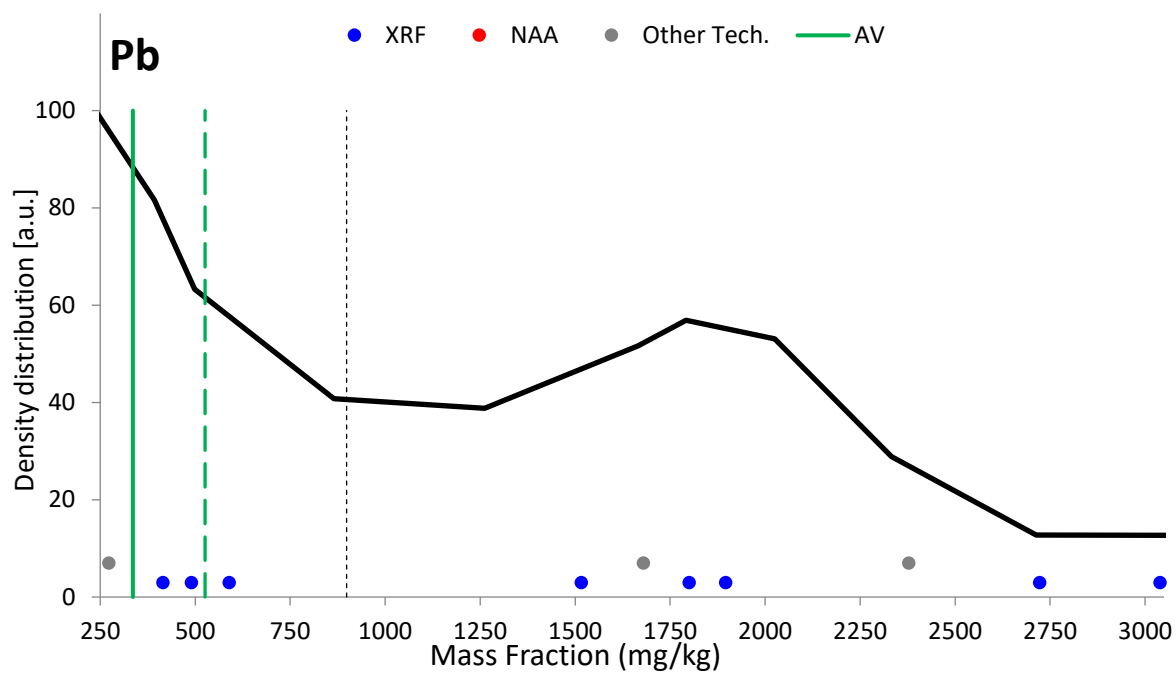


FIG.131. Density distribution function for the measurand Pb (Plant sample).

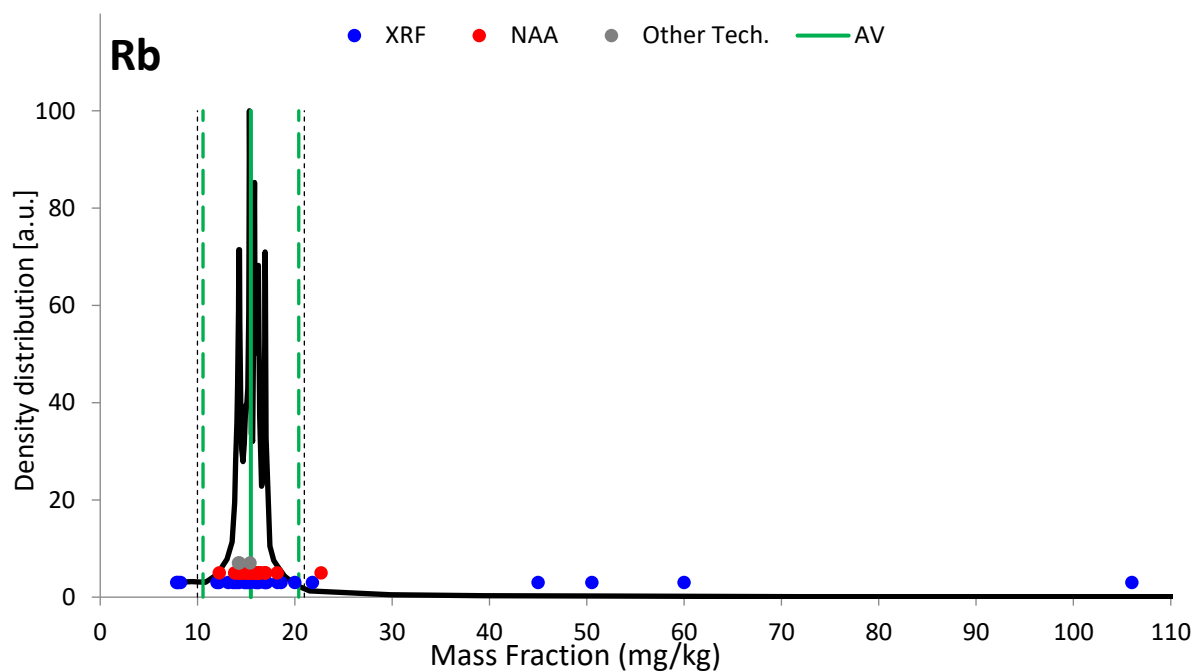


FIG.132. Density distribution function for the measurand Rb (Plant sample).

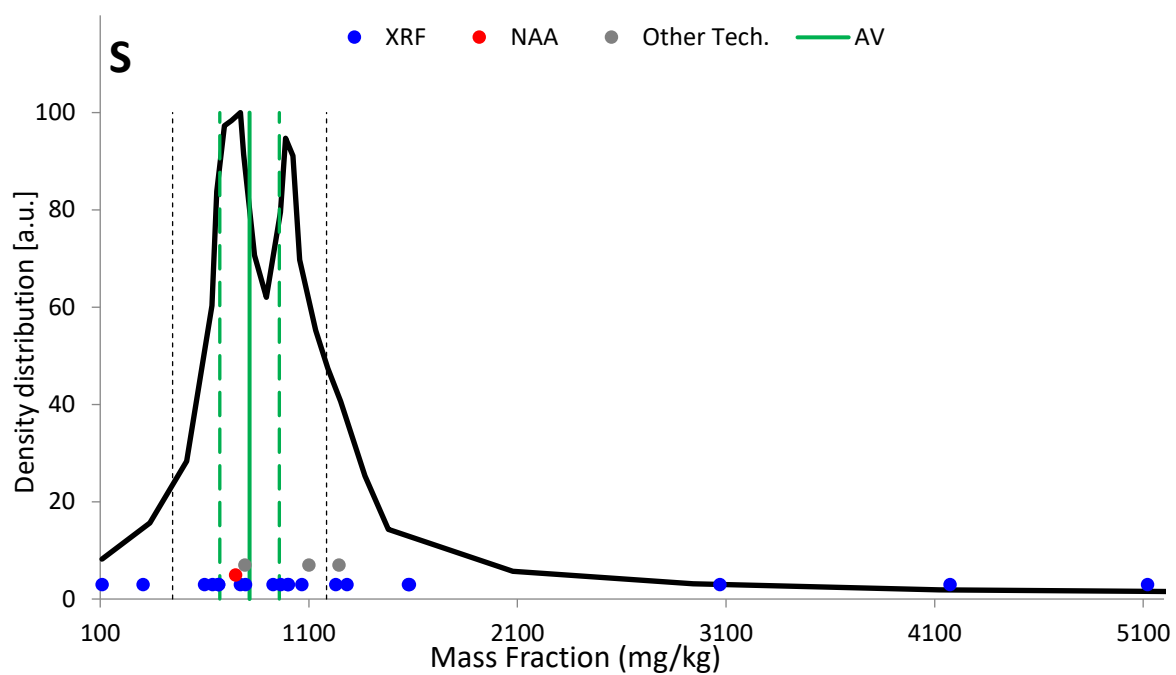


FIG.133. Density distribution function for the measurand S (Plant sample).

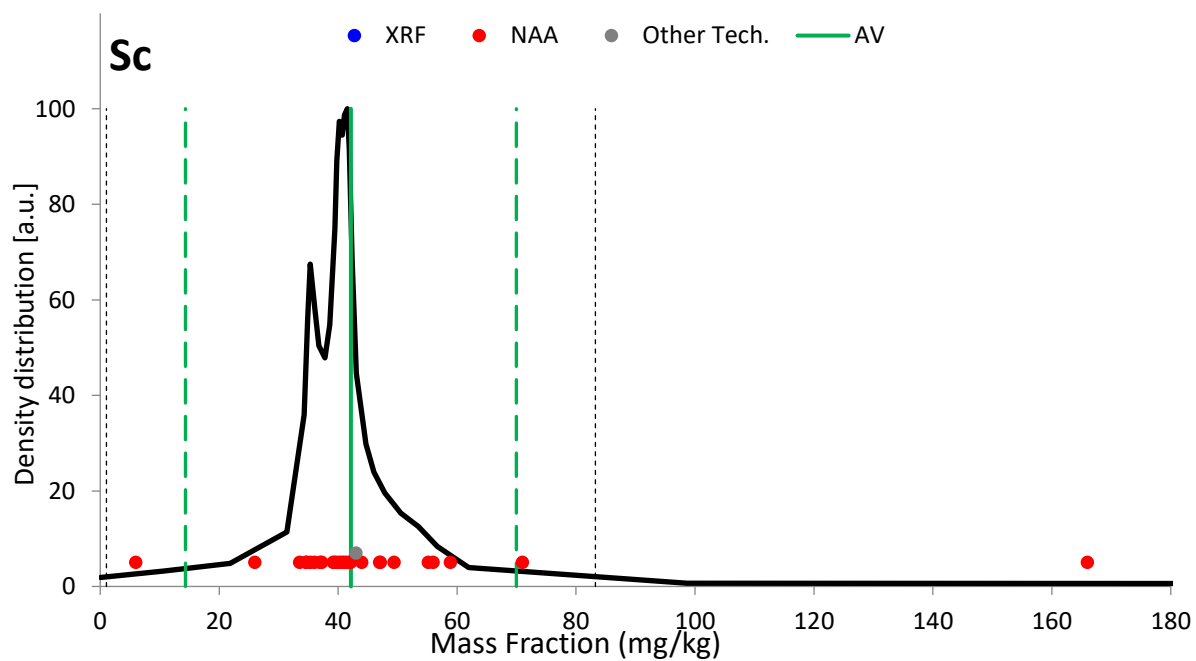


FIG.134. Density distribution function for the measurand Sc (Plant sample).

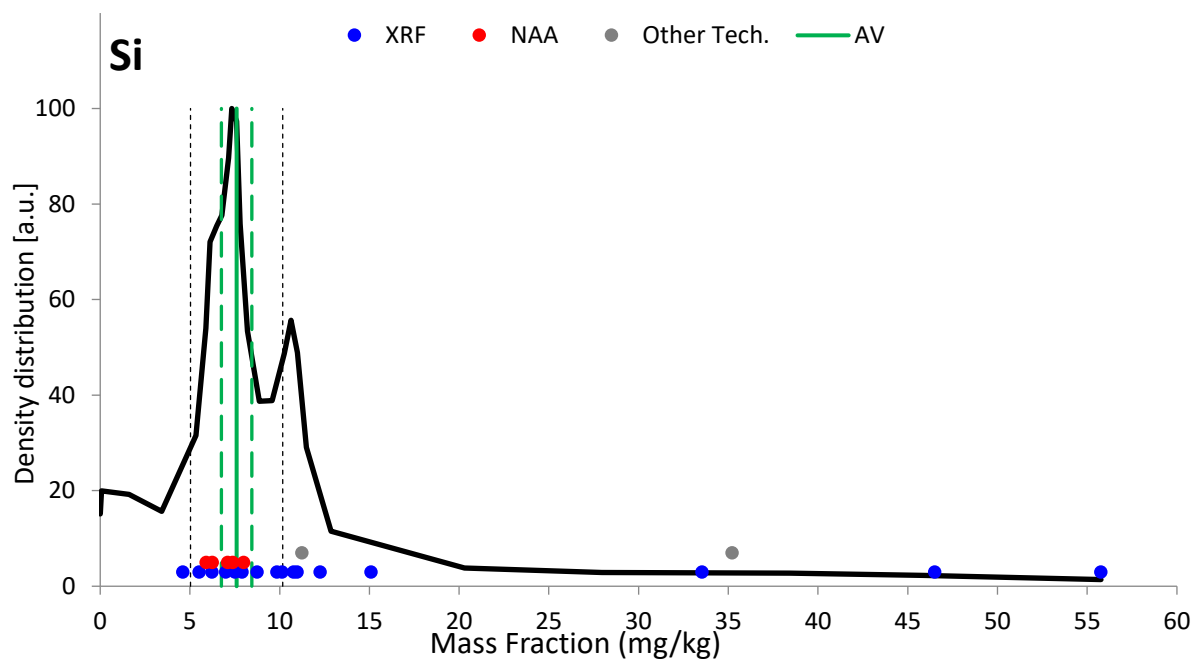


FIG.135. Density distribution function for the measurand Si (Plant sample).

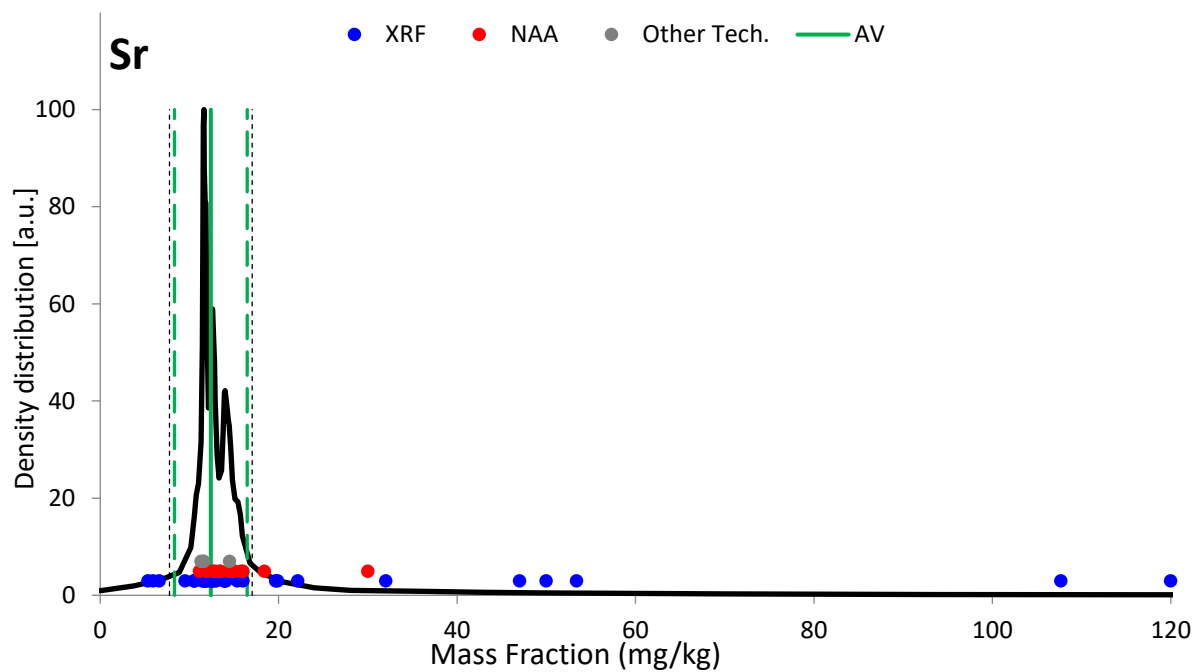


FIG.136. Density distribution function for the measurand Sr (Plant sample).

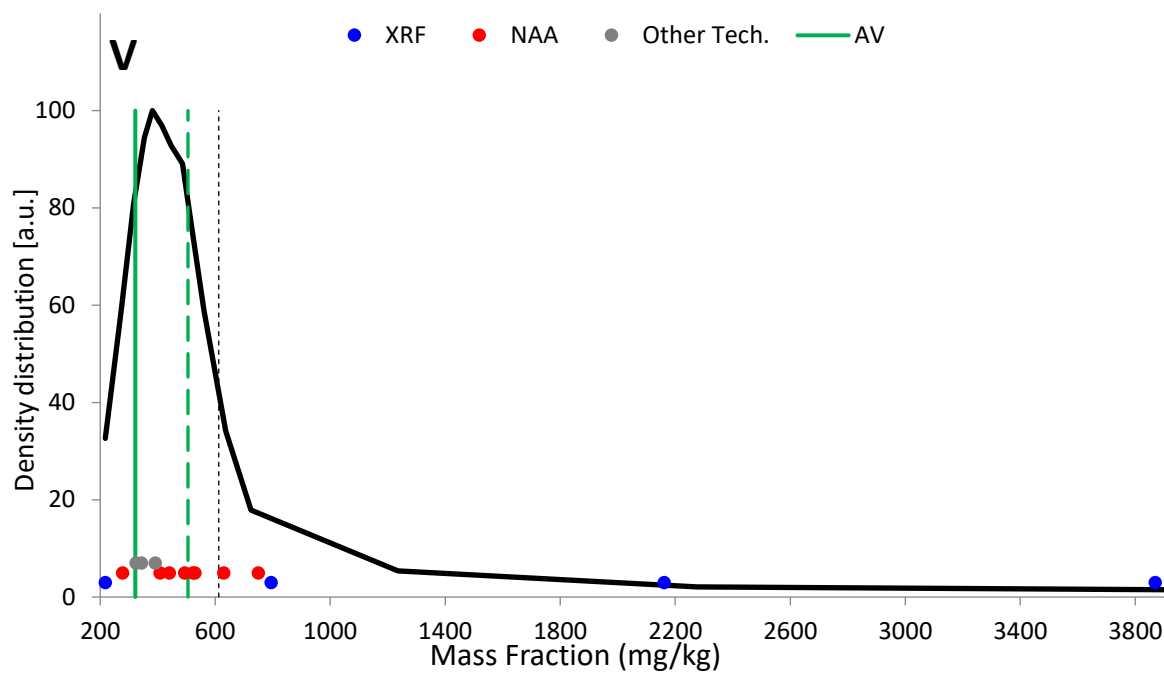


FIG.137. Density distribution function for the measurand V (Plant sample).

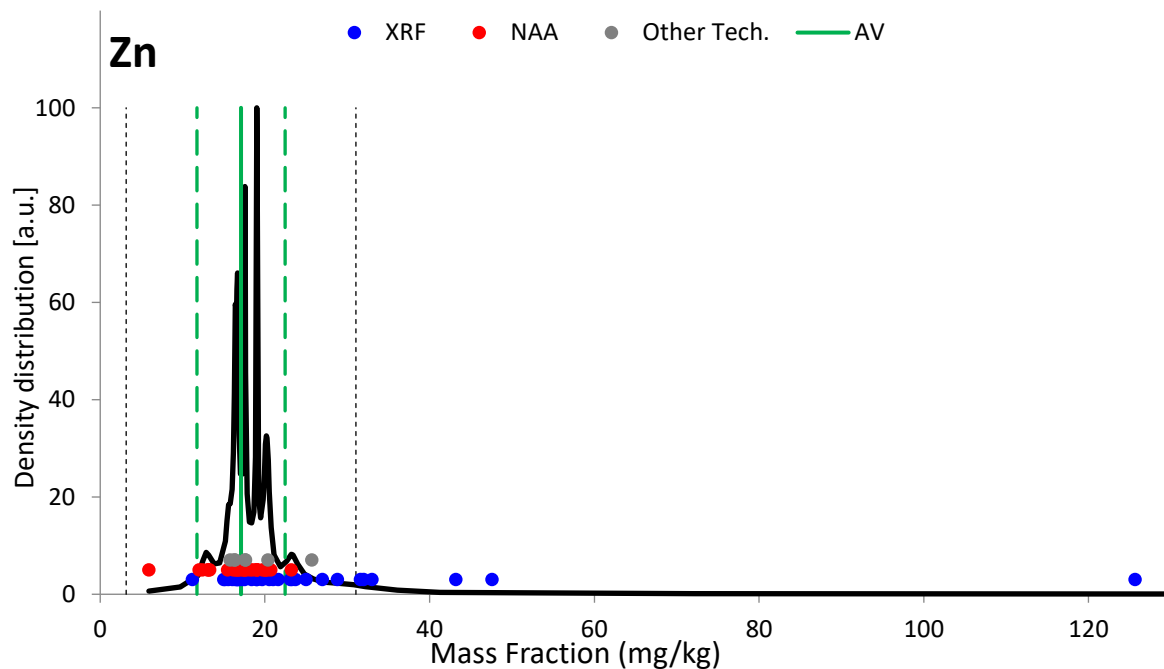


FIG.138. Density distribution function for the measurand Zn (Plant sample).

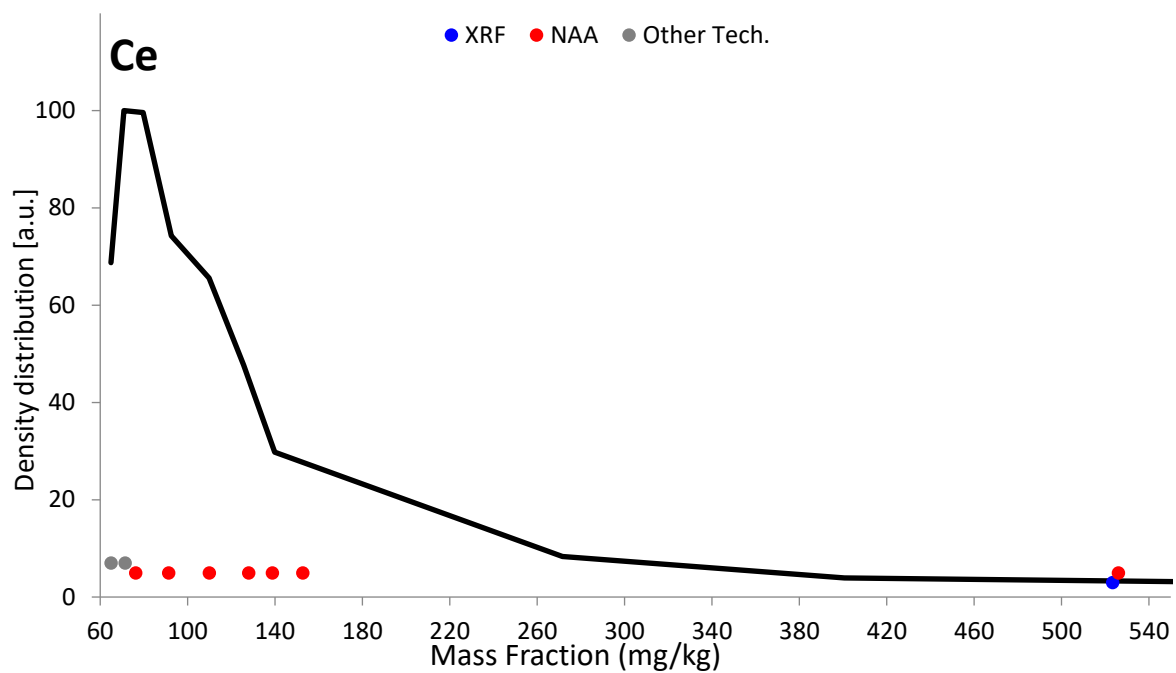


FIG. 139. Density distribution function for the measurand Ce (Plant sample).

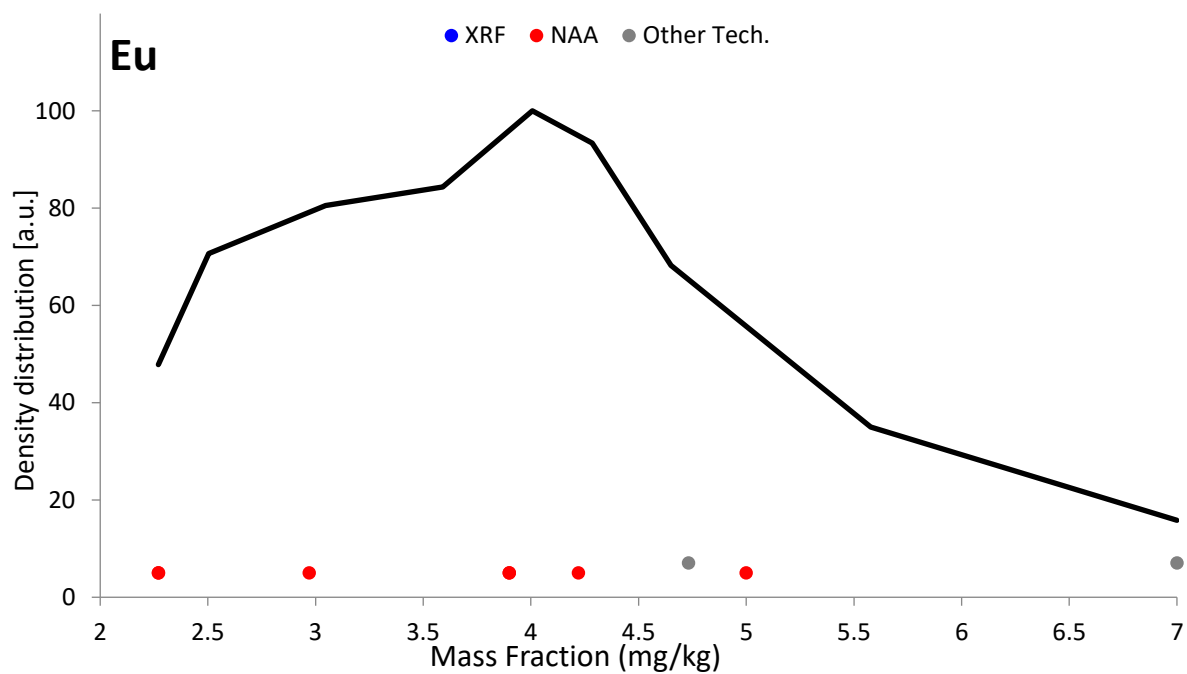


FIG. 140. Density distribution function for the measurand Eu (Plant sample).

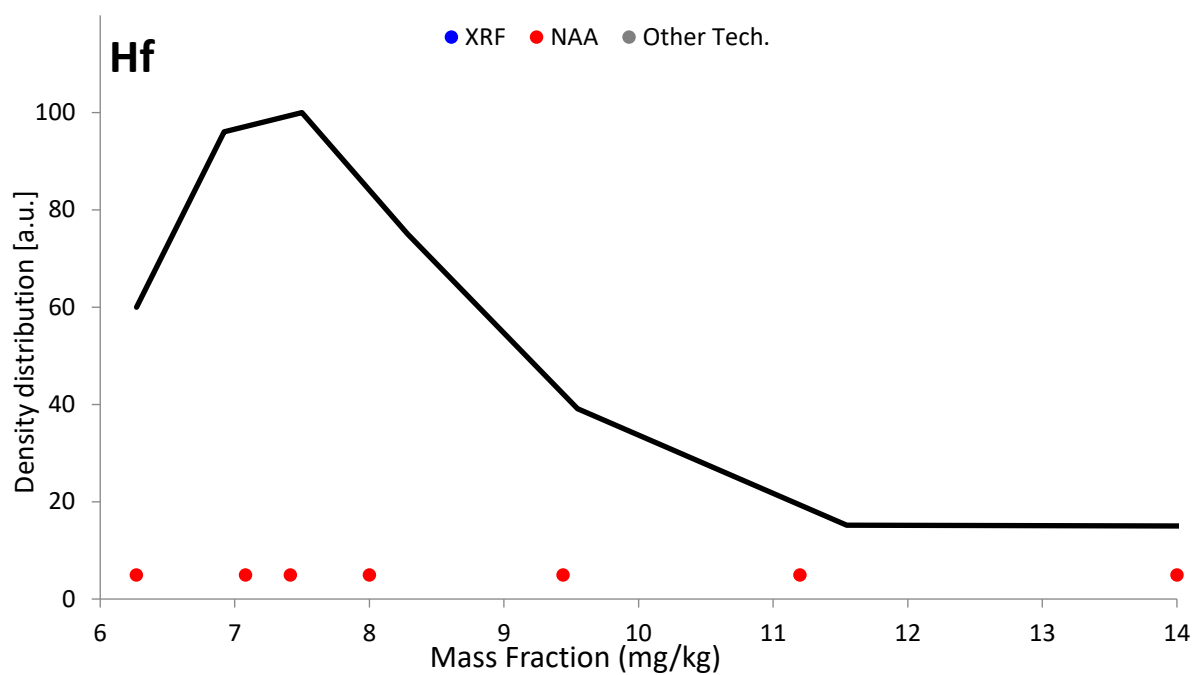


FIG. 141. Density distribution function for the measurand Hf (Plant sample).

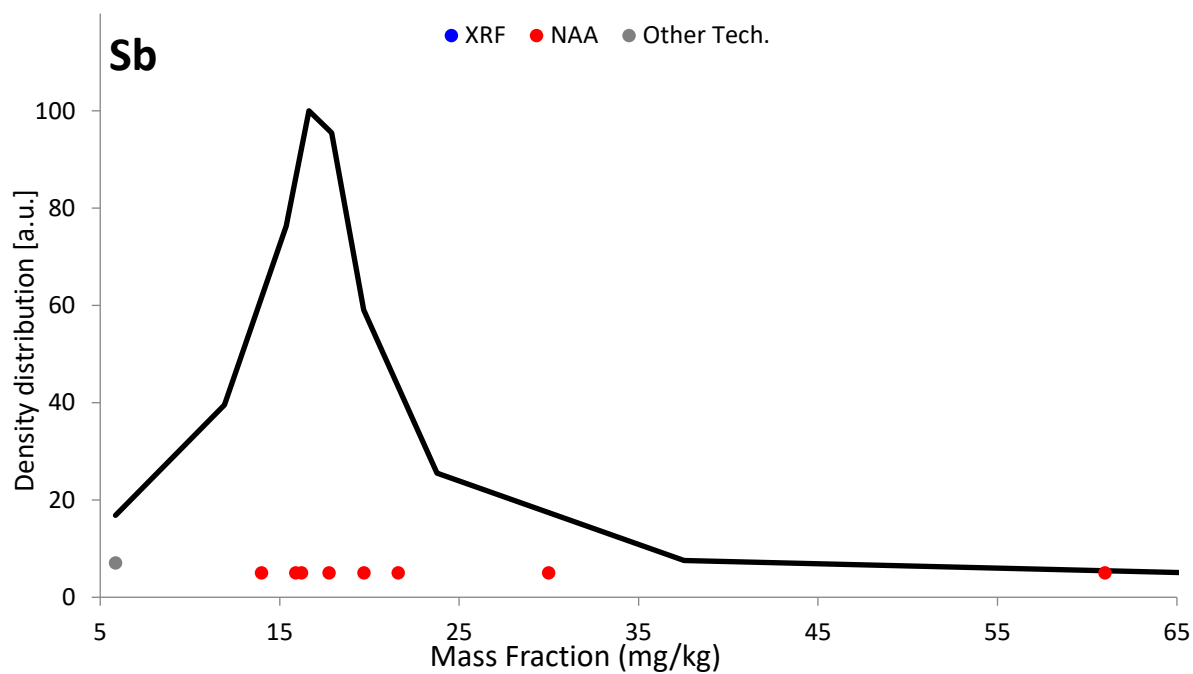


FIG. 142. Density distribution function for the measurand Sb (Plant sample).

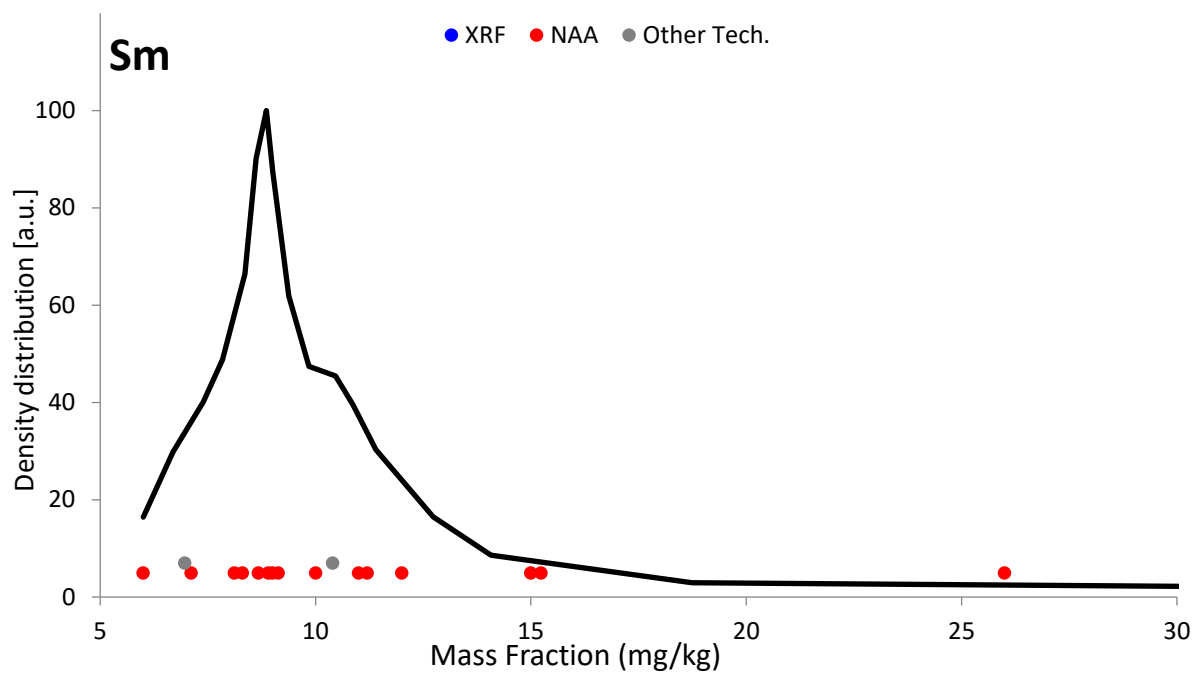


FIG. 143. Density distribution function for the measurand Sm (Plant sample).

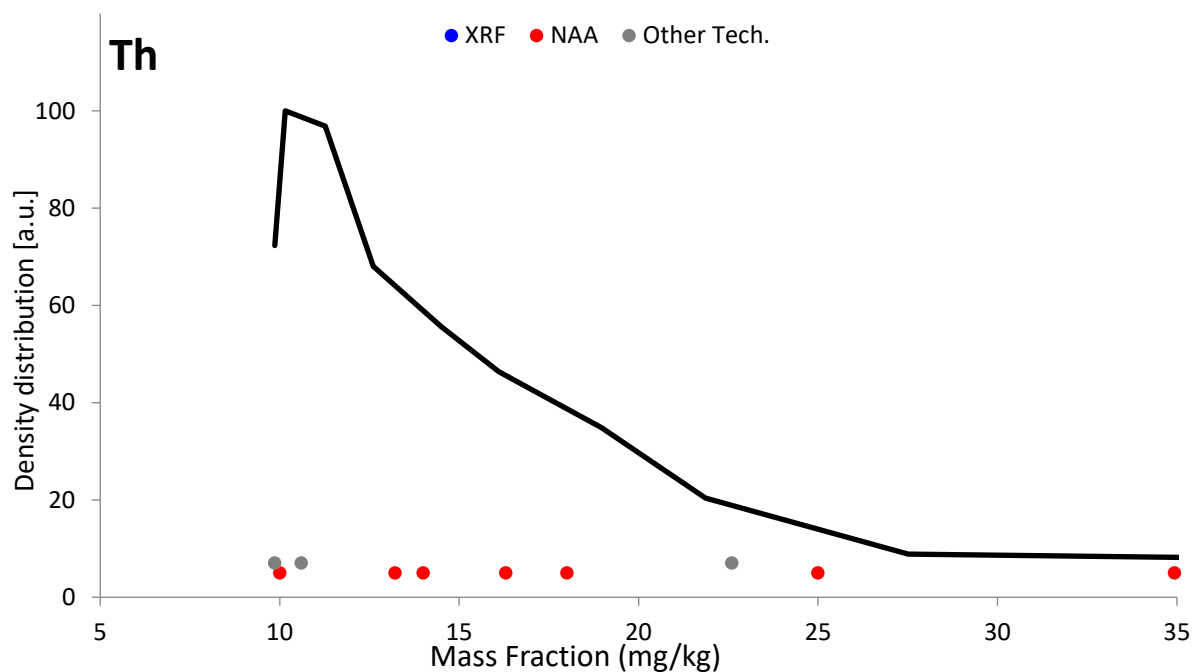


FIG. 144. Density distribution function for the measurand Th (Plant sample).

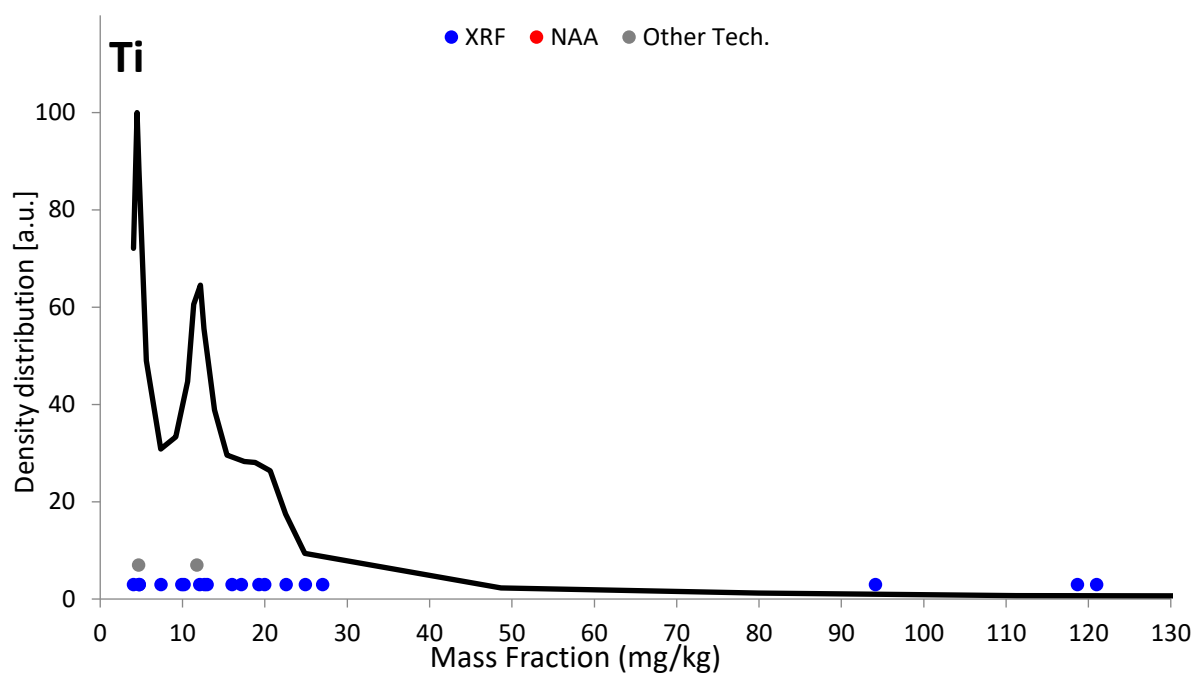


FIG. 145. Density distribution function for the measurand Ti (Plant sample).

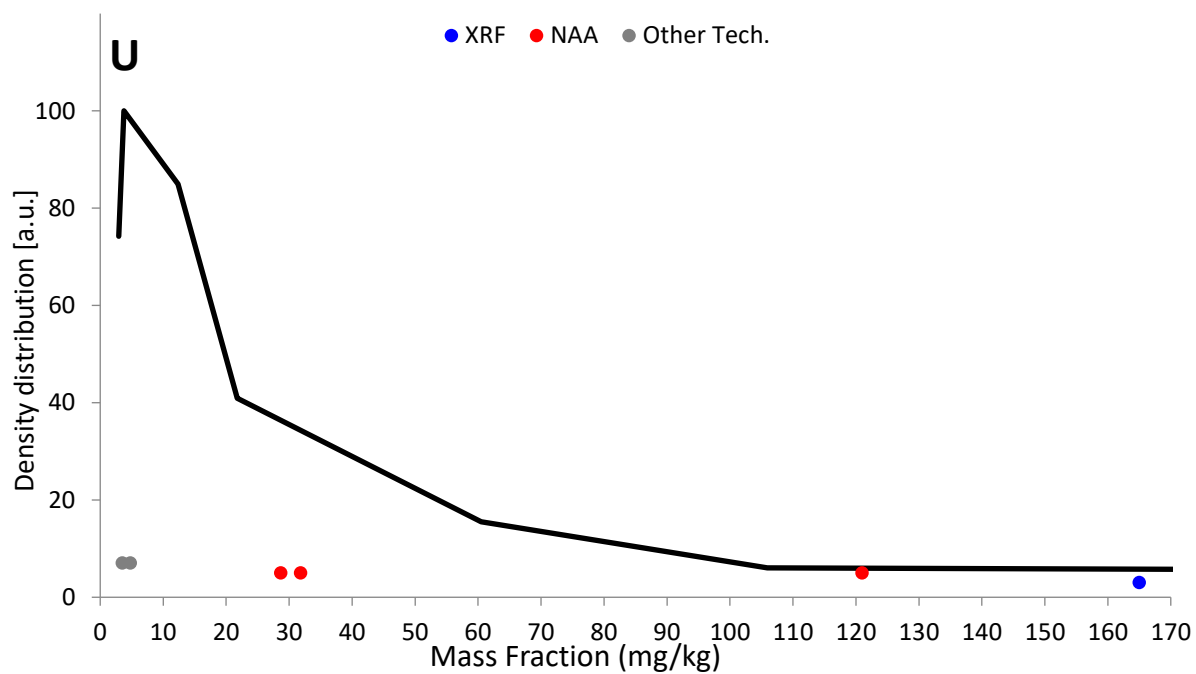


FIG. 146. Density distribution function for the measurand U (Plant sample).

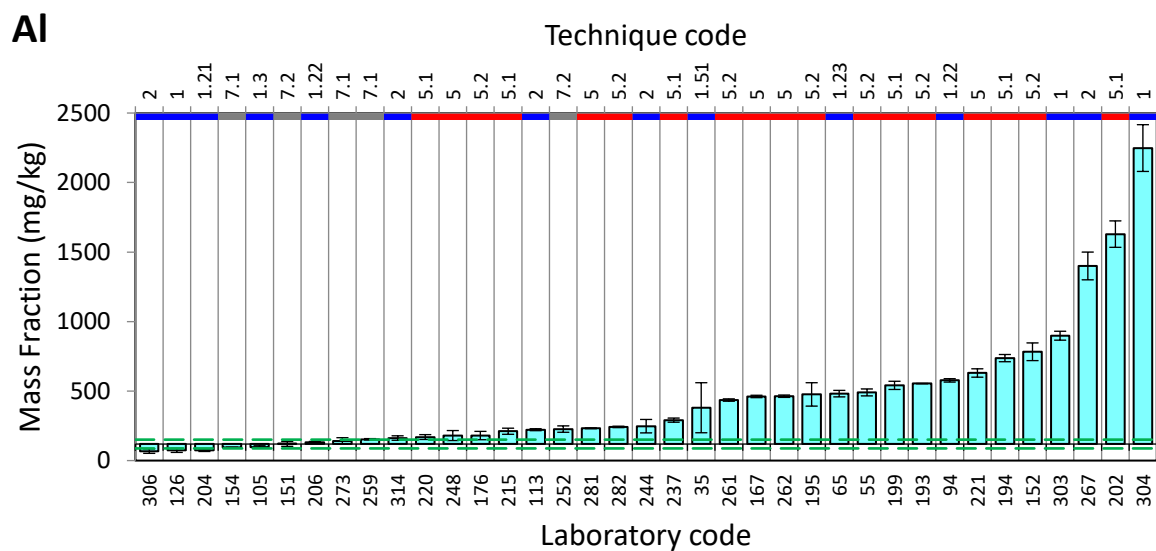


FIG. 147. Bar chart distributions of results for measurand Al (Plant sample).

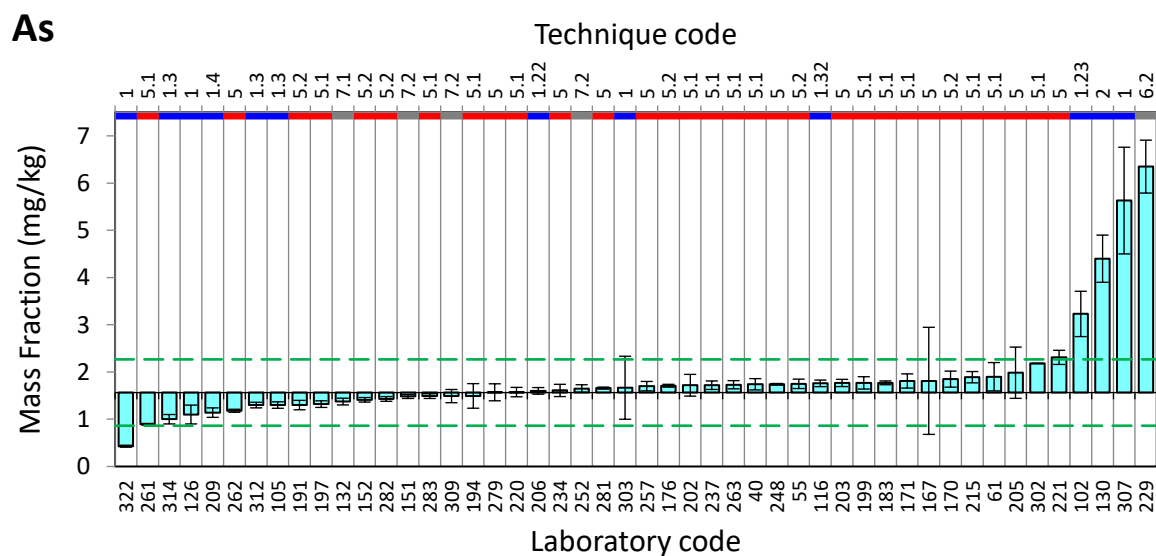


FIG. 148. Bar chart distributions of results for measurand As (Plant sample).

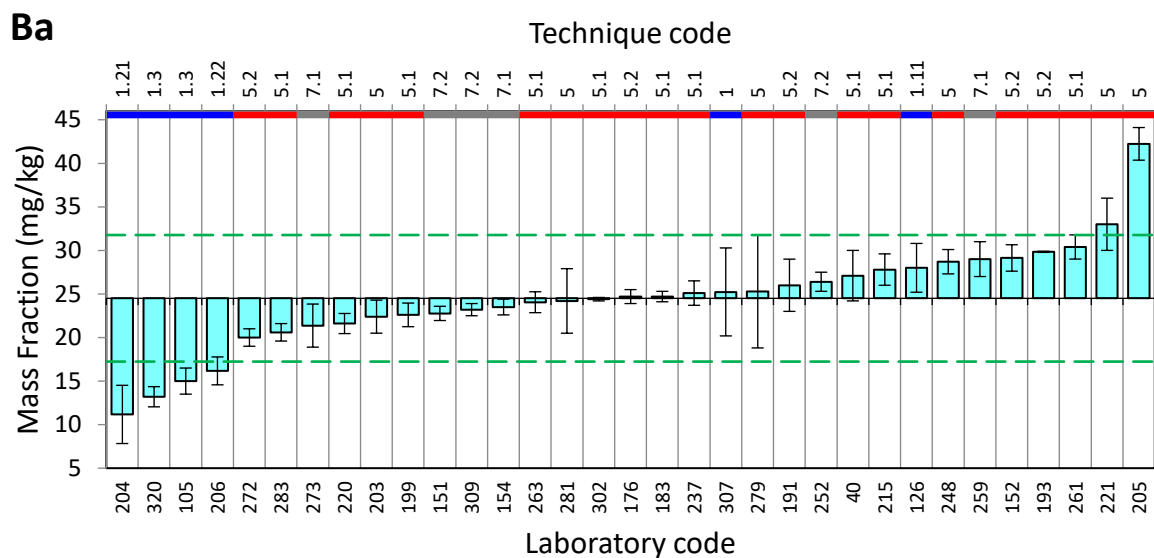


FIG. 149. Bar chart distributions of results for measurand Ba (Plant sample).

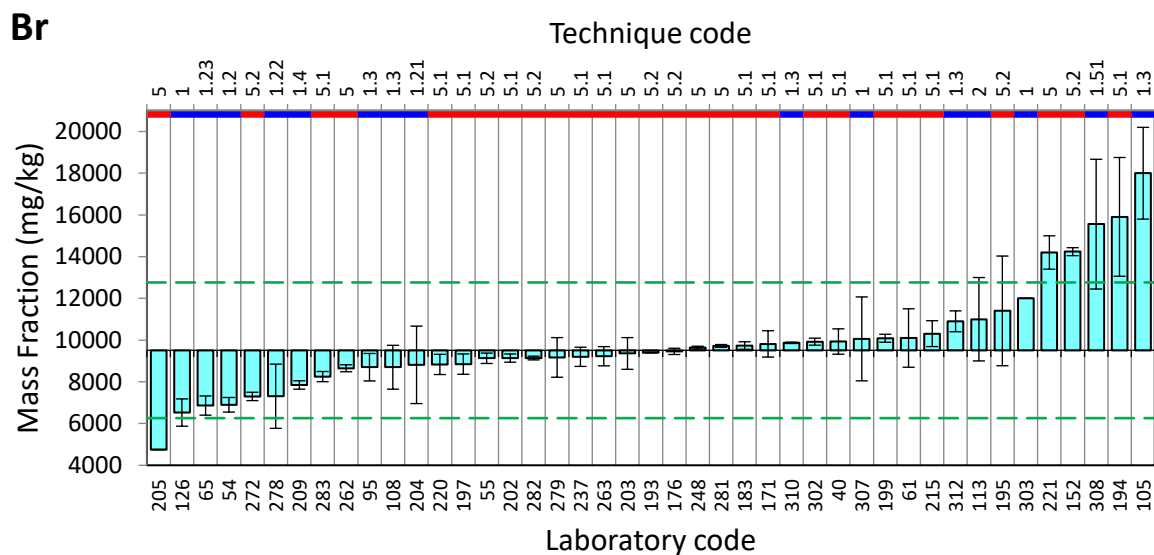


FIG. 150. Bar chart distributions of results for measurand Br (Plant sample).

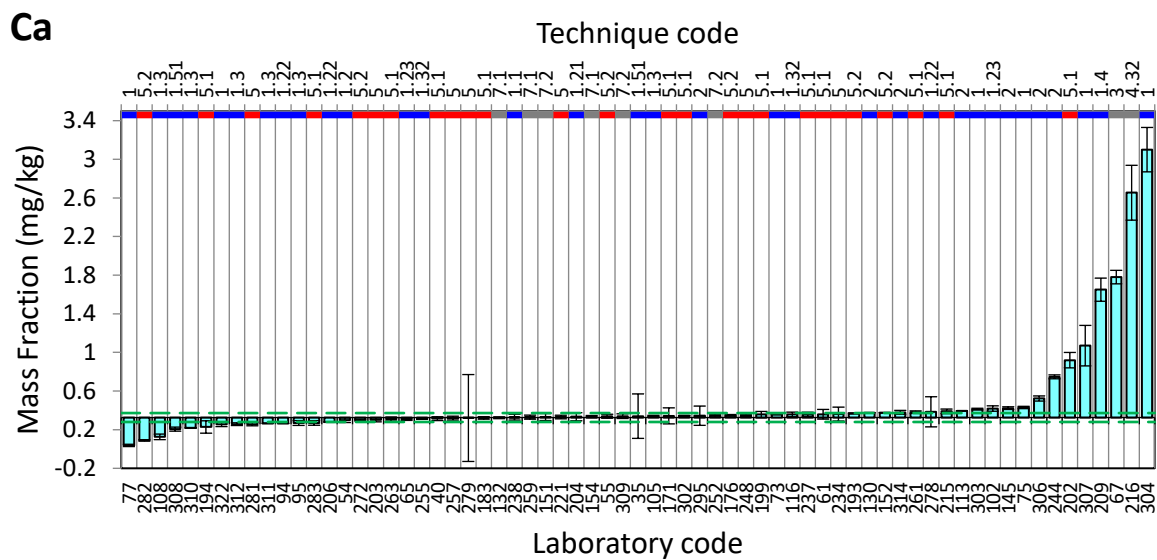


FIG. 151. Bar chart distributions of results for measurand Ca (Plant sample).

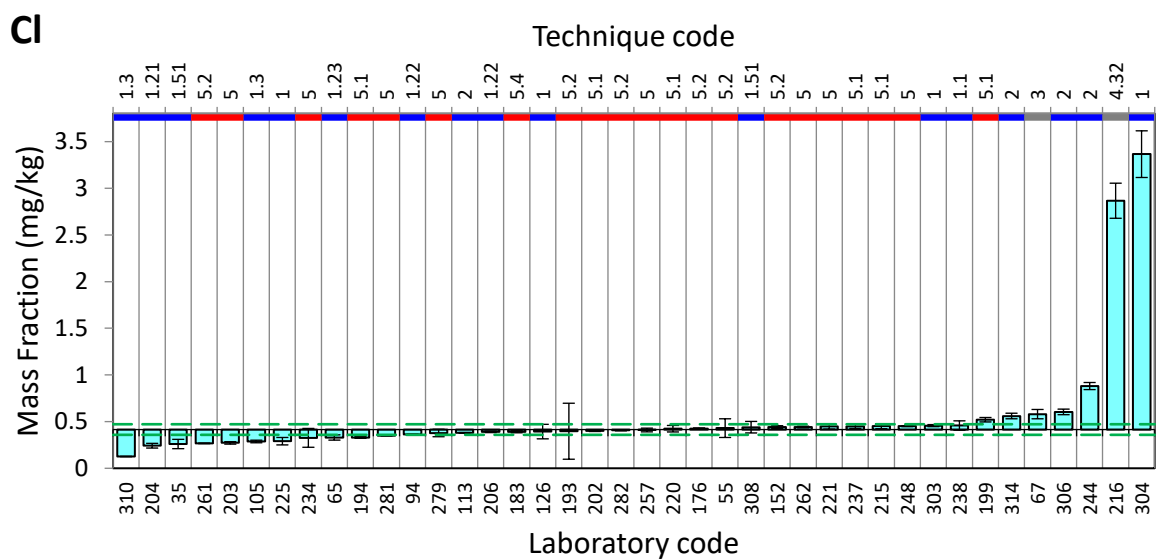


FIG. 152. Bar chart distributions of results for measurand Cl (Plant sample).

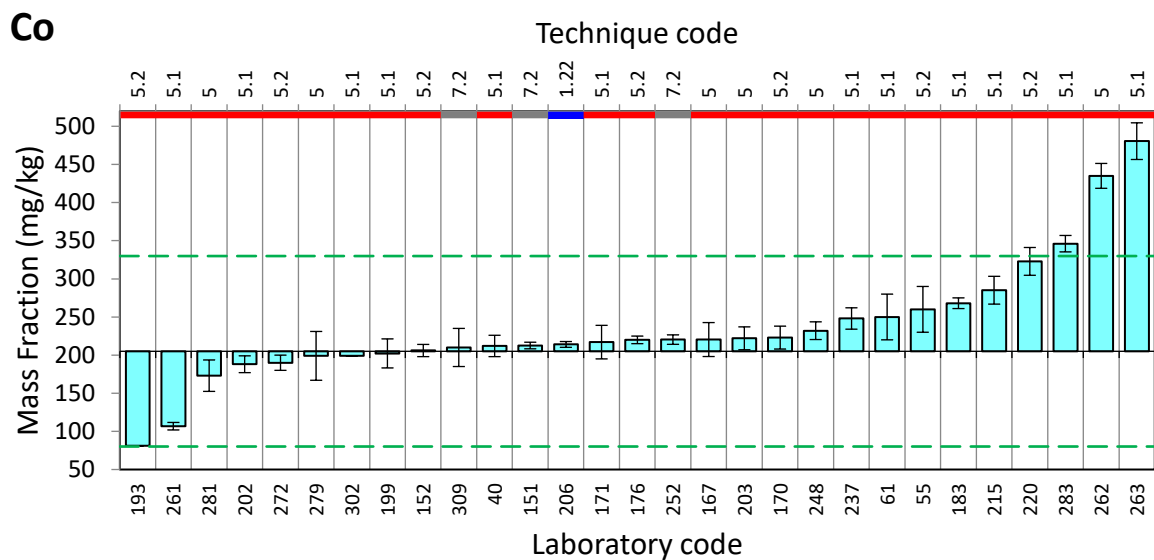


FIG. 153. Bar chart distributions of results for measurand Co (Plant sample).

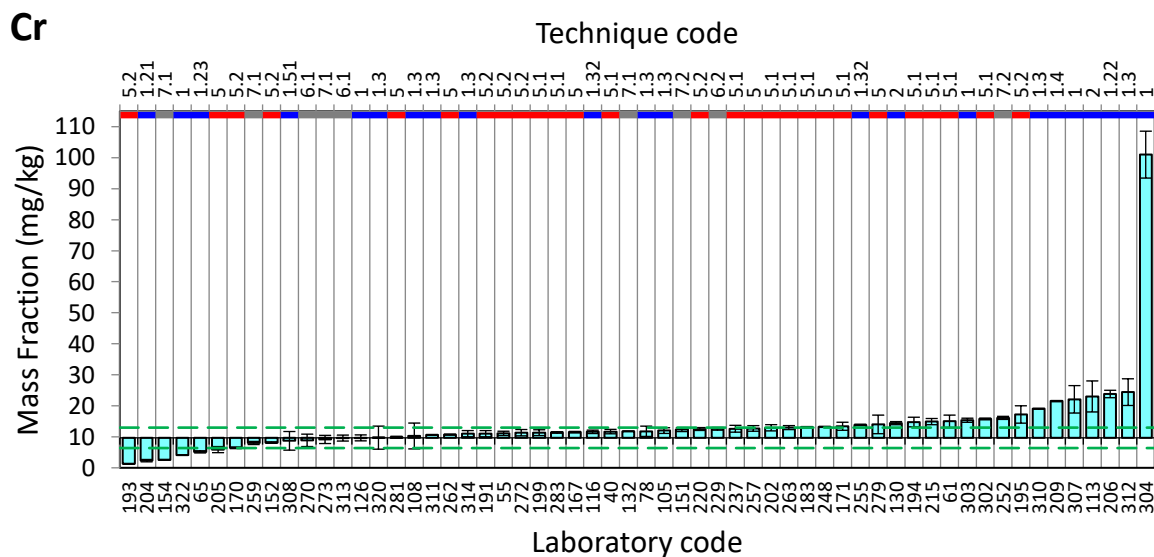


FIG. 154. Bar chart distributions of results for measurand Cr (Plant sample).

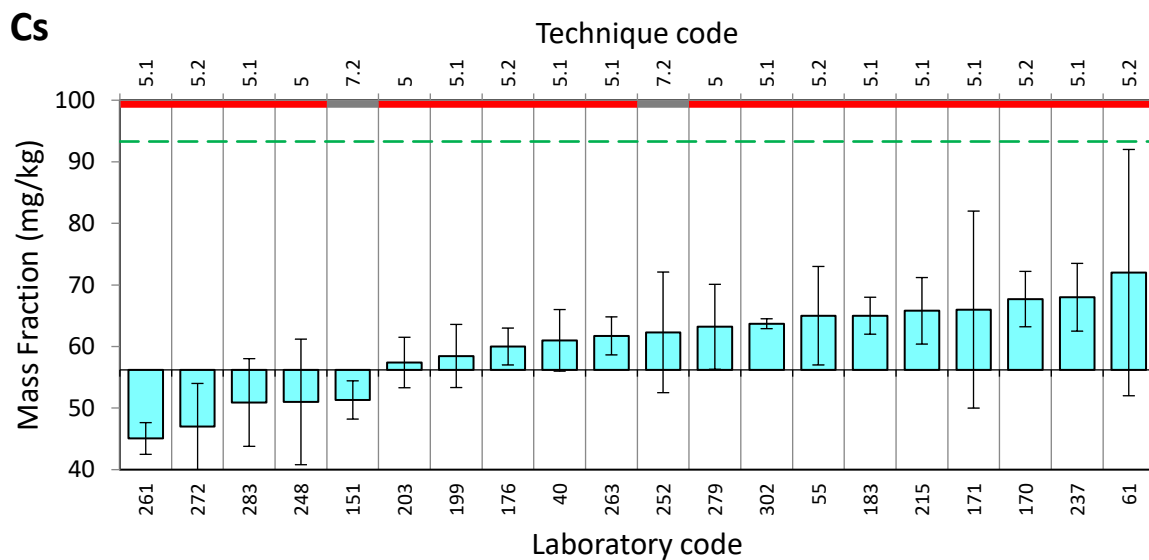


FIG. 155. Bar chart distributions of results for measurand Cs (Plant sample).

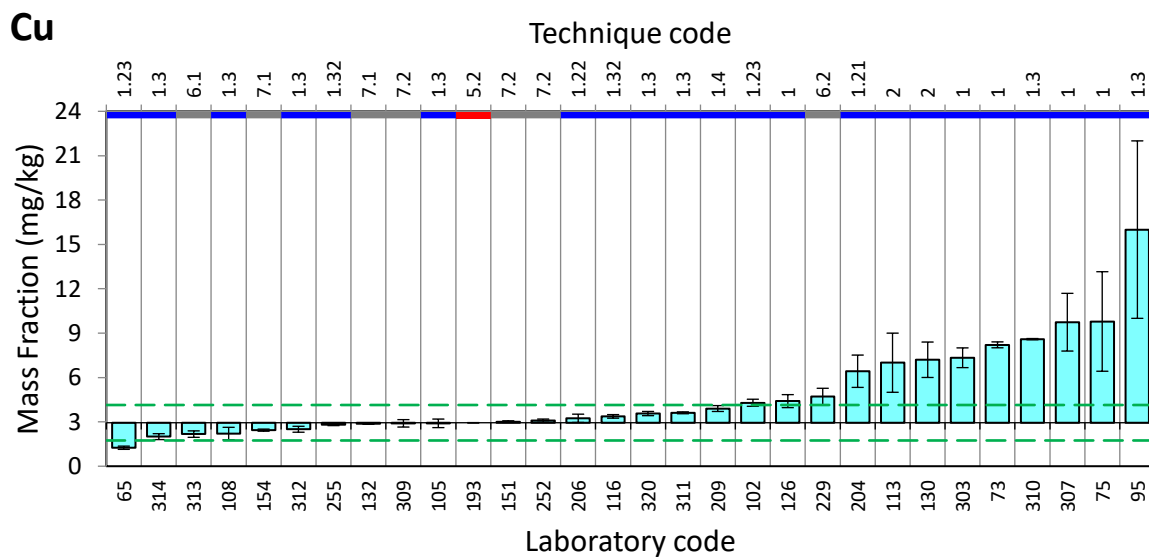


FIG. 156. Bar chart distributions of results for measurand Cu (Plant sample).

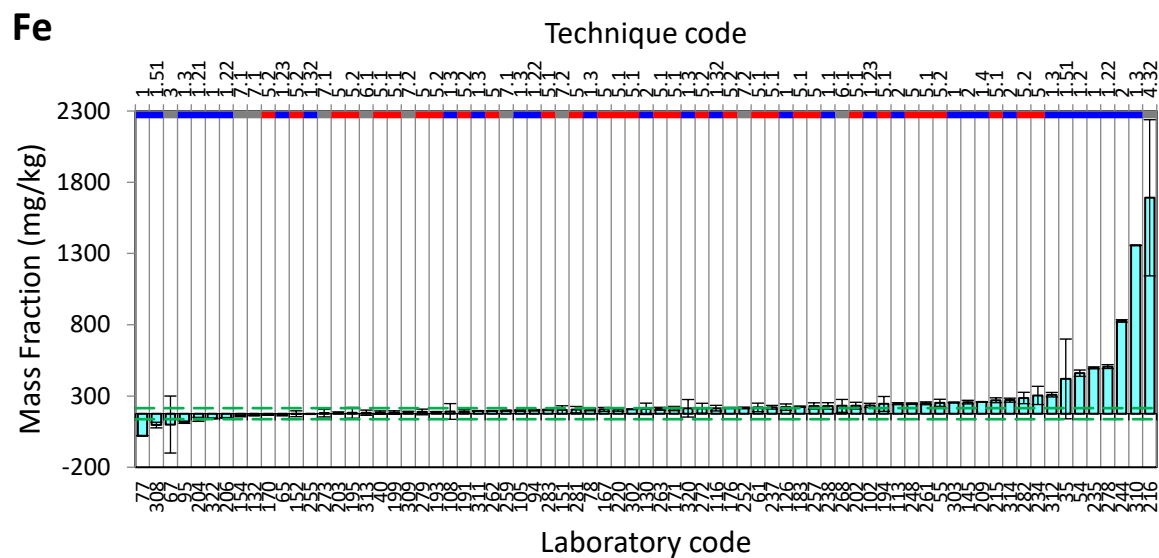


FIG. 157. Bar chart distributions of results for measurand Fe (Plant sample).

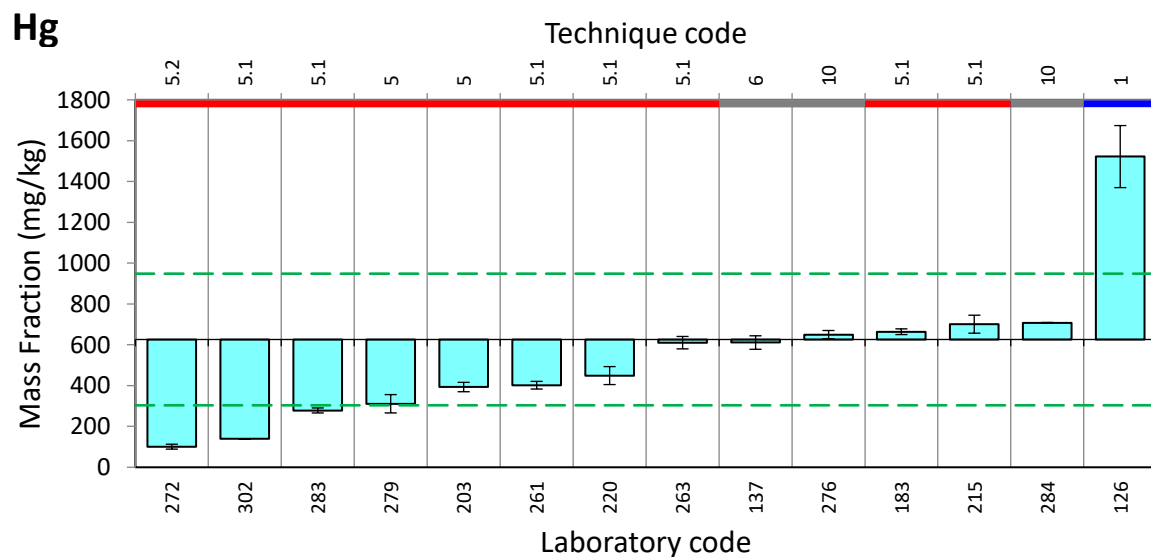


FIG. 158. Bar chart distributions of results for measurand Hg (Plant sample).

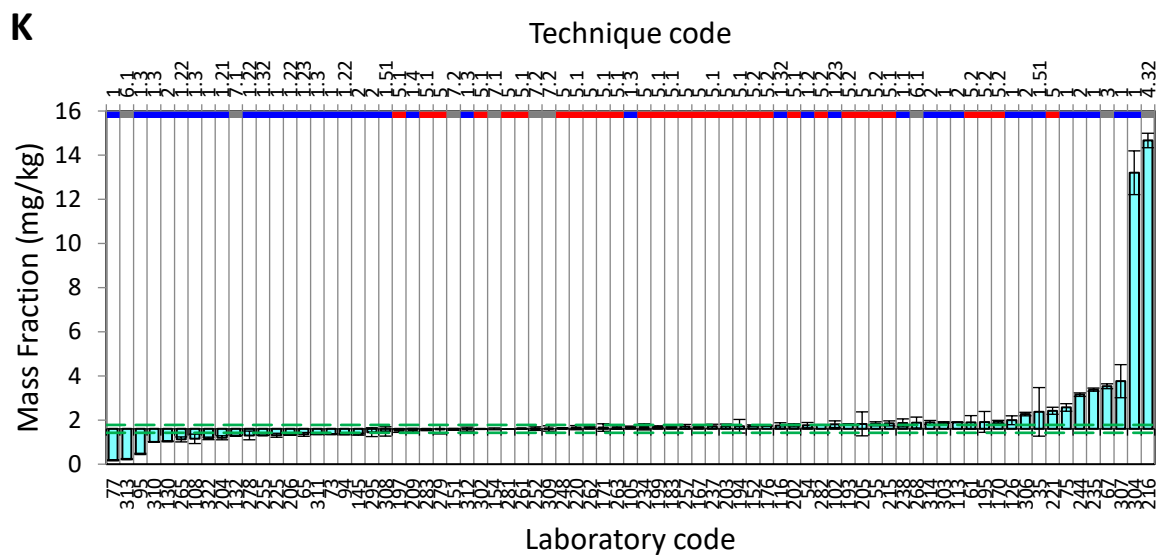


FIG. 159. Bar chart distributions of results for measurand K (Plant sample).

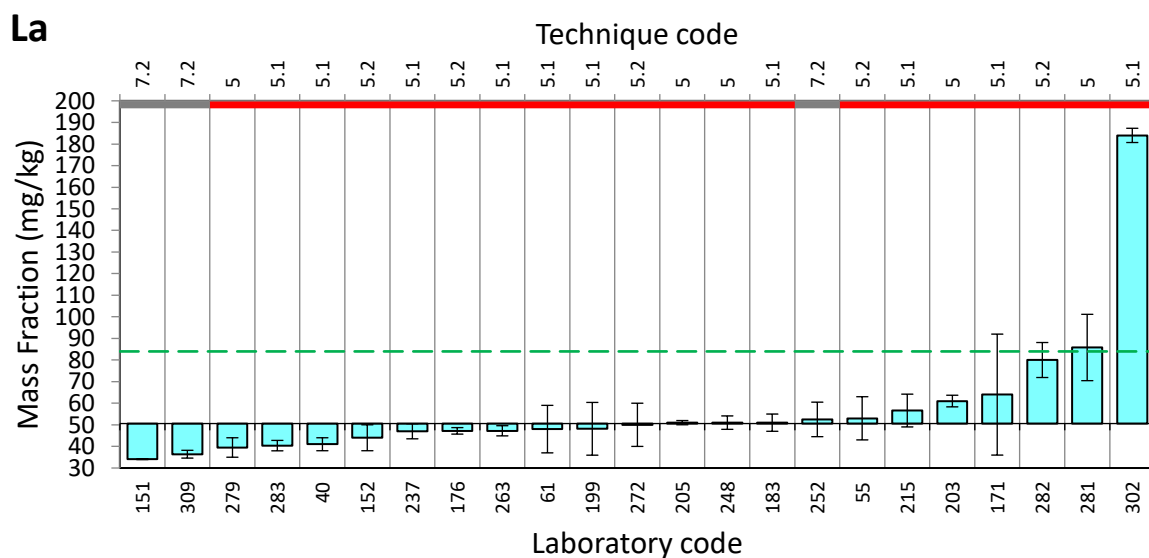


FIG. 160. Bar chart distributions of results for measurand La (Plant sample).

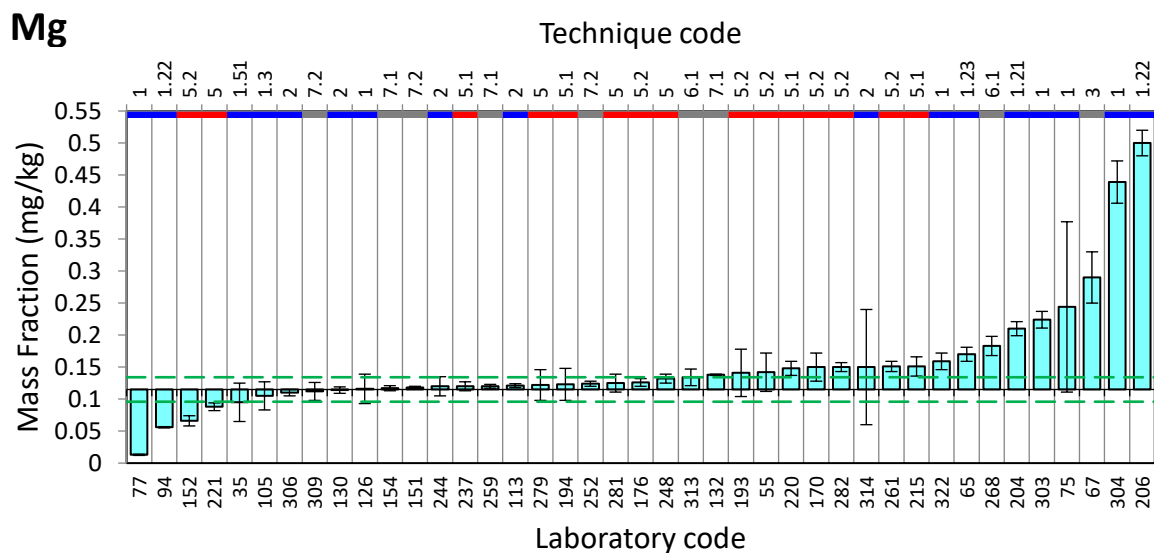


FIG. 161. Bar chart distributions of results for measurand Mg (Plant sample).

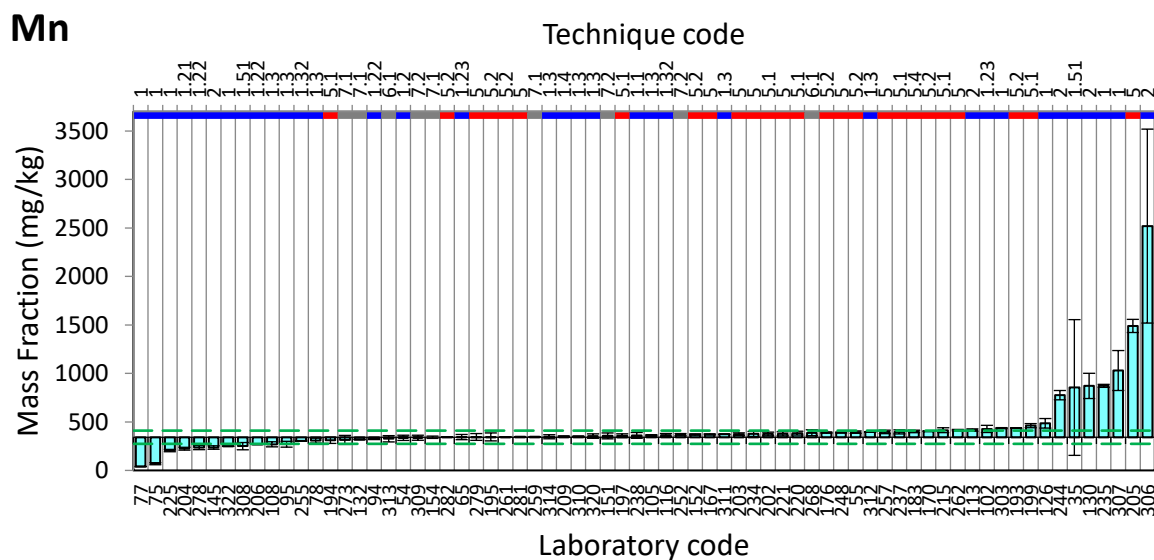


FIG. 162. Bar chart distributions of results for measurand Mn (Plant sample).

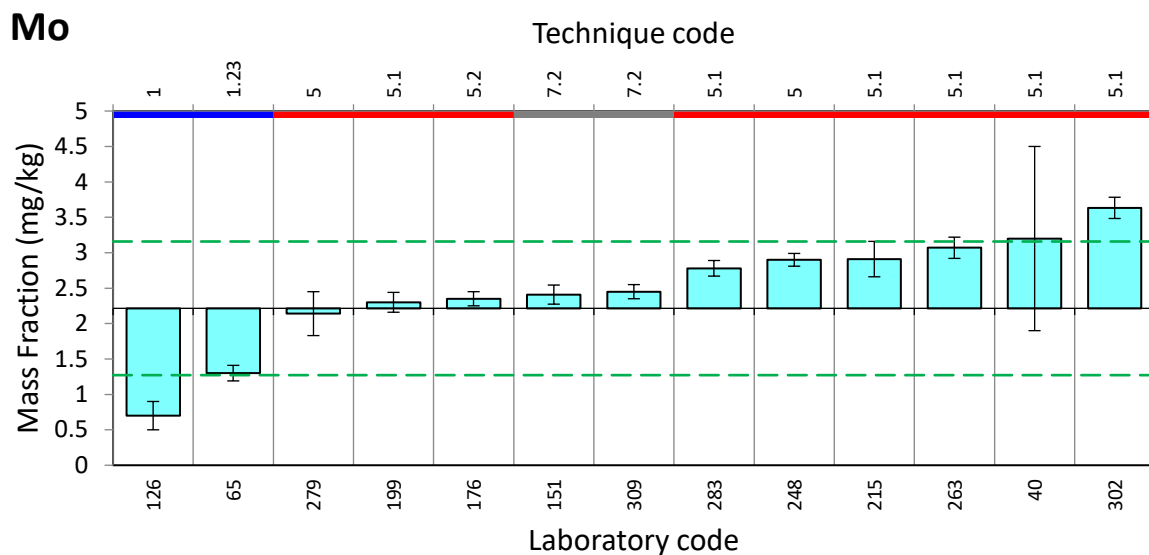


FIG. 163. Bar chart distributions of results for measurand Mo (Plant sample).

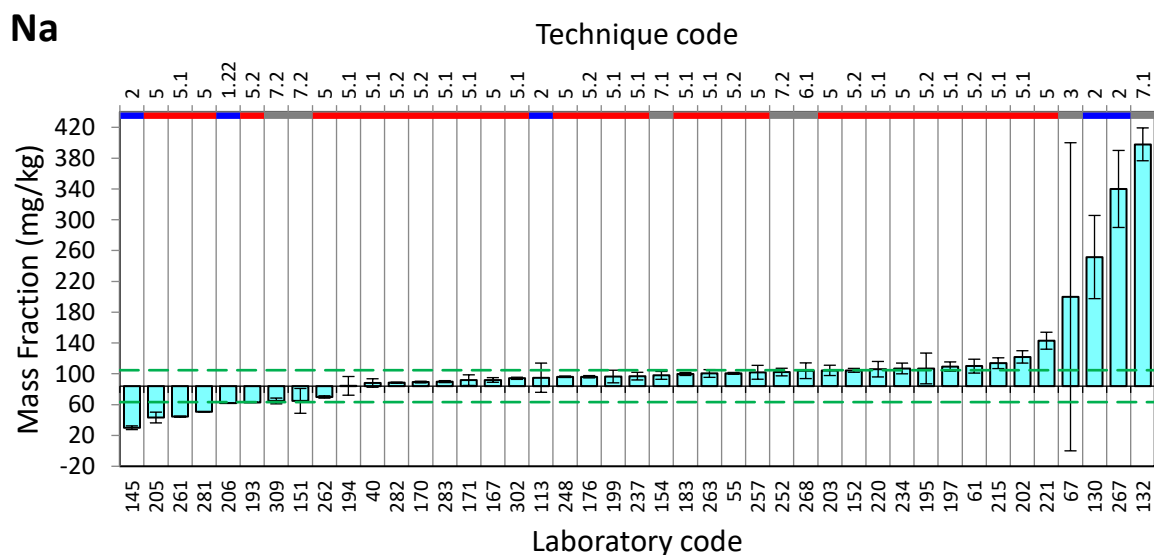


FIG. 164. Bar chart distributions of results for measurand Na (Plant sample).

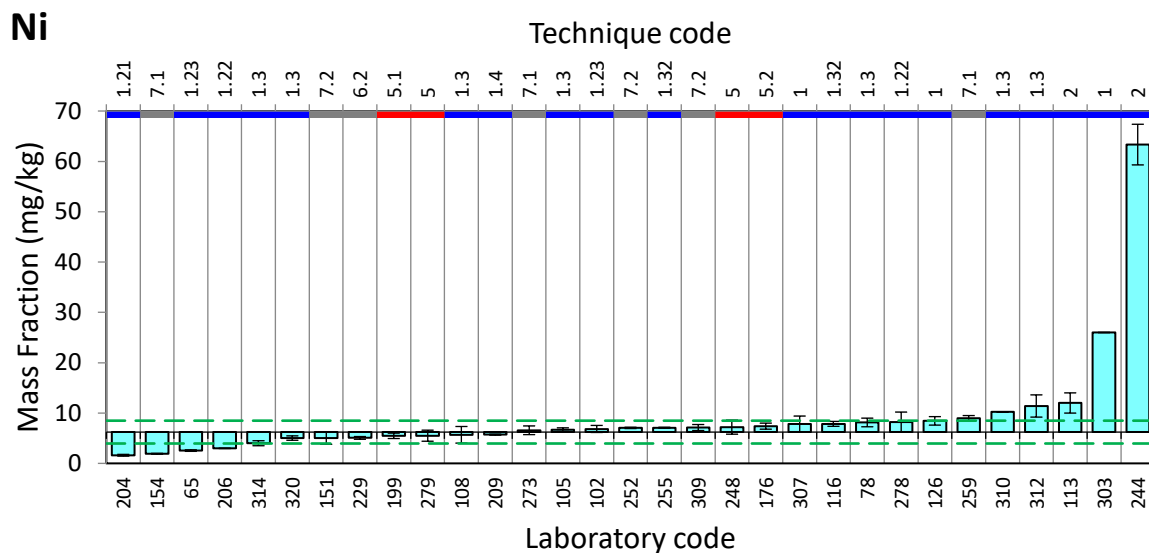


FIG. 165. Bar chart distributions of results for measurand Ni (Plant sample).

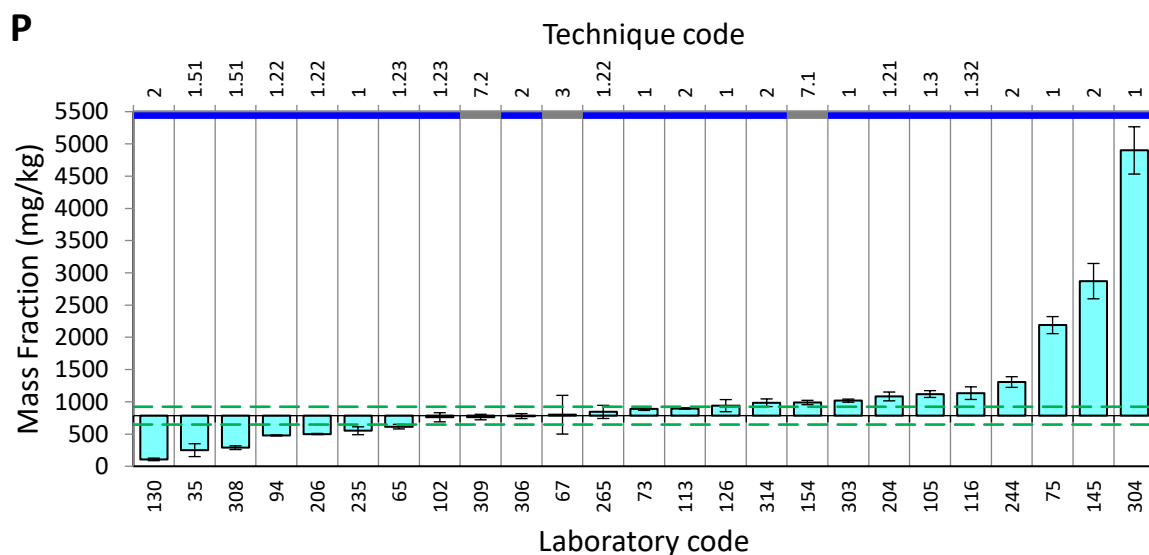


FIG. 166. Bar chart distributions of results for measurand P (Plant sample).

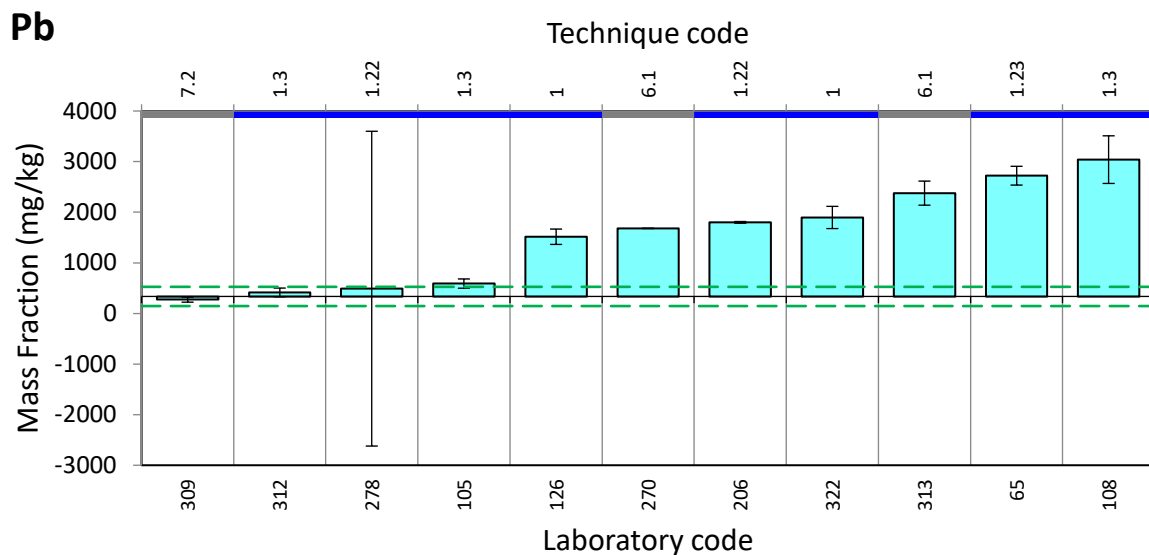


FIG. 167. Bar chart distributions of results for measurand Pb (Plant sample).

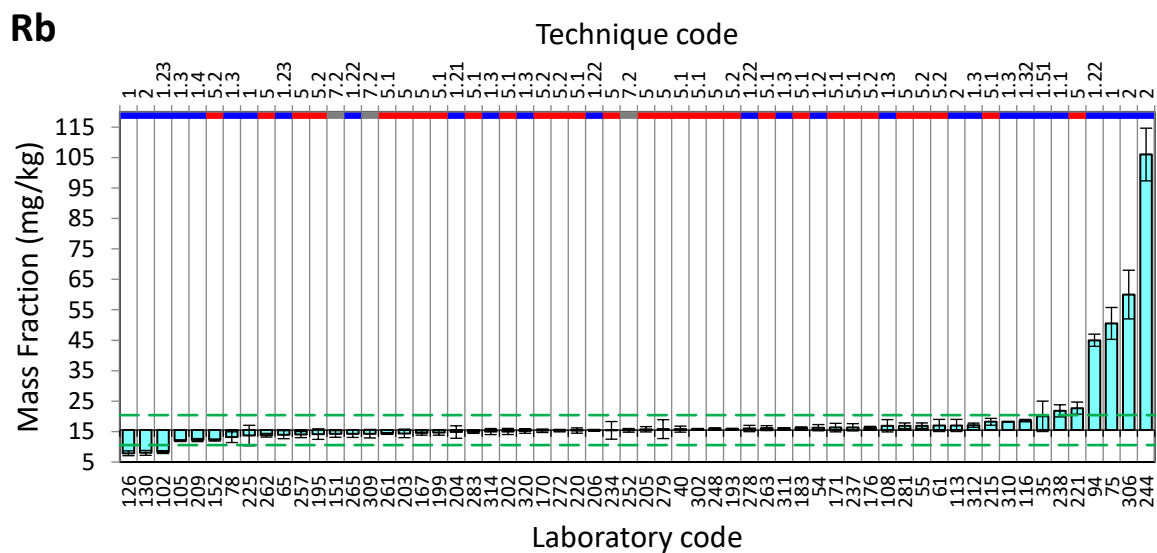


FIG. 168. Bar chart distributions of results for measurand Rb (Plant sample).

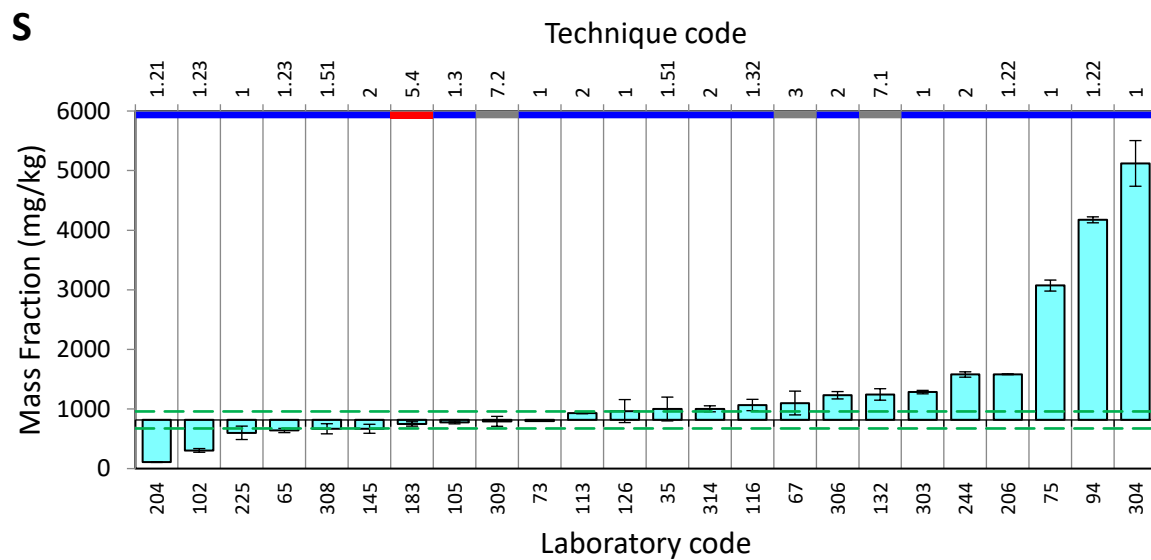


FIG. 169. Bar chart distributions of results for measurand S (Plant sample).

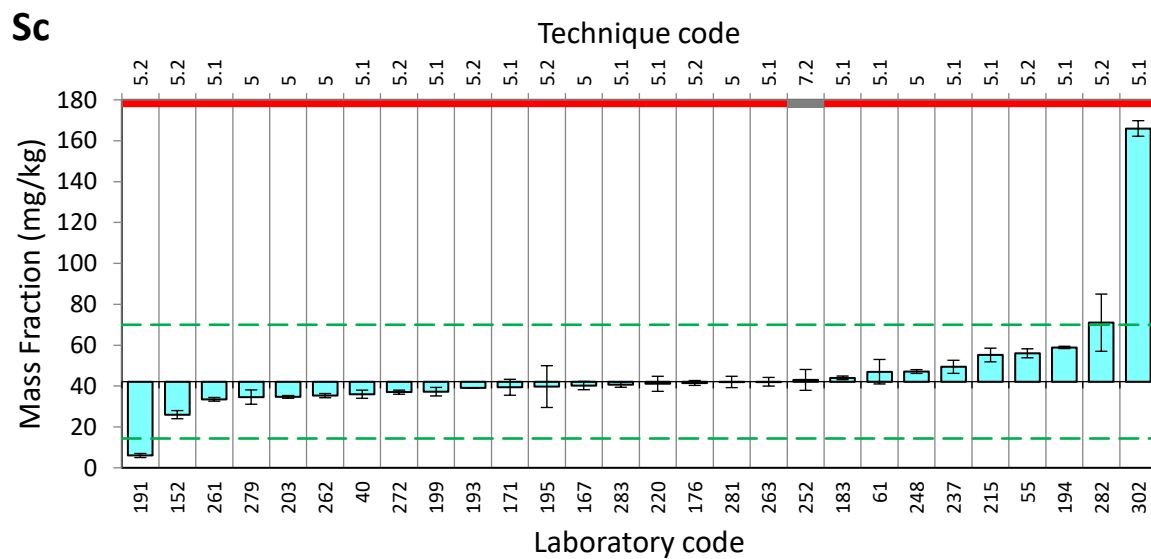


FIG. 170. Bar chart distributions of results for measurand Sc (Plant sample).

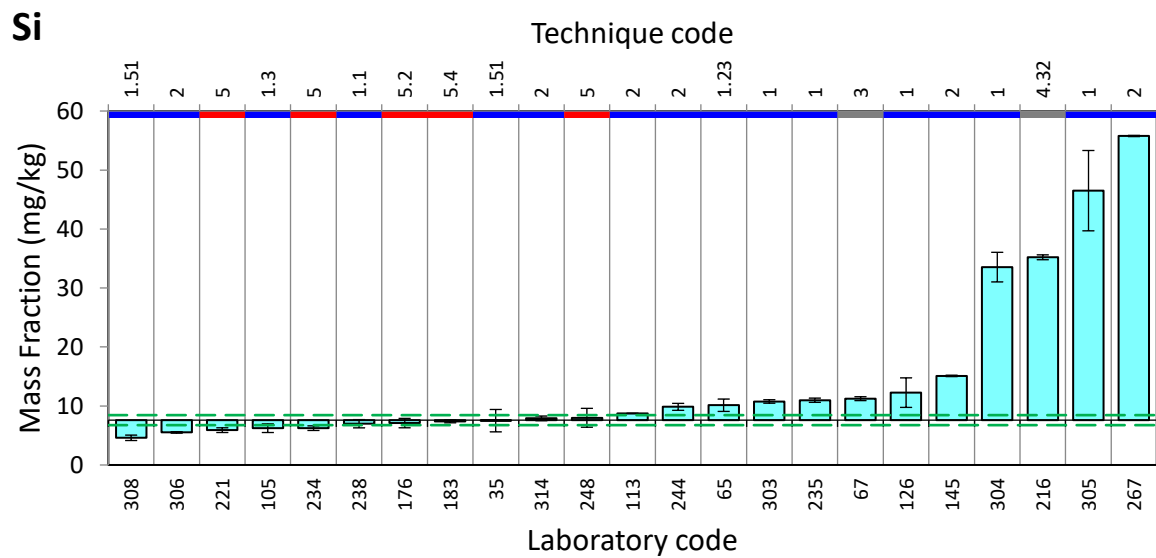


FIG. 171. Bar chart distributions of results for measurand Si (Plant sample).

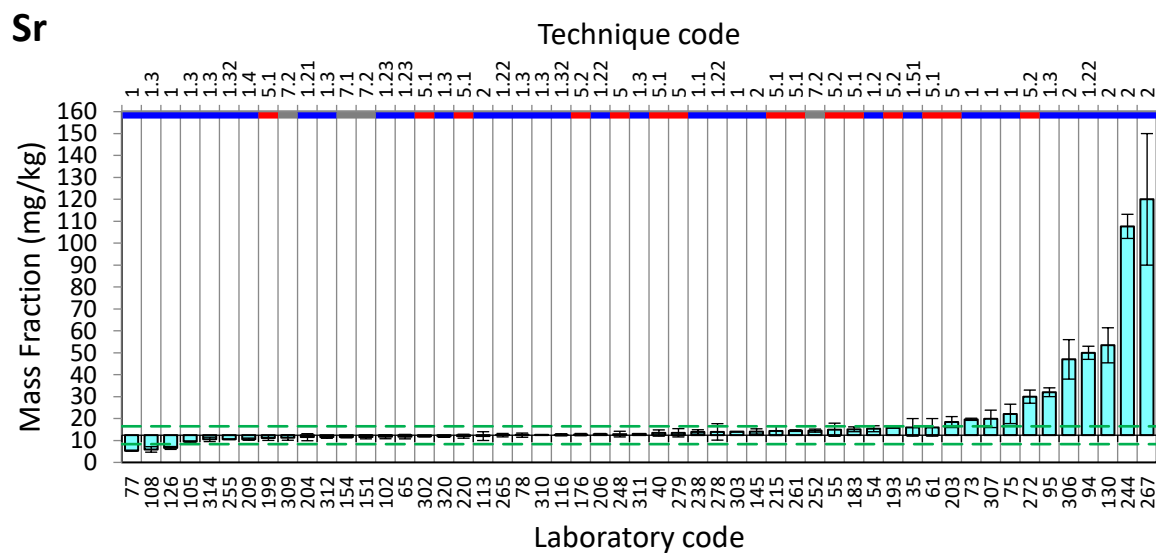


FIG. 172. Bar chart distributions of results for measurand Sr (Plant sample).

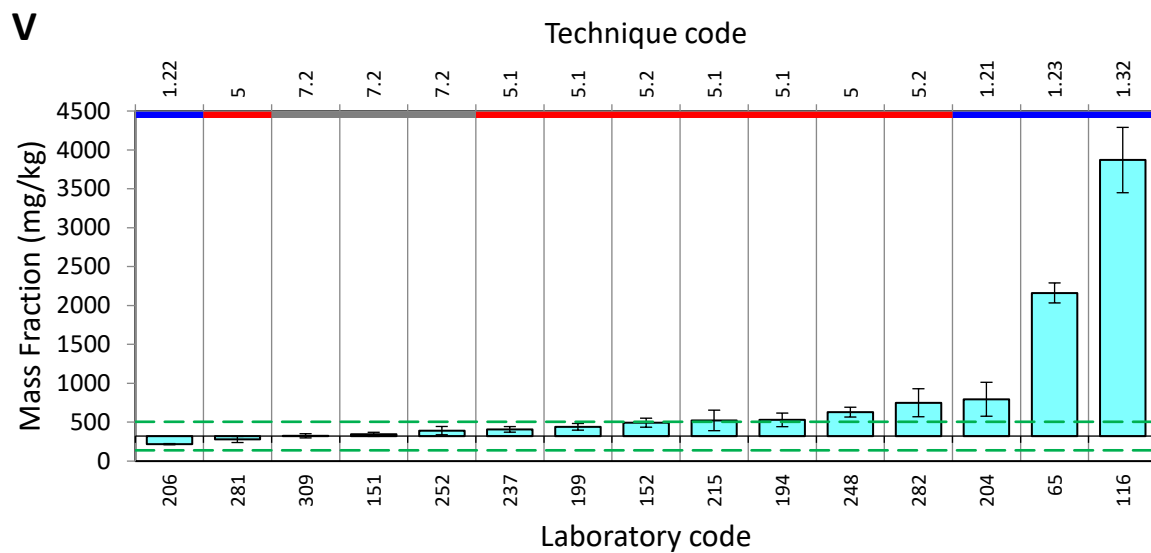


FIG. 173. Bar chart distributions of results for measurand V (Plant sample).

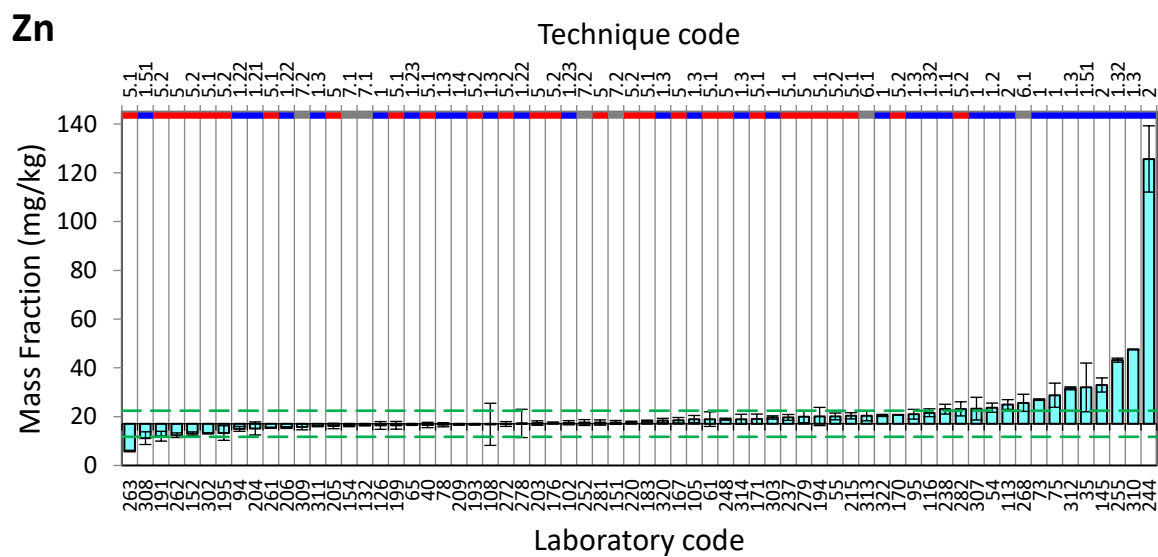


FIG. 174. Bar chart distributions of results for measurand Zn (Plant sample).

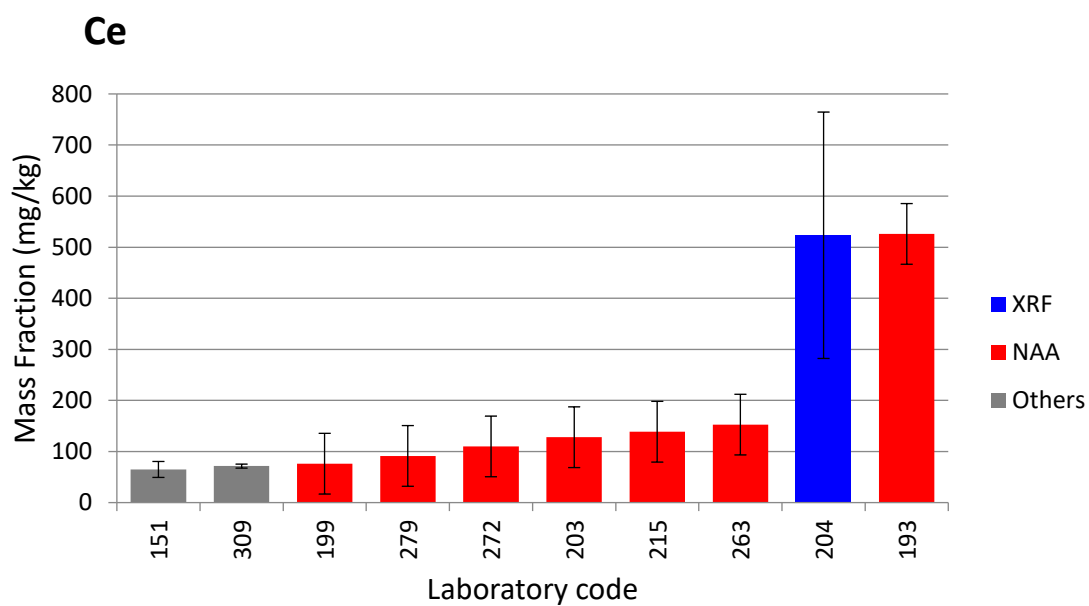


FIG. 175. Bar chart distributions of results for measurand Ce (Plant sample).

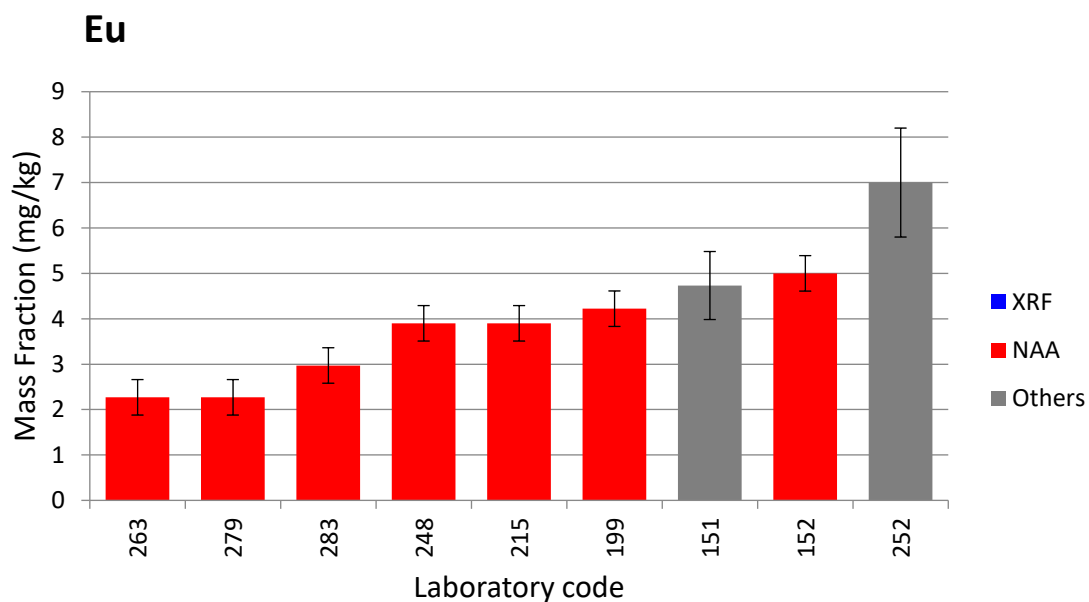


FIG. 176. Bar chart distributions of results for measurand Eu (Plant sample).

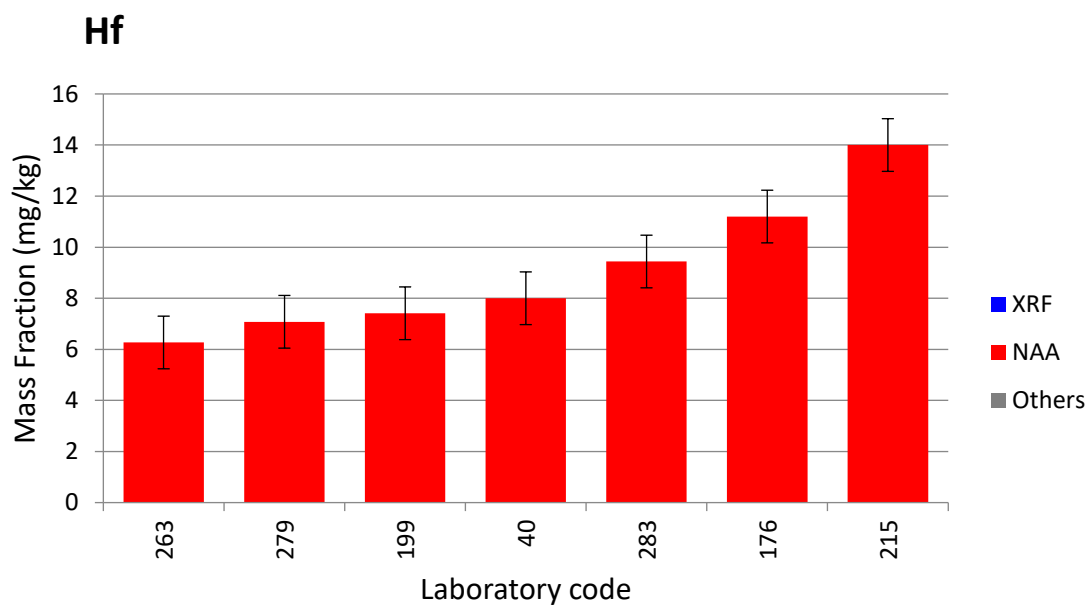


FIG. 177. Bar chart distributions of results for measurand Hf (Plant sample).

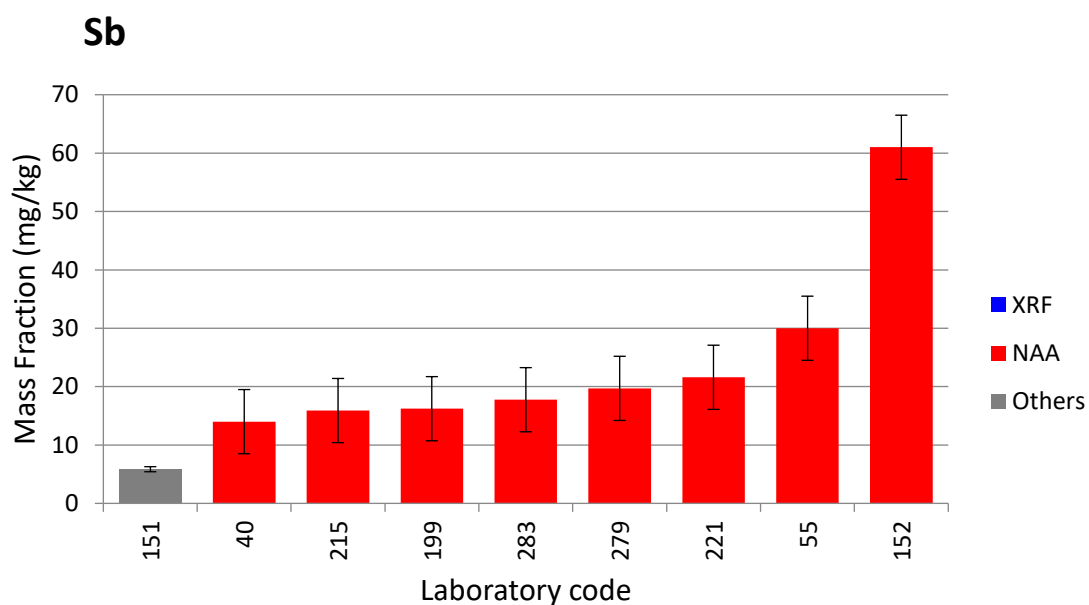


FIG. 178. Bar chart distributions of results for measurand Sb (Plant sample).

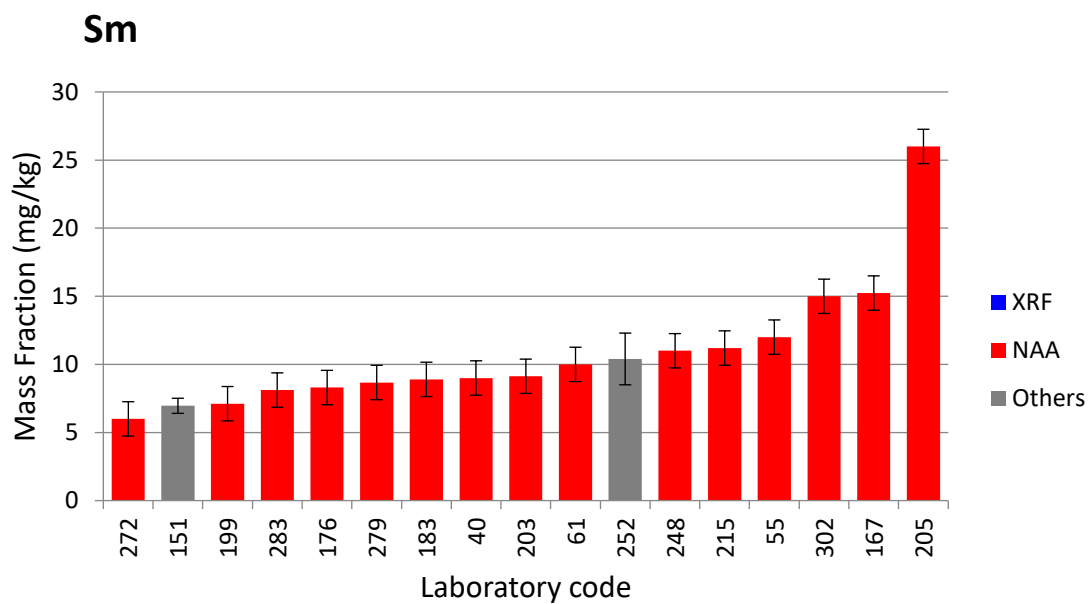


FIG. 179. Bar chart distributions of results for measurand Sm (Plant sample).

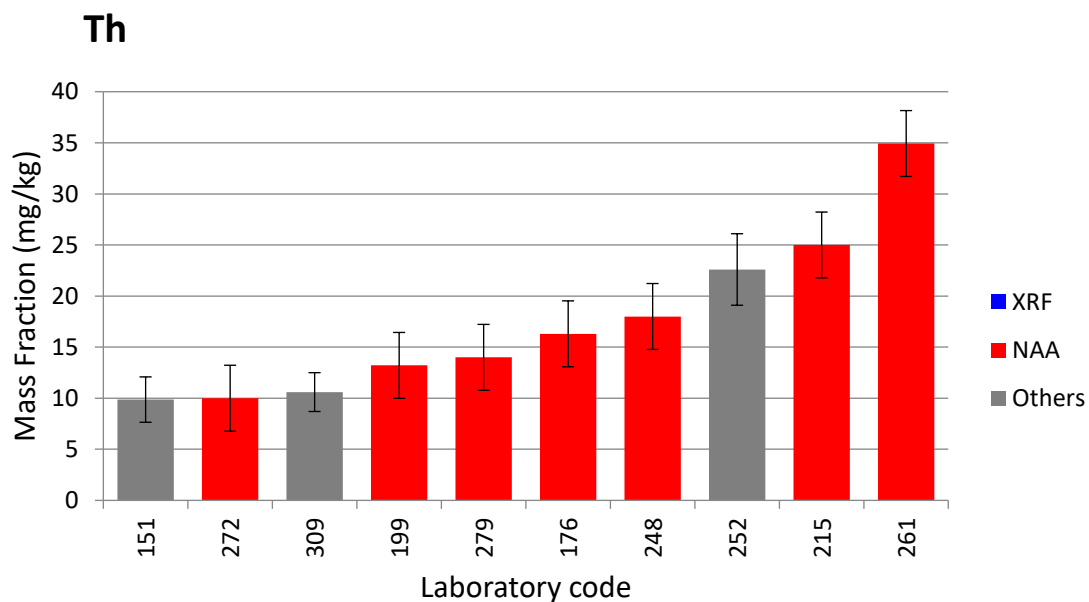


FIG. 180. Bar chart distributions of results for measurand Th (Plant sample).

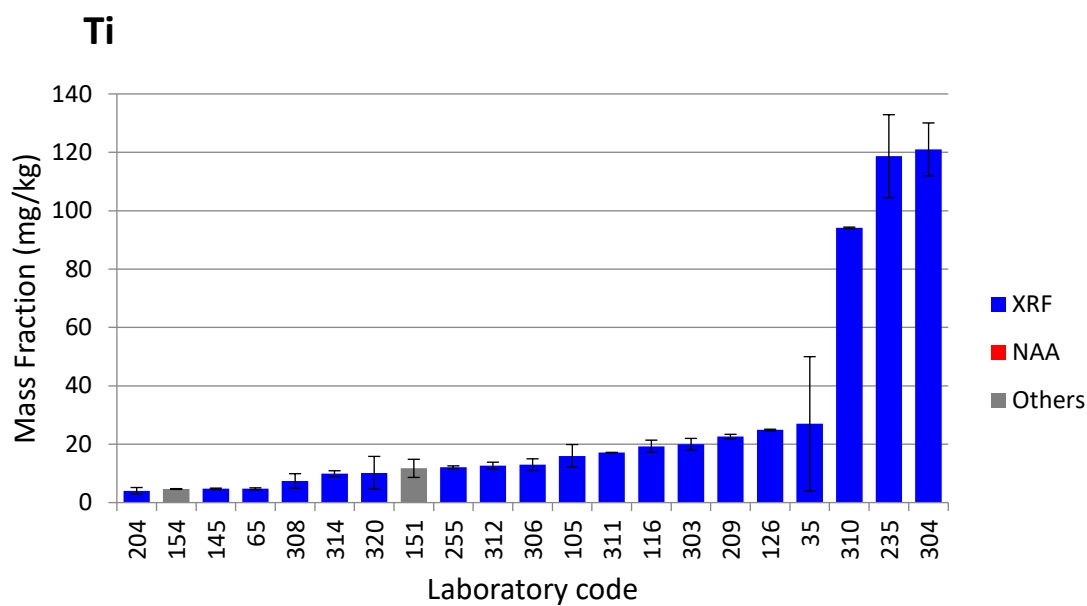


FIG. 181. Bar chart distributions of results for measurand Ti (Plant sample).

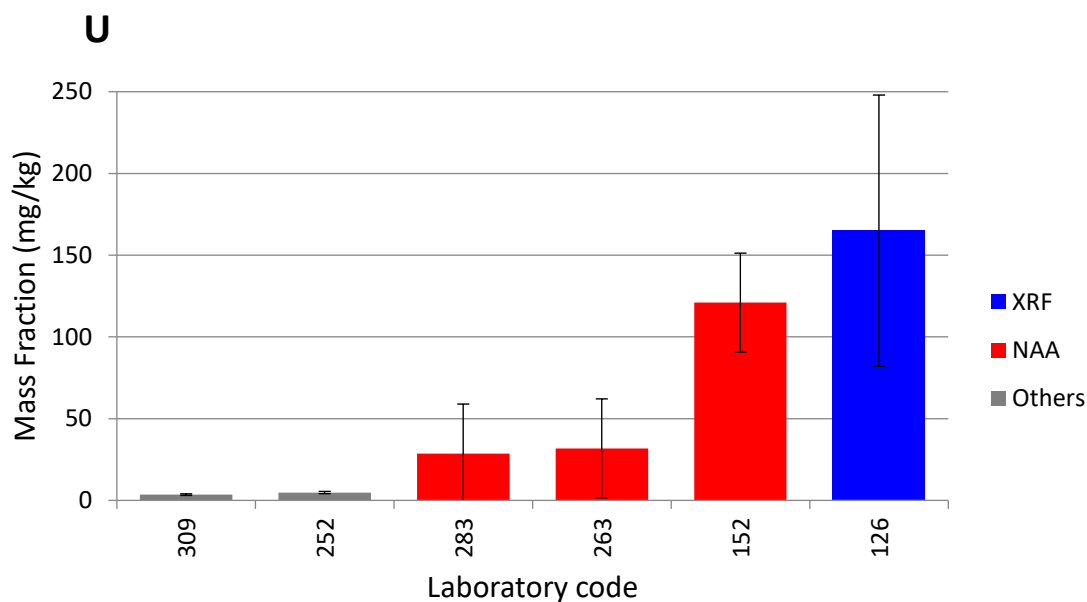


FIG. 182. Bar chart distributions of results for measurand U (Plant sample).

35

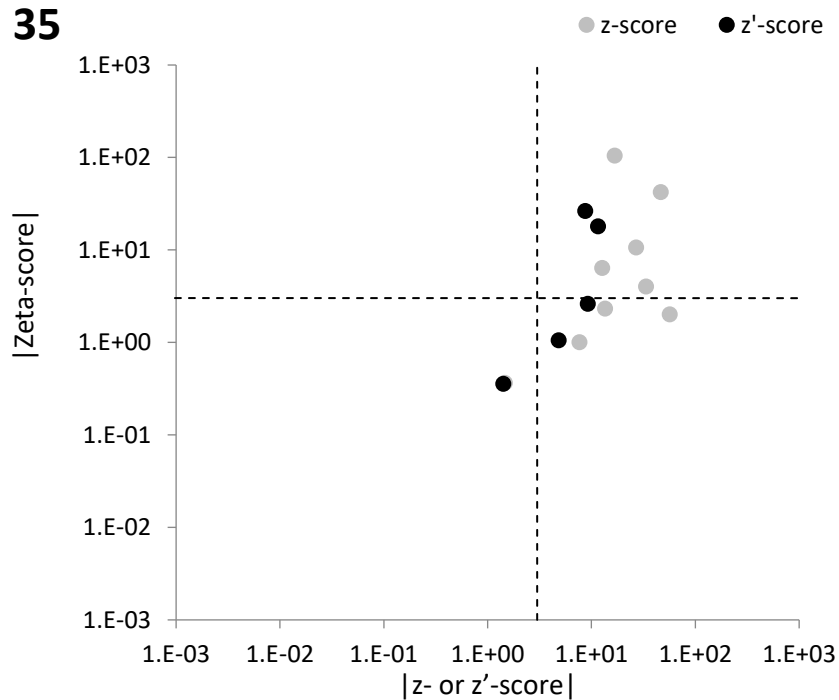


FIG. 183. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 35 (Clay sample).

35

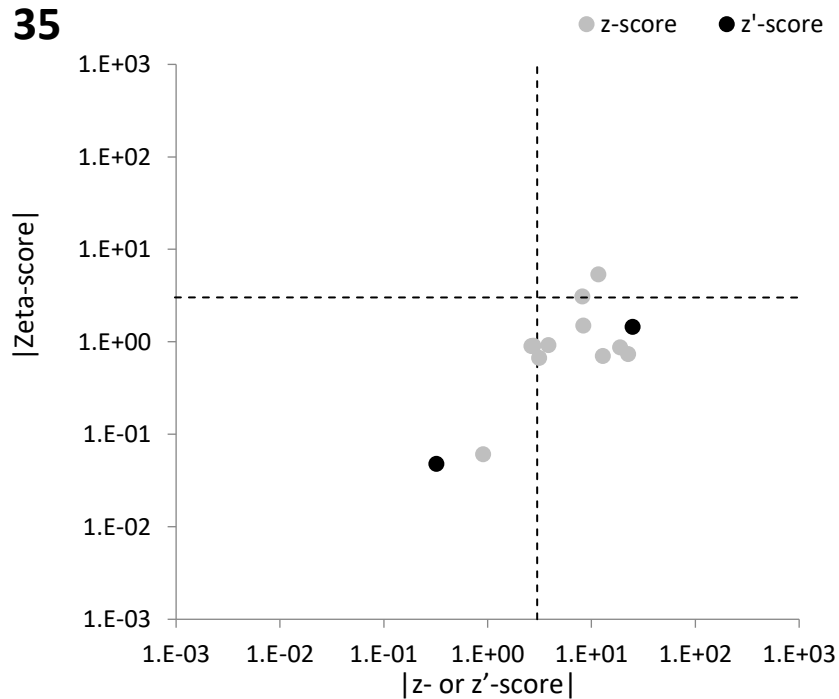


FIG. 184. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 35 (Plant sample).

40

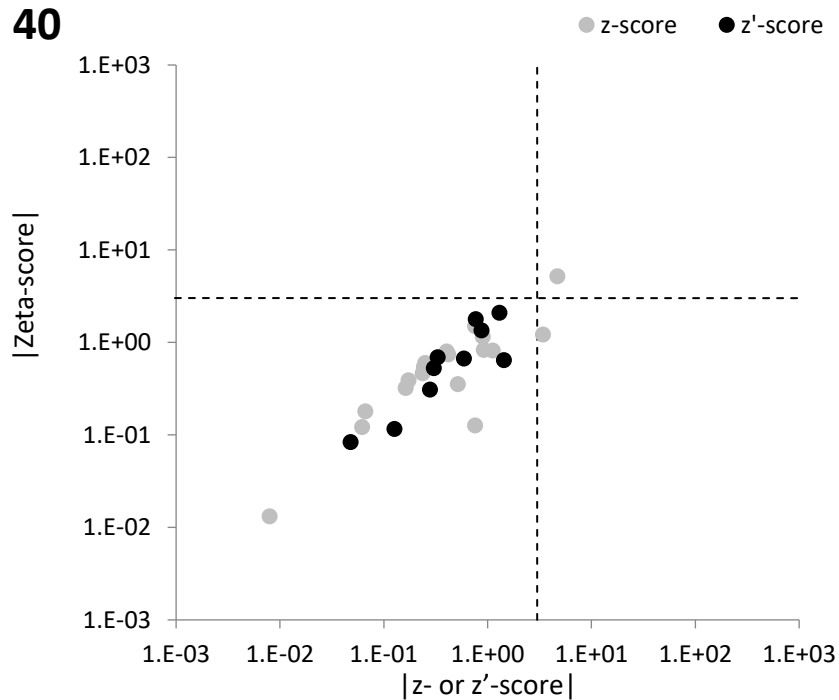


FIG. 185. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 40 (Clay sample).

40

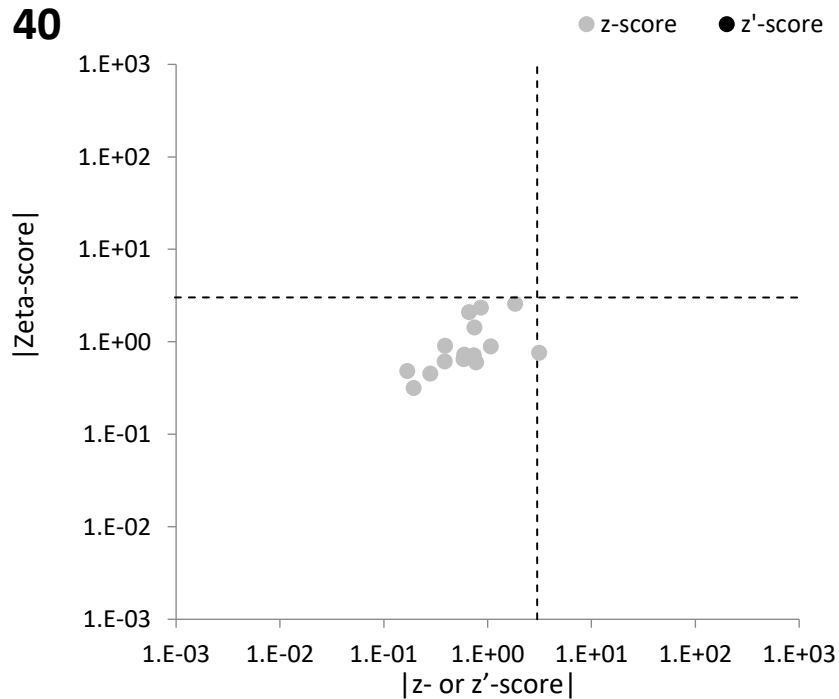


FIG. 186. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 40 (Plant sample).

54

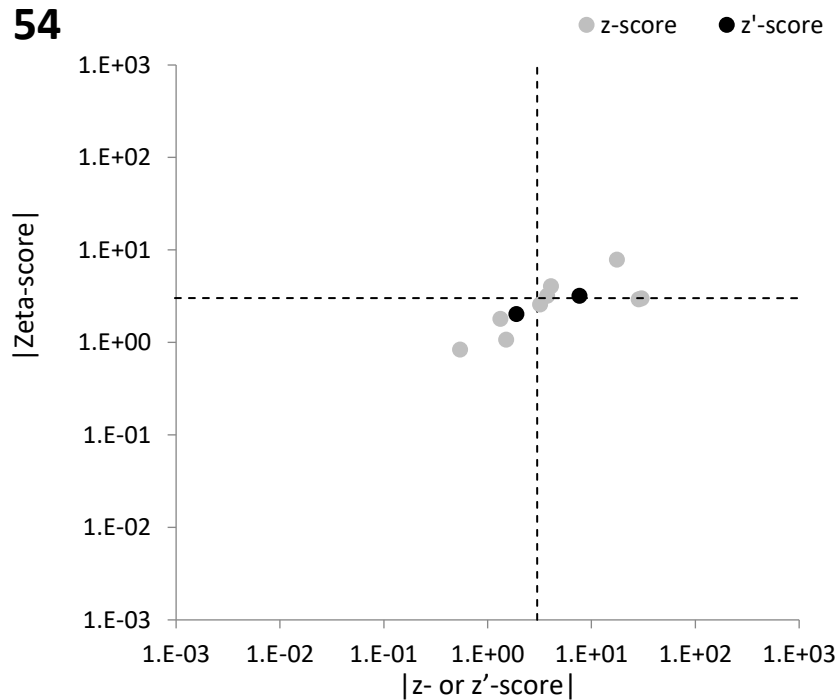


FIG. 187. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 54 (Clay sample).

54

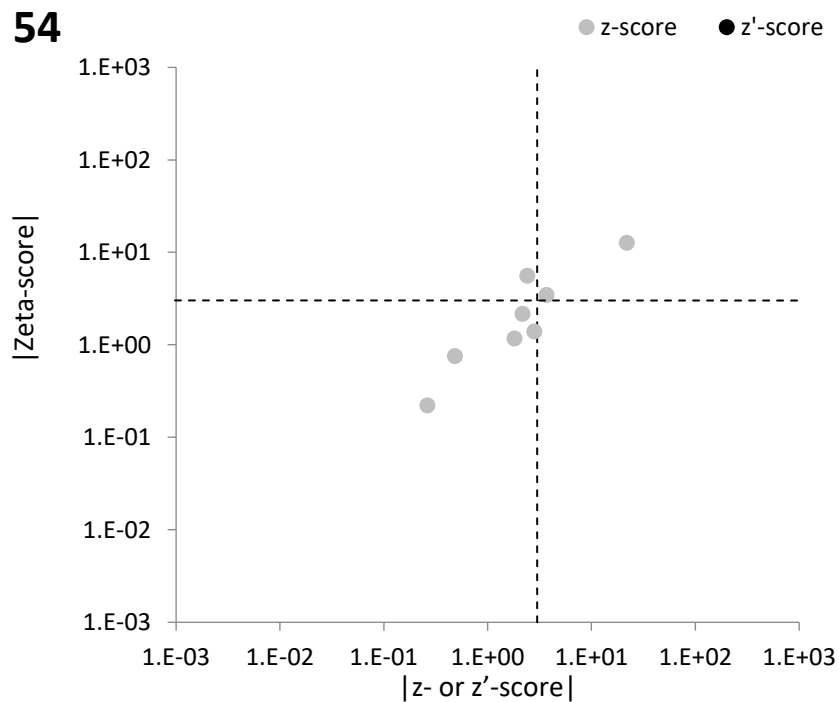


FIG. 188. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 54 (Plant sample).

55

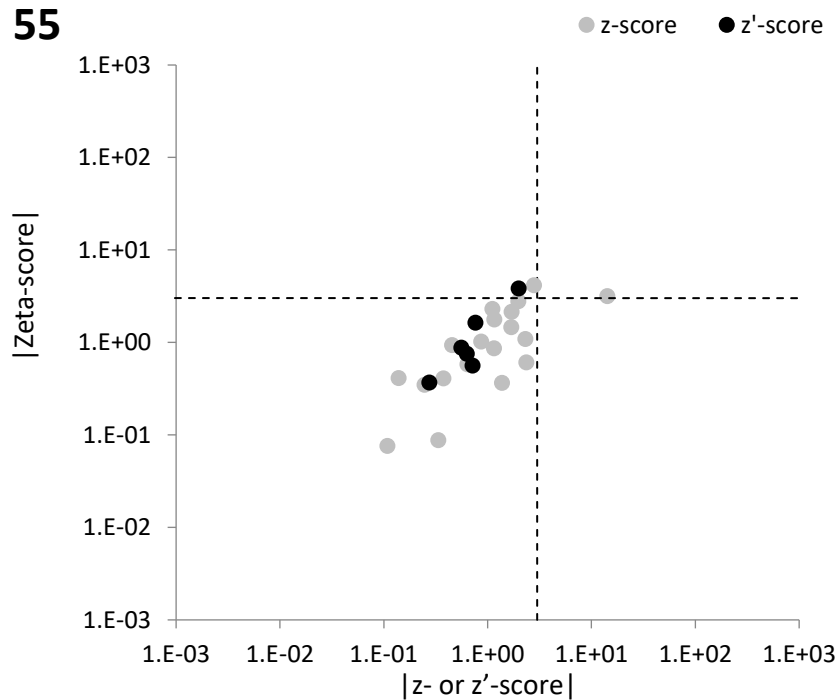


FIG. 189. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 55 (Clay sample).

55

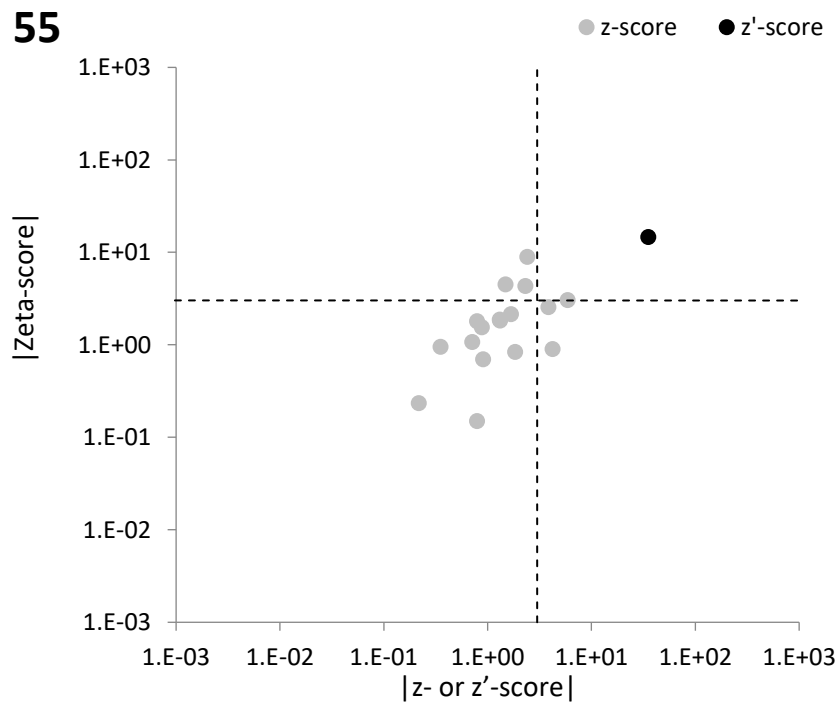


FIG. 190. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 55 (Plant sample).

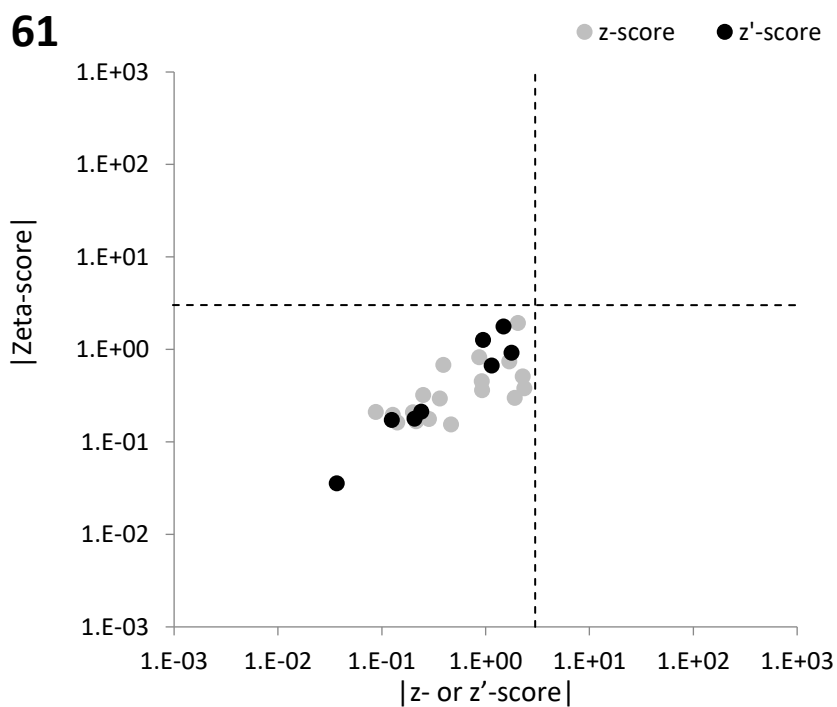


FIG. 191. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 61 (Clay sample).

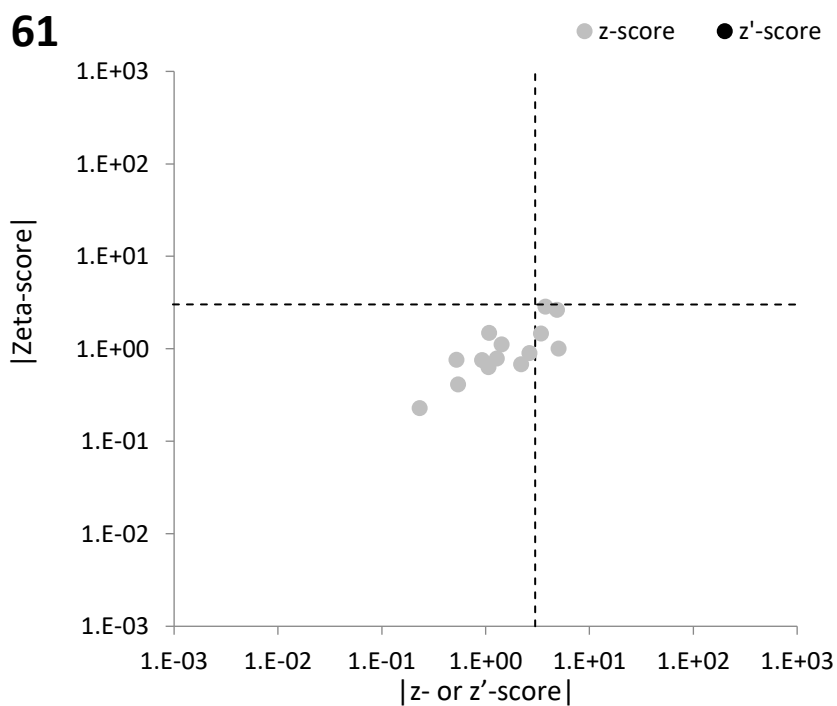


FIG. 192. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 61 (Plant sample).

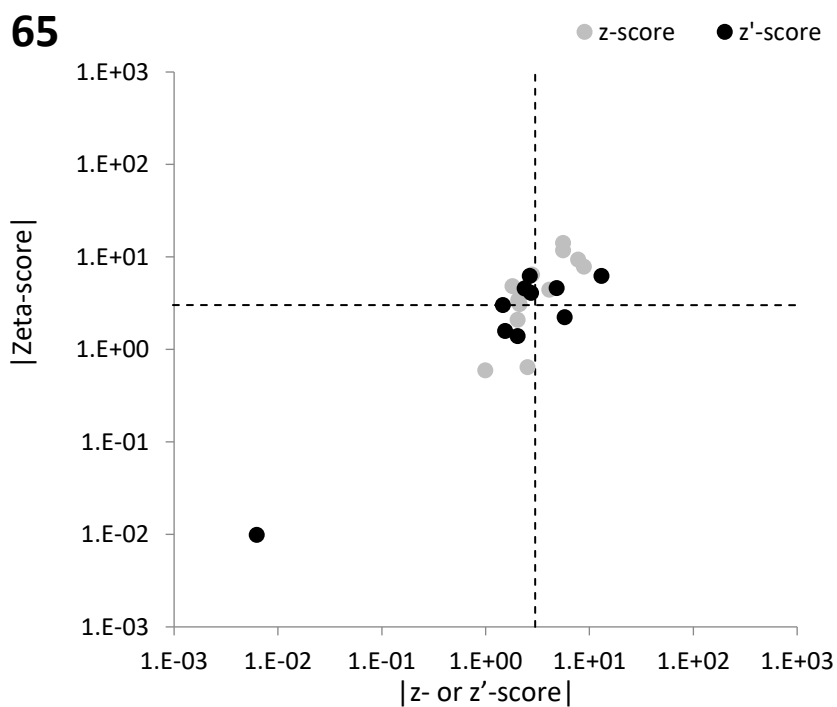


FIG. 193. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 65 (Clay sample).

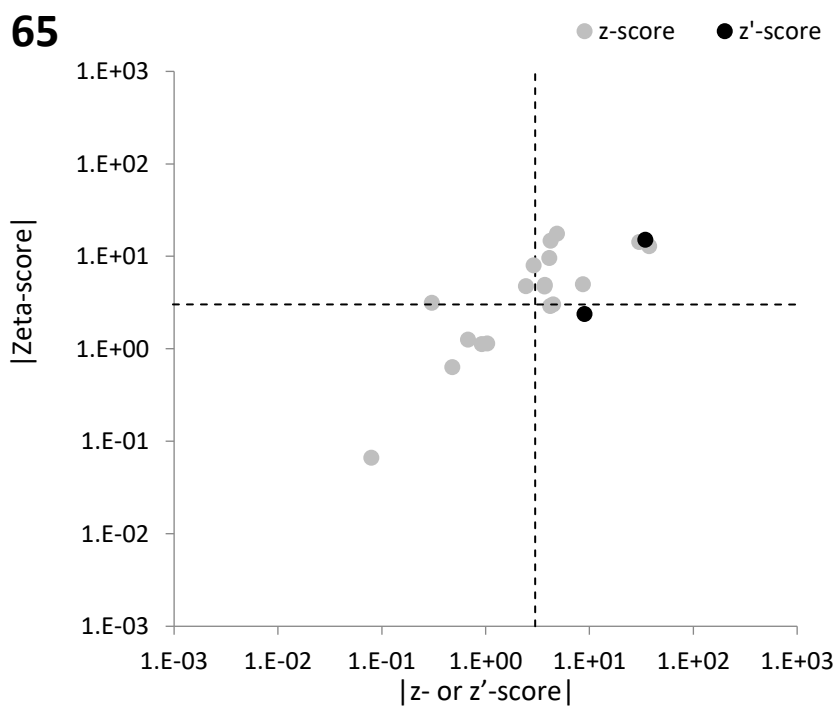


FIG. 194. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 65 (Plant sample).

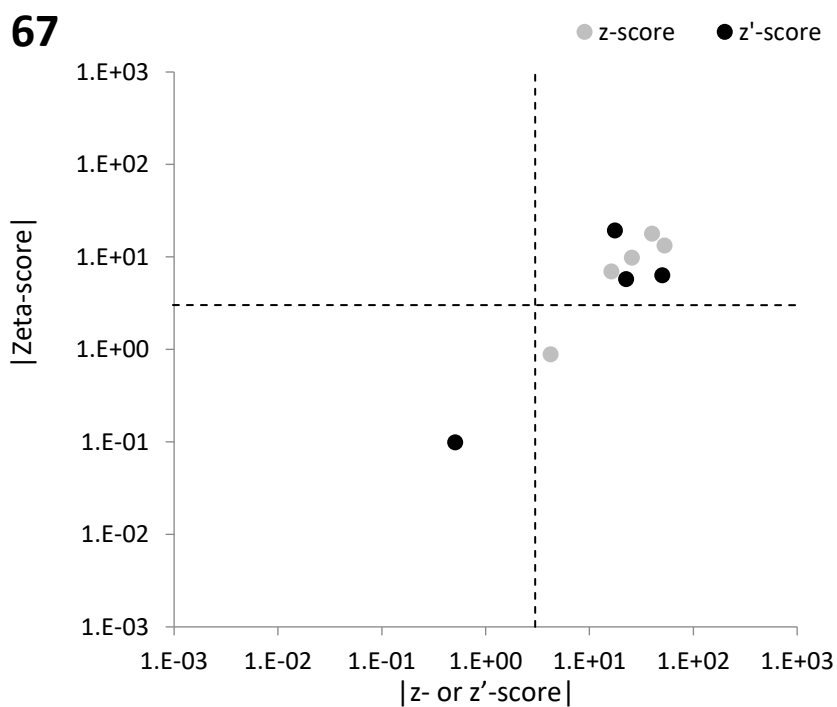


FIG. 195. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 67 (Clay sample).

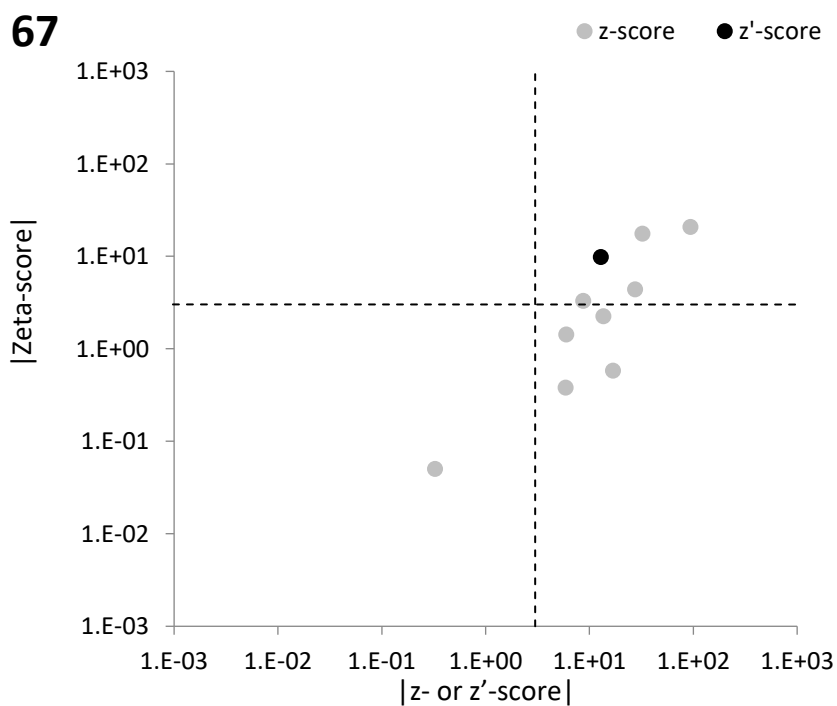


FIG. 196. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 67 (Plant sample).

73

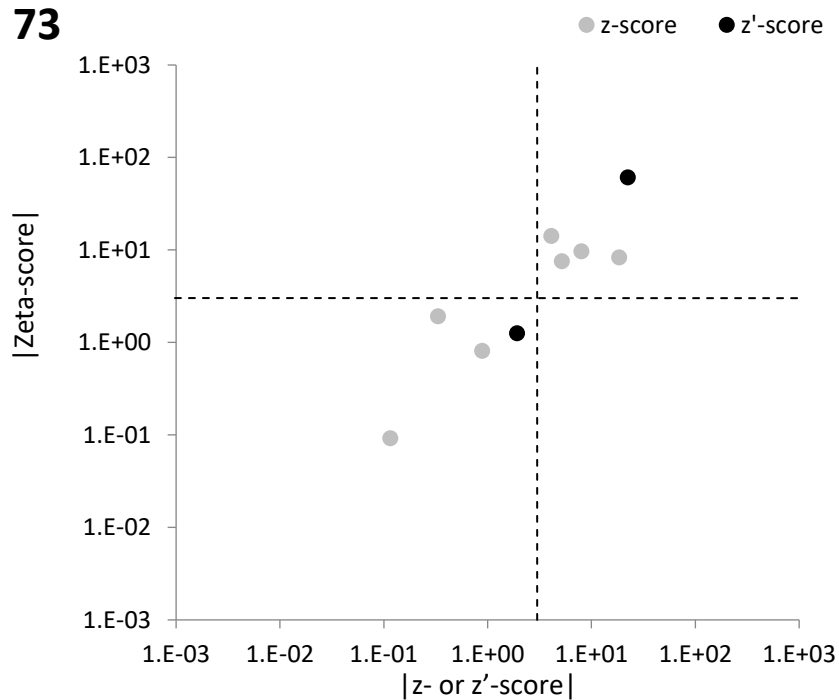


FIG. 197. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 73 (Clay sample).

73

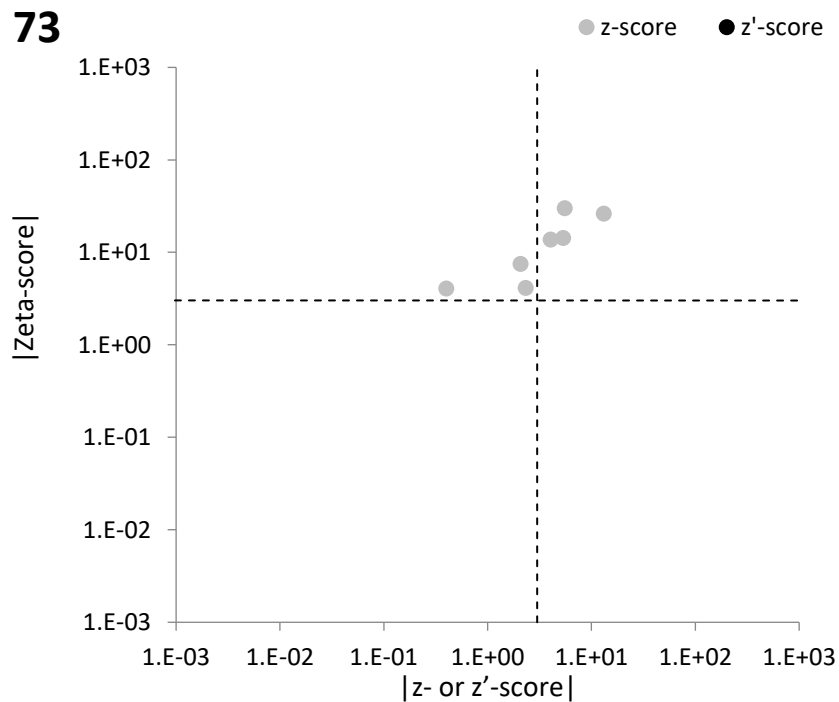


FIG. 198. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 73 (Plant sample).

75

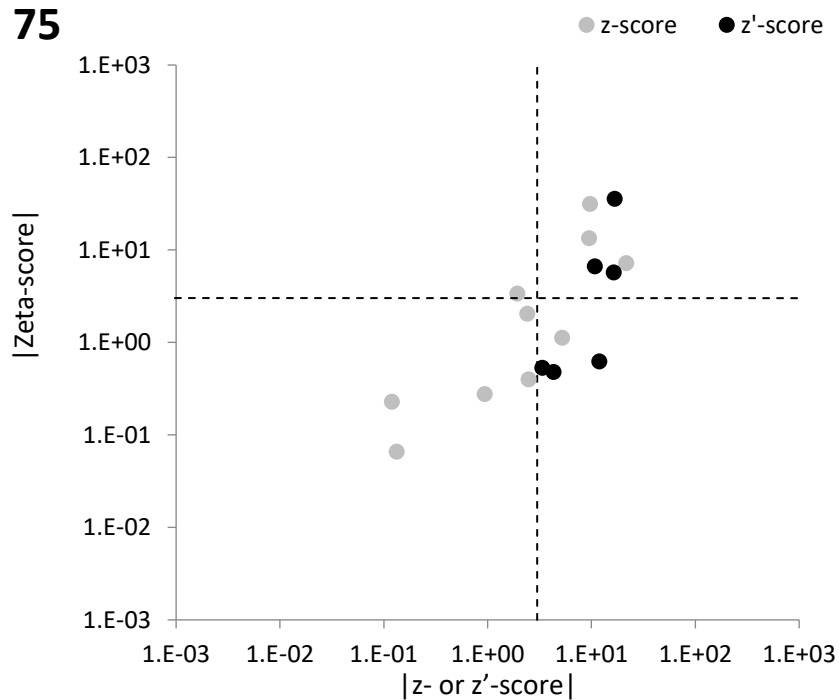


FIG. 199. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 75 (Clay sample).

75

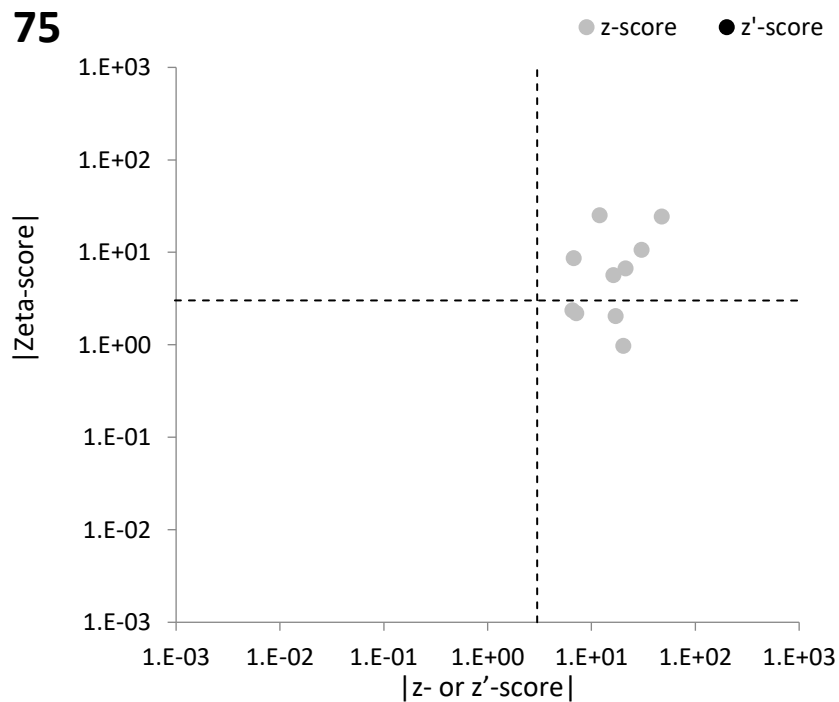


FIG. 200. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 75 (Plant sample).

77

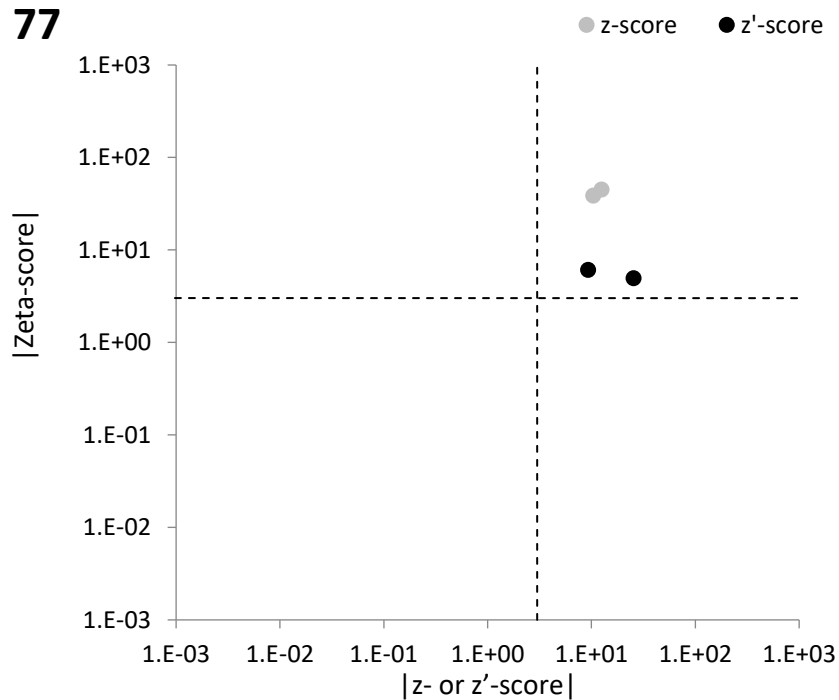


FIG. 201. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 77 (Clay sample).

77

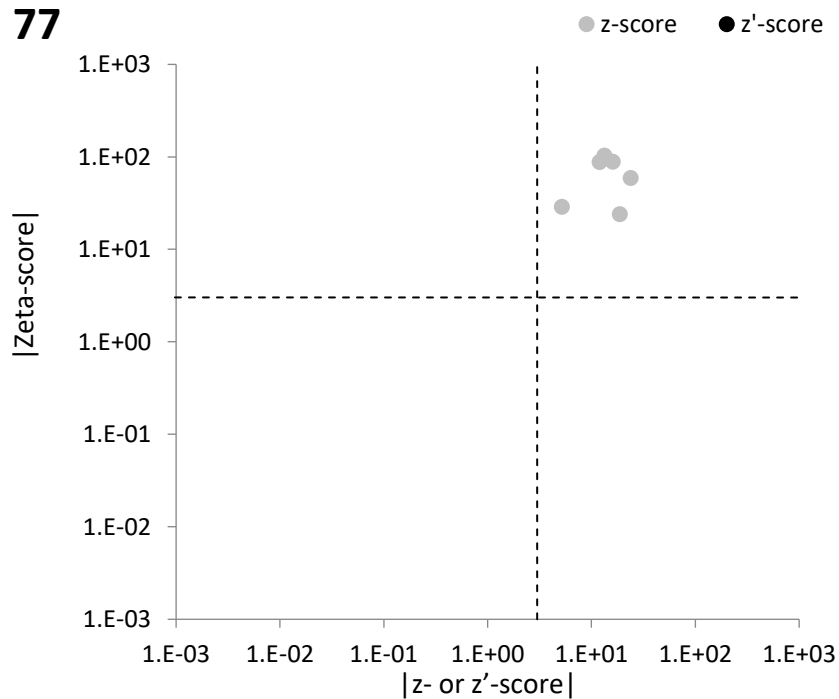


FIG. 202. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 77 (Plant sample).

78

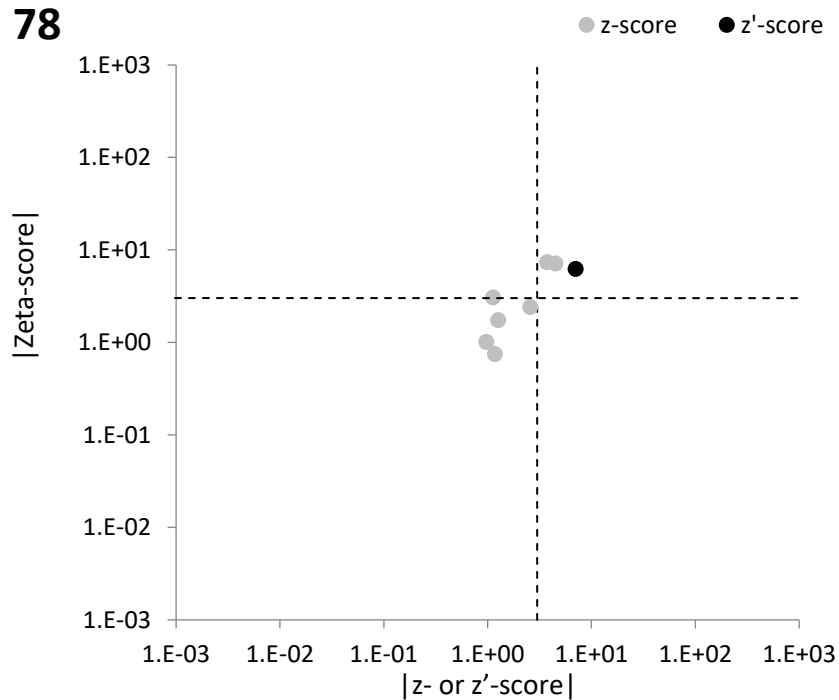


FIG. 203. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 78 (Clay sample).

78

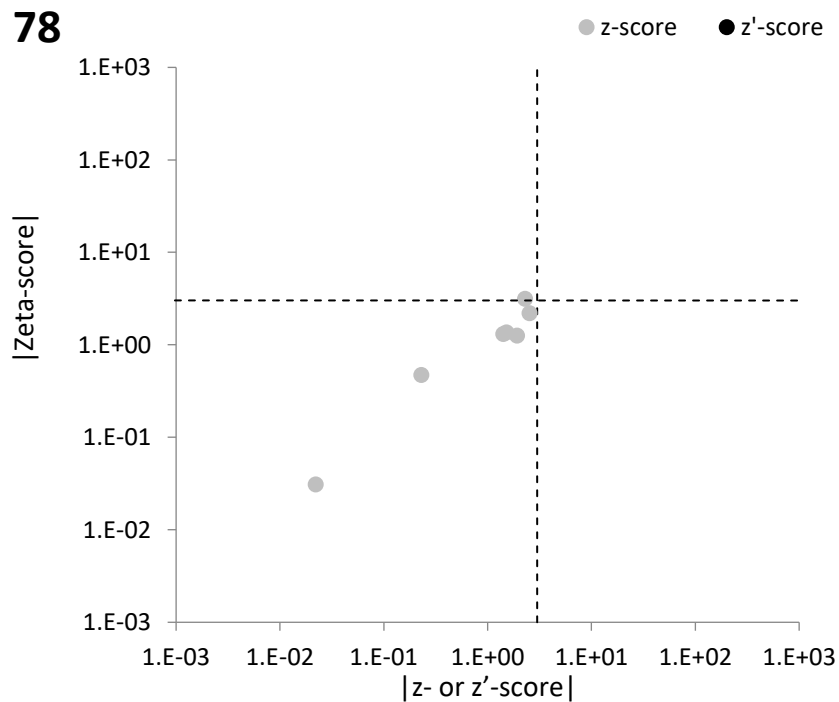


FIG. 204. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 78 (Plant sample).

94

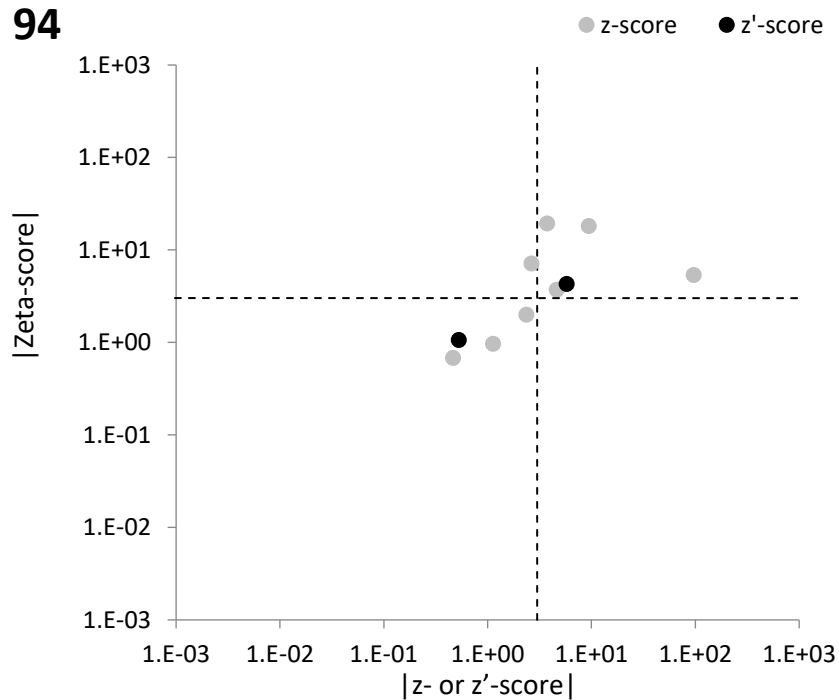


FIG. 205. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 94 (Clay sample).

94

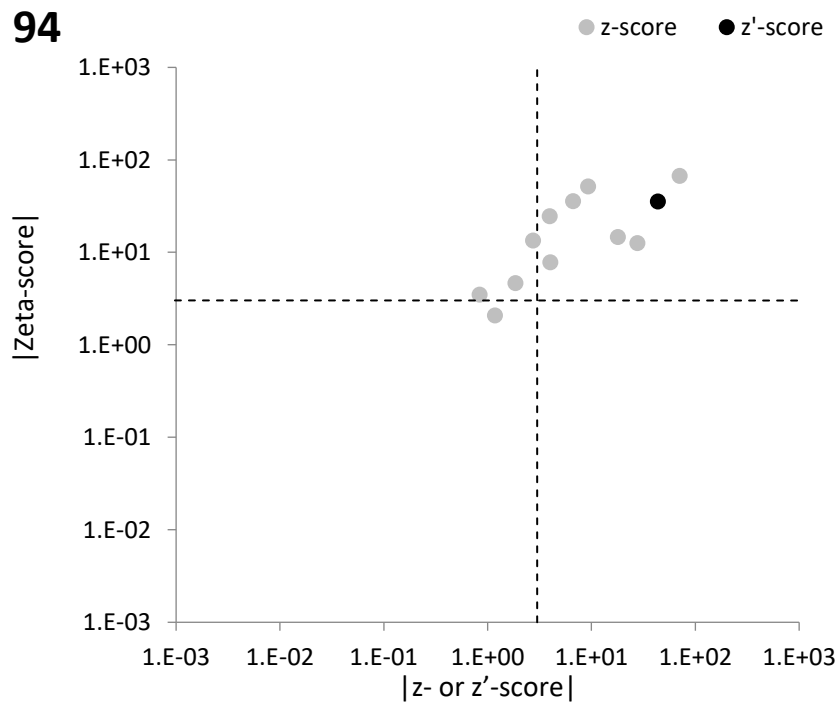


FIG. 206. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 94 (Plant sample).

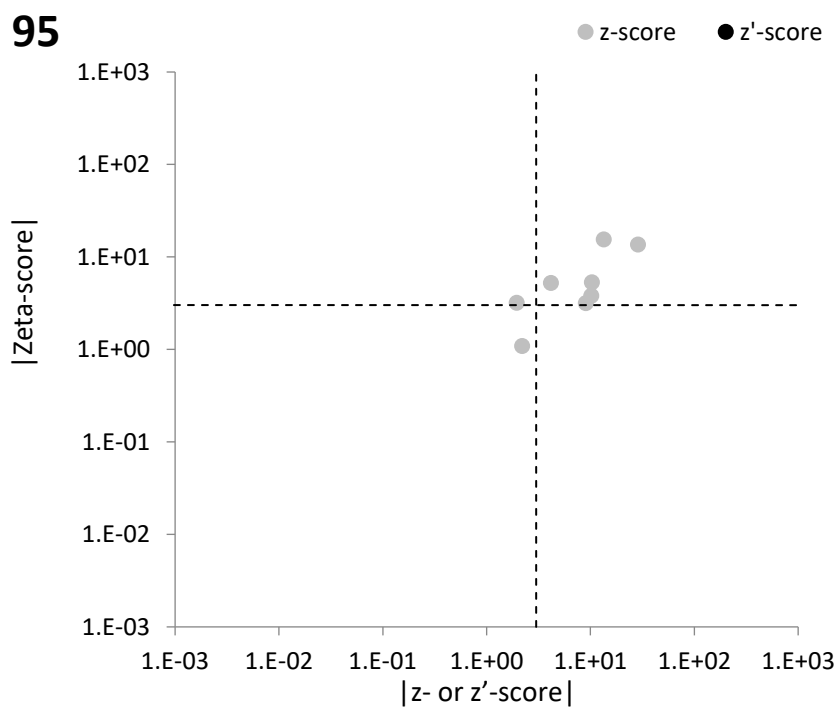


FIG. 207. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 95 (Clay sample).

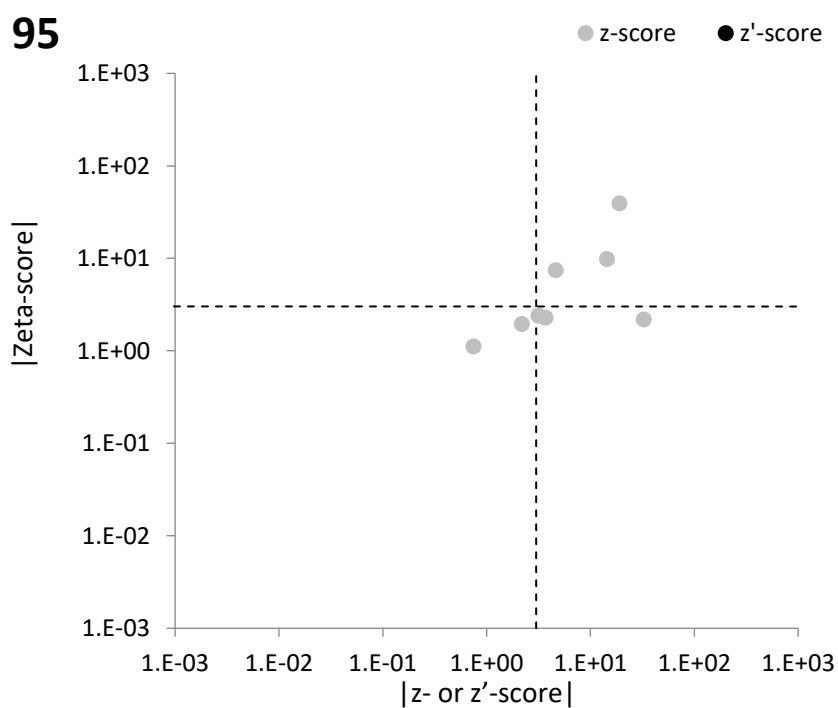


FIG. 208. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 95 (Plant sample).

102

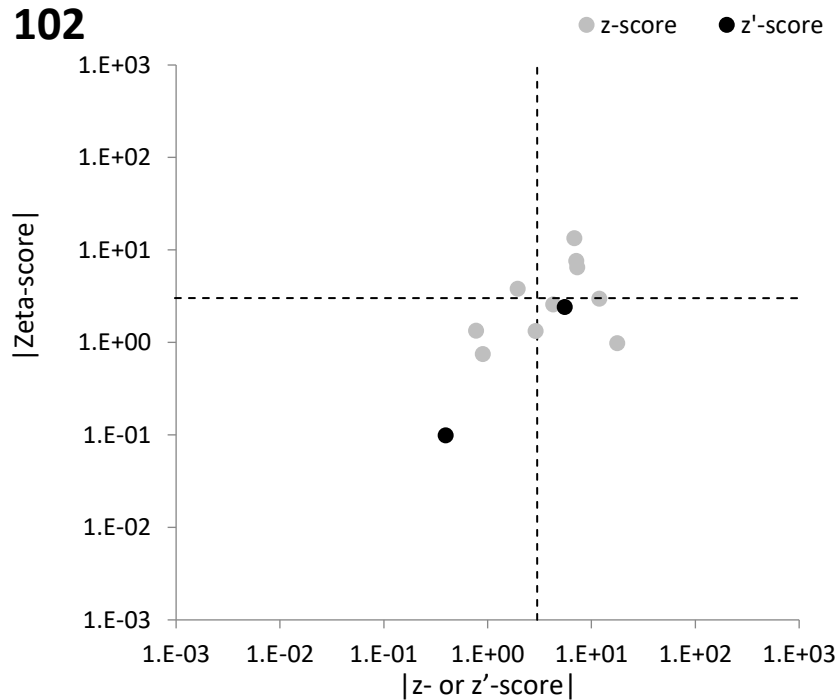


FIG. 209. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 102 (Clay sample).

102

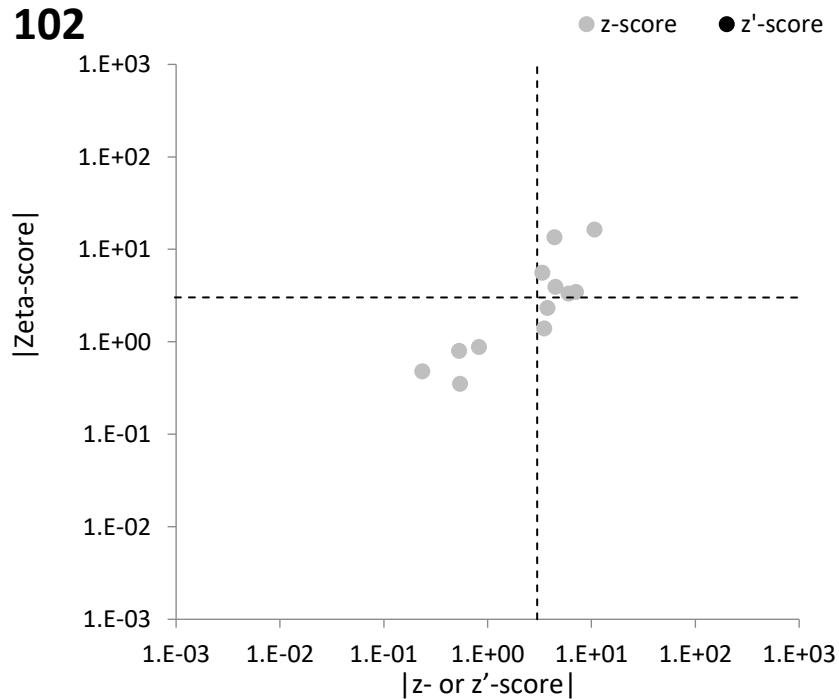


FIG. 210. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 102 (Plant sample).

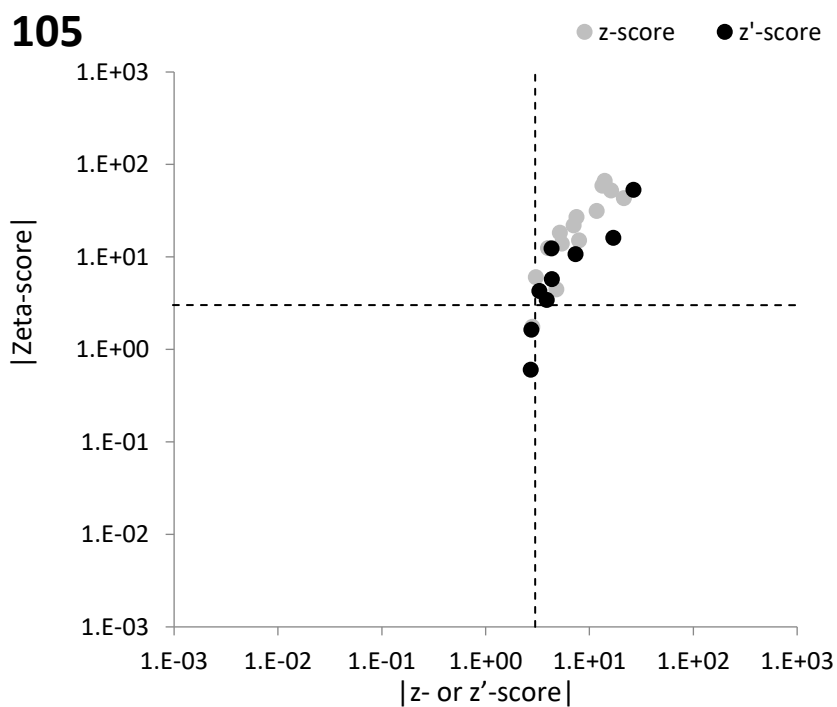


FIG. 211. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 105 (Clay sample).

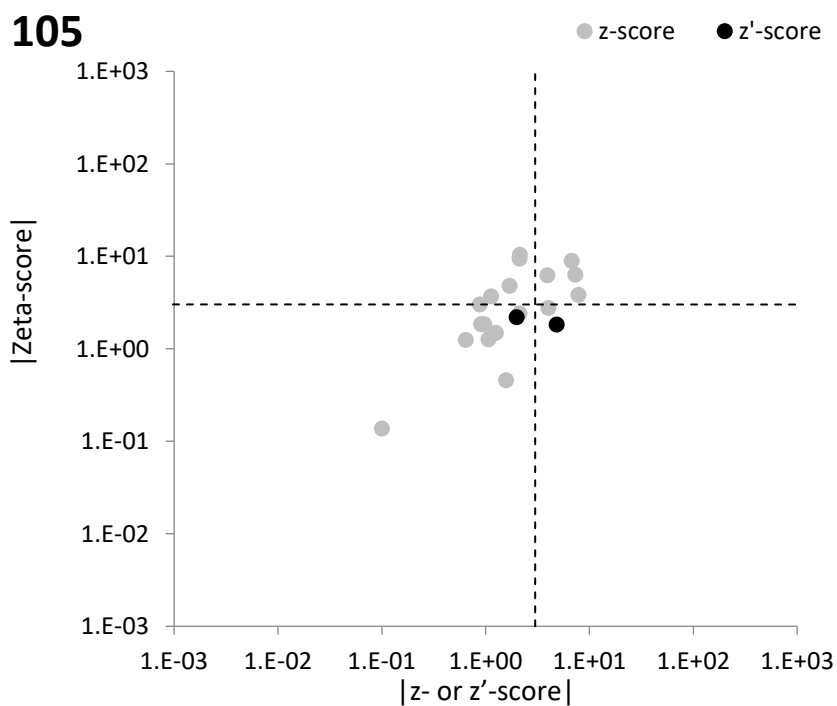


FIG. 212. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 105 (Plant sample).

108

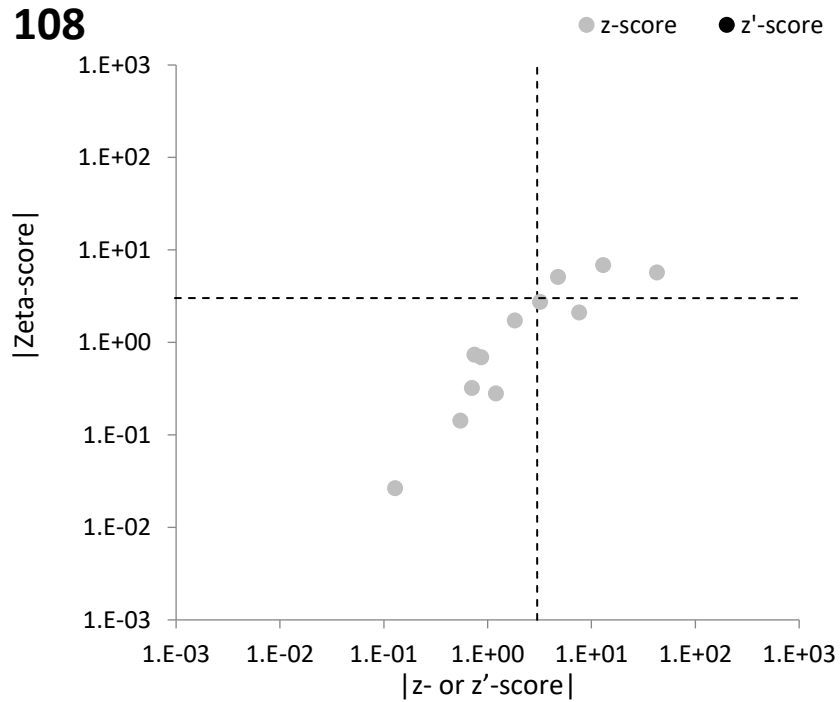


FIG. 213. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 108 (Plant sample).

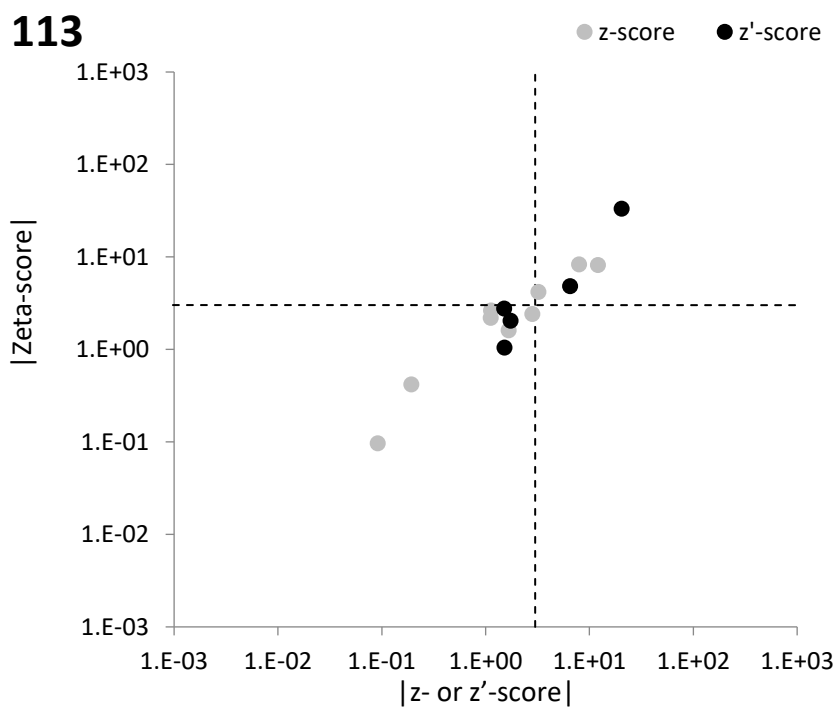


FIG. 214. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 113 (Clay sample).

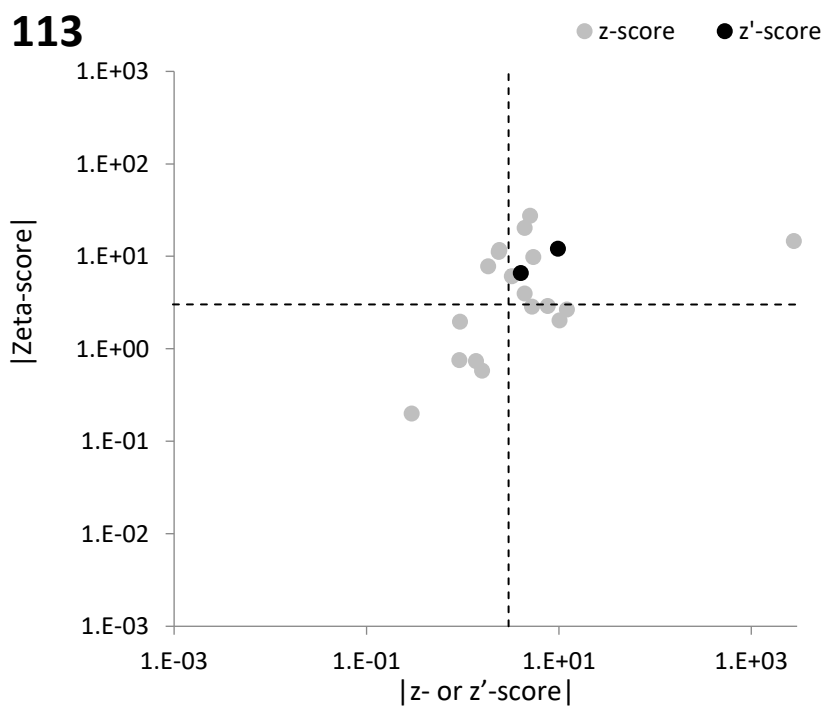


FIG. 215. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 113 (Plant sample).

116

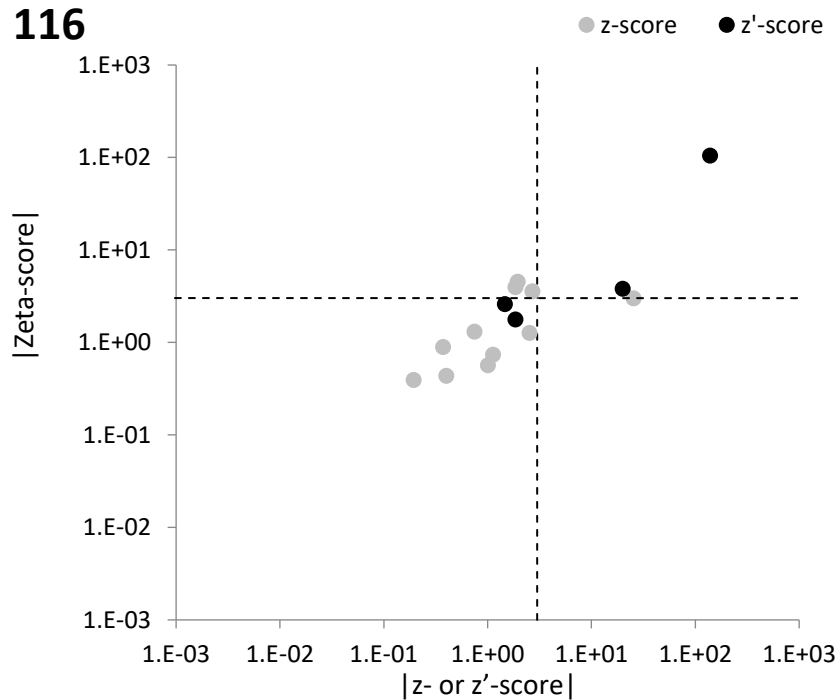


FIG. 216. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 116 (Clay sample).

116

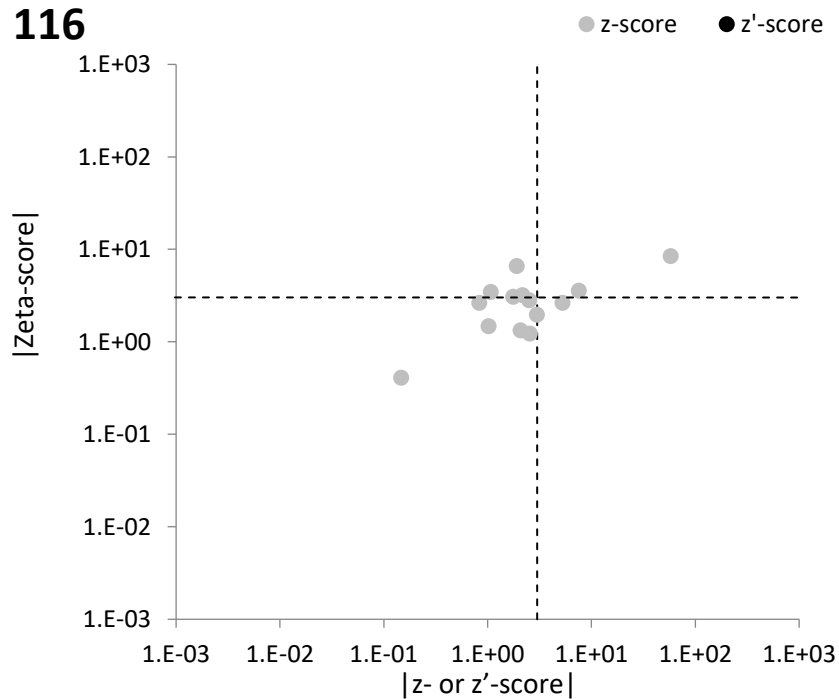


FIG. 217. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 116 (Plant sample).

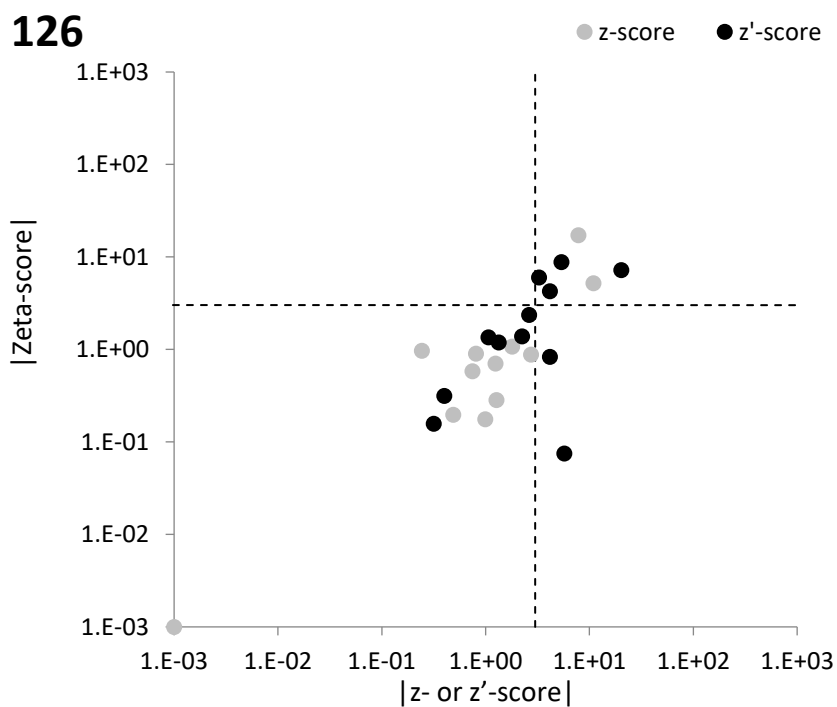


FIG. 218. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 126 (Clay sample).

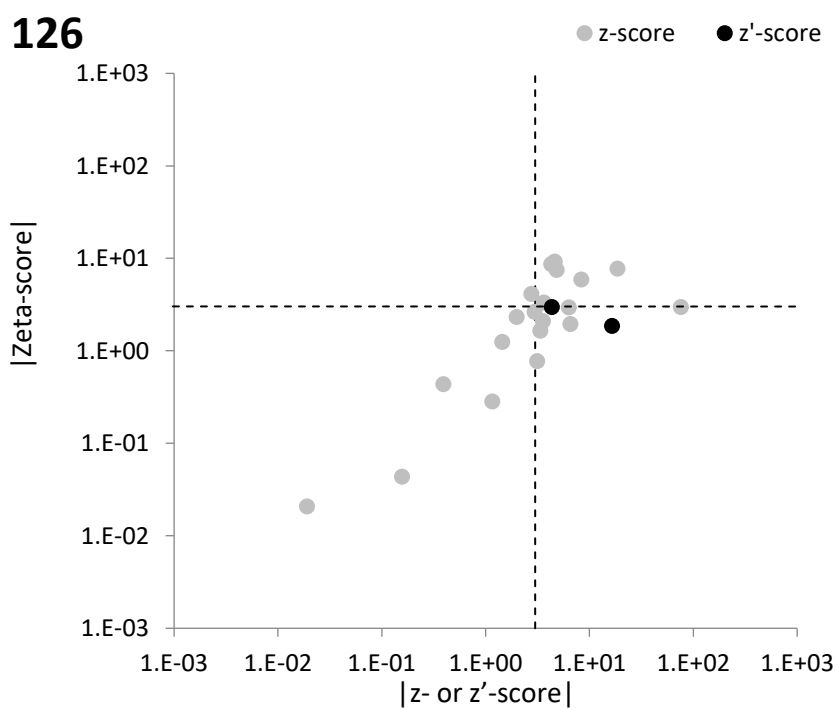


FIG. 219. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 126 (Plant sample).

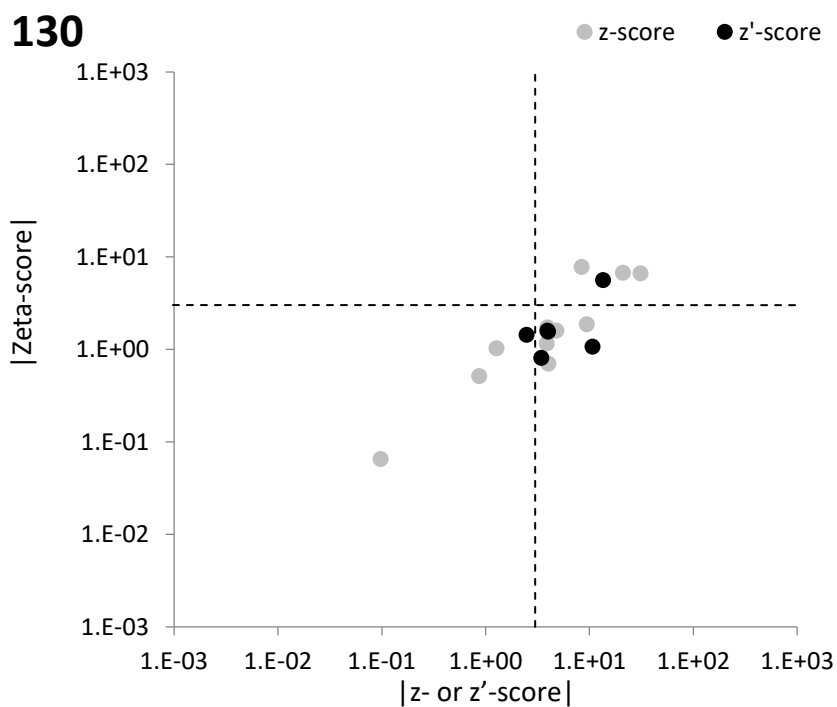


FIG. 220. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 130 (Clay sample).

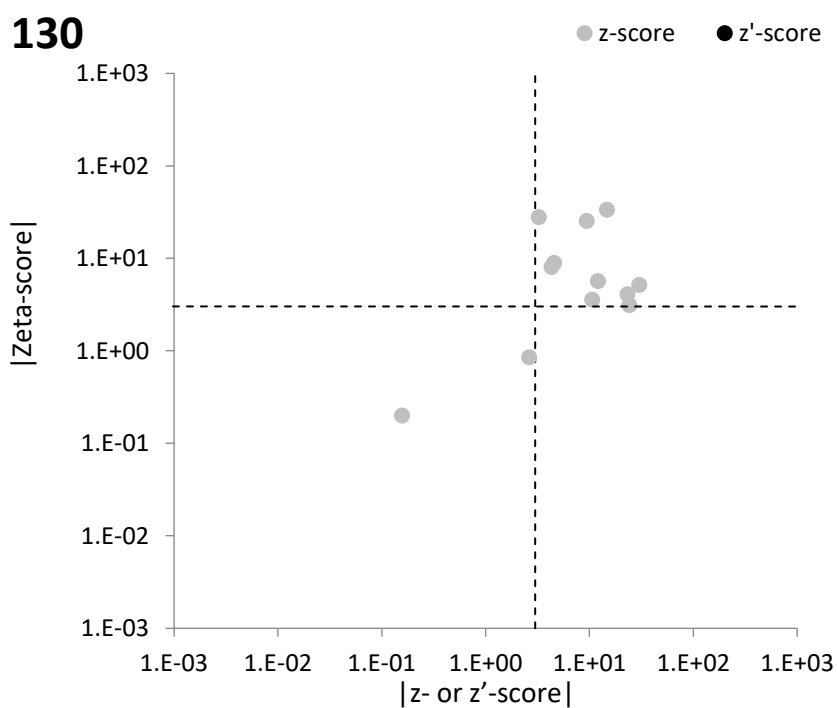


FIG. 221. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 130 (Plant sample).

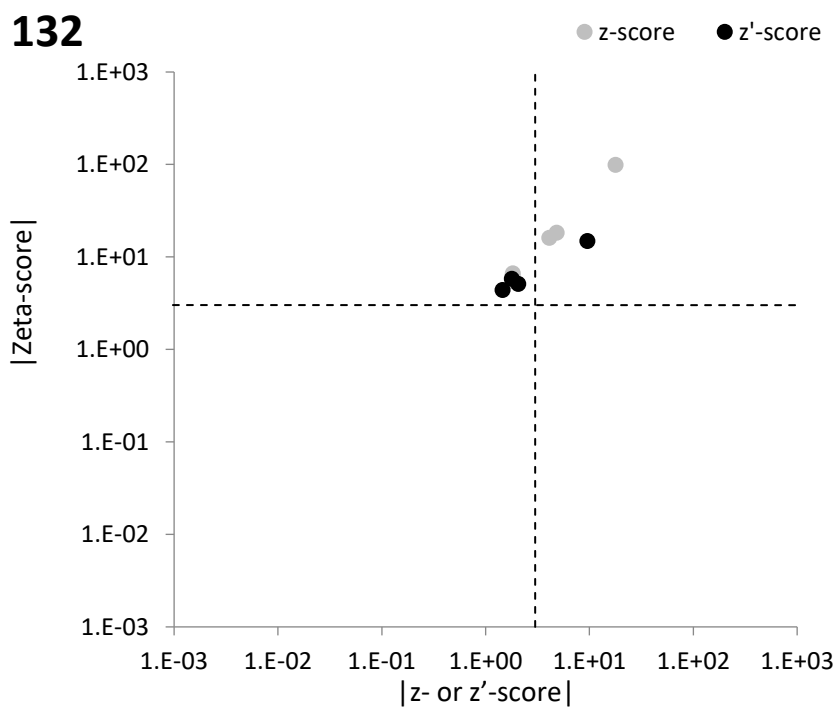


FIG. 222. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 132 (Clay sample).

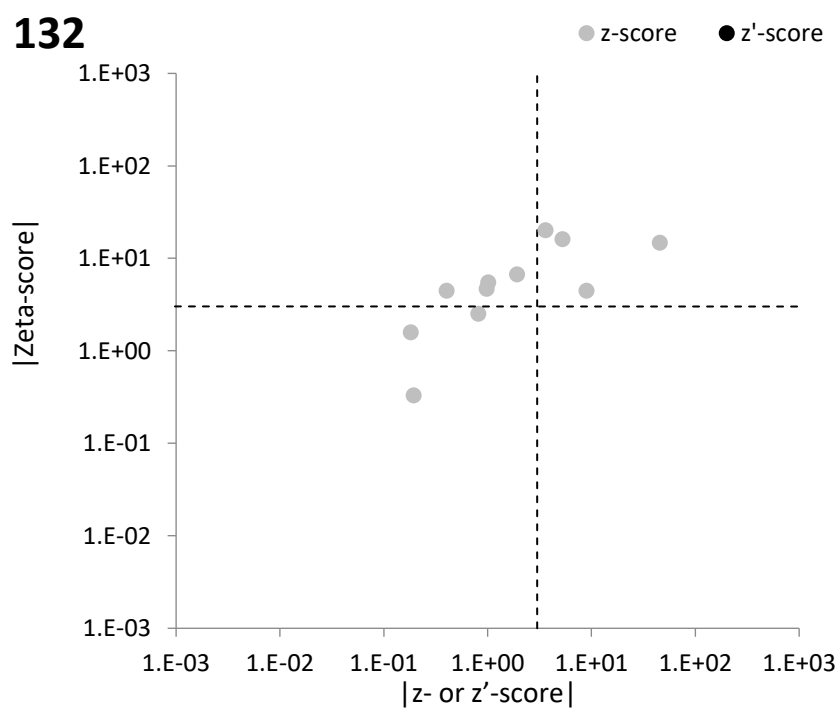


FIG. 223. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 132 (Plant sample).

137

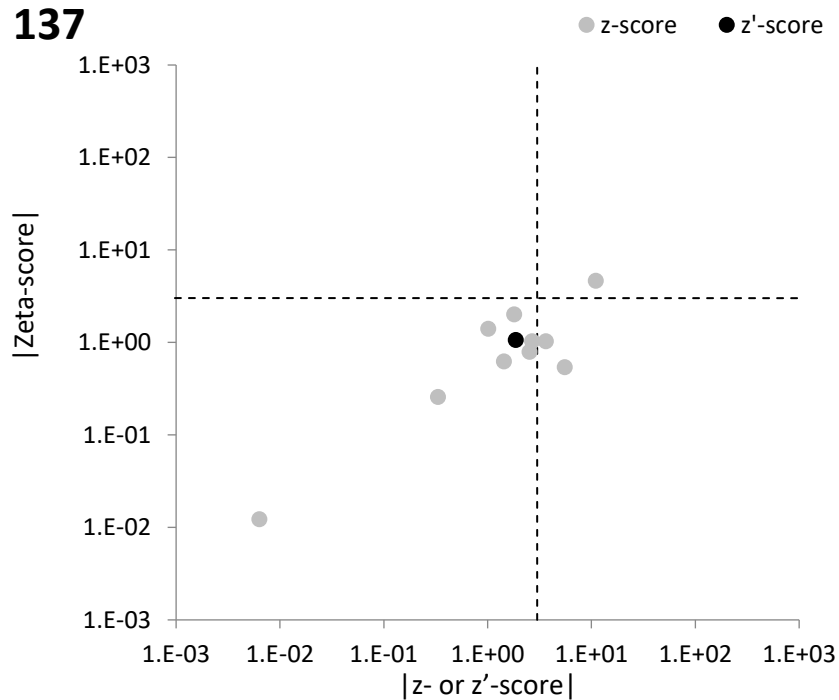


FIG. 224. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 137 (Clay sample).

137

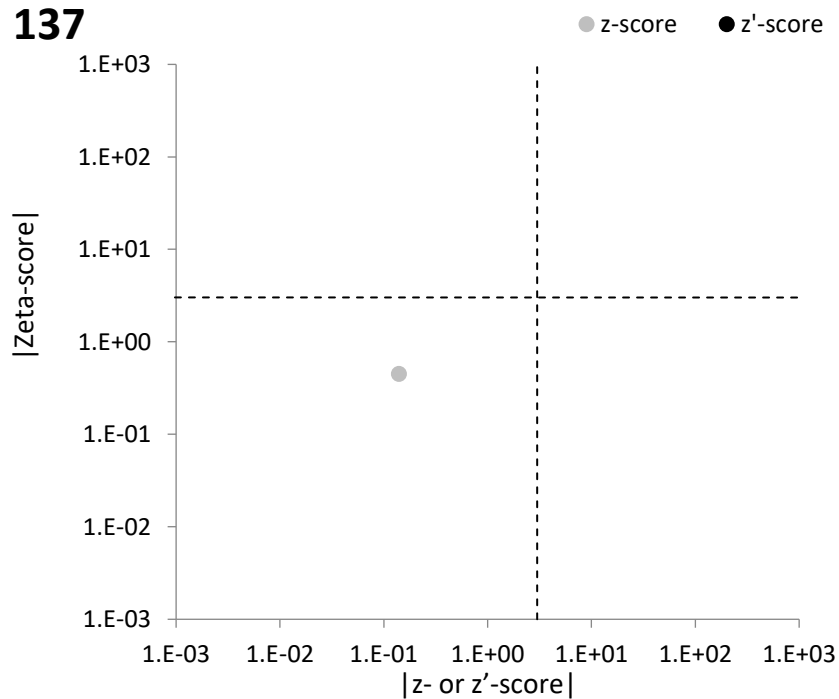


FIG. 225. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 137 (Plant sample).

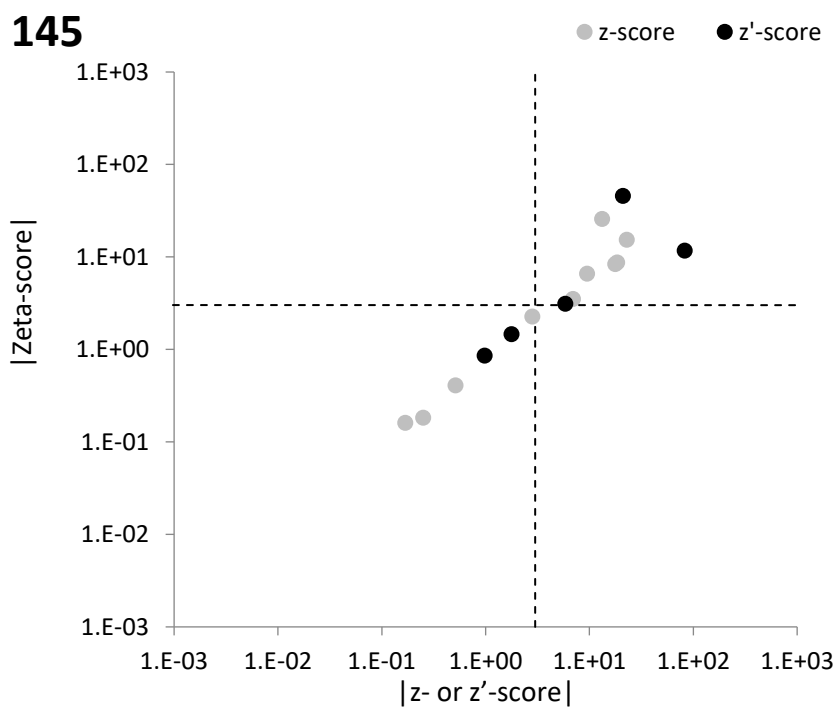


FIG. 226. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 145 (Clay sample).

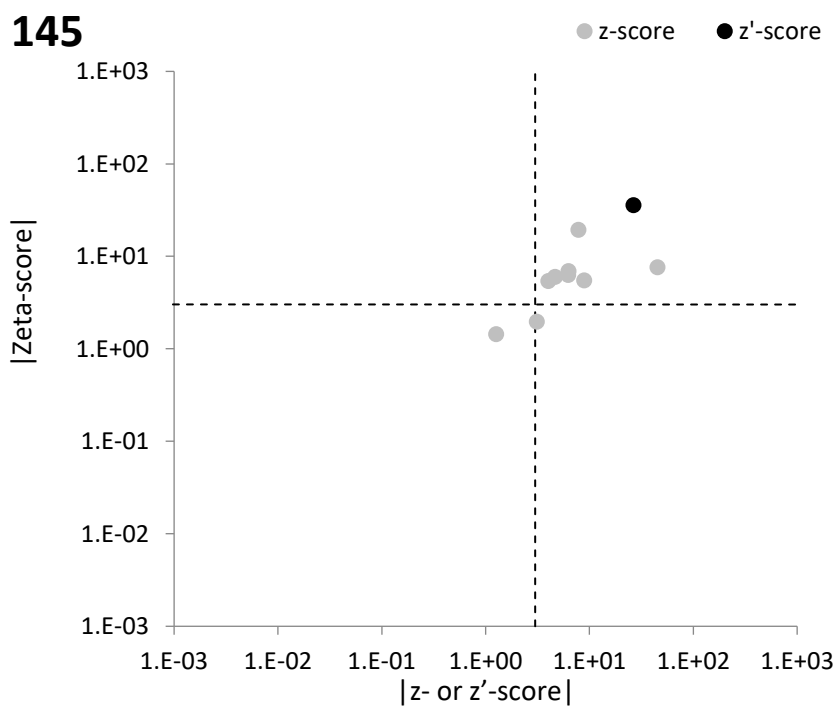


FIG. 227. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 145 (Plant sample).

151

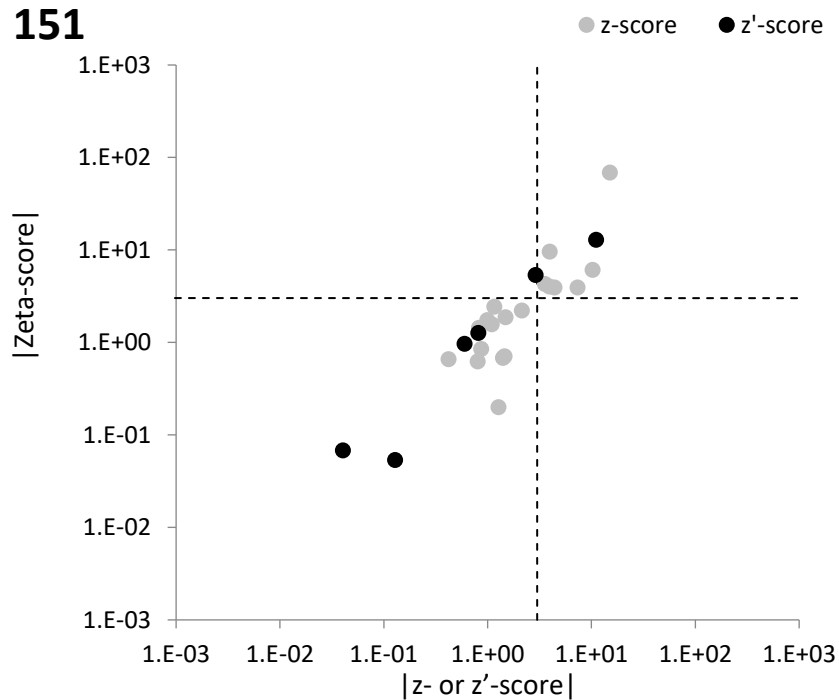


FIG. 228. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 151 (Clay sample).

151

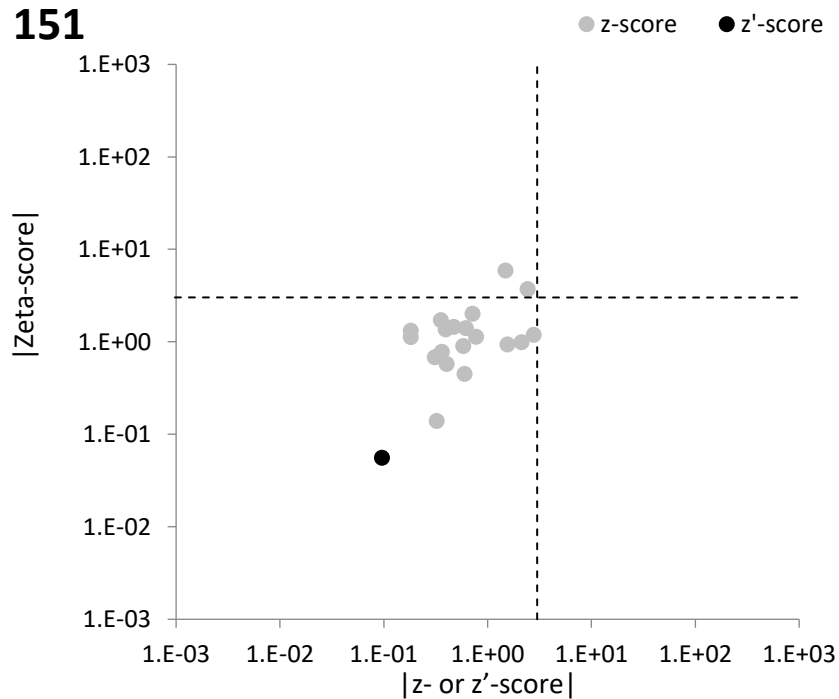


FIG. 229. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 151 (Plant sample).

152

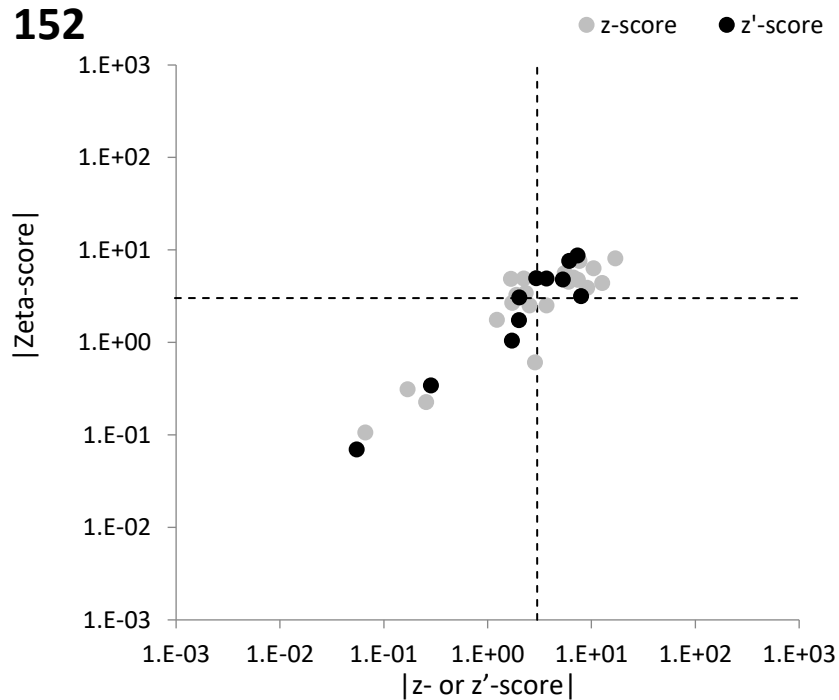


FIG. 230. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 152 (Clay sample).

152

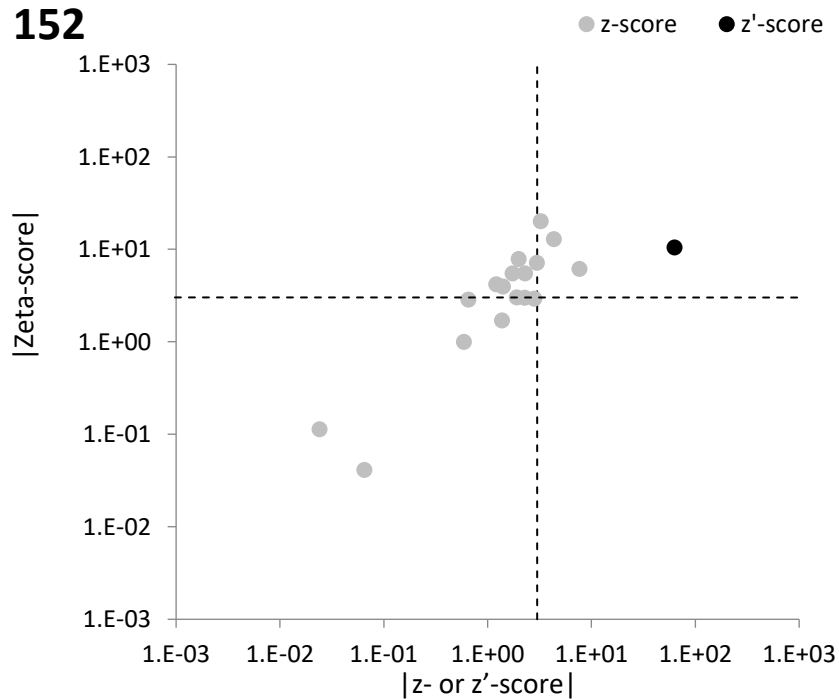


FIG. 231. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 152 (Plant sample).

154

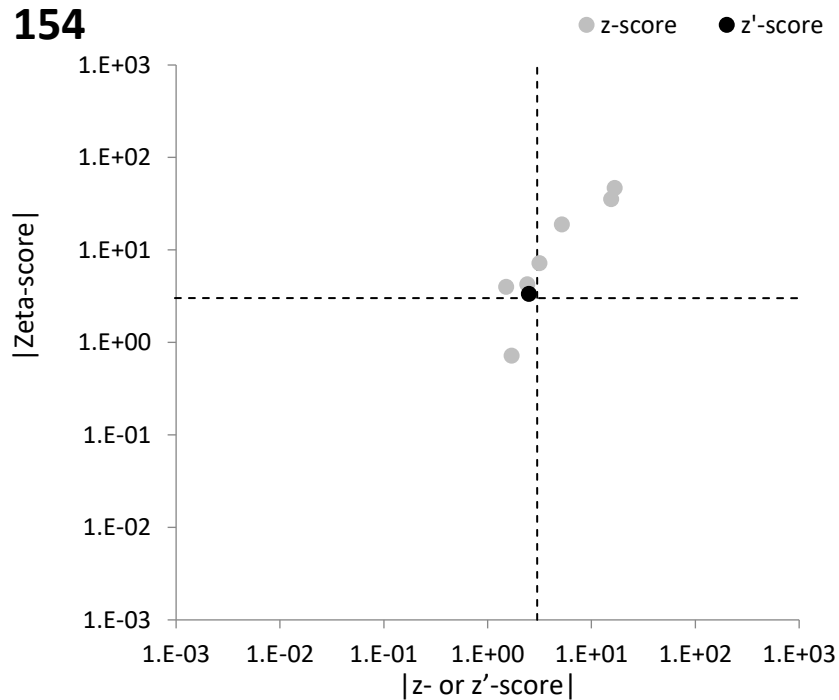


FIG. 232. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 154 (Clay sample).

154

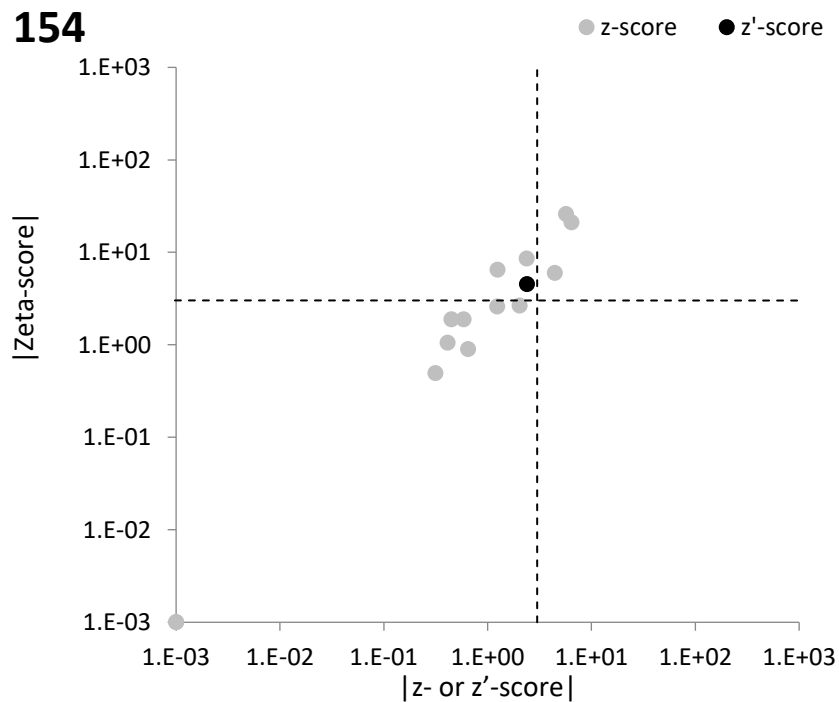


FIG. 233. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 154 (Plant sample).

155

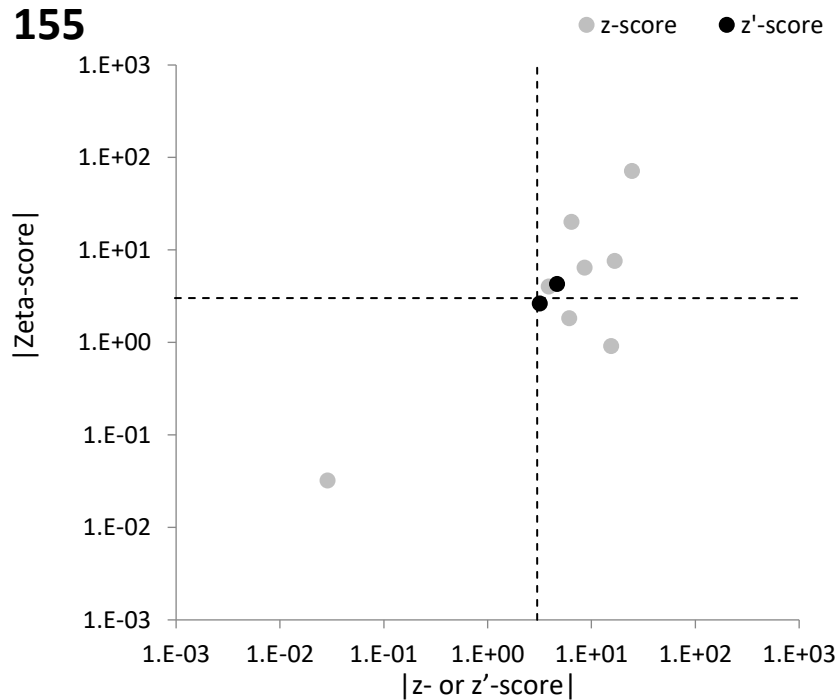


FIG. 234. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 155 (Clay sample).

167

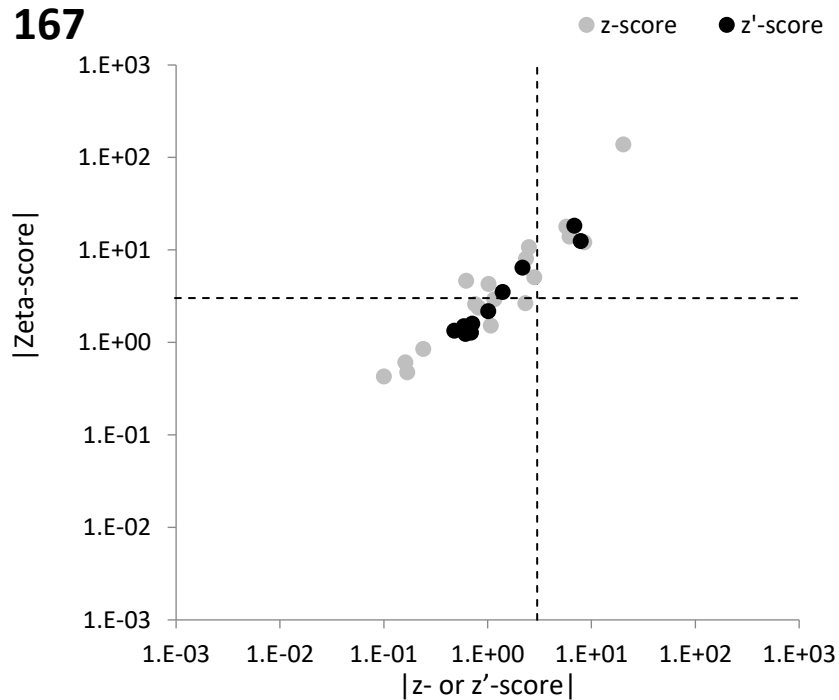


FIG. 235. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 167 (Clay sample).

167

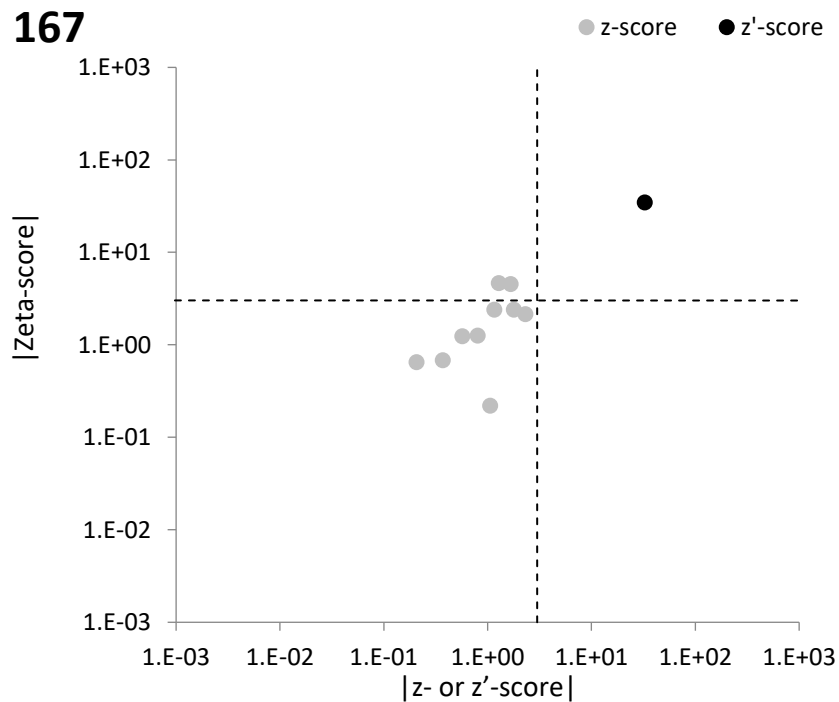


FIG. 236. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 167 (Plant sample).

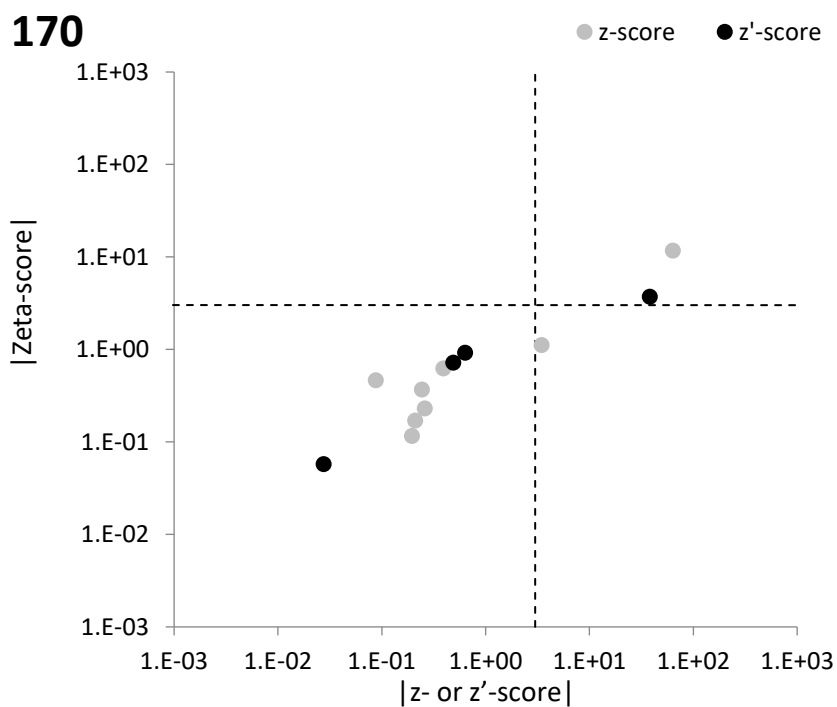


FIG. 237. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 170 (Clay sample).

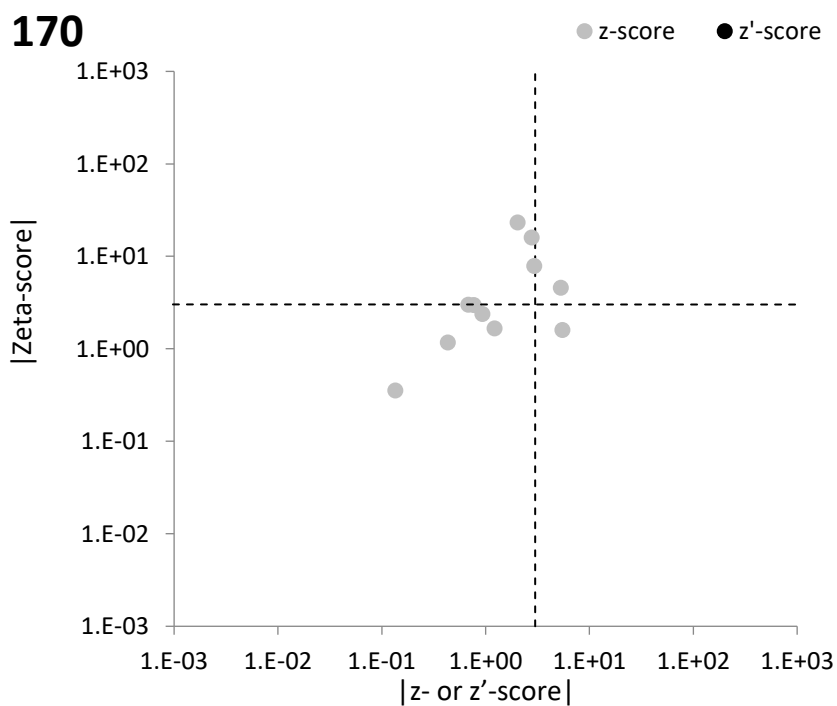


FIG. 238. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 170 (Plant sample).

171

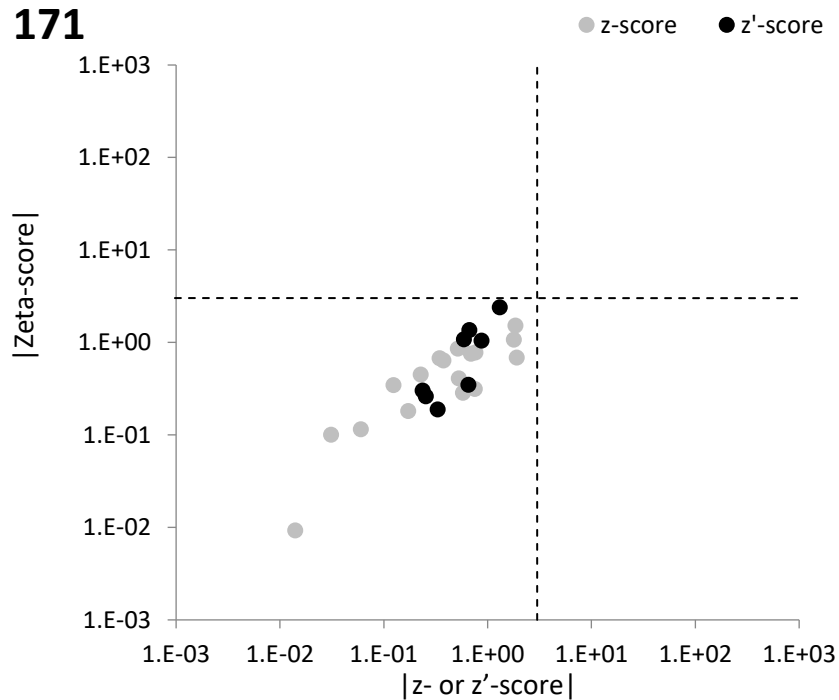


FIG. 239. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 171 (Clay sample).

171

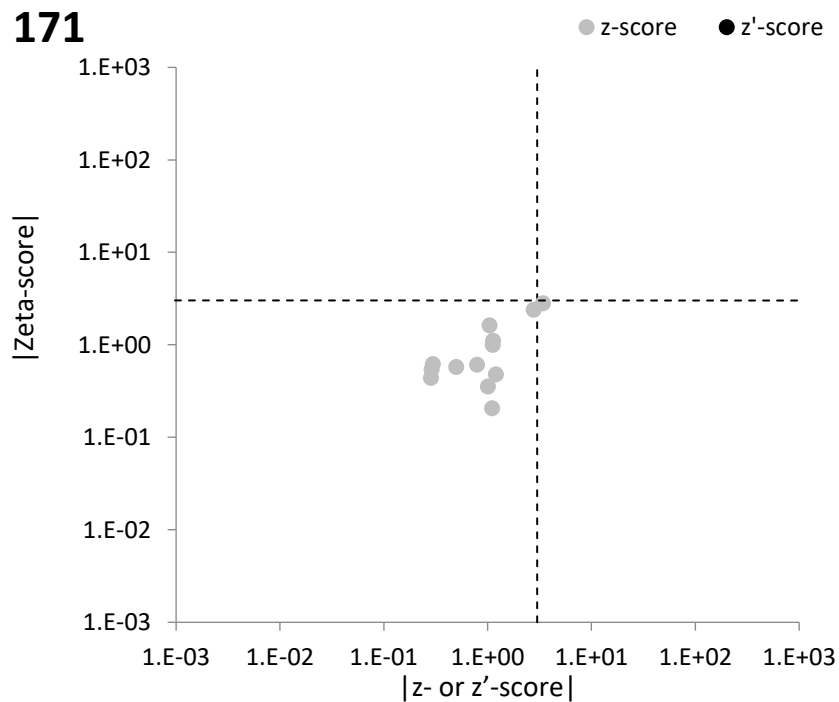


FIG. 240. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 171 (Plant sample).

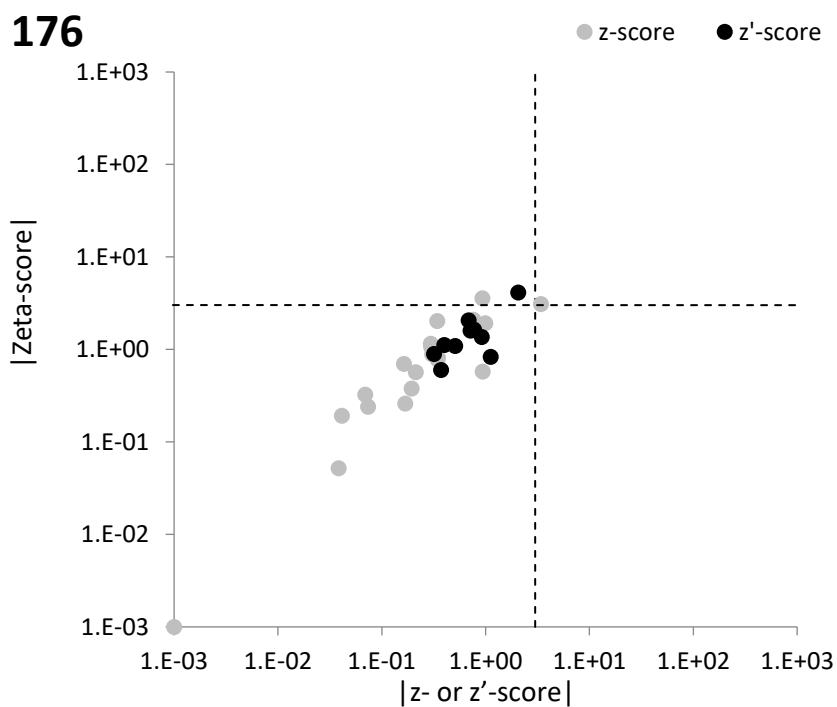


FIG. 241. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 176 (Clay sample).

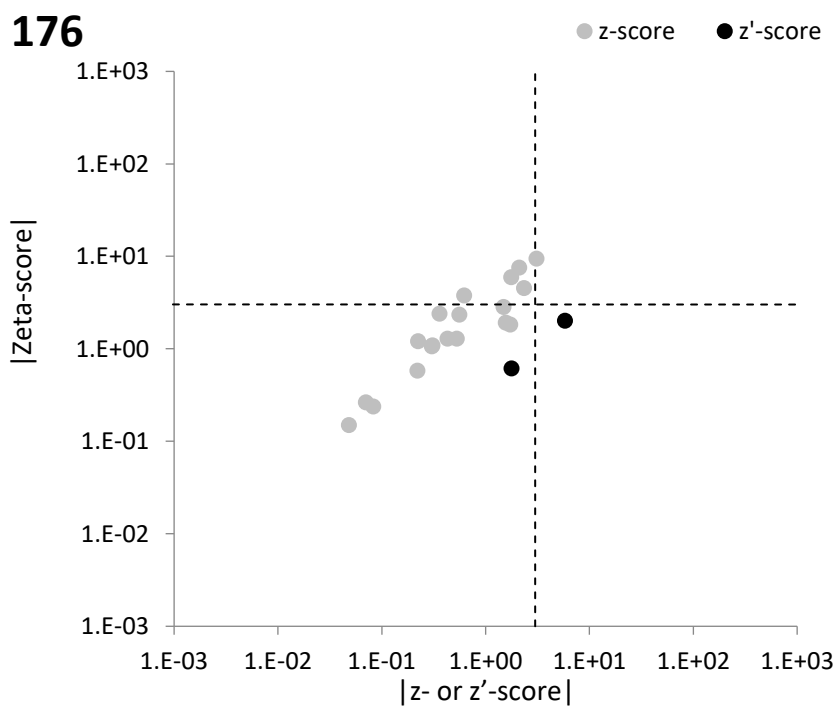


FIG. 242. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 176 (Plant sample).

182

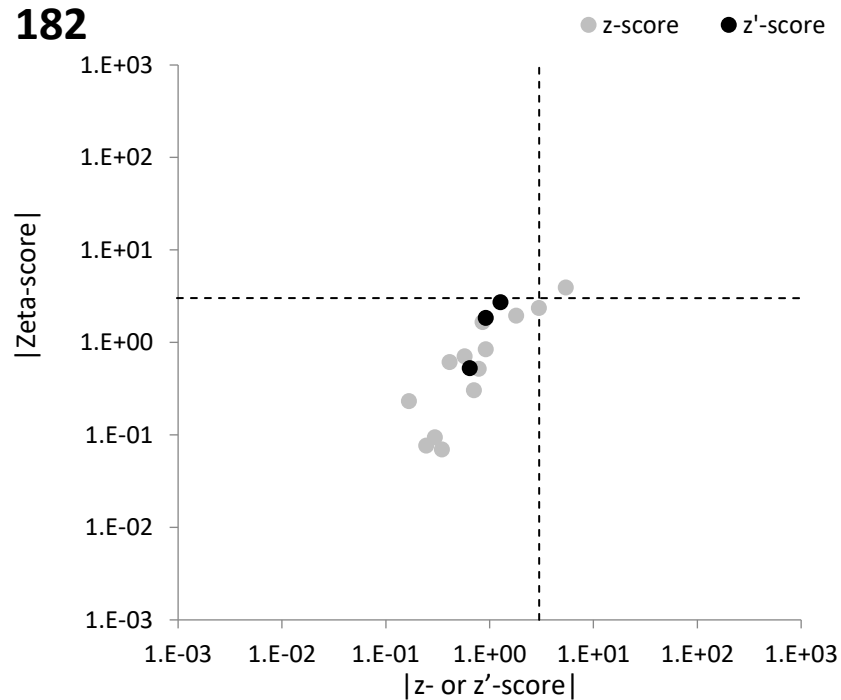


FIG. 243. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 182 (Clay sample).

183

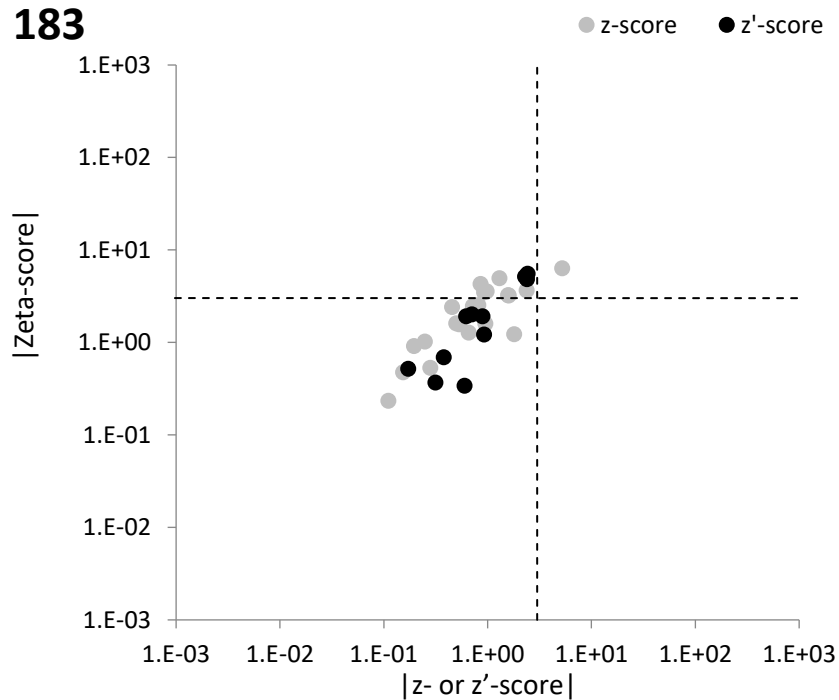


FIG. 244. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 183 (Clay sample).

183

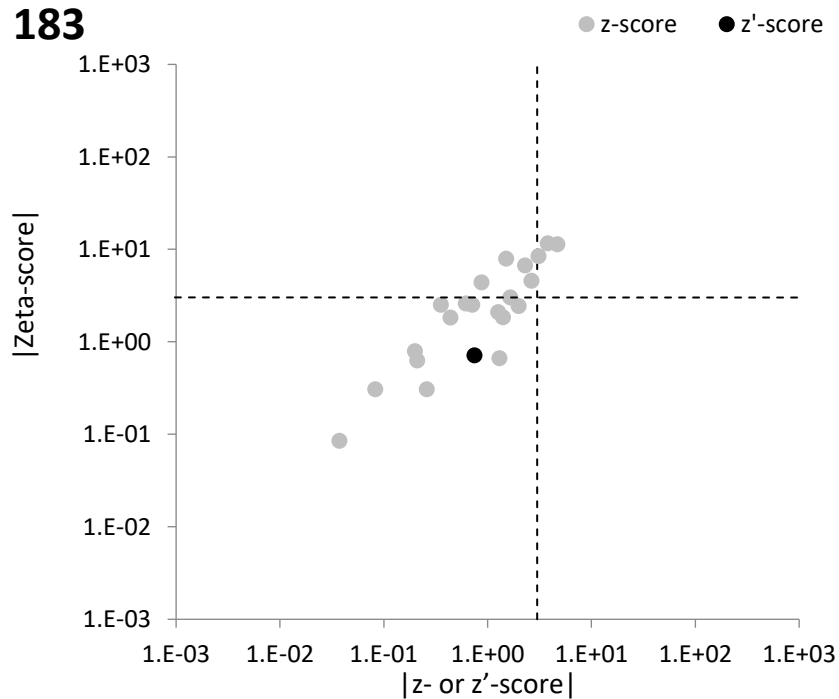


FIG. 245. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 183 (Plant sample).

191

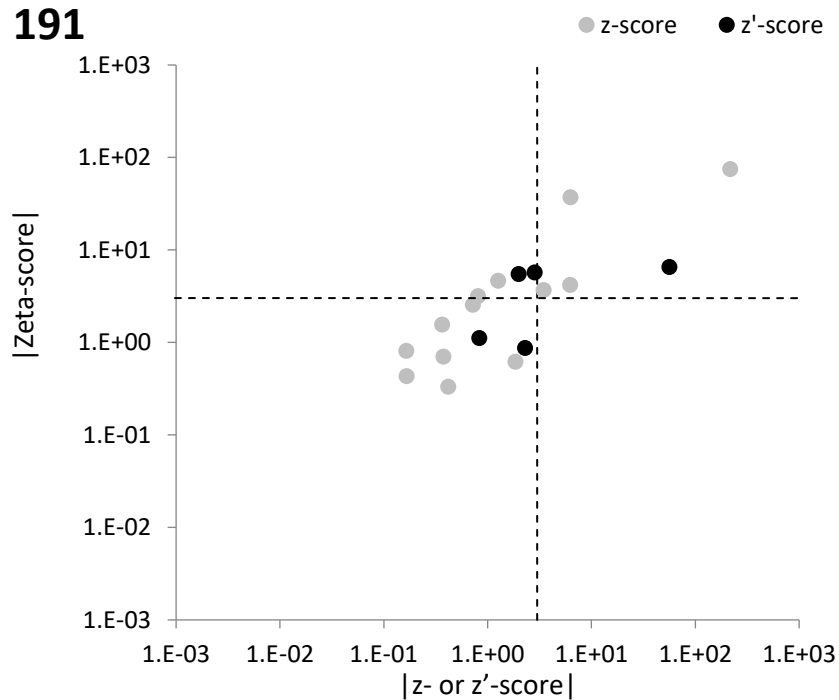


FIG. 246. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 191 (Clay sample).

191

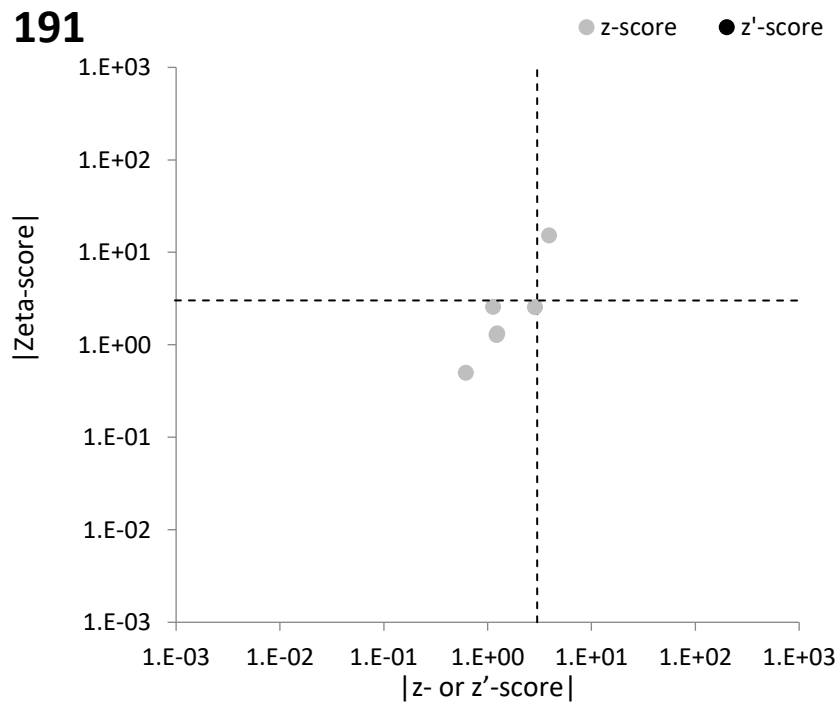


FIG. 247. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 191 (Plant sample).

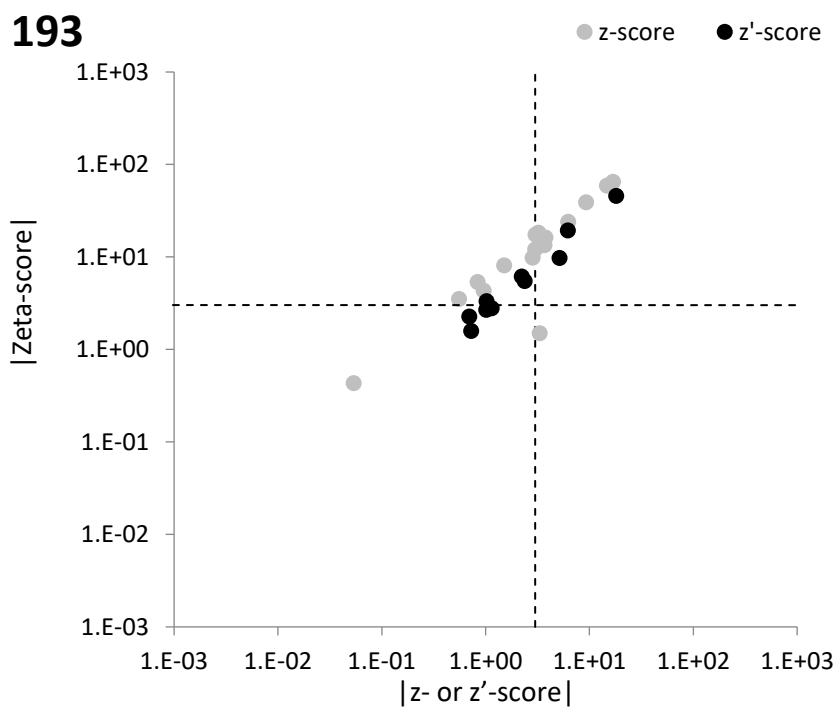


FIG. 248. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 193 (Clay sample).

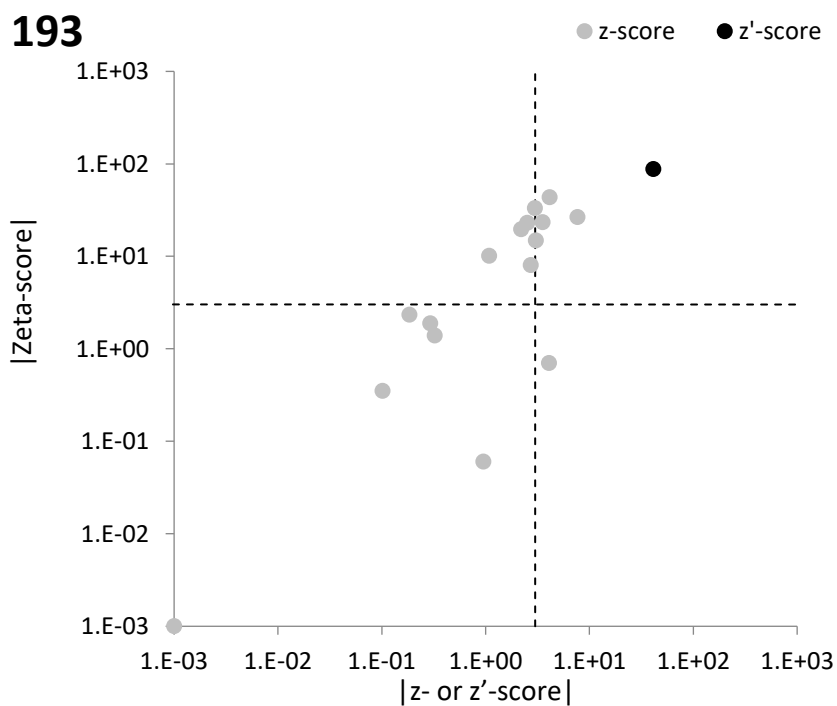


FIG. 249. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 193 (Plant sample).

194

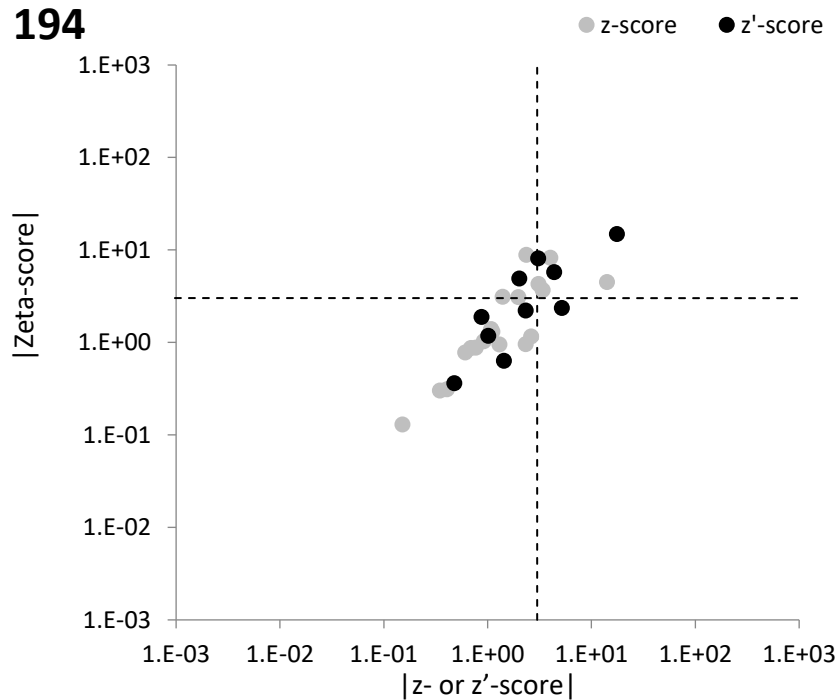


FIG. 250. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 194 (Clay sample).

194

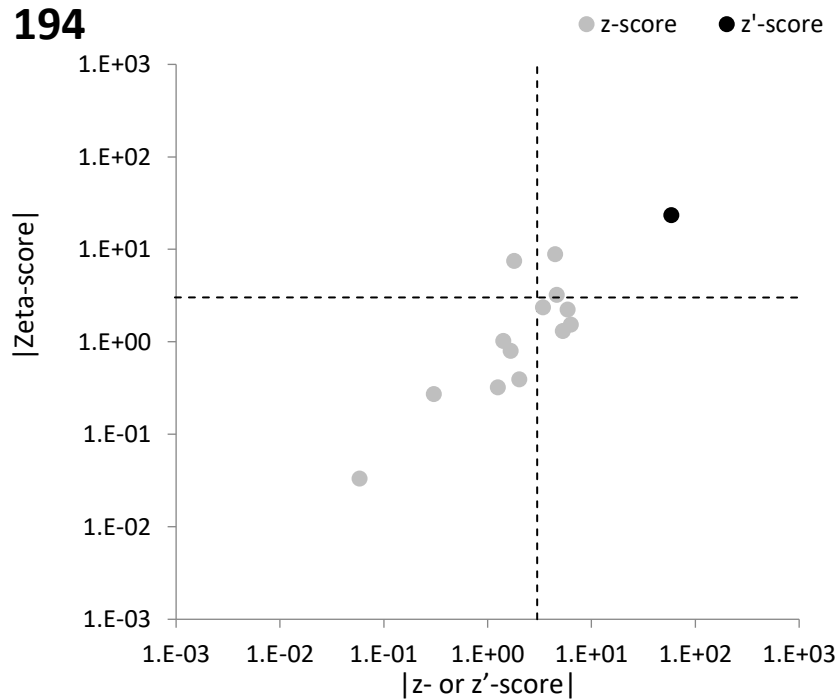


FIG. 251. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 194 (Plant sample).

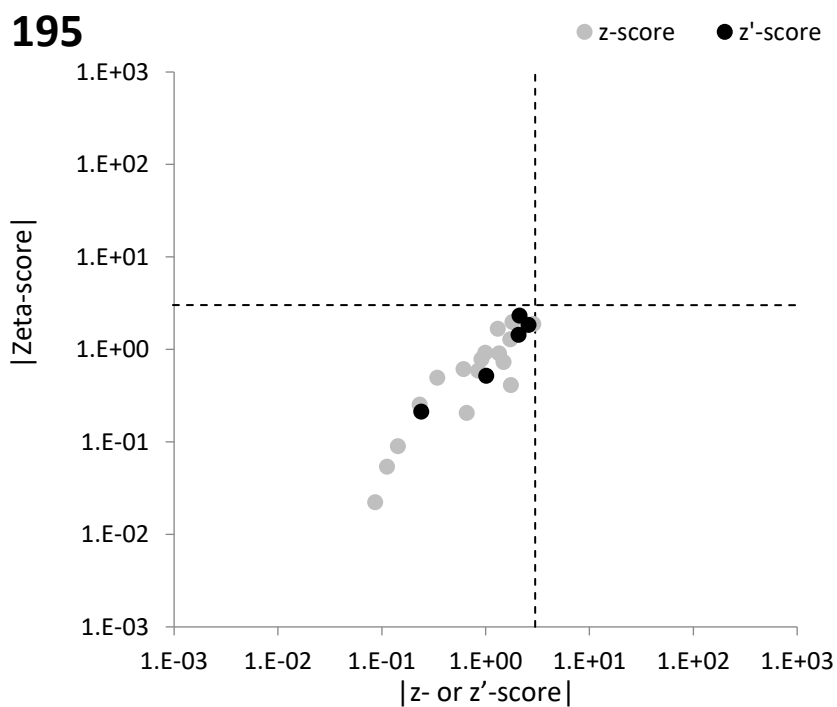


FIG. 252. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 195 (Clay sample).

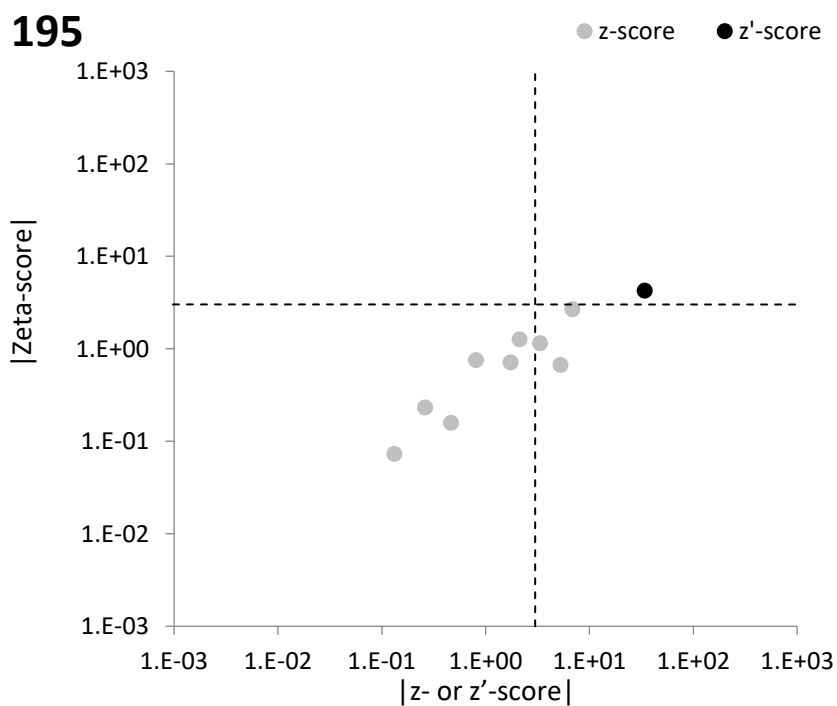


FIG. 253. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 195 (Plant sample).

197

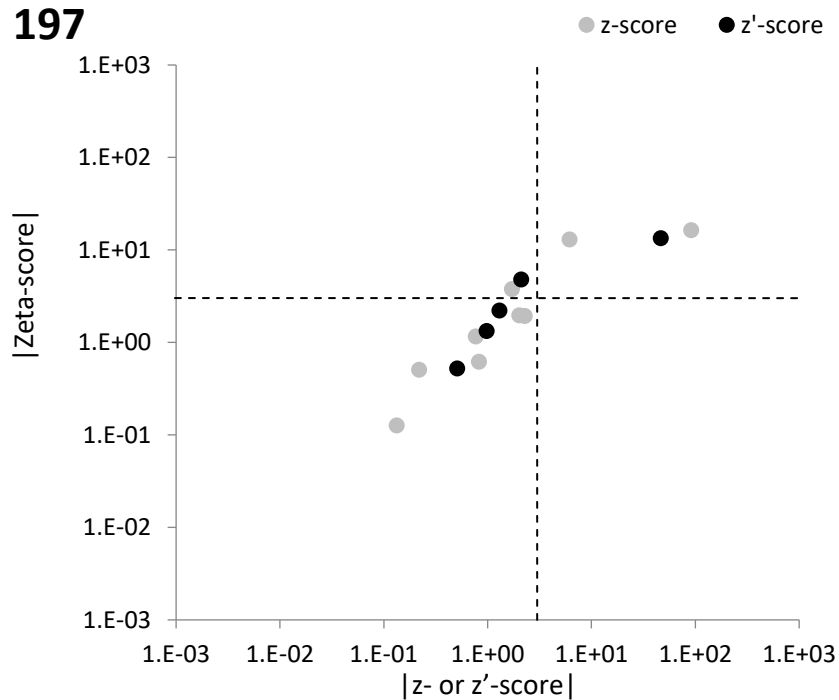


FIG. 254. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 197 (Clay sample).

197

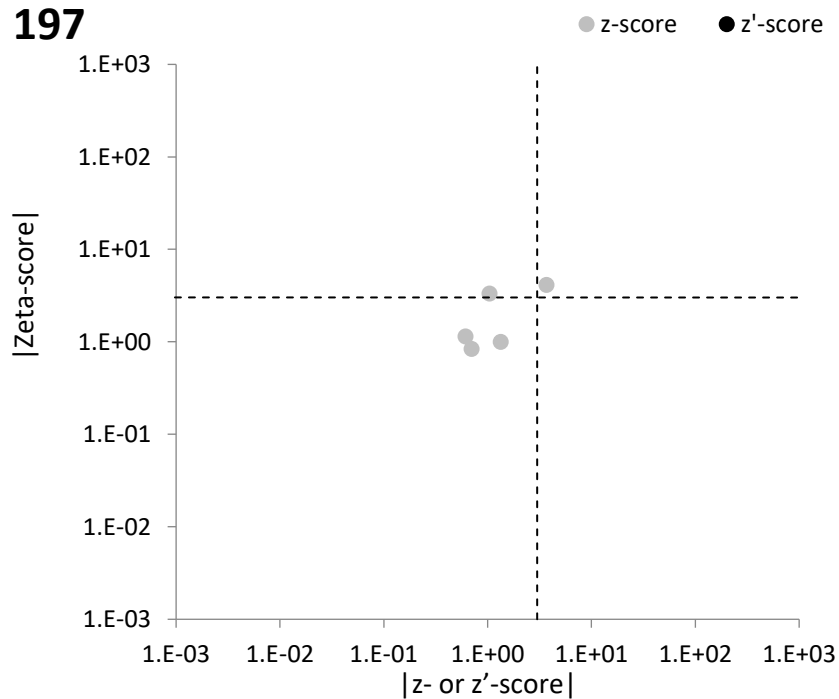


FIG. 255. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 197 (Plant sample).

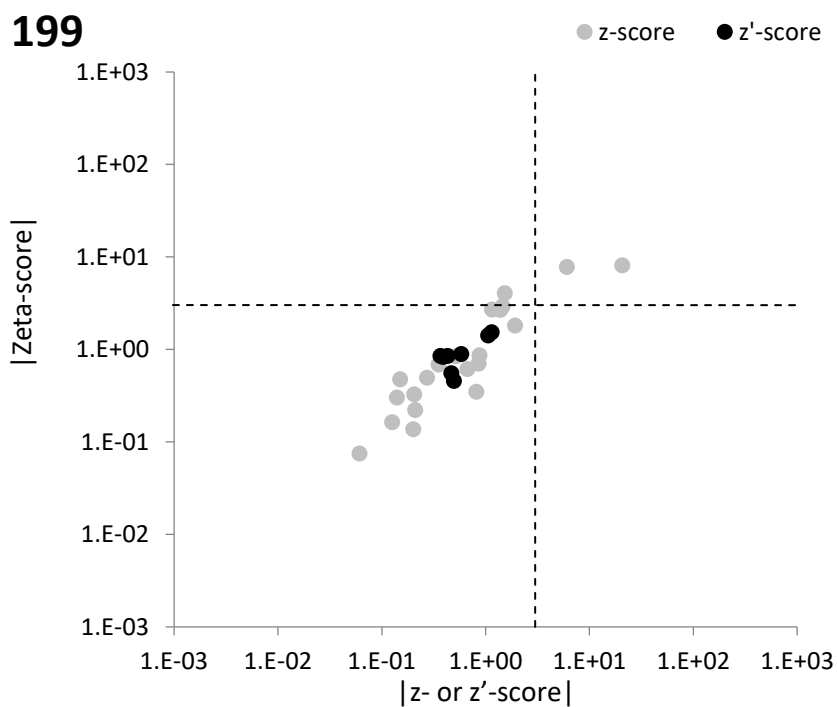


FIG. 256. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 199 (Clay sample).

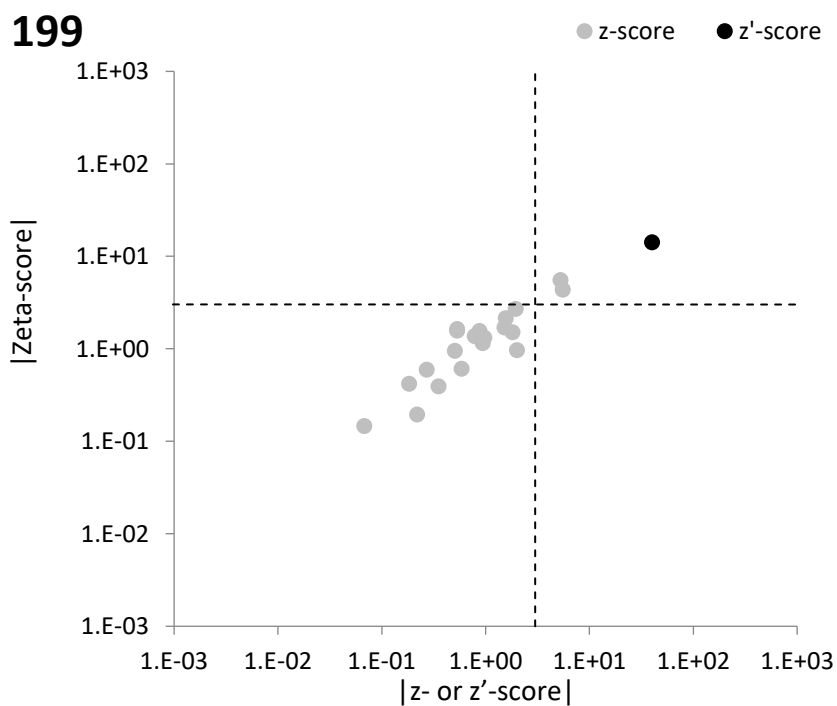


FIG. 257. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 199 (Plant sample).

202

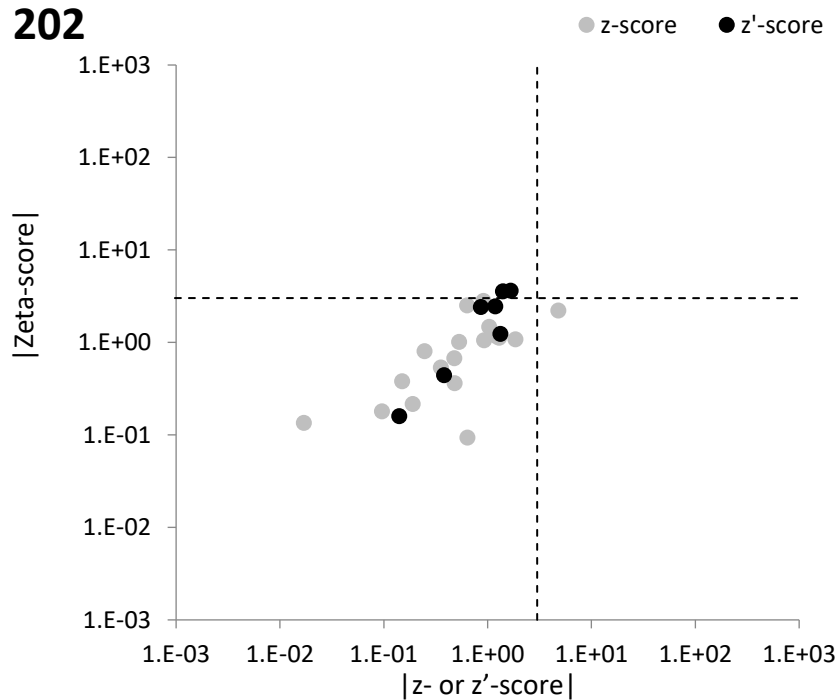


FIG. 258. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 202 (Clay sample).

202

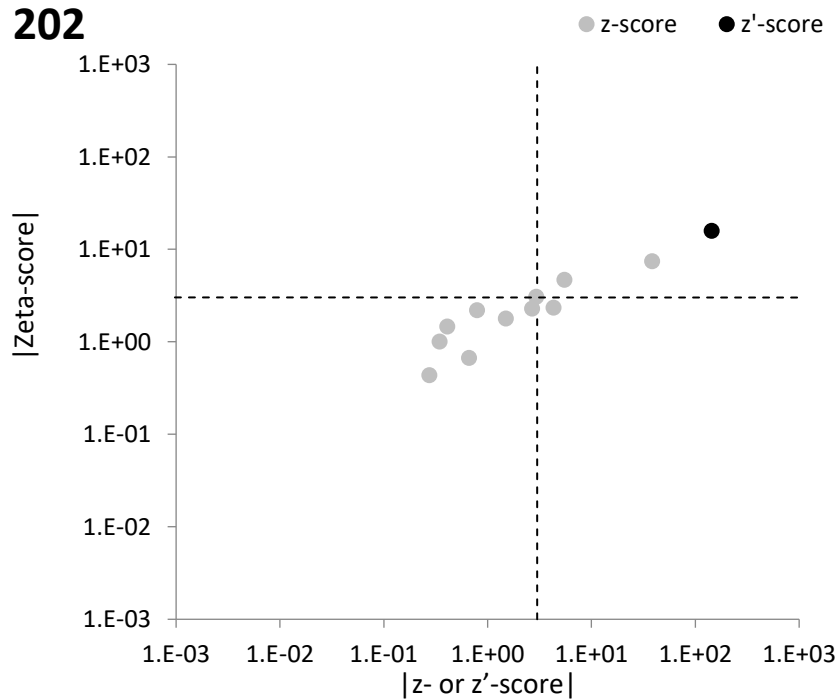


FIG. 259. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 202 (Plant sample).

203

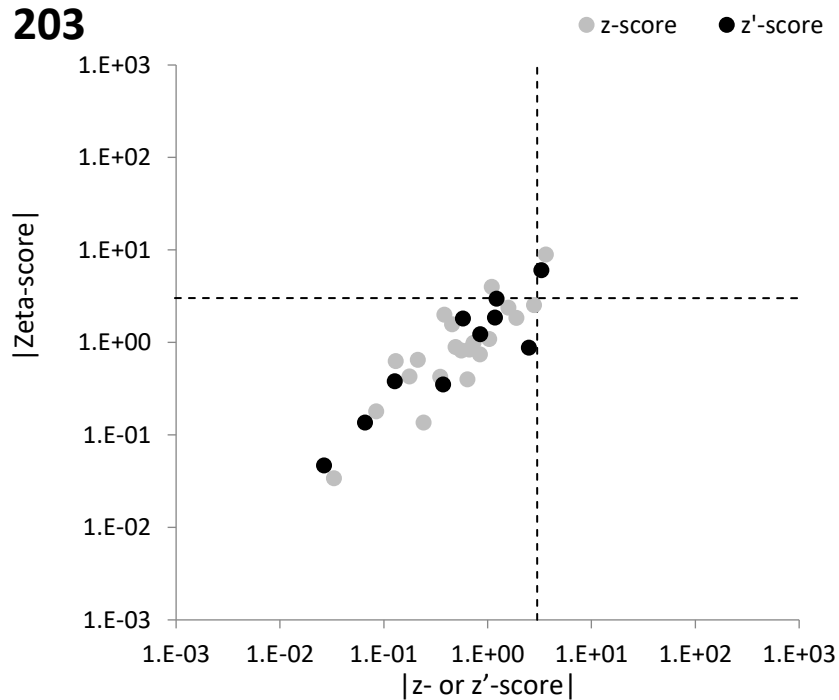


FIG. 260. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 203 (Clay sample).

203

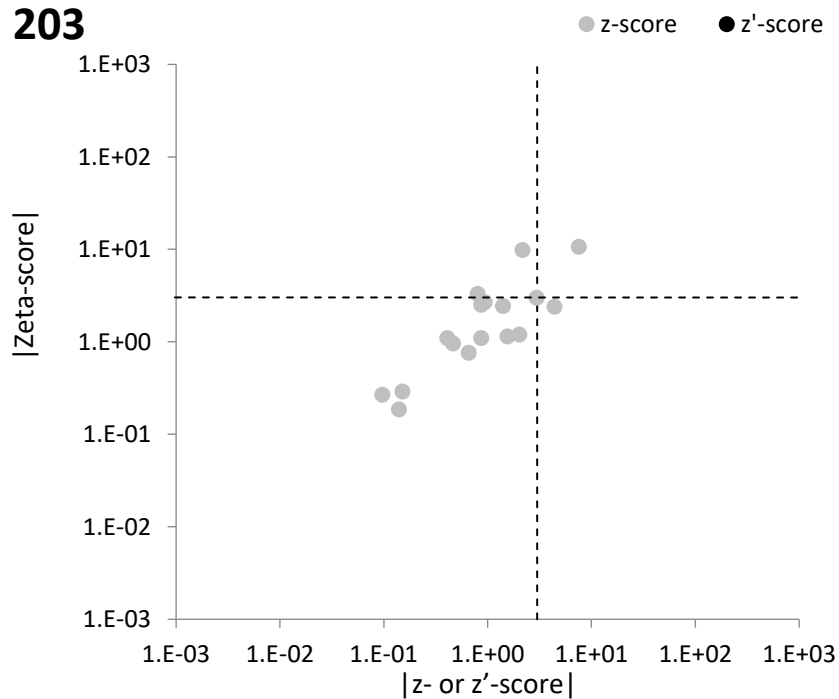


FIG. 261. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 203 (Plant sample).

204

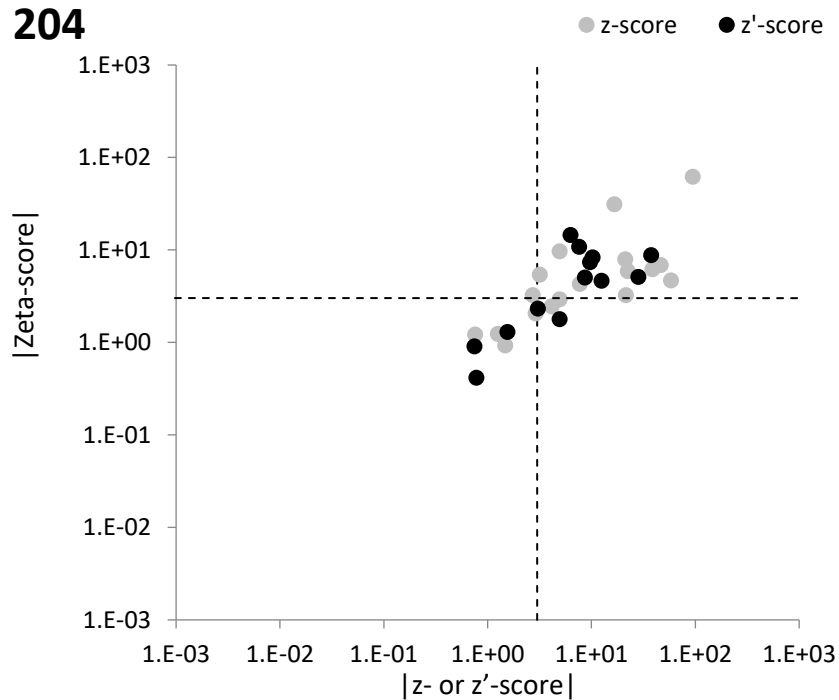


FIG. 262. Combined plots of $z\text{-}$ or $z'\text{-}$ scores and Zeta-scores for the laboratory with code 204 (Clay sample).

204

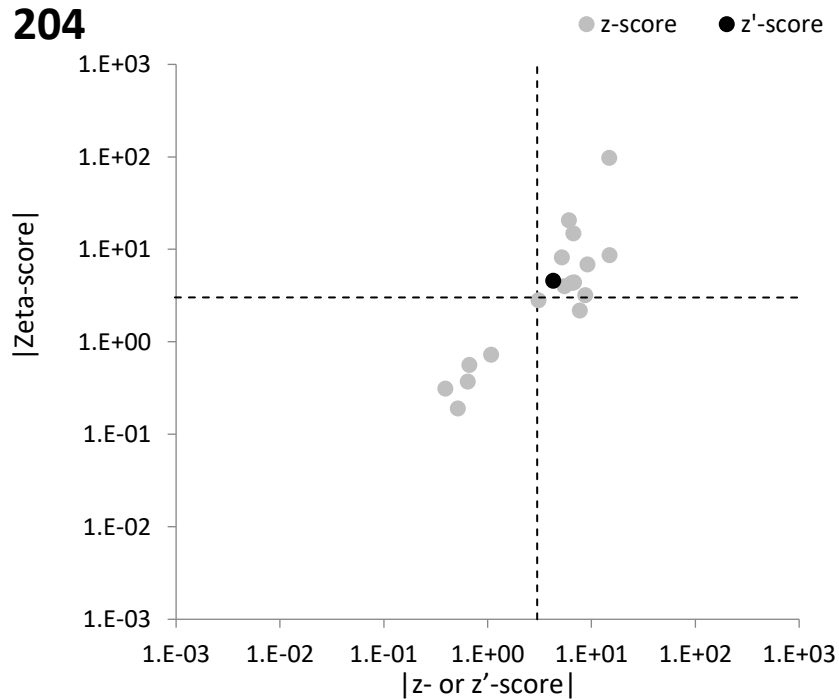


FIG. 263. Combined plots of $z\text{-}$ or $z'\text{-}$ scores and Zeta-scores for the laboratory with code 204 (Plant sample).

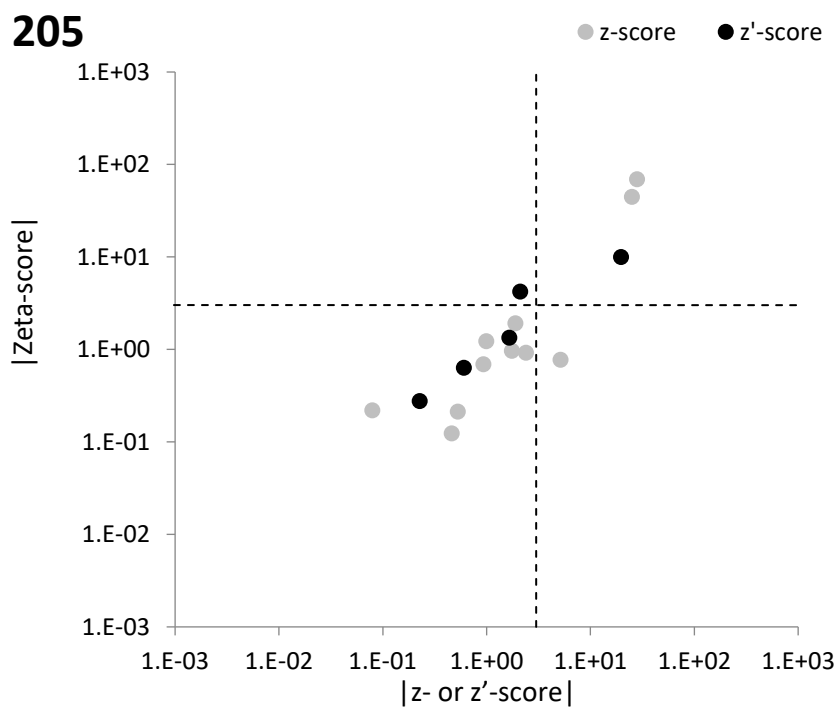


FIG. 264. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 205 (Clay sample).

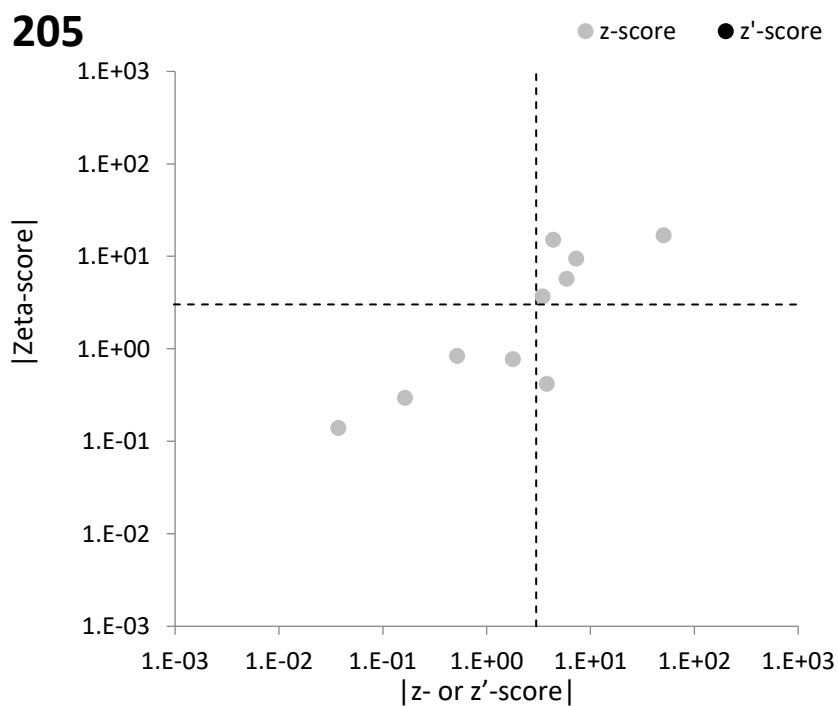


FIG. 265. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 205 (Plant sample).

206

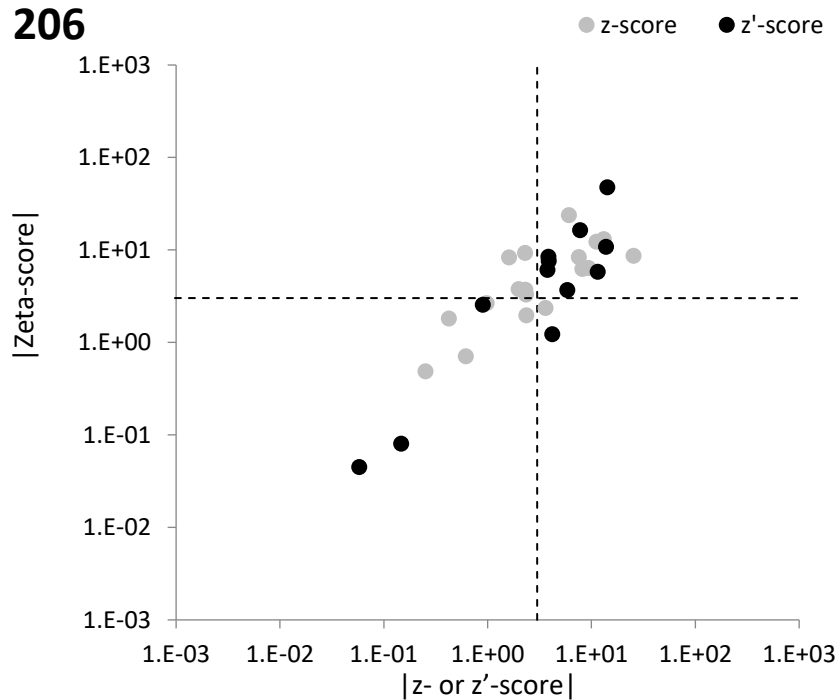


FIG. 266. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 206 (Clay sample).

206

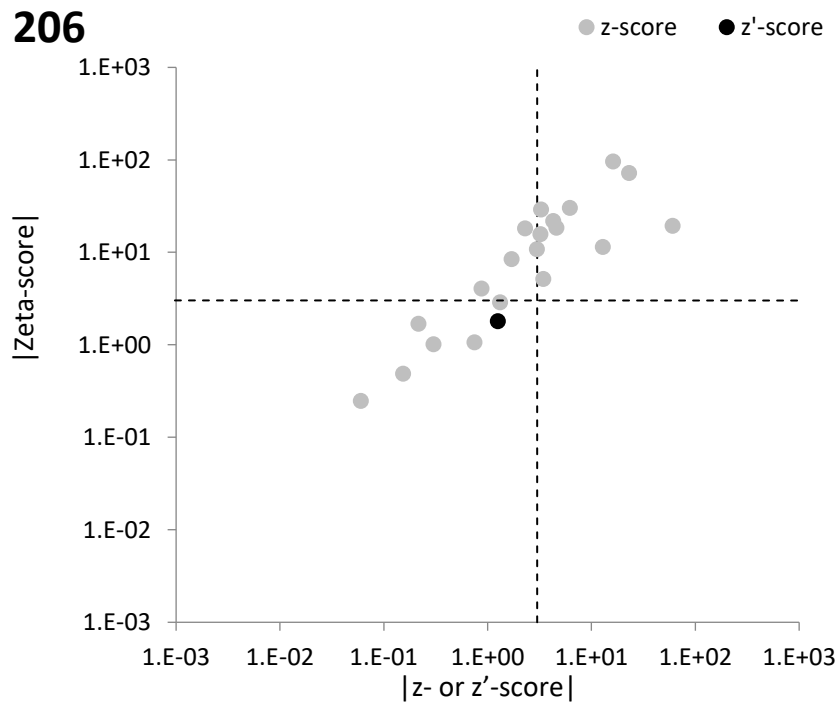


FIG. 267. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 206 (Plant sample).

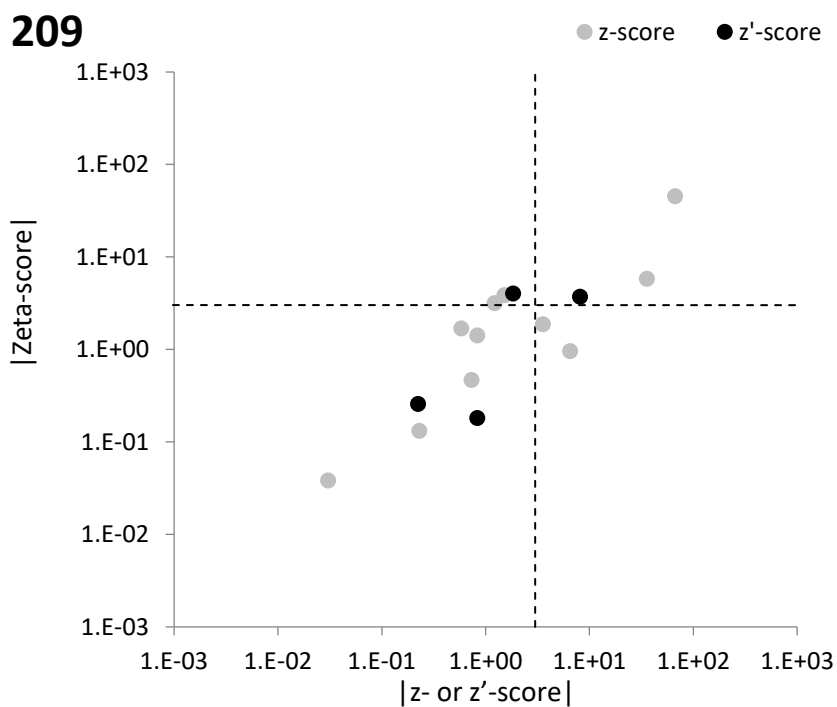


FIG. 268. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 209 (Clay sample).

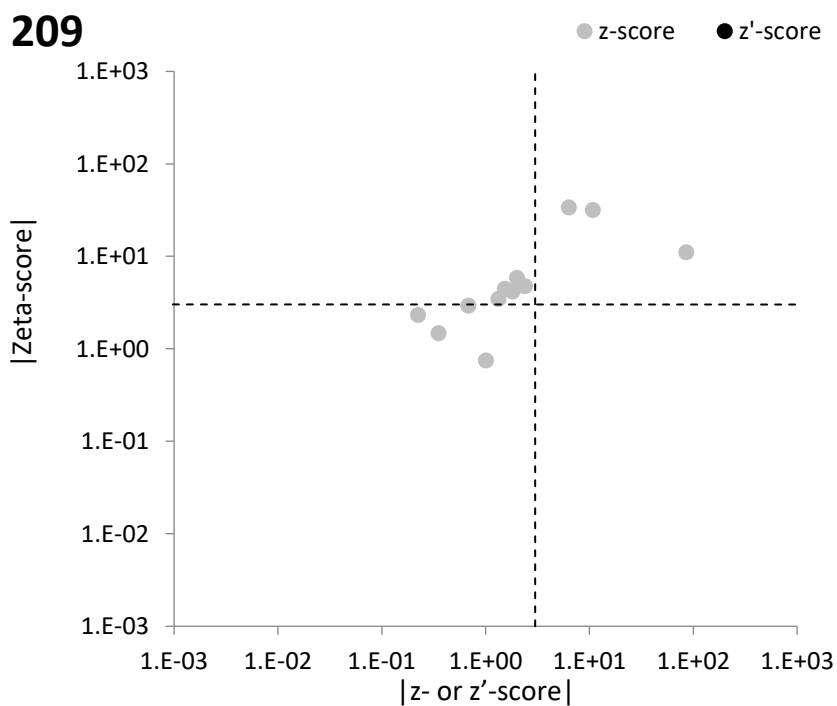


FIG. 269. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 209 (Plant sample).

215

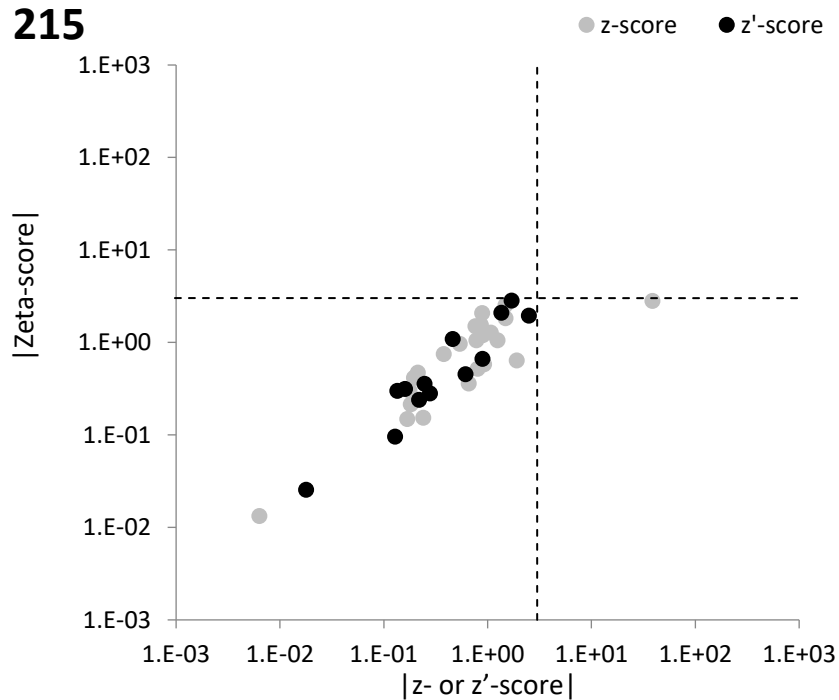


FIG. 270. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 215 (Clay sample).

215

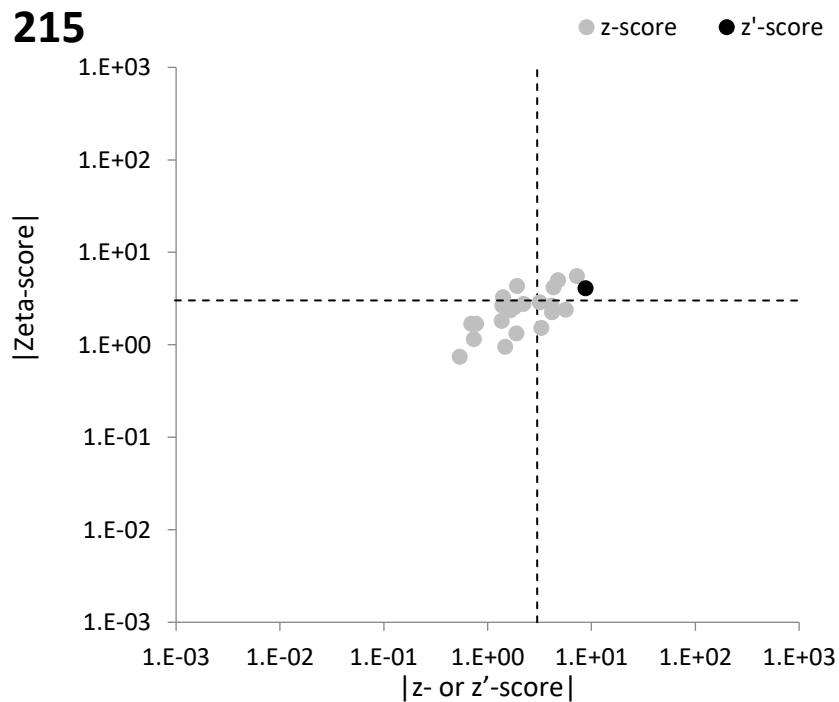


FIG. 271. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 215 (Plant sample).

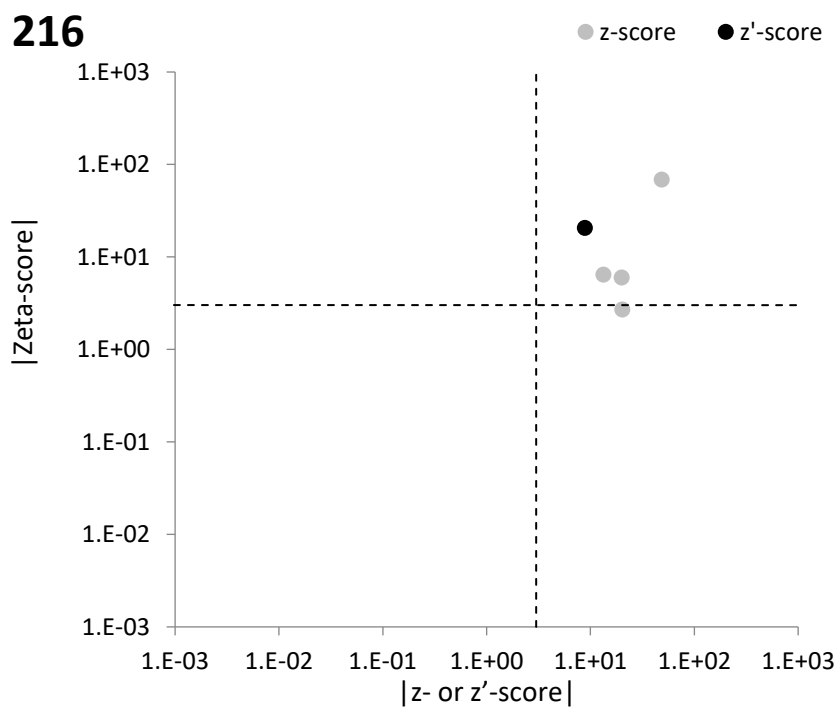


FIG. 272. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 216 (Clay sample).

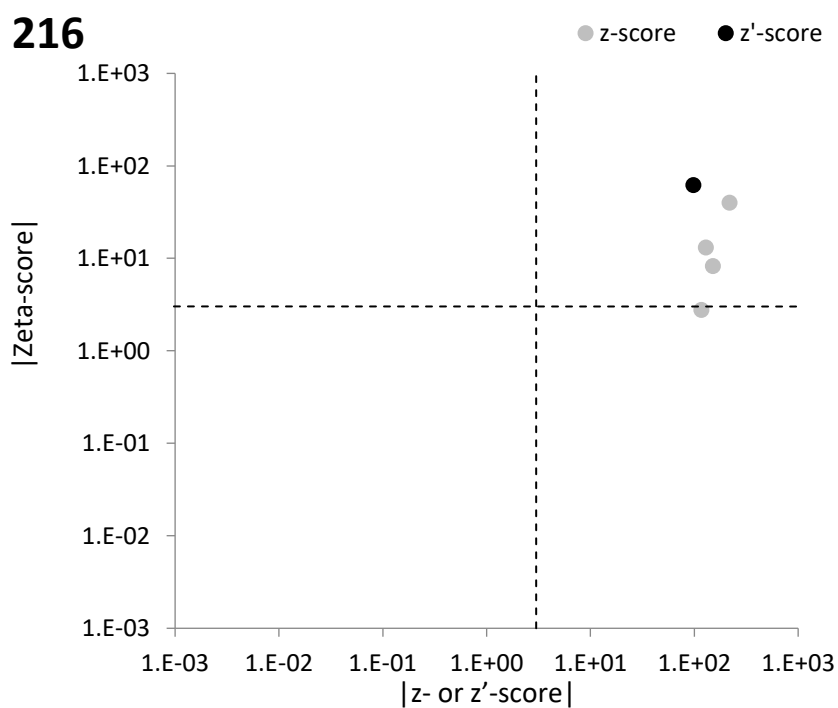


FIG. 273. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 216 (Plant sample).

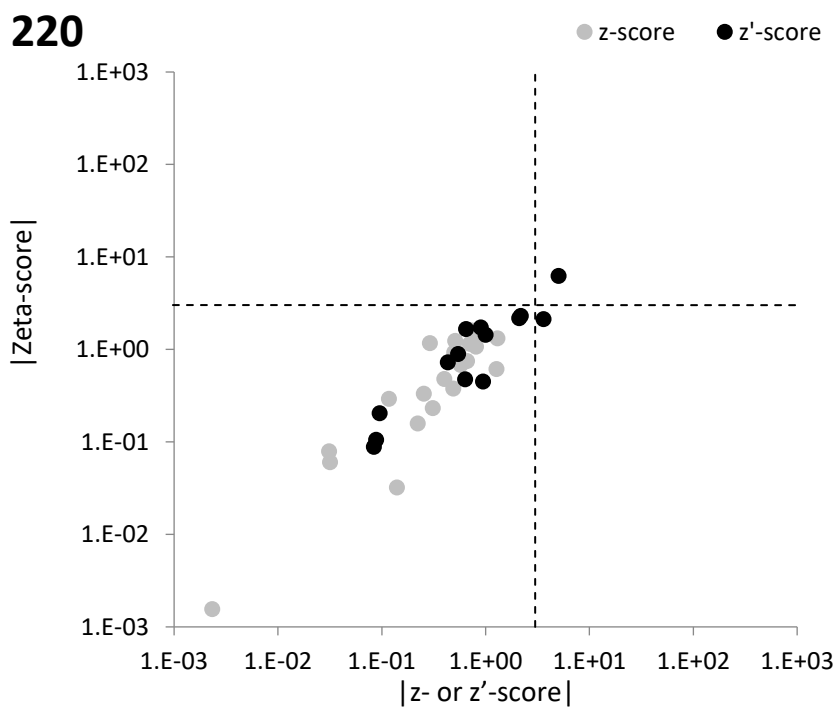


FIG. 274. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 220 (Clay sample).

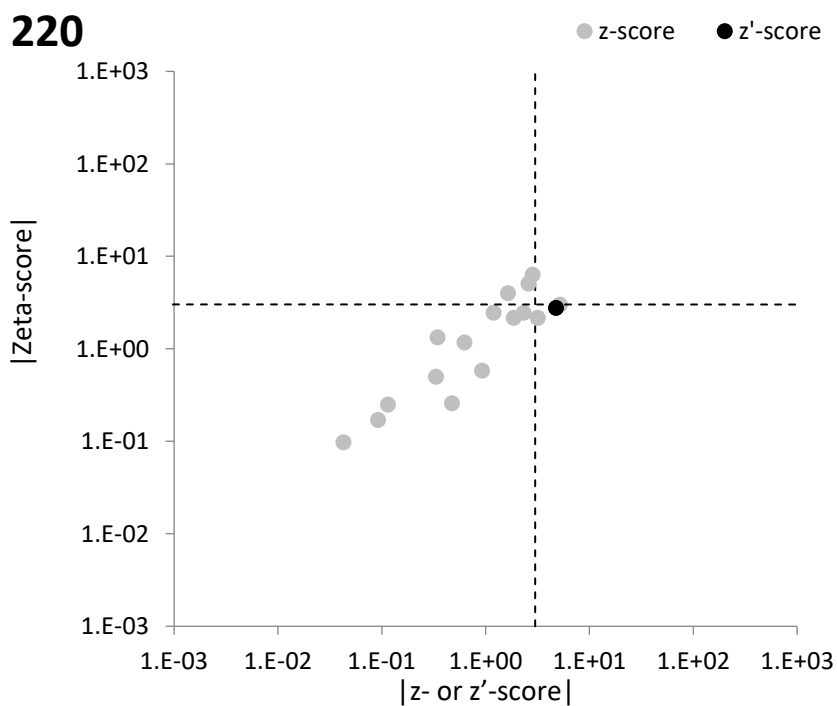


FIG. 275. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 220 (Plant sample).

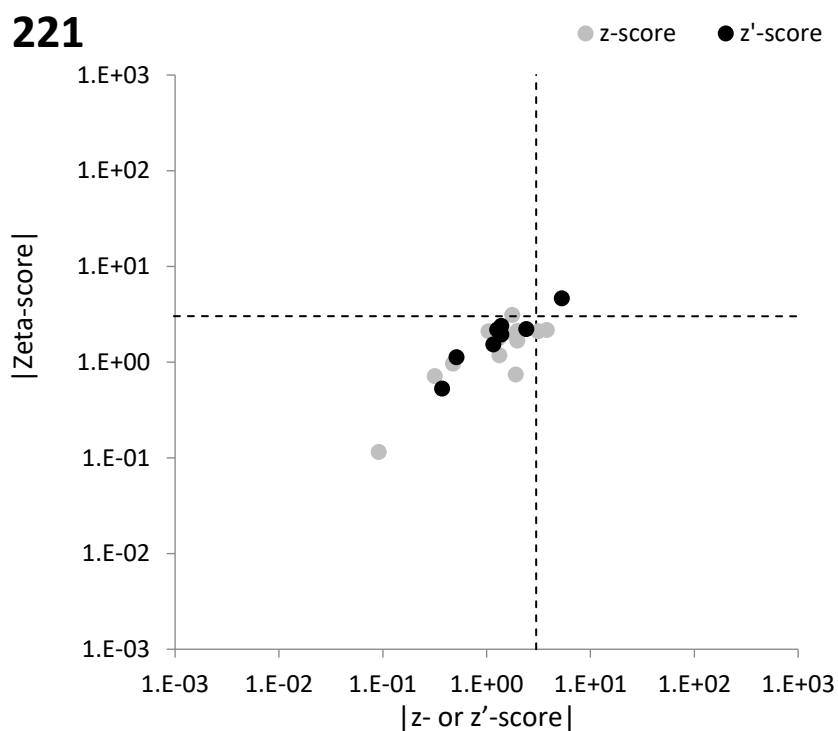


FIG. 276. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 221 (Clay sample).

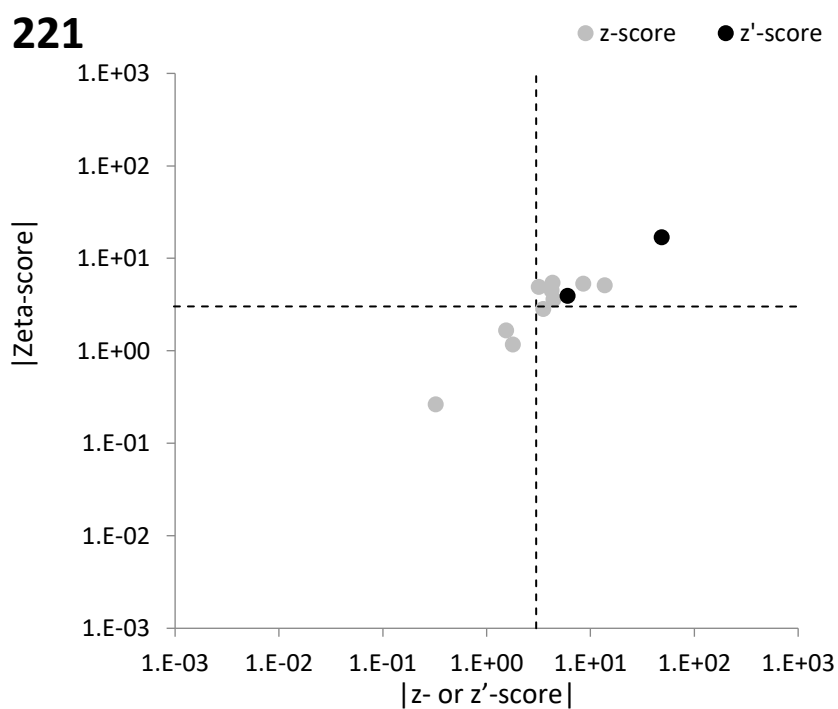


FIG. 277. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 221 (Plant sample).

225

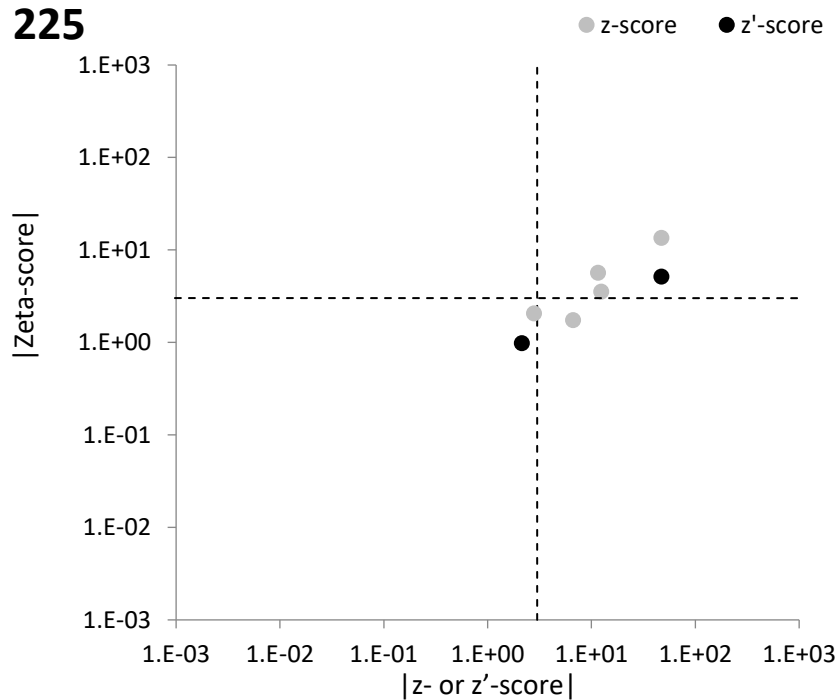


FIG. 278. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 225 (Clay sample).

225

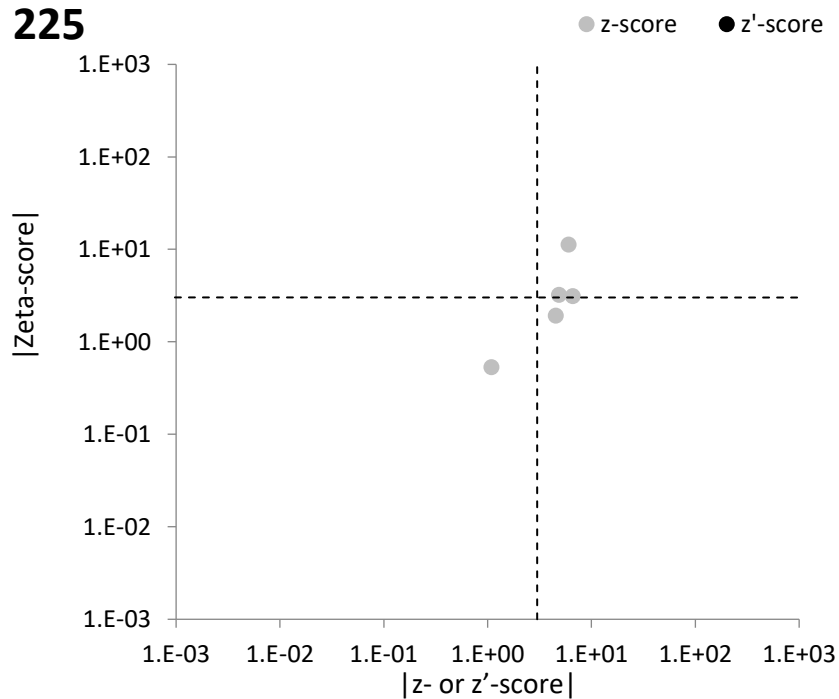


FIG. 279. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 225 (Plant sample).

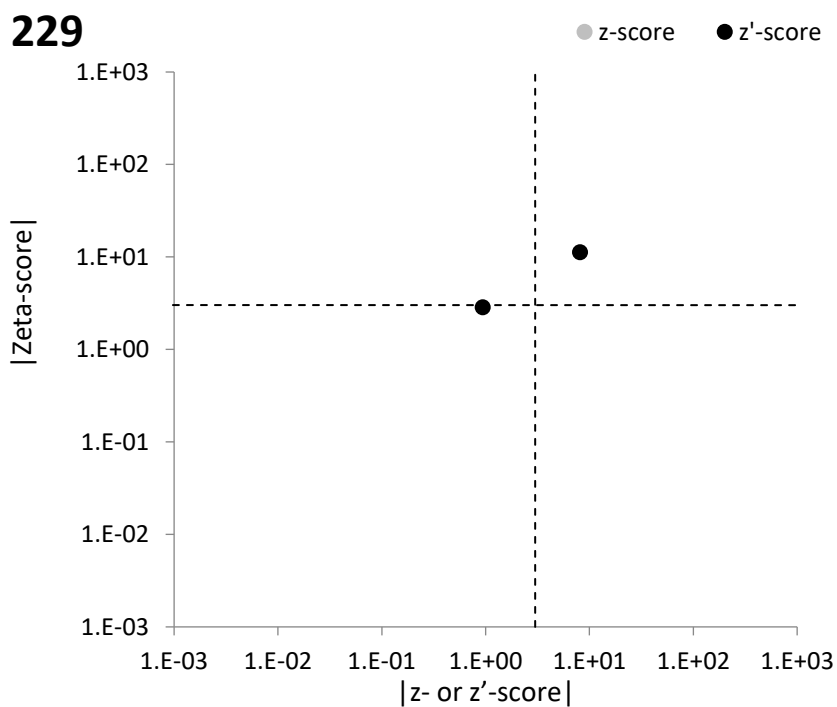


FIG. 280. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 229 (Clay sample).

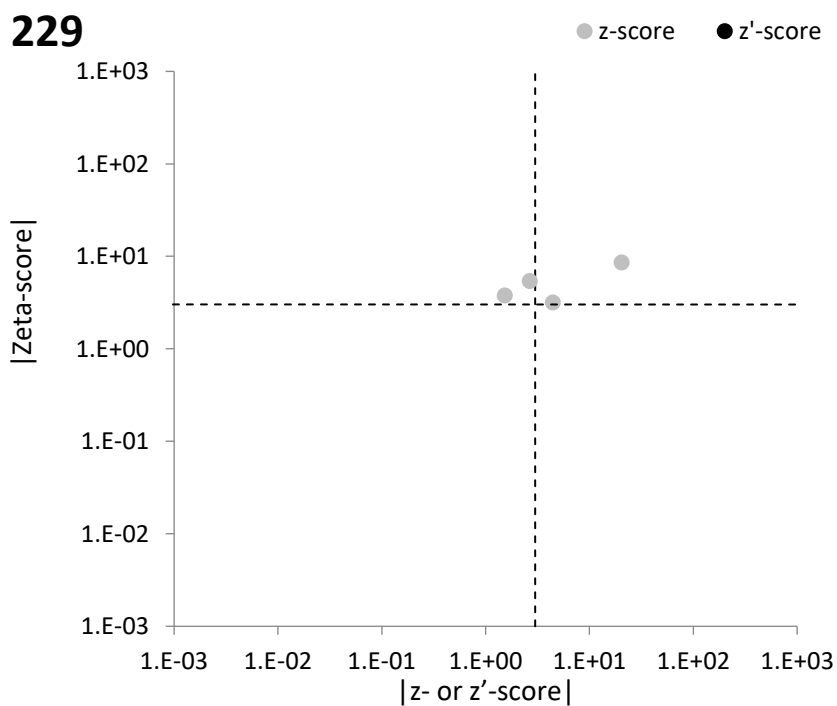


FIG. 281. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 229 (Plant sample).

234

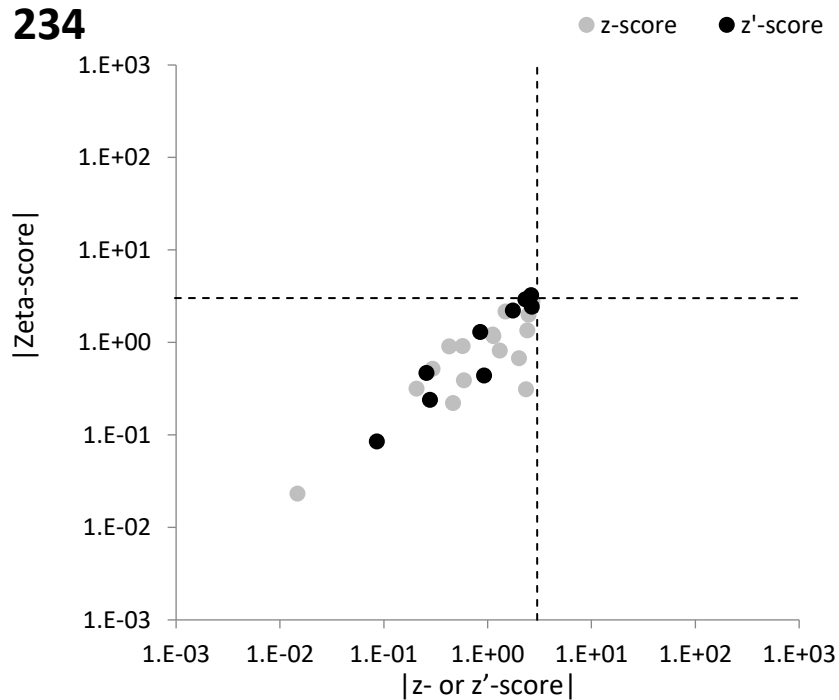


FIG. 282. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 234 (Clay sample).

234

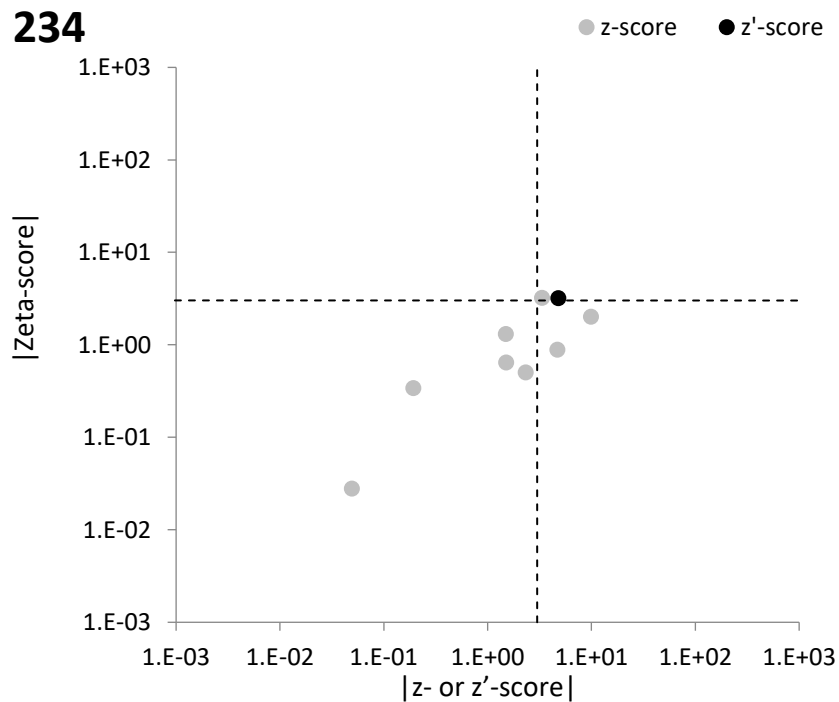


FIG. 283. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 234 (Plant sample).

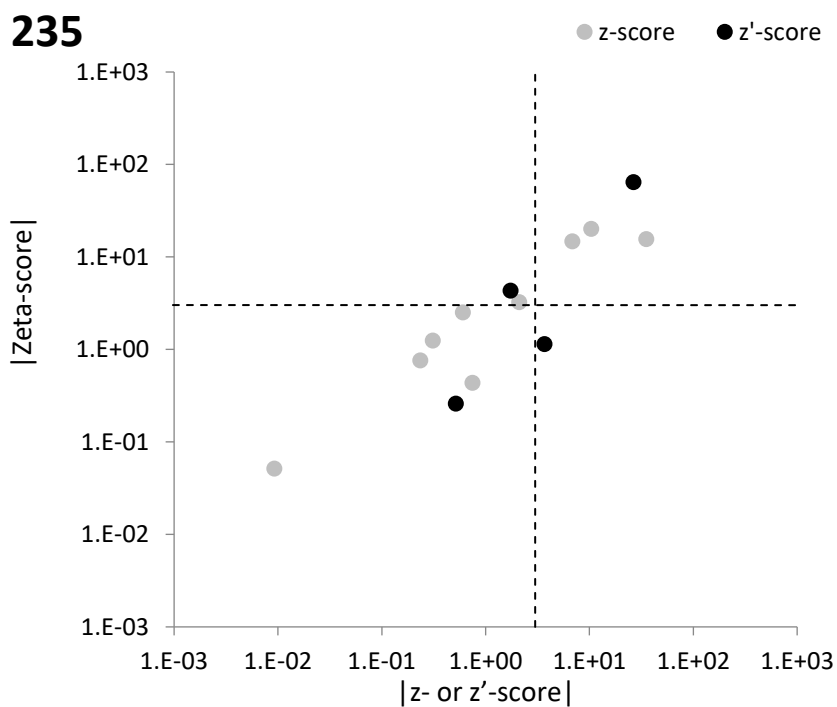


FIG. 284. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 235 (Clay sample).

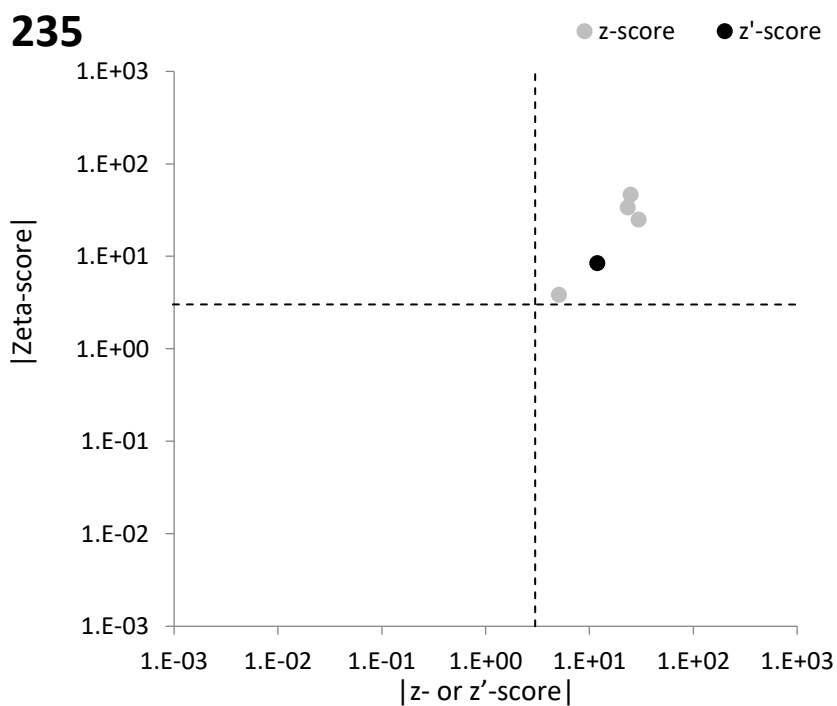


FIG. 285. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 235 (Plant sample).

236

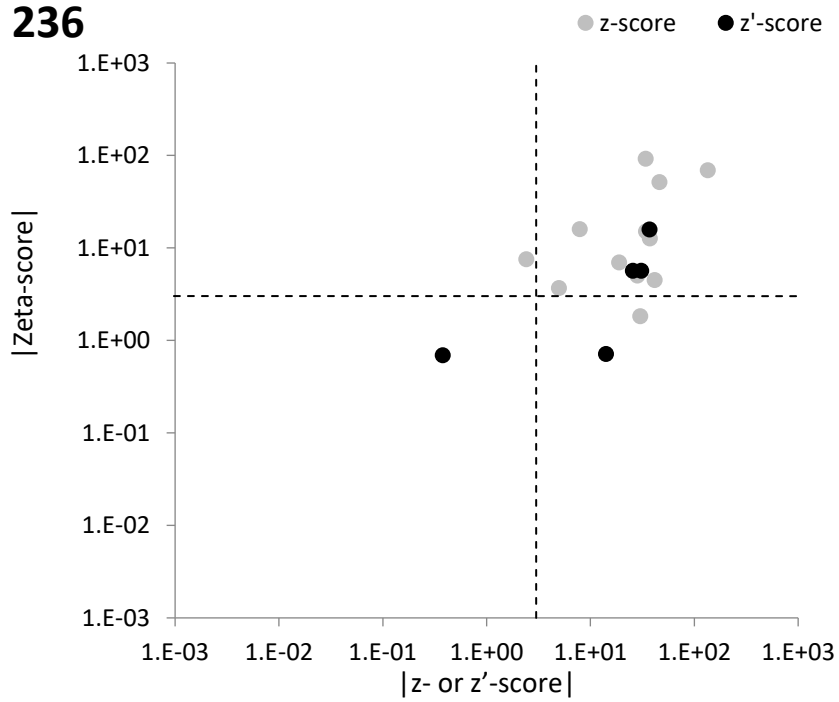


FIG. 286. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 236 (Clay sample).

237

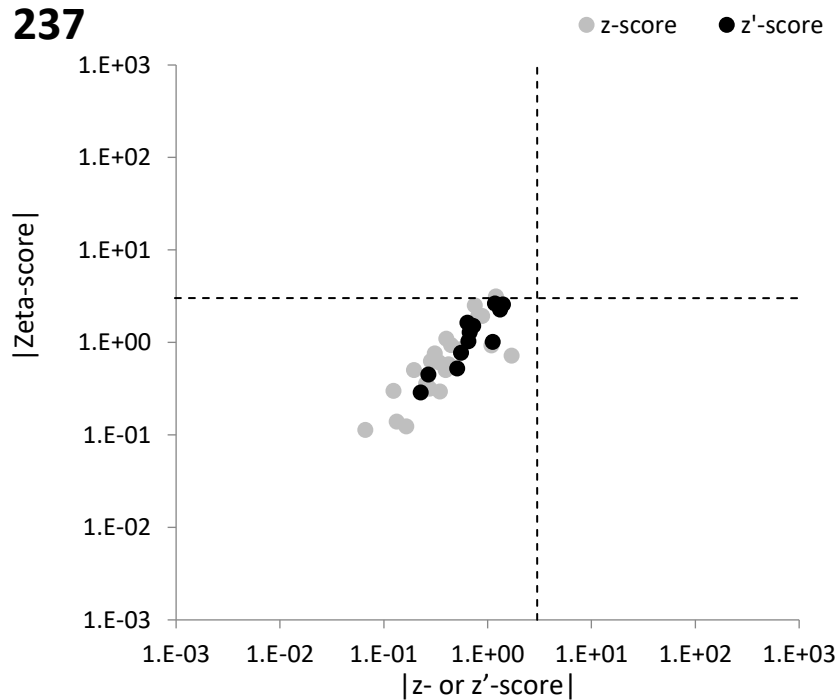


FIG. 287. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 237 (Clay sample).

237

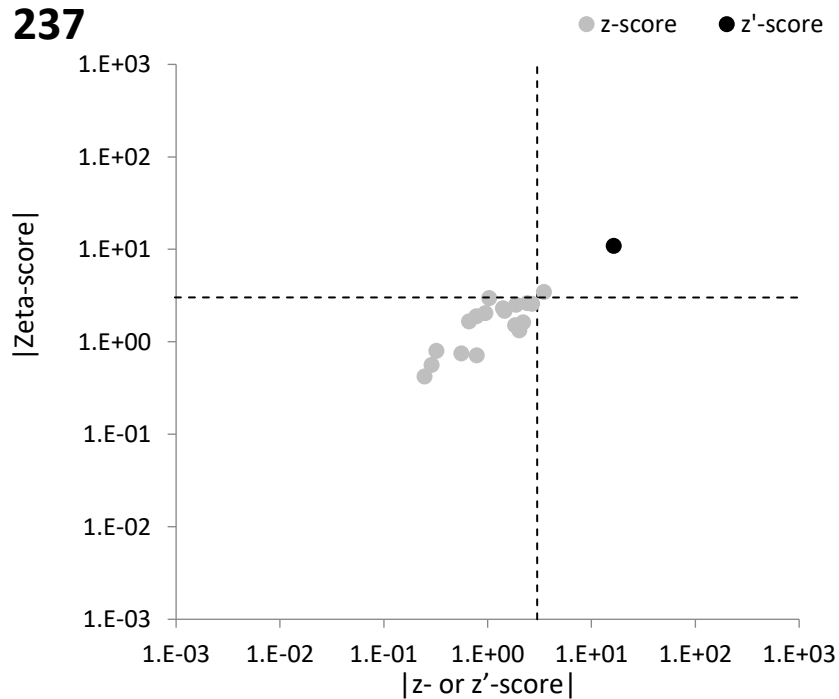


FIG. 288. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 237 (Plant sample).

238

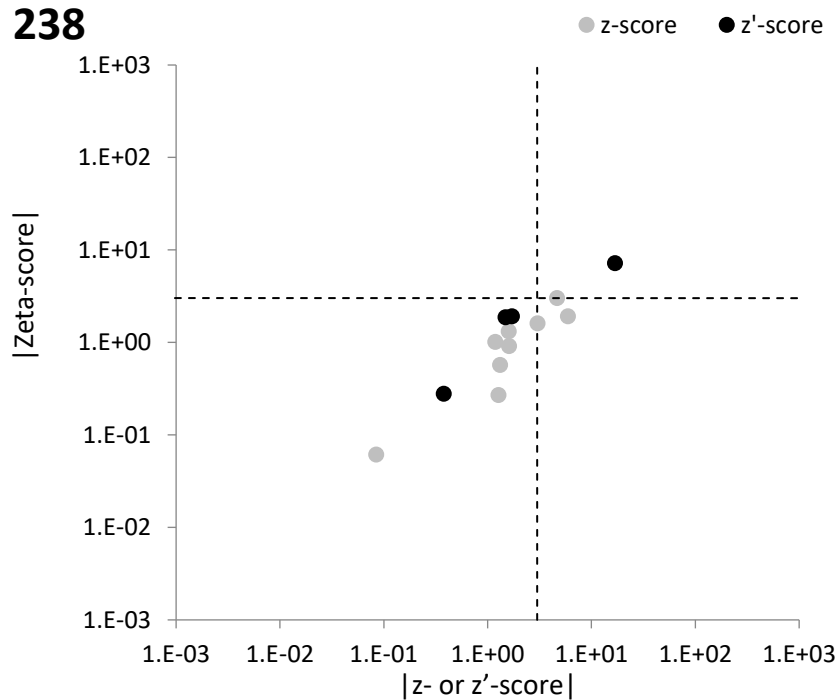


FIG. 289. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 238 (Clay sample).

238

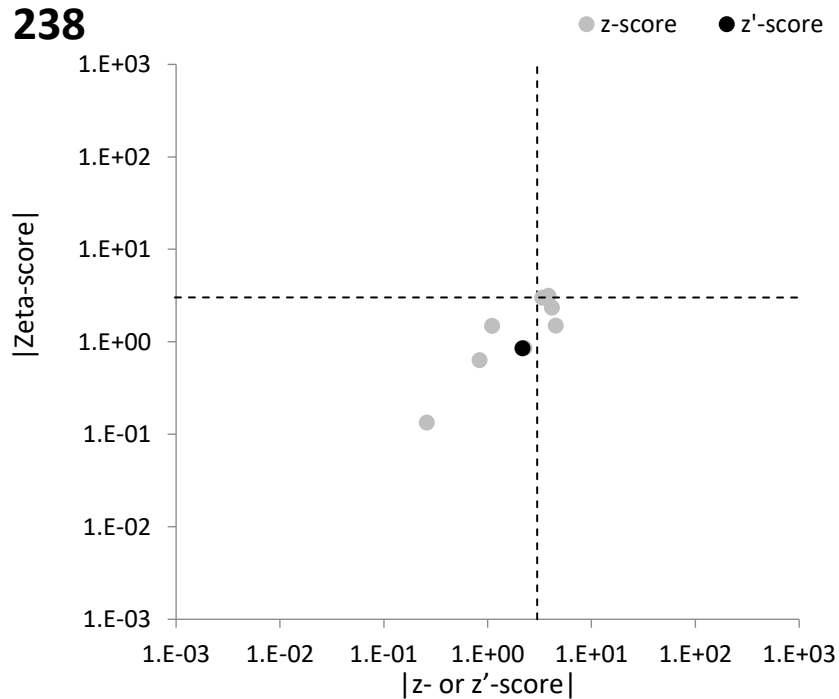


FIG. 290. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 238 (Plant sample).

244

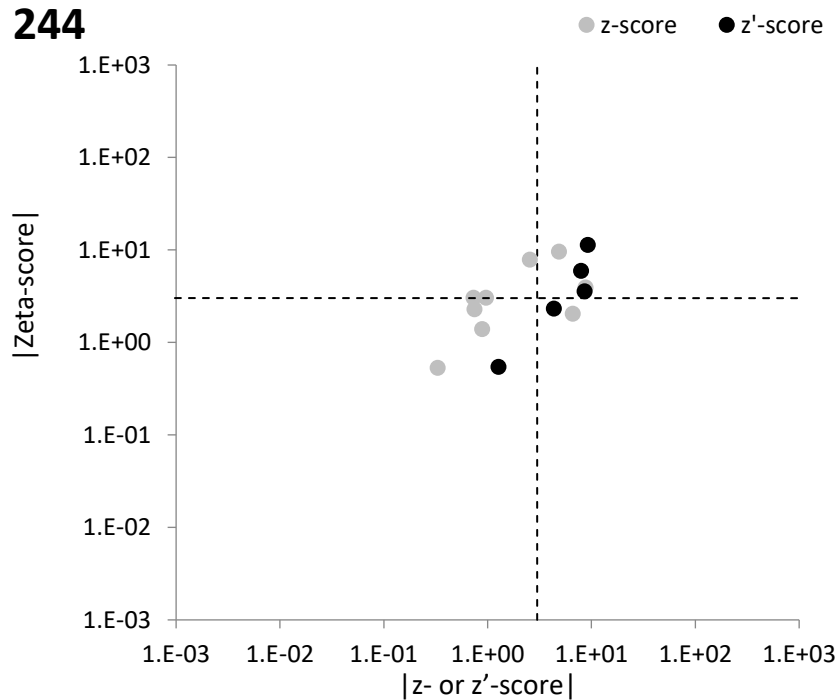


FIG. 291. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 244 (Clay sample).

244

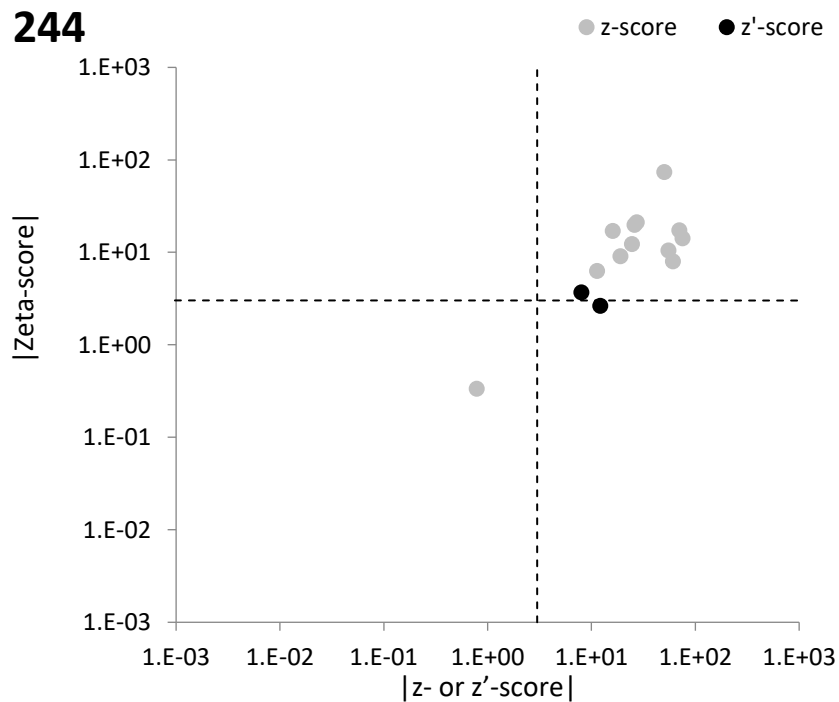


FIG. 292. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 244 (Plant sample).

247

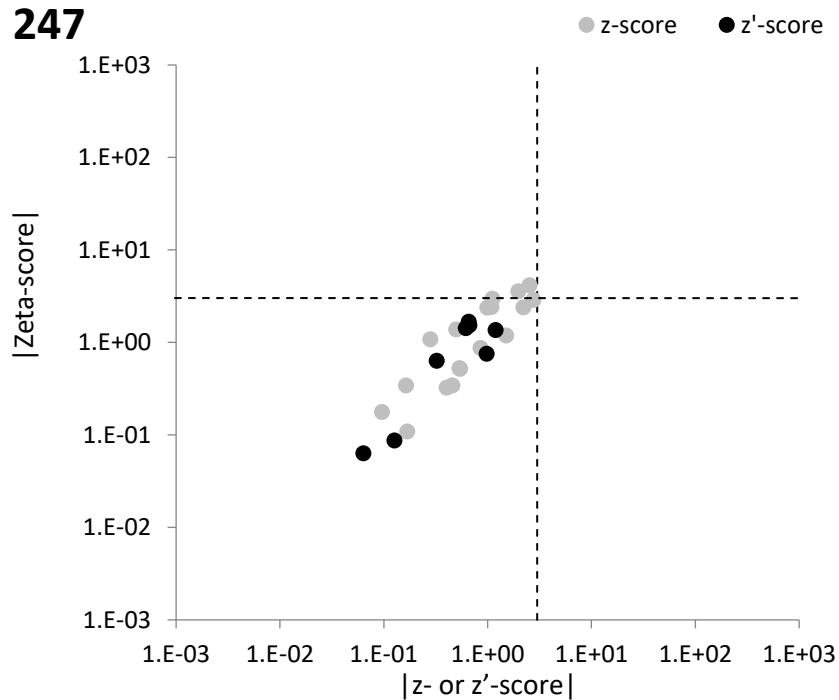


FIG. 293. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 247 (Clay sample).

248

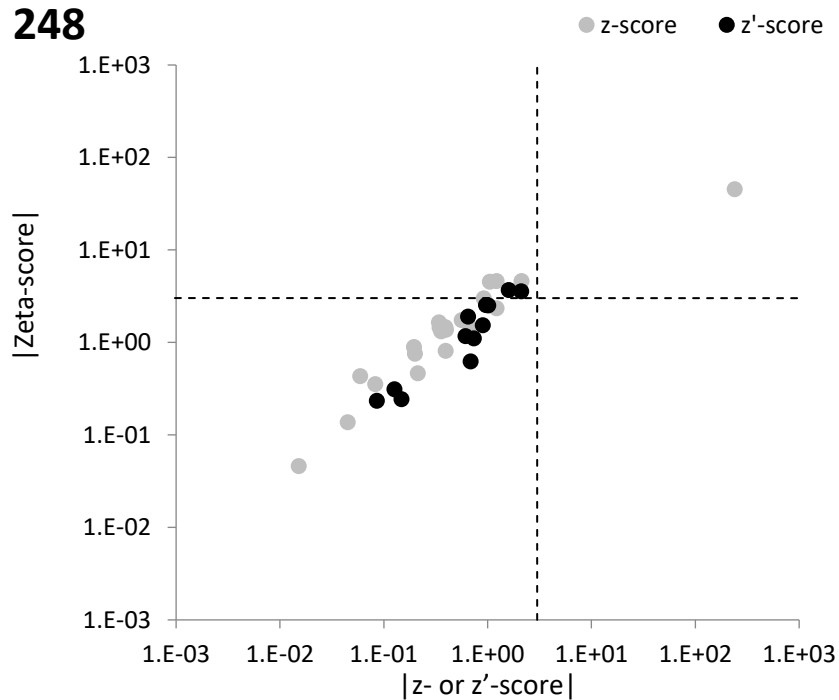


FIG. 294. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 248 (Clay sample).

248

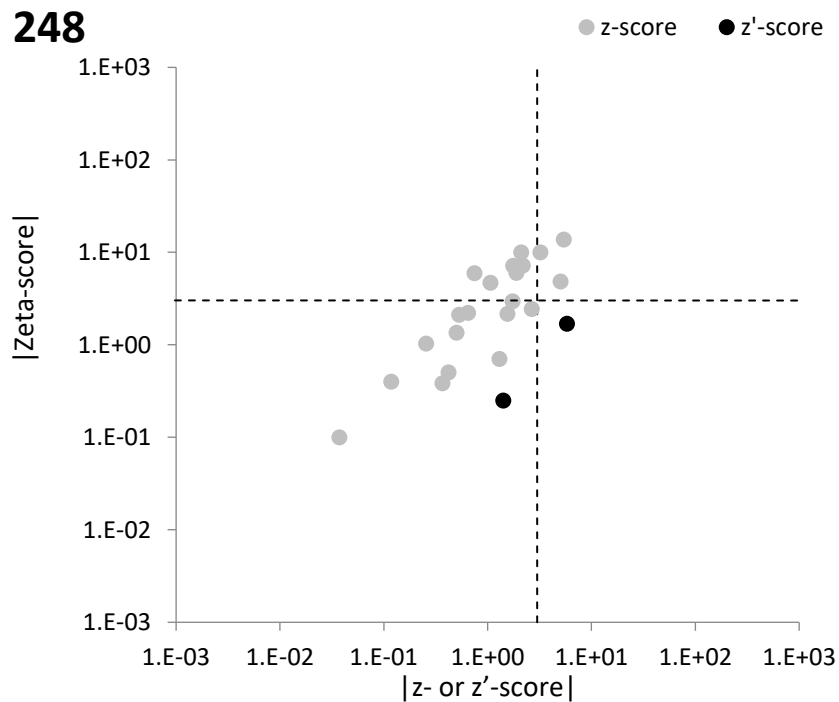


FIG. 295. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 248 (Plant sample).

250

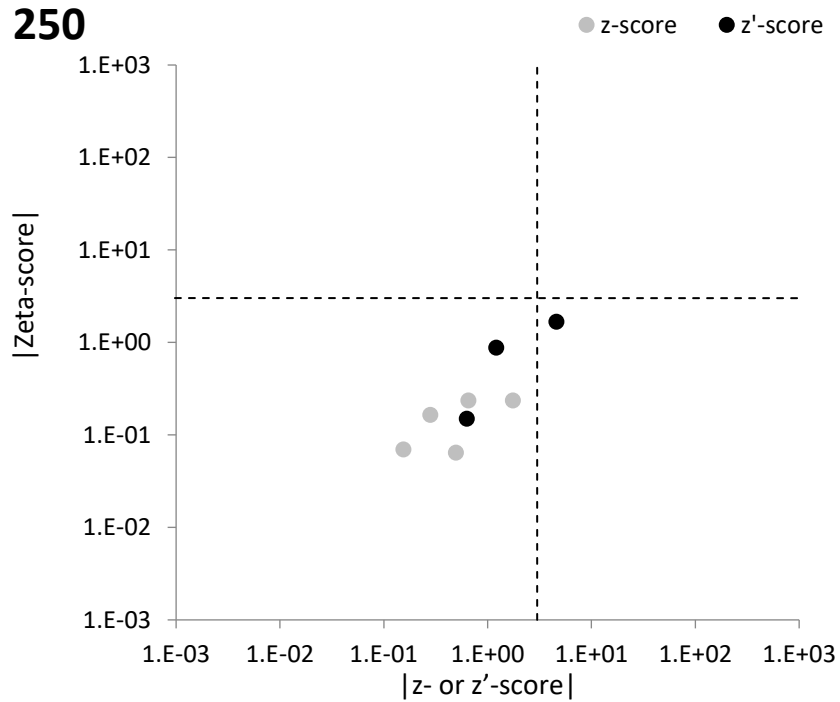


FIG. 296. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 250 (Clay sample).

252

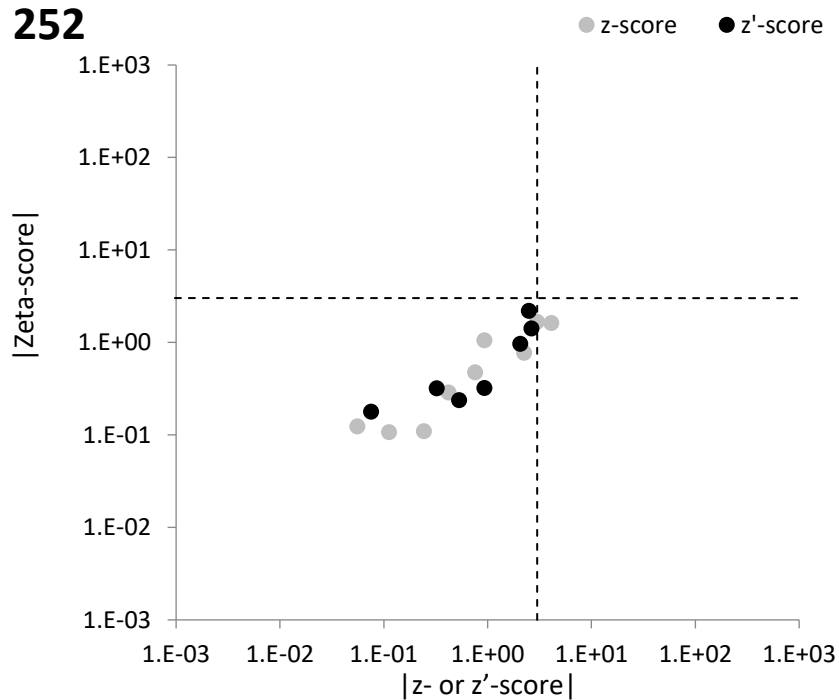


FIG. 297. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 252 (Clay sample).

252

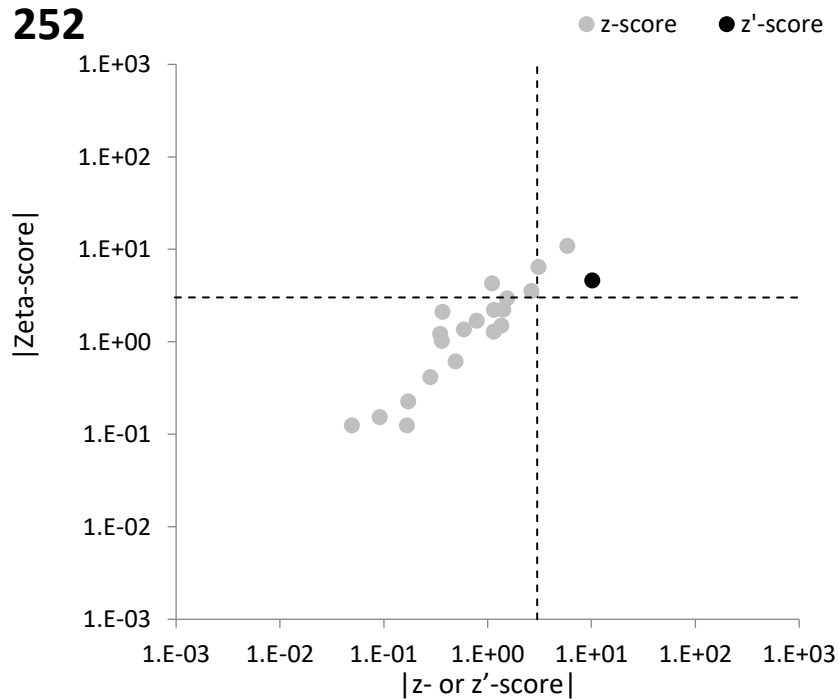


FIG. 298. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 252 (Plant sample).

255

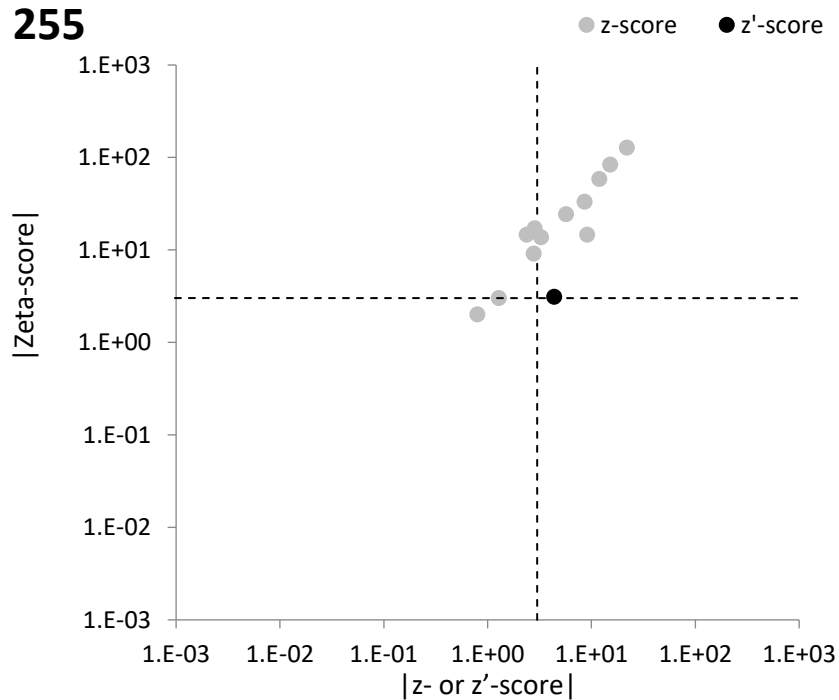


FIG. 299. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 255 (Clay sample).

255

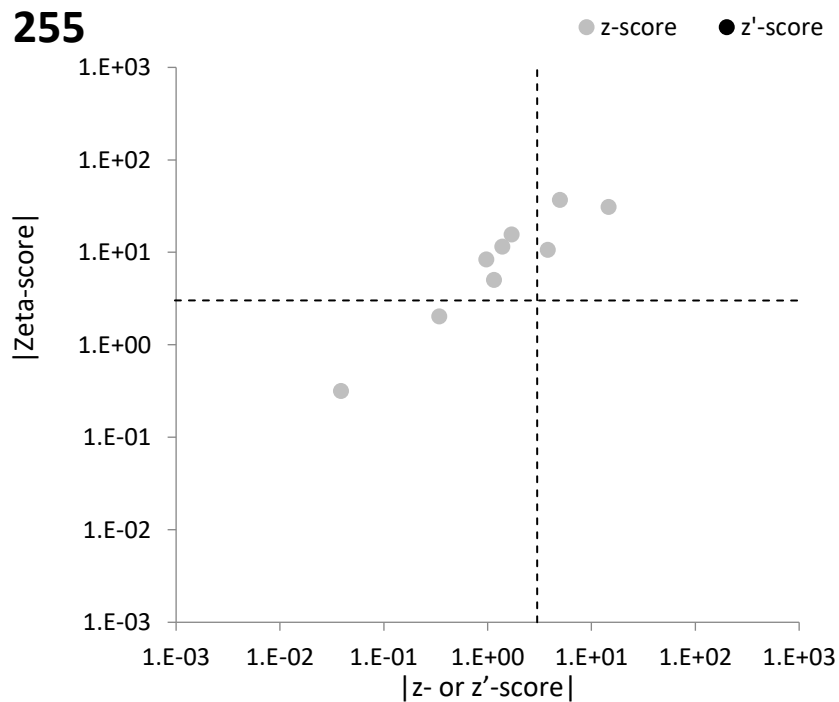


FIG. 300. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 255 (Plant sample).

257

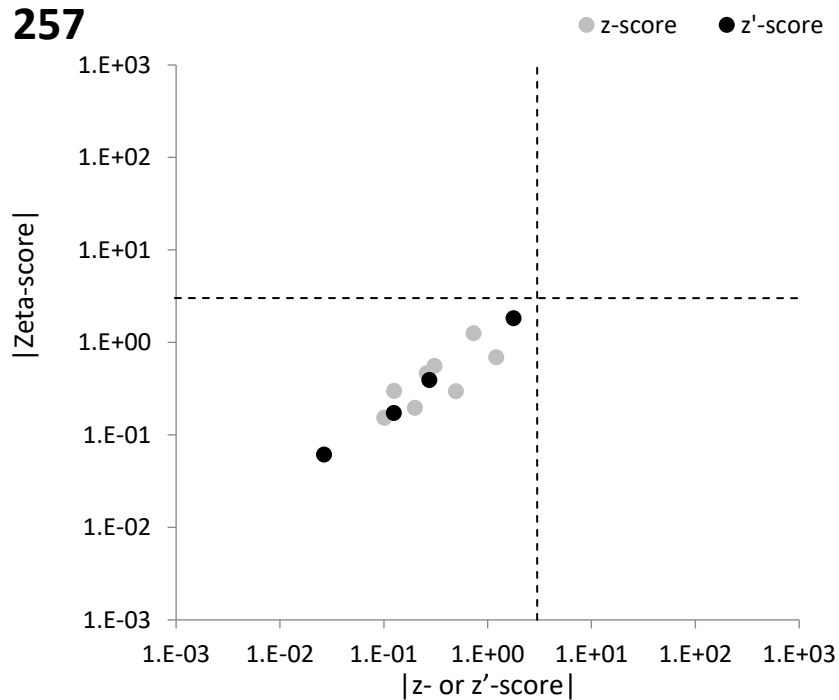


FIG. 301. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 257 (Clay sample).

257

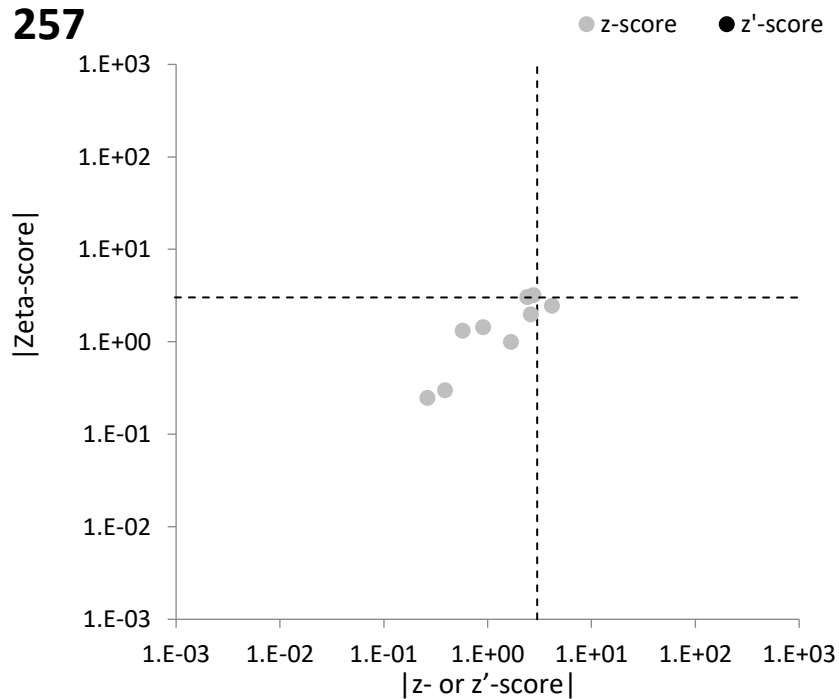


FIG. 302. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 257 (Plant sample).

258

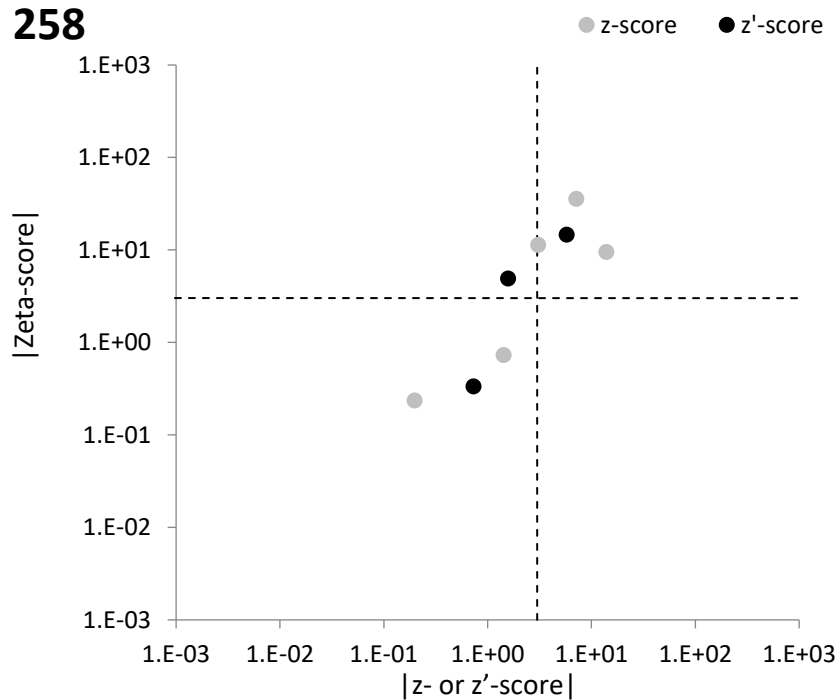


FIG. 303. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 258 (Clay sample).

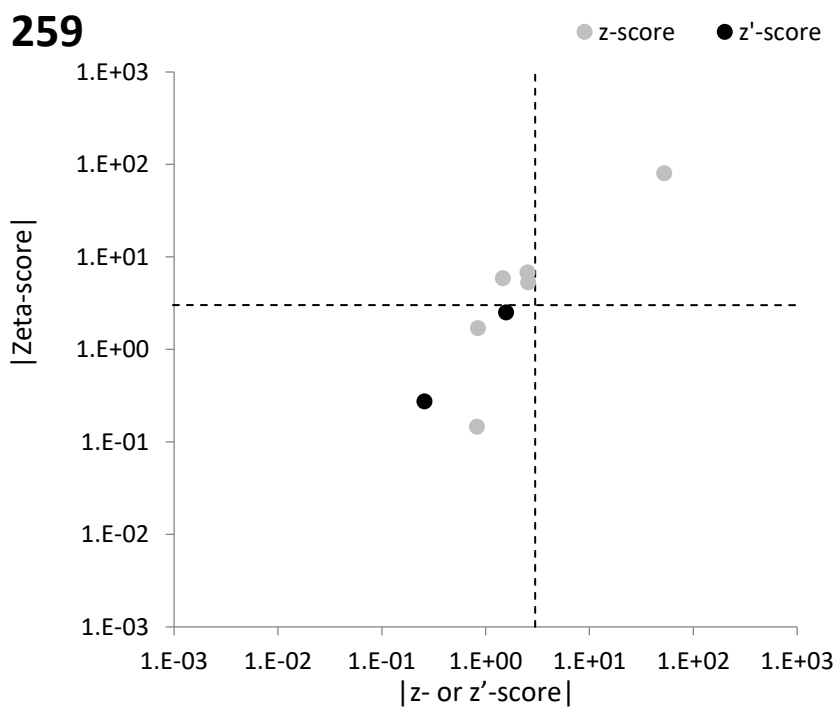


FIG. 304. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 259 (Clay sample).

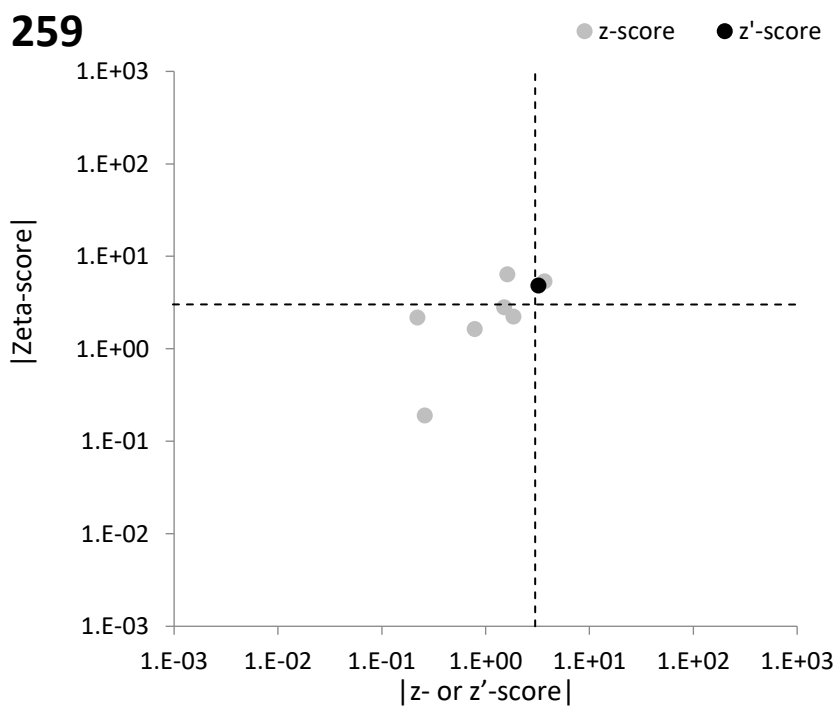


FIG. 305. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 259 (Plant sample).

261

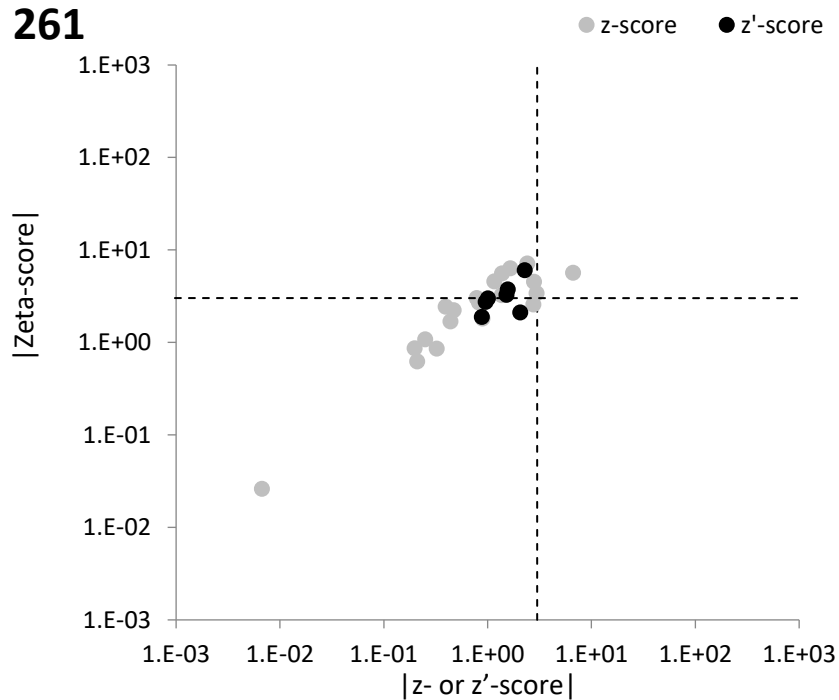


FIG. 306. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 261 (Clay sample).

261

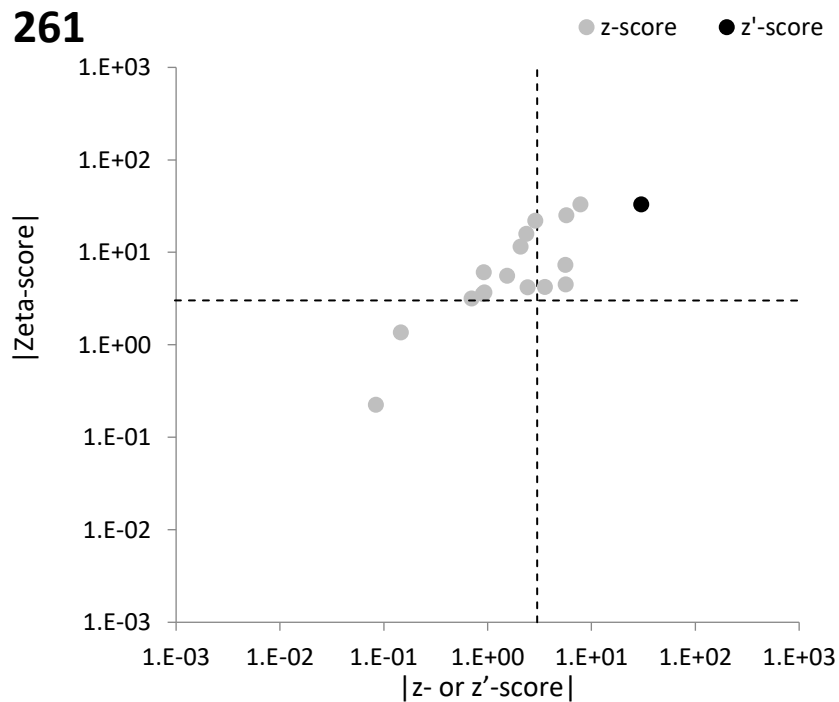


FIG. 307. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 261 (Plant sample).

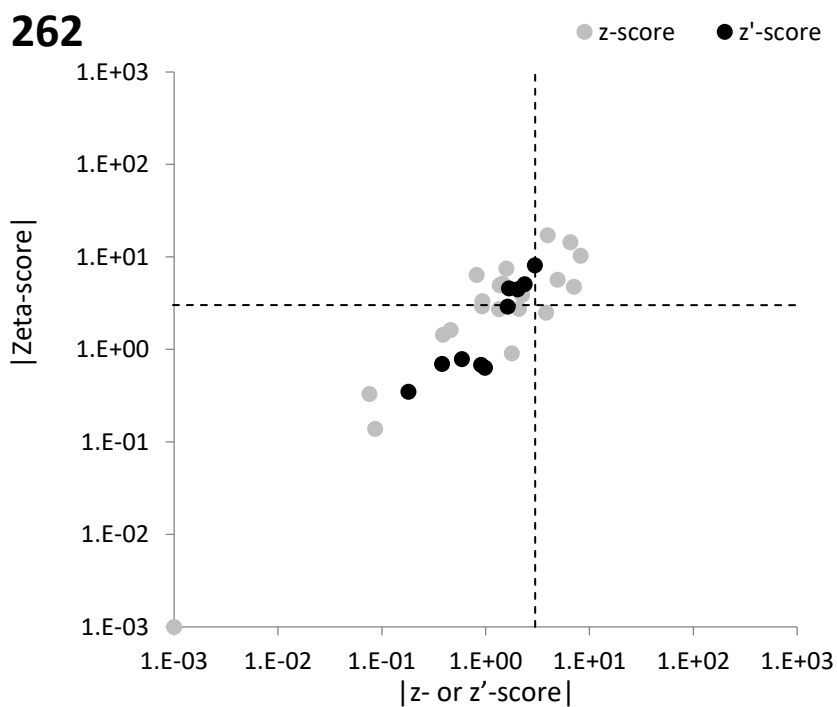


FIG. 308. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 262 (Clay sample).

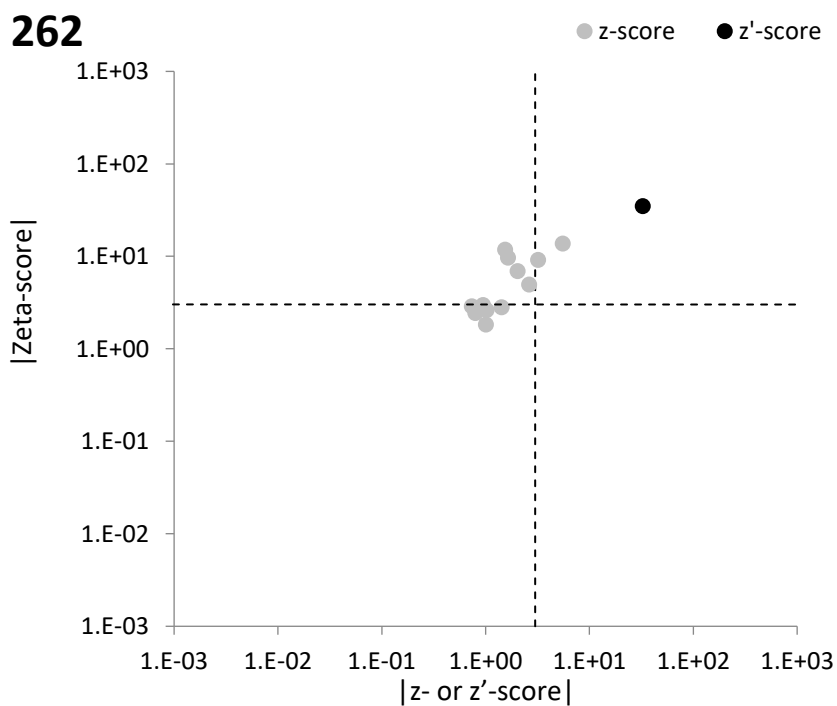


FIG. 309. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 262 (Plant sample).

263

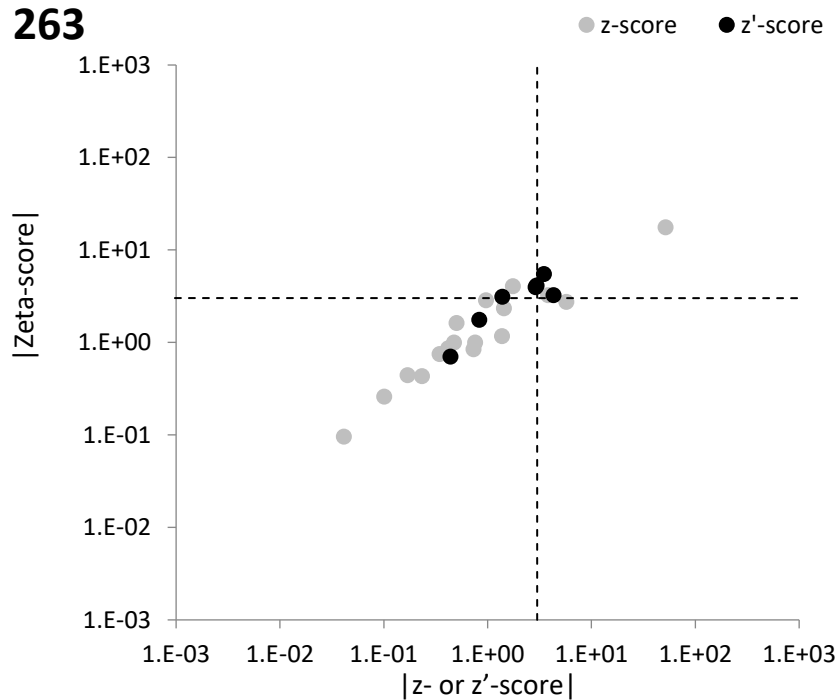


FIG. 310. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 263 (Clay sample).

263

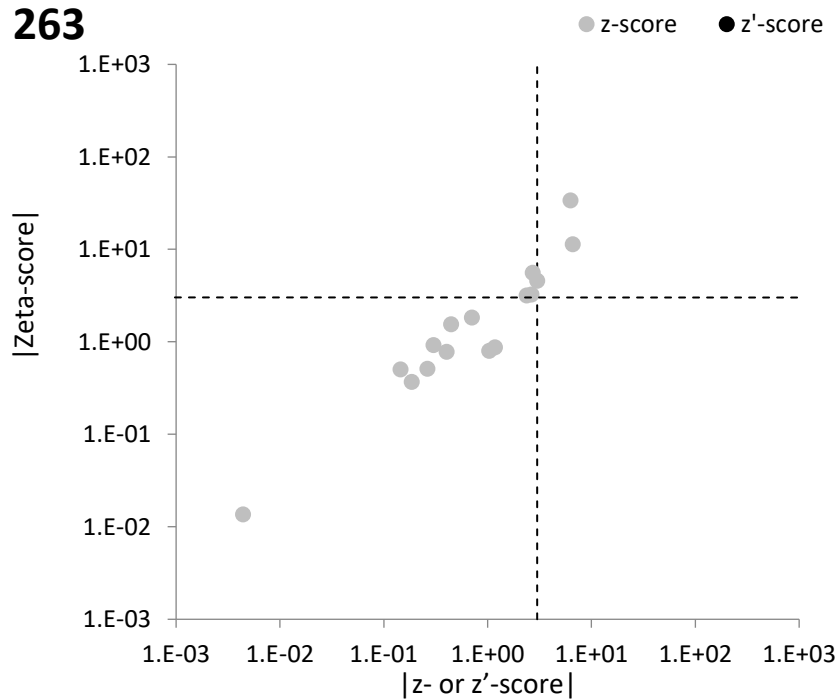


FIG. 311. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 263 (Plant sample).

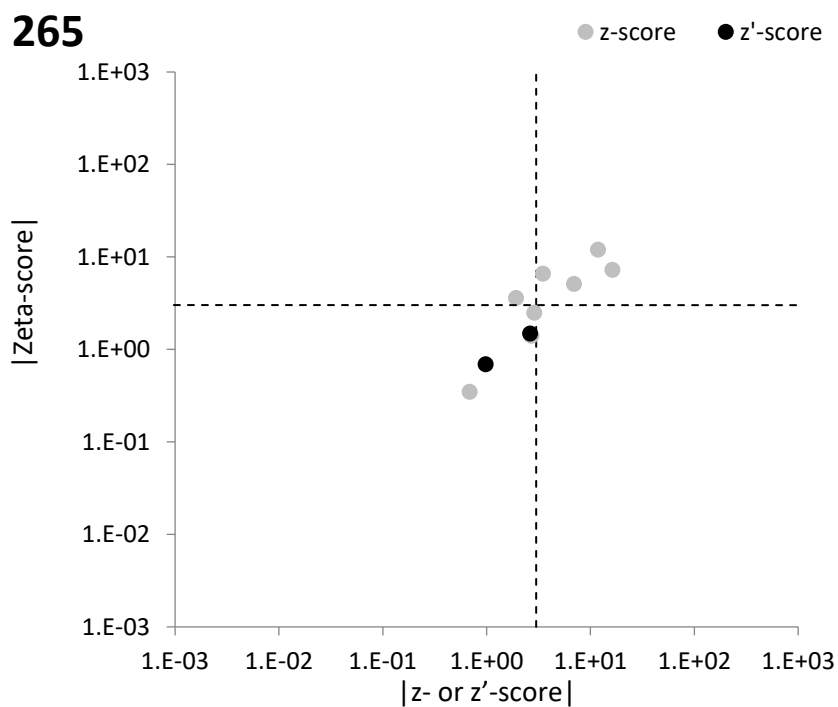


FIG. 312. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 265 (Clay sample).

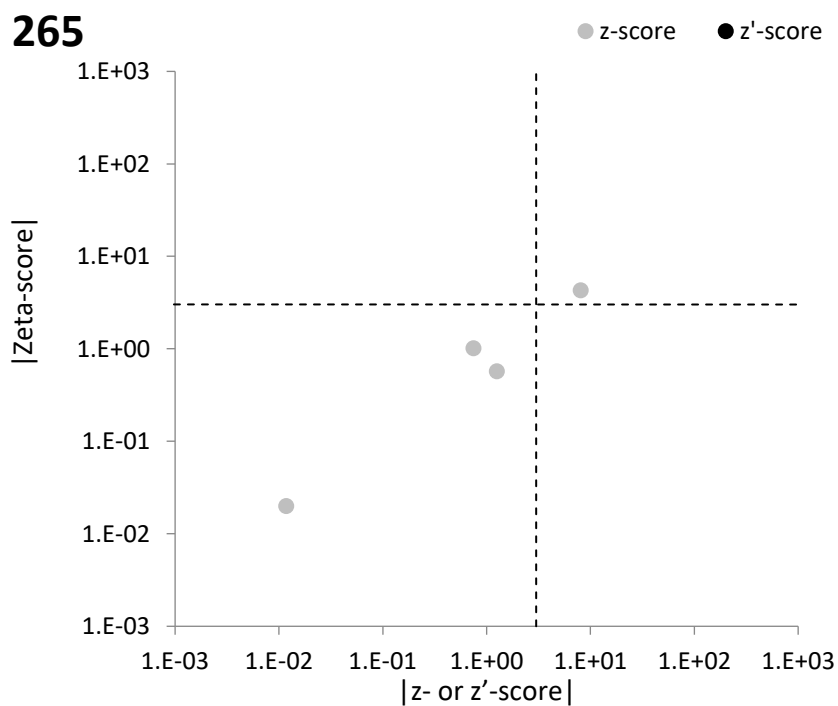


FIG. 313. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 265 (Plant sample).

267

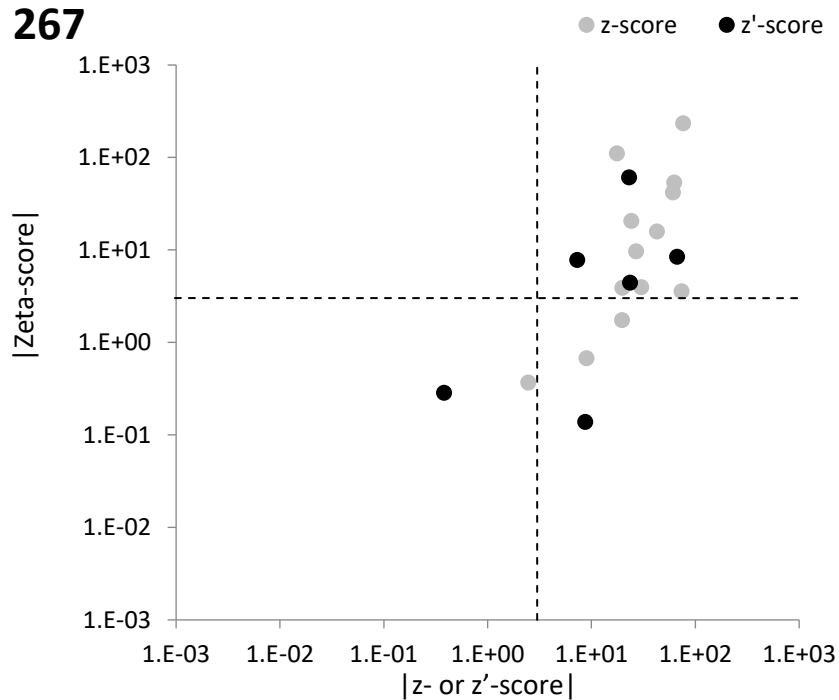


FIG. 314. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 267 (Clay sample).

267

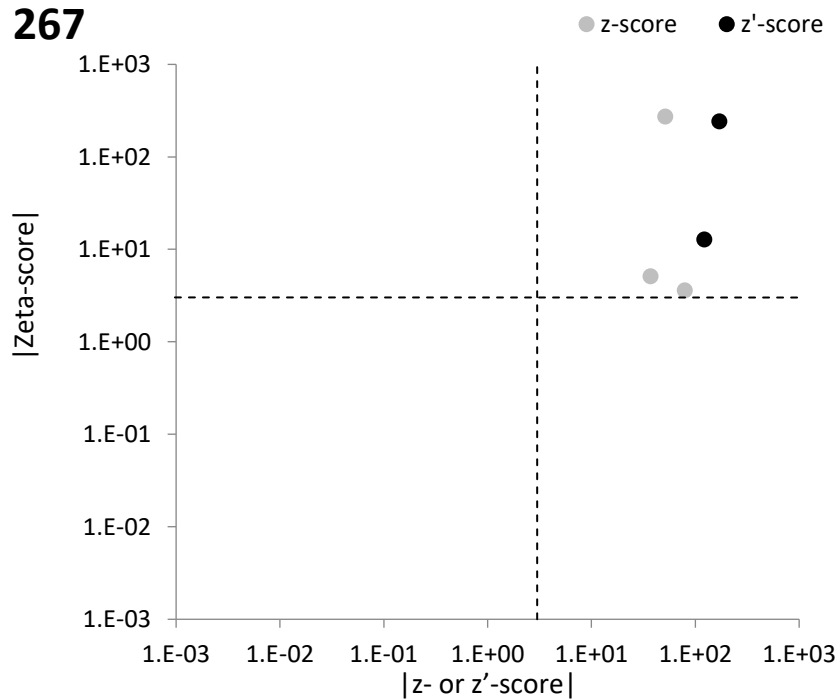


FIG. 315. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 267 (Plant sample).

268

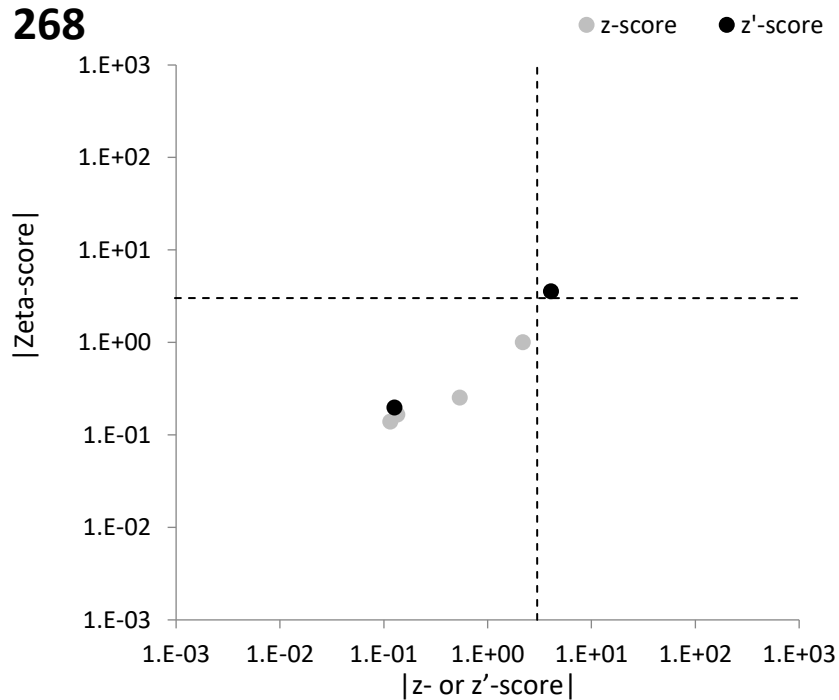


FIG. 316. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 268 (Clay sample).

268

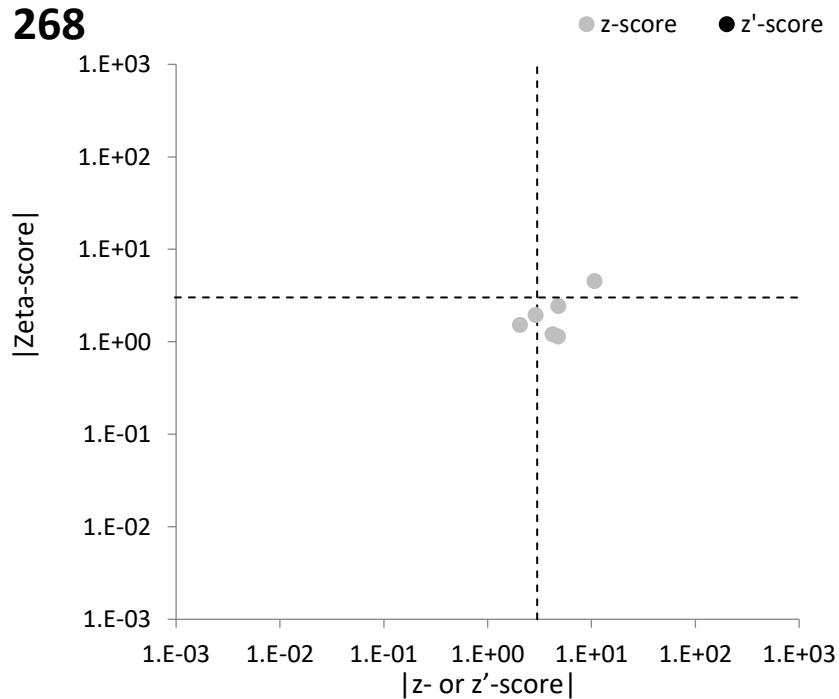


FIG. 317. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 268 (Plant sample).

270

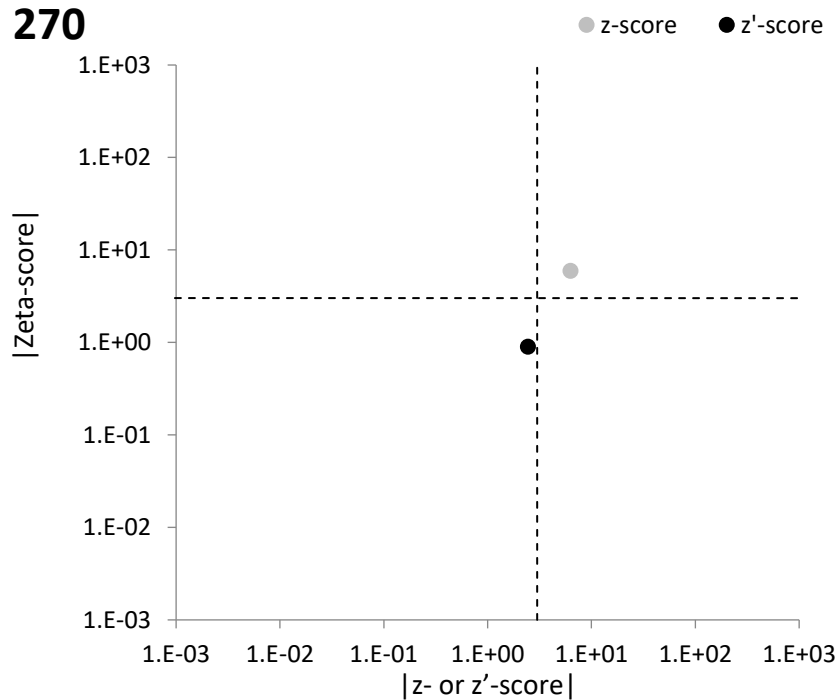


FIG. 318. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 270 (Clay sample).

270

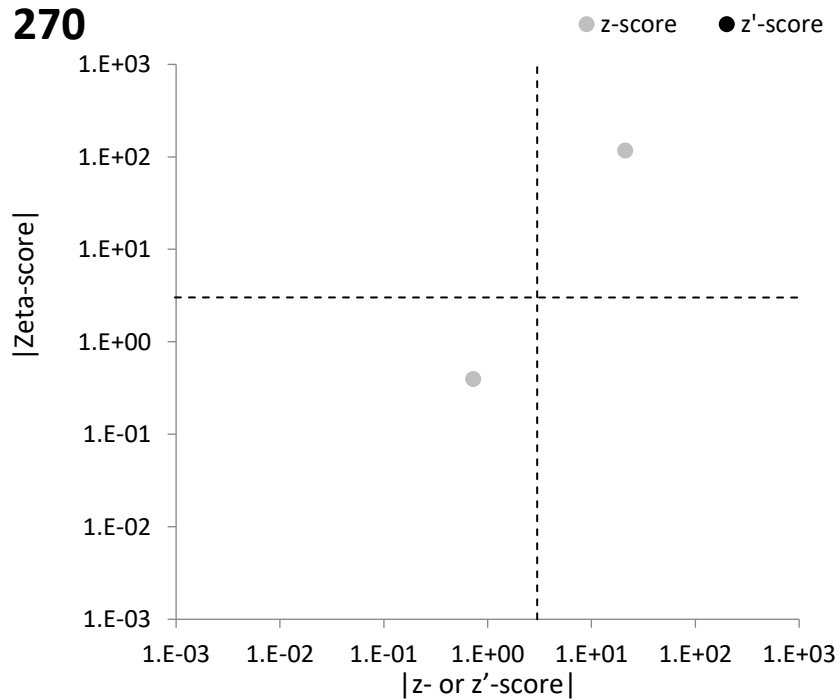


FIG. 319. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 270 (Plant sample).

271

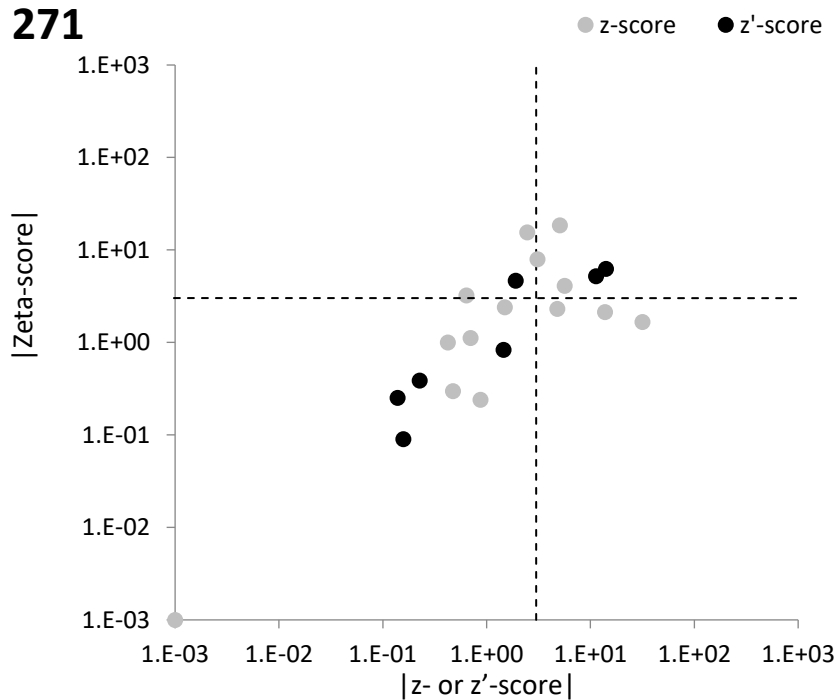


FIG. 320. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 271 (Clay sample).

272

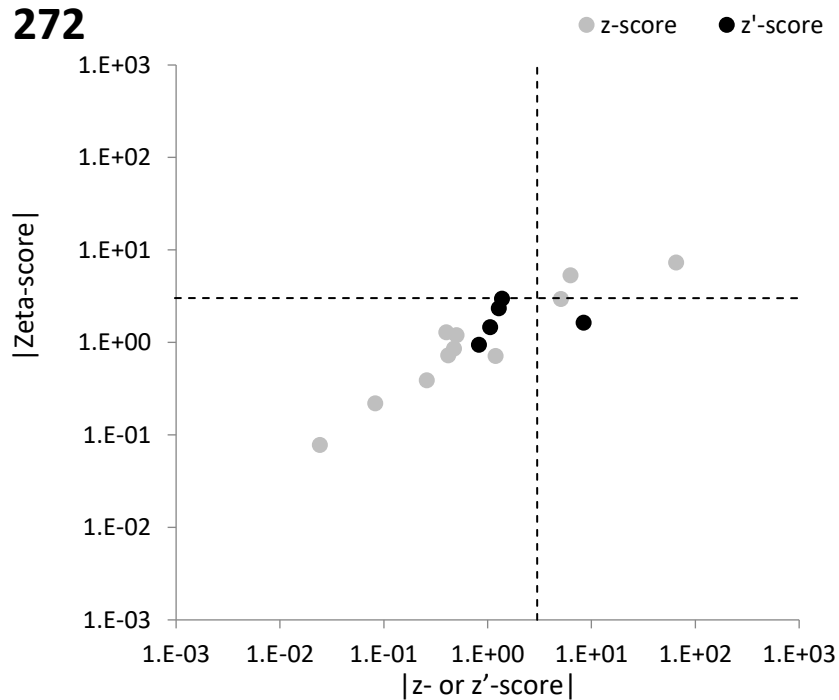


FIG. 321. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 272 (Clay sample).

272

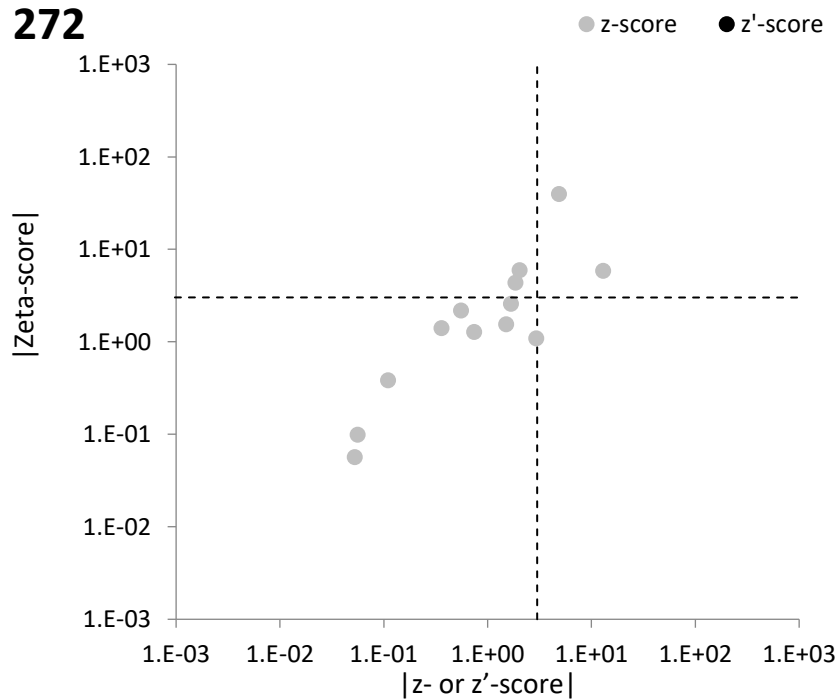


FIG. 322. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 272 (Plant sample).

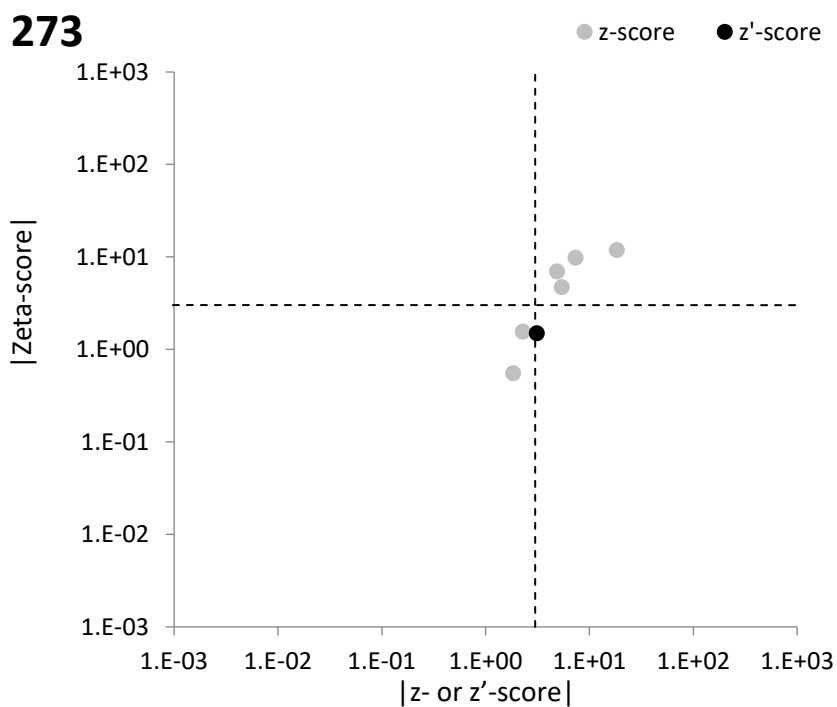


FIG. 323. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 273 (Clay sample).

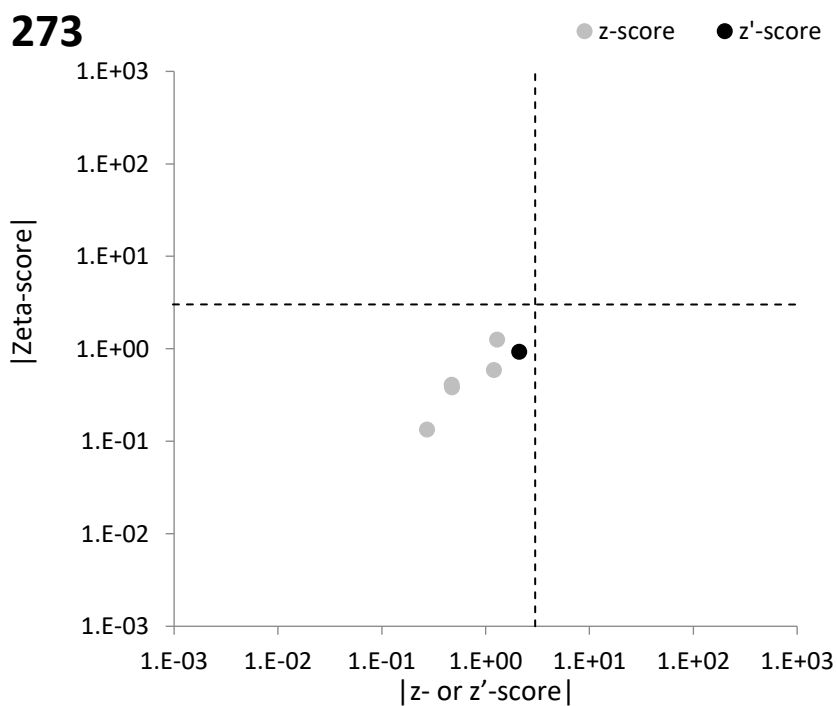


FIG. 324. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 273 (Plant sample).

276

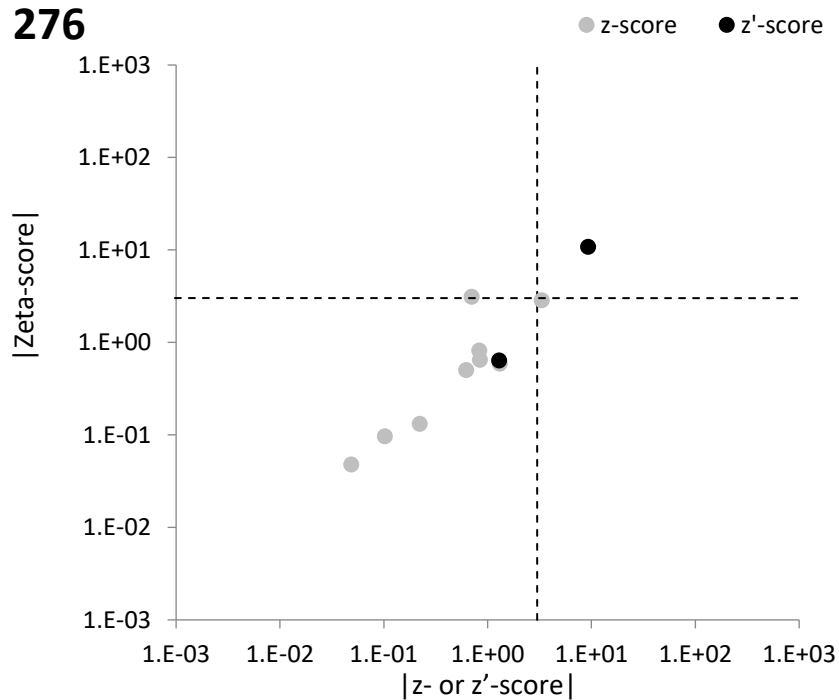


FIG. 325. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 276 (Clay sample).

276

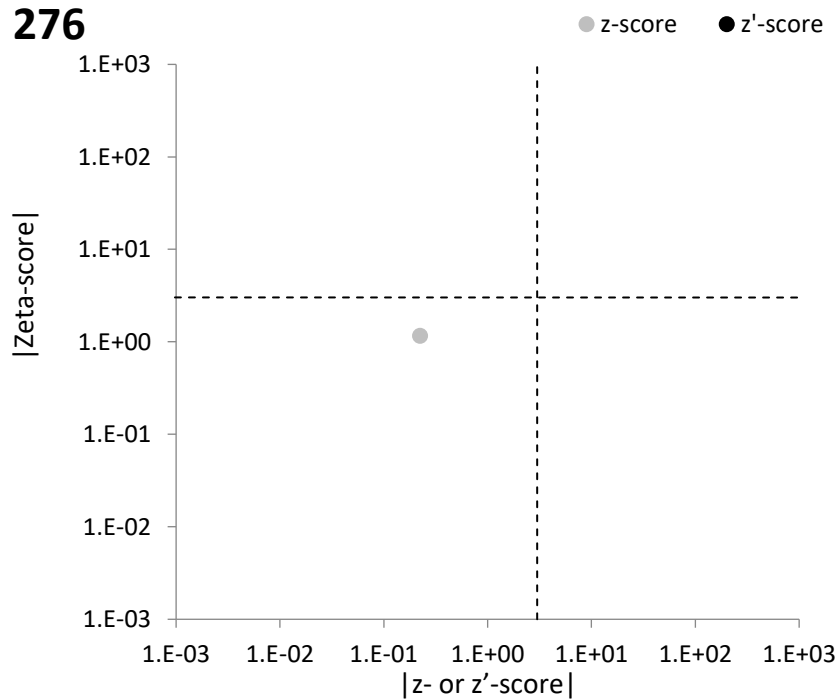


FIG. 326. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 276 (Plant sample).

278

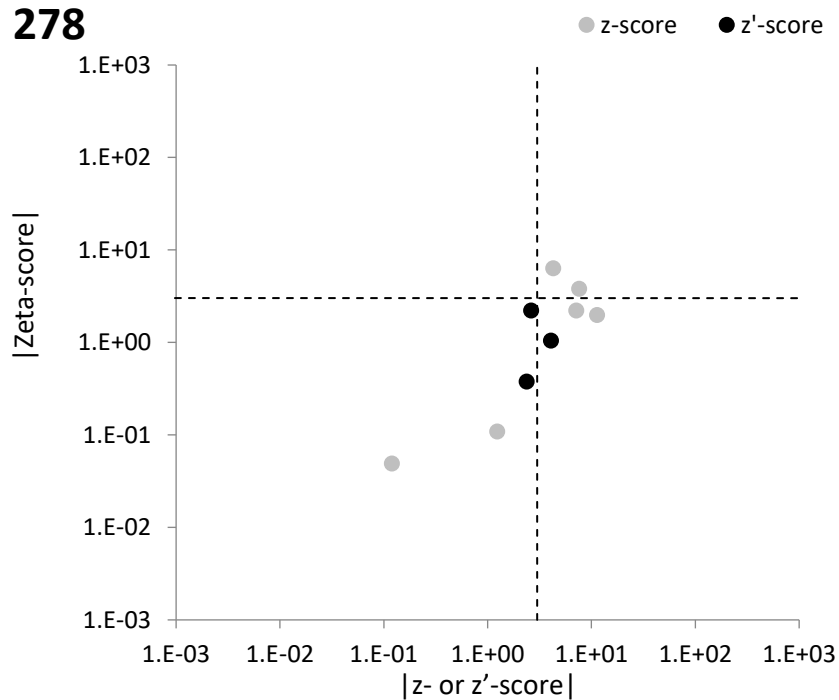


FIG. 327. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 278 (Clay sample).

278

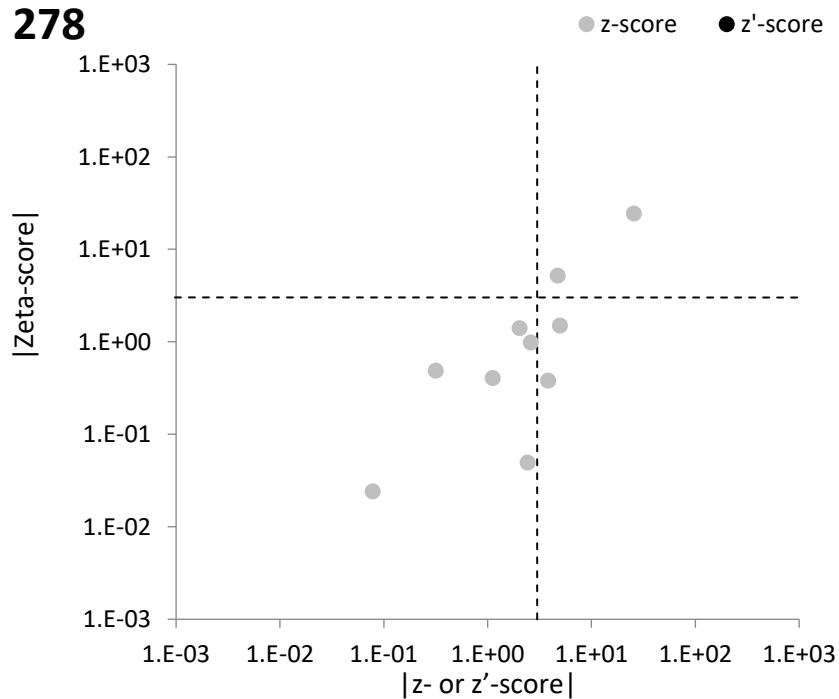


FIG. 328. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 278 (Plant sample).

279

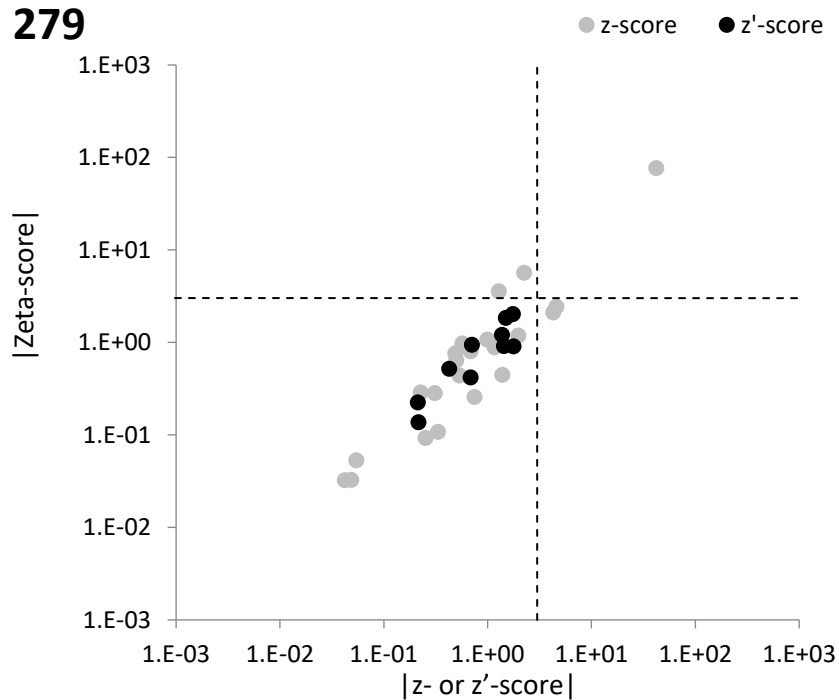


FIG. 329. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 279 (Clay sample).

279

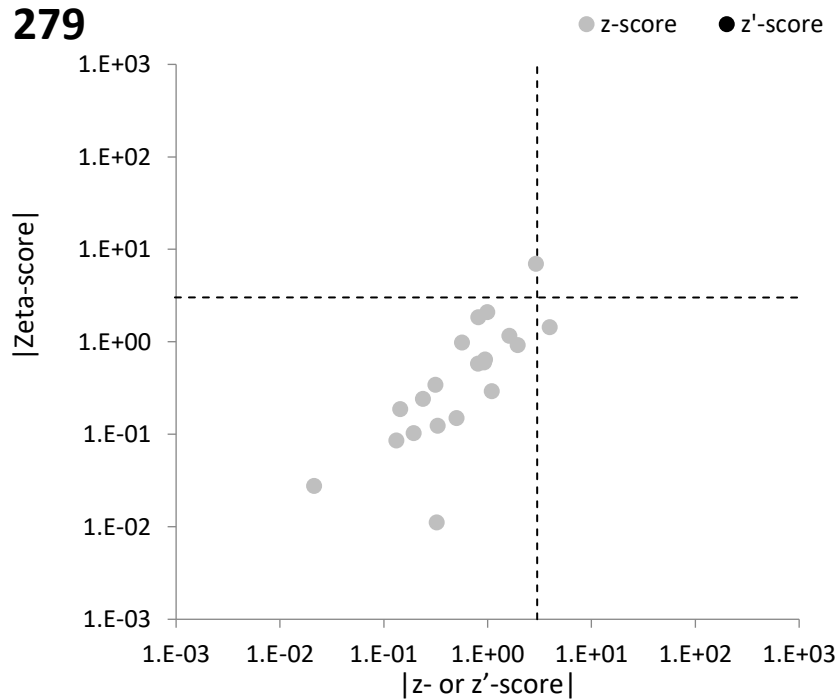


FIG. 330. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 279 (Plant sample).

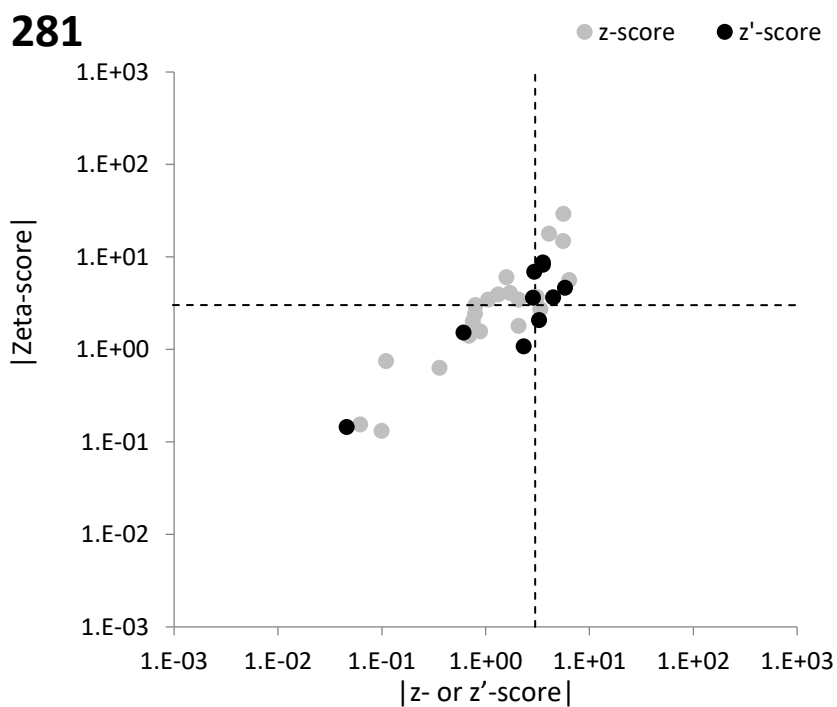


FIG. 331. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 281 (Clay sample).

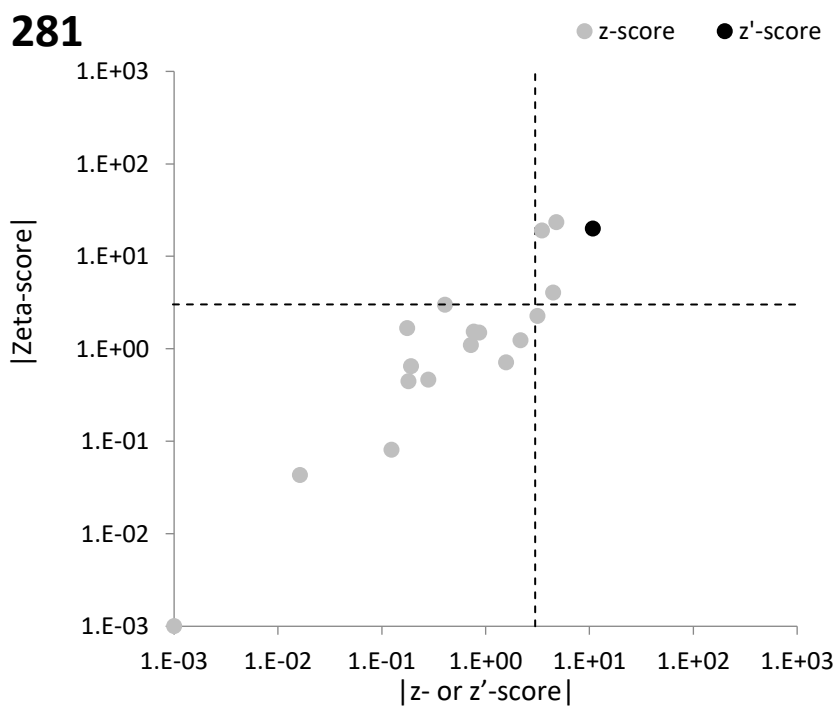


FIG. 332. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 281 (Plant sample).

282

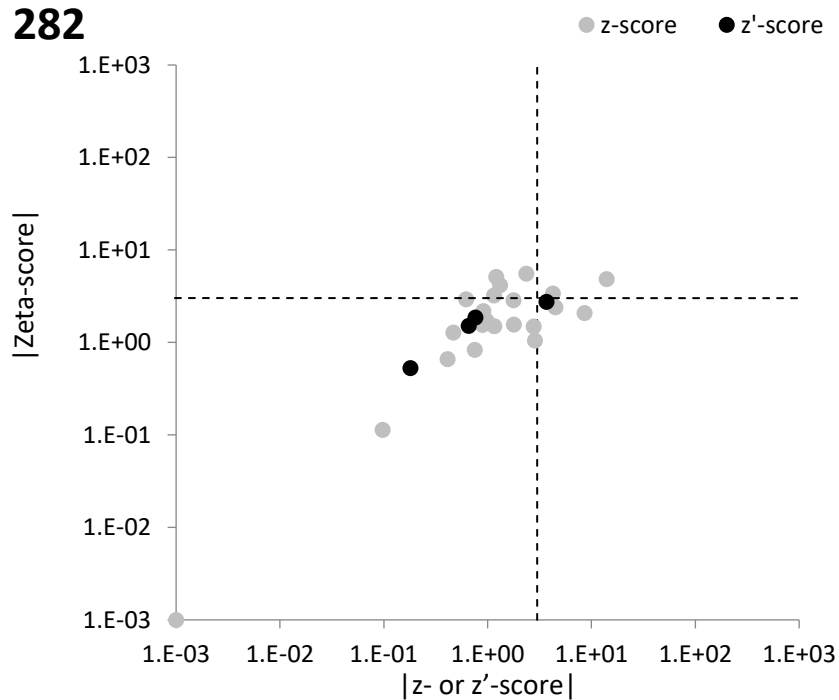


FIG. 333. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 282 (Clay sample).

282

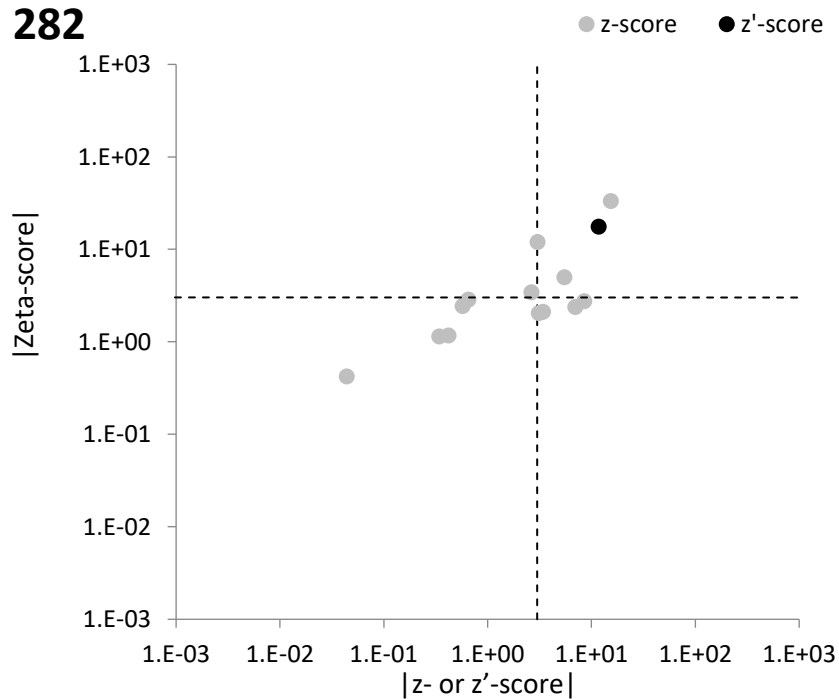


FIG. 334. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 282 (Plant sample).

283

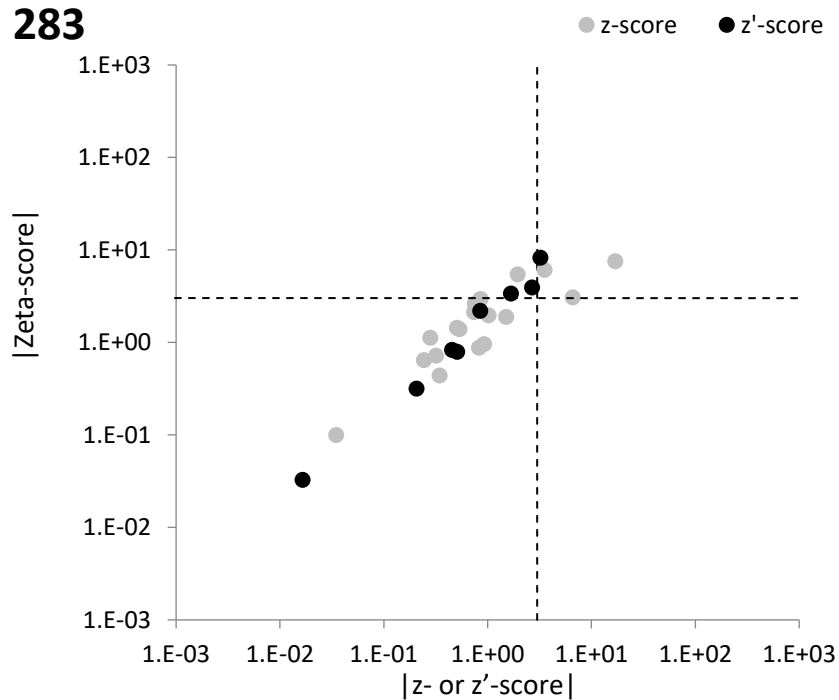


FIG. 335. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 283 (Clay sample).

283

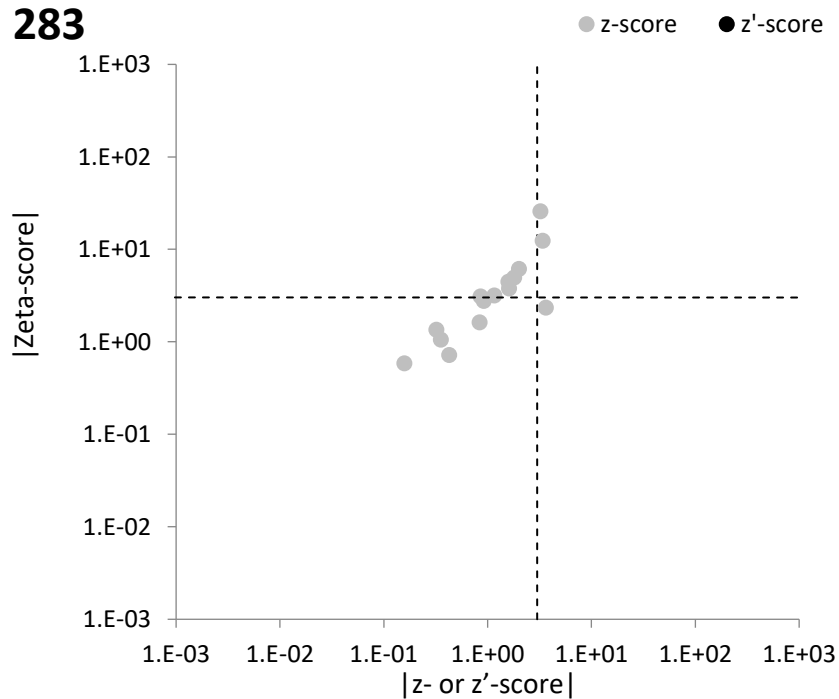


FIG. 336. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 283 (Plant sample).

284

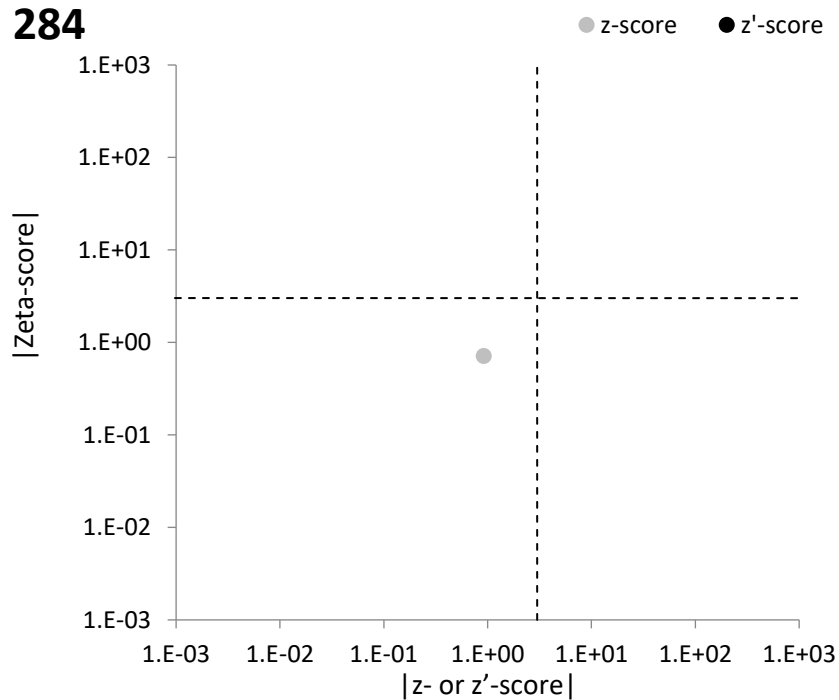


FIG. 337. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 284 (Clay sample).

284

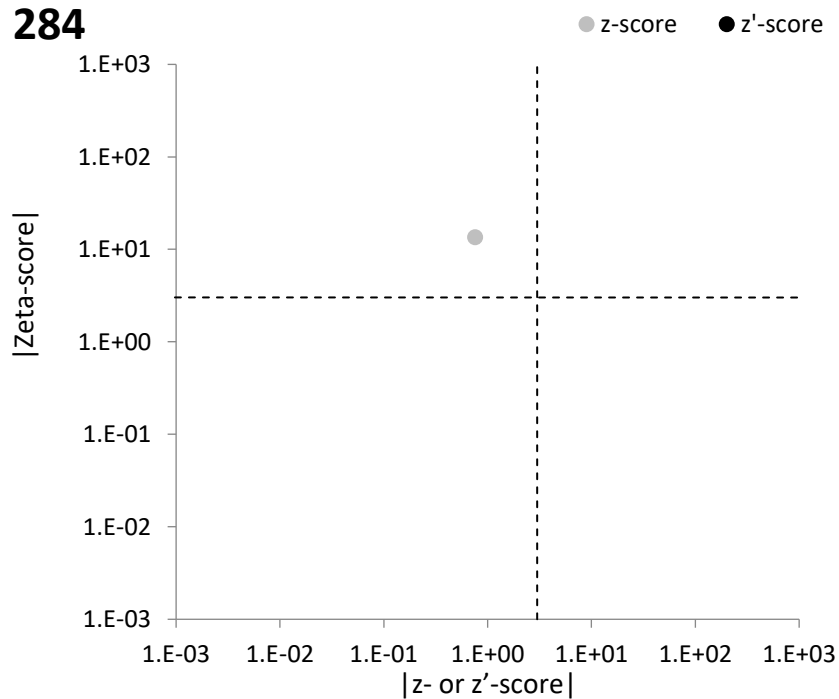


FIG. 338. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 284 (Plant sample).

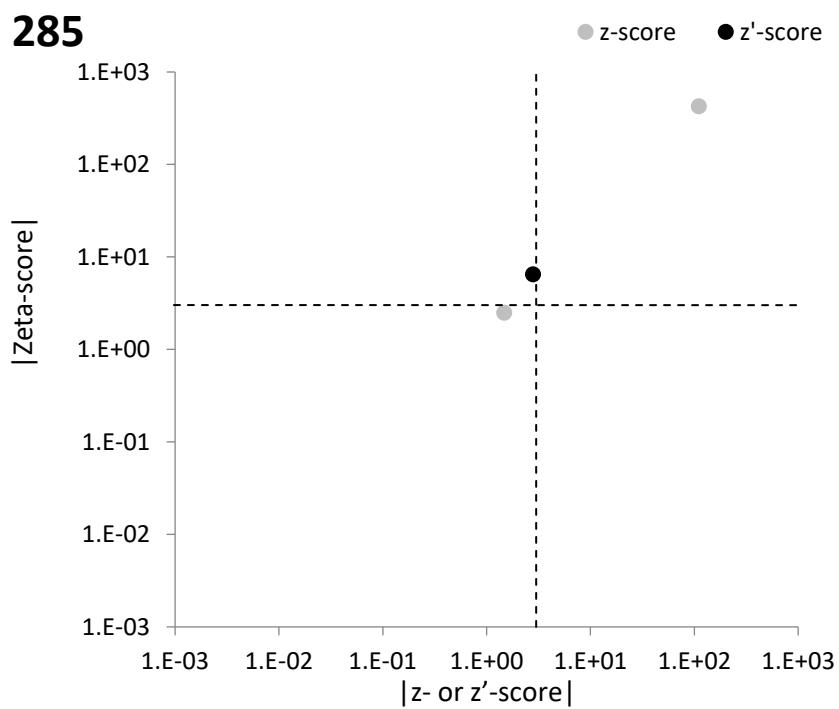


FIG. 339. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 285 (Clay sample).

286

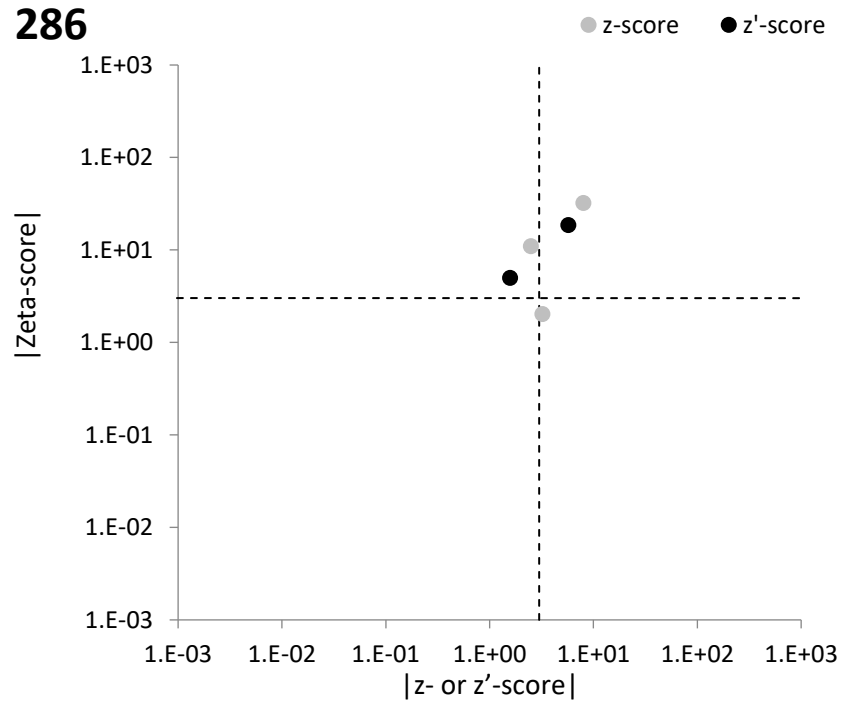


FIG. 340. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 286 (Clay sample).

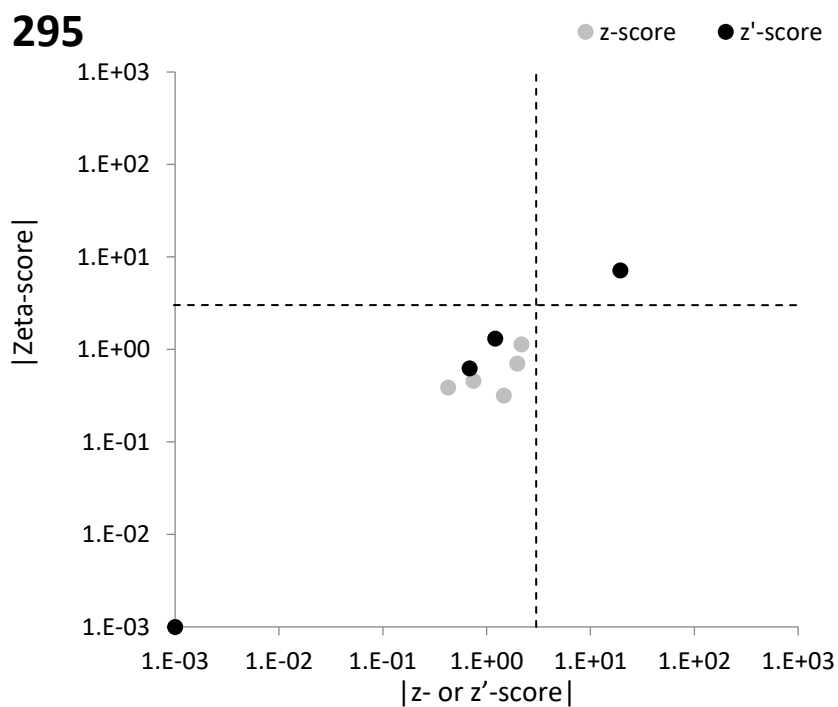


FIG. 341. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 295 (Clay sample).

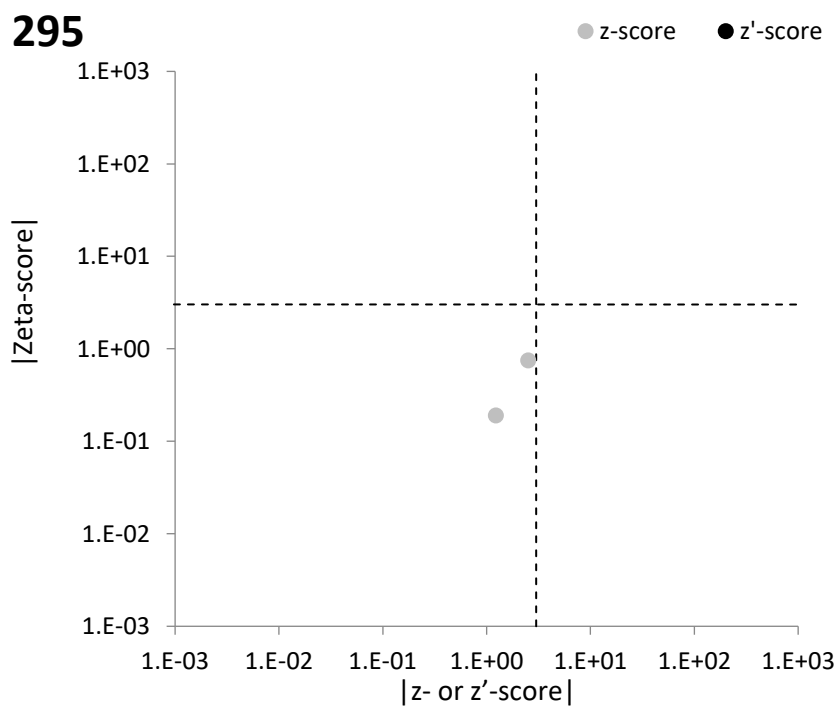


FIG. 342. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 295 (Plant sample).

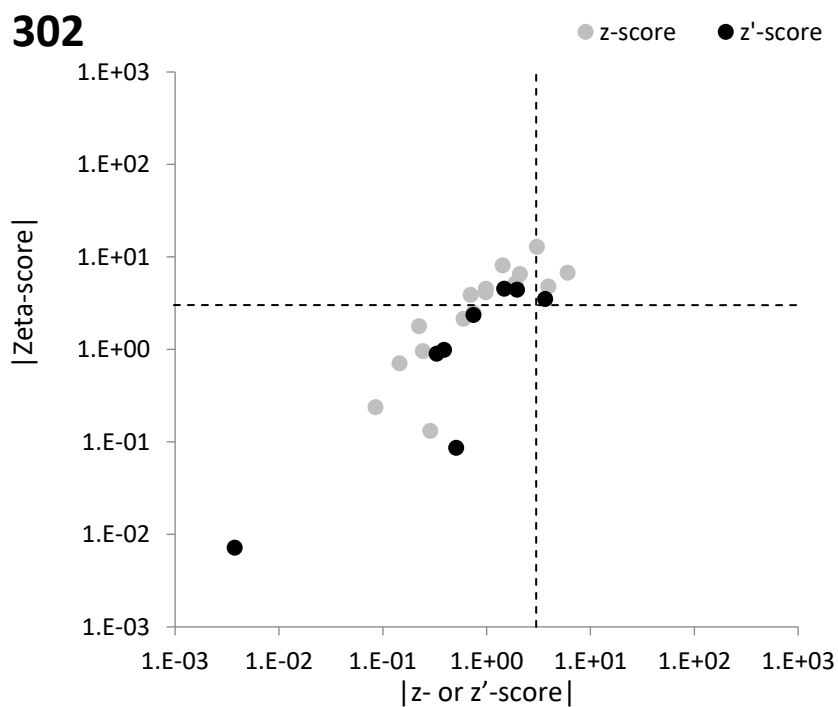


FIG. 343. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 302 (Clay sample).

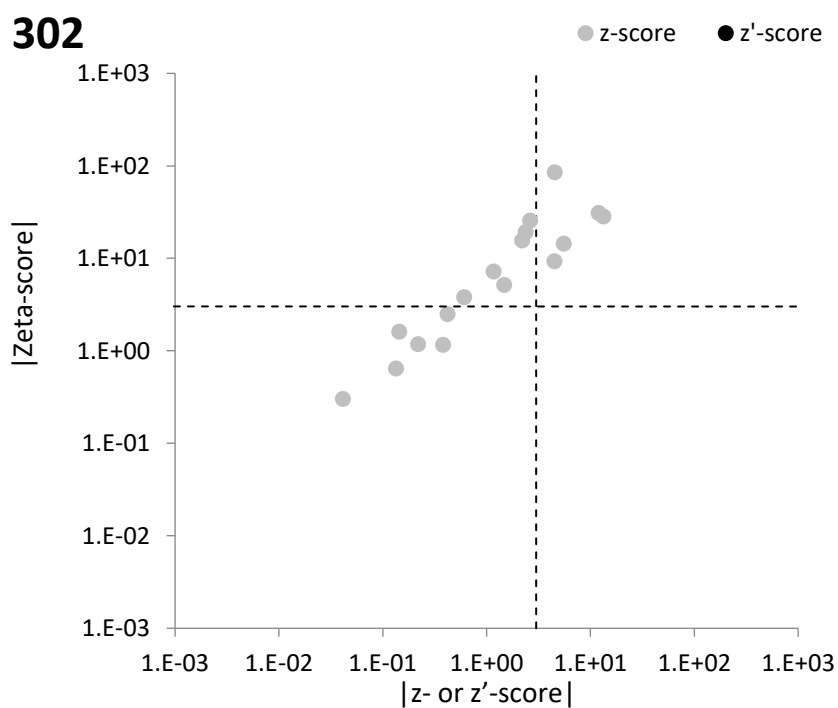


FIG. 344. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 302 (Plant sample).

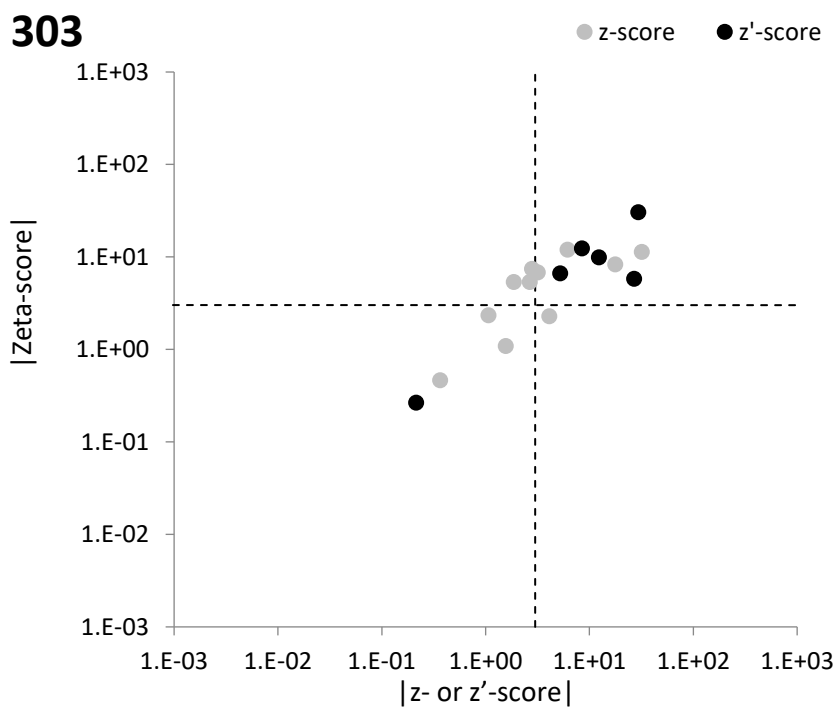


FIG. 345. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 303 (Clay sample).

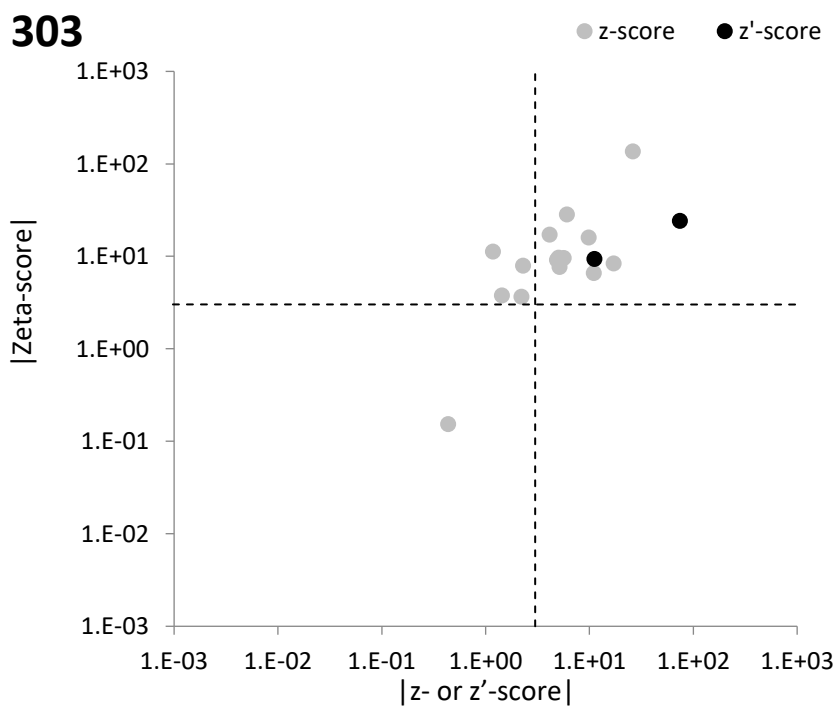


FIG. 346. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 303 (Plant sample).

304

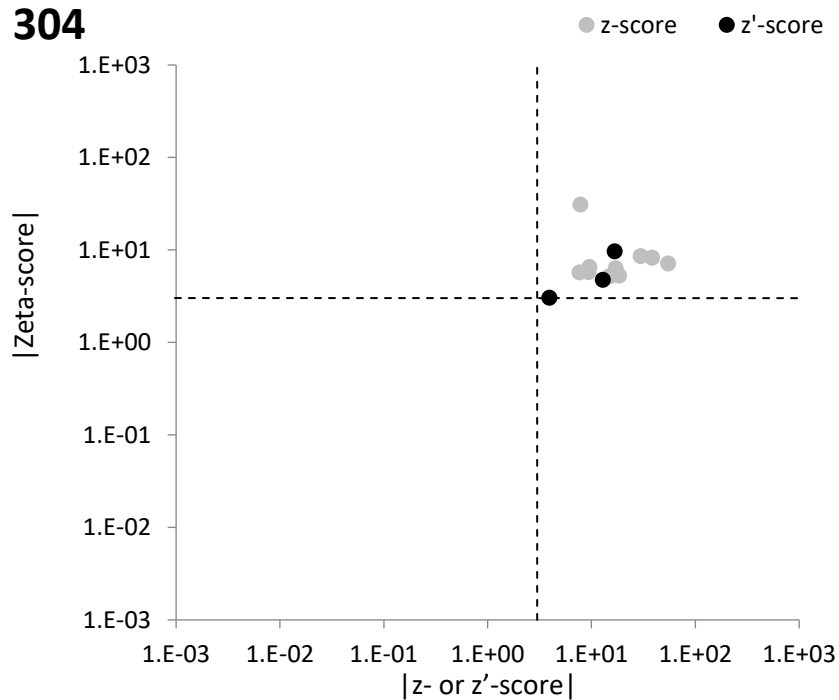


FIG. 347. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 304 (Clay sample).

304

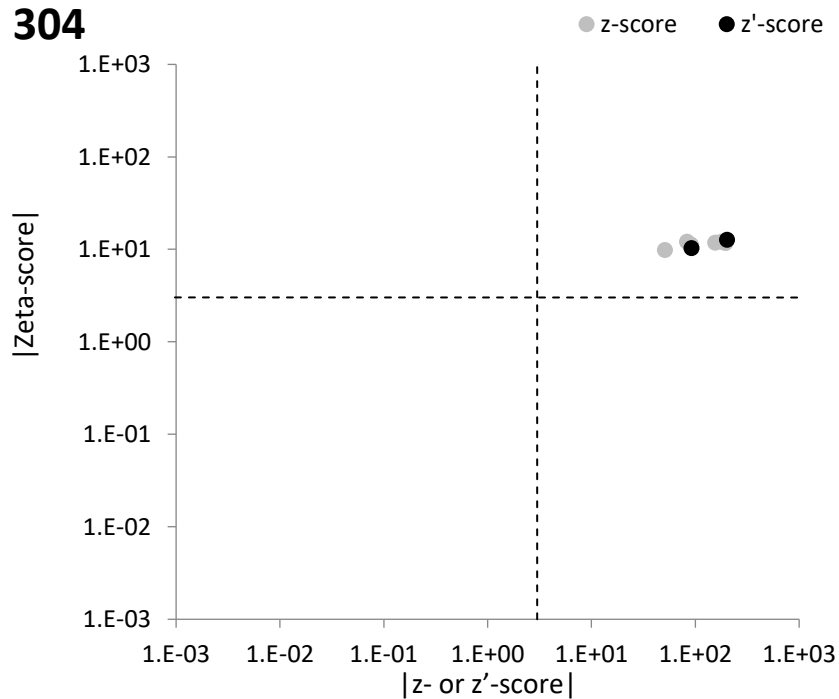


FIG. 348. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 304 (Plant sample).

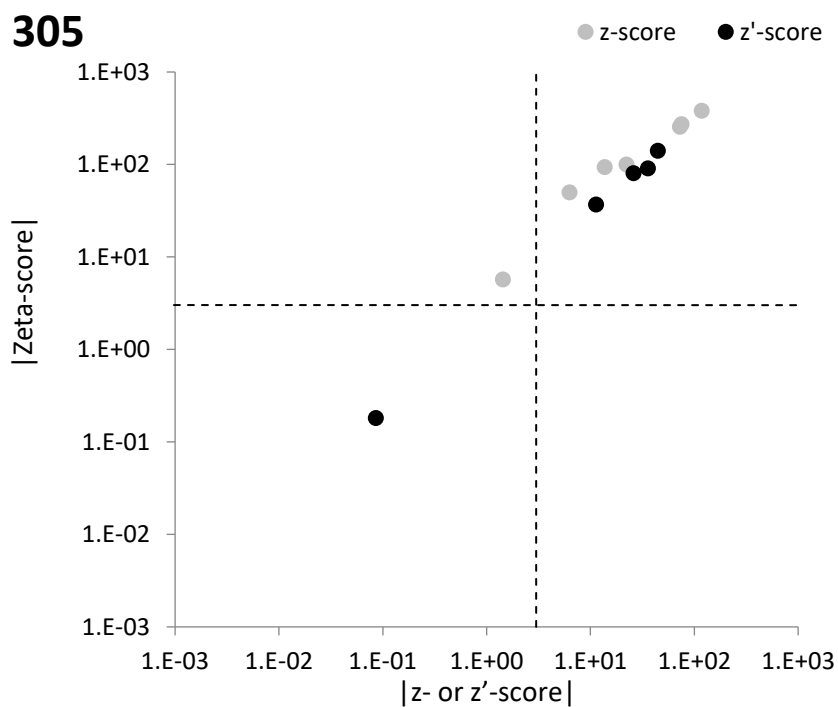


FIG. 349. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 305 (Clay sample).

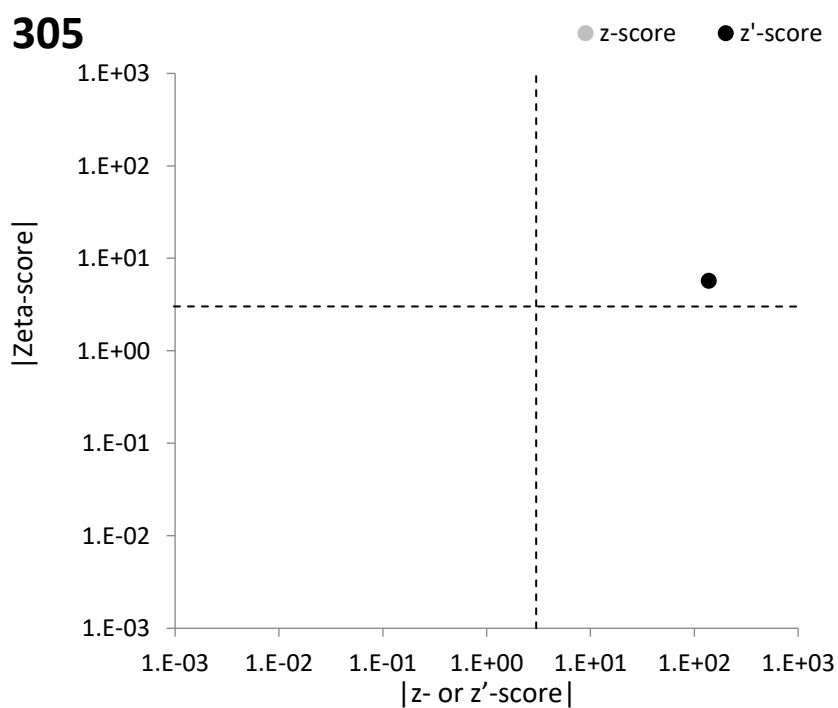


FIG. 350. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 305 (Plant sample).

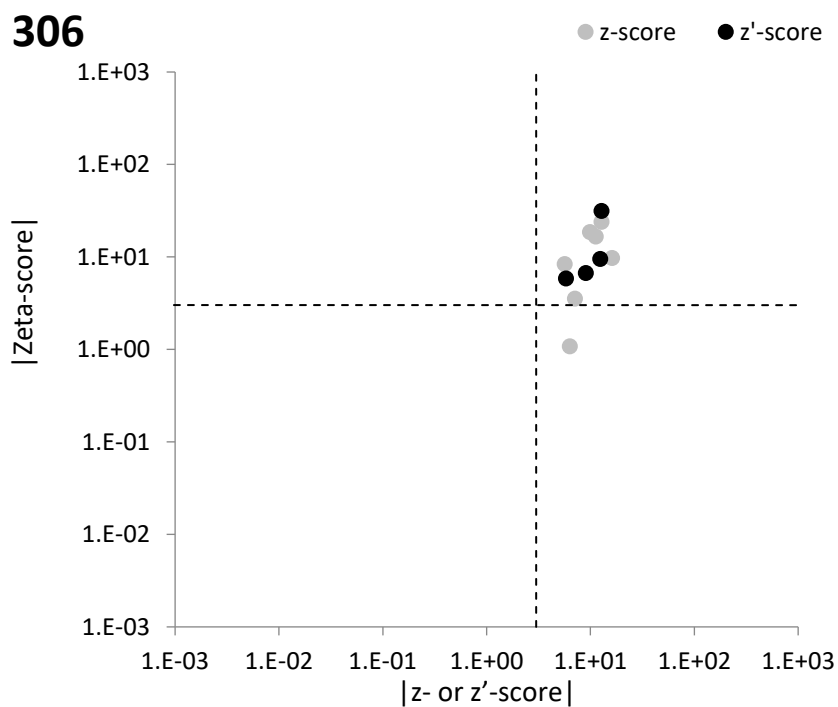


FIG. 351. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 306 (Clay sample).

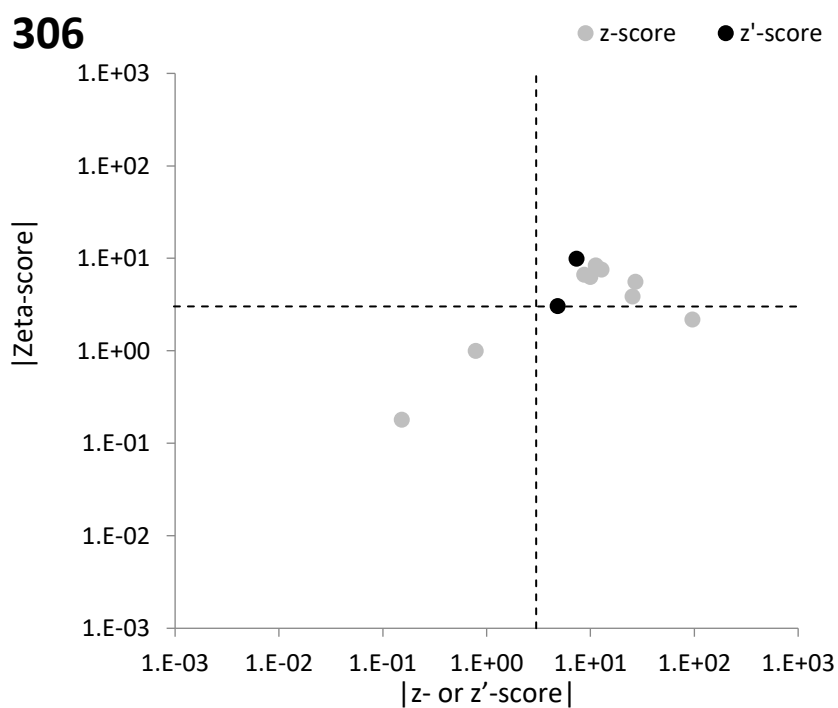


FIG. 352. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 306 (Plant sample).

307

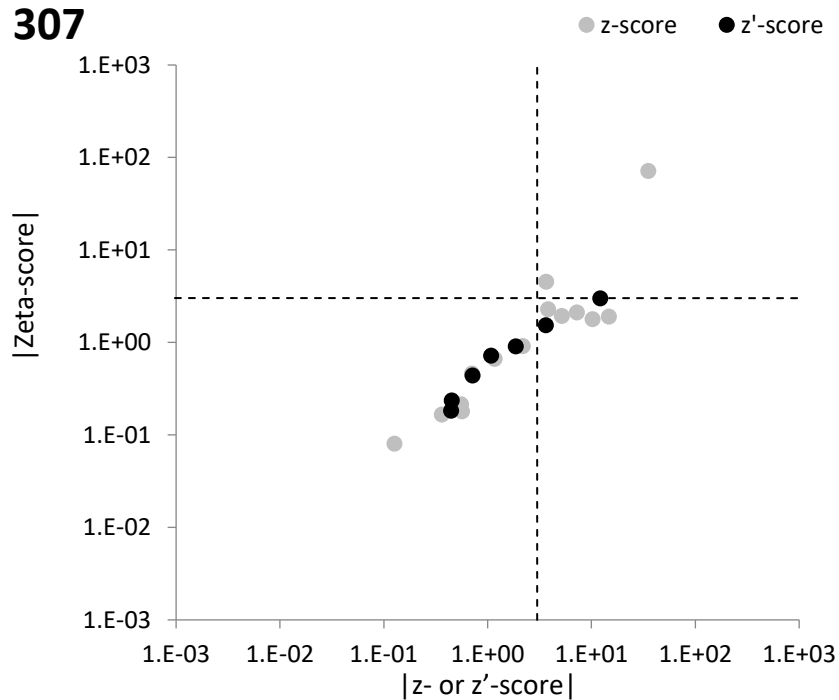


FIG. 353. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 307 (Clay sample).

307

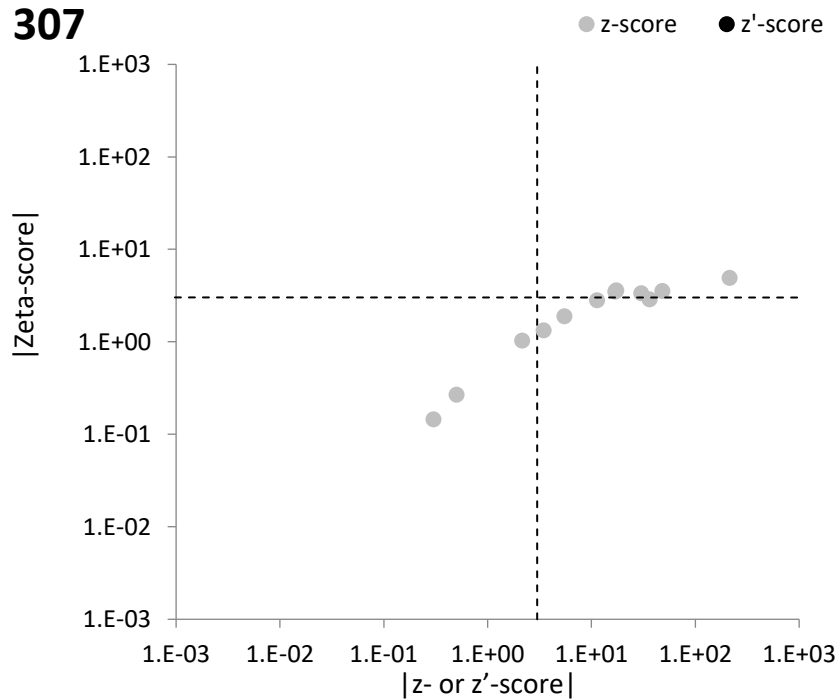


FIG. 354. Combined plots of z - or z' -scores and Zeta-scores for the laboratory with code 307 (Plant sample).

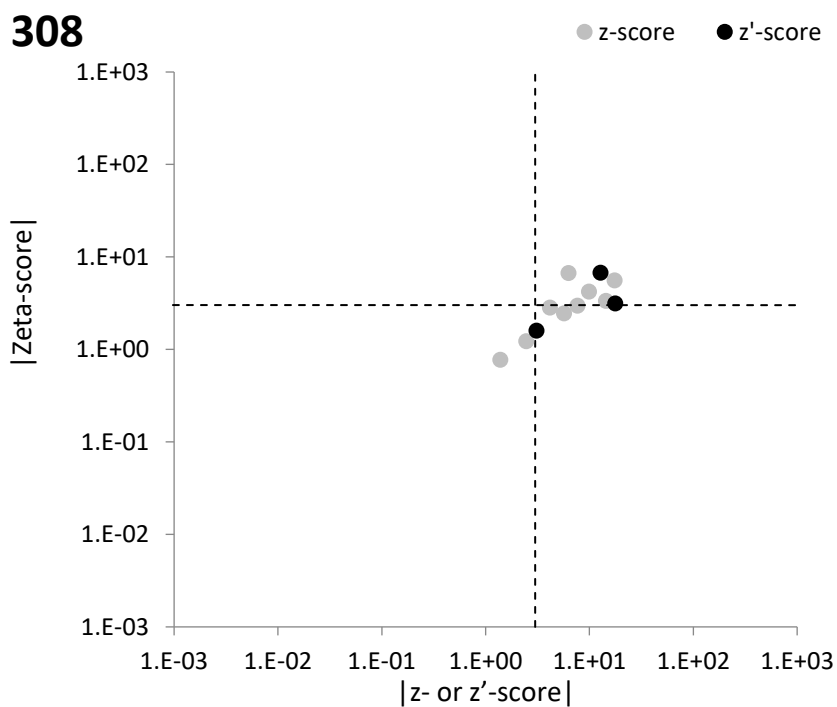


FIG. 355. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 308 (Clay sample).

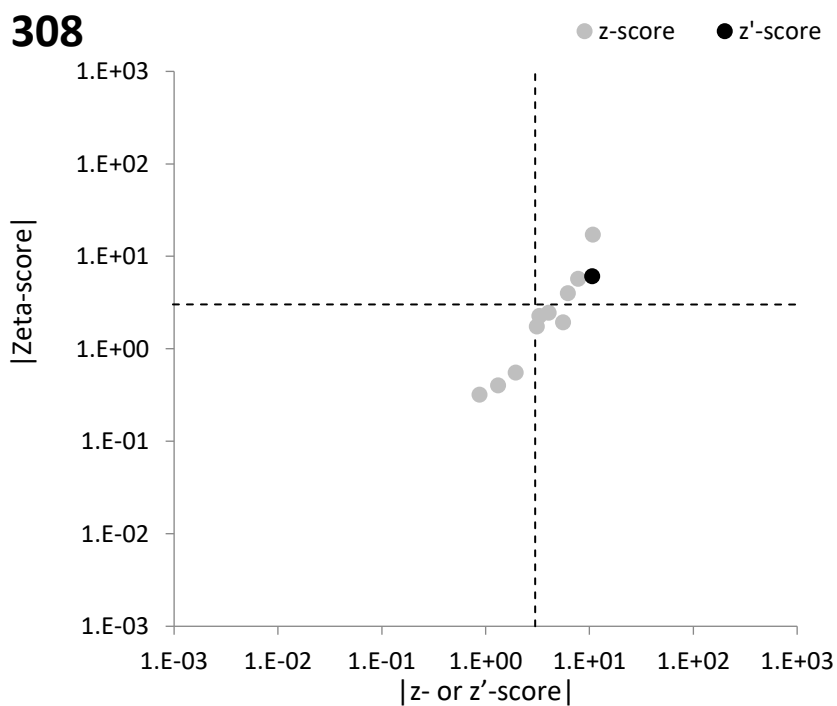


FIG. 356. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 308 (Plant sample).

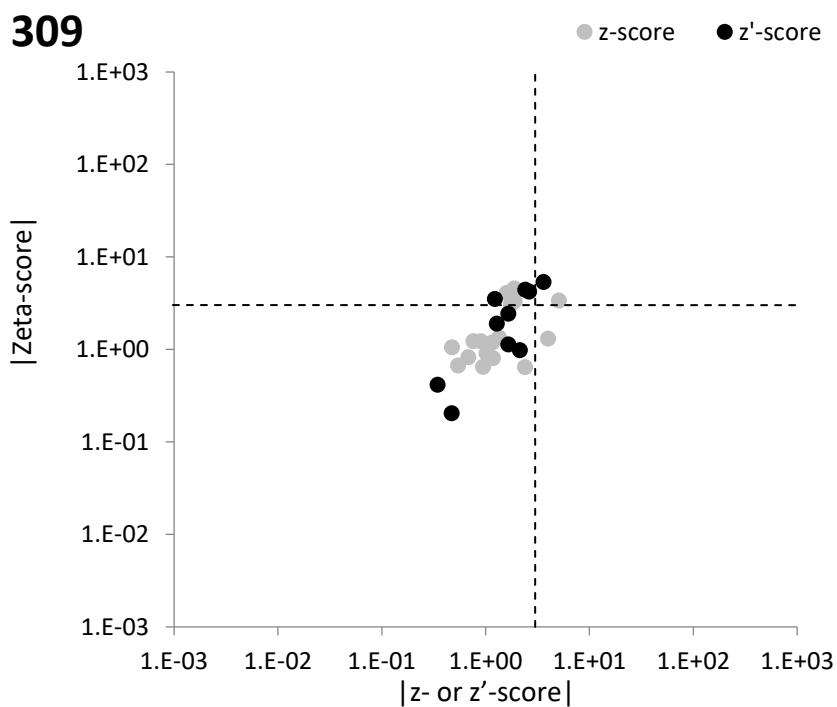


FIG. 357. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 309 (Clay sample).

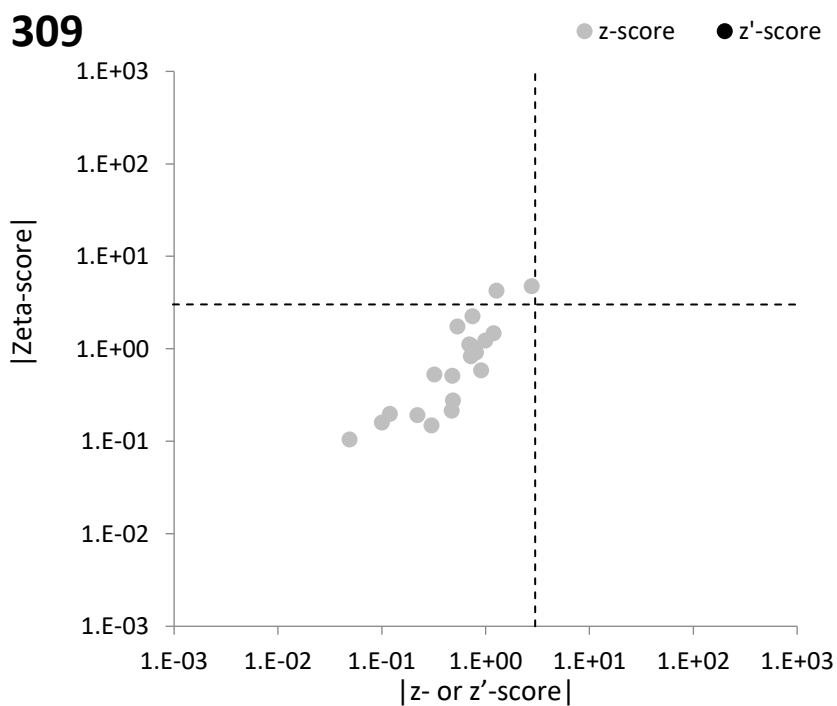


FIG. 358. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 309 (Plant sample).

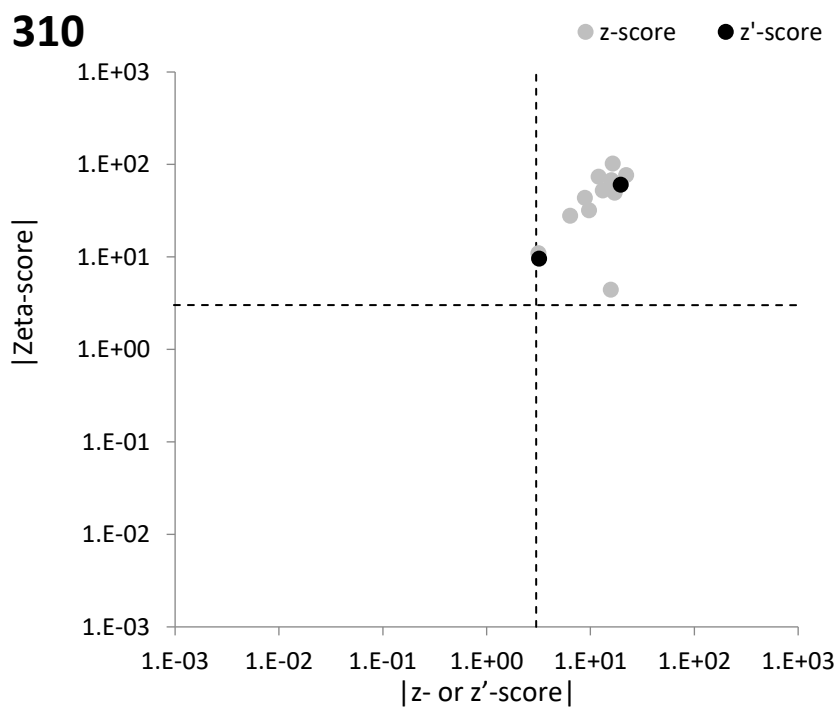


FIG. 359. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 310 (Clay sample).

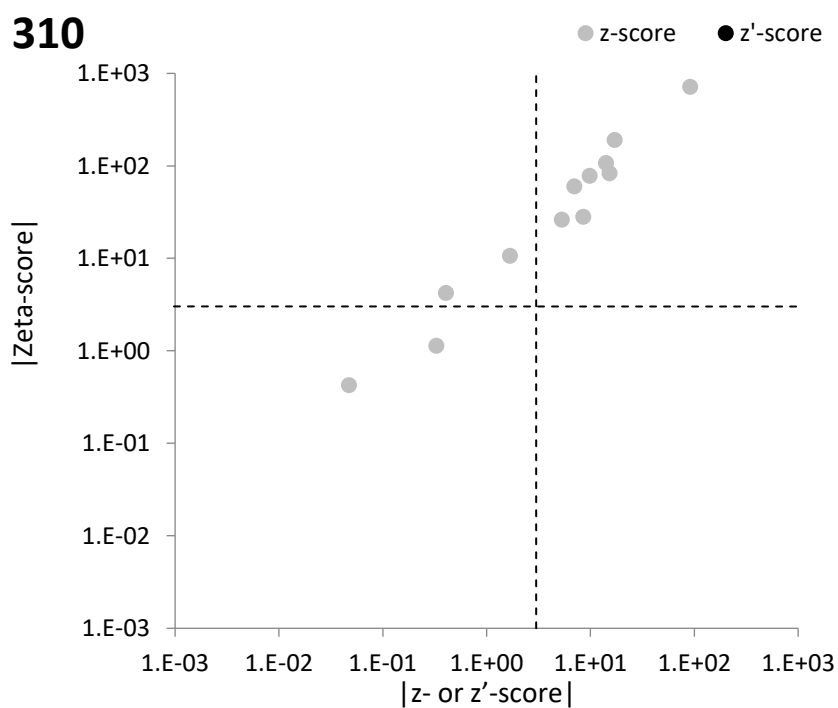


FIG. 360. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 310 (Plant sample).

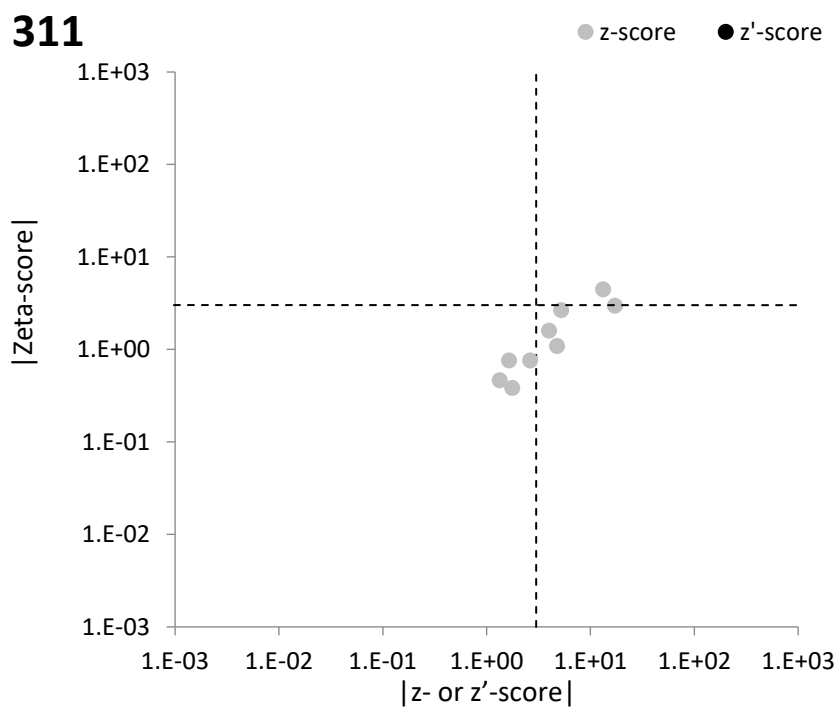


FIG. 361. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 311 (Clay sample).

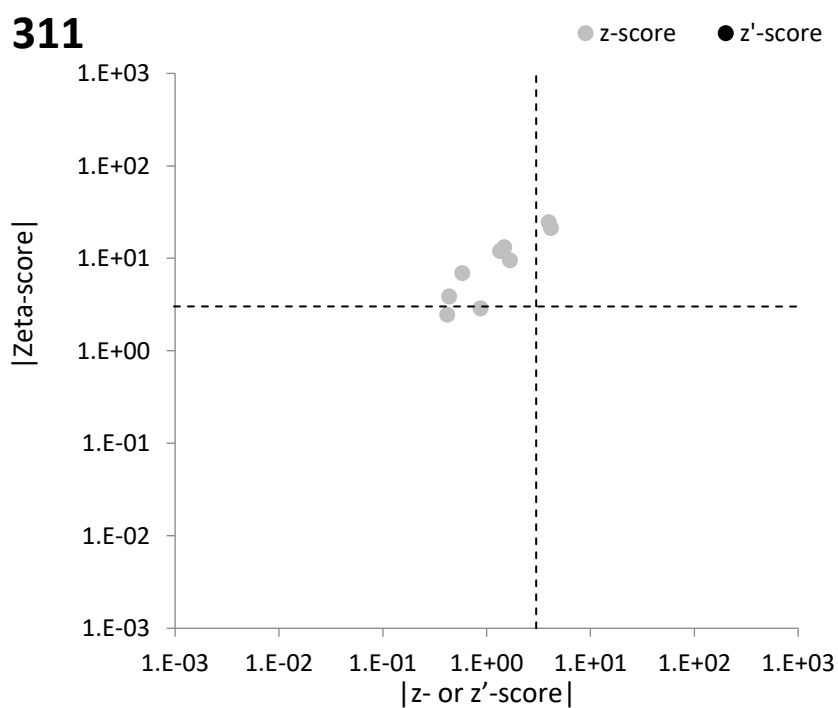


FIG. 362. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 311 (Plant sample).

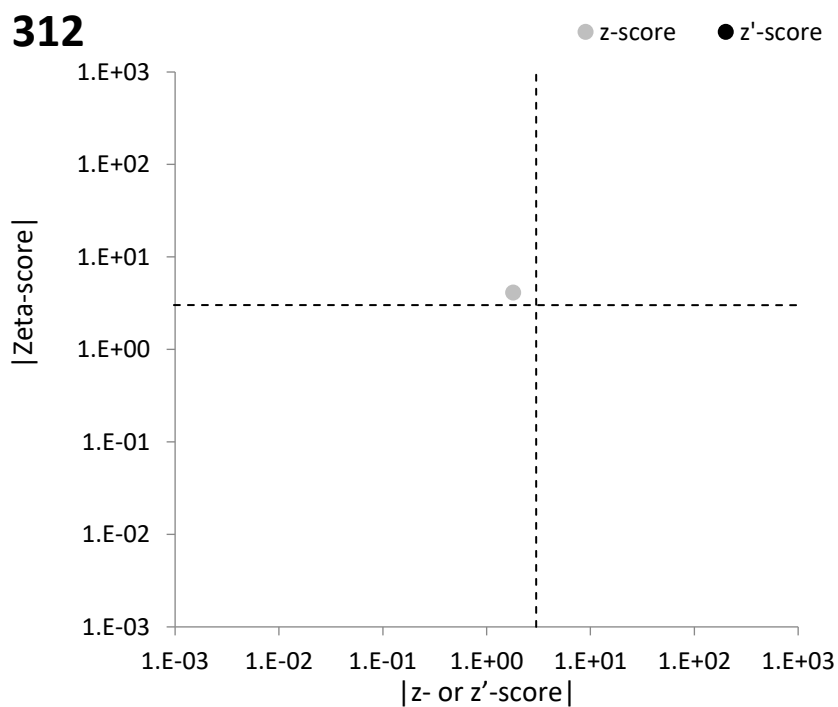


FIG. 363. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 312 (Clay sample).

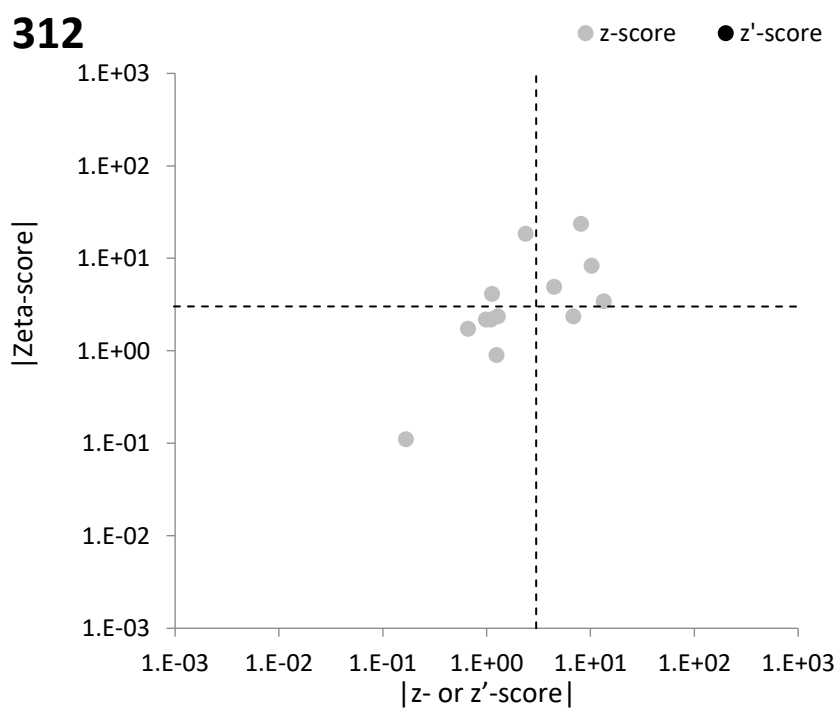


FIG. 364. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 312 (Plant sample).

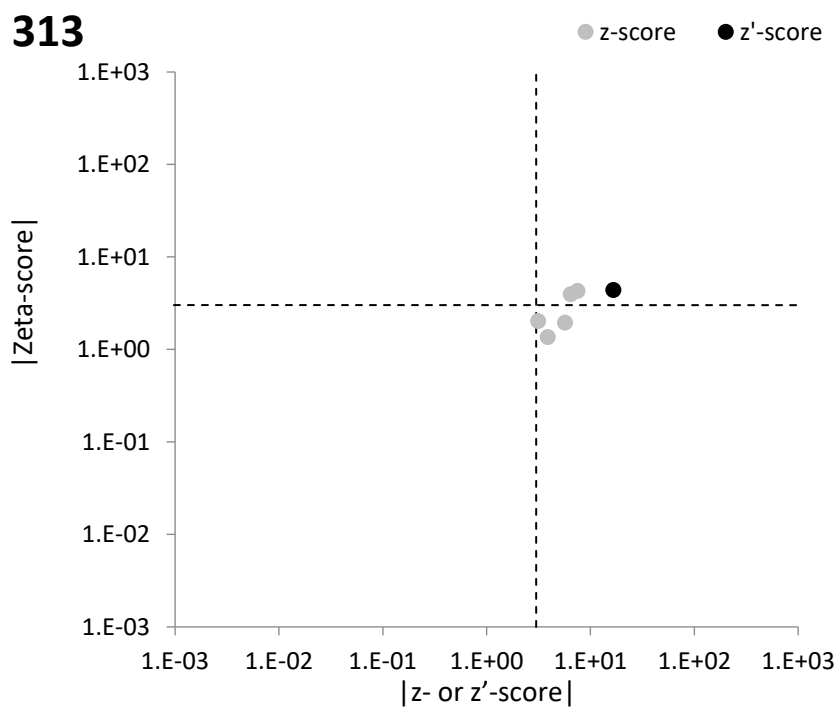


FIG. 365. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 313 (Clay sample).

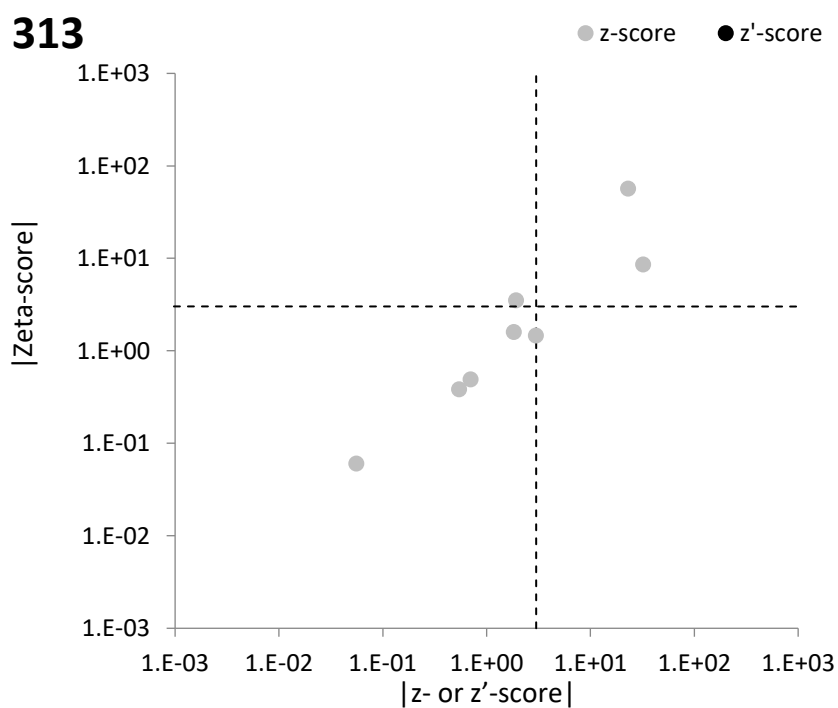


FIG. 366. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 313 (Plant sample).

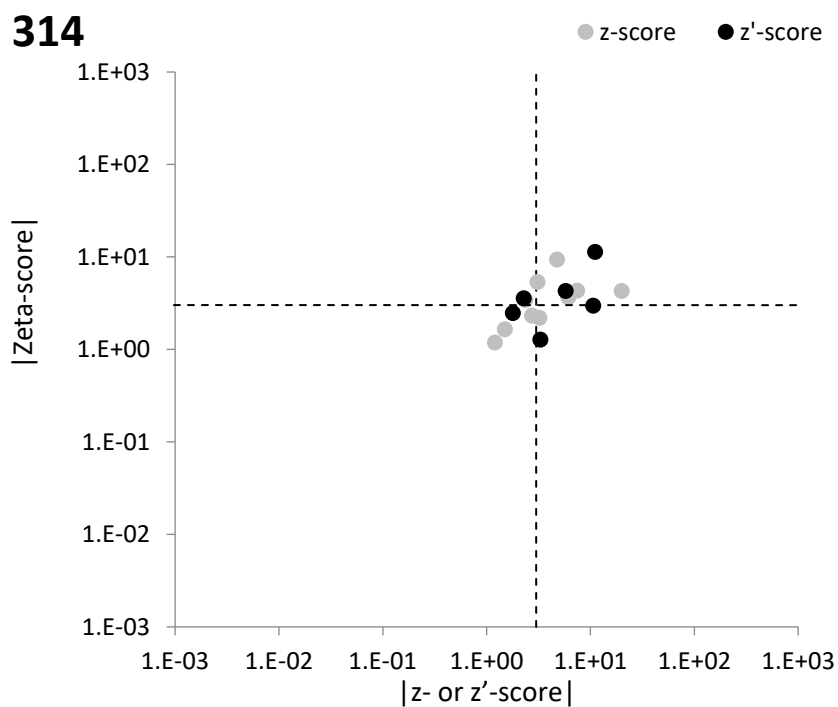


FIG. 367. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 314 (Clay sample).

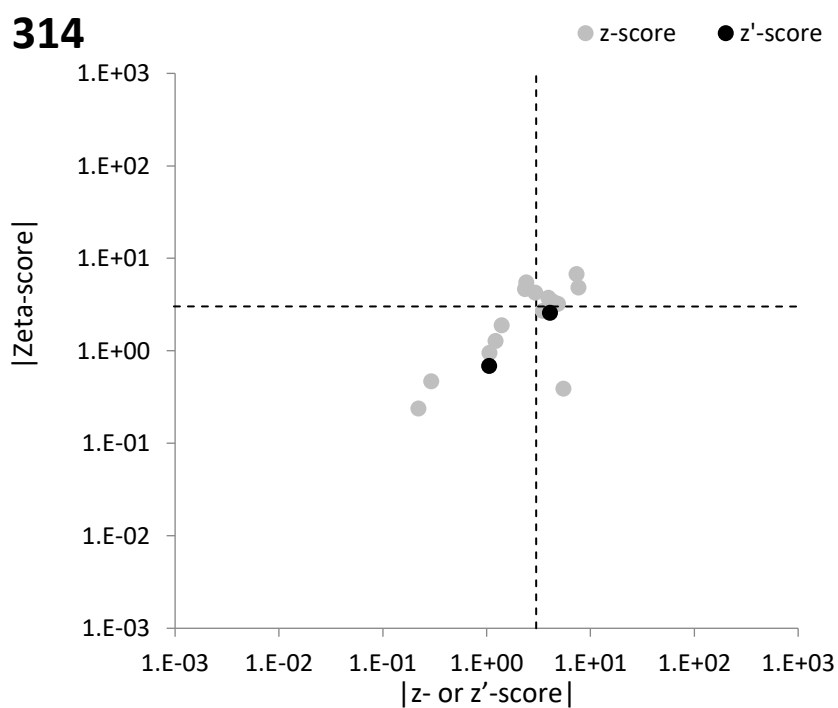


FIG. 368. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 314 (Plant sample).

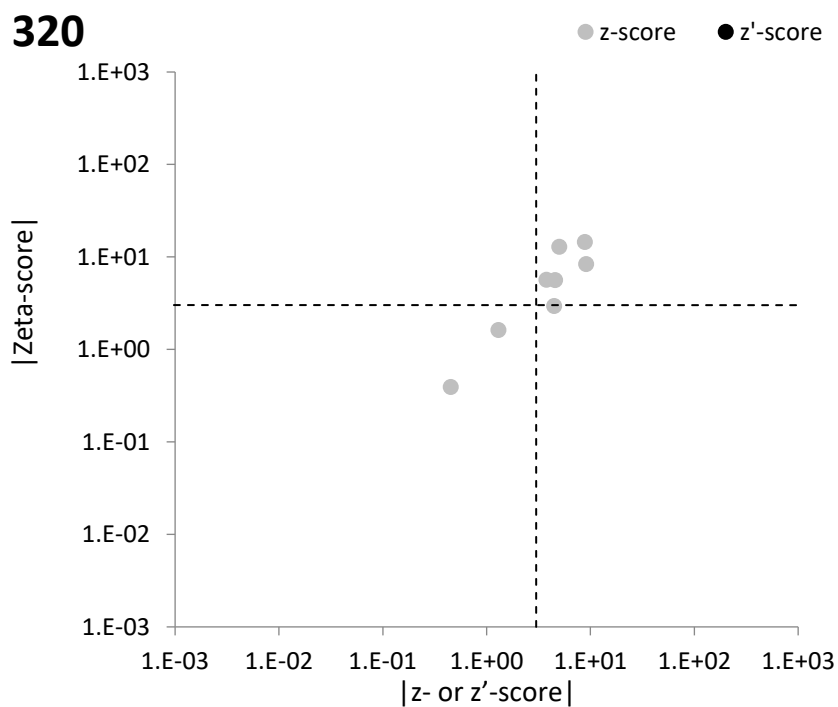


FIG. 369. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 320 (Clay sample).

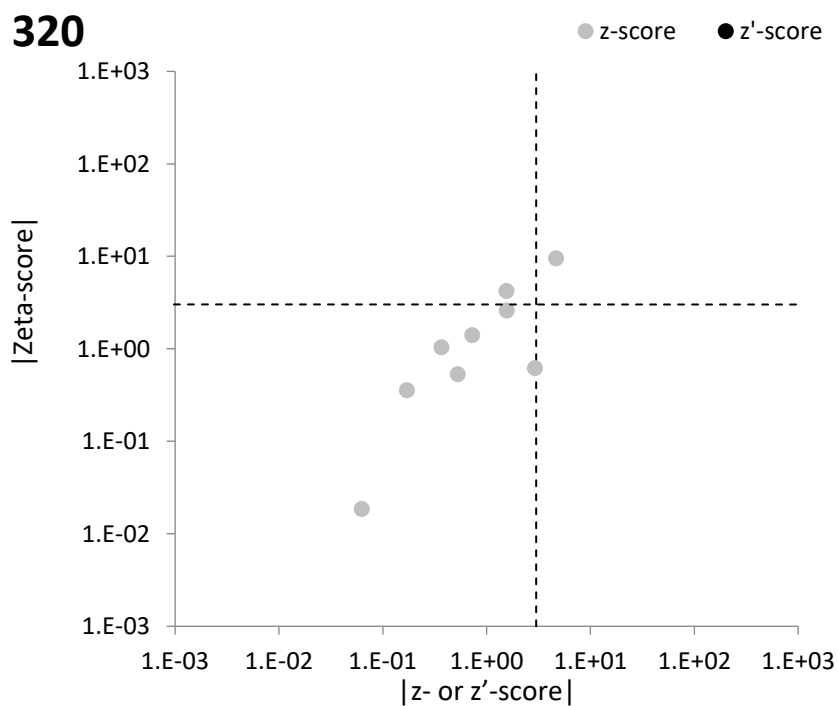


FIG. 370. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 320 (Plant sample).

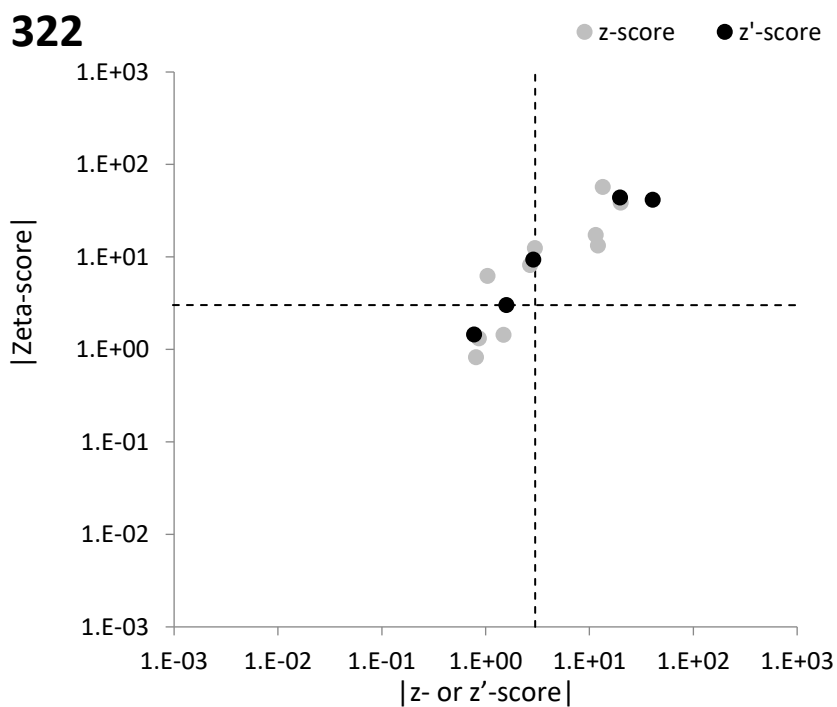


FIG. 371. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 322 (Clay sample).

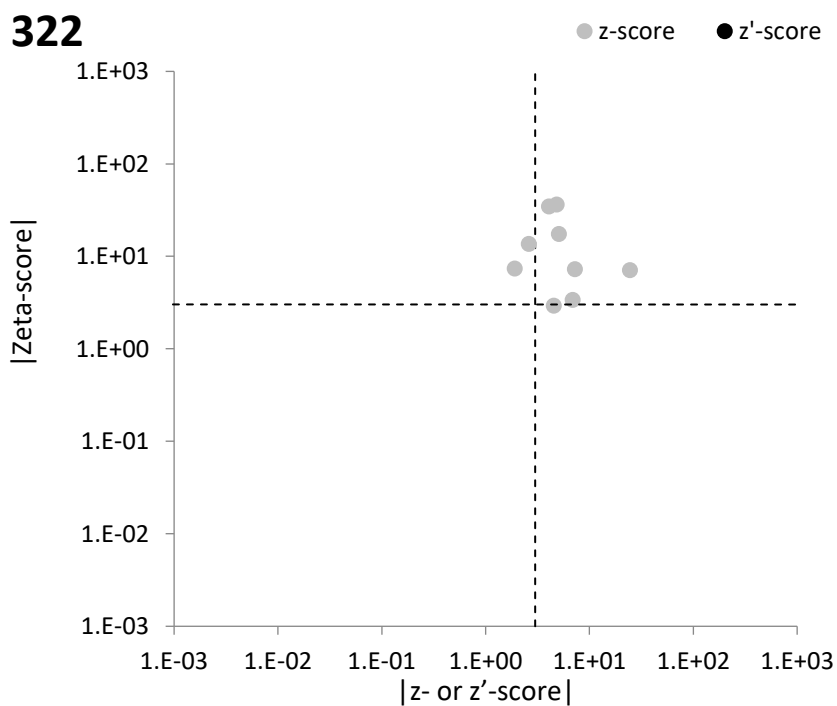


FIG. 372. Combined plots of z- or z'-scores and Zeta-scores for the laboratory with code 322 (Plant sample).

TABLE 5a. SUMMARY OF THE PERFORMANCE INDICATORS FOR EACH PARTICIPANT (CLAY SAMPLE).

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		<i>z</i>	<i>z'</i>	<i>Zeta</i>	<i>z</i>	<i>z'</i>	<i>Zeta</i>
35	18	1	1	7	8	4	7
40	30	16	10	27	2	0	1
54	13	3	1	6	6	1	5
55	25	18	6	22	1	0	3
61	27	18	8	26	0	0	0
65	28	7	7	7	5	3	15
67	11	0	1	2	5	3	7
73	10	3	1	4	4	1	5
75	20	6	0	9	4	6	7
77	12	0	0	0	7	4	11
78	8	5	0	4	2	1	4
94	11	4	1	4	4	1	6
95	8	2	0	1	6	0	7
102	13	4	1	8	6	1	4
105	35	1	2	3	16	7	23
113	16	6	3	9	3	2	5
116	18	10	2	9	1	2	6
126	36	10	6	19	3	6	6
130	22	3	1	14	9	6	5
132	12	3	3	0	3	1	10
137	13	7	1	10	3	0	1
145	18	4	2	6	6	3	9
151	33	12	5	16	7	1	9
152	34	11	6	12	10	5	20
154	12	3	1	1	5	0	8
155	10	1	0	4	7	2	6
167	31	14	8	15	5	2	14
170	12	6	3	10	2	1	2
171	26	17	8	25	0	0	0
176	34	21	10	29	1	0	3
182	18	12	3	15	1	0	1
183	38	21	11	21	1	0	12
191	24	9	4	9	5	5	14
193	31	6	7	6	12	3	22
194	33	17	6	20	4	4	11
195	22	17	5	22	0	0	0
197	17	7	4	9	3	1	6
199	32	19	8	26	2	0	3
202	26	17	7	23	1	0	2
203	32	20	9	28	1	1	3
204	43	5	3	11	15	10	22

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		z	z'	<i>Zeta</i>	z	z'	<i>Zeta</i>
205	17	8	4	12	3	1	4
206	39	10	3	10	9	9	21
209	18	7	3	9	4	1	6
215	43	22	13	36	1	0	0
216	6	0	0	1	4	1	4
220	39	22	12	35	0	2	1
221	26	13	7	21	2	1	2
225	8	1	1	3	4	2	5
229	2	0	1	1	0	1	1
234	28	16	9	24	1	1	3
235	14	6	2	7	3	3	7
236	19	1	1	3	11	4	14
237	39	22	12	33	0	0	1
238	13	6	3	11	3	1	2
244	16	6	1	6	3	4	8
247	27	18	8	24	0	0	2
248	36	20	12	27	1	0	6
250	8	5	2	8	0	1	0
252	21	8	7	16	2	0	1
255	17	5	0	1	8	1	13
257	12	8	4	12	0	0	0
258	9	2	2	3	4	1	6
259	13	5	2	4	2	0	5
261	28	19	7	14	1	0	13
262	32	15	10	16	6	0	15
263	25	14	5	16	3	2	8
265	12	4	2	5	4	0	5
267	22	1	1	5	12	5	14
268	6	4	1	5	0	1	1
269	1	0	0	0	0	0	0
270	5	0	1	1	1	1	2
271	24	8	5	13	6	2	8
272	17	8	4	14	3	1	2
273	10	2	0	3	4	2	5
276	13	8	1	9	1	1	2
278	13	2	2	9	6	1	2
279	36	20	10	30	3	0	3
281	32	15	5	14	6	5	17
282	27	18	3	20	4	1	6
283	29	15	7	19	3	1	7
284	1	1	0	1	0	0	0
285	5	1	1	1	1	0	2
286	7	1	1	1	2	1	4

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		z	z'	<i>Zeta</i>	z	z'	<i>Zeta</i>
295	9	5	3	8	0	1	1
302	27	13	7	12	3	2	13
303	28	6	1	5	7	5	14
304	19	0	0	0	13	3	16
305	18	1	1	1	7	5	13
306	12	0	0	1	7	4	10
307	25	7	5	18	7	2	3
308	13	2	0	6	7	3	6
309	38	15	9	18	2	1	9
310	17	0	0	0	12	2	14
311	11	4	0	8	5	0	1
312	12	1	0	0	8	2	11
313	7	0	0	3	5	1	3
314	20	4	2	7	6	4	9
320	12	2	0	3	6	0	5
322	19	6	3	4	5	2	12

TABLE 5b. SUMMARY OF THE PERFORMANCE INDICATORS FOR EACH PARTICIPANT (PLANT SAMPLE).

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		<i>z</i>	<i>z'</i>	<i>Zeta</i>	<i>z</i>	<i>z'</i>	<i>Zeta</i>
35	15	3	1	11	9	1	3
40	18	14	0	15	1	0	0
54	9	6	0	5	3	0	4
55	20	14	0	13	3	1	5
61	15	10	0	14	4	0	0
65	21	8	0	7	10	2	13
67	11	1	0	5	8	2	6
73	7	3	0	0	4	0	7
75	10	0	0	4	10	0	6
77	10	0	0	0	7	2	9
78	7	7	0	6	0	0	1
94	13	4	0	1	8	1	12
95	8	2	0	5	6	0	3
102	12	4	0	6	8	0	6
105	22	13	1	11	5	1	9
108	12	7	0	9	5	0	3
113	20	8	0	9	10	2	11
116	15	11	0	8	3	0	6
126	35	8	0	15	15	2	10
130	12	2	0	2	10	0	10
132	12	7	0	3	5	0	9
137	1	1	0	1	0	0	0
145	12	1	0	2	8	2	9
151	29	19	1	18	1	0	3
152	22	14	0	7	3	1	11
154	17	11	1	9	3	0	6
167	12	10	0	8	0	1	3
170	11	9	0	7	2	0	4
171	13	12	0	13	1	0	0
176	24	18	1	16	1	1	5
183	23	18	1	14	3	0	8
191	8	5	0	5	3	0	3
193	21	11	0	7	6	1	11
194	14	7	0	10	6	1	4
195	10	6	0	9	3	1	1
197	5	4	0	3	1	0	2
199	27	18	0	18	2	1	3
202	12	8	0	8	3	1	4
203	19	15	0	14	2	0	3
204	20	5	0	7	12	1	11
205	15	4	0	5	8	1	8

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		z	z'	<i>Zeta</i>	z	z'	<i>Zeta</i>
206	21	10	1	7	10	0	14
209	15	9	0	4	3	0	8
215	30	13	0	16	8	1	6
216	5	0	0	1	4	1	4
220	17	14	0	14	2	1	3
221	13	3	0	4	7	2	8
225	5	1	0	2	4	0	3
229	4	2	0	0	2	0	4
234	9	5	0	7	3	1	2
235	7	0	0	0	5	1	6
237	19	17	0	17	1	1	2
238	10	4	1	8	5	0	2
244	16	1	0	2	13	2	14
248	26	18	1	14	3	1	9
252	36	18	0	16	2	1	5
255	10	6	0	2	3	0	7
257	9	8	0	7	1	0	2
258	5	0	0	0	4	1	5
259	14	6	0	5	5	1	7
261	19	11	0	2	6	1	16
262	14	10	0	6	2	1	7
263	21	13	0	10	4	0	7
265	4	3	0	3	1	0	1
267	17	0	0	0	15	2	17
268	6	2	0	5	4	0	1
270	5	1	0	2	3	0	2
272	16	11	0	9	2	0	4
273	7	5	1	6	0	1	1
276	1	1	0	1	0	0	0
278	10	6	0	8	4	0	2
279	26	19	0	19	1	0	1
281	18	13	0	14	4	1	4
282	14	6	0	9	7	1	5
283	22	12	0	7	3	0	8
284	1	1	0	0	0	0	1
295	2	2	0	2	0	0	0
302	19	12	0	6	5	0	11
303	22	5	0	1	10	2	16
304	17	0	0	0	14	2	16
305	10	0	0	0	6	1	7
306	13	2	0	3	8	2	9
307	18	3	0	7	10	0	6
308	13	3	0	7	7	2	5

Part. Code	Number of results	Number of values < 3			Number of values ≥ 3		
		z	z'	<i>Zeta</i>	z	z'	<i>Zeta</i>
309	24	20	0	18	0	0	2
310	16	4	0	2	9	0	11
311	10	7	0	2	2	0	7
312	14	8	0	7	5	0	6
313	8	6	0	5	2	0	3
314	18	8	1	9	7	1	8
320	10	8	0	7	1	0	2
322	10	2	0	1	7	0	8

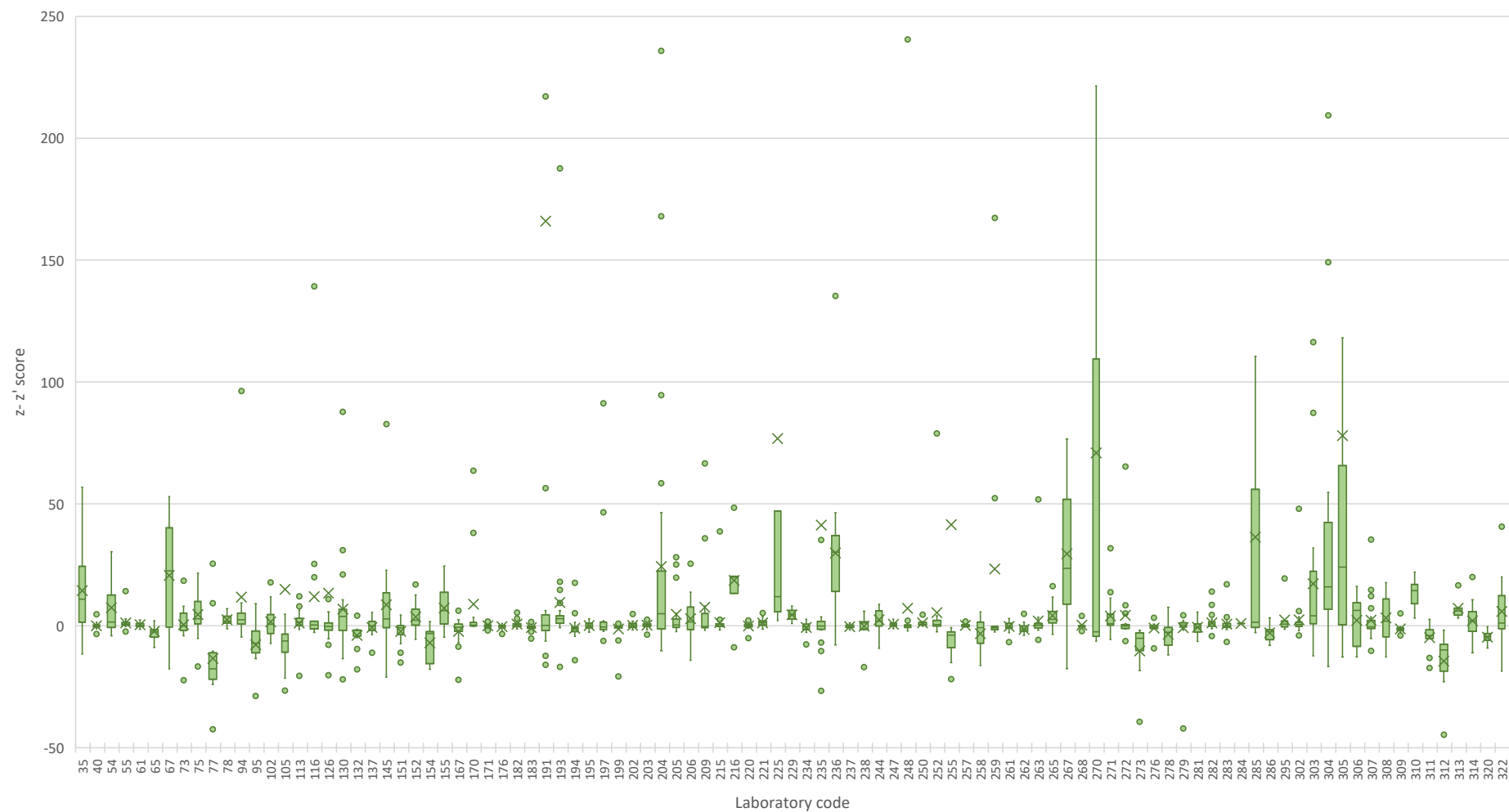


FIG. 373. Box-and-whisker plot of the z- and z'-scores for each participant (Clay sample).

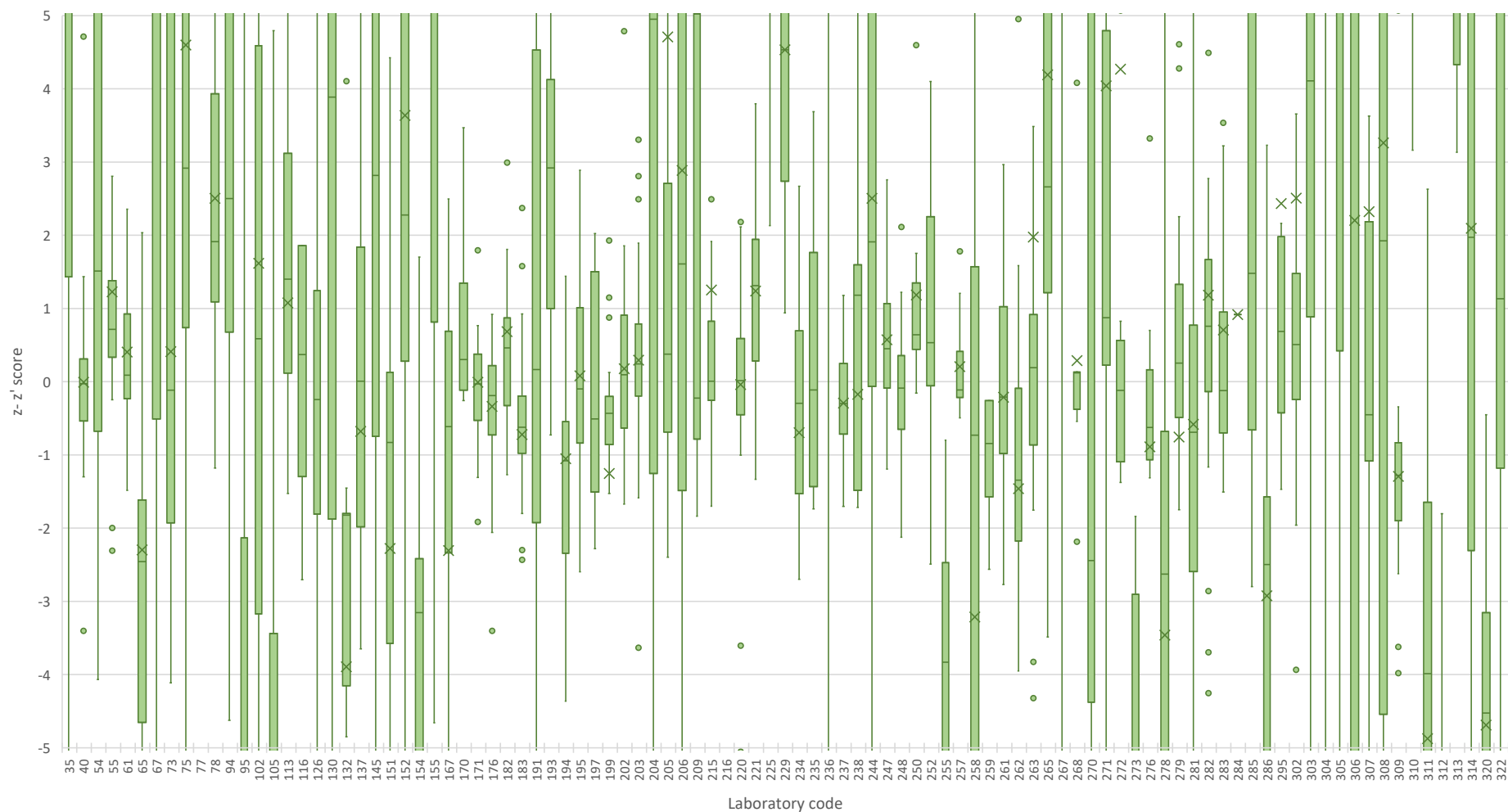


FIG. 374. Box-and-whisker plot of the z - and z' -scores for each participant with the vertical scale reduced to the range $-5 \div 5$ (clay sample).

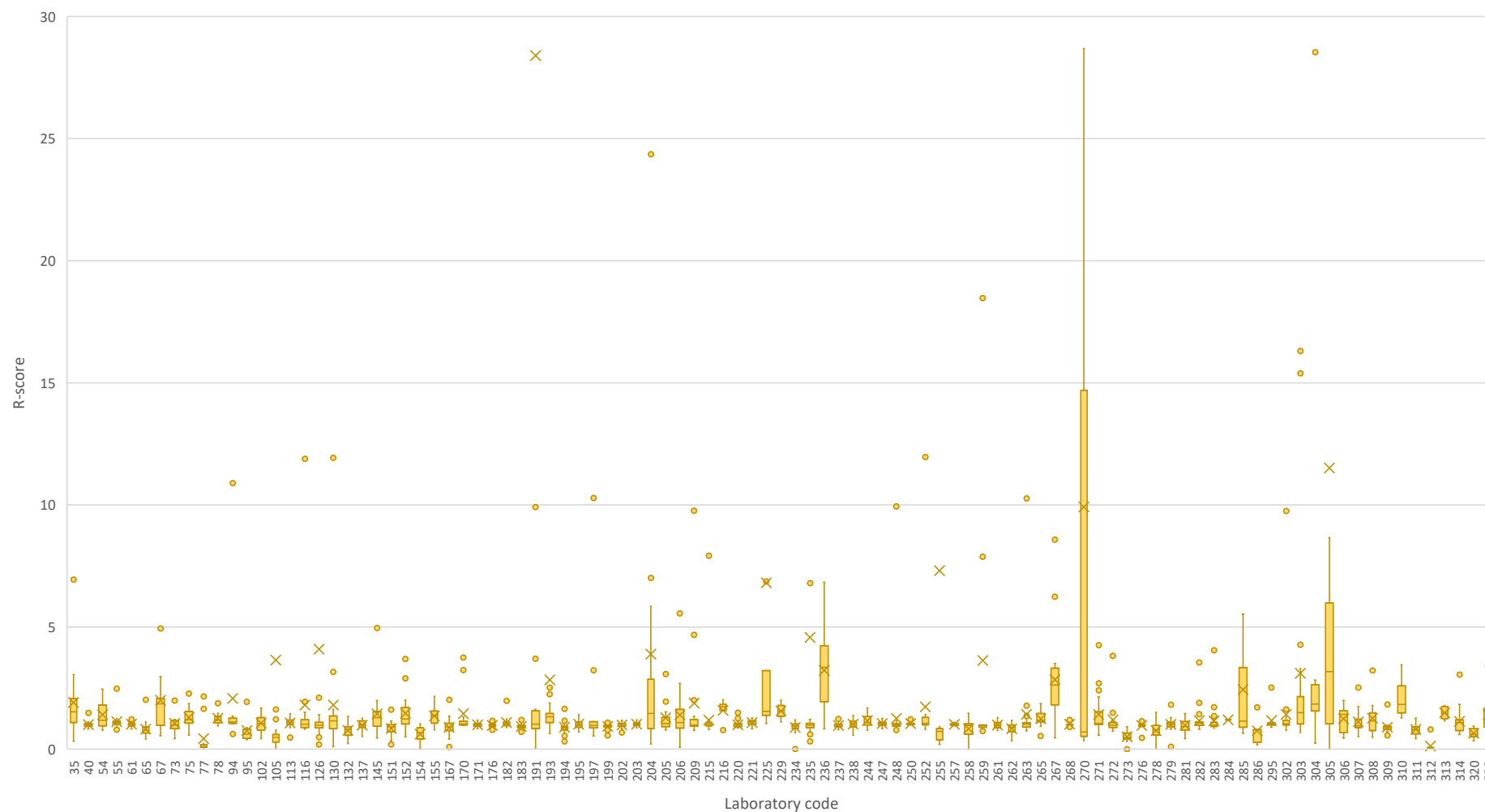


FIG. 375. Box-and-whisker plot of the *R*-scores for each participant (clay sample).

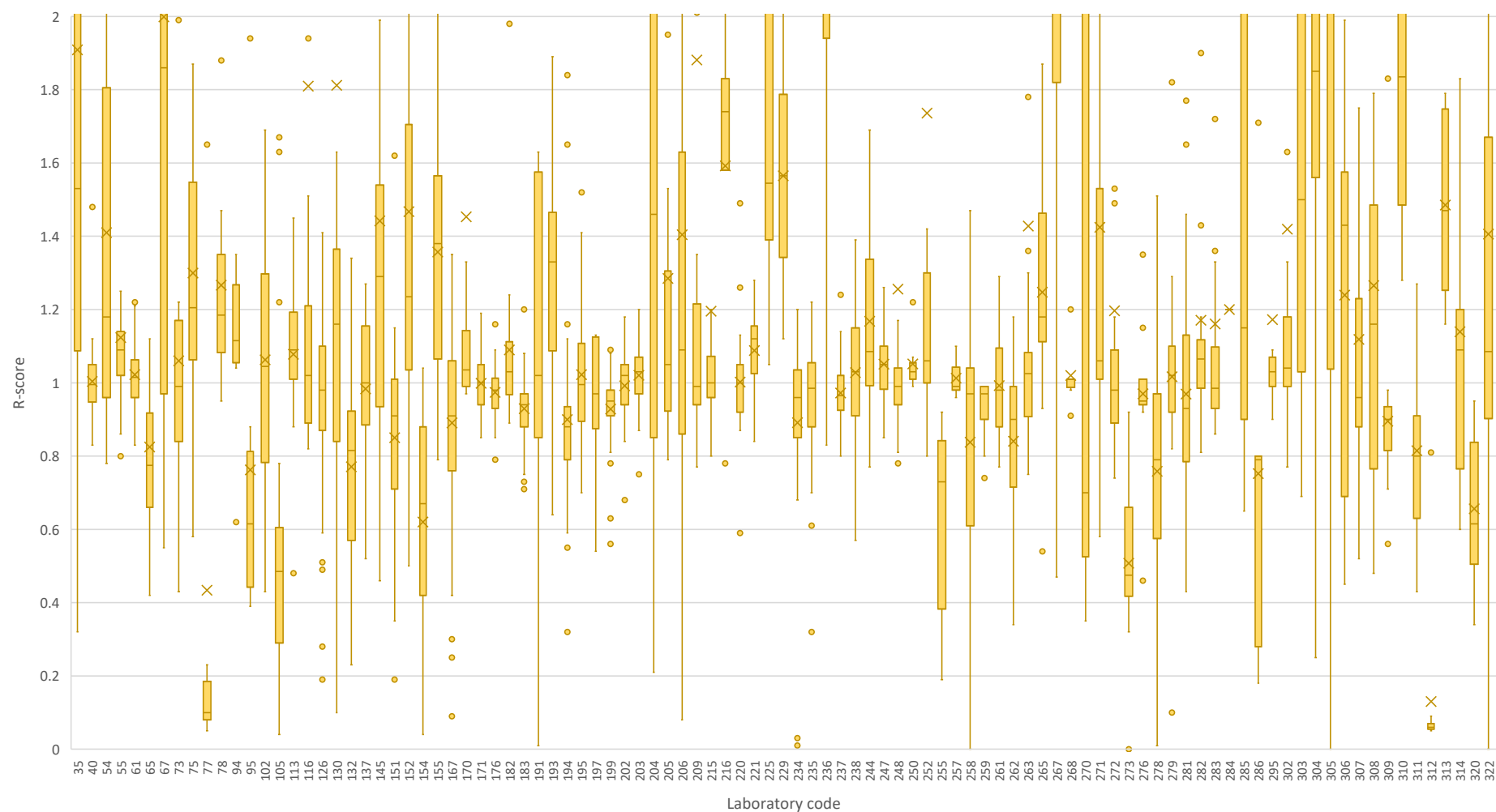


FIG. 376. Box-and-whisker plot of the R -scores for each participant with vertical scale reduced to the range $0 \div 2$ (clay sample).

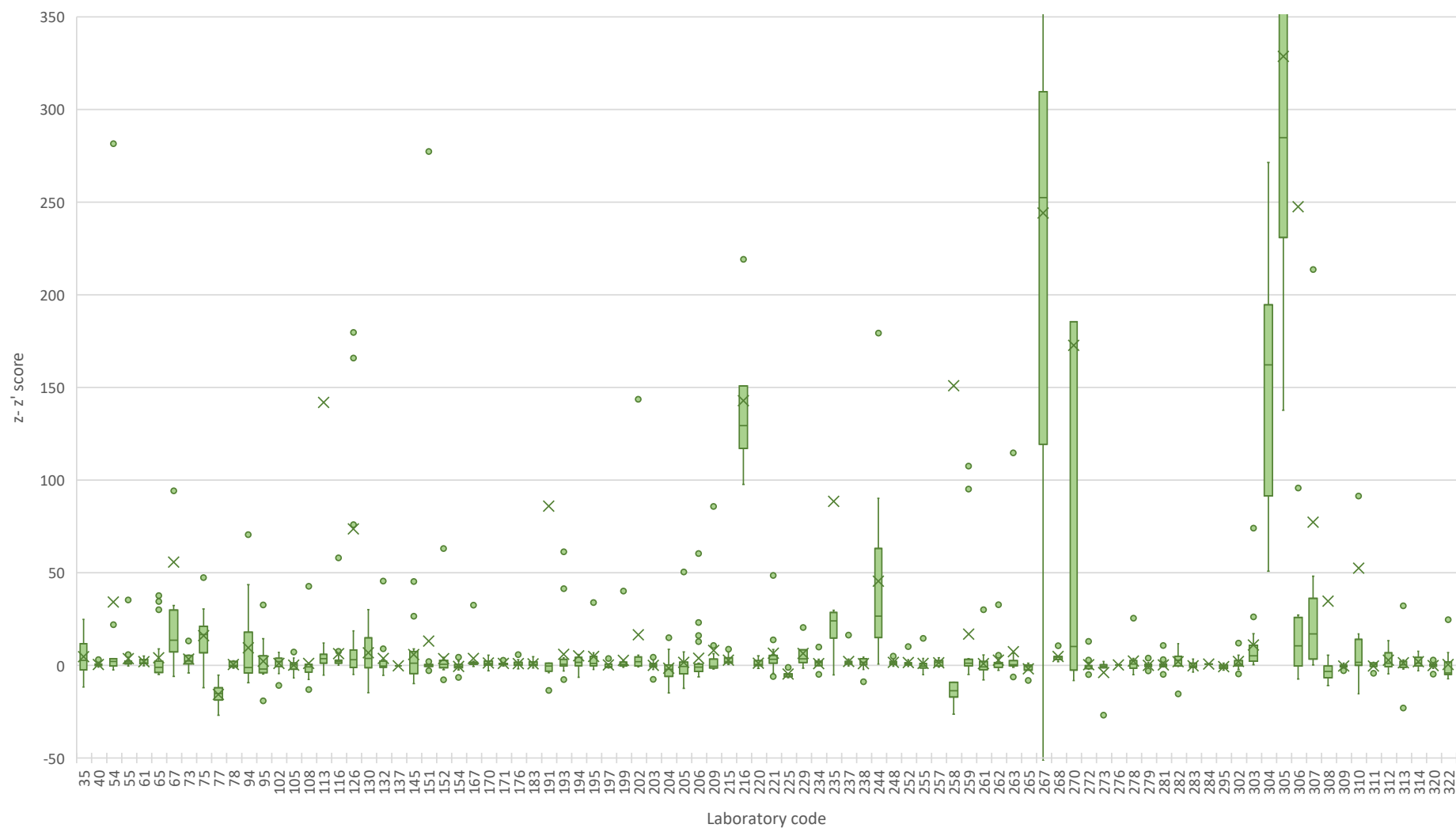


FIG. 377. Box-and-whisker plot of the z - and z' -scores for each participant (plant sample).

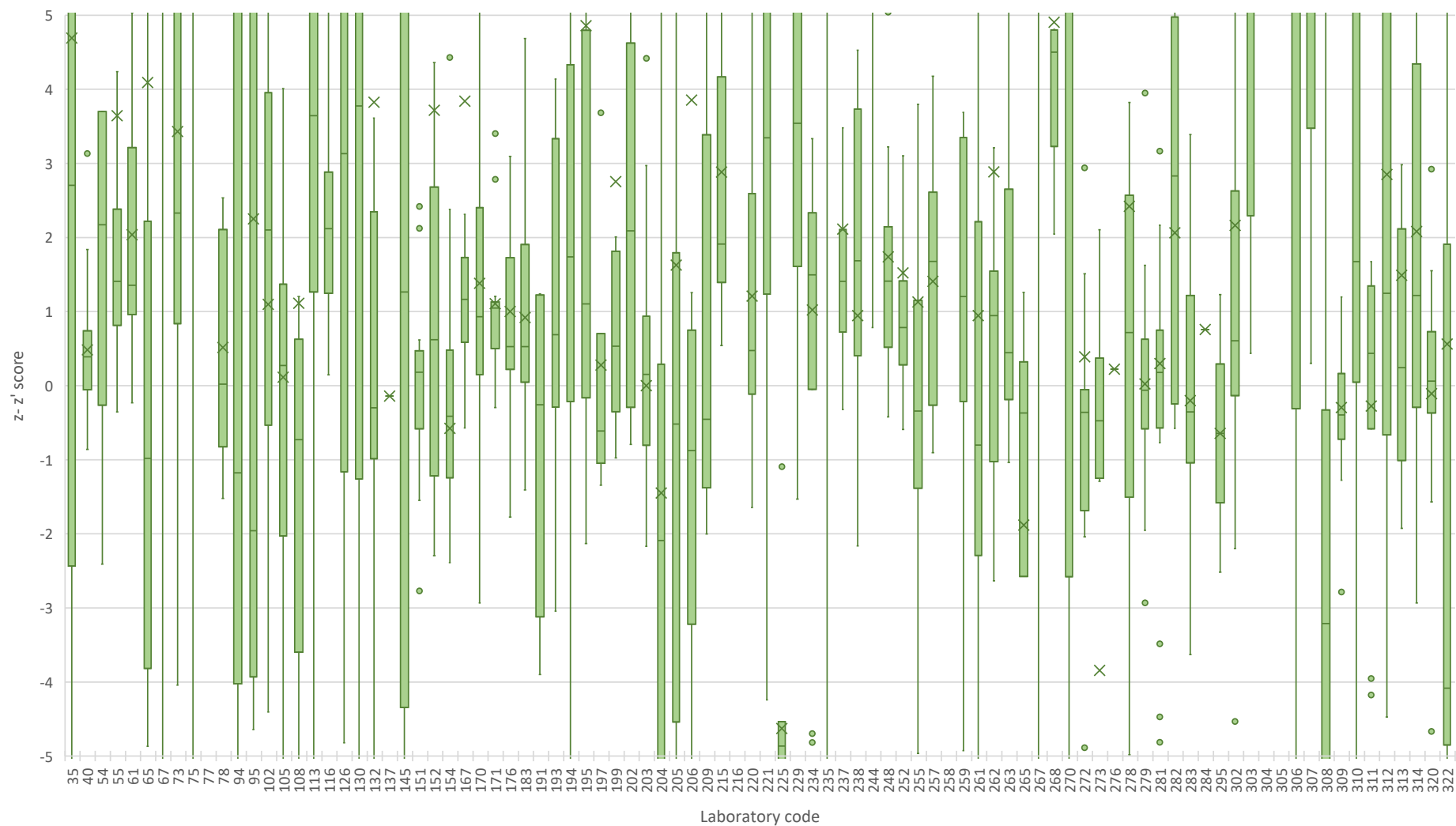


FIG. 378. Box-and-whisker plot of the z - and z' -scores for each participant with the vertical scale reduced to the range $-5 \div 5$ (plant sample).

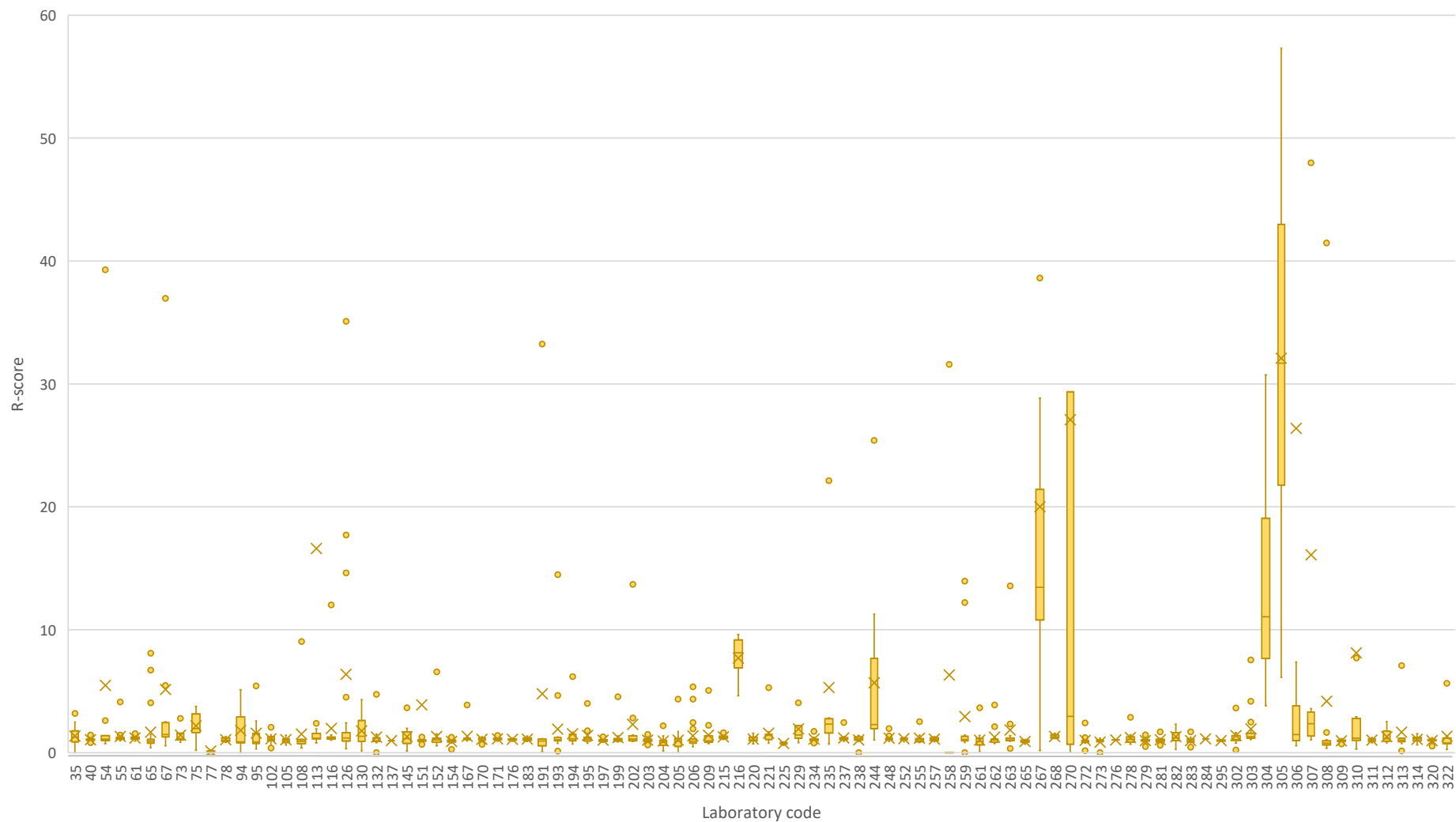


FIG. 379. Box-and-whisker plot of the R-scores for each participant (plant sample).

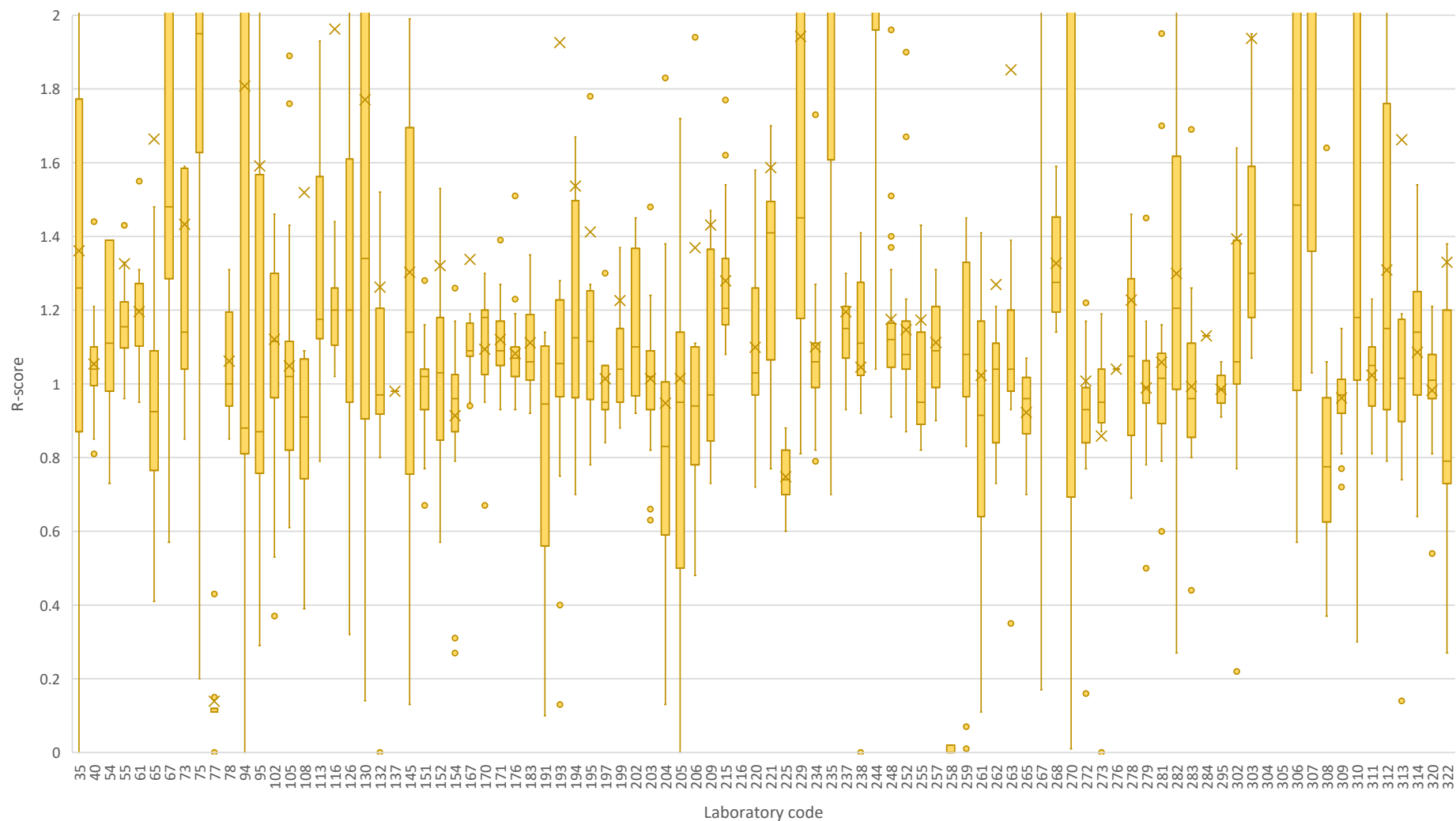


FIG. 380. Box-and-whisker plot of the R-scores for each participant with vertical scale reduced to the range 0÷2 (plant sample).

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