Test Group Summary Report
C17 Metals in Soil
June 2025 PT Round

Issued: October 9, 2025

PTC | Proficiency Testing Canada

Table of Contents

1.0 The Proficiency Testing Report

The Proficiency Testing Report consists of two parts.

- *PTC Proficiency Testing Report*: This report contains participant-specific data and other confidential information. This report is emailed to participants at the end of the PT round.
- *Test Group Summary Report*: A Test Group Summary Report is created for each quantified test group at the end of the PT round. These reports contain more detailed information on the round than is found in the participant-specific PTC Proficiency Testing Report. These reports do not contain any confidential information and are made available on the PTC web site.

2.0 Definitions

The PTC Proficiency Testing Reports contain some terms that new participants may not be familiar with:

PT Code: The PT Code is unique to each analyte that a participant is registered for.

Lab Info: If a participant is accredited by CALA, this three-digit number in the Laboratory Information is the appendix number that the accredited method is assigned to.

N: The number of participants results that were used to calculate the summary statistics. This excludes qualified data (e.g., <) and any results that were flagged as outliers.

Assigned Value: The Assigned Value is the Robust Mean of the reported results, outliers excluded. This is often referred to as the "target" value.

Reported Value: The result reported by the participant.

SDPTA: The Standard Deviation of Proficiency Testing Assessment; this value is used to determine the acceptance limits for the PT evaluation. The calculations examine the Robust Standard Deviation (from consensus STD) and Regression Standard Deviation (STD from historical studies or TNI limits); and, if any, Homogeneity and Stability flags to determine the SDPTA (whichever is higher).

z-Score: A value assigned to each reported result that is a measure of the degree to which it deviates from the Assigned Value.

PT Score: The composite score of the four results reported for each analyte. It is normalized to a score out of 100.

Bias: A flag assigned if bias is detected using the re-scaled *z*-score procedure.

U: The Uncertainty of the assigned value.

3.0 Scoring System

Participant performance is evaluated for each proficiency testing sample by a quantitative method that is consistent with ISO/IEC 17043 - *Conformity assessment- General requirements for the competence of proficiency testing providers*, the *International Harmonized Protocol for Proficiency Testing of (Chemical) Analytical Laboratories* (2006), and ISO 13528 *Statistical methods for use in proficiency testing by interlaboratory comparison*.

The following is a brief description of the evaluation procedure used by PTC. The detailed evaluation procedure is described in PROC09 – PT Evaluation *Procedure*, which is available on the PTC website www.PTCanada.org).

3.1 HOMOGENEITY AND STABILITY ASSESSMENT

Homogeneity and stability are assessed using participant data. Regression analysis is performed on reported result against order of sample production (Homogeneity) and reported result against date of analysis (Stability). If the slope is significantly different than zero for either then the Standard Deviation of Proficiency Assessment (s) is increased to minimize the impact.

3.2 THE Z SCORE

A "z-score" is calculated for each reported result as follows:

$$z - Score = \frac{(x - \bar{X})}{SDPA}$$

where: x = participant result;
$\overline{X}$ = the Assigned Value;
SDPA = the Standard Deviation for Proficiency Assessment.

The assigned value $\overline{X}$ is generally estimated from the inter-laboratory Robust mean after outliers due to obvious gross errors (e.g., reported in wrong units) have been removed.

The Standard Deviation for Proficiency Assessment, s, is determined as follows:

- The inter-laboratory Robust standard deviation ($Stdev_{rob}$) is calculated using reported results, obvious outliers removed;
- The regression equation standard deviation ($Stdev_{reg}$) is estimated from regression equations derived from previous studies (see PROC11- *PT Regression Equations* for details);
- The SDPA is the higher of $Stdev_{rob}$ and $Stdev_{reg}$;
- When a laboratory reports its detection limit, s will be estimated using a pooled variance procedure that uses both the inter-laboratory data and the reported detection limit.

3.2 COMPOSITE (PT) SCORE

Since each PT round involves four or two separate samples of distinct concentration for each test, it is necessary to calculate a composite PT score for each test to determine overall performance. The composite score is calculated by first averaging the absolute *z*-scores for the four results and then calculating a final score as 100 + (-15 x avg |z|).

Acceptable PT Scores equal or exceed 70.

3.3 IDENTIFYING BIAS

The proficiency testing report provides flags for bias. These are determined using the re-scaled *z*-score procedure.

$$RSZ = \frac{\square z}{\sqrt{N}}$$

where *z* = the *z*- score
N = the number of samples

Flags are assigned for each test group/parameter combination as follows:

RSZ $\geq$ -2 and $\leq$ 2 no flag assigned

RSZ > 2	H (High)
RSZ > 3	VH (Very High)
RSZ < -2	L (LOW)
RSZ < -3	VL (Very Low)

3.4 DEVIATIONS FROM EVALUATION PROCEDURE

Other than changes to the Standard Deviation of Proficiency Assessment due to homogeneity or stability flags, any deviation from the published evaluation procedure is described on the cover page(s) of the final *PTC Proficiency Testing Report*.

4.0 PT Round Specific Data Summary

The following pages provide more detailed information about the PT round indicated in the cover page of this report than is found in the participant-specific PTC Proficiency Testing Report. The graphical representations and the statistical summaries are based upon the data after outliers have been removed.

4.1 SUMMARY STATISTICS

In addition to some of the statistics found in the customer reports, this table includes additional summary statistics such as Median, different measures of dispersion, the number of outliers removed, the number of results in the Questionable range (|z| between 2 and 3) and the Unacceptable range (z > 3), and whether a data set was flagged for Homogeneity or Stability. This section also includes sorted scatter plots of the data for each sample.

4.2 *z* - SCORE PLOTS

The z -scores for each sample are ranked in increasing order and plotted. When the data is normally distributed, the plot should show a slight sigmoidal curve, with an equal number of points above zero as below. Each bar in these plots is colour-coded to indicate the analytical method used by the participant.

4.3 KERNEL DENSITY PLOTS

Kernel density plots are generated for each data set. These plots are a graphical way to represent the overall data distribution and are used to visualize possible deviations from normality and unimodality.

4.4 STABILITY AND HOMOGENEITY PLOTS

Plots of reported result against analysis date, and reported result against order of bottling are displayed, along with the regression line. These regression analyses are used to determine if the SDPA should be adjusted due to homogeneity or stability.

4.5 BOX-AND-WHISKER PLOTS

Box-and-Whisker plots are another way to display the distribution of the data. The box denotes the first and third quartile and the whiskers are the 5th and 95th percentile.

4.6 HISTORIC COMPARISON PLOT

The Historic Comparison Plot is a plot of robust mean against robust standard deviation for the previous ten PT rounds as well as the current PT round. This plot can be used to identify possible changes in the sample formulation.

Aluminum

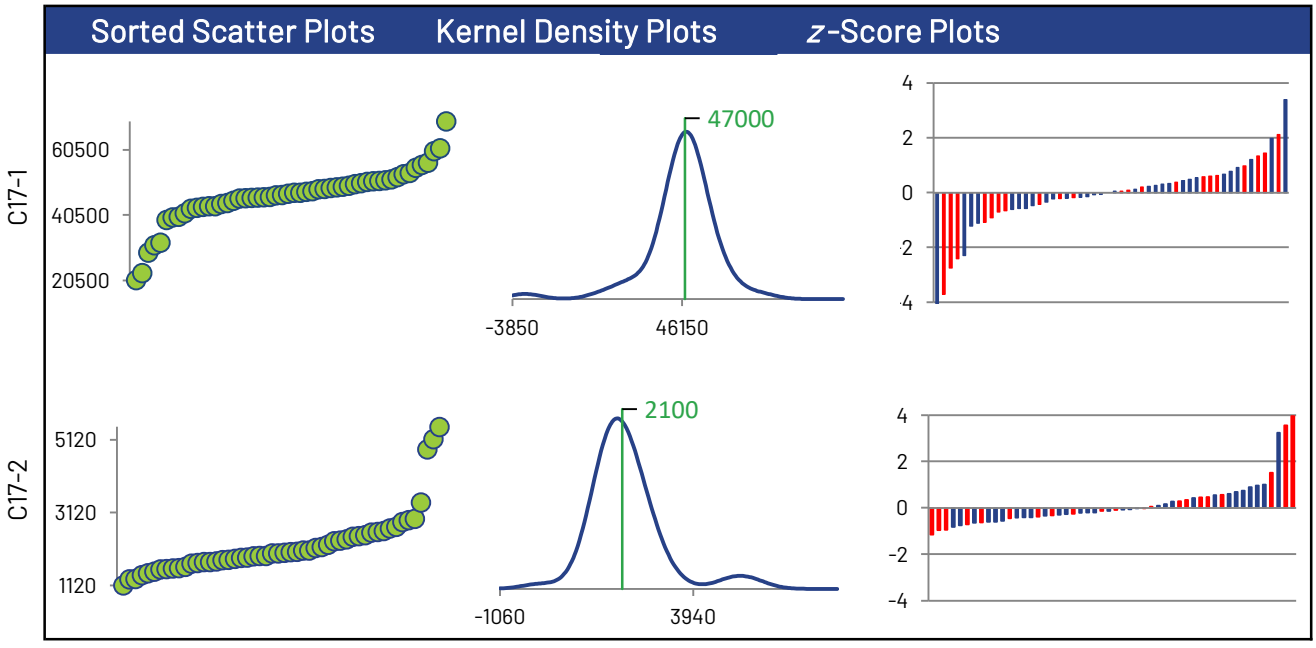
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	52	52	52	52
Median µg/g	47200	2010	47200	40100
Robust Mean µg/g	47000	2100	47300	39700
Uncdrtainty of the Assigned Value µg/g	1030	97.4	1040	927
Robust Standard Deviation µg/g	5940	562	5990	5350
Regression Standard Deviation µg/g	6550	675	6600	5600
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA) µg/g	6550	853	6600	5600
Flagged Outliers	1	1	1	1
|z|>3.0	3	3	2	3
2<|z|<3	4	0	1	2
Failure Rate %*	9.4			

Methods Used

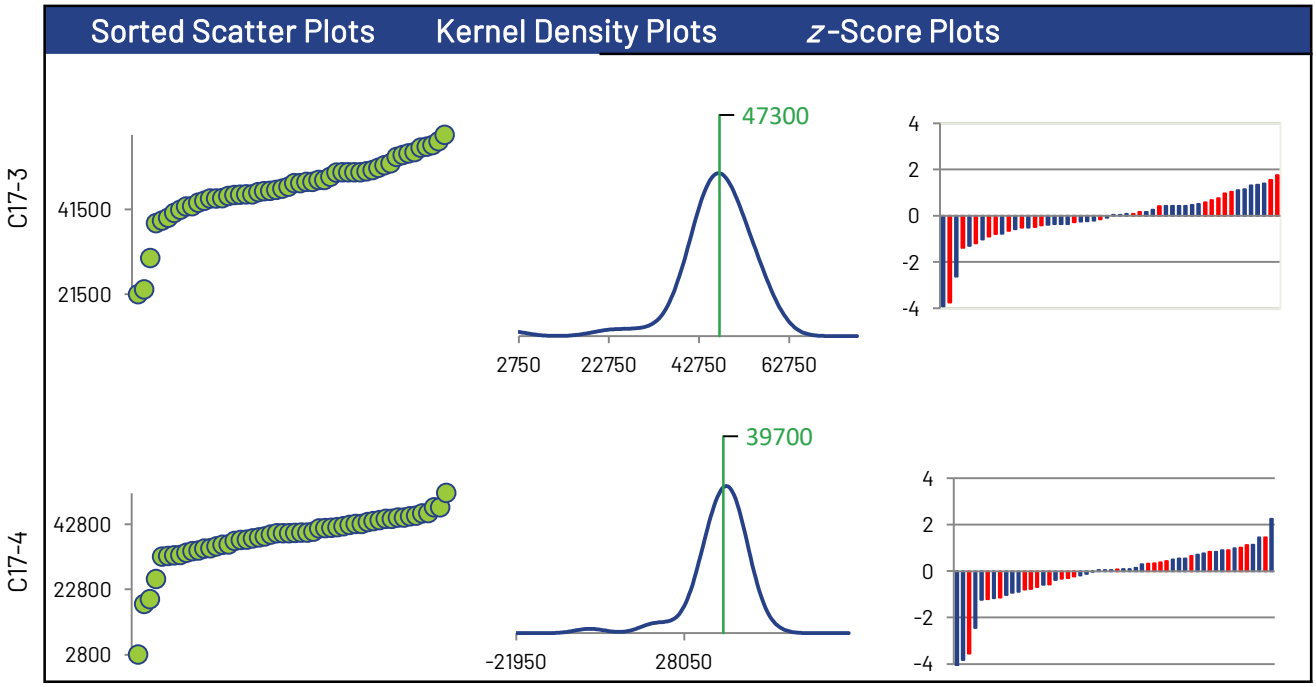
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	31	31	31	31
ICP/OES (Red)	21	21	21	21

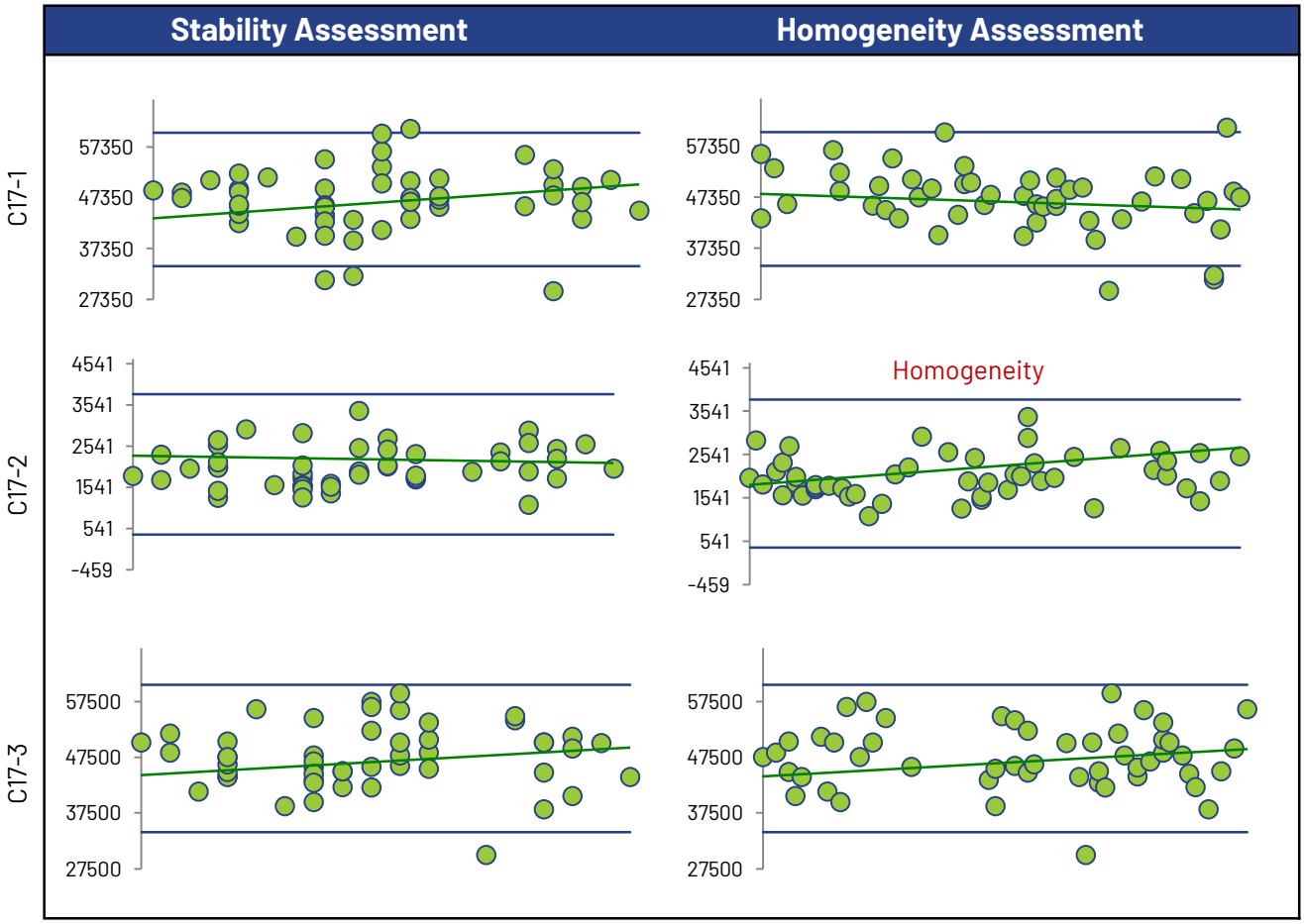
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

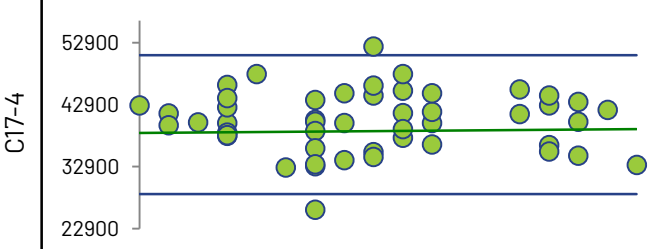
Aluminum


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
41500
21500
47300
2750
22750
42750
62750
4
2
0
-2
-4
C17-4
42800
22800
2800
39700
-21950
28050

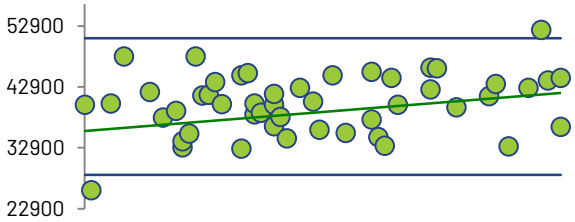

Stability Assessment
Homogeneity Assessment
C17-1
57350
47350
37350
27350
C17-2
4541
3541
2541
1541
541
-459
Homogeneity
C17-3
57500
47500
37500
27500

Aluminum

Stability Assessment



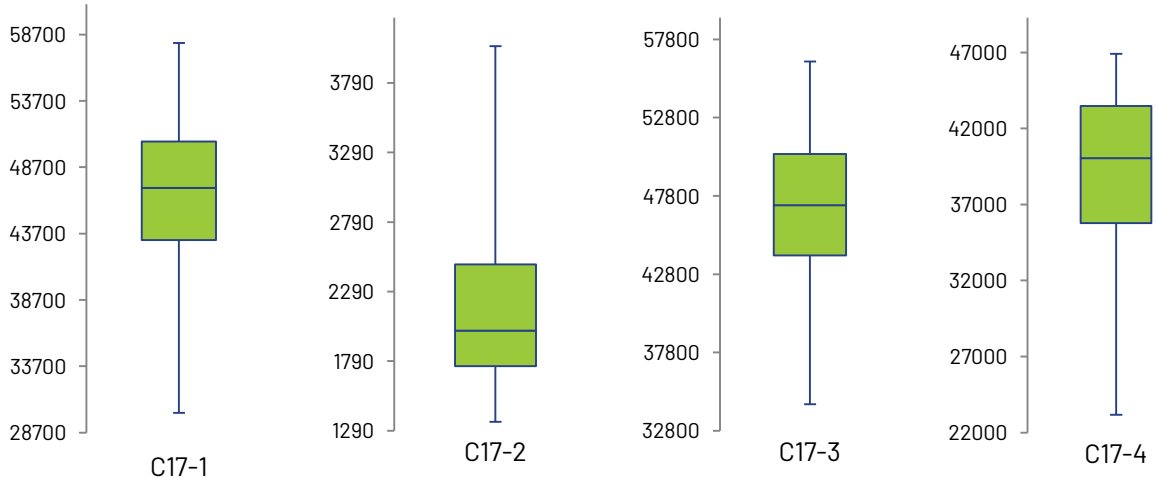
Homogeneity Assessment



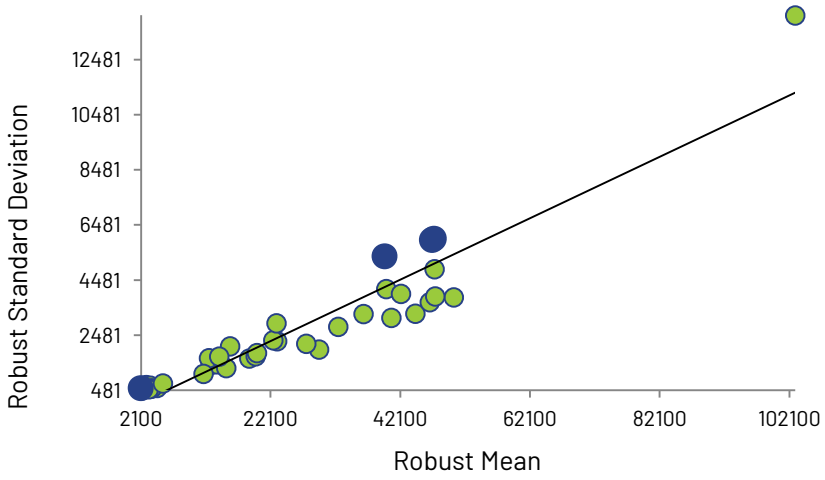
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Antimony

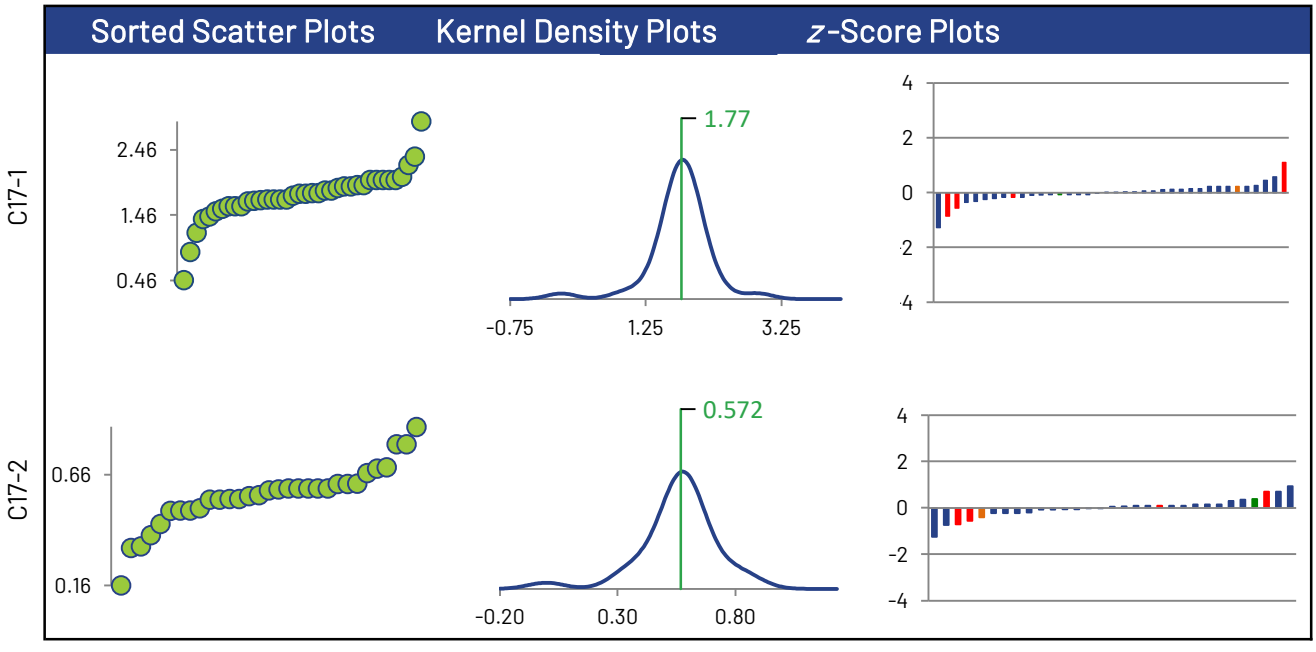
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	38	31	40	33
Median µg/g	1.79	0.592	2.02	0.790
Robust Mean µg/g	1.77	0.572	2.04	0.774
Uncdrtainty of the Assigned Value µg/g	0.0499	0.0245	0.0625	0.0311
Robust Standard Deviation µg/g	0.246	0.109	0.316	0.143
Regression Standard Deviation µg/g	1.02	0.328	1.17	0.443
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	1.02	0.328	1.17	0.443
Flagged Outliers	2	2	2	2
|z|>3.0	0	0	0	0
2<|z|<3	0	0	0	0
Failure Rate %*	0.0			

Methods Used

Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	32	25	34	27
ICP/OES (Red)	4	4	4	4
HYDRIDE AA (Green)	1	1	1	1
HYDRIDE ICP (Orange)	1	1	1	1

All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



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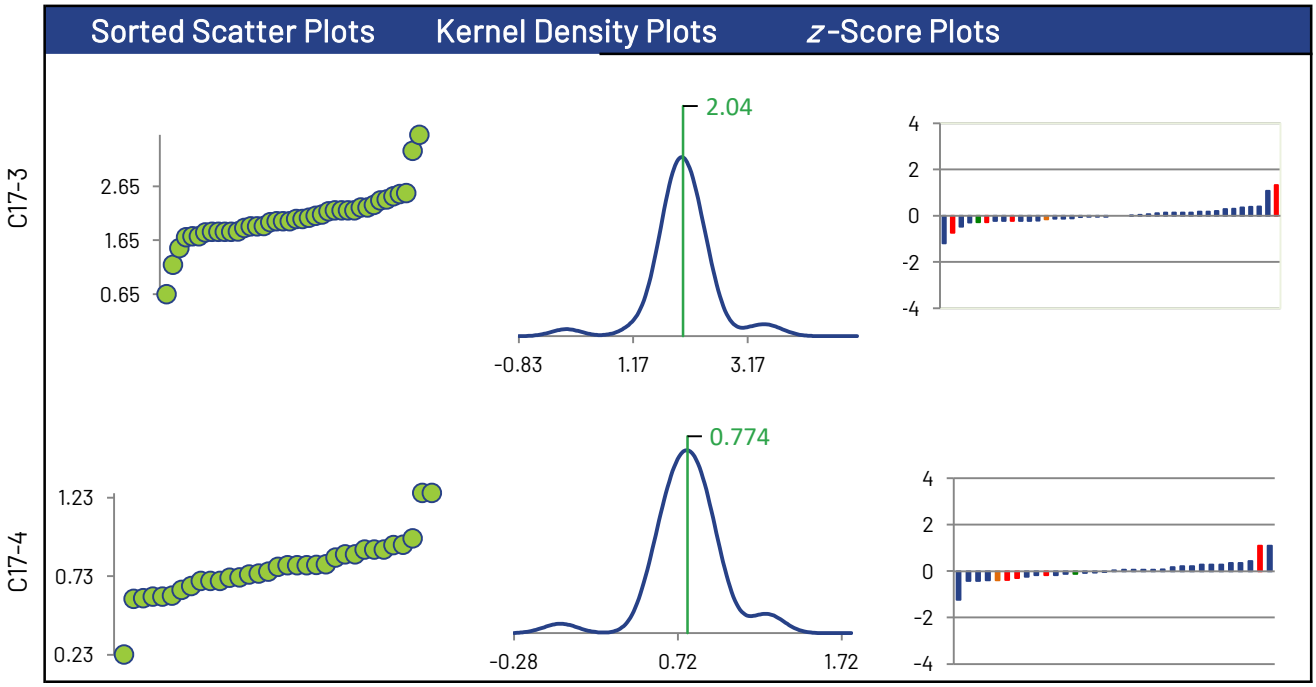
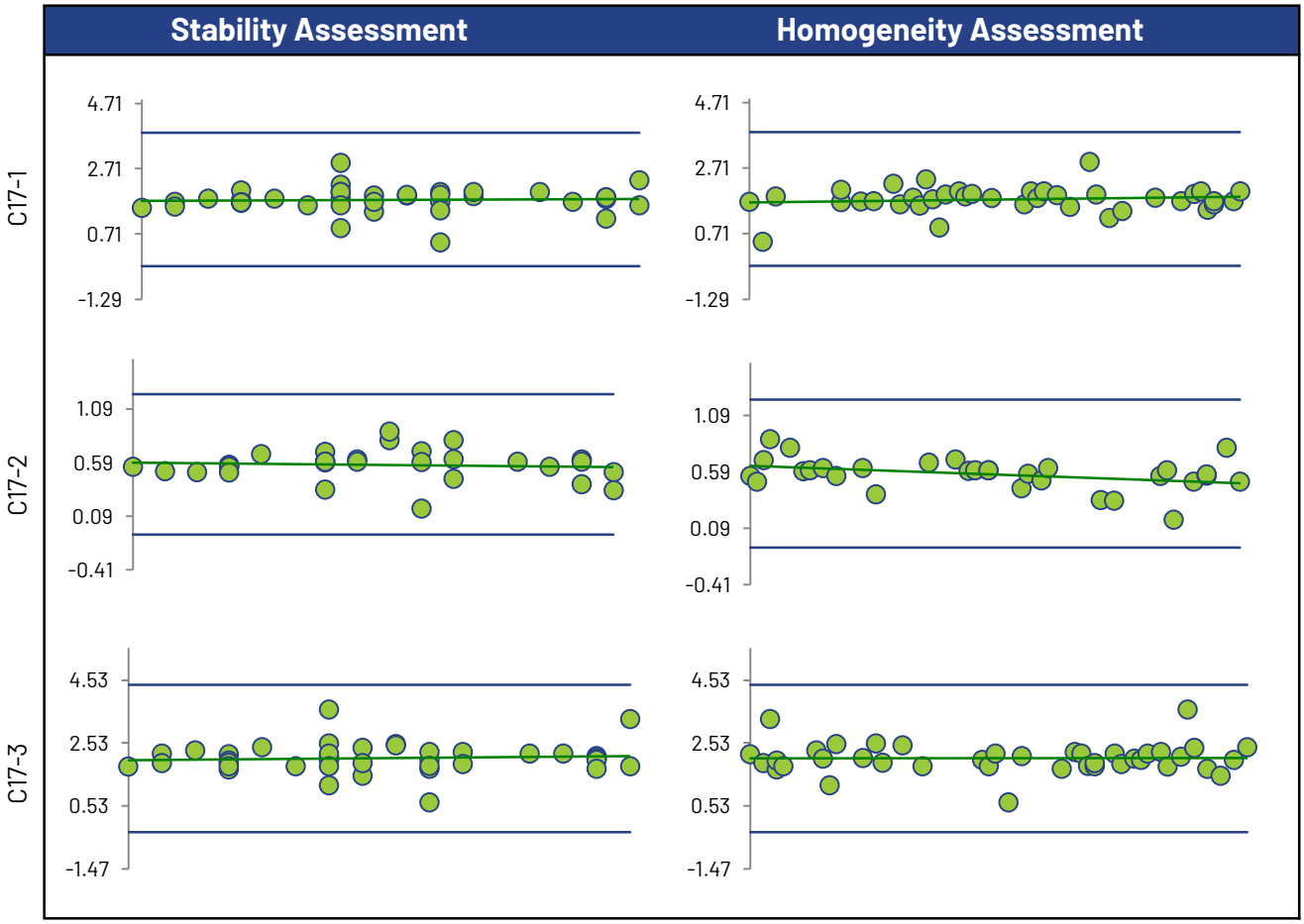
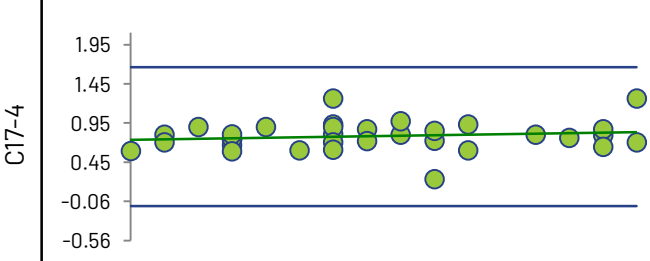
Antimony


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
2.65
1.65
0.65
2.04
-0.83
1.17
3.17
4
2
0
-2
-4
C17-4
1.23
0.73
0.23
0.774
-0.28
0.72
1.72
4
2
0
-2
-4

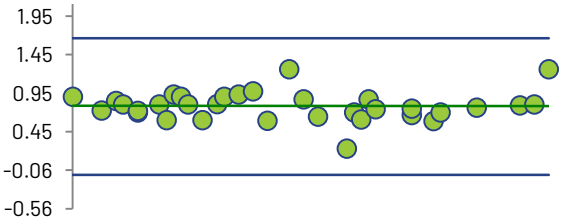

Stability Assessment
Homogeneity Assessment
C17-1
4.71
2.71
0.71
-1.29
C17-2
1.09
0.59
0.09
-0.41
C17-3
4.53
2.53
0.53
-1.47

Antimony

Stability Assessment



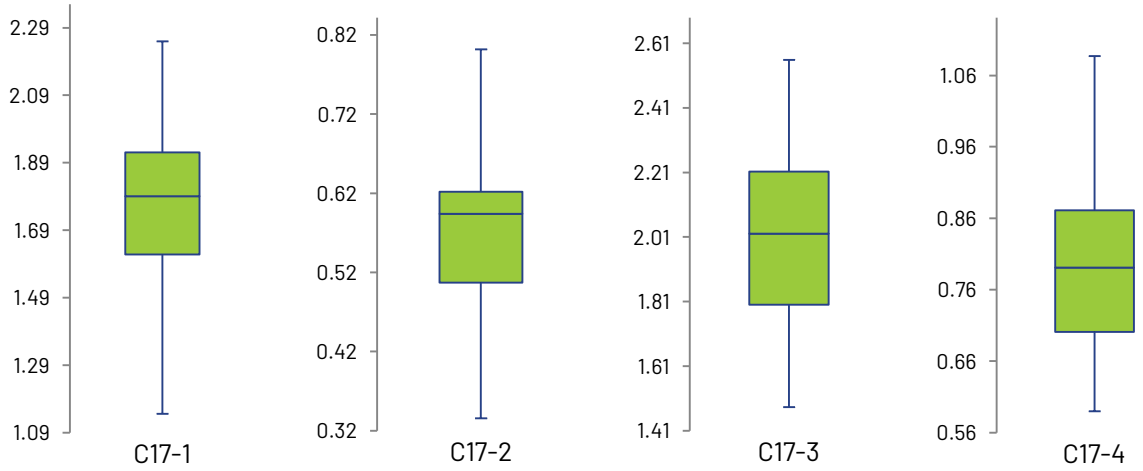
Homogeneity Assessment



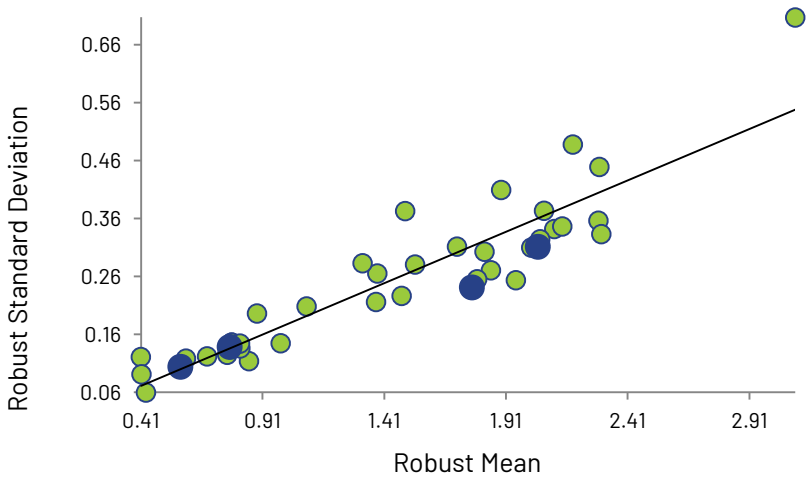
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Arsenic

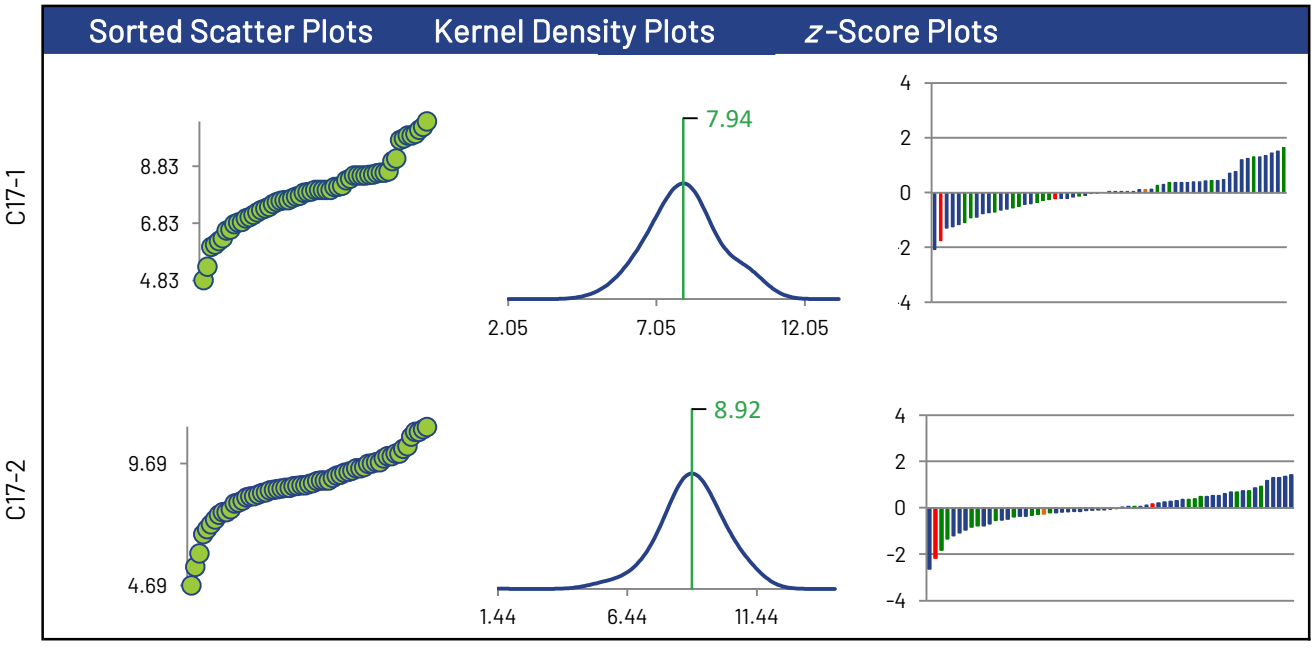
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	59	61	62	58
Median µg/g	8.00	8.86	14.0	3.93
Robust Mean µg/g	7.94	8.92	13.9	3.89
Uncdrtainty of the Assigned Value µg/g	0.189	0.178	0.257	0.0985
Robust Standard Deviation µg/g	1.16	1.11	1.62	0.600
Regression Standard Deviation µg/g	1.50	1.61	2.16	1.05
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	1.50	1.61	2.16	1.05
Flagged Outliers	1	1	1	1
|z|>3.0	0	0	0	0
2<|z|<3	1	2	3	1
Failure Rate %*	1.6			

Methods Used

Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	41	41	41	41
HYDRIDE AA (Red)	2	2	2	2
ICP/OES (Green)	15	17	18	14
HYDRIDE ICP (Orange)	1	1	1	1

All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



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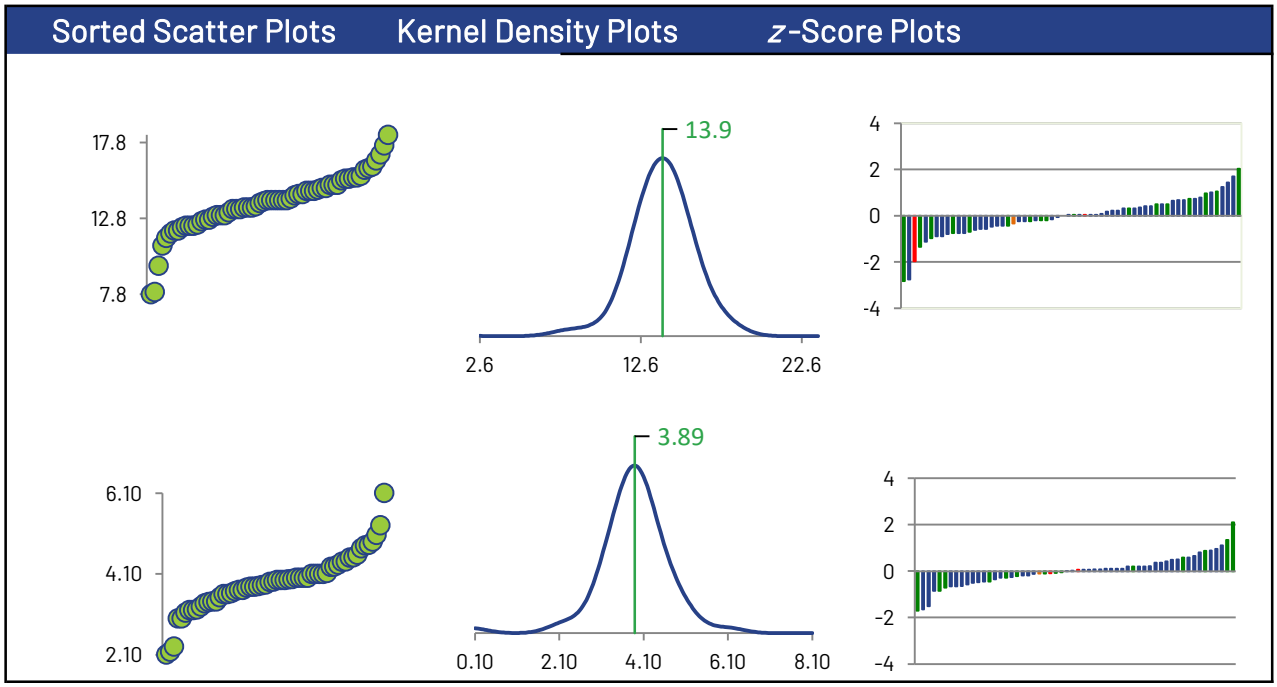
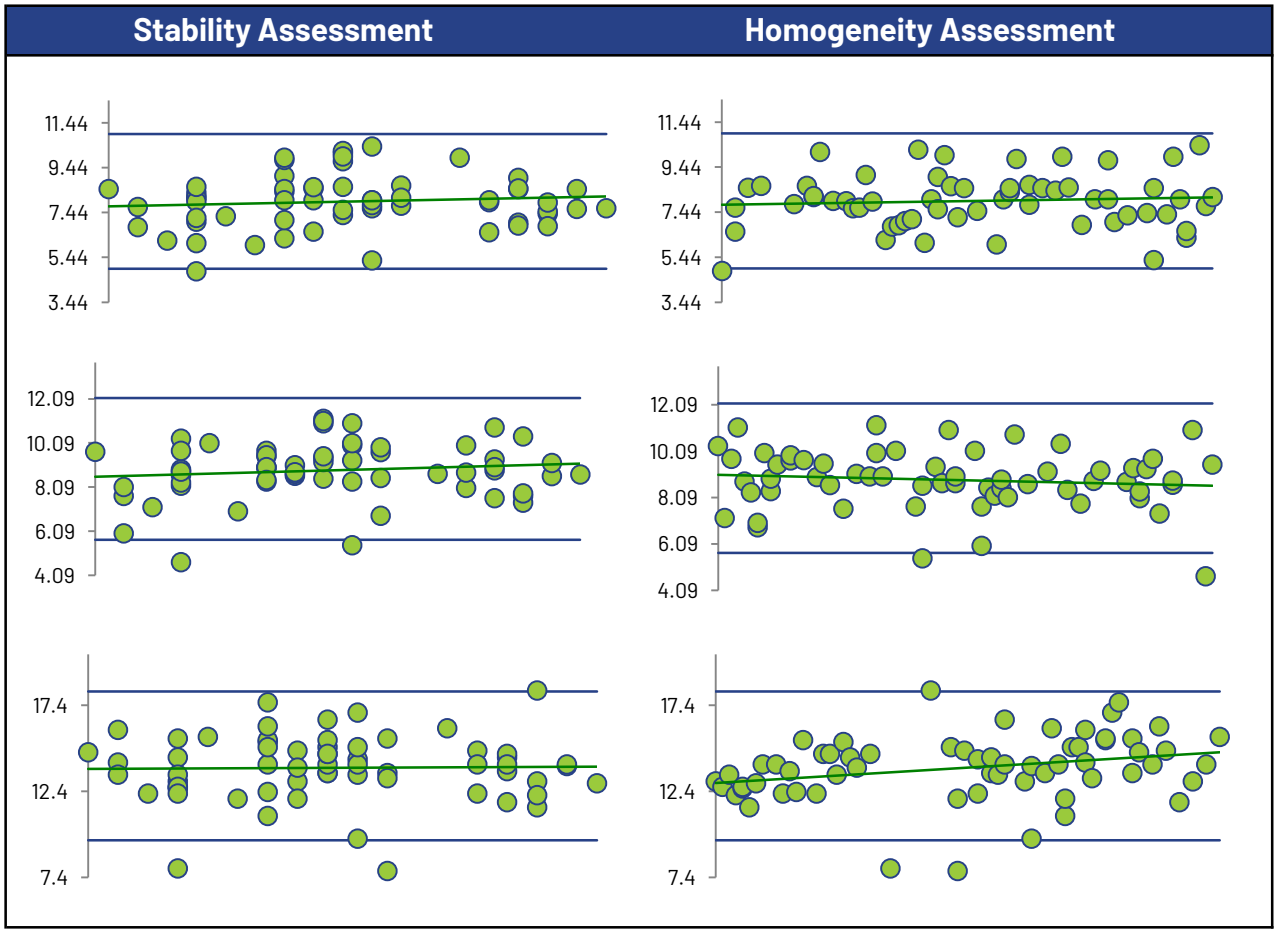
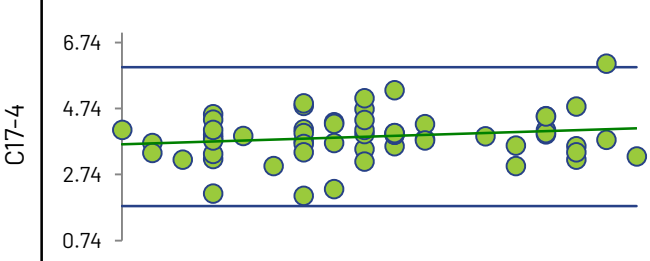
Arsenic


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
17.8
12.8
7.8
13.9
2.6
12.6
22.6
4
2
0
-2
-4
C17-4
6.10
4.10
2.10
3.89
0.10
2.10
4.10
6.10
8.10
4
2
0
-2
-4

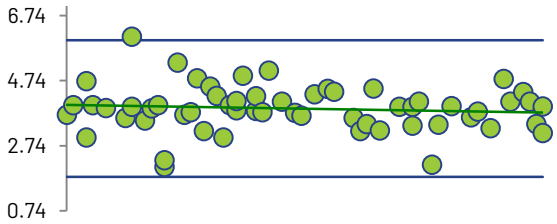

Stability Assessment
Homogeneity Assessment
C17-1
11.44
9.44
7.44
5.44
3.44
C17-2
12.09
10.09
8.09
6.09
4.09
C17-3
17.4
12.4
7.4

Arsenic

Stability Assessment



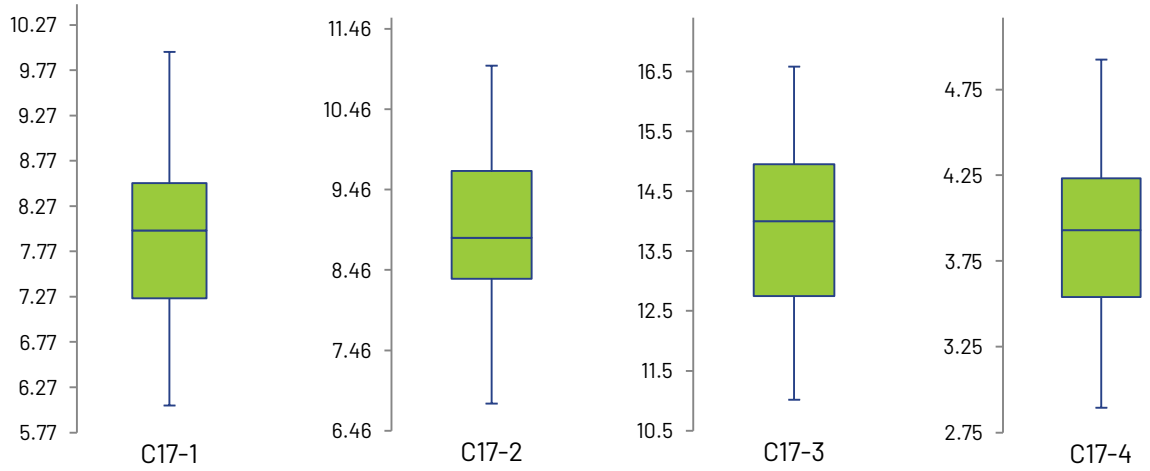
Homogeneity Assessment



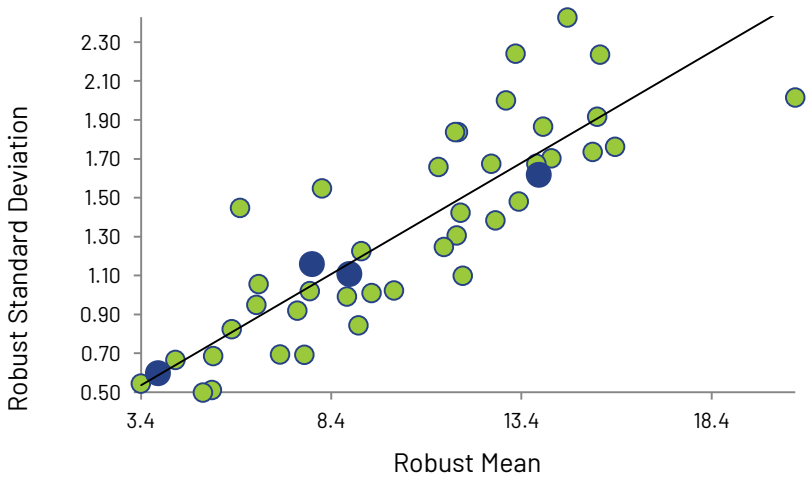
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Barium

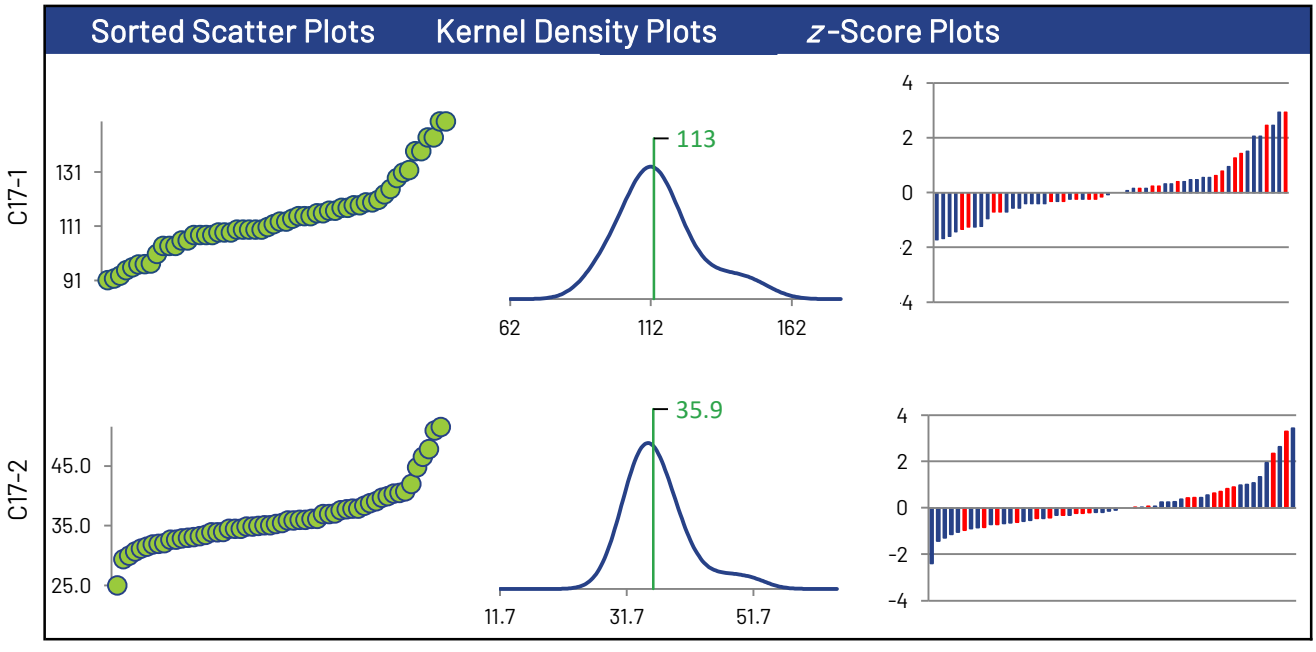
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	56	56	56	56
Median µg/g	113	35.4	178	62.9
Robust Mean µg/g	113	35.9	179	63.2
Uncdrtainty of the Assigned Value µg/g	2.10	0.643	2.27	1.32
Robust Standard Deviation µg/g	12.6	3.85	13.6	7.89
Regression Standard Deviation µg/g	9.93	4.57	14.5	6.46
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	12.6	4.57	14.5	7.89
Flagged Outliers	0	0	0	0
|z|>3.0	0	2	1	0
2<|z|<3	6	3	4	0
Failure Rate %*	0.0			

Methods Used

Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	35	35	35	35
ICP/OES (Red)	21	21	21	21

All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



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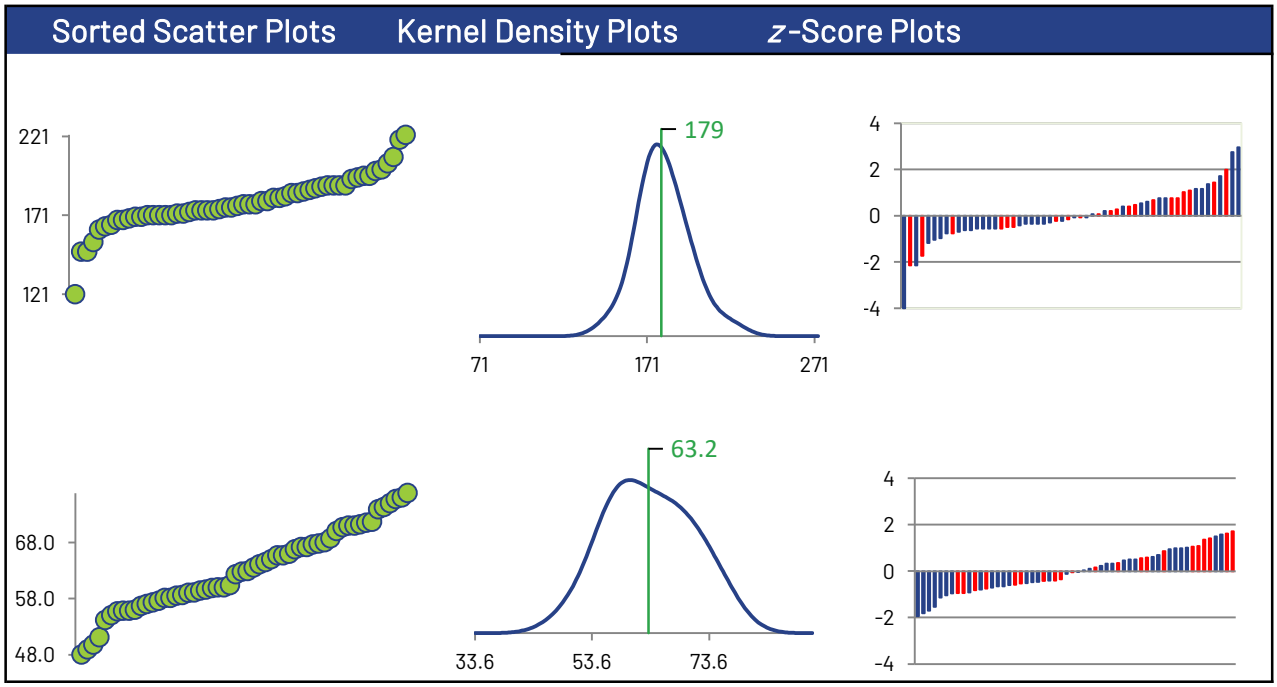
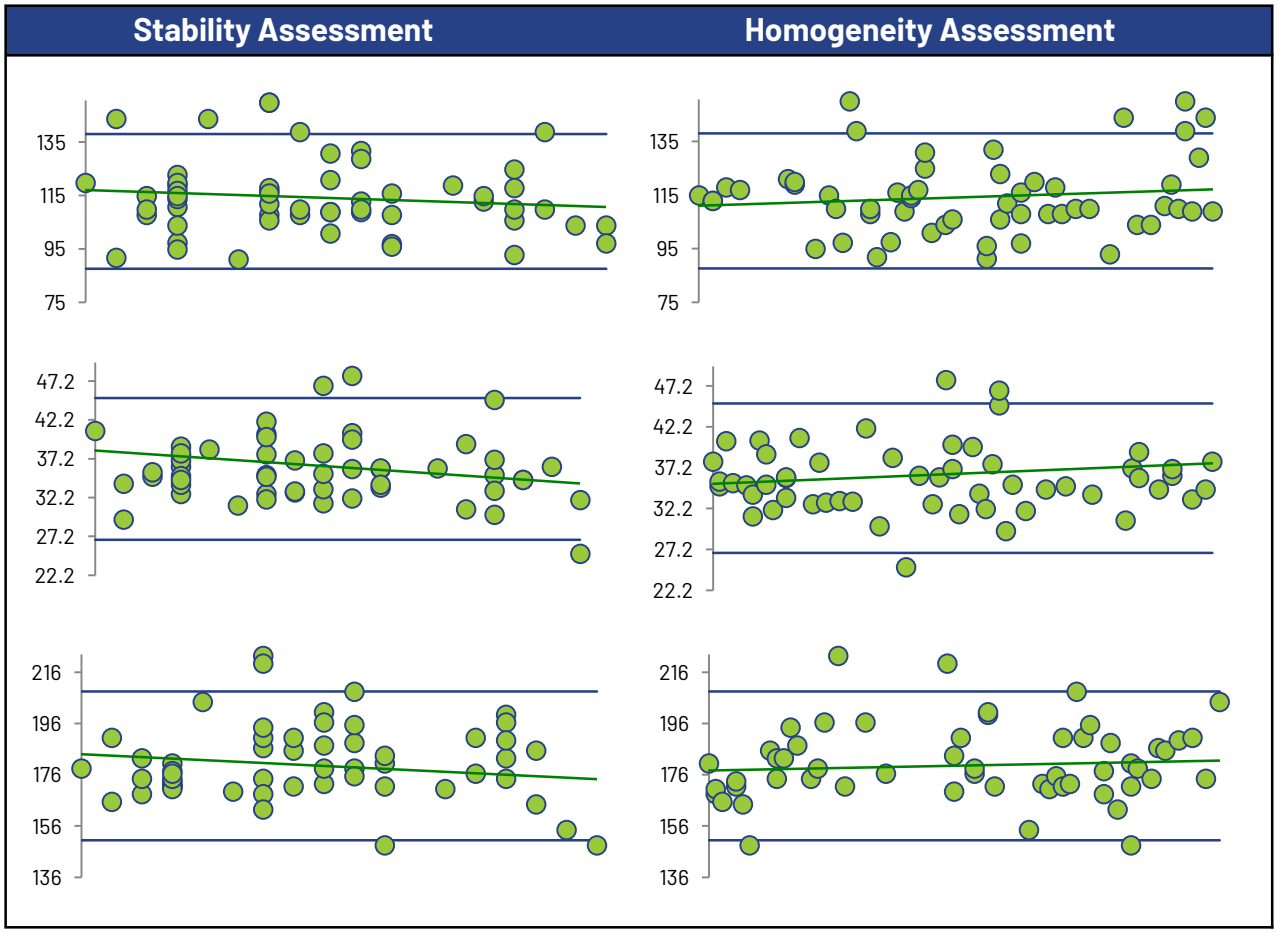
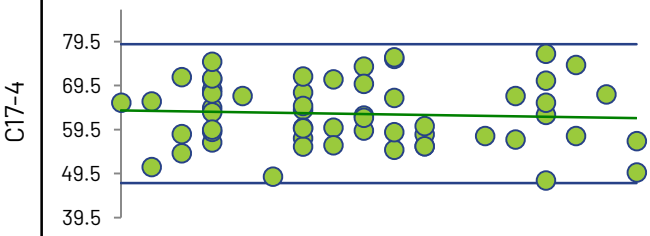
Barium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
221
171
121
179
71
171
271
4
2
0
-2
-4
C17-4
68.0
58.0
48.0
63.2
33.6
53.6
73.6
4
2
0
-2
-4

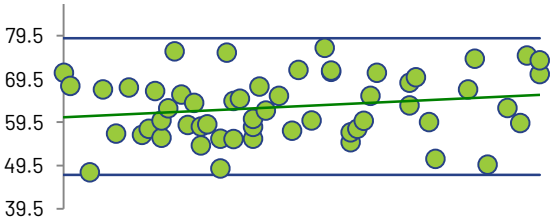

Stability Assessment
Homogeneity Assessment
C17-1
135
115
95
75
C17-2
47.2
42.2
37.2
32.2
27.2
22.2
C17-3
216
196
176
156
136

Barium

Stability Assessment



Homogeneity Assessment



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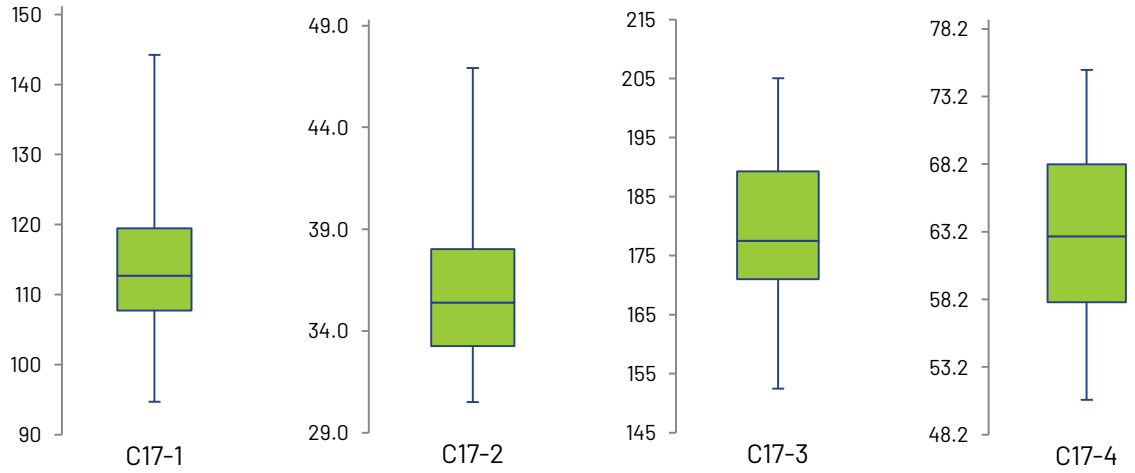
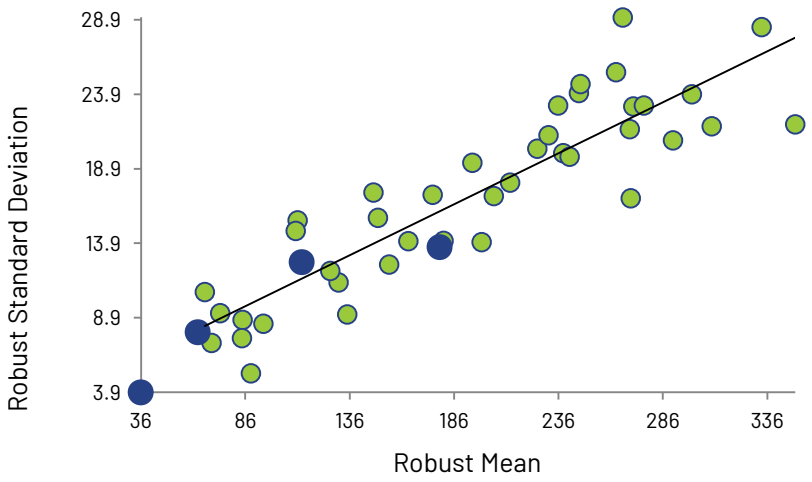
Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Beryllium

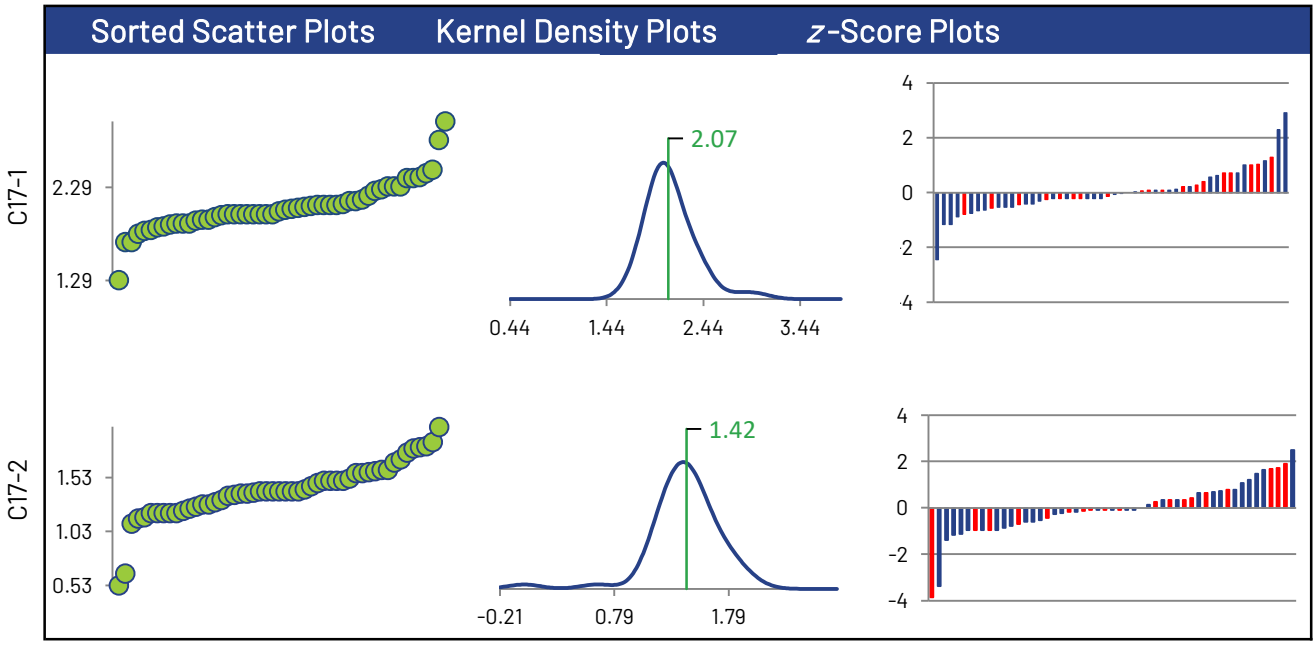
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	52	51	52	52
Median µg/g	2.04	1.40	2.75	1.90
Robust Mean µg/g	2.07	1.42	2.77	1.92
Uncdrtainty of the Assigned Value µg/g	0.0367	0.0383	0.0626	0.0314
Robust Standard Deviation µg/g	0.212	0.219	0.361	0.181
Regression Standard Deviation µg/g	0.318	0.232	0.411	0.299
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	0.318	0.232	0.411	0.299
Flagged Outliers	1	1	1	1
|z|>3.0	0	2	2	1
2<|z|<3	3	1	3	1
Failure Rate %*	0.0			

Methods Used

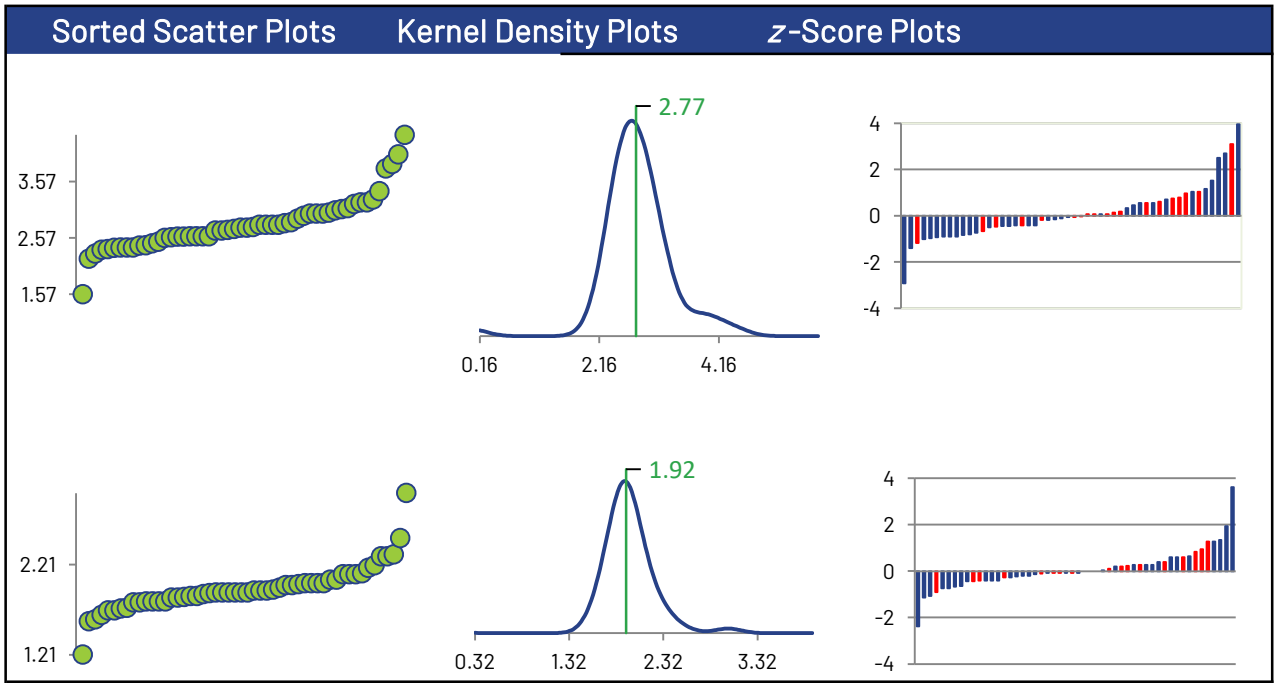
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	33	32	33	33
ICP/OES (Red)	19	19	19	19

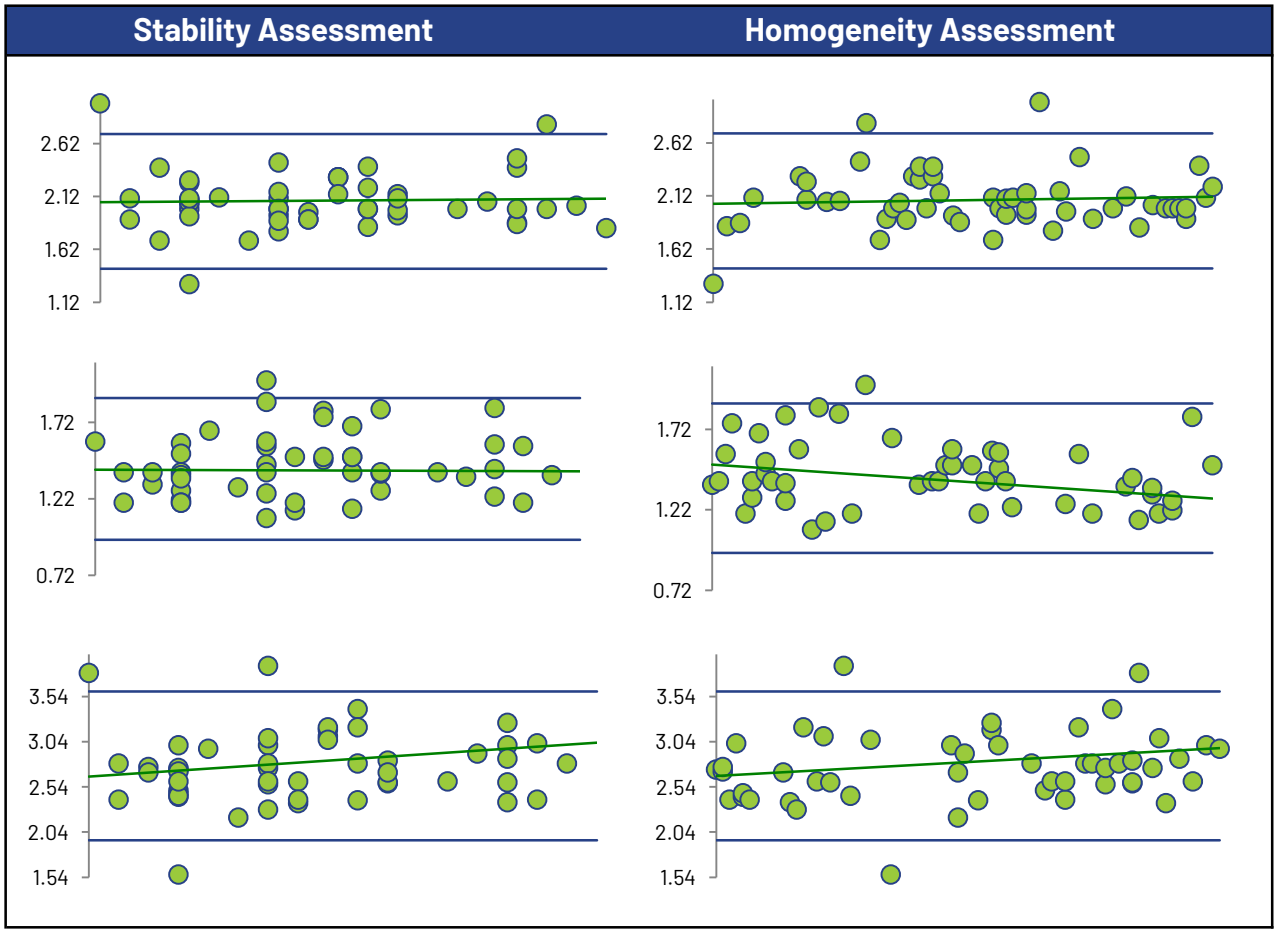
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

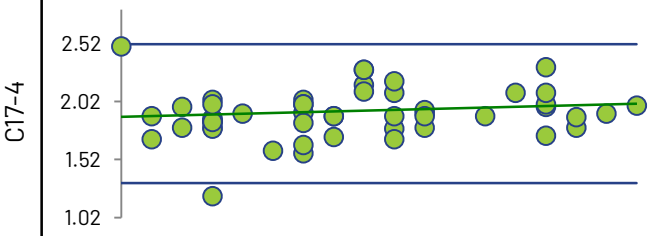
Beryllium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
3.57
2.57
1.57
2.77
0.16
2.16
4.16
4
2
0
-2
-4
C17-4
2.21
1.21
1.92
0.32
1.32
2.32
3.32
4
2
0
-2
-4

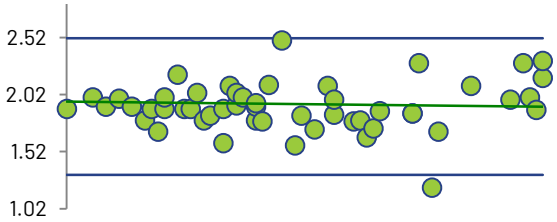

Stability Assessment
Homogeneity Assessment
C17-1
2.62
2.12
1.62
1.12
C17-2
1.72
1.22
0.72
C17-3
3.54
3.04
2.54
2.04
1.54

Beryllium

Stability Assessment



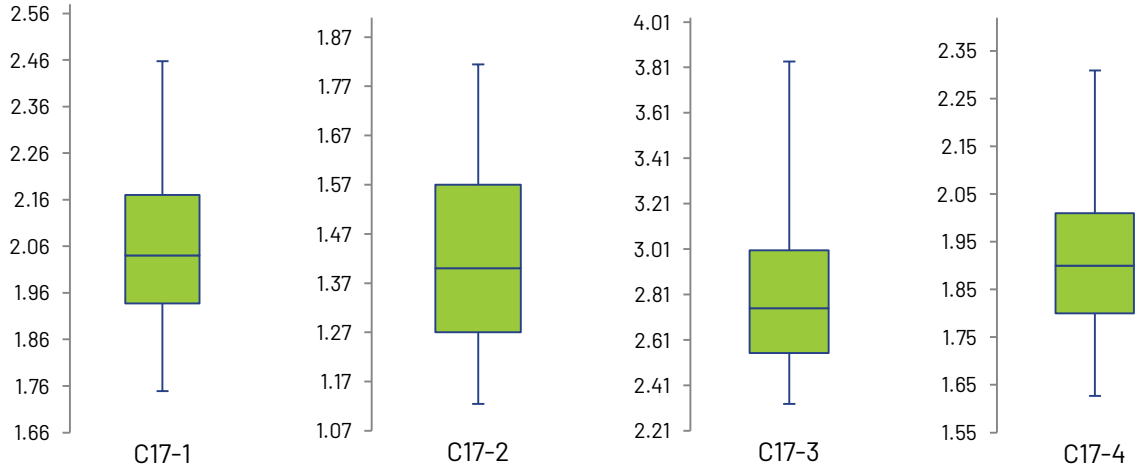
Homogeneity Assessment



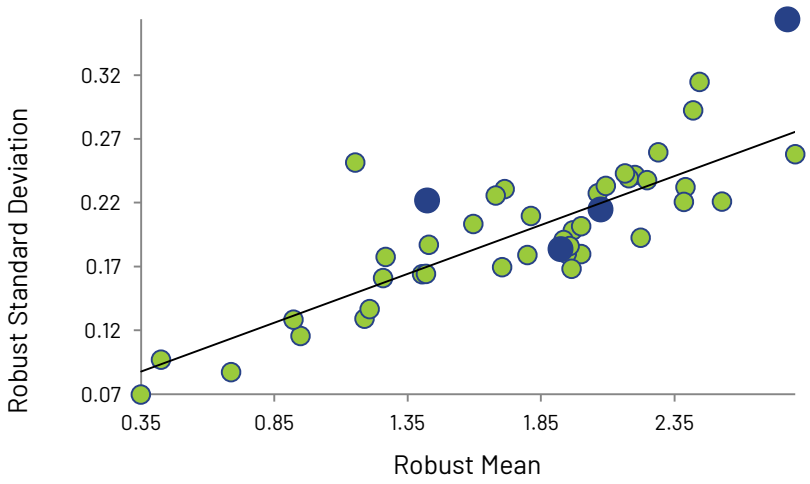
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Boron

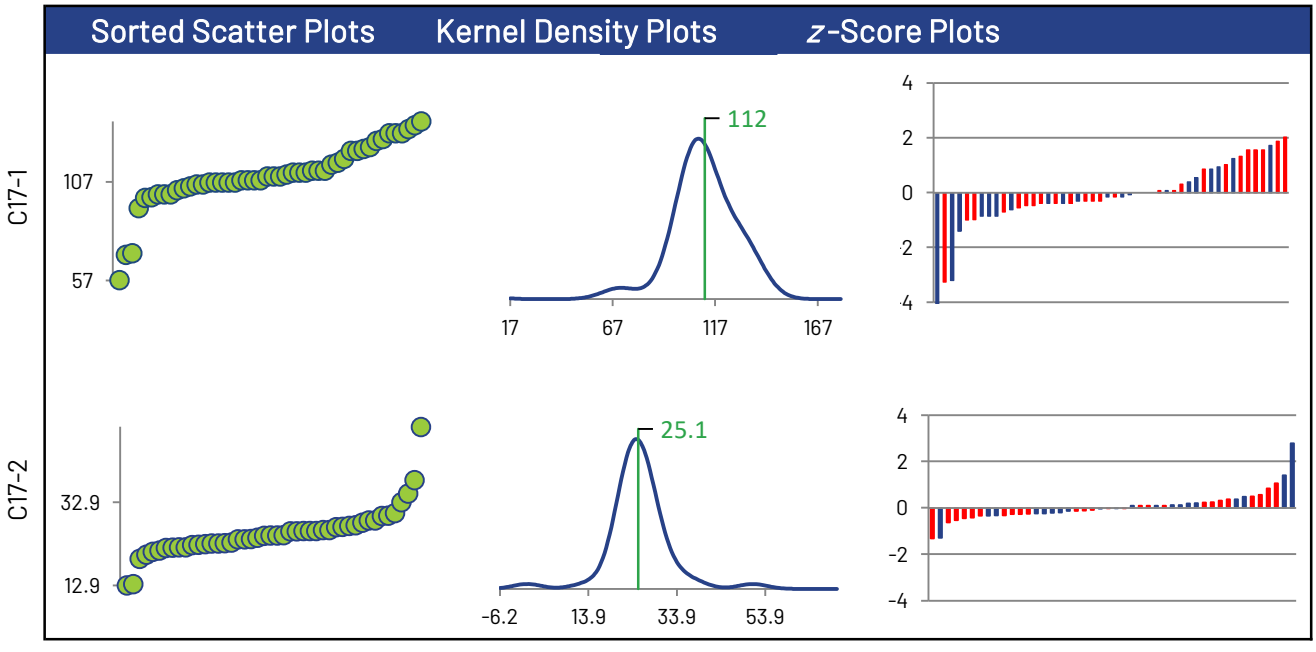
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	48	46	48	48
Median µg/g	110	24.9	121	59.7
Robust Mean µg/g	112	25.1	121	59.8
Uncdrtainty of the Assigned Value µg/g	2.31	0.667	2.20	1.11
Robust Standard Deviation µg/g	12.8	3.62	12.2	6.15
Regression Standard Deviation µg/g	12.6	3.44	13.5	7.09
Stability Flag		Stability		
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	12.8	9.31	13.5	7.09
Flagged Outliers	1	1	1	1
|z|>3.0	3	0	2	2
2<|z|<3	1	1	0	2
Failure Rate %*	6.1			

Methods Used

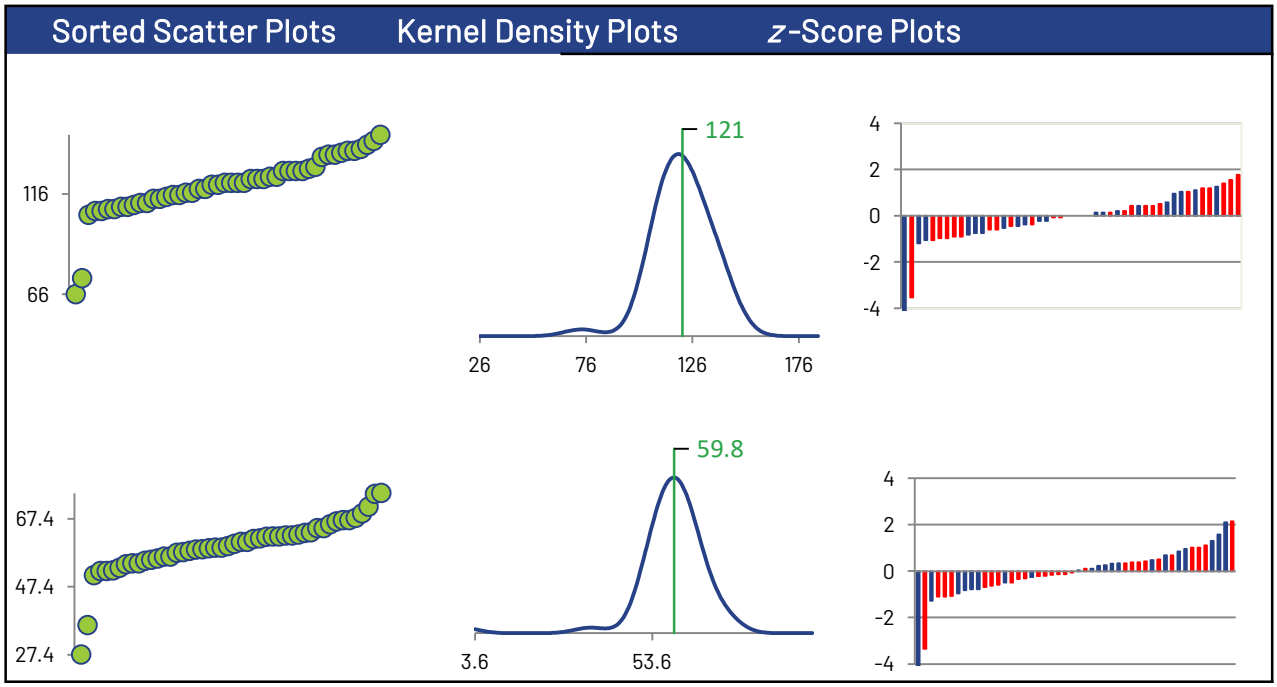
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	21	20	21	21
ICP/MS (Red)	27	26	27	27

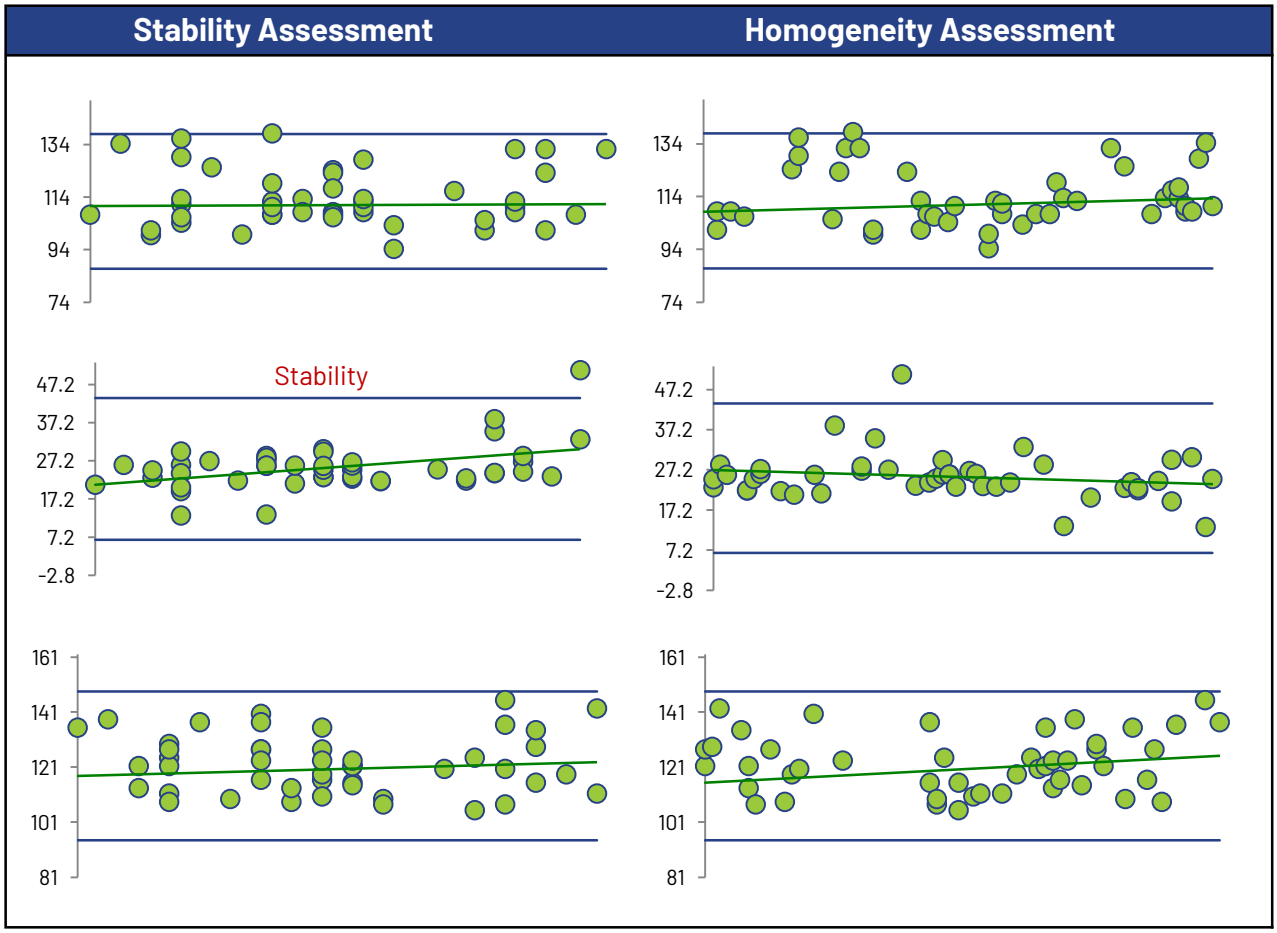
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

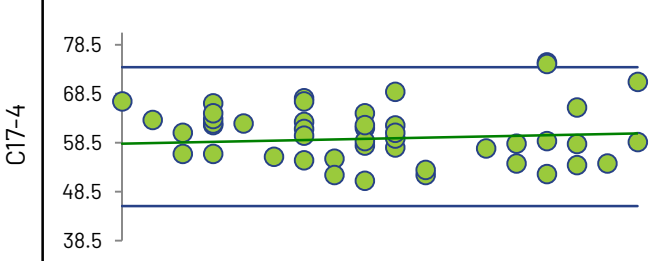
Boron


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
116
66
121
26
76
126
176
4
2
0
-2
-4
C17-4
67.4
47.4
27.4
59.8
3.6
53.6
4
2
0
-2
-4

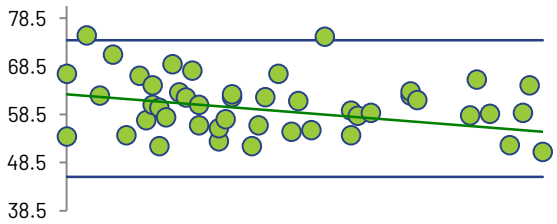

Stability Assessment
Homogeneity Assessment
C17-1
134
114
94
74
C17-2
Stability
47.2
37.2
27.2
17.2
7.2
-2.8
C17-3
161
141
121
101
81

Boron

Stability Assessment



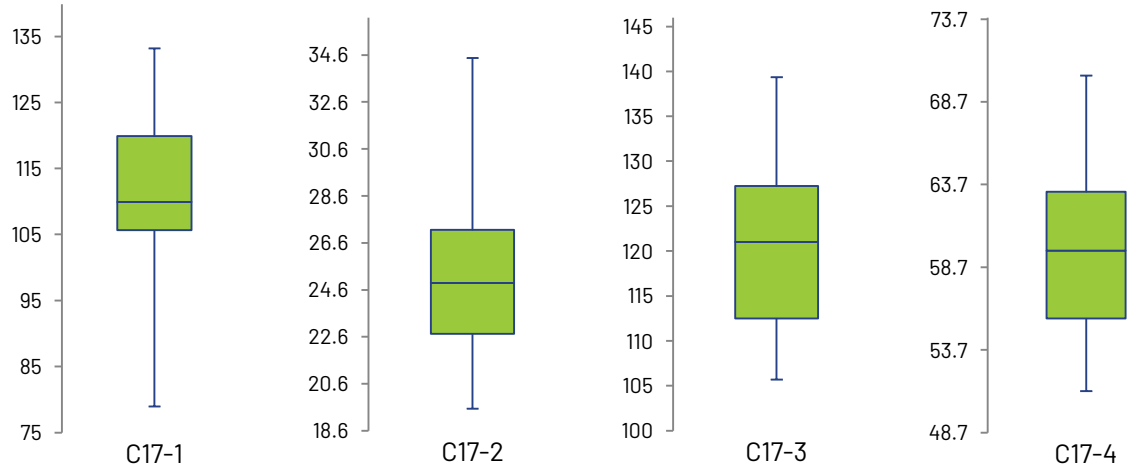
Homogeneity Assessment



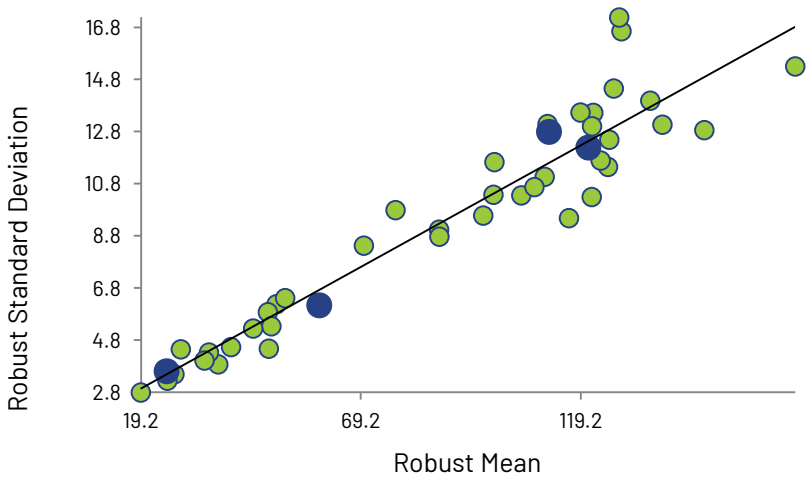
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Cadmium

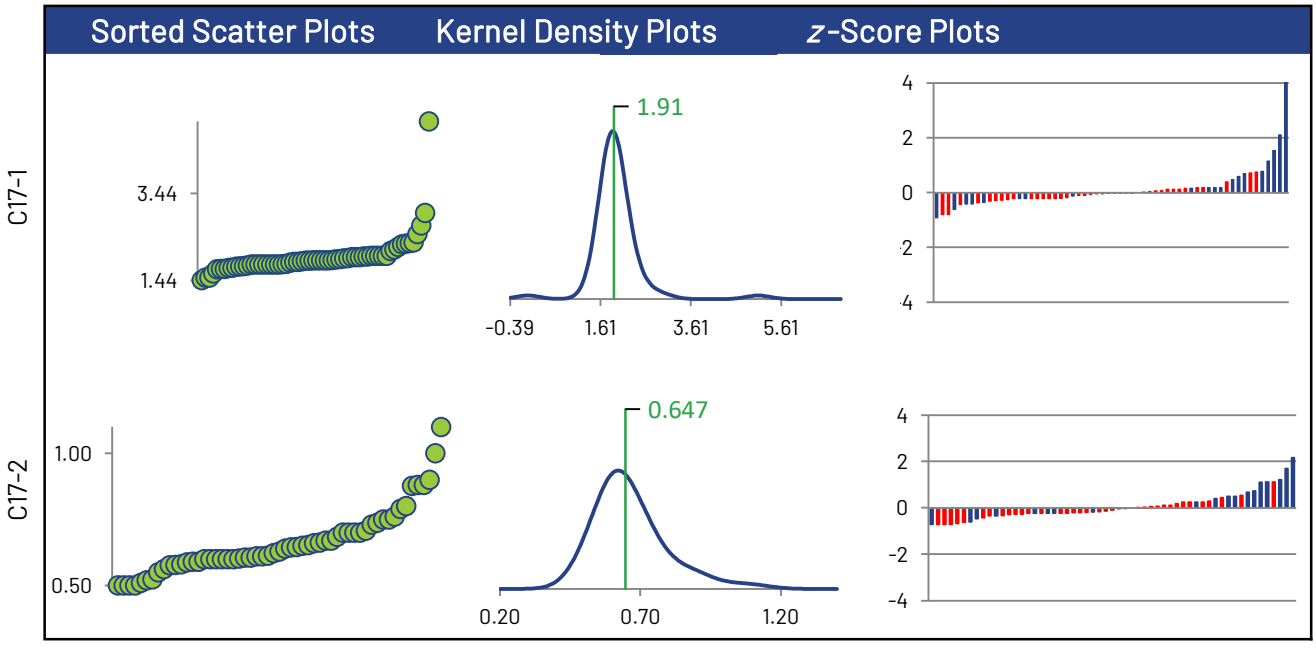
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	60	57	61	60
Median µg/g	1.90	0.629	4.10	2.14
Robust Mean µg/g	1.91	0.647	4.20	2.13
Uncdrtainty of the Assigned Value µg/g	0.0297	0.0169	0.0803	0.0324
Robust Standard Deviation µg/g	0.184	0.102	0.502	0.201
Regression Standard Deviation µg/g	0.318	0.209	0.517	0.337
Stability Flag				
Homogeneity Flag	Homogeneity			
Standard Deviation Used (SDPA) µg/g	0.512	0.209	0.517	0.337
Flagged Outliers	2	2	1	2
|z|>3.0	1	0	6	2
2<|z|<3	1	1	4	0
Failure Rate %*	0.0			

Methods Used

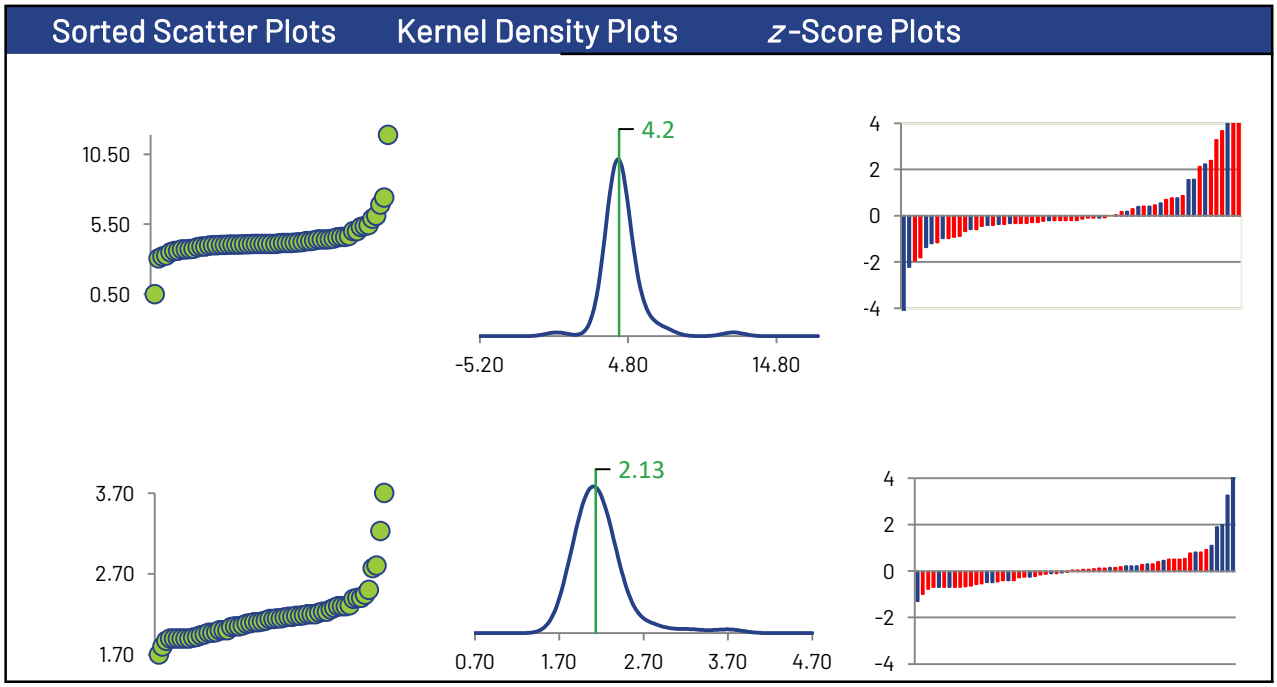
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	21	19	21	21
ICP/MS (Red)	39	38	40	39

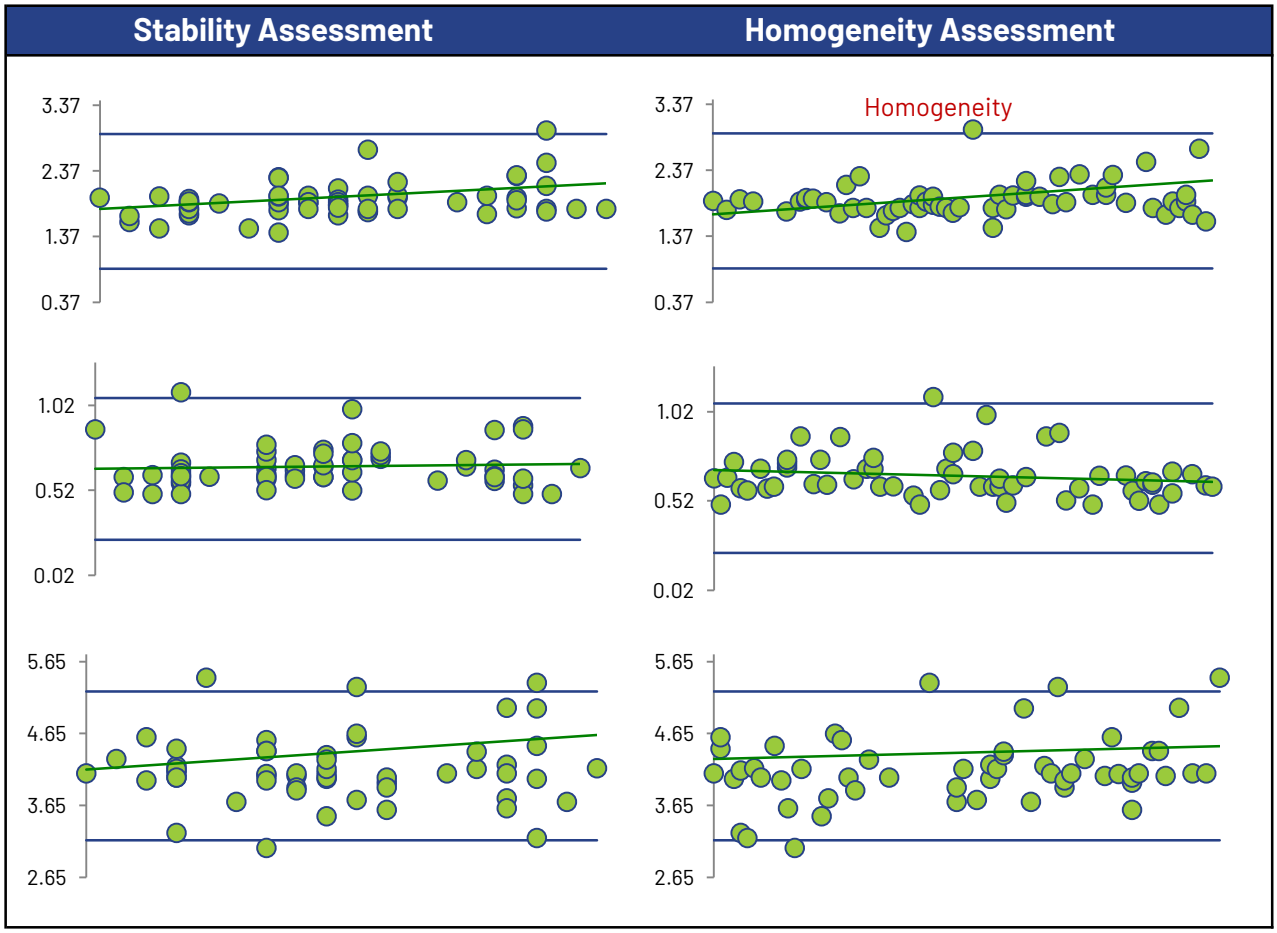
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

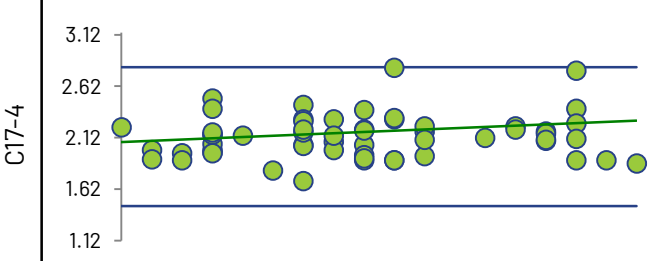
Cadmium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
10.50
5.50
0.50
4.2
-5.20
4.80
14.80
4
2
0
-2
-4
C17-4
3.70
2.70
1.70
2.13
0.70
1.70
2.70
3.70
4.70
4
2
0
-2
-4

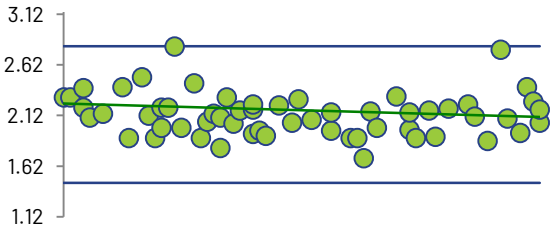

Stability Assessment
Homogeneity Assessment
C17-1
3.37
2.37
1.37
0.37
Homogeneity
C17-2
1.02
0.52
0.02
C17-3
5.65
4.65
3.65
2.65

Cadmium

Stability Assessment



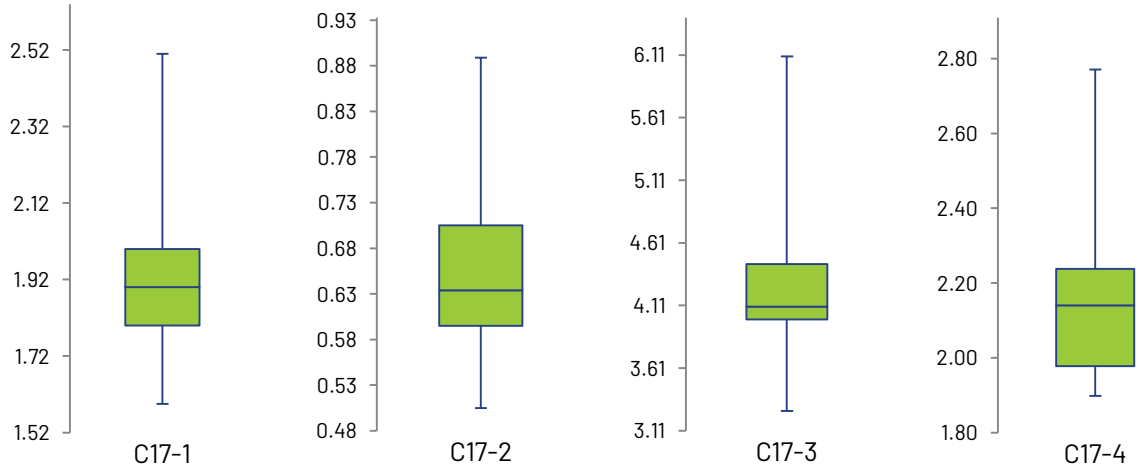
Homogeneity Assessment



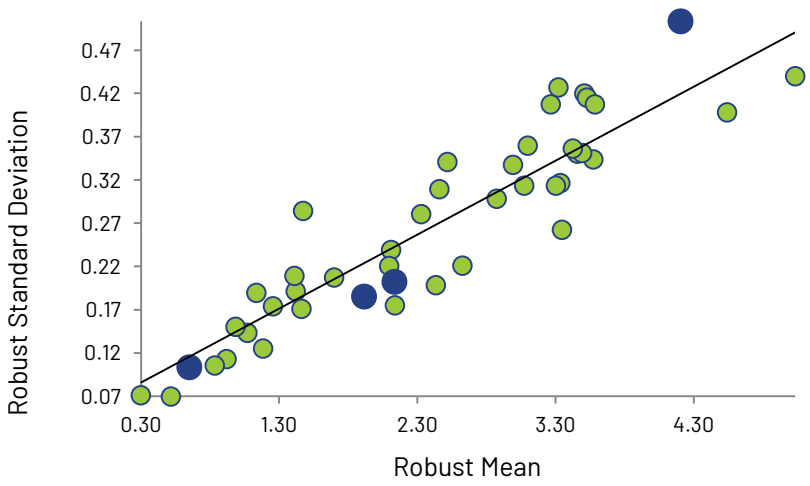
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Chromium

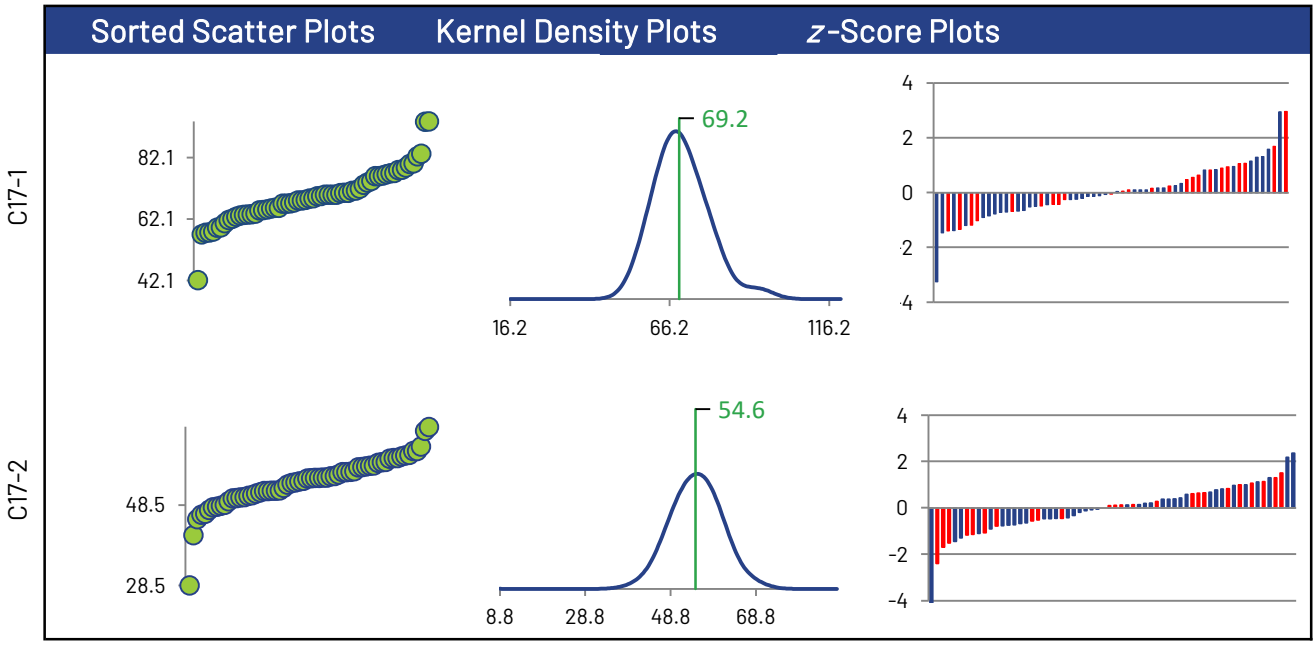
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	61	62	61	61
Median µg/g	68.8	55.2	105	71.9
Robust Mean µg/g	69.2	54.6	106	72.0
Uncdrtainty of the Assigned Value µg/g	1.24	0.862	1.84	1.07
Robust Standard Deviation µg/g	7.72	5.43	11.5	6.66
Regression Standard Deviation µg/g	6.79	5.68	9.60	7.01
Stability Flag				
Homogeneity Flag	Homogeneity		Homogeneity	
Standard Deviation Used (SDPA) µg/g	8.34	5.68	17.0	7.01
Flagged Outliers	1	0	1	1
|z|>3.0	1	1	1	1
2<|z|<3	2	3	1	4
Failure Rate %*	1.6			

Methods Used

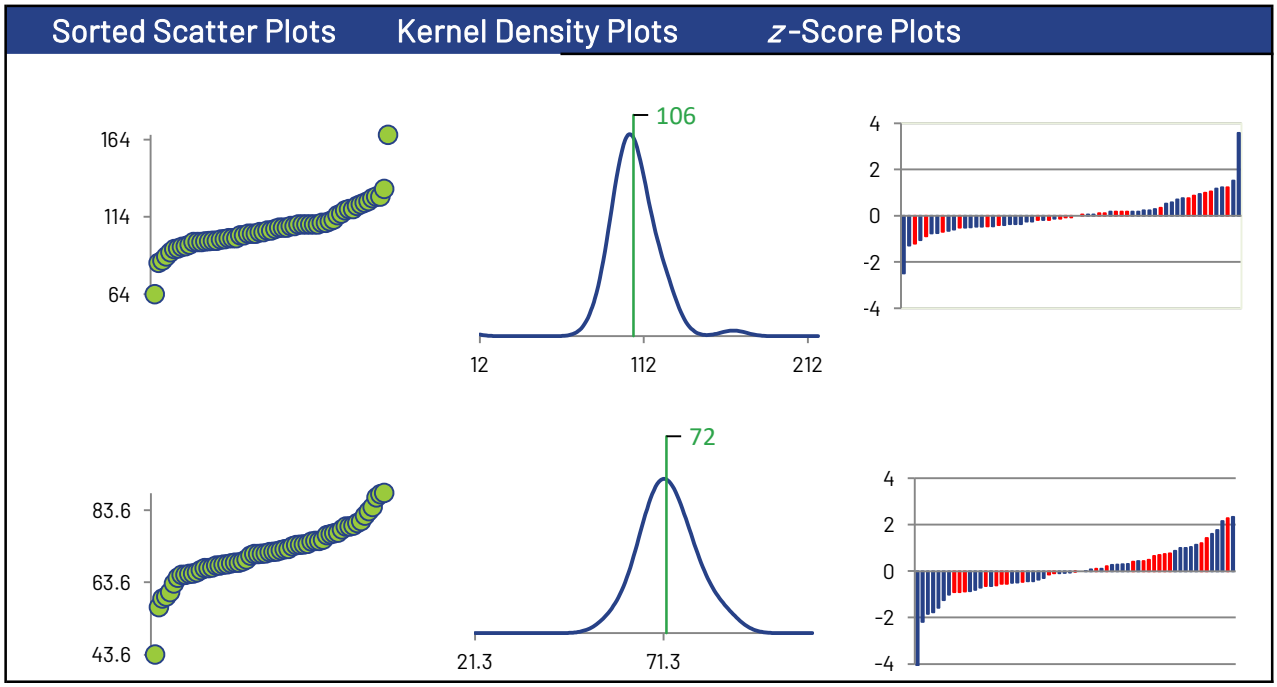
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	37	37	37	37
ICP/OES (Red)	24	25	24	24

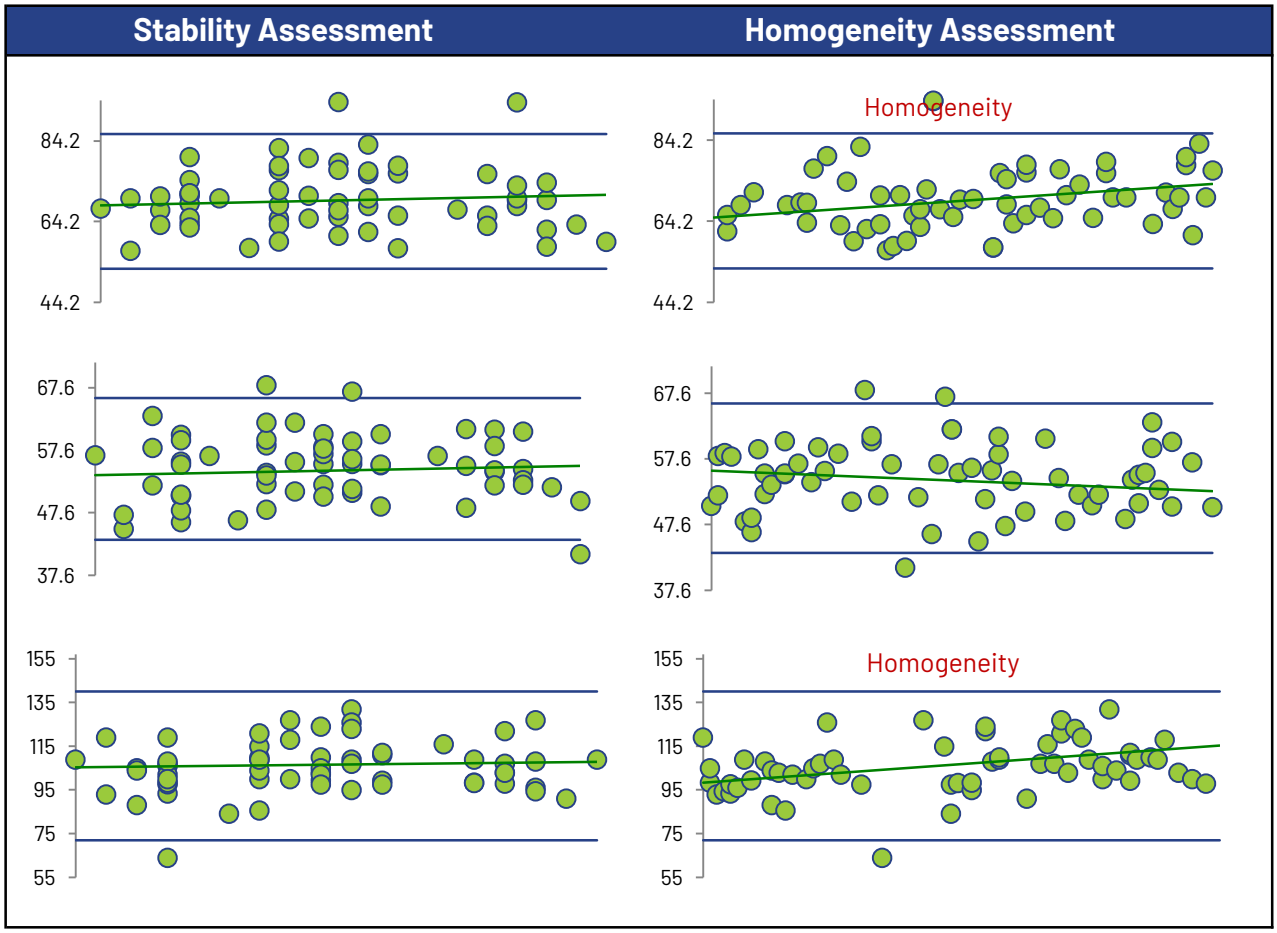
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

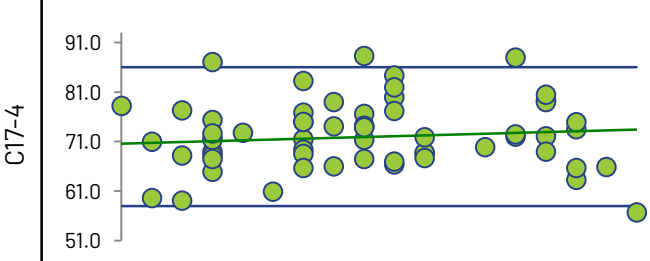
Chromium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
164
114
64
106
12
112
212
4
2
0
-2
-4
C17-4
83.6
63.6
43.6
72
21.3
71.3
4
2
0
-2
-4

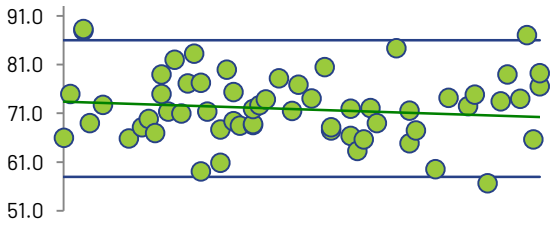

Stability Assessment
Homogeneity Assessment
C17-1
84.2
64.2
44.2
Homogeneity
84.2
64.2
44.2
C17-2
67.6
57.6
47.6
37.6
67.6
57.6
47.6
37.6
C17-3
155
135
115
95
75
55
Homogeneity
155
135
115
95
75
55

Chromium

Stability Assessment



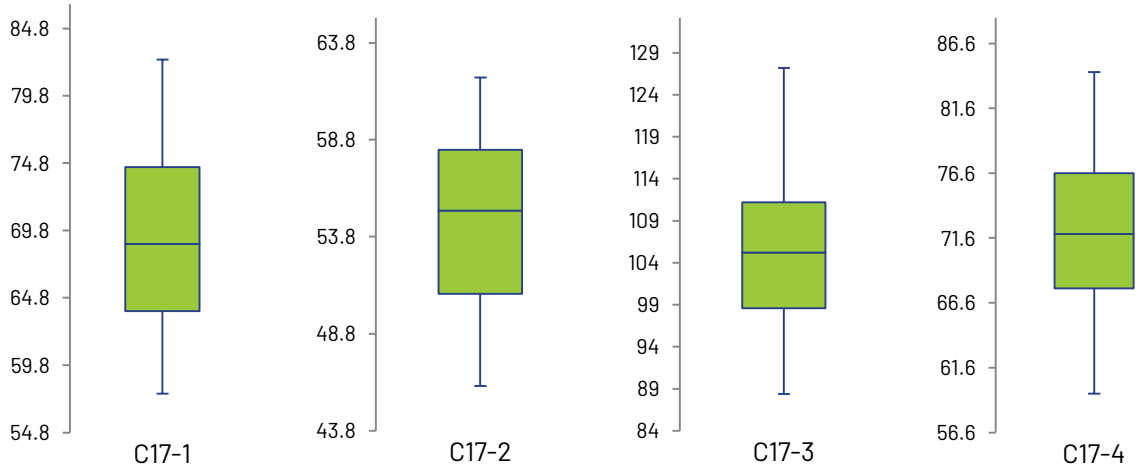
Homogeneity Assessment



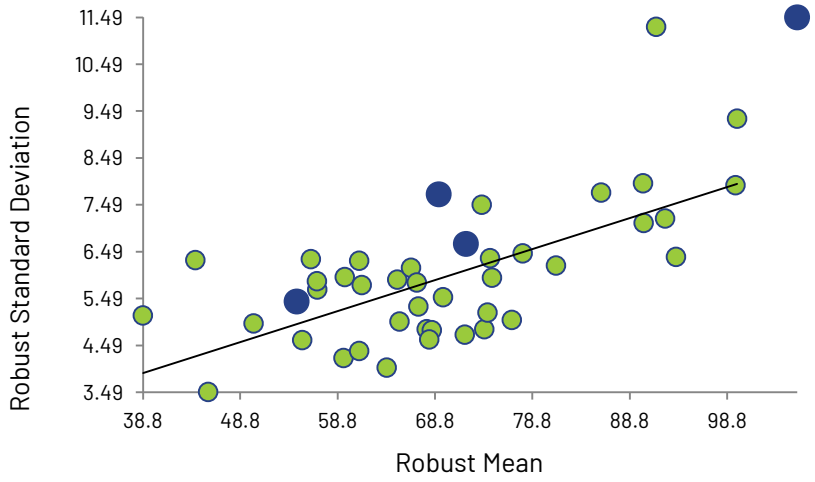
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Cobalt

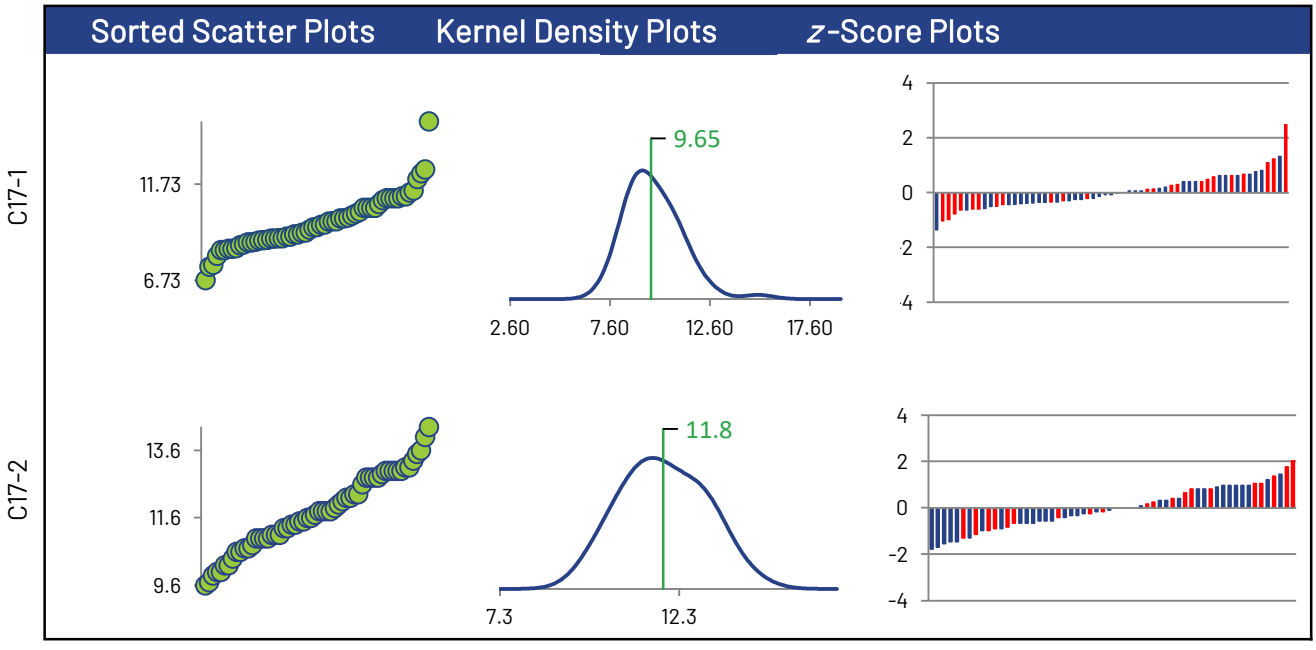
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	59	58	59	59
Median µg/g	9.50	11.8	11.7	15.6
Robust Mean µg/g	9.65	11.8	11.7	15.7
Uncdrtainty of the Assigned Value µg/g	0.205	0.204	0.213	0.273
Robust Standard Deviation µg/g	1.26	1.24	1.31	1.68
Regression Standard Deviation µg/g	0.943	1.15	1.15	1.53
Stability Flag				
Homogeneity Flag	Homogeneity		Homogeneity	
Standard Deviation Used (SDPA) µg/g	2.15	1.24	1.38	1.68
Flagged Outliers	1	2	1	1
|z|>3.0	0	0	2	1
2<|z|<3	1	1	3	4
Failure Rate %*	5.0			

Methods Used

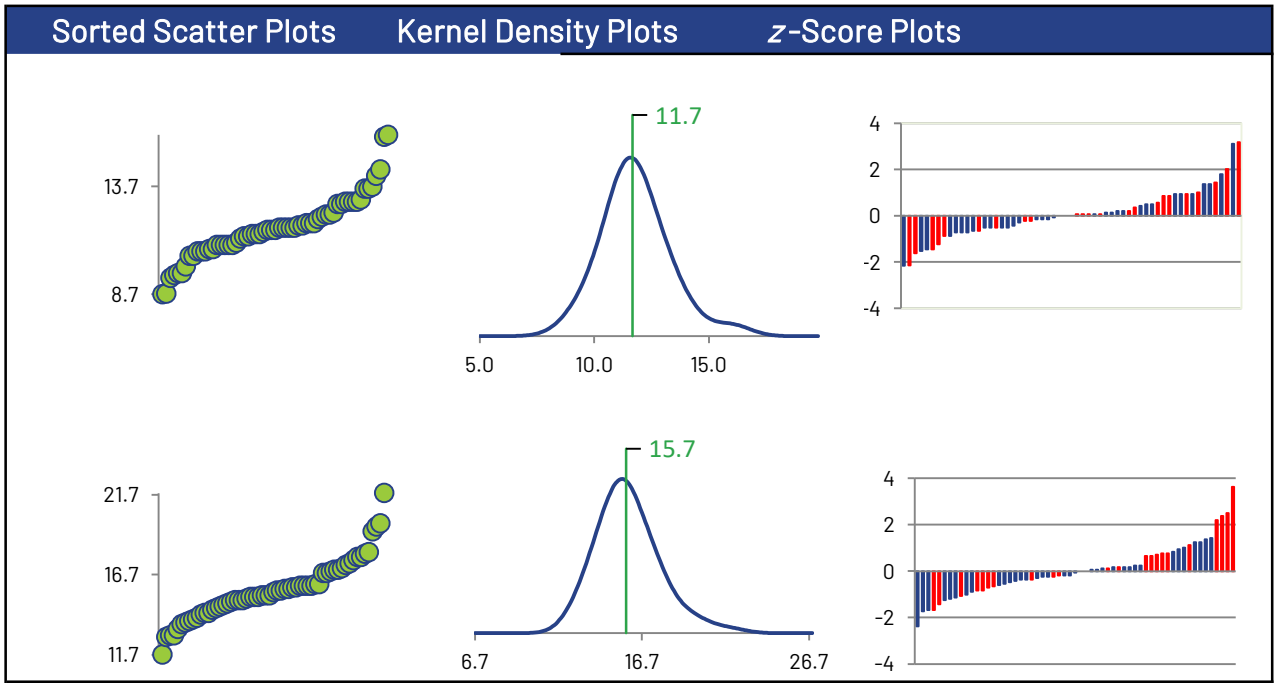
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	36	36	36	36
ICP/OES (Red)	23	22	23	23

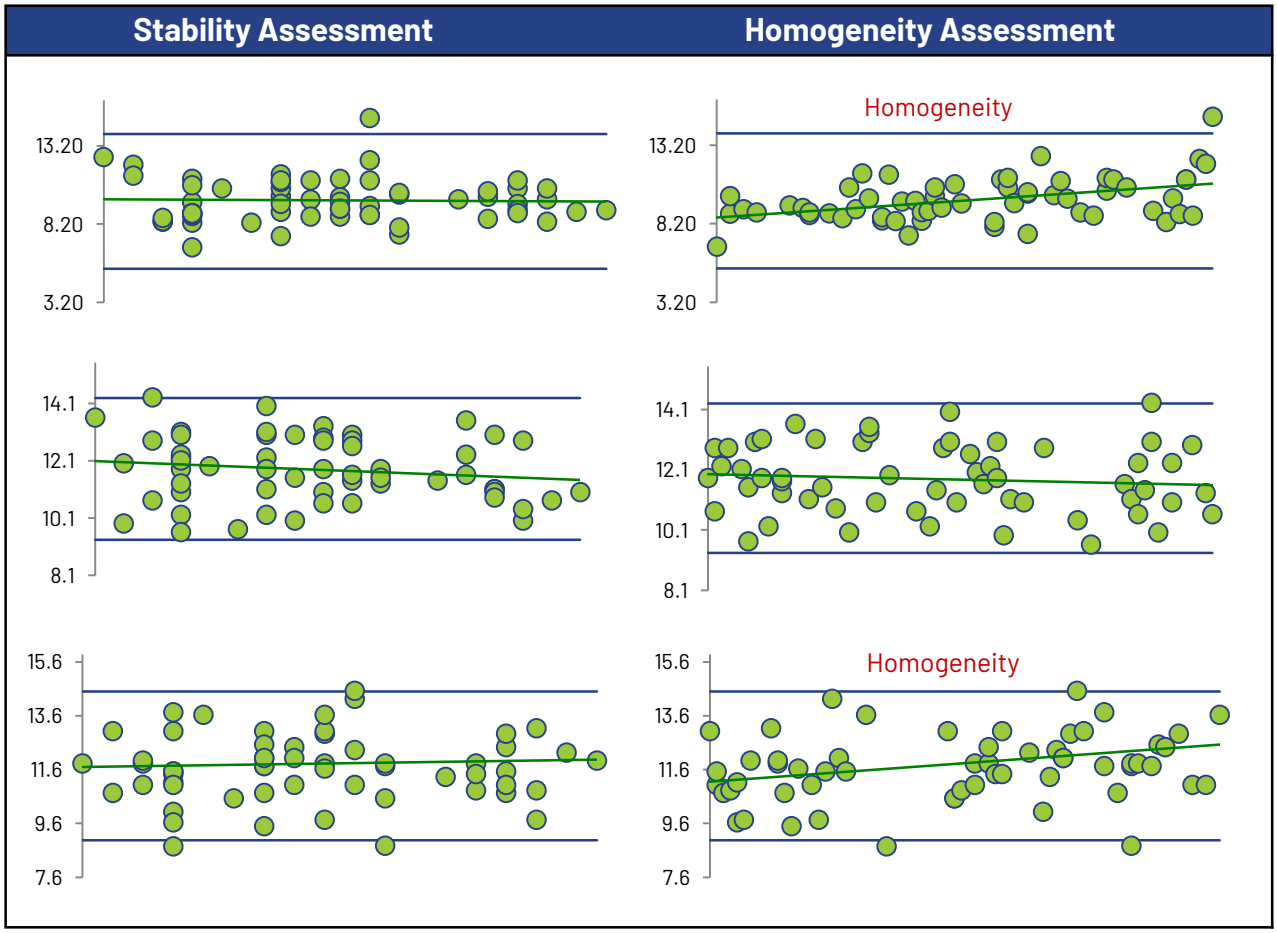
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

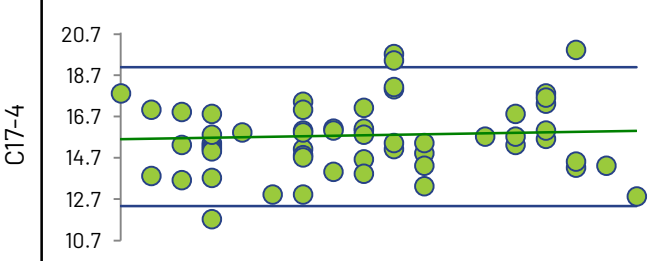
Cobalt


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
13.7
8.7
11.7
5.0
10.0
15.0
4
2
0
-2
-4
C17-4
21.7
16.7
11.7
15.7
6.7
16.7
26.7
4
2
0
-2
-4

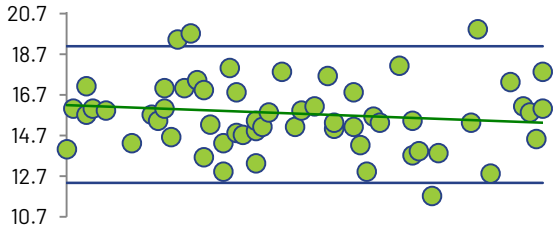

Stability Assessment
Homogeneity Assessment
C17-1
13.20
8.20
3.20
Homogeneity
13.20
8.20
3.20
C17-2
14.1
12.1
10.1
8.1
14.1
12.1
10.1
8.1
C17-3
15.6
13.6
11.6
9.6
7.6
Homogeneity
15.6
13.6
11.6
9.6
7.6

Cobalt

Stability Assessment



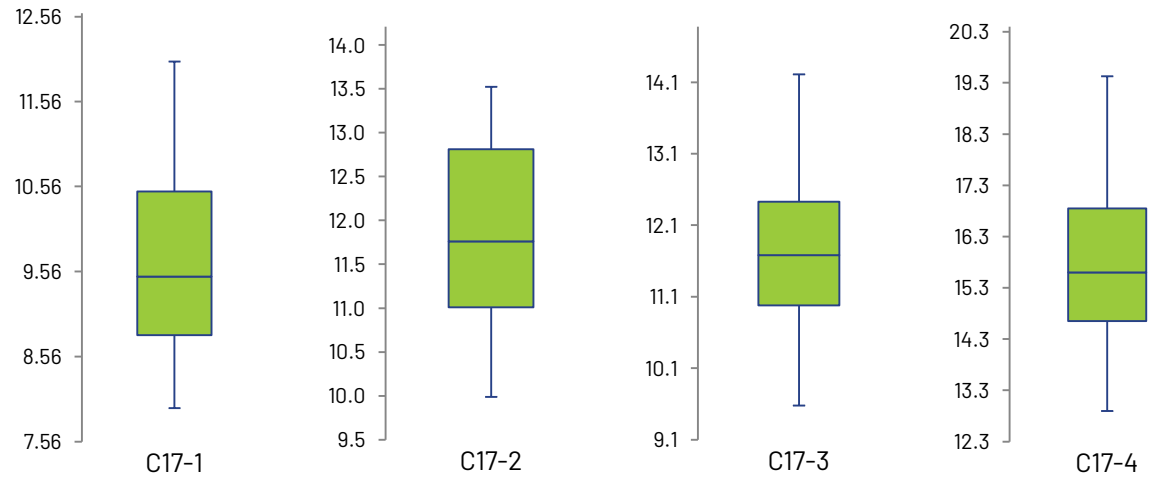
Homogeneity Assessment



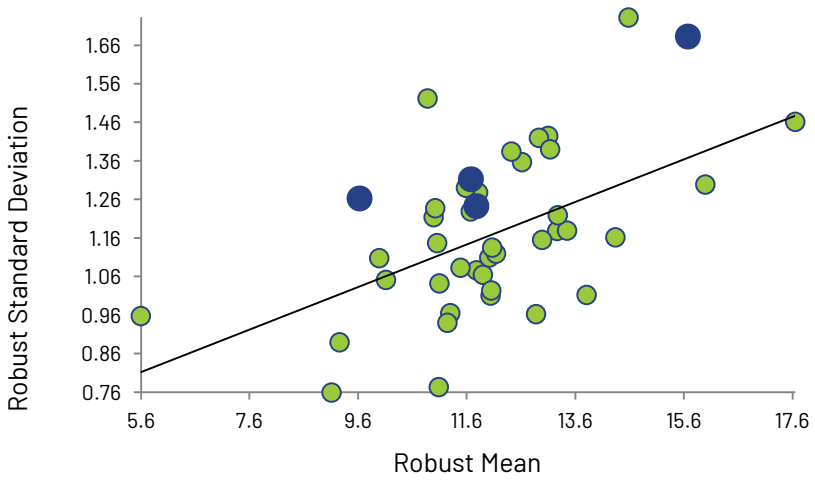
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Copper

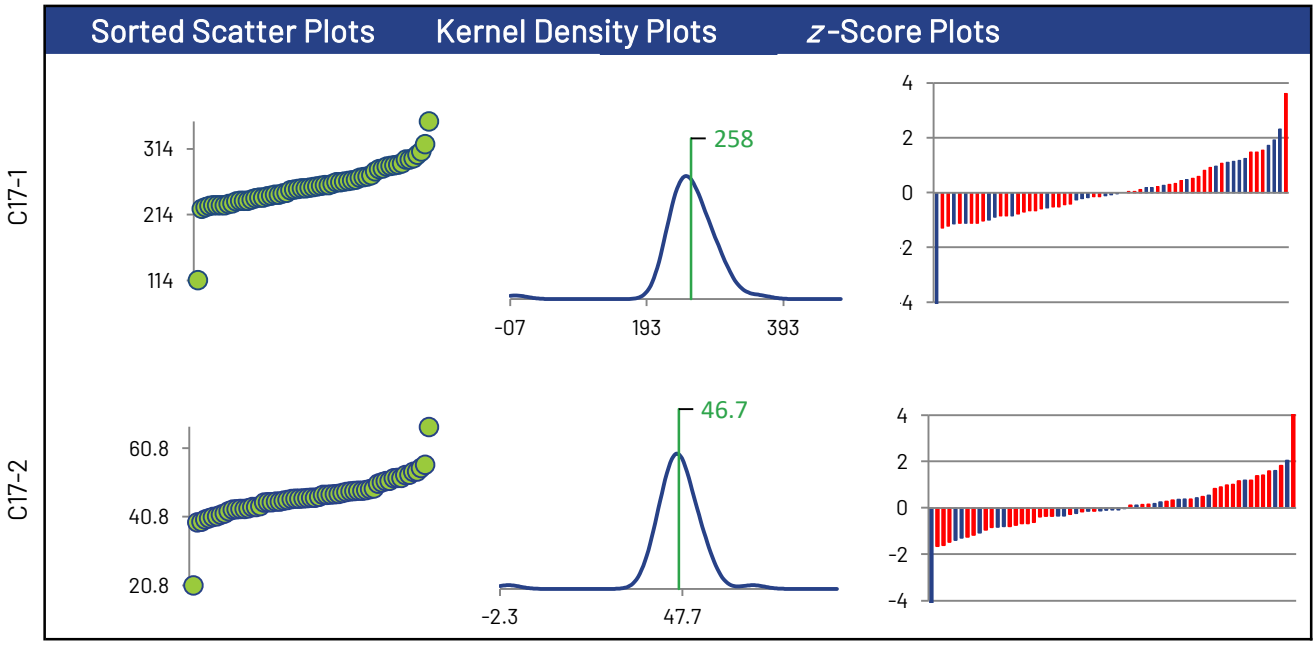
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	61	61	61	61
Median µg/g	256	46.4	318	168
Robust Mean µg/g	258	46.7	325	168
Uncdrtainty of the Assigned Value µg/g	4.34	0.731	6.24	3.07
Robust Standard Deviation µg/g	27.1	4.57	39.0	19.2
Regression Standard Deviation µg/g	21.6	3.90	27.2	14.1
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	27.1	4.57	39.0	19.2
Flagged Outliers	0	0	0	0
|z|>3.0	2	2	4	1
2<|z|<3	1	1	4	4
Failure Rate %*	4.9			

Methods Used

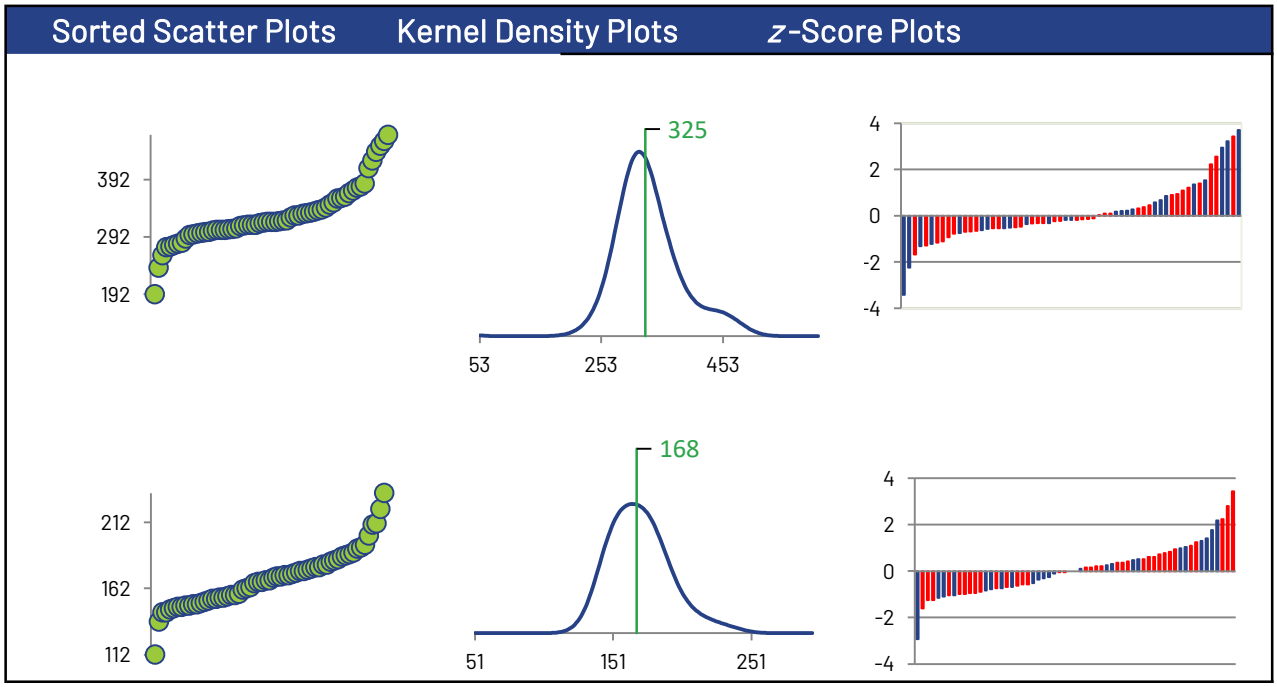
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	25	25	25	25
ICP/MS (Red)	36	36	36	36

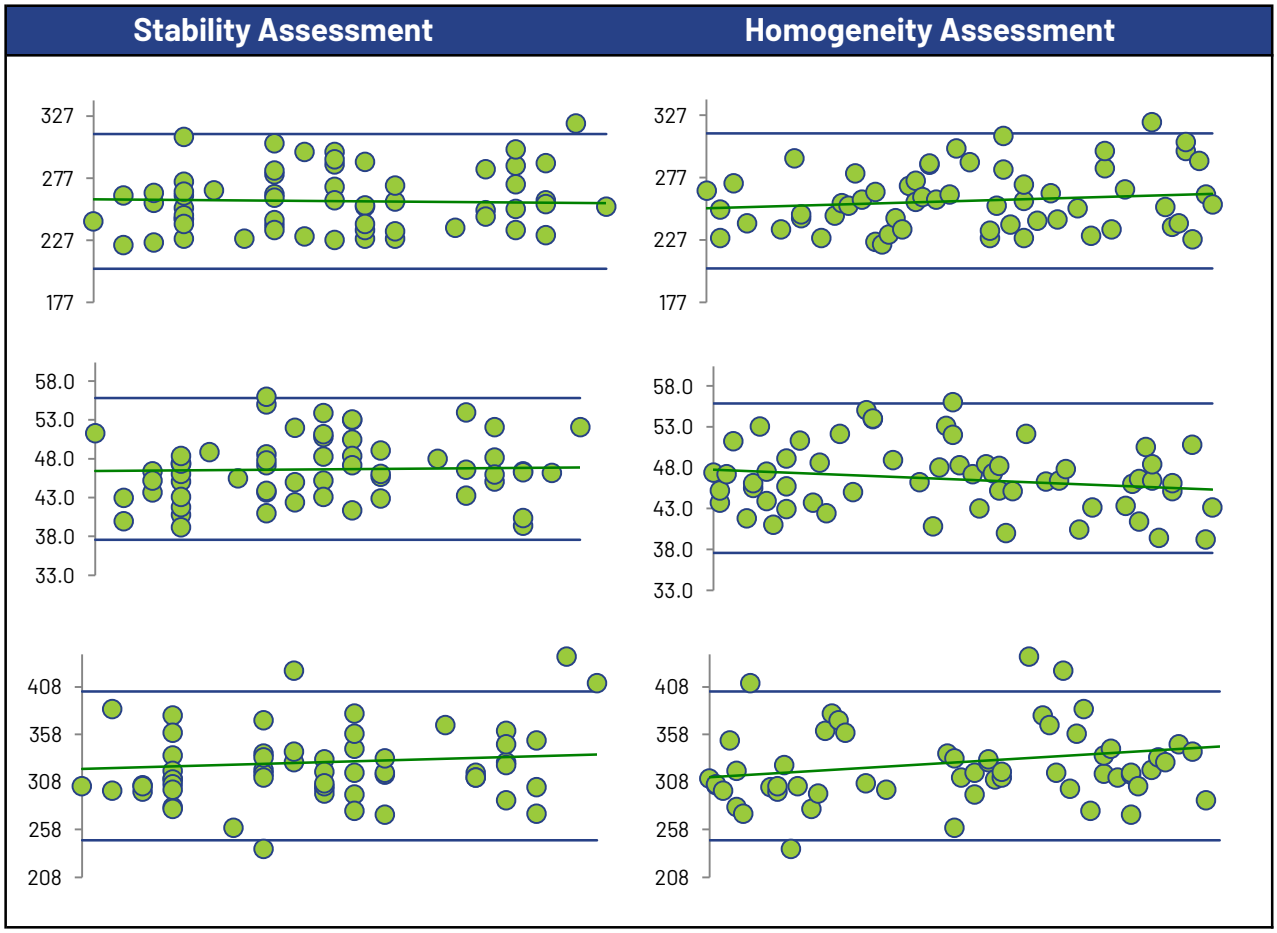
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

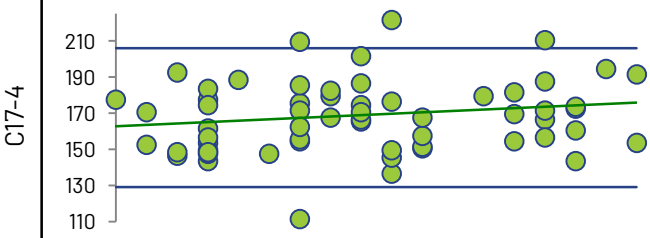
Copper


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
392
292
192
325
53
253
453
4
2
0
-2
-4
C17-4
212
162
112
168
51
151
251
4
2
0
-2
-4

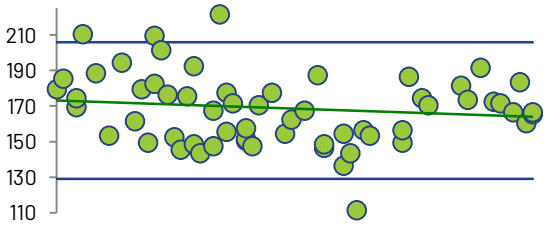

Stability Assessment
Homogeneity Assessment
C17-1
327
277
227
177
C17-2
58.0
53.0
48.0
43.0
38.0
33.0
C17-3
408
358
308
258
208

Copper

Stability Assessment



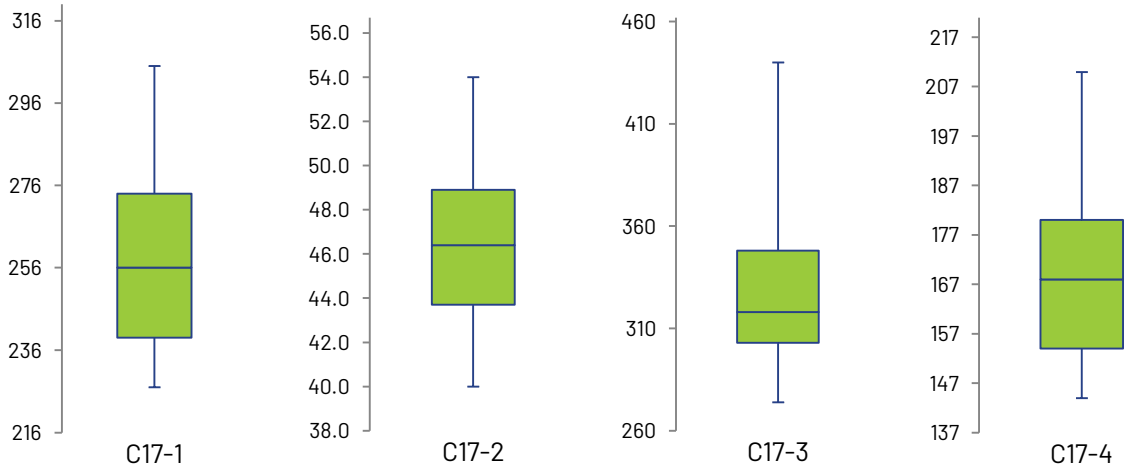
Homogeneity Assessment



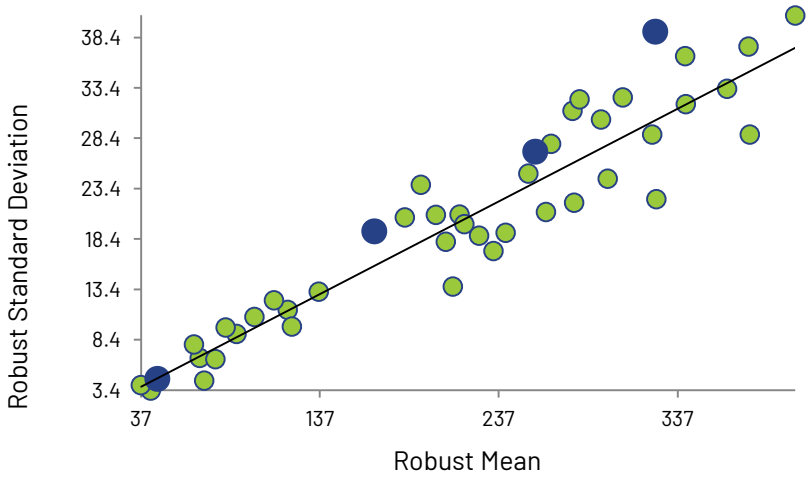
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Iron

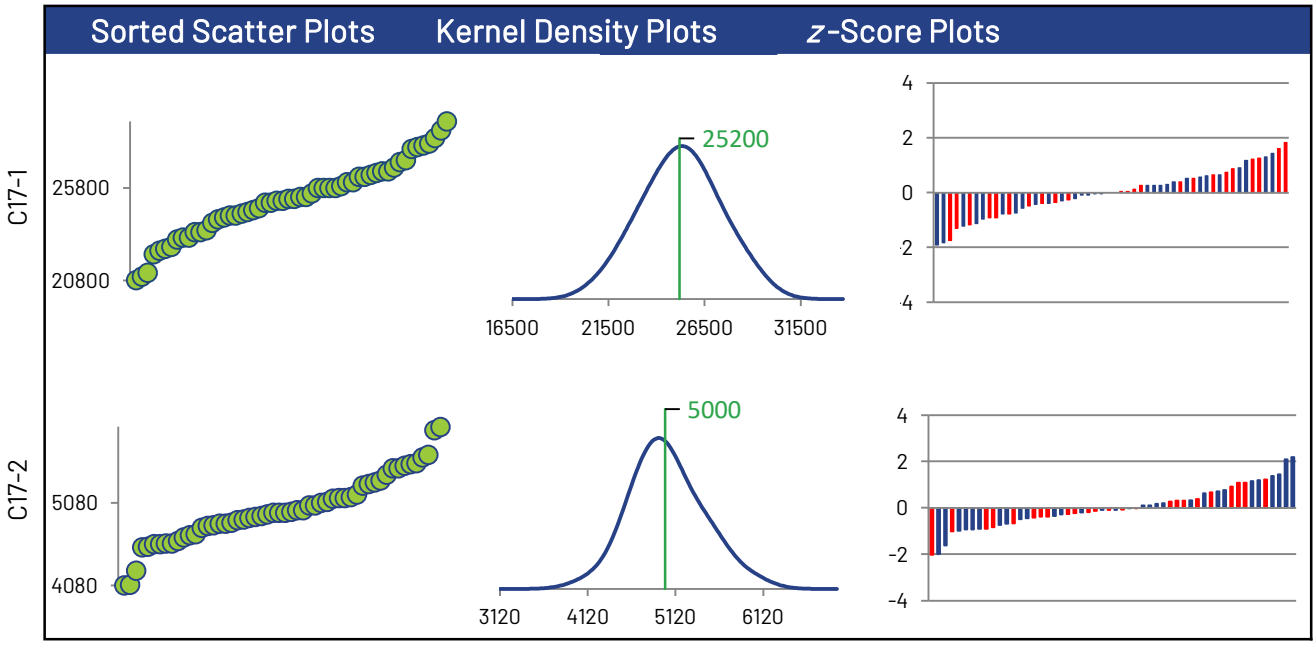
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	54	54	54	54
Median µg/g	25200	4960	25600	14900
Robust Mean µg/g	25200	5000	25700	15100
Uncdrtainty of the Assigned Value µg/g	354	66.9	442	276
Robust Standard Deviation µg/g	2080	393	2600	1620
Regression Standard Deviation µg/g	2300	457	2350	1380
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	2300	457	2600	1620
Flagged Outliers	2	2	2	2
|z|>3.0	0	0	0	0
2<|z|<3	0	3	4	2
Failure Rate %*	3.6			

Methods Used

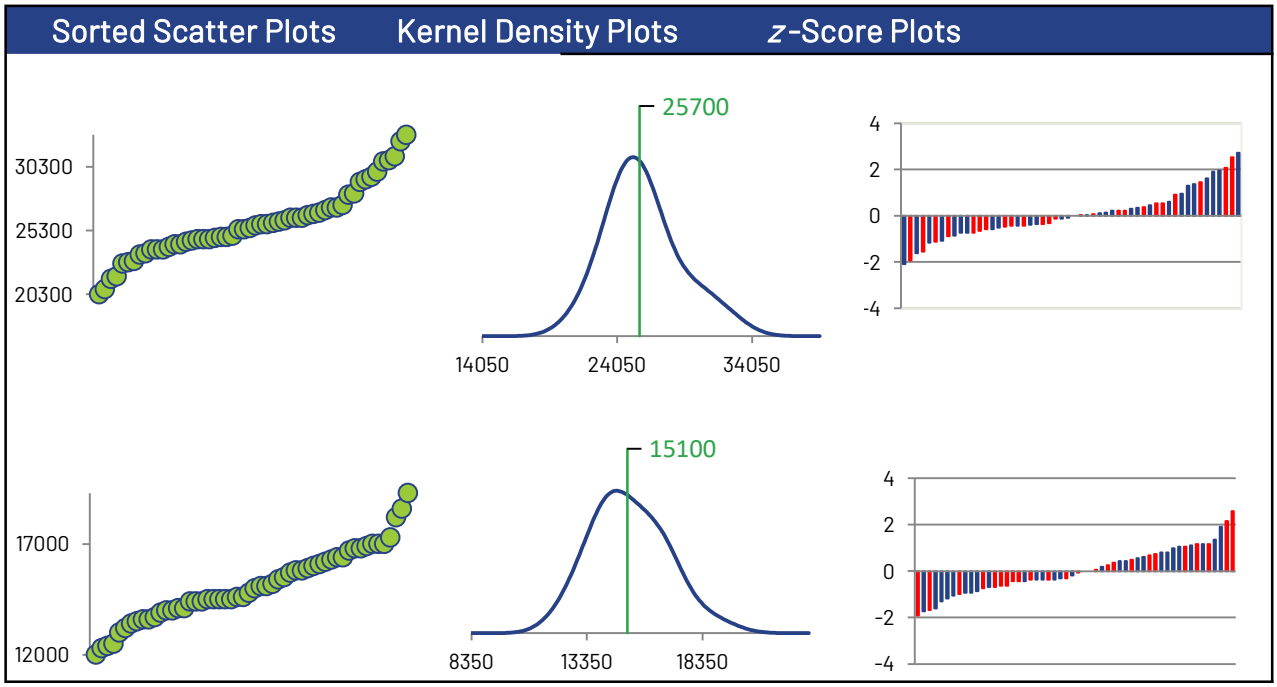
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	30	30	30	30
ICP/OES (Red)	24	24	24	24

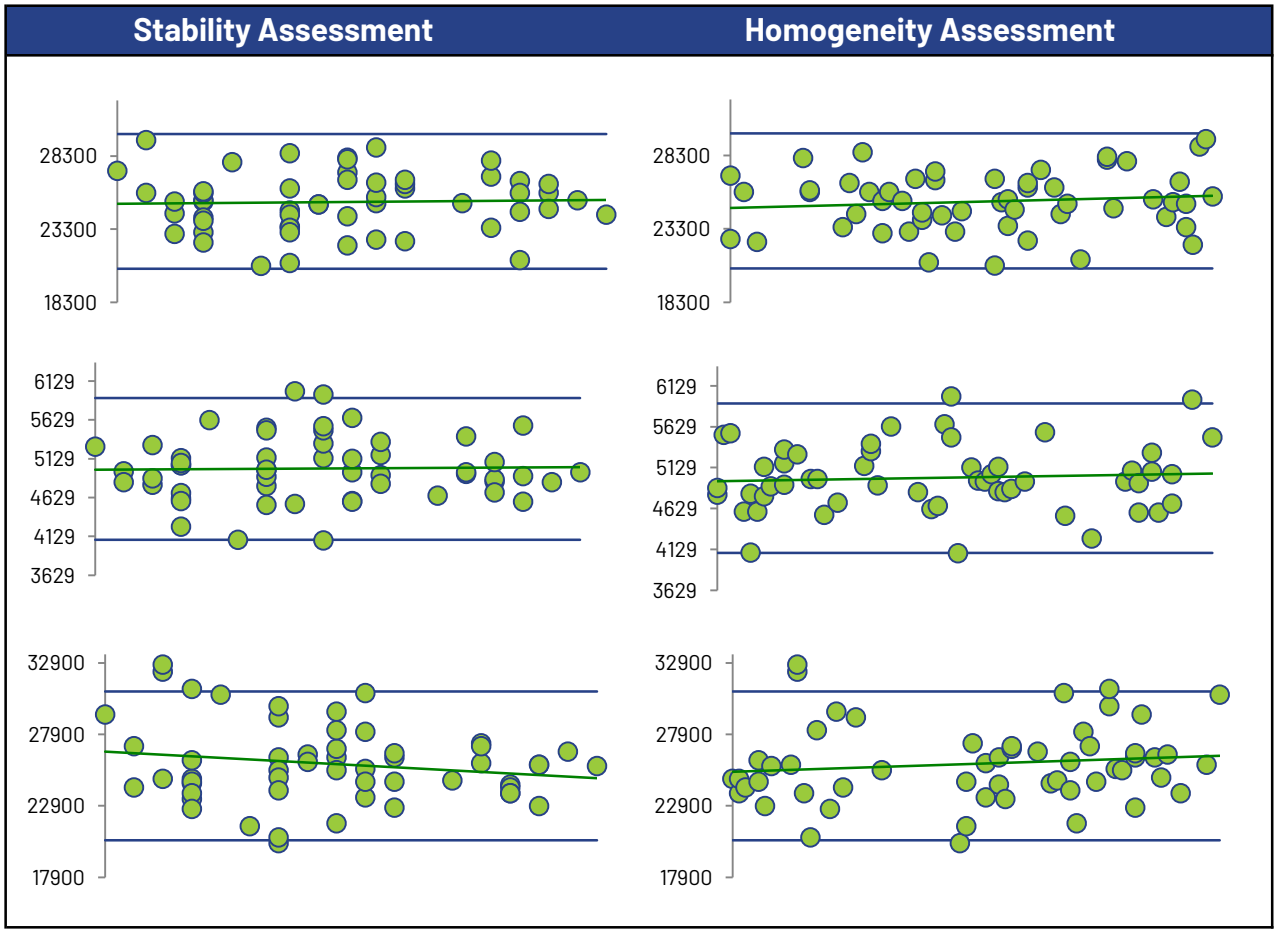
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

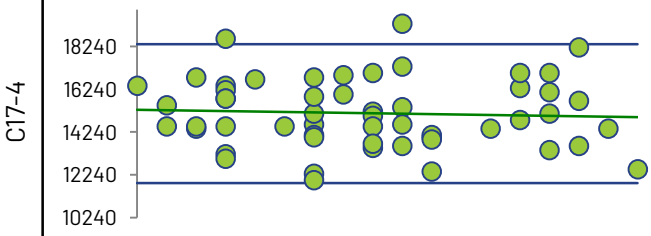
Iron


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
30300
25300
20300
25700
14050
24050
34050
4
2
0
-2
-4
C17-4
17000
12000
15100
8350
13350
18350
4
2
0
-2
-4

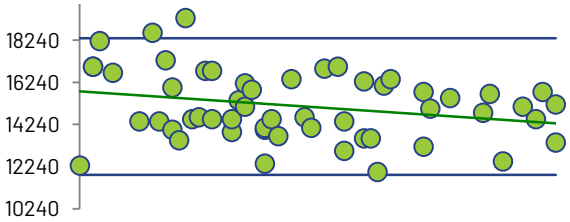

Stability Assessment
Homogeneity Assessment
C17-1
28300
23300
18300
C17-2
6129
5629
5129
4629
4129
3629
C17-3
32900
27900
22900
17900

Iron

Stability Assessment



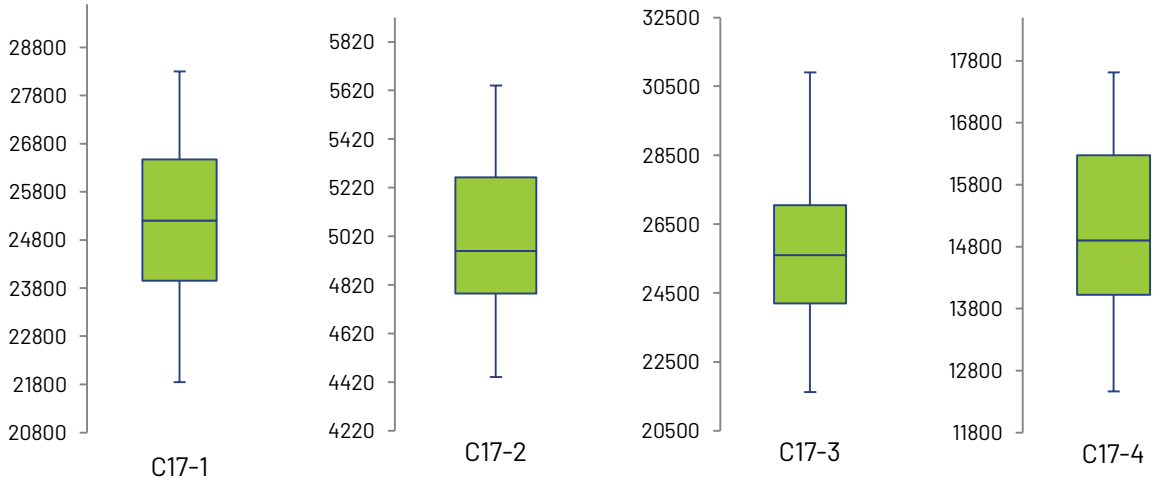
Homogeneity Assessment



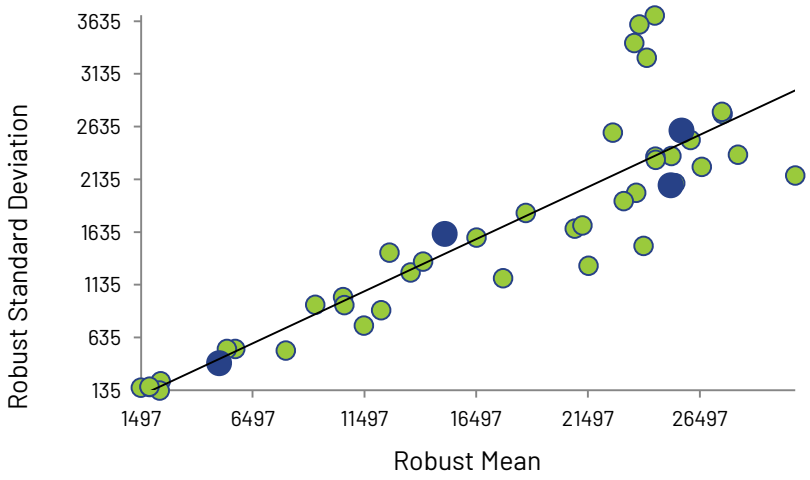
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Lead

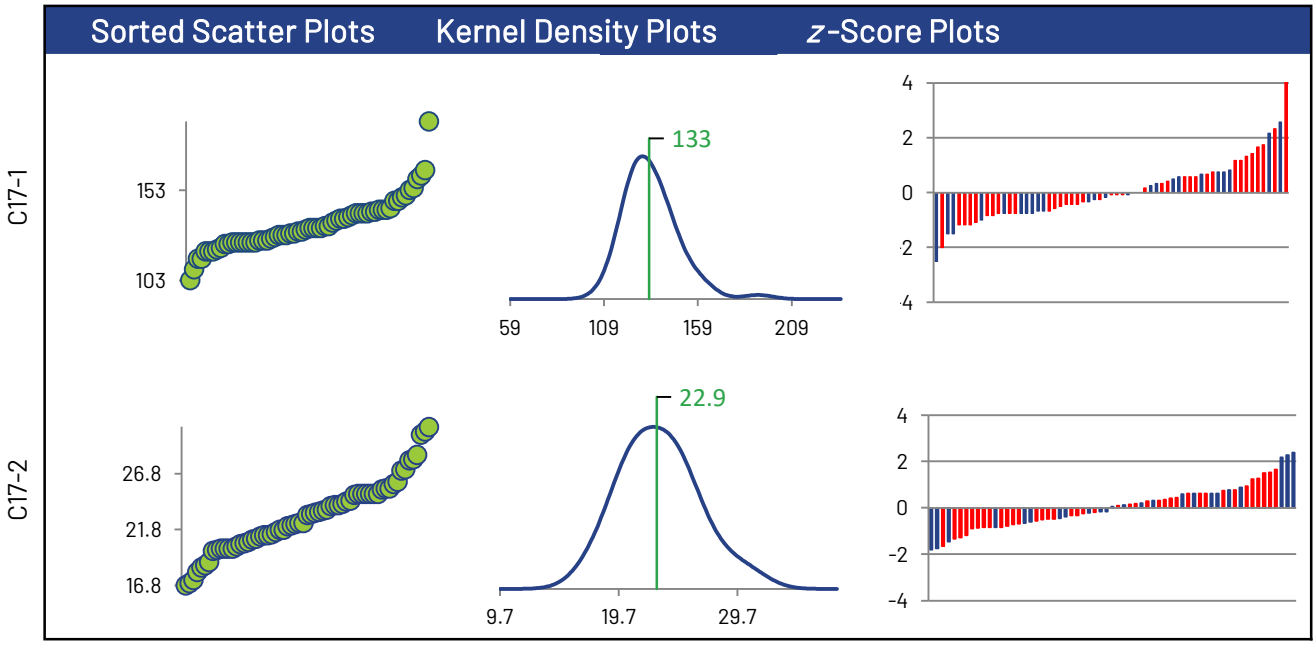
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	63	63	63	63
Median µg/g	132	23.1	225	183
Robust Mean µg/g	133	22.9	226	185
Uncdrtainty of the Assigned Value µg/g	1.89	0.507	4.77	2.83
Robust Standard Deviation µg/g	12.0	3.22	30.3	18.0
Regression Standard Deviation µg/g	11.6	3.39	18.6	15.5
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	12.0	3.39	30.3	18.0
Flagged Outliers	2	2	2	2
|z|>3.0	1	0	0	0
2<|z|<3	4	3	2	2
Failure Rate %*	3.1			

Methods Used

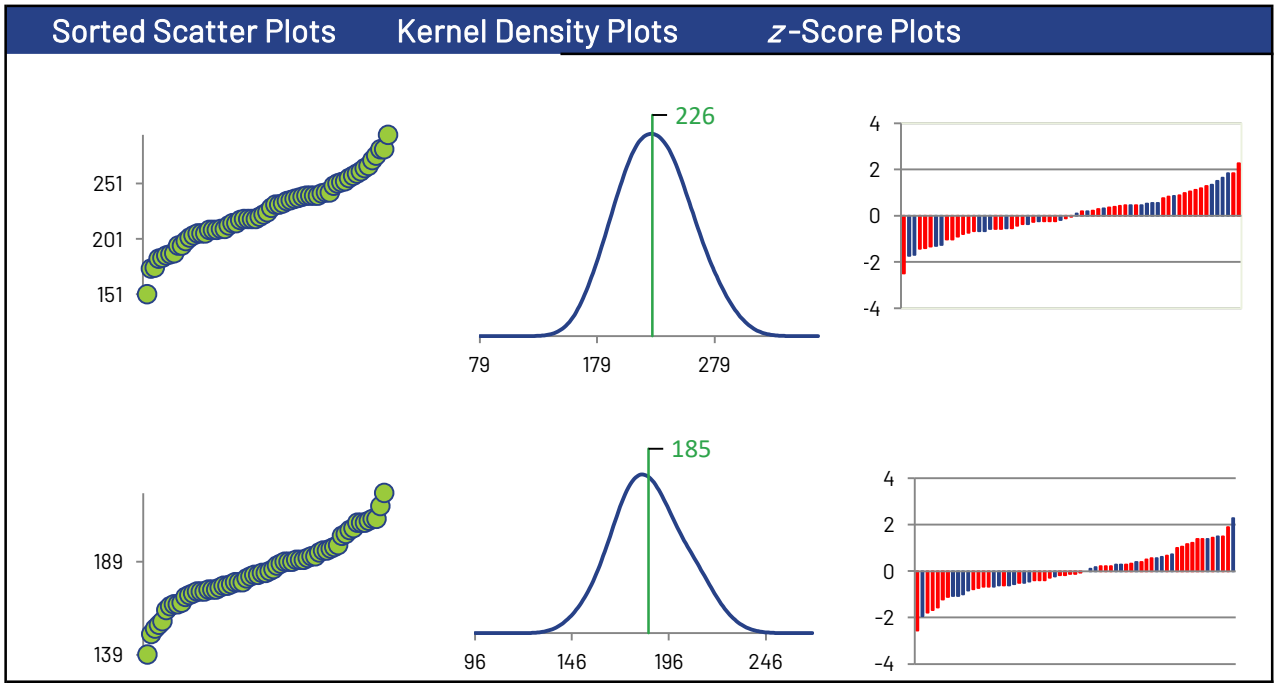
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	24	24	24	24
ICP/MS (Red)	39	39	39	39

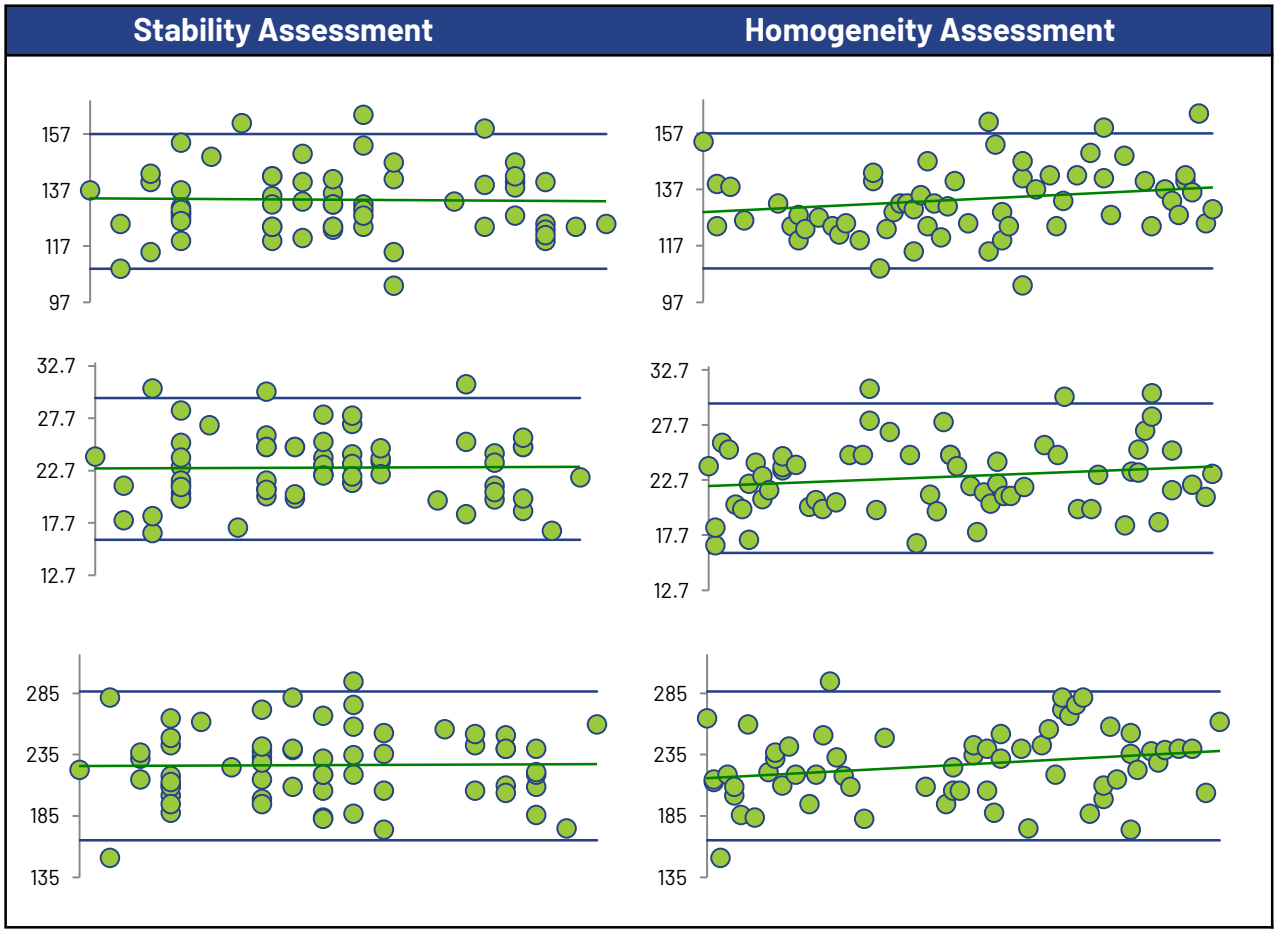
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

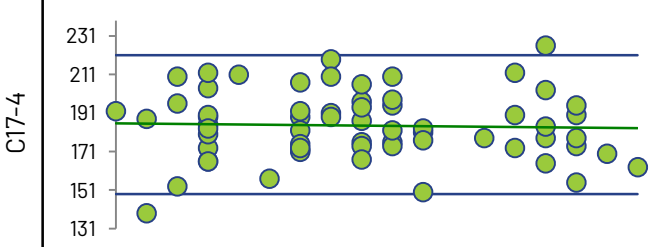
Lead


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
251
201
151
226
79
179
279
4
2
0
-2
-4
C17-4
189
139
185
96
146
196
246
4
2
0
-2
-4

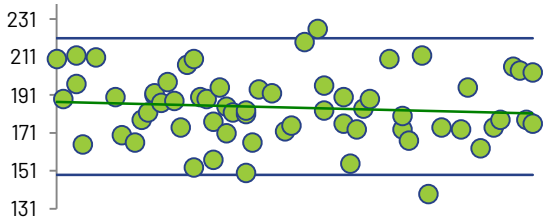

Stability Assessment
Homogeneity Assessment
C17-1
157
137
117
97
C17-2
32.7
27.7
22.7
17.7
12.7
C17-3
285
235
185
135

Lead

Stability Assessment



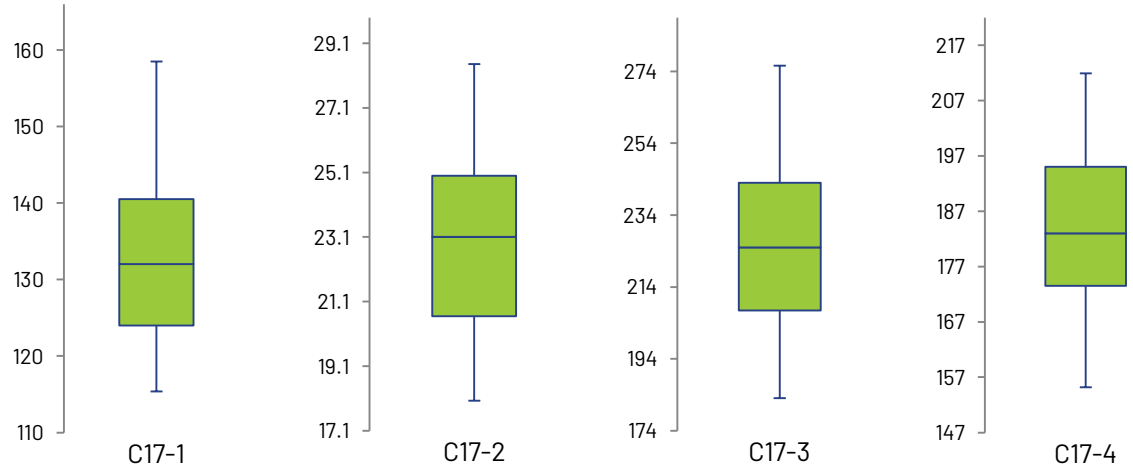
Homogeneity Assessment



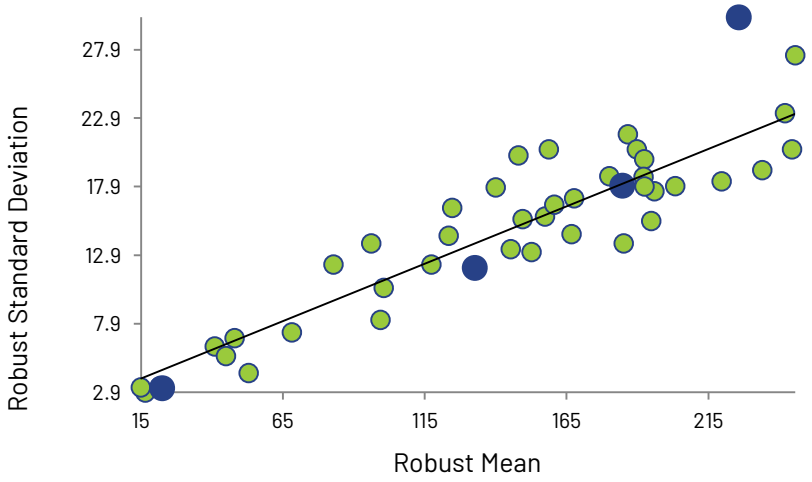
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Manganese

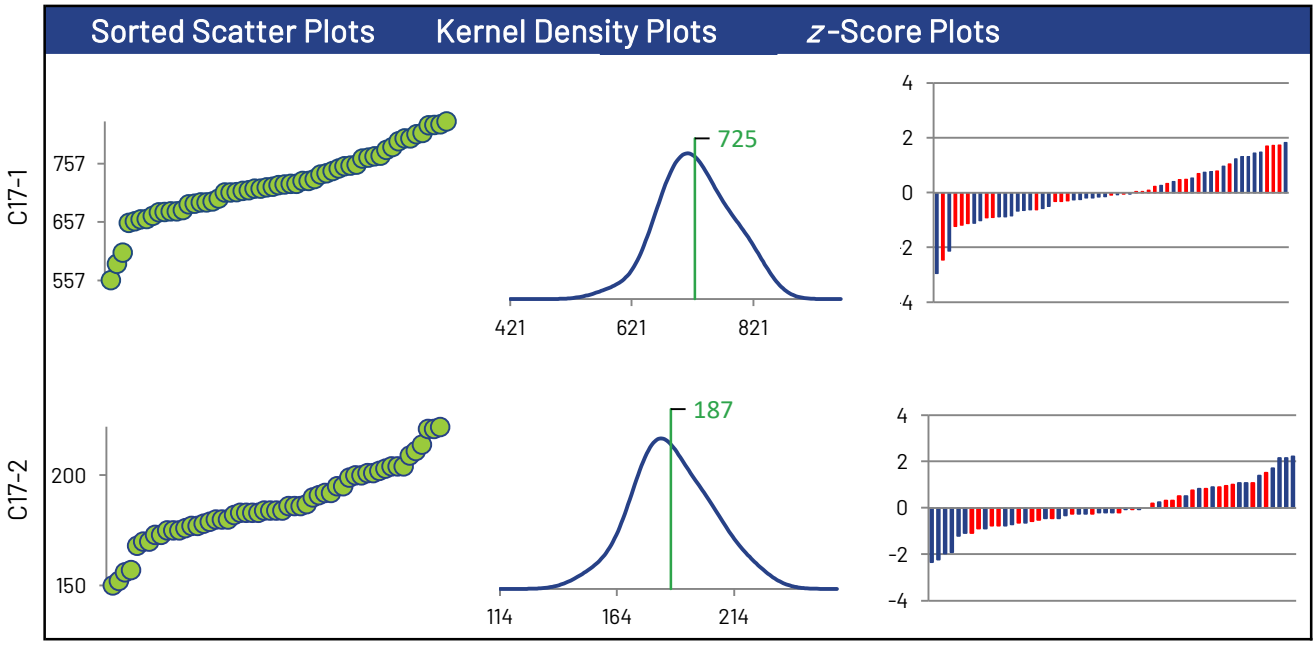
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	57	55	57	57
Median µg/g	720	184	1150	866
Robust Mean µg/g	725	187	1150	860
Uncdrtainty of the Assigned Value µg/g	9.42	2.66	15.0	13.9
Robust Standard Deviation µg/g	56.9	15.8	90.6	84.2
Regression Standard Deviation µg/g	53.2	13.7	84.0	63.0
Stability Flag			Stability	
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	56.9	15.8	215	84.2
Flagged Outliers	0	2	0	0
|z|>3.0	0	0	2	2
2<|z|<3	3	5	1	3
Failure Rate %*	3.5			

Methods Used

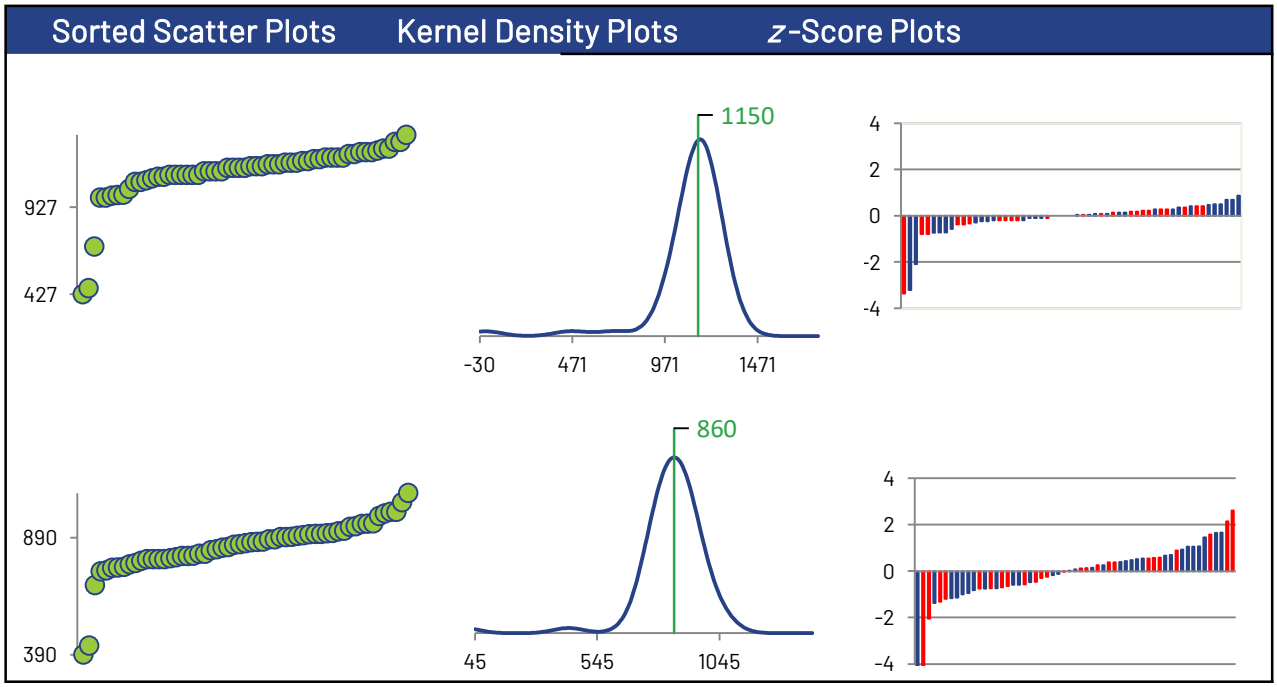
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	32	31	32	32
ICP/OES (Red)	25	24	25	25

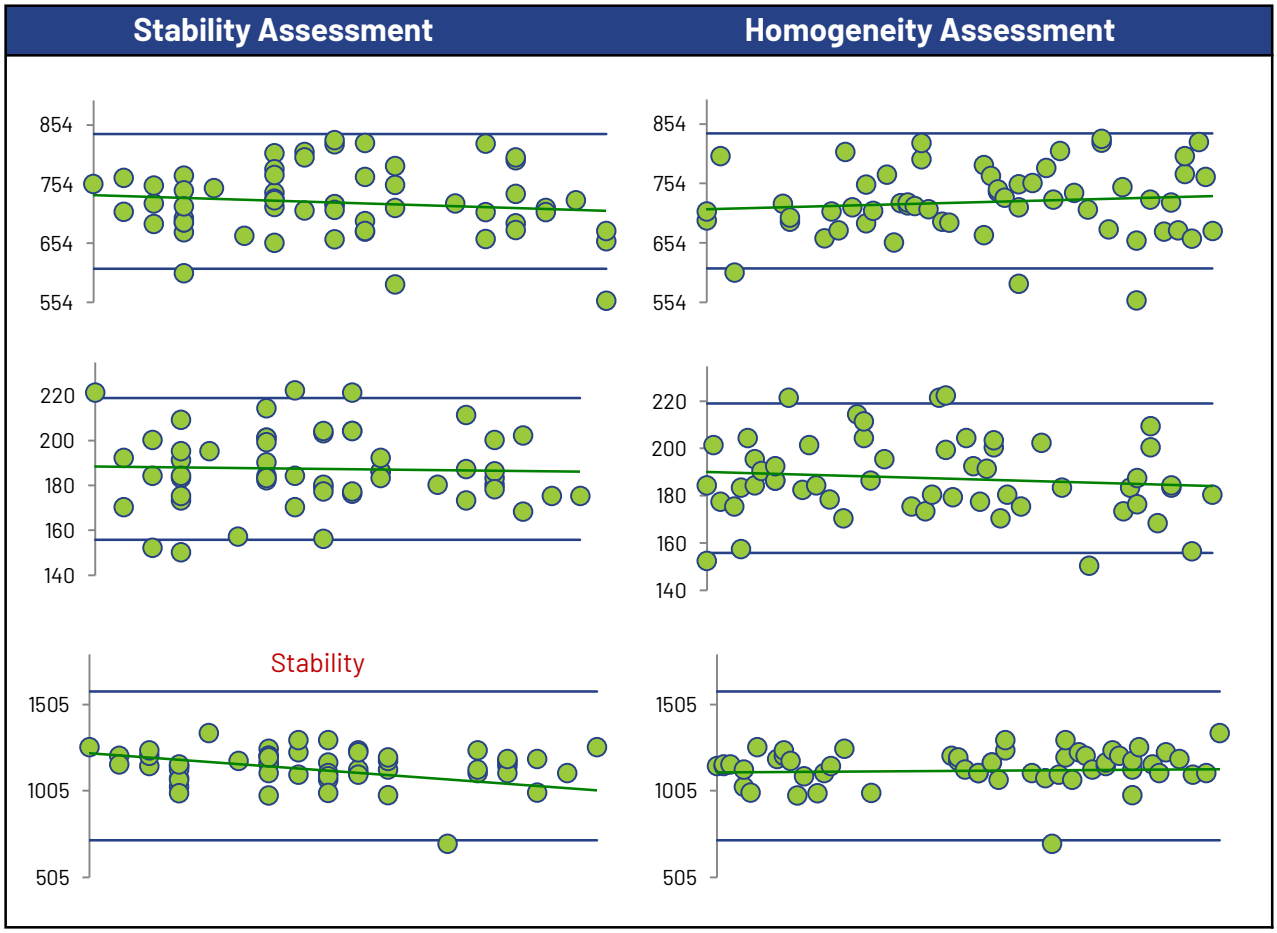
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

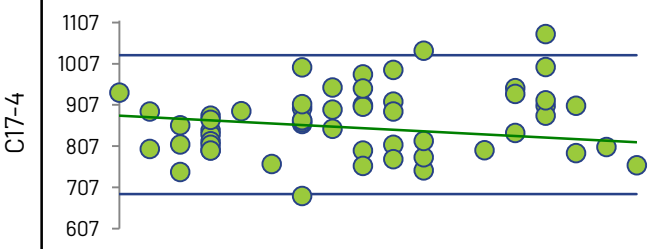
Manganese


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
927
427
1150
-30
471
971
1471
4
2
0
-2
-4
C17-4
890
390
860
45
545
1045
4
2
0
-2
-4

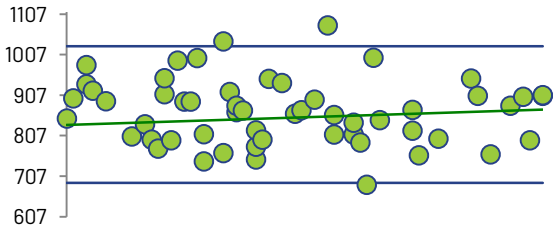

Stability Assessment
Homogeneity Assessment
C17-1
854
754
654
554
C17-2
220
200
180
160
140
C17-3
Stability
1505
1005
505

Manganese

Stability Assessment



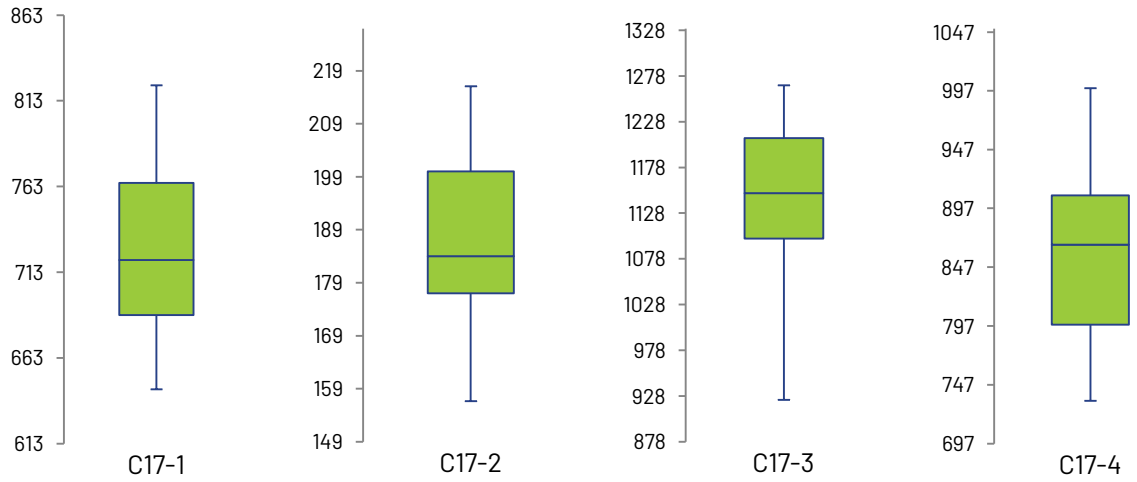
Homogeneity Assessment



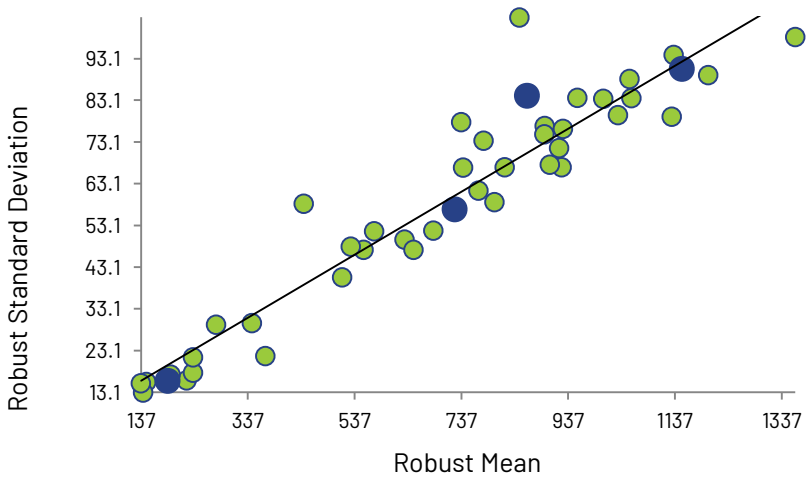
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Mercury

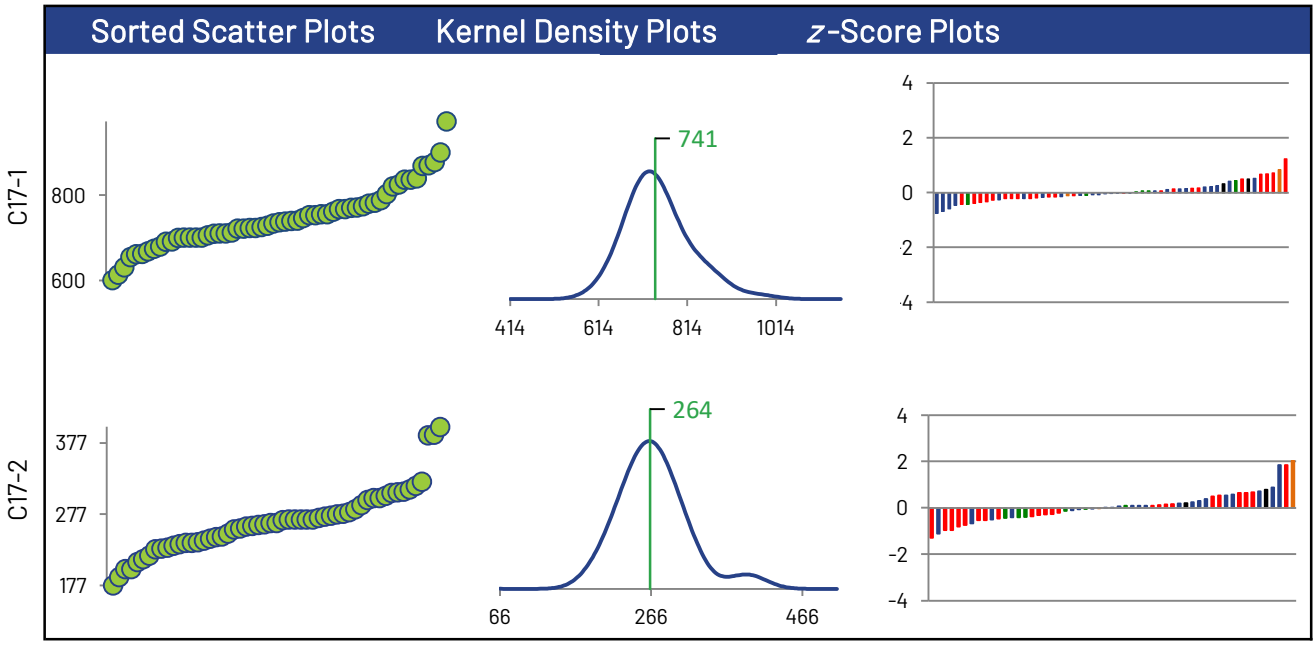
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	57	55	59	54
Median µg/g	736	265	1470	514
Robust Mean µg/g	741	264	1470	516
Uncdrtainty of the Assigned Value µg/g	10.9	6.47	22.1	7.79
Robust Standard Deviation µg/g	65.6	38.4	136	45.8
Regression Standard Deviation µg/g	189	67.4	376	132
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	189	67.4	376	132
Flagged Outliers	2	2	2	3
|z|>3.0	0	0	0	0
2<|z|<3	0	1	0	1
Failure Rate %*	1.6			

Methods Used

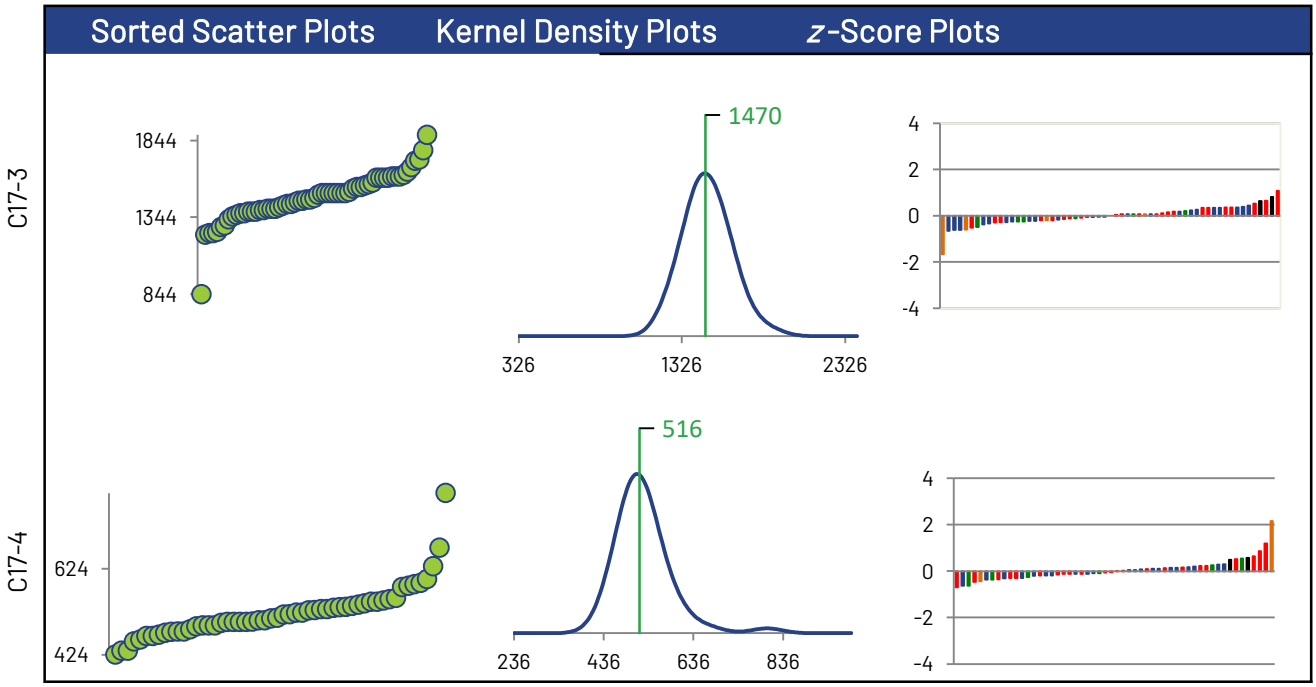
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	24	22	24	21
COLD VAPOUR AA (Red)	23	23	23	23
ATOMIC FLUORESCENCE (Green)	6	6	6	6
ICP/OES (Orange)	2	2	4	2
PYROLYTIC AA (Black)	2	2	2	2

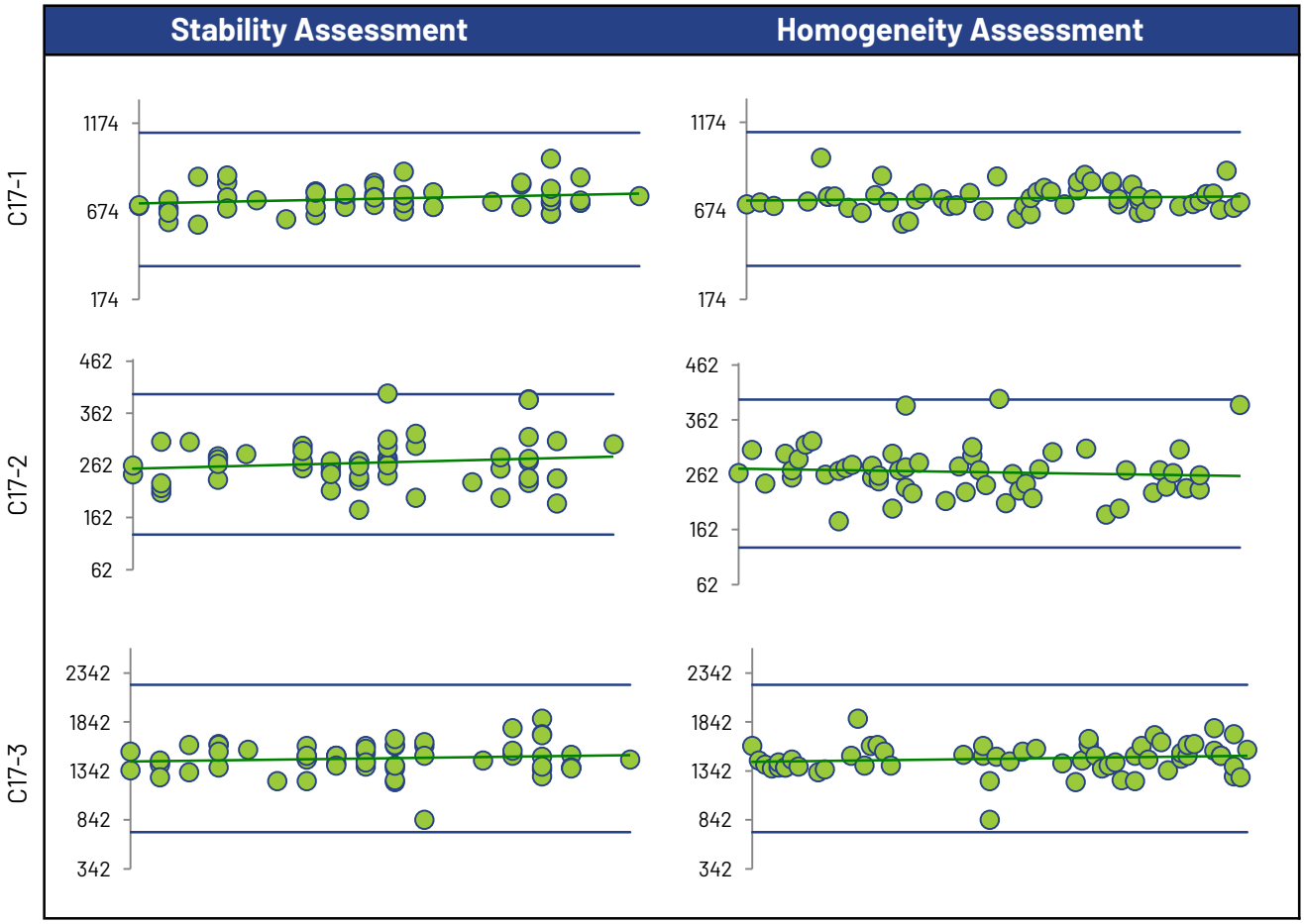
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

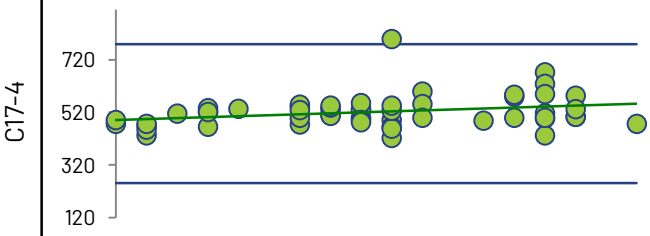
Mercury


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
1844
1344
844
1470
326
1326
2326
4
2
0
-2
-4
C17-4
624
424
516
236
436
636
836
4
2
0
-2
-4

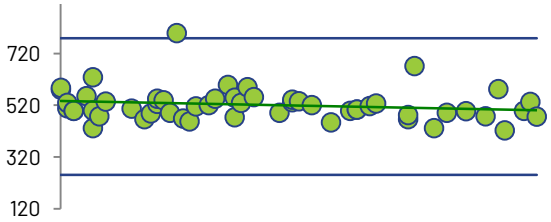

Stability Assessment
Homogeneity Assessment
C17-1
1174
674
174
1174
674
174
C17-2
462
362
262
162
62
462
362
262
162
62
C17-3
2342
1842
1342
842
342
2342
1842
1342
842
342

Mercury

Stability Assessment



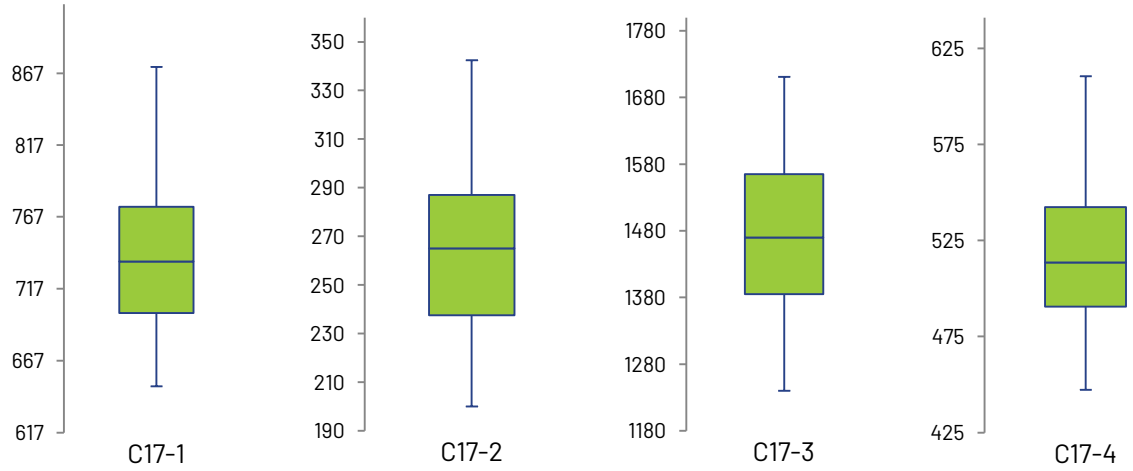
Homogeneity Assessment



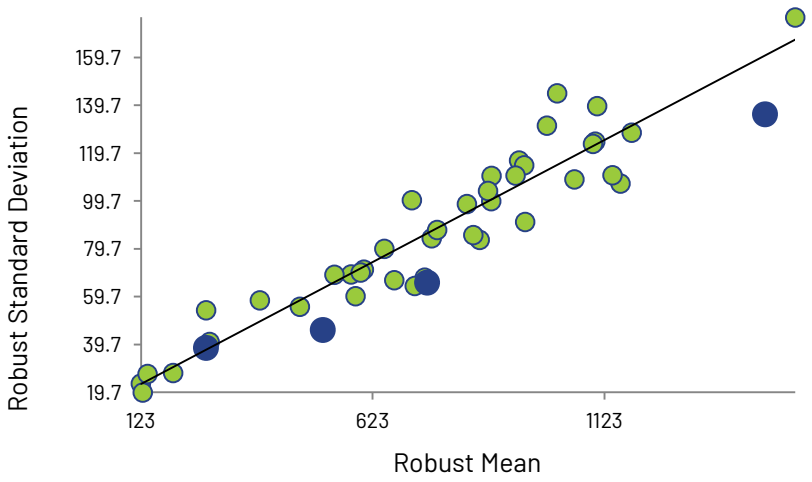
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Nickel

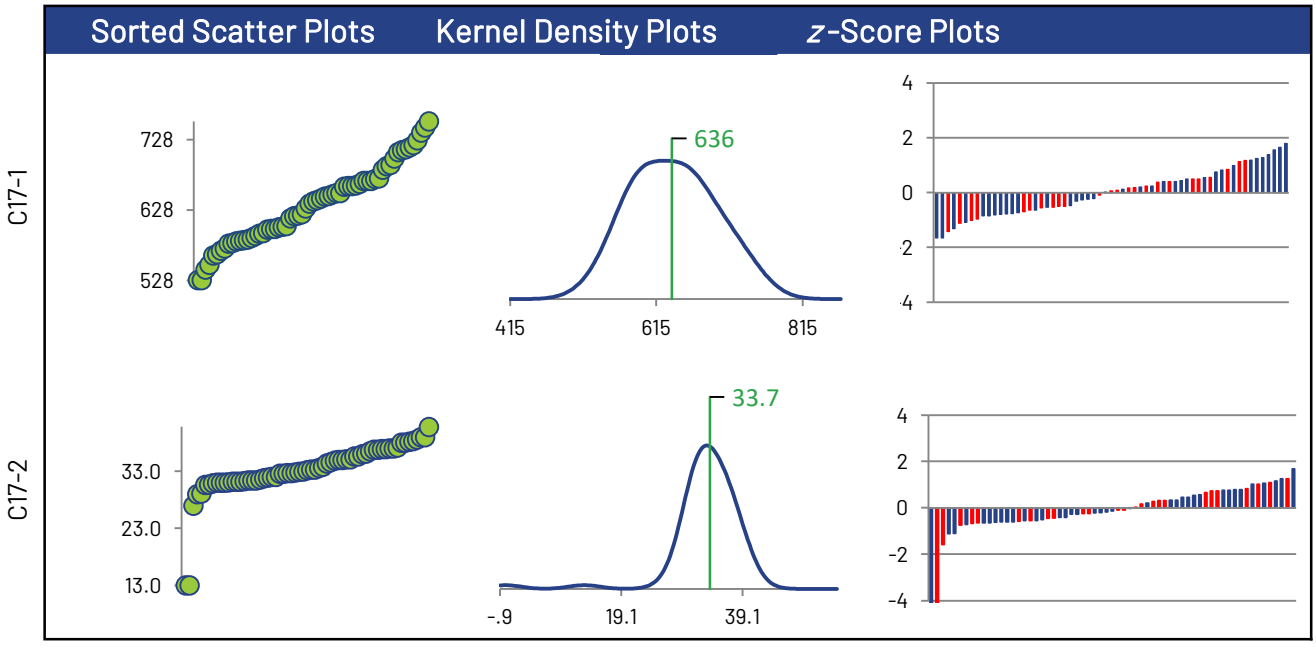
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	61	63	61	61
Median µg/g	640	33.2	437	425
Robust Mean µg/g	636	33.7	437	428
Uncdrtainty of the Assigned Value µg/g	9.67	0.518	6.58	5.47
Robust Standard Deviation µg/g	60.4	3.29	41.1	34.2
Regression Standard Deviation µg/g	65.5	3.47	45.0	44.1
Stability Flag		Stability		
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/g	65.5	4.23	47.3	44.1
Flagged Outliers	2	0	2	2
|z|>3.0	0	2	1	0
2<|z|<3	0	0	1	1
Failure Rate %*	3.2			

Methods Used

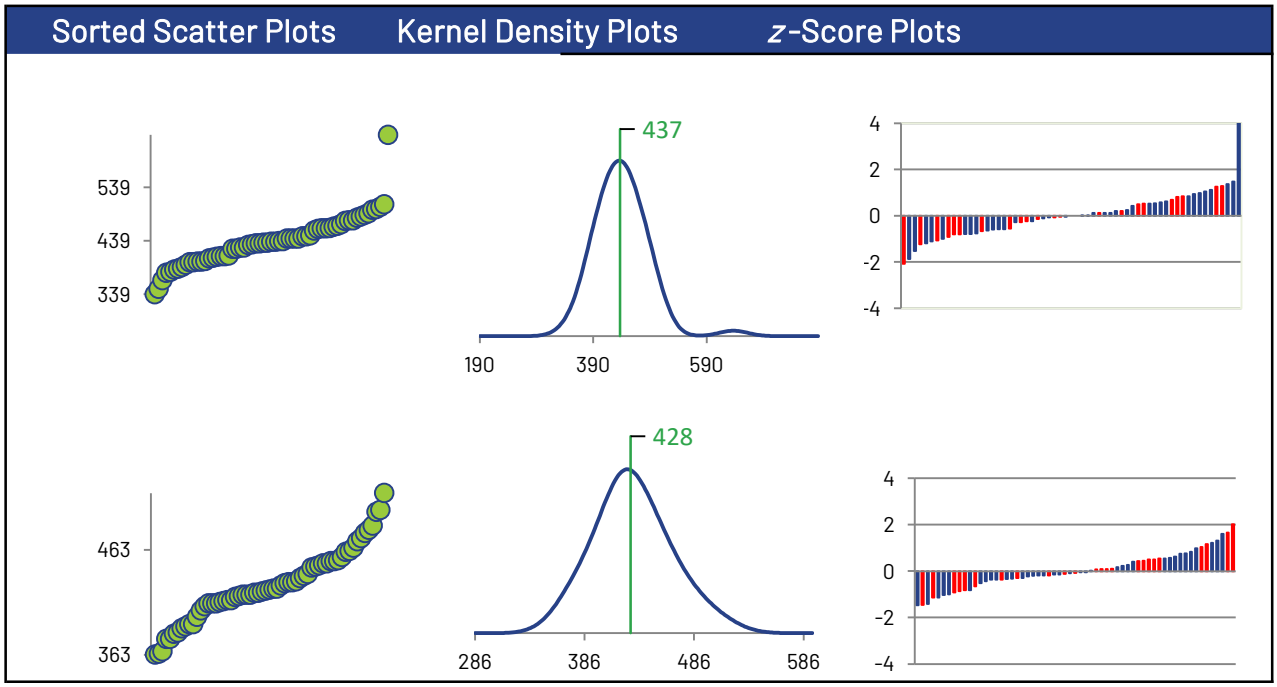
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	37	38	37	37
ICP/OES (Red)	24	25	24	24

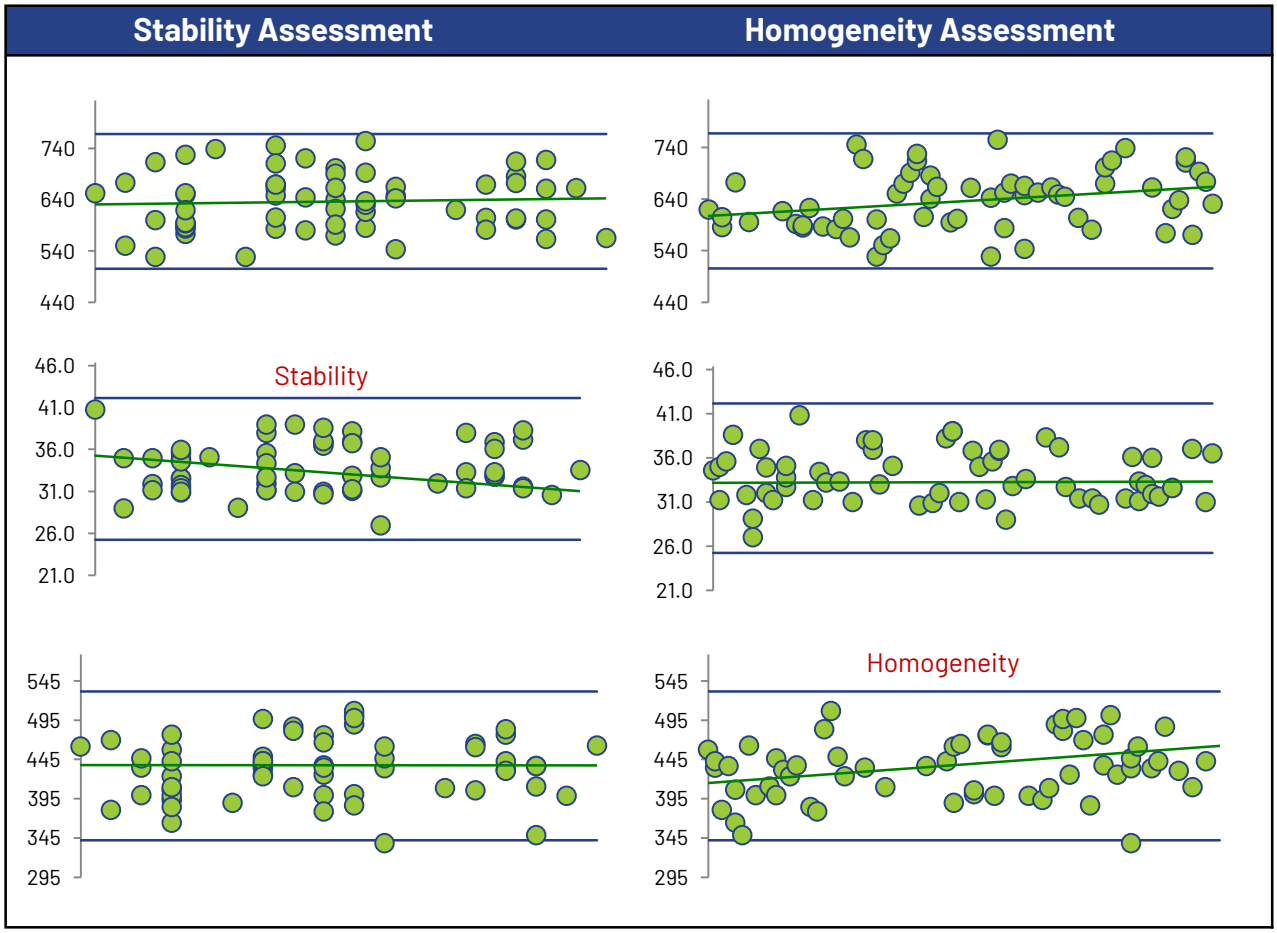
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

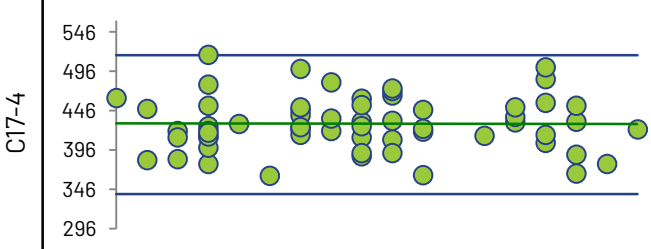
Nickel


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
539
439
339
437
190
390
590
4
2
0
-2
-4
C17-4
463
363
428
286
386
486
586
4
2
0
-2
-4

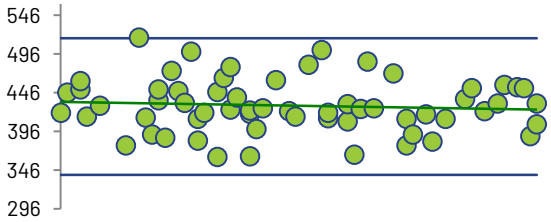

Stability Assessment
Homogeneity Assessment
C17-1
740
640
540
440
C17-2
46.0
41.0
36.0
31.0
26.0
21.0
Stability
C17-3
545
495
445
395
345
295
Homogeneity

Nickel

Stability Assessment



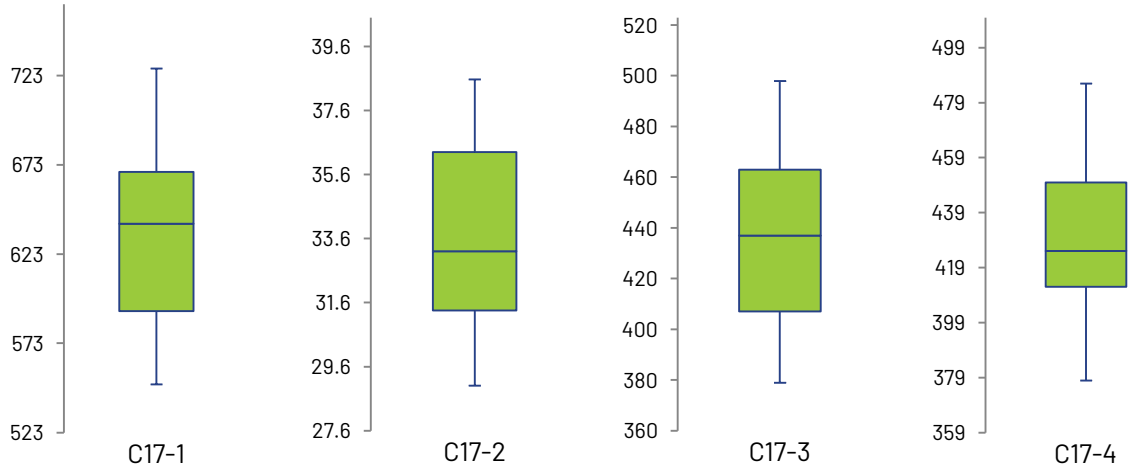
Homogeneity Assessment



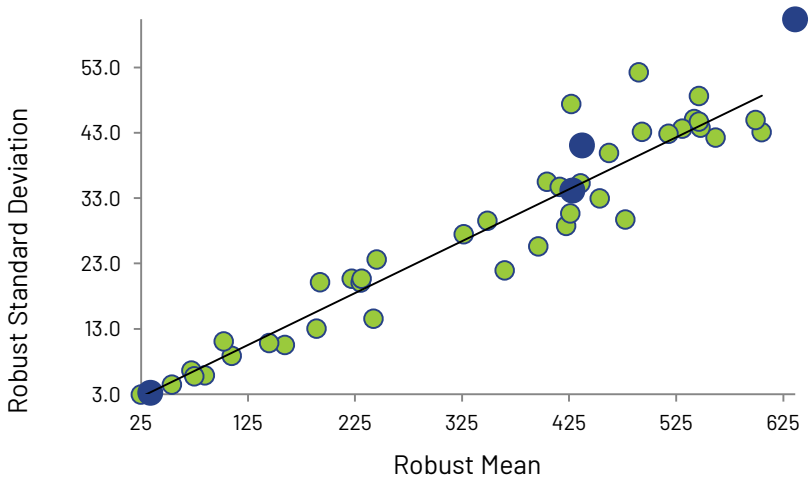
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Strontium

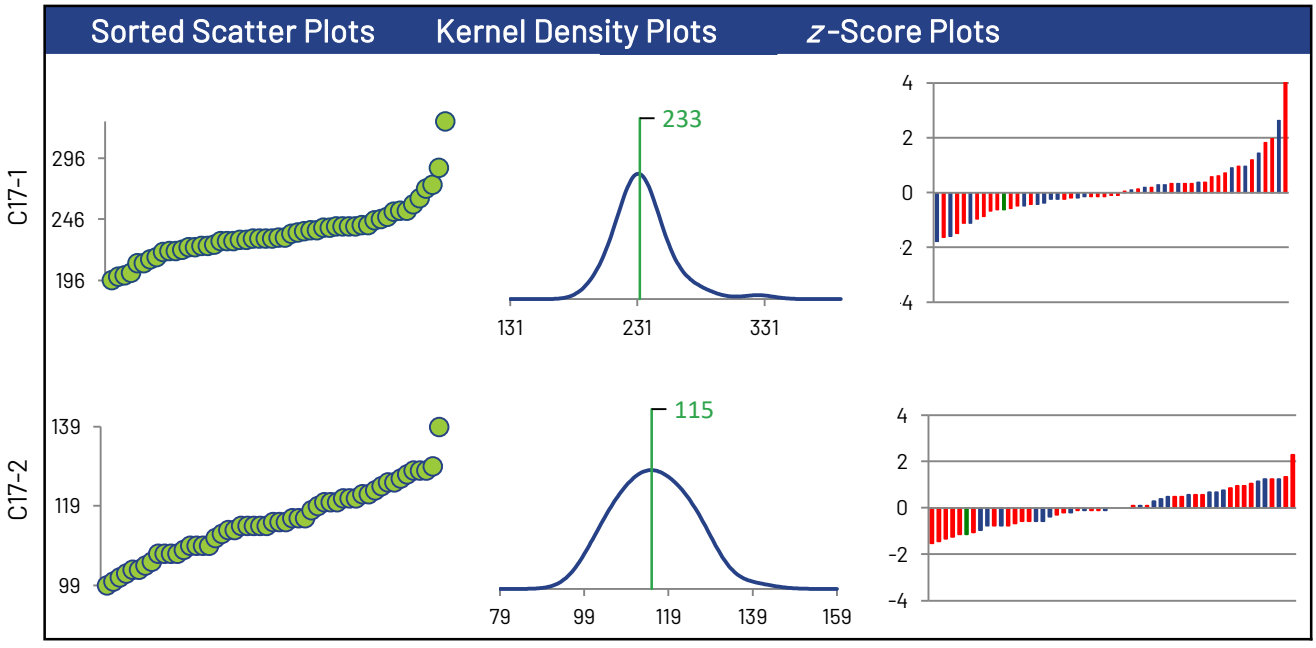
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	53	53	53	53
Median µg/g	231	115	347	175
Robust Mean µg/g	233	115	345	176
Uncdrtainty of the Assigned Value µg/g	2.92	1.61	5.25	2.28
Robust Standard Deviation µg/g	17.0	9.40	30.6	13.3
Regression Standard Deviation µg/g	20.8	10.5	30.5	15.8
Stability Flag				
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/g	20.8	10.5	41.2	15.8
Flagged Outliers	0	0	0	0
|z|>3.0	1	0	0	0
2<|z|<3	1	1	0	2
Failure Rate %*	0.0			

Methods Used

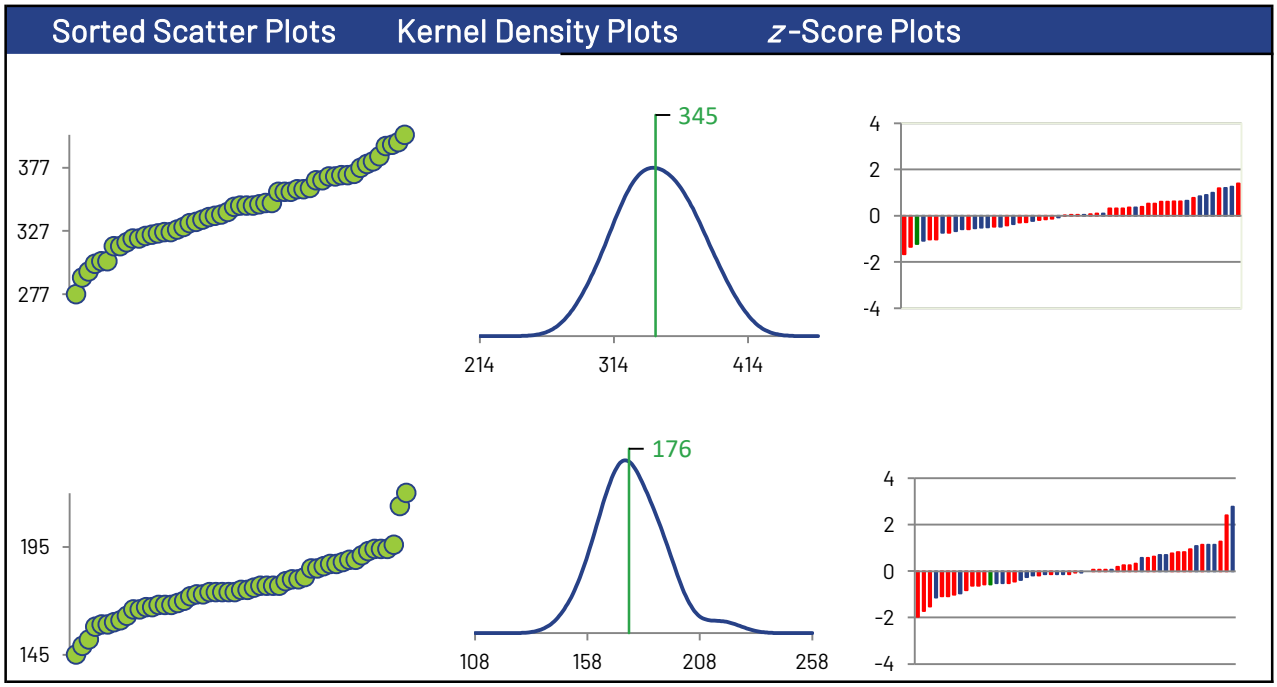
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	20	20	20	20
ICP/MS (Red)	32	32	32	32
AA FLAME (Green)	1	1	1	1

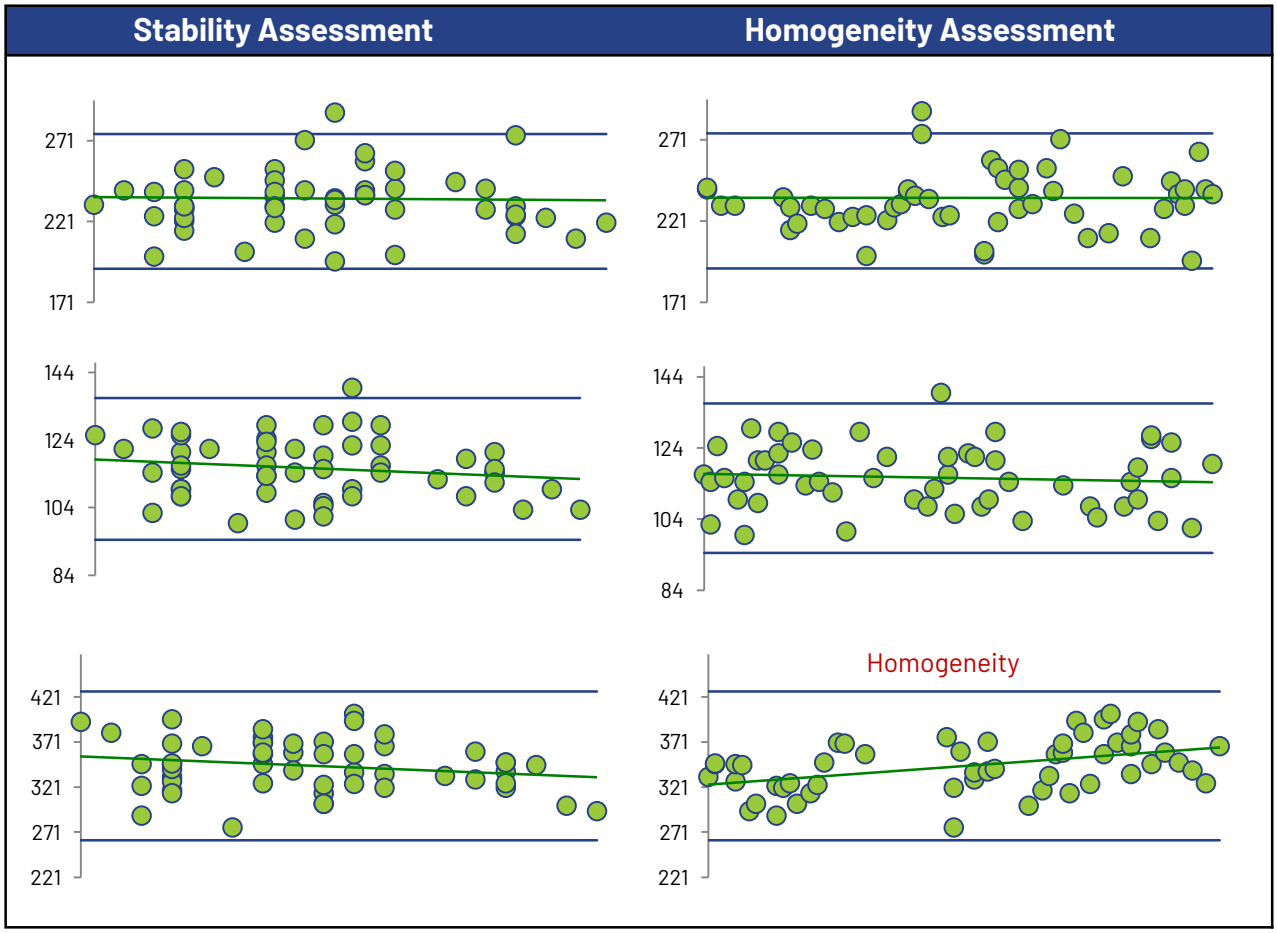
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

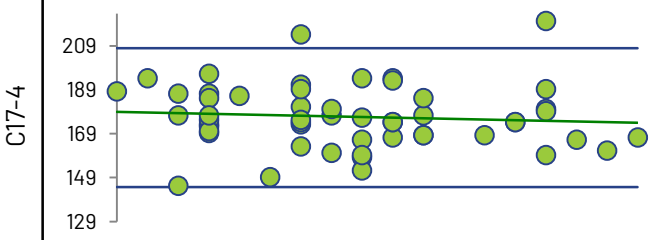
Strontium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
377
327
277
345
214
314
414
4
2
0
-2
-4
C17-4
195
145
176
108
158
208
258
4
2
0
-2
-4

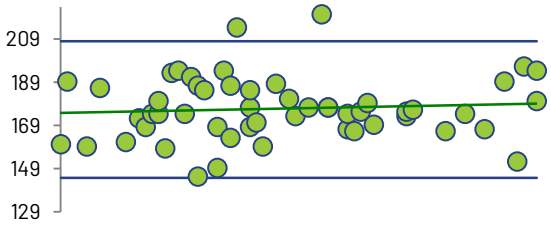

Stability Assessment
Homogeneity Assessment
C17-1
271
221
171
C17-2
144
124
104
84
C17-3
421
371
321
271
221
Homogeneity

Strontium

Stability Assessment



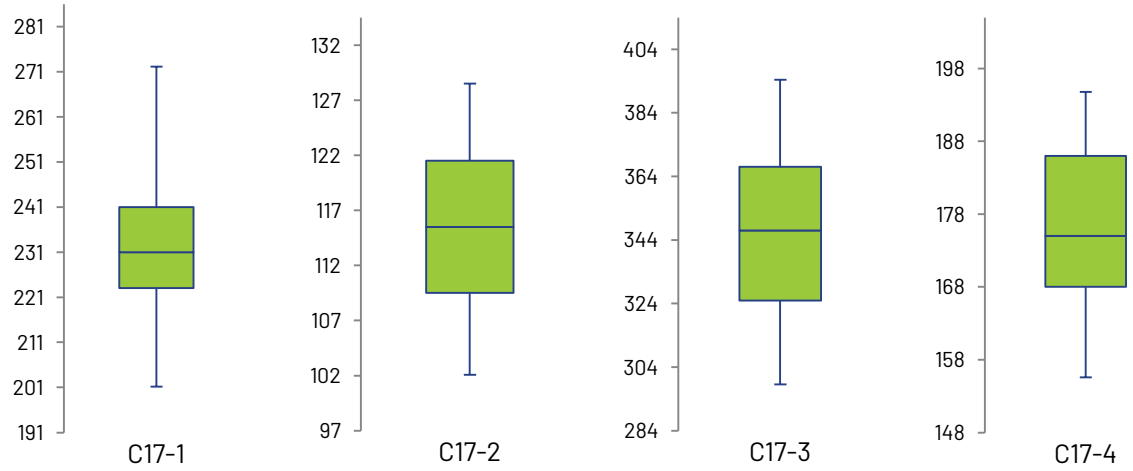
Homogeneity Assessment



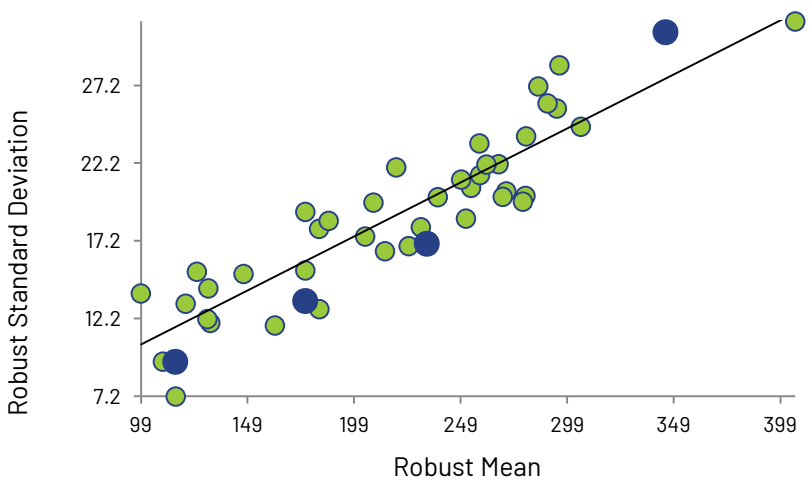
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Tin

Summary Statistics

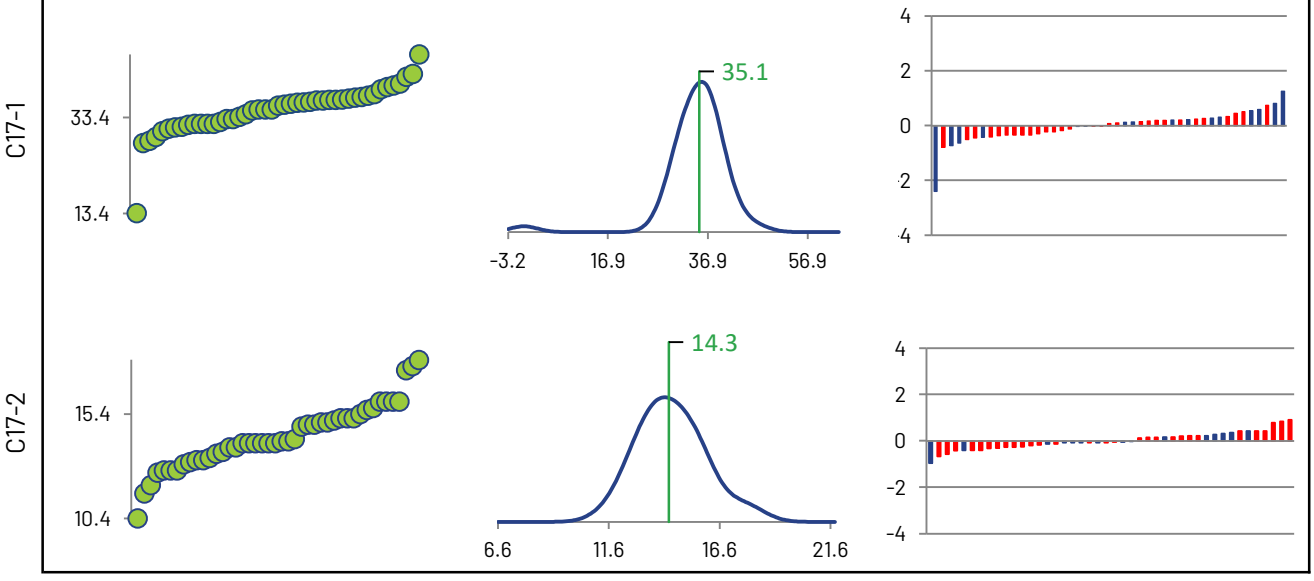
Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	45	44	45	45
Median µg/g	35.8	14.1	52.2	47.0
Robust Mean µg/g	35.1	14.3	52.4	46.7
Uncdrtainty of the Assigned Value µg/g	0.732	0.269	1.03	0.755
Robust Standard Deviation µg/g	3.93	1.43	5.52	4.05
Regression Standard Deviation µg/g	9.04	4.05	13.2	11.8
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	9.04	4.05	13.2	11.8
Flagged Outliers	0	0	0	0
|z|>3.0	0	0	0	0
2<|z|<3	1	0	1	1
Failure Rate %*	0.0			

Methods Used

Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	16	15	16	16
ICP/MS (Red)	29	29	29	29

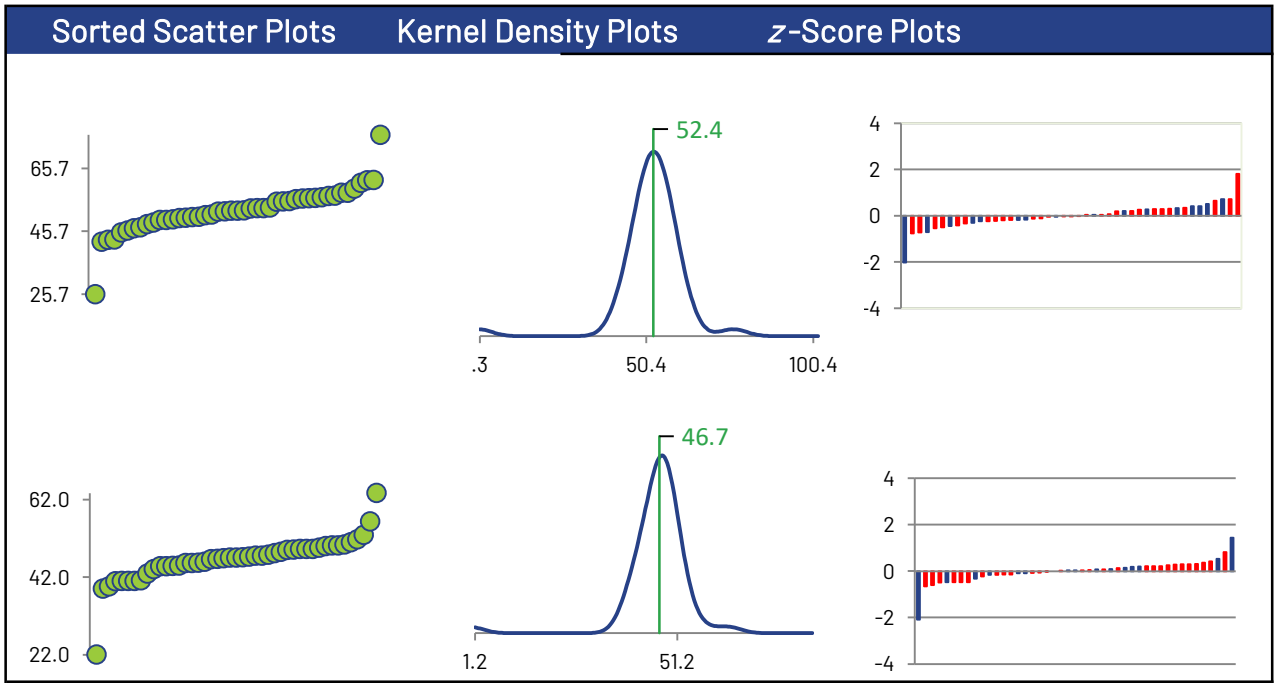
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers

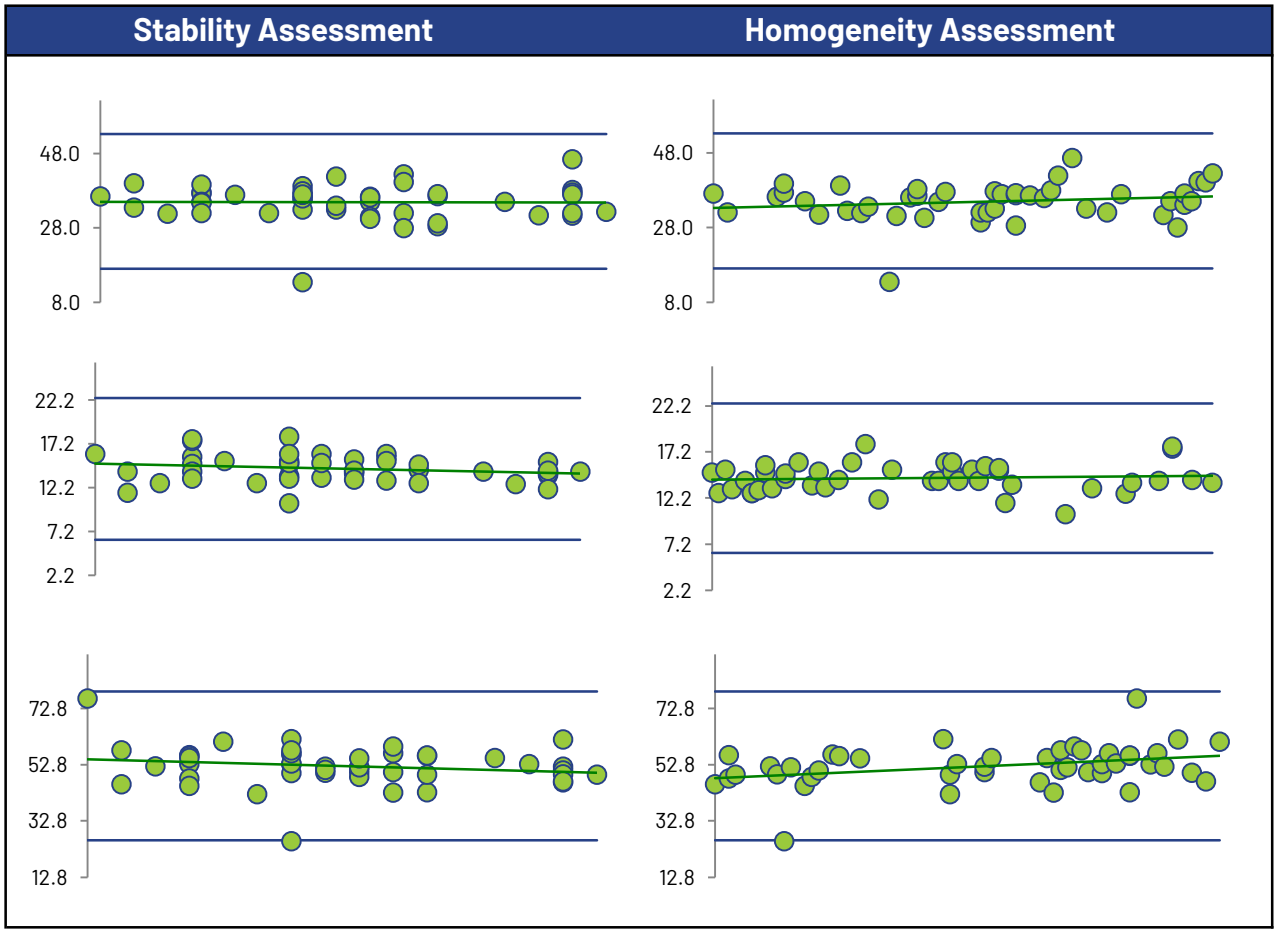
Sorted Scatter Plots | Kernel Density Plots | *z*-Score Plots



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

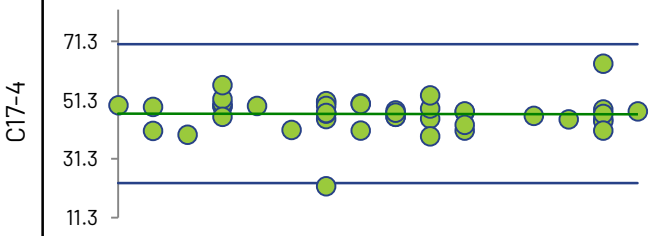
Tin


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
65.7
45.7
25.7
52.4
.3
50.4
100.4
4
2
0
-2
-4
C17-4
62.0
42.0
22.0
46.7
1.2
51.2
4
2
0
-2
-4

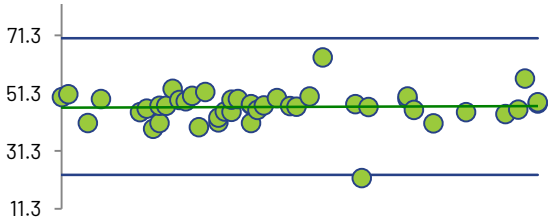

Stability Assessment
Homogeneity Assessment
C17-1
48.0
28.0
8.0
48.0
28.0
8.0
C17-2
22.2
17.2
12.2
7.2
2.2
22.2
17.2
12.2
7.2
2.2
C17-3
72.8
52.8
32.8
12.8
72.8
52.8
32.8
12.8

Tin

Stability Assessment



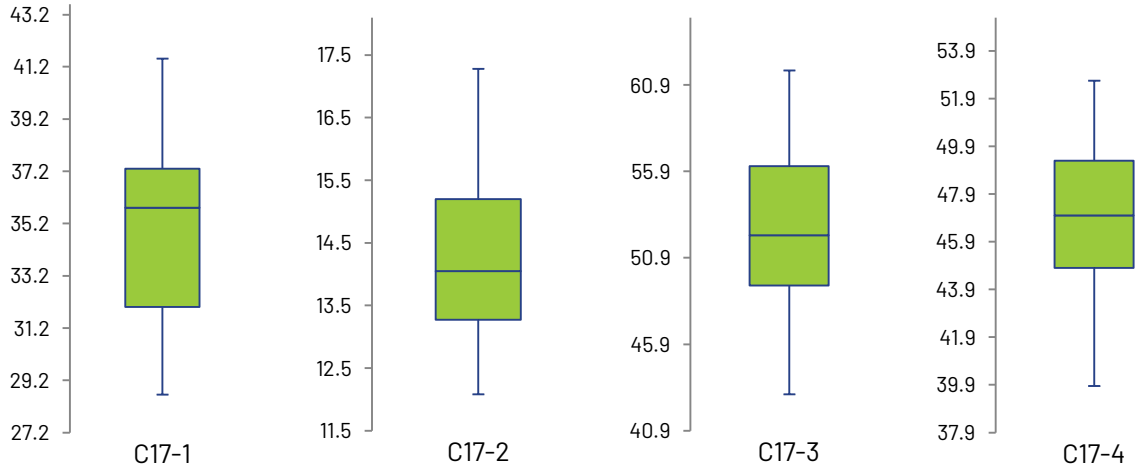
Homogeneity Assessment



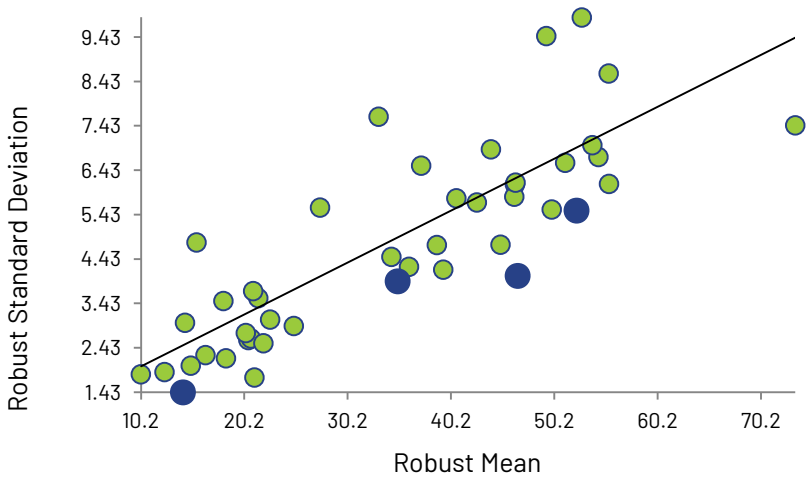
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Titanium

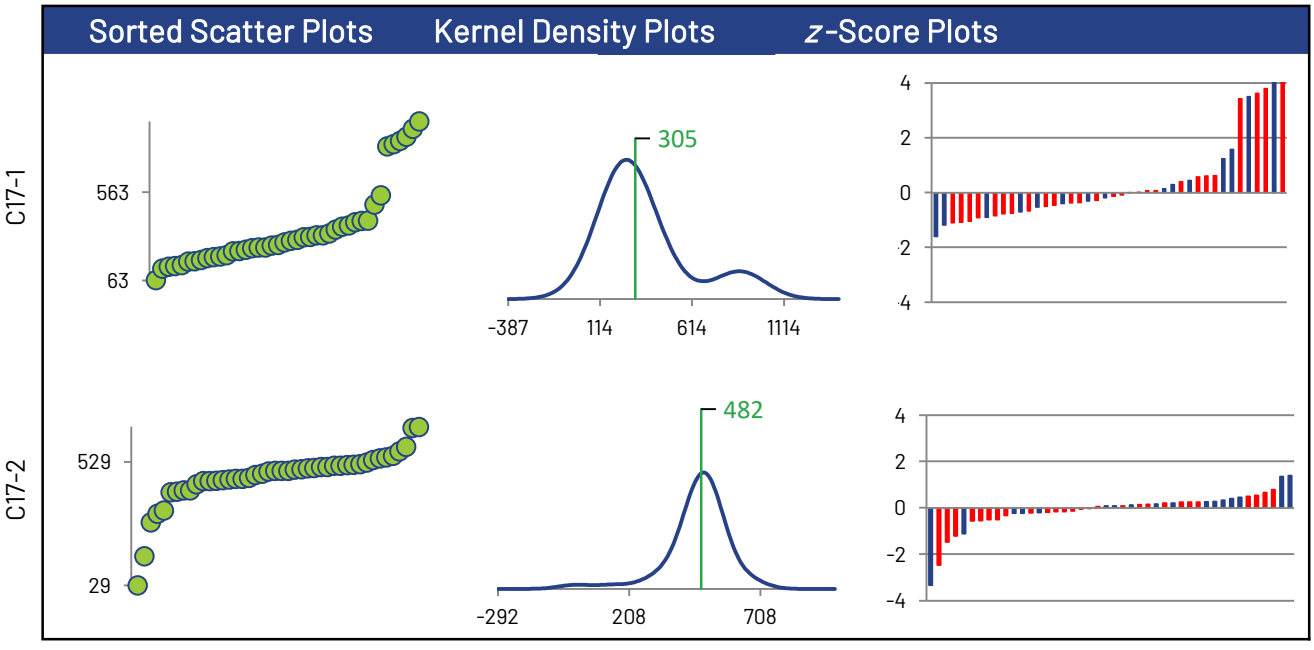
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	42	44	43	44
Median µg/g	282	493	310	301
Robust Mean µg/g	305	482	334	334
Uncdrtainty of the Assigned Value µg/g	28.9	12.1	28.2	35.8
Robust Standard Deviation µg/g	150	64.0	148	190
Regression Standard Deviation µg/g	91.3	136	98.7	98.7
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	150	136	148	190
Flagged Outliers	2	0	1	0
|z|>3.0	6	1	4	4
2<|z|<3	0	1	4	1
Failure Rate %*	8.9			

Methods Used

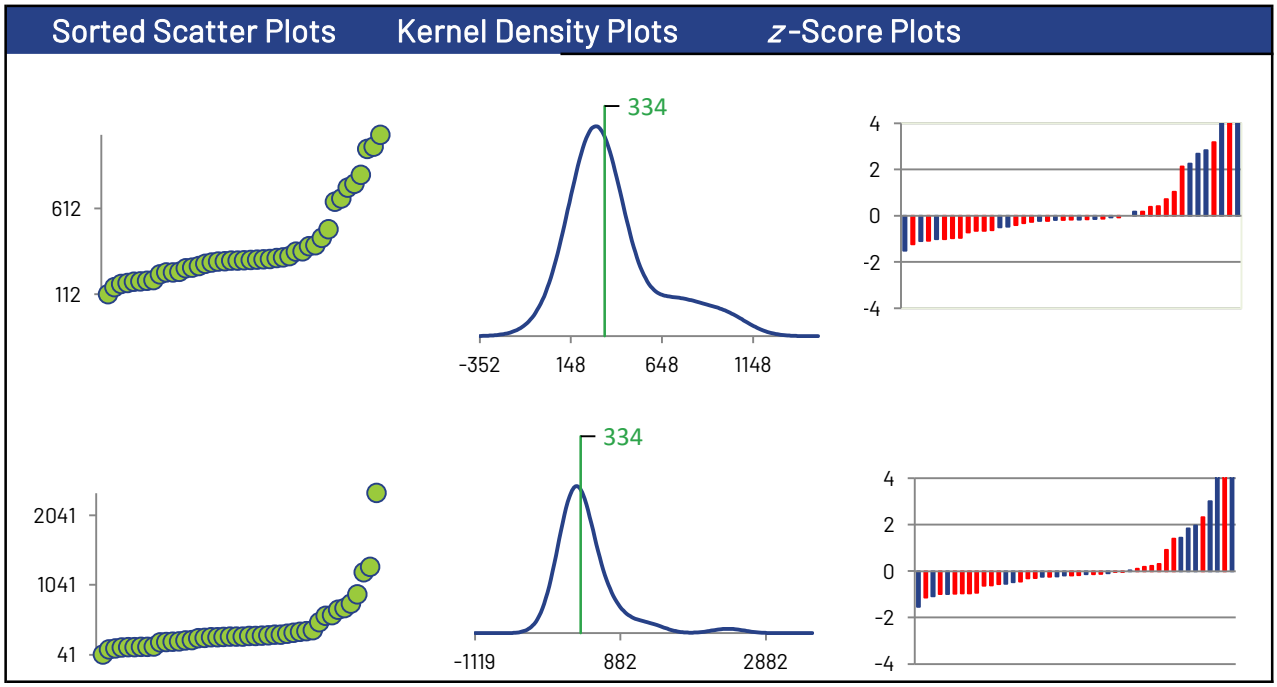
Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	15	17	16	17
ICP/MS (Red)	27	27	27	27

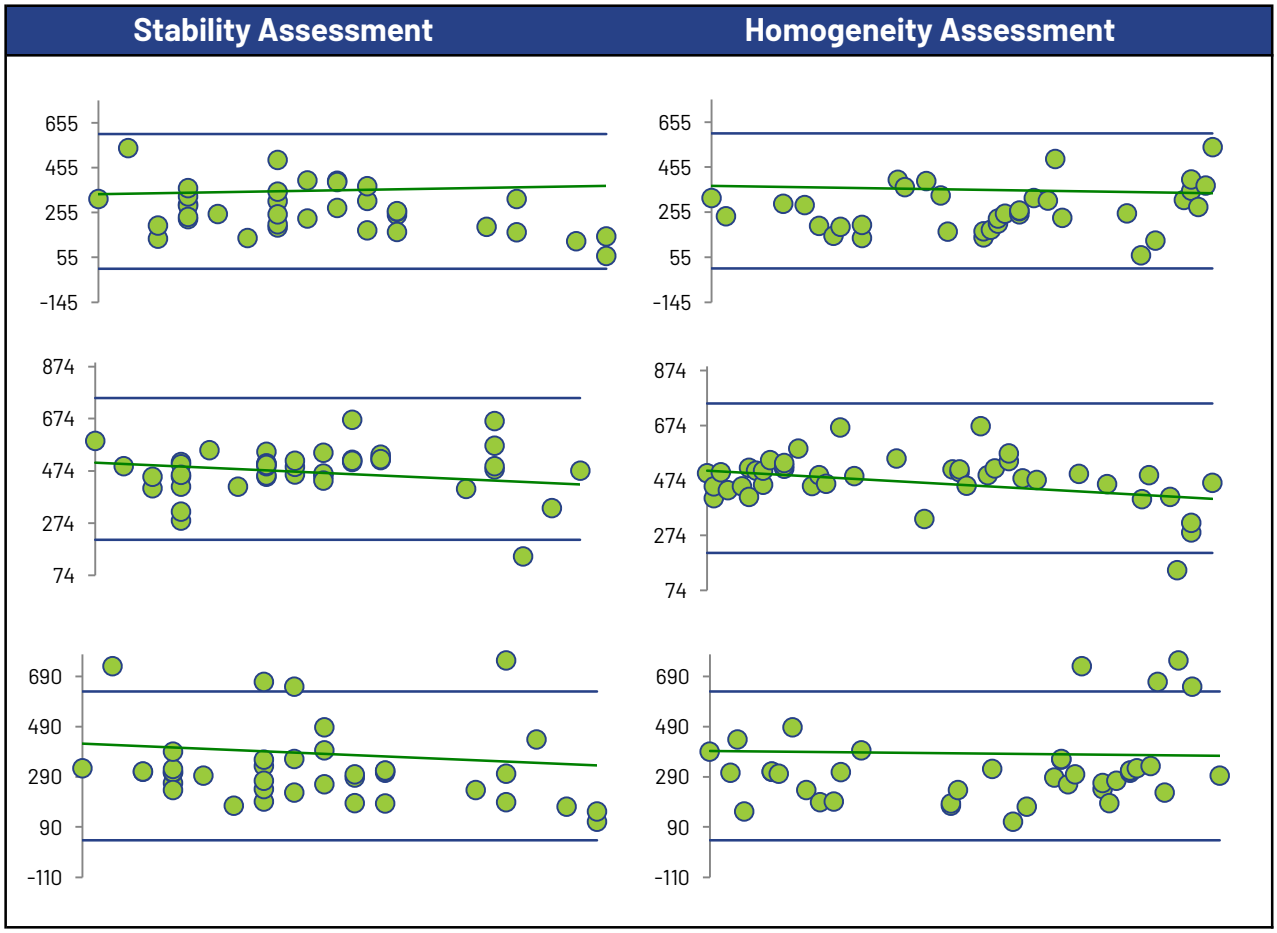
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

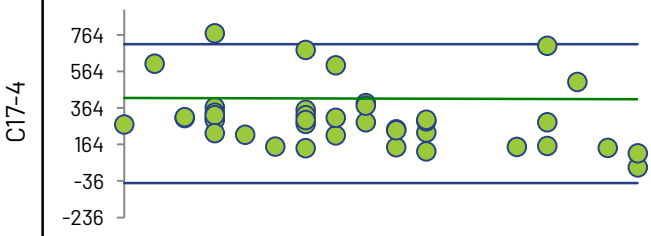
Titanium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
612
112
334
-352
148
648
1148
4
2
0
-2
-4
C17-4
2041
1041
41
334
-1119
882
2882
4
2
0
-2
-4

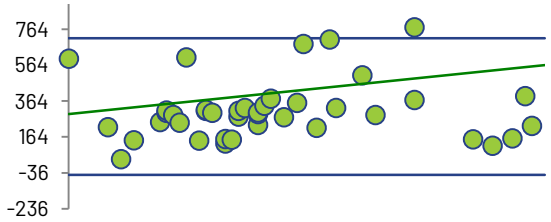

Stability Assessment
Homogeneity Assessment
C17-1
655
455
255
55
-145
C17-2
874
674
474
274
74
C17-3
690
490
290
90
-110

Titanium

Stability Assessment



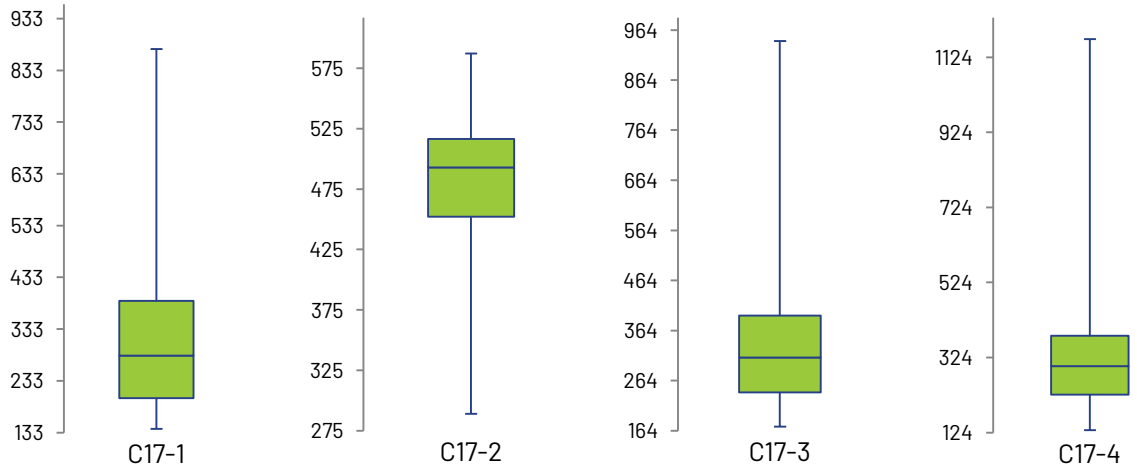
Homogeneity Assessment



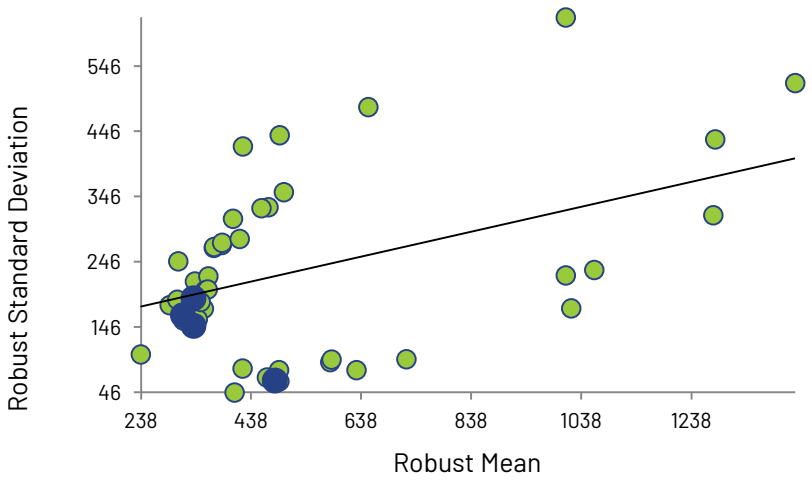
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Uranium

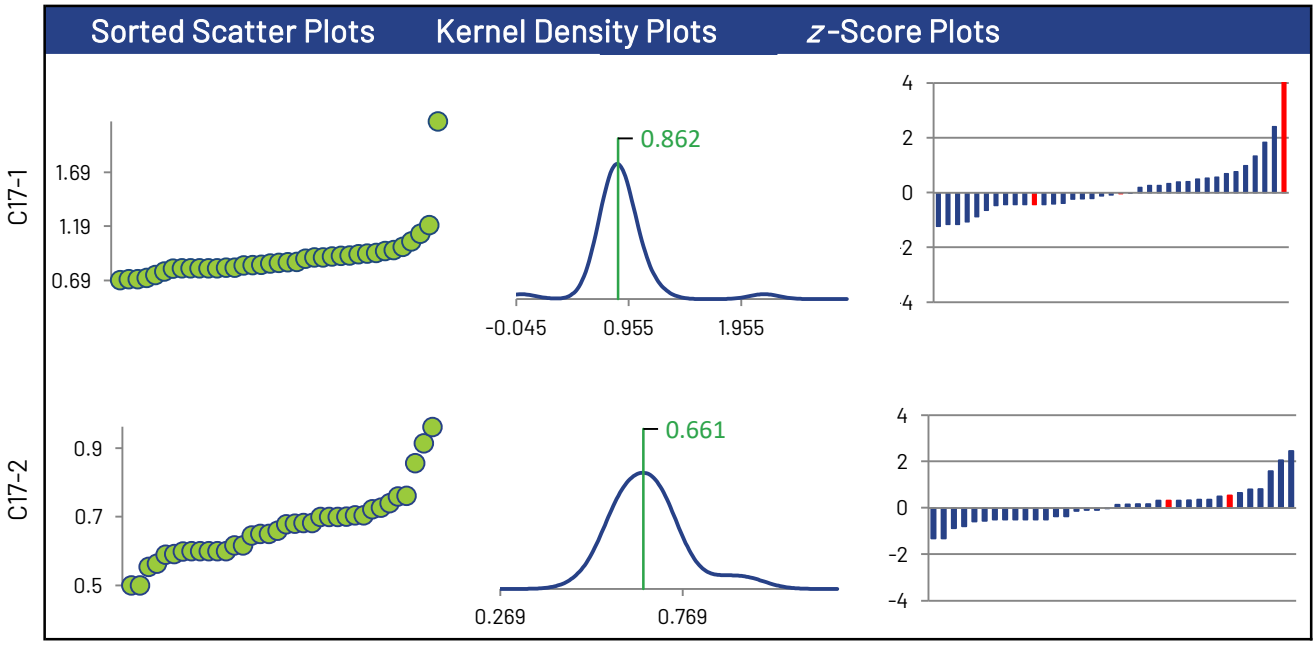
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	37	36	39	36
Median µg/g	0.850	0.669	2.88	0.738
Robust Mean µg/g	0.862	0.661	2.92	0.740
Uncdrtainty of the Assigned Value µg/g	0.0226	0.0167	0.0879	0.0205
Robust Standard Deviation µg/g	0.110	0.0803	0.439	0.0982
Regression Standard Deviation µg/g	0.140	0.123	0.319	0.129
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	0.140	0.123	0.439	0.129
Flagged Outliers	3	2	3	3
|z|>3.0	1	0	1	0
2<|z|<3	1	2	0	0
Failure Rate %*	2.1			

Methods Used

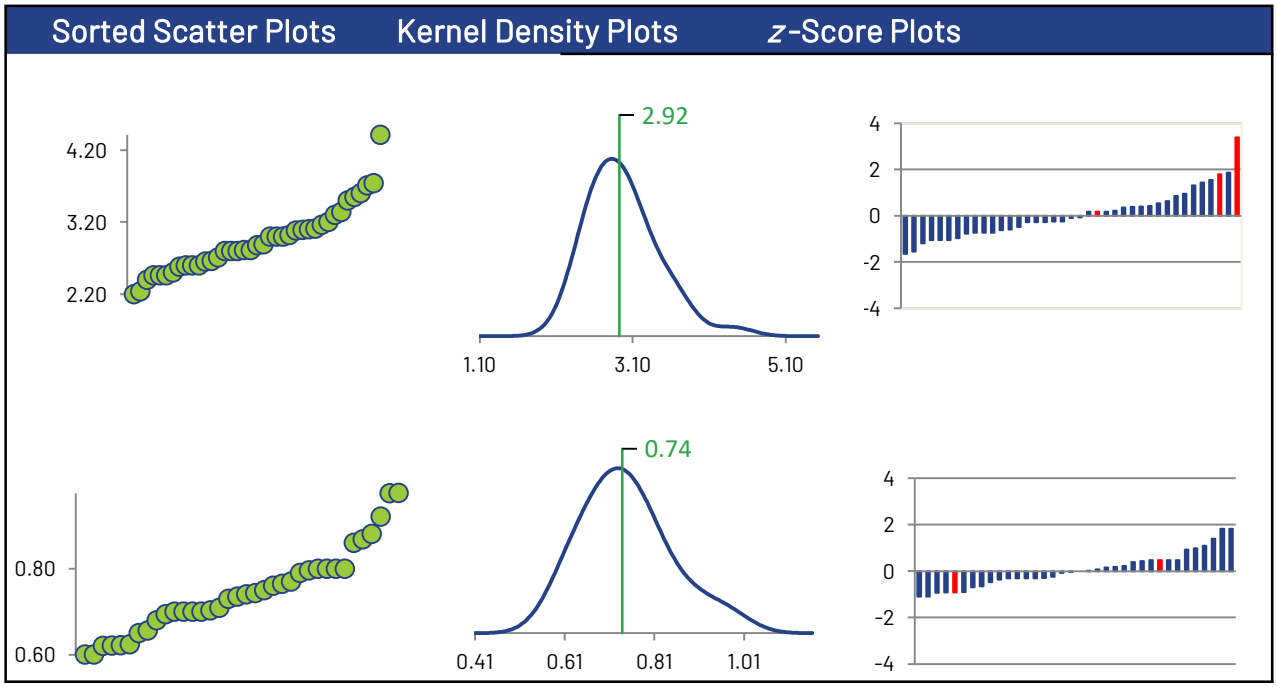
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	34	34	36	34
ICP/OES (Red)	3	2	3	2

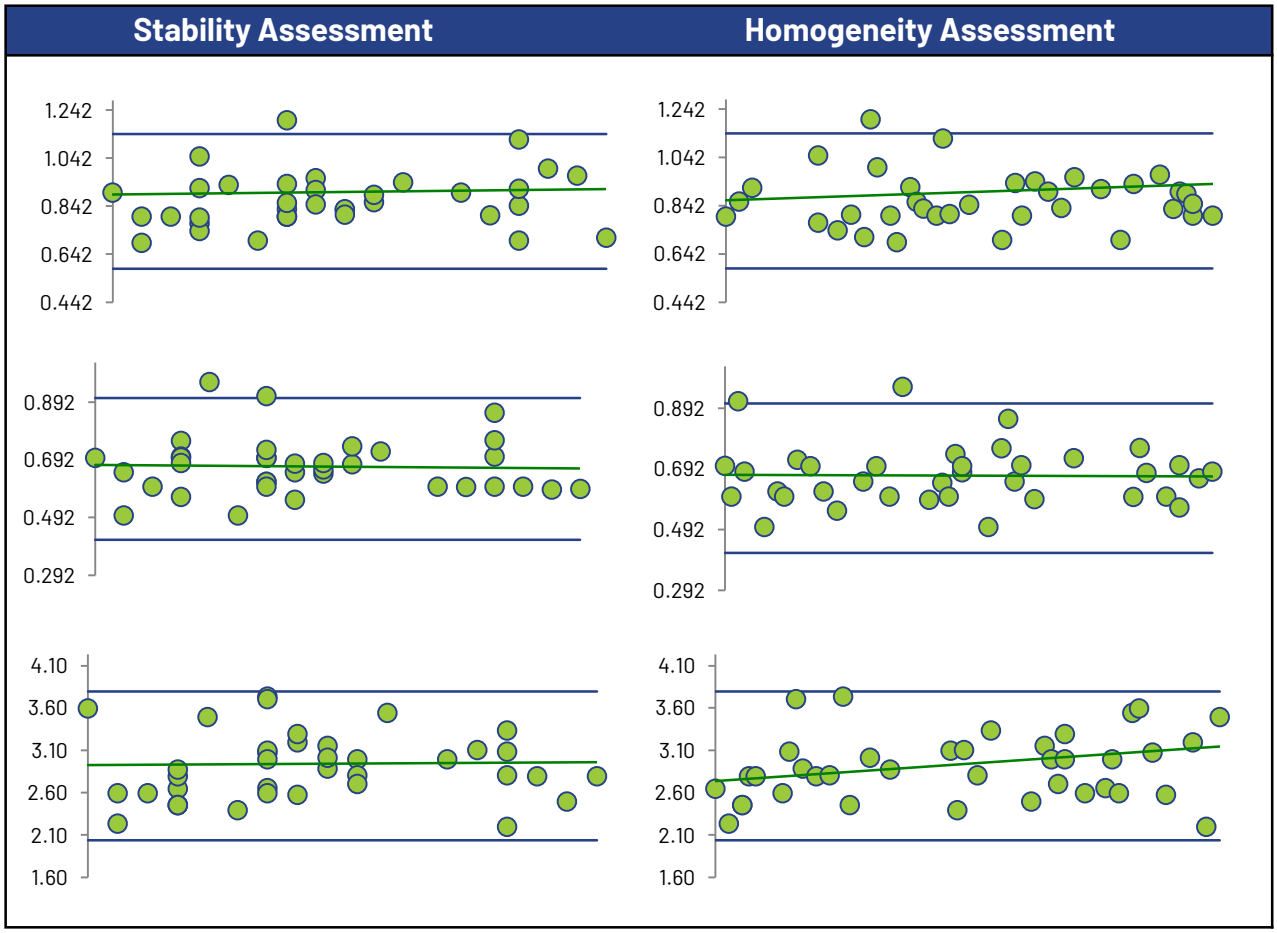
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

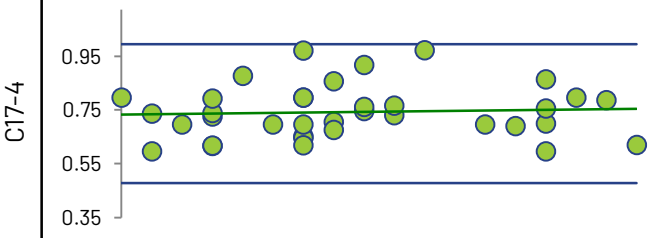
Uranium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
4.20
3.20
2.20
2.92
1.10
3.10
5.10
4
2
0
-2
-4
C17-4
0.80
0.60
0.74
0.41
0.61
0.81
1.01
4
2
0
-2
-4

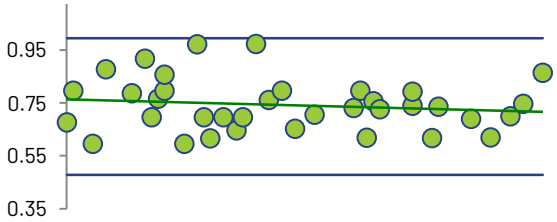

Stability Assessment
Homogeneity Assessment
C17-1
1.242
1.042
0.842
0.642
0.442
C17-2
0.892
0.692
0.492
0.292
C17-3
4.10
3.60
3.10
2.60
2.10
1.60

Uranium

Stability Assessment



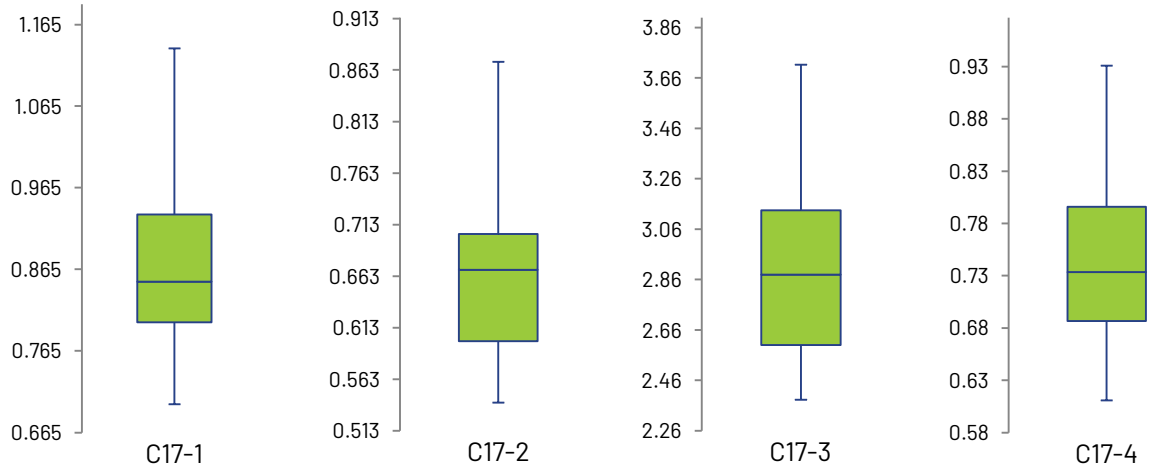
Homogeneity Assessment



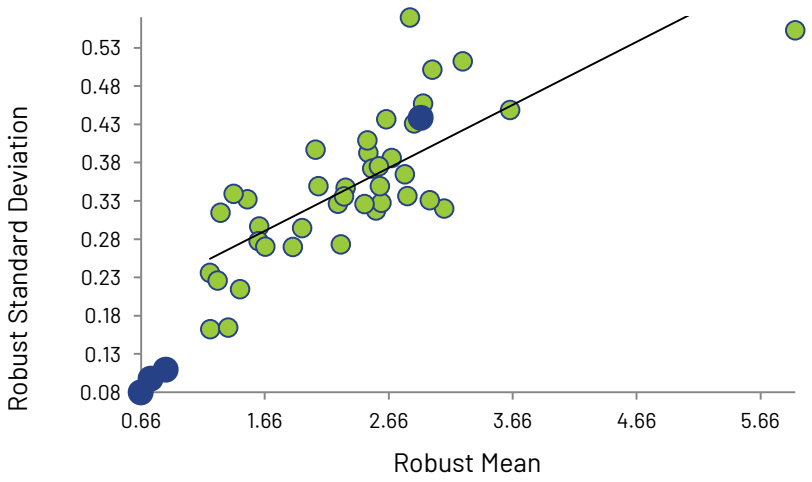
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Vanadium

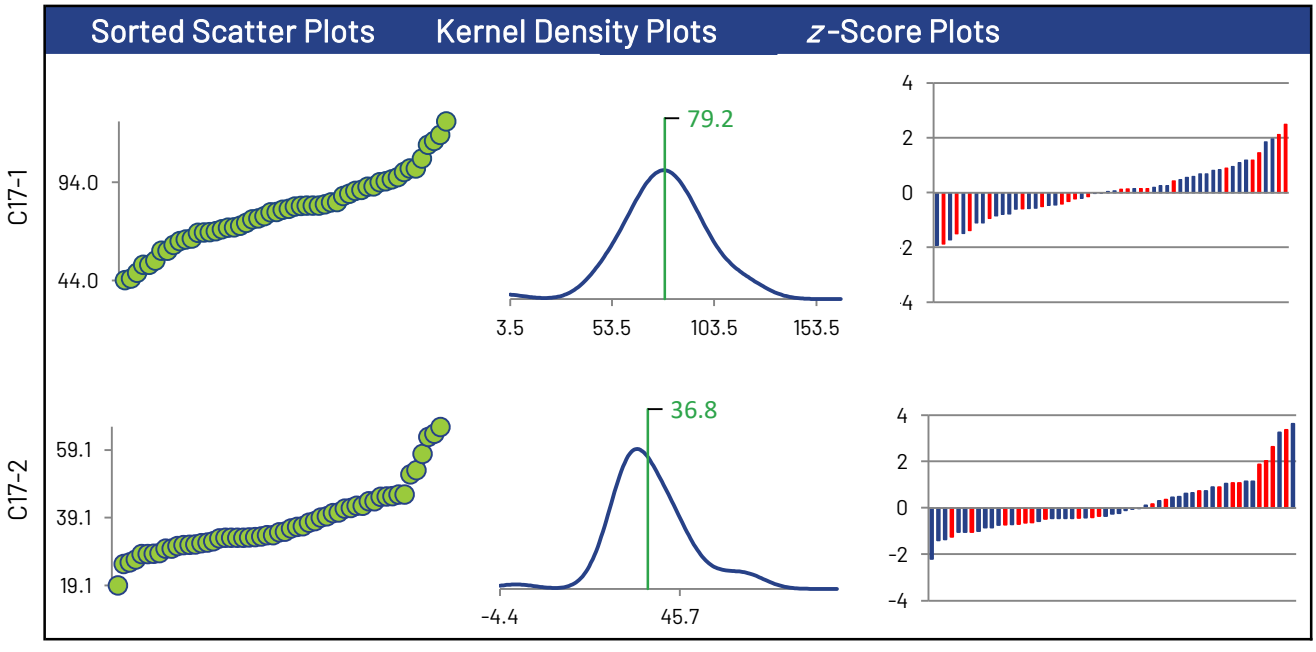
Summary Statistics

Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	54	55	54	54
Median µg/g	80.2	34.8	114	56.7
Robust Mean µg/g	79.2	36.8	118	57.5
Uncdrtainty of the Assigned Value µg/g	3.11	1.36	4.18	2.19
Robust Standard Deviation µg/g	18.3	8.07	24.6	12.9
Regression Standard Deviation µg/g	11.3	5.34	16.8	8.26
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	18.3	8.07	24.6	12.9
Flagged Outliers	2	1	2	2
|z|>3.0	0	3	1	2
2<|z|<3	2	3	1	1
Failure Rate %*	7.1			

Methods Used

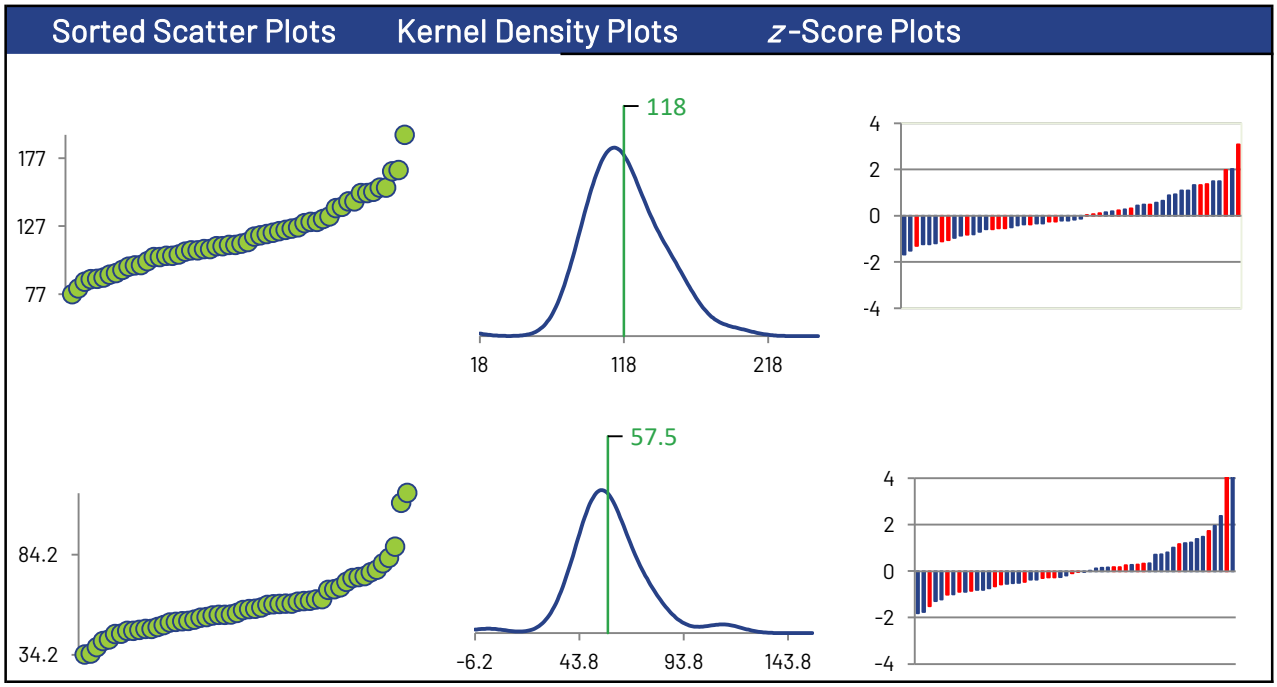
Method	C17-1	C17-2	C17-3	C17-4
ICP/MS (Blue)	34	35	34	34
ICP/OES (Red)	20	20	20	20

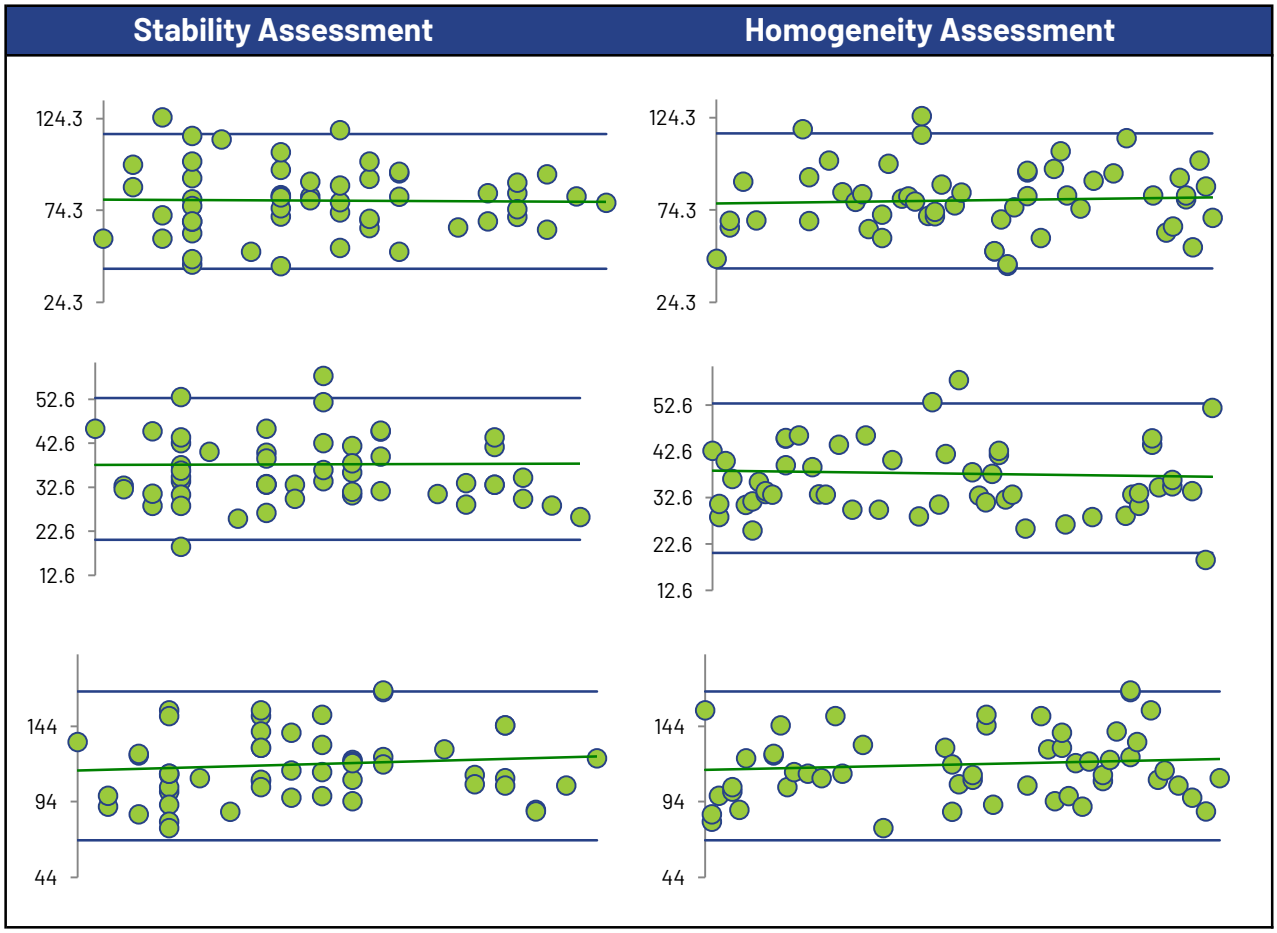
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

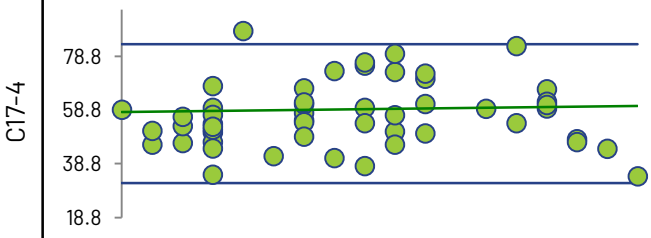
Vanadium


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
177
127
77
118
18
118
218
4
2
0
-2
-4
C17-4
84.2
34.2
57.5
-6.2
43.8
93.8
143.8
4
2
0
-2
-4

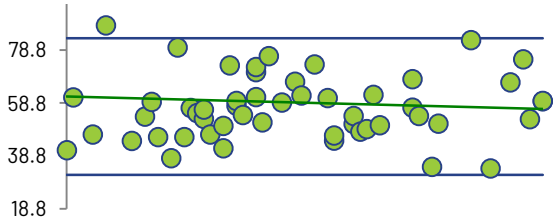

Stability Assessment
Homogeneity Assessment
C17-1
124.3
74.3
24.3
124.3
74.3
24.3
C17-2
52.6
42.6
32.6
22.6
12.6
52.6
42.6
32.6
22.6
12.6
C17-3
144
94
44
144
94
44

Vanadium

Stability Assessment



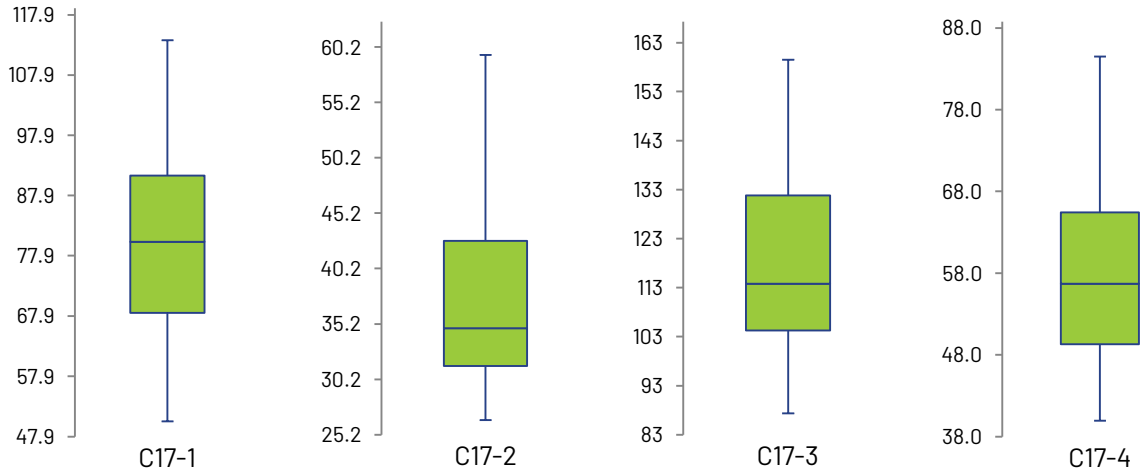
Homogeneity Assessment



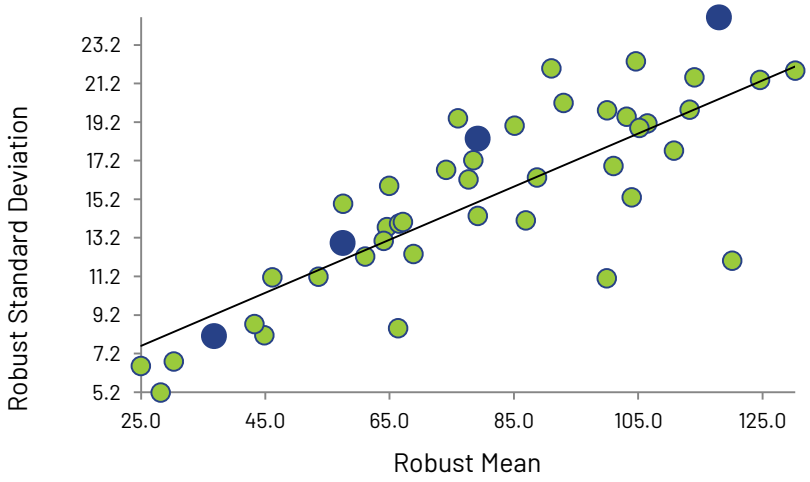
Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



Zinc

Summary Statistics

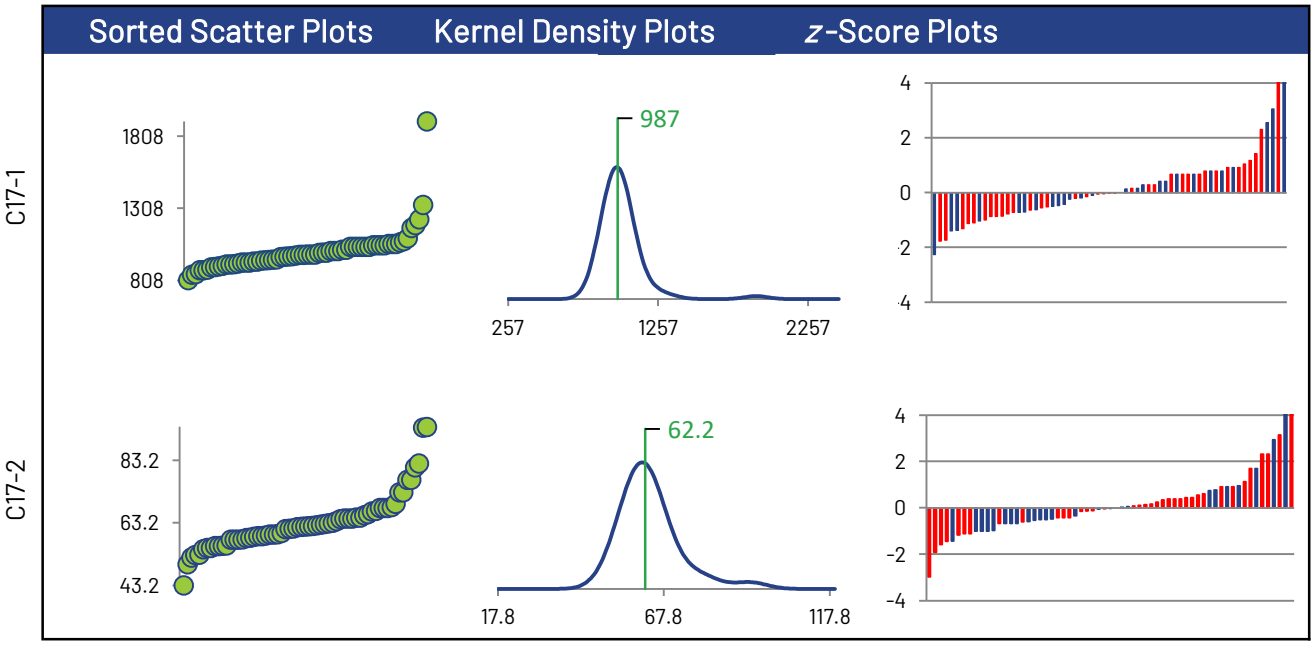
Statistic	C17-1	C17-2	C17-3	C17-4
No. of results used for summary statistics	63	63	63	62
Median µg/g	986	62.1	696	683
Robust Mean µg/g	987	62.2	698	689
Uncertainty of the Assigned Value µg/g	12.4	1.01	12.5	9.87
Robust Standard Deviation µg/g	78.5	6.39	79.5	62.2
Regression Standard Deviation µg/g	79.3	5.26	56.1	55.4
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/g	79.3	6.39	79.5	62.2
Flagged Outliers	1	1	1	2
|z|>3.0	3	3	1	0
2<|z|<3	3	4	1	2
Failure Rate %*	4.7			

Methods Used

Method	C17-1	C17-2	C17-3	C17-4
ICP/OES (Blue)	26	25	25	25
ICP/MS (Red)	37	38	38	37

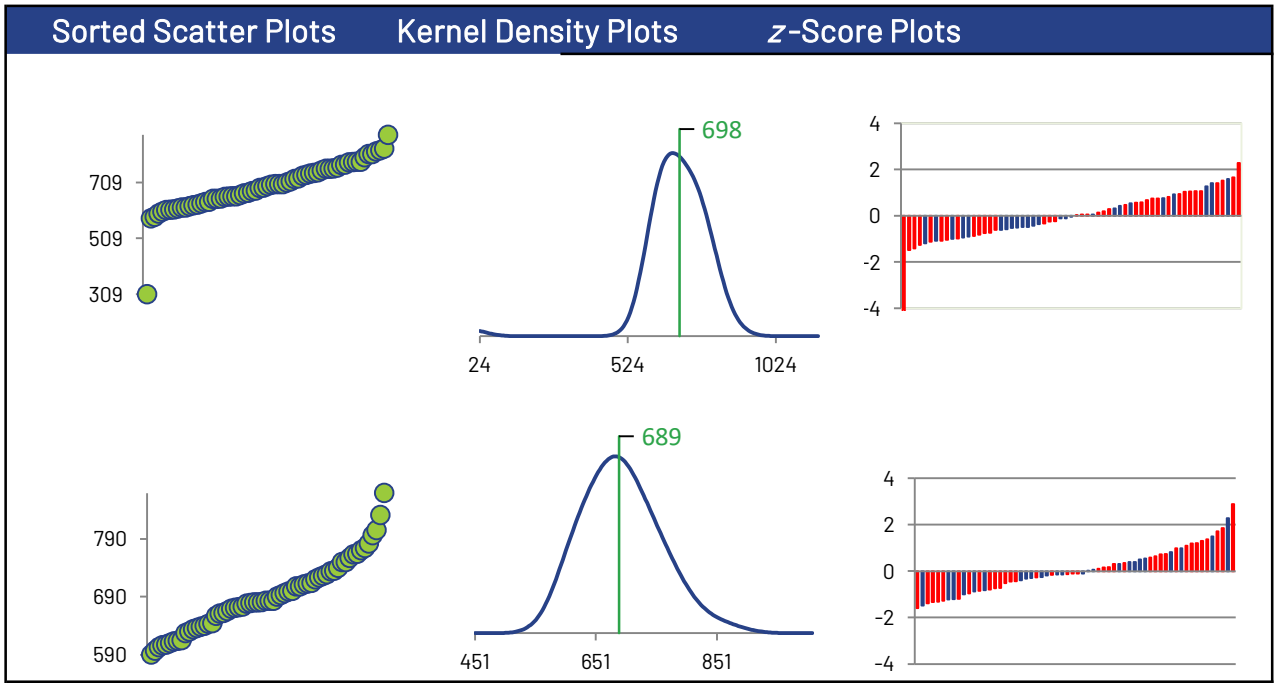
All summary stats, except the failure rate, and the plots below are based on the data excluding any flagged outliers

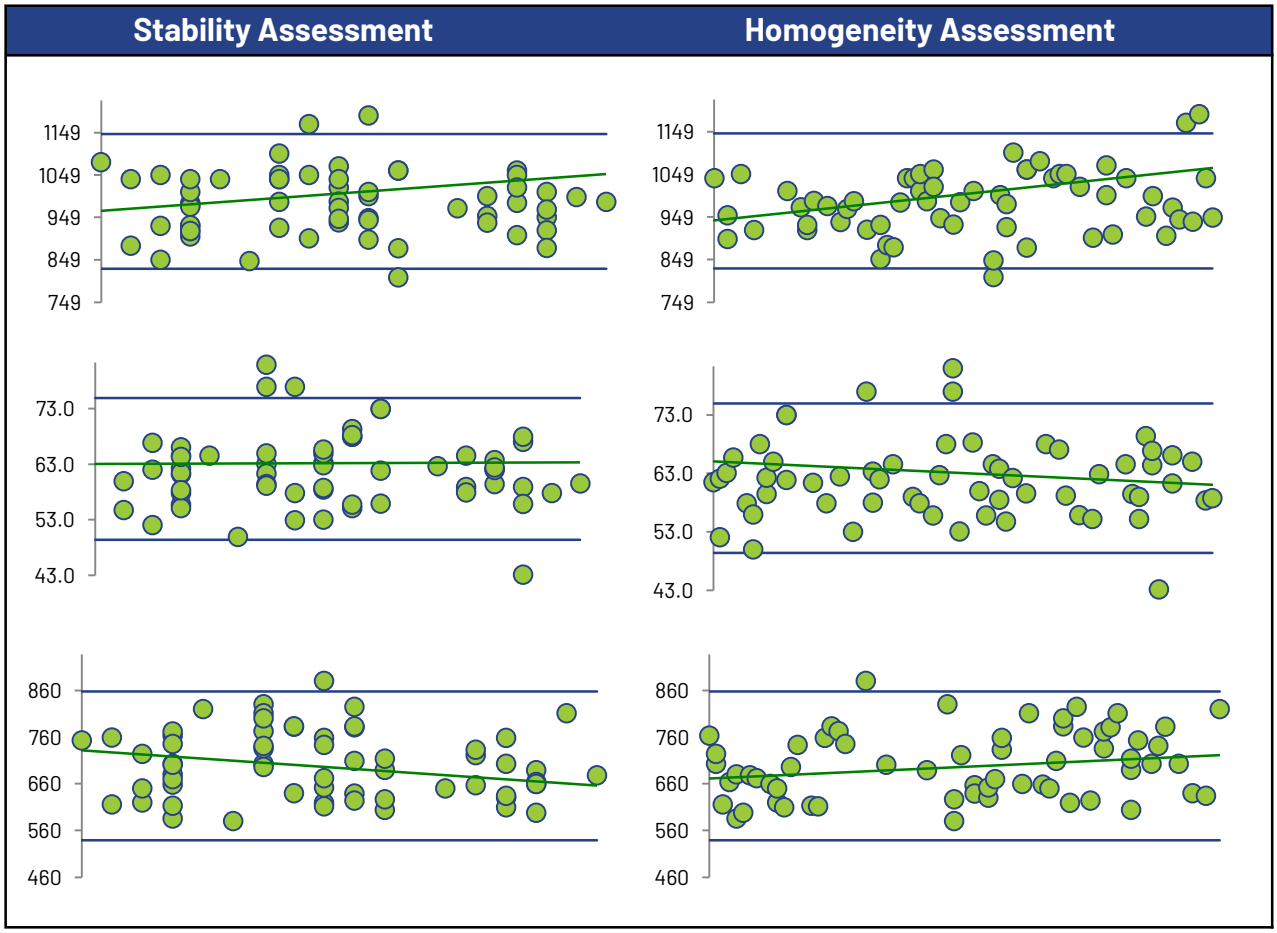
Sorted Scatter Plots | Kernel Density Plots | *z*-Score Plots



* Displayed failure rate does not account for the RDL modified z-Scores or inaccurately reported non-detects.

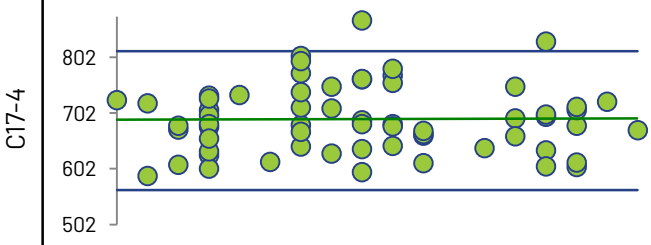
Zinc


Sorted Scatter Plots
Kernel Density Plots
z-Score Plots
C17-3
709
509
309
698
24
524
1024
4
2
0
-2
-4
C17-4
790
690
590
689
451
651
851
4
2
0
-2
-4

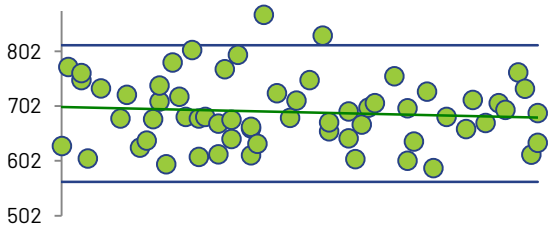

Stability Assessment
Homogeneity Assessment
C17-1
1149
1049
949
849
749
C17-2
73.0
63.0
53.0
43.0
C17-3
860
760
660
560
460

Zinc

Stability Assessment



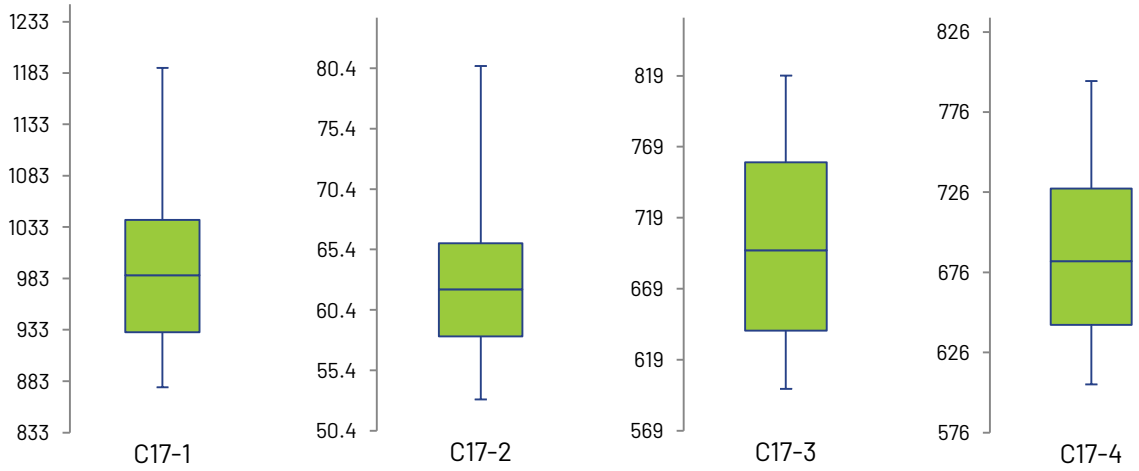
Homogeneity Assessment



Stability assessments are regression analysis of reported result against date of analysis.

Homogeneity assessments are regression analysis of reported result against bottling order.

Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)