

EVALUATION OF THE INTERLABORATORY COMPARISON TEST

Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners – AZ4

Sample dispatch on 9th May 2017

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1 Interlaboratory comparison test: Pharmaceuticals, industrial chemicals and artificial sweeteners – AZ4

1.1 Participants and time schedule

- Number of registrations: 18
- Number of submitted data records: 18
- Dispatch of samples: 9th May 2017
- Closing date for submission of data: 6th June 2017

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

1.2 Sampling, sample material and distribution

The following samples were made available

- 1 Sample surface water (AZ4 A)
- 1 Sample municipal waste water (AZ4 B)

The sampling of surface water and municipal waste water was carried out on 8th May 2017. The samples were stored at < 4 °C until further processing. Both samples were partly spiked with specific substances and were filled into bottles under continuous stirring to achieve homogeneous samples.

The samples were dispatched on 9th May 2017.

Each participant received:

- 2 samples (each 2000 ml), each filled in 2x 1000 ml aluminium bottles

1.3 Control testing

During filling the bottles, aliquots of each sample were collected randomly for control testing. Testing was performed close to the time of sample dispatch.

In the parameter-oriented evaluation, the results of the control testing are given in the form of arithmetic means of the detected concentrations as check value ± U.

2 Evaluation

The analytical results had to be made available to the organiser not later than 23rd May 2017. Any values received at a later date were not considered. A statistical evaluation of interlaboratory comparison data was only carried out if at least 6 valid results per parameter were available.

To evaluate the data, outliers were detected first by using the outlier test method according to Hampel. Values identified as conspicuous by this test method are marked specifically in the parameter-oriented evaluation. Further evaluation was performed in accordance with DIN ISO 5725-2. Results < LOQ or < LOD are not taken into account for calculation.

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

z-Score

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

$$z\text{-score} = \frac{x_i - \bar{X}}{SD}$$

In this context,

- x_i is the measurement value of the participating laboratory.
- \bar{X} is the adjusted average value (i.e. after removal of outliers) of the participants' results.
- SD is the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round.

Interpretation of z-Scores in the parameter-oriented evaluation:

- $|z| < 2$ result: good
- $2 < |z| < 3$ result: questionable
- $|z| > 3$ result: not satisfactory

3 Representation and interpretation of measurement results

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

The laboratory oriented report shows the results of the individual laboratories, including the recovery rates and z-Scores.

An annotation of the tables and graphics is given in section 5.

4 Explanatory notes

During the detailed evaluation of the proficiency testing it was observed that the laboratory LC0001 mismatched the results (except for Acesulfame). After consulting the laboratory the results were revised. For that reason the target values changed for Benzotriazole, Carbamazepine, Cyclamate, Diazepam (Sample B), Diclofenac, Metaprolol, Saccarin (Sample B), Sotalol (Sample B), Sucralose (Sample A) and Sulfamethoxazole. All confirmations of participation were revised and sent to the correspondent laboratory. You can find the previous target values before revision on page 138.

As explained in section 2, the z-Score is calculated using the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round. As a consequence it might occur that the z-Score between -2 and 2 covers an extraordinary range, due to a high variance of the results. On the other hand, a low variation of the participants' results leads to an extraordinary small recovery rate range when applying a z-Score of -2 to +2.

The recovery rate is calculated for the individual result based on the target value. Therefore, in the case of a high variance of the results, participants should also consider recovery rates as an indicator for the necessity of internal quality assurance measures.

- Compare Metoprolol Sample AZ4 A (n=12)
- Compare Sucralose Sample AZ4 A (n=9)
- Compare Cyclamat Sample AZ4 B (n=10)
- Compare Saccharin Sample AZ4 B (n=9)

Sample AZ4 A: For the parameters Diazepam, Ibuprofen and Sotalol no target value was calculated because of the low analyte content and/or the small number of submitted results.

Sample AZ4 B: For the parameter Ibuprofen no target value was calculated because of the small number of submitted results.

5 Annotations on tables and charts

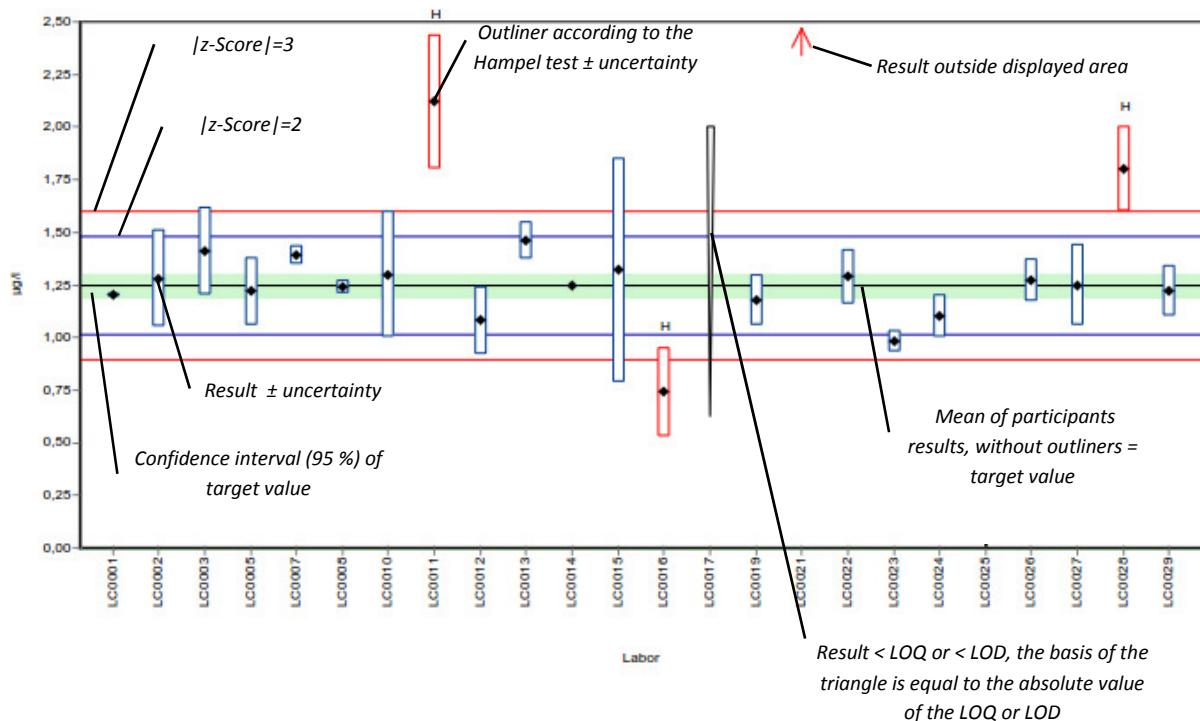
5.1 Information and abbreviations in tables

Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Mean	Mean of the participants results, without outliers (3 significant digits)
CI (99 %)	99% confidence interval (3 significant digits)
Minimum	Minimum of all submitted results, after removal of outliers (3 significant digits)
Maximum	Maximum of all submitted results, after removal of outliers (3 significant digits)
SD	Reproducibility standard deviation, calculated from the participants results, after removal of outliers (3 significant digits)
RSD %	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, after removal of outliers (2 significant digits)
Check value ± U	Mean of check value ± measurement uncertainty (3 significant digits)
Labcode	Laboratory identifier (anonymized)
Result	Result as indicated by participant (max. 5 decimal places)
± U	Results uncertainty as indicated by participant (max. 5 decimal places)
LOQ	Limit of quantification
LOD	Limit of detection
Recovery	Recovery rate in % based on target value (3 significant digits, max. one decimal place given)
z-Score	Deviation of result based on target value depicted as a multiple of the criteria (3 significant digits, max. 2 decimal places given)
-	<i>No data available</i>
Comments	Comment on the respective result (e.g. H, FN, FP)
H	Outlier according to Hampel-Test
FN	False negative – for a result < LOQ or result < LOD: The absolute value of the LOQ or LOD fulfils the condition of an outlier according to the Hampel test.
FP	False positive – for parameters where no target value is available because of a too low analyte content (n < 6):

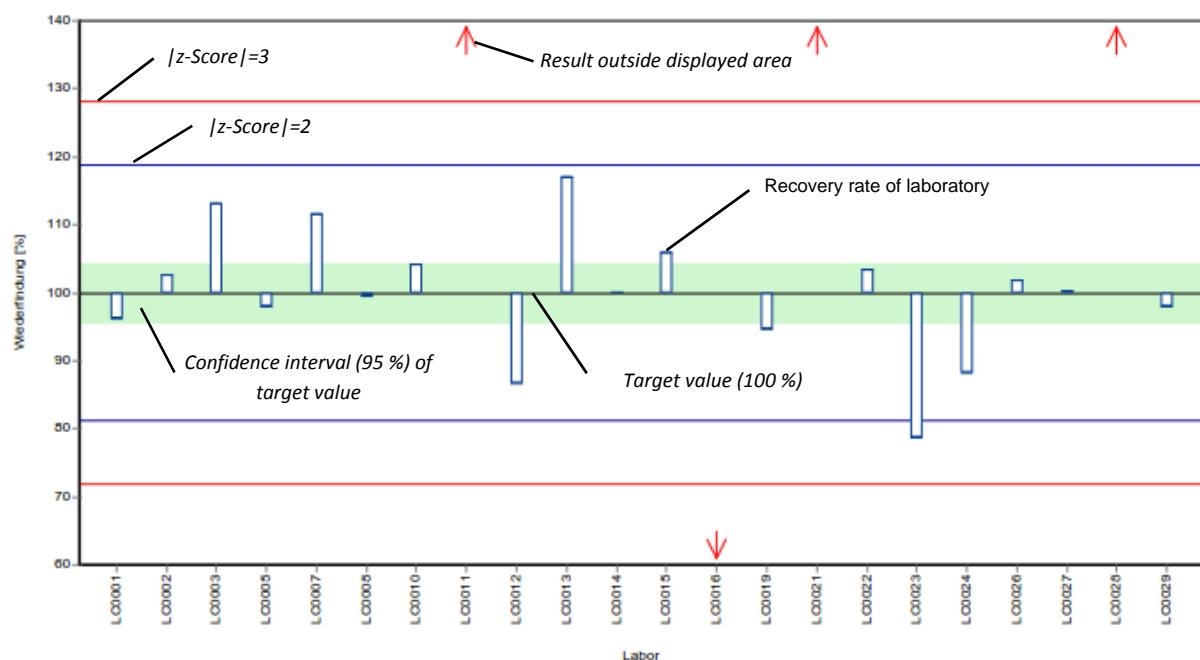
Standard deviation	Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
n	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
Target value	Number of results
Criteria	Mean of the participants results, without outliers (3 significant digits)
	Criteria for z-Score calculation. The given value matches the reproducibility standard deviation, calculated from the participants' results, after removal of outliers (3 significant digits).

5.2 Graphical presentation of results

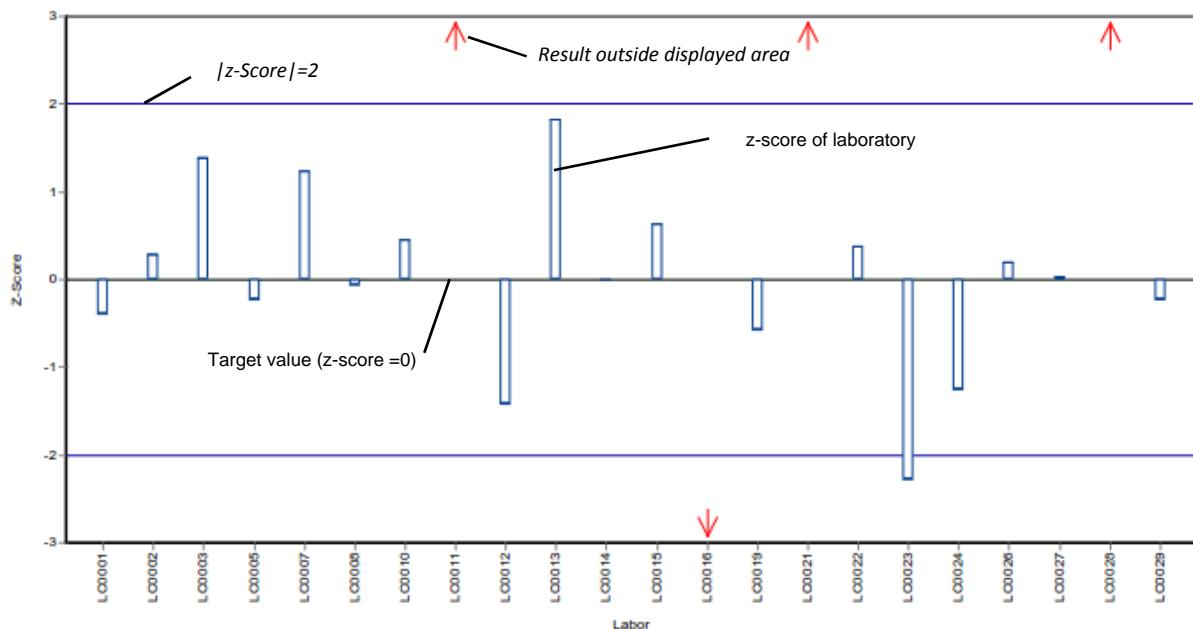
Example chart: Results



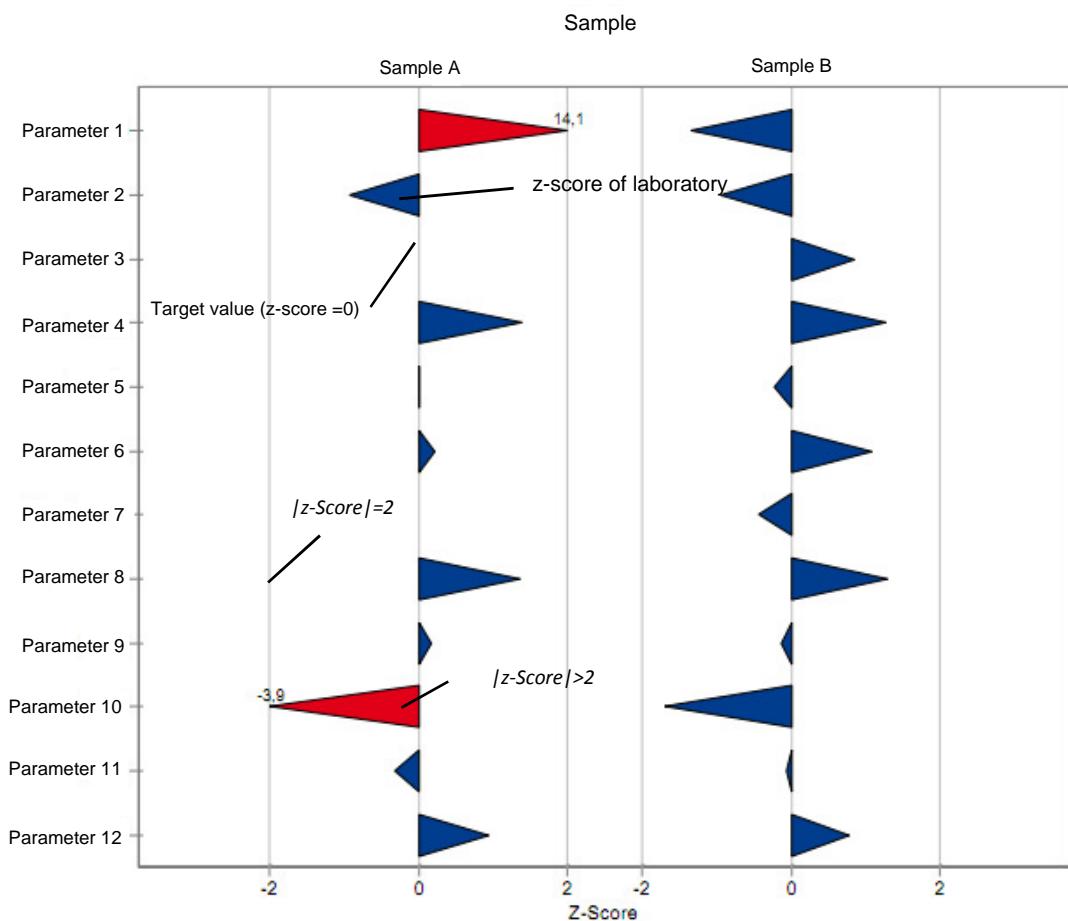
Example chart: Recovery



Example chart: z-score



Example chart: z-score - laboratory oriented report



Summary of results, after removal of outliers: Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

6 Summary of results, after removal of outliers

Parameter	Sample	Unit	Number of results for calculation	Number of outliers	Mean	± CI (99%)	Minimum	Maximum	SD	RSD %
Acesulfame	AZ4 A	µg/l	13	2	0.188	± 0.0181	0.149	0.225	0.0218	12
	AZ4 B	µg/l								
Benzotriazole	AZ4 A	µg/l	15	0	0.261	± 0.0238	0.197	0.314	0.0307	12
	AZ4 B	µg/l								
Carbamazepine	AZ4 A	µg/l	16	0	0.0576	± 0.00491	0.04	0.066	0.00655	11
	AZ4 B	µg/l								
Cyclamate	AZ4 A	µg/l	10	0	0.311	± 0.0578	0.199	0.41	0.0609	20
	AZ4 B	µg/l								
Diazepam	AZ4 A	µg/l	0	0	-	± -	-	-	-	-
	AZ4 B	µg/l								
Diclofenac	AZ4 A	µg/l	13	2	0.36	± 0.0373	0.309	0.469	0.0448	12
	AZ4 B	µg/l								
Ibuprofen	AZ4 A	µg/l	5	0	-	± -	0.06	0.113	-	-
	AZ4 B	µg/l								
Metoprolol	AZ4 A	µg/l	12	0	0.015	± 0.00488	0.007	0.025	0.00563	37
	AZ4 B	µg/l								
Saccharin	AZ4 A	µg/l	8	0	0.0658	± 0.0166	0.044	0.091	0.0156	24
	AZ4 B	µg/l								
Sotalol	AZ4 A	µg/l	0	0	-	± -	-	-	-	-
	AZ4 B	µg/l								
Sucralose	AZ4 A	µg/l	9	0	0.461	± 0.145	0.199	0.667	0.145	31
	AZ4 B	µg/l								
Sulfamethoxazole	AZ4 A	µg/l	14	2	0.0562	± 0.00335	0.0481	0.0625	0.00418	7.4
	AZ4 B	µg/l								

7 Parameter oriented report

Acesulfame	13
Benzotriazole	21
Carbamazepine	29
Cyclamate	37
Diazepam	45
Diclofenac	51
Ibuprofen	59
Metoprolol	63
Saccharin	71
Sotalol	79
Sucralose	85
Sulfamethoxazole	93

Parameter oriented report

AZ4 A

Acesulfame

Unit	µg/l
Mean ± CI (99%)	0.188 ± 0.0181
Minimum - Maximum	0.149 - 0.225
Control test value ± U	0.175 ± 0.0323

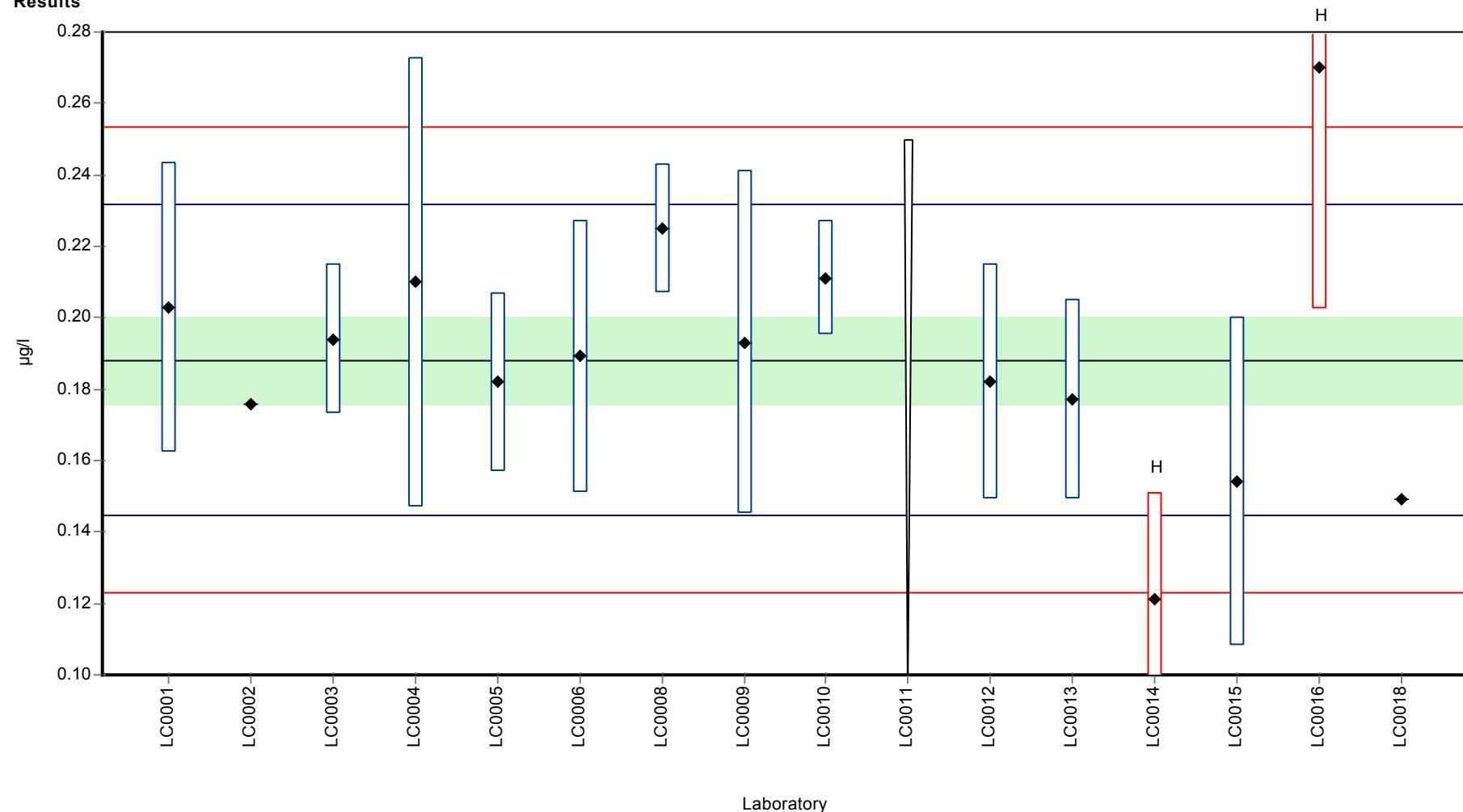
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.203	0.0406	108	0.69	
LC0002	0.176	-	93.6	-0.56	
LC0003	0.194	0.021	103	0.27	
LC0004	0.21	0.063	112	1.01	
LC0005	0.182	0.025	96.8	-0.28	
LC0006	0.1891	0.038	101	0.05	
LC0007	-	-	-	-	
LC0008	0.225	0.018	120	1.7	
LC0009	0.193	0.048	103	0.23	
LC0010	0.211	0.016	112	1.05	
LC0011	< 0.25 (LOQ)	-	-	-	
LC0012	0.182	0.033	96.8	-0.28	
LC0013	0.177	0.028	94.1	-0.51	
LC0014	0.121	0.03	64.3	-3.08	H
LC0015	0.154	0.046	81.9	-1.57	
LC0016	0.27	0.0675	144	3.76	H
LC0017	-	-	-	-	
LC0018	0.149	-	79.2	-1.8	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.189 ± 0.0269	0.188 ± 0.0181	µg/l
Minimum	0.121	0.149	µg/l
Maximum	0.27	0.225	µg/l
Standard deviation	0.0347	0.0218	µg/l
rel. Standard deviation	18.4	11.6	%
n	15	13	-

Graphical presentation of results

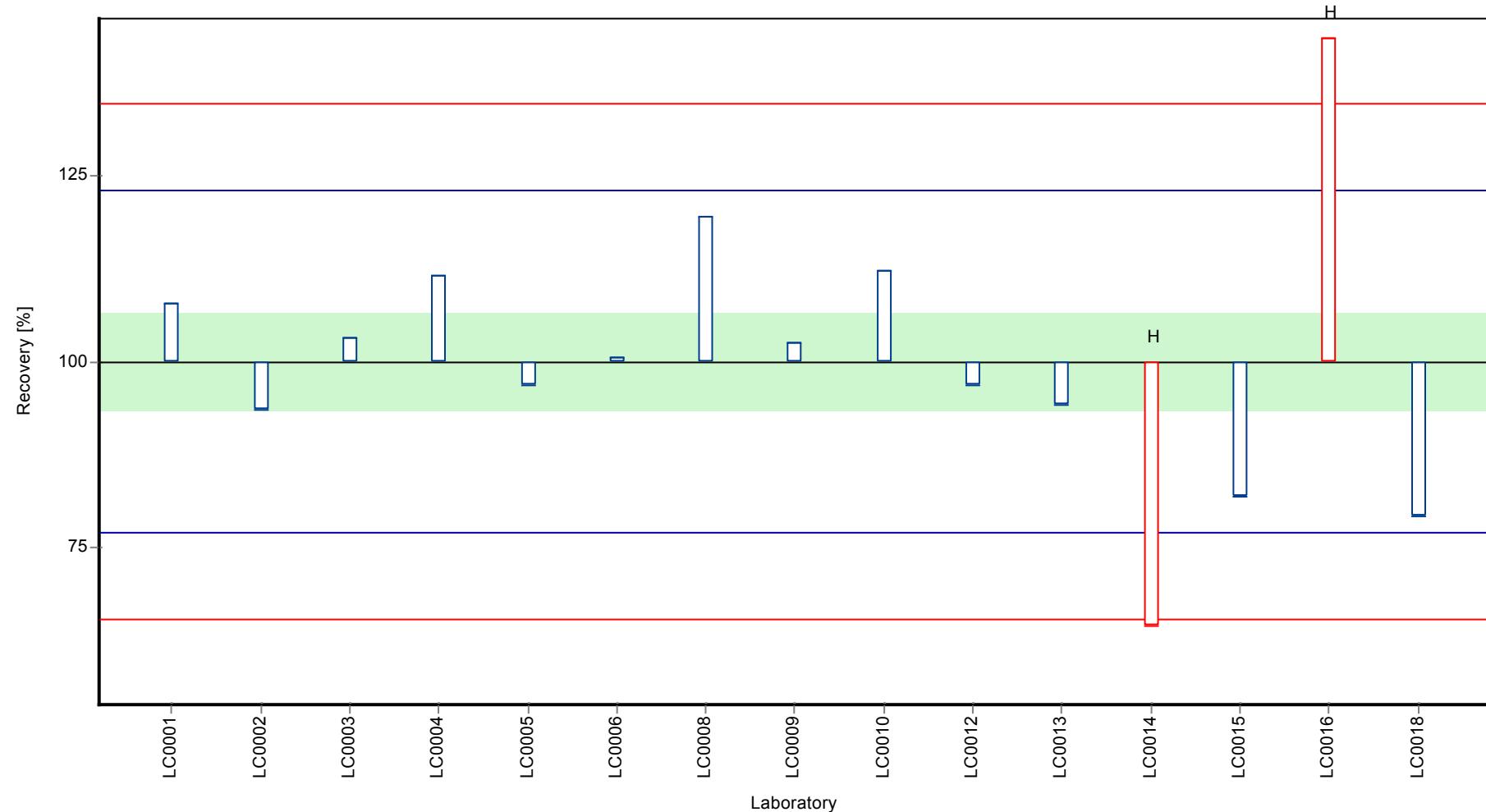
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

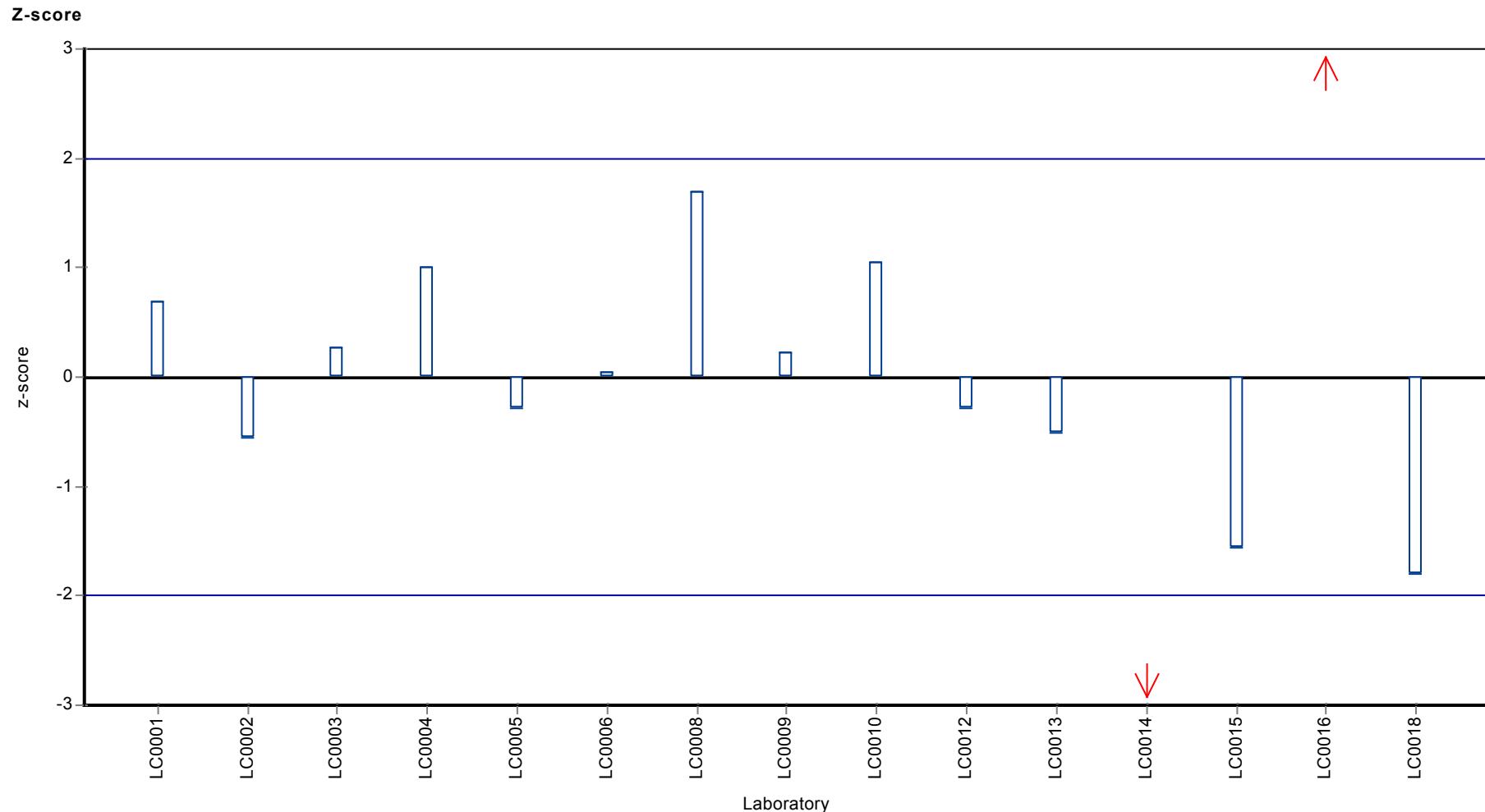
Sample: AZ4A, Parameter: Acesulfame

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Acesulfame



Parameter oriented report

AZ4 B

Acesulfame

Unit	µg/l
Mean ± CI (99%)	1.87 ± 0.163
Minimum - Maximum	1.55 - 2.26
Control test value ± U	1.93 ± 0.204

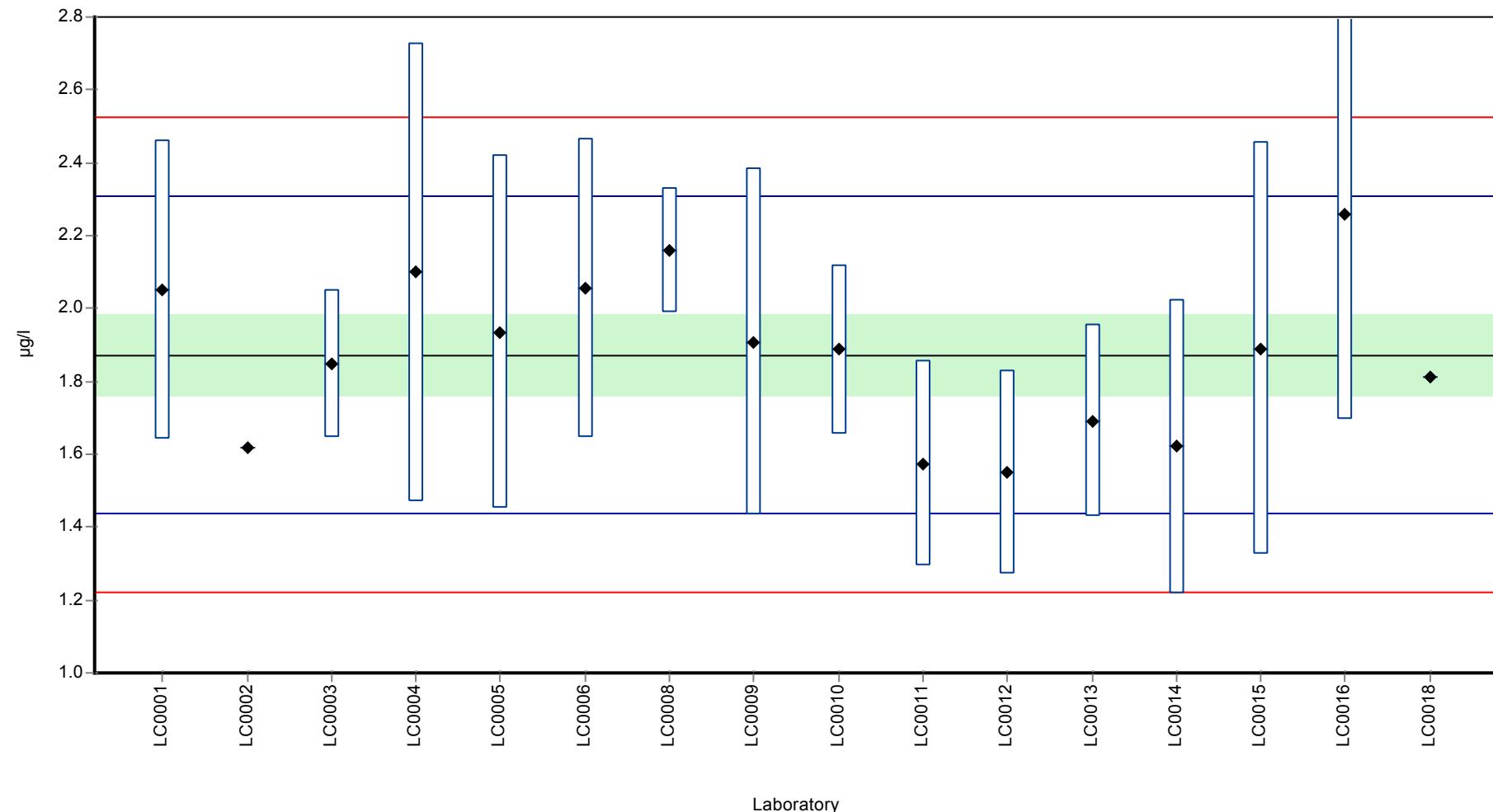
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.05	0.41	109	0.81	
LC0002	1.62	-	86.5	-1.16	
LC0003	1.848	0.203	98.7	-0.11	
LC0004	2.1	0.63	112	1.04	
LC0005	1.935	0.484	103	0.29	
LC0006	2.057	0.411	110	0.85	
LC0007	-	-	-	-	
LC0008	2.16	0.173	115	1.32	
LC0009	1.908	0.477	102	0.16	
LC0010	1.888	0.233	101	0.07	
LC0011	1.574	0.283	84.1	-1.37	
LC0012	1.55	0.279	82.8	-1.48	
LC0013	1.692	0.264	90.4	-0.83	
LC0014	1.621	0.405	86.6	-1.15	
LC0015	1.89	0.567	101	0.08	
LC0016	2.259	0.565	121	1.77	
LC0017	-	-	-	-	
LC0018	1.81	-	96.7	-0.29	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.87 ± 0.163	1.87 ± 0.163	µg/l
Minimum	1.55	1.55	µg/l
Maximum	2.26	2.26	µg/l
Standard deviation	0.218	0.218	µg/l
rel. Standard deviation	11.6	11.6	%
n	16	16	-

Graphical presentation of results

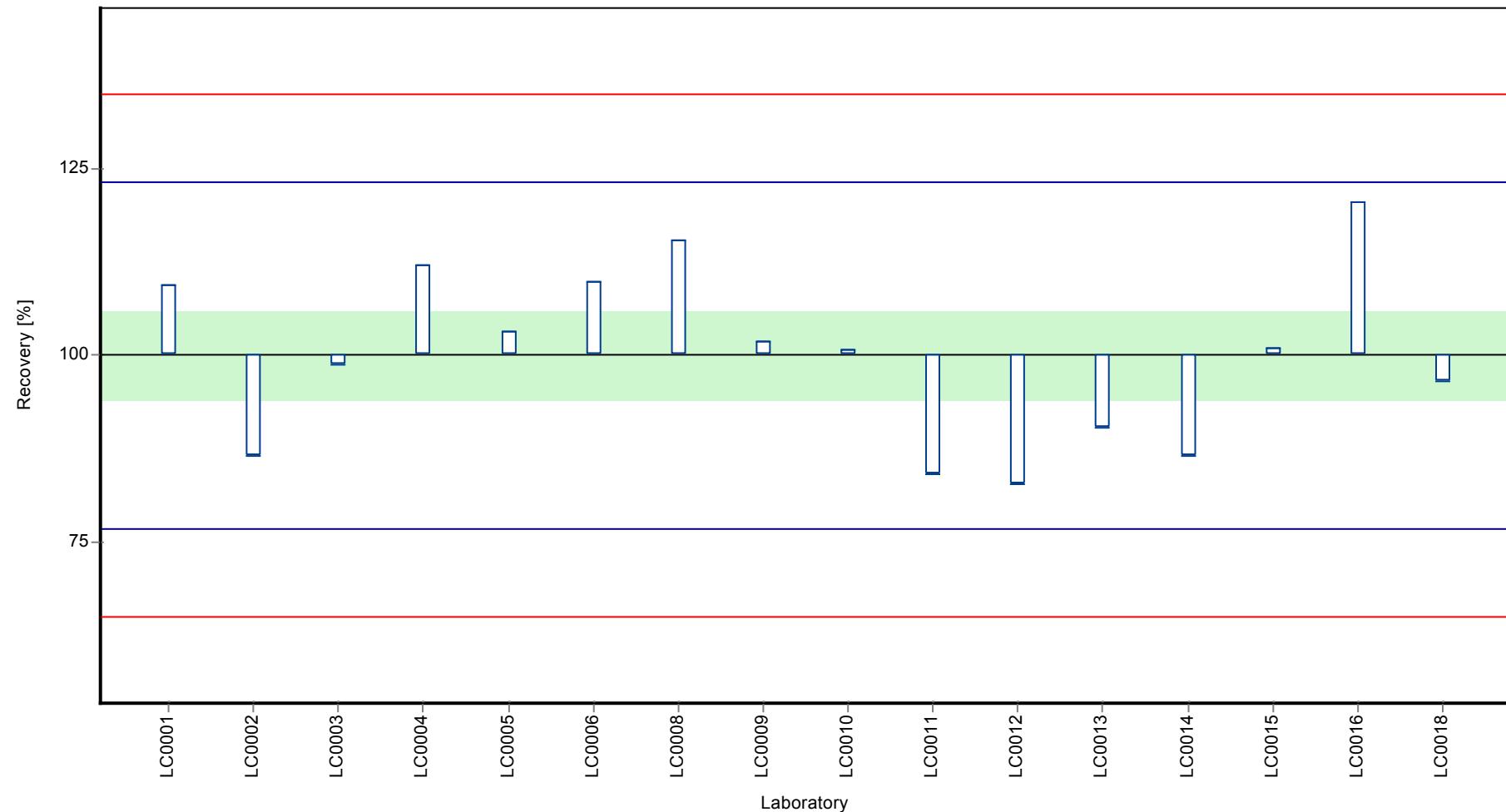
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

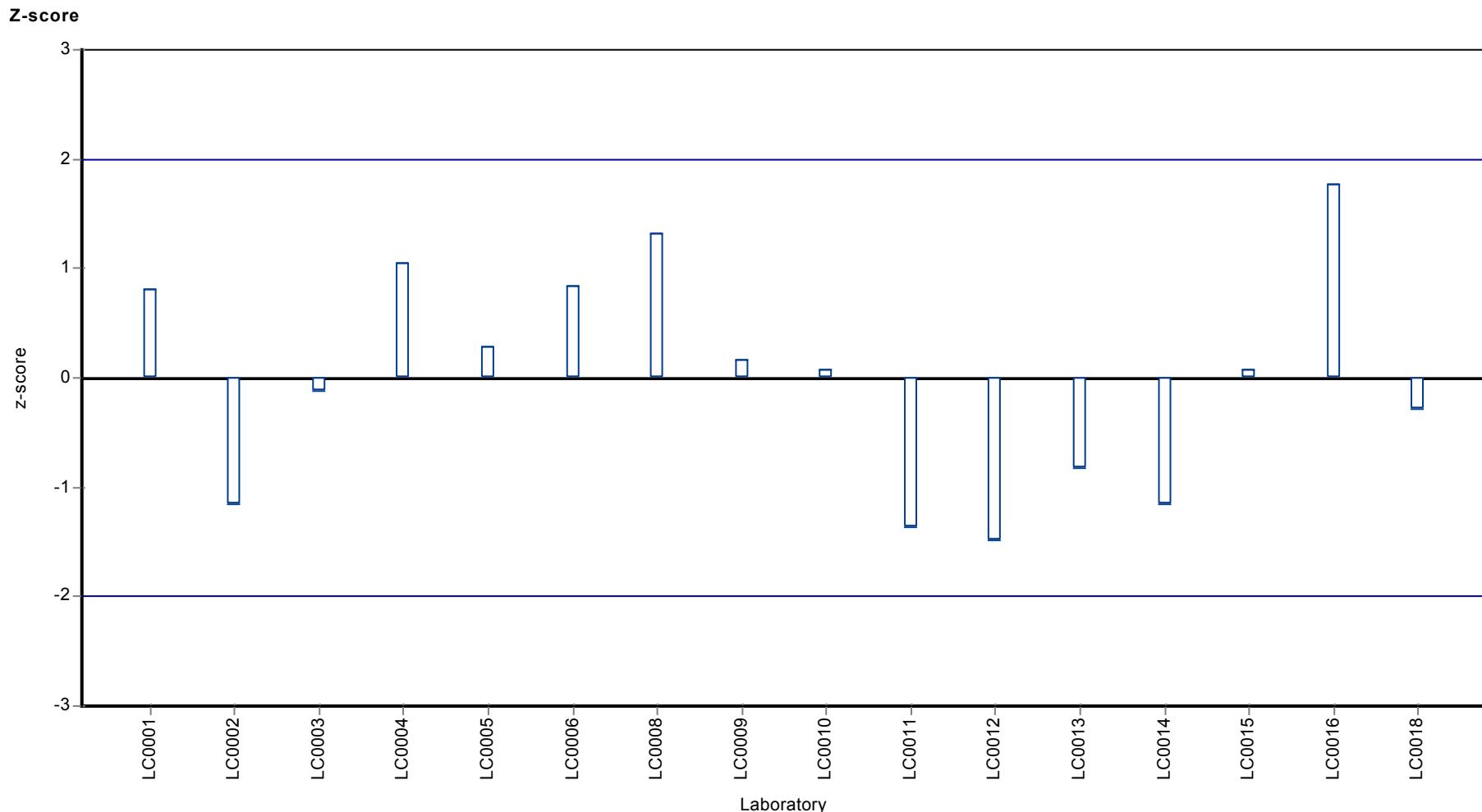
Sample: AZ4B, Parameter: Acesulfame

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Acesulfame



Parameter oriented report

AZ4 A

Benzotriazole

Unit	µg/l
Mean ± CI (99%)	0.261 ± 0.0238
Minimum - Maximum	0.197 - 0.314
Control test value ± U	0.238 ± 0.00801

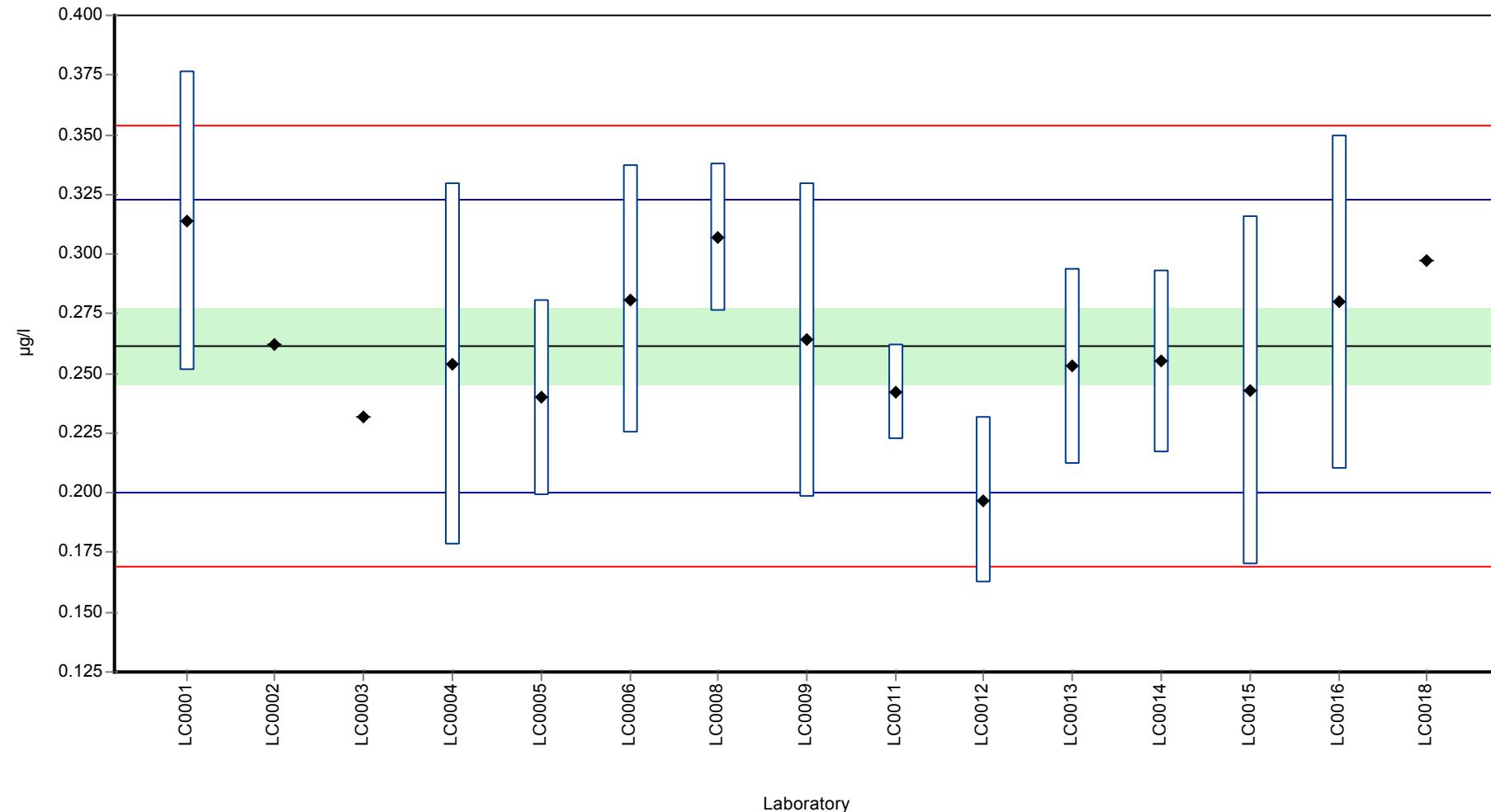
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.314	0.0628	120	1.71	
LC0002	0.262	-	100	0.02	
LC0003	0.232	-	88.8	-0.96	
LC0004	0.254	0.076	97.2	-0.24	
LC0005	0.24	0.041	91.8	-0.7	
LC0006	0.2811	0.056	108	0.64	
LC0007	-	-	-	-	
LC0008	0.307	0.031	117	1.48	
LC0009	0.264	0.066	101	0.08	
LC0010	-	-	-	-	
LC0011	0.242	0.02	92.6	-0.63	
LC0012	0.197	0.035	75.4	-2.1	
LC0013	0.253	0.041	96.8	-0.27	
LC0014	0.255	0.038	97.5	-0.21	
LC0015	0.243	0.073	93	-0.6	
LC0016	0.28	0.07	107	0.6	
LC0017	-	-	-	-	
LC0018	0.297	-	114	1.16	

Characteristics of parameter

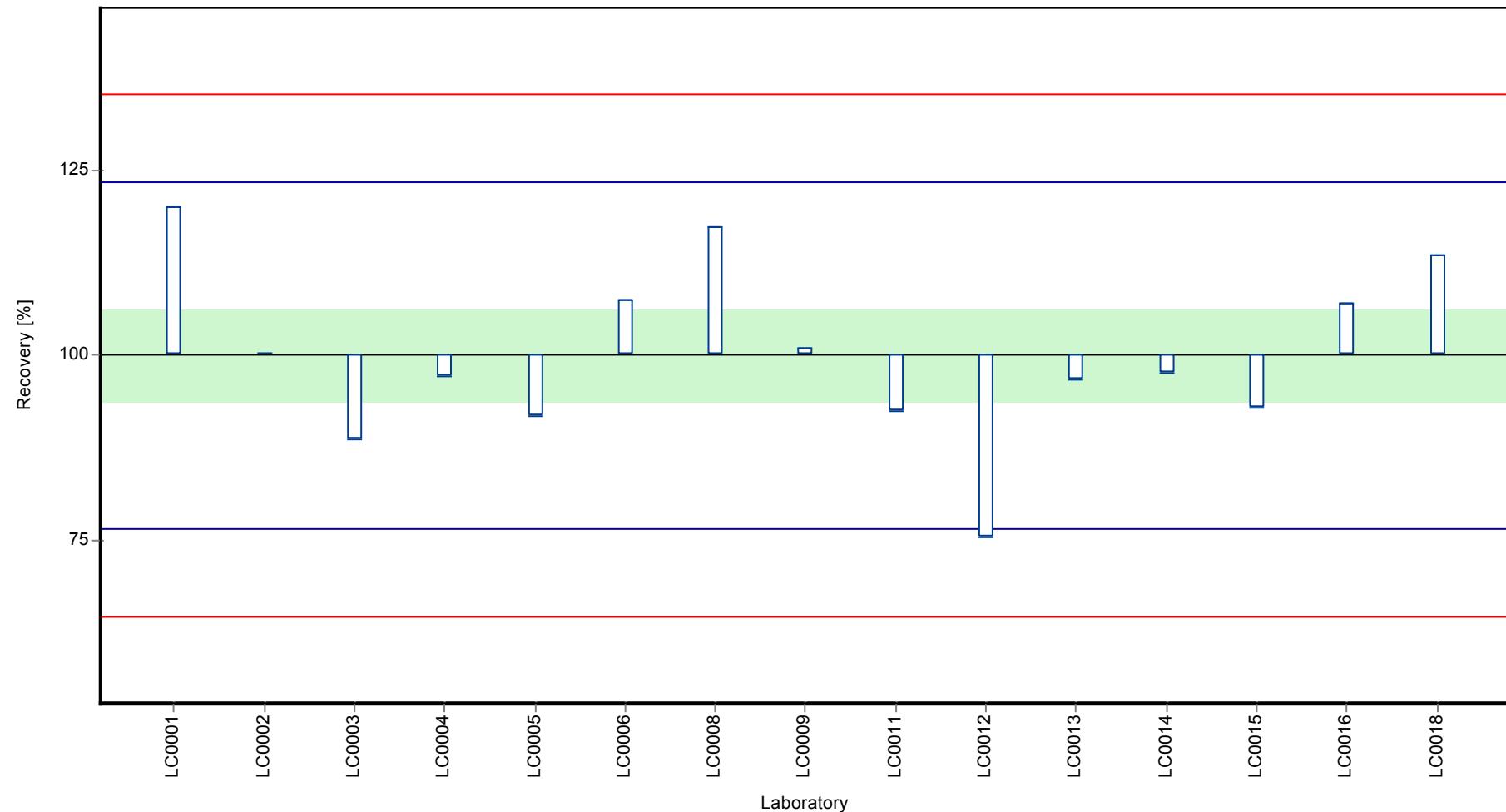
	all results	without outliers	Unit
Mean ± CI (99%)	0.261 ± 0.0238	0.261 ± 0.0238	µg/l
Minimum	0.197	0.197	µg/l
Maximum	0.314	0.314	µg/l
Standard deviation	0.0307	0.0307	µg/l
rel. Standard deviation	11.7	11.7	%
n	15	15	-

Graphical presentation of results

Results

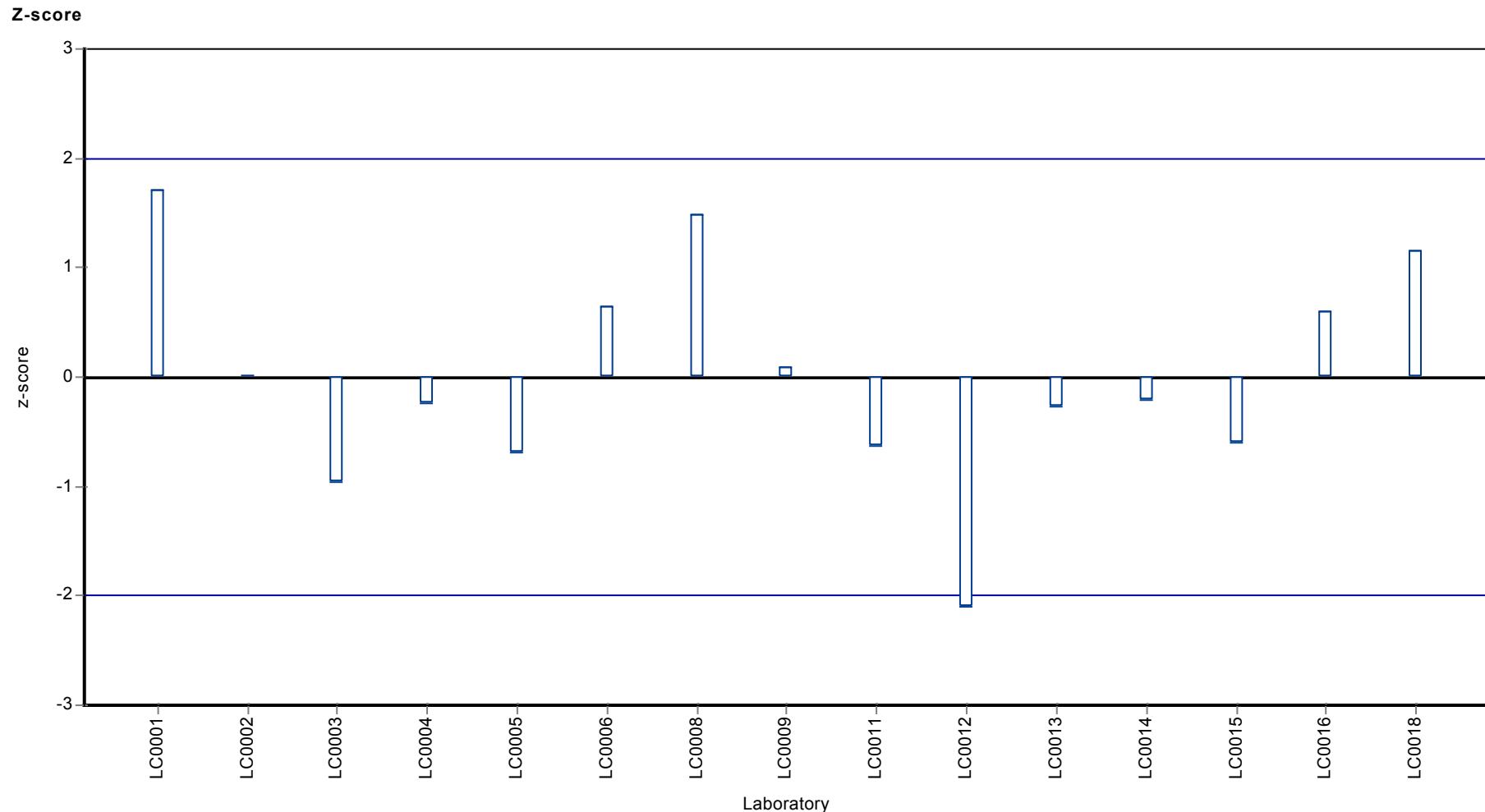


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Benzotriazole



Parameter oriented report

AZ4 B

Benzotriazole

Unit	µg/l
Mean ± CI (99%)	8.21 ± 0.669
Minimum - Maximum	6.17 - 9.45
Control test value ± U	8.03 ± 0.306

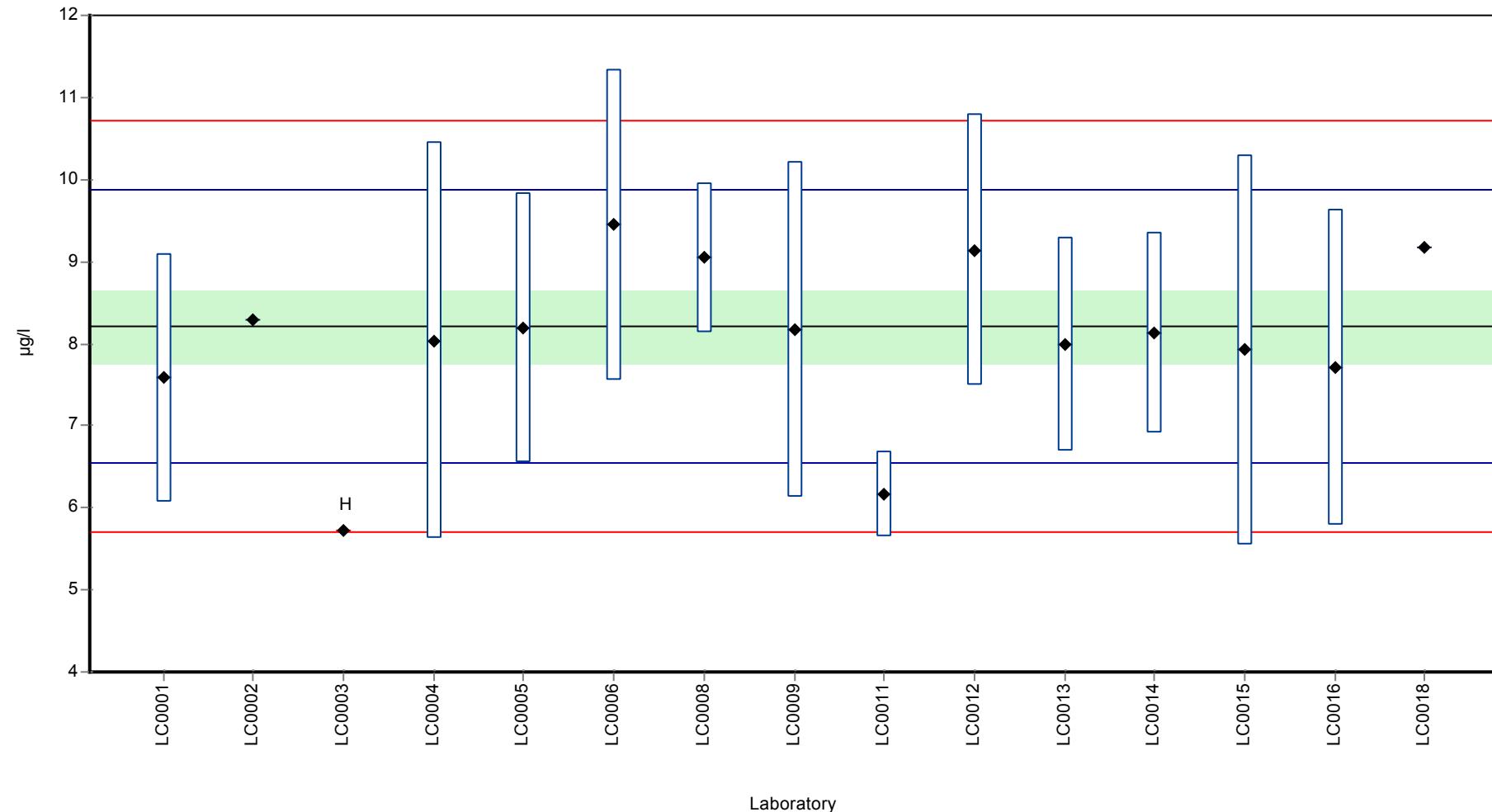
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.58	1.516	92.3	-0.76	
LC0002	8.29	-	101	0.09	
LC0003	5.72	-	69.6	-2.99	H
LC0004	8.04	2.41	97.9	-0.21	
LC0005	8.194	1.639	99.8	-0.02	
LC0006	9.448	1.89	115	1.48	
LC0007	-	-	-	-	
LC0008	9.05	0.91	110	1	
LC0009	8.168	2.042	99.4	-0.05	
LC0010	-	-	-	-	
LC0011	6.165	0.518	75.1	-2.45	
LC0012	9.14	1.65	111	1.11	
LC0013	7.985	1.302	97.2	-0.27	
LC0014	8.134	1.22	99	-0.1	
LC0015	7.92	2.376	96.4	-0.35	
LC0016	7.7	1.925	93.7	-0.62	
LC0017	-	-	-	-	
LC0018	9.18	-	112	1.16	

Characteristics of parameter

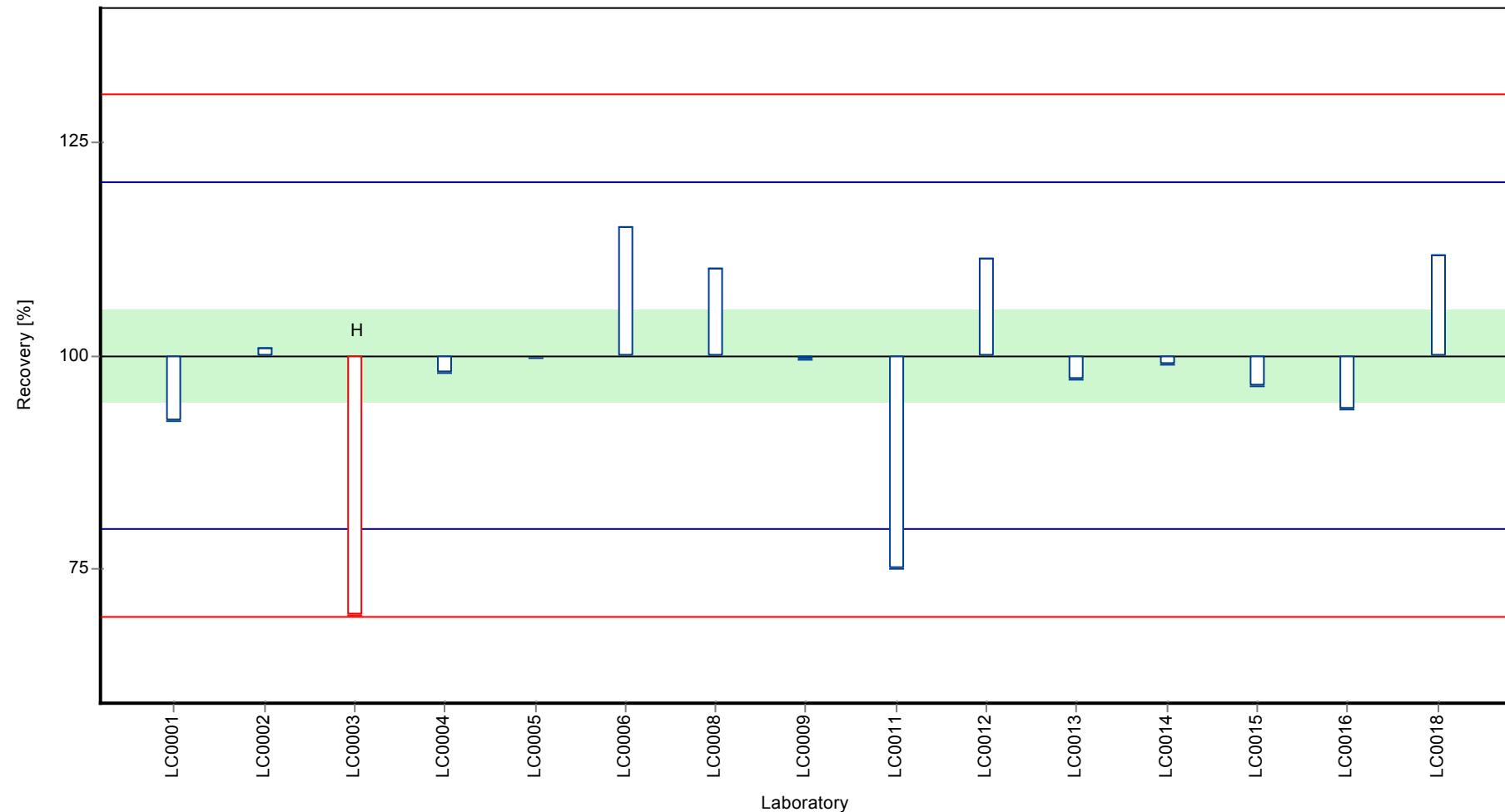
	all results	without outliers	Unit
Mean ± CI (99%)	8.05 ± 0.798	8.21 ± 0.669	µg/l
Minimum	5.72	6.17	µg/l
Maximum	9.45	9.45	µg/l
Standard deviation	1.03	0.835	µg/l
rel. Standard deviation	12.8	10.2 %	
n	15	14	-

Graphical presentation of results

Results

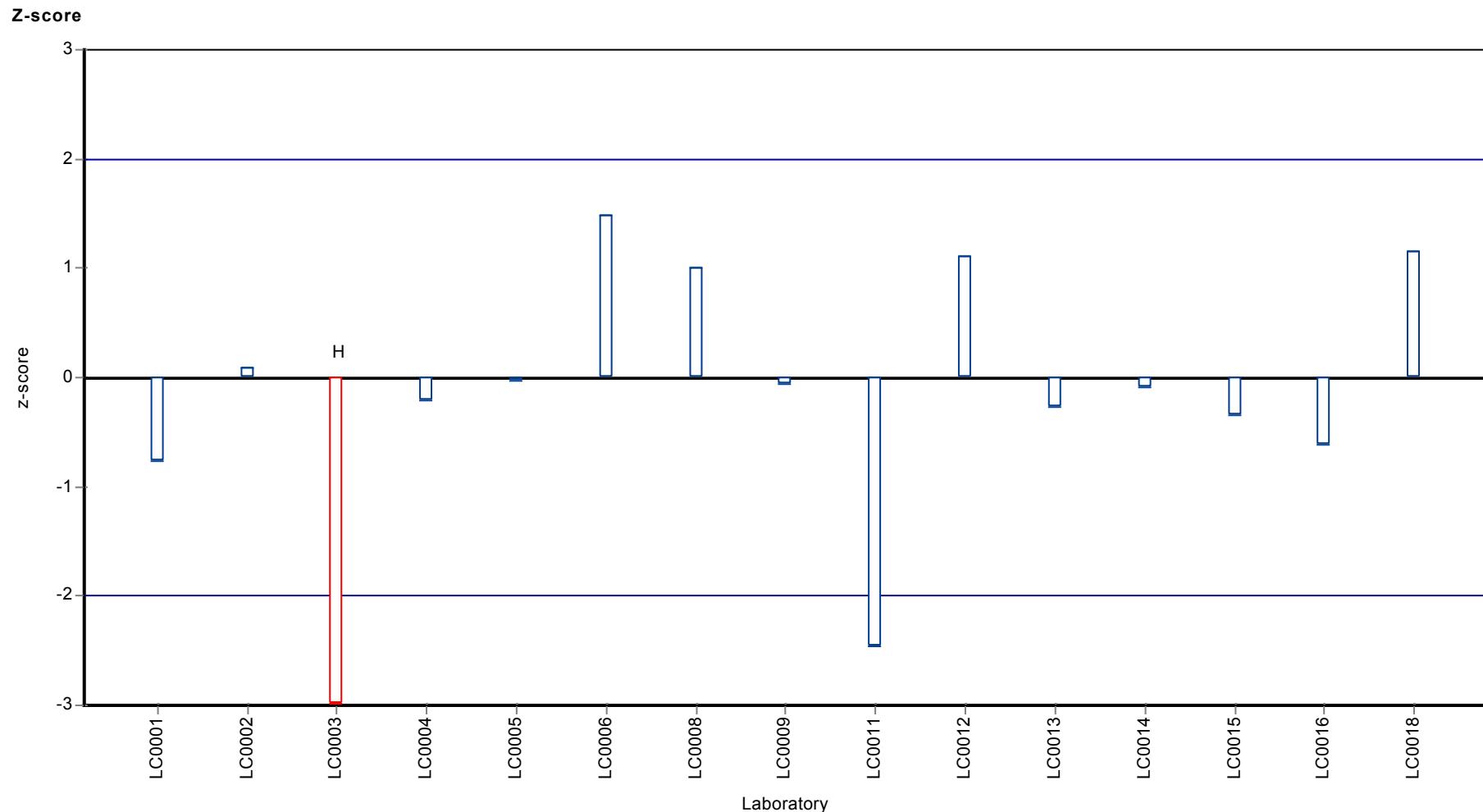


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Benzotriazole



Parameter oriented report

AZ4 A

Carbamazepine

Unit	µg/l
Mean ± CI (99%)	0.0576 ± 0.00491
Minimum - Maximum	0.04 - 0.066
Control test value ± U	0.0613 ± 0.00275

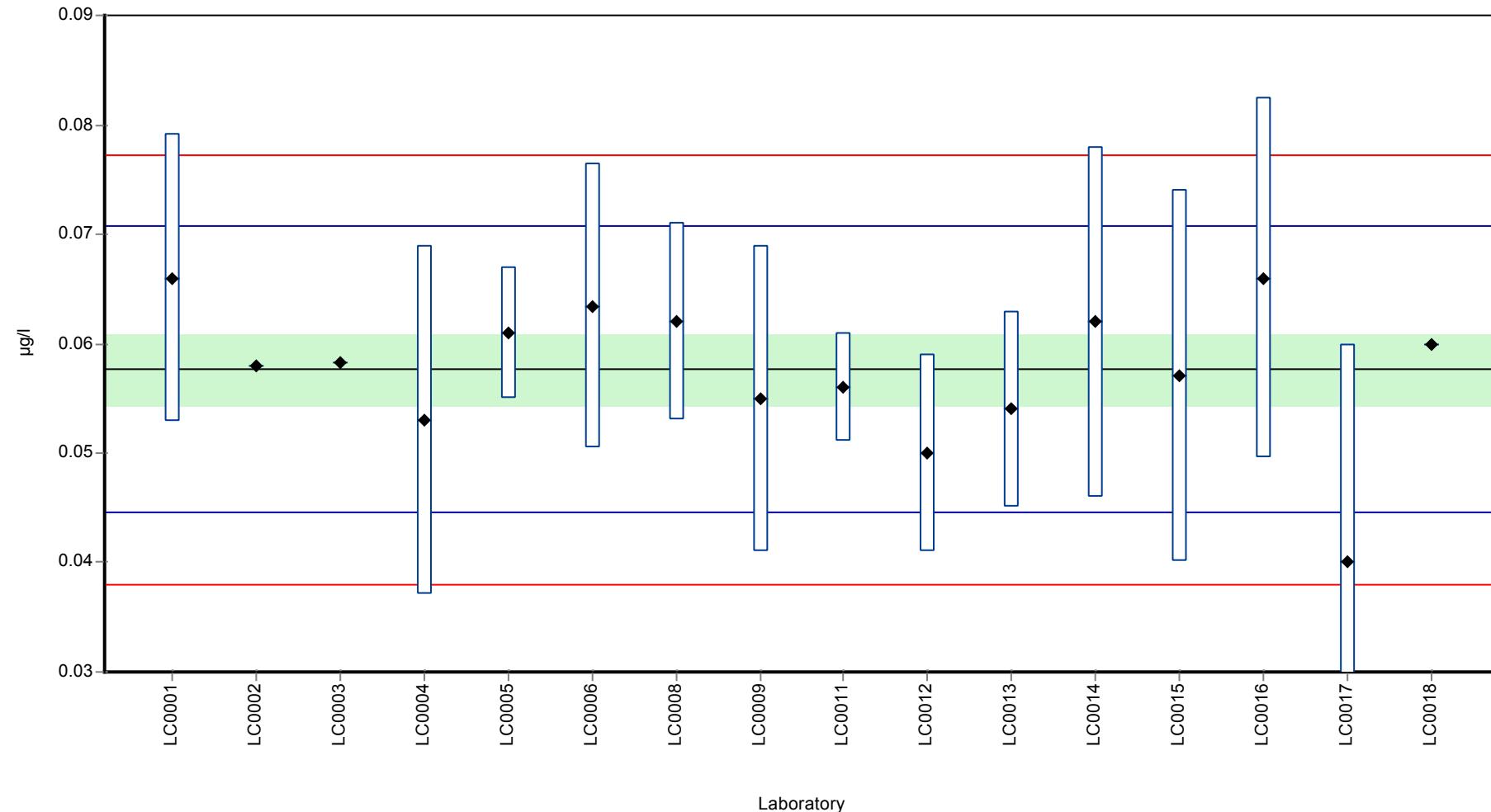
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.066	0.0132	115	1.28	
LC0002	0.058	-	101	0.06	
LC0003	0.0583	-	101	0.11	
LC0004	0.053	0.016	92	-0.7	
LC0005	0.061	0.006	106	0.52	
LC0006	0.0634	0.013	110	0.89	
LC0007	-	-	-	-	
LC0008	0.062	0.009	108	0.67	
LC0009	0.055	0.014	95.5	-0.4	
LC0010	-	-	-	-	
LC0011	0.056	0.005	97.2	-0.24	
LC0012	0.05	0.009	86.8	-1.16	
LC0013	0.054	0.009	93.7	-0.55	
LC0014	0.062	0.016	108	0.67	
LC0015	0.057	0.017	98.9	-0.09	
LC0016	0.066	0.0165	115	1.28	
LC0017	0.04	0.02	69.4	-2.69	
LC0018	0.06	-	104	0.37	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.0576 ± 0.00491	0.0576 ± 0.00491	µg/l
Minimum	0.04	0.04	µg/l
Maximum	0.066	0.066	µg/l
Standard deviation	0.00655	0.00655	µg/l
rel. Standard deviation	11.4	11.4	%
n	16	16	-

Graphical presentation of results

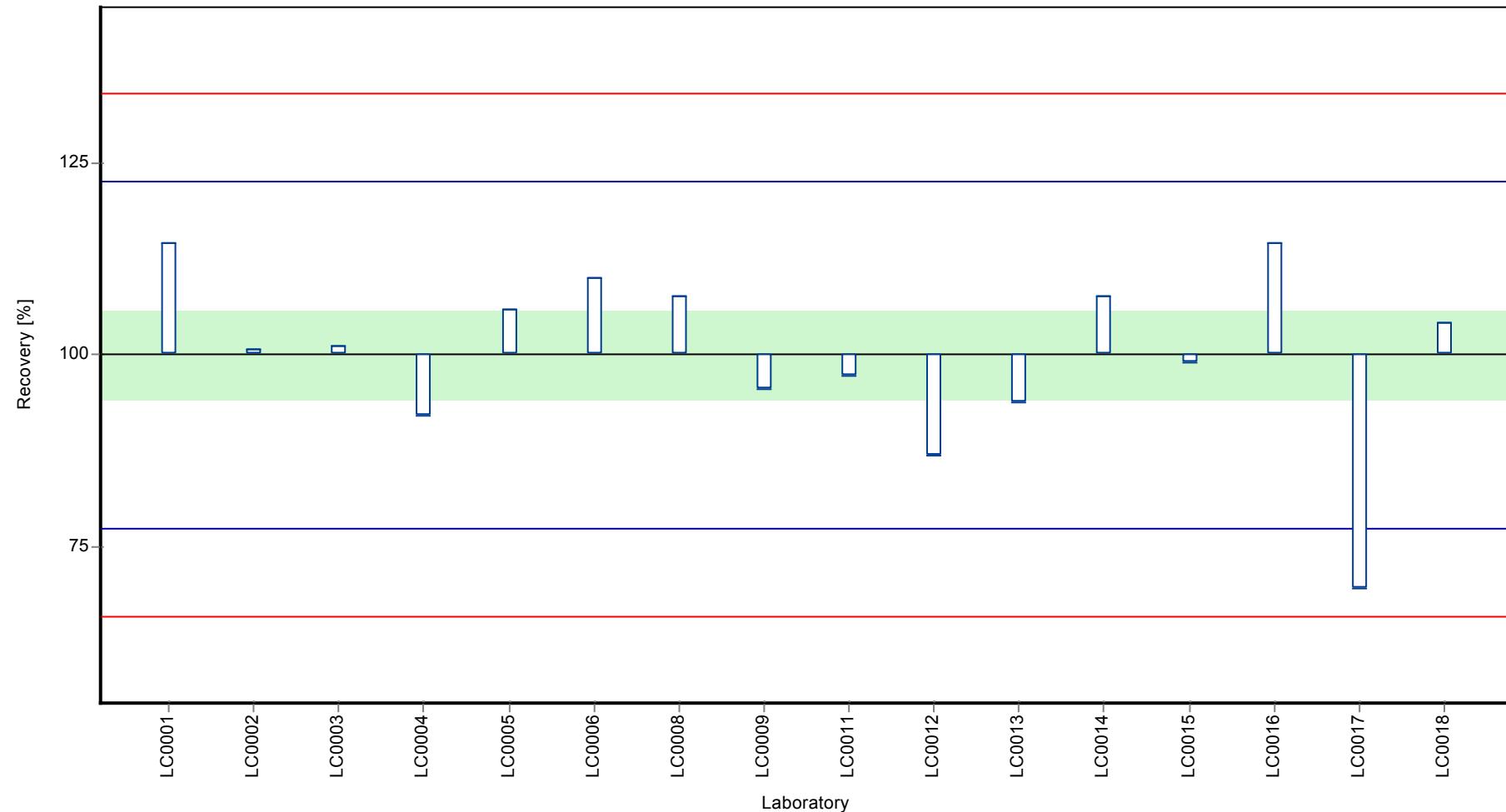
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

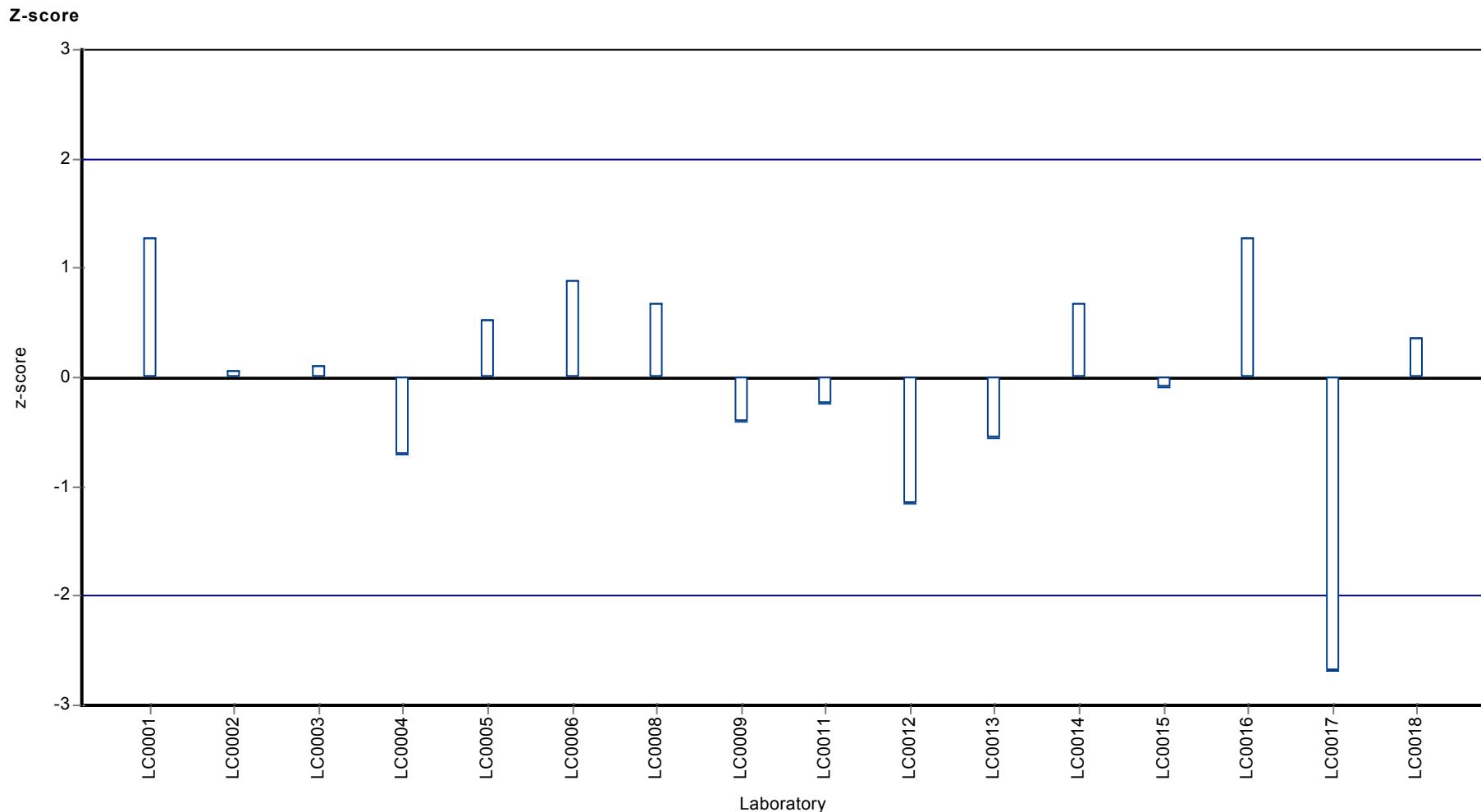
Sample: AZ4A, Parameter: Carbamazepine

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Carbamazepine



Parameter oriented report

AZ4 B

Carbamazepine

Unit	µg/l
Mean ± CI (99%)	0.588 ± 0.0527
Minimum - Maximum	0.49 - 0.699
Control test value ± U	0.63 ± 0.0403

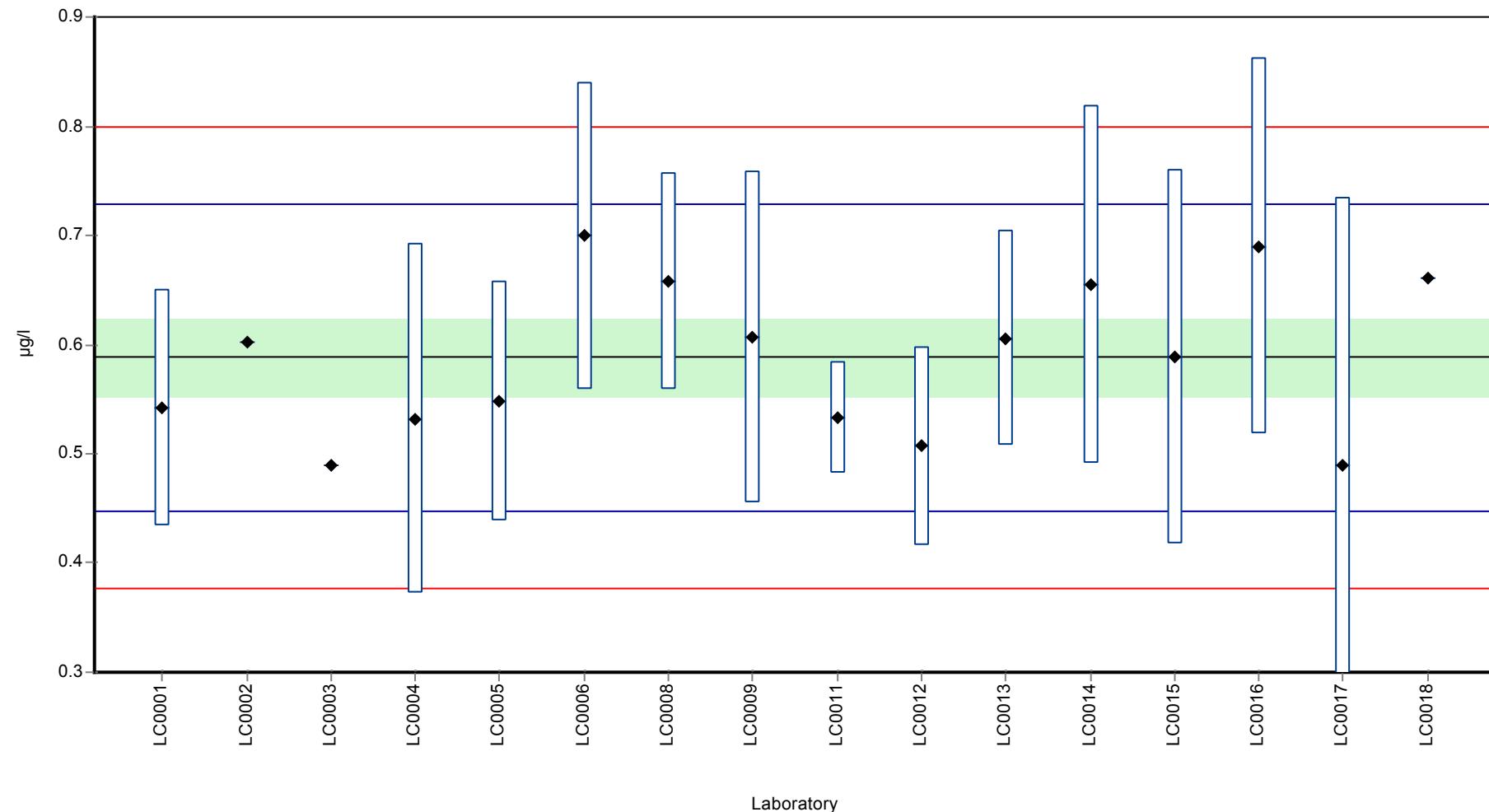
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.542	0.1084	92.2	-0.66	
LC0002	0.603	-	103	0.21	
LC0003	0.49	-	83.3	-1.4	
LC0004	0.532	0.16	90.5	-0.8	
LC0005	0.548	0.11	93.2	-0.57	
LC0006	0.6993	0.14	119	1.58	
LC0007	-	-	-	-	
LC0008	0.658	0.099	112	0.99	
LC0009	0.607	0.152	103	0.27	
LC0010	-	-	-	-	
LC0011	0.533	0.051	90.6	-0.79	
LC0012	0.507	0.091	86.2	-1.15	
LC0013	0.606	0.099	103	0.25	
LC0014	0.655	0.164	111	0.95	
LC0015	0.589	0.171	100	0.01	
LC0016	0.69	0.1725	117	1.45	
LC0017	0.49	0.245	83.3	-1.4	
LC0018	0.661	-	112	1.04	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.588 ± 0.0527	0.588 ± 0.0527	µg/l
Minimum	0.49	0.49	µg/l
Maximum	0.699	0.699	µg/l
Standard deviation	0.0703	0.0703	µg/l
rel. Standard deviation	11.9	11.9	%
n	16	16	-

Graphical presentation of results

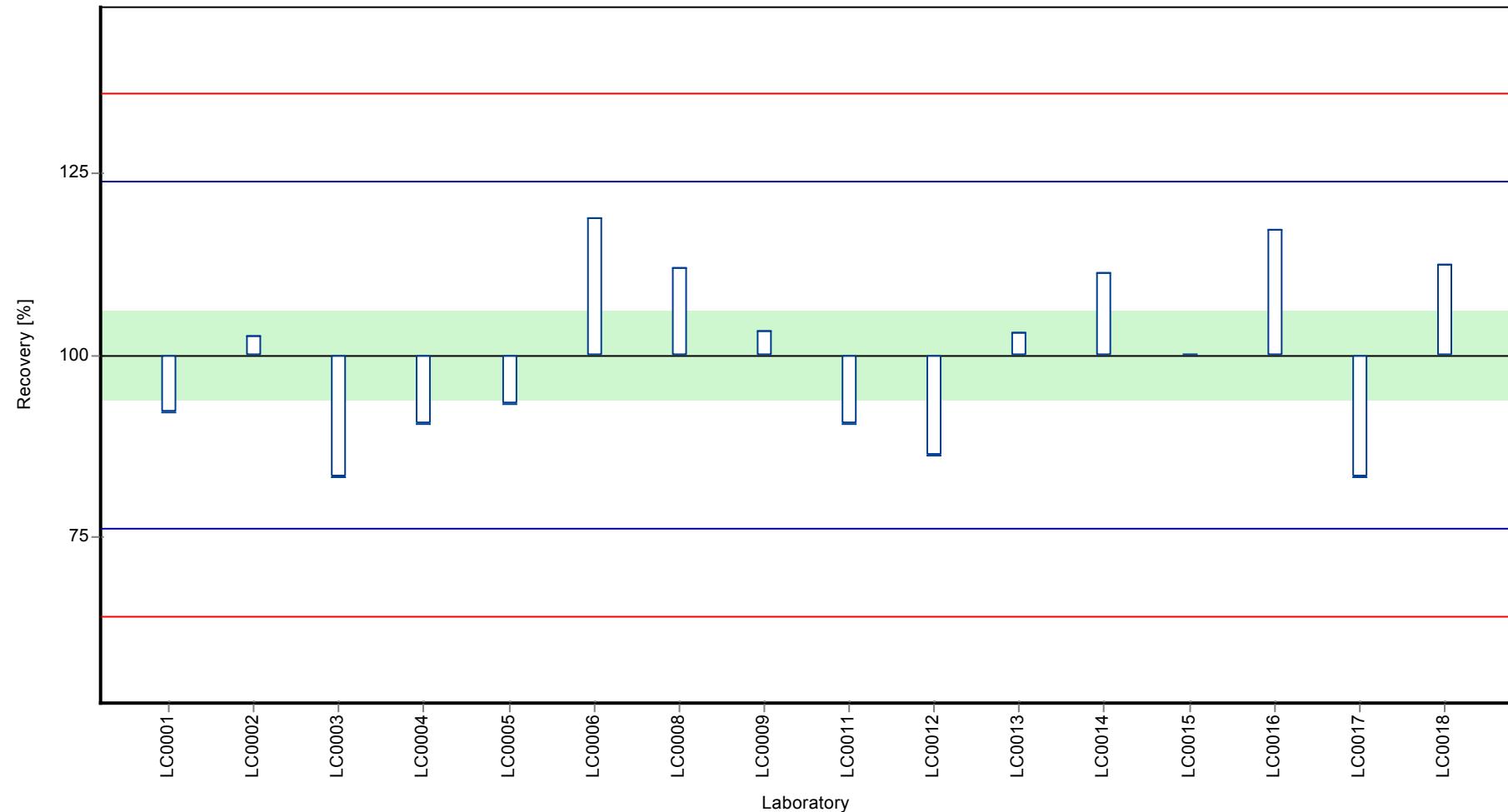
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

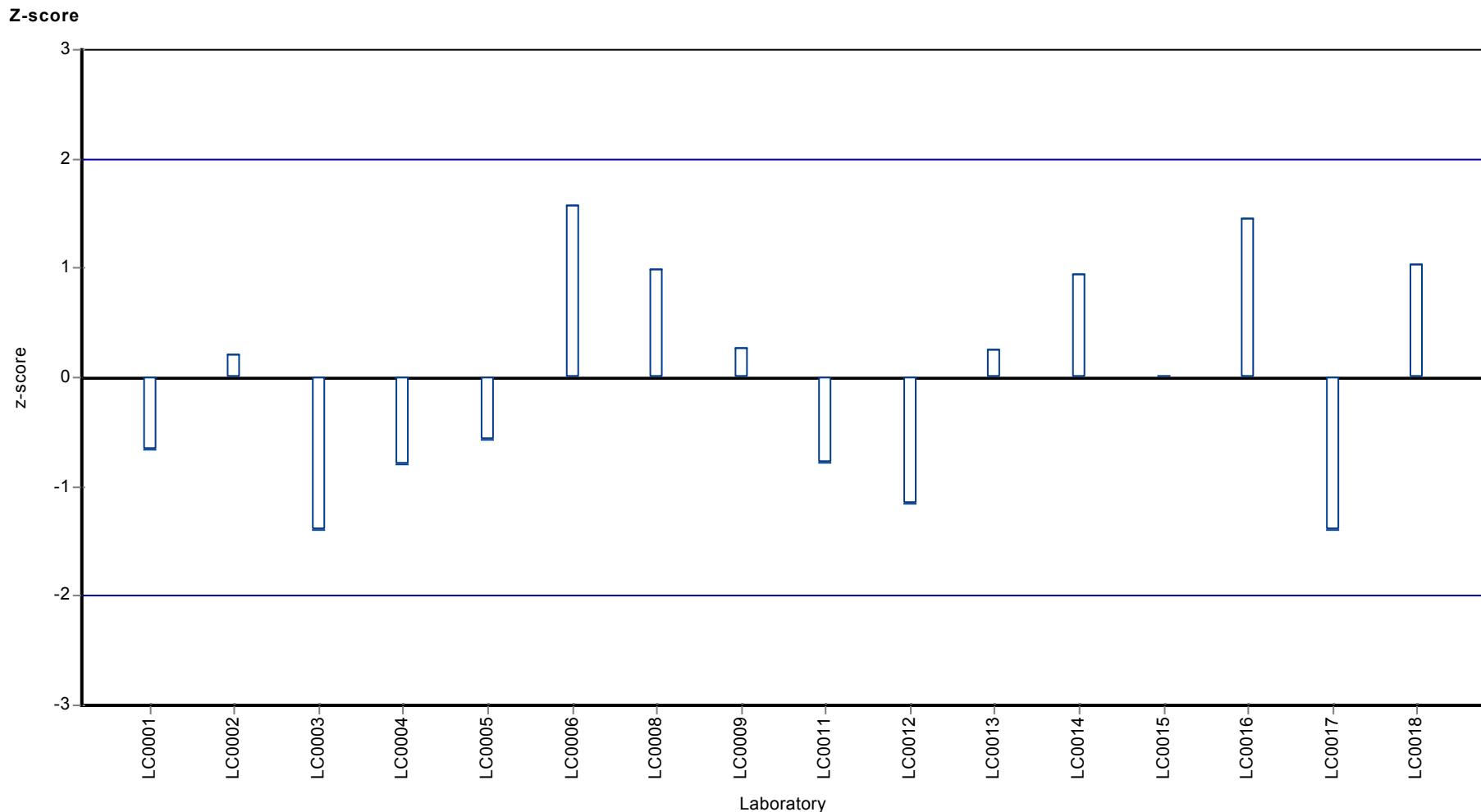
Sample: AZ4B, Parameter: Carbamazepine

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Carbamazepine



Parameter oriented report

AZ4 A

Cyclamate

Unit	µg/l
Mean ± CI (99%)	0.311 ± 0.0578
Minimum - Maximum	0.199 - 0.41
Control test value ± U	0.327 ± 0.0334

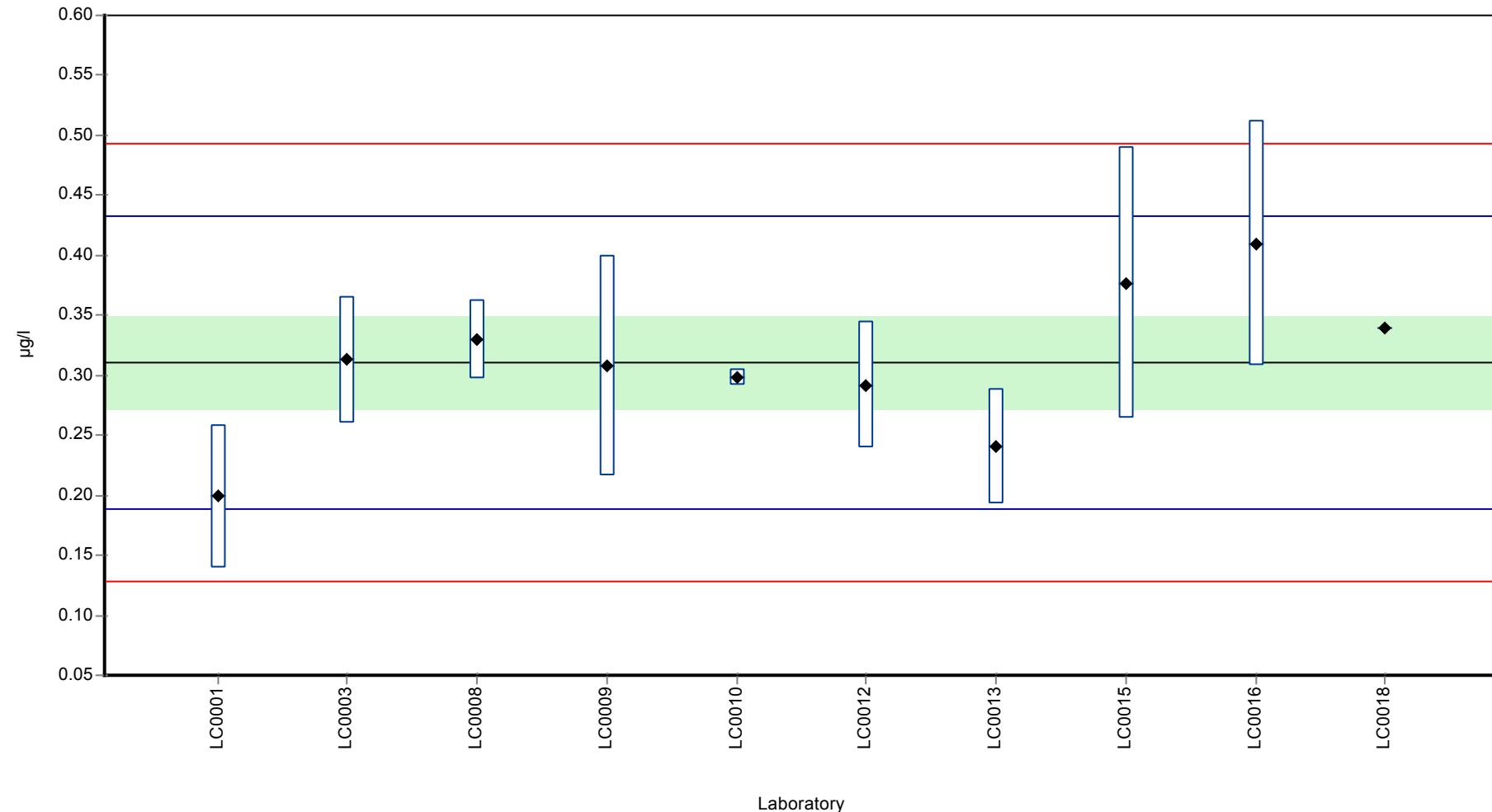
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.199	0.0597	64.1	-1.83	
LC0002	-	-	-	-	
LC0003	0.313	0.053	101	0.04	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	0.33	0.033	106	0.32	
LC0009	0.308	0.092	99.2	-0.04	
LC0010	0.298	0.007	95.9	-0.21	
LC0011	-	-	-	-	
LC0012	0.292	0.053	94	-0.3	
LC0013	0.24	0.048	77.3	-1.16	
LC0014	-	-	-	-	
LC0015	0.377	0.113	121	1.09	
LC0016	0.41	0.1025	132	1.63	
LC0017	-	-	-	-	
LC0018	0.339	-	109	0.47	

Characteristics of parameter

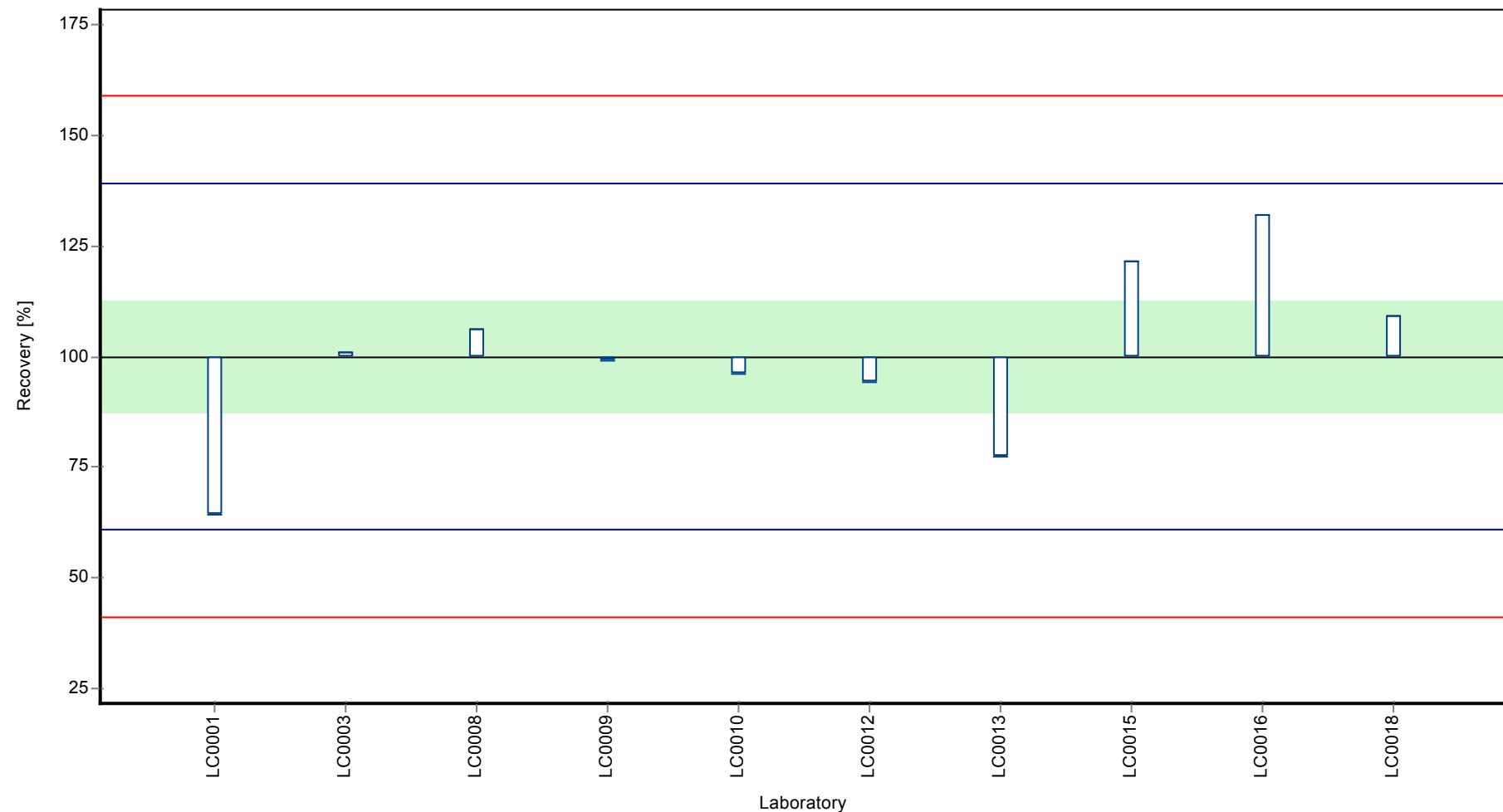
	all results	without outliers	Unit
Mean ± CI (99%)	0.311 ± 0.0578	0.311 ± 0.0578	µg/l
Minimum	0.199	0.199	µg/l
Maximum	0.41	0.41	µg/l
Standard deviation	0.0609	0.0609	µg/l
rel. Standard deviation	19.6	19.6	%
n	10	10	-

Graphical presentation of results

Results

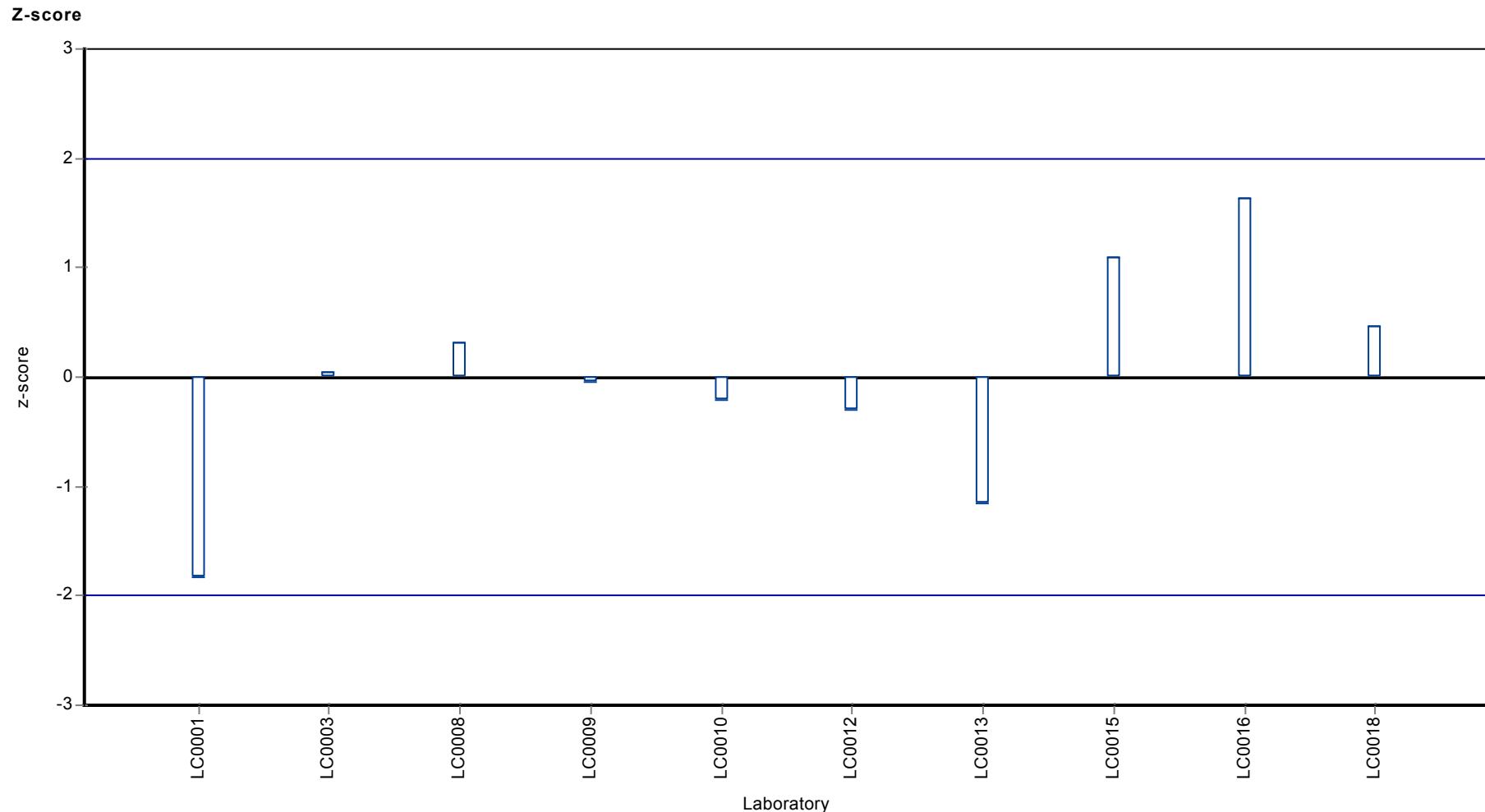


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Cyclamate



Parameter oriented report

AZ4 B

Cyclamate

Unit	µg/l
Mean ± CI (99%)	0.214 ± 0.0709
Minimum - Maximum	0.109 - 0.305
Control test value ± U	0.219 ± 0.0327

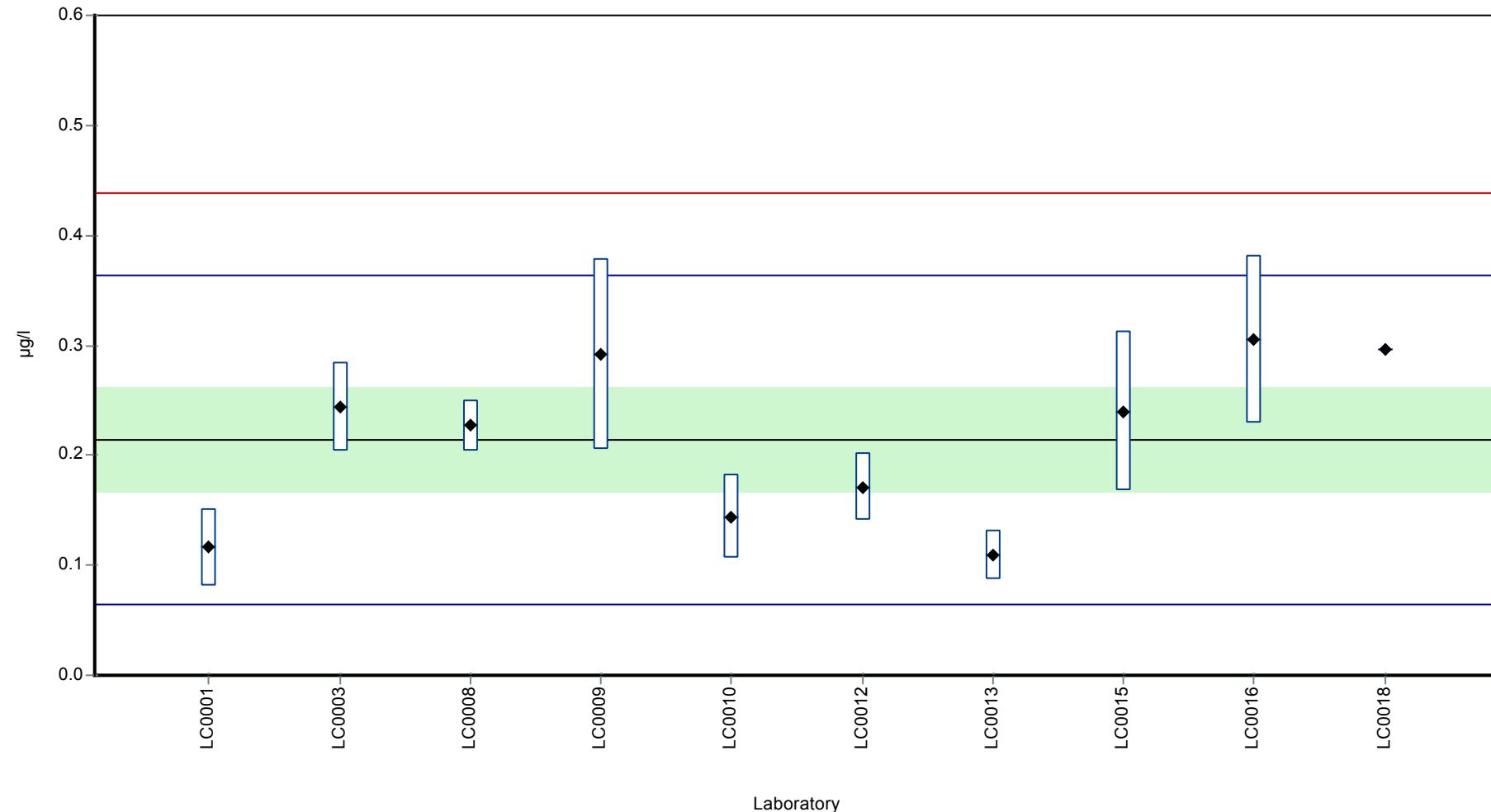
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.116	0.0348	54.1	-1.32	
LC0002	-	-	-	-	
LC0003	0.244	0.041	114	0.4	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	0.227	0.023	106	0.17	
LC0009	0.292	0.087	136	1.04	
LC0010	0.144	0.038	67.2	-0.94	
LC0011	-	-	-	-	
LC0012	0.171	0.031	79.8	-0.58	
LC0013	0.109	0.022	50.8	-1.41	
LC0014	-	-	-	-	
LC0015	0.24	0.072	112	0.34	
LC0016	0.305	0.07625	142	1.21	
LC0017	-	-	-	-	
LC0018	0.296	-	138	1.09	

Characteristics of parameter

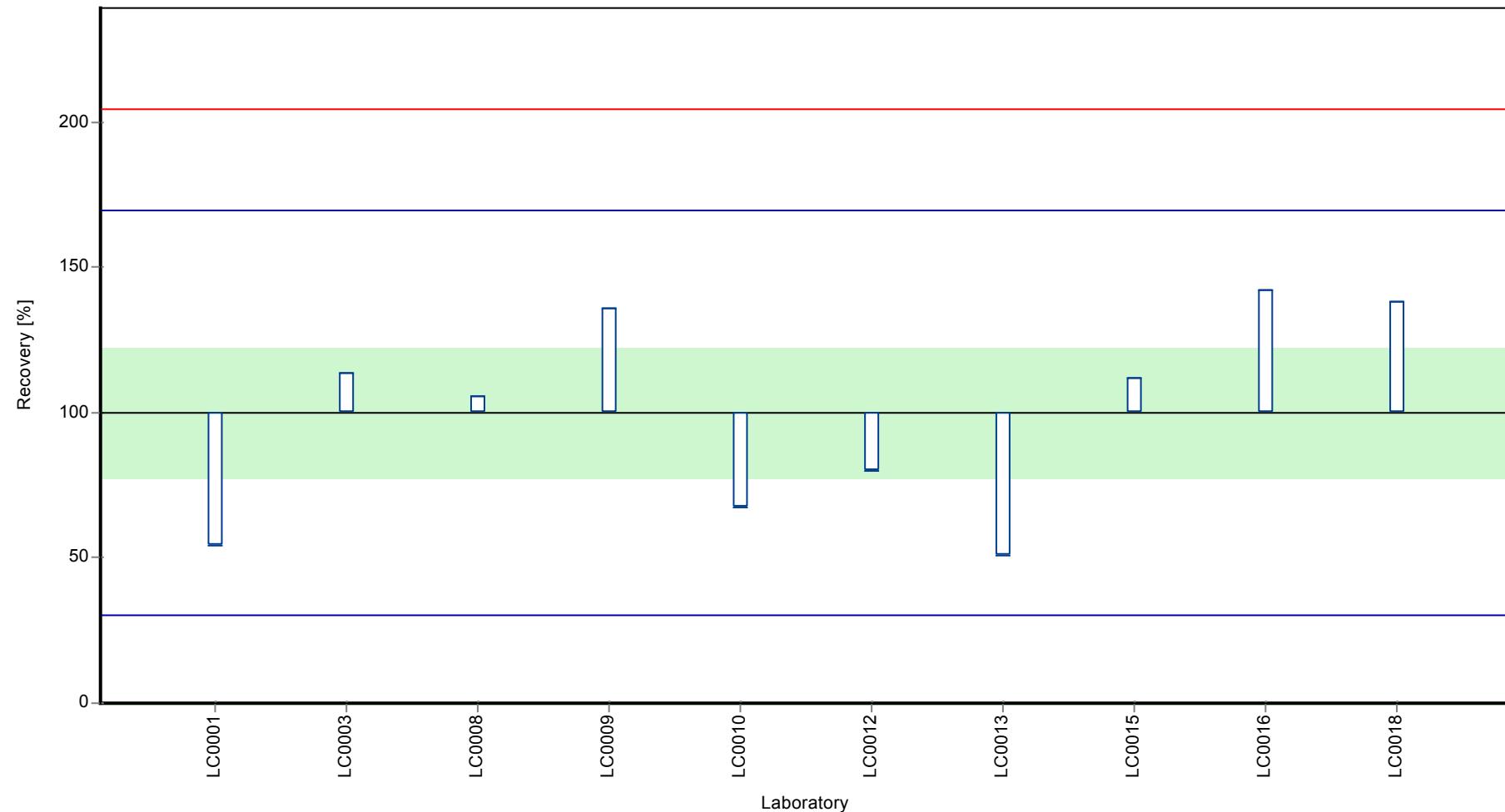
	all results	without outliers	Unit
Mean ± CI (99%)	0.214 ± 0.0709	0.214 ± 0.0709	µg/l
Minimum	0.109	0.109	µg/l
Maximum	0.305	0.305	µg/l
Standard deviation	0.0747	0.0747	µg/l
rel. Standard deviation	34.8	34.8	%
n	10	10	-

Graphical presentation of results

Results

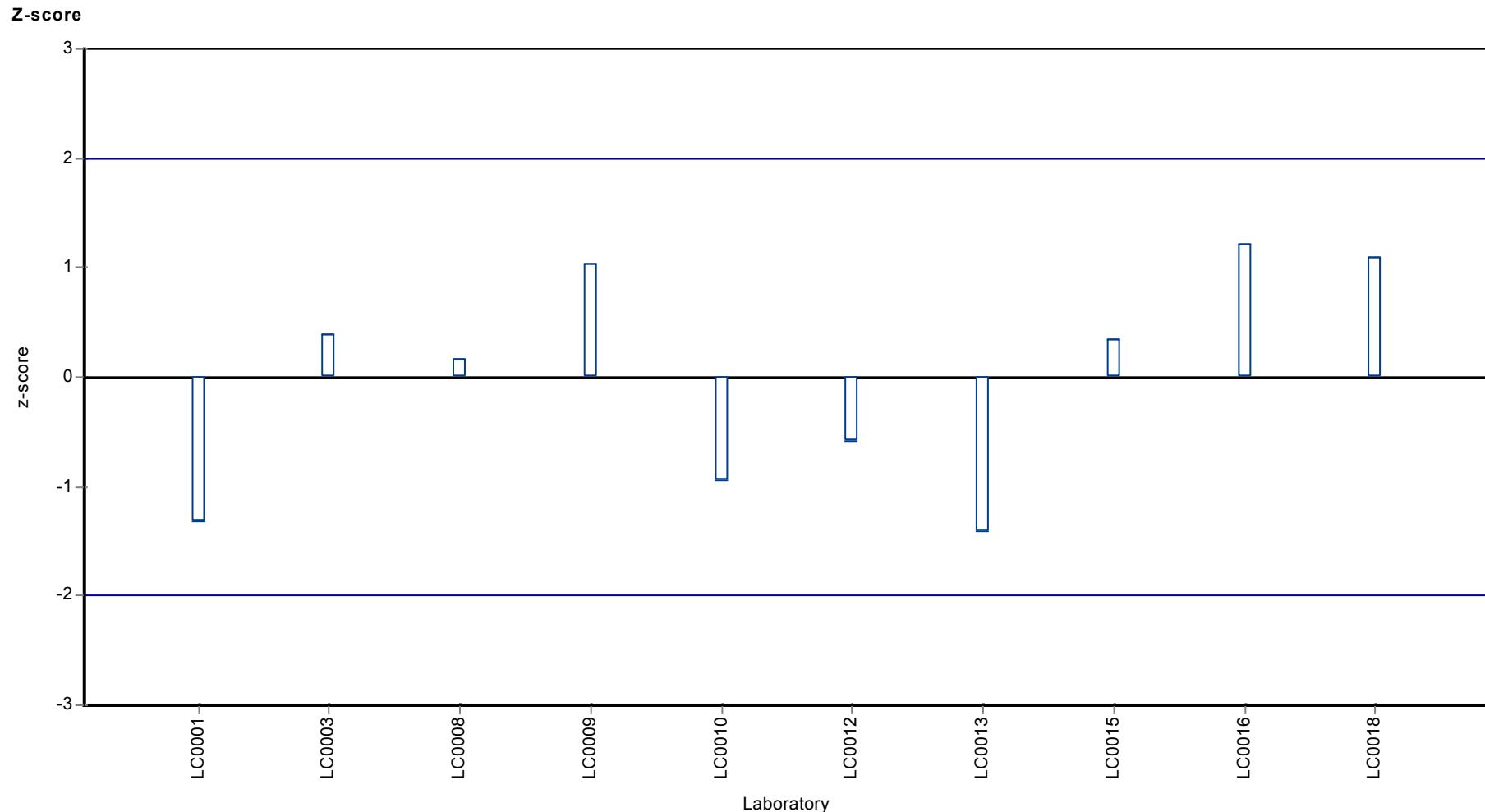


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Cyclamate



Parameter oriented report

AZ4 A

Diazepam

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	-
Control test value ± U	<0.025 (LOD)

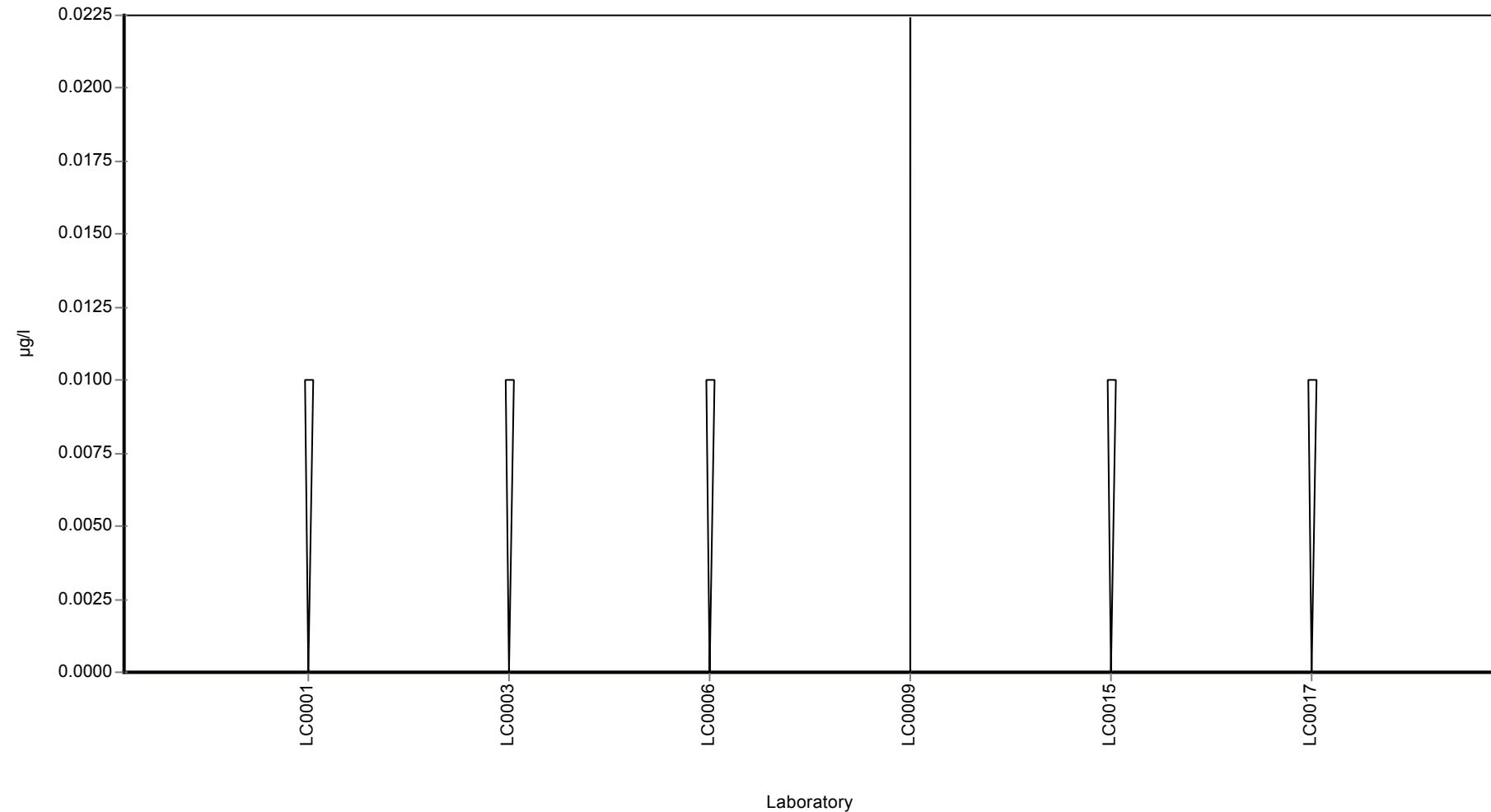
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.01 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	< 0.01 (LOQ)	-	-	-	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	< 0.01 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 10 (LOQ)	-	-	-	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	< 0.01 (LOQ)	-	-	-	
LC0018	-	-	-	-	

Characteristics of parameter

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

Graphical presentation of results

Results



Parameter oriented report

AZ4 B

Diazepam

Unit	µg/l
Mean ± CI (99%)	0.278 ± 0.0473
Minimum - Maximum	0.213 - 0.323
Control test value ± U	0.302 ± 0.0188

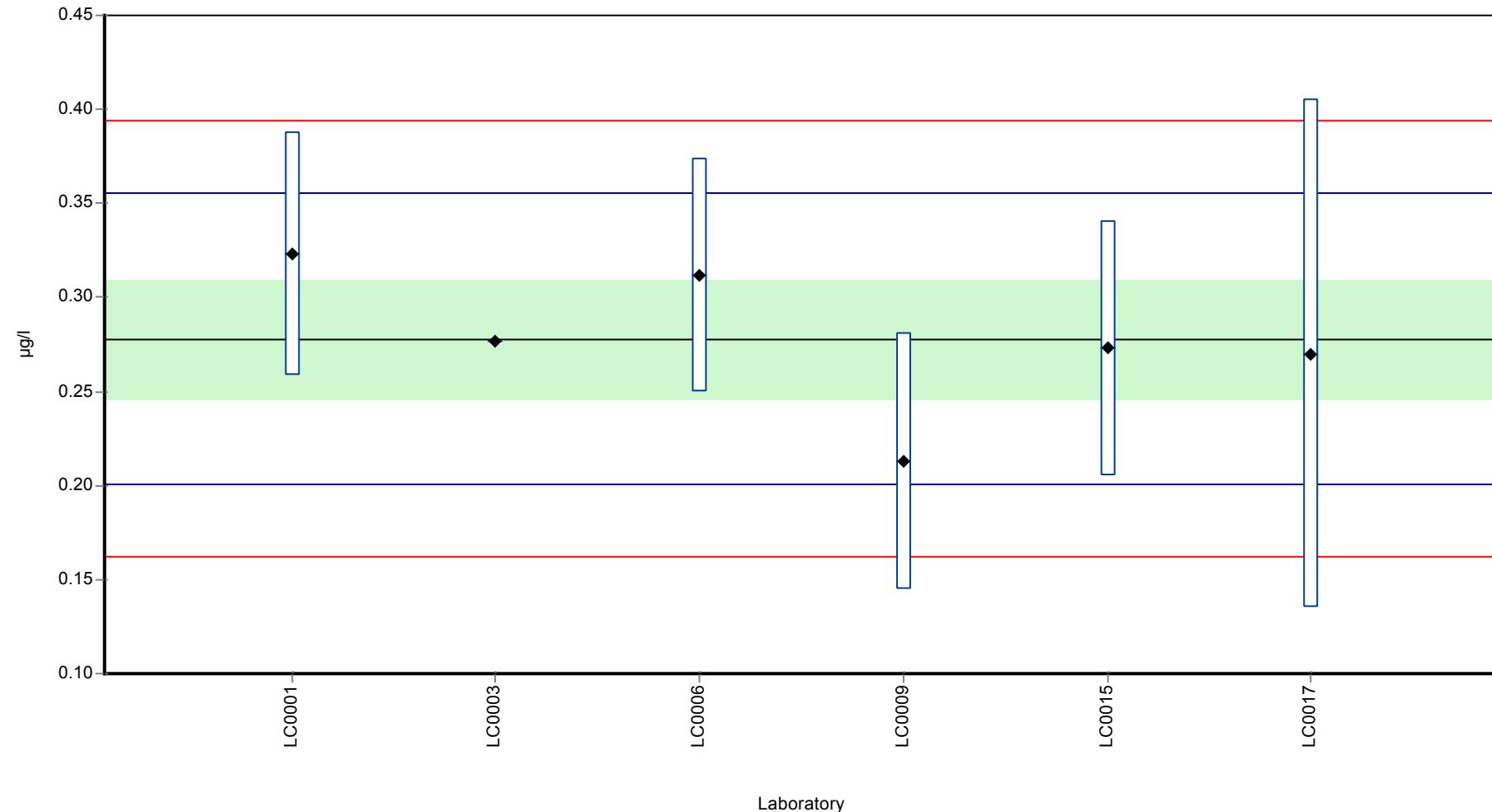
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.323	0.0646	116	1.17	
LC0002	-	-	-	-	
LC0003	0.277	-	99.7	-0.02	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.3115	0.062	112	0.87	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.213	0.068	76.6	-1.68	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	0.273	0.068	98.2	-0.13	
LC0016	-	-	-	-	
LC0017	0.27	0.135	97.2	-0.2	
LC0018	-	-	-	-	

Characteristics of parameter

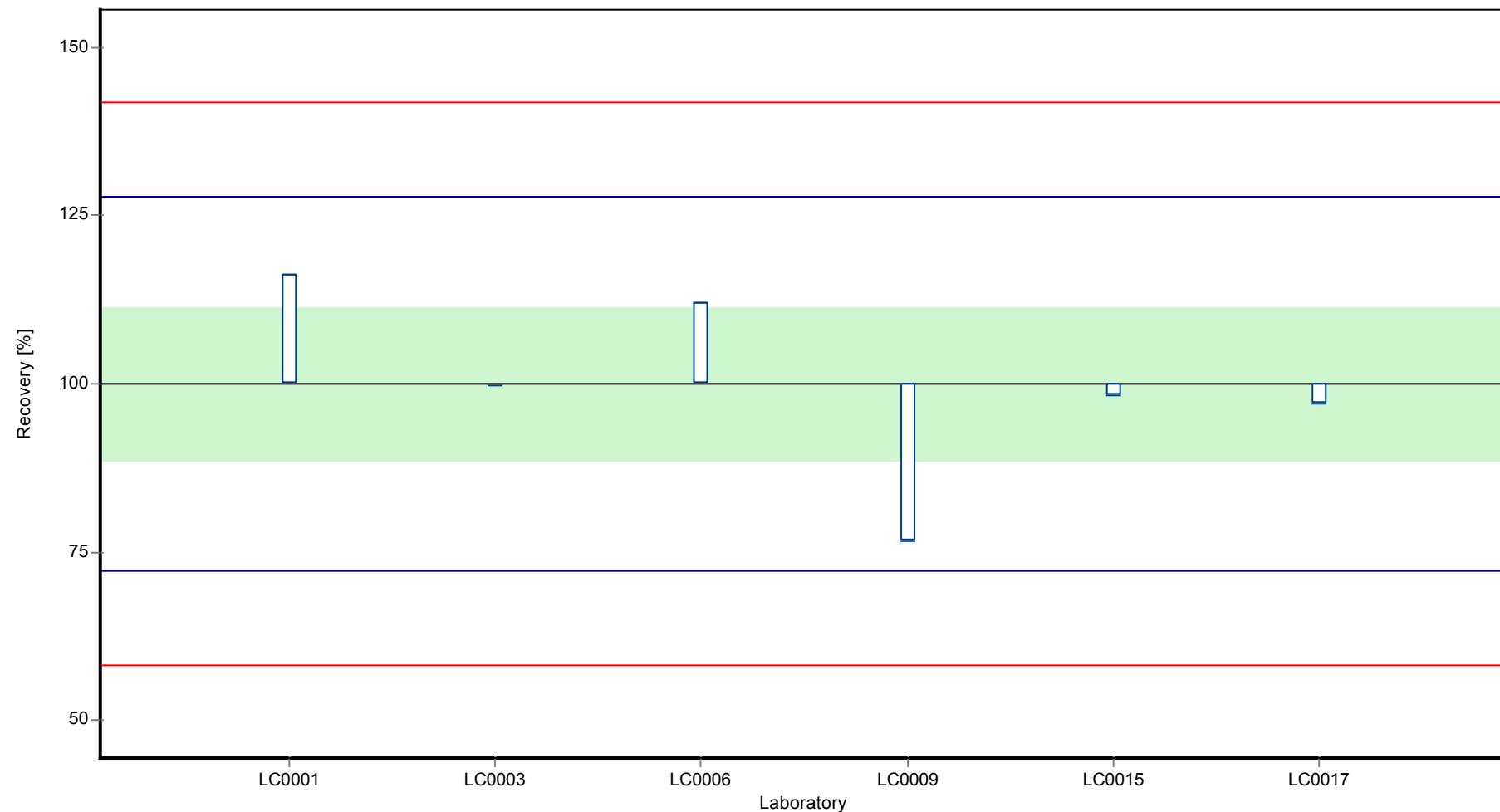
	all results	without outliers	Unit
Mean ± CI (99%)	0.278 ± 0.0473	0.278 ± 0.0473	µg/l
Minimum	0.213	0.213	µg/l
Maximum	0.323	0.323	µg/l
Standard deviation	0.0386	0.0386	µg/l
rel. Standard deviation	13.9	13.9	%
n	6	6	-

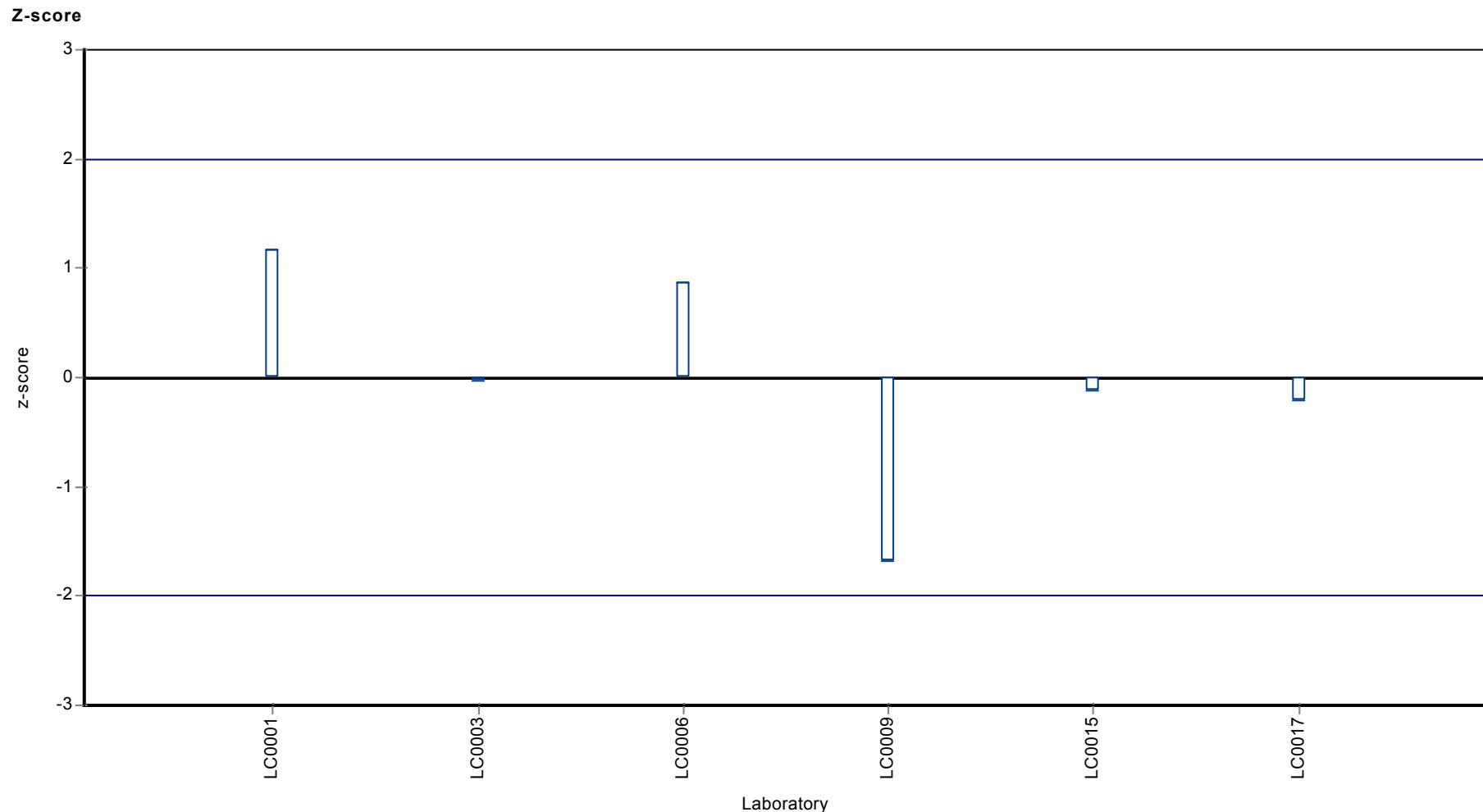
Graphical presentation of results

Results



Recovery rate





Parameter oriented report

AZ4 A

Diclofenac

Unit	µg/l
Mean ± CI (99%)	0.36 ± 0.0373
Minimum - Maximum	0.309 - 0.469
Control test value ± U	0.354 ± 0.0205

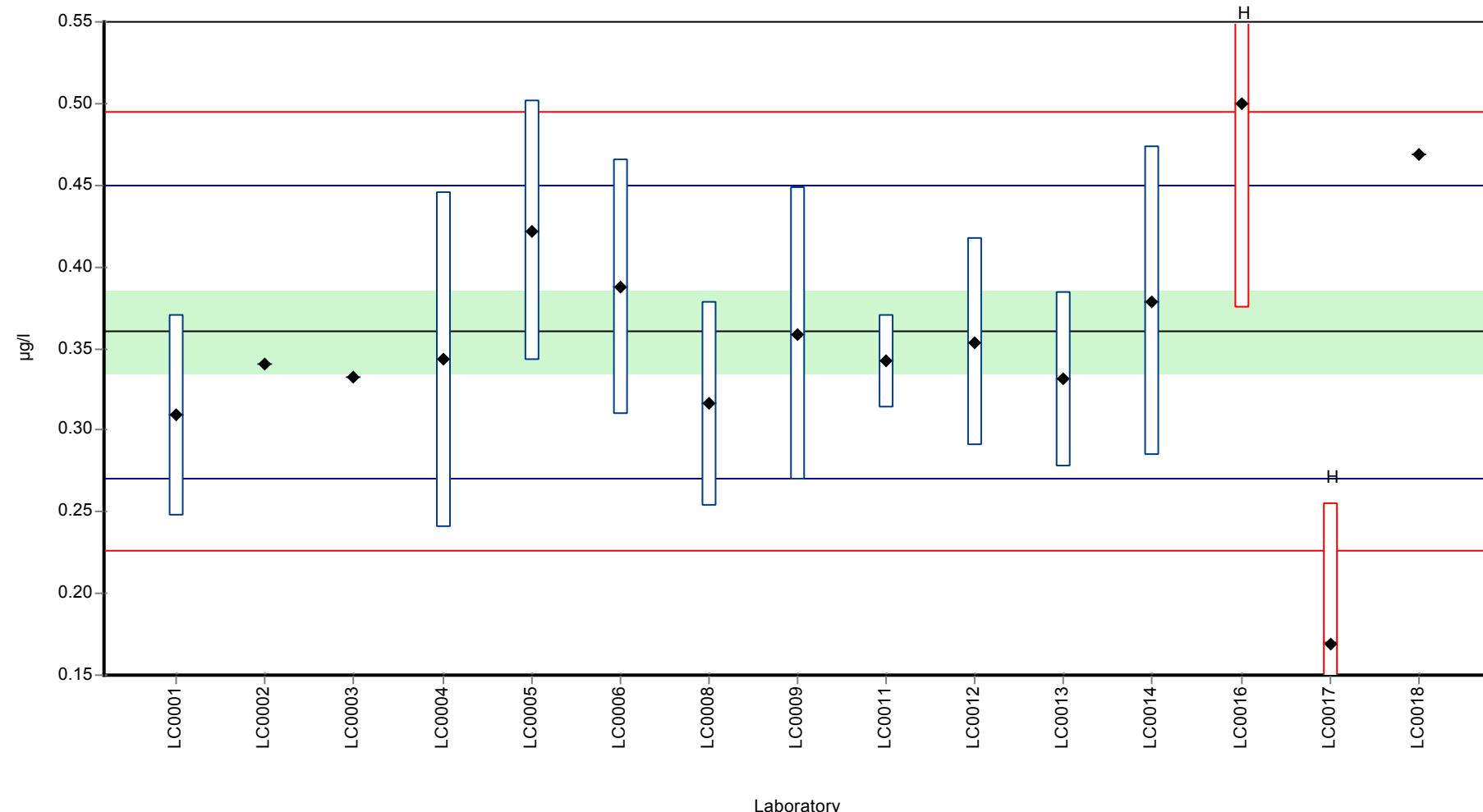
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.309	0.0618	85.8	-1.15	
LC0002	0.34	-	94.4	-0.45	
LC0003	0.332	-	92.2	-0.63	
LC0004	0.343	0.103	95.2	-0.39	
LC0005	0.422	0.08	117	1.38	
LC0006	0.3875	0.078	108	0.61	
LC0007	-	-	-	-	
LC0008	0.316	0.063	87.7	-0.99	
LC0009	0.359	0.09	99.6	-0.03	
LC0010	-	-	-	-	
LC0011	0.342	0.029	94.9	-0.41	
LC0012	0.354	0.064	98.3	-0.14	
LC0013	0.331	0.054	91.9	-0.65	
LC0014	0.379	0.095	105	0.42	
LC0015	-	-	-	-	
LC0016	0.5	0.125	139	3.12	H
LC0017	0.17	0.085	47.2	-4.25	H
LC0018	0.469	-	130	2.43	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.357 ± 0.0584	0.36 ± 0.0373	µg/l
Minimum	0.17	0.309	µg/l
Maximum	0.5	0.469	µg/l
Standard deviation	0.0754	0.0448	µg/l
rel. Standard deviation	21.1	12.4 %	
n	15	13	-

Graphical presentation of results

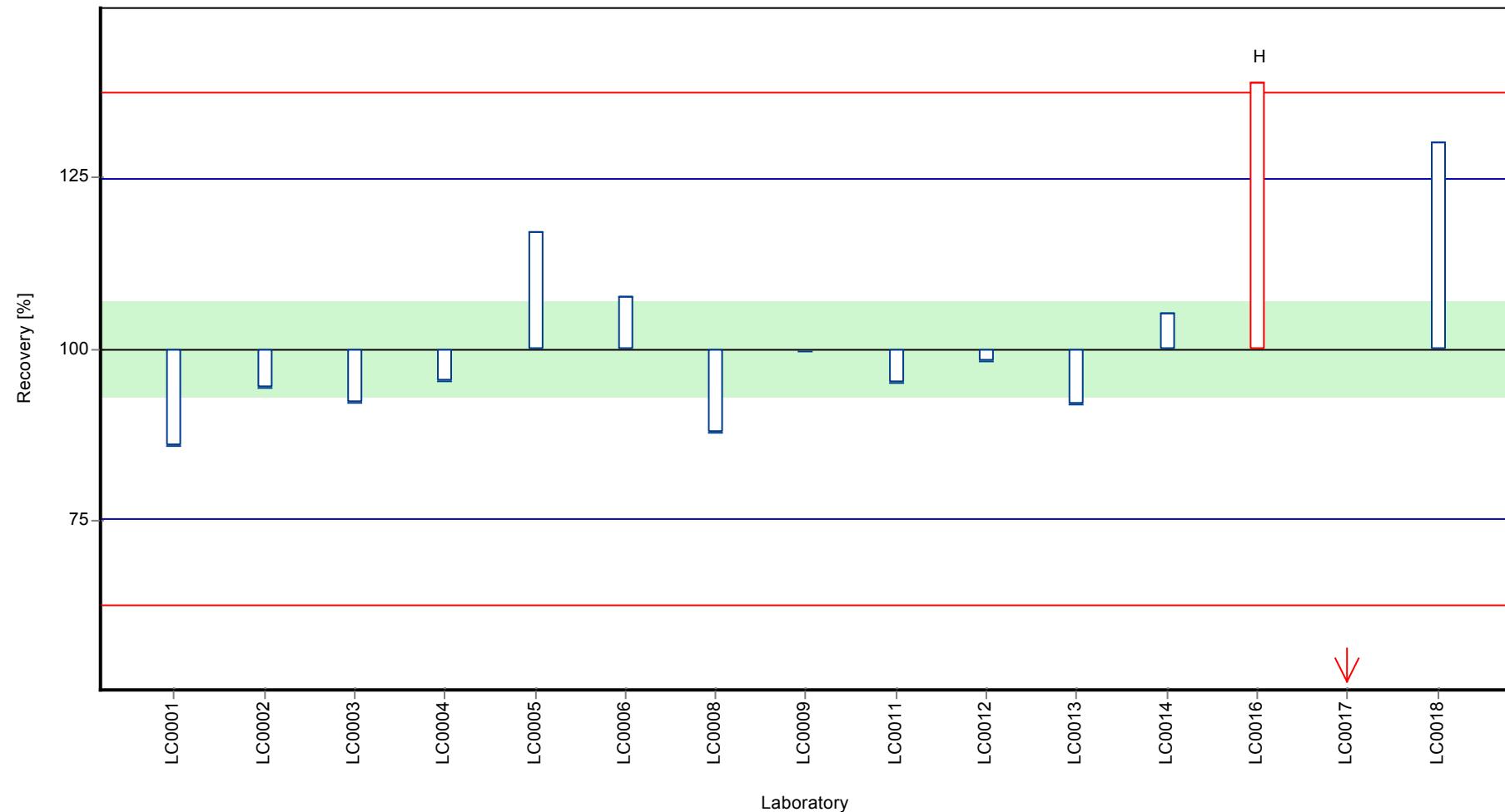
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

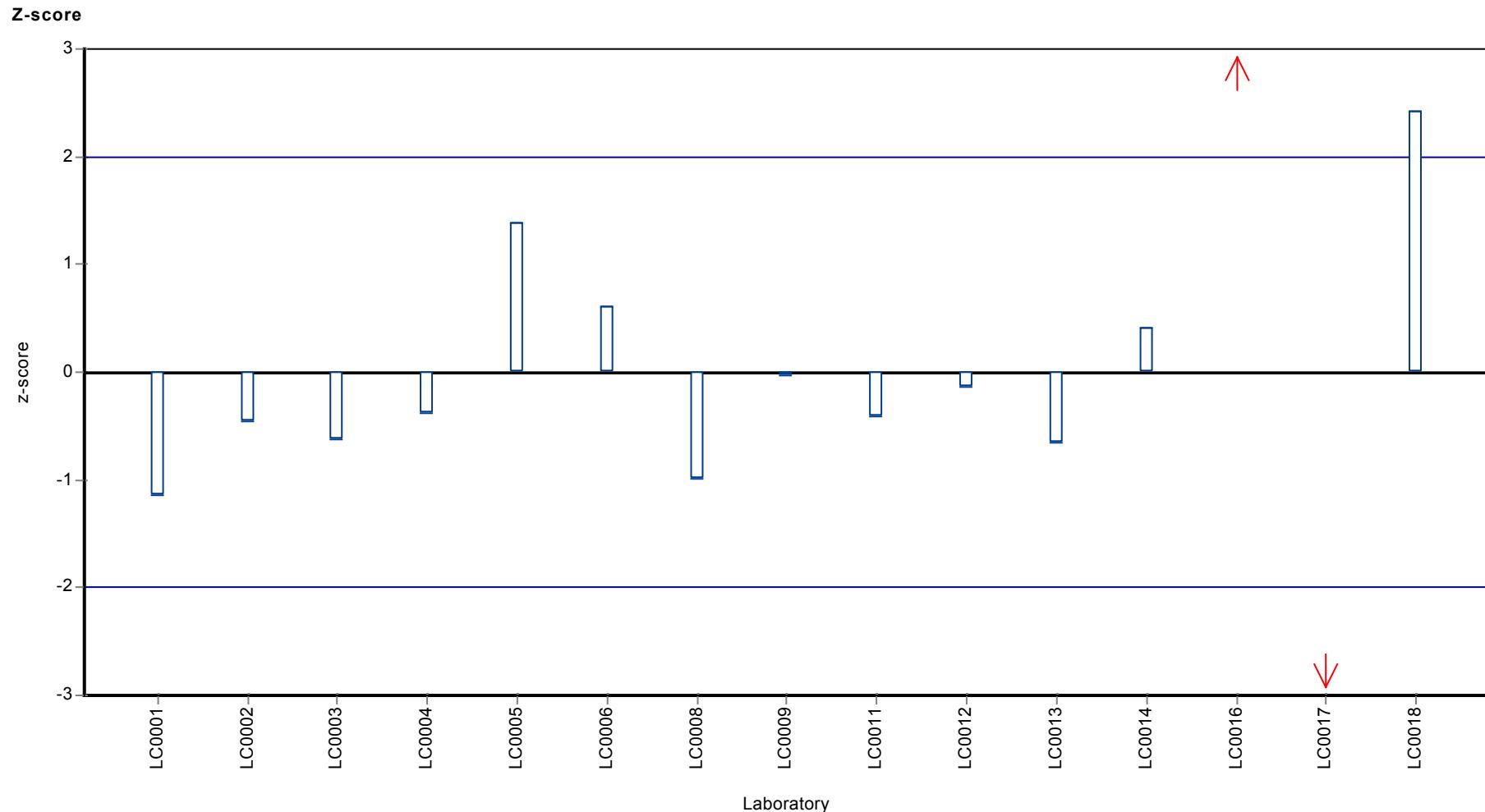
Sample: AZ4A, Parameter: Diclofenac

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Diclofenac



Parameter oriented report

AZ4 B

Diclofenac

Unit	$\mu\text{g/l}$
Mean \pm CI (99%)	2.87 ± 0.327
Minimum - Maximum	1.97 - 3.6
Control test value \pm U	2.83 ± 0.107

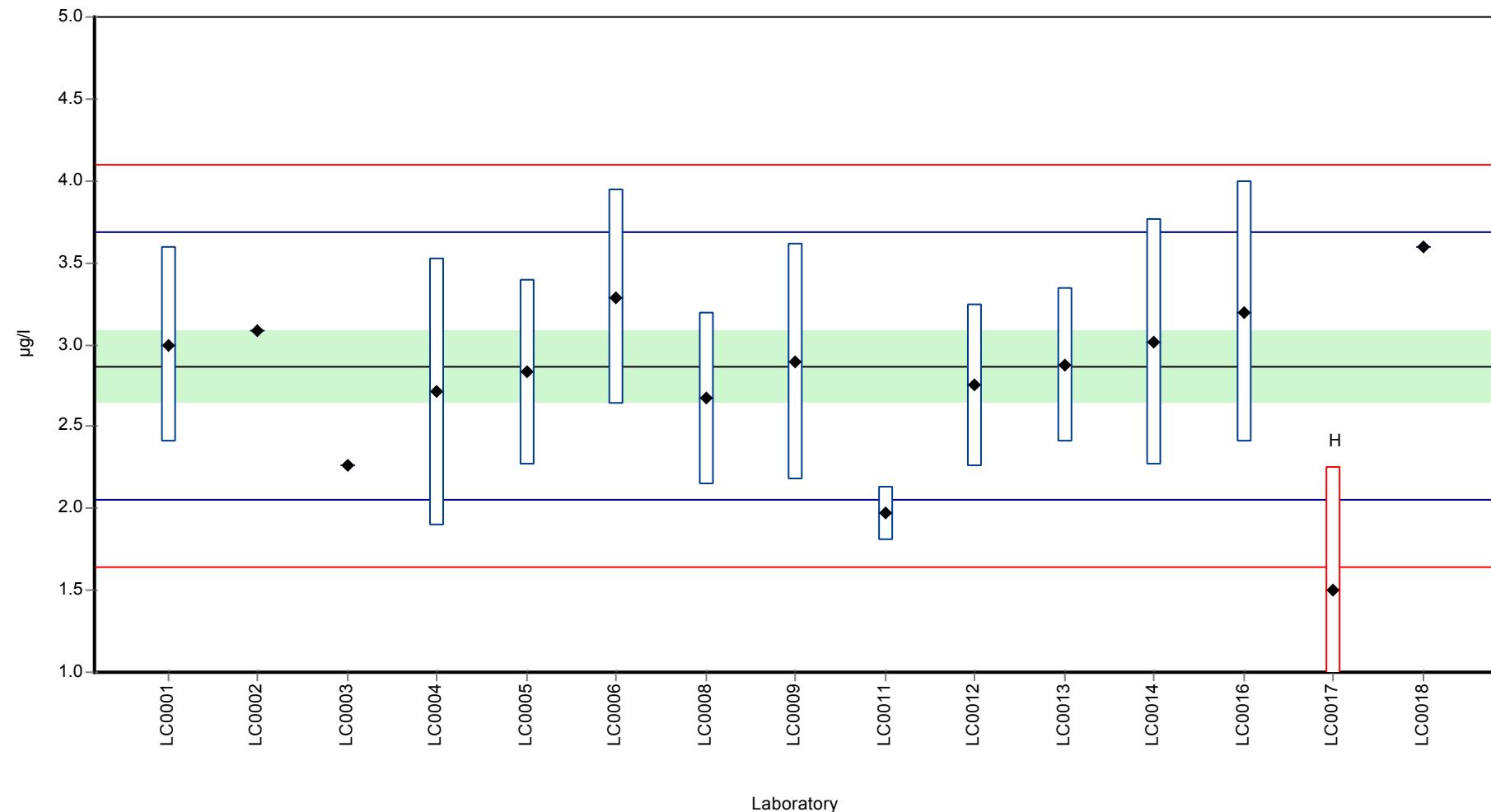
Labcode	Result	$\pm U$	Recovery [%]	z-score	Comments
LC0001	3	0.6	105	0.32	
LC0002	3.09	-	108	0.54	
LC0003	2.26	-	78.8	-1.49	
LC0004	2.71	0.813	94.5	-0.39	
LC0005	2.831	0.566	98.7	-0.09	
LC0006	3.289	0.658	115	1.03	
LC0007	-	-	-	-	
LC0008	2.67	0.53	93.1	-0.48	
LC0009	2.895	0.724	101	0.07	
LC0010	-	-	-	-	
LC0011	1.97	0.165	68.7	-2.2	
LC0012	2.75	0.495	95.9	-0.29	
LC0013	2.874	0.468	100	0.01	
LC0014	3.017	0.754	105	0.36	
LC0015	-	-	-	-	
LC0016	3.2	0.8	112	0.81	
LC0017	1.5	0.75	52.3	-3.35	H
LC0018	3.6	-	126	1.79	

Characteristics of parameter

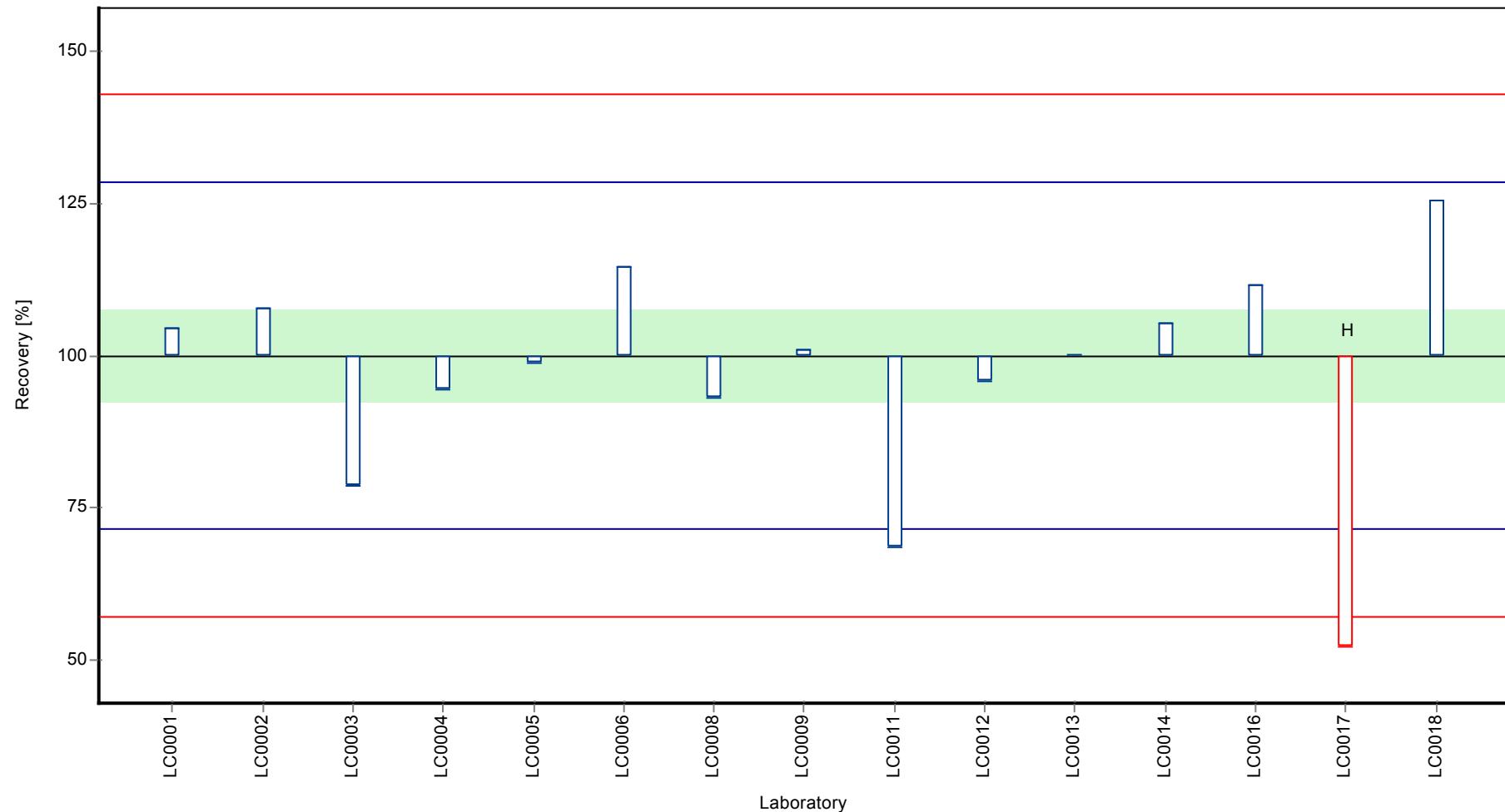
	all results	without outliers	Unit
Mean \pm CI (99%)	2.78 ± 0.41	2.87 ± 0.327	$\mu\text{g/l}$
Minimum	1.5	1.97	$\mu\text{g/l}$
Maximum	3.6	3.6	$\mu\text{g/l}$
Standard deviation	0.529	0.408	$\mu\text{g/l}$
rel. Standard deviation	19	14.2 %	
n	15	14	-

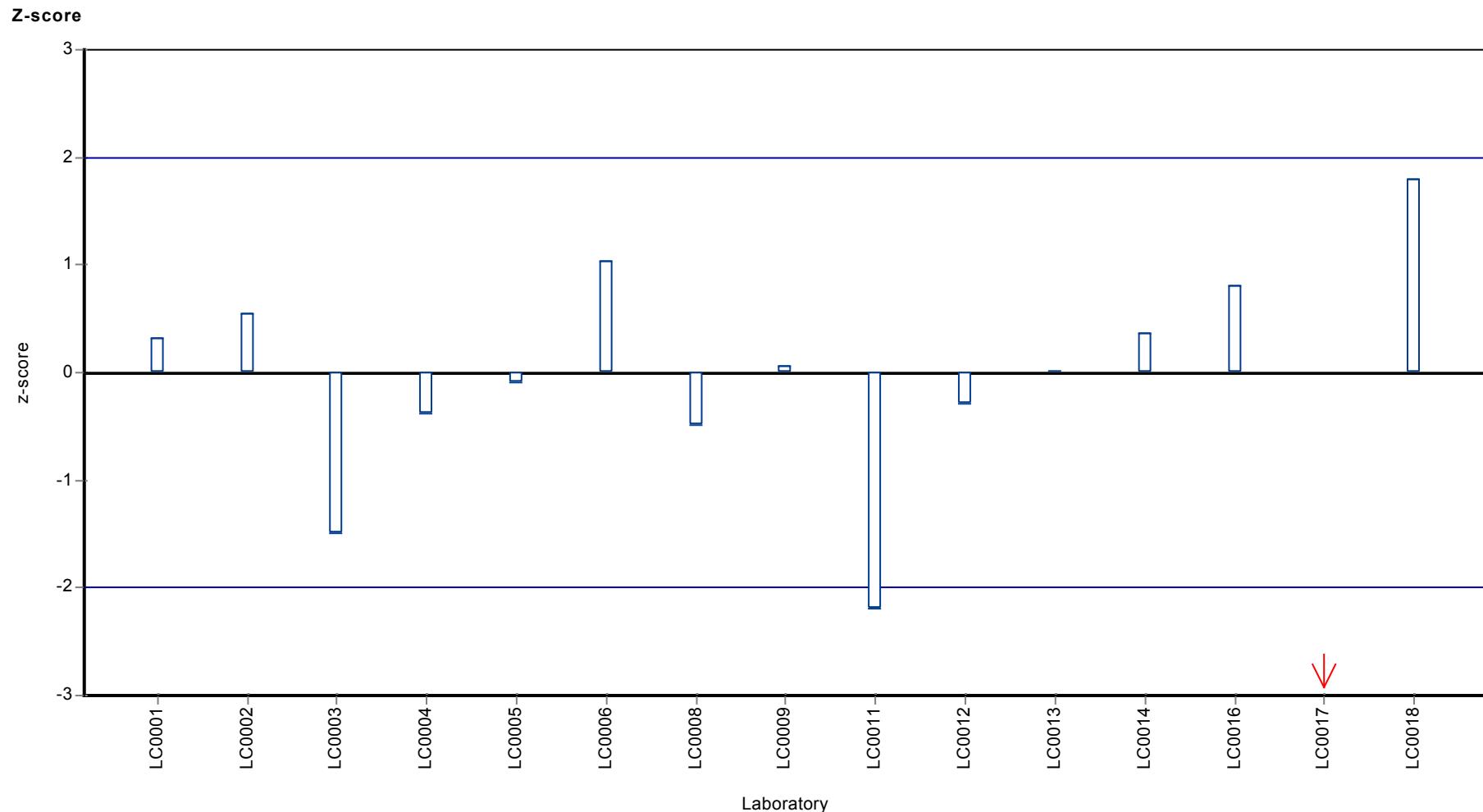
Graphical presentation of results

Results



Recovery rate





Parameter oriented report

AZ4 A

Ibuprofen

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.06 - 0.113
Control test value ± U	0.0852 ± 0.0104

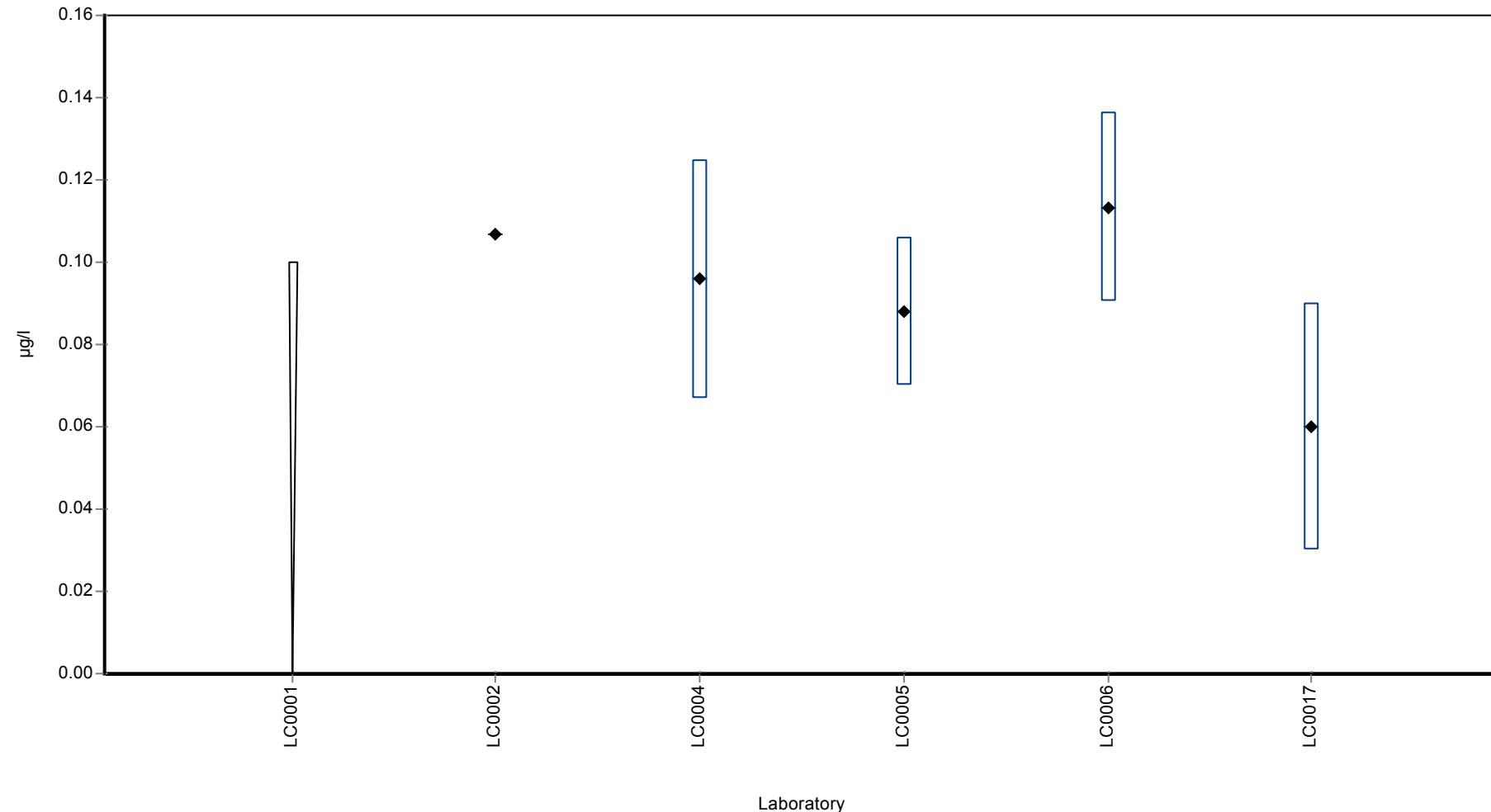
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.1 (LOQ)	-	-	-	
LC0002	0.107	-	-	-	
LC0003	-	-	-	-	
LC0004	0.096	0.029	-	-	
LC0005	0.088	0.018	-	-	
LC0006	0.1133	0.023	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	-	-	-	-	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	-	-	-	-	
LC0016	-	-	-	-	
LC0017	0.06	0.03	-	-	
LC0018	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.0929 ± 0.0279	-	µg/l
Minimum	0.06	0.06	µg/l
Maximum	0.113	0.113	µg/l
Standard deviation	0.0208	-	µg/l
rel. Standard deviation	22.4	-	%
n	5	5	-

Graphical presentation of results

Results



Parameter oriented report

AZ4 B

Ibuprofen

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.2 - 0.751
Control test value ± U	0.445 ± 0.0366

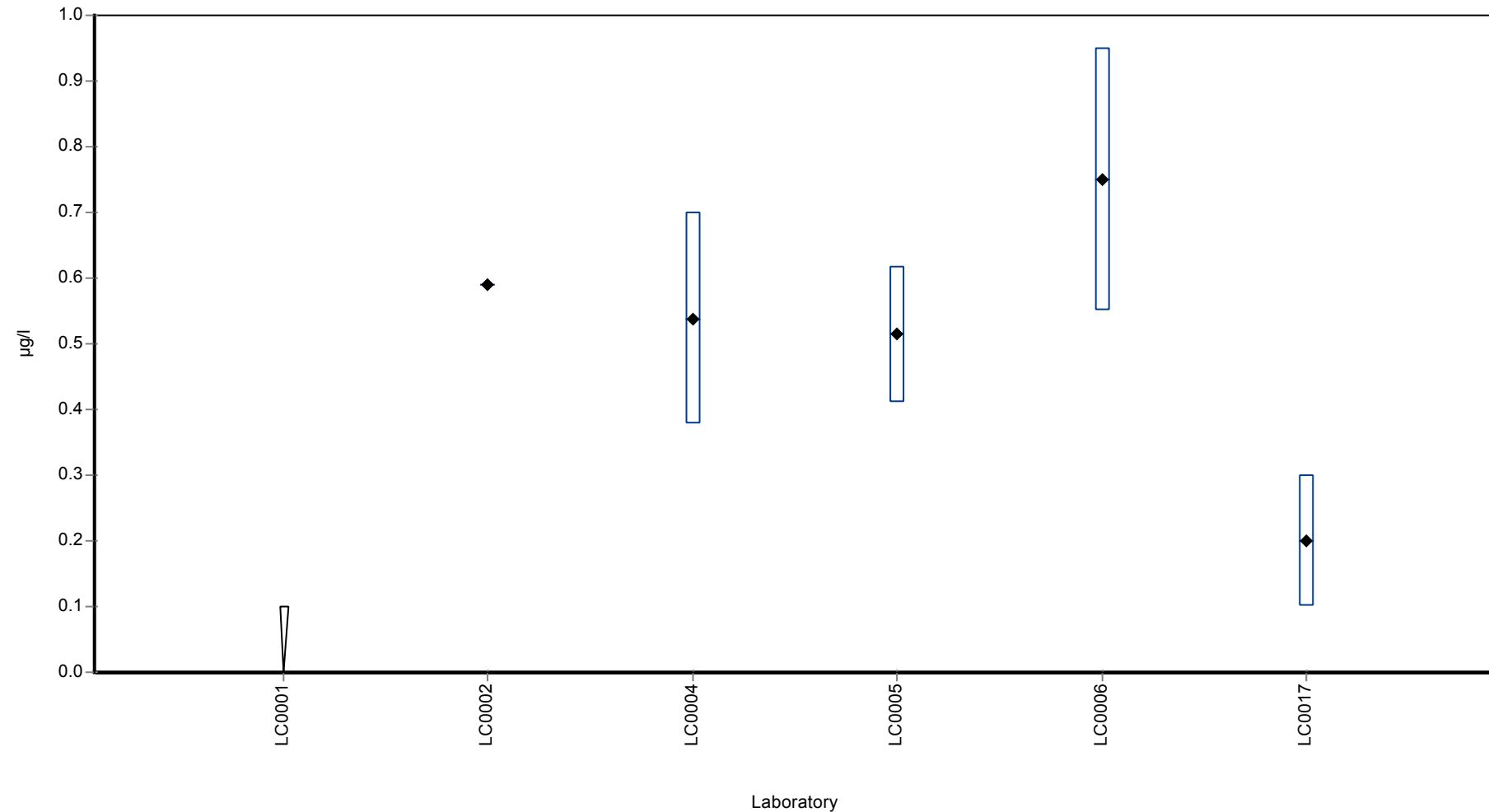
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.1 (LOQ)	-	-	-	
LC0002	0.59	-	-	-	
LC0003	-	-	-	-	
LC0004	0.538	0.161	-	-	
LC0005	0.514	0.103	-	-	
LC0006	0.7511	0.2	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	-	-	-	-	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	-	-	-	-	
LC0016	-	-	-	-	
LC0017	0.2	0.1	-	-	
LC0018	-	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.519 ± 0.269	-	µg/l
Minimum	0.2	0.2	µg/l
Maximum	0.751	0.751	µg/l
Standard deviation	0.201	-	µg/l
rel. Standard deviation	38.7	-	%
n	5	5	-

Graphical presentation of results

Results



Parameter oriented report

AZ4 A

Metoprolol

Unit	µg/l
Mean ± CI (99%)	0.015 ± 0.00488
Minimum - Maximum	0.007 - 0.025
Control test value ± U	<0.025 (LOQ)

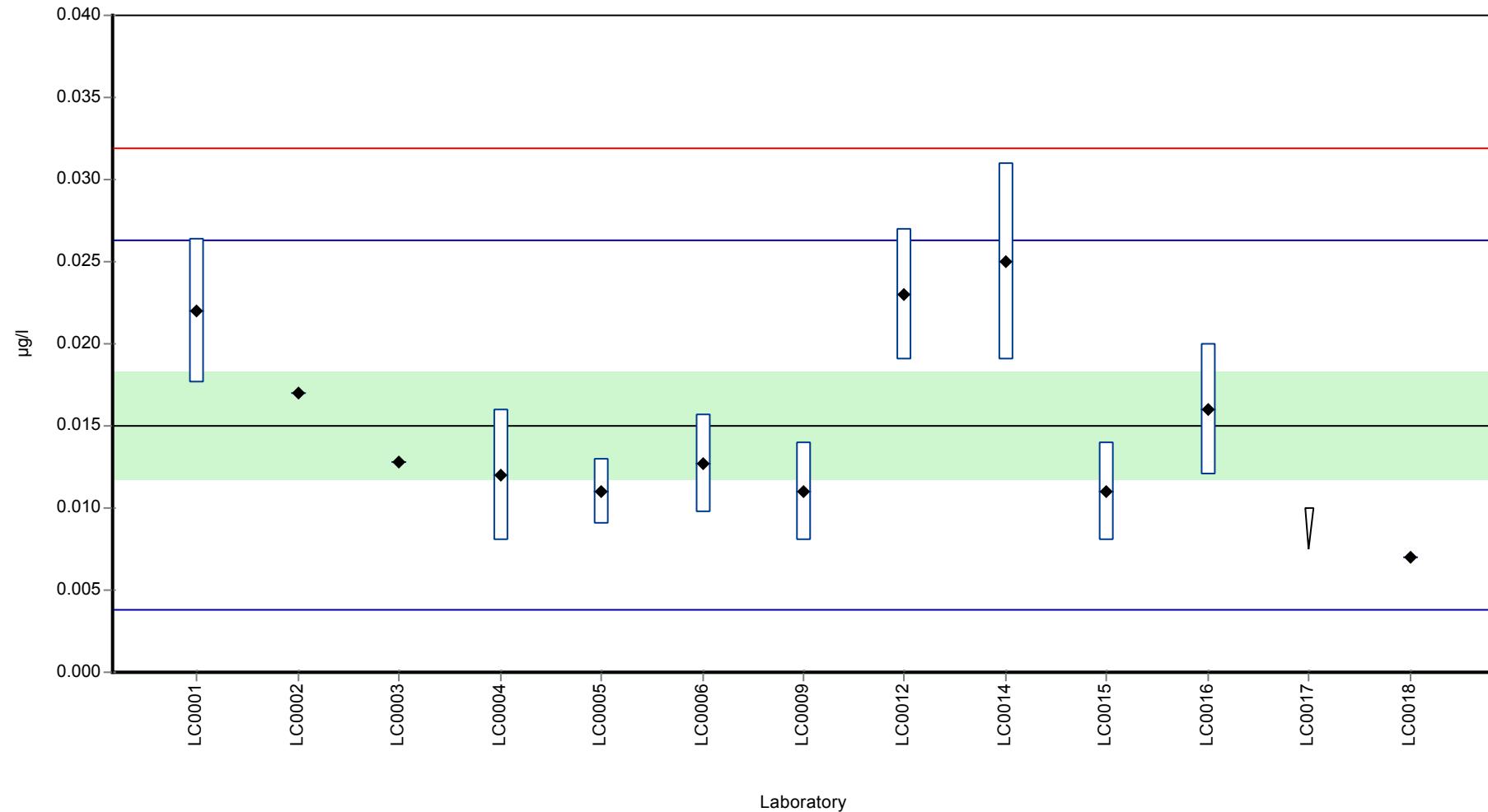
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.022	0.0044	146	1.24	
LC0002	0.017	-	113	0.35	
LC0003	0.0128	-	85.1	-0.4	
LC0004	0.012	0.004	79.8	-0.54	
LC0005	0.011	0.002	73.1	-0.72	
LC0006	0.0127	0.003	84.4	-0.42	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.011	0.003	73.1	-0.72	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	0.023	0.004	153	1.41	
LC0013	-	-	-	-	
LC0014	0.025	0.006	166	1.77	
LC0015	0.011	0.003	73.1	-0.72	
LC0016	0.016	0.004	106	0.17	
LC0017	< 0.01 (LOQ)	-	-	-	
LC0018	0.007	-	46.5	-1.43	

Characteristics of parameter

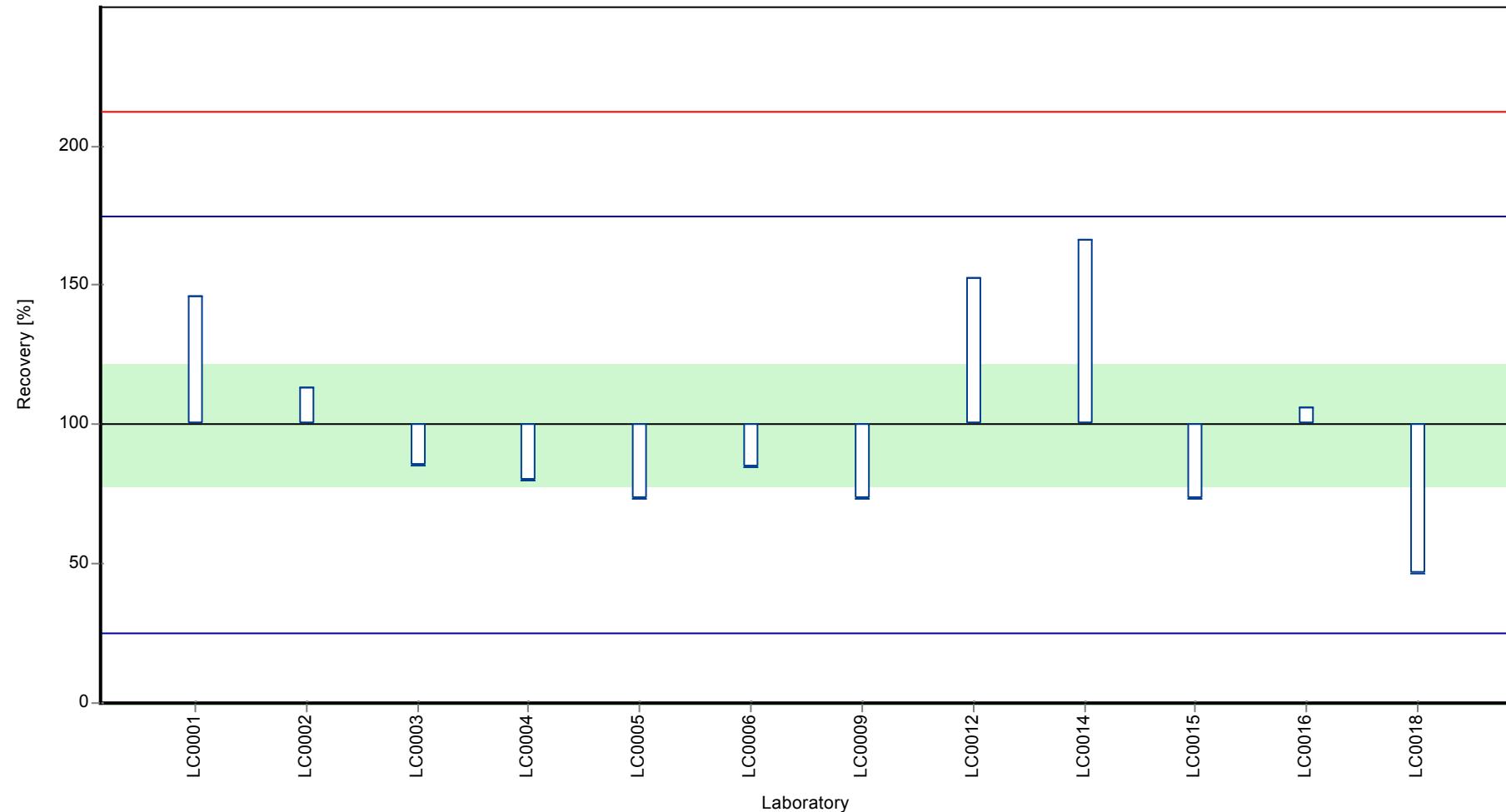
	all results	without outliers	Unit
Mean ± CI (99%)	0.015 ± 0.00488	0.015 ± 0.00488	µg/l
Minimum	0.007	0.007	µg/l
Maximum	0.025	0.025	µg/l
Standard deviation	0.00563	0.00563	µg/l
rel. Standard deviation	37.5	37.5 %	
n	12	12	-

Graphical presentation of results

Results

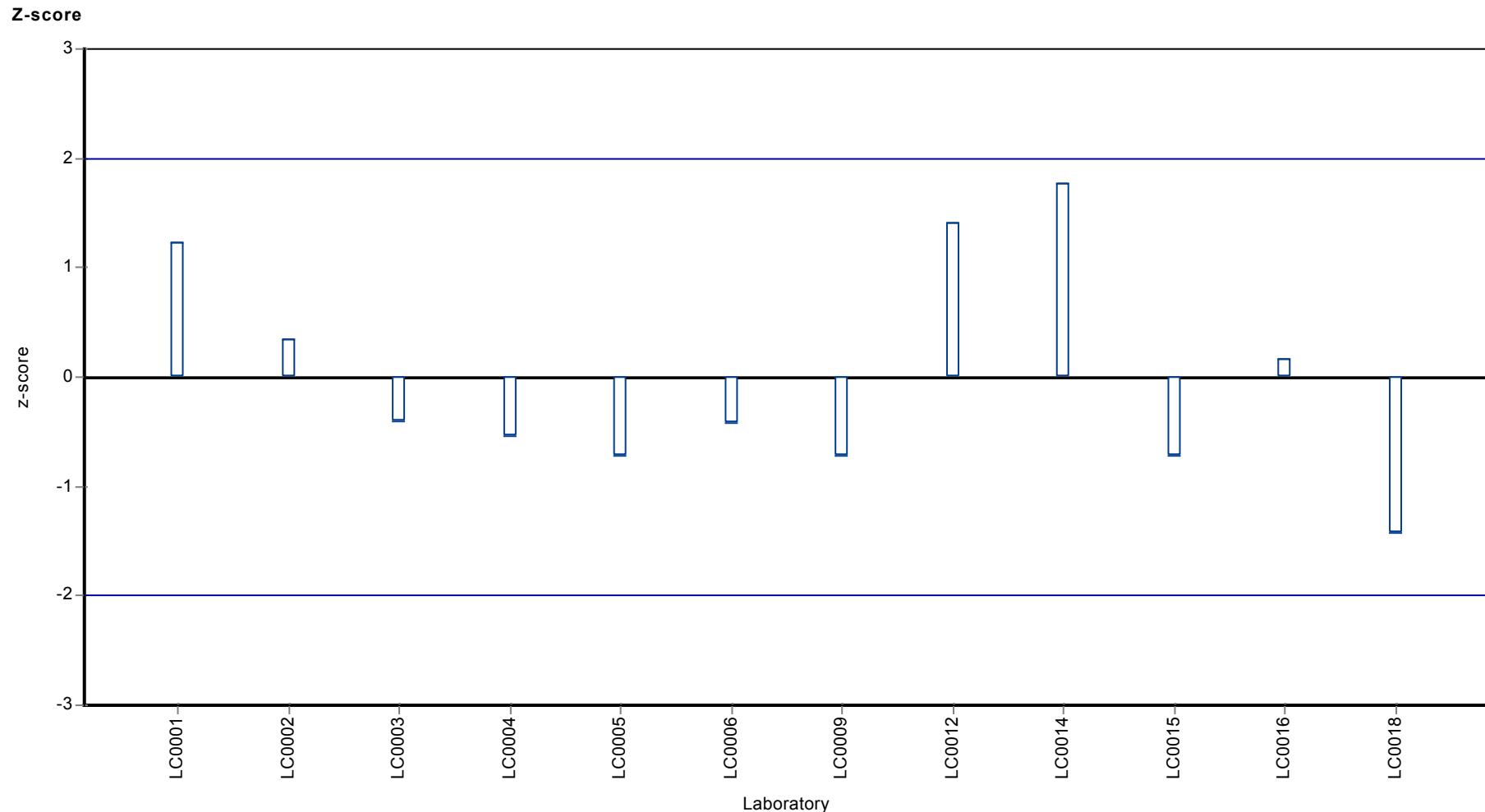


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Metoprolol



Parameter oriented report

AZ4 B

Metoprolol

Unit	µg/l
Mean ± CI (99%)	0.293 ± 0.0422
Minimum - Maximum	0.191 - 0.352
Control test value ± U	0.314 ± 0.00953

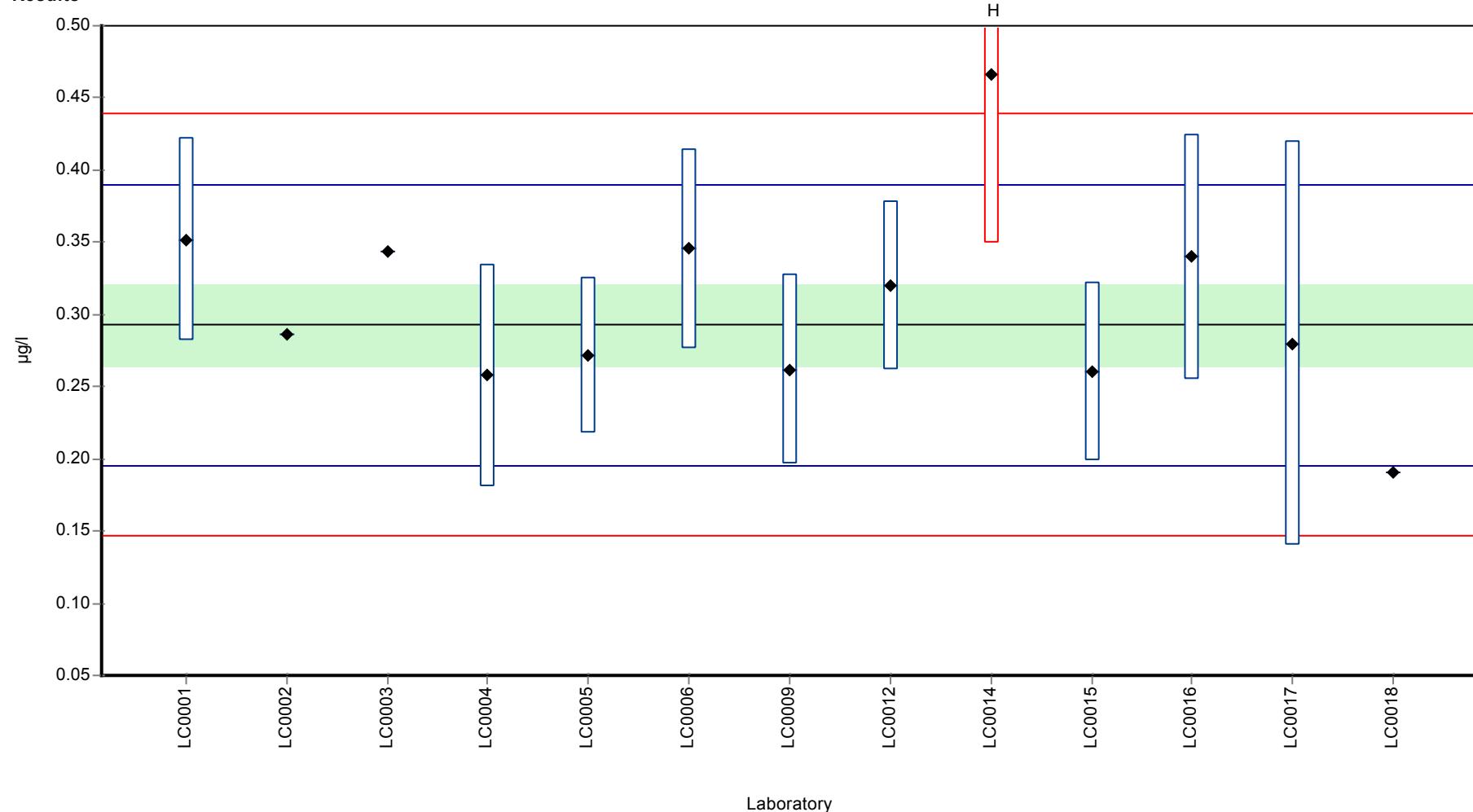
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.352	0.0704	120	1.22	
LC0002	0.286	-	97.8	-0.13	
LC0003	0.344	-	118	1.06	
LC0004	0.258	0.077	88.2	-0.71	
LC0005	0.272	0.054	93	-0.42	
LC0006	0.3455	0.069	118	1.09	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.262	0.066	89.6	-0.63	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	0.32	0.058	109	0.56	
LC0013	-	-	-	-	
LC0014	0.466	0.117	159	3.56	H
LC0015	0.26	0.062	88.9	-0.67	
LC0016	0.34	0.085	116	0.97	
LC0017	0.28	0.14	95.7	-0.26	
LC0018	0.191	-	65.3	-2.08	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.306 ± 0.0558	0.293 ± 0.0422	µg/l
Minimum	0.191	0.191	µg/l
Maximum	0.466	0.352	µg/l
Standard deviation	0.067	0.0487	µg/l
rel. Standard deviation	21.9	16.7 %	
n	13	12	-

Graphical presentation of results

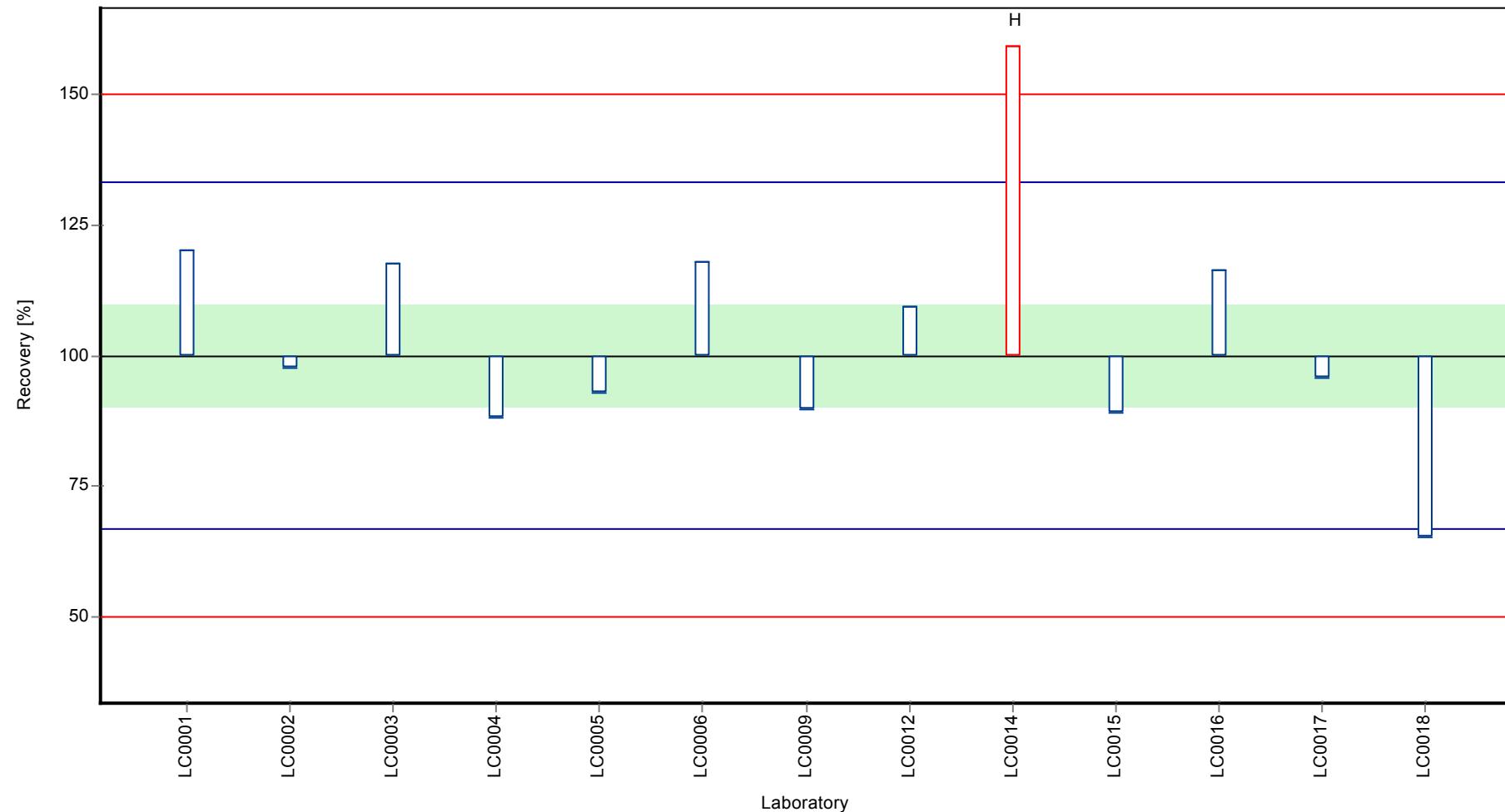
Results



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

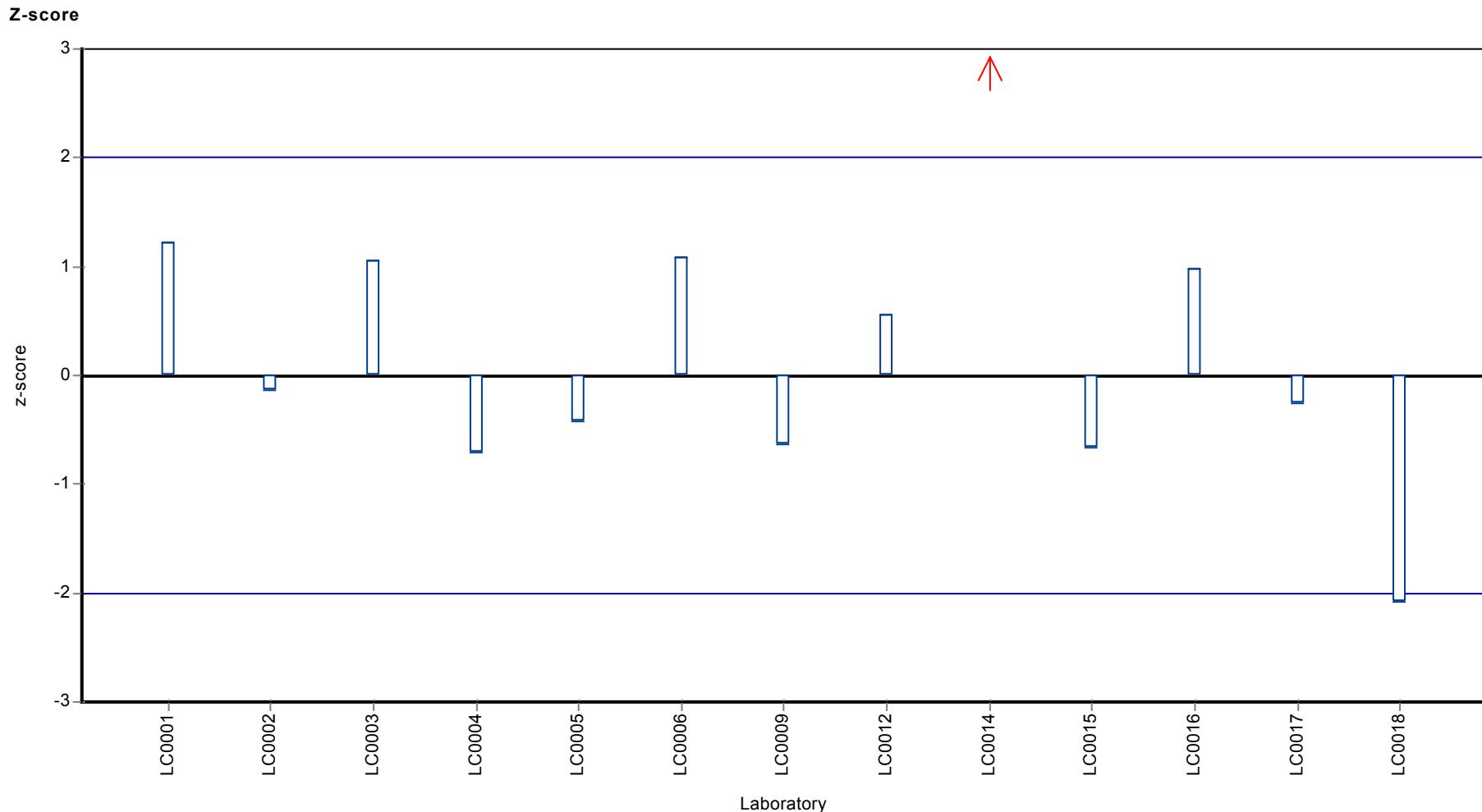
Sample: AZ4B, Parameter: Metoprolol

Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Metoprolol



Parameter oriented report

AZ4 A

Saccharin

Unit	µg/l
Mean ± CI (99%)	0.0658 ± 0.0166
Minimum - Maximum	0.044 - 0.091
Control test value ± U	0.0614 ± 0.0123

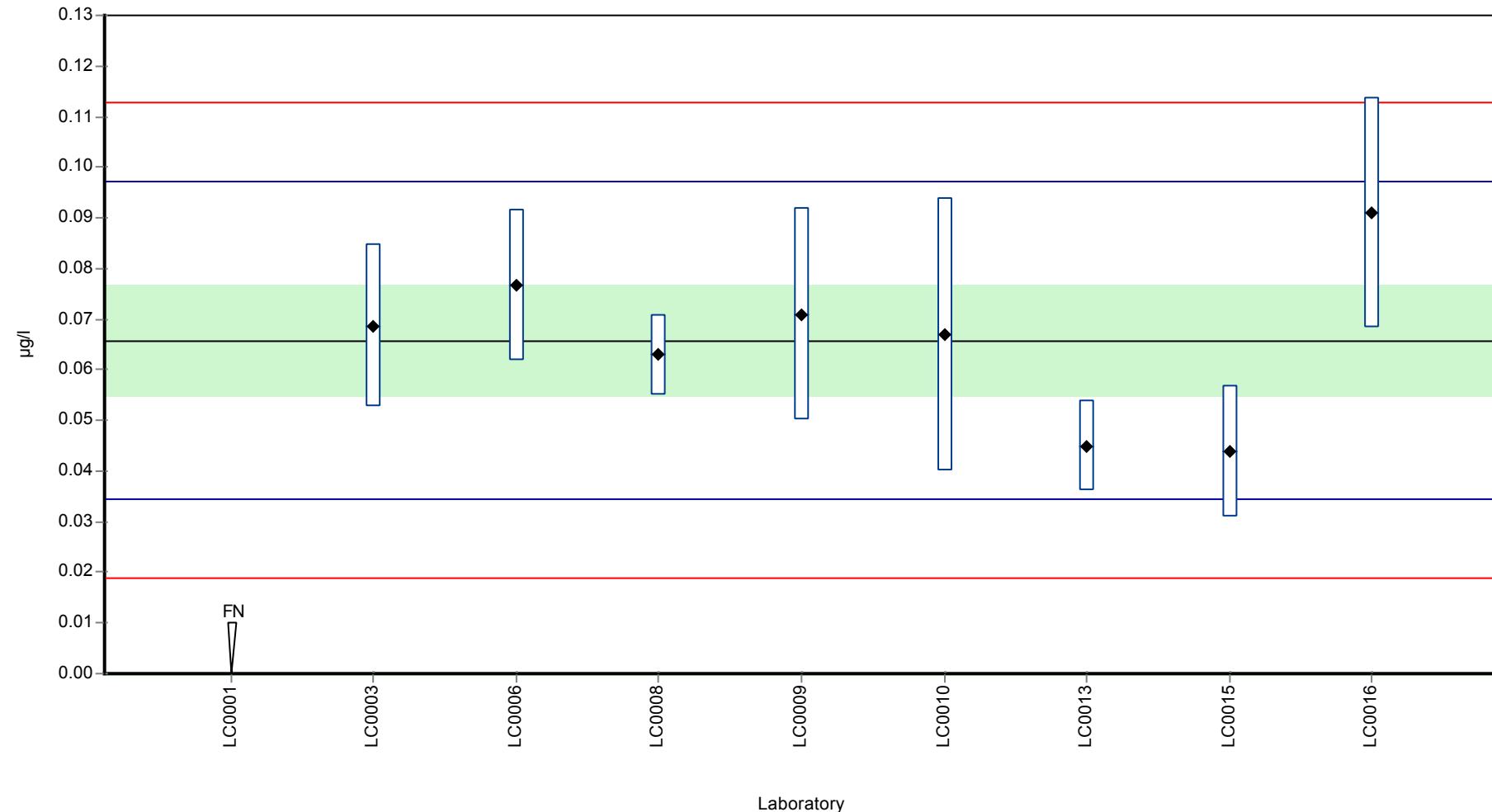
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.01 (LOQ)	-	-	-	FN
LC0002	-	-	-	-	
LC0003	0.0687	0.016	104	0.18	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.0768	0.015	117	0.7	
LC0007	-	-	-	-	
LC0008	0.063	0.008	95.7	-0.18	
LC0009	0.071	0.021	108	0.33	
LC0010	0.067	0.027	102	0.08	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	0.045	0.009	68.4	-1.33	
LC0014	-	-	-	-	
LC0015	0.044	0.013	66.9	-1.4	
LC0016	0.091	0.02275	138	1.61	
LC0017	-	-	-	-	
LC0018	-	-	-	-	

Characteristics of parameter

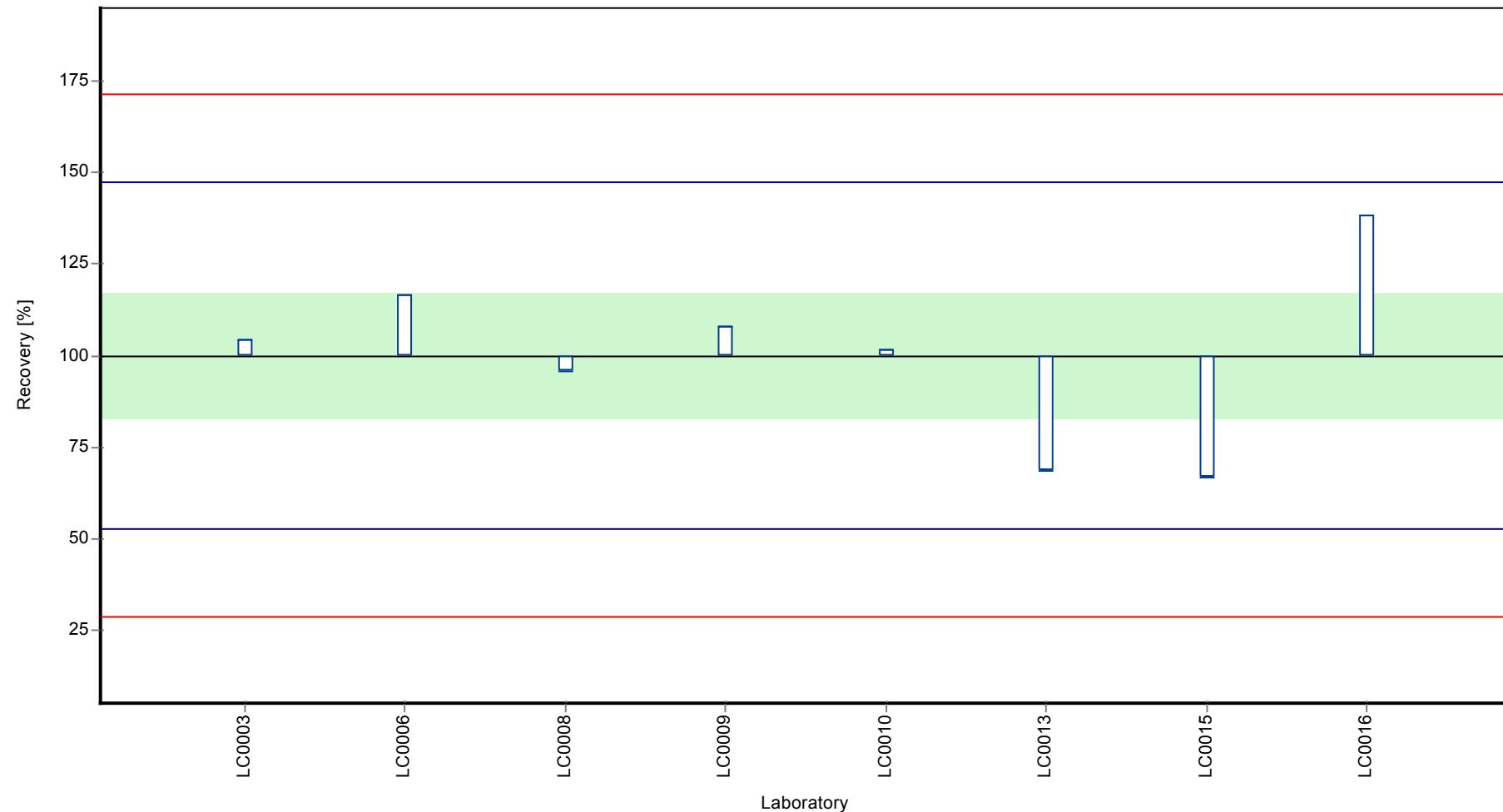
	all results	without outliers	Unit
Mean ± CI (99%)	0.0658 ± 0.0166	0.0658 ± 0.0166	µg/l
Minimum	0.044	0.044	µg/l
Maximum	0.091	0.091	µg/l
Standard deviation	0.0156	0.0156	µg/l
rel. Standard deviation	23.7	23.7 %	
n	8	8	-

Graphical presentation of results

Results

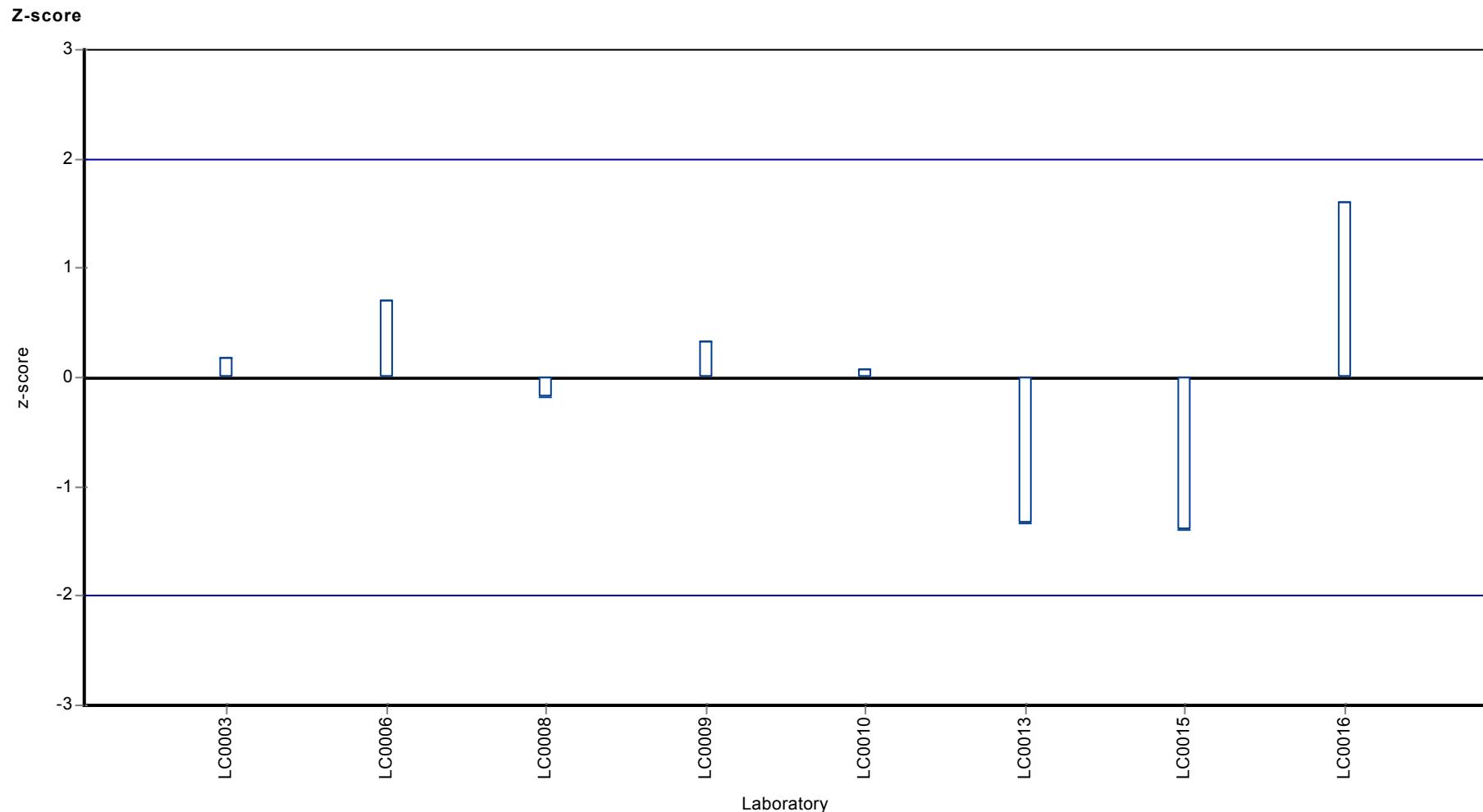


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Saccharin



Parameter oriented report

AZ4 B

Saccharin

Unit	µg/l
Mean ± CI (99%)	1.44 ± 0.536
Minimum - Maximum	0.365 - 1.94
Control test value ± U	1.55 ± 0.176

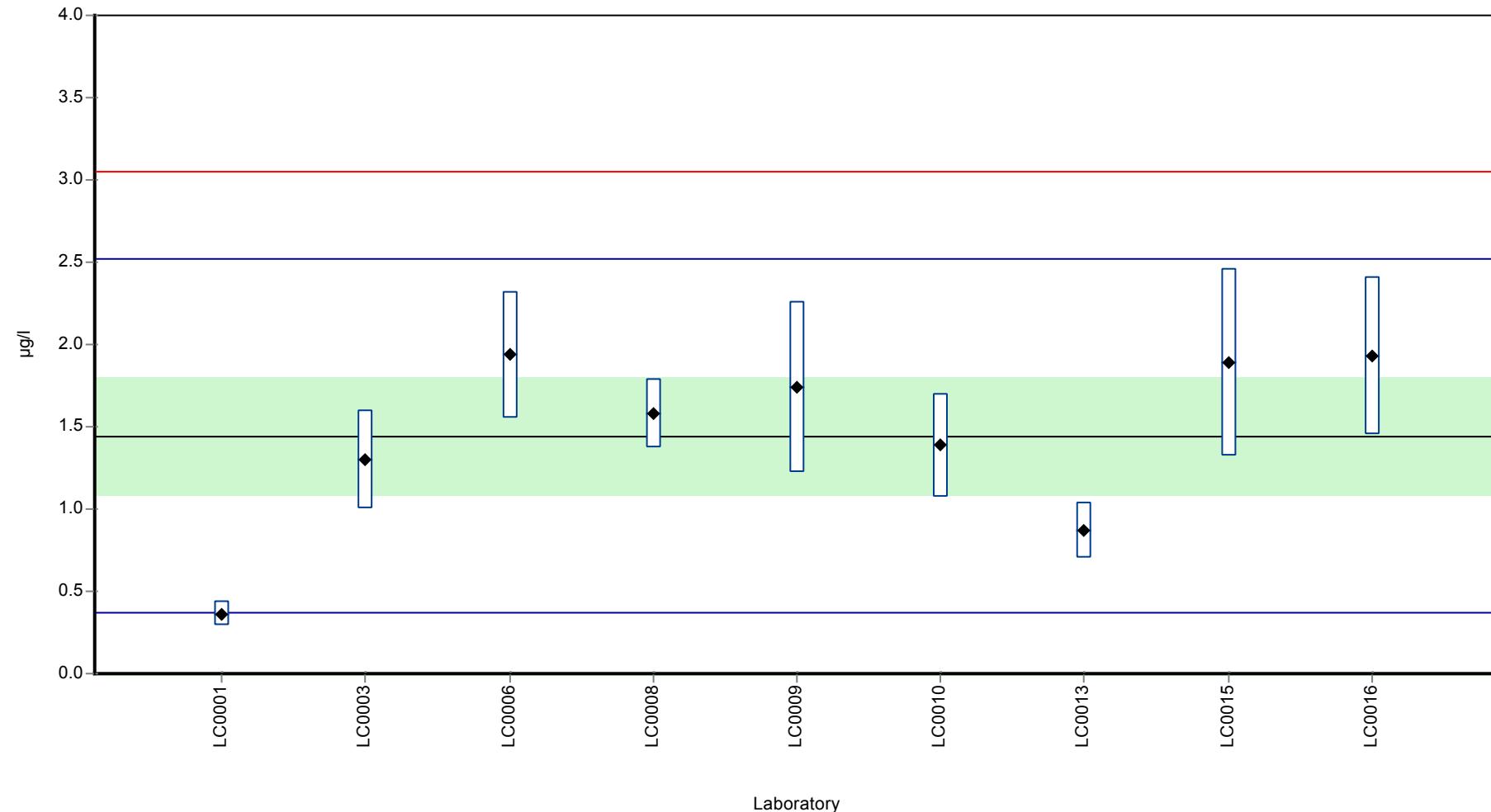
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.365	0.073	25.3	-2.01	
LC0002	-	-	-	-	
LC0003	1.3	0.299	90	-0.27	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	1.937	0.387	134	0.92	
LC0007	-	-	-	-	
LC0008	1.58	0.21	109	0.25	
LC0009	1.739	0.522	120	0.55	
LC0010	1.386	0.311	96	-0.11	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	0.87	0.174	60.2	-1.07	
LC0014	-	-	-	-	
LC0015	1.89	0.567	131	0.83	
LC0016	1.93	0.4825	134	0.91	
LC0017	-	-	-	-	
LC0018	-	-	-	-	

Characteristics of parameter

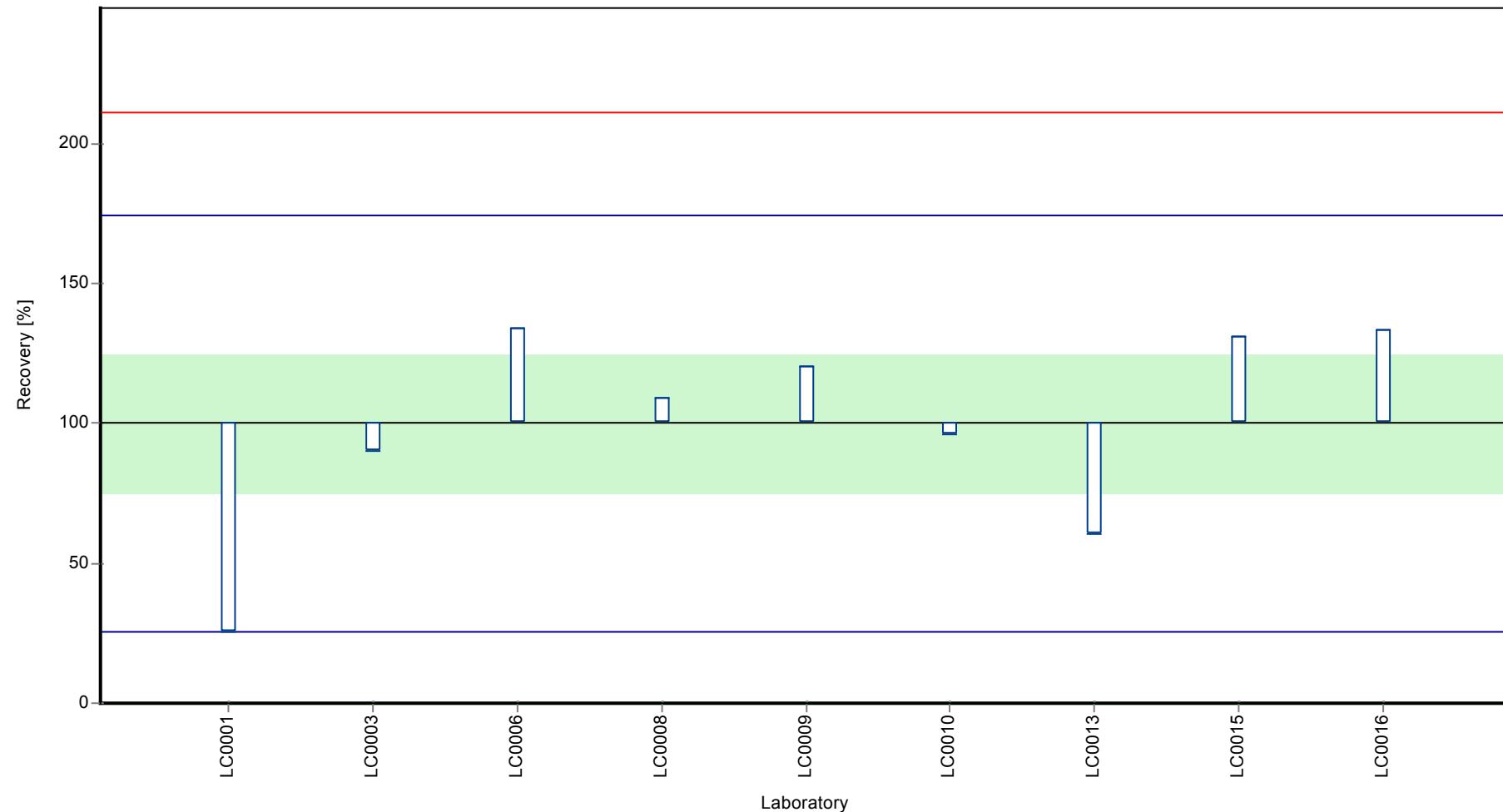
	all results	without outliers	Unit
Mean ± CI (99%)	1.44 ± 0.536	1.44 ± 0.536	µg/l
Minimum	0.365	0.365	µg/l
Maximum	1.94	1.94	µg/l
Standard deviation	0.536	0.536	µg/l
rel. Standard deviation	37.1	37.1	%
n	9	9	-

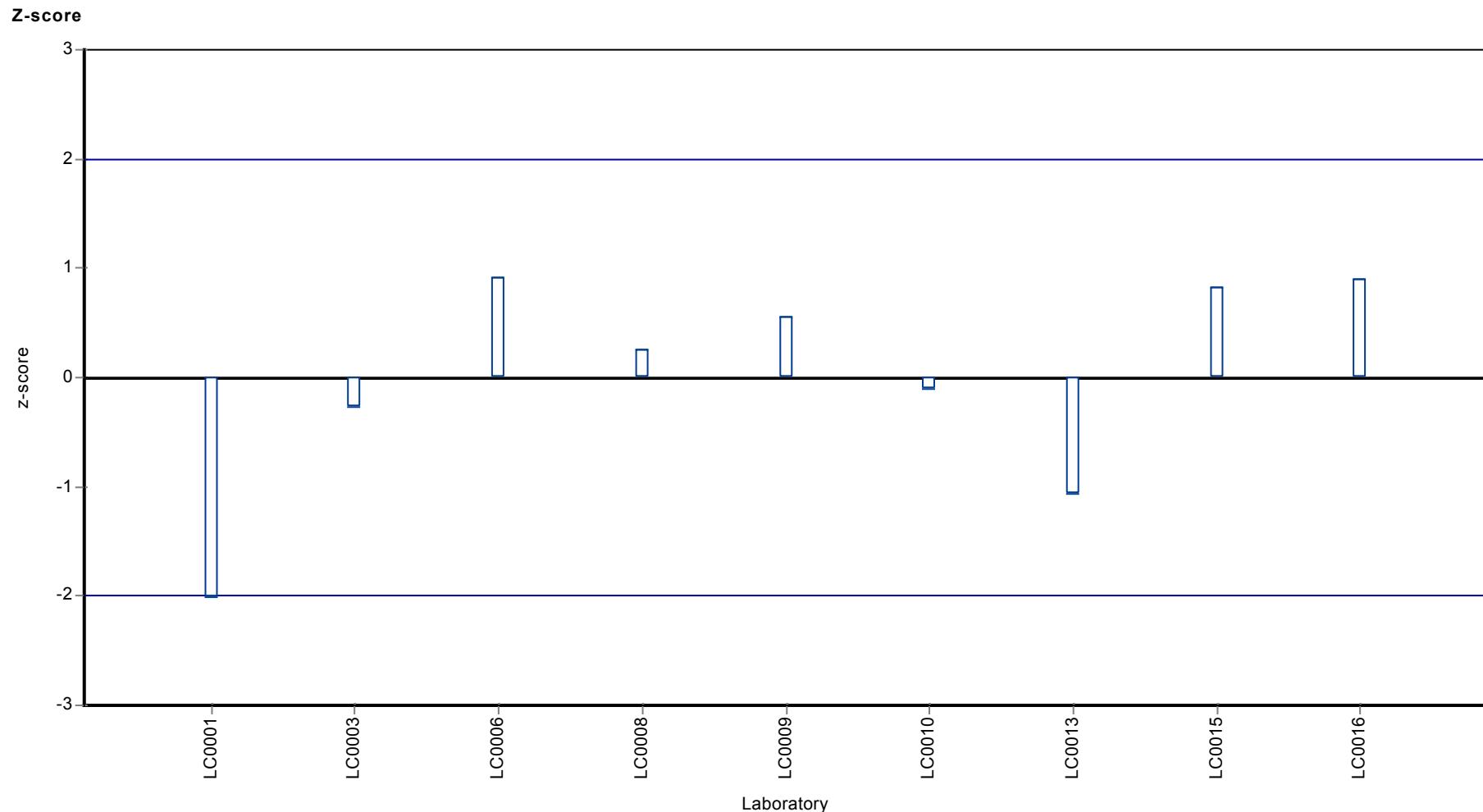
Graphical presentation of results

Results



Recovery rate





Parameter oriented report

AZ4 A

Sotalol

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	-
Control test value ± U	<0.025 (LOD)

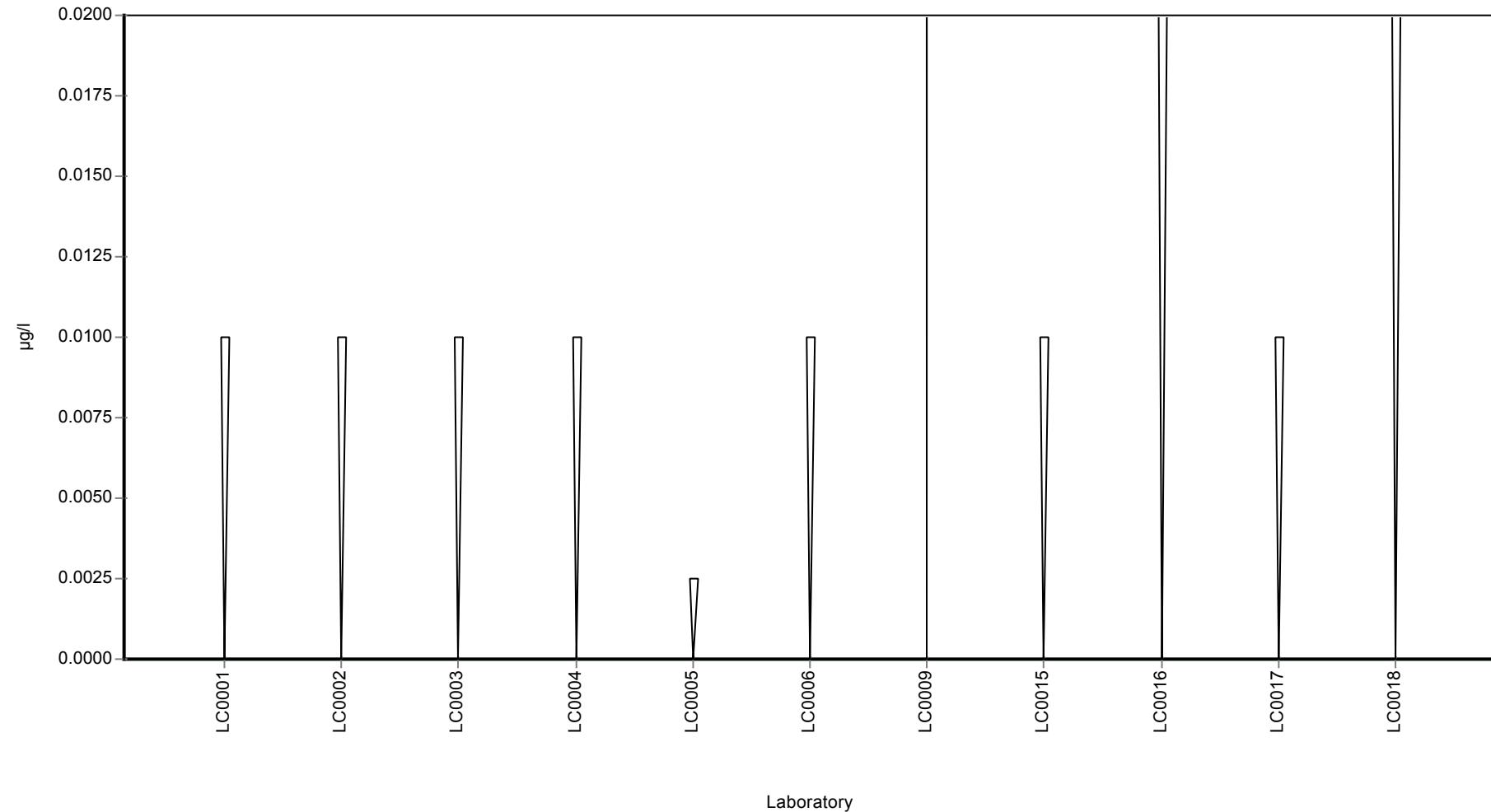
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.01 (LOQ)	-	-	-	
LC0002	< 0.01 (LOQ)	-	-	-	
LC0003	< 0.01 (LOQ)	-	-	-	
LC0004	< 0.01 (LOQ)	-	-	-	
LC0005	< 0.0025 (LOQ)	-	-	-	
LC0006	< 0.01 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 10 (LOQ)	-	-	-	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	< 0.02 (LOQ)	-	-	-	
LC0017	< 0.01 (LOQ)	-	-	-	
LC0018	< 0.02 (LOQ)	-	-	-	

Characteristics of parameter

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

Graphical presentation of results

Results



Parameter oriented report

AZ4 B

Sotalol

Unit	µg/l
Mean ± CI (99%)	0.401 ± 0.0631
Minimum - Maximum	0.24 - 0.483
Control test value ± U	0.446 ± 0.0184

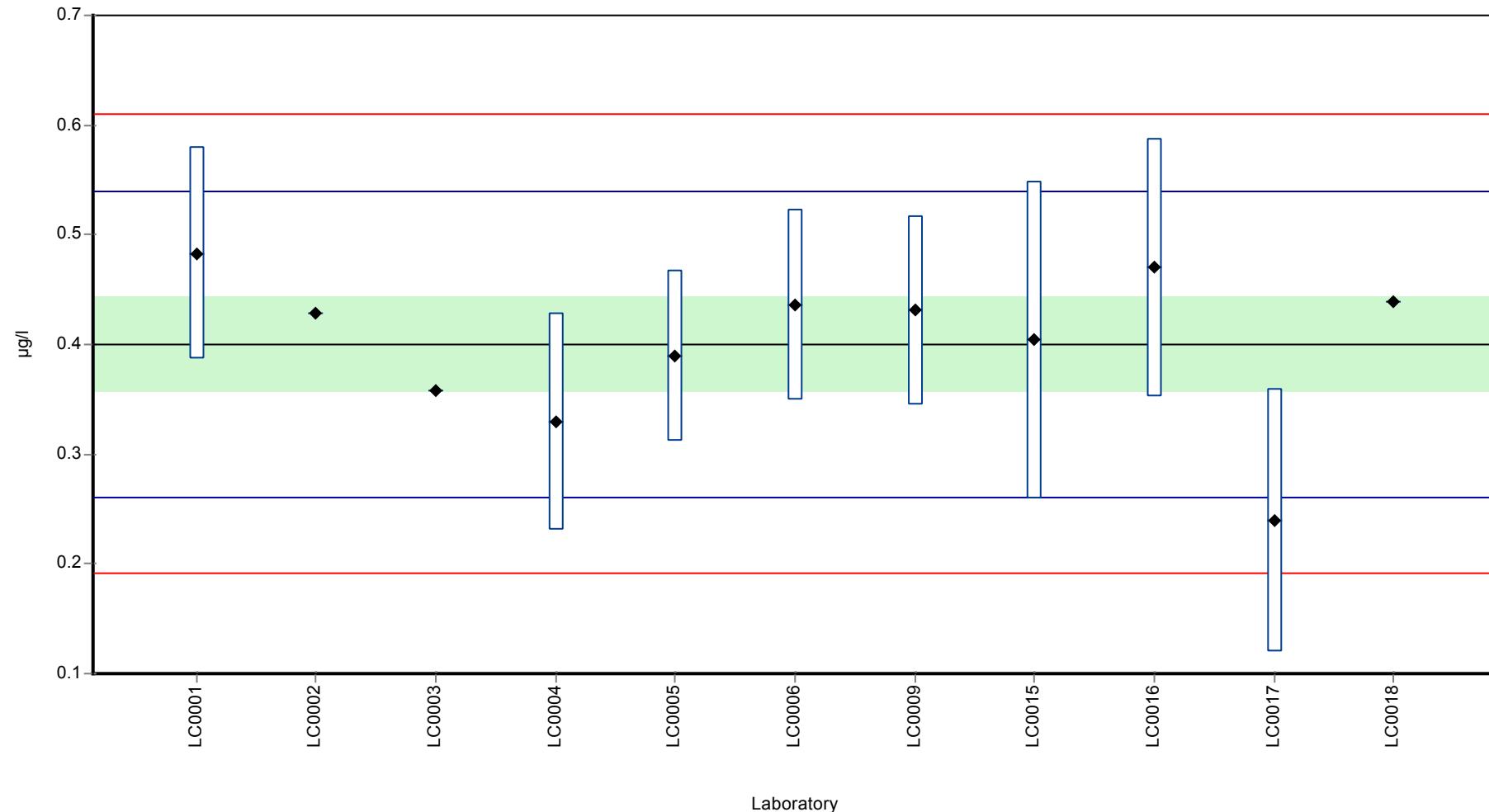
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.483	0.0966	121	1.18	
LC0002	0.428	-	107	0.39	
LC0003	0.358	-	89.3	-0.61	
LC0004	0.33	0.099	82.4	-1.01	
LC0005	0.389	0.078	97.1	-0.17	
LC0006	0.4354	0.087	109	0.5	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.431	0.086	108	0.43	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	-	-	-	-	
LC0014	-	-	-	-	
LC0015	0.404	0.145	101	0.05	
LC0016	0.47	0.1175	117	0.99	
LC0017	0.24	0.12	59.9	-2.3	
LC0018	0.439	-	110	0.55	

Characteristics of parameter

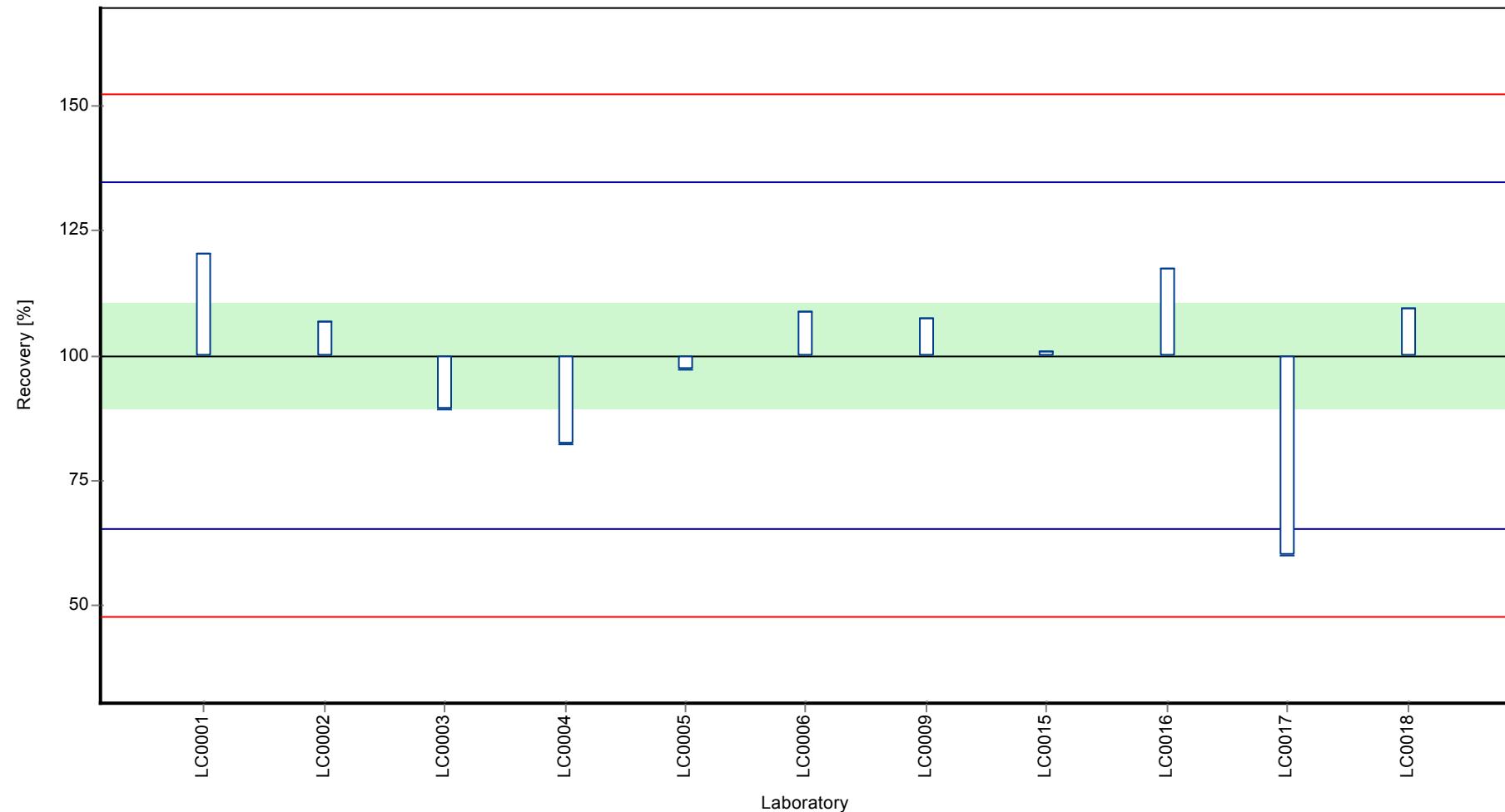
	all results	without outliers	Unit
Mean ± CI (99%)	0.401 ± 0.0631	0.401 ± 0.0631	µg/l
Minimum	0.24	0.24	µg/l
Maximum	0.483	0.483	µg/l
Standard deviation	0.0698	0.0698	µg/l
rel. Standard deviation	17.4	17.4	%
n	11	11	-

Graphical presentation of results

Results

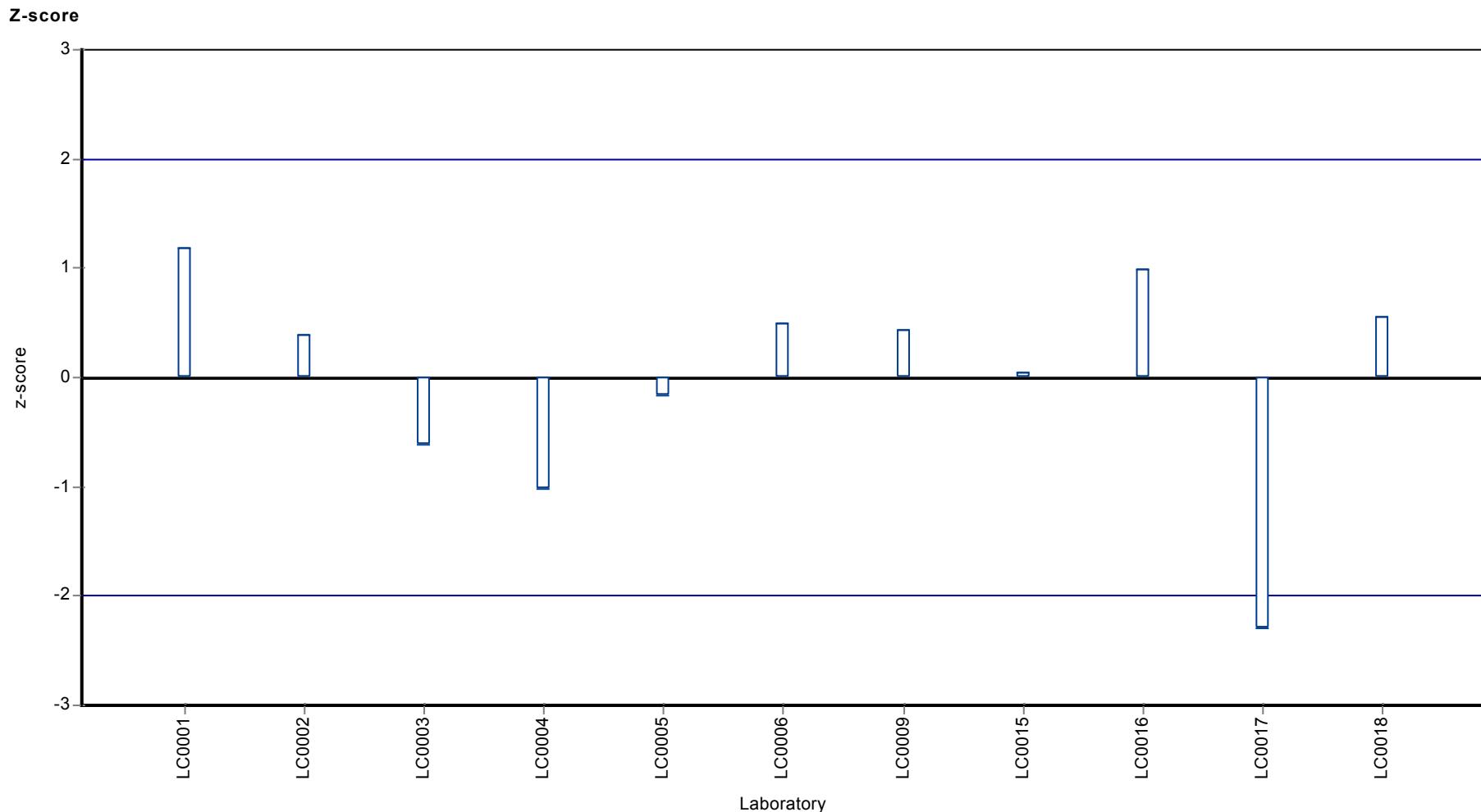


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Sotalol



Parameter oriented report

AZ4 A

Sucralose

Unit	µg/l
Mean ± CI (99%)	0.461 ± 0.145
Minimum - Maximum	0.199 - 0.667
Control test value ± U	0.473 ± 0.112

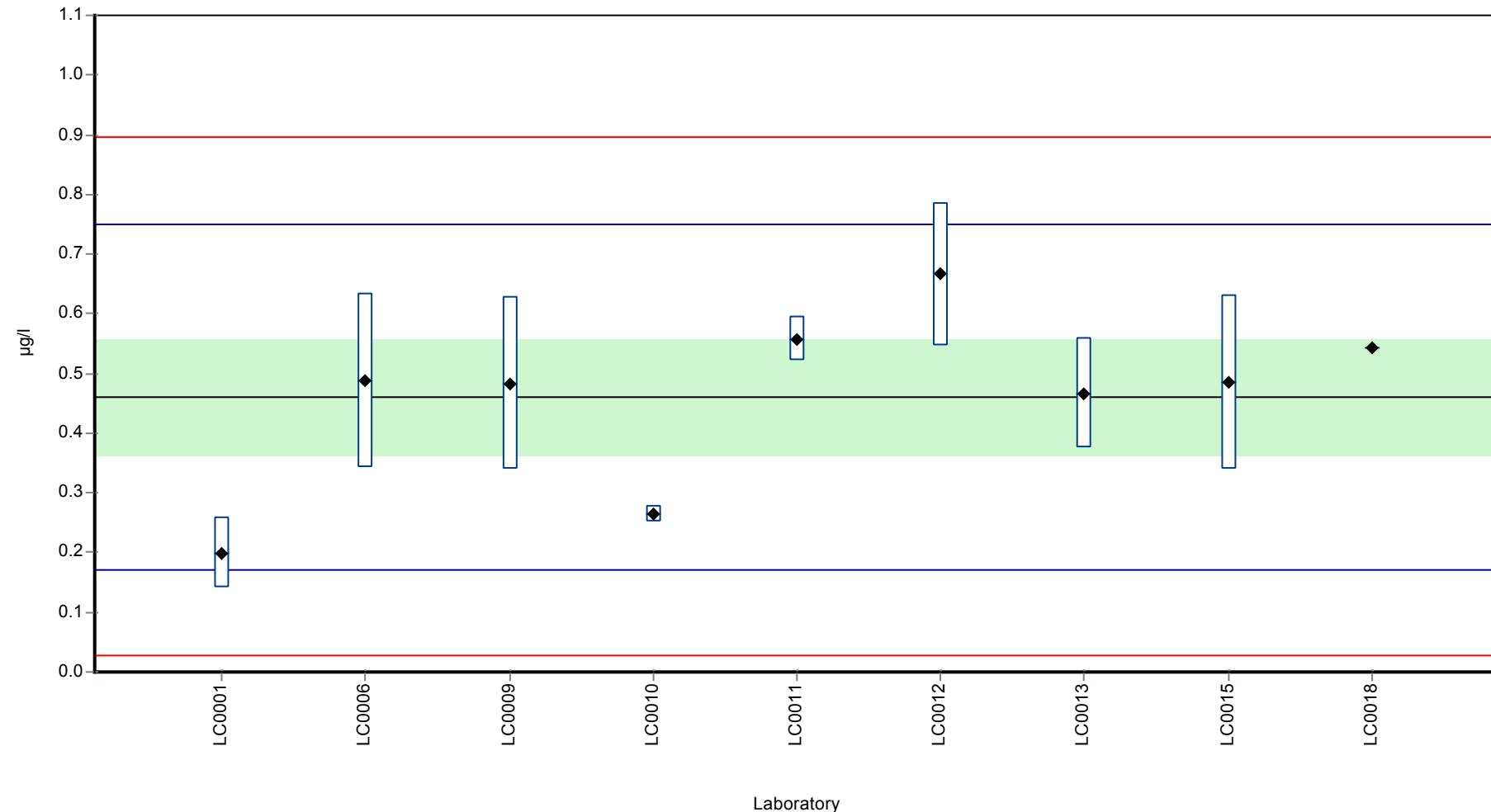
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.199	0.0597	43.1	-1.82	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	0.4873	0.146	106	0.18	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.483	0.145	105	0.15	
LC0010	0.265	0.014	57.4	-1.36	
LC0011	0.558	0.038	121	0.67	
LC0012	0.667	0.12	145	1.42	
LC0013	0.467	0.093	101	0.04	
LC0014	-	-	-	-	
LC0015	0.485	0.146	105	0.16	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	0.542	-	117	0.56	

Characteristics of parameter

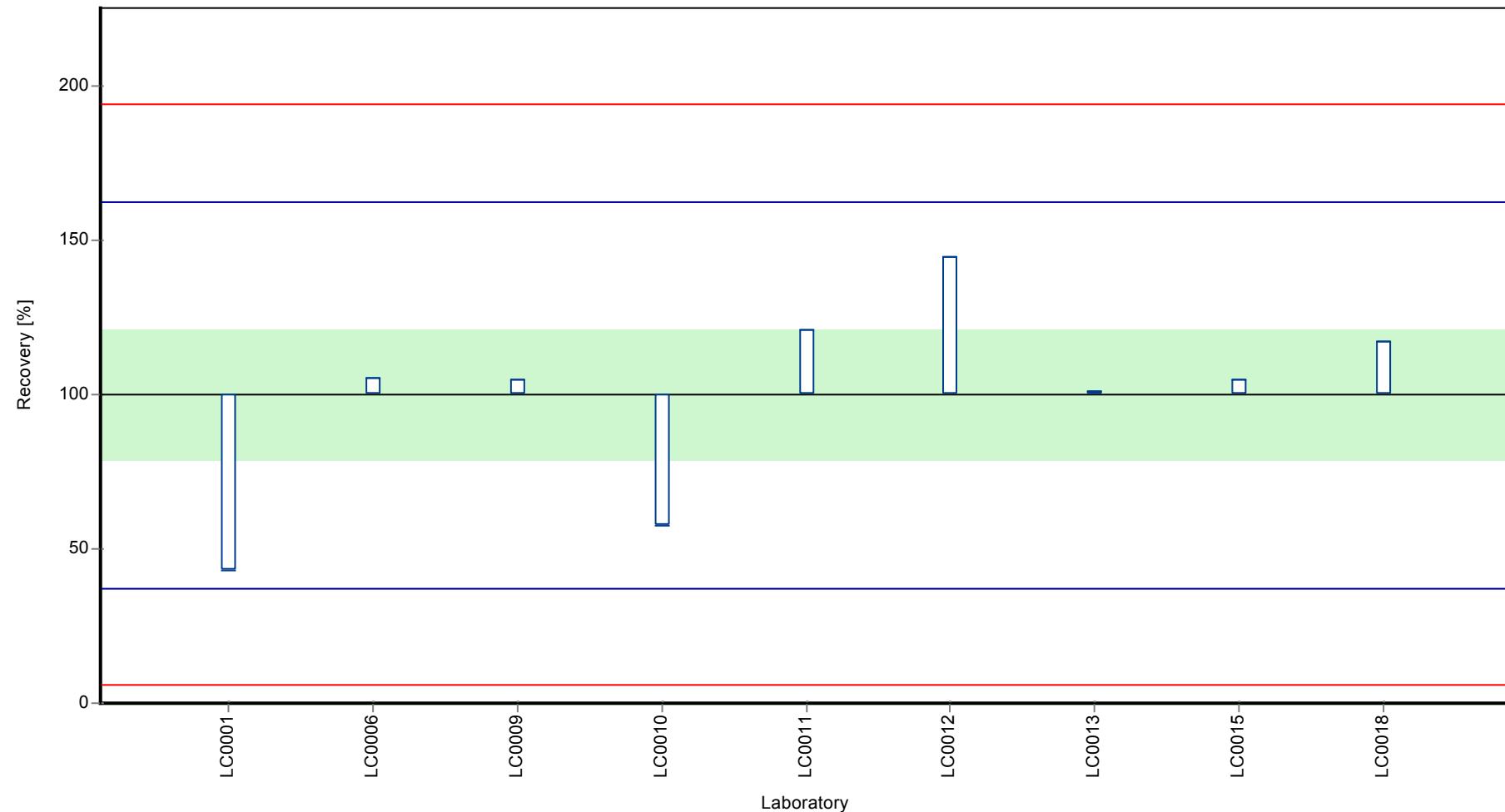
	all results	without outliers	Unit
Mean ± CI (99%)	0.461 ± 0.145	0.461 ± 0.145	µg/l
Minimum	0.199	0.199	µg/l
Maximum	0.667	0.667	µg/l
Standard deviation	0.145	0.145	µg/l
rel. Standard deviation	31.3	31.3	%
n	9	9	-

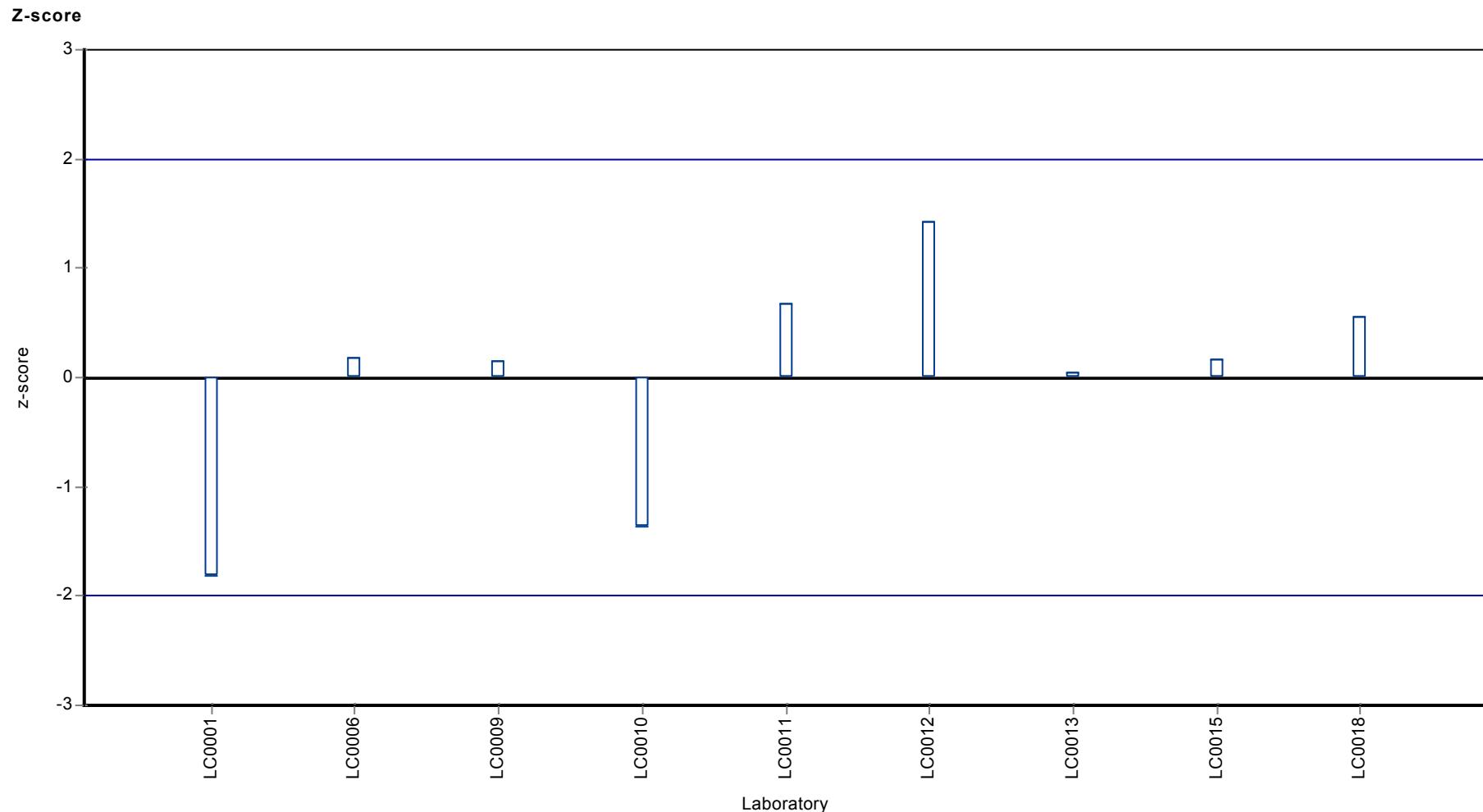
Graphical presentation of results

Results



Recovery rate





Parameter oriented report

AZ4 B

Sucralose

Unit	µg/l
Mean ± CI (99%)	8.72 ± 0.823
Minimum - Maximum	8.1 - 10.1
Control test value ± U	8.28 ± 0.926

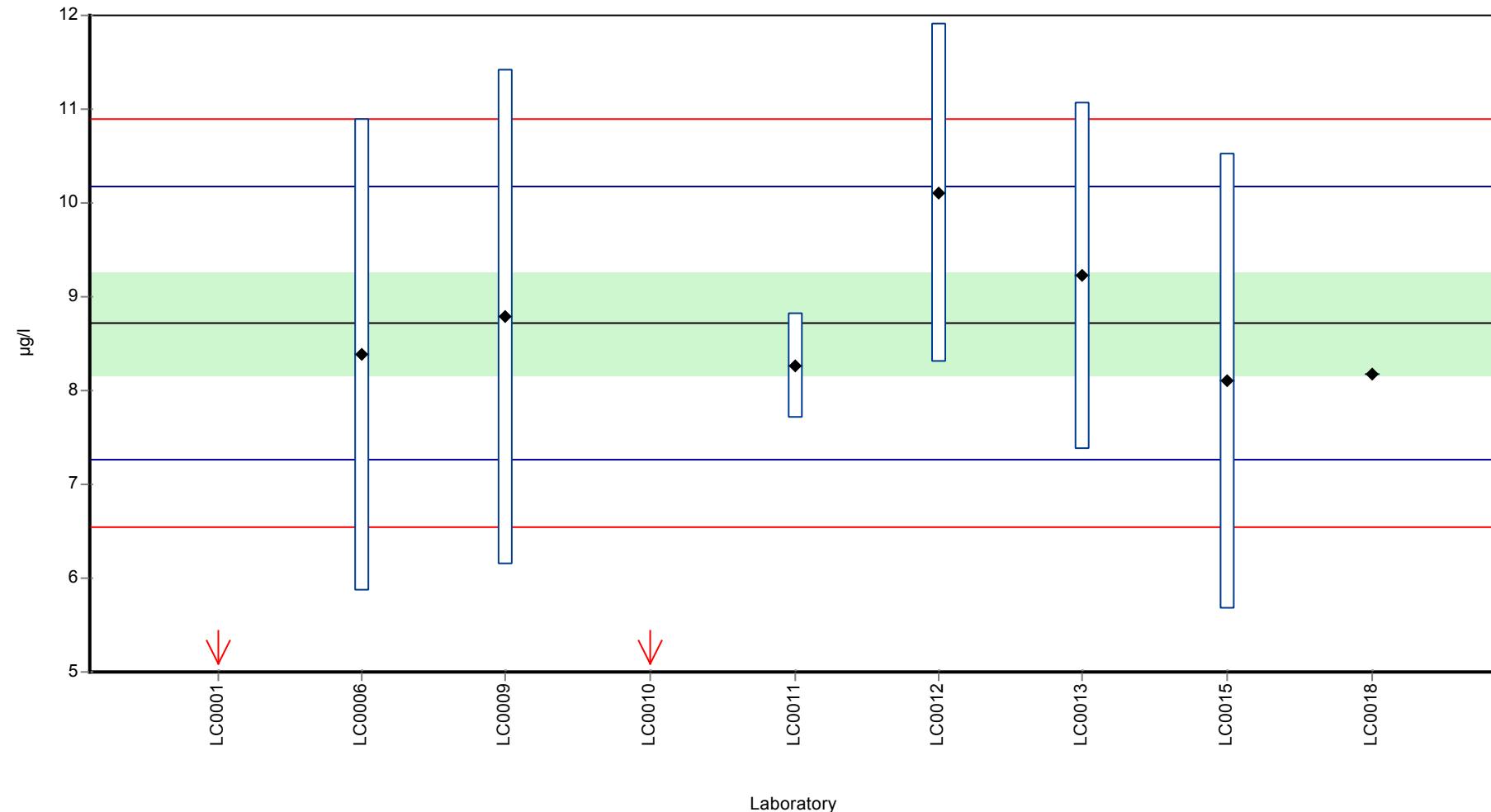
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.37	1.011	38.7	-7.36	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	8.382	2.514	96.2	-0.46	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	8.783	2.64	101	0.09	
LC0010	1.95	0.236	22.4	-9.32	H
LC0011	8.267	0.562	94.8	-0.62	
LC0012	10.1	1.81	116	1.9	
LC0013	9.22	1.844	106	0.69	
LC0014	-	-	-	-	
LC0015	8.1	2.43	92.9	-0.85	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	8.17	-	93.7	-0.75	

Characteristics of parameter

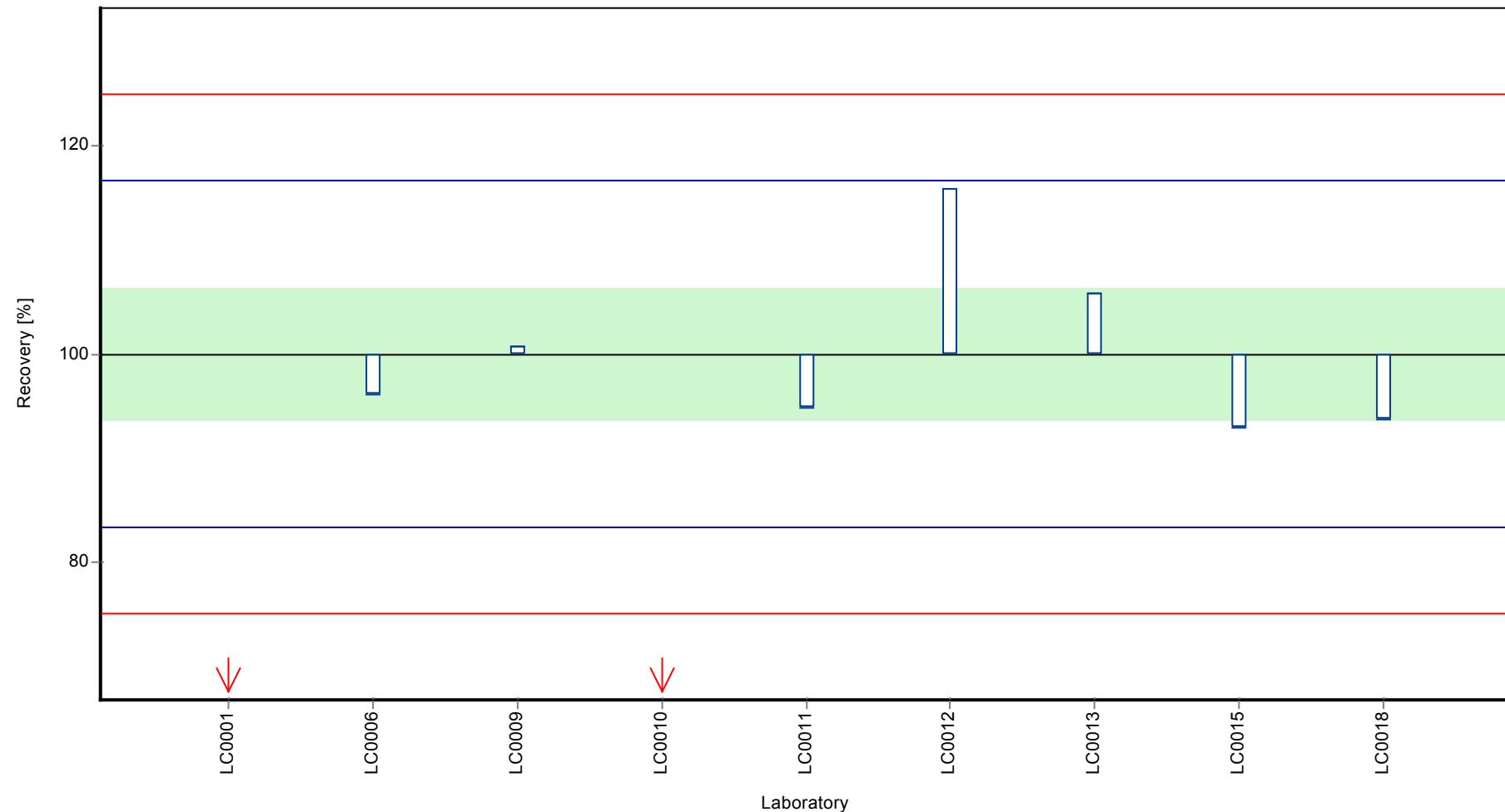
	all results	without outliers	Unit
Mean ± CI (99%)	7.37 ± 2.77	8.72 ± 0.823	µg/l
Minimum	1.95	8.1	µg/l
Maximum	10.1	10.1	µg/l
Standard deviation	2.77	0.726	µg/l
rel. Standard deviation	37.5	8.33	%
n	9	7	-

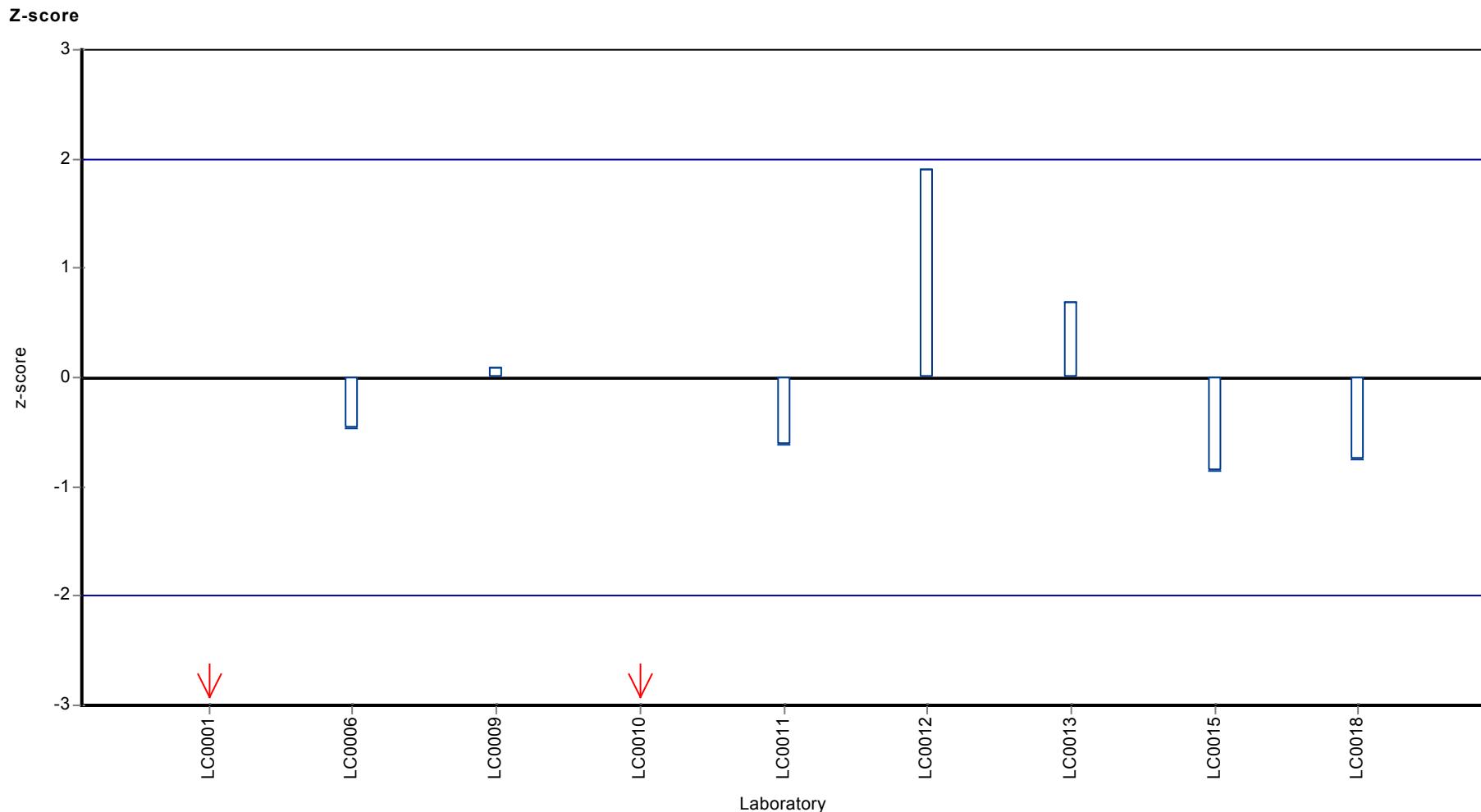
Graphical presentation of results

Results



Recovery rate





Parameter oriented report

AZ4 A

Sulfamethoxazole

Unit	µg/l
Mean ± CI (99%)	0.0562 ± 0.00335
Minimum - Maximum	0.0481 - 0.0625
Control test value ± U	0.0601 ± 0.00312

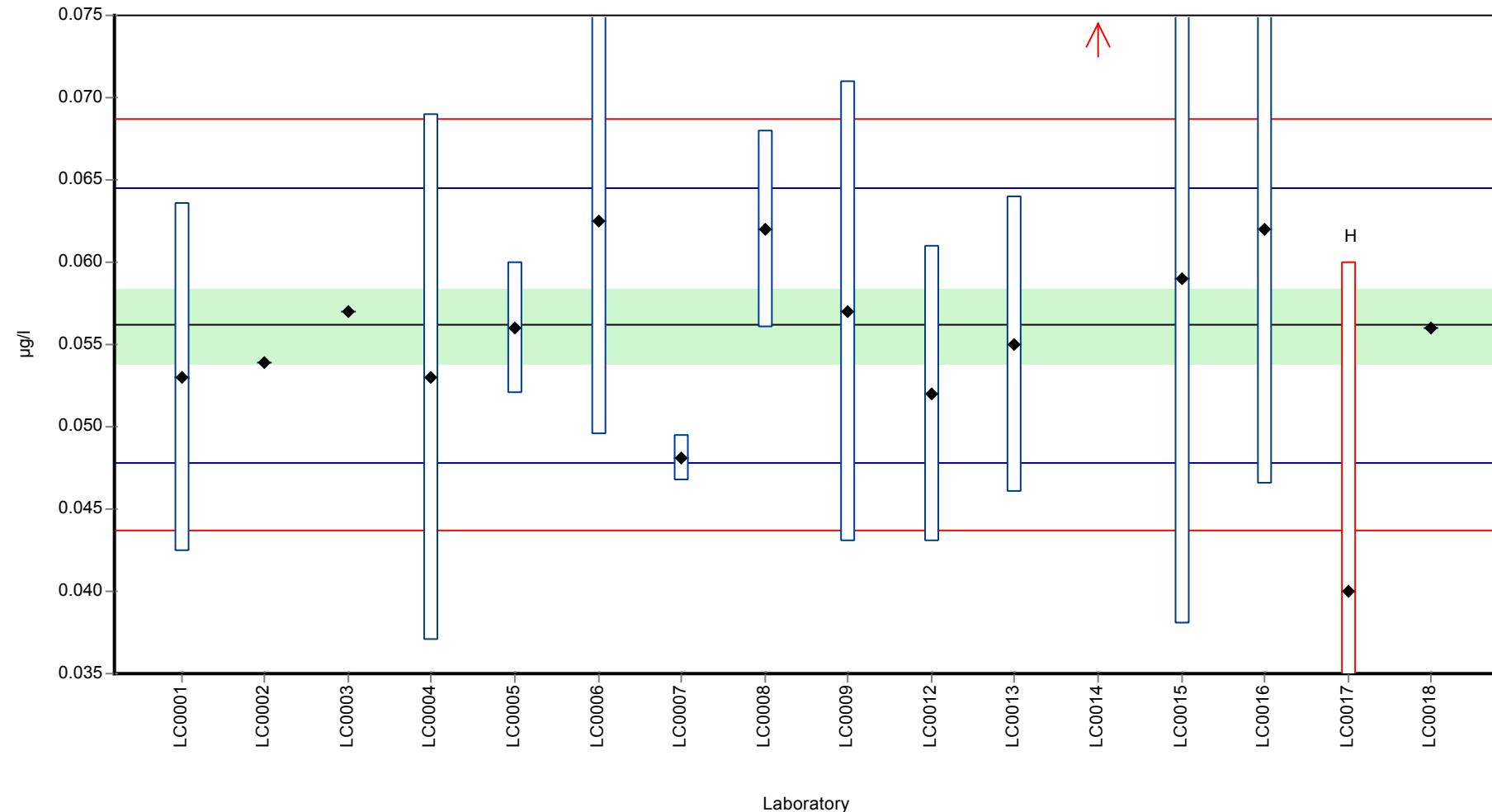
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.053	0.0106	94.3	-0.76	
LC0002	0.0539	-	95.9	-0.55	
LC0003	0.057	-	101	0.2	
LC0004	0.053	0.016	94.3	-0.76	
LC0005	0.056	0.004	99.7	-0.04	
LC0006	0.0625	0.013	111	1.51	
LC0007	0.0481	0.0014	85.6	-1.93	
LC0008	0.062	0.006	110	1.39	
LC0009	0.057	0.014	101	0.2	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	0.052	0.009	92.6	-1	
LC0013	0.055	0.009	97.9	-0.28	
LC0014	0.101	0.02	180	10.7	H
LC0015	0.059	0.021	105	0.68	
LC0016	0.062	0.0155	110	1.39	
LC0017	0.04	0.02	71.2	-3.87	H
LC0018	0.056	-	99.7	-0.04	

Characteristics of parameter

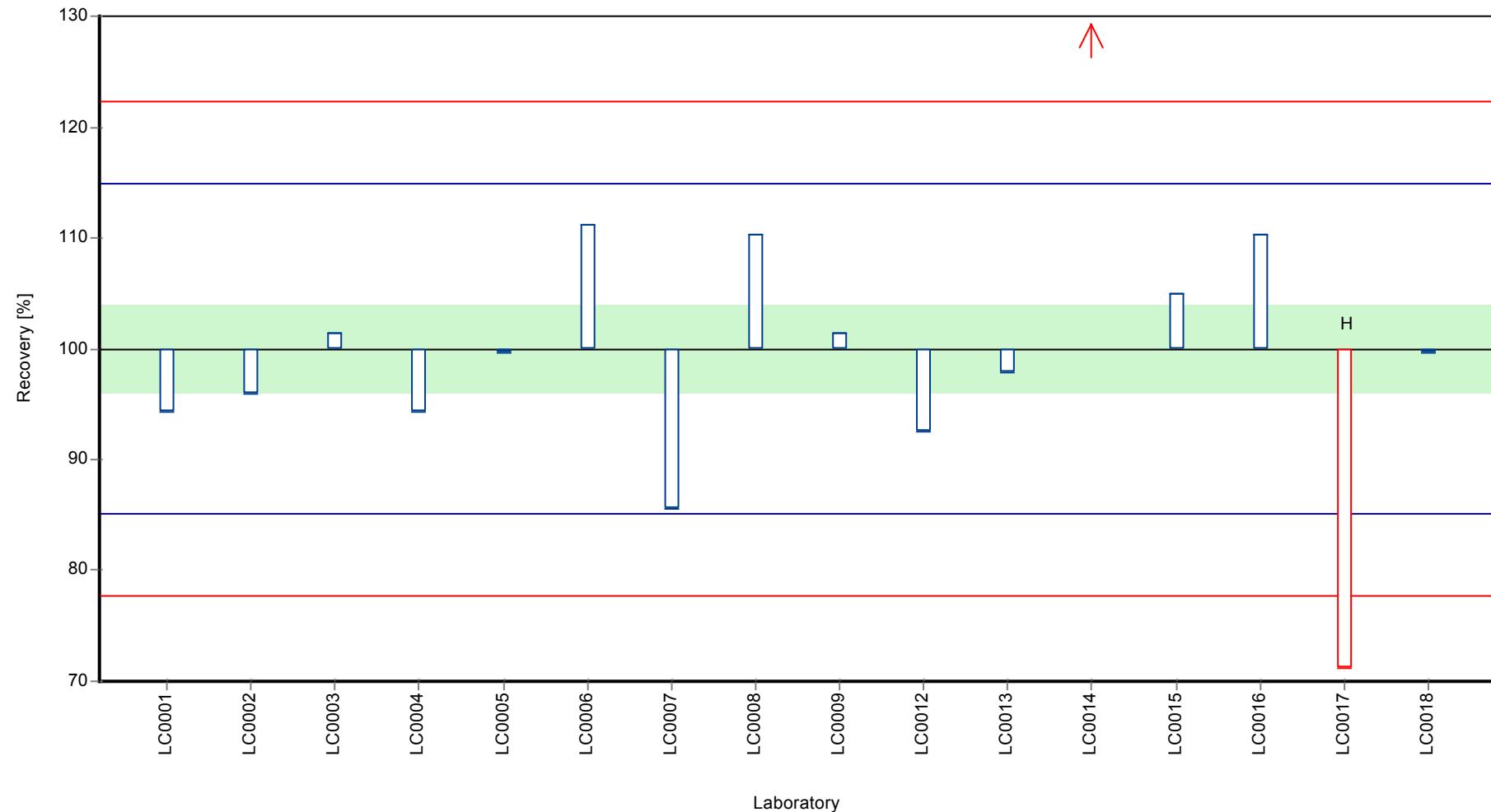
	all results	without outliers	Unit
Mean ± CI (99%)	0.058 ± 0.00958	0.0562 ± 0.00335	µg/l
Minimum	0.04	0.0481	µg/l
Maximum	0.101	0.0625	µg/l
Standard deviation	0.0128	0.00418	µg/l
rel. Standard deviation	22	7.43 %	
n	16	14	-

Graphical presentation of results

Results

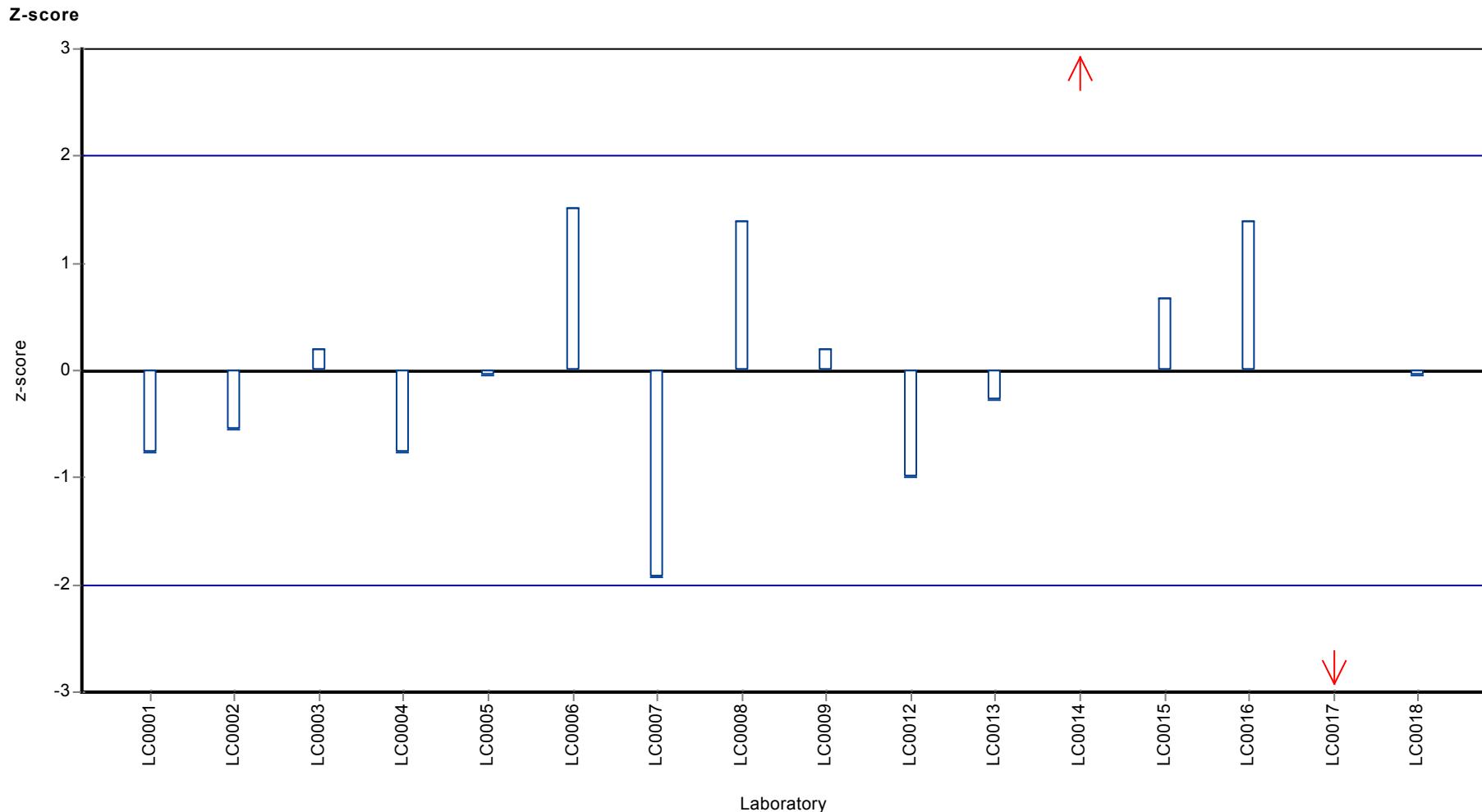


Recovery rate



Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4A, Parameter: Sulfamethoxazole



Parameter oriented report

AZ4 B

Sulfamethoxazole

Unit	µg/l
Mean ± CI (99%)	0.0633 ± 0.00787
Minimum - Maximum	0.04 - 0.08
Control test value ± U	0.0686 ± 0.00294

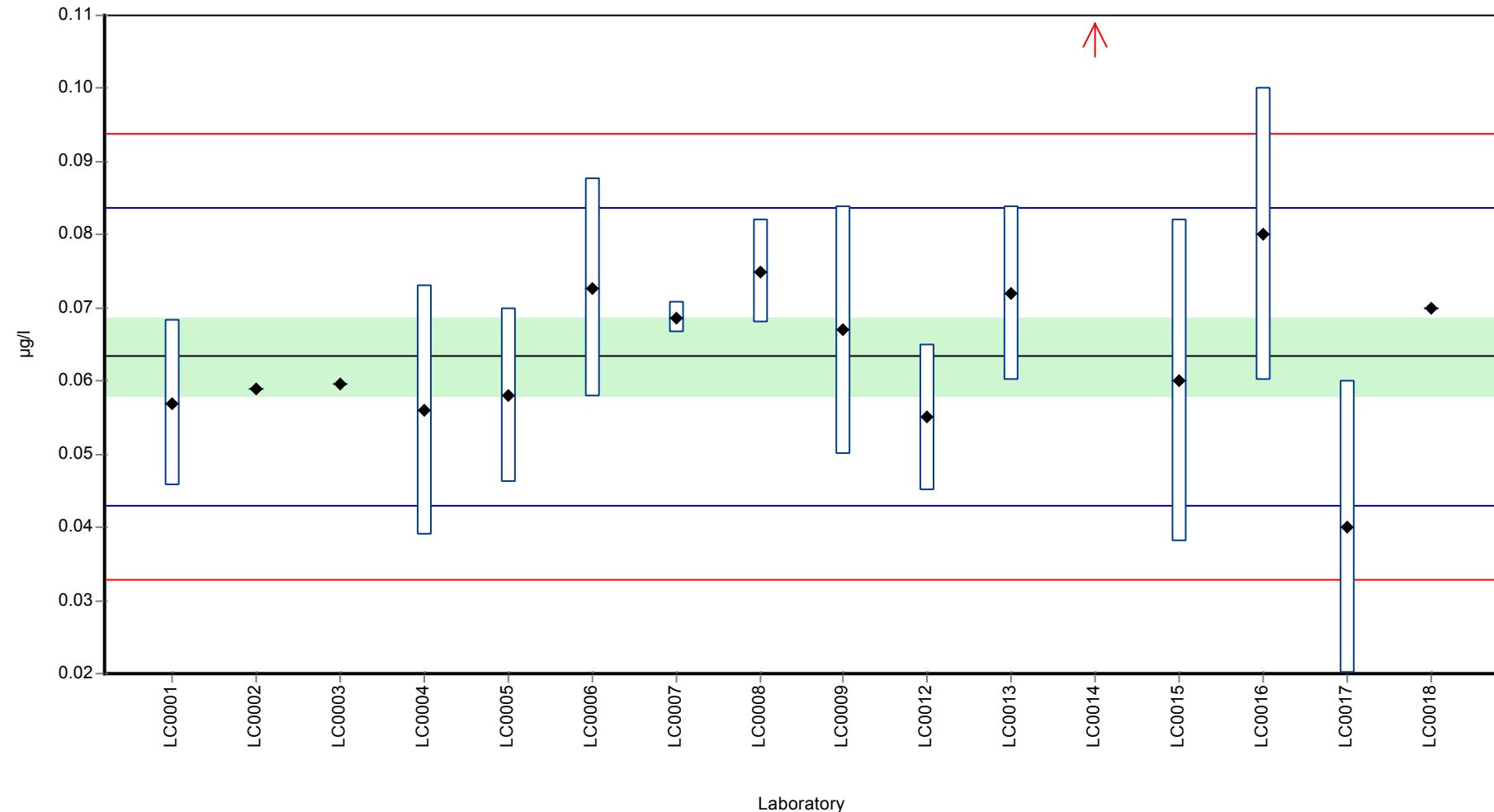
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.057	0.0114	90	-0.62	
LC0002	0.059	-	93.2	-0.43	
LC0003	0.0595	-	94	-0.38	
LC0004	0.056	0.017	88.4	-0.72	
LC0005	0.058	0.012	91.6	-0.52	
LC0006	0.0727	0.015	115	0.92	
LC0007	0.0687	0.0021	108	0.53	
LC0008	0.075	0.007	118	1.15	
LC0009	0.067	0.017	106	0.36	
LC0010	-	-	-	-	
LC0011	-	-	-	-	
LC0012	0.055	0.01	86.9	-0.82	
LC0013	0.072	0.012	114	0.85	
LC0014	0.113	0.023	178	4.89	H
LC0015	0.06	0.022	94.7	-0.33	
LC0016	0.08	0.02	126	1.64	
LC0017	0.04	0.02	63.2	-2.3	
LC0018	0.07	-	111	0.66	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.0664 ± 0.0119	0.0633 ± 0.00787	µg/l
Minimum	0.04	0.04	µg/l
Maximum	0.113	0.08	µg/l
Standard deviation	0.0158	0.0102	µg/l
rel. Standard deviation	23.8	16 %	
n	16	15	-

Graphical presentation of results

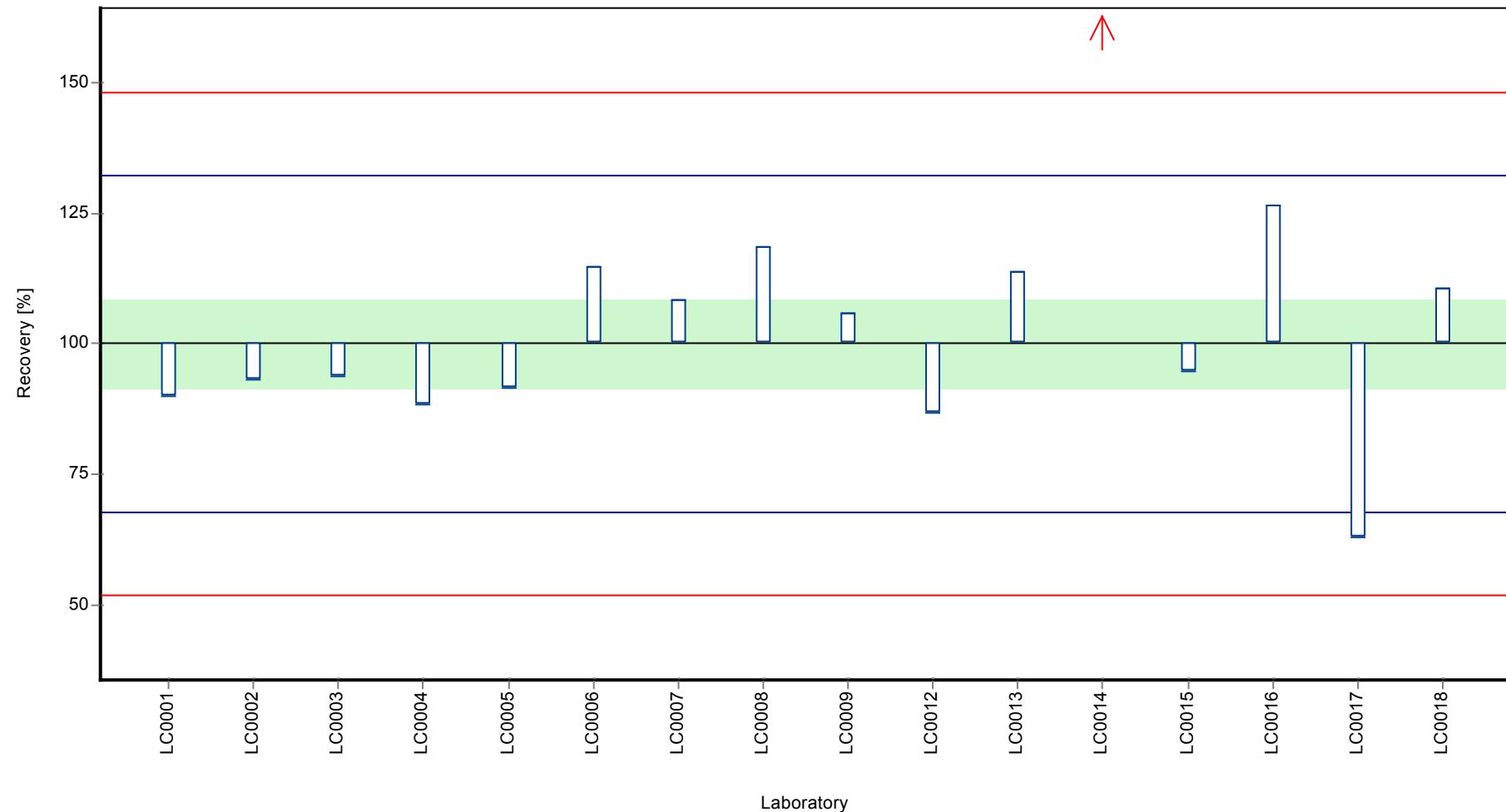
Results

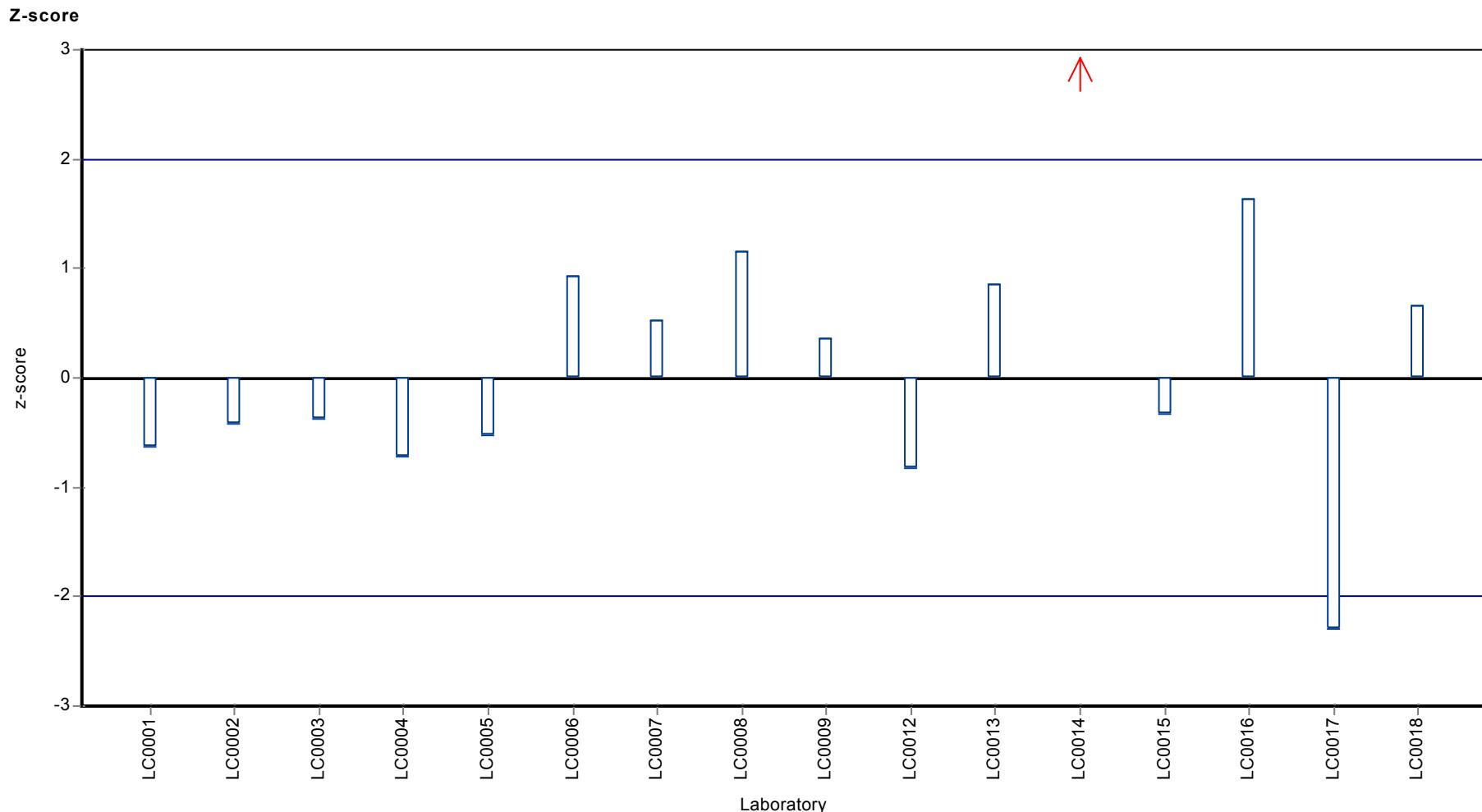


Parameter oriented report Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

Sample: AZ4B, Parameter: Sulfamethoxazole

Recovery rate





8 Laboratory oriented report

The laboratory oriented report is sorted by laboratory code.

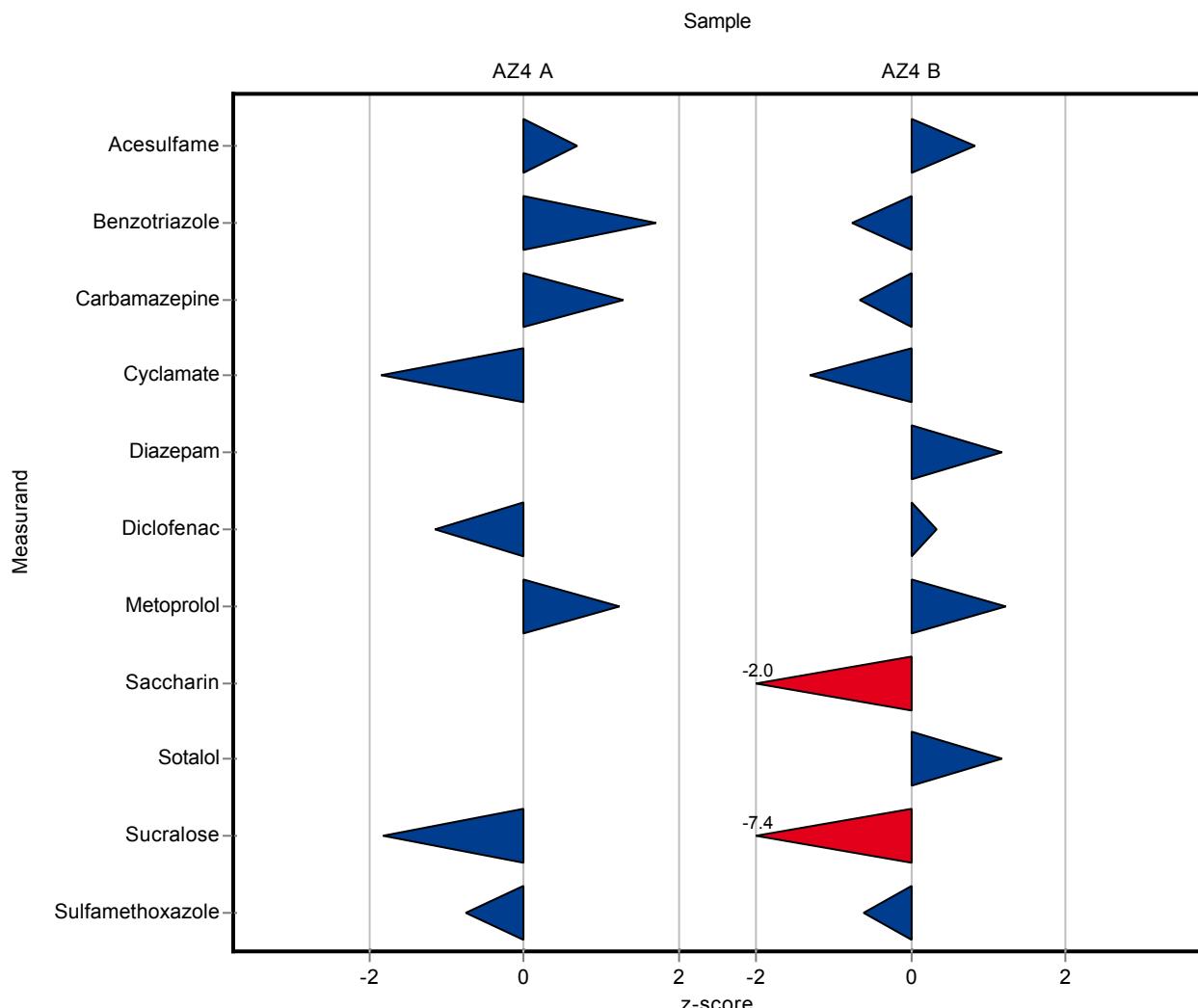
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.203	0.0406	0.0218	108	0.69
Benzotriazole	µg/l	0.261	±	0.0238	0.314	0.0628	0.0307	120	1.71
Carbamazepine	µg/l	0.0576	±	0.00491	0.066	0.0132	0.00655	115	1.28
Cyclamate	µg/l	0.311	±	0.0578	0.199	0.0597	0.0609	64.1	-1.83
Diazepam	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.309	0.0618	0.0448	85.8	-1.15
Ibuprofen	µg/l	-	±	-	<0.1 (LOQ)	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.022	0.0044	0.00563	146	1.24
Saccharin	µg/l	0.0658	±	0.0166	<0.01 (LOQ)	-	0.0156	-	-
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.199	0.0597	0.145	43.1	-1.82
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.053	0.0106	0.00418	94.3	-0.76

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	2.05	0.41	0.218	109	0.81
Benzotriazole	µg/l	8.21	±	0.669	7.58	1.516	0.835	92.3	-0.76
Carbamazepine	µg/l	0.588	±	0.0527	0.542	0.1084	0.0703	92.2	-0.66
Cyclamate	µg/l	0.214	±	0.0709	0.116	0.0348	0.0747	54.1	-1.32
Diazepam	µg/l	0.278	±	0.0473	0.323	0.0646	0.0386	116	1.17
Diclofenac	µg/l	2.87	±	0.327	3	0.6	0.408	105	0.32
Ibuprofen	µg/l	-	±	-	<0.1 (LOQ)	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.352	0.0704	0.0487	120	1.22
Saccharin	µg/l	1.44	±	0.536	0.365	0.073	0.536	25.3	-2.01
Sotalol	µg/l	0.401	±	0.0631	0.483	0.0966	0.0698	121	1.18
Sucralose	µg/l	8.72	±	0.823	3.37	1.011	0.726	38.7	-7.36
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.057	0.0114	0.0102	90	-0.62



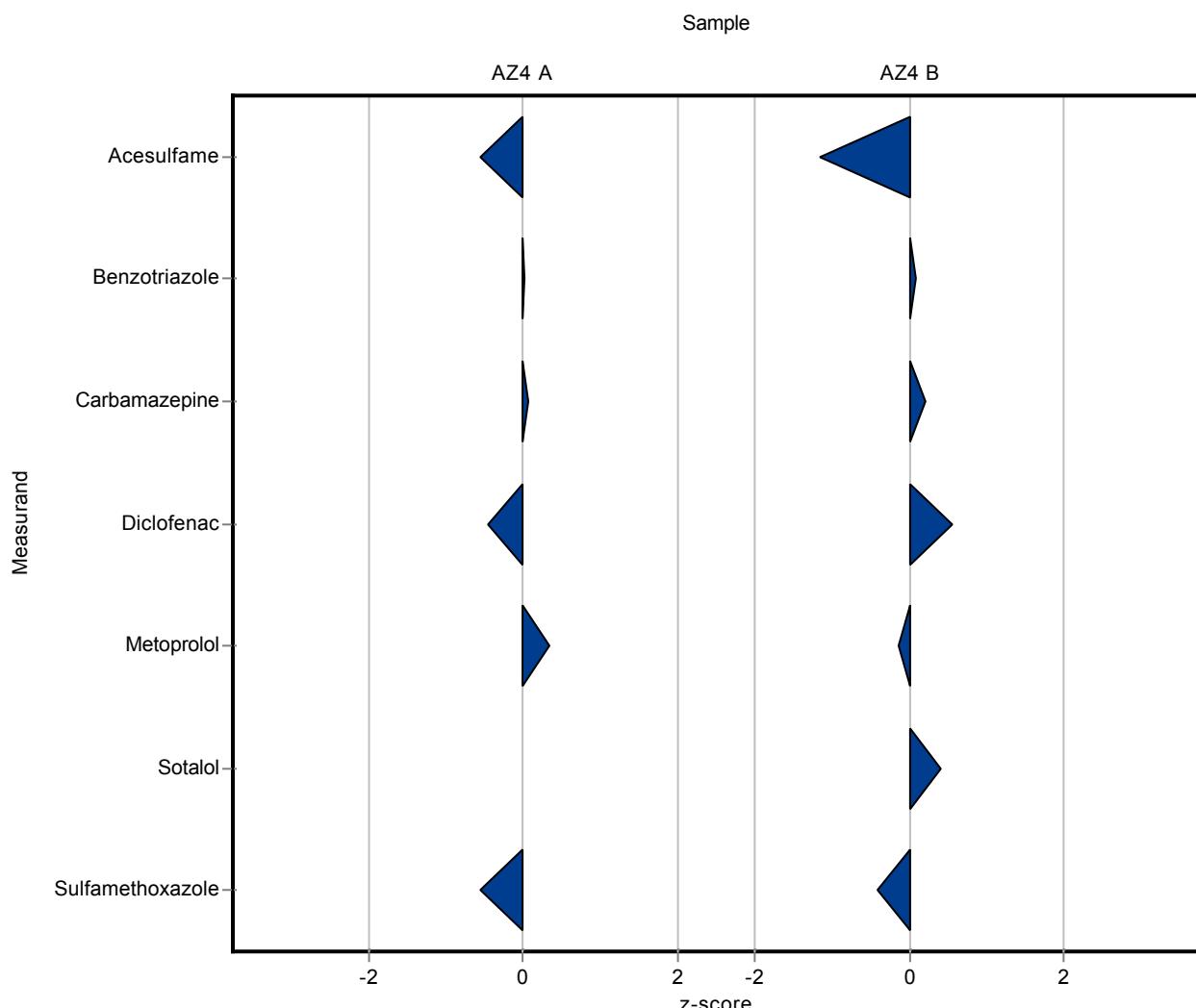
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.176	-	0.0218	93.6	-0.56
Benzotriazole	µg/l	0.261	±	0.0238	0.262	-	0.0307	100	0.02
Carbamazepine	µg/l	0.0576	±	0.00491	0.058	-	0.00655	101	0.06
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.34	-	0.0448	94.4	-0.45
Ibuprofen	µg/l	-	±	-	0.107	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.017	-	0.00563	113	0.35
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.0539	-	0.00418	95.9	-0.55

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.62	-	0.218	86.5	-1.16
Benzotriazole	µg/l	8.21	±	0.669	8.29	-	0.835	101	0.09
Carbamazepine	µg/l	0.588	±	0.0527	0.603	-	0.0703	103	0.21
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	3.09	-	0.408	108	0.54
Ibuprofen	µg/l	-	±	-	0.59	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.286	-	0.0487	97.8	-0.13
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	0.428	-	0.0698	107	0.39
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.059	-	0.0102	93.2	-0.43



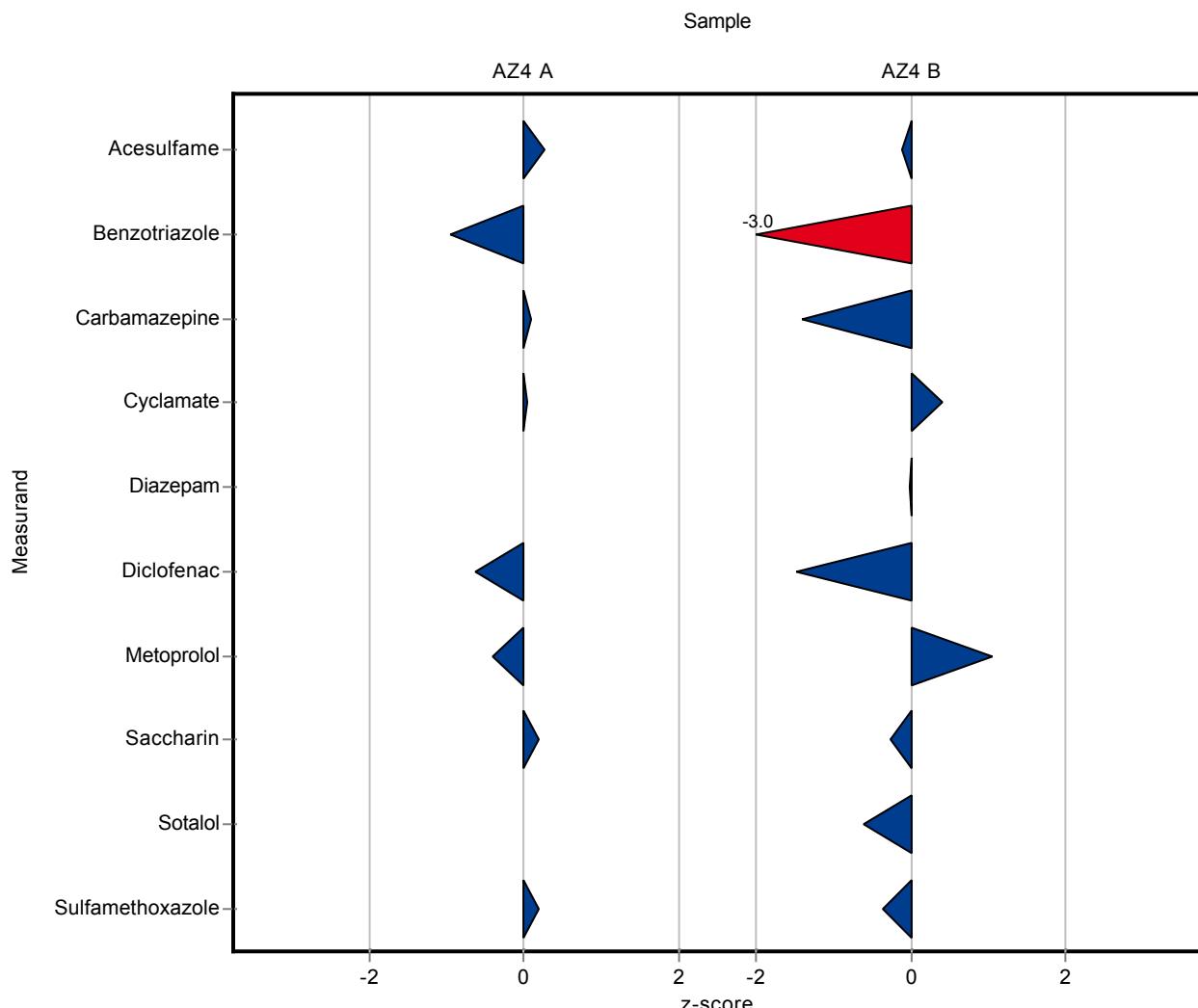
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.194	0.021	0.0218	103	0.27
Benzotriazole	µg/l	0.261	±	0.0238	0.232	-	0.0307	88.8	-0.96
Carbamazepine	µg/l	0.0576	±	0.00491	0.0583	-	0.00655	101	0.11
Cyclamate	µg/l	0.311	±	0.0578	0.313	0.053	0.0609	101	0.04
Diazepam	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.332	-	0.0448	92.2	-0.63
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.0128	-	0.00563	85.1	-0.4
Saccharin	µg/l	0.0658	±	0.0166	0.0687	0.016	0.0156	104	0.18
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.057	-	0.00418	101	0.2

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.848	0.203	0.218	98.7	-0.11
Benzotriazole	µg/l	8.21	±	0.669	5.72	-	0.835	69.6	-2.99
Carbamazepine	µg/l	0.588	±	0.0527	0.49	-	0.0703	83.3	-1.4
Cyclamate	µg/l	0.214	±	0.0709	0.244	0.041	0.0747	114	0.4
Diazepam	µg/l	0.278	±	0.0473	0.277	-	0.0386	99.7	-0.02
Diclofenac	µg/l	2.87	±	0.327	2.26	-	0.408	78.8	-1.49
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.344	-	0.0487	118	1.06
Saccharin	µg/l	1.44	±	0.536	1.3	0.299	0.536	90	-0.27
Sotalol	µg/l	0.401	±	0.0631	0.358	-	0.0698	89.3	-0.61
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.0595	-	0.0102	94	-0.38



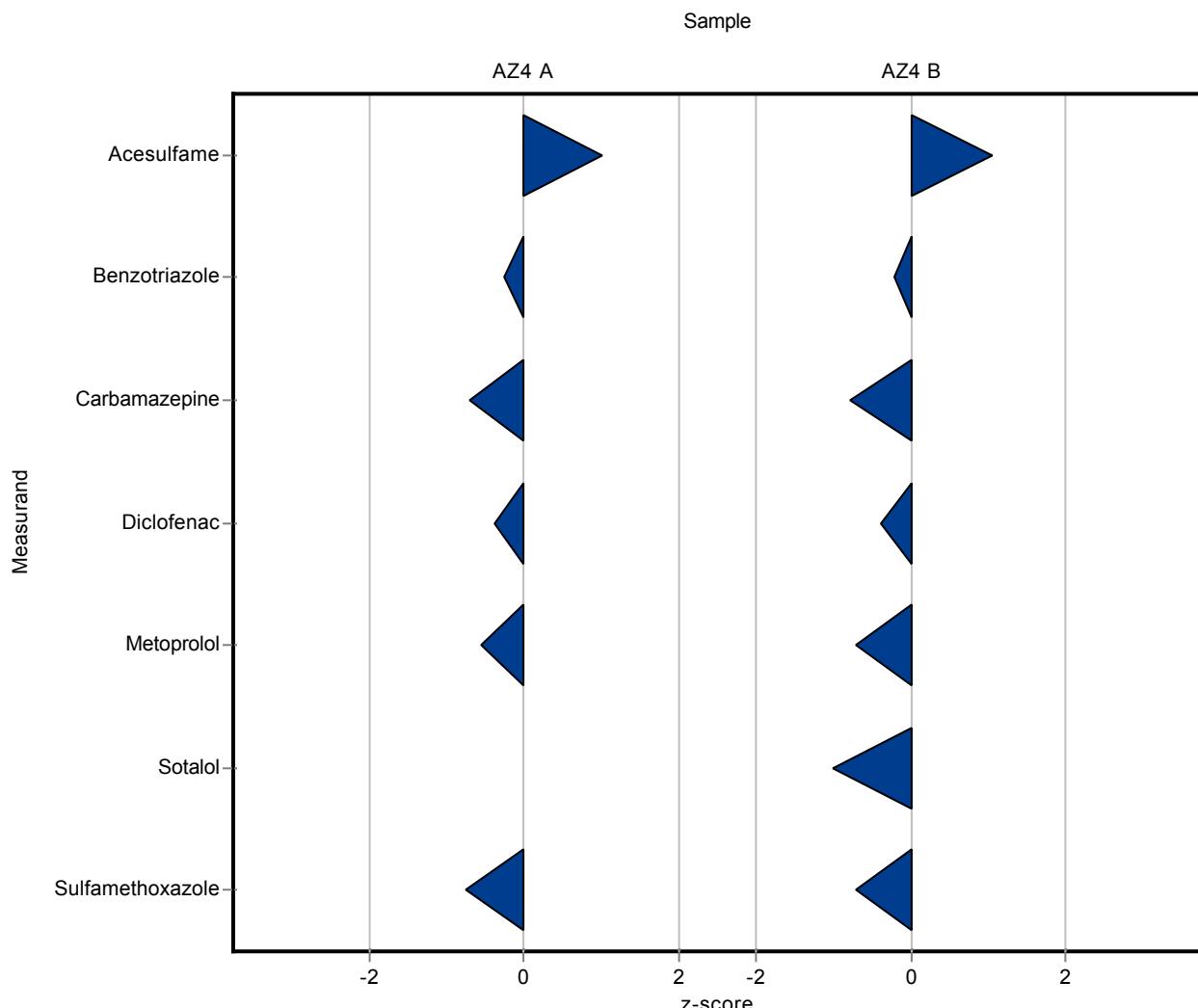
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.21	0.063	0.0218	112	1.01
Benzotriazole	µg/l	0.261	±	0.0238	0.254	0.076	0.0307	97.2	-0.24
Carbamazepine	µg/l	0.0576	±	0.00491	0.053	0.016	0.00655	92	-0.7
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.343	0.103	0.0448	95.2	-0.39
Ibuprofen	µg/l	-	±	-	0.096	0.029	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.012	0.004	0.00563	79.8	-0.54
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.053	0.016	0.00418	94.3	-0.76

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	2.1	0.63	0.218	112	1.04
Benzotriazole	µg/l	8.21	±	0.669	8.04	2.41	0.835	97.9	-0.21
Carbamazepine	µg/l	0.588	±	0.0527	0.532	0.16	0.0703	90.5	-0.8
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	2.71	0.813	0.408	94.5	-0.39
Ibuprofen	µg/l	-	±	-	0.538	0.161	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.258	0.077	0.0487	88.2	-0.71
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	0.33	0.099	0.0698	82.4	-1.01
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.056	0.017	0.0102	88.4	-0.72



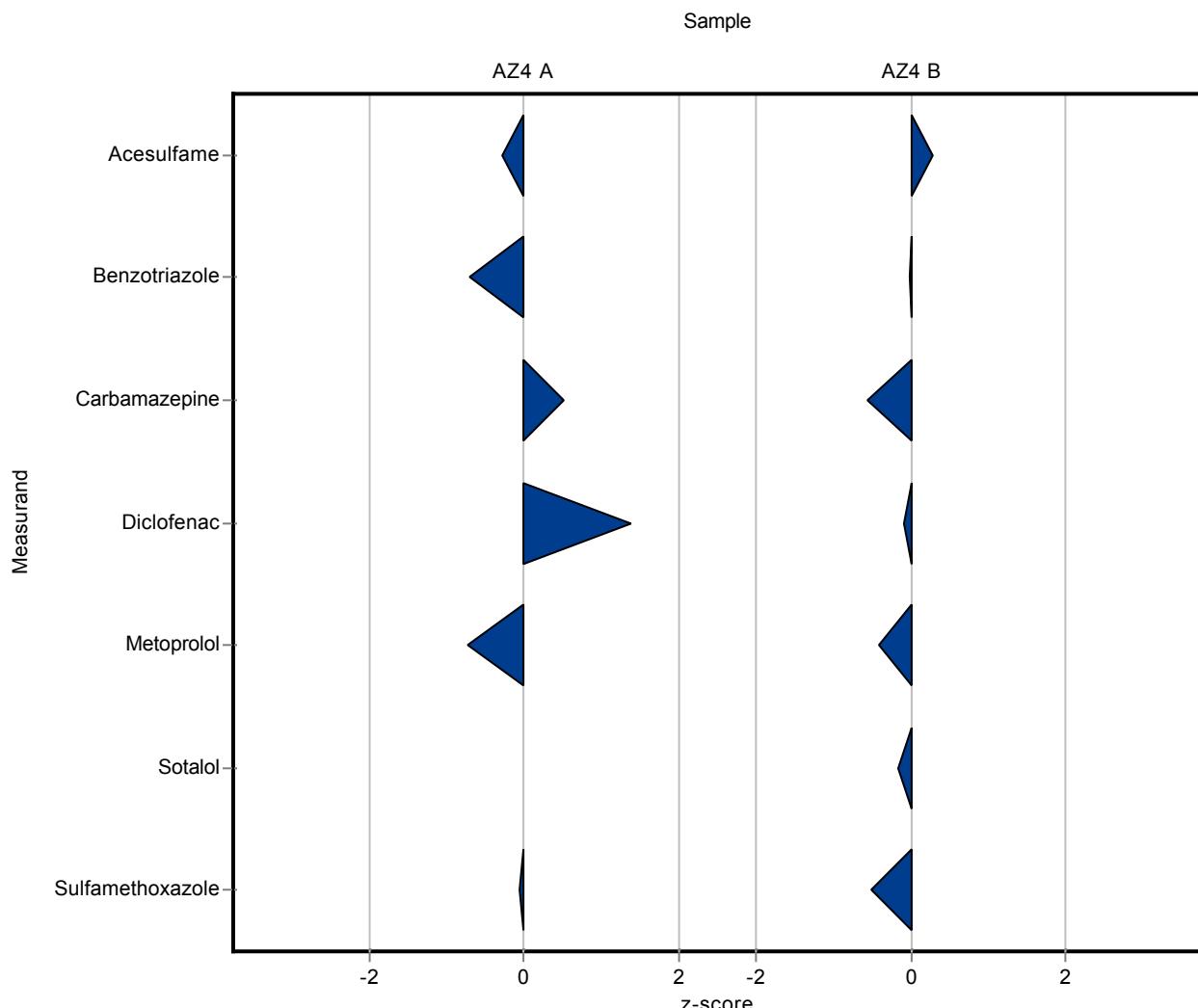
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.182	0.025	0.0218	96.8	-0.28
Benzotriazole	µg/l	0.261	±	0.0238	0.24	0.041	0.0307	91.8	-0.7
Carbamazepine	µg/l	0.0576	±	0.00491	0.061	0.006	0.00655	106	0.52
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.422	0.08	0.0448	117	1.38
Ibuprofen	µg/l	-	±	-	0.088	0.018	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.011	0.002	0.00563	73.1	-0.72
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	<0.0025	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.056	0.004	0.00418	99.7	-0.04

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.935	0.484	0.218	103	0.29
Benzotriazole	µg/l	8.21	±	0.669	8.194	1.639	0.835	99.8	-0.02
Carbamazepine	µg/l	0.588	±	0.0527	0.548	0.11	0.0703	93.2	-0.57
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	2.831	0.566	0.408	98.7	-0.09
Ibuprofen	µg/l	-	±	-	0.514	0.103	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.272	0.054	0.0487	93	-0.42
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	0.389	0.078	0.0698	97.1	-0.17
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.058	0.012	0.0102	91.6	-0.52



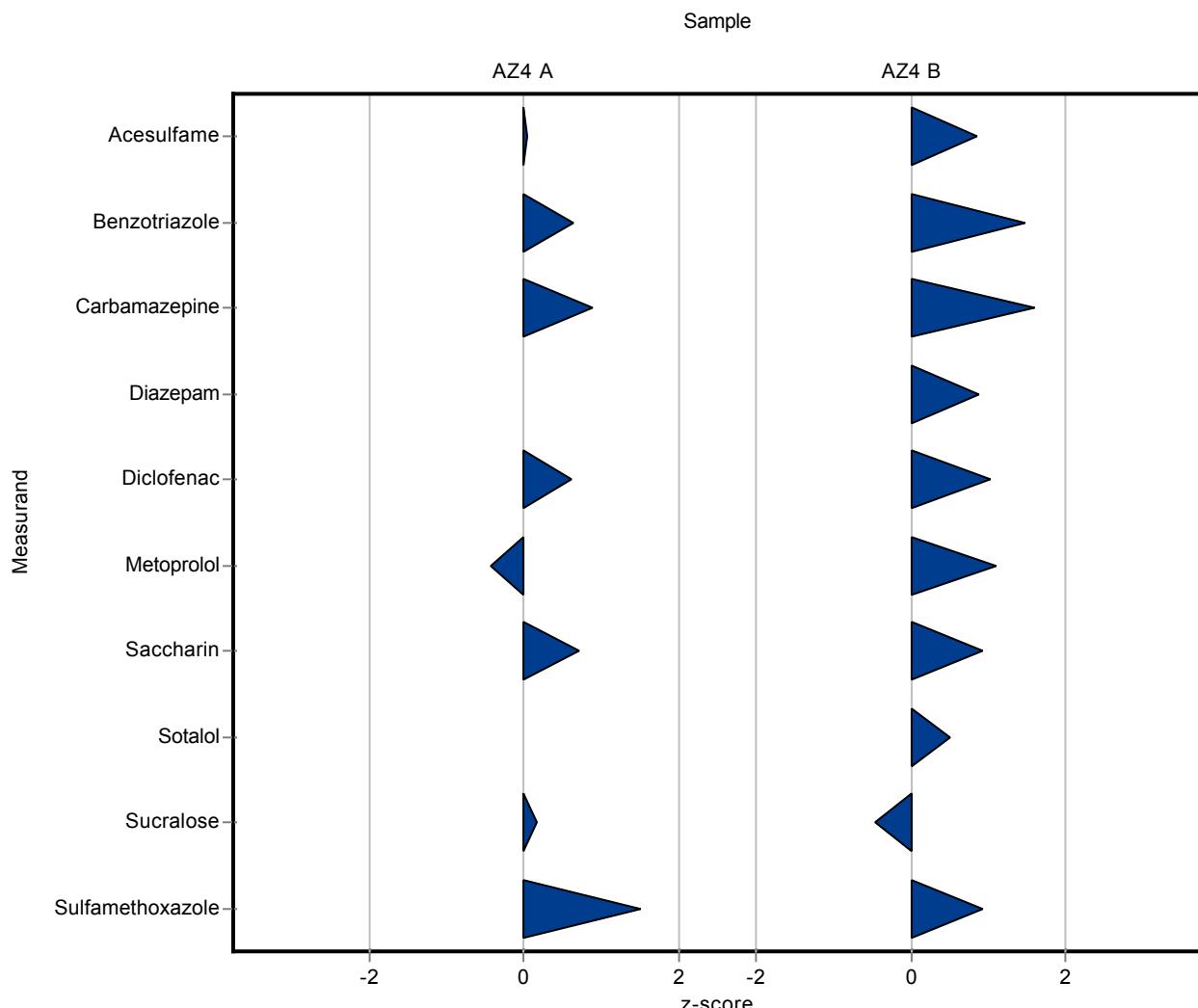
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.1891	0.038	0.0218	101	0.05
Benzotriazole	µg/l	0.261	±	0.0238	0.2811	0.056	0.0307	108	0.64
Carbamazepine	µg/l	0.0576	±	0.00491	0.0634	0.013	0.00655	110	0.89
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.3875	0.078	0.0448	108	0.61
Ibuprofen	µg/l	-	±	-	0.1133	0.023	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.0127	0.003	0.00563	84.4	-0.42
Saccharin	µg/l	0.0658	±	0.0166	0.0768	0.015	0.0156	117	0.7
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.4873	0.146	0.145	106	0.18
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.0625	0.013	0.00418	111	1.51

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	2.057	0.411	0.218	110	0.85
Benzotriazole	µg/l	8.21	±	0.669	9.448	1.89	0.835	115	1.48
Carbamazepine	µg/l	0.588	±	0.0527	0.6993	0.14	0.0703	119	1.58
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	0.3115	0.062	0.0386	112	0.87
Diclofenac	µg/l	2.87	±	0.327	3.289	0.658	0.408	115	1.03
Ibuprofen	µg/l	-	±	-	0.7511	0.2	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.3455	0.069	0.0487	118	1.09
Saccharin	µg/l	1.44	±	0.536	1.937	0.387	0.536	134	0.92
Sotalol	µg/l	0.401	±	0.0631	0.4354	0.087	0.0698	109	0.5
Sucralose	µg/l	8.72	±	0.823	8.382	2.514	0.726	96.2	-0.46
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.0727	0.015	0.0102	115	0.92



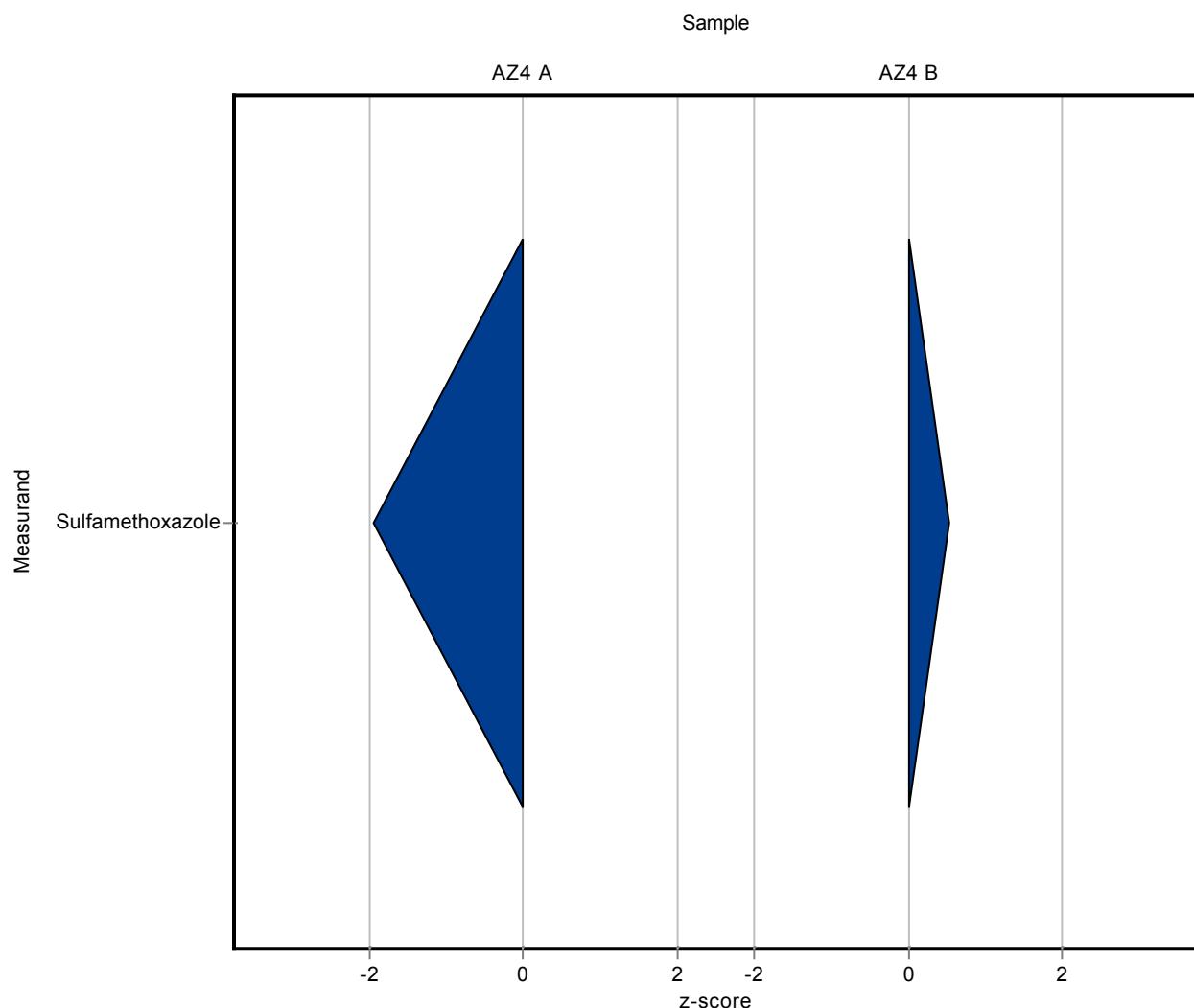
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	-	-	0.0218	-	-
Benzotriazole	µg/l	0.261	±	0.0238	-	-	0.0307	-	-
Carbamazepine	µg/l	0.0576	±	0.00491	-	-	0.00655	-	-
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	-	-	0.0448	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	-	-	0.00563	-	-
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	-	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.0481	0.0014	0.00418	85.6	-1.93

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	-	-	0.218	-	-
Benzotriazole	µg/l	8.21	±	0.669	-	-	0.835	-	-
Carbamazepine	µg/l	0.588	±	0.0527	-	-	0.0703	-	-
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	-	-	0.408	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	-	-	0.0487	-	-
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	-	-	0.0698	-	-
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.0687	0.0021	0.0102	108	0.53



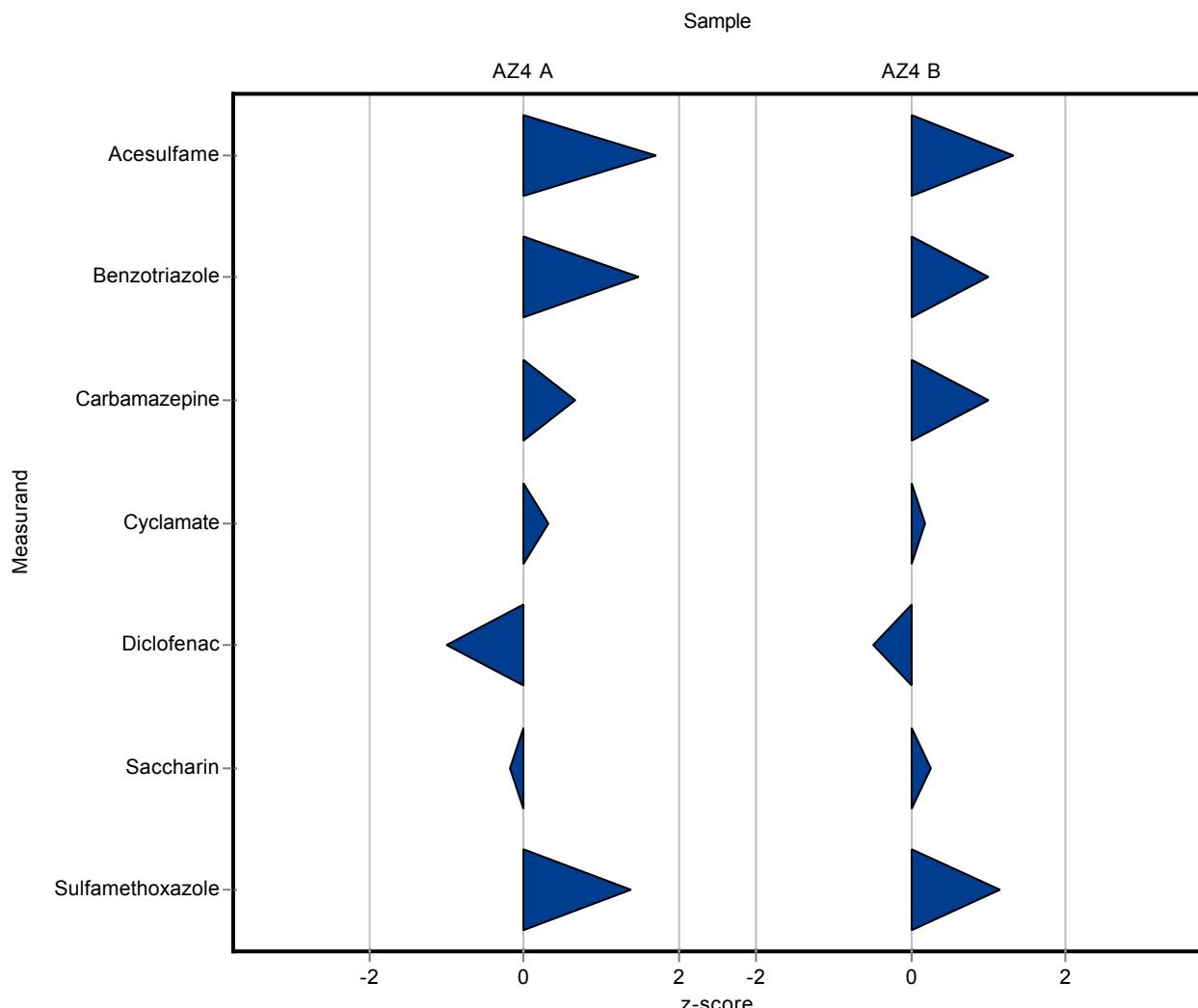
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	0.188	\pm	0.0181	0.225	0.018	0.0218	120	1.7
Benzotriazole	$\mu\text{g/l}$	0.261	\pm	0.0238	0.307	0.031	0.0307	117	1.48
Carbamazepine	$\mu\text{g/l}$	0.0576	\pm	0.00491	0.062	0.009	0.00655	108	0.67
Cyclamate	$\mu\text{g/l}$	0.311	\pm	0.0578	0.33	0.033	0.0609	106	0.32
Diazepam	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Diclofenac	$\mu\text{g/l}$	0.36	\pm	0.0373	0.316	0.063	0.0448	87.7	-0.99
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.015	\pm	0.00488	-	-	0.00563	-	-
Saccharin	$\mu\text{g/l}$	0.0658	\pm	0.0166	0.063	0.008	0.0156	95.7	-0.18
Sotalol	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Sucralose	$\mu\text{g/l}$	0.461	\pm	0.145	-	-	0.145	-	-
Sulfamethoxazole	$\mu\text{g/l}$	0.0562	\pm	0.00335	0.062	0.006	0.00418	110	1.39

Sample: AZ4B

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	1.87	\pm	0.163	2.16	0.173	0.218	115	1.32
Benzotriazole	$\mu\text{g/l}$	8.21	\pm	0.669	9.05	0.91	0.835	110	1
Carbamazepine	$\mu\text{g/l}$	0.588	\pm	0.0527	0.658	0.099	0.0703	112	0.99
Cyclamate	$\mu\text{g/l}$	0.214	\pm	0.0709	0.227	0.023	0.0747	106	0.17
Diazepam	$\mu\text{g/l}$	0.278	\pm	0.0473	-	-	0.0386	-	-
Diclofenac	$\mu\text{g/l}$	2.87	\pm	0.327	2.67	0.53	0.408	93.1	-0.48
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.293	\pm	0.0422	-	-	0.0487	-	-
Saccharin	$\mu\text{g/l}$	1.44	\pm	0.536	1.58	0.21	0.536	109	0.25
Sotalol	$\mu\text{g/l}$	0.401	\pm	0.0631	-	-	0.0698	-	-
Sucralose	$\mu\text{g/l}$	8.72	\pm	0.823	-	-	0.726	-	-
Sulfamethoxazole	$\mu\text{g/l}$	0.0633	\pm	0.00787	0.075	0.007	0.0102	118	1.15



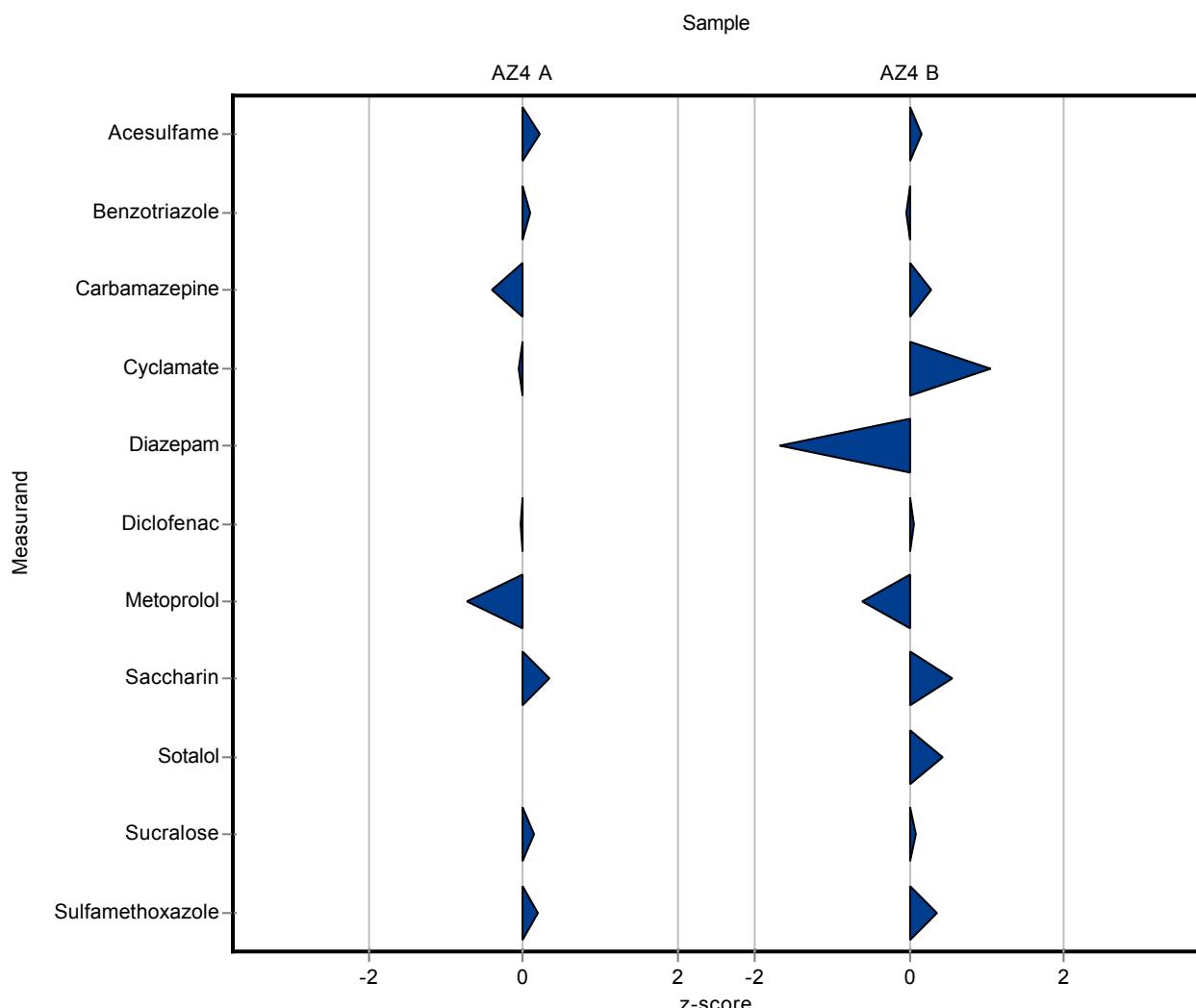
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.193	0.048	0.0218	103	0.23
Benzotriazole	µg/l	0.261	±	0.0238	0.264	0.066	0.0307	101	0.08
Carbamazepine	µg/l	0.0576	±	0.00491	0.055	0.014	0.00655	95.5	-0.4
Cyclamate	µg/l	0.311	±	0.0578	0.308	0.092	0.0609	99.2	-0.04
Diazepam	µg/l	-	±	-	<10 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.359	0.09	0.0448	99.6	-0.03
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.011	0.003	0.00563	73.1	-0.72
Saccharin	µg/l	0.0658	±	0.0166	0.071	0.021	0.0156	108	0.33
Sotalol	µg/l	-	±	-	<10 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.483	0.145	0.145	105	0.15
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.057	0.014	0.00418	101	0.2

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.908	0.477	0.218	102	0.16
Benzotriazole	µg/l	8.21	±	0.669	8.168	2.042	0.835	99.4	-0.05
Carbamazepine	µg/l	0.588	±	0.0527	0.607	0.152	0.0703	103	0.27
Cyclamate	µg/l	0.214	±	0.0709	0.292	0.087	0.0747	136	1.04
Diazepam	µg/l	0.278	±	0.0473	0.213	0.068	0.0386	76.6	-1.68
Diclofenac	µg/l	2.87	±	0.327	2.895	0.724	0.408	101	0.07
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.262	0.066	0.0487	89.6	-0.63
Saccharin	µg/l	1.44	±	0.536	1.739	0.522	0.536	120	0.55
Sotalol	µg/l	0.401	±	0.0631	0.431	0.086	0.0698	108	0.43
Sucralose	µg/l	8.72	±	0.823	8.783	2.64	0.726	101	0.09
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.067	0.017	0.0102	106	0.36



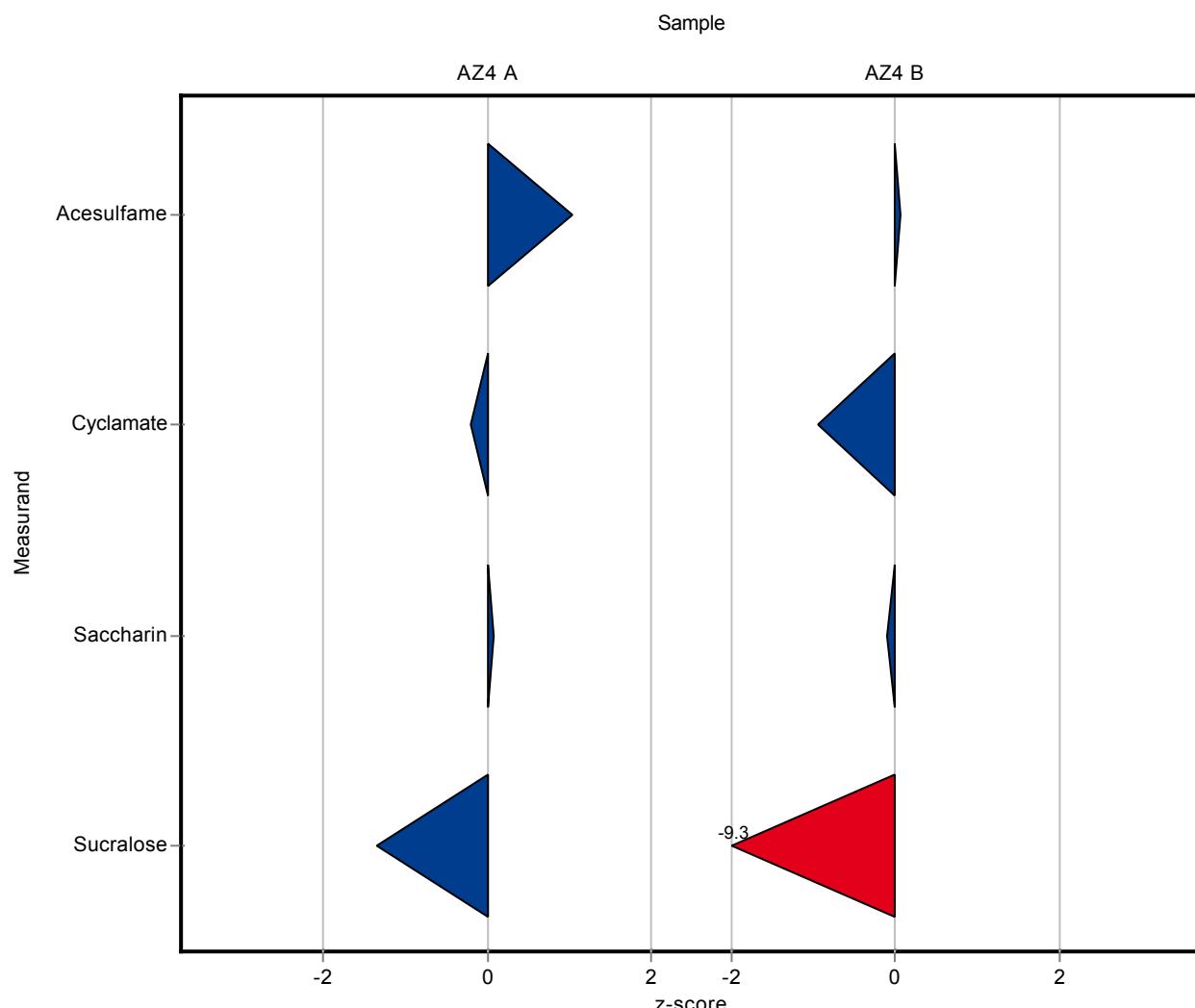
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.211	0.016	0.0218	112	1.05
Benzotriazole	µg/l	0.261	±	0.0238	-	-	0.0307	-	-
Carbamazepine	µg/l	0.0576	±	0.00491	-	-	0.00655	-	-
Cyclamate	µg/l	0.311	±	0.0578	0.298	0.007	0.0609	95.9	-0.21
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	-	-	0.0448	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	-	-	0.00563	-	-
Saccharin	µg/l	0.0658	±	0.0166	0.067	0.027	0.0156	102	0.08
Sotalol	µg/l	-	±	-	-	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.265	0.014	0.145	57.4	-1.36
Sulfamethoxazole	µg/l	0.0562	±	0.00335	-	-	0.00418	-	-

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.888	0.233	0.218	101	0.07
Benzotriazole	µg/l	8.21	±	0.669	-	-	0.835	-	-
Carbamazepine	µg/l	0.588	±	0.0527	-	-	0.0703	-	-
Cyclamate	µg/l	0.214	±	0.0709	0.144	0.038	0.0747	67.2	-0.94
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	-	-	0.408	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	-	-	0.0487	-	-
Saccharin	µg/l	1.44	±	0.536	1.386	0.311	0.536	96	-0.11
Sotalol	µg/l	0.401	±	0.0631	-	-	0.0698	-	-
Sucralose	µg/l	8.72	±	0.823	1.95	0.236	0.726	22.4	-9.32
Sulfamethoxazole	µg/l	0.0633	±	0.00787	-	-	0.0102	-	-



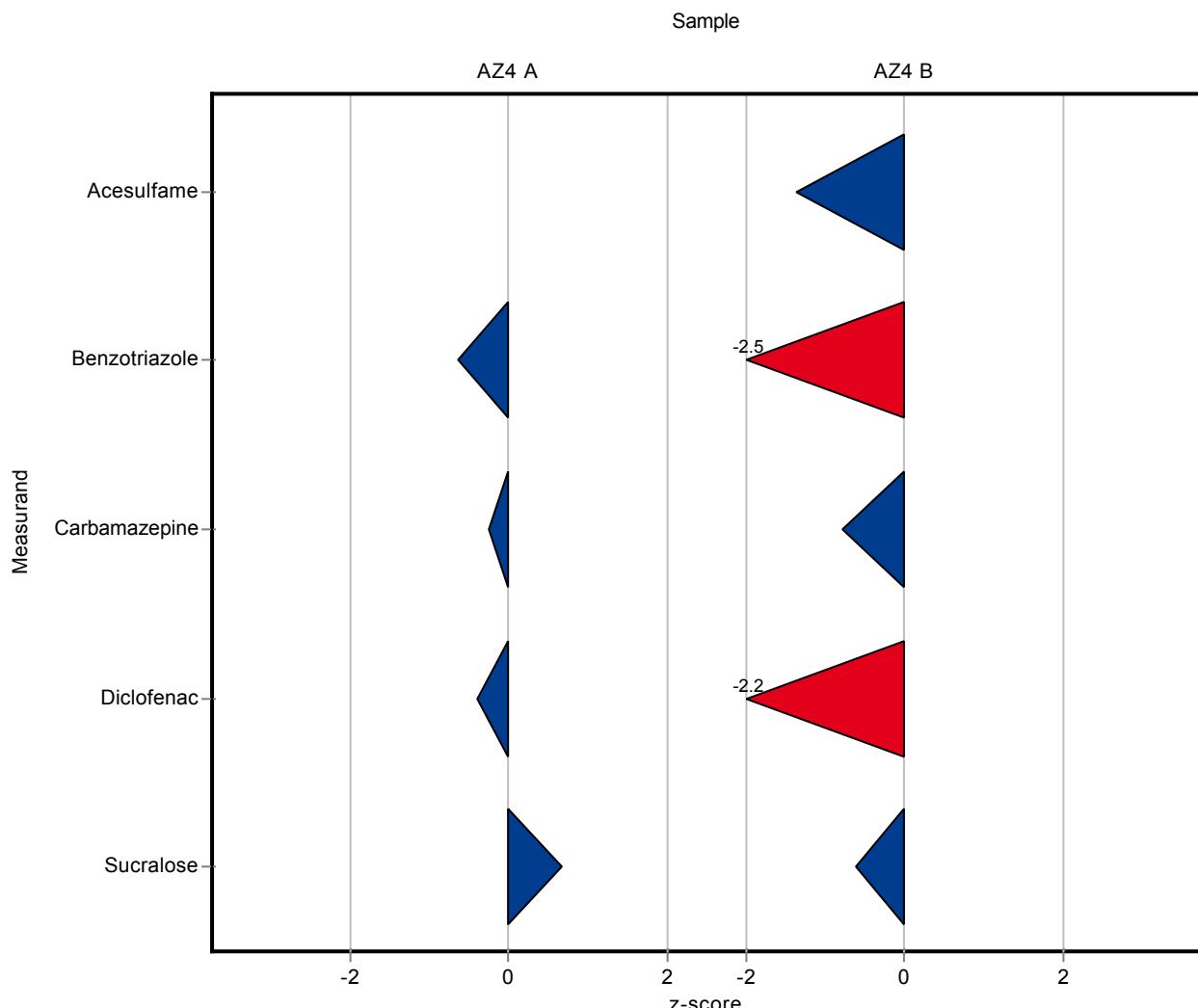
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	0.188	\pm	0.0181	<0.25 (LOQ)	-	0.0218	-	-
Benzotriazole	$\mu\text{g/l}$	0.261	\pm	0.0238	0.242	0.02	0.0307	92.6	-0.63
Carbamazepine	$\mu\text{g/l}$	0.0576	\pm	0.00491	0.056	0.005	0.00655	97.2	-0.24
Cyclamate	$\mu\text{g/l}$	0.311	\pm	0.0578	-	-	0.0609	-	-
Diazepam	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Diclofenac	$\mu\text{g/l}$	0.36	\pm	0.0373	0.342	0.029	0.0448	94.9	-0.41
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.015	\pm	0.00488	-	-	0.00563	-	-
Saccharin	$\mu\text{g/l}$	0.0658	\pm	0.0166	-	-	0.0156	-	-
Sotalol	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Sucralose	$\mu\text{g/l}$	0.461	\pm	0.145	0.558	0.038	0.145	121	0.67
Sulfamethoxazole	$\mu\text{g/l}$	0.0562	\pm	0.00335	-	-	0.00418	-	-

Sample: AZ4B

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	1.87	\pm	0.163	1.574	0.283	0.218	84.1	-1.37
Benzotriazole	$\mu\text{g/l}$	8.21	\pm	0.669	6.165	0.518	0.835	75.1	-2.45
Carbamazepine	$\mu\text{g/l}$	0.588	\pm	0.0527	0.533	0.051	0.0703	90.6	-0.79
Cyclamate	$\mu\text{g/l}$	0.214	\pm	0.0709	-	-	0.0747	-	-
Diazepam	$\mu\text{g/l}$	0.278	\pm	0.0473	-	-	0.0386	-	-
Diclofenac	$\mu\text{g/l}$	2.87	\pm	0.327	1.97	0.165	0.408	68.7	-2.2
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.293	\pm	0.0422	-	-	0.0487	-	-
Saccharin	$\mu\text{g/l}$	1.44	\pm	0.536	-	-	0.536	-	-
Sotalol	$\mu\text{g/l}$	0.401	\pm	0.0631	-	-	0.0698	-	-
Sucralose	$\mu\text{g/l}$	8.72	\pm	0.823	8.267	0.562	0.726	94.8	-0.62
Sulfamethoxazole	$\mu\text{g/l}$	0.0633	\pm	0.00787	-	-	0.0102	-	-



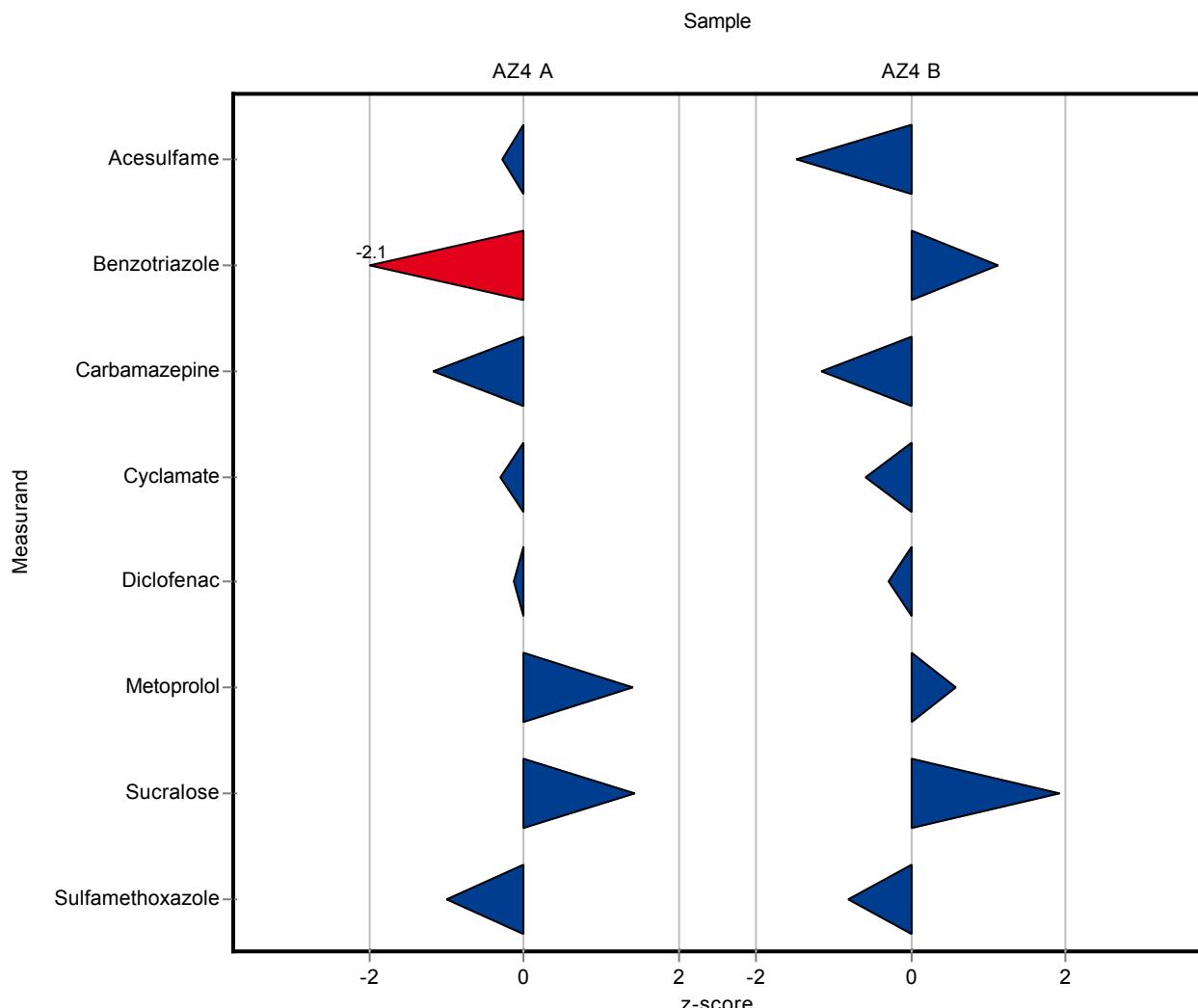
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.182	0.033	0.0218	96.8	-0.28
Benzotriazole	µg/l	0.261	±	0.0238	0.197	0.035	0.0307	75.4	-2.1
Carbamazepine	µg/l	0.0576	±	0.00491	0.05	0.009	0.00655	86.8	-1.16
Cyclamate	µg/l	0.311	±	0.0578	0.292	0.053	0.0609	94	-0.3
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.354	0.064	0.0448	98.3	-0.14
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.023	0.004	0.00563	153	1.41
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	-	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.667	0.12	0.145	145	1.42
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.052	0.009	0.00418	92.6	-1

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.55	0.279	0.218	82.8	-1.48
Benzotriazole	µg/l	8.21	±	0.669	9.14	1.65	0.835	111	1.11
Carbamazepine	µg/l	0.588	±	0.0527	0.507	0.091	0.0703	86.2	-1.15
Cyclamate	µg/l	0.214	±	0.0709	0.171	0.031	0.0747	79.8	-0.58
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	2.75	0.495	0.408	95.9	-0.29
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.32	0.058	0.0487	109	0.56
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	-	-	0.0698	-	-
Sucralose	µg/l	8.72	±	0.823	10.1	1.81	0.726	116	1.9
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.055	0.01	0.0102	86.9	-0.82



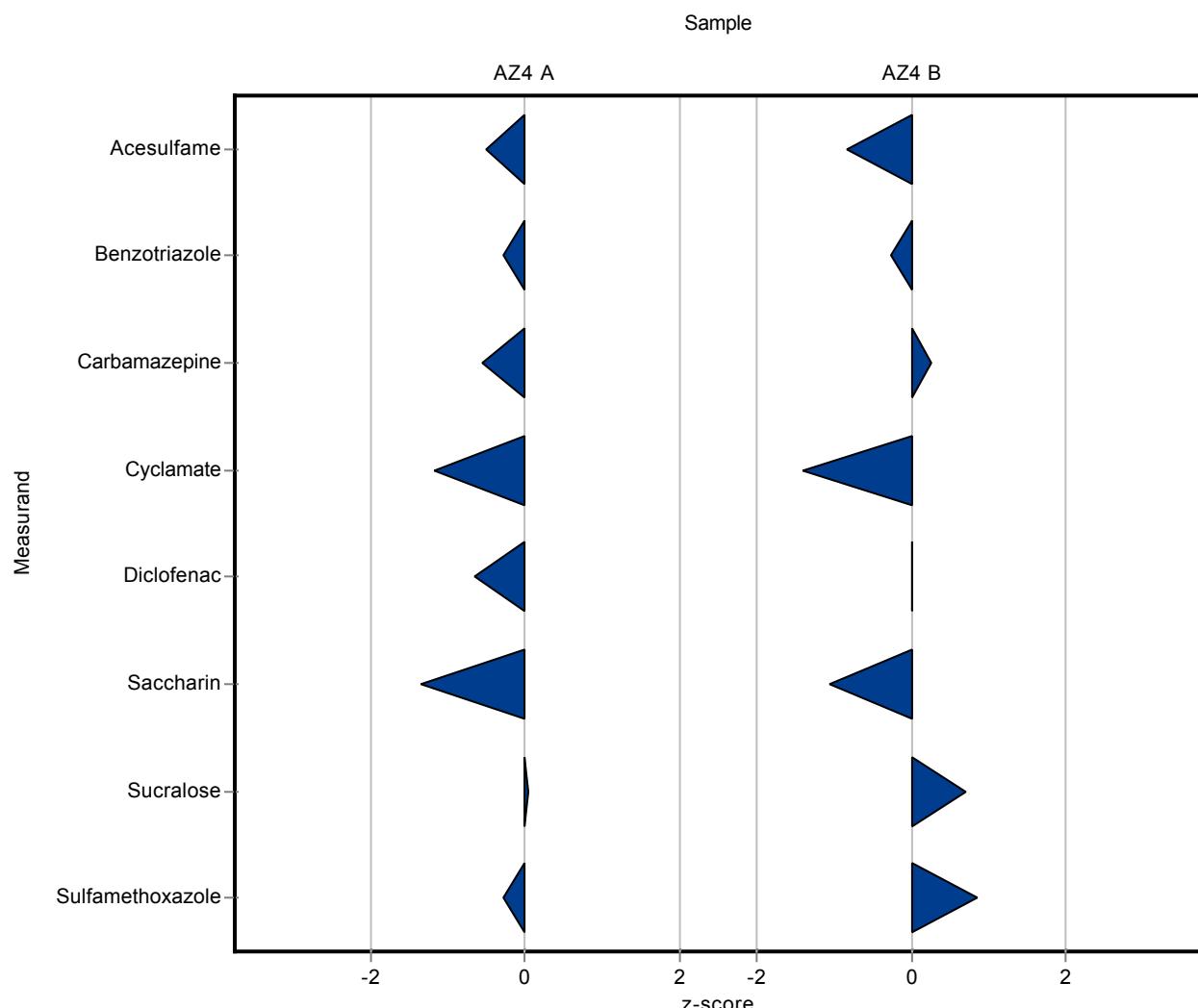
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	0.188	\pm	0.0181	0.177	0.028	0.0218	94.1	-0.51
Benzotriazole	$\mu\text{g/l}$	0.261	\pm	0.0238	0.253	0.041	0.0307	96.8	-0.27
Carbamazepine	$\mu\text{g/l}$	0.0576	\pm	0.00491	0.054	0.009	0.00655	93.7	-0.55
Cyclamate	$\mu\text{g/l}$	0.311	\pm	0.0578	0.24	0.048	0.0609	77.3	-1.16
Diazepam	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Diclofenac	$\mu\text{g/l}$	0.36	\pm	0.0373	0.331	0.054	0.0448	91.9	-0.65
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.015	\pm	0.00488	-	-	0.00563	-	-
Saccharin	$\mu\text{g/l}$	0.0658	\pm	0.0166	0.045	0.009	0.0156	68.4	-1.33
Sotalol	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Sucralose	$\mu\text{g/l}$	0.461	\pm	0.145	0.467	0.093	0.145	101	0.04
Sulfamethoxazole	$\mu\text{g/l}$	0.0562	\pm	0.00335	0.055	0.009	0.00418	97.9	-0.28

Sample: AZ4B

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	1.87	\pm	0.163	1.692	0.264	0.218	90.4	-0.83
Benzotriazole	$\mu\text{g/l}$	8.21	\pm	0.669	7.985	1.302	0.835	97.2	-0.27
Carbamazepine	$\mu\text{g/l}$	0.588	\pm	0.0527	0.606	0.099	0.0703	103	0.25
Cyclamate	$\mu\text{g/l}$	0.214	\pm	0.0709	0.109	0.022	0.0747	50.8	-1.41
Diazepam	$\mu\text{g/l}$	0.278	\pm	0.0473	-	-	0.0386	-	-
Diclofenac	$\mu\text{g/l}$	2.87	\pm	0.327	2.874	0.468	0.408	100	0.01
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.293	\pm	0.0422	-	-	0.0487	-	-
Saccharin	$\mu\text{g/l}$	1.44	\pm	0.536	0.87	0.174	0.536	60.2	-1.07
Sotalol	$\mu\text{g/l}$	0.401	\pm	0.0631	-	-	0.0698	-	-
Sucralose	$\mu\text{g/l}$	8.72	\pm	0.823	9.22	1.844	0.726	106	0.69
Sulfamethoxazole	$\mu\text{g/l}$	0.0633	\pm	0.00787	0.072	0.012	0.0102	114	0.85



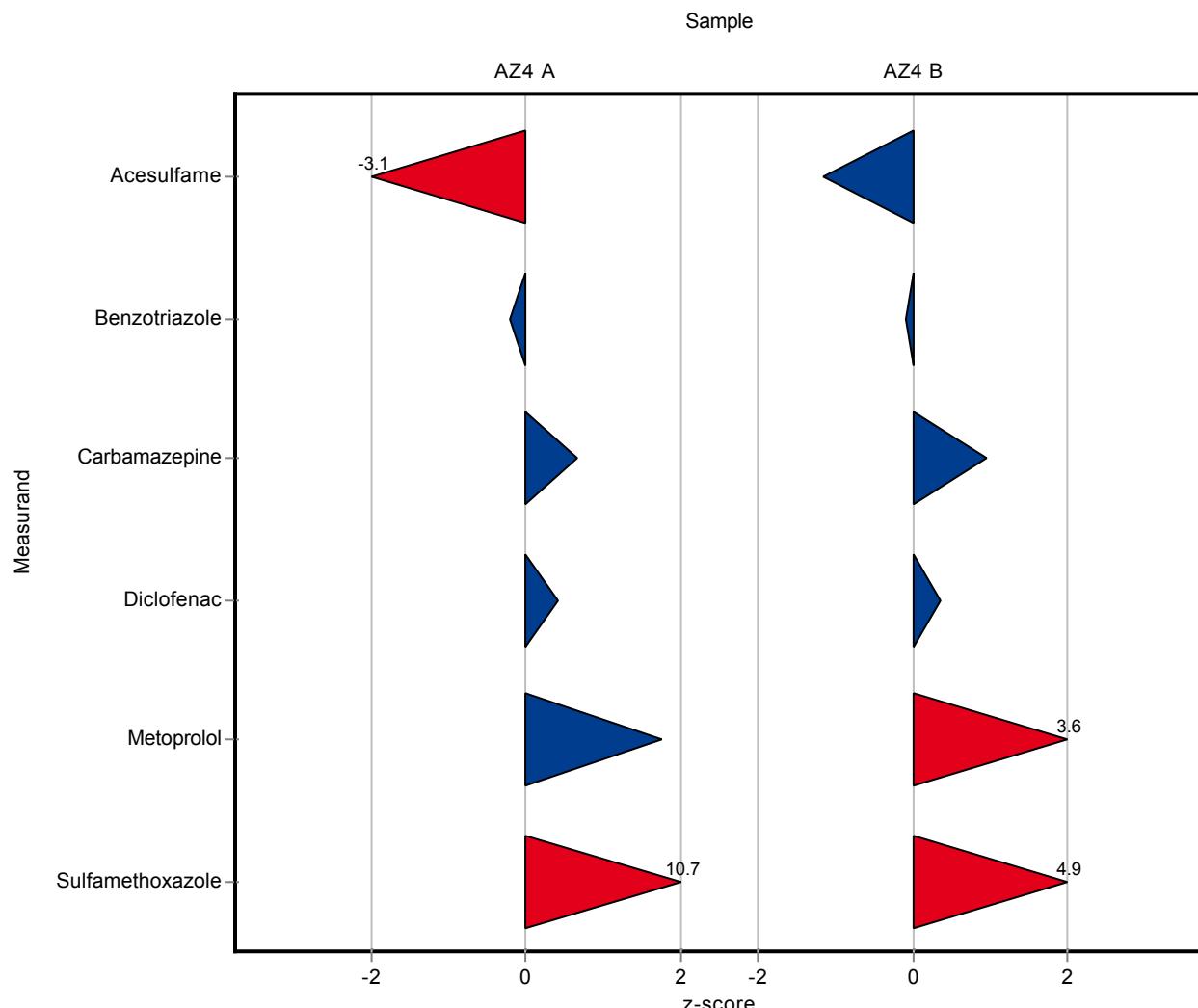
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	0.188	\pm	0.0181	0.121	0.03	0.0218	64.3	-3.08
Benzotriazole	$\mu\text{g/l}$	0.261	\pm	0.0238	0.255	0.038	0.0307	97.5	-0.21
Carbamazepine	$\mu\text{g/l}$	0.0576	\pm	0.00491	0.062	0.016	0.00655	108	0.67
Cyclamate	$\mu\text{g/l}$	0.311	\pm	0.0578	-	-	0.0609	-	-
Diazepam	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Diclofenac	$\mu\text{g/l}$	0.36	\pm	0.0373	0.379	0.095	0.0448	105	0.42
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.015	\pm	0.00488	0.025	0.006	0.00563	166	1.77
Saccharin	$\mu\text{g/l}$	0.0658	\pm	0.0166	-	-	0.0156	-	-
Sotalol	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Sucralose	$\mu\text{g/l}$	0.461	\pm	0.145	-	-	0.145	-	-
Sulfamethoxazole	$\mu\text{g/l}$	0.0562	\pm	0.00335	0.101	0.02	0.00418	180	10.7

Sample: AZ4B

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	1.87	\pm	0.163	1.621	0.405	0.218	86.6	-1.15
Benzotriazole	$\mu\text{g/l}$	8.21	\pm	0.669	8.134	1.22	0.835	99	-0.1
Carbamazepine	$\mu\text{g/l}$	0.588	\pm	0.0527	0.655	0.164	0.0703	111	0.95
Cyclamate	$\mu\text{g/l}$	0.214	\pm	0.0709	-	-	0.0747	-	-
Diazepam	$\mu\text{g/l}$	0.278	\pm	0.0473	-	-	0.0386	-	-
Diclofenac	$\mu\text{g/l}$	2.87	\pm	0.327	3.017	0.754	0.408	105	0.36
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.293	\pm	0.0422	0.466	0.117	0.0487	159	3.56
Saccharin	$\mu\text{g/l}$	1.44	\pm	0.536	-	-	0.536	-	-
Sotalol	$\mu\text{g/l}$	0.401	\pm	0.0631	-	-	0.0698	-	-
Sucralose	$\mu\text{g/l}$	8.72	\pm	0.823	-	-	0.726	-	-
Sulfamethoxazole	$\mu\text{g/l}$	0.0633	\pm	0.00787	0.113	0.023	0.0102	178	4.89



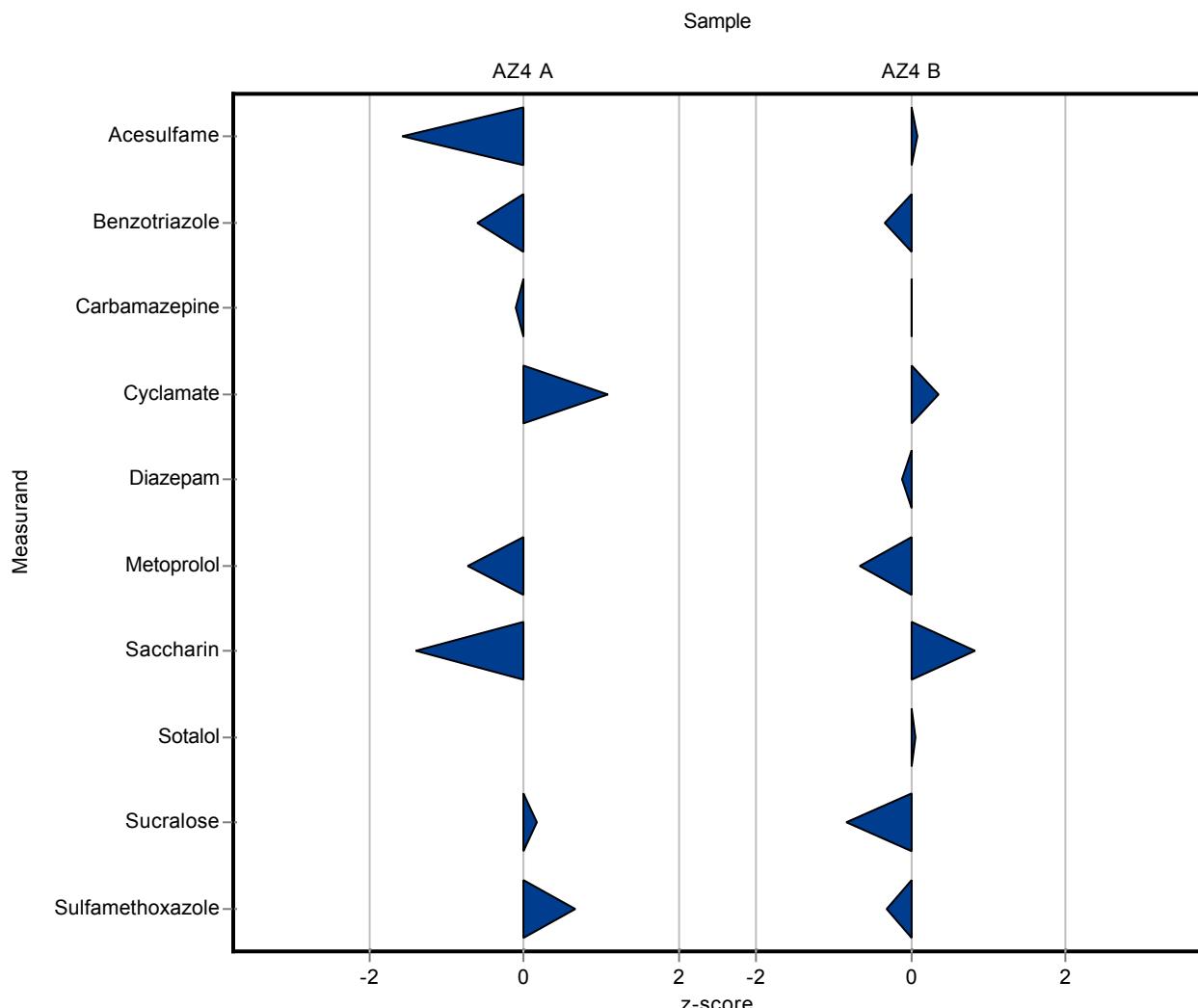
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.154	0.046	0.0218	81.9	-1.57
Benzotriazole	µg/l	0.261	±	0.0238	0.243	0.073	0.0307	93	-0.6
Carbamazepine	µg/l	0.0576	±	0.00491	0.057	0.017	0.00655	98.9	-0.09
Cyclamate	µg/l	0.311	±	0.0578	0.377	0.113	0.0609	121	1.09
Diazepam	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	-	-	0.0448	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.011	0.003	0.00563	73.1	-0.72
Saccharin	µg/l	0.0658	±	0.0166	0.044	0.013	0.0156	66.9	-1.4
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	0.485	0.146	0.145	105	0.16
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.059	0.021	0.00418	105	0.68

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	1.89	0.567	0.218	101	0.08
Benzotriazole	µg/l	8.21	±	0.669	7.92	2.376	0.835	96.4	-0.35
Carbamazepine	µg/l	0.588	±	0.0527	0.589	0.171	0.0703	100	0.01
Cyclamate	µg/l	0.214	±	0.0709	0.24	0.072	0.0747	112	0.34
Diazepam	µg/l	0.278	±	0.0473	0.273	0.068	0.0386	98.2	-0.13
Diclofenac	µg/l	2.87	±	0.327	-	-	0.408	-	-
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.26	0.062	0.0487	88.9	-0.67
Saccharin	µg/l	1.44	±	0.536	1.89	0.567	0.536	131	0.83
Sotalol	µg/l	0.401	±	0.0631	0.404	0.145	0.0698	101	0.05
Sucralose	µg/l	8.72	±	0.823	8.1	2.43	0.726	92.9	-0.85
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.06	0.022	0.0102	94.7	-0.33



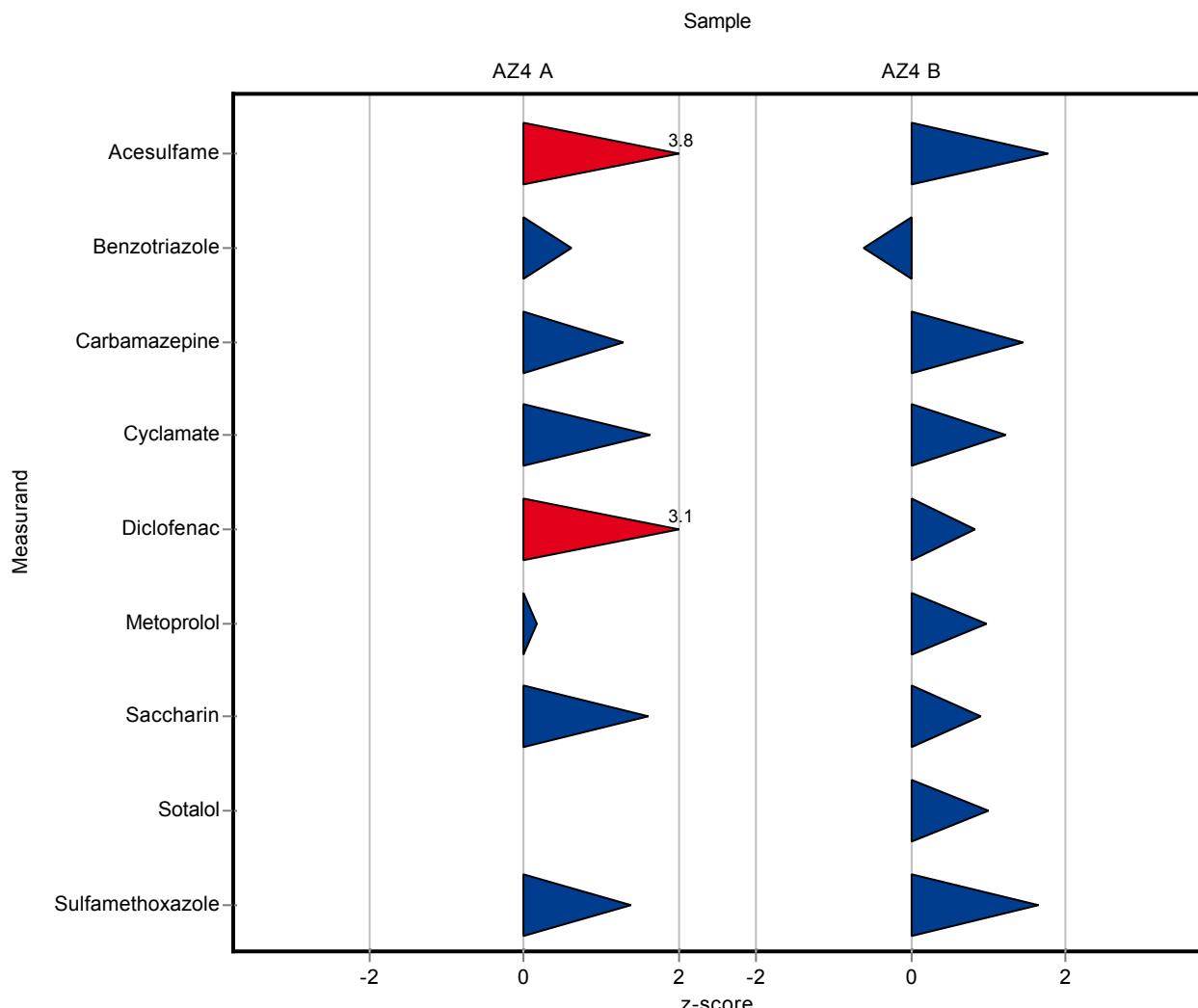
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	0.27	0.0675	0.0218	144	3.76
Benzotriazole	µg/l	0.261	±	0.0238	0.28	0.07	0.0307	107	0.6
Carbamazepine	µg/l	0.0576	±	0.00491	0.066	0.0165	0.00655	115	1.28
Cyclamate	µg/l	0.311	±	0.0578	0.41	0.1025	0.0609	132	1.63
Diazepam	µg/l	-	±	-	-	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.5	0.125	0.0448	139	3.12
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	0.016	0.004	0.00563	106	0.17
Saccharin	µg/l	0.0658	±	0.0166	0.091	0.02275	0.0156	138	1.61
Sotalol	µg/l	-	±	-	<0.02 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.062	0.0155	0.00418	110	1.39

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	2.259	0.565	0.218	121	1.77
Benzotriazole	µg/l	8.21	±	0.669	7.7	1.925	0.835	93.7	-0.62
Carbamazepine	µg/l	0.588	±	0.0527	0.69	0.1725	0.0703	117	1.45
Cyclamate	µg/l	0.214	±	0.0709	0.305	0.07625	0.0747	142	1.21
Diazepam	µg/l	0.278	±	0.0473	-	-	0.0386	-	-
Diclofenac	µg/l	2.87	±	0.327	3.2	0.8	0.408	112	0.81
Ibuprofen	µg/l	-	±	-	-	-	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.34	0.085	0.0487	116	0.97
Saccharin	µg/l	1.44	±	0.536	1.93	0.4825	0.536	134	0.91
Sotalol	µg/l	0.401	±	0.0631	0.47	0.1175	0.0698	117	0.99
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.08	0.02	0.0102	126	1.64



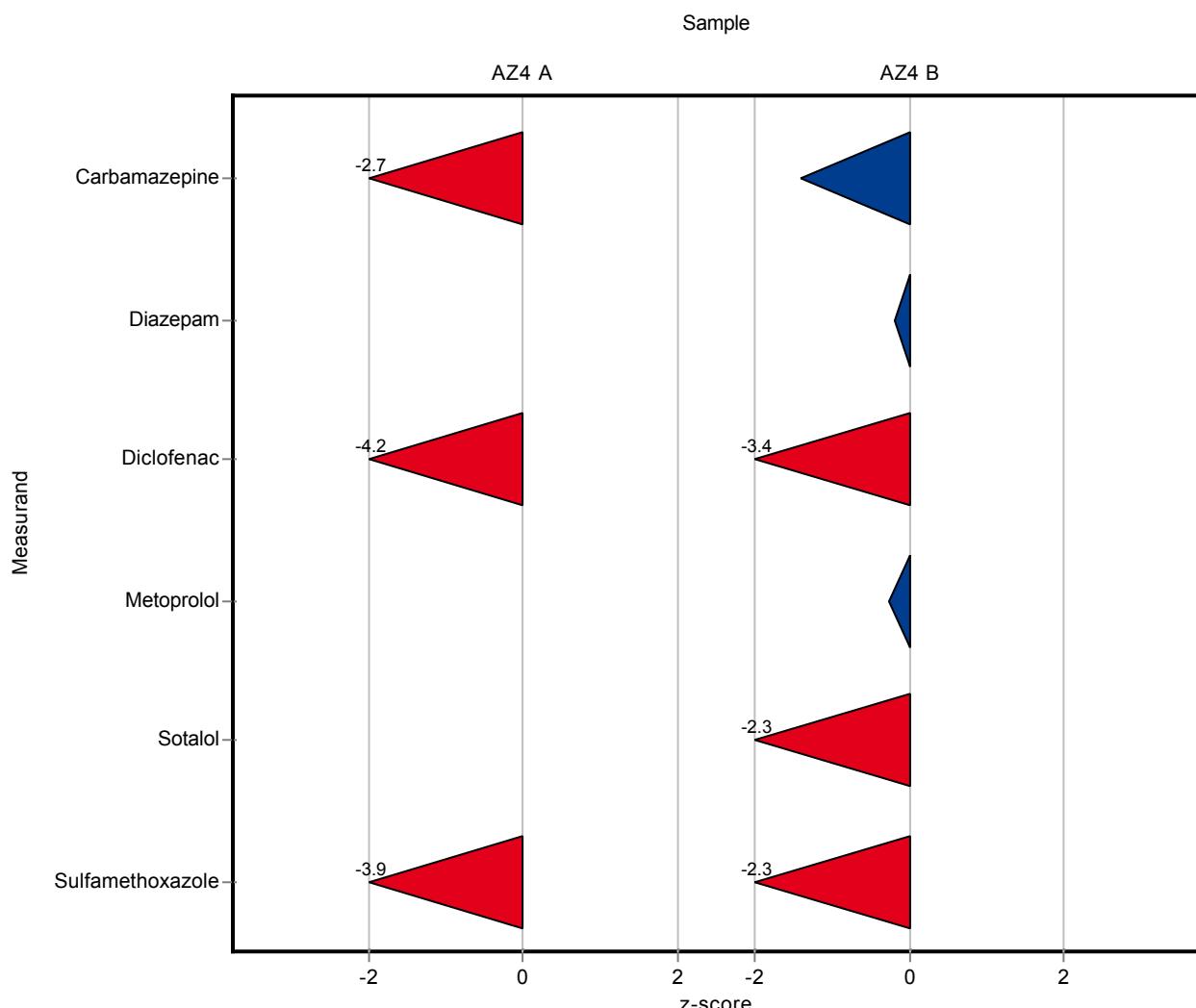
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	0.188	±	0.0181	-	-	0.0218	-	-
Benzotriazole	µg/l	0.261	±	0.0238	-	-	0.0307	-	-
Carbamazepine	µg/l	0.0576	±	0.00491	0.04	0.02	0.00655	69.4	-2.69
Cyclamate	µg/l	0.311	±	0.0578	-	-	0.0609	-	-
Diazepam	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Diclofenac	µg/l	0.36	±	0.0373	0.17	0.085	0.0448	47.2	-4.25
Ibuprofen	µg/l	-	±	-	0.06	0.03	-	-	-
Metoprolol	µg/l	0.015	±	0.00488	<0.01 (LOQ)	-	0.00563	-	-
Saccharin	µg/l	0.0658	±	0.0166	-	-	0.0156	-	-
Sotalol	µg/l	-	±	-	<0.01 (LOQ)	-	-	-	-
Sucralose	µg/l	0.461	±	0.145	-	-	0.145	-	-
Sulfamethoxazole	µg/l	0.0562	±	0.00335	0.04	0.02	0.00418	71.2	-3.87

Sample: AZ4B

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acesulfame	µg/l	1.87	±	0.163	-	-	0.218	-	-
Benzotriazole	µg/l	8.21	±	0.669	-	-	0.835	-	-
Carbamazepine	µg/l	0.588	±	0.0527	0.49	0.245	0.0703	83.3	-1.4
Cyclamate	µg/l	0.214	±	0.0709	-	-	0.0747	-	-
Diazepam	µg/l	0.278	±	0.0473	0.27	0.135	0.0386	97.2	-0.2
Diclofenac	µg/l	2.87	±	0.327	1.5	0.75	0.408	52.3	-3.35
Ibuprofen	µg/l	-	±	-	0.2	0.1	-	-	-
Metoprolol	µg/l	0.293	±	0.0422	0.28	0.14	0.0487	95.7	-0.26
Saccharin	µg/l	1.44	±	0.536	-	-	0.536	-	-
Sotalol	µg/l	0.401	±	0.0631	0.24	0.12	0.0698	59.9	-2.3
Sucralose	µg/l	8.72	±	0.823	-	-	0.726	-	-
Sulfamethoxazole	µg/l	0.0633	±	0.00787	0.04	0.02	0.0102	63.2	-2.3



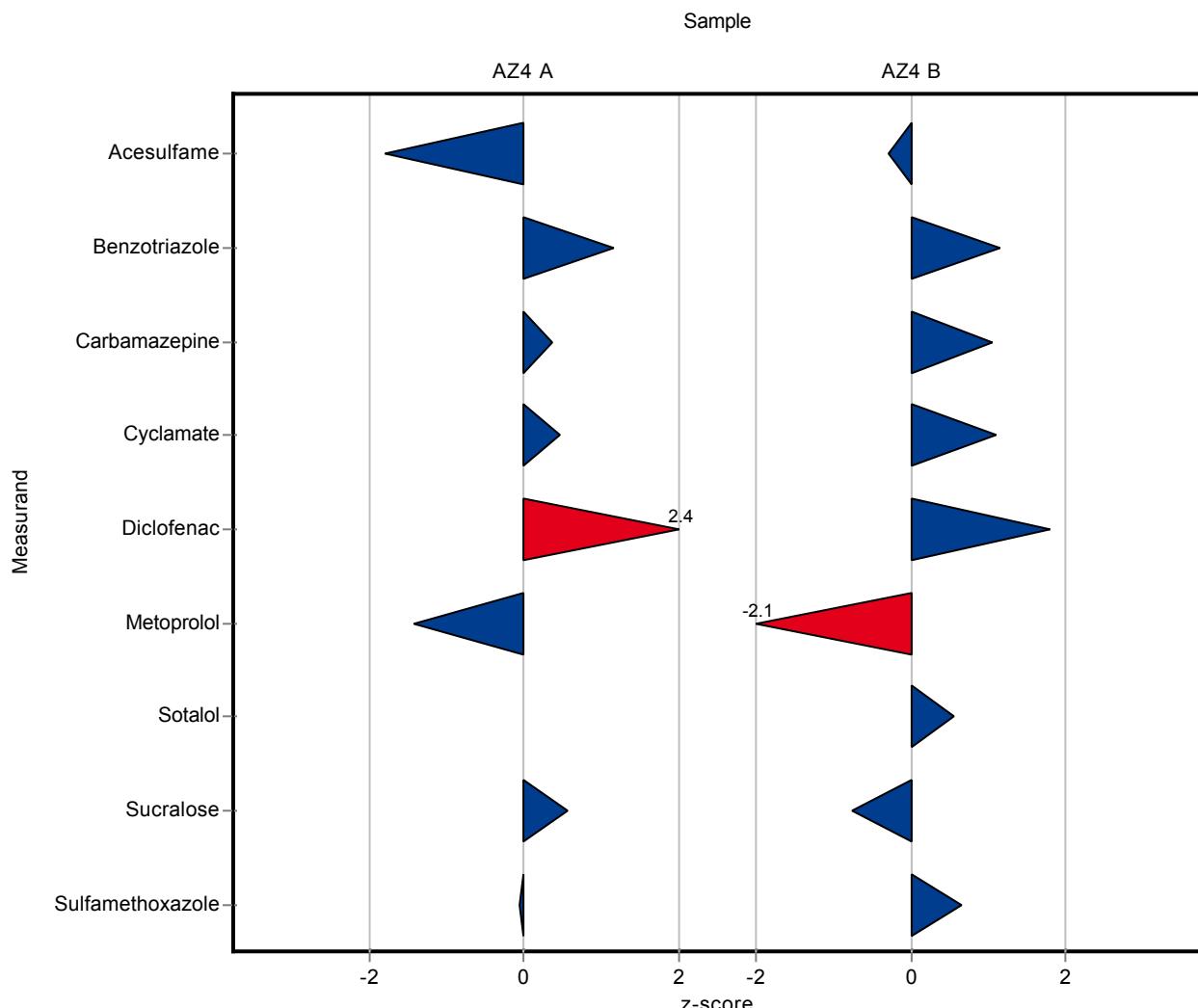
The following results were achieved:

Sample: AZ4A

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	0.188	\pm	0.0181	0.149	-	0.0218	79.2	-1.8
Benzotriazole	$\mu\text{g/l}$	0.261	\pm	0.0238	0.297	-	0.0307	114	1.16
Carbamazepine	$\mu\text{g/l}$	0.0576	\pm	0.00491	0.06	-	0.00655	104	0.37
Cyclamate	$\mu\text{g/l}$	0.311	\pm	0.0578	0.339	-	0.0609	109	0.47
Diazepam	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Diclofenac	$\mu\text{g/l}$	0.36	\pm	0.0373	0.469	-	0.0448	130	2.43
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.015	\pm	0.00488	0.007	-	0.00563	46.5	-1.43
Saccharin	$\mu\text{g/l}$	0.0658	\pm	0.0166	-	-	0.0156	-	-
Sotalol	$\mu\text{g/l}$	-	\pm	-	<0.02 (LOQ)	-	-	-	-
Sucralose	$\mu\text{g/l}$	0.461	\pm	0.145	0.542	-	0.145	117	0.56
Sulfamethoxazole	$\mu\text{g/l}$	0.0562	\pm	0.00335	0.056	-	0.00418	99.7	-0.04

Sample: AZ4B

Parameter	Unit	Target	\pm	CI(99%)	Result	$\pm U$	Criteria	Recovery	z-score
Acesulfame	$\mu\text{g/l}$	1.87	\pm	0.163	1.81	-	0.218	96.7	-0.29
Benzotriazole	$\mu\text{g/l}$	8.21	\pm	0.669	9.18	-	0.835	112	1.16
Carbamazepine	$\mu\text{g/l}$	0.588	\pm	0.0527	0.661	-	0.0703	112	1.04
Cyclamate	$\mu\text{g/l}$	0.214	\pm	0.0709	0.296	-	0.0747	138	1.09
Diazepam	$\mu\text{g/l}$	0.278	\pm	0.0473	-	-	0.0386	-	-
Diclofenac	$\mu\text{g/l}$	2.87	\pm	0.327	3.6	-	0.408	126	1.79
Ibuprofen	$\mu\text{g/l}$	-	\pm	-	-	-	-	-	-
Metoprolol	$\mu\text{g/l}$	0.293	\pm	0.0422	0.191	-	0.0487	65.3	-2.08
Saccharin	$\mu\text{g/l}$	1.44	\pm	0.536	-	-	0.536	-	-
Sotalol	$\mu\text{g/l}$	0.401	\pm	0.0631	0.439	-	0.0698	110	0.55
Sucralose	$\mu\text{g/l}$	8.72	\pm	0.823	8.17	-	0.726	93.7	-0.75
Sulfamethoxazole	$\mu\text{g/l}$	0.0633	\pm	0.00787	0.07	-	0.0102	111	0.66



Summary of results, after removal of outliers: Pharmaceuticals, Industrial Chemicals and Artificial Sweeteners - AZ4

9 Summary of results before revision

Parameter	Sample	Unit	Number of results for calculation	Number of outliers	Mean	± CI (99%)	Minimum	Maximum	SD	RSD %
Acesulfame	AZ4 A	µg/l	13	2	0.188	± 0.0181	0.149	0.225	0.0218	12
	AZ4 B	µg/l								
Benzotriazole	AZ4 A	µg/l	14	1	0.258	± 0.0225	0.197	0.307	0.0281	11
	AZ4 B	µg/l								
Carbamazepine	AZ4 A	µg/l	15	1	0.057	± 0.00493	0.04	0.066	0.00637	11
	AZ4 B	µg/l								
Cyclamate	AZ4 A	µg/l	9	1	0.323	± 0.0495	0.24	0.41	0.0495	15
	AZ4 B	µg/l								
Diazepam	AZ4 A	µg/l	1	0	-	± -	0.323	0.323	-	-
	AZ4 B	µg/l								
Diclofenac	AZ4 A	µg/l	12	3	0.365	± 0.038	0.316	0.469	0.0439	12
	AZ4 B	µg/l								
Ibuprofen	AZ4 A	µg/l	5	0	-	± -	0.06	0.113	-	-
	AZ4 B	µg/l								
Metoprolol	AZ4 A	µg/l	11	1	0.0144	± 0.00492	0.007	0.025	0.00544	38
	AZ4 B	µg/l								
Saccharin	AZ4 A	µg/l	8	1	0.0658	± 0.0166	0.044	0.091	0.0156	24
	AZ4 B	µg/l								
Sotalol	AZ4 A	µg/l	1	0	-	± -	0.483	0.483	-	-
	AZ4 B	µg/l								
Sucralose	AZ4 A	µg/l	8	1	0.494	± 0.12	0.265	0.667	0.113	23
	AZ4 B	µg/l								
Sulfamethoxazole	AZ4 A	µg/l	14	2	0.0565	± 0.00327	0.0481	0.0625	0.00408	7.2
	AZ4 B	µg/l								