

EVALUATION OF THE INTERLABORATORY COMPARISON TEST

Volatile halogenated hydrocarbons (VHH) – C59

Sample dispatch on 5th June 2018

1st Edition 2nd August 2018

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1 Interlaboratory comparison test Volatile halogenated hydrocarbons (VHH) – C59

1.1 Participants and time schedule

- Number of registrations: 18
- Number of submitted data records: 17
- Dispatch of samples: 5th June 2018
- Closing date for submission of data: 3rd July 2018

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 (C59 A)
- 1 Sample ground water (C59 B)

The sampling of the ground- and surface water was carried out on 4th June 2018.

Both samples were stored at < 4 °C until further processing.

The samples were partly spiked with specific substances and were filled into bottles under continuous stirring to achieve homogeneous samples. The samples were dispatched on 5th June 2018.

Each participant received:

- 2 samples (each 600 ml), each filled in 600 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. The parameters were determined by an external laboratory (accredited according to ISO/IEC 17025 standard).

In the parameter-oriented evaluation, the results of the control testing are given in the form of arithmetic means of the detected concentrations as control test $\pm U$.

2 Evaluation

The analytical results had to be made available to the organiser not later than 3rd July 2018. 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.

In justified cases, the outlier elimination was done according to other criteria. This procedure is documented in section 4 of the report.

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:

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

In this context,

x_i	is the measurement value of the participating laboratory.
\bar{X}	is the target value, normally the average value of the participants' results after removal of outliers; if this approach is not applicable, the target value is assigned according to the procedure given in section 4;
Criteria	is normally the reproducibility standard deviation (sR) calculated from the participants' results (after removal of outliers) in the relevant test round; if this approach is not applicable, the criteria is derived according to the procedure given in section 4

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

As explained in section 2, the z-Score is normally calculated using the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round. It might occur that the z-Score between -2 and 2 covers a large range of measurement values when the variance of the results is high. On the other hand, the range of good results can be very narrow, when the variation of the participants' results is small.

The recovery rate is calculated for the individual result based on the target value and is thus independent of the reproducibility standard deviation. In the case of a high variance of the results, participants should also consider recovery rates as additional criteria to decide on the necessity of internal quality assurance measures.

This is particularly recommended for parameter 1,1-Dichloroethene in sample A and B.

Sample C59 B: For parameter Tetrachloroethene no target value could be calculated because of the low analyte contents.

5 Annotations on tables and charts

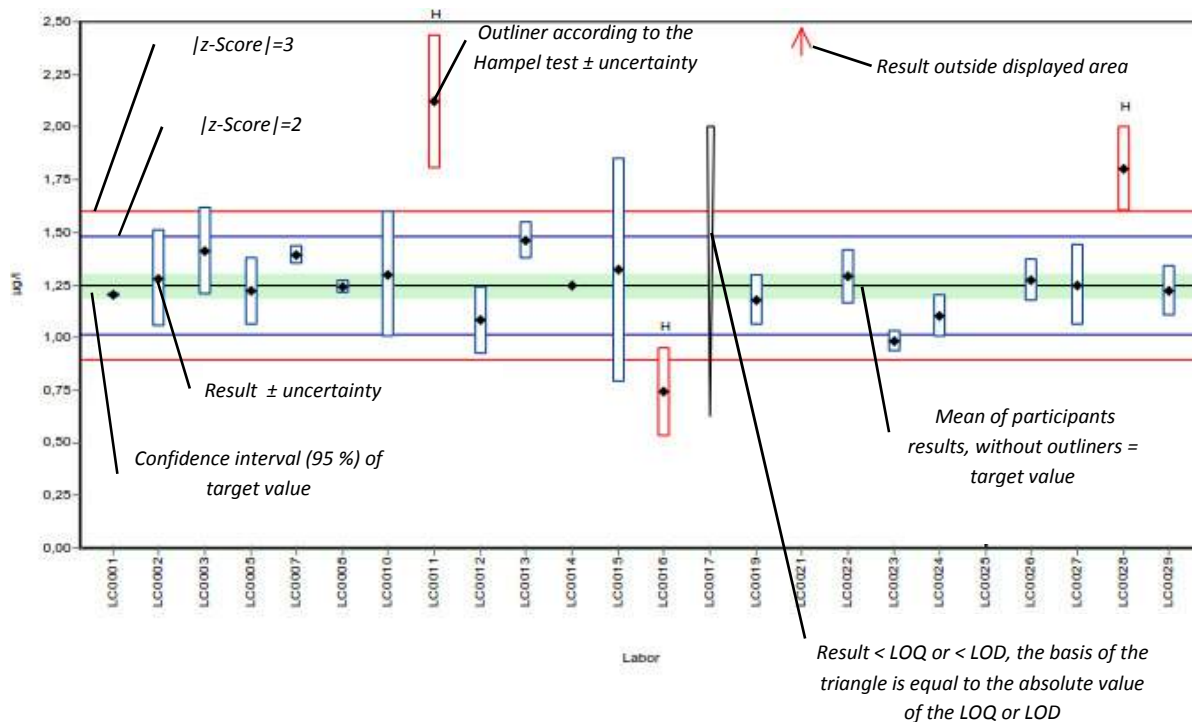
5.1 Information and abbreviations in tables

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)
Control test value ± U	Mean of control test 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):

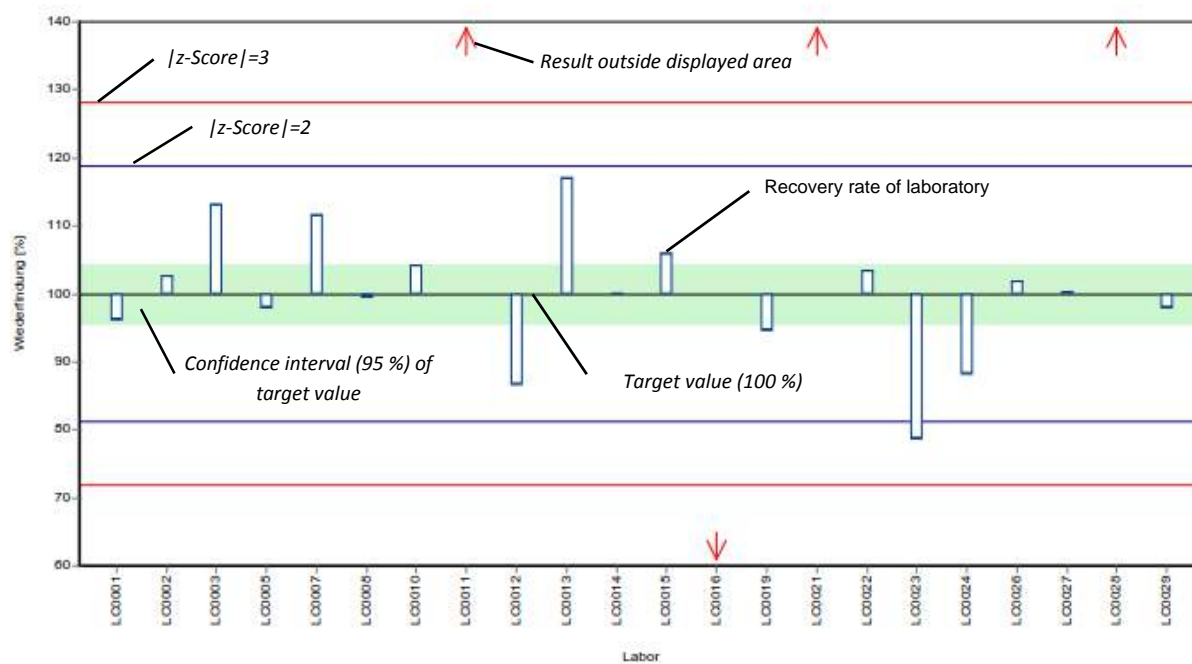
	Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from the participants results relative to the target value, given in %, (3 significant digits)
n	Number of results
Target value	Mean of the participants results, without outliers (3 significant digits)
Criteria	Criteria for z-Score calculation (if not otherwise stated in clause 4: 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

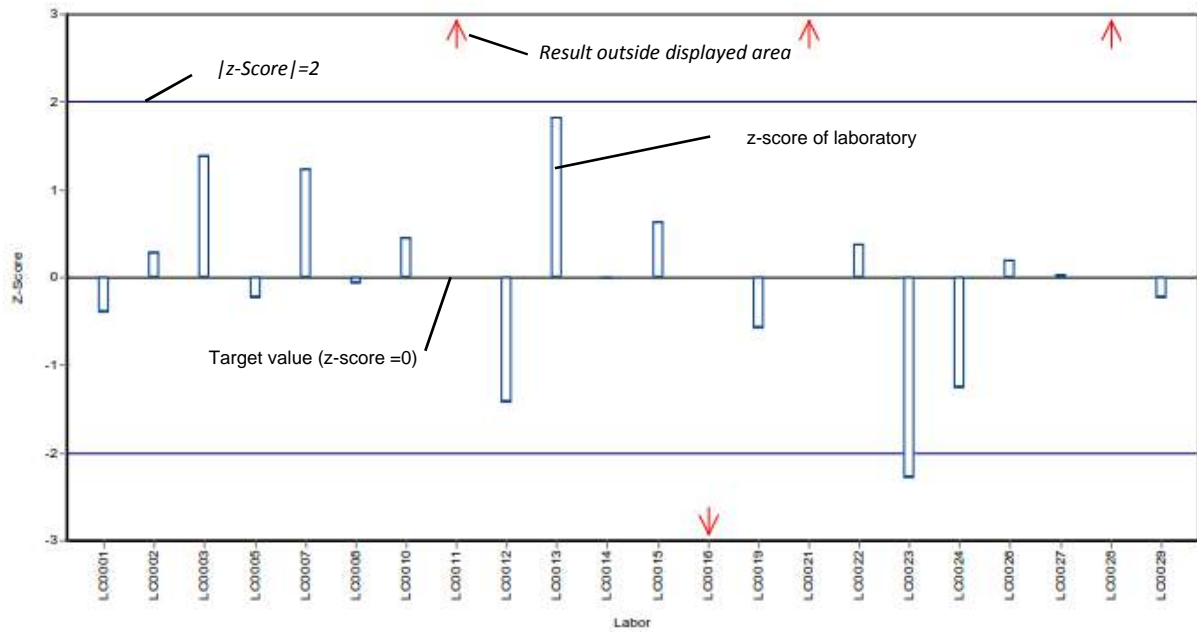
Example chart: Results



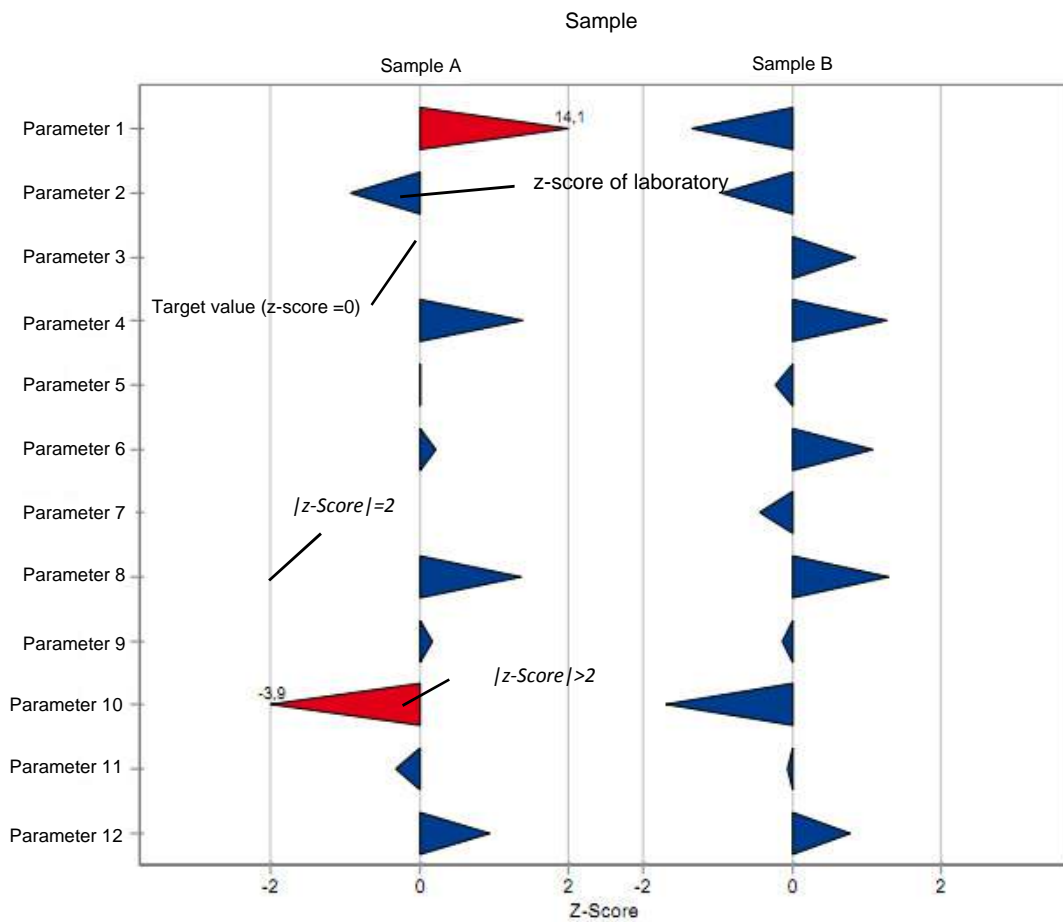
Example chart: Recovery



Example chart: z-score



Example chart: z-score - laboratory oriented report



Summary of results, after removal of outliers: Volatile halogenated hydrocarbons (VHH) - C59

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 %
1,1,1-Trichloroethane	C59 A	µg/l	16	0	4.87	± 0.642	2.9	6.55	0.856	18
	C59 B	µg/l	13	3	1.32	± 0.0869	1.17	1.58	0.104	7.9
1,1-Dichloroethene	C59 A	µg/l	12	4	5.04	± 0.209	4.65	5.5	0.241	4.8
	C59 B	µg/l	13	3	1.3	± 0.0574	1.15	1.4	0.0689	5.3
1,2-Dichloroethane	C59 A	µg/l	16	0	5.47	± 0.511	4.3	6.9	0.681	12
	C59 B	µg/l	15	1	2.1	± 0.125	1.79	2.44	0.161	7.7
Bromodichloromethane	C59 A	µg/l	14	2	4.99	± 0.307	4.34	5.89	0.383	7.7
	C59 B	µg/l	14	2	2.91	± 0.147	2.61	3.38	0.184	6.3
cis-1,2-Dichloroethene	C59 A	µg/l	13	0	3.06	± 0.257	2.74	3.9	0.309	10
	C59 B	µg/l	13	0	1.27	± 0.108	1.08	1.6	0.13	10
Dibromochloromethane	C59 A	µg/l	15	1	10.4	± 0.656	8.63	12	0.847	8.1
	C59 B	µg/l	16	0	2.32	± 0.162	2.04	2.8	0.216	9.3
Dichloromethane	C59 A	µg/l	13	2	7.05	± 0.402	6.09	8	0.484	6.9
	C59 B	µg/l	14	1	2.86	± 0.154	2.57	3.22	0.192	6.7
Tetrachloroethene	C59 A	µg/l	14	3	2.81	± 0.289	2.26	3.78	0.36	13
	C59 B	µg/l	1	0	-	± -	0.1	0.1	-	-
Tetrachloromethane	C59 A	µg/l	14	2	5.75	± 0.462	5.01	7.11	0.577	10
	C59 B	µg/l	15	1	1.05	± 0.108	0.801	1.37	0.139	13
trans-1,2-Dichloroethene	C59 A	µg/l	13	0	4.86	± 0.553	3.67	6.31	0.664	14
	C59 B	µg/l	13	0	1.05	± 0.105	0.835	1.31	0.126	12
Tribromomethane	C59 A	µg/l	16	0	8.48	± 0.837	6.97	11.2	1.12	13
	C59 B	µg/l	16	0	3	± 0.25	2.53	3.62	0.333	11
Trichloroethene	C59 A	µg/l	16	1	5.75	± 0.644	3.84	7.35	0.859	15
	C59 B	µg/l	15	2	1.16	± 0.0896	1	1.37	0.116	10
Trichloromethane	C59 A	µg/l	17	0	8.28	± 1.1	5.73	11.6	1.51	18
	C59 B	µg/l	15	2	2.95	± 0.167	2.62	3.4	0.216	7.3

7 Parameter oriented report

1,1,1-Trichloroethane	13
1,1-Dichloroethene	21
1,2-Dichloroethane	29
Bromdichloromethane	37
cis-1,2-Dichloroethene.....	45
Dibromochloromethane	53
Dichloromethane	61
Tetrachloroethene	69
Tetrachloromethane	75
trans-1,2-Dichloroethene	83
Tribromomethane	91
Trichloroethene	99
Trichloromethane	107

Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,1,1-Trichloroethane

Parameter oriented report

C59 A

1,1,1-Trichloroethane

Unit	µg/l
Mean ± CI (99%)	4.87 ± 0.642
Minimum - Maximum	2.9 - 6.55
Control test value ± U	4.48 ± 0.897

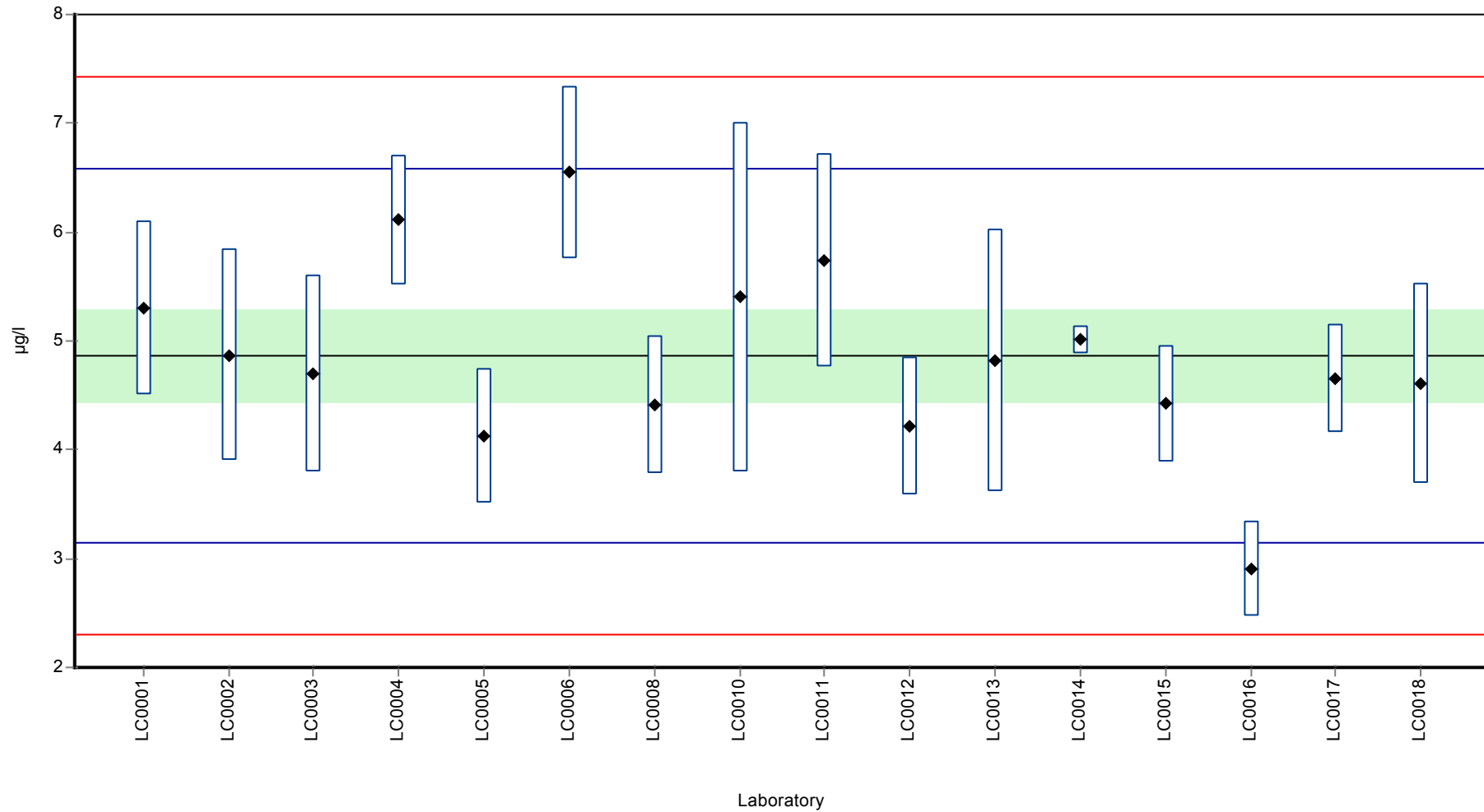
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.3	0.8	109	0.51	
LC0002	4.87	0.97	100	0.01	
LC0003	4.7	0.9	96.6	-0.19	
LC0004	6.11	0.6	126	1.45	
LC0005	4.13	0.62	84.9	-0.86	
LC0006	6.55	0.79	135	1.97	
LC0007	-	-	-	-	
LC0008	4.41	0.63	90.6	-0.53	
LC0009	-	-	-	-	
LC0010	5.4	1.6	111	0.63	
LC0011	5.74	0.976	118	1.02	
LC0012	4.22	0.63	86.7	-0.75	
LC0013	4.82	1.2	99.1	-0.05	
LC0014	5.01	0.131	103	0.17	
LC0015	4.42	0.53	90.8	-0.52	
LC0016	2.905	0.436	59.7	-2.29	
LC0017	4.65	0.5	95.6	-0.25	
LC0018	4.61	0.92	94.8	-0.3	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	4.87 ± 0.642	4.87 ± 0.642	µg/l
Minimum	2.9	2.9	µg/l
Maximum	6.55	6.55	µg/l
Standard deviation	0.856	0.856	µg/l
rel. Standard deviation	17.6	17.6	%
n	16	16	-

Graphical presentation of results

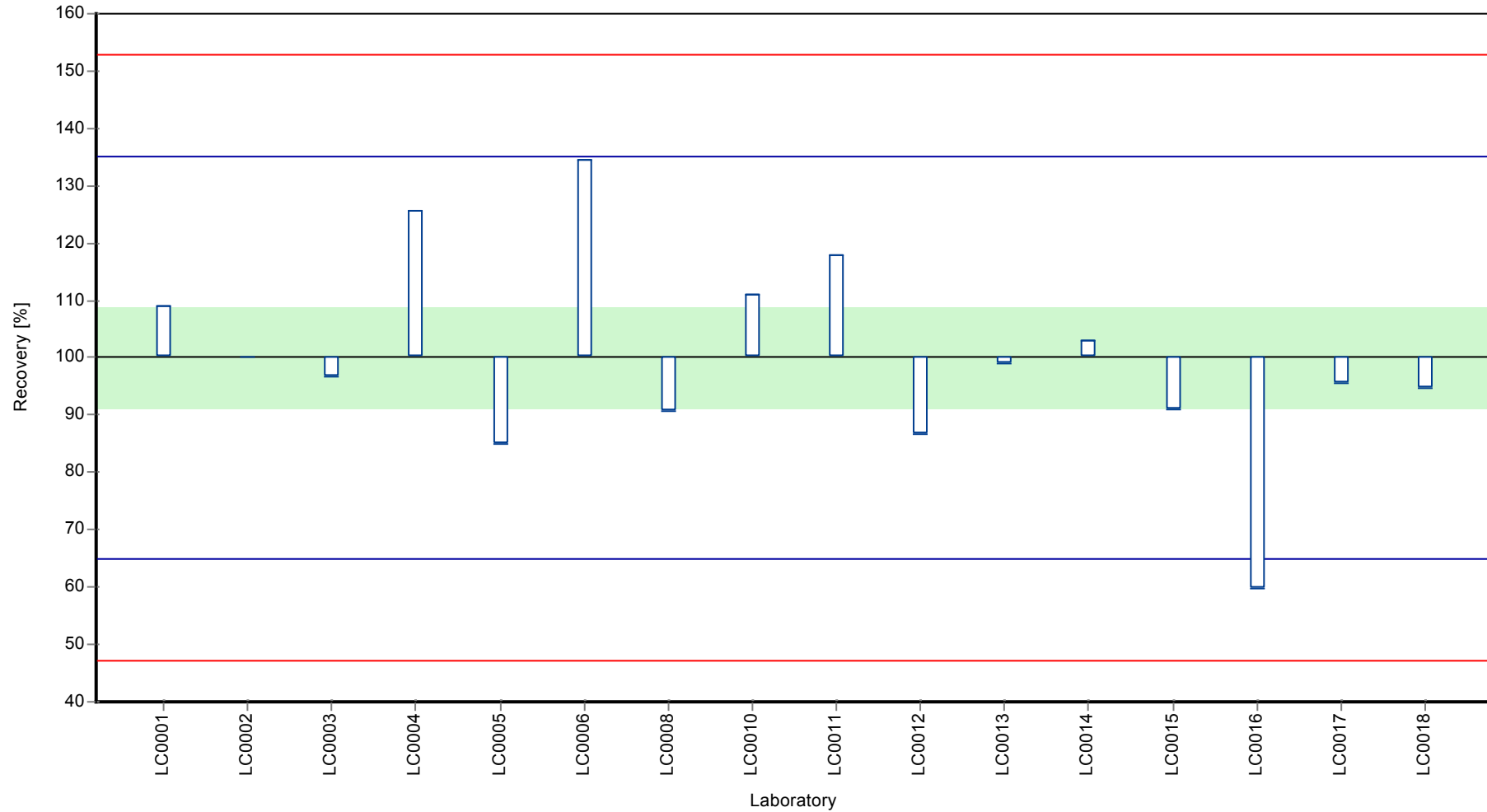
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,1,1-Trichloroethane

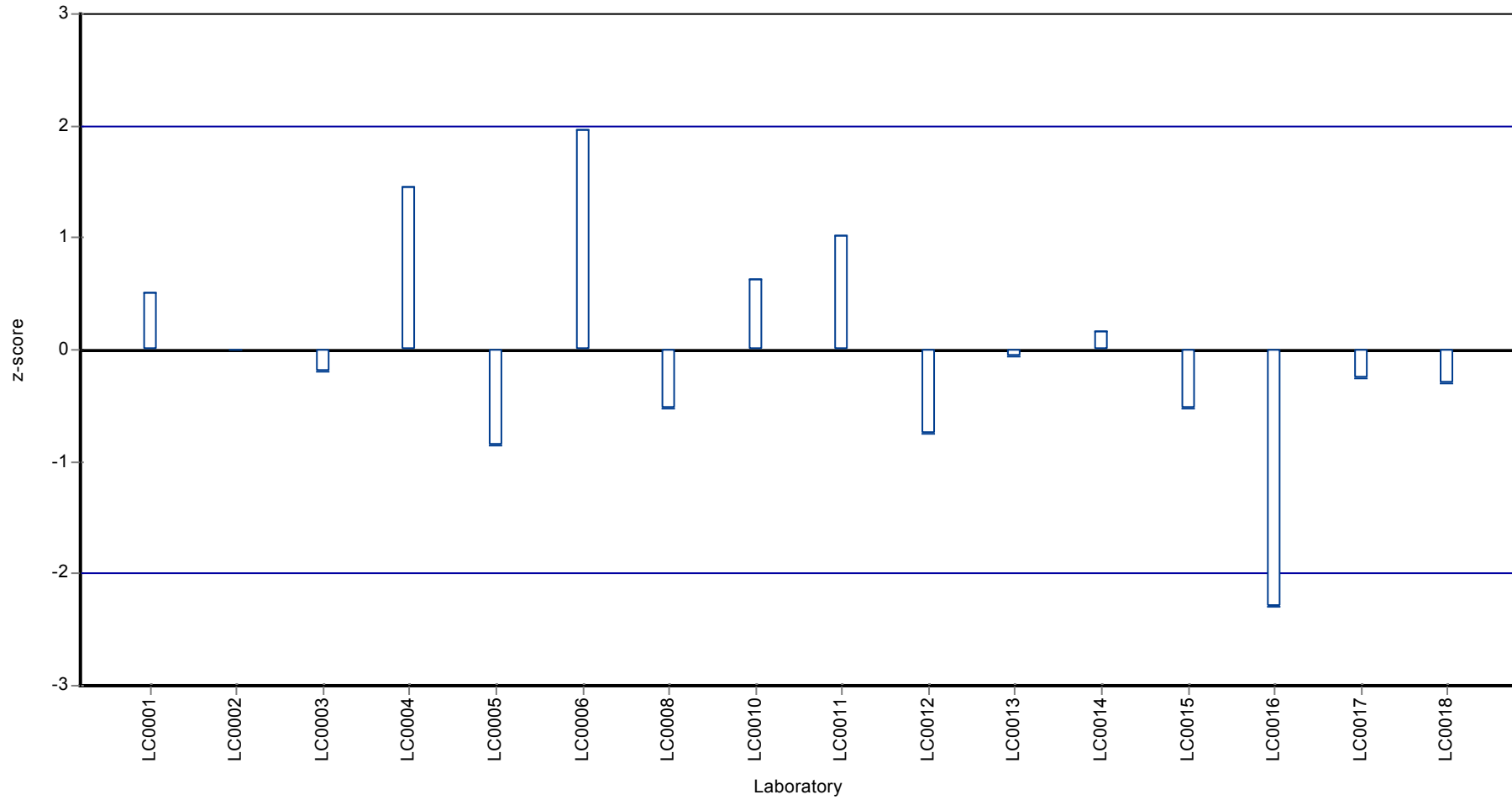
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,1,1-Trichloroethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,1,1-Trichloroethane

Parameter oriented report

C59 B

1,1,1-Trichloroethane

Unit	µg/l
Mean ± CI (99%)	1.32 ± 0.0869
Minimum - Maximum	1.17 - 1.58
Control test value ± U	1.2 ± 0.239

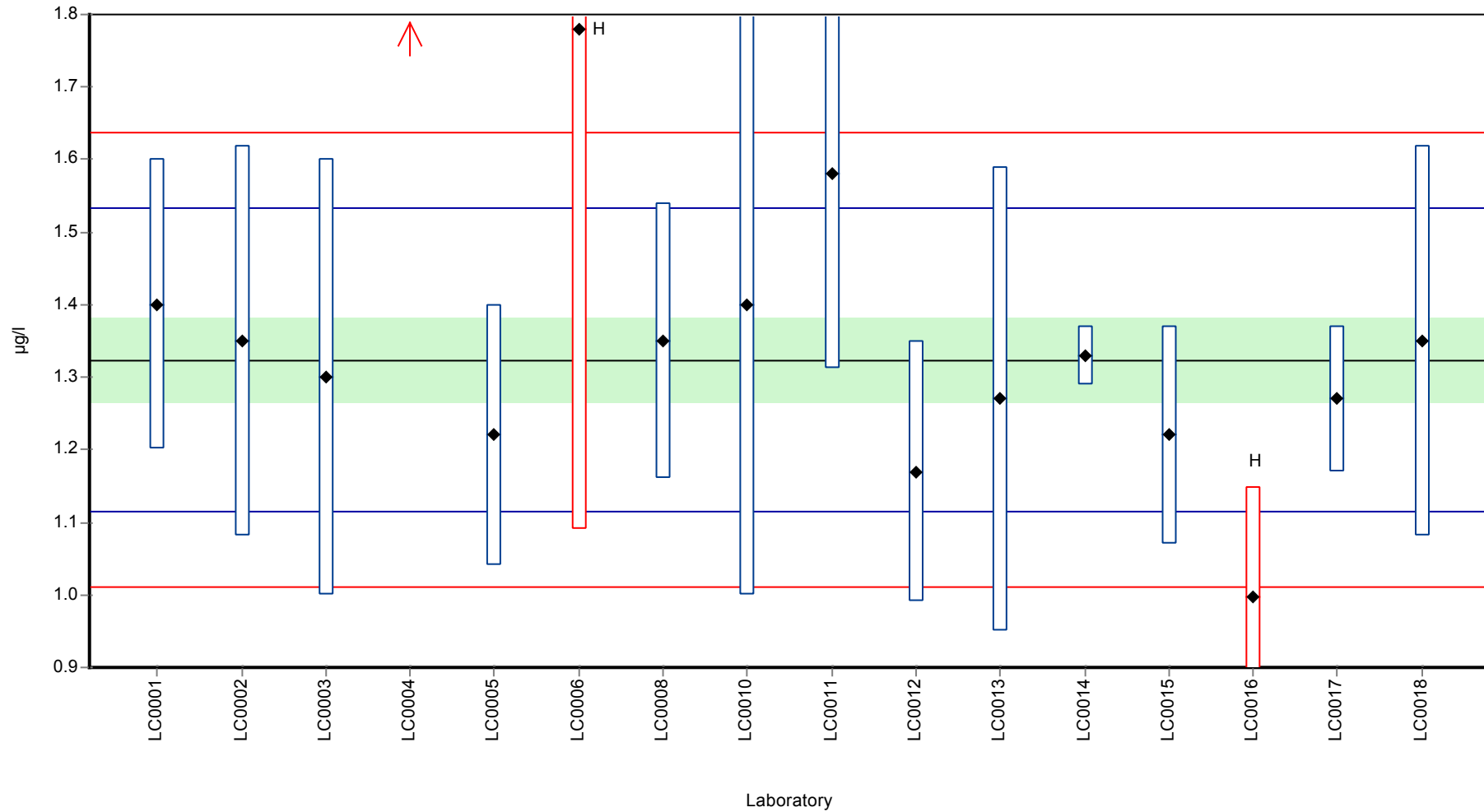
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.4	0.2	106	0.73	
LC0002	1.35	0.27	102	0.25	
LC0003	1.3	0.3	98.2	-0.23	
LC0004	1.92	0.19	145	5.71	H
LC0005	1.22	0.18	92.2	-0.99	
LC0006	1.78	0.69	134	4.37	H
LC0007	-	-	-	-	
LC0008	1.35	0.19	102	0.25	
LC0009	-	-	-	-	
LC0010	1.4	0.4	106	0.73	
LC0011	1.58	0.269	119	2.45	
LC0012	1.17	0.18	88.4	-1.47	
LC0013	1.27	0.32	95.9	-0.52	
LC0014	1.33	0.04	100	0.06	
LC0015	1.22	0.15	92.2	-0.99	
LC0016	0.998	0.15	75.4	-3.12	H
LC0017	1.27	0.1	95.9	-0.52	
LC0018	1.35	0.27	102	0.25	

Characteristics of parameter

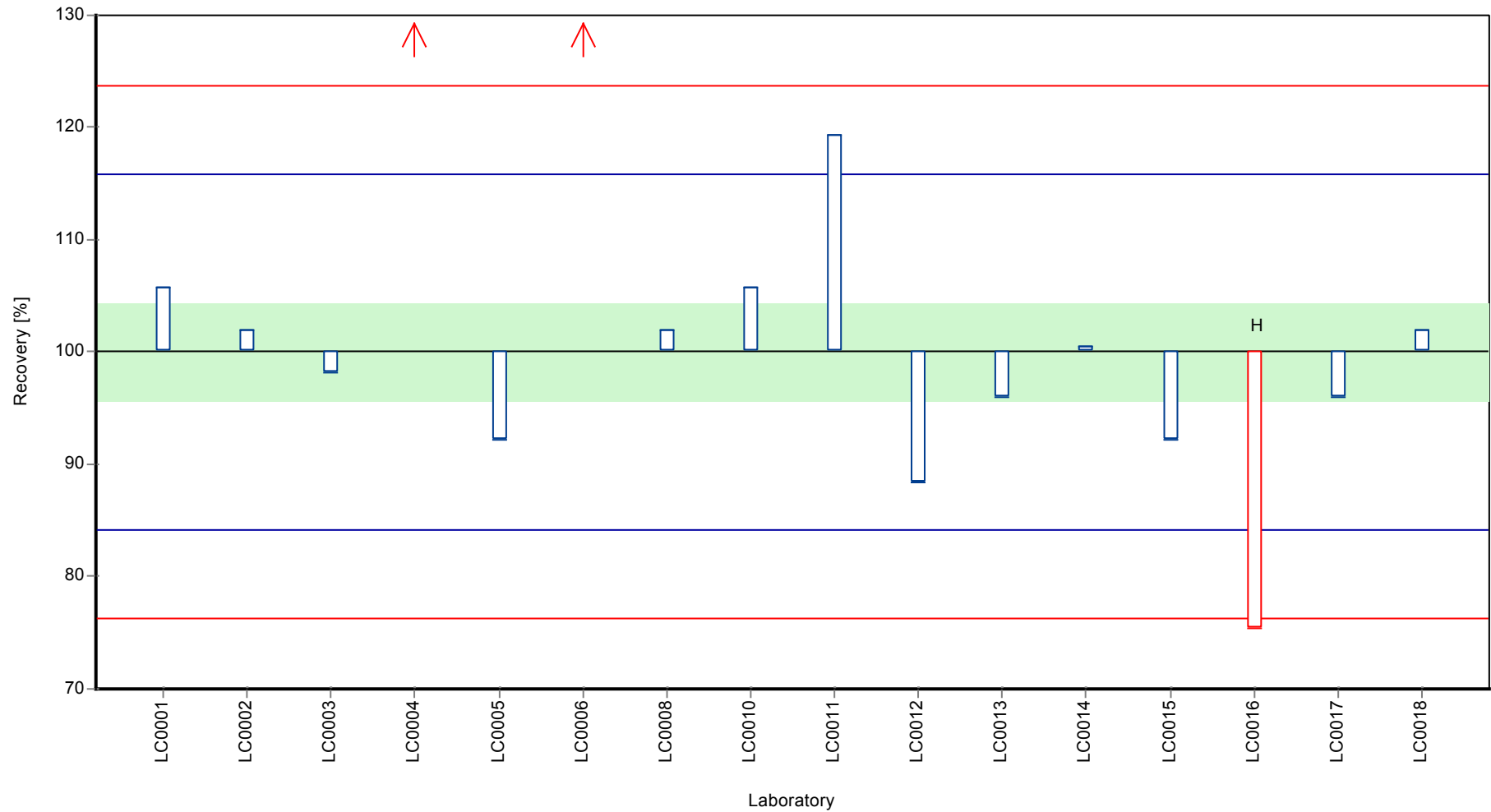
	all results	without outliers	Unit
Mean ± CI (99%)	1.37 ± 0.17	1.32 ± 0.0869	µg/l
Minimum	0.998	1.17	µg/l
Maximum	1.92	1.58	µg/l
Standard deviation	0.226	0.104	µg/l
rel. Standard deviation	16.5	7.89	%
n	16	13	-

Graphical presentation of results

Results



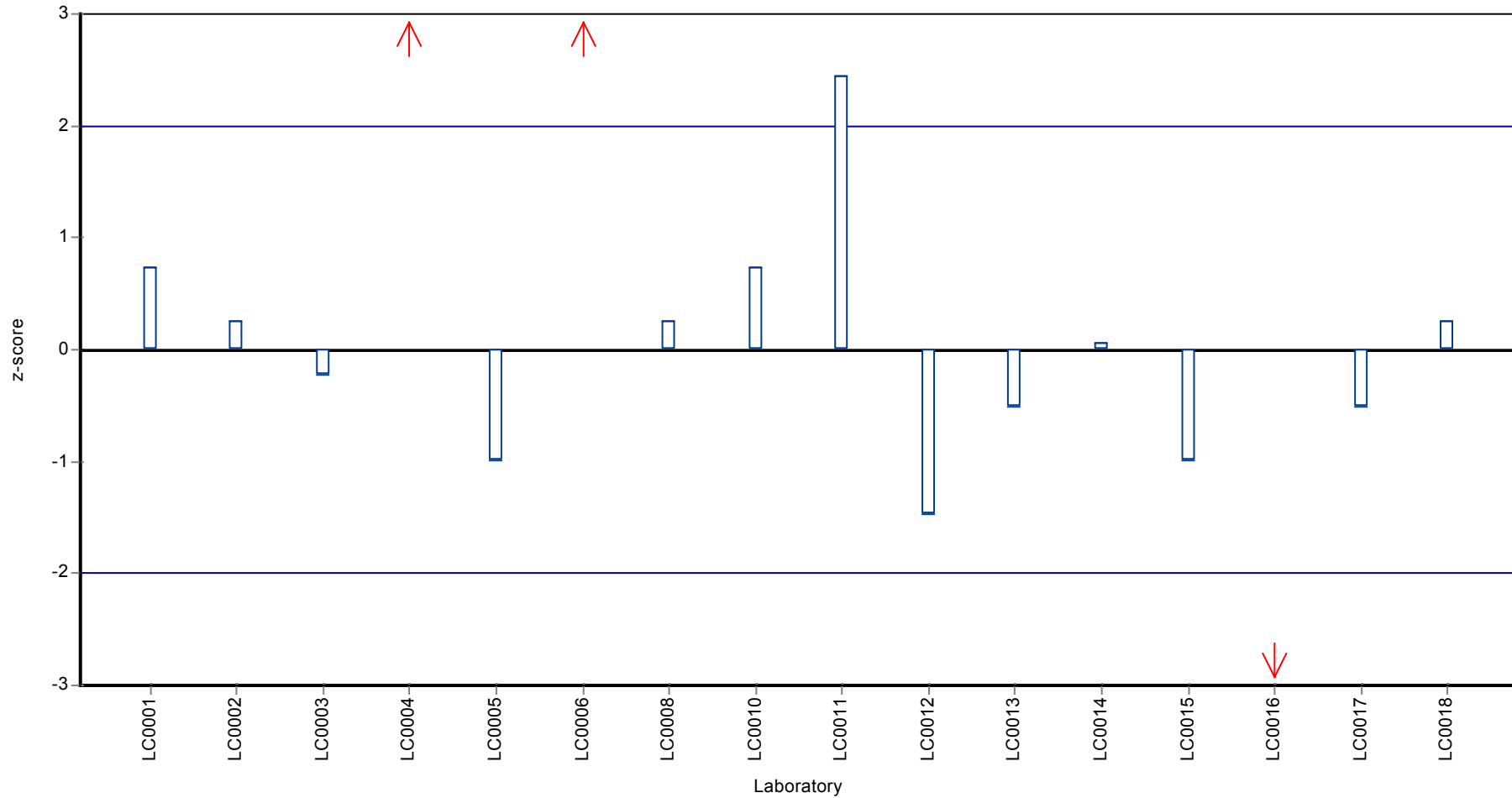
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,1,1-Trichloroethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,1-Dichloroethene

Parameter oriented report

C59 A

1,1-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	5.04 ± 0.209
Minimum - Maximum	4.65 - 5.5
Control test value ± U	5.62 ± 1.12

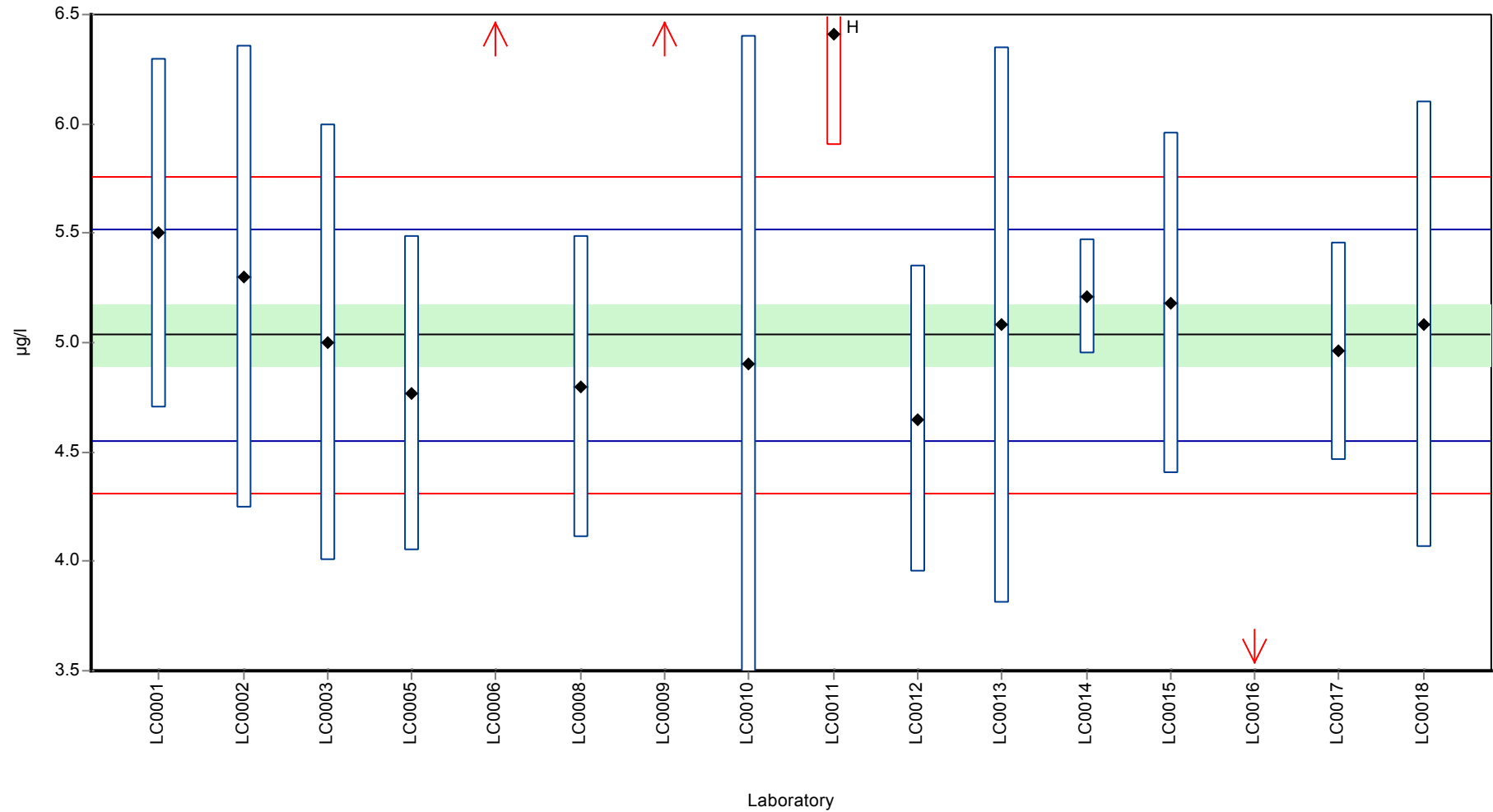
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.5	0.8	109	1.92	
LC0002	5.3	1.06	105	1.09	
LC0003	5	1	99.3	-0.15	
LC0004	-	-	-	-	
LC0005	4.77	0.72	94.7	-1.1	
LC0006	7.4	0.47	147	9.79	H
LC0007	-	-	-	-	
LC0008	4.8	0.69	95.3	-0.98	
LC0009	11.64	2.79	231	27.4	H
LC0010	4.9	1.5	97.3	-0.56	
LC0011	6.41	0.513	127	5.69	H
LC0012	4.65	0.7	92.3	-1.6	
LC0013	5.08	1.27	101	0.18	
LC0014	5.21	0.266	103	0.72	
LC0015	5.18	0.78	103	0.6	
LC0016	3.399	0.51	67.5	-6.78	H
LC0017	4.96	0.5	98.5	-0.31	
LC0018	5.08	1.02	101	0.18	

Characteristics of parameter

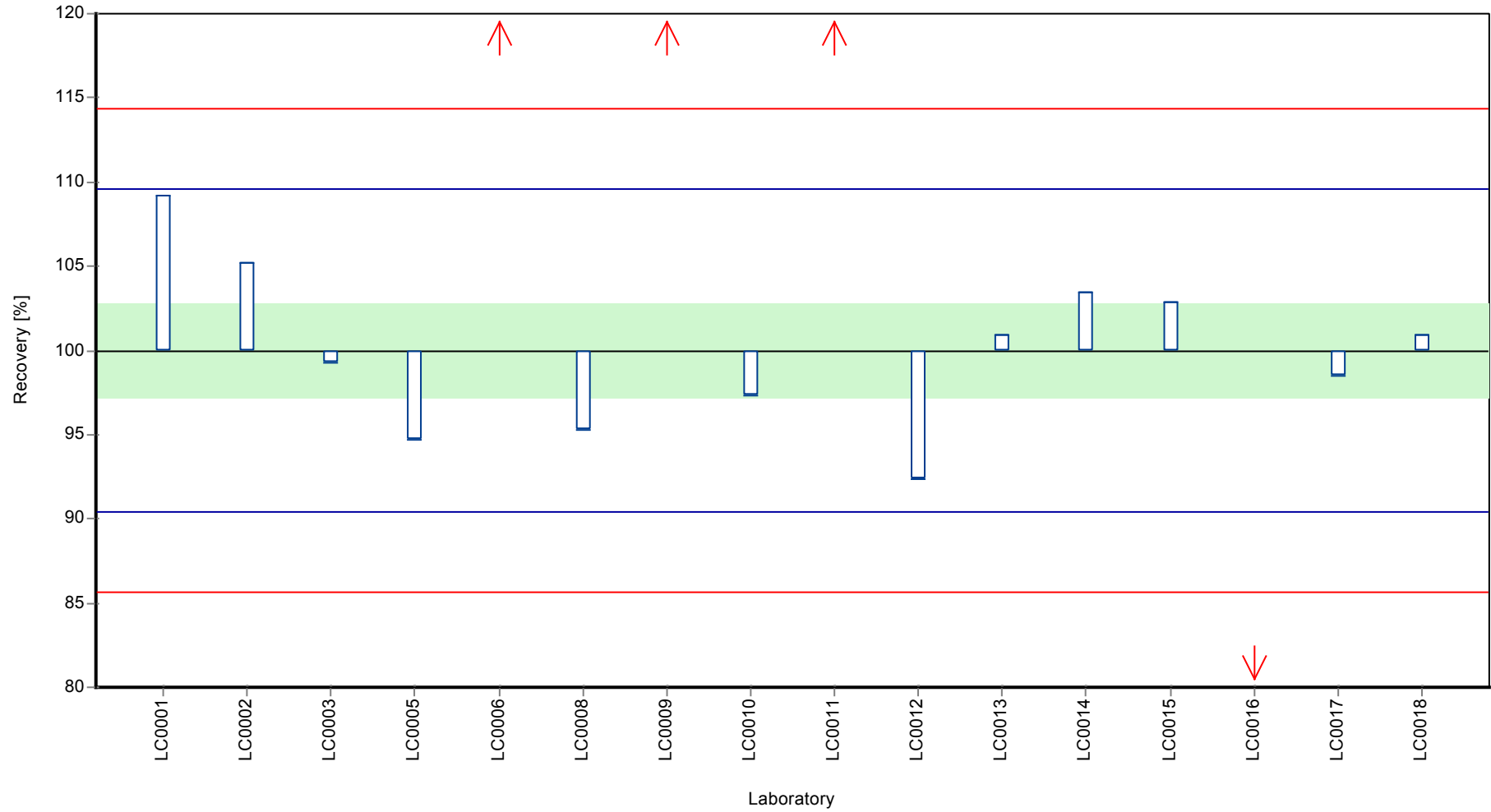
	all results	without outliers	Unit
Mean ± CI (99%)	5.58 ± 1.36	5.04 ± 0.209	µg/l
Minimum	3.4	4.65	µg/l
Maximum	11.6	5.5	µg/l
Standard deviation	1.82	0.241	µg/l
rel. Standard deviation	32.6	4.79	%
n	16	12	-

Graphical presentation of results

Results



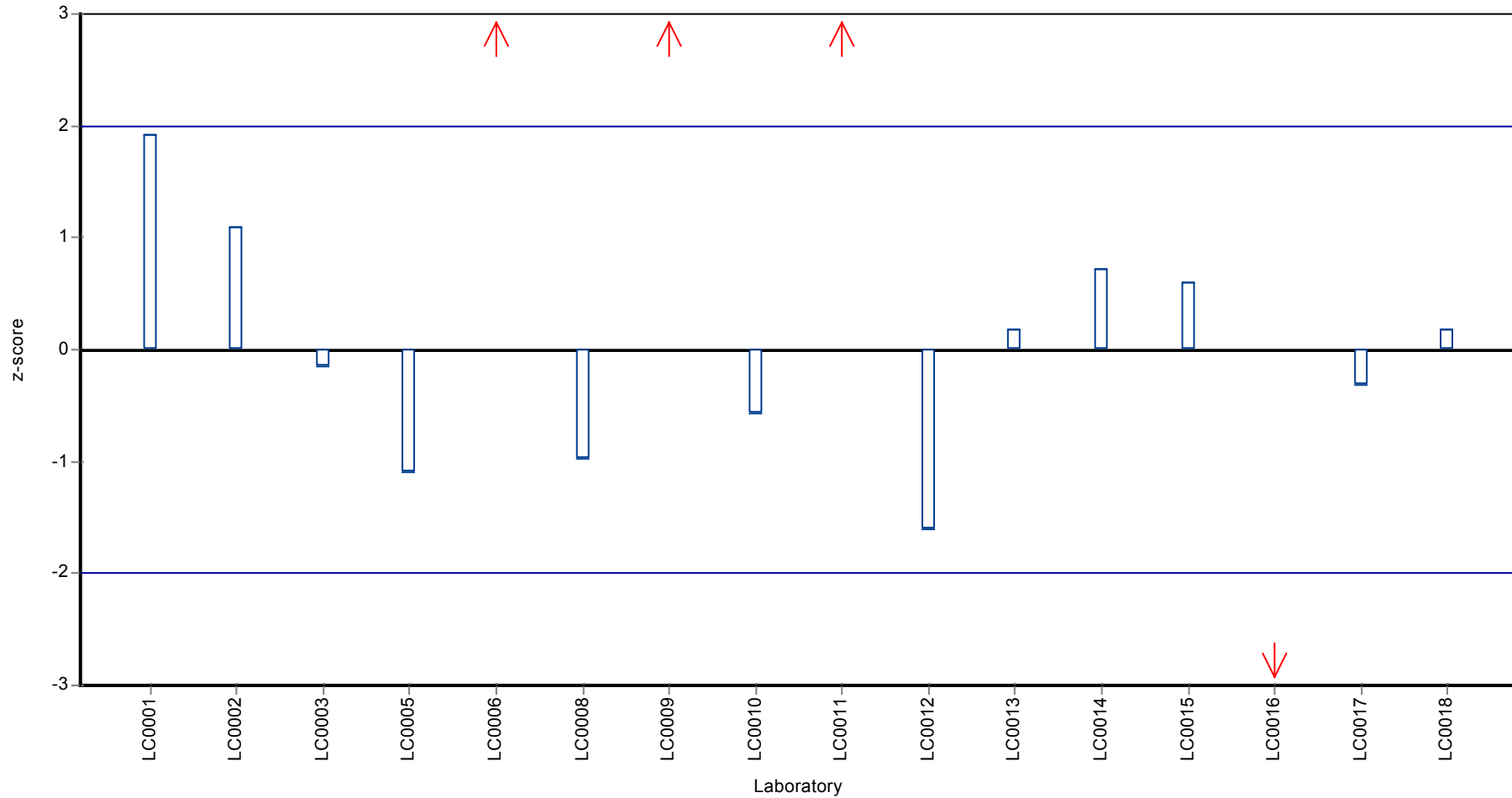
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,1-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,1-Dichloroethene

Parameter oriented report

C59 B

1,1-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	1.3 ± 0.0574
Minimum - Maximum	1.15 - 1.4
Control test value ± U	1.44 ± 0.288

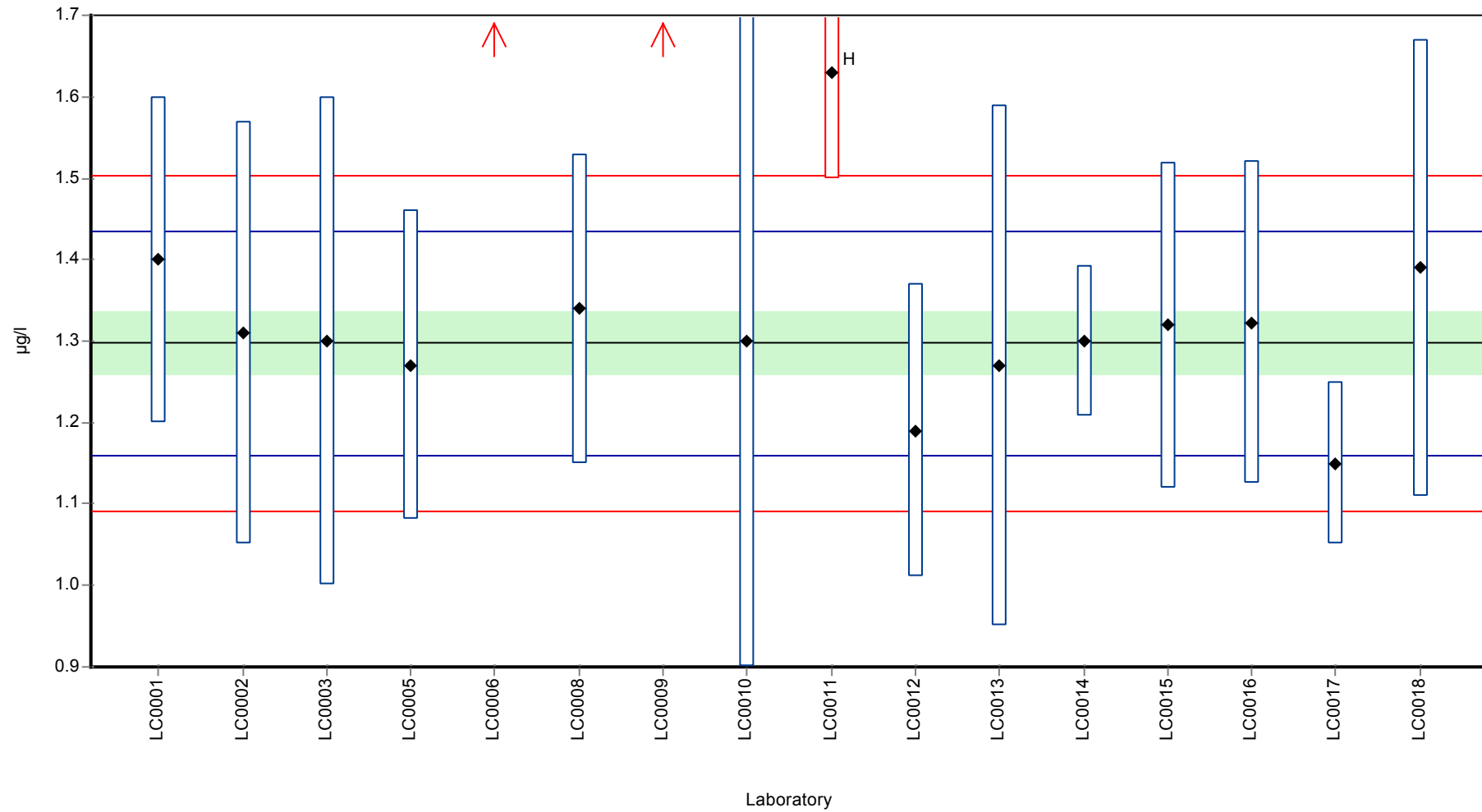
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.4	0.2	108	1.49	
LC0002	1.31	0.26	101	0.19	
LC0003	1.3	0.3	100	0.04	
LC0004	-	-	-	-	
LC0005	1.27	0.19	97.9	-0.39	
LC0006	1.98	0.39	153	9.91	H
LC0007	-	-	-	-	
LC0008	1.34	0.19	103	0.62	
LC0009	2.96	0.83	228	24.1	H
LC0010	1.3	0.4	100	0.04	
LC0011	1.63	0.13	126	4.83	H
LC0012	1.19	0.18	91.7	-1.55	
LC0013	1.27	0.32	97.9	-0.39	
LC0014	1.3	0.093	100	0.04	
LC0015	1.32	0.2	102	0.33	
LC0016	1.323	0.198	102	0.38	
LC0017	1.15	0.1	88.7	-2.13	
LC0018	1.39	0.28	107	1.35	

Characteristics of parameter

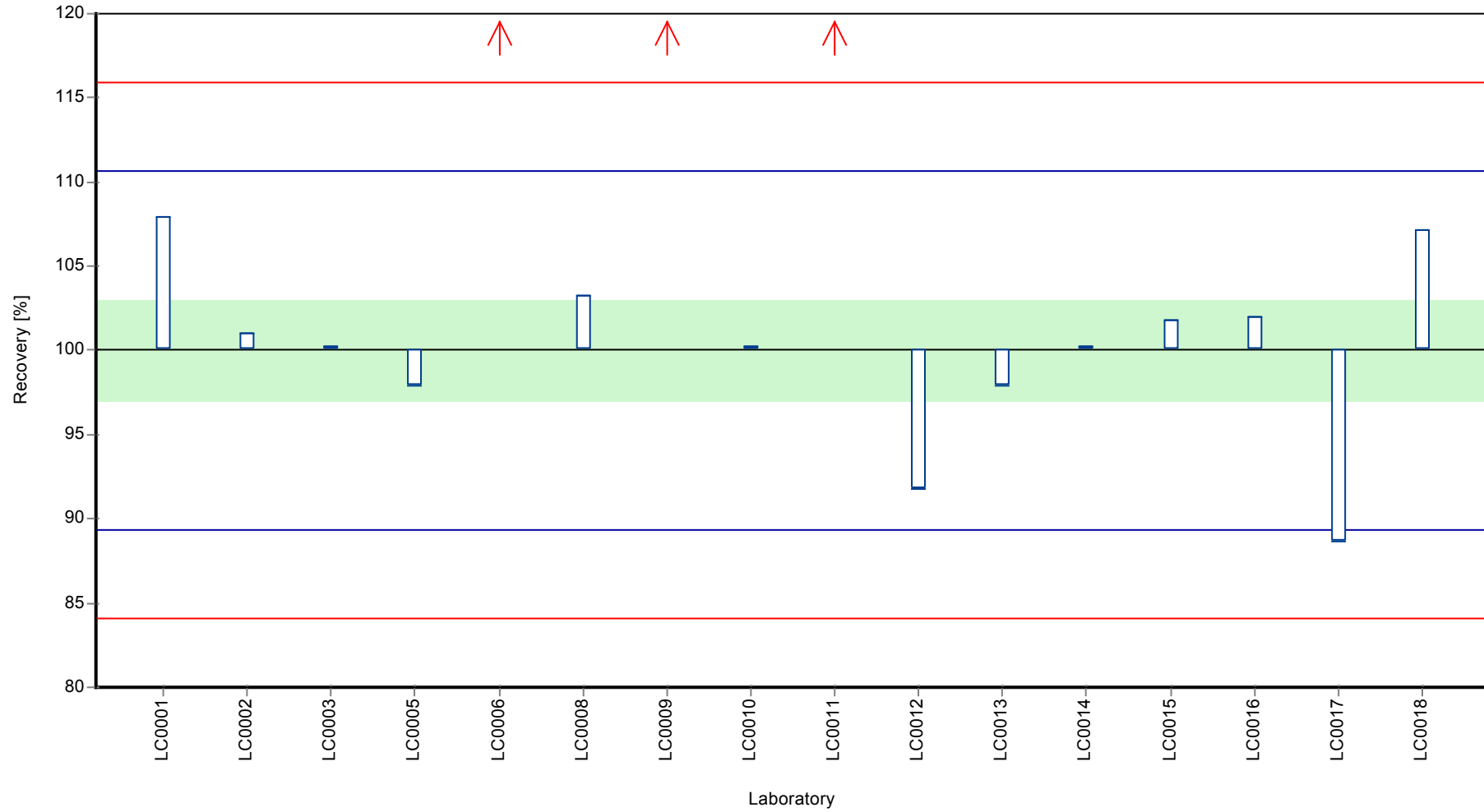
	all results	without outliers	Unit
Mean ± CI (99%)	1.46 ± 0.333	1.3 ± 0.0574	µg/l
Minimum	1.15	1.15	µg/l
Maximum	2.96	1.4	µg/l
Standard deviation	0.444	0.0689	µg/l
rel. Standard deviation	30.3	5.31	%
n	16	13	-

Graphical presentation of results

Results



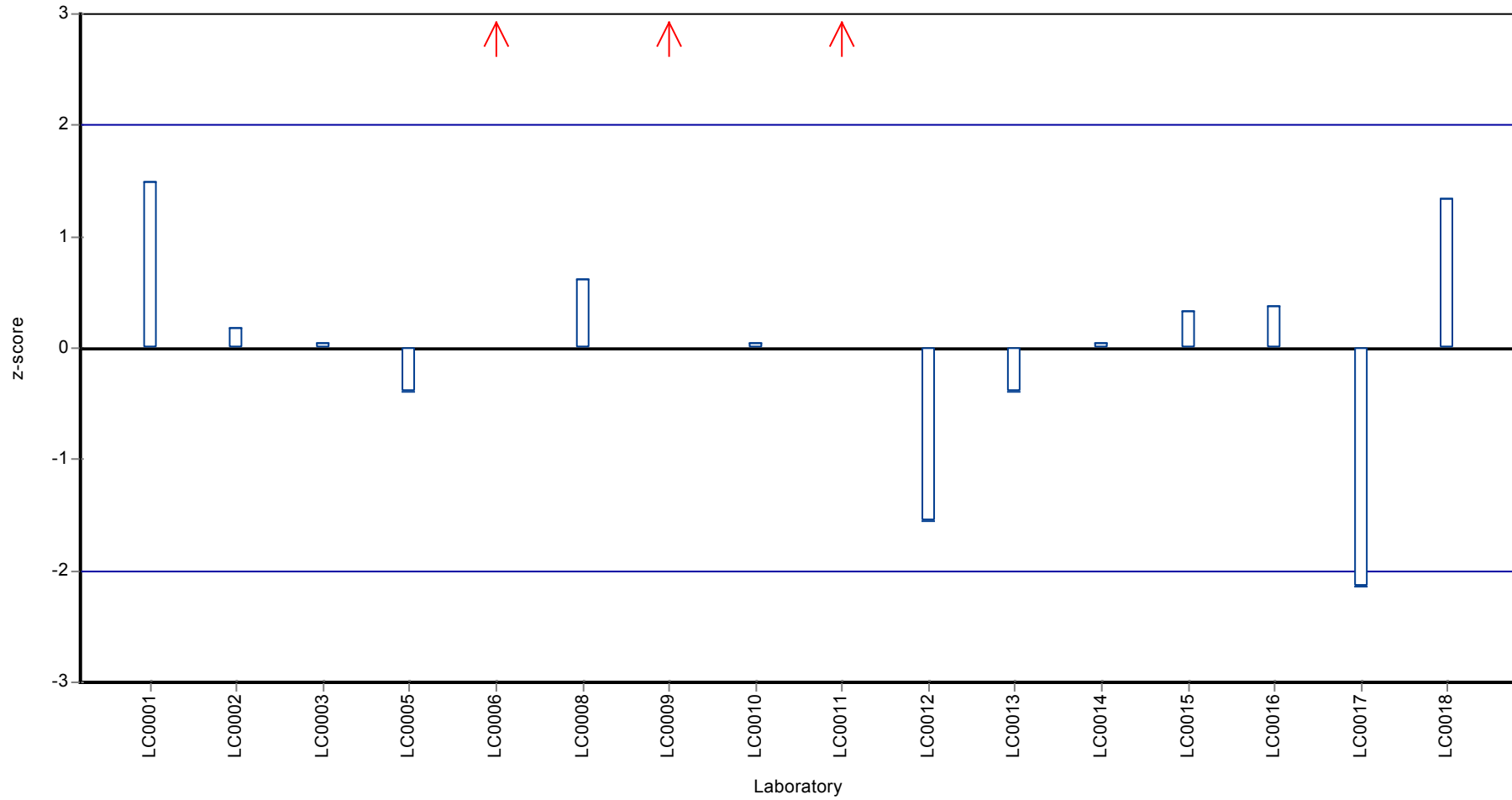
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,1-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,2-Dichloroethane

Parameter oriented report

C59 A

1,2-Dichloroethane

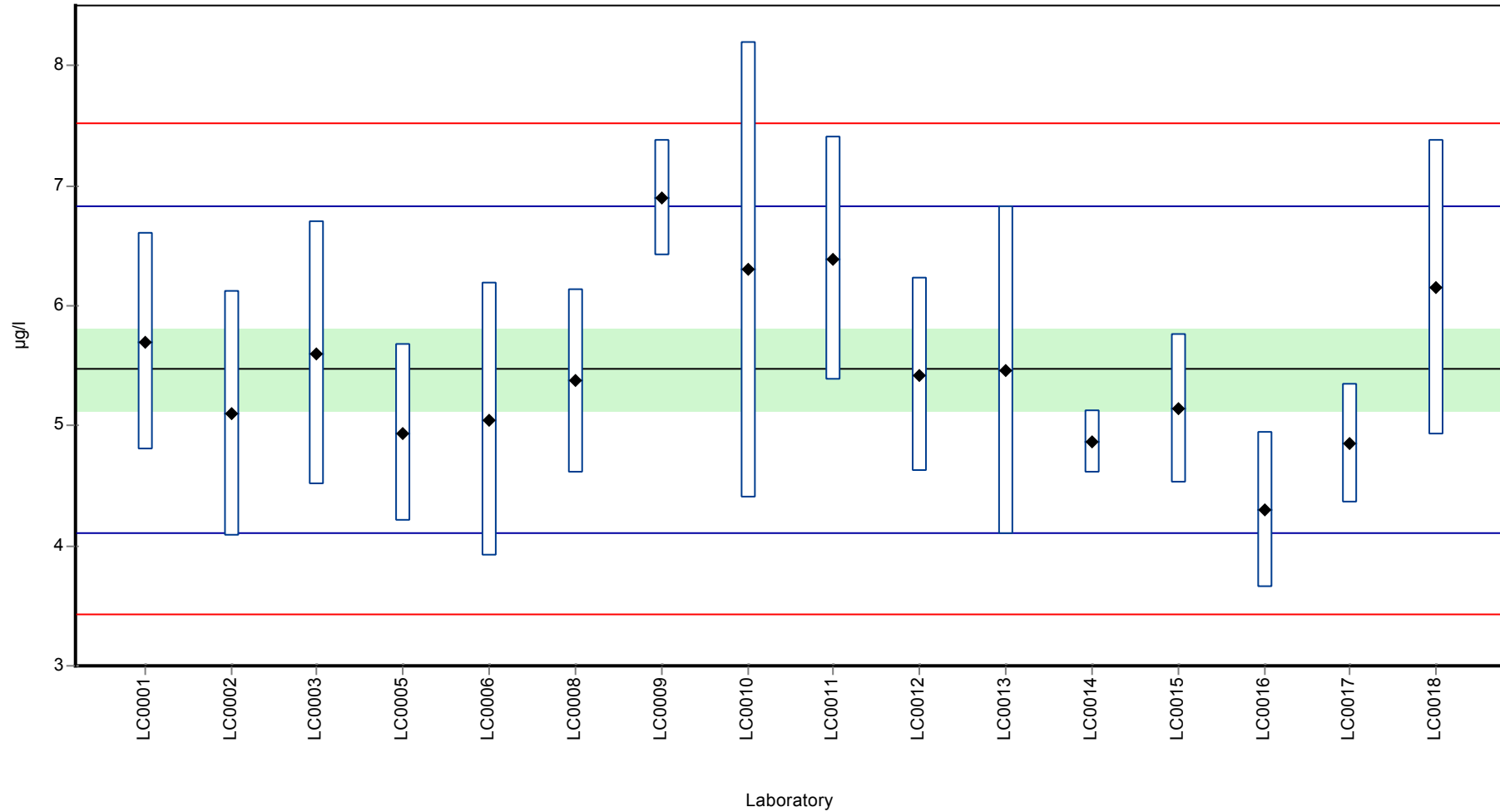
Unit	µg/l
Mean ± CI (99%)	5.47 ± 0.511
Minimum - Maximum	4.3 - 6.9
Control test value ± U	5.09 ± 1.02

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.7	0.9	104	0.34	
LC0002	5.1	1.02	93.2	-0.54	
LC0003	5.6	1.1	102	0.19	
LC0004	-	-	-	-	
LC0005	4.94	0.74	90.3	-0.78	
LC0006	5.05	1.14	92.3	-0.62	
LC0007	-	-	-	-	
LC0008	5.37	0.77	98.2	-0.15	
LC0009	6.9	0.48	126	2.1	
LC0010	6.3	1.9	115	1.22	
LC0011	6.39	1.02	117	1.35	
LC0012	5.42	0.81	99.1	-0.07	
LC0013	5.46	1.37	99.8	-0.02	
LC0014	4.86	0.263	88.8	-0.9	
LC0015	5.14	0.62	94	-0.48	
LC0016	4.297	0.645	78.5	-1.72	
LC0017	4.85	0.5	88.7	-0.91	
LC0018	6.15	1.23	112	1	

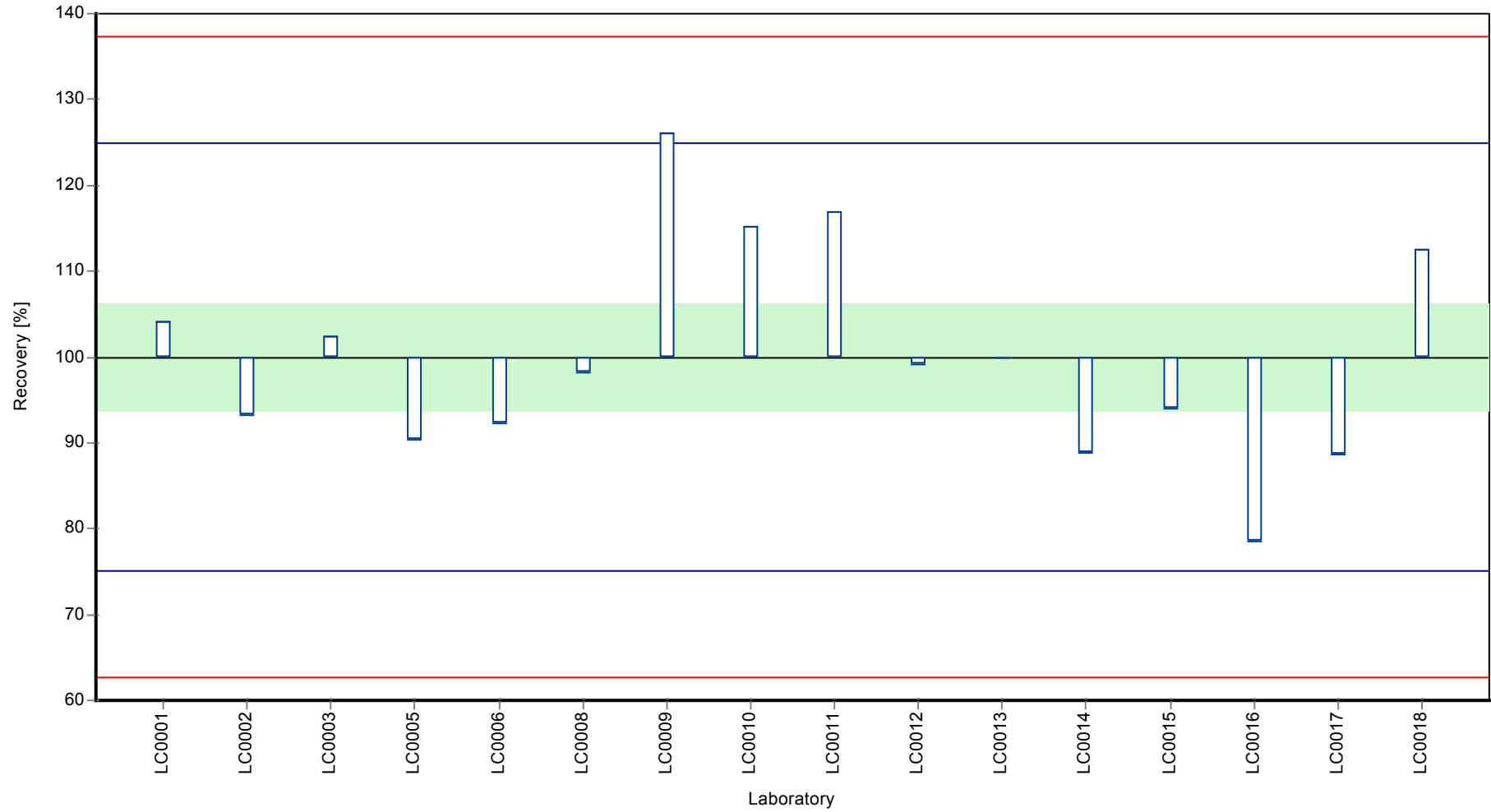
Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.47 ± 0.511	5.47 ± 0.511	µg/l
Minimum	4.3	4.3	µg/l
Maximum	6.9	6.9	µg/l
Standard deviation	0.681	0.681	µg/l
rel. Standard deviation	12.5	12.5	%
n	16	16	-

Graphical presentation of results
Results



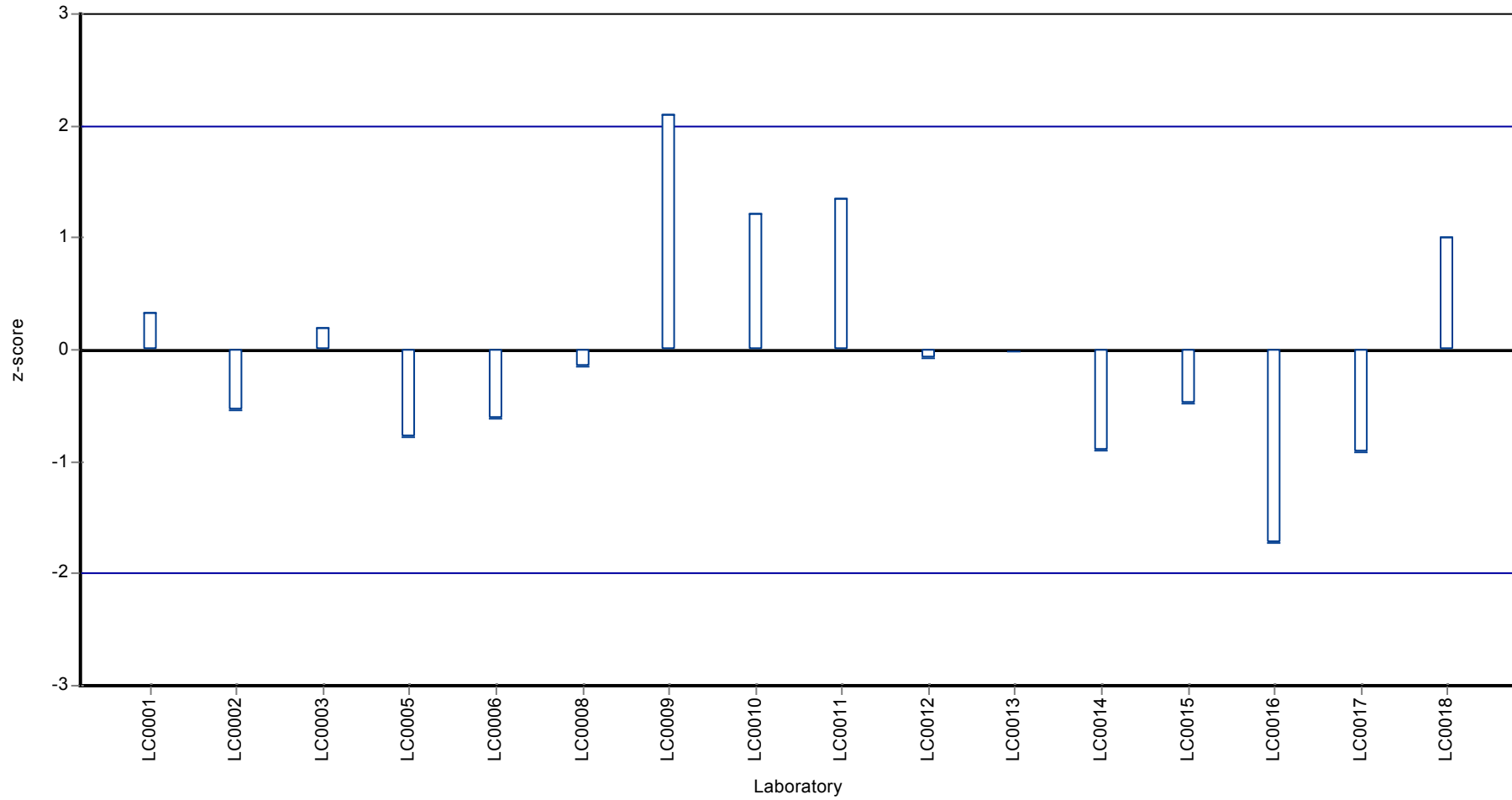
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: 1,2-Dichloroethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,2-Dichloroethane

Parameter oriented report

C59 B

1,2-Dichloroethane

Unit	µg/l
Mean ± CI (99%)	2.1 ± 0.125
Minimum - Maximum	1.79 - 2.44
Control test value ± U	1.92 ± 0.383

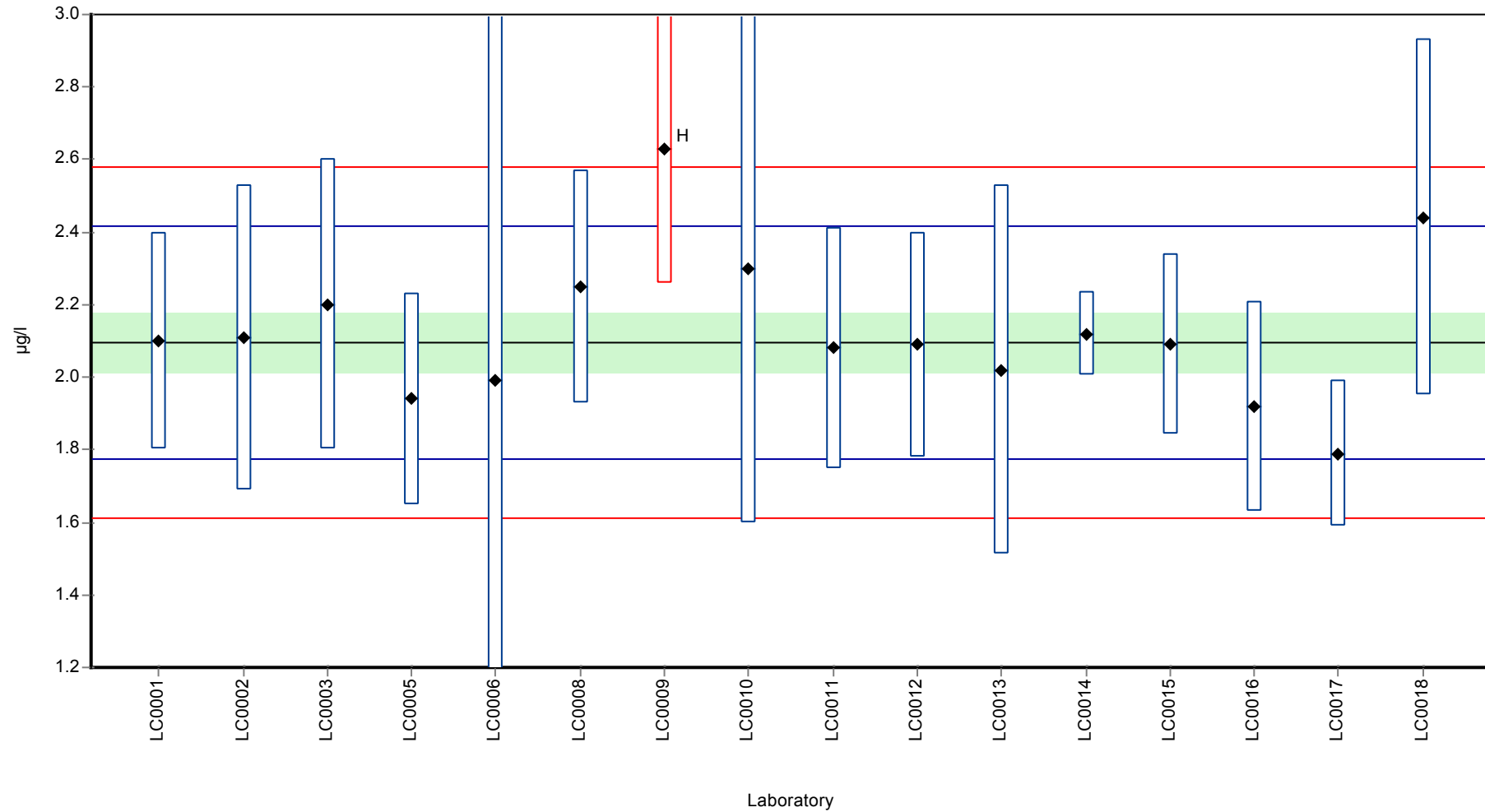
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.1	0.3	100	0.03	
LC0002	2.11	0.42	101	0.09	
LC0003	2.2	0.4	105	0.65	
LC0004	-	-	-	-	
LC0005	1.94	0.29	92.6	-0.97	
LC0006	1.99	1.01	94.9	-0.66	
LC0007	-	-	-	-	
LC0008	2.25	0.32	107	0.96	
LC0009	2.63	0.37	125	3.32	H
LC0010	2.3	0.7	110	1.27	
LC0011	2.08	0.333	99.2	-0.1	
LC0012	2.09	0.31	99.7	-0.04	
LC0013	2.02	0.51	96.4	-0.47	
LC0014	2.12	0.114	101	0.15	
LC0015	2.09	0.25	99.7	-0.04	
LC0016	1.919	0.288	91.6	-1.1	
LC0017	1.79	0.2	85.4	-1.9	
LC0018	2.44	0.49	116	2.14	

Characteristics of parameter

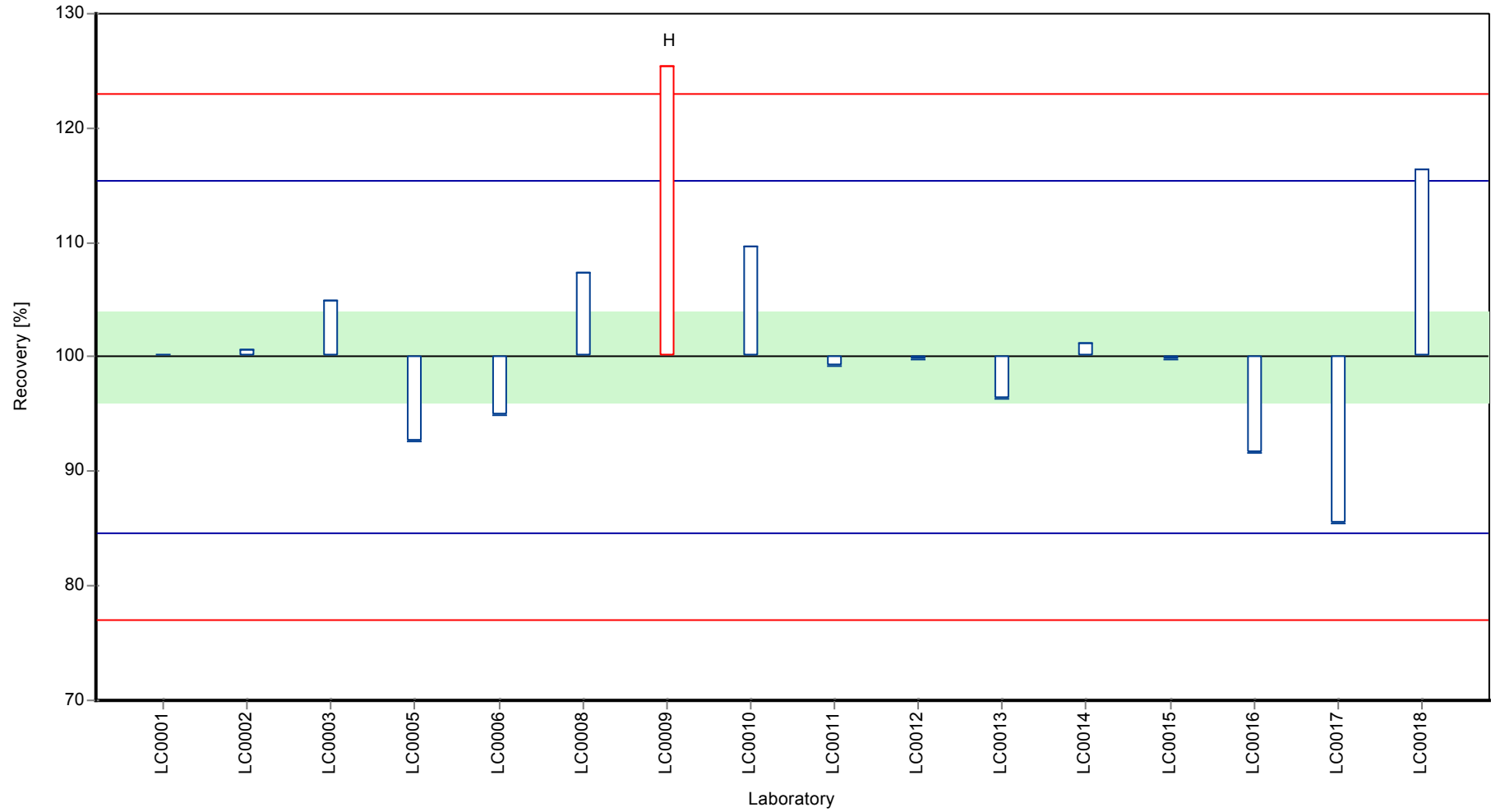
	all results	without outliers	Unit
Mean ± CI (99%)	2.13 ± 0.154	2.1 ± 0.125	µg/l
Minimum	1.79	1.79	µg/l
Maximum	2.63	2.44	µg/l
Standard deviation	0.205	0.161	µg/l
rel. Standard deviation	9.62	7.67	%
n	16	15	-

Graphical presentation of results

Results



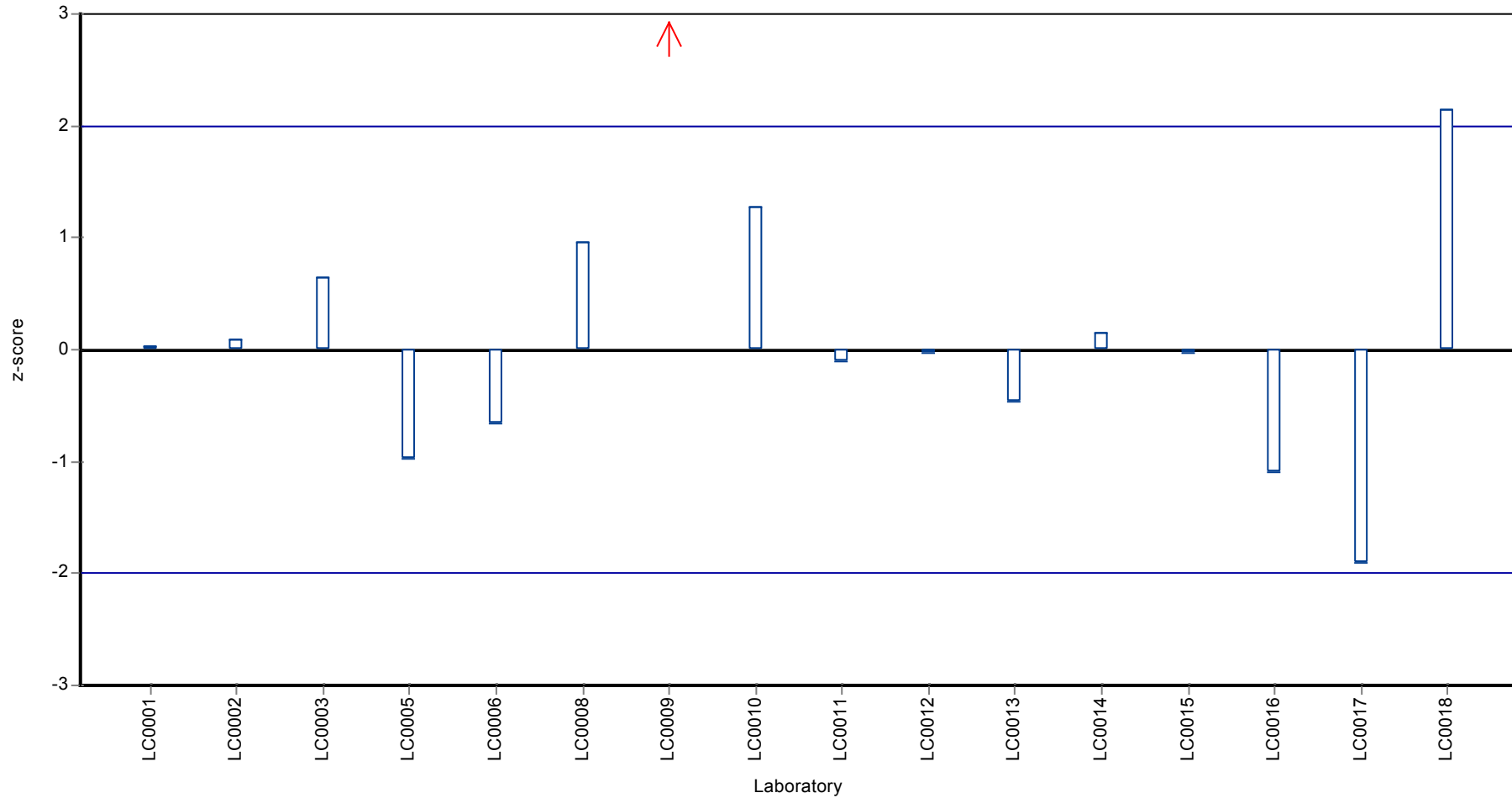
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: 1,2-Dichloroethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Bromodichloromethane

Parameter oriented report

C59 A

Bromodichloromethane

Unit	µg/l
Mean ± CI (99%)	4.99 ± 0.307
Minimum - Maximum	4.34 - 5.89
Control test value ± U	4.65 ± 0.929

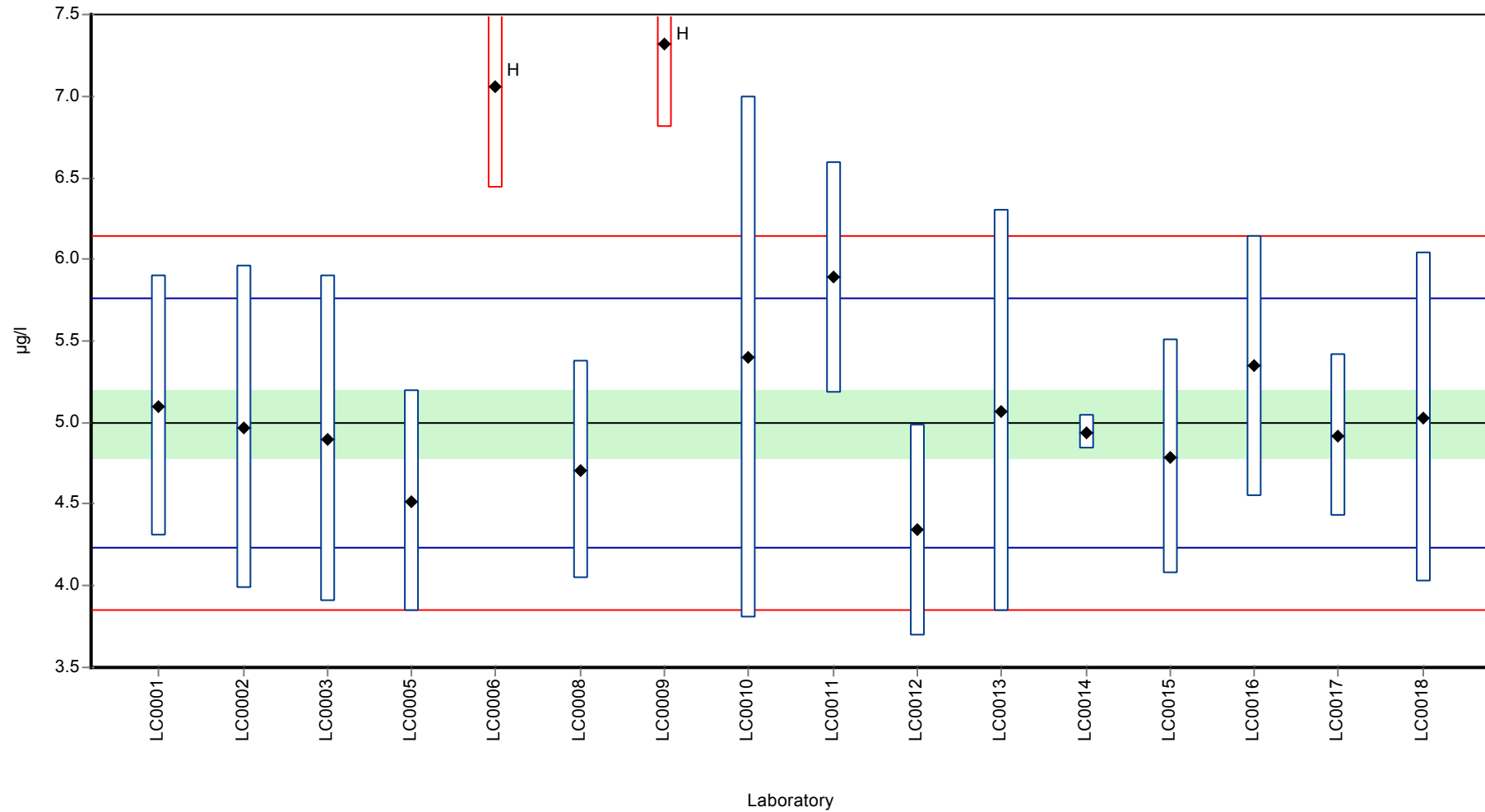
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.1	0.8	102	0.28	
LC0002	4.97	0.99	99.5	-0.06	
LC0003	4.9	1	98.1	-0.25	
LC0004	-	-	-	-	
LC0005	4.52	0.68	90.5	-1.24	
LC0006	7.06	0.63	141	5.4	H
LC0007	-	-	-	-	
LC0008	4.71	0.67	94.3	-0.74	
LC0009	7.32	0.51	147	6.08	H
LC0010	5.4	1.6	108	1.06	
LC0011	5.89	0.707	118	2.34	
LC0012	4.34	0.65	86.9	-1.71	
LC0013	5.07	1.23	102	0.2	
LC0014	4.94	0.104	98.9	-0.14	
LC0015	4.79	0.72	95.9	-0.54	
LC0016	5.346	0.802	107	0.92	
LC0017	4.92	0.5	98.5	-0.2	
LC0018	5.03	1.01	101	0.09	

Characteristics of parameter

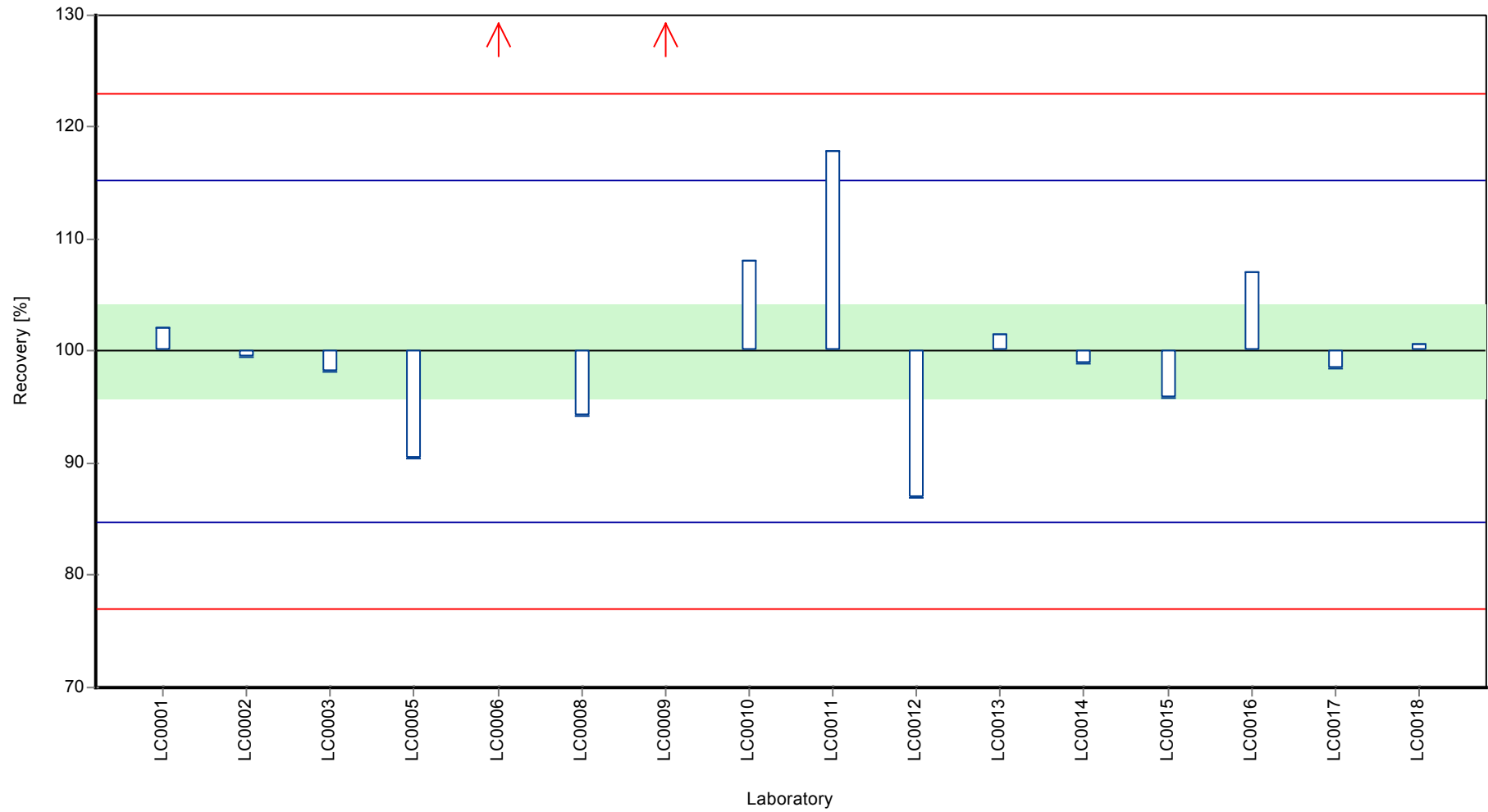
	all results	without outliers	Unit
Mean ± CI (99%)	5.27 ± 0.624	4.99 ± 0.307	µg/l
Minimum	4.34	4.34	µg/l
Maximum	7.32	5.89	µg/l
Standard deviation	0.831	0.383	µg/l
rel. Standard deviation	15.8	7.66	%
n	16	14	-

Graphical presentation of results

Results



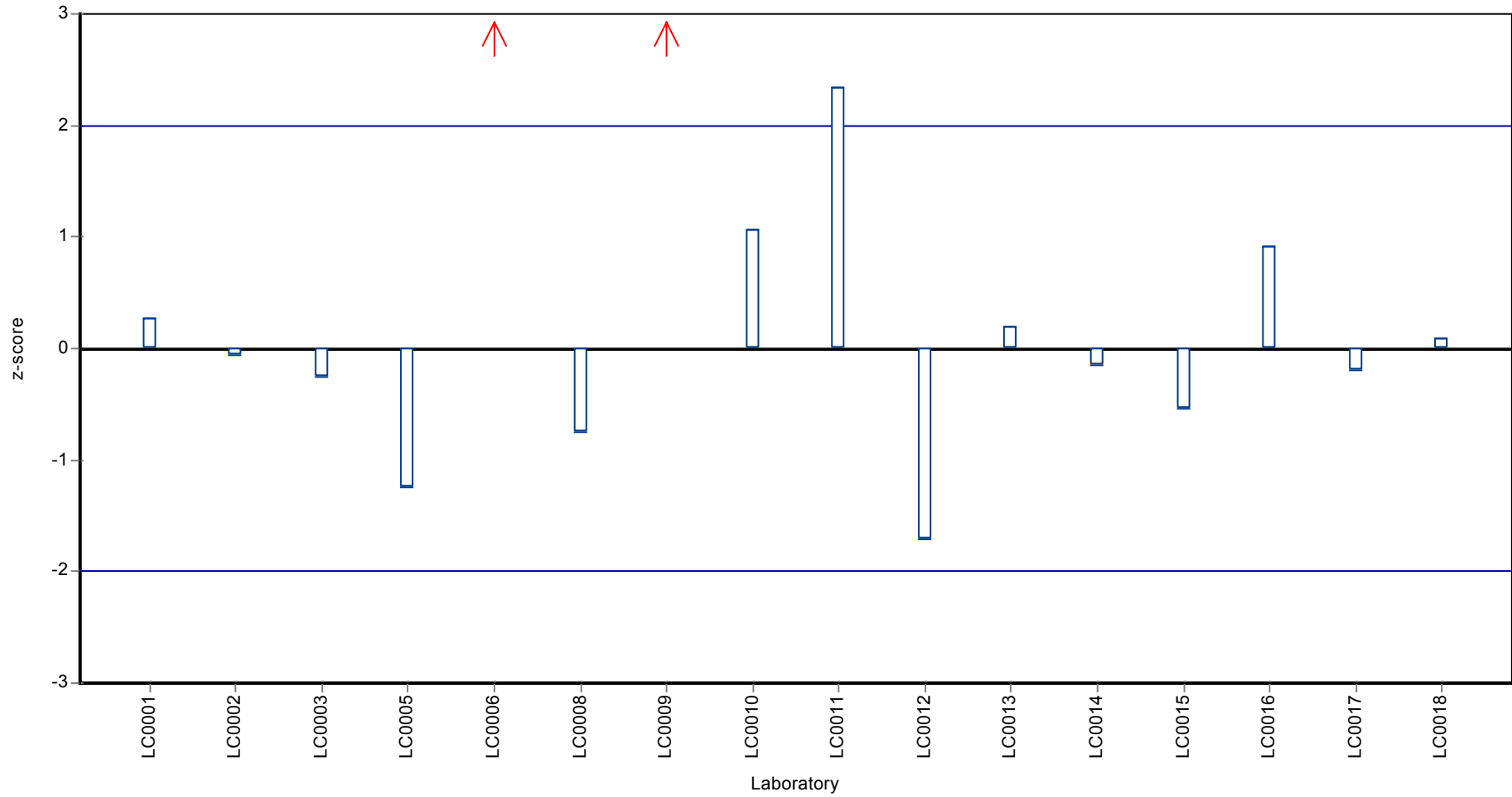
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Bromodichloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Bromodichloromethane

Parameter oriented report

C59 B

Bromodichloromethane

Unit	µg/l
Mean ± CI (99%)	2.91 ± 0.147
Minimum - Maximum	2.61 - 3.38
Control test value ± U	2.59 ± 0.518

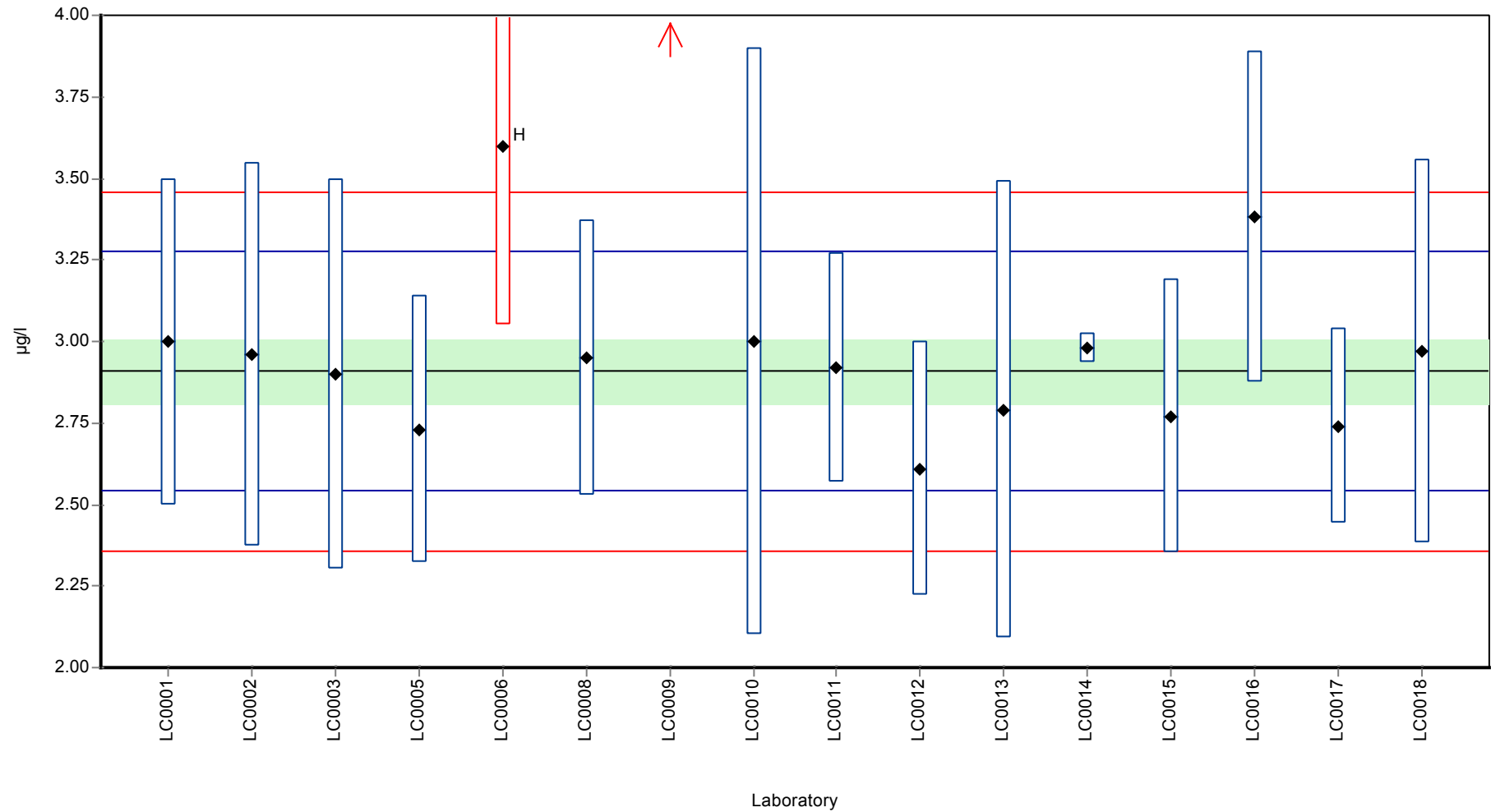
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3	0.5	103	0.51	
LC0002	2.96	0.59	102	0.29	
LC0003	2.9	0.6	99.7	-0.04	
LC0004	-	-	-	-	
LC0005	2.73	0.41	93.9	-0.97	
LC0006	3.6	0.55	124	3.77	H
LC0007	-	-	-	-	
LC0008	2.95	0.42	101	0.23	
LC0009	4.24	0.3	146	7.26	H
LC0010	3	0.9	103	0.51	
LC0011	2.92	0.35	100	0.07	
LC0012	2.61	0.39	89.8	-1.62	
LC0013	2.79	0.7	96	-0.64	
LC0014	2.98	0.045	102	0.4	
LC0015	2.77	0.42	95.3	-0.75	
LC0016	3.383	0.507	116	2.59	
LC0017	2.74	0.3	94.2	-0.91	
LC0018	2.97	0.59	102	0.34	

Characteristics of parameter

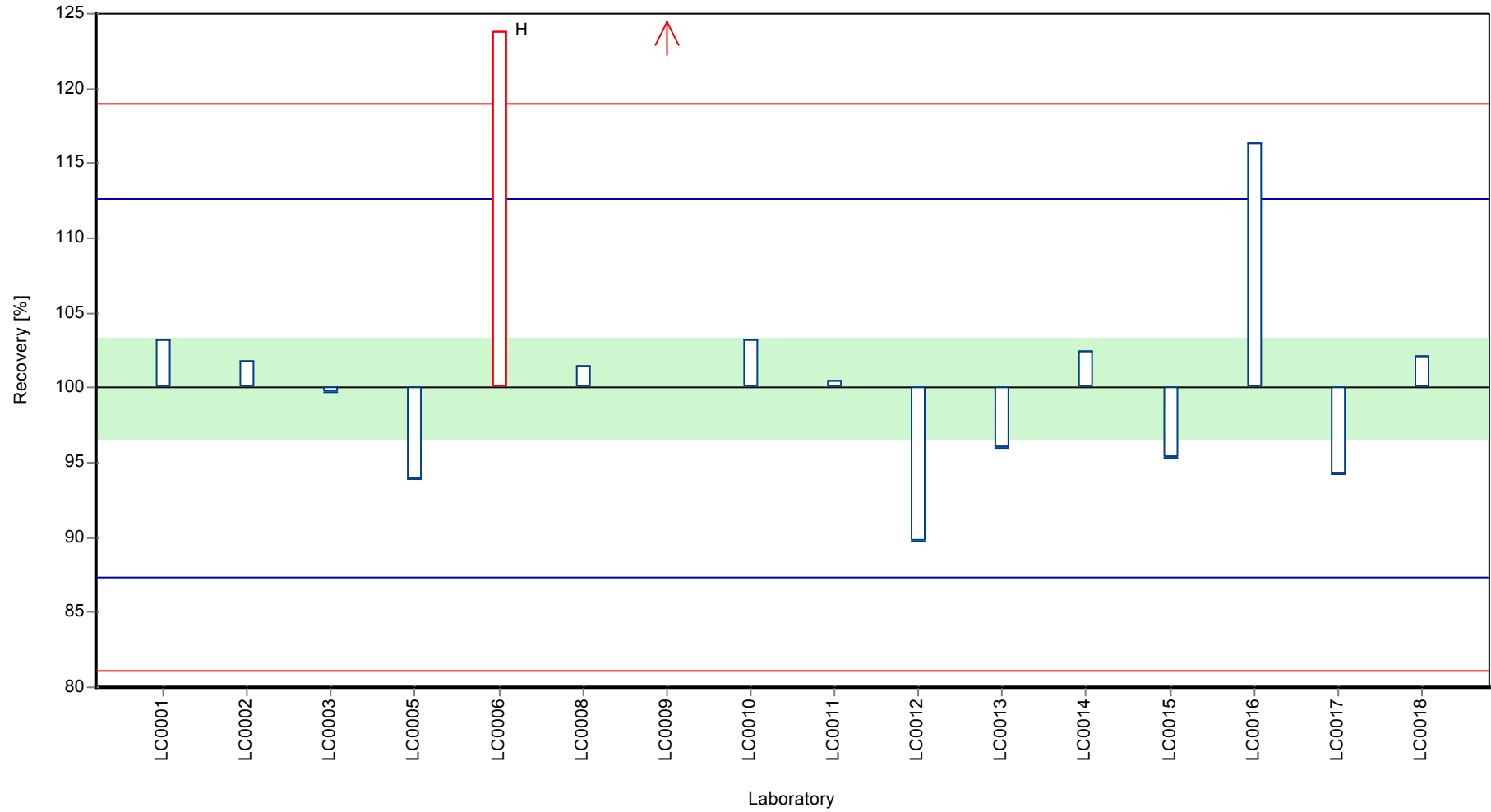
	all results	without outliers	Unit
Mean ± CI (99%)	3.03 ± 0.302	2.91 ± 0.147	µg/l
Minimum	2.61	2.61	µg/l
Maximum	4.24	3.38	µg/l
Standard deviation	0.403	0.184	µg/l
rel. Standard deviation	13.3	6.31	%
n	16	14	-

Graphical presentation of results

Results



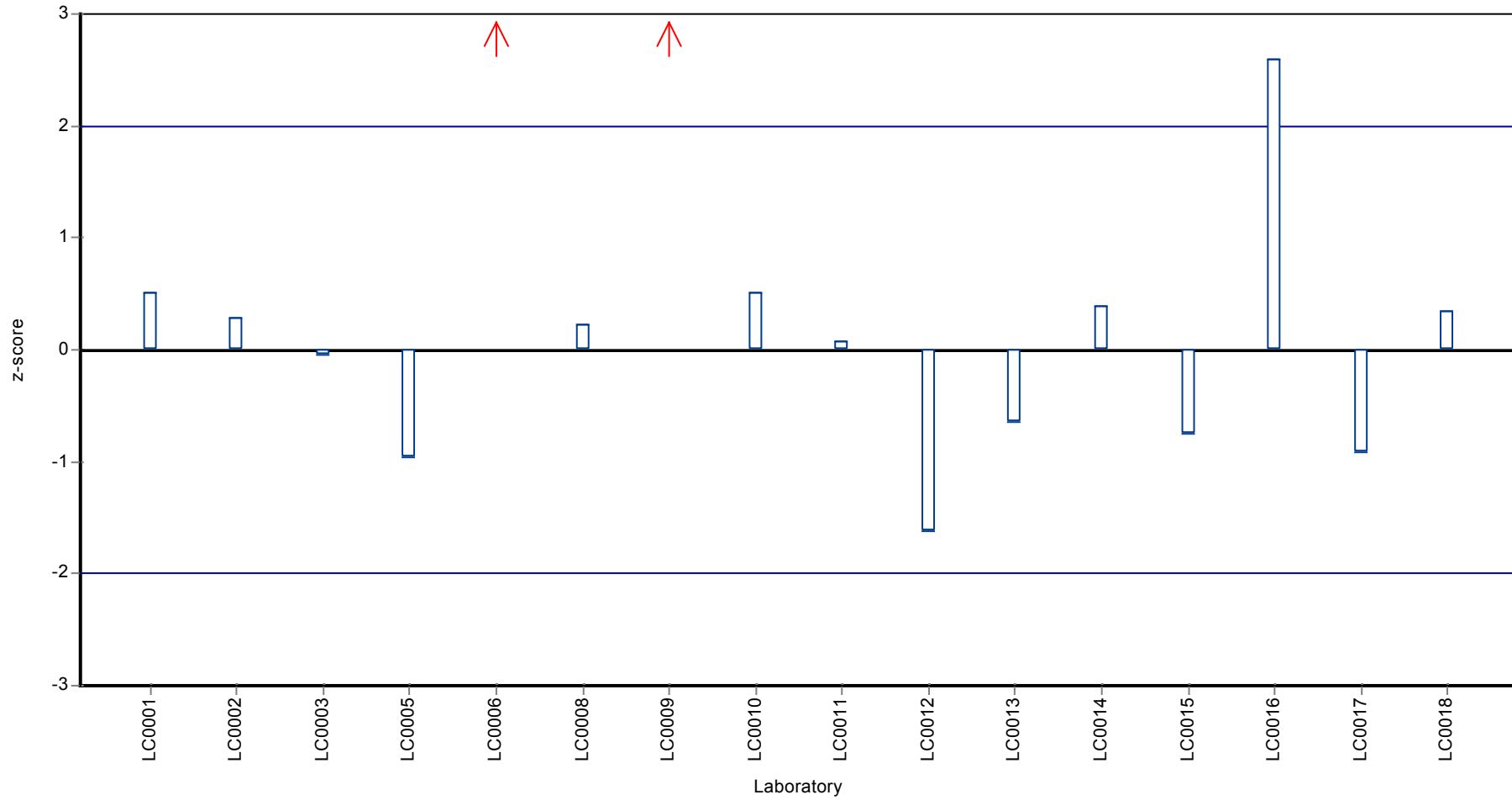
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Bromodichloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: cis-1,2-Dichloroethene

Parameter oriented report

C59 A

cis-1,2-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	3.06 ± 0.257
Minimum - Maximum	2.74 - 3.9
Control test value ± U	2.86 ± 0.572

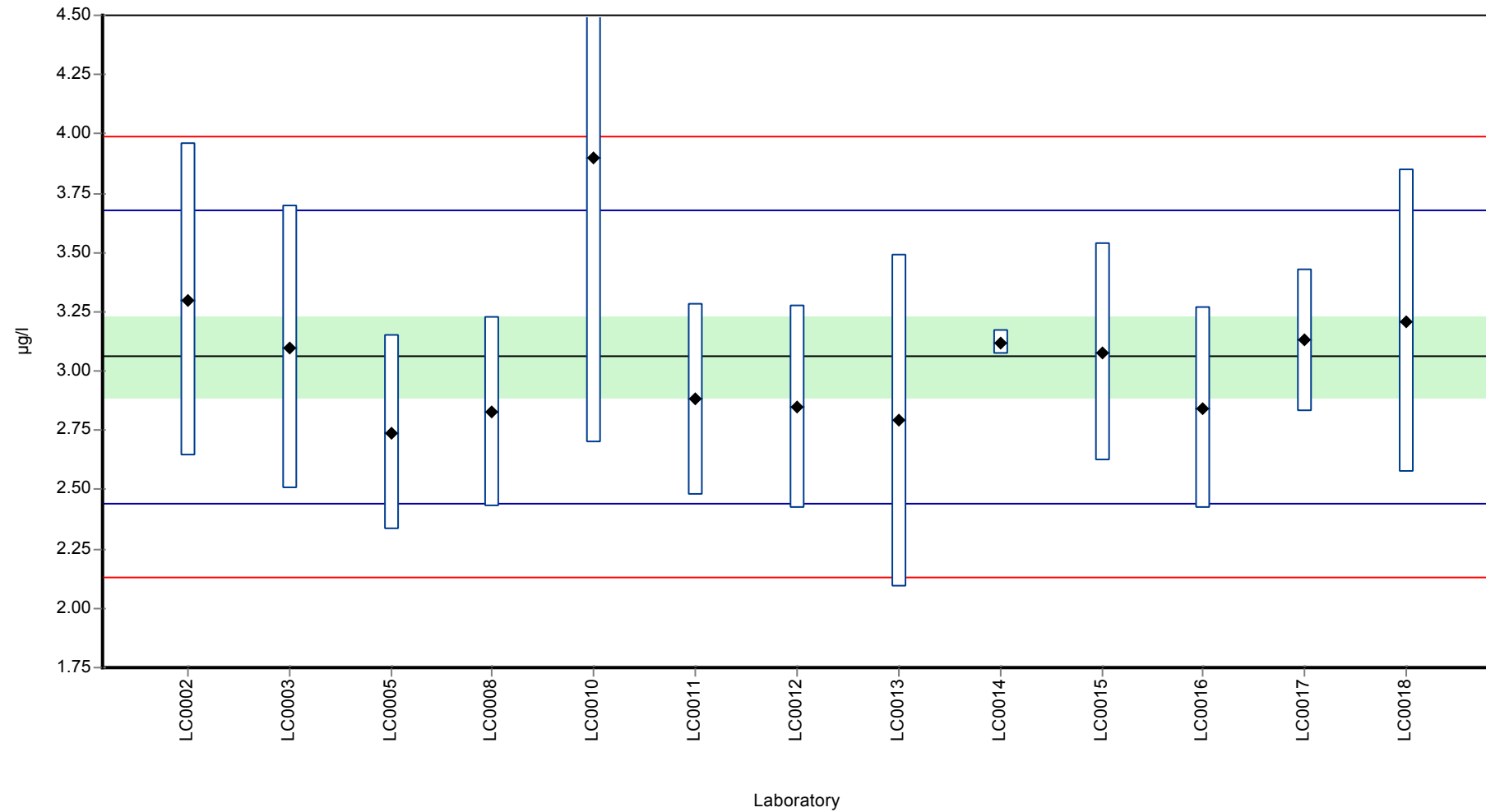
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	3.3	0.66	108	0.78	
LC0003	3.1	0.6	101	0.13	
LC0004	-	-	-	-	
LC0005	2.74	0.41	89.6	-1.03	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	2.83	0.4	92.5	-0.74	
LC0009	-	-	-	-	
LC0010	3.9	1.2	127	2.72	
LC0011	2.88	0.403	94.1	-0.58	
LC0012	2.85	0.43	93.2	-0.68	
LC0013	2.79	0.7	91.2	-0.87	
LC0014	3.12	0.053	102	0.2	
LC0015	3.08	0.46	101	0.07	
LC0016	2.844	0.427	93	-0.7	
LC0017	3.13	0.3	102	0.23	
LC0018	3.21	0.64	105	0.49	

Characteristics of parameter

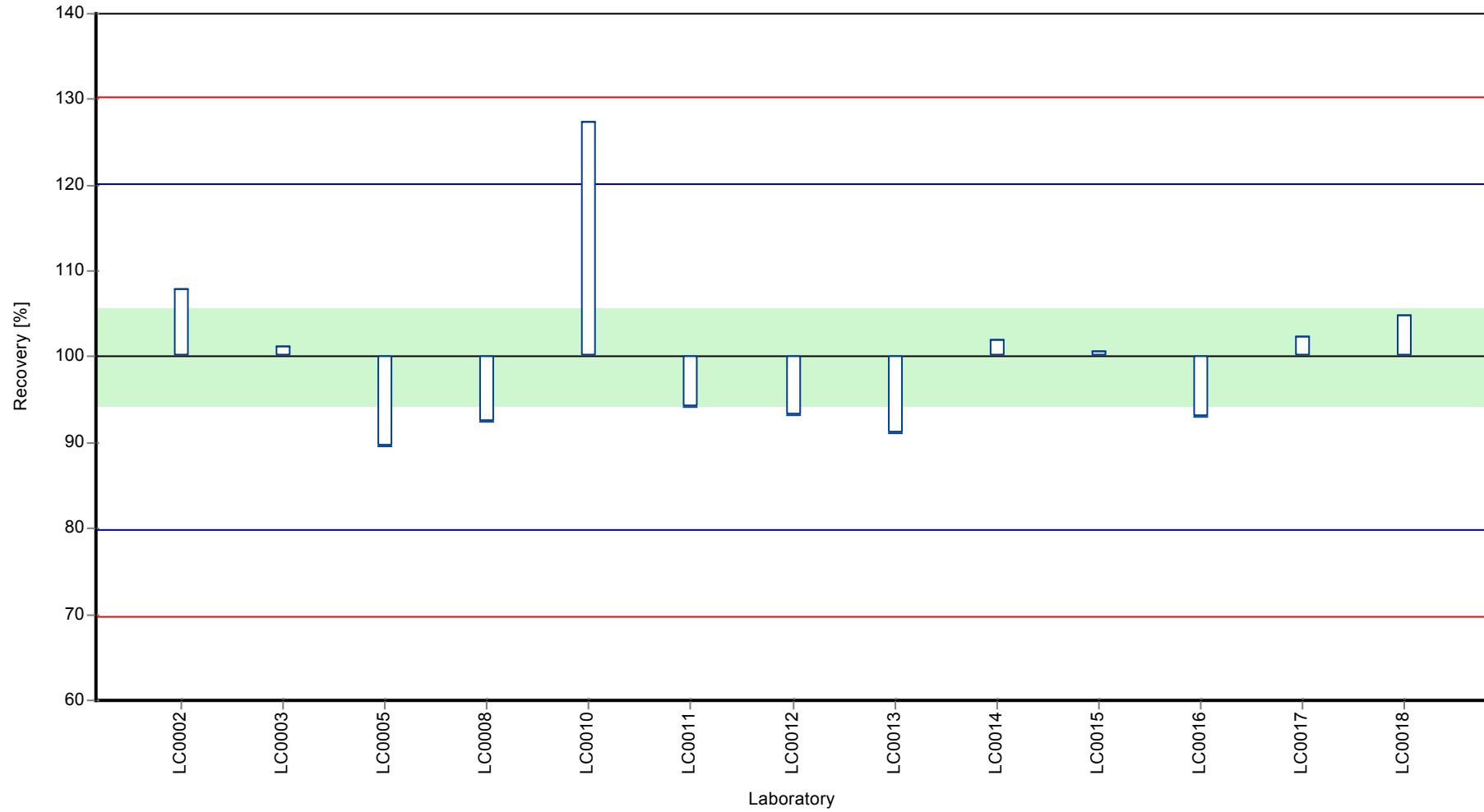
	all results	without outliers	Unit
Mean ± CI (99%)	3.06 ± 0.257	3.06 ± 0.257	µg/l
Minimum	2.74	2.74	µg/l
Maximum	3.9	3.9	µg/l
Standard deviation	0.309	0.309	µg/l
rel. Standard deviation	10.1	10.1	%
n	13	13	-

Graphical presentation of results

Results



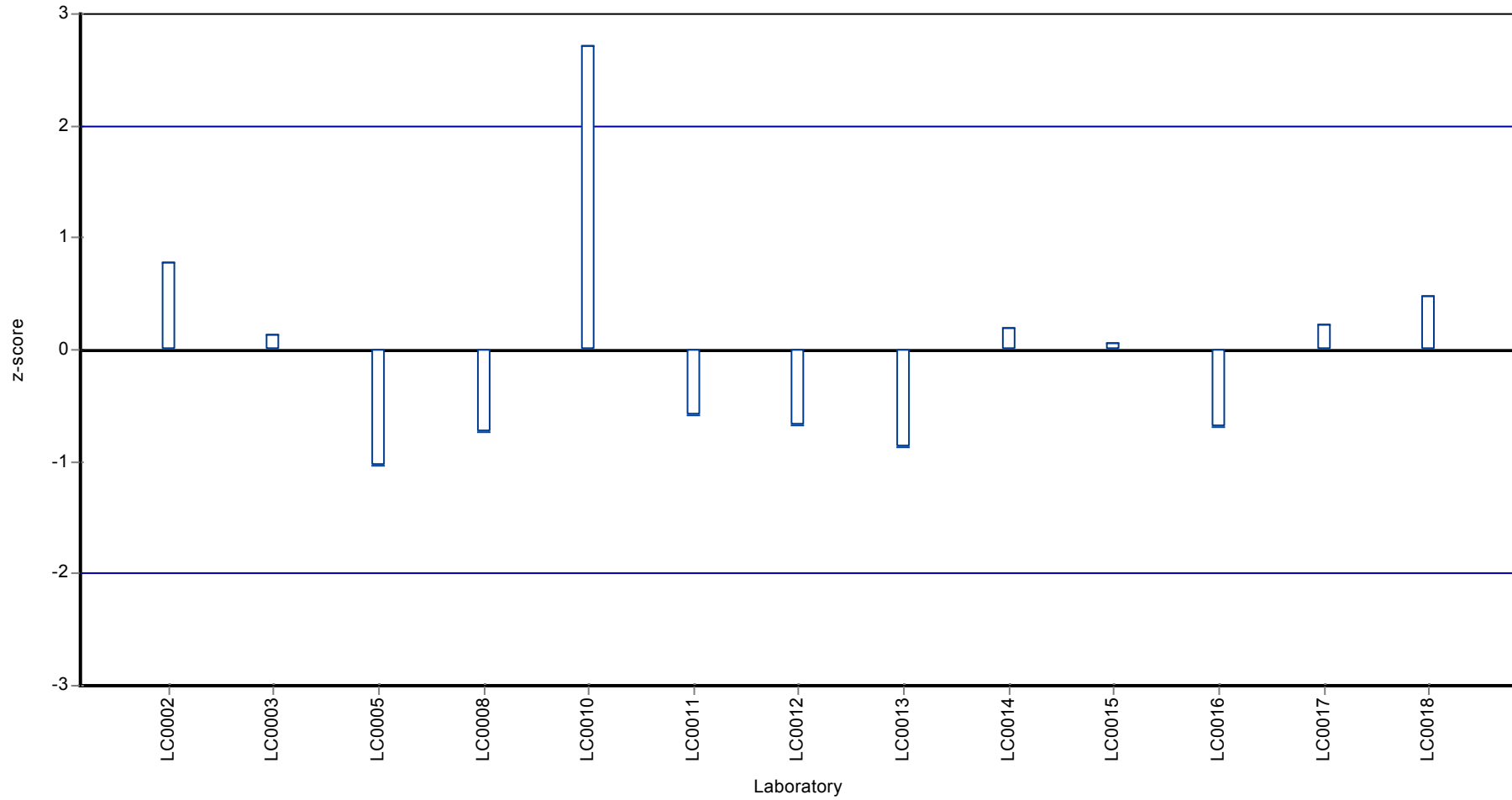
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: cis-1,2-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: cis-1,2-Dichloroethene

Parameter oriented report

C59 B

cis-1,2-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	1.27 ± 0.108
Minimum - Maximum	1.08 - 1.6
Control test value ± U	1.17 ± 0.235

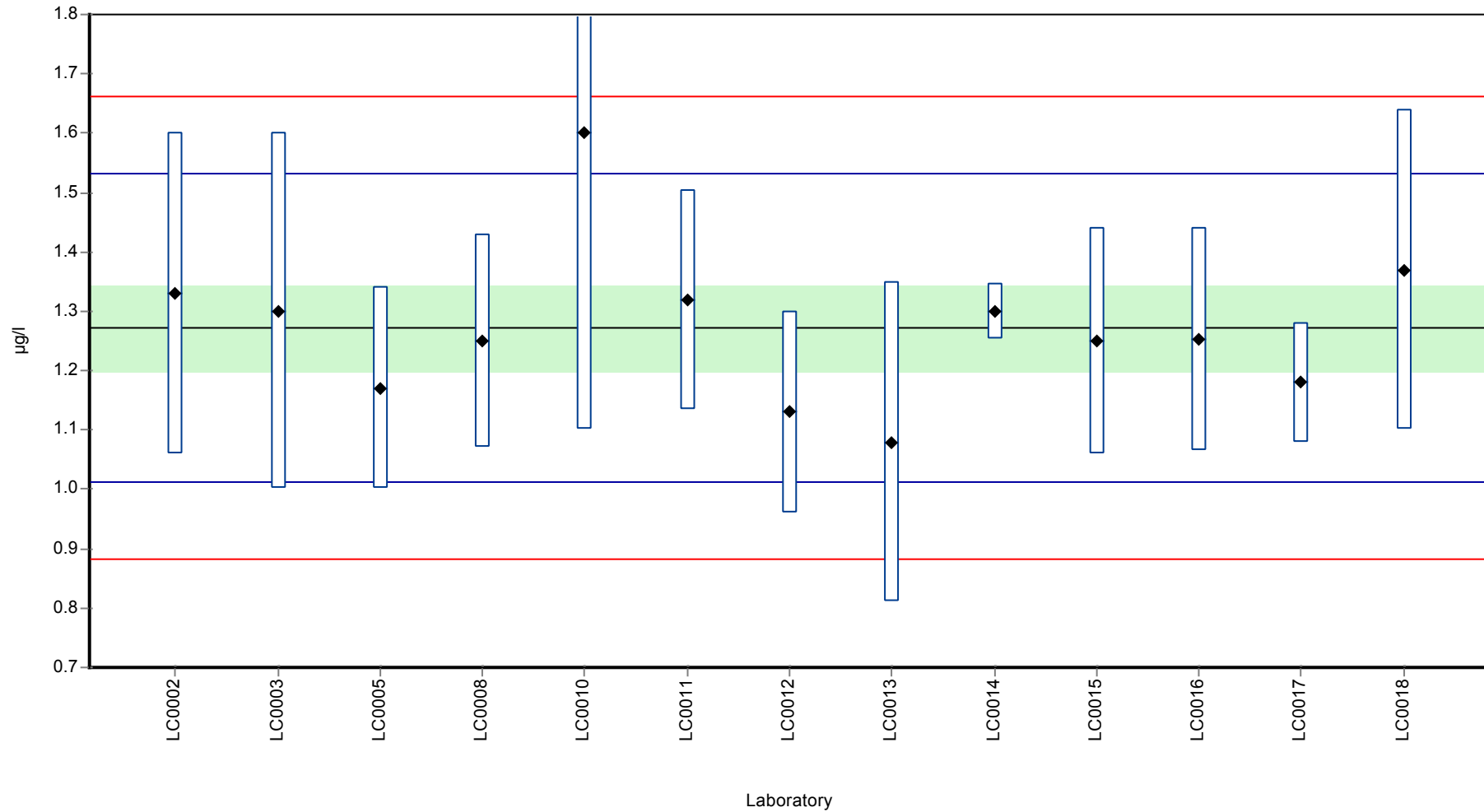
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	1.33	0.27	105	0.45	
LC0003	1.3	0.3	102	0.22	
LC0004	-	-	-	-	
LC0005	1.17	0.17	92	-0.79	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	1.25	0.18	98.3	-0.17	
LC0009	-	-	-	-	
LC0010	1.6	0.5	126	2.53	
LC0011	1.32	0.185	104	0.37	
LC0012	1.13	0.17	88.9	-1.09	
LC0013	1.08	0.27	84.9	-1.48	
LC0014	1.3	0.046	102	0.22	
LC0015	1.25	0.19	98.3	-0.17	
LC0016	1.253	0.188	98.5	-0.14	
LC0017	1.18	0.1	92.8	-0.71	
LC0018	1.37	0.27	108	0.76	

Characteristics of parameter

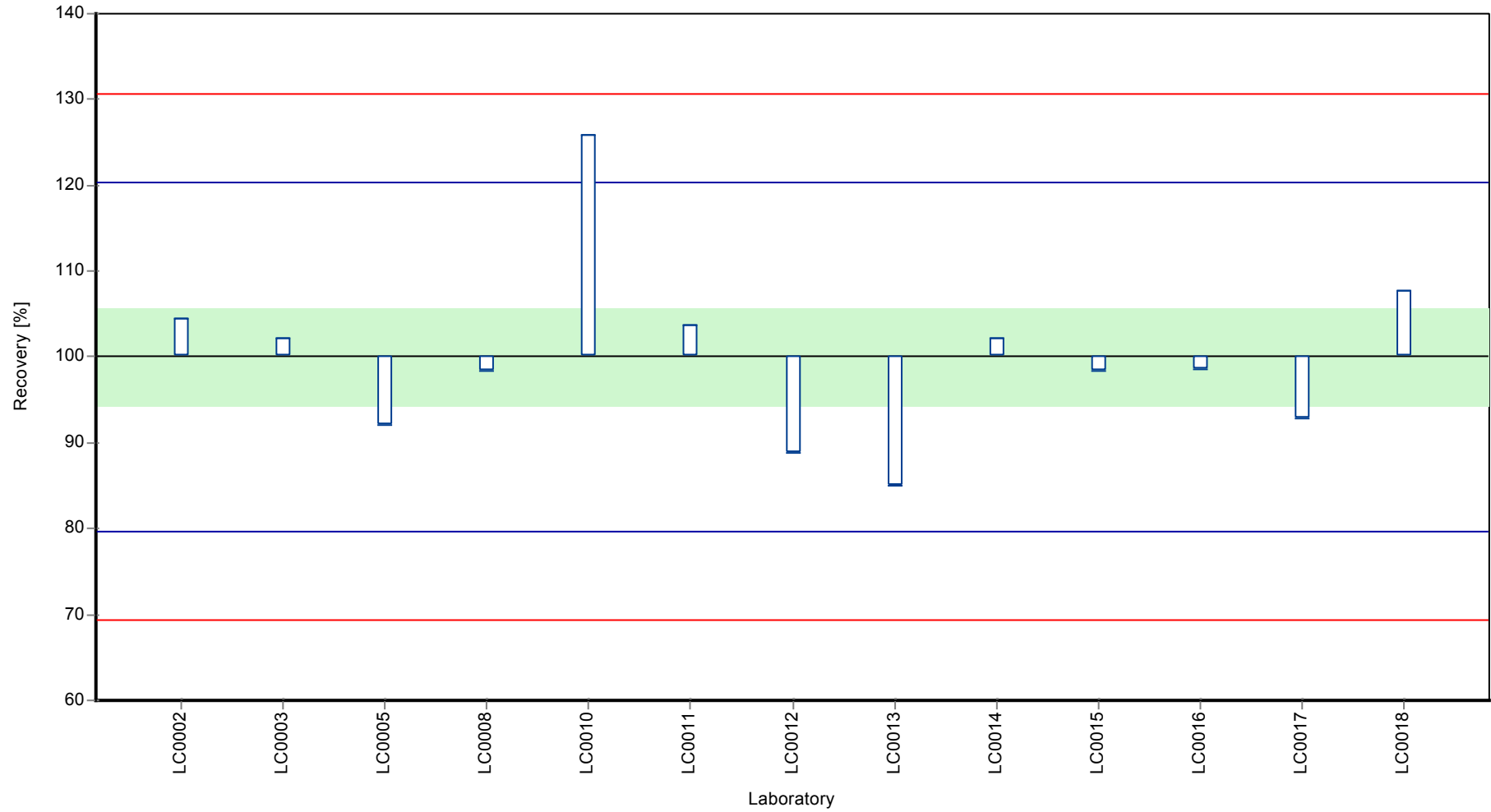
	all results	without outliers	Unit
Mean ± CI (99%)	1.27 ± 0.108	1.27 ± 0.108	µg/l
Minimum	1.08	1.08	µg/l
Maximum	1.6	1.6	µg/l
Standard deviation	0.13	0.13	µg/l
rel. Standard deviation	10.2	10.2	%
n	13	13	-

Graphical presentation of results

Results



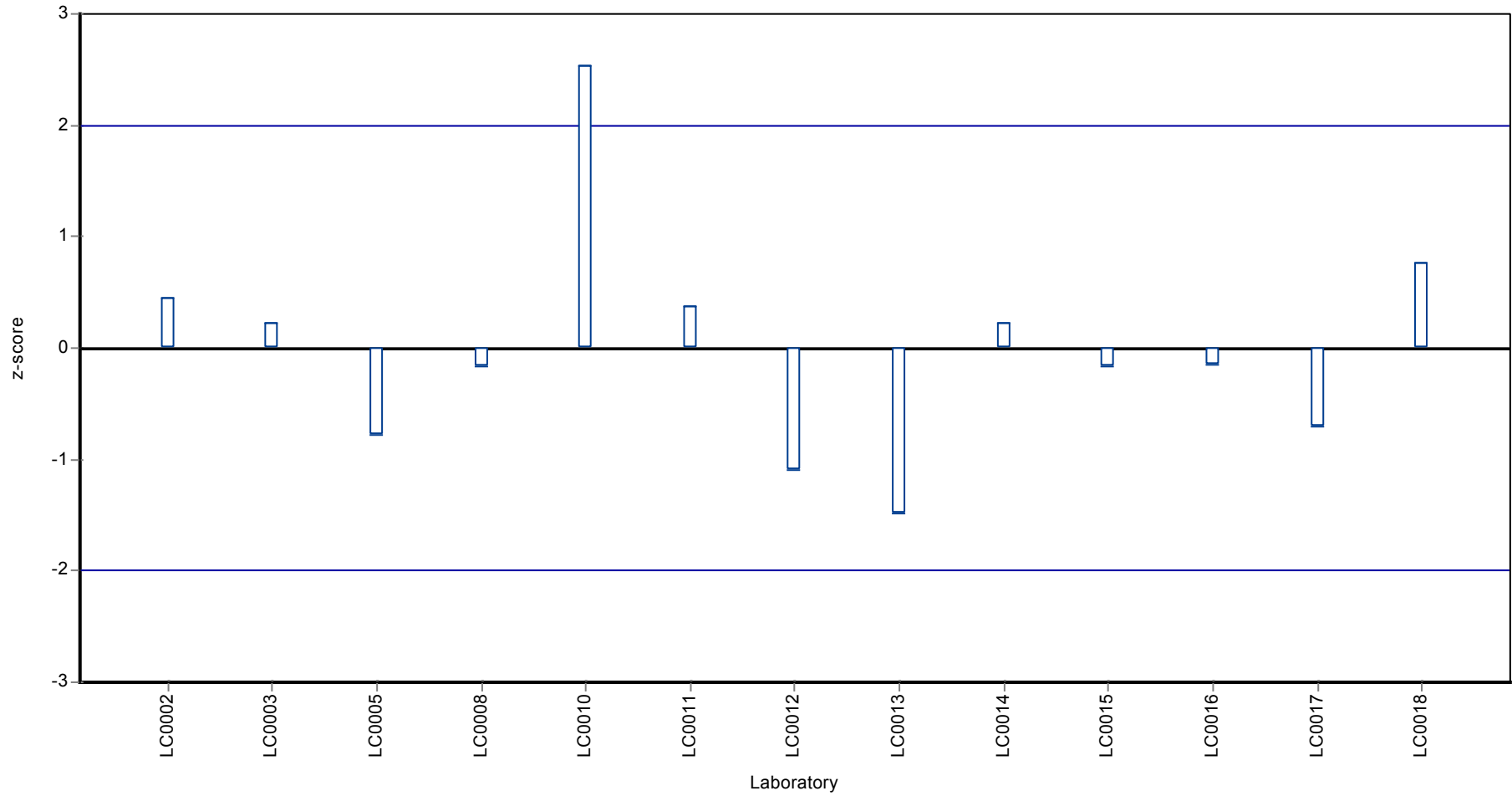
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: cis-1,2-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Dibromochloromethane

Parameter oriented report

C59 A

Dibromochloromethane

Unit	µg/l
Mean ± CI (99%)	10.4 ± 0.656
Minimum - Maximum	8.63 - 12
Control test value ± U	9.56 ± 1.91

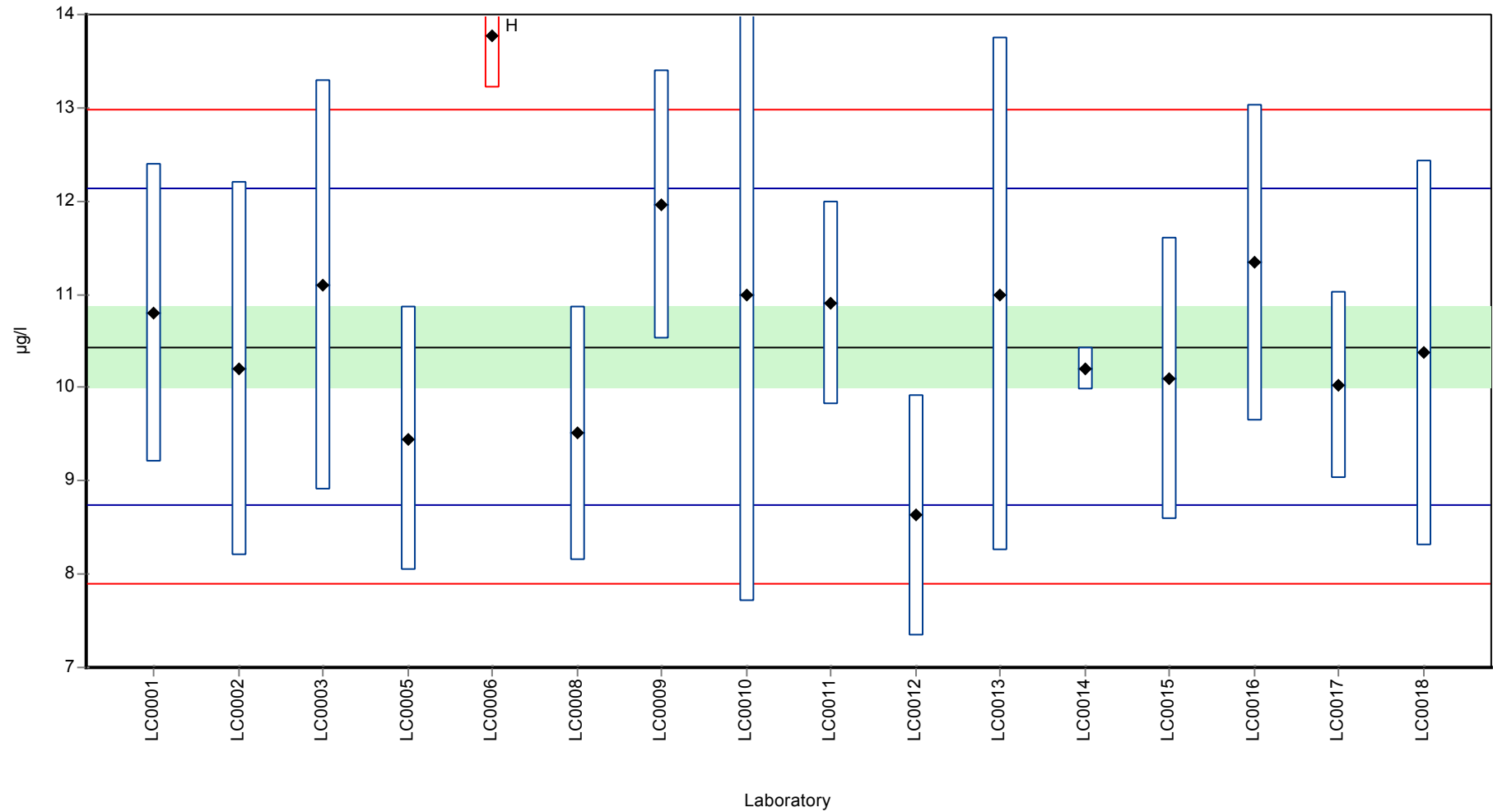
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.8	1.6	103	0.43	
LC0002	10.2	2	97.7	-0.28	
LC0003	11.1	2.2	106	0.78	
LC0004	-	-	-	-	
LC0005	9.45	1.42	90.5	-1.17	
LC0006	13.77	0.56	132	3.93	H
LC0007	-	-	-	-	
LC0008	9.51	1.36	91.1	-1.1	
LC0009	11.96	1.44	115	1.8	
LC0010	11	3.3	105	0.66	
LC0011	10.9	1.09	104	0.55	
LC0012	8.63	1.29	82.7	-2.13	
LC0013	11	2.76	105	0.66	
LC0014	10.2	0.23	97.7	-0.28	
LC0015	10.1	1.51	96.8	-0.4	
LC0016	11.336	1.7	109	1.06	
LC0017	10.02	1	96	-0.49	
LC0018	10.37	2.07	99.3	-0.08	

Characteristics of parameter

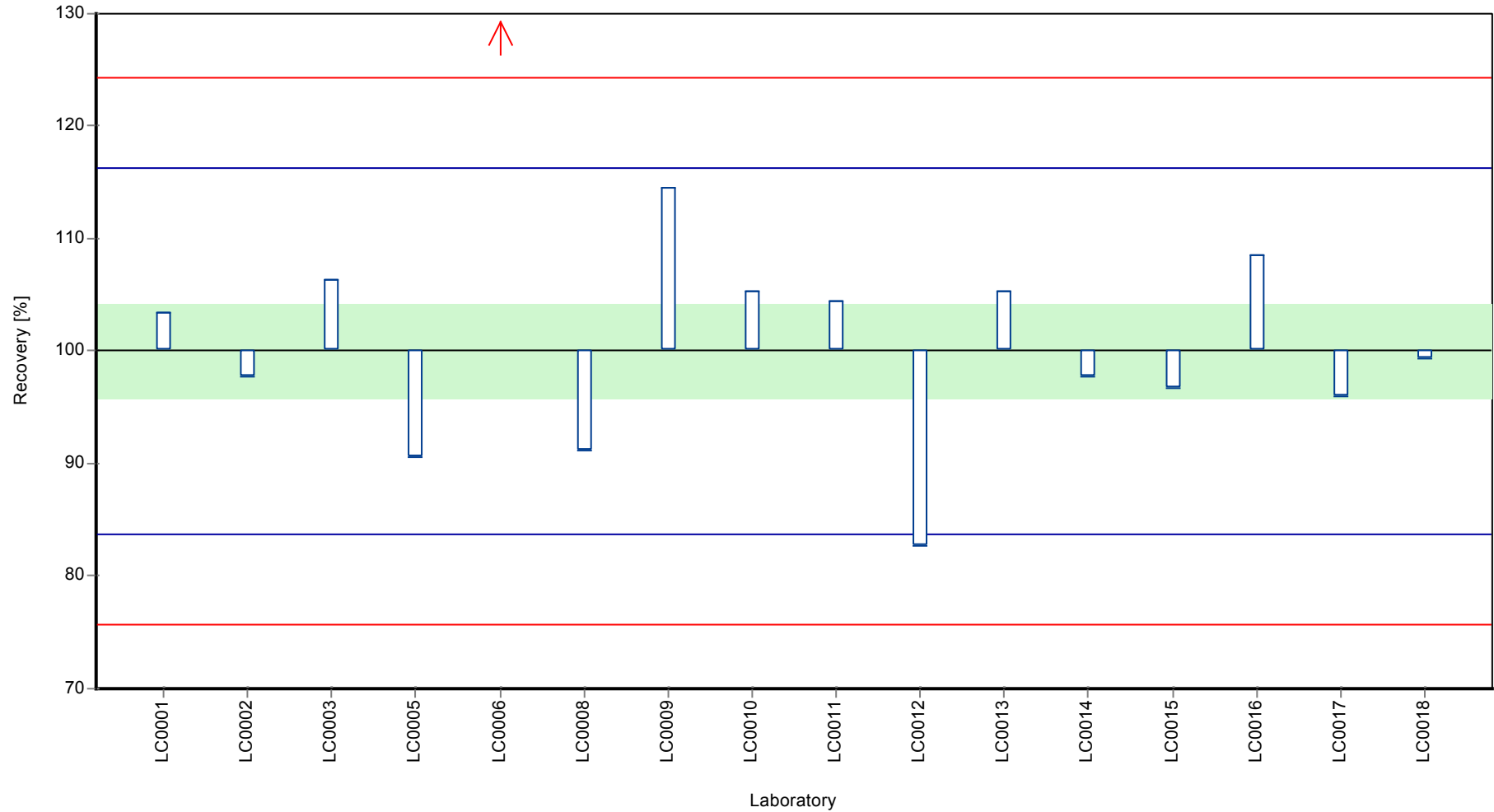
	all results	without outliers	Unit
Mean ± CI (99%)	10.6 ± 0.876	10.4 ± 0.656	µg/l
Minimum	8.63	8.63	µg/l
Maximum	13.8	12	µg/l
Standard deviation	1.17	0.847	µg/l
rel. Standard deviation	11	8.12	%
n	16	15	-

Graphical presentation of results

Results



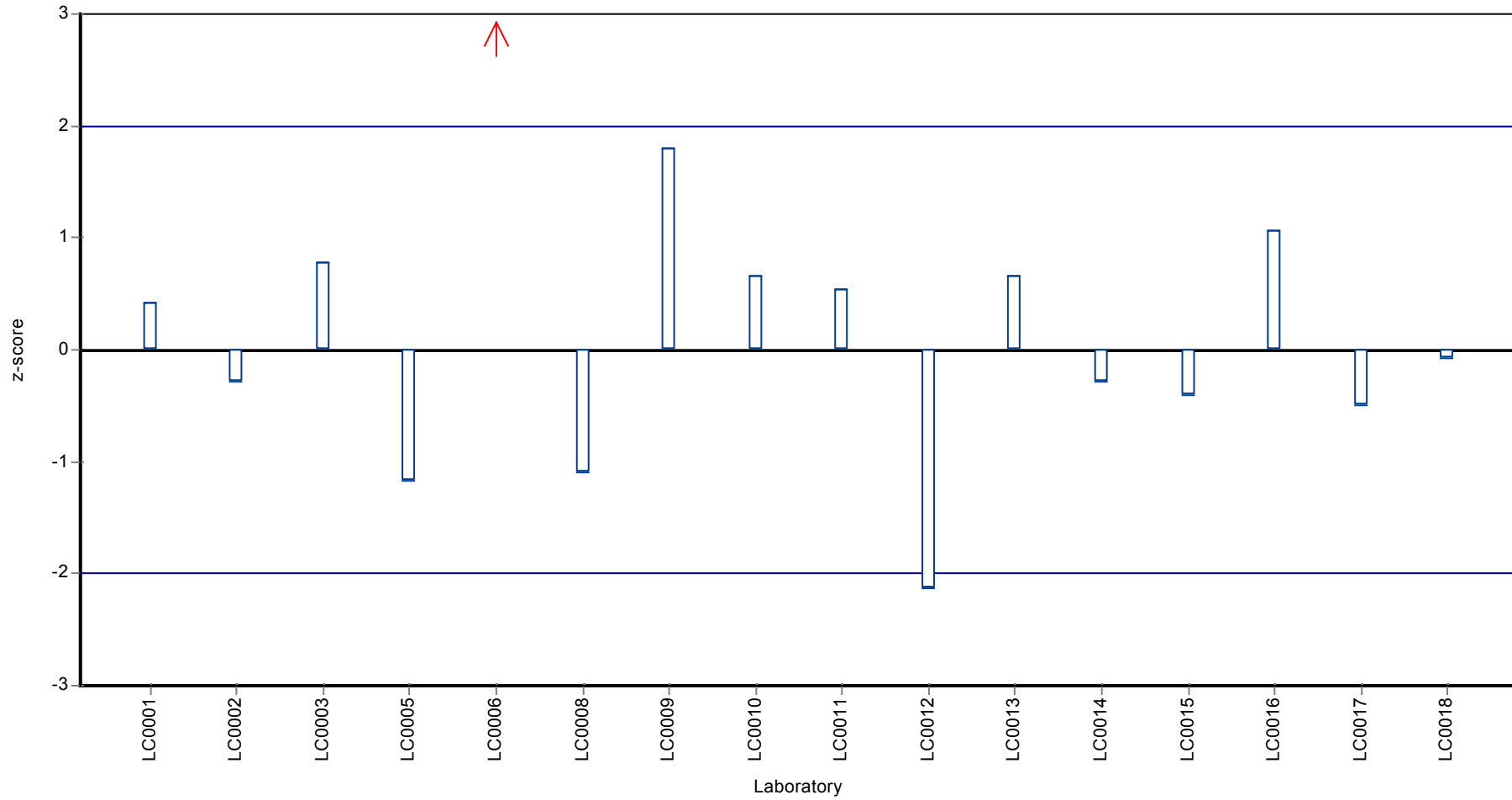
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Dibromochloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Dibromochloromethane

Parameter oriented report

C59 B

Dibromochloromethane

Unit	µg/l
Mean ± CI (99%)	2.32 ± 0.162
Minimum - Maximum	2.04 - 2.8
Control test value ± U	2.01 ± 0.402

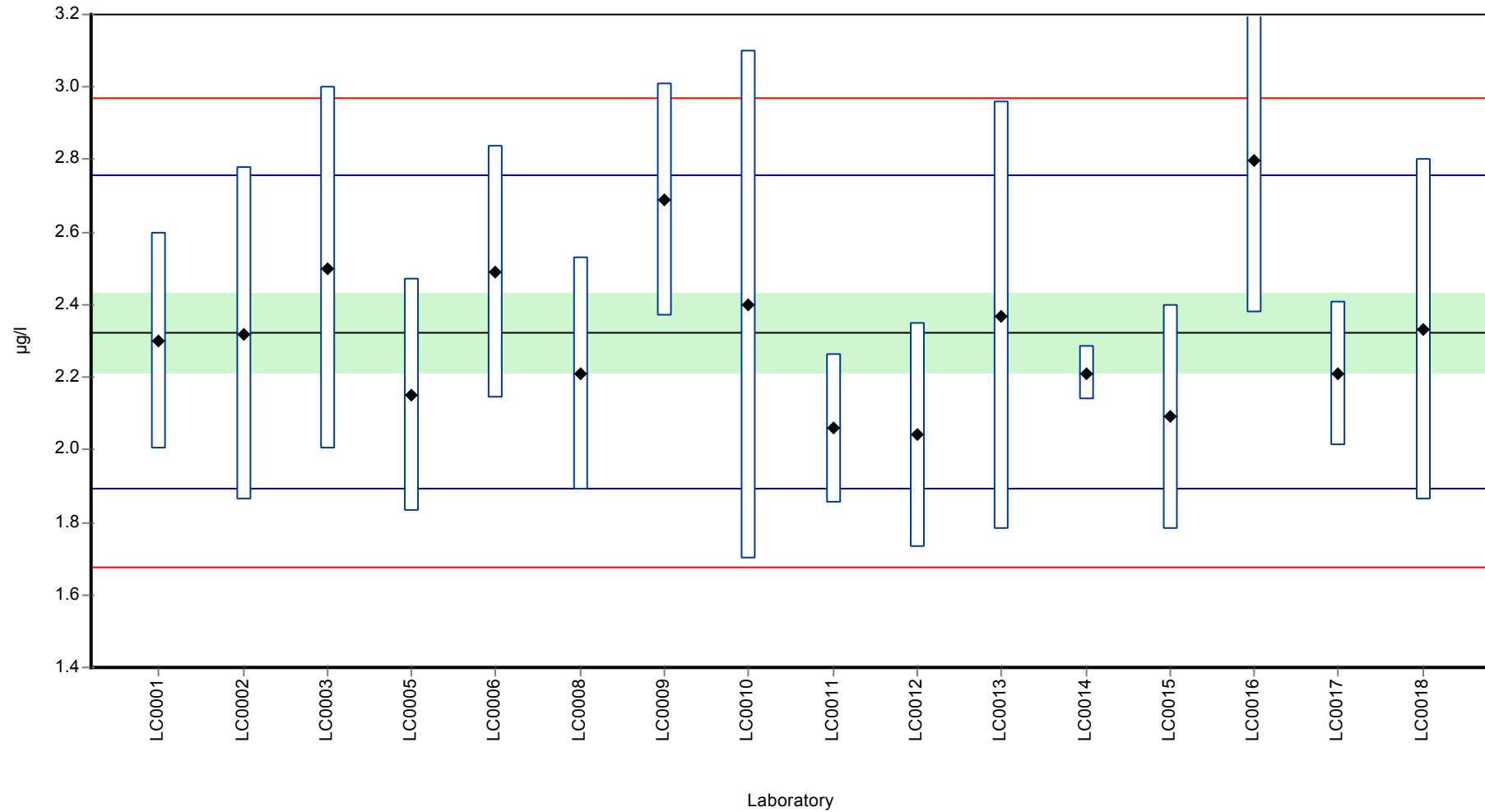
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.3	0.3	99	-0.11	
LC0002	2.32	0.46	99.9	-0.01	
LC0003	2.5	0.5	108	0.82	
LC0004	-	-	-	-	
LC0005	2.15	0.32	92.6	-0.8	
LC0006	2.49	0.35	107	0.77	
LC0007	-	-	-	-	
LC0008	2.21	0.32	95.1	-0.52	
LC0009	2.69	0.32	116	1.7	
LC0010	2.4	0.7	103	0.36	
LC0011	2.06	0.206	88.7	-1.22	
LC0012	2.04	0.31	87.8	-1.31	
LC0013	2.37	0.59	102	0.22	
LC0014	2.21	0.075	95.1	-0.52	
LC0015	2.09	0.31	90	-1.08	
LC0016	2.799	0.42	120	2.2	
LC0017	2.21	0.2	95.1	-0.52	
LC0018	2.33	0.47	100	0.03	

Characteristics of parameter

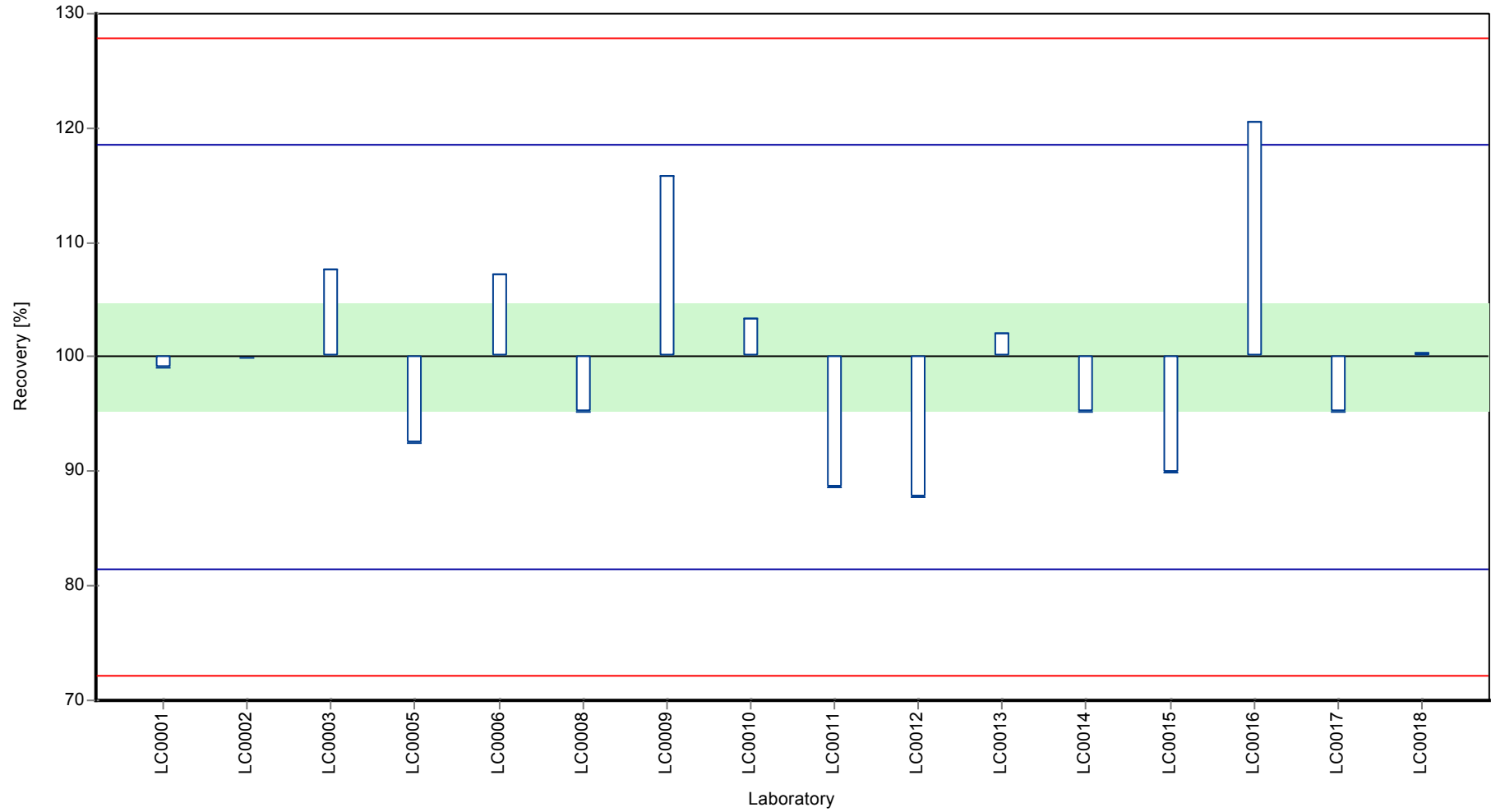
	all results	without outliers	Unit
Mean ± CI (99%)	2.32 ± 0.162	2.32 ± 0.162	µg/l
Minimum	2.04	2.04	µg/l
Maximum	2.8	2.8	µg/l
Standard deviation	0.216	0.216	µg/l
rel. Standard deviation	9.31	9.31	%
n	16	16	-

Graphical presentation of results

Results



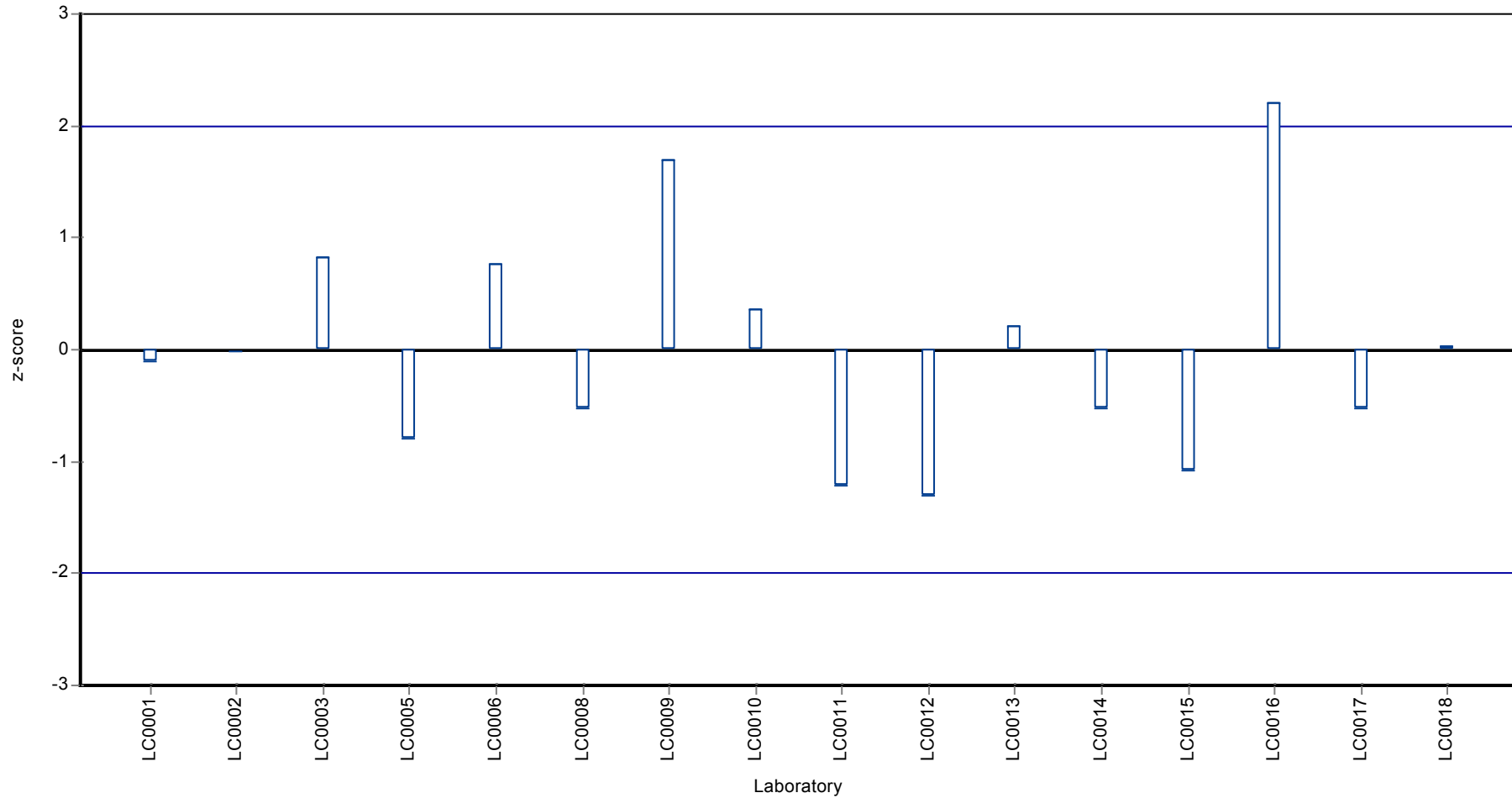
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Dibromochloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Dichloromethane

Parameter oriented report

C59 A

Dichloromethane

Unit	µg/l
Mean ± CI (99%)	7.05 ± 0.402
Minimum - Maximum	6.09 - 8
Control test value ± U	6.97 ± 1.39

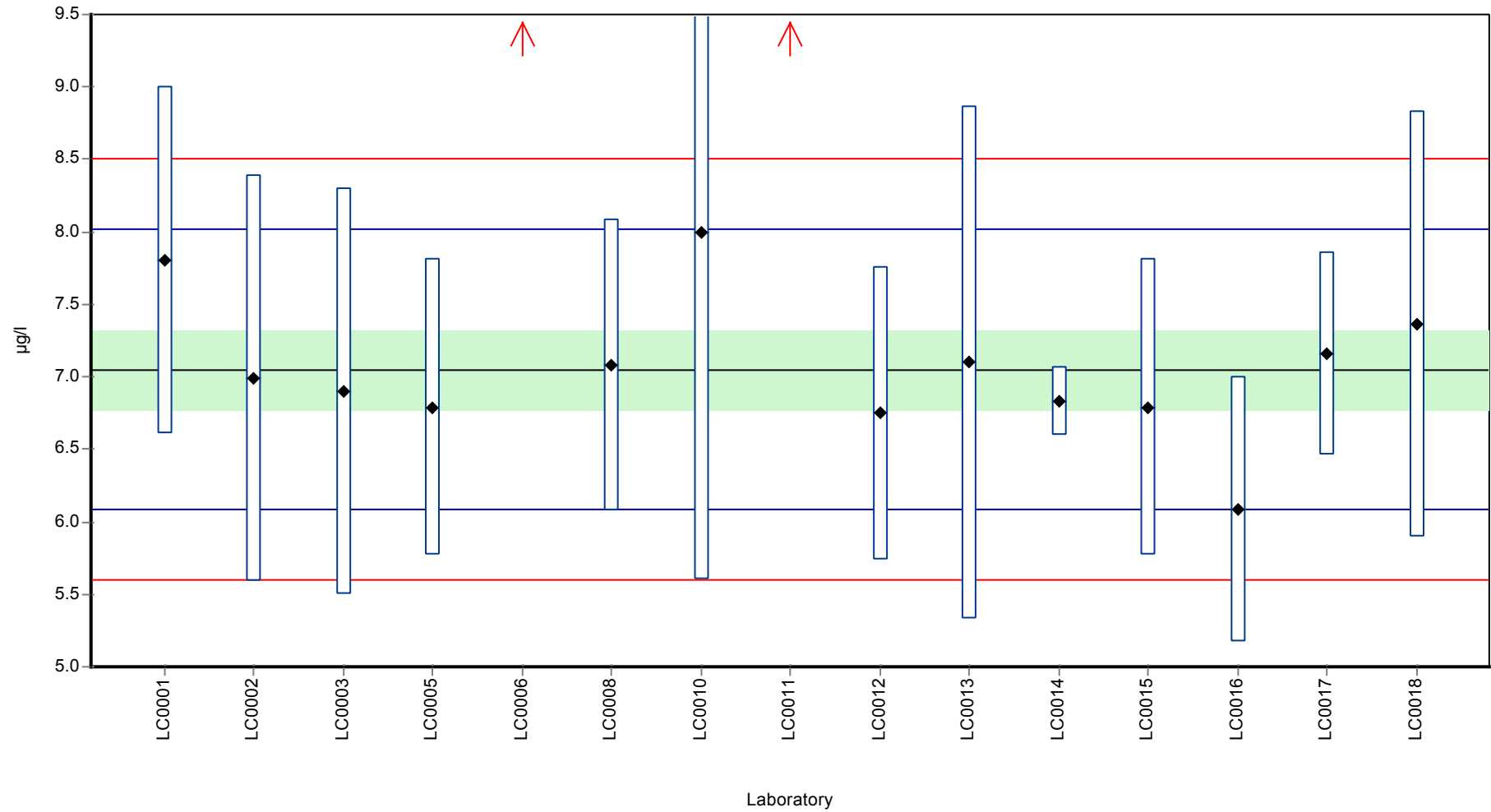
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	7.8	1.2	111	1.55	
LC0002	6.99	1.4	99.2	-0.12	
LC0003	6.9	1.4	97.9	-0.31	
LC0004	-	-	-	-	
LC0005	6.79	1.02	96.3	-0.54	
LC0006	14.66	1.23	208	15.7	H
LC0007	-	-	-	-	
LC0008	7.08	1.01	100	0.06	
LC0009	-	-	-	-	
LC0010	8	2.4	113	1.97	
LC0011	9.74	1.95	138	5.57	H
LC0012	6.75	1.01	95.8	-0.62	
LC0013	7.1	1.77	101	0.11	
LC0014	6.83	0.235	96.9	-0.45	
LC0015	6.79	1.02	96.3	-0.54	
LC0016	6.086	0.913	86.3	-1.99	
LC0017	7.16	0.7	102	0.23	
LC0018	7.36	1.47	104	0.64	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	7.74 ± 1.62	7.05 ± 0.402	µg/l
Minimum	6.09	6.09	µg/l
Maximum	14.7	8	µg/l
Standard deviation	2.09	0.484	µg/l
rel. Standard deviation	27	6.86	%
n	15	13	-

Graphical presentation of results

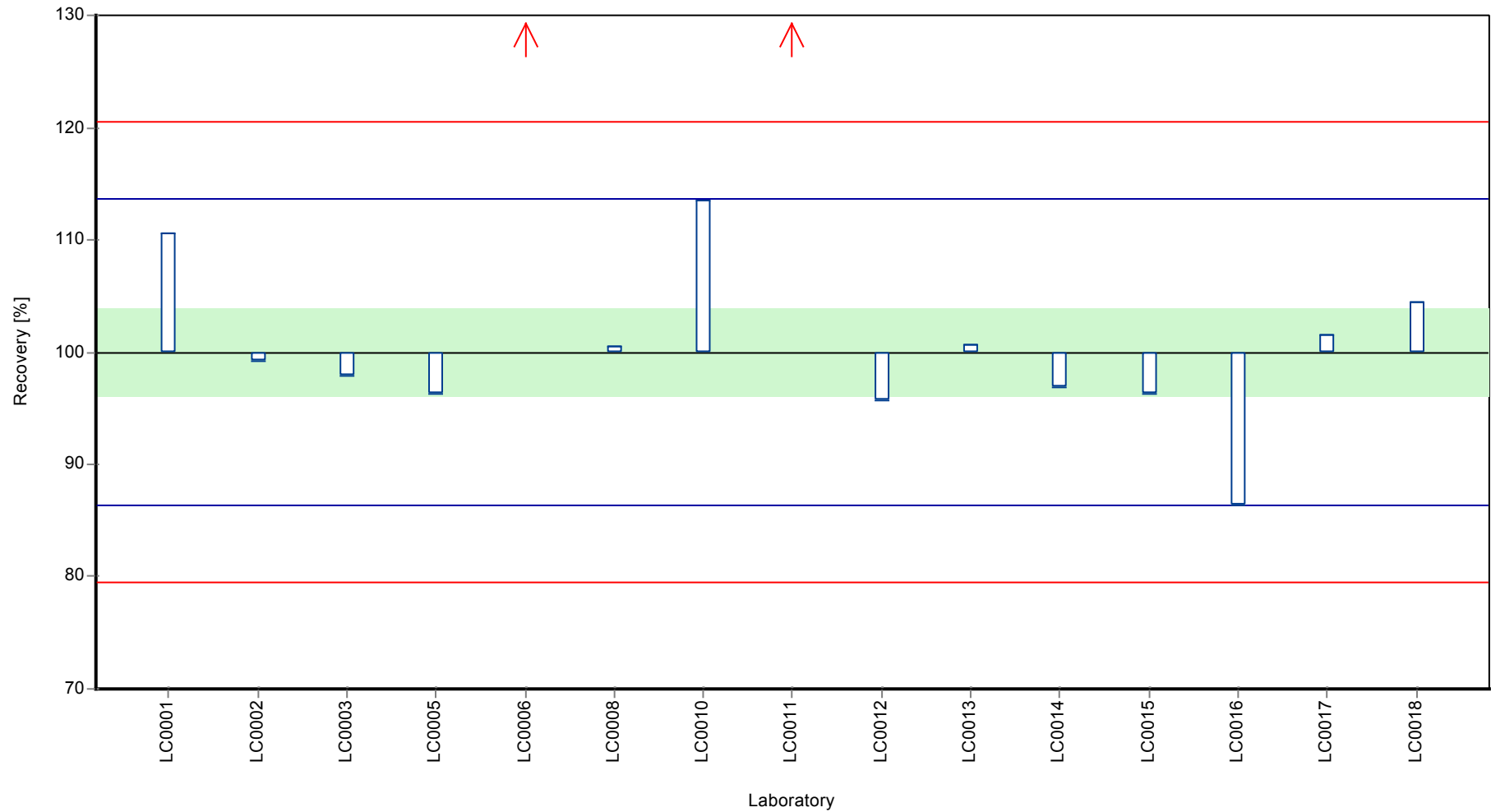
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Dichloromethane

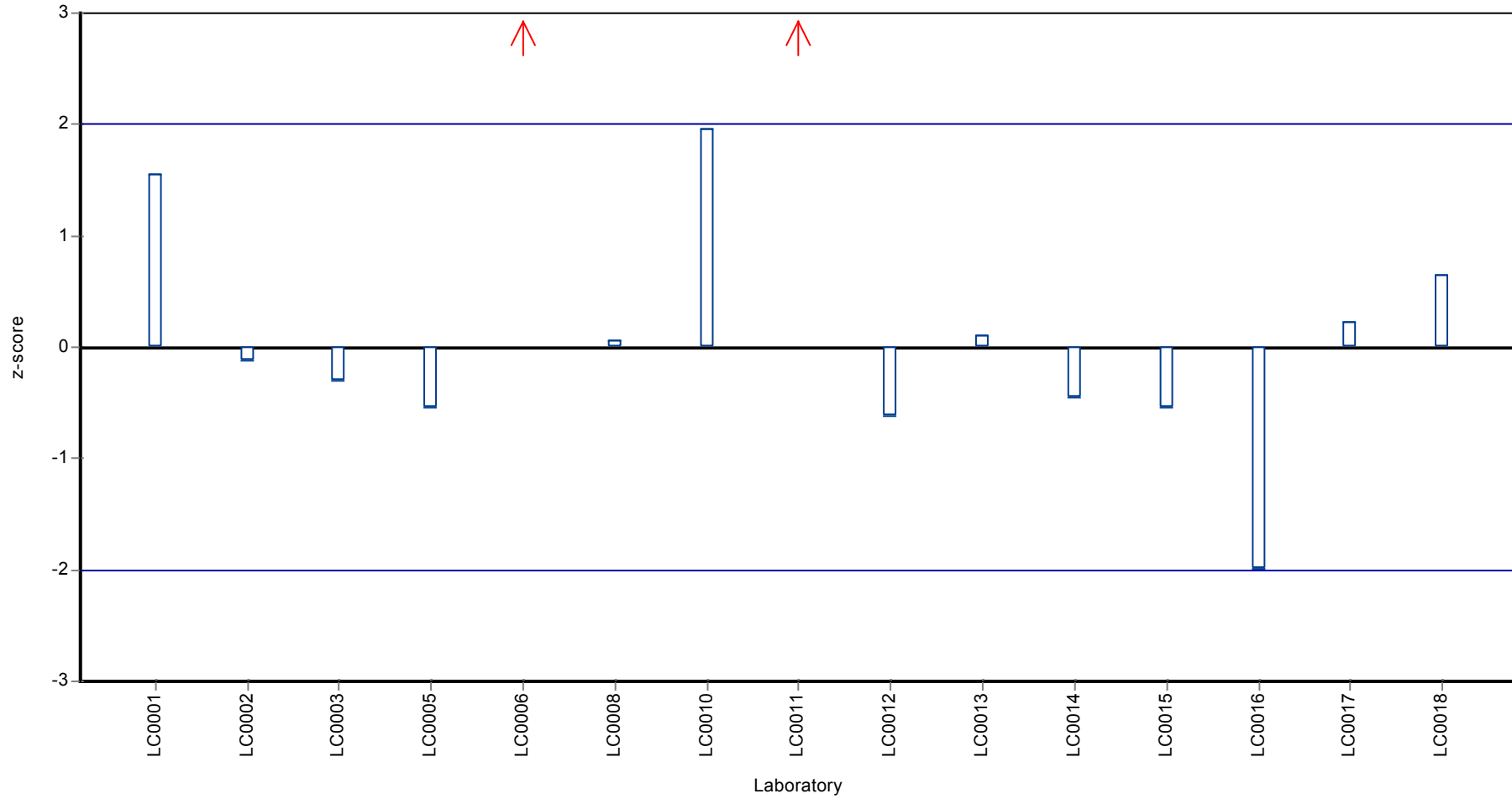
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Dichloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Dichloromethane

Parameter oriented report

C59 B

Dichloromethane

Unit	µg/l
Mean ± CI (99%)	2.86 ± 0.154
Minimum - Maximum	2.57 - 3.22
Control test value ± U	2.65 ± 0.531

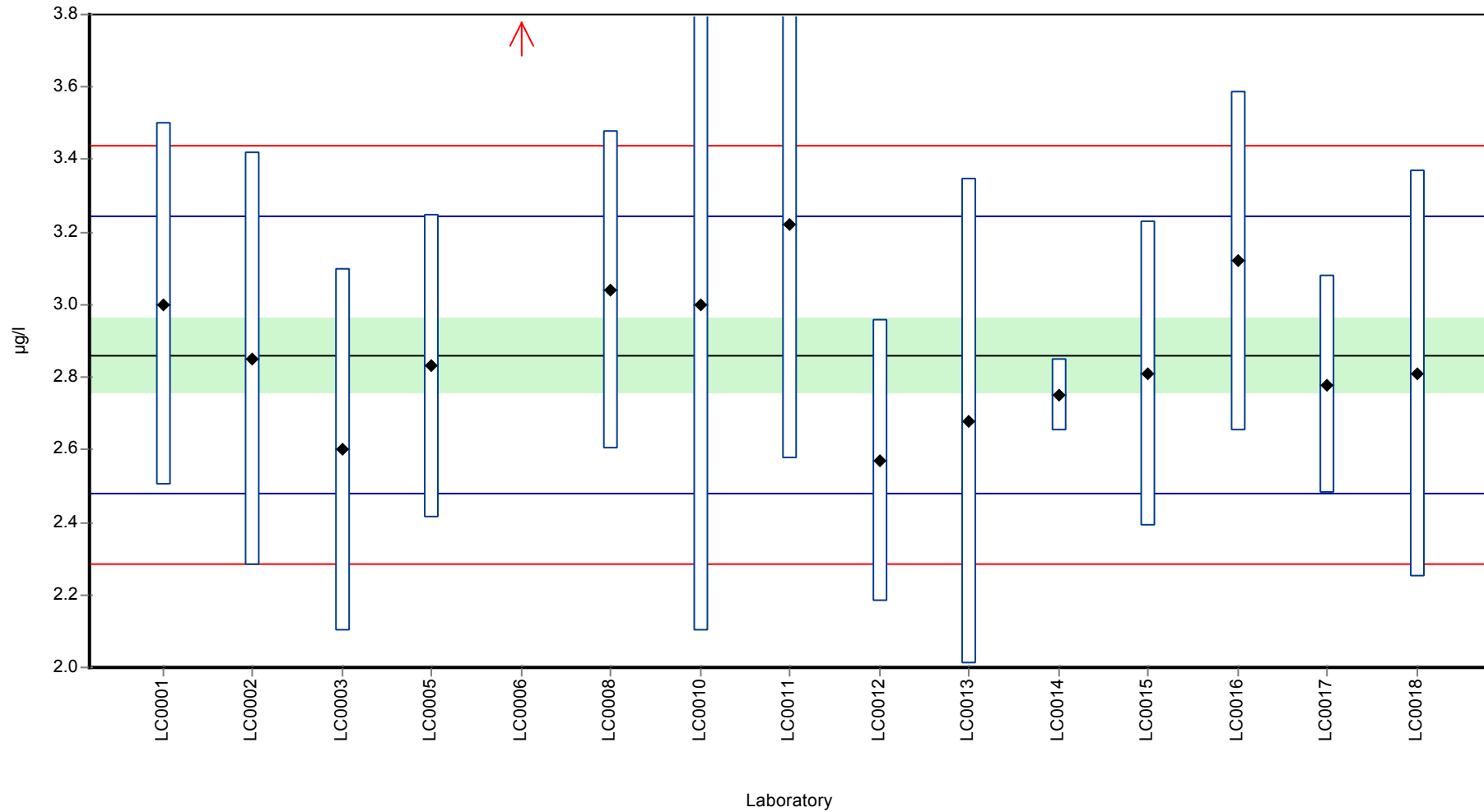
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3	0.5	105	0.72	
LC0002	2.85	0.57	99.6	-0.06	
LC0003	2.6	0.5	90.9	-1.36	
LC0004	-	-	-	-	
LC0005	2.83	0.42	98.9	-0.16	
LC0006	11.6	1.06	405	45.6	H
LC0007	-	-	-	-	
LC0008	3.04	0.44	106	0.93	
LC0009	-	-	-	-	
LC0010	3	0.9	105	0.72	
LC0011	3.22	0.644	113	1.87	
LC0012	2.57	0.39	89.8	-1.52	
LC0013	2.68	0.67	93.7	-0.95	
LC0014	2.75	0.098	96.1	-0.58	
LC0015	2.81	0.42	98.2	-0.27	
LC0016	3.12	0.468	109	1.35	
LC0017	2.78	0.3	97.2	-0.42	
LC0018	2.81	0.56	98.2	-0.27	

Characteristics of parameter

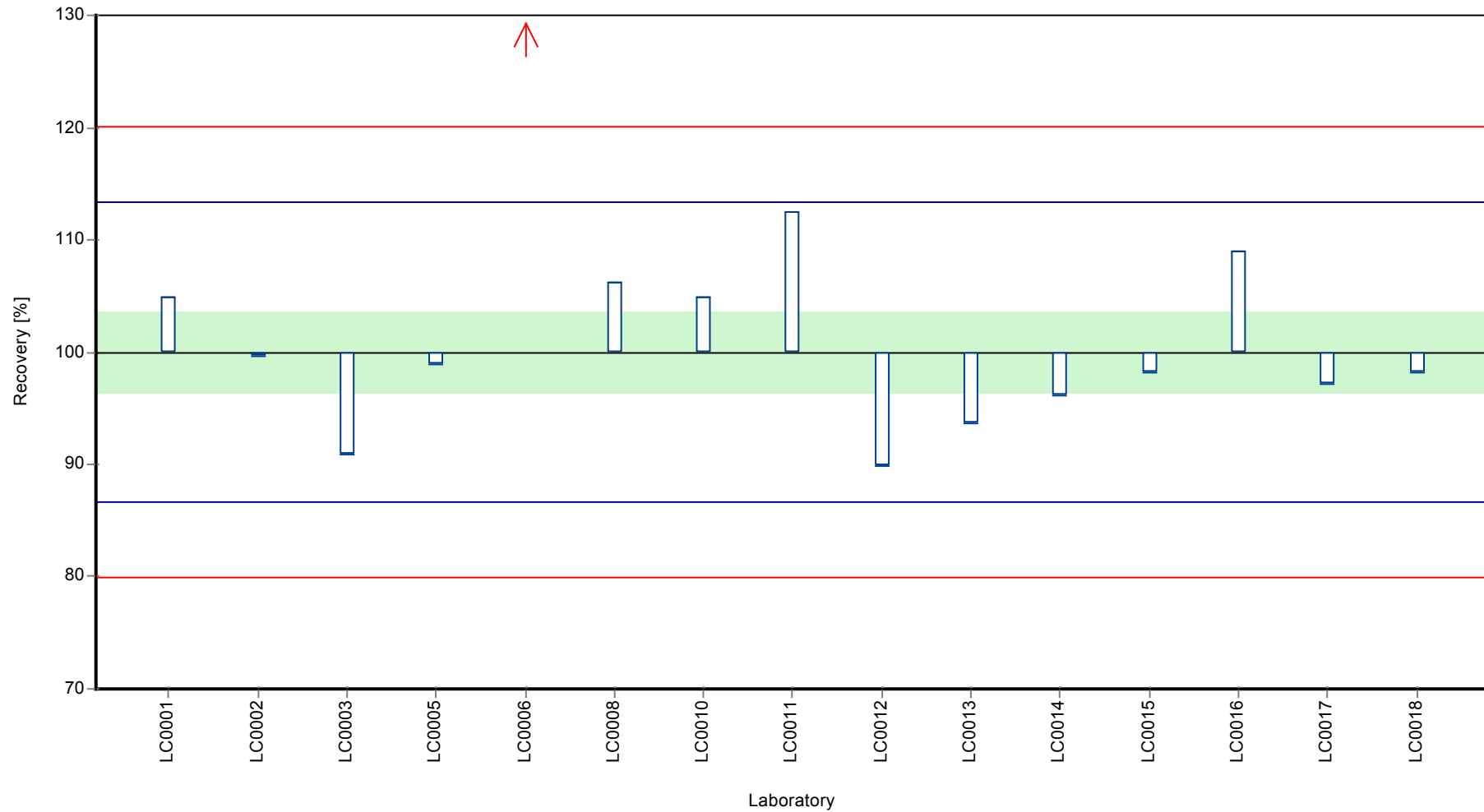
	all results	without outliers	Unit
Mean ± CI (99%)	3.44 ± 1.75	2.86 ± 0.154	µg/l
Minimum	2.57	2.57	µg/l
Maximum	11.6	3.22	µg/l
Standard deviation	2.26	0.192	µg/l
rel. Standard deviation	65.7	6.7	%
n	15	14	-

Graphical presentation of results

Results



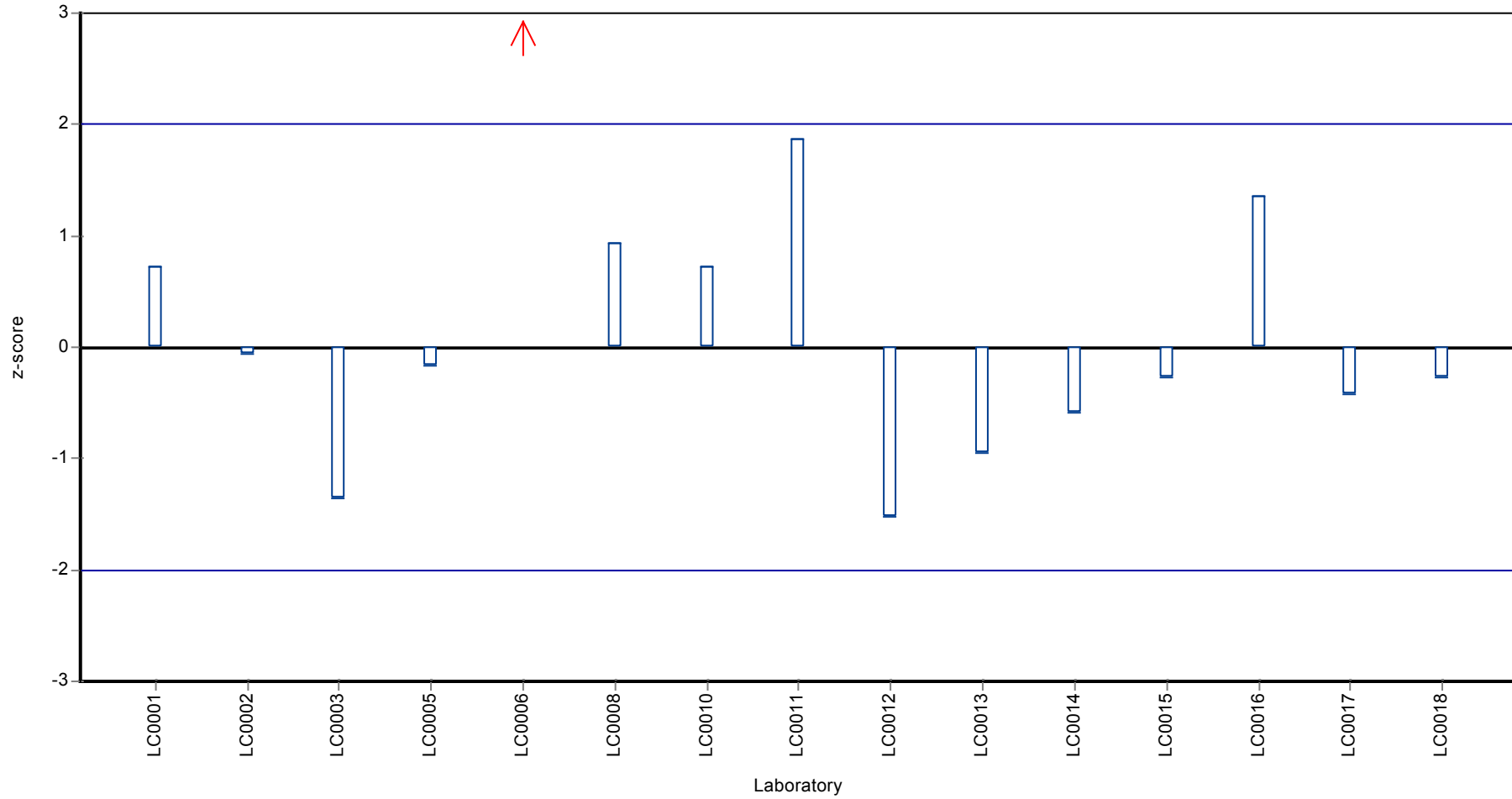
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Dichloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tetrachloroethene

Parameter oriented report

C59 A

Tetrachloroethene

Unit	µg/l
Mean ± CI (99%)	2.81 ± 0.289
Minimum - Maximum	2.26 - 3.78
Control test value ± U	2.45 ± 0.489

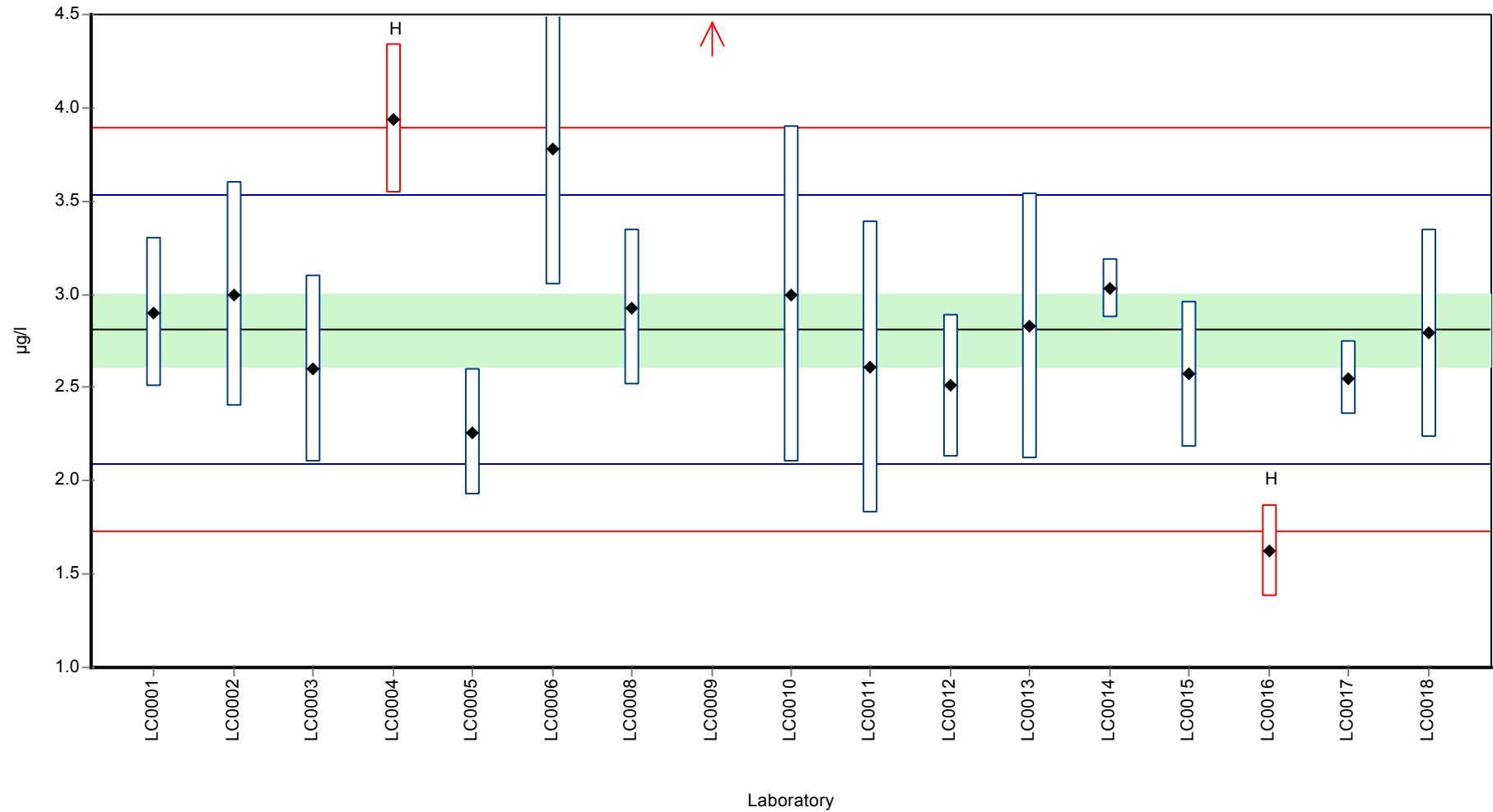
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.9	0.4	103	0.25	
LC0002	3	0.6	107	0.52	
LC0003	2.6	0.5	92.5	-0.59	
LC0004	3.94	0.4	140	3.13	H
LC0005	2.26	0.34	80.4	-1.53	
LC0006	3.78	0.73	134	2.69	
LC0007	-	-	-	-	
LC0008	2.93	0.42	104	0.33	
LC0009	6.48	0.78	230	10.2	H
LC0010	3	0.9	107	0.52	
LC0011	2.61	0.783	92.8	-0.56	
LC0012	2.51	0.38	89.3	-0.84	
LC0013	2.83	0.71	101	0.05	
LC0014	3.03	0.157	108	0.61	
LC0015	2.57	0.39	91.4	-0.67	
LC0016	1.626	0.244	57.8	-3.29	H
LC0017	2.55	0.2	90.7	-0.73	
LC0018	2.79	0.56	99.2	-0.06	

Characteristics of parameter

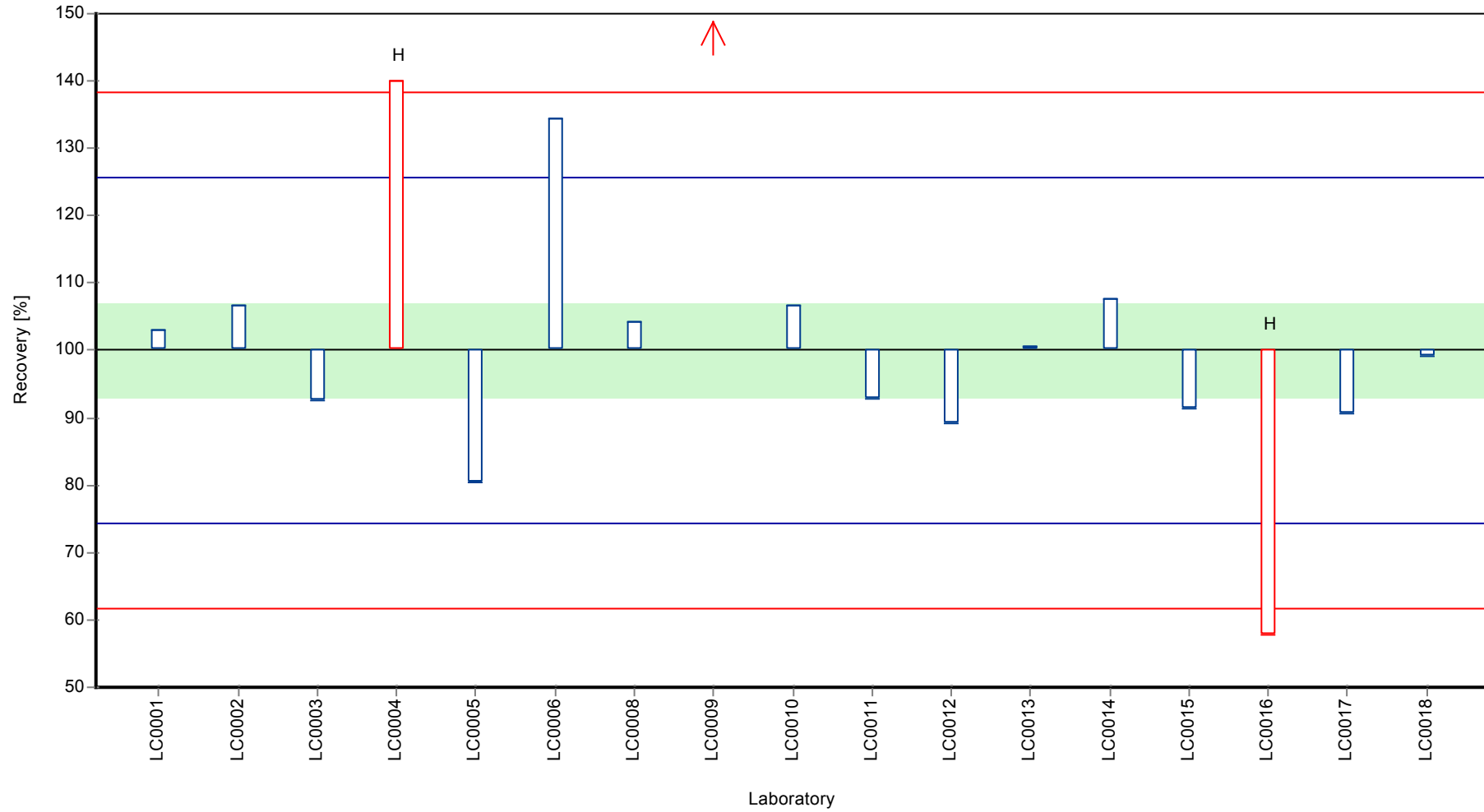
	all results	without outliers	Unit
Mean ± CI (99%)	3.02 ± 0.751	2.81 ± 0.289	µg/l
Minimum	1.63	2.26	µg/l
Maximum	6.48	3.78	µg/l
Standard deviation	1.03	0.36	µg/l
rel. Standard deviation	34.1	12.8	%
n	17	14	-

Graphical presentation of results

Results



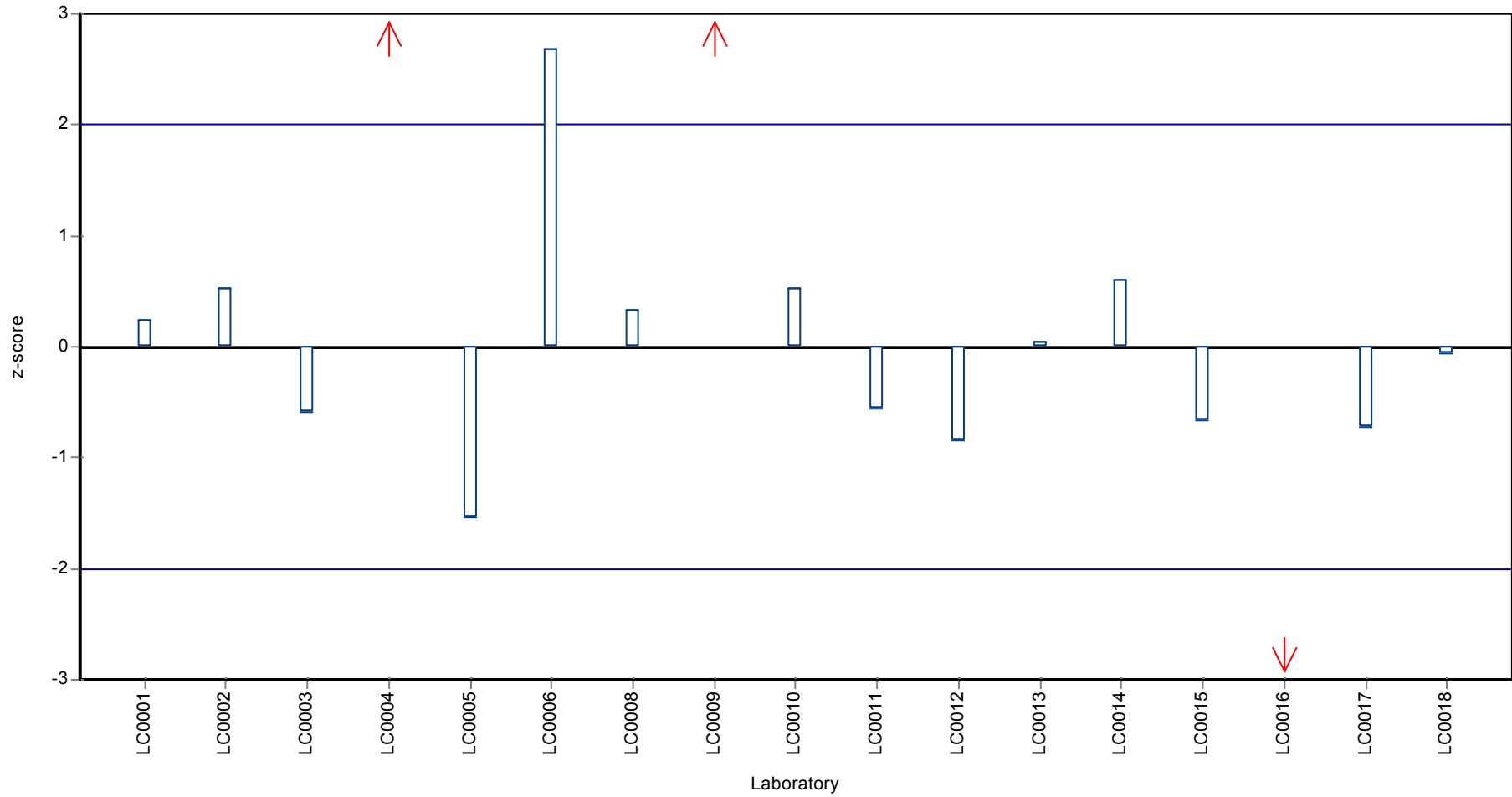
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tetrachloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Tetrachloroethene

Parameter oriented report

C59 B

Tetrachloroethene

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.1 - 0.1
Control test value ± U	< 0.1 (LOQ)

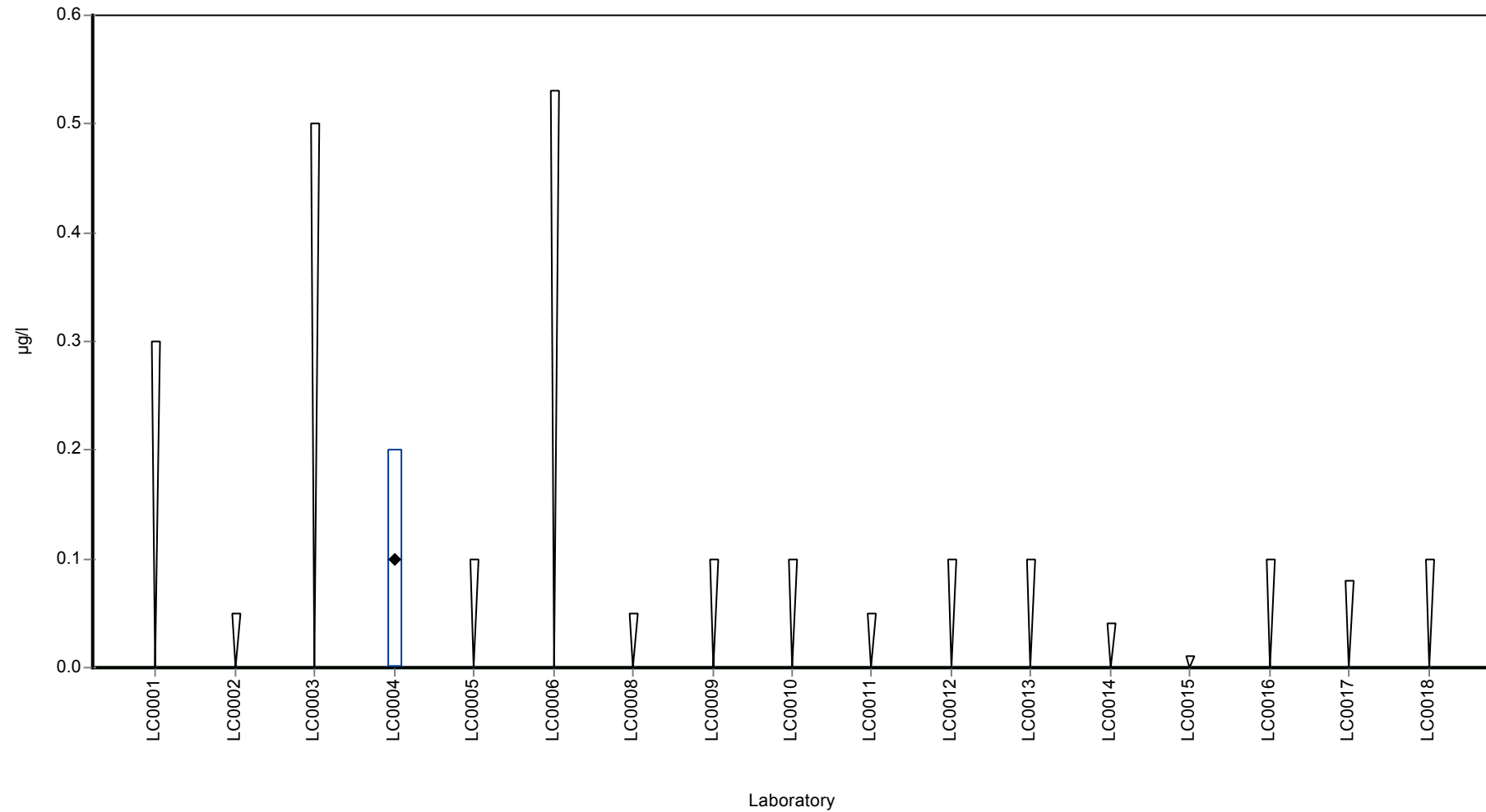
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.3 (LOQ)	-	-	-	
LC0002	< 0.05 (LOQ)	-	-	-	
LC0003	< 0.5 (LOQ)	-	-	-	
LC0004	0.1	0.1	-	-	
LC0005	< 0.1 (LOQ)	-	-	-	
LC0006	< 0.53 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	< 0.05 (LOQ)	-	-	-	
LC0009	<0.1 (LOD)	-	-	-	
LC0010	< 0.1 (LOQ)	-	-	-	
LC0011	< 0.05 (LOQ)	-	-	-	
LC0012	< 0.1 (LOQ)	-	-	-	
LC0013	< 0.1 (LOQ)	-	-	-	
LC0014	< 0.04 (LOQ)	-	-	-	
LC0015	< 0.01 (LOQ)	-	-	-	
LC0016	< 0.1 (LOQ)	-	-	-	
LC0017	< 0.08 (LOQ)	-	-	-	
LC0018	< 0.1 (LOQ)	-	-	-	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.1	-	µg/l
Minimum	0.1	0.1	µg/l
Maximum	0.1	0.1	µg/l
Standard deviation	-	-	µg/l
rel. Standard deviation	-	-	%
n	1	1	-

Graphical presentation of results

Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tetrachloromethane

Parameter oriented report

C59 A

Tetrachloromethane

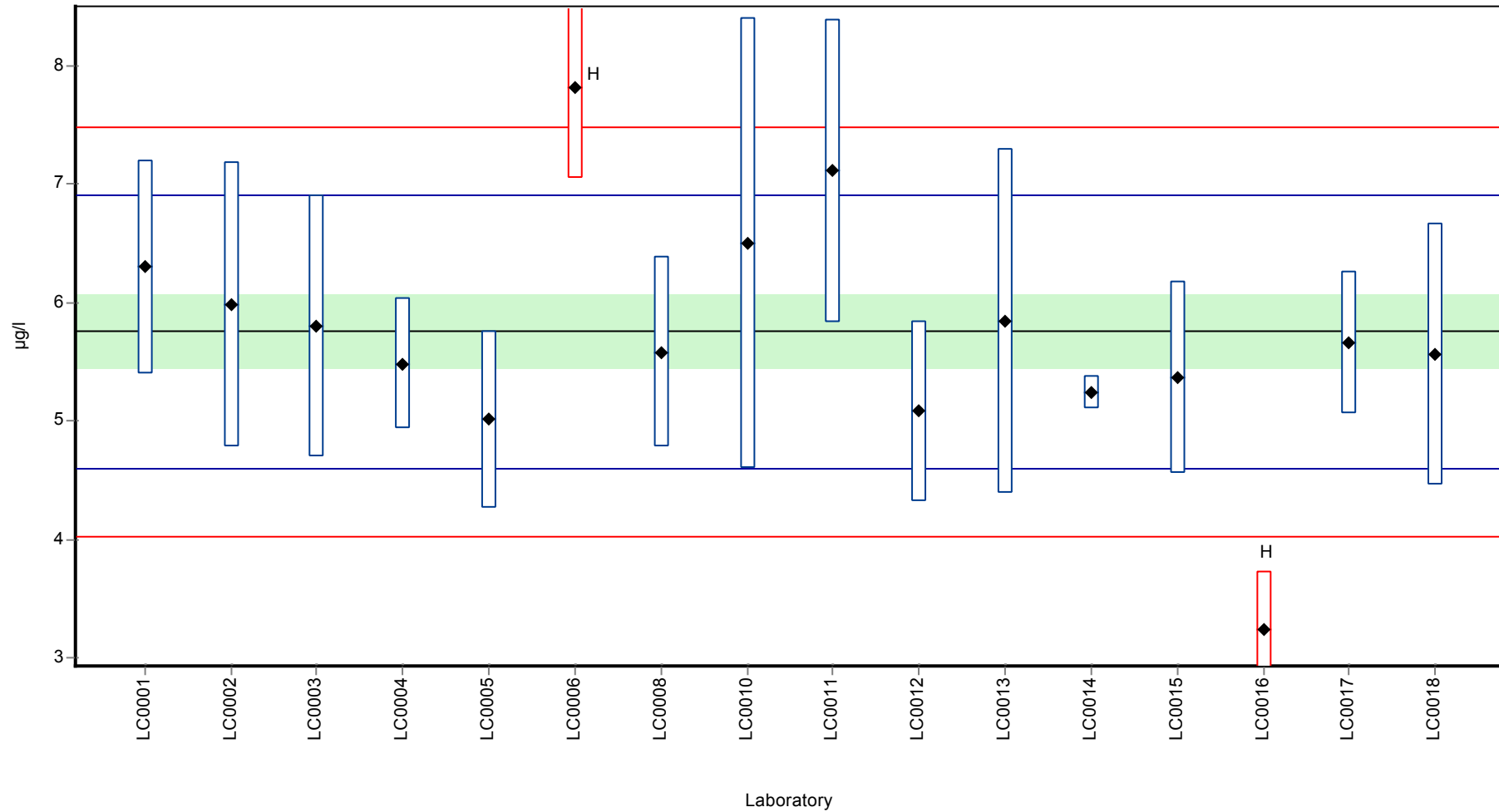
Unit	µg/l
Mean ± CI (99%)	5.75 ± 0.462
Minimum - Maximum	5.01 - 7.11
Control test value ± U	4.51 ± 1.35

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.3	0.9	110	0.95	
LC0002	5.98	1.2	104	0.4	
LC0003	5.8	1.1	101	0.09	
LC0004	5.48	0.55	95.3	-0.47	
LC0005	5.01	0.75	87.1	-1.28	
LC0006	7.82	0.78	136	3.59	H
LC0007	-	-	-	-	
LC0008	5.58	0.8	97	-0.3	
LC0009	-	-	-	-	
LC0010	6.5	1.9	113	1.3	
LC0011	7.11	1.28	124	2.36	
LC0012	5.08	0.76	88.3	-1.16	
LC0013	5.84	1.46	102	0.15	
LC0014	5.24	0.139	91.1	-0.89	
LC0015	5.37	0.81	93.4	-0.66	
LC0016	3.241	0.486	56.4	-4.35	H
LC0017	5.66	0.6	98.4	-0.16	
LC0018	5.56	1.11	96.7	-0.33	

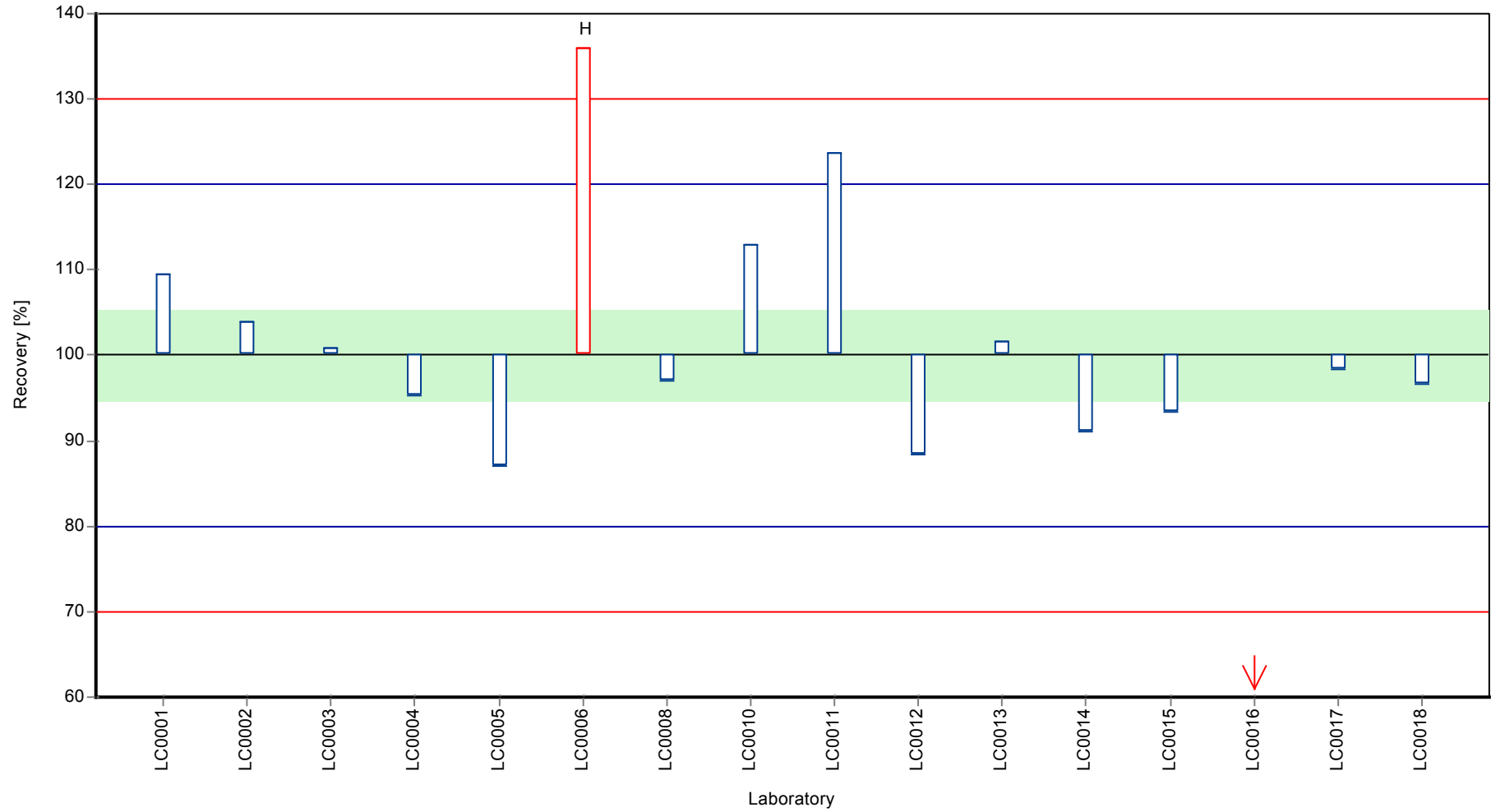
Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	5.72 ± 0.747	5.75 ± 0.462	µg/l
Minimum	3.24	5.01	µg/l
Maximum	7.82	7.11	µg/l
Standard deviation	0.996	0.577	µg/l
rel. Standard deviation	17.4	10	%
n	16	14	-

Graphical presentation of results
Results



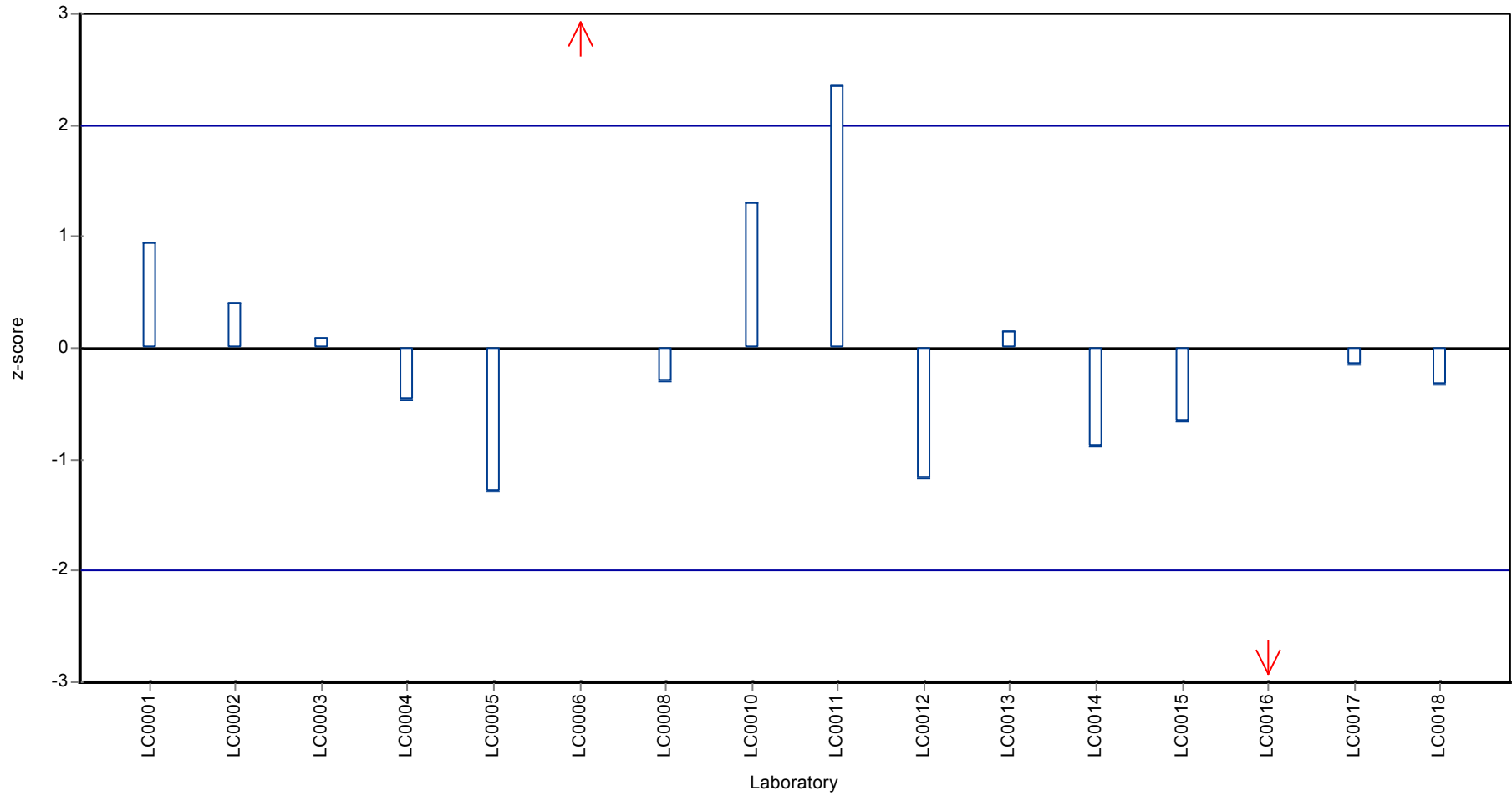
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tetrachloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Tetrachloromethane

Parameter oriented report

C59 B

Tetrachloromethane

Unit	µg/l
Mean ± CI (99%)	1.05 ± 0.108
Minimum - Maximum	0.801 - 1.37
Control test value ± U	1.21 ± 0.241

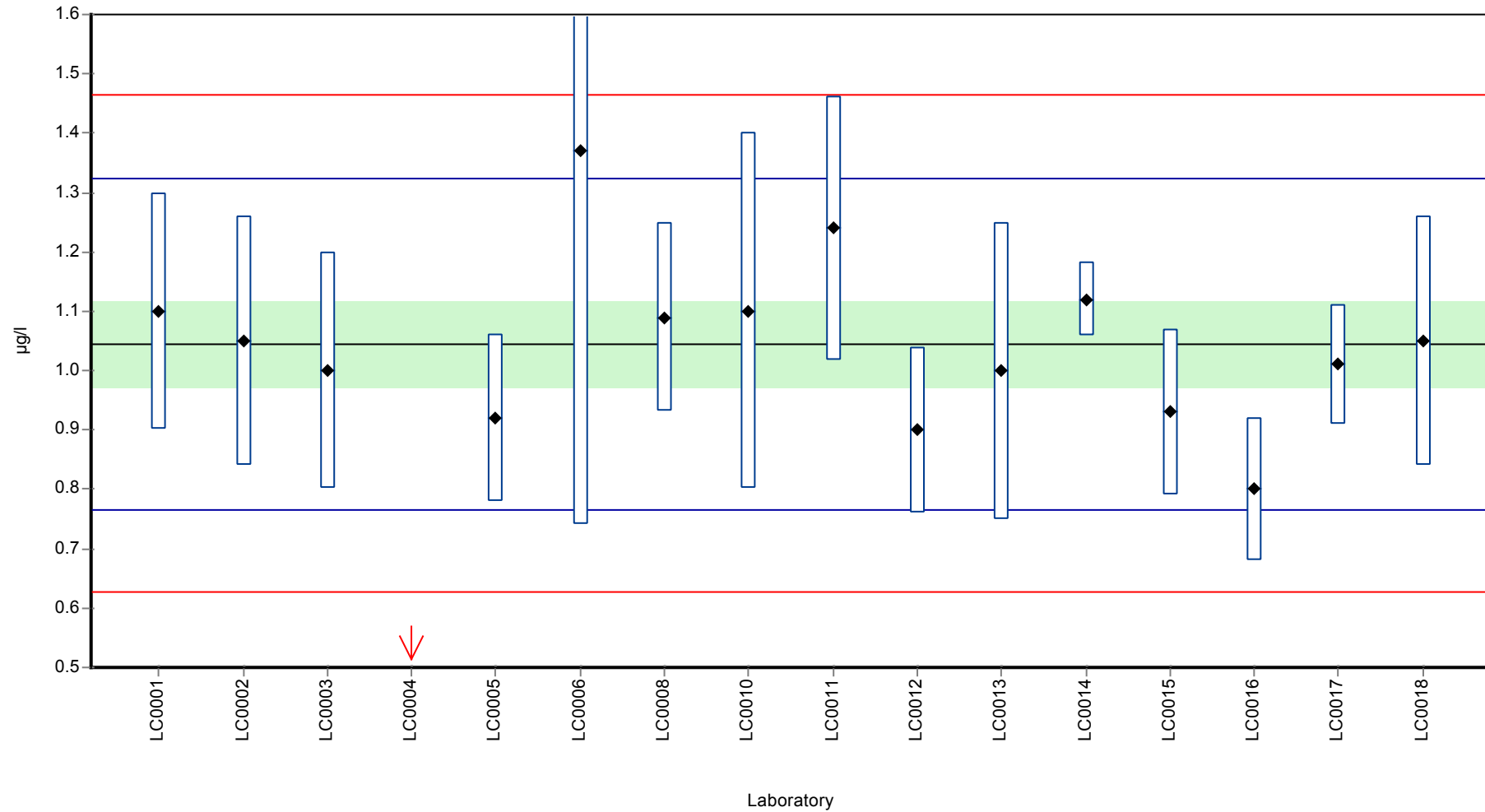
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.1	0.2	105	0.39	
LC0002	1.05	0.21	100	0.03	
LC0003	1	0.2	95.7	-0.33	
LC0004	0.068	0.05	6.5	-7.01	H
LC0005	0.92	0.14	88	-0.9	
LC0006	1.37	0.63	131	2.33	
LC0007	-	-	-	-	
LC0008	1.09	0.16	104	0.32	
LC0009	-	-	-	-	
LC0010	1.1	0.3	105	0.39	
LC0011	1.24	0.223	119	1.4	
LC0012	0.9	0.14	86.1	-1.04	
LC0013	1	0.25	95.7	-0.33	
LC0014	1.12	0.063	107	0.54	
LC0015	0.93	0.14	89	-0.83	
LC0016	0.801	0.12	76.6	-1.75	
LC0017	1.01	0.1	96.6	-0.25	
LC0018	1.05	0.21	100	0.03	

Characteristics of parameter

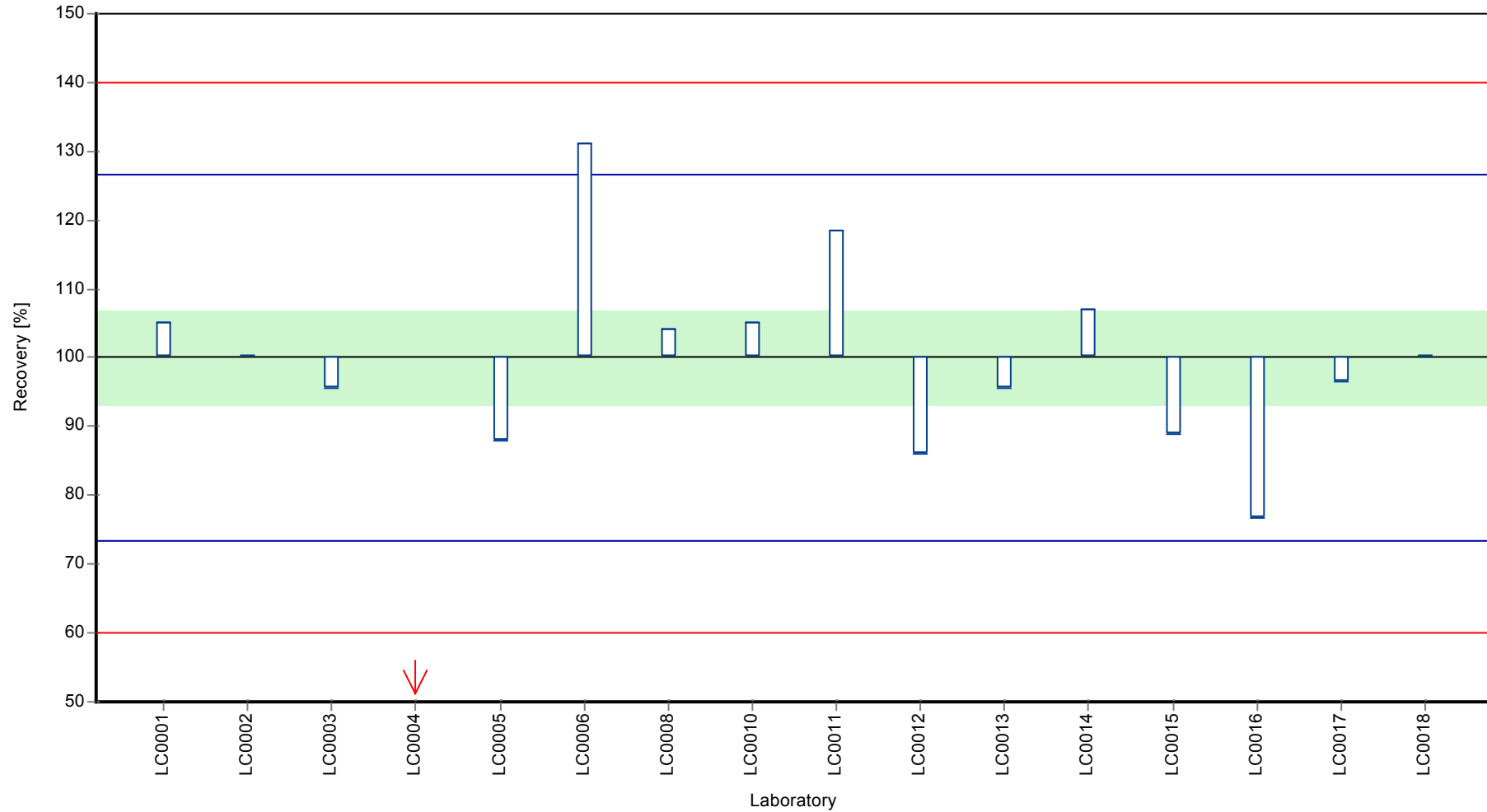
	all results	without outliers	Unit
Mean ± CI (99%)	0.984 ± 0.209	1.05 ± 0.108	µg/l
Minimum	0.068	0.801	µg/l
Maximum	1.37	1.37	µg/l
Standard deviation	0.279	0.139	µg/l
rel. Standard deviation	28.3	13.3	%
n	16	15	-

Graphical presentation of results

Results



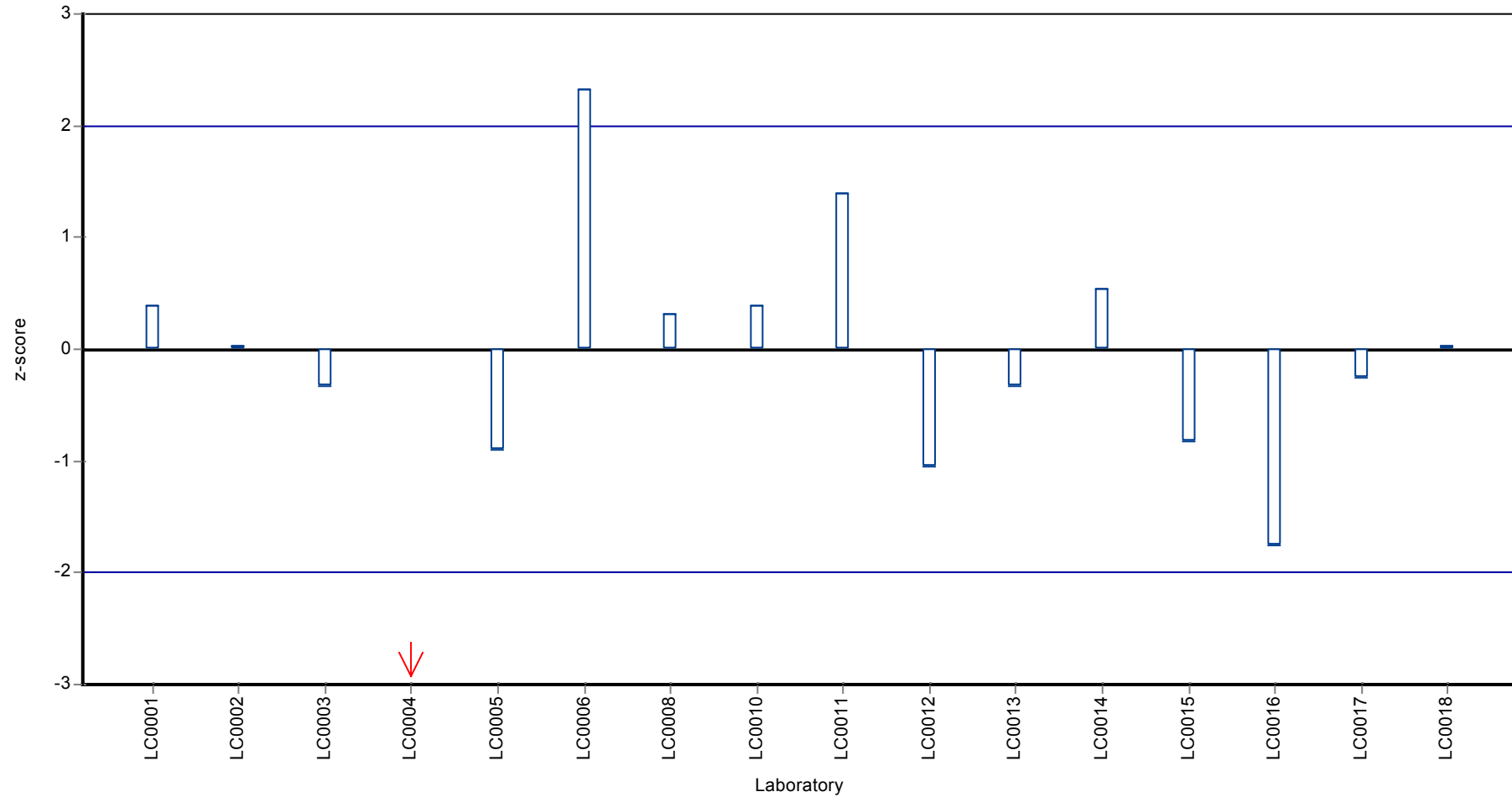
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Tetrachloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: trans-1,2-Dichloroethene

Parameter oriented report

C59 A

trans-1,2-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	4.86 ± 0.553
Minimum - Maximum	3.67 - 6.31
Control test value ± U	4.68 ± 0.936

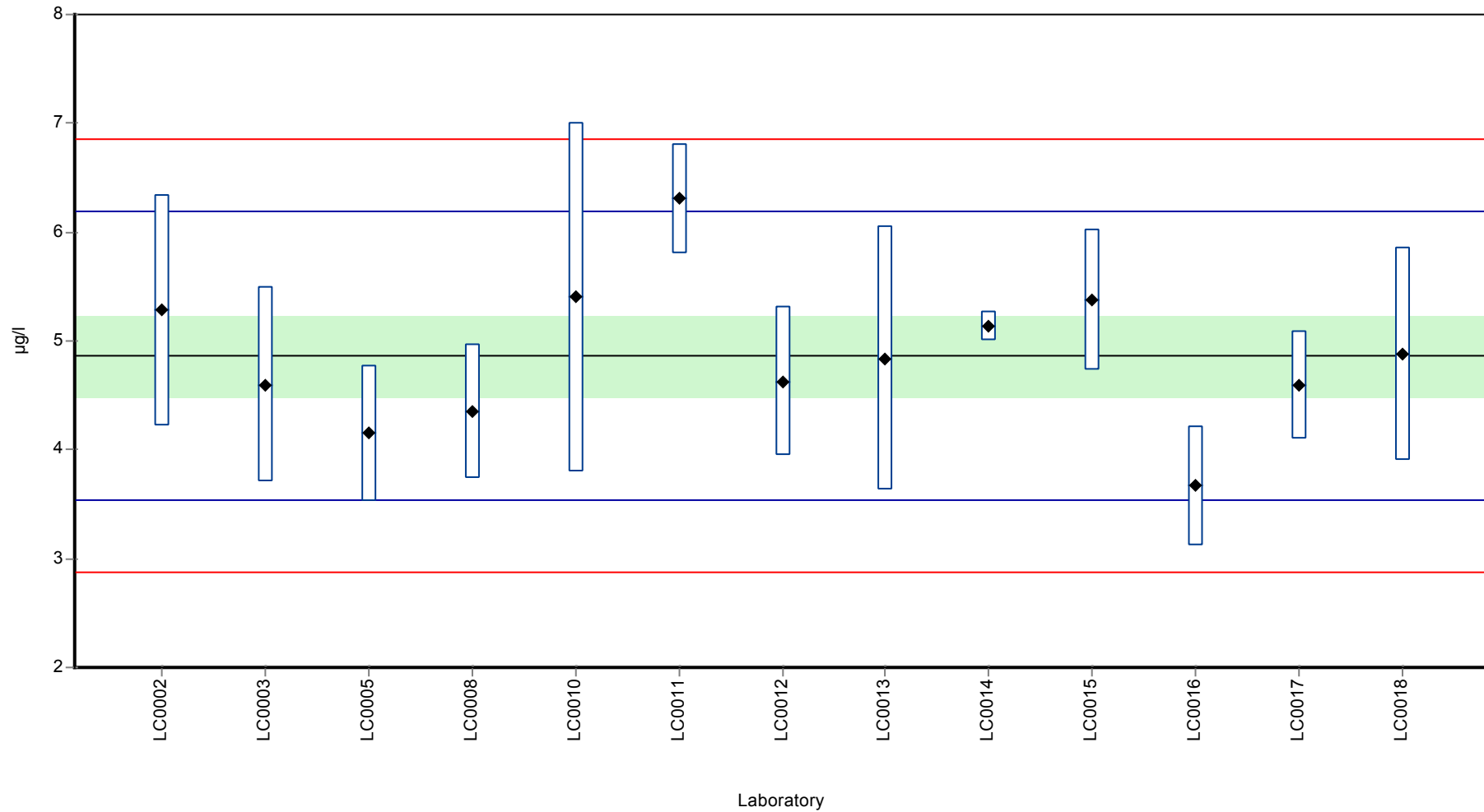
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	5.28	1.06	109	0.63	
LC0003	4.6	0.9	94.6	-0.4	
LC0004	-	-	-	-	
LC0005	4.15	0.62	85.3	-1.07	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	4.35	0.62	89.4	-0.77	
LC0009	-	-	-	-	
LC0010	5.4	1.6	111	0.81	
LC0011	6.31	0.505	130	2.18	
LC0012	4.63	0.69	95.2	-0.35	
LC0013	4.84	1.21	99.5	-0.03	
LC0014	5.14	0.138	106	0.42	
LC0015	5.38	0.65	111	0.78	
LC0016	3.67	0.55	75.5	-1.8	
LC0017	4.59	0.5	94.4	-0.41	
LC0018	4.88	0.98	100	0.03	

Characteristics of parameter

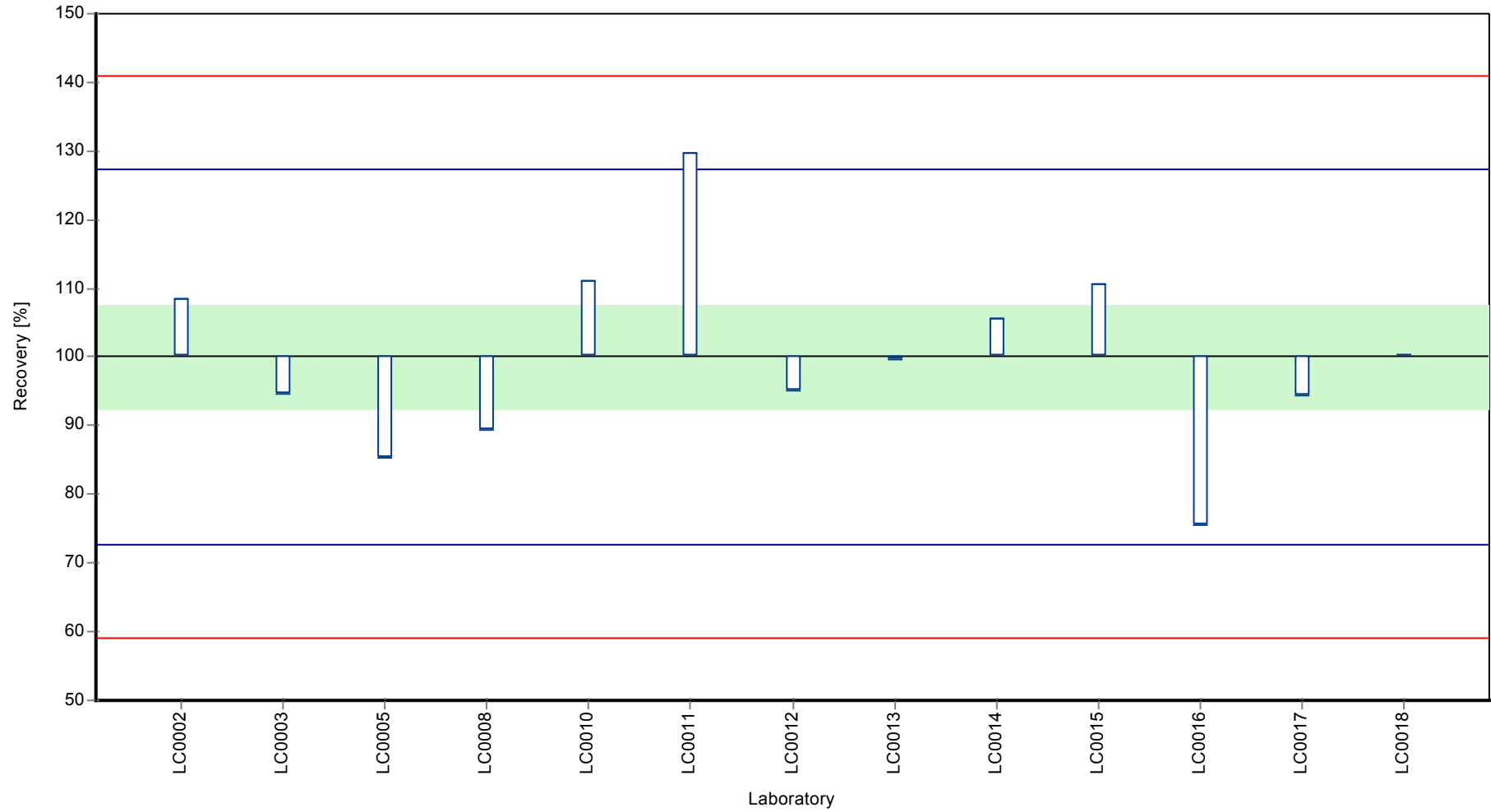
	all results	without outliers	Unit
Mean ± CI (99%)	4.86 ± 0.553	4.86 ± 0.553	µg/l
Minimum	3.67	3.67	µg/l
Maximum	6.31	6.31	µg/l
Standard deviation	0.664	0.664	µg/l
rel. Standard deviation	13.7	13.7	%
n	13	13	-

Graphical presentation of results

Results



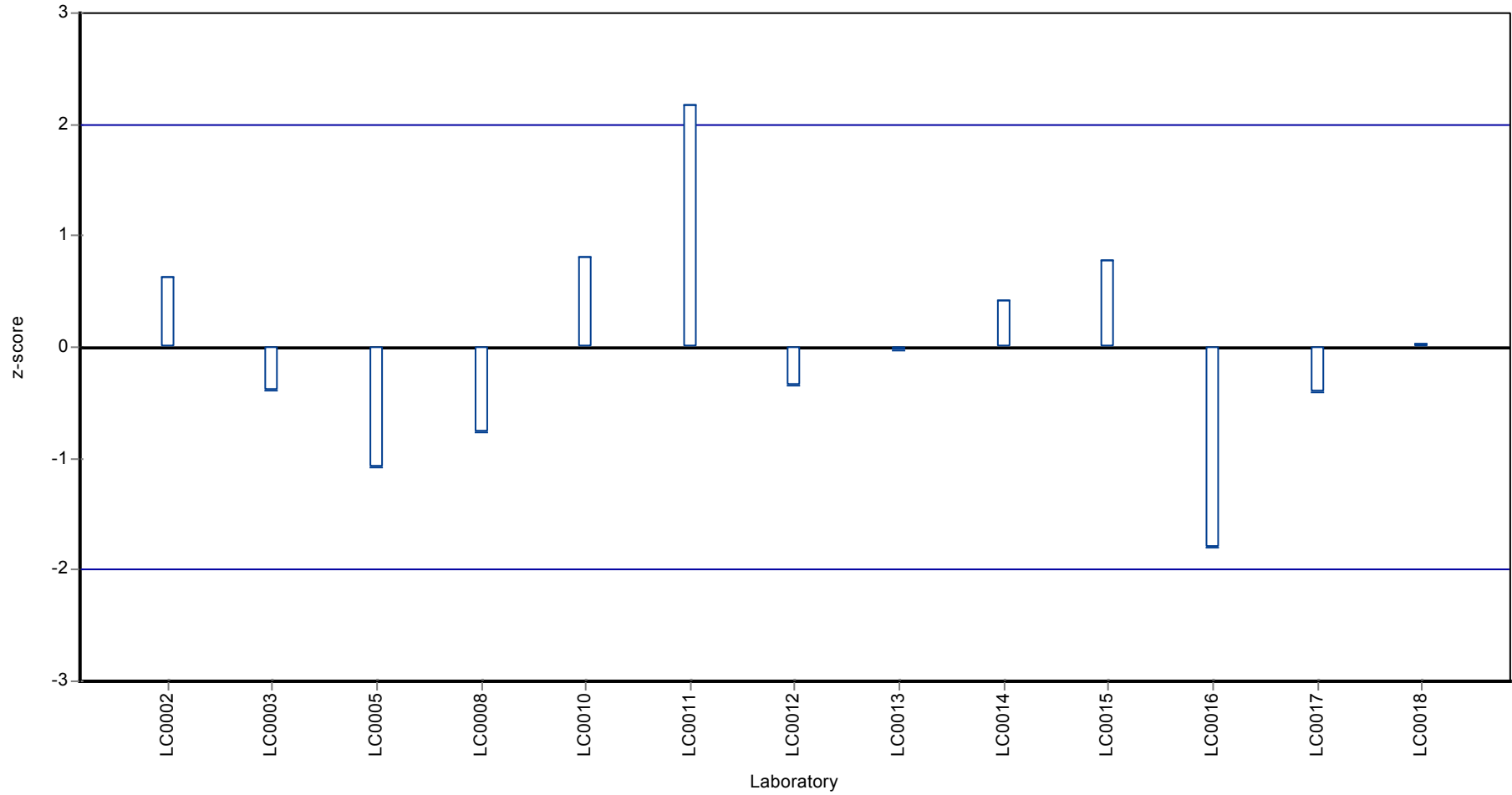
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: trans-1,2-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: trans-1,2-Dichloroethene

Parameter oriented report

C59 B

trans-1,2-Dichloroethene

Unit	µg/l
Mean ± CI (99%)	1.05 ± 0.105
Minimum - Maximum	0.835 - 1.31
Control test value ± U	1.02 ± 0.203

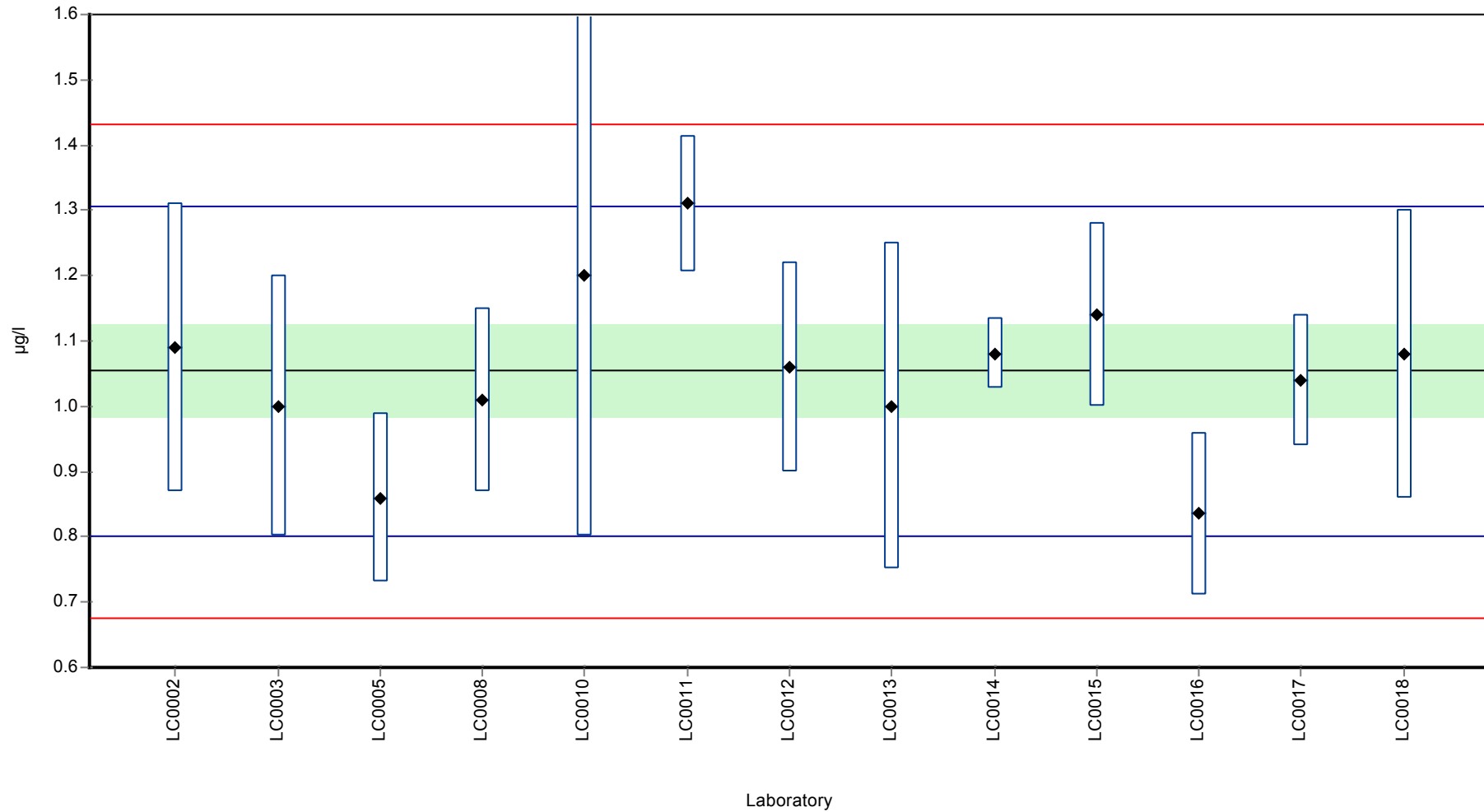
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	1.09	0.22	103	0.28	
LC0003	1	0.2	94.9	-0.43	
LC0004	-	-	-	-	
LC0005	0.86	0.13	81.6	-1.54	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	1.01	0.14	95.8	-0.35	
LC0009	-	-	-	-	
LC0010	1.2	0.4	114	1.16	
LC0011	1.31	0.105	124	2.03	
LC0012	1.06	0.16	101	0.05	
LC0013	1	0.25	94.9	-0.43	
LC0014	1.08	0.054	102	0.2	
LC0015	1.14	0.14	108	0.68	
LC0016	0.835	0.125	79.2	-1.74	
LC0017	1.04	0.1	98.7	-0.11	
LC0018	1.08	0.22	102	0.2	

Characteristics of parameter

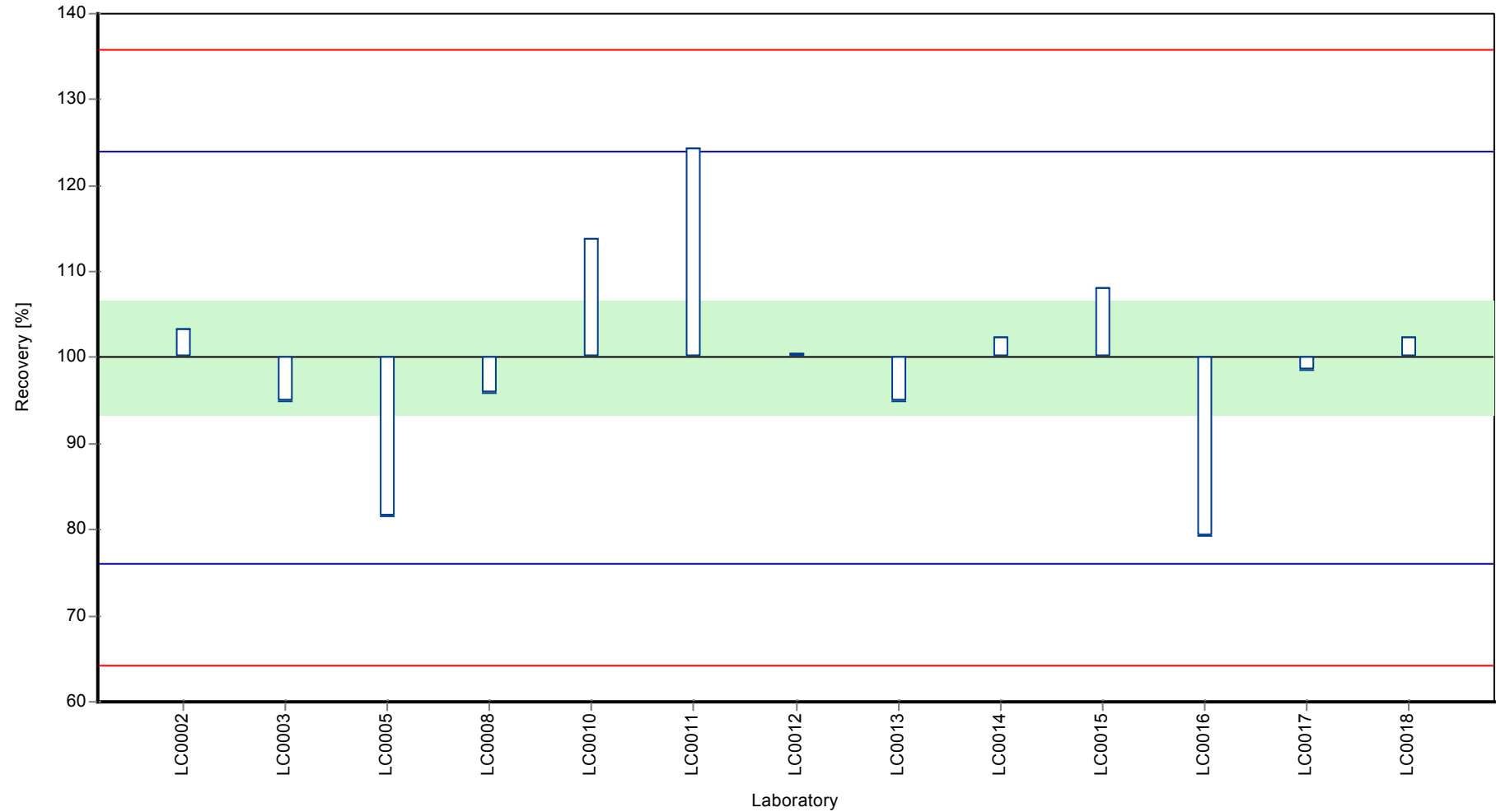
	all results	without outliers	Unit
Mean ± CI (99%)	1.05 ± 0.105	1.05 ± 0.105	µg/l
Minimum	0.835	0.835	µg/l
Maximum	1.31	1.31	µg/l
Standard deviation	0.126	0.126	µg/l
rel. Standard deviation	12	12	%
n	13	13	-

Graphical presentation of results

Results



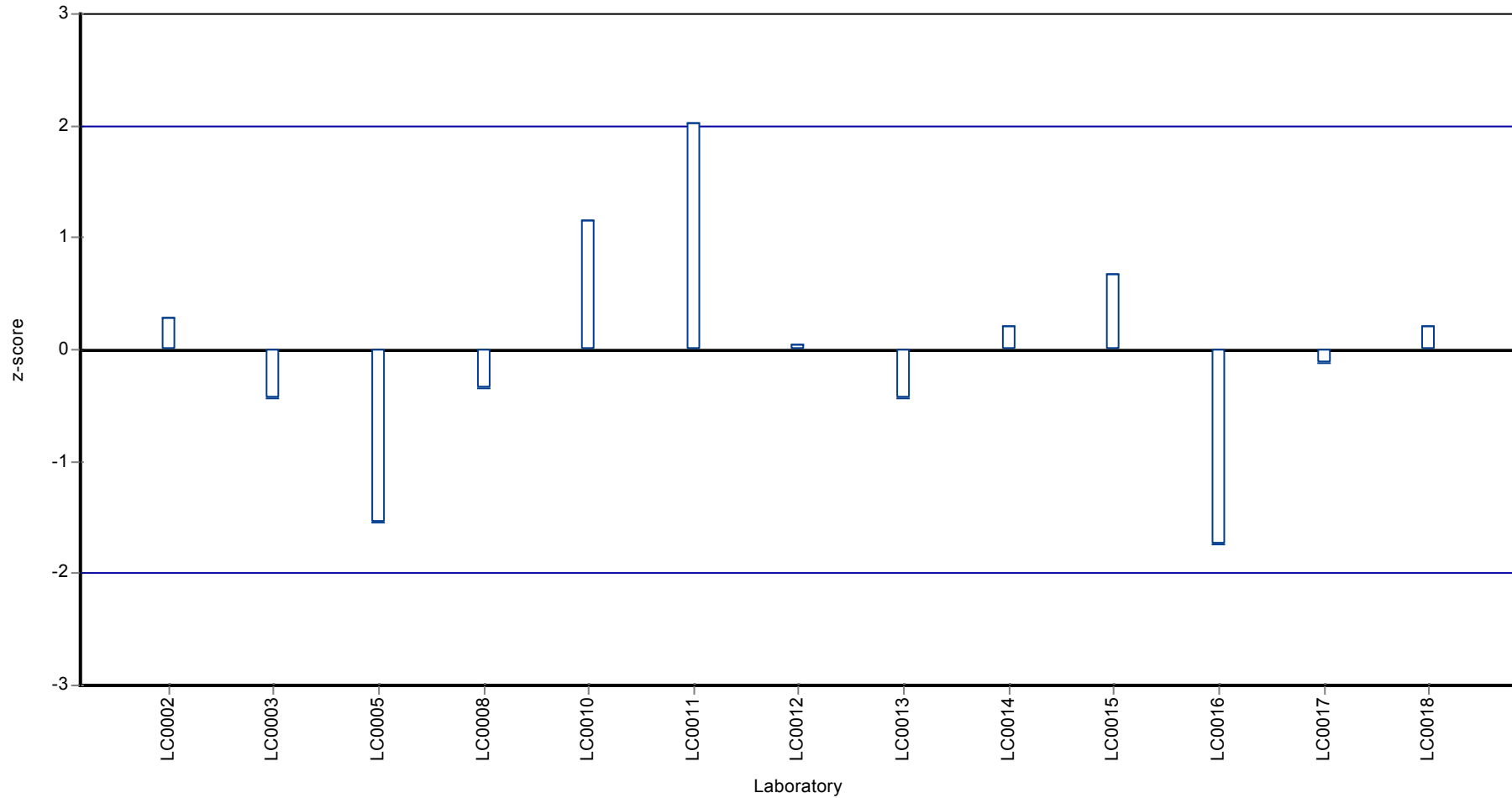
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: trans-1,2-Dichloroethene

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tribromomethane

Parameter oriented report

C59 A

Tribromomethane

Unit	µg/l
Mean ± CI (99%)	8.48 ± 0.837
Minimum - Maximum	6.97 - 11.2
Control test value ± U	7.43 ± 1.49

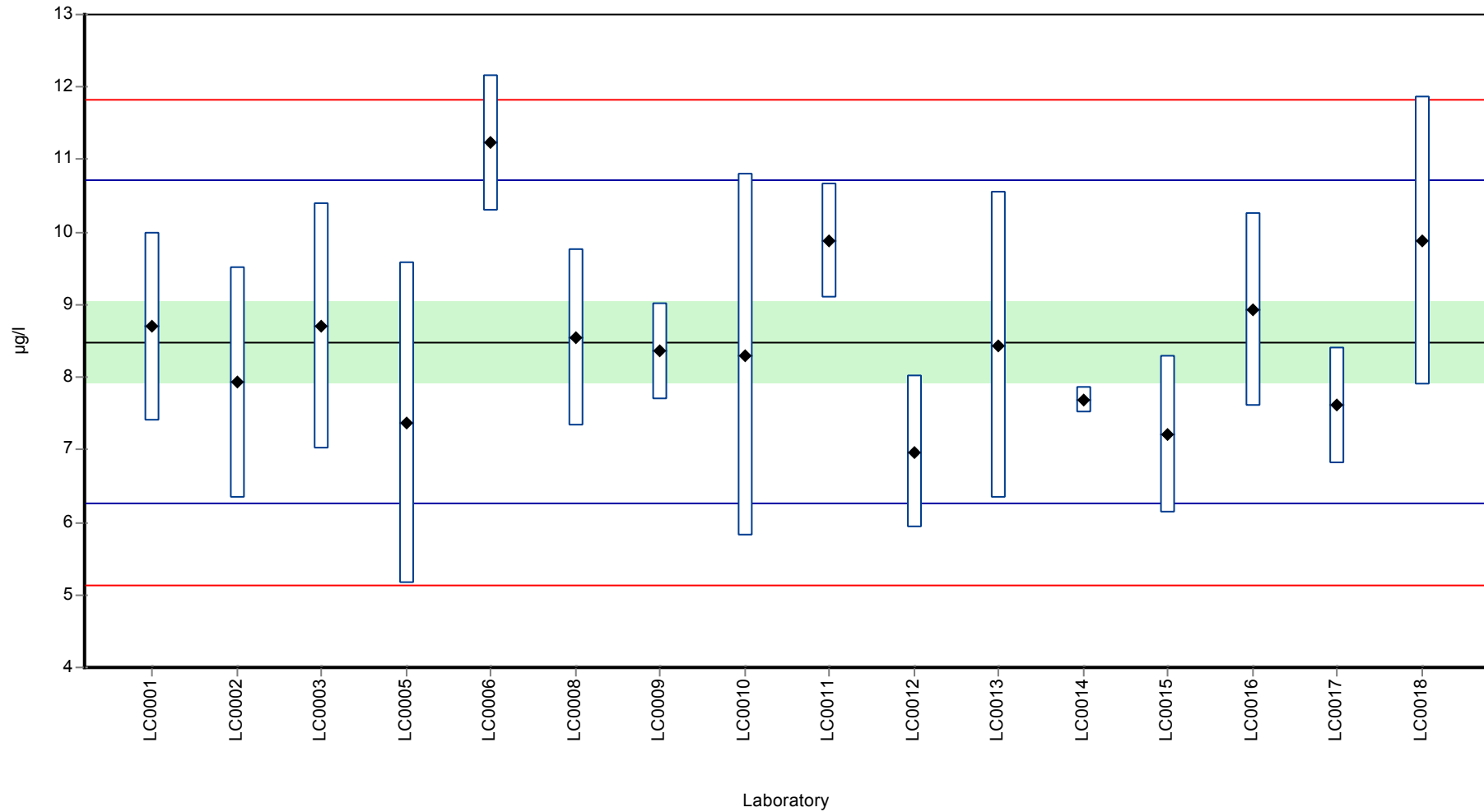
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	8.7	1.3	103	0.19	
LC0002	7.93	1.59	93.5	-0.5	
LC0003	8.7	1.7	103	0.19	
LC0004	-	-	-	-	
LC0005	7.37	2.21	86.9	-1	
LC0006	11.23	0.94	132	2.46	
LC0007	-	-	-	-	
LC0008	8.54	1.22	101	0.05	
LC0009	8.36	0.67	98.5	-0.11	
LC0010	8.3	2.5	97.8	-0.17	
LC0011	9.89	0.791	117	1.26	
LC0012	6.97	1.05	82.2	-1.36	
LC0013	8.44	2.11	99.5	-0.04	
LC0014	7.69	0.184	90.6	-0.71	
LC0015	7.21	1.08	85	-1.14	
LC0016	8.926	1.339	105	0.4	
LC0017	7.61	0.8	89.7	-0.78	
LC0018	9.88	1.98	116	1.25	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	8.48 ± 0.837	8.48 ± 0.837	µg/l
Minimum	6.97	6.97	µg/l
Maximum	11.2	11.2	µg/l
Standard deviation	1.12	1.12	µg/l
rel. Standard deviation	13.1	13.1	%
n	16	16	-

Graphical presentation of results

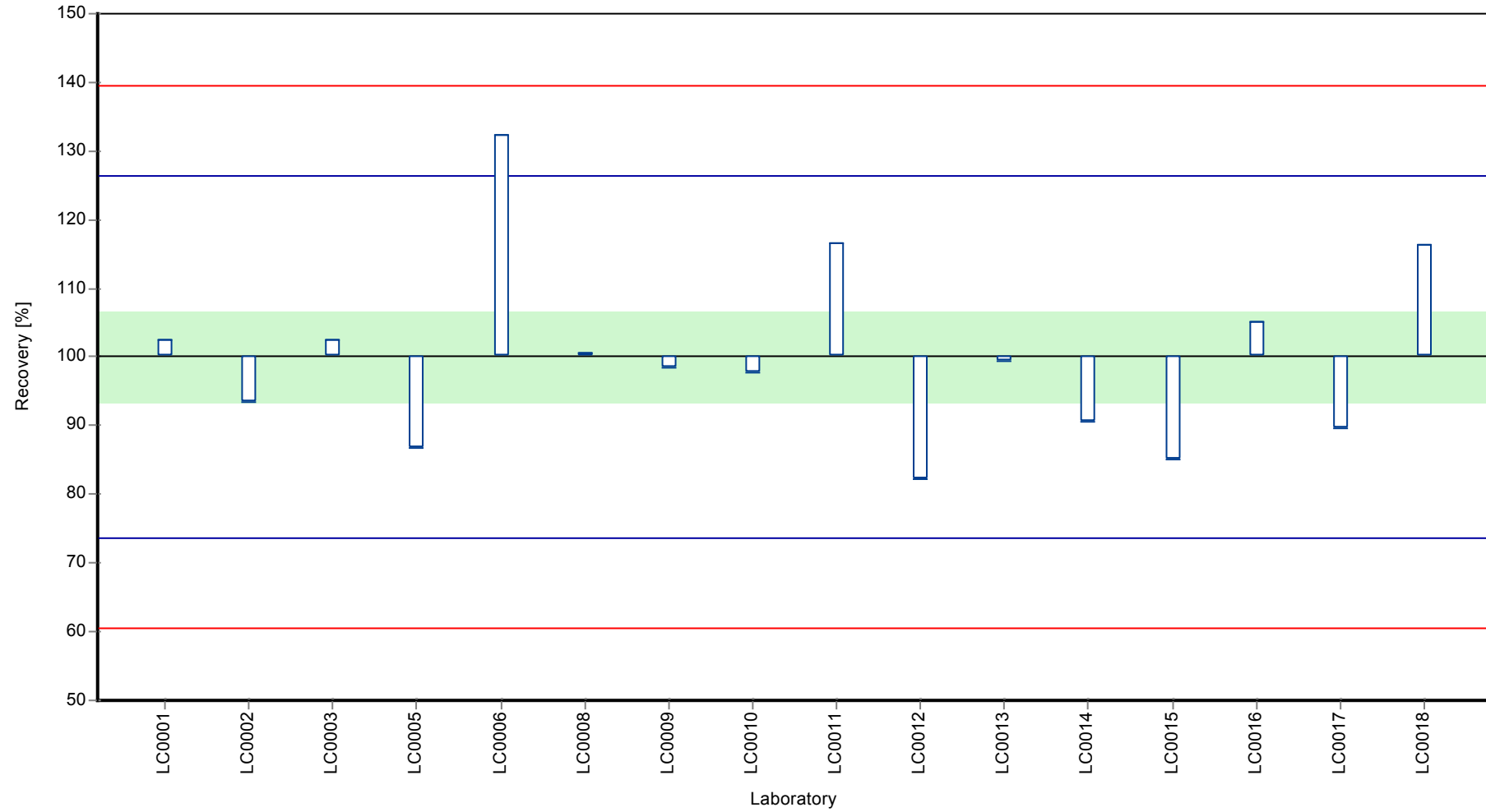
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tribromomethane

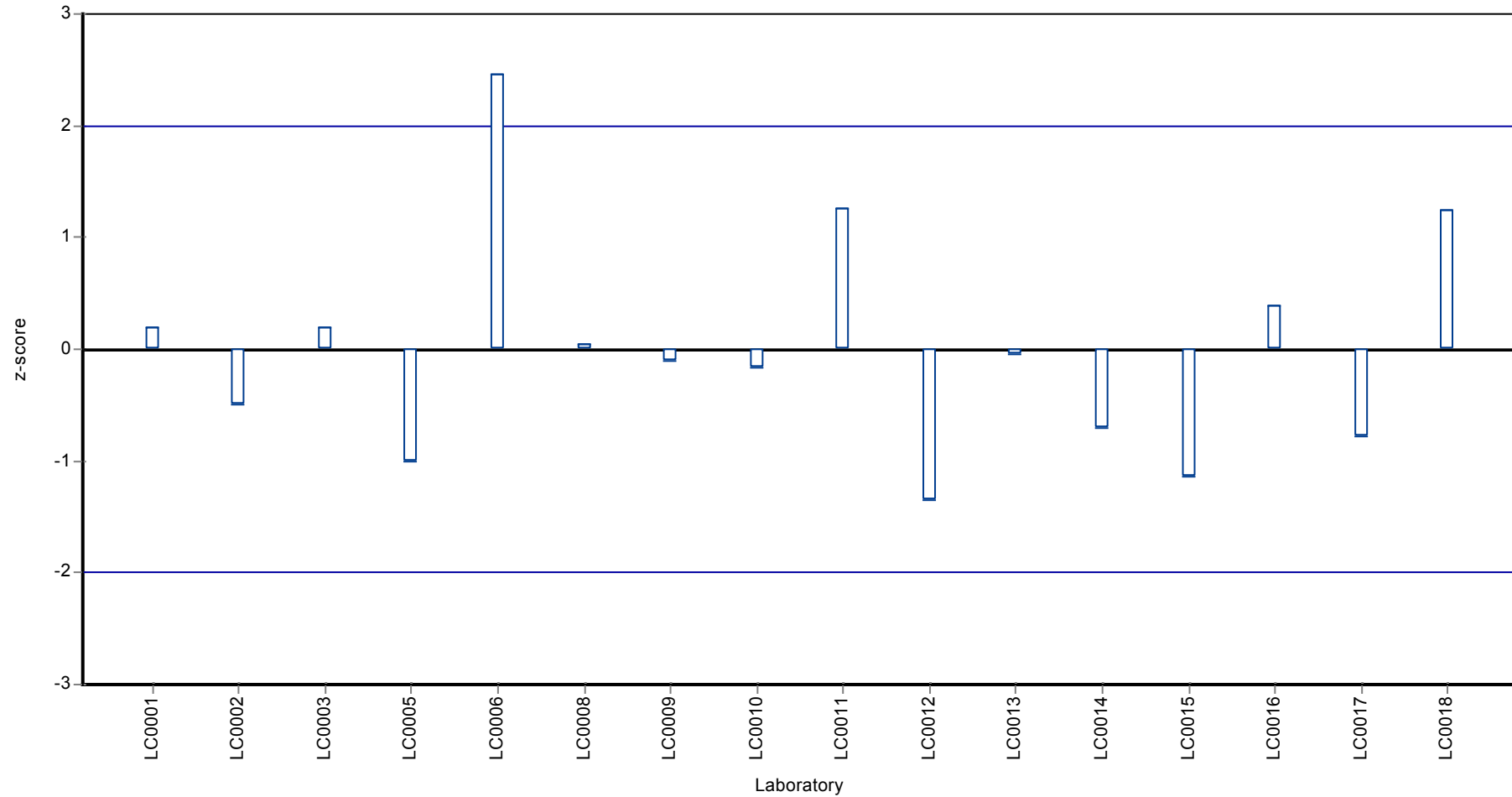
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Tribromomethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Tribromomethane

Parameter oriented report

C59 B

Tribromomethane

Unit	µg/l
Mean ± CI (99%)	3 ± 0.25
Minimum - Maximum	2.53 - 3.62
Control test value ± U	2.52 ± 0.504

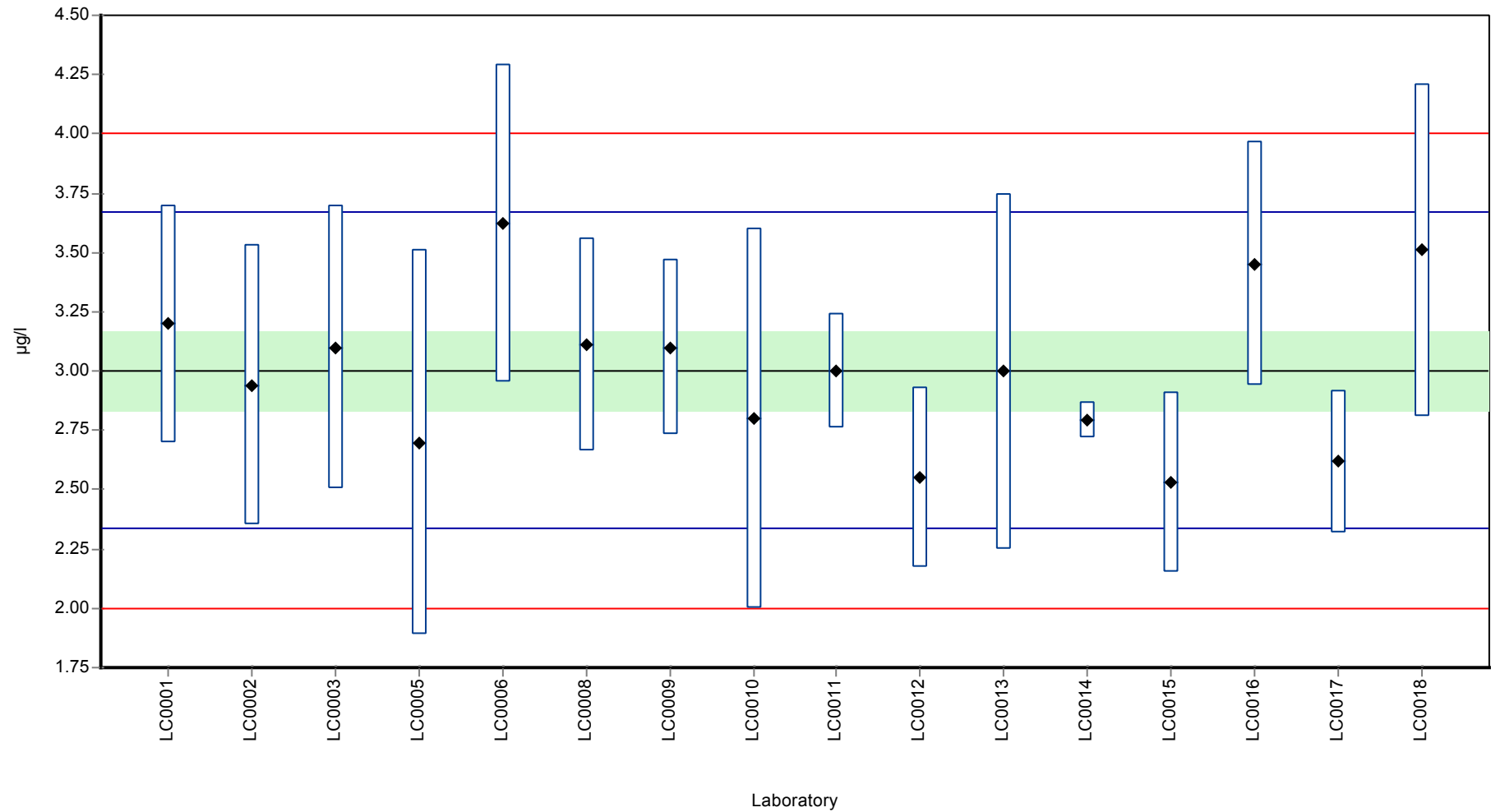
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.2	0.5	107	0.6	
LC0002	2.94	0.59	98	-0.18	
LC0003	3.1	0.6	103	0.3	
LC0004	-	-	-	-	
LC0005	2.7	0.81	90	-0.9	
LC0006	3.62	0.67	121	1.86	
LC0007	-	-	-	-	
LC0008	3.11	0.45	104	0.33	
LC0009	3.1	0.37	103	0.3	
LC0010	2.8	0.8	93.3	-0.6	
LC0011	3	0.24	100	0.00	
LC0012	2.55	0.38	85	-1.35	
LC0013	3	0.75	100	0.00	
LC0014	2.79	0.076	93	-0.63	
LC0015	2.53	0.38	84.3	-1.41	
LC0016	3.453	0.518	115	1.35	
LC0017	2.62	0.3	87.3	-1.14	
LC0018	3.51	0.7	117	1.53	

Characteristics of parameter

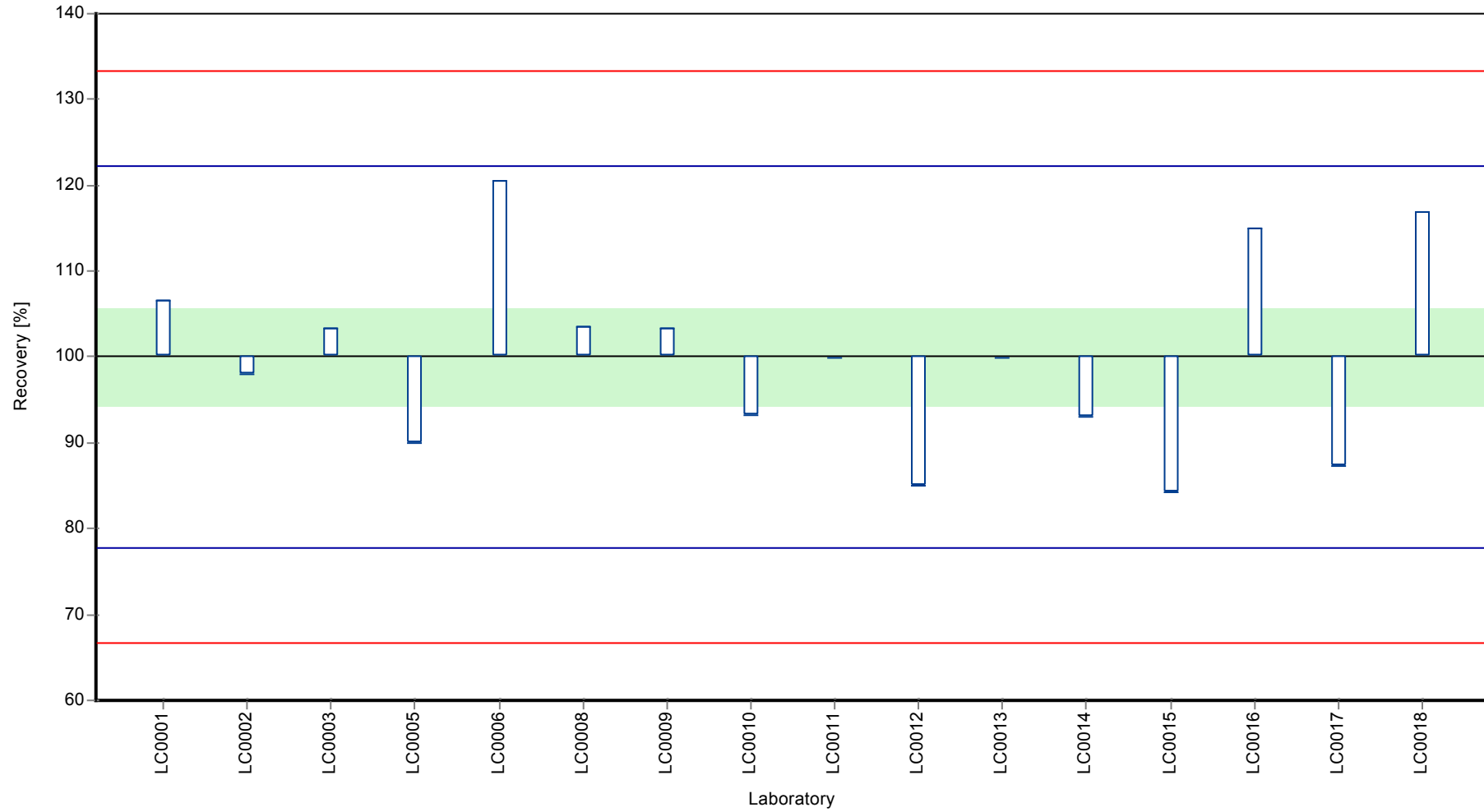
	all results	without outliers	Unit
Mean ± CI (99%)	3 ± 0.25	3 ± 0.25	µg/l
Minimum	2.53	2.53	µg/l
Maximum	3.62	3.62	µg/l
Standard deviation	0.333	0.333	µg/l
rel. Standard deviation	11.1	11.1	%
n	16	16	-

Graphical presentation of results

Results



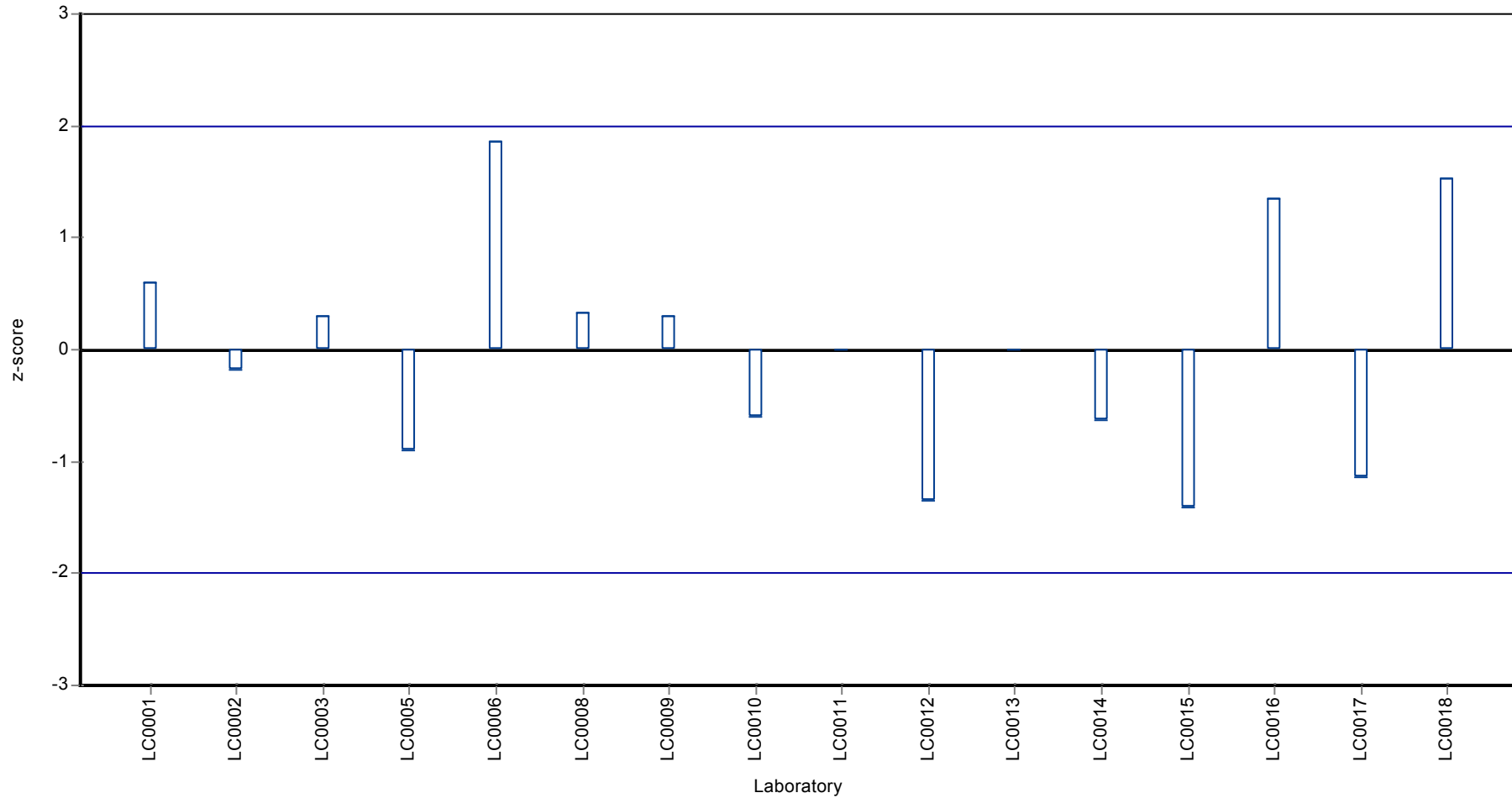
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Tribromomethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Trichloroethene

Parameter oriented report

C59 A

Trichloroethene

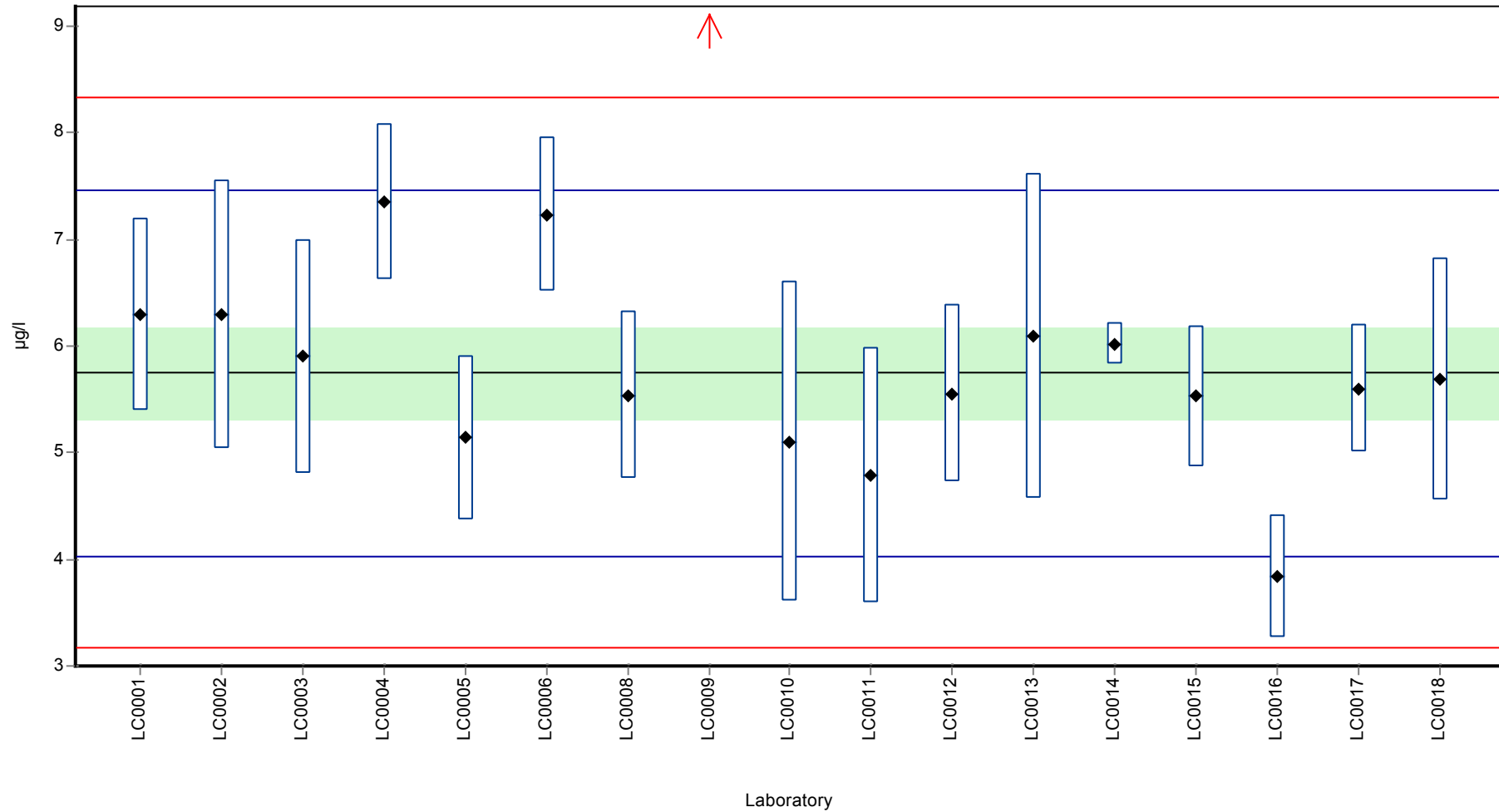
Unit	µg/l
Mean ± CI (99%)	5.75 ± 0.644
Minimum - Maximum	3.84 - 7.35
Control test value ± U	5.26 ± 1.05

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	6.3	0.9	110	0.64	
LC0002	6.29	1.26	109	0.63	
LC0003	5.9	1.1	103	0.18	
LC0004	7.35	0.73	128	1.87	
LC0005	5.14	0.77	89.4	-0.71	
LC0006	7.23	0.72	126	1.73	
LC0007	-	-	-	-	
LC0008	5.54	0.79	96.4	-0.24	
LC0009	13.39	2.54	233	8.9	H
LC0010	5.1	1.5	88.7	-0.75	
LC0011	4.79	1.2	83.3	-1.11	
LC0012	5.55	0.83	96.6	-0.23	
LC0013	6.09	1.52	106	0.4	
LC0014	6.02	0.189	105	0.32	
LC0015	5.53	0.66	96.2	-0.25	
LC0016	3.842	0.576	66.8	-2.22	
LC0017	5.6	0.6	97.4	-0.17	
LC0018	5.69	1.14	99	-0.07	

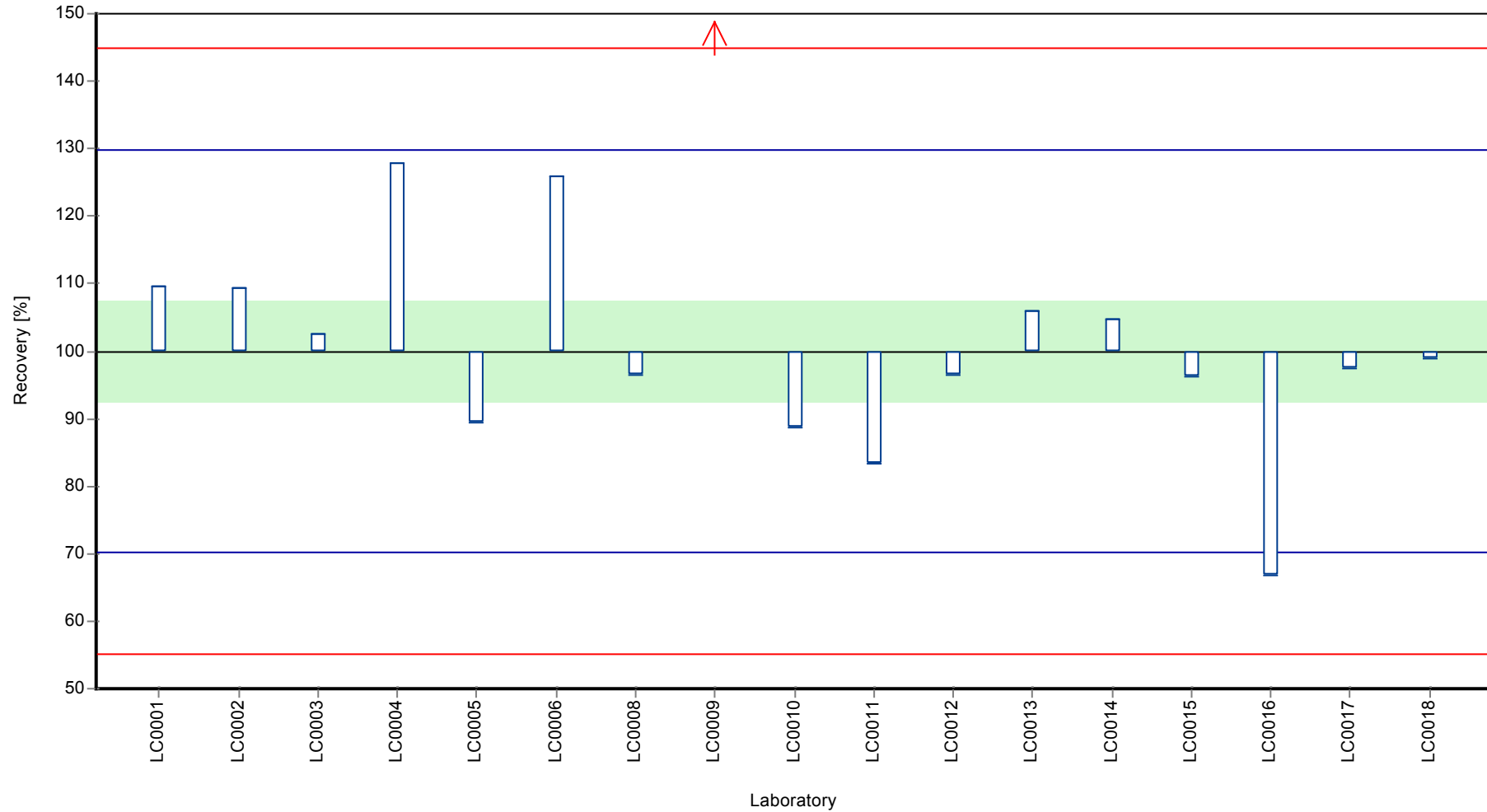
Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	6.2 ± 1.48	5.75 ± 0.644	µg/l
Minimum	3.84	3.84	µg/l
Maximum	13.4	7.35	µg/l
Standard deviation	2.03	0.859	µg/l
rel. Standard deviation	32.8	14.9	%
n	17	16	-

Graphical presentation of results
Results



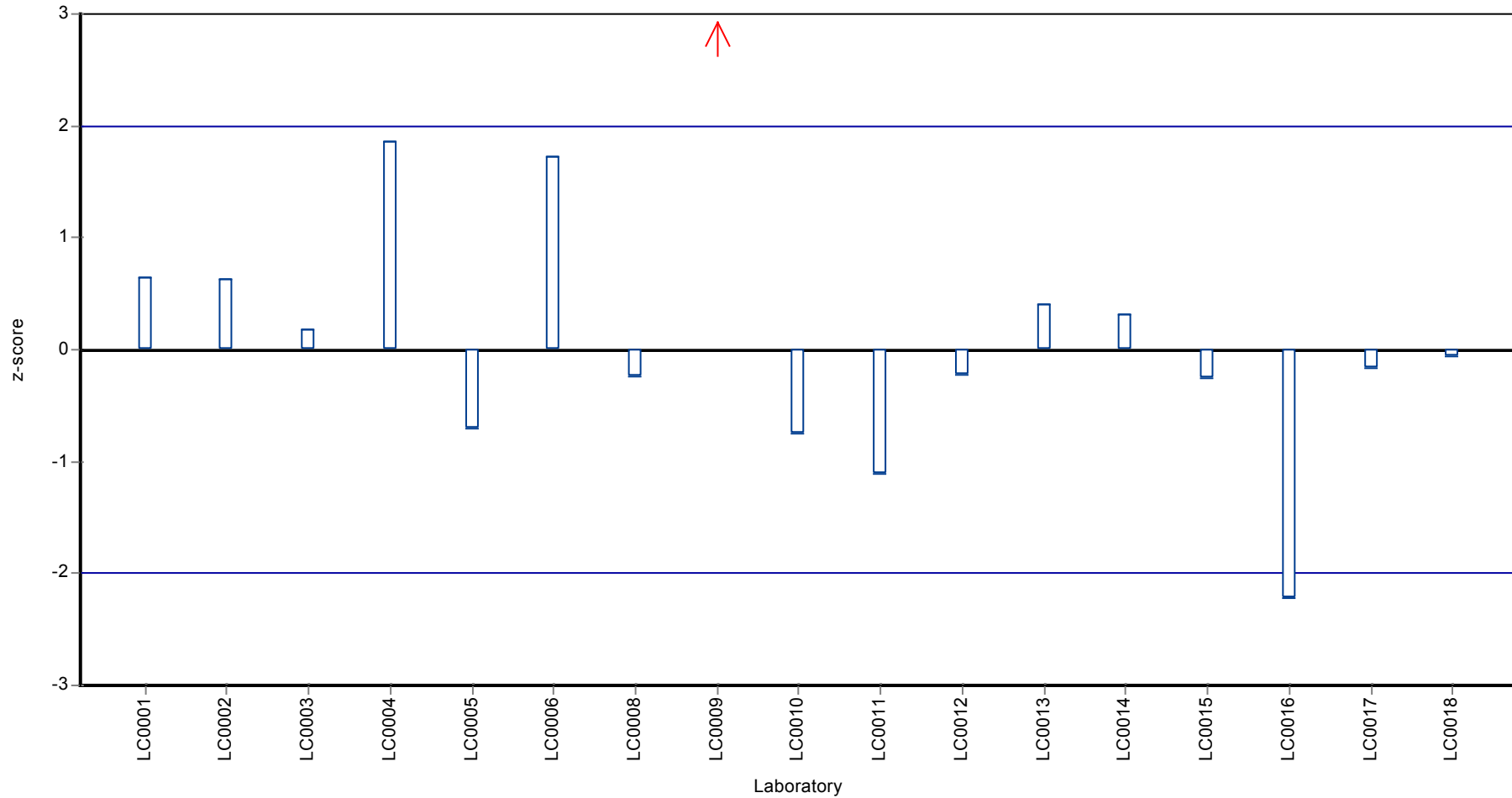
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Trichloroethene

Z-score



Parameter oriented report

C59 B

Trichloroethene

Unit	µg/l
Mean ± CI (99%)	1.16 ± 0.0896
Minimum - Maximum	1 - 1.37
Control test value ± U	1.08 ± 0.216

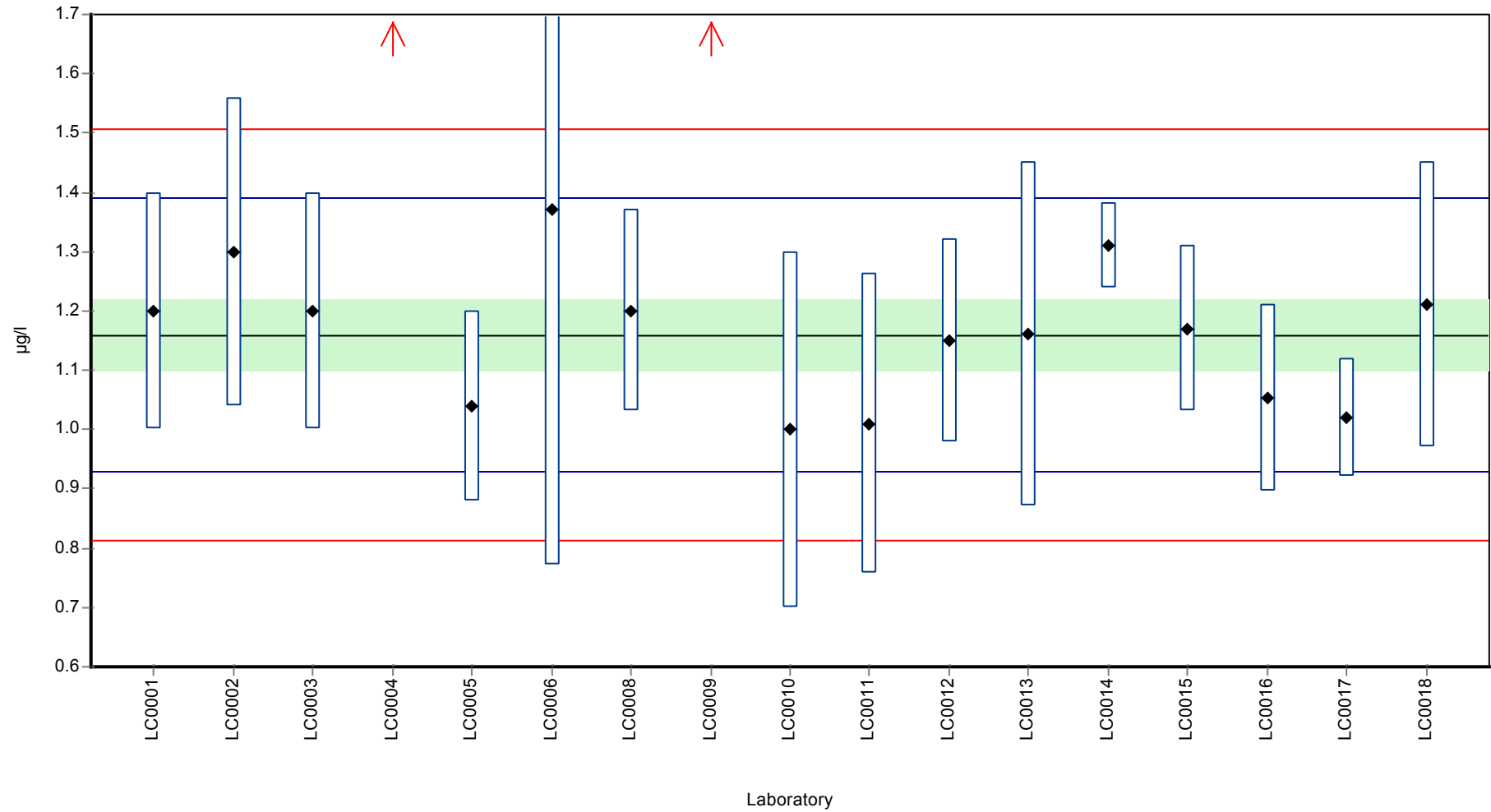
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.2	0.2	103	0.35	
LC0002	1.3	0.26	112	1.21	
LC0003	1.2	0.2	103	0.35	
LC0004	1.86	0.18	160	6.06	H
LC0005	1.04	0.16	89.7	-1.03	
LC0006	1.37	0.6	118	1.82	
LC0007	-	-	-	-	
LC0008	1.2	0.17	103	0.35	
LC0009	2.45	0.59	211	11.2	H
LC0010	1	0.3	86.2	-1.38	
LC0011	1.01	0.253	87.1	-1.29	
LC0012	1.15	0.17	99.2	-0.08	
LC0013	1.16	0.29	100	0.00	
LC0014	1.31	0.072	113	1.3	
LC0015	1.17	0.14	101	0.09	
LC0016	1.053	0.158	90.8	-0.92	
LC0017	1.02	0.1	88	-1.21	
LC0018	1.21	0.24	104	0.44	

Characteristics of parameter

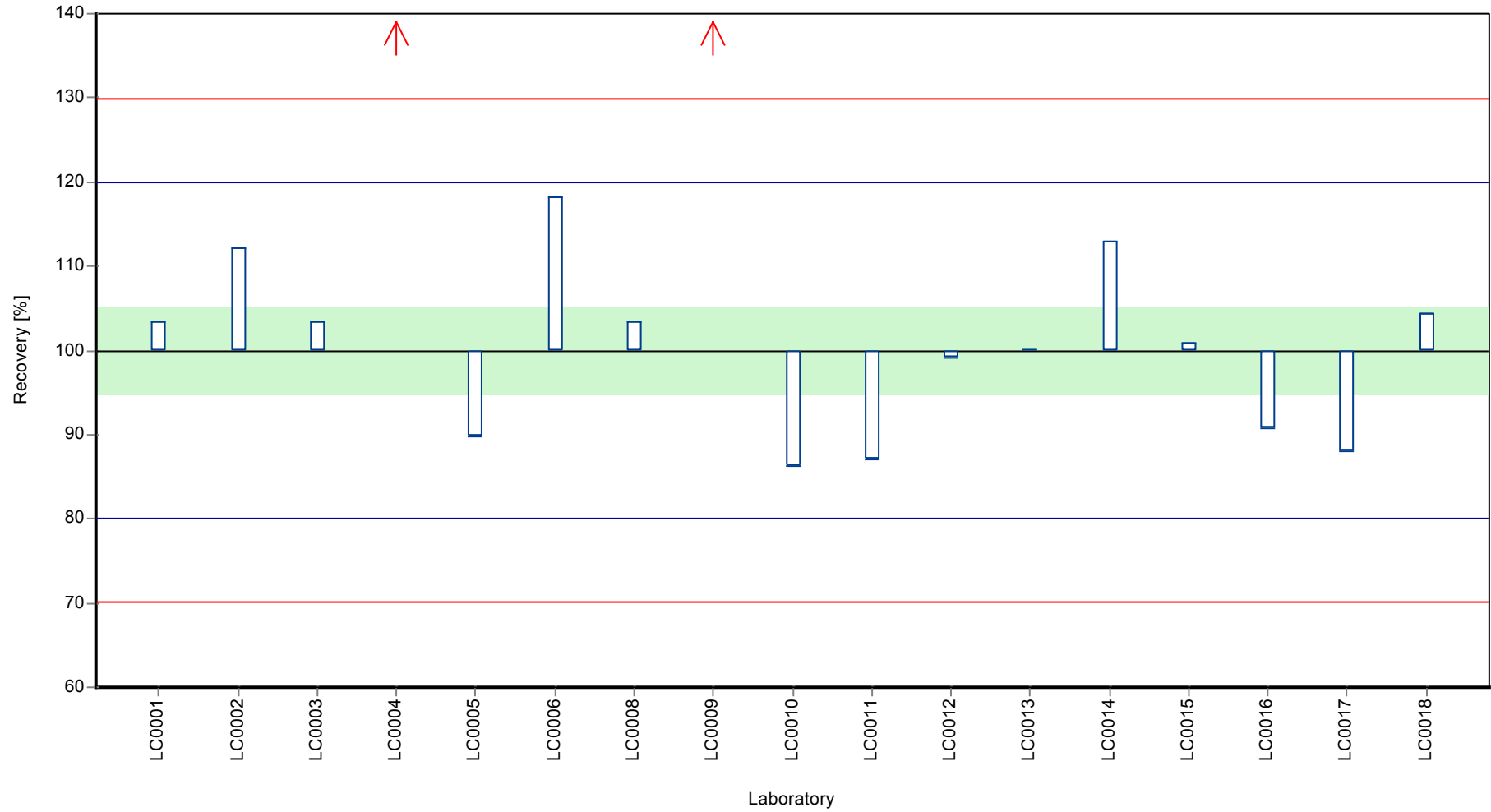
	all results	without outliers	Unit
Mean ± CI (99%)	1.28 ± 0.264	1.16 ± 0.0896	µg/l
Minimum	1	1	µg/l
Maximum	2.45	1.37	µg/l
Standard deviation	0.363	0.116	µg/l
rel. Standard deviation	28.4	9.97	%
n	17	15	-

Graphical presentation of results

Results



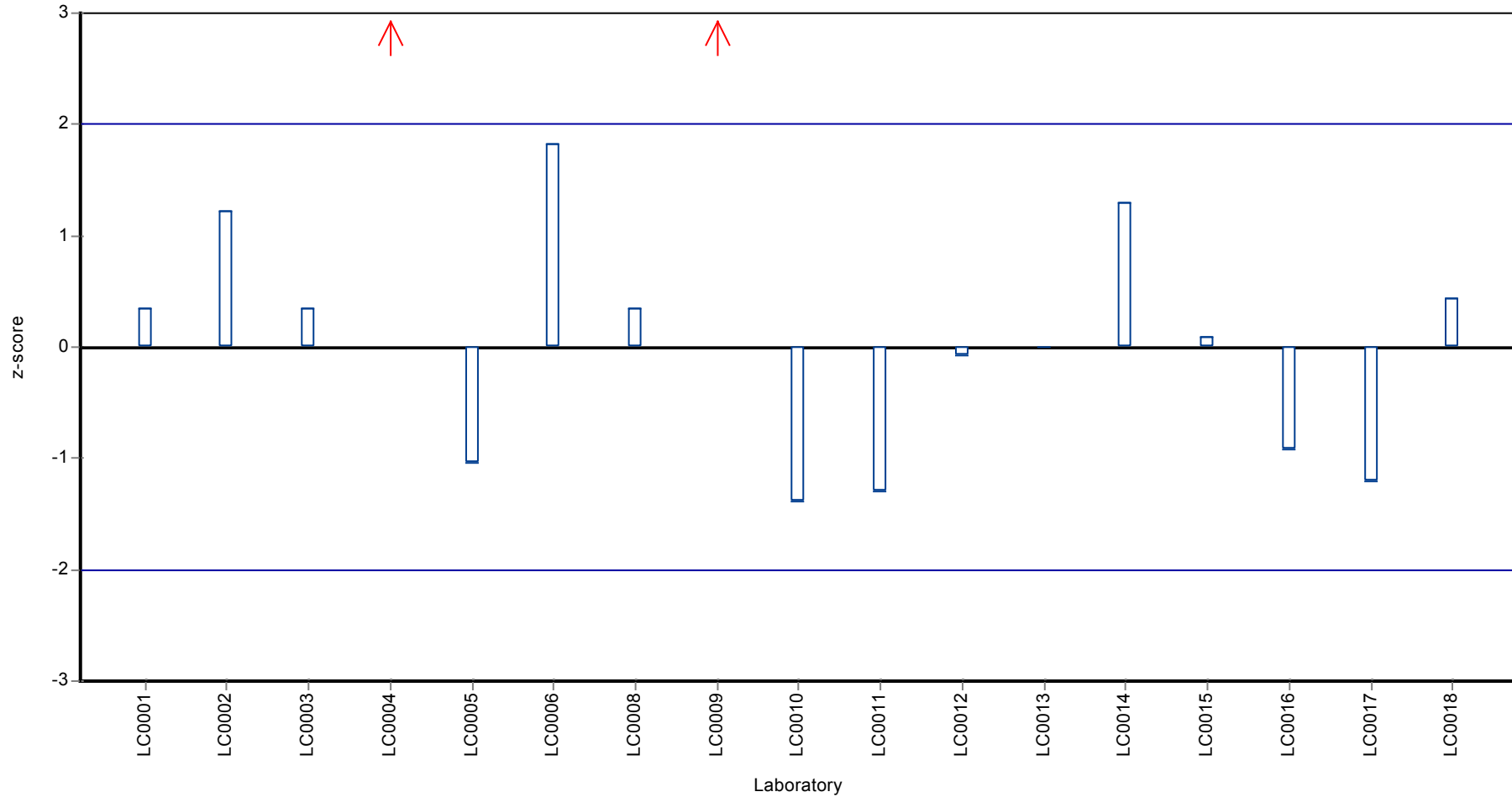
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Trichloroethene

Z-score



Parameter oriented report

C59 A

Trichloromethane

Unit	µg/l
Mean ± CI (99%)	8.28 ± 1.1
Minimum - Maximum	5.73 - 11.6
Control test value ± U	7.32 ± 1.46

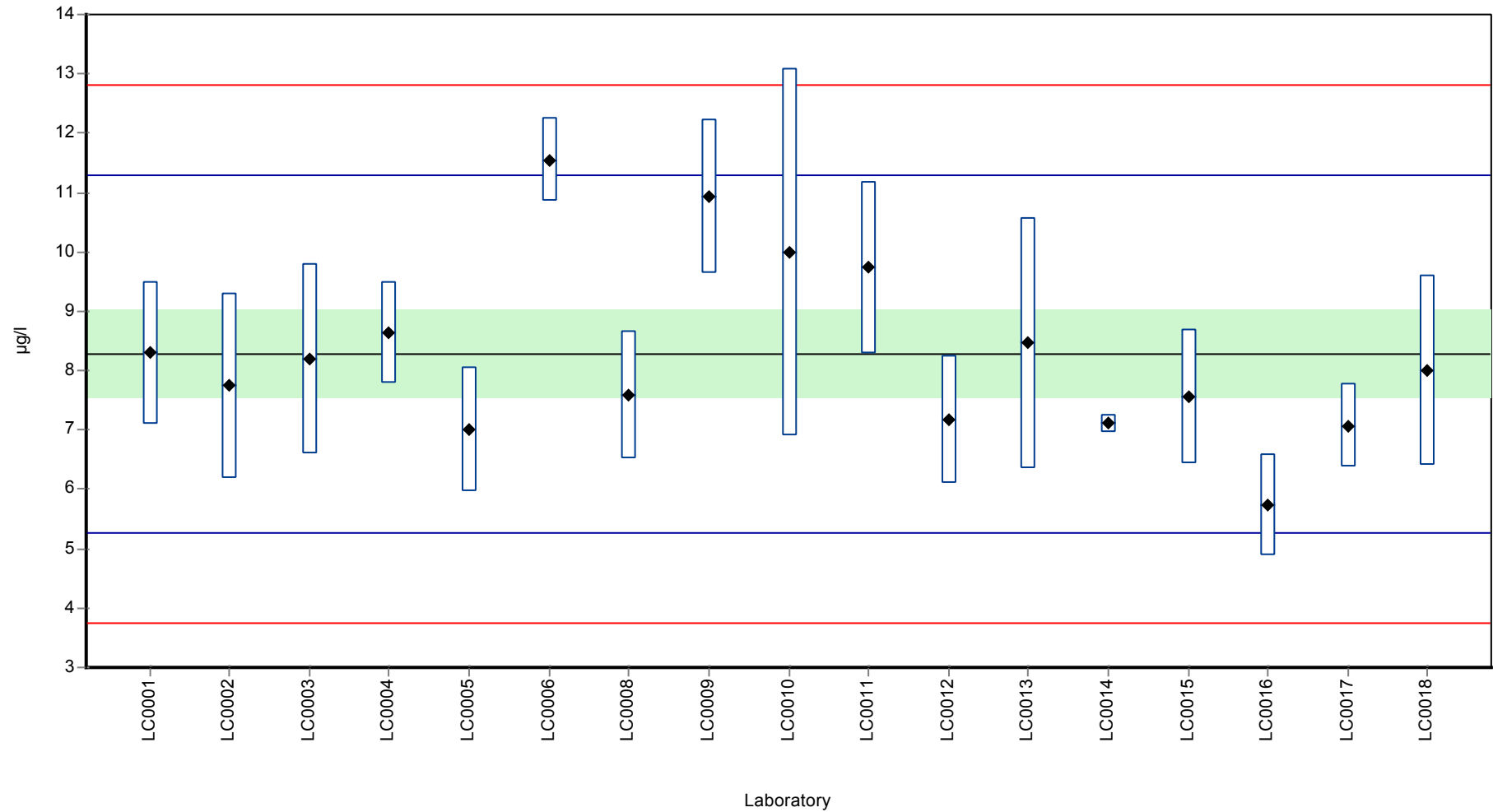
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	8.3	1.2	100	0.01	
LC0002	7.74	1.55	93.5	-0.36	
LC0003	8.2	1.6	99	-0.05	
LC0004	8.63	0.86	104	0.23	
LC0005	7.01	1.05	84.7	-0.84	
LC0006	11.55	0.7	139	2.17	
LC0007	-	-	-	-	
LC0008	7.58	1.08	91.5	-0.46	
LC0009	10.93	1.31	132	1.75	
LC0010	10	3.1	121	1.14	
LC0011	9.73	1.46	118	0.96	
LC0012	7.17	1.08	86.6	-0.74	
LC0013	8.46	2.12	102	0.12	
LC0014	7.11	0.16	85.9	-0.78	
LC0015	7.56	1.13	91.3	-0.48	
LC0016	5.733	0.86	69.2	-1.69	
LC0017	7.07	0.7	85.4	-0.8	
LC0018	8	1.6	96.6	-0.19	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	8.28 ± 1.1	8.28 ± 1.1	µg/l
Minimum	5.73	5.73	µg/l
Maximum	11.6	11.6	µg/l
Standard deviation	1.51	1.51	µg/l
rel. Standard deviation	18.2	18.2	%
n	17	17	-

Graphical presentation of results

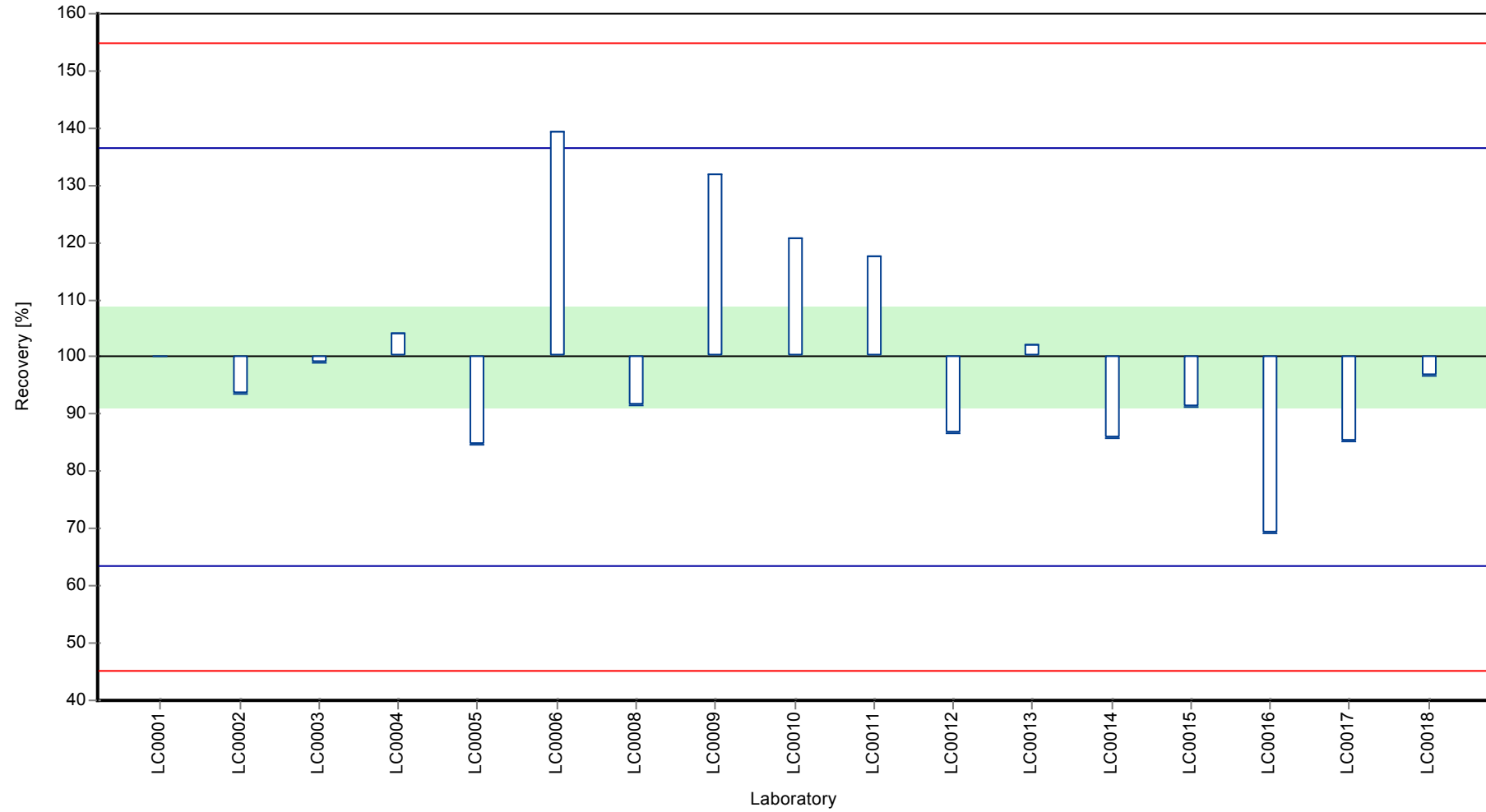
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Trichloromethane

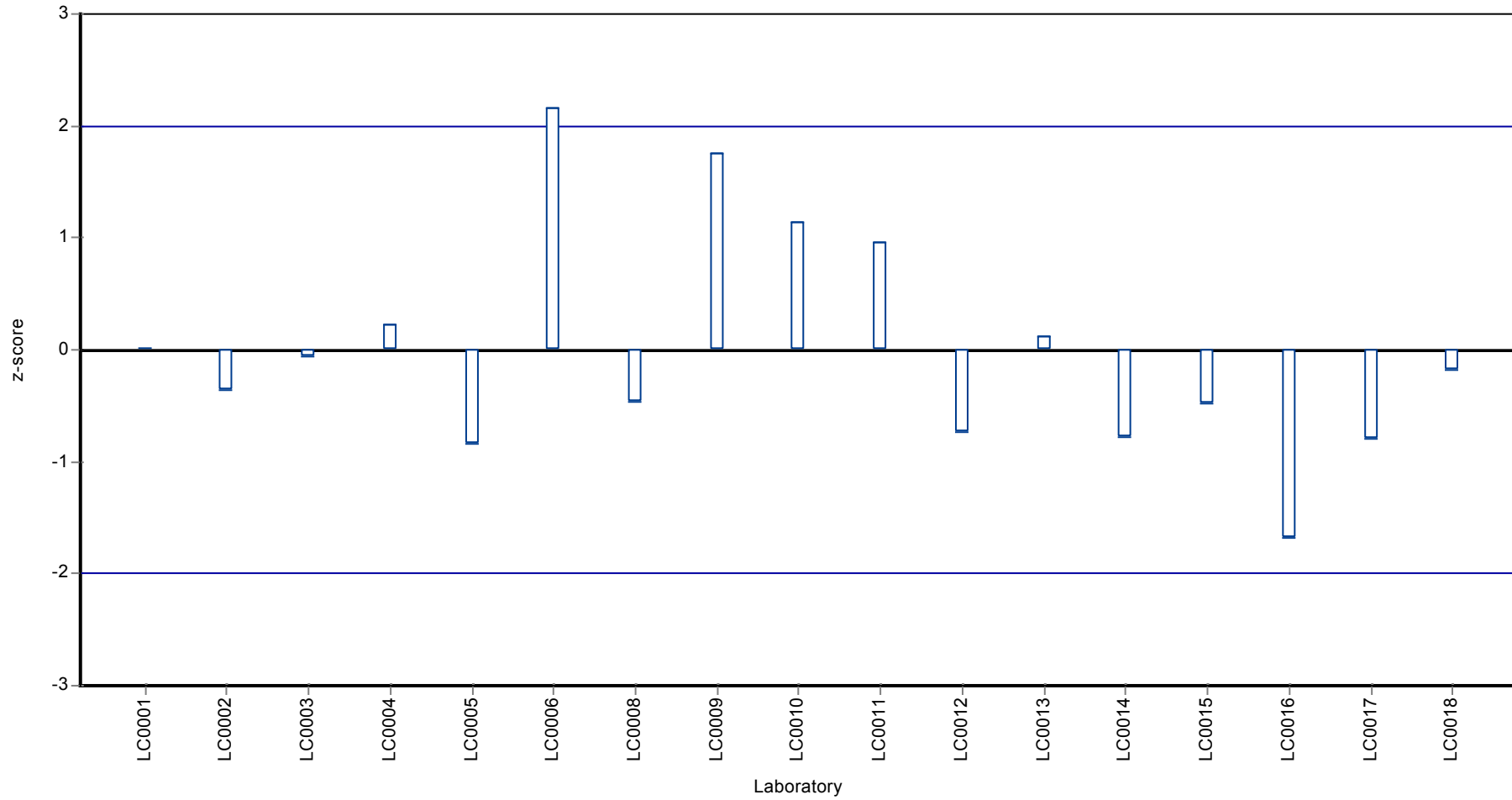
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59A, Parameter: Trichloromethane

Z-score



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Trichloromethane

Parameter oriented report

C59 B

Trichloromethane

Unit	µg/l
Mean ± CI (99%)	2.95 ± 0.167
Minimum - Maximum	2.62 - 3.4
Control test value ± U	2.6 ± 0.519

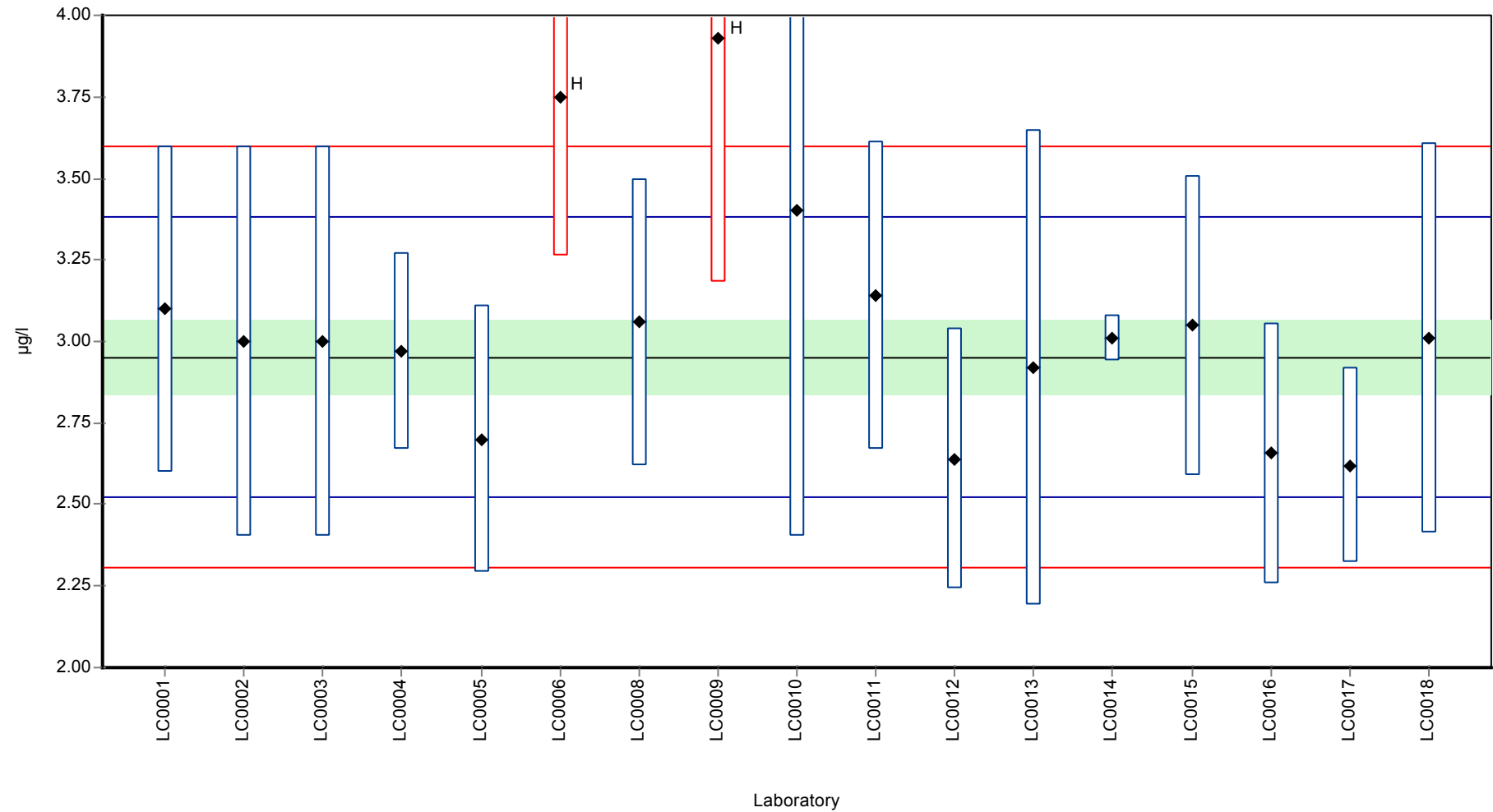
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	3.1	0.5	105	0.69	
LC0002	3	0.6	102	0.22	
LC0003	3	0.6	102	0.22	
LC0004	2.97	0.3	101	0.08	
LC0005	2.7	0.41	91.5	-1.17	
LC0006	3.75	0.49	127	3.7	H
LC0007	-	-	-	-	
LC0008	3.06	0.44	104	0.5	
LC0009	3.93	0.75	133	4.54	H
LC0010	3.4	1	115	2.08	
LC0011	3.14	0.471	106	0.87	
LC0012	2.64	0.4	89.4	-1.45	
LC0013	2.92	0.73	98.9	-0.15	
LC0014	3.01	0.069	102	0.27	
LC0015	3.05	0.46	103	0.46	
LC0016	2.656	0.398	90	-1.37	
LC0017	2.62	0.3	88.8	-1.54	
LC0018	3.01	0.6	102	0.27	

Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	3.06 ± 0.261	2.95 ± 0.167	µg/l
Minimum	2.62	2.62	µg/l
Maximum	3.93	3.4	µg/l
Standard deviation	0.359	0.216	µg/l
rel. Standard deviation	11.7	7.3	%
n	17	15	-

Graphical presentation of results

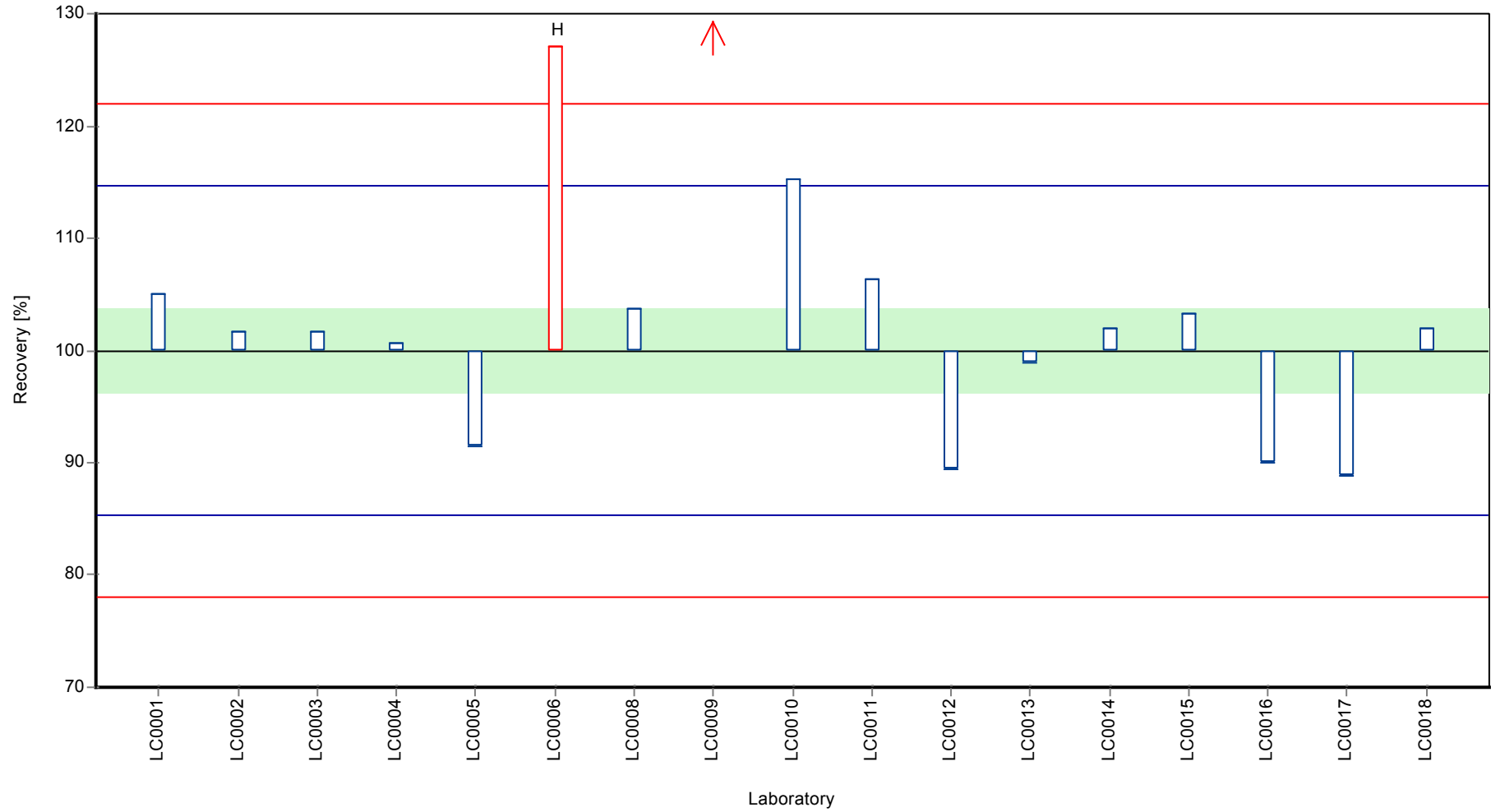
Results



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Trichloromethane

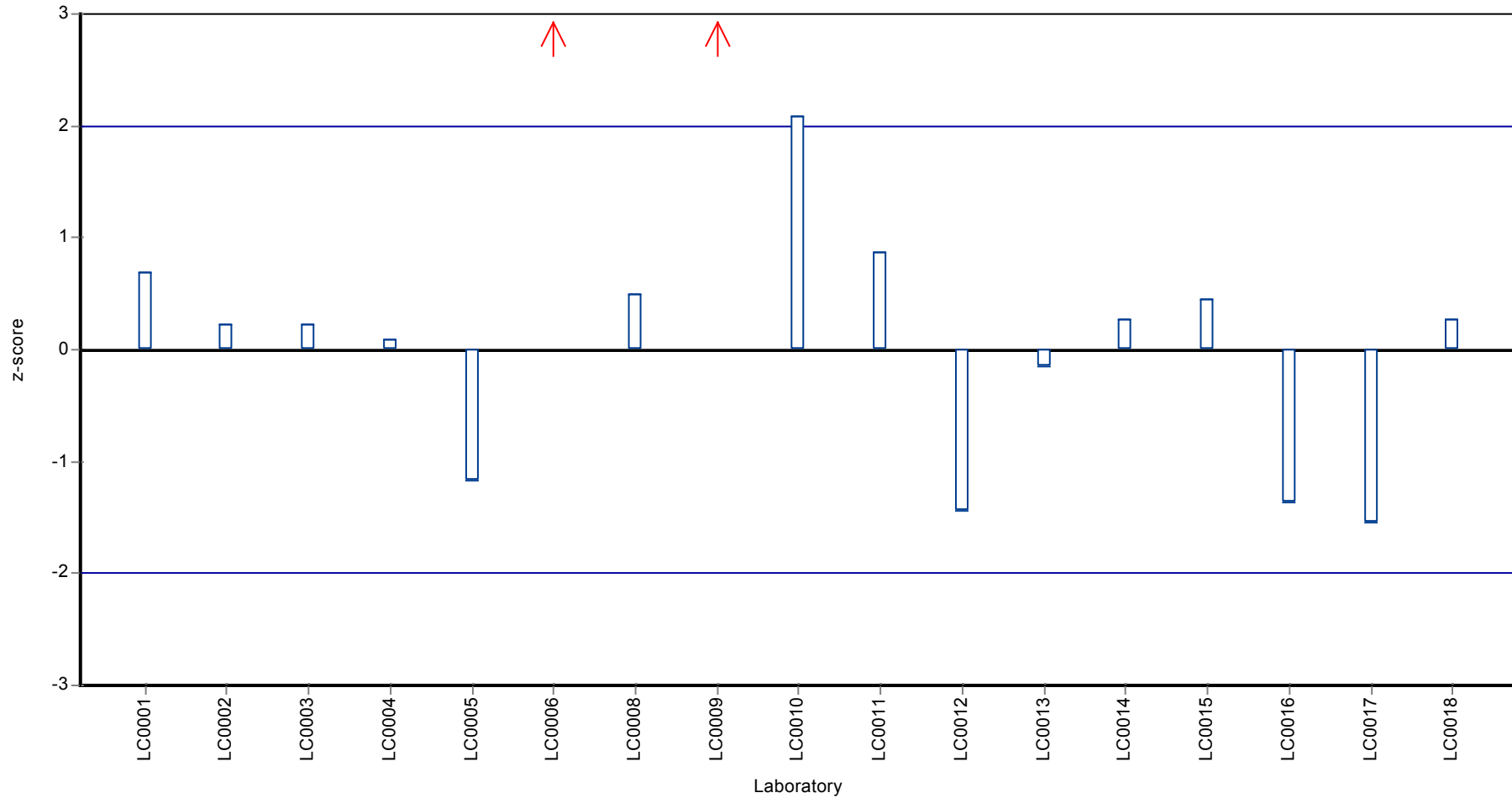
Recovery rate



Parameter oriented report Volatile halogenated hydrocarbons (VHH) - C59

Sample: C59B, Parameter: Trichloromethane

Z-score



8 Laboratory oriented report

The laboratory oriented report is sorted by laboratory code.

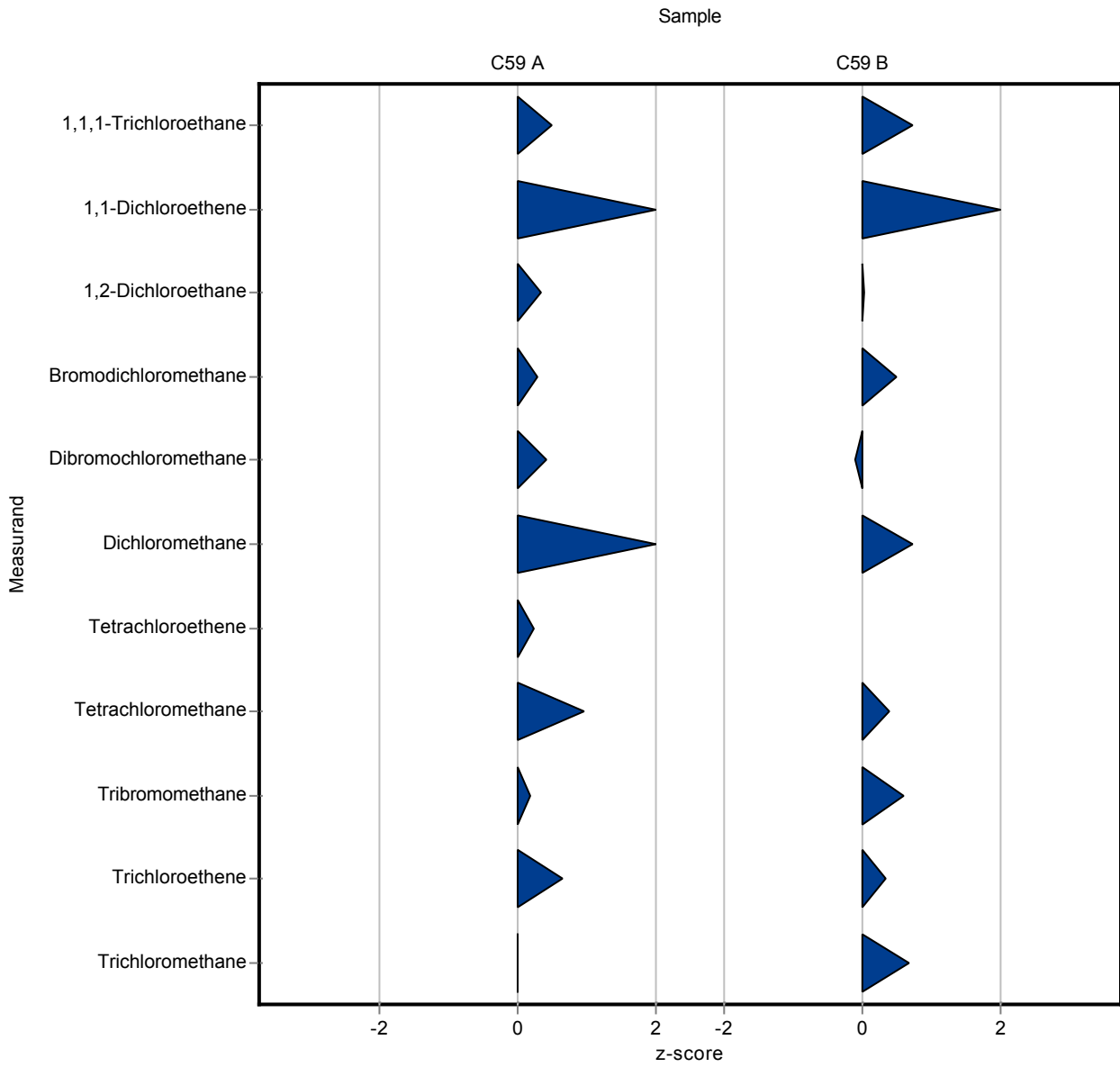
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	5.3	0.8	0.856	109	0.51
1,1-Dichloroethene	µg/l	5.04 ± 0.209	5.5	0.8	0.241	109	1.92
1,2-Dichloroethane	µg/l	5.47 ± 0.511	5.7	0.9	0.681	104	0.34
Bromodichloromethane	µg/l	4.99 ± 0.307	5.1	0.8	0.383	102	0.28
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	-	-	0.309	-	-
Dibromochloromethane	µg/l	10.4 ± 0.656	10.8	1.6	0.847	103	0.43
Dichloromethane	µg/l	7.05 ± 0.402	7.8	1.2	0.484	111	1.55
Tetrachloroethene	µg/l	2.81 ± 0.289	2.9	0.4	0.36	103	0.25
Tetrachloromethane	µg/l	5.75 ± 0.462	6.3	0.9	0.577	110	0.95
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	-	-	0.664	-	-
Tribromomethane	µg/l	8.48 ± 0.837	8.7	1.3	1.12	103	0.19
Trichloroethene	µg/l	5.75 ± 0.644	6.3	0.9	0.859	110	0.64
Trichloromethane	µg/l	8.28 ± 1.1	8.3	1.2	1.51	100	0.01

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.4	0.2	0.104	106	0.73
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.4	0.2	0.0689	108	1.49
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.1	0.3	0.161	100	0.03
Bromodichloromethane	µg/l	2.91 ± 0.147	3	0.5	0.184	103	0.51
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	-	-	0.13	-	-
Dibromochloromethane	µg/l	2.32 ± 0.162	2.3	0.3	0.216	99	-0.11
Dichloromethane	µg/l	2.86 ± 0.154	3	0.5	0.192	105	0.72
Tetrachloroethene	µg/l	- ± -	<0.3 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1.1	0.2	0.139	105	0.39
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	-	-	0.126	-	-
Tribromomethane	µg/l	3 ± 0.25	3.2	0.5	0.333	107	0.60
Trichloroethene	µg/l	1.16 ± 0.0896	1.2	0.2	0.116	103	0.35
Trichloromethane	µg/l	2.95 ± 0.167	3.1	0.5	0.216	105	0.69



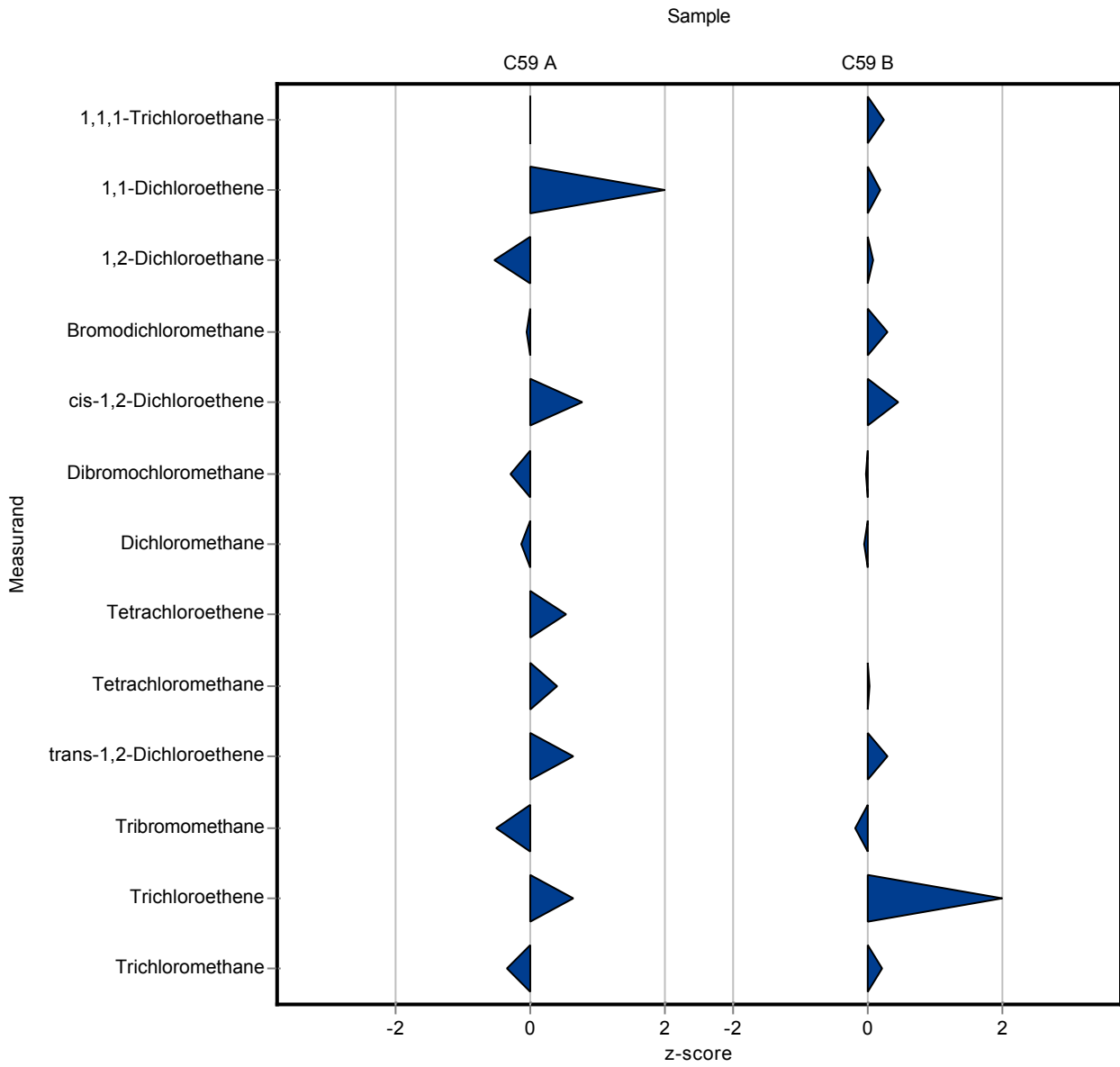
The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	4.87	0.97	0.856	100	0.01
1,1-Dichloroethene	µg/l	5.04	± 0.209	5.3	1.06	0.241	105	1.09
1,2-Dichloroethane	µg/l	5.47	± 0.511	5.1	1.02	0.681	93.2	-0.54
Bromodichloromethane	µg/l	4.99	± 0.307	4.97	0.99	0.383	99.5	-0.06
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	3.3	0.66	0.309	108	0.78
Dibromochloromethane	µg/l	10.4	± 0.656	10.2	2	0.847	97.7	-0.28
Dichloromethane	µg/l	7.05	± 0.402	6.99	1.4	0.484	99.2	-0.12
Tetrachloroethene	µg/l	2.81	± 0.289	3	0.6	0.36	107	0.52
Tetrachloromethane	µg/l	5.75	± 0.462	5.98	1.2	0.577	104	0.40
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	5.28	1.06	0.664	109	0.63
Tribromomethane	µg/l	8.48	± 0.837	7.93	1.59	1.12	93.5	-0.50
Trichloroethene	µg/l	5.75	± 0.644	6.29	1.26	0.859	109	0.63
Trichloromethane	µg/l	8.28	± 1.1	7.74	1.55	1.51	93.5	-0.36

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.35	0.27	0.104	102	0.25
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.31	0.26	0.0689	101	0.19
1,2-Dichloroethane	µg/l	2.1	± 0.125	2.11	0.42	0.161	101	0.09
Bromodichloromethane	µg/l	2.91	± 0.147	2.96	0.59	0.184	102	0.29
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	1.33	0.27	0.13	105	0.45
Dibromochloromethane	µg/l	2.32	± 0.162	2.32	0.46	0.216	99.9	-0.01
Dichloromethane	µg/l	2.86	± 0.154	2.85	0.57	0.192	99.6	-0.06
Tetrachloroethene	µg/l	-	± -	<0.05 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	1.05	0.21	0.139	100	0.03
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	1.09	0.22	0.126	103	0.28
Tribromomethane	µg/l	3	± 0.25	2.94	0.59	0.333	98	-0.18
Trichloroethene	µg/l	1.16	± 0.0896	1.3	0.26	0.116	112	1.21
Trichloromethane	µg/l	2.95	± 0.167	3	0.6	0.216	102	0.22



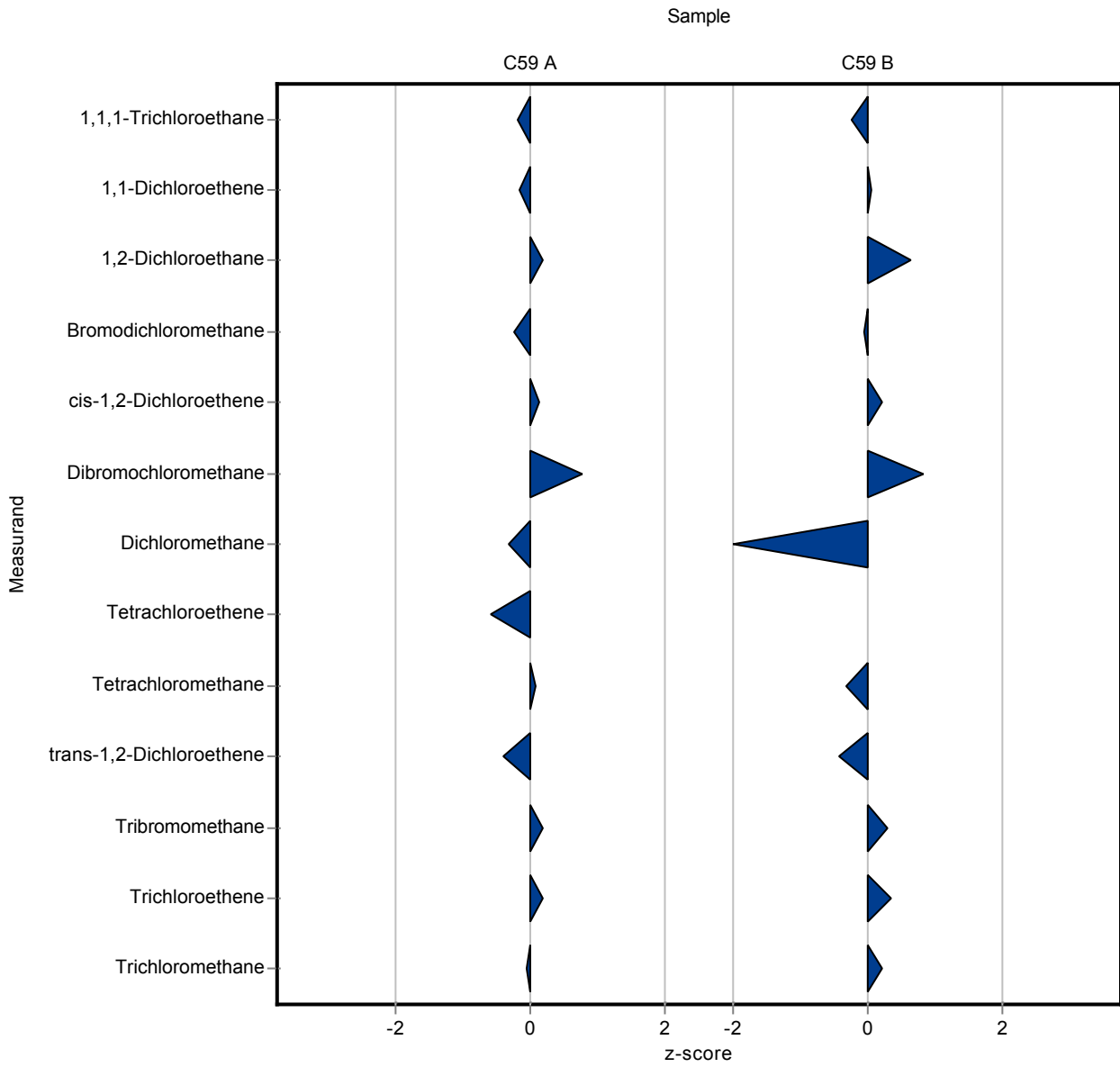
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	4.7	0.9	0.856	96.6	-0.19
1,1-Dichloroethene	µg/l	5.04 ± 0.209	5	1	0.241	99.3	-0.15
1,2-Dichloroethane	µg/l	5.47 ± 0.511	5.6	1.1	0.681	102	0.19
Bromodichloromethane	µg/l	4.99 ± 0.307	4.9	1	0.383	98.1	-0.25
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	3.1	0.6	0.309	101	0.13
Dibromochloromethane	µg/l	10.4 ± 0.656	11.1	2.2	0.847	106	0.78
Dichloromethane	µg/l	7.05 ± 0.402	6.9	1.4	0.484	97.9	-0.31
Tetrachloroethene	µg/l	2.81 ± 0.289	2.6	0.5	0.36	92.5	-0.59
Tetrachloromethane	µg/l	5.75 ± 0.462	5.8	1.1	0.577	101	0.09
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	4.6	0.9	0.664	94.6	-0.40
Tribromomethane	µg/l	8.48 ± 0.837	8.7	1.7	1.12	103	0.19
Trichloroethene	µg/l	5.75 ± 0.644	5.9	1.1	0.859	103	0.18
Trichloromethane	µg/l	8.28 ± 1.1	8.2	1.6	1.51	99	-0.05

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.3	0.3	0.104	98.2	-0.23
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.3	0.3	0.0689	100	0.04
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.2	0.4	0.161	105	0.65
Bromodichloromethane	µg/l	2.91 ± 0.147	2.9	0.6	0.184	99.7	-0.04
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.3	0.3	0.13	102	0.22
Dibromochloromethane	µg/l	2.32 ± 0.162	2.5	0.5	0.216	108	0.82
Dichloromethane	µg/l	2.86 ± 0.154	2.6	0.5	0.192	90.9	-1.36
Tetrachloroethene	µg/l	- ± -	<0.5 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1	0.2	0.139	95.7	-0.33
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1	0.2	0.126	94.9	-0.43
Tribromomethane	µg/l	3 ± 0.25	3.1	0.6	0.333	103	0.30
Trichloroethene	µg/l	1.16 ± 0.0896	1.2	0.2	0.116	103	0.35
Trichloromethane	µg/l	2.95 ± 0.167	3	0.6	0.216	102	0.22



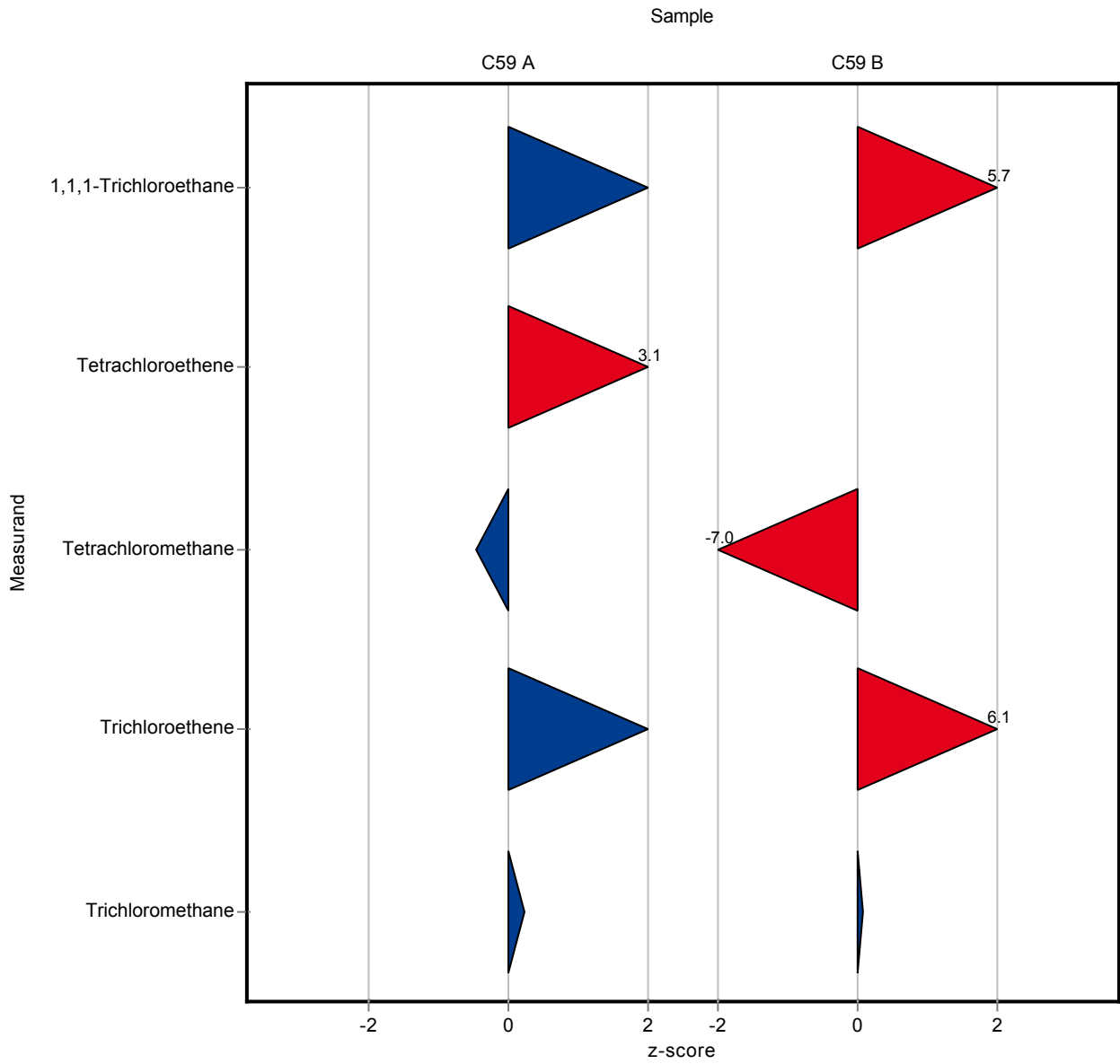
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	6.11	0.6	0.856	126	1.45
1,1-Dichloroethene	µg/l	5.04 ± 0.209	-	-	0.241	-	-
1,2-Dichloroethane	µg/l	5.47 ± 0.511	-	-	0.681	-	-
Bromodichloromethane	µg/l	4.99 ± 0.307	-	-	0.383	-	-
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	-	-	0.309	-	-
Dibromochloromethane	µg/l	10.4 ± 0.656	-	-	0.847	-	-
Dichloromethane	µg/l	7.05 ± 0.402	-	-	0.484	-	-
Tetrachloroethene	µg/l	2.81 ± 0.289	3.94	0.4	0.36	140	3.13
Tetrachloromethane	µg/l	5.75 ± 0.462	5.48	0.55	0.577	95.3	-0.47
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	-	-	0.664	-	-
Tribromomethane	µg/l	8.48 ± 0.837	-	-	1.12	-	-
Trichloroethene	µg/l	5.75 ± 0.644	7.35	0.73	0.859	128	1.87
Trichloromethane	µg/l	8.28 ± 1.1	8.63	0.86	1.51	104	0.23

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.92	0.19	0.104	145	5.71
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	-	-	0.0689	-	-
1,2-Dichloroethane	µg/l	2.1 ± 0.125	-	-	0.161	-	-
Bromodichloromethane	µg/l	2.91 ± 0.147	-	-	0.184	-	-
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	-	-	0.13	-	-
Dibromochloromethane	µg/l	2.32 ± 0.162	-	-	0.216	-	-
Dichloromethane	µg/l	2.86 ± 0.154	-	-	0.192	-	-
Tetrachloroethene	µg/l	- ± -	0.1	0.1	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	0.068	0.05	0.139	6.5	-7.01
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	-	-	0.126	-	-
Tribromomethane	µg/l	3 ± 0.25	-	-	0.333	-	-
Trichloroethene	µg/l	1.16 ± 0.0896	1.86	0.18	0.116	160	6.06
Trichloromethane	µg/l	2.95 ± 0.167	2.97	0.3	0.216	101	0.08



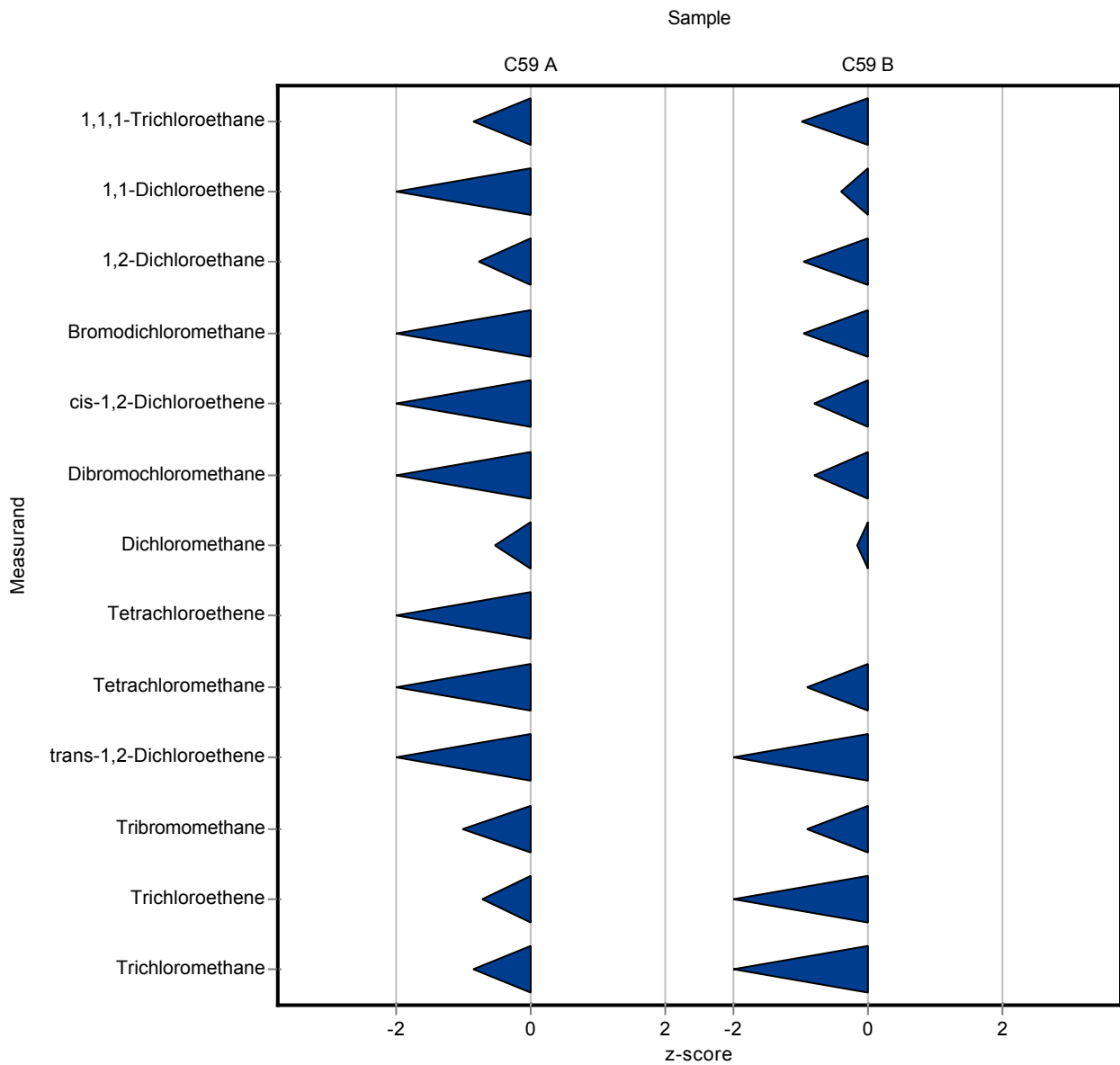
The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	4.13	0.62	0.856	84.9	-0.86
1,1-Dichloroethene	µg/l	5.04	± 0.209	4.77	0.72	0.241	94.7	-1.10
1,2-Dichloroethane	µg/l	5.47	± 0.511	4.94	0.74	0.681	90.3	-0.78
Bromodichloromethane	µg/l	4.99	± 0.307	4.52	0.68	0.383	90.5	-1.24
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	2.74	0.41	0.309	89.6	-1.03
Dibromochloromethane	µg/l	10.4	± 0.656	9.45	1.42	0.847	90.5	-1.17
Dichloromethane	µg/l	7.05	± 0.402	6.79	1.02	0.484	96.3	-0.54
Tetrachloroethene	µg/l	2.81	± 0.289	2.26	0.34	0.36	80.4	-1.53
Tetrachloromethane	µg/l	5.75	± 0.462	5.01	0.75	0.577	87.1	-1.28
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	4.15	0.62	0.664	85.3	-1.07
Tribromomethane	µg/l	8.48	± 0.837	7.37	2.21	1.12	86.9	-1.00
Trichloroethene	µg/l	5.75	± 0.644	5.14	0.77	0.859	89.4	-0.71
Trichloromethane	µg/l	8.28	± 1.1	7.01	1.05	1.51	84.7	-0.84

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.22	0.18	0.104	92.2	-0.99
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.27	0.19	0.0689	97.9	-0.39
1,2-Dichloroethane	µg/l	2.1	± 0.125	1.94	0.29	0.161	92.6	-0.97
Bromodichloromethane	µg/l	2.91	± 0.147	2.73	0.41	0.184	93.9	-0.97
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	1.17	0.17	0.13	92	-0.79
Dibromochloromethane	µg/l	2.32	± 0.162	2.15	0.32	0.216	92.6	-0.80
Dichloromethane	µg/l	2.86	± 0.154	2.83	0.42	0.192	98.9	-0.16
Tetrachloroethene	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	0.92	0.14	0.139	88	-0.90
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	0.86	0.13	0.126	81.6	-1.54
Tribromomethane	µg/l	3	± 0.25	2.7	0.81	0.333	90	-0.90
Trichloroethene	µg/l	1.16	± 0.0896	1.04	0.16	0.116	89.7	-1.03
Trichloromethane	µg/l	2.95	± 0.167	2.7	0.41	0.216	91.5	-1.17



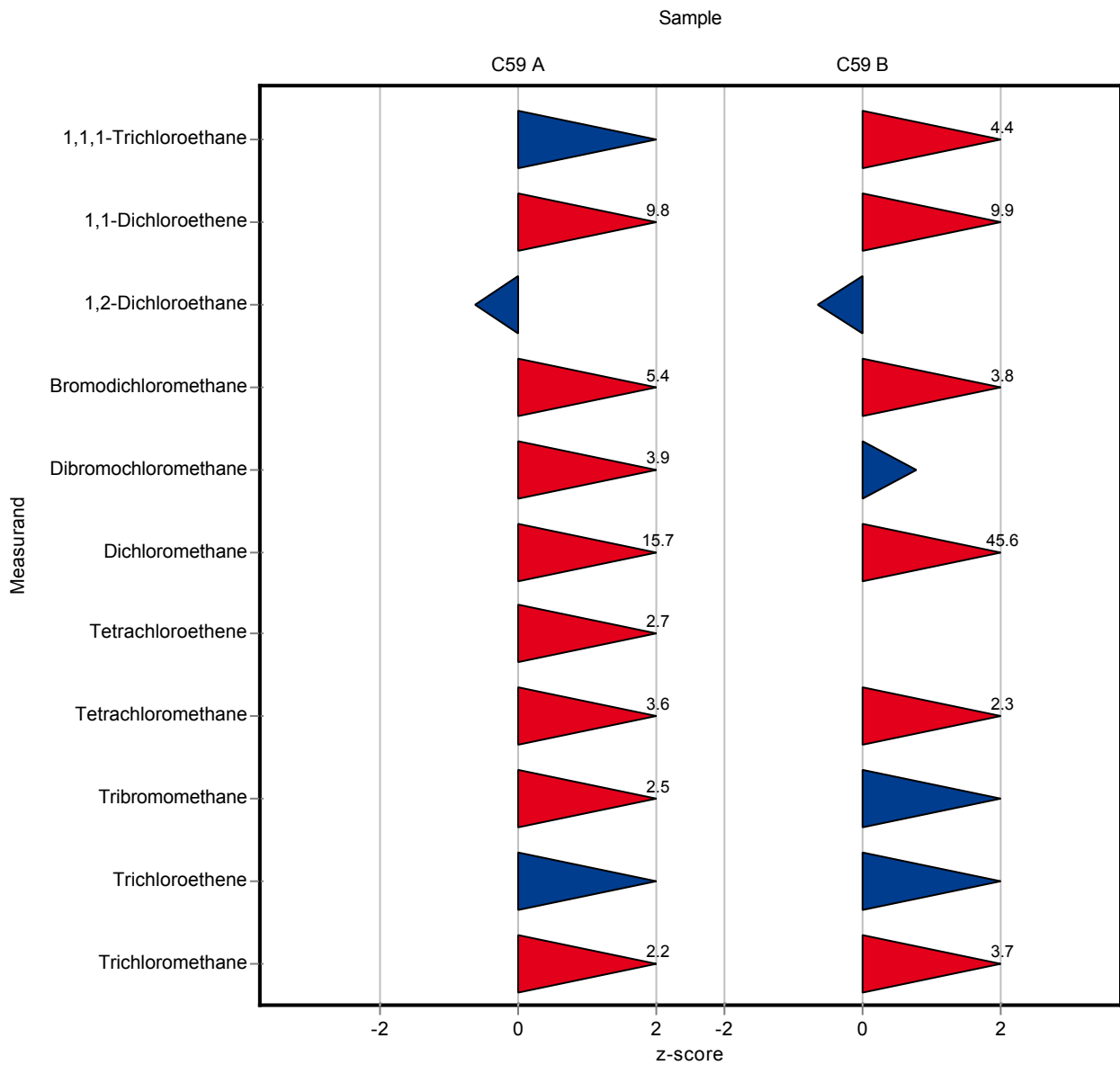
The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	6.55	0.79	0.856	135	1.97
1,1-Dichloroethene	µg/l	5.04	± 0.209	7.4	0.47	0.241	147	9.79
1,2-Dichloroethane	µg/l	5.47	± 0.511	5.05	1.14	0.681	92.3	-0.62
Bromodichloromethane	µg/l	4.99	± 0.307	7.06	0.63	0.383	141	5.40
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	-	-	0.309	-	-
Dibromochloromethane	µg/l	10.4	± 0.656	13.77	0.56	0.847	132	3.93
Dichloromethane	µg/l	7.05	± 0.402	14.66	1.23	0.484	208	15.70
Tetrachloroethene	µg/l	2.81	± 0.289	3.78	0.73	0.36	134	2.69
Tetrachloromethane	µg/l	5.75	± 0.462	7.82	0.78	0.577	136	3.59
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	-	-	0.664	-	-
Tribromomethane	µg/l	8.48	± 0.837	11.23	0.94	1.12	132	2.46
Trichloroethene	µg/l	5.75	± 0.644	7.23	0.72	0.859	126	1.73
Trichloromethane	µg/l	8.28	± 1.1	11.55	0.7	1.51	139	2.17

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.78	0.69	0.104	134	4.37
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.98	0.39	0.0689	153	9.91
1,2-Dichloroethane	µg/l	2.1	± 0.125	1.99	1.01	0.161	94.9	-0.66
Bromodichloromethane	µg/l	2.91	± 0.147	3.6	0.55	0.184	124	3.77
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	-	-	0.13	-	-
Dibromochloromethane	µg/l	2.32	± 0.162	2.49	0.35	0.216	107	0.77
Dichloromethane	µg/l	2.86	± 0.154	11.6	1.06	0.192	405	45.60
Tetrachloroethene	µg/l	-	± -	<0.53 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	1.37	0.63	0.139	131	2.33
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	-	-	0.126	-	-
Tribromomethane	µg/l	3	± 0.25	3.62	0.67	0.333	121	1.86
Trichloroethene	µg/l	1.16	± 0.0896	1.37	0.6	0.116	118	1.82
Trichloromethane	µg/l	2.95	± 0.167	3.75	0.49	0.216	127	3.70



The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	-	-	0.856	-	-
1,1-Dichloroethene	µg/l	5.04 ± 0.209	-	-	0.241	-	-
1,2-Dichloroethane	µg/l	5.47 ± 0.511	-	-	0.681	-	-
Bromodichloromethane	µg/l	4.99 ± 0.307	-	-	0.383	-	-
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	-	-	0.309	-	-
Dibromochloromethane	µg/l	10.4 ± 0.656	-	-	0.847	-	-
Dichloromethane	µg/l	7.05 ± 0.402	-	-	0.484	-	-
Tetrachloroethene	µg/l	2.81 ± 0.289	-	-	0.36	-	-
Tetrachloromethane	µg/l	5.75 ± 0.462	-	-	0.577	-	-
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	-	-	0.664	-	-
Tribromomethane	µg/l	8.48 ± 0.837	-	-	1.12	-	-
Trichloroethene	µg/l	5.75 ± 0.644	-	-	0.859	-	-
Trichloromethane	µg/l	8.28 ± 1.1	-	-	1.51	-	-

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	-	-	0.104	-	-
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	-	-	0.0689	-	-
1,2-Dichloroethane	µg/l	2.1 ± 0.125	-	-	0.161	-	-
Bromodichloromethane	µg/l	2.91 ± 0.147	-	-	0.184	-	-
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	-	-	0.13	-	-
Dibromochloromethane	µg/l	2.32 ± 0.162	-	-	0.216	-	-
Dichloromethane	µg/l	2.86 ± 0.154	-	-	0.192	-	-
Tetrachloroethene	µg/l	- ± -	-	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	-	-	0.139	-	-
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	-	-	0.126	-	-
Tribromomethane	µg/l	3 ± 0.25	-	-	0.333	-	-
Trichloroethene	µg/l	1.16 ± 0.0896	-	-	0.116	-	-
Trichloromethane	µg/l	2.95 ± 0.167	-	-	0.216	-	-

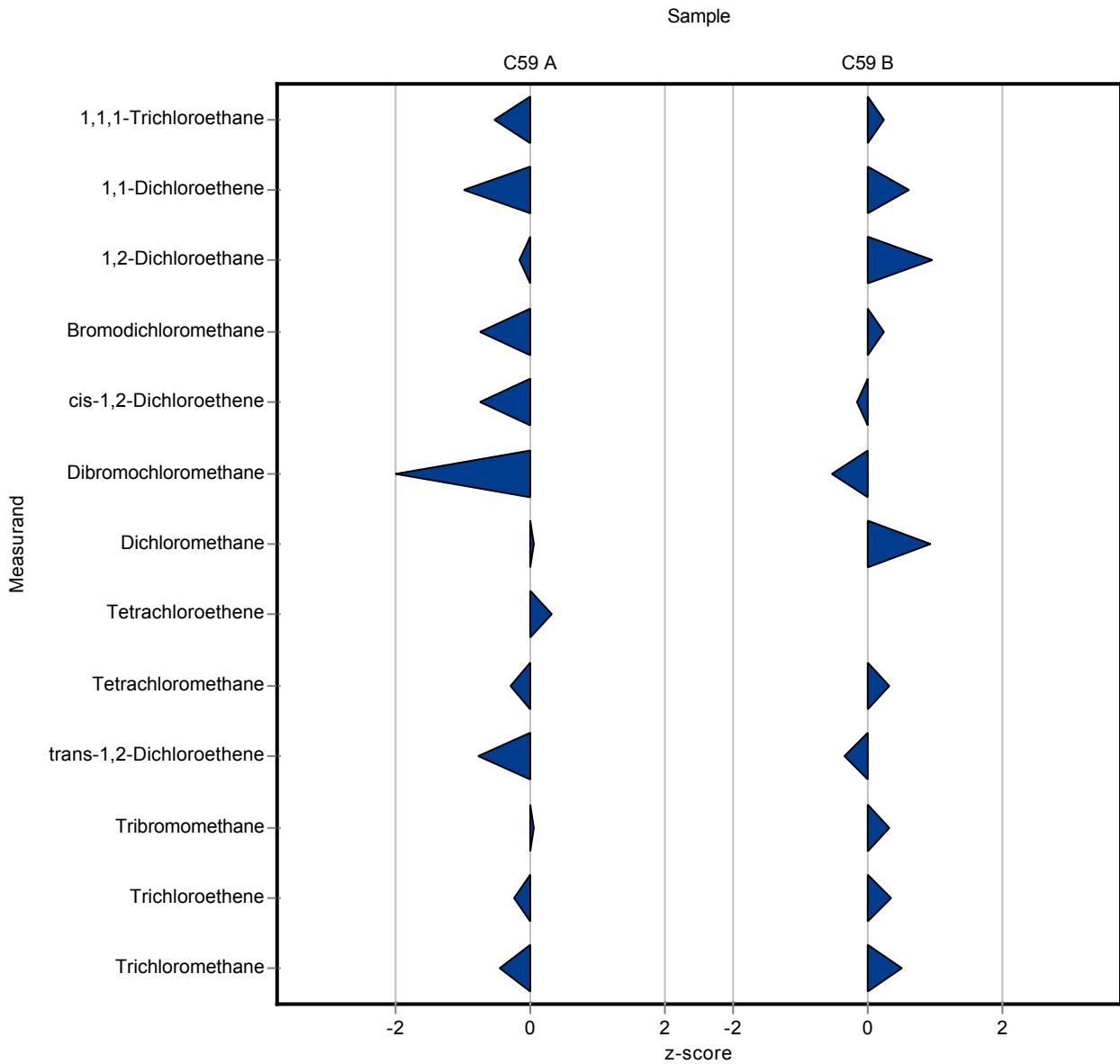
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	4.41	0.63	0.856	90.6	-0.53
1,1-Dichloroethene	µg/l	5.04 ± 0.209	4.8	0.69	0.241	95.3	-0.98
1,2-Dichloroethane	µg/l	5.47 ± 0.511	5.37	0.77	0.681	98.2	-0.15
Bromodichloromethane	µg/l	4.99 ± 0.307	4.71	0.67	0.383	94.3	-0.74
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	2.83	0.4	0.309	92.5	-0.74
Dibromochloromethane	µg/l	10.4 ± 0.656	9.51	1.36	0.847	91.1	-1.10
Dichloromethane	µg/l	7.05 ± 0.402	7.08	1.01	0.484	100	0.06
Tetrachloroethene	µg/l	2.81 ± 0.289	2.93	0.42	0.36	104	0.33
Tetrachloromethane	µg/l	5.75 ± 0.462	5.58	0.8	0.577	97	-0.30
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	4.35	0.62	0.664	89.4	-0.77
Tribromomethane	µg/l	8.48 ± 0.837	8.54	1.22	1.12	101	0.05
Trichloroethene	µg/l	5.75 ± 0.644	5.54	0.79	0.859	96.4	-0.24
Trichloromethane	µg/l	8.28 ± 1.1	7.58	1.08	1.51	91.5	-0.46

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.35	0.19	0.104	102	0.25
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.34	0.19	0.0689	103	0.62
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.25	0.32	0.161	107	0.96
Bromodichloromethane	µg/l	2.91 ± 0.147	2.95	0.42	0.184	101	0.23
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.25	0.18	0.13	98.3	-0.17
Dibromochloromethane	µg/l	2.32 ± 0.162	2.21	0.32	0.216	95.1	-0.52
Dichloromethane	µg/l	2.86 ± 0.154	3.04	0.44	0.192	106	0.93
Tetrachloroethene	µg/l	- ± -	<0.05 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1.09	0.16	0.139	104	0.32
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1.01	0.14	0.126	95.8	-0.35
Tribromomethane	µg/l	3 ± 0.25	3.11	0.45	0.333	104	0.33
Trichloroethene	µg/l	1.16 ± 0.0896	1.2	0.17	0.116	103	0.35
Trichloromethane	µg/l	2.95 ± 0.167	3.06	0.44	0.216	104	0.50



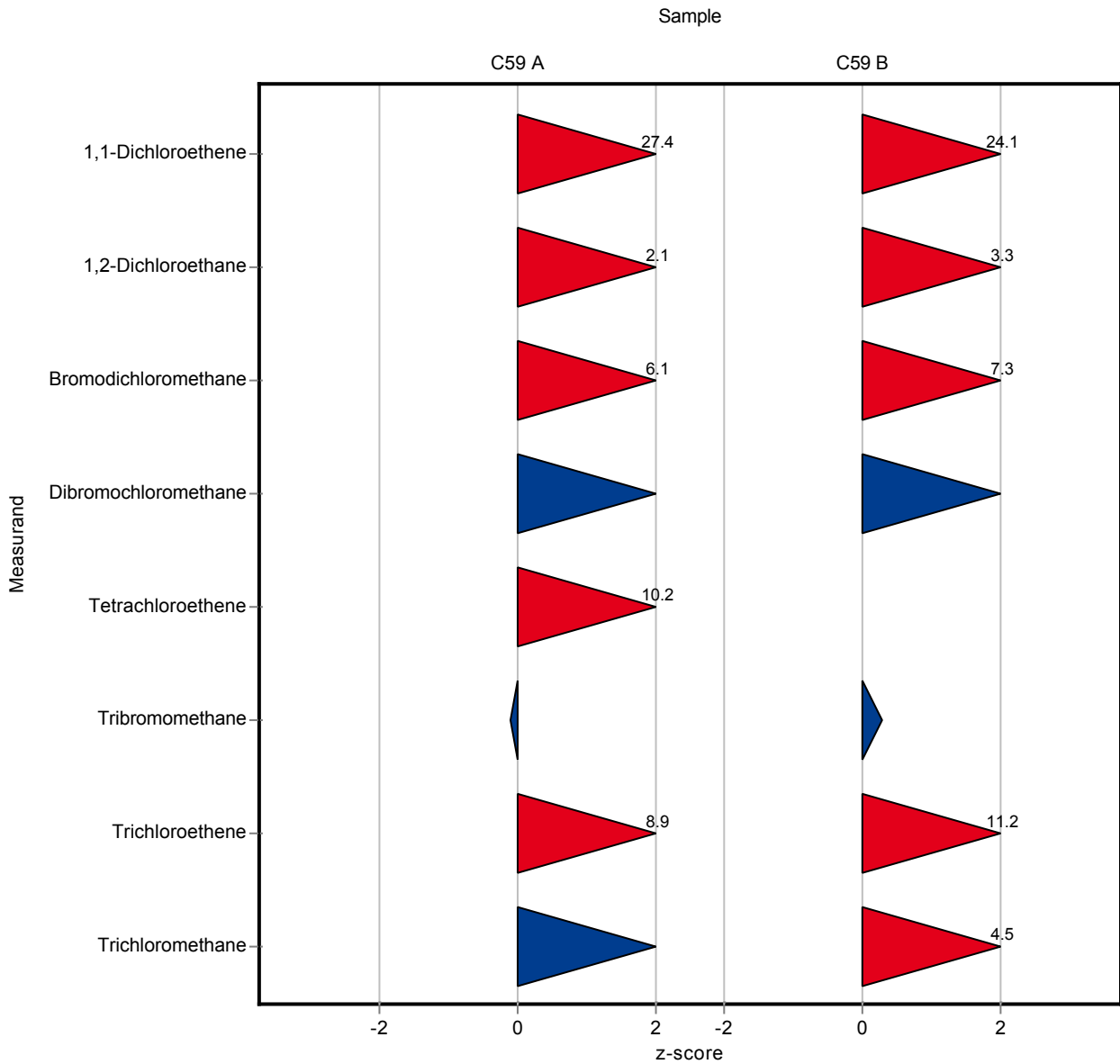
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	-	-	0.856	-	-
1,1-Dichloroethene	µg/l	5.04 ± 0.209	11.64	2.79	0.241	231	27.40
1,2-Dichloroethane	µg/l	5.47 ± 0.511	6.9	0.48	0.681	126	2.10
Bromodichloromethane	µg/l	4.99 ± 0.307	7.32	0.51	0.383	147	6.08
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	-	-	0.309	-	-
Dibromochloromethane	µg/l	10.4 ± 0.656	11.96	1.44	0.847	115	1.80
Dichloromethane	µg/l	7.05 ± 0.402	-	-	0.484	-	-
Tetrachloroethene	µg/l	2.81 ± 0.289	6.48	0.78	0.36	230	10.20
Tetrachloromethane	µg/l	5.75 ± 0.462	-	-	0.577	-	-
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	-	-	0.664	-	-
Tribromomethane	µg/l	8.48 ± 0.837	8.36	0.67	1.12	98.5	-0.11
Trichloroethene	µg/l	5.75 ± 0.644	13.39	2.54	0.859	233	8.90
Trichloromethane	µg/l	8.28 ± 1.1	10.93	1.31	1.51	132	1.75

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	-	-	0.104	-	-
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	2.96	0.83	0.0689	228	24.10
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.63	0.37	0.161	125	3.32
Bromodichloromethane	µg/l	2.91 ± 0.147	4.24	0.3	0.184	146	7.26
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	-	-	0.13	-	-
Dibromochloromethane	µg/l	2.32 ± 0.162	2.69	0.32	0.216	116	1.70
Dichloromethane	µg/l	2.86 ± 0.154	-	-	0.192	-	-
Tetrachloroethene	µg/l	- ± -	<0.1 (LOD)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	-	-	0.139	-	-
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	-	-	0.126	-	-
Tribromomethane	µg/l	3 ± 0.25	3.1	0.37	0.333	103	0.30
Trichloroethene	µg/l	1.16 ± 0.0896	2.45	0.59	0.116	211	11.20
Trichloromethane	µg/l	2.95 ± 0.167	3.93	0.75	0.216	133	4.54



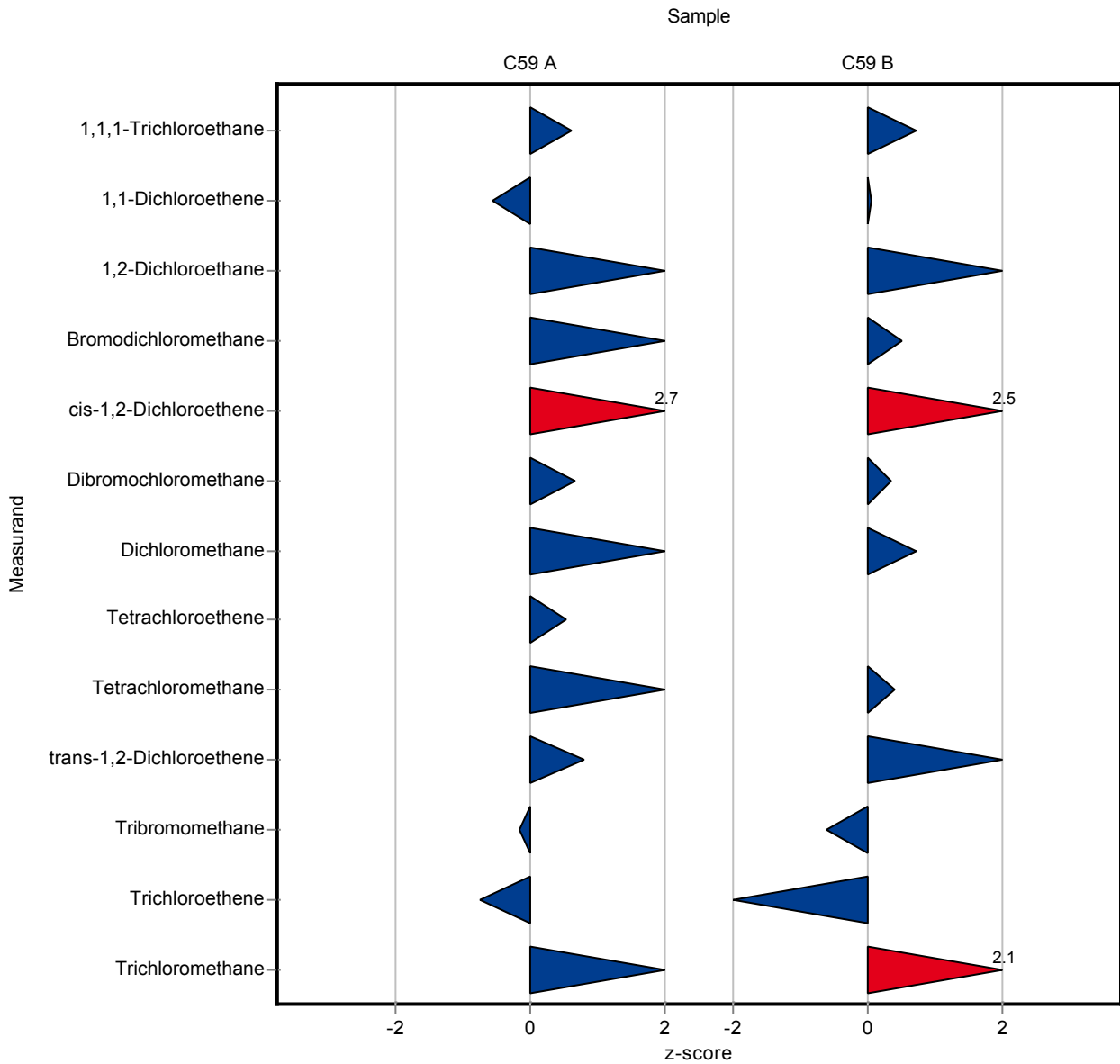
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	5.4	1.6	0.856	111	0.63
1,1-Dichloroethene	µg/l	5.04 ± 0.209	4.9	1.5	0.241	97.3	-0.56
1,2-Dichloroethane	µg/l	5.47 ± 0.511	6.3	1.9	0.681	115	1.22
Bromodichloromethane	µg/l	4.99 ± 0.307	5.4	1.6	0.383	108	1.06
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	3.9	1.2	0.309	127	2.72
Dibromochloromethane	µg/l	10.4 ± 0.656	11	3.3	0.847	105	0.66
Dichloromethane	µg/l	7.05 ± 0.402	8	2.4	0.484	113	1.97
Tetrachloroethene	µg/l	2.81 ± 0.289	3	0.9	0.36	107	0.52
Tetrachloromethane	µg/l	5.75 ± 0.462	6.5	1.9	0.577	113	1.30
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	5.4	1.6	0.664	111	0.81
Tribromomethane	µg/l	8.48 ± 0.837	8.3	2.5	1.12	97.8	-0.17
Trichloroethene	µg/l	5.75 ± 0.644	5.1	1.5	0.859	88.7	-0.75
Trichloromethane	µg/l	8.28 ± 1.1	10	3.1	1.51	121	1.14

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.4	0.4	0.104	106	0.73
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.3	0.4	0.0689	100	0.04
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.3	0.7	0.161	110	1.27
Bromodichloromethane	µg/l	2.91 ± 0.147	3	0.9	0.184	103	0.51
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.6	0.5	0.13	126	2.53
Dibromochloromethane	µg/l	2.32 ± 0.162	2.4	0.7	0.216	103	0.36
Dichloromethane	µg/l	2.86 ± 0.154	3	0.9	0.192	105	0.72
Tetrachloroethene	µg/l	- ± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1.1	0.3	0.139	105	0.39
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1.2	0.4	0.126	114	1.16
Tribromomethane	µg/l	3 ± 0.25	2.8	0.8	0.333	93.3	-0.60
Trichloroethene	µg/l	1.16 ± 0.0896	1	0.3	0.116	86.2	-1.38
Trichloromethane	µg/l	2.95 ± 0.167	3.4	1	0.216	115	2.08



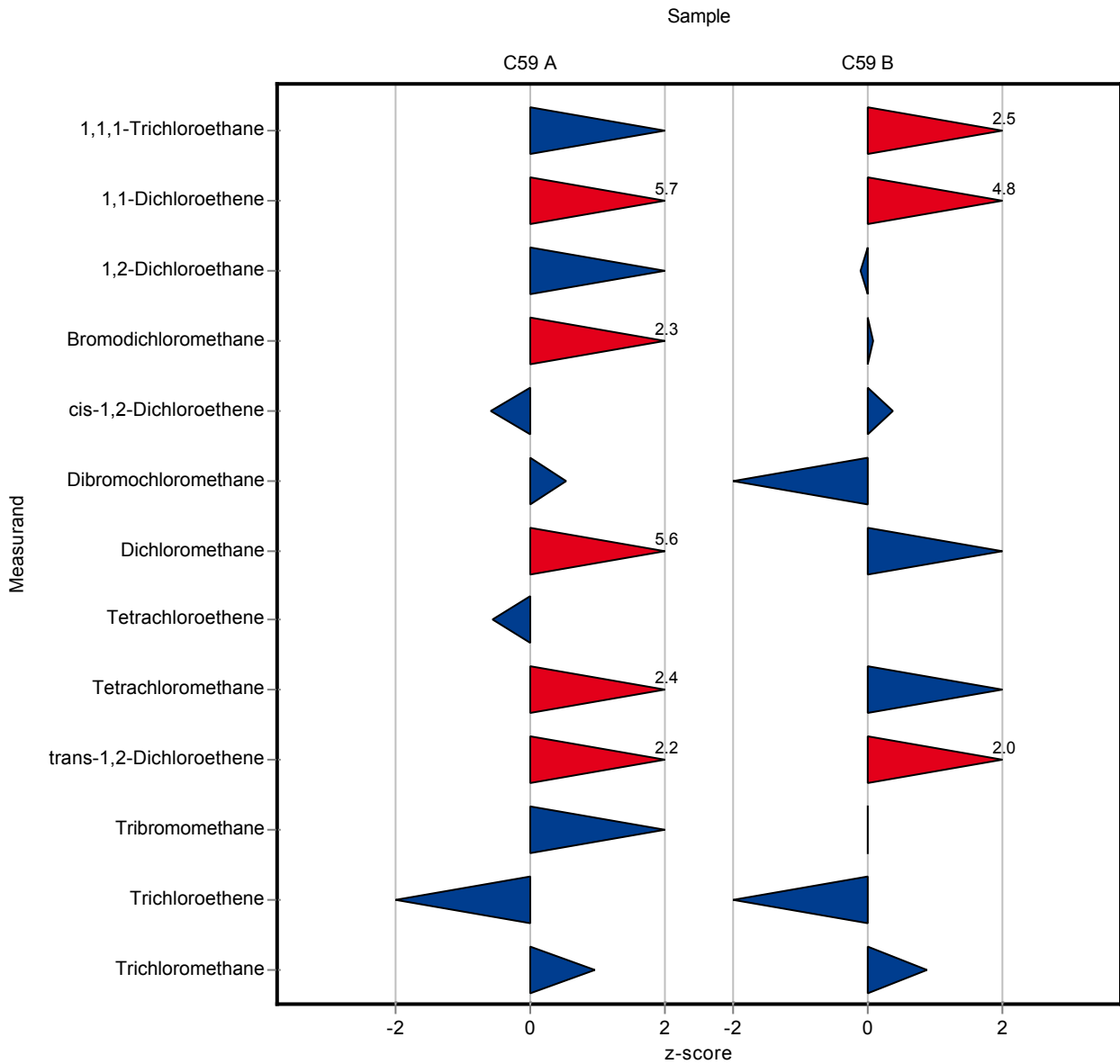
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	5.74	0.976	0.856	118	1.02
1,1-Dichloroethene	µg/l	5.04 ± 0.209	6.41	0.513	0.241	127	5.69
1,2-Dichloroethane	µg/l	5.47 ± 0.511	6.39	1.02	0.681	117	1.35
Bromodichloromethane	µg/l	4.99 ± 0.307	5.89	0.707	0.383	118	2.34
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	2.88	0.403	0.309	94.1	-0.58
Dibromochloromethane	µg/l	10.4 ± 0.656	10.9	1.09	0.847	104	0.55
Dichloromethane	µg/l	7.05 ± 0.402	9.74	1.95	0.484	138	5.57
Tetrachloroethene	µg/l	2.81 ± 0.289	2.61	0.783	0.36	92.8	-0.56
Tetrachloromethane	µg/l	5.75 ± 0.462	7.11	1.28	0.577	124	2.36
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	6.31	0.505	0.664	130	2.18
Tribromomethane	µg/l	8.48 ± 0.837	9.89	0.791	1.12	117	1.26
Trichloroethene	µg/l	5.75 ± 0.644	4.79	1.2	0.859	83.3	-1.11
Trichloromethane	µg/l	8.28 ± 1.1	9.73	1.46	1.51	118	0.96

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.58	0.269	0.104	119	2.45
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.63	0.13	0.0689	126	4.83
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.08	0.333	0.161	99.2	-0.10
Bromodichloromethane	µg/l	2.91 ± 0.147	2.92	0.35	0.184	100	0.07
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.32	0.185	0.13	104	0.37
Dibromochloromethane	µg/l	2.32 ± 0.162	2.06	0.206	0.216	88.7	-1.22
Dichloromethane	µg/l	2.86 ± 0.154	3.22	0.644	0.192	113	1.87
Tetrachloroethene	µg/l	- ± -	<0.05 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1.24	0.223	0.139	119	1.40
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1.31	0.105	0.126	124	2.03
Tribromomethane	µg/l	3 ± 0.25	3	0.24	0.333	100	0.00
Trichloroethene	µg/l	1.16 ± 0.0896	1.01	0.253	0.116	87.1	-1.29
Trichloromethane	µg/l	2.95 ± 0.167	3.14	0.471	0.216	106	0.87



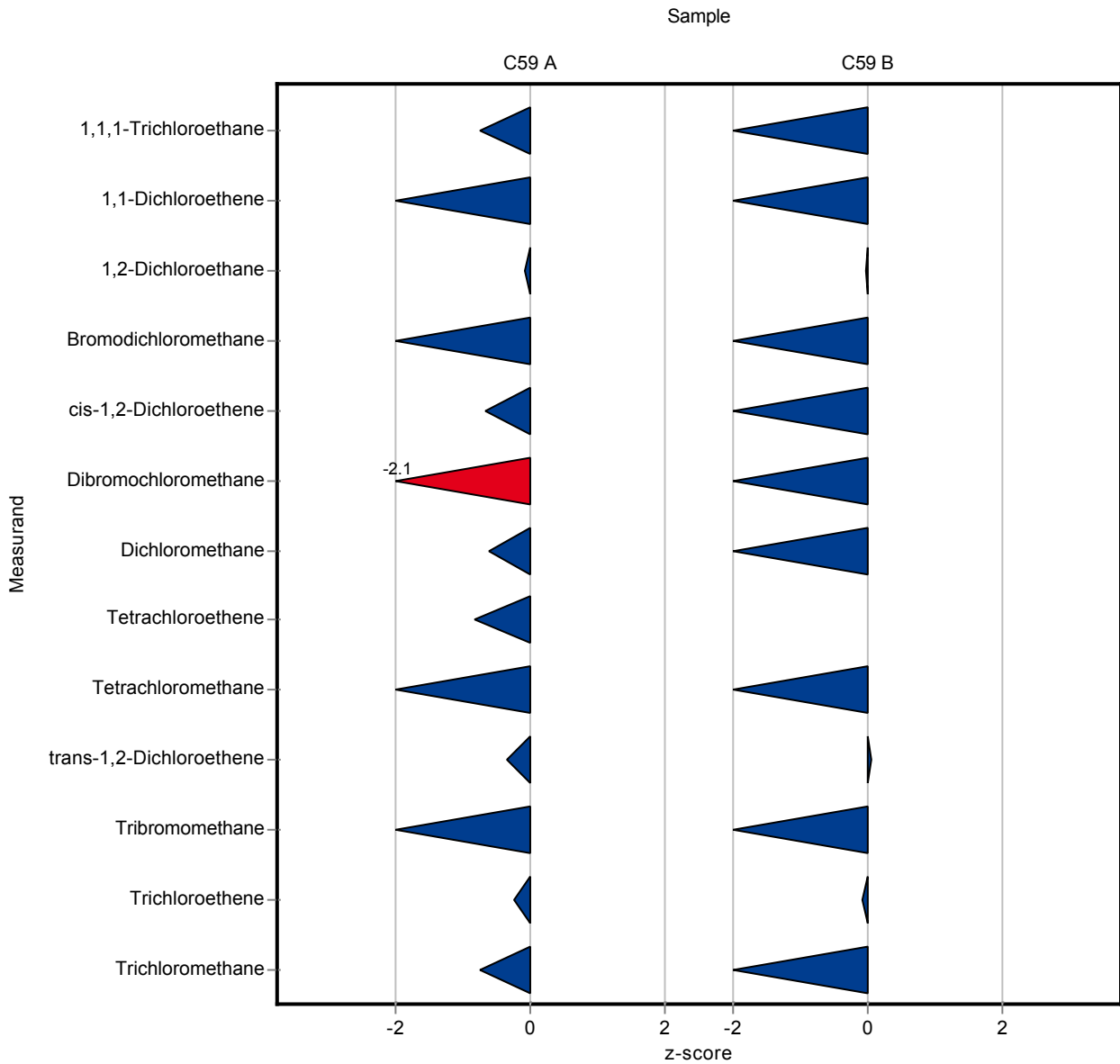
The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	4.22	0.63	0.856	86.7	-0.75
1,1-Dichloroethene	µg/l	5.04	± 0.209	4.65	0.7	0.241	92.3	-1.60
1,2-Dichloroethane	µg/l	5.47	± 0.511	5.42	0.81	0.681	99.1	-0.07
Bromodichloromethane	µg/l	4.99	± 0.307	4.34	0.65	0.383	86.9	-1.71
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	2.85	0.43	0.309	93.2	-0.68
Dibromochloromethane	µg/l	10.4	± 0.656	8.63	1.29	0.847	82.7	-2.13
Dichloromethane	µg/l	7.05	± 0.402	6.75	1.01	0.484	95.8	-0.62
Tetrachloroethene	µg/l	2.81	± 0.289	2.51	0.38	0.36	89.3	-0.84
Tetrachloromethane	µg/l	5.75	± 0.462	5.08	0.76	0.577	88.3	-1.16
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	4.63	0.69	0.664	95.2	-0.35
Tribromomethane	µg/l	8.48	± 0.837	6.97	1.05	1.12	82.2	-1.36
Trichloroethene	µg/l	5.75	± 0.644	5.55	0.83	0.859	96.6	-0.23
Trichloromethane	µg/l	8.28	± 1.1	7.17	1.08	1.51	86.6	-0.74

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.17	0.18	0.104	88.4	-1.47
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.19	0.18	0.0689	91.7	-1.55
1,2-Dichloroethane	µg/l	2.1	± 0.125	2.09	0.31	0.161	99.7	-0.04
Bromodichloromethane	µg/l	2.91	± 0.147	2.61	0.39	0.184	89.8	-1.62
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	1.13	0.17	0.13	88.9	-1.09
Dibromochloromethane	µg/l	2.32	± 0.162	2.04	0.31	0.216	87.8	-1.31
Dichloromethane	µg/l	2.86	± 0.154	2.57	0.39	0.192	89.8	-1.52
Tetrachloroethene	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	0.9	0.14	0.139	86.1	-1.04
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	1.06	0.16	0.126	101	0.05
Tribromomethane	µg/l	3	± 0.25	2.55	0.38	0.333	85	-1.35
Trichloroethene	µg/l	1.16	± 0.0896	1.15	0.17	0.116	99.2	-0.08
Trichloromethane	µg/l	2.95	± 0.167	2.64	0.4	0.216	89.4	-1.45



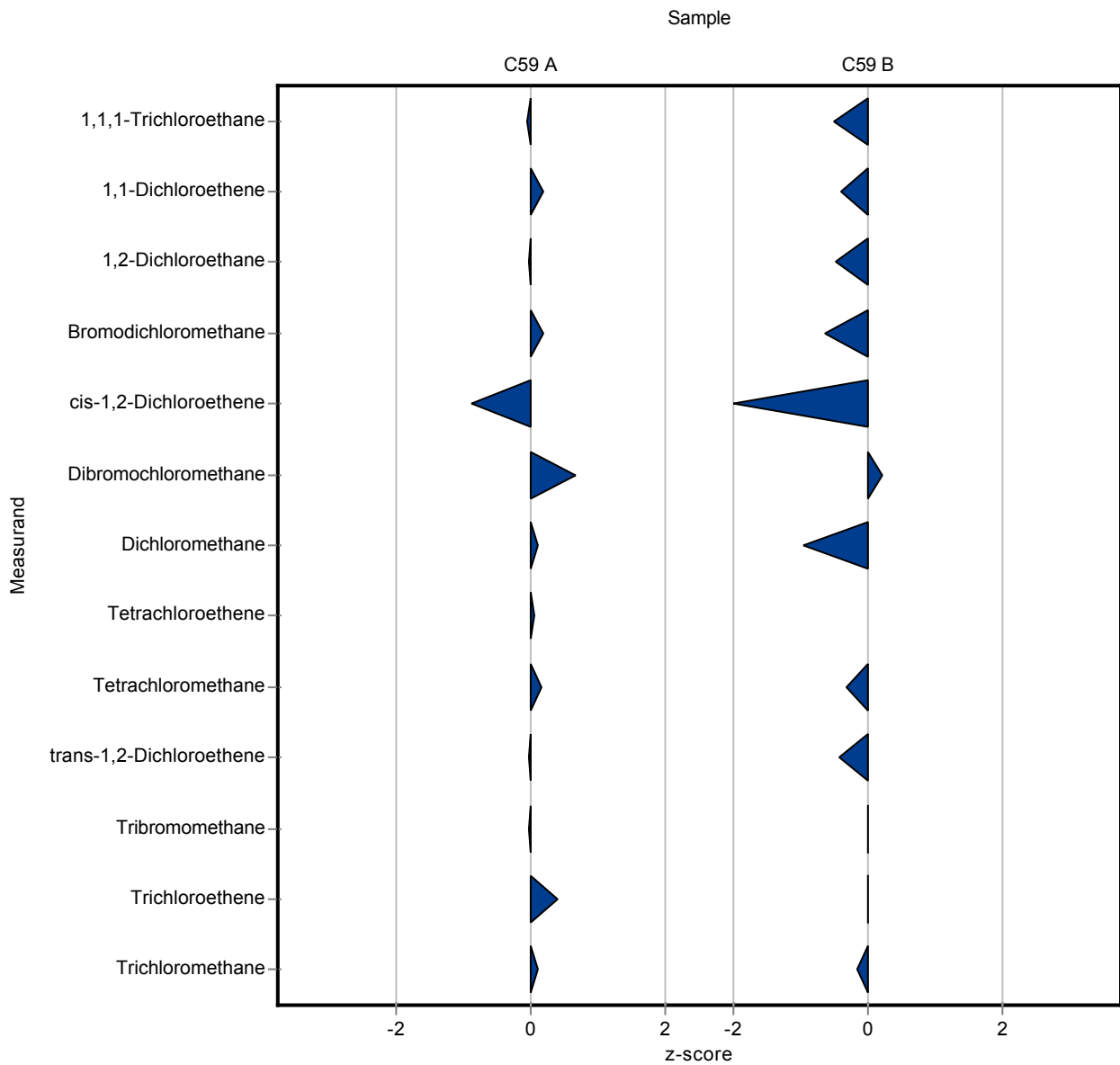
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	4.82	1.2	0.856	99.1	-0.05
1,1-Dichloroethene	µg/l	5.04 ± 0.209	5.08	1.27	0.241	101	0.18
1,2-Dichloroethane	µg/l	5.47 ± 0.511	5.46	1.37	0.681	99.8	-0.02
Bromodichloromethane	µg/l	4.99 ± 0.307	5.07	1.23	0.383	102	0.20
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	2.79	0.7	0.309	91.2	-0.87
Dibromochloromethane	µg/l	10.4 ± 0.656	11	2.76	0.847	105	0.66
Dichloromethane	µg/l	7.05 ± 0.402	7.1	1.77	0.484	101	0.11
Tetrachloroethene	µg/l	2.81 ± 0.289	2.83	0.71	0.36	101	0.05
Tetrachloromethane	µg/l	5.75 ± 0.462	5.84	1.46	0.577	102	0.15
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	4.84	1.21	0.664	99.5	-0.03
Tribromomethane	µg/l	8.48 ± 0.837	8.44	2.11	1.12	99.5	-0.04
Trichloroethene	µg/l	5.75 ± 0.644	6.09	1.52	0.859	106	0.40
Trichloromethane	µg/l	8.28 ± 1.1	8.46	2.12	1.51	102	0.12

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.27	0.32	0.104	95.9	-0.52
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.27	0.32	0.0689	97.9	-0.39
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.02	0.51	0.161	96.4	-0.47
Bromodichloromethane	µg/l	2.91 ± 0.147	2.79	0.7	0.184	96	-0.64
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.08	0.27	0.13	84.9	-1.48
Dibromochloromethane	µg/l	2.32 ± 0.162	2.37	0.59	0.216	102	0.22
Dichloromethane	µg/l	2.86 ± 0.154	2.68	0.67	0.192	93.7	-0.95
Tetrachloroethene	µg/l	- ± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1	0.25	0.139	95.7	-0.33
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1	0.25	0.126	94.9	-0.43
Tribromomethane	µg/l	3 ± 0.25	3	0.75	0.333	100	0.00
Trichloroethene	µg/l	1.16 ± 0.0896	1.16	0.29	0.116	100	0.00
Trichloromethane	µg/l	2.95 ± 0.167	2.92	0.73	0.216	98.9	-0.15



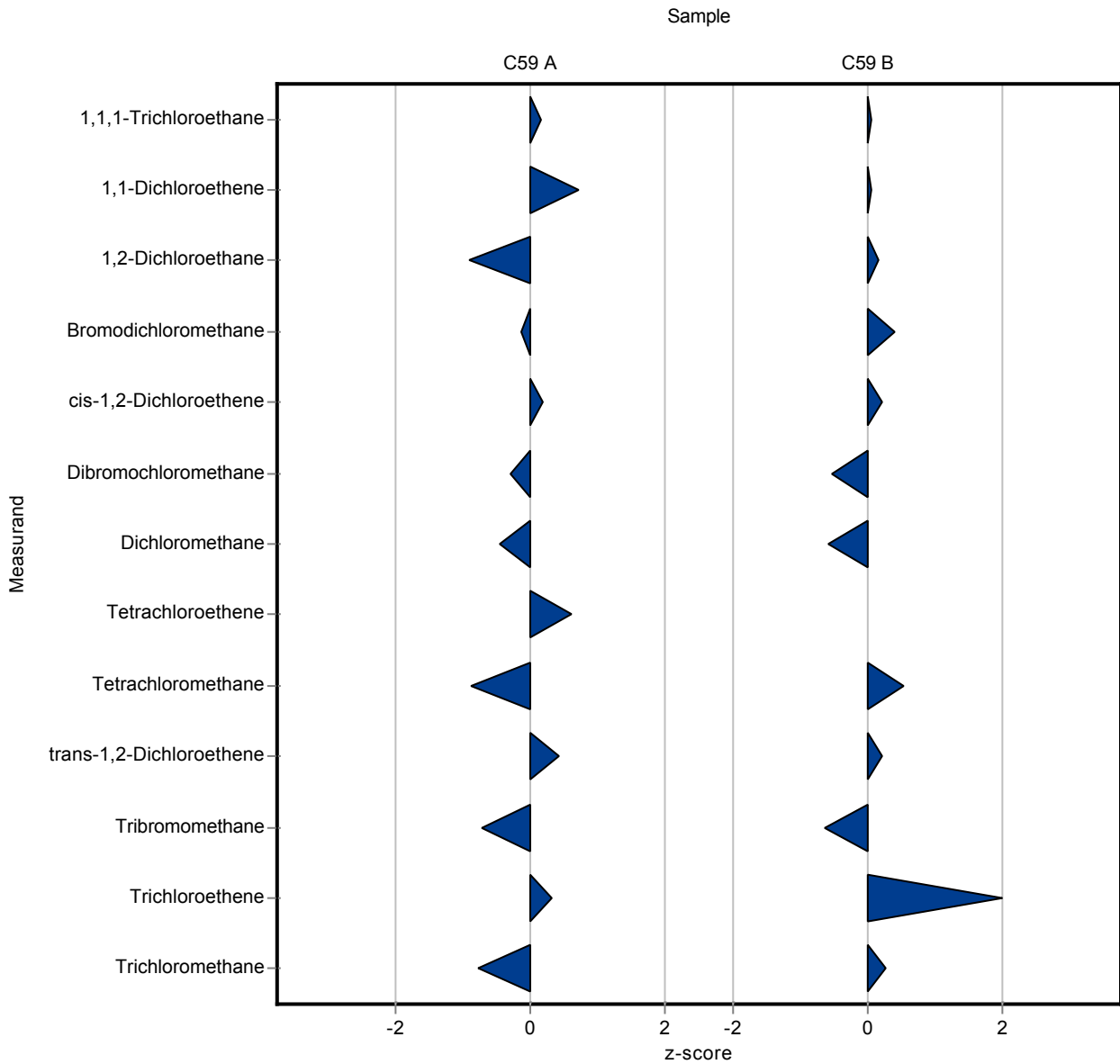
The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	5.01	0.131	0.856	103	0.17
1,1-Dichloroethene	µg/l	5.04	± 0.209	5.21	0.266	0.241	103	0.72
1,2-Dichloroethane	µg/l	5.47	± 0.511	4.86	0.263	0.681	88.8	-0.90
Bromodichloromethane	µg/l	4.99	± 0.307	4.94	0.104	0.383	98.9	-0.14
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	3.12	0.053	0.309	102	0.20
Dibromochloromethane	µg/l	10.4	± 0.656	10.2	0.23	0.847	97.7	-0.28
Dichloromethane	µg/l	7.05	± 0.402	6.83	0.235	0.484	96.9	-0.45
Tetrachloroethene	µg/l	2.81	± 0.289	3.03	0.157	0.36	108	0.61
Tetrachloromethane	µg/l	5.75	± 0.462	5.24	0.139	0.577	91.1	-0.89
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	5.14	0.138	0.664	106	0.42
Tribromomethane	µg/l	8.48	± 0.837	7.69	0.184	1.12	90.6	-0.71
Trichloroethene	µg/l	5.75	± 0.644	6.02	0.189	0.859	105	0.32
Trichloromethane	µg/l	8.28	± 1.1	7.11	0.16	1.51	85.9	-0.78

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.33	0.04	0.104	100	0.06
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.3	0.093	0.0689	100	0.04
1,2-Dichloroethane	µg/l	2.1	± 0.125	2.12	0.114	0.161	101	0.15
Bromodichloromethane	µg/l	2.91	± 0.147	2.98	0.045	0.184	102	0.40
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	1.3	0.046	0.13	102	0.22
Dibromochloromethane	µg/l	2.32	± 0.162	2.21	0.075	0.216	95.1	-0.52
Dichloromethane	µg/l	2.86	± 0.154	2.75	0.098	0.192	96.1	-0.58
Tetrachloroethene	µg/l	-	± -	<0.04 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	1.12	0.063	0.139	107	0.54
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	1.08	0.054	0.126	102	0.20
Tribromomethane	µg/l	3	± 0.25	2.79	0.076	0.333	93	-0.63
Trichloroethene	µg/l	1.16	± 0.0896	1.31	0.072	0.116	113	1.30
Trichloromethane	µg/l	2.95	± 0.167	3.01	0.069	0.216	102	0.27



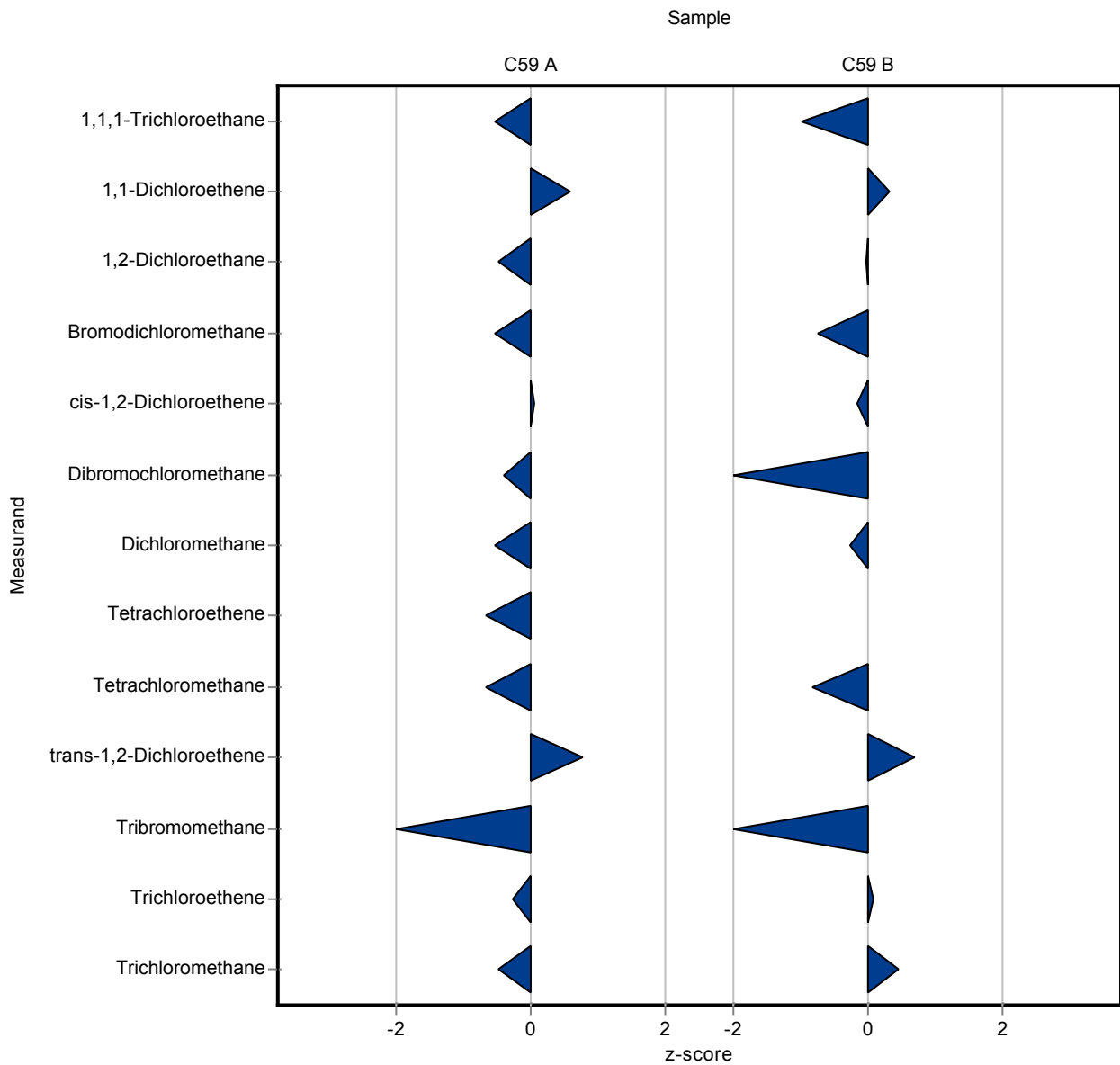
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	4.42	0.53	0.856	90.8	-0.52
1,1-Dichloroethene	µg/l	5.04 ± 0.209	5.18	0.78	0.241	103	0.60
1,2-Dichloroethane	µg/l	5.47 ± 0.511	5.14	0.62	0.681	94	-0.48
Bromodichloromethane	µg/l	4.99 ± 0.307	4.79	0.72	0.383	95.9	-0.54
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	3.08	0.46	0.309	101	0.07
Dibromochloromethane	µg/l	10.4 ± 0.656	10.1	1.51	0.847	96.8	-0.40
Dichloromethane	µg/l	7.05 ± 0.402	6.79	1.02	0.484	96.3	-0.54
Tetrachloroethene	µg/l	2.81 ± 0.289	2.57	0.39	0.36	91.4	-0.67
Tetrachloromethane	µg/l	5.75 ± 0.462	5.37	0.81	0.577	93.4	-0.66
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	5.38	0.65	0.664	111	0.78
Tribromomethane	µg/l	8.48 ± 0.837	7.21	1.08	1.12	85	-1.14
Trichloroethene	µg/l	5.75 ± 0.644	5.53	0.66	0.859	96.2	-0.25
Trichloromethane	µg/l	8.28 ± 1.1	7.56	1.13	1.51	91.3	-0.48

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.22	0.15	0.104	92.2	-0.99
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.32	0.2	0.0689	102	0.33
1,2-Dichloroethane	µg/l	2.1 ± 0.125	2.09	0.25	0.161	99.7	-0.04
Bromodichloromethane	µg/l	2.91 ± 0.147	2.77	0.42	0.184	95.3	-0.75
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.25	0.19	0.13	98.3	-0.17
Dibromochloromethane	µg/l	2.32 ± 0.162	2.09	0.31	0.216	90	-1.08
Dichloromethane	µg/l	2.86 ± 0.154	2.81	0.42	0.192	98.2	-0.27
Tetrachloroethene	µg/l	- ± -	<0.01 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	0.93	0.14	0.139	89	-0.83
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1.14	0.14	0.126	108	0.68
Tribromomethane	µg/l	3 ± 0.25	2.53	0.38	0.333	84.3	-1.41
Trichloroethene	µg/l	1.16 ± 0.0896	1.17	0.14	0.116	101	0.09
Trichloromethane	µg/l	2.95 ± 0.167	3.05	0.46	0.216	103	0.46



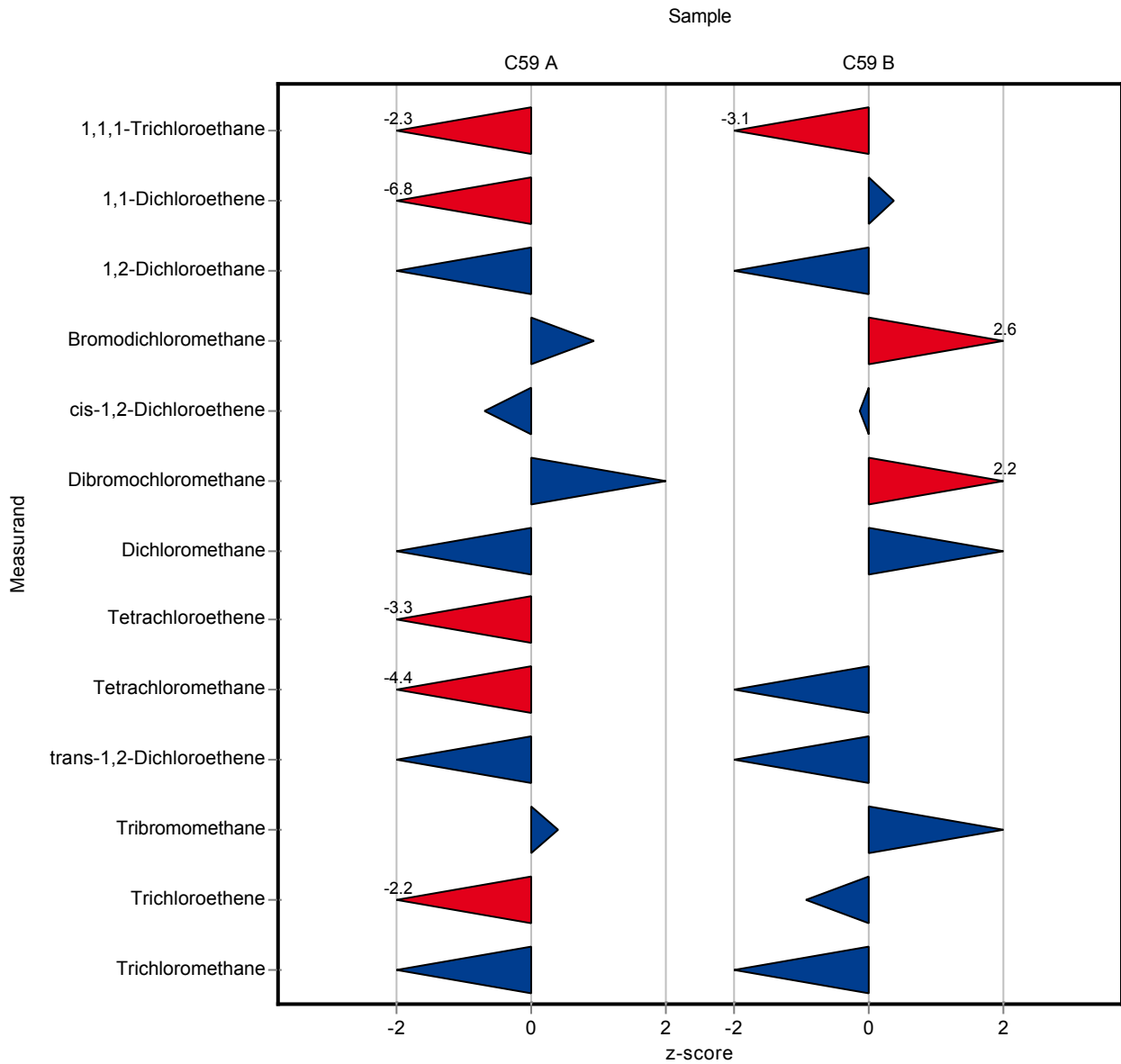
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	2.905	0.436	0.856	59.7	-2.29
1,1-Dichloroethene	µg/l	5.04 ± 0.209	3.399	0.51	0.241	67.5	-6.78
1,2-Dichloroethane	µg/l	5.47 ± 0.511	4.297	0.645	0.681	78.5	-1.72
Bromodichloromethane	µg/l	4.99 ± 0.307	5.346	0.802	0.383	107	0.92
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	2.844	0.427	0.309	93	-0.70
Dibromochloromethane	µg/l	10.4 ± 0.656	11.336	1.7	0.847	109	1.06
Dichloromethane	µg/l	7.05 ± 0.402	6.086	0.913	0.484	86.3	-1.99
Tetrachloroethene	µg/l	2.81 ± 0.289	1.626	0.244	0.36	57.8	-3.29
Tetrachloromethane	µg/l	5.75 ± 0.462	3.241	0.486	0.577	56.4	-4.35
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	3.67	0.55	0.664	75.5	-1.80
Tribromomethane	µg/l	8.48 ± 0.837	8.926	1.339	1.12	105	0.40
Trichloroethene	µg/l	5.75 ± 0.644	3.842	0.576	0.859	66.8	-2.22
Trichloromethane	µg/l	8.28 ± 1.1	5.733	0.86	1.51	69.2	-1.69

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	0.998	0.15	0.104	75.4	-3.12
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.323	0.198	0.0689	102	0.38
1,2-Dichloroethane	µg/l	2.1 ± 0.125	1.919	0.288	0.161	91.6	-1.10
Bromodichloromethane	µg/l	2.91 ± 0.147	3.383	0.507	0.184	116	2.59
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.253	0.188	0.13	98.5	-0.14
Dibromochloromethane	µg/l	2.32 ± 0.162	2.799	0.42	0.216	120	2.20
Dichloromethane	µg/l	2.86 ± 0.154	3.12	0.468	0.192	109	1.35
Tetrachloroethene	µg/l	- ± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	0.801	0.12	0.139	76.6	-1.75
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	0.835	0.125	0.126	79.2	-1.74
Tribromomethane	µg/l	3 ± 0.25	3.453	0.518	0.333	115	1.35
Trichloroethene	µg/l	1.16 ± 0.0896	1.053	0.158	0.116	90.8	-0.92
Trichloromethane	µg/l	2.95 ± 0.167	2.656	0.398	0.216	90	-1.37



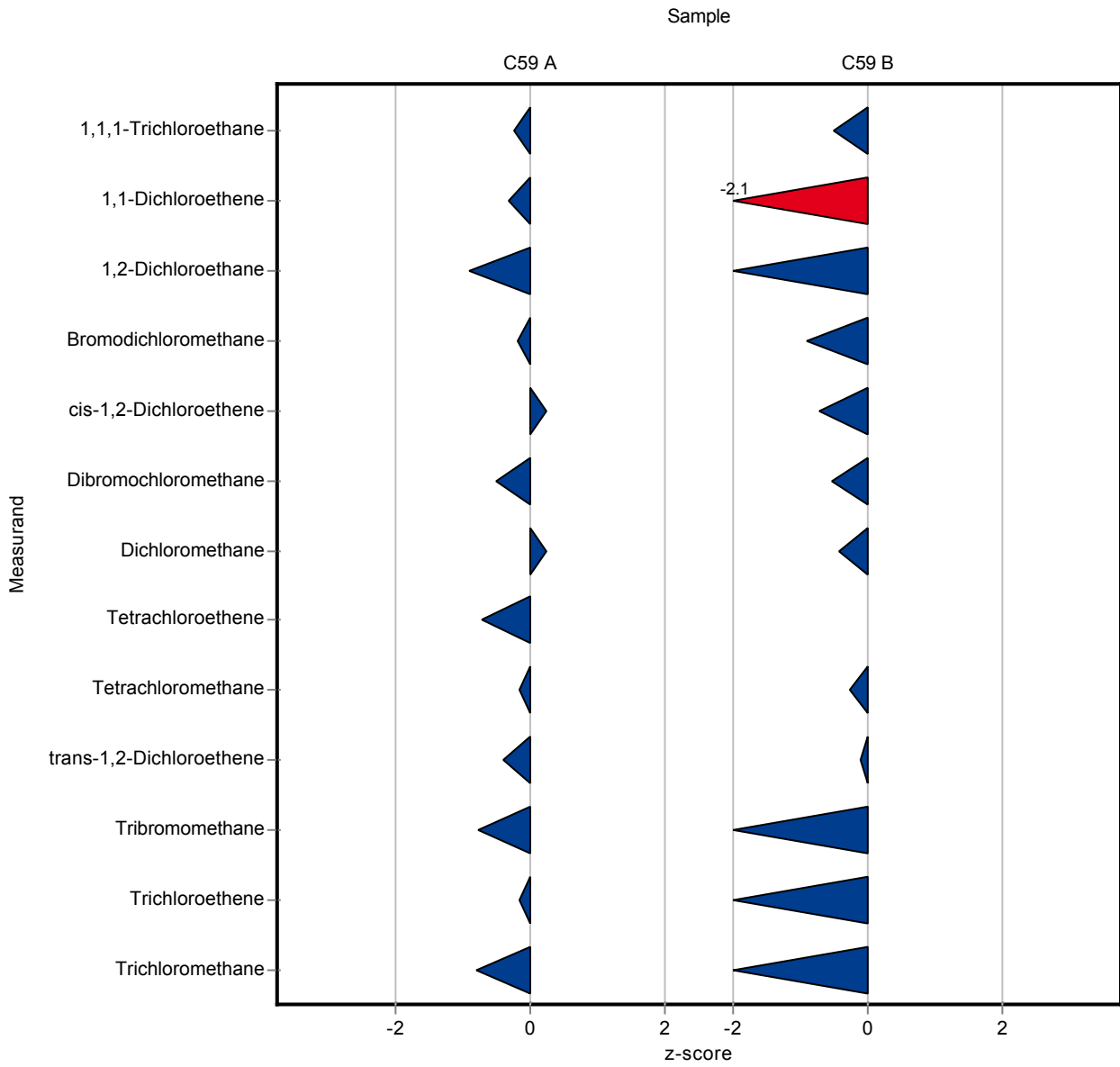
The following results were achieved:

Sample: C59A

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87 ± 0.642	4.65	0.5	0.856	95.6	-0.25
1,1-Dichloroethene	µg/l	5.04 ± 0.209	4.96	0.5	0.241	98.5	-0.31
1,2-Dichloroethane	µg/l	5.47 ± 0.511	4.85	0.5	0.681	88.7	-0.91
Bromodichloromethane	µg/l	4.99 ± 0.307	4.92	0.5	0.383	98.5	-0.20
cis-1,2-Dichloroethene	µg/l	3.06 ± 0.257	3.13	0.3	0.309	102	0.23
Dibromochloromethane	µg/l	10.4 ± 0.656	10.02	1	0.847	96	-0.49
Dichloromethane	µg/l	7.05 ± 0.402	7.16	0.7	0.484	102	0.23
Tetrachloroethene	µg/l	2.81 ± 0.289	2.55	0.2	0.36	90.7	-0.73
Tetrachloromethane	µg/l	5.75 ± 0.462	5.66	0.6	0.577	98.4	-0.16
trans-1,2-Dichloroethene	µg/l	4.86 ± 0.553	4.59	0.5	0.664	94.4	-0.41
Tribromomethane	µg/l	8.48 ± 0.837	7.61	0.8	1.12	89.7	-0.78
Trichloroethene	µg/l	5.75 ± 0.644	5.6	0.6	0.859	97.4	-0.17
Trichloromethane	µg/l	8.28 ± 1.1	7.07	0.7	1.51	85.4	-0.80

Sample: C59B

Parameter	Unit	Target ± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32 ± 0.0869	1.27	0.1	0.104	95.9	-0.52
1,1-Dichloroethene	µg/l	1.3 ± 0.0574	1.15	0.1	0.0689	88.7	-2.13
1,2-Dichloroethane	µg/l	2.1 ± 0.125	1.79	0.2	0.161	85.4	-1.90
Bromodichloromethane	µg/l	2.91 ± 0.147	2.74	0.3	0.184	94.2	-0.91
cis-1,2-Dichloroethene	µg/l	1.27 ± 0.108	1.18	0.1	0.13	92.8	-0.71
Dibromochloromethane	µg/l	2.32 ± 0.162	2.21	0.2	0.216	95.1	-0.52
Dichloromethane	µg/l	2.86 ± 0.154	2.78	0.3	0.192	97.2	-0.42
Tetrachloroethene	µg/l	- ± -	<0.08 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05 ± 0.108	1.01	0.1	0.139	96.6	-0.25
trans-1,2-Dichloroethene	µg/l	1.05 ± 0.105	1.04	0.1	0.126	98.7	-0.11
Tribromomethane	µg/l	3 ± 0.25	2.62	0.3	0.333	87.3	-1.14
Trichloroethene	µg/l	1.16 ± 0.0896	1.02	0.1	0.116	88	-1.21
Trichloromethane	µg/l	2.95 ± 0.167	2.62	0.3	0.216	88.8	-1.54



The following results were achieved:

Sample: C59A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	4.87	± 0.642	4.61	0.92	0.856	94.8	-0.30
1,1-Dichloroethene	µg/l	5.04	± 0.209	5.08	1.02	0.241	101	0.18
1,2-Dichloroethane	µg/l	5.47	± 0.511	6.15	1.23	0.681	112	1.00
Bromodichloromethane	µg/l	4.99	± 0.307	5.03	1.01	0.383	101	0.09
cis-1,2-Dichloroethene	µg/l	3.06	± 0.257	3.21	0.64	0.309	105	0.49
Dibromochloromethane	µg/l	10.4	± 0.656	10.37	2.07	0.847	99.3	-0.08
Dichloromethane	µg/l	7.05	± 0.402	7.36	1.47	0.484	104	0.64
Tetrachloroethene	µg/l	2.81	± 0.289	2.79	0.56	0.36	99.2	-0.06
Tetrachloromethane	µg/l	5.75	± 0.462	5.56	1.11	0.577	96.7	-0.33
trans-1,2-Dichloroethene	µg/l	4.86	± 0.553	4.88	0.98	0.664	100	0.03
Tribromomethane	µg/l	8.48	± 0.837	9.88	1.98	1.12	116	1.25
Trichloroethene	µg/l	5.75	± 0.644	5.69	1.14	0.859	99	-0.07
Trichloromethane	µg/l	8.28	± 1.1	8	1.6	1.51	96.6	-0.19

Sample: C59B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
1,1,1-Trichloroethane	µg/l	1.32	± 0.0869	1.35	0.27	0.104	102	0.25
1,1-Dichloroethene	µg/l	1.3	± 0.0574	1.39	0.28	0.0689	107	1.35
1,2-Dichloroethane	µg/l	2.1	± 0.125	2.44	0.49	0.161	116	2.14
Bromodichloromethane	µg/l	2.91	± 0.147	2.97	0.59	0.184	102	0.34
cis-1,2-Dichloroethene	µg/l	1.27	± 0.108	1.37	0.27	0.13	108	0.76
Dibromochloromethane	µg/l	2.32	± 0.162	2.33	0.47	0.216	100	0.03
Dichloromethane	µg/l	2.86	± 0.154	2.81	0.56	0.192	98.2	-0.27
Tetrachloroethene	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Tetrachloromethane	µg/l	1.05	± 0.108	1.05	0.21	0.139	100	0.03
trans-1,2-Dichloroethene	µg/l	1.05	± 0.105	1.08	0.22	0.126	102	0.20
Tribromomethane	µg/l	3	± 0.25	3.51	0.7	0.333	117	1.53
Trichloroethene	µg/l	1.16	± 0.0896	1.21	0.24	0.116	104	0.44
Trichloromethane	µg/l	2.95	± 0.167	3.01	0.6	0.216	102	0.27

