

**EVALUATION OF THE  
INTERLABORATORY COMPARISON  
TEST  
Metals M140**

Sample dispatch on 6<sup>th</sup> February 2018

1<sup>st</sup> Edition 16<sup>th</sup> May 2018

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## 1 Interlaboratory comparison test: Metals – M140

### 1.1 Participants and time schedule

- Number of registrations: 30
- Number of submitted data records: 24
- Dispatch of samples: 6th February 2018
- Closing date for submission of data: 6th March 2018

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

### 1.2 Sampling, sample material and distribution

The sampling of ground water and surface water was carried out on 5<sup>th</sup> February 2018.

The following samples were made available

- Sample M140 A – ground water
- Sample M140 B – surface water

Both samples were filtered using 0.45 µm membrane disc filters and 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 stabilized with HNO<sub>3</sub> (pH < 2) and dispatched on 6<sup>th</sup> February 2018.

Each participant received:

- 2 samples (each 250 ml), each filled in 250 ml PE-HD 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 control test value ± measurement uncertainty (± U).

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## 2 Evaluation

The analytical results had to be made available to the organiser not later than 6<sup>th</sup> March 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-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 consider recovery rates as additional criteria to decide on the necessity of internal quality assurance measures. This is particularly recommended for the following parameters:

- Cf. Sample M140 A: Arsenic, Iron, Lead and Nickel (high variance)
- Cf. Sample M140 B: Selenium (low variance)

Sample M140 A: For the parameters Aluminium, Cadmium and Mercury no target value was calculated because of the low analyte content and/or the small number of submitted results.

Sample M140 B: For the parameter Cadmium no target value was calculated because of the low analyte content and/or the small number of submitted results.

#### Mercury

For some participants the reported results of the parameter mercury were considerably too low.

The participants are always provided the samples together with detailed information on the procedure of the Interlaboratory comparison test, the sample materials, the analytical parameters, and a recommended time frame for analysis to prevent

instability effects. The recommendation for this proficiency test round was to complete the analysis before 13<sup>th</sup> February 2018.

During the evaluation of the proficiency test results the following factors were considered as possible reasons for low mercury results: the specified analysis period, the date of the sample receipt (package runtime) and the temperature of the samples at the receipt.

The verification of the date of the sample receipt and the temperature of the samples at the receipt showed no systematic variations with regard to the submitted mercury contents.

From a total of 15 results for mercury, 10 results were submitted stating a measurement date in the acceptable time frame from 7<sup>th</sup> to 15<sup>th</sup> February 2018. Three results were exceeding the recommended time frame for analysis by more than 7 days (measurement dates: 19<sup>th</sup> February 2018, 20<sup>th</sup> February 2018, and 26<sup>th</sup> February 2018), and also showed very low mercury concentrations. These results were manually eliminated as outliers and thus not considered for the calculation of the target value.

## 5 Annotations on tables and charts

### 5.1 Information and abbreviations in tables

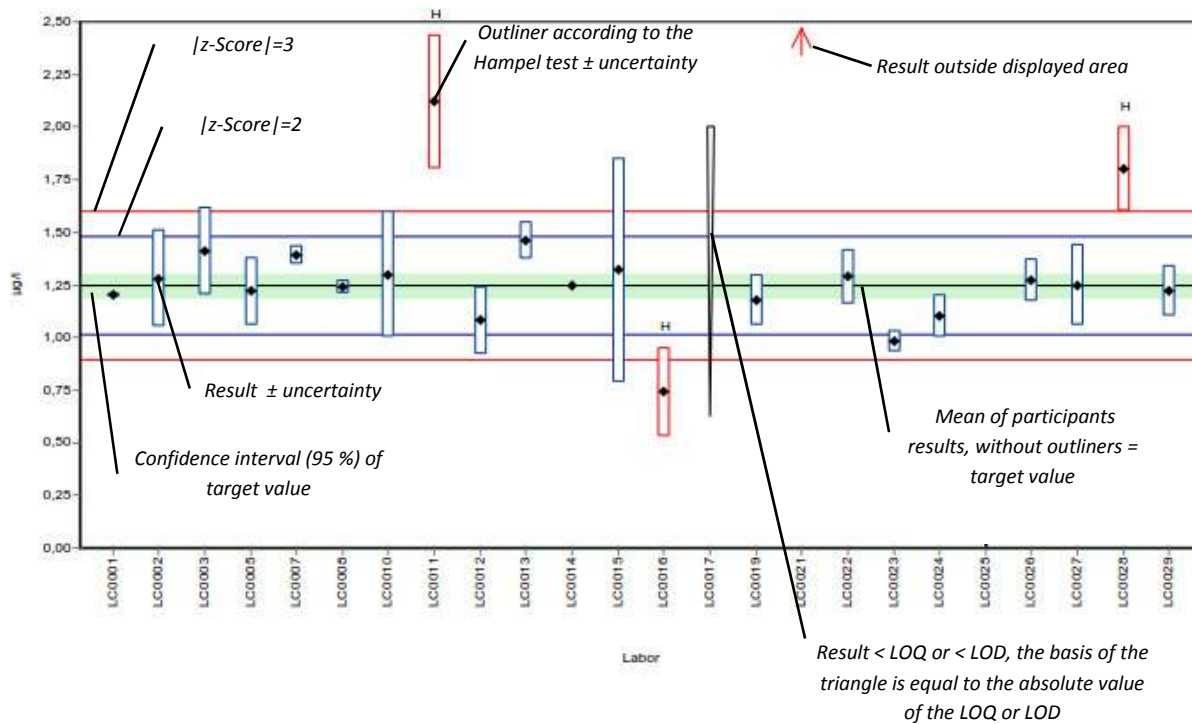
Parameter	Analyte identifier
Sample	Sample identifier
Unit	Given unit for result and uncertainty (e.g. µg/l)
Mean	Mean of the participants results, without outliers (3 significant digits)
CI (99 %)	99% confidence interval (3 significant digits)
Minimum	Minimum of all submitted results, after removal 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 testing ± 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):



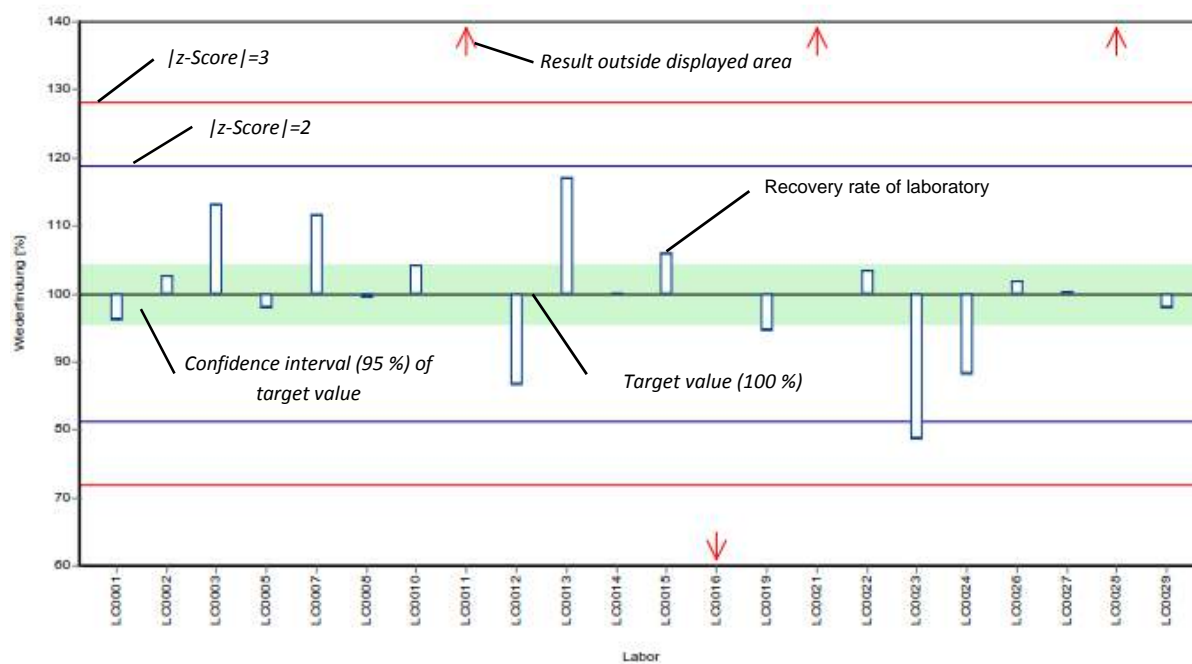
	Result that exceeds the median of the absolute values of the transmitted LOQs or LODs by more than 100 %.
Standard deviation	Reproducibility standard deviation, calculated from the participants results (3 significant digits)
Rel. standard deviation	Reproducibility standard deviation, calculated from 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. 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

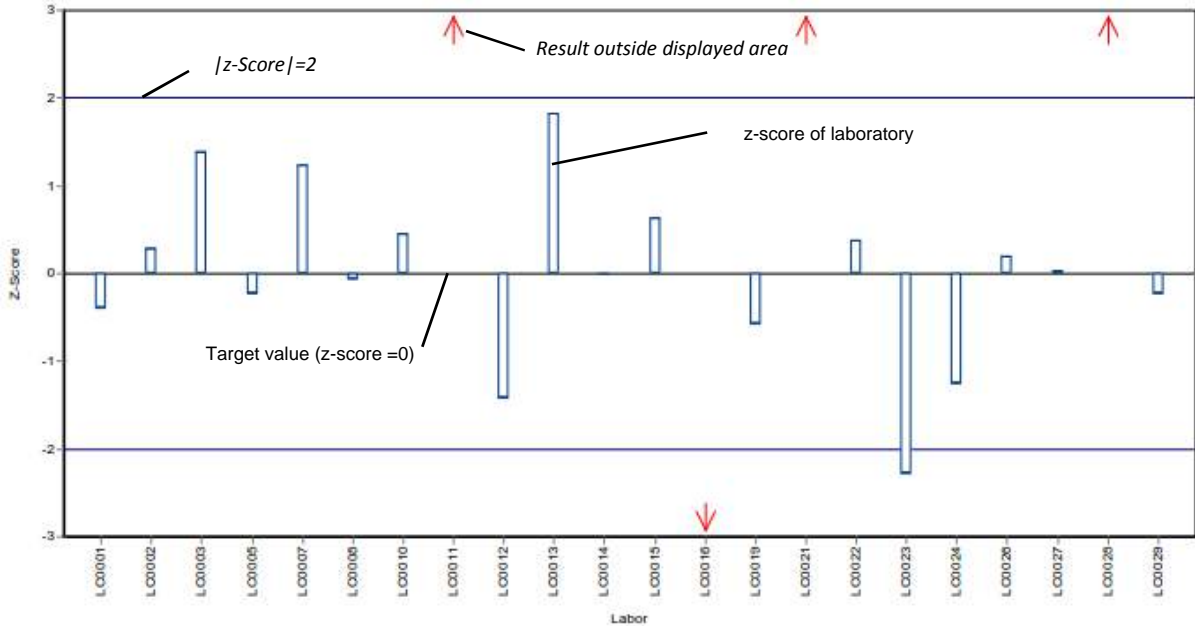
### Example chart: Results



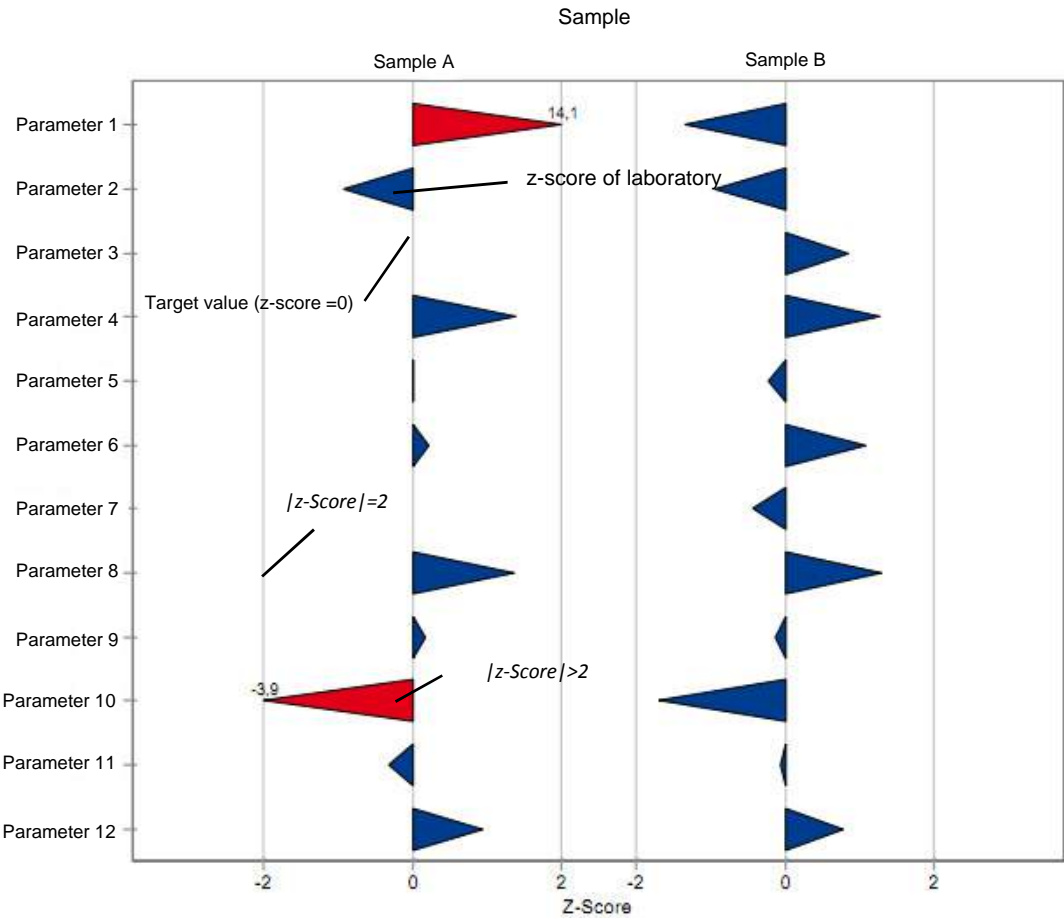
### Example chart: Recovery



**Example chart: z-score**



**Example chart: z-score - laboratory oriented report**



Summary of results, after removal of outliers: Metals M140

## 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 %
Aluminium	M140 A	µg/l	4	2	-	± -	0,238	0,504	-	-
	M140 B	µg/l	16	3	10,8	± 0,857	9	13	1,14	11
Arsenic	M140 A	µg/l	6	3	0,266	± 0,0739	0,23	0,383	0,0603	23
	M140 B	µg/l	10	2	0,623	± 0,0541	0,57	0,732	0,0571	9,2
Lead	M140 A	µg/l	10	2	0,148	± 0,0314	0,08	0,191	0,0331	22
	M140 B	µg/l	13	2	0,977	± 0,0579	0,87	1,1	0,0696	7,1
Cadmium	M140 A	µg/l	5	1	-	± -	0,0162	0,0326	-	-
	M140 B	µg/l	4	1	-	± -	0,008	0,0358	-	-
Chromium	M140 A	µg/l	9	5	0,739	± 0,0552	0,697	0,866	0,0552	7,5
	M140 B	µg/l	16	1	2,16	± 0,142	1,8	2,6	0,19	8,8
Iron	M140 A	µg/l	13	2	4,22	± 1,44	2,16	8	1,73	41
	M140 B	µg/l	15	4	14,4	± 1,31	12,3	18,8	1,69	12
Copper	M140 A	µg/l	16	5	13,8	± 0,547	12,5	15,2	0,729	5,3
	M140 B	µg/l	17	4	5,09	± 0,232	4,64	5,76	0,318	6,3
Manganese	M140 A	µg/l	13	1	1,7	± 0,103	1,5	1,9	0,124	7,3
	M140 B	µg/l	13	3	4,26	± 0,206	3,8	4,65	0,248	5,8
Nickel	M140 A	µg/l	11	3	0,85	± 0,19	0,5	1,2	0,21	25
	M140 B	µg/l	14	3	1,67	± 0,106	1,4	1,83	0,132	7,9
Mercury	M140 A	µg/l	3	0	-	± -	0,006	0,0679	-	-
	M140 B	µg/l	9	6	1,09	± 0,0893	0,975	1,2	0,0893	8,2
Selenium	M140 A	µg/l	14	2	2,73	± 0,274	2,1	3,51	0,341	12
	M140 B	µg/l	12	4	3,92	± 0,153	3,53	4,28	0,177	4,5
Uranium	M140 A	µg/l	13	2	4,26	± 0,165	3,98	4,6	0,198	4,7
	M140 B	µg/l	14	0	1,11	± 0,046	1,03	1,2	0,0573	5,2
Zinc	M140 A	µg/l	17	4	1060	± 35,7	980	1160	49,1	4,6
	M140 B	µg/l	17	3	11,8	± 0,714	9,2	13,2	0,981	8,3

## 7 Parameter oriented report

Aluminum .....	14
Arsenic .....	20
Lead .....	28
Cadmium .....	36
Chromium .....	40
Iron .....	48
Copper .....	56
Manganese .....	64
Nickel .....	72
Mercury .....	80
Selenium .....	86
Uranium .....	94
Zinc .....	102

## Parameter oriented report

### M140 A

#### Aluminium

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.238 - 0.504
Control test value ± U	<0.2 (BG)

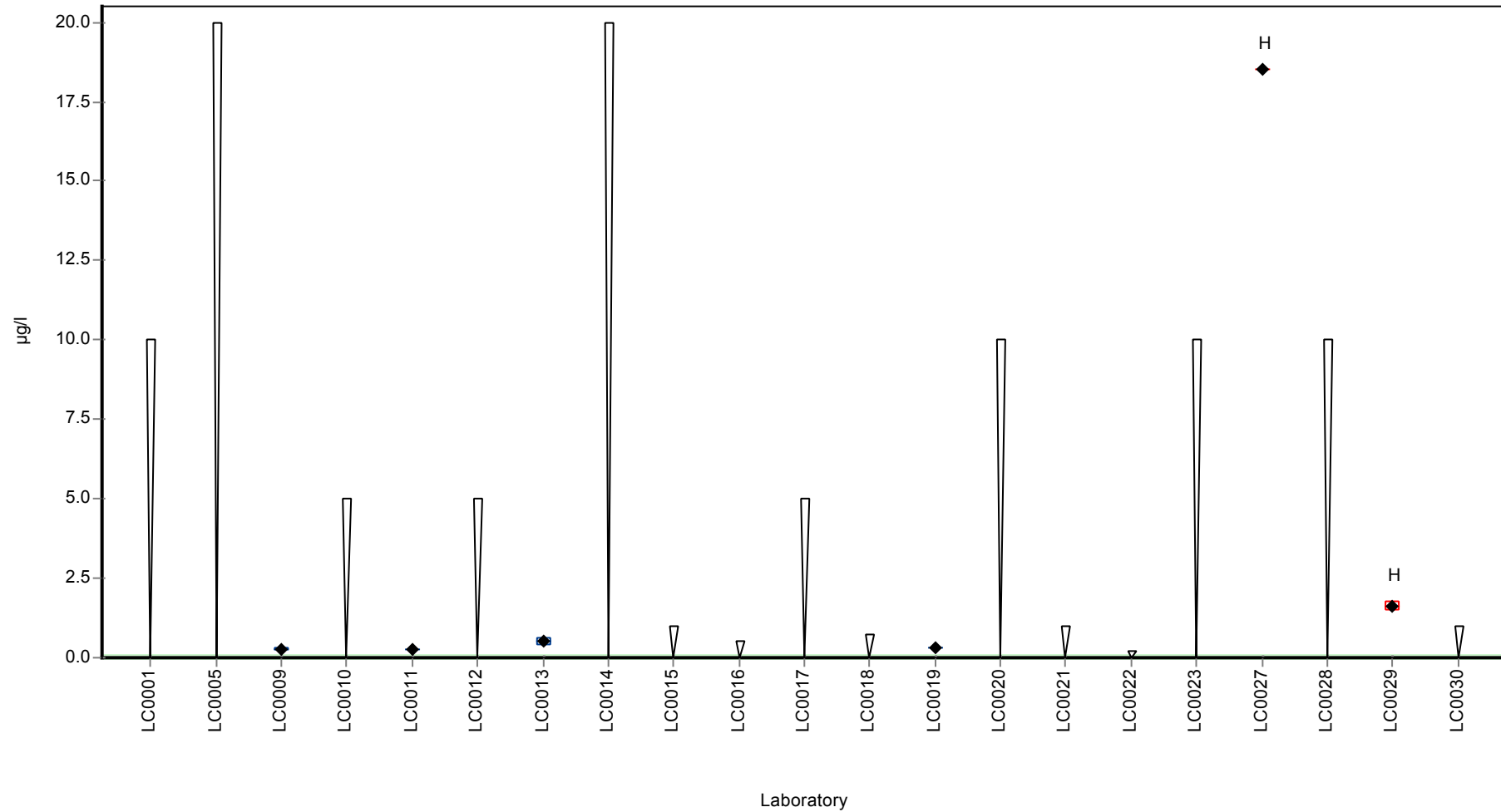
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 10 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 20 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.273	0.061	-	-	
LC0010	< 5 (LOQ)	-	-	-	
LC0011	0.238	0.005	-	-	
LC0012	< 5 (LOQ)	-	-	-	
LC0013	0.504	0.126	-	-	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	< 1 (LOQ)	-	-	-	
LC0016	< 0.5 (LOQ)	-	-	-	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	<0.732 (LOD)	-	-	-	
LC0019	0.33	0.04	-	-	
LC0020	< 10 (LOQ)	-	-	-	
LC0021	< 1 (LOQ)	-	-	-	
LC0022	<0.2 (LOD)	-	-	-	
LC0023	< 10 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	18.5	-	-	-	H
LC0028	< 10 (LOQ)	-	-	-	
LC0029	1.6	0.16	-	-	H
LC0030	< 1 (LOQ)	-	-	-	

#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	3.57 ± 8.98	-	µg/l
Minimum	0.238	0.238	µg/l
Maximum	18.5	0.504	µg/l
Standard deviation	7.33	-	µg/l
rel. Standard deviation	205	-	%
n	6	4	-

Graphical presentation of results

Results



## Parameter oriented report

### M140 B

#### Aluminium

Unit	µg/l
Mean ± CI (99%)	10.8 ± 0.857
Minimum - Maximum	9 - 13
Control test value ± U	8.57 ± 0.276

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10.2	1.53	94.5	-0.52	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	4.22	0.481	39.1	-5.76	H
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	10.696	1.275	99.1	-0.09	
LC0010	12	1.2	111	1.05	
LC0011	5.776	0.336	53.5	-4.39	H
LC0012	9	-	83.4	-1.57	
LC0013	10.2	2.6	94.5	-0.52	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	11.7	1.8	108	0.79	
LC0016	11.9	1.5	110	0.97	
LC0017	11.1	1.1	103	0.27	
LC0018	< 10 (LOQ)	-	-	-	
LC0019	11.2	1.36	104	0.35	
LC0020	10.39	3.9	96.2	-0.36	
LC0021	9.16	0.82	84.8	-1.43	
LC0022	11.6	1.2	107	0.7	
LC0023	13	2	120	1.93	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	19	-	176	7.18	H
LC0028	10	1	92.6	-0.7	
LC0029	11.4	1.14	106	0.53	
LC0030	9.2	-	85.2	-1.4	

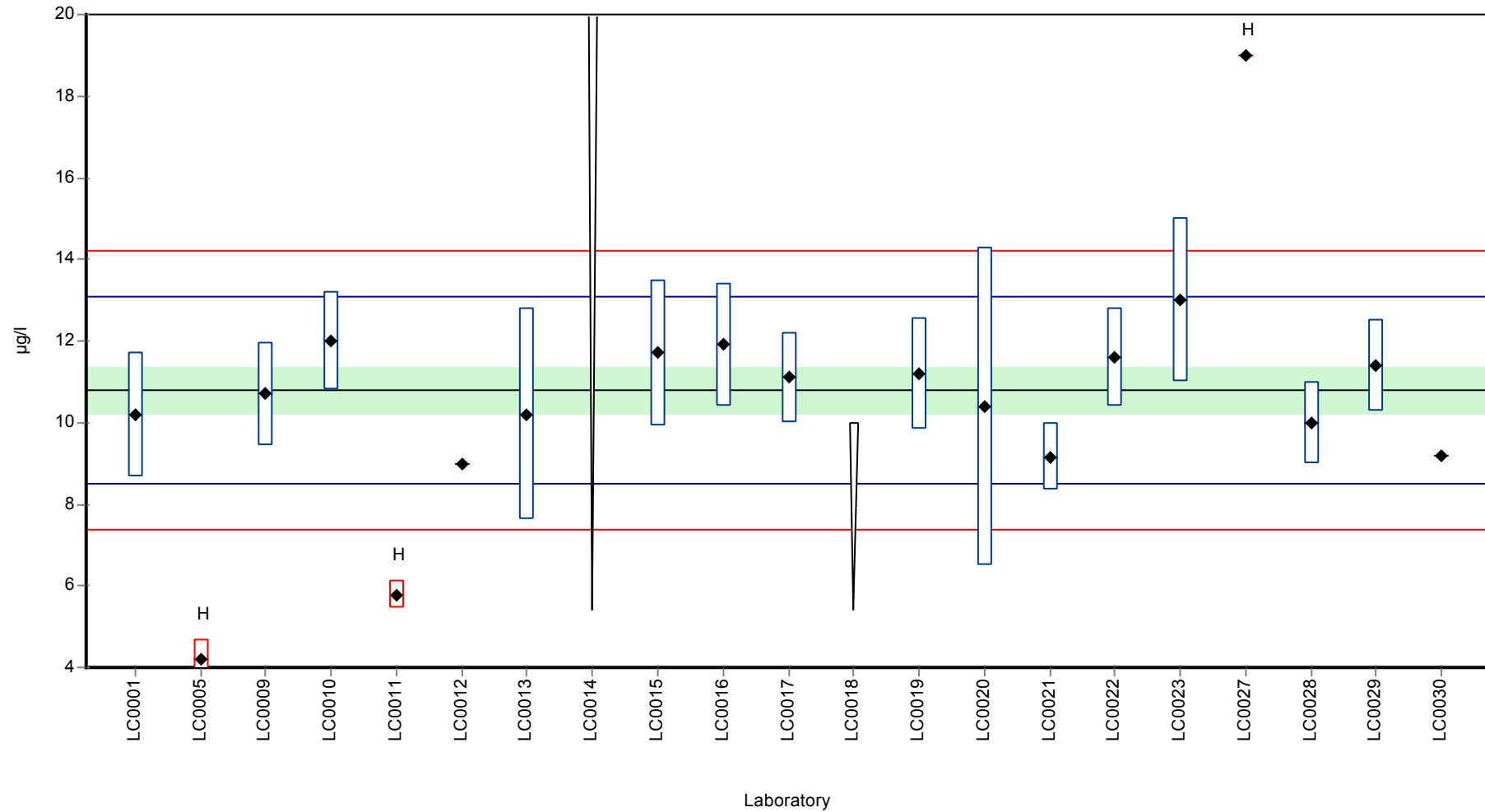
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	10.6 ± 2.02	10.8 ± 0.857	µg/l
Minimum	4.22	9	µg/l
Maximum	19	13	µg/l
Standard deviation	2.93	1.14	µg/l
rel. Standard deviation	27.6	10.6	%
n	19	16	-

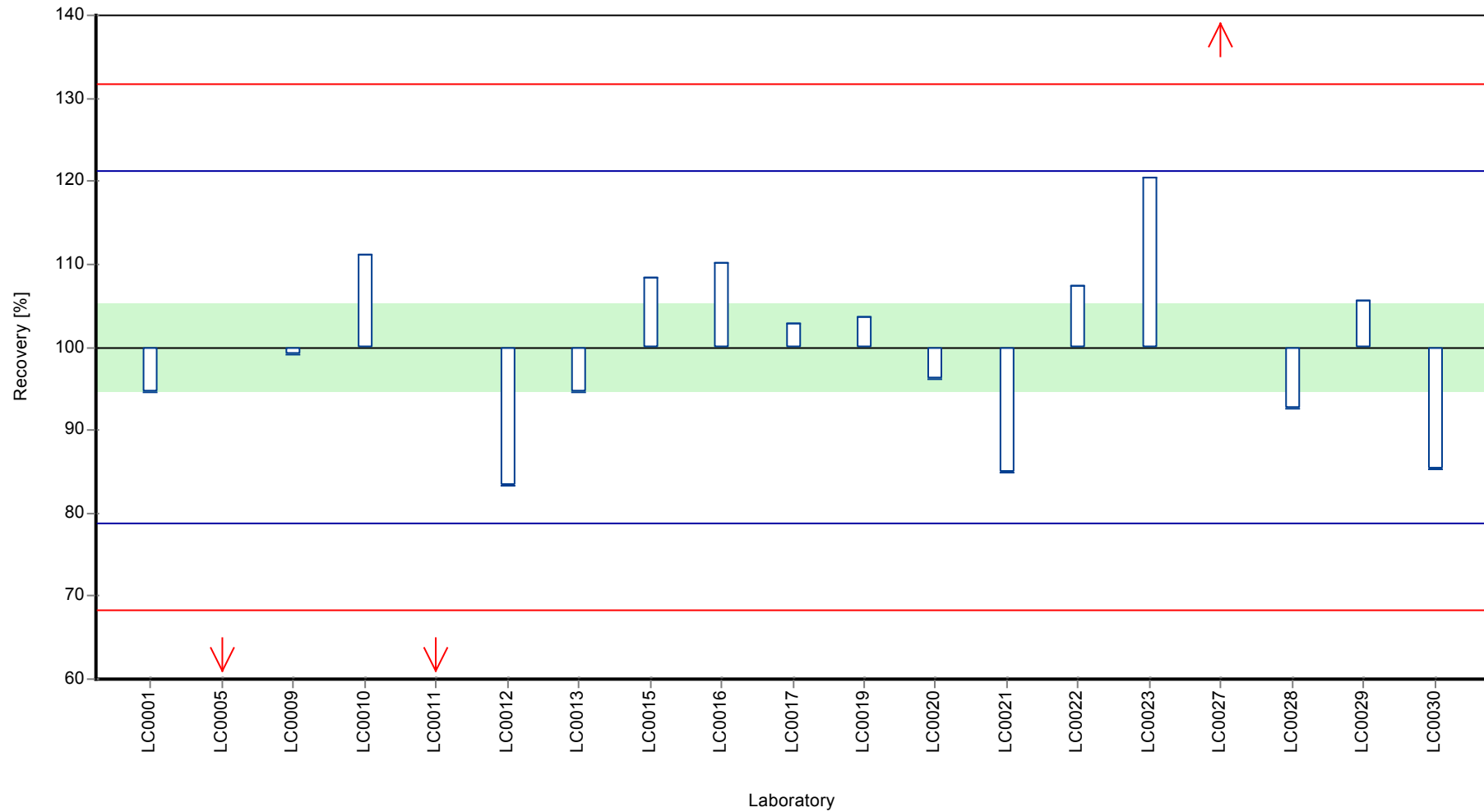


Graphical presentation of results

Results



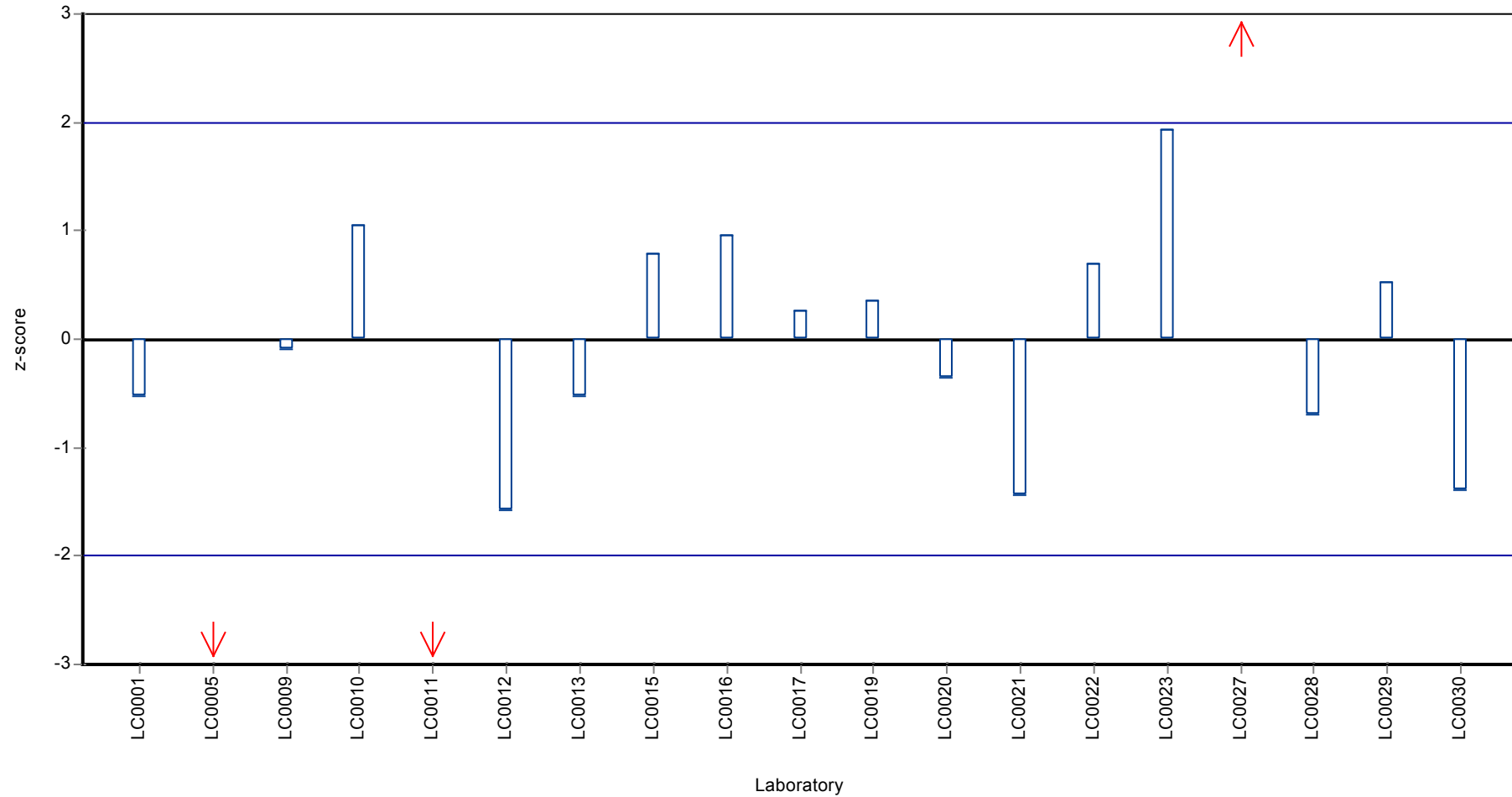
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Aluminium

Z-score



## Parameter oriented report

### M140 A

#### Arsenic

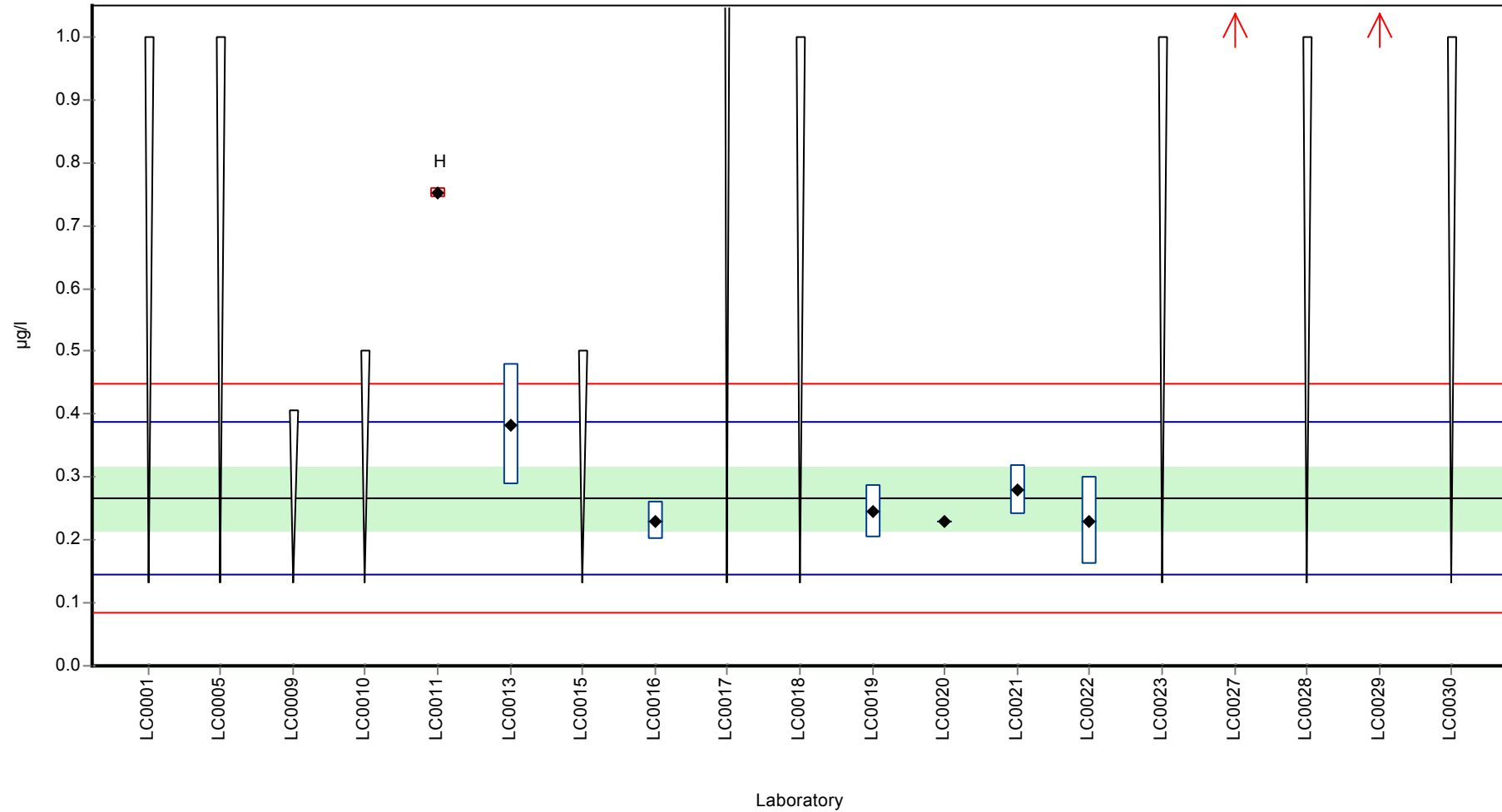
Unit	µg/l
Mean ± CI (99%)	0.266 ± 0.0739
Minimum - Maximum	0.23 - 0.383
Control test value ± U	0.282 ± 0.0133

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 1 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 1 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 0.407 (LOQ)	-	-	-	
LC0010	< 0.5 (LOQ)	-	-	-	
LC0011	0.752	0.007	282	8.05	H
LC0012	-	-	-	-	
LC0013	0.383	0.096	144	1.93	
LC0014	-	-	-	-	
LC0015	< 0.5 (LOQ)	-	-	-	
LC0016	0.23	0.03	86.3	-0.6	
LC0017	< 2 (LOQ)	-	-	-	
LC0018	< 1 (LOQ)	-	-	-	
LC0019	0.2454	0.042	92.1	-0.35	
LC0020	0.23	-	86.3	-0.6	
LC0021	0.28	0.04	105	0.23	
LC0022	0.23	0.07	86.3	-0.6	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	5.025	-	1890	78.9	H
LC0028	< 1 (LOQ)	-	-	-	
LC0029	2.85	0.27	1070	42.8	H
LC0030	< 1 (LOQ)	-	-	-	

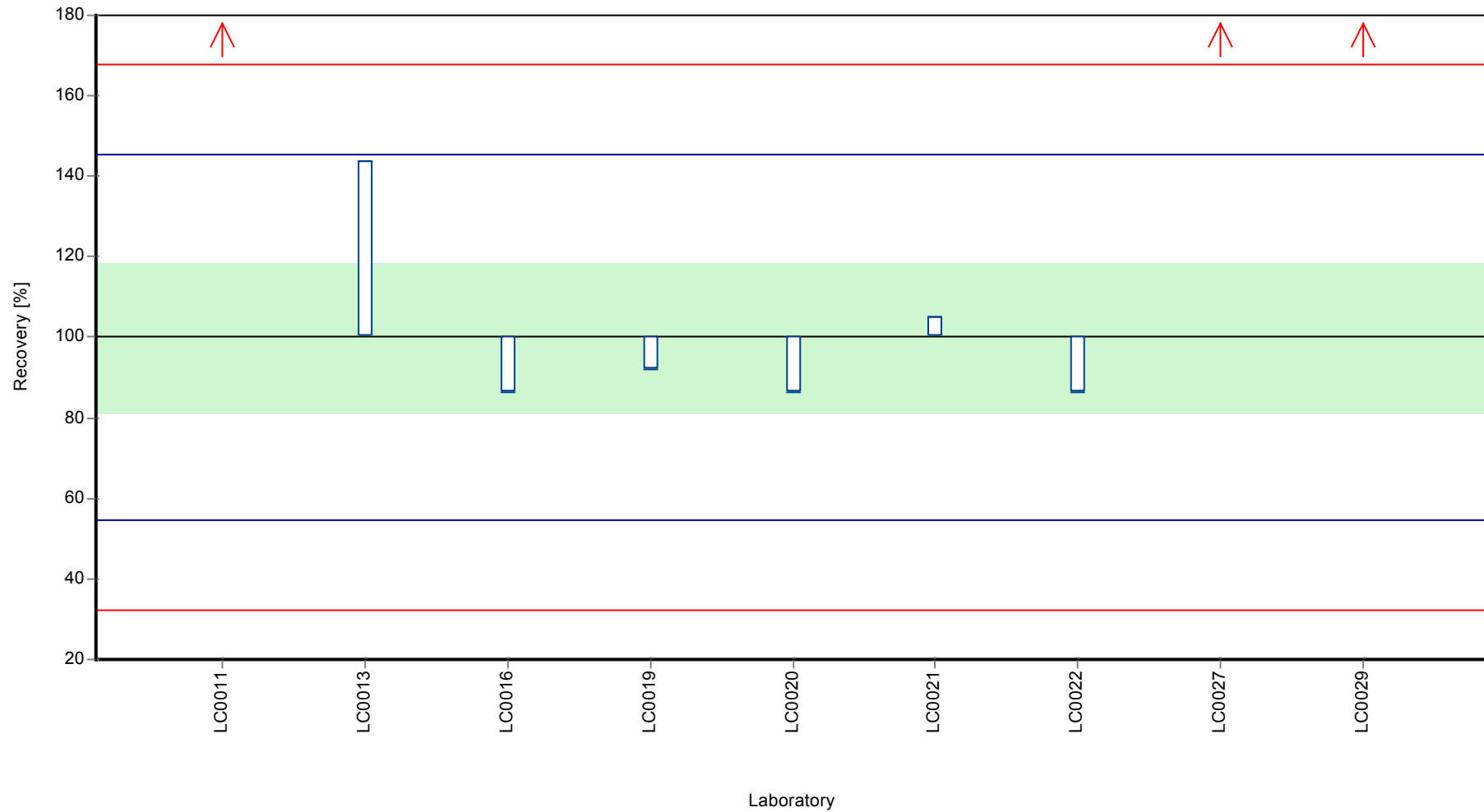
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.14 ± 1.69	0.266 ± 0.0739	µg/l
Minimum	0.23	0.23	µg/l
Maximum	5.03	0.383	µg/l
Standard deviation	1.69	0.0603	µg/l
rel. Standard deviation	148	22.6	%
n	9	6	-

**Graphical presentation of results**  
**Results**



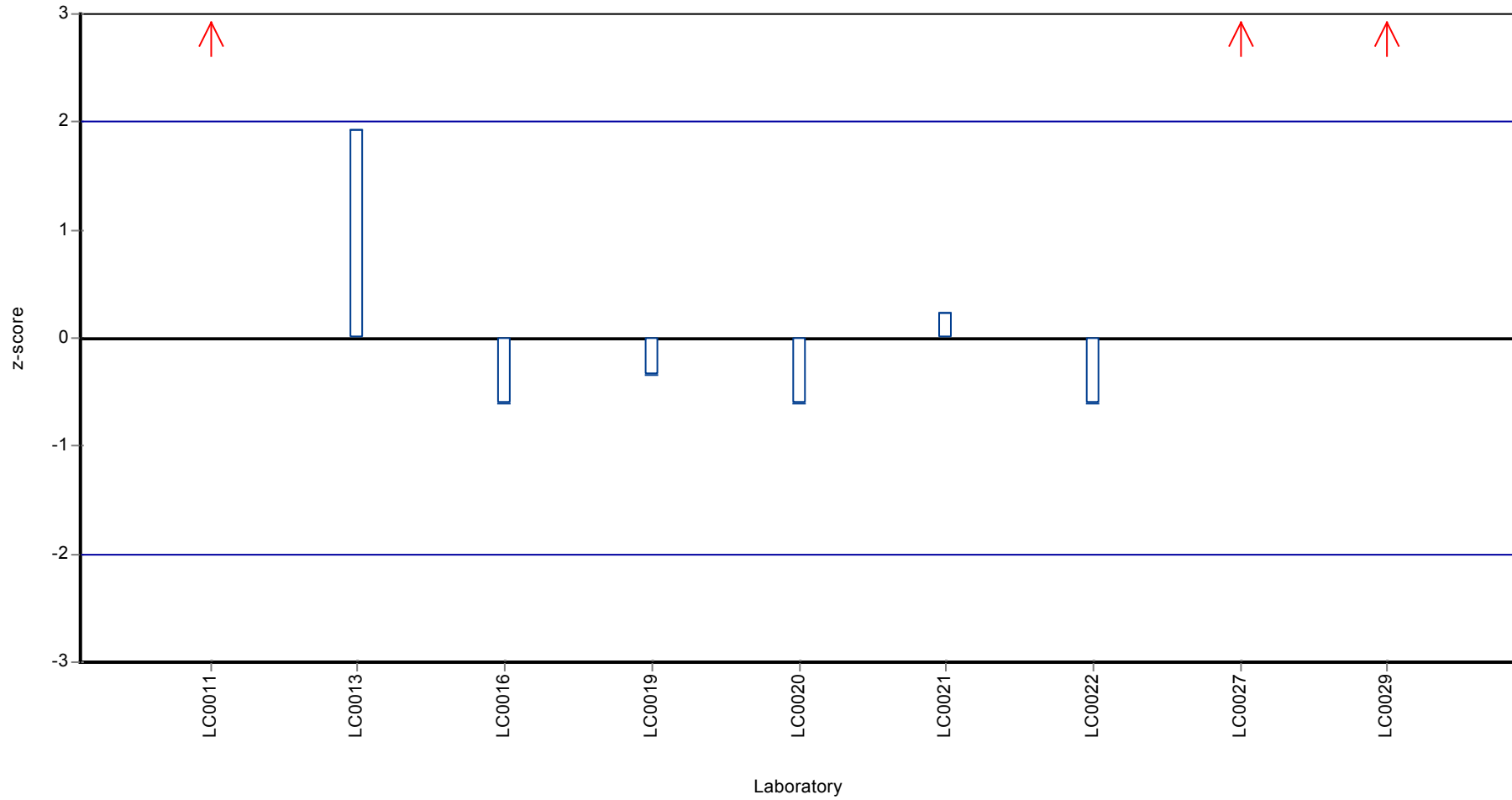
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Arsenic

Z-score



## Parameter oriented report

### M140 B

#### Arsenic

Unit	µg/l
Mean ± CI (99%)	0.623 ± 0.0541
Minimum - Maximum	0.57 - 0.732
Control test value ± U	0.64 ± 0.0272

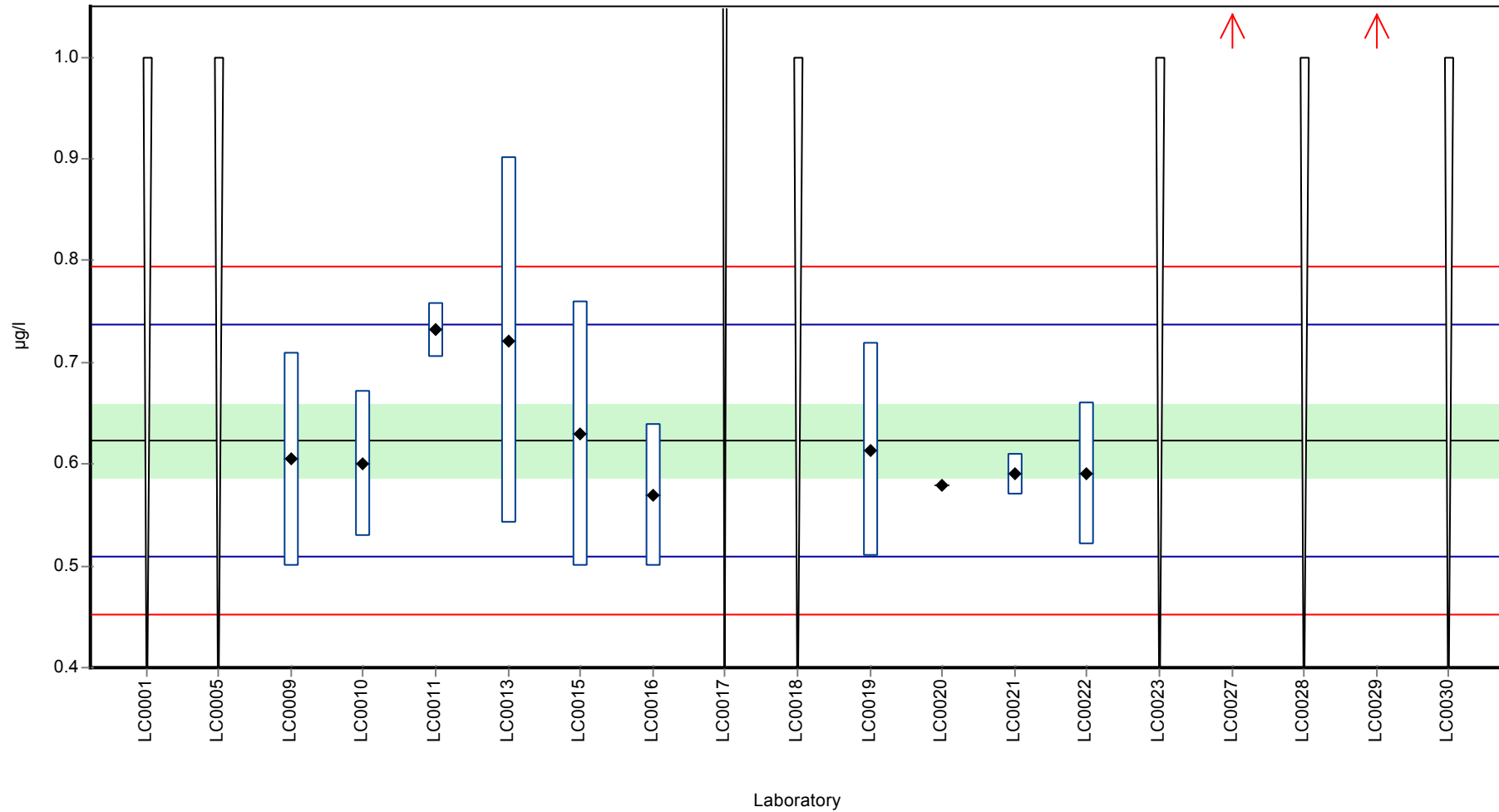
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 1 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 1 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.605	0.105	97.1	-0.32	
LC0010	0.6	0.072	96.3	-0.41	
LC0011	0.732	0.027	117	1.91	
LC0012	-	-	-	-	
LC0013	0.721	0.18	116	1.71	
LC0014	-	-	-	-	
LC0015	0.63	0.13	101	0.12	
LC0016	0.57	0.07	91.5	-0.93	
LC0017	< 2 (LOQ)	-	-	-	
LC0018	< 1 (LOQ)	-	-	-	
LC0019	0.6136	0.105	98.5	-0.17	
LC0020	0.58	-	93.1	-0.76	
LC0021	0.59	0.02	94.7	-0.58	
LC0022	0.59	0.07	94.7	-0.58	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	1.8	-	289	20.6	H
LC0028	< 1 (LOQ)	-	-	-	
LC0029	3.01	0.29	483	41.8	H
LC0030	< 1 (LOQ)	-	-	-	

#### Characteristics of parameter

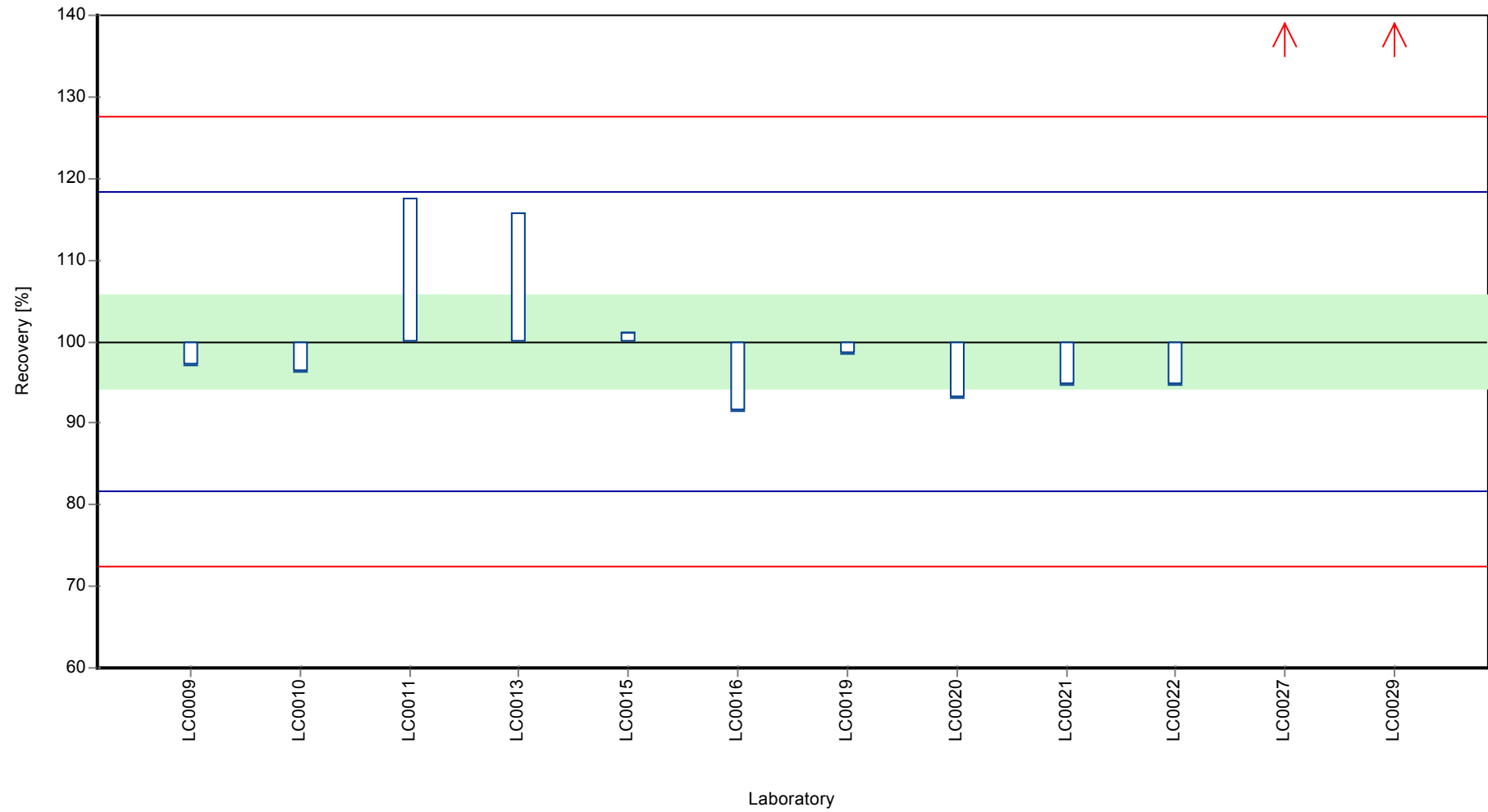
	all results	without outliers	Unit
Mean ± CI (99%)	0.92 ± 0.642	0.623 ± 0.0541	µg/l
Minimum	0.57	0.57	µg/l
Maximum	3.01	0.732	µg/l
Standard deviation	0.742	0.0571	µg/l
rel. Standard deviation	80.6	9.16	%
n	12	10	-



Graphical presentation of results  
Results



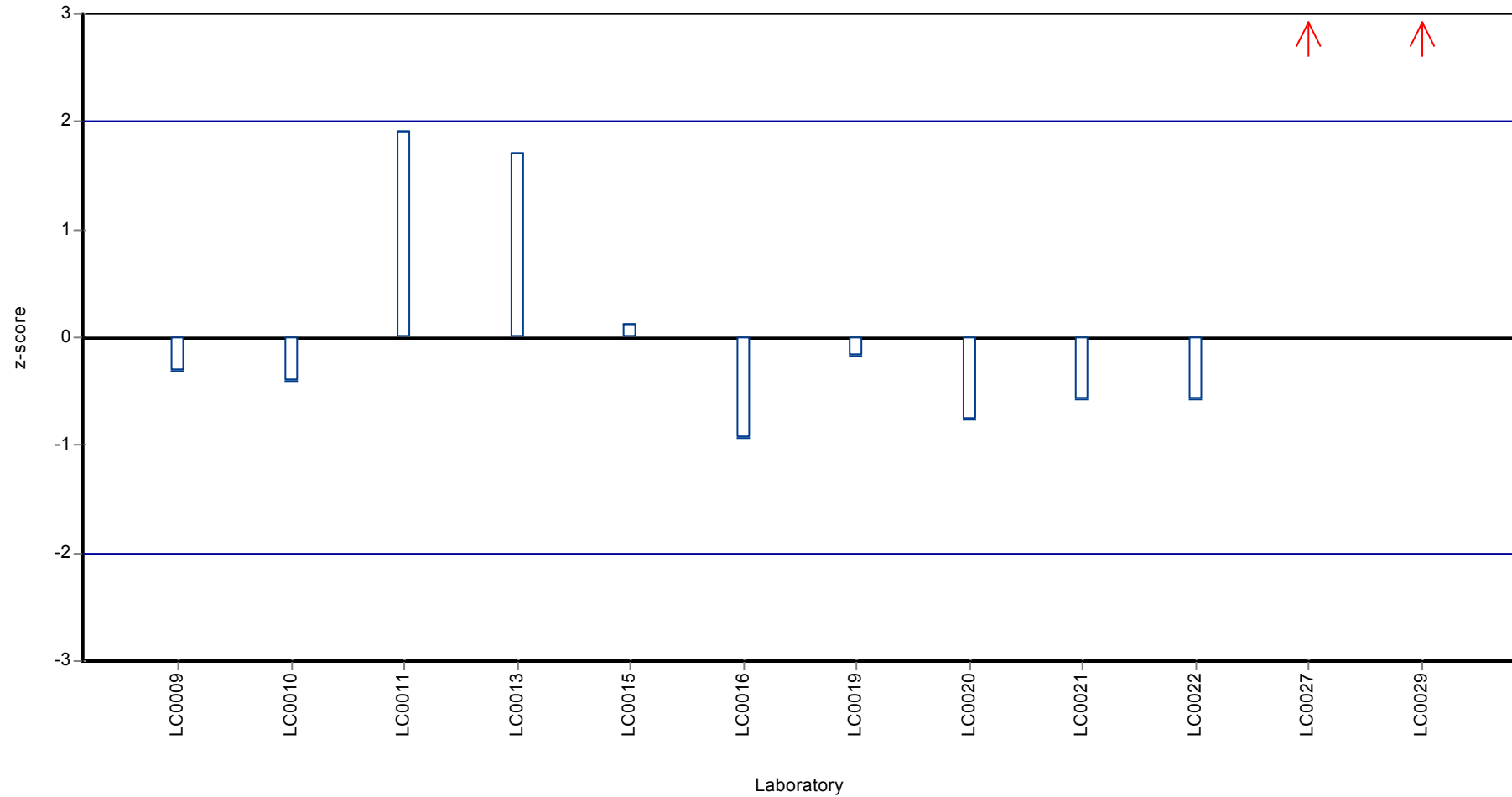
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Arsenic

Z-score



## Parameter oriented report

### M140 A

#### Lead

Unit	µg/l
Mean ± CI (99%)	0.148 ± 0.0314
Minimum - Maximum	0.08 - 0.191
Control test value ± U	0.146 ± 0.00926

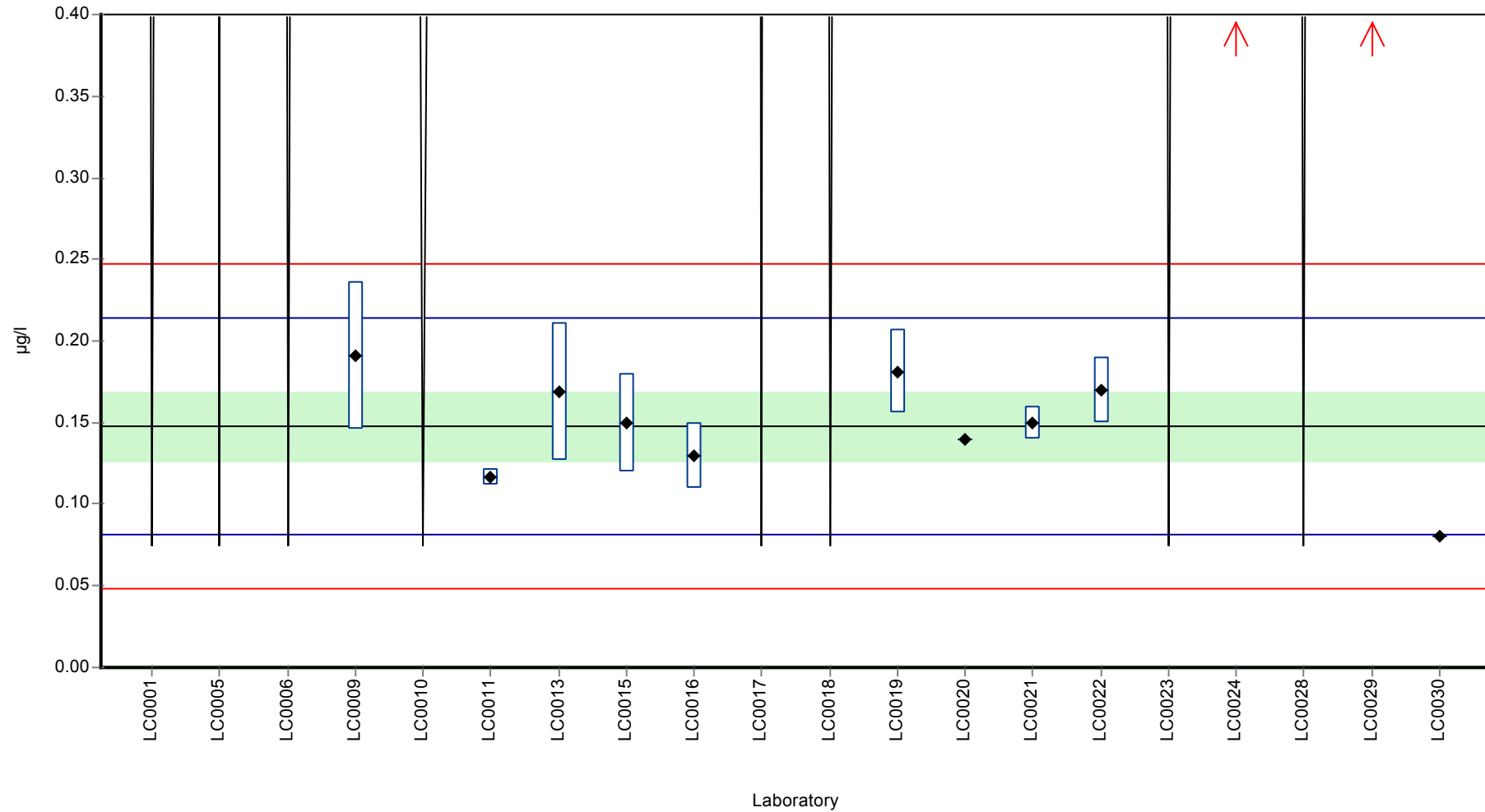
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 1 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 20 (LOQ)	-	-	-	
LC0006	< 1 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.191	0.045	129	1.3	
LC0010	< 0.5 (LOQ)	-	-	-	
LC0011	0.117	0.005	79.1	-0.93	
LC0012	-	-	-	-	
LC0013	0.169	0.042	114	0.64	
LC0014	-	-	-	-	
LC0015	0.15	0.03	101	0.07	
LC0016	0.13	0.02	87.9	-0.54	
LC0017	< 2 (LOQ)	-	-	-	
LC0018	< 1 (LOQ)	-	-	-	
LC0019	0.1813	0.026	123	1.01	
LC0020	0.14	-	94.7	-0.24	
LC0021	0.15	0.01	101	0.07	
LC0022	0.17	0.02	115	0.67	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	49	4	33100	1480	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 1 (LOQ)	-	-	-	
LC0029	1.3	0.16	879	34.8	H
LC0030	0.08	-	54.1	-2.05	

#### Characteristics of parameter

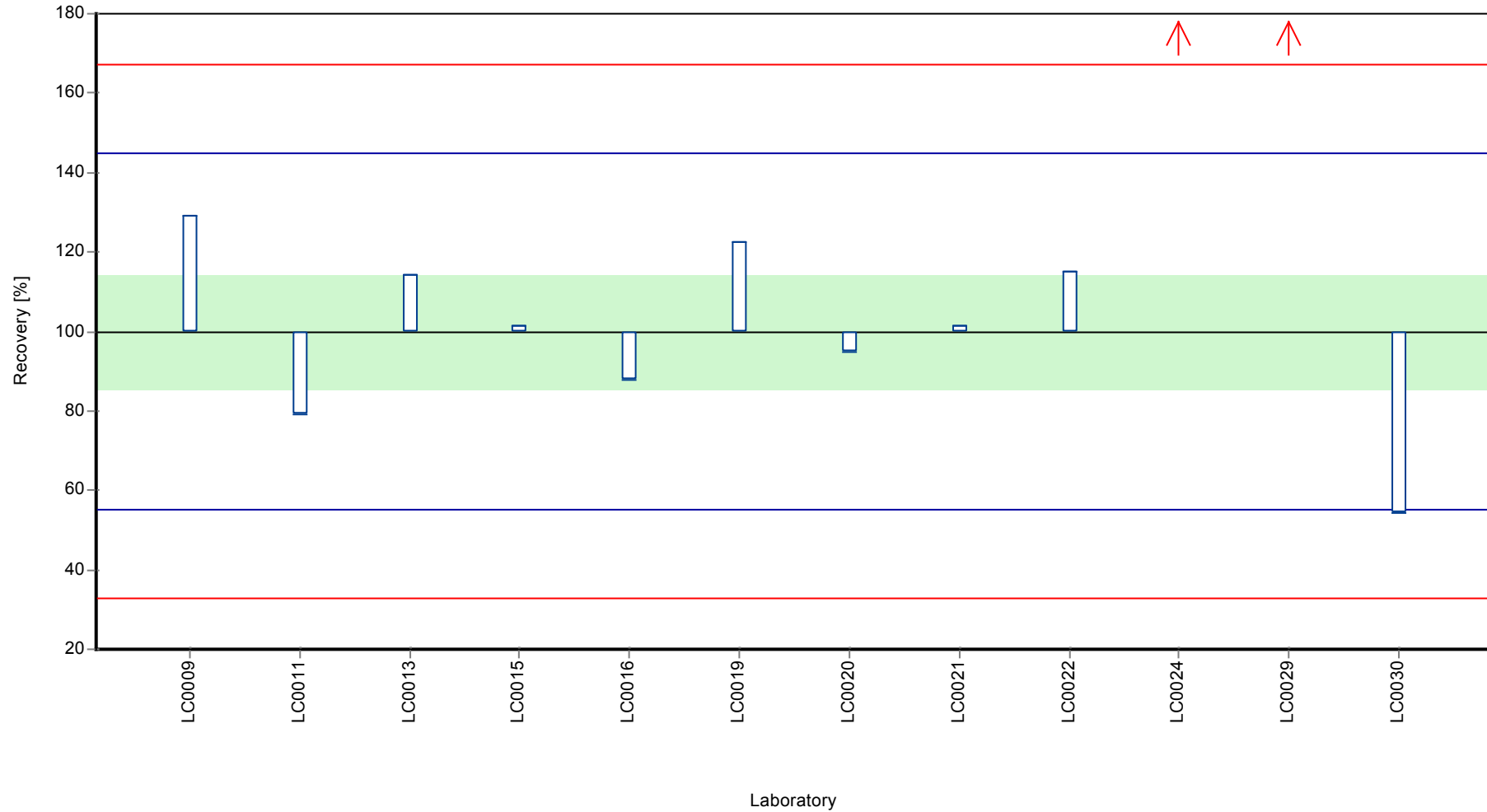
	all results	without outliers	Unit
Mean ± CI (99%)	4.31 ± 12.2	0.148 ± 0.0314	µg/l
Minimum	0.08	0.08	µg/l
Maximum	49	0.191	µg/l
Standard deviation	14.1	0.0331	µg/l
rel. Standard deviation	326	22.4	%
n	12	10	-

Graphical presentation of results

Results



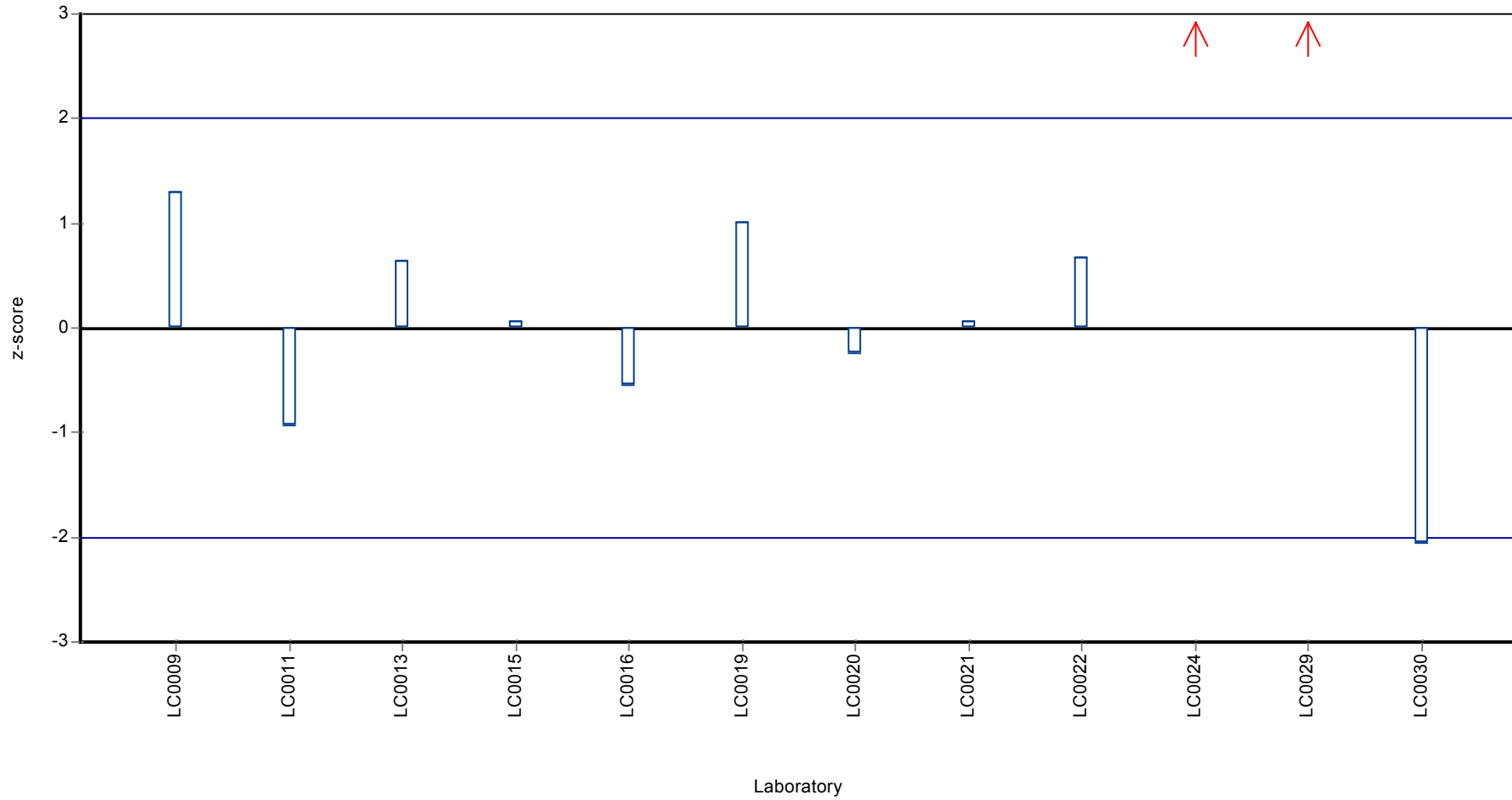
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Lead

Z-score



## Parameter oriented report

### M140 B

#### Lead

Unit	µg/l
Mean ± CI (99%)	0.977 ± 0.0579
Minimum - Maximum	0.87 - 1.1
Control test value ± U	0.92 ± 0.0388

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1	0.15	102	0.33	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 20 (LOQ)	-	-	-	
LC0006	< 1 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	1.066	0.054	109	1.28	
LC0010	1.1	0.088	113	1.77	
LC0011	0.884	0.01	90.5	-1.34	
LC0012	-	-	-	-	
LC0013	1.01	0.25	103	0.47	
LC0014	-	-	-	-	
LC0015	0.91	0.14	93.1	-0.97	
LC0016	0.87	0.13	89	-1.54	
LC0017	< 2 (LOQ)	-	-	-	
LC0018	< 1 (LOQ)	-	-	-	
LC0019	1.0139	0.148	104	0.53	
LC0020	1	-	102	0.33	
LC0021	0.96	0.02	98.2	-0.25	
LC0022	0.99	0.1	101	0.18	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	32	3	3270	446	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1	0.1	102	0.33	
LC0029	0.4	0.05	40.9	-8.3	H
LC0030	0.9	-	92.1	-1.11	

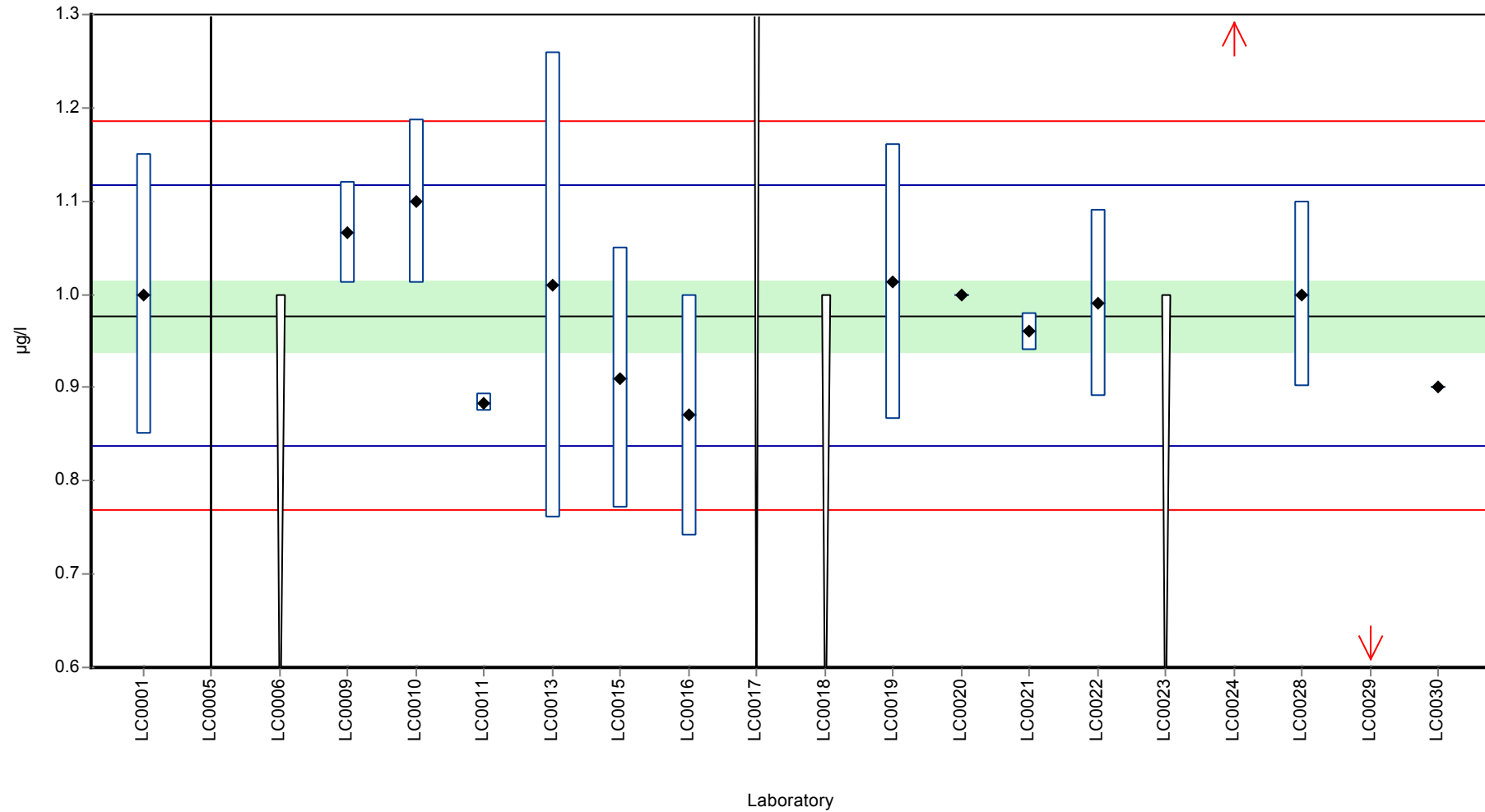
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	3.01 ± 6.21	0.977 ± 0.0579	µg/l
Minimum	0.4	0.87	µg/l
Maximum	32	1.1	µg/l
Standard deviation	8.02	0.0696	µg/l
rel. Standard deviation	267	7.12	%
n	15	13	-

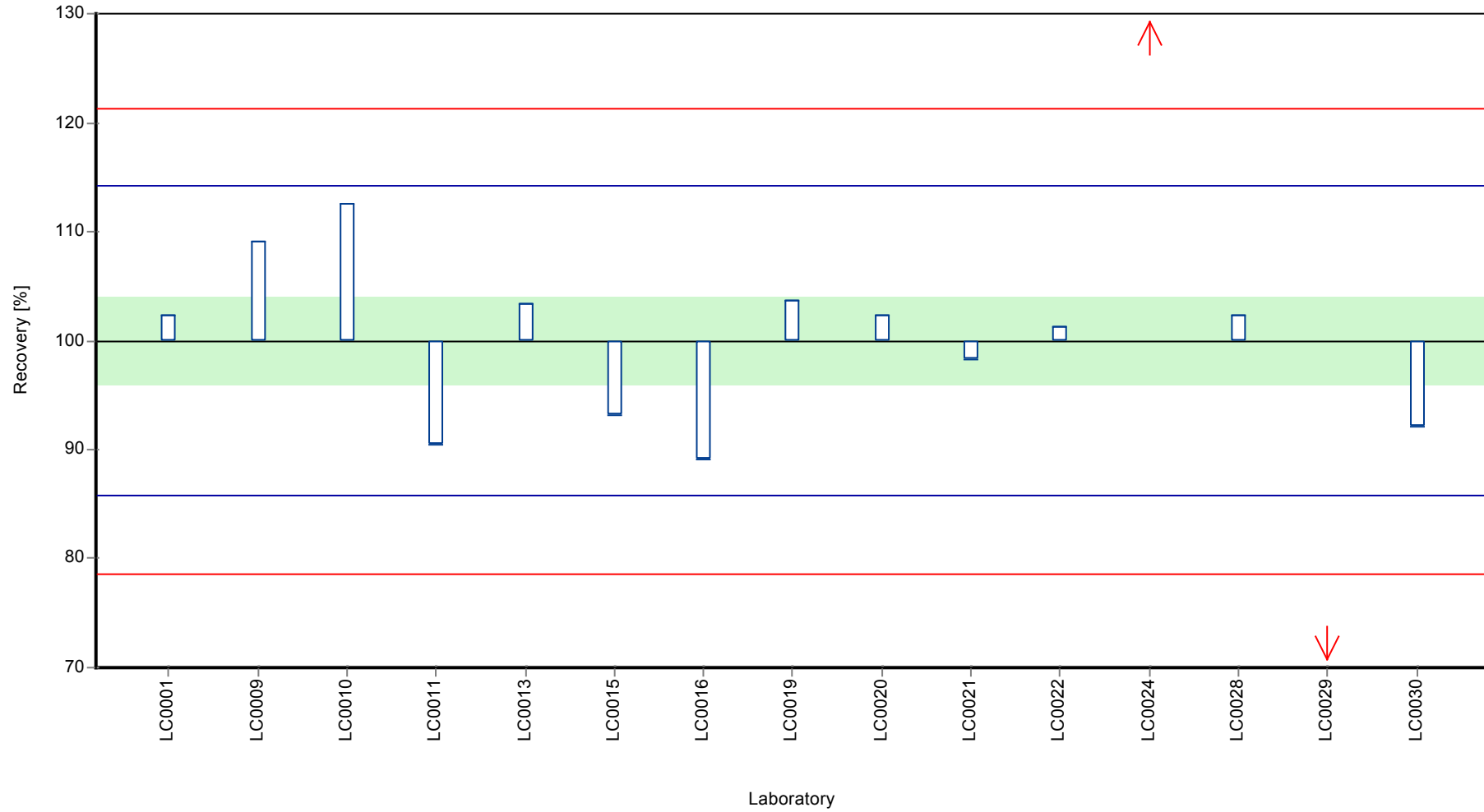


Graphical presentation of results

Results



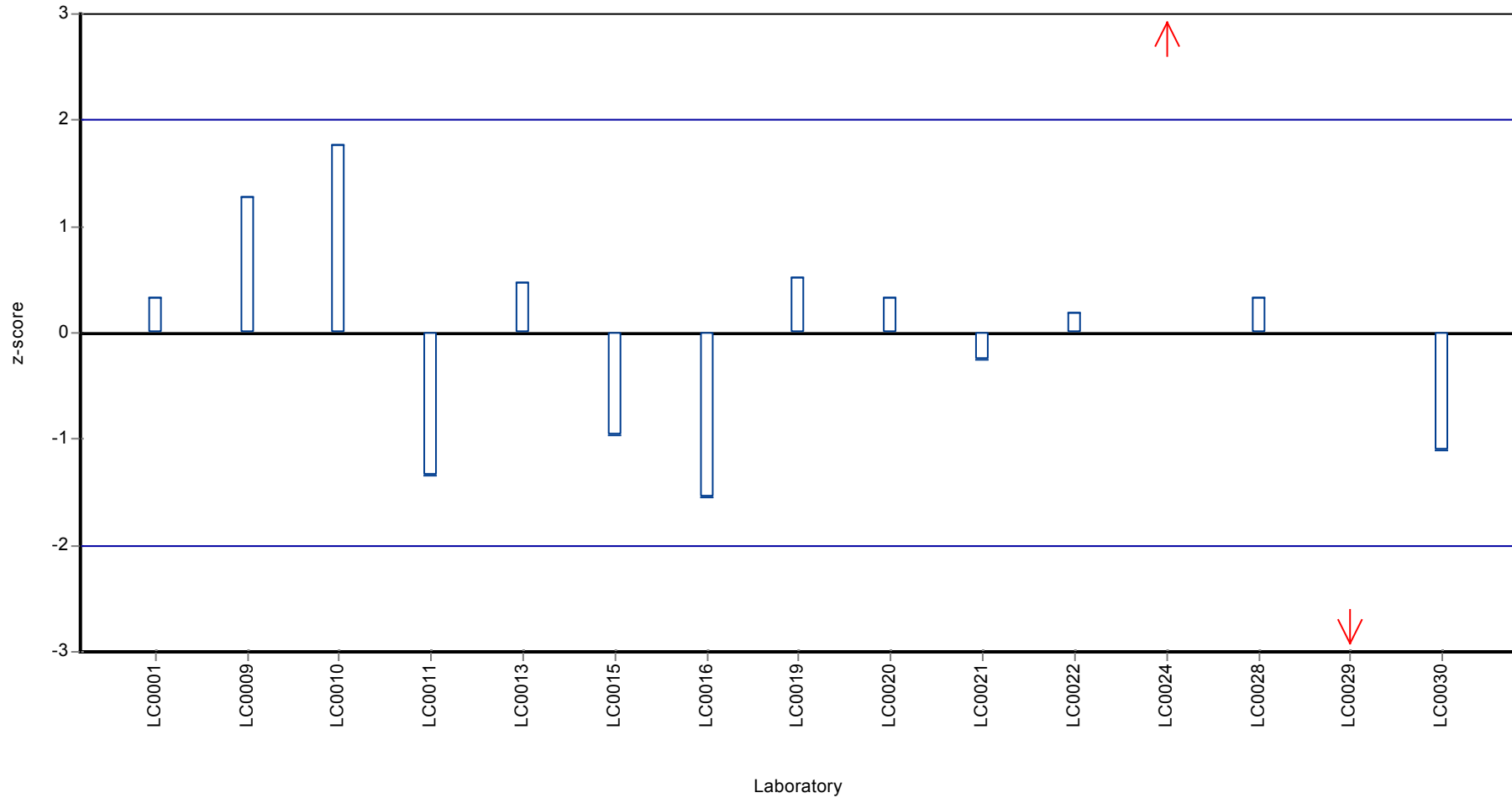
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Lead

Z-score



## Parameter oriented report

### M140 A

#### Cadmium

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.0162 - 0.0326
Control test value ± U	0.0169 ± 0.00142

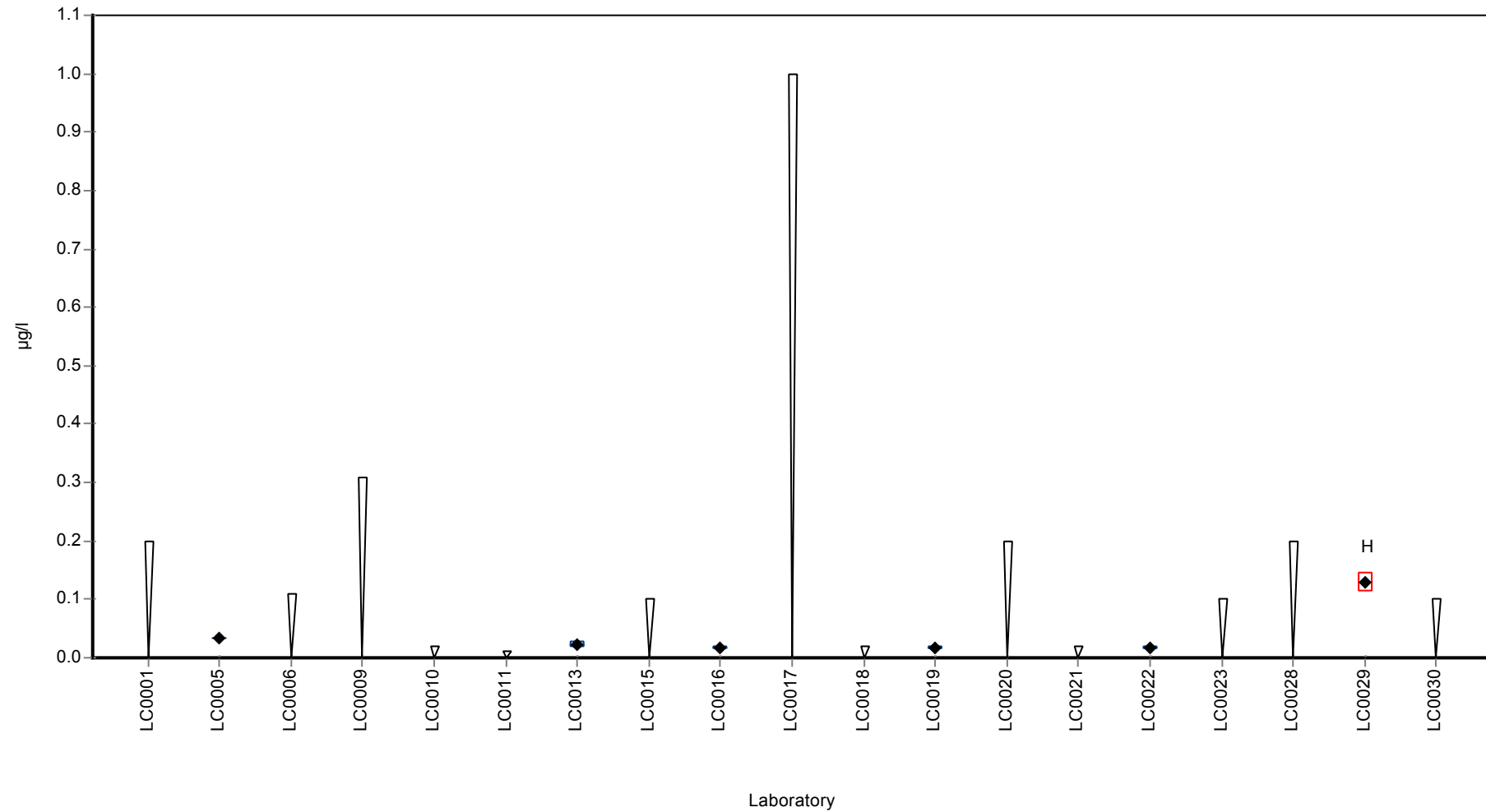
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.2 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	0.0326	0.0023	-	-	
LC0006	< 0.11 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 0.3088 (LOQ)	-	-	-	
LC0010	<0.02 (LOD)	-	-	-	
LC0011	< 0.01 (LOQ)	-	-	-	
LC0012	-	-	-	-	
LC0013	0.0218	0.0055	-	-	
LC0014	-	-	-	-	
LC0015	< 0.1 (LOQ)	-	-	-	
LC0016	0.018	0.003	-	-	
LC0017	< 1 (LOQ)	-	-	-	
LC0018	<0.02 (LOD)	-	-	-	
LC0019	0.0162	0.0028	-	-	
LC0020	< 0.2 (LOQ)	-	-	-	
LC0021	< 0.02 (LOQ)	-	-	-	
LC0022	0.017	0.002	-	-	
LC0023	< 0.1 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 0.2 (LOQ)	-	-	-	
LC0029	0.13	0.017	-	-	H
LC0030	< 0.1 (LOQ)	-	-	-	

#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.0393 ± 0.0549	-	µg/l
Minimum	0.0162	0.0162	µg/l
Maximum	0.13	0.0326	µg/l
Standard deviation	0.0449	-	µg/l
rel. Standard deviation	114	-	%
n	6	5	-

Graphical presentation of results

Results



## Parameter oriented report

### M140 B

#### Cadmium

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.008 - 0.0358
Control test value ± U	0.0077 ± 0.00101

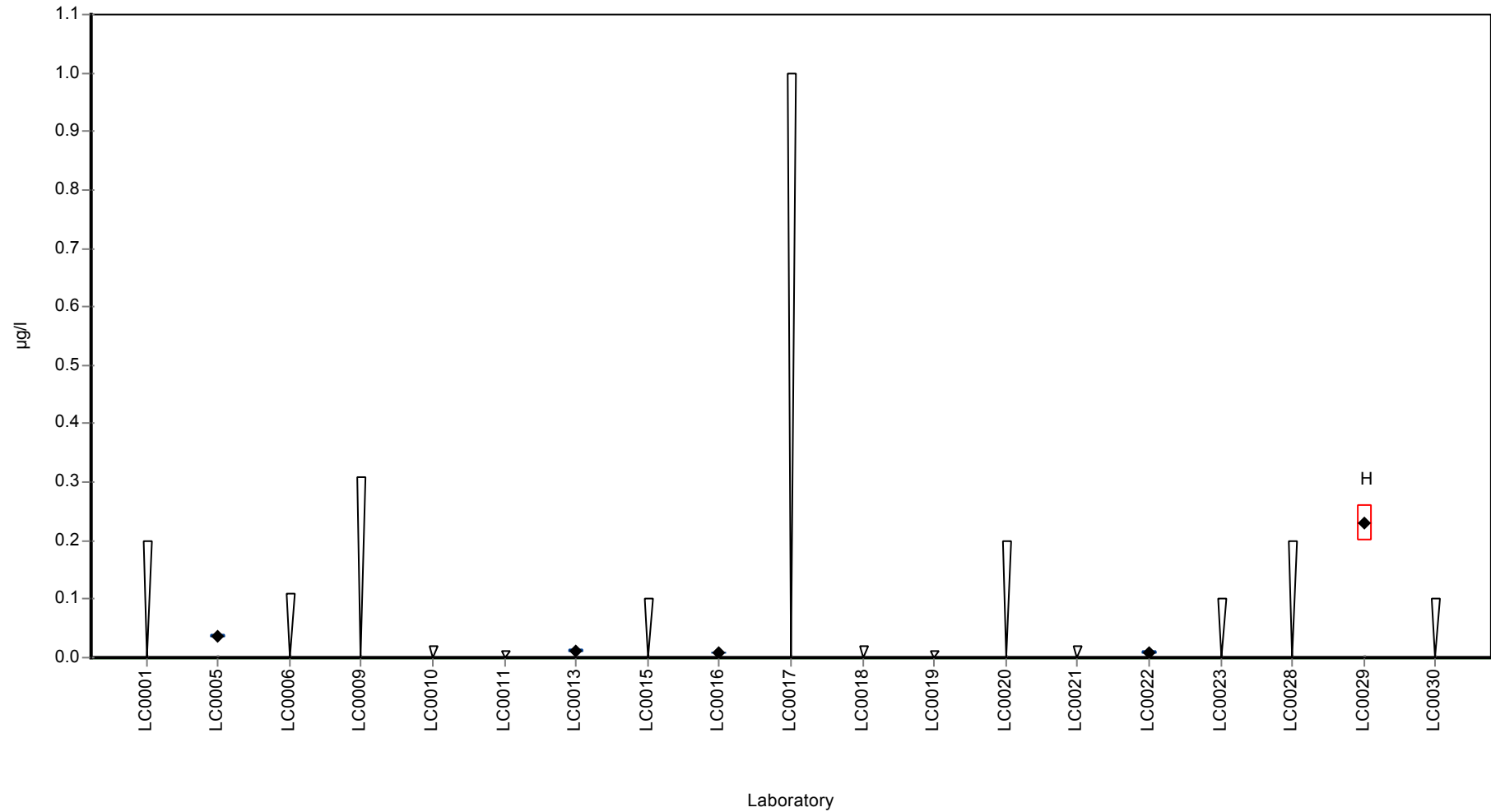
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.2 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	0.0358	0.0025	-	-	
LC0006	< 0.11 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 0.3088 (LOQ)	-	-	-	
LC0010	<0.02 (LOD)	-	-	-	
LC0011	< 0.01 (LOQ)	-	-	-	
LC0012	-	-	-	-	
LC0013	0.0123	0.0031	-	-	
LC0014	-	-	-	-	
LC0015	< 0.1 (LOQ)	-	-	-	
LC0016	0.009	0.001	-	-	
LC0017	< 1 (LOQ)	-	-	-	
LC0018	<0.02 (LOD)	-	-	-	
LC0019	< 0.01 (LOQ)	-	-	-	
LC0020	< 0.2 (LOQ)	-	-	-	
LC0021	< 0.02 (LOQ)	-	-	-	
LC0022	0.008	0.002	-	-	
LC0023	< 0.1 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 0.2 (LOQ)	-	-	-	
LC0029	0.23	0.03	-	-	H
LC0030	< 0.1 (LOQ)	-	-	-	

#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.059 ± 0.129	-	µg/l
Minimum	0.008	0.008	µg/l
Maximum	0.23	0.0358	µg/l
Standard deviation	0.0963	-	µg/l
rel. Standard deviation	163	-	%
n	5	4	-

Graphical presentation of results

Results



## Parameter oriented report

### M140 A

#### Chromium

Unit	µg/l
Mean ± CI (99%)	0.739 ± 0.0552
Minimum - Maximum	0.697 - 0.866
Control test value ± U	0.777 ± 0.0377

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.13	0.17	153	7.09	H
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	0.2773	0.019	37.5	-8.35	H
LC0006	0.7228	0.072	97.9	-0.29	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.74	0.106	100	0.02	
LC0010	0.7	0.084	94.8	-0.7	
LC0011	3.34	0.189	452	47.1	H
LC0012	-	-	-	-	
LC0013	0.866	0.217	117	2.31	
LC0014	-	-	-	-	
LC0015	0.78	0.12	106	0.75	
LC0016	0.7	0.1	94.8	-0.7	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	< 1 (LOQ)	-	-	-	
LC0019	0.697	0.066	94.4	-0.75	
LC0020	-	-	-	-	
LC0021	0.7	0.04	94.8	-0.7	
LC0022	0.742	0.07	100	0.06	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 1 (LOQ)	-	-	-	
LC0029	2.8	0.34	379	37.3	H
LC0030	0.3	-	40.6	-7.94	H

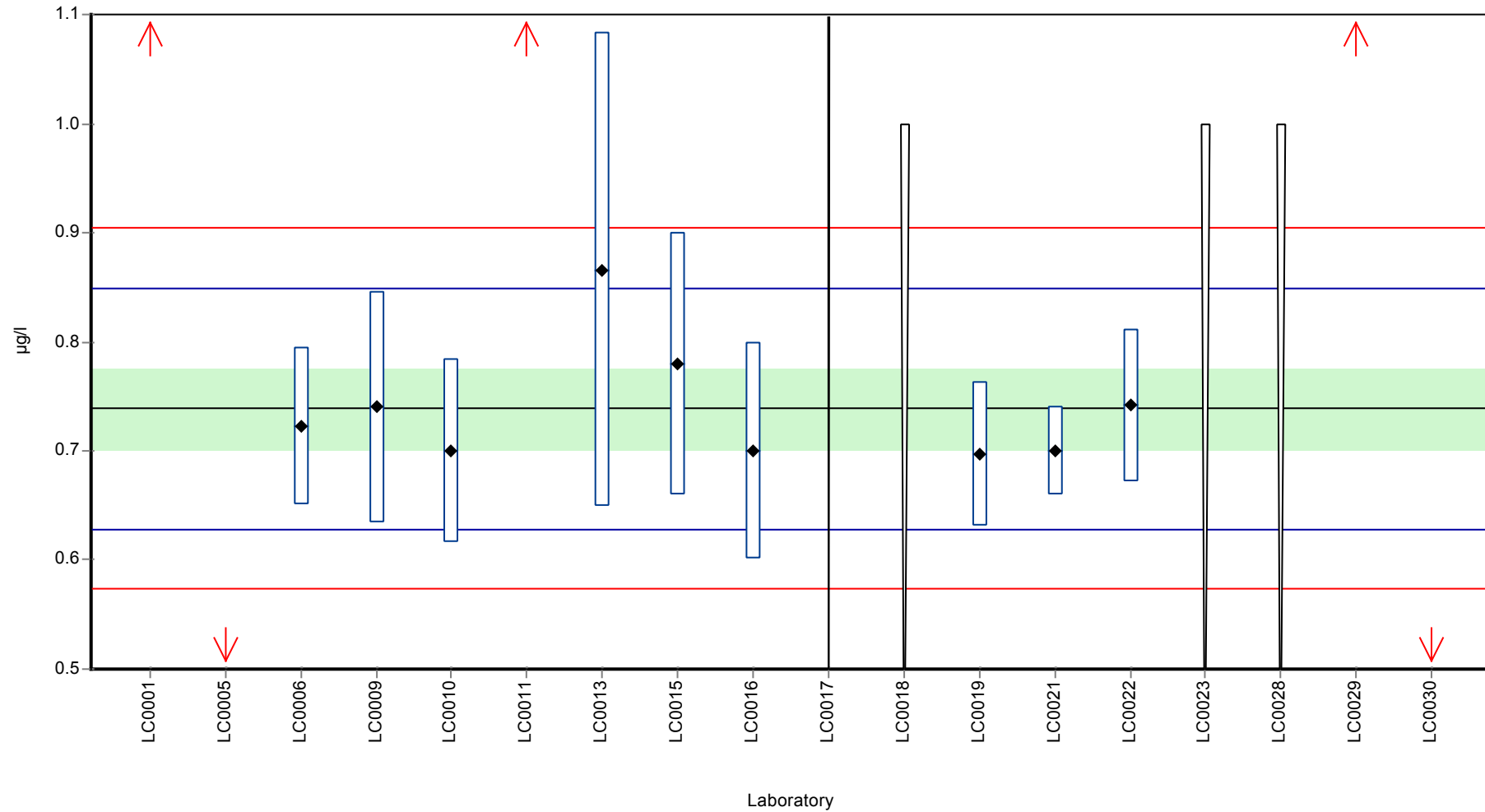
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.04 ± 0.716	0.739 ± 0.0552	µg/l
Minimum	0.277	0.697	µg/l
Maximum	3.34	0.866	µg/l
Standard deviation	0.893	0.0552	µg/l
rel. Standard deviation	86.2	7.48	%
n	14	9	-

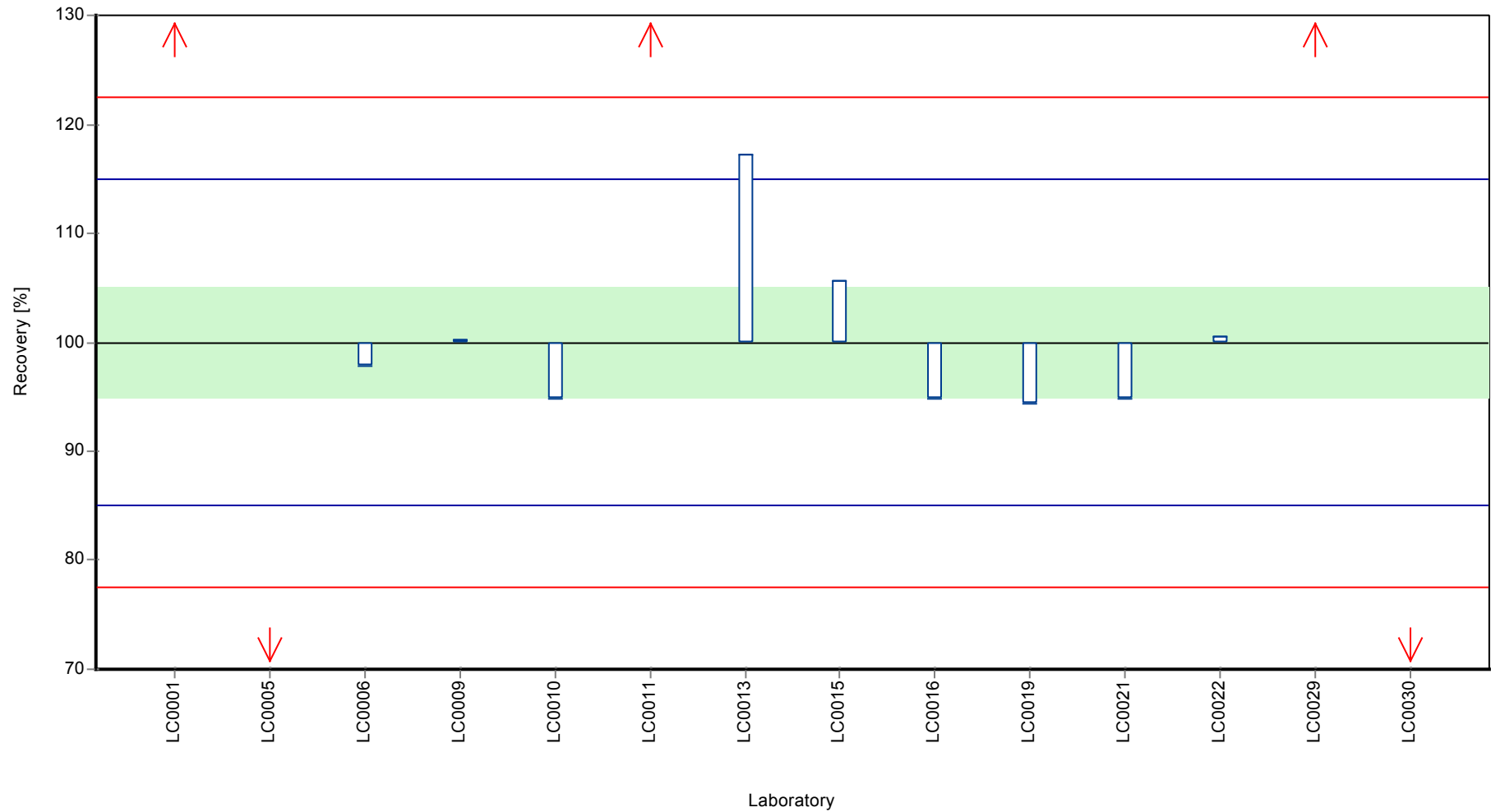


Graphical presentation of results

Results



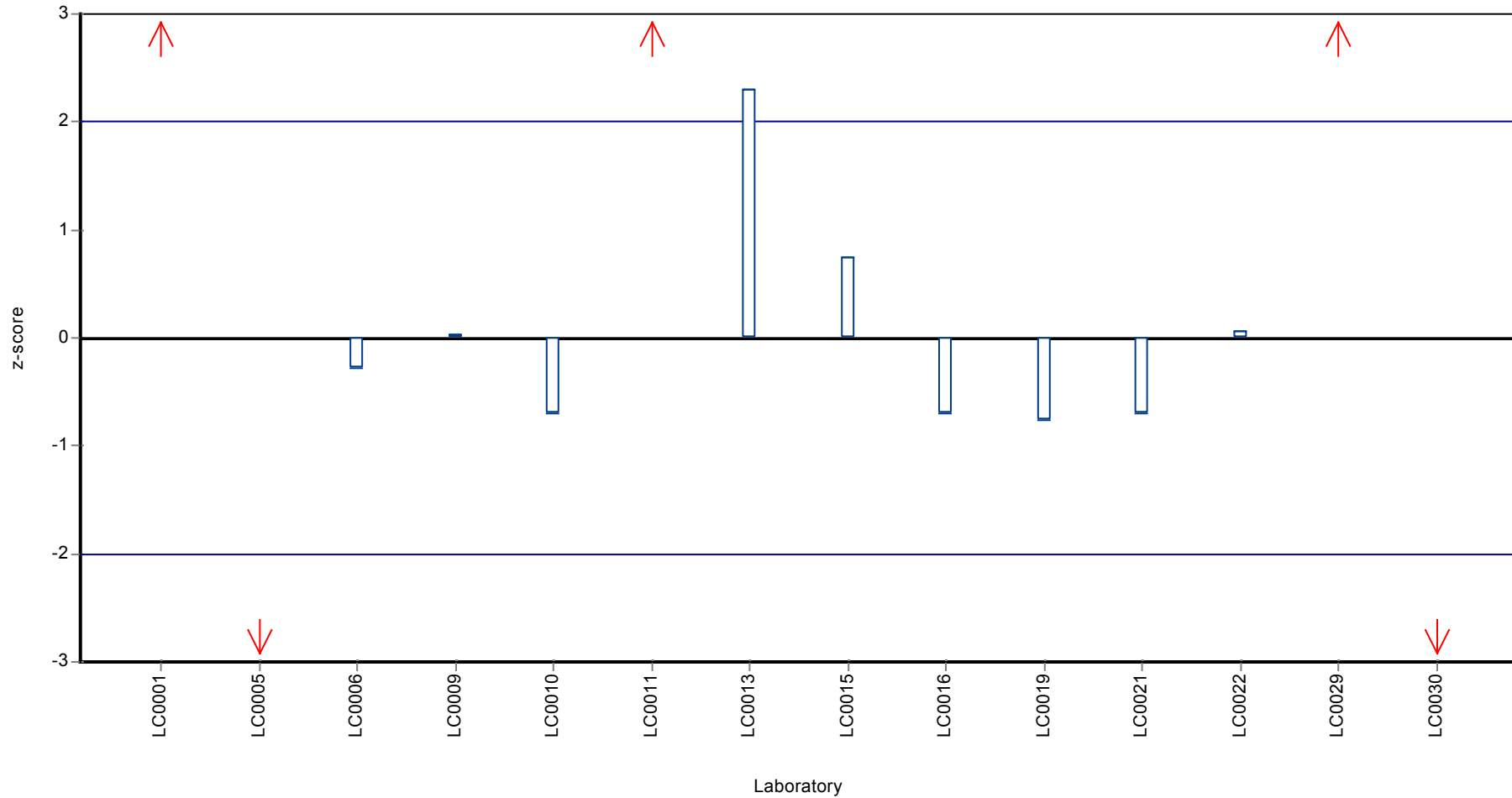
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Chromium

Z-score



## Parameter oriented report

### M140 B

#### Chromium

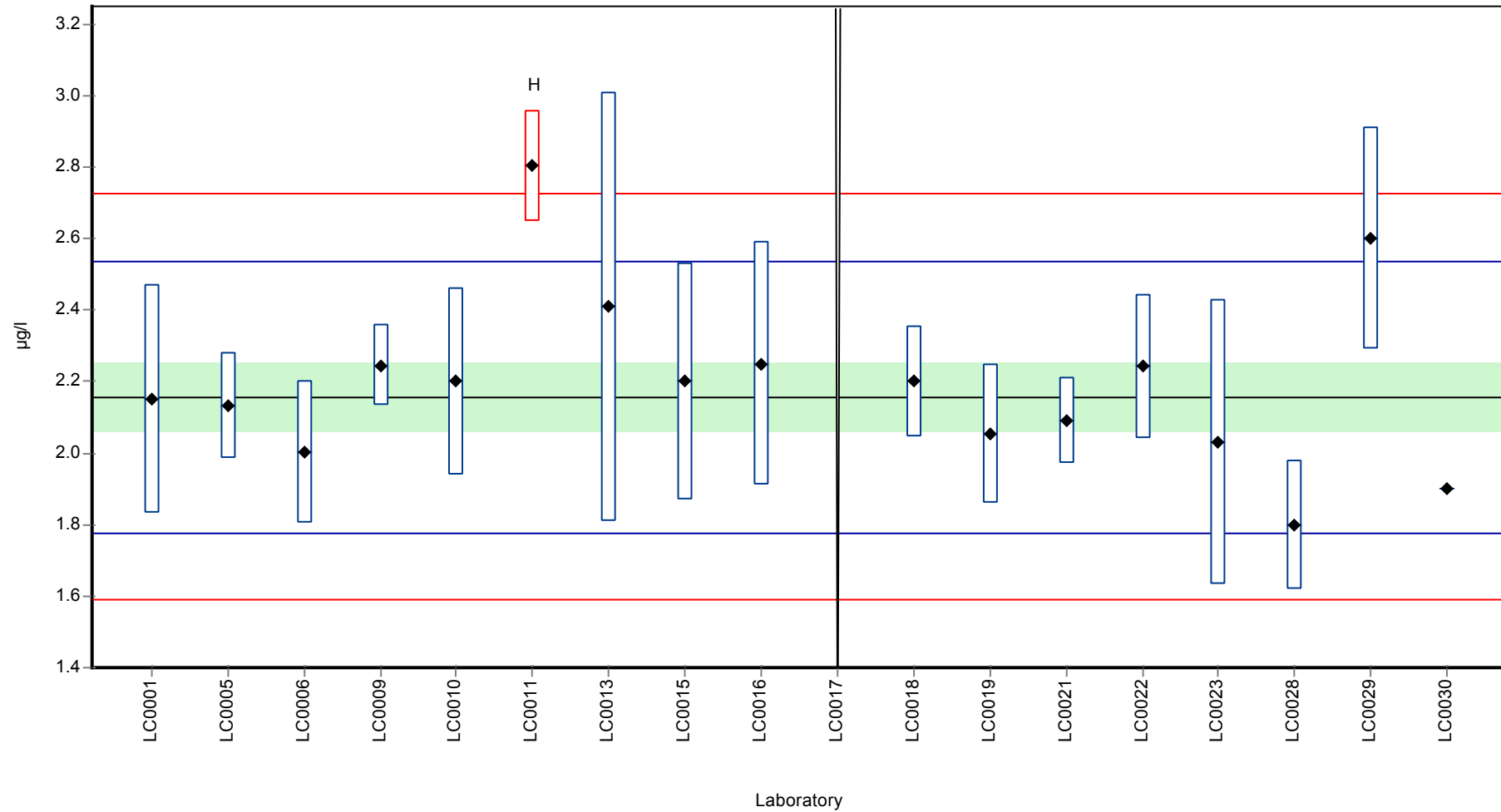
Unit	µg/l
Mean ± CI (99%)	2.16 ± 0.142
Minimum - Maximum	1.8 - 2.6
Control test value ± U	2.18 ± 0.0737

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	2.15	0.32	99.7	-0.03	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	2.133	0.149	98.9	-0.12	
LC0006	2.0033	0.2	92.9	-0.81	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	2.245	0.113	104	0.47	
LC0010	2.2	0.264	102	0.23	
LC0011	2.803	0.154	130	3.41	H
LC0012	-	-	-	-	
LC0013	2.41	0.6	112	1.34	
LC0014	-	-	-	-	
LC0015	2.2	0.33	102	0.23	
LC0016	2.25	0.34	104	0.49	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	2.2	0.157	102	0.23	
LC0019	2.0518	0.195	95.1	-0.55	
LC0020	-	-	-	-	
LC0021	2.09	0.12	96.9	-0.35	
LC0022	2.242	0.2	104	0.45	
LC0023	2.03	0.4	94.1	-0.67	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1.8	0.18	83.5	-1.88	
LC0029	2.6	0.31	121	2.34	
LC0030	1.9	-	88.1	-1.35	

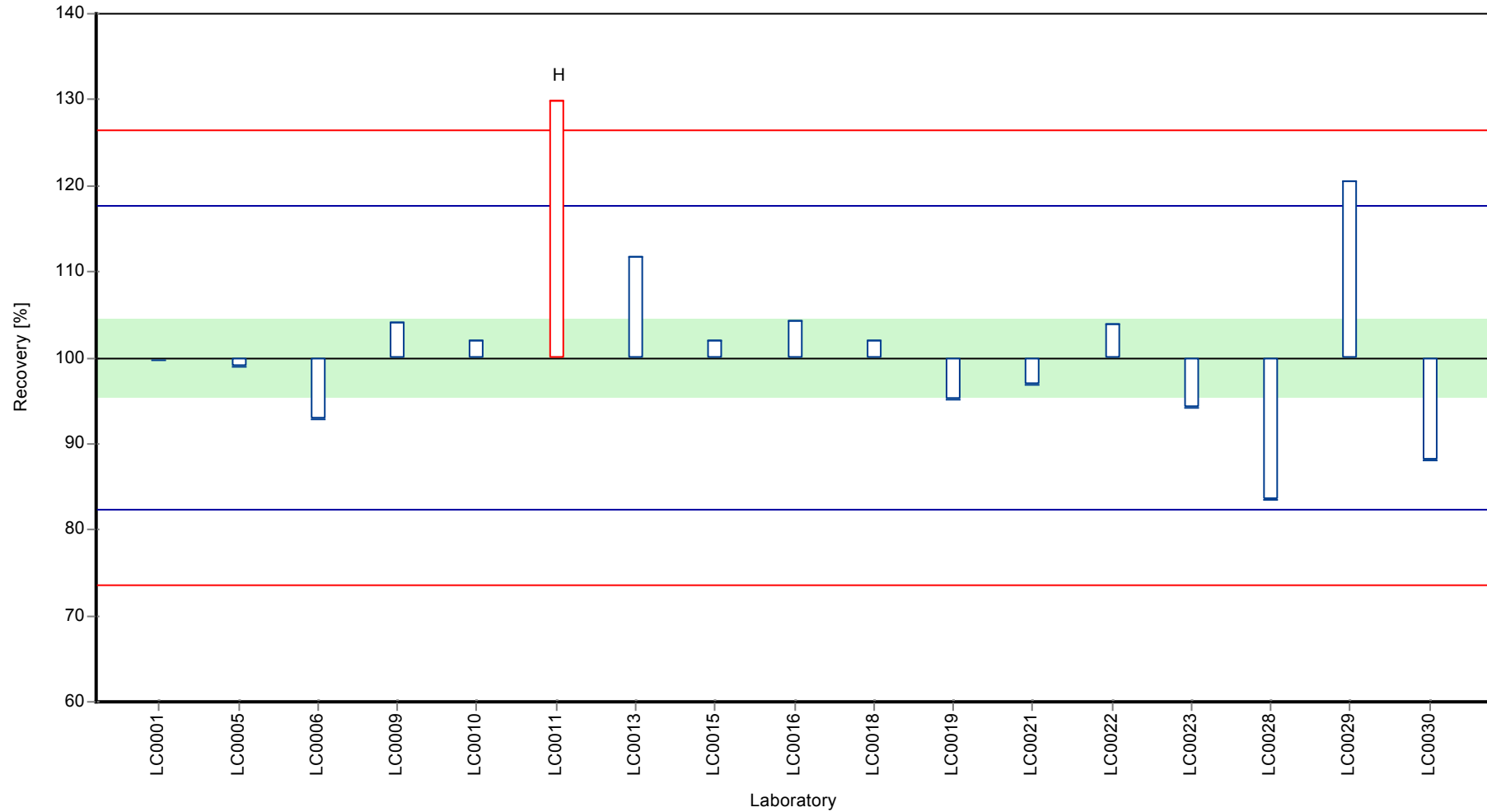
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	2.19 ± 0.176	2.16 ± 0.142	µg/l
Minimum	1.8	1.8	µg/l
Maximum	2.8	2.6	µg/l
Standard deviation	0.241	0.19	µg/l
rel. Standard deviation	11	8.79	%
n	17	16	-

**Graphical presentation of results**  
**Results**



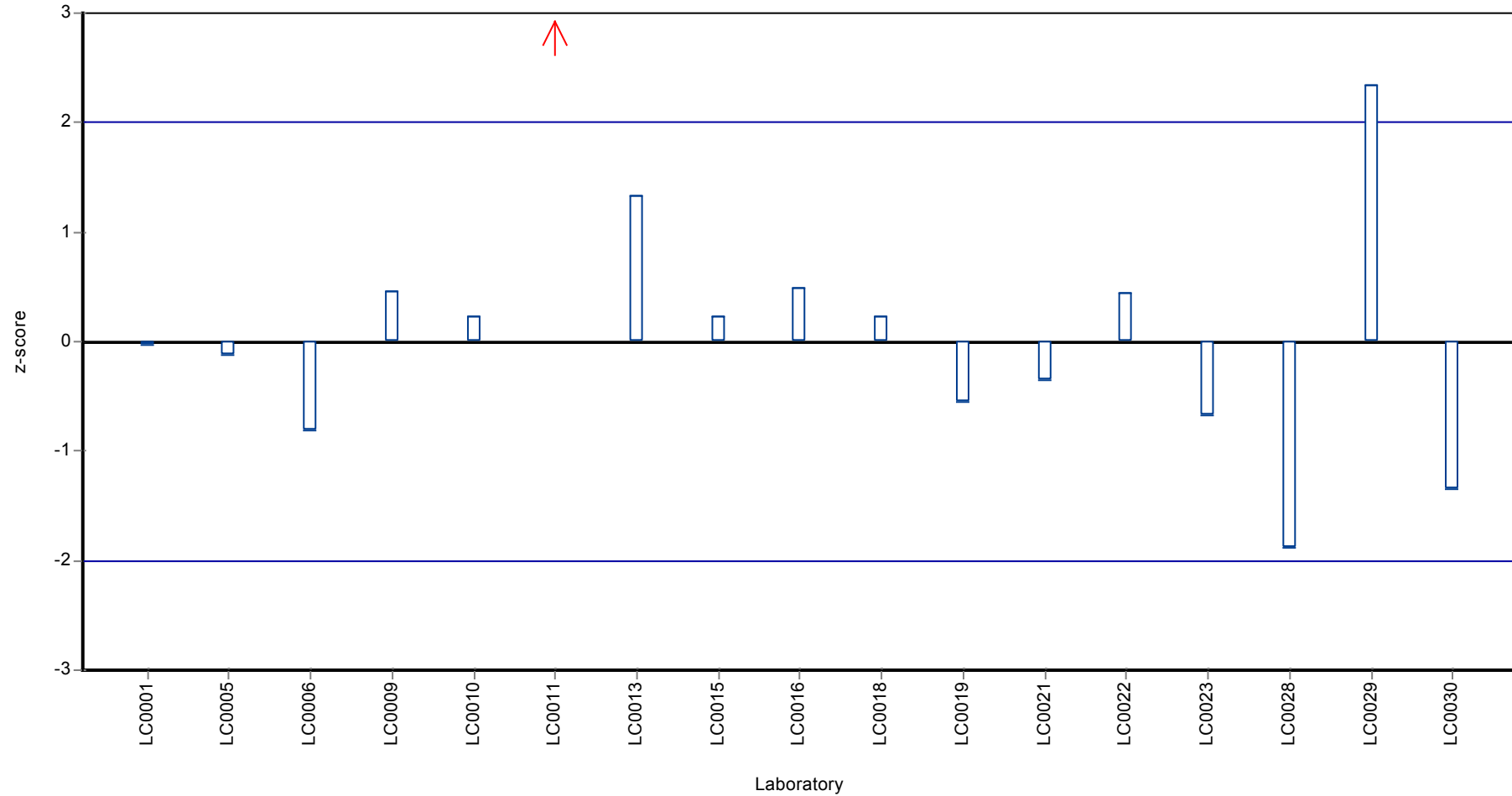
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Chromium

Z-score



## Parameter oriented report

### M140 A

#### Iron

Unit	µg/l
Mean ± CI (99%)	4.22 ± 1.44
Minimum - Maximum	2.16 - 8
Control test value ± U	4.11 ± 0.347

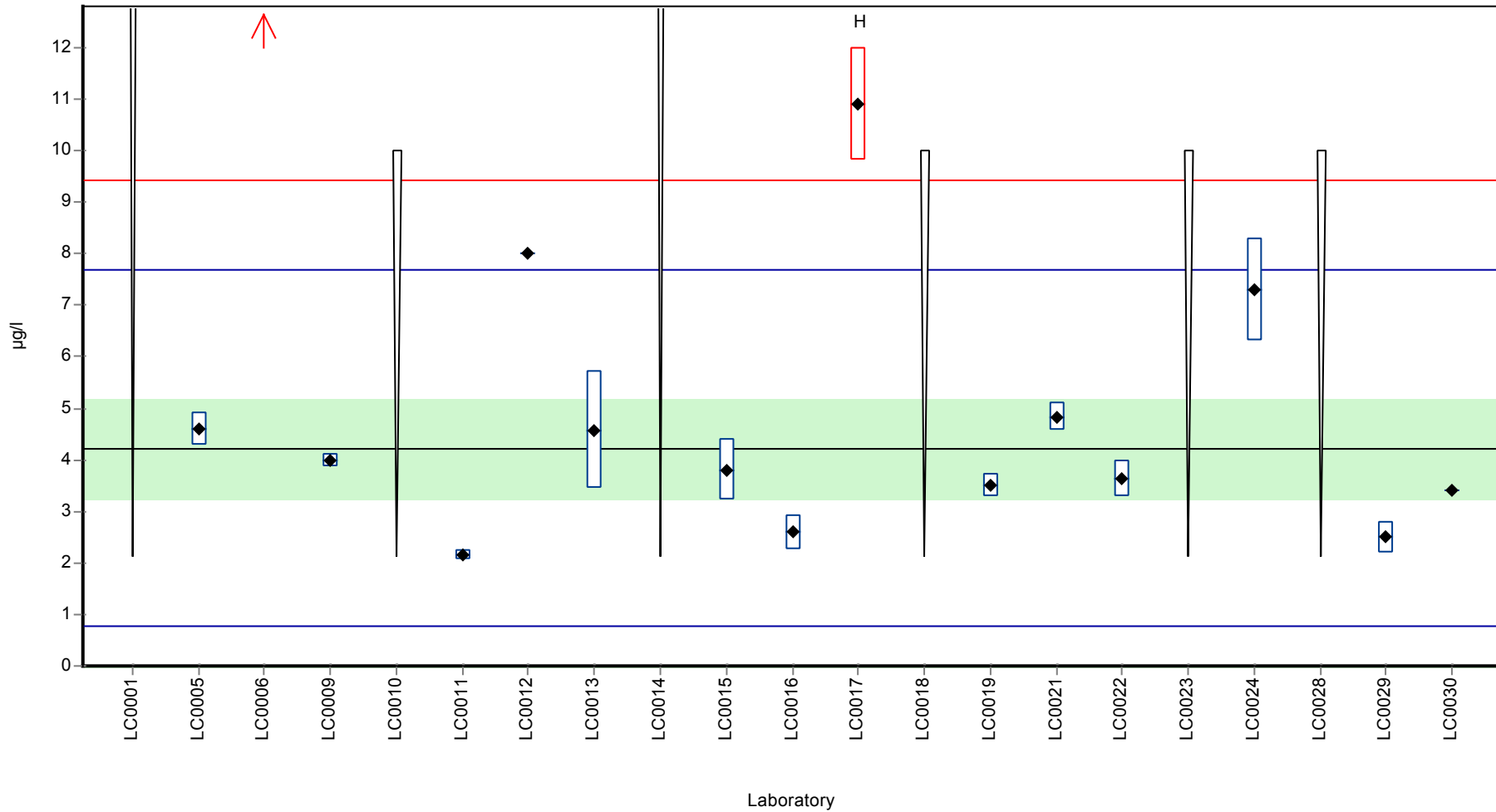
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 20 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	4.593	0.317	109	0.21	
LC0006	23	1.61	545	10.8	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	3.977	0.125	94.2	-0.14	
LC0010	< 10 (LOQ)	-	-	-	
LC0011	2.162	0.088	51.2	-1.19	
LC0012	8	-	189	2.18	
LC0013	4.57	1.14	108	0.2	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	3.8	0.6	90	-0.24	
LC0016	2.6	0.34	61.6	-0.94	
LC0017	10.9	1.1	258	3.86	H
LC0018	< 10 (LOQ)	-	-	-	
LC0019	3.5026	0.22	83	-0.41	
LC0020	-	-	-	-	
LC0021	4.84	0.26	115	0.36	
LC0022	3.64	0.35	86.2	-0.34	
LC0023	< 10 (LOQ)	-	-	-	
LC0024	7.3	1	173	1.78	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	2.5	0.3	59.2	-0.99	
LC0030	3.4	-	80.5	-0.47	

#### Characteristics of parameter

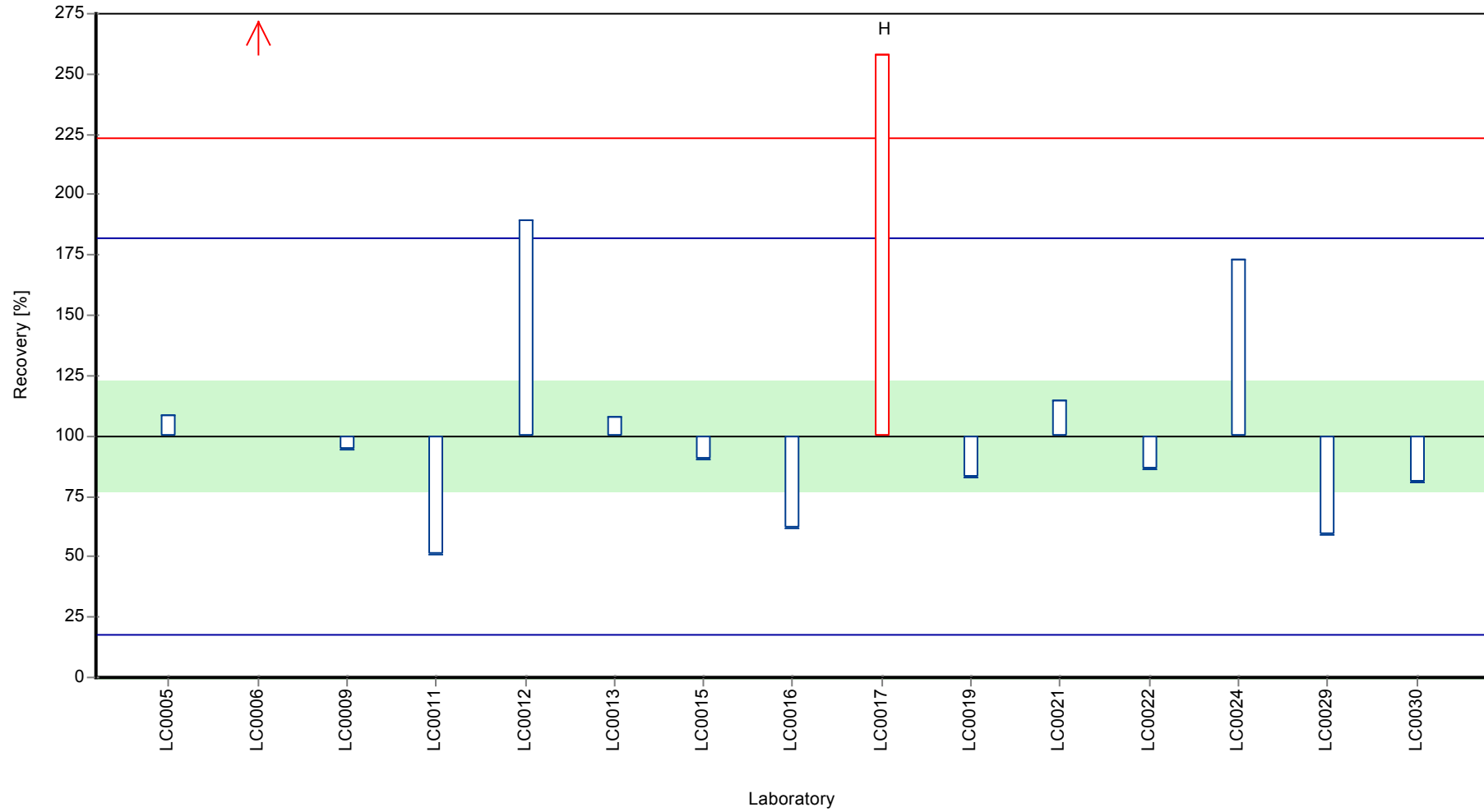
	all results	without outliers	Unit
Mean ± CI (99%)	5.92 ± 4.09	4.22 ± 1.44	µg/l
Minimum	2.16	2.16	µg/l
Maximum	23	8	µg/l
Standard deviation	5.28	1.73	µg/l
rel. Standard deviation	89.2	41	%
n	15	13	-



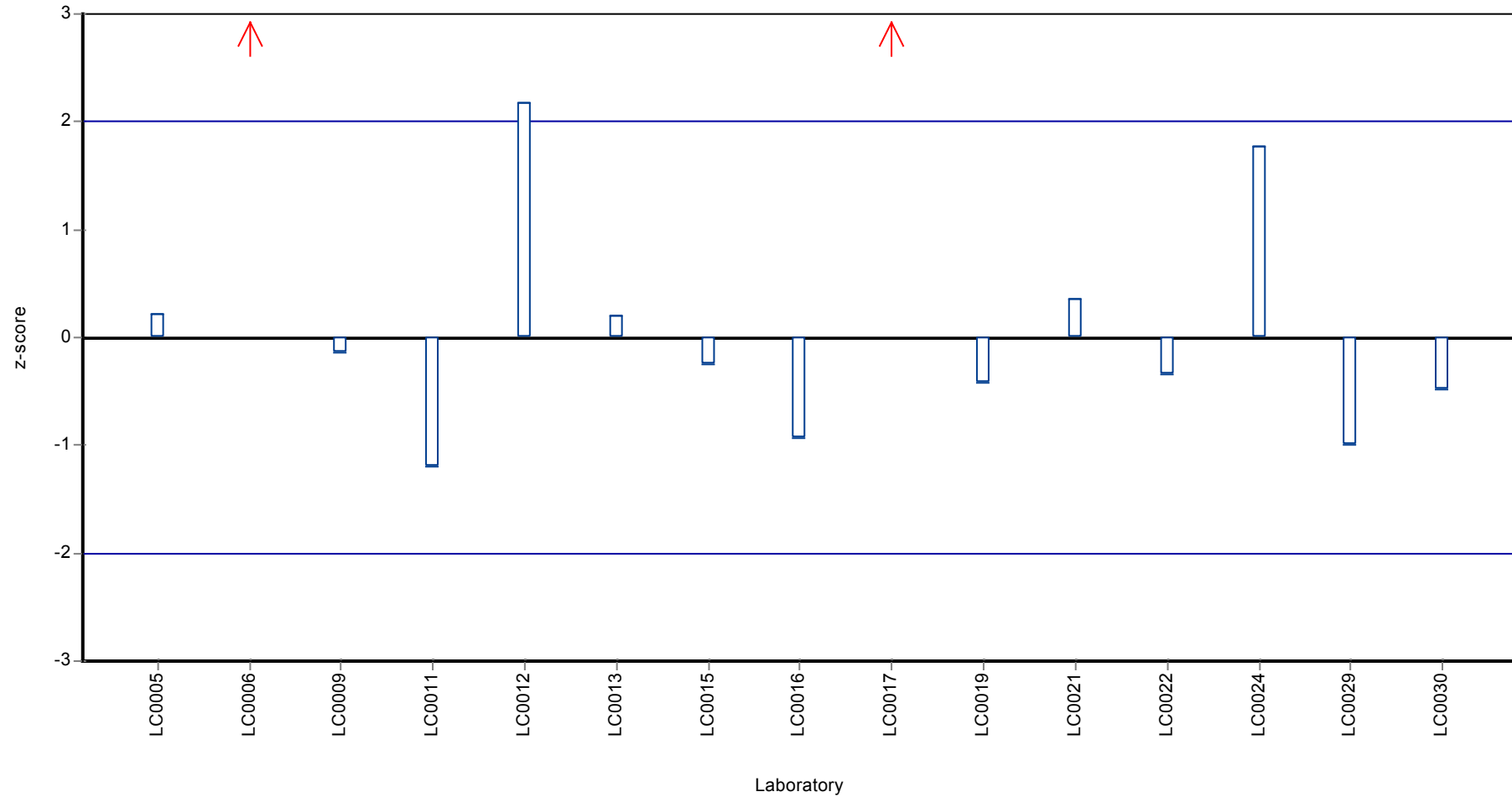
**Graphical presentation of results**  
**Results**



Recovery rate



Z-score



## Parameter oriented report

### M140 B

#### Iron

Unit	µg/l
Mean ± CI (99%)	14.4 ± 1.31
Minimum - Maximum	12.3 - 18.8
Control test value ± U	14.2 ± 0.742

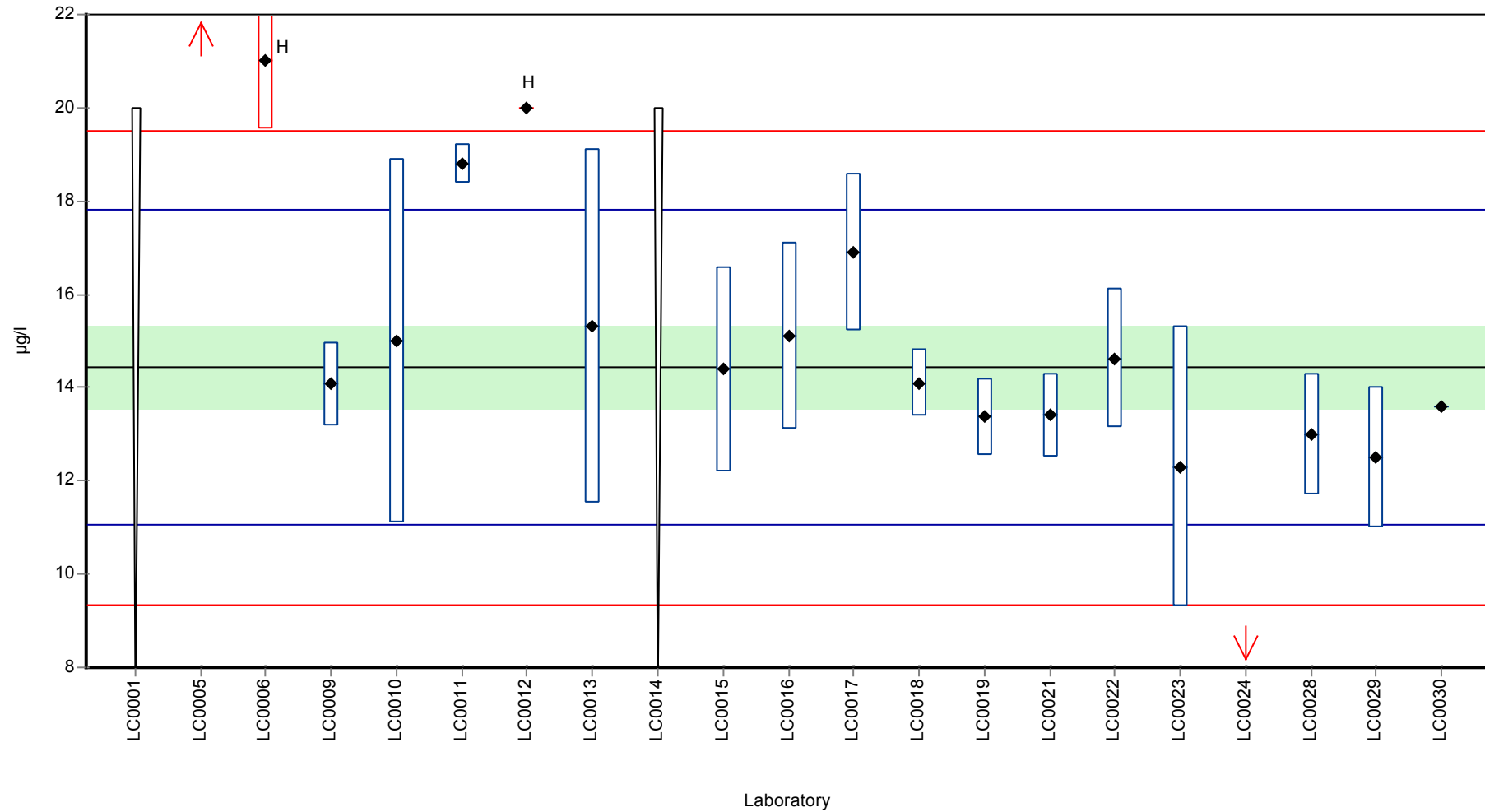
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 20 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	22.78	1.572	158	4.93	H
LC0006	21	1.47	146	3.88	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	14.079	0.894	97.6	-0.21	
LC0010	15	3.9	104	0.34	
LC0011	18.8	0.424	130	2.58	
LC0012	20	-	139	3.29	H
LC0013	15.3	3.8	106	0.51	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	14.4	2.2	99.8	-0.02	
LC0016	15.1	2	105	0.39	
LC0017	16.9	1.7	117	1.46	
LC0018	14.1	0.714	97.7	-0.2	
LC0019	13.368	0.84	92.6	-0.63	
LC0020	-	-	-	-	
LC0021	13.4	0.9	92.9	-0.61	
LC0022	14.63	1.5	101	0.12	
LC0023	12.3	3	85.2	-1.26	
LC0024	4.9	0.7	34	-5.63	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	13	1.3	90.1	-0.84	
LC0029	12.5	1.5	86.6	-1.14	
LC0030	13.6	-	94.2	-0.49	

#### Characteristics of parameter

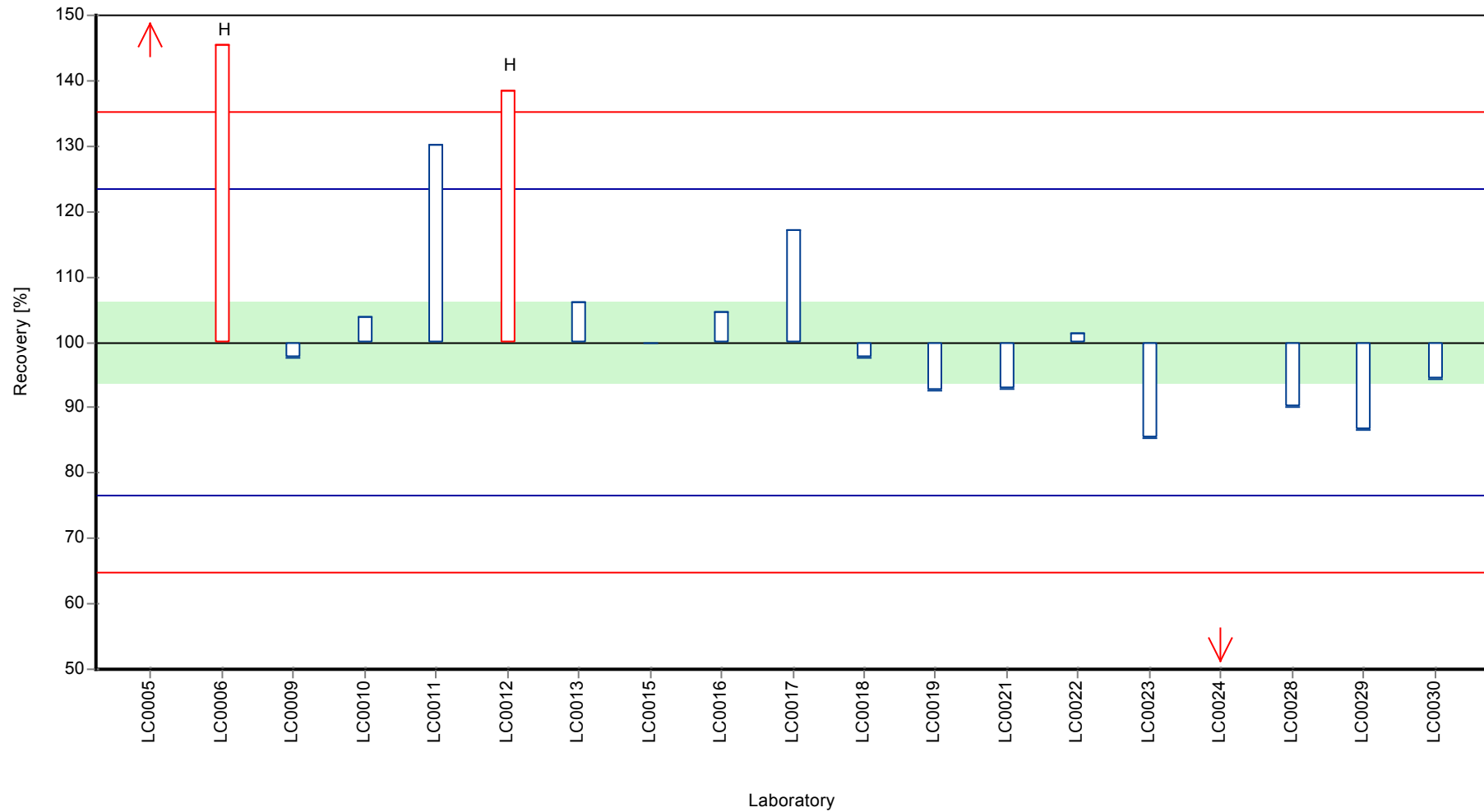
	all results	without outliers	Unit
Mean ± CI (99%)	15 ± 2.66	14.4 ± 1.31	µg/l
Minimum	4.9	12.3	µg/l
Maximum	22.8	18.8	µg/l
Standard deviation	3.86	1.69	µg/l
rel. Standard deviation	25.7	11.7	%
n	19	15	-

Graphical presentation of results

Results



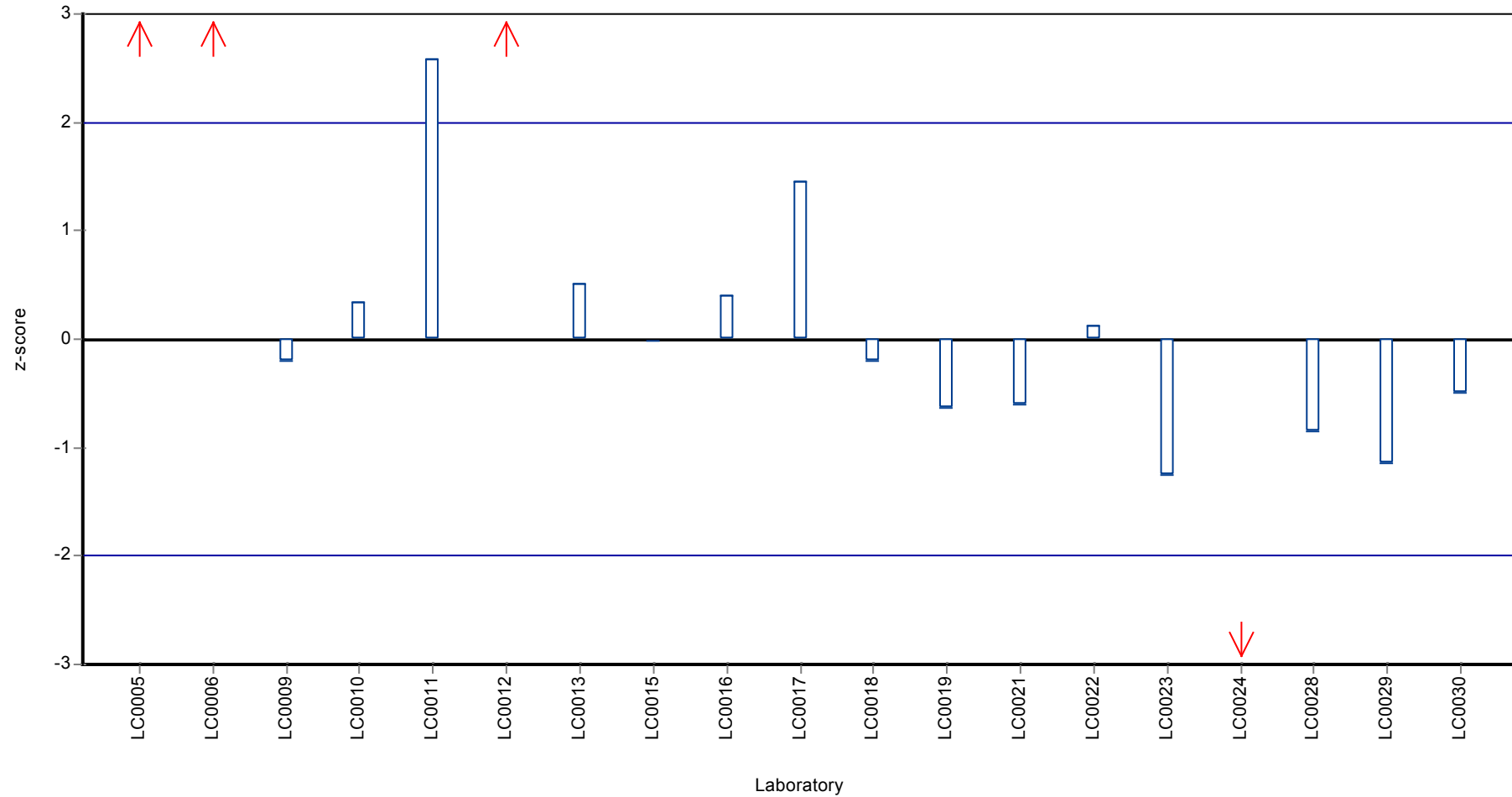
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Iron

Z-score



## Parameter oriented report

### M140 A

#### Copper

Unit	µg/l
Mean ± CI (99%)	13.8 ± 0.547
Minimum - Maximum	12.5 - 15.2
Control test value ± U	14.5 ± 1.17

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	14	2.1	102	0.31	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	5.719	0.4	41.5	-11.1	H
LC0006	8.068	2.151	58.6	-7.83	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	14.68	0.952	107	1.24	
LC0010	13.9	1.112	101	0.17	
LC0011	13.301	0.031	96.6	-0.65	
LC0012	23	-	167	12.7	H
LC0013	14.7	3.7	107	1.27	
LC0014	-	-	-	-	
LC0015	12.8	1.3	92.9	-1.34	
LC0016	13.2	1.72	95.8	-0.79	
LC0017	13.8	1.4	100	0.04	
LC0018	14.5	0.3	105	1	
LC0019	0.0602	0.007	0.4	-18.8	H
LC0020	15.19	3	110	1.94	
LC0021	12.5	0.6	90.8	-1.75	
LC0022	13.5	1.35	98	-0.38	
LC0023	13.5	3	98	-0.38	
LC0024	6.6	1	47.9	-9.84	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	14	1.4	102	0.31	
LC0029	13.2	1.31	95.8	-0.79	
LC0030	13.6	-	98.7	-0.24	

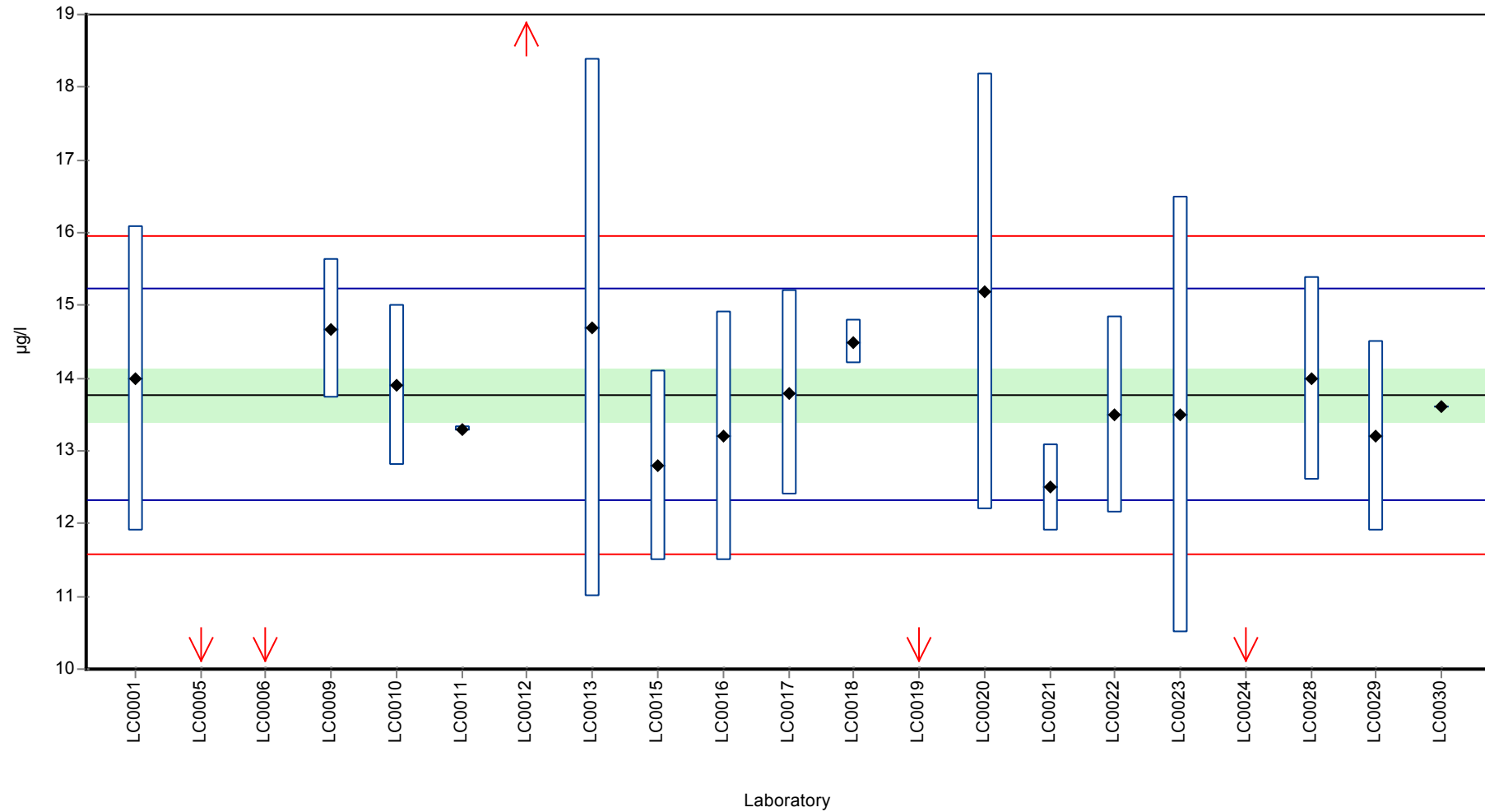
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	12.6 ± 2.92	13.8 ± 0.547	µg/l
Minimum	0.0602	12.5	µg/l
Maximum	23	15.2	µg/l
Standard deviation	4.47	0.729	µg/l
rel. Standard deviation	35.6	5.29	%
n	21	16	-



Graphical presentation of results

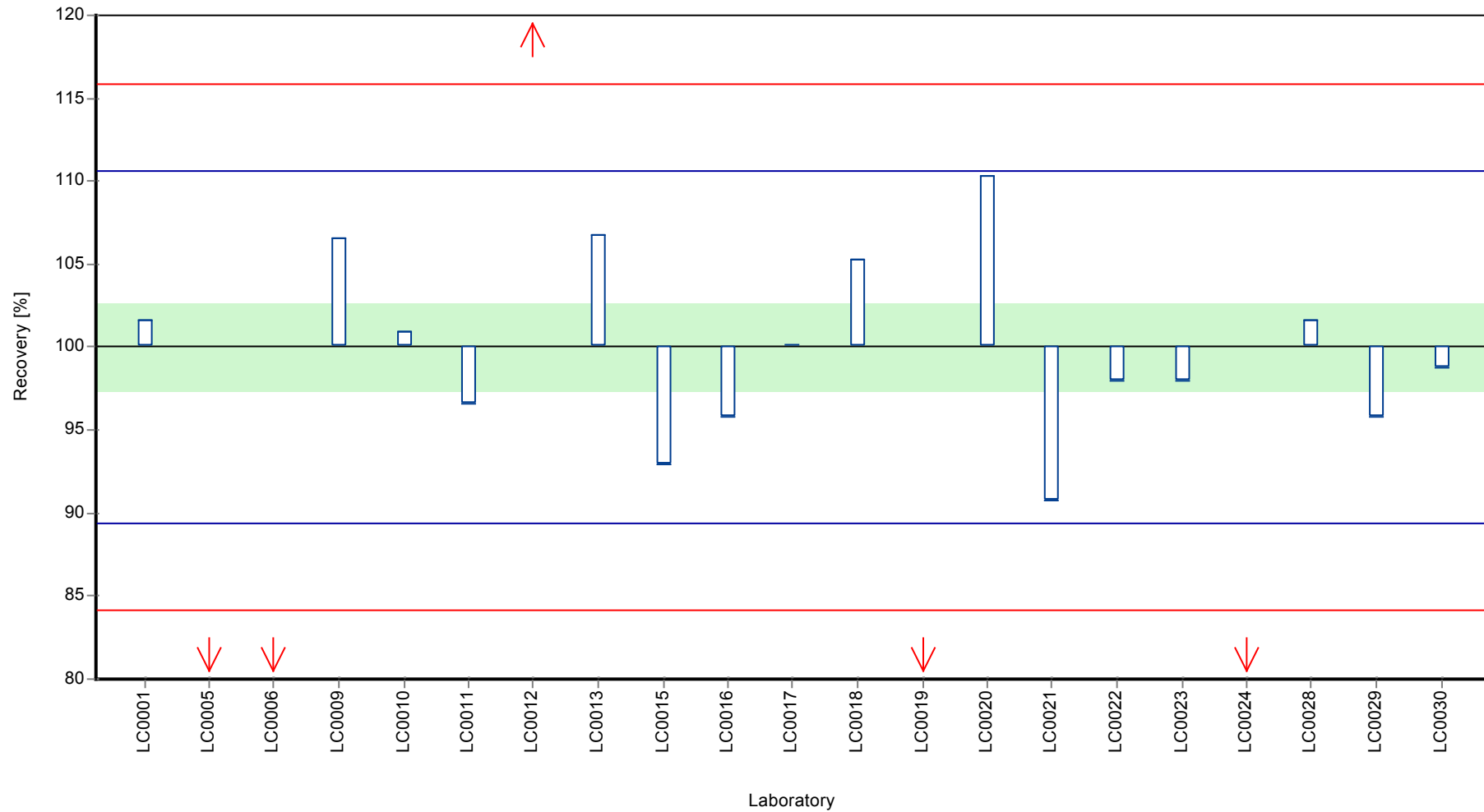
Results



Parameter oriented report Metals M140

Sample: M140A, Parameter: Copper

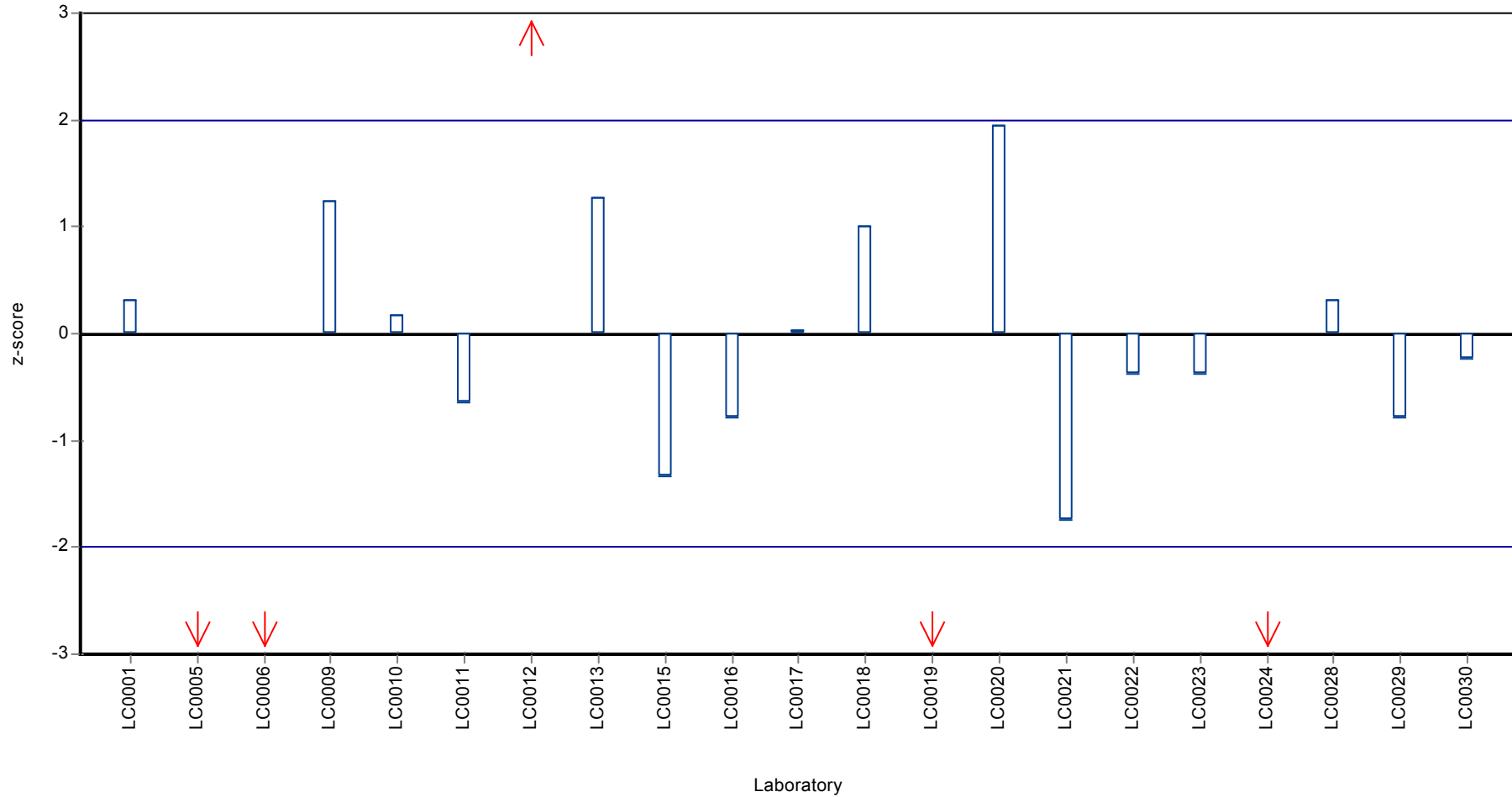
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Copper

Z-score



## Parameter oriented report

### M140 B

#### Copper

Unit	µg/l
Mean ± CI (99%)	5.09 ± 0.232
Minimum - Maximum	4.64 - 5.76
Control test value ± U	5.17 ± 0.385

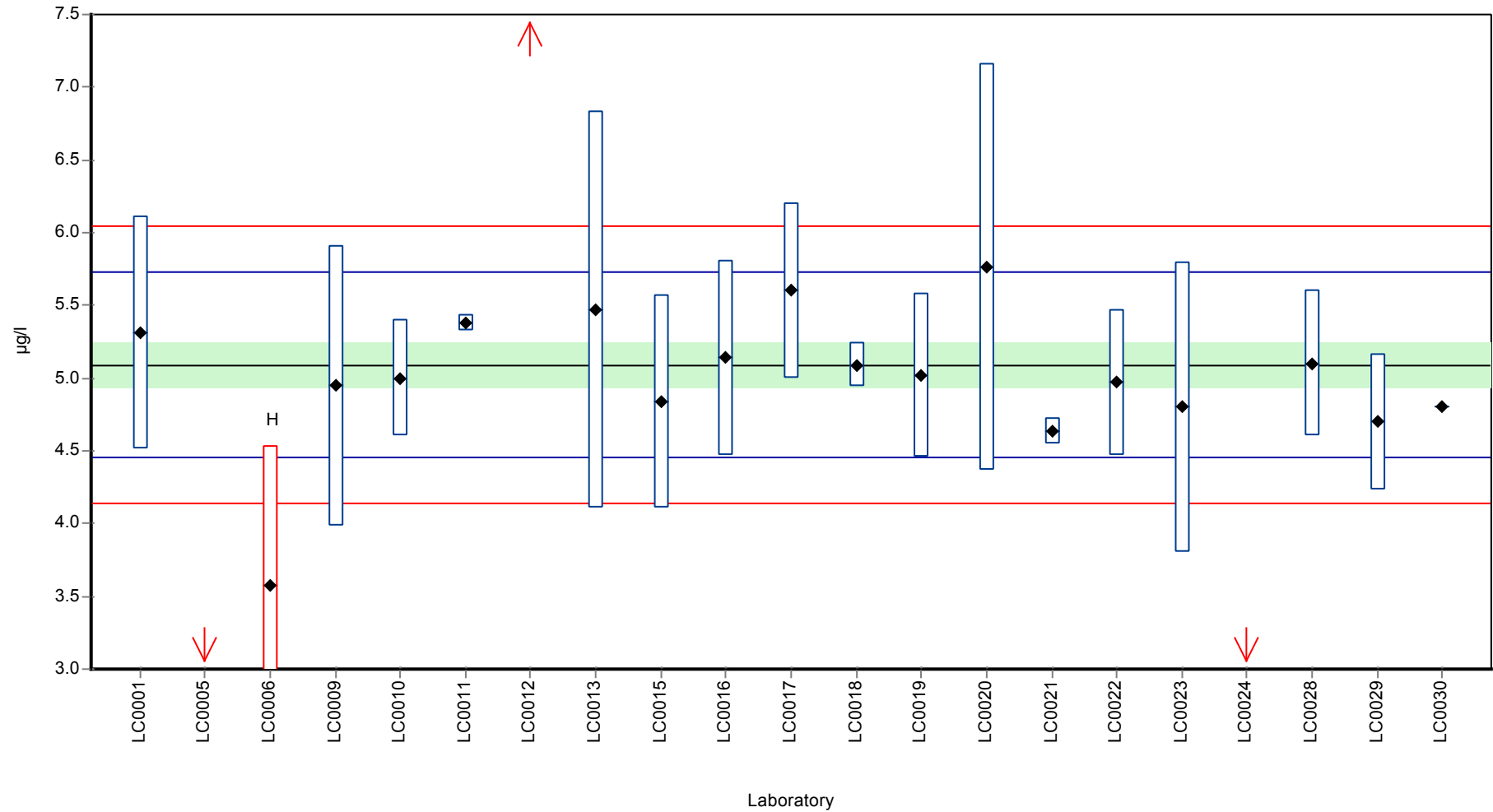
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	5.31	0.8	104	0.69	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	1.703	0.162	33.4	-10.6	H
LC0006	3.5771	0.955	70.2	-4.76	H
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.947	0.965	97.2	-0.46	
LC0010	5	0.4	98.2	-0.29	
LC0011	5.379	0.061	106	0.9	
LC0012	17	-	334	37.4	H
LC0013	5.47	1.37	107	1.19	
LC0014	-	-	-	-	
LC0015	4.84	0.73	95	-0.79	
LC0016	5.14	0.67	101	0.15	
LC0017	5.6	0.6	110	1.6	
LC0018	5.09	0.15	100	-0.01	
LC0019	5.019	0.562	98.6	-0.23	
LC0020	5.76	1.4	113	2.1	
LC0021	4.64	0.09	91.1	-1.42	
LC0022	4.97	0.5	97.6	-0.38	
LC0023	4.8	1	94.3	-0.92	
LC0024	0.8	0.08	15.7	-13.5	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	5.1	0.5	100	0.02	
LC0029	4.7	0.47	92.3	-1.23	
LC0030	4.8	-	94.3	-0.92	

#### Characteristics of parameter

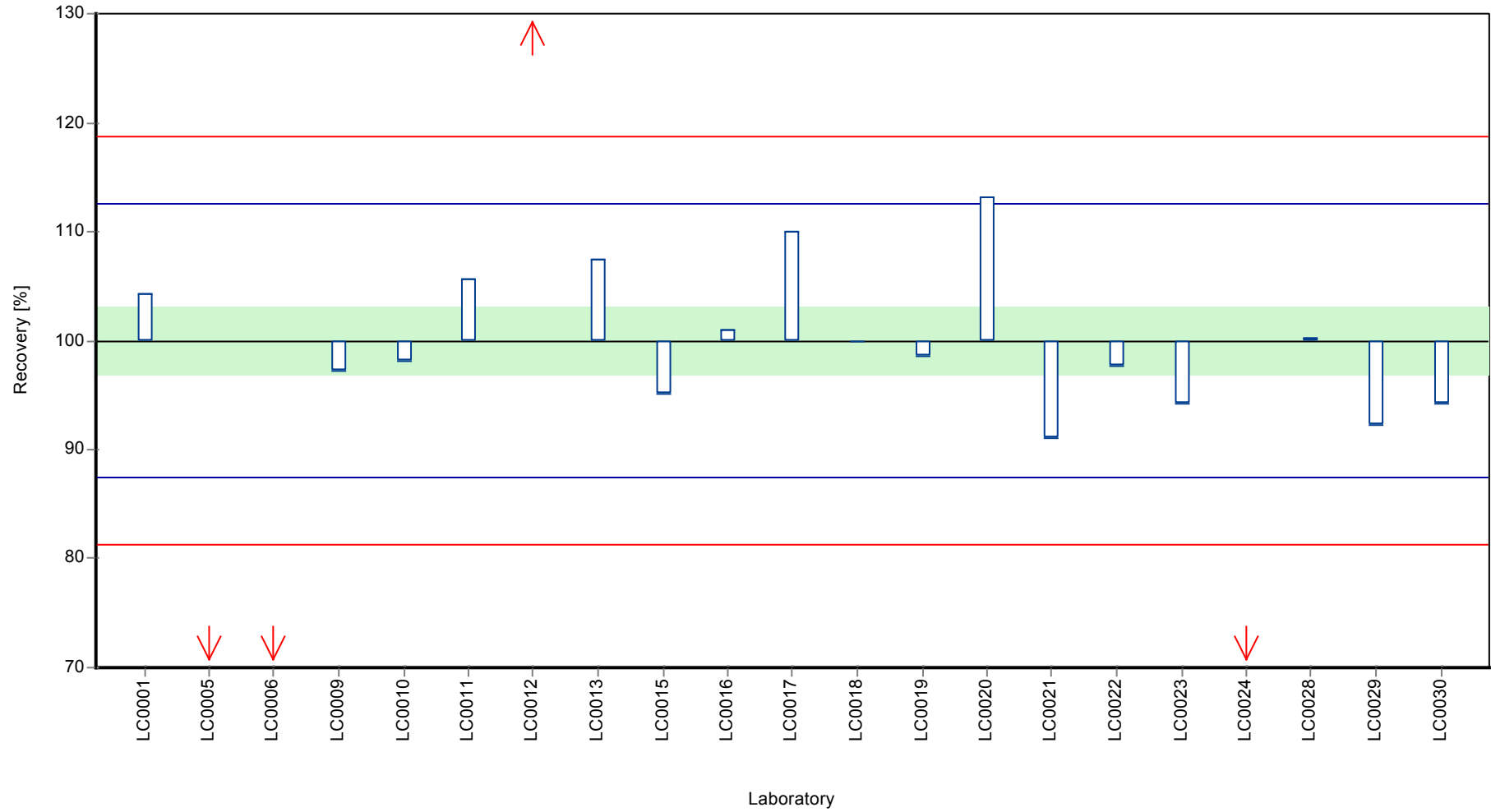
	all results	without outliers	Unit
Mean ± CI (99%)	5.22 ± 1.94	5.09 ± 0.232	µg/l
Minimum	0.8	4.64	µg/l
Maximum	17	5.76	µg/l
Standard deviation	2.96	0.318	µg/l
rel. Standard deviation	56.7	6.25	%
n	21	17	-

Graphical presentation of results

Results



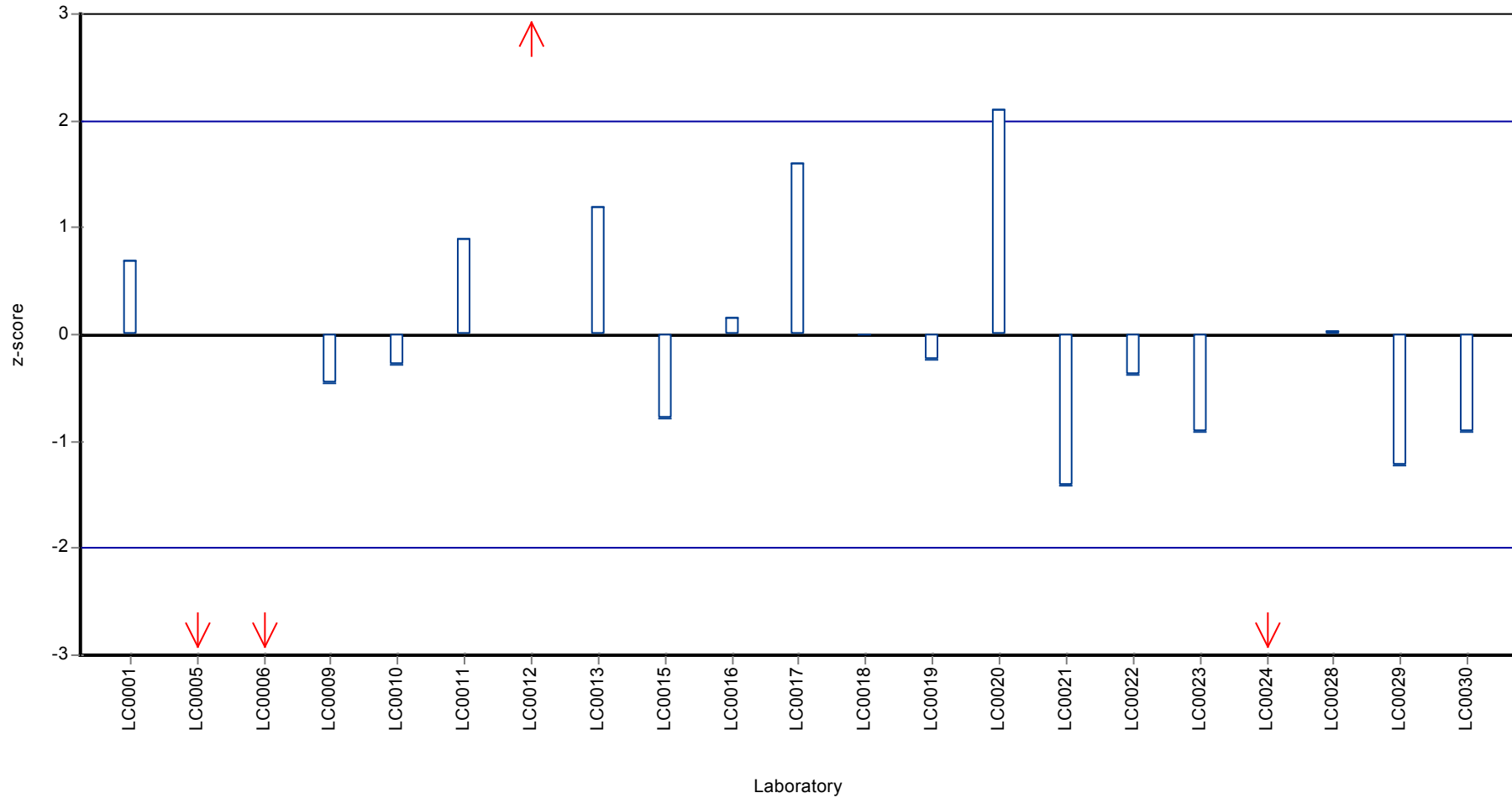
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Copper

Z-score



## Parameter oriented report

### M140 A

#### Manganese

Unit	µg/l
Mean ± CI (99%)	1.7 ± 0.103
Minimum - Maximum	1.5 - 1.9
Control test value ± U	1.82 ± 0.0884

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 15 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	1.899	0.108	112	1.58	
LC0006	1.6322	0.222	95.8	-0.57	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	1.821	0.078	107	0.95	
LC0010	< 2 (LOQ)	-	-	-	
LC0011	1.584	0.026	93	-0.96	
LC0012	< 5 (LOQ)	-	-	-	
LC0013	1.79	0.45	105	0.7	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	1.77	0.27	104	0.54	
LC0016	1.89	0.24	111	1.51	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	< 10 (LOQ)	-	-	-	
LC0019	1.7133	0.11	101	0.08	
LC0020	1.64	-	96.3	-0.51	
LC0021	1.68	0.07	98.6	-0.19	
LC0022	1.64	0.2	96.3	-0.51	
LC0023	1.58	0.3	92.8	-0.99	
LC0024	< 0.4 (LOQ)	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 5 (LOQ)	-	-	-	
LC0029	1.5	0.17	88.1	-1.64	
LC0030	0.2	-	11.7	-12.2	H

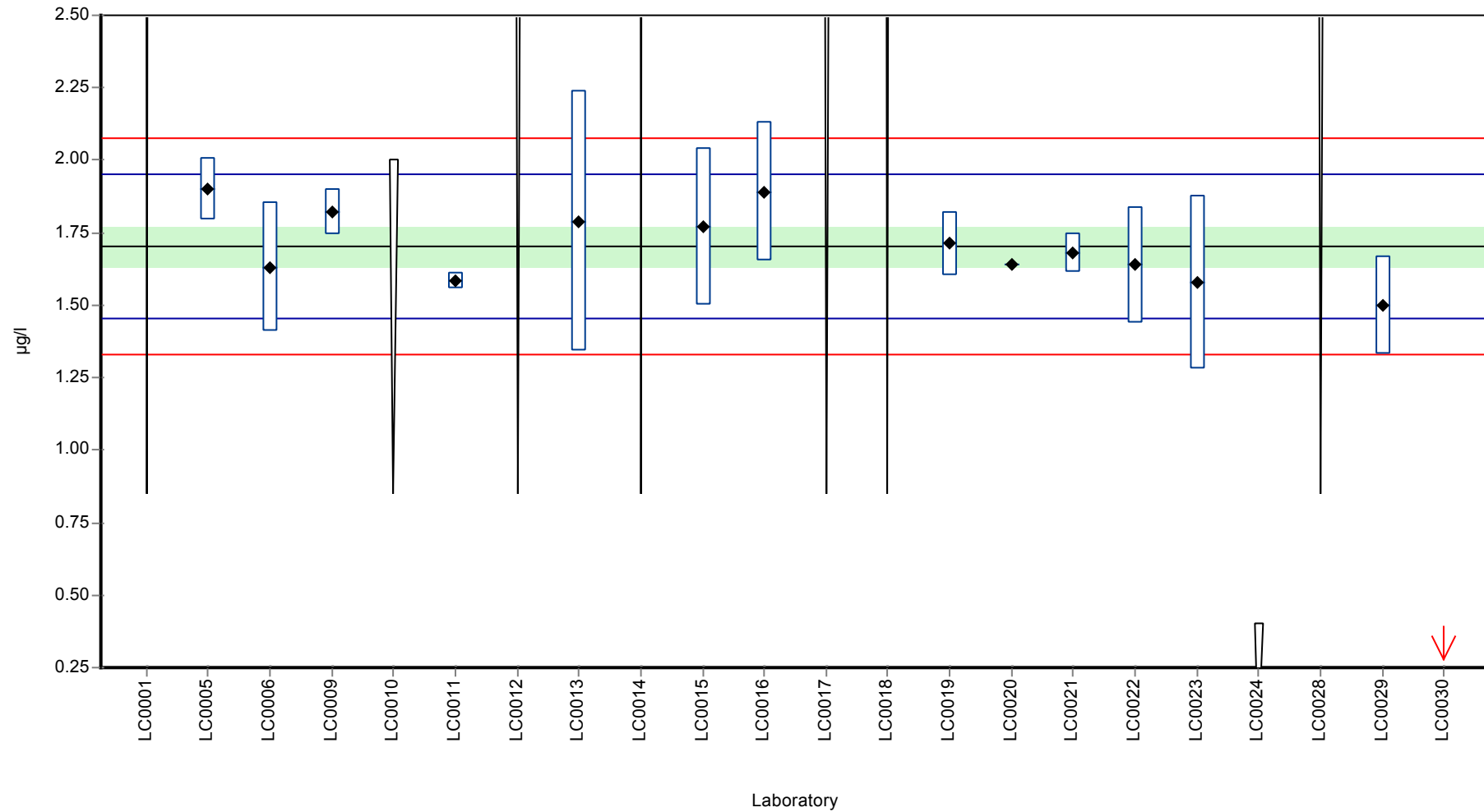
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	1.6 ± 0.336	1.7 ± 0.103	µg/l
Minimum	0.2	1.5	µg/l
Maximum	1.9	1.9	µg/l
Standard deviation	0.419	0.124	µg/l
rel. Standard deviation	26.3	7.26	%
n	14	13	-

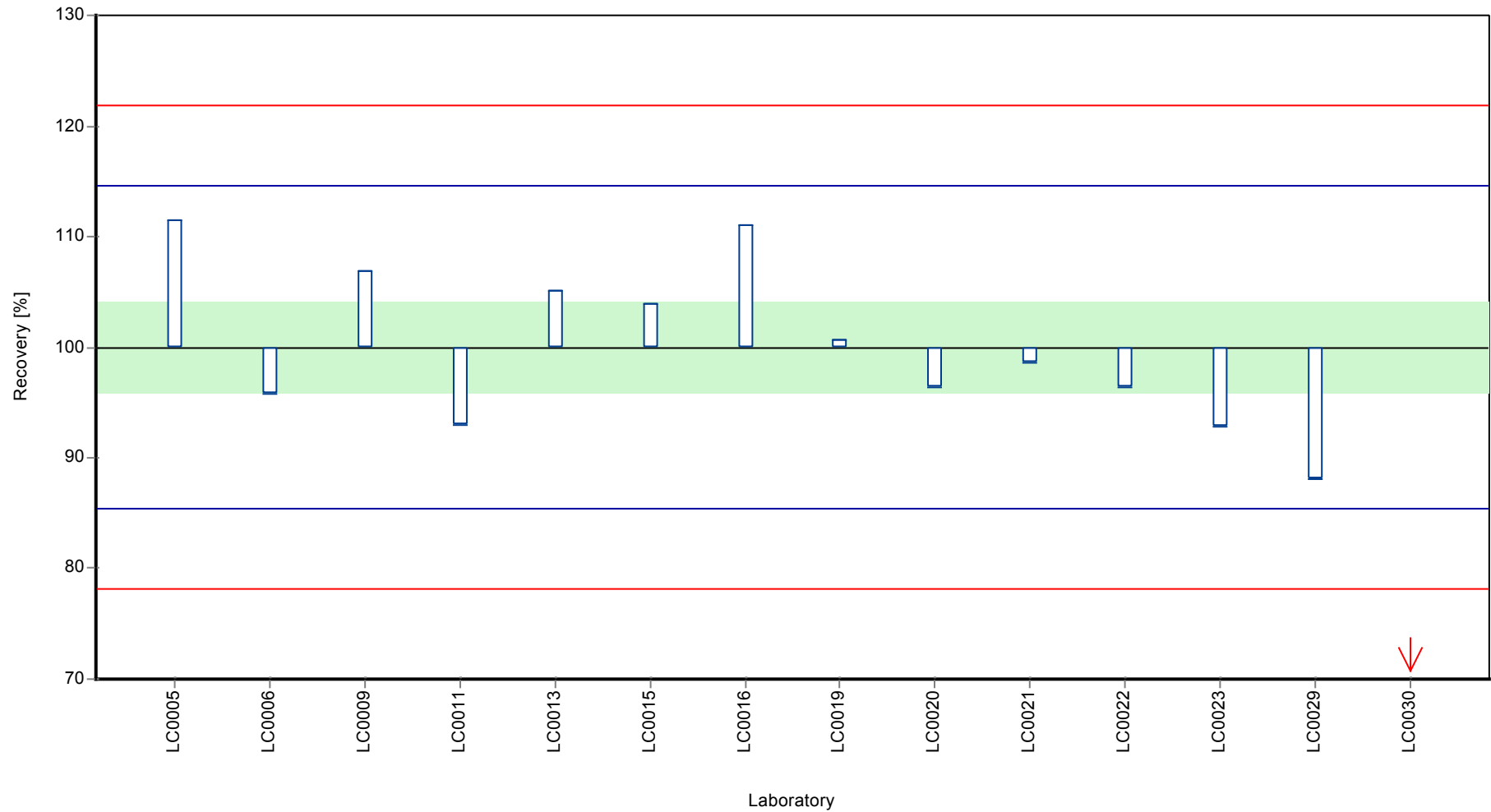


Graphical presentation of results

Results



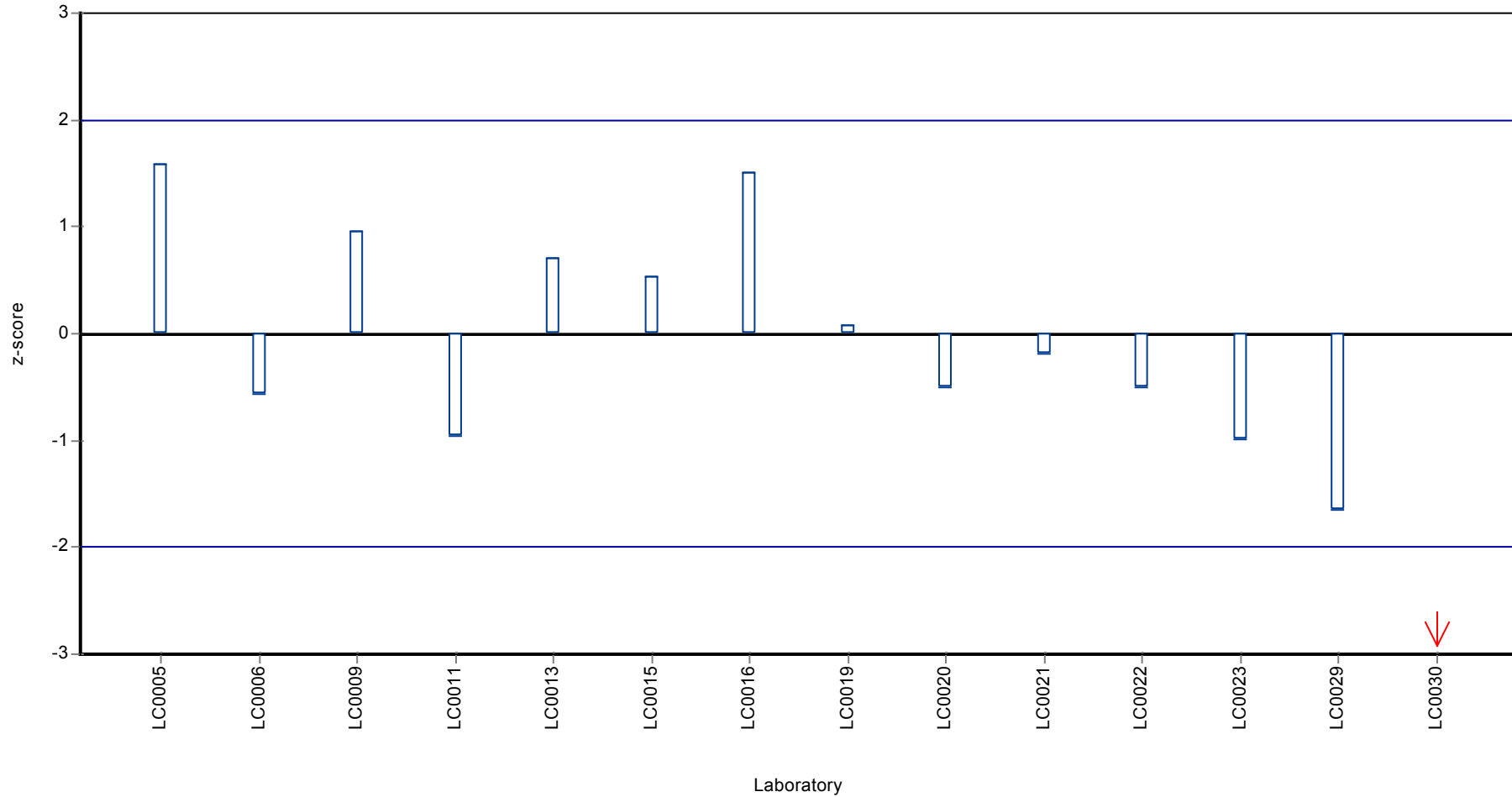
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Manganese

Z-score



## Parameter oriented report

### M140 B

#### Manganese

Unit	µg/l
Mean ± CI (99%)	4.26 ± 0.206
Minimum - Maximum	3.8 - 4.65
Control test value ± U	4.23 ± 0.148

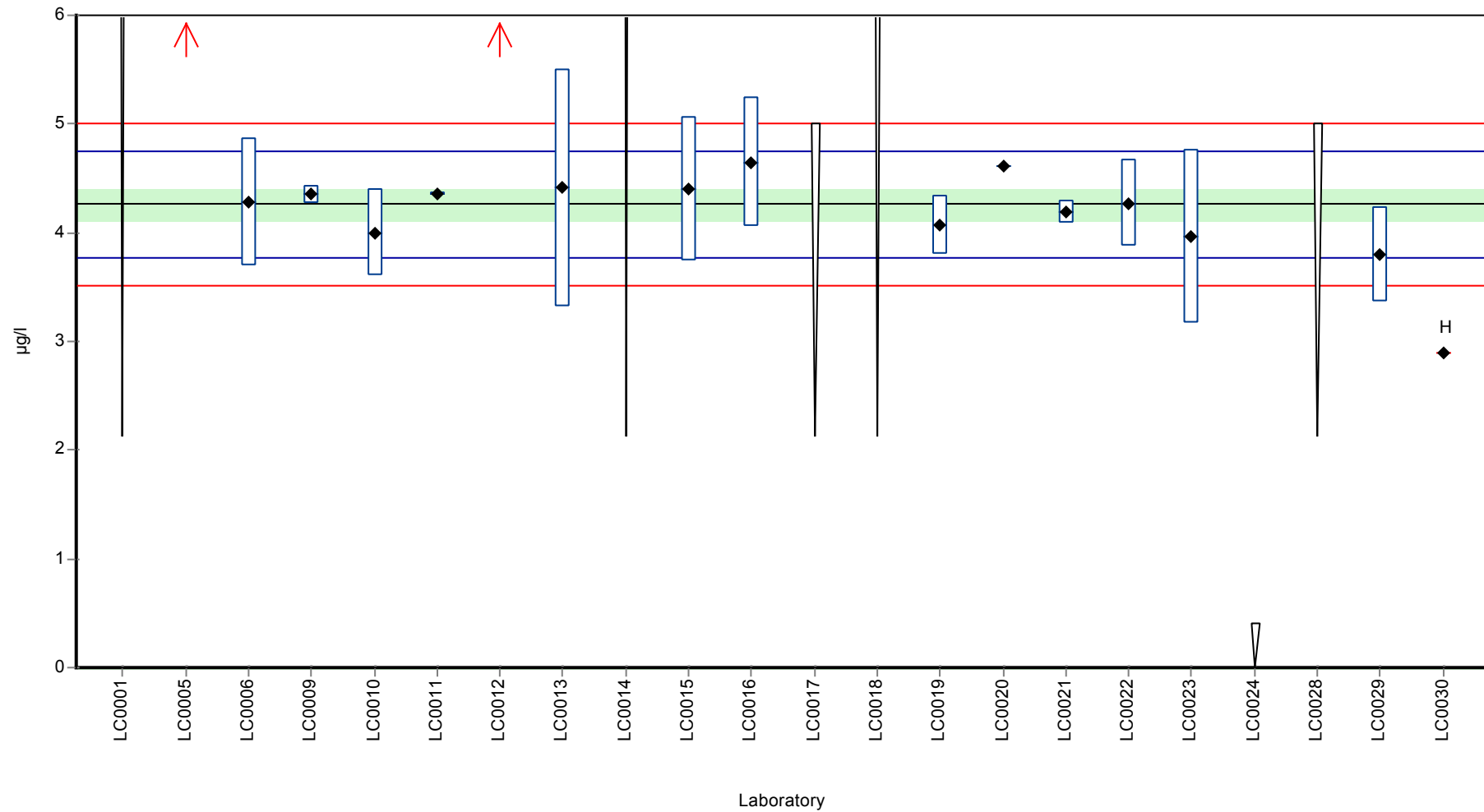
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 15 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	6.764	0.386	159	10.1	H
LC0006	4.2816	0.582	101	0.09	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.351	0.086	102	0.37	
LC0010	4	0.4	93.9	-1.04	
LC0011	4.358	0.02	102	0.4	
LC0012	7	-	164	11.1	H
LC0013	4.41	1.1	104	0.61	
LC0014	< 20 (LOQ)	-	-	-	
LC0015	4.4	0.66	103	0.57	
LC0016	4.65	0.59	109	1.58	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	< 10 (LOQ)	-	-	-	
LC0019	4.0738	0.269	95.7	-0.75	
LC0020	4.61	-	108	1.42	
LC0021	4.19	0.11	98.4	-0.28	
LC0022	4.27	0.4	100	0.05	
LC0023	3.97	0.8	93.2	-1.16	
LC0024	< 0.4 (LOQ)	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 5 (LOQ)	-	-	-	
LC0029	3.8	0.44	89.2	-1.85	
LC0030	2.9	-	68.1	-5.48	H

#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	4.5 ± 0.761	4.26 ± 0.206	µg/l
Minimum	2.9	3.8	µg/l
Maximum	7	4.65	µg/l
Standard deviation	1.01	0.248	µg/l
rel. Standard deviation	22.5	5.82	%
n	16	13	-

Graphical presentation of results

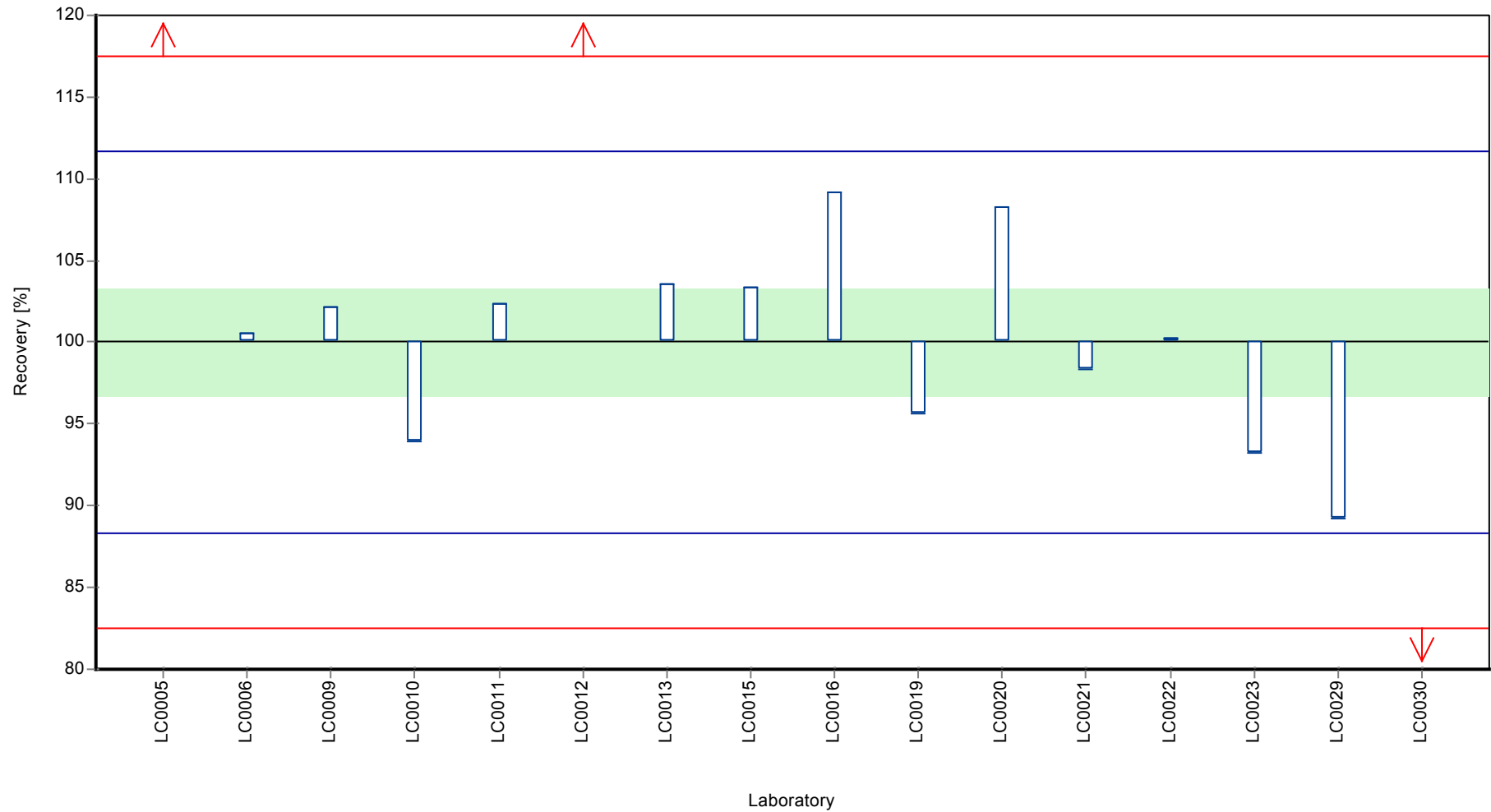
Results



Parameter oriented report Metals M140

Sample: M140B, Parameter: Manganese

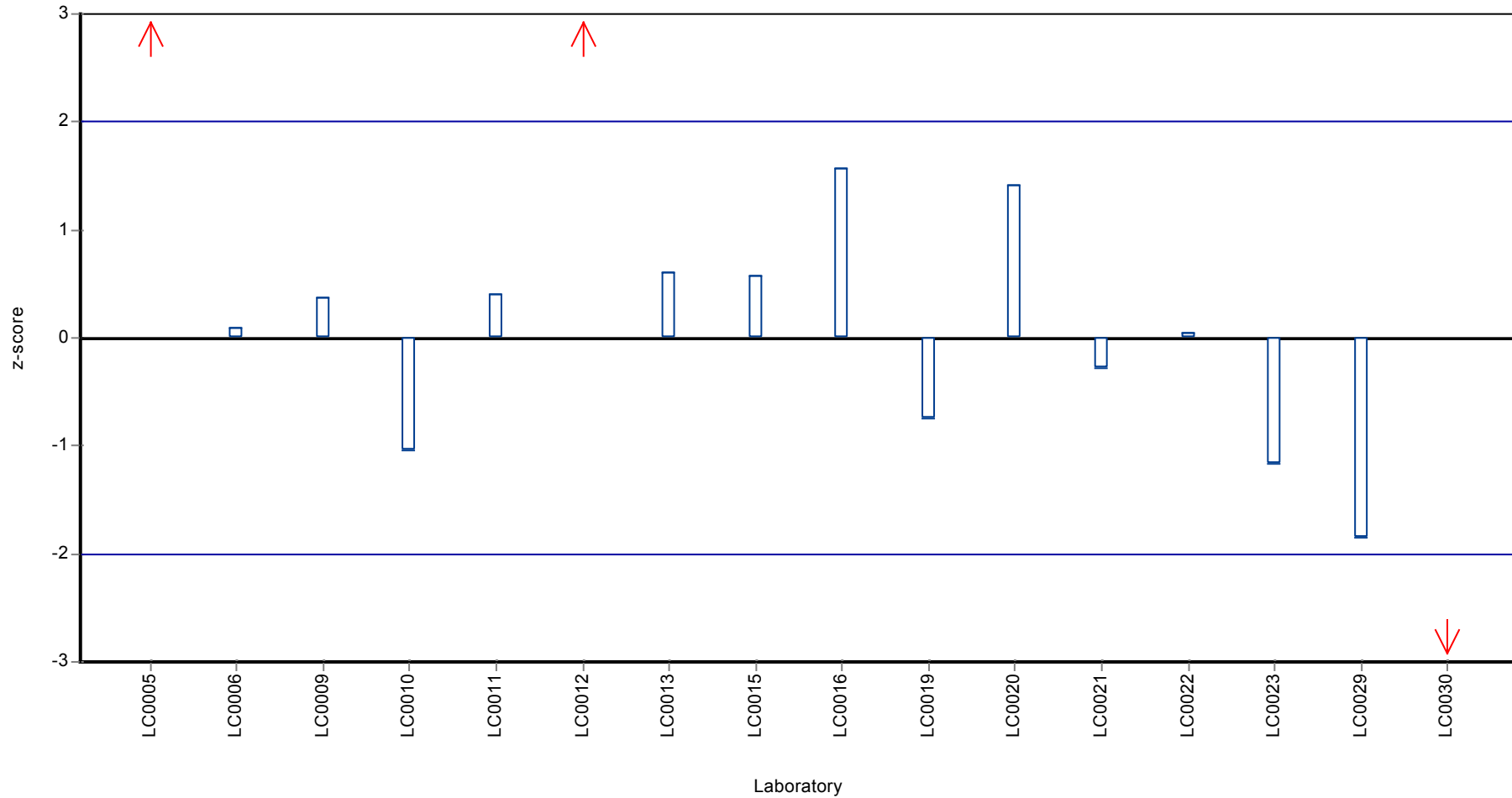
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Manganese

Z-score



## Parameter oriented report

### M140 A

#### Nickel

Unit	µg/l
Mean ± CI (99%)	0.85 ± 0.19
Minimum - Maximum	0.5 - 1.2
Control test value ± U	0.794 ± 0.0629

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.2	0.18	141	1.66	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	1.163	0.081	137	1.49	
LC0006	< 1 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.802	0.077	94.3	-0.23	
LC0010	< 1 (LOQ)	-	-	-	
LC0011	2.364	0.086	278	7.2	H
LC0012	-	-	-	-	
LC0013	0.818	0.205	96.2	-0.15	
LC0014	-	-	-	-	
LC0015	0.72	0.11	84.7	-0.62	
LC0016	0.69	0.1	81.2	-0.76	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	1.03	0.22	121	0.86	
LC0019	0.738	0.081	86.8	-0.53	
LC0020	-	-	-	-	
LC0021	0.91	0.06	107	0.28	
LC0022	0.78	0.1	91.8	-0.33	
LC0023	< 1 (LOQ)	-	-	-	
LC0024	10.1	2	1190	44	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 1 (LOQ)	-	-	-	
LC0029	13.1	1.59	1540	58.3	H
LC0030	0.5	-	58.8	-1.66	

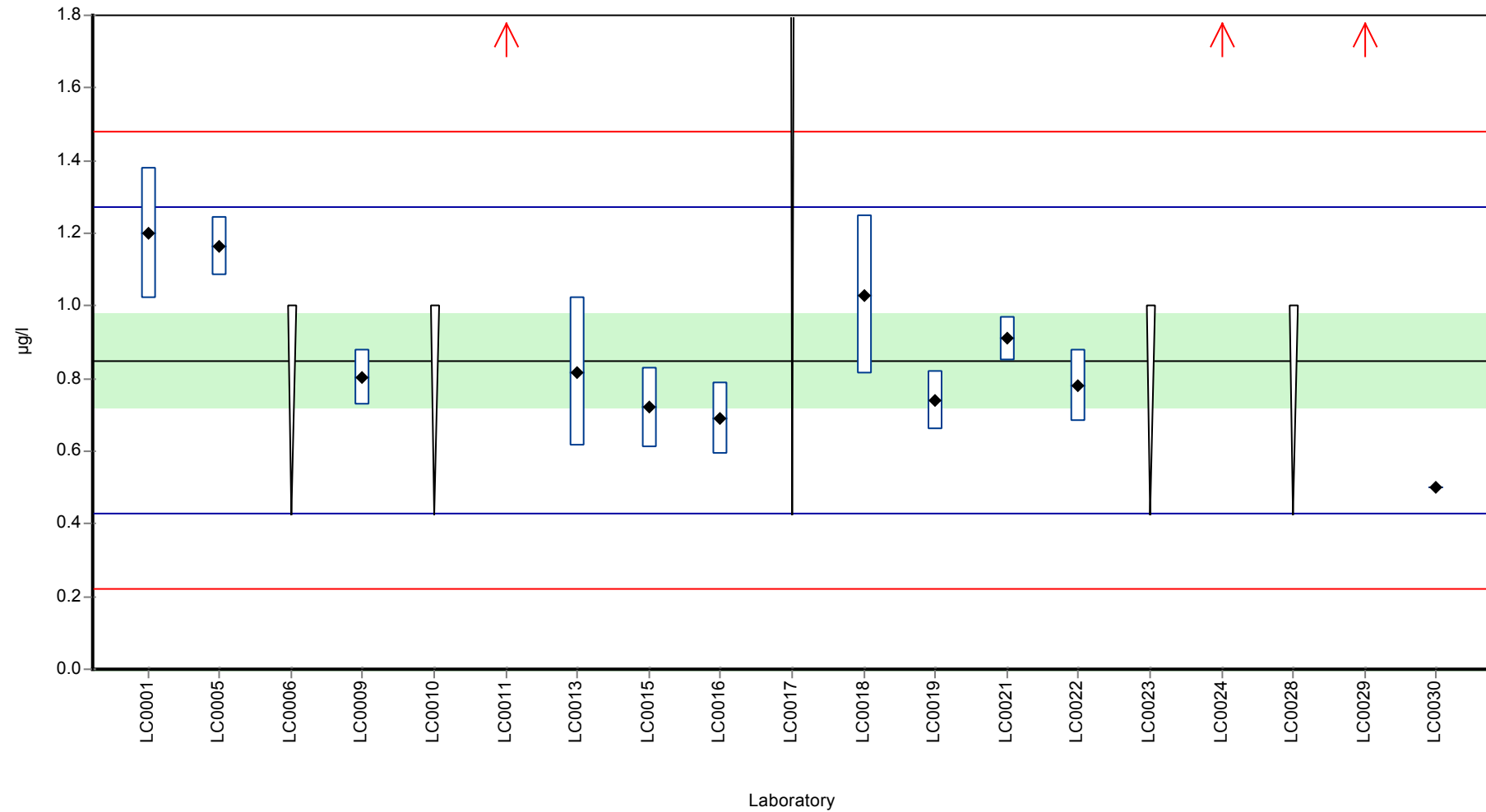
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	2.49 ± 3.15	0.85 ± 0.19	µg/l
Minimum	0.5	0.5	µg/l
Maximum	13.1	1.2	µg/l
Standard deviation	3.93	0.21	µg/l
rel. Standard deviation	157	24.7	%
n	14	11	-

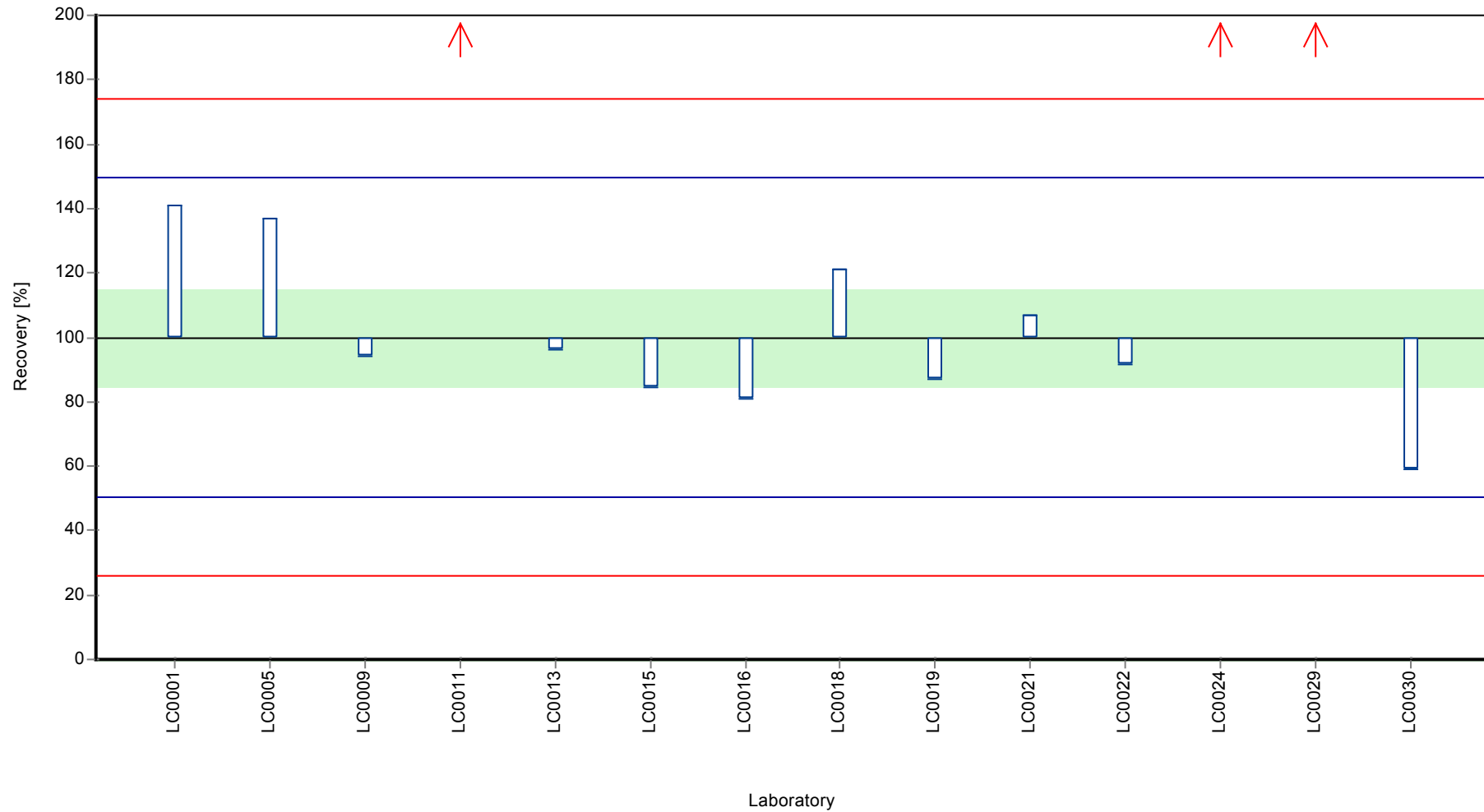


Graphical presentation of results

Results



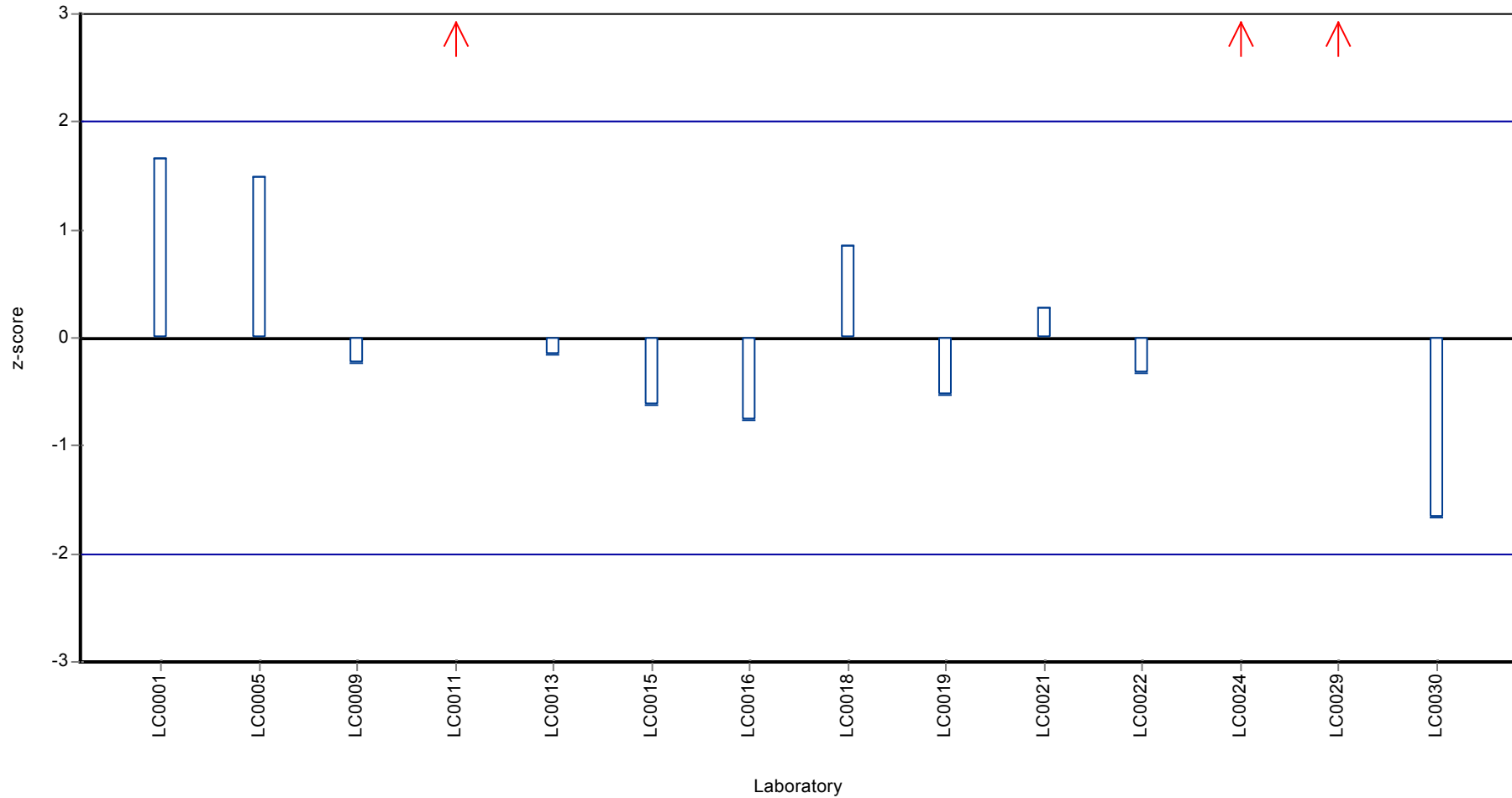
Recovery rate



Parameter oriented report Metals M140

Sample: M140A, Parameter: Nickel

Z-score



## Parameter oriented report

### M140 B

#### Nickel

Unit	µg/l
Mean ± CI (99%)	1.67 ± 0.106
Minimum - Maximum	1.4 - 1.83
Control test value ± U	1.67 ± 0.0843

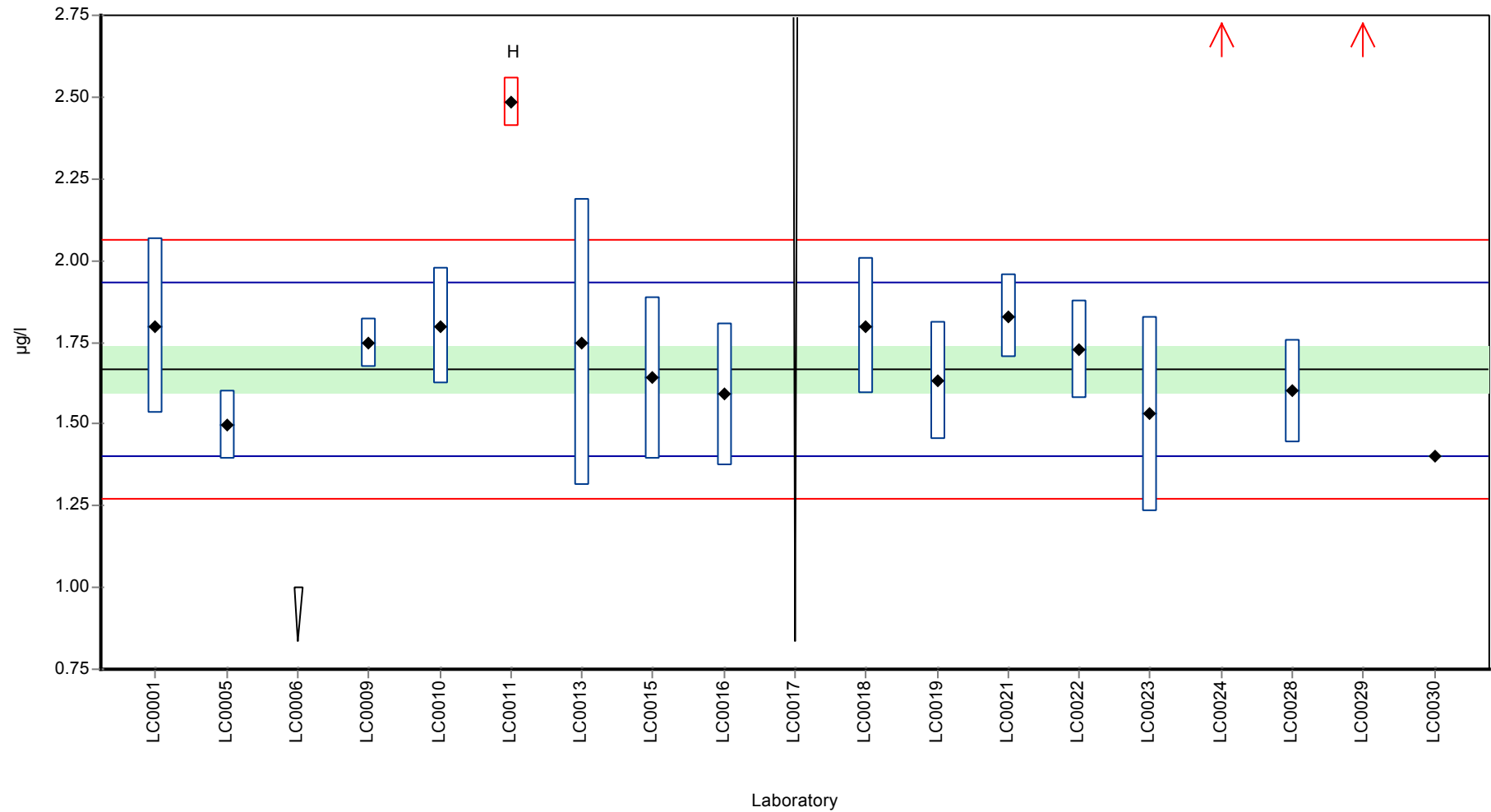
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.8	0.27	108	1	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	1.499	0.105	89.9	-1.28	
LC0006	< 1 (LOQ)	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	1.749	0.076	105	0.61	
LC0010	1.8	0.18	108	1	
LC0011	2.485	0.075	149	6.18	H
LC0012	-	-	-	-	
LC0013	1.75	0.44	105	0.62	
LC0014	-	-	-	-	
LC0015	1.64	0.25	98.3	-0.21	
LC0016	1.59	0.22	95.3	-0.59	
LC0017	< 5 (LOQ)	-	-	-	
LC0018	1.8	0.21	108	1	
LC0019	1.6323	0.1796	97.9	-0.27	
LC0020	-	-	-	-	
LC0021	1.83	0.13	110	1.23	
LC0022	1.728	0.15	104	0.46	
LC0023	1.53	0.3	91.7	-1.04	
LC0024	6.9	1.4	414	39.5	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1.6	0.16	95.9	-0.51	
LC0029	7.1	0.86	426	41.1	H
LC0030	1.4	-	83.9	-2.02	

#### Characteristics of parameter

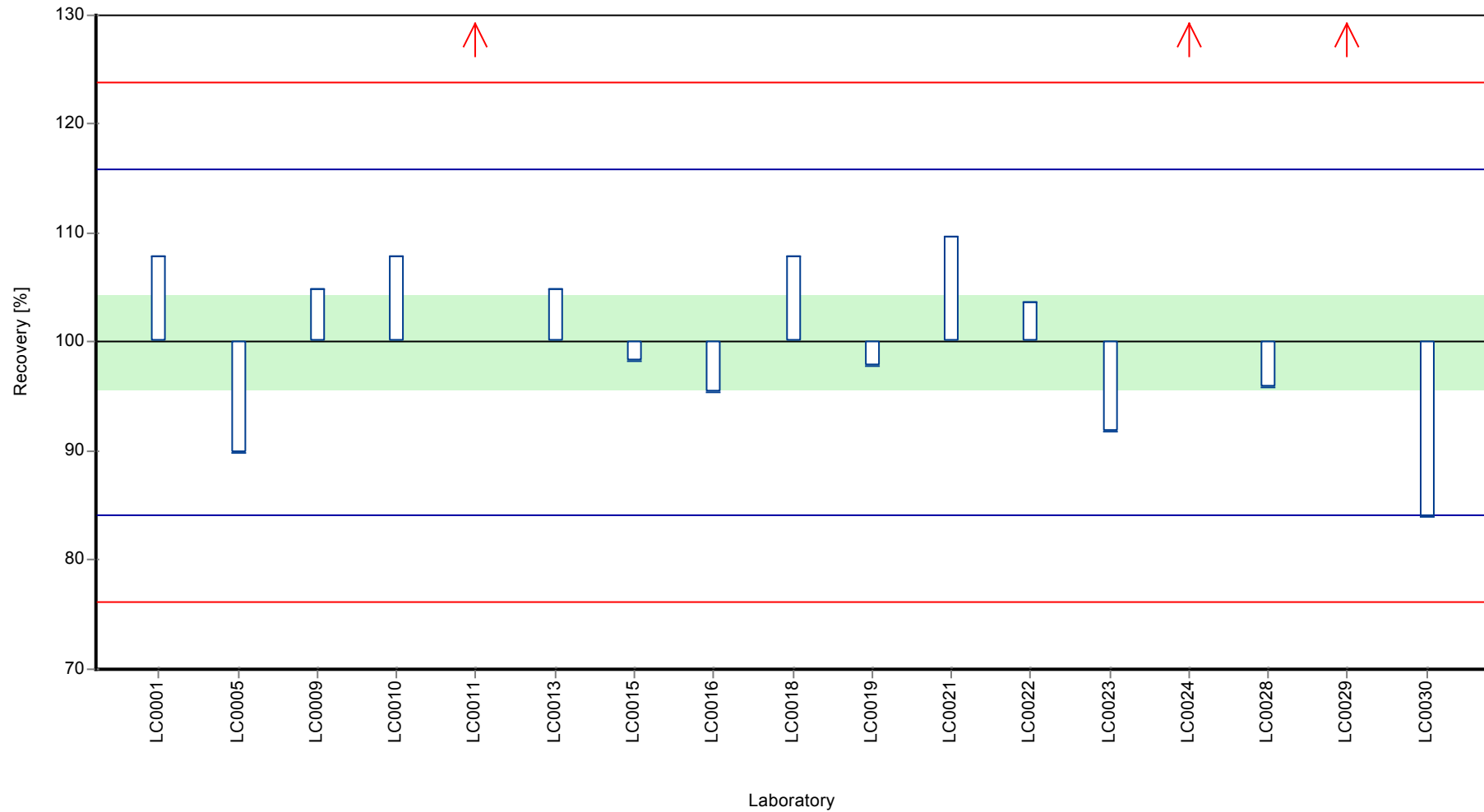
	all results	without outliers	Unit
Mean ± CI (99%)	2.34 ± 1.29	1.67 ± 0.106	µg/l
Minimum	1.4	1.4	µg/l
Maximum	7.1	1.83	µg/l
Standard deviation	1.77	0.132	µg/l
rel. Standard deviation	75.5	7.93	%
n	17	14	-

Graphical presentation of results

Results



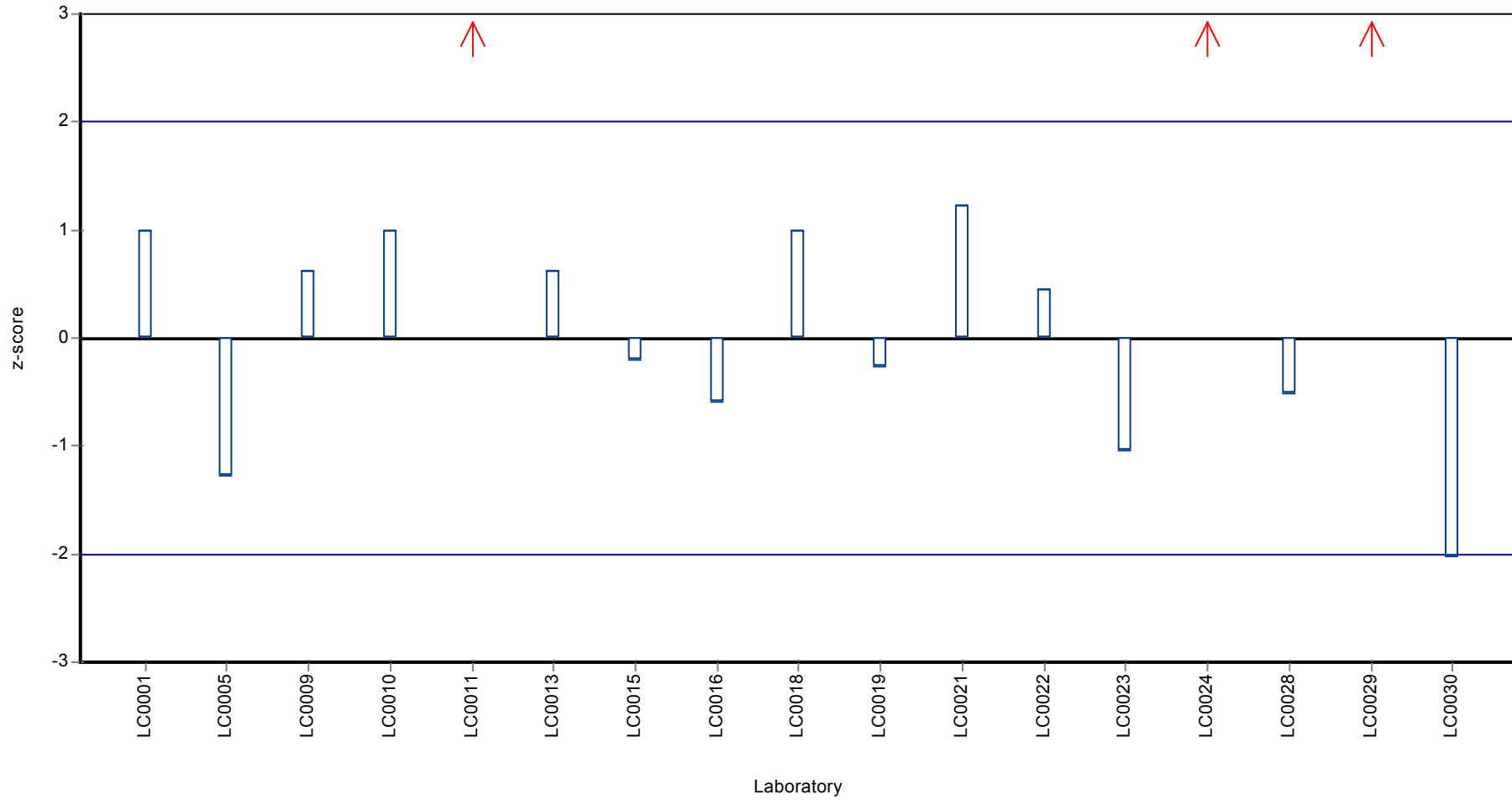
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Nickel

Z-score



## Parameter oriented report

### M140 A

#### Mercury

Unit	µg/l
Mean ± CI (99%)	-
Minimum - Maximum	0.006 - 0.0679
Control test value ± U	<0.025 (NG)

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	< 0.1 (LOQ)	-	-	-	
LC0002	-	-	-	-	
LC0003	< 0.14 (LOQ)	-	-	-	
LC0004	-	-	-	-	
LC0005	< 0.2 (LOQ)	-	-	-	
LC0006	0.0679	0.013	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	< 0.02 (LOQ)	-	-	-	
LC0010	<0.01 (LOD)	-	-	-	
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	0.0134	0.0034	-	-	
LC0014	-	-	-	-	
LC0015	< 0.05 (LOQ)	-	-	-	
LC0016	0.006	0.002	-	-	
LC0017	< 0.2 (LOQ)	-	-	-	
LC0018	< 0.2 (LOQ)	-	-	-	
LC0019	< 0.01 (LOQ)	-	-	-	
LC0020	< 0.1 (LOQ)	-	-	-	
LC0021	< 0.02 (LOQ)	-	-	-	
LC0022	< 0.0005 (LOQ)	-	-	-	
LC0023	< 0.05 (LOQ)	-	-	-	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	< 0.1 (LOQ)	-	-	-	
LC0029	-	-	-	-	
LC0030	-	-	-	-	

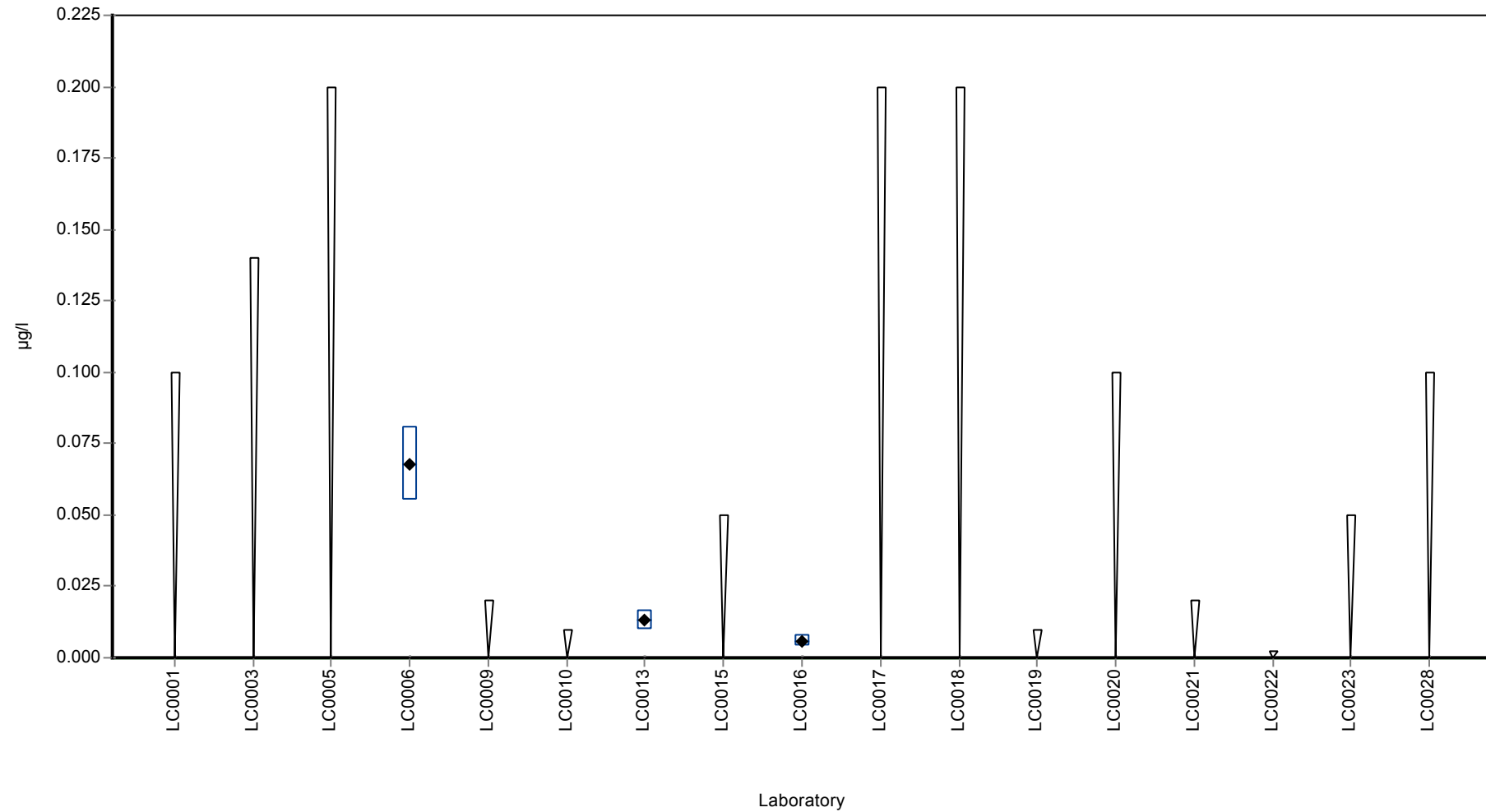
#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	0.0291 ± 0.0586	-	µg/l
Minimum	0.006	0.006	µg/l
Maximum	0.0679	0.0679	µg/l
Standard deviation	0.0338	-	µg/l
rel. Standard deviation	116	-	%
n	3	3	-



Graphical presentation of results

Results



## Parameter oriented report

### M140 B

#### Mercury

Unit	µg/l
Mean ± CI (99%)	1.09 ± 0.0893
Minimum - Maximum	0.975 - 1.2
Control test value ± U	1.38 ± 0.0357

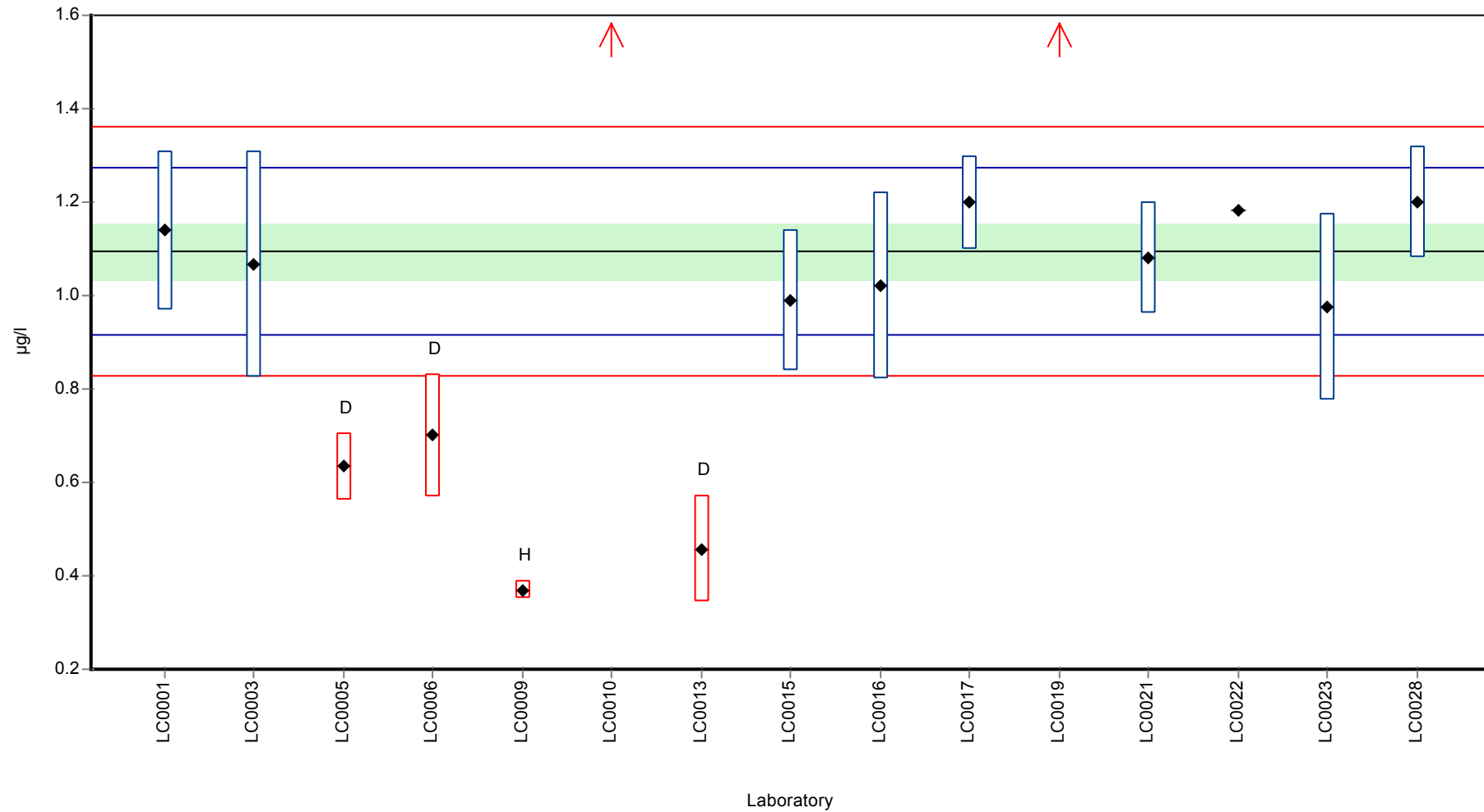
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.14	0.17	104	0.51	
LC0002	-	-	-	-	
LC0003	1.067	0.241	97.4	-0.31	
LC0004	-	-	-	-	
LC0005	0.6339	0.072	57.9	-5.16	D
LC0006	0.7012	0.132	64	-4.41	D
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	0.37	0.019	33.8	-8.12	H
LC0010	1.74	0.2088	159	7.22	H
LC0011	-	-	-	-	
LC0012	-	-	-	-	
LC0013	0.457	0.114	41.7	-7.14	D
LC0014	-	-	-	-	
LC0015	0.99	0.15	90.4	-1.18	
LC0016	1.02	0.2	93.2	-0.84	
LC0017	1.2	0.1	110	1.18	
LC0018	-	-	-	-	
LC0019	2.1493	0.509	196	11.8	H
LC0020	-	-	-	-	
LC0021	1.08	0.12	98.6	-0.17	
LC0022	1.1825	0.0005	108	0.98	
LC0023	0.975	0.2	89	-1.34	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1.2	0.12	110	1.18	
LC0029	-	-	-	-	
LC0030	-	-	-	-	

#### Characteristics of parameter

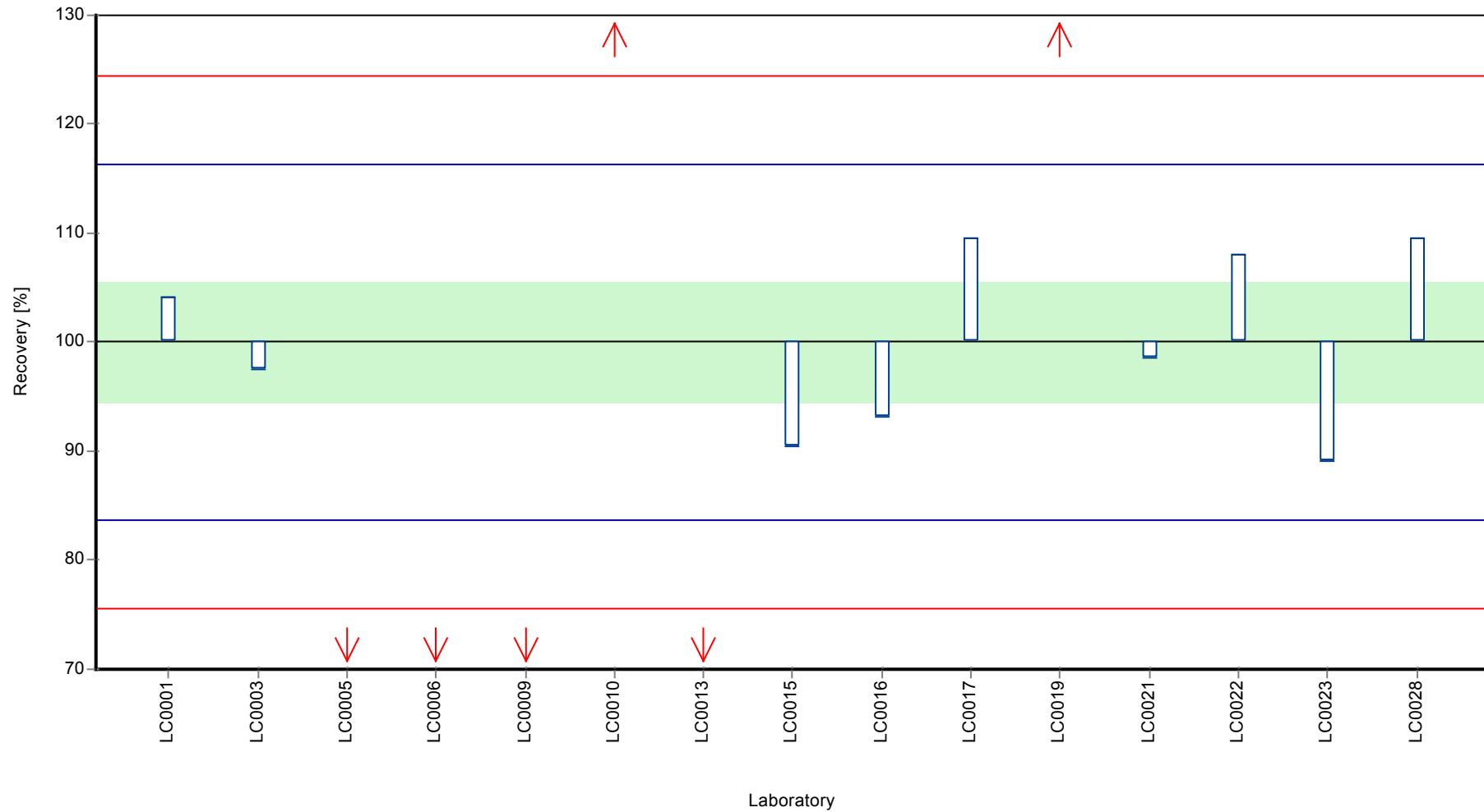
	all results	without outliers	Unit
Mean ± CI (99%)	1.06 ± 0.351	1.09 ± 0.0893	µg/l
Minimum	0.37	0.975	µg/l
Maximum	2.15	1.2	µg/l
Standard deviation	0.453	0.0893	µg/l
rel. Standard deviation	42.7	8.16	%
n	15	9	-

Graphical presentation of results

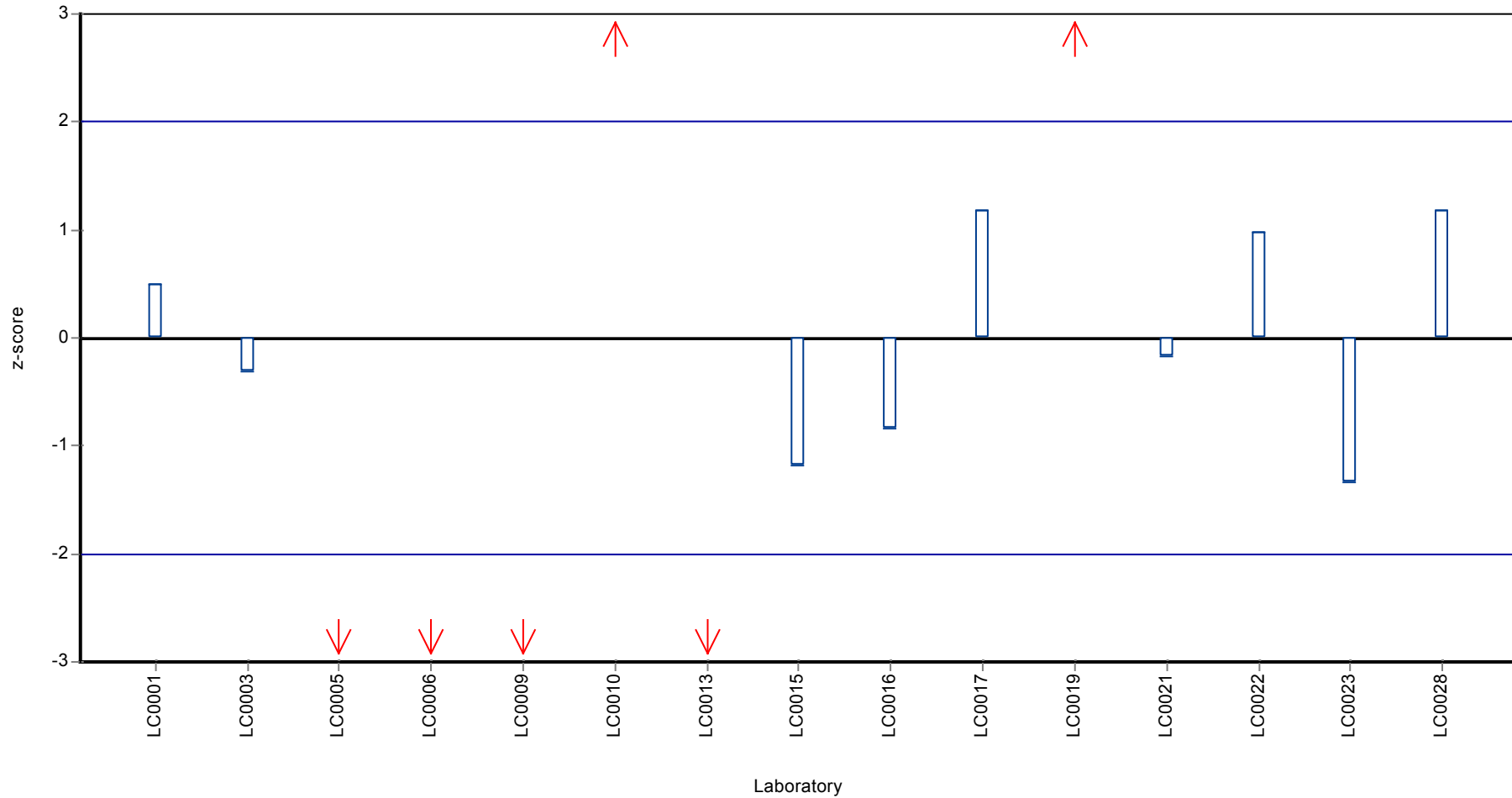
Results



Recovery rate



Z-score



## Parameter oriented report

### M140 A

#### Selenium

Unit	µg/l
Mean ± CI (99%)	2.73 ± 0.274
Minimum - Maximum	2.1 - 3.51
Control test value ± U	2.37 ± 0.365

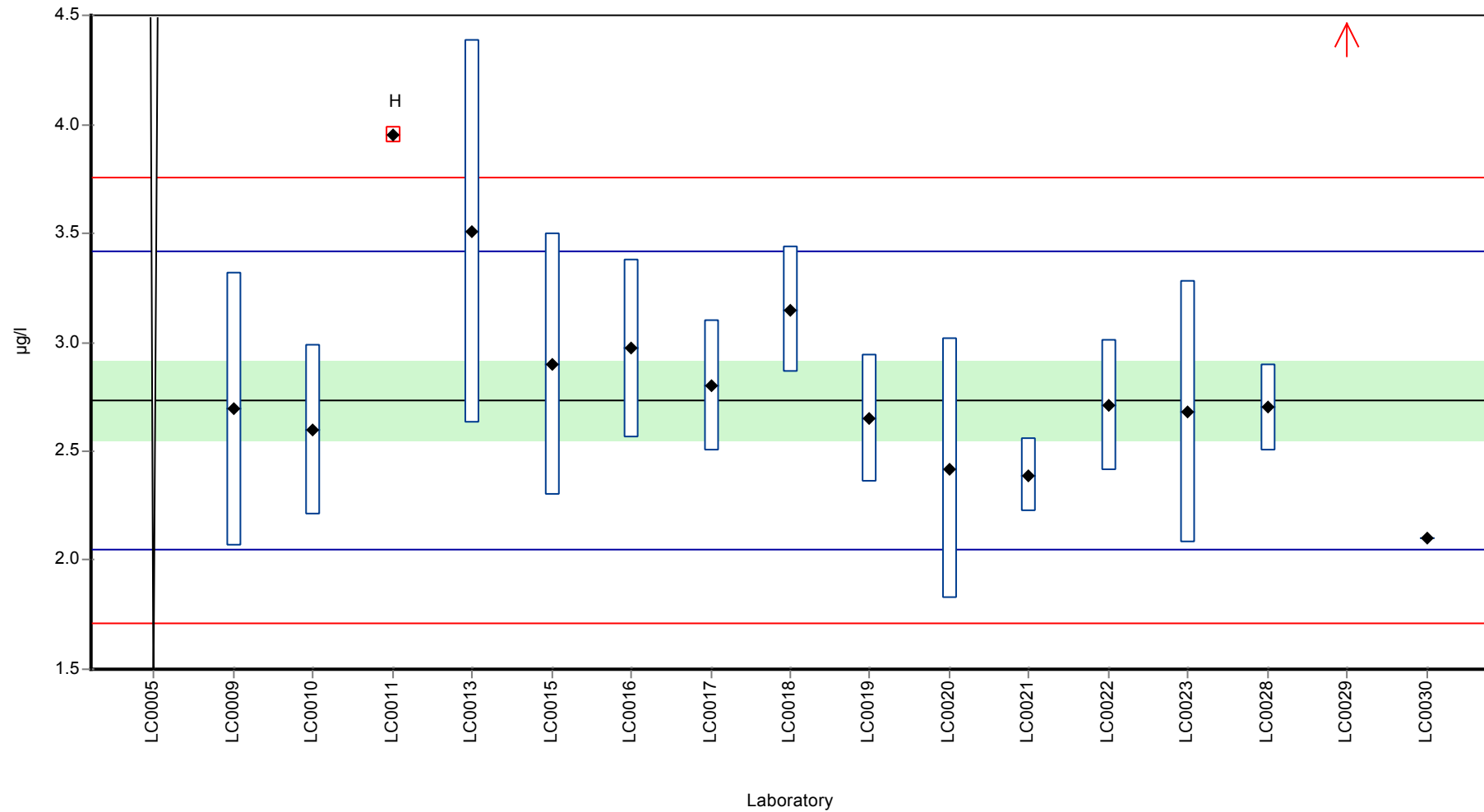
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 5 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	2.692	0.627	98.5	-0.12	
LC0010	2.6	0.39	95.1	-0.39	
LC0011	3.948	0.037	144	3.56	H
LC0012	-	-	-	-	
LC0013	3.51	0.88	128	2.28	
LC0014	-	-	-	-	
LC0015	2.9	0.6	106	0.49	
LC0016	2.97	0.41	109	0.69	
LC0017	2.8	0.3	102	0.19	
LC0018	3.15	0.29	115	1.22	
LC0019	2.6494	0.291	96.9	-0.25	
LC0020	2.42	0.6	88.5	-0.92	
LC0021	2.39	0.17	87.4	-1.01	
LC0022	2.71	0.3	99.1	-0.07	
LC0023	2.68	0.6	98	-0.16	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	2.7	0.2	98.8	-0.1	
LC0029	5.3	0.5	194	7.52	H
LC0030	2.1	-	76.8	-1.86	

#### Characteristics of parameter

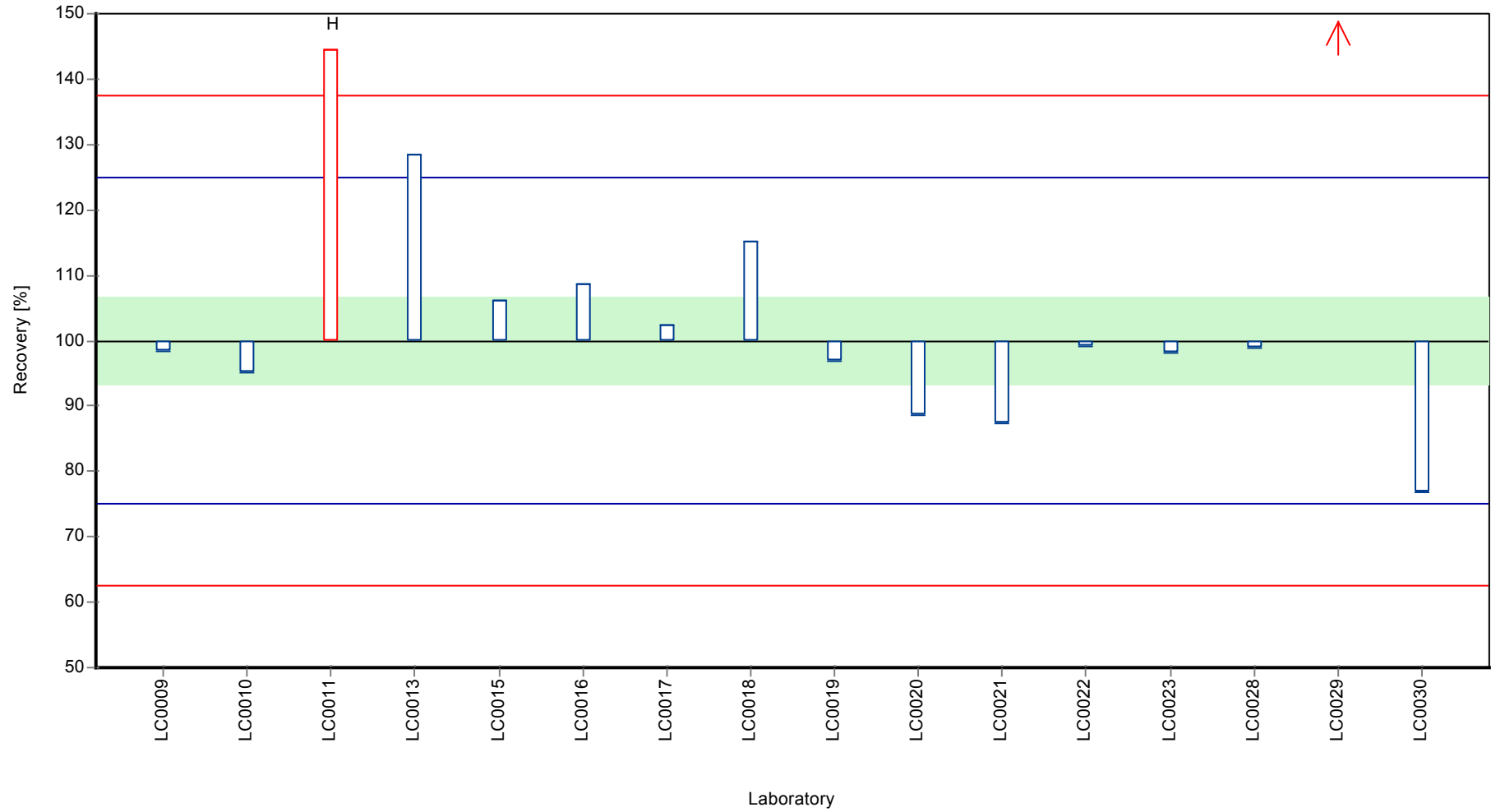
	all results	without outliers	Unit
Mean ± CI (99%)	2.97 ± 0.571	2.73 ± 0.274	µg/l
Minimum	2.1	2.1	µg/l
Maximum	5.3	3.51	µg/l
Standard deviation	0.761	0.341	µg/l
rel. Standard deviation	25.6	12.5	%
n	16	14	-

Graphical presentation of results

Results



Recovery rate

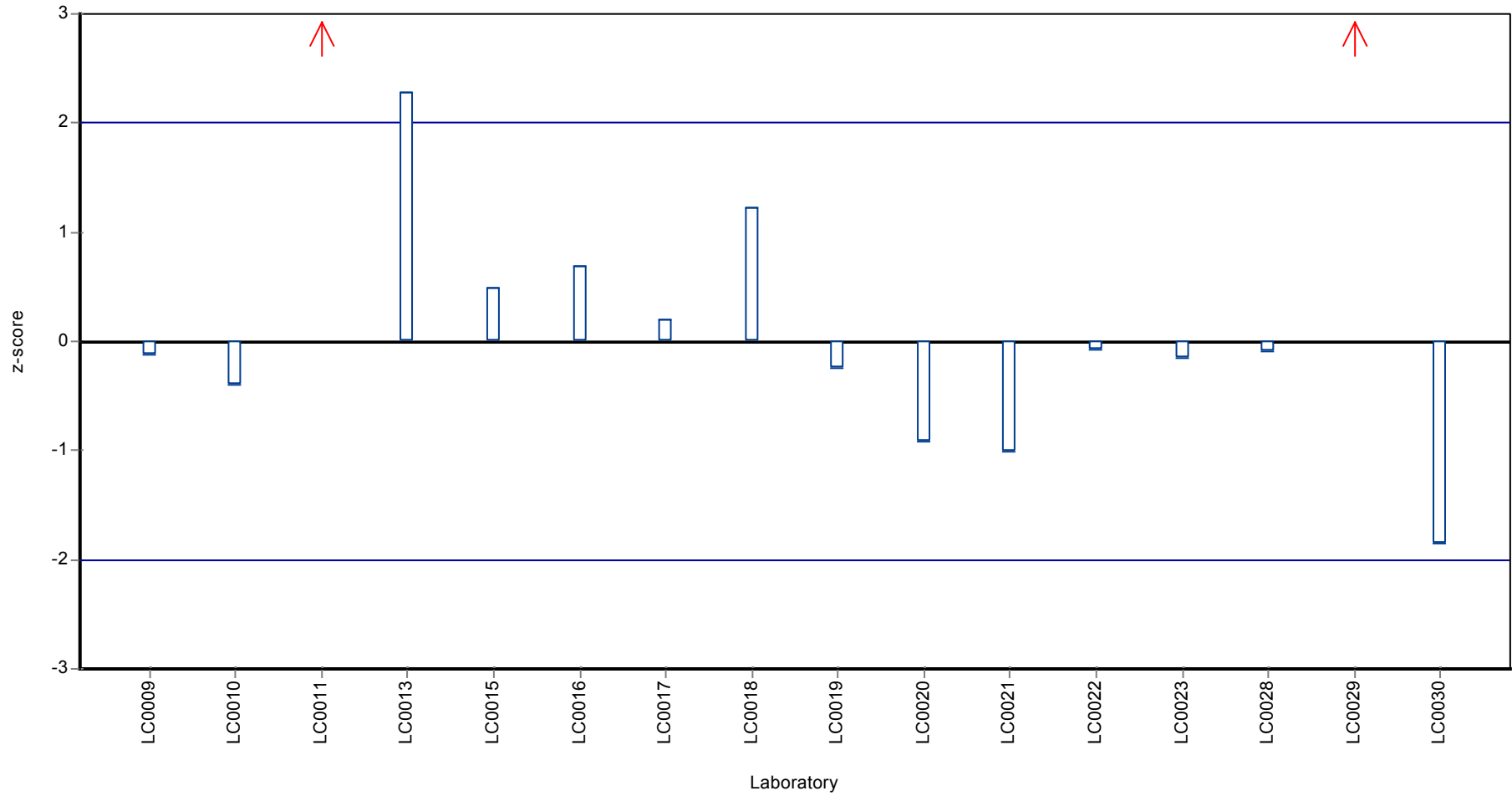




Parameter oriented report Metals M140

Sample: M140A, Parameter: Selenium

Z-score



## Parameter oriented report

### M140 B

#### Selenium

Unit	µg/l
Mean ± CI (99%)	3.92 ± 0.153
Minimum - Maximum	3.53 - 4.28
Control test value ± U	3.68 ± 0.633

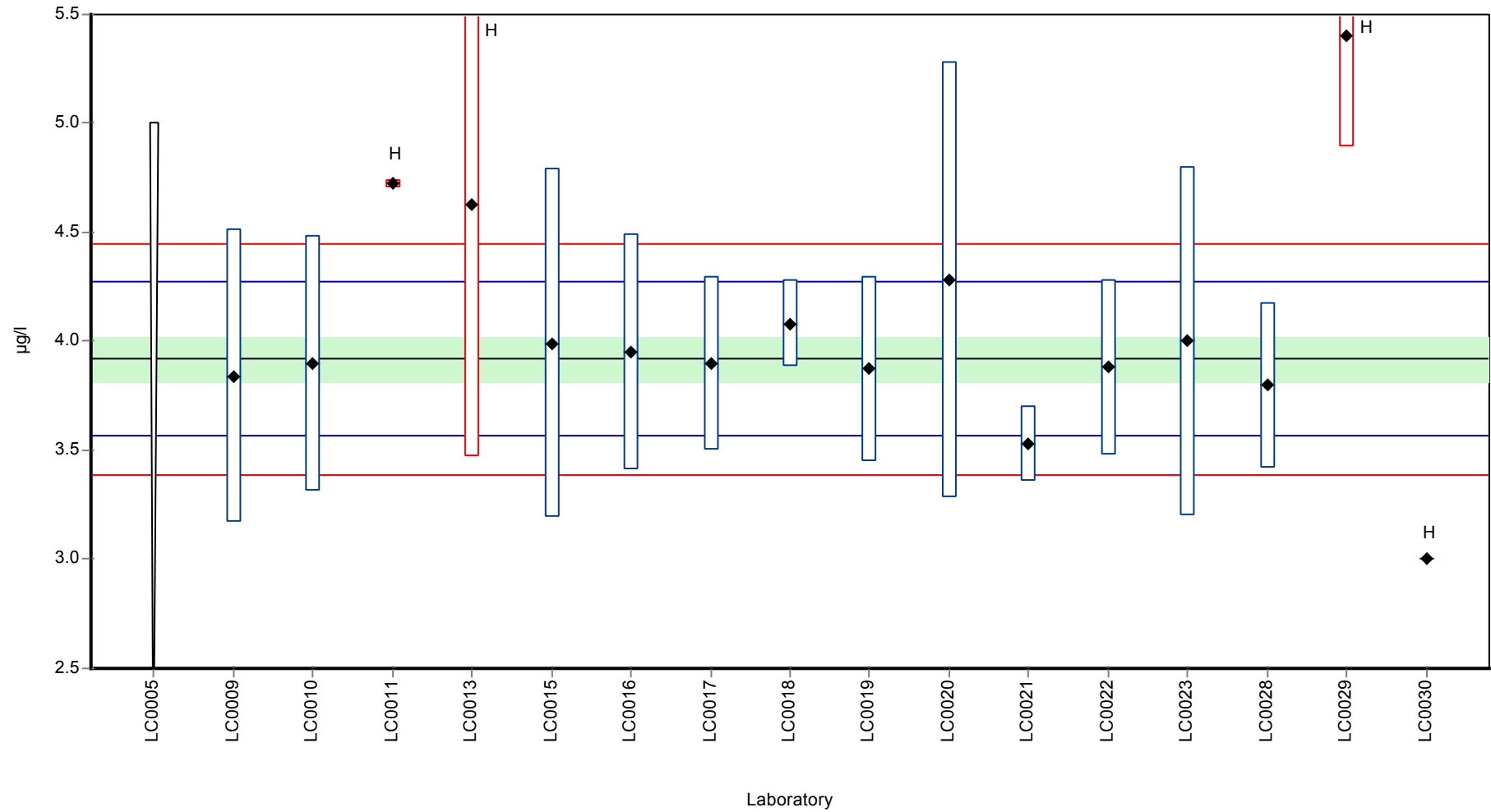
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	< 5 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	3.84	0.673	98	-0.44	
LC0010	3.9	0.585	99.5	-0.1	
LC0011	4.722	0.019	120	4.54	H
LC0012	-	-	-	-	
LC0013	4.63	1.16	118	4.02	H
LC0014	-	-	-	-	
LC0015	3.99	0.8	102	0.4	
LC0016	3.95	0.54	101	0.18	
LC0017	3.9	0.4	99.5	-0.1	
LC0018	4.08	0.2	104	0.91	
LC0019	3.8741	0.426	98.9	-0.25	
LC0020	4.28	1	109	2.04	
LC0021	3.53	0.17	90.1	-2.2	
LC0022	3.88	0.4	99	-0.22	
LC0023	4	0.8	102	0.46	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	3.8	0.38	97	-0.67	
LC0029	5.4	0.51	138	8.37	H
LC0030	3	-	76.6	-5.19	H

#### Characteristics of parameter

	all results	without outliers	Unit
Mean ± CI (99%)	4.05 ± 0.4	3.92 ± 0.153	µg/l
Minimum	3	3.53	µg/l
Maximum	5.4	4.28	µg/l
Standard deviation	0.533	0.177	µg/l
rel. Standard deviation	13.2	4.52	%
n	16	12	-

Graphical presentation of results

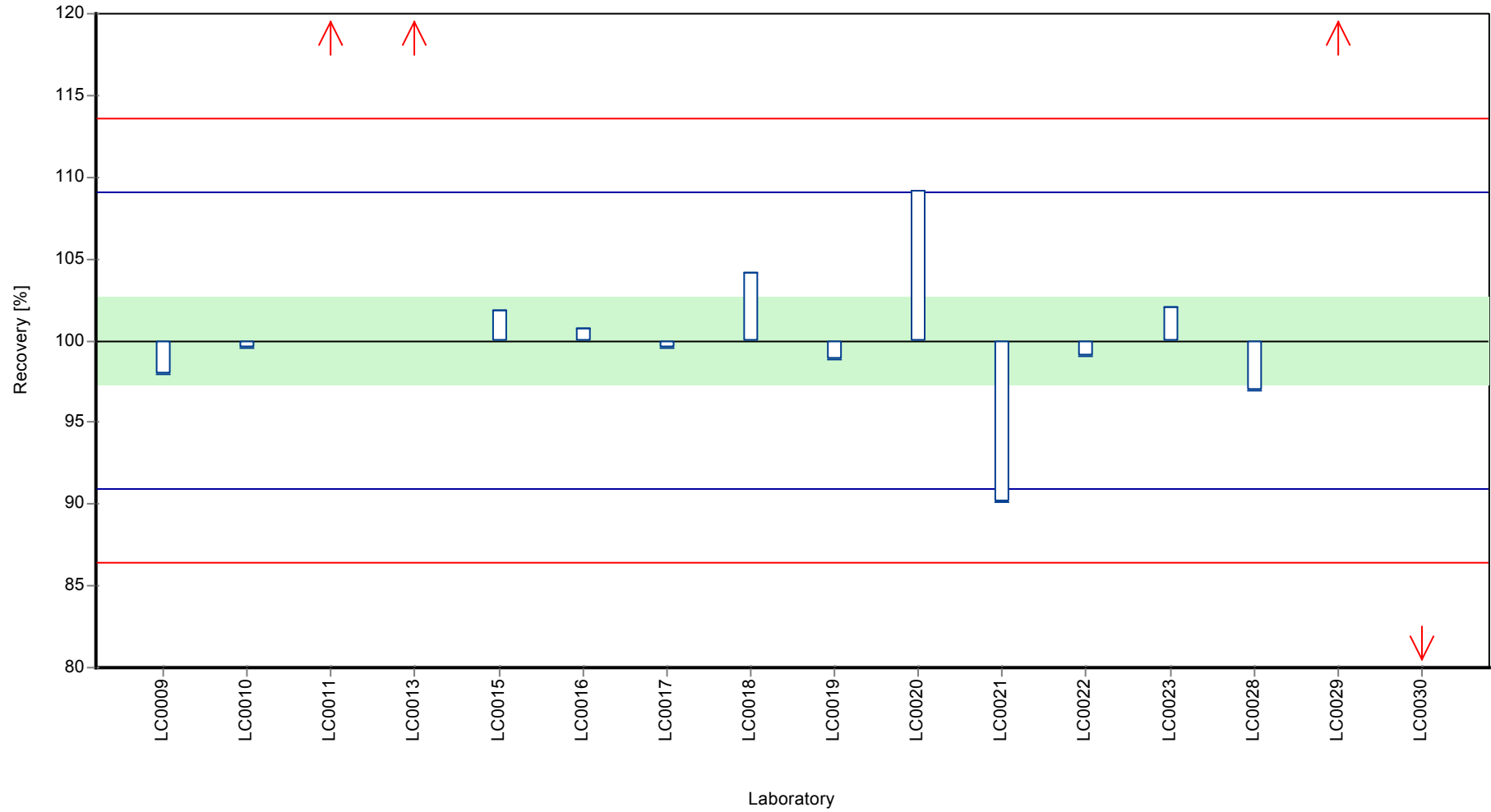
Results



Parameter oriented report Metals M140

Sample: M140B, Parameter: Selenium

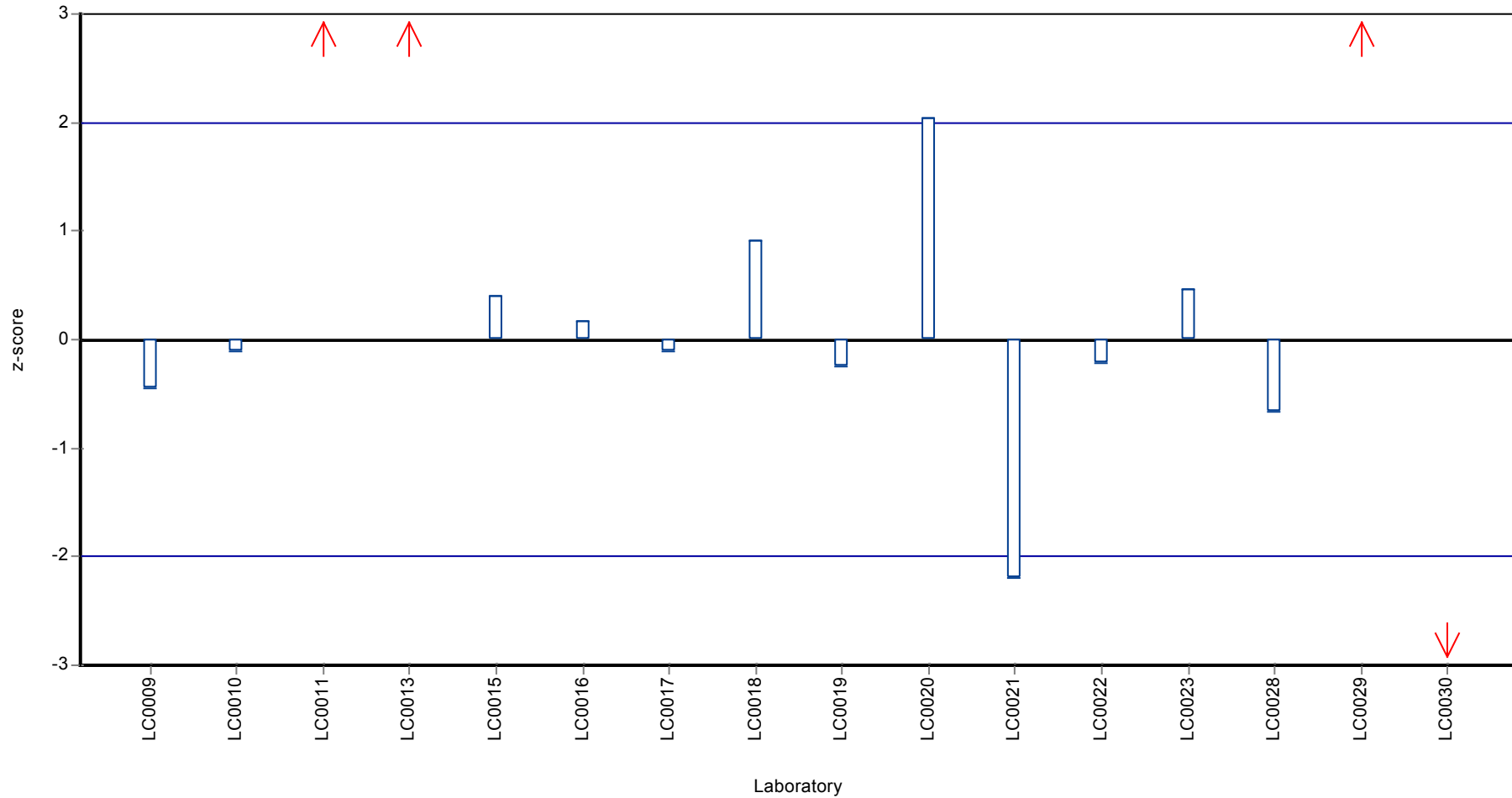
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Selenium

Z-score



## Parameter oriented report

### M140 A

#### Uranium

Unit	µg/l
Mean ± CI (99%)	4.26 ± 0.165
Minimum - Maximum	3.98 - 4.6
Control test value ± U	4.3 ± 0.397

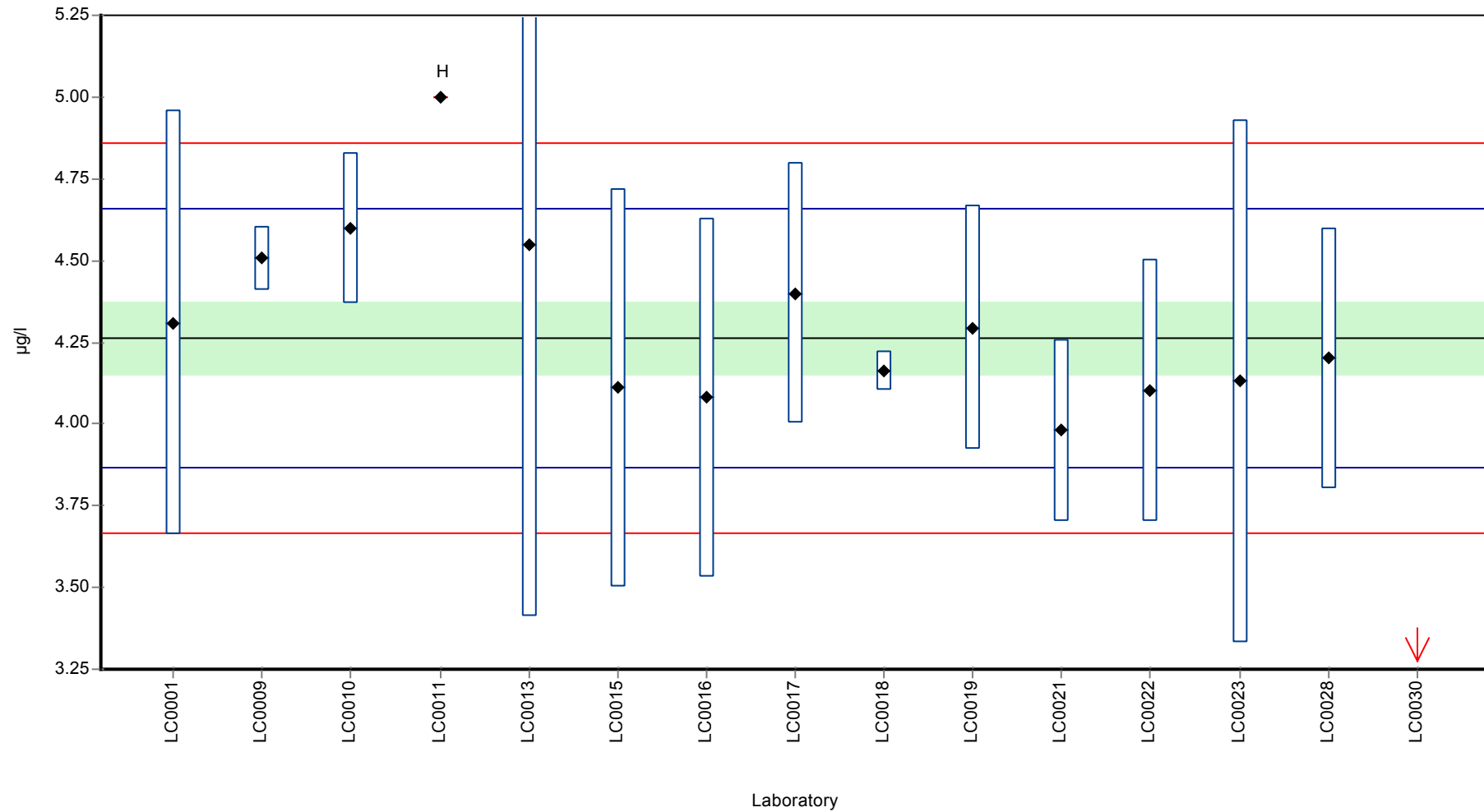
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	4.31	0.65	101	0.23	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	4.506	0.099	106	1.22	
LC0010	4.6	0.23	108	1.7	
LC0011	4.997	0.002	117	3.7	H
LC0012	-	-	-	-	
LC0013	4.55	1.14	107	1.45	
LC0014	-	-	-	-	
LC0015	4.11	0.61	96.4	-0.77	
LC0016	4.08	0.55	95.7	-0.93	
LC0017	4.4	0.4	103	0.69	
LC0018	4.16	0.06	97.6	-0.52	
LC0019	4.295	0.374	101	0.16	
LC0020	-	-	-	-	
LC0021	3.98	0.28	93.4	-1.43	
LC0022	4.103	0.4	96.2	-0.81	
LC0023	4.13	0.8	96.9	-0.67	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	4.2	0.4	98.5	-0.32	
LC0029	-	-	-	-	
LC0030	2	-	46.9	-11.4	H

#### Characteristics of parameter

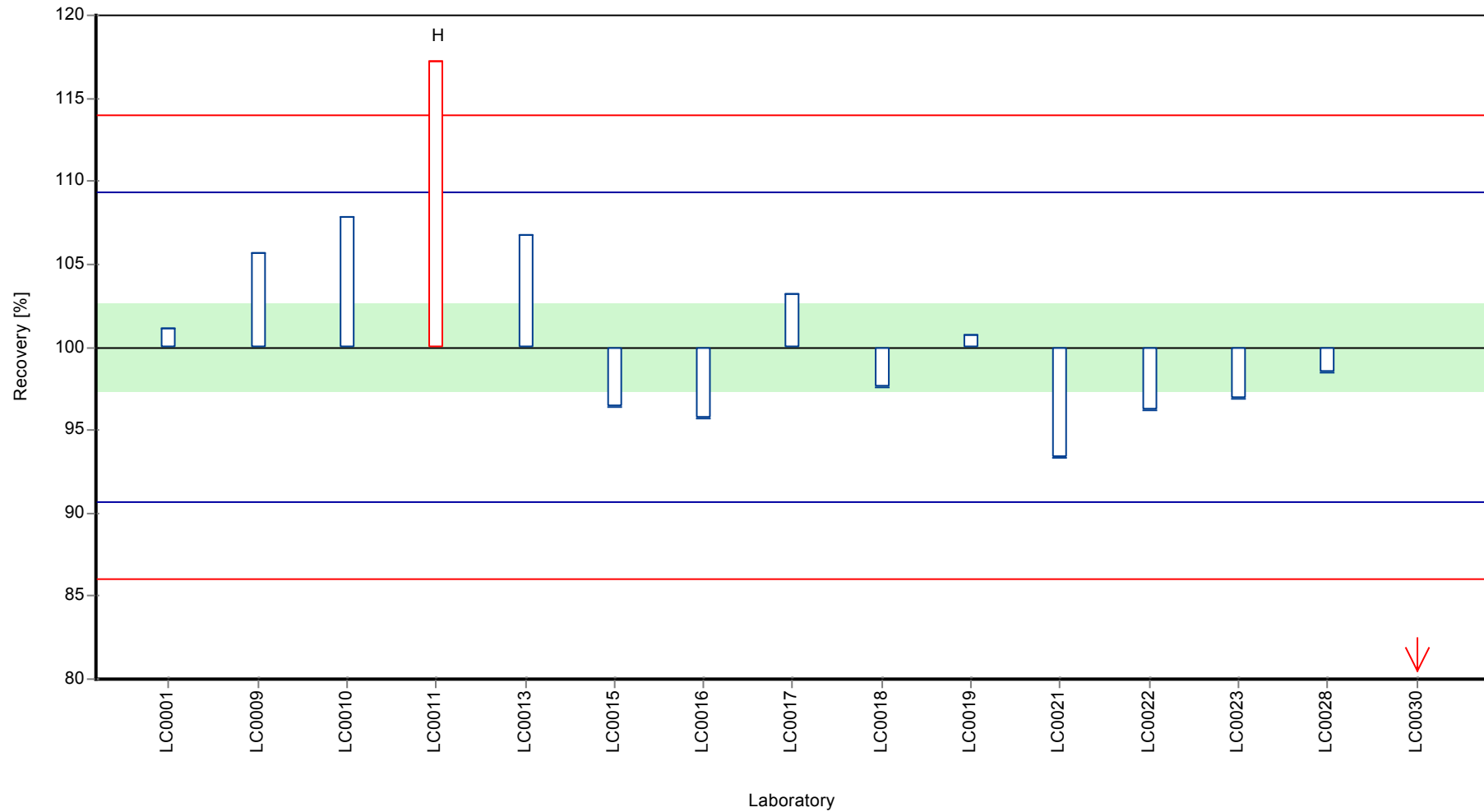
	all results	without outliers	Unit
Mean ± CI (99%)	4.16 ± 0.506	4.26 ± 0.165	µg/l
Minimum	2	3.98	µg/l
Maximum	5	4.6	µg/l
Standard deviation	0.653	0.198	µg/l
rel. Standard deviation	15.7	4.65	%
n	15	13	-

Graphical presentation of results

Results



Recovery rate

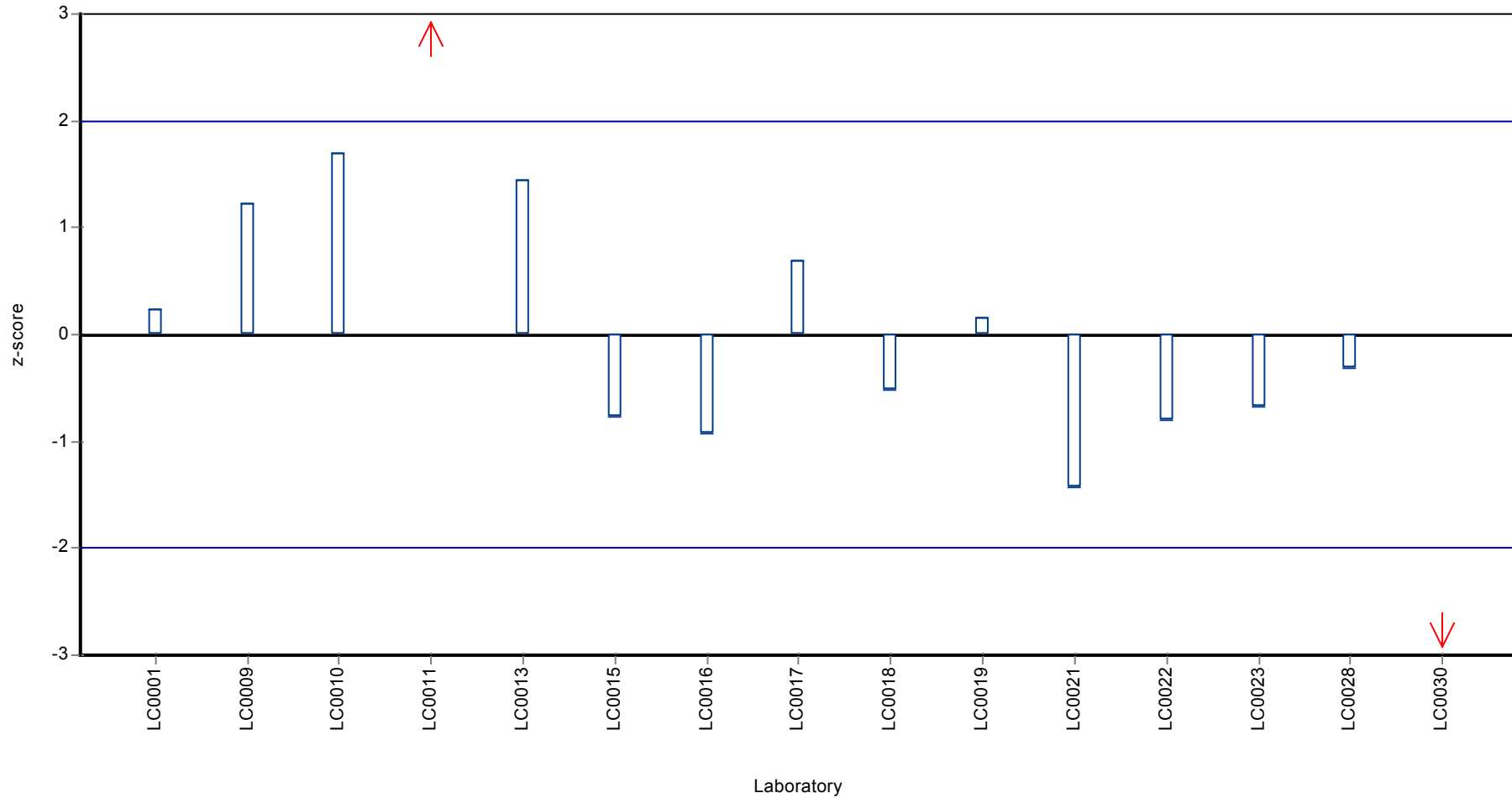




Parameter oriented report Metals M140

Sample: M140A, Parameter: Uranium

Z-score



## Parameter oriented report

### M140 B

#### Uranium

Unit	µg/l
Mean ± CI (99%)	1.11 ± 0.046
Minimum - Maximum	1.03 - 1.2
Control test value ± U	1.1 ± 0.0987

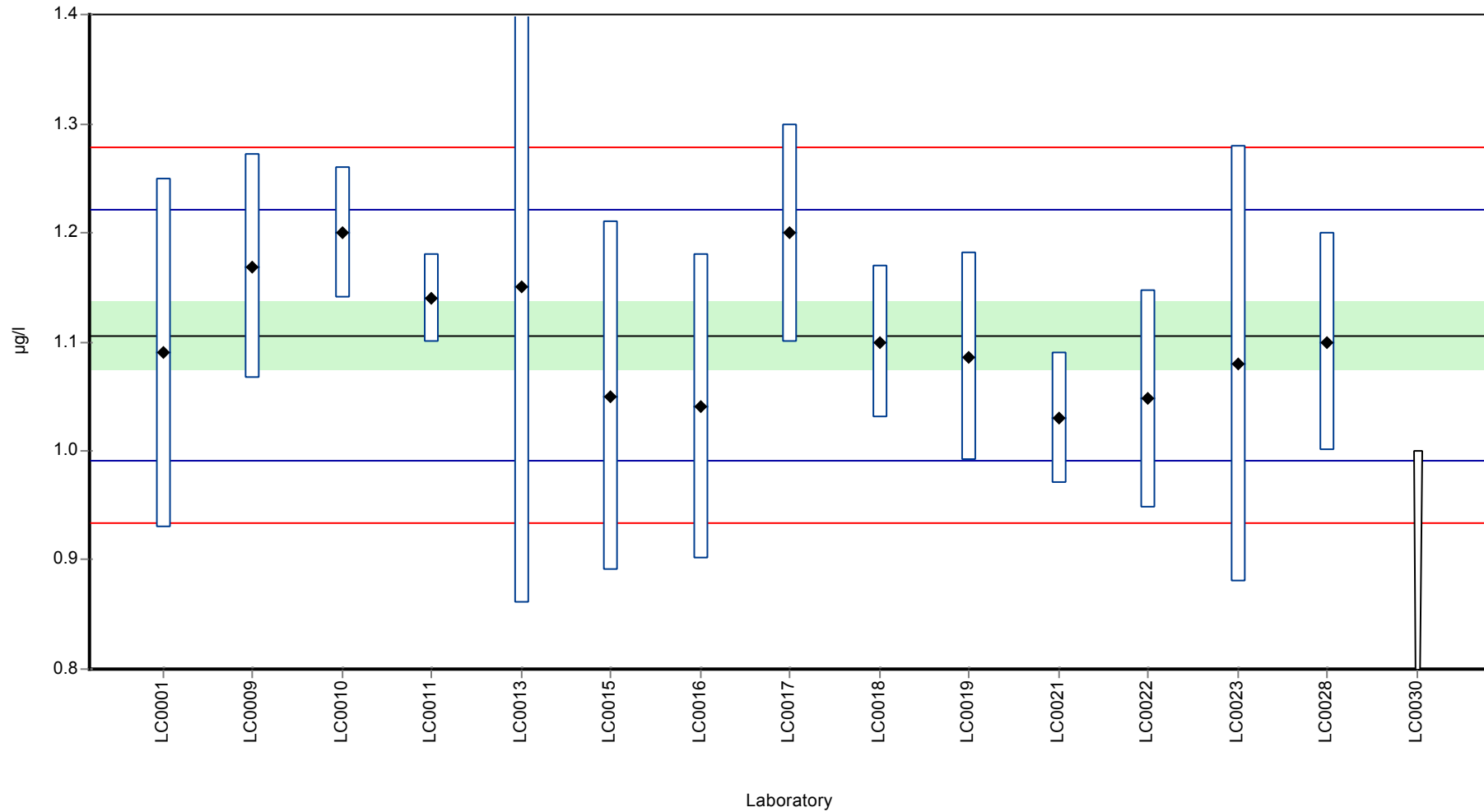
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1.09	0.16	98.6	-0.28	
LC0002	-	-	-	-	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
LC0005	-	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	1.169	0.103	106	1.1	
LC0010	1.2	0.06	109	1.64	
LC0011	1.14	0.04	103	0.59	
LC0012	-	-	-	-	
LC0013	1.15	0.29	104	0.77	
LC0014	-	-	-	-	
LC0015	1.05	0.16	94.9	-0.98	
LC0016	1.04	0.14	94	-1.15	
LC0017	1.2	0.1	109	1.64	
LC0018	1.1	0.07	99.5	-0.1	
LC0019	1.0864	0.095	98.2	-0.34	
LC0020	-	-	-	-	
LC0021	1.03	0.06	93.1	-1.32	
LC0022	1.048	0.1	94.8	-1.01	
LC0023	1.08	0.2	97.7	-0.45	
LC0024	-	-	-	-	
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1.1	0.1	99.5	-0.1	
LC0029	-	-	-	-	
LC0030	< 1 (LOQ)	-	-	-	

#### Characteristics of parameter

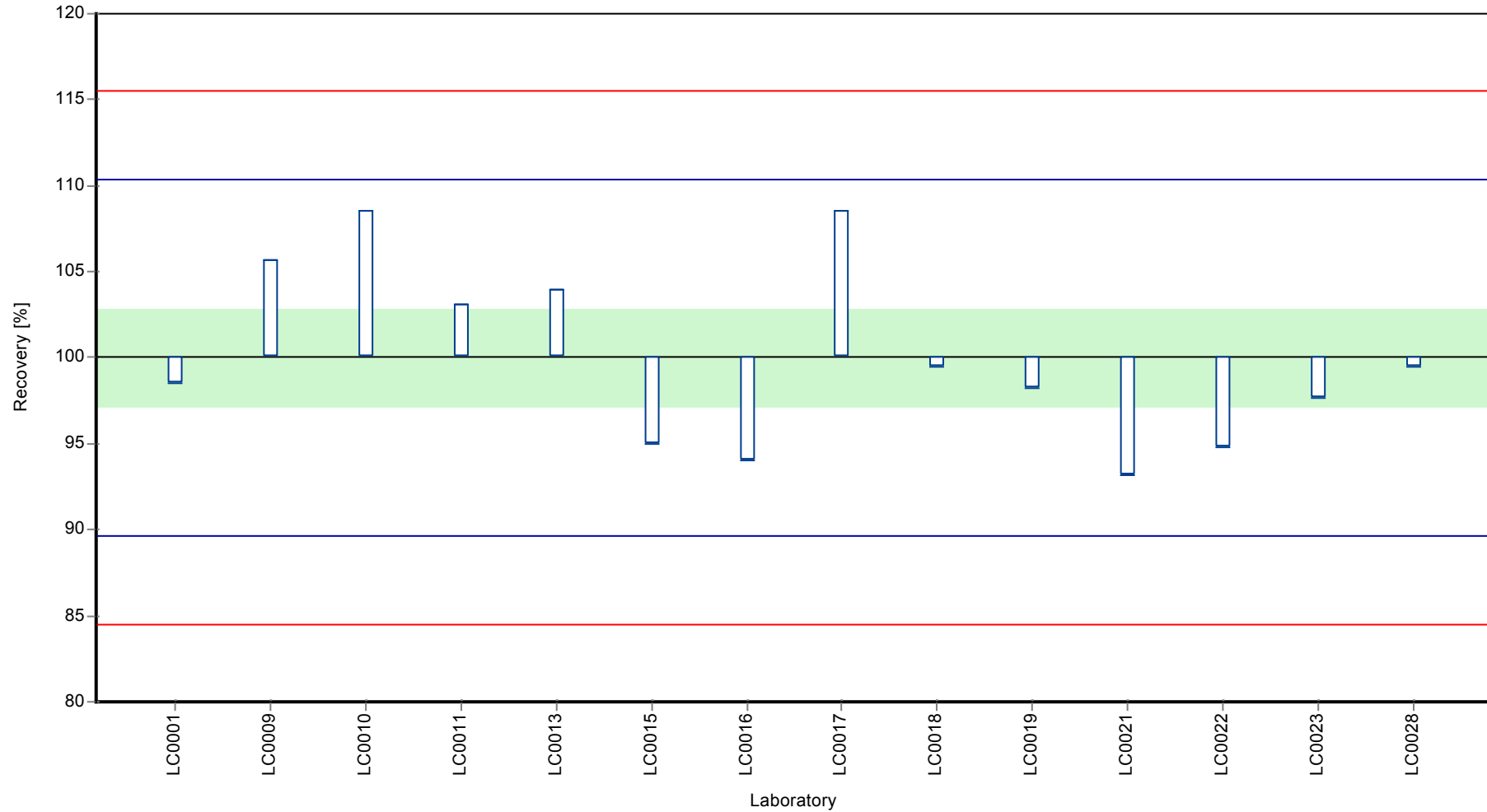
	all results	without outliers	Unit
Mean ± CI (99%)	1.11 ± 0.046	1.11 ± 0.046	µg/l
Minimum	1.03	1.03	µg/l
Maximum	1.2	1.2	µg/l
Standard deviation	0.0573	0.0573	µg/l
rel. Standard deviation	5.19	5.19	%
n	14	14	-

Graphical presentation of results

Results



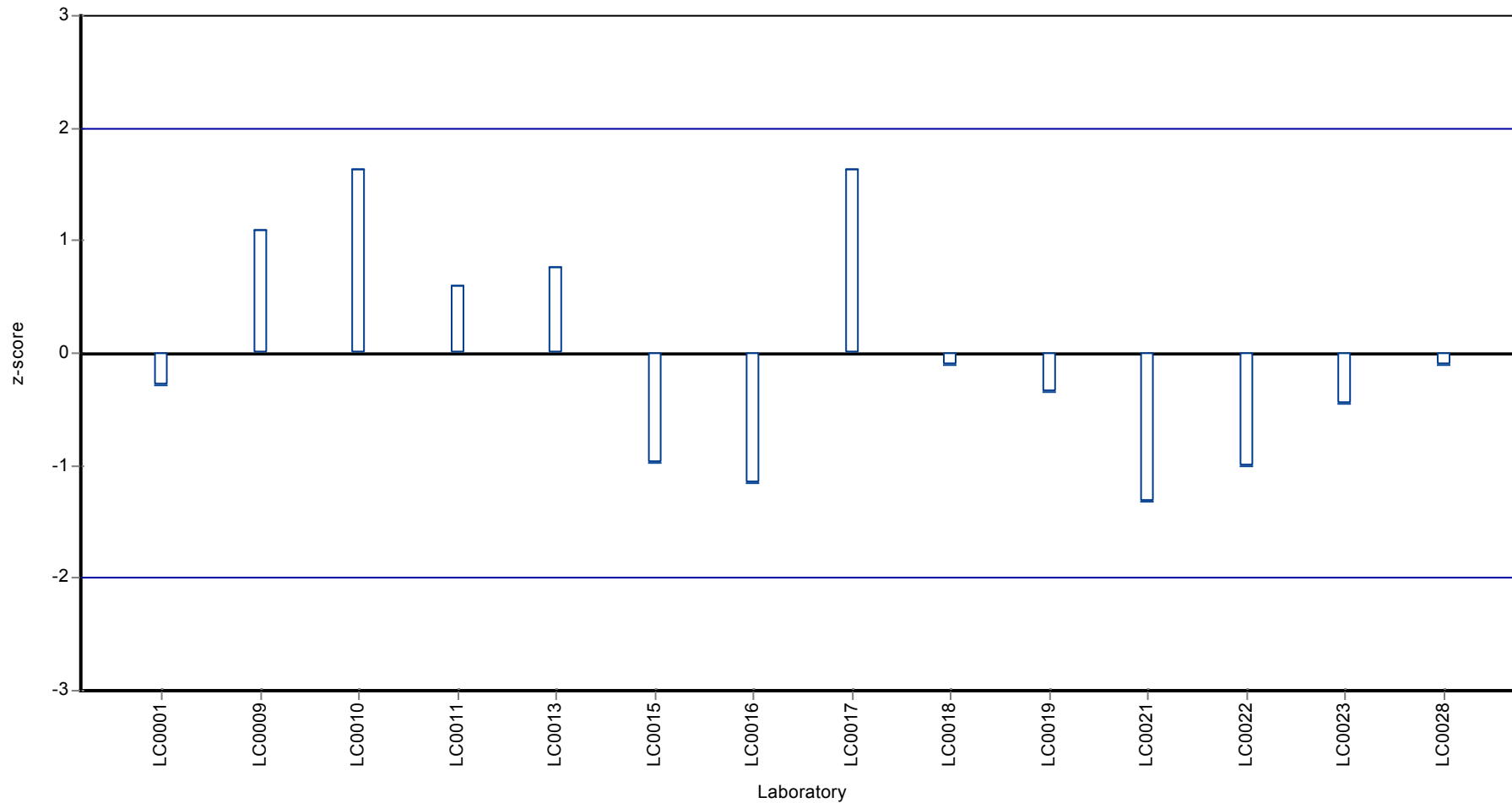
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Uranium

Z-score



## Parameter oriented report

### M140 A

#### Zinc

Unit	µg/l
Mean ± CI (99%)	1060 ± 35.7
Minimum - Maximum	980 - 1160
Control test value ± U	1090 ± 92.2

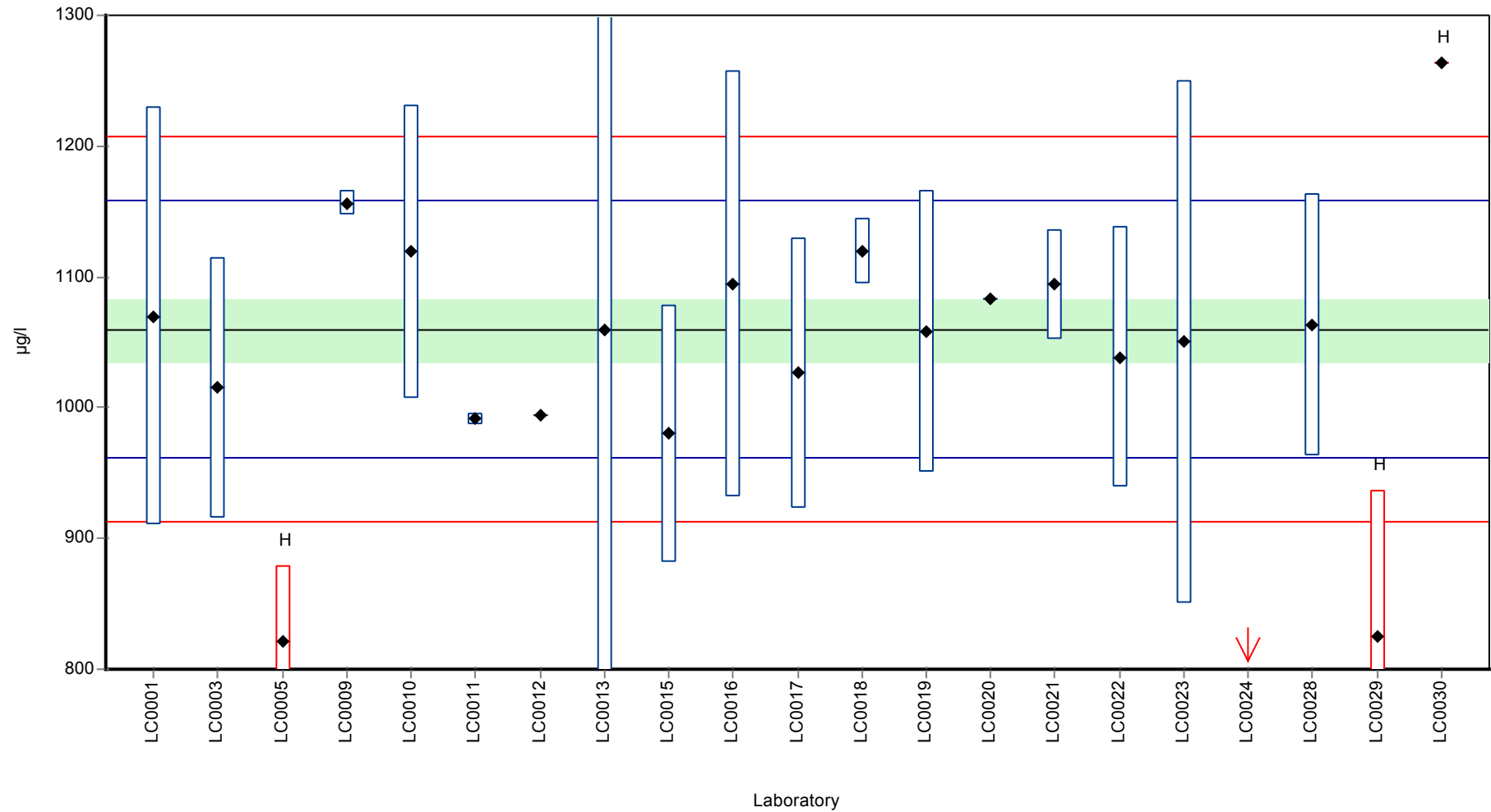
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	1070	160	101	0.21	
LC0002	-	-	-	-	
LC0003	1015.295	99.702	95.8	-0.9	
LC0004	-	-	-	-	
LC0005	820.9	57.46	77.5	-4.87	H
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	1156.13	9.549	109	1.97	
LC0010	1119	111.9	106	1.21	
LC0011	991.115	4.985	93.5	-1.4	
LC0012	994	-	93.8	-1.34	
LC0013	1060	265	100	0.01	
LC0014	-	-	-	-	
LC0015	980	98	92.5	-1.62	
LC0016	1095	163	103	0.72	
LC0017	1026.4	103	96.9	-0.68	
LC0018	1120	24.9	106	1.23	
LC0019	1058.4	107.96	99.9	-0.03	
LC0020	1083	-	102	0.48	
LC0021	1094	42	103	0.7	
LC0022	1038.7	100	98	-0.43	
LC0023	1050	200	99.1	-0.2	
LC0024	491	40	46.3	-11.6	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	1063	100	100	0.07	
LC0029	825.2	111	77.9	-4.78	H
LC0030	1263.7	-	119	4.16	H

#### Characteristics of parameter

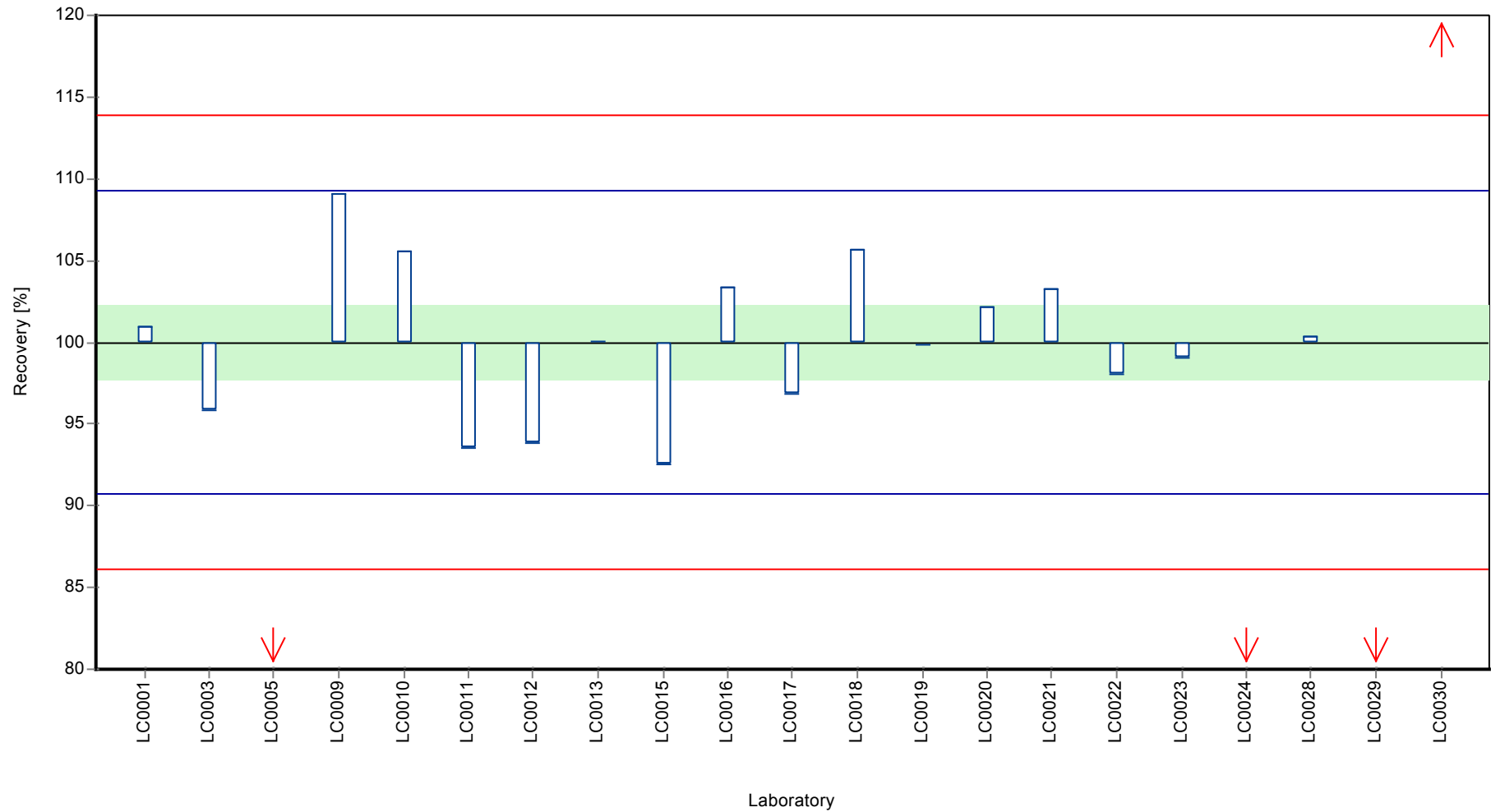
	all results	without outliers	Unit
Mean ± CI (99%)	1020 ± 102	1060 ± 35.7	µg/l
Minimum	491	980	µg/l
Maximum	1260	1160	µg/l
Standard deviation	155	49.1	µg/l
rel. Standard deviation	15.2	4.63	%
n	21	17	-

Graphical presentation of results

Results



Recovery rate

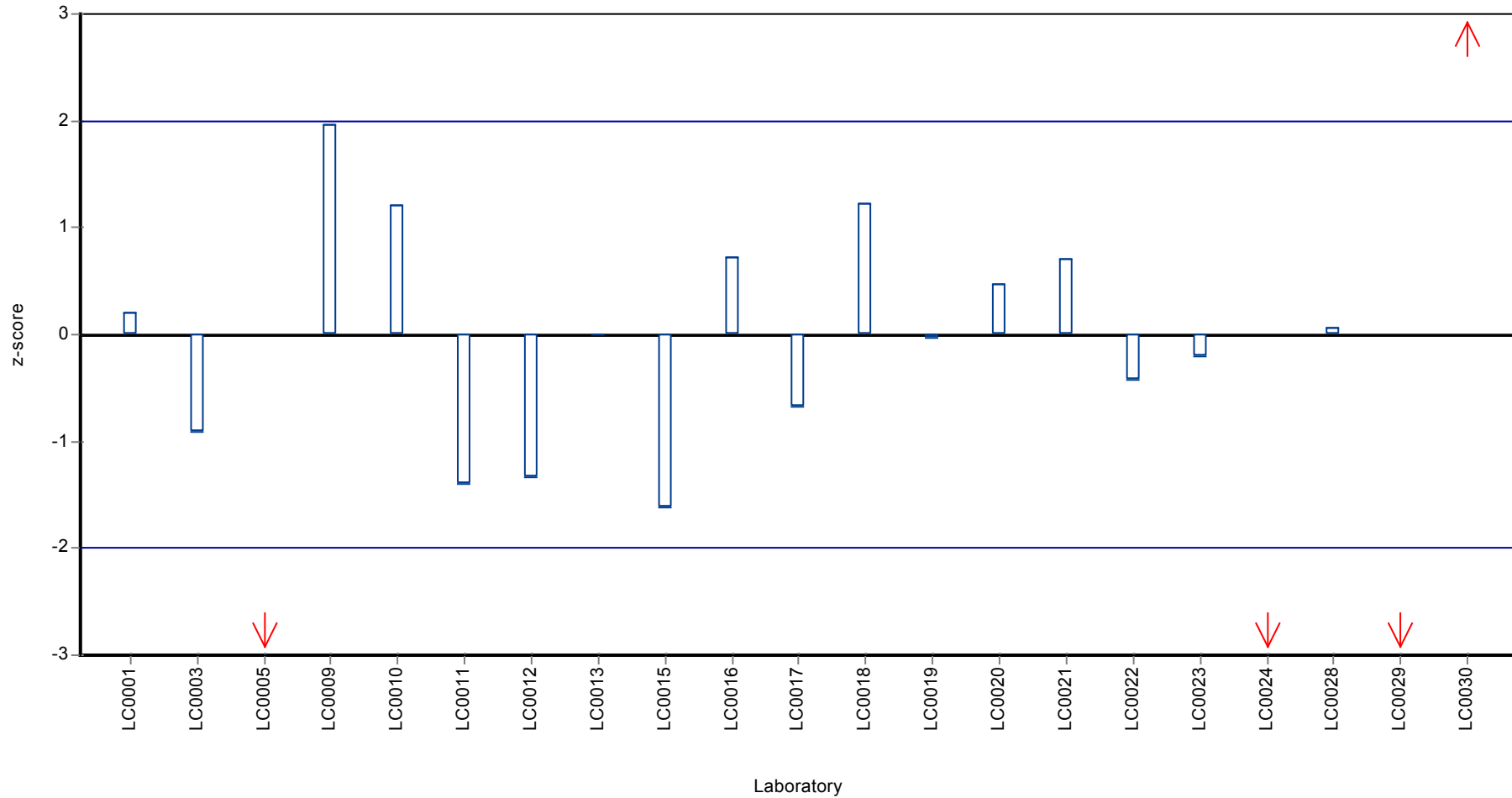




Parameter oriented report Metals M140

Sample: M140A, Parameter: Zinc

Z-score



## Parameter oriented report

### M140 B

#### Zinc

Unit	µg/l
Mean ± CI (99%)	11.8 ± 0.714
Minimum - Maximum	9.2 - 13.2
Control test value ± U	11.6 ± 0.984

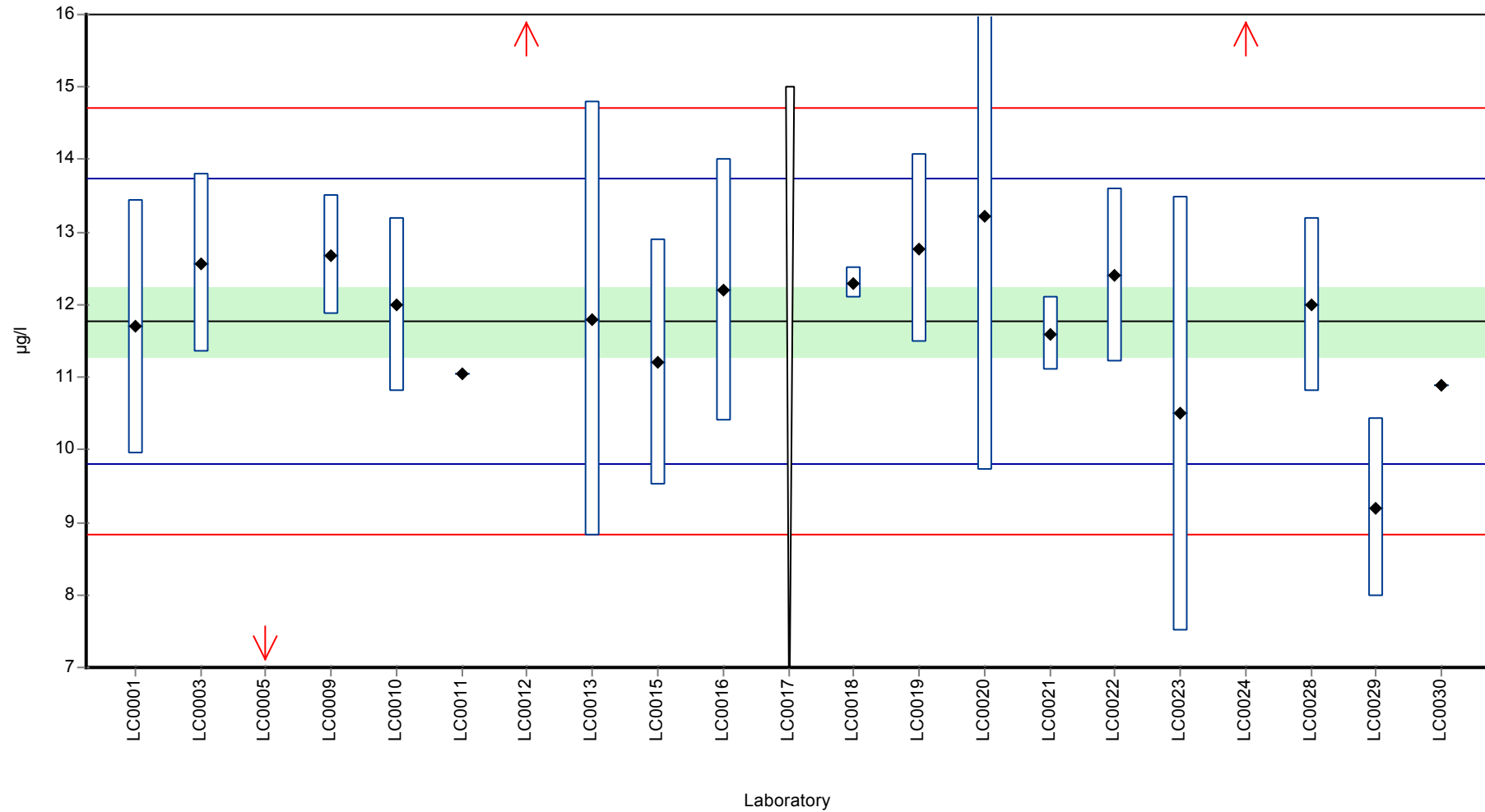
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	11.7	1.75	99.4	-0.07	
LC0002	-	-	-	-	
LC0003	12.57	1.234	107	0.81	
LC0004	-	-	-	-	
LC0005	5.896	0.413	50.1	-5.99	H
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	-	-	-	-	
LC0009	12.686	0.83	108	0.93	
LC0010	12	1.2	102	0.23	
LC0011	11.058	0.003	93.9	-0.73	
LC0012	22	-	187	10.4	H
LC0013	11.8	3	100	0.03	
LC0014	-	-	-	-	
LC0015	11.2	1.7	95.1	-0.58	
LC0016	12.2	1.81	104	0.44	
LC0017	< 15 (LOQ)	-	-	-	
LC0018	12.3	0.22	104	0.54	
LC0019	12.7728	1.303	109	1.02	
LC0020	13.22	3.5	112	1.48	
LC0021	11.6	0.5	98.5	-0.17	
LC0022	12.4	1.2	105	0.64	
LC0023	10.5	3	89.2	-1.3	
LC0024	26	2.5	221	14.5	H
LC0025	-	-	-	-	
LC0026	-	-	-	-	
LC0027	-	-	-	-	
LC0028	12	1.2	102	0.23	
LC0029	9.2	1.23	78.2	-2.62	
LC0030	10.9	-	92.6	-0.89	

#### Characteristics of parameter

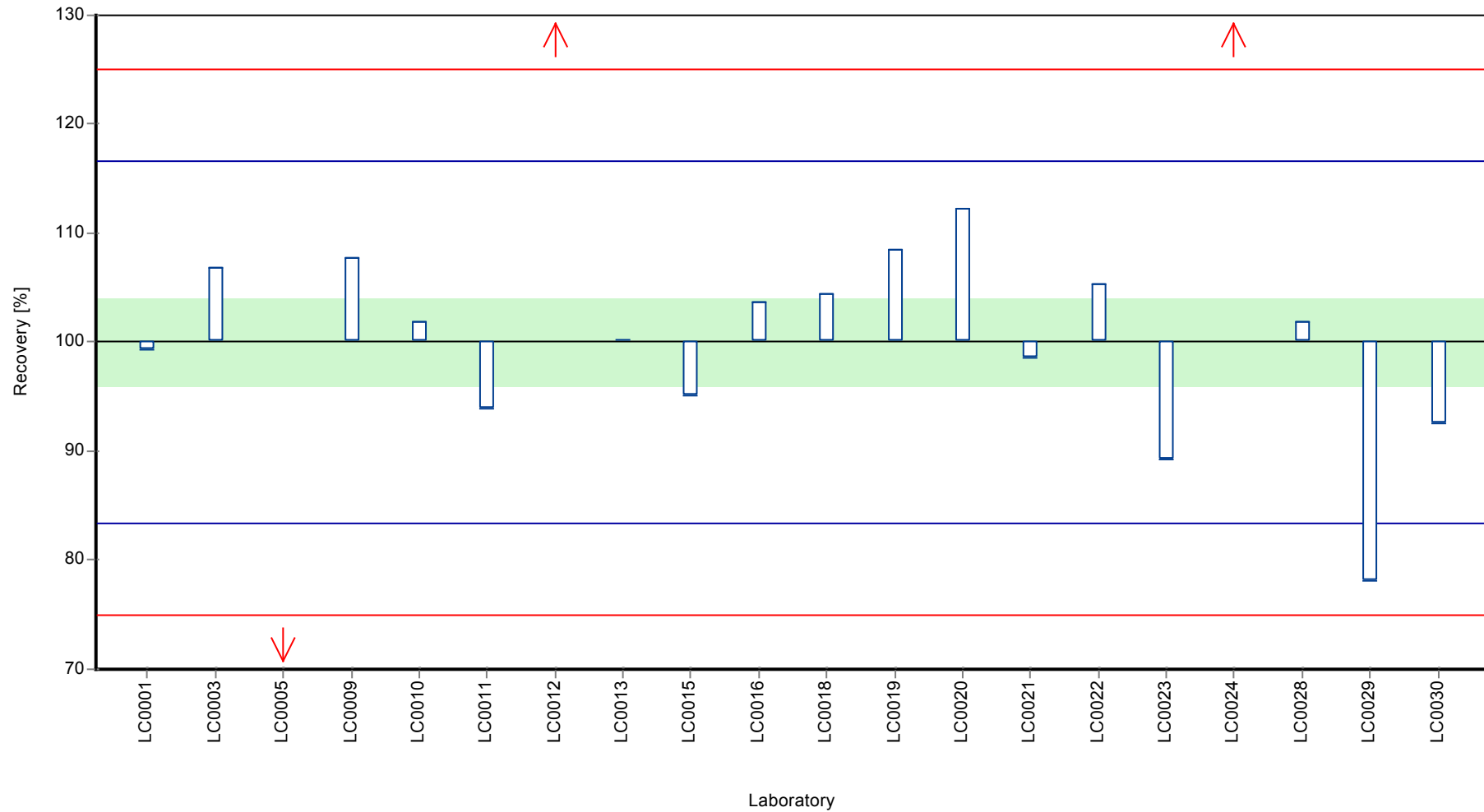
	all results	without outliers	Unit
Mean ± CI (99%)	12.7 ± 2.84	11.8 ± 0.714	µg/l
Minimum	5.9	9.2	µg/l
Maximum	26	13.2	µg/l
Standard deviation	4.23	0.981	µg/l
rel. Standard deviation	33.3	8.33	%
n	20	17	-

Graphical presentation of results

Results



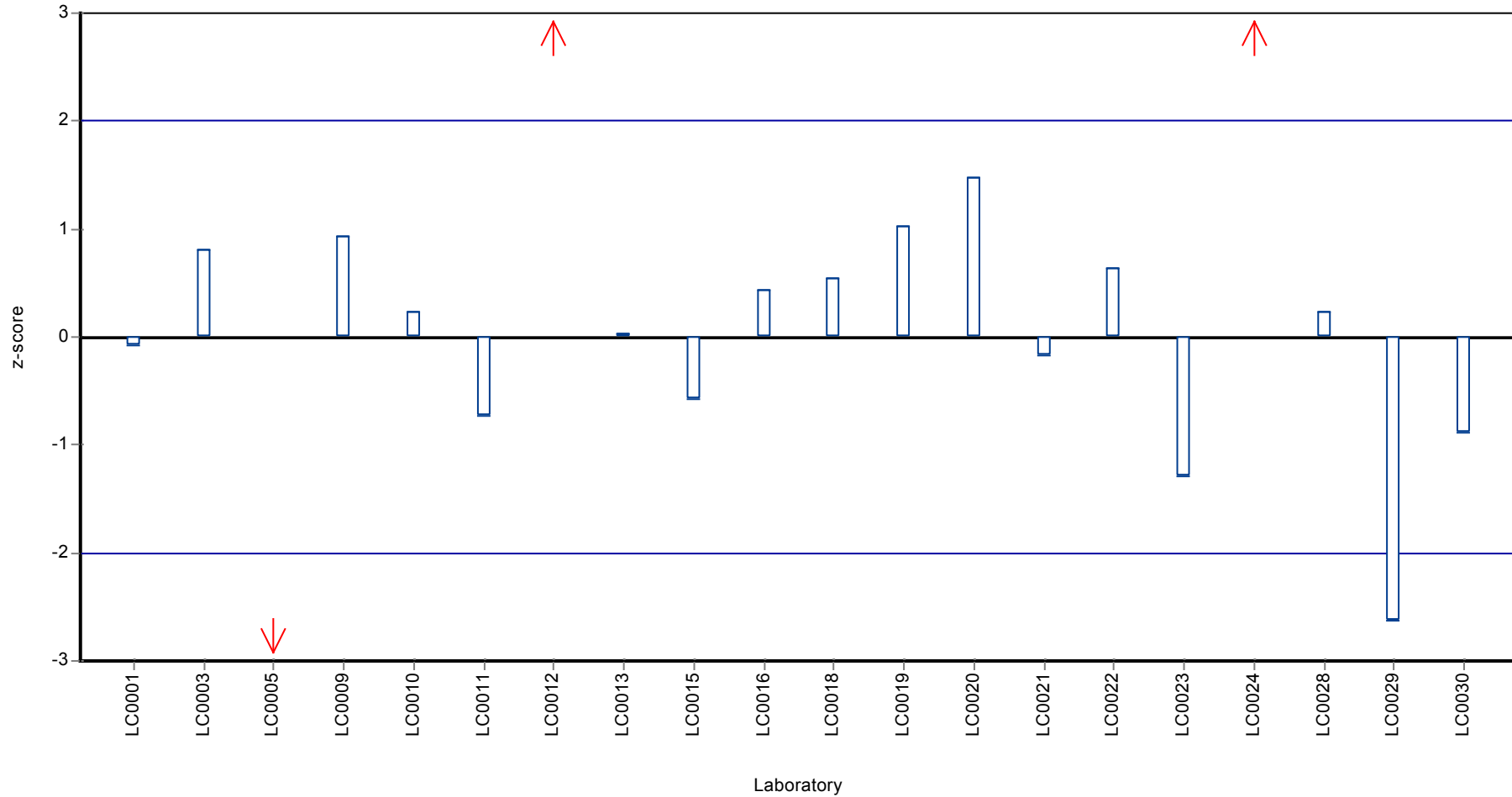
Recovery rate



Parameter oriented report Metals M140

Sample: M140B, Parameter: Zinc

Z-score



## 8 Laboratory oriented report

The laboratory oriented report is sorted by laboratory code.

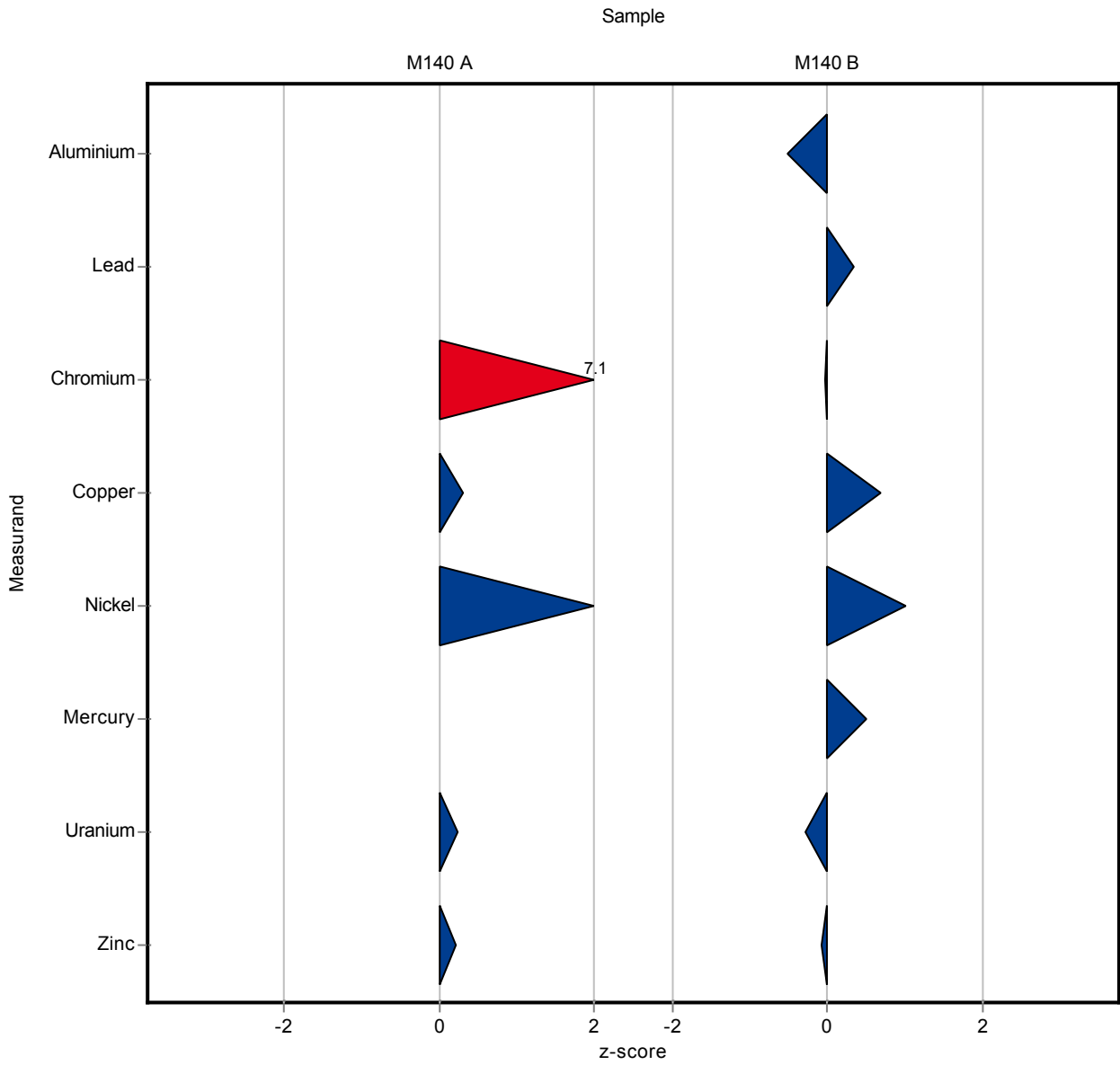
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<10 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<1 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	1.13	0.17	0.0552	153	7.09
Iron	µg/l	4.22	± 1.44	<20 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	14	2.1	0.729	102	0.31
Manganese	µg/l	1.7	± 0.103	<15 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	1.2	0.18	0.21	141	1.66
Mercury	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	4.31	0.65	0.198	101	0.23
Zinc	µg/l	1060	± 35.7	1070	160	49.1	101	0.21

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	10.2	1.53	1.14	94.5	-0.52
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	1	0.15	0.0696	102	0.33
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.15	0.32	0.19	99.7	-0.03
Iron	µg/l	14.4	± 1.31	<20 (LOQ)	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	5.31	0.8	0.318	104	0.69
Manganese	µg/l	4.26	± 0.206	<15 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	1.8	0.27	0.132	108	1.00
Mercury	µg/l	1.09	± 0.0893	1.14	0.17	0.0893	104	0.51
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	1.09	0.16	0.0573	98.6	-0.28
Zinc	µg/l	11.8	± 0.714	11.7	1.75	0.981	99.4	-0.07





The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

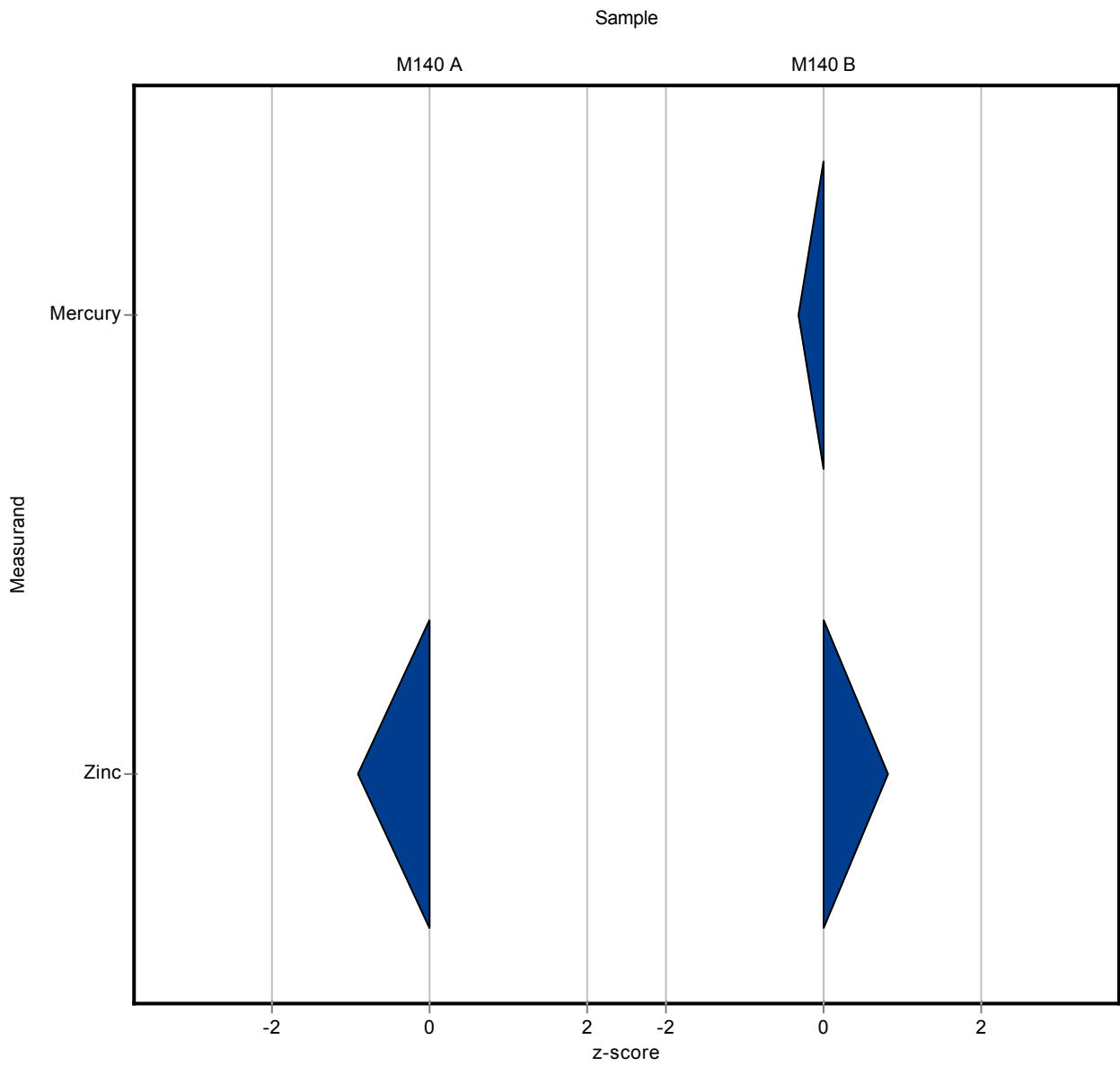
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	<0.14 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	1015.295	99.702	49.1	95.8	-0.90

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	1.067	0.241	0.0893	97.4	-0.31
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	12.57	1.234	0.981	107	0.81



The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

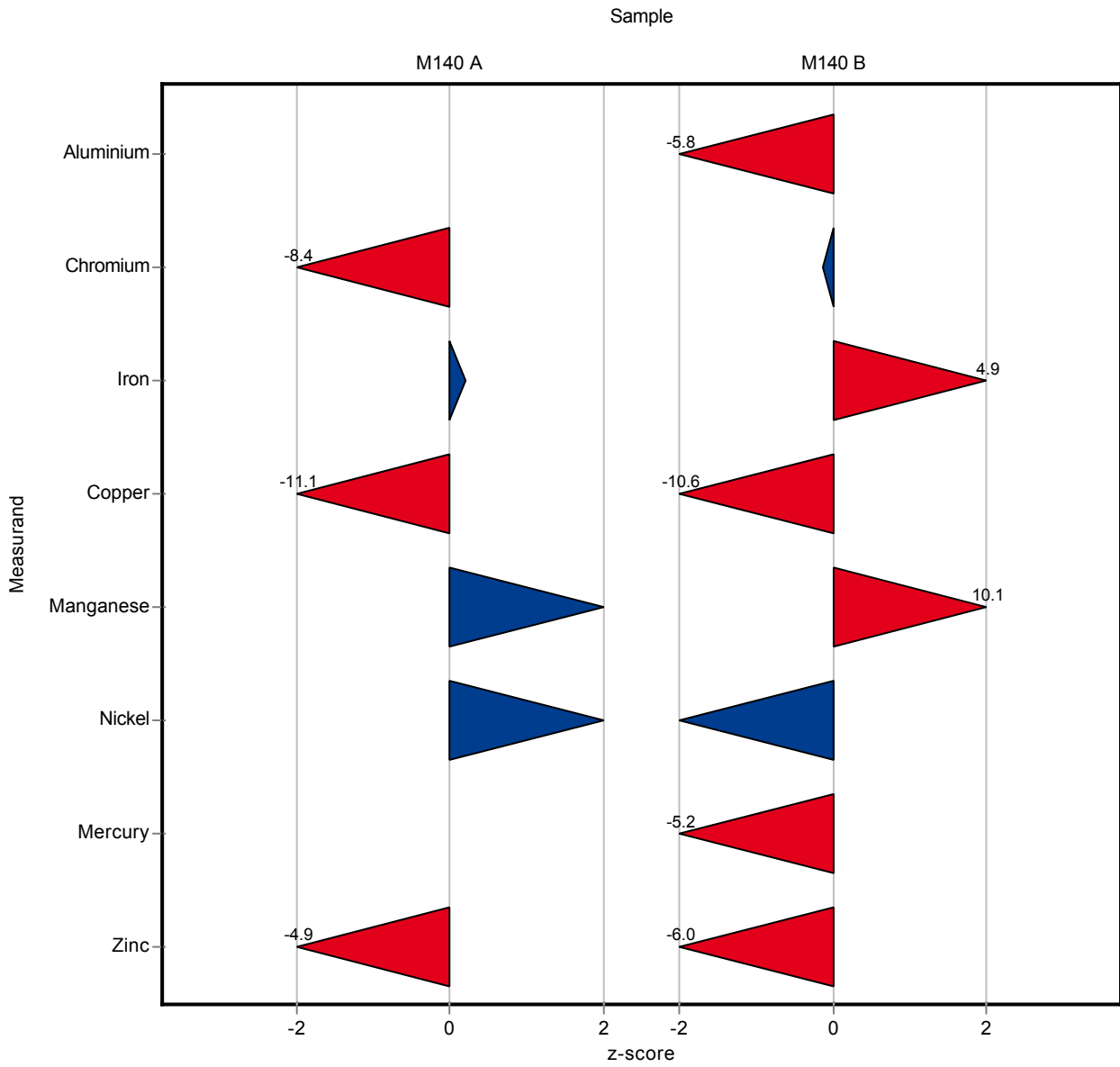
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<20 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<20 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	0.0326	0.0023	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.2773	0.019	0.0552	37.5	-8.35
Iron	µg/l	4.22	± 1.44	4.593	0.317	1.73	109	0.21
Copper	µg/l	13.8	± 0.547	5.719	0.4	0.729	41.5	-11.10
Manganese	µg/l	1.7	± 0.103	1.899	0.108	0.124	112	1.58
Nickel	µg/l	0.85	± 0.19	1.163	0.081	0.21	137	1.49
Mercury	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	<5 (LOQ)	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	820.9	57.46	49.1	77.5	-4.87

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	4.22	0.481	1.14	39.1	-5.76
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	<20 (LOQ)	-	0.0696	-	-
Cadmium	µg/l	-	± -	0.0358	0.0025	-	-	-
Chromium	µg/l	2.16	± 0.142	2.133	0.149	0.19	98.9	-0.12
Iron	µg/l	14.4	± 1.31	22.78	1.572	1.69	158	4.93
Copper	µg/l	5.09	± 0.232	1.703	0.162	0.318	33.4	-10.60
Manganese	µg/l	4.26	± 0.206	6.764	0.386	0.248	159	10.10
Nickel	µg/l	1.67	± 0.106	1.499	0.105	0.132	89.9	-1.28
Mercury	µg/l	1.09	± 0.0893	0.6339	0.072	0.0893	57.9	-5.16
Selenium	µg/l	3.92	± 0.153	<5 (LOQ)	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	5.896	0.413	0.981	50.1	-5.99



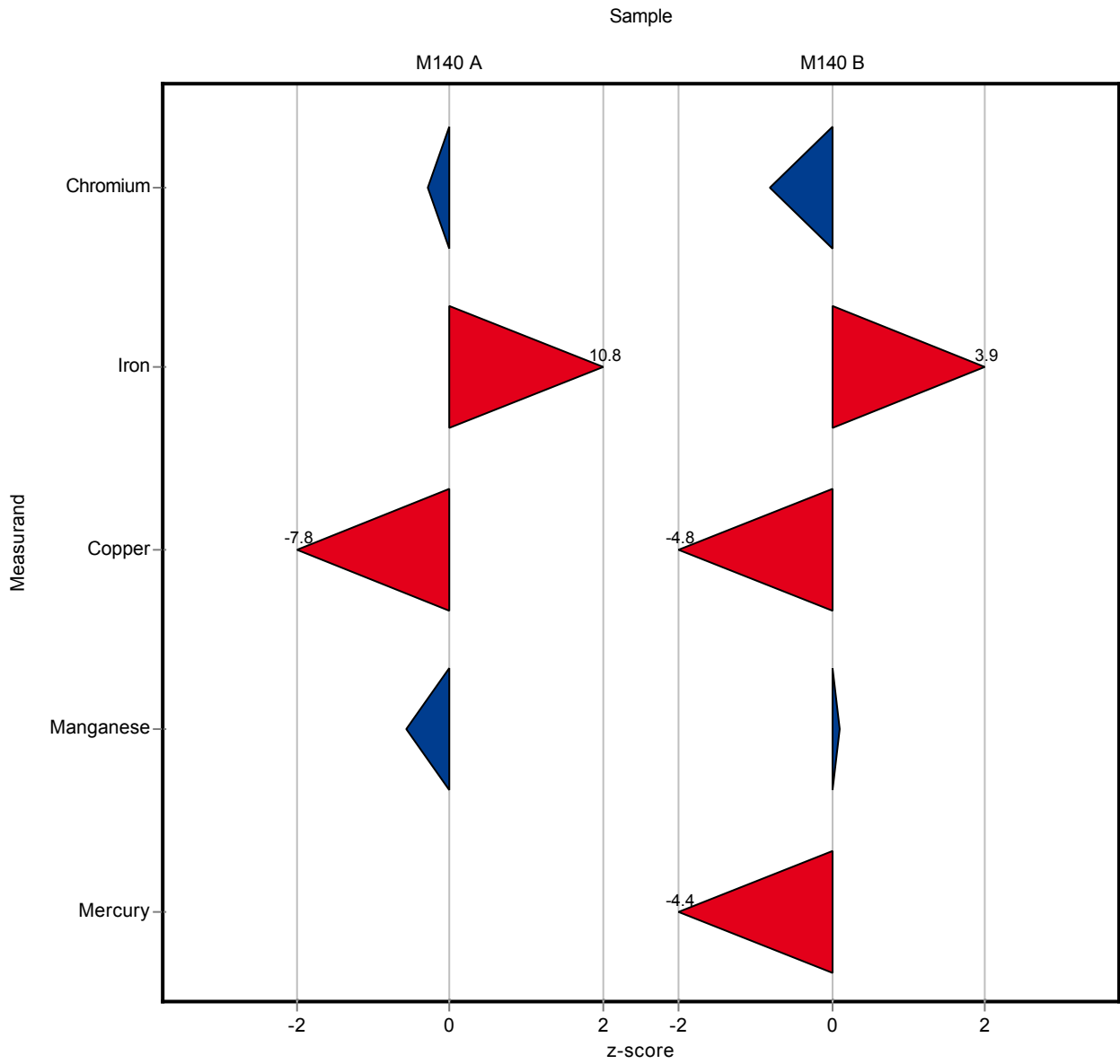
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<1 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.11 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.7228	0.072	0.0552	97.9	-0.29
Iron	µg/l	4.22	± 1.44	23	1.61	1.73	545	10.80
Copper	µg/l	13.8	± 0.547	8.068	2.151	0.729	58.6	-7.83
Manganese	µg/l	1.7	± 0.103	1.6322	0.222	0.124	95.8	-0.57
Nickel	µg/l	0.85	± 0.19	<1 (LOQ)	-	0.21	-	-
Mercury	µg/l	-	± -	0.0679	0.013	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	<1 (LOQ)	-	0.0696	-	-
Cadmium	µg/l	-	± -	<0.11 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.0033	0.2	0.19	92.9	-0.81
Iron	µg/l	14.4	± 1.31	21	1.47	1.69	146	3.88
Copper	µg/l	5.09	± 0.232	3.5771	0.955	0.318	70.2	-4.76
Manganese	µg/l	4.26	± 0.206	4.2816	0.582	0.248	101	0.09
Nickel	µg/l	1.67	± 0.106	<1 (LOQ)	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	0.7012	0.132	0.0893	64	-4.41
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-





The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

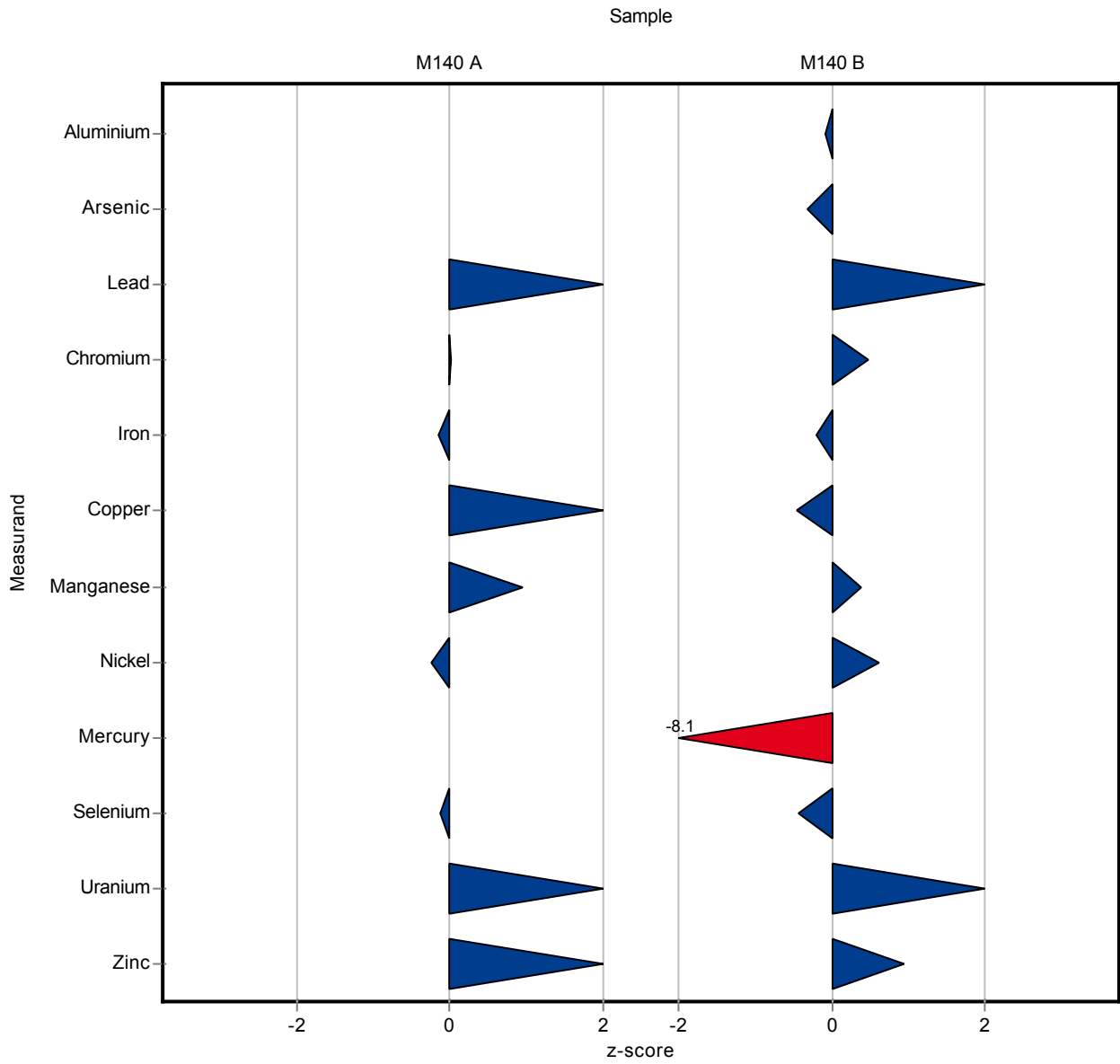
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	0.273	0.061	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<0.407	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	0.191	0.045	0.0331	129	1.30
Cadmium	µg/l	-	± -	<0.3088	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.74	0.106	0.0552	100	0.02
Iron	µg/l	4.22	± 1.44	3.977	0.125	1.73	94.2	-0.14
Copper	µg/l	13.8	± 0.547	14.68	0.952	0.729	107	1.24
Manganese	µg/l	1.7	± 0.103	1.821	0.078	0.124	107	0.95
Nickel	µg/l	0.85	± 0.19	0.802	0.077	0.21	94.3	-0.23
Mercury	µg/l	-	± -	<0.02 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.692	0.627	0.341	98.5	-0.12
Uranium	µg/l	4.26	± 0.165	4.506	0.099	0.198	106	1.22
Zinc	µg/l	1060	± 35.7	1156.13	9.549	49.1	109	1.97

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	10.696	1.275	1.14	99.1	-0.09
Arsenic	µg/l	0.623	± 0.0541	0.605	0.105	0.0571	97.1	-0.32
Lead	µg/l	0.977	± 0.0579	1.066	0.054	0.0696	109	1.28
Cadmium	µg/l	-	± -	<0.3088	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.245	0.113	0.19	104	0.47
Iron	µg/l	14.4	± 1.31	14.079	0.894	1.69	97.6	-0.21
Copper	µg/l	5.09	± 0.232	4.947	0.965	0.318	97.2	-0.46
Manganese	µg/l	4.26	± 0.206	4.351	0.086	0.248	102	0.37
Nickel	µg/l	1.67	± 0.106	1.749	0.076	0.132	105	0.61
Mercury	µg/l	1.09	± 0.0893	0.37	0.019	0.0893	33.8	-8.12
Selenium	µg/l	3.92	± 0.153	3.84	0.673	0.177	98	-0.44
Uranium	µg/l	1.11	± 0.046	1.169	0.103	0.0573	106	1.10
Zinc	µg/l	11.8	± 0.714	12.686	0.83	0.981	108	0.93



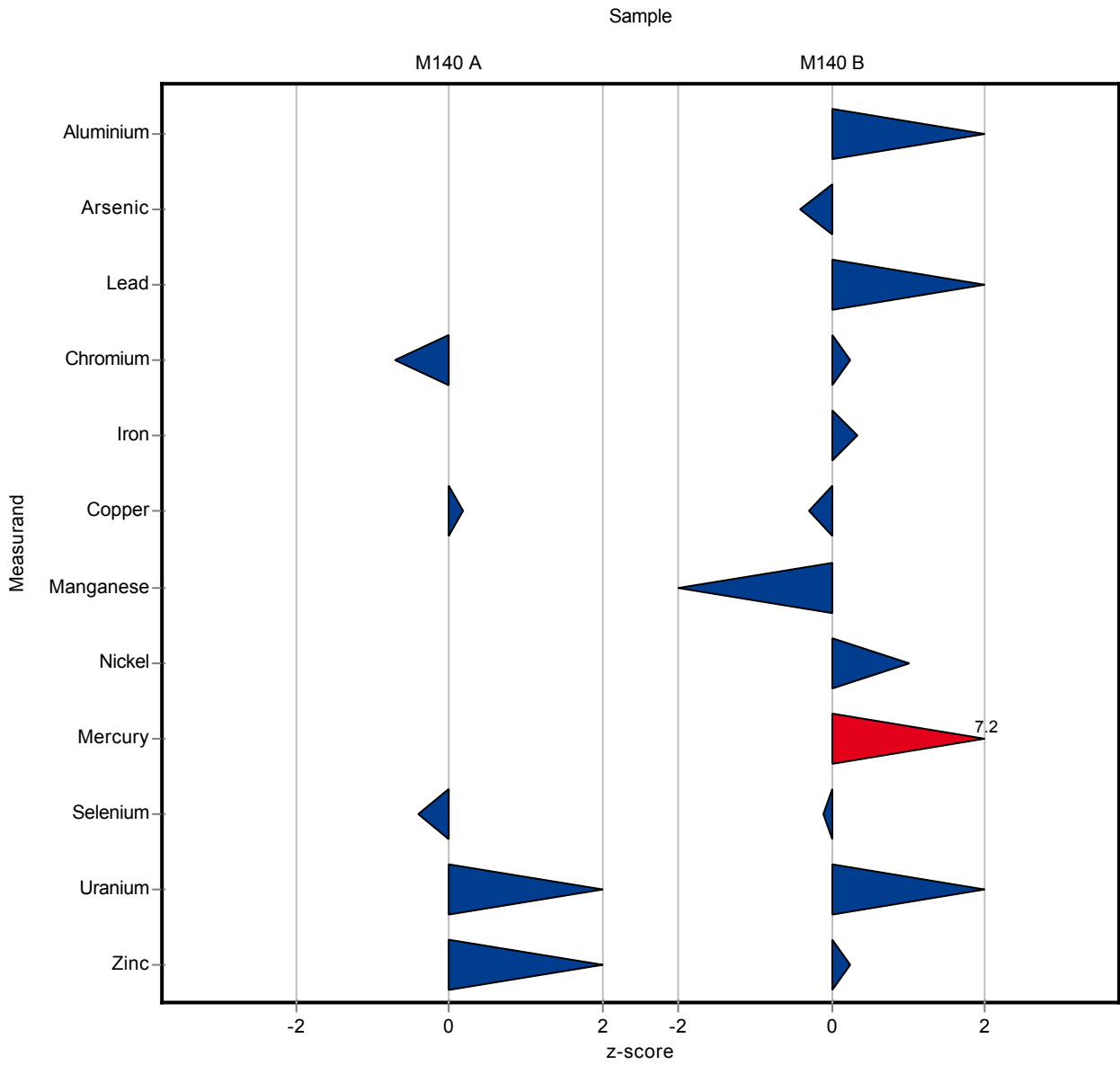
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<5 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<0.5 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<0.5 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.02 (LOD)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.7	0.084	0.0552	94.8	-0.70
Iron	µg/l	4.22	± 1.44	<10 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	13.9	1.112	0.729	101	0.17
Manganese	µg/l	1.7	± 0.103	<2 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	<1 (LOQ)	-	0.21	-	-
Mercury	µg/l	-	± -	<0.01 (LOD)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.6	0.39	0.341	95.1	-0.39
Uranium	µg/l	4.26	± 0.165	4.6	0.23	0.198	108	1.70
Zinc	µg/l	1060	± 35.7	1119	111.9	49.1	106	1.21

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	12	1.2	1.14	111	1.05
Arsenic	µg/l	0.623	± 0.0541	0.6	0.072	0.0571	96.3	-0.41
Lead	µg/l	0.977	± 0.0579	1.1	0.088	0.0696	113	1.77
Cadmium	µg/l	-	± -	<0.02 (LOD)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.2	0.264	0.19	102	0.23
Iron	µg/l	14.4	± 1.31	15	3.9	1.69	104	0.34
Copper	µg/l	5.09	± 0.232	5	0.4	0.318	98.2	-0.29
Manganese	µg/l	4.26	± 0.206	4	0.4	0.248	93.9	-1.04
Nickel	µg/l	1.67	± 0.106	1.8	0.18	0.132	108	1.00
Mercury	µg/l	1.09	± 0.0893	1.74	0.2088	0.0893	159	7.22
Selenium	µg/l	3.92	± 0.153	3.9	0.585	0.177	99.5	-0.10
Uranium	µg/l	1.11	± 0.046	1.2	0.06	0.0573	109	1.64
Zinc	µg/l	11.8	± 0.714	12	1.2	0.981	102	0.23



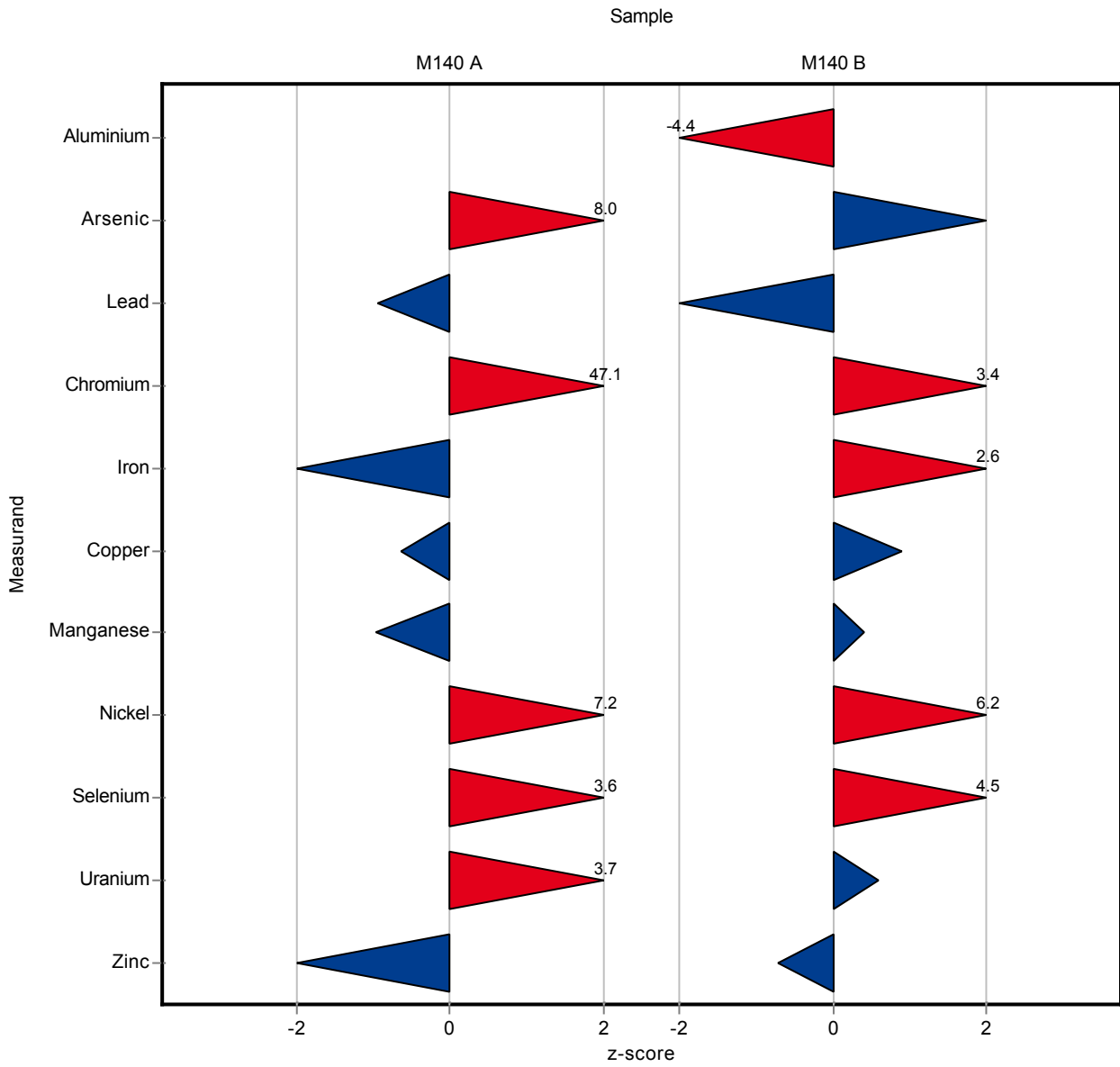
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	0.238	0.005	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.752	0.007	0.0603	282	8.05
Lead	µg/l	0.148	± 0.0314	0.117	0.005	0.0331	79.1	-0.93
Cadmium	µg/l	-	± -	<0.01 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	3.34	0.189	0.0552	452	47.10
Iron	µg/l	4.22	± 1.44	2.162	0.088	1.73	51.2	-1.19
Copper	µg/l	13.8	± 0.547	13.301	0.031	0.729	96.6	-0.65
Manganese	µg/l	1.7	± 0.103	1.584	0.026	0.124	93	-0.96
Nickel	µg/l	0.85	± 0.19	2.364	0.086	0.21	278	7.20
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	3.948	0.037	0.341	144	3.56
Uranium	µg/l	4.26	± 0.165	4.997	0.002	0.198	117	3.70
Zinc	µg/l	1060	± 35.7	991.115	4.985	49.1	93.5	-1.40

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	5.776	0.336	1.14	53.5	-4.39
Arsenic	µg/l	0.623	± 0.0541	0.732	0.027	0.0571	117	1.91
Lead	µg/l	0.977	± 0.0579	0.884	0.01	0.0696	90.5	-1.34
Cadmium	µg/l	-	± -	<0.01 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.803	0.154	0.19	130	3.41
Iron	µg/l	14.4	± 1.31	18.8	0.424	1.69	130	2.58
Copper	µg/l	5.09	± 0.232	5.379	0.061	0.318	106	0.90
Manganese	µg/l	4.26	± 0.206	4.358	0.02	0.248	102	0.40
Nickel	µg/l	1.67	± 0.106	2.485	0.075	0.132	149	6.18
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	4.722	0.019	0.177	120	4.54
Uranium	µg/l	1.11	± 0.046	1.14	0.04	0.0573	103	0.59
Zinc	µg/l	11.8	± 0.714	11.058	0.003	0.981	93.9	-0.73





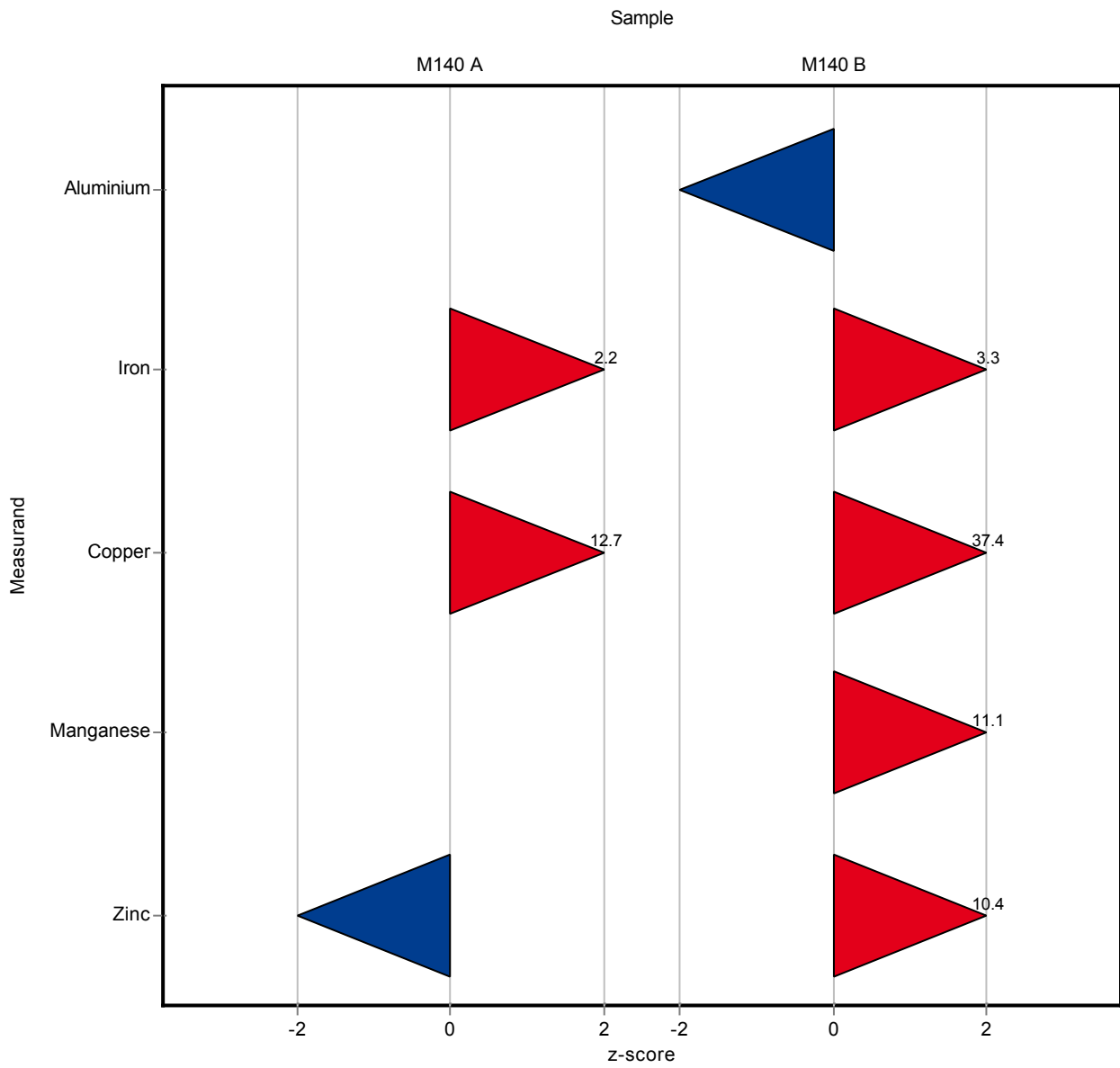
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<5 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	8	-	1.73	189	2.18
Copper	µg/l	13.8	± 0.547	23	-	0.729	167	12.70
Manganese	µg/l	1.7	± 0.103	<5 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	994	-	49.1	93.8	-1.34

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	9	-	1.14	83.4	-1.57
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	20	-	1.69	139	3.29
Copper	µg/l	5.09	± 0.232	17	-	0.318	334	37.40
Manganese	µg/l	4.26	± 0.206	7	-	0.248	164	11.10
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	22	-	0.981	187	10.40



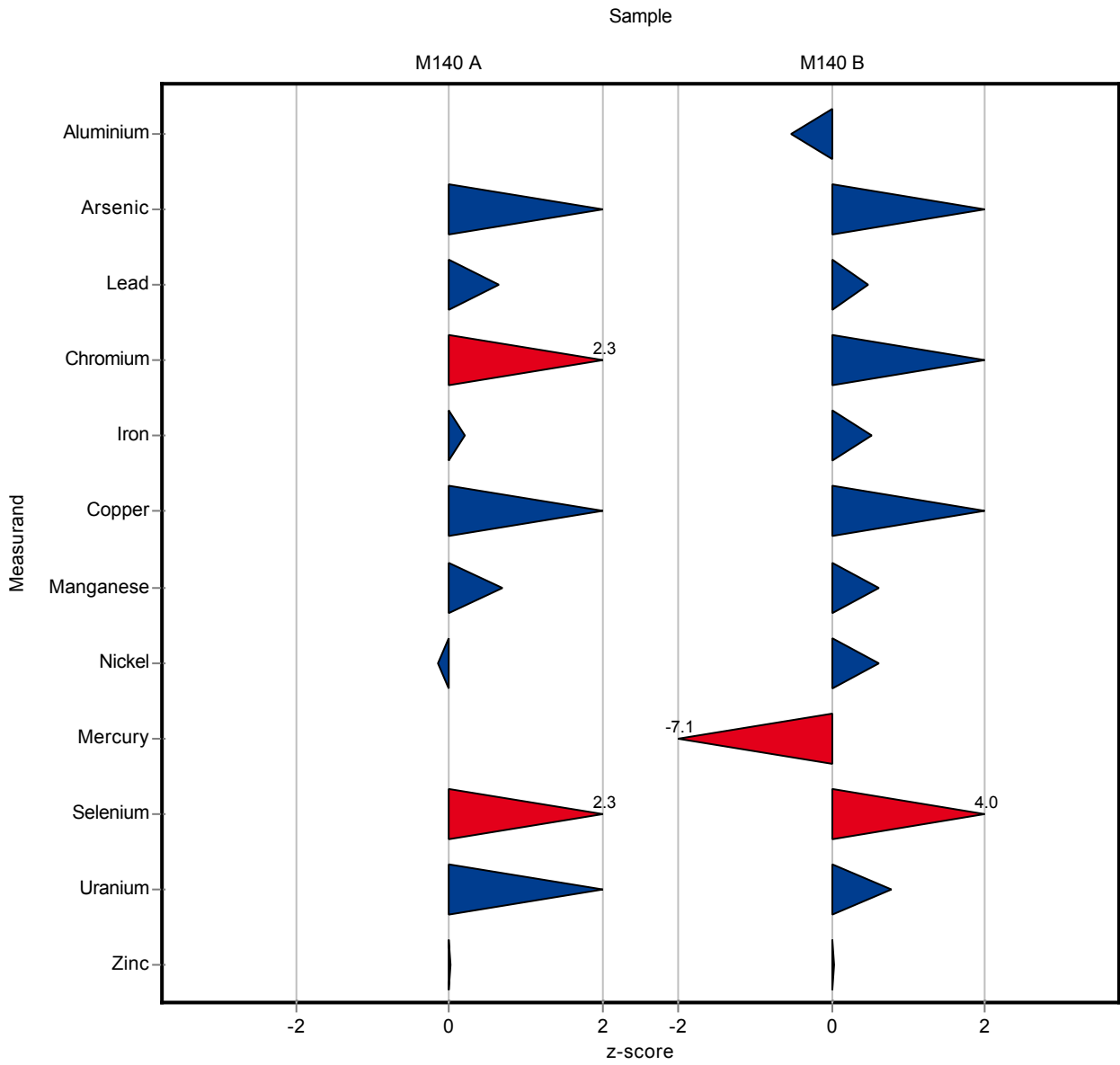
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	0.504	0.126	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.383	0.096	0.0603	144	1.93
Lead	µg/l	0.148	± 0.0314	0.169	0.042	0.0331	114	0.64
Cadmium	µg/l	-	± -	0.0218	0.0055	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.866	0.217	0.0552	117	2.31
Iron	µg/l	4.22	± 1.44	4.57	1.14	1.73	108	0.20
Copper	µg/l	13.8	± 0.547	14.7	3.7	0.729	107	1.27
Manganese	µg/l	1.7	± 0.103	1.79	0.45	0.124	105	0.70
Nickel	µg/l	0.85	± 0.19	0.818	0.205	0.21	96.2	-0.15
Mercury	µg/l	-	± -	0.0134	0.0034	-	-	-
Selenium	µg/l	2.73	± 0.274	3.51	0.88	0.341	128	2.28
Uranium	µg/l	4.26	± 0.165	4.55	1.14	0.198	107	1.45
Zinc	µg/l	1060	± 35.7	1060	265	49.1	100	0.01

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	10.2	2.6	1.14	94.5	-0.52
Arsenic	µg/l	0.623	± 0.0541	0.721	0.18	0.0571	116	1.71
Lead	µg/l	0.977	± 0.0579	1.01	0.25	0.0696	103	0.47
Cadmium	µg/l	-	± -	0.0123	0.0031	-	-	-
Chromium	µg/l	2.16	± 0.142	2.41	0.6	0.19	112	1.34
Iron	µg/l	14.4	± 1.31	15.3	3.8	1.69	106	0.51
Copper	µg/l	5.09	± 0.232	5.47	1.37	0.318	107	1.19
Manganese	µg/l	4.26	± 0.206	4.41	1.1	0.248	104	0.61
Nickel	µg/l	1.67	± 0.106	1.75	0.44	0.132	105	0.62
Mercury	µg/l	1.09	± 0.0893	0.457	0.114	0.0893	41.7	-7.14
Selenium	µg/l	3.92	± 0.153	4.63	1.16	0.177	118	4.02
Uranium	µg/l	1.11	± 0.046	1.15	0.29	0.0573	104	0.77
Zinc	µg/l	11.8	± 0.714	11.8	3	0.981	100	0.03



The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<20 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	<20 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	<20 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	<20 (LOQ)	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	<20 (LOQ)	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	<20 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

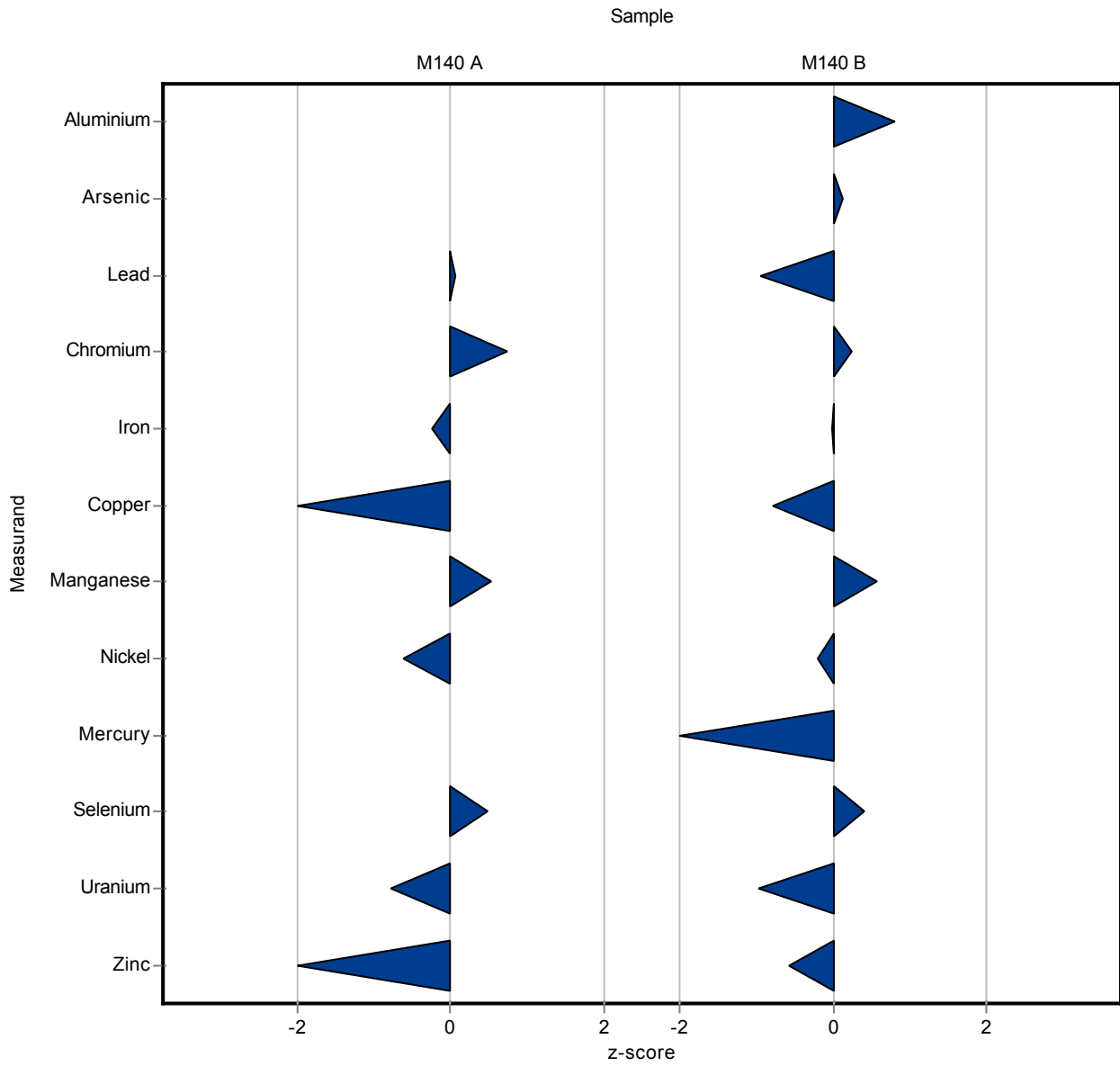
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<1 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<0.5 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	0.15	0.03	0.0331	101	0.07
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.78	0.12	0.0552	106	0.75
Iron	µg/l	4.22	± 1.44	3.8	0.6	1.73	90	-0.24
Copper	µg/l	13.8	± 0.547	12.8	1.3	0.729	92.9	-1.34
Manganese	µg/l	1.7	± 0.103	1.77	0.27	0.124	104	0.54
Nickel	µg/l	0.85	± 0.19	0.72	0.11	0.21	84.7	-0.62
Mercury	µg/l	-	± -	<0.05 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.9	0.6	0.341	106	0.49
Uranium	µg/l	4.26	± 0.165	4.11	0.61	0.198	96.4	-0.77
Zinc	µg/l	1060	± 35.7	980	98	49.1	92.5	-1.62

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.7	1.8	1.14	108	0.79
Arsenic	µg/l	0.623	± 0.0541	0.63	0.13	0.0571	101	0.12
Lead	µg/l	0.977	± 0.0579	0.91	0.14	0.0696	93.1	-0.97
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.2	0.33	0.19	102	0.23
Iron	µg/l	14.4	± 1.31	14.4	2.2	1.69	99.8	-0.02
Copper	µg/l	5.09	± 0.232	4.84	0.73	0.318	95	-0.79
Manganese	µg/l	4.26	± 0.206	4.4	0.66	0.248	103	0.57
Nickel	µg/l	1.67	± 0.106	1.64	0.25	0.132	98.3	-0.21
Mercury	µg/l	1.09	± 0.0893	0.99	0.15	0.0893	90.4	-1.18
Selenium	µg/l	3.92	± 0.153	3.99	0.8	0.177	102	0.40
Uranium	µg/l	1.11	± 0.046	1.05	0.16	0.0573	94.9	-0.98
Zinc	µg/l	11.8	± 0.714	11.2	1.7	0.981	95.1	-0.58



The following results were achieved:

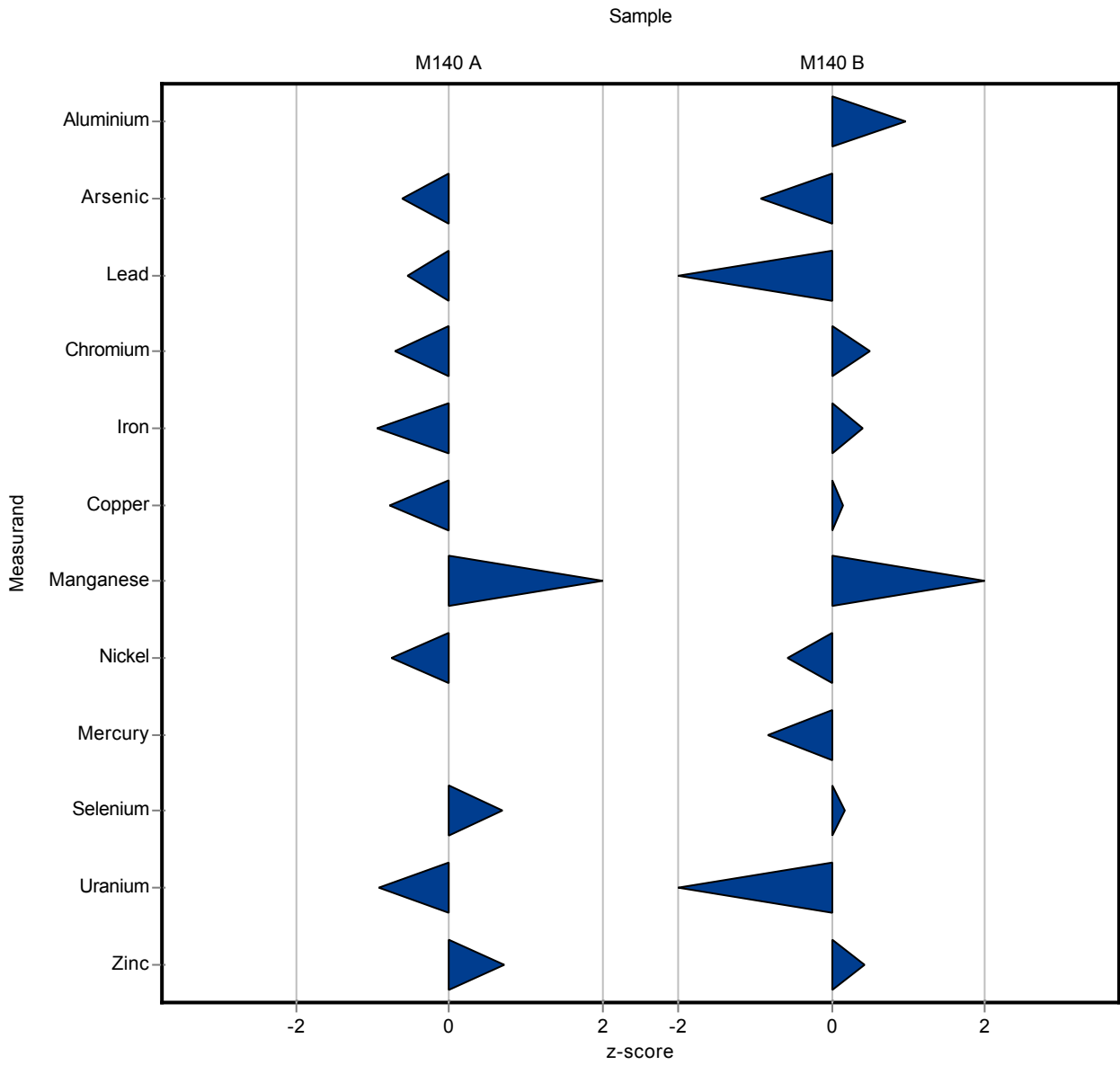
Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<0.5 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.23	0.03	0.0603	86.3	-0.60
Lead	µg/l	0.148	± 0.0314	0.13	0.02	0.0331	87.9	-0.54
Cadmium	µg/l	-	± -	0.018	0.003	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.7	0.1	0.0552	94.8	-0.70
Iron	µg/l	4.22	± 1.44	2.6	0.34	1.73	61.6	-0.94
Copper	µg/l	13.8	± 0.547	13.2	1.72	0.729	95.8	-0.79
Manganese	µg/l	1.7	± 0.103	1.89	0.24	0.124	111	1.51
Nickel	µg/l	0.85	± 0.19	0.69	0.1	0.21	81.2	-0.76
Mercury	µg/l	-	± -	0.006	0.002	-	-	-
Selenium	µg/l	2.73	± 0.274	2.97	0.41	0.341	109	0.69
Uranium	µg/l	4.26	± 0.165	4.08	0.55	0.198	95.7	-0.93
Zinc	µg/l	1060	± 35.7	1095	163	49.1	103	0.72

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.9	1.5	1.14	110	0.97
Arsenic	µg/l	0.623	± 0.0541	0.57	0.07	0.0571	91.5	-0.93
Lead	µg/l	0.977	± 0.0579	0.87	0.13	0.0696	89	-1.54
Cadmium	µg/l	-	± -	0.009	0.001	-	-	-
Chromium	µg/l	2.16	± 0.142	2.25	0.34	0.19	104	0.49
Iron	µg/l	14.4	± 1.31	15.1	2	1.69	105	0.39
Copper	µg/l	5.09	± 0.232	5.14	0.67	0.318	101	0.15
Manganese	µg/l	4.26	± 0.206	4.65	0.59	0.248	109	1.58
Nickel	µg/l	1.67	± 0.106	1.59	0.22	0.132	95.3	-0.59
Mercury	µg/l	1.09	± 0.0893	1.02	0.2	0.0893	93.2	-0.84
Selenium	µg/l	3.92	± 0.153	3.95	0.54	0.177	101	0.18
Uranium	µg/l	1.11	± 0.046	1.04	0.14	0.0573	94	-1.15
Zinc	µg/l	11.8	± 0.714	12.2	1.81	0.981	104	0.44





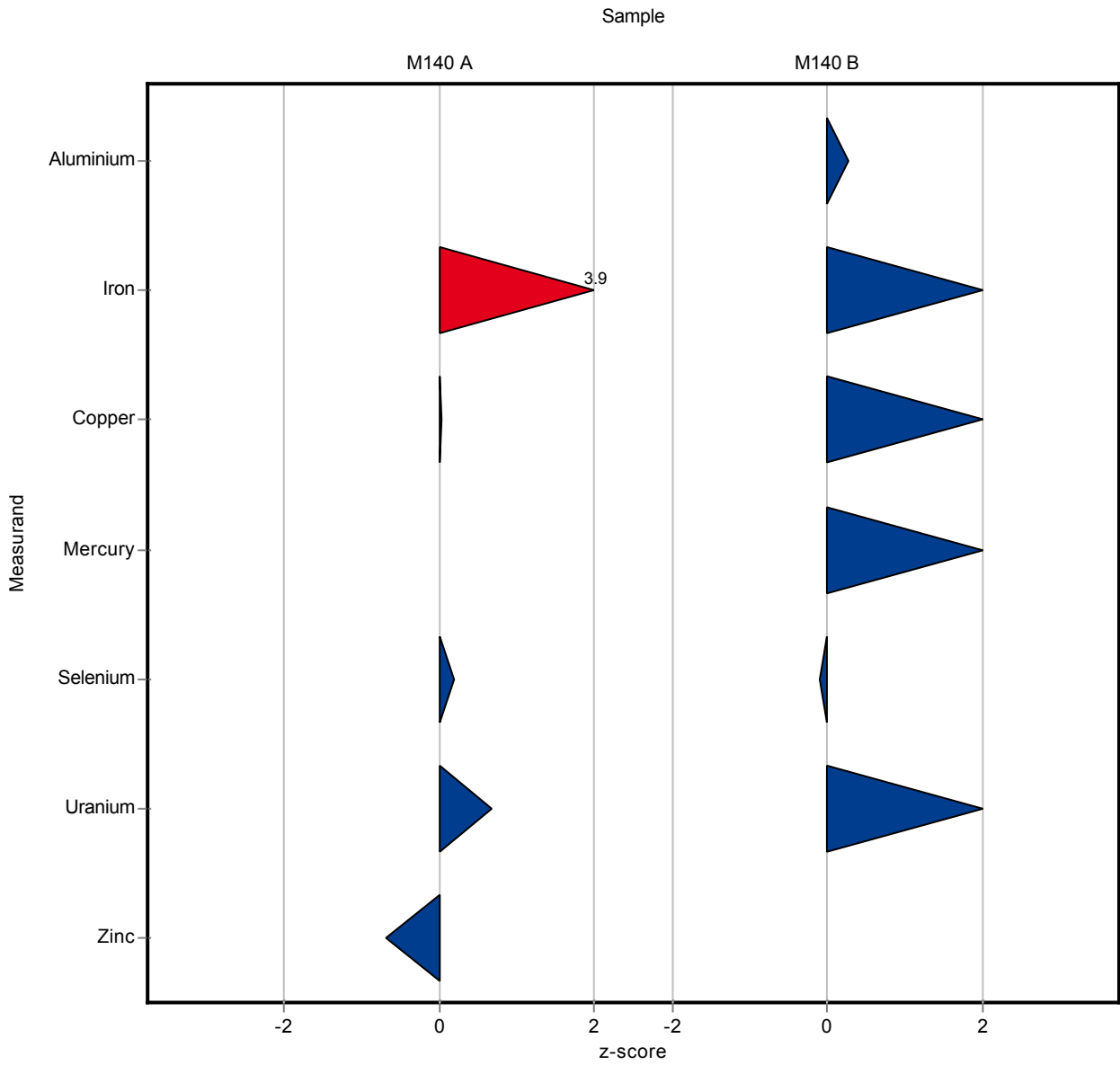
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<5 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<2 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<2 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<1 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	<5 (LOQ)	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	10.9	1.1	1.73	258	3.86
Copper	µg/l	13.8	± 0.547	13.8	1.4	0.729	100	0.04
Manganese	µg/l	1.7	± 0.103	<5 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	<5 (LOQ)	-	0.21	-	-
Mercury	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.8	0.3	0.341	102	0.19
Uranium	µg/l	4.26	± 0.165	4.4	0.4	0.198	103	0.69
Zinc	µg/l	1060	± 35.7	1026.4	103	49.1	96.9	-0.68

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.1	1.1	1.14	103	0.27
Arsenic	µg/l	0.623	± 0.0541	<2 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	<2 (LOQ)	-	0.0696	-	-
Cadmium	µg/l	-	± -	<1 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	<5 (LOQ)	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	16.9	1.7	1.69	117	1.46
Copper	µg/l	5.09	± 0.232	5.6	0.6	0.318	110	1.60
Manganese	µg/l	4.26	± 0.206	<5 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	<5 (LOQ)	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	1.2	0.1	0.0893	110	1.18
Selenium	µg/l	3.92	± 0.153	3.9	0.4	0.177	99.5	-0.10
Uranium	µg/l	1.11	± 0.046	1.2	0.1	0.0573	109	1.64
Zinc	µg/l	11.8	± 0.714	<15 (LOQ)	-	0.981	-	-



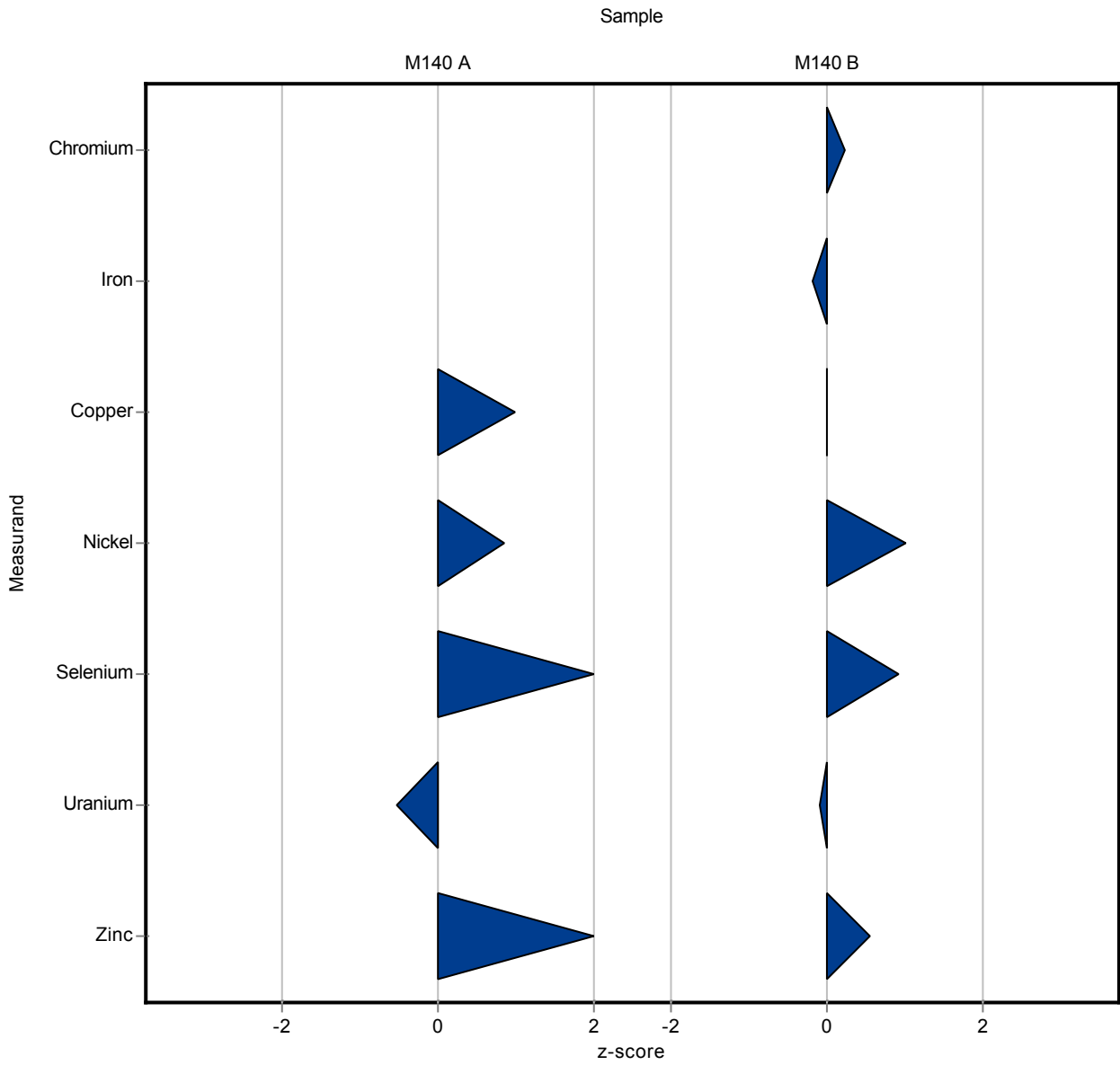
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<0.732 (LOD)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<1 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.02 (LOD)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	<1 (LOQ)	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	<10 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	14.5	0.3	0.729	105	1.00
Manganese	µg/l	1.7	± 0.103	<10 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	1.03	0.22	0.21	121	0.86
Mercury	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	3.15	0.29	0.341	115	1.22
Uranium	µg/l	4.26	± 0.165	4.16	0.06	0.198	97.6	-0.52
Zinc	µg/l	1060	± 35.7	1120	24.9	49.1	106	1.23

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	<10 (LOQ)	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	<1 (LOQ)	-	0.0696	-	-
Cadmium	µg/l	-	± -	<0.02 (LOD)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.2	0.157	0.19	102	0.23
Iron	µg/l	14.4	± 1.31	14.1	0.714	1.69	97.7	-0.20
Copper	µg/l	5.09	± 0.232	5.09	0.15	0.318	100	-0.01
Manganese	µg/l	4.26	± 0.206	<10 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	1.8	0.21	0.132	108	1.00
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	4.08	0.2	0.177	104	0.91
Uranium	µg/l	1.11	± 0.046	1.1	0.07	0.0573	99.5	-0.10
Zinc	µg/l	11.8	± 0.714	12.3	0.22	0.981	104	0.54



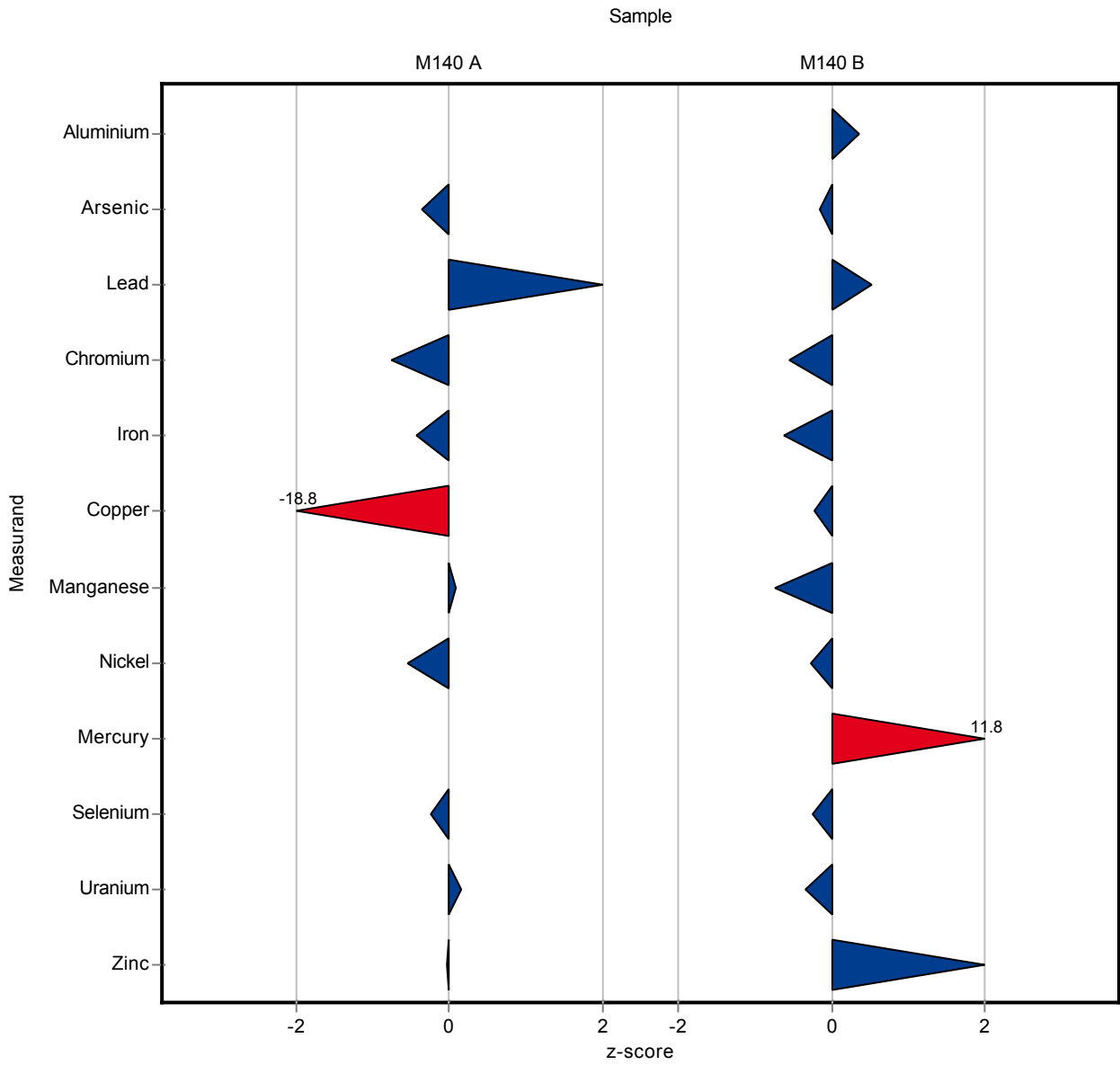
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	0.33	0.04	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.2454	0.042	0.0603	92.1	-0.35
Lead	µg/l	0.148	± 0.0314	0.1813	0.026	0.0331	123	1.01
Cadmium	µg/l	-	± -	0.0162	0.0028	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.697	0.066	0.0552	94.4	-0.75
Iron	µg/l	4.22	± 1.44	3.5026	0.22	1.73	83	-0.41
Copper	µg/l	13.8	± 0.547	0.0602	0.007	0.729	0.437	-18.80
Manganese	µg/l	1.7	± 0.103	1.7133	0.11	0.124	101	0.08
Nickel	µg/l	0.85	± 0.19	0.738	0.081	0.21	86.8	-0.53
Mercury	µg/l	-	± -	<0.01 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.6494	0.291	0.341	96.9	-0.25
Uranium	µg/l	4.26	± 0.165	4.295	0.374	0.198	101	0.16
Zinc	µg/l	1060	± 35.7	1058.4	107.96	49.1	99.9	-0.03

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.2	1.36	1.14	104	0.35
Arsenic	µg/l	0.623	± 0.0541	0.6136	0.105	0.0571	98.5	-0.17
Lead	µg/l	0.977	± 0.0579	1.0139	0.148	0.0696	104	0.53
Cadmium	µg/l	-	± -	<0.01 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.0518	0.195	0.19	95.1	-0.55
Iron	µg/l	14.4	± 1.31	13.368	0.84	1.69	92.6	-0.63
Copper	µg/l	5.09	± 0.232	5.019	0.562	0.318	98.6	-0.23
Manganese	µg/l	4.26	± 0.206	4.0738	0.269	0.248	95.7	-0.75
Nickel	µg/l	1.67	± 0.106	1.6323	0.1796	0.132	97.9	-0.27
Mercury	µg/l	1.09	± 0.0893	2.1493	0.509	0.0893	196	11.80
Selenium	µg/l	3.92	± 0.153	3.8741	0.426	0.177	98.9	-0.25
Uranium	µg/l	1.11	± 0.046	1.0864	0.095	0.0573	98.2	-0.34
Zinc	µg/l	11.8	± 0.714	12.7728	1.303	0.981	109	1.02



The following results were achieved:

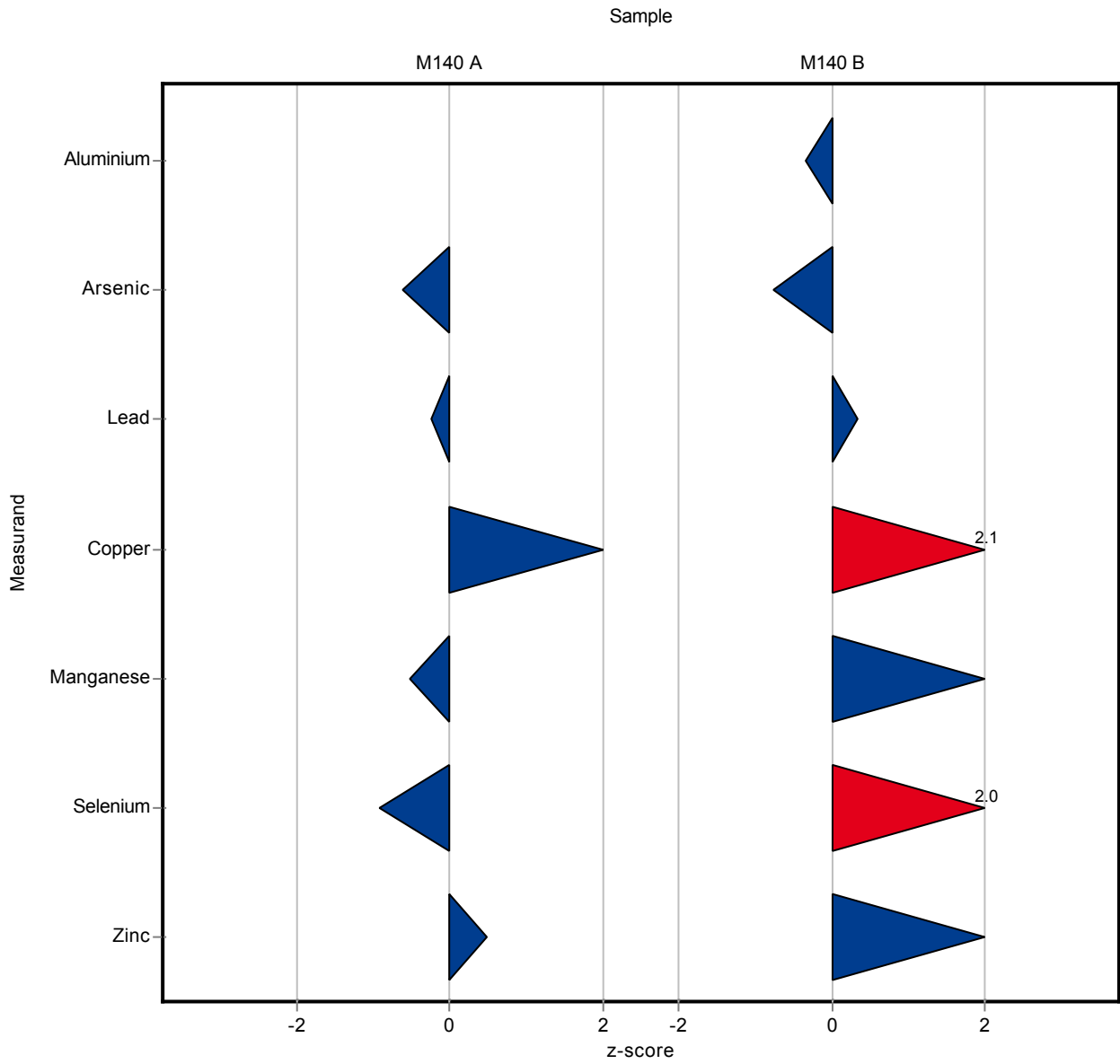
Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<10 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.23	-	0.0603	86.3	-0.60
Lead	µg/l	0.148	± 0.0314	0.14	-	0.0331	94.7	-0.24
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	15.19	3	0.729	110	1.94
Manganese	µg/l	1.7	± 0.103	1.64	-	0.124	96.3	-0.51
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.42	0.6	0.341	88.5	-0.92
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	1083	-	49.1	102	0.48

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	10.39	3.9	1.14	96.2	-0.36
Arsenic	µg/l	0.623	± 0.0541	0.58	-	0.0571	93.1	-0.76
Lead	µg/l	0.977	± 0.0579	1	-	0.0696	102	0.33
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	5.76	1.4	0.318	113	2.10
Manganese	µg/l	4.26	± 0.206	4.61	-	0.248	108	1.42
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	4.28	1	0.177	109	2.04
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	13.22	3.5	0.981	112	1.48





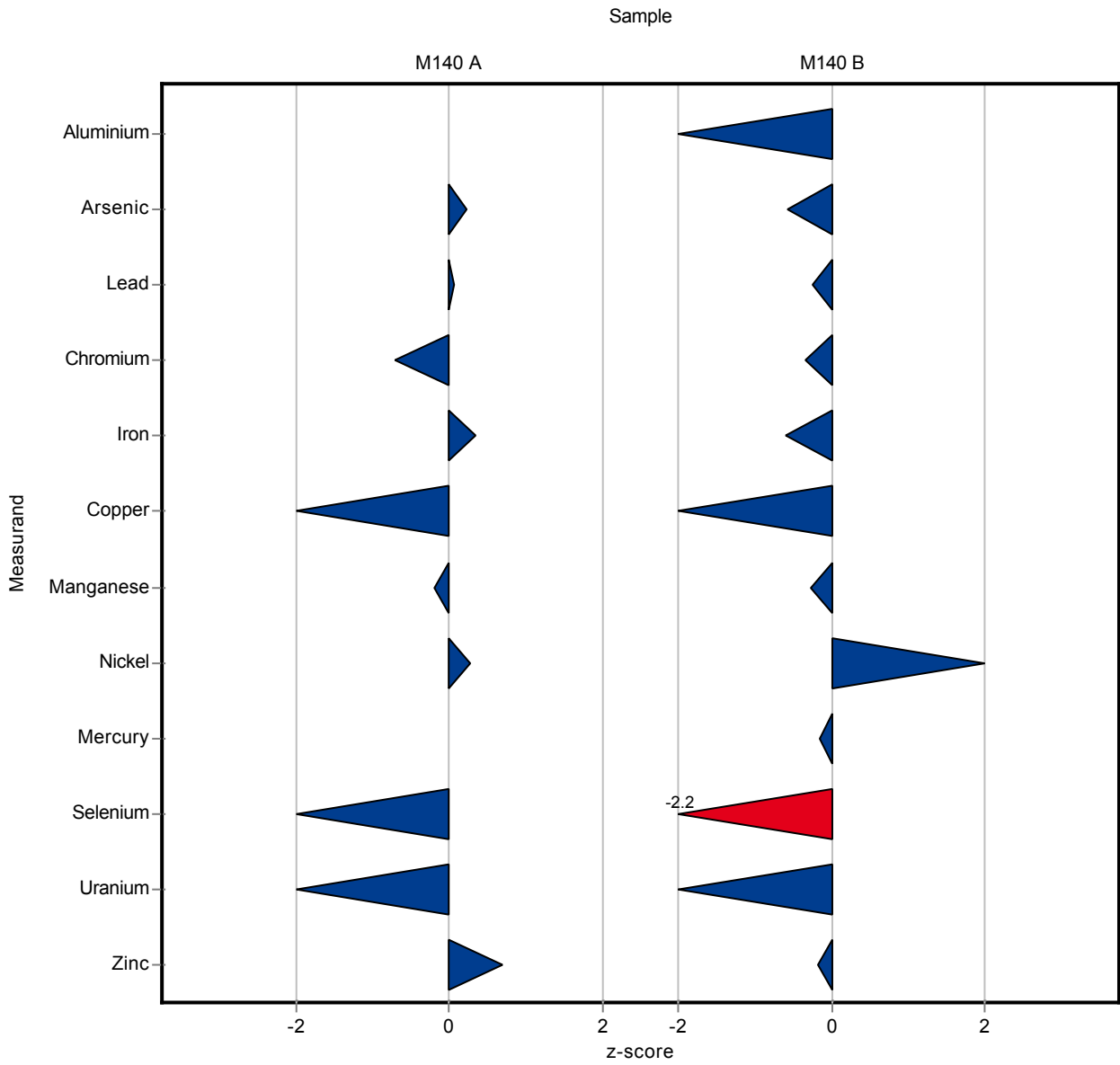
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<1 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.28	0.04	0.0603	105	0.23
Lead	µg/l	0.148	± 0.0314	0.15	0.01	0.0331	101	0.07
Cadmium	µg/l	-	± -	<0.02 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.7	0.04	0.0552	94.8	-0.70
Iron	µg/l	4.22	± 1.44	4.84	0.26	1.73	115	0.36
Copper	µg/l	13.8	± 0.547	12.5	0.6	0.729	90.8	-1.75
Manganese	µg/l	1.7	± 0.103	1.68	0.07	0.124	98.6	-0.19
Nickel	µg/l	0.85	± 0.19	0.91	0.06	0.21	107	0.28
Mercury	µg/l	-	± -	<0.02 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.39	0.17	0.341	87.4	-1.01
Uranium	µg/l	4.26	± 0.165	3.98	0.28	0.198	93.4	-1.43
Zinc	µg/l	1060	± 35.7	1094	42	49.1	103	0.70

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	9.16	0.82	1.14	84.8	-1.43
Arsenic	µg/l	0.623	± 0.0541	0.59	0.02	0.0571	94.7	-0.58
Lead	µg/l	0.977	± 0.0579	0.96	0.02	0.0696	98.2	-0.25
Cadmium	µg/l	-	± -	<0.02 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.09	0.12	0.19	96.9	-0.35
Iron	µg/l	14.4	± 1.31	13.4	0.9	1.69	92.9	-0.61
Copper	µg/l	5.09	± 0.232	4.64	0.09	0.318	91.1	-1.42
Manganese	µg/l	4.26	± 0.206	4.19	0.11	0.248	98.4	-0.28
Nickel	µg/l	1.67	± 0.106	1.83	0.13	0.132	110	1.23
Mercury	µg/l	1.09	± 0.0893	1.08	0.12	0.0893	98.6	-0.17
Selenium	µg/l	3.92	± 0.153	3.53	0.17	0.177	90.1	-2.20
Uranium	µg/l	1.11	± 0.046	1.03	0.06	0.0573	93.1	-1.32
Zinc	µg/l	11.8	± 0.714	11.6	0.5	0.981	98.5	-0.17



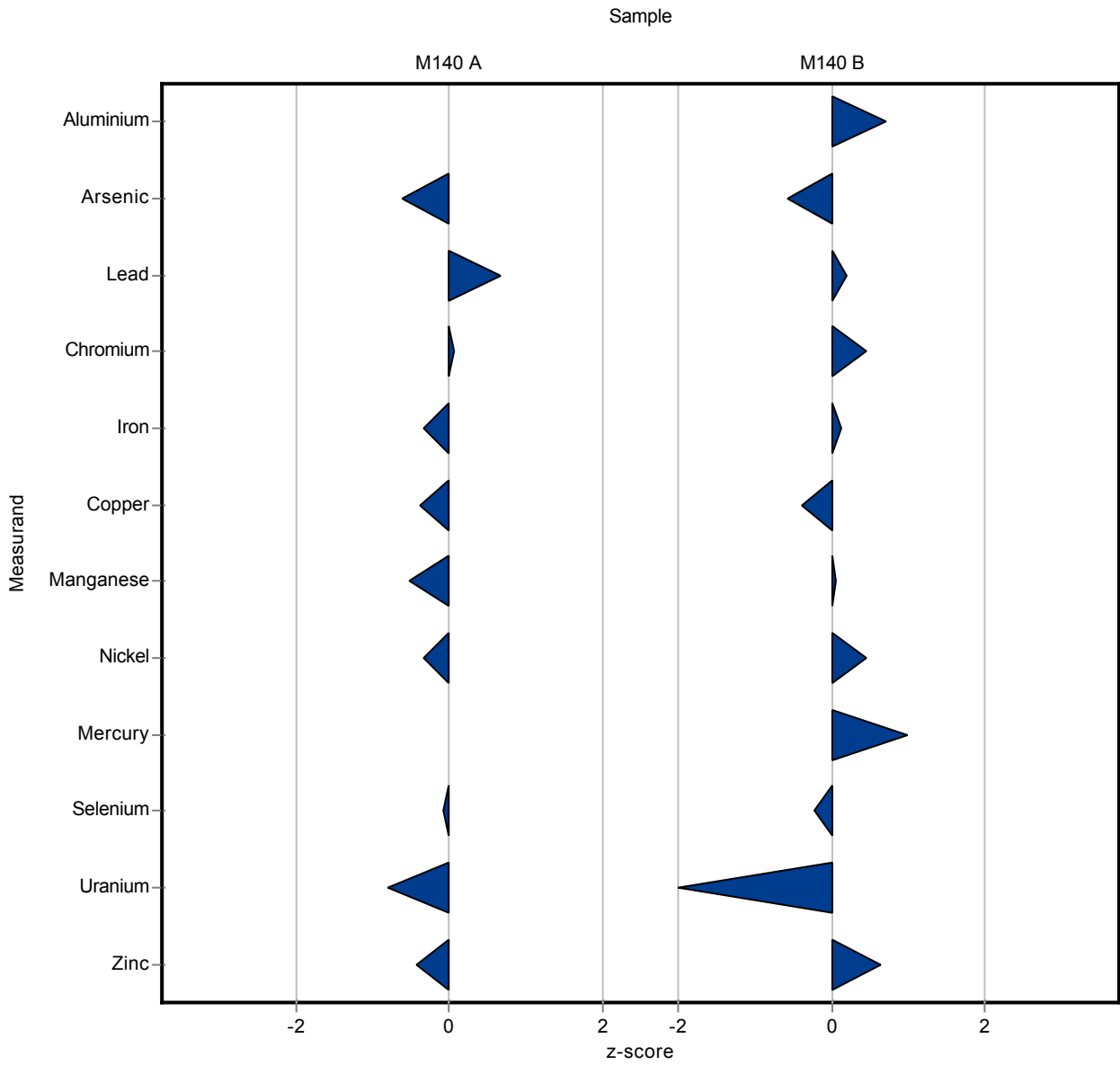
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<0.2 (LOD)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	0.23	0.07	0.0603	86.3	-0.60
Lead	µg/l	0.148	± 0.0314	0.17	0.02	0.0331	115	0.67
Cadmium	µg/l	-	± -	0.017	0.002	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.742	0.07	0.0552	100	0.06
Iron	µg/l	4.22	± 1.44	3.64	0.35	1.73	86.2	-0.34
Copper	µg/l	13.8	± 0.547	13.5	1.35	0.729	98	-0.38
Manganese	µg/l	1.7	± 0.103	1.64	0.2	0.124	96.3	-0.51
Nickel	µg/l	0.85	± 0.19	0.78	0.1	0.21	91.8	-0.33
Mercury	µg/l	-	± -	<0.0005	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.71	0.3	0.341	99.1	-0.07
Uranium	µg/l	4.26	± 0.165	4.103	0.4	0.198	96.2	-0.81
Zinc	µg/l	1060	± 35.7	1038.7	100	49.1	98	-0.43

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.6	1.2	1.14	107	0.70
Arsenic	µg/l	0.623	± 0.0541	0.59	0.07	0.0571	94.7	-0.58
Lead	µg/l	0.977	± 0.0579	0.99	0.1	0.0696	101	0.18
Cadmium	µg/l	-	± -	0.008	0.002	-	-	-
Chromium	µg/l	2.16	± 0.142	2.242	0.2	0.19	104	0.45
Iron	µg/l	14.4	± 1.31	14.63	1.5	1.69	101	0.12
Copper	µg/l	5.09	± 0.232	4.97	0.5	0.318	97.6	-0.38
Manganese	µg/l	4.26	± 0.206	4.27	0.4	0.248	100	0.05
Nickel	µg/l	1.67	± 0.106	1.728	0.15	0.132	104	0.46
Mercury	µg/l	1.09	± 0.0893	1.1825	0.0005	0.0893	108	0.98
Selenium	µg/l	3.92	± 0.153	3.88	0.4	0.177	99	-0.22
Uranium	µg/l	1.11	± 0.046	1.048	0.1	0.0573	94.8	-1.01
Zinc	µg/l	11.8	± 0.714	12.4	1.2	0.981	105	0.64



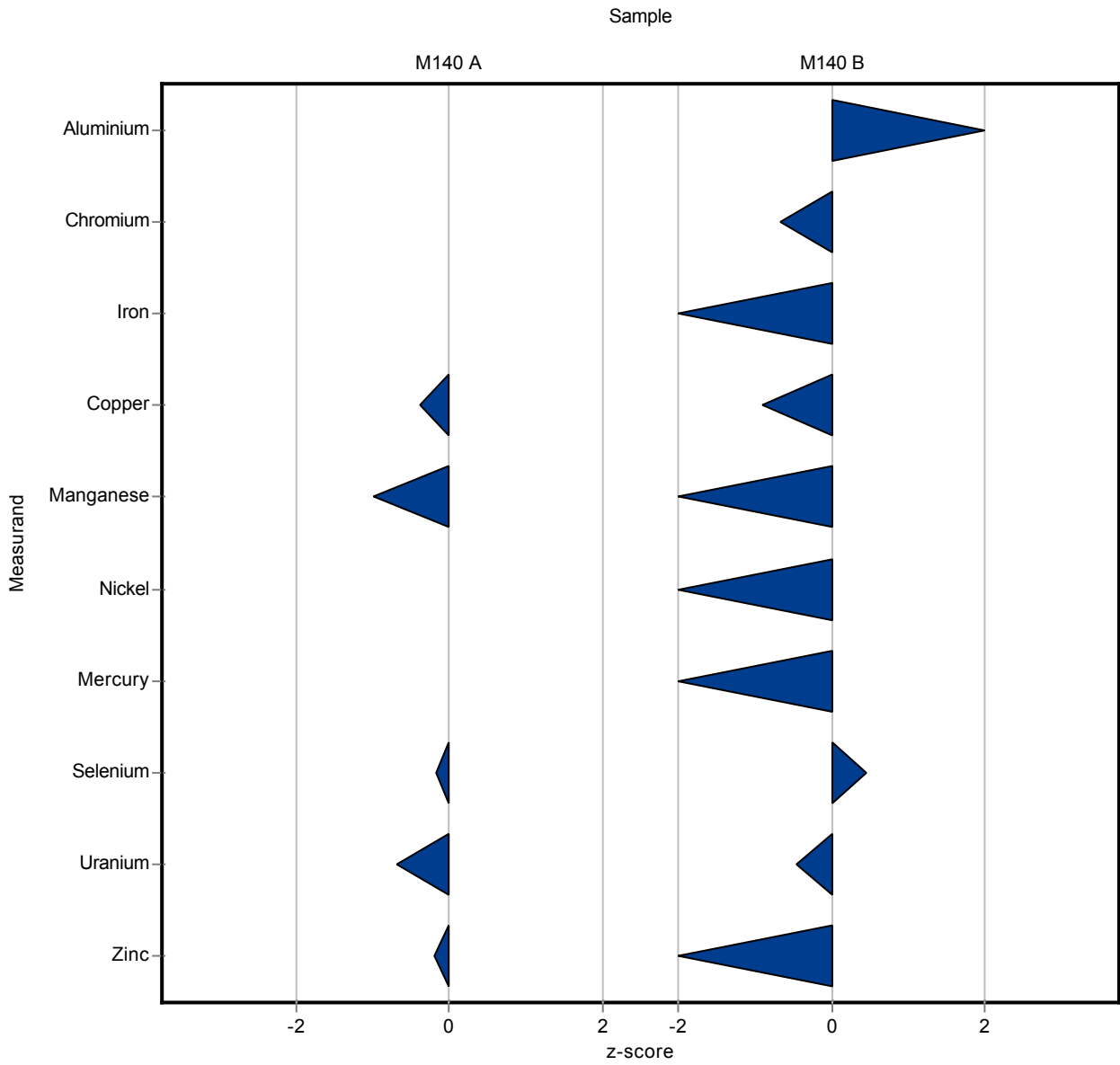
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<10 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<1 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	<1 (LOQ)	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	<10 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	13.5	3	0.729	98	-0.38
Manganese	µg/l	1.7	± 0.103	1.58	0.3	0.124	92.8	-0.99
Nickel	µg/l	0.85	± 0.19	<1 (LOQ)	-	0.21	-	-
Mercury	µg/l	-	± -	<0.05 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.68	0.6	0.341	98	-0.16
Uranium	µg/l	4.26	± 0.165	4.13	0.8	0.198	96.9	-0.67
Zinc	µg/l	1060	± 35.7	1050	200	49.1	99.1	-0.20

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	13	2	1.14	120	1.93
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	<1 (LOQ)	-	0.0696	-	-
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	2.03	0.4	0.19	94.1	-0.67
Iron	µg/l	14.4	± 1.31	12.3	3	1.69	85.2	-1.26
Copper	µg/l	5.09	± 0.232	4.8	1	0.318	94.3	-0.92
Manganese	µg/l	4.26	± 0.206	3.97	0.8	0.248	93.2	-1.16
Nickel	µg/l	1.67	± 0.106	1.53	0.3	0.132	91.7	-1.04
Mercury	µg/l	1.09	± 0.0893	0.975	0.2	0.0893	89	-1.34
Selenium	µg/l	3.92	± 0.153	4	0.8	0.177	102	0.46
Uranium	µg/l	1.11	± 0.046	1.08	0.2	0.0573	97.7	-0.45
Zinc	µg/l	11.8	± 0.714	10.5	3	0.981	89.2	-1.30



The following results were achieved:

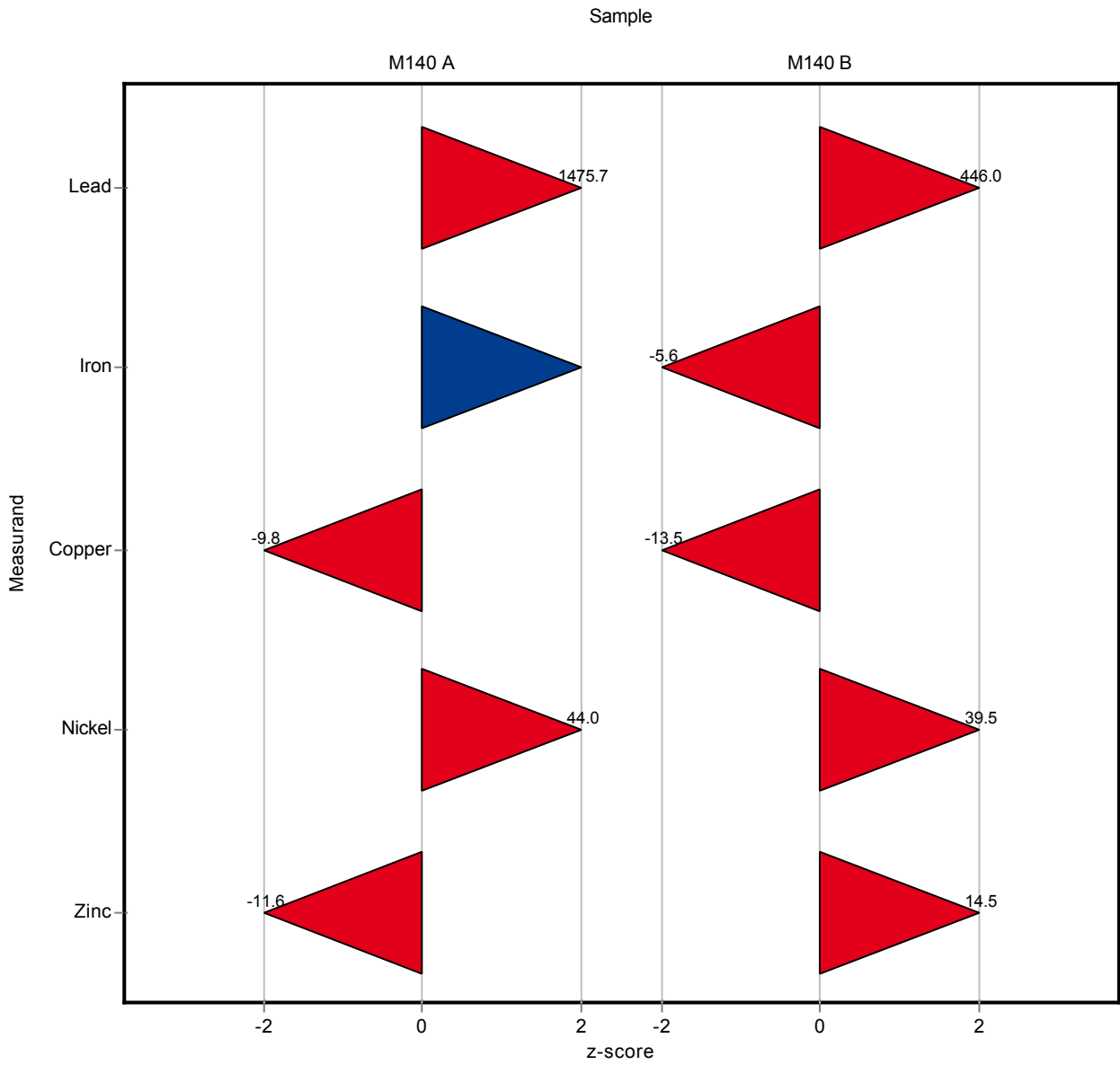
Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	49	4	0.0331	33100	1480.00
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	7.3	1	1.73	173	1.78
Copper	µg/l	13.8	± 0.547	6.6	1	0.729	47.9	-9.84
Manganese	µg/l	1.7	± 0.103	<0.4 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	10.1	2	0.21	1190	44.00
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	491	40	49.1	46.3	-11.60

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	32	3	0.0696	3270	446.00
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	4.9	0.7	1.69	34	-5.63
Copper	µg/l	5.09	± 0.232	0.8	0.08	0.318	15.7	-13.50
Manganese	µg/l	4.26	± 0.206	<0.4 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	6.9	1.4	0.132	414	39.50
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	26	2.5	0.981	221	14.50





The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	-	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	-	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	-	-	1.14	-	-
Arsenic	µg/l	0.623	± 0.0541	-	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-

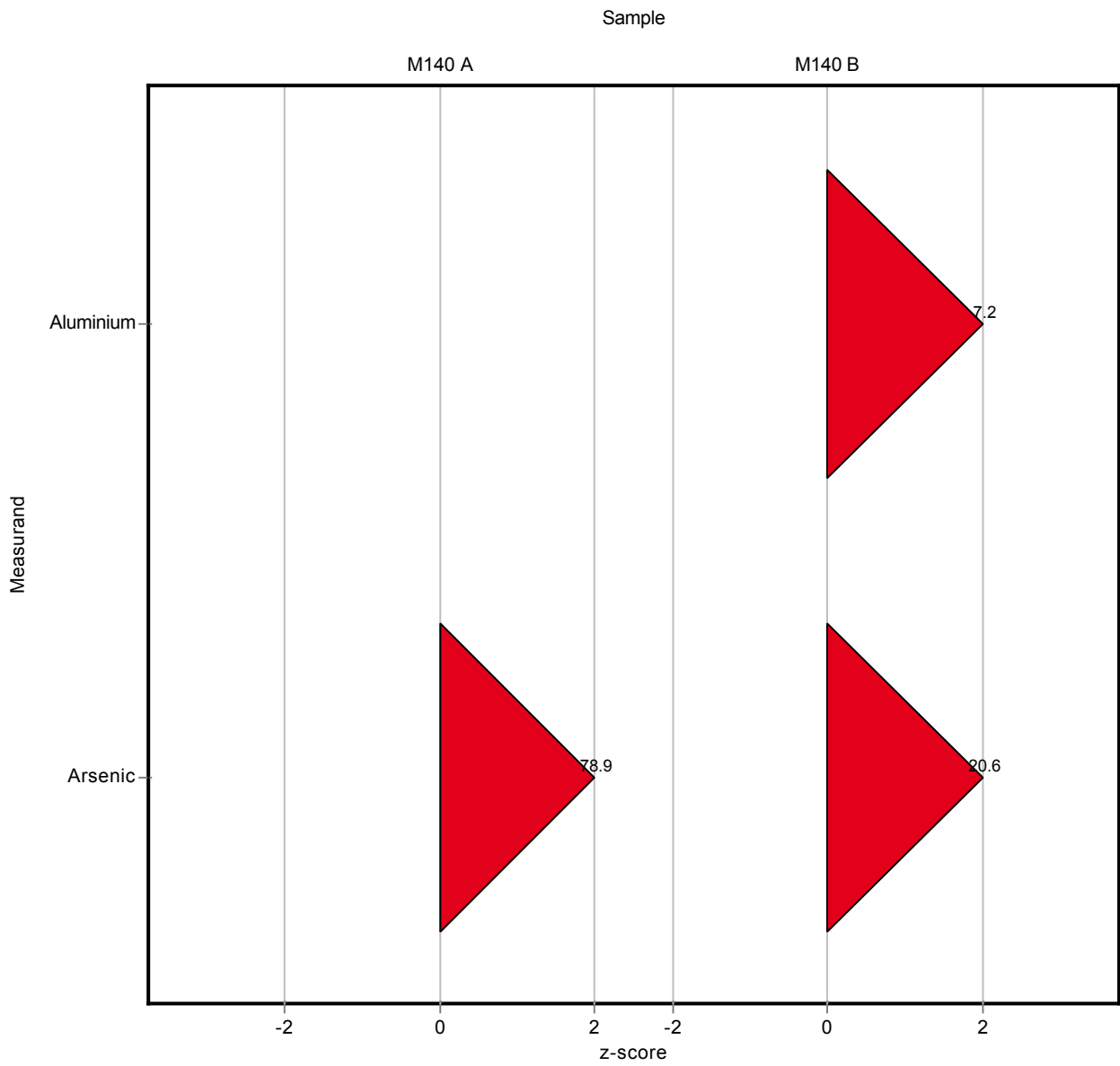
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	18.5	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	5.025	-	0.0603	1890	78.90
Lead	µg/l	0.148	± 0.0314	-	-	0.0331	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	-	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	-	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	-	-	0.729	-	-
Manganese	µg/l	1.7	± 0.103	-	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	-	-	0.21	-	-
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	-	-	0.341	-	-
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	-	-	49.1	-	-

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	19	-	1.14	176	7.18
Arsenic	µg/l	0.623	± 0.0541	1.8	-	0.0571	289	20.60
Lead	µg/l	0.977	± 0.0579	-	-	0.0696	-	-
Cadmium	µg/l	-	± -	-	-	-	-	-
Chromium	µg/l	2.16	± 0.142	-	-	0.19	-	-
Iron	µg/l	14.4	± 1.31	-	-	1.69	-	-
Copper	µg/l	5.09	± 0.232	-	-	0.318	-	-
Manganese	µg/l	4.26	± 0.206	-	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	-	-	0.132	-	-
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	-	-	0.177	-	-
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	-	-	0.981	-	-



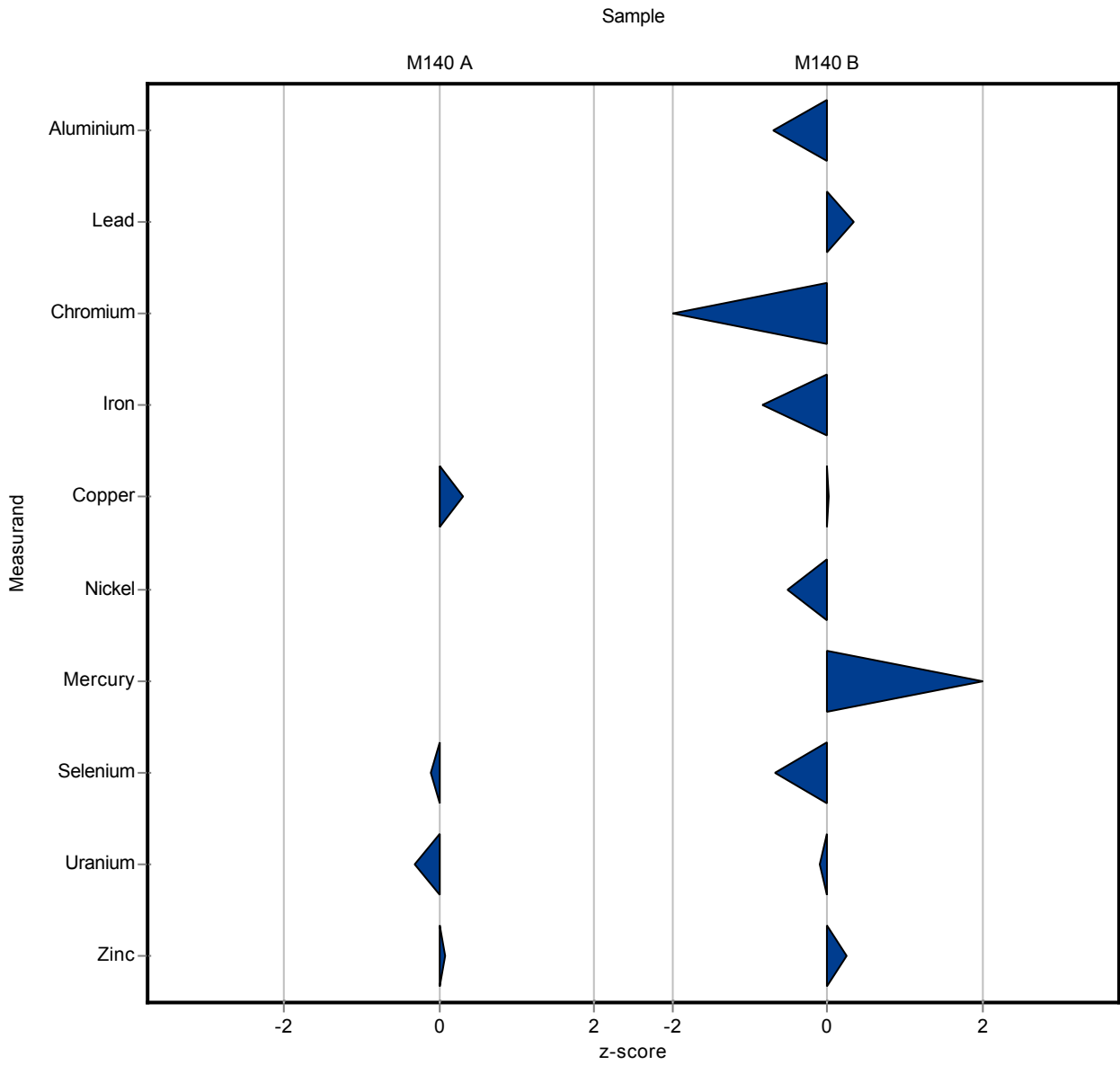
The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<10 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	<1 (LOQ)	-	0.0331	-	-
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	<1 (LOQ)	-	0.0552	-	-
Iron	µg/l	4.22	± 1.44	<10 (LOQ)	-	1.73	-	-
Copper	µg/l	13.8	± 0.547	14	1.4	0.729	102	0.31
Manganese	µg/l	1.7	± 0.103	<5 (LOQ)	-	0.124	-	-
Nickel	µg/l	0.85	± 0.19	<1 (LOQ)	-	0.21	-	-
Mercury	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.7	0.2	0.341	98.8	-0.10
Uranium	µg/l	4.26	± 0.165	4.2	0.4	0.198	98.5	-0.32
Zinc	µg/l	1060	± 35.7	1063	100	49.1	100	0.07

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	10	1	1.14	92.6	-0.70
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	1	0.1	0.0696	102	0.33
Cadmium	µg/l	-	± -	<0.2 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	1.8	0.18	0.19	83.5	-1.88
Iron	µg/l	14.4	± 1.31	13	1.3	1.69	90.1	-0.84
Copper	µg/l	5.09	± 0.232	5.1	0.5	0.318	100	0.02
Manganese	µg/l	4.26	± 0.206	<5 (LOQ)	-	0.248	-	-
Nickel	µg/l	1.67	± 0.106	1.6	0.16	0.132	95.9	-0.51
Mercury	µg/l	1.09	± 0.0893	1.2	0.12	0.0893	110	1.18
Selenium	µg/l	3.92	± 0.153	3.8	0.38	0.177	97	-0.67
Uranium	µg/l	1.11	± 0.046	1.1	0.1	0.0573	99.5	-0.10
Zinc	µg/l	11.8	± 0.714	12	1.2	0.981	102	0.23



The following results were achieved:

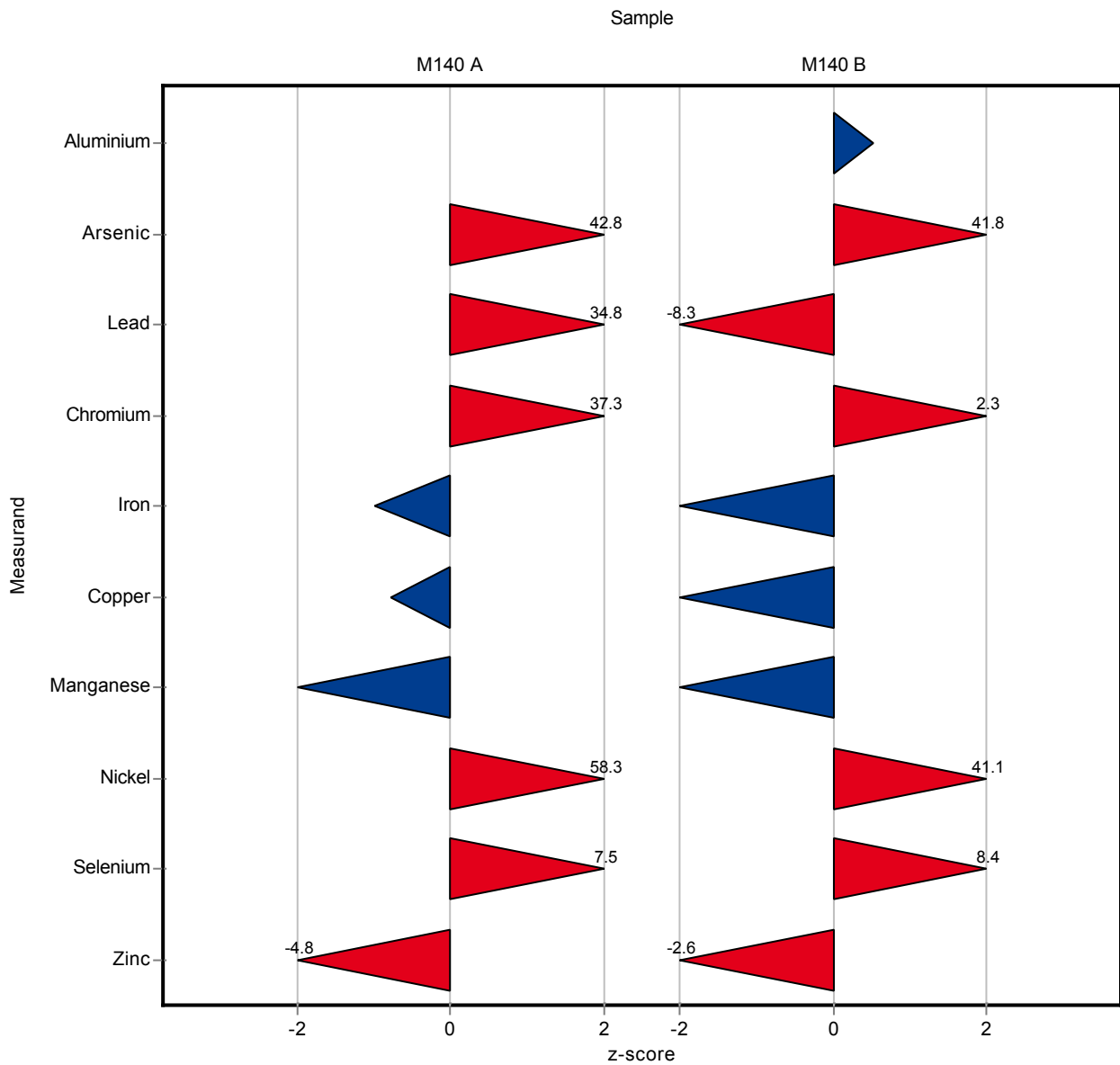
Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	1.6	0.16	-	-	-
Arsenic	µg/l	0.266	± 0.0739	2.85	0.27	0.0603	1070	42.80
Lead	µg/l	0.148	± 0.0314	1.3	0.16	0.0331	879	34.80
Cadmium	µg/l	-	± -	0.13	0.017	-	-	-
Chromium	µg/l	0.739	± 0.0552	2.8	0.34	0.0552	379	37.30
Iron	µg/l	4.22	± 1.44	2.5	0.3	1.73	59.2	-0.99
Copper	µg/l	13.8	± 0.547	13.2	1.31	0.729	95.8	-0.79
Manganese	µg/l	1.7	± 0.103	1.5	0.17	0.124	88.1	-1.64
Nickel	µg/l	0.85	± 0.19	13.1	1.59	0.21	1540	58.30
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	5.3	0.5	0.341	194	7.52
Uranium	µg/l	4.26	± 0.165	-	-	0.198	-	-
Zinc	µg/l	1060	± 35.7	825.2	111	49.1	77.9	-4.78

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	11.4	1.14	1.14	106	0.53
Arsenic	µg/l	0.623	± 0.0541	3.01	0.29	0.0571	483	41.80
Lead	µg/l	0.977	± 0.0579	0.4	0.05	0.0696	40.9	-8.30
Cadmium	µg/l	-	± -	0.23	0.03	-	-	-
Chromium	µg/l	2.16	± 0.142	2.6	0.31	0.19	121	2.34
Iron	µg/l	14.4	± 1.31	12.5	1.5	1.69	86.6	-1.14
Copper	µg/l	5.09	± 0.232	4.7	0.47	0.318	92.3	-1.23
Manganese	µg/l	4.26	± 0.206	3.8	0.44	0.248	89.2	-1.85
Nickel	µg/l	1.67	± 0.106	7.1	0.86	0.132	426	41.10
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	5.4	0.51	0.177	138	8.37
Uranium	µg/l	1.11	± 0.046	-	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	9.2	1.23	0.981	78.2	-2.62





The following results were achieved:

Sample: M140A

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	-	± -	<1 (LOQ)	-	-	-	-
Arsenic	µg/l	0.266	± 0.0739	<1 (LOQ)	-	0.0603	-	-
Lead	µg/l	0.148	± 0.0314	0.08	-	0.0331	54.1	-2.05
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	0.739	± 0.0552	0.3	-	0.0552	40.6	-7.94
Iron	µg/l	4.22	± 1.44	3.4	-	1.73	80.5	-0.47
Copper	µg/l	13.8	± 0.547	13.6	-	0.729	98.7	-0.24
Manganese	µg/l	1.7	± 0.103	0.2	-	0.124	11.7	-12.20
Nickel	µg/l	0.85	± 0.19	0.5	-	0.21	58.8	-1.66
Mercury	µg/l	-	± -	-	-	-	-	-
Selenium	µg/l	2.73	± 0.274	2.1	-	0.341	76.8	-1.86
Uranium	µg/l	4.26	± 0.165	2	-	0.198	46.9	-11.40
Zinc	µg/l	1060	± 35.7	1263.7	-	49.1	119	4.16

Sample: M140B

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Aluminium	µg/l	10.8	± 0.857	9.2	-	1.14	85.2	-1.40
Arsenic	µg/l	0.623	± 0.0541	<1 (LOQ)	-	0.0571	-	-
Lead	µg/l	0.977	± 0.0579	0.9	-	0.0696	92.1	-1.11
Cadmium	µg/l	-	± -	<0.1 (LOQ)	-	-	-	-
Chromium	µg/l	2.16	± 0.142	1.9	-	0.19	88.1	-1.35
Iron	µg/l	14.4	± 1.31	13.6	-	1.69	94.2	-0.49
Copper	µg/l	5.09	± 0.232	4.8	-	0.318	94.3	-0.92
Manganese	µg/l	4.26	± 0.206	2.9	-	0.248	68.1	-5.48
Nickel	µg/l	1.67	± 0.106	1.4	-	0.132	83.9	-2.02
Mercury	µg/l	1.09	± 0.0893	-	-	0.0893	-	-
Selenium	µg/l	3.92	± 0.153	3	-	0.177	76.6	-5.19
Uranium	µg/l	1.11	± 0.046	<1 (LOQ)	-	0.0573	-	-
Zinc	µg/l	11.8	± 0.714	10.9	-	0.981	92.6	-0.89

