ENVIRONMENT AGENCY AUSTRIA umweltbundesamt

INTERLABORATORY COMPARISON EVALUATION

Polycyclic aromatic hydrocarbons – P16

incl. HC-Index and Phenoleindex

Sample dispatch on 14th April 2015

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1 Interlaboratory comparison P16

1.1 Participants and time schedule

- Number of registrations: 37
- Number of submitted data records: 37
- Dispatch of samples: 14th April 2015
- Closing date for submission of data: 13th May 2015

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

1.2 Sampling, sample material and distribution

One synthetic water and one groundwater was selected as sample material. The sampling of the groundwater was carried out on 13th April 2015. The sample was stored at < 4 °C until further processing. Both samples were partly spiked with specific substances. The samples were filled into bottles with continuous stirring. The homogeneous mixtures were dispatched on 14th April 2015. Each participant received:

- PAK: 2 samples, each sample filled in 2 x 1000 ml glass bottles
- HC-Index: 2 samples, each sample filled in 2 x 1000 ml glass bottles
- Phenoleindex: 2 samples, each sample filled in 2 x 1000 ml glass bottles

1.3 Check analysis

While filling the bottles, aliquots of each sample were collected at random moments for check analysis. Testing was performed 2 days after sample dispatch.

In the parameter-oriented evaluation, the results of the check testing are listed in the form of arithmetic means of the detected concentrations as check value ± U The uncertainties of the check value were calculated as extended uncertainties (k=2).

2 Evaluation

The analytical results had to be made available to the organiser not later than 20th May 2014. Any values received at a later date were not considered. A statistical evaluation of interlaboratory comparison data was only carried out if at least 6 valid results per parameter were available.

To evaluate the data, outliers were detected first by using the outlier test method according to Hampel. Values identified as conspicuous by this test method are marked specifically in the parameter-oriented evaluation. Further evaluation was performed in accordance with DIN ISO 5725-2. The adjusted average value (after removal of outliers) for all submitted results was used as a basis for the calculation of recovery rates.

z-Score

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

$$z - score = \frac{x_i - \overline{X}}{\sigma}$$

In this context,

x_i is the measurement value of the participating laboratory.

$\overline{X}$ is the adjusted average value (i.e. after removal of outliers) of the participants' results.

σ is the reproducibility standard deviation, calculated from the participants' results (after removal of outliers) in the relevant test round.

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

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

3 Representation and interpretation of measurement results

The parameter-oriented evaluation 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 illustrated in graphical form (see 5 Explanatory notes on the parameter oriented report)

4 Explanatory notes

None.

5 Explanatory notes on the parameter oriented report

Mean ± CI (99%)	***Mean of the participants results, without outliners ± 99% confidence interval***
Minimum – Maximum	***Minimum and maximum of all submitted results, after removal of outliners***
Check value ± U	***Mean of check value ± expanded uncertainty (k=2)***

Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	0.015	0.0001	89. 7	-0.5	
LC0002	0.0148	0.003	88. 5	0.6	
LC0003	-	-	-	-	
LC0004	-	-	-	-	
. . .					
LC0009	0.100	0.01	597.9	24.2	H

Symbols and abbreviations:

± U Results uncertainty as indicated by participant

\- *No data available*

Possible remarks in the column comments:

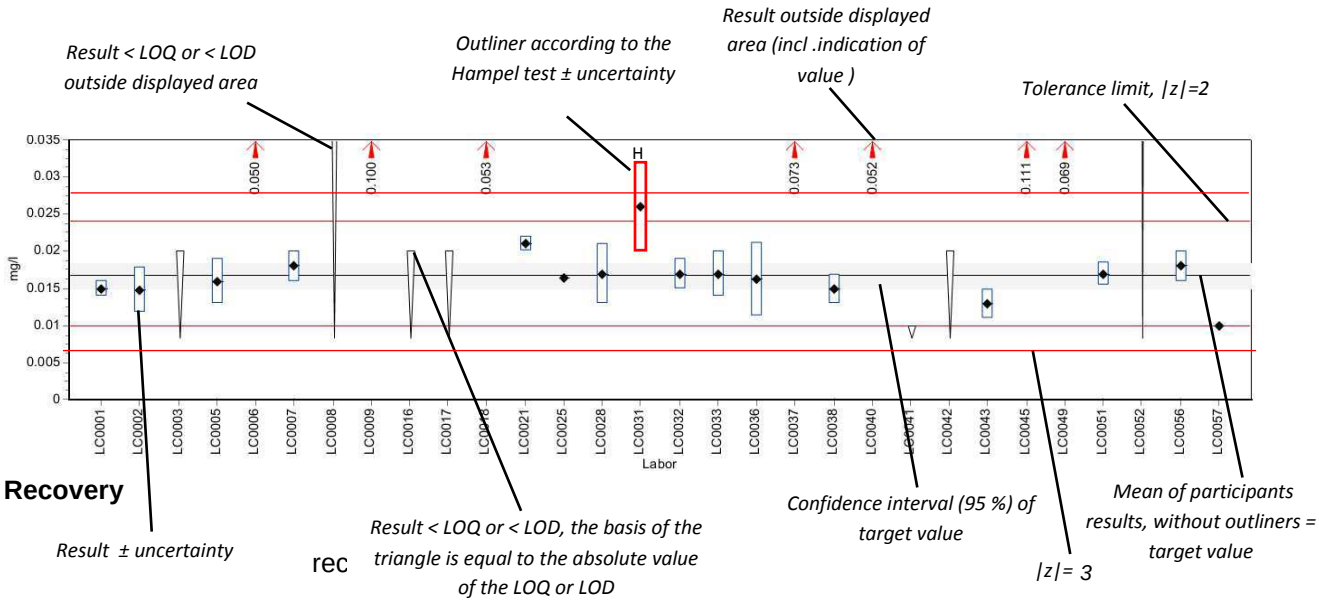
H Outliner according to Hampel-Test

FN False negative – For a result < LOQ (level of quantification): The absolute value of the LOQ fulfils the condition of an outliner according to the Hampel test.

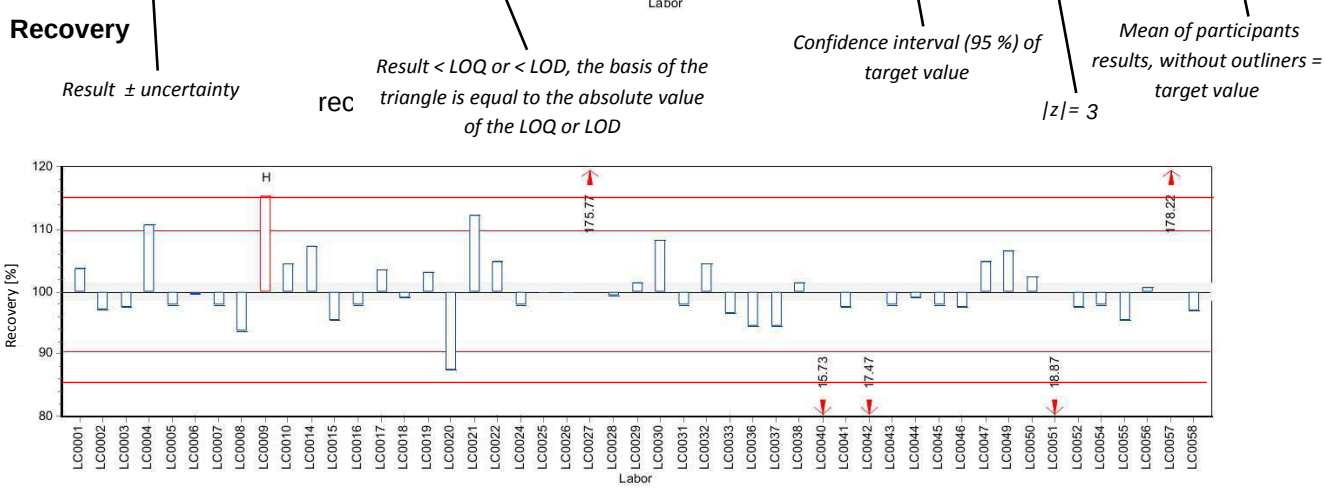
FP False positive – For parameters where no target value is available because of a too low analyte content (n < 6): Result that exceeds the median of the absolute values of the transmitted LOQs by more than 100 %.

Graphical presentation of results

Results

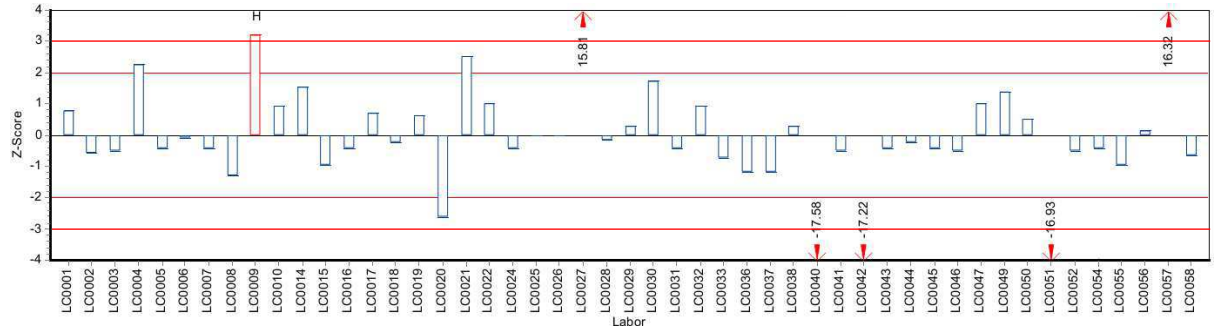


Recovery



z-Score

Presentation of results as z-scores.



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6 Summary of results, after removal of outliers

Parameter	Sample	Unit	Number of results for calculation	Number of outliners	Mean	±	CI (99%)	Minimum	Maximum	SD	RSD
Acenaphthene	P16 A - PAH	ng/l	19	4	86,5	±	34,7	20	219	50,4	58,3
	P16 B - PAH	ng/l	19	3	37,1	±	11	9,1	72	15,9	43
Acenaphthylene	P16 A - PAH	ng/l	19	0	79,1	±	17,8	30	118	25,8	32,6
	P16 B - PAH	ng/l	13	1	13,7	±	5,58	7	32,4	6,7	49
Anthracene	P16 A - PAH	ng/l	24	1	80,4	±	12,7	40	132	20,8	25,9
	P16 B - PAH	ng/l	22	2	49,8	±	8,97	22	77,1	14	28,2
Benzo[a]anthracene	P16 A - PAH	ng/l	22	4	37,8	±	9,1	16	72	14,2	37,7
	P16 B - PAH	ng/l	21	2	16,5	±	4,9	5	35,3	7,49	45,3
Benzo[a]pyrene	P16 A - PAH	ng/l	29	0	120	±	21,6	50	210	38,8	32,3
	P16 B - PAH	ng/l	26	1	44,6	±	9,21	22	87,2	15,7	35,1
Benzo[b]fluoranthene	P16 A - PAH	ng/l	25	1	44,9	±	7,65	19	69,4	12,8	28,4
	P16 B - PAH	ng/l	17	2	8,2	±	1,87	4,2	13	2,56	31,3
Benzo[g,h,i]perylene	P16 A - PAH	ng/l	27	0	47,2	±	9,13	12	87	15,8	33,5
	P16 B - PAH	ng/l	14	2	5,82	±	1,72	2,6	10,2	2,14	36,8
Benzo[k]fluoranthene	P16 A - PAH	ng/l	27	0	53	±	9	24,6	82	15,6	29,4
	P16 B - PAH	ng/l	17	2	6,94	±	1,64	3,3	11,4	2,25	32,5
Chrysene	P16 A - PAH	ng/l	23	3	51,4	±	8,2	25	83,9	13,1	25,5
	P16 B - PAH	ng/l	10	1	4,91	±	2,3	1,2	8,3	2,42	49,3
Dibenzo[a,h]anthracene	P16 A - PAH	ng/l	24	0	56,5	±	11,6	20	97,1	18,9	33,4
	P16 B - PAH	ng/l	17	2	7,8	±	1,97	4,8	14,3	2,71	34,7
Fluoranthene	P16 A - PAH	ng/l	29	0	110	±	20,5	40	210	36,7	33,3
	P16 B - PAH	ng/l	24	2	21,3	±	4,8	9,4	40	7,84	36,9
Fluorene	P16 A - PAH	ng/l	21	3	276	±	55,2	86	437,7	84,3	30,6
	P16 B - PAH	ng/l	21	2	38,1	±	9,24	15	70	14,1	37
Indeno[1,2,3-cd]pyrene	P16 A - PAH	ng/l	6	1	8,75	±	2,13	6	11,1	1,74	19,9
	P16 B - PAH	ng/l	5	0	-	±	-	1	2,25	-	-
Naphthalene	P16 A - PAH	ng/l	25	0	1710	±	489	1,3	3172	816	47,7

Summary of results, after removal of outliers: Polycyclic aromatic Hydrocarbons, HC-Index and Phenole-Index - P16

Parameter	Sample	Unit	Number of results for calculation	Number of outliners	Mean	± CI (99%)	Minimum	Maximum	SD	RSD
Naphthalene	P16 B - PAH	ng/l	22	3	178	± 37,5	50	274	58,6	33
Phenanthrene	P16 A - PAH	ng/l	21	4	291	± 44	130	454,2	67,2	23,1
	P16 B - PAH	ng/l	20	4	37,3	± 10,5	13	73,5	15,7	42
Pyrene	P16 A - PAH	ng/l	26	1	66,3	± 10,1	30	101	17,2	25,9
	P16 B - PAH	ng/l	11	1	7,67	± 3,82	2,5	18	4,22	55,1
HC-Index	P16 A - HC-Index	mg/l	21	0	0,767	± 0,187	0,39	1,42	0,285	37,2
	P16 B - HC-Index	mg/l	19	1	0,241	± 0,045	0,1	0,35	0,0653	27,1
Phenole index	P16 A - Phenole index	mg/l	5	1	-	± -	0,09225	0,112	-	-
	P16 B - Phenole index	mg/l	5	1	-	± -	0,03435	0,05	-	-

7 Parameter oriented report

Parameter oriented report

P16 A - PAH

Acenaphthene

Unit	ng/l
Mean ± Cl (99%)	86,5 ± 34,7
Minimum - Maximum	20 - 219
Check value ± U	67,1 ± 14,2

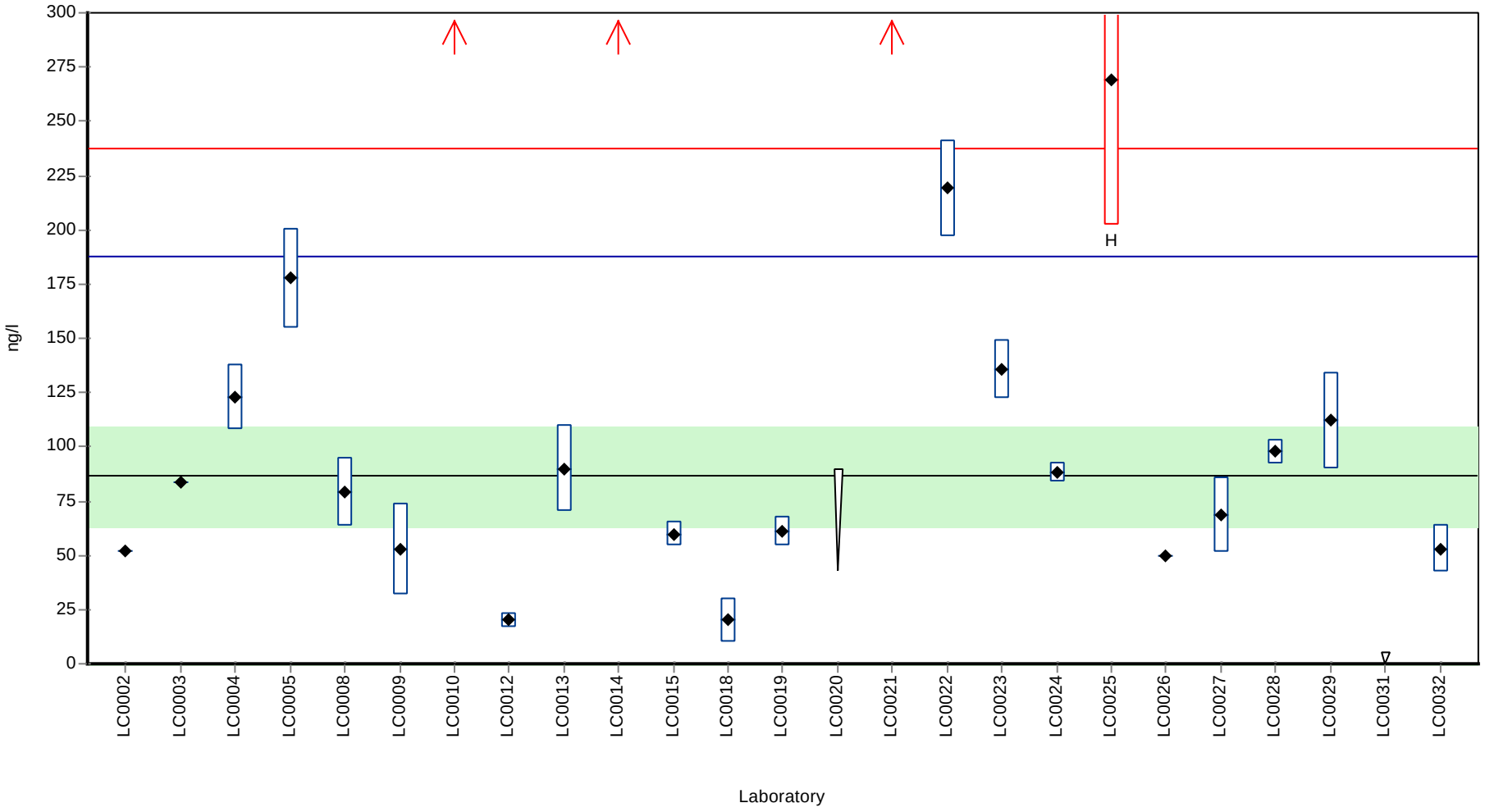
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	51,800	-	59,9	-0,7	
LC0003	83,600	-	96,7	-0,1	
LC0004	123,000	15,000	142,2	0,7	
LC0005	177,600	23,100	205,3	1,8	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	79,000	16,000	91,3	-0,1	
LC0009	53,000	21,000	61,3	-0,7	
LC0010	1400,000	567,000	1618,6	26,0	H
LC0011	-	-	-	-	
LC0012	20,000	3,170	23,1	-1,3	
LC0013	90,000	20,000	104,1	0,1	
LC0014	1387,900	458,000	1604,6	25,8	H
LC0015	59,900	6,000	69,3	-0,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	20,000	10,000	23,1	-1,3	
LC0019	61,000	7,100	70,5	-0,5	
LC0020	< 90 (LOQ)	-	-	-	
LC0021	420,000	105,000	485,6	6,6	H
LC0022	219,000	22,000	253,2	2,6	
LC0023	136,000	13,600	157,2	1,0	
LC0024	88,000	4,400	101,7	0,0	
LC0025	269,000	67,000	311,0	3,6	H
LC0026	50,000	-	57,8	-0,7	
LC0027	68,800	17,200	79,5	-0,4	
LC0028	97,680	5,798	112,9	0,2	
LC0029	112,000	22,000	129,5	0,5	
LC0030	-	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	53,000	11,000	61,3	-0,7	

Characteristics of parameter

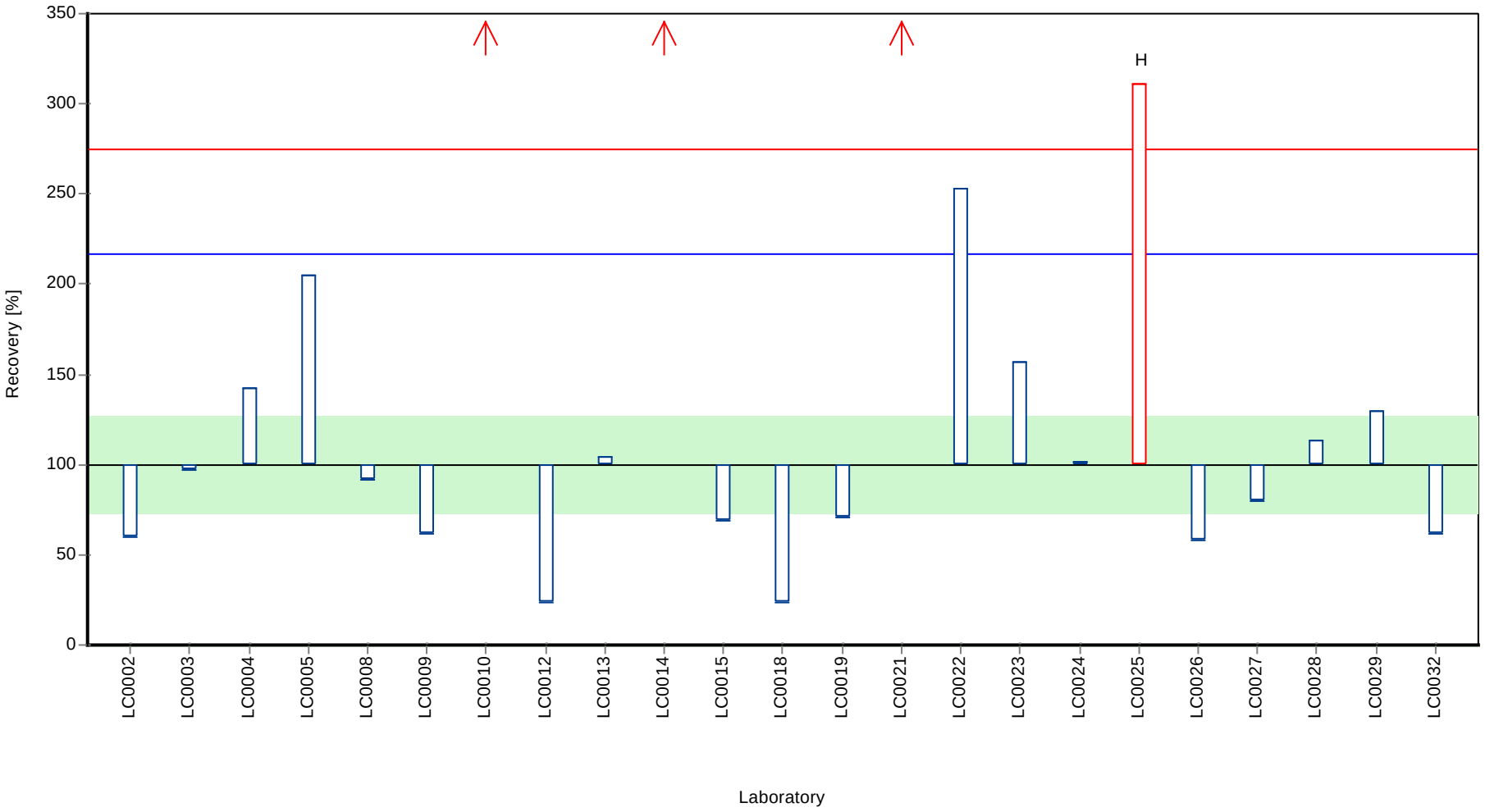
	all results	without outliners	Unit
Mean ± Cl (99%)	223 ± 238	86,5 ± 34,7	ng/l
Minimum	20	20	ng/l
Maximum	1400	219	ng/l
Standard deviation	380	50,4	ng/l
rel. Standard deviation	171	58,3	%
n	23	19	-

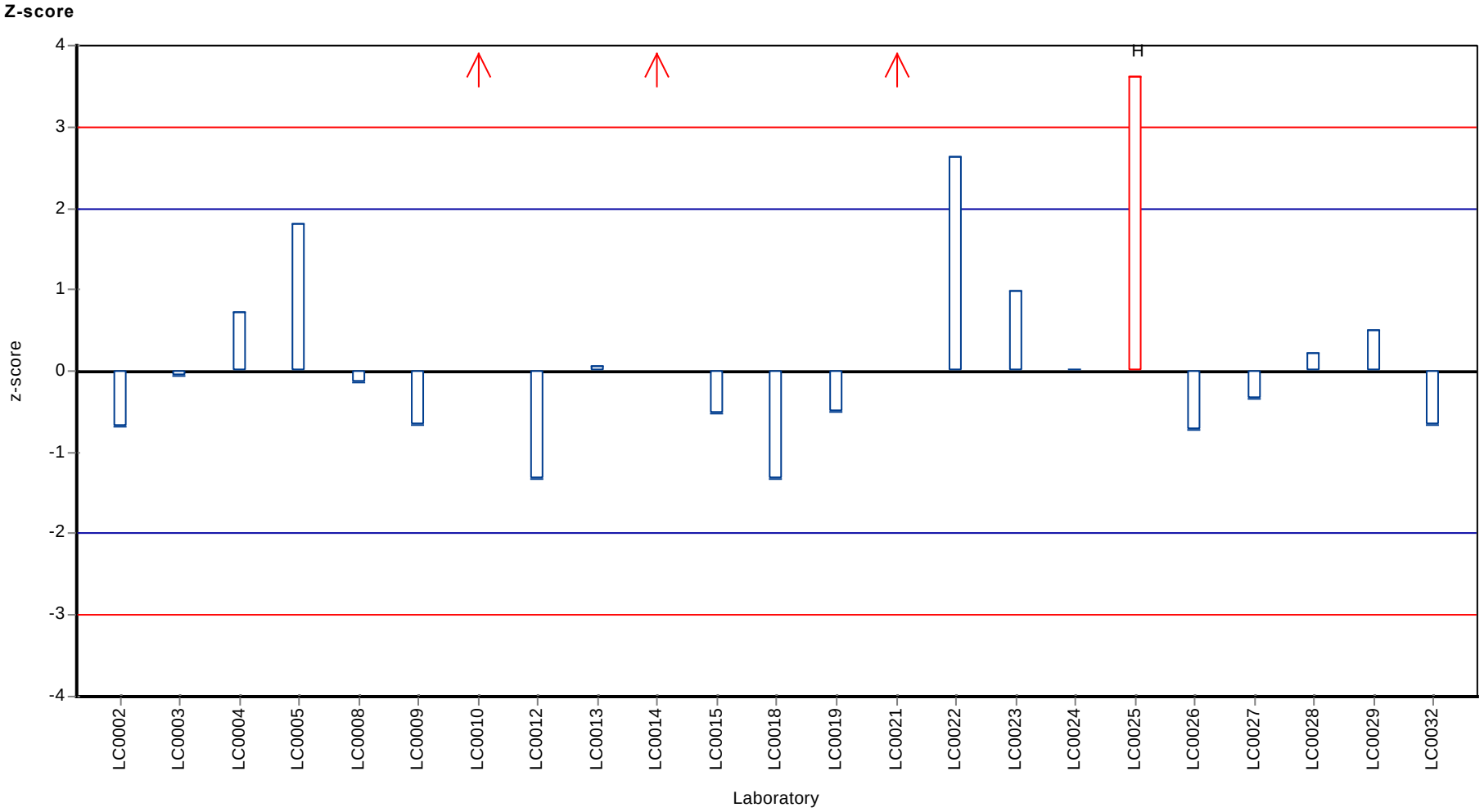
Graphical presentation of results

Results



Recovery rate

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LC0002
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LC0029
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Acenaphthene

Unit	ng/l
Mean ± Cl (99%)	37,1 ± 11
Minimum - Maximum	9,1 - 72
Check value ± U	34,1 ± 2,2

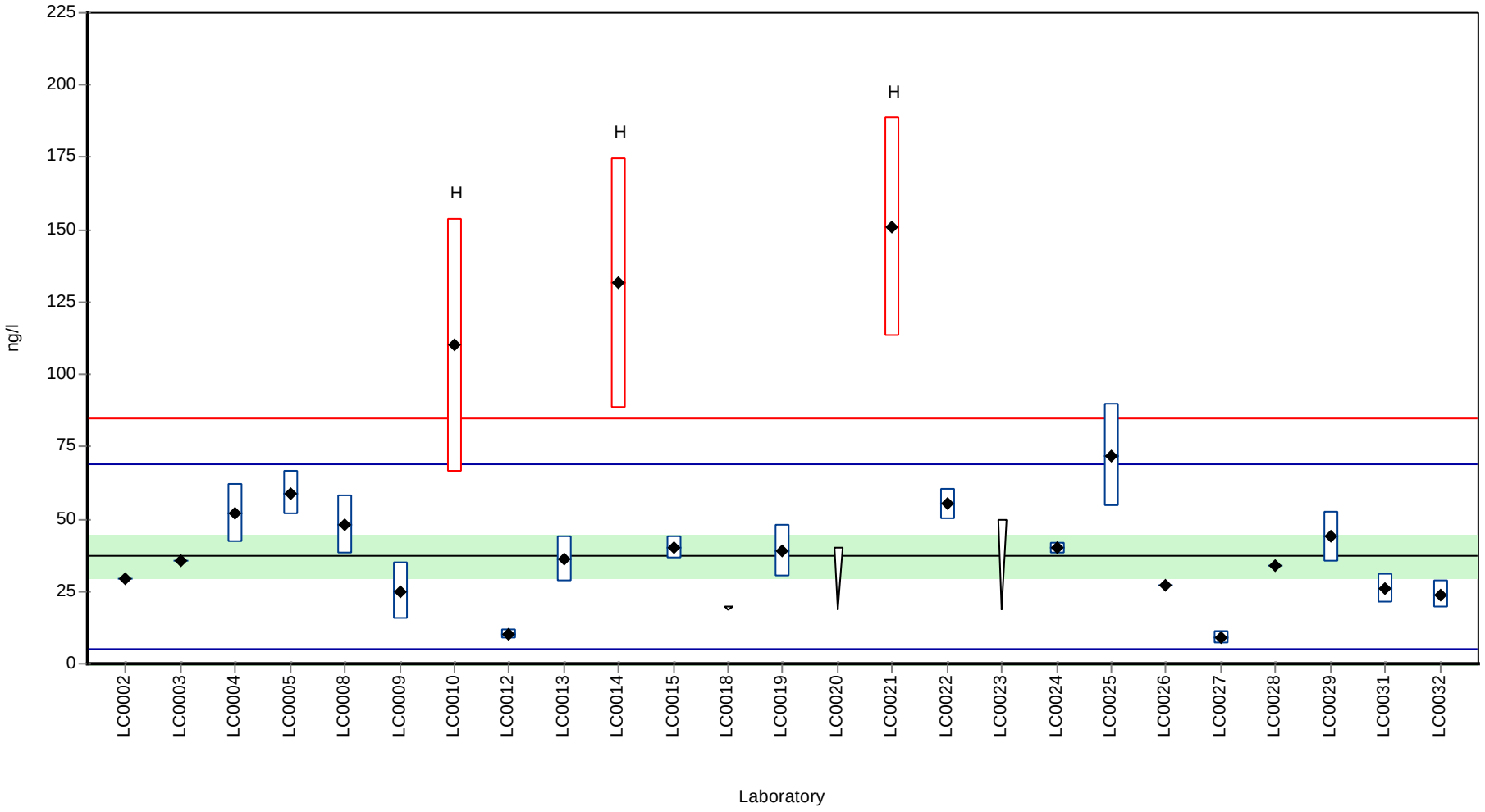
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	29,200	-	78,7	-0,5	
LC0003	35,400	-	95,5	-0,1	
LC0004	52,000	10,000	140,2	0,9	
LC0005	58,900	7,600	158,8	1,4	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	48,000	10,000	129,4	0,7	
LC0009	25,000	10,000	67,4	-0,8	
LC0010	110,000	44,000	296,6	4,6	H
LC0011	-	-	-	-	
LC0012	10,000	1,600	27,0	-1,7	
LC0013	36,000	8,000	97,1	-0,1	
LC0014	131,500	43,400	354,6	5,9	H
LC0015	40,100	4,000	108,1	0,2	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	39,000	9,200	105,2	0,1	
LC0020	< 40 (LOQ)	-	-	-	
LC0021	151,000	38,000	407,2	7,1	H
LC0022	55,200	5,520	148,8	1,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	40,000	2,000	107,9	0,2	
LC0025	72,000	18,000	194,1	2,2	
LC0026	26,900	-	72,5	-0,6	
LC0027	9,100	2,300	24,5	-1,8	
LC0028	33,810	0,212	91,2	-0,2	
LC0029	44,000	8,800	118,6	0,4	
LC0030	-	-	-	-	
LC0031	26,000	5,000	70,1	-0,7	
LC0032	24,000	4,700	64,7	-0,8	

Characteristics of parameter

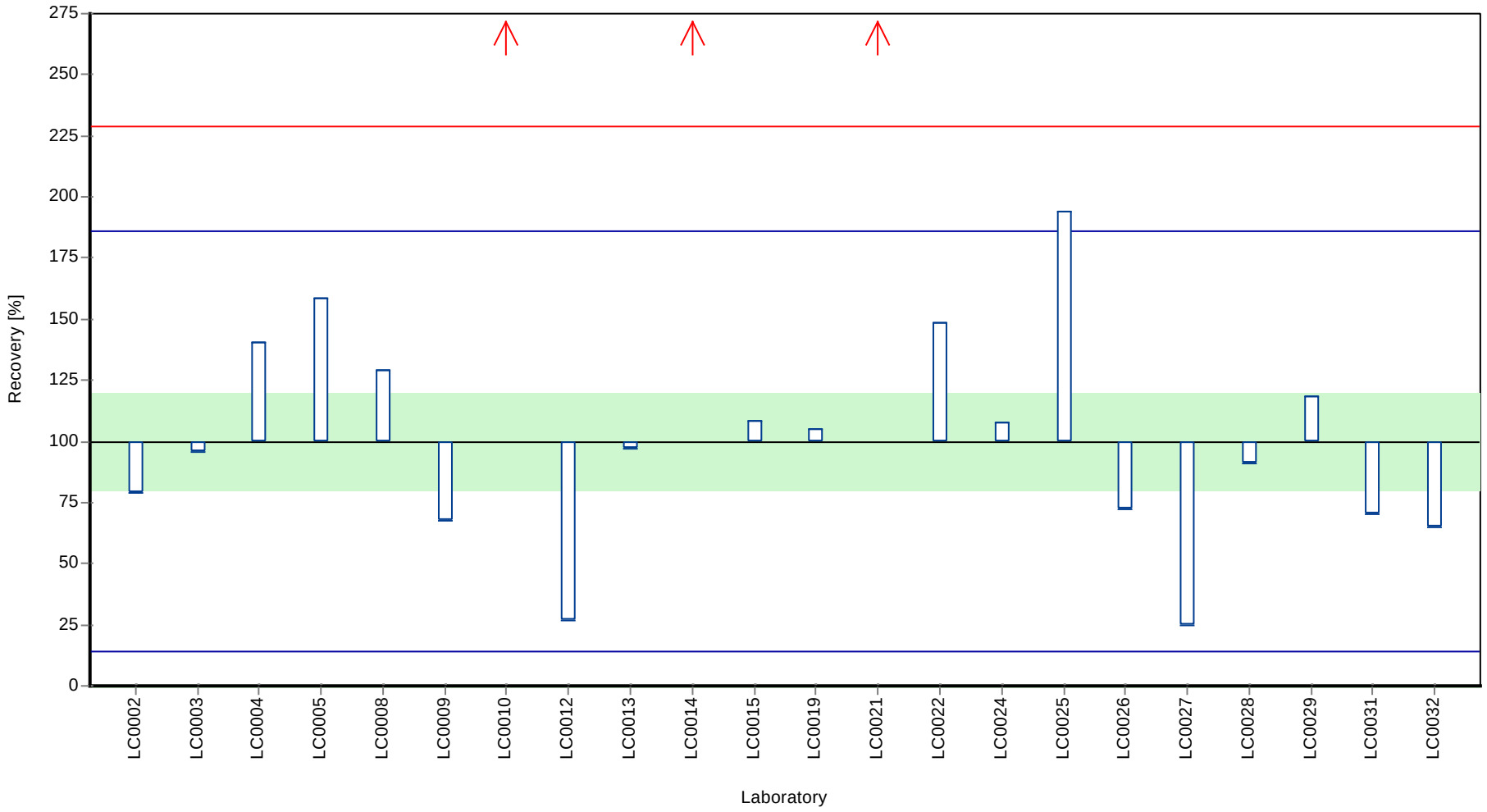
	all results	without outliners	Unit
Mean ± Cl (99%)	49,9 ± 23,4	37,1 ± 11	ng/l
Minimum	9,1	9,1	ng/l
Maximum	151	72	ng/l
Standard deviation	36,6	15,9	ng/l
rel. Standard deviation	73,5	43	%
n	22	19	-

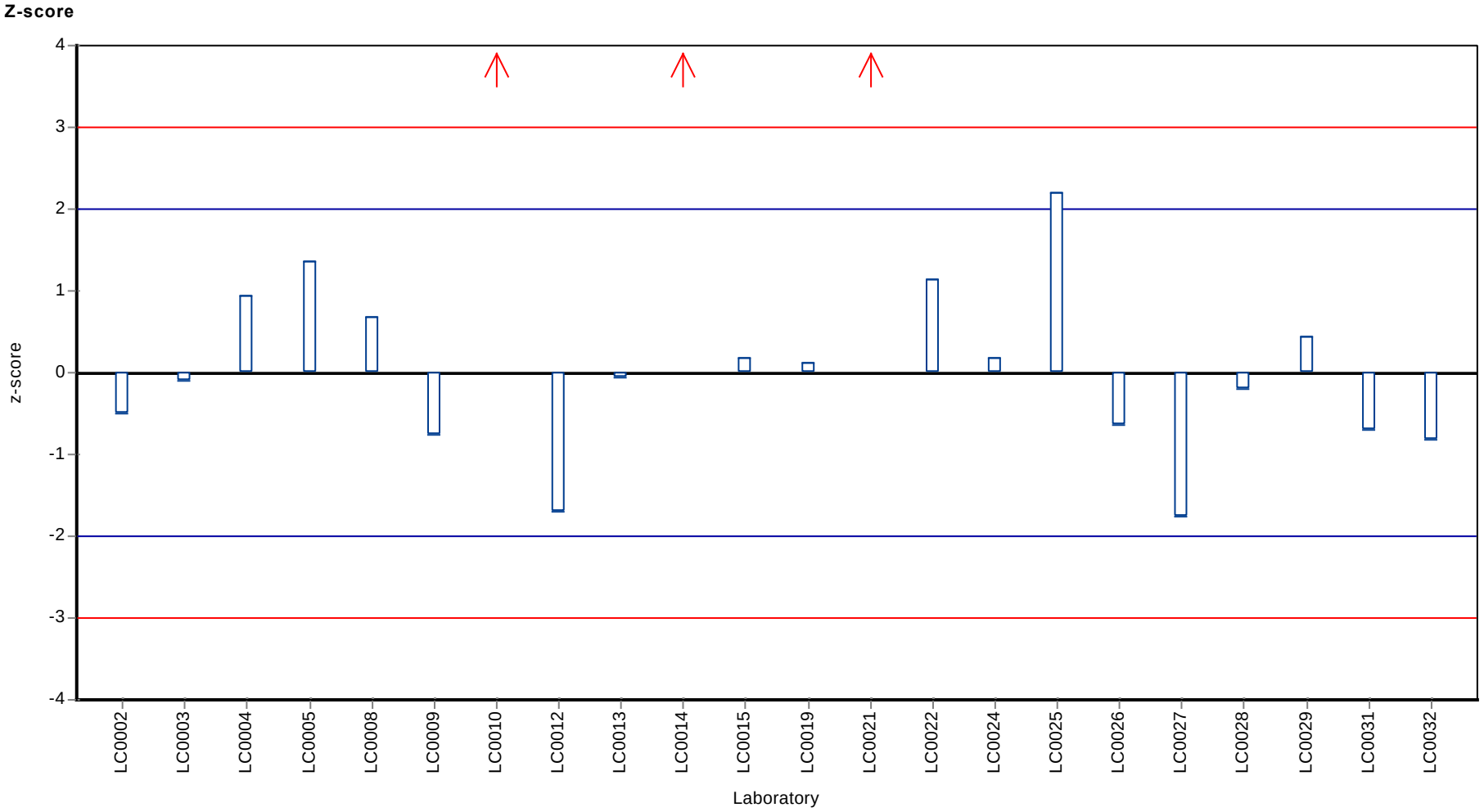
Graphical presentation of results

Results



Recovery rate

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LC0021
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LC0025
LC0026
LC0027
LC0028
LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Acenaphthylene

Unit	ng/l
Mean ± Cl (99%)	79,1 ± 17,8
Minimum - Maximum	30 - 118
Check value ± U	65,0 ± 4,6

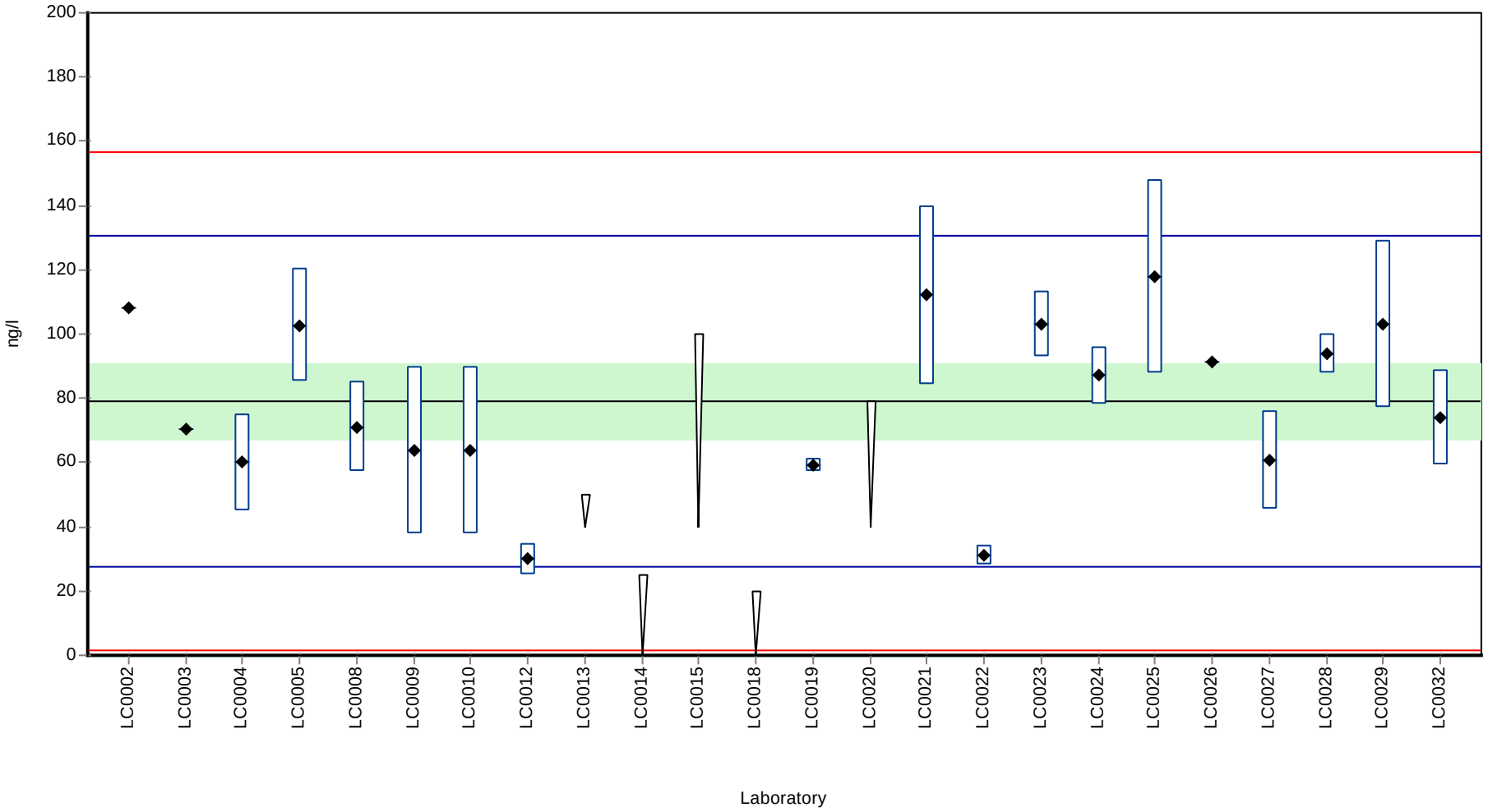
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	108,000	-	136,5	1,1	
LC0003	70,300	-	88,9	-0,3	
LC0004	60,000	15,000	75,9	-0,7	
LC0005	102,700	17,500	129,8	0,9	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	71,000	14,000	89,8	-0,3	
LC0009	64,000	26,000	80,9	-0,6	
LC0010	64,000	26,000	80,9	-0,6	
LC0011	-	-	-	-	
LC0012	30,000	4,750	37,9	-1,9	
LC0013	< 50 (LOQ)	-	-	-	
LC0014	< 25 (LOQ)	-	-	-	
LC0015	< 100 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	59,000	2,100	74,6	-0,8	
LC0020	< 79 (LOQ)	-	-	-	
LC0021	112,000	28,000	141,6	1,3	
LC0022	31,200	3,120	39,4	-1,9	
LC0023	103,000	10,300	130,2	0,9	
LC0024	87,000	8,700	110,0	0,3	
LC0025	118,000	30,000	149,2	1,5	
LC0026	91,200	-	115,3	0,5	
LC0027	60,600	15,200	76,6	-0,7	
LC0028	93,840	6,119	118,6	0,6	
LC0029	103,000	26,000	130,2	0,9	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	74,000	15,000	93,6	-0,2	

Characteristics of parameter

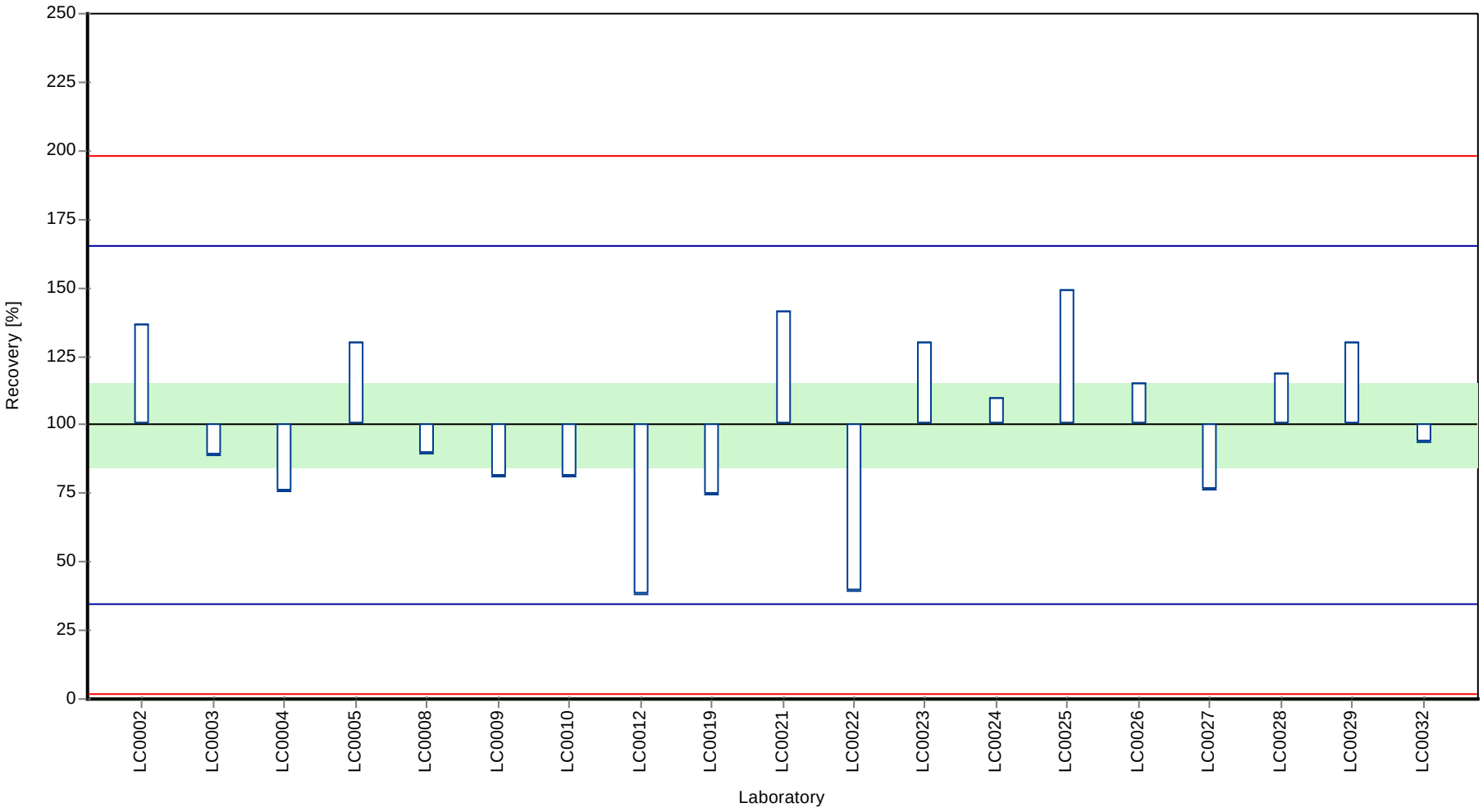
	all results	without outliners	Unit
Mean ± Cl (99%)	79,1 ± 17,8	79,1 ± 17,8	ng/l
Minimum	30	30	ng/l
Maximum	118	118	ng/l
Standard deviation	25,8	25,8	ng/l
rel. Standard deviation	32,6	32,6	%
n	19	19	-

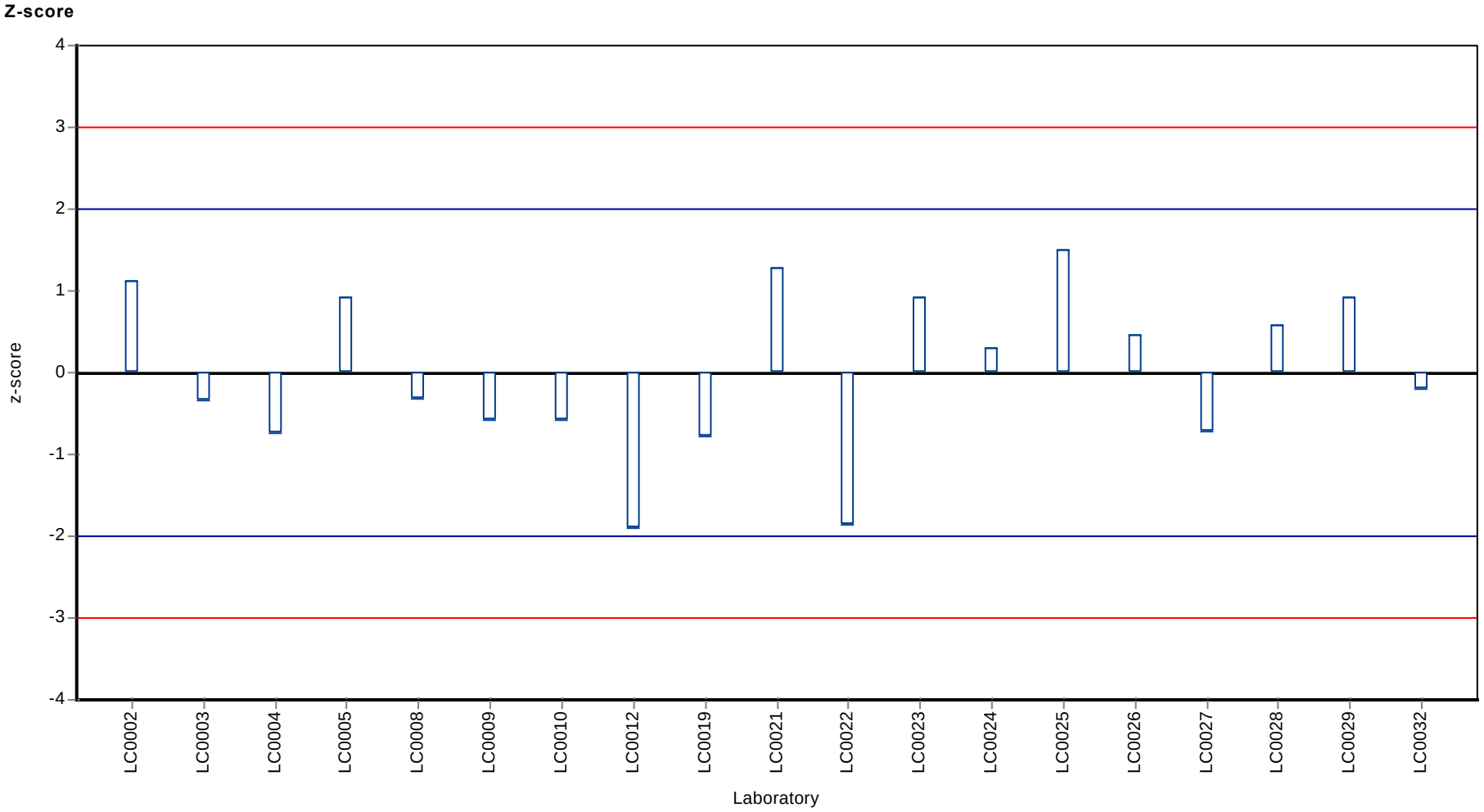
Graphical presentation of results

Results



Recovery rate

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LC0002
LC0003
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LC0021
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LC0023
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Acenaphthylene

Unit	ng/l
Mean ± Cl (99%)	13,7 ± 5,58
Minimum - Maximum	7 - 32,4
Check value ± U	7,6 ± 0,8

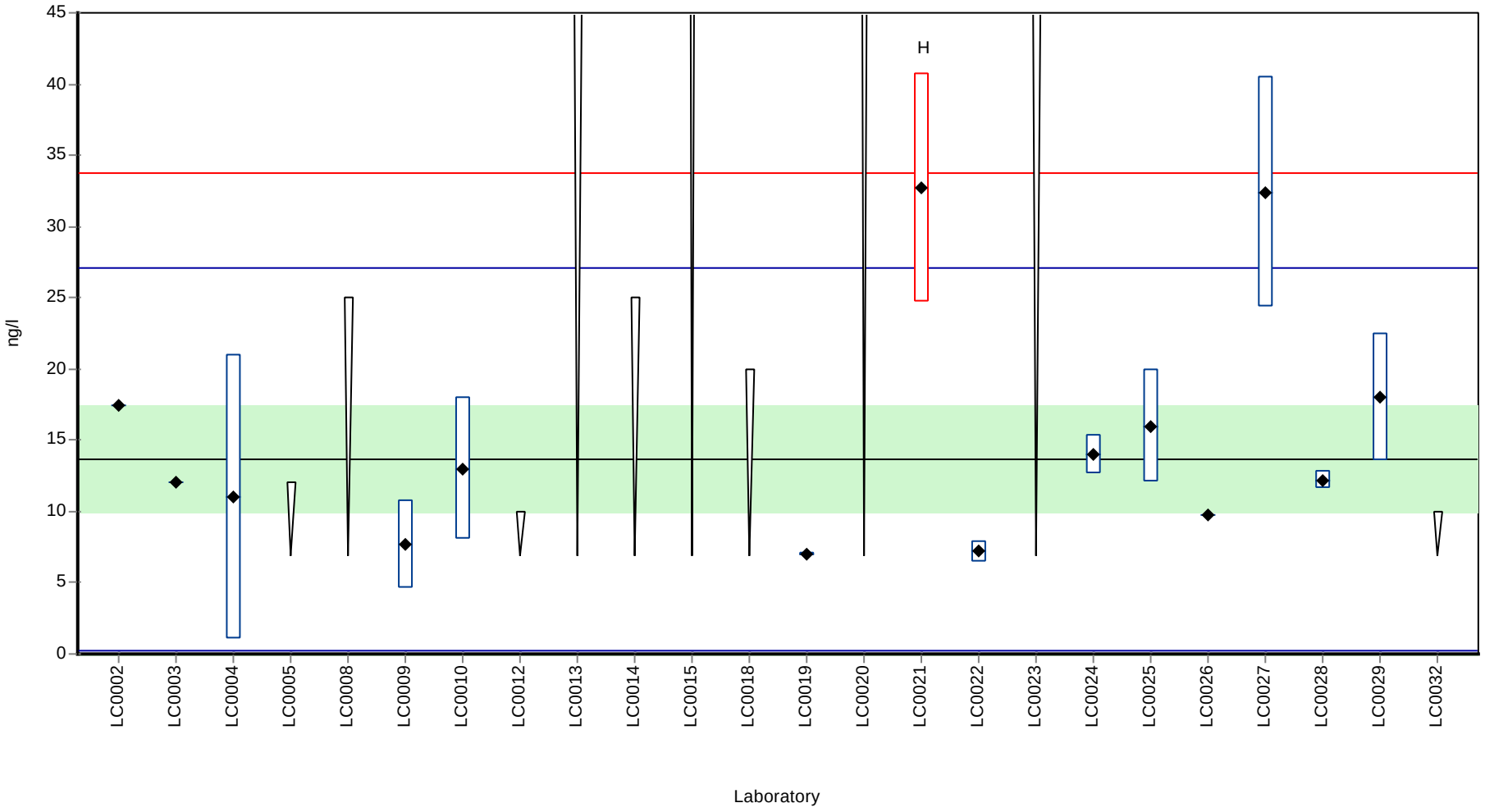
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	17,500	-	127,9	0,6	
LC0003	12,100	-	88,4	-0,2	
LC0004	11,000	10,000	80,4	-0,4	
LC0005	< 12 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	7,700	3,100	56,3	-0,9	
LC0010	13,000	5,000	95,0	-0,1	
LC0011	-	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	< 50 (LOQ)	-	-	-	
LC0014	< 25 (LOQ)	-	-	-	
LC0015	< 100 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	7,000	0,100	51,2	-1,0	
LC0020	< 79 (LOQ)	-	-	-	
LC0021	32,700	8,000	239,0	2,8	H
LC0022	7,200	0,720	52,6	-1,0	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	14,000	1,400	102,3	0,0	
LC0025	16,000	4,000	116,9	0,3	
LC0026	9,790	-	71,5	-0,6	
LC0027	32,400	8,100	236,8	2,8	
LC0028	12,210	0,666	89,2	-0,2	
LC0029	18,000	4,500	131,5	0,6	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

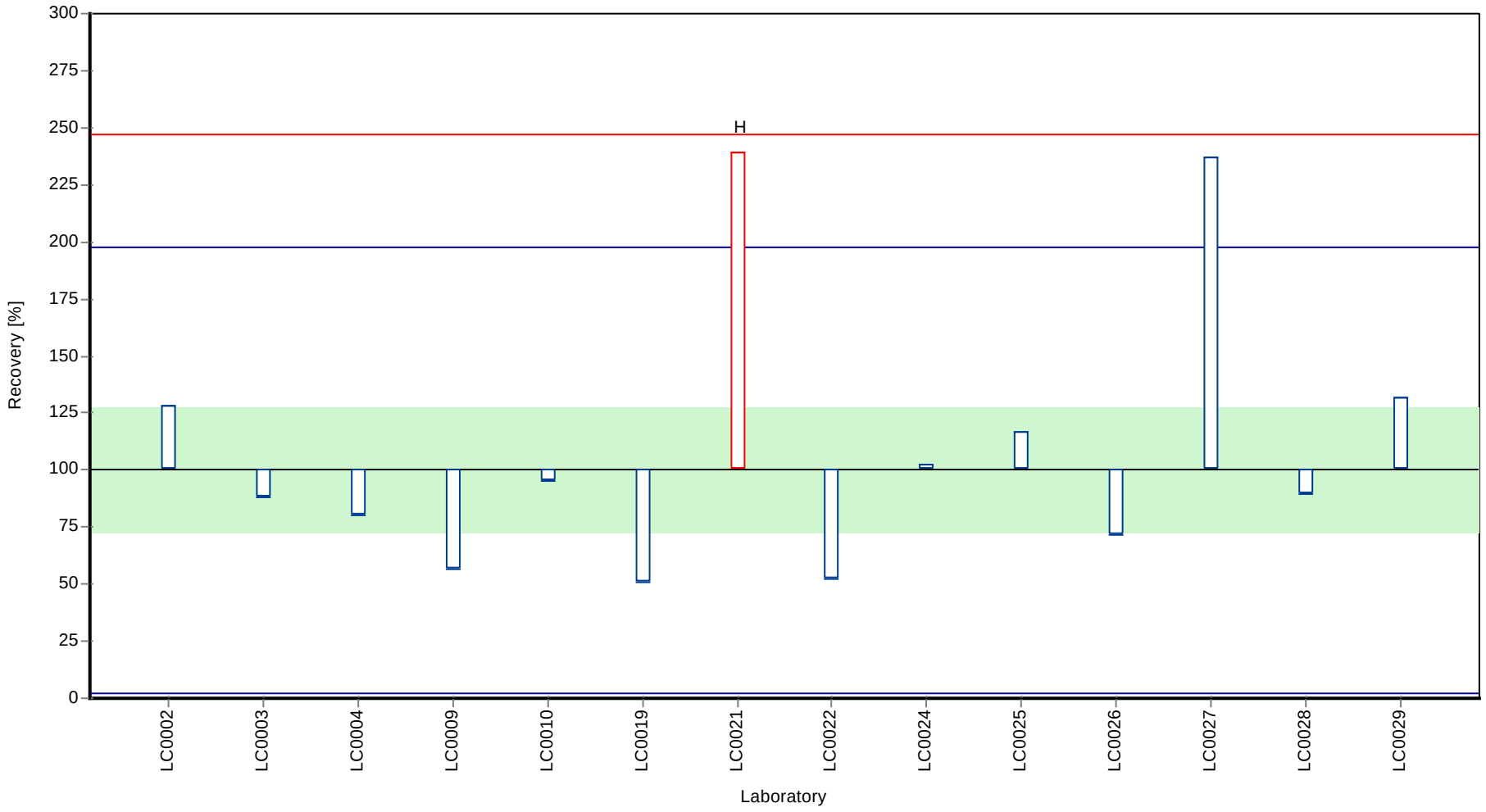
	all results	without outliners	Unit
Mean ± Cl (99%)	15 ± 6,58	13,7 ± 5,58	ng/l
Minimum	7	7	ng/l
Maximum	32,7	32,4	ng/l
Standard deviation	8,2	6,7	ng/l
rel. Standard deviation	54,5	49	%
n	14	13	-

Graphical presentation of results

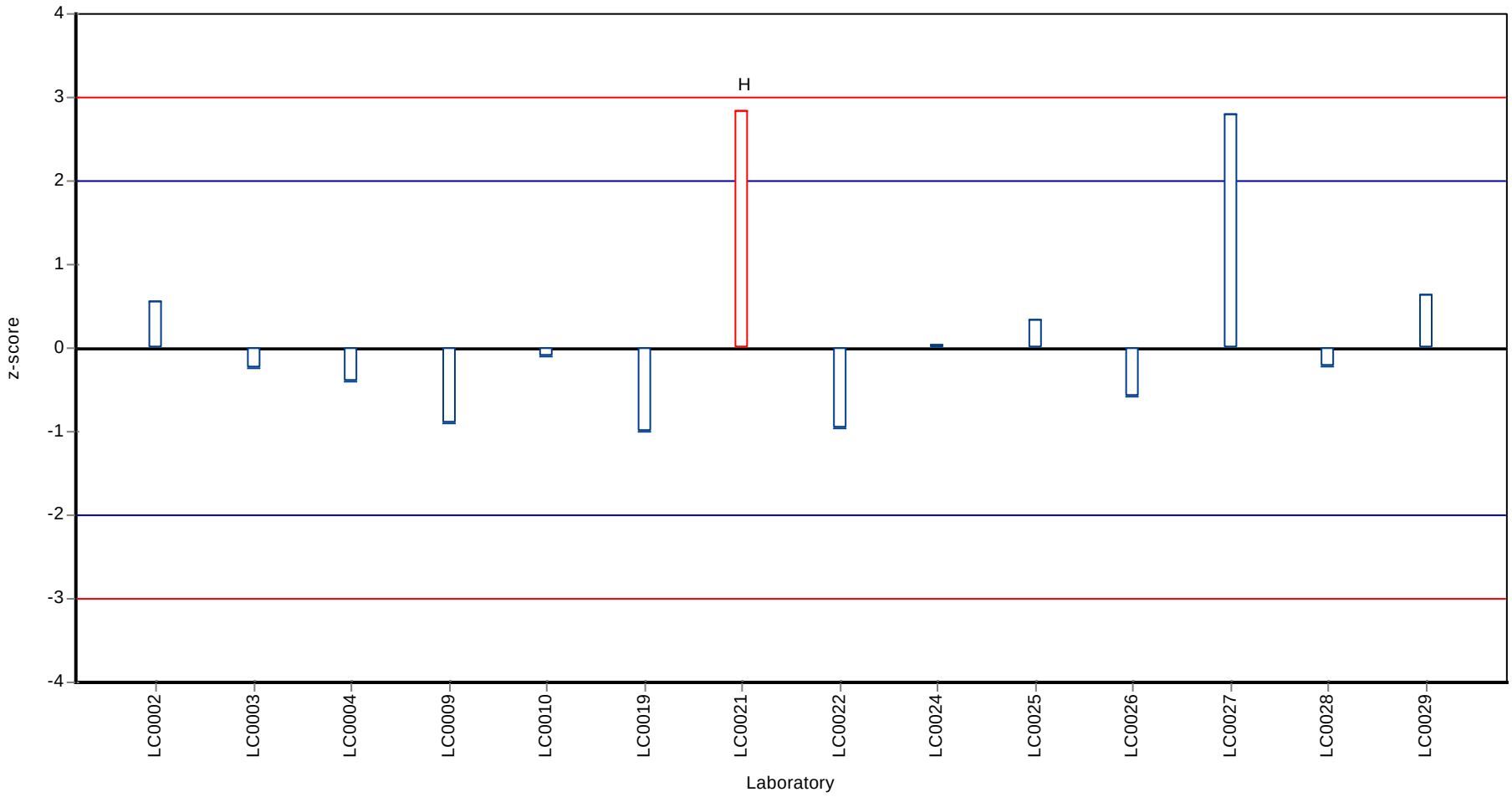
Results



Recovery rate



Z-score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z-score
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LC0002
LC0003
LC0004
LC0009
LC0010
LC0019
LC0021
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LC0028
LC0029
Laboratory

Parameter oriented report

P16 A - PAH

Anthracene

Unit	ng/l
Mean ± Cl (99%)	80,4 ± 12,7
Minimum - Maximum	40 - 132
Check value ± U	82,8 ± 12,1

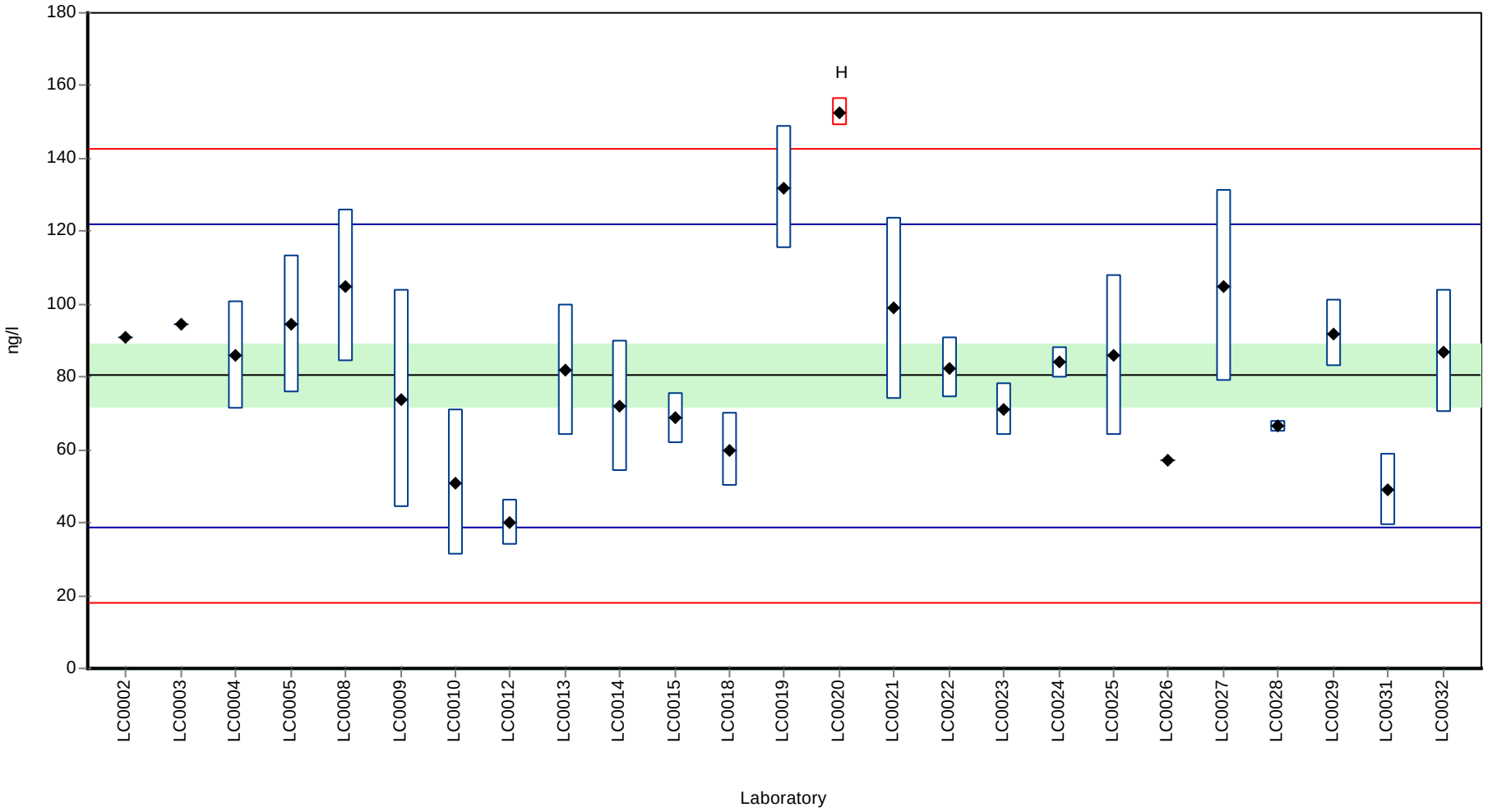
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	90,900	-	113,1	0,5	
LC0003	94,700	-	117,8	0,7	
LC0004	86,000	15,000	107,0	0,3	
LC0005	94,300	18,900	117,3	0,7	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	105,000	21,000	130,6	1,2	
LC0009	74,000	30,000	92,0	-0,3	
LC0010	51,000	20,000	63,4	-1,4	
LC0011	-	-	-	-	
LC0012	40,000	6,340	49,8	-1,9	
LC0013	82,000	18,000	102,0	0,1	
LC0014	72,000	18,000	89,6	-0,4	
LC0015	68,700	6,900	85,4	-0,6	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	60,000	10,000	74,6	-1,0	
LC0019	132,000	17,000	164,2	2,5	
LC0020	152,700	3,900	189,9	3,5	H
LC0021	98,800	25,000	122,9	0,9	
LC0022	82,500	8,300	102,6	0,1	
LC0023	71,000	7,100	88,3	-0,5	
LC0024	84,000	4,200	104,5	0,2	
LC0025	86,000	22,000	107,0	0,3	
LC0026	57,300	-	71,3	-1,1	
LC0027	105,000	26,300	130,6	1,2	
LC0028	66,400	1,442	82,6	-0,7	
LC0029	92,000	9,300	114,4	0,6	
LC0030	-	-	-	-	
LC0031	49,000	10,000	60,9	-1,5	
LC0032	87,000	17,000	108,2	0,3	

Characteristics of parameter

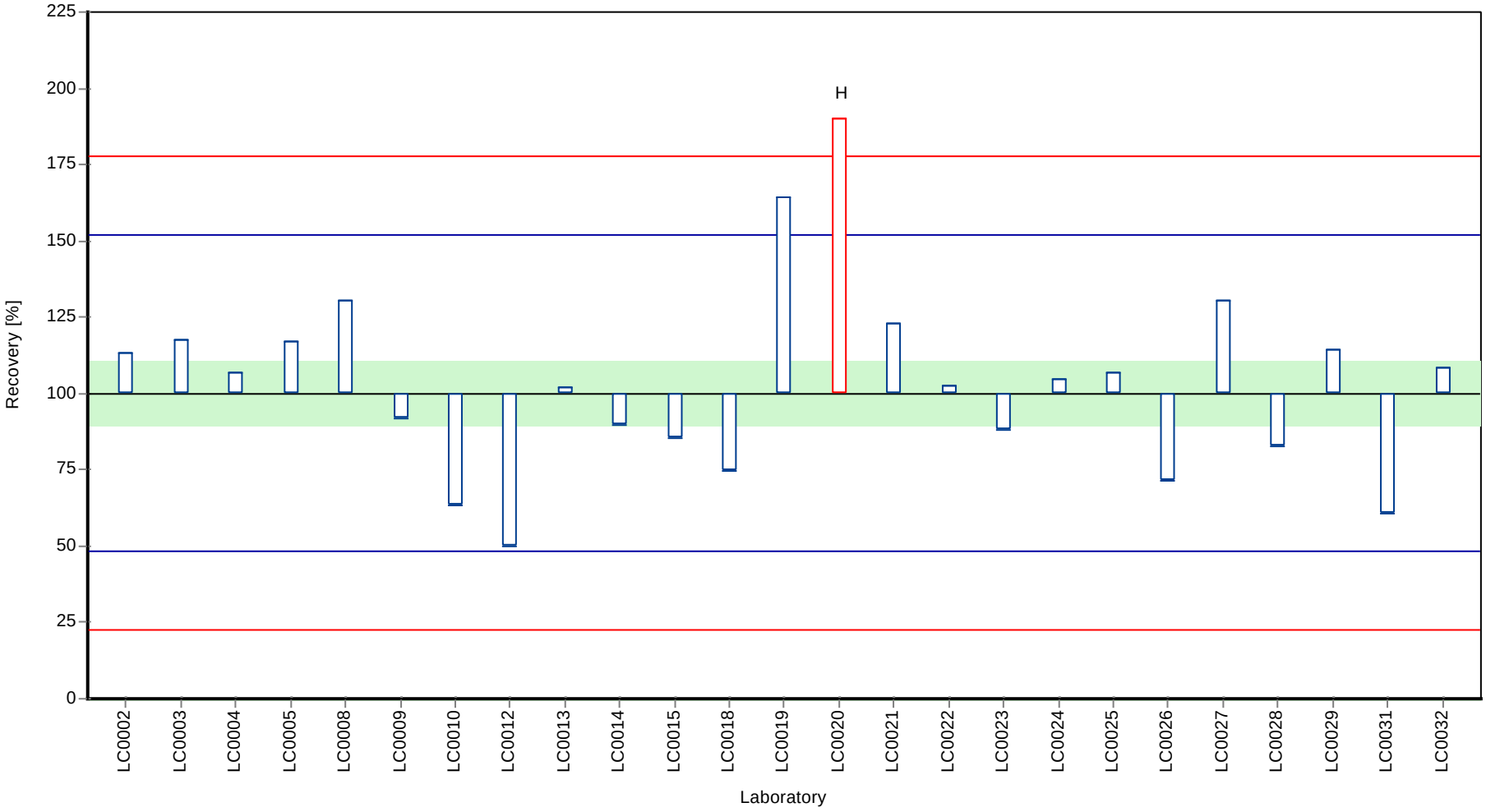
	all results	without outliners	Unit
Mean ± Cl (99%)	83,3 ± 15	80,4 ± 12,7	ng/l
Minimum	40	40	ng/l
Maximum	153	132	ng/l
Standard deviation	25	20,8	ng/l
rel. Standard deviation	30	25,9	%
n	25	24	-

Graphical presentation of results

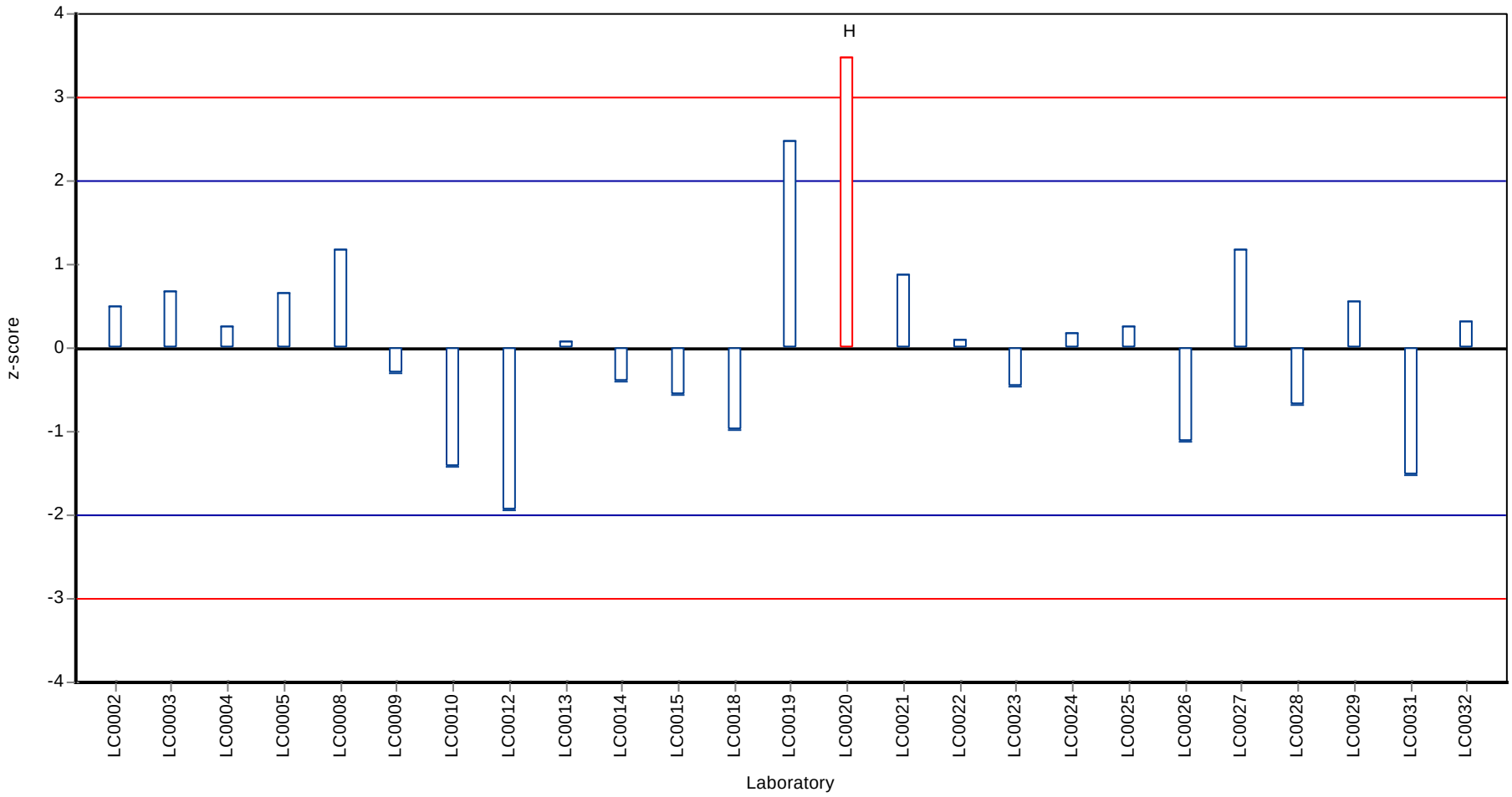
Results



Recovery rate



Z-score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LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Anthracene

Unit	ng/l
Mean ± Cl (99%)	49,8 ± 8,97
Minimum - Maximum	22 - 77,1
Check value ± U	51,5 ± 2

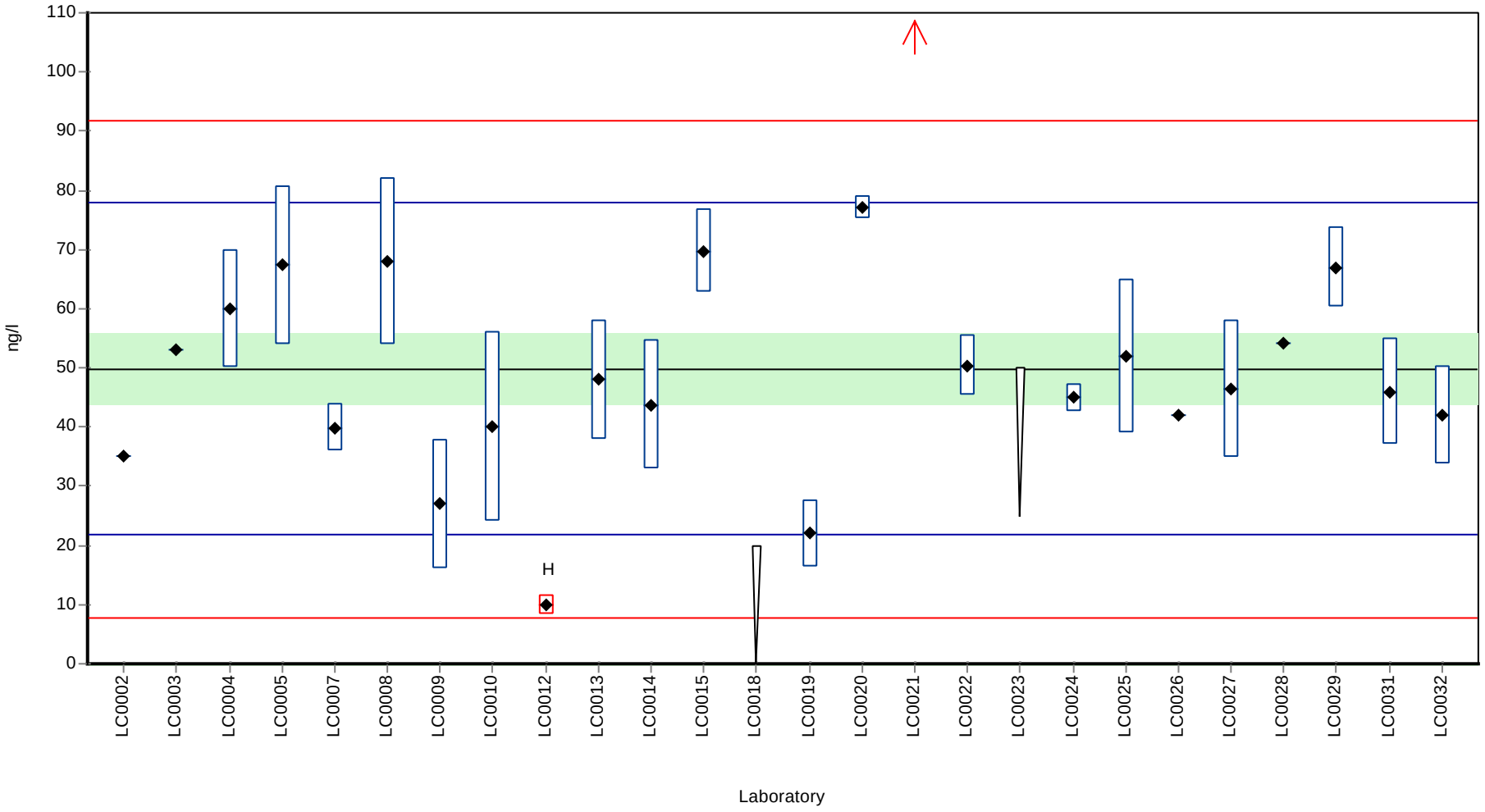
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	35,000	-	70,3	-1,1	
LC0003	53,100	-	106,6	0,2	
LC0004	60,000	10,000	120,5	0,7	
LC0005	67,300	13,500	135,1	1,2	
LC0006	-	-	-	-	
LC0007	39,870	4,000	80,0	-0,7	
LC0008	68,000	14,000	136,5	1,3	
LC0009	27,000	11,000	54,2	-1,6	
LC0010	40,000	16,000	80,3	-0,7	
LC0011	-	-	-	-	
LC0012	10,000	1,600	20,1	-2,8	H
LC0013	48,000	10,000	96,4	-0,1	
LC0014	43,800	11,000	87,9	-0,4	
LC0015	69,700	7,000	139,9	1,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	22,000	5,700	44,2	-2,0	
LC0020	77,100	2,000	154,8	1,9	
LC0021	121,000	30,000	242,9	5,1	H
LC0022	50,400	5,100	101,2	0,0	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	45,000	2,300	90,3	-0,3	
LC0025	52,000	13,000	104,4	0,2	
LC0026	41,900	-	84,1	-0,6	
LC0027	46,500	11,600	93,4	-0,2	
LC0028	54,120	0,121	108,7	0,3	
LC0029	67,000	6,800	134,5	1,2	
LC0030	-	-	-	-	
LC0031	46,000	9,000	92,4	-0,3	
LC0032	42,000	8,400	84,3	-0,6	

Characteristics of parameter

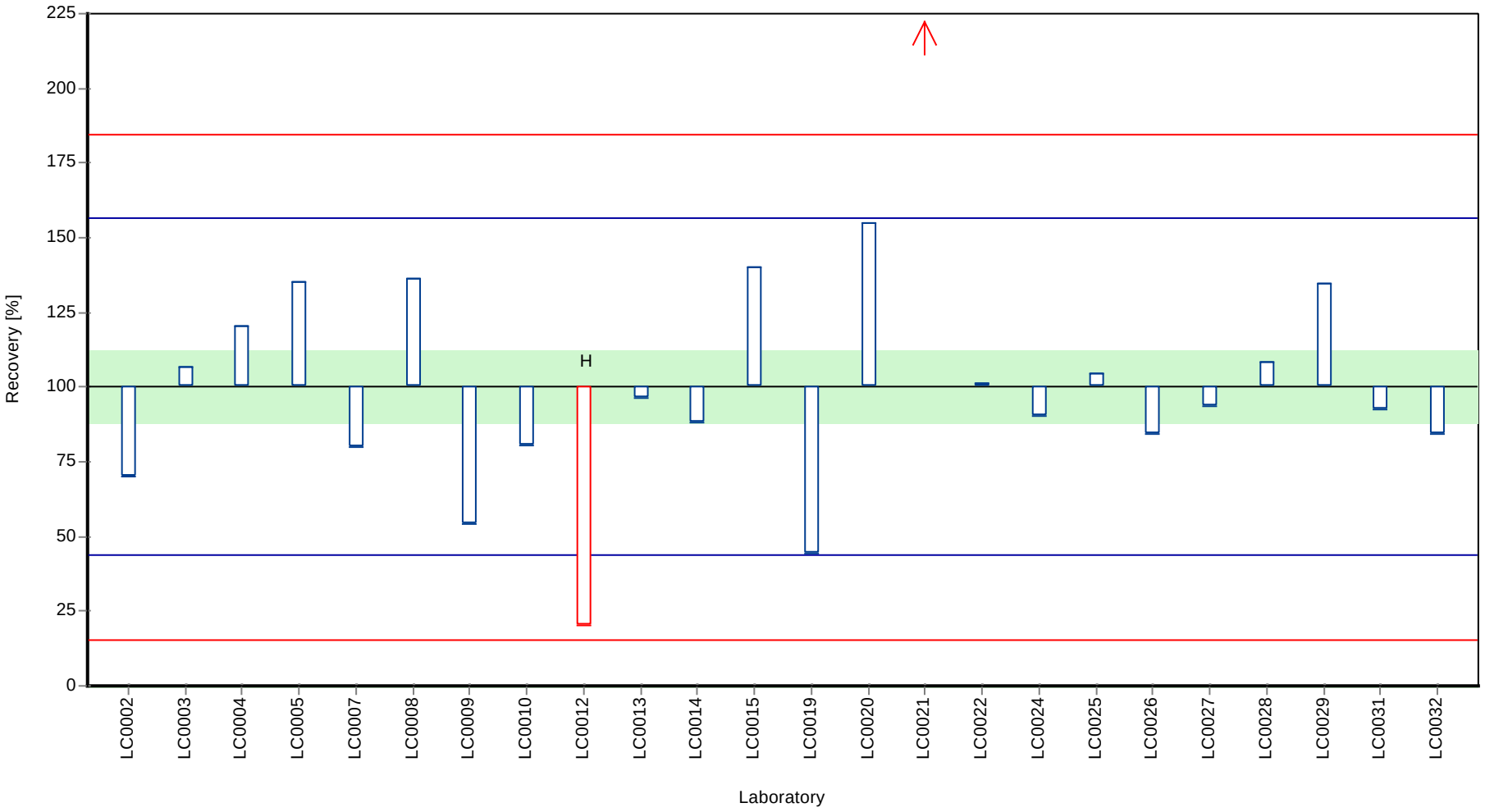
	all results	without outliners	Unit
Mean ± Cl (99%)	51,1 ± 13,2	49,8 ± 8,97	ng/l
Minimum	10	22	ng/l
Maximum	121	77,1	ng/l
Standard deviation	21,6	14	ng/l
rel. Standard deviation	42,3	28,2	%
n	24	22	-

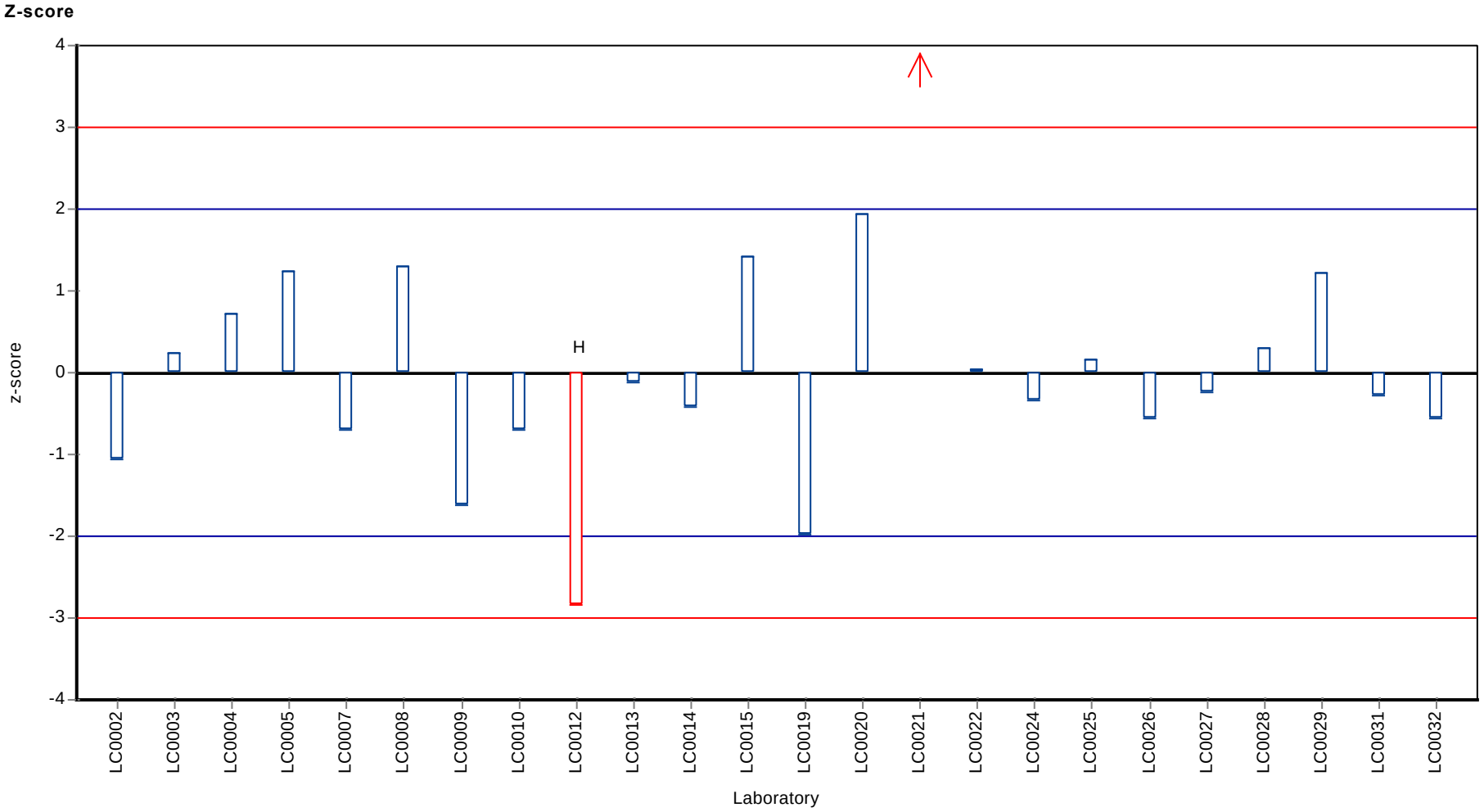
Graphical presentation of results

Results



Recovery rate




Z-score
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z-score
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LC0031
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Benzo[a]anthracene

Unit	ng/l
Mean ± Cl (99%)	37,8 ± 9,1
Minimum - Maximum	16 - 72
Check value ± U	35,5 ± 10,9

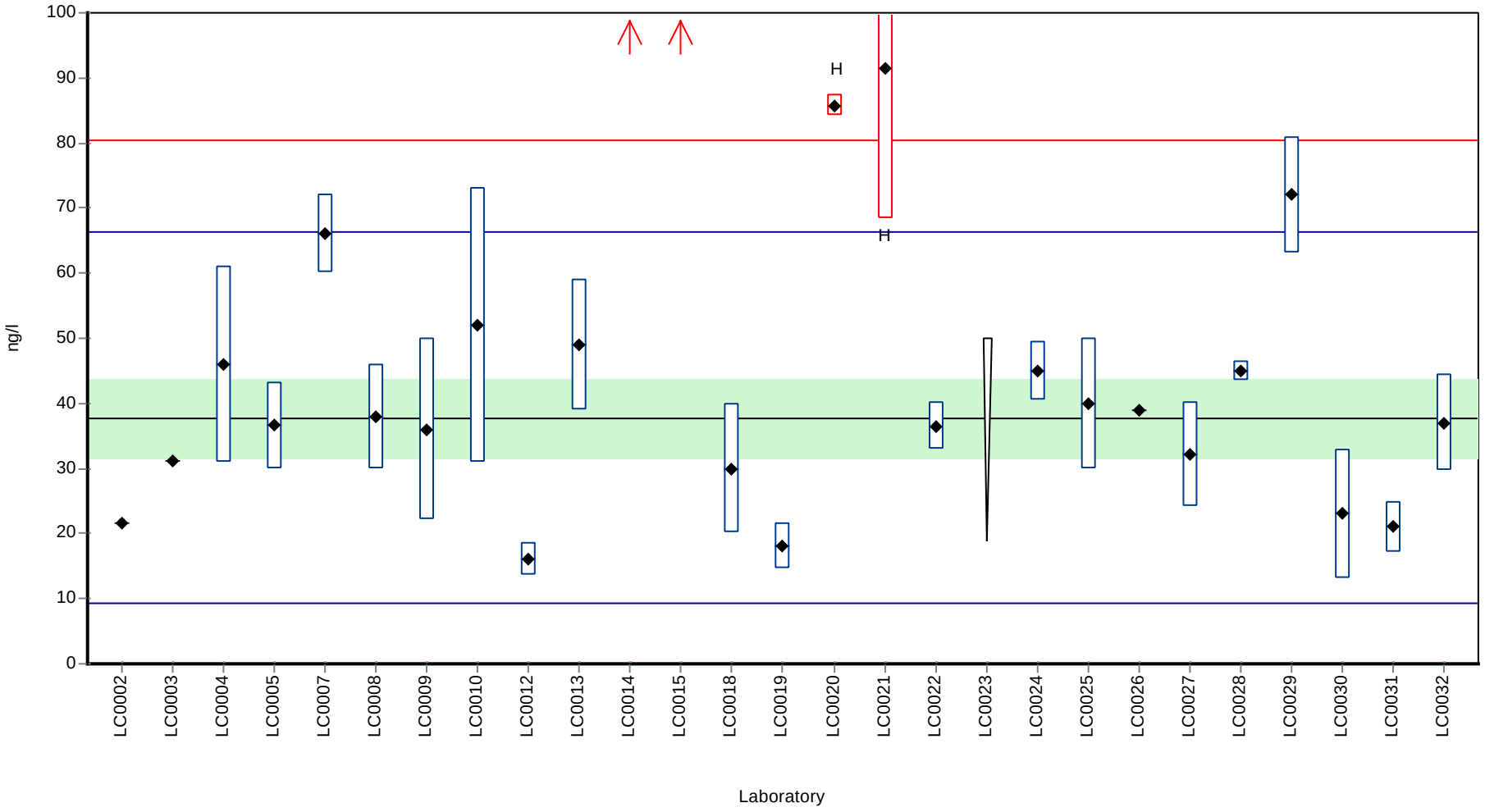
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	21,600	-	57,2	-1,1	
LC0003	31,100	-	82,4	-0,5	
LC0004	46,000	15,000	121,8	0,6	
LC0005	36,600	6,600	96,9	-0,1	
LC0006	-	-	-	-	
LC0007	66,050	6,000	174,9	2,0	
LC0008	38,000	8,000	100,6	0,0	
LC0009	36,000	14,000	95,3	-0,1	
LC0010	52,000	21,000	137,7	1,0	
LC0011	-	-	-	-	
LC0012	16,000	2,540	42,4	-1,5	
LC0013	49,000	10,000	129,7	0,8	
LC0014	225,700	47,400	597,6	13,2	H
LC0015	110,400	11,000	292,3	5,1	H
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	30,000	10,000	79,4	-0,5	
LC0019	18,000	3,500	47,7	-1,4	
LC0020	85,800	1,700	227,2	3,4	H
LC0021	91,400	23,000	242,0	3,8	H
LC0022	36,500	3,700	96,6	-0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	45,000	4,500	119,2	0,5	
LC0025	40,000	10,000	105,9	0,2	
LC0026	38,900	-	103,0	0,1	
LC0027	32,100	8,000	85,0	-0,4	
LC0028	44,990	1,618	119,1	0,5	
LC0029	72,000	9,000	190,7	2,4	
LC0030	23,000	9,9999	60,9	-1,0	
LC0031	21,000	4,000	55,6	-1,2	
LC0032	37,000	7,400	98,0	-0,1	

Characteristics of parameter

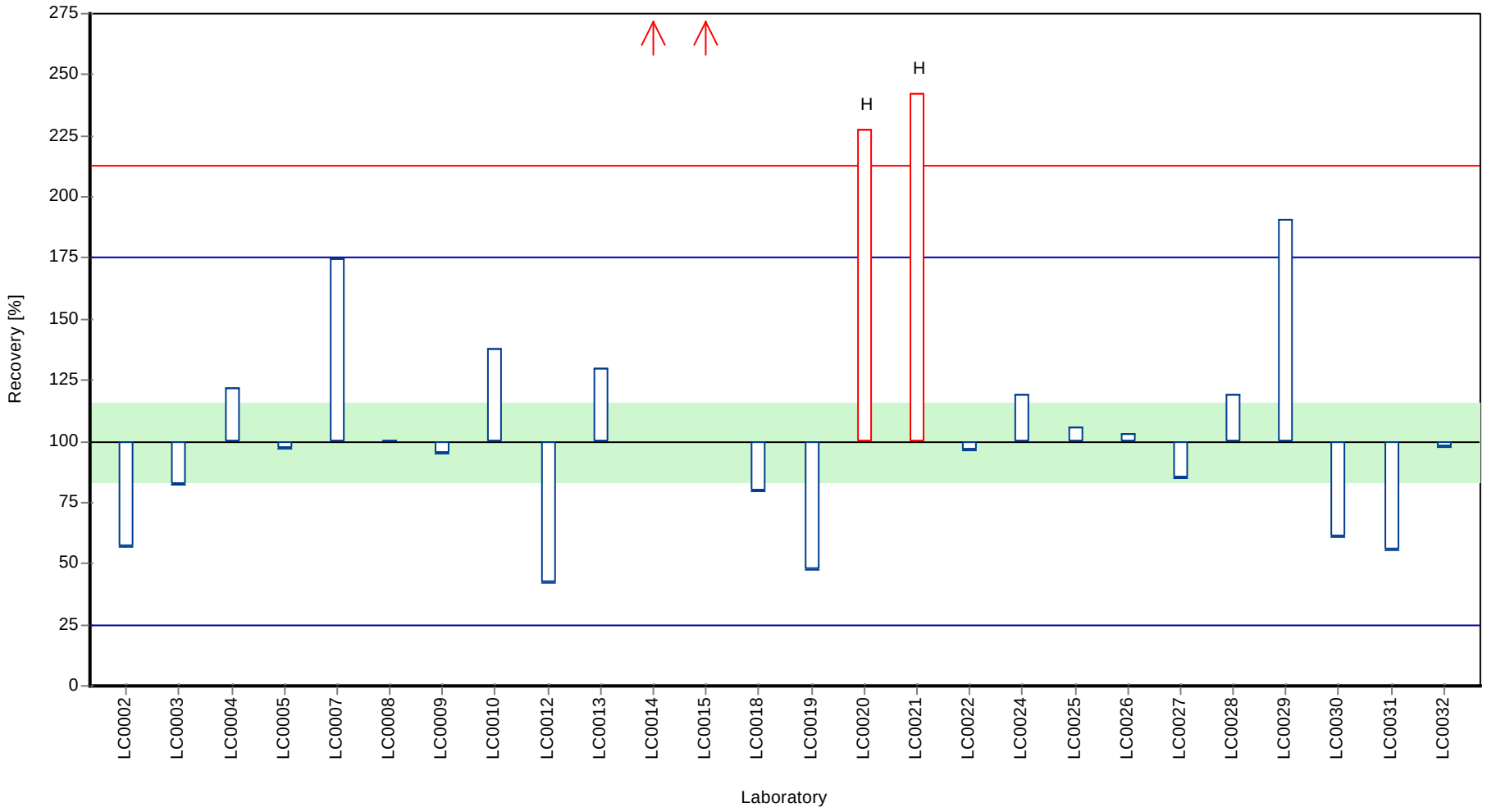
	all results	without outliners	Unit
Mean ± Cl (99%)	51,7 ± 25	37,8 ± 9,1	ng/l
Minimum	16	16	ng/l
Maximum	226	72	ng/l
Standard deviation	42,4	14,2	ng/l
rel. Standard deviation	82	37,7	%
n	26	22	-

Graphical presentation of results

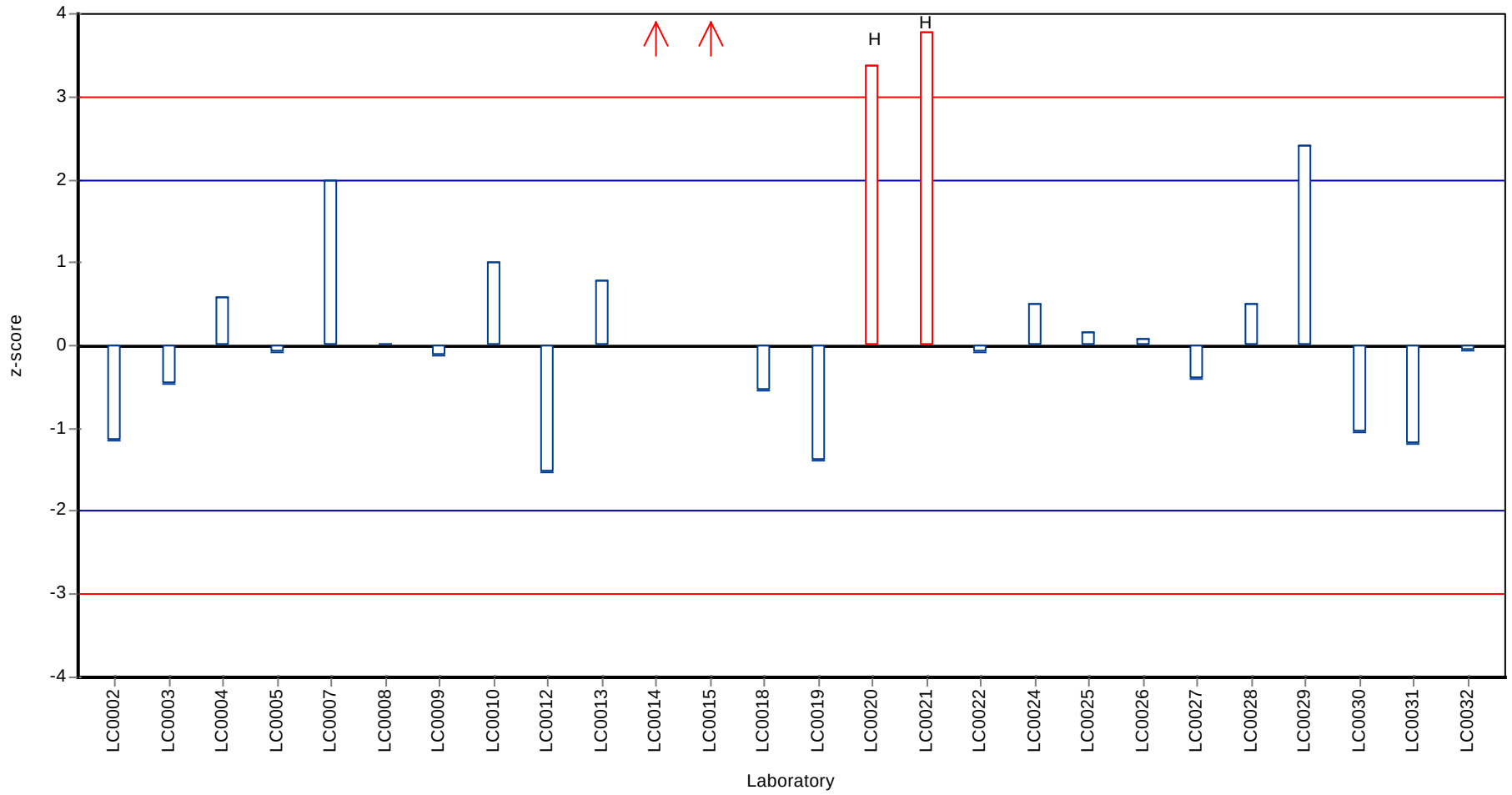
Results



Recovery rate



Z-score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LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Benzo[a]anthracene

Unit	ng/l
Mean ± Cl (99%)	16,5 ± 4,9
Minimum - Maximum	5 - 35,3
Check value ± U	12,0 ± 1,1

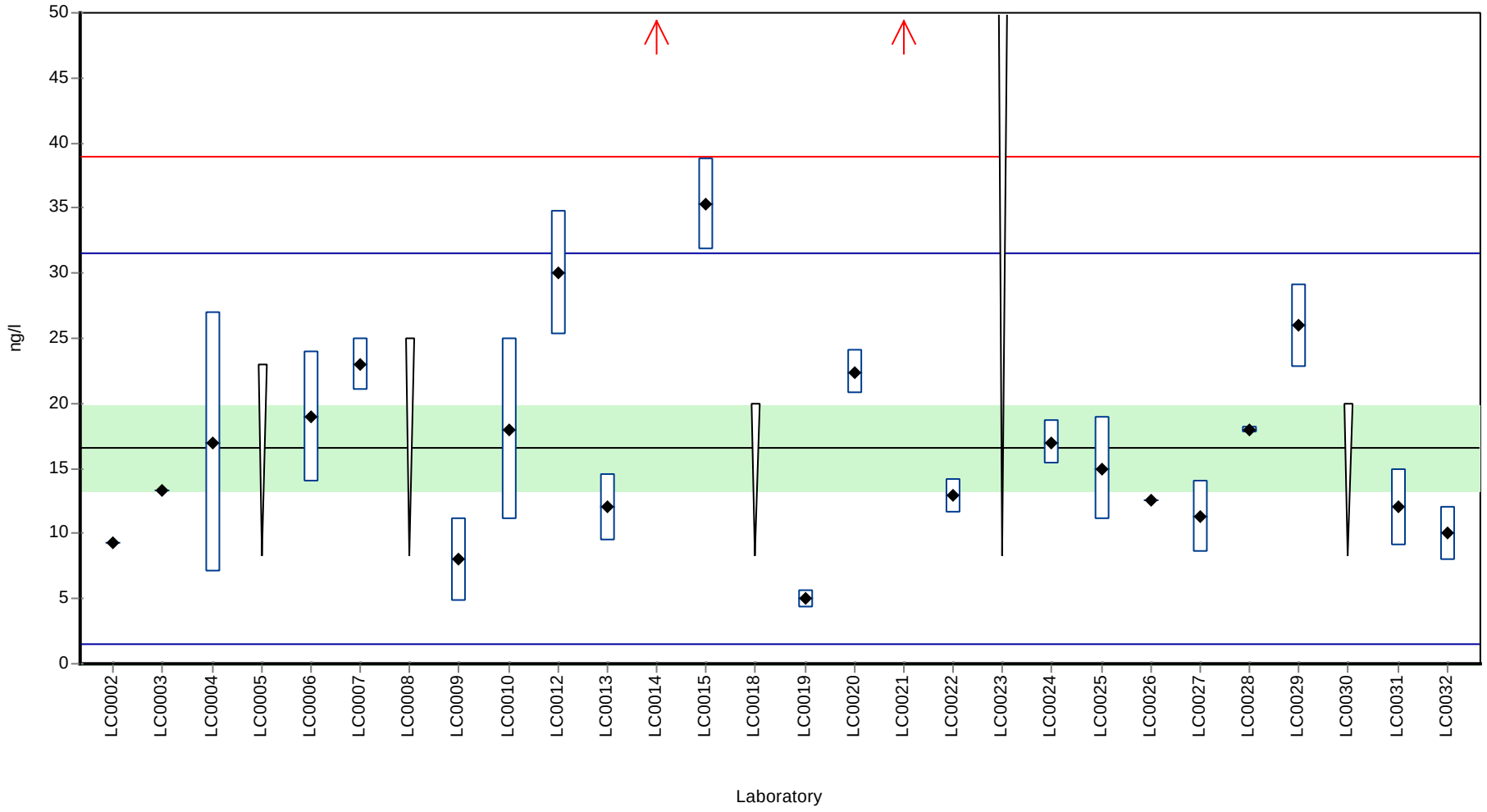
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	9,240	-	55,9	-1,0	
LC0003	13,300	-	80,5	-0,4	
LC0004	17,000	10,000	102,9	0,1	
LC0005	< 23 (LOQ)	-	-	-	
LC0006	19,000	5,000	115,0	0,3	
LC0007	22,990	2,000	139,1	0,9	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	8,000	3,200	48,4	-1,1	
LC0010	18,000	7,000	108,9	0,2	
LC0011	-	-	-	-	
LC0012	30,000	4,800	181,6	1,8	
LC0013	12,000	2,600	72,6	-0,6	
LC0014	71,500	15,000	432,7	7,3	H
LC0015	35,300	3,500	213,6	2,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	5,000	0,700	30,3	-1,5	
LC0020	22,400	1,700	135,6	0,8	
LC0021	112,000	28,000	677,8	12,7	H
LC0022	12,900	1,300	78,1	-0,5	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	17,000	1,700	102,9	0,1	
LC0025	15,000	4,000	90,8	-0,2	
LC0026	12,600	-	76,3	-0,5	
LC0027	11,300	2,800	68,4	-0,7	
LC0028	17,950	0,242	108,6	0,2	
LC0029	26,000	3,200	157,4	1,3	
LC0030	< 20 (LOQ)	-	-	-	
LC0031	12,000	3,000	72,6	-0,6	
LC0032	10,000	2,100	60,5	-0,9	

Characteristics of parameter

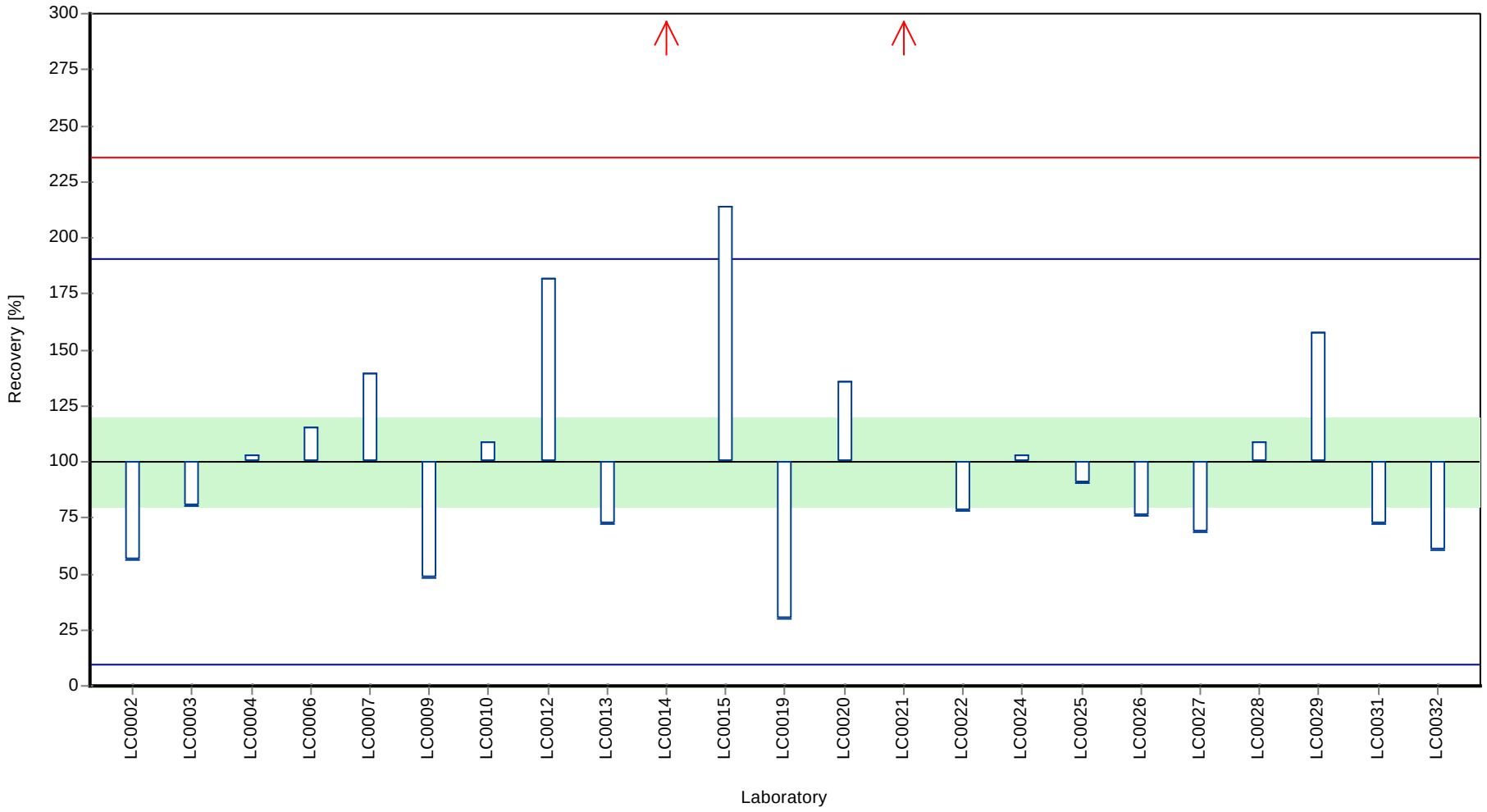
	all results	without outliners	Unit
Mean ± Cl (99%)	23,1 ± 14,8	16,5 ± 4,9	ng/l
Minimum	5	5	ng/l
Maximum	112	35,3	ng/l
Standard deviation	23,6	7,49	ng/l
rel. Standard deviation	102	45,3	%
n	23	21	-

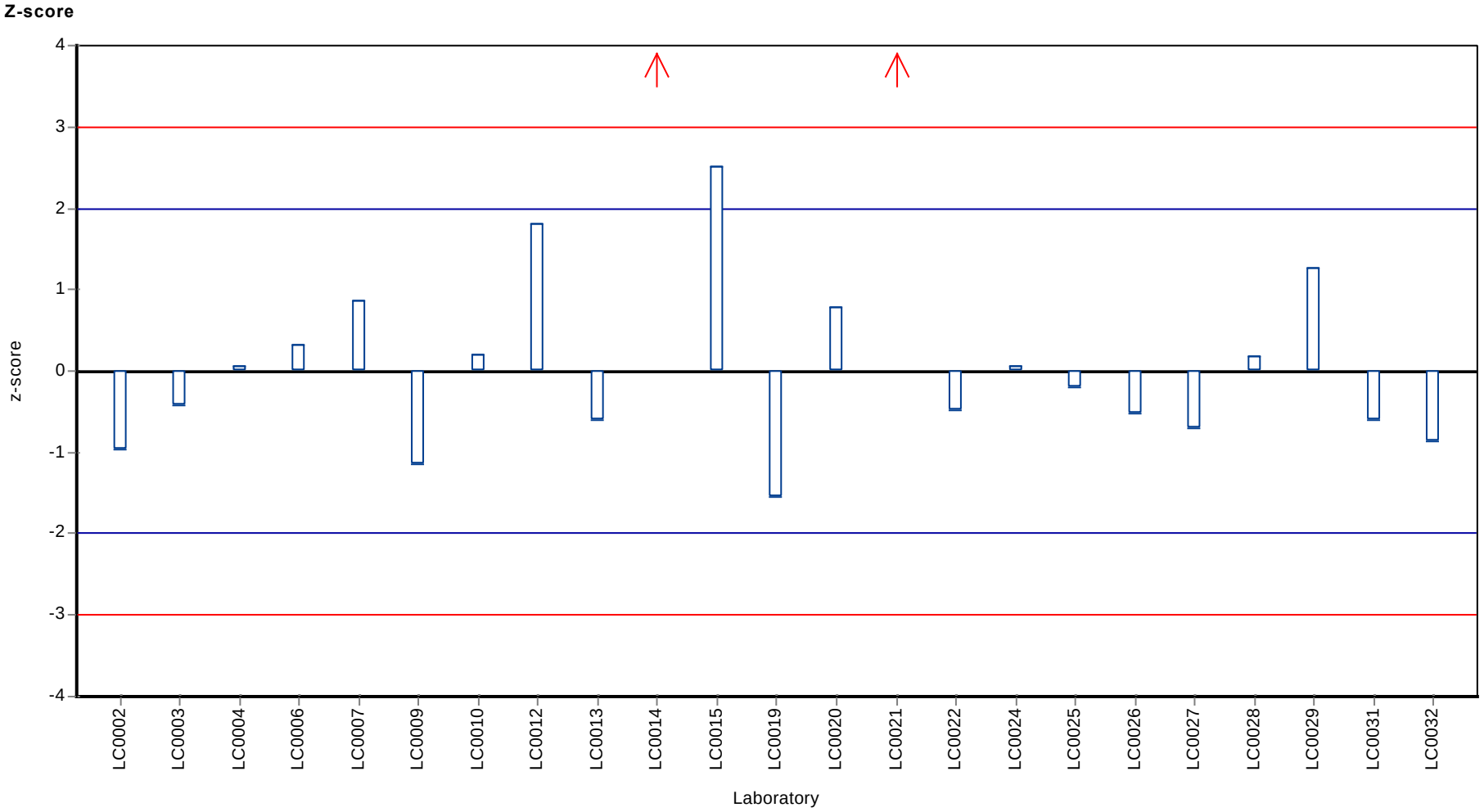
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
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LC0031
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Benzo[a]pyrene

Unit	ng/l
Mean ± Cl (99%)	120 ± 21,6
Minimum - Maximum	50 - 210
Check value ± U	100 ± 36

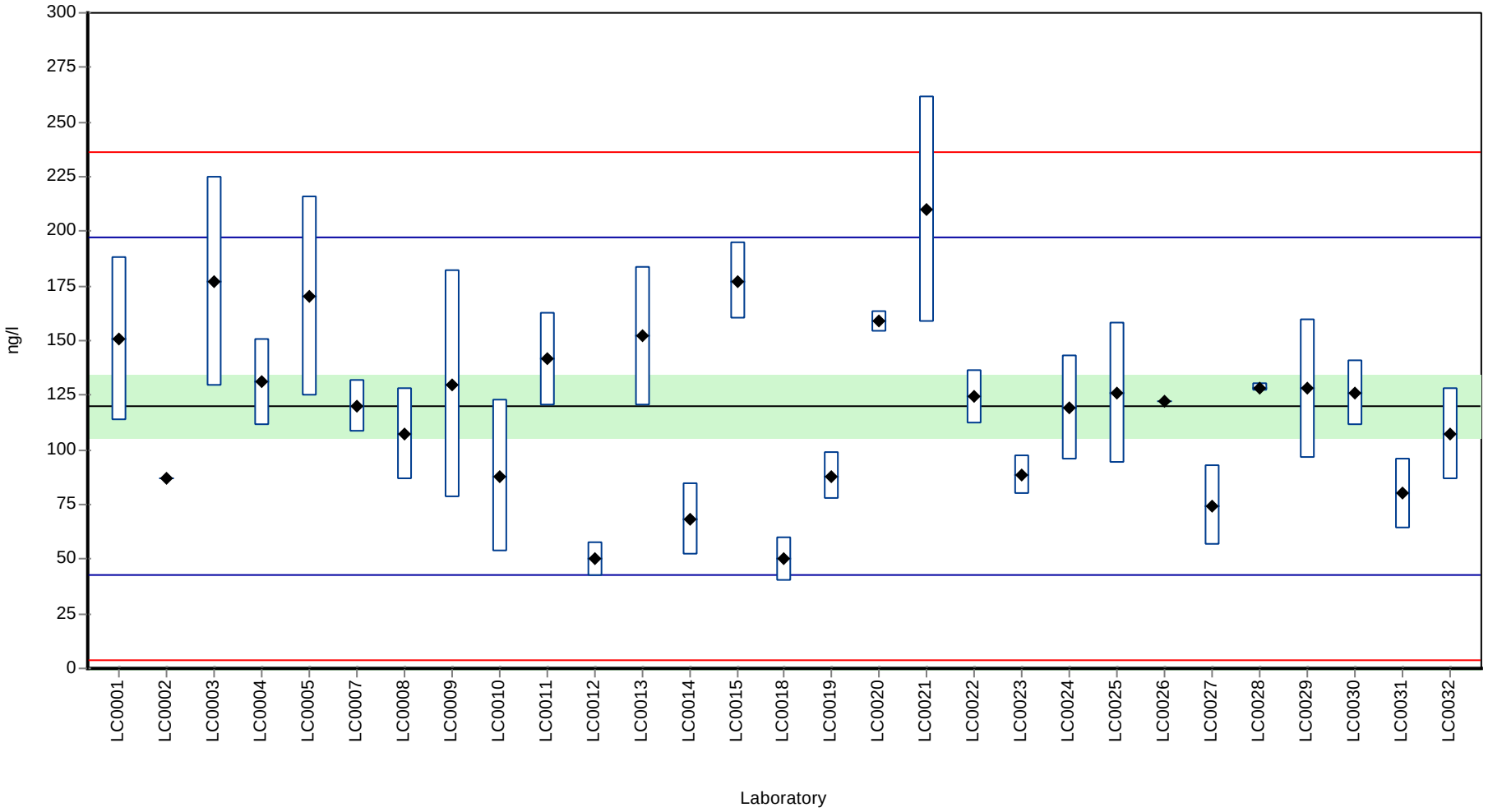
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	150,800	37,700	125,6	0,8	
LC0002	87,100	-	72,6	-0,8	
LC0003	177,000	47,800	147,5	1,5	
LC0004	131,000	20,000	109,1	0,3	
LC0005	170,100	45,900	141,7	1,3	
LC0006	-	-	-	-	
LC0007	120,160	12,000	100,1	0,0	
LC0008	107,000	21,000	89,1	-0,3	
LC0009	130,000	52,000	108,3	0,3	
LC0010	88,000	35,000	73,3	-0,8	
LC0011	141,500	21,200	117,9	0,6	
LC0012	50,000	7,920	41,7	-1,8	
LC0013	152,000	32,000	126,6	0,8	
LC0014	68,600	16,500	57,1	-1,3	
LC0015	177,300	17,700	147,7	1,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	50,000	10,000	41,7	-1,8	
LC0019	88,000	11,000	73,3	-0,8	
LC0020	158,700	4,800	132,2	1,0	
LC0021	210,000	52,000	174,9	2,3	
LC0022	124,200	12,500	103,5	0,1	
LC0023	88,600	8,900	73,8	-0,8	
LC0024	119,000	24,000	99,1	0,0	
LC0025	126,000	32,000	105,0	0,2	
LC0026	122,000	-	101,6	0,1	
LC0027	74,500	18,600	62,1	-1,2	
LC0028	128,580	2,001	107,1	0,2	
LC0029	128,000	32,000	106,6	0,2	
LC0030	126,000	15,0003	105,0	0,2	
LC0031	80,000	16,000	66,6	-1,0	
LC0032	107,000	21,000	89,1	-0,3	

Characteristics of parameter

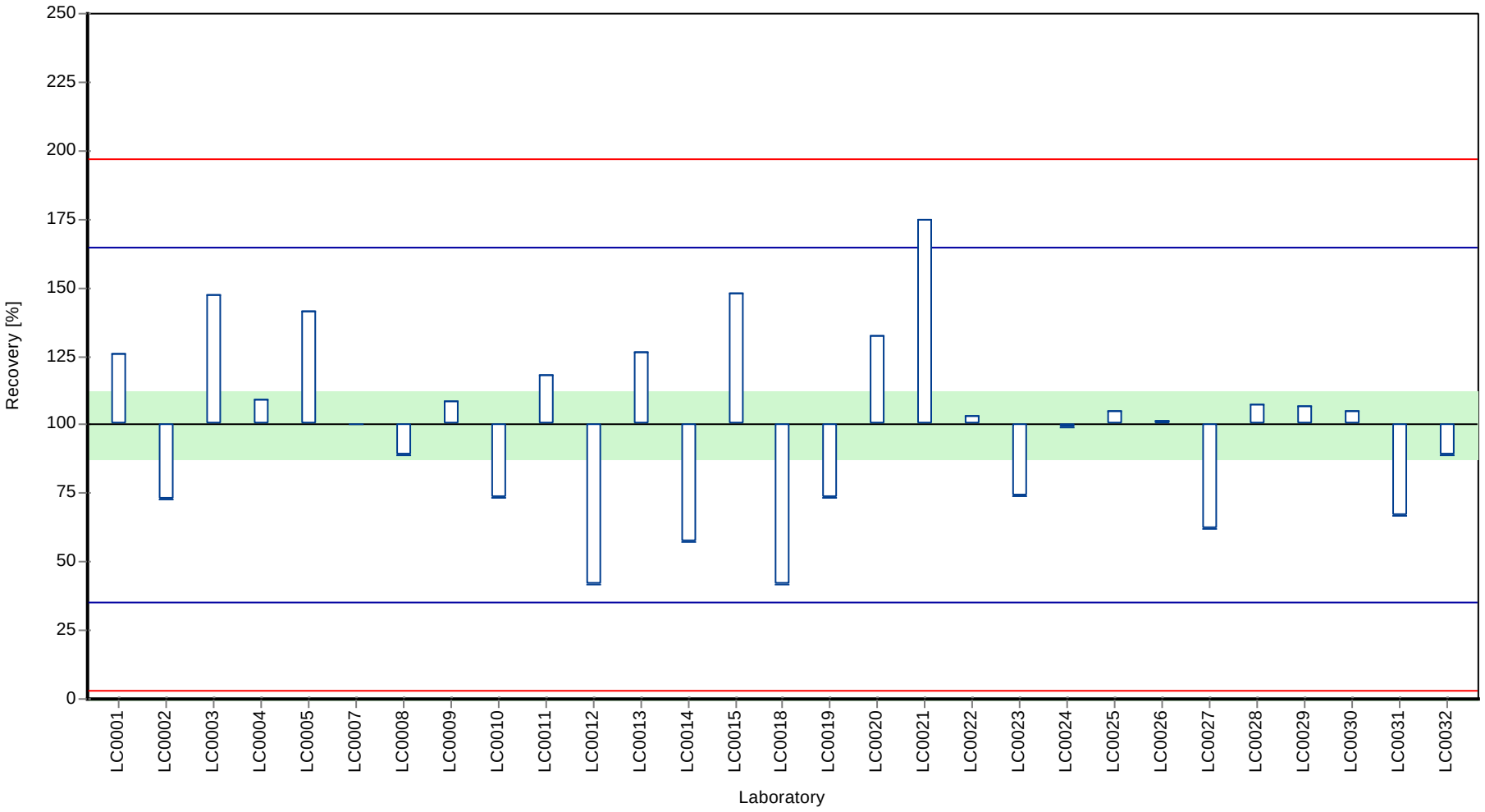
	all results	without outliners	Unit
Mean ± Cl (99%)	120 ± 21,6	120 ± 21,6	ng/l
Minimum	50	50	ng/l
Maximum	210	210	ng/l
Standard deviation	38,8	38,8	ng/l
rel. Standard deviation	32,3	32,3	%
n	29	29	-

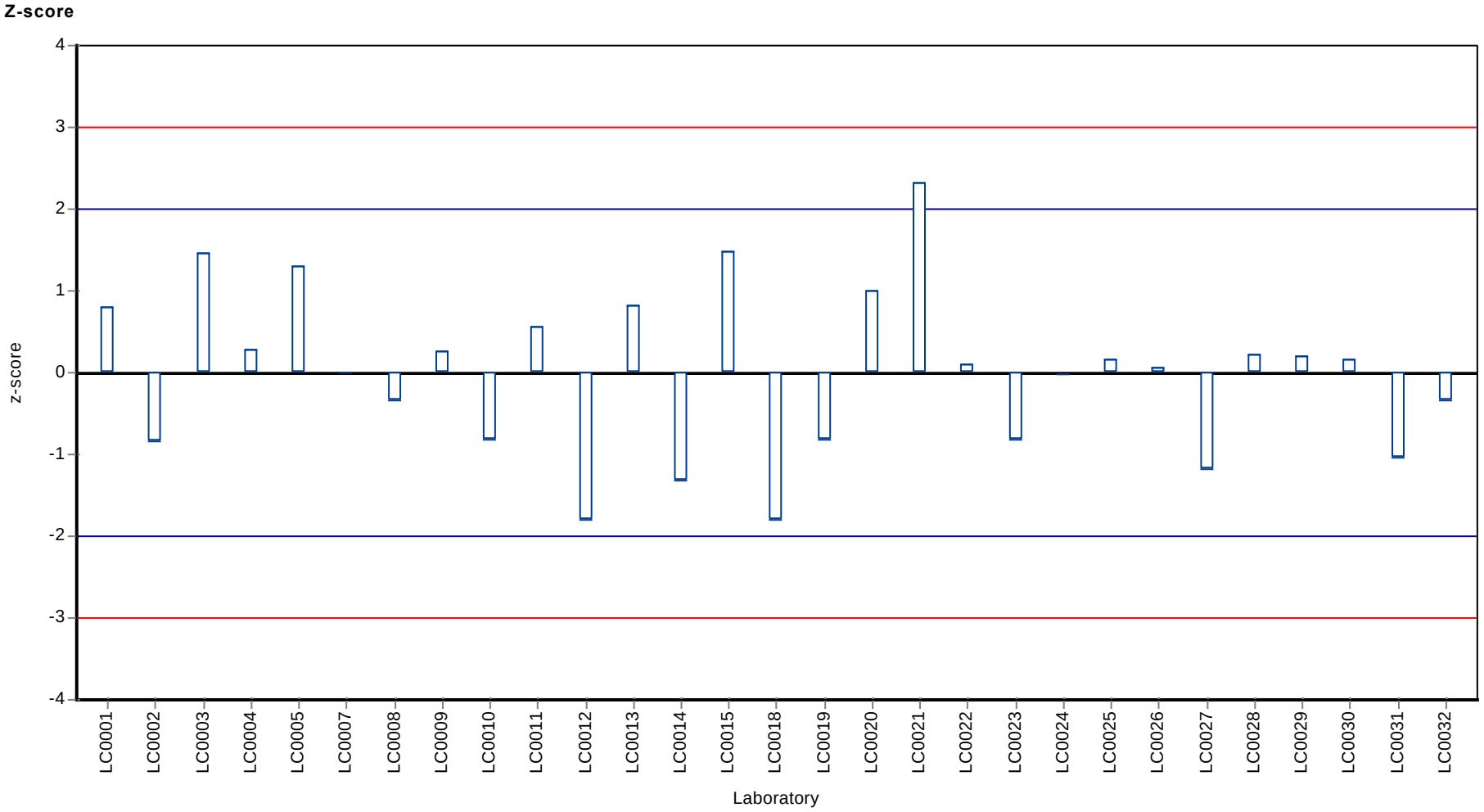
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
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LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Benzo[a]pyrene

Unit	ng/l
Mean ± Cl (99%)	44,6 ± 9,21
Minimum - Maximum	22 - 87,2
Check value ± U	35,3 ± 1,1

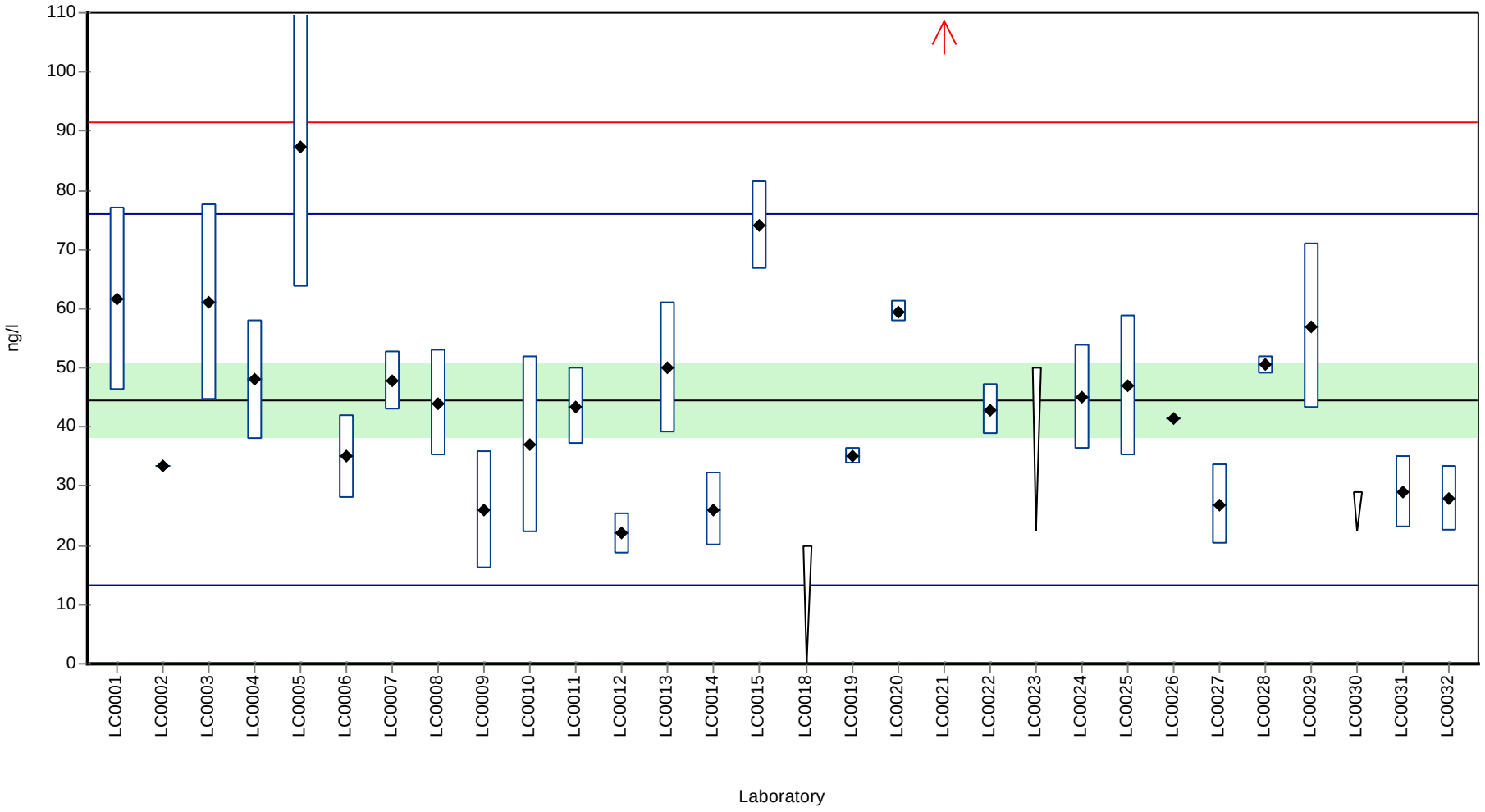
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	61,600	15,400	138,2	1,1	
LC0002	33,500	-	75,1	-0,7	
LC0003	61,100	16,500	137,1	1,1	
LC0004	48,000	10,000	107,7	0,2	
LC0005	87,200	23,500	195,6	2,7	
LC0006	35,000	7,000	78,5	-0,6	
LC0007	47,720	5,000	107,0	0,2	
LC0008	44,000	9,000	98,7	0,0	
LC0009	26,000	10,000	58,3	-1,2	
LC0010	37,000	15,000	83,0	-0,5	
LC0011	43,500	6,500	97,6	-0,1	
LC0012	22,000	3,520	49,4	-1,4	
LC0013	50,000	11,000	112,2	0,3	
LC0014	26,100	6,300	58,5	-1,2	
LC0015	74,100	7,400	166,2	1,9	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	35,000	1,400	78,5	-0,6	
LC0020	59,500	1,800	133,5	1,0	
LC0021	386,000	96,000	865,9	21,8	H
LC0022	42,900	4,300	96,2	-0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	45,000	8,900	100,9	0,0	
LC0025	47,000	12,000	105,4	0,2	
LC0026	41,400	-	92,9	-0,2	
LC0027	26,900	6,700	60,3	-1,1	
LC0028	50,500	1,514	113,3	0,4	
LC0029	57,000	14,000	127,9	0,8	
LC0030	< 29 (LOQ)	-	-	-	
LC0031	29,000	6,000	65,1	-1,0	
LC0032	28,000	5,500	62,8	-1,1	

Characteristics of parameter

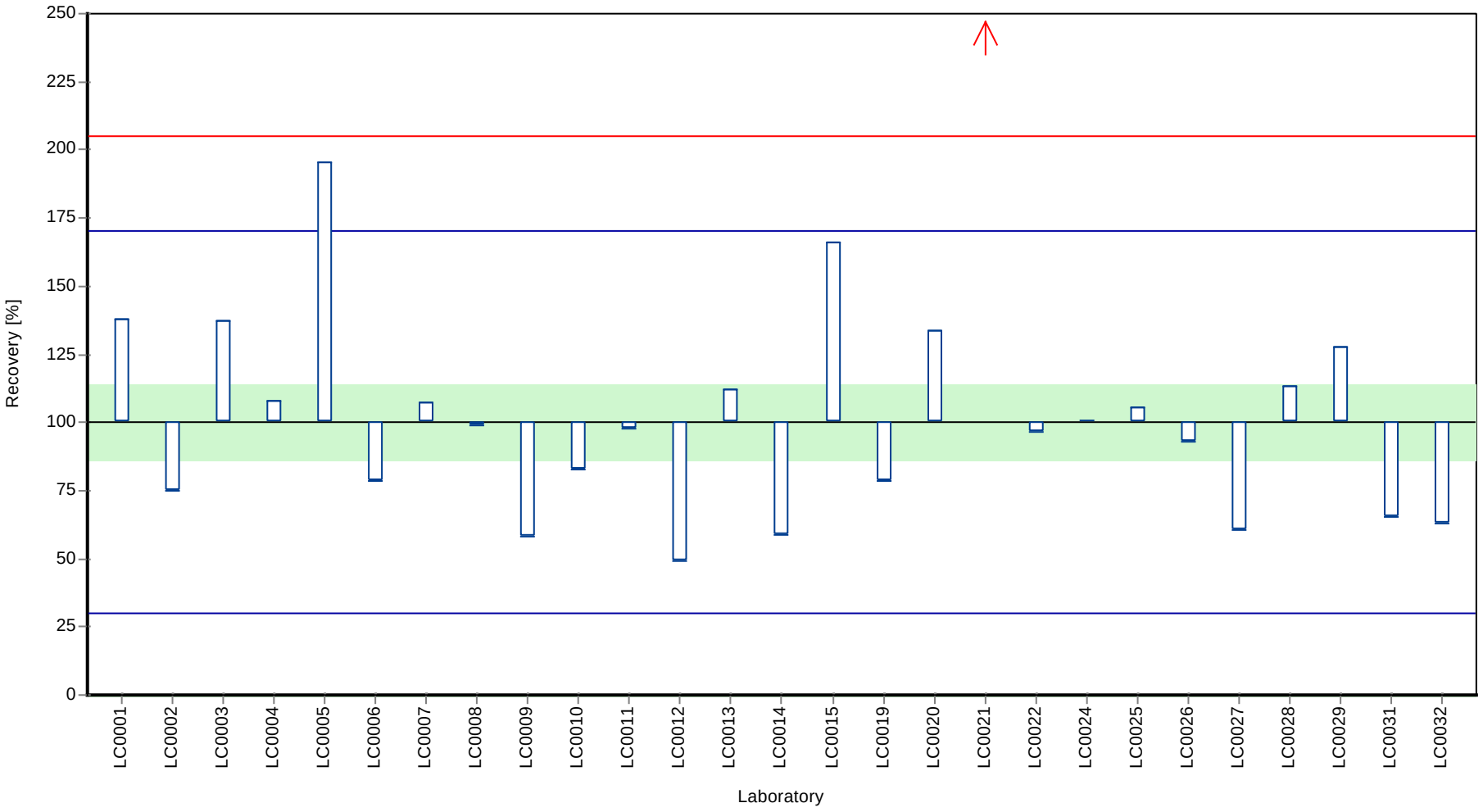
	all results	without outliners	Unit
Mean ± Cl (99%)	57,2 ± 39	44,6 ± 9,21	ng/l
Minimum	22	22	ng/l
Maximum	386	87,2	ng/l
Standard deviation	67,5	15,7	ng/l
rel. Standard deviation	118	35,1	%
n	27	26	-

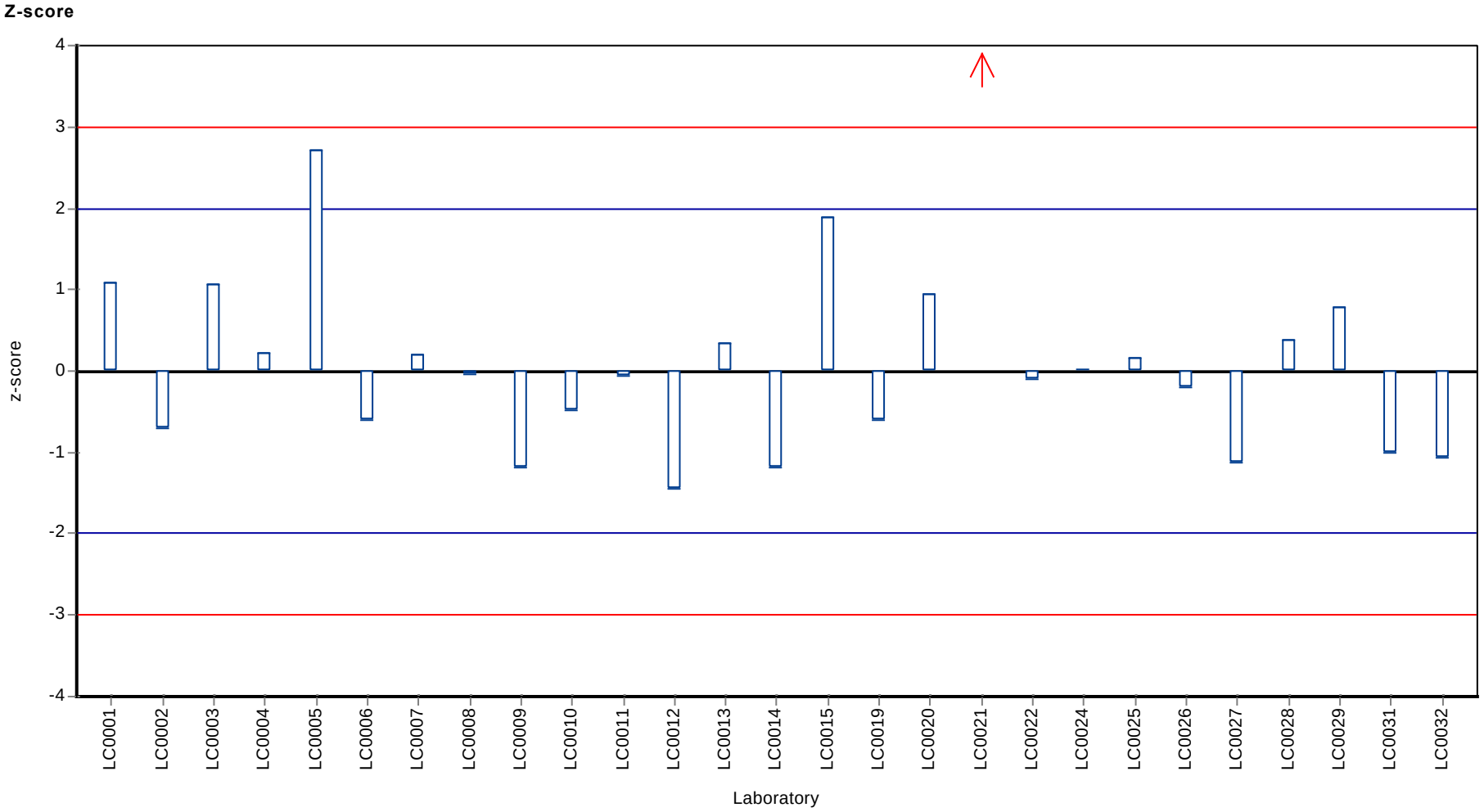
Graphical presentation of results

Results



Recovery rate




Z-score
4
3
2
1
0
-1
-2
-3
-4
z-score
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Benzo[b]fluoranthene

Unit	ng/l
Mean ± Cl (99%)	44,9 ± 7,65
Minimum - Maximum	19 - 69,4
Check value ± U	36,0 ± 11

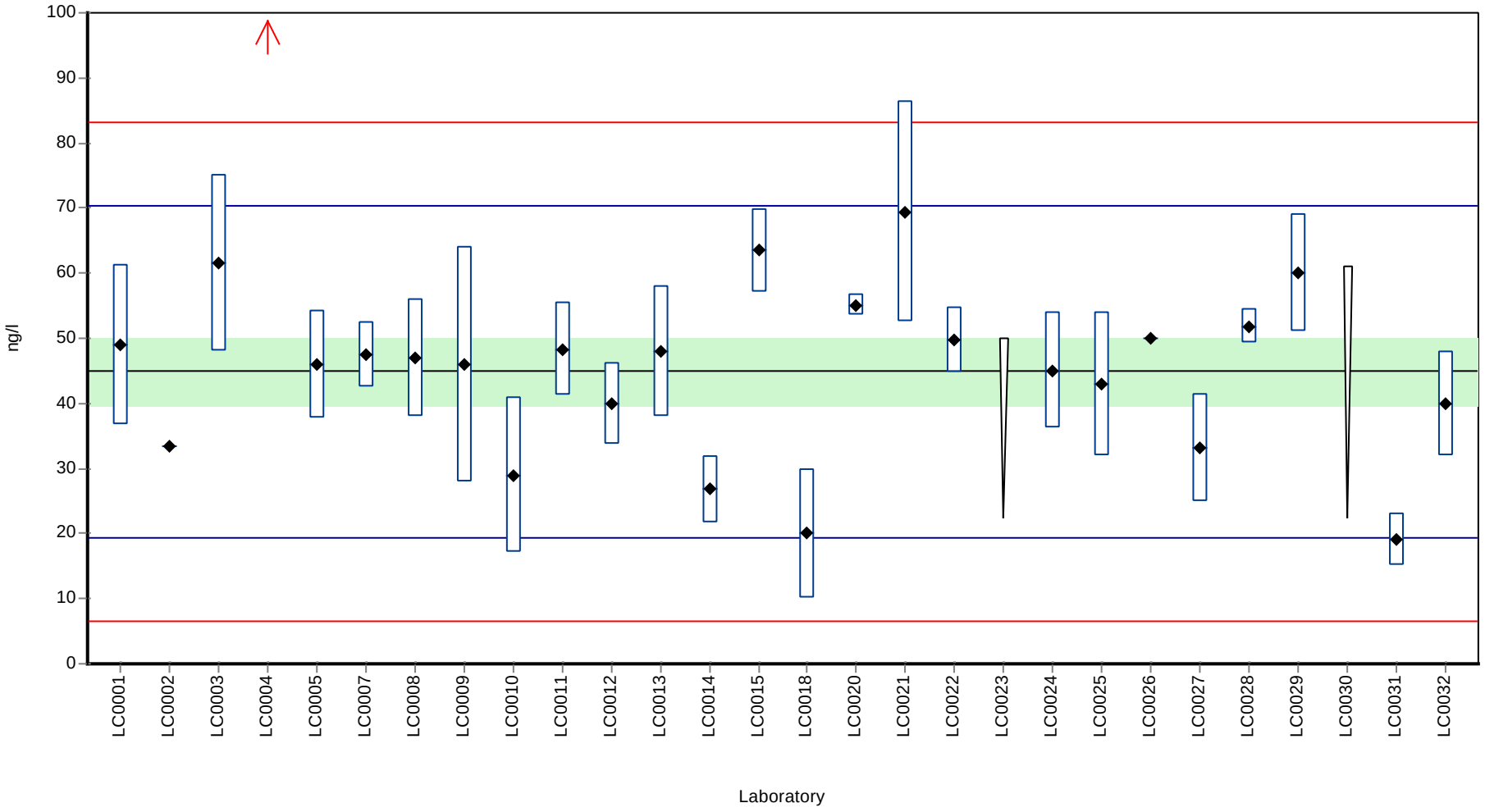
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	49,100	12,300	109,4	0,3	
LC0002	33,300	-	74,2	-0,9	
LC0003	61,600	13,600	137,2	1,3	
LC0004	103,000	20,000	229,5	4,6	H
LC0005	45,900	8,300	102,3	0,1	
LC0006	-	-	-	-	
LC0007	47,540	5,000	105,9	0,2	
LC0008	47,000	9,000	104,7	0,2	
LC0009	46,000	18,000	102,5	0,1	
LC0010	29,000	12,000	64,6	-1,2	
LC0011	48,300	7,200	107,6	0,3	
LC0012	40,000	6,340	89,1	-0,4	
LC0013	48,000	10,000	106,9	0,2	
LC0014	26,800	5,100	59,7	-1,4	
LC0015	63,500	6,400	141,5	1,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	20,000	10,000	44,6	-2,0	
LC0019	-	-	-	-	
LC0020	55,100	1,700	122,7	0,8	
LC0021	69,400	17,000	154,6	1,9	
LC0022	49,800	5,000	110,9	0,4	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	45,000	8,900	100,2	0,0	
LC0025	43,000	11,000	95,8	-0,1	
LC0026	49,900	-	111,2	0,4	
LC0027	33,100	8,300	73,7	-0,9	
LC0028	51,870	2,648	115,6	0,5	
LC0029	60,000	9,000	133,7	1,2	
LC0030	< 61 (LOQ)	-	-	-	
LC0031	19,000	4,000	42,3	-2,0	
LC0032	40,000	8,000	89,1	-0,4	

Characteristics of parameter

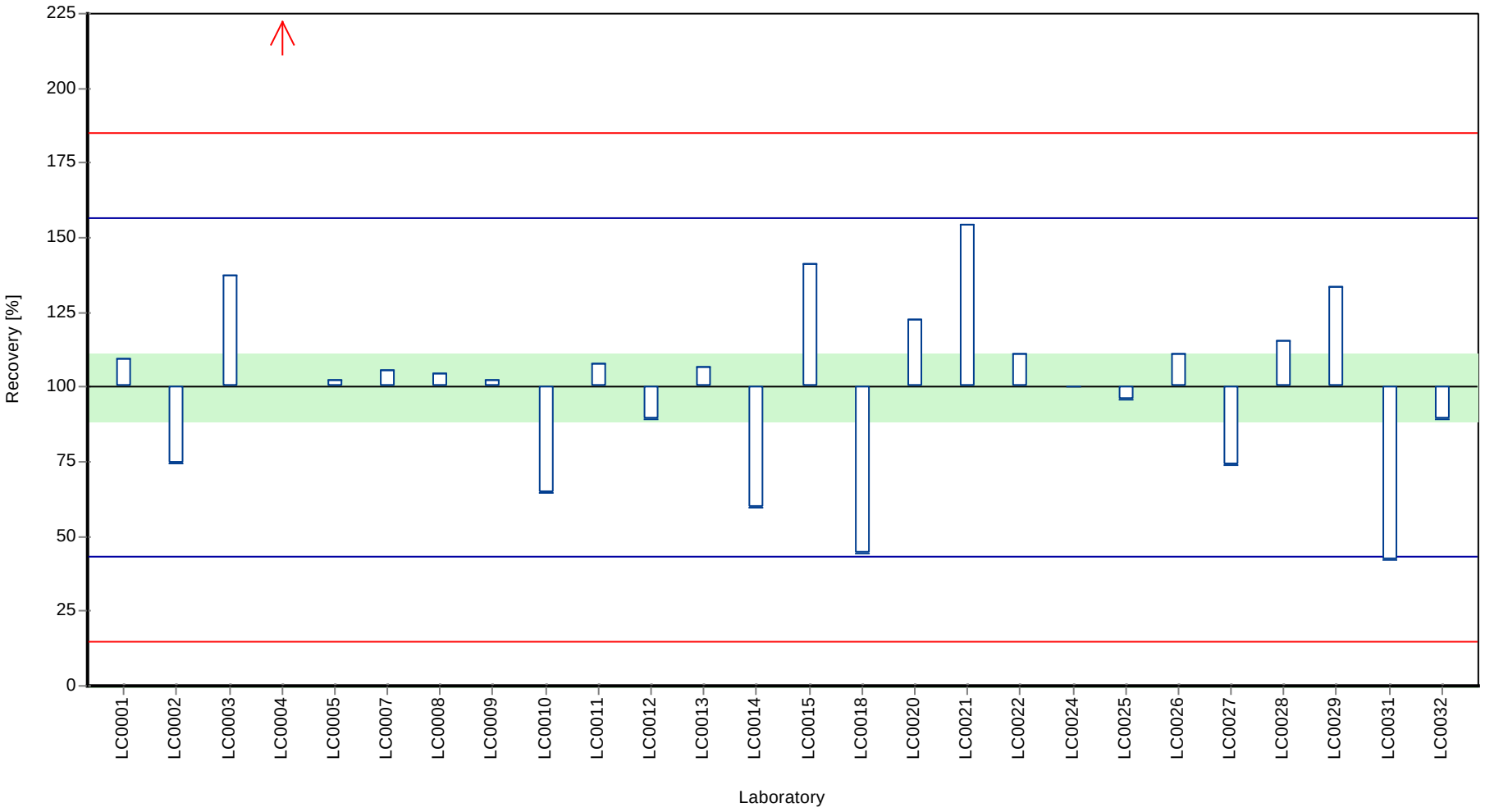
	all results	without outliners	Unit
Mean ± Cl (99%)	47,1 ± 9,95	44,9 ± 7,65	ng/l
Minimum	19	19	ng/l
Maximum	103	69,4	ng/l
Standard deviation	16,9	12,8	ng/l
rel. Standard deviation	35,9	28,4	%
n	26	25	-

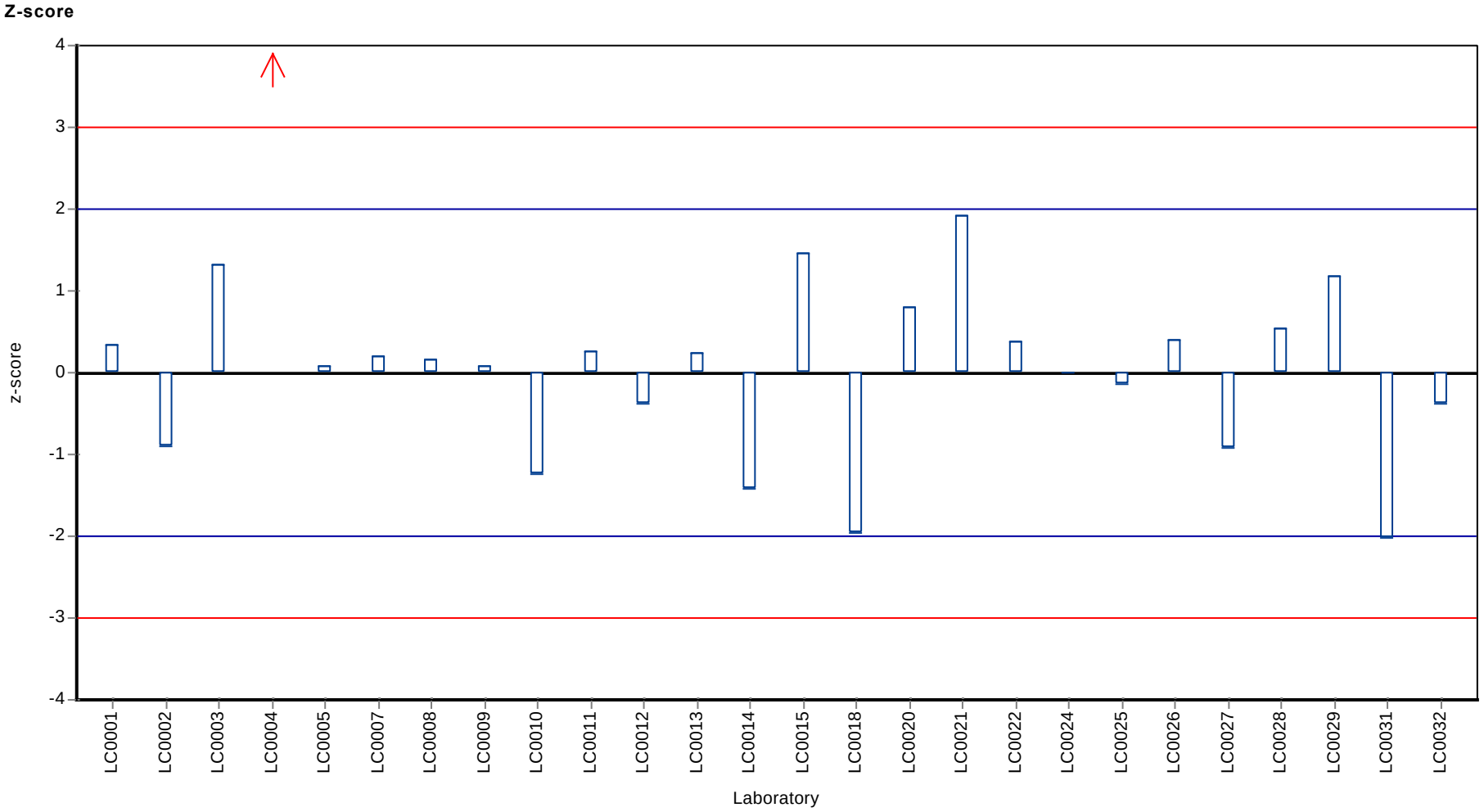
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0018
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Benzo[b]fluoranthene

Unit	ng/l
Mean ± Cl (99%)	8,2 ± 1,87
Minimum - Maximum	4,2 - 13
Check value ± U	<11,0 (LOQ)

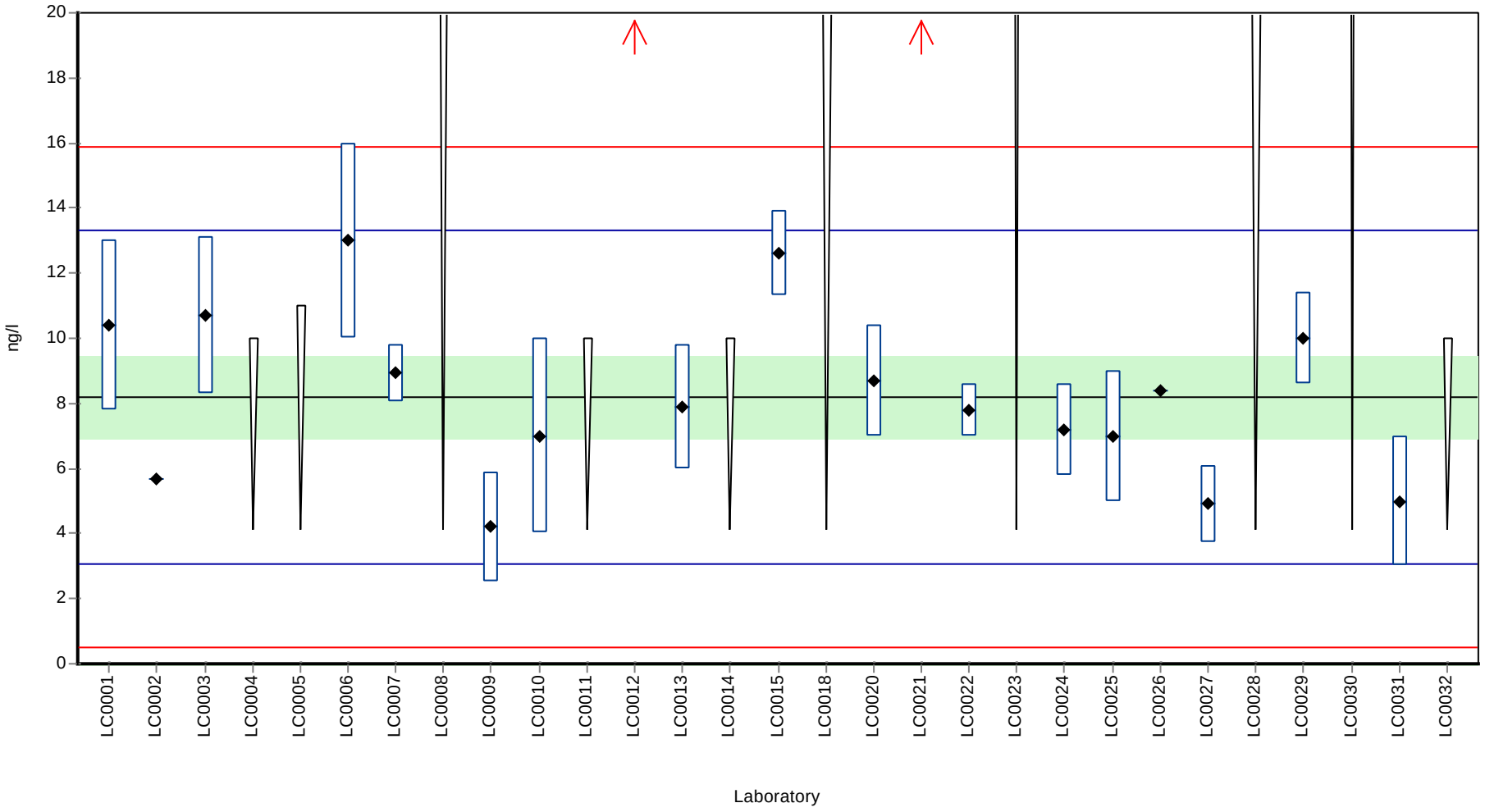
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10,400	2,600	126,9	0,9	
LC0002	5,680	-	69,3	-1,0	
LC0003	10,700	2,400	130,5	1,0	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 11 (LOQ)	-	-	-	
LC0006	13,000	3,000	158,6	1,9	
LC0007	8,920	0,900	108,8	0,3	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	4,200	1,700	51,2	-1,6	
LC0010	7,000	3,000	85,4	-0,5	
LC0011	< 10 (LOQ)	-	-	-	
LC0012	20,000	3,200	244,0	4,6	H
LC0013	7,900	1,900	96,4	-0,1	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	12,600	1,300	153,7	1,7	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	-	-	-	-	
LC0020	8,700	1,700	106,1	0,2	
LC0021	35,000	9,000	426,9	10,5	H
LC0022	7,800	0,800	95,1	-0,2	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	7,200	1,400	87,8	-0,4	
LC0025	7,000	2,000	85,4	-0,5	
LC0026	8,370	-	102,1	0,1	
LC0027	4,900	1,200	59,8	-1,3	
LC0028	< 20 (LOQ)	-	-	-	
LC0029	10,000	1,400	122,0	0,7	
LC0030	< 61 (LOQ)	-	-	-	
LC0031	5,000	2,000	61,0	-1,2	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

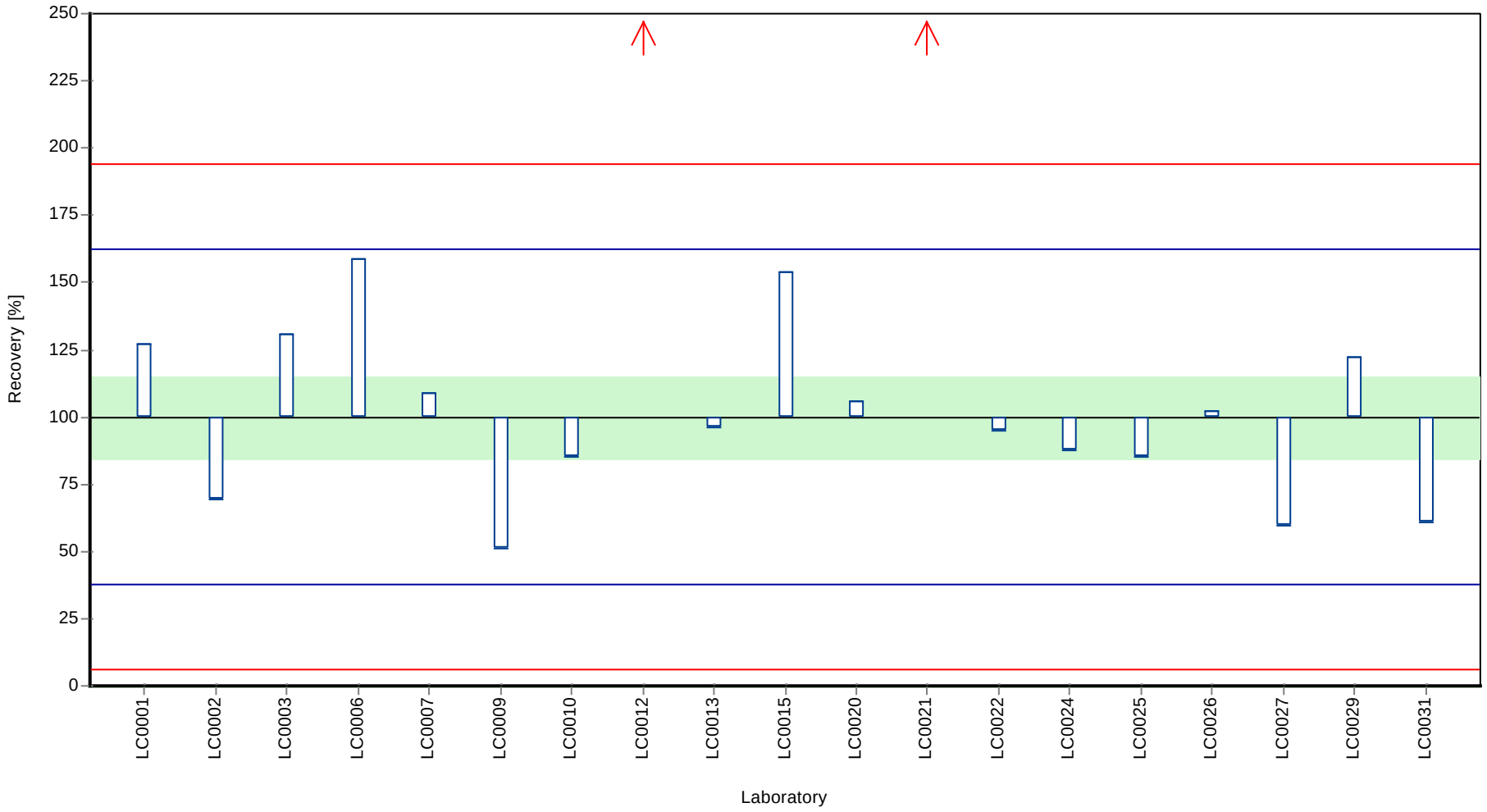
	all results	without outliners	Unit
Mean ± Cl (99%)	10,2 ± 4,82	8,2 ± 1,87	ng/l
Minimum	4,2	4,2	ng/l
Maximum	35	13	ng/l
Standard deviation	7,01	2,56	ng/l
rel. Standard deviation	68,5	31,3	%
n	19	17	-

Graphical presentation of results

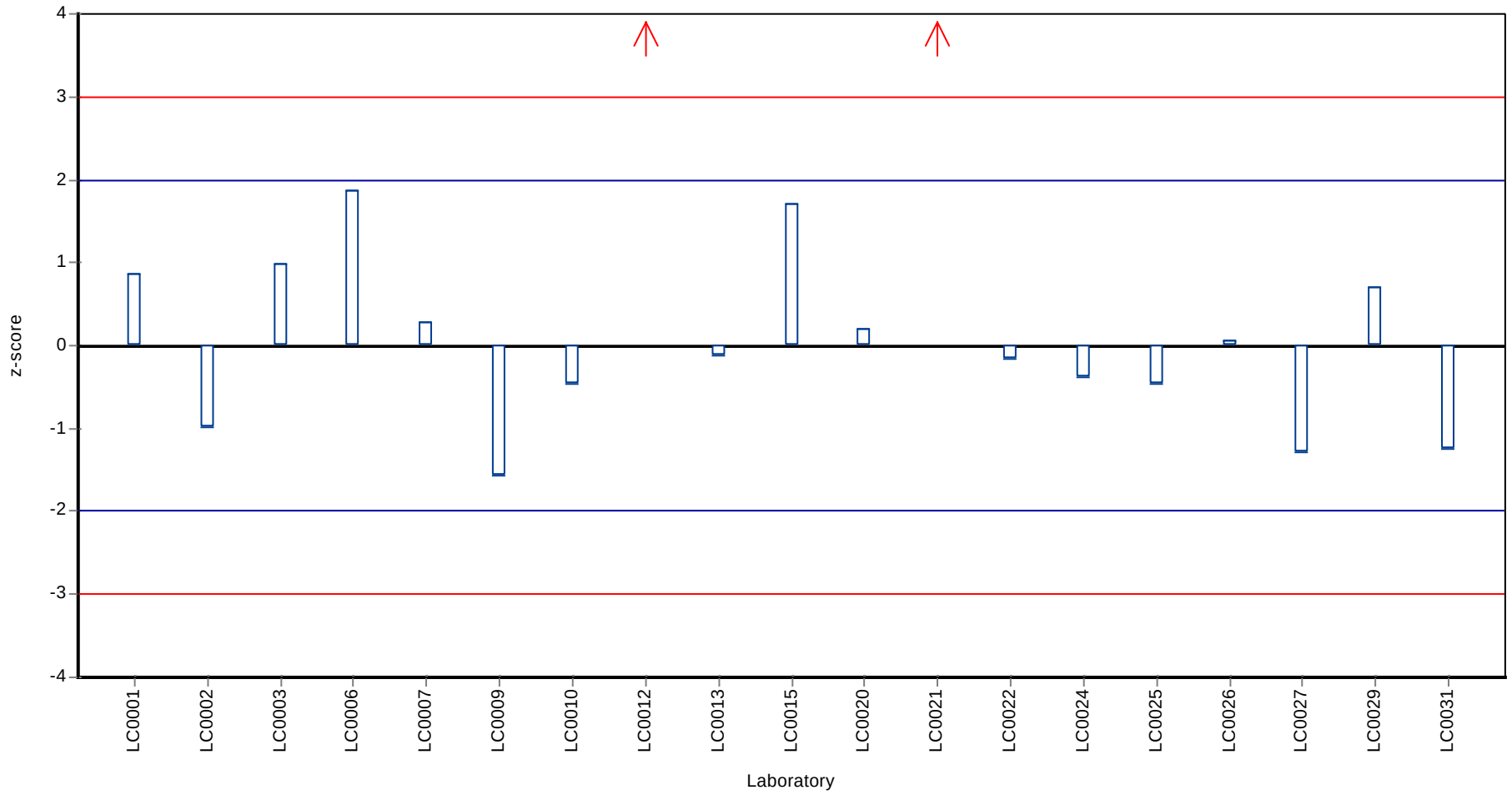
Results



Recovery rate



Z-score


4
3
2
1
0
-1
-2
-3
-4
z-score
LC0001
LC0002
LC0003
LC0006
LC0007
LC0009
LC0010
LC0012
LC0013
LC0015
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0029
LC0031
Laboratory

Parameter oriented report

P16 A - PAH

Benzo[g,h,i]perylene

Unit	ng/l
Mean ± Cl (99%)	47,2 ± 9,13
Minimum - Maximum	12 - 87
Check value ± U	26,9 ± 13

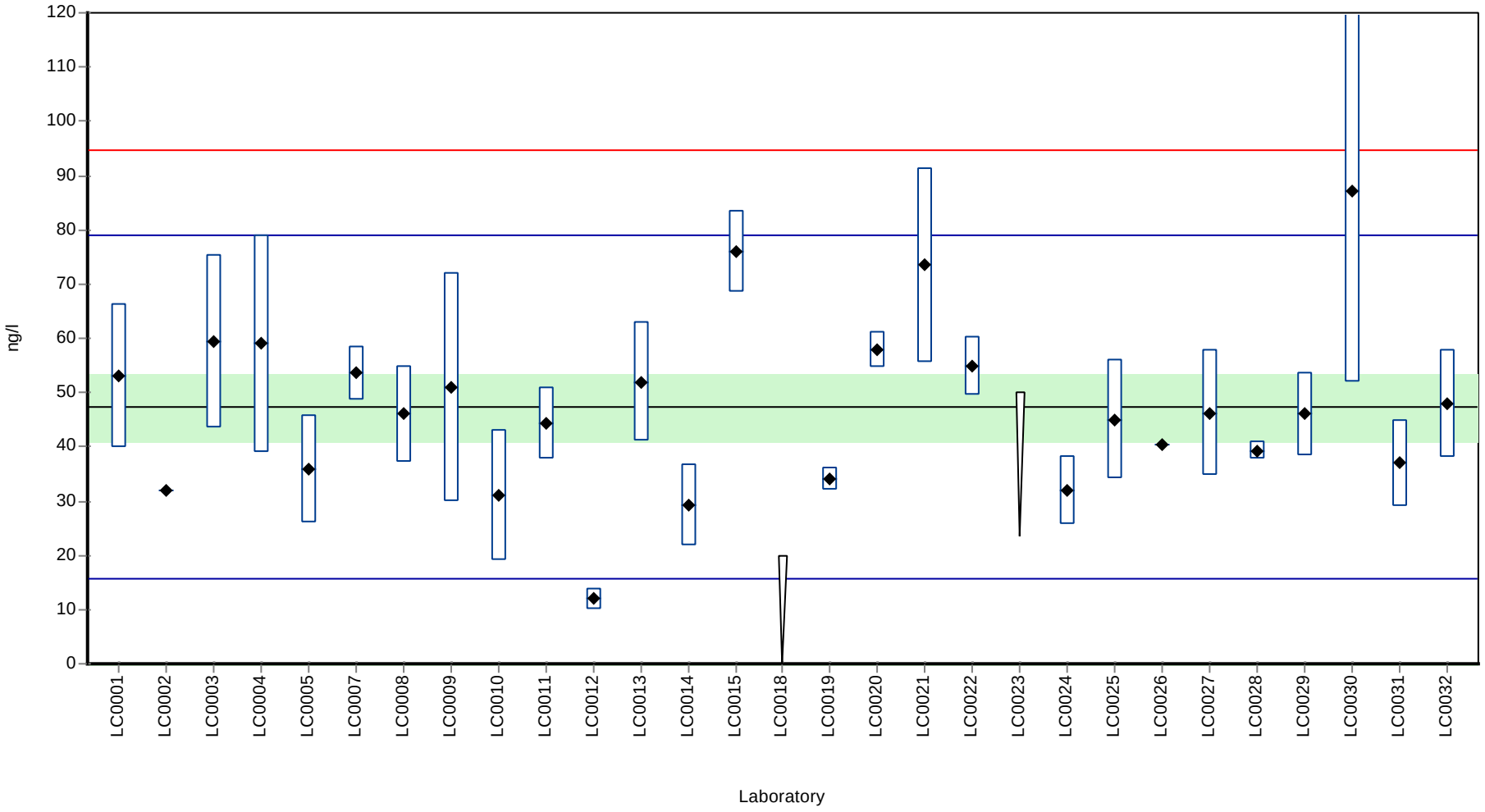
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	53,000	13,300	112,2	0,4	
LC0002	31,900	-	67,5	-1,0	
LC0003	59,400	16,000	125,7	0,8	
LC0004	59,000	20,000	124,9	0,7	
LC0005	35,800	10,020	75,8	-0,7	
LC0006	-	-	-	-	
LC0007	53,600	5,000	113,5	0,4	
LC0008	46,000	9,000	97,4	-0,1	
LC0009	51,000	21,000	108,0	0,2	
LC0010	31,000	12,000	65,6	-1,0	
LC0011	44,400	6,700	94,0	-0,2	
LC0012	12,000	1,900	25,4	-2,2	
LC0013	52,000	11,000	110,1	0,3	
LC0014	29,300	7,600	62,0	-1,1	
LC0015	76,000	7,600	160,9	1,8	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	34,000	2,100	72,0	-0,8	
LC0020	58,000	3,300	122,8	0,7	
LC0021	73,500	18,000	155,6	1,7	
LC0022	54,900	5,500	116,2	0,5	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	32,000	6,400	67,7	-1,0	
LC0025	45,000	11,000	95,3	-0,1	
LC0026	40,300	-	85,3	-0,4	
LC0027	46,200	11,600	97,8	-0,1	
LC0028	39,210	1,647	83,0	-0,5	
LC0029	46,000	7,800	97,4	-0,1	
LC0030	87,000	35,0001	184,2	2,5	
LC0031	37,000	8,000	78,3	-0,6	
LC0032	48,000	10,000	101,6	0,0	

Characteristics of parameter

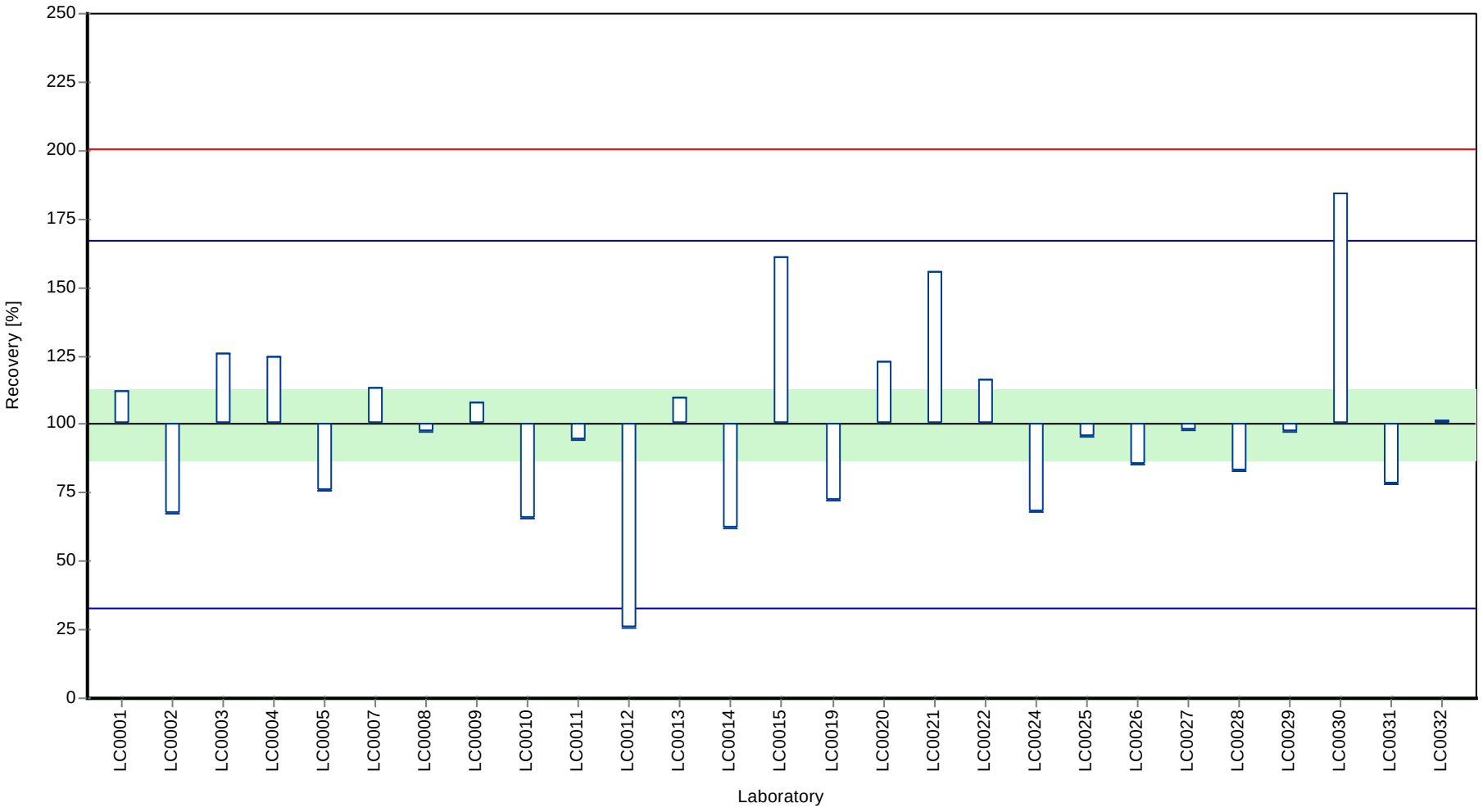
	all results	without outliners	Unit
Mean ± Cl (99%)	47,2 ± 9,13	47,2 ± 9,13	ng/l
Minimum	12	12	ng/l
Maximum	87	87	ng/l
Standard deviation	15,8	15,8	ng/l
rel. Standard deviation	33,5	33,5	%
n	27	27	-

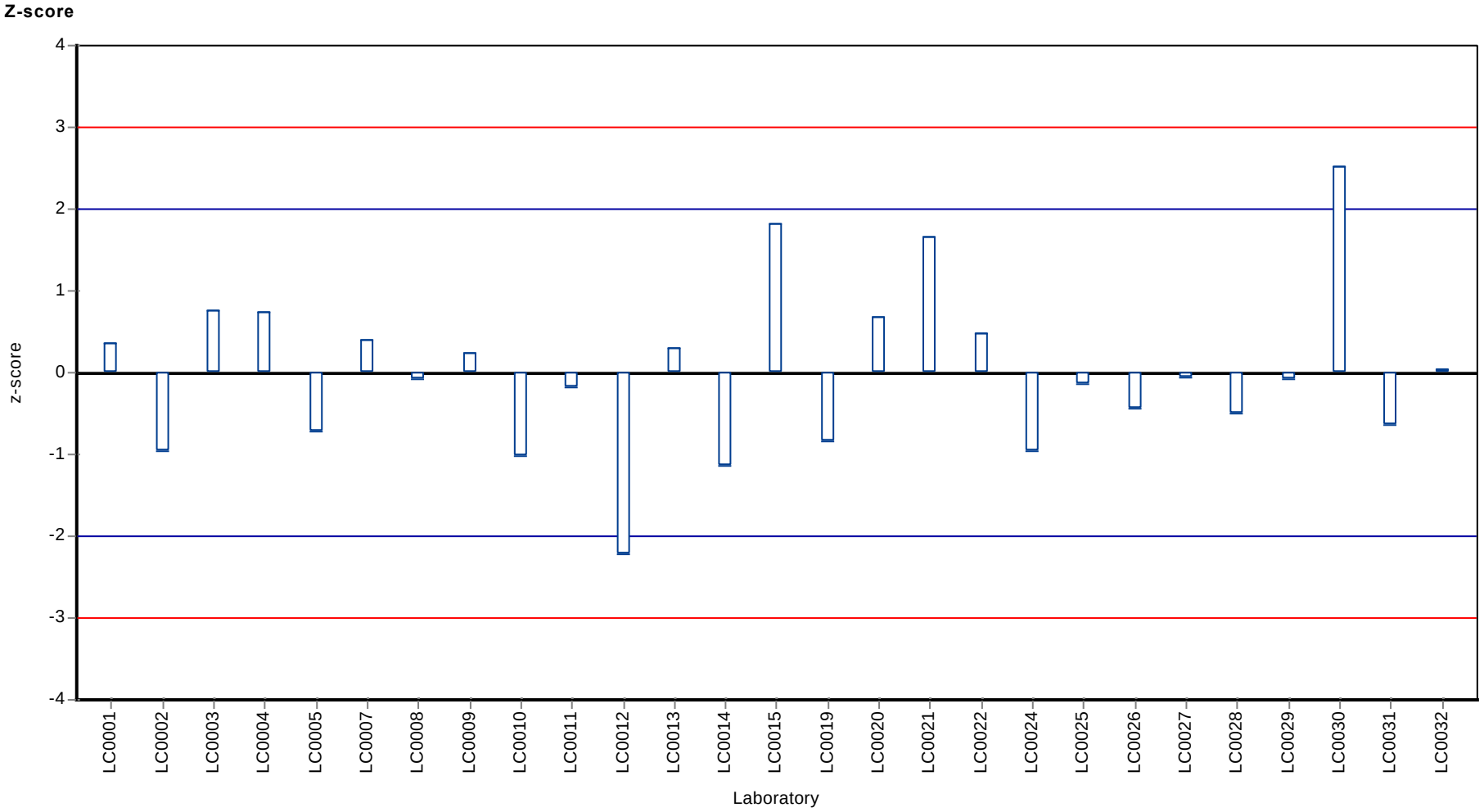
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0030
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Benzo[g,h,i]perylene

Unit	ng/l
Mean ± Cl (99%)	5,82 ± 1,72
Minimum - Maximum	2,6 - 10,2
Check value ± U	<6,3 (LOQ)

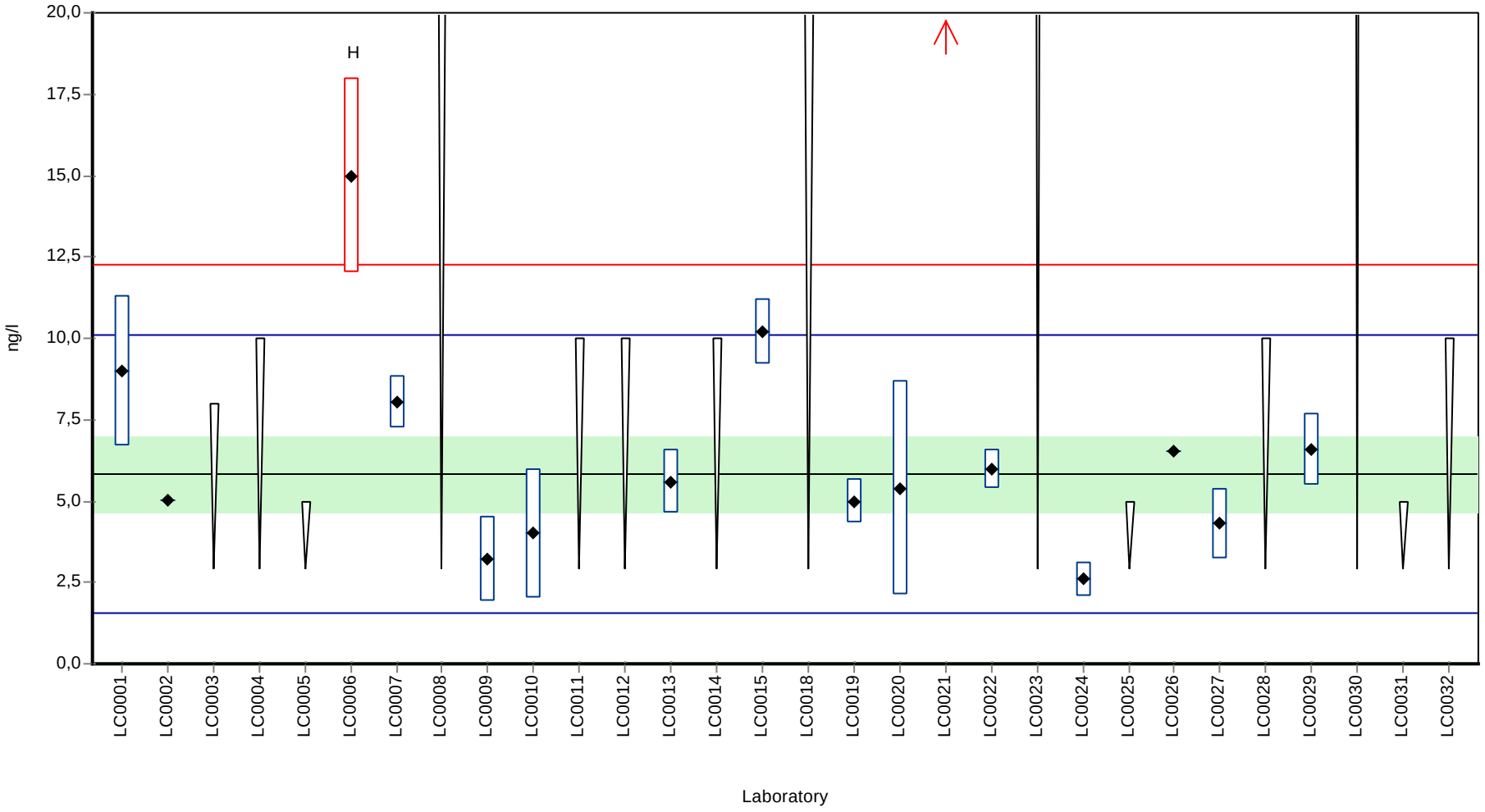
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	9,000	2,300	154,6	1,5	
LC0002	5,040	-	86,6	-0,4	
LC0003	< 8 (LOQ)	-	-	-	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 5 (LOQ)	-	-	-	
LC0006	15,000	3,000	257,7	4,3	H
LC0007	8,030	0,800	138,0	1,0	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	3,200	1,300	55,0	-1,2	
LC0010	4,000	2,000	68,7	-0,8	
LC0011	< 10 (LOQ)	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	5,600	1,000	96,2	-0,1	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	10,200	1,000	175,3	2,0	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	5,000	0,700	85,9	-0,4	
LC0020	5,400	3,300	92,8	-0,2	
LC0021	50,800	13,000	872,9	21,0	H
LC0022	6,000	0,600	103,1	0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	2,600	0,520	44,7	-1,5	
LC0025	< 5 (LOQ)	-	-	-	
LC0026	6,510	-	111,9	0,3	
LC0027	4,300	1,100	73,9	-0,7	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	6,600	1,100	113,4	0,4	
LC0030	< 70 (LOQ)	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

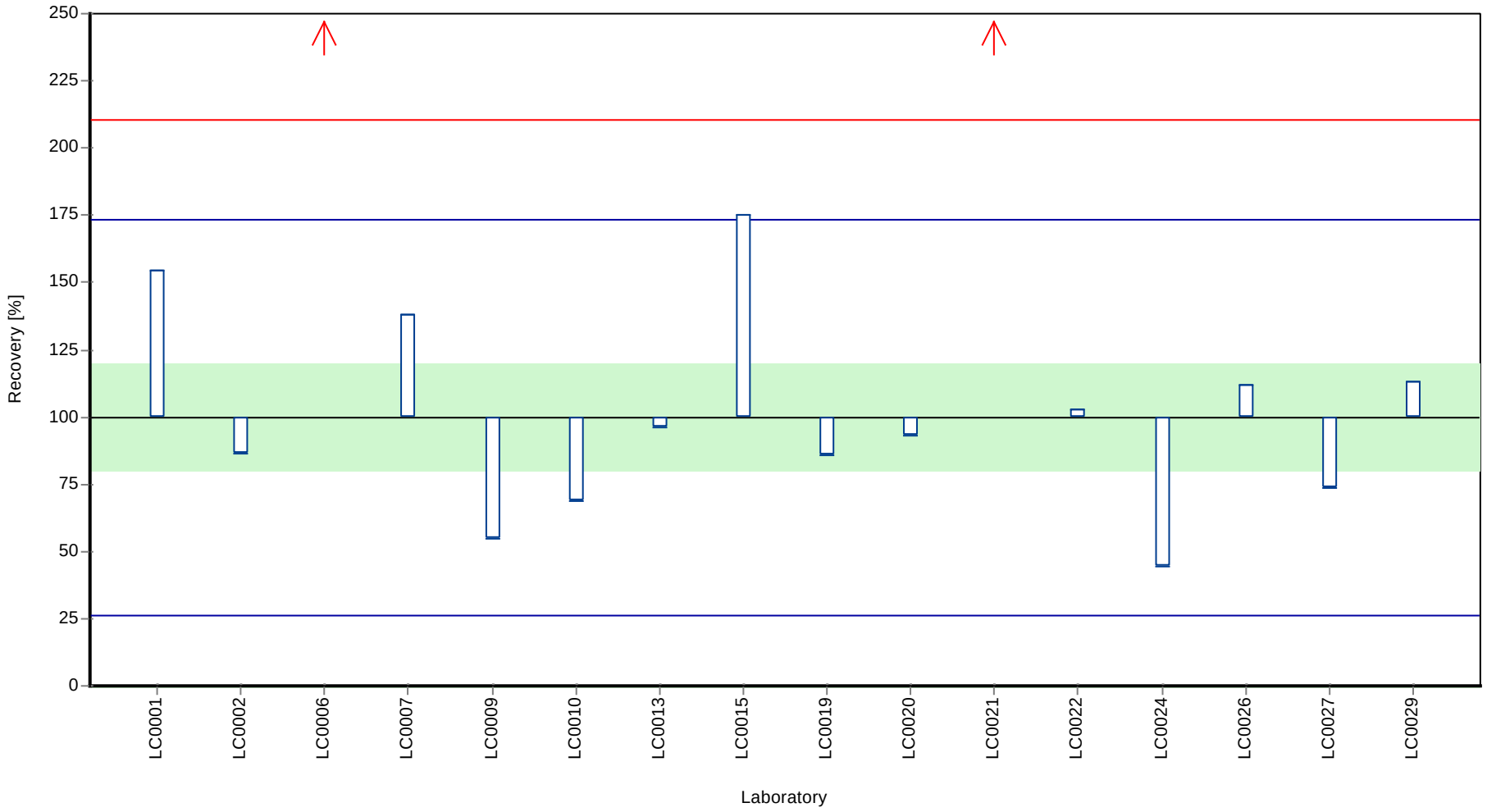
	all results	without outliners	Unit
Mean ± Cl (99%)	9,21 ± 8,63	5,82 ± 1,72	ng/l
Minimum	2,6	2,6	ng/l
Maximum	50,8	10,2	ng/l
Standard deviation	11,5	2,14	ng/l
rel. Standard deviation	125	36,8	%
n	16	14	-

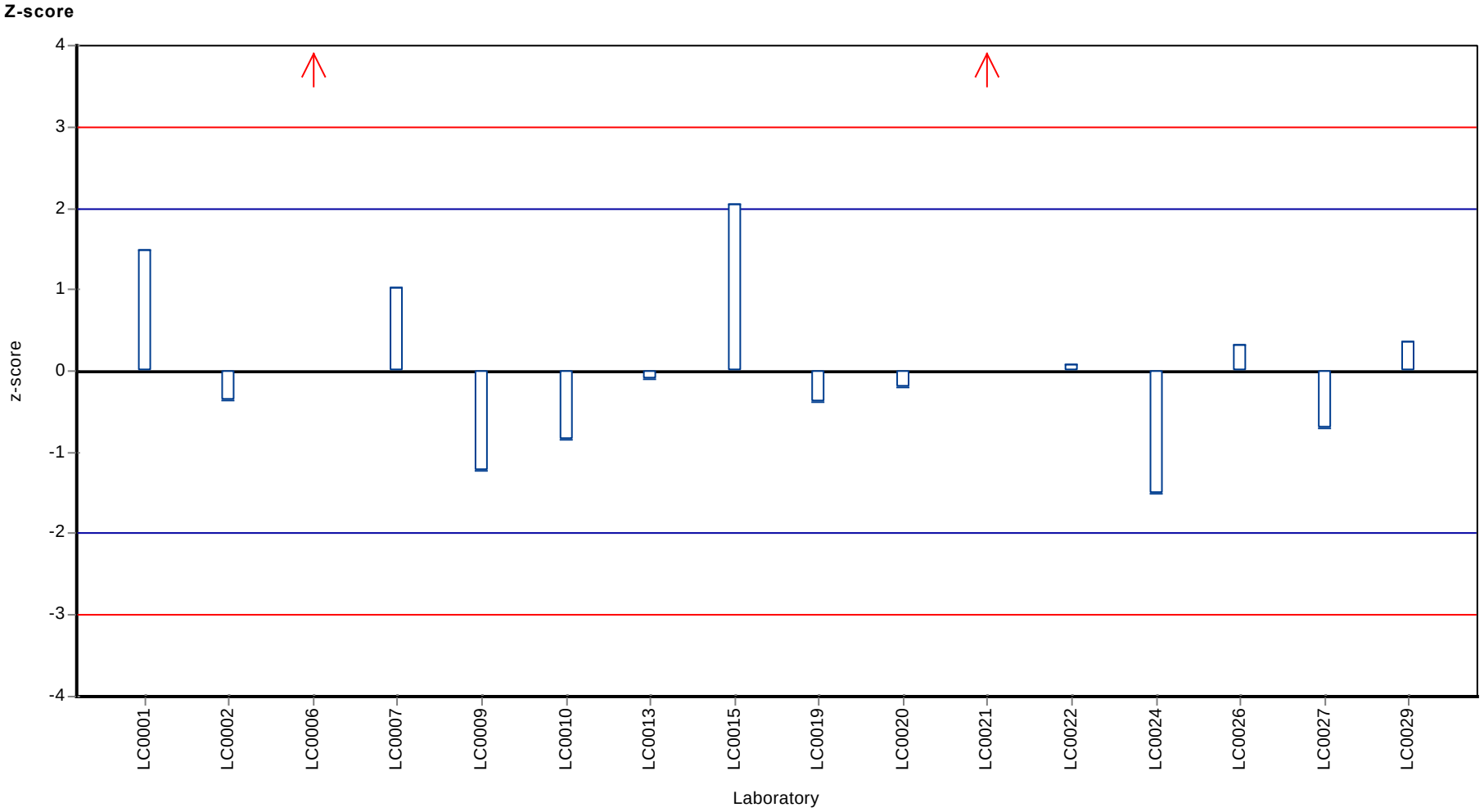
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0006
LC0007
LC0009
LC0010
LC0013
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0026
LC0027
LC0029
Laboratory

Parameter oriented report

P16 A - PAH

Benzo[k]fluoranthene

Unit	ng/l
Mean ± Cl (99%)	53 ± 9
Minimum - Maximum	24,6 - 82
Check value ± U	39,0 ± 17,3

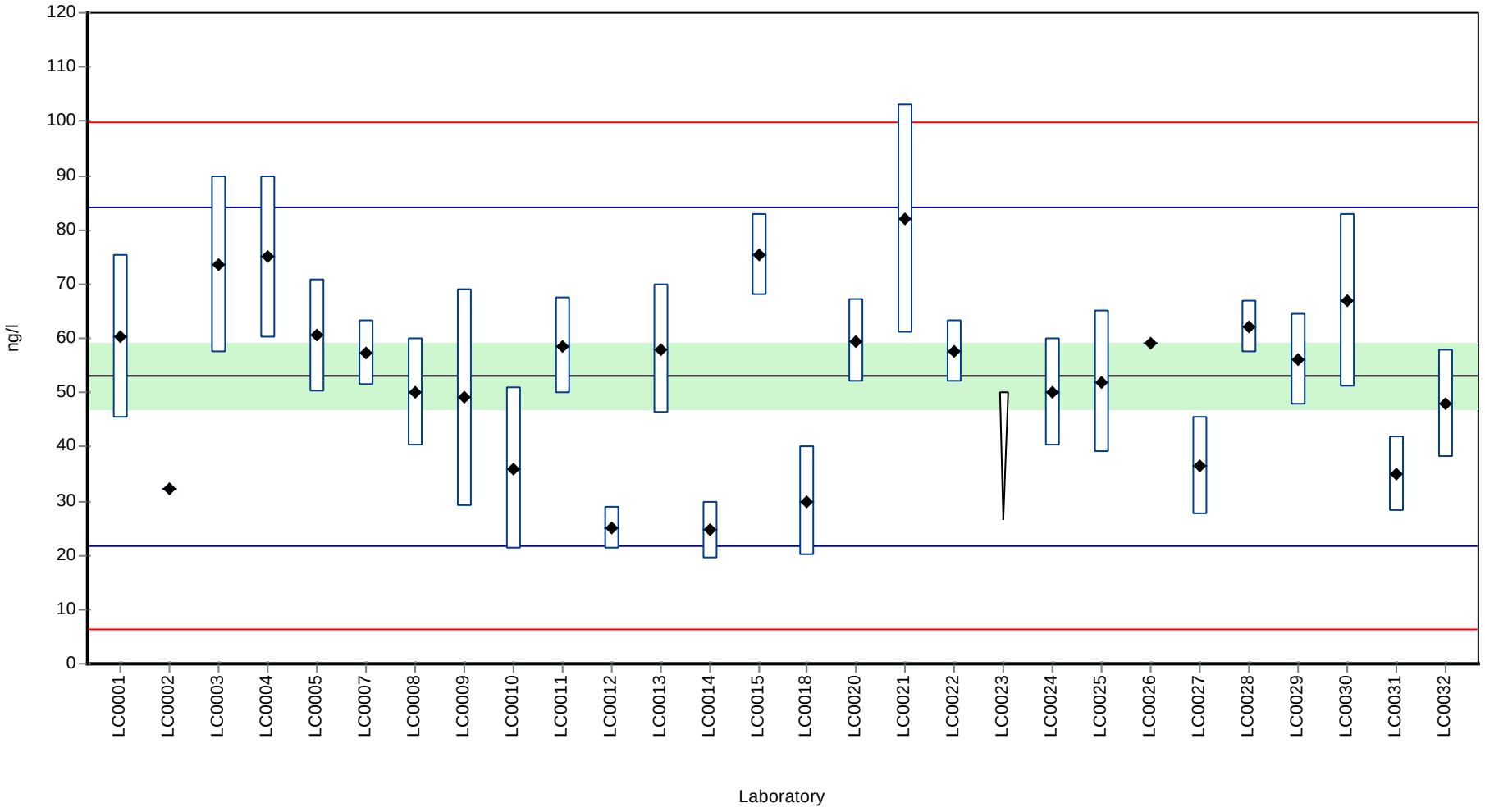
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	60,300	15,100	113,9	0,5	
LC0002	32,200	-	60,8	-1,3	
LC0003	73,500	16,200	138,8	1,3	
LC0004	75,000	15,000	141,6	1,4	
LC0005	60,500	10,300	114,2	0,5	
LC0006	-	-	-	-	
LC0007	57,190	6,000	108,0	0,3	
LC0008	50,000	10,000	94,4	-0,2	
LC0009	49,000	20,000	92,5	-0,3	
LC0010	36,000	15,000	68,0	-1,1	
LC0011	58,600	8,800	110,7	0,4	
LC0012	25,000	3,960	47,2	-1,8	
LC0013	58,000	12,000	109,5	0,3	
LC0014	24,600	5,400	46,5	-1,8	
LC0015	75,300	7,500	142,2	1,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	30,000	10,000	56,6	-1,5	
LC0019	-	-	-	-	
LC0020	59,500	7,600	112,4	0,4	
LC0021	82,000	21,000	154,8	1,9	
LC0022	57,600	5,800	108,8	0,3	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	50,000	10,000	94,4	-0,2	
LC0025	52,000	13,000	98,2	-0,1	
LC0026	59,000	-	111,4	0,4	
LC0027	36,400	9,100	68,7	-1,1	
LC0028	62,190	4,854	117,4	0,6	
LC0029	56,000	8,400	105,7	0,2	
LC0030	67,000	16,0003	126,5	0,9	
LC0031	35,000	7,000	66,1	-1,2	
LC0032	48,000	10,000	90,6	-0,3	

Characteristics of parameter

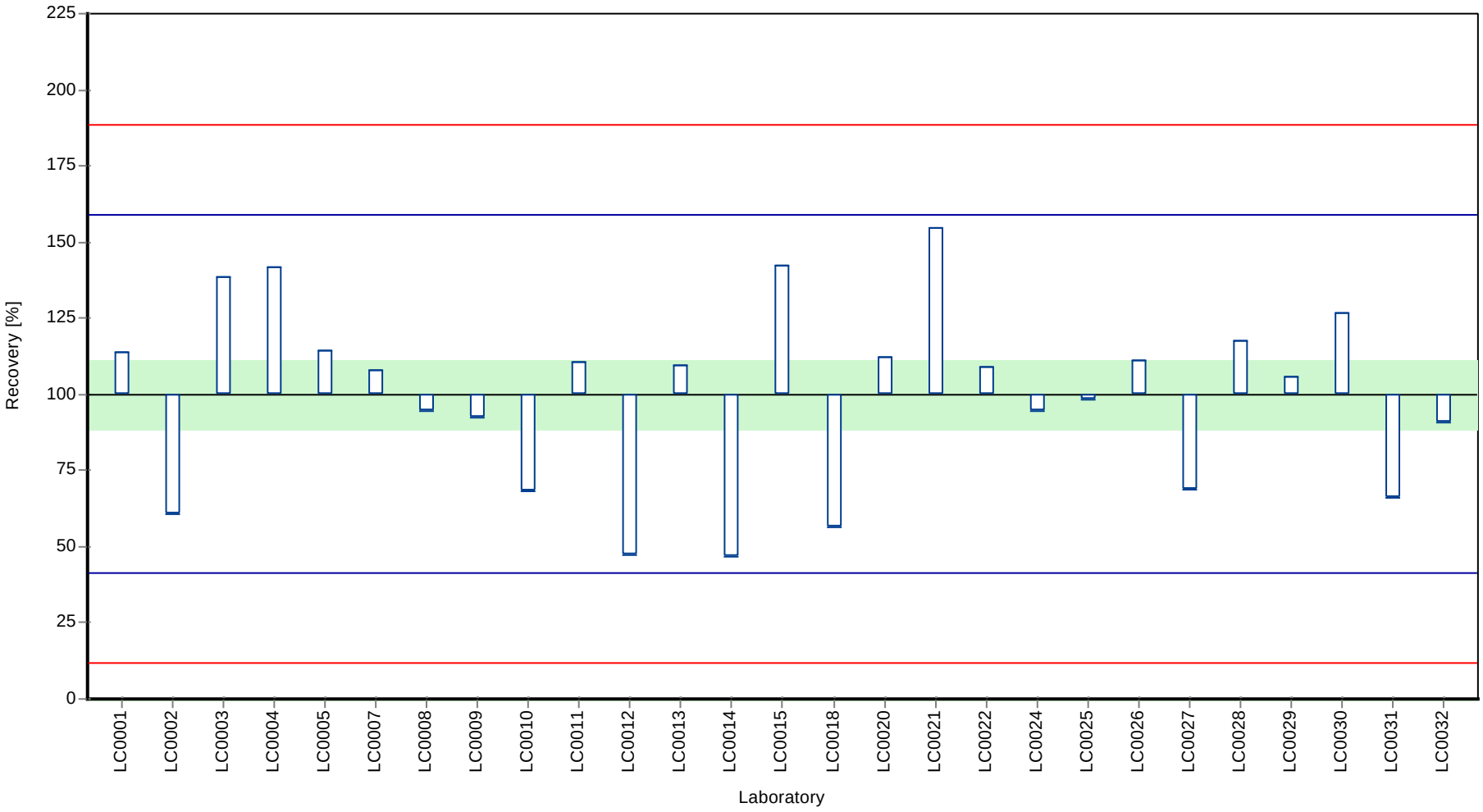
	all results	without outliners	Unit
Mean ± Cl (99%)	53 ± 9	53 ± 9	ng/l
Minimum	24,6	24,6	ng/l
Maximum	82	82	ng/l
Standard deviation	15,6	15,6	ng/l
rel. Standard deviation	29,4	29,4	%
n	27	27	-

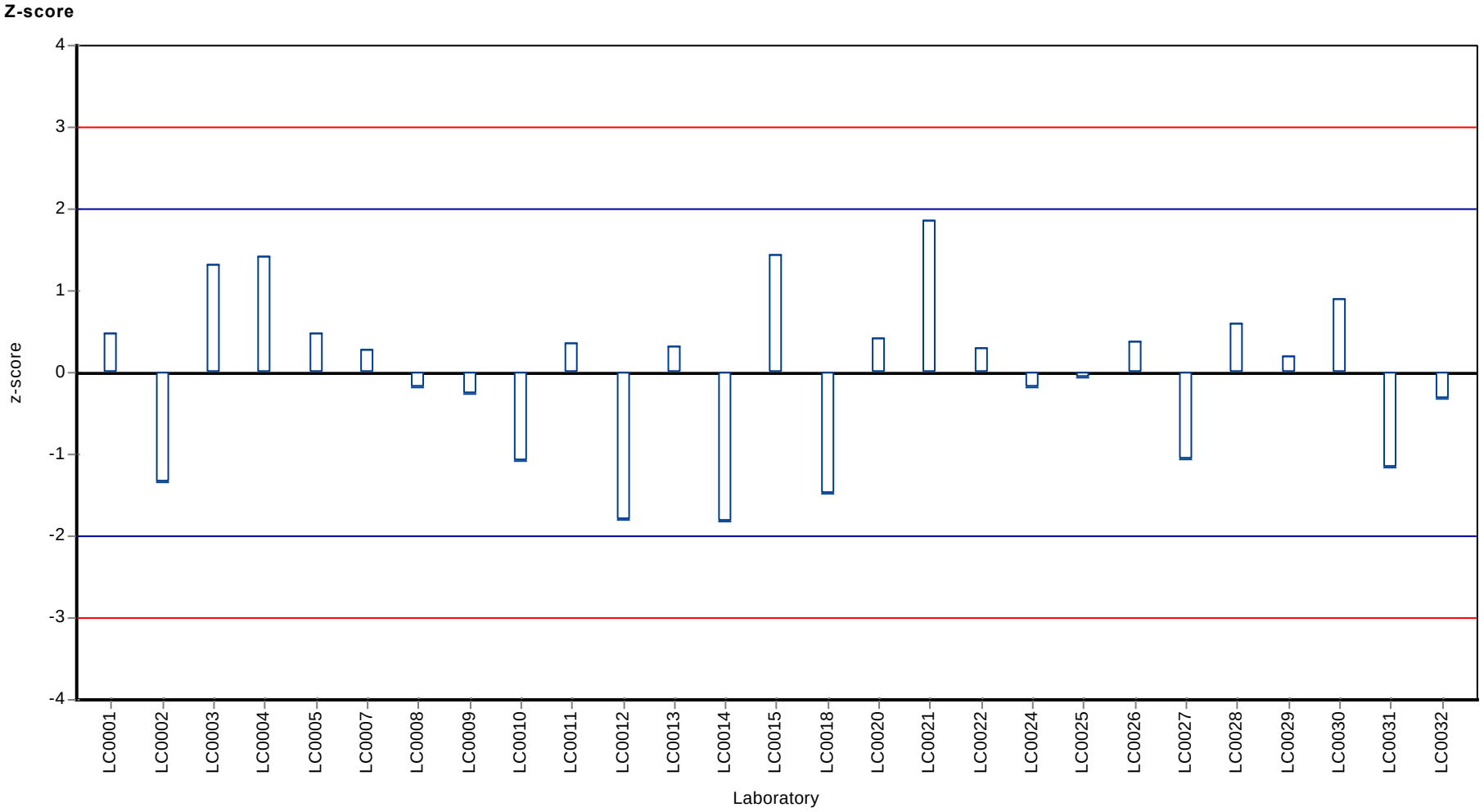
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0004
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LC0008
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LC0010
LC0011
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LC0029
LC0030
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Benzo[k]fluoranthene

Unit	ng/l
Mean ± Cl (99%)	6,94 ± 1,64
Minimum - Maximum	3,3 - 11,4
Check value ± U	<8,5 (LOQ)

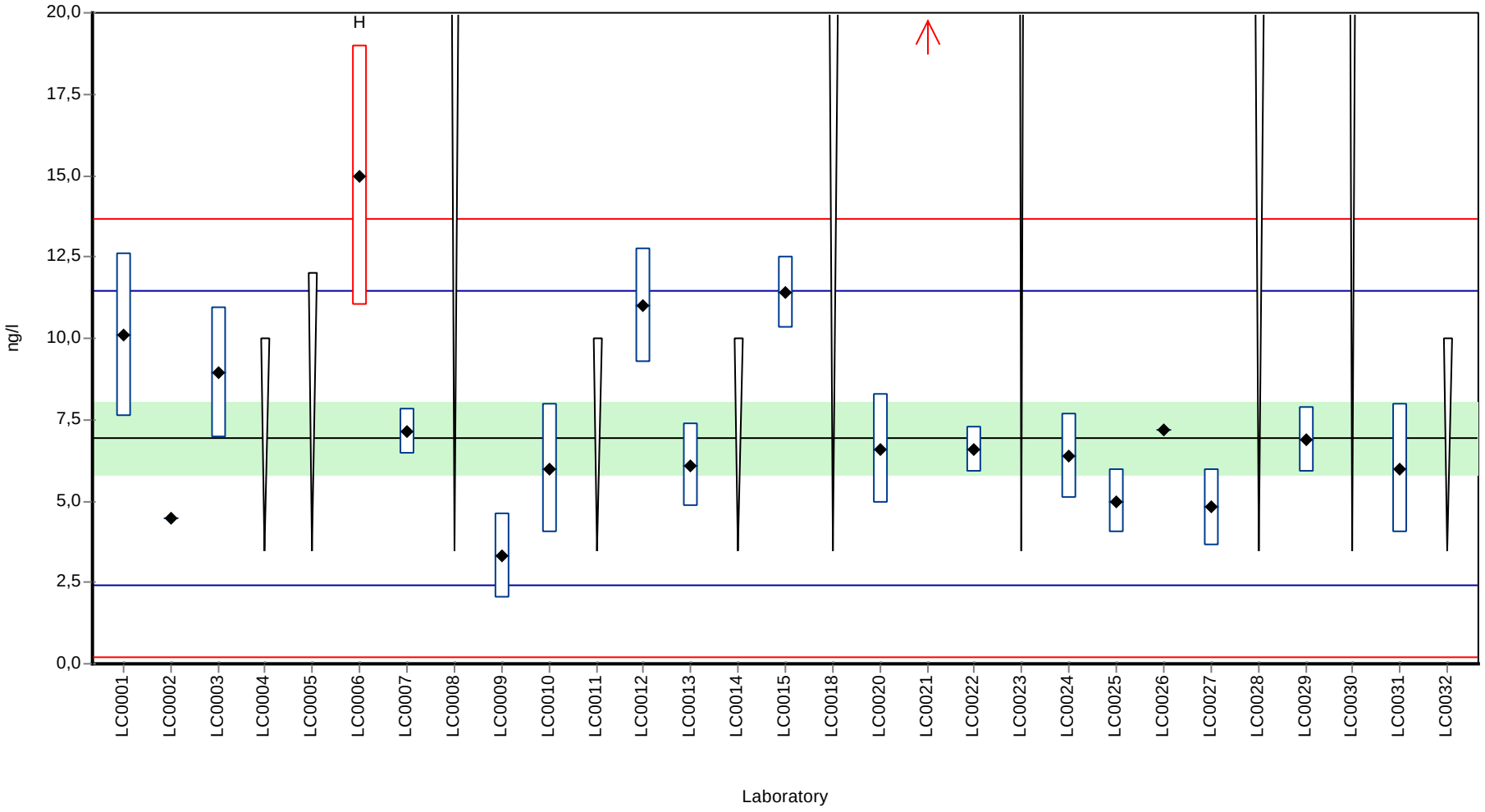
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	10,100	2,500	145,6	1,4	
LC0002	4,460	-	64,3	-1,1	
LC0003	8,930	2,000	128,8	0,9	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 12 (LOQ)	-	-	-	
LC0006	15,000	4,000	216,3	3,6	H
LC0007	7,140	0,700	102,9	0,1	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	3,300	1,300	47,6	-1,6	
LC0010	6,000	2,000	86,5	-0,4	
LC0011	< 10 (LOQ)	-	-	-	
LC0012	11,000	1,760	158,6	1,8	
LC0013	6,100	1,300	87,9	-0,4	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	11,400	1,100	164,4	2,0	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	-	-	-	-	
LC0020	6,600	1,700	95,2	-0,1	
LC0021	35,400	9,000	510,4	12,6	H
LC0022	6,600	0,700	95,2	-0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	6,400	1,300	92,3	-0,2	
LC0025	5,000	1,000	72,1	-0,9	
LC0026	7,180	-	103,5	0,1	
LC0027	4,800	1,200	69,2	-0,9	
LC0028	< 20 (LOQ)	-	-	-	
LC0029	6,900	1,000	99,5	0,0	
LC0030	< 33 (LOQ)	-	-	-	
LC0031	6,000	2,000	86,5	-0,4	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

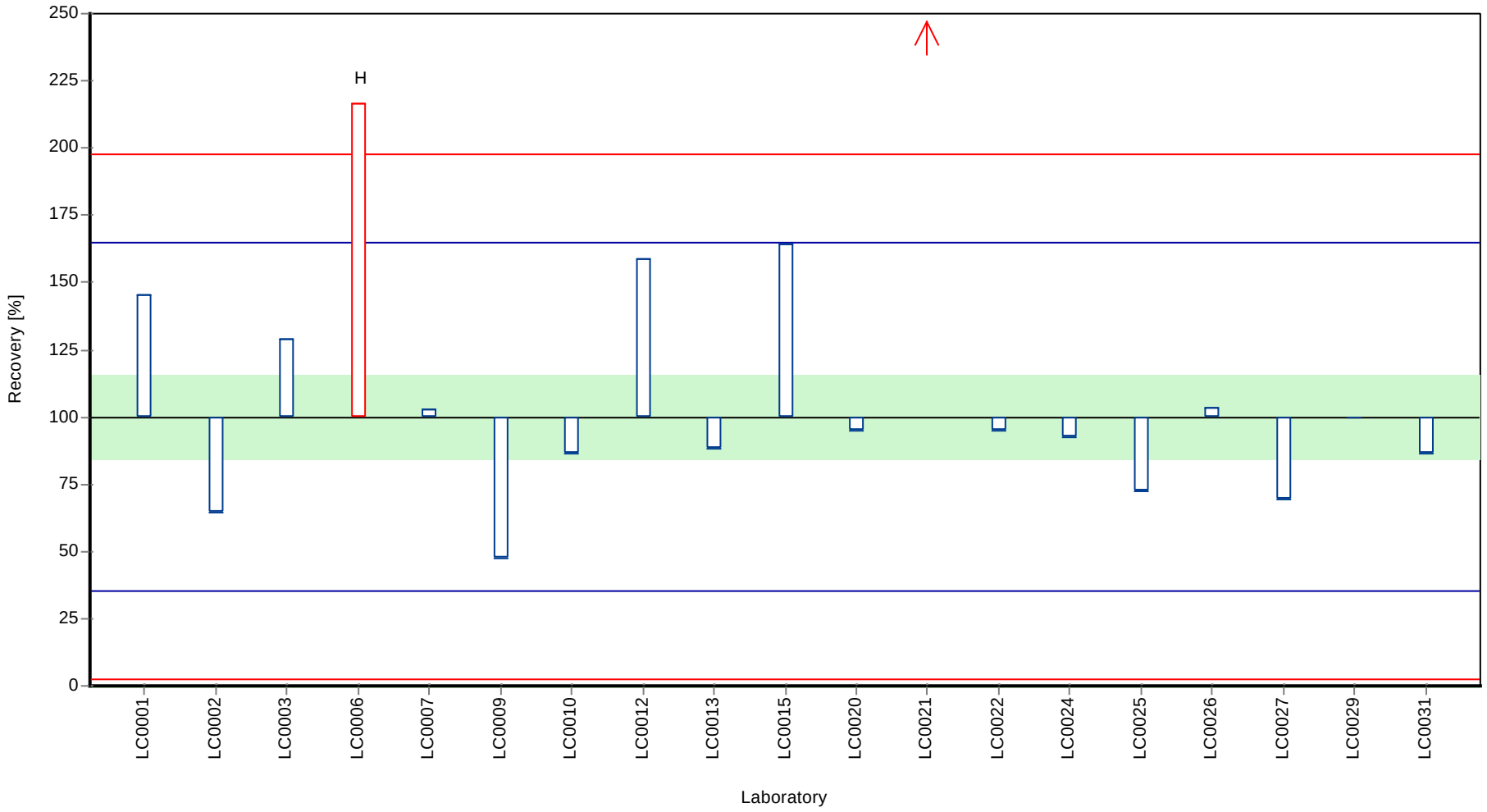
	all results	without outliners	Unit
Mean ± Cl (99%)	8,86 ± 4,83	6,94 ± 1,64	ng/l
Minimum	3,3	3,3	ng/l
Maximum	35,4	11,4	ng/l
Standard deviation	7,02	2,25	ng/l
rel. Standard deviation	79,2	32,5	%
n	19	17	-

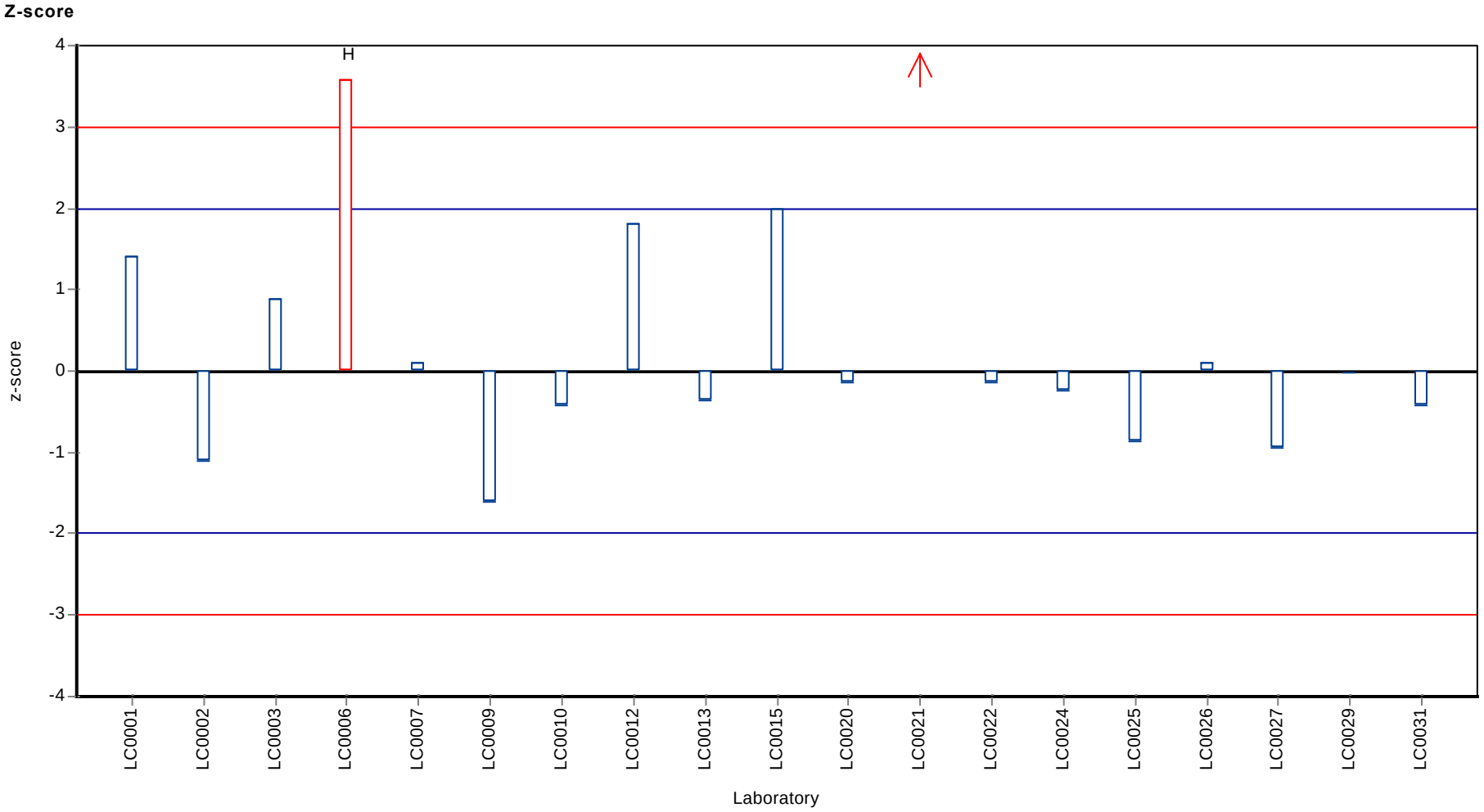
Graphical presentation of results

Results



Recovery rate




Z-score
H
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0006
LC0007
LC0009
LC0010
LC0012
LC0013
LC0015
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0029
LC0031
Laboratory

Parameter oriented report

P16 A - PAH

Chrysene

Unit	ng/l
Mean ± Cl (99%)	51,4 ± 8,2
Minimum - Maximum	25 - 83,9
Check value ± U	43,8 ± 13,4

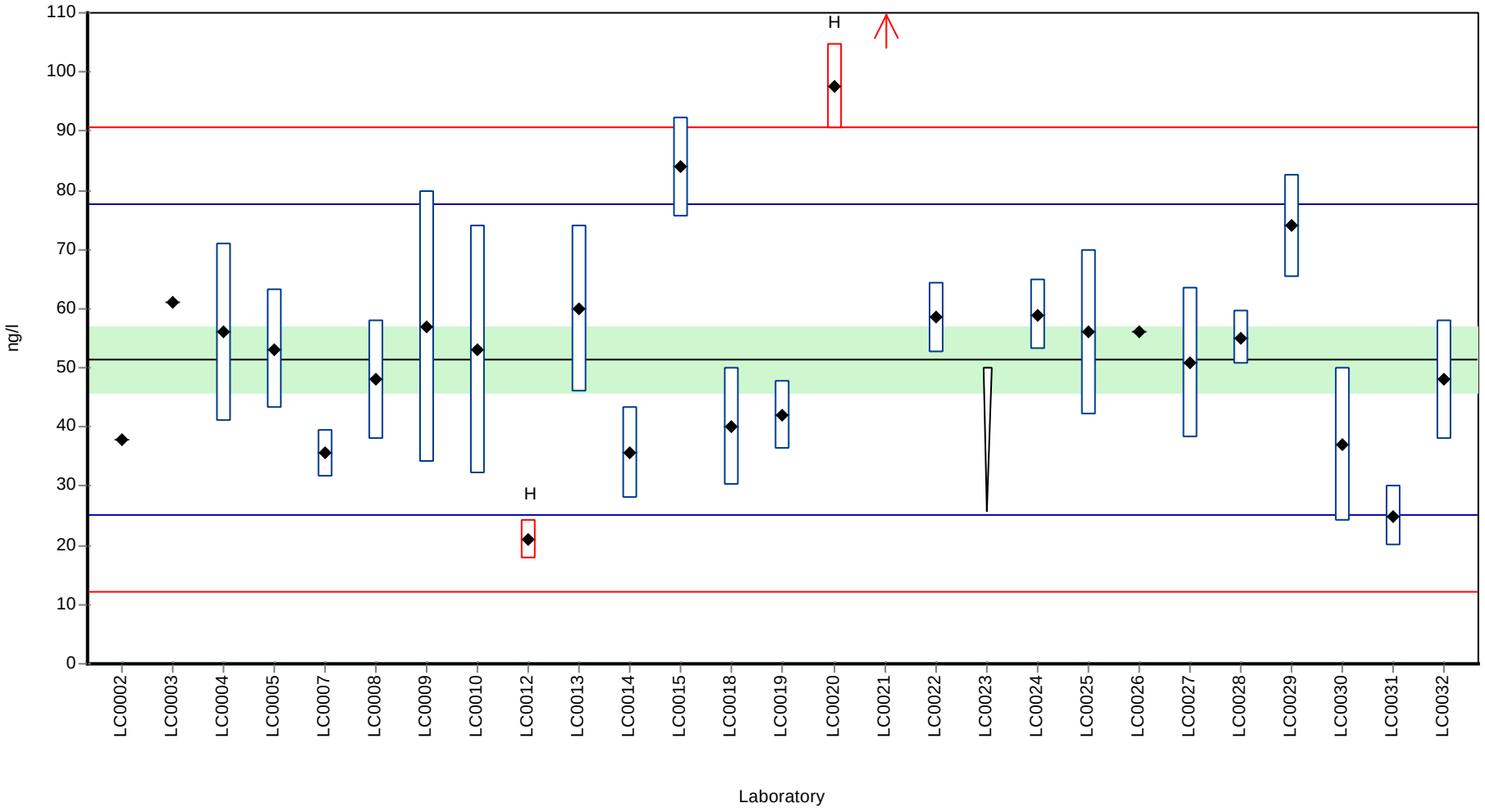
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	37,900	-	73,7	-1,0	
LC0003	61,100	-	118,8	0,7	
LC0004	56,000	15,000	108,9	0,3	
LC0005	53,200	10,100	103,5	0,1	
LC0006	-	-	-	-	
LC0007	35,530	4,000	69,1	-1,2	
LC0008	48,000	10,000	93,3	-0,3	
LC0009	57,000	23,000	110,8	0,4	
LC0010	53,000	21,000	103,1	0,1	
LC0011	-	-	-	-	
LC0012	21,000	3,330	40,8	-2,3	H
LC0013	60,000	14,000	116,7	0,7	
LC0014	35,700	7,800	69,4	-1,2	
LC0015	83,900	8,400	163,1	2,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	40,000	10,000	77,8	-0,9	
LC0019	42,000	5,700	81,7	-0,7	
LC0020	97,500	7,200	189,6	3,5	H
LC0021	124,000	31,000	241,1	5,5	H
LC0022	58,500	5,900	113,8	0,5	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	59,000	5,900	114,7	0,6	
LC0025	56,000	14,000	108,9	0,3	
LC0026	56,100	-	109,1	0,4	
LC0027	50,800	12,700	98,8	0,0	
LC0028	55,060	4,589	107,1	0,3	
LC0029	74,000	8,700	143,9	1,7	
LC0030	37,000	13,000	71,9	-1,1	
LC0031	25,000	5,000	48,6	-2,0	
LC0032	48,000	10,000	93,3	-0,3	

Characteristics of parameter

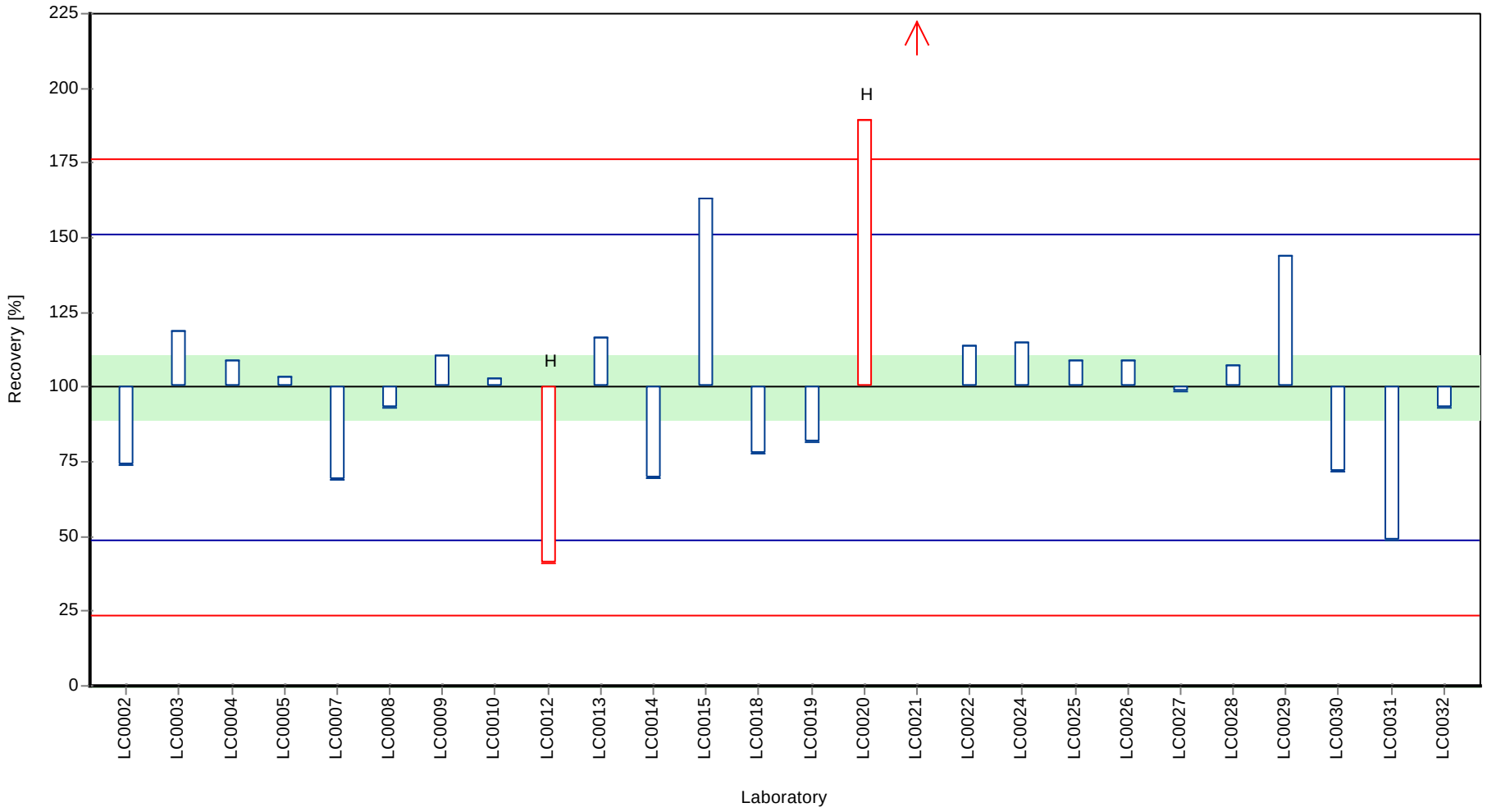
	all results	without outliners	Unit
Mean ± Cl (99%)	54,8 ± 12,8	51,4 ± 8,2	ng/l
Minimum	21	25	ng/l
Maximum	124	83,9	ng/l
Standard deviation	21,7	13,1	ng/l
rel. Standard deviation	39,6	25,5	%
n	26	23	-

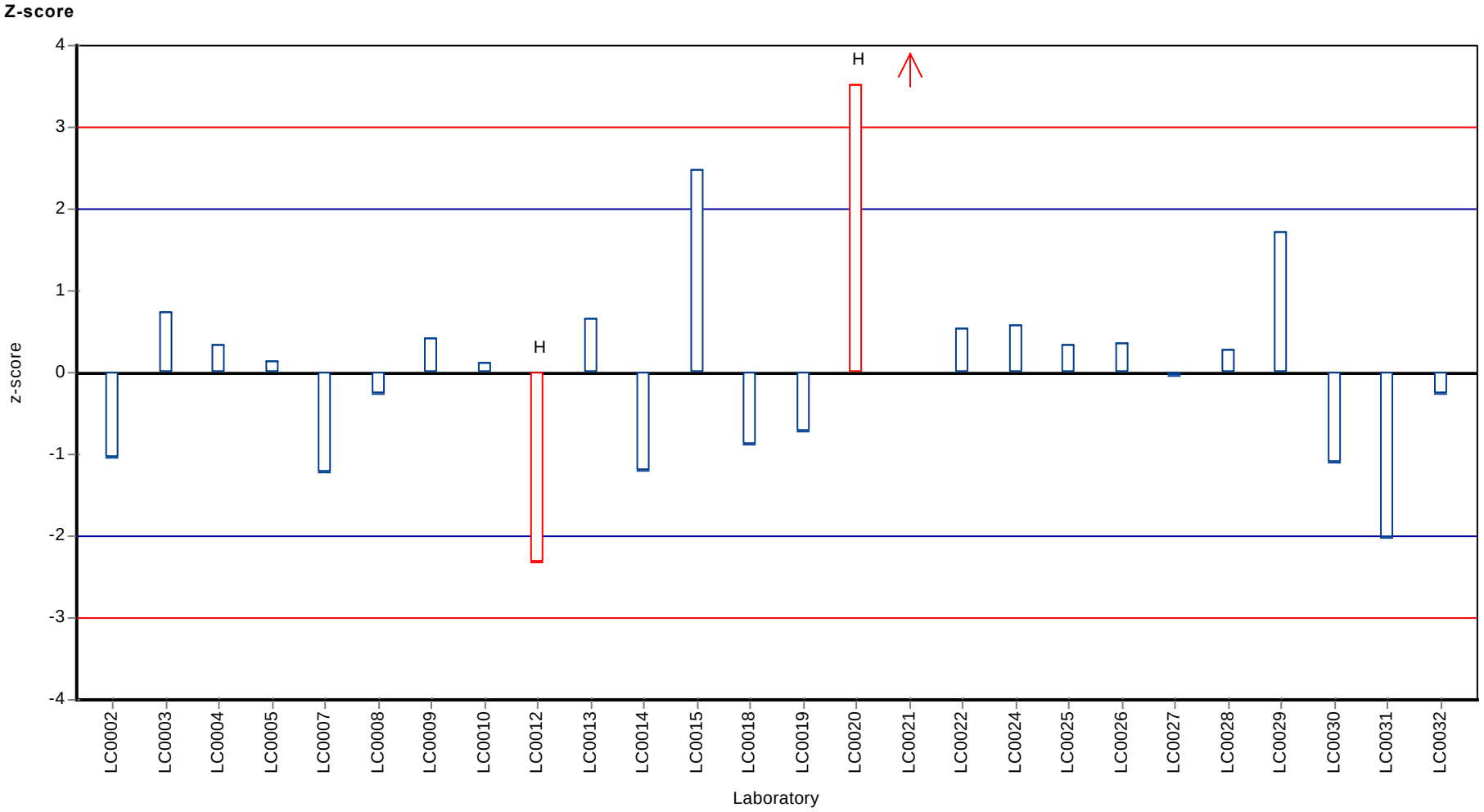
Graphical presentation of results

Results



Recovery rate




Z-score
4
3
2
1
0
-1
-2
-3
-4
z-score
H
H
LC0002
LC0003
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0018
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0030
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Chrysene

Unit	ng/l
Mean ± Cl (99%)	4,91 ± 2,3
Minimum - Maximum	1,2 - 8,3
Check value ± U	<2,7 (LOD)

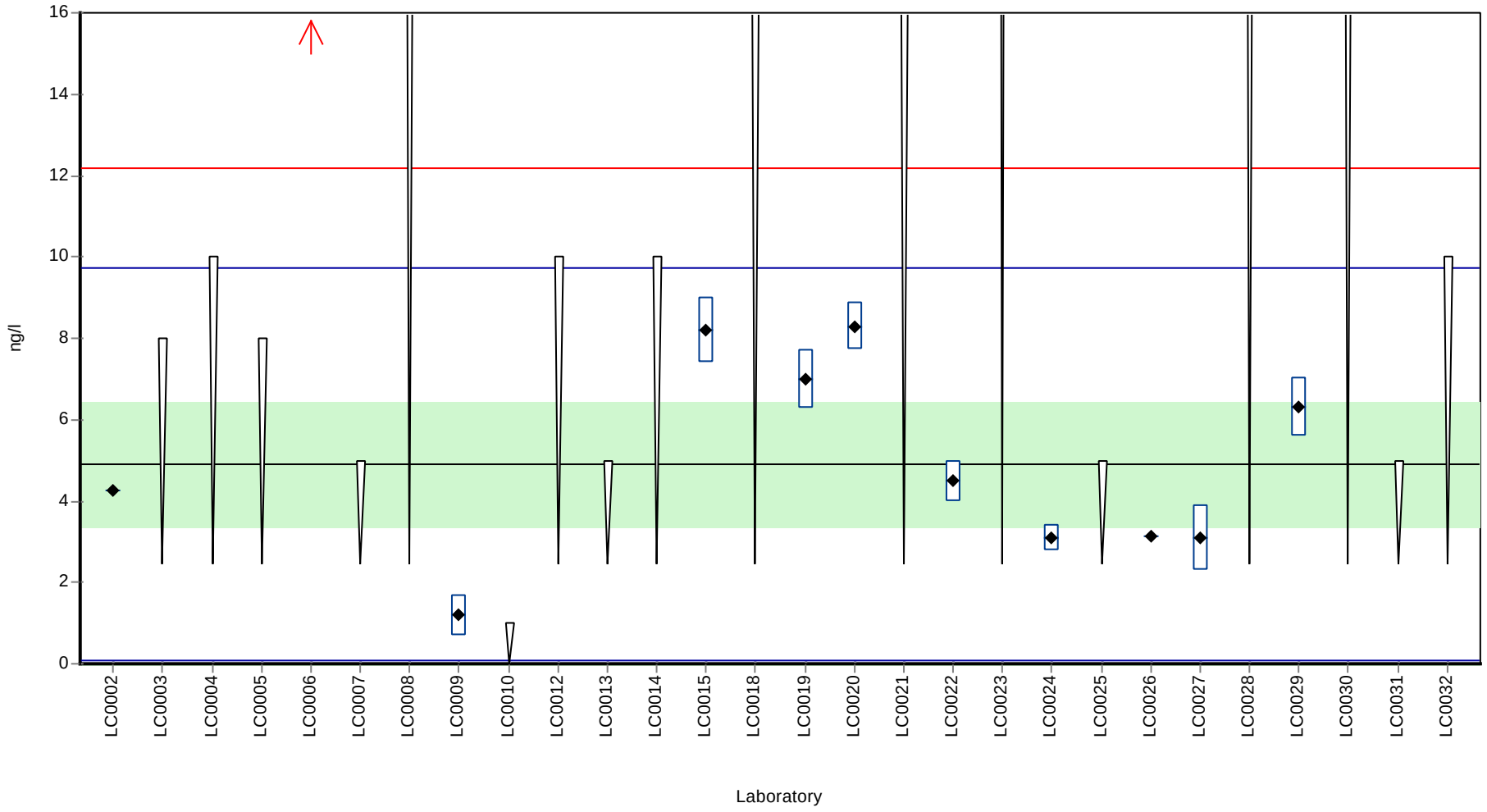
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	4,270	-	87,0	-0,3	
LC0003	< 8 (LOQ)	-	-	-	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 8 (LOQ)	-	-	-	
LC0006	28,000	6,000	570,3	9,5	H
LC0007	< 5 (LOQ)	-	-	-	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	1,200	0,500	24,4	-1,5	
LC0010	<1 (LOD)	-	-	-	
LC0011	-	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	< 5 (LOQ)	-	-	-	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	8,200	0,800	167,0	1,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	7,000	0,710	142,6	0,9	
LC0020	8,300	0,600	169,0	1,4	
LC0021	< 20 (LOQ)	-	-	-	
LC0022	4,500	0,500	91,6	-0,2	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	3,100	0,310	63,1	-0,7	
LC0025	< 5 (LOQ)	-	-	-	
LC0026	3,130	-	63,7	-0,7	
LC0027	3,100	0,800	63,1	-0,7	
LC0028	< 30 (LOQ)	-	-	-	
LC0029	6,300	0,730	128,3	0,6	
LC0030	< 26 (LOQ)	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

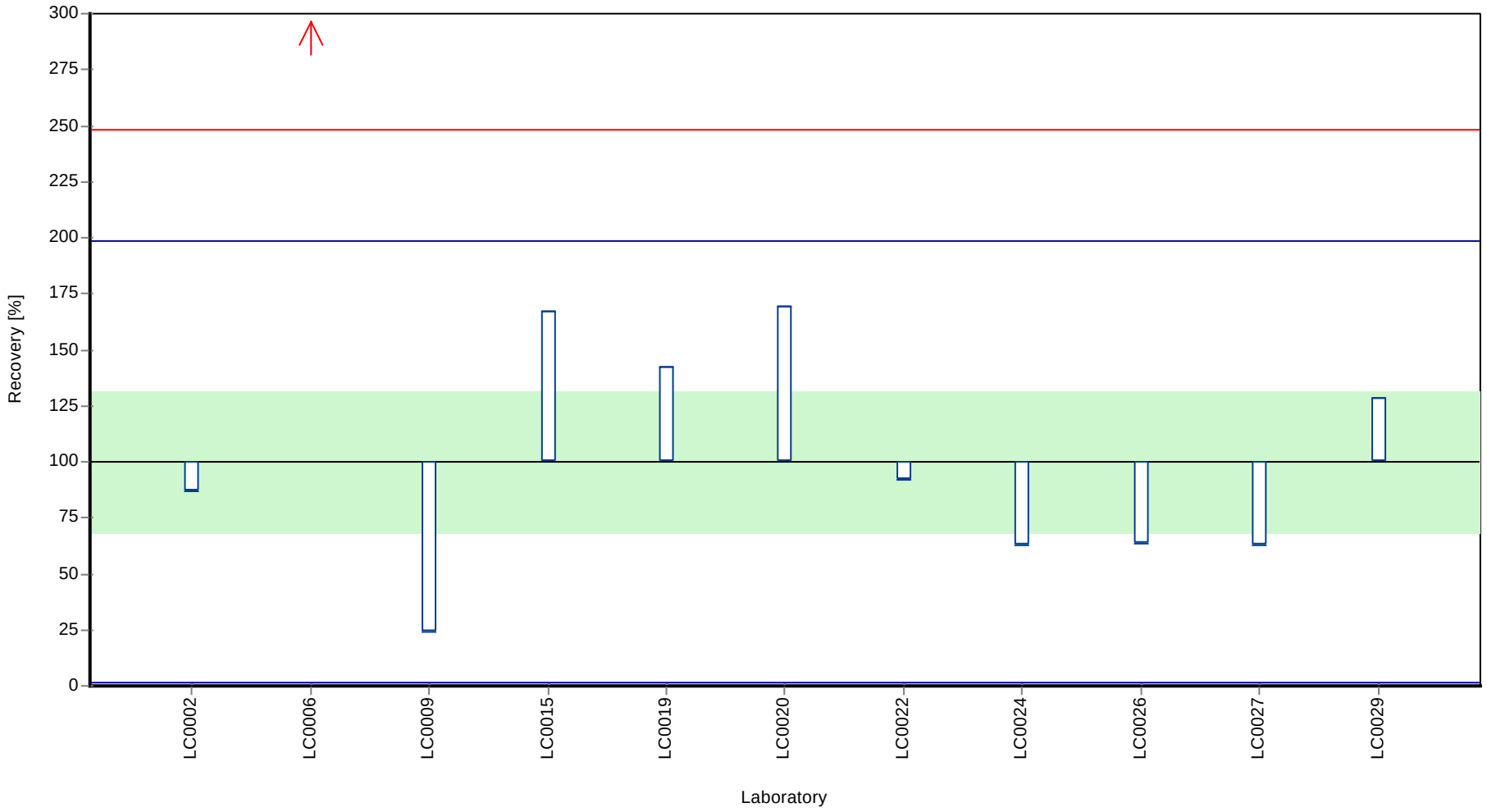
	all results	without outliners	Unit
Mean ± Cl (99%)	7,01 ± 6,63	4,91 ± 2,3	ng/l
Minimum	1,2	1,2	ng/l
Maximum	28	8,3	ng/l
Standard deviation	7,33	2,42	ng/l
rel. Standard deviation	105	49,3	%
n	11	10	-

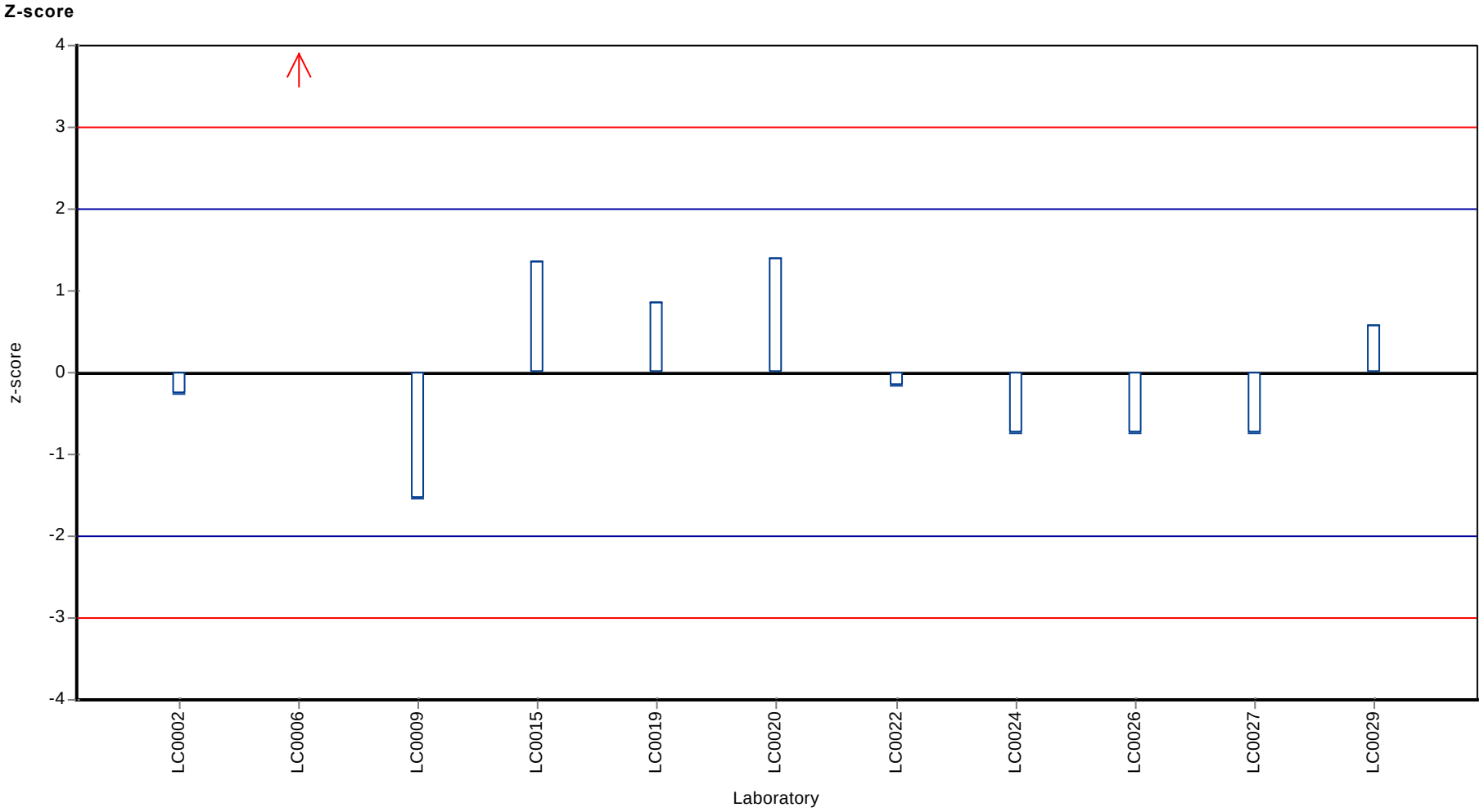
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0006
LC0009
LC0015
LC0019
LC0020
LC0022
LC0024
LC0026
LC0027
LC0029
Laboratory

Parameter oriented report

P16 A - PAH

Dibenzo[a,h]anthracene

Unit	ng/l
Mean ± Cl (99%)	56,5 ± 11,6
Minimum - Maximum	20 - 97,1
Check value ± U	32,5 ± 14,9

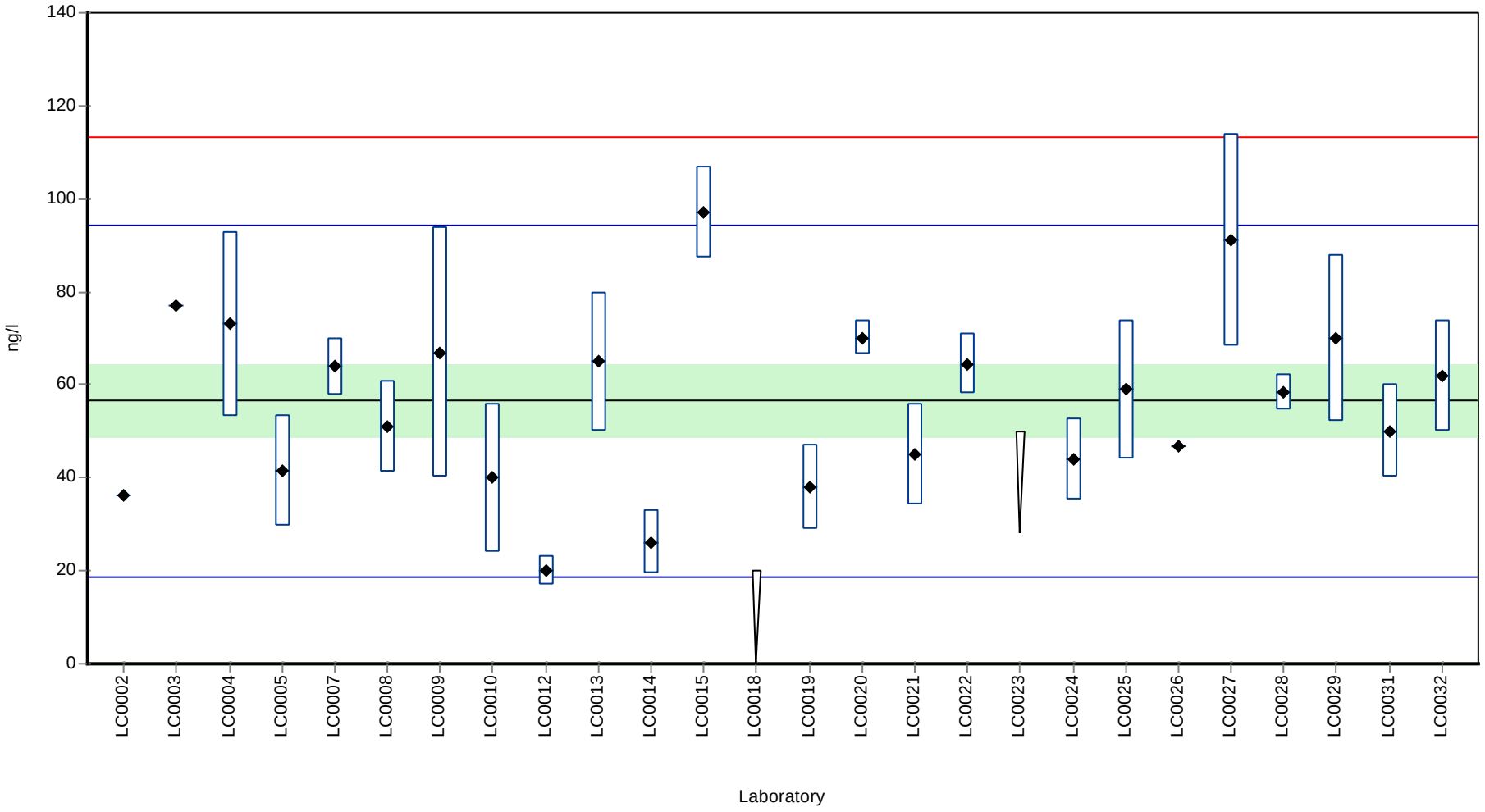
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	36,300	-	64,2	-1,1	
LC0003	77,100	-	136,4	1,1	
LC0004	73,000	20,000	129,1	0,9	
LC0005	41,400	12,000	73,2	-0,8	
LC0006	-	-	-	-	
LC0007	63,860	6,000	113,0	0,4	
LC0008	51,000	10,000	90,2	-0,3	
LC0009	67,000	27,000	118,5	0,6	
LC0010	40,000	16,000	70,8	-0,9	
LC0011	-	-	-	-	
LC0012	20,000	3,170	35,4	-1,9	
LC0013	65,000	15,000	115,0	0,4	
LC0014	26,200	6,800	46,3	-1,6	
LC0015	97,100	9,700	171,8	2,1	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	38,000	9,200	67,2	-1,0	
LC0020	70,100	3,600	124,0	0,7	
LC0021	45,000	11,000	79,6	-0,6	
LC0022	64,500	6,500	114,1	0,4	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	44,000	8,800	77,8	-0,7	
LC0025	59,000	15,000	104,4	0,1	
LC0026	46,800	-	82,8	-0,5	
LC0027	91,000	22,800	161,0	1,8	
LC0028	58,370	4,001	103,3	0,1	
LC0029	70,000	18,000	123,8	0,7	
LC0030	-	-	-	-	
LC0031	50,000	10,000	88,4	-0,3	
LC0032	62,000	12,000	109,7	0,3	

Characteristics of parameter

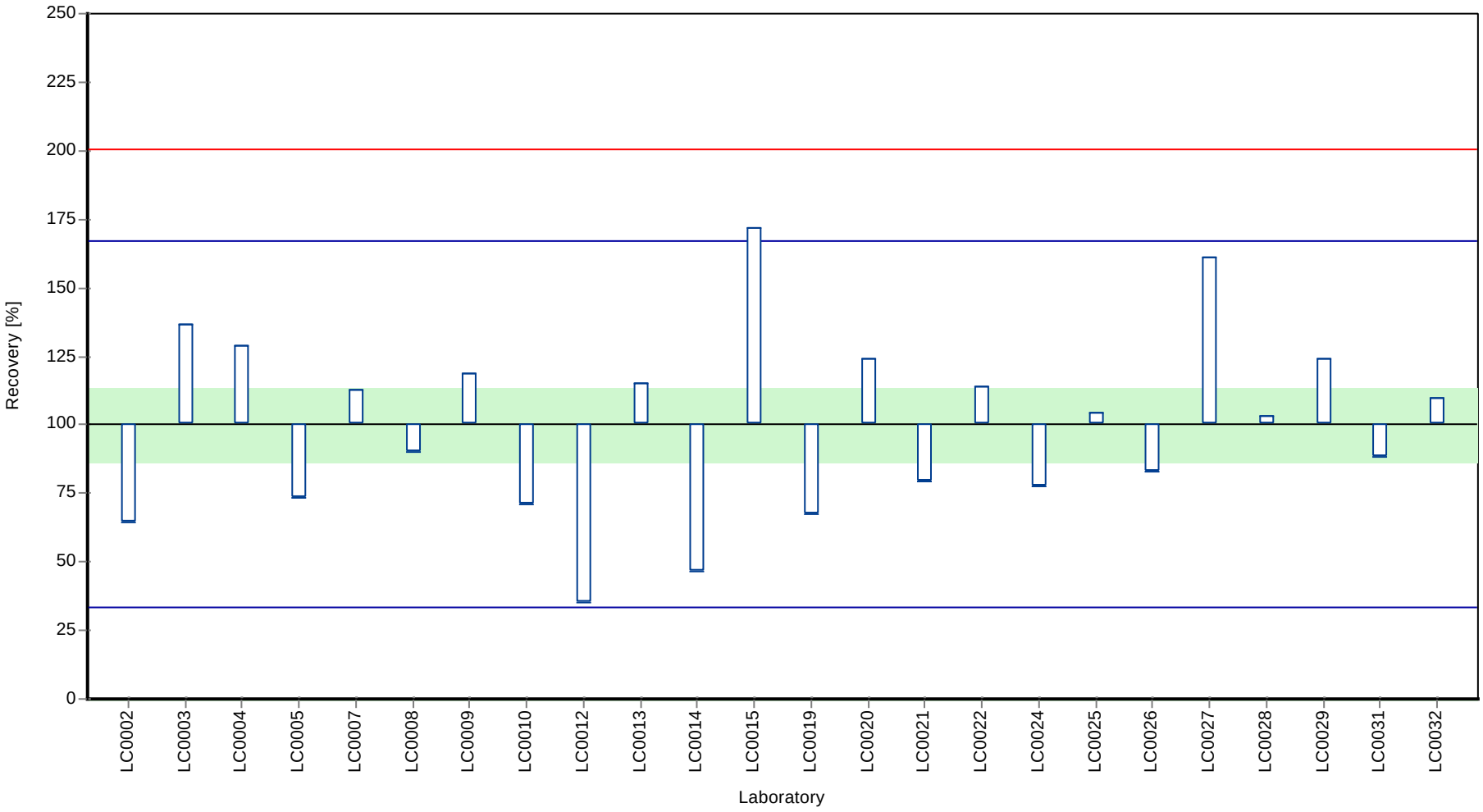
	all results	without outliners	Unit
Mean ± Cl (99%)	56,5 ± 11,6	56,5 ± 11,6	ng/l
Minimum	20	20	ng/l
Maximum	97,1	97,1	ng/l
Standard deviation	18,9	18,9	ng/l
rel. Standard deviation	33,4	33,4	%
n	24	24	-

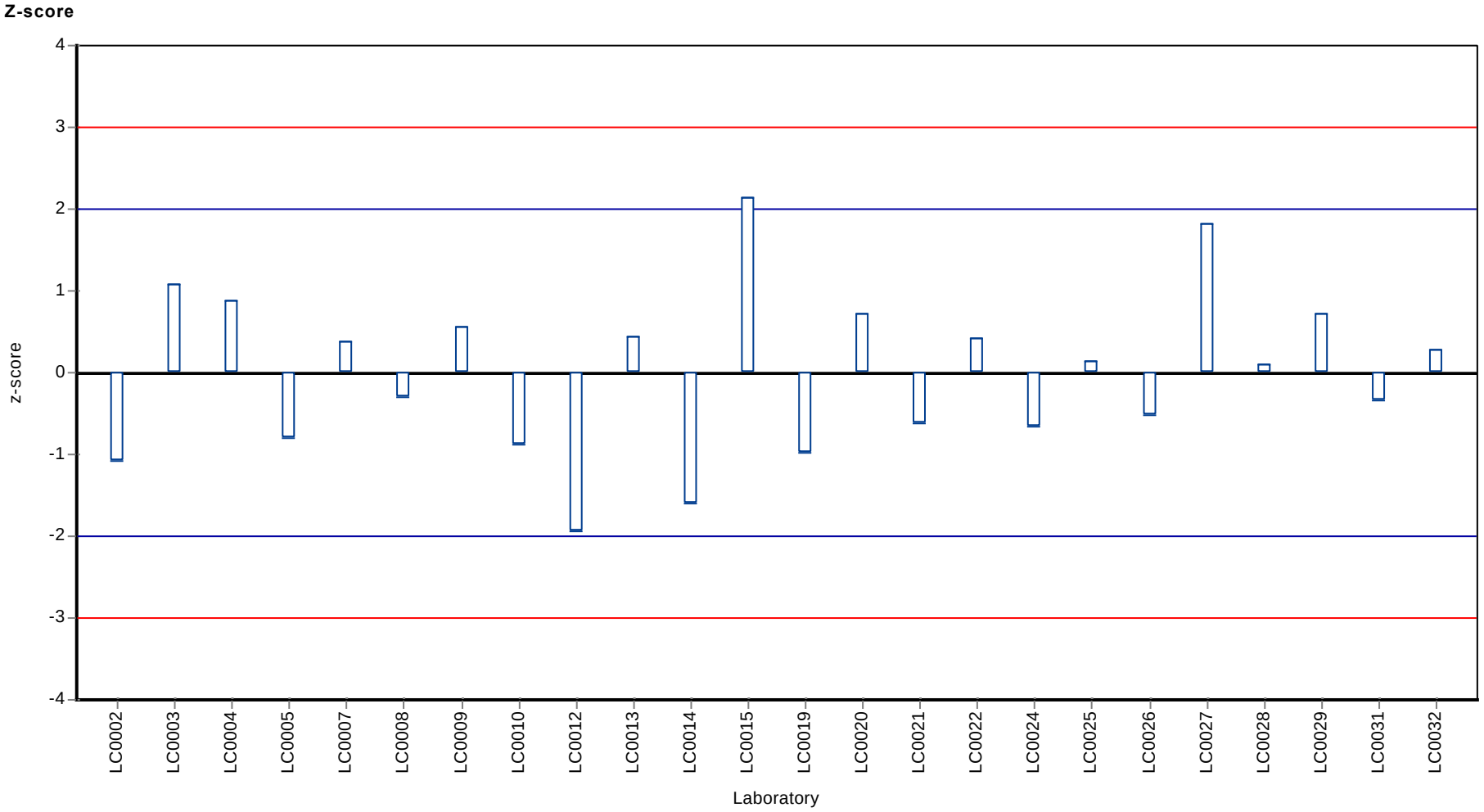
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0003
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Dibenzo[a,h]anthracene

Unit	ng/l
Mean ± Cl (99%)	7,8 ± 1,97
Minimum - Maximum	4,8 - 14,3
Check value ± U	<6,2 (LOQ)

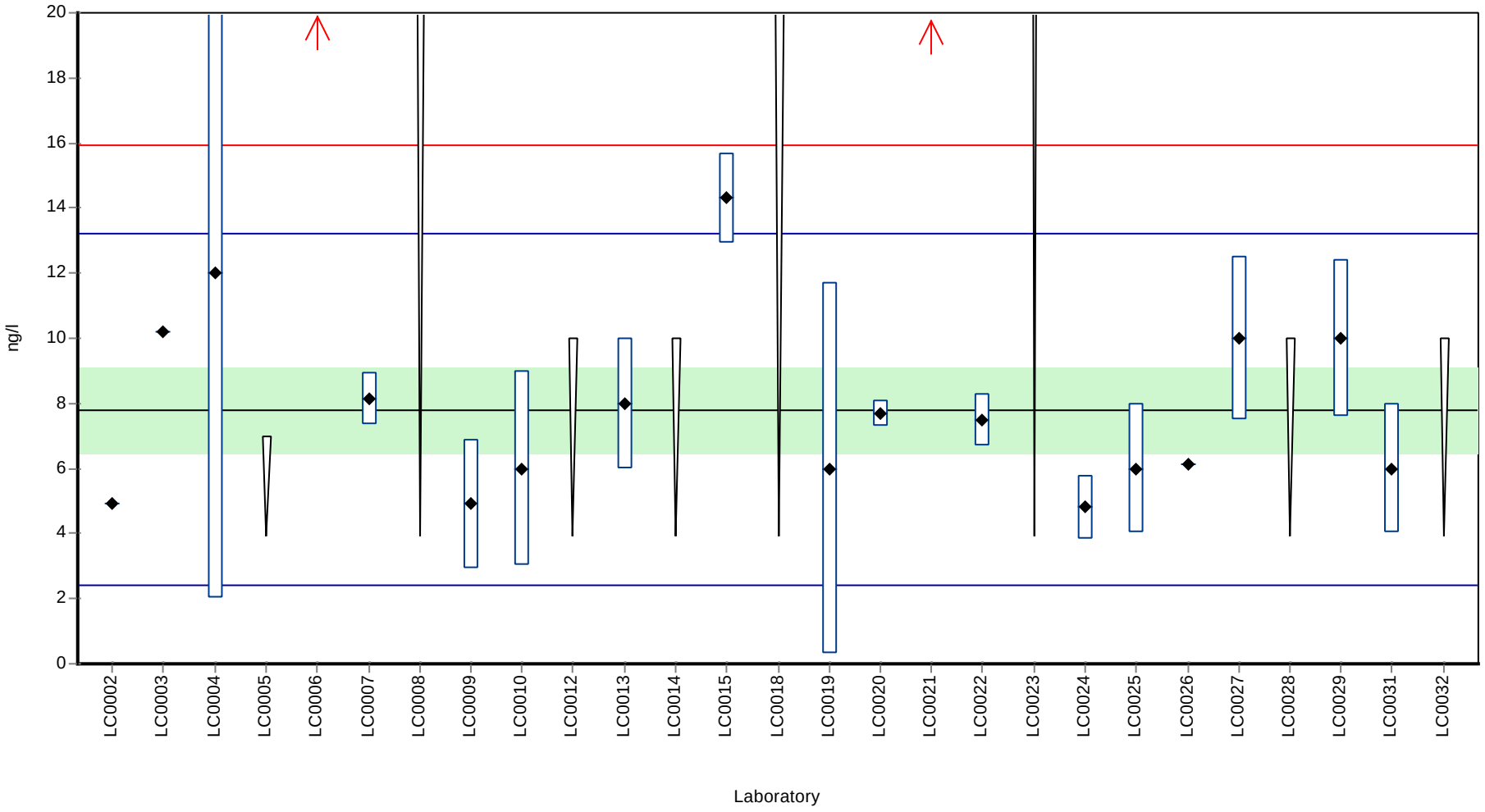
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	4,900	-	62,8	-1,1	
LC0003	10,200	-	130,8	0,9	
LC0004	12,000	10,000	153,8	1,6	
LC0005	< 7 (LOQ)	-	-	-	
LC0006	21,000	5,000	269,2	4,9	H
LC0007	8,160	0,800	104,6	0,1	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	4,900	2,000	62,8	-1,1	
LC0010	6,000	3,000	76,9	-0,7	
LC0011	-	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	8,000	2,000	102,6	0,1	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	14,300	1,400	183,3	2,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	6,000	5,700	76,9	-0,7	
LC0020	7,700	0,400	98,7	0,0	
LC0021	88,200	22,000	1130,7	29,7	H
LC0022	7,500	0,800	96,1	-0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	4,800	0,960	61,5	-1,1	
LC0025	6,000	2,000	76,9	-0,7	
LC0026	6,150	-	78,8	-0,6	
LC0027	10,000	2,500	128,2	0,8	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	10,000	2,400	128,2	0,8	
LC0030	-	-	-	-	
LC0031	6,000	2,000	76,9	-0,7	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

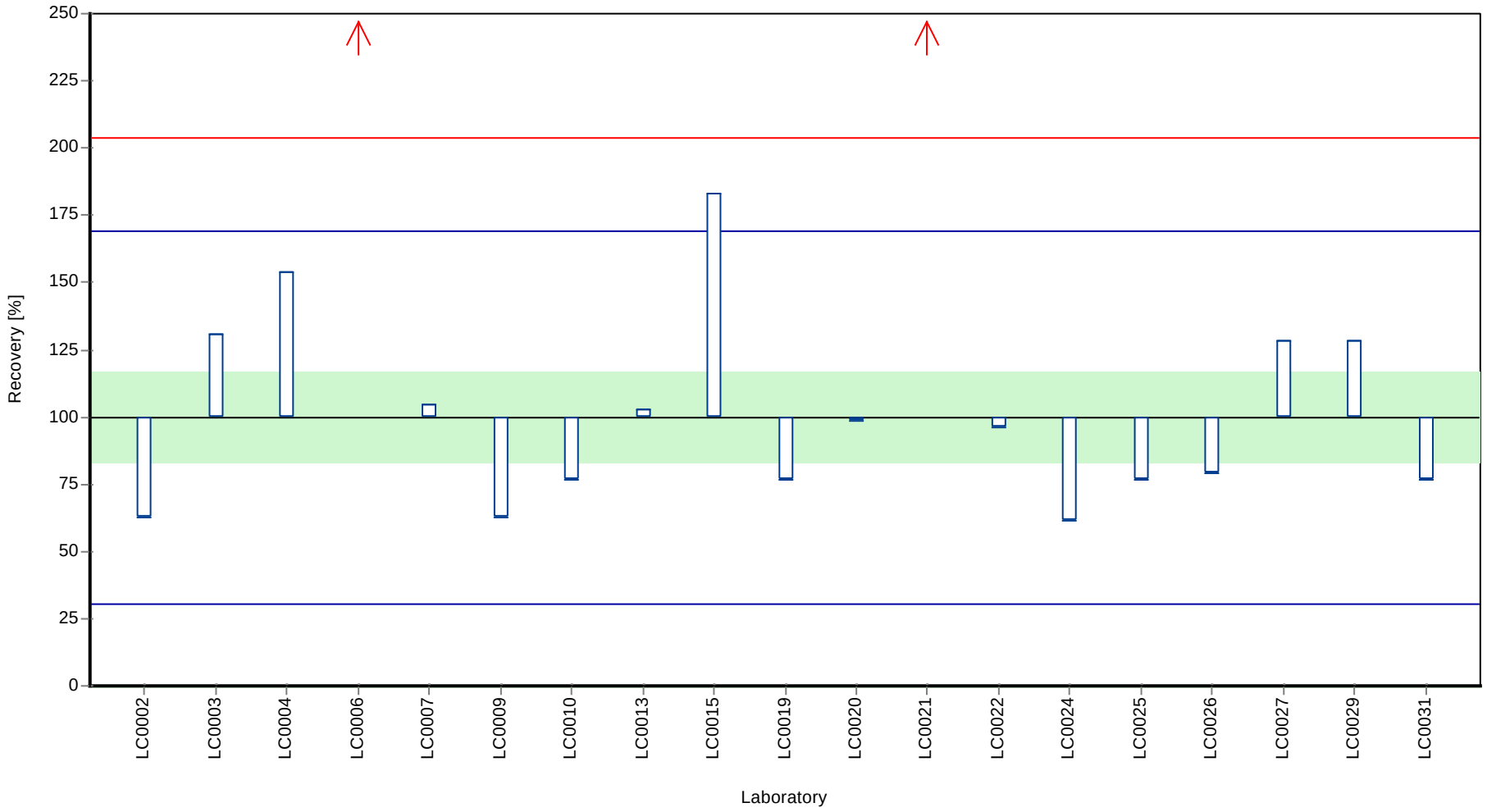
	all results	without outliners	Unit
Mean ± Cl (99%)	12,7 ± 12,9	7,8 ± 1,97	ng/l
Minimum	4,8	4,8	ng/l
Maximum	88,2	14,3	ng/l
Standard deviation	18,7	2,71	ng/l
rel. Standard deviation	147	34,7	%
n	19	17	-

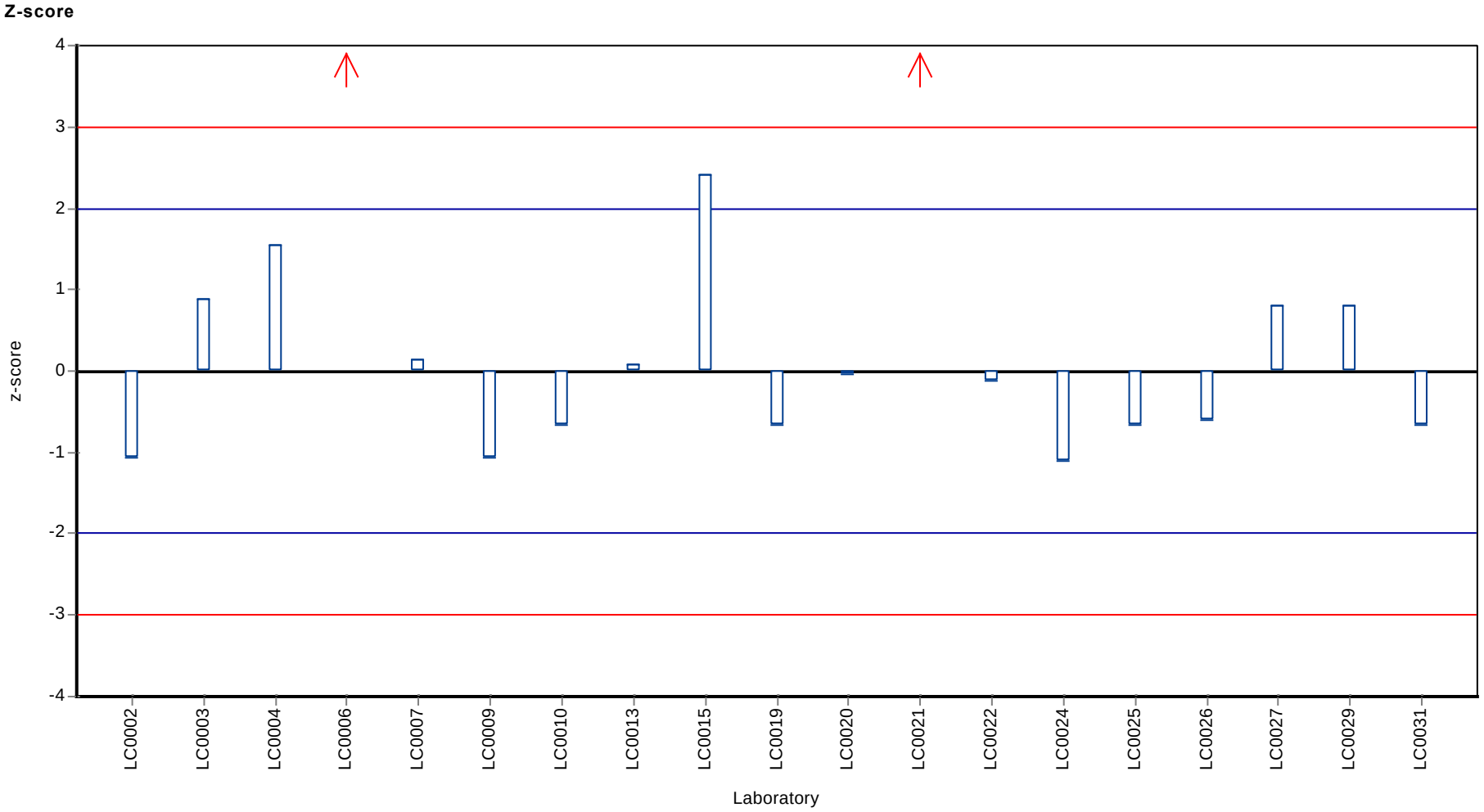
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0003
LC0004
LC0006
LC0007
LC0009
LC0010
LC0013
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0029
LC0031
Laboratory

Parameter oriented report

P16 A - PAH

Fluoranthene

Unit	ng/l
Mean ± Cl (99%)	110 ± 20,5
Minimum - Maximum	40 - 210
Check value ± U	104 ± 24

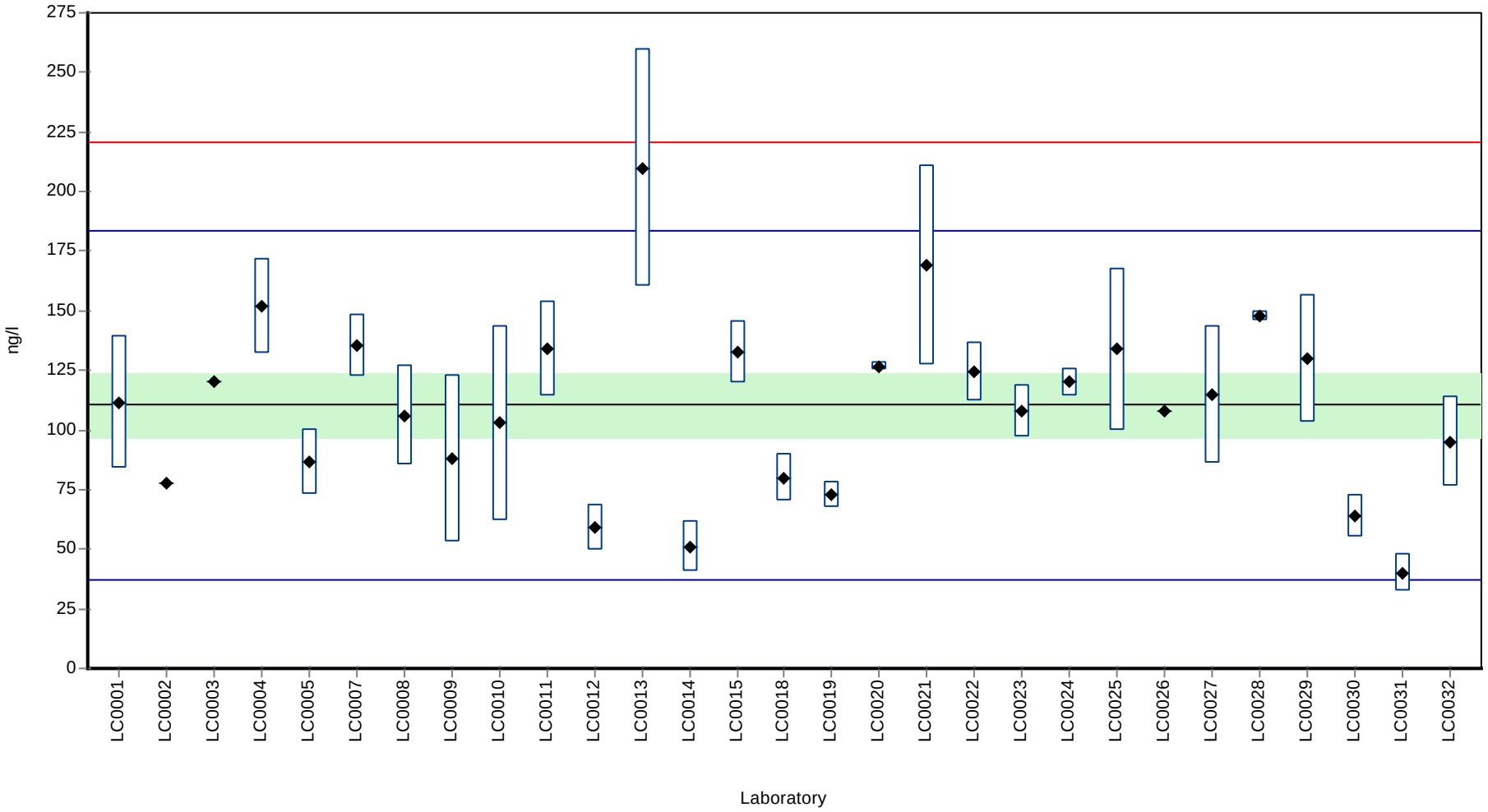
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	111,500	27,900	101,0	0,0	
LC0002	77,800	-	70,5	-0,9	
LC0003	120,000	-	108,7	0,3	
LC0004	152,000	20,000	137,7	1,1	
LC0005	86,700	13,900	78,5	-0,6	
LC0006	-	-	-	-	
LC0007	135,230	13,000	122,5	0,7	
LC0008	106,000	21,000	96,0	-0,1	
LC0009	88,000	35,000	79,7	-0,6	
LC0010	103,000	41,000	93,3	-0,2	
LC0011	134,100	20,100	121,5	0,6	
LC0012	59,000	9,510	53,4	-1,4	
LC0013	210,000	50,000	190,2	2,7	
LC0014	51,100	10,700	46,3	-1,6	
LC0015	132,700	13,300	120,2	0,6	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	80,000	10,000	72,5	-0,8	
LC0019	73,000	5,700	66,1	-1,0	
LC0020	126,700	1,700	114,8	0,4	
LC0021	169,000	42,000	153,1	1,6	
LC0022	124,300	12,500	112,6	0,4	
LC0023	108,000	10,800	97,8	-0,1	
LC0024	120,000	6,000	108,7	0,3	
LC0025	134,000	34,000	121,4	0,6	
LC0026	108,000	-	97,8	-0,1	
LC0027	115,000	28,800	104,2	0,1	
LC0028	147,840	1,824	133,9	1,0	
LC0029	130,000	27,000	117,7	0,5	
LC0030	64,000	9,0003	58,0	-1,3	
LC0031	40,000	8,000	36,2	-1,9	
LC0032	95,000	19,000	86,0	-0,4	

Characteristics of parameter

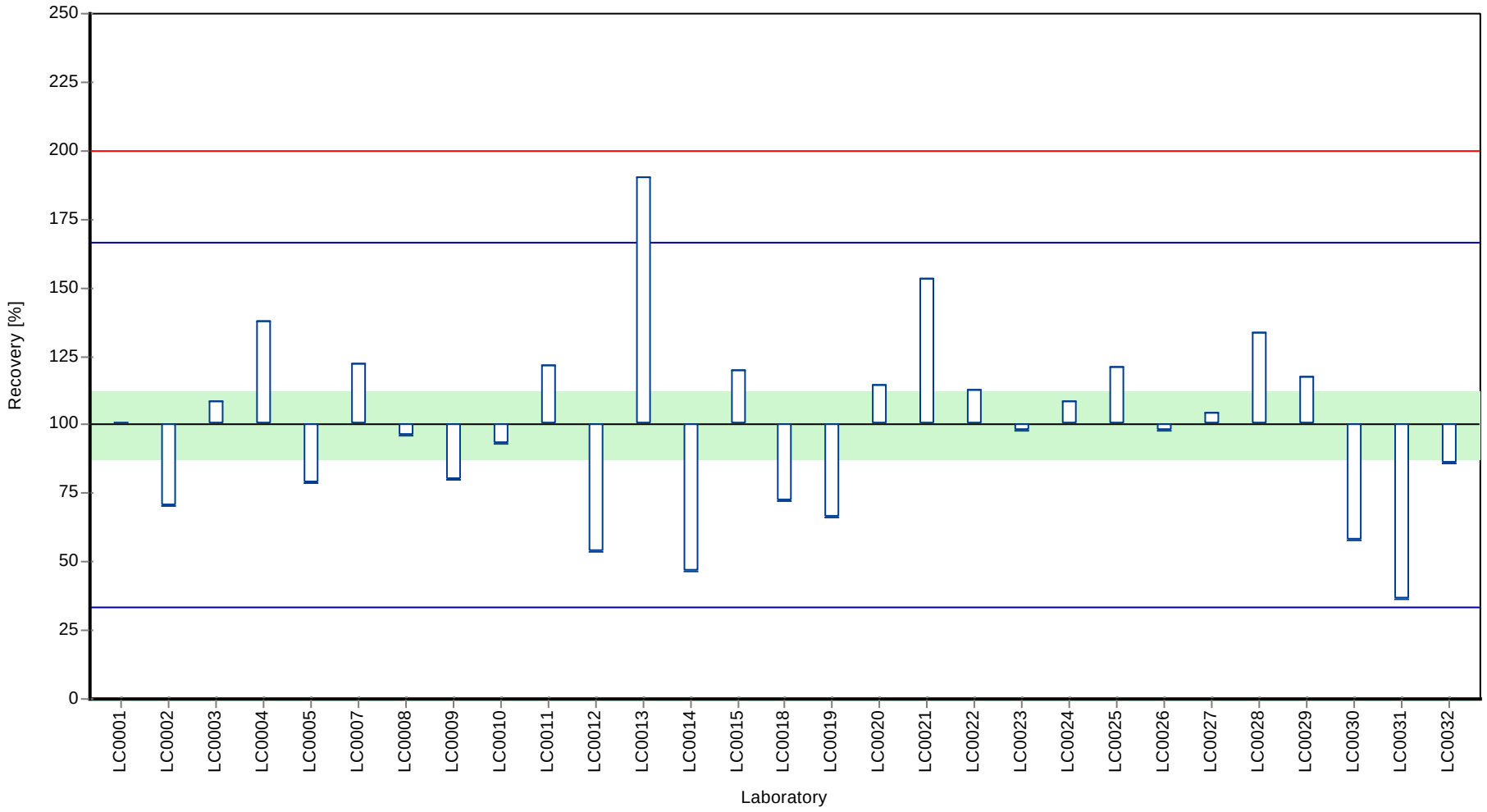
	all results	without outliners	Unit
Mean ± Cl (99%)	110 ± 20,5	110 ± 20,5	ng/l
Minimum	40	40	ng/l
Maximum	210	210	ng/l
Standard deviation	36,7	36,7	ng/l
rel. Standard deviation	33,3	33,3	%
n	29	29	-

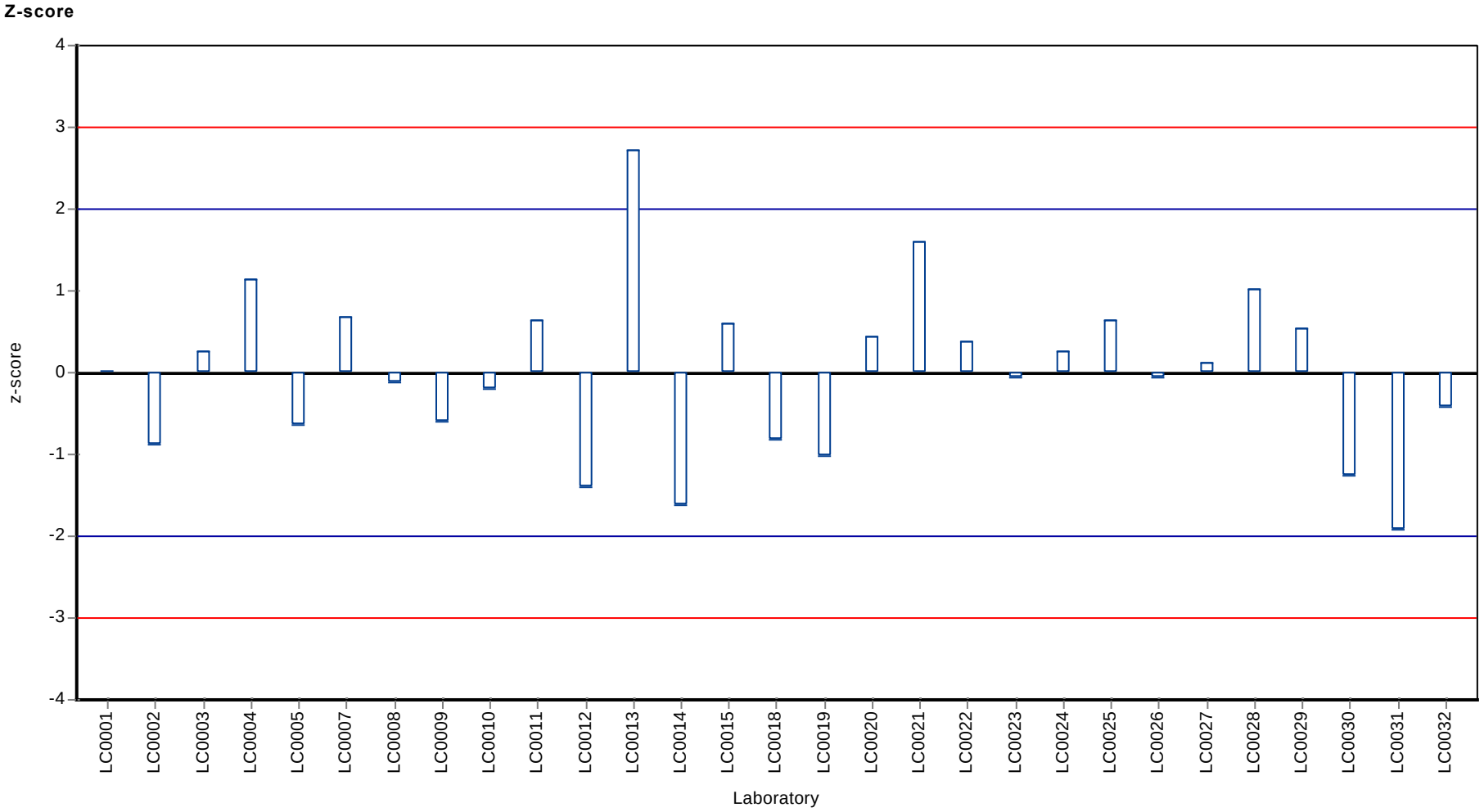
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0004
LC0005
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0014
LC0015
LC0018
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LC0020
LC0021
LC0022
LC0023
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0030
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Fluoranthene

Unit	ng/l
Mean ± Cl (99%)	21,3 ± 4,8
Minimum - Maximum	9,4 - 40
Check value ± U	17,4 ± 4,6

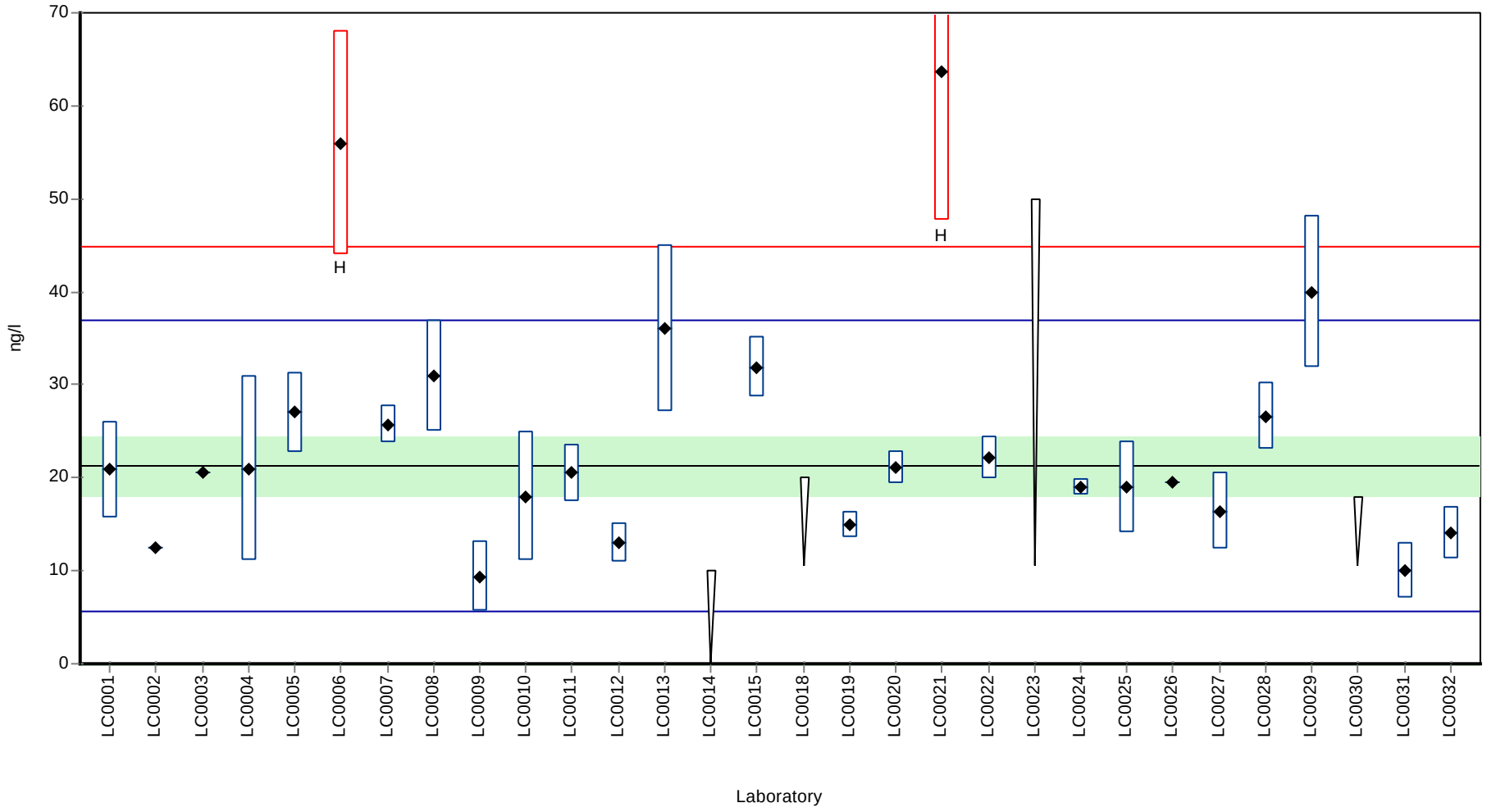
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	20,900	5,200	98,3	0,0	
LC0002	12,400	-	58,3	-1,1	
LC0003	20,500	-	96,5	-0,1	
LC0004	21,000	10,000	98,8	0,0	
LC0005	27,000	4,300	127,0	0,7	
LC0006	56,000	12,000	263,5	4,4	H
LC0007	25,710	2,000	121,0	0,6	
LC0008	31,000	6,000	145,9	1,2	
LC0009	9,400	3,800	44,2	-1,5	
LC0010	18,000	7,000	84,7	-0,4	
LC0011	20,500	3,100	96,5	-0,1	
LC0012	13,000	2,080	61,2	-1,1	
LC0013	36,000	9,000	169,4	1,9	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	31,900	3,200	150,1	1,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	15,000	1,400	70,6	-0,8	
LC0020	21,100	1,700	99,3	0,0	
LC0021	63,600	16,000	299,2	5,4	H
LC0022	22,200	2,300	104,5	0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	19,000	0,940	89,4	-0,3	
LC0025	19,000	5,000	89,4	-0,3	
LC0026	19,500	-	91,8	-0,2	
LC0027	16,400	4,100	77,2	-0,6	
LC0028	26,570	3,604	125,0	0,7	
LC0029	40,000	8,200	188,2	2,4	
LC0030	< 18 (LOQ)	-	-	-	
LC0031	10,000	3,000	47,1	-1,4	
LC0032	14,000	2,800	65,9	-0,9	

Characteristics of parameter

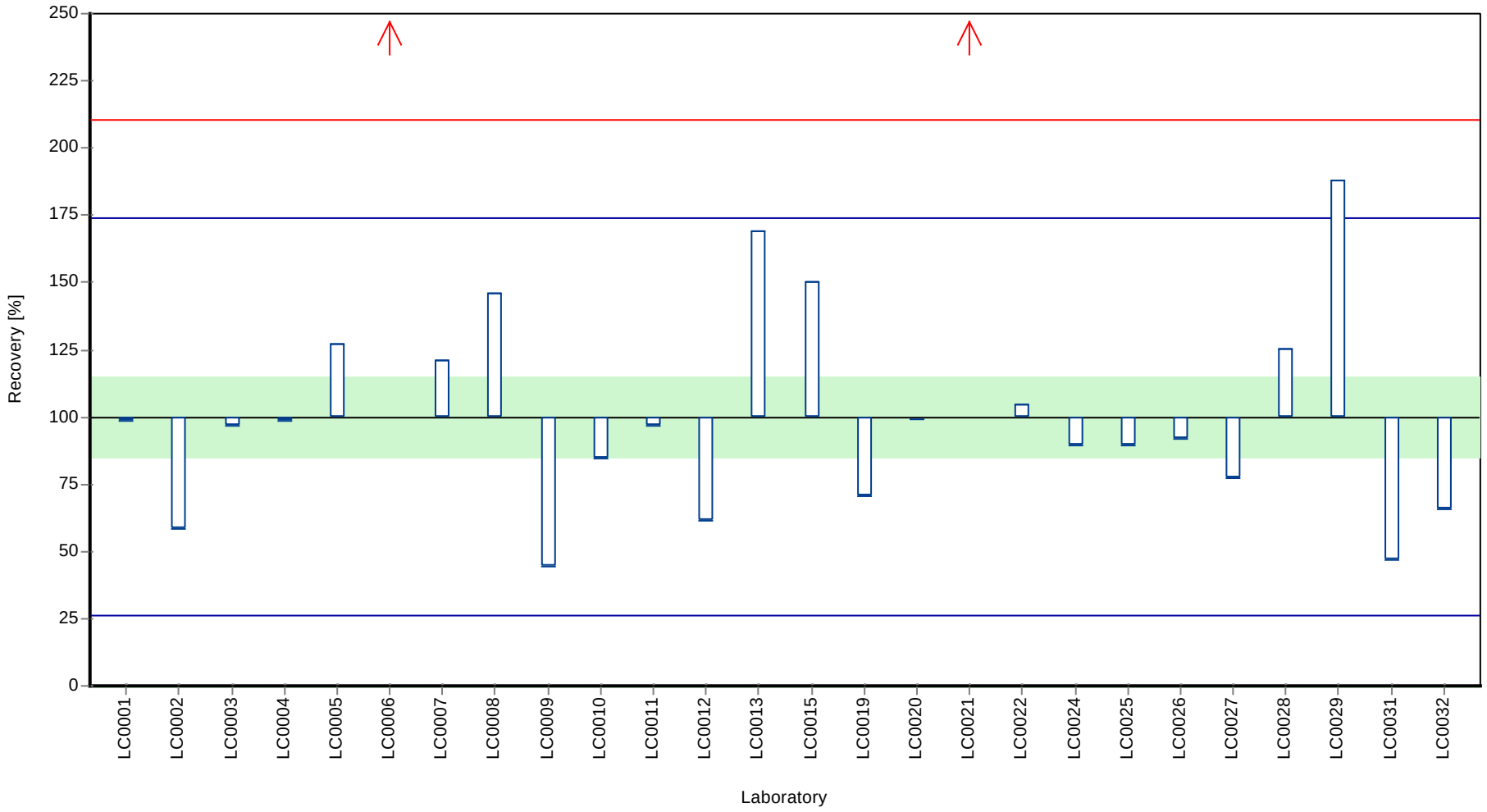
	all results	without outliners	Unit
Mean ± Cl (99%)	24,2 ± 7,61	21,3 ± 4,8	ng/l
Minimum	9,4	9,4	ng/l
Maximum	63,6	40	ng/l
Standard deviation	12,9	7,84	ng/l
rel. Standard deviation	53,4	36,9	%
n	26	24	-

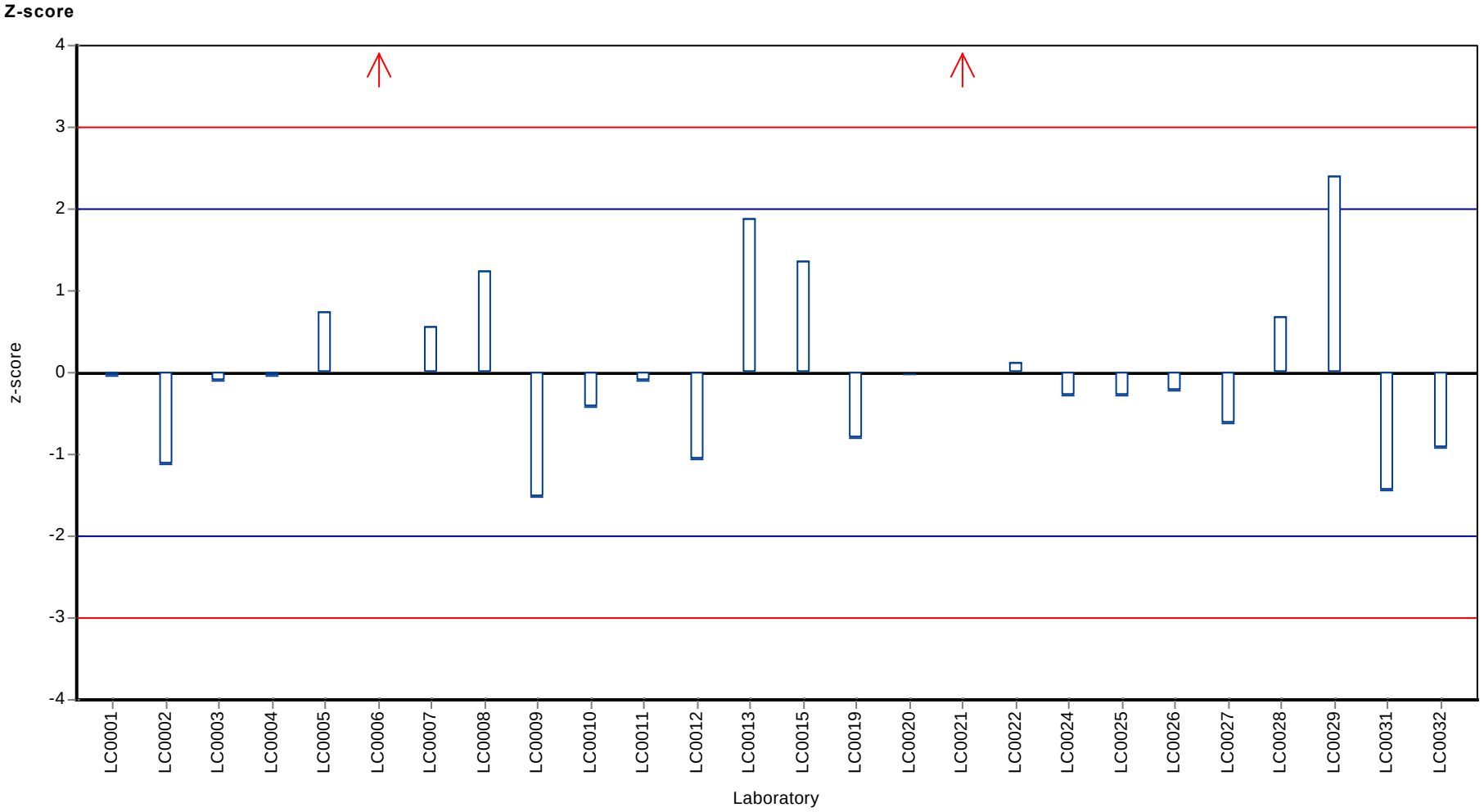
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0001
LC0002
LC0003
LC0004
LC0005
LC0006
LC0007
LC0008
LC0009
LC0010
LC0011
LC0012
LC0013
LC0015
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0031
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Fluorene

Unit	ng/l
Mean ± Cl (99%)	276 ± 55,2
Minimum - Maximum	86 - 437,7
Check value ± U	304 ± 48

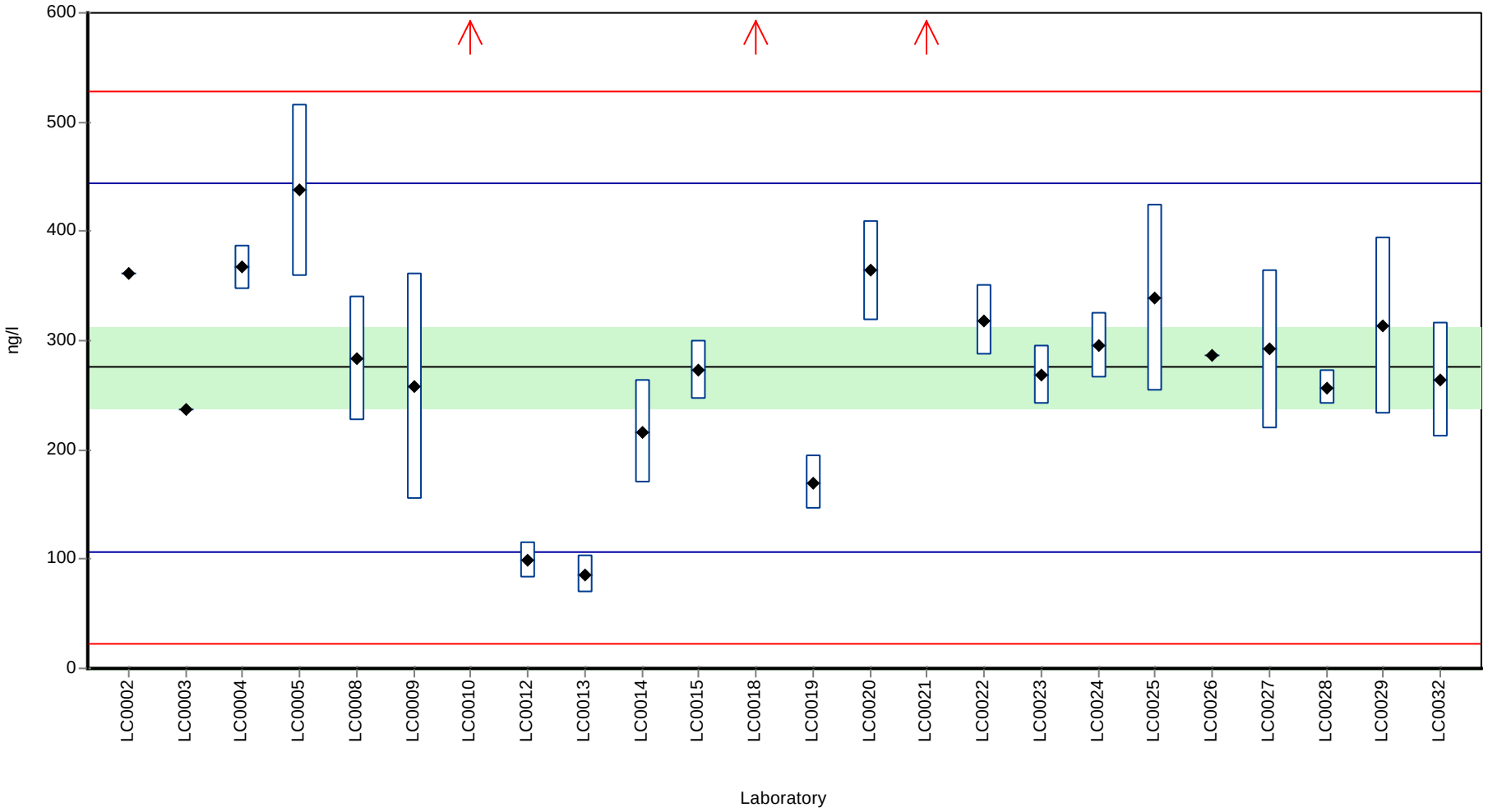
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	362,000	-	131,3	1,0	
LC0003	237,000	-	86,0	-0,5	
LC0004	367,000	20,000	133,2	1,1	
LC0005	437,700	78,800	158,8	1,9	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	284,000	57,000	103,0	0,1	
LC0009	258,000	103,000	93,6	-0,2	
LC0010	1600,000	635,000	580,5	15,7	H
LC0011	-	-	-	-	
LC0012	99,000	15,800	35,9	-2,1	
LC0013	86,000	17,000	31,2	-2,2	
LC0014	216,500	47,600	78,6	-0,7	
LC0015	272,700	27,300	98,9	0,0	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	1590,000	160,000	576,9	15,6	H
LC0019	170,000	25,000	61,7	-1,3	
LC0020	364,000	45,500	132,1	1,0	
LC0021	679,000	170,000	246,4	4,8	H
LC0022	318,500	31,900	115,6	0,5	
LC0023	269,000	26,900	97,6	-0,1	
LC0024	295,000	30,000	107,0	0,2	
LC0025	339,000	85,000	123,0	0,8	
LC0026	286,000	-	103,8	0,1	
LC0027	292,000	73,000	106,0	0,2	
LC0028	257,230	15,445	93,3	-0,2	
LC0029	313,000	81,000	113,6	0,4	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	264,000	53,000	95,8	-0,1	

Characteristics of parameter

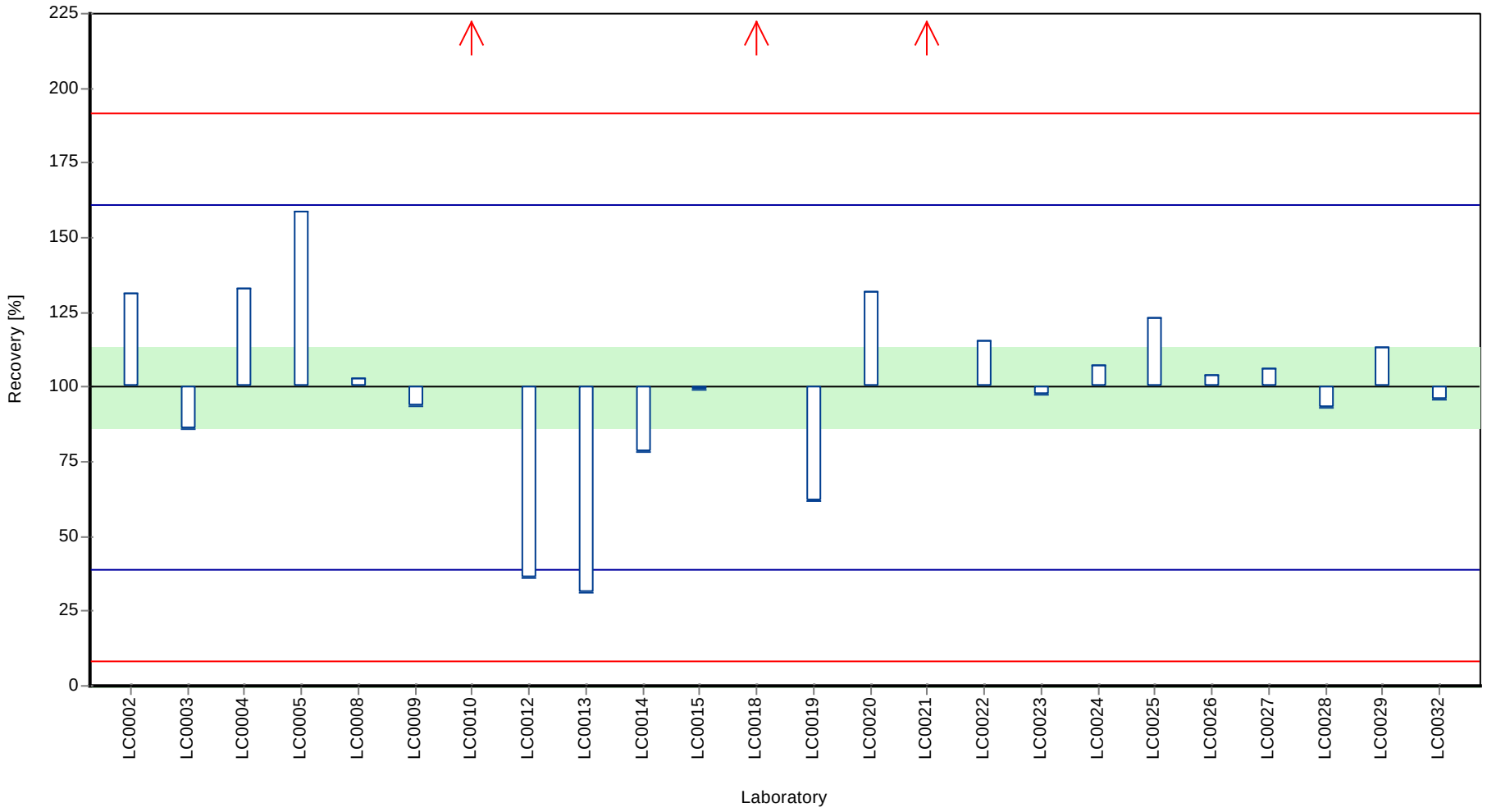
	all results	without outliners	Unit
Mean ± Cl (99%)	402 ± 235	276 ± 55,2	ng/l
Minimum	86	86	ng/l
Maximum	1600	438	ng/l
Standard deviation	385	84,3	ng/l
rel. Standard deviation	95,6	30,6	%
n	24	21	-

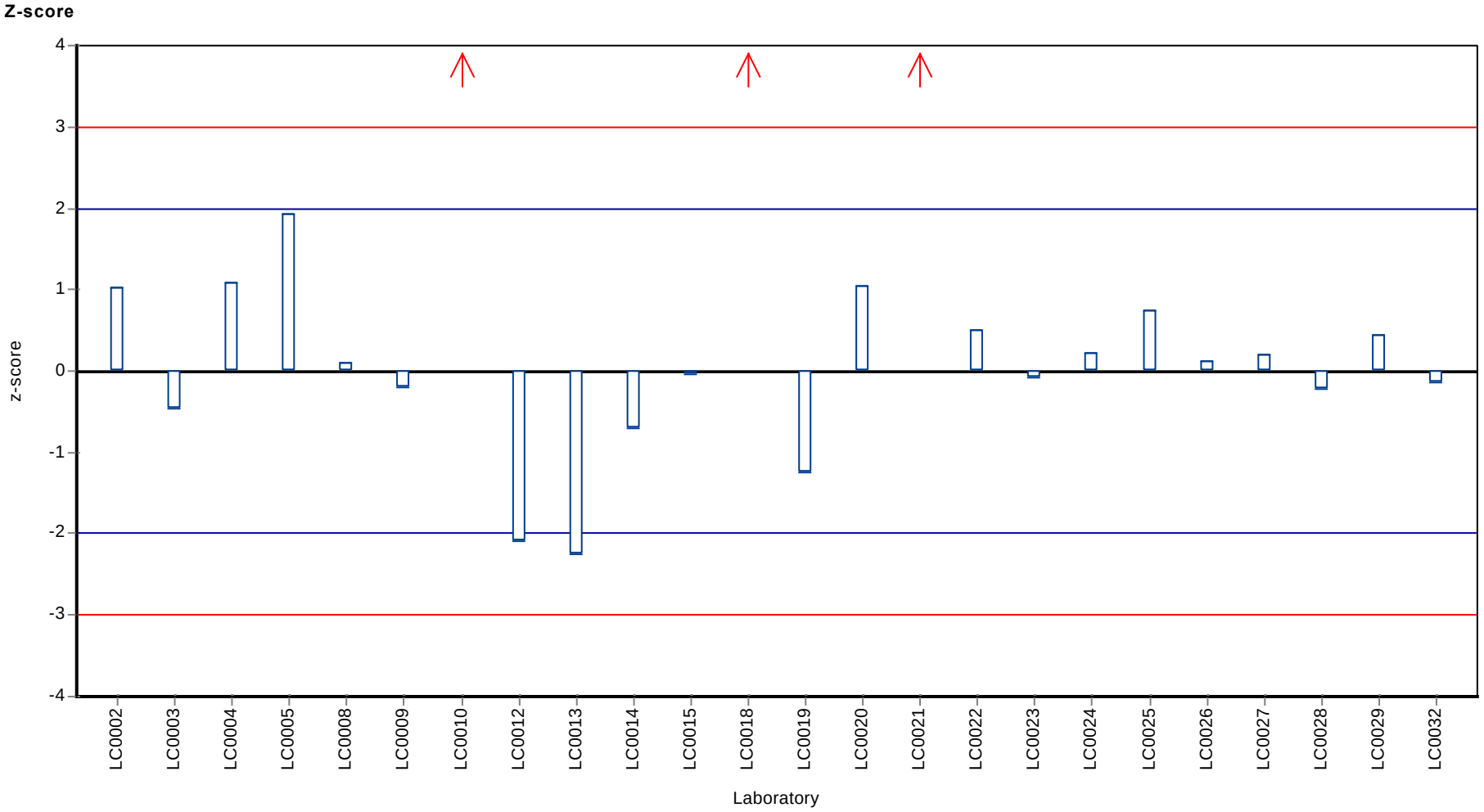
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0003
LC0004
LC0005
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LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Fluorene

Unit	ng/l
Mean ± Cl (99%)	38,1 ± 9,24
Minimum - Maximum	15 - 70
Check value ± U	38,1 ± 1,3

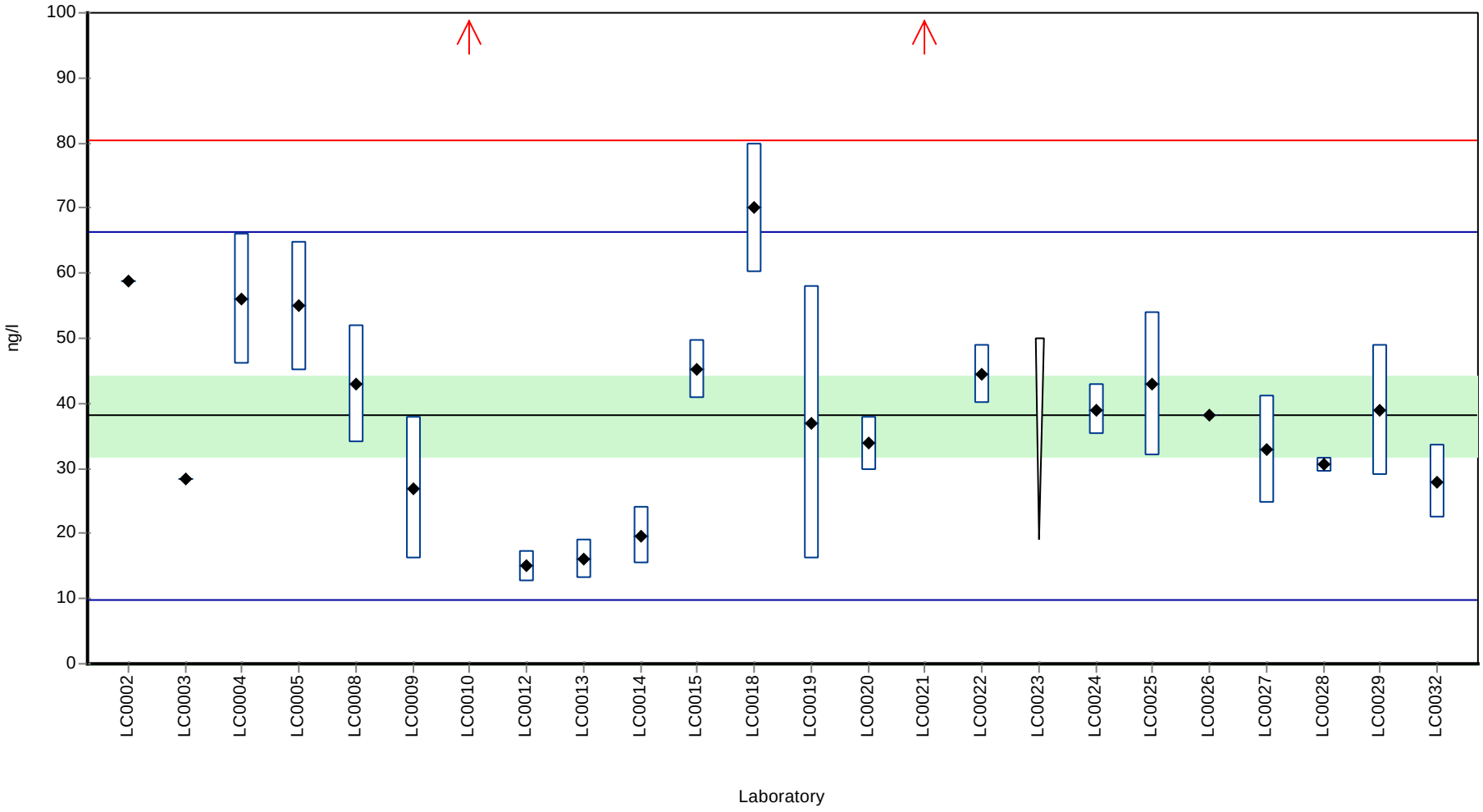
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	58,900	-	154,6	1,5	
LC0003	28,300	-	74,3	-0,7	
LC0004	56,000	10,000	147,0	1,3	
LC0005	55,000	9,900	144,4	1,2	
LC0006	-	-	-	-	
LC0007	-	-	-	-	
LC0008	43,000	9,000	112,9	0,3	
LC0009	27,000	11,000	70,9	-0,8	
LC0010	120,000	49,000	315,0	5,8	H
LC0011	-	-	-	-	
LC0012	15,000	2,400	39,4	-1,6	
LC0013	16,000	3,000	42,0	-1,6	
LC0014	19,700	4,300	51,7	-1,3	
LC0015	45,200	4,500	118,7	0,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	70,000	10,000	183,8	2,3	
LC0019	37,000	21,000	97,1	-0,1	
LC0020	33,800	4,200	88,7	-0,3	
LC0021	167,000	42,000	438,4	9,1	H
LC0022	44,400	4,500	116,6	0,4	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	39,000	3,900	102,4	0,1	
LC0025	43,000	11,000	112,9	0,3	
LC0026	38,200	-	100,3	0,0	
LC0027	32,900	8,200	86,4	-0,4	
LC0028	30,560	1,090	80,2	-0,5	
LC0029	39,000	10,000	102,4	0,1	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	28,000	5,600	73,5	-0,7	

Characteristics of parameter

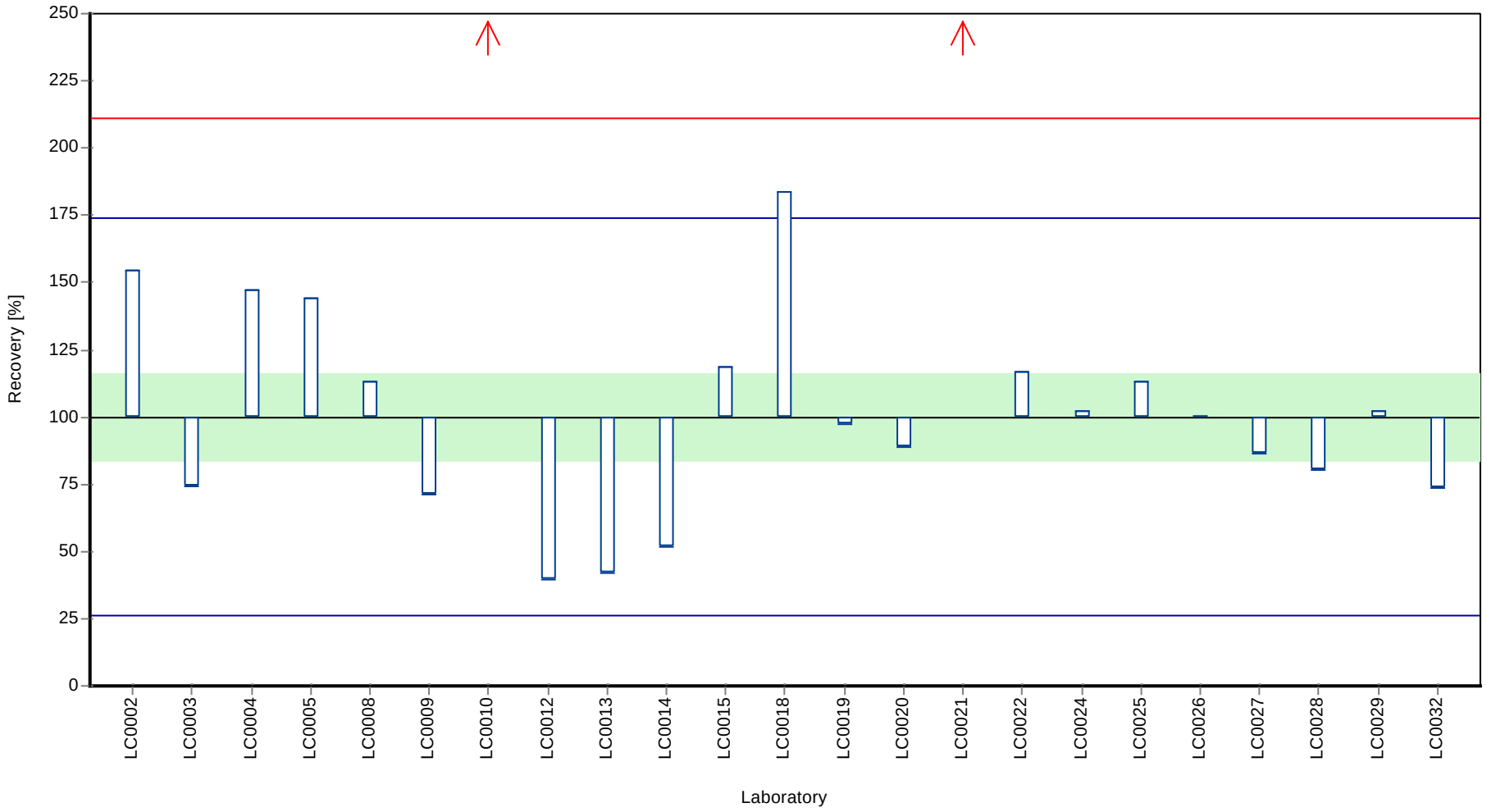
	all results	without outliners	Unit
Mean ± Cl (99%)	47,3 ± 21,2	38,1 ± 9,24	ng/l
Minimum	15	15	ng/l
Maximum	167	70	ng/l
Standard deviation	34	14,1	ng/l
rel. Standard deviation	71,9	37	%
n	23	21	-

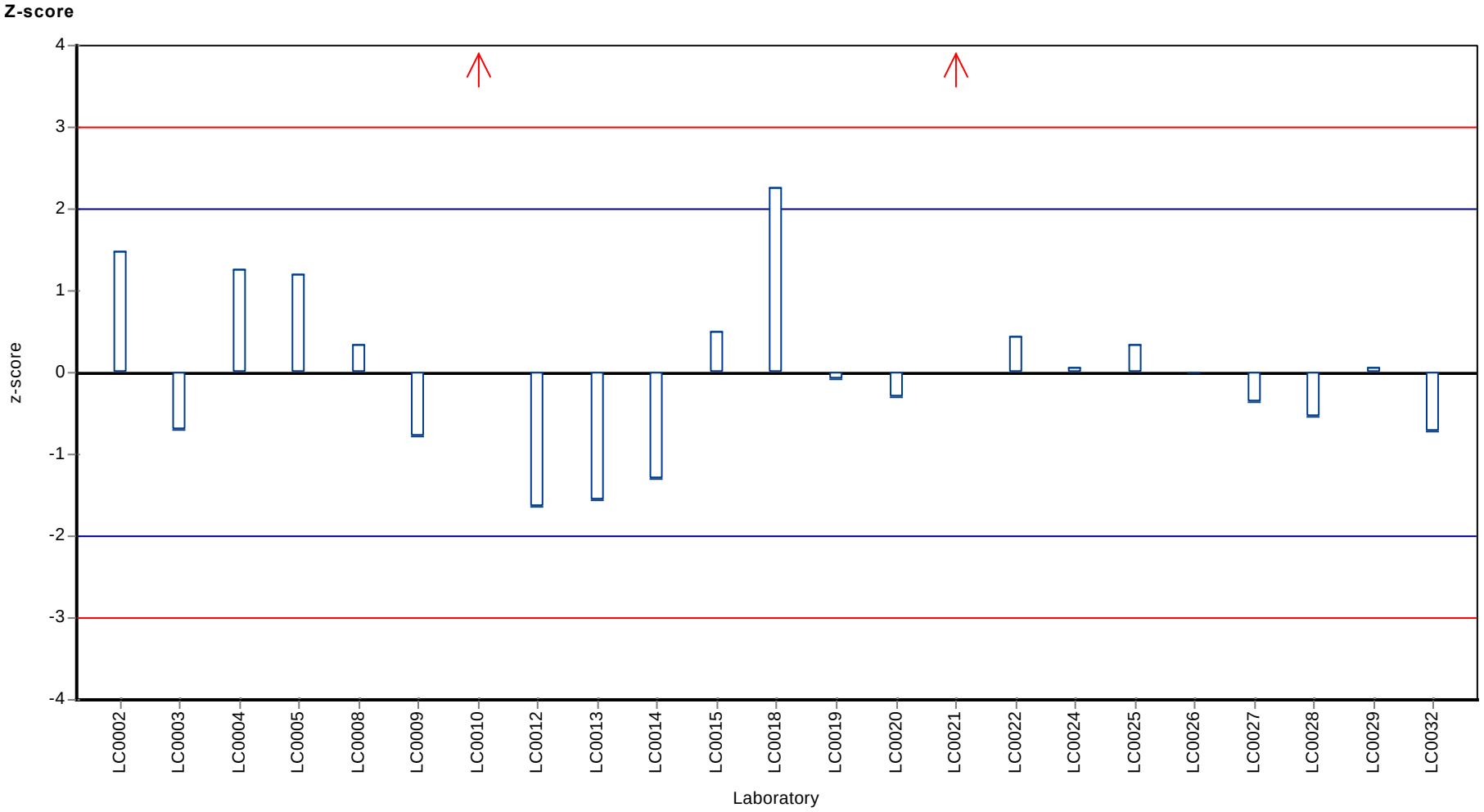
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0003
LC0004
LC0005
LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0018
LC0019
LC0020
LC0021
LC0022
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Indeno[1,2,3-cd]pyrene

Unit	ng/l
Mean ± Cl (99%)	8,75 ± 2,13
Minimum - Maximum	6 - 11,1
Check value ± U	6,0 ± 2

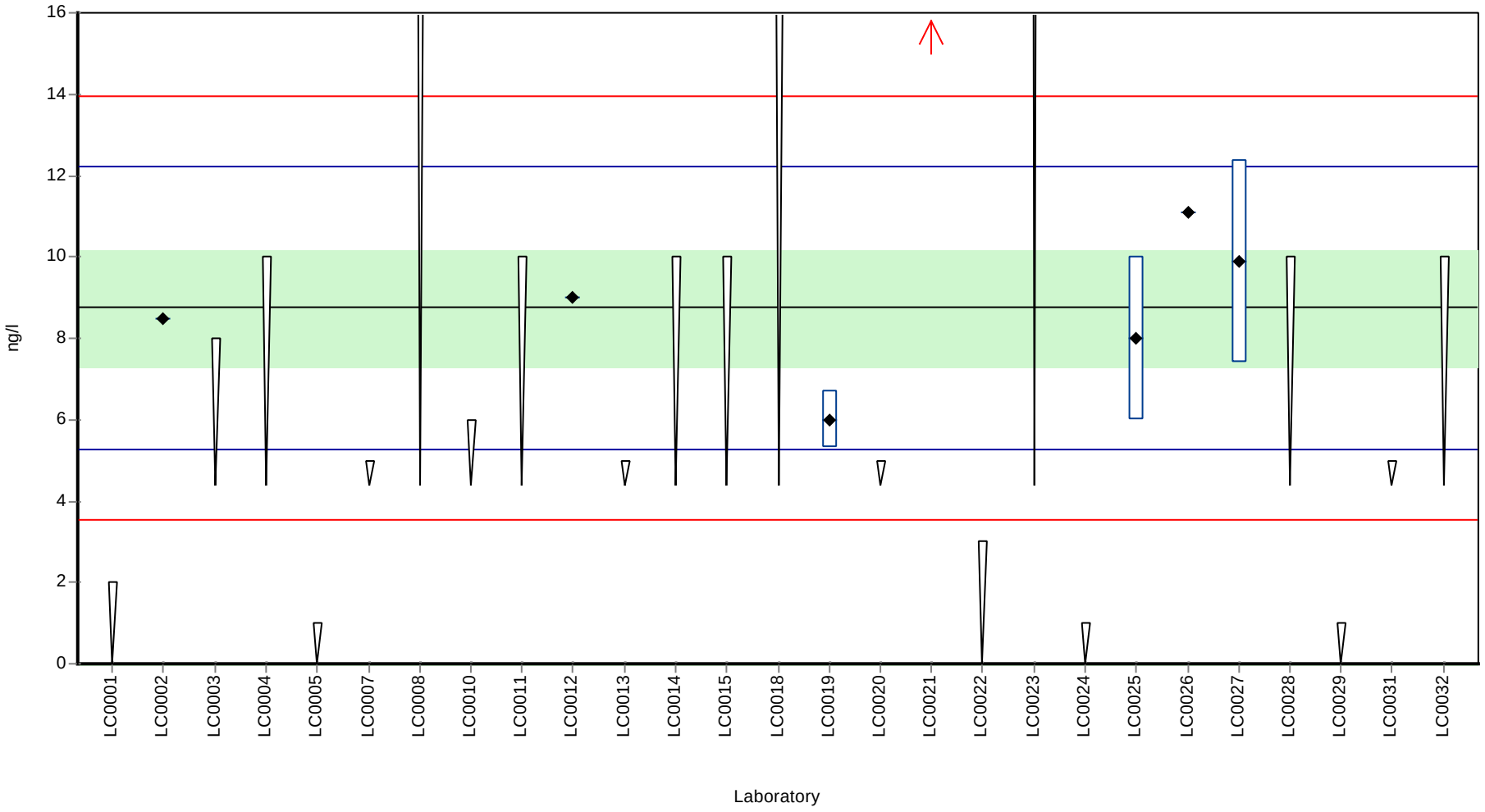
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	<2 (LOD)	-	-	-	
LC0002	8,500	-	97,1	-0,1	
LC0003	< 8 (LOQ)	-	-	-	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 1 (LOQ)	-	-	-	
LC0006	-	-	-	-	
LC0007	< 5 (LOQ)	-	-	-	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	-	-	-	-	
LC0010	< 6 (LOQ)	-	-	-	
LC0011	< 10 (LOQ)	-	-	-	
LC0012	9,000	-	102,9	0,1	
LC0013	< 5 (LOQ)	-	-	-	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	< 10 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	6,000	0,700	68,6	-1,6	
LC0020	< 5 (LOQ)	-	-	-	
LC0021	32,300	8,000	369,1	13,6	H
LC0022	< 3 (LOQ)	-	-	-	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	< 1 (LOQ)	-	-	-	
LC0025	8,000	2,000	91,4	-0,4	
LC0026	11,100	-	126,9	1,4	
LC0027	9,900	2,500	113,1	0,7	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	< 1 (LOQ)	-	-	-	
LC0030	-	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

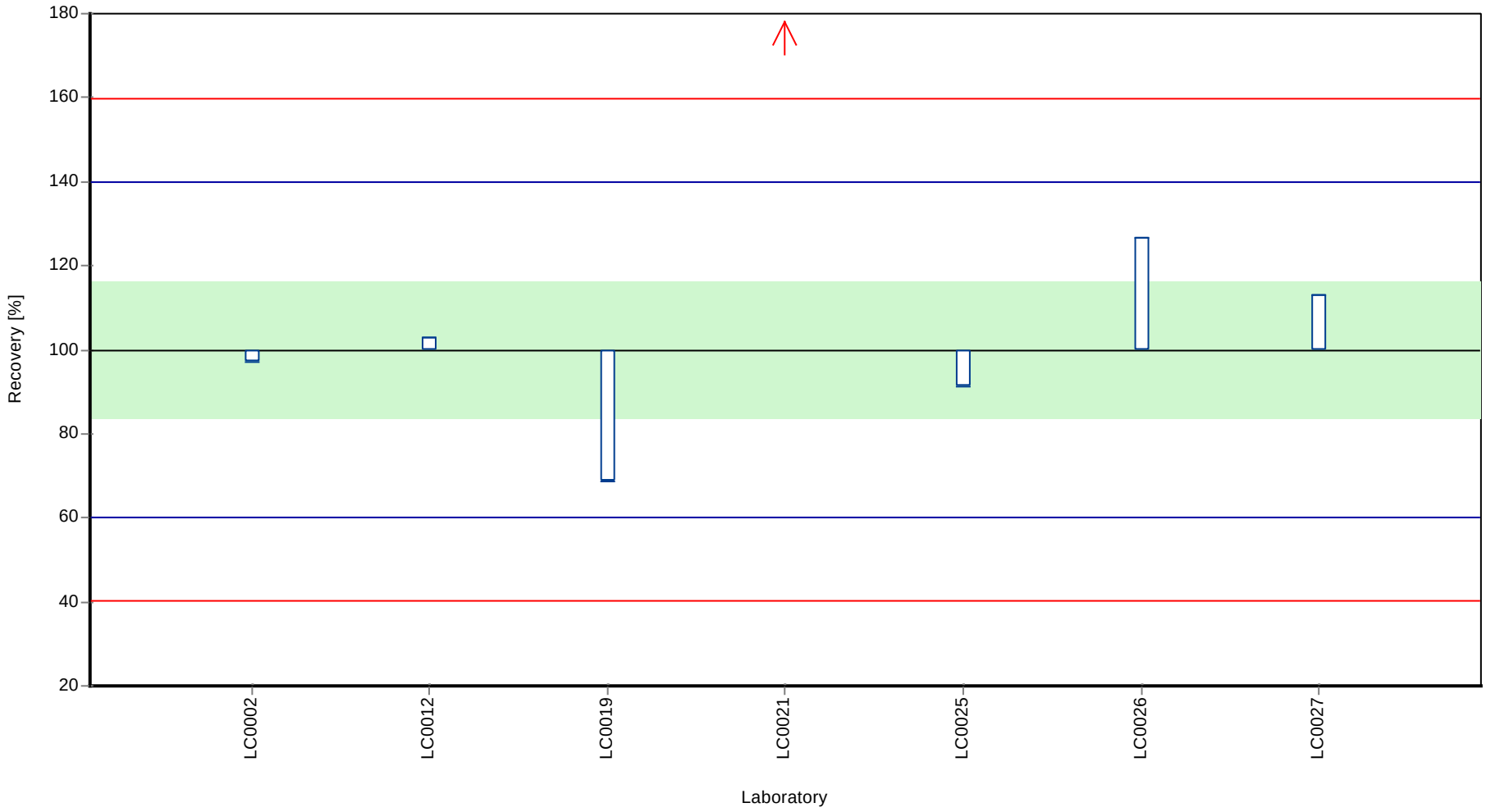
	all results	without outliners	Unit
Mean ± Cl (99%)	12,1 ± 10,3	8,75 ± 2,13	ng/l
Minimum	6	6	ng/l
Maximum	32,3	11,1	ng/l
Standard deviation	9,04	1,74	ng/l
rel. Standard deviation	74,6	19,9	%
n	7	6	-

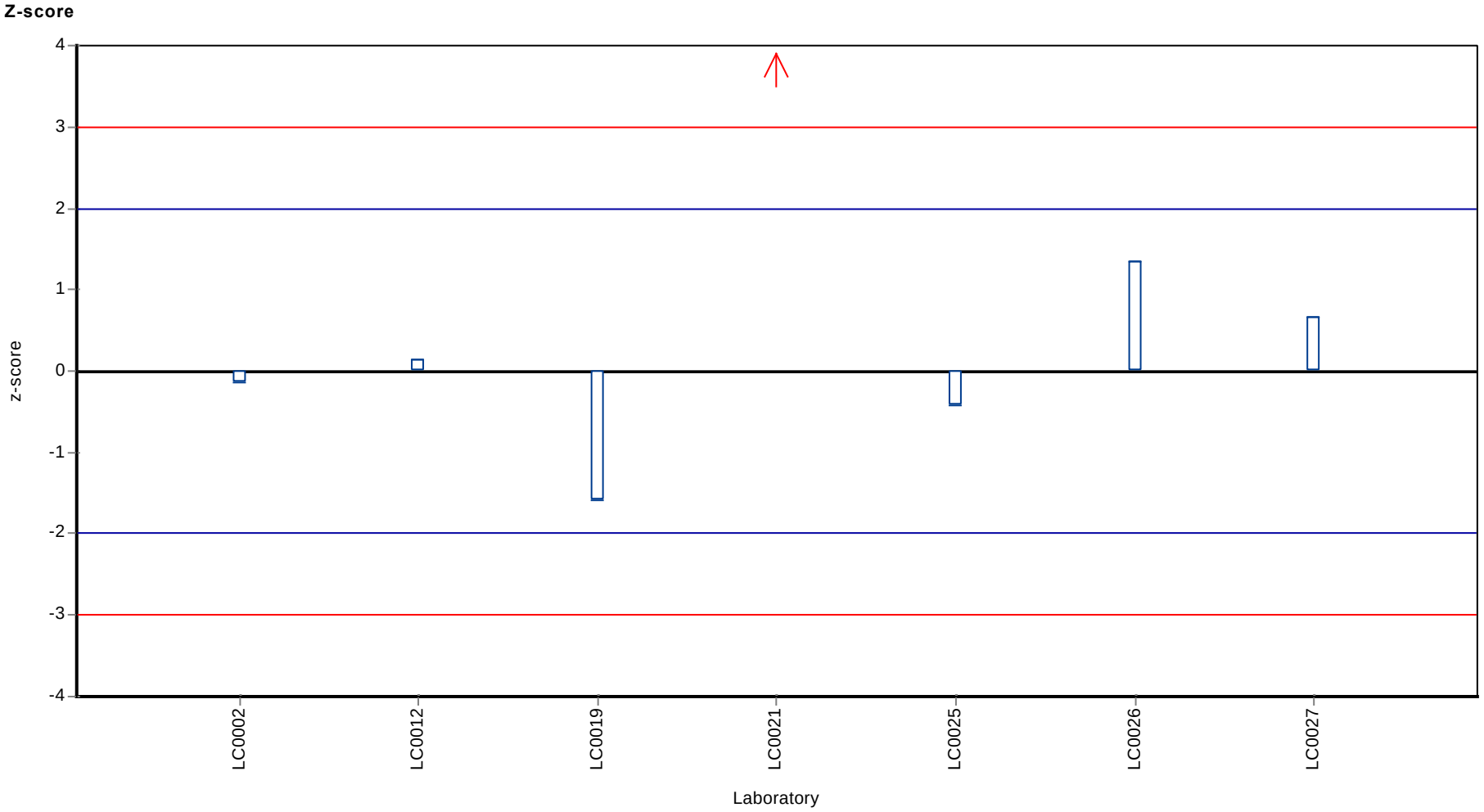
Graphical presentation of results

Results



Recovery rate




Z-score
4
3
2
1
0
-1
-2
-3
-4
z-score
LC0002
LC0012
LC0019
LC0021
LC0025
LC0026
LC0027
Laboratory

Parameter oriented report

P16 B - PAH

Indeno[1,2,3-cd]pyrene

Unit	ng/l
Mean ± Cl (99%)	-
Minimum - Maximum	1 - 2,25
Check value ± U	<1,3 (LOD)

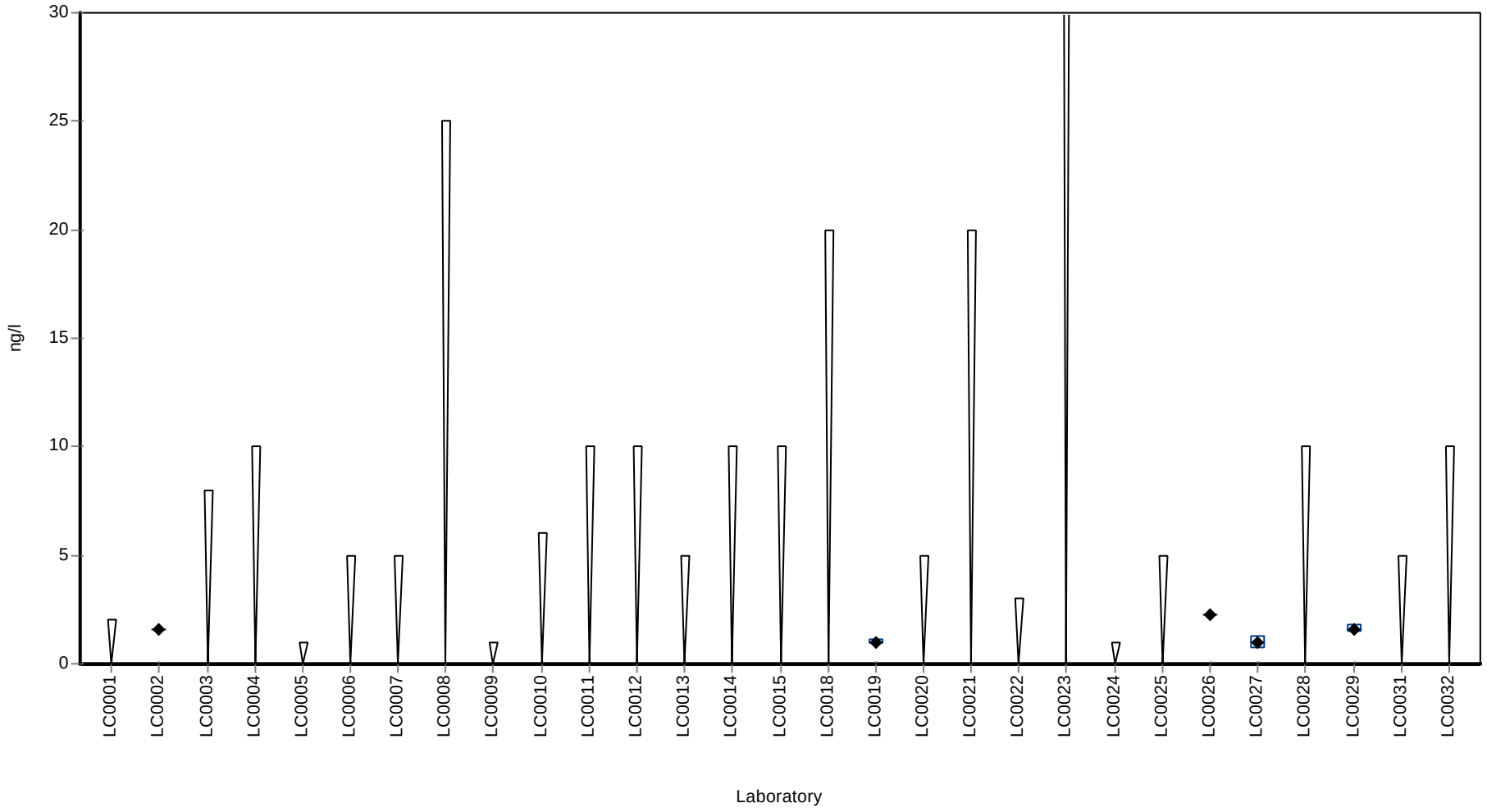
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	<2 (LOD)	-	-	-	
LC0002	1,570	-	-	-	
LC0003	< 8 (LOQ)	-	-	-	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 1 (LOQ)	-	-	-	
LC0006	< 5 (LOQ)	-	-	-	
LC0007	< 5 (LOQ)	-	-	-	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	< 1 (LOQ)	-	-	-	
LC0010	< 6 (LOQ)	-	-	-	
LC0011	< 10 (LOQ)	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	< 5 (LOQ)	-	-	-	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	< 10 (LOQ)	-	-	-	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	1,000	0,100	-	-	
LC0020	< 5 (LOQ)	-	-	-	
LC0021	< 20 (LOQ)	-	-	-	
LC0022	< 3 (LOQ)	-	-	-	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	< 1 (LOQ)	-	-	-	
LC0025	< 5 (LOQ)	-	-	-	
LC0026	2,250	-	-	-	
LC0027	1,000	0,300	-	-	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	1,600	0,190	-	-	
LC0030	-	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

	all results	without outliners	Unit
Mean ± Cl (99%)	1,48 ± 0,696	-	ng/l
Minimum	1	1	ng/l
Maximum	2,25	2,25	ng/l
Standard deviation	0,519	-	ng/l
rel. Standard deviation	35	-	%
n	5	5	-

Graphical presentation of results

Results



Parameter oriented report

P16 A - PAH

Naphthalene

Unit	ng/l
Mean ± Cl (99%)	1710 ± 489
Minimum - Maximum	1,3 - 3172
Check value ± U	1684 ± 318

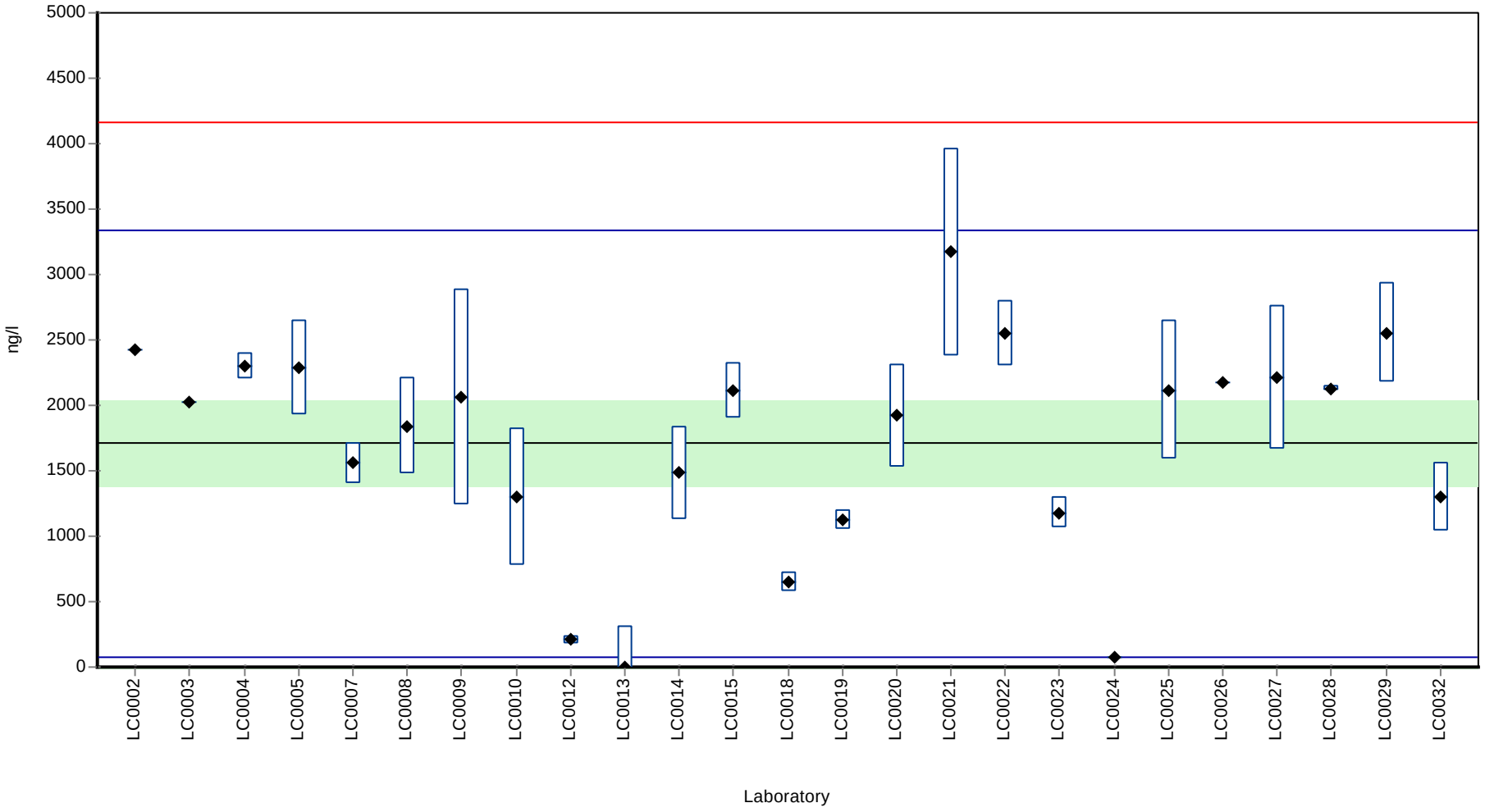
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	2420,000	-	141,5	0,9	
LC0003	2020,000	-	118,1	0,4	
LC0004	2300,000	100,000	134,5	0,7	
LC0005	2284,600	365,500	133,6	0,7	
LC0006	-	-	-	-	
LC0007	1559,100	156,000	91,2	-0,2	
LC0008	1840,000	368,000	107,6	0,2	
LC0009	2059,000	824,000	120,4	0,4	
LC0010	1300,000	530,000	76,0	-0,5	
LC0011	-	-	-	-	
LC0012	210,000	33,300	12,3	-1,8	
LC0013	1,300	310,000	0,1	-2,1	
LC0014	1486,300	356,700	86,9	-0,3	
LC0015	2116,000	212,000	123,7	0,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	650,000	70,000	38,0	-1,3	
LC0019	1127,000	71,000	65,9	-0,7	
LC0020	1920,000	389,000	112,3	0,3	
LC0021	3172,000	793,000	185,5	1,8	
LC0022	2550,000	255,000	149,1	1,0	
LC0023	1180,000	118,000	69,0	-0,7	
LC0024	81,000	8,100	4,7	-2,0	
LC0025	2118,000	530,000	123,8	0,5	
LC0026	2172,000	-	127,0	0,6	
LC0027	2209,000	552,000	129,2	0,6	
LC0028	2130,000	21,712	124,5	0,5	
LC0029	2553,000	383,000	149,3	1,0	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	1300,000	259,000	76,0	-0,5	

Characteristics of parameter

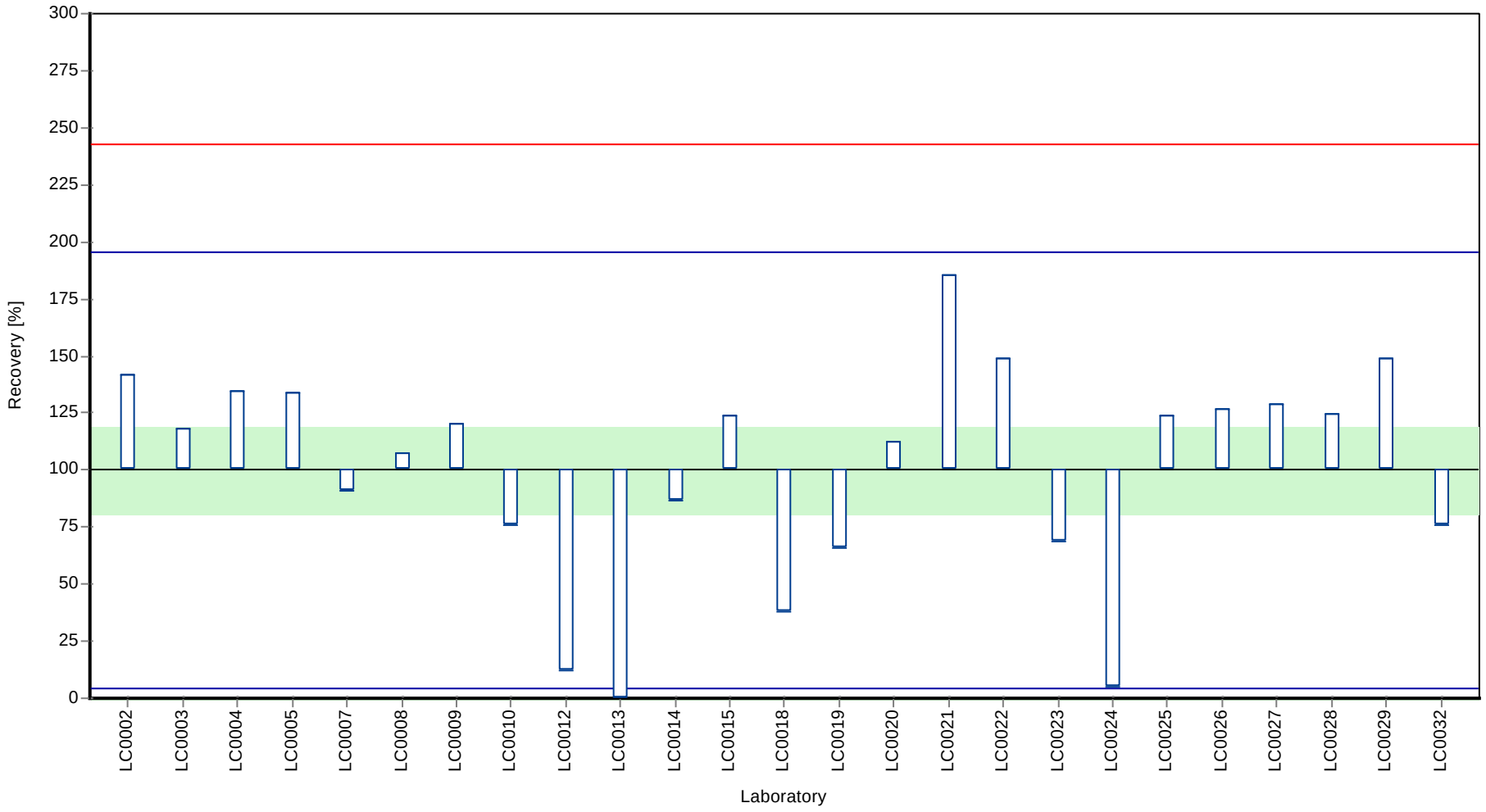
	all results	without outliners	Unit
Mean ± Cl (99%)	1710 ± 489	1710 ± 489	ng/l
Minimum	1,3	1,3	ng/l
Maximum	3170	3170	ng/l
Standard deviation	816	816	ng/l
rel. Standard deviation	47,7	47,7	%
n	25	25	-

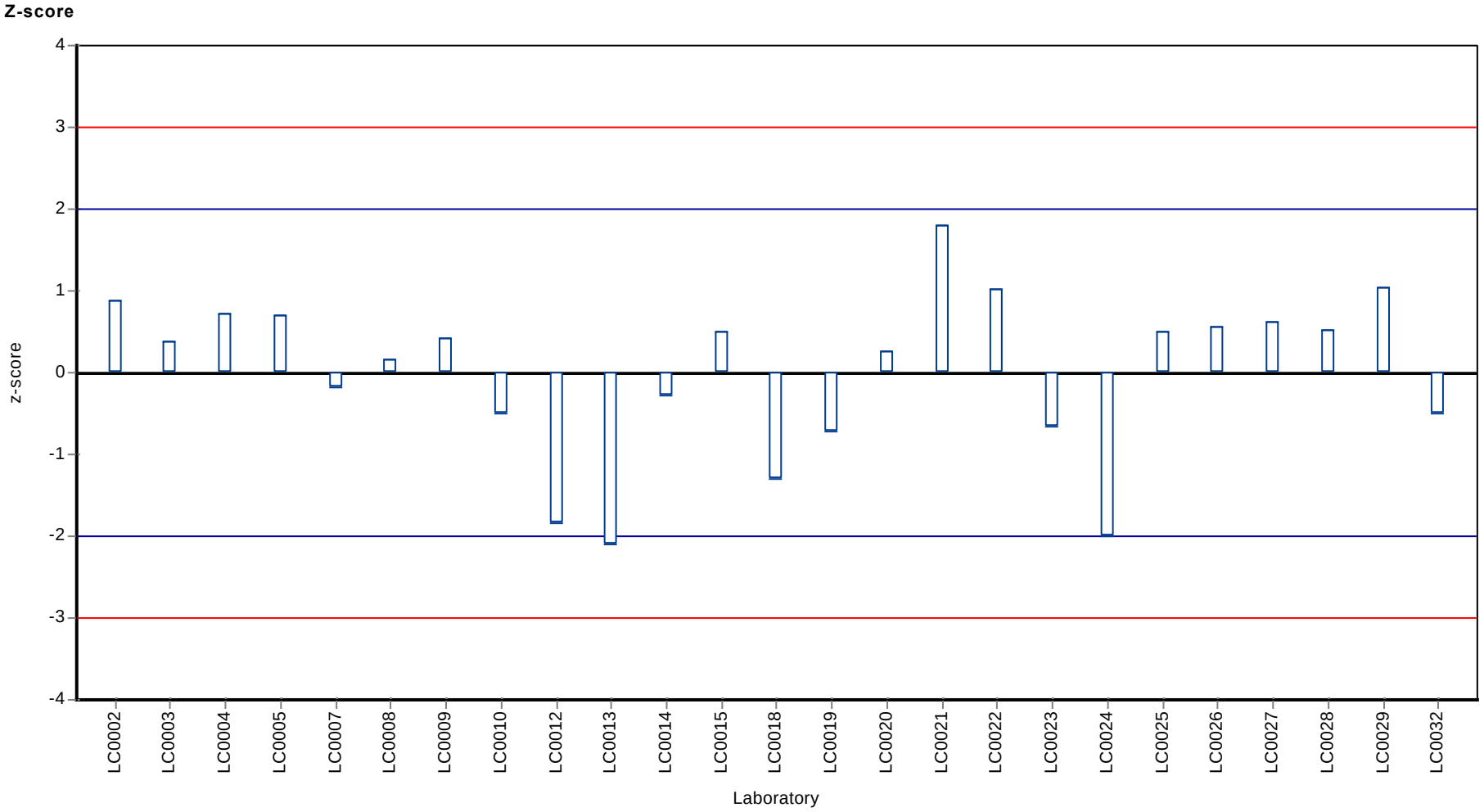
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
3
2
1
0
-1
-2
-3
-4
LC0002
LC0003
LC0004
LC0005
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LC0008
LC0009
LC0010
LC0012
LC0013
LC0014
LC0015
LC0018
LC0019
LC0020
LC0021
LC0022
LC0023
LC0024
LC0025
LC0026
LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Naphthalene

Unit	ng/l
Mean ± Cl (99%)	178 ± 37,5
Minimum - Maximum	50 - 274
Check value ± U	201 ± 6

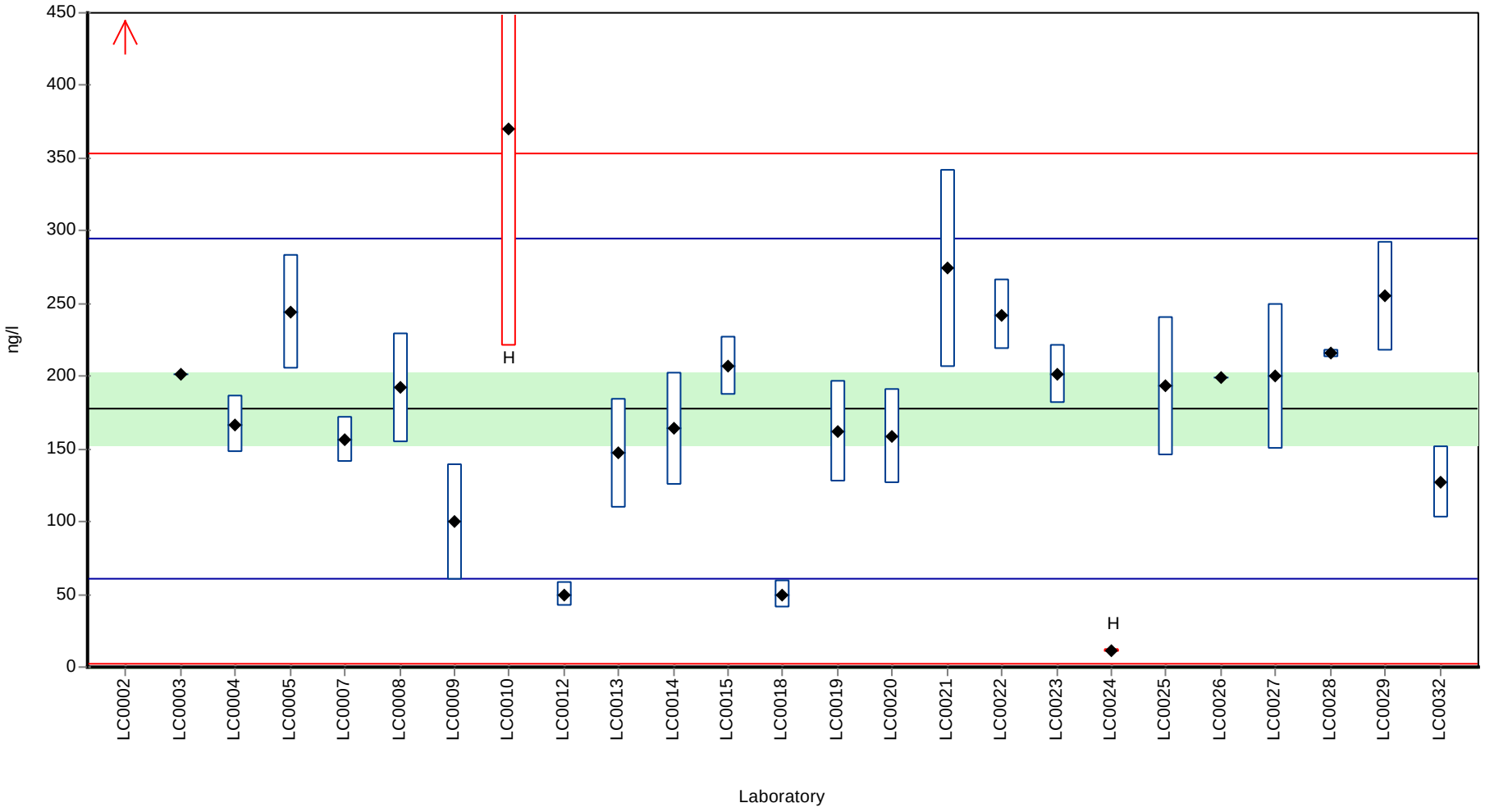
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	421,000	-	237,2	4,2	H
LC0003	201,000	-	113,2	0,4	
LC0004	167,000	20,000	94,1	-0,2	
LC0005	244,200	39,100	137,6	1,1	
LC0006	-	-	-	-	
LC0007	156,200	16,000	88,0	-0,4	
LC0008	192,000	38,000	108,2	0,2	
LC0009	100,000	40,000	56,3	-1,3	
LC0010	370,000	150,000	208,4	3,3	H
LC0011	-	-	-	-	
LC0012	50,000	8,100	28,2	-2,2	
LC0013	147,000	38,000	82,8	-0,5	
LC0014	163,700	39,300	92,2	-0,2	
LC0015	207,000	20,700	116,6	0,5	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	50,000	10,000	28,2	-2,2	
LC0019	162,000	35,000	91,3	-0,3	
LC0020	158,600	32,200	89,3	-0,3	
LC0021	274,000	68,000	154,4	1,6	
LC0022	242,100	24,300	136,4	1,1	
LC0023	201,000	20,100	113,2	0,4	
LC0024	11,000	1,100	6,2	-2,8	H
LC0025	193,000	48,000	108,7	0,3	
LC0026	199,000	-	112,1	0,4	
LC0027	200,000	50,000	112,7	0,4	
LC0028	215,550	2,634	121,4	0,6	
LC0029	255,000	38,000	143,6	1,3	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	127,000	25,000	71,5	-0,9	

Characteristics of parameter

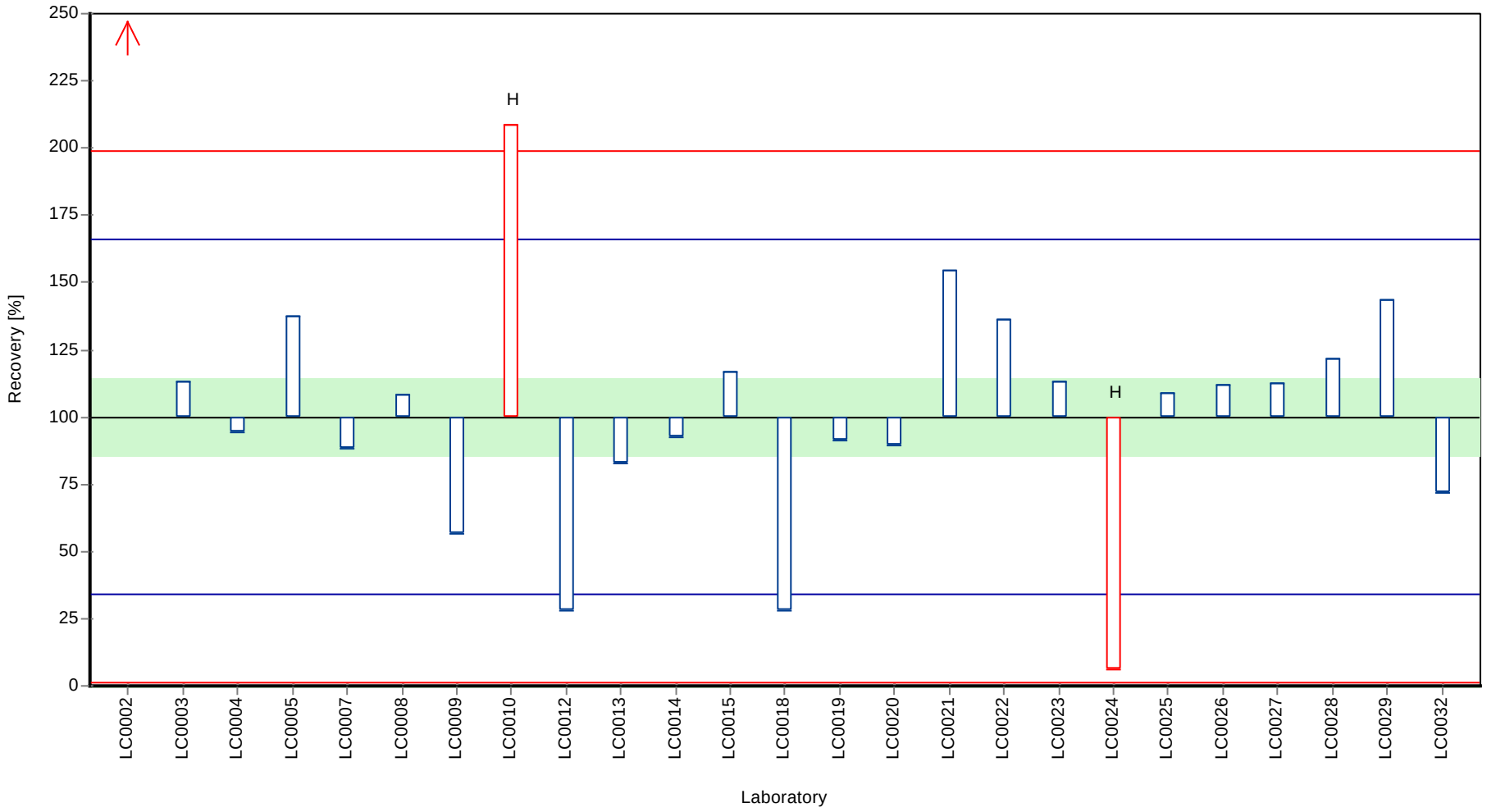
	all results	without outliners	Unit
Mean ± Cl (99%)	188 ± 53,8	178 ± 37,5	ng/l
Minimum	11	50	ng/l
Maximum	421	274	ng/l
Standard deviation	89,7	58,6	ng/l
rel. Standard deviation	47,7	33	%
n	25	22	-

Graphical presentation of results

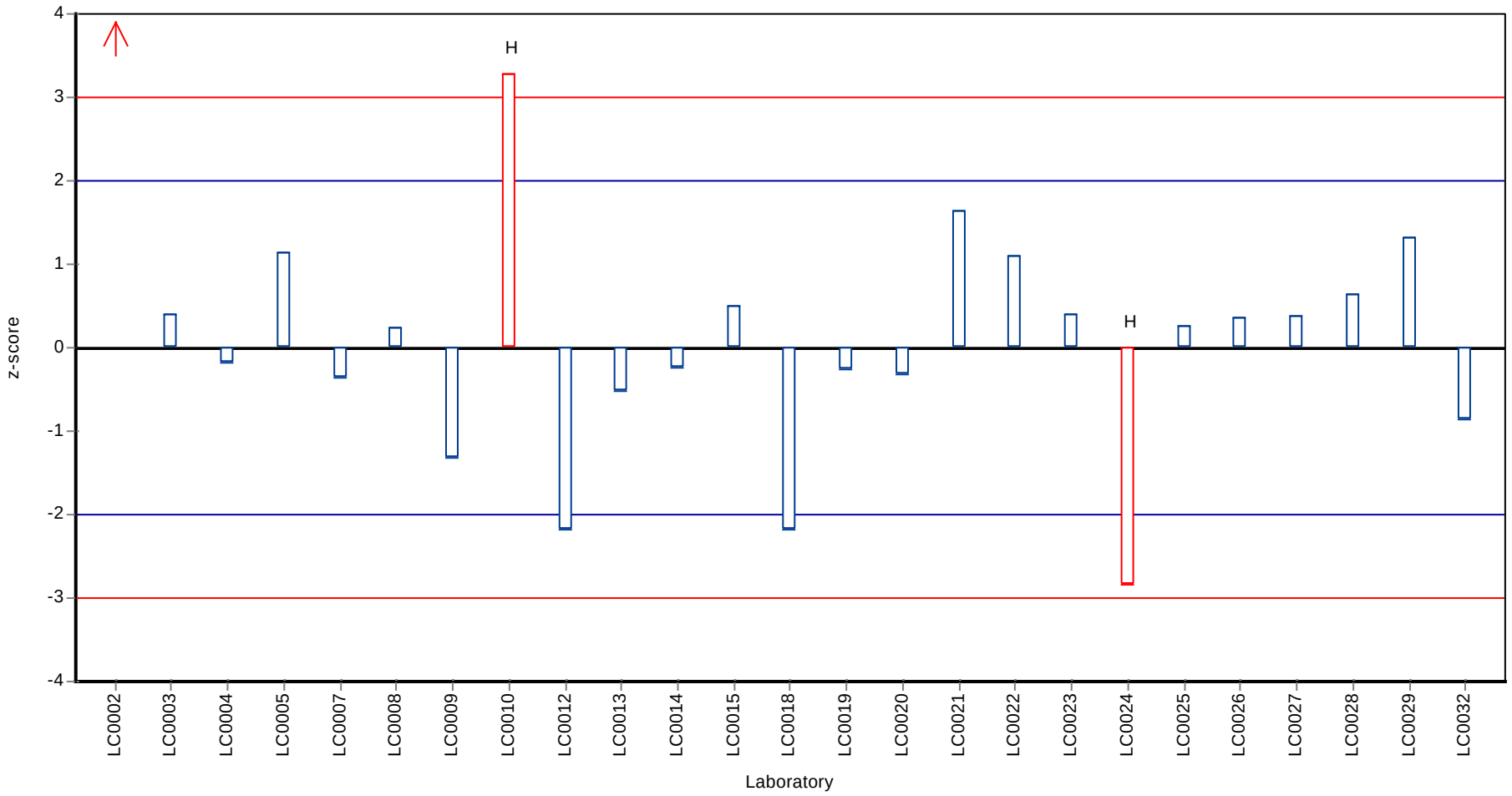
Results



Recovery rate



Z-score


4
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z-score
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LC0002
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LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Phenanthrene

Unit	ng/l
Mean ± Cl (99%)	291 ± 44
Minimum - Maximum	130 - 454,2
Check value ± U	300 ± 60

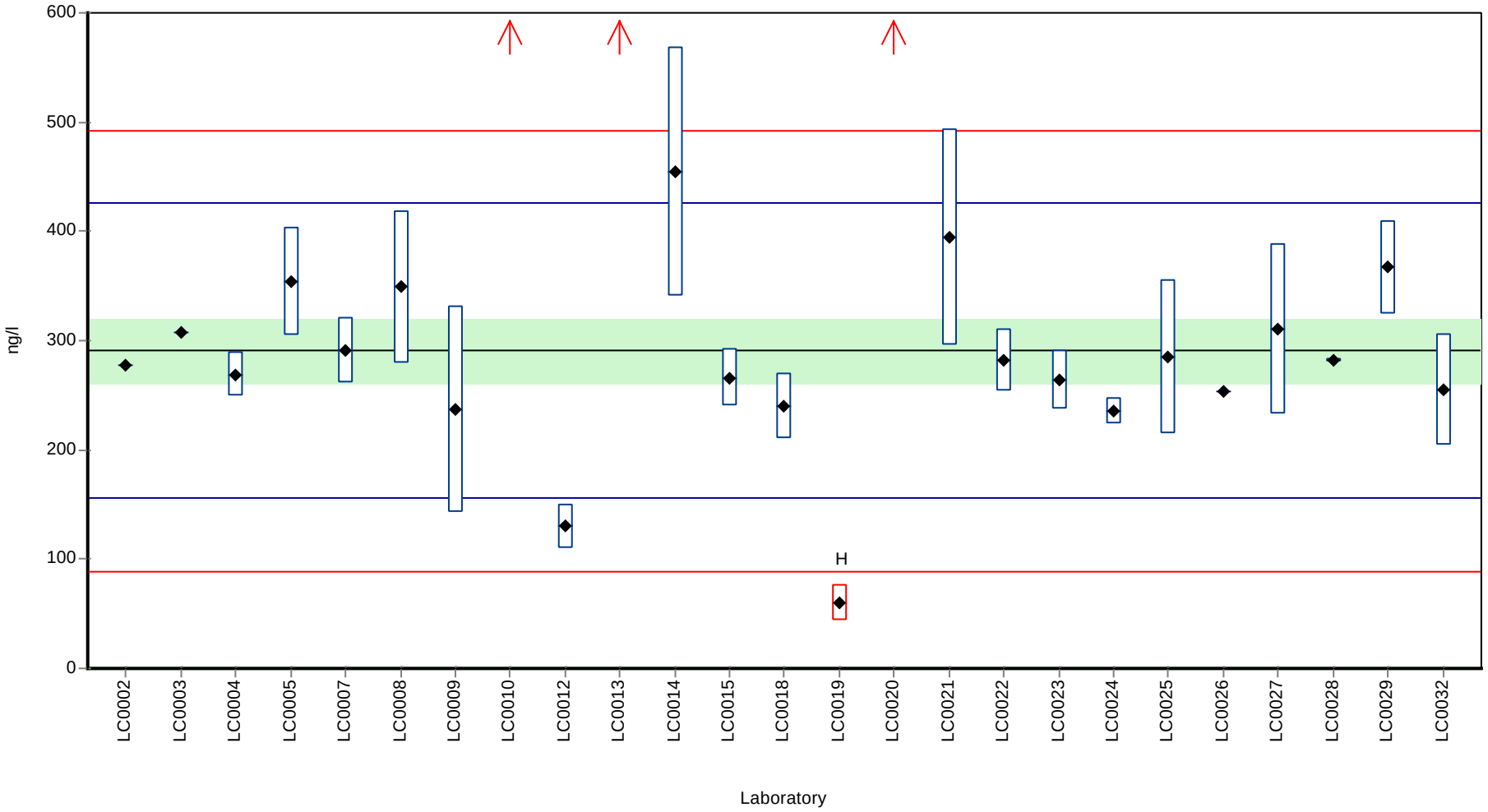
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	277,000	-	95,3	-0,2	
LC0003	308,000	-	105,9	0,3	
LC0004	269,000	20,000	92,5	-0,3	
LC0005	354,100	49,600	121,8	0,9	
LC0006	-	-	-	-	
LC0007	291,500	30,000	100,2	0,0	
LC0008	349,000	70,000	120,0	0,9	
LC0009	237,000	95,000	81,5	-0,8	
LC0010	720,000	289,000	247,6	6,4	H
LC0011	-	-	-	-	
LC0012	130,000	20,600	44,7	-2,4	
LC0013	720,000	150,000	247,6	6,4	H
LC0014	454,200	113,600	156,2	2,4	
LC0015	266,200	26,600	91,5	-0,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	240,000	30,000	82,5	-0,8	
LC0019	60,000	17,000	20,6	-3,4	H
LC0020	718,000	109,900	246,9	6,4	H
LC0021	394,000	99,000	135,5	1,5	
LC0022	282,300	28,500	97,1	-0,1	
LC0023	264,000	26,400	90,8	-0,4	
LC0024	236,000	12,000	81,2	-0,8	
LC0025	285,000	71,000	98,0	-0,1	
LC0026	254,000	-	87,3	-0,5	
LC0027	311,000	77,800	106,9	0,3	
LC0028	282,610	1,559	97,2	-0,1	
LC0029	367,000	43,000	126,2	1,1	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	255,000	51,000	87,7	-0,5	

Characteristics of parameter

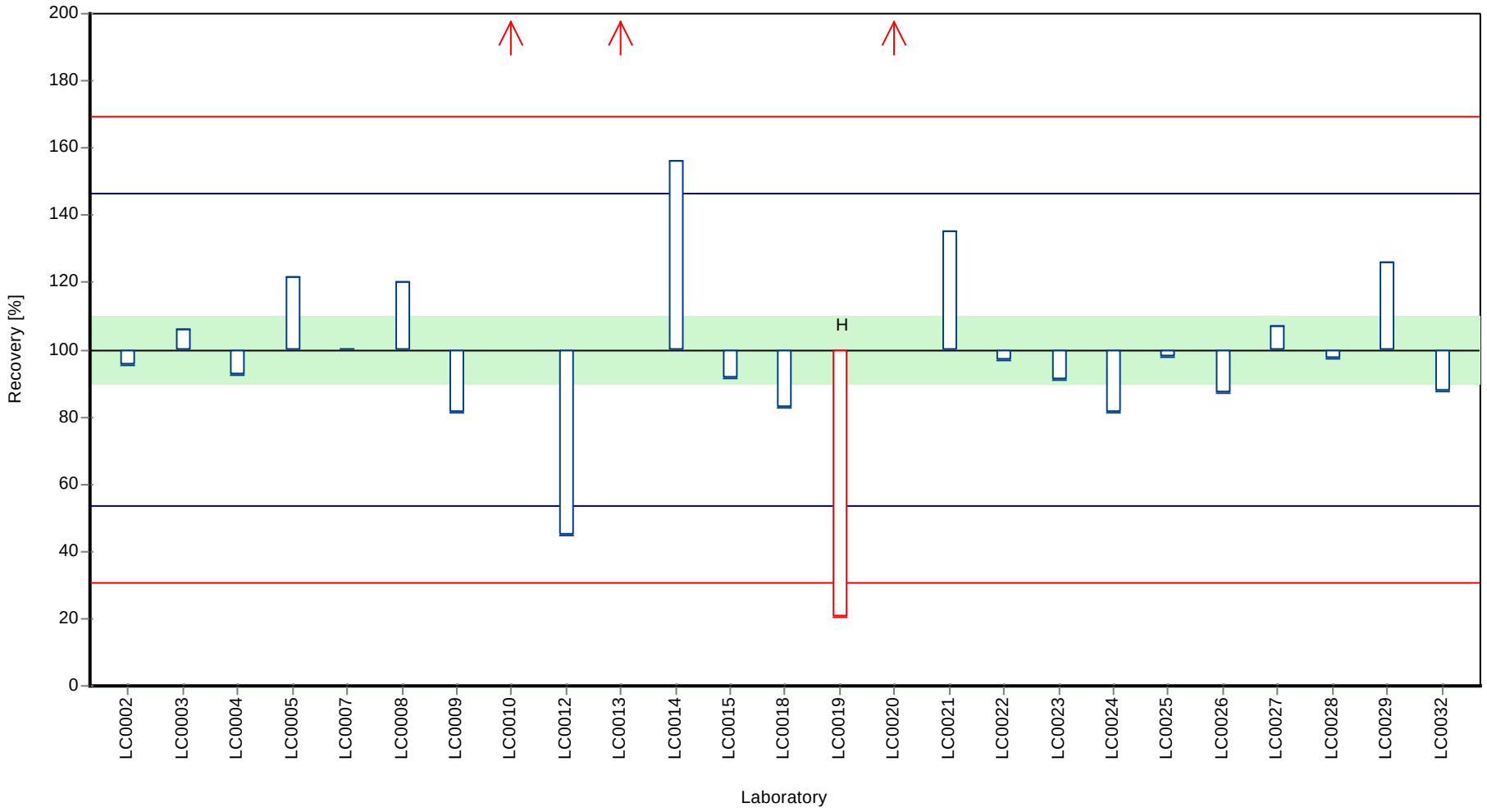
	all results	without outliners	Unit
Mean ± Cl (99%)	333 ± 98,7	291 ± 44	ng/l
Minimum	60	130	ng/l
Maximum	720	454	ng/l
Standard deviation	165	67,2	ng/l
rel. Standard deviation	49,4	23,1	%
n	25	21	-

Graphical presentation of results

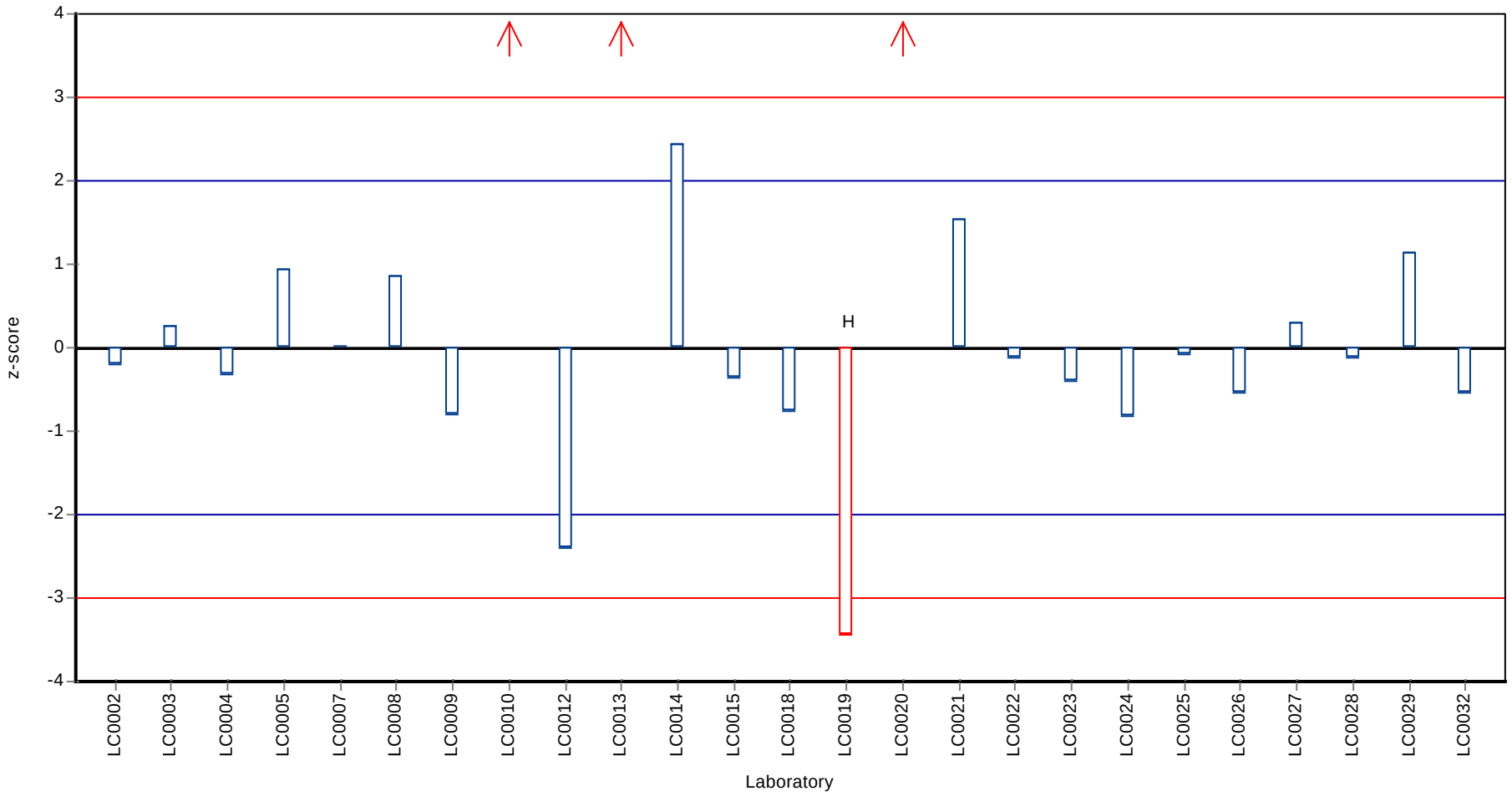
Results



Recovery rate



Z-score


4
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z-score
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LC0027
LC0028
LC0029
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Phenanthrene

Unit	ng/l
Mean ± Cl (99%)	37,3 ± 10,5
Minimum - Maximum	13 - 73,5
Check value ± U	31,6 ± 1,4

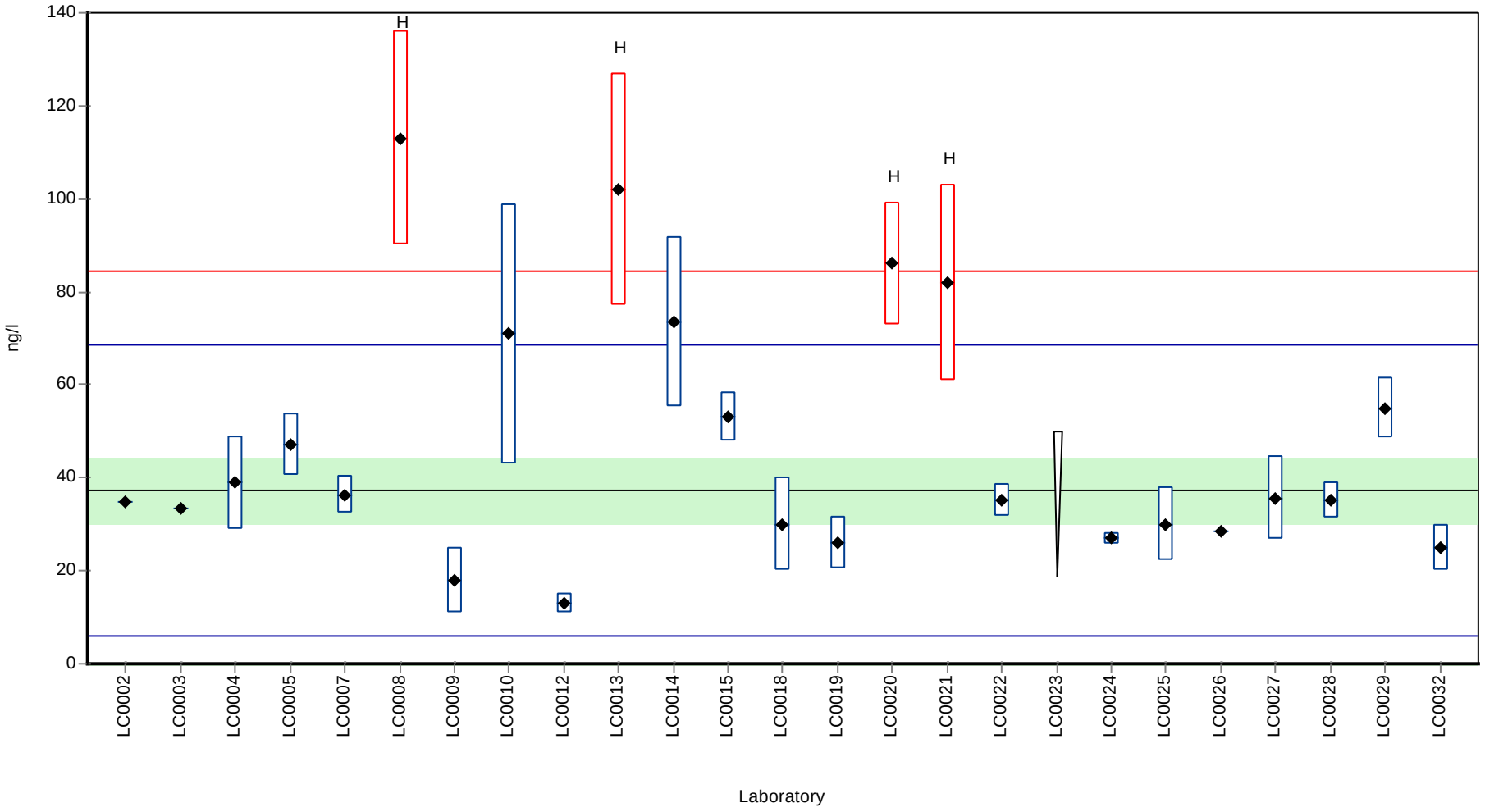
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	34,700	-	92,9	-0,2	
LC0003	33,400	-	89,5	-0,3	
LC0004	39,000	10,000	104,5	0,1	
LC0005	47,200	6,600	126,4	0,6	
LC0006	-	-	-	-	
LC0007	36,300	4,000	97,2	-0,1	
LC0008	113,000	23,000	302,7	4,8	H
LC0009	18,000	7,000	48,2	-1,2	
LC0010	71,000	28,000	190,2	2,1	
LC0011	-	-	-	-	
LC0012	13,000	2,080	34,8	-1,6	
LC0013	102,000	25,000	273,2	4,1	H
LC0014	73,500	18,400	196,9	2,3	
LC0015	53,100	5,300	142,2	1,0	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	30,000	10,000	80,4	-0,5	
LC0019	26,000	5,700	69,6	-0,7	
LC0020	86,100	13,200	230,6	3,1	H
LC0021	82,000	21,000	219,6	2,8	H
LC0022	35,100	3,510	94,0	-0,1	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	27,000	1,300	72,3	-0,7	
LC0025	30,000	8,000	80,4	-0,5	
LC0026	28,400	-	76,1	-0,6	
LC0027	35,700	8,900	95,6	-0,1	
LC0028	35,290	3,847	94,5	-0,1	
LC0029	55,000	6,400	147,3	1,1	
LC0030	-	-	-	-	
LC0031	-	-	-	-	
LC0032	25,000	5,000	67,0	-0,8	

Characteristics of parameter

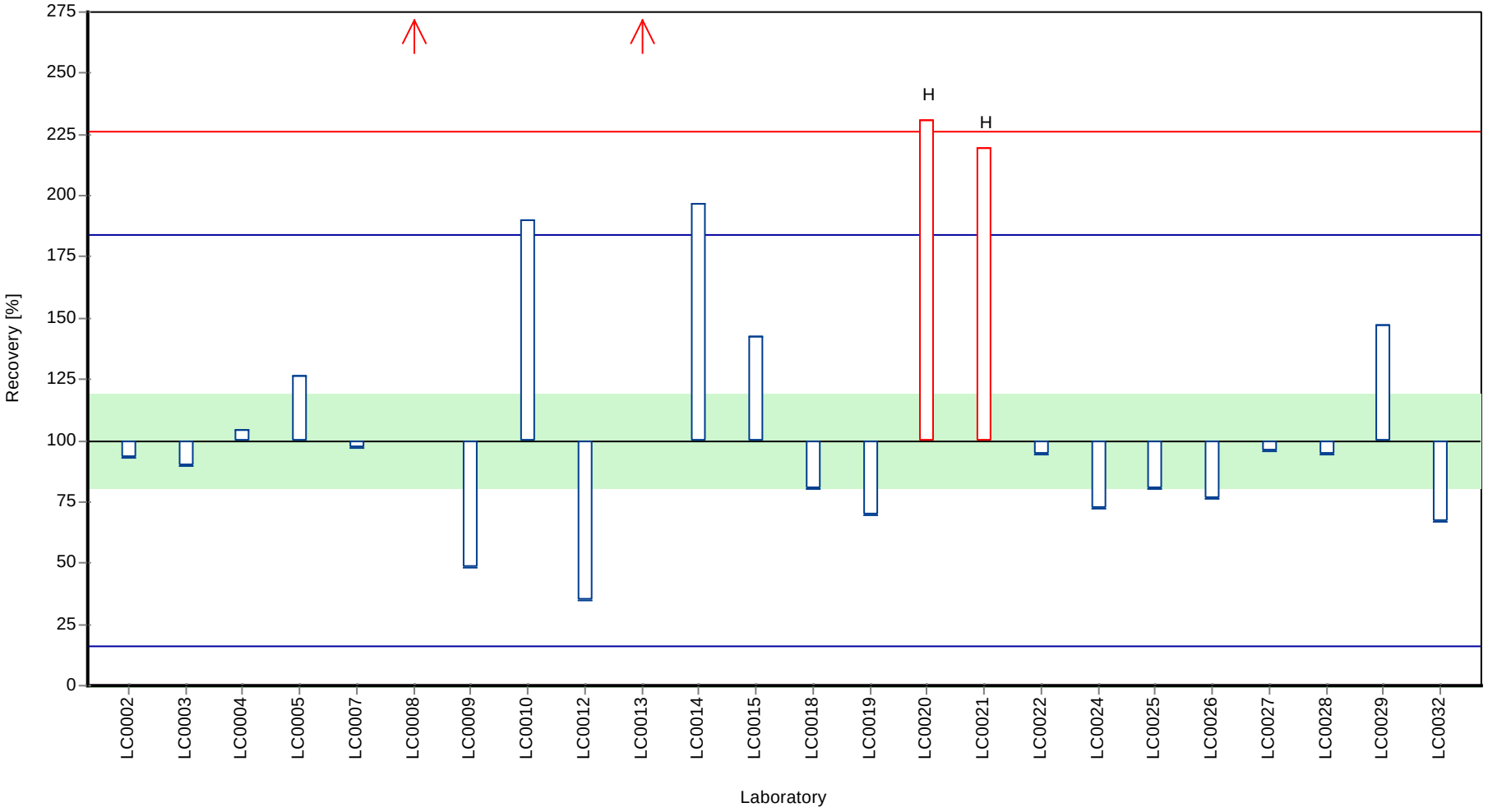
	all results	without outliners	Unit
Mean ± Cl (99%)	47,1 ± 16,5	37,3 ± 10,5	ng/l
Minimum	13	13	ng/l
Maximum	113	73,5	ng/l
Standard deviation	26,9	15,7	ng/l
rel. Standard deviation	57,2	42	%
n	24	20	-

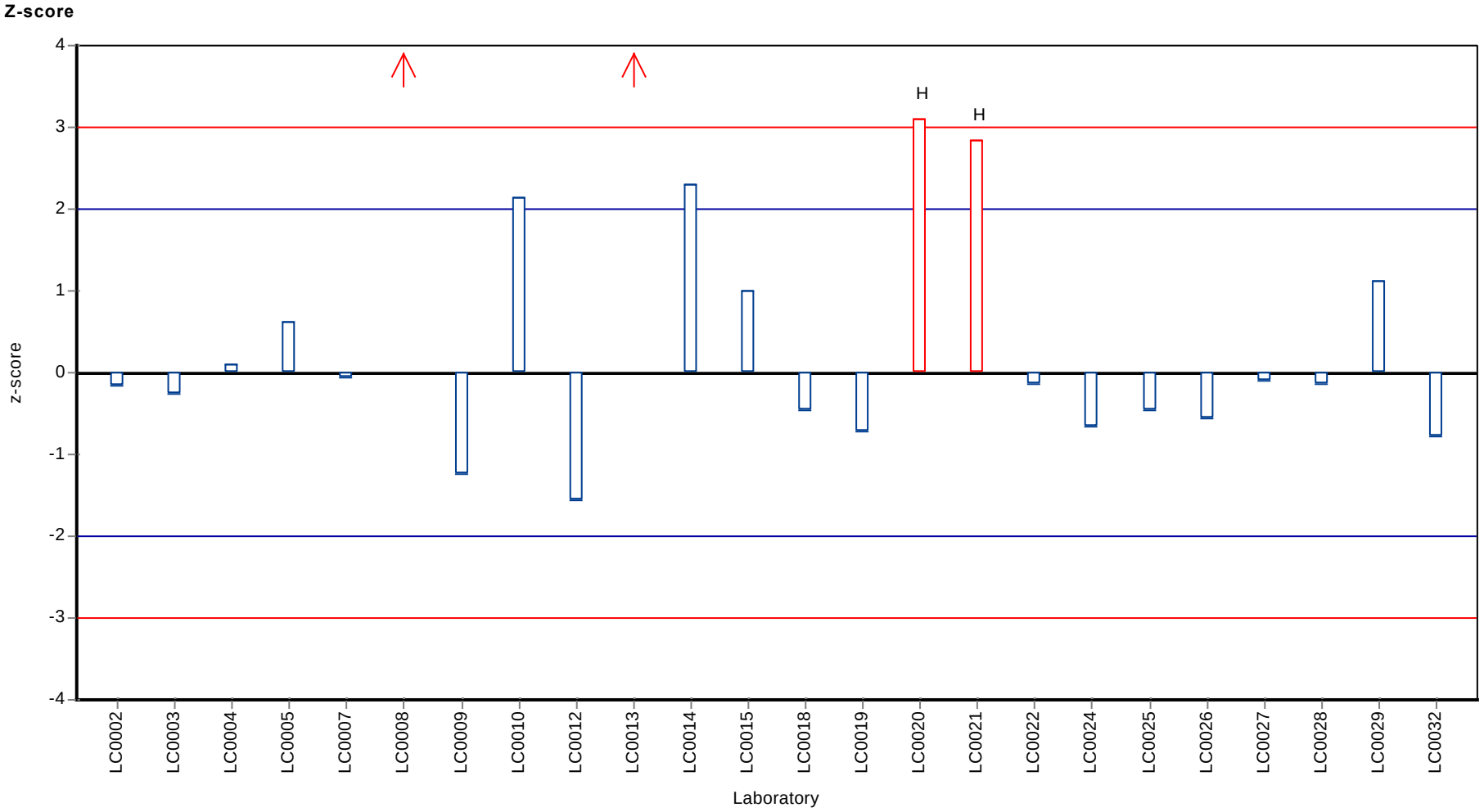
Graphical presentation of results

Results



Recovery rate




Z-score
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z-score
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LC0029
LC0032
Laboratory

Parameter oriented report

P16 A - PAH

Pyrene

Unit	ng/l
Mean ± Cl (99%)	66,3 ± 10,1
Minimum - Maximum	30 - 101
Check value ± U	64,9 ± 14,5

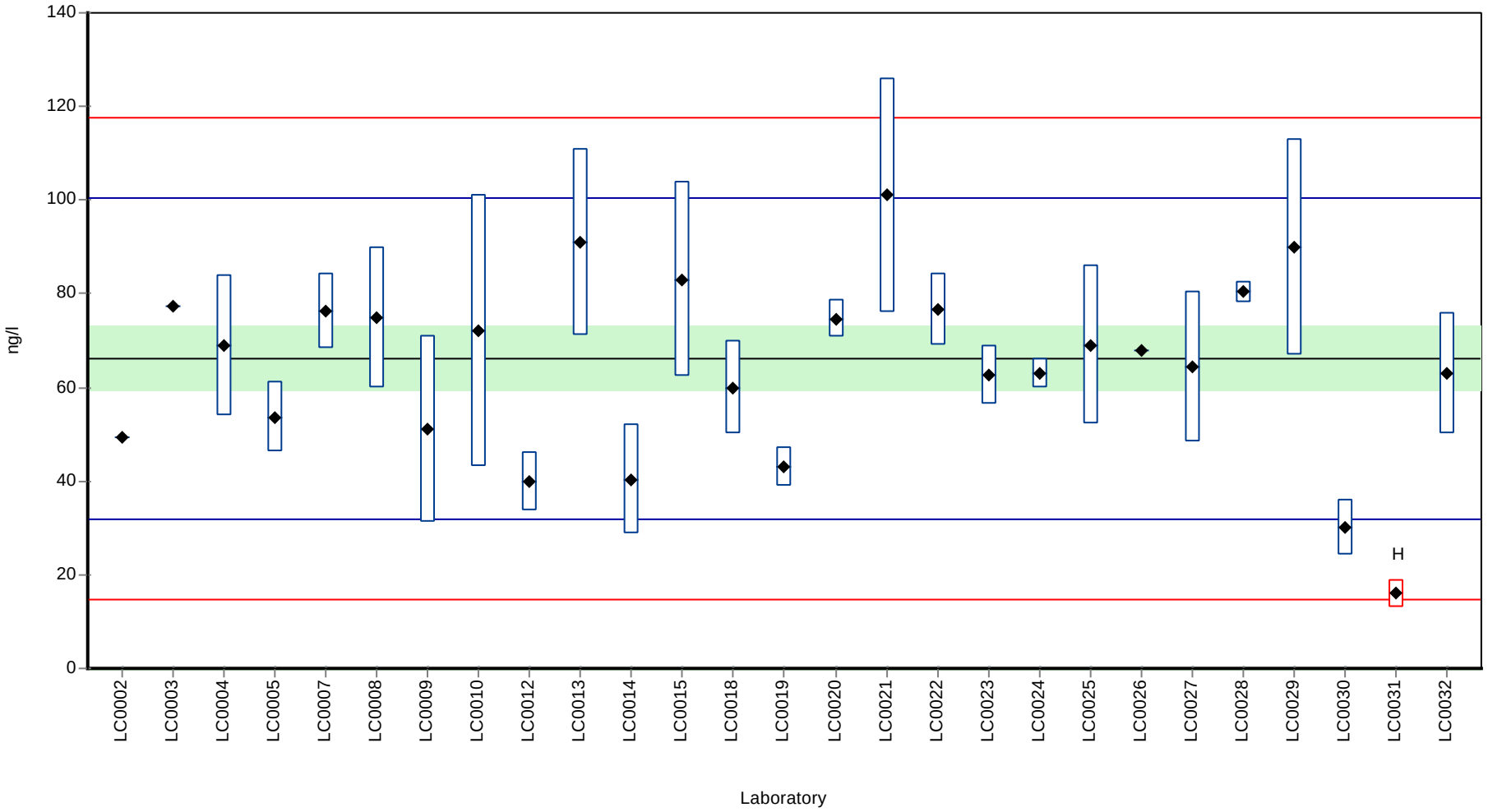
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	49,400	-	74,5	-1,0	
LC0003	77,400	-	116,8	0,6	
LC0004	69,000	15,000	104,1	0,2	
LC0005	53,700	7,500	81,0	-0,7	
LC0006	-	-	-	-	
LC0007	76,180	8,000	114,9	0,6	
LC0008	75,000	15,000	113,2	0,5	
LC0009	51,000	20,000	76,9	-0,9	
LC0010	72,000	29,000	108,6	0,3	
LC0011	-	-	-	-	
LC0012	40,000	6,340	60,3	-1,5	
LC0013	91,000	20,000	137,3	1,4	
LC0014	40,300	11,700	60,8	-1,5	
LC0015	83,100	20,800	125,4	1,0	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	60,000	10,000	90,5	-0,4	
LC0019	43,000	4,200	64,9	-1,4	
LC0020	74,600	4,000	112,5	0,5	
LC0021	101,000	25,000	152,4	2,0	
LC0022	76,500	7,700	115,4	0,6	
LC0023	62,600	6,260	94,4	-0,2	
LC0024	63,000	3,100	95,0	-0,2	
LC0025	69,000	17,000	104,1	0,2	
LC0026	67,900	-	102,4	0,1	
LC0027	64,300	16,100	97,0	-0,1	
LC0028	80,390	2,295	121,3	0,8	
LC0029	90,000	23,000	135,8	1,4	
LC0030	30,000	6,000	45,3	-2,1	
LC0031	16,000	3,000	24,1	-2,9	H
LC0032	63,000	13,000	95,0	-0,2	

Characteristics of parameter

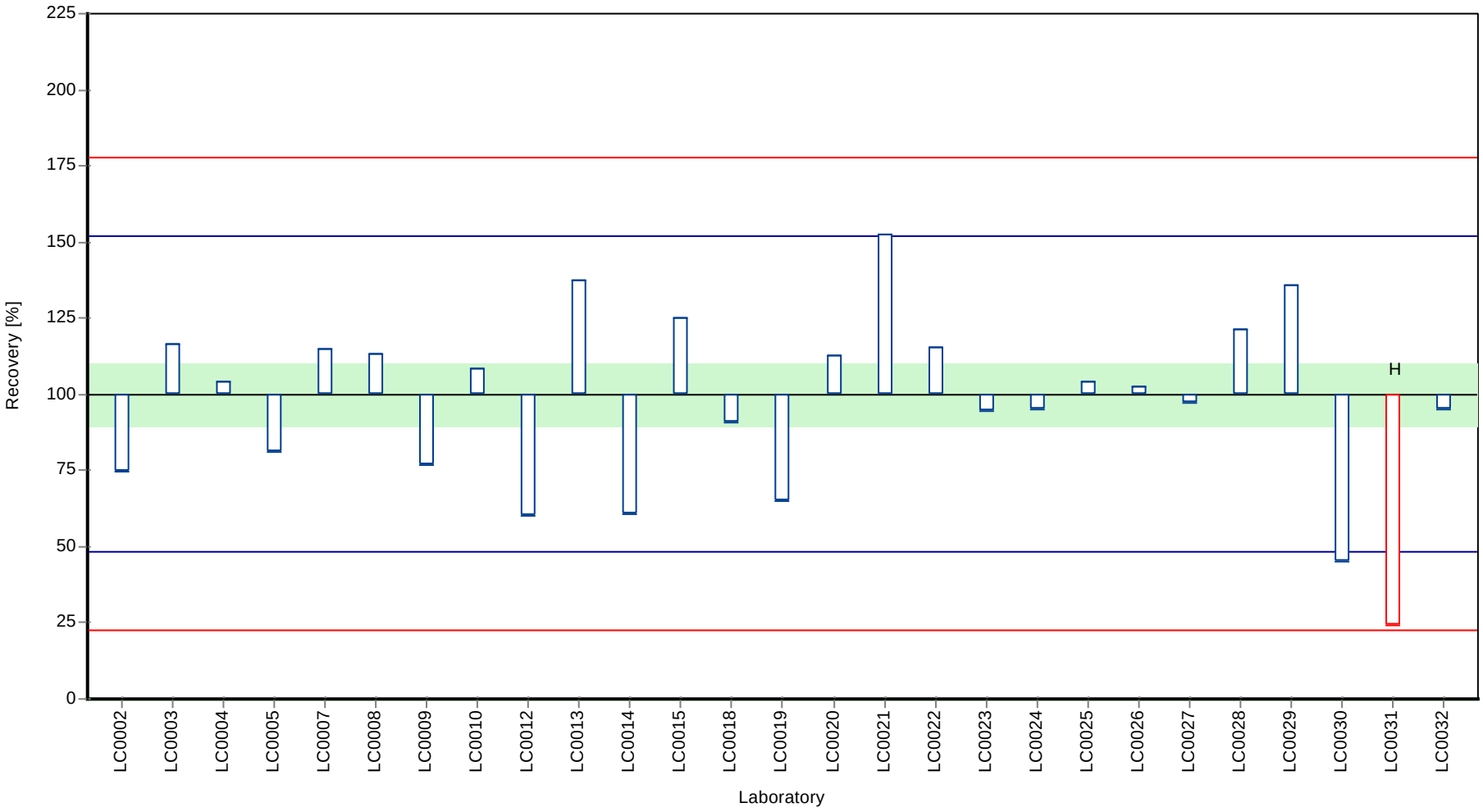
	all results	without outliners	Unit
Mean ± Cl (99%)	64,4 ± 11,2	66,3 ± 10,1	ng/l
Minimum	16	30	ng/l
Maximum	101	101	ng/l
Standard deviation	19,4	17,2	ng/l
rel. Standard deviation	30,1	25,9	%
n	27	26	-

Graphical presentation of results

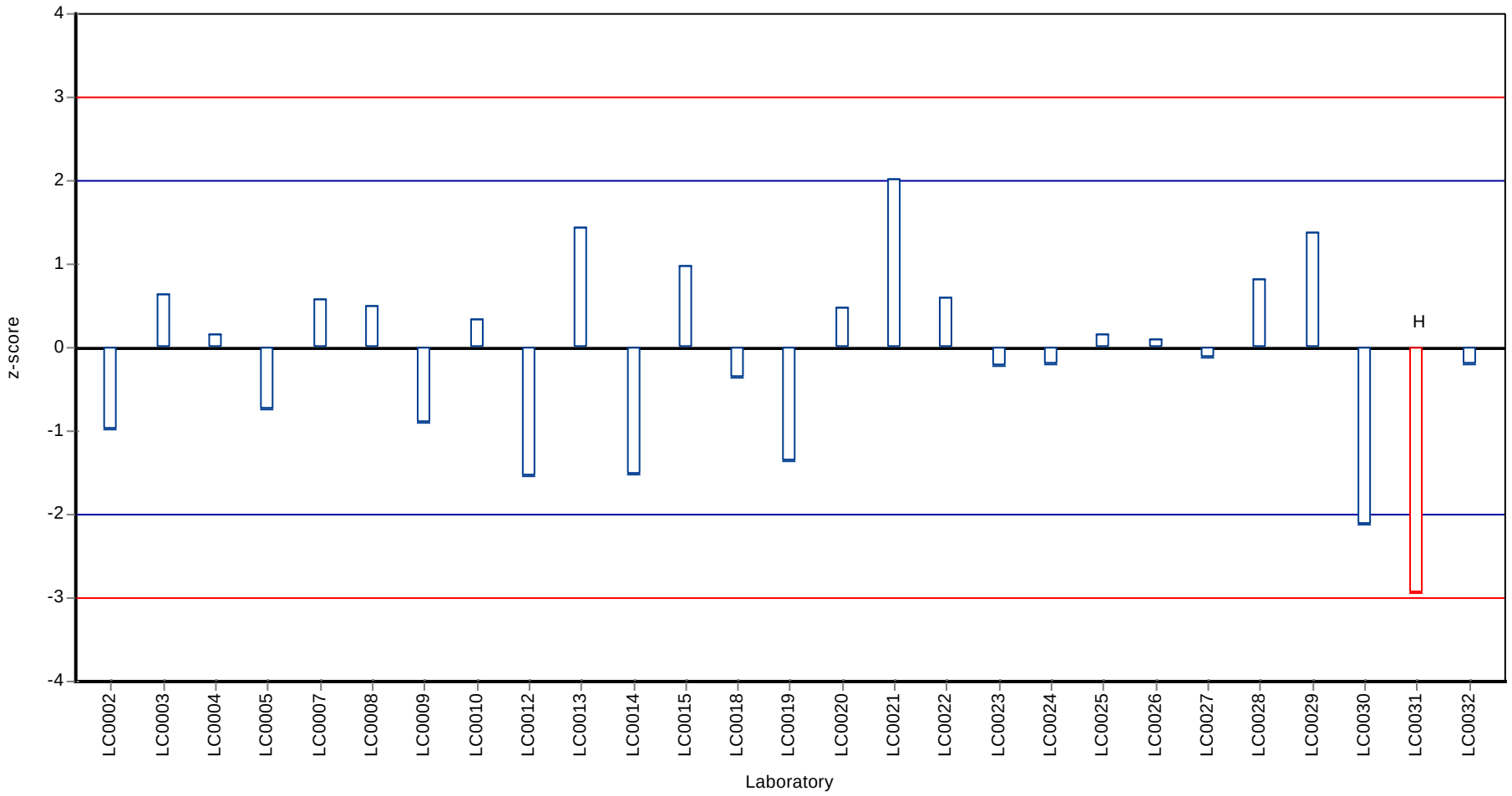
Results



Recovery rate



Z-score


4
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z-score
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LC0002
LC0003
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LC0028
LC0029
LC0030
LC0031
LC0032
Laboratory

Parameter oriented report

P16 B - PAH

Pyrene

Unit	ng/l
Mean ± Cl (99%)	7,67 ± 3,82
Minimum - Maximum	2,5 - 18
Check value ± U	<6,0 (LOQ)

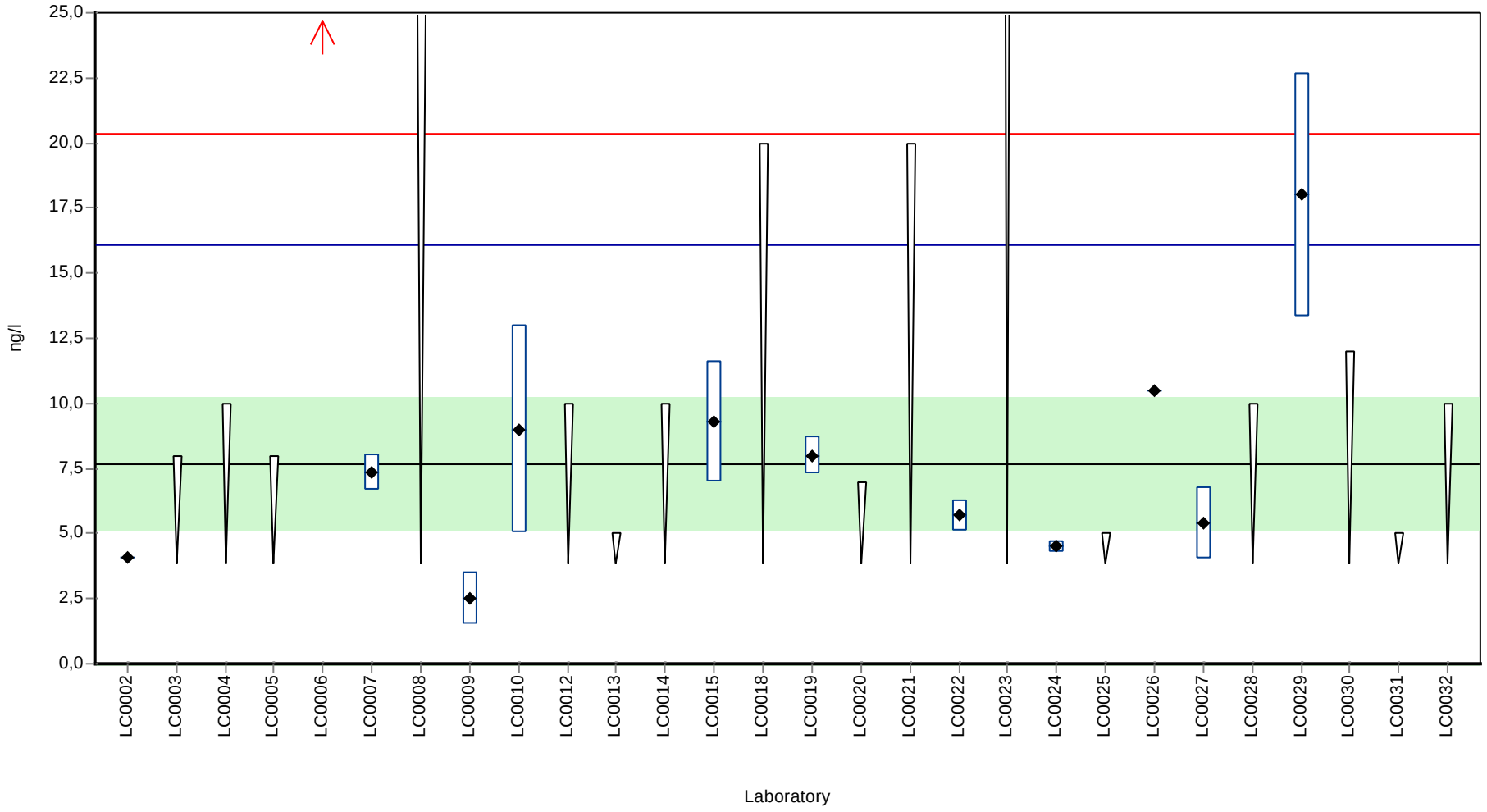
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0001	-	-	-	-	
LC0002	4,070	-	53,1	-0,9	
LC0003	< 8 (LOQ)	-	-	-	
LC0004	< 10 (LOQ)	-	-	-	
LC0005	< 8 (LOQ)	-	-	-	
LC0006	27,000	5,000	352,2	4,6	H
LC0007	7,350	0,700	95,9	-0,1	
LC0008	< 25 (LOQ)	-	-	-	
LC0009	2,500	1,000	32,6	-1,2	
LC0010	9,000	4,000	117,4	0,3	
LC0011	-	-	-	-	
LC0012	< 10 (LOQ)	-	-	-	
LC0013	< 5 (LOQ)	-	-	-	
LC0014	< 10 (LOQ)	-	-	-	
LC0015	9,300	2,300	121,3	0,4	
LC0016	-	-	-	-	
LC0017	-	-	-	-	
LC0018	< 20 (LOQ)	-	-	-	
LC0019	8,000	0,700	104,4	0,1	
LC0020	< 7 (LOQ)	-	-	-	
LC0021	< 20 (LOQ)	-	-	-	
LC0022	5,700	0,600	74,4	-0,5	
LC0023	< 50 (LOQ)	-	-	-	
LC0024	4,500	0,230	58,7	-0,8	
LC0025	< 5 (LOQ)	-	-	-	
LC0026	10,500	-	137,0	0,7	
LC0027	5,400	1,400	70,4	-0,5	
LC0028	< 10 (LOQ)	-	-	-	
LC0029	18,000	4,700	234,8	2,4	
LC0030	< 12 (LOQ)	-	-	-	
LC0031	< 5 (LOQ)	-	-	-	
LC0032	< 10 (LOQ)	-	-	-	

Characteristics of parameter

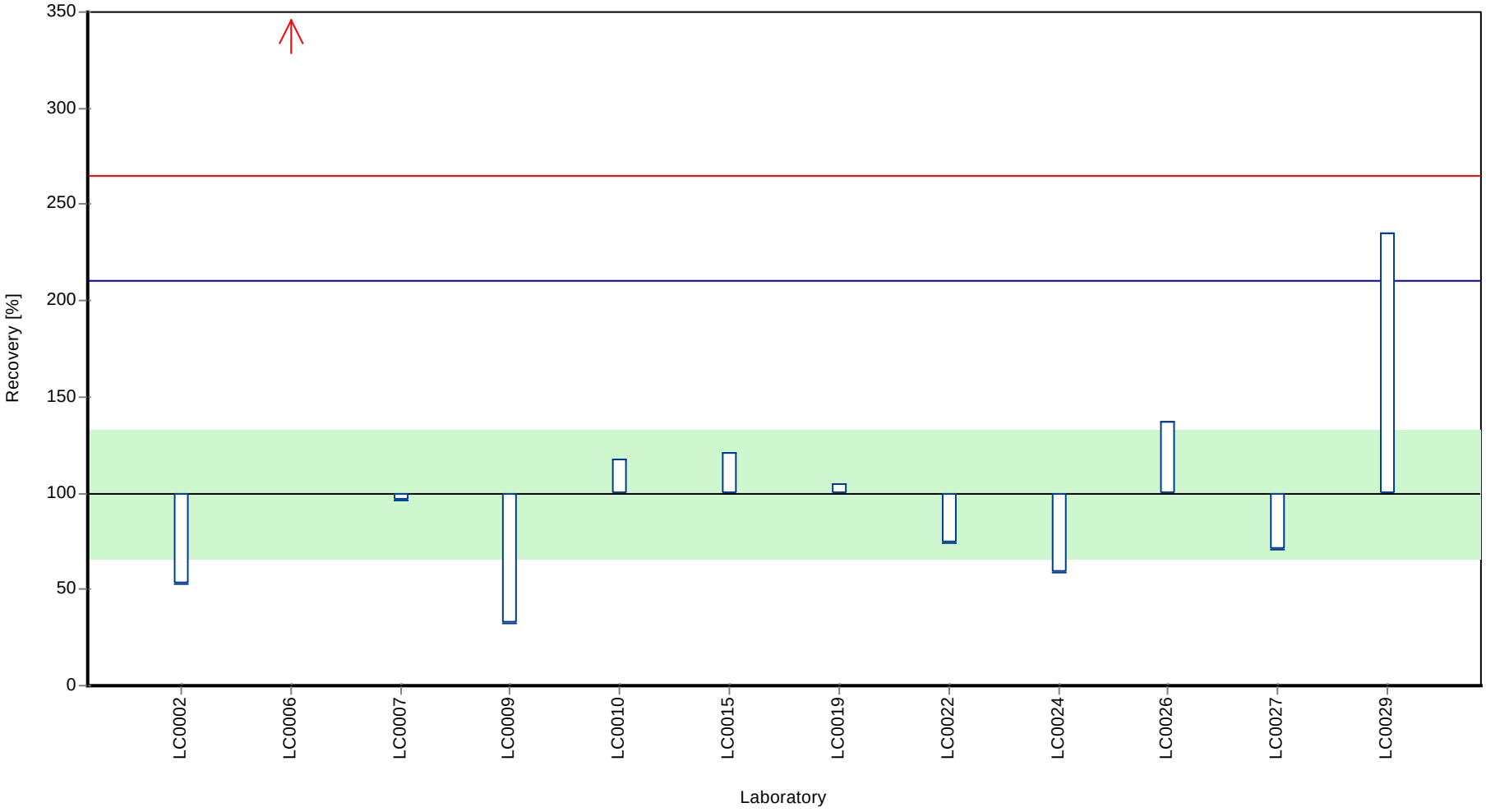
	all results	without outliners	Unit
Mean ± Cl (99%)	9,28 ± 5,96	7,67 ± 3,82	ng/l
Minimum	2,5	2,5	ng/l
Maximum	27	18	ng/l
Standard deviation	6,88	4,22	ng/l
rel. Standard deviation	74,2	55,1	%
n	12	11	-

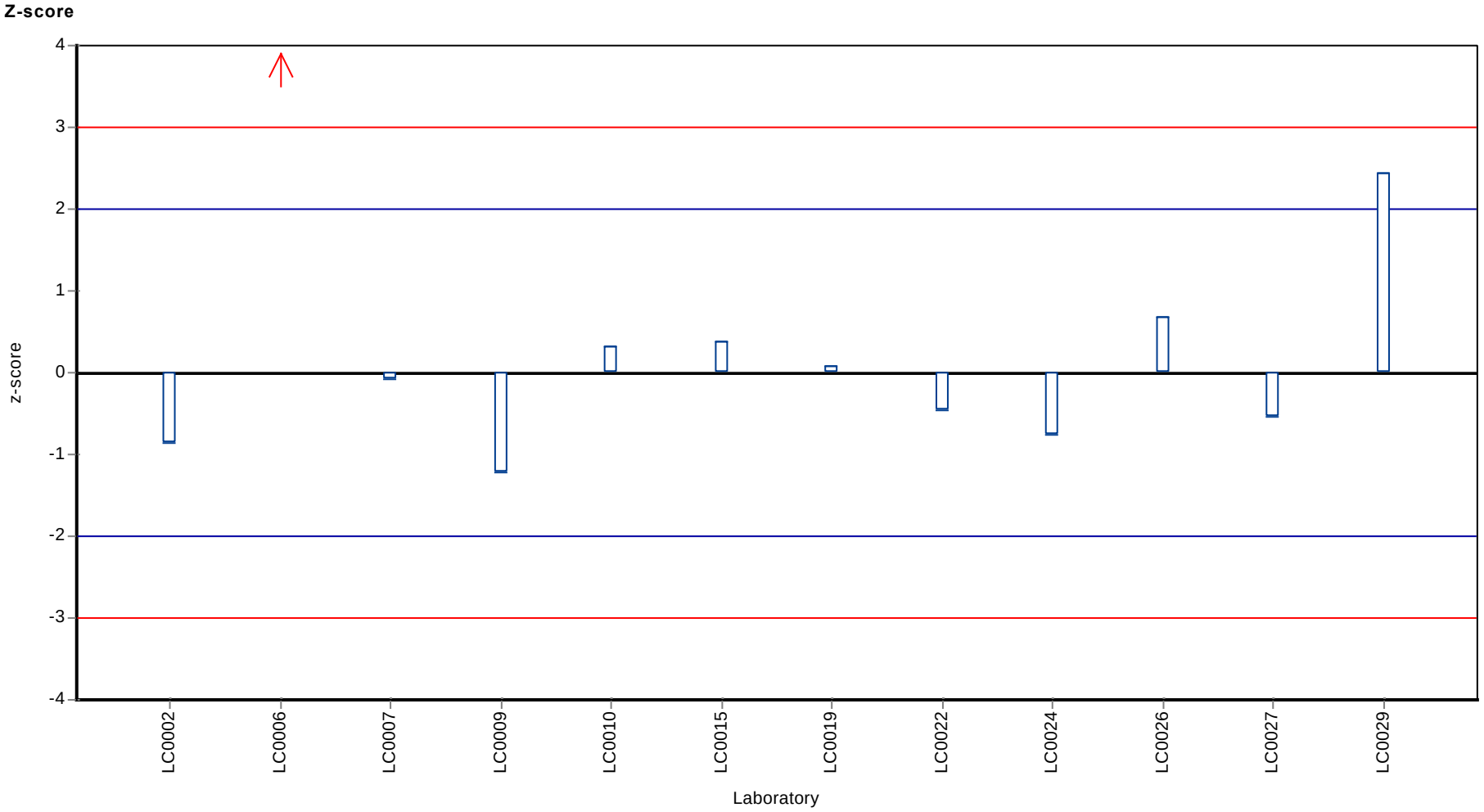
Graphical presentation of results

Results



Recovery rate




Z-score
4
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z-score
LC0002
LC0006
LC0007
LC0009
LC0010
LC0015
LC0019
LC0022
LC0024
LC0026
LC0027
LC0029
Laboratory

Parameter oriented report

P16 A - HC-Index

HC-Index

Unit	mg/l
Mean ± Cl (99%)	0,767 ± 0,187
Minimum - Maximum	0,39 - 1,42
Check value ± U	0,92 ± 0,3

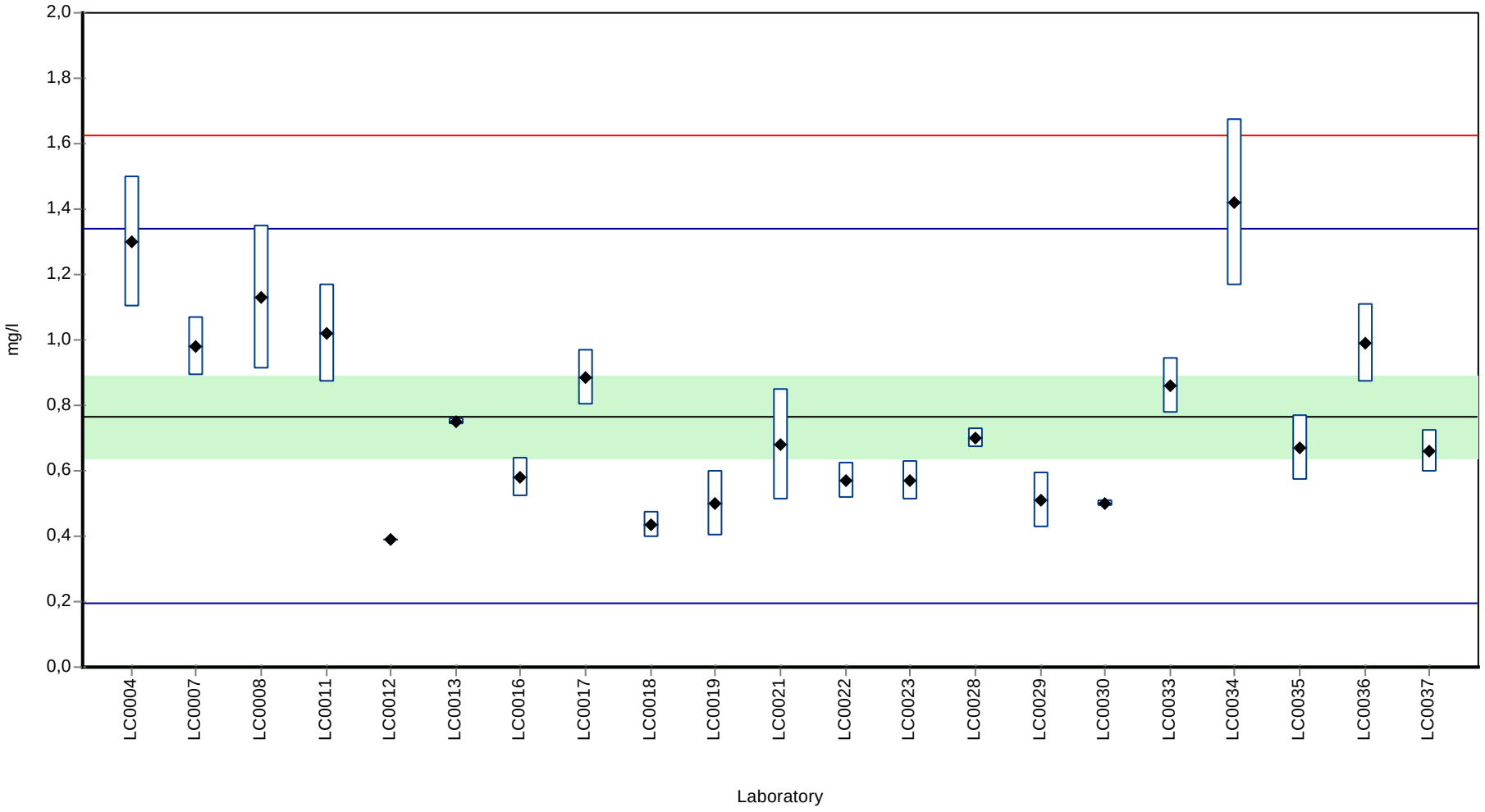
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0004	1,300	0,200	169,5	1,9	
LC0005	-	-	-	-	
LC0007	0,980	0,090	127,8	0,7	
LC0008	1,130	0,220	147,4	1,3	
LC0011	1,020	0,150	133,0	0,9	
LC0012	0,390	-	50,9	-1,3	
LC0013	0,750	0,012	97,8	-0,1	
LC0014	-	-	-	-	
LC0016	0,580	0,060	75,6	-0,7	
LC0017	0,8859	0,0842	115,5	0,4	
LC0018	0,436	0,040	56,9	-1,2	
LC0019	0,499	0,100	65,1	-0,9	
LC0021	0,680	0,170	88,7	-0,3	
LC0022	0,570	0,057	74,3	-0,7	
LC0023	0,572	0,060	74,6	-0,7	
LC0028	0,700	0,030	91,3	-0,2	
LC0029	0,510	0,084	66,5	-0,9	
LC0030	0,500	0,009	65,2	-0,9	
LC0032	-	-	-	-	
LC0033	0,860	0,086	112,2	0,3	
LC0034	1,420	0,2556	185,2	2,3	
LC0035	0,670	0,1005	87,4	-0,3	
LC0036	0,990	0,1188	129,1	0,8	
LC0037	0,660	0,066	86,1	-0,4	

Characteristics of parameter

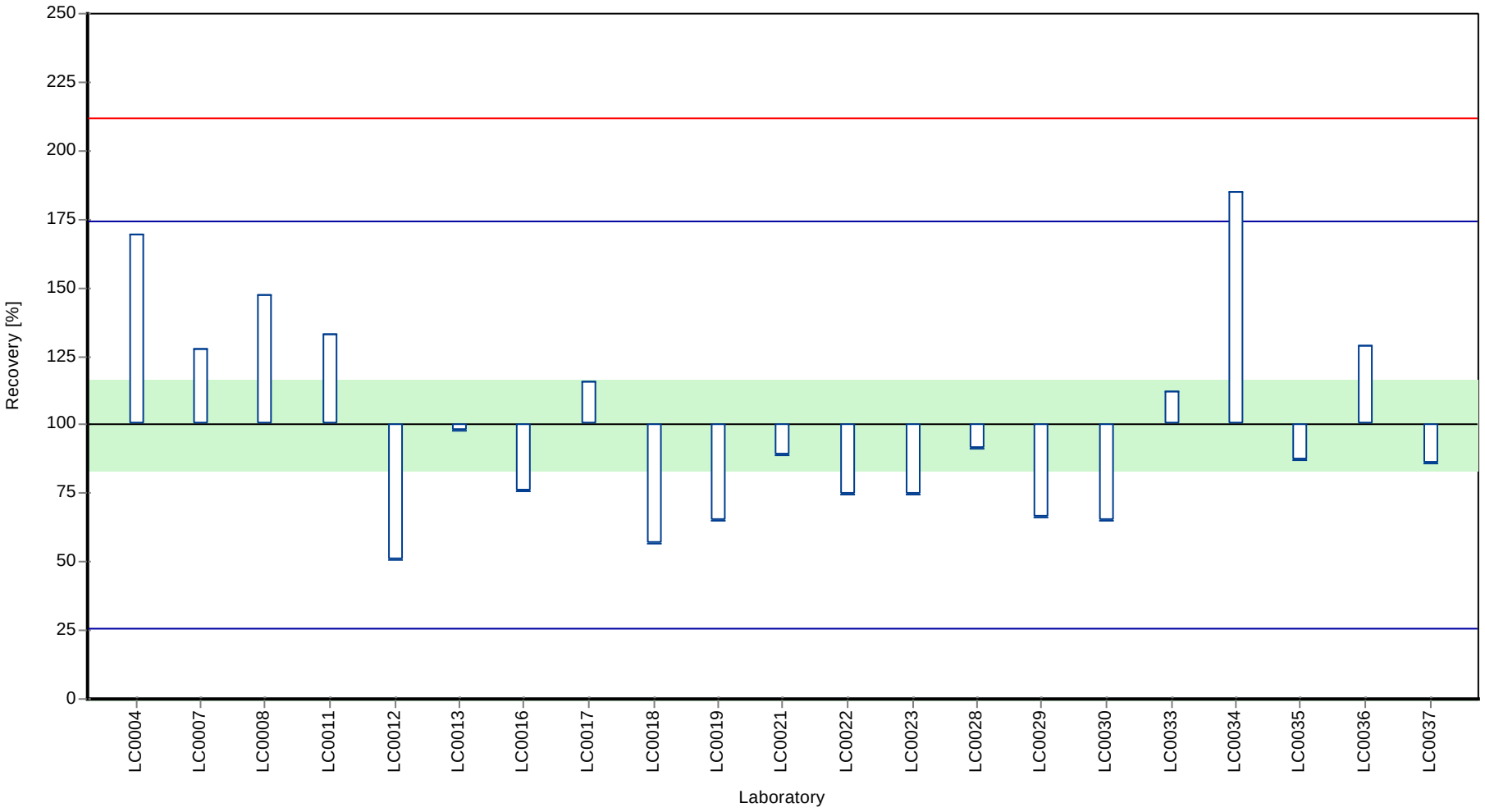
	all results	without outliners	Unit
Mean ± Cl (99%)	0,767 ± 0,187	0,767 ± 0,187	mg/l
Minimum	0,39	0,39	mg/l
Maximum	1,42	1,42	mg/l
Standard deviation	0,285	0,285	mg/l
rel. Standard deviation	37,2	37,2	%
n	21	21	-

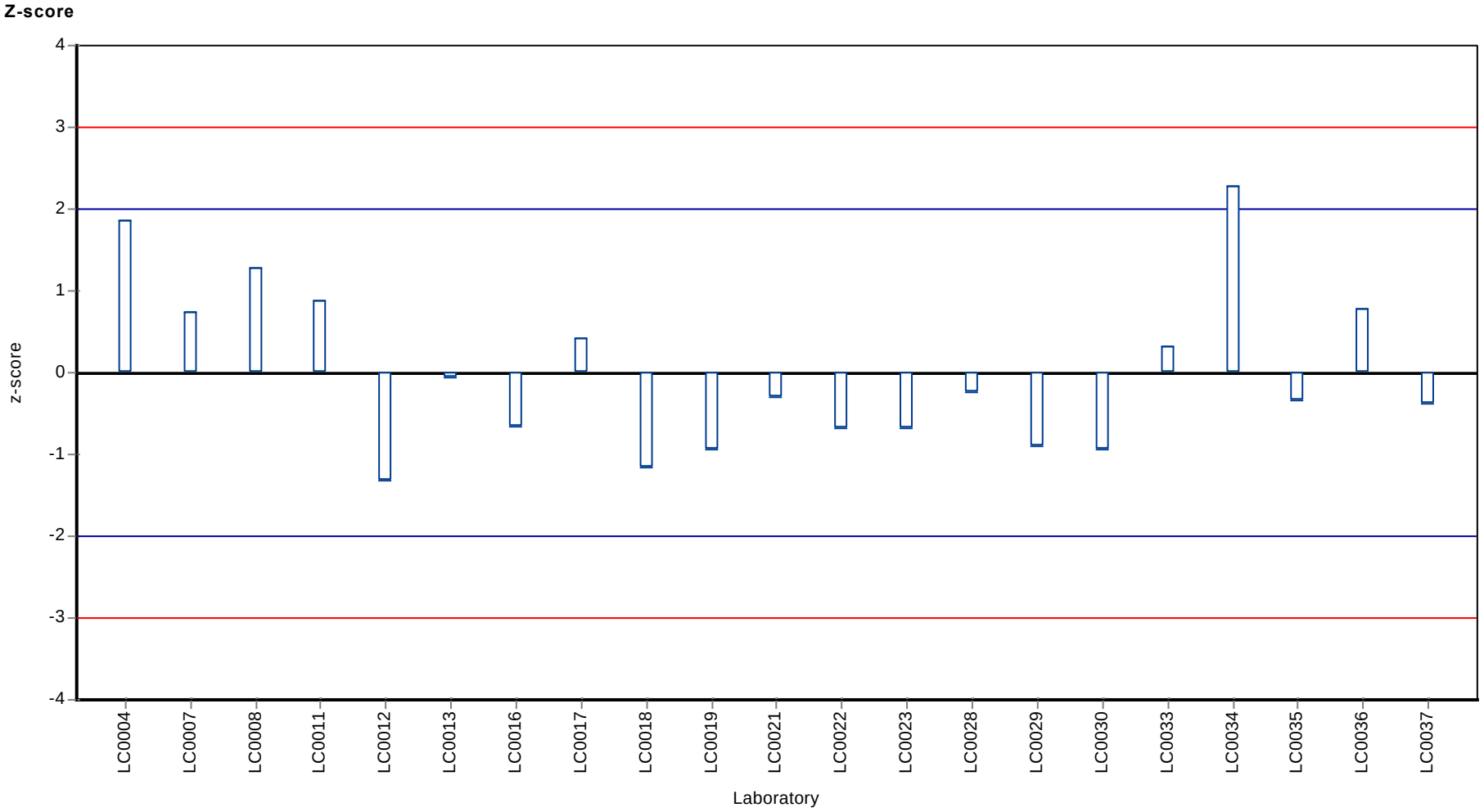
Graphical presentation of results

Results



Recovery rate




Z-score
z-score
4
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LC0004
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LC0011
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LC0022
LC0023
LC0028
LC0029
LC0030
LC0033
LC0034
LC0035
LC0036
LC0037
Laboratory

Parameter oriented report

P16 B - HC-Index

HC-Index

Unit	mg/l
Mean ± Cl (99%)	0,241 ± 0,045
Minimum - Maximum	0,1 - 0,35
Check value ± U	0,36 ± 0,13

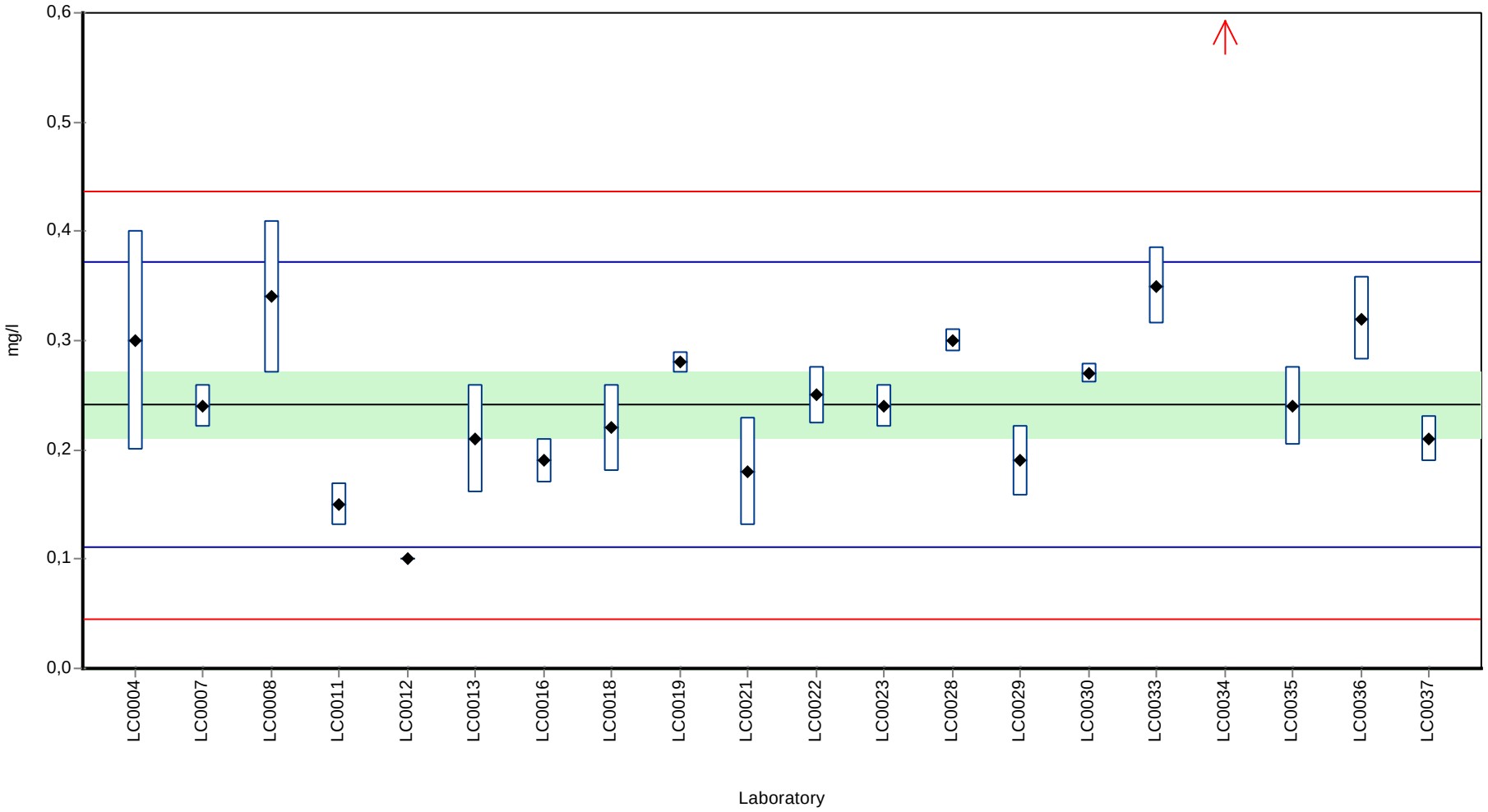
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0004	0,300	0,100	124,5	0,9	
LC0005	-	-	-	-	
LC0007	0,240	0,020	99,6	0,0	
LC0008	0,340	0,070	141,0	1,5	
LC0011	0,150	0,020	62,2	-1,4	
LC0012	0,100	-	41,5	-2,2	
LC0013	0,210	0,050	87,1	-0,5	
LC0014	-	-	-	-	
LC0016	0,190	0,020	78,8	-0,8	
LC0017	-	-	-	-	
LC0018	0,220	0,040	91,3	-0,3	
LC0019	0,280	0,010	116,2	0,6	
LC0021	0,180	0,050	74,7	-0,9	
LC0022	0,250	0,026	103,7	0,1	
LC0023	0,240	0,020	99,6	0,0	
LC0028	0,300	0,010	124,5	0,9	
LC0029	0,190	0,032	78,8	-0,8	
LC0030	0,270	0,009	112,0	0,4	
LC0032	-	-	-	-	
LC0033	0,350	0,035	145,2	1,7	
LC0034	0,680	0,1224	282,1	6,7	H
LC0035	0,240	0,036	99,6	0,0	
LC0036	0,320	0,0384	132,8	1,2	
LC0037	0,210	0,021	87,1	-0,5	

Characteristics of parameter

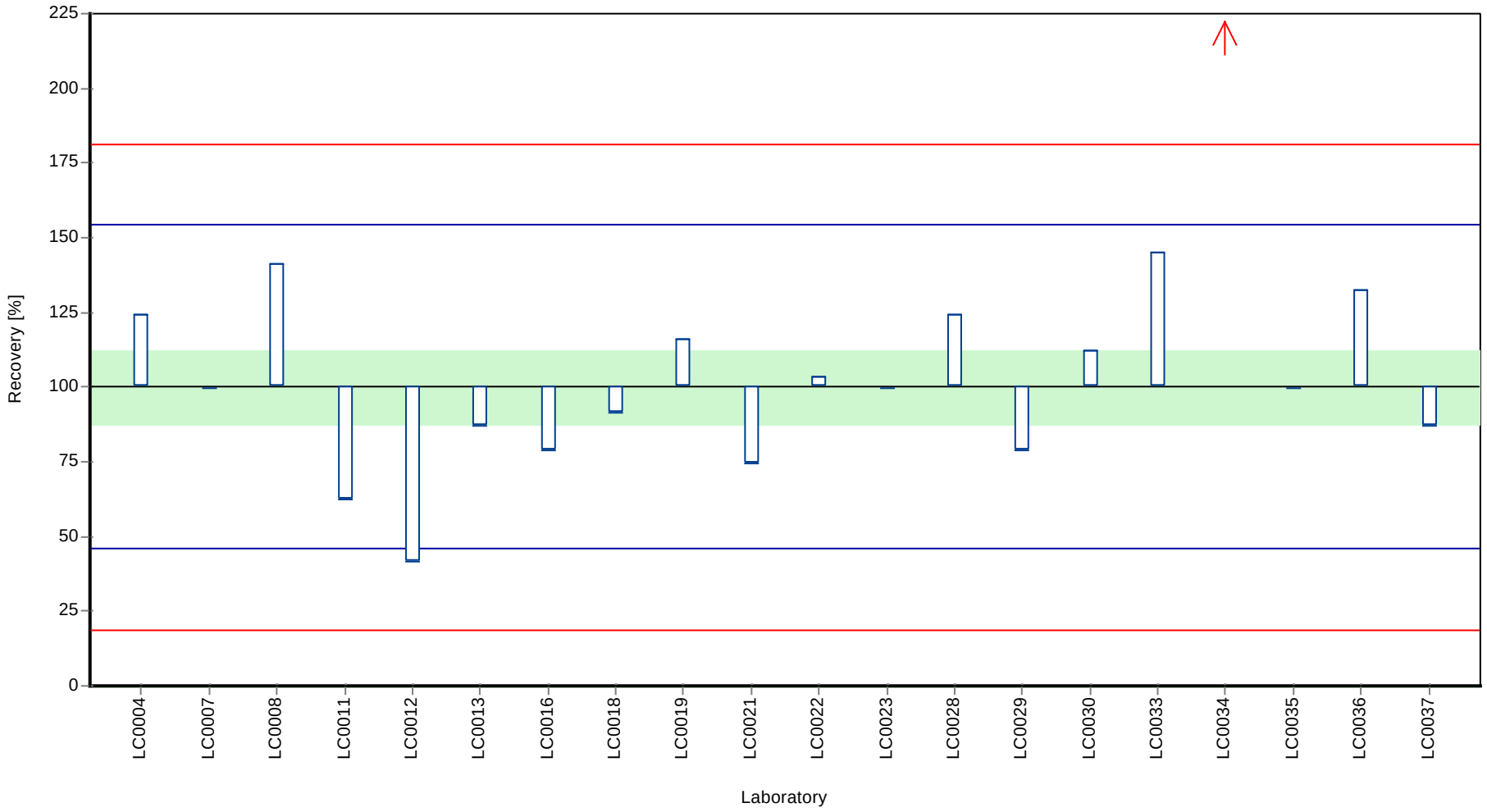
	all results	without outliners	Unit
Mean ± Cl (99%)	0,263 ± 0,0784	0,241 ± 0,045	mg/l
Minimum	0,1	0,1	mg/l
Maximum	0,68	0,35	mg/l
Standard deviation	0,117	0,0653	mg/l
rel. Standard deviation	44,5	27,1	%
n	20	19	-

Graphical presentation of results

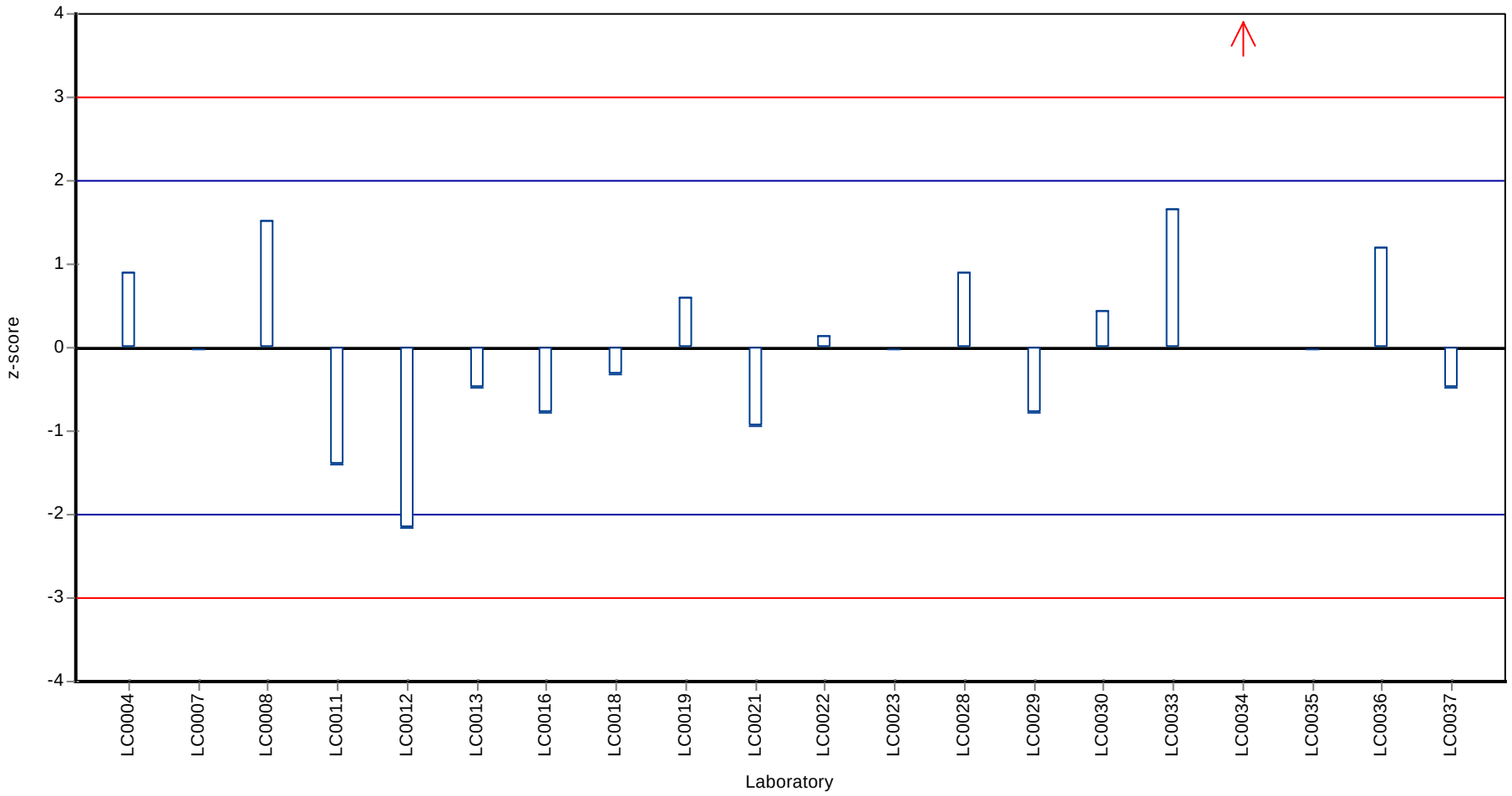
Results



Recovery rate



Z-score


4
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-4
z-score
LC0004
LC0007
LC0008
LC0011
LC0012
LC0013
LC0016
LC0018
LC0019
LC0021
LC0022
LC0023
LC0028
LC0029
LC0030
LC0033
LC0034
LC0035
LC0036
LC0037
Laboratory

Parameter oriented report

P16 A - Phenole index

Phenole index

Unit	mg/l
Mean ± Cl (99%)	-
Minimum - Maximum	0,09225 - 0,112
Check value ± U	0,12 ± 0,02

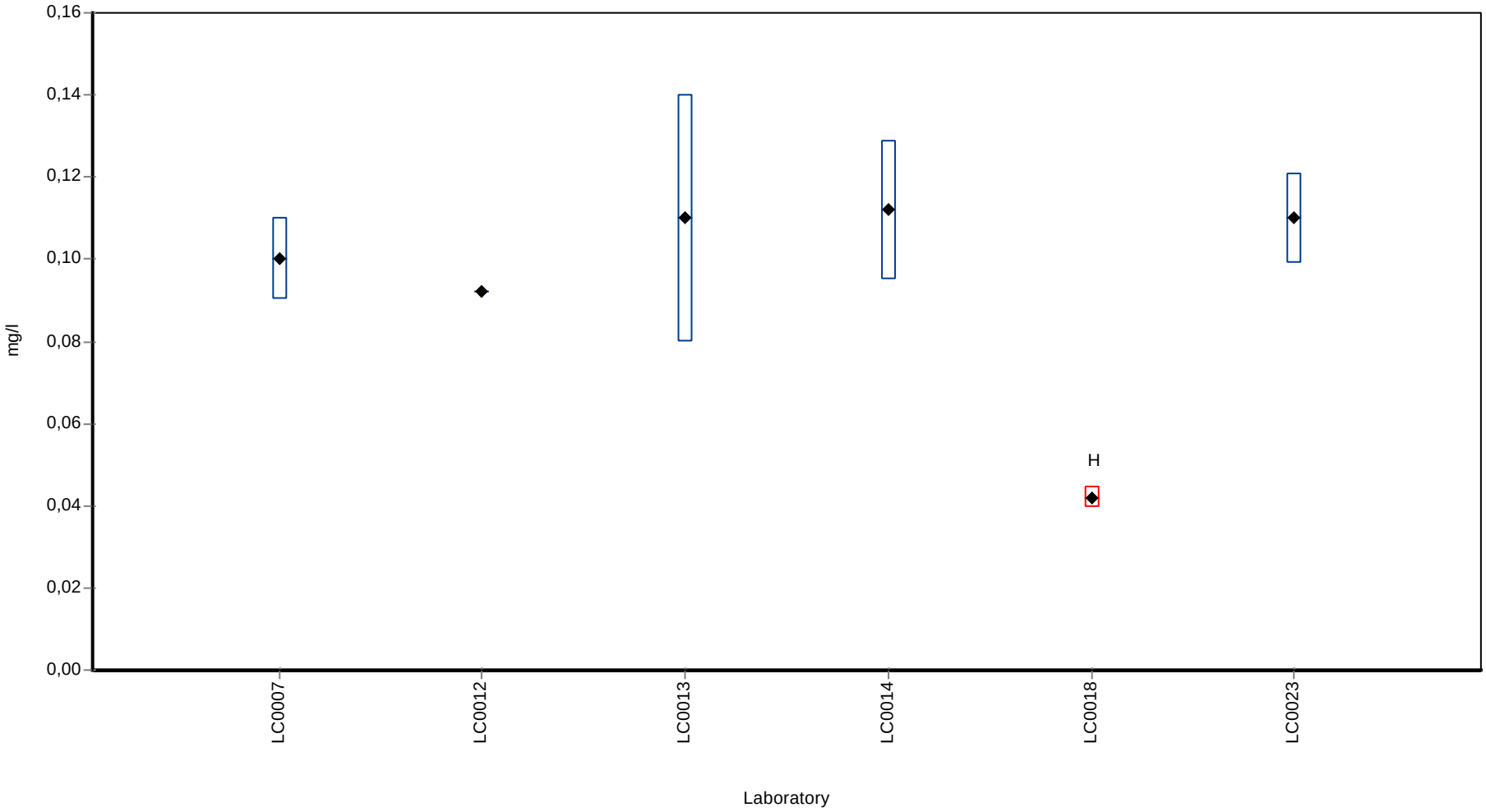
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0007	0,100	0,010	-	-	
LC0012	0,0922	-	-	-	
LC0013	0,110	0,030	-	-	
LC0014	0,112	0,017	-	-	
LC0018	0,042	0,0025	-	-	H
LC0023	0,110	0,011	-	-	

Characteristics of parameter

	all results	without outliners	Unit
Mean ± Cl (99%)	0,0944 ± 0,0328	-	mg/l
Minimum	0,042	0,0922	mg/l
Maximum	0,112	0,112	mg/l
Standard deviation	0,0268	-	mg/l
rel. Standard deviation	28,3	-	%
n	6	5	-

Graphical presentation of results

Results



Parameter oriented report

P16 B - Phenole index

Phenole index

Unit	mg/l
Mean ± Cl (99%)	-
Minimum - Maximum	0,03435 - 0,05
Check value ± U	0,055 ± 0,011

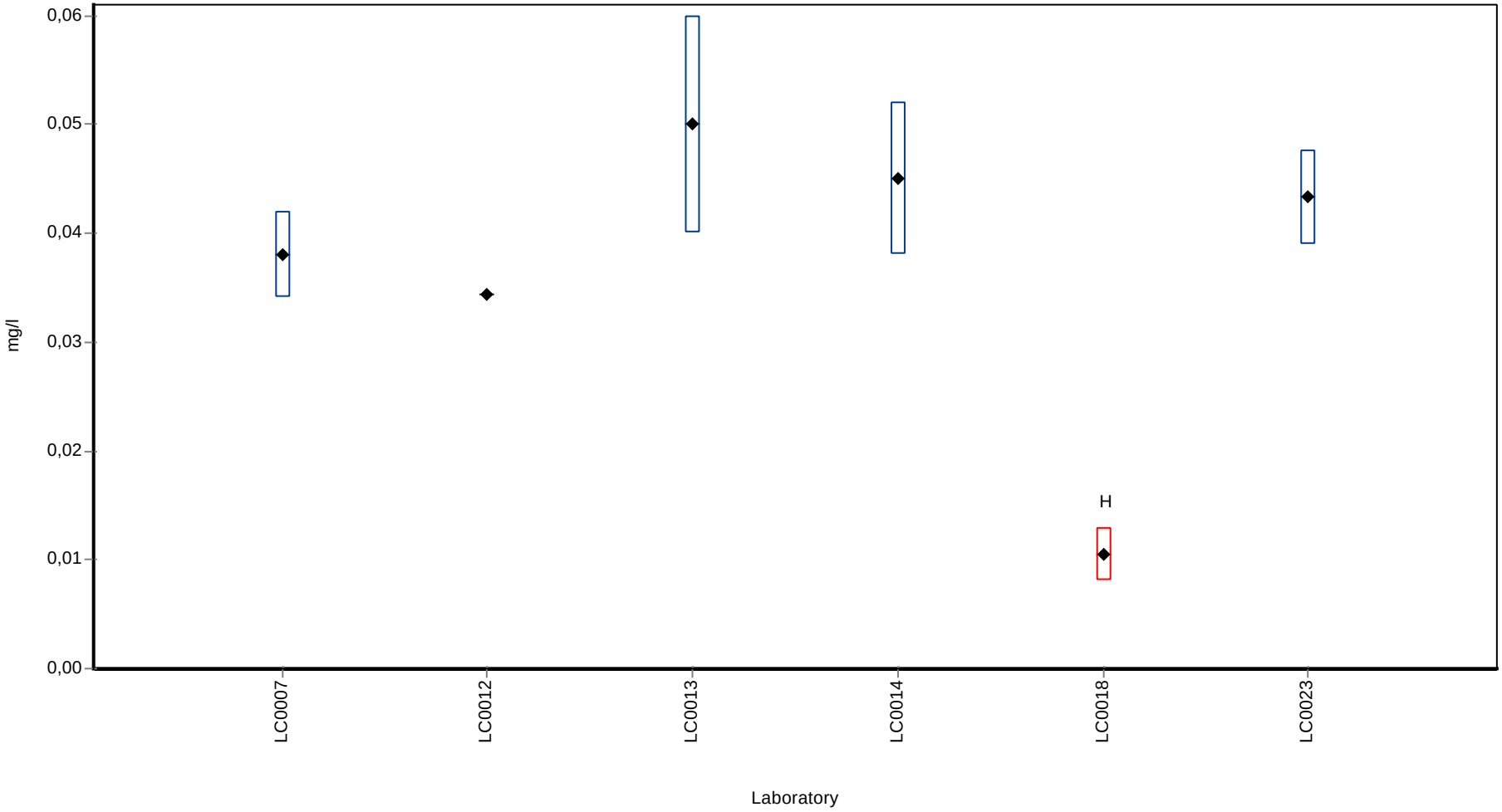
Labcode	Result	± U	Recovery [%]	z-score	Comments
LC0007	0,038	0,004	-	-	
LC0012	0,0343	-	-	-	
LC0013	0,050	0,010	-	-	
LC0014	0,045	0,007	-	-	
LC0018	0,0105	0,0025	-	-	H
LC0023	0,0433	0,0043	-	-	

Characteristics of parameter

	all results	without outliners	Unit
Mean ± Cl (99%)	0,0369 ± 0,0172	-	mg/l
Minimum	0,0105	0,0343	mg/l
Maximum	0,05	0,05	mg/l
Standard deviation	0,014	-	mg/l
rel. Standard deviation	38	-	%
n	6	5	-

Graphical presentation of results

Results



8 Laboratory oriented report

The laboratory oriented report is sorted by laboratory code.

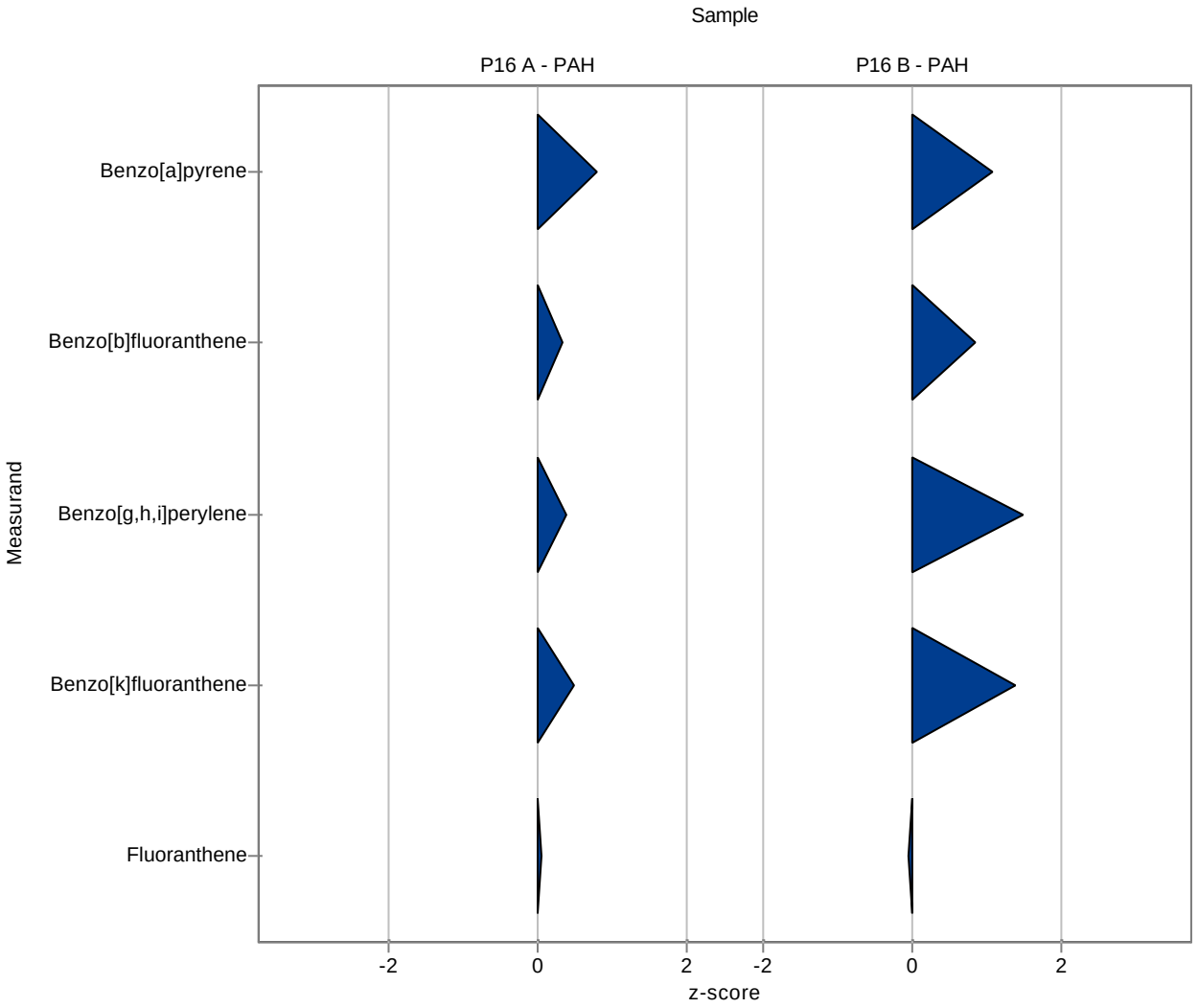
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	± 17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	± 9,1	-	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	± 21,6	150,8	37,7	38,8	125,6	0,79
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	49,1	12,3	12,8	109,4	0,33
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	53	13,3	15,8	112,2	0,36
Benzo[k]fluoranthene	ng/l	53	± 9	60,3	15,1	15,6	113,9	0,47
Chrysene	ng/l	51,4	± 8,2	-	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	± 20,5	111,5	27,9	36,7	101,0	0,03
Fluorene	ng/l	276	± 55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<2 (LOD)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	-	-	816	-	-
Phenanthrene	ng/l	291	± 44	-	-	67,2	-	-
Pyrene	ng/l	66,3	± 10,1	-	-	17,2	-	-

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	± 5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	± 4,9	-	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	± 9,21	61,6	15,4	15,7	138,2	1,09
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	10,4	2,6	2,56	126,9	0,86
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	9	2,3	2,14	154,6	1,48
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	10,1	2,5	2,25	145,6	1,40
Chrysene	ng/l	4,91	± 2,3	-	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	-	-	2,71	-	-
Fluoranthene	ng/l	21,3	± 4,8	20,9	5,2	7,84	98,3	-0,05
Fluorene	ng/l	38,1	± 9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<2 (LOD)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	± 10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	± 3,82	-	-	4,22	-	-


Sample
P16 A - PAH
P16 B - PAH
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Fluoranthene
Measurand
-2
0
2
-2
0
2
z-score

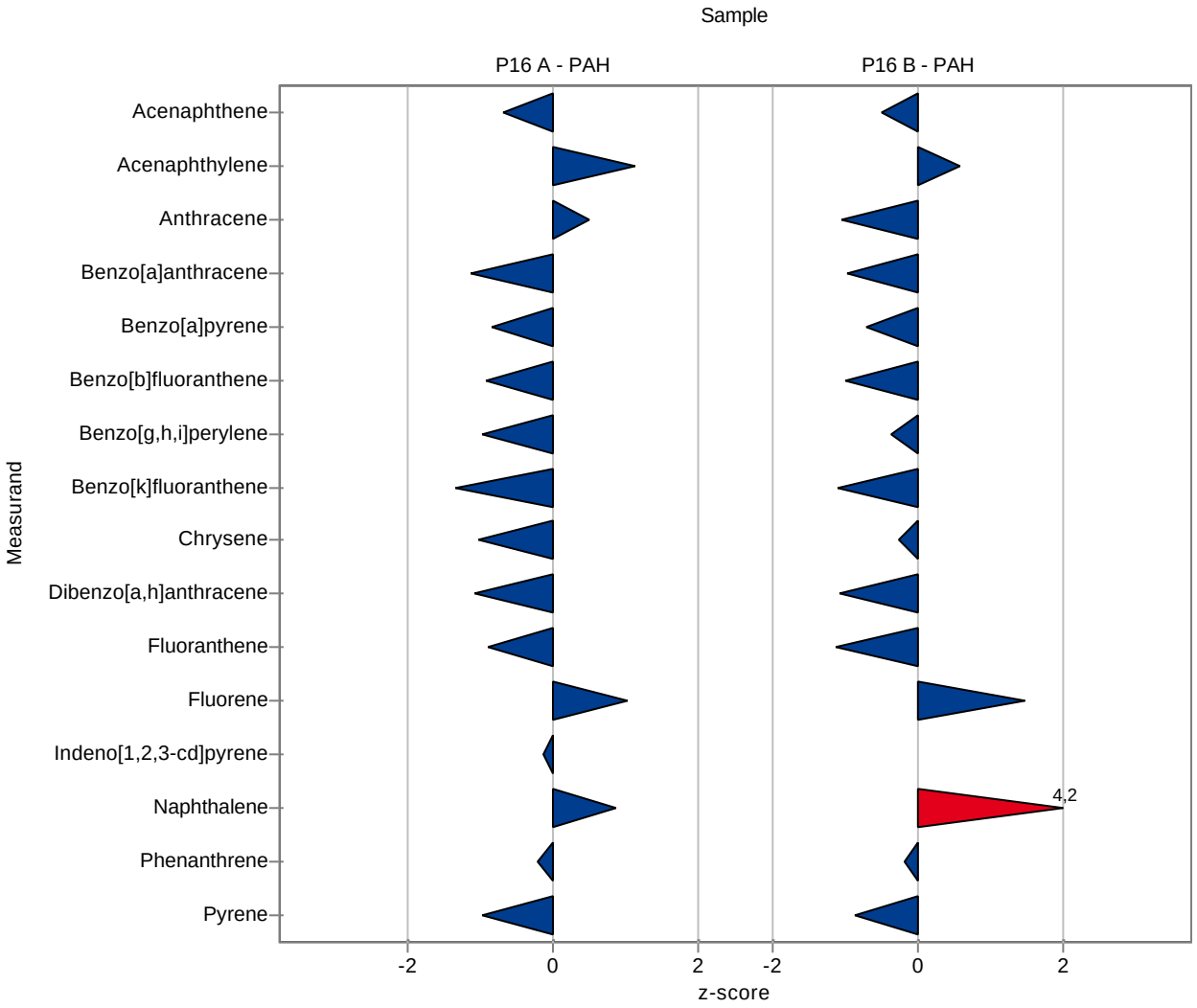
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	51,8	-	50,4	59,9	-0,69
Acenaphthylene	ng/l	79,1	± 17,8	108	-	25,8	136,5	1,12
Anthracene	ng/l	80,4	± 12,7	90,9	-	20,8	113,1	0,50
Benzo[a]anthracene	ng/l	37,8	± 9,1	21,6	-	14,2	57,2	-1,14
Benzo[a]pyrene	ng/l	120	± 21,6	87,1	-	38,8	72,6	-0,85
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	33,3	-	12,8	74,2	-0,91
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	31,9	-	15,8	67,5	-0,97
Benzo[k]fluoranthene	ng/l	53	± 9	32,2	-	15,6	60,8	-1,33
Chrysene	ng/l	51,4	± 8,2	37,9	-	13,1	73,7	-1,03
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	36,3	-	18,9	64,2	-1,07
Fluoranthene	ng/l	110	± 20,5	77,8	-	36,7	70,5	-0,89
Fluorene	ng/l	276	± 55,2	362	-	84,3	131,3	1,03
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	8,5	-	1,74	97,1	-0,14
Naphthalene	ng/l	1710	± 489	2420	-	816	141,5	0,87
Phenanthrene	ng/l	291	± 44	277	-	67,2	95,3	-0,21
Pyrene	ng/l	66,3	± 10,1	49,4	-	17,2	74,5	-0,98

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	29,2	-	15,9	78,7	-0,49
Acenaphthylene	ng/l	13,7	± 5,58	17,5	-	6,7	127,9	0,57
Anthracene	ng/l	49,8	± 8,97	35	-	14	70,3	-1,06
Benzo[a]anthracene	ng/l	16,5	± 4,9	9,24	-	7,49	55,9	-0,97
Benzo[a]pyrene	ng/l	44,6	± 9,21	33,5	-	15,7	75,1	-0,71
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	5,68	-	2,56	69,3	-0,98
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	5,04	-	2,14	86,6	-0,36
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	4,46	-	2,25	64,3	-1,10
Chrysene	ng/l	4,91	± 2,3	4,27	-	2,42	87,0	-0,26
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	4,9	-	2,71	62,8	-1,07
Fluoranthene	ng/l	21,3	± 4,8	12,4	-	7,84	58,3	-1,13
Fluorene	ng/l	38,1	± 9,24	58,9	-	14,1	154,6	1,47
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	1,57	-	-	-	-
Naphthalene	ng/l	178	± 37,5	421	-	58,6	237,2	4,15
Phenanthrene	ng/l	37,3	± 10,5	34,7	-	15,7	92,9	-0,17
Pyrene	ng/l	7,67	± 3,82	4,07	-	4,22	53,1	-0,85


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
4,2
-2
0
2
-2
0
2
z-score

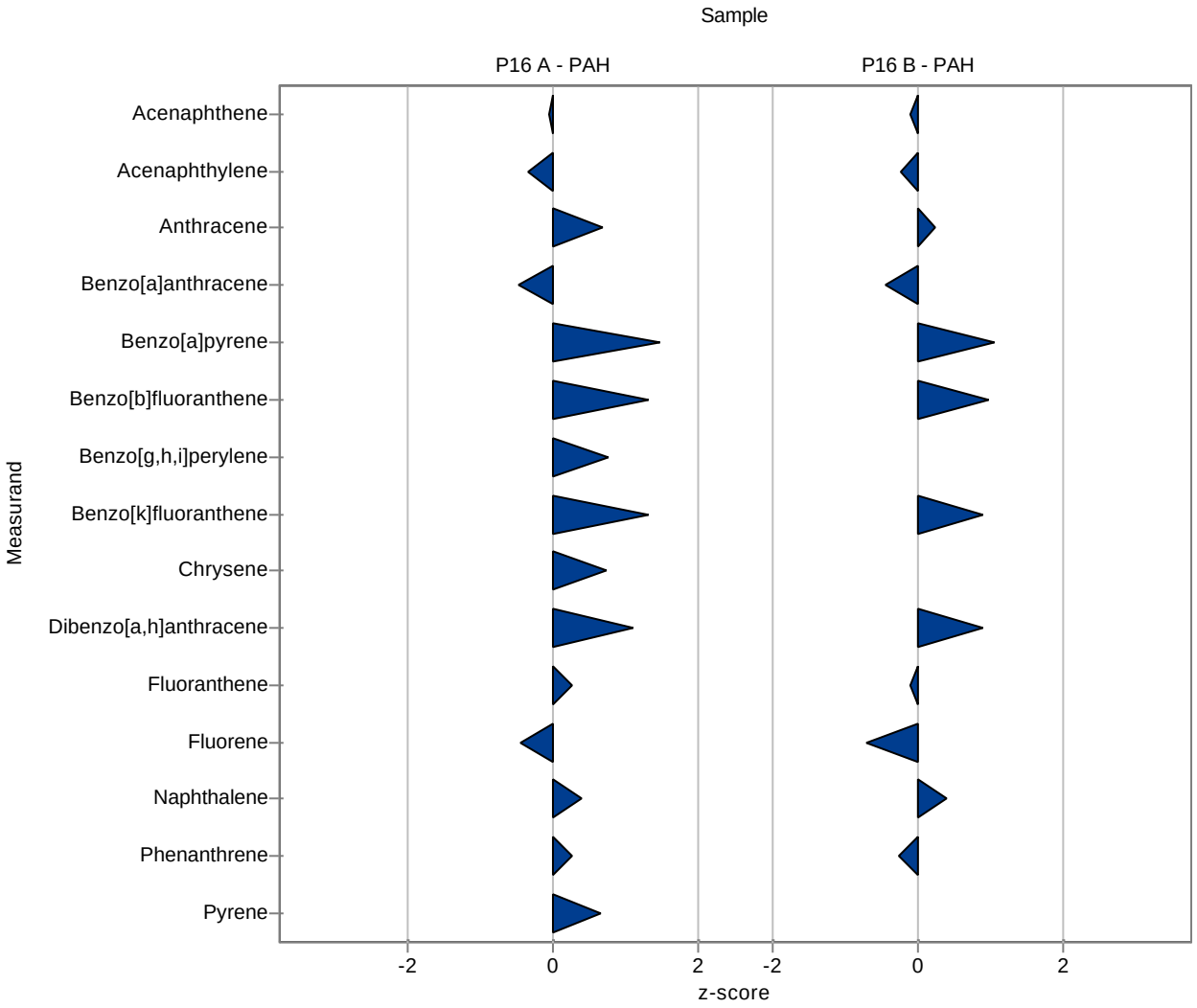
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	83,6	-	50,4	96,7	-0,06
Acenaphthylene	ng/l	79,1	± 17,8	70,3	-	25,8	88,9	-0,34
Anthracene	ng/l	80,4	± 12,7	94,7	-	20,8	117,8	0,69
Benzo[a]anthracene	ng/l	37,8	± 9,1	31,1	-	14,2	82,4	-0,47
Benzo[a]pyrene	ng/l	120	± 21,6	177	47,8	38,8	147,5	1,47
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	61,6	13,6	12,8	137,2	1,31
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	59,4	16	15,8	125,7	0,77
Benzo[k]fluoranthene	ng/l	53	± 9	73,5	16,2	15,6	138,8	1,32
Chrysene	ng/l	51,4	± 8,2	61,1	-	13,1	118,8	0,74
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	77,1	-	18,9	136,4	1,09
Fluoranthene	ng/l	110	± 20,5	120	-	36,7	108,7	0,26
Fluorene	ng/l	276	± 55,2	237	-	84,3	86,0	-0,46
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<8 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	2020	-	816	118,1	0,38
Phenanthrene	ng/l	291	± 44	308	-	67,2	105,9	0,26
Pyrene	ng/l	66,3	± 10,1	77,4	-	17,2	116,8	0,65

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	35,4	-	15,9	95,5	-0,11
Acenaphthylene	ng/l	13,7	± 5,58	12,1	-	6,7	88,4	-0,24
Anthracene	ng/l	49,8	± 8,97	53,1	-	14	106,6	0,23
Benzo[a]anthracene	ng/l	16,5	± 4,9	13,3	-	7,49	80,5	-0,43
Benzo[a]pyrene	ng/l	44,6	± 9,21	61,1	16,5	15,7	137,1	1,06
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	10,7	2,4	2,56	130,5	0,98
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	<8 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	8,93	2	2,25	128,8	0,89
Chrysene	ng/l	4,91	± 2,3	<8 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	10,2	-	2,71	130,8	0,89
Fluoranthene	ng/l	21,3	± 4,8	20,5	-	7,84	96,5	-0,10
Fluorene	ng/l	38,1	± 9,24	28,3	-	14,1	74,3	-0,69
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<8 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	201	-	58,6	113,2	0,40
Phenanthrene	ng/l	37,3	± 10,5	33,4	-	15,7	89,5	-0,25
Pyrene	ng/l	7,67	± 3,82	<8 (LOQ)	-	4,22	-	-


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	1,3	0,2	0,285	169,5	1,87

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	123	15	50,4	142,2	0,72
Acenaphthylene	ng/l	79,1	±	17,8	60	15	25,8	75,9	-0,74
Anthracene	ng/l	80,4	±	12,7	86	15	20,8	107,0	0,27
Benzo[a]anthracene	ng/l	37,8	±	9,1	46	15	14,2	121,8	0,58
Benzo[a]pyrene	ng/l	120	±	21,6	131	20	38,8	109,1	0,28
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	103	20	12,8	229,5	4,56
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	59	20	15,8	124,9	0,74
Benzo[k]fluoranthene	ng/l	53	±	9	75	15	15,6	141,6	1,41
Chrysene	ng/l	51,4	±	8,2	56	15	13,1	108,9	0,35
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	73	20	18,9	129,1	0,87
Fluoranthene	ng/l	110	±	20,5	152	20	36,7	137,7	1,13
Fluorene	ng/l	276	±	55,2	367	20	84,3	133,2	1,08
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	2300	100	816	134,5	0,72
Phenanthrene	ng/l	291	±	44	269	20	67,2	92,5	-0,32
Pyrene	ng/l	66,3	±	10,1	69	15	17,2	104,1	0,16

Sample: P16BKWI

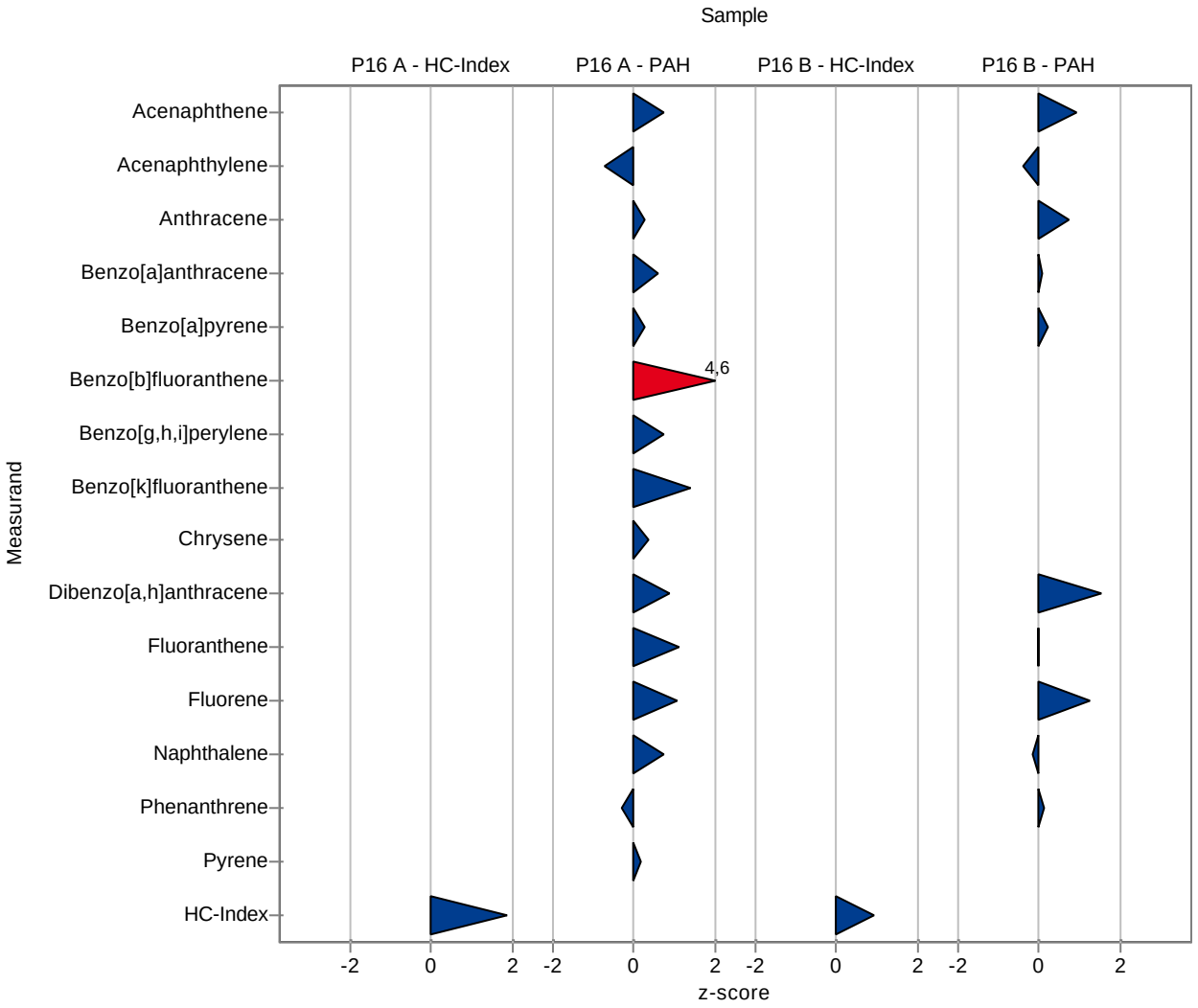
Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,3	0,1	0,0653	124,5	0,90

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	52	10	15,9	140,2	0,94
Acenaphthylene	ng/l	13,7	±	5,58	11	10	6,7	80,4	-0,40
Anthracene	ng/l	49,8	±	8,97	60	10	14	120,5	0,73
Benzo[a]anthracene	ng/l	16,5	±	4,9	17	10	7,49	102,9	0,06
Benzo[a]pyrene	ng/l	44,6	±	9,21	48	10	15,7	107,7	0,22
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<10 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<10 (LOQ)	-	2,25	-	-

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0004

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<10 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	12	10	2,71	153,8	1,55
Fluoranthene	ng/l	21,3	±	4,8	21	10	7,84	98,8	-0,03
Fluorene	ng/l	38,1	±	9,24	56	10	14,1	147,0	1,27
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	167	20	58,6	94,1	-0,18
Phenanthrene	ng/l	37,3	±	10,5	39	10	15,7	104,5	0,11
Pyrene	ng/l	7,67	±	3,82	<10 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
4,6
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	-	-	0,285	-	-

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	177,6	23,1	50,4	205,3	1,81
Acenaphthylene	ng/l	79,1	±	17,8	102,7	17,5	25,8	129,8	0,91
Anthracene	ng/l	80,4	±	12,7	94,3	18,9	20,8	117,3	0,67
Benzo[a]anthracene	ng/l	37,8	±	9,1	36,6	6,6	14,2	96,9	-0,08
Benzo[a]pyrene	ng/l	120	±	21,6	170,1	45,9	38,8	141,7	1,29
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	45,9	8,3	12,8	102,3	0,08
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	35,8	10,02	15,8	75,8	-0,72
Benzo[k]fluoranthene	ng/l	53	±	9	60,5	10,3	15,6	114,2	0,48
Chrysene	ng/l	51,4	±	8,2	53,2	10,1	13,1	103,5	0,14
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	41,4	12	18,9	73,2	-0,80
Fluoranthene	ng/l	110	±	20,5	86,7	13,9	36,7	78,5	-0,65
Fluorene	ng/l	276	±	55,2	437,7	78,8	84,3	158,8	1,92
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<1 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	2284,6	365,5	816	133,6	0,70
Phenanthrene	ng/l	291	±	44	354,1	49,6	67,2	121,8	0,94
Pyrene	ng/l	66,3	±	10,1	53,7	7,5	17,2	81,0	-0,73

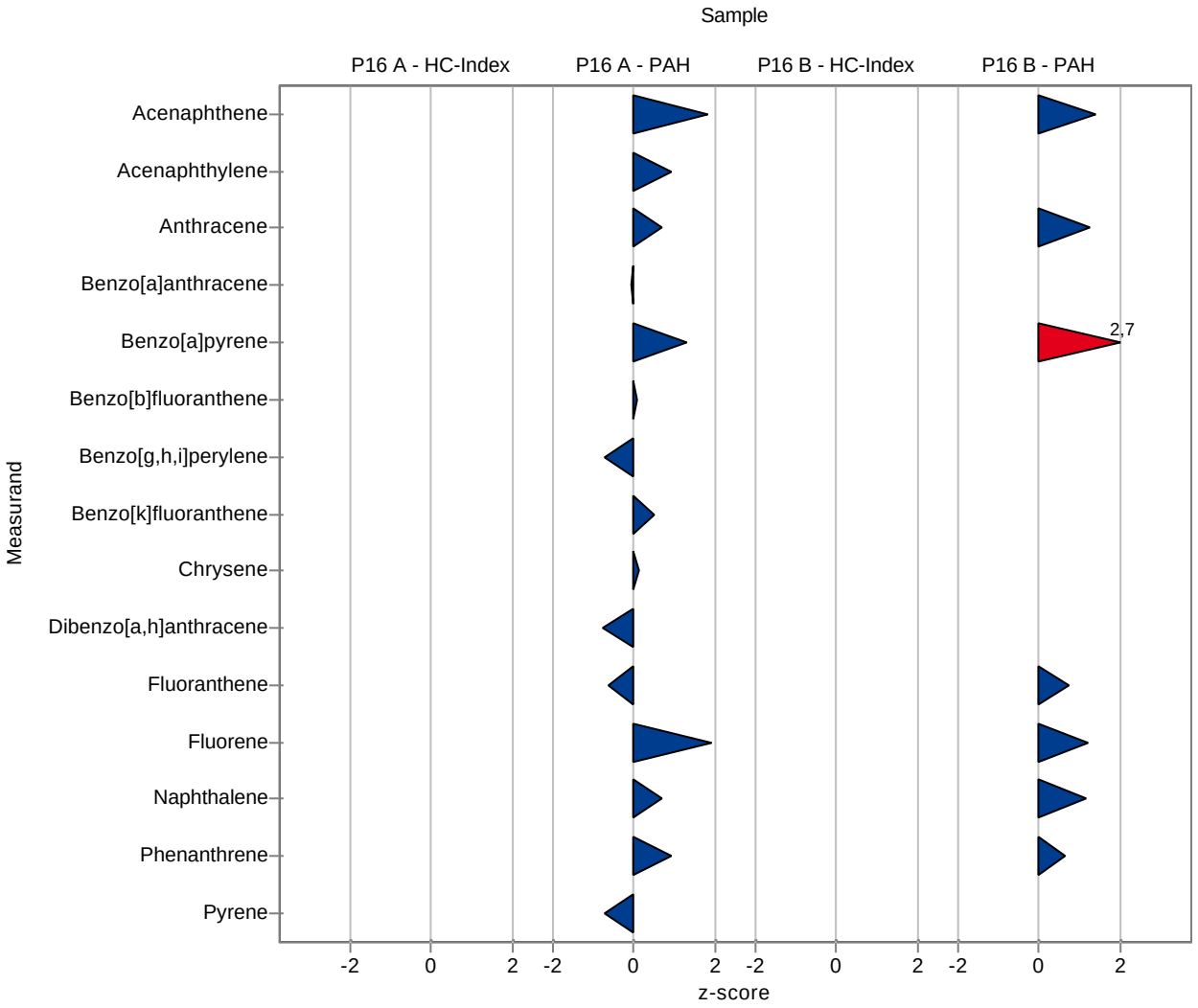
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	-	-	0,0653	-	-

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	58,9	7,6	15,9	158,8	1,37
Acenaphthylene	ng/l	13,7	±	5,58	<12 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	67,3	13,5	14	135,1	1,25
Benzo[a]anthracene	ng/l	16,5	±	4,9	<23 (LOQ)	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	±	9,21	87,2	23,5	15,7	195,6	2,72
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<11 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<5 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<12 (LOQ)	-	2,25	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<8 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<7 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	27	4,3	7,84	127,0	0,73
Fluorene	ng/l	38,1	±	9,24	55	9,9	14,1	144,4	1,20
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<1 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	244,2	39,1	58,6	137,6	1,14
Phenanthrene	ng/l	37,3	±	10,5	47,2	6,6	15,7	126,4	0,63
Pyrene	ng/l	7,67	±	3,82	<8 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
2,7
-2
0
2
z-score

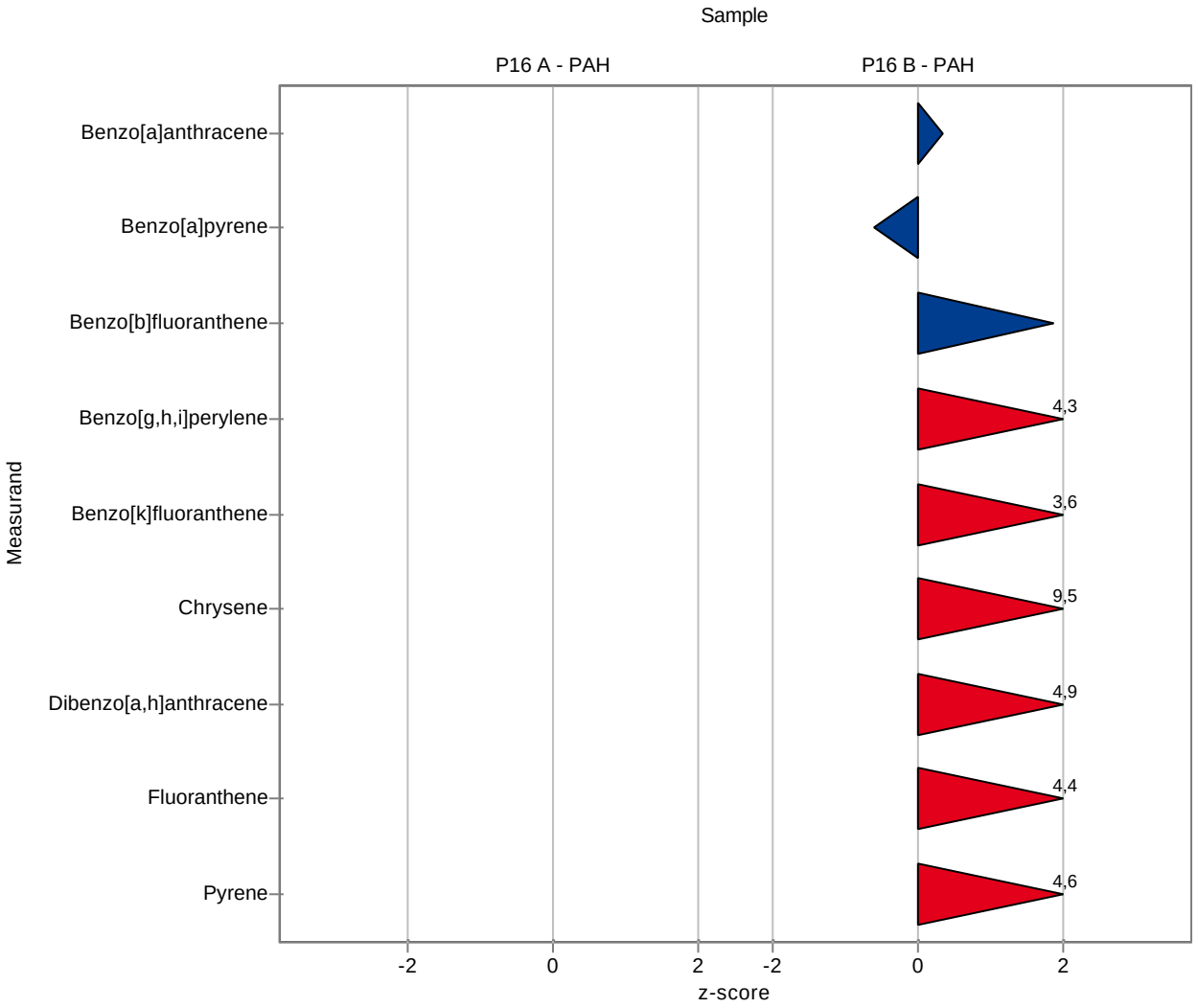
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	± 17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	± 9,1	-	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	± 21,6	-	-	38,8	-	-
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	-	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	-	-	15,8	-	-
Benzo[k]fluoranthene	ng/l	53	± 9	-	-	15,6	-	-
Chrysene	ng/l	51,4	± 8,2	-	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	± 20,5	-	-	36,7	-	-
Fluorene	ng/l	276	± 55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	-	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	-	-	816	-	-
Phenanthrene	ng/l	291	± 44	-	-	67,2	-	-
Pyrene	ng/l	66,3	± 10,1	-	-	17,2	-	-

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	± 5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	± 4,9	19	5	7,49	115,0	0,33
Benzo[a]pyrene	ng/l	44,6	± 9,21	35	7	15,7	78,5	-0,61
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	13	3	2,56	158,6	1,87
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	15	3	2,14	257,7	4,29
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	15	4	2,25	216,3	3,58
Chrysene	ng/l	4,91	± 2,3	28	6	2,42	570,3	9,54
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	21	5	2,71	269,2	4,88
Fluoranthene	ng/l	21,3	± 4,8	56	12	7,84	263,5	4,43
Fluorene	ng/l	38,1	± 9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	± 10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	± 3,82	27	5	4,22	352,2	4,58


Sample
P16 A - PAH
P16 B - PAH
Measurand
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Pyrene
4,3
3,6
9,5
4,9
4,4
4,6
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,98	0,09	0,285	127,8	0,75

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	±	17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	±	9,1	66,05	6	14,2	174,9	1,99
Benzo[a]pyrene	ng/l	120	±	21,6	120,16	12	38,8	100,1	0,00
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	47,54	5	12,8	105,9	0,21
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	53,6	5	15,8	113,5	0,40
Benzo[k]fluoranthene	ng/l	53	±	9	57,19	6	15,6	108,0	0,27
Chrysene	ng/l	51,4	±	8,2	35,53	4	13,1	69,1	-1,21
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	63,86	6	18,9	113,0	0,39
Fluoranthene	ng/l	110	±	20,5	135,23	13	36,7	122,5	0,68
Fluorene	ng/l	276	±	55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<5 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1559,1	156	816	91,2	-0,19
Phenanthrene	ng/l	291	±	44	291,5	30	67,2	100,2	0,01
Pyrene	ng/l	66,3	±	10,1	76,18	8	17,2	114,9	0,58

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,1	0,01	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,24	0,02	0,0653	99,6	-0,02

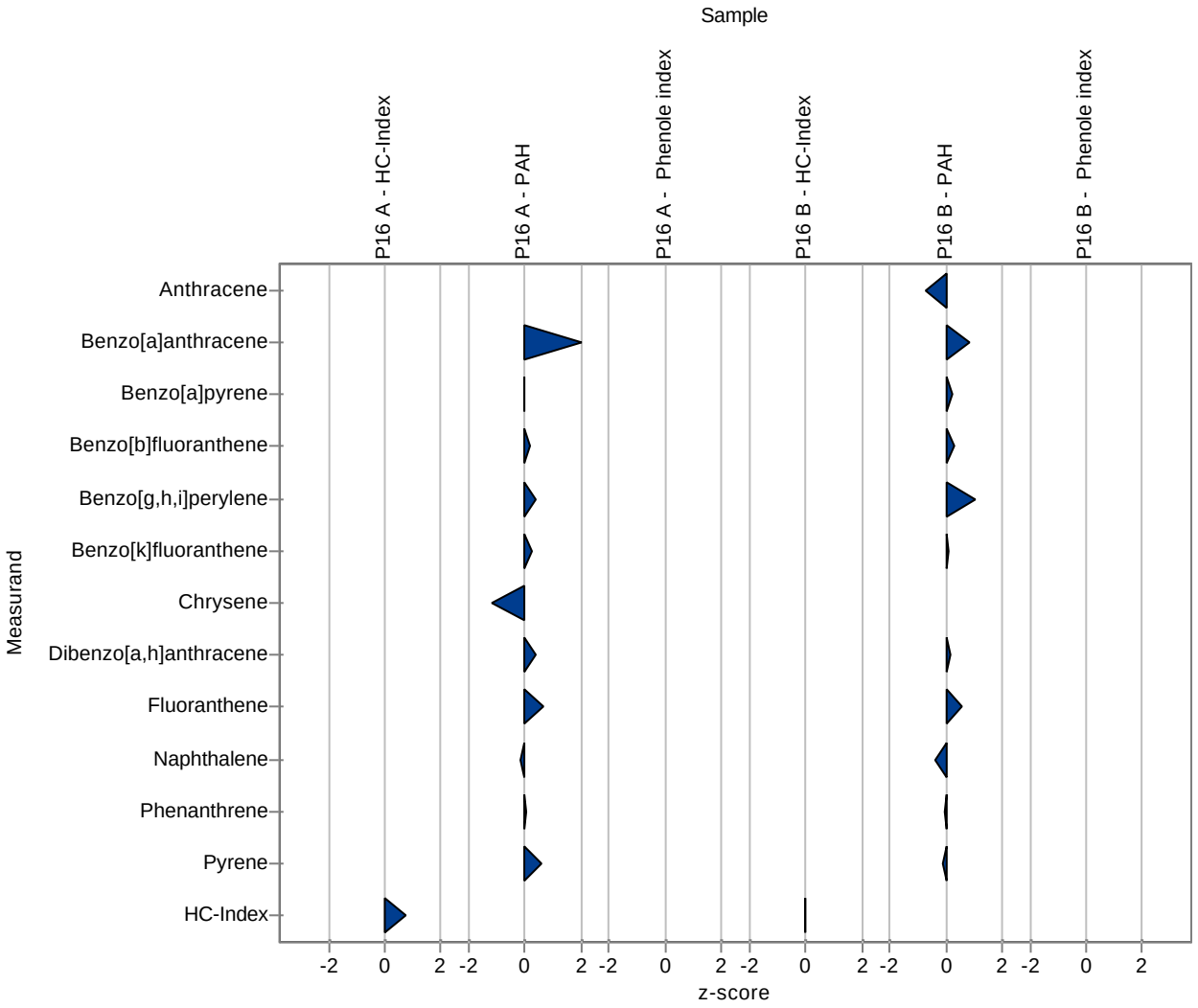
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	39,87	4	14	80,0	-0,71
Benzo[a]anthracene	ng/l	16,5	±	4,9	22,99	2	7,49	139,1	0,86

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	47,72	5	15,7	107,0	0,20
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	8,92	0,9	2,56	108,8	0,28
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	8,03	0,8	2,14	138,0	1,03
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	7,14	0,7	2,25	102,9	0,09
Chrysene	ng/l	4,91	±	2,3	<5 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	8,16	0,8	2,71	104,6	0,13
Fluoranthene	ng/l	21,3	±	4,8	25,71	2	7,84	121,0	0,57
Fluorene	ng/l	38,1	±	9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	156,2	16	58,6	88,0	-0,36
Phenanthrene	ng/l	37,3	±	10,5	36,3	4	15,7	97,2	-0,07
Pyrene	ng/l	7,67	±	3,82	7,35	0,7	4,22	95,9	-0,07

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,038	0,004	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Naphthalene
Phenanthrene
Pyrene
HC-Index
-2 0 2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	1,13	0,22	0,285	147,4	1,27

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	79	16	50,4	91,3	-0,15
Acenaphthylene	ng/l	79,1	±	17,8	71	14	25,8	89,8	-0,31
Anthracene	ng/l	80,4	±	12,7	105	21	20,8	130,6	1,18
Benzo[a]anthracene	ng/l	37,8	±	9,1	38	8	14,2	100,6	0,02
Benzo[a]pyrene	ng/l	120	±	21,6	107	21	38,8	89,1	-0,34
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	47	9	12,8	104,7	0,17
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	46	9	15,8	97,4	-0,08
Benzo[k]fluoranthene	ng/l	53	±	9	50	10	15,6	94,4	-0,19
Chrysene	ng/l	51,4	±	8,2	48	10	13,1	93,3	-0,26
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	51	10	18,9	90,2	-0,29
Fluoranthene	ng/l	110	±	20,5	106	21	36,7	96,0	-0,12
Fluorene	ng/l	276	±	55,2	284	57	84,3	103,0	0,10
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<25 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1840	368	816	107,6	0,16
Phenanthrene	ng/l	291	±	44	349	70	67,2	120,0	0,87
Pyrene	ng/l	66,3	±	10,1	75	15	17,2	113,2	0,51

Sample: P16BKWI

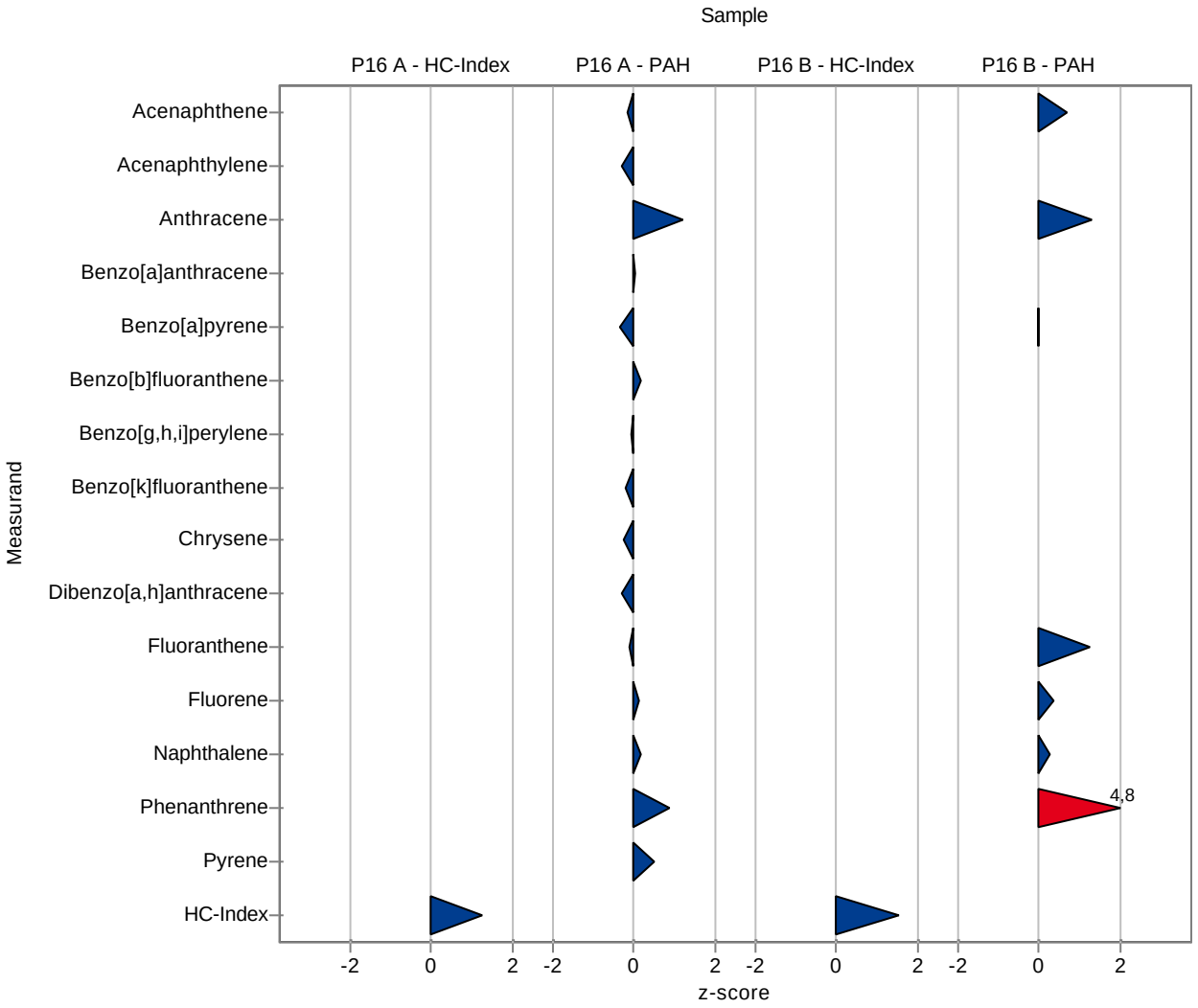
Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,34	0,07	0,0653	141,0	1,52

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	48	10	15,9	129,4	0,68
Acenaphthylene	ng/l	13,7	±	5,58	<25 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	68	14	14	136,5	1,30
Benzo[a]anthracene	ng/l	16,5	±	4,9	<25 (LOQ)	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	±	9,21	44	9	15,7	98,7	-0,04
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<25 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<25 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<25 (LOQ)	-	2,25	-	-

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0008

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<25 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<25 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	31	6	7,84	145,9	1,24
Fluorene	ng/l	38,1	±	9,24	43	9	14,1	112,9	0,35
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<25 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	192	38	58,6	108,2	0,25
Phenanthrene	ng/l	37,3	±	10,5	113	23	15,7	302,7	4,82
Pyrene	ng/l	7,67	±	3,82	<25 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
4,8
-2
0
2
z-score

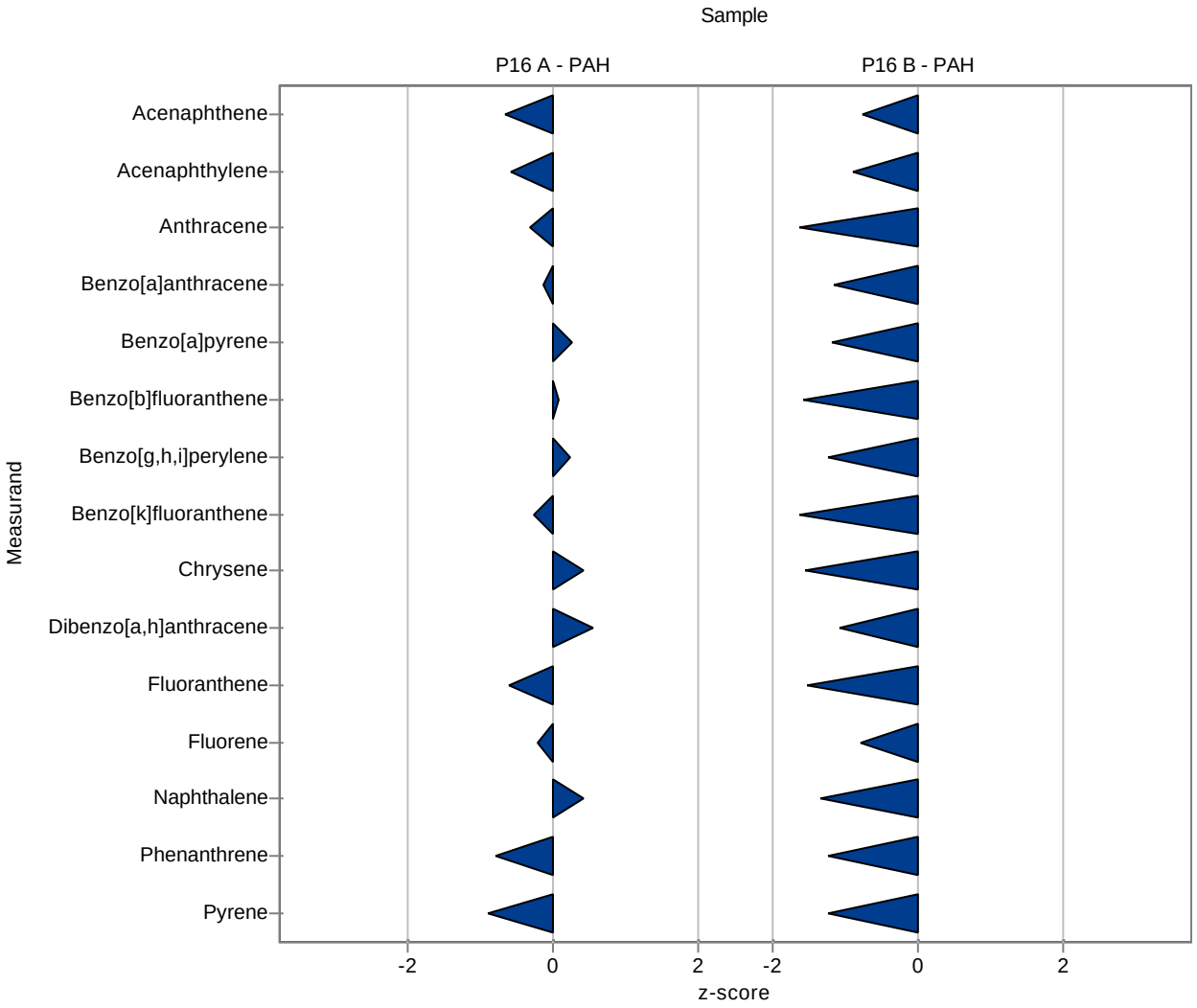
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	53	21	50,4	61,3	-0,66
Acenaphthylene	ng/l	79,1	± 17,8	64	26	25,8	80,9	-0,58
Anthracene	ng/l	80,4	± 12,7	74	30	20,8	92,0	-0,31
Benzo[a]anthracene	ng/l	37,8	± 9,1	36	14	14,2	95,3	-0,12
Benzo[a]pyrene	ng/l	120	± 21,6	130	52	38,8	108,3	0,26
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	46	18	12,8	102,5	0,09
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	51	21	15,8	108,0	0,24
Benzo[k]fluoranthene	ng/l	53	± 9	49	20	15,6	92,5	-0,25
Chrysene	ng/l	51,4	± 8,2	57	23	13,1	110,8	0,42
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	67	27	18,9	118,5	0,55
Fluoranthene	ng/l	110	± 20,5	88	35	36,7	79,7	-0,61
Fluorene	ng/l	276	± 55,2	258	103	84,3	93,6	-0,21
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	-	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	2059	824	816	120,4	0,43
Phenanthrene	ng/l	291	± 44	237	95	67,2	81,5	-0,80
Pyrene	ng/l	66,3	± 10,1	51	20	17,2	76,9	-0,89

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	25	10	15,9	67,4	-0,76
Acenaphthylene	ng/l	13,7	± 5,58	7,7	3,1	6,7	56,3	-0,89
Anthracene	ng/l	49,8	± 8,97	27	11	14	54,2	-1,63
Benzo[a]anthracene	ng/l	16,5	± 4,9	8	3,2	7,49	48,4	-1,14
Benzo[a]pyrene	ng/l	44,6	± 9,21	26	10	15,7	58,3	-1,19
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	4,2	1,7	2,56	51,2	-1,56
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	3,2	1,3	2,14	55,0	-1,22
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	3,3	1,3	2,25	47,6	-1,61
Chrysene	ng/l	4,91	± 2,3	1,2	0,5	2,42	24,4	-1,53
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	4,9	2	2,71	62,8	-1,07
Fluoranthene	ng/l	21,3	± 4,8	9,4	3,8	7,84	44,2	-1,51
Fluorene	ng/l	38,1	± 9,24	27	11	14,1	70,9	-0,79
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<1 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	100	40	58,6	56,3	-1,32
Phenanthrene	ng/l	37,3	± 10,5	18	7	15,7	48,2	-1,23
Pyrene	ng/l	7,67	± 3,82	2,5	1	4,22	32,6	-1,22


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
-2
0
2
-2
0
2
z-score

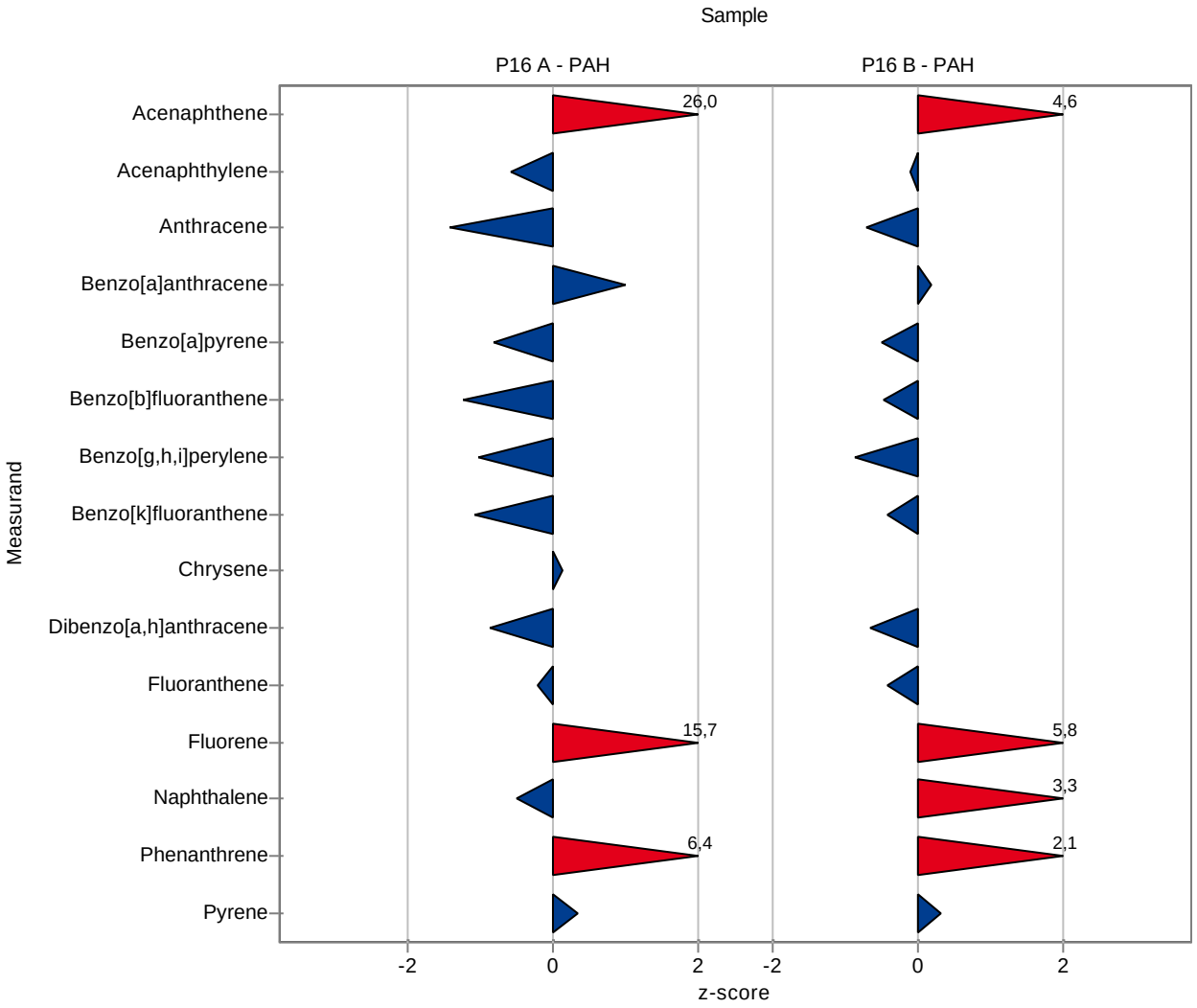
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	1400	567	50,4	1618,6	26,04
Acenaphthylene	ng/l	79,1	± 17,8	64	26	25,8	80,9	-0,58
Anthracene	ng/l	80,4	± 12,7	51	20	20,8	63,4	-1,41
Benzo[a]anthracene	ng/l	37,8	± 9,1	52	21	14,2	137,7	1,00
Benzo[a]pyrene	ng/l	120	± 21,6	88	35	38,8	73,3	-0,83
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	29	12	12,8	64,6	-1,25
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	31	12	15,8	65,6	-1,03
Benzo[k]fluoranthene	ng/l	53	± 9	36	15	15,6	68,0	-1,09
Chrysene	ng/l	51,4	± 8,2	53	21	13,1	103,1	0,12
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	40	16	18,9	70,8	-0,88
Fluoranthene	ng/l	110	± 20,5	103	41	36,7	93,3	-0,20
Fluorene	ng/l	276	± 55,2	1600	635	84,3	580,5	15,71
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<6 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	1300	530	816	76,0	-0,50
Phenanthrene	ng/l	291	± 44	720	289	67,2	247,6	6,38
Pyrene	ng/l	66,3	± 10,1	72	29	17,2	108,6	0,33

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	110	44	15,9	296,6	4,58
Acenaphthylene	ng/l	13,7	± 5,58	13	5	6,7	95,0	-0,10
Anthracene	ng/l	49,8	± 8,97	40	16	14	80,3	-0,70
Benzo[a]anthracene	ng/l	16,5	± 4,9	18	7	7,49	108,9	0,20
Benzo[a]pyrene	ng/l	44,6	± 9,21	37	15	15,7	83,0	-0,48
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	7	3	2,56	85,4	-0,47
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	4	2	2,14	68,7	-0,85
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	6	2	2,25	86,5	-0,42
Chrysene	ng/l	4,91	± 2,3	<1 (LOD)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	6	3	2,71	76,9	-0,67
Fluoranthene	ng/l	21,3	± 4,8	18	7	7,84	84,7	-0,42
Fluorene	ng/l	38,1	± 9,24	120	49	14,1	315,0	5,81
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<6 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	370	150	58,6	208,4	3,28
Phenanthrene	ng/l	37,3	± 10,5	71	28	15,7	190,2	2,15
Pyrene	ng/l	7,67	± 3,82	9	4	4,22	117,4	0,32


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
26,0
4,6
15,7
5,8
3,3
6,4
2,1
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	1,02	0,15	0,285	133,0	0,89

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	±	17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	±	9,1	-	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	±	21,6	141,5	21,2	38,8	117,9	0,55
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	48,3	7,2	12,8	107,6	0,27
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	44,4	6,7	15,8	94,0	-0,18
Benzo[k]fluoranthene	ng/l	53	±	9	58,6	8,8	15,6	110,7	0,36
Chrysene	ng/l	51,4	±	8,2	-	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	±	20,5	134,1	20,1	36,7	121,5	0,64
Fluorene	ng/l	276	±	55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	-	-	816	-	-
Phenanthrene	ng/l	291	±	44	-	-	67,2	-	-
Pyrene	ng/l	66,3	±	10,1	-	-	17,2	-	-

Sample: P16BKWI

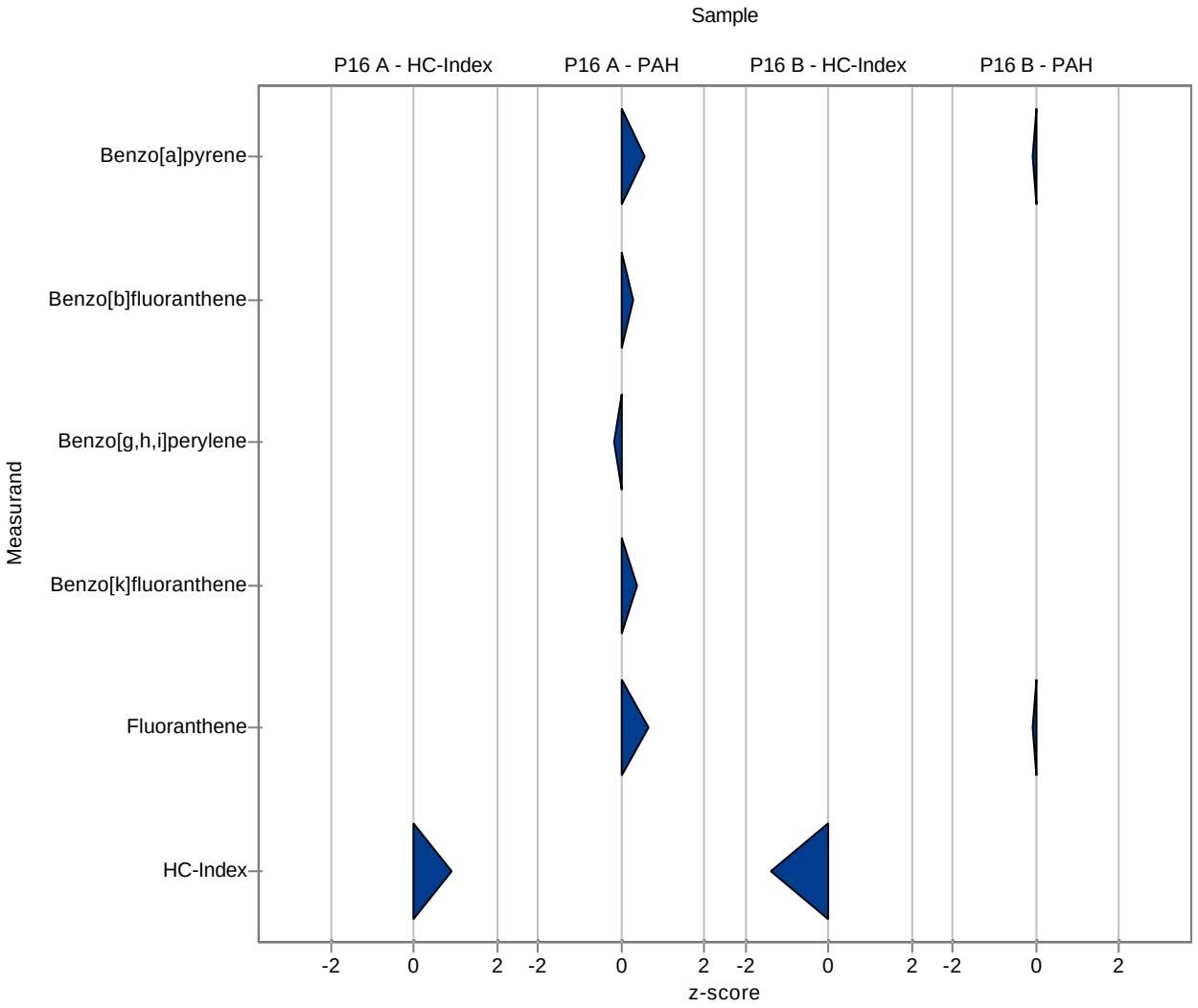
Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,15	0,02	0,0653	62,2	-1,39

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	±	4,9	-	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	±	9,21	43,5	6,5	15,7	97,6	-0,07
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<10 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<10 (LOQ)	-	2,25	-	-

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0011

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	-	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	-	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	20,5	3,1	7,84	96,5	-0,10
Fluorene	ng/l	38,1	±	9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	±	10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	±	3,82	-	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Fluoranthene
HC-Index
Measurand
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,39	-	0,285	50,9	-1,32

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	20	3,17	50,4	23,1	-1,32
Acenaphthylene	ng/l	79,1	±	17,8	30	4,75	25,8	37,9	-1,90
Anthracene	ng/l	80,4	±	12,7	40	6,34	20,8	49,8	-1,94
Benzo[a]anthracene	ng/l	37,8	±	9,1	16	2,54	14,2	42,4	-1,53
Benzo[a]pyrene	ng/l	120	±	21,6	50	7,92	38,8	41,7	-1,81
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	40	6,34	12,8	89,1	-0,38
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	12	1,9	15,8	25,4	-2,23
Benzo[k]fluoranthene	ng/l	53	±	9	25	3,96	15,6	47,2	-1,79
Chrysene	ng/l	51,4	±	8,2	21	3,33	13,1	40,8	-2,32
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	20	3,17	18,9	35,4	-1,93
Fluoranthene	ng/l	110	±	20,5	59	9,51	36,7	53,4	-1,40
Fluorene	ng/l	276	±	55,2	99	15,8	84,3	35,9	-2,10
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	9	-	1,74	102,9	0,14
Naphthalene	ng/l	1710	±	489	210	33,3	816	12,3	-1,84
Phenanthrene	ng/l	291	±	44	130	20,6	67,2	44,7	-2,39
Pyrene	ng/l	66,3	±	10,1	40	6,34	17,2	60,3	-1,53

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,09225	-	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,1	-	0,0653	41,5	-2,16

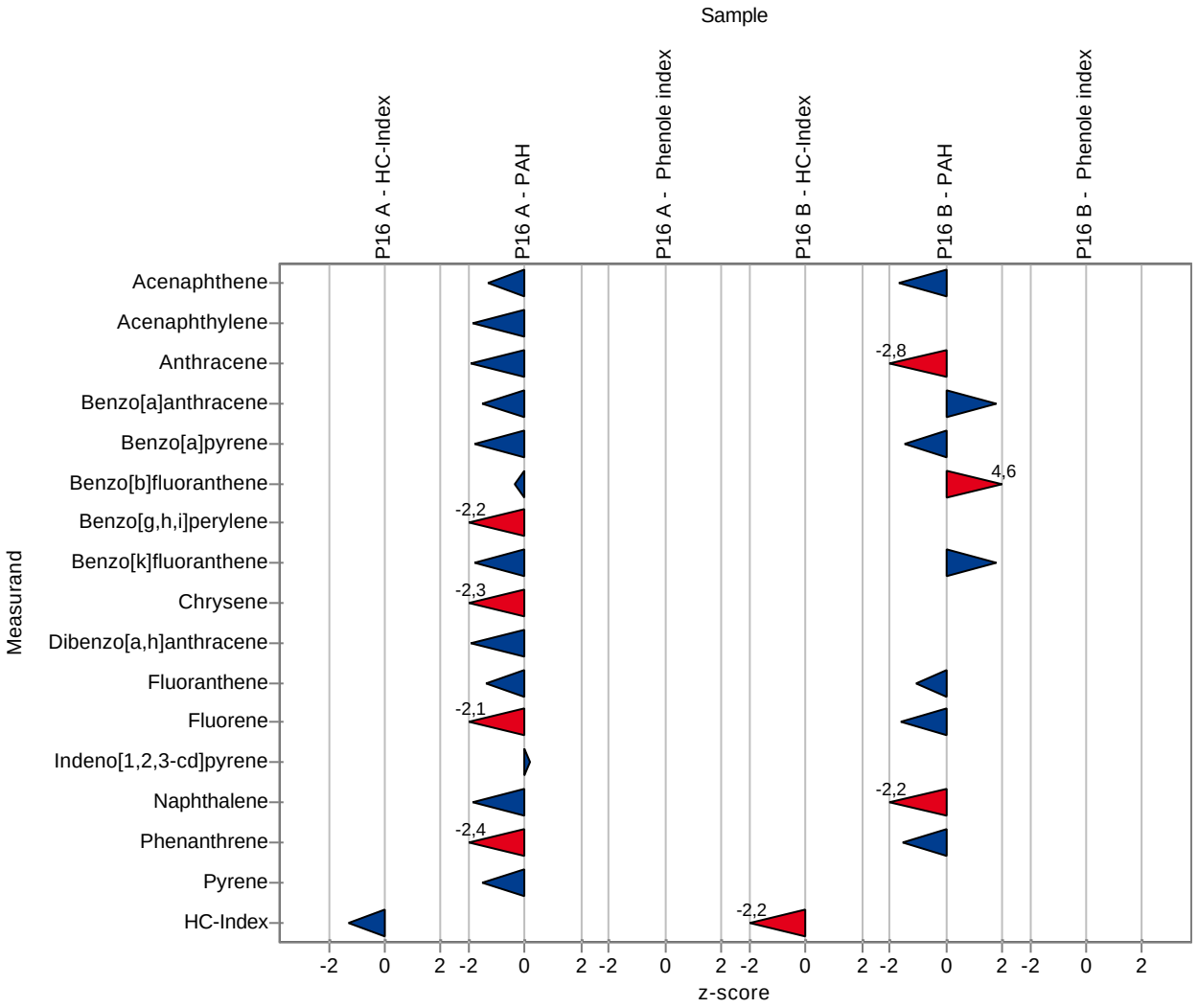
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	10	1,6	15,9	27,0	-1,70
Acenaphthylene	ng/l	13,7	±	5,58	<10 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	10	1,6	14	20,1	-2,84
Benzo[a]anthracene	ng/l	16,5	±	4,9	30	4,8	7,49	181,6	1,80

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	22	3,52	15,7	49,4	-1,44
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	20	3,2	2,56	244,0	4,60
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	11	1,76	2,25	158,6	1,80
Chrysene	ng/l	4,91	±	2,3	<10 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<10 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	13	2,08	7,84	61,2	-1,05
Fluorene	ng/l	38,1	±	9,24	15	2,4	14,1	39,4	-1,64
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	50	8,1	58,6	28,2	-2,18
Phenanthrene	ng/l	37,3	±	10,5	13	2,08	15,7	34,8	-1,55
Pyrene	ng/l	7,67	±	3,82	<10 (LOQ)	-	4,22	-	-

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,03435	-	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
HC-Index
-2,8
4,6
-2,2
-2,3
-2,1
-2,2
-2,4
-2,2
-2 0 2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,75	0,012	0,285	97,8	-0,06

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	90	20	50,4	104,1	0,07
Acenaphthylene	ng/l	79,1	±	17,8	<50 (LOQ)	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	82	18	20,8	102,0	0,08
Benzo[a]anthracene	ng/l	37,8	±	9,1	49	10	14,2	129,7	0,79
Benzo[a]pyrene	ng/l	120	±	21,6	152	32	38,8	126,6	0,82
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	48	10	12,8	106,9	0,24
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	52	11	15,8	110,1	0,30
Benzo[k]fluoranthene	ng/l	53	±	9	58	12	15,6	109,5	0,32
Chrysene	ng/l	51,4	±	8,2	60	14	13,1	116,7	0,65
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	65	15	18,9	115,0	0,45
Fluoranthene	ng/l	110	±	20,5	210	50	36,7	190,2	2,71
Fluorene	ng/l	276	±	55,2	86	17	84,3	31,2	-2,25
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<5 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1,3	310	816	0,1	-2,10
Phenanthrene	ng/l	291	±	44	720	150	67,2	247,6	6,38
Pyrene	ng/l	66,3	±	10,1	91	20	17,2	137,3	1,44

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,11	0,03	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,21	0,05	0,0653	87,1	-0,48

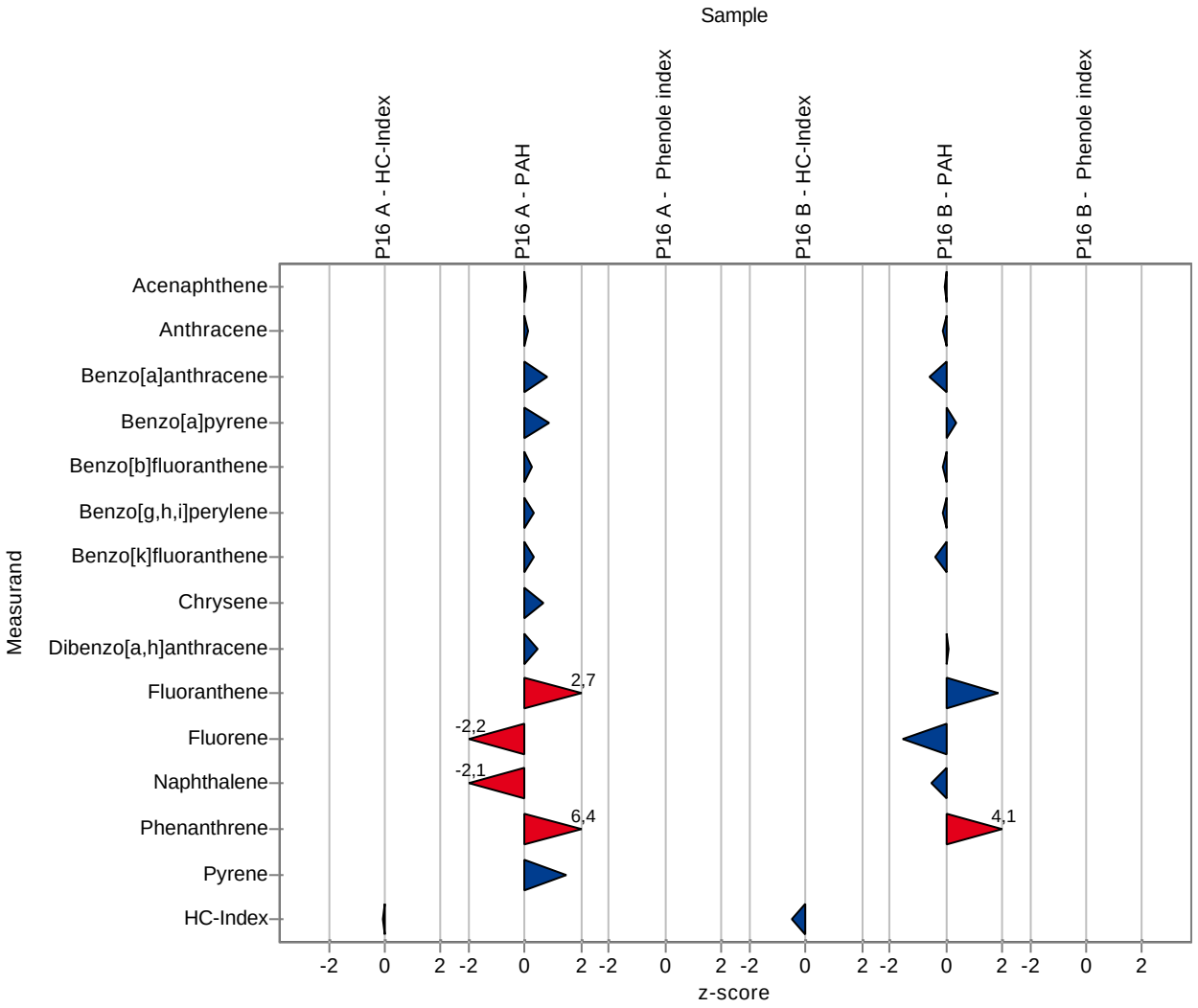
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	36	8	15,9	97,1	-0,07
Acenaphthylene	ng/l	13,7	±	5,58	<50 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	48	10	14	96,4	-0,13
Benzo[a]anthracene	ng/l	16,5	±	4,9	12	2,6	7,49	72,6	-0,60

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	50	11	15,7	112,2	0,35
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	7,9	1,9	2,56	96,4	-0,12
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	5,6	1	2,14	96,2	-0,10
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	6,1	1,3	2,25	87,9	-0,37
Chrysene	ng/l	4,91	±	2,3	<5 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	8	2	2,71	102,6	0,07
Fluoranthene	ng/l	21,3	±	4,8	36	9	7,84	169,4	1,88
Fluorene	ng/l	38,1	±	9,24	16	3	14,1	42,0	-1,57
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	147	38	58,6	82,8	-0,52
Phenanthrene	ng/l	37,3	±	10,5	102	25	15,7	273,2	4,12
Pyrene	ng/l	7,67	±	3,82	<5 (LOQ)	-	4,22	-	-

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,05	0,01	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Acenaphthene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
2,7
-2,2
-2,1
6,4
4,1
-2 0 2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	-	-	0,285	-	-

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	1387,9	458	50,4	1604,6	25,80
Acenaphthylene	ng/l	79,1	±	17,8	<25 (LOQ)	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	72	18	20,8	89,6	-0,40
Benzo[a]anthracene	ng/l	37,8	±	9,1	225,7	47,4	14,2	597,6	13,21
Benzo[a]pyrene	ng/l	120	±	21,6	68,6	16,5	38,8	57,1	-1,33
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	26,8	5,1	12,8	59,7	-1,42
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	29,3	7,6	15,8	62,0	-1,13
Benzo[k]fluoranthene	ng/l	53	±	9	24,6	5,4	15,6	46,5	-1,82
Chrysene	ng/l	51,4	±	8,2	35,7	7,8	13,1	69,4	-1,20
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	26,2	6,8	18,9	46,3	-1,61
Fluoranthene	ng/l	110	±	20,5	51,1	10,7	36,7	46,3	-1,61
Fluorene	ng/l	276	±	55,2	216,5	47,6	84,3	78,6	-0,70
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1486,3	356,7	816	86,9	-0,27
Phenanthrene	ng/l	291	±	44	454,2	113,6	67,2	156,2	2,43
Pyrene	ng/l	66,3	±	10,1	40,3	11,7	17,2	60,8	-1,51

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,112	0,017	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	-	-	0,0653	-	-

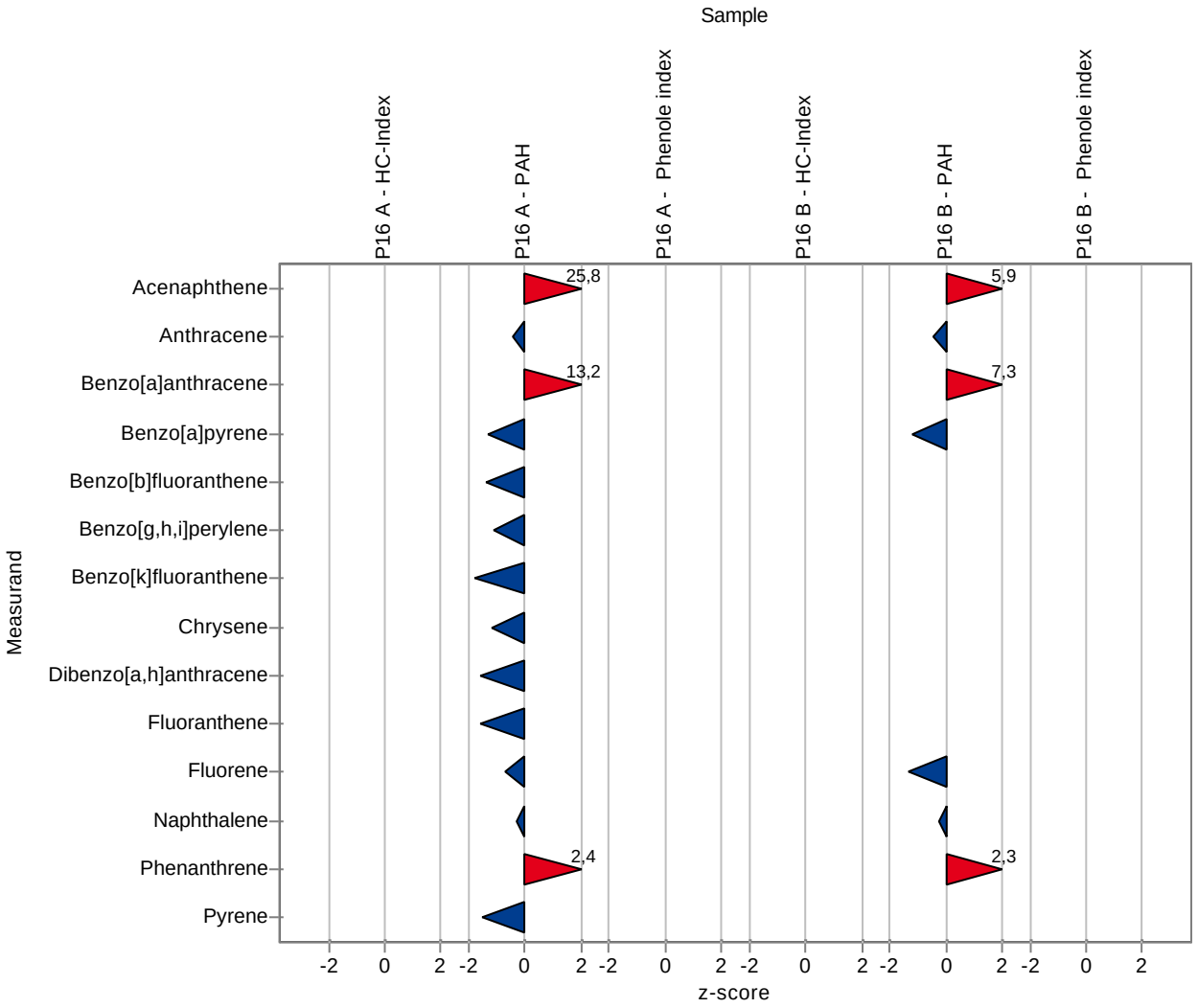
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	131,5	43,4	15,9	354,6	5,92
Acenaphthylene	ng/l	13,7	±	5,58	<25 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	43,8	11	14	87,9	-0,43
Benzo[a]anthracene	ng/l	16,5	±	4,9	71,5	15	7,49	432,7	7,34

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	26,1	6,3	15,7	58,5	-1,18
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<10 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<10 (LOQ)	-	2,25	-	-
Chrysene	ng/l	4,91	±	2,3	<10 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<10 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	<10 (LOQ)	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	19,7	4,3	14,1	51,7	-1,30
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	163,7	39,3	58,6	92,2	-0,24
Phenanthrene	ng/l	37,3	±	10,5	73,5	18,4	15,7	196,9	2,30
Pyrene	ng/l	7,67	±	3,82	<10 (LOQ)	-	4,22	-	-

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,045	0,007	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Acenaphthene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
25,8
5,9
13,2
7,3
2,4
2,3
-2 0 2
z-score

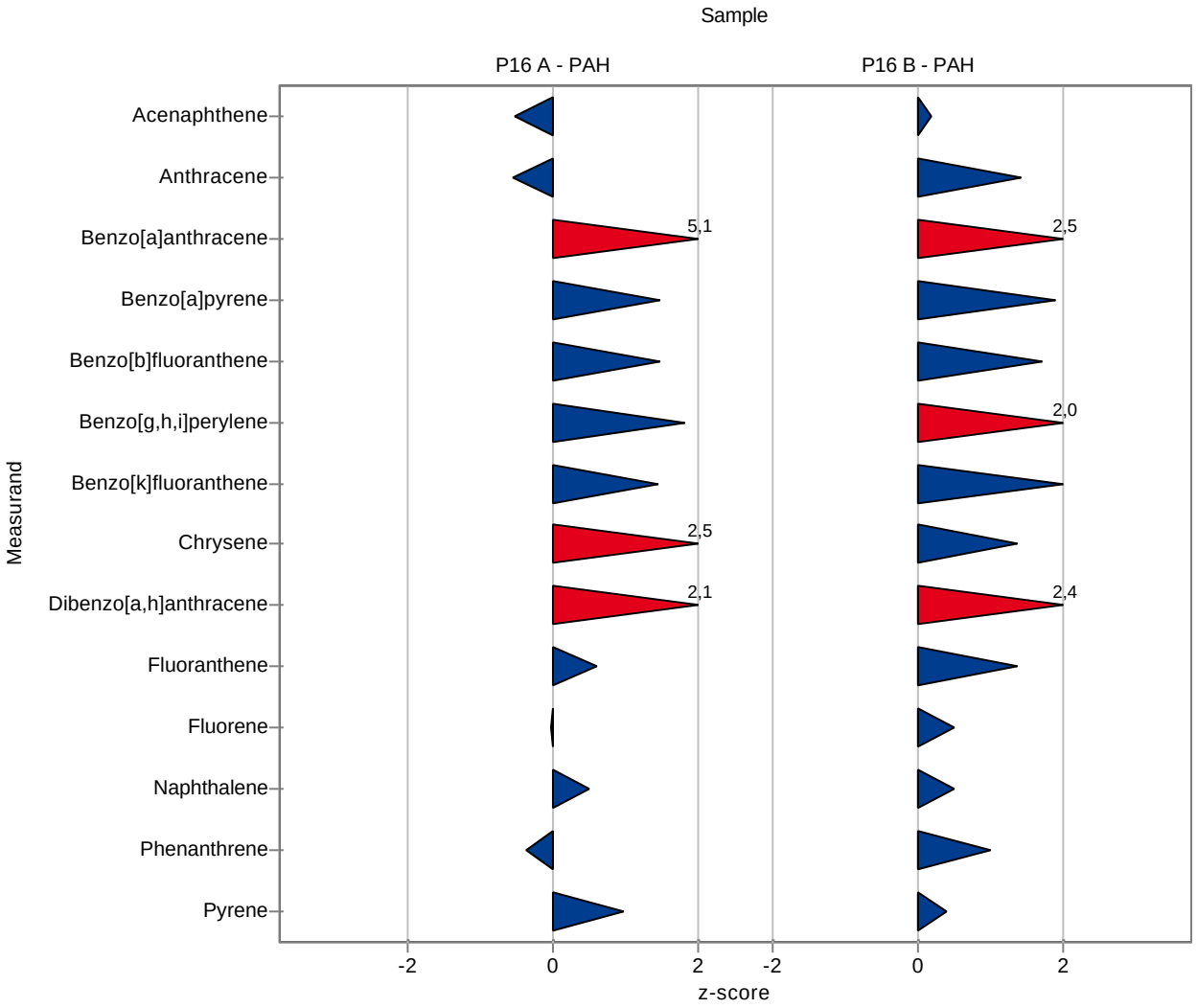
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	59,9	6	50,4	69,3	-0,53
Acenaphthylene	ng/l	79,1	± 17,8	<100 (LOQ)	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	68,7	6,9	20,8	85,4	-0,56
Benzo[a]anthracene	ng/l	37,8	± 9,1	110,4	11	14,2	292,3	5,11
Benzo[a]pyrene	ng/l	120	± 21,6	177,3	17,7	38,8	147,7	1,48
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	63,5	6,4	12,8	141,5	1,46
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	76	7,6	15,8	160,9	1,82
Benzo[k]fluoranthene	ng/l	53	± 9	75,3	7,5	15,6	142,2	1,43
Chrysene	ng/l	51,4	± 8,2	83,9	8,4	13,1	163,1	2,48
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	97,1	9,7	18,9	171,8	2,15
Fluoranthene	ng/l	110	± 20,5	132,7	13,3	36,7	120,2	0,61
Fluorene	ng/l	276	± 55,2	272,7	27,3	84,3	98,9	-0,03
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	2116	212	816	123,7	0,50
Phenanthrene	ng/l	291	± 44	266,2	26,6	67,2	91,5	-0,37
Pyrene	ng/l	66,3	± 10,1	83,1	20,8	17,2	125,4	0,98

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	40,1	4	15,9	108,1	0,19
Acenaphthylene	ng/l	13,7	± 5,58	<100 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	69,7	7	14	139,9	1,42
Benzo[a]anthracene	ng/l	16,5	± 4,9	35,3	3,5	7,49	213,6	2,51
Benzo[a]pyrene	ng/l	44,6	± 9,21	74,1	7,4	15,7	166,2	1,89
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	12,6	1,3	2,56	153,7	1,72
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	10,2	1	2,14	175,3	2,04
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	11,4	1,1	2,25	164,4	1,98
Chrysene	ng/l	4,91	± 2,3	8,2	0,8	2,42	167,0	1,36
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	14,3	1,4	2,71	183,3	2,40
Fluoranthene	ng/l	21,3	± 4,8	31,9	3,2	7,84	150,1	1,36
Fluorene	ng/l	38,1	± 9,24	45,2	4,5	14,1	118,7	0,50
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	207	20,7	58,6	116,6	0,50
Phenanthrene	ng/l	37,3	± 10,5	53,1	5,3	15,7	142,2	1,00
Pyrene	ng/l	7,67	± 3,82	9,3	2,3	4,22	121,3	0,39


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
5,1
2,5
2,0
2,5
2,1
2,4
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,58	0,06	0,285	75,6	-0,65

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	±	17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	±	9,1	-	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	±	21,6	-	-	38,8	-	-
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	-	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	-	-	15,8	-	-
Benzo[k]fluoranthene	ng/l	53	±	9	-	-	15,6	-	-
Chrysene	ng/l	51,4	±	8,2	-	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	±	20,5	-	-	36,7	-	-
Fluorene	ng/l	276	±	55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	-	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	-	-	816	-	-
Phenanthrene	ng/l	291	±	44	-	-	67,2	-	-
Pyrene	ng/l	66,3	±	10,1	-	-	17,2	-	-

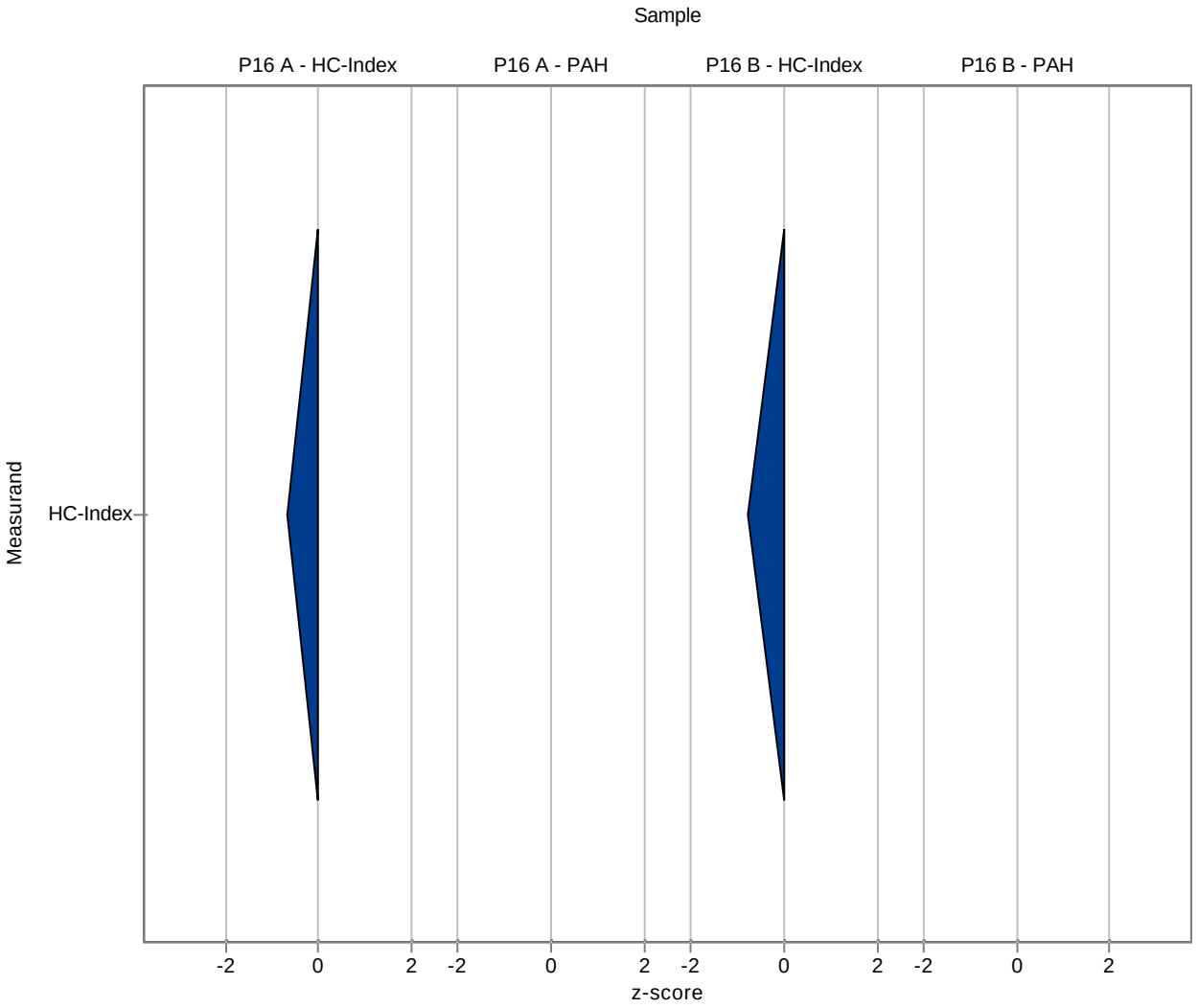
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,19	0,02	0,0653	78,8	-0,78

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	±	4,9	-	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	±	9,21	-	-	15,7	-	-
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	-	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	-	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	-	-	2,25	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	-	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	-	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	-	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	-	-	-	-	-
Naphthalene	ng/l	178	±	37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	±	10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	±	3,82	-	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
HC-Index
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	± 0,187	0,8859	0,0842	0,285	115,5	0,42

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	± 17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	± 9,1	-	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	± 21,6	-	-	38,8	-	-
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	-	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	-	-	15,8	-	-
Benzo[k]fluoranthene	ng/l	53	± 9	-	-	15,6	-	-
Chrysene	ng/l	51,4	± 8,2	-	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	± 20,5	-	-	36,7	-	-
Fluorene	ng/l	276	± 55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	-	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	-	-	816	-	-
Phenanthrene	ng/l	291	± 44	-	-	67,2	-	-
Pyrene	ng/l	66,3	± 10,1	-	-	17,2	-	-

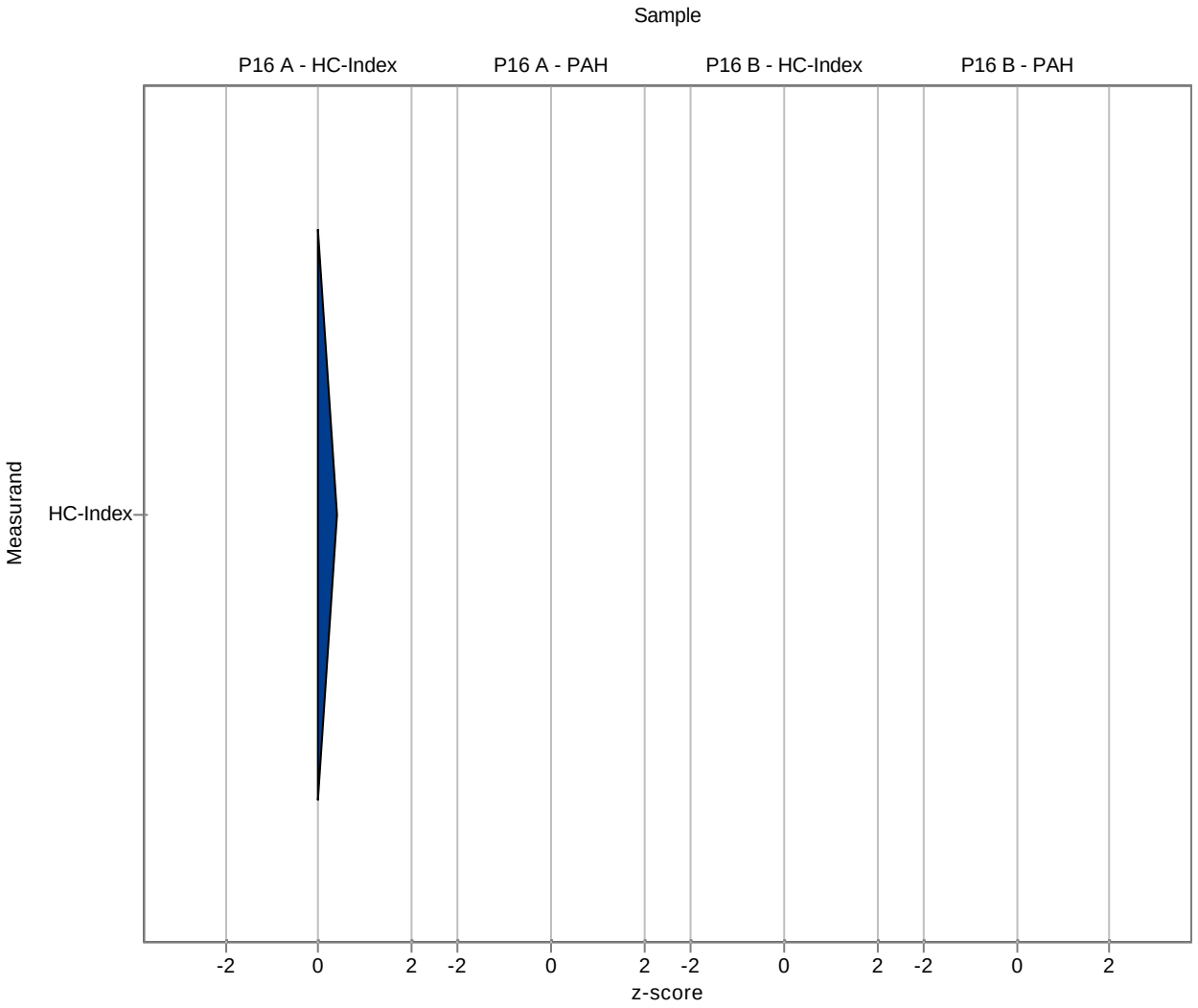
Sample: P16BKWI

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	± 0,045	-	-	0,0653	-	-

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	± 5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	± 4,9	-	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	± 9,21	-	-	15,7	-	-
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	-	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	-	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	-	-	2,25	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	-	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	-	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	-	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	-	-	-	-	-
Naphthalene	ng/l	178	±	37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	±	10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	±	3,82	-	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
HC-Index
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,436	0,04	0,285	56,9	-1,16

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	20	10	50,4	23,1	-1,32
Acenaphthylene	ng/l	79,1	±	17,8	<20 (LOQ)	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	60	10	20,8	74,6	-0,98
Benzo[a]anthracene	ng/l	37,8	±	9,1	30	10	14,2	79,4	-0,55
Benzo[a]pyrene	ng/l	120	±	21,6	50	10	38,8	41,7	-1,81
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	20	10	12,8	44,6	-1,95
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	<20 (LOQ)	-	15,8	-	-
Benzo[k]fluoranthene	ng/l	53	±	9	30	10	15,6	56,6	-1,47
Chrysene	ng/l	51,4	±	8,2	40	10	13,1	77,8	-0,87
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	<20 (LOQ)	-	18,9	-	-
Fluoranthene	ng/l	110	±	20,5	80	10	36,7	72,5	-0,83
Fluorene	ng/l	276	±	55,2	1590	160	84,3	576,9	15,59
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<20 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	650	70	816	38,0	-1,30
Phenanthrene	ng/l	291	±	44	240	30	67,2	82,5	-0,76
Pyrene	ng/l	66,3	±	10,1	60	10	17,2	90,5	-0,37

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,042	0,0025	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,22	0,04	0,0653	91,3	-0,32

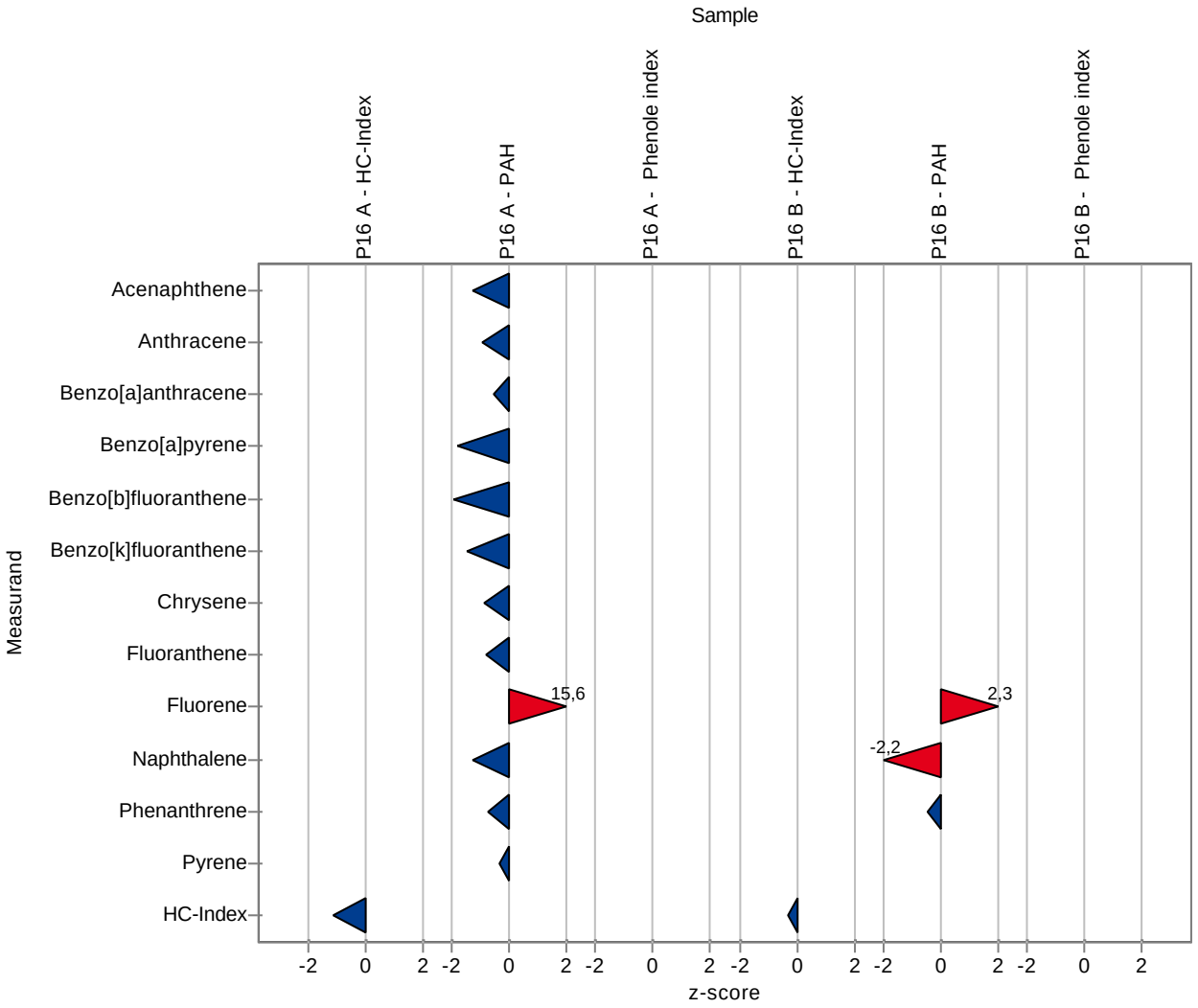
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	<20 (LOQ)	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	<20 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	<20 (LOQ)	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	±	4,9	<20 (LOQ)	-	7,49	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	<20 (LOQ)	-	15,7	-	-
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<20 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<20 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<20 (LOQ)	-	2,25	-	-
Chrysene	ng/l	4,91	±	2,3	<20 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<20 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	<20 (LOQ)	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	70	10	14,1	183,8	2,26
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<20 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	50	10	58,6	28,2	-2,18
Phenanthrene	ng/l	37,3	±	10,5	30	10	15,7	80,4	-0,47
Pyrene	ng/l	7,67	±	3,82	<20 (LOQ)	-	4,22	-	-

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,0105	0,0025	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Acenaphthene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Chrysene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
15,6
2,3
-2,2
-2 0 2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	± 0,187	0,499	0,1	0,285	65,1	-0,94

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	61	7,1	50,4	70,5	-0,51
Acenaphthylene	ng/l	79,1	± 17,8	59	2,1	25,8	74,6	-0,78
Anthracene	ng/l	80,4	± 12,7	132	17	20,8	164,2	2,48
Benzo[a]anthracene	ng/l	37,8	± 9,1	18	3,5	14,2	47,7	-1,39
Benzo[a]pyrene	ng/l	120	± 21,6	88	11	38,8	73,3	-0,83
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	-	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	34	2,1	15,8	72,0	-0,84
Benzo[k]fluoranthene	ng/l	53	± 9	-	-	15,6	-	-
Chrysene	ng/l	51,4	± 8,2	42	5,7	13,1	81,7	-0,72
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	38	9,2	18,9	67,2	-0,98
Fluoranthene	ng/l	110	± 20,5	73	5,7	36,7	66,1	-1,02
Fluorene	ng/l	276	± 55,2	170	25	84,3	61,7	-1,25
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	6	0,7	1,74	68,6	-1,58
Naphthalene	ng/l	1710	± 489	1127	71	816	65,9	-0,72
Phenanthrene	ng/l	291	± 44	60	17	67,2	20,6	-3,43
Pyrene	ng/l	66,3	± 10,1	43	4,2	17,2	64,9	-1,36

Sample: P16BKWI

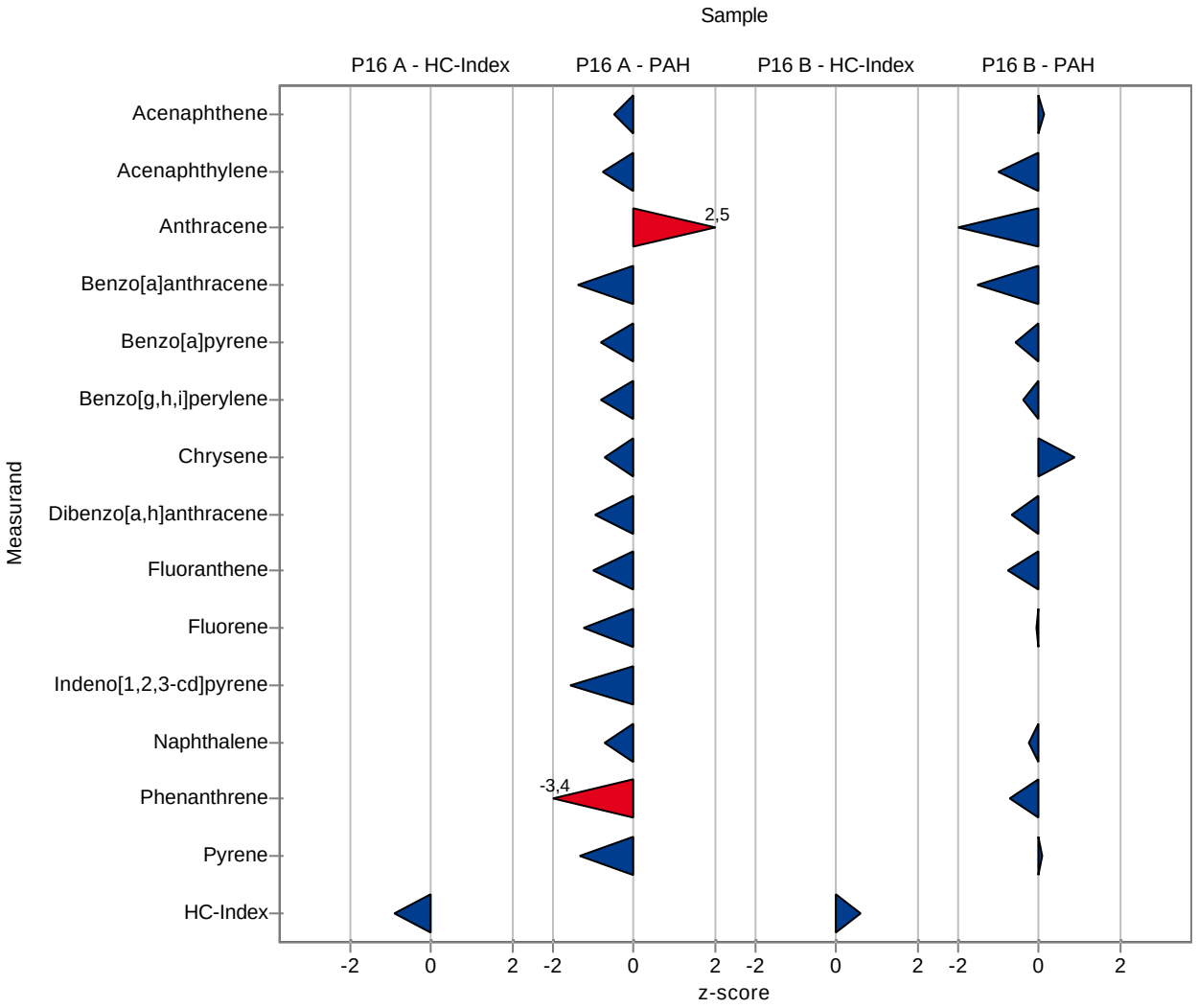
Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	± 0,045	0,28	0,01	0,0653	116,2	0,60

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	39	9,2	15,9	105,2	0,12
Acenaphthylene	ng/l	13,7	± 5,58	7	0,1	6,7	51,2	-1,00
Anthracene	ng/l	49,8	± 8,97	22	5,7	14	44,2	-1,98
Benzo[a]anthracene	ng/l	16,5	± 4,9	5	0,7	7,49	30,3	-1,54
Benzo[a]pyrene	ng/l	44,6	± 9,21	35	1,4	15,7	78,5	-0,61
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	-	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	5	0,7	2,14	85,9	-0,38
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	-	-	2,25	-	-

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0019

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	± 2,3	7	0,71	2,42	142,6	0,86
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	6	5,7	2,71	76,9	-0,67
Fluoranthene	ng/l	21,3	± 4,8	15	1,4	7,84	70,6	-0,80
Fluorene	ng/l	38,1	± 9,24	37	21	14,1	97,1	-0,08
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	1	0,1	-	-	-
Naphthalene	ng/l	178	± 37,5	162	35	58,6	91,3	-0,26
Phenanthrene	ng/l	37,3	± 10,5	26	5,7	15,7	69,6	-0,72
Pyrene	ng/l	7,67	± 3,82	8	0,7	4,22	104,4	0,08


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[g,h,i]perylene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
HC-Index
2,5
-3,4
-2
0
2
z-score

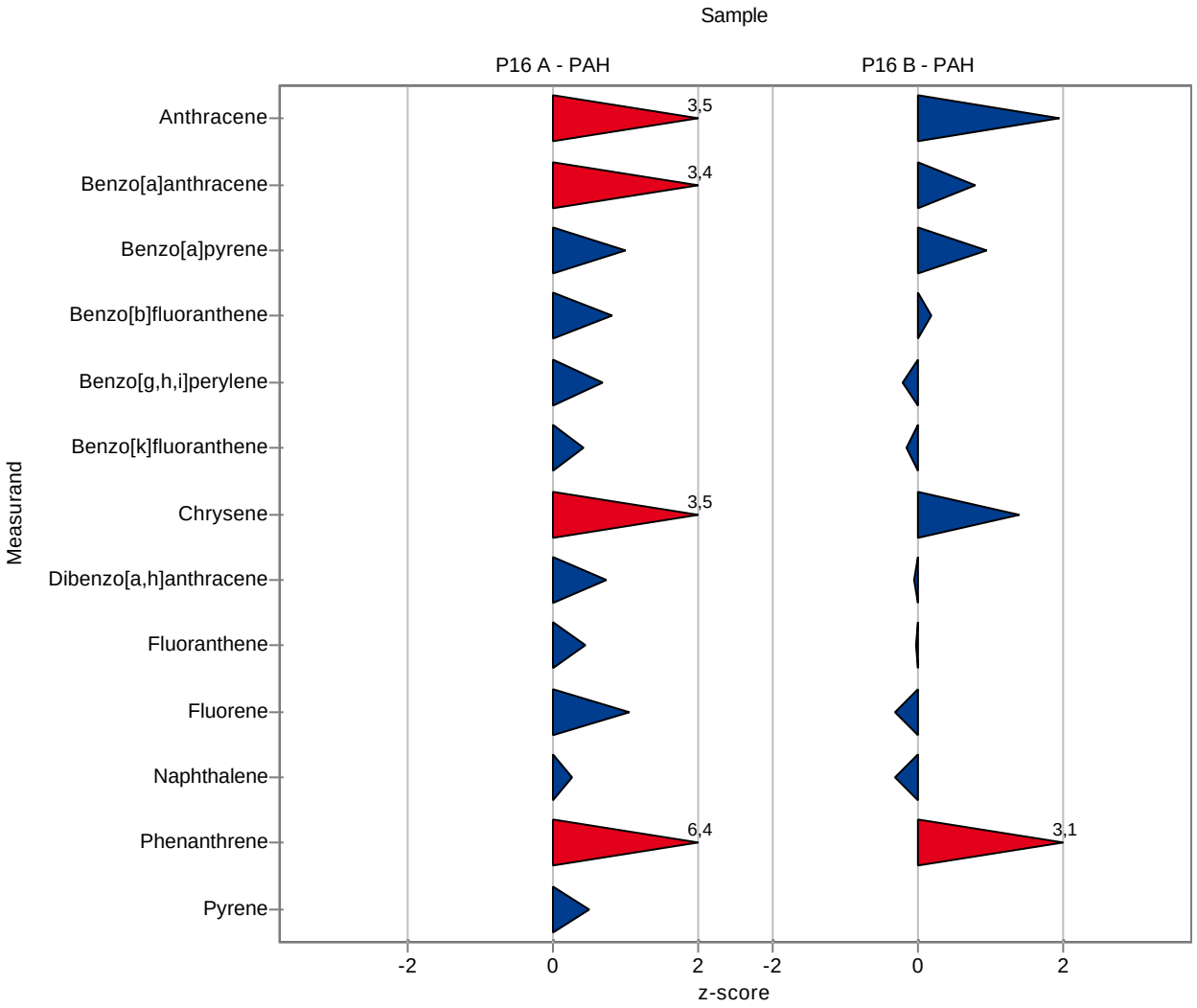
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	<90 (LOQ)	-	50,4	-	-
Acenaphthylene	ng/l	79,1	± 17,8	<79 (LOQ)	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	152,7	3,9	20,8	189,9	3,48
Benzo[a]anthracene	ng/l	37,8	± 9,1	85,8	1,7	14,2	227,2	3,38
Benzo[a]pyrene	ng/l	120	± 21,6	158,7	4,8	38,8	132,2	1,00
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	55,1	1,7	12,8	122,7	0,80
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	58	3,3	15,8	122,8	0,68
Benzo[k]fluoranthene	ng/l	53	± 9	59,5	7,6	15,6	112,4	0,42
Chrysene	ng/l	51,4	± 8,2	97,5	7,2	13,1	189,6	3,51
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	70,1	3,6	18,9	124,0	0,72
Fluoranthene	ng/l	110	± 20,5	126,7	1,7	36,7	114,8	0,44
Fluorene	ng/l	276	± 55,2	364	45,5	84,3	132,1	1,05
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<5 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	1920	389	816	112,3	0,26
Phenanthrene	ng/l	291	± 44	718	109,9	67,2	246,9	6,35
Pyrene	ng/l	66,3	± 10,1	74,6	4	17,2	112,5	0,48

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	<40 (LOQ)	-	15,9	-	-
Acenaphthylene	ng/l	13,7	± 5,58	<79 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	77,1	2	14	154,8	1,95
Benzo[a]anthracene	ng/l	16,5	± 4,9	22,4	1,7	7,49	135,6	0,78
Benzo[a]pyrene	ng/l	44,6	± 9,21	59,5	1,8	15,7	133,5	0,95
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	8,7	1,7	2,56	106,1	0,20
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	5,4	3,3	2,14	92,8	-0,20
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	6,6	1,7	2,25	95,2	-0,15
Chrysene	ng/l	4,91	± 2,3	8,3	0,6	2,42	169,0	1,40
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	7,7	0,4	2,71	98,7	-0,04
Fluoranthene	ng/l	21,3	± 4,8	21,1	1,7	7,84	99,3	-0,02
Fluorene	ng/l	38,1	± 9,24	33,8	4,2	14,1	88,7	-0,30
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	158,6	32,2	58,6	89,3	-0,32
Phenanthrene	ng/l	37,3	± 10,5	86,1	13,2	15,7	230,6	3,11
Pyrene	ng/l	7,67	± 3,82	<7 (LOQ)	-	4,22	-	-


Sample
P16 A - PAH
P16 B - PAH
Measurand
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
3,5
3,4
3,5
6,4
3,1
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,68	0,17	0,285	88,7	-0,30

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	420	105	50,4	485,6	6,61
Acenaphthylene	ng/l	79,1	±	17,8	112	28	25,8	141,6	1,27
Anthracene	ng/l	80,4	±	12,7	98,8	25	20,8	122,9	0,88
Benzo[a]anthracene	ng/l	37,8	±	9,1	91,4	23	14,2	242,0	3,77
Benzo[a]pyrene	ng/l	120	±	21,6	210	52	38,8	174,9	2,32
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	69,4	17	12,8	154,6	1,92
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	73,5	18	15,8	155,6	1,66
Benzo[k]fluoranthene	ng/l	53	±	9	82	21	15,6	154,8	1,86
Chrysene	ng/l	51,4	±	8,2	124	31	13,1	241,1	5,53
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	45	11	18,9	79,6	-0,61
Fluoranthene	ng/l	110	±	20,5	169	42	36,7	153,1	1,59
Fluorene	ng/l	276	±	55,2	679	170	84,3	246,4	4,79
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	32,3	8	1,74	369,1	13,55
Naphthalene	ng/l	1710	±	489	3172	793	816	185,5	1,79
Phenanthrene	ng/l	291	±	44	394	99	67,2	135,5	1,54
Pyrene	ng/l	66,3	±	10,1	101	25	17,2	152,4	2,02

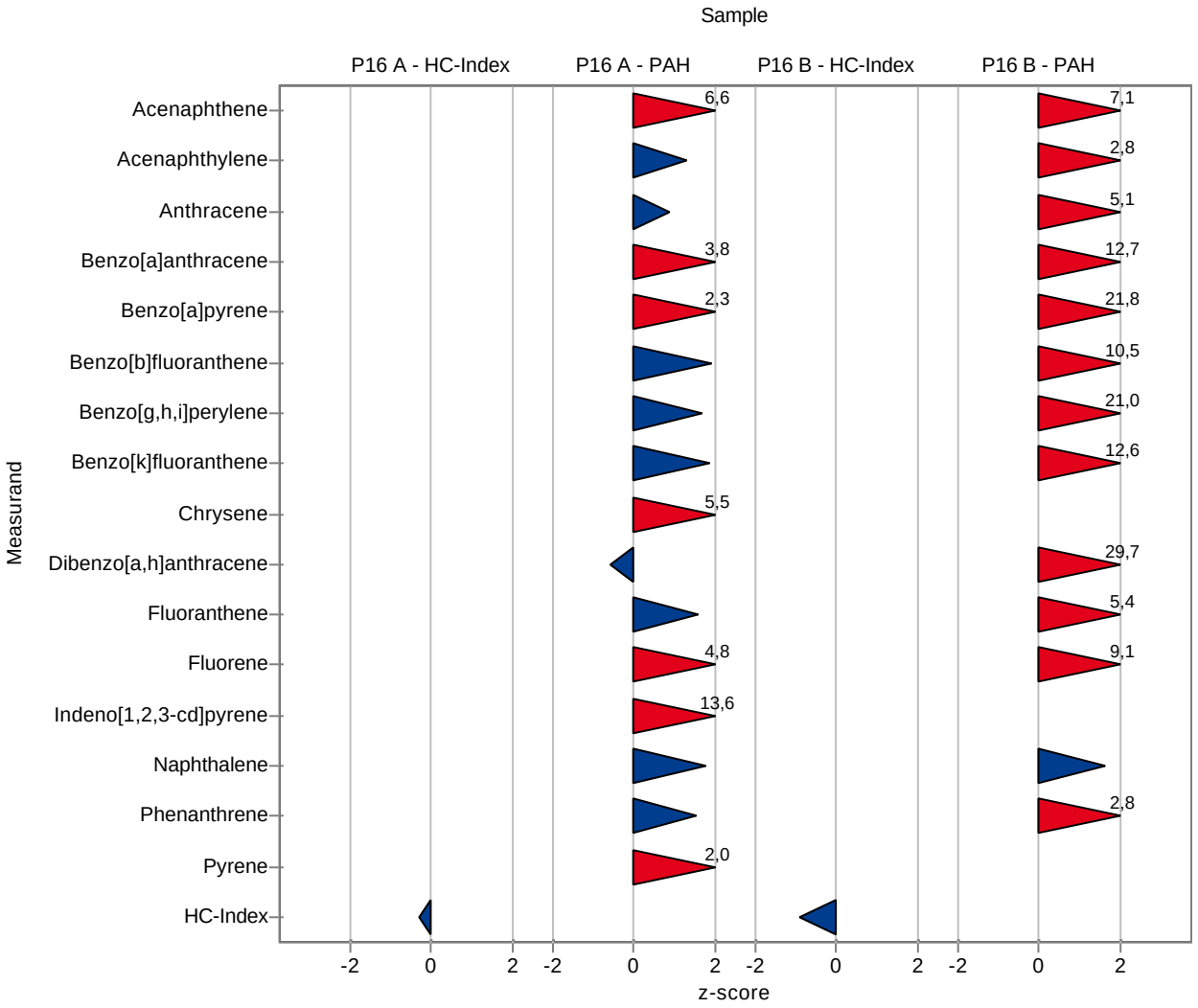
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,18	0,05	0,0653	74,7	-0,93

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	151	38	15,9	407,2	7,15
Acenaphthylene	ng/l	13,7	±	5,58	32,7	8	6,7	239,0	2,84
Anthracene	ng/l	49,8	±	8,97	121	30	14	242,9	5,08
Benzo[a]anthracene	ng/l	16,5	±	4,9	112	28	7,49	677,8	12,75
Benzo[a]pyrene	ng/l	44,6	±	9,21	386	96	15,7	865,9	21,81
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	35	9	2,56	426,9	10,46
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	50,8	13	2,14	872,9	21,00
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	35,4	9	2,25	510,4	12,64

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<20 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	88,2	22	2,71	1130,7	29,72
Fluoranthene	ng/l	21,3	±	4,8	63,6	16	7,84	299,2	5,40
Fluorene	ng/l	38,1	±	9,24	167	42	14,1	438,4	9,14
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<20 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	274	68	58,6	154,4	1,65
Phenanthrene	ng/l	37,3	±	10,5	82	21	15,7	219,6	2,85
Pyrene	ng/l	7,67	±	3,82	<20 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
HC-Index
6,6
3,8
2,3
5,5
4,8
13,6
2,0
7,1
2,8
5,1
12,7
21,8
10,5
21,0
12,6
29,7
5,4
9,1
2,8
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,57	0,057	0,285	74,3	-0,69

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	219	22	50,4	253,2	2,63
Acenaphthylene	ng/l	79,1	±	17,8	31,2	3,12	25,8	39,4	-1,86
Anthracene	ng/l	80,4	±	12,7	82,5	8,3	20,8	102,6	0,10
Benzo[a]anthracene	ng/l	37,8	±	9,1	36,5	3,7	14,2	96,6	-0,09
Benzo[a]pyrene	ng/l	120	±	21,6	124,2	12,5	38,8	103,5	0,11
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	49,8	5	12,8	110,9	0,39
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	54,9	5,5	15,8	116,2	0,48
Benzo[k]fluoranthene	ng/l	53	±	9	57,6	5,8	15,6	108,8	0,30
Chrysene	ng/l	51,4	±	8,2	58,5	5,9	13,1	113,8	0,54
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	64,5	6,5	18,9	114,1	0,42
Fluoranthene	ng/l	110	±	20,5	124,3	12,5	36,7	112,6	0,38
Fluorene	ng/l	276	±	55,2	318,5	31,9	84,3	115,6	0,51
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<3 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	2550	255	816	149,1	1,03
Phenanthrene	ng/l	291	±	44	282,3	28,5	67,2	97,1	-0,13
Pyrene	ng/l	66,3	±	10,1	76,5	7,7	17,2	115,4	0,60

Sample: P16BKWI

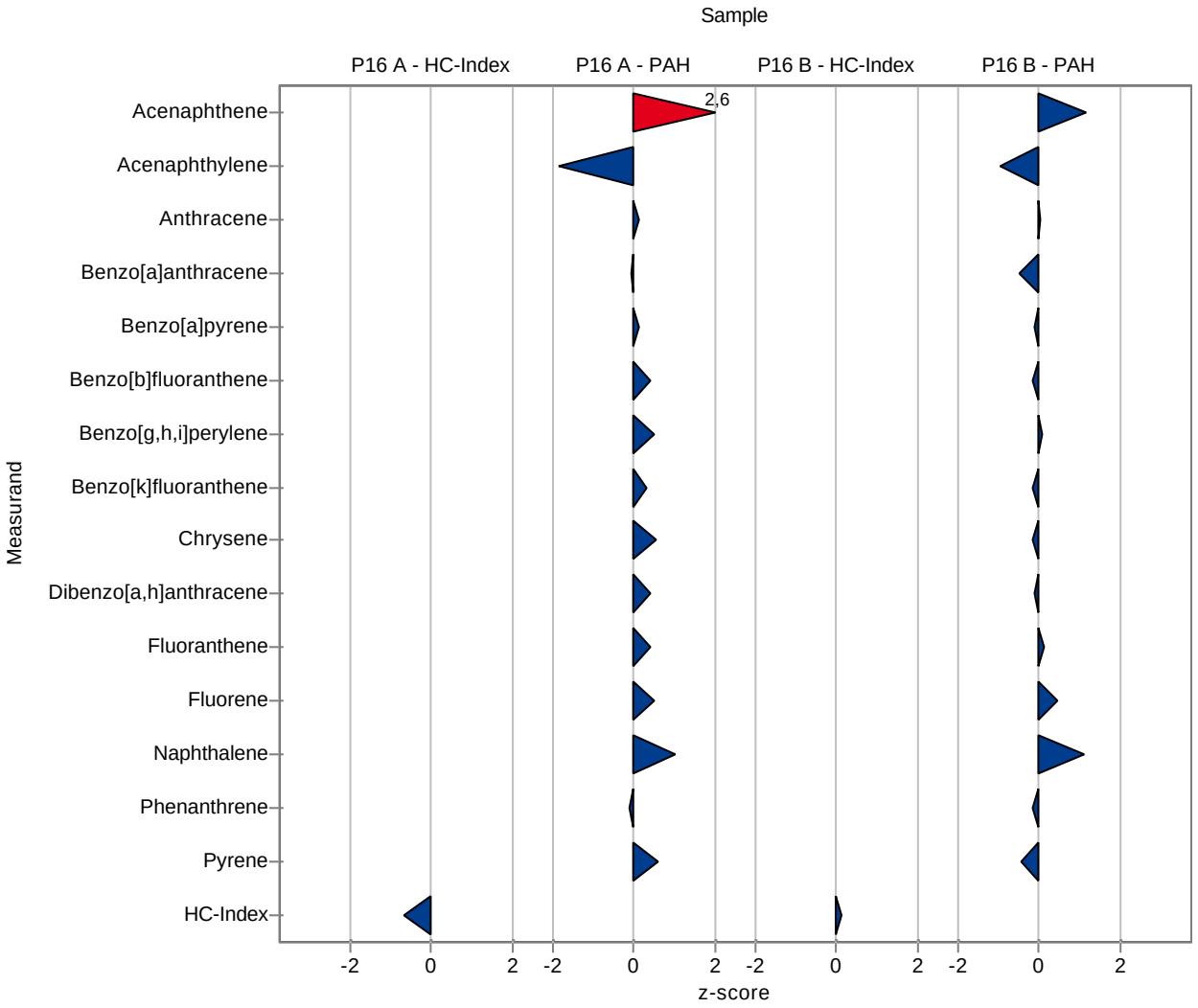
Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,25	0,026	0,0653	103,7	0,14

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	55,2	5,52	15,9	148,8	1,14
Acenaphthylene	ng/l	13,7	±	5,58	7,2	0,72	6,7	52,6	-0,97
Anthracene	ng/l	49,8	±	8,97	50,4	5,1	14	101,2	0,04
Benzo[a]anthracene	ng/l	16,5	±	4,9	12,9	1,3	7,49	78,1	-0,48
Benzo[a]pyrene	ng/l	44,6	±	9,21	42,9	4,3	15,7	96,2	-0,11
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	7,8	0,8	2,56	95,1	-0,16
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	6	0,6	2,14	103,1	0,08
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	6,6	0,7	2,25	95,2	-0,15

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0022

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	4,5	0,5	2,42	91,6	-0,17
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	7,5	0,8	2,71	96,1	-0,11
Fluoranthene	ng/l	21,3	±	4,8	22,2	2,3	7,84	104,5	0,12
Fluorene	ng/l	38,1	±	9,24	44,4	4,5	14,1	116,6	0,45
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<3 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	242,1	24,3	58,6	136,4	1,10
Phenanthrene	ng/l	37,3	±	10,5	35,1	3,51	15,7	94,0	-0,14
Pyrene	ng/l	7,67	±	3,82	5,7	0,6	4,22	74,4	-0,47


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
2,6
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
Measurand
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,572	0,06	0,285	74,6	-0,68

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	136	13,6	50,4	157,2	0,98
Acenaphthylene	ng/l	79,1	±	17,8	103	10,3	25,8	130,2	0,93
Anthracene	ng/l	80,4	±	12,7	71	7,1	20,8	88,3	-0,45
Benzo[a]anthracene	ng/l	37,8	±	9,1	<50 (LOQ)	-	14,2	-	-
Benzo[a]pyrene	ng/l	120	±	21,6	88,6	8,9	38,8	73,8	-0,81
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	<50 (LOQ)	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	<50 (LOQ)	-	15,8	-	-
Benzo[k]fluoranthene	ng/l	53	±	9	<50 (LOQ)	-	15,6	-	-
Chrysene	ng/l	51,4	±	8,2	<50 (LOQ)	-	13,1	-	-
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	<50 (LOQ)	-	18,9	-	-
Fluoranthene	ng/l	110	±	20,5	108	10,8	36,7	97,8	-0,07
Fluorene	ng/l	276	±	55,2	269	26,9	84,3	97,6	-0,08
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<50 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1180	118	816	69,0	-0,65
Phenanthrene	ng/l	291	±	44	264	26,4	67,2	90,8	-0,40
Pyrene	ng/l	66,3	±	10,1	62,6	6,26	17,2	94,4	-0,21

Sample: P16APHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,11	0,011	-	-	-

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,24	0,02	0,0653	99,6	-0,02

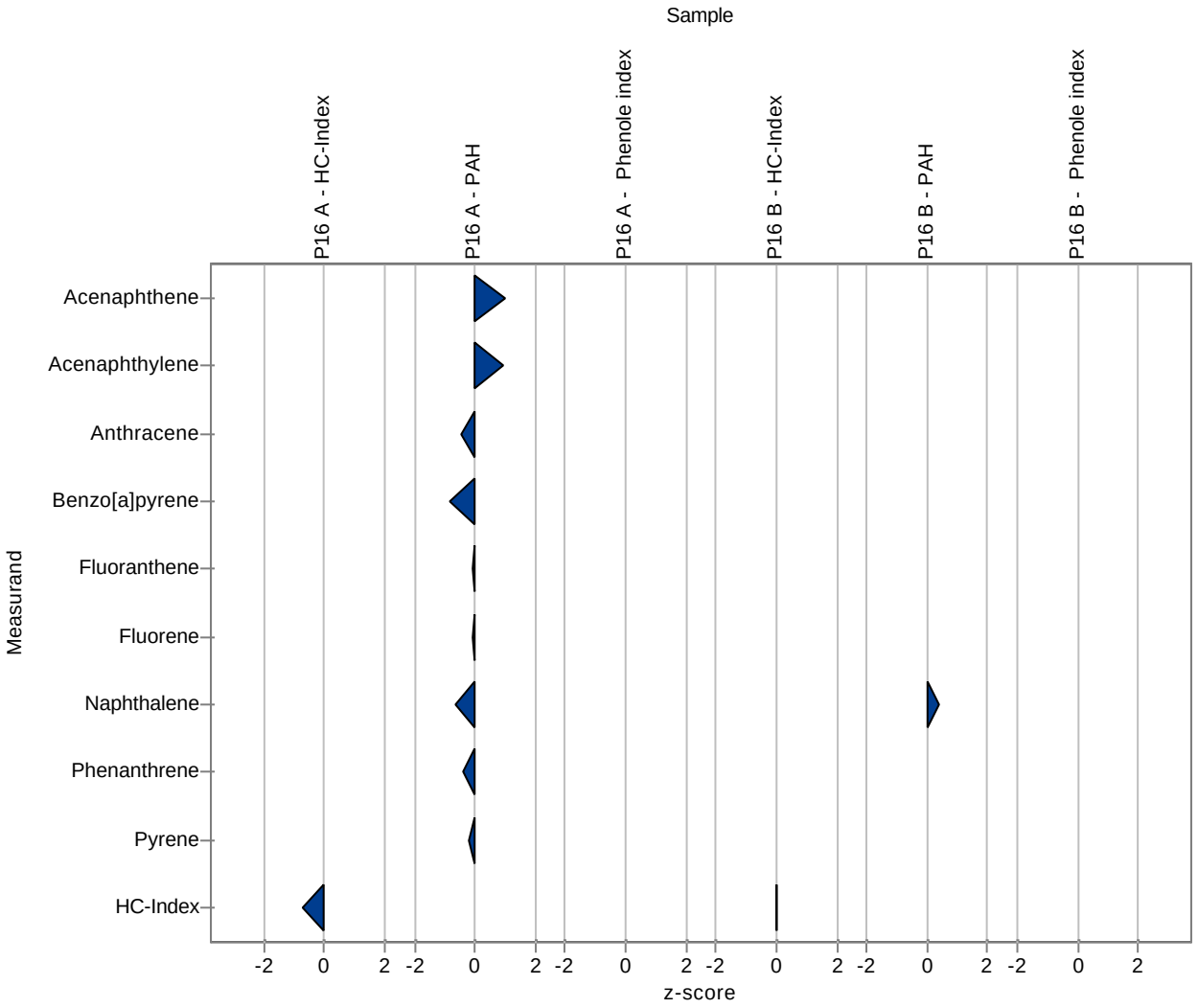
Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	<50 (LOQ)	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	<50 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	<50 (LOQ)	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	±	4,9	<50 (LOQ)	-	7,49	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Benzo[a]pyrene	ng/l	44,6	±	9,21	<50 (LOQ)	-	15,7	-	-
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<50 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<50 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<50 (LOQ)	-	2,25	-	-
Chrysene	ng/l	4,91	±	2,3	<50 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<50 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	<50 (LOQ)	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	<50 (LOQ)	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<50 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	201	20,1	58,6	113,2	0,40
Phenanthrene	ng/l	37,3	±	10,5	<50 (LOQ)	-	15,7	-	-
Pyrene	ng/l	7,67	±	3,82	<50 (LOQ)	-	4,22	-	-

Sample: P16BPHEN

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Phenole index	mg/l	-	±	-	0,0433	0,0043	-	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 A - Phenole index
P16 B - HC-Index
P16 B - PAH
P16 B - Phenole index
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]pyrene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
-2 0 2
z-score

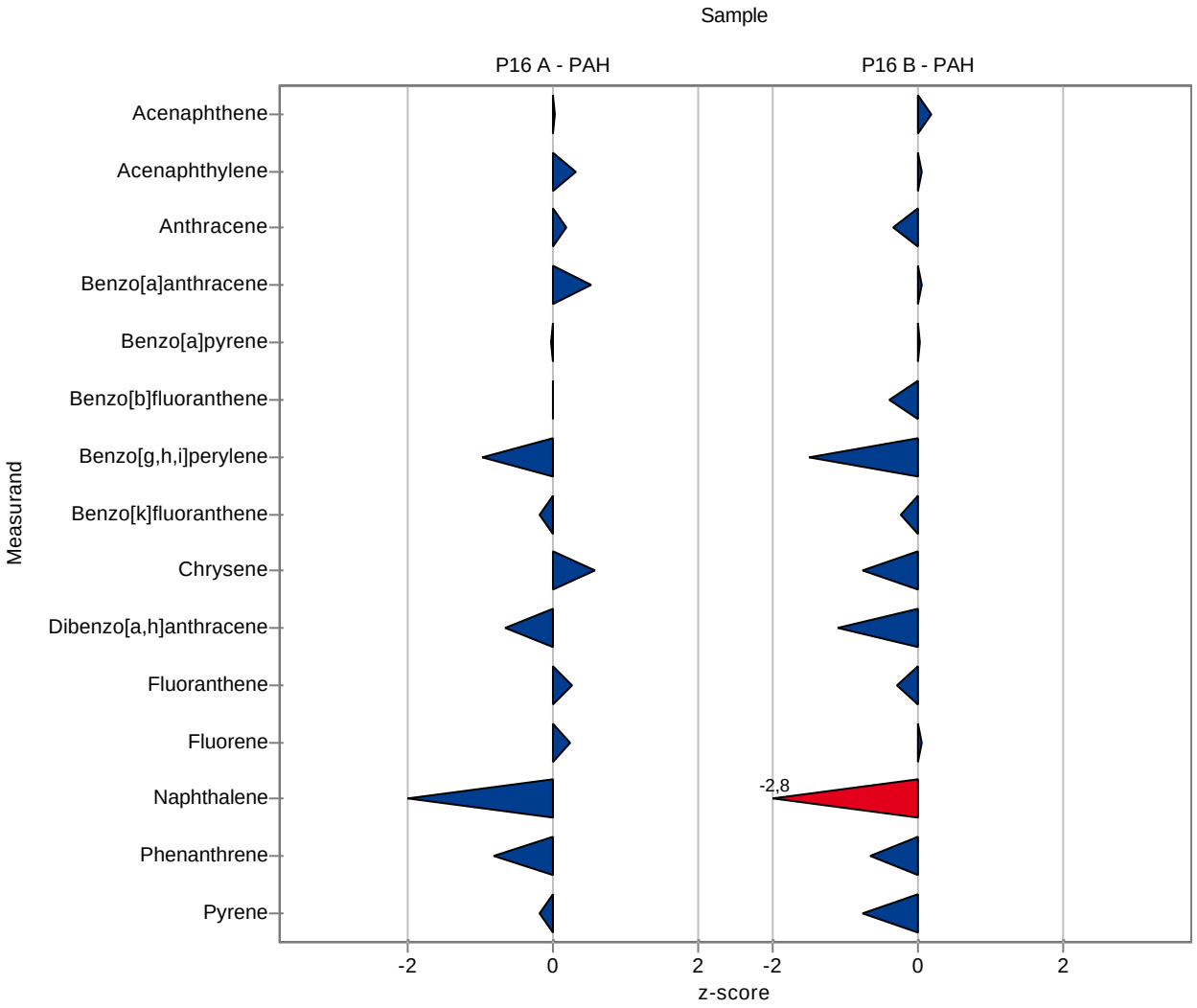
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	88	4,4	50,4	101,7	0,03
Acenaphthylene	ng/l	79,1	± 17,8	87	8,7	25,8	110,0	0,31
Anthracene	ng/l	80,4	± 12,7	84	4,2	20,8	104,5	0,17
Benzo[a]anthracene	ng/l	37,8	± 9,1	45	4,5	14,2	119,2	0,51
Benzo[a]pyrene	ng/l	120	± 21,6	119	24	38,8	99,1	-0,03
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	45	8,9	12,8	100,2	0,01
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	32	6,4	15,8	67,7	-0,96
Benzo[k]fluoranthene	ng/l	53	± 9	50	10	15,6	94,4	-0,19
Chrysene	ng/l	51,4	± 8,2	59	5,9	13,1	114,7	0,58
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	44	8,8	18,9	77,8	-0,66
Fluoranthene	ng/l	110	± 20,5	120	6	36,7	108,7	0,26
Fluorene	ng/l	276	± 55,2	295	30	84,3	107,0	0,23
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<1 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	81	8,1	816	4,7	-2,00
Phenanthrene	ng/l	291	± 44	236	12	67,2	81,2	-0,82
Pyrene	ng/l	66,3	± 10,1	63	3,1	17,2	95,0	-0,19

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	40	2	15,9	107,9	0,18
Acenaphthylene	ng/l	13,7	± 5,58	14	1,4	6,7	102,3	0,05
Anthracene	ng/l	49,8	± 8,97	45	2,3	14	90,3	-0,34
Benzo[a]anthracene	ng/l	16,5	± 4,9	17	1,7	7,49	102,9	0,06
Benzo[a]pyrene	ng/l	44,6	± 9,21	45	8,9	15,7	100,9	0,03
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	7,2	1,4	2,56	87,8	-0,39
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	2,6	0,52	2,14	44,7	-1,50
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	6,4	1,3	2,25	92,3	-0,24
Chrysene	ng/l	4,91	± 2,3	3,1	0,31	2,42	63,1	-0,75
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	4,8	0,96	2,71	61,5	-1,11
Fluoranthene	ng/l	21,3	± 4,8	19	0,94	7,84	89,4	-0,29
Fluorene	ng/l	38,1	± 9,24	39	3,9	14,1	102,4	0,06
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<1 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	11	1,1	58,6	6,2	-2,84
Phenanthrene	ng/l	37,3	± 10,5	27	1,3	15,7	72,3	-0,66
Pyrene	ng/l	7,67	± 3,82	4,5	0,23	4,22	58,7	-0,75


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
-2,8
-2
0
2
-2
0
2
z-score

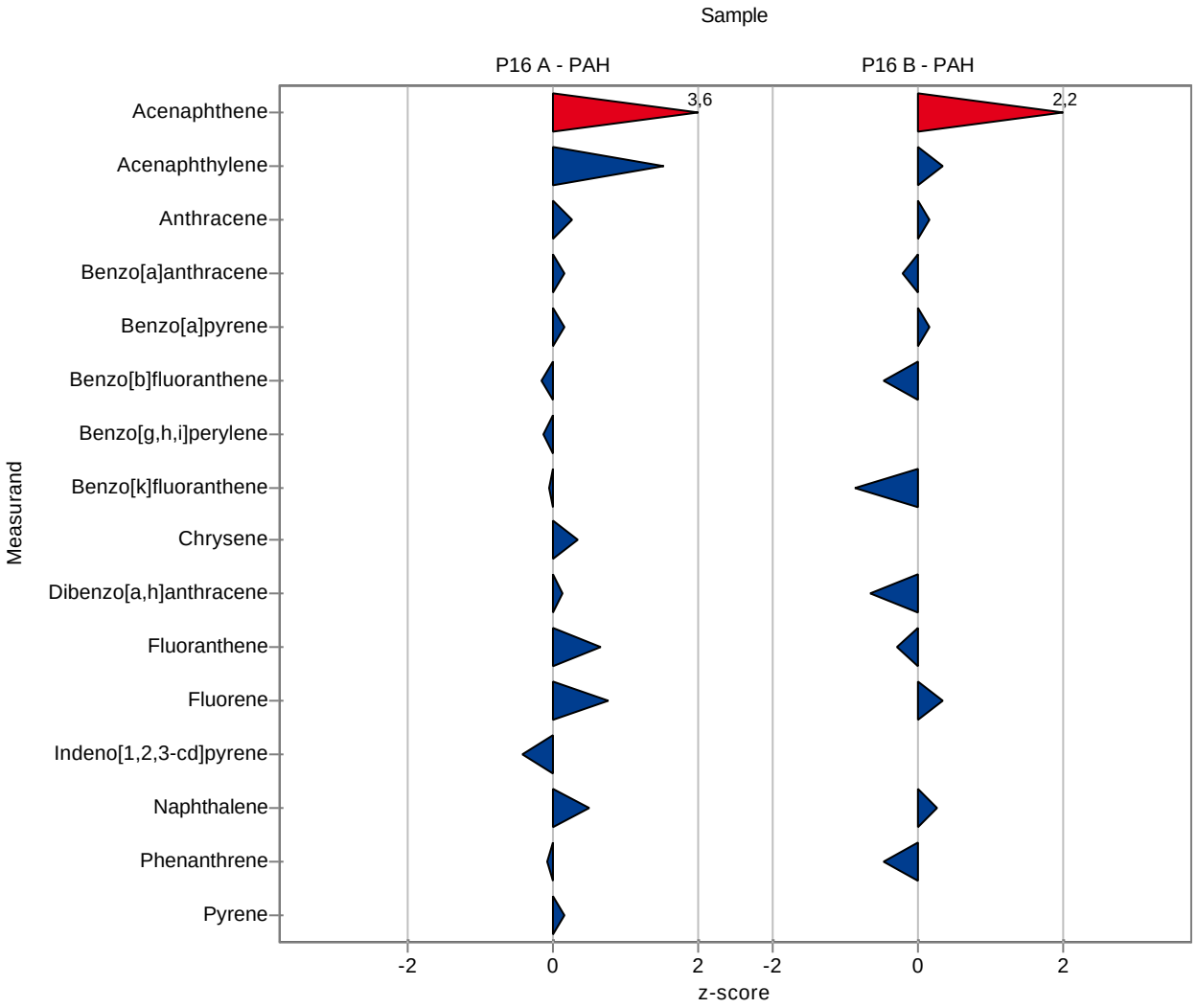
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	269	67	50,4	311,0	3,62
Acenaphthylene	ng/l	79,1	± 17,8	118	30	25,8	149,2	1,51
Anthracene	ng/l	80,4	± 12,7	86	22	20,8	107,0	0,27
Benzo[a]anthracene	ng/l	37,8	± 9,1	40	10	14,2	105,9	0,16
Benzo[a]pyrene	ng/l	120	± 21,6	126	32	38,8	105,0	0,15
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	43	11	12,8	95,8	-0,15
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	45	11	15,8	95,3	-0,14
Benzo[k]fluoranthene	ng/l	53	± 9	52	13	15,6	98,2	-0,06
Chrysene	ng/l	51,4	± 8,2	56	14	13,1	108,9	0,35
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	59	15	18,9	104,4	0,13
Fluoranthene	ng/l	110	± 20,5	134	34	36,7	121,4	0,64
Fluorene	ng/l	276	± 55,2	339	85	84,3	123,0	0,75
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	8	2	1,74	91,4	-0,43
Naphthalene	ng/l	1710	± 489	2118	530	816	123,8	0,50
Phenanthrene	ng/l	291	± 44	285	71	67,2	98,0	-0,09
Pyrene	ng/l	66,3	± 10,1	69	17	17,2	104,1	0,16

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	72	18	15,9	194,1	2,19
Acenaphthylene	ng/l	13,7	± 5,58	16	4	6,7	116,9	0,35
Anthracene	ng/l	49,8	± 8,97	52	13	14	104,4	0,16
Benzo[a]anthracene	ng/l	16,5	± 4,9	15	4	7,49	90,8	-0,20
Benzo[a]pyrene	ng/l	44,6	± 9,21	47	12	15,7	105,4	0,15
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	7	2	2,56	85,4	-0,47
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	<5 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	5	1	2,25	72,1	-0,86
Chrysene	ng/l	4,91	± 2,3	<5 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	6	2	2,71	76,9	-0,67
Fluoranthene	ng/l	21,3	± 4,8	19	5	7,84	89,4	-0,29
Fluorene	ng/l	38,1	± 9,24	43	11	14,1	112,9	0,35
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	193	48	58,6	108,7	0,26
Phenanthrene	ng/l	37,3	± 10,5	30	8	15,7	80,4	-0,47
Pyrene	ng/l	7,67	± 3,82	<5 (LOQ)	-	4,22	-	-


Sample
P16 A - PAH
P16 B - PAH
3,6
2,2
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
Measurand
-2
0
2
-2
0
2
z-score

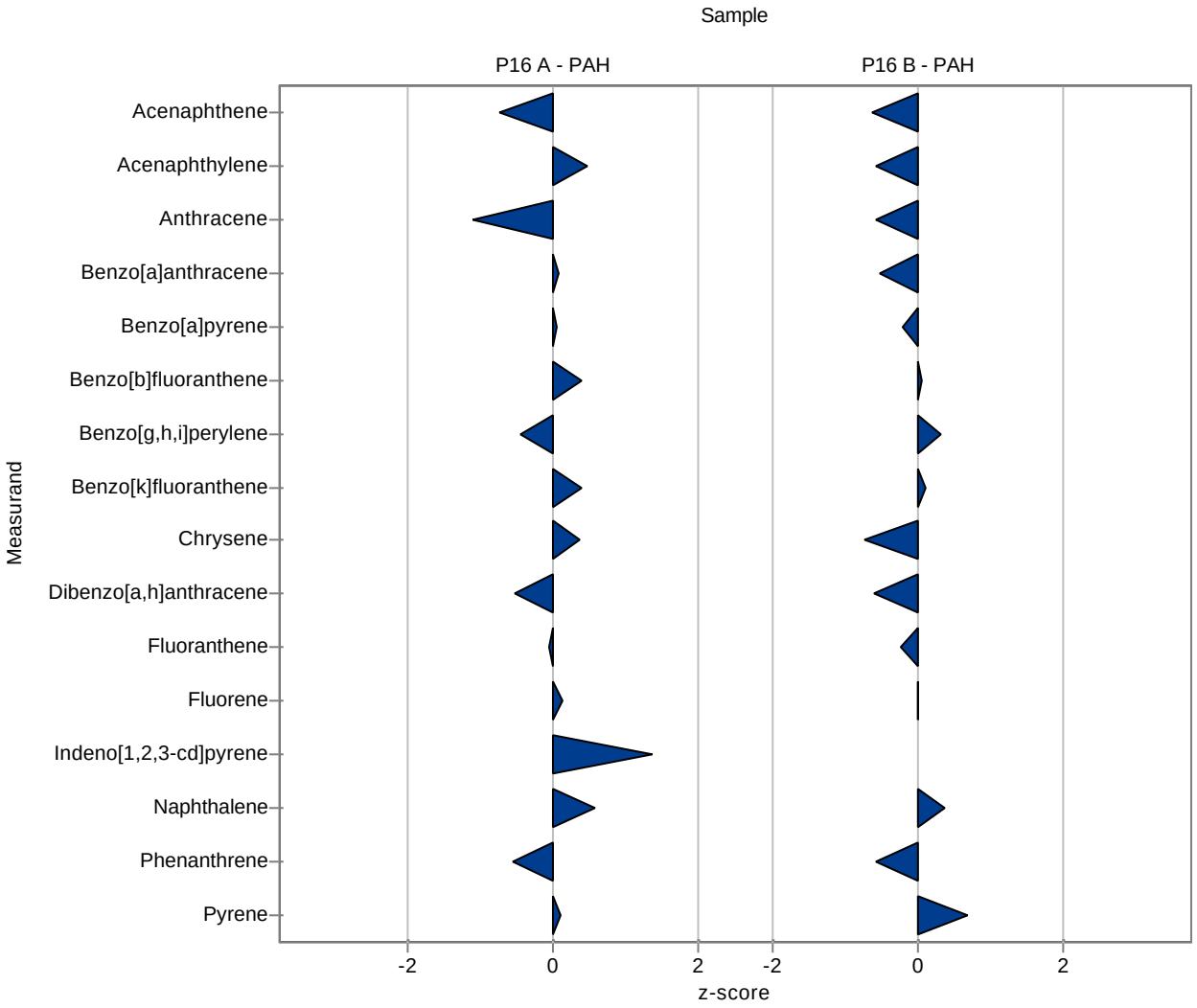
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	50	-	50,4	57,8	-0,72
Acenaphthylene	ng/l	79,1	± 17,8	91,2	-	25,8	115,3	0,47
Anthracene	ng/l	80,4	± 12,7	57,3	-	20,8	71,3	-1,11
Benzo[a]anthracene	ng/l	37,8	± 9,1	38,9	-	14,2	103,0	0,08
Benzo[a]pyrene	ng/l	120	± 21,6	122	-	38,8	101,6	0,05
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	49,9	-	12,8	111,2	0,39
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	40,3	-	15,8	85,3	-0,44
Benzo[k]fluoranthene	ng/l	53	± 9	59	-	15,6	111,4	0,39
Chrysene	ng/l	51,4	± 8,2	56,1	-	13,1	109,1	0,36
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	46,8	-	18,9	82,8	-0,52
Fluoranthene	ng/l	110	± 20,5	108	-	36,7	97,8	-0,07
Fluorene	ng/l	276	± 55,2	286	-	84,3	103,8	0,12
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	11,1	-	1,74	126,9	1,35
Naphthalene	ng/l	1710	± 489	2172	-	816	127,0	0,57
Phenanthrene	ng/l	291	± 44	254	-	67,2	87,3	-0,55
Pyrene	ng/l	66,3	± 10,1	67,9	-	17,2	102,4	0,09

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	26,9	-	15,9	72,5	-0,64
Acenaphthylene	ng/l	13,7	± 5,58	9,79	-	6,7	71,5	-0,58
Anthracene	ng/l	49,8	± 8,97	41,9	-	14	84,1	-0,56
Benzo[a]anthracene	ng/l	16,5	± 4,9	12,6	-	7,49	76,3	-0,52
Benzo[a]pyrene	ng/l	44,6	± 9,21	41,4	-	15,7	92,9	-0,20
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	8,37	-	2,56	102,1	0,07
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	6,51	-	2,14	111,9	0,32
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	7,18	-	2,25	103,5	0,11
Chrysene	ng/l	4,91	± 2,3	3,13	-	2,42	63,7	-0,74
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	6,15	-	2,71	78,8	-0,61
Fluoranthene	ng/l	21,3	± 4,8	19,5	-	7,84	91,8	-0,22
Fluorene	ng/l	38,1	± 9,24	38,2	-	14,1	100,3	0,01
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	2,25	-	-	-	-
Naphthalene	ng/l	178	± 37,5	199	-	58,6	112,1	0,37
Phenanthrene	ng/l	37,3	± 10,5	28,4	-	15,7	76,1	-0,57
Pyrene	ng/l	7,67	± 3,82	10,5	-	4,22	137,0	0,67


Sample
P16 A - PAH
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
-2
0
2
-2
0
2
z-score

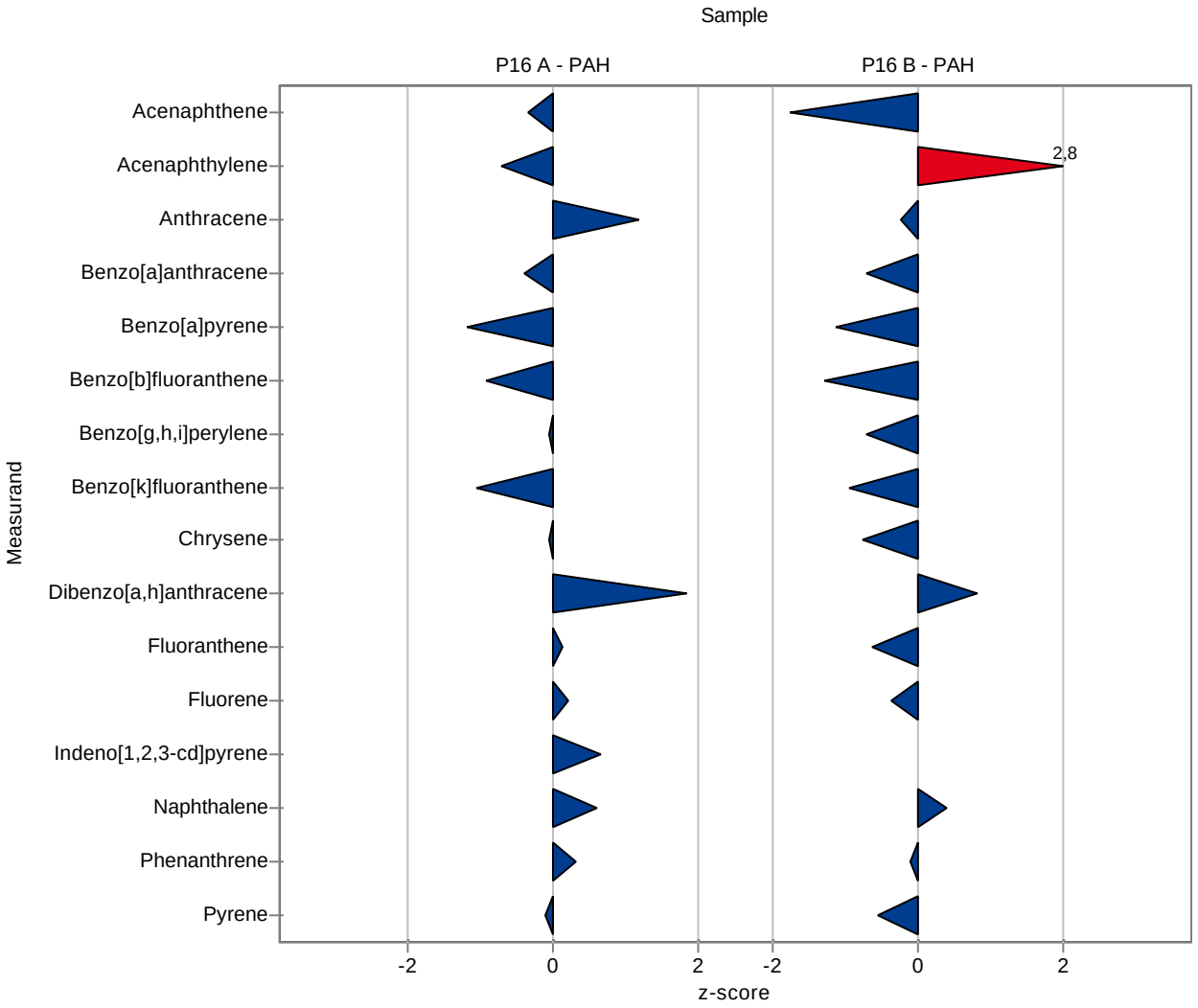
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	68,8	17,2	50,4	79,5	-0,35
Acenaphthylene	ng/l	79,1	± 17,8	60,6	15,2	25,8	76,6	-0,72
Anthracene	ng/l	80,4	± 12,7	105	26,3	20,8	130,6	1,18
Benzo[a]anthracene	ng/l	37,8	± 9,1	32,1	8	14,2	85,0	-0,40
Benzo[a]pyrene	ng/l	120	± 21,6	74,5	18,6	38,8	62,1	-1,17
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	33,1	8,3	12,8	73,7	-0,92
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	46,2	11,6	15,8	97,8	-0,07
Benzo[k]fluoranthene	ng/l	53	± 9	36,4	9,1	15,6	68,7	-1,06
Chrysene	ng/l	51,4	± 8,2	50,8	12,7	13,1	98,8	-0,05
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	91	22,8	18,9	161,0	1,83
Fluoranthene	ng/l	110	± 20,5	115	28,8	36,7	104,2	0,12
Fluorene	ng/l	276	± 55,2	292	73	84,3	106,0	0,19
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	9,9	2,5	1,74	113,1	0,66
Naphthalene	ng/l	1710	± 489	2209	552	816	129,2	0,61
Phenanthrene	ng/l	291	± 44	311	77,8	67,2	106,9	0,30
Pyrene	ng/l	66,3	± 10,1	64,3	16,1	17,2	97,0	-0,12

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	9,1	2,3	15,9	24,5	-1,76
Acenaphthylene	ng/l	13,7	± 5,58	32,4	8,1	6,7	236,8	2,79
Anthracene	ng/l	49,8	± 8,97	46,5	11,6	14	93,4	-0,24
Benzo[a]anthracene	ng/l	16,5	± 4,9	11,3	2,8	7,49	68,4	-0,70
Benzo[a]pyrene	ng/l	44,6	± 9,21	26,9	6,7	15,7	60,3	-1,13
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	4,9	1,2	2,56	59,8	-1,29
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	4,3	1,1	2,14	73,9	-0,71
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	4,8	1,2	2,25	69,2	-0,95
Chrysene	ng/l	4,91	± 2,3	3,1	0,8	2,42	63,1	-0,75
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	10	2,5	2,71	128,2	0,81
Fluoranthene	ng/l	21,3	± 4,8	16,4	4,1	7,84	77,2	-0,62
Fluorene	ng/l	38,1	± 9,24	32,9	8,2	14,1	86,4	-0,37
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	1	0,3	-	-	-
Naphthalene	ng/l	178	± 37,5	200	50	58,6	112,7	0,38
Phenanthrene	ng/l	37,3	± 10,5	35,7	8,9	15,7	95,6	-0,10
Pyrene	ng/l	7,67	± 3,82	5,4	1,4	4,22	70,4	-0,54


Sample
P16 A - PAH
P16 B - PAH
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene
Measurand
2,8
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,7	0,03	0,285	91,3	-0,23

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	97,68	5,798	50,4	112,9	0,22
Acenaphthylene	ng/l	79,1	±	17,8	93,84	6,119	25,8	118,6	0,57
Anthracene	ng/l	80,4	±	12,7	66,4	1,442	20,8	82,6	-0,67
Benzo[a]anthracene	ng/l	37,8	±	9,1	44,99	1,618	14,2	119,1	0,51
Benzo[a]pyrene	ng/l	120	±	21,6	128,58	2,001	38,8	107,1	0,22
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	51,87	2,648	12,8	115,6	0,55
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	39,21	1,647	15,8	83,0	-0,51
Benzo[k]fluoranthene	ng/l	53	±	9	62,19	4,854	15,6	117,4	0,59
Chrysene	ng/l	51,4	±	8,2	55,06	4,589	13,1	107,1	0,28
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	58,37	4,001	18,9	103,3	0,10
Fluoranthene	ng/l	110	±	20,5	147,84	1,824	36,7	133,9	1,02
Fluorene	ng/l	276	±	55,2	257,23	15,445	84,3	93,3	-0,22
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	2130	21,712	816	124,5	0,51
Phenanthrene	ng/l	291	±	44	282,61	1,559	67,2	97,2	-0,12
Pyrene	ng/l	66,3	±	10,1	80,39	2,295	17,2	121,3	0,82

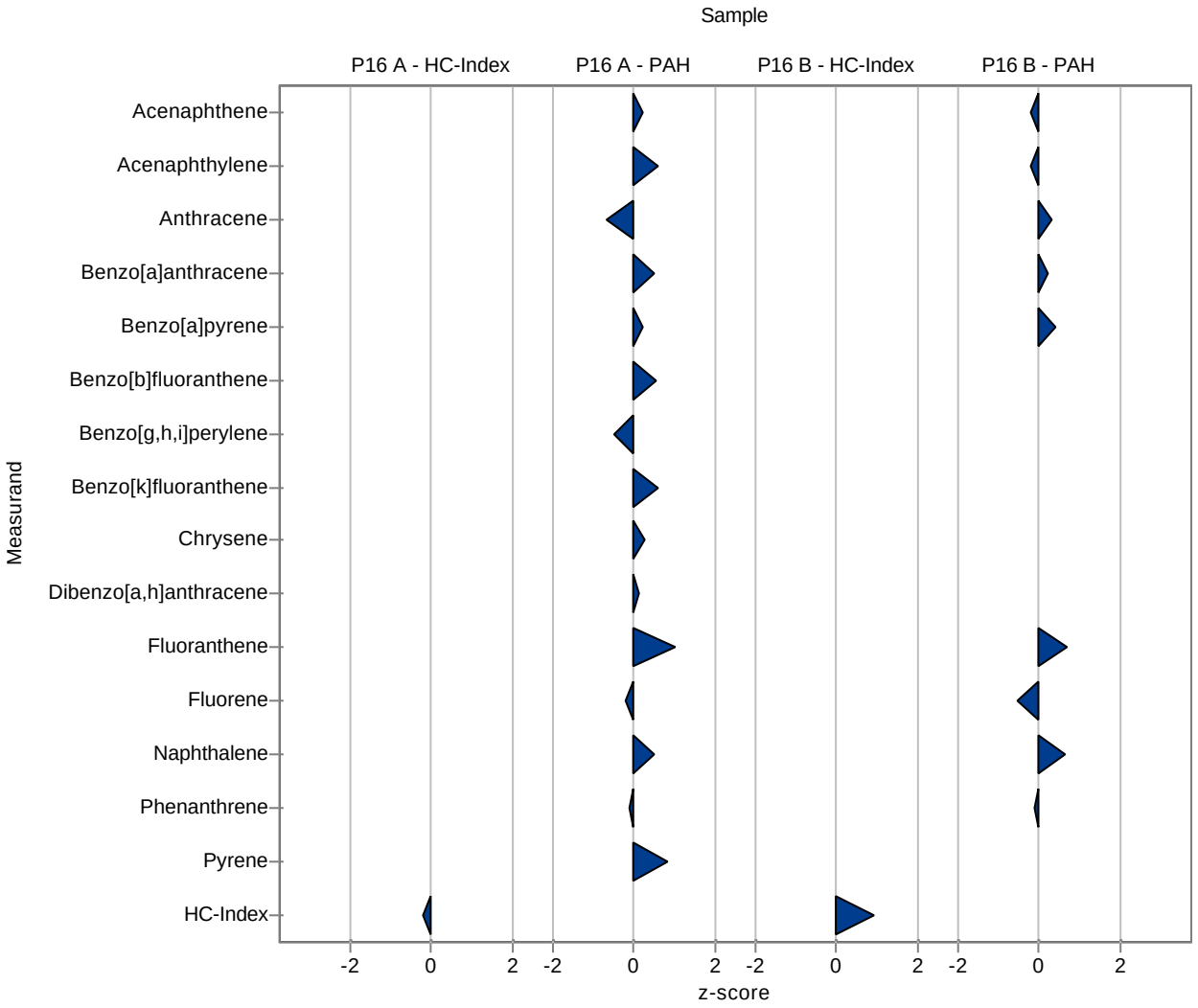
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,3	0,01	0,0653	124,5	0,90

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	33,81	0,212	15,9	91,2	-0,21
Acenaphthylene	ng/l	13,7	±	5,58	12,21	0,666	6,7	89,2	-0,22
Anthracene	ng/l	49,8	±	8,97	54,12	0,121	14	108,7	0,31
Benzo[a]anthracene	ng/l	16,5	±	4,9	17,95	0,242	7,49	108,6	0,19
Benzo[a]pyrene	ng/l	44,6	±	9,21	50,5	1,514	15,7	113,3	0,38
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<20 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<20 (LOQ)	-	2,25	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<30 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<10 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	26,57	3,604	7,84	125,0	0,68
Fluorene	ng/l	38,1	±	9,24	30,56	1,09	14,1	80,2	-0,53
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	215,55	2,634	58,6	121,4	0,65
Phenanthrene	ng/l	37,3	±	10,5	35,29	3,847	15,7	94,5	-0,13
Pyrene	ng/l	7,67	±	3,82	<10 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,51	0,084	0,285	66,5	-0,90

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	112	22	50,4	129,5	0,51
Acenaphthylene	ng/l	79,1	±	17,8	103	26	25,8	130,2	0,93
Anthracene	ng/l	80,4	±	12,7	92	9,3	20,8	114,4	0,56
Benzo[a]anthracene	ng/l	37,8	±	9,1	72	9	14,2	190,7	2,41
Benzo[a]pyrene	ng/l	120	±	21,6	128	32	38,8	106,6	0,21
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	60	9	12,8	133,7	1,18
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	46	7,8	15,8	97,4	-0,08
Benzo[k]fluoranthene	ng/l	53	±	9	56	8,4	15,6	105,7	0,20
Chrysene	ng/l	51,4	±	8,2	74	8,7	13,1	143,9	1,72
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	70	18	18,9	123,8	0,71
Fluoranthene	ng/l	110	±	20,5	130	27	36,7	117,7	0,53
Fluorene	ng/l	276	±	55,2	313	81	84,3	113,6	0,44
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<1 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	2553	383	816	149,3	1,03
Phenanthrene	ng/l	291	±	44	367	43	67,2	126,2	1,13
Pyrene	ng/l	66,3	±	10,1	90	23	17,2	135,8	1,38

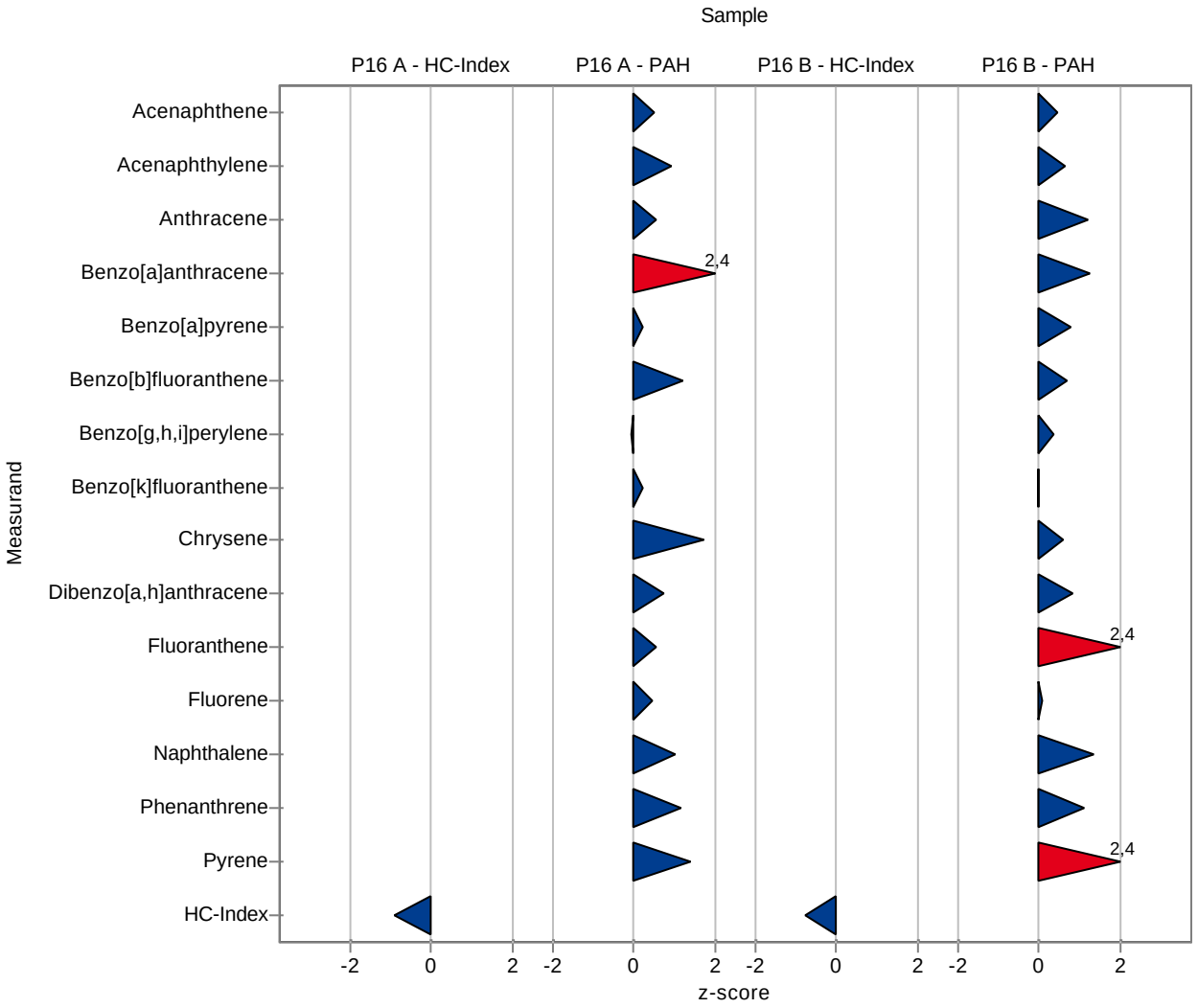
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,19	0,032	0,0653	78,8	-0,78

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	44	8,8	15,9	118,6	0,43
Acenaphthylene	ng/l	13,7	±	5,58	18	4,5	6,7	131,5	0,64
Anthracene	ng/l	49,8	±	8,97	67	6,8	14	134,5	1,23
Benzo[a]anthracene	ng/l	16,5	±	4,9	26	3,2	7,49	157,4	1,27
Benzo[a]pyrene	ng/l	44,6	±	9,21	57	14	15,7	127,9	0,79
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	10	1,4	2,56	122,0	0,70
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	6,6	1,1	2,14	113,4	0,36
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	6,9	1	2,25	99,5	-0,02

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	6,3	0,73	2,42	128,3	0,57
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	10	2,4	2,71	128,2	0,81
Fluoranthene	ng/l	21,3	±	4,8	40	8,2	7,84	188,2	2,39
Fluorene	ng/l	38,1	±	9,24	39	10	14,1	102,4	0,06
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	1,6	0,19	-	-	-
Naphthalene	ng/l	178	±	37,5	255	38	58,6	143,6	1,32
Phenanthrene	ng/l	37,3	±	10,5	55	6,4	15,7	147,3	1,13
Pyrene	ng/l	7,67	±	3,82	18	4,7	4,22	234,8	2,45


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
HC-Index
2,4
2,4
2,4
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,5	0,009	0,285	65,2	-0,93

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	-	-	50,4	-	-
Acenaphthylene	ng/l	79,1	±	17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	±	12,7	-	-	20,8	-	-
Benzo[a]anthracene	ng/l	37,8	±	9,1	23	9,99994	14,2	60,9	-1,04
Benzo[a]pyrene	ng/l	120	±	21,6	126	15,0003	38,8	105,0	0,15
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	<61 (LOQ)	-	12,8	-	-
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	87	35,0001	15,8	184,2	2,51
Benzo[k]fluoranthene	ng/l	53	±	9	67	16,00027	15,6	126,5	0,90
Chrysene	ng/l	51,4	±	8,2	37	12,99995	13,1	71,9	-1,10
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	-	-	18,9	-	-
Fluoranthene	ng/l	110	±	20,5	64	9,00032	36,7	58,0	-1,26
Fluorene	ng/l	276	±	55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	-	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	-	-	816	-	-
Phenanthrene	ng/l	291	±	44	-	-	67,2	-	-
Pyrene	ng/l	66,3	±	10,1	30	6	17,2	45,3	-2,11

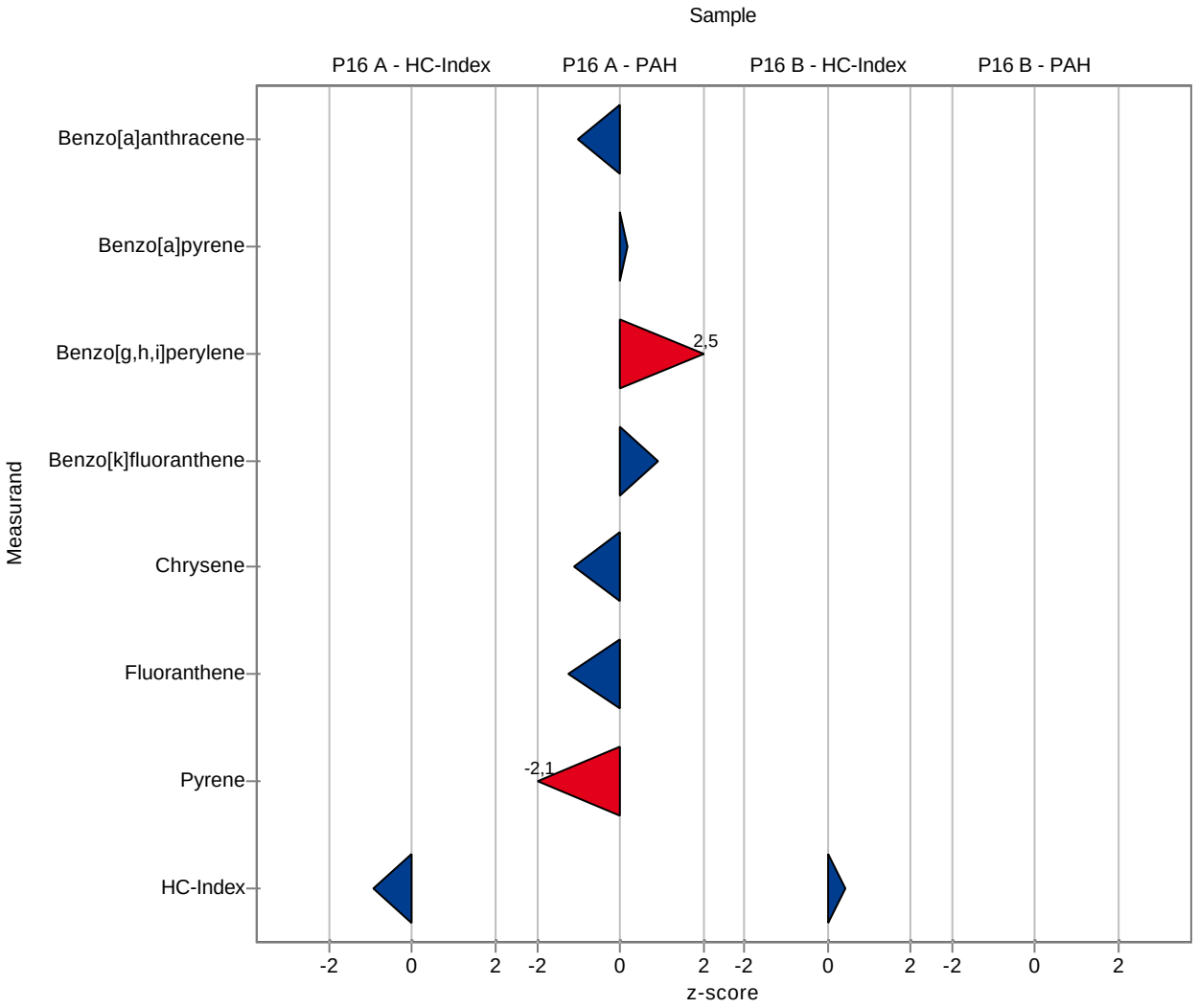
Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,27	0,008999999	0,0653	112,0	0,44

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	-	-	15,9	-	-
Acenaphthylene	ng/l	13,7	±	5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	-	-	14	-	-
Benzo[a]anthracene	ng/l	16,5	±	4,9	<20 (LOQ)	-	7,49	-	-
Benzo[a]pyrene	ng/l	44,6	±	9,21	<29 (LOQ)	-	15,7	-	-
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<61 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<70 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<33 (LOQ)	-	2,25	-	-

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<26 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	-	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	<18 (LOQ)	-	7,84	-	-
Fluorene	ng/l	38,1	±	9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	-	-	-	-	-
Naphthalene	ng/l	178	±	37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	±	10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	±	3,82	<12 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Fluoranthene
Pyrene
HC-Index
2,5
-2,1
-2
0
2
z-score

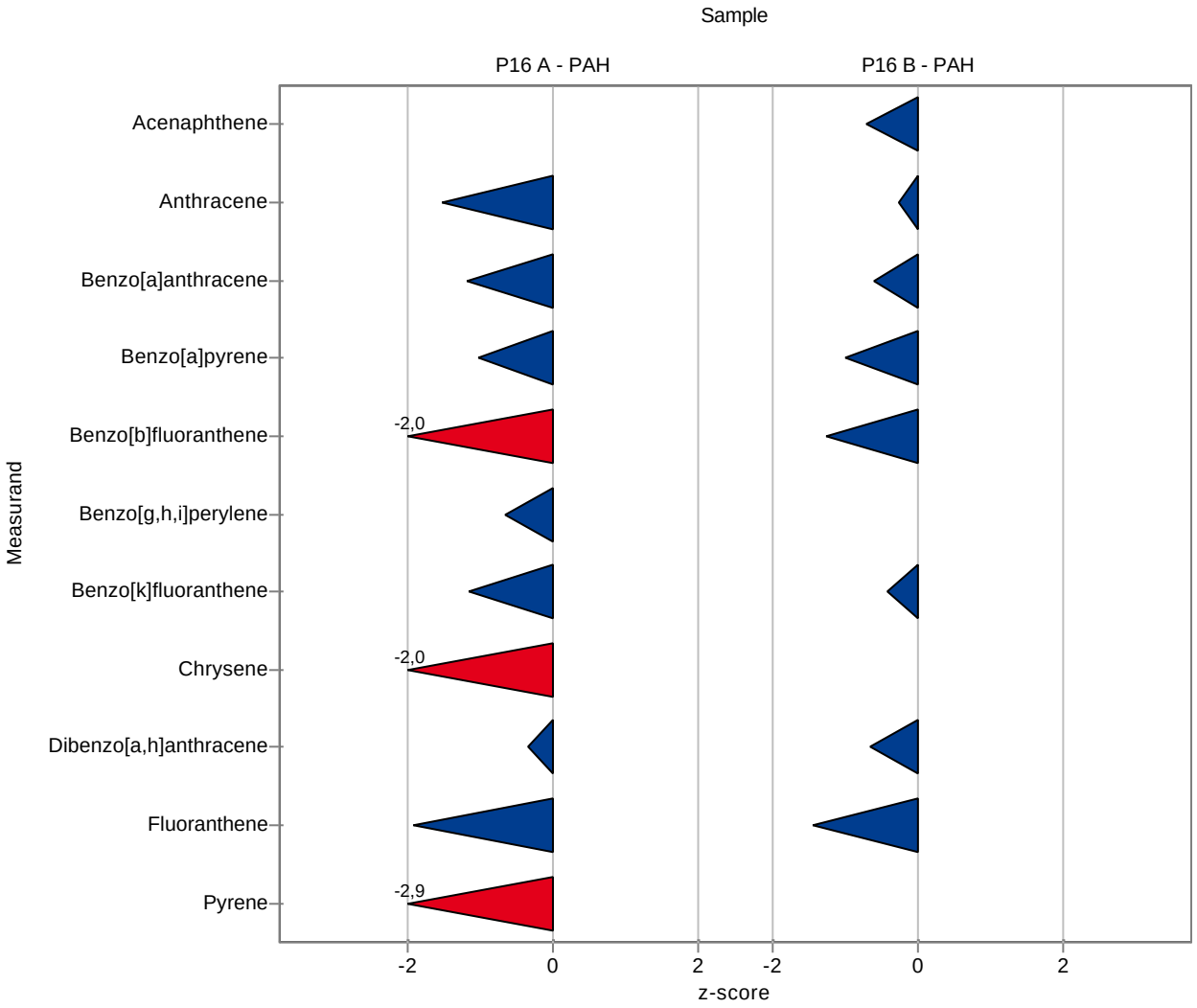
The following results were achieved:

Sample: P16APAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	± 34,7	<5 (LOQ)	-	50,4	-	-
Acenaphthylene	ng/l	79,1	± 17,8	-	-	25,8	-	-
Anthracene	ng/l	80,4	± 12,7	49	10	20,8	60,9	-1,51
Benzo[a]anthracene	ng/l	37,8	± 9,1	21	4	14,2	55,6	-1,18
Benzo[a]pyrene	ng/l	120	± 21,6	80	16	38,8	66,6	-1,03
Benzo[b]fluoranthene	ng/l	44,9	± 7,65	19	4	12,8	42,3	-2,03
Benzo[g,h,i]perylene	ng/l	47,2	± 9,13	37	8	15,8	78,3	-0,65
Benzo[k]fluoranthene	ng/l	53	± 9	35	7	15,6	66,1	-1,15
Chrysene	ng/l	51,4	± 8,2	25	5	13,1	48,6	-2,01
Dibenzo[a,h]anthracene	ng/l	56,5	± 11,6	50	10	18,9	88,4	-0,35
Fluoranthene	ng/l	110	± 20,5	40	8	36,7	36,2	-1,92
Fluorene	ng/l	276	± 55,2	-	-	84,3	-	-
Indeno[1,2,3-cd]pyrene	ng/l	8,75	± 2,13	<5 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	± 489	-	-	816	-	-
Phenanthrene	ng/l	291	± 44	-	-	67,2	-	-
Pyrene	ng/l	66,3	± 10,1	16	3	17,2	24,1	-2,93

Sample: P16BPAK

Parameter	Unit	Target	± CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	± 11	26	5	15,9	70,1	-0,70
Acenaphthylene	ng/l	13,7	± 5,58	-	-	6,7	-	-
Anthracene	ng/l	49,8	± 8,97	46	9	14	92,4	-0,27
Benzo[a]anthracene	ng/l	16,5	± 4,9	12	3	7,49	72,6	-0,60
Benzo[a]pyrene	ng/l	44,6	± 9,21	29	6	15,7	65,1	-1,00
Benzo[b]fluoranthene	ng/l	8,2	± 1,87	5	2	2,56	61,0	-1,25
Benzo[g,h,i]perylene	ng/l	5,82	± 1,72	<5 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	± 1,64	6	2	2,25	86,5	-0,42
Chrysene	ng/l	4,91	± 2,3	<5 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	± 1,97	6	2	2,71	76,9	-0,67
Fluoranthene	ng/l	21,3	± 4,8	10	3	7,84	47,1	-1,44
Fluorene	ng/l	38,1	± 9,24	-	-	14,1	-	-
Indeno[1,2,3-cd]pyrene	ng/l	-	± -	<5 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	± 37,5	-	-	58,6	-	-
Phenanthrene	ng/l	37,3	± 10,5	-	-	15,7	-	-
Pyrene	ng/l	7,67	± 3,82	<5 (LOQ)	-	4,22	-	-


Sample
P16 A - PAH
P16 B - PAH
Acenaphthene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Pyrene
Measurand
-2,0
-2,0
-2,9
-2
0
2
-2
0
2
z-score

The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	-	-	0,285	-	-

Sample: P16APAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	86,5	±	34,7	53	11	50,4	61,3	-0,66
Acenaphthylene	ng/l	79,1	±	17,8	74	15	25,8	93,6	-0,20
Anthracene	ng/l	80,4	±	12,7	87	17	20,8	108,2	0,32
Benzo[a]anthracene	ng/l	37,8	±	9,1	37	7,4	14,2	98,0	-0,05
Benzo[a]pyrene	ng/l	120	±	21,6	107	21	38,8	89,1	-0,34
Benzo[b]fluoranthene	ng/l	44,9	±	7,65	40	8	12,8	89,1	-0,38
Benzo[g,h,i]perylene	ng/l	47,2	±	9,13	48	10	15,8	101,6	0,05
Benzo[k]fluoranthene	ng/l	53	±	9	48	10	15,6	90,6	-0,32
Chrysene	ng/l	51,4	±	8,2	48	10	13,1	93,3	-0,26
Dibenzo[a,h]anthracene	ng/l	56,5	±	11,6	62	12	18,9	109,7	0,29
Fluoranthene	ng/l	110	±	20,5	95	19	36,7	86,0	-0,42
Fluorene	ng/l	276	±	55,2	264	53	84,3	95,8	-0,14
Indeno[1,2,3-cd]pyrene	ng/l	8,75	±	2,13	<10 (LOQ)	-	1,74	-	-
Naphthalene	ng/l	1710	±	489	1300	259	816	76,0	-0,50
Phenanthrene	ng/l	291	±	44	255	51	67,2	87,7	-0,53
Pyrene	ng/l	66,3	±	10,1	63	13	17,2	95,0	-0,19

Sample: P16BKWI

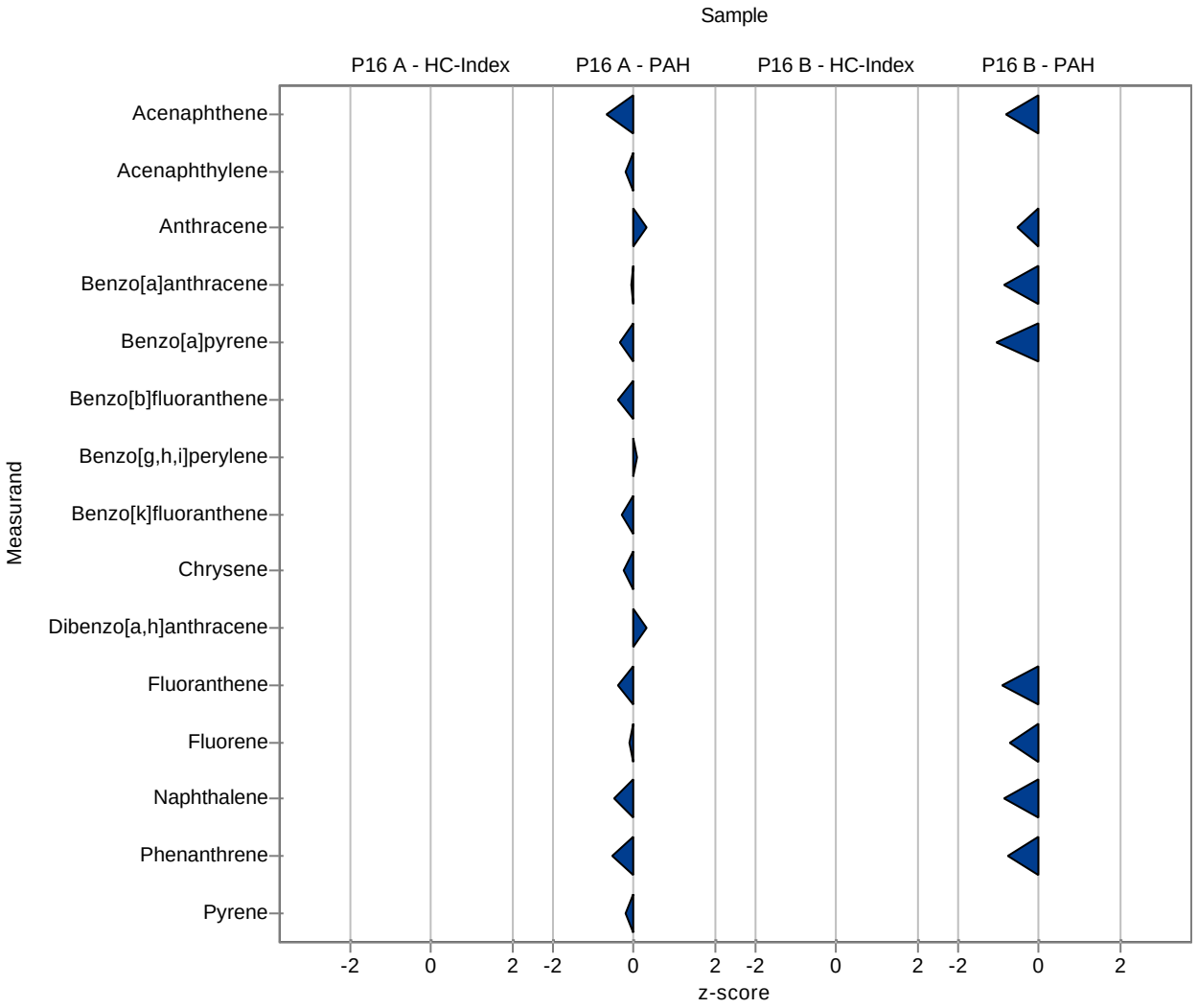
Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	-	-	0,0653	-	-

Sample: P16BPAK

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Acenaphthene	ng/l	37,1	±	11	24	4,7	15,9	64,7	-0,82
Acenaphthylene	ng/l	13,7	±	5,58	<10 (LOQ)	-	6,7	-	-
Anthracene	ng/l	49,8	±	8,97	42	8,4	14	84,3	-0,56
Benzo[a]anthracene	ng/l	16,5	±	4,9	10	2,1	7,49	60,5	-0,87
Benzo[a]pyrene	ng/l	44,6	±	9,21	28	5,5	15,7	62,8	-1,06
Benzo[b]fluoranthene	ng/l	8,2	±	1,87	<10 (LOQ)	-	2,56	-	-
Benzo[g,h,i]perylene	ng/l	5,82	±	1,72	<10 (LOQ)	-	2,14	-	-
Benzo[k]fluoranthene	ng/l	6,94	±	1,64	<10 (LOQ)	-	2,25	-	-

Summary of results Polycyclic Aromatic Hydrocarbons - P16 Laborcode: LC0032

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
Chrysene	ng/l	4,91	±	2,3	<10 (LOQ)	-	2,42	-	-
Dibenzo[a,h]anthracene	ng/l	7,8	±	1,97	<10 (LOQ)	-	2,71	-	-
Fluoranthene	ng/l	21,3	±	4,8	14	2,8	7,84	65,9	-0,93
Fluorene	ng/l	38,1	±	9,24	28	5,6	14,1	73,5	-0,72
Indeno[1,2,3-cd]pyrene	ng/l	-	±	-	<10 (LOQ)	-	-	-	-
Naphthalene	ng/l	178	±	37,5	127	25	58,6	71,5	-0,86
Phenanthrene	ng/l	37,3	±	10,5	25	5	15,7	67,0	-0,79
Pyrene	ng/l	7,67	±	3,82	<10 (LOQ)	-	4,22	-	-


Sample
P16 A - HC-Index
P16 A - PAH
P16 B - HC-Index
P16 B - PAH
Measurand
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenzo[a,h]anthracene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene
-2
0
2
z-score

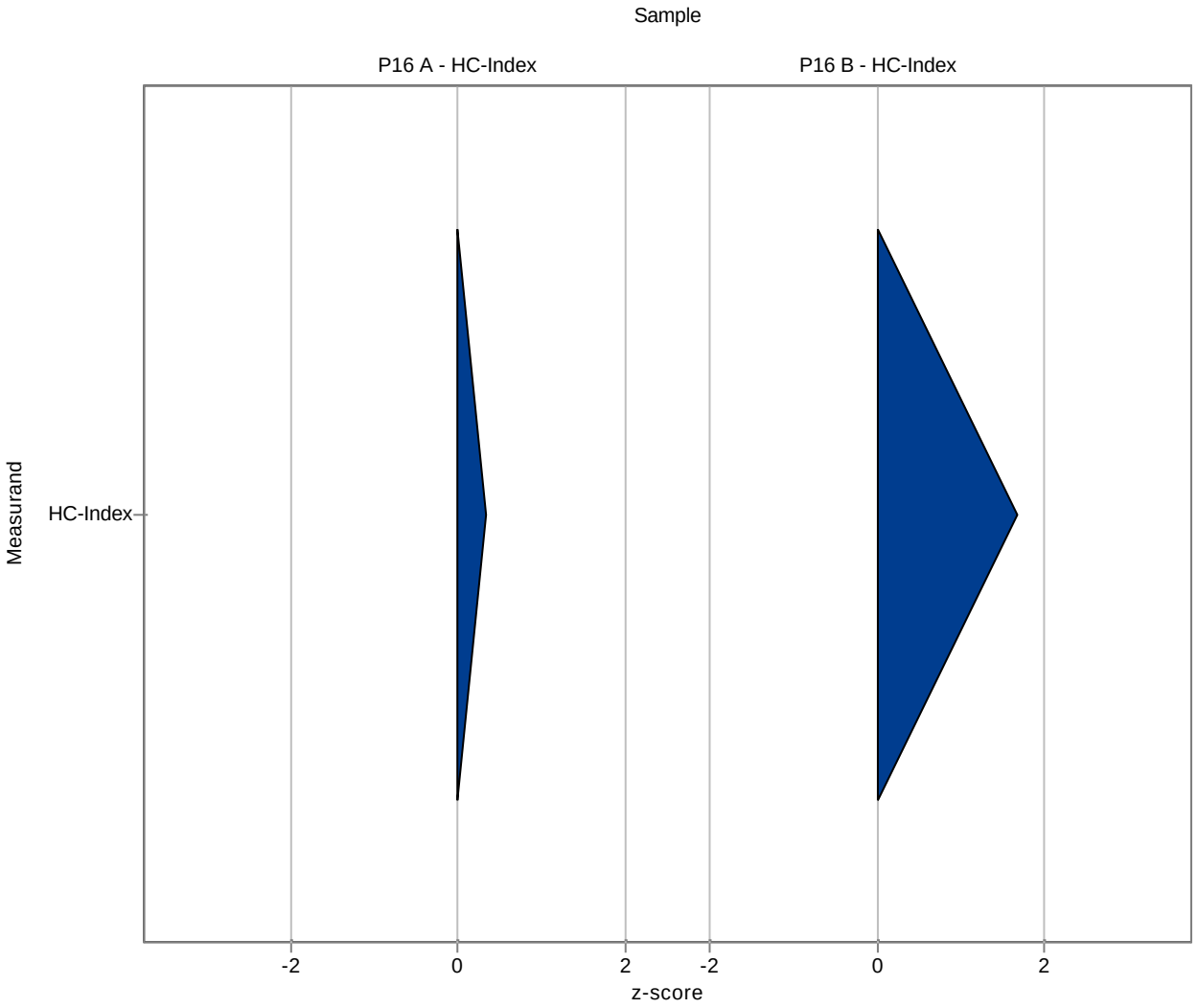
The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,86	0,086	0,285	112,2	0,33

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,35	0,035	0,0653	145,2	1,67


Sample
P16 A - HC-Index
P16 B - HC-Index
Measurand
HC-Index
-2
0
2
-2
0
2
z-score

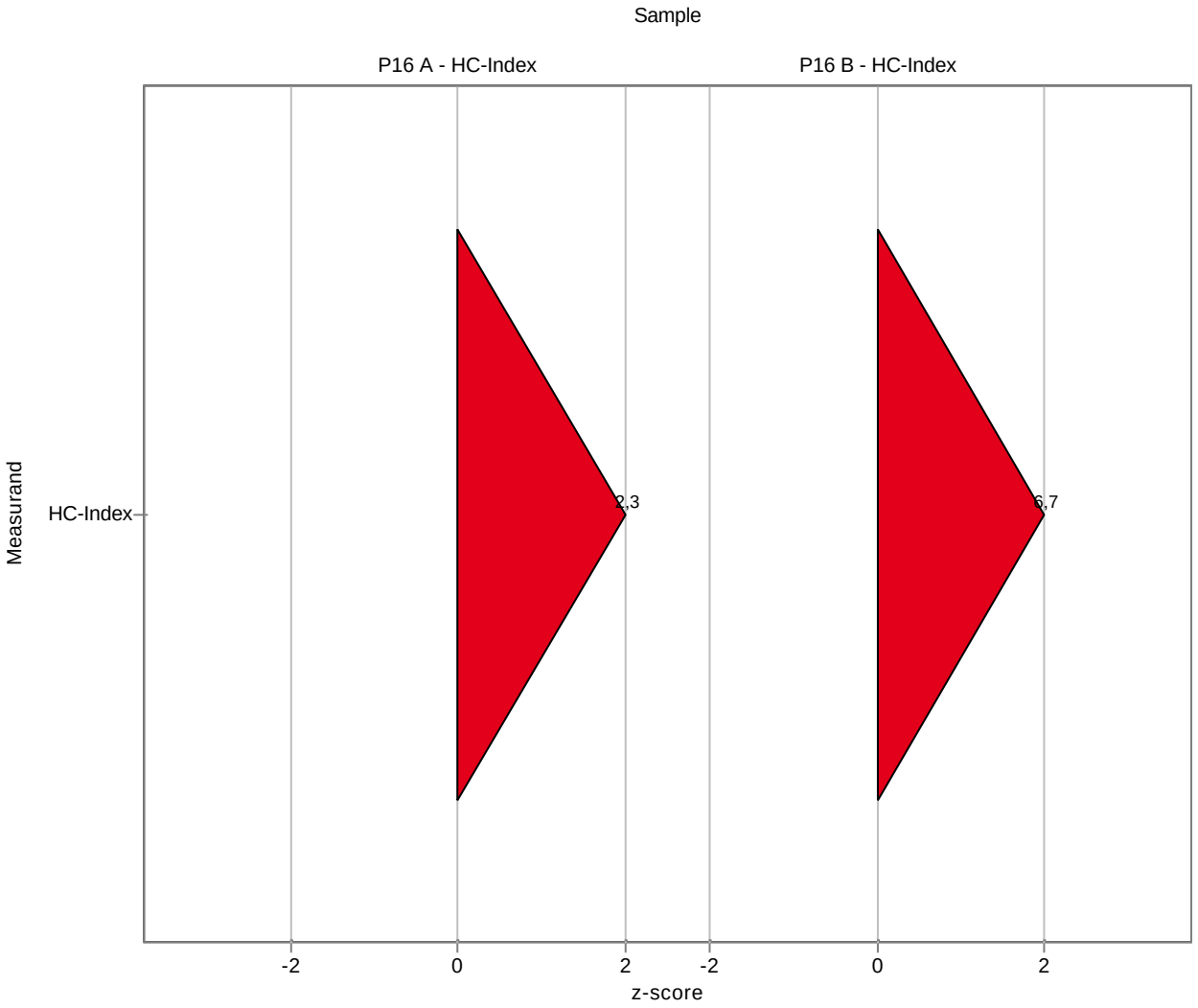
The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	1,42	0,2556	0,285	185,2	2,29

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,68	0,1224	0,0653	282,1	6,72


Sample
P16 A - HC-Index
P16 B - HC-Index
Measurand
HC-Index
2,3
6,7
-2
0
2
-2
0
2
z-score

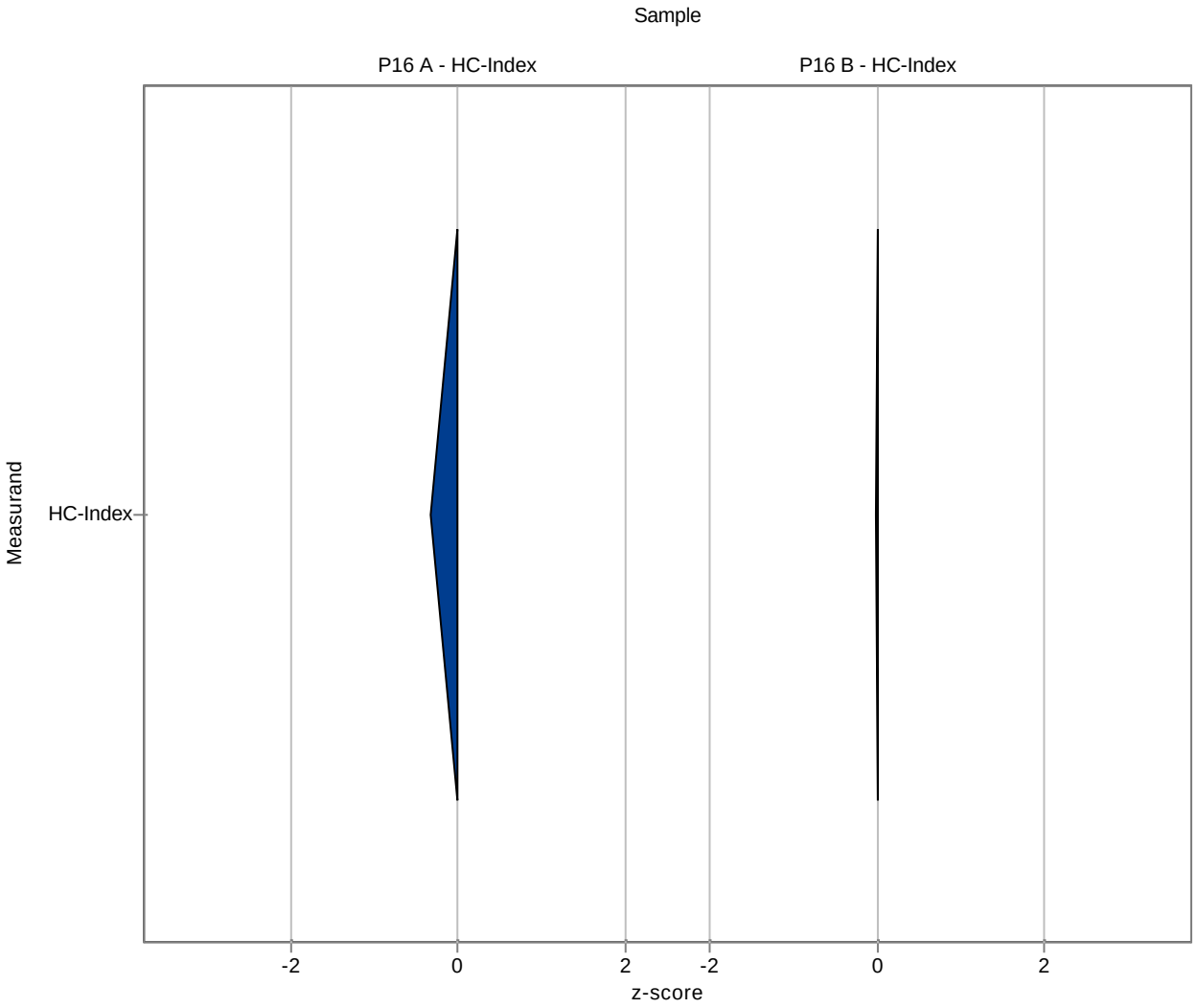
The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,67	0,1005	0,285	87,4	-0,34

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,24	0,036	0,0653	99,6	-0,02


Sample
P16 A - HC-Index
P16 B - HC-Index
Measurand
HC-Index
-2
0
2
-2
0
2
z-score

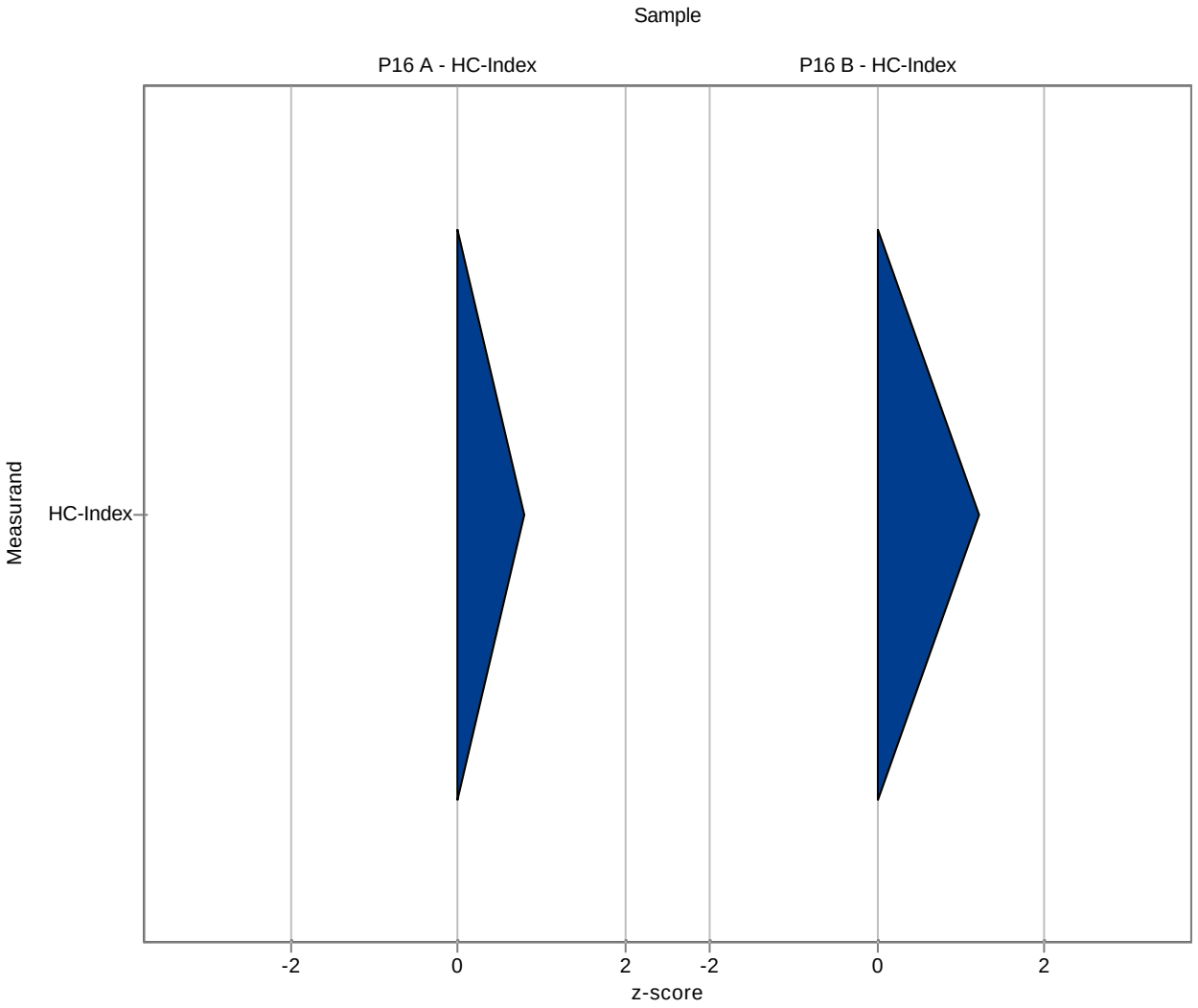
The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,99	0,1188	0,285	129,1	0,78

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,32	0,0384	0,0653	132,8	1,21


Sample
P16 A - HC-Index
P16 B - HC-Index
Measurand
HC-Index
-2
0
2
-2
0
2
z-score

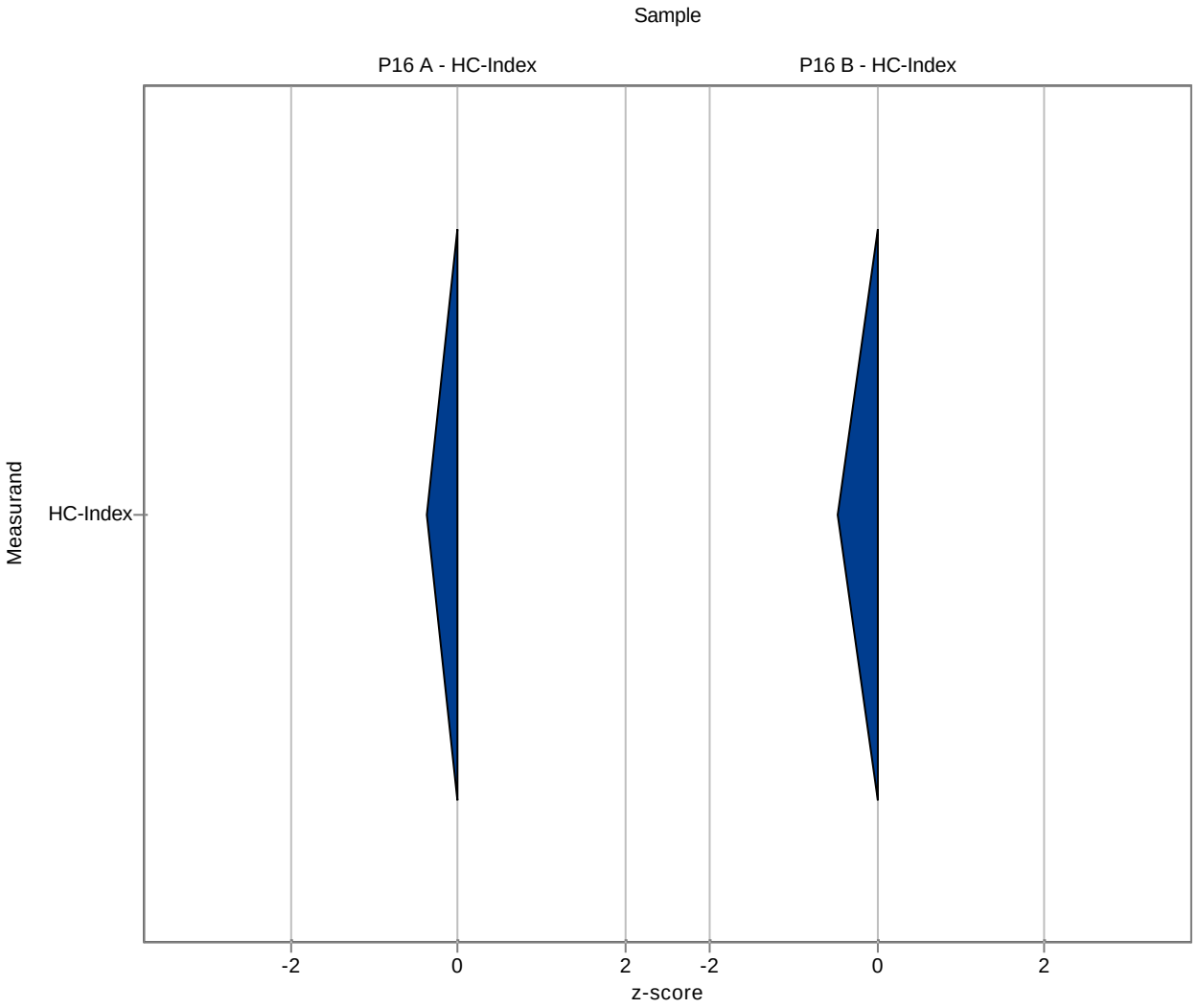
The following results were achieved:

Sample: P16AKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,767	±	0,187	0,66	0,066	0,285	86,1	-0,37

Sample: P16BKWI

Parameter	Unit	Target	±	CI(99%)	Result	± U	Criteria	Recovery	z-score
HC-Index	mg/l	0,241	±	0,045	0,21	0,021	0,0653	87,1	-0,48


Sample
P16 A - HC-Index
P16 B - HC-Index
Measurand
HC-Index
-2
0
2
-2
0
2
z-score