Proficiency Testing Scheme for Water Analysis

Round C49

Volatile Halogenated Hydrocarbons

Sample Dispatch: 4 March 2013

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This report summarises the results of round C49 “Volatile Halogenated Hydrocarbons” within the IFA-Test Systems Proficiency-Testing Scheme for water analysis. The samples C49A and C49B were distributed to the participants on Monday, 4 March 2013. Closing date for reporting results to the IFA-Tulln was Friday, 29 March 2013.

17 laboratories participated in this interlaboratory comparison. 16 laboratories submitted results.

Samples

For sample preparation, ultrapure water was spiked with concentrated solutions of inorganic salts in order to simulate the ionic composition of natural ground water. The following salts were added to the samples: $Mg(NO_3)_2$, $MgSO_4$, Na_2SO_4, $NaHCO_3$, $KHCO_3$, $CaCl_2$ and $Ca(NO_3)_2$. Prior to sample preparation, blank samples of ultrapure water and artificial water matrix were analysed by Purge&Trap-GC-MS to exclude contamination with halogenated hydrocarbons and other interfering substances.

The samples were spiked with traces of the following compounds: Trichloroethene, Trichloromethane, 1,1,1-Trichloroethane, Tetrachloromethane, Tribromomethane, Tetrachloroethene, Bromodichloromethane, 1,2-Dichloroethane, Dibromochloromethane, 1,1-Dichloroethene, Dichloromethane, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene. The calculation of the target concentrations of the compounds was based on the mass of standard added to the samples.

1,1,1-Trichloroethane was not added to sample C49A. Tetrachloromethane and Dibromochloromethane were not added to sample C49B, in order to check the analytical blank values.

Homogeneity, accuracy and stability tests at the IFA-Tulln

For verification of homogeneity fifteen samples were analysed for the compounds of interest by Purge&Trap-GC-MS measurements prior to shipment to the participants. The results of the measurements are listed in the result tables and the parameter oriented part of the report (”IFA result”).

Stability tests for the water samples of the present round were carried out three weeks after sample dispatch. The results of the measurements are listed in the result tables and the parameter oriented part of the report (”Stability test”).

Results

Data evaluation was based on target concentrations that were calculated from the weights of the standards used to prepare the samples. Their uncertainty intervals correspond to the expanded uncertainty (coverage factor k = 2) as described in the EURACHEM/CITAC Guide “Quantifying Uncertainty in Analytical Measurement” (Second Edition).

Recoveries for individual laboratory results and overall mean values were calculated from these target concentrations. The results were tested for outliers using the Hampel outlier test (level of significance 99 %). A minimum number of four results was required for the outlier test.

The target concentrations of 1,1,1-Trichloroethane, Tetrachloromethane and Dibromochloromethane, which were not added to the samples C49A or C49B, were set to < 0.08 µg/L 1,1,1-Trichloroethane, < 0.06 µg/L Tetrachloromethane and < 0.1 µg/L Dibromochloromethane which meets the minimum quantifiable values defined by the Austrian ground and river water monitoring program and the quantification limits of the analytical methods applied in the IFA.

Standard deviations and coefficients of variation (CVs) were only calculated when at least three results were available. The recoveries of the target concentrations, calculated from outlier-corrected data mean values ranged between 92.0 % (Dibromochloromethane in sample C49A) and 120.3 % (Dichloromethane in sample C49A). The between-laboratory coefficients of variation ranged from 3.9 % (Bromodichloromethane in sample C49B) to 21.2 % (Dichloromethane in sample C49A).

All confidence intervals of the outlier-corrected laboratory mean values encompass the corresponding target values with their uncertainties. Thus, statistically, no difference could be detected between theoretical target concentrations and outlier corrected laboratory means.

z-Scores

The most common approach is to form the z-score given by

$$z = \frac{x_i - \bar{x}}{\sigma}$$

z	z-score
x_i	result of laboratory
$\bar{x}$	target value or mean value („consensus value“)
σ	standard deviation

Thus, the z-score is the ratio of the estimated bias (difference between result and target value) and a standard deviation. The z-score criteria were determined from relative standard deviations from all interlaboratory comparisons that were organised by the IFA-Tulln in the period from 2002 to 2012. They represent long-term performance data of all former participating laboratories. The z-scores are listed together with the recoveries in the tables of the parameter oriented part.

Additionally, each laboratory obtained for every sample a single sheet that summarises the z-scores of the laboratory in graphical and tabular form.

The following table lists the z-score criteria as relative standard deviation and their limits of applicability. Z-scores were only calculated, if the target values were higher than these limits.

Thus, no z-scores were calculated for Dichloromethane in sample C49A.

Parameter	z-Score-criteria (%)	Lower limit [µg/L]
1,1,1-Trichloroethane	15	0.15
1,1-Dichloroethene	21	0.5
1,2-Dichloroethane	14	0.5
cis-1,2-Dichloroethene	15	0.2
trans-1,2-Dichloroethene	13	0.2
Bromodichloromethane	14	0.15
Dibromochloromethane	15	0.2
Dichloromethane	14	1
Tetrachloroethene	19	0.2
Tetrachloromethane	18	0.15
Tribromomethane	18	0.2
Trichloroethene	17	0.2
Trichloromethane	15	0.3

Normally, a classification based on z-scores is made this way:

|z-Score|	Classification
<2	satisfactory
2<|z|<3	questionable
>3	unsatisfactory

Please note that this evaluation is made on the background of the average performance of all participants of the IFA-Test-Systems proficiency testing scheme during the period from 2002 to 2012.

Illustration of results

An explanation to the illustration of the results is given on the following page. Graphical and tabular illustration of results can be divided into a parameter oriented and a laboratory oriented part.

The **laboratory oriented part** contains the measurement results and reported uncertainties of each individual laboratory for all parameters together with the achieved recoveries in graphical and tabular form. This part of the report also lists tables with the results originally reported by the laboratories.

In the **parameter oriented part** the reported results and corresponding uncertainties are illustrated together with recoveries of the target values and the z-scores for each parameter and all laboratories. This information is presented in graphical and tabular form. Results, which were identified as outliers by the Hampel test are marked with an asterisk in the column “out”. These values were not considered for the calculation of statistical parameters (mean values, standard deviations and confidence intervals). Moreover, the parameter oriented part contains the uncertainties of the target value. The uncertainty intervals correspond to the expanded uncertainty (coverage factor $k = 2$) as described in the EURACHEM / CITAC Guide “Quantifying Uncertainty in Analytical Measurement” (Second Edition). The uncertainty interval of the reference concentration is illustrated in the graphs as a grey band around the 100 % recovery line.

Results, for which no recoveries could be calculated, are illustrated by one of the following symbols: **FN** (false negative), **FP** (false positive) or • - symbol.

- “FN”: a result is considered false negative when the “< result” reported is lower than the corresponding target value
- “FP”: False positive results can be obtained for compounds not added to the samples: a result is termed FP if it is higher than the corresponding limit of quantification of the analytical procedure employed at the IFA-Tulln.
- “•”: All other results for which no recovery can be calculated are illustrated by this symbol

Tulln, 04 April 2013

Sample C10B
Parameter Dichloromethane

Target value ± U (k=2) 10,4 µg/l ± 0,5 µg/l ***Obtained from mass weighed out, U = uncertainty***

IFA result ± U (k=2) 10,2 µg/l ± 1,0 µg/l ***Determined at IFA prior to shipment of samples***

Stability test ± U (k=2) 10,2 µg/l ± 1,0 µg/l ***Determined at IFA 5 weeks after sample dispatch***

Lab code	Result	Out	+/-	Unit	Recovery	z-Score
A	11,0		1,28	µg/l	106 %	0,30
B	9,0		1,8	µg/l	87 %	-0,71
C	10		2	µg/l	96 %	-0,20
D				µg/l		
E	13,7		0,40	µg/l	132 %	1,67
F	6,8		0,7	µg/l	65 %	-1,82
G	< 20			µg/l		
H				µg/l	•	
I	11,0			µg/l	106%	0,30
J	24,1	*	1,51	µg/l	232 %	6,93
K	10,09		1,22	µg/l	97 %	-0,16
L	2,76	*		µg/l	27 %	-3,87
M	6,38		1,87	µg/l	61 %	-2,03
N	< 5		0,5	µg/l	FN	
O	15,6	*	4	µg/l	150 %	2,63
P	10,3		1,0	µg/l	99 %	-0,05
Q	10		1,14	µg/l	96 %	-0,20
R	8,88		0,46	µg/l	85 %	-0,77
S				µg/l		
T	9,03		0,08	µg/l	87 %	-0,69
U	22,5	*	0,5	µg/l	216 %	6,12
V	10,33		0,25	µg/l	99 %	-0,04

Recovery of target value in percent

z-Score of the laboratory

An asterisk indicates a result detected as outlier by Hampel test

Interval expected to encompass target value as stated by participant

	All results	Outliers excl.	Unit
Mean +/- CI (99%)	11,3 ± 3,8	9,7 ± 1,6	µg/l
Recov. +/- CI (99%)	108,3 ± 36,3	93,6 ± 15,1	%
SD between labs	5,3	1,9	µg/l
RSD between labs	47,3	19,1	%
n for calculation	17	13	

Between laboratory standard deviation

Overall laboratory mean and recovery with corresponding confidence intervals (p=99%)

Number of data used for calculation of statistic parameters

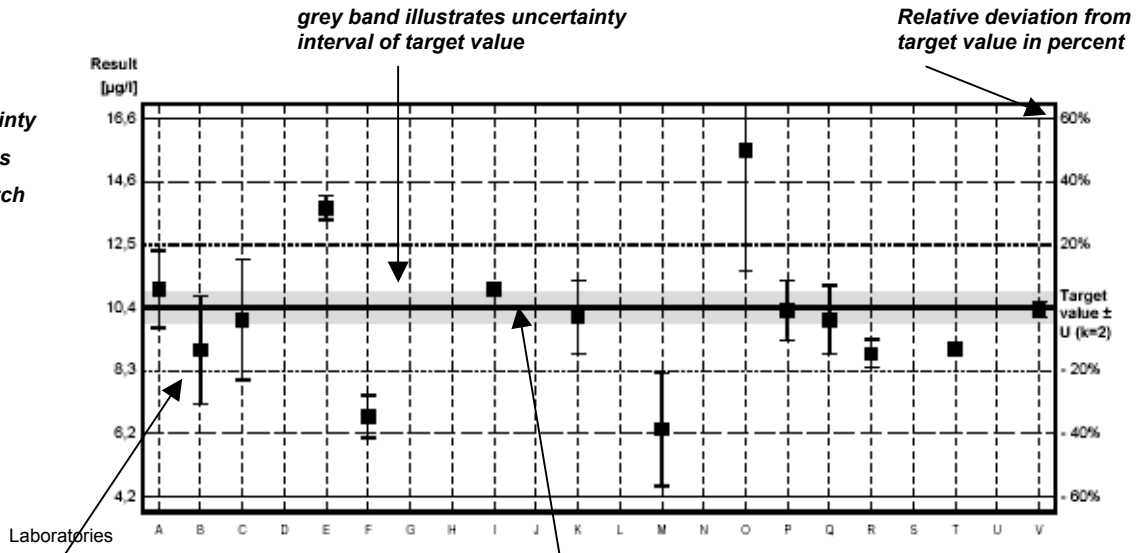


Diagram 1. Measurement results and corresponding uncertainty intervals

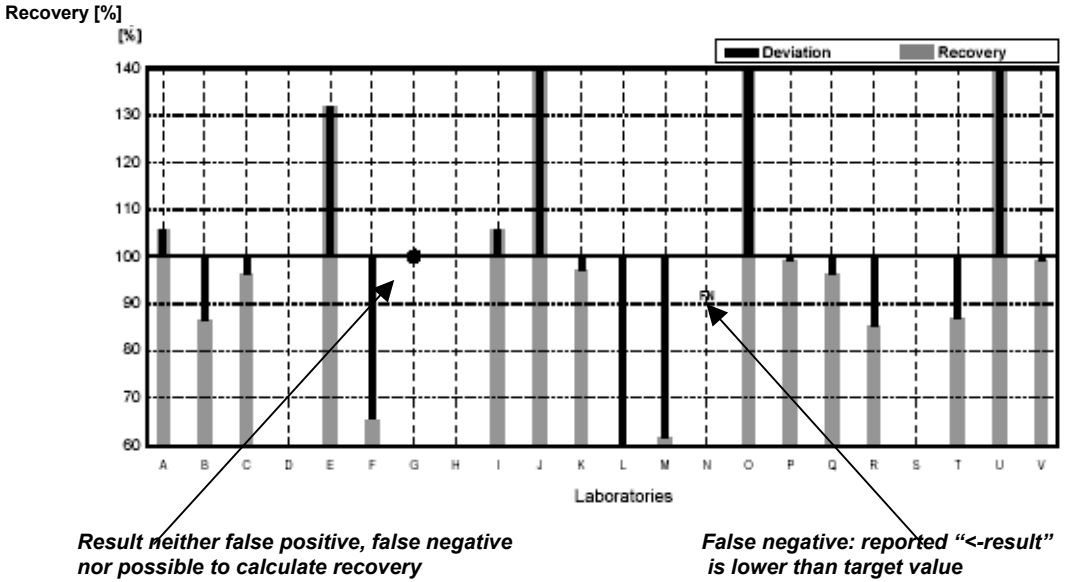


Diagram 2. Recoveries and deviations from target values

EXPLANATION

Illustration of Results
Tables and Parameter Oriented Part

Round C49
Volatile Halogenated Hydrocarbons

Sample Dispatch: 4 March 2013

Results Sample C49A

	Trichloro-ethene	Tetrachloro-ethene	1,1,1-Tri-chloroethane	Trichloro-methane	Tetrachloro-methane	1,1-Dichloro-ethene	Tribromo-methane
Target value	0.24	0.65	<0.08	0.56	0.75	3.60	1.61
IFA Result	0.25	0.66	<0.04	0.57	0.72	3.57	1.63
Stability test	0.25	0.63	<0.04	0.58	0.72	3.47	1.53
A	0.3	0.6	<0.5	0.6	0.7	3.7	1.5
B	0.22	0.57	<0.10	0.55	0.66	3.9	1.5
C	0.206	0.561	<0.2	0.359	0.950	10.059	1.132
D	0.26	0.77	0	0.61	0.95	4.77	1.52
E	0.28	0.66		0.58	0.79		
F	0.23	0.58	<0.1	0.54	0.70	3.59	1.56
G	0.26	0.70	<0.02	0.58	0.77	3.66	1.71
H	0.26	0.68	<0.05	0.53	0.77	4.88	1.79
I							
J	<0.5	0.63	<0.5	0.55	0.73	3.71	1.64
K	0.2	0.5	<0.1	0.5	0.8	5.0	1.1
L	0.257	0.619	<0.1	0.525	0.620	2.42	1.41
M	<0.3	0.69		<0.4			1.81
N	0.27	0.74	<0.03	0.57	0.84	3.92	1.34
O	0.23	0.53	<0.10	1.02	1.01		1.38
P	0.17	0.48	<0.05	0.36	0.61	3.07	n.B.
Q	0.2	0.7	<0.15	0.5	0.6		

Uncertainties Sample C49A

	Trichloro-ethene ±	Tetrachloro-ethene ±	1,1,1-Tri-chloroethane ±	Trichloro-methane ±	Tetrachloro-methane ±	1,1-Dichloro-ethene ±	Tribromo-methane ±
Target value	0.01	0.03		0.03	0.04	0.18	0.08
IFA Result	0.04	0.10		0.09	0.11	0.54	0.24
Stability test	0.04	0.09		0.09	0.11	0.52	0.23
A	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B	0.044	0.11		0.11	0.13	0.78	0.30
C	0.044	0.178	0.045	0.091	0.277	3.873	0.434
D	0.07	0.22		0.12	0.19	0.95	0.30
E	0.14	0.17		0.15	0.20		
F	0.03	0.09		0.08	0.11	0.54	0.23
G	0.05	0.14		0.12	0.15	0.73	0.34
H	0.04	0.10		0.08	0.12	0.73	0.27
I							
J		0.11		0.10	0.16	0.82	0.29
K	0.06	0.15	0.03	0.15	0.24	1.5	0.33
L	0.051	0.124		0.105	0.124	0.48	0.28
M		0.03					0.05
N	0.008	0.048		0.033	0.016	0.254	0.030
O	0.05	0.12		0.13	0.34		0.06
P	0.03	0.07		0.05	0.09	0.46	
Q	0.05	0.12		0.12	0.1		

All data in µg/L

Results Sample C49A

	Bromodichloro-methane	Dibromochloro-methane	Dichloro-methane	1,2-Dichloro-ethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
Target value	0.56	1.23	0.92	0.88	0.42	2.30
IFA Result	0.56	1.24	0.97	0.88	0.43	2.29
Stability test	0.55	1.19	1.05	0.88	0.44	2.24
A	0.6	1.0	0.9	0.9	0.4	2.4
B	0.54	1.2	0.99	0.85	0.42	2.2
C	0.532	1.037	1.564	1.006	0.466	4.425
D	0.55	1.18	1.33	1.12		
E	0.48	1.0				
F	0.53	1.19	0.92	0.84	<0.5	2.33
G	0.55	1.30	0.97	0.89	0.44	2.41
H	0.57	1.36	1.13	1.06	0.46	2.62
I						
J	0.60	1.17	1.10	0.91	0.52	2.55
K	0.3	0.8	1.4	0.9	0.4	
L	0.515	1.12	<1.0	1.36	<1.0	2.32
M	0.60	1.52		<0.3		
N	0.56	1.09	<1.5	0.98	0.50	2.45
O	0.44	1.02	2.15	18.90		
P	0.51	0.99	1.07	0.70	0.39	2.04
Q			0.8		0.4	

Uncertainties Sample C49A

	Bromodichloro-methane ±	Dibromochloro-methane ±	Dichloro-methane ±	1,2-Dichloro-ethane ±	cis-1,2-Dichloroethene ±	trans-1,2-Dichloroethene ±
Target value	0.03	0.06	0.05	0.04	0.02	0.12
IFA Result	0.08	0.19	0.15	0.13	0.06	0.34
Stability test	0.08	0.18	0.16	0.13	0.07	0.34
A	0.2	0.2	0.2	0.2	0.2	0.2
B	0.11	0.24	0.20	0.17	0.084	0.44
C	0.132	0.382	0.424	0.239	0.056	0.544
D	0.11	0.24	0.27	0.22		
E	0.12	0.25				
F	0.08	0.18	0.14	0.13		0.35
G	0.11	0.26	0.19	0.18	0.09	0.48
H	0.09	0.20	0.17	0.16	0.07	0.39
I						
J	0.10	0.19	0.24	0.15	0.11	0.56
K	0.09	0.24	0.42	0.27	0.12	
L	0.103	0.22		0.27		0.46
M	0.05	0.04				
N	0.029	0.054		0.039	0.070	0.087
O	0.05	0.16	0.30	0.71		
P	0.08	0.15	0.16	0.11	0.06	0.31
Q			0.1		0.1	

All data in µg/L

Results Sample C49B

	Trichloro-ethene	Tetrachloro-ethene	1,1,1-Tri-chloroethane	Trichloro-methane	Tetrachloro-methane	1,1-Dichloro-ethene	Tribromo-methane
Target value	0.88	0.35	0.81	2.78	<0.06	0.68	0.69
IFA Result	0.88	0.35	0.85	2.81	<0.03	0.68	0.68
Stability test	0.85	0.34	0.85	2.76	<0.03	0.68	0.67
A	0.8	0.3	0.8	2.5	<0.5	0.8	0.7
B	0.84	0.36	0.82	2.7	<0.10	0.85	0.71
C	0.750	0.291	1.057	1.601	<0.3	1.930	0.444
D	0.96	0.41	1.01	2.78	0	0.92	0.70
E	0.96	0.38		2.6	<0.01		
F	0.81	0.30	0.81	2.75	<0.1	0.69	0.66
G	0.94	0.35	0.78	2.87	<0.09	0.70	0.79
H	1.03	0.35	0.89	2.78	<0.05	0.99	0.62
I							
J	0.86	<0.5	0.86	2.64	<0.5	0.75	0.75
K	0.4	0.2	0.5	1.5	<0.5	0.8	0.4
L	0.825	0.325	0.779	2.50	<0.02	0.652	0.627
M	1.00	0.35		1.85			0.76
N	0.95	0.38	0.86	2.57	<0.02	0.71	0.64
O	0.79	0.33	1.04	3.44	0.74		0.79
P	0.72	0.27	0.68	1.79	<0.05	0.60	n.B.
Q	0.7	0.3	0.7	2.7	<0.15		

Uncertainties Sample C49B

	Trichloro-ethene ±	Tetrachloro-ethene ±	1,1,1-Tri-chloroethane ±	Trichloro-methane ±	Tetrachloro-methane ±	1,1-Dichloro-ethene ±	Tribromo-methane ±
Target value	0.04	0.02	0.04	0.14		0.03	0.03
IFA Result	0.13	0.05	0.13	0.42		0.10	0.10
Stability test	0.13	0.05	0.13	0.41		0.10	0.10
A	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B	0.17	0.072	0.16	0.54		0.17	0.14
C	0.159	0.093	0.237	0.405	0.088	0.743	0.170
D	0.14	0.13	0.20	0.56		0.18	0.14
E	0.24	0.10		0.65			
F	0.12	0.05	0.12	0.41		0.10	0.10
G	0.19	0.07	0.16	0.57		0.14	0.16
H	0.15	0.05	0.13	0.42		0.15	0.09
I							
J	0.19		0.19	0.50		0.17	0.13
K	0.12	0.06	0.15	0.45	0.15	0.24	0.12
L	0.165	0.065	0.156	0.50		0.130	0.125
M	0.08	0.03		0.17			0.05
N	0.109	0.019	0.107	0.036		0.015	0.030
O	0.06	0.12	0.05	0.44	0.30		0.17
P	0.11	0.04	0.10	0.27		0.09	
Q	0.12	0.07	0.14	0.2			

All data in µg/L

Results Sample C49B

	Bromodichloro-methane	Dibromochloro-methane	Dichloro-methane	1,2-Dichloro-ethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
Target value	0.16	<0.1	11.89	1.07	1.22	1.19
IFA Result	0.17	<0.05	12.18	1.06	1.23	1.19
Stability test	0.17	<0.05	12.05	1.05	1.20	1.17
A	0.3	<0.5	11.5	1.1	1.1	1.1
B	0.16	<0.10	12	1.0	1.2	1.2
C	0.157	<0.3	13.977	1.078	1.032	2.285
D	0.24	0	11.94	1.23		
E	0.17	<0.1				
F	0.16	<0.1	11.79	0.87	1.05	1.18
G	0.16	<0.02	13.4	1.06	1.19	1.24
H	0.16	<0.05	13.7	1.44	1.49	1.49
I						
J	<0.5	<0.5	13.4	1.12	1.42	1.42
K	0.1	<0.1	18.6	1.2	1.4	
L	0.158	<0.1	11.1	1.01	2.90	1.19
M	0.17	<0.2		<0.3		
N	0.17	<0.02	12.4	1.13	1.28	1.18
O	0.16	<0.10	0.94	18.02		
P	0.15	<0.05	10.50	0.96	1.16	1.09
Q			10		1.1	

Uncertainties Sample C49B

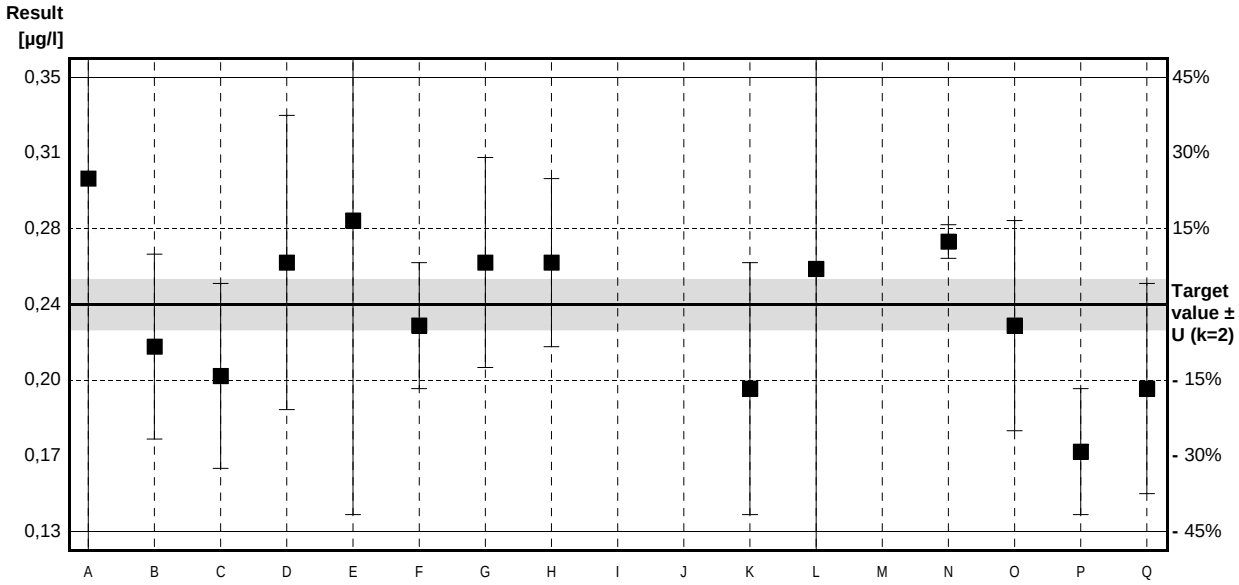
	Bromodichloro-methane ±	Dibromochloro-methane ±	Dichloro-methane ±	1,2-Dichloro-ethane ±	cis-1,2-Dichloroethene ±	trans-1,2-Dichloroethene ±
Target value	0.01		0.59	0.05	0.06	0.06
IFA Result	0.03		1.83	0.16	0.18	0.18
Stability test	0.03		1.81	0.16	0.18	0.18
A	0.2	0.2	0.2	0.2	0.2	0.2
B	0.032		2.4	0.20	0.24	0.24
C	0.039	0.110	3.788	0.257	0.124	0.281
D	0.05		2.39	0.25		
E	0.05					
F	0.02		1.77	0.13	0.16	0.18
G	0.03		2.6	0.21	0.24	0.25
H	0.02		2.1	0.22	0.22	0.22
I						
J			2.95	0.18	0.31	0.31
K	0.03	0.03	5.58	0.36	0.42	
L	0.032		2.2	0.2	0.58	0.24
M	0.03					
N	0.010		0.80	0.039	0.062	0.096
O	0.05		0.21	2.00		
P	0.02		1.58	0.14	0.17	0.16
Q			1		0.2	

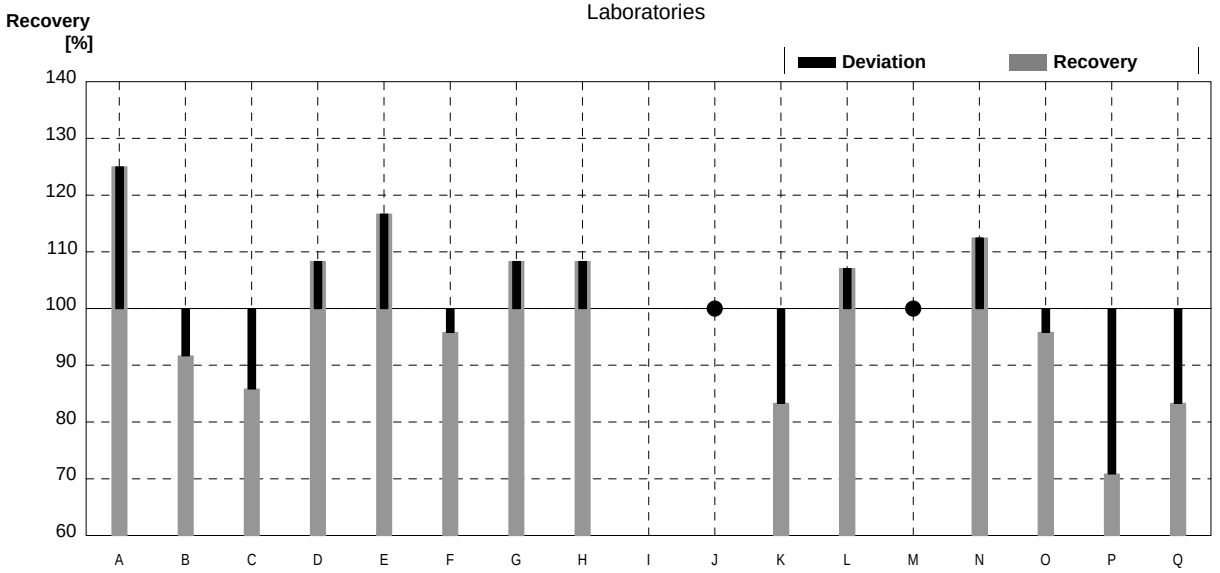
All data in µg/L

Sample C49A
Parameter Trichloroethene

Target value ± U (k=2)	0,24	µg/l	±	0,01	µg/l
IFA result ± U (k=2)	0,25	µg/l	±	0,04	µg/l
Stability test ± U (k=2)	0,25	µg/l	±	0,04	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,3	0,2	µg/l	125%	1,47
B	0,22	0,044	µg/l	92%	-0,49
C	0,206	0,044	µg/l	86%	-0,83
D	0,26	0,07	µg/l	108%	0,49
E	0,28	0,14	µg/l	117%	0,98
F	0,23	0,03	µg/l	96%	-0,25
G	0,26	0,05	µg/l	108%	0,49
H	0,26	0,04	µg/l	108%	0,49
I			µg/l		
J	<0,5		µg/l	•	
K	0,2	0,06	µg/l	83%	-0,98
L	0,257	0,051	µg/l	107%	0,42
M	<0,3		µg/l	•	
N	0,27	0,008	µg/l	113%	0,74
O	0,23	0,05	µg/l	96%	-0,25
P	0,17	0,03	µg/l	71%	-1,72
Q	0,2	0,05	µg/l	83%	-0,98





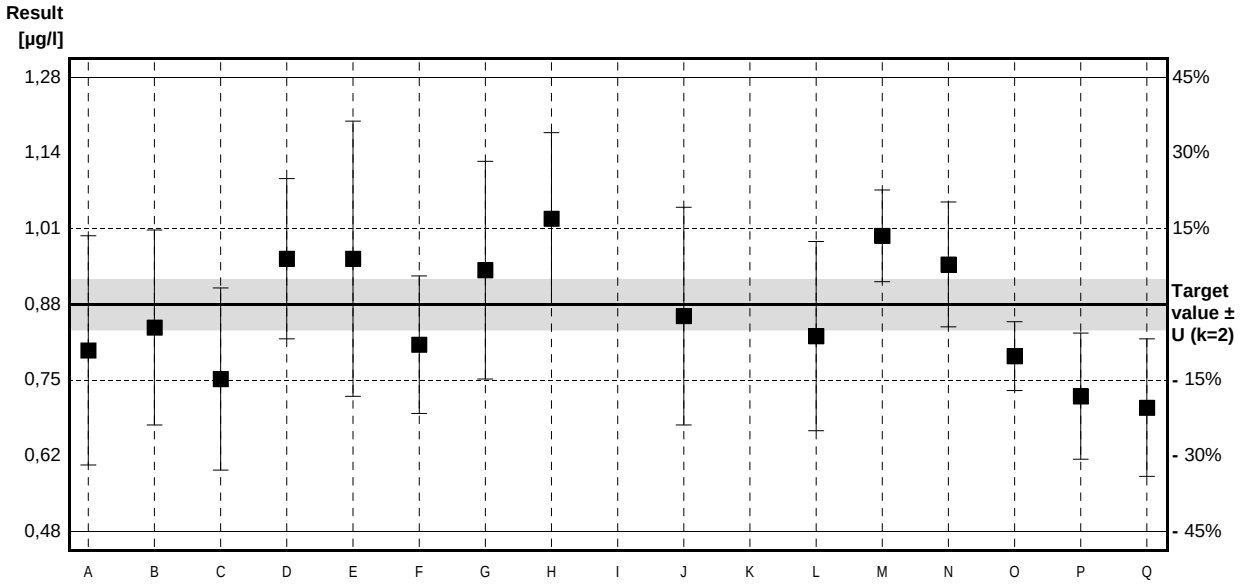
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,24 ± 0,03	0,24 ± 0,03	µg/l
Recov. ± CI(99%)	99,5 ± 12,3	99,5 ± 12,3	%
SD between labs	0,04	0,04	µg/l
RSD between labs	15,3	15,3	%
n for calculation	14	14	

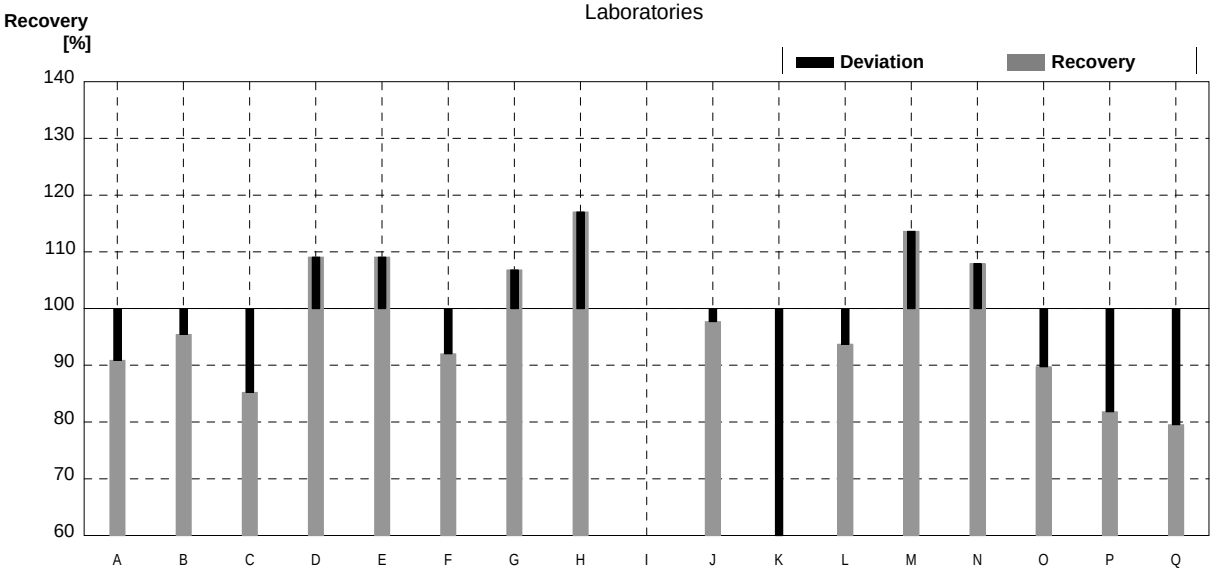
Sample C49B

Parameter Trichloroethene

Target value ± U (k=2)	0,88	µg/l	±	0,04	µg/l
IFA result ± U (k=2)	0,88	µg/l	±	0,13	µg/l
Stability test ± U (k=2)	0,85	µg/l	±	0,13	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,8	0,2	µg/l	91%	-0,53
B	0,84	0,17	µg/l	95%	-0,27
C	0,750	0,159	µg/l	85%	-0,87
D	0,96	0,14	µg/l	109%	0,53
E	0,96	0,24	µg/l	109%	0,53
F	0,81	0,12	µg/l	92%	-0,47
G	0,94	0,19	µg/l	107%	0,40
H	1,03	0,15	µg/l	117%	1,00
I			µg/l		
J	0,86	0,19	µg/l	98%	-0,13
K	0,4	0,12	µg/l	45%	-3,21
L	0,825	0,165	µg/l	94%	-0,37
M	1,00	0,08	µg/l	114%	0,80
N	0,95	0,109	µg/l	108%	0,47
O	0,79	0,06	µg/l	90%	-0,60
P	0,72	0,11	µg/l	82%	-1,07
Q	0,7	0,12	µg/l	80%	-1,20





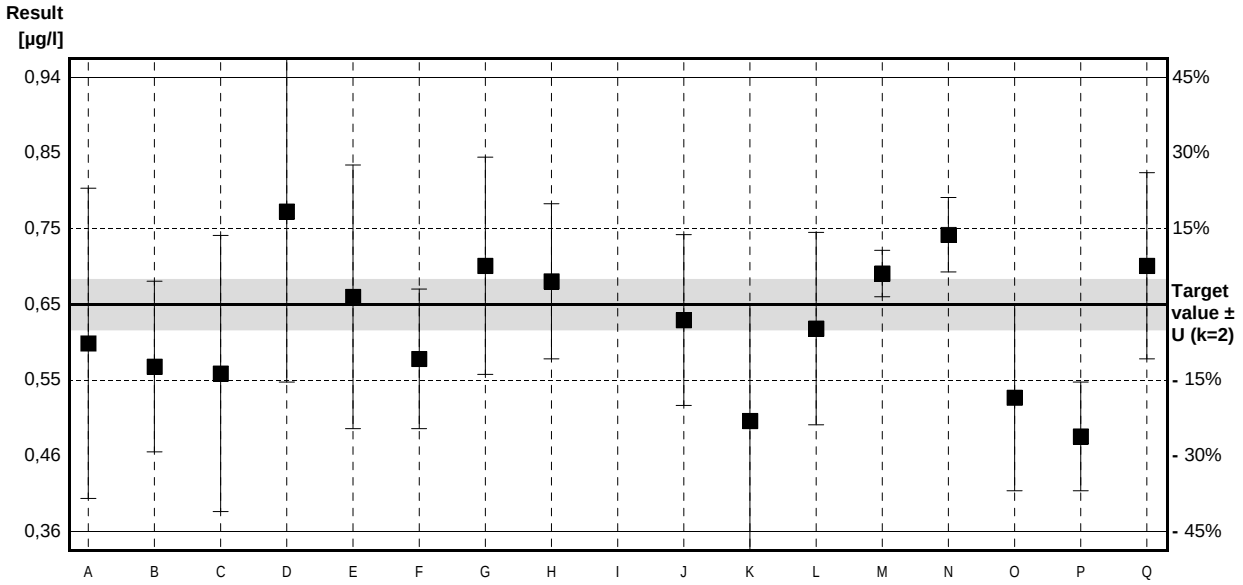
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,83 ± 0,11	0,83 ± 0,11	µg/l
Recov. ± CI(99%)	94,7 ± 12,9	94,7 ± 12,9	%
SD between labs	0,15	0,15	µg/l
RSD between labs	18,4	18,4	%
n for calculation	16	16	

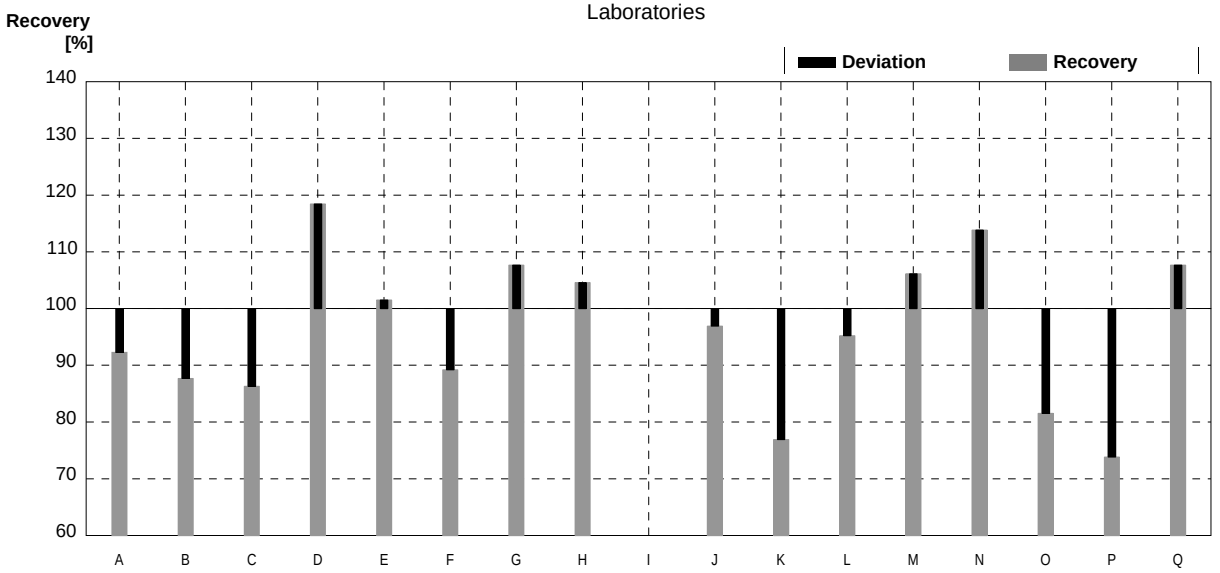
Sample C49A

Parameter Tetrachloroethene

Target value ± U (k=2)	0,65	µg/l	±	0,03	µg/l
IFA result ± U (k=2)	0,66	µg/l	±	0,10	µg/l
Stability test ± U (k=2)	0,63	µg/l	±	0,09	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,6	0,2	µg/l	92%	-0,40
B	0,57	0,11	µg/l	88%	-0,65
C	0,561	0,178	µg/l	86%	-0,72
D	0,77	0,22	µg/l	118%	0,97
E	0,66	0,17	µg/l	102%	0,08
F	0,58	0,09	µg/l	89%	-0,57
G	0,70	0,14	µg/l	108%	0,40
H	0,68	0,10	µg/l	105%	0,24
I			µg/l		
J	0,63	0,11	µg/l	97%	-0,16
K	0,5	0,15	µg/l	77%	-1,21
L	0,619	0,124	µg/l	95%	-0,25
M	0,69	0,03	µg/l	106%	0,32
N	0,74	0,048	µg/l	114%	0,73
O	0,53	0,12	µg/l	82%	-0,97
P	0,48	0,07	µg/l	74%	-1,38
Q	0,7	0,12	µg/l	108%	0,40





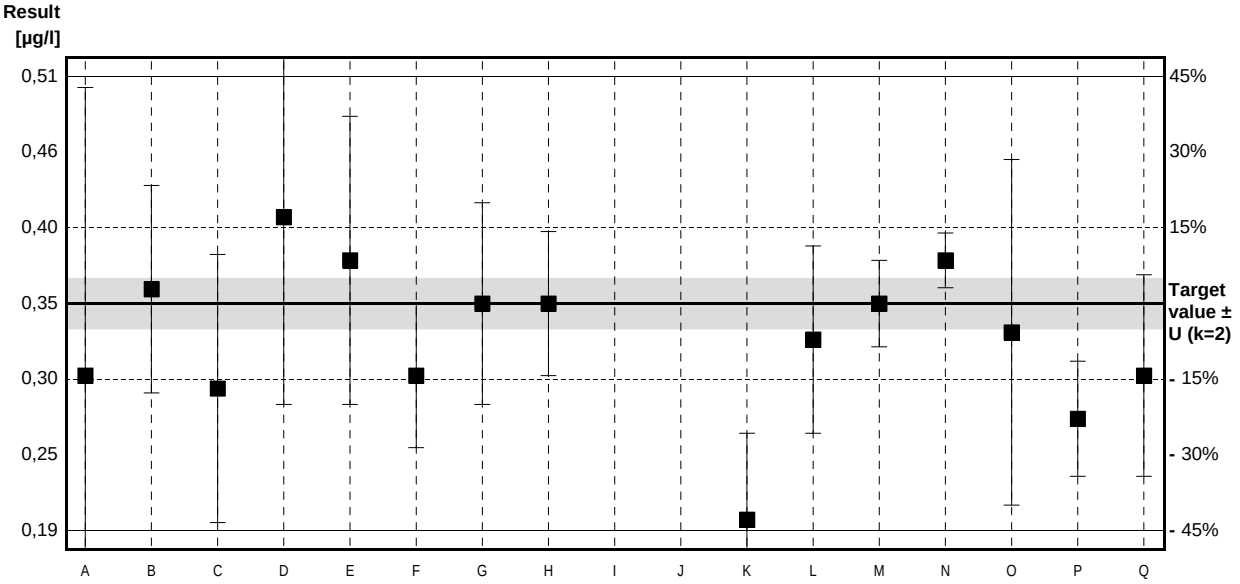
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,63 ± 0,06	0,63 ± 0,06	µg/l
Recov. ± CI(99%)	96,3 ± 9,7	96,3 ± 9,7	%
SD between labs	0,09	0,09	µg/l
RSD between labs	13,7	13,7	%
n for calculation	16	16	

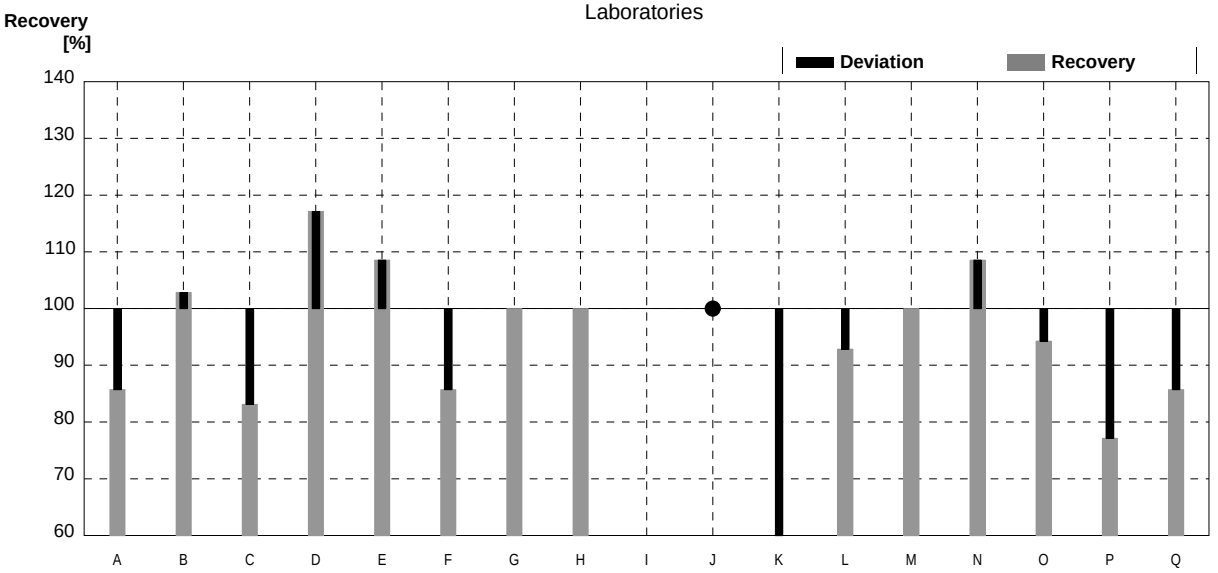
Sample C49B

Parameter Tetrachloroethene

Target value ± U (k=2)	0,35	µg/l	±	0,02	µg/l
IFA result ± U (k=2)	0,35	µg/l	±	0,05	µg/l
Stability test ± U (k=2)	0,34	µg/l	±	0,05	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,3	0,2	µg/l	86%	-0,75
B	0,36	0,072	µg/l	103%	0,15
C	0,291	0,093	µg/l	83%	-0,89
D	0,41	0,13	µg/l	117%	0,90
E	0,38	0,10	µg/l	109%	0,45
F	0,30	0,05	µg/l	86%	-0,75
G	0,35	0,07	µg/l	100%	0,00
H	0,35	0,05	µg/l	100%	0,00
I			µg/l		
J	<0,5		µg/l	•	
K	0,2	0,06	µg/l	57%	-2,26
L	0,325	0,065	µg/l	93%	-0,38
M	0,35	0,03	µg/l	100%	0,00
N	0,38	0,019	µg/l	109%	0,45
O	0,33	0,12	µg/l	94%	-0,30
P	0,27	0,04	µg/l	77%	-1,20
Q	0,3	0,07	µg/l	86%	-0,75





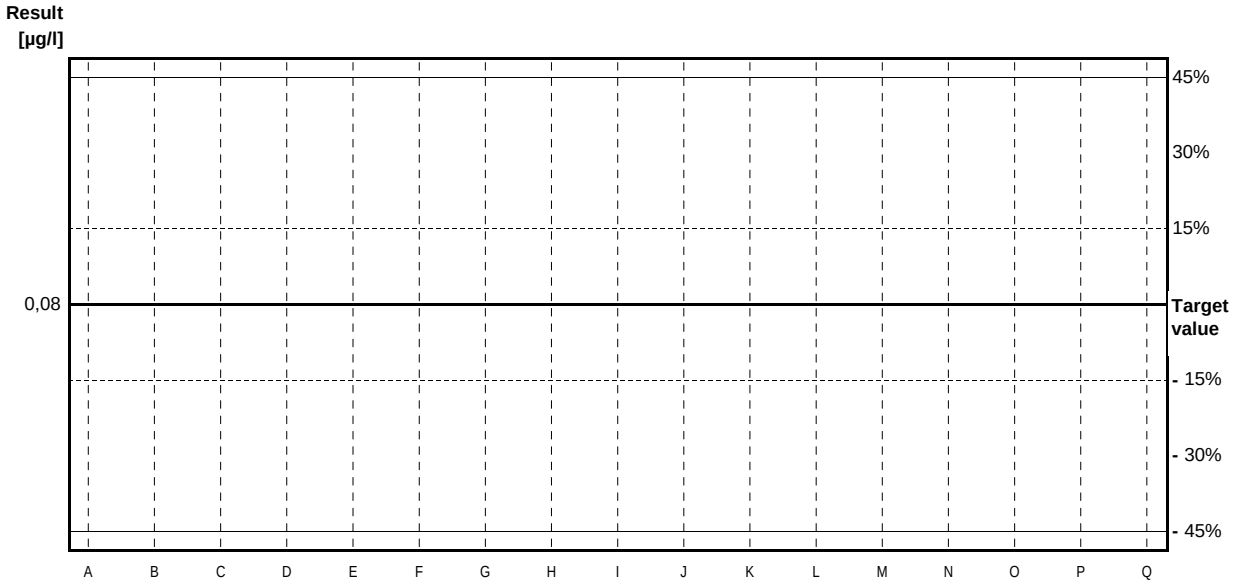
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,33 ± 0,04	0,33 ± 0,04	µg/l
Recov. ± CI(99%)	93,3 ± 11,5	93,3 ± 11,5	%
SD between labs	0,05	0,05	µg/l
RSD between labs	16,0	16,0	%
n for calculation	15	15	

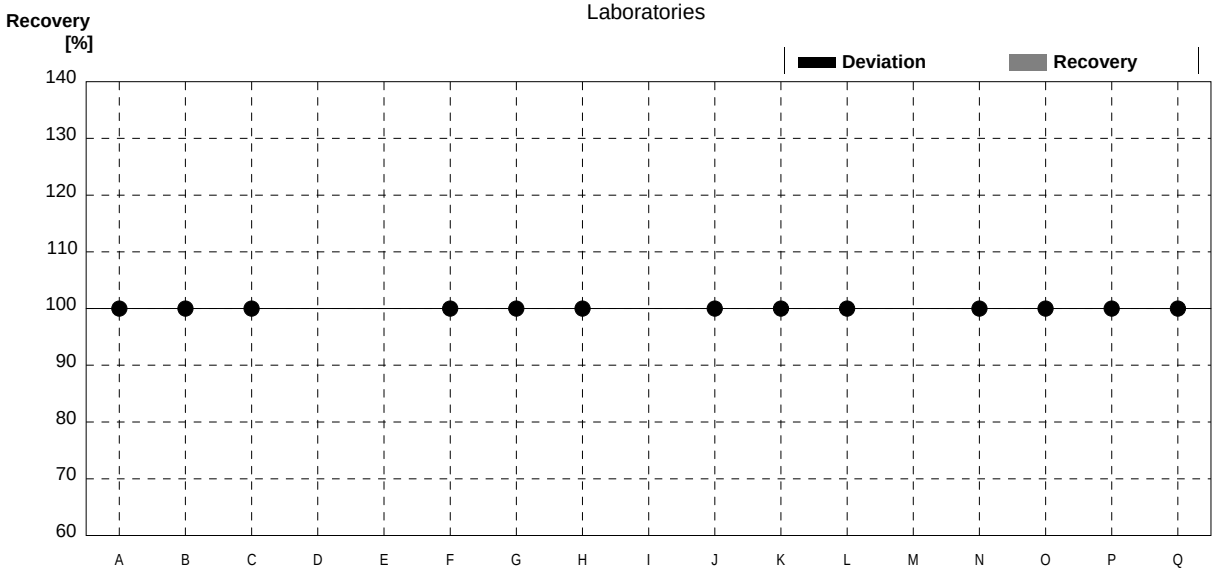
Sample C49A

Parameter 1,1,1-Trichloroethane

Target value	<0,08	µg/l
IFA result	<0,04	µg/l
Stability test	<0,04	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,5	0,2	µg/l	•	
B	<0,10		µg/l	•	
C	<0,2	0,045	µg/l	•	
D	0		µg/l		
E			µg/l		
F	<0,1		µg/l	•	
G	<0,02		µg/l	•	
H	<0,05		µg/l	•	
I			µg/l		
J	<0,5		µg/l	•	
K	<0,1	0,03	µg/l	•	
L	<0,1		µg/l	•	
M			µg/l		
N	<0,03		µg/l	•	
O	<0,10		µg/l	•	
P	<0,05		µg/l	•	
Q	<0,15		µg/l	•	





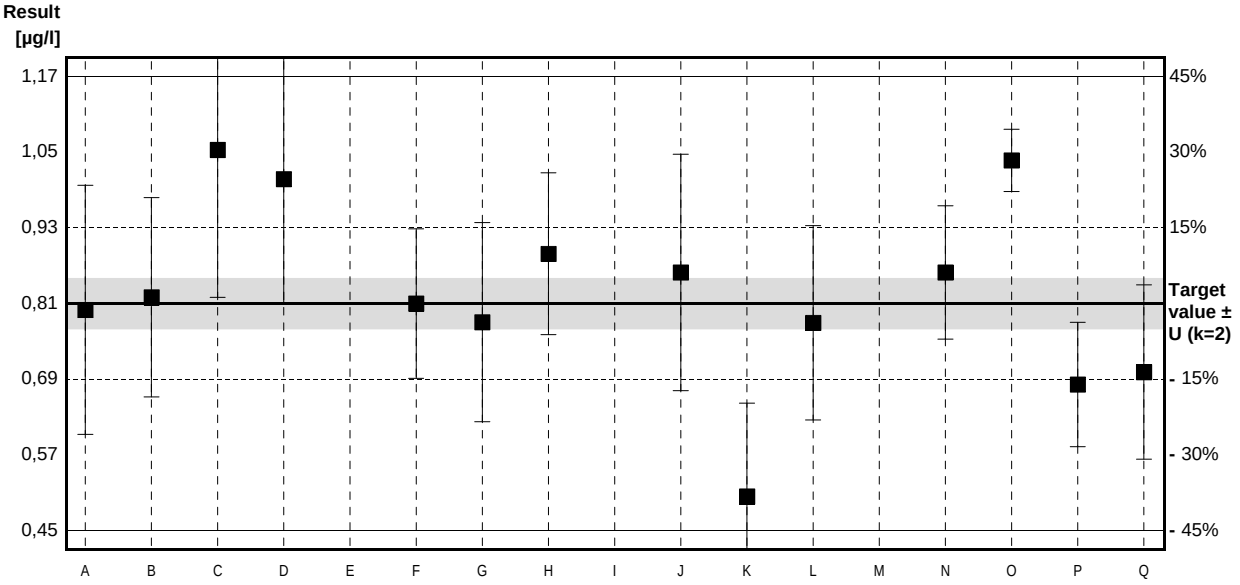
	All results	Outliers excl.	Unit
Mean ± CI(99%)			µg/l
Recov. ± CI(99%)			%
SD between labs			µg/l
RSD between labs			%
n for calculation			

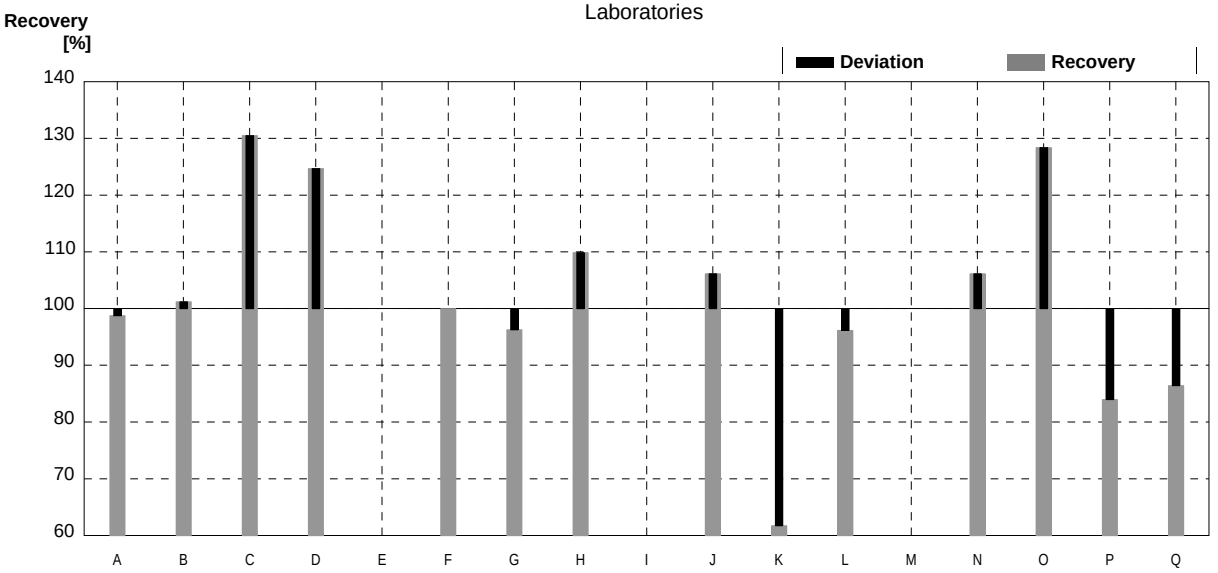
Sample C49B

Parameter 1,1,1-Trichloroethane

Target value ± U (k=2)	0,81	µg/l	±	0,04	µg/l
IFA result ± U (k=2)	0,85	µg/l	±	0,13	µg/l
Stability test ± U (k=2)	0,85	µg/l	±	0,13	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,8	0,2	µg/l	99%	-0,08
B	0,82	0,16	µg/l	101%	0,08
C	1,057	0,237	µg/l	130%	2,03
D	1,01	0,20	µg/l	125%	1,65
E			µg/l		
F	0,81	0,12	µg/l	100%	0,00
G	0,78	0,16	µg/l	96%	-0,25
H	0,89	0,13	µg/l	110%	0,66
I			µg/l		
J	0,86	0,19	µg/l	106%	0,41
K	0,5 *	0,15	µg/l	62%	-2,55
L	0,779	0,156	µg/l	96%	-0,26
M			µg/l		
N	0,86	0,107	µg/l	106%	0,41
O	1,04	0,05	µg/l	128%	1,89
P	0,68	0,10	µg/l	84%	-1,07
Q	0,7	0,14	µg/l	86%	-0,91





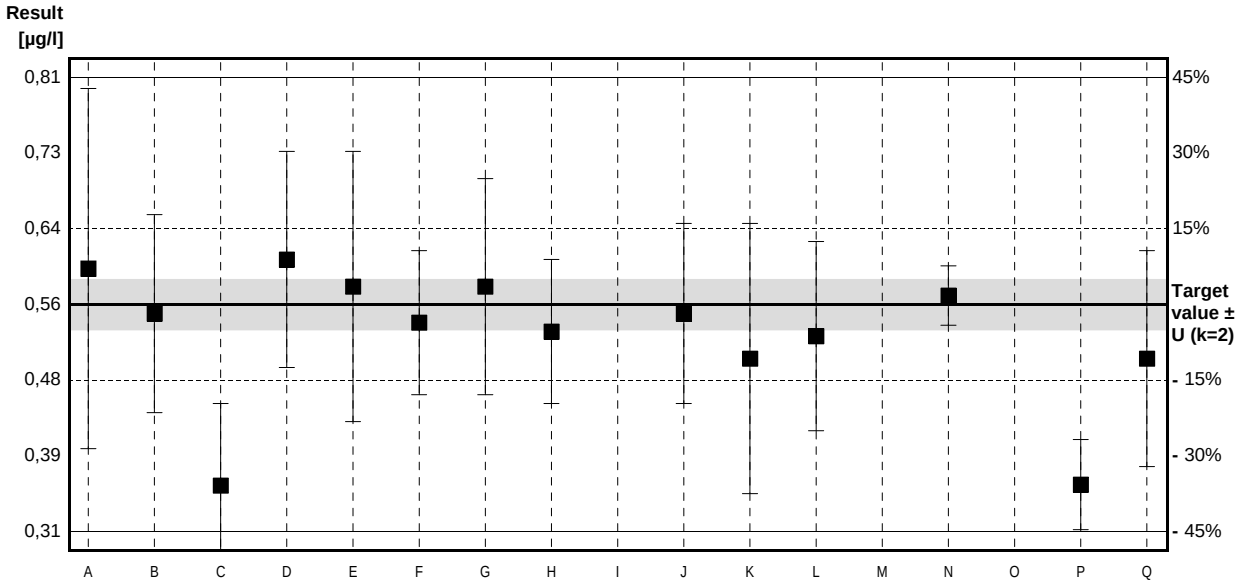
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,83 ± 0,12	0,85 ± 0,10	µg/l
Recov. ± CI(99%)	102,2 ± 14,8	105,3 ± 12,5	%
SD between labs	0,15	0,12	µg/l
RSD between labs	18,0	14,1	%
n for calculation	14	13	

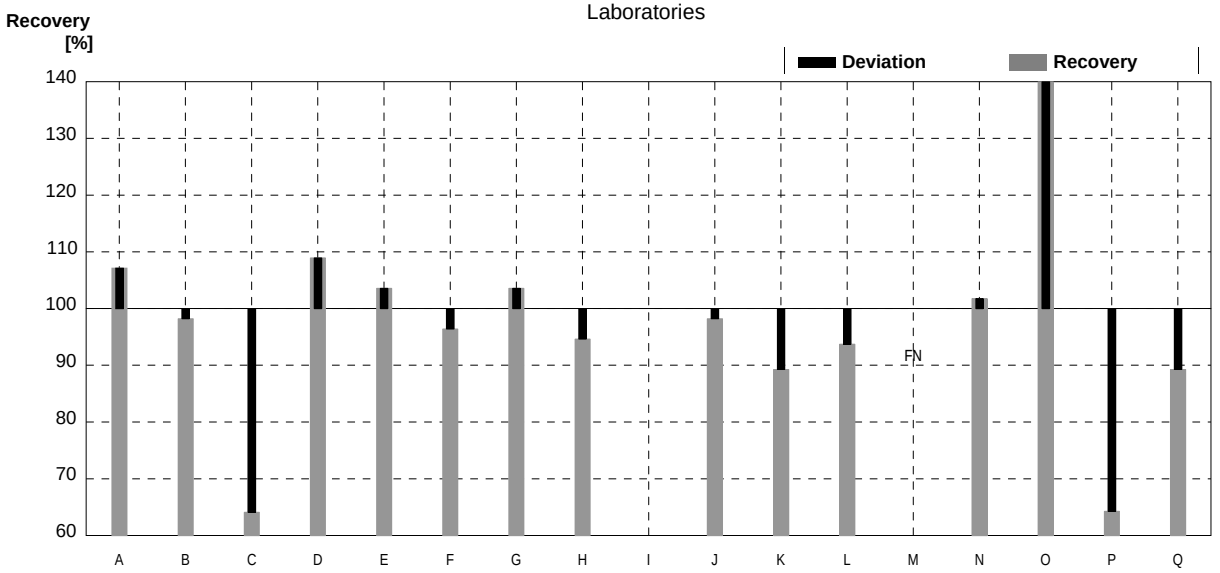
Sample C49A

Parameter Trichloromethane

Target value ± U (k=2)	0,56	µg/l	±	0,03	µg/l
IFA result ± U (k=2)	0,57	µg/l	±	0,09	µg/l
Stability test ± U (k=2)	0,58	µg/l	±	0,09	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,6	0,2	µg/l	107%	0,48
B	0,55	0,11	µg/l	98%	-0,12
C	0,359 *	0,091	µg/l	64%	-2,39
D	0,61	0,12	µg/l	109%	0,60
E	0,58	0,15	µg/l	104%	0,24
F	0,54	0,08	µg/l	96%	-0,24
G	0,58	0,12	µg/l	104%	0,24
H	0,53	0,08	µg/l	95%	-0,36
I			µg/l		
J	0,55	0,10	µg/l	98%	-0,12
K	0,5	0,15	µg/l	89%	-0,71
L	0,525	0,105	µg/l	94%	-0,42
M	<0,4		µg/l	FN	
N	0,57	0,033	µg/l	102%	0,12
O	1,02 *	0,13	µg/l	182%	5,48
P	0,36 *	0,05	µg/l	64%	-2,38
Q	0,5	0,12	µg/l	89%	-0,71





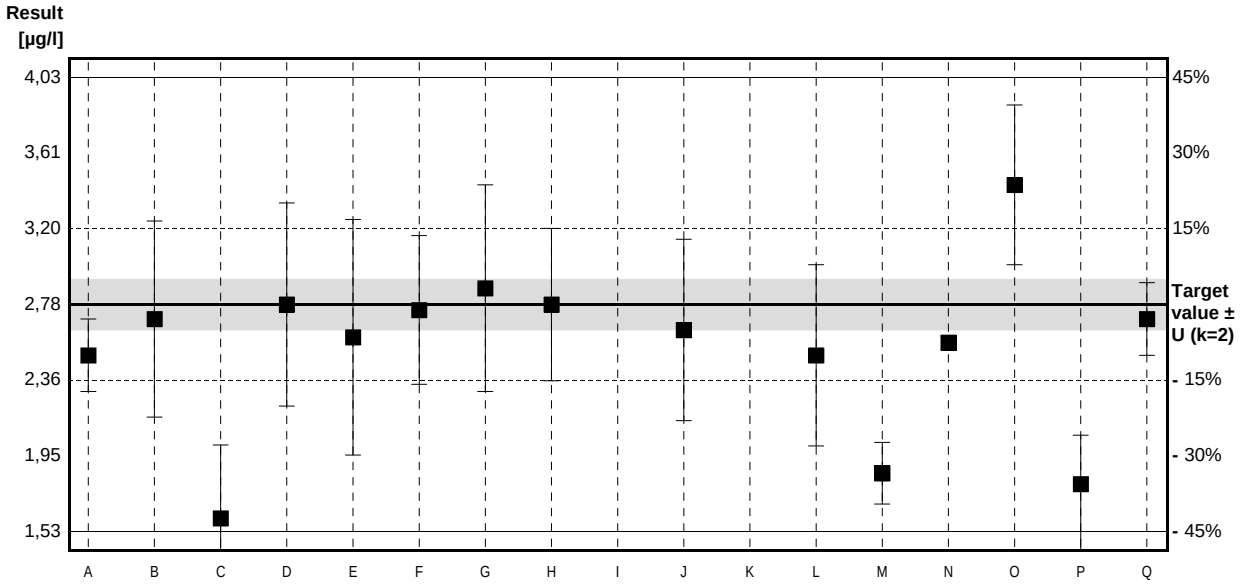
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,56 ± 0,11	0,55 ± 0,03	µg/l
Recov. ± CI(99%)	99,7 ± 20,3	98,7 ± 5,8	%
SD between labs	0,15	0,04	µg/l
RSD between labs	26,5	6,5	%
n for calculation	15	12	

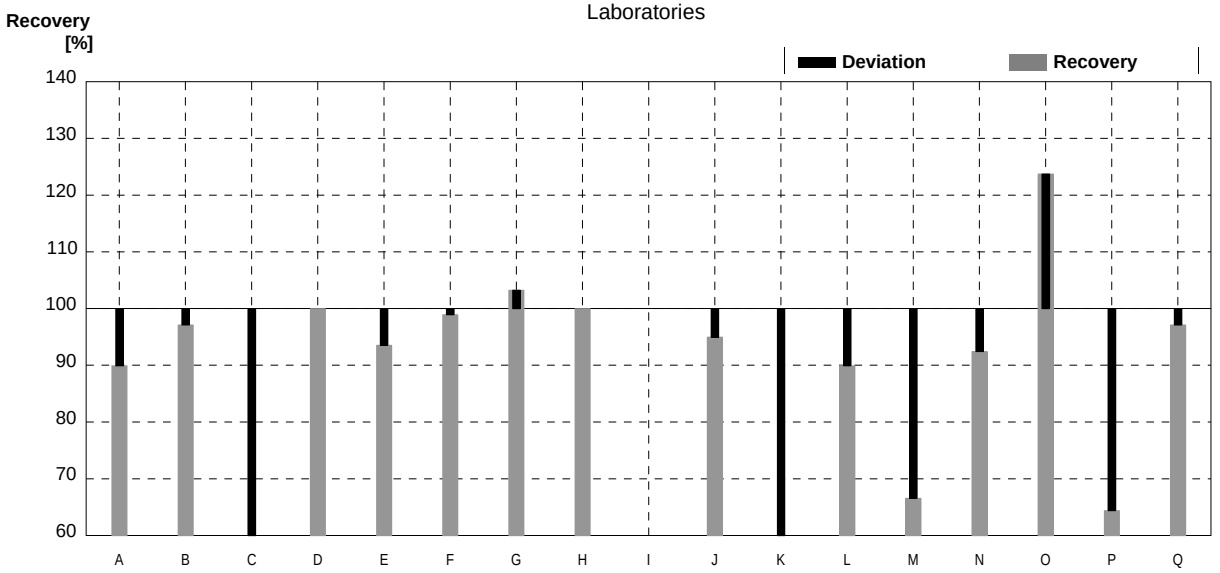
Sample C49B

Parameter Trichloromethane

Target value ± U (k=2)	2,78	µg/l	±	0,14	µg/l
IFA result ± U (k=2)	2,81	µg/l	±	0,42	µg/l
Stability test ± U (k=2)	2,76	µg/l	±	0,41	µg/l

Lab Code	Result		±	Unit	Recovery	z-Score
A	2,5		0,2	µg/l	90%	-0,67
B	2,7		0,54	µg/l	97%	-0,19
C	1,601	*	0,405	µg/l	58%	-2,83
D	2,78		0,56	µg/l	100%	0,00
E	2,6		0,65	µg/l	94%	-0,43
F	2,75		0,41	µg/l	99%	-0,07
G	2,87		0,57	µg/l	103%	0,22
H	2,78		0,42	µg/l	100%	0,00
I				µg/l		
J	2,64		0,50	µg/l	95%	-0,34
K	1,5	*	0,45	µg/l	54%	-3,07
L	2,50		0,50	µg/l	90%	-0,67
M	1,85	*	0,17	µg/l	67%	-2,23
N	2,57		0,036	µg/l	92%	-0,50
O	3,44	*	0,44	µg/l	124%	1,58
P	1,79	*	0,27	µg/l	64%	-2,37
Q	2,7		0,2	µg/l	97%	-0,19





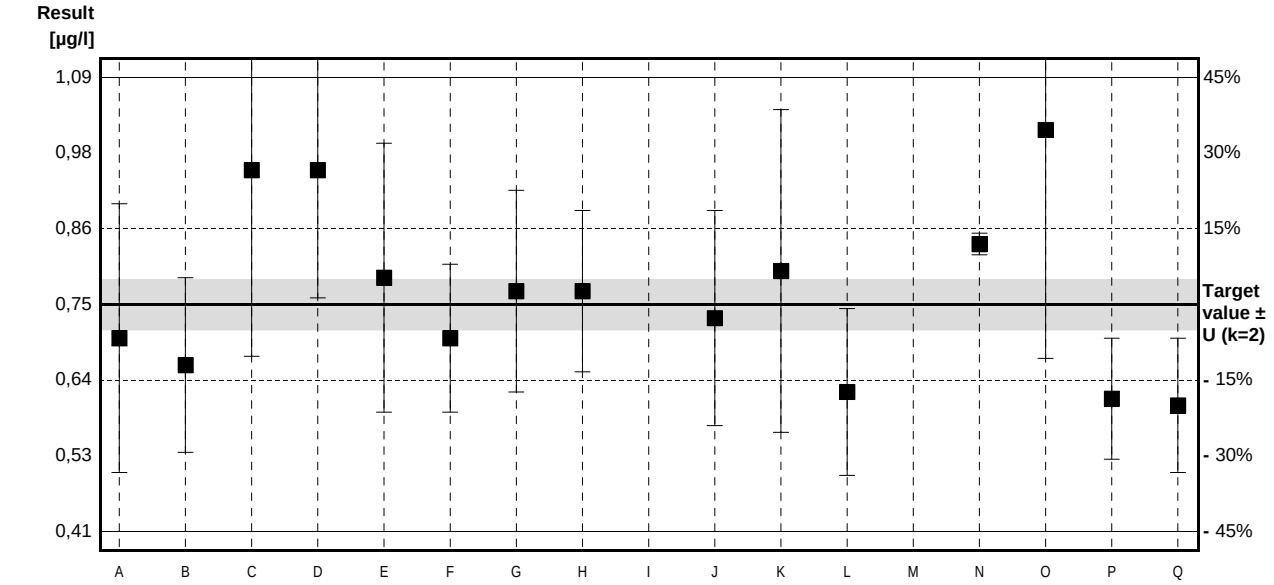
	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,47 ± 0,38	2,67 ± 0,12	µg/l
Recov. ± CI(99%)	89,0 ± 13,8	96,1 ± 4,2	%
SD between labs	0,52	0,12	µg/l
RSD between labs	21,1	4,5	%
n for calculation	16	11	

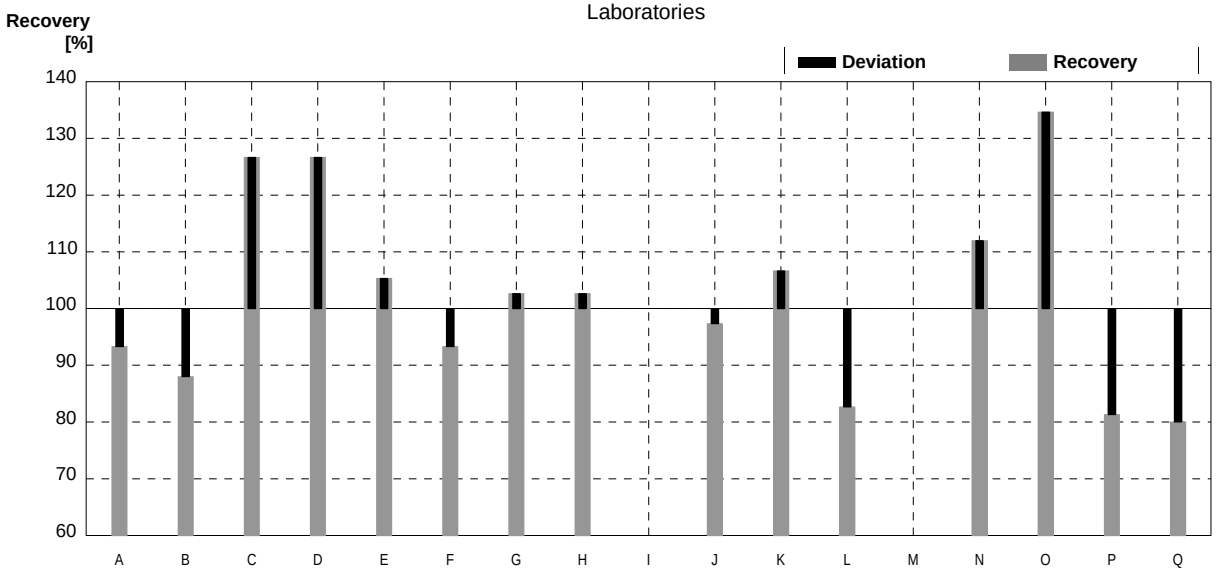
Sample C49A

Parameter Tetrachloromethane

Target value ± U (k=2)	0,75	µg/l	±	0,04	µg/l
IFA result ± U (k=2)	0,72	µg/l	±	0,11	µg/l
Stability test ± U (k=2)	0,72	µg/l	±	0,11	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,7	0,2	µg/l	93%	-0,37
B	0,66	0,13	µg/l	88%	-0,67
C	0,950	0,277	µg/l	127%	1,48
D	0,95	0,19	µg/l	127%	1,48
E	0,79	0,20	µg/l	105%	0,30
F	0,70	0,11	µg/l	93%	-0,37
G	0,77	0,15	µg/l	103%	0,15
H	0,77	0,12	µg/l	103%	0,15
I			µg/l		
J	0,73	0,16	µg/l	97%	-0,15
K	0,8	0,24	µg/l	107%	0,37
L	0,620	0,124	µg/l	83%	-0,96
M			µg/l		
N	0,84	0,016	µg/l	112%	0,67
O	1,01	0,34	µg/l	135%	1,93
P	0,61	0,09	µg/l	81%	-1,04
Q	0,6	0,1	µg/l	80%	-1,11





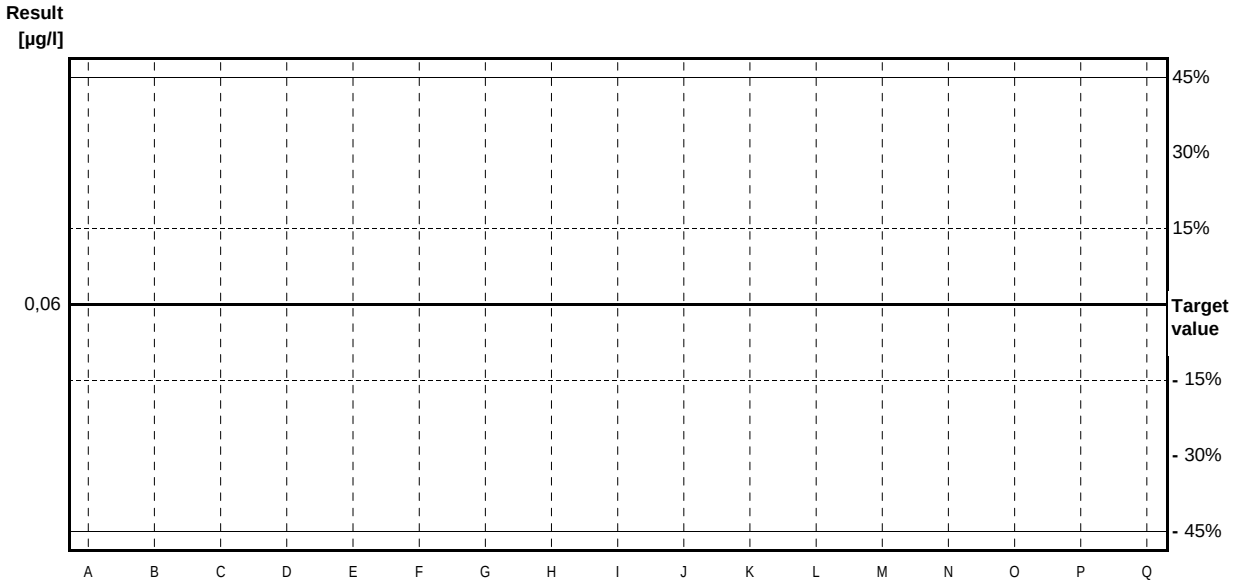
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,77 ± 0,10	0,77 ± 0,10	µg/l
Recov. ± CI(99%)	102,2 ± 13,1	102,2 ± 13,1	%
SD between labs	0,13	0,13	µg/l
RSD between labs	16,7	16,7	%
n for calculation	15	15	

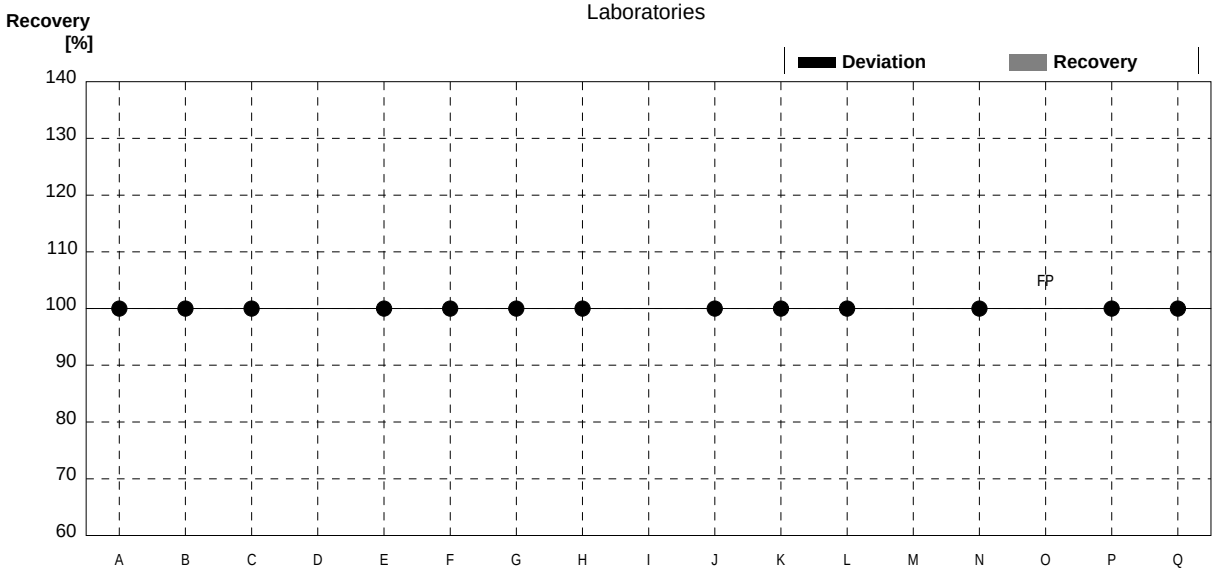
Sample C49B

Parameter Tetrachloromethane

Target value	<0,06	µg/l
IFA result	<0,03	µg/l
Stability test	<0,03	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,5	0,2	µg/l	•	
B	<0,10		µg/l	•	
C	<0,3	0,088	µg/l	•	
D	0		µg/l		
E	<0,01		µg/l	•	
F	<0,1		µg/l	•	
G	<0,09		µg/l	•	
H	<0,05		µg/l	•	
I			µg/l		
J	<0,5		µg/l	•	
K	<0,5	0,15	µg/l	•	
L	<0,02		µg/l	•	
M			µg/l		
N	<0,02		µg/l	•	
O	0,74	0,30	µg/l	FP	
P	<0,05		µg/l	•	
Q	<0,15		µg/l	•	





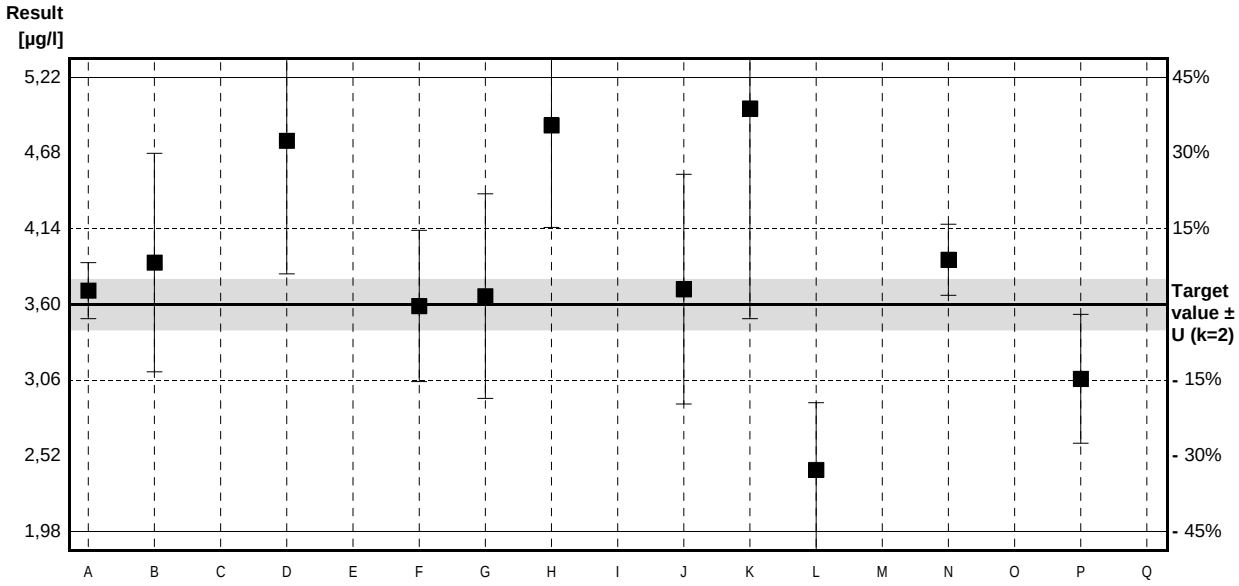
	All results	Outliers excl.	Unit
Mean ± CI(99%)			µg/l
Recov. ± CI(99%)			%
SD between labs			µg/l
RSD between labs			%
n for calculation			

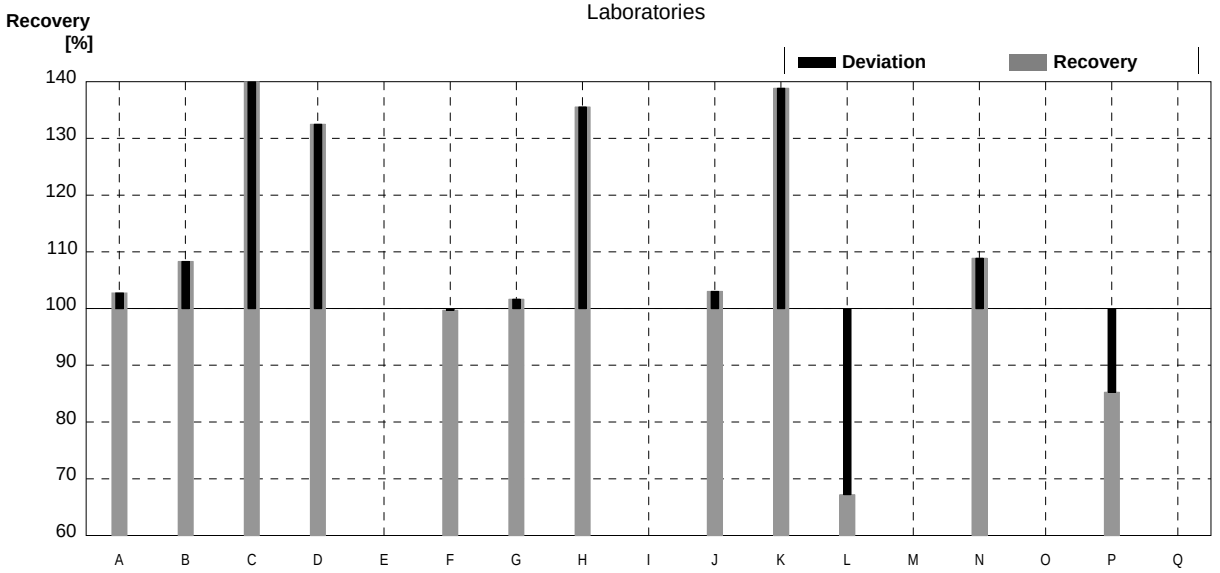
Sample C49A

Parameter 1,1-Dichloroethene

Target value ± U (k=2)	3,60	µg/l	±	0,18	µg/l
IFA result ± U (k=2)	3,57	µg/l	±	0,54	µg/l
Stability test ± U (k=2)	3,47	µg/l	±	0,52	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	3,7	0,2	µg/l	103%	0,13
B	3,9	0,78	µg/l	108%	0,40
C	10,059 *	3,873	µg/l	279%	8,54
D	4,77	0,95	µg/l	133%	1,55
E			µg/l		
F	3,59	0,54	µg/l	100%	-0,01
G	3,66	0,73	µg/l	102%	0,08
H	4,88	0,73	µg/l	136%	1,69
I			µg/l		
J	3,71	0,82	µg/l	103%	0,15
K	5,0	1,5	µg/l	139%	1,85
L	2,42	0,48	µg/l	67%	-1,56
M			µg/l		
N	3,92	0,254	µg/l	109%	0,42
O			µg/l		
P	3,07	0,46	µg/l	85%	-0,70
Q			µg/l		





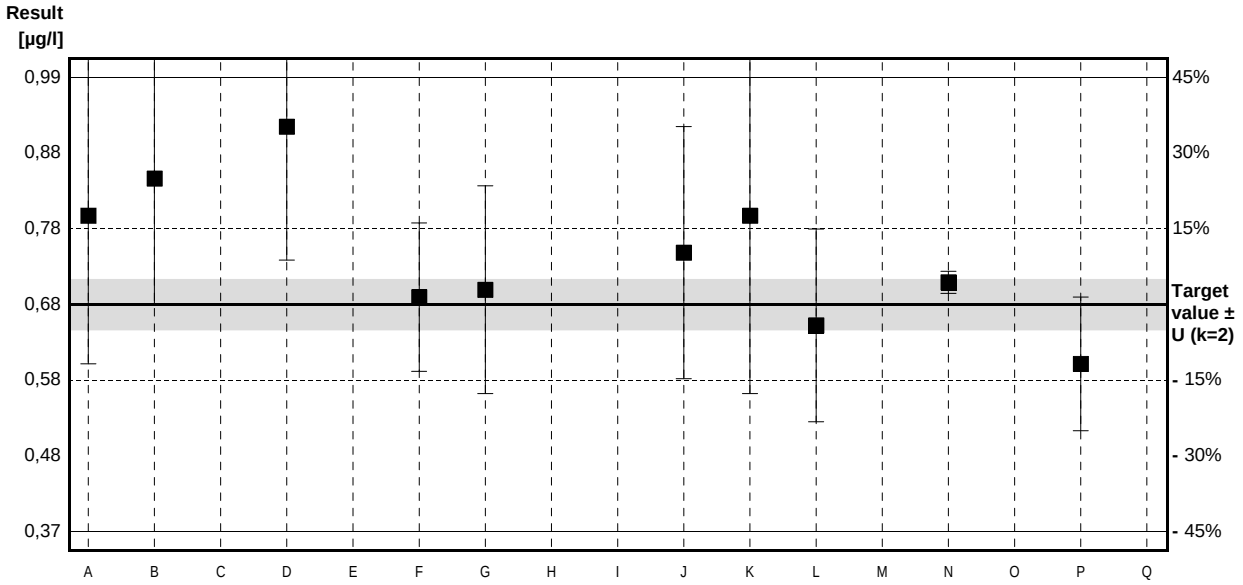
	All results	Outliers excl.	Unit
Mean ± CI(99%)	4,39 ± 1,74	3,87 ± 0,74	µg/l
Recov. ± CI(99%)	121,9 ± 48,2	107,6 ± 20,6	%
SD between labs	1,93	0,78	µg/l
RSD between labs	44,0	20,0	%
n for calculation	12	11	

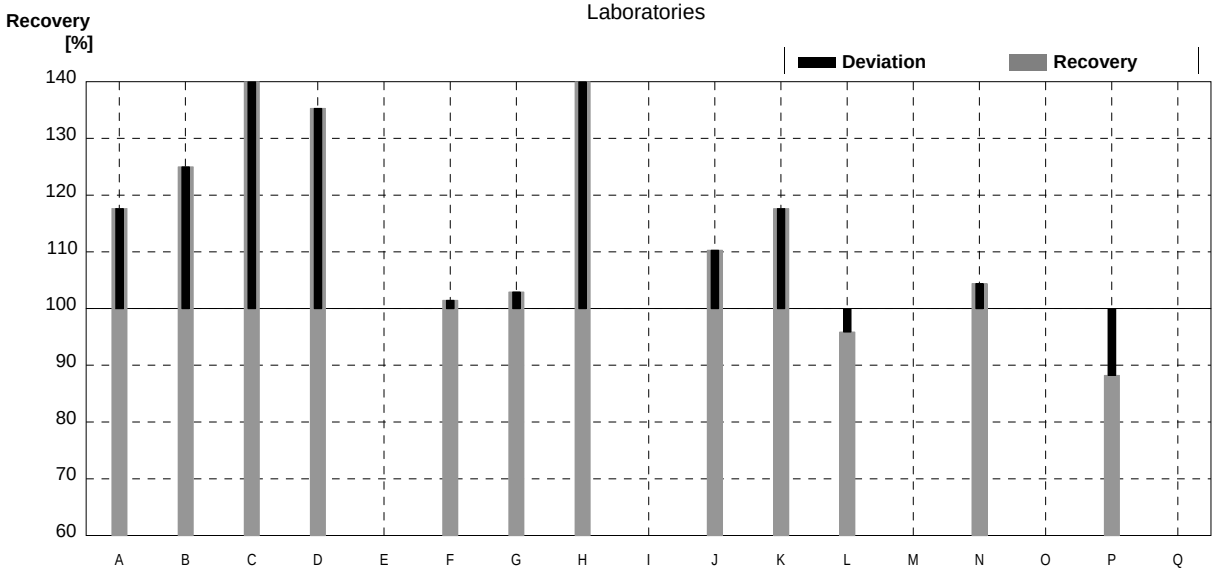
Sample C49B

Parameter 1,1-Dichloroethene

Target value ± U (k=2)	0,68	µg/l	±	0,03	µg/l
IFA result ± U (k=2)	0,68	µg/l	±	0,10	µg/l
Stability test ± U (k=2)	0,68	µg/l	±	0,10	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,8	0,2	µg/l	118%	0,84
B	0,85	0,17	µg/l	125%	1,19
C	1,930 *	0,743	µg/l	284%	8,75
D	0,92	0,18	µg/l	135%	1,68
E			µg/l		
F	0,69	0,10	µg/l	101%	0,07
G	0,70	0,14	µg/l	103%	0,14
H	0,99	0,15	µg/l	146%	2,17
I			µg/l		
J	0,75	0,17	µg/l	110%	0,49
K	0,8	0,24	µg/l	118%	0,84
L	0,652	0,130	µg/l	96%	-0,20
M			µg/l		
N	0,71	0,015	µg/l	104%	0,21
O			µg/l		
P	0,60	0,09	µg/l	88%	-0,56
Q			µg/l		





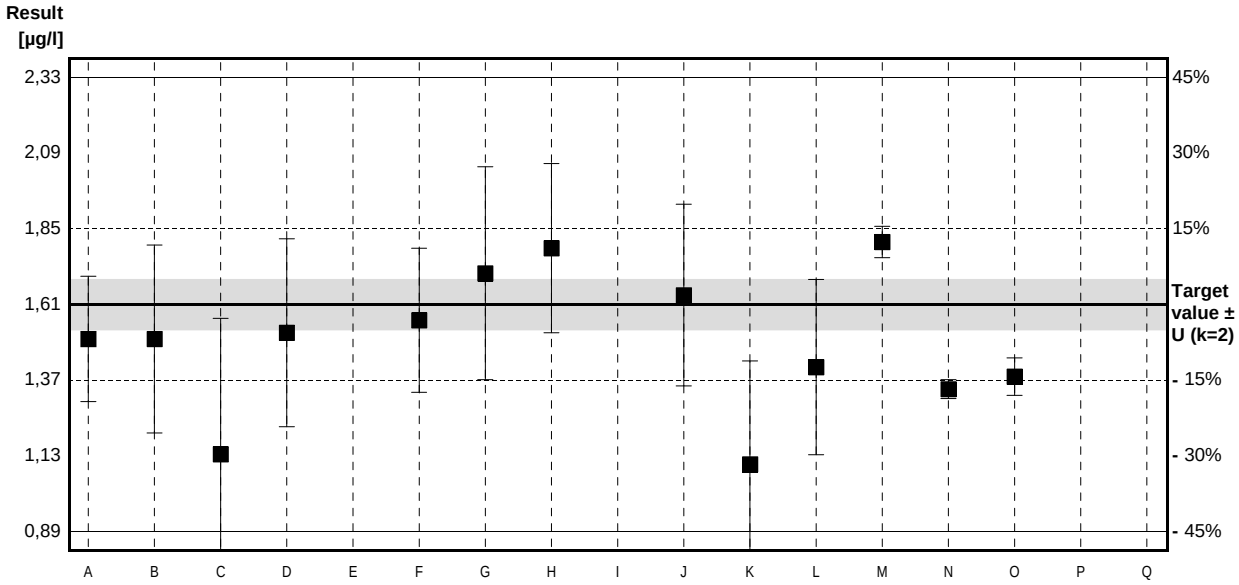
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,87 ± 0,32	0,77 ± 0,11	µg/l
Recov. ± CI(99%)	127,4 ± 46,6	113,1 ± 16,5	%
SD between labs	0,35	0,12	µg/l
RSD between labs	40,8	15,2	%
n for calculation	12	11	

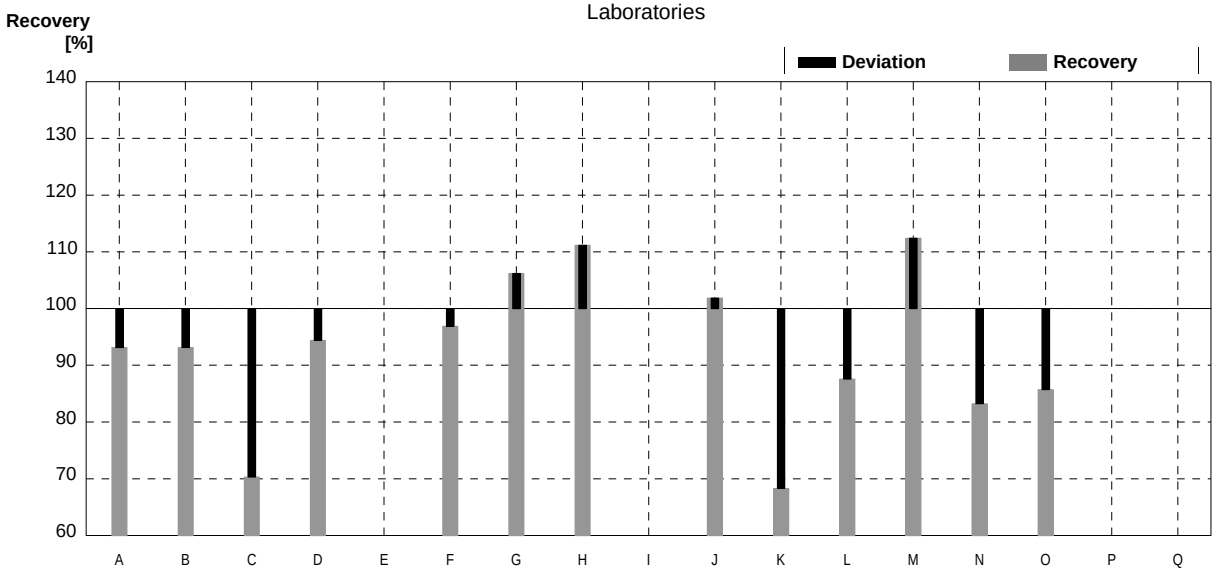
Sample C49A

Parameter Tribromomethane

Target value ± U (k=2)	1,61	µg/l	±	0,08	µg/l
IFA result ± U (k=2)	1,63	µg/l	±	0,24	µg/l
Stability test ± U (k=2)	1,53	µg/l	±	0,23	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,5	0,2	µg/l	93%	-0,38
B	1,5	0,30	µg/l	93%	-0,38
C	1,132	0,434	µg/l	70%	-1,65
D	1,52	0,30	µg/l	94%	-0,31
E			µg/l		
F	1,56	0,23	µg/l	97%	-0,17
G	1,71	0,34	µg/l	106%	0,35
H	1,79	0,27	µg/l	111%	0,62
I			µg/l		
J	1,64	0,29	µg/l	102%	0,10
K	1,1	0,33	µg/l	68%	-1,76
L	1,41	0,28	µg/l	88%	-0,69
M	1,81	0,05	µg/l	112%	0,69
N	1,34	0,030	µg/l	83%	-0,93
O	1,38	0,06	µg/l	86%	-0,79
P	n,B.		µg/l		
Q			µg/l		





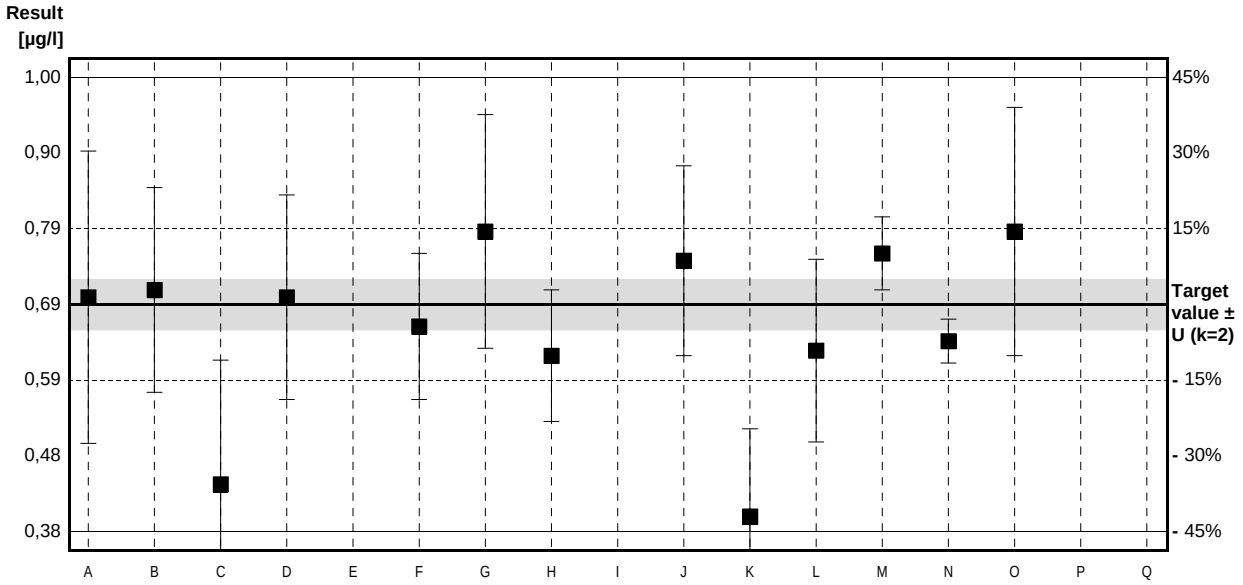
	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,49 ± 0,19	1,49 ± 0,19	µg/l
Recov. ± CI(99%)	92,7 ± 11,7	92,7 ± 11,7	%
SD between labs	0,22	0,22	µg/l
RSD between labs	14,9	14,9	%
n for calculation	13	13	

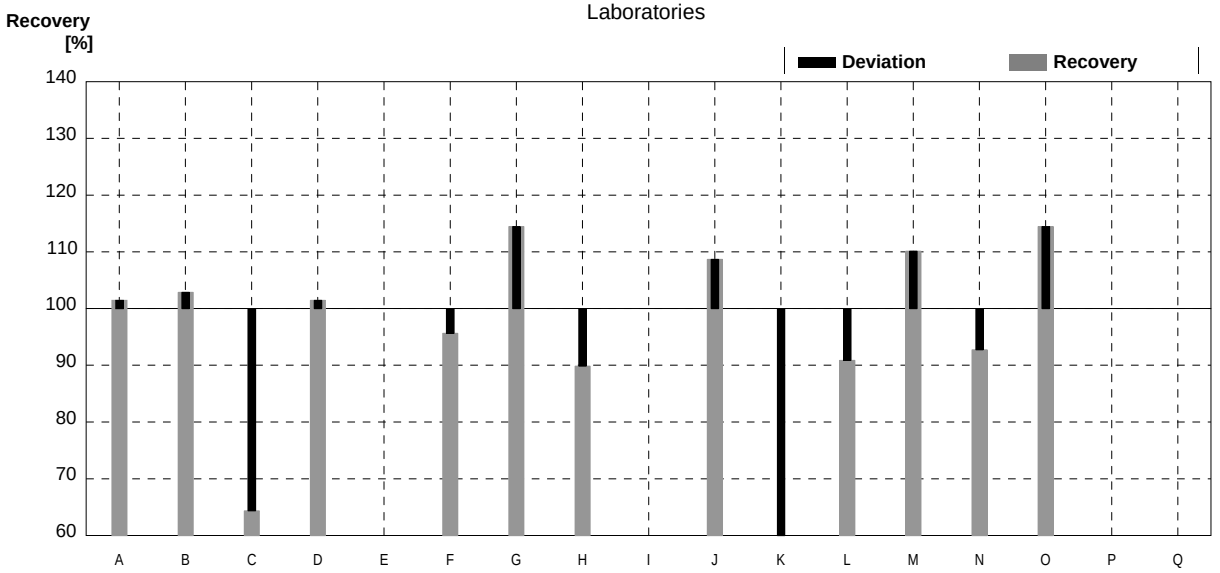
Sample C49B

Parameter Tribromomethane

Target value ± U (k=2)	0,69	µg/l	±	0,03	µg/l
IFA result ± U (k=2)	0,68	µg/l	±	0,10	µg/l
Stability test ± U (k=2)	0,67	µg/l	±	0,10	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,7	0,2	µg/l	101%	0,08
B	0,71	0,14	µg/l	103%	0,16
C	0,444	0,170	µg/l	64%	-1,98
D	0,70	0,14	µg/l	101%	0,08
E			µg/l		
F	0,66	0,10	µg/l	96%	-0,24
G	0,79	0,16	µg/l	114%	0,81
H	0,62	0,09	µg/l	90%	-0,56
I			µg/l		
J	0,75	0,13	µg/l	109%	0,48
K	0,4 *	0,12	µg/l	58%	-2,33
L	0,627	0,125	µg/l	91%	-0,51
M	0,76	0,05	µg/l	110%	0,56
N	0,64	0,030	µg/l	93%	-0,40
O	0,79	0,17	µg/l	114%	0,81
P	n,B.		µg/l		
Q			µg/l		





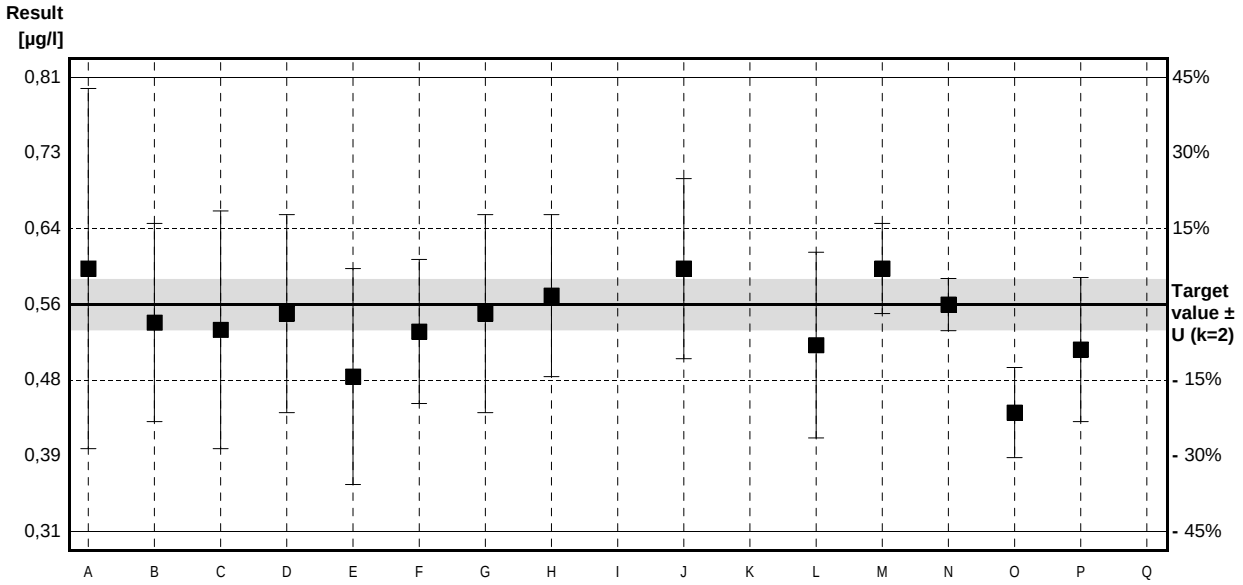
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,66 ± 0,10	0,68 ± 0,09	µg/l
Recov. ± CI(99%)	95,8 ± 14,8	98,9 ± 12,5	%
SD between labs	0,12	0,10	µg/l
RSD between labs	18,3	14,1	%
n for calculation	13	12	

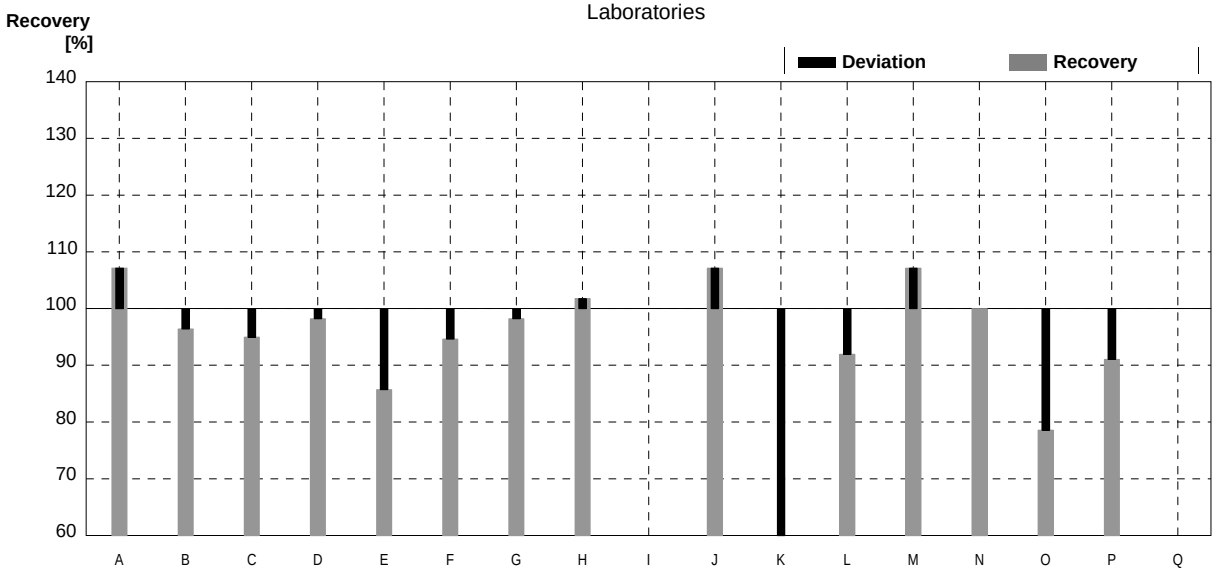
Sample C49A

Parameter Bromodichloromethane

Target value ± U (k=2)	0,56 µg/l	±	0,03 µg/l	
IFA result ± U (k=2)	0,56 µg/l	±	0,08 µg/l	
Stability test ± U (k=2)	0,55 µg/l	±	0,08 µg/l	

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,6	0,2	µg/l	107%	0,51
B	0,54	0,11	µg/l	96%	-0,26
C	0,532	0,132	µg/l	95%	-0,36
D	0,55	0,11	µg/l	98%	-0,13
E	0,48	0,12	µg/l	86%	-1,02
F	0,53	0,08	µg/l	95%	-0,38
G	0,55	0,11	µg/l	98%	-0,13
H	0,57	0,09	µg/l	102%	0,13
I			µg/l		
J	0,60	0,10	µg/l	107%	0,51
K	0,3 *	0,09	µg/l	54%	-3,32
L	0,515	0,103	µg/l	92%	-0,57
M	0,60	0,05	µg/l	107%	0,51
N	0,56	0,029	µg/l	100%	0,00
O	0,44	0,05	µg/l	79%	-1,53
P	0,51	0,08	µg/l	91%	-0,64
Q			µg/l		





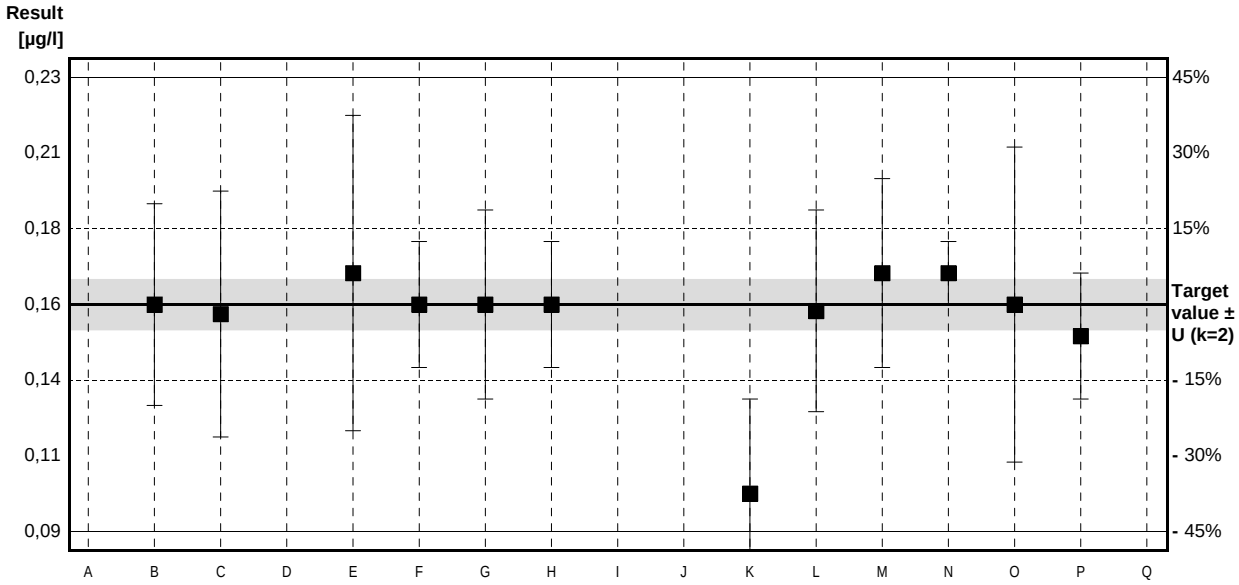
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,53 ± 0,06	0,54 ± 0,04	µg/l
Recov. ± CI(99%)	93,8 ± 10,5	96,6 ± 6,6	%
SD between labs	0,08	0,05	µg/l
RSD between labs	14,6	8,5	%
n for calculation	15	14	

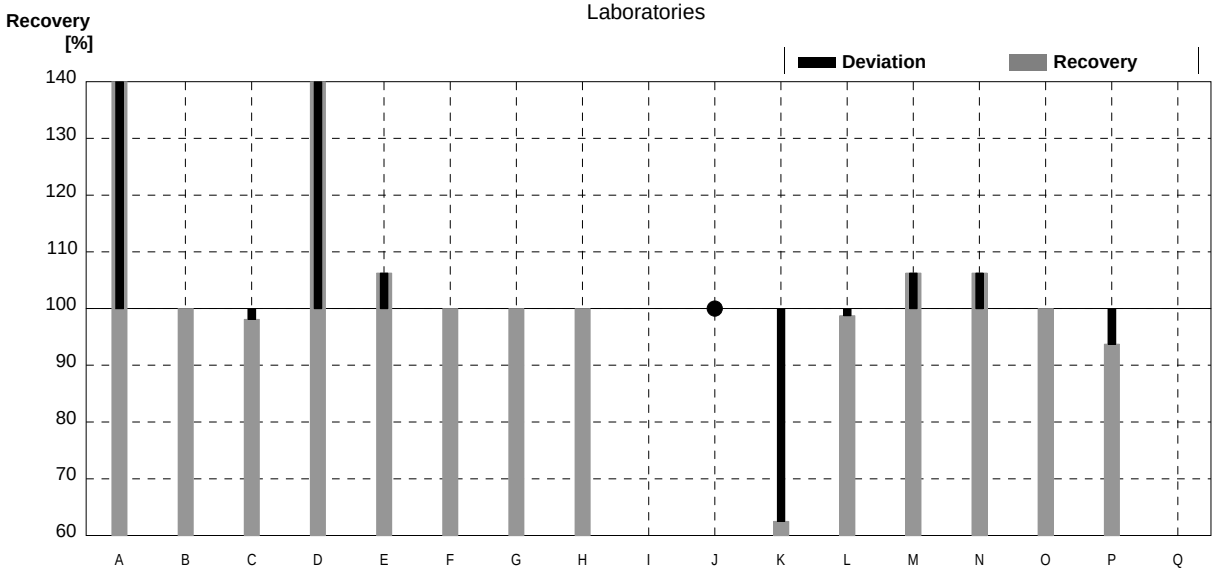
Sample C49B

Parameter Bromodichloromethane

Target value ± U (k=2)	0,16	µg/l	±	0,01	µg/l
IFA result ± U (k=2)	0,17	µg/l	±	0,03	µg/l
Stability test ± U (k=2)	0,17	µg/l	±	0,03	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,3 *	0,2	µg/l	188%	6,25
B	0,16	0,032	µg/l	100%	0,00
C	0,157	0,039	µg/l	98%	-0,13
D	0,24 *	0,05	µg/l	150%	3,57
E	0,17	0,05	µg/l	106%	0,45
F	0,16	0,02	µg/l	100%	0,00
G	0,16	0,03	µg/l	100%	0,00
H	0,16	0,02	µg/l	100%	0,00
I			µg/l		
J	<0,5		µg/l	•	
K	0,1 *	0,03	µg/l	63%	-2,68
L	0,158	0,032	µg/l	99%	-0,09
M	0,17	0,03	µg/l	106%	0,45
N	0,17	0,010	µg/l	106%	0,45
O	0,16	0,05	µg/l	100%	0,00
P	0,15	0,02	µg/l	94%	-0,45
Q			µg/l		





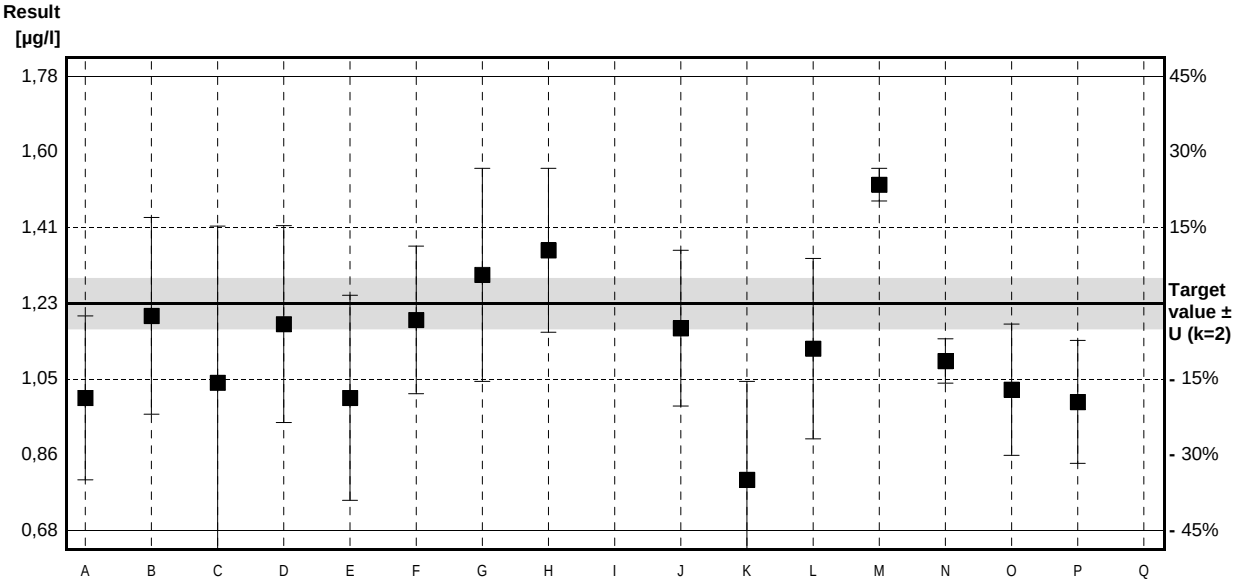
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,17 ± 0,04	0,16 ± 0,01	µg/l
Recov. ± CI(99%)	107,8 ± 23,3	100,9 ± 3,7	%
SD between labs	0,05	0,01	µg/l
RSD between labs	26,8	3,9	%
n for calculation	14	11	

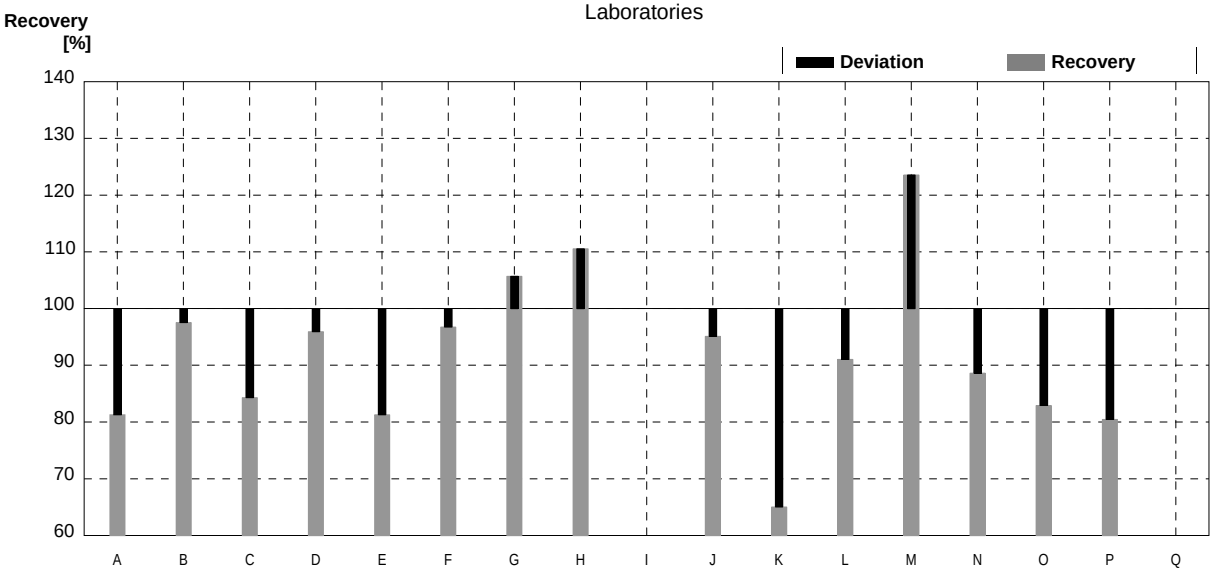
Sample C49A

Parameter Dibromochloromethane

Target value ± U (k=2)	1,23	µg/l	±	0,06	µg/l
IFA result ± U (k=2)	1,24	µg/l	±	0,19	µg/l
Stability test ± U (k=2)	1,19	µg/l	±	0,18	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,0	0,2	µg/l	81%	-1,25
B	1,2	0,24	µg/l	98%	-0,16
C	1,037	0,382	µg/l	84%	-1,05
D	1,18	0,24	µg/l	96%	-0,27
E	1,0	0,25	µg/l	81%	-1,25
F	1,19	0,18	µg/l	97%	-0,22
G	1,30	0,26	µg/l	106%	0,38
H	1,36	0,20	µg/l	111%	0,70
I			µg/l		
J	1,17	0,19	µg/l	95%	-0,33
K	0,8	0,24	µg/l	65%	-2,33
L	1,12	0,22	µg/l	91%	-0,60
M	1,52	0,04	µg/l	124%	1,57
N	1,09	0,054	µg/l	89%	-0,76
O	1,02	0,16	µg/l	83%	-1,14
P	0,99	0,15	µg/l	80%	-1,30
Q			µg/l		





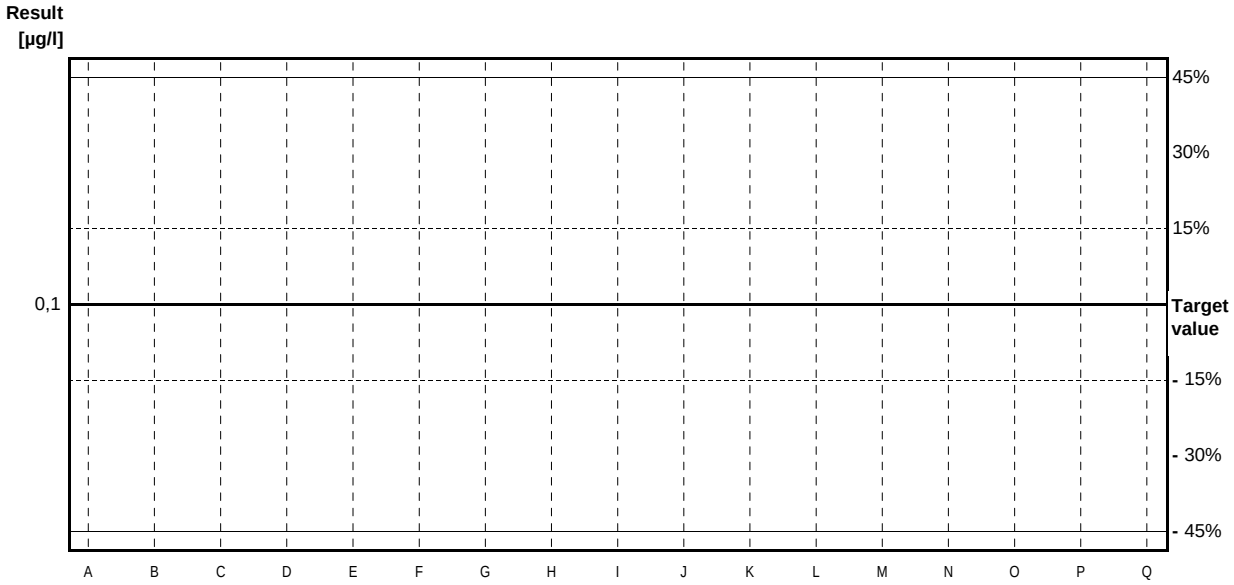
	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,13 ± 0,14	1,13 ± 0,14	µg/l
Recov. ± CI(99%)	92,0 ± 11,0	92,0 ± 11,0	%
SD between labs	0,18	0,18	µg/l
RSD between labs	15,5	15,5	%
n for calculation	15	15	

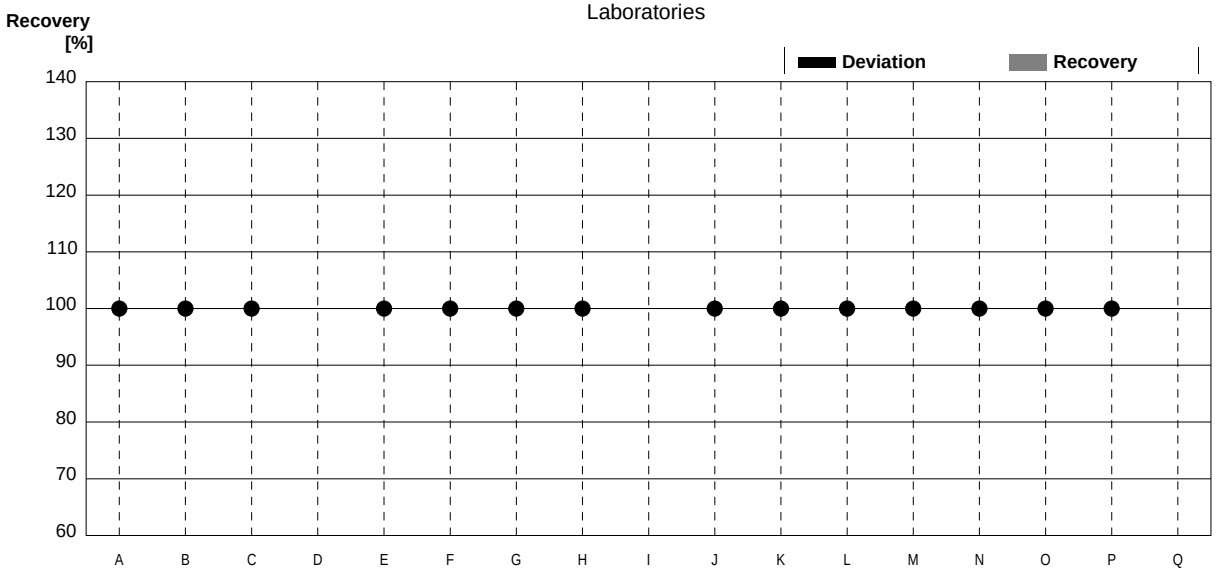
Sample C49B

Parameter Dibromochloromethane

Target value	<0,1	µg/l
IFA result	<0,05	µg/l
Stability test	<0,05	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	<0,5	0,2	µg/l	•	
B	<0,10		µg/l	•	
C	<0,3	0,110	µg/l	•	
D	0		µg/l		
E	<0,1		µg/l	•	
F	<0,1		µg/l	•	
G	<0,02		µg/l	•	
H	<0,05		µg/l	•	
I			µg/l		
J	<0,5		µg/l	•	
K	<0,1	0,03	µg/l	•	
L	<0,1		µg/l	•	
M	<0,2		µg/l	•	
N	<0,02		µg/l	•	
O	<0,10		µg/l	•	
P	<0,05		µg/l	•	
Q			µg/l		





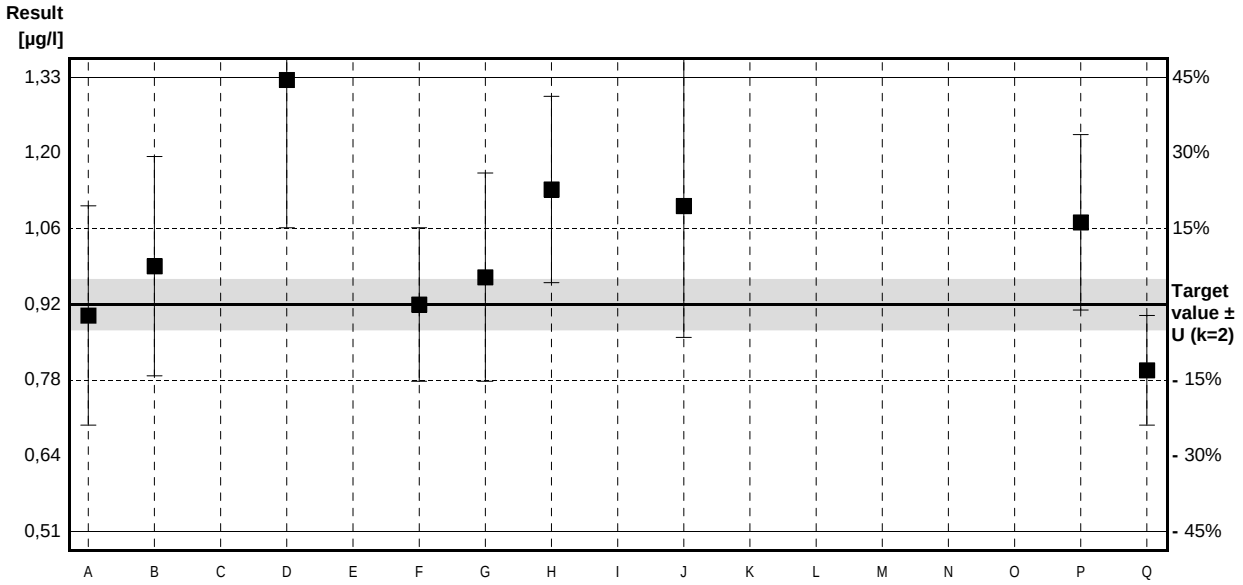
	All results	Outliers excl.	Unit
Mean ± CI(99%)			µg/l
Recov. ± CI(99%)			%
SD between labs			µg/l
RSD between labs			%
n for calculation			

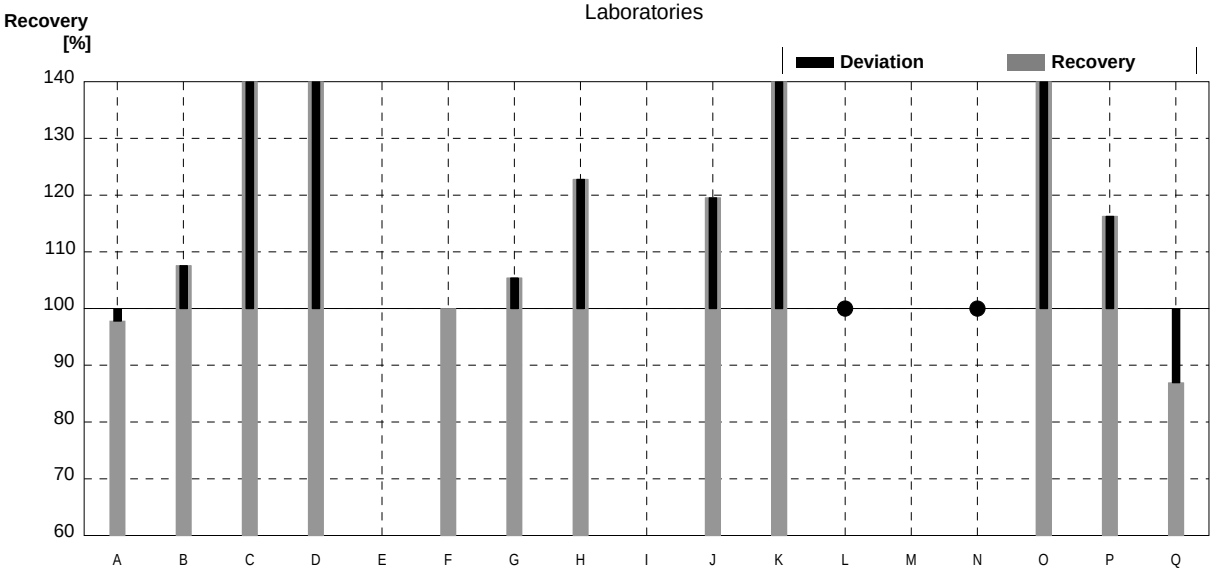
Sample C49A

Parameter Dichloromethane

Target value ± U (k=2)	0,92	µg/l	±	0,05	µg/l
IFA result ± U (k=2)	0,97	µg/l	±	0,15	µg/l
Stability test ± U (k=2)	1,05	µg/l	±	0,16	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,9	0,2	µg/l	98%	
B	0,99	0,20	µg/l	108%	
C	1,564	0,424	µg/l	170%	
D	1,33	0,27	µg/l	145%	
E			µg/l		
F	0,92	0,14	µg/l	100%	
G	0,97	0,19	µg/l	105%	
H	1,13	0,17	µg/l	123%	
I			µg/l		
J	1,10	0,24	µg/l	120%	
K	1,4	0,42	µg/l	152%	
L	<1,0		µg/l	•	
M			µg/l		
N	<1,5		µg/l	•	
O	2,15 *	0,30	µg/l	234%	
P	1,07	0,16	µg/l	116%	
Q	0,8	0,1	µg/l	87%	





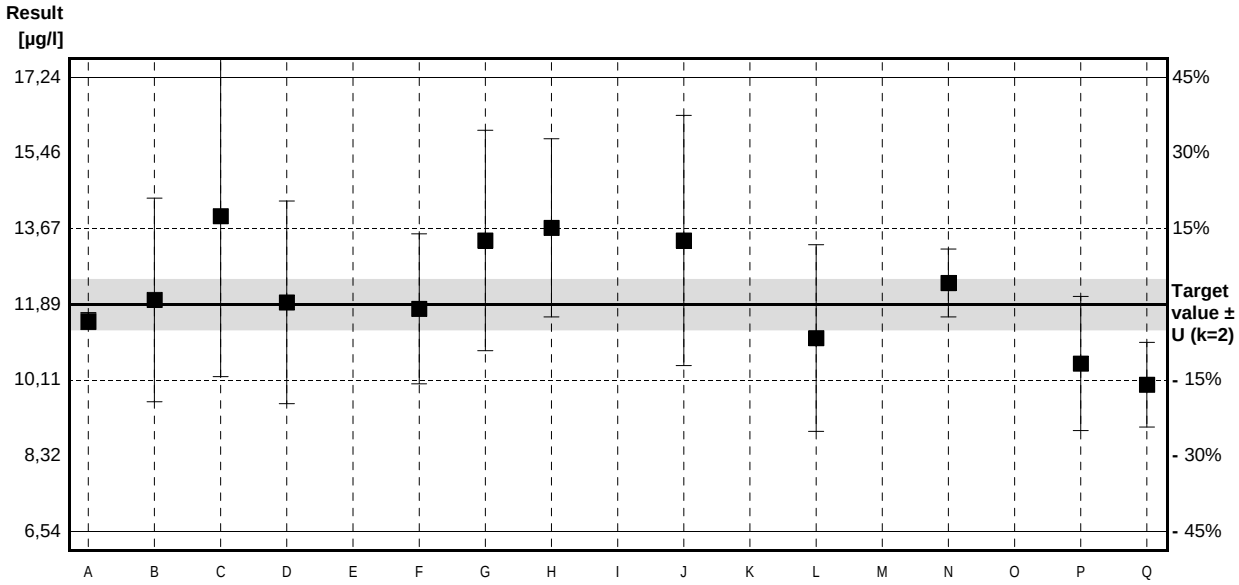
	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,19 ± 0,34	1,11 ± 0,22	µg/l
Recov. ± CI(99%)	129,7 ± 36,6	120,3 ± 24,4	%
SD between labs	0,38	0,23	µg/l
RSD between labs	31,4	21,2	%
n for calculation	12	11	

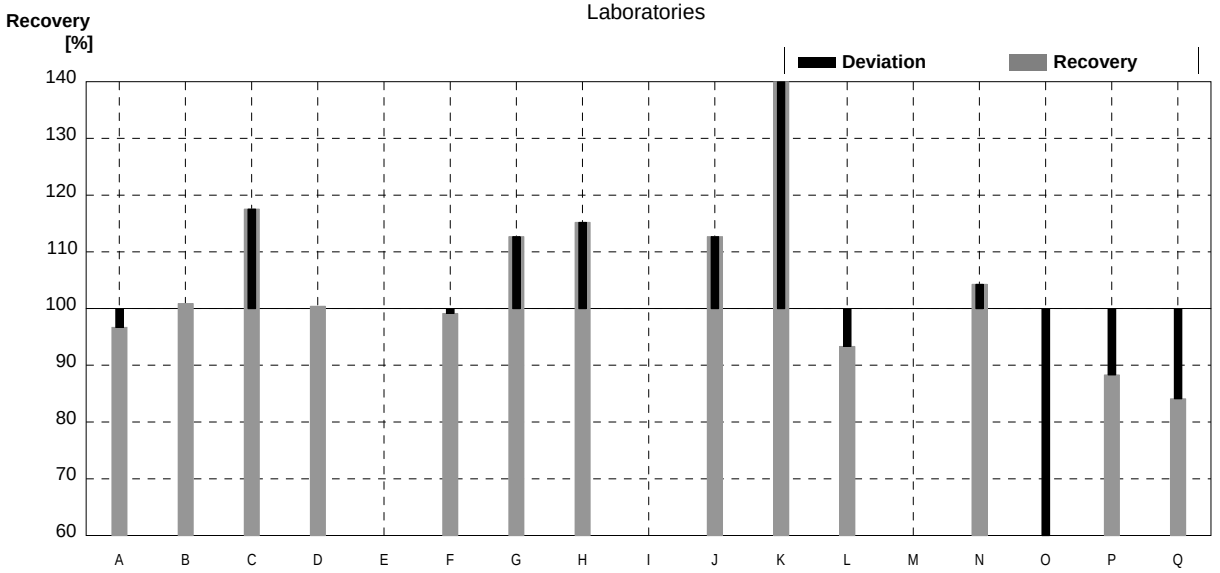
Sample C49B

Parameter Dichloromethane

Target value ± U (k=2)	11,89 µg/l	±	0,59 µg/l	
IFA result ± U (k=2)	12,18 µg/l	±	1,83 µg/l	
Stability test ± U (k=2)	12,05 µg/l	±	1,81 µg/l	

Lab Code	Result	±	Unit	Recovery	z-Score
A	11,5	0,2	µg/l	97%	-0,23
B	12	2,4	µg/l	101%	0,07
C	13,977	3,788	µg/l	118%	1,25
D	11,94	2,39	µg/l	100%	0,03
E			µg/l		
F	11,79	1,77	µg/l	99%	-0,06
G	13,4	2,6	µg/l	113%	0,91
H	13,7	2,1	µg/l	115%	1,09
I			µg/l		
J	13,4	2,95	µg/l	113%	0,91
K	18,6	5,58	µg/l	156%	4,03
L	11,1	2,2	µg/l	93%	-0,47
M			µg/l		
N	12,4	0,80	µg/l	104%	0,31
O	0,94 *	0,21	µg/l	8%	-6,58
P	10,50	1,58	µg/l	88%	-0,84
Q	10	1	µg/l	84%	-1,14





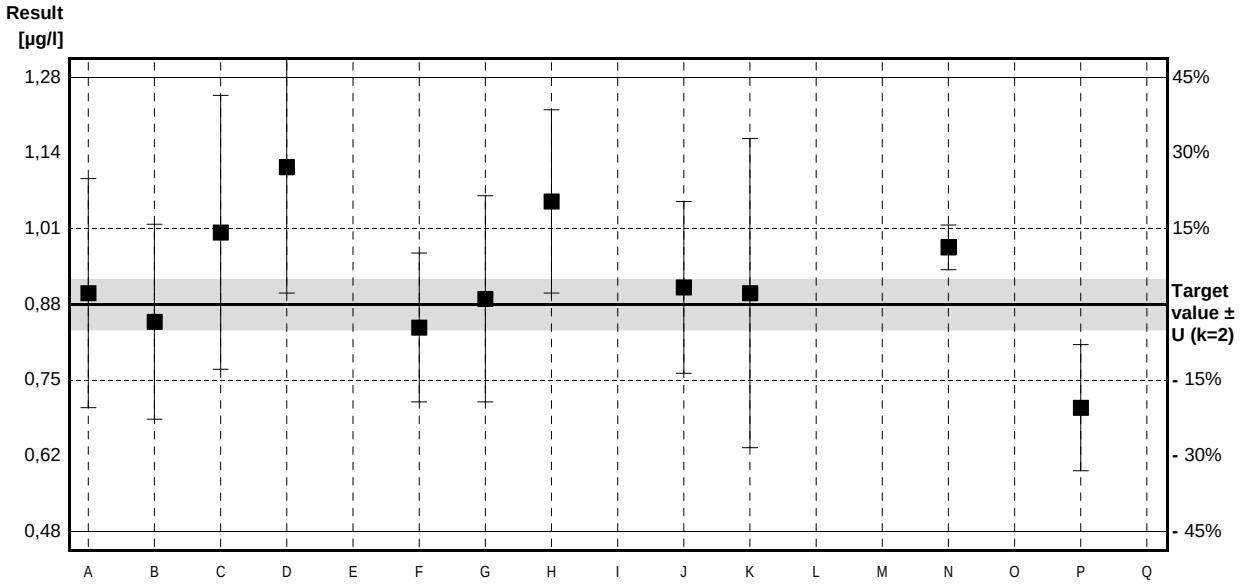
	All results	Outliers excl.	Unit
Mean ± CI(99%)	11,80 ± 3,02	12,64 ± 1,84	µg/l
Recov. ± CI(99%)	99,3 ± 25,4	106,3 ± 15,4	%
SD between labs	3,76	2,17	µg/l
RSD between labs	31,8	17,2	%
n for calculation	14	13	

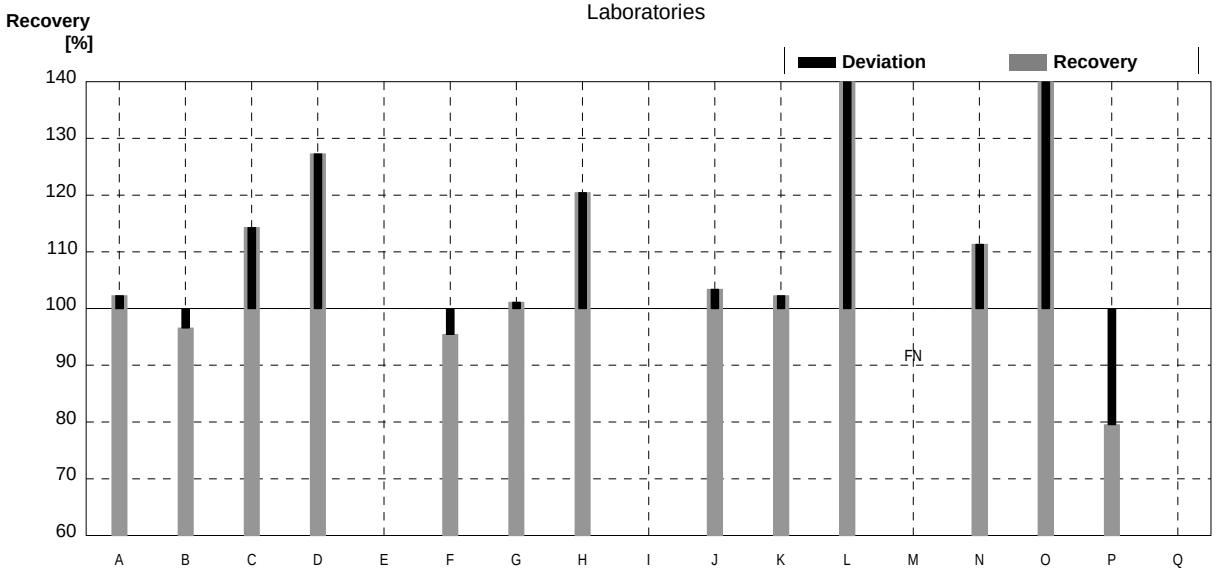
Sample C49A

Parameter 1,2-Dichloroethane

Target value ± U (k=2)	0,88	µg/l	±	0,04 µg/l
IFA result ± U (k=2)	0,88	µg/l	±	0,13 µg/l
Stability test ± U (k=2)	0,88	µg/l	±	0,13 µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,9	0,2	µg/l	102%	0,16
B	0,85	0,17	µg/l	97%	-0,24
C	1,006	0,239	µg/l	114%	1,02
D	1,12	0,22	µg/l	127%	1,95
E			µg/l		
F	0,84	0,13	µg/l	95%	-0,32
G	0,89	0,18	µg/l	101%	0,08
H	1,06	0,16	µg/l	120%	1,46
I			µg/l		
J	0,91	0,15	µg/l	103%	0,24
K	0,9	0,27	µg/l	102%	0,16
L	1,36 *	0,27	µg/l	155%	3,90
M	<0,3		µg/l	FN	
N	0,98	0,039	µg/l	111%	0,81
O	18,90 *	0,71	µg/l	2148%	146,27
P	0,70	0,11	µg/l	80%	-1,46
Q			µg/l		





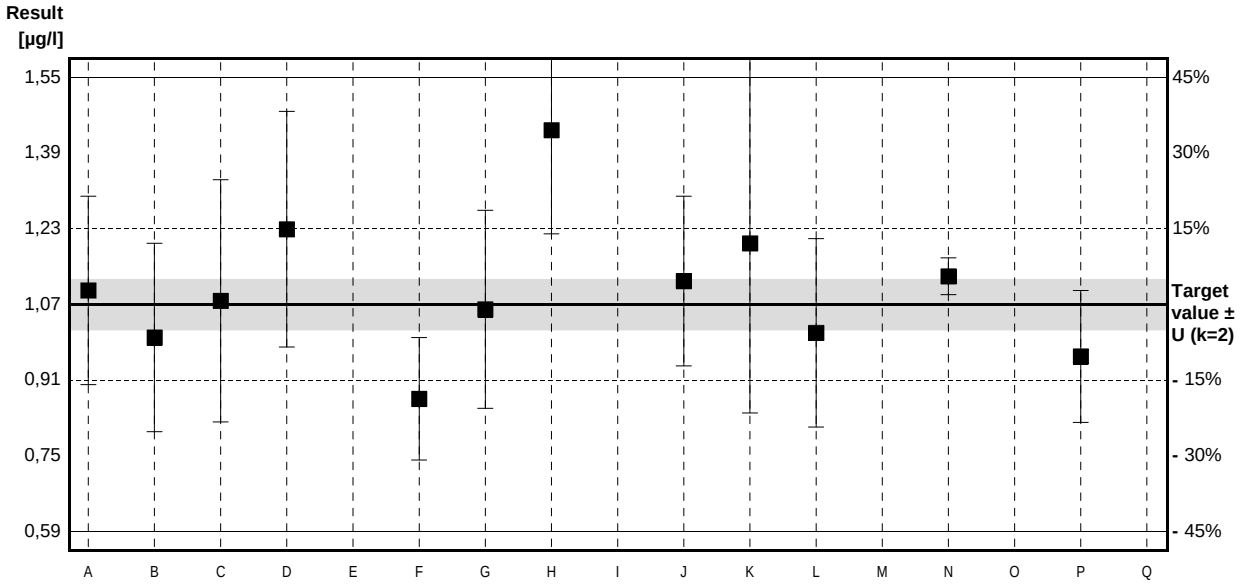
	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,34 ± 4,21	0,92 ± 0,11	µg/l
Recov. ± CI(99%)	265,9 ± 478,6	104,9 ± 12,5	%
SD between labs	4,98	0,11	µg/l
RSD between labs	212,8	12,4	%
n for calculation	13	11	

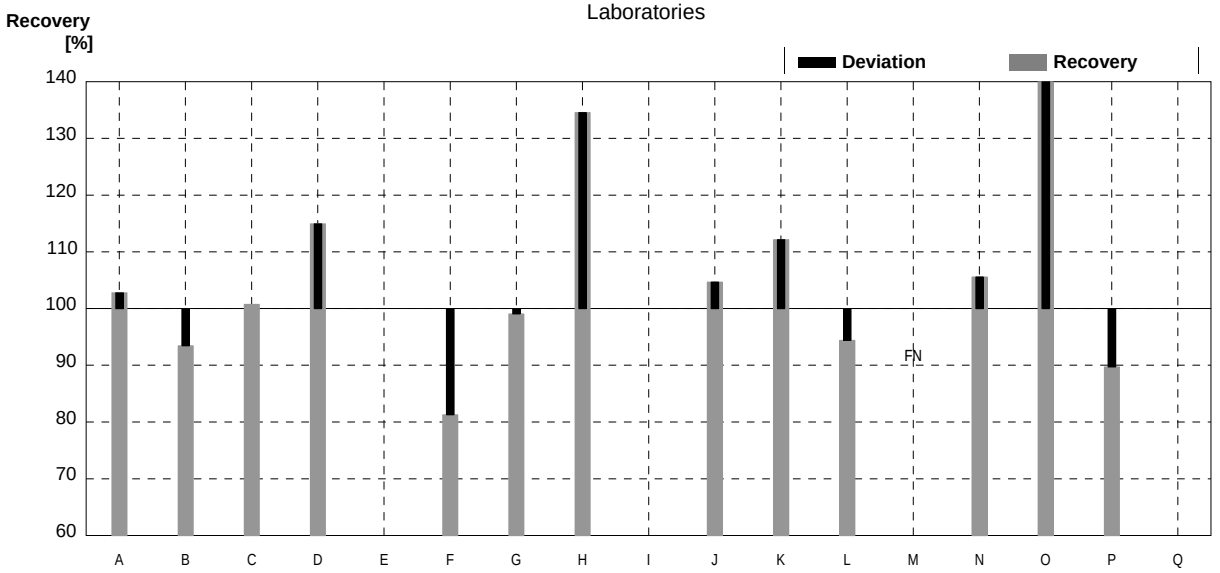
Sample C49B

Parameter 1,2-Dichloroethane

Target value ± U (k=2)	1,07 µg/l	±	0,05 µg/l	
IFA result ± U (k=2)	1,06 µg/l	±	0,16 µg/l	
Stability test ± U (k=2)	1,05 µg/l	±	0,16 µg/l	

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,1	0,2	µg/l	103%	0,20
B	1,0	0,20	µg/l	93%	-0,47
C	1,078	0,257	µg/l	101%	0,05
D	1,23	0,25	µg/l	115%	1,07
E			µg/l		
F	0,87	0,13	µg/l	81%	-1,34
G	1,06	0,21	µg/l	99%	-0,07
H	1,44	0,22	µg/l	135%	2,47
I			µg/l		
J	1,12	0,18	µg/l	105%	0,33
K	1,2	0,36	µg/l	112%	0,87
L	1,01	0,2	µg/l	94%	-0,40
M	<0,3		µg/l	FN	
N	1,13	0,039	µg/l	106%	0,40
O	18,02 *	2,00	µg/l	1684%	113,15
P	0,96	0,14	µg/l	90%	-0,73
Q			µg/l		





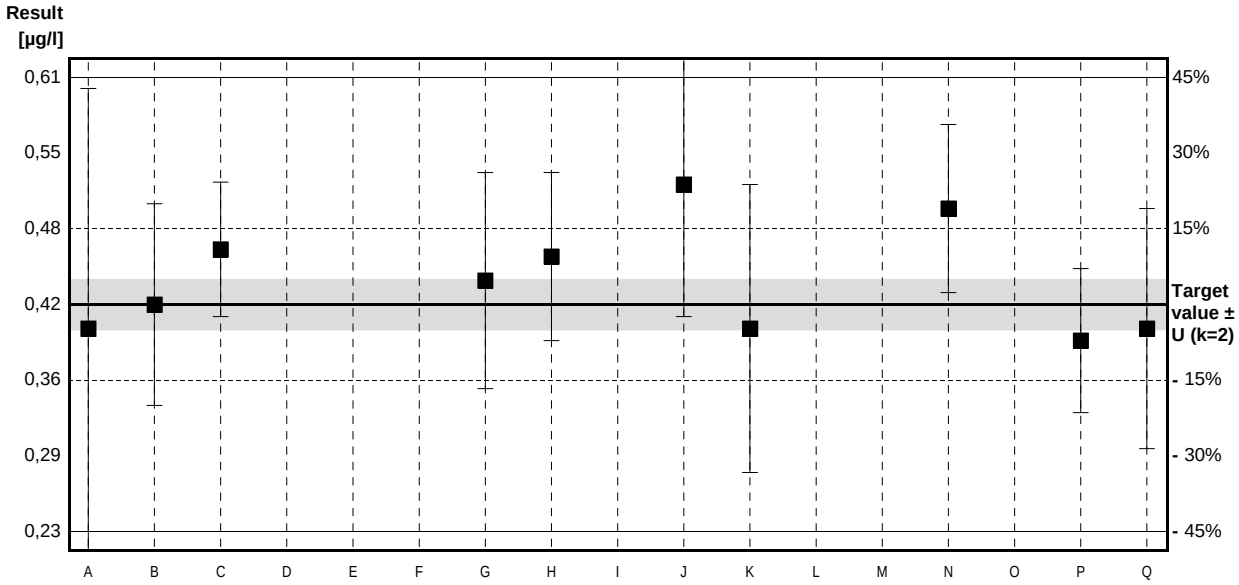
	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,40 ± 3,97	1,10 ± 0,13	µg/l
Recov. ± CI(99%)	224,4 ± 371,2	102,8 ± 12,3	%
SD between labs	4,69	0,15	µg/l
RSD between labs	195,5	13,3	%
n for calculation	13	12	

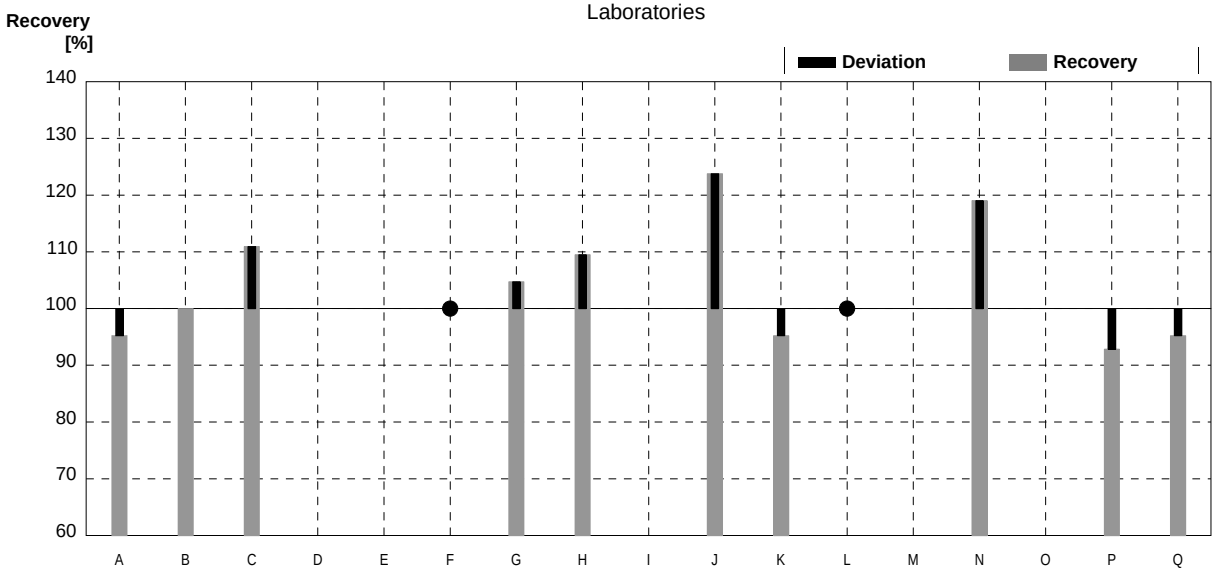
Sample C49A

Parameter cis-1,2-Dichloroethene

Target value ± U (k=2)	0,42	µg/l	±	0,02	µg/l
IFA result ± U (k=2)	0,43	µg/l	±	0,06	µg/l
Stability test ± U (k=2)	0,44	µg/l	±	0,07	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	0,4	0,2	µg/l	95%	-0,32
B	0,42	0,084	µg/l	100%	0,00
C	0,466	0,056	µg/l	111%	0,73
D			µg/l		
E			µg/l		
F	<0,5		µg/l	•	
G	0,44	0,09	µg/l	105%	0,32
H	0,46	0,07	µg/l	110%	0,63
I			µg/l		
J	0,52	0,11	µg/l	124%	1,59
K	0,4	0,12	µg/l	95%	-0,32
L	<1,0		µg/l	•	
M			µg/l		
N	0,50	0,070	µg/l	119%	1,27
O			µg/l		
P	0,39	0,06	µg/l	93%	-0,48
Q	0,4	0,1	µg/l	95%	-0,32





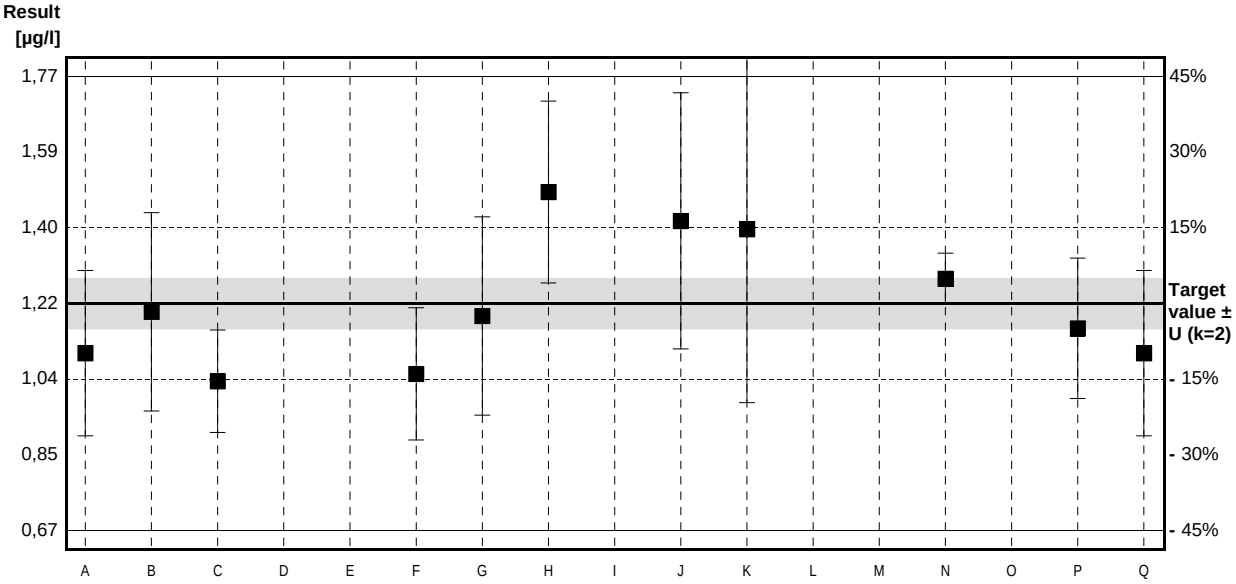
	All results	Outliers excl.	Unit
Mean ± CI(99%)	0,44 ± 0,05	0,44 ± 0,05	µg/l
Recov. ± CI(99%)	104,7 ± 11,3	104,7 ± 11,3	%
SD between labs	0,05	0,05	µg/l
RSD between labs	10,4	10,4	%
n for calculation	10	10	

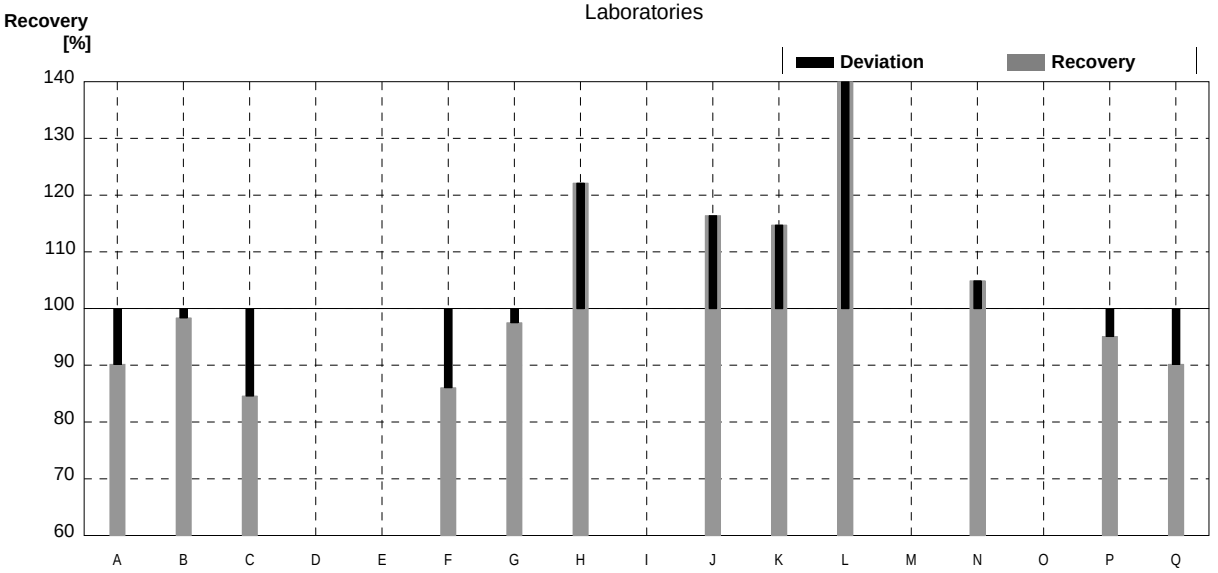
Sample C49B

Parameter cis-1,2-Dichloroethene

Target value ± U (k=2)	1,22	µg/l	±	0,06	µg/l
IFA result ± U (k=2)	1,23	µg/l	±	0,18	µg/l
Stability test ± U (k=2)	1,20	µg/l	±	0,18	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,1	0,2	µg/l	90%	-0,66
B	1,2	0,24	µg/l	98%	-0,11
C	1,032	0,124	µg/l	85%	-1,03
D			µg/l		
E			µg/l		
F	1,05	0,16	µg/l	86%	-0,93
G	1,19	0,24	µg/l	98%	-0,16
H	1,49	0,22	µg/l	122%	1,48
I			µg/l		
J	1,42	0,31	µg/l	116%	1,09
K	1,4	0,42	µg/l	115%	0,98
L	2,90 *	0,58	µg/l	238%	9,18
M			µg/l		
N	1,28	0,062	µg/l	105%	0,33
O			µg/l		
P	1,16	0,17	µg/l	95%	-0,33
Q	1,1	0,2	µg/l	90%	-0,66





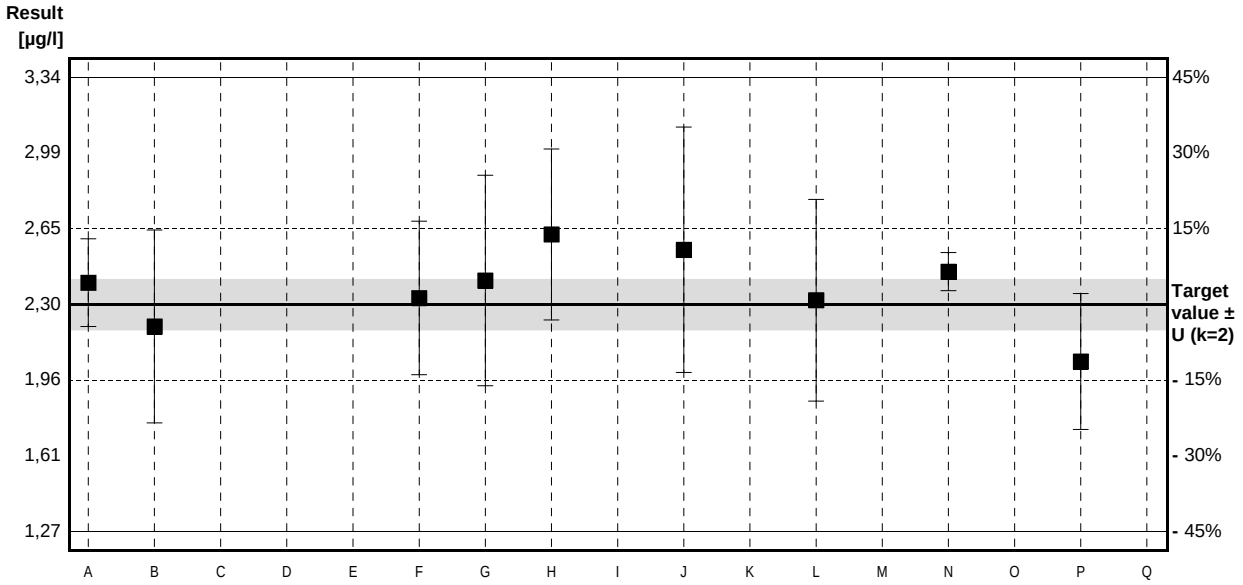
	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,36 ± 0,46	1,22 ± 0,15	µg/l
Recov. ± CI(99%)	111,5 ± 37,3	100,0 ± 12,3	%
SD between labs	0,51	0,16	µg/l
RSD between labs	37,3	12,9	%
n for calculation	12	11	

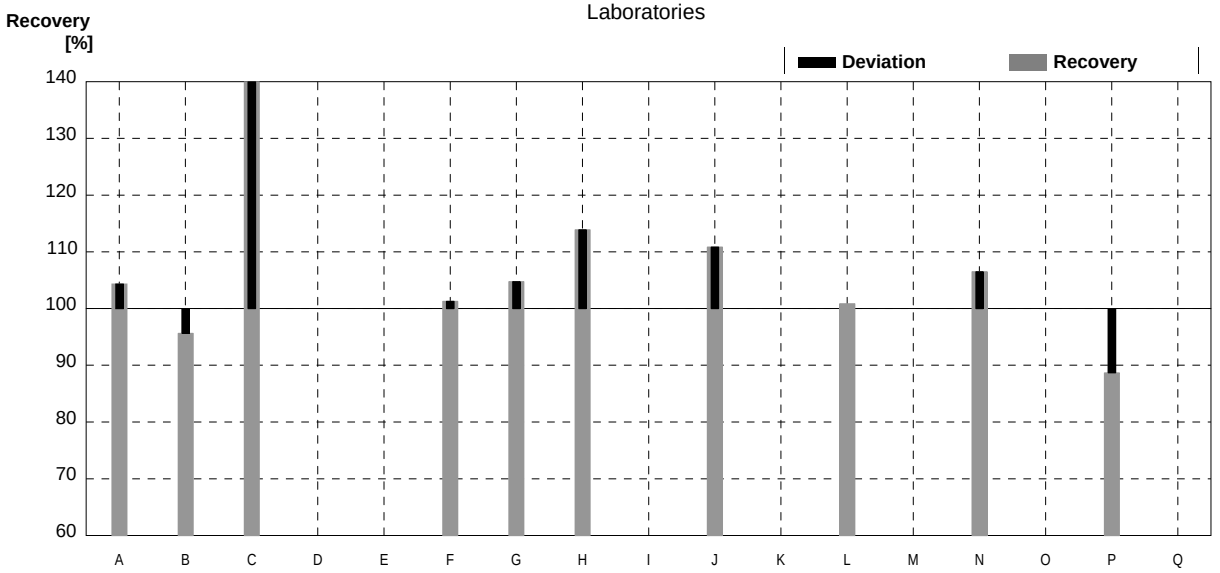
Sample C49A

Parameter trans-1,2-Dichloroethene

Target value ± U (k=2)	2,30	µg/l	±	0,12	µg/l
IFA result ± U (k=2)	2,29	µg/l	±	0,34	µg/l
Stability test ± U (k=2)	2,24	µg/l	±	0,34	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	2,4	0,2	µg/l	104%	0,33
B	2,2	0,44	µg/l	96%	-0,33
C	4,425 *	0,544	µg/l	192%	7,11
D			µg/l		
E			µg/l		
F	2,33	0,35	µg/l	101%	0,10
G	2,41	0,48	µg/l	105%	0,37
H	2,62	0,39	µg/l	114%	1,07
I			µg/l		
J	2,55	0,56	µg/l	111%	0,84
K			µg/l		
L	2,32	0,46	µg/l	101%	0,07
M			µg/l		
N	2,45	0,087	µg/l	107%	0,50
O			µg/l		
P	2,04	0,31	µg/l	89%	-0,87
Q			µg/l		





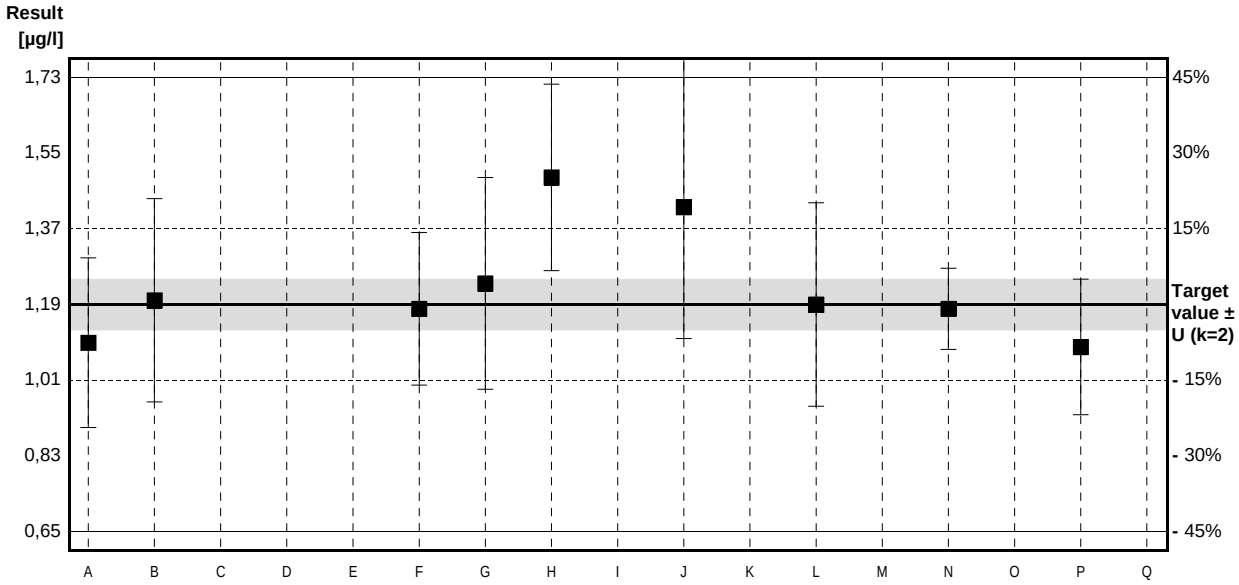
	All results	Outliers excl.	Unit
Mean ± CI(99%)	2,57 ± 0,70	2,37 ± 0,20	µg/l
Recov. ± CI(99%)	111,9 ± 30,3	103,0 ± 8,5	%
SD between labs	0,67	0,18	µg/l
RSD between labs	26,1	7,4	%
n for calculation	10	9	

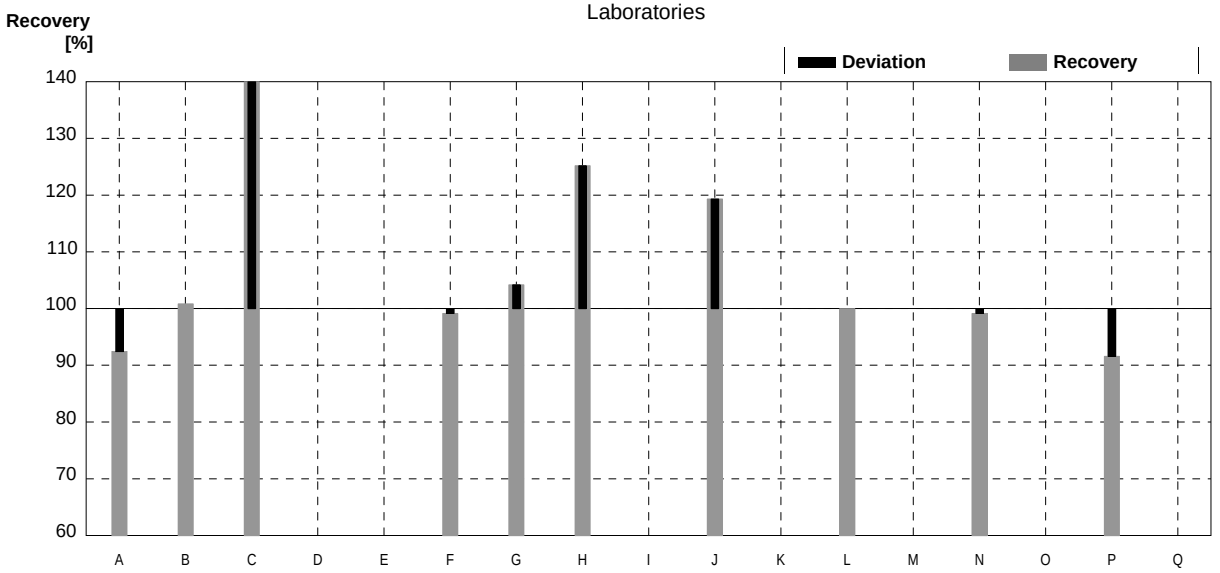
Sample C49B

Parameter trans-1,2-Dichloroethene

Target value ± U (k=2)	1,19	µg/l	±	0,06	µg/l
IFA result ± U (k=2)	1,19	µg/l	±	0,18	µg/l
Stability test ± U (k=2)	1,17	µg/l	±	0,18	µg/l

Lab Code	Result	±	Unit	Recovery	z-Score
A	1,1	0,2	µg/l	92%	-0,58
B	1,2	0,24	µg/l	101%	0,06
C	2,285 *	0,281	µg/l	192%	7,08
D			µg/l		
E			µg/l		
F	1,18	0,18	µg/l	99%	-0,06
G	1,24	0,25	µg/l	104%	0,32
H	1,49	0,22	µg/l	125%	1,94
I			µg/l		
J	1,42	0,31	µg/l	119%	1,49
K			µg/l		
L	1,19	0,24	µg/l	100%	0,00
M			µg/l		
N	1,18	0,096	µg/l	99%	-0,06
O			µg/l		
P	1,09	0,16	µg/l	92%	-0,65
Q			µg/l		





	All results	Outliers excl.	Unit
Mean ± CI(99%)	1,34 ± 0,37	1,23 ± 0,15	µg/l
Recov. ± CI(99%)	112,4 ± 31,1	103,5 ± 12,8	%
SD between labs	0,36	0,14	µg/l
RSD between labs	26,7	11,0	%
n for calculation	10	9	

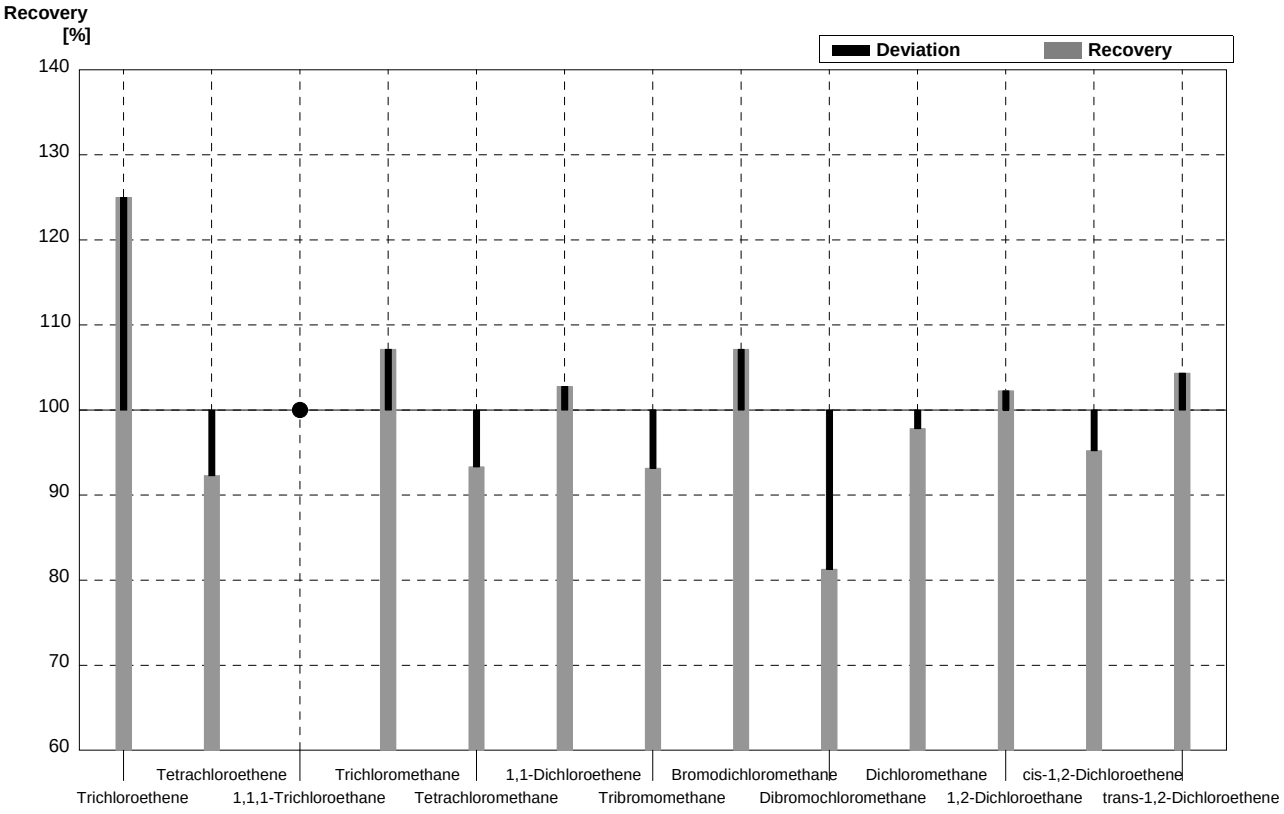
Illustration of Results
Laboratory Oriented Part

Round C49
Volatile Halogenated Hydrocarbons

Sample Dispatch: 4 March 2013

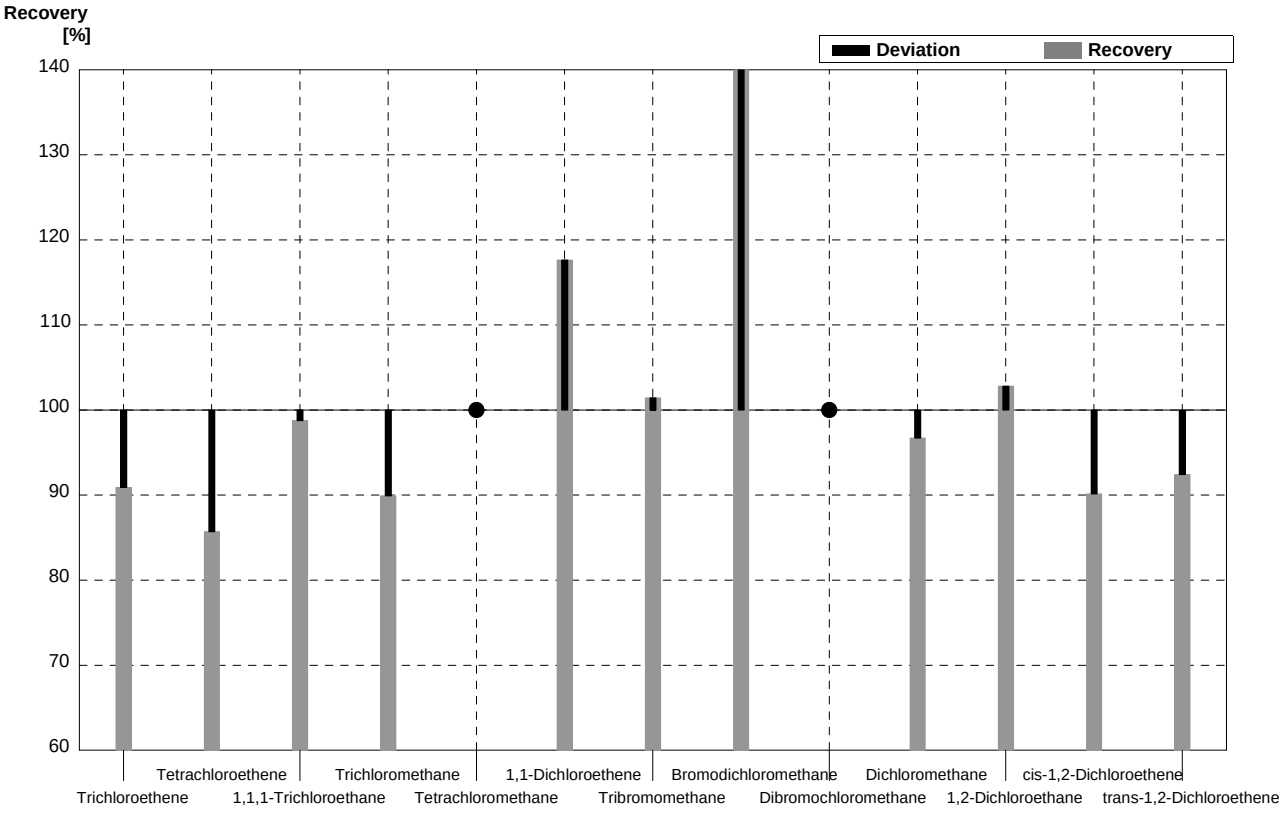
Sample C49A
Laboratory A

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,3	0,2	µg/l	125%
Tetrachloroethene	0,65	0,03	0,6	0,2	µg/l	92%
1,1,1-Trichloroethane	<0,08		<0,5	0,2	µg/l	•
Trichloromethane	0,56	0,03	0,6	0,2	µg/l	107%
Tetrachloromethane	0,75	0,04	0,7	0,2	µg/l	93%
1,1-Dichloroethene	3,60	0,18	3,7	0,2	µg/l	103%
Tribromomethane	1,61	0,08	1,5	0,2	µg/l	93%
Bromodichloromethane	0,56	0,03	0,6	0,2	µg/l	107%
Dibromochloromethane	1,23	0,06	1,0	0,2	µg/l	81%
Dichloromethane	0,92	0,05	0,9	0,2	µg/l	98%
1,2-Dichloroethane	0,88	0,04	0,9	0,2	µg/l	102%
cis-1,2-Dichloroethene	0,42	0,02	0,4	0,2	µg/l	95%
trans-1,2-Dichloroethene	2,30	0,12	2,4	0,2	µg/l	104%



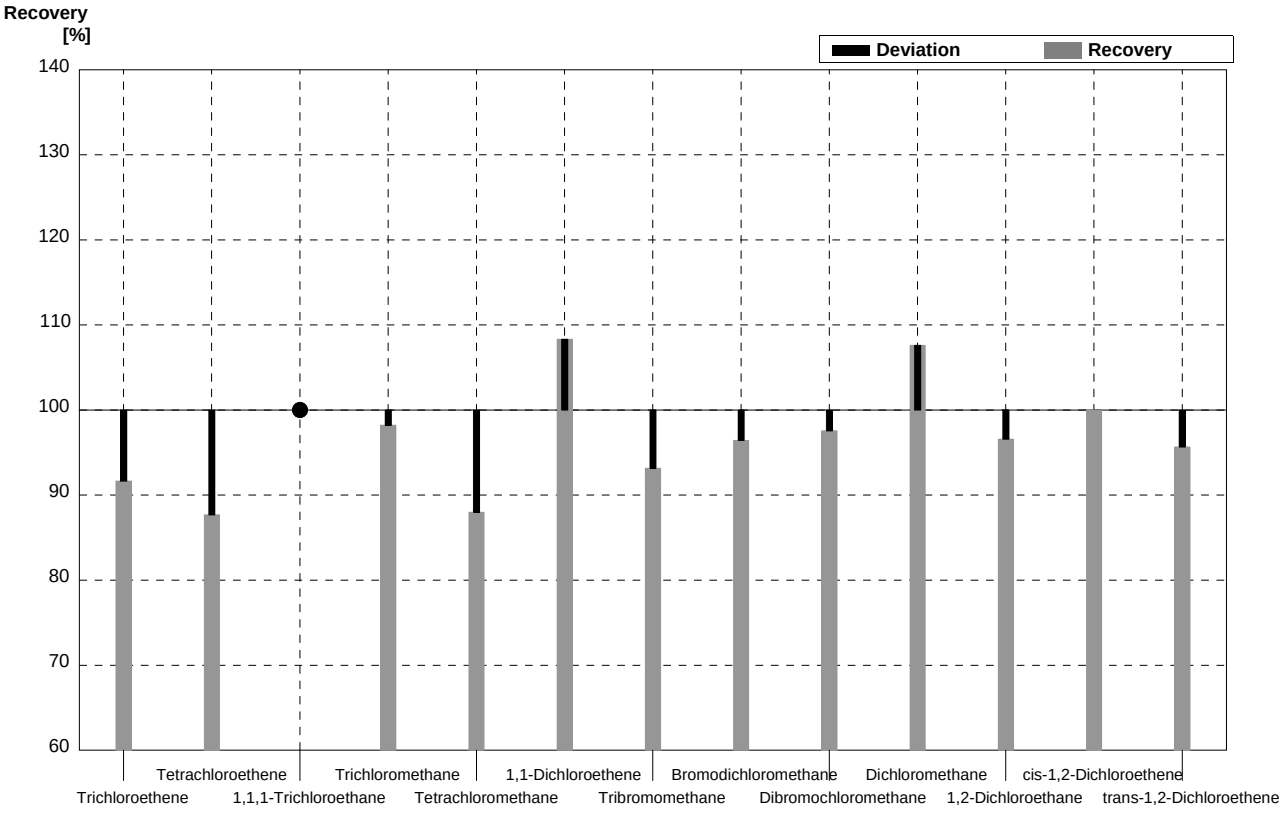
Sample C49B
Laboratory A

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,8	0,2	µg/l	91%
Tetrachloroethene	0,35	0,02	0,3	0,2	µg/l	86%
1,1,1-Trichloroethane	0,81	0,04	0,8	0,2	µg/l	99%
Trichloromethane	2,78	0,14	2,5	0,2	µg/l	90%
Tetrachloromethane	<0,06		<0,5	0,2	µg/l	•
1,1-Dichloroethene	0,68	0,03	0,8	0,2	µg/l	118%
Tribromomethane	0,69	0,03	0,7	0,2	µg/l	101%
Bromodichloromethane	0,16	0,01	0,3	0,2	µg/l	188%
Dibromochloromethane	<0,1		<0,5	0,2	µg/l	•
Dichloromethane	11,89	0,59	11,5	0,2	µg/l	97%
1,2-Dichloroethane	1,07	0,05	1,1	0,2	µg/l	103%
cis-1,2-Dichloroethene	1,22	0,06	1,1	0,2	µg/l	90%
trans-1,2-Dichloroethene	1,19	0,06	1,1	0,2	µg/l	92%



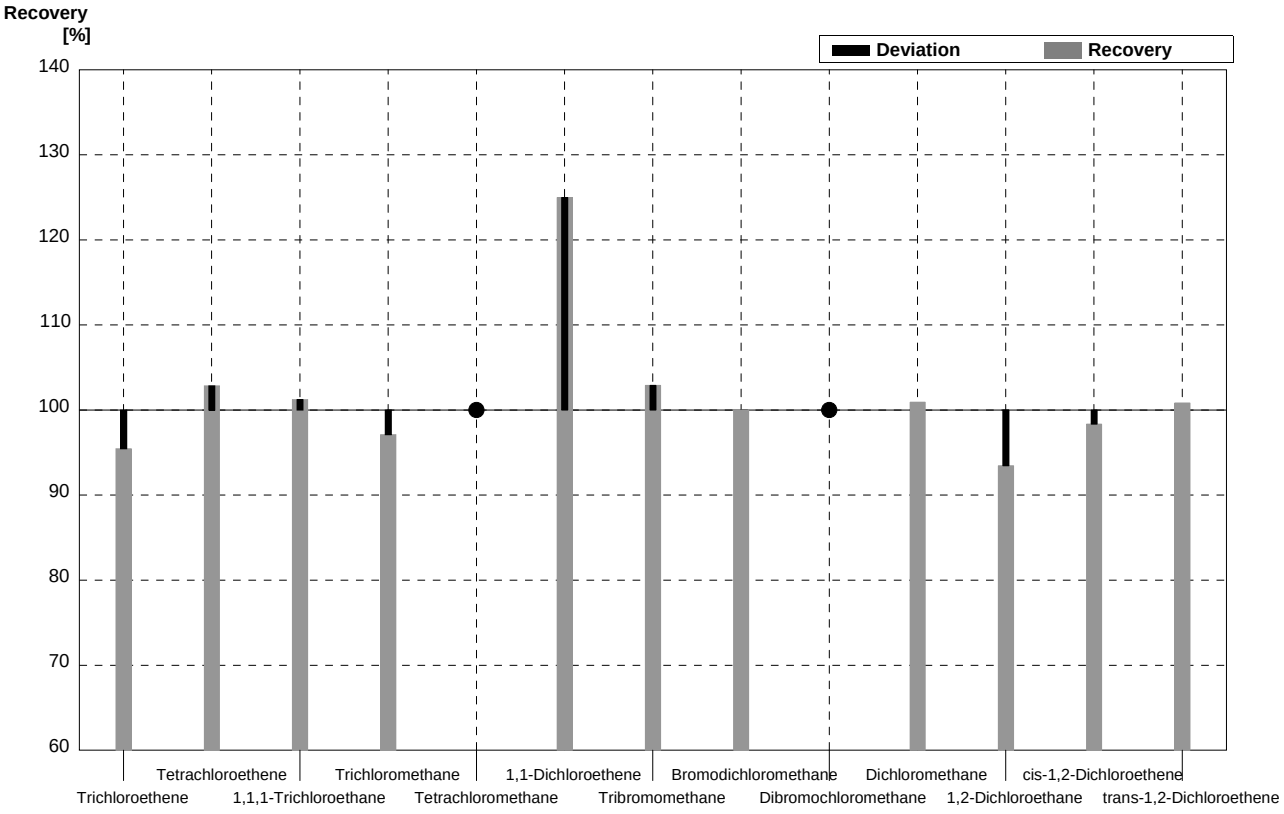
Sample C49A
Laboratory B

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,22	0,044	µg/l	92%
Tetrachloroethene	0,65	0,03	0,57	0,11	µg/l	88%
1,1,1-Trichloroethane	<0,08		<0,10		µg/l	•
Trichloromethane	0,56	0,03	0,55	0,11	µg/l	98%
Tetrachloromethane	0,75	0,04	0,66	0,13	µg/l	88%
1,1-Dichloroethene	3,60	0,18	3,9	0,78	µg/l	108%
Tribromomethane	1,61	0,08	1,5	0,30	µg/l	93%
Bromodichloromethane	0,56	0,03	0,54	0,11	µg/l	96%
Dibromochloromethane	1,23	0,06	1,2	0,24	µg/l	98%
Dichloromethane	0,92	0,05	0,99	0,20	µg/l	108%
1,2-Dichloroethane	0,88	0,04	0,85	0,17	µg/l	97%
cis-1,2-Dichloroethene	0,42	0,02	0,42	0,084	µg/l	100%
trans-1,2-Dichloroethene	2,30	0,12	2,2	0,44	µg/l	96%



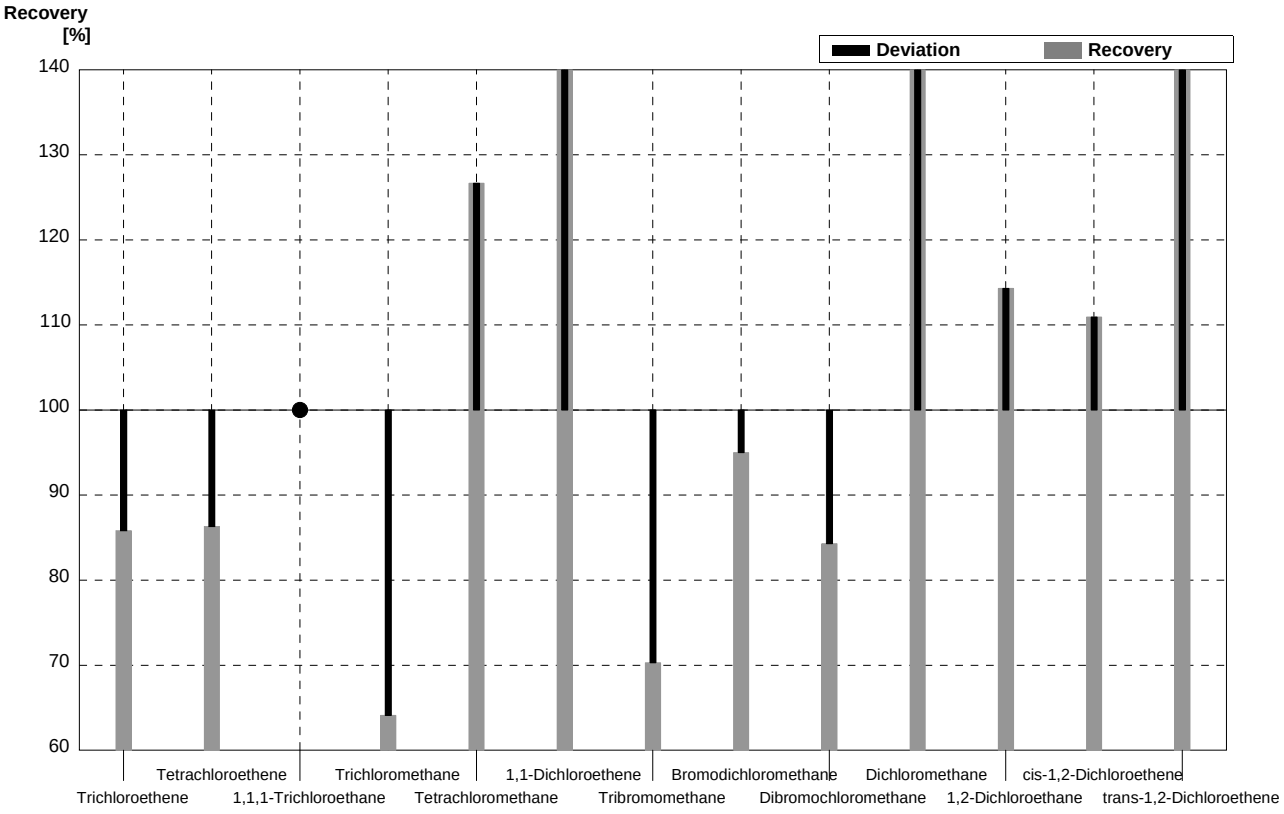
Sample C49B
Laboratory B

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,84	0,17	µg/l	95%
Tetrachloroethene	0,35	0,02	0,36	0,072	µg/l	103%
1,1,1-Trichloroethane	0,81	0,04	0,82	0,16	µg/l	101%
Trichloromethane	2,78	0,14	2,7	0,54	µg/l	97%
Tetrachloromethane	<0,06		<0,10		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,85	0,17	µg/l	125%
Tribromomethane	0,69	0,03	0,71	0,14	µg/l	103%
Bromodichloromethane	0,16	0,01	0,16	0,032	µg/l	100%
Dibromochloromethane	<0,1		<0,10		µg/l	•
Dichloromethane	11,89	0,59	12	2,4	µg/l	101%
1,2-Dichloroethane	1,07	0,05	1,0	0,20	µg/l	93%
cis-1,2-Dichloroethene	1,22	0,06	1,2	0,24	µg/l	98%
trans-1,2-Dichloroethene	1,19	0,06	1,2	0,24	µg/l	101%



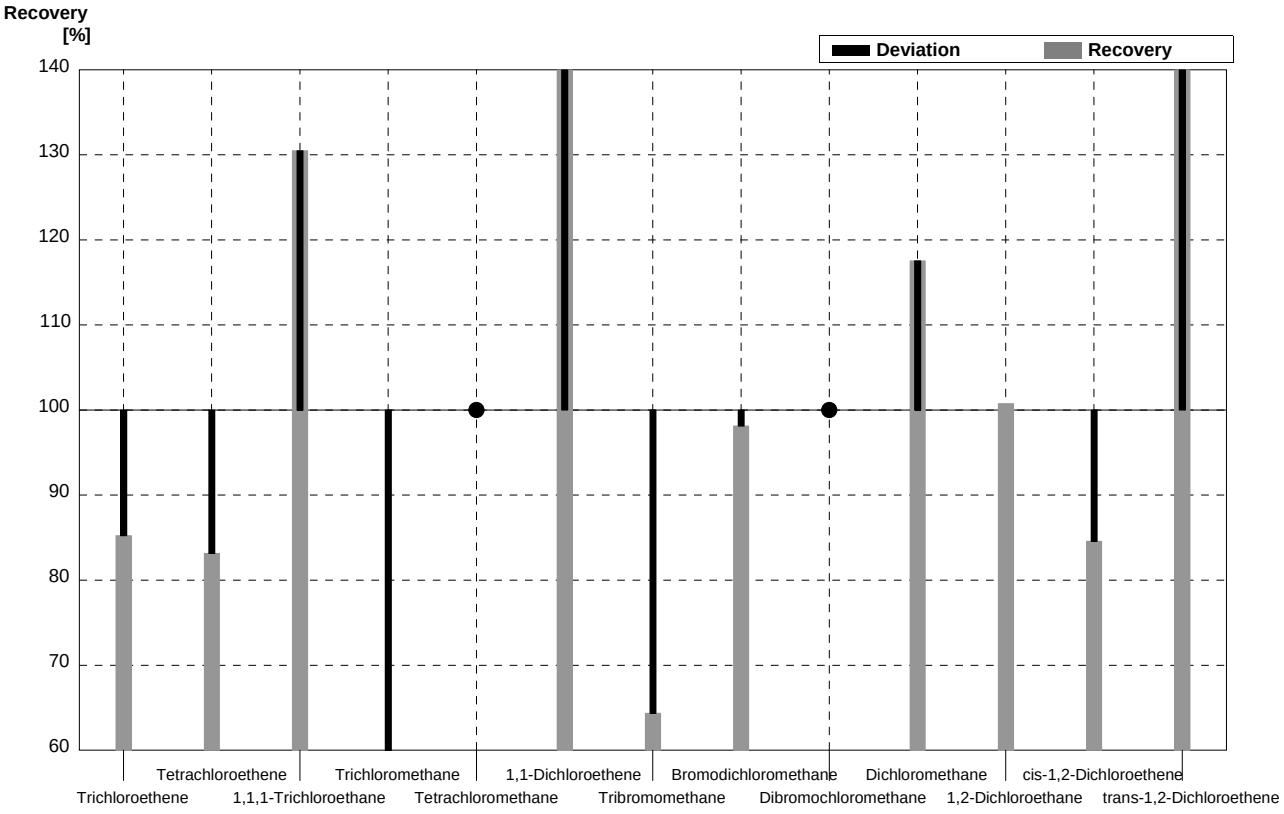
Sample C49A
Laboratory C

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,206	0,044	µg/l	86%
Tetrachloroethene	0,65	0,03	0,561	0,178	µg/l	86%
1,1,1-Trichloroethane	<0,08		<0,2	0,045	µg/l	•
Trichloromethane	0,56	0,03	0,359	0,091	µg/l	64%
Tetrachloromethane	0,75	0,04	0,950	0,277	µg/l	127%
1,1-Dichloroethene	3,60	0,18	10,059	3,873	µg/l	279%
Tribromomethane	1,61	0,08	1,132	0,434	µg/l	70%
Bromodichloromethane	0,56	0,03	0,532	0,132	µg/l	95%
Dibromochloromethane	1,23	0,06	1,037	0,382	µg/l	84%
Dichloromethane	0,92	0,05	1,564	0,424	µg/l	170%
1,2-Dichloroethane	0,88	0,04	1,006	0,239	µg/l	114%
cis-1,2-Dichloroethene	0,42	0,02	0,466	0,056	µg/l	111%
trans-1,2-Dichloroethene	2,30	0,12	4,425	0,544	µg/l	192%



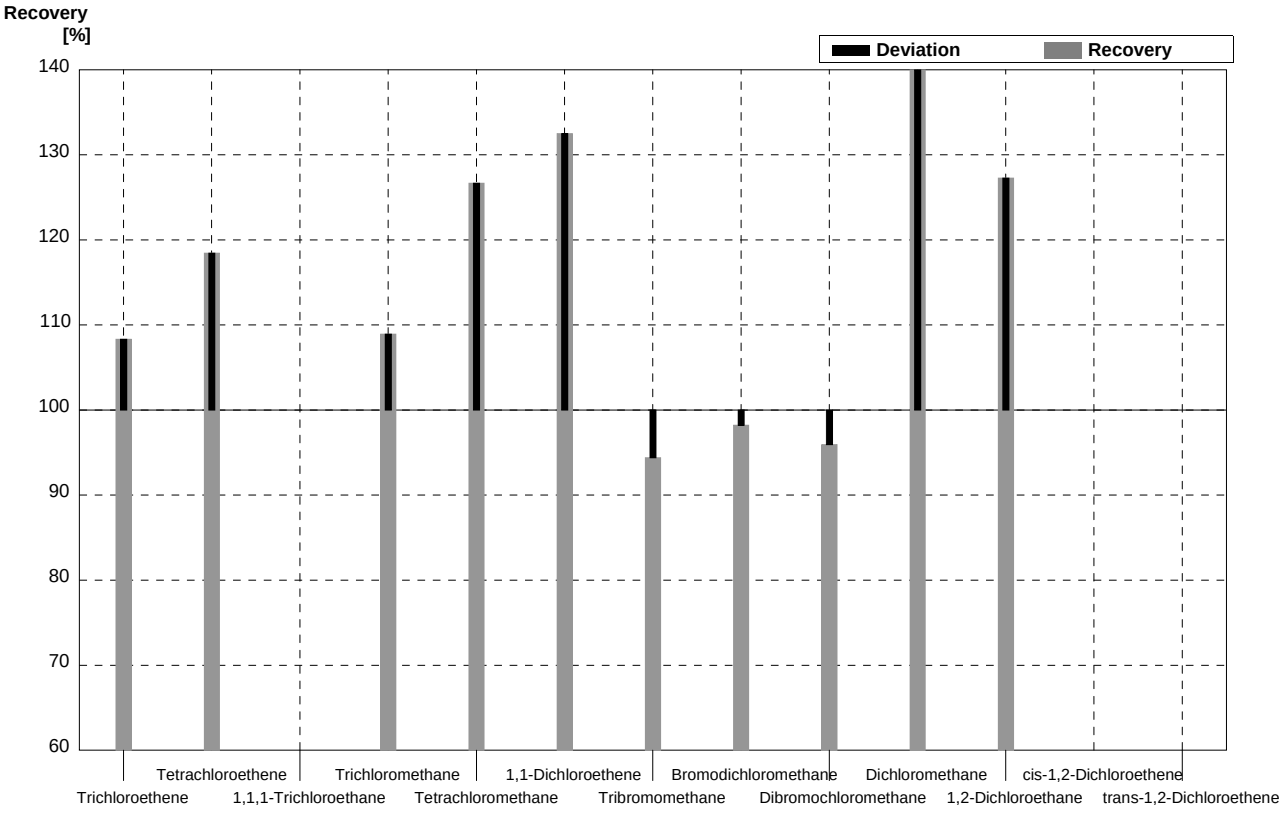
Sample C49B
Laboratory C

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,750	0,159	µg/l	85%
Tetrachloroethene	0,35	0,02	0,291	0,093	µg/l	83%
1,1,1-Trichloroethane	0,81	0,04	1,057	0,237	µg/l	130%
Trichloromethane	2,78	0,14	1,601	0,405	µg/l	58%
Tetrachloromethane	<0,06		<0,3	0,088	µg/l	•
1,1-Dichloroethene	0,68	0,03	1,930	0,743	µg/l	284%
Tribromomethane	0,69	0,03	0,444	0,170	µg/l	64%
Bromodichloromethane	0,16	0,01	0,157	0,039	µg/l	98%
Dibromochloromethane	<0,1		<0,3	0,110	µg/l	•
Dichloromethane	11,89	0,59	13,977	3,788	µg/l	118%
1,2-Dichloroethane	1,07	0,05	1,078	0,257	µg/l	101%
cis-1,2-Dichloroethene	1,22	0,06	1,032	0,124	µg/l	85%
trans-1,2-Dichloroethene	1,19	0,06	2,285	0,281	µg/l	192%



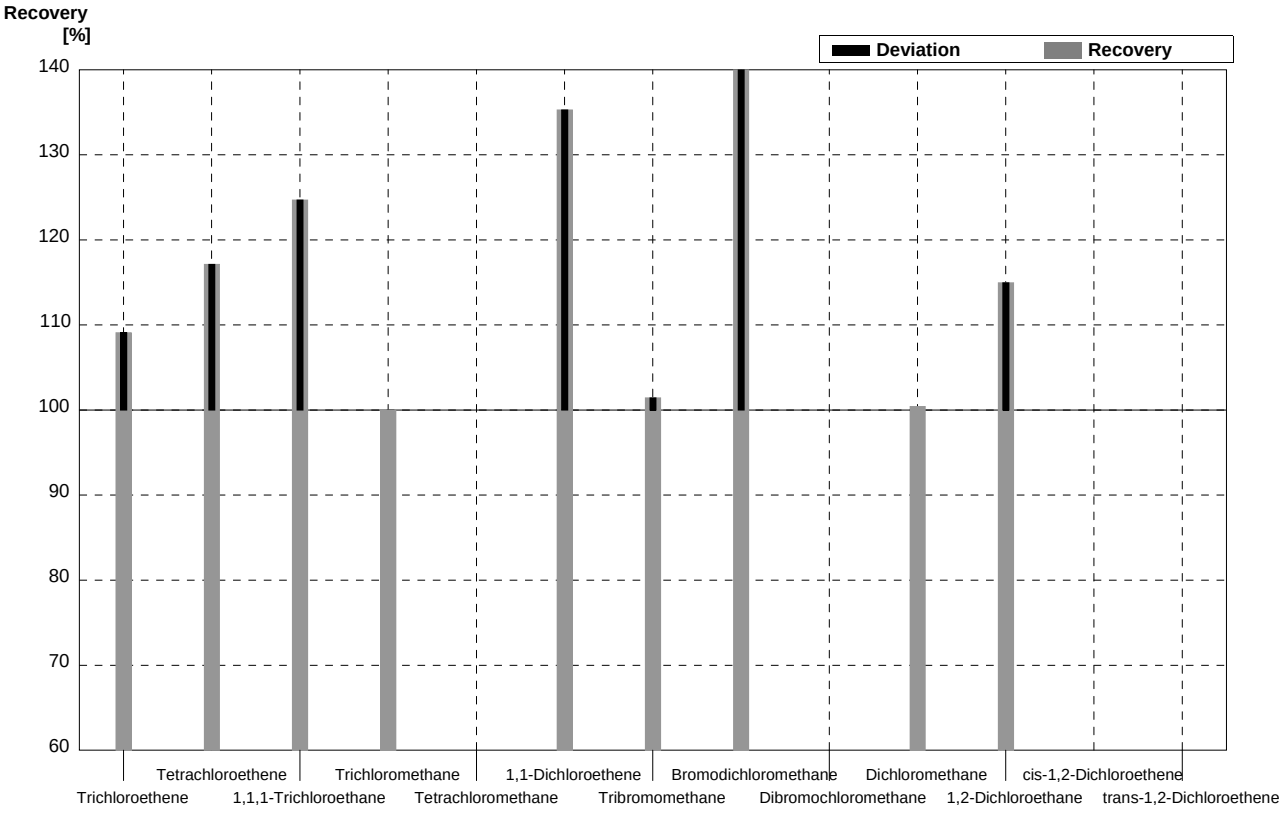
Sample C49A
Laboratory D

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,26	0,07	µg/l	108%
Tetrachloroethene	0,65	0,03	0,77	0,22	µg/l	118%
1,1,1-Trichloroethane	<0,08		0		µg/l	
Trichloromethane	0,56	0,03	0,61	0,12	µg/l	109%
Tetrachloromethane	0,75	0,04	0,95	0,19	µg/l	127%
1,1-Dichloroethene	3,60	0,18	4,77	0,95	µg/l	133%
Tribromomethane	1,61	0,08	1,52	0,30	µg/l	94%
Bromodichloromethane	0,56	0,03	0,55	0,11	µg/l	98%
Dibromochloromethane	1,23	0,06	1,18	0,24	µg/l	96%
Dichloromethane	0,92	0,05	1,33	0,27	µg/l	145%
1,2-Dichloroethane	0,88	0,04	1,12	0,22	µg/l	127%
cis-1,2-Dichloroethene	0,42	0,02			µg/l	
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



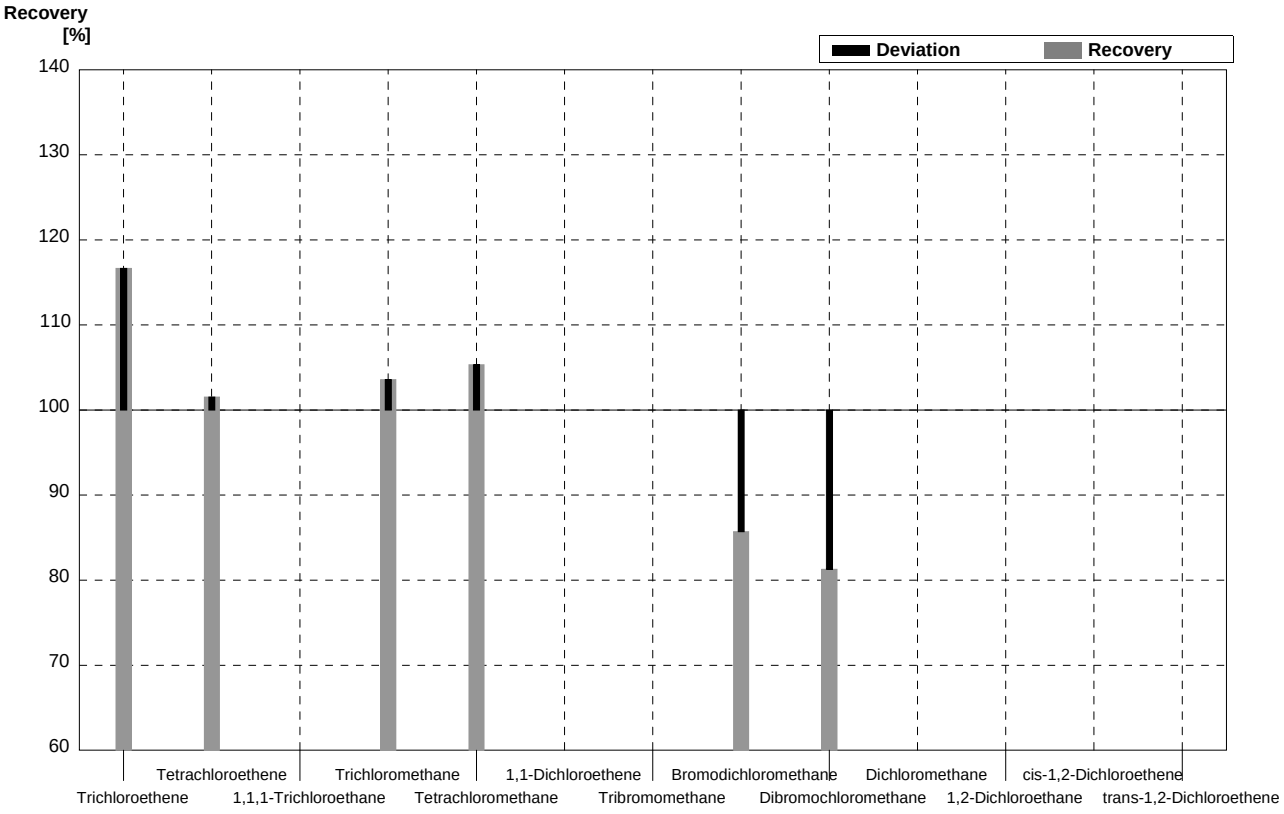
Sample C49B
Laboratory D

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,96	0,14	µg/l	109%
Tetrachloroethene	0,35	0,02	0,41	0,13	µg/l	117%
1,1,1-Trichloroethane	0,81	0,04	1,01	0,20	µg/l	125%
Trichloromethane	2,78	0,14	2,78	0,56	µg/l	100%
Tetrachloromethane	<0,06		0		µg/l	
1,1-Dichloroethene	0,68	0,03	0,92	0,18	µg/l	135%
Tribromomethane	0,69	0,03	0,70	0,14	µg/l	101%
Bromodichloromethane	0,16	0,01	0,24	0,05	µg/l	150%
Dibromochloromethane	<0,1		0		µg/l	
Dichloromethane	11,89	0,59	11,94	2,39	µg/l	100%
1,2-Dichloroethane	1,07	0,05	1,23	0,25	µg/l	115%
cis-1,2-Dichloroethene	1,22	0,06			µg/l	
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



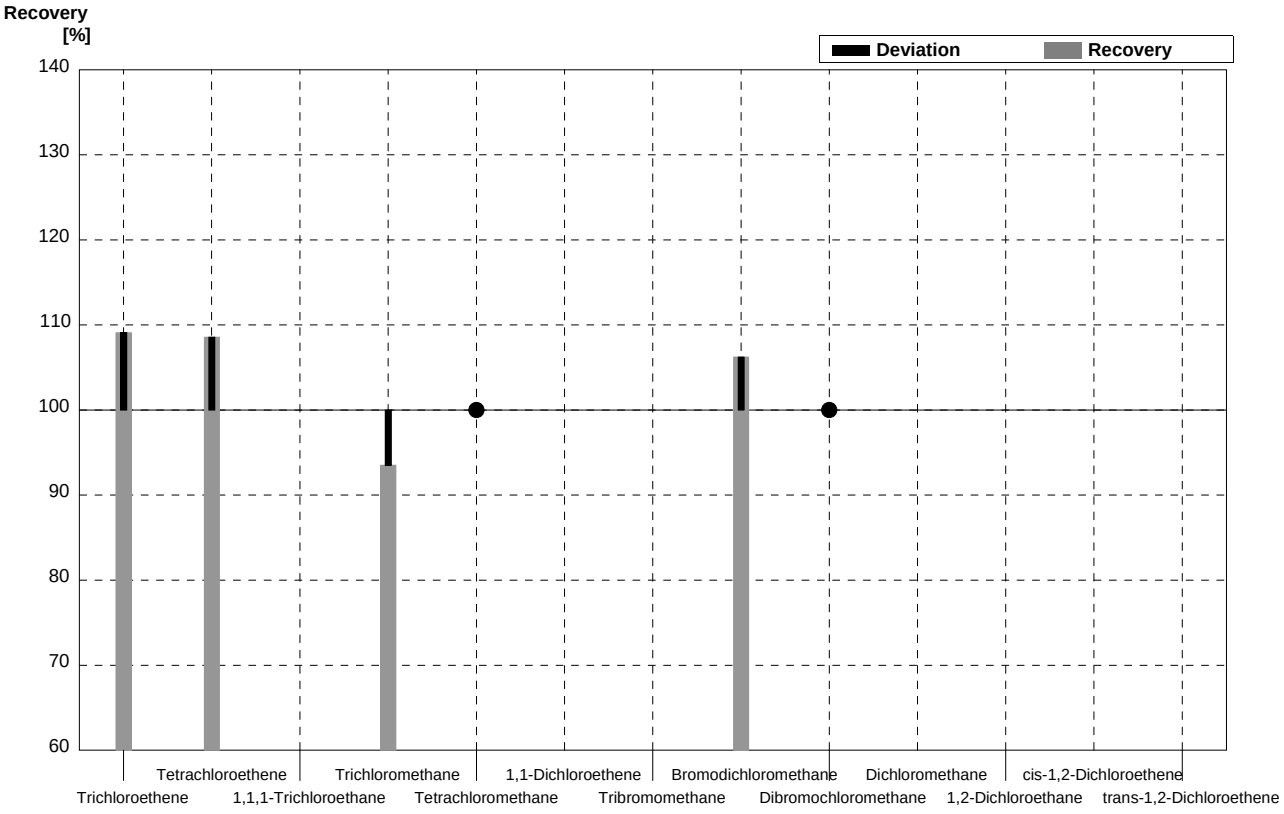
Sample C49A
Laboratory E

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,28	0,14	µg/l	117%
Tetrachloroethene	0,65	0,03	0,66	0,17	µg/l	102%
1,1,1-Trichloroethane	<0,08				µg/l	
Trichloromethane	0,56	0,03	0,58	0,15	µg/l	104%
Tetrachloromethane	0,75	0,04	0,79	0,20	µg/l	105%
1,1-Dichloroethene	3,60	0,18			µg/l	
Tribromomethane	1,61	0,08			µg/l	
Bromodichloromethane	0,56	0,03	0,48	0,12	µg/l	86%
Dibromochloromethane	1,23	0,06	1,0	0,25	µg/l	81%
Dichloromethane	0,92	0,05			µg/l	
1,2-Dichloroethane	0,88	0,04			µg/l	
cis-1,2-Dichloroethene	0,42	0,02			µg/l	
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



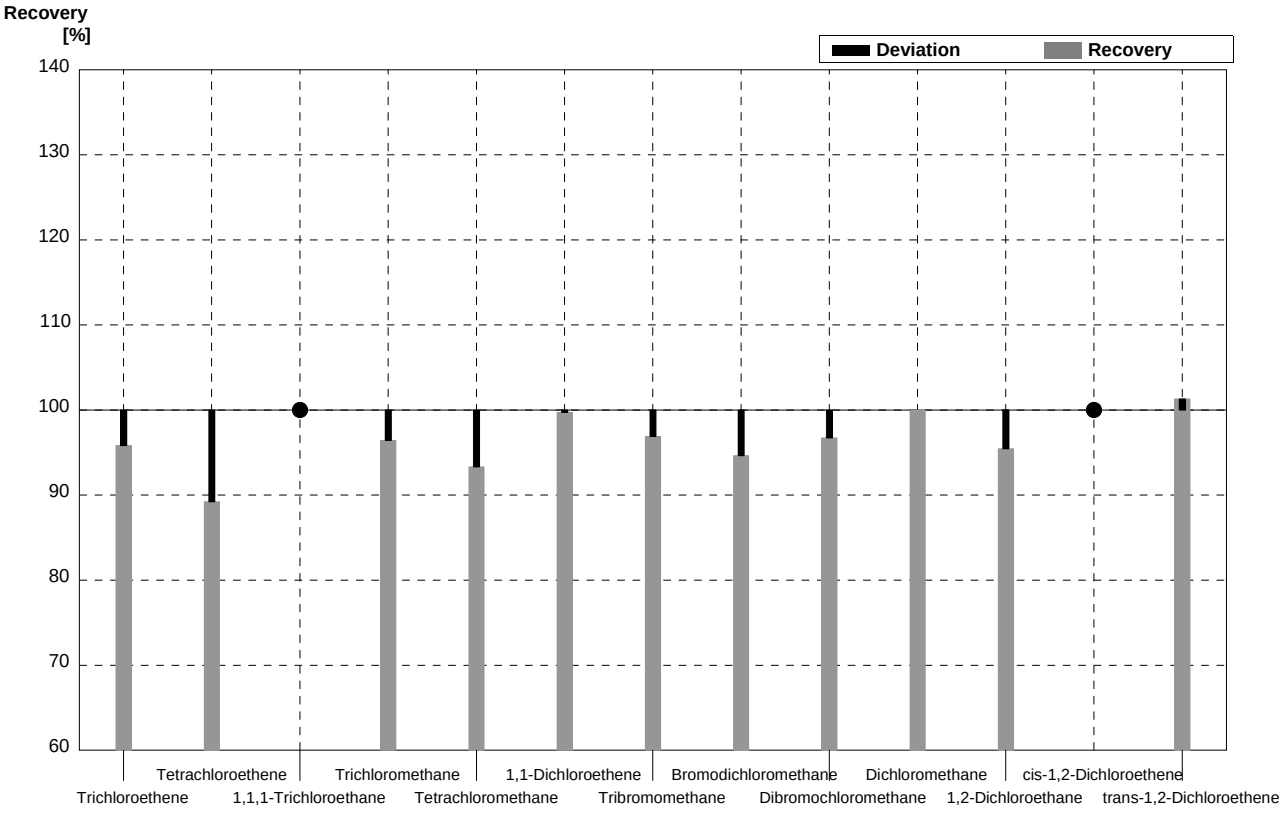
Sample C49B
Laboratory E

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,96	0,24	µg/l	109%
Tetrachloroethene	0,35	0,02	0,38	0,10	µg/l	109%
1,1,1-Trichloroethane	0,81	0,04			µg/l	
Trichloromethane	2,78	0,14	2,6	0,65	µg/l	94%
Tetrachloromethane	<0,06		<0,01		µg/l	•
1,1-Dichloroethene	0,68	0,03			µg/l	
Tribromomethane	0,69	0,03			µg/l	
Bromodichloromethane	0,16	0,01	0,17	0,05	µg/l	106%
Dibromochloromethane	<0,1		<0,1		µg/l	•
Dichloromethane	11,89	0,59			µg/l	
1,2-Dichloroethane	1,07	0,05			µg/l	
cis-1,2-Dichloroethene	1,22	0,06			µg/l	
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



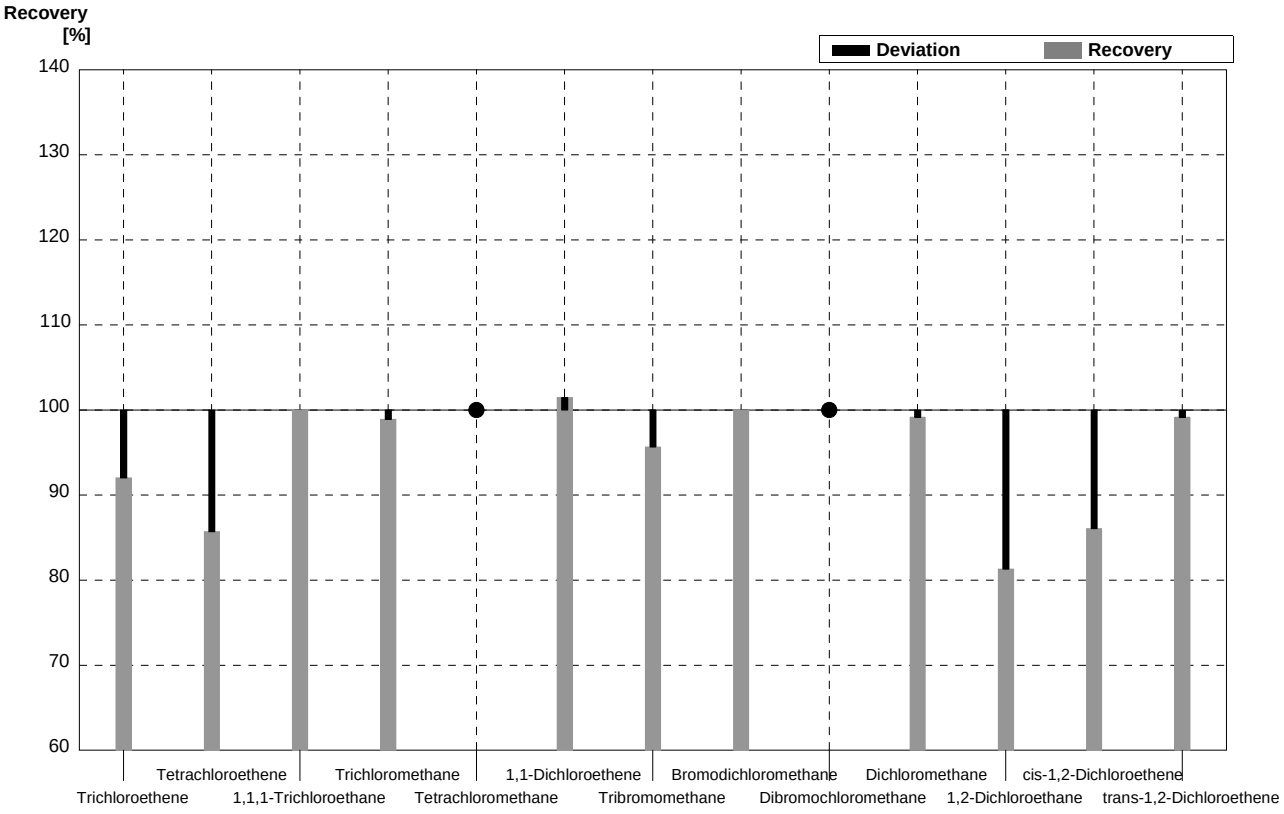
Sample C49A
Laboratory F

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,23	0,03	µg/l	96%
Tetrachloroethene	0,65	0,03	0,58	0,09	µg/l	89%
1,1,1-Trichloroethane	<0,08		<0,1		µg/l	•
Trichloromethane	0,56	0,03	0,54	0,08	µg/l	96%
Tetrachloromethane	0,75	0,04	0,70	0,11	µg/l	93%
1,1-Dichloroethene	3,60	0,18	3,59	0,54	µg/l	100%
Tribromomethane	1,61	0,08	1,56	0,23	µg/l	97%
Bromodichloromethane	0,56	0,03	0,53	0,08	µg/l	95%
Dibromochloromethane	1,23	0,06	1,19	0,18	µg/l	97%
Dichloromethane	0,92	0,05	0,92	0,14	µg/l	100%
1,2-Dichloroethane	0,88	0,04	0,84	0,13	µg/l	95%
cis-1,2-Dichloroethene	0,42	0,02	<0,5		µg/l	•
trans-1,2-Dichloroethene	2,30	0,12	2,33	0,35	µg/l	101%



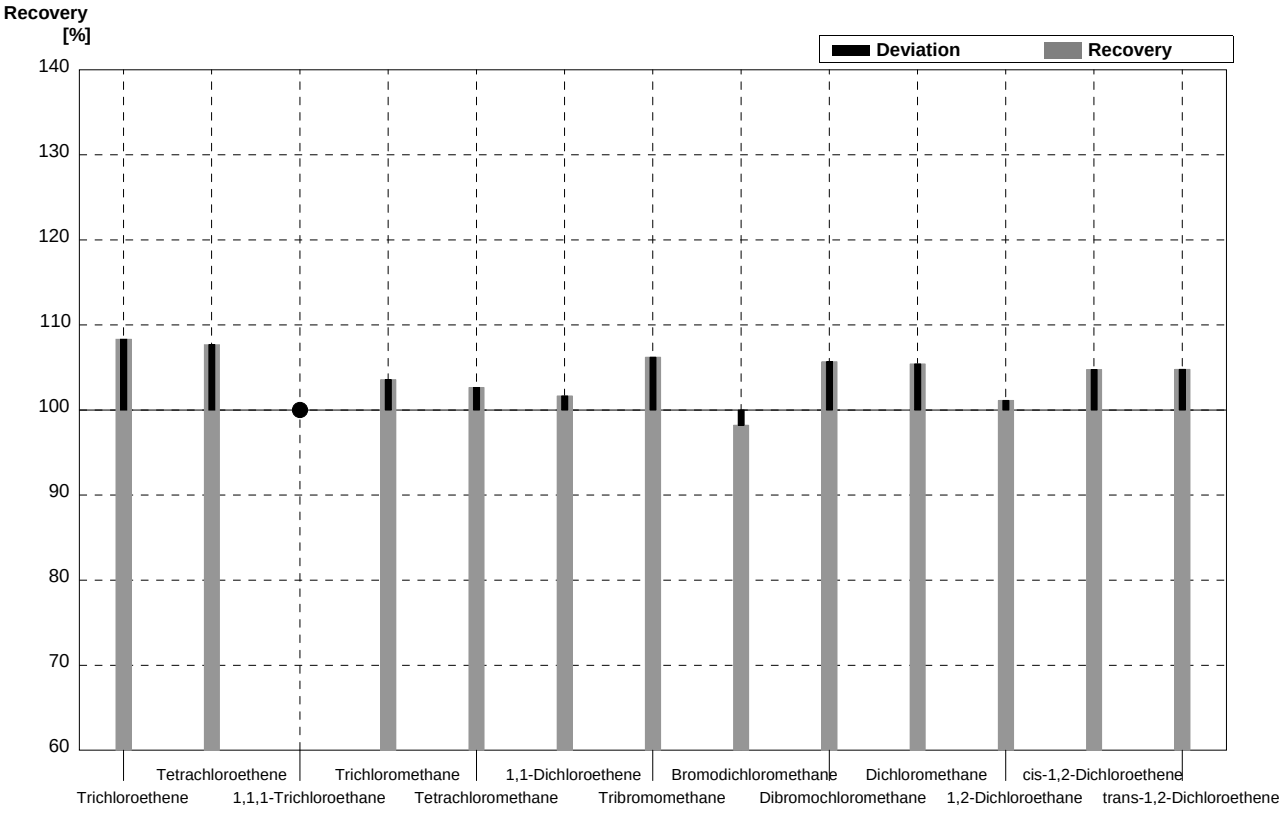
Sample C49B
Laboratory F

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,81	0,12	µg/l	92%
Tetrachloroethene	0,35	0,02	0,30	0,05	µg/l	86%
1,1,1-Trichloroethane	0,81	0,04	0,81	0,12	µg/l	100%
Trichloromethane	2,78	0,14	2,75	0,41	µg/l	99%
Tetrachloromethane	<0,06		<0,1		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,69	0,10	µg/l	101%
Tribromomethane	0,69	0,03	0,66	0,10	µg/l	96%
Bromodichloromethane	0,16	0,01	0,16	0,02	µg/l	100%
Dibromochloromethane	<0,1		<0,1		µg/l	•
Dichloromethane	11,89	0,59	11,79	1,77	µg/l	99%
1,2-Dichloroethane	1,07	0,05	0,87	0,13	µg/l	81%
cis-1,2-Dichloroethene	1,22	0,06	1,05	0,16	µg/l	86%
trans-1,2-Dichloroethene	1,19	0,06	1,18	0,18	µg/l	99%



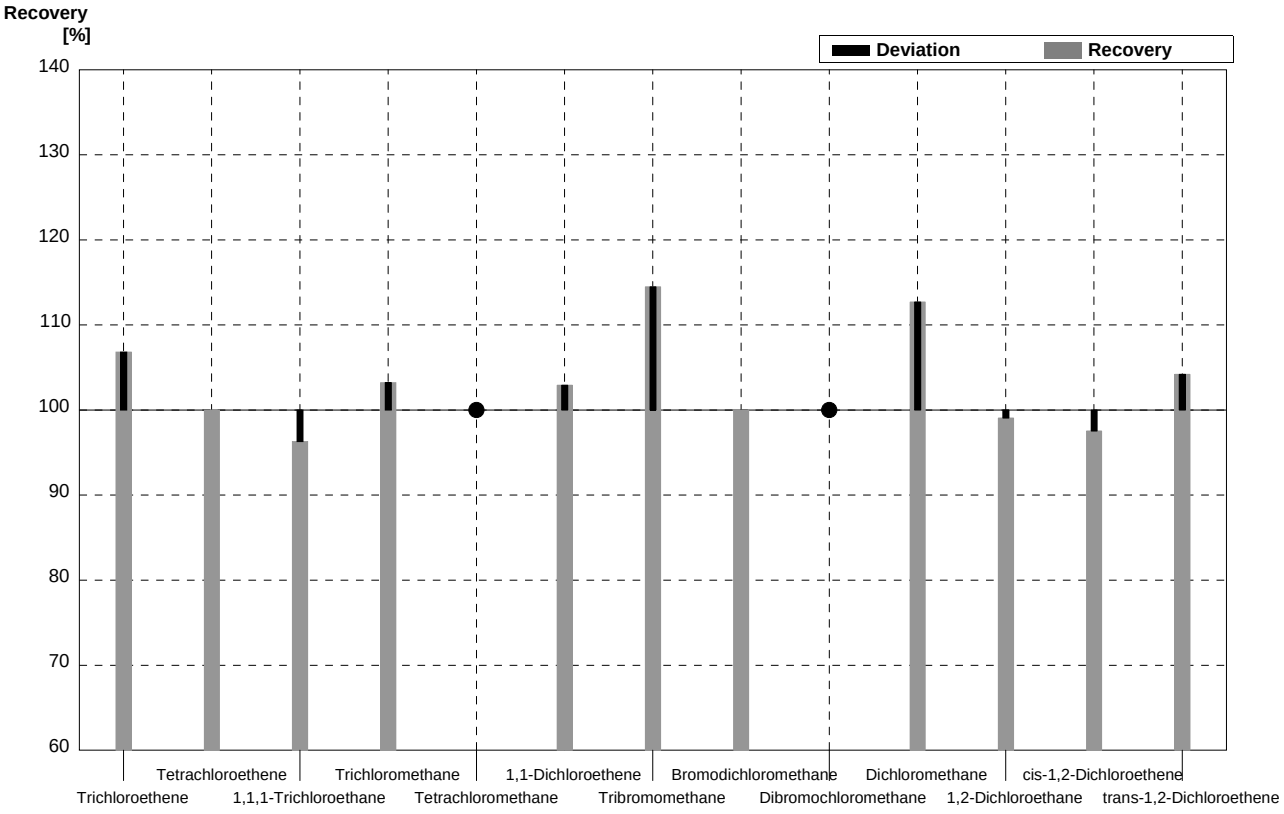
Sample C49A
Laboratory G

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,26	0,05	µg/l	108%
Tetrachloroethene	0,65	0,03	0,70	0,14	µg/l	108%
1,1,1-Trichloroethane	<0,08		<0,02		µg/l	•
Trichloromethane	0,56	0,03	0,58	0,12	µg/l	104%
Tetrachloromethane	0,75	0,04	0,77	0,15	µg/l	103%
1,1-Dichloroethene	3,60	0,18	3,66	0,73	µg/l	102%
Tribromomethane	1,61	0,08	1,71	0,34	µg/l	106%
Bromodichloromethane	0,56	0,03	0,55	0,11	µg/l	98%
Dibromochloromethane	1,23	0,06	1,30	0,26	µg/l	106%
Dichloromethane	0,92	0,05	0,97	0,19	µg/l	105%
1,2-Dichloroethane	0,88	0,04	0,89	0,18	µg/l	101%
cis-1,2-Dichloroethene	0,42	0,02	0,44	0,09	µg/l	105%
trans-1,2-Dichloroethene	2,30	0,12	2,41	0,48	µg/l	105%



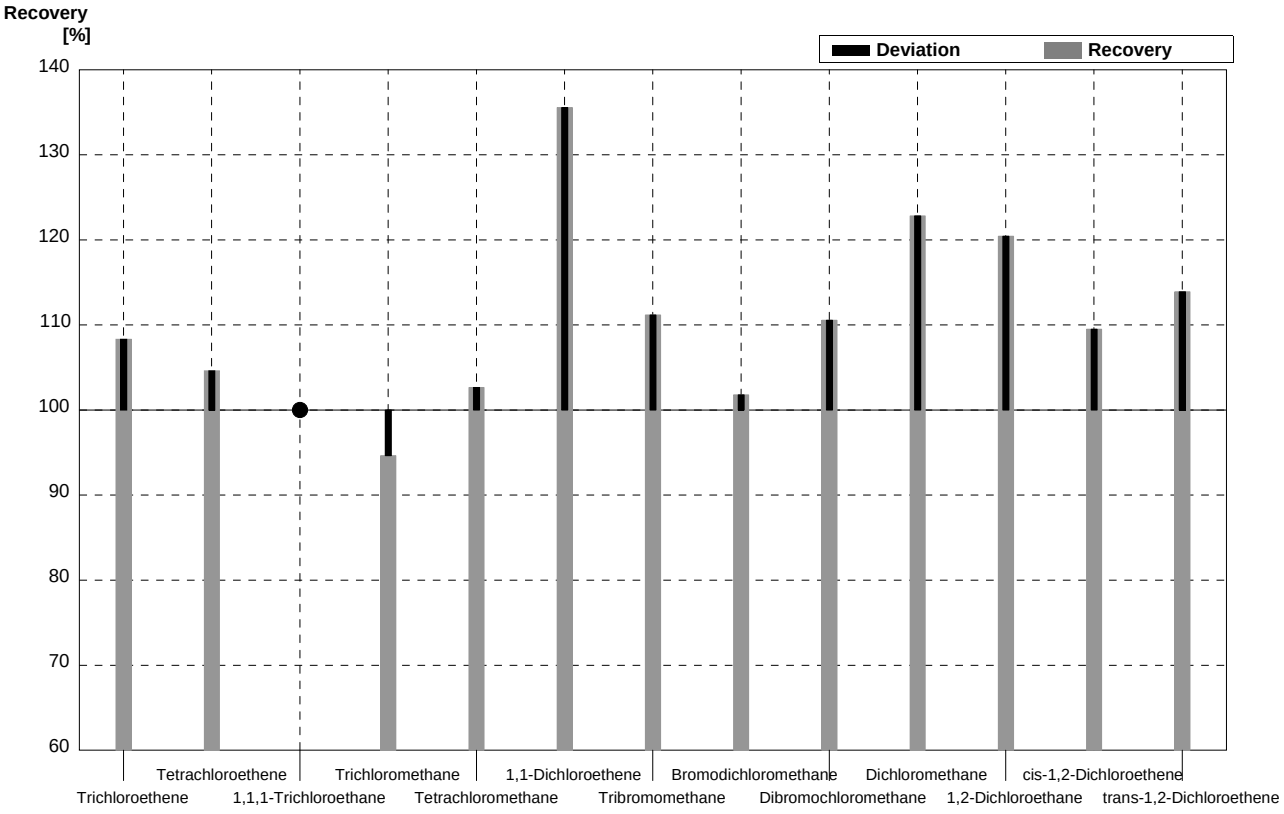
Sample C49B
Laboratory G

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,94	0,19	µg/l	107%
Tetrachloroethene	0,35	0,02	0,35	0,07	µg/l	100%
1,1,1-Trichloroethane	0,81	0,04	0,78	0,16	µg/l	96%
Trichloromethane	2,78	0,14	2,87	0,57	µg/l	103%
Tetrachloromethane	<0,06		<0,09		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,70	0,14	µg/l	103%
Tribromomethane	0,69	0,03	0,79	0,16	µg/l	114%
Bromodichloromethane	0,16	0,01	0,16	0,03	µg/l	100%
Dibromochloromethane	<0,1		<0,02		µg/l	•
Dichloromethane	11,89	0,59	13,4	2,6	µg/l	113%
1,2-Dichloroethane	1,07	0,05	1,06	0,21	µg/l	99%
cis-1,2-Dichloroethene	1,22	0,06	1,19	0,24	µg/l	98%
trans-1,2-Dichloroethene	1,19	0,06	1,24	0,25	µg/l	104%



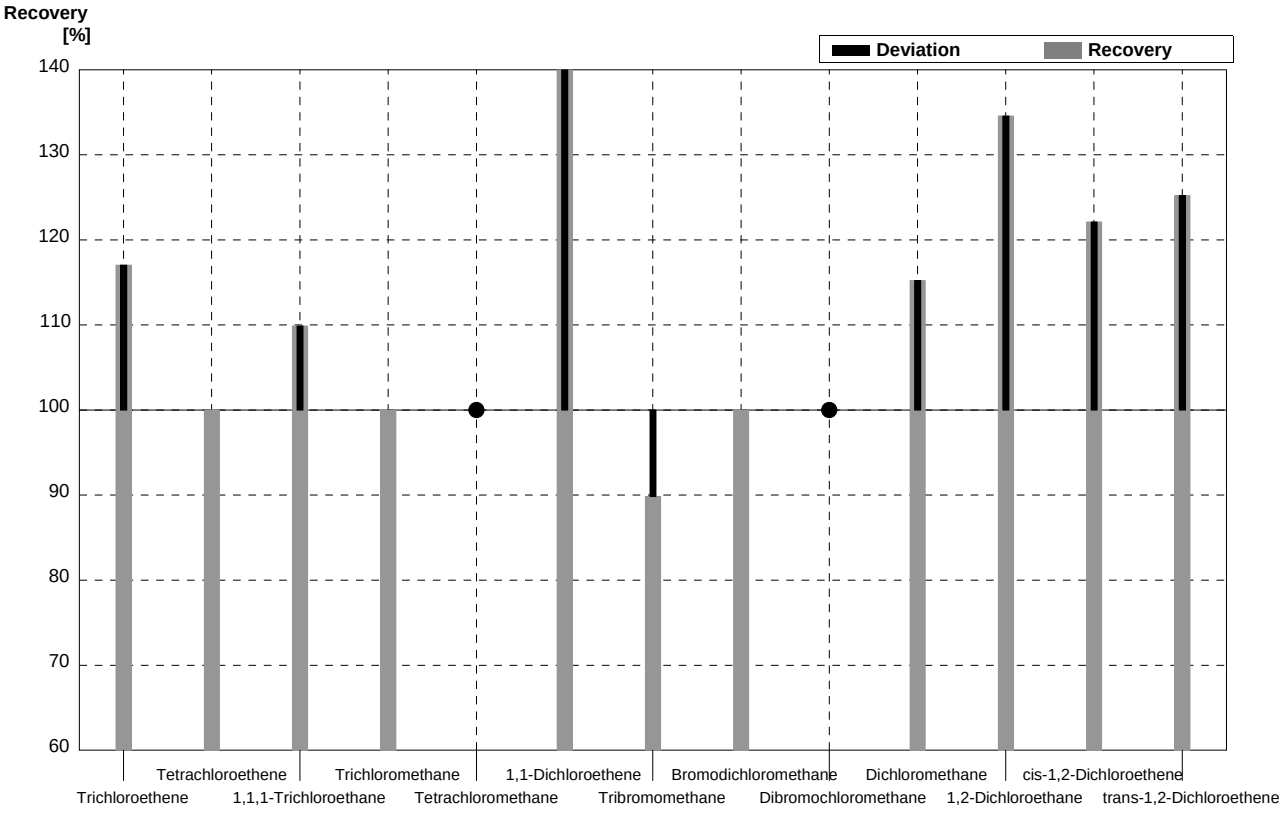
Sample C49A
Laboratory H

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,26	0,04	µg/l	108%
Tetrachloroethene	0,65	0,03	0,68	0,10	µg/l	105%
1,1,1-Trichloroethane	<0,08		<0,05		µg/l	•
Trichloromethane	0,56	0,03	0,53	0,08	µg/l	95%
Tetrachloromethane	0,75	0,04	0,77	0,12	µg/l	103%
1,1-Dichloroethene	3,60	0,18	4,88	0,73	µg/l	136%
Tribromomethane	1,61	0,08	1,79	0,27	µg/l	111%
Bromodichloromethane	0,56	0,03	0,57	0,09	µg/l	102%
Dibromochloromethane	1,23	0,06	1,36	0,20	µg/l	111%
Dichloromethane	0,92	0,05	1,13	0,17	µg/l	123%
1,2-Dichloroethane	0,88	0,04	1,06	0,16	µg/l	120%
cis-1,2-Dichloroethene	0,42	0,02	0,46	0,07	µg/l	110%
trans-1,2-Dichloroethene	2,30	0,12	2,62	0,39	µg/l	114%



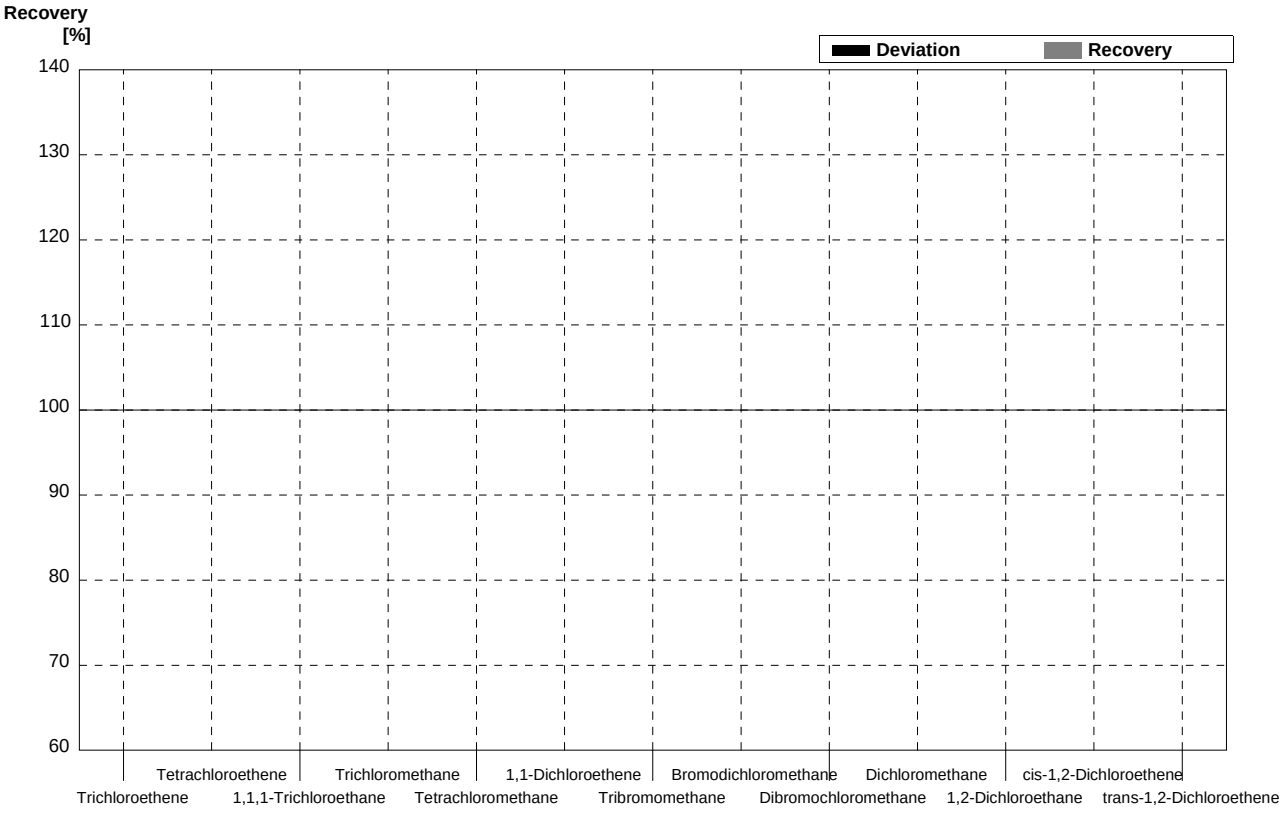
Sample C49B
Laboratory H

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	1,03	0,15	µg/l	117%
Tetrachloroethene	0,35	0,02	0,35	0,05	µg/l	100%
1,1,1-Trichloroethane	0,81	0,04	0,89	0,13	µg/l	110%
Trichloromethane	2,78	0,14	2,78	0,42	µg/l	100%
Tetrachloromethane	<0,06		<0,05		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,99	0,15	µg/l	146%
Tribromomethane	0,69	0,03	0,62	0,09	µg/l	90%
Bromodichloromethane	0,16	0,01	0,16	0,02	µg/l	100%
Dibromochloromethane	<0,1		<0,05		µg/l	•
Dichloromethane	11,89	0,59	13,7	2,1	µg/l	115%
1,2-Dichloroethane	1,07	0,05	1,44	0,22	µg/l	135%
cis-1,2-Dichloroethene	1,22	0,06	1,49	0,22	µg/l	122%
trans-1,2-Dichloroethene	1,19	0,06	1,49	0,22	µg/l	125%



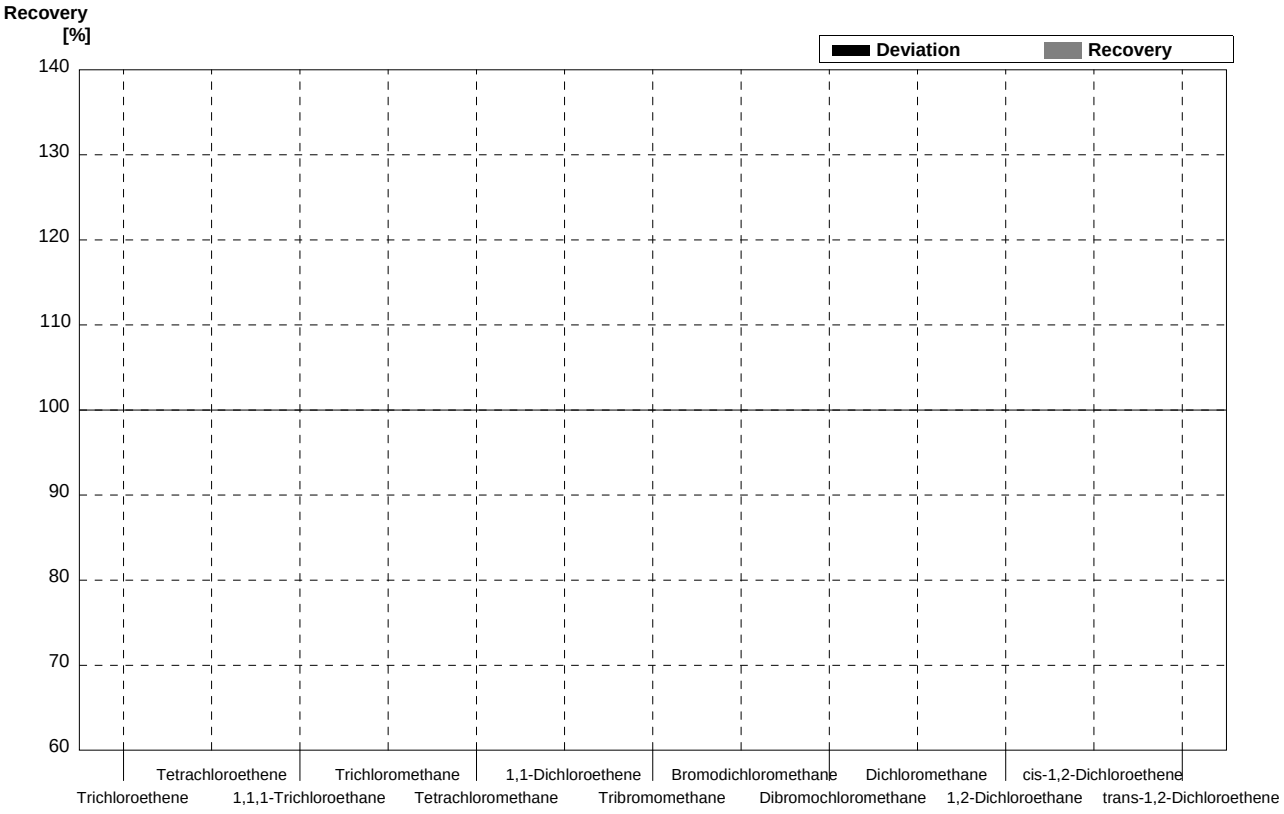
Sample C49A
Laboratory I

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01			µg/l	
Tetrachloroethene	0,65	0,03			µg/l	
1,1,1-Trichloroethane	<0,08				µg/l	
Trichloromethane	0,56	0,03			µg/l	
Tetrachloromethane	0,75	0,04			µg/l	
1,1-Dichloroethene	3,60	0,18			µg/l	
Tribromomethane	1,61	0,08			µg/l	
Bromodichloromethane	0,56	0,03			µg/l	
Dibromochloromethane	1,23	0,06			µg/l	
Dichloromethane	0,92	0,05			µg/l	
1,2-Dichloroethane	0,88	0,04			µg/l	
cis-1,2-Dichloroethene	0,42	0,02			µg/l	
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



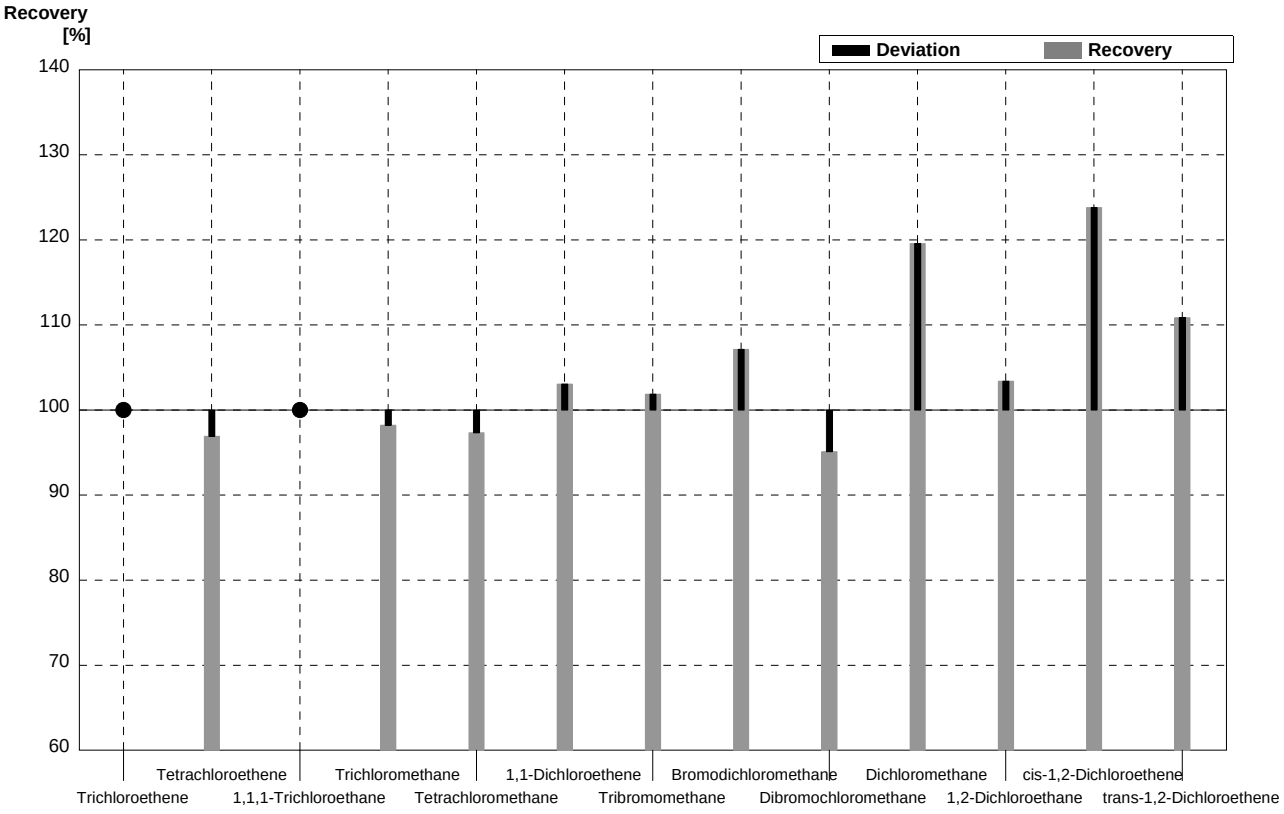
Sample C49B
Laboratory I

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04			µg/l	
Tetrachloroethene	0,35	0,02			µg/l	
1,1,1-Trichloroethane	0,81	0,04			µg/l	
Trichloromethane	2,78	0,14			µg/l	
Tetrachloromethane	<0,06				µg/l	
1,1-Dichloroethene	0,68	0,03			µg/l	
Tribromomethane	0,69	0,03			µg/l	
Bromodichloromethane	0,16	0,01			µg/l	
Dibromochloromethane	<0,1				µg/l	
Dichloromethane	11,89	0,59			µg/l	
1,2-Dichloroethane	1,07	0,05			µg/l	
cis-1,2-Dichloroethene	1,22	0,06			µg/l	
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



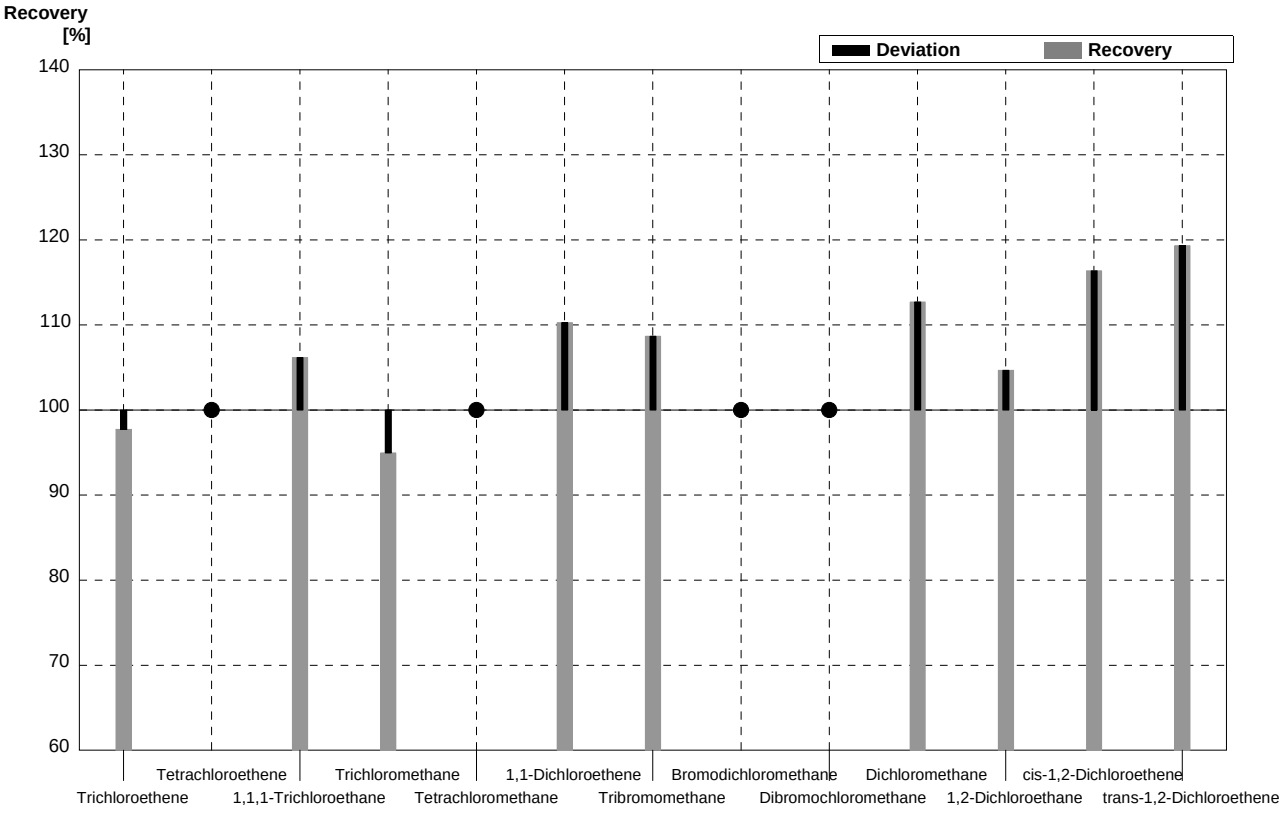
Sample C49A
Laboratory J

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	<0,5		µg/l	•
Tetrachloroethene	0,65	0,03	0,63	0,11	µg/l	97%
1,1,1-Trichloroethane	<0,08		<0,5		µg/l	•
Trichloromethane	0,56	0,03	0,55	0,10	µg/l	98%
Tetrachloromethane	0,75	0,04	0,73	0,16	µg/l	97%
1,1-Dichloroethene	3,60	0,18	3,71	0,82	µg/l	103%
Tribromomethane	1,61	0,08	1,64	0,29	µg/l	102%
Bromodichloromethane	0,56	0,03	0,60	0,10	µg/l	107%
Dibromochloromethane	1,23	0,06	1,17	0,19	µg/l	95%
Dichloromethane	0,92	0,05	1,10	0,24	µg/l	120%
1,2-Dichloroethane	0,88	0,04	0,91	0,15	µg/l	103%
cis-1,2-Dichloroethene	0,42	0,02	0,52	0,11	µg/l	124%
trans-1,2-Dichloroethene	2,30	0,12	2,55	0,56	µg/l	111%



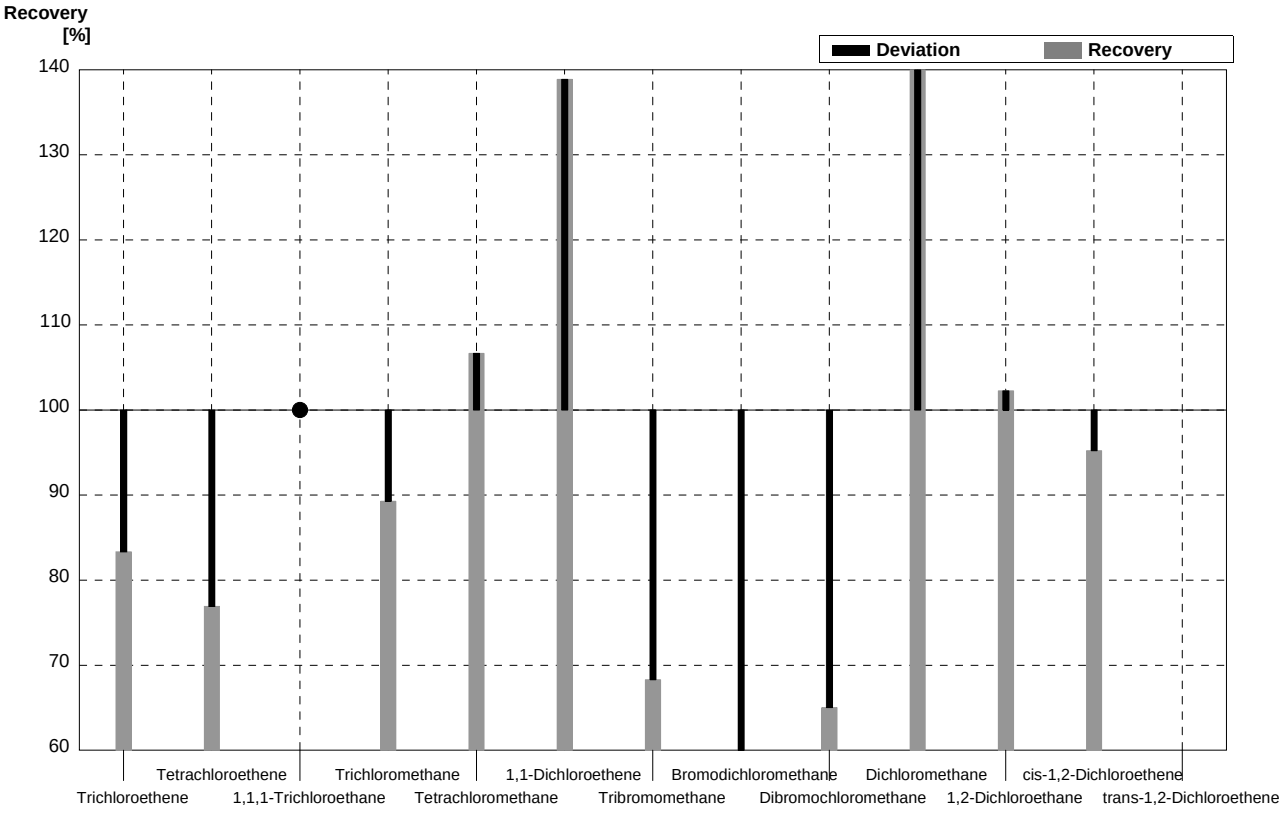
Sample C49B
Laboratory J

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,86	0,19	µg/l	98%
Tetrachloroethene	0,35	0,02	<0,5		µg/l	•
1,1,1-Trichloroethane	0,81	0,04	0,86	0,19	µg/l	106%
Trichloromethane	2,78	0,14	2,64	0,50	µg/l	95%
Tetrachloromethane	<0,06		<0,5		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,75	0,17	µg/l	110%
Tribromomethane	0,69	0,03	0,75	0,13	µg/l	109%
Bromodichloromethane	0,16	0,01	<0,5		µg/l	•
Dibromochloromethane	<0,1		<0,5		µg/l	•
Dichloromethane	11,89	0,59	13,4	2,95	µg/l	113%
1,2-Dichloroethane	1,07	0,05	1,12	0,18	µg/l	105%
cis-1,2-Dichloroethene	1,22	0,06	1,42	0,31	µg/l	116%
trans-1,2-Dichloroethene	1,19	0,06	1,42	0,31	µg/l	119%



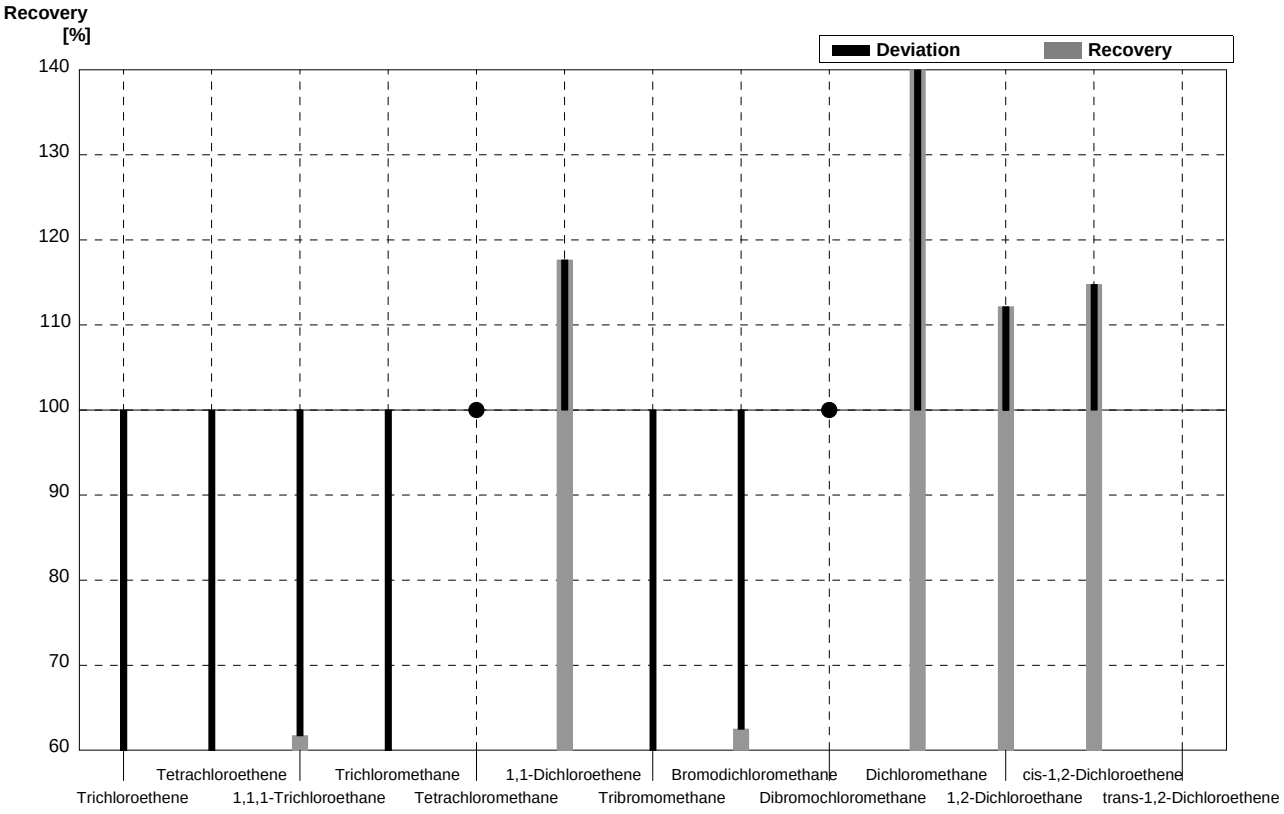
Sample C49A
Laboratory K

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,2	0,06	µg/l	83%
Tetrachloroethene	0,65	0,03	0,5	0,15	µg/l	77%
1,1,1-Trichloroethane	<0,08		<0,1	0,03	µg/l	•
Trichloromethane	0,56	0,03	0,5	0,15	µg/l	89%
Tetrachloromethane	0,75	0,04	0,8	0,24	µg/l	107%
1,1-Dichloroethene	3,60	0,18	5,0	1,5	µg/l	139%
Tribromomethane	1,61	0,08	1,1	0,33	µg/l	68%
Bromodichloromethane	0,56	0,03	0,3	0,09	µg/l	54%
Dibromochloromethane	1,23	0,06	0,8	0,24	µg/l	65%
Dichloromethane	0,92	0,05	1,4	0,42	µg/l	152%
1,2-Dichloroethane	0,88	0,04	0,9	0,27	µg/l	102%
cis-1,2-Dichloroethene	0,42	0,02	0,4	0,12	µg/l	95%
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



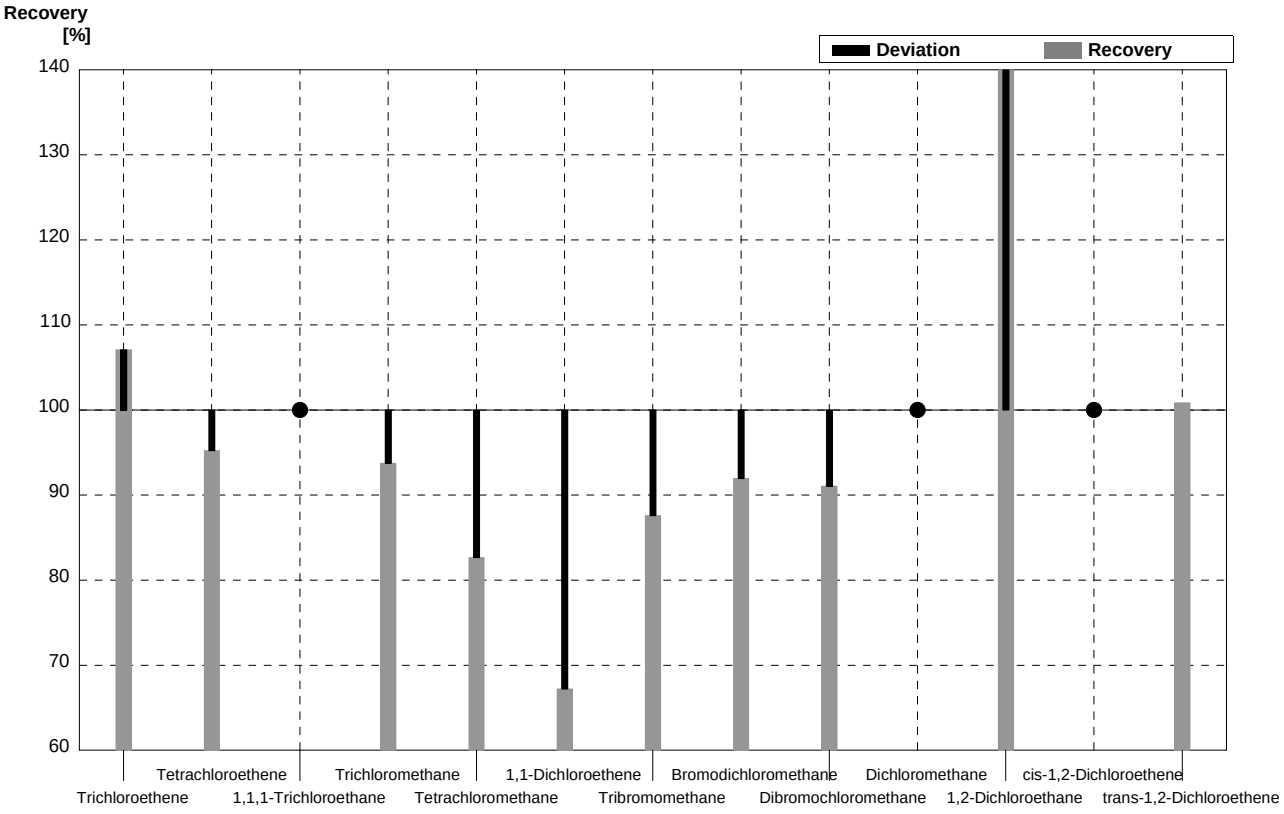
Sample C49B
Laboratory K

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,4	0,12	µg/l	45%
Tetrachloroethene	0,35	0,02	0,2	0,06	µg/l	57%
1,1,1-Trichloroethane	0,81	0,04	0,5	0,15	µg/l	62%
Trichloromethane	2,78	0,14	1,5	0,45	µg/l	54%
Tetrachloromethane	<0,06		<0,5	0,15	µg/l	•
1,1-Dichloroethene	0,68	0,03	0,8	0,24	µg/l	118%
Tribromomethane	0,69	0,03	0,4	0,12	µg/l	58%
Bromodichloromethane	0,16	0,01	0,1	0,03	µg/l	63%
Dibromochloromethane	<0,1		<0,1	0,03	µg/l	•
Dichloromethane	11,89	0,59	18,6	5,58	µg/l	156%
1,2-Dichloroethane	1,07	0,05	1,2	0,36	µg/l	112%
cis-1,2-Dichloroethene	1,22	0,06	1,4	0,42	µg/l	115%
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



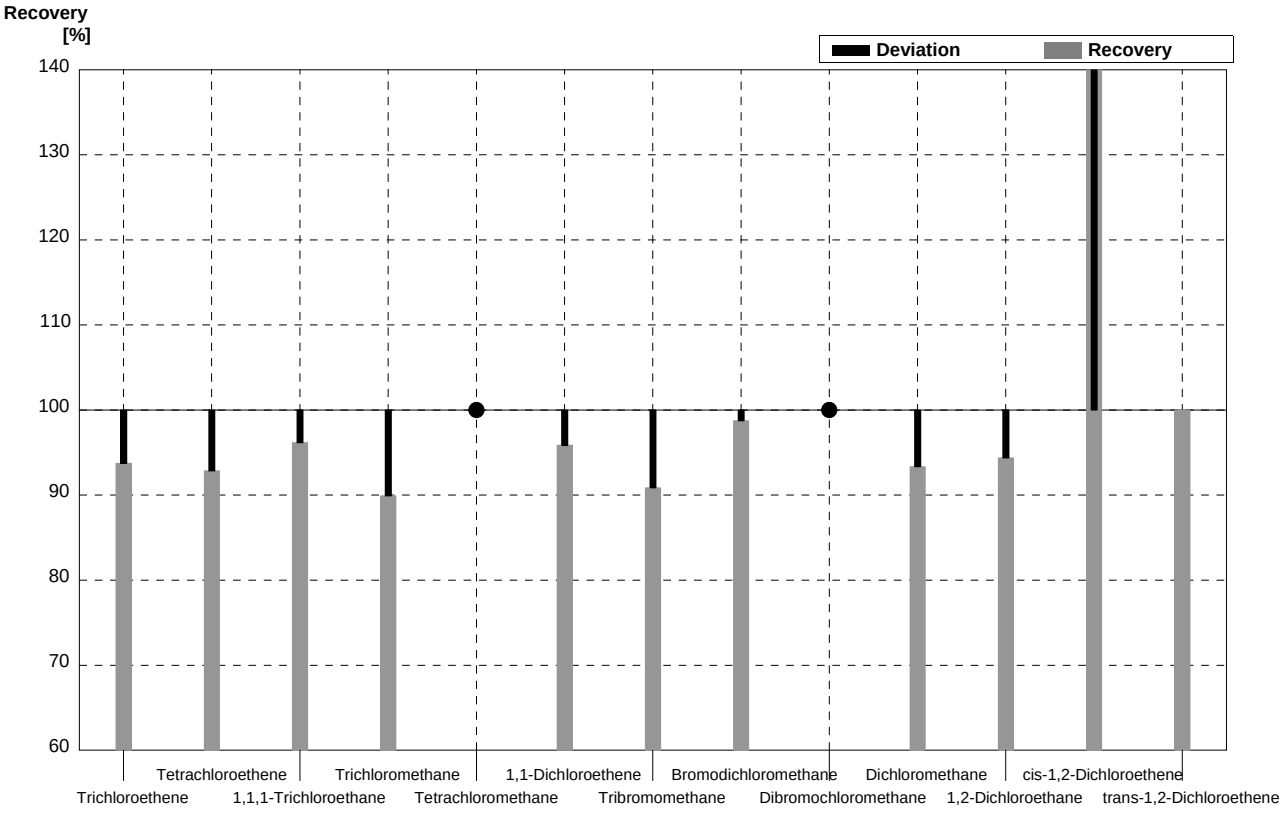
Sample C49A
Laboratory L

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,257	0,051	µg/l	107%
Tetrachloroethene	0,65	0,03	0,619	0,124	µg/l	95%
1,1,1-Trichloroethane	<0,08		<0,1		µg/l	•
Trichloromethane	0,56	0,03	0,525	0,105	µg/l	94%
Tetrachloromethane	0,75	0,04	0,620	0,124	µg/l	83%
1,1-Dichloroethene	3,60	0,18	2,42	0,48	µg/l	67%
Tribromomethane	1,61	0,08	1,41	0,28	µg/l	88%
Bromodichloromethane	0,56	0,03	0,515	0,103	µg/l	92%
Dibromochloromethane	1,23	0,06	1,12	0,22	µg/l	91%
Dichloromethane	0,92	0,05	<1,0		µg/l	•
1,2-Dichloroethane	0,88	0,04	1,36	0,27	µg/l	155%
cis-1,2-Dichloroethene	0,42	0,02	<1,0		µg/l	•
trans-1,2-Dichloroethene	2,30	0,12	2,32	0,46	µg/l	101%



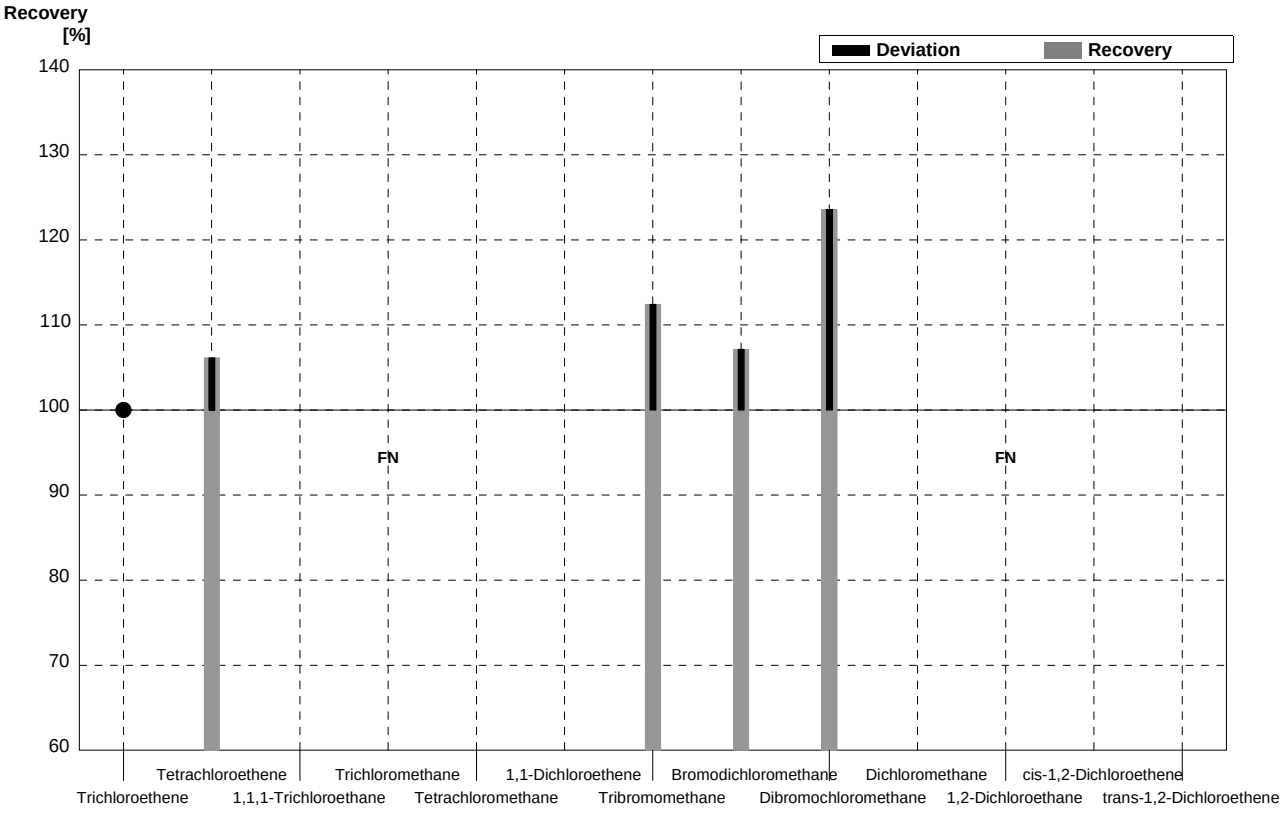
Sample C49B
Laboratory L

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,825	0,165	µg/l	94%
Tetrachloroethene	0,35	0,02	0,325	0,065	µg/l	93%
1,1,1-Trichloroethane	0,81	0,04	0,779	0,156	µg/l	96%
Trichloromethane	2,78	0,14	2,50	0,50	µg/l	90%
Tetrachloromethane	<0,06		<0,02		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,652	0,130	µg/l	96%
Tribromomethane	0,69	0,03	0,627	0,125	µg/l	91%
Bromodichloromethane	0,16	0,01	0,158	0,032	µg/l	99%
Dibromochloromethane	<0,1		<0,1		µg/l	•
Dichloromethane	11,89	0,59	11,1	2,2	µg/l	93%
1,2-Dichloroethane	1,07	0,05	1,01	0,2	µg/l	94%
cis-1,2-Dichloroethene	1,22	0,06	2,90	0,58	µg/l	238%
trans-1,2-Dichloroethene	1,19	0,06	1,19	0,24	µg/l	100%



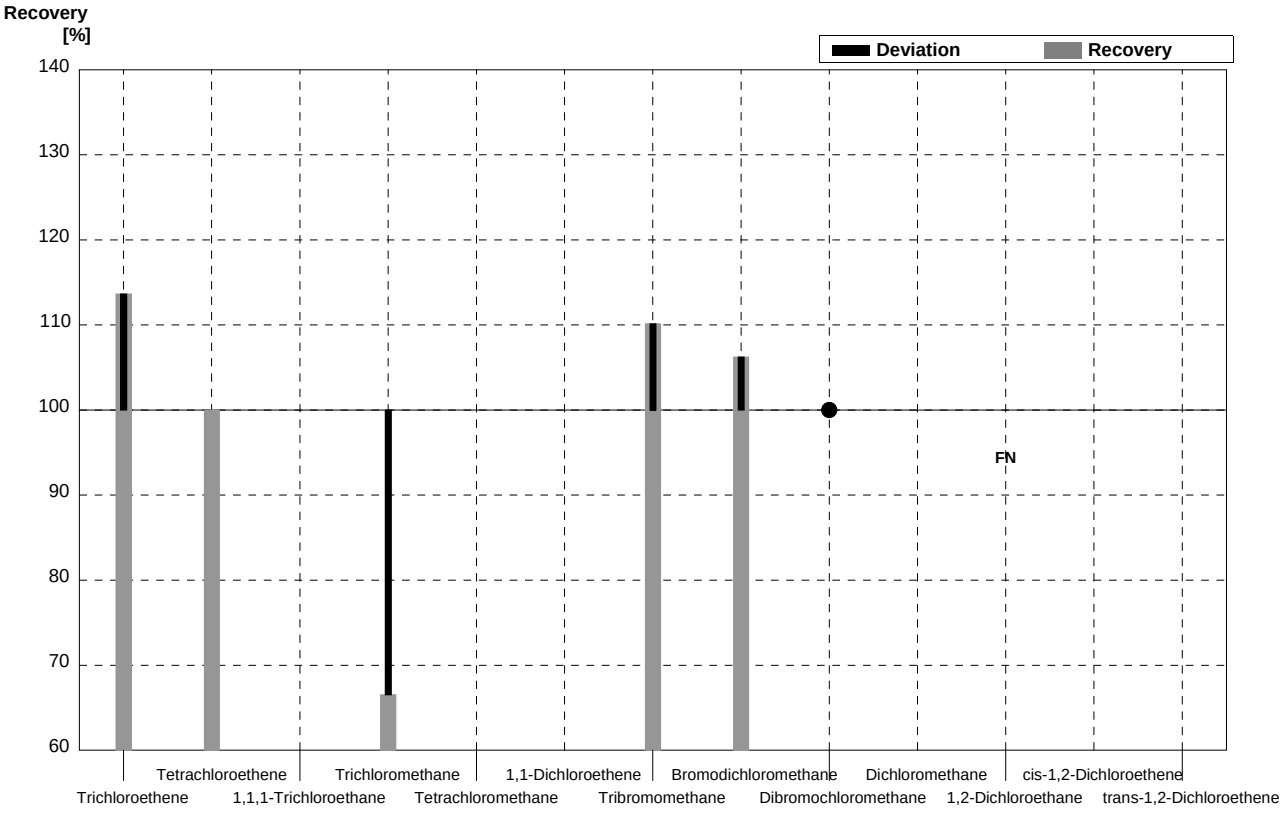
Sample C49A
Laboratory M

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	<0,3		µg/l	•
Tetrachloroethene	0,65	0,03	0,69	0,03	µg/l	106%
1,1,1-Trichloroethane	<0,08				µg/l	
Trichloromethane	0,56	0,03	<0,4		µg/l	FN
Tetrachloromethane	0,75	0,04			µg/l	
1,1-Dichloroethene	3,60	0,18			µg/l	
Tribromomethane	1,61	0,08	1,81	0,05	µg/l	112%
Bromodichloromethane	0,56	0,03	0,60	0,05	µg/l	107%
Dibromochloromethane	1,23	0,06	1,52	0,04	µg/l	124%
Dichloromethane	0,92	0,05			µg/l	
1,2-Dichloroethane	0,88	0,04	<0,3		µg/l	FN
cis-1,2-Dichloroethene	0,42	0,02			µg/l	
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



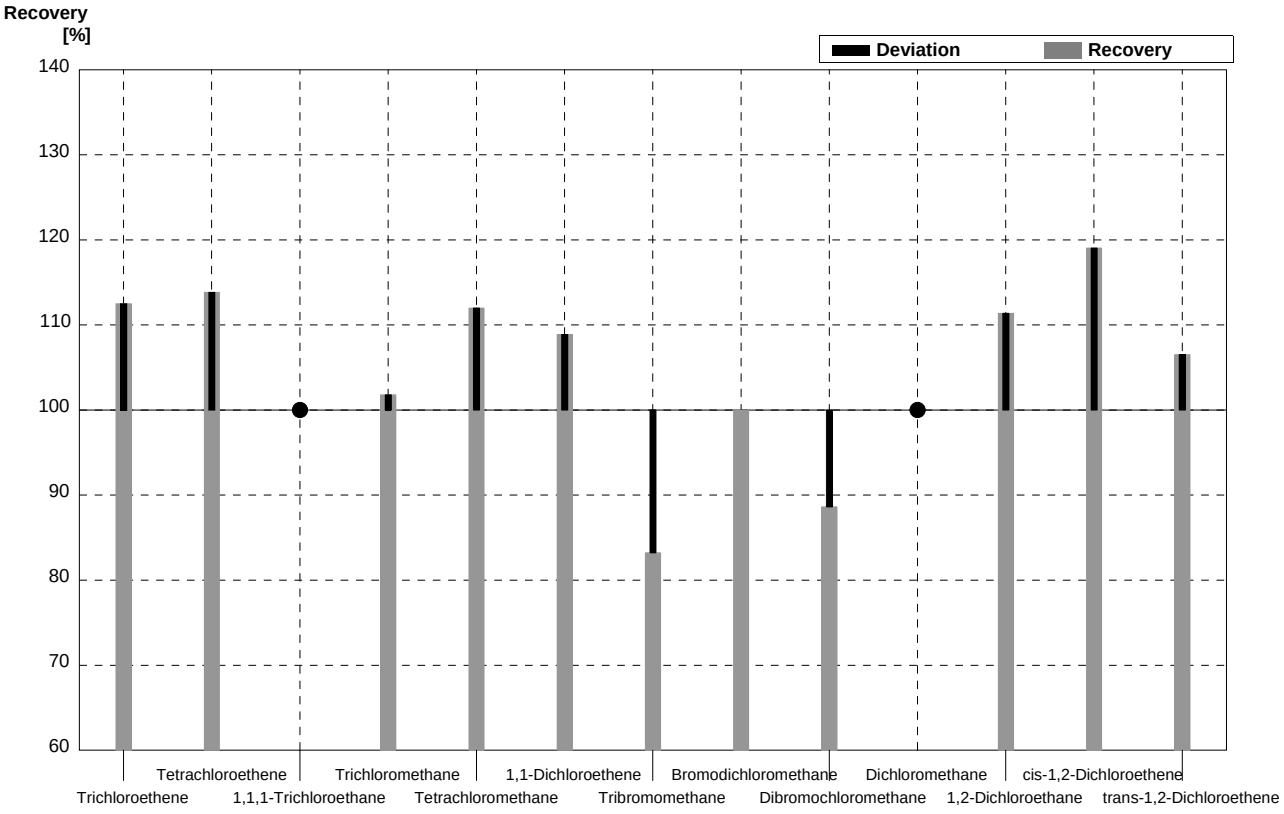
Sample C49B
Laboratory M

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	1,00	0,08	µg/l	114%
Tetrachloroethene	0,35	0,02	0,35	0,03	µg/l	100%
1,1,1-Trichloroethane	0,81	0,04			µg/l	
Trichloromethane	2,78	0,14	1,85	0,17	µg/l	67%
Tetrachloromethane	<0,06				µg/l	
1,1-Dichloroethene	0,68	0,03			µg/l	
Tribromomethane	0,69	0,03	0,76	0,05	µg/l	110%
Bromodichloromethane	0,16	0,01	0,17	0,03	µg/l	106%
Dibromochloromethane	<0,1		<0,2		µg/l	•
Dichloromethane	11,89	0,59			µg/l	
1,2-Dichloroethane	1,07	0,05	<0,3		µg/l	FN
cis-1,2-Dichloroethene	1,22	0,06			µg/l	
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



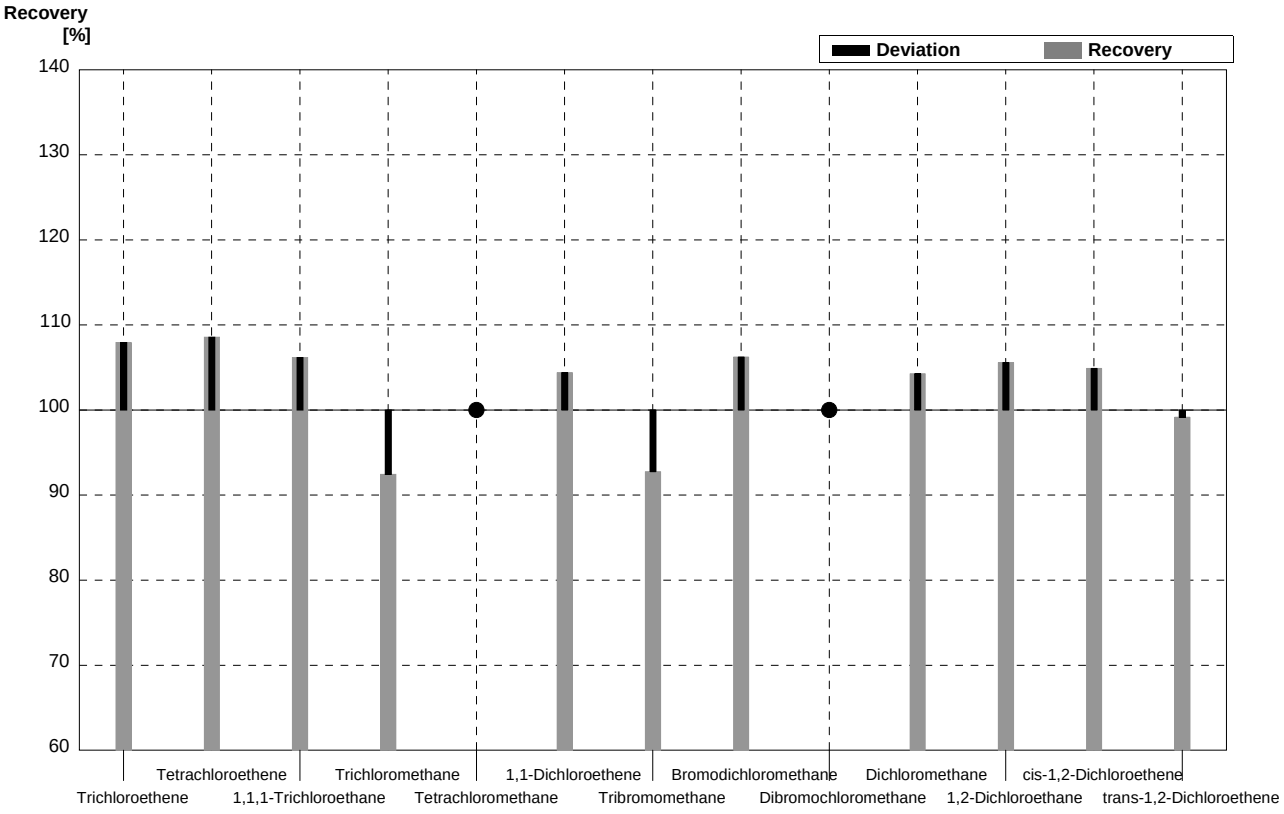
Sample C49A
Laboratory N

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,27	0,008	µg/l	113%
Tetrachloroethene	0,65	0,03	0,74	0,048	µg/l	114%
1,1,1-Trichloroethane	<0,08		<0,03		µg/l	•
Trichloromethane	0,56	0,03	0,57	0,033	µg/l	102%
Tetrachloromethane	0,75	0,04	0,84	0,016	µg/l	112%
1,1-Dichloroethene	3,60	0,18	3,92	0,254	µg/l	109%
Tribromomethane	1,61	0,08	1,34	0,030	µg/l	83%
Bromodichloromethane	0,56	0,03	0,56	0,029	µg/l	100%
Dibromochloromethane	1,23	0,06	1,09	0,054	µg/l	89%
Dichloromethane	0,92	0,05	<1,5		µg/l	•
1,2-Dichloroethane	0,88	0,04	0,98	0,039	µg/l	111%
cis-1,2-Dichloroethene	0,42	0,02	0,50	0,070	µg/l	119%
trans-1,2-Dichloroethene	2,30	0,12	2,45	0,087	µg/l	107%



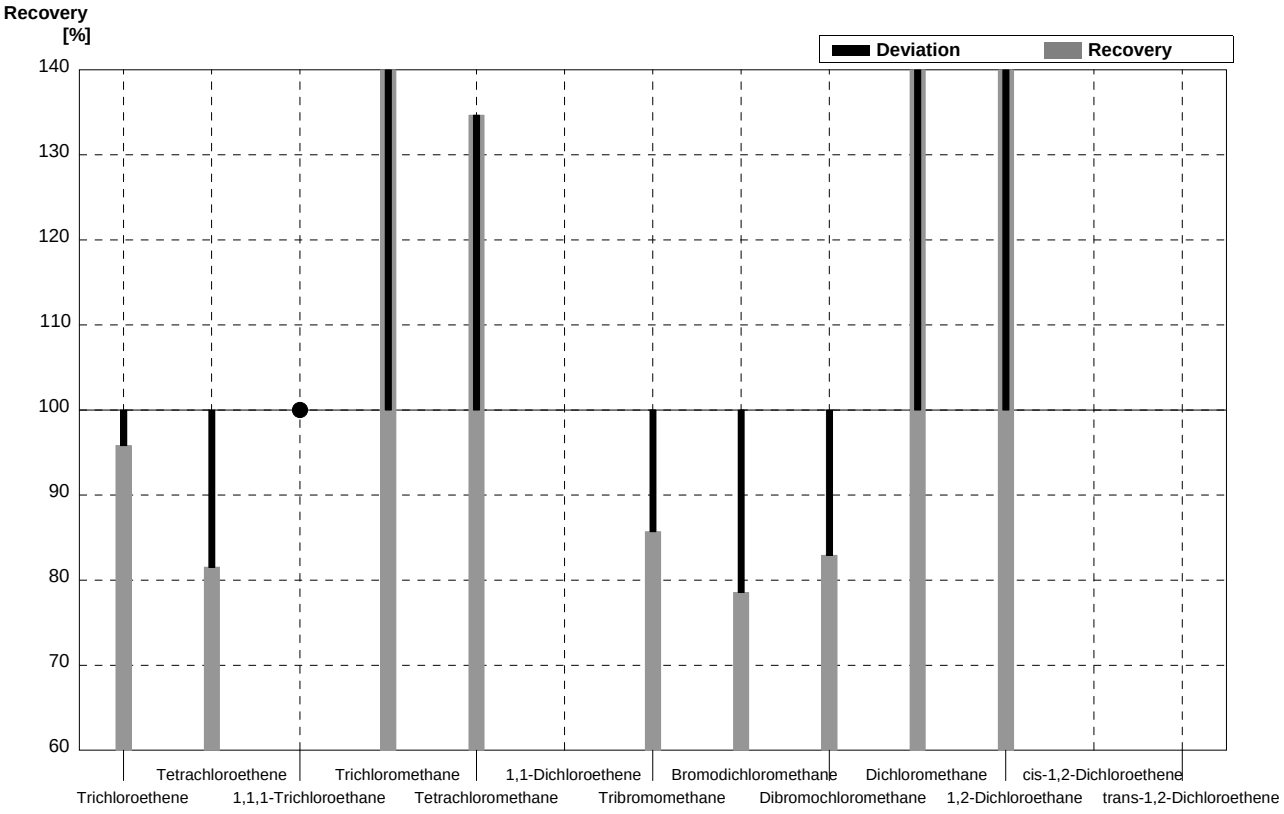
Sample C49B
Laboratory N

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,95	0,109	µg/l	108%
Tetrachloroethene	0,35	0,02	0,38	0,019	µg/l	109%
1,1,1-Trichloroethane	0,81	0,04	0,86	0,107	µg/l	106%
Trichloromethane	2,78	0,14	2,57	0,036	µg/l	92%
Tetrachloromethane	<0,06		<0,02		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,71	0,015	µg/l	104%
Tribromomethane	0,69	0,03	0,64	0,030	µg/l	93%
Bromodichloromethane	0,16	0,01	0,17	0,010	µg/l	106%
Dibromochloromethane	<0,1		<0,02		µg/l	•
Dichloromethane	11,89	0,59	12,4	0,80	µg/l	104%
1,2-Dichloroethane	1,07	0,05	1,13	0,039	µg/l	106%
cis-1,2-Dichloroethene	1,22	0,06	1,28	0,062	µg/l	105%
trans-1,2-Dichloroethene	1,19	0,06	1,18	0,096	µg/l	99%



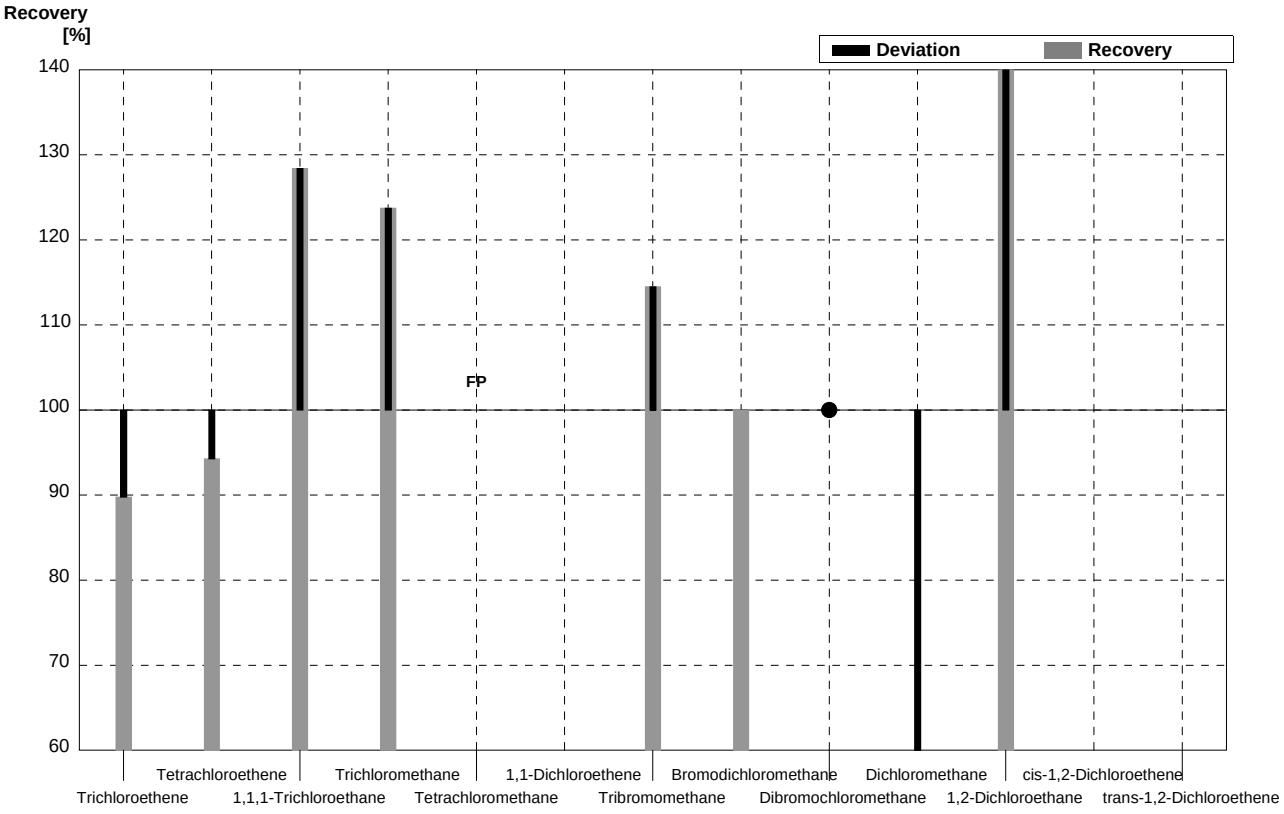
Sample C49A
Laboratory O

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,23	0,05	µg/l	96%
Tetrachloroethene	0,65	0,03	0,53	0,12	µg/l	82%
1,1,1-Trichloroethane	<0,08		<0,10		µg/l	•
Trichloromethane	0,56	0,03	1,02	0,13	µg/l	182%
Tetrachloromethane	0,75	0,04	1,01	0,34	µg/l	135%
1,1-Dichloroethene	3,60	0,18			µg/l	
Tribromomethane	1,61	0,08	1,38	0,06	µg/l	86%
Bromodichloromethane	0,56	0,03	0,44	0,05	µg/l	79%
Dibromochloromethane	1,23	0,06	1,02	0,16	µg/l	83%
Dichloromethane	0,92	0,05	2,15	0,30	µg/l	234%
1,2-Dichloroethane	0,88	0,04	18,90	0,71	µg/l	2148%
cis-1,2-Dichloroethene	0,42	0,02			µg/l	
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



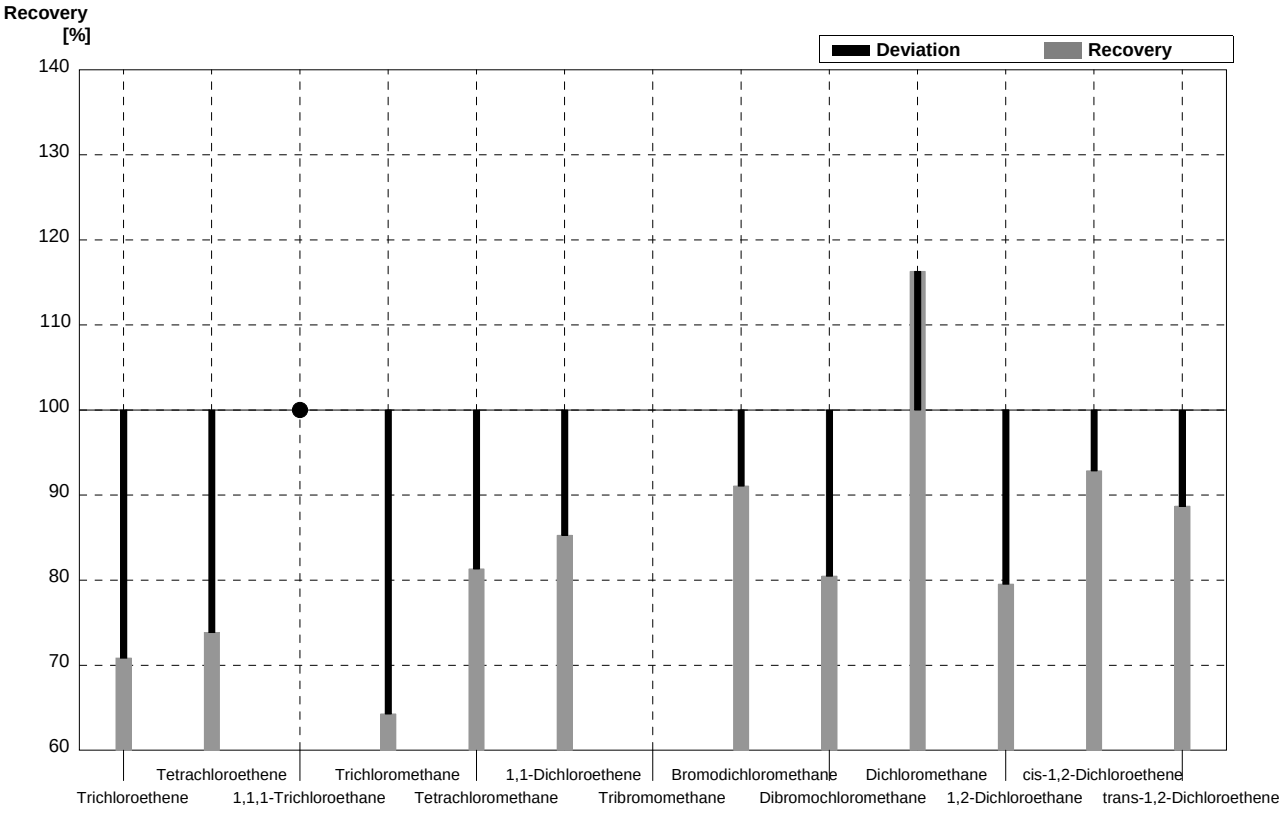
Sample C49B
Laboratory O

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,79	0,06	µg/l	90%
Tetrachloroethene	0,35	0,02	0,33	0,12	µg/l	94%
1,1,1-Trichloroethane	0,81	0,04	1,04	0,05	µg/l	128%
Trichloromethane	2,78	0,14	3,44	0,44	µg/l	124%
Tetrachloromethane	<0,06		0,74	0,30	µg/l	FP
1,1-Dichloroethene	0,68	0,03			µg/l	
Tribromomethane	0,69	0,03	0,79	0,17	µg/l	114%
Bromodichloromethane	0,16	0,01	0,16	0,05	µg/l	100%
Dibromochloromethane	<0,1		<0,10		µg/l	•
Dichloromethane	11,89	0,59	0,94	0,21	µg/l	8%
1,2-Dichloroethane	1,07	0,05	18,02	2,00	µg/l	1684%
cis-1,2-Dichloroethene	1,22	0,06			µg/l	
trans-1,2-Dichloroethene	1,19	0,06			µg/l	



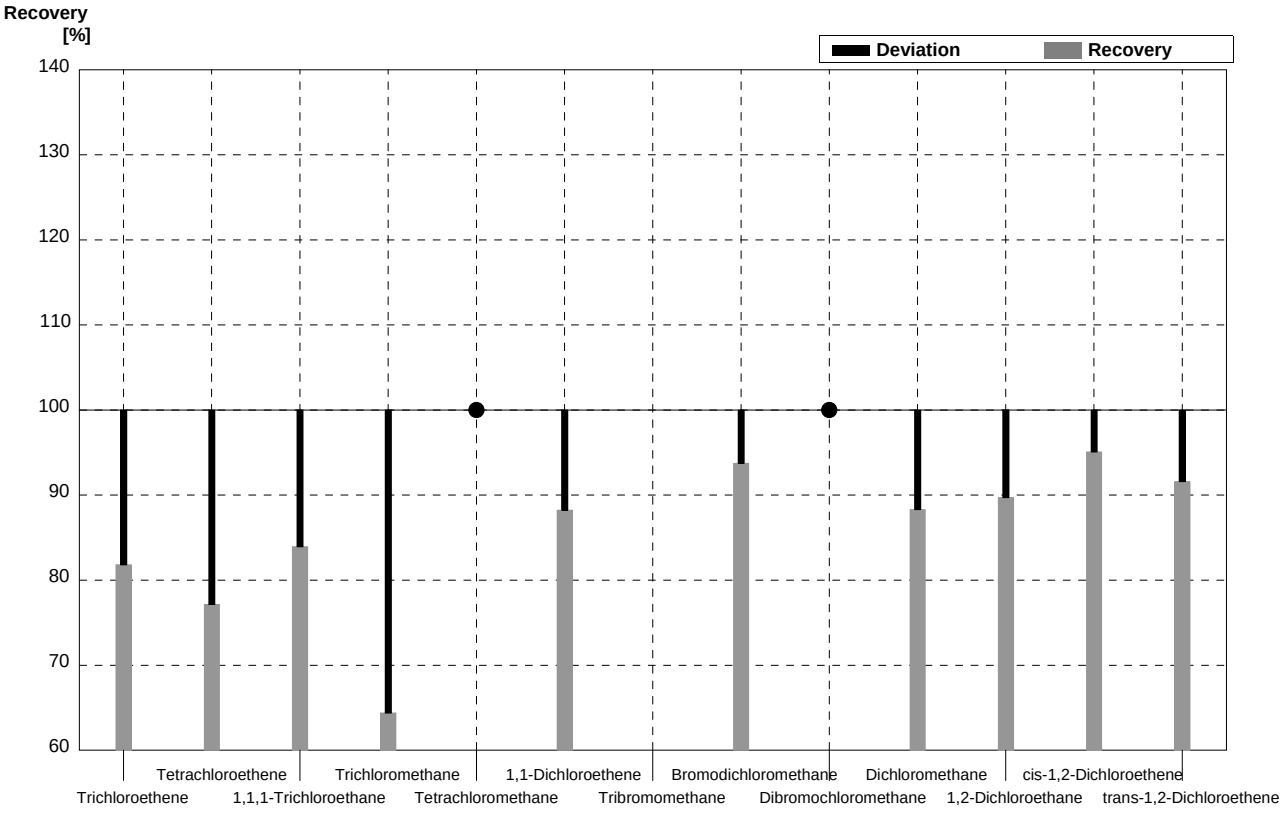
Sample C49A
Laboratory P

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,17	0,03	µg/l	71%
Tetrachloroethene	0,65	0,03	0,48	0,07	µg/l	74%
1,1,1-Trichloroethane	<0,08		<0,05		µg/l	•
Trichloromethane	0,56	0,03	0,36	0,05	µg/l	64%
Tetrachloromethane	0,75	0,04	0,61	0,09	µg/l	81%
1,1-Dichloroethene	3,60	0,18	3,07	0,46	µg/l	85%
Tribromomethane	1,61	0,08	n,B.		µg/l	
Bromodichloromethane	0,56	0,03	0,51	0,08	µg/l	91%
Dibromochloromethane	1,23	0,06	0,99	0,15	µg/l	80%
Dichloromethane	0,92	0,05	1,07	0,16	µg/l	116%
1,2-Dichloroethane	0,88	0,04	0,70	0,11	µg/l	80%
cis-1,2-Dichloroethene	0,42	0,02	0,39	0,06	µg/l	93%
trans-1,2-Dichloroethene	2,30	0,12	2,04	0,31	µg/l	89%



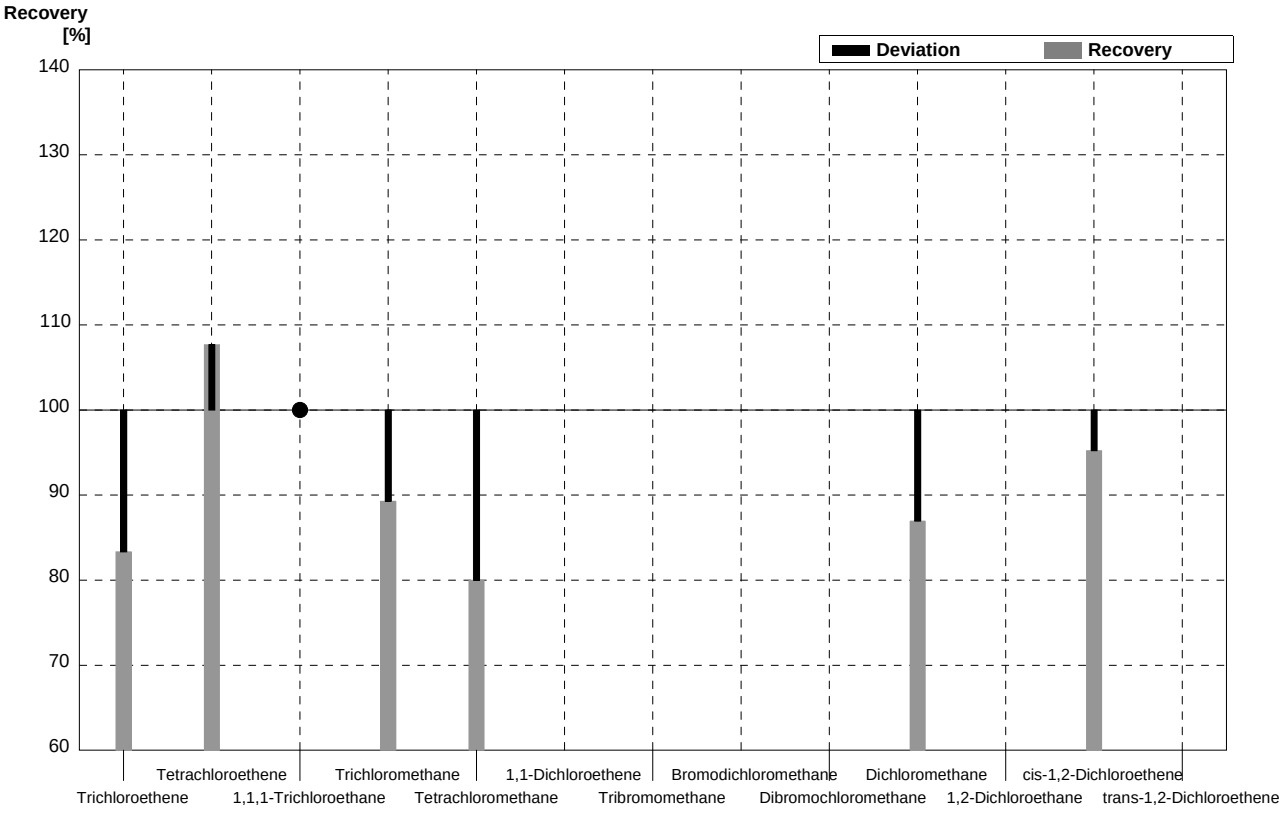
Sample C49B
Laboratory P

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,72	0,11	µg/l	82%
Tetrachloroethene	0,35	0,02	0,27	0,04	µg/l	77%
1,1,1-Trichloroethane	0,81	0,04	0,68	0,10	µg/l	84%
Trichloromethane	2,78	0,14	1,79	0,27	µg/l	64%
Tetrachloromethane	<0,06		<0,05		µg/l	•
1,1-Dichloroethene	0,68	0,03	0,60	0,09	µg/l	88%
Tribromomethane	0,69	0,03	n,B.		µg/l	
Bromodichloromethane	0,16	0,01	0,15	0,02	µg/l	94%
Dibromochloromethane	<0,1		<0,05		µg/l	•
Dichloromethane	11,89	0,59	10,50	1,58	µg/l	88%
1,2-Dichloroethane	1,07	0,05	0,96	0,14	µg/l	90%
cis-1,2-Dichloroethene	1,22	0,06	1,16	0,17	µg/l	95%
trans-1,2-Dichloroethene	1,19	0,06	1,09	0,16	µg/l	92%



Sample C49A
Laboratory Q

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,24	0,01	0,2	0,05	µg/l	83%
Tetrachloroethene	0,65	0,03	0,7	0,12	µg/l	108%
1,1,1-Trichloroethane	<0,08		<0,15		µg/l	•
Trichloromethane	0,56	0,03	0,5	0,12	µg/l	89%
Tetrachloromethane	0,75	0,04	0,6	0,1	µg/l	80%
1,1-Dichloroethene	3,60	0,18			µg/l	
Tribromomethane	1,61	0,08			µg/l	
Bromodichloromethane	0,56	0,03			µg/l	
Dibromochloromethane	1,23	0,06			µg/l	
Dichloromethane	0,92	0,05	0,8	0,1	µg/l	87%
1,2-Dichloroethane	0,88	0,04			µg/l	
cis-1,2-Dichloroethene	0,42	0,02	0,4	0,1	µg/l	95%
trans-1,2-Dichloroethene	2,30	0,12			µg/l	



Sample C49B
Laboratory Q

Parameter	Target value	± U (k=2)	Result	±	Unit	Recovery
Trichloroethene	0,88	0,04	0,7	0,12	µg/l	80%
Tetrachloroethene	0,35	0,02	0,3	0,07	µg/l	86%
1,1,1-Trichloroethane	0,81	0,04	0,7	0,14	µg/l	86%
Trichloromethane	2,78	0,14	2,7	0,2	µg/l	97%
Tetrachloromethane	<0,06		<0,15		µg/l	•
1,1-Dichloroethene	0,68	0,03			µg/l	
Tribromomethane	0,69	0,03			µg/l	
Bromodichloromethane	0,16	0,01			µg/l	
Dibromochloromethane	<0,1				µg/l	
Dichloromethane	11,89	0,59	10	1	µg/l	84%
1,2-Dichloroethane	1,07	0,05			µg/l	
cis-1,2-Dichloroethene	1,22	0,06	1,1	0,2	µg/l	90%
trans-1,2-Dichloroethene	1,19	0,06			µg/l