

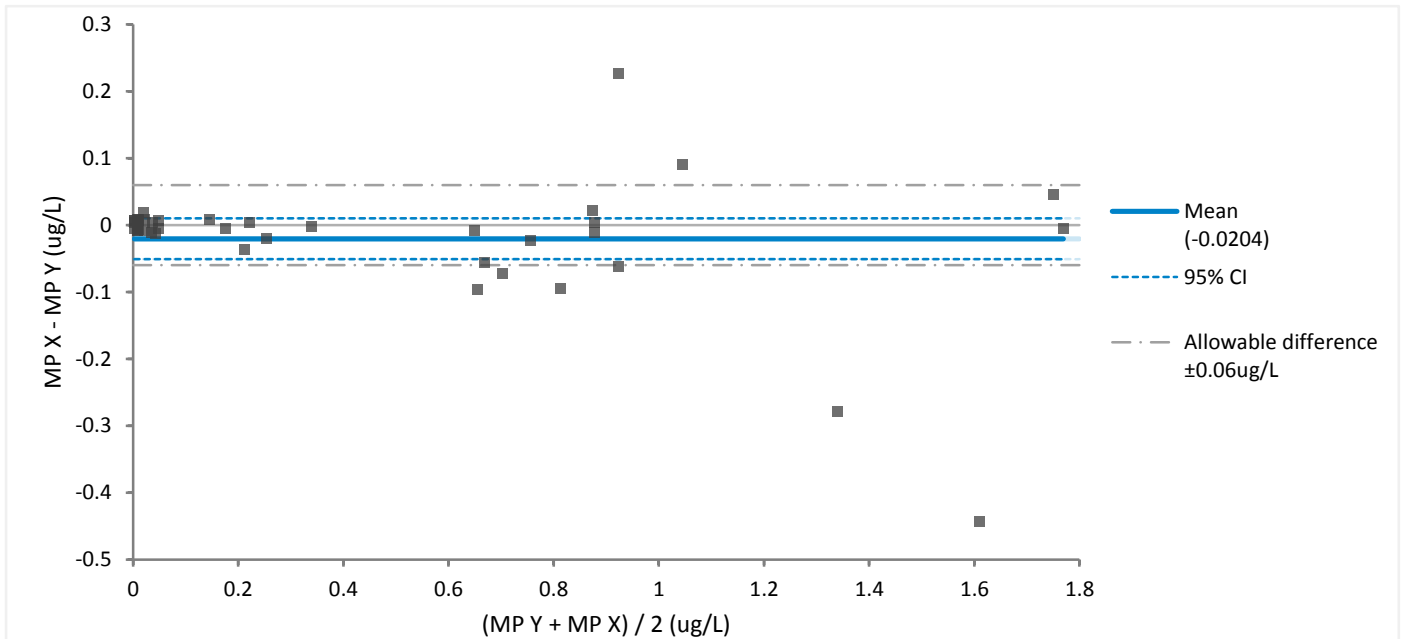
Method comparison: MP Y, MP X ≥ 0 to <1.8

CLSI EP09-A3 - Appendix I

Last updated 30 June 2015 at 9:33 by Simon Huntington

Descriptives

Difference plot



N | 40

Measuring interval | 0.0000 to 1.8000

	Minimum	Maximum
MP Y	0.0010	1.8330
MP X	0.0010	1.7740
$(MP Y + MP X) / 2$	0.0025	1.7695

Fit Differences

Parameter	Estimate	95% CI	SE
Mean difference	-0.0204	-0.05089 to 0.01014	0.01508

Comparability

Interval	Difference	95% CI	Allowable difference	p-value
0.0025 to 1.7695	-0.0204	-0.0509 to 0.0101	± 0.0600	0.1846 ¹

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

¹ Do not reject the null hypothesis at the 5% significance level.

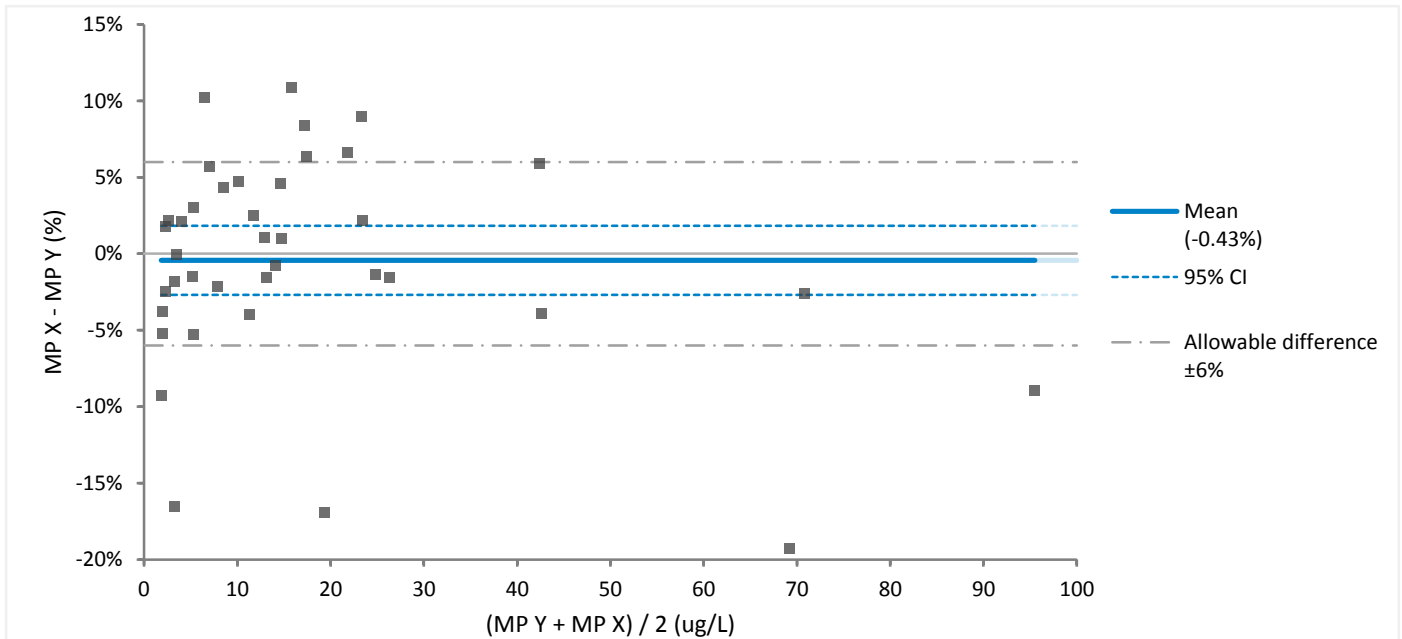
Method comparison: MP Y, MP X ≥ 1.8 to <100

CLSI EP09-A3 - Appendix I

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Descriptives

Difference plot



N | 39

Measuring interval | 1.8000 to 100.0000

	Minimum	Maximum
MP Y	1.9450	99.8020
MP X	1.7730	91.2350
(MP Y + MP X) / 2	1.8590	95.5185

Fit Differences

Parameter	Estimate	95% CI	SE
Mean difference	-0.43%	-2.689% to 1.829%	1.116%

Comparability

Interval	Difference	95% CI	Allowable difference	p-value
1.8590 to 95.5185	-0.43%	-2.7% to 1.8%	$\pm 6.0\%$	0.7019 ¹

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

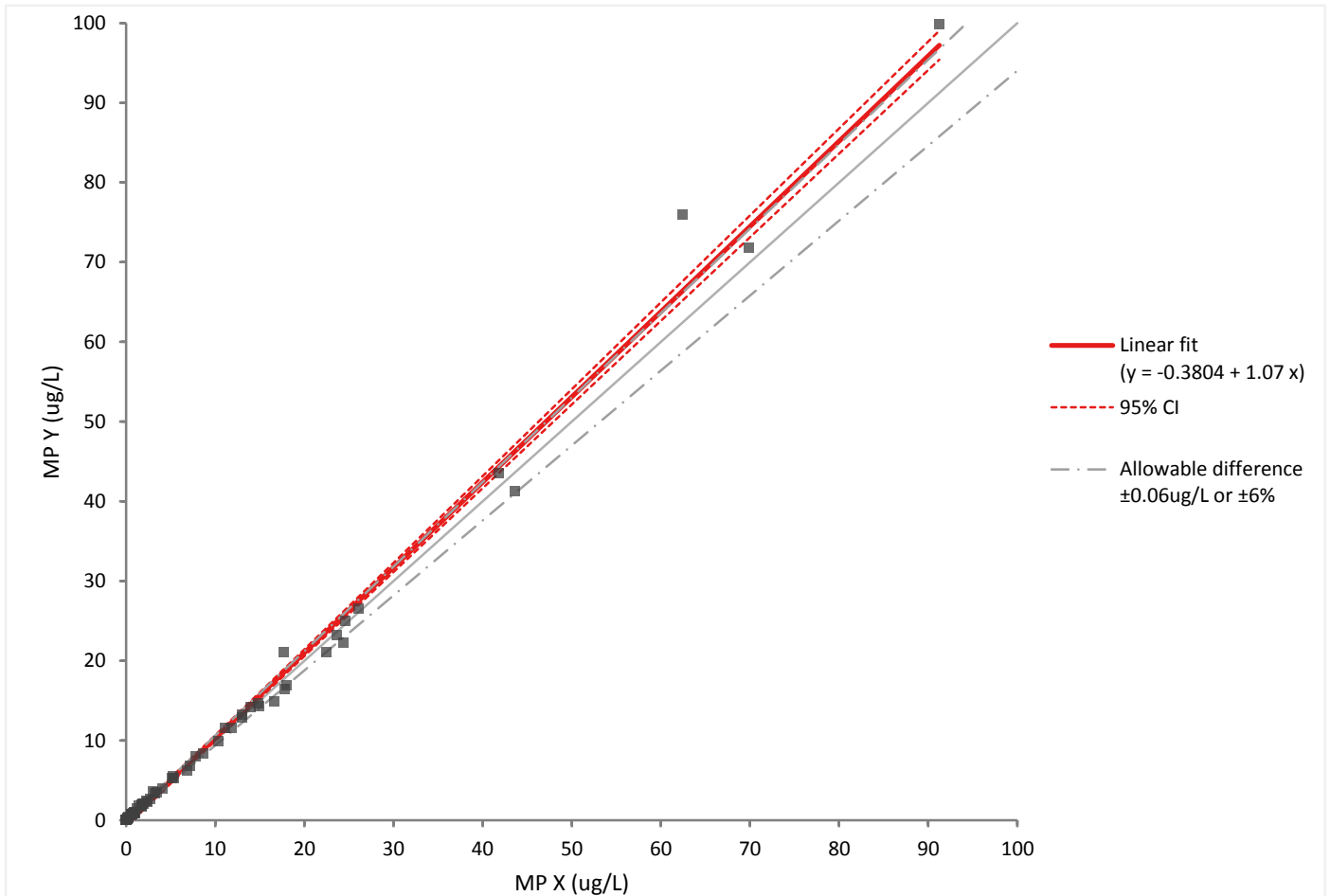
¹ Do not reject the null hypothesis at the 5% significance level.

Method comparison: MP X, MP Y

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Last updated 30 June 2015 at 9:22 by Simon Huntington

Descriptives



N | 79

	Minimum	Maximum
MP X	0.0010	91.2350
MP Y	0.0010	99.8020

Fit Y on X

Ordinary least-squares fit

Equation | $MP\ Y\ (ug/L) = -0.3804 + 1.07\ MP\ X\ (ug/L)$

Parameter	Estimate	95% CI	SE
Intercept	-0.3804	-0.7777 to 0.0169	0.19954
Slope	1.070	1.048 to 1.091	0.010846

$S_{y,x}$ | 1.5576

Method comparison: MP X, MP Y

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Comparability

	X	Difference (Y - X)	95% CI	Allowable difference	p-value
MDP	5.000	-0.6%	-7.8% to 6.5%	±6.0%	0.8588 ¹

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

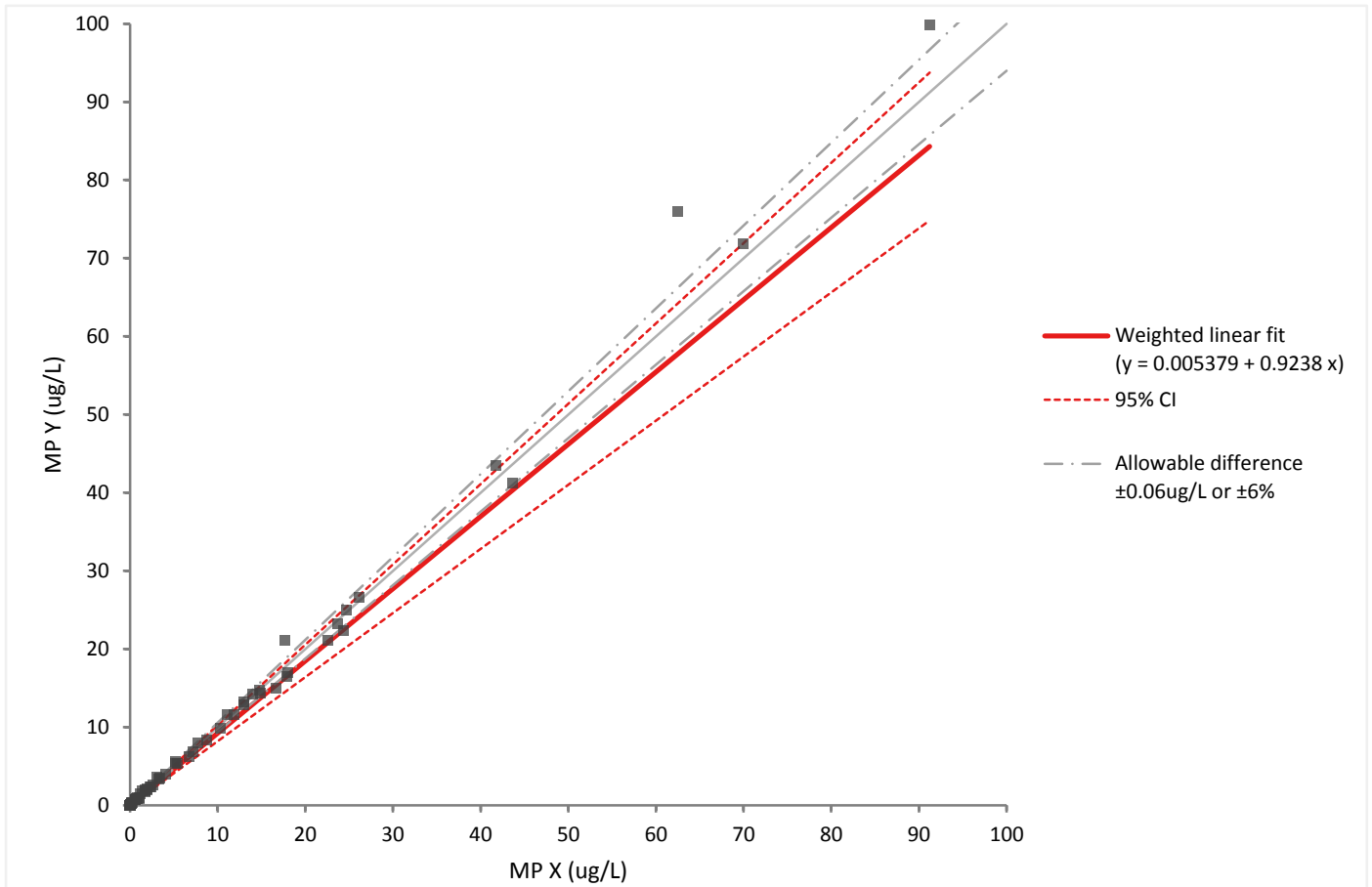
¹ Do not reject the null hypothesis at the 5% significance level.

Method comparison: MP X, MP Y

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Descriptives



N | 79

	Minimum	Maximum
MP X	0.0010	91.2350
MP Y	0.0010	99.8020

Fit Y on X

Weighted least-squares fit

Equation | $\text{MP Y (ug/L)} = 0.005379 + 0.9238 \text{ MP X (ug/L)}$

Parameter	Estimate	95% CI	SE
Intercept	0.0054	0.0046 to 0.0062	0.00041
Slope	0.9238	0.8201 to 1.027	0.052054

Weighted $S_{y.x}$ | 0.4456

Method comparison: MP X, MP Y

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Comparability

	X	Difference (Y - X)	95% CI	Allowable difference	p-value
MDP	5.000	-7.5% *	-17.9% to 2.8%	±6.0%	0.1527 ¹

* Performance requirement not met.

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

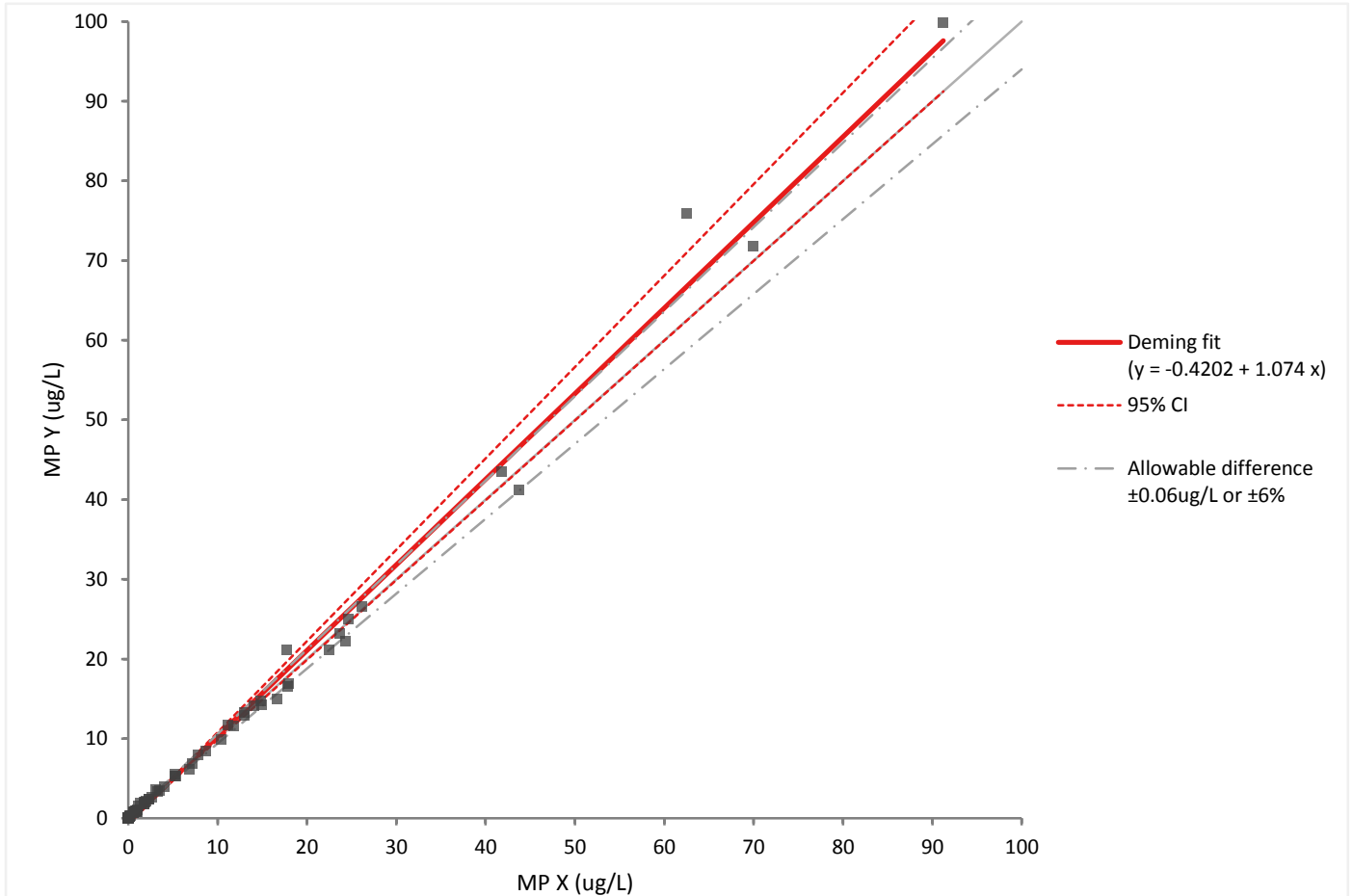
¹ Do not reject the null hypothesis at the 5% significance level.

Method comparison: MP X, MP Y

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Descriptives



N | 79

	Minimum	Maximum
MP X	0.0010	91.2350
MP Y	0.0010	99.8020

Fit Y on X

Deming fit

Equation | $\text{MP Y (ug/L)} = -0.4202 + 1.074 \text{ MP X (ug/L)}$

Variance ratio X/Y (λ) | 1.000

Parameter	Estimate	Jackknife 95% CI	Jackknife SE
Intercept	-0.4202	-0.7771 to -0.06340	0.17920
Slope	1.074	1.001 to 1.147	0.036668

Method comparison: MP X, MP Y

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Comparability

	X	Difference (Y - X)	95% CI	Allowable difference	p-value
MDP	5.000	-1.0%	-5.0% to 3.0%	±6.0%	0.6237 ¹

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

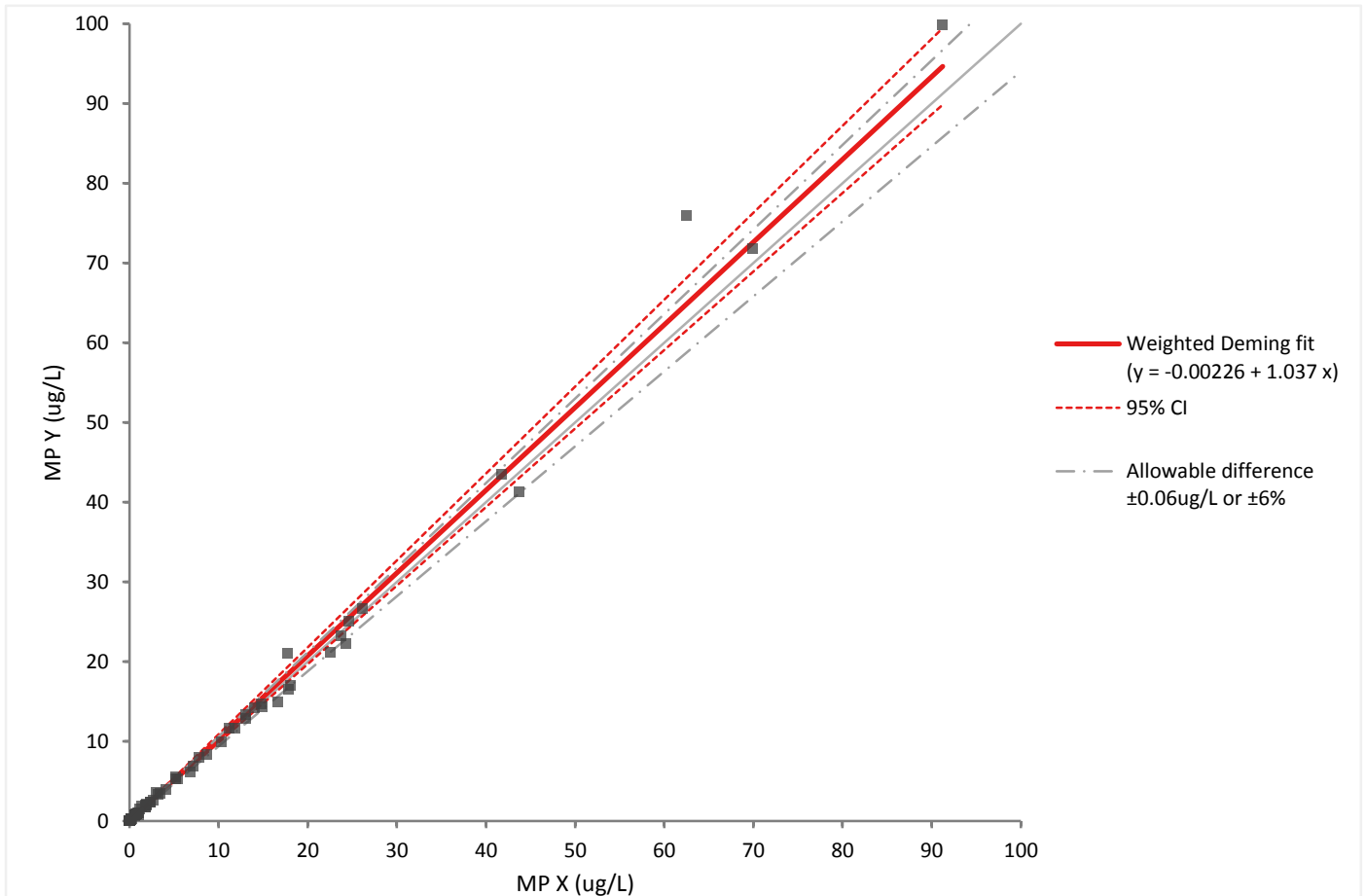
¹ Do not reject the null hypothesis at the 5% significance level.

Method comparison: MP X, MP Y

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Descriptives



N | 79

	Minimum	Maximum
MP X	0.0010	91.2350
MP Y	0.0010	99.8020

Fit Y on X

Weighted Deming fit

Equation | $MP Y (ug/L) = -0.00226 + 1.037 MP X (ug/L)$

Variance ratio X/Y (λ) | 1.000

Parameter	Estimate	Jackknife 95% CI	Jackknife SE
Intercept	-0.002260	-0.006056 to 0.001536	1.9064 E-03
Slope	1.037	0.9846 to 1.090	0.026445

Method comparison: MP X, MP Y

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Comparability

	X	Difference (Y - X)	95% CI	Allowable difference	p-value
MDP	5.000	3.7%	-1.6% to 8.9%	±6.0%	0.1666 ¹

H0: $\mu_{\text{difference}} = 0$

The difference is equal to 0.

H1: $\mu_{\text{difference}} \neq 0$

The difference is not equal to 0.

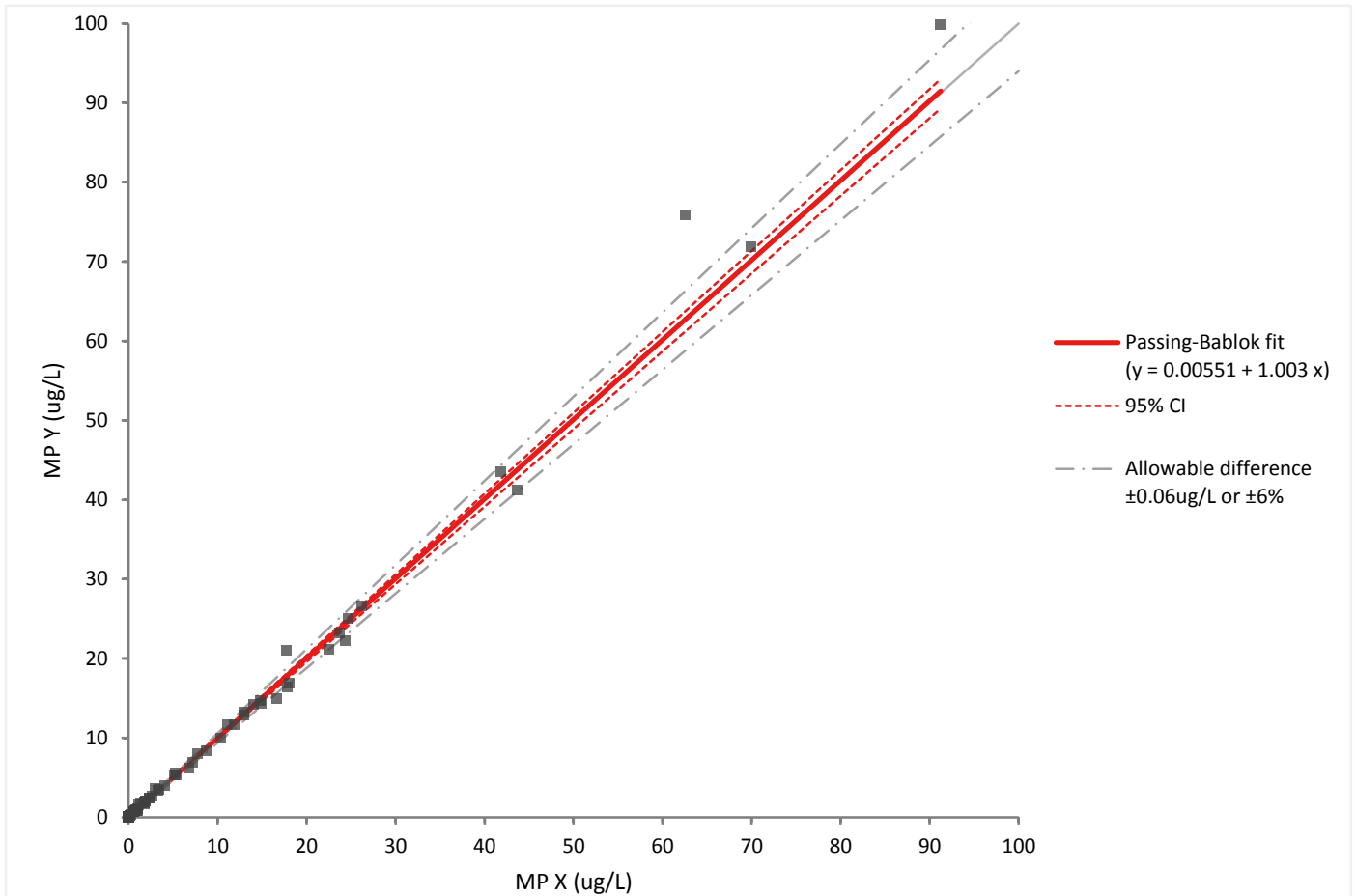
¹ Do not reject the null hypothesis at the 5% significance level.

Method comparison: MP X, MP Y

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Descriptives



N | 79

	Minimum	Maximum
MP X	0.0010	91.2350
MP Y	0.0010	99.8020

Fit Y on X

Passing-Bablok fit

Equation | $MP Y (ug/L) = 0.00551 + 1.003 MP X (ug/L)$

Parameter	Estimate	Bootstrap 95% CI
Intercept	0.005510	-0.006043 to 0.009040
Slope	1.003	0.9785 to 1.019

CI based on 999 bootstrap samples.

Method comparison: MP X, MP Y

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Comparability

	X	Difference (Y - X)	95% CI	Allowable difference
MDP	5.000	0.4%	-2.1% to 1.9%	±6.0%