

Proficiency Testing Program
Organised by
Center for Laboratory Proficiency Testing
Department of Science Service,
Ministry of Science and Technology, Bangkok, Thailand
Heavy metals (As, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Se and Zn) in water
PTEN - W02 - 1801
30 March 2018

SUMMARY SHEET

Laboratory Name : Technical Training and Support Service, Center for Scientific and Technological Equipment, Walailak University

Laboratory Code : W02 - 1801 - 107

Test items (mg/L)	Number of results	Assigned value (x_{pt})	Standard deviation for proficiency assessment (σ_{pt})	Lab's result		z-score
				Value	MU	
Arsenic (As)	116	0.0394	0.0079	0.041	-	0.20
Cadmium (Cd)	141	0.199	0.020	0.20	-	0.05
Chromium (Cr)	130	0.0488	0.0098	0.050	-	0.12
Copper (Cu)	154	0.195	0.020	0.20	-	0.25
Iron (Fe)	168	0.399	0.040	0.41	-	0.27
Manganese (Mn)	165	0.196	0.020	0.20	-	0.20
Nickel (Ni)	131	0.386	0.039	0.39	-	0.10
Lead (Pb)	143	0.0504	0.0076	0.051	-	0.08
Selenium (Se)	96	0.0504	0.0076	0.050	-	-0.05
Zinc (Zn)	150	0.204	0.020	0.20	-	-0.20

Note

- Assigned values (x_{pt}) are the robust averages of the participant results in this round, calculated by using Algorithm A (ISO 13528:2015).
- Standard deviations for proficiency assessment (σ_{pt}) are the target standard deviations from previous rounds and expert judgement.
- Each z-score marked with "A" is an outlier ($|z| \geq 3.0$). Therefore, laboratory which is marked with "A" shall investigate the result. Laboratory is also encouraged to review the result which has an absolute z-score value between two and three ($2.0 < |z| < 3.0$) marked with "W".
- This summary sheet shall be read in conjunction with the final report.

Reported by

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Program Coordinator

Approved by

[Signature]

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