

Proficiency Testing Program
Organised by
Center for Laboratory Proficiency Testing
Department of Science Service,
Ministry of Science and Technology, Bangkok, Thailand

pH - value in water

PTEN - W03 - 1901

21 February 2019

SUMMARY SHEET

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

Laboratory Code : W03 - 1901 - 282

Test item	Sample	Number of results	Assigned value		Standard deviation for proficiency assessment (σ_{pt})	Lab's result		z-score
			X_{pt}	MU		Value	MU	
pH-value at 25 °C	A	397	4.180	0.015	0.050	4.23	0.06	1.00
	B	397	8.271	0.015	0.050	8.18	0.10	-1.82

Note

- Assigned values (X_{pt}) are the reference values determined by reference laboratory (National Institute of Metrology, Thailand).
- Standard deviations for proficiency assessment (σ_{pt}) are the target standard deviations by perception from the standard methods for the examination of water and wastewater, AWWA, APHA, 23rd ed., 2017. part 4500-H⁺ B. and ISO 10523:2008, Water quality-determination of pH.
- MU is measurement uncertainty at 95% confidence level.
- 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.

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