

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 - 1402 (round 2)

28 August 2014

SUMMARY SHEET

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

Laboratory Code : W03 - 1402 - 081

Test	Sample	Reference value (x)		Standard deviation for proficiency assessment ($\hat{\sigma}_p$)	Lab's result		z-score
		Value	MU		Value	MU	
pH - value at 25 °C	A	5.391	0.010	0.050	5.40	-	0.18
	B	8.694	0.010	0.050	8.63	-	-1.28

Note

1. Each z-score marked with "A" is an outlier ($|z| \geq 3$) therefore, laboratory which is marked with "A" shall investigate result. Laboratory is also encouraged to review result which has an absolute z - score value between two and three ($2 < |z| < 3$) marked with "W".
2. This summary sheet shall be read in conjunction with the final report.
3. Reference value (x) is the value assigned by the reference laboratory (National Institute of Metrology, Thailand).
4. Standard deviation for proficiency assessment ($\hat{\sigma}_p$) is the target standard deviation by perception from the standard methods for the examination of water and wastewater, AWWA, APHA, 22nd ed. 2012. part 4500-H⁺ B. and ISO 10523 : 2008, Water quality-Determination of pH.

Reported by

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(Mrs. Wannee Aupaiboon)
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Approved by

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Proficiency Testing Program
Organised by
Center for Laboratory Proficiency Testing
Department of Science Service,
Ministry of Science and Technology, Bangkok, Thailand
Chemical Oxygen Demand (COD) in water
PTEN - W01 - 1401
25 August 2014
SUMMARY SHEET

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

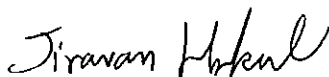
Laboratory Code : W01 - 1401 - 071

Sample	No. of results	Lab's result (mg/L)		Robust average (x^*)	Standard deviation for proficiency assessment ($\hat{\sigma}_p$)	z-score
		Value	MU			
A	227	133	-	130.3	14.0	0.19
B	227	514	-	500.8	20.0	0.66

Note

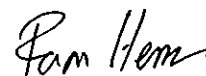
1. Robust average (x^*) is the assigned value of the results reported by the participants in this round, calculated by using Algorithm A (ISO 13528:2005).
2. Standard deviation for proficiency assessment ($\hat{\sigma}_p$) is the target standard deviation by perception from the standard methods ISO 6060 : 1989 (E) Water Quality - Determination of the Chemical Oxygen Demand.
3. Each z-score marked with "A" is an outlier ($|z| \geq 3$) therefore, laboratory which is marked with "A" shall investigate result. Laboratory is also encouraged to review result which has an absolute z - score value between two and three (i.e. $2 < |z| < 3$) or marked with "W".
4. This summary sheet should be read in conjunction with the final report.

Reported by



(Miss Jirawan Hunwattanakul)
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Approved by



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Director of Center for Laboratory Proficiency Testing
Department of Science Service



Proficiency Testing Program

Organised by

Center for Laboratory Proficiency Testing

Department of Science Service, Ministry of Science and Technology, Bangkok, Thailand

Aerobic plate count in starch (round 2)

PTMI - PC01 - 1402

8 August 2014

SUMMARY SHEET

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

Laboratory Code : PC01 - 1402 - 022

Test	No. of results	Lab's result as lab reported (cfu/g)	Lab's result (log cfu/g)	Robust average (x^*) (log cfu/g)	Standard deviation for proficiency assessment ($\hat{\sigma}_p$) (log cfu/g)	z-score
Aerobic plate count	76	3.5×10^5	5.54	5.02	0.50	1.04

Note

1. Each z-score marked with "A" is an outlier ($|z| \geq 3$) therefore, laboratory which is marked with "A" shall investigate result. Laboratory is also encouraged to review result which has an absolute z-score value between two and three (i.e. $2 < |z| < 3$) or marked with "W".
2. This summary sheet should be read in conjunction with the final report.
3. Robust average (x^*) is the assigned value of the results reported by the participants in this round, calculated by using Algorithm A (ISO 13528:2005).
4. Standard deviation for proficiency assessment ($\hat{\sigma}_p$) is set at a value of 0.50 log cfu/g from expert judgment for best practice.

Reported by

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