

**Proficiency Testing Program**

Organised by

Center for Laboratory Proficiency Testing

Department of Science Service,

Ministry of Higher Education, Science, Research and Innovation, Thailand

Chemical Oxygen Demand (COD) in water

PTEN - W01 - 2101

20 July 2021

**SUMMARY SHEET**

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

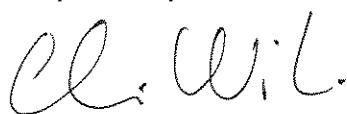
Laboratory Code : W01 - 2101 - 116

Sample	Number of results	Assigned value ( $x_{pt}$ ) (mg/L)	Standard deviation for proficiency assessment ( $\sigma_{pt}$ ) (mg/L)	Lab's result (mg/L)		z-score
				Value	MU	
A	291	250.0	20.0	256	-	0.30
B	291	509.1	20.4	525	-	0.78

**Note**

1. Assigned values ( $x_{pt}$ ) are the robust averages of the participant results in this round, calculated by using Algorithm A (ISO 13528: 2015).
2. Standard deviations for proficiency assessment ( $\sigma_{pt}$ ) are the target standard deviations by perception from expert judgement.
3. MU are measurement uncertainties at 95% confidence level.
4. 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".
5. This summary sheet shall be read in conjunction with the final report.

Reported by



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Program Coordinator

Approved by



(Mrs. Wannee Aupaiboon)

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