

**JABATAN KIMIA MALAYSIA
PROFICIENCY TESTING PROGRAMME**

ENVITEST 7-19

Year 2019

**BOD 3 Day, COD, Ammoniacal Nitrogen, Total Nitrogen and Suspended
Solids in Palm Oil/Rubber Effluent**

KIMIA PT Final Report No. 19/2019

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ACKNOWLEDGEMENTS

This proficiency testing programme was conducted by Quality Management and Research Centre in collaboration with Environmental Quality Division of Department of Chemistry Malaysia, Petaling Jaya.

We would like to thank the management and staff of the participating laboratories for their support towards this programme.

Approved signatory,

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This report was authorized by
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Date: 20th November 2019

SUMMARY

This proficiency testing programme was conducted in September 2019. A total of one hundred and twenty-two (122) participants from laboratories in Malaysia participated in this PT scheme. A set of four PT items labelled as ENVITEST 7-19 Item A, Item B, Item C and Item D, was dispatched to the participating laboratories and only 118 participants had submitted their results.

Results for this study are summarised as follows:

PT Item	Testing Parameter	Assigned value (mg/L)	Expanded Uncertainty (mg/L)	Number of scores, $ z \leq 2.0$	Total number of responses	% $ z \leq 2.0$
Item A	BOD 3 Day	100	4	25	79	68
Item B	Suspended Solids	117	2	15	110	86
Item C	COD	207	2	3	109	97
Item D	Ammoniacal Nitrogen	50	0	13	110	88
	Total Nitrogen	147	4	8	77	90

The expanded uncertainties are based on coverage factor, $k = 2$ for 95% confidence level.