

Summary of Results

External Quality Assessment of Water Microbiology Endoscope Rinse Water Scheme

Distribution Number: EW38

Sample Numbers: EW38A, EW38B

Distribution Date:	January 2025
Results Due:	31 January 2025
Report Date:	05 February 2025
Samples prepared and quality control tested by:	Divya George Nafeesa Hussain Afifa Halim Sabine Naujokat Zak Prior Jake Videlefsky
Data analysed by:	Nita Patel Hiten Pragji
Report compiled by:	Nita Patel Hiten Pragji
Authorised by:	Nita Patel

This report must not be reproduced without permission of the organisers.

UK Health Security Agency
Food and Environmental Proficiency Testing Unit (FEPTU)
61 Colindale Avenue
London
NW9 5EQ
Tel: +44 (0)20 8327 7119
Fax:

For further information on the scheme please refer to:

Scheme Guide: <https://www.feptu.org.uk/schemes/scheme-guide/>

Guide to Scoring and Statistics: <https://www.feptu.org.uk/schemes/scoring/>

General guidance for z-scores:

Participants' enumeration results are converted into z-scores using the following formula:

$$Z = \frac{(x_i - X_{pt})}{\sigma_{pt}}$$

x_i = participants' result expressed (expressed as a log₁₀ value)
 X_{pt} = assigned value (participants' consensus median (expressed as a log₁₀ value))
 σ_{pt} = the fixed standard deviation for the examination (calculated by FEPTU)

The σ_{pt} -value expresses the acceptable difference between the individual participant's result and the participants' consensus median. The σ_{pt} -value used for calculating z-scores for all parameters in the Endoscope Rinse Water Scheme is 0.35. A guide to interpreting z-scores follows, although laboratories must interpret their scores in the context of their own laboratory situation.

z = -1.99 to +1.99 **satisfactory**
z = -2 to -2.99 or +2 to +2.99 **questionable**
z = < -3.00 or > + 3.00 **unsatisfactory**

It is usually recommended that z-scores exceeding +/-2 are investigated to establish the possible cause. As a general rule, PHE recommends that all questionable and unsatisfactory results are investigated.

FEPTU Quality Control: To demonstrate homogeneity of the sample, a minimum of 10 LENTICULE® discs, selected randomly from a batch, are tested in duplicate for enumeration.

To demonstrate stability of the sample, a minimum of six LENTICULE discs, selected randomly from a batch, are examined throughout the distribution period for enumeration.

UK Health Security Agency uses methods stipulated in (Health Technical Memorandum 01-06: Decontamination of flexible endoscopes: Part E - Testing methods - March 2016).

The FEPTU results are used for guidance in the preliminary intended results notification, dispatched immediately after every distribution.

Refer to section 19.0 of the Scheme Guide if you have experienced difficulties with any of the examinations.

<https://www.feptu.org.uk/schemes/scheme-guide/>

Participants are reminded that reporting an incorrect or false negative results could have serious public health implications.

Please contact FEPTU staff for advice and information:

Repeat samples	Carmen Gomes or Kermin Daruwalla	Tel: +44 (0)20 8327 7119
Data Analysis	Nita Patel	Fax:
Microbiological advice	Nita Patel or Zak Prior	Email: foodeqa@ukhsa.gov.uk
General comments and complaints	Nita Patel or Zak Prior	FEPTU's website
Scheme consultants	Caroline Willis	
Scheme Co-ordinator	Nita Patel	

Accreditation: UKHSA Water EQA Scheme for Endoscope Rinse Water is accredited by the United Kingdom Accreditation Service (UKAS) to ISO/IEC 17043:2010.



0006

Sample: EW38A

Contents:

Micrococcus sp. (33) (wild strain), *Penicillium chrysogenum* (18) (wild strain), *Providencia rettgeri* (68) (NCTC 7475)

Expected Results:

All counts are expressed as colony forming units (cfu) per 100mL.

The fixed standard deviation value (σ_{pt} value) used for calculation of the z-scores is **0.35** for all parameters.

Results	
FEPTU median (MF)*	61
No. results returned	76
Assigned value (Participants median all results)	62
Conclusion based on assigned value**	Risk assessment required
Uncertainty of assigned value	3
Participants mean (all results)	59
Expected Range	20 - 104
Standard deviation***	22
No of outlying counts	5
False positives	N/A
False negatives	0
Your result	
Your conclusion	
Score for performance assessment	
Z-score	

* Membrane filtration

** Reference: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/553303/HTM01-06_PartE.pdf

*** Robust S^* based on median absolute deviation about the participants' median ($MADe$)

Examination	Expected Result	Your Result	Your Score
<i>P.aeruginosa</i>	Not detected		

<i>P.aeruginosa</i>	
Total participants reporting for <i>P.aeruginosa</i>	69
Participants reporting correctly the absence of <i>P.aeruginosa</i>	69 (100%)

Examination	Expected Result	Your Result	Your Score
Yeast/Moulds	Detected		

Yeast/Moulds	
Total participants reporting for Yeast/Moulds	55
Participants reporting correctly the presence of Yeast/Moulds	48 (87%)
Total sent samples	80
Not examined	1
Non returns	3

Sample: EW38B

Contents:

Pseudomonas aeruginosa (92) (wild strain), *Saccharomyces cerevisiae* (15) (wild strain)

Expected Results:

All counts are expressed as colony forming units (cfu) per 100mL.

The fixed standard deviation value (σ_{pt} value) used for calculation of the z-scores is **0.35** for all parameters.

Results	
FEPTU median (MF)*	92
No. results returned	76
Assigned value (Participants median all results)	100
Conclusion based on assigned value**	Risk assessment required
Uncertainty of assigned value	5
Participants mean (all results)	95
Expected Range	41 - 159
Standard deviation***	28
No of outlying counts	7
False positives	N/A
False negatives	1
Your result	
Your conclusion	
Score for performance assessment	
Z-score	

* Membrane filtration

** Reference: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/553303/HTM01-06_PartE.pdf

*** Robust S^* based on median absolute deviation about the participants' median ($MADe$)

Examination	Expected Result	Your Result	Your Score
<i>P.aeruginosa</i>	Detected		

<i>P.aeruginosa</i>	
Total participants reporting for <i>P.aeruginosa</i>	69
Participants reporting correctly the presence of <i>P.aeruginosa</i>	68 (98%)

Examination	Expected Result	Your Result	Your Score
Yeast/Moulds	Detected		

Yeast/Moulds	
Total participants reporting for Yeast/Moulds	50
Participants reporting correctly the presence of Yeast/Moulds	16 (32%)
Total sent samples	80
Not examined	1
Non returns	3

Performance Assessment Sheet

Distribution	Sample	Total Viable Counts 28°C - 32°C for 5 days score
EW38	EW38A	
	EW38B	
EW37	EW37A	
	EW37B	
EW36	EW36A	
	EW36B	
Total maximum possible score		
Total percentage		

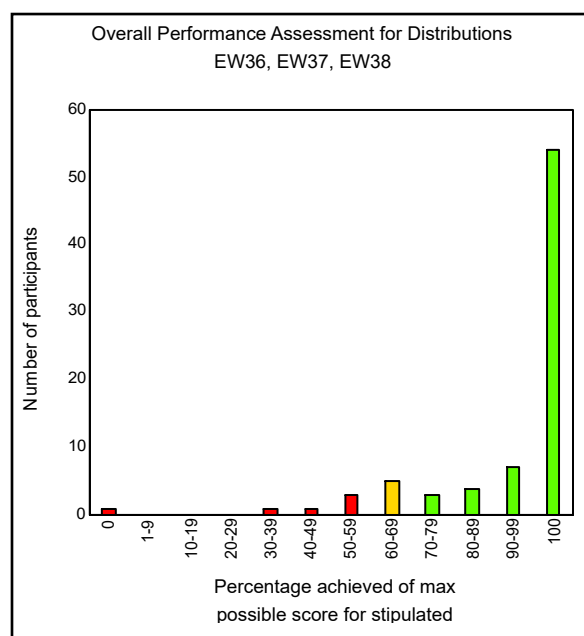
Performance Assessment Comment:

Participants are reminded that to take advantage of the performance assessment overtime tool provided in the reports they need to take part in more than one distribution a year.

Performance assessments are designed to alert participants to on-going problems with their examinations and are provided after every distribution. Scores are allocated to results reported for every parameter, for every sample to help assess performance.

Cumulative scores are calculated for the current and previous two distributions for the Endoscope Rinse Water Scheme. Participants' cumulative scores for each of the examinations are compared with the maximum possible scores after every distribution.

Your overall performance with the enumerations in the endoscope rinse water proficiency testing samples for the current and previous two distributions is collated in the chart to the right.



Performance Assessment Comment:

Laboratories that achieve less than 70% of the maximum possible score are likely to be experiencing significant problems with their examinations and are advised to:

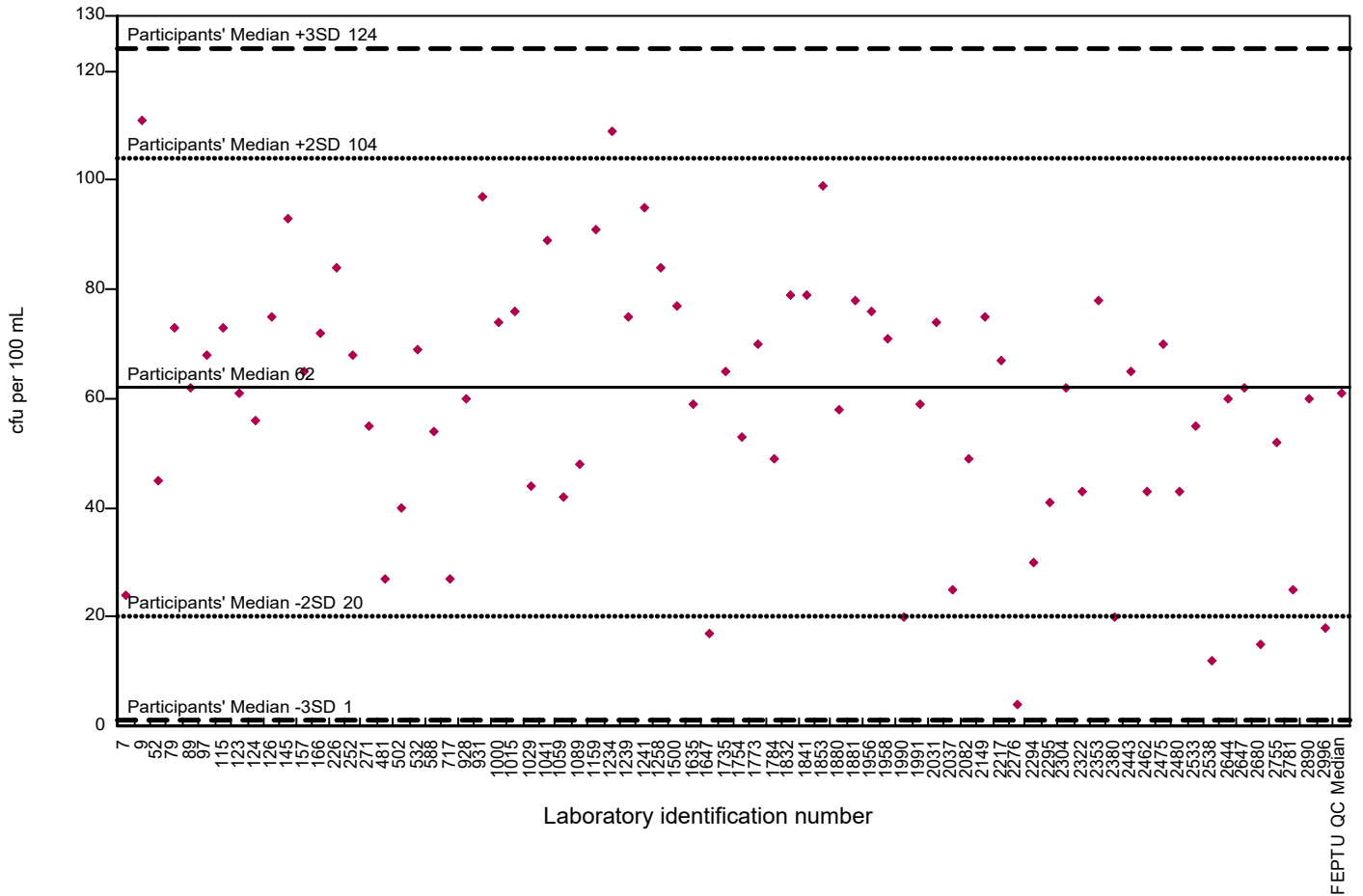
- refer to the relevant distribution reports for sample-specific comments
- refer to the website guidance documents:

[Scheme Guide - FEPTU](#) and [Scoring - FEPTU](#)

- contact the organisers for advice

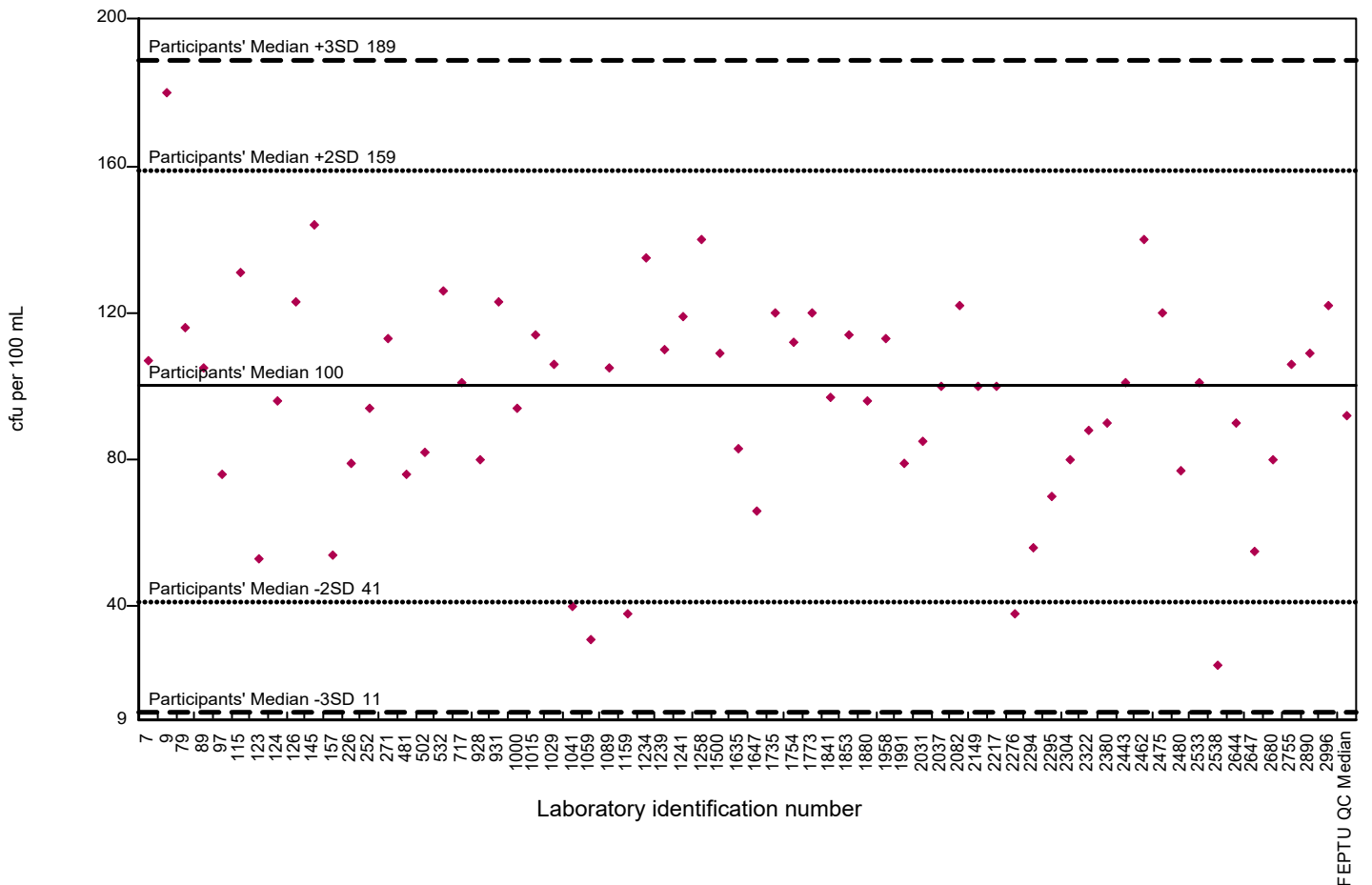
EW38A - Total Viable Counts 28°C - 32°C for 5 days

Key: ♦ Reported result



EW38B - Total Viable Counts 28°C - 32°C for 5 days

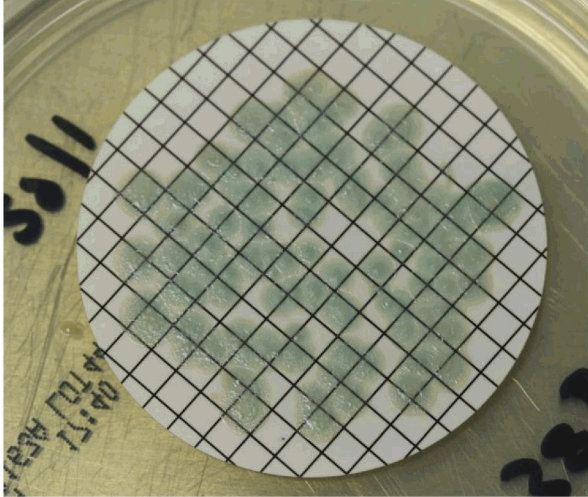
Key: ♦ Reported result



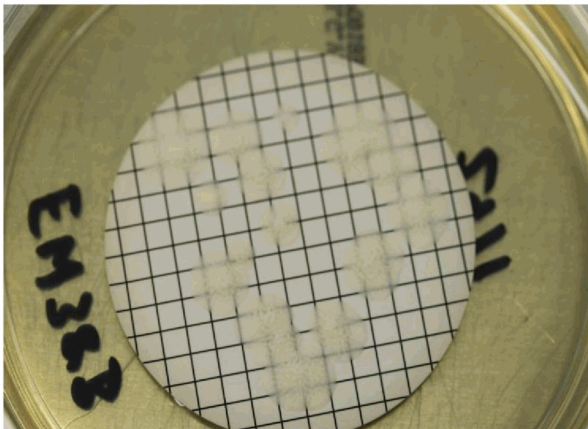
Sample specific comment

EW38B – Yeast and moulds

This sample contained *Saccharomyces cerevisiae* at levels of approximately 15 colony forming unit per 100 mL. In the FEPTU laboratory on yeast extract agar (YEA) after 48 hours incubation this organism was masked by the higher levels of *Pseudomonas aeruginosa* present, hence the reason why laboratories may have had difficulties in isolating the *S. cerevisiae* in the sample. However on Oxytetracycline-Glucose Yeast Extract Agar (OGYE) agar the colonies were present, see images below:



YEA agar after 5 days of incubation at 30°C



OGYE agar after 5 days of incubation at 30°C

Participants are advised to review their procedure and media used when examining samples for yeasts and mould.

Due to the low performance for this examination, it has not been scored.

EW38A: 53 laboratories provided an actual conclusion on the results obtained; responses are shown in the tables below:

Colony forming counts reported per 100mL	Conclusion reported by the laboratories (number of laboratories)
Range reported 12 - 74	Acceptable/Satisfactory (5)
Range reported 4 - 91	Risk assessment required (21)
Range reported 18 – 1.11×10^2 Censored value >100	Unsatisfactory/Unacceptable (26) (1)
Range reported 17 – 1.09×10^2	Not routinely reported (23)

EW38B: 53 laboratories provided an actual conclusion on the results obtained; responses are shown in the tables below:

Colony forming counts reported per 100mL	Conclusion reported by the laboratories (number of laboratories)
Range reported 0 – 1.20×10^2 Censored value >100	Acceptable/Satisfactory (4) (1)
Range reported 24 – 1.22×10^2 Censored value >100	Risk assessment required (18) (1)
Count reported 76 – 1.80×10^2 Censored values >100 and $>1.30 \times 10^2$	Unsatisfactory/Unacceptable (23) (6)
Range reported 31 – 1.35×10^2 Censored value >100	Not routinely reported (21) (2)

Participants are reminded to only report a conclusion on a test result if this is part of your reporting procedures.

In the UK the interpretation of test results can be found in this document on page 15. https://www.england.nhs.uk/wp-content/uploads/2021/05/HTM01-06_PartE.pdf. However, the Interpretation/conclusions of microbiological test results in your country may vary to those published in this document.

General comment:

If you do not return a result for a distribution, you will not be able to view all the participants' results data in your individualised report. Please contact us if you require this information on foodeqa@ukhsa.gov.uk.

New website

We are pleased to announce the launch of our new website: <https://www.feptu.org.uk/>. Please refer to this website to obtain the latest information for your proficiency testing.

Information of importance

To understand more about the proficiency testing schemes, please use the following links for information on:

1. Report format explained: [Annotated report](#)
2. Performance rating: [Performance-over-time](#) and [Scheme guide](#) (section 16.0)
3. Scoring and statistics used: [Scoring information and stats](#)
4. Homogeneity and stability: [Scheme guide](#) (section 9.0)
5. Complaints and appeal process: [Scheme guide](#) (section 20.0 and 21.0)

For further information about the operation of the service including confidentiality and terms of participation, please refer to the Scheme Guide: [Scheme guide](#)

End of report

