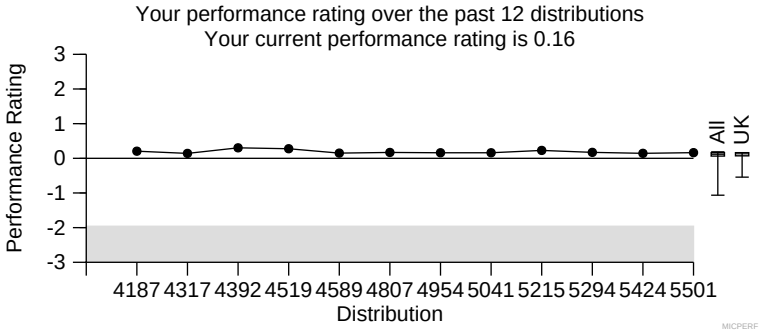
Intended Result		Your Report	Your Score
Specimen 8204	Median concentration 6.53 log IU/mL	6.54 log IU/mL	
Specimen 8205	Median concentration 5.73 log IU/mL	5.61 log IU/mL	
Specimen 8206	Median concentration 3.34 log IU/mL	3.20 log IU/mL	
Specimen 8207	Median concentration 3.14 log IU/mL	3.10 log IU/mL	
Average of the median differences in conc. between specimens **8204** and **8205** is 0.80 log IU/mL		Difference in conc. is 0.93 log IU/mL	2
Average of the median differences in conc. between specimens **8206** and **8207** is 0.20 log IU/mL		Difference in conc. is 0.10 log IU/mL	2

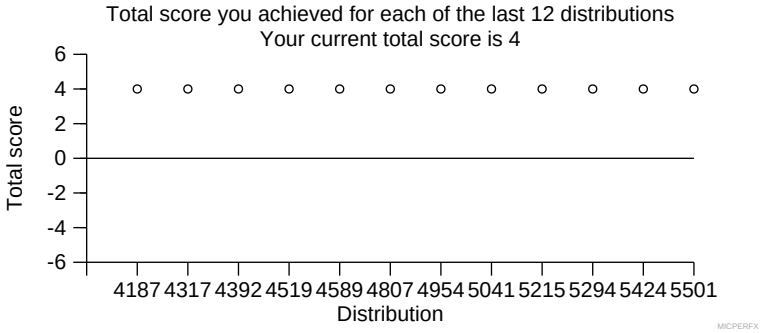
Cumulative score information
Total number of specimens sent to you for **UK NEQAS for Hepatitis B DNA quantification** over the last 2 distributions is 8
For these distributions specimen numbers 7959 7961 8204 8206 have been analysed and scored.

Number of reports analysed 4
Number of specimens reported as not examined (not scored) 0
Number of specimens received too late for analysis (not scored) 0
Number of specimens for which no report was received (not scored) 0
Your cumulative score for these specimens was 8 out of a possible total of 8

The mean score calculated from the reports returned by **UK** laboratories was 7.79 (with a standard error of 1.28)

Performance rating
Your performance rating for **UK NEQAS for Hepatitis B DNA quantification** (i.e. the number of standard errors by which your cumulative score lies above or below the mean) for **UK** laboratories is 0.16.
A performance rating of more than 1.96 standard errors below the mean indicates possible poor performance.
Please note your performance rating may alter if other participants' results are amended.
No score penalty is incurred for non return of reports. However non return of results may be used as a measure of poor performance.





Comments:
A total of 186 sets of specimens were distributed with 167 participants returning results. The overall performance was excellent for both specimen pairs, with 97.0% of participants reporting within 0.3 log IU/mL from the median difference for specimen pair 8204 and 8205 and 98.2% of participants reporting within 0.3 log IU/mL from the median difference for specimen pair 8206 and 8207.

The average of the median differences in concentration reported between specimen pair 8204 and 8205 was 0.81 log IU/ml. A total of 160 out of 165 (97.0%) participants reported results with a log difference within 0.3 log IU/mL of the median difference. Of the outlying results: one participant reported results within 0.3 to 0.5 log IU/mL of the median difference (Cepheid: GeneXpert n=1); two participants reported results 0.5 to 0.75 log IU/mL of the median difference (Sacace Real-TM n=1 and Abbott: Alinity n=1); two participants reported results >0.75 log IU/mL of the median difference (Cobas 6800/8800 n=1 and Abbott: Alinity m n=1).

The average of the median differences in concentration reported between specimen pair 8206 and 8207 was 0.20 log IU/mL. A total of 162 out of 165 (98.2%) participants reported results with a log difference within 0.3 log IU/mL of the median difference. Of the outlying results: two participants reported results within 0.3 to 0.5 log IU/mL of the median difference (Cobas 6800/8800 n=1 and Abbott: Alinity m n=1). One participant reported a partial result (Cepheid: GeneXpert n=1).

Please see page 4 for general comments about this distribution.

Turn around time: The time taken to report your results was 0-days. This information is provided for your own use and does not form part of your performance assessment.

Enquiries: Pre-distribution test results are available should you experience a technical failure and wish to discuss the results. Written enquiries about this distribution should be addressed to Dr Sanjiv Rughooputh at organiser@ukneqasmicro.org.uk.

For repeat specimens please request using the web form at **https://ukneqasmicro.org.uk/participant-info/order-repeat-specimens/.**

Acknowledgements: We thank colleagues at UKHSA Manchester, UKHSA Bristol and the Department of Microbiology at Gloucestershire Hospitals for their kind assistance with pre-distribution testing.

Report authorised by: Dr Sanjiv Rughooputh, Scheme Organiser.

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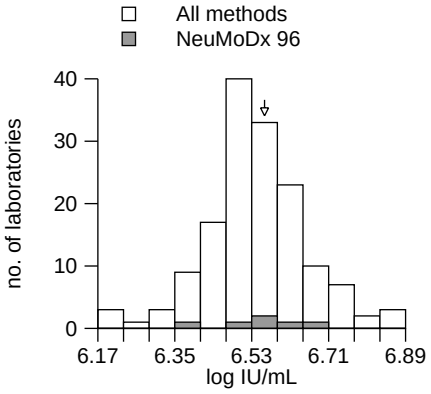
Four freeze-dried serum specimens were dispatched with the request for the quantification of HBV DNA. Specimens 8204 and 8205 both consisted of a single donation of HBV DNA positive serum (genotype A) diluted 1:44.5 and 1:276, respectively, in human serum negative for HBV DNA. Specimens 8206 and 8207 both consisted of a single donation of HBV DNA positive serum (genotype D1) diluted 1:19.2 and 1:29.8, respectively, in human serum negative for HBV DNA. Bronidox at a final concentration of 0.05% was added as a preservative.

Specimen : 8204

	n (UK)	range	median	5%-95%
All methods	165 (45)	3.61-7.48	6.53	6.17-6.78
Abbott Real-Time	10 (2)	6.01-6.90	6.13	6.03-6.66
Abbott: Alinity	12 (4)	6.21-7.22	6.65	6.40-6.98
Abbott: Alinity m	19 (9)	6.32-7.17	6.64	6.40-6.87
Cepheid: GeneXpert	12 (4)	6.38-6.69	6.44	6.38-6.57
Cepheid: Xpert HBV VL	4	6.35-6.51	6.44	6.35-6.51
Cobas 6800/8800	43 (13)	3.61-6.72	6.51	6.44-6.62
Cobas Amplip TaqMan v2	9	6.45-6.61	6.49	6.45-6.60
Hologic: Aptima	7 (4)	6.21-6.71	6.47	6.25-6.65
NeuMoDx 96	6 (3)	6.36-6.70	6.54	6.40-6.67
Qiagen: Artus	8 (2)	6.23-6.99	6.58	6.32-6.95
Roche: Cobas 4800	16 (1)	6.47-6.69	6.59	6.50-6.64
Roche: Cobas 5800	8	6.44-6.59	6.52	6.45-6.59



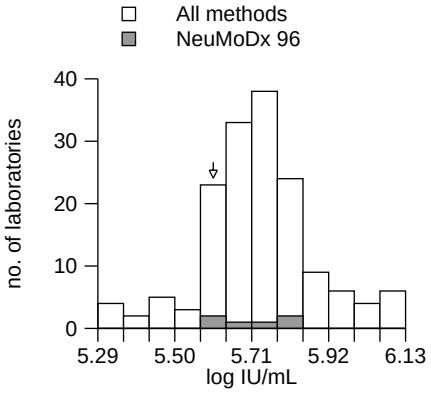
Your result :
6.54 log IU/mL

Method median concentration :
6.54 log IU/mL

Median concentration :
6.53 log IU/mL

Specimen : 8205

	n (UK)	range	median	5%-95%
All methods	165 (45)	5.04-7.40	5.73	5.34-6.04
Abbott Real-Time	10 (2)	5.22-6.07	5.32	5.22-5.82
Abbott: Alinity	12 (4)	5.60-6.15	5.83	5.65-6.09
Abbott: Alinity m	19 (9)	5.34-6.08	5.87	5.58-6.07
Cepheid: GeneXpert	12 (4)	5.55-5.92	5.61	5.55-5.81
Cepheid: Xpert HBV VL	4	5.63-5.80	5.66	5.63-5.78
Cobas 6800/8800	43 (13)	5.58-5.90	5.71	5.61-5.79
Cobas Amplip TaqMan v2	9	5.63-5.78	5.69	5.64-5.78
Hologic: Aptima	7 (4)	5.32-5.62	5.44	5.34-5.58
NeuMoDx 96	6 (3)	5.61-5.80	5.74	5.61-5.80
Qiagen: Artus	8 (2)	5.57-6.13	5.78	5.61-6.11
Roche: Cobas 4800	16 (1)	5.69-5.89	5.79	5.71-5.86
Roche: Cobas 5800	8	5.63-5.78	5.69	5.64-5.77



Your result :
5.61 log IU/mL

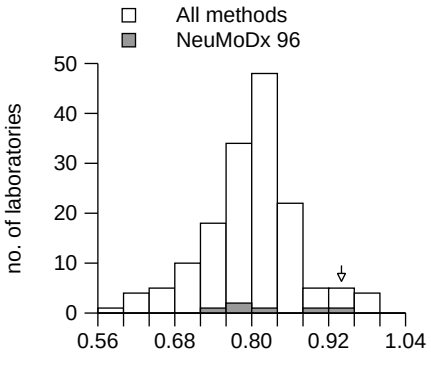
Method median concentration :
5.74 log IU/mL

Median concentration :
5.73 log IU/mL

Intended result : 0.50 to 1.10 log IU/mL
(average median of the reported differences in concentration between specimen 8204 and 8205 +/- 0.3 log IU/mL, with an uncertainty of 0.026)

Difference in concentration between specimen 8204 and 8205 expressed in log IU/mL :

	n (UK)	range	av.median	5%-95%
All methods	165 (45)	-2.16-1.82	0.81	0.64-0.97
Abbott Real-Time	10 (2)	0.70-0.99	0.81	0.74-0.94
Abbott: Alinity	12 (4)	0.56-1.53	0.76	0.58-1.14
Abbott: Alinity m	19 (9)	0.61-1.82	0.71	0.61-1.06
Cepheid: GeneXpert	12 (4)	0.51-1.13	0.82	0.61-1.00
Cepheid: Xpert HBV VL	4	0.69-0.86	0.72	0.69-0.84
Cobas 6800/8800	43 (13)	-2.16-0.95	0.83	0.74-0.87
Cobas Amplip TaqMan v2	9	0.74-0.91	0.82	0.75-0.88
Hologic: Aptima	7 (4)	0.89-1.09	1.00	0.91-1.08
NeuMoDx 96	6 (3)	0.75-0.93	0.80	0.75-0.92
Qiagen: Artus	8 (2)	0.66-0.86	0.81	0.70-0.86
Roche: Cobas 4800	16 (1)	0.75-0.84	0.80	0.75-0.84
Roche: Cobas 5800	8	0.75-0.89	0.81	0.76-0.88



Your result :
Difference in conc. is 0.93 log IU/mL

Your score : 2

Overall results	UK	All	Score
Median			
+/- 0.3 log	44	160	2
+/- >0.3 to 0.5 log	0	1	1
+/- >0.5 to 0.75 log	0	2	0
+/- >0.75 log	1	2	-1
Total	45	165	
%Correct	97.8	97.0	

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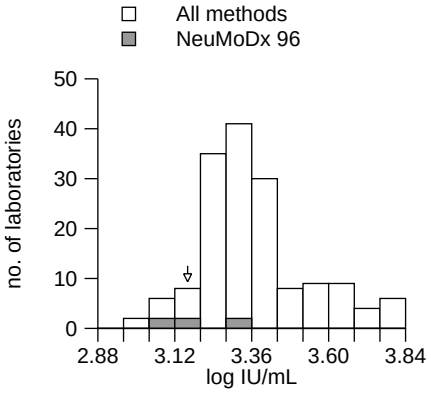
Specimen : 8206

	n (UK)	range	median	5%-95%
All methods	165 (45)	2.27-4.90	3.34	3.10-3.78
Abbott Real-Time	10 (2)	3.01-3.71	3.20	3.03-3.55
Abbott: Alinity	12 (4)	3.36-3.86	3.66	3.40-3.83
Abbott: Alinity m	19 (9)	3.29-3.86	3.61	3.39-3.82
Cepheid: GeneXpert	12 (4)	3.18-3.40	3.34	3.25-3.39
Cepheid: Xpert HBV VL	4	3.23-3.45	3.35	3.24-3.44
Cobas 6800/8800	43 (13)	2.27-3.42	3.26	3.09-3.34
Cobas Amplip TaqMan v2	9	3.24-3.55	3.27	3.25-3.48
Hologic: Aptima	7 (4)	3.39-3.56	3.46	3.40-3.55
NeuMoDx 96	6 (3)	3.10-3.34	3.20	3.10-3.33
Qiagen: Artus	8 (2)	3.37-4.13	3.53	3.39-4.05
Roche: Cobas 4800	16 (1)	3.24-3.53	3.39	3.27-3.45
Roche: Cobas 5800	8	3.21-3.36	3.30	3.22-3.35



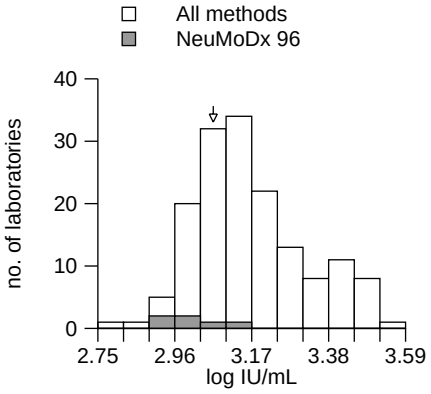
Your result :
3.20 log IU/mL

Method median concentration :
3.20 log IU/mL

Median concentration :
3.34 log IU/mL

Specimen : 8207

	n (UK)	range	median	5%-95%
All methods	164 (45)	2.05-4.65	3.14	2.95-3.48
Abbott Real-Time	10 (2)	2.81-3.47	2.97	2.84-3.33
Abbott: Alinity	12 (4)	3.09-3.66	3.39	3.12-3.61
Abbott: Alinity m	19 (9)	2.90-3.64	3.42	2.99-3.63
Cepheid: GeneXpert	11 (4)	3.09-3.30	3.17	3.11-3.27
Cepheid: Xpert HBV VL	4	3.10-3.20	3.17	3.11-3.20
Cobas 6800/8800	43 (13)	2.05-3.23	3.07	2.99-3.19
Cobas Amplip TaqMan v2	9	3.01-3.41	3.11	3.03-3.34
Hologic: Aptima	7 (4)	3.08-3.36	3.29	3.12-3.34
NeuMoDx 96	6 (3)	2.90-3.11	3.00	2.91-3.11
Qiagen: Artus	8 (2)	3.16-3.91	3.35	3.19-3.84
Roche: Cobas 4800	16 (1)	3.06-3.28	3.20	3.06-3.27
Roche: Cobas 5800	8	3.03-3.16	3.07	3.03-3.15



Your result :
3.10 log IU/mL

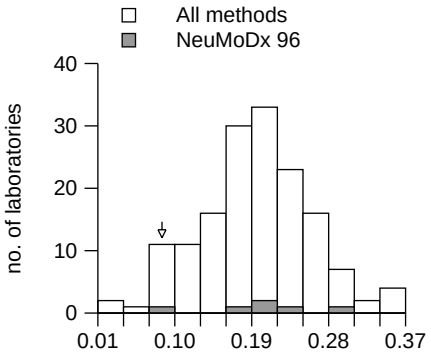
Method median concentration :
3.00 log IU/mL

Median concentration :
3.14 log IU/mL

Intended result : -0.10 to 0.50 log IU/mL
(average median of the reported differences in concentration between specimen 8206 and 8207 +/- 0.3 log IU/mL, with an uncertainty of 0.008)

Difference in concentration between specimen 8206 and 8207 expressed in log IU/mL :

	n (UK)	range	av.median	5%-95%
All methods	164 (45)	-0.15-0.53	0.20	0.08-0.34
Abbott Real-Time	10 (2)	0.14-0.24	0.19	0.14-0.24
Abbott: Alinity	12 (4)	0.04-0.43	0.23	0.06-0.42
Abbott: Alinity m	19 (9)	-0.01-0.53	0.27	0.01-0.39
Cepheid: GeneXpert	11 (4)	0.02-0.26	0.20	0.05-0.25
Cepheid: Xpert HBV VL	4	0.07-0.27	0.20	0.09-0.26
Cobas 6800/8800	43 (13)	-0.15-0.30	0.19	0.09-0.25
Cobas Amplip TaqMan v2	9	0.14-0.23	0.18	0.14-0.22
Hologic: Aptima	7 (4)	0.12-0.31	0.17	0.12-0.30
NeuMoDx 96	6 (3)	0.10-0.30	0.20	0.12-0.28
Qiagen: Artus	8 (2)	0.12-0.23	0.20	0.14-0.23
Roche: Cobas 4800	16 (1)	0.08-0.37	0.20	0.13-0.29
Roche: Cobas 5800	8	0.15-0.26	0.20	0.16-0.26



Your result :
Difference in conc. is 0.10 log IU/mL

Your score : 2

Overall results	UK	All	Score
Median			
+/- 0.3 log	45	162	2
+/- >0.3 to 0.5 log	0	2	1
+/- >0.5 to 0.75 log	0	0	0
+/- >0.75 log	0	0	-1
Partial result	0	1	1
Total	45	165	
%Correct	100.0	98.2	

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Comments on distribution 5501

Overall performance in this distribution was excellent with 97.6% of participants achieving the maximum score across both sets of specimens pair. This is a improvement of 0.9% on the previous distribution 5424, where participants achieved an overall performance of 96.7%.

The return rate in this distribution was 89.8%. This represents a decline of 1.5% compared to distribution 5424, where the return rate was 91.3%.

Participants who did not obtain the intended results are requested to investigate and report the plausible root cause by completing an incident review form (IRF) online within 30 days of this report being published.

Non return of results without a valid reason is considered as poor performance and should also be reported in a similar manner.

IRFs are taken into considerations when poor performance analysis is carried out for the National Quality Assurance Advisory Panel (NQAAP). IRFs can be completed on the following link: https://uknegasmicro.org.uk/incident-review-form/

End of report

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