

Intended Result	Your Report	Your Score
Specimen 4091 Median concentration 3.66 log IU/mL	3.70 log IU/mL	
Specimen 4092 Median concentration 3.04 log IU/mL	3.14 log IU/mL	
Specimen 4093 Median concentration 5.79 log IU/mL	5.85 log IU/mL	
Specimen 4094 Median concentration 4.90 log IU/mL	5.02 log IU/mL	
Average of the median differences in conc. between specimens <b>4091</b> and <b>4092</b> is 0.60 log IU/mL	Difference in conc. is 0.56 log IU/mL	2
Average of the median differences in conc. between specimens <b>4093</b> and <b>4094</b> is 1.00 log IU/mL	Difference in conc. is 0.83 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 3874 3876 4091 4093 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 7.77 (with a standard error of 1.11)

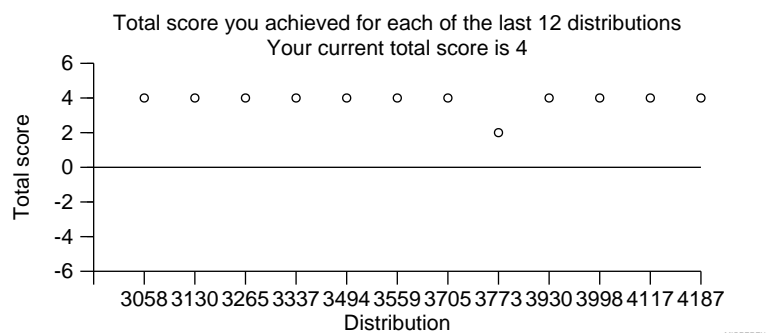
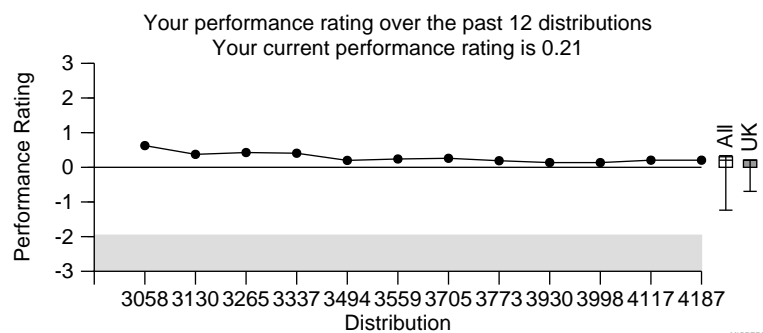
**Performance rating**

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 0.21.

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 168 participants were sent specimens; 12 participants did not return any results, whilst 4 other participants did not examine the specimens. The overall performance was good for both specimen pairs.

The average of the median differences in concentration reported between specimen pair 4091 and 4092 was 0.61 log IU/mL. 150 out of 152 (98.7%) participants reported results with a log difference within 0.3 log IU/mL. Of the outlying results: one participant reported results within 0.3 to 0.5 log IU/mL (Qiagen Artus n=1). One participant reported result greater than 0.75 log IU/mL (Qiagen Artus n=1).

The average of the median differences in concentration reported between specimen pair 4093 and 4094 was 1.00 log IU/mL. A total of 143 out of 152 (94.1%) participants reported results with a log difference within 0.3 log IU/mL. Of the outlying results: six participants reported results within 0.3 to 0.5 log IU/mL (Cobas Amplip TaqMan v2 n=5; Siemens: kPCR n=1). Two participants reported result greater than 0.75 log IU/mL (Cobas Amplip TaqMan v2 n=2).

**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 Habib Seyedzadeh at the email address below.

For repeat specimens please request using the web form or e-mail [organiser@ukneqasmicro.org.uk](mailto:organiser@ukneqasmicro.org.uk) stating your laboratory identification number, the distribution name, distribution number and specimen numbers and reason for request.

**Acknowledgements:** We thank colleagues at St. Thomas Hospital, London, for their kind assistance with pre- and post distribution testing. Thanks are also due to colleagues at PHE-NIS Public Health Laboratory Manchester and the University College Hospital, London, for their kind assistance with pre-distribution testing.

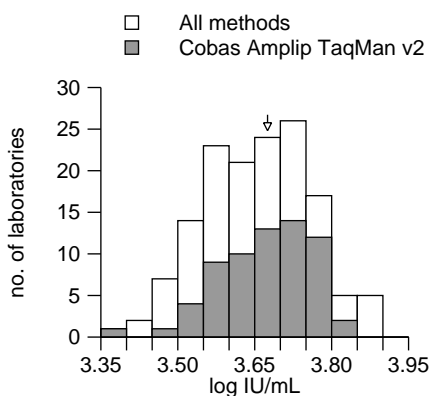
Report authorised by: Dr.Sanjiv Rughooputh, Director



Four freeze-dried serum specimens were dispatched with the request for the quantification of HBV DNA. Specimen 4091 and 4092 consisted of a single HBV DNA serum (genotype A) diluted 1:4 and 1:16 respectively in human serum negative for HBV DNA. Specimens 4093 and 4094 consisted of a single donation of HBV DNA positive serum (genotype B) diluted 1:97.6 and 1:976 respectively in human serum negative for HBV DNA.

**Specimen : 4091**

	n (UK)	range	median	5%-95%
All methods	151 (37)	2.66-4.55	3.66	3.46-3.84
Abbott Real-Time	31 (12)	3.40-3.89	3.64	3.46-3.84
Beckman: DxN VERIS	3 (1)	3.50-3.79	3.53	3.50-3.77
Cobas 6800/8800	10 (3)	3.50-3.66	3.60	3.51-3.66
Cobas Amplip TaqMan v2	67 (9)	3.29-3.84	3.68	3.53-3.80
Cobas HP TaqMan v2	3	3.17-3.70	3.62	3.21-3.70
Hologic: Aptima	5 (5)	3.56-3.78	3.60	3.56-3.77
Qiagen: Artus	8 (2)	2.66-3.63	3.55	2.96-3.63
Real-Time Single target	5 (3)	3.51-3.81	3.59	3.52-3.77
Roche: Cobas 4800	8 (2)	3.30-3.80	3.69	3.41-3.77
Sacace Real-TM	1	4.11-4.11		
Siemens: kPCR	6	3.73-3.86	3.81	3.73-3.86
Unspecified	1	3.71-3.71		



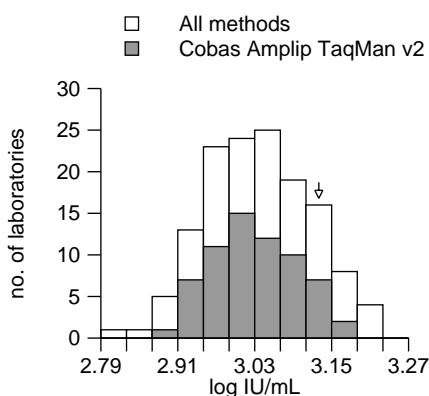
Your result :  
3.70 log IU/mL

Method median concentration :  
3.68 log IU/mL

Median concentration :  
3.66 log IU/mL

**Specimen : 4092**

	n (UK)	range	median	5%-95%
All methods	151 (37)	1.78-4.16	3.04	2.89-3.22
Abbott Real-Time	31 (12)	2.90-3.33	3.05	2.91-3.27
Beckman: DxN VERIS	3 (1)	2.80-3.18	2.97	2.82-3.16
Cobas 6800/8800	10 (3)	2.85-3.15	3.01	2.91-3.15
Cobas Amplip TaqMan v2	67 (9)	2.73-3.17	3.02	2.92-3.15
Cobas HP TaqMan v2	3	2.60-3.00	2.99	2.64-3.00
Hologic: Aptima	5 (5)	2.94-3.14	2.98	2.95-3.12
Qiagen: Artus	8 (2)	1.78-3.28	3.01	2.17-3.21
Real-Time Single target	5 (3)	2.91-3.32	2.97	2.92-3.27
Roche: Cobas 4800	8 (2)	2.70-3.15	3.09	2.83-3.14
Sacace Real-TM	1	3.54-3.54		
Siemens: kPCR	6	3.10-3.34	3.15	3.11-3.30
Unspecified	1	2.93-2.93		



Your result :  
3.14 log IU/mL

Method median concentration :  
3.02 log IU/mL

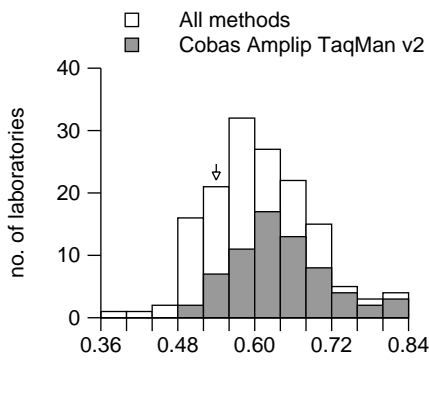
Median concentration :  
3.04 log IU/mL

**Intended result : 0.30 to 0.90 log IU/mL**

(average median of the reported differences in concentration between specimen 4091 and 4092 +/- 0.3 log IU/mL, with an uncertainty of 0.009)

Difference in concentration between specimen 4091 and 4092 expressed in log IU/mL :

	n (UK)	range	av. median	5%-95%
All methods	151 (37)	0.29-0.88	0.60	0.50-0.76
Abbott Real-Time	31 (12)	0.45-0.70	0.57	0.48-0.68
Beckman: DxN VERIS	3 (1)	0.52-0.73	0.62	0.53-0.72
Cobas 6800/8800	10 (3)	0.50-0.65	0.55	0.51-0.65
Cobas Amplip TaqMan v2	67 (9)	0.50-0.84	0.63	0.54-0.77
Cobas HP TaqMan v2	3	0.57-0.71	0.62	0.57-0.70
Hologic: Aptima	5 (5)	0.42-0.80	0.64	0.46-0.78
Qiagen: Artus	8 (2)	0.29-0.88	0.56	0.38-0.80
Real-Time Single target	5 (3)	0.48-0.68	0.56	0.50-0.67
Roche: Cobas 4800	8 (2)	0.56-0.65	0.60	0.57-0.64
Sacace Real-TM	1	0.57-0.57		
Siemens: kPCR	6	0.52-0.69	0.64	0.53-0.69
Unspecified	1	0.77-0.77		



Your result :  
Difference in conc. is 0.56 log IU/mL

Your score : 2

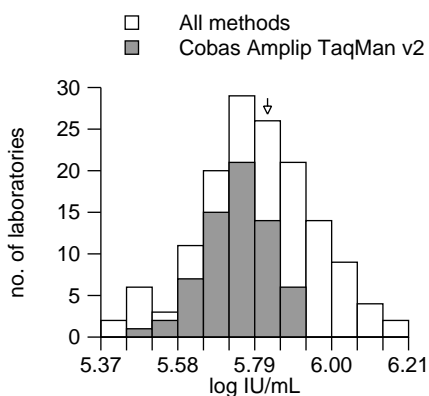
Overall results	UK	All	Score
Median			
+/- 0.3 log	37	150	2
+/- >0.3 to 0.5 log	0	1	1
+/- >0.5 to 0.75 log	0	0	0
+/- >0.75 log	0	0	-1
Two incorrect	0	1	-2
Total	37	152	
%Correct	100.0	98.7	



Four freeze-dried serum specimens were dispatched with the request for the quantification of HBV DNA. Specimen 4091 and 4092 consisted of a single HBV DNA serum (genotype A) diluted 1:4 and 1:16 respectively in human serum negative for HBV DNA. Specimens 4093 and 4094 consisted of a single donation of HBV DNA positive serum (genotype B) diluted 1:97.6 and 1:976 respectively in human serum negative for HBV DNA.

**Specimen : 4093**

	n (UK)	range	median	5%-95%
All methods	152 (37)	3.21-6.49	5.79	5.47-6.07
Abbott Real-Time	31 (12)	5.67-6.27	5.93	5.71-6.16
Beckman: DxN VERIS	3 (1)	5.48-5.94	5.71	5.50-5.92
Cobas 6800/8800	10 (3)	5.85-6.03	5.89	5.85-5.99
Cobas Amplip TaqMan v2	67 (9)	4.89-5.93	5.74	5.58-5.88
Cobas HP TaqMan v2	3	5.59-5.85	5.81	5.61-5.85
Hologic: Aptima	5 (5)	5.43-5.54	5.46	5.43-5.53
Qiagen: Artus	9 (2)	3.21-6.00	5.86	3.91-5.99
Real-Time Single target	5 (3)	5.43-6.04	5.72	5.46-6.01
Roche: Cobas 4800	8 (2)	5.50-6.08	6.00	5.65-6.06
Sacace Real-TM	1	5.60-5.60		
Siemens: kPCR	6	5.62-5.90	5.81	5.65-5.89
Unspecified	1	5.74-5.74		



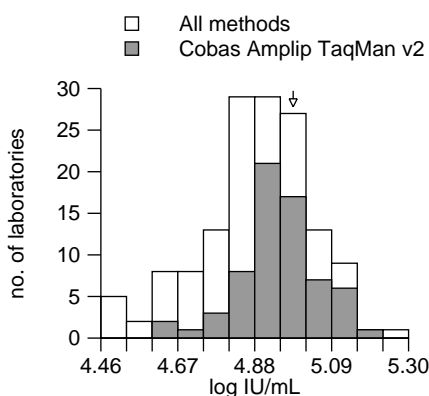
Your result :  
5.85 log IU/mL

Method median concentration :  
5.74 log IU/mL

Median concentration :  
5.79 log IU/mL

**Specimen : 4094**

	n (UK)	range	median	5%-95%
All methods	152 (37)	2.29-5.33	4.90	4.50-5.12
Abbott Real-Time	31 (12)	4.65-5.26	4.93	4.68-5.13
Beckman: DxN VERIS	3 (1)	4.40-4.81	4.61	4.42-4.79
Cobas 6800/8800	10 (3)	4.75-4.96	4.85	4.76-4.92
Cobas Amplip TaqMan v2	67 (9)	3.85-5.18	4.94	4.70-5.11
Cobas HP TaqMan v2	3	4.50-4.90	4.85	4.53-4.89
Hologic: Aptima	5 (5)	4.48-4.63	4.58	4.49-4.63
Qiagen: Artus	9 (2)	2.29-5.09	4.81	2.97-5.04
Real-Time Single target	5 (3)	4.37-4.82	4.75	4.39-4.81
Roche: Cobas 4800	8 (2)	4.70-5.04	4.95	4.76-5.03
Sacace Real-TM	1	4.56-4.56		
Siemens: kPCR	6	4.49-4.86	4.73	4.53-4.84
Unspecified	1	4.81-4.81		



Your result :  
5.02 log IU/mL

Method median concentration :  
4.94 log IU/mL

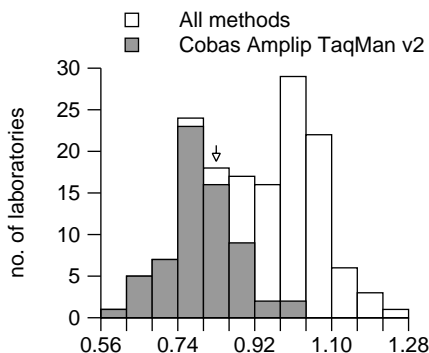
Median concentration :  
4.90 log IU/mL

**Intended result : 0.70 to 1.30 log IU/mL**

(average median of the reported differences in concentration between specimen 4093 and 4094 +/- 0.3 log IU/mL, with an uncertainty of 0.018)

Difference in concentration between specimen 4093 and 4094 expressed in log IU/mL :

	n (UK)	range	av. median	5%-95%
All methods	152 (37)	-0.07-1.85	1.00	0.71-1.13
Abbott Real-Time	31 (12)	0.87-1.16	1.01	0.92-1.11
Beckman: DxN VERIS	3 (1)	1.08-1.13	1.10	1.08-1.13
Cobas 6800/8800	10 (3)	0.99-1.17	1.05	1.00-1.16
Cobas Amplip TaqMan v2	67 (9)	-0.07-1.85	0.78	0.66-0.93
Cobas HP TaqMan v2	3	0.91-1.09	1.01	0.92-1.08
Hologic: Aptima	5 (5)	0.85-0.98	0.91	0.86-0.97
Qiagen: Artus	9 (2)	0.90-1.10	1.01	0.91-1.08
Real-Time Single target	5 (3)	0.93-1.27	1.07	0.94-1.26
Roche: Cobas 4800	8 (2)	0.80-1.07	1.05	0.87-1.07
Sacace Real-TM	1	1.04-1.04		
Siemens: kPCR	6	0.96-1.40	1.02	0.97-1.33
Unspecified	1	0.93-0.93		



Your result :  
Difference in conc. is 0.83 log IU/mL

Your score : 2

Overall results	UK	All	Score
Median			
+/- 0.3 log	37	143	2
+/- >0.3 to 0.5 log	0	7	1
+/- >0.5 to 0.75 log	0	0	0
+/- >0.75 log	0	2	-1
Total	37	152	
%Correct	100.0	94.1	

