

Date: 04/01/2023

## CALIBRATION CERTIFICATE

This is to state that the haematology cell counter model **HORIBA MEDICAL: YUMIZEN YH1500**, bearing serial no: **108M1XH00715** installed at **REDCLIFFE LIFETECH PRIVATE LIMITED -HYDERABAD** was calibrated with Calibrator on **4<sup>th</sup> JANUARY 2023**.

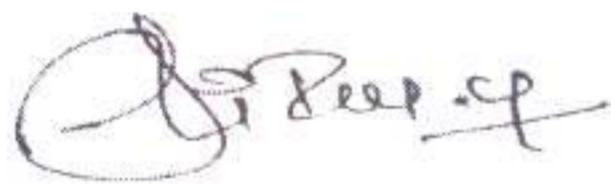
Subsequently controls were processed and found them in respective range.

Calibrator Used: **ABX MINOCAL**

Lot No.: **CX477**

Expiry Date: **05/02/2023**

Next Calibration Due Date: **04/01/2024**



**Conducted: Mr. G. Sriram**

**(Horiba Service Engineer)**

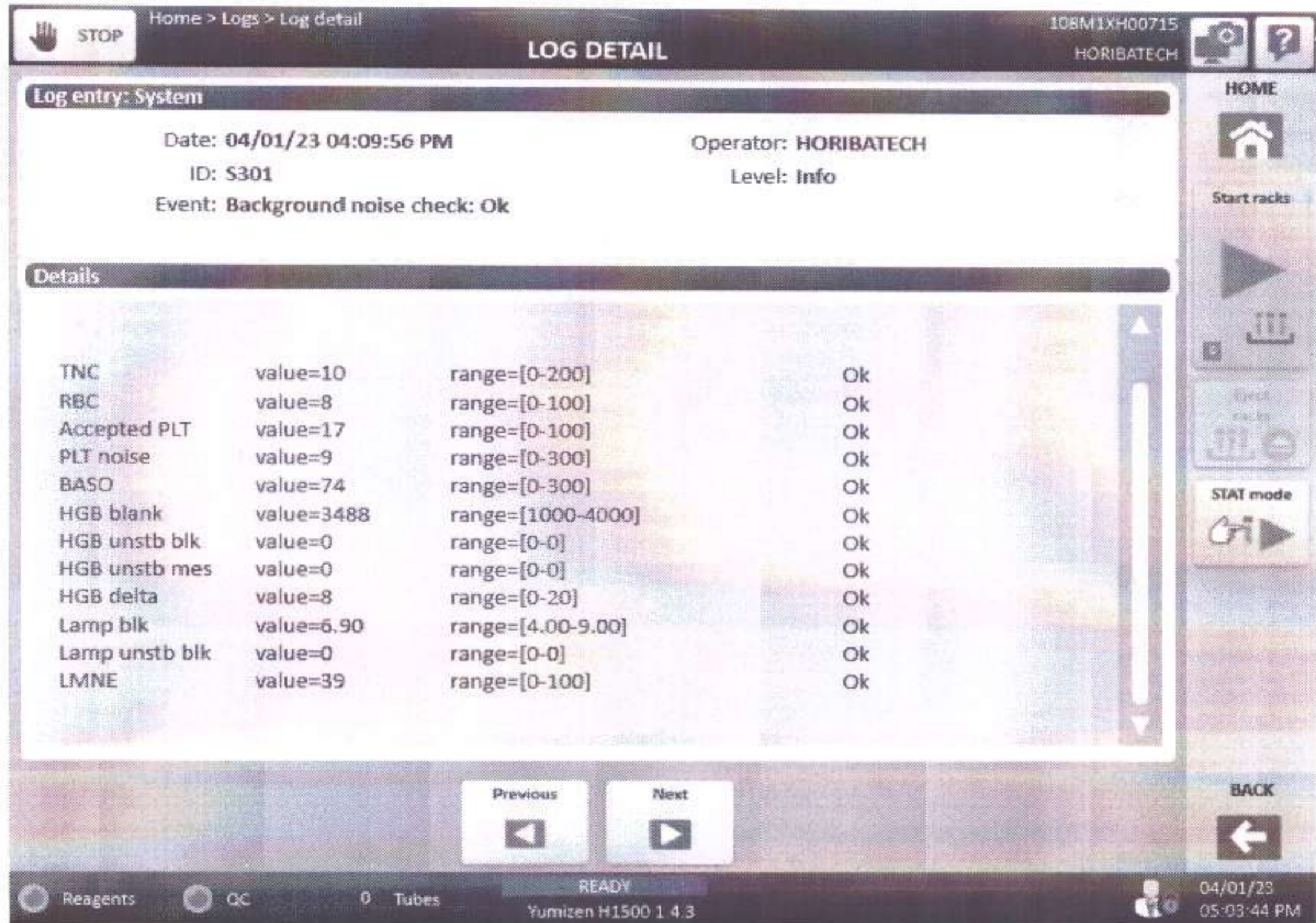
**A. Performance Qualification**

**A. Instrument Identification**

Instrument Name : YUMIZEN H1500  
Serial Number : 108M1XH00715

**B. Following is the list of test to be performed and verified**

- **Blank Reference cycle:** To verify the Startup Cycle of the instrument.



Conducted By: *[Signature]*

Verified By:

# CALIBRATION

- **Calibration:** To calibrate the Instrument using calibrator (ABX Minocal) and verify the same.

**Procedure:** Go to Quality Assurance icon on main screen and then Calibration icon. Run Calibrator (ABX Minocal) 11 times, without taking the values of first run, calibrate the instrument using average of the last 10 runs. Run Calibrator as a sample to verify the calibration.

**Lot: CX477; Expiry: 05/02/2023.**

Home > Logs > Log detail

108M1XH00715  
HORIBATECH

**LOG DETAIL**

Log entry: System

Date: 04/01/23 05:02:00 PM Operator: HORIBATECH  
ID: S303 Level: Info  
Event: Calibration report

Details

Sample ID: CX477  
Test: DIF  
Analysis mode: M  
Runs: 11

Param.	New cal.	Old Cal	Target	Mean	CV%	Saved	Units
TNCHGB	1.003	1.011	8.75	8.82	0.72	Yes	10 <sup>3</sup> /mm <sup>3</sup>
TNCBAS	0.964	0.976	8.75	8.86	1.91	Yes	10 <sup>3</sup> /mm <sup>3</sup>
TNCDIF	0.861	0.922	8.75	9.37	1.08	Yes	10 <sup>3</sup> /mm <sup>3</sup>
RBC	1.115	1.147	4.57	4.70	0.55	Yes	10 <sup>6</sup> /mm <sup>3</sup>
MCV	0.950	0.950	86.0	86.0	0.20	Yes	fL
PLT	1.002	0.995	264	262	3.57	Yes	10 <sup>3</sup> /mm <sup>3</sup>
HGB	0.934	0.932	14.0	14.0	0.36	Yes	g/dL

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 04/01/23 05:02:35 PM

Home > Quality Assurance > Calibration

STOP 108M1XH00715 HORIBATECH

## CALIBRATION

Tube: CX477 Analysis mode: Manual Runs: 11/11  
Last calibration: 04/01/23

	TNCHGB 10 <sup>3</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>3</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	MCV fL	PLT 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL
Mean	8.82	8.86	9.37	4.70	86.0	262	14.0
CV (%)	0.72	1.91	1.08	0.55	0.20	3.57	0.36
Target	8.75	8.75	8.75	4.57	86.0	264	14.0
Current cal.	1.011	0.976	0.922	1.147	0.950	0.995	0.932
New cal.	1.003	0.964	0.861	1.115	0.950	1.002	0.934

Selection

	TNCHGB 10 <sup>3</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>3</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	MCV fL	PLT 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL
1 ✓	8.84	8.72	9.31	4.68	86.3	282	13.9
2 ✓	8.77	8.81	9.37	4.70	86.1	265	13.9
3 ✓	8.82	8.78	9.52	4.73	85.9	261	14.0
4 ✓	8.77	8.86	9.31	4.70	85.9	259	14.0
5 ✓	8.71	9.26	9.25	4.68	85.8	255	14.0
6 ✓	8.82	8.83	9.35	4.66	85.9	256	13.9

Export Stop calibration Start analysis New calibration Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 04/01/23 05:02:05 PM

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Home > Quality Assurance > Calibration

STOP 108M1XH00715 HORIBATECH

## CALIBRATION

Tube: CX477 Analysis mode: Manual Runs: 11/11  
Last calibration: 04/01/23

	TNCHGB 10 <sup>3</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>3</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	MCV fL	PLT 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL
Mean	8.82	8.86	9.37	4.70	86.0	262	14.0
CV (%)	0.72	1.91	1.08	0.55	0.20	3.57	0.36
Target	8.75	8.75	8.75	4.57	86.0	264	14.0
Current cal.	1.011	0.976	0.922	1.147	0.950	0.995	0.932
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Selection

	TNCHGB 10 <sup>3</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>3</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	MCV fL	PLT 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL
6 ✓	8.82	8.83	9.35	4.66	85.9	256	13.9
7 ✓	8.85	8.79	9.23	4.72	85.9	259	14.0
8 ✓	8.94	8.76	9.55	4.75	86.3	270	14.0
9 ✓	8.77	8.66	9.37	4.69	86.0	270	14.0
10 ✓	8.89	9.01	9.45	4.70	85.9	259	14.0
11 ✓	8.83	9.00	9.38	4.68	85.9	247	13.9

Export Stop calibration Start analysis New calibration Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 04/01/23 05:02:09 PM

Conducted By: 

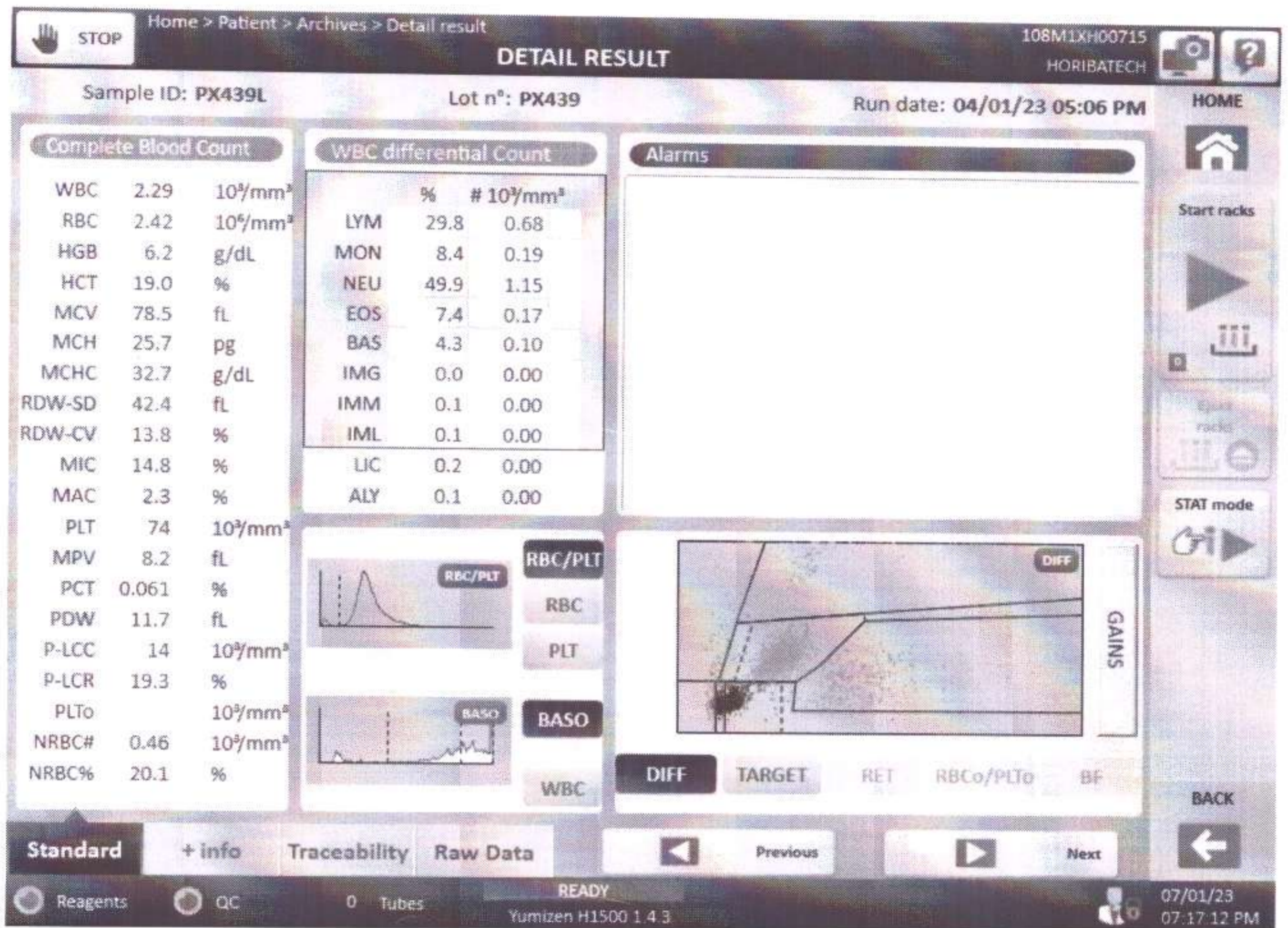
Verified By:

# QUALITY CONTROL

- **Control Runs:** The quality of the analyzer is checked by running three levels of Controls & getting the values in the range as per the kit insert.
  - **Lot: ABX Diffrol PX439; Exp: 05/03/2023.**

Serial No: 108M1XH00715

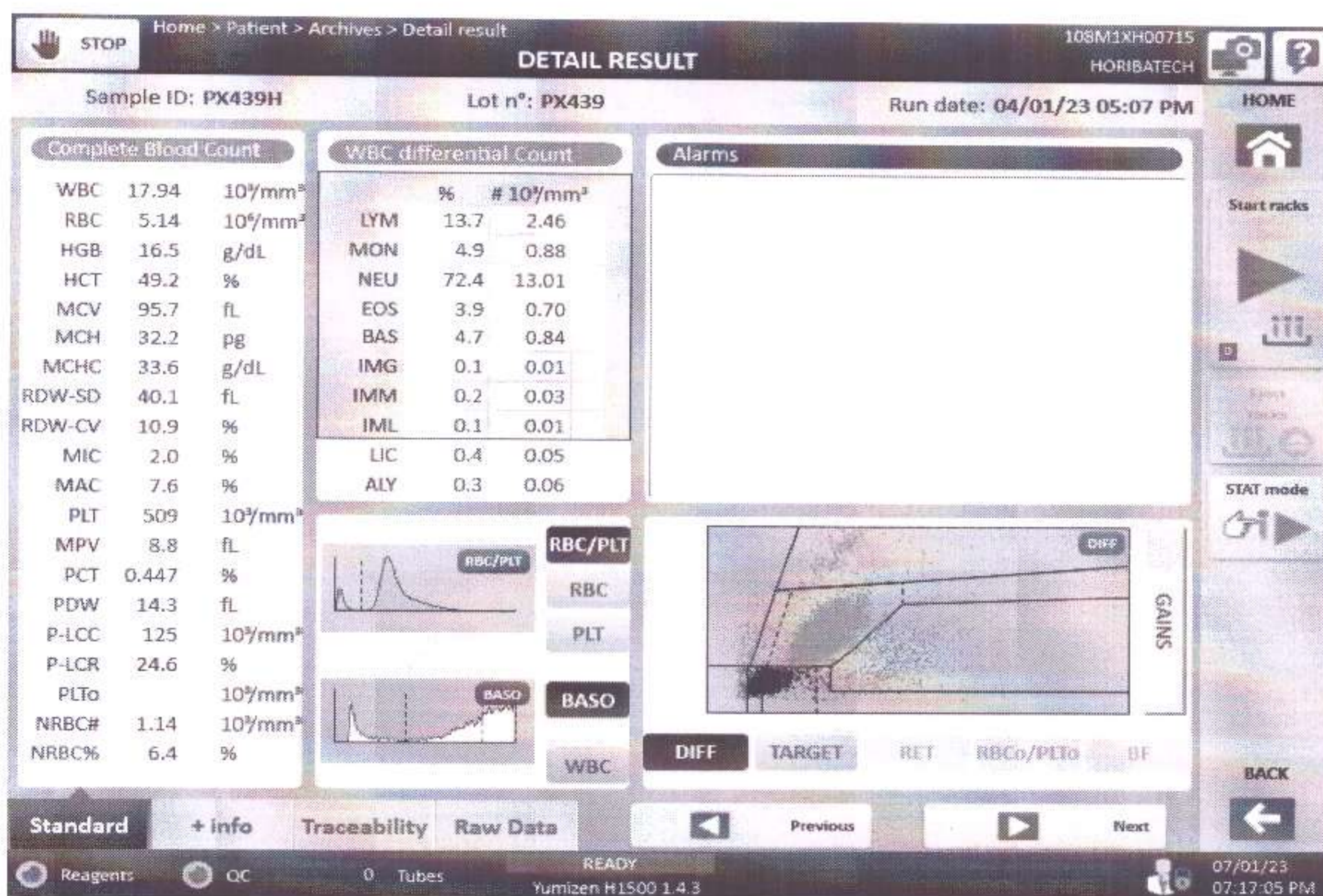
Level: Low Control



## Level: Normal Control



## Level: High Control



## REPEATABILITY

- **Precision Study:** Precision is checked by running blood sample in 10 replicates & getting CV% in within acceptance.

Serial No: 108M1XH00715

The image shows two screenshots of a medical device's log detail screen. Both screenshots are titled 'LOG DETAIL' and show a 'Log entry: System' section with the following information:

- Date: 04/01/23 08:07:08 PM
- Operator: HORIBATECH
- ID: S302
- Level: Info
- Event: Repeatability report

The 'Details' section of the first screenshot shows the following table:

Param.	CV%	CV limit	Mean	Min	Max	Units
WBC	0.95	2.00	11.15	11.00	11.35	10 <sup>3</sup> /mm <sup>3</sup>
RBC	0.40	2.00	5.20	5.16	5.23	10 <sup>6</sup> /mm <sup>3</sup>
HGB	0.22	1.00	13.9	13.9	14.0	g/dL
HCT	0.38	2.00	43.2	42.8	43.4	%
MCV	0.13	1.00	83.0	82.9	83.2	fL
RDW-SD	1.55	4.00	40.7	39.9	42.1	fL
RDW-CV	1.69	3.00	12.9	12.6	13.3	%
PLT	2.52	5.00	278	266	288	10 <sup>3</sup> /mm <sup>3</sup>
MPV	1.63	3.00	9.7	9.4	9.9	fL

The 'Details' section of the second screenshot shows the following table:

PLT	2.52	5.00	278	266	288	10 <sup>3</sup> /mm <sup>3</sup>
MPV	1.63	3.00	9.7	9.4	9.9	fL
LYM%	2.09	5.00	17.2	16.7	17.7	%
MON%	3.57	15.00	8.3	8.0	8.8	%
NEU%	0.55	3.00	72.0	71.5	72.7	%
EOS%	13.74	20.00	0.9	0.7	1.2	%
BAS%	23.74	30.00	0.3	0.2	0.5	%
NRBC%	0.00	9999.00	0.0	0.0	0.0	%
TNCHGB	1.01	9999.00	11.31	11.16	11.52	10 <sup>3</sup> /mm <sup>3</sup>
TNCBAS	0.94	9999.00	10.93	10.77	11.12	10 <sup>3</sup> /mm <sup>3</sup>
TNCDIF	1.07	9999.00	10.68	10.53	10.97	10 <sup>3</sup> /mm <sup>3</sup>
TNC	0.95	9999.00	11.15	11.00	11.35	10 <sup>3</sup> /mm <sup>3</sup>
LIC%	10.36	40.00	1.2	0.9	1.3	%
ALY%	38.73	40.00	0.2	0.1	0.3	%

Both screenshots also show a status bar at the bottom with 'Reagents', 'QC', '0 Tubes', 'READY', 'Yumizen H1500 1.4.3', and the date '07/01/23 07:19:14 PM'.

STOP
Home > Quality Assurance > Repeatability
108M1XH00715  
HORIBATECH

REPEATABILITY

Tube: H914307
Test: DIF
Analysis mode: Automatic
Runs: 11/11

Last repeatability test: 04/01/23

	WBC 10 <sup>9</sup> /mm <sup>3</sup>	RBC 10 <sup>6</sup> /mm <sup>3</sup>	HGB g/dL	HCT %	MCV fL	RDW-SD fL	RDW-CV %	PLT 10 <sup>9</sup> /mm <sup>3</sup>
Min	9.96	5.60	15.5	48.3	85.7	41.3	13.6	197
Max	10.19	5.69	15.6	49.2	86.8	42.8	14.7	217
Mean	10.09	5.66	15.5	48.9	86.4	42.0	14.2	206
SD	0.08	0.03	0.1	0.3	0.3	0.6	0.3	6
CV (%)	0.75	0.47	0.34	0.65	0.34	1.49	1.89	2.89

	WBC	RBC	HGB	HCT	MCV	RDW-SD	RDW-CV	PLT
1	10.14	5.66	15.5	48.8	86.2	42.8	14.2	208
2	10.19	5.67	15.6	49.2	86.8	42.1	14.3	203
3	10.10	5.64	15.5	48.8	86.4	42.1	14.4	199
4	10.04	5.69	15.6	49.2	86.6	42.8	14.1	217
5	9.96	5.68	15.6	49.2	86.6	41.3	14.2	207

Export
Stop repeatability
Start analysis

New repeatability
Edit
Cancel
Continue

Reagents
QC
0 Tubes
READY
Yumizen H1500 1.4.3
07/01/23  
07:17:50 PM

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STOP
Home > Quality Assurance > Repeatability
108M1XH00715  
HORIBATECH

REPEATABILITY

Tube: H914307
Test: DIF
Analysis mode: Automatic
Runs: 11/11

Last repeatability test: 04/01/23

	MPV fL	LYM% %	MON% %	NEU% %	EOS% %	BAS% %	NRBC% %	TNCHGB 10 <sup>9</sup> /mm <sup>3</sup>
	9.6	28.5	6.4	45.7	13.4	0.5	0.0	10.19
	10.0	30.5	7.7	48.7	15.8	0.9	0.0	10.41
	9.8	29.4	7.2	47.5	14.4	0.8	0.0	10.30
	0.2	0.6	0.4	0.9	0.7	0.1	0.0	0.09
	1.55	2.15	5.50	1.95	4.61	18.28	0.00	0.84

	MPV	LYM%	MON%	NEU%	EOS%	BAS%	NRBC%	TNCHGB
	10.0	28.6	7.3	47.8	15.1	0.6	0.0	10.39
	9.9	28.9*	7.6*	48.0*	14.0	0.9	0.0	10.41
	9.8	29.2	7.7	48.0	13.4	0.9	0.0	10.29
	9.6	29.8	6.4	48.0	14.6	0.7	0.0	10.24
	9.7	29.4	7.4	48.4	13.6	0.7	0.0	10.20

Export
Stop repeatability
Start analysis

New repeatability
Edit
Cancel
Continue

Reagents
QC
0 Tubes
READY
Yumizen H1500 1.4.3
07/01/23  
07:18:09 PM



STOP Home > Quality Assurance > Repeatability 108M1XH00715 HORIBATECH

### REPEATABILITY

Tube: H914307 Test: DIF Analysis mode: Automatic Runs: 11/11  
Last repeatability test: 04/01/23

	BAS% %	NRBC% %	TNCHGB 10 <sup>9</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>9</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>9</sup> /mm <sup>3</sup>	TNC 10 <sup>9</sup> /mm <sup>3</sup>	LIC% %	ALY% %
	0.5	0.0	10.19	2.42	9.35	9.96	0.5	0.4
	0.9	0.0	10.41	10.46	9.58	10.19	0.8	1.0
	0.8	0.0	10.30	9.51	9.47	10.09	0.6	0.6
	0.1	0.0	0.09	2.36	0.08	0.08	0.1	0.2
	18.28	0.00	0.84	24.79	0.88	0.75	17.15	38.01

	BAS% %	NRBC% %	TNCHGB 10 <sup>9</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>9</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>9</sup> /mm <sup>3</sup>	TNC 10 <sup>9</sup> /mm <sup>3</sup>	LIC% %	ALY% %
	0.5	0.0	10.39	10.33	9.58	10.14	0.6	0.4
	0.9	0.0	10.41	10.46	9.58	10.19	0.6	0.4*
	0.9	0.0	10.29	10.27	9.54	10.10	0.8	0.4
	0.7	0.0	10.24	10.21	9.51	10.04	0.5	1.0
	0.7	0.0	10.20	10.43	9.47	9.96	0.5	0.5

Export Stop repeatability Start analysis New repeatability Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 07/01/23 07:18:23 PM

STOP Home > Quality Assurance > Repeatability 108M1XH00715 HORIBATECH

### REPEATABILITY

Tube: H914307 Test: DIF Analysis mode: Automatic Runs: 11/11  
Last repeatability test: 04/01/23

	WBC 10 <sup>9</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL	HCT %	MCV fL	RDW-SD fL	RDW-CV %	PLT 10 <sup>9</sup> /mm <sup>3</sup>
Min	9.96	5.60	15.5	48.3	85.7	41.3	13.6	197
Max	10.19	5.69	15.6	49.2	86.8	42.8	14.7	217
Mean	10.09	5.66	15.5	48.9	86.4	42.0	14.2	206
SD	0.08	0.03	0.1	0.3	0.3	0.6	0.3	6
CV (%)	0.75	0.47	0.34	0.65	0.34	1.49	1.89	2.89

	WBC 10 <sup>9</sup> /mm <sup>3</sup>	RBC 10 <sup>9</sup> /mm <sup>3</sup>	HGB g/dL	HCT %	MCV fL	RDW-SD fL	RDW-CV %	PLT 10 <sup>9</sup> /mm <sup>3</sup>
6 ✓	10.16	5.65	15.6	48.8	86.4	42.1	14.2	205
7 ✓	10.18	5.69	15.5	49.2	86.6	41.3	14.7	212
	10.01	5.65	15.5	48.9	86.6	41.3	13.6	199
	10.02	5.60	15.5	48.4	86.4	41.3	14.3	197
	10.07*	5.67	15.6	49.0	86.5	42.8	14.1	206

Export Stop repeatability Start analysis New repeatability Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 07/01/23 07:18:47 PM

STOP Home > Quality Assurance > Repeatability 108M1XH00715  
HORIBATECH

**REPEATABILITY**

Tube: H914307 Test: DIF Analysis mode: Automatic Runs: 11/11  
Last repeatability test: 04/01/23

RDW-SD fl	RDW-CV %	PLT 10 <sup>3</sup> /mm <sup>3</sup>	MPV fl	LYM% %	MON% %	NEU% %	EOS% %
41.3	13.6	197	9.6	28.5	6.4	45.7	13.4
42.8	14.7	217	10.0	30.5	7.7	48.7	15.8
42.0	14.2	206	9.8	29.4	7.2	47.5	14.4
0.6	0.3	6	0.2	0.6	0.4	0.9	0.7
1.49	1.89	2.89	1.55	2.15	5.50	1.95	4.61

RDW-SD	RDW-CV	PLT	MPV	LYM%	MON%	NEU%	EOS%
42.1	14.2	205	10.0	29.6	7.4	45.7	15.8
41.3	14.7	212	9.6	30.2	7.3	46.8	14.3
41.3	13.6	199	9.8	30.5	7.3	46.2	8 ✓
41.3	14.3	197	9.8	29.6	6.9	47.5	9 ✓
42.8	14.1	206	9.9	29.0 *	6.7 *	48.7 *	10 ✓

Export Stop Start analysis New repeatability Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 07/01/23  
07:18:42 PM

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STOP Home > Quality Assurance > Repeatability 108M1XH00715  
HORIBATECH

**REPEATABILITY**

Tube: H914307 Test: DIF Analysis mode: Automatic Runs: 11/11  
Last repeatability test: 04/01/23

BAS% %	NRBC% %	TNCHGB 10 <sup>3</sup> /mm <sup>3</sup>	TNCBAS 10 <sup>3</sup> /mm <sup>3</sup>	TNCDIF 10 <sup>3</sup> /mm <sup>3</sup>	TNC 10 <sup>3</sup> /mm <sup>3</sup>	LIC% %	ALY% %
0.5	0.0	10.19	2.42	9.35	9.96	0.5	0.4
0.9	0.0	10.41	10.46	9.58	10.19	0.8	1.0
0.8	0.0	10.30	9.51	9.47	10.09	0.6	0.6
0.1	0.0	0.09	2.36	0.08	0.08	0.1	0.2
18.28	0.00	0.84	24.79	0.88	0.75	17.15	38.01

BAS%	NRBC%	TNCHGB	TNCBAS	TNCDIF	TNC	LIC%	ALY%
0.9	0.0	10.37	10.19	9.54	10.16	0.6	0.4
0.8	0.0	10.41	10.08	9.35	10.18	0.6	0.7
8 ✓	0.9	10.19	10.31	9.41	10.01	0.8	0.6
9 ✓	0.9	10.20	9.91	9.47	10.02	0.6	1.0
10 ✓	0.5 *	10.26 *	2.42 *	9.36	10.07	0.5	0.7

Export Stop Start analysis New repeatability Edit Cancel Confirm

Reagents QC 0 Tubes READY Yumizen H1500 1.4.3 07/01/23  
07:18:31 PM

Conducted By: *[Signature]*

Verified By:

- **Carryover Study:** Carry over is checked by running quality controls (Low & high) in 3 replicates & getting CV% in within acceptance.
- **Carry Over % =  $(L1-L3) * 100 / (H3-L3)$ .**

YH 1500		Sr No: 108M1XH00715																							
CARRYOVER STUDY		05.01.2023																							
HB	H1	16.6		L1	6.2																				
	H2	16.6		L2	6.3																				
	H3	16.7		L3	6.3																				
RBC	H1	5.17		L1	2.42																				
	H2	5.14		L2	2.44																				
	H3	5.2		L3	2.41																				
PLATELETS	H1	513		L1	67																				
	H2	504		L2	69																				
	H3	522		L3	74																				
WBC	H1	17.59		L1	1.73																				
	H2	17.71		L2	1.91																				
	H3	17.66		L3	1.92																				
<table border="1"> <thead> <tr> <th>Parameters</th> <th>WBC 10<sup>3</sup>/mm<sup>3</sup></th> <th>RBC 10<sup>6</sup>/mm<sup>3</sup></th> <th>HGB g/dL</th> <th>PLT 10<sup>3</sup>/mm<sup>3</sup></th> </tr> </thead> <tbody> <tr> <td>Carry Over (%)</td> <td>-1.21</td> <td>0.4</td> <td>-0.961538</td> <td>-1.6</td> </tr> <tr> <td>Manufacturer acceptable CV%</td> <td>0.5</td> <td>1</td> <td>1</td> <td>0.5</td> </tr> <tr> <td>Status</td> <td>Passed</td> <td>Passed</td> <td>Passed</td> <td>Passed</td> </tr> </tbody> </table>						Parameters	WBC 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>6</sup> /mm <sup>3</sup>	HGB g/dL	PLT 10 <sup>3</sup> /mm <sup>3</sup>	Carry Over (%)	-1.21	0.4	-0.961538	-1.6	Manufacturer acceptable CV%	0.5	1	1	0.5	Status	Passed	Passed	Passed	Passed
Parameters	WBC 10 <sup>3</sup> /mm <sup>3</sup>	RBC 10 <sup>6</sup> /mm <sup>3</sup>	HGB g/dL	PLT 10 <sup>3</sup> /mm <sup>3</sup>																					
Carry Over (%)	-1.21	0.4	-0.961538	-1.6																					
Manufacturer acceptable CV%	0.5	1	1	0.5																					
Status	Passed	Passed	Passed	Passed																					
Source: User Manual , Summary of performance data, Carryover																									


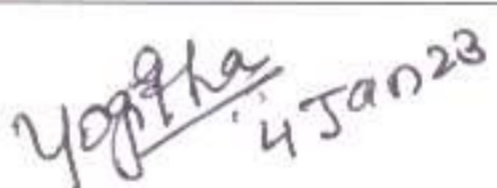
Conducted By:



Verified By:

**B. PERFORMANCE CERTIFICATE:**

**Instrument Name** : YUMIZEN H1500  
**Serial Number** : 108M1XH00715  
**Customer Details with complete address** : REDCLIFFE LIFETECH PRIVATE LIMITED,  
HYDERABAD  
**Installation Date** : 04-01-2023  
**Warranty expires on** : RR (Reagent Rental).

<b>Prepared by:</b>	HORIBA Medical - HORIBA India Pvt. Ltd.		
<b>Name:</b>	G.SRIRAM		
<b>Title:</b> Customer Support Service	<b>Sign:</b> 	<b>Date:</b> 04.01.2023	
<b>Reviewed by:</b>	REDCLIFFE LIFETECH PRIVATE LIMITED, HYDERABAD		
<b>Name:</b>			
<b>Title: Quality Manager</b>	<b>Sign:</b>	<b>Date: 04.01.2023</b>	
<b>Approved by:</b>	REDCLIFFE LIFETECH PRIVATE LIMITED, HYDERABAD		
<b>Name:</b>			
<b>Title: Lab Director</b>	<b>Sign:</b>  4 Jan 23	<b>Date: 04.01.2023</b>	

**Conclusion:** Instrument has been qualified for Performance.

# QC Results

**HORIBA**  
Medical

**Redcliffe**  
labs

Date: 12/07/2023 08:59:32 Lot: PX442L State: Valid / Included  
 Device: YUMIZEN H1500 Comments:


Test	Result	Failed Rules	Target	Tolerance	Lower Bound	Upper Bound
WBC	2.47	In Range	2.4	0.40	2.0	2.8
RBC	2.43	In Range	2.46	0.16	2.3	2.62
HGB	6.3	In Range	6.2	0.40	5.8	6.6
HCT	18.7	In Range	18.6	1.50	17.1	20.1
MCV	77.2	In Range	75.5	5.00	70.5	80.5
MCH	25.9	In Range	25.2	2.00	23.2	27.2
MCHC	33.6	In Range	33.4	3.00	30.4	36.4
RDW-CV	13.9	In Range	14.5	4.00	10.5	18.5
RDW-SD	42.4	In Range	43.0	8.00	35.0	51.0
PLT	67	In Range	67.0	20.00	47.0	87.0
MPV	8.8	In Range	8.7	2.00	6.7	10.7
LYM%	28.9	In Range	27.9	12.00	15.9	39.9
MON%	7.1	In Range	7.1	7.10	0.0	14.2
NEU%	51.3	In Range	53.8	10.00	43.8	63.8
EOS%	8.0	In Range	7.2	7.20	0.0	14.4
BAS%	4.7	In Range	4.0	2.50	1.5	6.5
NRBC%	15.2	In Range	16.0	8.00	8.0	24.0
LYM#	0.71	In Range	0.67	0.33	0.34	1.0
MON#	0.18	In Range	0.17	0.17	0.0	0.34
NEU#	1.26	In Range	1.29	0.35	0.94	1.64
EOS#	0.20	In Range	0.17	0.17	0.0	0.34
BAS#	0.12	In Range	0.1	0.10	0.0	0.2
NRBC#	0.38	In Range	0.38	0.30	0.08	0.68

*performed by  
SH*

*Yop file  
12 Jul 23*

# QC Results

**HORIBA**  
Medical

 Redcliffe  
labs


Date: 12/07/2023 08:56:40 Lot: PX442N State: Valid / Included  
Device: YUMIZEN H1500 Comments:

Test	Result	Failed Rules	Target	Tolerance	Lower Bound	Upper Bound
WBC	7.11	In Range	7.2	1.00	6.2	8.2
RBC	4.72	In Range	4.72	0.20	4.52	4.92
HGB	14.2	In Range	14.0	0.50	13.5	14.5
HCT	41.9	In Range	41.1	2.00	39.1	43.1
MCV	88.8	In Range	87.0	5.00	82.0	92.0
MCH	30.1	In Range	29.7	2.00	27.7	31.7
MCHC	33.9	In Range	34.1	3.00	31.1	37.1
RDW-CV	11.5	In Range	11.5	4.00	7.5	15.5
RDW-SD	41.2	In Range	41.0	8.00	33.0	49.0
PLT	263	In Range	258.0	30.00	228.0	288.0
MPV	9.0	In Range	9.3	2.00	7.3	11.3
LYM%	30.0	In Range	29.7	8.00	21.7	37.7
MON%	7.0	In Range	6.6	5.90	0.7	12.5
NEU%	54.6	In Range	56.4	10.00	46.4	66.4
EOS%	3.9	In Range	3.5	3.50	0.0	7.0
BAS%	4.5	In Range	3.8	3.00	0.8	6.8
NRBC%	17.5	In Range	17.4	8.00	9.4	25.4
LYM#	2.13	In Range	2.14	0.70	1.44	2.84
MON#	0.50	In Range	0.48	0.43	0.05	0.91
NEU#	3.88	In Range	4.06	0.90	3.16	4.96
EOS#	0.28	In Range	0.25	0.25	0.0	0.5
BAS#	0.32	In Range	0.27	0.18	0.09	0.45
NRBC#	1.24	In Range	1.25	0.45	0.8	1.7

*performed by*  
*[Signature]*

# QC Results

**HORIBA**  
Medical

 **Redcliffe**  
labs

Date: 12/07/2023 09:02:10 Lot: PX442H State: Valid / Included  
Device: YUMIZEN H1500 Comments:

Test	Result	Failed Rules	Target	Tolerance	Lower Bound	Upper Bound
WBC	17.75	In Range	17.2	2.20	15.0	19.4
RBC	5.24	In Range	5.32	0.25	5.07	5.57
HGB	17.3	In Range	17.0	0.60	16.4	17.6
HCT	50.9	In Range	49.7	2.50	47.2	52.2
MCV	97.1	In Range	93.5	5.00	88.5	98.5
MCH	33.0	In Range	32.0	2.50	29.5	34.5
MCHC	34.0	In Range	34.2	3.00	31.2	37.2
RDW-CV	10.8	In Range	11.5	4.00	7.5	15.5
RDW-SD	40.1	In Range	42.5	8.00	34.5	50.5
PLT	484	In Range	482.0	50.00	432.0	532.0
MPV	9.1	In Range	9.4	2.00	7.4	11.4
LYM%	11.3	In Range	12.1	8.00	4.1	20.1
MON%	5.0	In Range	4.4	4.00	0.4	8.4
NEU%	74.1	In Range	74.2	10.00	64.2	84.2
EOS%	4.8	In Range	4.8	4.80	0.0	9.6
BAS%	4.8	In Range	4.5	2.50	2.0	7.0
NRBC%	5.7	In Range	5.4	2.00	3.4	7.4
LYM#	2.01	In Range	2.08	1.50	0.58	3.58
MON#	0.88	In Range	0.76	0.68	0.08	1.44
NEU#	13.15	In Range	12.76	1.90	10.86	14.66
EOS#	0.86	In Range	0.83	0.83	0.0	1.66
BAS#	0.85	In Range	0.77	0.39	0.38	1.16
NRBC#	1.02	In Range	0.92	0.35	0.57	1.27

*performed by*  