



Logs - Blank

Date/Time	Operator	Status	WBC (10 ⁹ /μL)	RBC (10 ⁶ /μL)	HGB (g/dL)	PLT (10 ⁹ /μL)
03/04/2022 11:42:34 PM	PATHKIND	●	0.01	0.01	0.0	0
03/05/2022 12:27:54 AM	PATHKIND	●	0.01	0.01	0.0	1
03/05/2022 12:35:25 AM	PATHKIND	●	0.01	0.00	0.0	4
03/05/2022 01:08:05 AM	PATHKIND	●	0.04	0.00	0.0	0
03/05/2022 05:37:26 AM	PATHKIND	●	0.02	0.00	0.0	1
03/05/2022 06:25:01 AM	PATHKIND	●	0.03	0.01	0.0	1
03/05/2022 02:42:55 PM	PATHKIND	●	0.02	0.00	0.0	2
03/06/2022 12:31:01 AM	PATHKIND	●	0.00	0.01	0.0	2
03/06/2022 02:11:44 AM	PATHKIND	●	0.02	0.00	0.0	1
03/06/2022 03:14:33 AM	PATHKIND	●	0.01	0.00	0.0	0
03/07/2022 12:33:21 AM	PATHKIND	●	0.01	0.00	0.0	1

Parameters: 0.03, 0.01, 0.0, 2
Status: PASSED
Comment: Add Comments

QUAL COMM REAG SYST Print Help

Results

Run Date 04/11/2022 11:27:21 AM

Operator PATHKIND

Last Name

Sample ID REPEAT 1

First Name

Rack/Pos

Gender

Age

Department

Patient ID

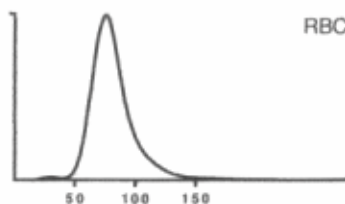
Physician

Birth Date

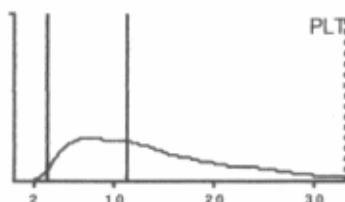
Type Standard

Sample comments

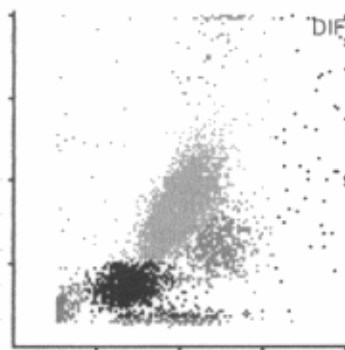
				Range
RBC	3.83		10 ⁶ /μL	3.80 - 6.00
HGB	10.4	I	g/dL	11.5 - 17.0
HCT	31.9	L	%	35.0 - 52.0
MCV	83.1		μm ³	76.0 - 100.0
MCH	27.1		pg	27.0 - 34.0
HC	32.6		g/dL	32.0 - 35.0
RDW-CV	14.7		%	11.0 - 17.0
RDW-SD	47.0		μm ³	37.0 - 49.0



				Range
PLT	227	*	10 ³ /μL	150 - 400
PCT	0.30	*	%	0.15 - 0.40
MPV	13.1	H*	μm ³	8.0 - 11.0
PDW	29.4	H*	μm ³	11.0 - 22.0
P-LCC	122		10 ³ /μL	44 - 140
P-LCR	53.6	h	%	18.0 - 50.0



				Range
WBC	9.99	*	10 ³ /μL	3.50 - 10.00
	#			
NEU	7.10	h*	1.60 - 7.00	71.9 * 40.0 - 73.0
LYM	2.20	*	1.00 - 3.00	22.2 * 15.0 - 45.0
MON	0.43	*	0.20 - 0.80	4.3 * 4.0 - 12.0
OS	0.13	*	0.00 - 0.50	1.4 * 0.5 - 7.0
BAS	0.02	*	0.00 - 0.15	0.2 * 0.0 - 2.0
LIC	0.11	h*	0.00 - 0.10	1.2 h* 0.0 - 1.0



Recommended actions

Slide review

Alarms

Control failed
Draining alarm disabled

WBC
Background Noise
LYM Interference

PLT
RBC PLT Interference

Susp. Pathologies

Macroplatelets
PLT aggregate or NRBC ?

Slide Review

- | | | |
|---------------------|---------------|-----------------|
| Neutrophil | Myeloblast | Anysocytosis |
| Lymphocyte | Promyelocyte | Hypochromia |
| Monocyte | Myelocyte | Polychromasia |
| Eosinophil | Metamyelocyte | Poikilocytosis |
| Basophil | Blast | Microcytosis |
| Atypical Lymphocyte | Target Cell | Macrocytosis |
| Other | Sickle Cell | Platelet Clumps |

Reviewed on _____ by _____ Signature :

Results

Run Date 04/11/2022 11:32:42 AM

Operator PATHKIND

Last Name

Sample ID REPEAT 2

First Name

Rack/Pos

Gender

Age

Department

Patient ID

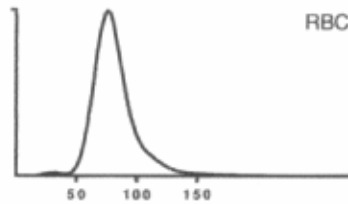
Physician

Birth Date

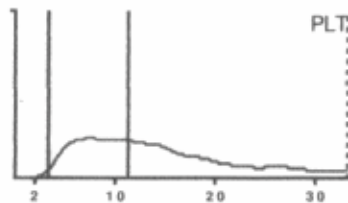
Type Standard

Sample comments

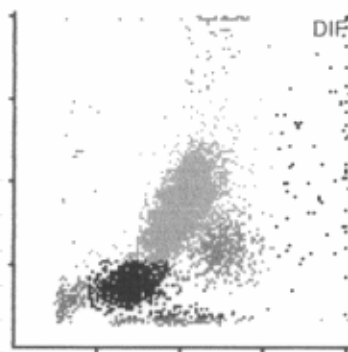
				Range
RBC	3.77		10 ⁶ /μL	3.80 - 6.00
HGB	10.3		g/dL	11.5 - 17.0
HCT	31.3	L	%	35.0 - 52.0
MCV	83.1		μm ³	76.0 - 100.0
MCH	27.5		pg	27.0 - 34.0
MCHC	33.0		g/dL	32.0 - 35.0
RDW-CV	14.3		%	11.0 - 17.0
RDW-SD	46.2		μm ³	37.0 - 49.0



				Range
PLT	217	*	10 ³ /μL	150 - 400
PCT	0.29	*	%	0.15 - 0.40
MPV	13.6	H*	μm ³	8.0 - 11.0
PDW	31.6	H*	μm ³	11.0 - 22.0
P-LCC	121		10 ³ /μL	44 - 140
P-LCR	55.9	h	%	18.0 - 50.0



				Range
WBC	9.55	*	10 ³ /μL	3.50 - 10.00
	#			
NEU	6.88	*	1.60 - 7.00	72.9 * 40.0 - 73.0
LYM	2.04	*	1.00 - 3.00	21.6 * 15.0 - 45.0
MON	0.36	*	0.20 - 0.80	3.8 * 4.0 - 12.0
EOS	0.13	*	0.00 - 0.50	1.4 * 0.5 - 7.0
BAS	0.03	*	0.00 - 0.15	0.3 * 0.0 - 2.0
LIC	0.11	h*	0.00 - 0.10	1.2 h* 0.0 - 1.0



Recommended actions

Slide review

Alarms

Control failed
Draining alarm disabled

WBC

Background Noise
LYM Interference

PLT

RBC PLT Interference

Susp. Pathologies

Macroplatelets
PLT aggregate or NRBC ?

Slide Review

Neutrophil	Myeloblast	Anysocytosis
Lymphocyte	Promyelocyte	Hypochromia
Monocyte	Myelocyte	Polychromasia
Eosinophil	Metamyelocyte	Poikilocytosis
Basophil	Blast	Microcytosis
Atypical Lymphocyte	Target Cell	Macrocytosis
Other	Sickle Cell	Platelet Clumps

Reviewed on _____ by _____ Signature :

Results

Run Date 04/11/2022 11:36:58 AM

Operator PATHKIND

Last Name

Sample ID REPEAT 3

First Name

Rack/Pos

Gender

Age

Department

Patient ID

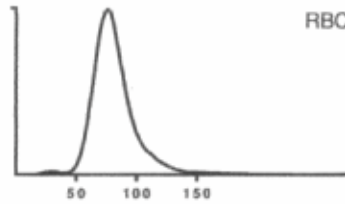
Physician

Birth Date

Type Standard

Sample comments

				Range
RBC	3.80		10 ⁶ /μL	3.80 - 6.00
HGB	10.4		g/dL	11.5 - 17.0
HCT	31.6	L	%	35.0 - 52.0
MCV	83.3		μm ³	76.0 - 100.0
MCH	27.3		pg	27.0 - 34.0
MCHC	32.8		g/dL	32.0 - 35.0
RDW-CV	14.4		%	11.0 - 17.0
RDW-SD	47.0		μm ³	37.0 - 49.0



Recommended actions

Slide review

Alarms

Control failed
Draining alarm disabled

WBC

Background Noise
LYM Interference

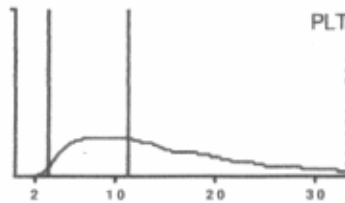
PLT

RBC PLT Interference

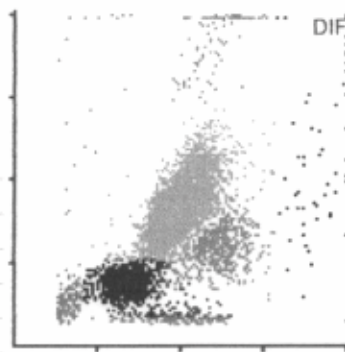
Susp. Pathologies

Macroplatelets
PLT aggregate or NRBC ?

				Range
PLT	216	*	10 ³ /μL	150 - 400
PCT	0.29	*	%	0.15 - 0.40
MPV	13.6	H*	μm ³	8.0 - 11.0
PDW	31.0	H*	μm ³	11.0 - 22.0
P-LCC	122		10 ³ /μL	44 - 140
P-LCR	56.3	h	%	18.0 - 50.0



				Range
WBC	9.94	*	10 ³ /μL	3.50 - 10.00
	#			
NEU	7.02	h*	1.60 - 7.00	71.3 * 40.0 - 73.0
LYM	2.16	*	1.00 - 3.00	22.0 * 15.0 - 45.0
MON	0.44	*	0.20 - 0.80	4.5 * 4.0 - 12.0
OS	0.17	*	0.00 - 0.50	1.7 * 0.5 - 7.0
BAS	0.05	*	0.00 - 0.15	0.5 * 0.0 - 2.0
LIC	0.10	*	0.00 - 0.10	1.0 * 0.0 - 1.0



Slide Review

Neutrophil
Lymphocyte
Monocyte
Eosinophil
Basophil
Atypical Lymphocyte
Other

Myeloblast
Promyelocyte
Myelocyte
Metamyelocyte
Blast
Target Cell
Sickle Cell

Anysocytosis
Hypochromia
Polychromasia
Poikilocytosis
Microcytosis
Macrocytosis
Platelet Clumps

Reviewed on _____ by _____ Signature :

QC - Control Run Report

Run Date 03/08/2022 12:45:43 AM

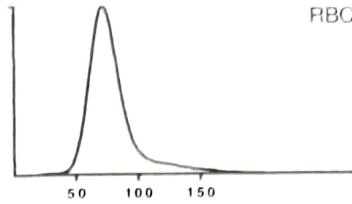
Operator PATHKIND

Name PX434N
Level Normal
Lot number PX434N

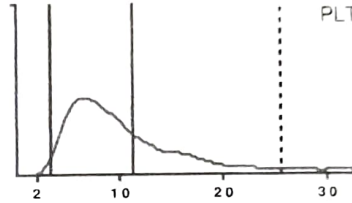
Sample ID PX434N
Exp. date 05/05/2022

Alarms

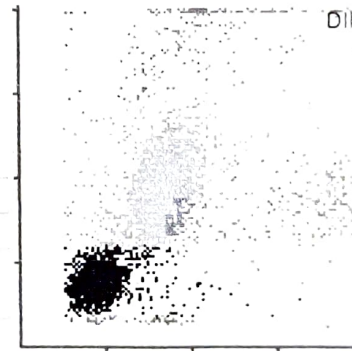
			Range
RBC	4.63	10 ⁶ /μL	4.46 - 4.86
HGB	13.2	g/dL	13.1 - 14.1
HCT	39.4	%	38.1 - 42.1
MCV	85.1	μm ³	81.0 - 91.0
MCH	28.6	pg	27.2 - 31.2
MCHC	33.6	g/dL	30.9 - 36.9
RDW-CV	13.5	%	10.0 - 18.0



			Range
PLT	248	10 ³ /μL	235 - 295
MPV	9.8	μm ³	8.2 - 12.2



			Range		Range
WBC	7.39	10 ³ /μL	6.20 - 8.20		
	#			%	
NEU	3.57		3.03 - 4.83	48.2	44.6 - 64.6
LYM	2.81		1.74 - 3.14	38.1	25.9 - 41.9
MON	0.41		0.00 - 0.80	5.6	0.0 - 11.0
EOS	0.38		0.00 - 0.64	5.1	0.0 - 8.8
AS	0.22		0.00 - 0.24	3.0	0.0 - 3.2



Handwritten signature

Slide Review

- | | | |
|---------------------|---------------|-----------------|
| Neutrophil | Myeloblast | Anysocytosis |
| Lymphocyte | Promyelocyte | Hypochromia |
| Monocyte | Myelocyte | Polychromasia |
| Eosinophil | Metamyelocyte | Poikilocytosis |
| Basophil | Blast | Microcytosis |
| Atypical Lymphocyte | Target Cell | Macrocytosis |
| Other | Sickle Cell | Platelet Clumps |

Reviewed on _____ by _____ Signature :



ate Limited

HIN/MED/2021-2022/100410

05/10/ 2021

CALIBRATION CERTIFICATE

This is to certify that the Hematology Analyzer **YumizenH550** bearing serial number: **910YAXH02141** installed at **PATHKIND LABS ,VARANASI** as calibrated on 10st SEPT 2021.

Calibrator : ABX MINOCAL
Lot No. : CX462.
Expiry Date : 5th OCT 2021

The reports of Blank Cycle, Repeatability and Calibration Values were all found in acceptable range.

Next calibration cycle is due on **9th SEPT 2022.**



Shrish Dixit

(Head- Products & Marketing)
For **Horiba India Pvt. Ltd.**

Calibration Report

Sample ID 1
Lot number CX468

Name MINOCAL

Exp. date 05/05/2022
Modified on

Coefficient	WBC	RBC	HGB	HCT	PLT	MPV
New	1.096	0.865	0.977	1.028	0.911	1.051
Current	1.110	0.916	0.999	1.001	0.793	1.070
Target	8.90	4.60	13.4	38.6	263	10.9
Mean	9.01	4.87	13.7	39.8	229	11.1
CV(%)	2.32	0.96	0.48	1.18	2.49	0.82

Number of calibration run selected for coefficient calculation (minimum 5) 5/7

Sel.	Run Time	WBC (10 ³ /μL)	RBC (10 ⁶ /μL)	HGB (g/dL)	HCT (%)	PLT (10 ³ /μL)	MPV (μm ³)
	04/10/2022 10:05:05 AM	8.95	4.84 h	13.9 h	39.7 h	213 l	11.3
✓	04/10/2022 10:07:25 AM	9.27 h	4.90 h	13.7 h	40.3 h	232 l	11.2
✓	04/10/2022 10:09:45 AM	9.11 h	4.89 h	13.7 h	40.1 h	236 l	11.1
	04/10/2022 10:14:34 AM	8.97	5.71 h	13.5	46.8 h	270	11.2
✓	04/10/2022 10:16:54 AM	8.70 l	4.79 h	13.6 h	39.1	224 l	11.1
✓	04/10/2022 10:19:14 AM	9.00	4.87 h	13.7 h	39.7 h	230 l	11.0
✓	04/10/2022 10:21:33 AM	8.98	4.89 h	13.8 h	40.0 h	222 l	11.0

HORIBA
Medical

**Installation Qualification, Performance,
Qualification and Operational
Qualification**

YUMIZEN H550
(Serial no:902**YAXH02141**)
Fully Automated Hematology Analyzer

For

**PATH KIND LANKA
VARANASI**

Table of Contents:

Section 1 General Instructions

Section 2 Installation Qualification

- I. Installation Qualification.
- II. Installation Procedure.
- III. Installation Certificate.

Section 3 Operational Qualification

- I. Operational Qualification.
- II. Operational Training Record.
- III. Operator Maintenance Protocol.
- IV. Operational Certificate.

Section 4 Performance Qualifications

- I. Performance Qualification.
- II. Performance Certificate.

Section 5 Attachments

General Instructions:

- HORIBA India Pvt. Ltd. is responsible for installation of YUMIZEN H550, Fully 6 part Part Automated Hematology Analyzer, at Sankalpo clinic pvt ltd. As per the attached protocol.
- An authorized HORIBA India Pvt. Ltd., representative will physically check the system and proceed for the installation.
- This installation protocol will be followed as specified by the manufacturer.
- Installation checks will also be performed to verify that the instrument has been installed with proper connections and utilities.
- An authorized HORIBA India Pvt. Ltd. representative will also perform the precision check on the system to check if it is as per the claim of the manufacturer.
- The results obtained for Calibration, QC & Precision checks will be verified by the qualified trained employee of
- PATHKIND DIAGNOSTIC PVT LTD ,along with an authorized HORIBA India Pvt. Ltd., representative.
- On completion of the Installation all the necessary documents of the System checks will be used to evaluate the instrument installation in accordance with the manufacturer's protocol and intended use.
- An authorized HORIBA India Pvt. Ltd., representative will verify the documents of the system checks and approve the same.
- Successful completion of this protocol will verify that this instrument has been installed in accordance with the intended usage.

Report Sign Off

Prepared by:	HORIBA Medical - HORIBA India Pvt. Ltd.		
Name:	ARUN PRAKASH		
Title:Executive support	Customer	Sign: <i>Arun Prakash</i>	Date: 24/04/2019
Approved by:	PATHKIND DIAGNOSTIC PVT LTD		
Name:	PRADESH KUMAR SINGH		
Title:LAB in charge	Sign: <i>Pradesh Kumar Singh</i>	Date: 24/04/2019	

YUMIZEN H550
(Serial no: **902YAXH02141**)
Fully Automated Hematology Analyzer

Installation Qualification

For

PATH KIND LANKA
VARANASI

#246, Okhla Industrial Estate, Phase III, New Delhi 110020, India, Tel: 011 4646 5000.

Visit us: <http://www.horiba.com/in/>

A. Installation Qualification**1. Installation Requirement :**

Sr. No.	Description	Compliance (Yes/No)
1.	Environmental conditions: Indoor Location not exposed to sunlight, water and vibration free platform. Temperature of 16°C to 34°C and maximum relative humidity of 80%.	yes
2.	Physical Space Requirement: 36(W) x 36(D) x 53(H)cm with at least 20 cm space at the back of the instrument from the wall.	yes
3.	Electrical Requirements: Power supply - 100Vac- 240 Vac +/- 10%. Power consumption – Maximum 150VA with earth less than 3 V.	yes
4.	UPS connection available.	yes

2. The instrument has been checked for the following:

Sr. No.	Verification	Provided (Yes/No)
1.	Instrument is identified Instrument Serial No. : 902YAXH02141	yes
2.	Manufacturer's specifications: Technical and Physical Requirement	yes
3.	Accessories / consumables are listed as per checklist (Provided along)	yes
4.	System checked for any External / physical damage.	yes
5.	Instrument User Manual (Soft Copy)	yes

3. Equipment Description :

YUMIZEN H550, Fully Automated Hematology Analyzer

Instrument Identification	Verified Yes/No
Equipment Type : Hematology Analyzer	Yes
Model : YUMIZEN H550	Yes
Manufacturer : HORIBA Medical, France	Yes
Marketed By : HORIBA Medical - HORIBA India Pvt. Ltd.	Yes
Equipment # : One	Yes
Serial Number : 902 YAXH02141	Yes
Dimensions : 36(W) x 36(D) x 53(H)	Yes
Power Supply: 100Vac to 240Vac (+/-10%) 50Hz to 60Hz	yes
Power Consumption: 150 VA	

4. Accessories/Consumables :

The accessories were supplied with the instrument as per the check list. Check & verified in case they are found to be in order.

5. Preventive Maintenance :

The routine preventive maintenance of the system will be carried out by an authorized HORIBA India Pvt. Ltd., engineer at a specified time interval as recommended by the manufacturer.

6. Spare Parts :

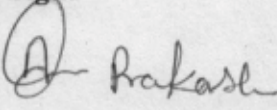
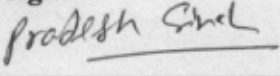
HORIBA India Pvt. Ltd strongly recommends the end user to maintain a basic consumable parts onsite to minimize down time due to minor failures. Spare parts as provided in the installation kit.

B. Installation Procedure:

1. Putting the system at the predefined and pre inspected location (Having suitable Working Conditions).
2. Removal of the internal packing material of the system.
3. Place the Instrument on the bench top (Vibration free).
4. Connect the Power cord to the Yumizen H550.
6. Turn on the inbuilt Printer.
7. All the operating software has been loaded in to Yumizen H550.
8. Now from back side of the instrument turn the power switch ON. Yumizen H550 goes through its power up and self-test sequence.
9. The Yumizen H550 login menu is displayed after the Start up cycle is completed. Enter the credentials.

C. INSTALLATION CERTIFICATE:

Instrument Name : YUMIZEN H550
Serial Number : 902YAXH02141
Customer Details with complete address : PATHKIND DUIAGNOSTIC PVT LTD,
RASMI NAGAR LANKA
VARANASI221005
Installation Date : 24/04/2019
Warranty expires on : RR (Reagent Rental).

Prepared by:	HORIBA Medical - HORIBA India Pvt. Ltd.		
Name:	ARUN PRAKASH		
Title:Executive support	Customer	Sign: 	Date:24/04/2019
Approved by:	PATHKIND LANKA VARANASI		
Name:	PRADESH KUMAR SINGH		
Title:LAB Incharge		Sign: 	Date:24/04/2019

Deviation:

Conclusion: Instrument has been qualified for Installation. Hence it has been taken for Operational Qualification.

HORIBA
Medical

HORIBA India Private Limited

HORIBA
Medical

YUMIZEN H550

(Serial no: **902YAXH02141**)

Fully Automated Hematology Analyzer

Operational Qualification

For

PATHKIND DIAGNOSTIC PVT LTD
VARANASI

#246, Okhla Industrial Estate, Phase III, New Delhi 110020, India, Tel: 011 4646 5000.Visit us: <http://www.horiba.com/in/>

A. Operational Qualification**1. Instrument Identification:**

Instrument Name : YUMIZEN H550

Serial Number : 902YAXH02141

2. Following is the list of actions performed and verified for running the system routinely.

Sr. No.	Test Name	Test Purpose	Method	Observation
1.	SYSTEM SWITCH ON	TO CHECK THE ERROR FREE POWER UP.	Switch on the main, switch on the system. Login into yumizen Application software. Start up cycle is performed. Login in as User and check for the Screen Errors.	Ok
2.	STARTUP CYCLE	TO CHECK THE BACK GROUND IS OK.	Run a startup cycle from the main menu; check if the background is in the acceptable range.	Ok
3.	PRINTER TEST	TO CHECK STATUS OF THE PRINTER.	Initiate a self-test of printer or run a sample to check the print.	Ok
4.	REAGENT STATUS	TO CHECK ADEQUATE REAGENT IS AVAILABLE FOR ANALYSIS	Manually check in the reagent bottles or else change the reagent from the Status Menu.	Ok
5.	SAMPLE ANALYSIS	TO CHECK PROPER FUNCTIONING	1. To run Stat/ Manual sample, press on sample identification and enter the sample ID and	ok

		OF SAMPLE ANALYSIS	press on validate.	
6.	ARCHIVE AND CURRENT REPORTS	TO RECOVER THE SAMPLE RESULT FROM ARCHIVE AND CURRENT REPORTS	Press on Results History icon and view the current results. To view archived reports, Select Archive results and select the date of the reports and view the report.	ok
7.	QUALITY CONTROL DATA	TO RECOVER QUALITY CONTROL DATA AND LJ GRAPH	Press on QC Icon from the Main Menu and select the Lot No. To view on QC Runs , Click on Dates .	ok
8..	FLAGS AND ALARMS	TO CHECK THE PROPER FLAGS AND ALARMS FOR SAMPLES	Run sample to verify alarms and flags.	ok

B. Operational Training Record

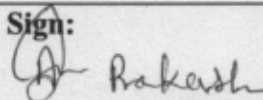
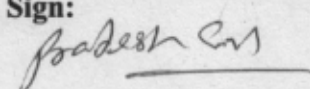
Operator Training: The users responsible for the operation of this instrument will be trained on the proper usage of the system. Training will focus on the basic operation and maintenance of the system. The training of the operators will be documented and the training records will be filled as indicated below:

C. Operator Maintenance Protocol

Maintenance and Troubleshooting: Perform Concentration Cleaning as advised by the HORIBA Medical Representative .Run a Shutdown cycle before switching off the analyzer .

D. OPERATIONAL CERTIFICATE:

Instrument Name : YUMIZEN H550.
Serial Number : 902YAXH02141
Customer Details : PATHKIND DIAGNOSTIC PVT LTD
with complete address RASMINAGAR LANKA
VARANASI 221005
Installation Date : 24/04/2019
Warranty expires on : RR (Reagent Rental).

Prepared by:	HORIBA Medical - HORIBA India Pvt. Ltd.	
Name:	ARUN PRAKASH	
Title:Customer support	Sign: 	Date:24/04/19
Approved by:	PATHKIND DIAGNOSTIC Pvt Ltd	
Name:	PRADESH KUMAR SINGH	
Title:	Sign: 	Date:24/04/2019

Deviation:

Conclusion: Instrument has been qualified for Operational. Hence it has been taken for Performance Qualification.

HORIBA
Medical

YUMIZEN H550
(Serial no:902**YAXH02141**)
Fully Automated Hematology Analyzer

Performance Qualification

For

PATHKIND DIAGNOSTIC PVT LTD
VARANASI

#246, Okhla Industrial Estate, Phase III, New Delhi 110020, India, Tel: 011 4646 5000.Visit us: <http://www.horiba.com/in/>

A. Performance Qualification**A. Instrument Identification:**

Instrument Name : YUMIZEN H550

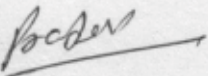
Serial Number : 902YAXH02141


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

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

Serial No: 902YAXH02141

Parameters	Acceptable Range	Observed Value
WBC $10^3/\text{mm}^3$	$\leq 0.3 \times 10^3/\text{mm}^3$	0.0
RBC $10^6/\text{mm}^3$	$\leq 0.02 \times 10^6/\text{mm}^3$	0.00
HGB g/dL	$\leq 0.3 \text{ g/dl}$	0.0
PLT $10^3/\text{mm}^3$	$\leq 10 \times 10^3/\text{mm}^3$	0

Conducted By: 

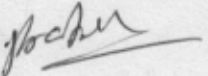

Verified By:

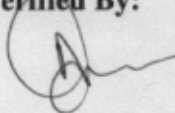
- **Control Runs:** The quality of the analyzer is checked by running three levels of Controls & getting the values in the range as per the kit insert.

- **Lot:** ABX Minotrol CX456; **Exp:** 05/05/2019.

Serial No: 902YAXH02141

LEVEL	STATUS
LOW (PX 426L)	OK
NORMAL (PX426N)	OK
HIGH (PX426H)	OK

Conducted By: 

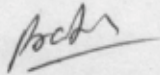
Verified By: 

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

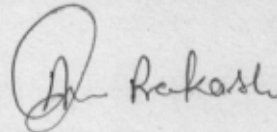
Serial No: 902YAXH02141

Parameters	CV % Acceptance	CV % Observed	Comments
RBC $10^6/\text{mm}^3$	< 2.0	0.6	
HGB g/dL	< 1.5	0.5	
HCT %	< 2.0	0.7	
PLT $10^3/\text{mm}^3$	< 5.0	3.9	
WBC $10^3/\text{mm}^3$	< 2.5	1.2	
GRA %	<4	2.0	
LYM%	<10	1.3	
MON%	<20	6.4	

Conducted By:



Verified By:

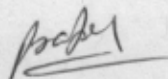


- **Carryover Study:** Carry over is checked by running quality controls (Low & high) in 3 replicates & getting CV% in within acceptance.
 - Carry Over % = $(L1-L3) * 100 / (H3-L3)$.

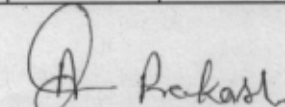
Serial No: 902YAXH02141

Parameters	WBC 10 ³ /mm ³	RBC 10 ⁶ /mm ³	HGB g/dL	HCT %	PLT 10 ³ /mm ³
Carry Over (%)	0.5	0.9	0	0.6	0.2
Manufacturer acceptable CV%	<1%	<1%	<1%	<1%	<1%
Status	Passed	Passed	Passed	Passed	Passed

Conducted By:

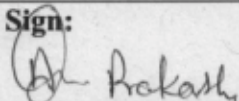
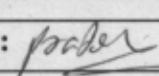


Verified By:



B. PERFORMANCE CERTIFICATE:

Instrument Name : YUMIZEN H550
Serial Number : 902YAXH02141.
Customer Details with complete address : PATHKIND DIAGNOSTIC PVT LTD ,
RASMINAGAR LANKA VARANASI
Installation Date : 24/04/2019
Warranty expires on : RR (Reagent Rental).

Prepared by:	HORIBA Medical - HORIBA India Pvt. Ltd.		
Name:	ARUN PRAKASH		
Title:Executive support	Customer	Sign: 	24/04/2019
Approved by:	PATHKIND DIAGNOSTIC Pvt Ltd		
Name:	PRADESH KUMAR SINGH		
Title:LAB in charge	Sign: 	Date:24/04/2019	

