

HORIBA
Medical

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

YUMIZEN H550

(Serial no: **112YAXH03617**)

Fully Automated Hematology Analyzer

For

XTRACARE DIAGNOSTICS, CHEMBUR

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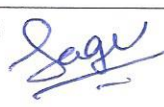
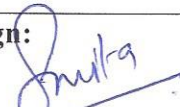

Section 5 Attachments

General Instructions:

HORIBA India Pvt.Ltd. is responsible for installation of YUMIZEN H550, Fully 6 part Part Automated Hematology Analyzer, XTRACARE DIAGNOSTICS, CHEMBUR 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
- XTRACARE DIAGNOSTICS, CHEMBUR, 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 India Pvt. Ltd.		
Name:	Sagar Matal		
Title: Engineer Customer Support	Sign: 	Date: 16/03/2022	
Reviewed by:	XTRACARE DIAGNOSTICS, CHEMBUR		
Name:	MS.SMITA		
Title: lab tech	Sign: 	Date: 16/03/2022	
Approved by:	XTRACARE DIAGNOSTICS, CHEMBUR		
Name:	DR.RISHI SIR		
Title: QA Head	Sign: 	Date: 16/03/2022	

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Medical

YUMIZEN H550

(Serial no: **112YAXH03617**)

Fully Automated Hematology Analyzer

Installation Qualification

For

XTRACARE DIAGNOSTICS,

CHEMBUR

#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. :112YAXH03617	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 : 112YAXH03617	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:


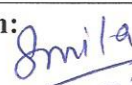

1. Putting the system at the predefined and preinspected location (Having suitable Working Conditions).
2. Removal of the internal packing material of the system.
3. Place the Instrument on the benchtop (Vibration free).
4. Connect the Power cord to the Yumizen H550.
6. Turn on the external Printer.
7. All the operating software has been loaded in to Yumizen H550.
8. Now fromback side of the instrument turn the power switch ON. Yumizen H550goes through its power up and self-test sequence.
- 9.The Yumizen H550 login menuis displayed after the Start up cycle is completed. Enter the credentials.

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C. INSTALLATION CERTIFICATE:

Instrument Name : YUMIZEN H550
Serial Number : 112YAXH03617
Customer Details :XTRACARE DIAGNOSTICS,CHEMBUR
Installation Date : 07/03/2022
Warranty expires on :06/03/2025

Prepared by:	HORIBA India Pvt. Ltd.		
Name:	Sagar Matal		
Title: Engineer Customer Support	Sign: 	Date: 16/03/2022	
Reviewed by:	XTRACARE DIAGNOSTICS,CHEMBUR		
Name:	MS.SMITA		
Title: lab tech	Sign: 	Date: 16/03/2022	
Approved by:	XTRACARE DIAGNOSTICS,CHEMBUR		
Name:	DR.RISHI SIR		
Title: QA Head	Sign: 	Date: 16/03/2022	

Deviation:

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

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YUMIZEN H550
(Serial no:**112YAXH03617**)

Fully Automated Hematology Analyzer

Operational Qualification

FOR

**XTRACARE DIAGNOSTICS,
CHEMBUR**

A. Operational Qualification

1. Instrument Identification:

Instrument Name : YUMIZEN H550

Serial Number : 112YAXH03617

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 OF SAMPLE ANALYSIS	1. To run Stat/ Manual sample, press on sample identification and enter the sample ID and press on validate.	ok

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

}
Sagar

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:

Sr. No.	Operators	Designation	Name of the Trainer	Date
1.	DR, RISHI SIR	LAB HEAD	Sagar Matal	07/03/2022
2.	MS.SMITA MAM	Technician	Sagar Matal	07/03/2022
3.	MRS.SUKANYA MAM	Technician	Sagar Matal	07/03/2022


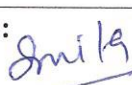

} Sagar

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 : 112YAXH03617
Customer Details :XTRACARE DIAGNOSTICS,CHEMBUR
Installation Date : 07/03/2022
Warranty expires on : 06/03/2025

Prepared by:	HORIBA India Pvt. Ltd.		
Name:	Sagar Matal		
Title:	Sign:	Date: 16/03/2022	
Engineer Customer Support			
Reviewed by:	XTRACARE DIAGNOSTICS,CHEMBUR		
Name:	MS.SMITA		
Title: lab tech	Sign:	Date: 16/03/2022	
			
Approved by:	XTRACARE DIAGNOSTICS,CHEMBUR		
Name:	DR.RISHI SIR		
Title: QA Head	Sign:	Date: 16/03/2022	
			

Deviation:

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

HORIBA
Medical

YUMIZEN H550
(Serial no: **112YAXH03617**)

Fully Automated Hematology Analyzer

Performance Qualification

**XTRACARE DIAGNOSTICS,
CHEMBUR**

■ Precision Study:

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

Serial No: 112YAXH03617

Parameters	CV % Acceptance	CV % Observed	Comments
RBC 10 ⁶ /μL	< 2.0	0.79	Satisfactory
HGB g/dL	< 1.5	0.83	
HCT %	< 2.0	0.63	
PLT 10 ³ /μL	< 5.0	2.31	
WBC 10 ³ /μL	< 3.0	2.85	
MCV μm ³	<1.5	0.36	
RDW CV %	<4	2.38	
RDW SD μm ³	<4	2.01	
PLCR %	<15	2.26	
NEU %	<3.5	2.45	
LYM%	<5	4.75	
MON%	<15	5.77	
EOS%	<20	4.74	
BAS%	<40	22.61	

Conducted By: SAGAR MATAL



Verified By: DR. RISHI SIR



B. PERFORMANCE CERTIFICATE:

A. Performance Qualification

A. Instrument Identification:

Instrument Name : YUMIZEN H550
Serial Number : 112YAXH03617

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: 112YAXH03617

Parameters	Acceptable Range	Observed Value
WBC $10^3/\text{mm}^3$	$\leq 0.3 \times 10^3/\mu\text{L}$	0.05
RBC $10^6/\text{mm}^3$	$\leq 0.02 \times 10^6/\mu\text{L}$	0.01
HGB g/dL	$\leq 0.3 \text{ g/dl}$	0.0
PLT $10^3/\text{mm}^3$	$\leq 5 \times 10^3/\mu\text{L}$	2

Conducted By: SAGAR MATAL



Verified By: DR. RISHI SIR

▪ **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 DIFFTROL PX434L; Exp: 05/05/2022
- Lot: ABX DIFFTROL PX434N; Exp: 05/05/2022.
- Lot: ABX DIFFTROL PX434H; Exp: 05/05/2022.

Serial No: 112YAXH03617

LEVEL	STATUS
LOW (PX434L)	OK
NORMAL (PX434N)	OK
HIGH (PX434H)	OK

Conducted By: SAGAR MATAL



Verified By: DR. RISHI SIR

Co
nd



XTRACARE DIAGNOSTICS

M.G.3 2/7-Ca, WADHAVALI NAKA, OPPOSITE NATIONAL AFTAR Co.R.C. MARG. CHEMBUR, MUMBAI 400074

PERFORMANCE QUALIFICATION PERFORMED FOR MINDRAY YUMIZEN H550 INTERASSAY & INTRASSAY PERFORMED ON PATIENT SAMPLE (EDTA WHOLE BLOOD) YUMIZEN H550

Sr No	WBC10 ³ /ul	RBC10 ³ /ul	HGB/dl	HCT%	MCV fl	MCH pg	MCHCg/dl	PLT	RDW %	PDW fl	MPV fl
1	18-04-22 M	7	4.25	11.9	36.4	85.8	28	32.6	350	17.7	10
2	18-04-22 M	6.92	4.22	11.9	36.3	86	28.1	32.7	347	19.1	10.2
3	18-04-22 M	6.97	4.21	11.8	36.2	85.9	28	32.6	340	18.9	10.3
4	18-04-22 M	6.81	4.19	11.9	36.1	86.3	28.4	33	340	18.4	10.5
5	18-04-22 M	6.92	4.17	11.8	35.8	85.9	28.4	33.1	338	18.9	10.4
6	18-04-22 E	6.66	4.24	11.9	36.7	86.6	28	32.4	335	19.3	10.3
7	18-04-22 E	6.59	4.24	11.8	36.7	86.6	27.9	32.3	354	18.6	10.3
8	18-04-22 E	6.56	4.28	12	37.1	86.7	28	32.3	325	18.9	10.3
9	18-04-22 E	6.58	4.27	11.9	37.2	87.1	28	32.2	314	18.4	10.3
10	18-04-22 E	6.42	4.18	11.9	36.6	87.7	28.5	32.5	319	19.7	18
11	19-04-22 M	6.6	4.25	12.1	37.3	87.8	28.6	32.5	354	19.8	10.2
12	19-04-22 M	6.51	4.15	11.9	36.1	87	28.7	32.9	341	19	17.8
13	19-04-22 M	6.39	4.19	11.9	36.7	87.6	28.5	32.5	346	19.2	17.7
14	19-04-22 M	6.66	4.26	12	37.3	87.5	28.1	32.1	347	19.1	17.2
15	19-04-22 M	6.65	4.22	12.1	37.1	88.1	28.8	32.7	338	20.2	16.6
16	19-04-22 E	6.11	4.33	12.1	37.4	86.5	27.9	32.3	339	20.2	17.5
17	19-04-22 E	6.43	4.36	12	37.7	86.6	27.6	31.9	342	20.1	17.6
18	19-04-22 E	6.33	4.35	12.1	37.8	86.9	27.9	32.1	330	19.6	17.2
19	19-04-22 E	6.1	4.37	12.2	37.9	86.7	27.9	32.2	355	20	17.9
20	19-04-22 E	6.07	4.41	12.1	38.2	86.7	27.6	31.8	343	20.8	19.4
	Mean	6.564	4.257	11.965	36.93	86.8	28.145	32.435	339.85	19.36	17.965
	SD	0.27995112	0.072917	0.11821	0.6752	0.669642	0.345612	0.3453069	11.09896	0.660462	0.793576
	CV%	4.26494704	1.712865	0.987968	1.828323	0.771478	1.227968	1.0646119	3.26584	3.411479	4.417346
											20.47731

Performance Qualification on MINDRAY YUMIZEN H550 (Fully automated) performed for the Parameters showed good precision. All the parameters were verified against the manufacturer acceptance criteria

PREPARED BY - QM

APPROVED BY - LD

HORIBA ABX SAS

Parc Euromédecine
Rue du Caducée - BP 7290
34184 Montpellier Cedex 4 - France
Web: www.horiba-abx.com
Tél. : 33 (0) 4 67 14 15 16

CERTIFICAT DE CONFORMITE DES PERFORMANCES PERFORMANCE COMPLIANCE CERTIFICATE

NOUS LE FABRICANT
WE THE MANUFACTURER

Nom
Name

HORIBA ABX SAS

Adresse
Address

Parc Euromédecine
Rue du Caducée - BP 7290
34184 Montpellier Cedex 4 - France

DECLARONS QUE LE PRODUIT
DECLARE THAT THE PRODUCT

Nom produit
Product Name

Yumizen H550

Numéro de série
Serial number

112YAXH03617

Date de test
Date tested

20.12.2021

EST CONFORME AUX CRITERES D'ACCEPTATION FINAUX.

Ce document certifie que le produit cité ci-dessus a subi tous les tests liés aux strictes procédures en vigueur. Le produit a passé avec succès l'ensemble des tests établis par HORIBA ABX en accord avec les exigences réglementaires liées aux aspects fonctionnels, sécuritaires, et de performances.

CONFORMS TO FINAL ACCEPTANCE CRITERIA.

This document certifies that the product listed above has completed testing according to stringent test procedures. The product has passed all functional, safety and performance verification tests established by HORIBA ABX in accordance with all appropriate regulatory requirements.

A
Place : Montpellier

Nom
Name : William PERRONE

Signature
Signature :



Date 20.12.2021
Date :

Fonction
Position : Responsable contrôle final



HORIBA India Private Limited

246, Okhla Industrial Estate Phase-III,
New Delhi 110020, India
Tel : +91 (11) 4646 5000 / 4669 5001
Fax : +91 (11) 4646 5020
http : //www.horiba.com
CIN : U73100DL2006PTC153232

CALIBRATION DATA

SMP NO/TIME	WBC	RBC	HGB	HCT	PLT
SCS1	6.80	4.41	12.3	34.00	258
SCS2	6.90	4.42	12.3	34.00	261
SCS3	6.90	4.38	12.3	33.60	257
SCS4	6.70	4.36	12.3	33.40	259
SCS5	6.80	4.42	12.3	33.90	264
MEAN	6.82	4.398	12.30	33.78	259.8
Acceptable Limits	6.51 - 7.09	4.320 - 4.497	12.11 - 12.36	33.06 - 34.55	250.3 - 276.7
Result	PASS	PASS	PASS	PASS	PASS

(Traceability System) :

The traceability system of Horiba Hematology analyzers are shown in attached sheet.



Shrish Dixit

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



HORIBA India Private Limited

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New Delhi 110020, India
Tel : +91 (11) 4646 5000 / 4669 5001
Fax : +91 (11) 4646 5020
http : //www.horiba.com
CIN : U73100DL2006PTC153232

HIN/MED/2023-2024/103514
19th May 2023

CALIBRATION CERTIFICATE

This is to certify that the Hematology Analyzer **YUMIZEN H550** bearing serial number:
112YAXH03617 installed at **X-TRACARE DIAGNOSTICS CHEMBUR**
as calibrated on 19th May 2023.

Calibrator : ABX MINOCAL
Lot No. : CX440
Expiry Date : 25th June 2023

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

Next calibration cycle is due on 18th May 2024.



Shrish Dixit

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

L-J QC Table

File No.: 2
 Lot No.: DH2307N
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: **Normal**
 QC Type: CBC-5
 QC Sample ID:

Target Limit(#)	Date	Time	WBC	Neu#	Lym#	Mon#	Eos#	Bas#	Neu%	Lym%	Mon%	Eos%	Bas%
	11/08/2023	10:50	8.73	4.92	2.65	0.44	0.71	0.43	56.4	30.3	5.0	8.3	5.0
			1.00	1.05	0.70	0.44	0.71	0.43	12.0	8.0	5.0	8.3	5.0
			8.52	5.05	2.46	0.42	0.59	0.51	59.3	28.9	4.9	6.9	6.0

NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCR
		4.65	13.2	42.1	90.6	28.4	31.4	16.8	55.1	242	8.6	0.137	13.3	0.209	51	21.2
2.05	85.77	2.24	6.0	2.0	5.0	2.5	3.0	3.0	8.0	40	3.0	0.050	5.0	0.100	25	10.0
		3.96	12.9	35.6	90.0	32.5	36.1	14.8	49.1	211	8.5	0.138	12.9	0.181	41	19.4

L-J QC Table

File No.: 1
 Lot No.: dh2307
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: **Low**
 QC Type: CRC-5

Target Limit(#)	Date	Time	WBC	Neu#	Lym#	Mon#	Eos#	Bas#	Neu%	Lym%	Mon%	Eos%	Bas%
	11/08/2023	10:48	3.72	1.87	1.44	0.18	0.23	0.31	50.0	38.6	4.9	6.3	8.2
			0.50	0.45	0.35	0.18	0.23	0.31	12.0	9.0	4.9	6.3	8.2
			3.66	1.84	1.44	0.16	0.22	0.27	50.4	39.3	4.4	5.9	7.5

NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCR
		2.30	5.6	18.1	78.8	24.6	31.2	18.4	52.5	44	8.2	0.138	13.2	0.360	8	17.9
1.28	32.64	0.18	4.0	1.5	5.0	2.5	3.0	3.0	8.0	20	3.0	0.050	5.0	0.360	8	10.0
		1.94	5.4	15.5	80.0	28.1	35.2	16.8	49.2	47	8.7	0.136	13.2	0.041	10	22.1

L-J QC Table

File No.: 3
 Lot No.: DH2307H
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: **High**

Target Limit(#)	Date	Time	WBC	Neu#	Lym#	Mon#	Eos#	Bas#	Neu%	Lym%	Mon%	Eos%	Bas%
	11/08/2023	10:53	20.70	12.60	4.12	1.11	2.24	0.41	62.8	20.5	5.5	11.1	2.0
			2.50	2.45	1.45	1.11	2.24	0.41	12.0	7.0	5.5	11.1	2.0
			19.72	13.09	3.77	1.03	1.83	0.47	66.4	19.1	5.2	9.3	2.4

NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCR
		5.36	16.9	53.6	100.0	31.5	31.5	15.4	56.0	484	8.9	0.137	13.6	0.431	110	22.7
3.47	113.00	0.30	8.0	2.4	5.0	2.5	3.0	3.0	8.0	60	3.0	0.050	5.0	0.200	35	10.0
		4.58	16.3	47.1	102.9	35.6	34.6	13.6	50.9	426	9.2	0.138	13.4	0.390	99	23.3

L-J QC Table

File No.: 2
 Lot No.: DH2307N
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: Normal
 QC Type: CBC-C5

Bas%	NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCC
5.0			4.65	13.2	42.1	90.6	28.4	31.4	16.8	55.1	242	8.6	0.137	13.3	0.209	51	21.2
5.0			2.24	6.0	2.0	5.0	2.5	3.0	3.0	8.0	40	3.0	0.050	5.0	0.100	25	10.0
5.9	2.17	90.76	3.79	12.9	34.9	92.0	34.0	37.0	14.7	49.2	216	8.9	0.139	13.3	0.193	47	22.0

Target Limit(%)
 10/08/2023 11:24

WBC 8.73
 Neu# 4.92
 Lym# 2.65
 Mon# 0.44
 Bas# 0.43
 Neu% 56.4
 Lym% 30.3
 Mon% 5.0

8.53
 1.05
 0.70
 0.44
 0.43
 60.5
 27.9
 4.9

5.16
 2.38
 0.42
 0.50

0.57
 0.73
 0.43
 0.50

0.73
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L-J QC Table

File No.: 1
 Lot No.: dh2307
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: Low
 QC Type: CBC-C5

Bas%	NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCC
8.2			2.30	5.6	18.1	78.8	24.6	31.2	18.4	52.5	44	8.2	0.138	13.2	0.360	8	17.1
8.2			0.18	4.0	15	5.0	2.5	3.0	3.0	49.6	42	8.3	0.137	11.9	0.360	8	10.1
9.3	1.30	28.57	0.18	4.0	15	79.2	26.6	33.6	17.3	49.6	42	8.3	0.137	11.9	0.035	9	20.1

Target Limit(%)
 10/08/2023 11:21

WBC 3.72
 Neu# 1.87
 Lym# 1.44
 Mon# 0.18
 Bas# 0.31
 Neu% 50.0
 Lym% 38.6
 Mon% 4.9

0.50
 0.45
 0.35
 0.18
 0.31
 50.6
 9.0
 3.9

1.91
 1.47
 0.15
 0.15

0.23
 0.23
 0.23
 0.25

0.31
 0.31
 0.31
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L-J QC Table

File No.: 3
 Lot No.: DH2307H
 Mode: Whole Blood
 Exp.Date: 05/09/2023
 Level: High

Bas%	NLR	PLR	RBC	HGB	HCT	MCV	MCH	MCHC	RDW-CV	RDW-SD	PLT	MPV	PDW-CV	PDW-SD	PCT	P-LCC	P-LCC
3.82			5.36	16.9	53.6	100.0	31.5	31.5	15.4	56.0	484	8.9	0.137	13.6	0.431	110	22.7
			0.30	8.0	2.4	5.0	2.5	3.0	3.0	8.0	60	3.0	0.050	5.0	0.200	35	10.0
			4.52	16.3	46.2	102.3	36.1	35.3	13.9	51.8	436	9.1	0.138	13.4	0.395	99	22.8

Target Limit(%)
 10/08/2023 11:26

WBC 20.70
 Neu# 12.60
 Lym# 4.12
 Mon# 1.11
 Bas# 2.24
 Neu% 62.8
 Lym% 20.5

2.50
 2.45
 1.45
 1.11
 2.24
 0.41
 62.8
 7.0

19.63
 13.25
 3.47
 1.06

1.85
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