



Scheduled Maintenance Work Order

Work Order No	n/p PW044121	Scheduled Month	January 2019
Work Order Date	n/p 01/01/2019	Completed Date	7/1/2019
Clinic Name	K.K SIMPANG	Clinic Code	PRK720
BE No	PRK030721	District	LM8
BE Category	HEMATOLOGY ANALYSER(M)	WO Assigned to	KEER ADARUL
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> MEET Equipment	
BE Condition	<input type="checkbox"/> Under Warranty	<input type="checkbox"/> BER Proposed	
Work Order Type	<input checked="" type="checkbox"/> Preventive Maintenance (PM) <input type="checkbox"/> Third Party Calibration (TPC) <input type="checkbox"/> Routine Inspection (RI) <input type="checkbox"/> Statutory Certification (SC)		

Reschedule Date	
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BE Third Party Calibration / Statutory Certification Details

Company Name	n/p	Cal / Cert Date	n/p
Contact Number	n/p	Cal / Cert Expiry Date	n/p

Action Taken

PPM COMPLETED AS PER CHECKLIST.

Manufacturer : NIKON KOTOGU
 Model : MEK650K
 S/N : 00646
 Purchase Date : 11/1/2014
 Kewpa No : KKM/JCN/PRK/ICK/08-06-12/14/14/79

Schedule Maintenance Execution Details

SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
1	ADARUL	7/1/2019	10:10	12:10

Customer Remarks

Engineer / Technician Signature

Name

Date 7/1/2019
 NOOR AZARUL B AHAMAD
 PERAK LAB SPECIALIST
 Quantum Medical Solution Sdn. Bhd.
 No 10 B, Persiaan Greentown, Ipoh
 Greentown Avenue, 30450 Ipoh, Perak
 Tel/fax : 05-2461991 Hp : 012-39648013

Customer Signature

Name

Designation

Date

Seal

NUR HAZWANI BINTI MOHAMAD YOSOF
 Juruteknologi Makmal Perubatan U29

07 JAN 2019

For Internal Use only

First Verification
QMS Circle Incharge

Final Verification
QMS State Incharge



KEMENTERIAN KESIHATAN MALAYSIA
MEET Planned Preventive Maintenance Checklist
Analyzers, Laboratory, Hematology, Cell Counting, Automated (Medium)
BE CODE : ME-009

CHECKLIST NO: CL-015-000
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ *n/a* BE NO ▶ *PRK030721*
MANUFACTURER ▶ *MIHA KOHON* MODEL ▶ *MEK6510K*
FREQUENCY ▶ 6 MONTHLY (/) 12 MONTHLY () PPM HOURS ▶ 2.00

PART 2 SPECIAL PRECAUTION

If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it.

Wear appropriate Personnel Protection Equipment (PPE) during work.

Wear grounded electrostatic wristband when handling PCB or electronic components.

Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines.

Make sure the test equipment used are duly calibrated.

PART 3 TEST APPARATUS

Tick (✓) where appropriate

NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON
<i>- n/a -</i>		ELECTRICAL SAFETY ANALYZER	<i>- n/a -</i>	

PART 4 QUALITATIVE TASKS

Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(/)	()	()	11 Probes- Verify physical integrity	(/)	()	()
2 Mount/ Fasteners - verify physical integrity	(/)	()	()	12 Temperature system- verify proper operation	(/)	()	()
3 Power Cord - verify proper insulation and integrity	(/)	()	()	13 Fan/motor/compressor/pump- verify physical integrity and proper operation	(/)	()	()
4 Strain Relief - verify physical integrity at both ends of line cord	(/)	()	()	14 Initialization Process- Verify	(/)	()	()
5 Fittings/ Connectors - check all fittings/connectors	(/)	()	()	15 Printer - Verify physical operation.	(/)	()	()
6 Controls/Switches - verify proper operation of controls	(/)	()	()	16 User Setting - Verify Operation	(/)	()	()
7 Indicators/Displays- verify proper operation	(/)	()	()	17 User calibration - Verify Operation	(/)	()	()
8 Electrodes and Transducer -verify physical integrity	(/)	()	()	18 Self Diagnostic - Verify Operation	(/)	()	()
9 Hydraulics and Pneumatics System-verify physical integrity	(/)	()	()	19 Plate movement calibration - Verify Operation	()	()	(/)
10 Sensors- verify physical integrity	(/)	()	()				

PART 5 PREVENTIVE MAINTENANCE TASKS

Tick (✓) where appropriate

	DONE	NOT DONE **	NA		DONE	NOT DONE **	NA
1 Clean exterior and interior of the equipment	(/)	()	()	6 Clean measuring area	(/)	()	()
2 Inspect/clean interior of unit	(/)	()	()	7 Calibrate system parameter	(/)	()	()
3 Clean hydraulics and pneumatic system	(/)	()	()	8 Perform Post routine	(/)	()	()
4 Tubings - clean/ replace ***	(/)	()	()				
5 Clean sampling mechanism	(/)	()	()				

Notes:

* For all Parts, NA is defined as NOT APPLICABLE

** If you have ticked 'NOT DONE', then justify in Part 8

*** Choose Whichever Applicable



KEMENTERIAN KESIHATAN MALAYSIA

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WORK ORDER NO *n/a*

PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1.	BACKGROUND CHECK					/		
2.	QC TEST					/		

PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :

☐ IEC 60601

☐ IEC 61010

☐ IEC 62353

Result :

☐ PASS

☐ FAIL

☒ NA

PART 8 NOTES

*NOT APPLICABLE FOR ELECTRICAL SAFETY TEST
DUE TO UNIT RUNNING UNDER SOFTWARE BOOT.



CORRECTIVE MAINTENANCE REQUIRED



FUNCTIONING



NOT FUNCTIONING

WORK ORDER NO *n/a*

NEXT PPM DATE

July 2019

PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.

COMPLETED BY: NOOR AZARUL B AHAMAD
PERAK LAB SPECIALIST

Quantum Medical Solution Sdn. Bhd

No 10 B, Persiaan Greentown 4c

Greenway Avenue, 30450 Ipoh, Perak

Tel/fax : 05-2461991 Hp : 012-39648013

DATE :

7/1/2019

BACKGROUND

WBC	0.0	WBC	{ 5 }
RBC	0.00		
HGB	0.0	100 200 300	
HCT	0.0	RBC	{ 5 }
MCV			(Ht)
MCH		100 200	
MCHC		PLT	{ 5 }
PLT	0		
		2 10 20	

JADUAL MINGGUAN PENYELENGGARAAN
"EMERGENCY EYE&SHOWER" MAKMAL
KLINIK KESIHATAN SIMPANG PKDLMS.2017

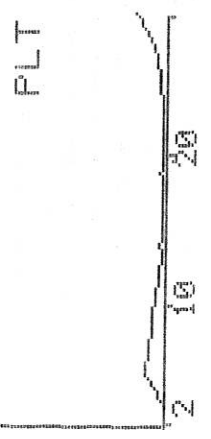
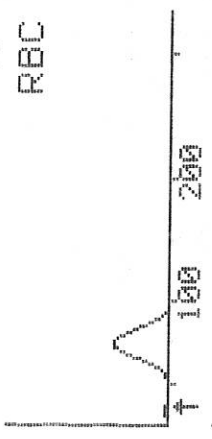
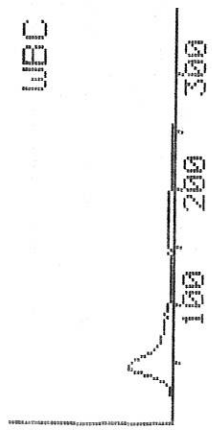
PENYELENGGARAAN EMERGENCY SHOWER	Minggu Bulan	1	2	3	4	TANDA TANGAN
	JANUARI					
1. MEMBERSIHKAN SHOWER						
2. MENGUJI FUNGSI PAM "E.SHOWER"						
3. MEMASTIKAN FUNGSI "EYE SPLASH" OK.						
4. MEMASTIKAN FUNGSI ALIRAN AIR OK.						
	FEBRUARI					
1. MEMBERSIHKAN SHOWER						
2. MENGUJI FUNGSI PAM						

KLIAK RESISTAN SINGAPORE

KLIAK RESISTAN SINGAPORE

07 JAN '19 11:56

ID MEK3DL01071st



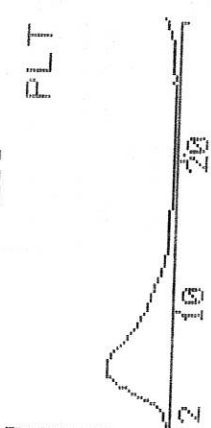
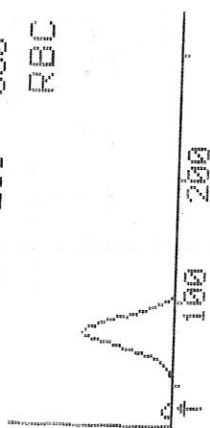
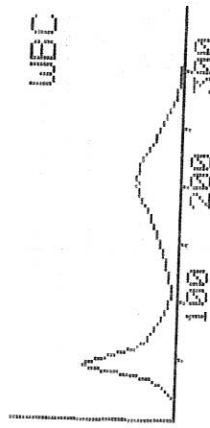
WBC	2.1	10 ³ /μL
RBC	2.42	10 ⁶ /μL
HGB	6.0	g/dL
HCT	18.5	%
MCV	16.4	fL
MCH	24.8	pg
MCHC	32.4	g/dL
PLT	81	10 ³ /μL
LY	(%)	(10 ³ /μL)
MD	56.7	1.2
GR	34.0	0.2
		0.7
RDW	16.9	%
PDCT	0.08	%
MPV	9.7	fL
PDW	17.3	%

[illegible]

KLINIK RESPIRASI SIMPANG 1

07 JAN '19 12:00

ID MEK3DN01071st



WBC	9.61	103 / μ L
RBC	4.70	106 / μ L
HCT	17.00	g / dL
MCHC	100.00	%
MCH	35.97	fL
PLT	247.4	g
	(%)	g / dL
LYM	57.4	103 / μ L
GR	42.6	(103 / μ L)
	5.4	2.00
	5.4	0.47
RDW	16.4	***
RDW	16.4	***
MPV	10.2	fL
PDW	17.3	***

REKOD PENYELENGGARAAN HARI/

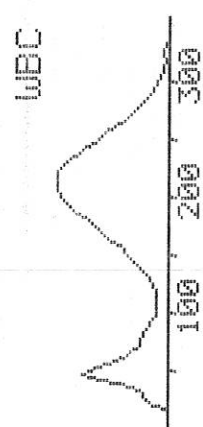
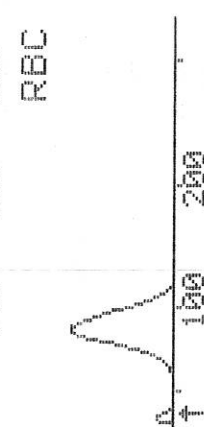

SERIAL NO : 201

(SIDAKAN χ^2 DI RUANG YANG BERKAITAN)

[illegible]

DIDAN DISAHKAN OLEH:

KLINIK KESIHATAN SIMPANG 1

07 JAN '19 12:03	ID	MEK3DH01071st	
 <p>WBC</p>	WBC	20.76	10 ³ /μL
	RBC	5.10	10 ⁶ /μL
	HCT	104.7	g/dL
	MCV	20.5	fL
 <p>RBC</p>	MCHC	34.2	g/dL
	MCH	24.5	10 ³ /μL
	PLT	12	(10 ³ /μL)
	LY	10.3	3.95
 <p>PLT</p>	MD	2.1	16.5
	GR	7.1	%
	RDW	15.4	%
	PCT	0.46	%
	MPV	9.0	fL
	PDW	17.4	%

SERIAL NO : 20

(SIDAKAN ✓ DI RUANG YANG BERKAITAN)

[illegible]

DIDAN DISAHKAN OLEH: