



INSTRUMENT DETAILS



Micropath Laboratory,
OmPlaza, Konda Lane,
Laxmipuri, Kolhapur, 416002.

INSTRUMENT NAME	ISE Electrolyte Analyzer
INSTRUMENT NUMBER	ML/INST - 02
SERIAL NUMBER	LTE 20585
MODEL NUMBER	Microlyte
MANUFACTURER'S NAME	Crystal Diagno Vision
VENDOR NAME	Microlab Instrument
INSTALLATION DATE	14/05/2024
DATE ENTERING IN TO SERVICE	14/05/2024
LOCATION	Kolhapur



Date- 14/05/2024

IQ (Installation Qualification)

To,

Micropath Laboratory, Kolhapur

Sr No	Utilities to be checked	Observation	Inference	Verified by & Date
1	Environmental condition as per requirement : Ambient Temp Range : <u>05 - 32 °C</u> Humidity Range: <u>Less Than 80 %</u>	Temp : <u>24 °C</u> Humidity : <u>52%</u>	YES	14/05/2024
2	Adequate space for installation : Minimum in FT. <u>3.0(W) X 2.5(D)</u>	OK FT. <u>4.0(W) X 2.6(D)</u>	YES	14/05/2024
3	Electrical Outlets : Actual voltage on site : <u>140-250 V</u>	230 V AC Regular	YES	14/05/2024

The instrument has been verified for the following:

Sr No.	Verification		Verified by & Date
1	Equipment is identified	YES	14/05/2024
2	Manufacturer's specifications are included	YES	14/05/2024
3	Accessories / consumables are listed	YES	14/05/2024



Equipment Description:

Instrument Identification		Verified By	Date
Equipment Name	ISE based Electrolyte Analyser	Mr. Abhijit Jagtap	14/05/2024
Model	Microlyte (Na/K/ICA)	Mr. Abhijit Jagtap	14/05/2024
Manufacturer	MICROLAB INSTRUMENTS	Mr. Abhijit Jagtap	14/05/2024
Marketed By	CRYSTAL DIAGNOVISION	Mr. Abhijit Jagtap	14/05/2024
Serial Number	LTE20585	Mr. Abhijit Jagtap	14/05/2024
SUPPLY	AC-220 V 50Hz POWER- 80VA	Mr. Abhijit Jagtap	14/05/2024

Validation By:

Name: Mr. Abhijit Jagtap

Designation: Service Engineer

Signature:



Date- 14/05/2024

TO,

MICROPATH LABORATORY,

Kolhapur

OQ (Operational Qualification)Equipment is working on ISE based maintenance free electrodes

Following is a list of tests to be performed and verified:

Test No	Test name	Test purpose	Verified by and Date
1	Self-checks	Initializing the instrument	14/05/2024
2	Mechanism operation Test	To test the mechanism of the instrument	14/05/2024
3	Printer	To test the working condition of the printer	14/05/2024
4	Calibration	For verification of the factory set calibration	14/05/2024
5	Quality control	For verification of calibration and validation of sample analysis	14/05/2024

Validation By :

Name: Mr. Abhijit Jagtap

Designation: S.O. Engineer

Signature



PERFORMANCE CERTIFICATE/CALIBRATION REPORT

To,
Micropath Laboratory,
Kolhapur,

Date- 14/05/2024

As desired by you please find enclosed herewith the report.

Name of System	<i>Microlyte Electrolytes Analyzer</i>
Sr. No.	LTE20585
Calibration done on	14/05/2024
Next calibration Due on	13/05/2025
Calibrated By	Mr. Abhijeet Jagtap

Instrument calibration Values,

Electrode	Na+	K+
Results	139.3	4.09
Mean	141	3.9
Range	134-148	3.59-4.21

All value is within range.
Checked instrument all found ok.



Crystal Diagnosis
Service Engineer.

Pump Constant: 9964

Cal-B Voltage
Na: 16.874 mv
K: 37.033 mv
iCa: 59.633 mv

Cal-A Voltage
Na: 36.210 mv
K: 55.668 mv
iCa: 48.852 mv

CALIBRATION SLOPE:

Na = **62.352** mv / decade
K = **61.902** mv / decade
iCa = **43.913** mv / decade

14 / 05 / 2024 12:10:31 AM

* SLOPE RANGE *
MIN MAX
Na: 38.00-75.00 mV/Dec
K: 38.00-75.00 mV/Dec
iCa: 15.00-55.00 mV/Dec

MicroPath Laboratory
ISE ELECTROLYTE ANALYZER

Sample Voltage
Na: 35.646 mv
K: 55.088 mv
iCa: 46.274 mv

Cal-A Voltage
Na: 36.728 mv
K: 55.744 mv
iCa: 48.379 mv

PID: 366

Name: Control L2

Na = **139.3** mMol / L
K = **4.099** mMol / L
iCa = **4.466** mg / dL
TCa = **8.933** mg / dL

14 / 05 / 2024 12:12:51 AM

* SERUM NORMAL RANGE *
MIN MAX
Na: 135.0-150.0 mMol / L
K: 3.500-5.500 mMol / L
iCa: 4.389-5.386 mg / dL

MicroPath Laboratory
ISE ELECTROLYTE ANALYZER

Sample Voltage
Na: 35.448 mv
K: 50.315 mv
iCa: 46.900 mv

Cal-A Voltage
Na: 36.835 mv
K: 55.775 mv
iCa: 48.440 mv

PID: 367
Name: Dhumma
Na = **137.7** mMol/L
K = **3.428** mMol/L(L)
iCa = **4.601** mg/dL
TCa = **9.201** mg/dL

14/05/2024 12:15:34 AM

* SERUM NORMAL RANGE *
MIN MAX
Na: 135.0-150.0 mMol/L
K: 3.500-5.500 mMol/L
iCa: 4.389-5.386 mg/dL

Sample Voltage
Na: 35.539 mv
K: 50.651 mv
iCa: 46.961 mv

Cal-A Voltage
Na: 36.759 mv
K: 55.653 mv
iCa: 48.379 mv

PID: 368
Name:
Na = **138.6** mMol/L
K = **3.487** mMol/L(L)
iCa = **4.630** mg/dL
TCa = **9.260** mg/dL

14/05/2024 12:17:05 AM

* SERUM NORMAL RANGE *
MIN MAX
Na: 135.0-150.0 mMol/L
K: 3.500-5.500 mMol/L
iCa: 4.389-5.386 mg/dL

Sample Voltage
Na: 35.463 mv
K: 50.437 mv
iCa: 46.854 mv

Cal-A Voltage
Na: 36.774 mv
K: 55.637 mv
iCa: 48.409 mv

PID: 369
Name:
Na = **138.1** mMol/L
K = **3.461** mMol/L(L)
iCa = **4.597** mg/dL
TCa = **9.194** mg/dL

14/05/2024 12:19:04 AM

* SERUM NORMAL RANGE *
MIN MAX
Na: 135.0-150.0 mMol/L
K: 3.500-5.500 mMol/L
iCa: 4.389-5.386 mg/dL

Sample Voltage
Na: 35.493 mv
K: 50.697 mv
iCa: 46.991 mv

Cal-A Voltage
Na: 36.744 mv
K: 55.607 mv
iCa: 48.440 mv

PID: 370
Name:
Na = **138.4** mMol/L
K = **3.499** mMol/L(L)
iCa = **4.623** mg/dL
TCa = **9.245** mg/dL

14/05/2024 12:20:37 AM

* SERUM NORMAL RANGE *
MIN MAX
Na: 135.0-150.0 mMol/L
K: 3.500-5.500 mMol/L
iCa: 4.389-5.386 mg/dL

Certificate Of Training

This Certificate Is Presented To

Avdhut dattataray ghatage

For Successfully Completing The Application Training & User
Maintenance Of Microlyte Electrolyte Analyzer

Rewarding CRYSTAL DIAGNOVISION

Office No - 31/32 , 5th Floor , C Wing , K. K.
Market , Dhankawadi , Pune - 43
Email- crystaldiagnovision@gmail.com



Abhijeet Jagtap
Mr. Abhijeet Jagtap
(Service Engineer)



Umesh Chandgude
Mr. Umesh Chandgude
(Service Engineer)

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Tayyaba mulla

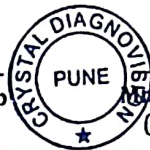
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