DIAMOND®	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 1 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	01

INSTALLATION QUALIFICATION,
OPERATIONAL QUALIFICATION,
PERFORMANCE QUALIFICATION
&
CALIBRATION CERTIFICATE

	LifeTech Biomedical		_	
DIAGNOSTICS	INSTALLATION / OPERATIONAL/PERFORMANCE		Page 2 of 11	
Techno Medica	QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE			
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01	
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	U I	

VALIDATION REPORT

Equipment Name : Arterial Blood Gas Analyzer

• Equipment Make : Techno Medica, Japan

• Equipment Model No. : GASTAT-720

• Equipment Serial No. : 01067802

• Supplier : LifeTech Biomedical.

LifeTech Biomedical

Address: 604, Suchita Business Park, Nr. Patel Chowk,

Pant nagar, Ghatkopar (E), Mumbai 400 075.

Contact Number: 9321318858

Contact Person: Sagar Satpute.

Email: sagarsatpute@vitanmedical.org, info@vitanmedical.org

	LifeTech Biomedical		_
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 3 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	01

I. APPROVAL OF THE IQ\OQ\PQ PROCEDURE:

3.1 Both "KRM HEALTHCARE, Laxmi Plaza, 436/437, Laxmi Industrial Estate, Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053" and LifeTech Biomedical are jointly responsible for the installation of GASTAT-720 Arterial Blood Gas

Analyzer (Sr. no. - 01067802) in the Pathology Department.

Validation Team from (Vendor):

•	
Name	Prashant Masurkar
Designation	Service Manager
Company	LifeTech Biomedical
Validation Tea	am from Pathology Lab:
Name	
Designation	. Senior Technician
Signature	
Date	

DIAMOND [®]	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 4 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	ΟΊ

Customer Authorizations:

II. INSTRUCTIONS

- 1. This document is to be completed at the time the system installation (Pathology Laboratory) and setup for operation.
- 2. An authorized (Company) representative will check the system and enter the specific data related to installation, operational and performance qualification.
- Employees of KRM HEALTHCARE, Laxmi Plaza, 436/437, Laxmi Industrial Estate,
 Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053 will verify each result and sign the results. The members of the validation team will carry this out.
- 4. All deviation from the normal specification to include any problems with installation will be noted under COMMENTS.

III. SCOPE

This installation Qualification protocol is performed on the **GASTAT-720 Blood gas Analyzer** located in Pathology Department.

This protocol defines the documentation that is used to evaluate the instrument installation in accordance with the manufacturer's specifications and intended use.

Successful completion of this protocol verifies that this instrument has been installed & operated in accordance with the intended usage.

Installation checks are performed to verify that the instrument has been installed with proper connections and utilities.

Operational qualification will evaluate that the instrument have operational features available for the successful operation of instrument in accordance with the manufacturer's specifications.

Performance qualification will verify the actual functioning or performance of instrument.

DIAMOND	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 5 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	O1

IV. Certificate of Purchase Order compliance

I certify to the best of my knowledge, the instrument GASTAT-720 Arterial Blood Gas Analyzer (Sr. no. - 01067802) installed on 13th June 2023 has been installed in compliance with the specifications of the Agreement order/ purchase order.

V. Equipment Description

S.N.	Instrument Identification	Verified by	Date
1	Equipment name: Blood Gas Analyzer		
2	Model: GASTAT 720		
3	Marketed By: LifeTech Biomedical		
4	Equipment ID : -	Prashant Masurkar	13/06/2023
5	Serial No: 01067802	masai kai	
6	Size: As per the specifications given		
7	Power: As per the specifications given		

DIAMOND	LifeTech Biomedical		_
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 6 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	U1

VI. Utilities

Sr.No	Utility	Remark	Verified by	Date
1	Environmental conditions as required.	YES		
	(Free from dust, electrical and magnetic			
	interference),			
	Temperature 22 – 26 °C			
	Humidity 10% to 85%, at 25°C			
2	Adequate space for installation:	YES	Prashant	40/00/0000
	(As per the specifications given)		Masurkar	13/06/2023
3	Electrical Outlets:	YES		
	Actual voltage on site (231 VAC)			
4	Earthing (0.1 to 3 V)	0.8 V		
5	Connected through UPS	YES		
6	Stabilizer	YES		

VII. The instrument has been checked for the following:

Sr	Verification	Remark	Verified by	Date
No.		Kemark	vermed by	Date
1	Instrument is identified	YES		
2	Manufacturer's specification are included	YES	Prashant	13/06/2023
3	Accessories /consumables are listed	YES	Masurkar	13/00/2023
4	Equipment manual from the manufacturer	YES, Online		

DIAMOND	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 7 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	U1

VIII. List of Manuals and Certificates.

Supplier provides the following with the instrument.

1	Operating Manual	Available - Yes Online
2	Purchase order /Agreement Order	Available - Yes
3	Calibration certificate	Available - Yes
4	Training Records	Available - Yes

IX. Maintenance:

The instrument listed within this document will be placed under the control of KRM HEALTHCARE, Laxmi Plaza, 436/437, Laxmi Industrial Estate, Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053 with respect to proper maintenance procedures as detailed in the operator's manual. The maintenance procedures and documents will be filed separately.

A trained analyst using the manuals provided with the instrument can perform basic and operational maintenance and it will be recorded.

X. INSTALLATION PROCEDURE

 Installation of Hardware and software: Follow the instructions mentioned in the Operator Manual.

DIAMOND®	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 8 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	01

XI. OPERATIONAL QUALIFICATION

a) Following features/functions are available in the instrument as per manufacturer's specification and verified:

Test No.	Test Name	Test Purpose	Verified	Date
1	Electronic Test – startup, warm-up	Pass/ Fail	Pass	
2	Flow Test	Normal/abnormal	Normal	
3	Valve Test	Normal/abnormal	Normal	
4	Temperature Test	Normal/abnormal	Normal	
5	Calibration	Calibration Performance	Ok	13/06/2023
6	Quality Control	QC Performance	Ok	1
7	Test Assay	Assay Performance	Ok	

DIAMOND [®]	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 9 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	<u> </u>

XII. PERFORMANCE QUALIFICATION

Performance qualification validates the test procedure performed on the new instrument.

Performance qualification not only validates instrument performance but also test procedure.

All in-house protocols are validated for performance qualification of instrument and method.

PQ Results - Pass

	LifeTech Biomedical		_	
DIAGNOSTICS	INSTALLATION / OPERATIONAL/PERFO	RMANCE	Page 10 of 11	ì
■Techno Medica	QUALIFICATION WITH CALIBRATION & CERTIFICATE	_	10 01 11	Ì
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01	Ì
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	U I	Ì

CALIBRATION CERTIFICATE

This to certify that GASTAT 720 Blood Gas Analyzer with serial no.: 01067802 installed in KRM HEALTHCARE, Laxmi Plaza, 436/437, Laxmi Industrial Estate, Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053, is self-calibration equipment and does not require external calibration.

The functioning of electrodes is tested by using Quality Control. Their range and value obtained is mentioned hereunder & they are found to be satisfactory.

QC	Parameter	Ranges	Value obtained in the machine
Level 02	pН	7.405 (7.355-7.455)	7.410
Gastrol	pCO2	41.2 (35.2-47.2)	42.8
QC	pO2	108 (94-122)	110
04112219	Na+	140 (134-146)	141
2023/12	K+	4.50 (4.20-4.80)	4.55
	Cl-	101 (96-106)	101.8
	Ca+	1.30 (1.10-1.50)	1.34

Calibration Done On:-13/06/2023 Next Calibration Due On:-13/06/2024

Note: - Calibration Validity is only one year.

For Life Tech Biomedical

DIAMOND [®]	LifeTech Biomedical		
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 11 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	<u> </u>

Date-13/06/2023

Certificate of Training

This is to certify that below mentioned Staff from KRM HEALTHCARE, Laxmi Plaza, 436/437, Laxmi Industrial Estate, Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053 have received basic user training for the GASTAT-720 Blood Gas analyzer, Make: Techno Medica Japan;

Name	Designation
1. Kumudini Rawool	Lab Incharge
2. Ajay Junjut	Sr. Technician
3. Bhoomika Ranva	Jr. Technician
4. Divya Bomble	Jr. Technician
5. Tejal Nayak	Jr. Technician
6. Freeza Rentia	Jr. Technician
7. Katishma Mote	Jr. Technician
8. Ketan Gujat	Jr. Technician
9. Aashish Kalambate	Jr. Technician

Topics covered:

- Application training
- Theory & hands-on

Training given by: - Mr. Prashant Masurkar

DIAMOND®	LifeTech Biomedical		_
Techno Medica	INSTALLATION / OPERATIONAL/PERFORMANCE QUALIFICATION WITH CALIBRATION & TRAINING CERTIFICATE		Page 12 of 11
Document No.:	IQ/OQ/PQ/ LTB/ GASTAT	Revision	01
Equipment Name:	GASTAT 700 Blood Gas Analyzer	No.:	U1

Validation procedures performed by (Vendor) Name:- Prashant Masurkar **Designation: -Service Manager Company :- LifeTech Biomedical** Validation procedures performed by Clinical Lab: **Designation: - Sr.Technician** Signature Date Validation procedures reviewed by Clinical Lab: **Designation:- Pathologist** Signature

Date