

Enabling Better Outcomes

CALIBRATION CERTIFICATE

This is to certify that Biochemistry Analyser SF-3000 PLUS bearing Serial No.4512-1493 which has been installed at ANNAI DIAGNOSTIC LAB, KULLANCHAVADI has been tested on the following aspects

1. LIGHT SOURCE :

Constant Light intensity for each filter.

2. CALIBRATION :

The Absorbance Factor according to the Factory set calibration.
The Read Cell Temperature according to the Factory set calibration.

3. FILTERS :

FILTERS(nm)	VOLTS(v)
340	3.90
405	5.00
505	5.90
545	6.30
580	6.30
630	6.50

Quality of the individual filters viz.340, 405, 505, 545, 580 and 630 were checked for calibration through the instrument software and calibrated.

On complete testing of the unit we found that the unit is working satisfactorily and used to carry out the necessary functions.

Date of Calibration : 25-08-2021
Next Calibration Due : 24-08-2022

For CPC DIAGNOSTICS PVT LTD

Authorised Signatory


25/08/2021

1) GLUCOSE identi

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.046
Using Stored Blank
S1 0.733 100.00
Factor = 300.30
Using Stored Curve
-- Blank Abs. Range --
From: 0.000 to: 0.200
-- Normal Range --
From: 75.00 to: 115.00
-- Valid Range --
From: 0.00 to: 500.00

S# ABS mg/dl Intrap

1 0.488 116.52 HIGH
Test Ended

2) UREA

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.065
Using Stored Blank
S1 0.246 50.00
Factor = 203.25
Using Stored Curve
-- Normal Range --
From: 10.00 to: 50.00
-- Valid Range --
From: 0.00 to: 100.00

S# ABS mg/dl Intrap

1 0.116 23.58
Test Ended

3) CREAT identi

Tube Mode
Stored Curve Data
S# dAbs mg/dl Intrap

B 0.137
Using Stored Blank
S1 0.0748 2.00
Factor = 26.74
Using Stored Curve
Lag Time (sec): 20
Fixed Time (sec): 60
-- Normal Range --
From: 0.60 to: 1.10
-- Valid Range --
From: 0.00 to: 15.00

S# dAbs mg/dl Intrap

1 0.0591 1.58 HIGH
Test Ended

42) BILI-T-BIO

Tube Mode
Factor = 13.00
Stored Curve Data
S# ABS

B 0.000
Using Stored Blank

S# ABS mg/dl Intrap

1 0.149 1.94
Test Ended

51) Protin-Bio

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.132
Using Stored Blank
S1 0.331 6.85
Factor = 20.69
Using Stored Curve
Use Control:
Normal Control

S# ABS mg/dl Intrap

1 0.213 4.41
Test Ended

47) ALBUMIN-ACCUREX

Tube Mode
Stored Curve Data
S# ABS g/dl Intrap

B 0.038
Using Stored Blank
S1 0.748 5.00
Factor = 6.68
Using Stored Curve

S# ABS g/dl Intrap

1 0.454 3.03
Test Ended

48) URIC ACID-BIO

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.041
Using Stored Blank
S1 0.107 6.00
Factor = 56.07
Using Stored Curve

S# ABS mg/dl Intrap

1 0.084 4.71
Test Ended

5) CHOL identi

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.050
Using Stored Blank
S1 0.307 200.00
Factor = 651.47
Using Stored Curve
-- Blank Abs. Range --
From: to: 0.200
-- Normal Range --
From: 0.00 to: 200.00
-- Valid Range --
From: 0.00 to: 700.00

S# ABS mg/dl Intrap

1 0.173 112.70
Test Ended

6) TRIGLYCERIDES

Tube Mode
Stored Curve Data
S# ABS mg/dl Intrap

B 0.073
Using Stored Blank
S1 0.226 200.00
Factor = 884.96
Using Stored Curve
-- Blank Abs. Range --
From: to: 0.200
-- Normal Range --
From: 0.00 to: 150.00
-- Valid Range --
From: 0.00 to: 1000.00

S# ABS mg/dl Intrap

1 0.166 146.90
Test Ended

Enabling Better Outcomes

INSTALLATION QUALIFICATION (IQ)

INSTRUMENT DESCRIPTION

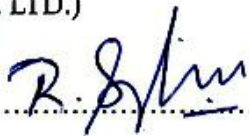
MODEL NO : Stat Fax 3000 Pjus
SERIAL NO : 4512-1493
MANUFACTURER : AWARENESS TECHNOLOGIES INC, USA
DISTRIBUTOR : CPC DIAGNOSTICS PVT. LTD
No. 324, KHADI GRAMMODYOG COMPLEX,
AVVAI SHANMUGAM SALAI, GOPALPURAM,
CHENNAI-86

CUSTOMER NAME : ANNAI DIAGNOSTIC LAB, KULLANCHAVADI

DATE OF INSTALLATION : 24/10/2017

ENGINEER (FOR CPC DIAGNOSTICS PVT. LTD.)

SIGNATURE





NAME

: Mr .R. SURAJ KUMAR

DESIGNATION

: DEPUTY GENERAL MANAGER

COMPANY

: CPC DIAGNOSTICS PVT. LTD.

CUSTOMER (ANNAI DIAGNOSTIC LAB, KULLANCHAVADI)

SIGNATURE



NAME

: M. LISA

DESIGNATION

: LAB. TECHNICIAN & PROPRIETOR

CORPORATE OFFICE

No.70/6, Old No.108/6, 4th floor, Westminster, Dr. Radhakrishnan Salai, Mylapore, Chennai - 600 004.

Phone No: 044-23460168/169

Enabling Better Outcomes

INSTALLATION REQUIREMENTS:

Installation Environment Conditions

Place should not be subjected to direct sunlight
Place should be flat and minimum of dust.

Power Supply

Voltage 220-240V AC
1.0 KVA Online UPS.

Temperature And Humidity Conditions

The temperature of the analyzer room should be between 18 - 30°C
The temperature fluctuation during the analysis should be $\pm 2^\circ\text{C}$

1. Dimensions Of System Main Units (Unit: mm)

40cm (L) X 37cm (W) X 14cm (H), (30 cm lid opened) 6.4 Kg

VERIFIED BY: MR.R.SURAJ KUMAR

REVIEWED BY:

(FOR ANNAI DIAGNOSTIC LAB, KULLANCHAVADI)


SIGNATURE: 


SIGNATURE:

Enabling Better Outcomes PERFORMANCE QUALIFICATION

FILTER VOLTAGES – All wave length voltage should be within 2 to 10 volts

Filters (nm)	Volts (v)
340	3.30
405	6.17
505	5.96
545	5.64
580	6.62
630	4.50

PRECISION CHECK

This module is highlighting the reproducibility and pipetting accuracy of the system. Measuring criteria

1. One end point chemistry
2. One kinetic chemistry
3. Large sample chemistry
4. Small sample chemistry
5. R1 only
6. R1 + R2

BY DOING PRECISION CHECK WITH GLUCOSE, ALT, CREATININE ABOVE REQUIREMENT WILL BE COMPLETED.

HERE BY I'm VERIFYING THAT THE CONTROL RESULT OF THE EXECUTED PARAMETERS ARE WITHIN THE SD RANGE AND CV RANGE.

VERIFIED BY: MR.R.SURAJ KUMAR

REVIEWED BY:
(FOR ANNAI DIAGNOSTIC LAB, KULLANCHAVADI)

SIGNATURE:



SIGNATURE:



everlife

CPC Diagnostics

CPC DIAGNOSTICS PVT LTD
REGISTERED OFFICE
No.9, 5th floor, Gokul Tower,
9 & 10, CP Ramaswamy Road,
Alwarpet, Chennai - 600 018
Tel: +91-44-24993989
Email: sales@cpodiagnosics.in
CIN: U52599TN1991PTC021095

Enabling Better Outcomes **OPERATIONAL QUALIFICATION**

ANALYSER CHECK

- FILTER VOLTAGES
- TEMPERATURE IN CUVET HOLDER
- TEMPERATURE IN INCUBATOR
- LAMP CONDITION

REMARK

OK
OK
OK
GOOD

VERIFIED BY: Mr.R.SURAJ KUMAR

REVIEWED BY:
(FOR ANNAI DIAGNOSTIC LAB, KULLANCHAVADI)

R. Suraj Kumar

SIGNATURE:



[Signature]

SIGNATURE:

GLUCOSE - Oxidase / Peroxidase Method

Kit Name : Biosystem

Month / Year: March - 2022

Equip. Name:	CPC Statfax 3000 +
QC Manufacture	CPC Diagnostic

Lot.#	141 - D
Exp. Date	30/04/2024

TARGET	
Mean	117.22
SD	4.15
CV(%)	3.54

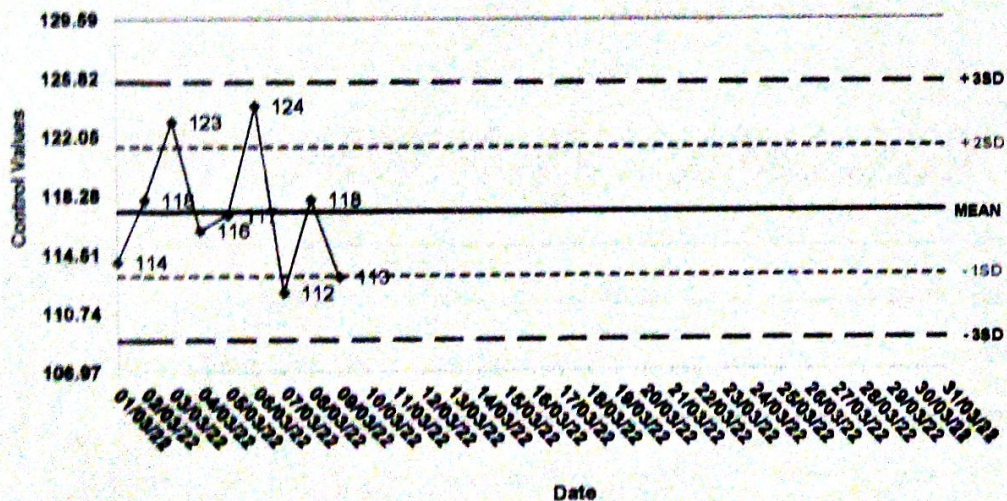
Day to Day	
Mean	117.22
SD	4.15
CV(%)	3.54
Mu	6.93

FORMAT AXIS SCALE	
Minimum	104.78
Maximum	129.66
Major Unit	4.15
Minor Unit	4.15
Horizontal X Axis	104.78

Days	Control Values
1-Mar	114
2-Mar	118
3-Mar	123
4-Mar	116
5-Mar	117
6-Mar	124
7-Mar	112
8-Mar	118
9-Mar	113
10-Mar	
11-Mar	
12-Mar	
13-Mar	
14-Mar	
15-Mar	
16-Mar	
17-Mar	
18-Mar	
19-Mar	
20-Mar	
21-Mar	
22-Mar	
23-Mar	
24-Mar	
25-Mar	
26-Mar	
27-Mar	
28-Mar	
29-Mar	
30-Mar	
31-Mar	

(+3SD)	(+2SD)	(+1SD)	MEAN	(-1SD)	(-2SD)	(-3SD)
129.66	125.82	121.37	117.22	113.08	108.93	104.78

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

UREA - Modified Berthlot Method

Kit Name : Biosystem

Month / Year: March - 2022

Equip. Name:	CPC Statfax 3000 +
QC Manufacture	CPC Diagnostics

Lot.#	131
Exp. Date	31.03.2024

TARGET	
Mean	29.74
SD	1.07
CV(%)	3.59

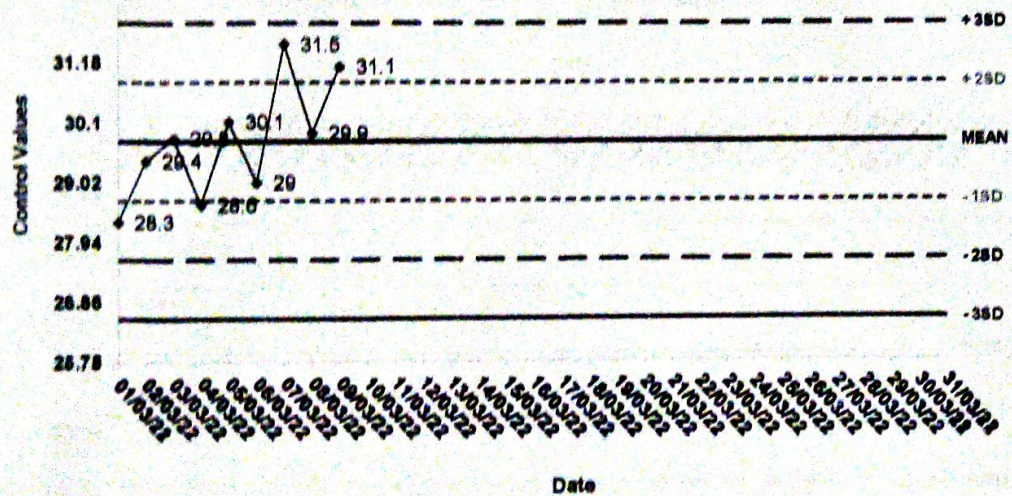
Day to Day	
Mean	29.74
SD	1.07
CV(%)	3.59
Mu	7.04

FORMAT AXIS SCALE	
Minimum	26.54
Maximum	32.95
Major Unit	1.07
Minor Unit	1.07
Horizontal X Axis	26.54

Days	Control Values
1-Mar	28.3
2-Mar	29.4
3-Mar	29.8
4-Mar	28.6
5-Mar	30.1
6-Mar	29
7-Mar	31.5
8-Mar	29.9
9-Mar	31.1
10-Mar	
11-Mar	
12-Mar	
13-Mar	
14-Mar	
15-Mar	
16-Mar	
17-Mar	
18-Mar	
19-Mar	
20-Mar	
21-Mar	
22-Mar	
23-Mar	
24-Mar	
25-Mar	
26-Mar	
27-Mar	
28-Mar	
29-Mar	
30-Mar	
31-Mar	

(+3SD)	(+2SD)	(+1SD)	MEAN	(-1SD)	(-2SD)	(-3SD)
32.95	31.68	30.61	29.74	28.68	27.61	26.54

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

Creatinine - Jaffe's Kinetic Method

Kit Name - Biosystem

Month / Year: March - 2022

Equip. Name	CPC Steffax 3000 +
QC Manufacture	CPC Diagnostics

Lot #	154
Exp. Date	31/03/2024

TARGET	
Mean	1.52
SD	0.04
CV(%)	2.69

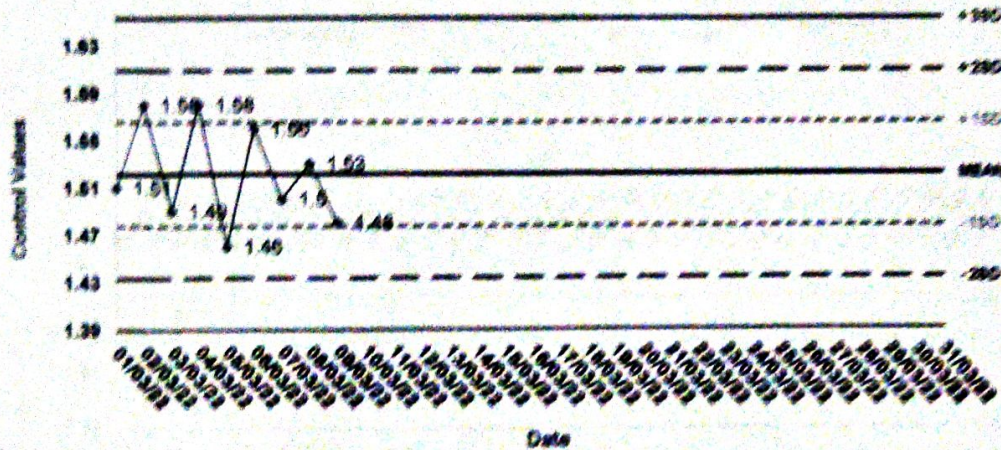
Day to Day	
Mean	1.52
SD	0.04
CV(%)	2.69
Qty	5.57

FORMAT AXIS SCALE	
Minimum	1.39
Maximum	1.65
Major Unit	0.04
Minor Unit	0.04
Horizontal X Axis	1.39

Days	Control Values
1-Mar	1.51
2-Mar	1.58
3-Mar	1.49
4-Mar	1.58
5-Mar	1.46
6-Mar	1.56
7-Mar	1.5
8-Mar	1.53
9-Mar	1.48
10-Mar	
11-Mar	
12-Mar	
13-Mar	
14-Mar	
15-Mar	
16-Mar	
17-Mar	
18-Mar	
19-Mar	
20-Mar	
21-Mar	
22-Mar	
23-Mar	
24-Mar	
25-Mar	
26-Mar	
27-Mar	
28-Mar	
29-Mar	
30-Mar	
31-Mar	

(+3)SD	(+2)SD	(+1)SD	MEAN	(-1)SD	(-2)SD	(-3)SD
1.66	1.61	1.57	1.52	1.48	1.43	1.39

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

BILIRUBIN - Diazoized Sulfanilic Method

Month / Year: March - 2022

Equip. Name:	CPC Staffax 3000 +
QC.Manufacture	CPC Diagnostics

Lot.#	162 -B
Exp. Date	31.10.2023

TARGET	
Mean	2.13
SD	0.13
CV(%)	6.05

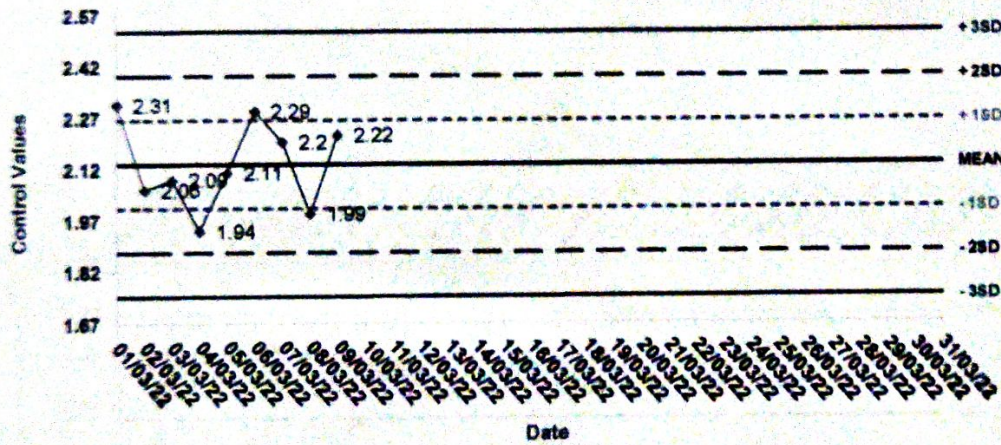
Day to Day	
Mean	2.13
SD	0.13
CV(%)	6.05
Mu	11.86

FORMAT AXIS SCALE	
Minimum	1.75
Maximum	2.52
Major Unit	0.13
Minor Unit	0.13
Horizontal X Axis	1.75

Days	Control Values
1-Mar	2.31
2-Mar	2.06
3-Mar	2.09
4-Mar	1.94
5-Mar	2.11
6-Mar	2.29
7-Mar	2.2
8-Mar	1.99
9-Mar	2.22
10-Mar	
11-Mar	
12-Mar	
13-Mar	
14-Mar	
15-Mar	
16-Mar	
17-Mar	
18-Mar	
19-Mar	
20-Mar	
21-Mar	
22-Mar	
23-Mar	
24-Mar	
25-Mar	
26-Mar	
27-Mar	
28-Mar	
29-Mar	
30-Mar	
31-Mar	

(+)-3SD	(+)-2SD	(+)-1SD	MEAN	(-)-1SD	(-)-2SD	(-)-3SD
2.52	2.39	2.26	2.13	2.01	1.88	1.75

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

PROTEIN - Biuret Method

Kit Name : Biosystem

Month / Year: March - 2022

Equip. Name:	CPC Staffax 3000 +
QC. Manufacture r	CPC Diagnostics

Lot.#	123
Exp. Date	30.11.2022

TARGET	
Mean	4.86
SD	0.23
CV(%)	4.74

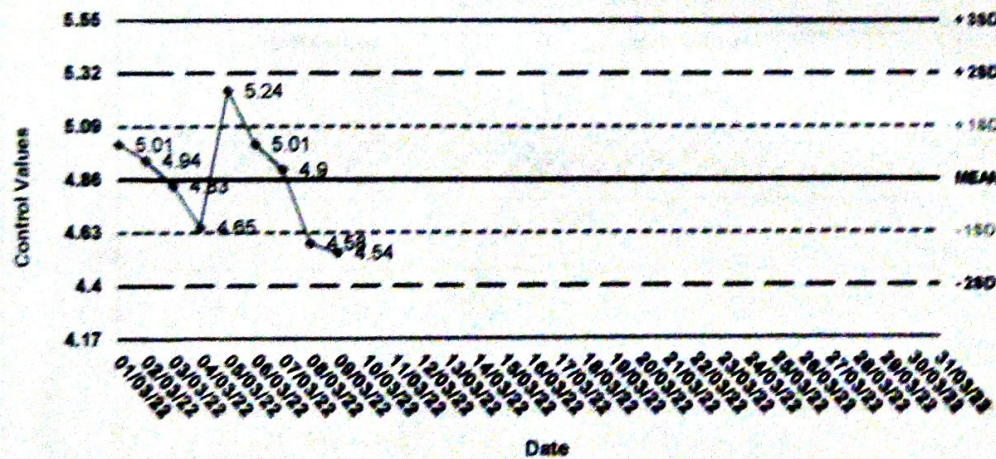
Day to Day	
Mean	4.86
SD	0.23
CV(%)	4.74
Mu	9.28

FORMAT AXIS SCALE	
Minimum	4.17
Maximum	5.55
Major Unit	0.23
Minor Unit	0.23
Horizontal X Axis	4.17

Days	Control Values
1-Mar	5.01
2-Mar	4.94
3-Mar	4.83
4-Mar	4.65
5-Mar	5.24
6-Mar	5.01
7-Mar	4.9
8-Mar	4.58
9-Mar	4.54
10-Mar	
11-Mar	
12-Mar	
13-Mar	
14-Mar	
15-Mar	
16-Mar	
17-Mar	
18-Mar	
19-Mar	
20-Mar	
21-Mar	
22-Mar	
23-Mar	
24-Mar	
25-Mar	
26-Mar	
27-Mar	
28-Mar	
29-Mar	
30-Mar	
31-Mar	

(+)-3SD	(+)-2SD	(+)-1SD	MEAN	(-)-1SD	(-)-2SD	(-)-3SD
5.55	5.32	5.09	4.86	4.63	4.40	4.17

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

ALBUMIN - Bromocresol Green Method

Kit Name - Biosystem Month / Year: March - 2022

Equip. Name:	CPC Staffax 3000 +
QC Manufacturer:	CPC Diagnostics

Lot #	129
Exp. Date	31/03/2023

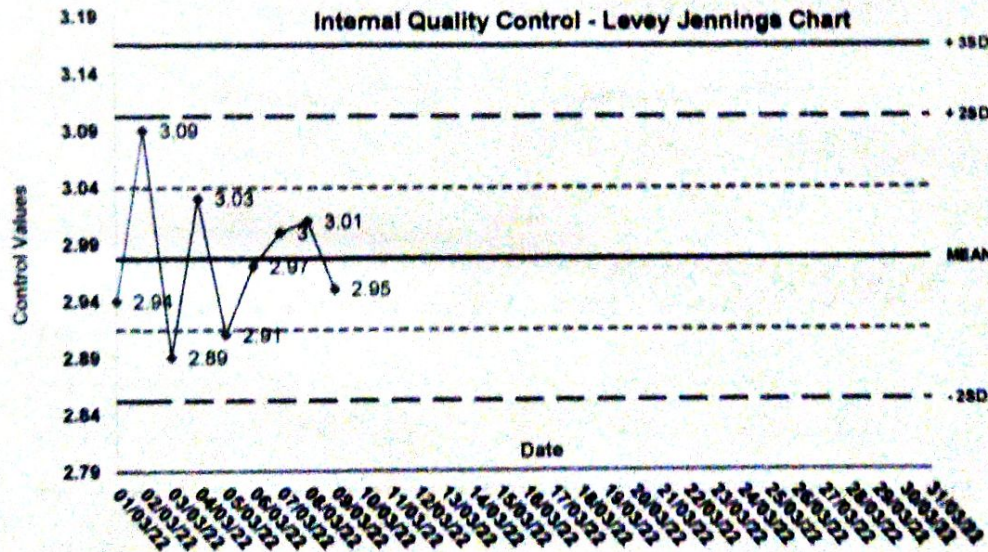
TARGET	
Mean	2.98
SD	0.06
CV(%)	2.10

Day to Day	
Mean	2.98
SD	0.06
CV(%)	2.10
Mu	4.13

FORMAT AXIS SCALE	
Minimum	2.79
Maximum	3.16
Major Unit	0.06
Minor Unit	0.06
Horizontal X Axis	2.79

Days	Control Values
01/03/2022	2.94
02/03/2022	3.09
03/03/2022	2.89
04/03/2022	3.03
05/03/2022	2.91
06/03/2022	2.97
07/03/2022	3
08/03/2022	3.01
09/03/2022	2.95
10/03/2022	
11/03/2022	
12/03/2022	
13/03/2022	
14/03/2022	
15/03/2022	
16/03/2022	
17/03/2022	
18/03/2022	
19/03/2022	
20/03/2022	
21/03/2022	
22/03/2022	
23/03/2022	
24/03/2022	
25/03/2022	
26/03/2022	
27/03/2022	
28/03/2022	
29/03/2022	
30/03/2022	
31/03/2022	

(+3SD)	(+2SD)	(+1SD)	MEAN	(-1SD)	(-2SD)	(-3SD)
3.16	3.10	3.04	2.98	2.91	2.85	2.79



Prepared By: _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

URIC ACID - Uricase / Peroxidase Method

Kit Name : Biosystem

Month / Year: March -2022

Equip. Name:	CPC Staffax 3000 +
QC Manufacturer	CPC Diagnostics

Lot.#	147
Exp. Date	31/03/2023

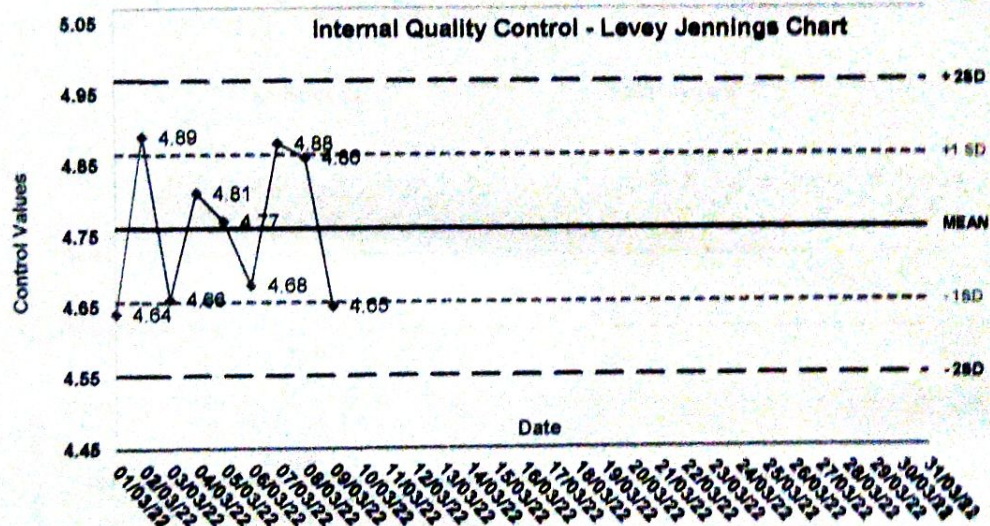
TARGET	
Mean	4.76
SD	0.10
CV(%)	2.19

Day to Day	
Mean	4.76
SD	0.10
CV(%)	2.19
Mu	4.29

FORMAT AXIS SCALE	
Minimum	4.45
Maximum	5.07
Major Unit	0.10
Minor Unit	0.10
Horizontal X Axis	4.45

Days	Control Values
01/03/2022	4.64
02/03/2022	4.89
03/03/2022	4.66
04/03/2022	4.81
06/03/2022	4.77
06/03/2022	4.68
07/03/2022	4.88
08/03/2022	4.86
08/03/2022	4.65
10/03/2022	
11/03/2022	
12/03/2022	
13/03/2022	
14/03/2022	
15/03/2022	
16/03/2022	
17/03/2022	
18/03/2022	
19/03/2022	
20/03/2022	
21/03/2022	
22/03/2022	
23/03/2022	
24/03/2022	
25/03/2022	
26/03/2022	
27/03/2022	
28/03/2022	
29/03/2022	
30/03/2022	
31/03/2022	

(+) \pm 3SD	(+) \pm 2SD	(+) \pm 1SD	MEAN	(-) \pm 1SD	(-) \pm 2SD	(-) \pm 3SD
5.07	4.97	4.86	4.76	4.66	4.55	4.45



Prepared By : _____ Approved By: _____

CHOLESTEROL - Oxidase / Peroxidase Method

Kit Name : Biosystem

Month / Year: March -2022

Equip. Name:	CPC Staffax 3000 +
QO. Manufacturer:	CPC Diagnostics

Lot #	151
Exp. Date	29/02/2024

TARGET	
Mean	109.00
SD	4.03
CV(%)	3.70

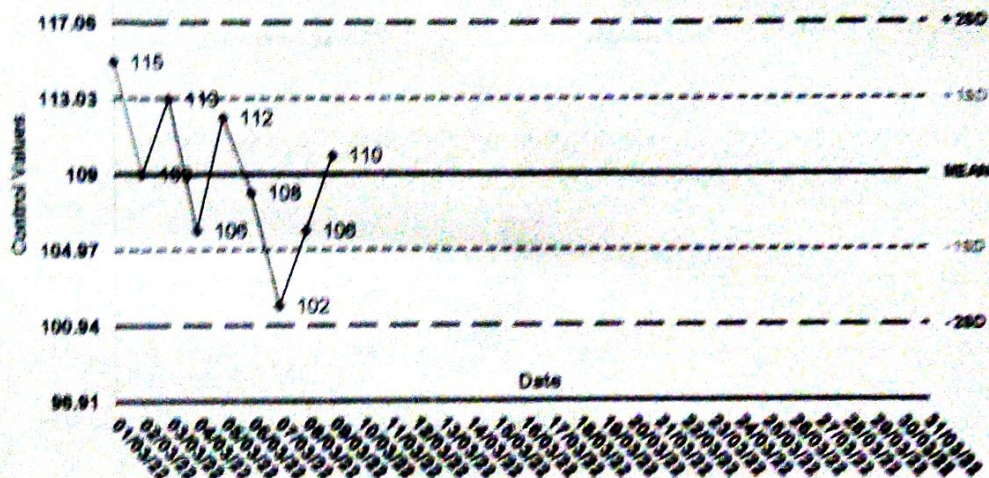
Day to Day	
Mean	109.00
SD	4.03
CV(%)	3.70
Mu	7.25

FORMAT AXIS SCALE	
Minimum	96.91
Maximum	121.09
Major Unit	4.03
Minor Unit	4.03
Horizontal X Axis	96.91

Days	Control Values
01/03/2022	115
02/03/2022	109
03/03/2022	113
04/03/2022	106
05/03/2022	112
06/03/2022	108
07/03/2022	102
08/03/2022	106
09/03/2022	110
10/03/2022	
11/03/2022	
12/03/2022	
13/03/2022	
14/03/2022	
15/03/2022	
16/03/2022	
17/03/2022	
18/03/2022	
19/03/2022	
20/03/2022	
21/03/2022	
22/03/2022	
23/03/2022	
24/03/2022	
25/03/2022	
26/03/2022	
27/03/2022	
28/03/2022	
29/03/2022	
30/03/2022	
31/03/2022	

(+1)SD	(+1)2SD	(+1)SD	MEAN	(-1)SD	(-1)2SD	(-1)SD
121.09	117.06	113.03	109.00	104.97	100.94	96.91

Internal Quality Control - Levey Jennings Chart



Prepared BY : _____ Approved By: _____

ANNAI DIAGNOSTIC LAB - KULLANCHAVADI

TRIGLYCERIDES : Oxidase / Peroxidase Method Kit Name : Bioevstem

Month / Year: March - 2022

Equip. Name:	CPU Statfax 3000 +
QC Manufacturer:	CPC Diagnostics

Lot #	147
Exp. Date	20/03/2024

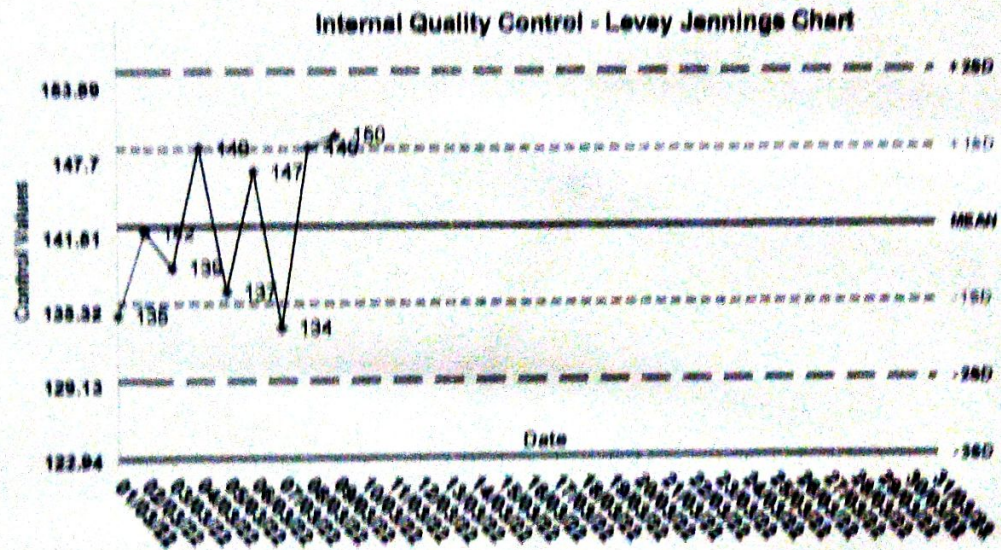
TARGET	
Mean	142.44
SD	6.44
CV(%)	4.52

Day to Day	
Mean	142.44
SD	6.44
CV(%)	4.52
Mu	6.97

FORMAT AXIS SCALE	
Minimum	123.11
Maximum	161.78
Major Unit	6.44
Minor Unit	6.44
Horizontal X Axis	123.11

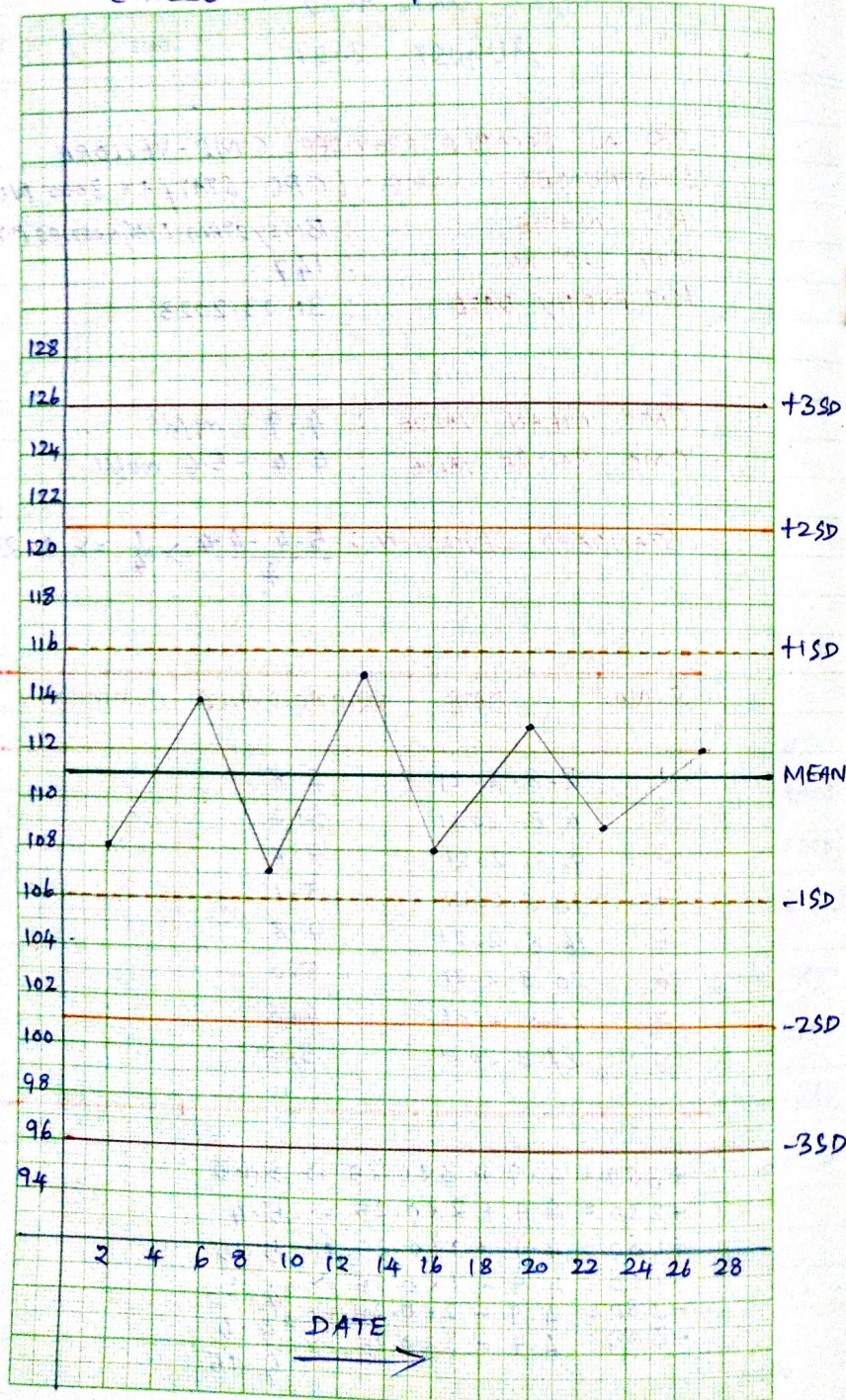
Days	Control Values	(+3SD)	(+2SD)	(+1SD)	MEAN	(-1SD)	(-2SD)	(-3SD)
01/03/2022	136	161.78	148.93	142.44	136.00	129.69	123.11	

Days	Control Values
02/03/2022	142
03/03/2022	139
04/03/2022	149
05/03/2022	137
06/03/2022	147
07/03/2022	134
08/03/2022	149
09/03/2022	160
10/03/2022	
11/03/2022	
12/03/2022	
13/03/2022	
14/03/2022	
15/03/2022	
16/03/2022	
17/03/2022	
18/03/2022	
19/03/2022	
20/03/2022	
21/03/2022	
22/03/2022	
23/03/2022	
24/03/2022	
25/03/2022	
26/03/2022	
27/03/2022	
28/03/2022	
29/03/2022	
30/03/2022	
31/03/2022	



Prepared By: _____ Approved By: _____

CHOLESTEROL - AUGUST - 2021



INTERNAL QUALITY CONTROL

CHOLESTEROL

AUGUST - 2021

Ex. No.

DATE

IQAS PROVIDER NAME : CMC - VELLORE

INSTRUMENT NAME : CPC STATFAX 3000 PLUS

KIT NAME : BIOSYSTEM DIAGNOSTICS PVT. LTD.

KIT LOT No. : 151

KIT EXPIRY DATE : 29.02.2024

CMC MEAN VALUE : 111 mg/dl.

CMC RANGE VALUE : 101 - 121 mg/dl.

STANDARD DEVIATION : $\frac{121-101}{4} \Rightarrow \frac{20}{4} \Rightarrow 5$

S.No.	DATE	CHOLESTEROL VALUE	COMMENTS
1	2.8.2021	108	
2	6.8.2021	114	
3	9.8.2021	107	
4	13.8.2021	115	
5	16.8.2021	108	
6	20.8.2021	113	
7	23.8.2021	109	
8	27.8.2021	112	

+ 3SD = 111 + 3x5 \Rightarrow 126

+ 2SD = 111 + 2x5 \Rightarrow 121

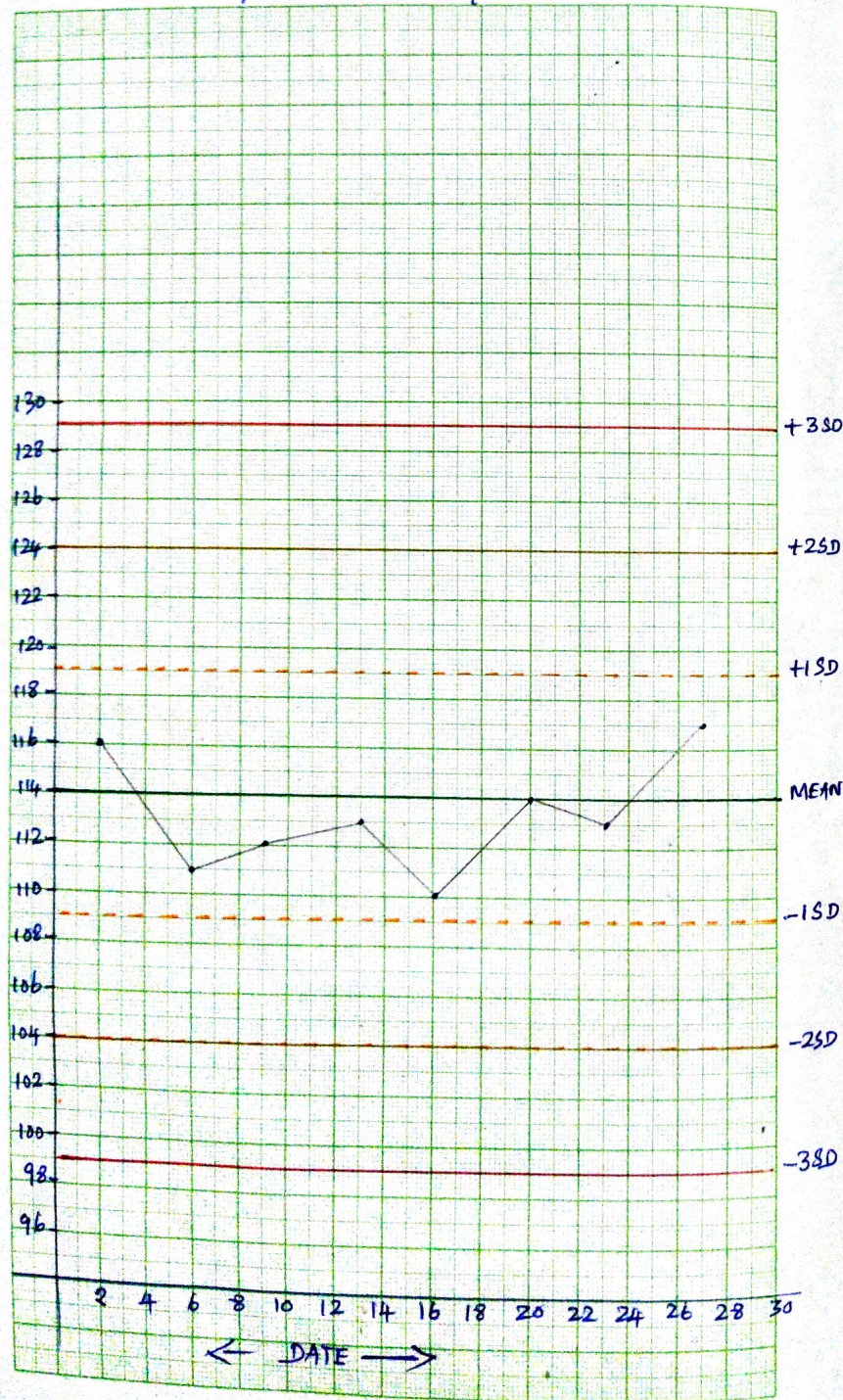
+ 1SD = 111 + 1x5 \Rightarrow 116

- 1SD = 111 - 1x5 \Rightarrow 106

- 2SD = 111 - 2x5 \Rightarrow 101

- 3SD = 111 - 3x5 \Rightarrow 96

GLUCOSE - AUGUST - 2021



INTERNAL QUALITY CONTROL

GLUCOSE

AUGUST - 2021

Ex. No.

DATE

IQ AS SAMPLE PROVIDER: CMC - VELLORE

INSTRUMENT NAME: CPC STAT FAX 3000 PLUS

LOT KIT NAME : BIOSYSTEM DIAGNOSTICS PVT LTD.

KIT LOT No. : 175 A

KIT EXPIRY DATE : 30.08.2023

CMC MEAN VALUE : 114 mg/dl.

CMC RANGE VALUE : 104 - 124 mg/dl.

STANDARD DEVIATION : $\frac{124 - 104}{4} \Rightarrow \frac{20}{4} \Rightarrow 5$

1 SD = 1 x 5 = 5

2 SD = 2 x 5 = 10

3 SD = 3 x 5 = 15

+ 3 SD = MEAN VALUE + 3 SD $\Rightarrow 114 + 15 \Rightarrow 129$

+ 2 SD = MEAN VALUE + 2 SD $\Rightarrow 114 + 10 \Rightarrow 124$

+ 1 SD = MEAN VALUE + 1 SD $\Rightarrow 114 + 5 \Rightarrow 119$

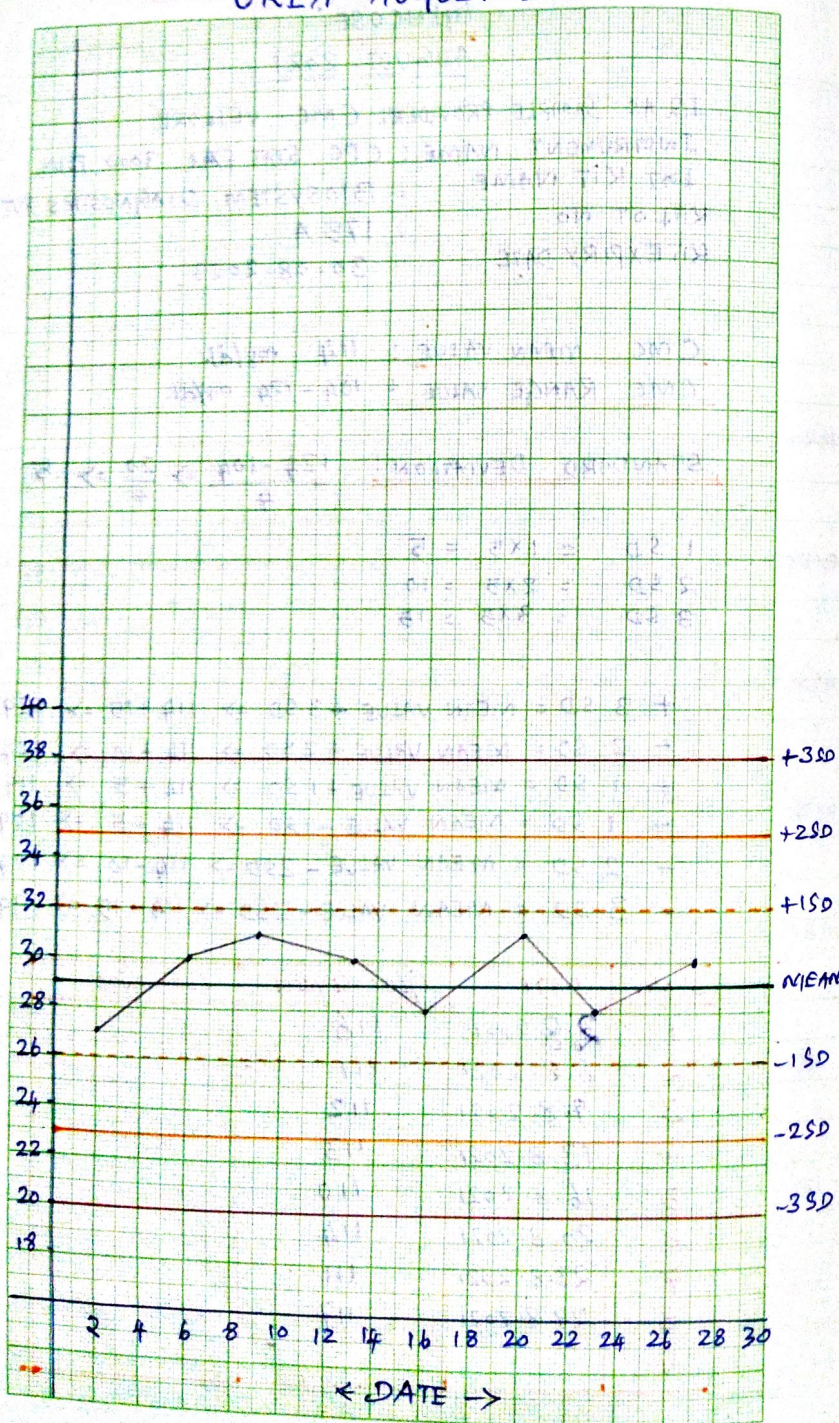
- 1 SD = MEAN VALUE - 1 SD $\Rightarrow 114 - 5 \Rightarrow 109$

- 2 SD = MEAN VALUE - 2 SD $\Rightarrow 114 - 10 \Rightarrow 104$

- 3 SD = MEAN VALUE - 3 SD $\Rightarrow 114 - 15 \Rightarrow 99$

S.No.	DATE	GLUCOSE VALUE	COMMENTS
1	2.8.2021	116	
2	6.8.2021	111	
3	9.8.2021	112	
4	13.8.2021	113	
5	16.8.2021	110	
6	20.8.2021	114	
7	23.8.2021	111	
8	27.8.2021	117	
9			

UREA - AUGUST - 2021



INTERNAL QUALITY CONTROL

UREA

Ex. No. AUGUST - 2021

DATE

IQAS SAMPLE PROVIDER : CMC - VELLORE
 INSTRUMENT NAME : CPC STATFAX 3000 PLUS
 KIT NAME : BIOSYSTEM DIAGNOSTICS PVT.LTD
 KIT LOT NO. : 131
 KIT EXPIRY DATE : 31.3.2024

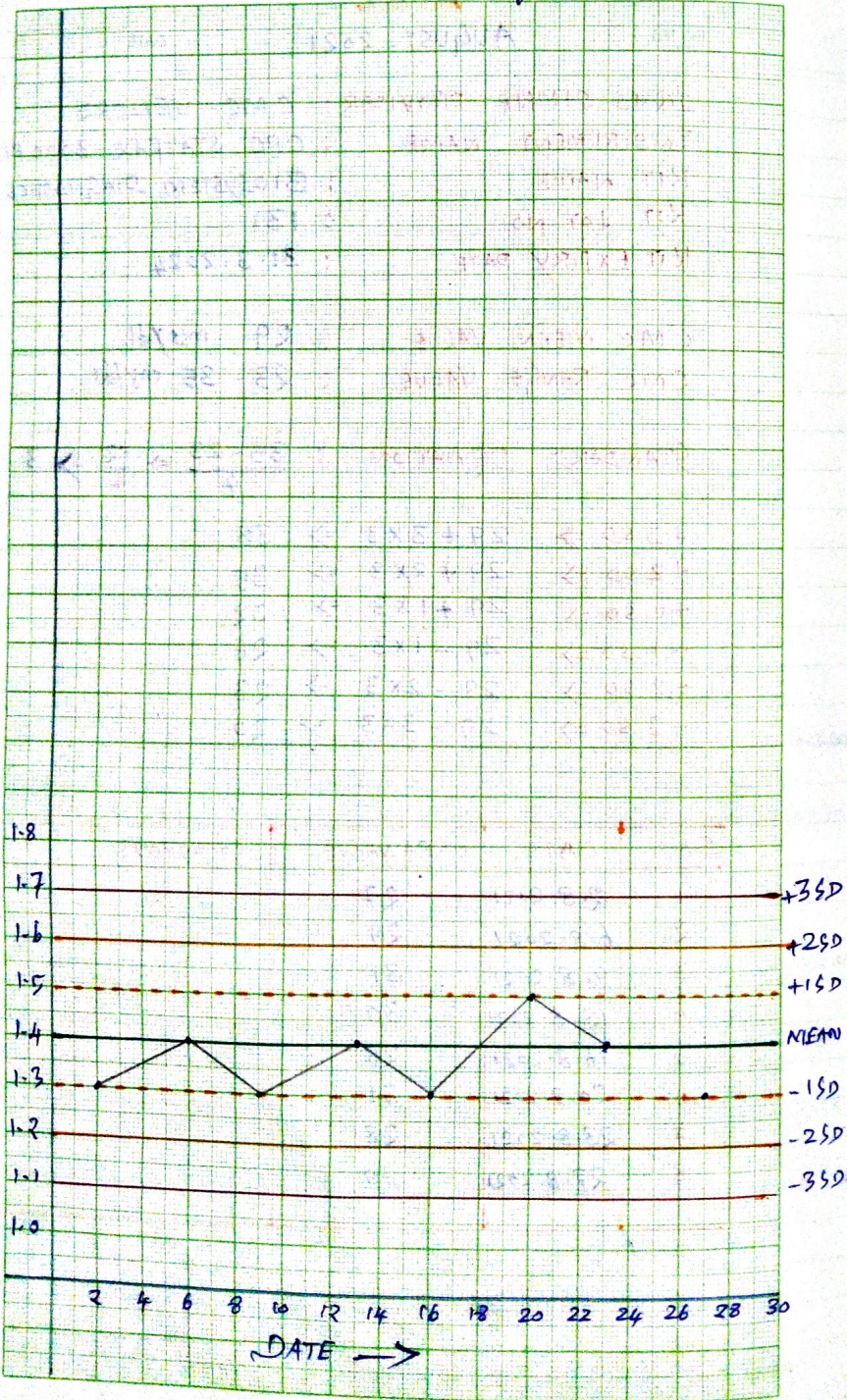
CMC MEAN VALUE : 29 mg/dl.
 CMC RANGE VALUE : 23 - 35 mg/dl.

STANDARD DEVIATION : $\frac{35-23}{4} \Rightarrow \frac{12}{4} \Rightarrow 3$

- +3 SD $\Rightarrow 29 + 3 \times 3 \Rightarrow 38$
- +2 SD $\Rightarrow 29 + 2 \times 3 \Rightarrow 35$
- +1 SD $\Rightarrow 29 + 1 \times 3 \Rightarrow 32$
- 1 SD $\Rightarrow 29 - 1 \times 3 \Rightarrow 26$
- 2 SD $\Rightarrow 29 - 2 \times 3 \Rightarrow 23$
- 3 SD $\Rightarrow 29 - 3 \times 3 \Rightarrow 20$

S.No.	DATE	UREA VALUE	COMMENTS
1	2.8.2021	27	
2	6.8.2021	29	
3	9.8.2021	31	
4	13.8.2021	30	
5	16.8.2021	28	
6	20.8.2021	31	
7	23.8.2021	28	
8	27.8.2021	30	

INTERNAL QUALITY CONTROL
CREATININE - AUGUST - 2021



INTERNAL QUALITY CONTROL
CREATININE

Ex. No. AUGUST - 2021

DATE

IQAS SAMPLE PROVIDER: CMC - VELLORE
INSTRUMENT NAME: CPC STATFAX 3000 PLUS
KIT NAME: BIOSYSTEM DIAGNOSTICS PVT LTD
KIT LOT No.: 154
KIT EXPIRY DATE: 31.03.2024

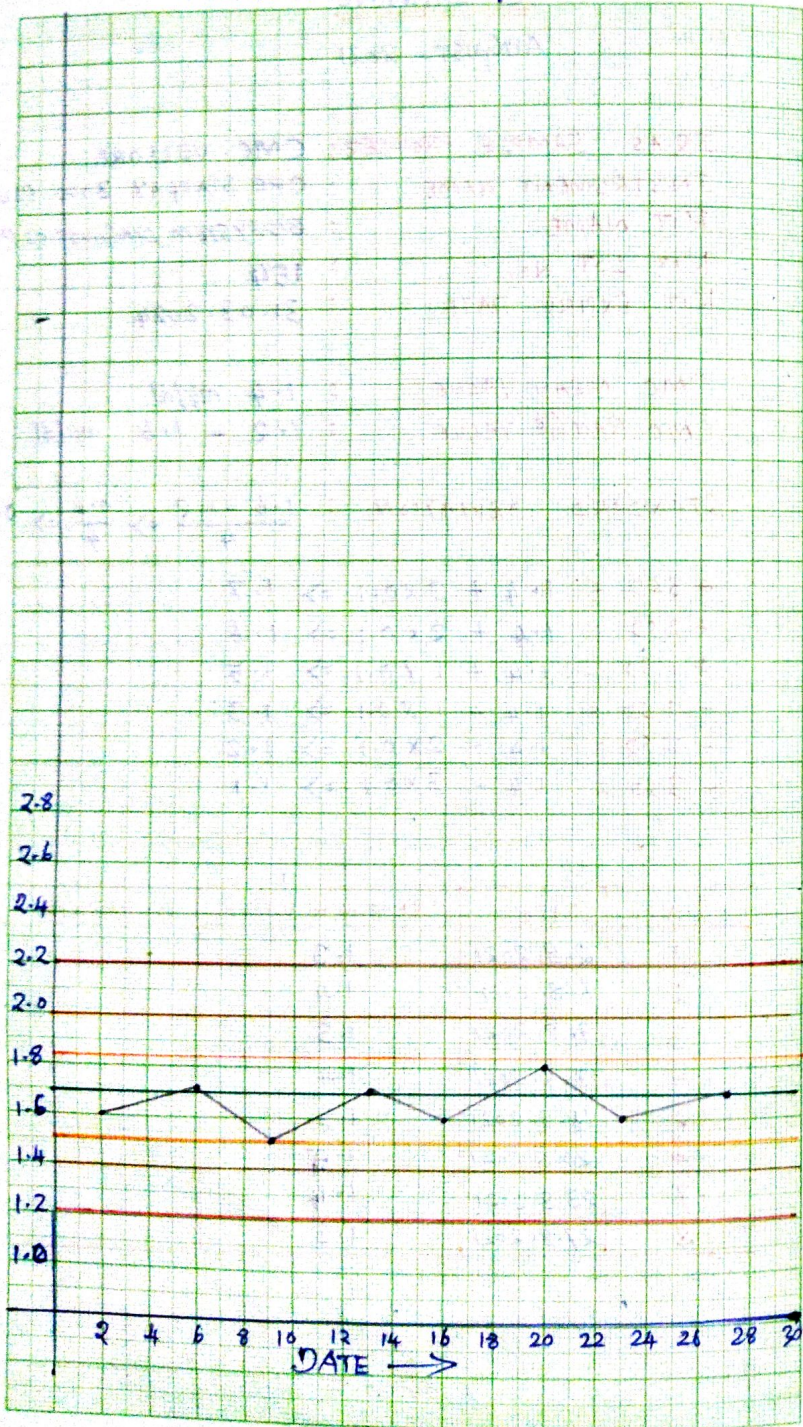
CMC MEAN VALUE: 1.4 mg/dl.
CMC RANGE VALUE: 1.2 - 1.6 mg/dl.

STANDARD DEVIATION: $\frac{1.6 - 1.2}{4} \Rightarrow \frac{0.4}{4} \Rightarrow 0.1$

- +3SD = 1.4 + 3 x 0.1 \Rightarrow 1.7
- +2SD = 1.4 + 2 x 0.1 \Rightarrow 1.6
- +1SD = 1.4 + 1 x 0.1 \Rightarrow 1.5
- 1SD = 1.4 - 1 x 0.1 \Rightarrow 1.3
- 2SD = 1.4 - 2 x 0.1 \Rightarrow 1.2
- 3SD = 1.4 - 3 x 0.1 \Rightarrow 1.1

S.No.	DATE	CREATININE VALUE	COMMENTS
1	2.8.2021	1.3	
2	6.8.2021	1.4	
3	9.8.2021	1.3	
4	13.8.2021	1.4	
5	16.8.2021	1.3	
6	20.8.2021	1.4	
7	23.8.2021	1.4	
8	27.8.2021	1.3	

T. BILIRUBIN - AUGUST - 2021



INTERNAL QUALITY CONTROL

T. BILIRUBIN

Ex. No. AUGUST - 2021

DATE

IQAS SAMPLE PROVIDER : CMC - VELLORE
 INSTRUMENT NAME : CPC STATFAX 3000 PLUS
 KIT NAME : BIOSYSTEM DIAGNOSTICS PVT LTD
 KIT LOT NO. : 16213
 KIT EXPIRY DATE : 31.10.2023

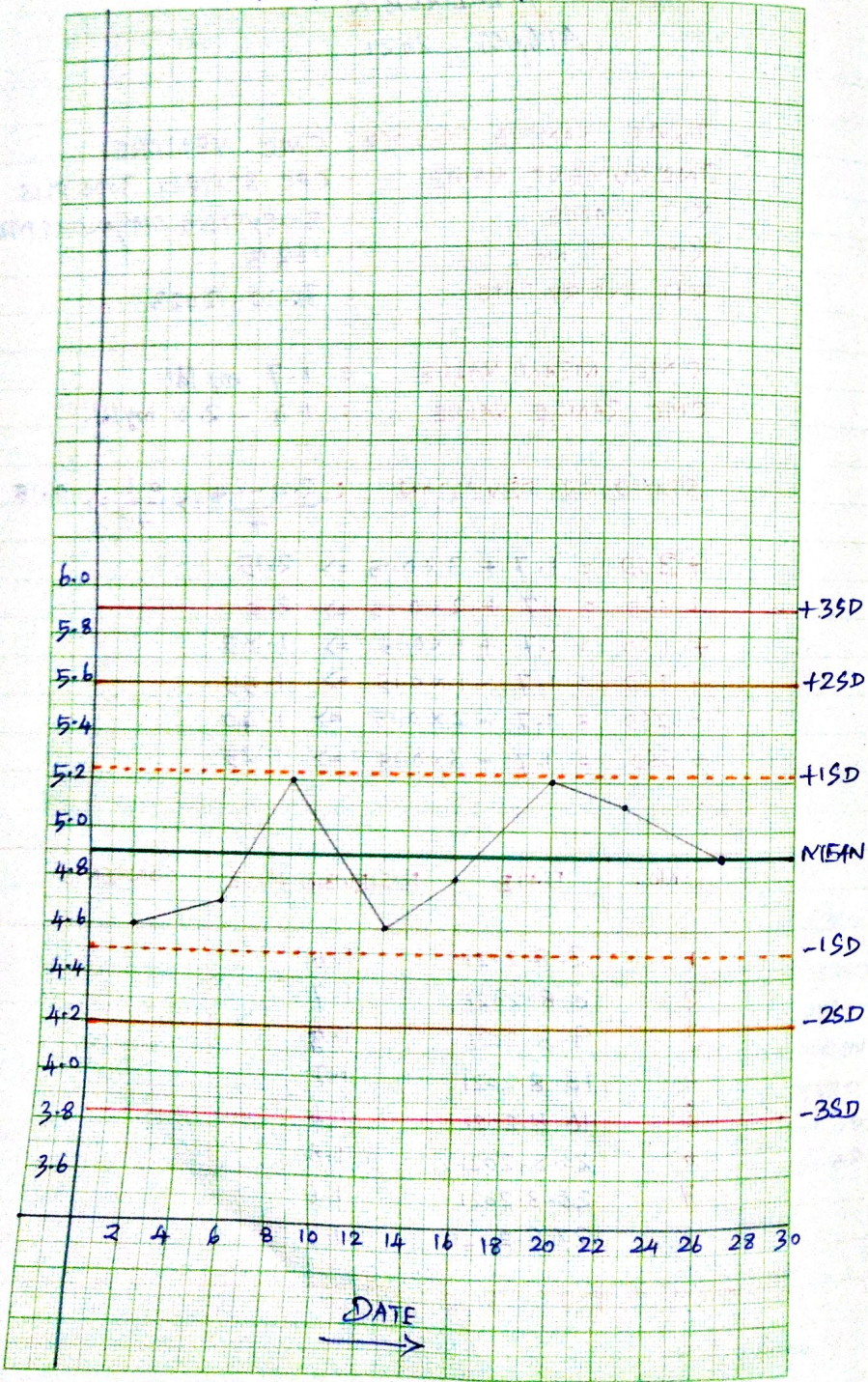
CMC MEAN VALUE : 1.7 mg/dl.
 CMC RANGE VALUE : 1.4 - 2.0 mg/dl.

STANDARD DEVIATION : $\frac{2.0 - 1.4}{4} \Rightarrow \frac{0.6}{4} \Rightarrow 0.15$

- +3SD = 1.7 + 3 x 0.15 \Rightarrow 2.15
- +2SD = 1.7 + 2 x 0.15 \Rightarrow 2.0
- +1SD = 1.7 + 1 x 0.15 \Rightarrow 1.85
- 1SD = 1.7 - 1 x 0.15 \Rightarrow 1.55
- 2SD = 1.7 - 2 x 0.15 \Rightarrow 1.40
- 3SD = 1.7 - 3 x 0.15 \Rightarrow 1.25

S.No.	DATE	BILIRUBIN VALUE	COMMENTS
1	2.8.2021	1.6	
2	6.8.2021	1.7	
3	9.8.2021	1.5	
4	13.8.2021	1.7	
5	16.8.2021	1.6	
6	20.8.2021	1.8	
7	23.8.2021	1.6	
8	27.8.2021	1.7	

T. PROTEIN - AUGUST - 2021



INTERNAL QUALITY CONTROL

T. PROTEIN

Ex. No.

AUGUST - 2021

DATE

IQAS SAMPLE PROVIDER : CMC-VELLORE
 INSTRUMENT NAME : CPC STATFAX 3000 PLUS
 KIT NAME : BIOSYSTEM DIAGNOSTICS ^{INTL}
 KIT LOT No. : 123
 KIT EXPIRY DATE : 30.11.2022

CMC MEAN VALUE : 4.9 mg/dl.

CMC RANGE VALUE : 4.2 - 5.6 mg/dl.

STANDARD DEVIATION : $\frac{5.6-4.2}{4} \Rightarrow \frac{1.4}{4} \Rightarrow 0.35$

+3SD : $4.9 + 3 \times 0.35 \Rightarrow 5.95$

+2SD : $4.9 + 2 \times 0.35 \Rightarrow 5.6$

+1SD : $4.9 + 1 \times 0.35 \Rightarrow 5.25$

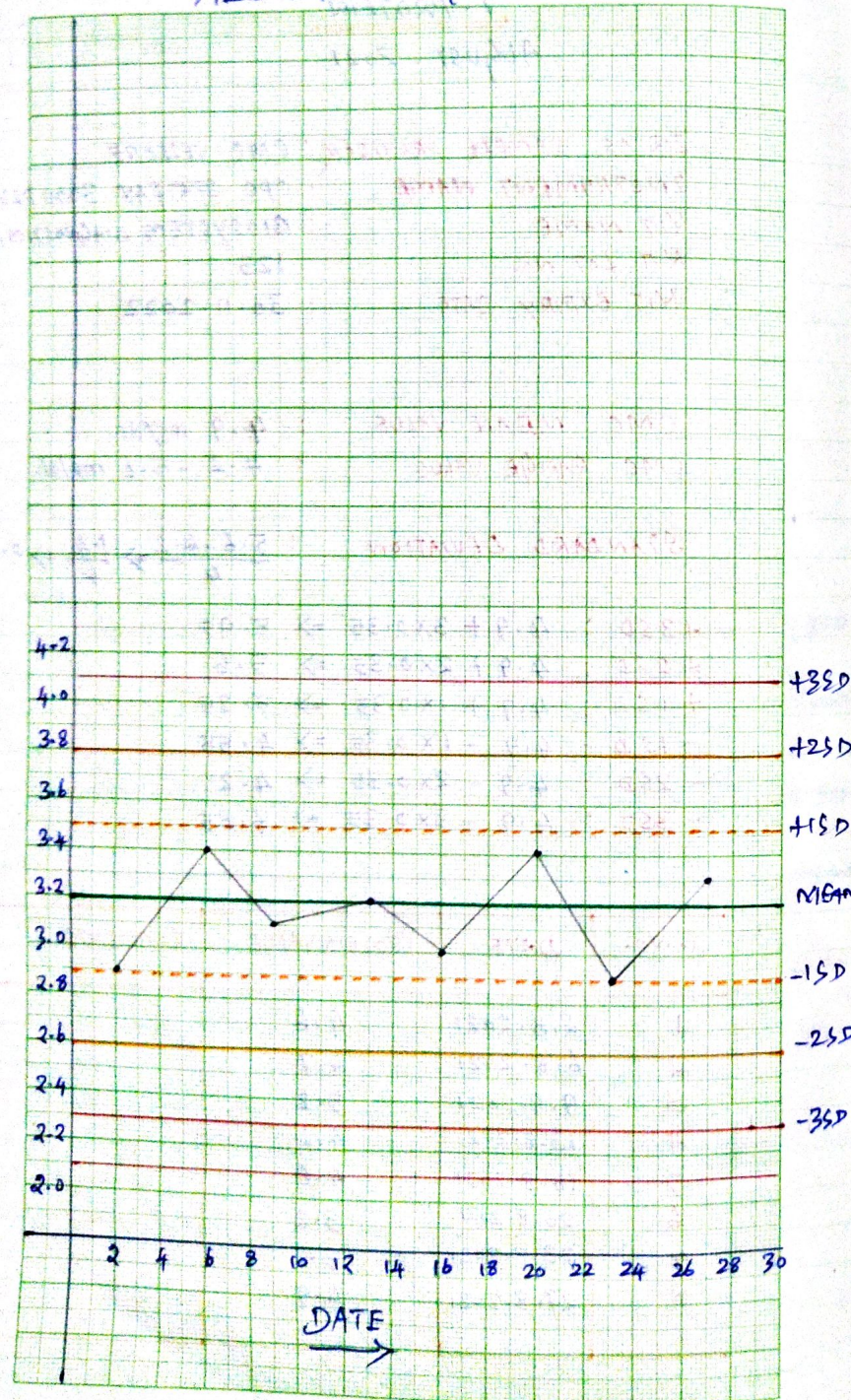
-1SD : $4.9 - 1 \times 0.35 \Rightarrow 4.55$

-2SD : $4.9 - 2 \times 0.35 \Rightarrow 4.2$

-3SD : $4.9 - 3 \times 0.35 \Rightarrow 3.85$

S. No.	DATE	PROTEIN VALUE	COMMENTS
1	2.8.2021	4.6	
2	6.8.2021	4.7	
3	9.8.2021	5.2	
4	13.8.2021	4.6	
5	16.8.2021	4.8	
6	20.8.2021	5.2	
7	23.8.2021	5.1	
8	27.8.2021	4.9	

ALBUMIN - AUGUST - 2021



INTERNAL QUALITY CONTROL

ALBUMIN

Ex. No. AUGUST - 2021

DATE

IQ AS SAMPLE PROVIDER : CMC - VELLORE
 INSTRUMENT NAME CPC : STAFFAX 3000 PLUS
 KIT NAME : ACCUREX BIOMEDICALS PVT LTD
 KIT LOT No. : 49020
 KIT EXPIRY DATE : 31.01.2022

CMC MEAN VALUE : 3.2 mg/dl.
 CMC RANGE VALUE : 2.6 - 3.8 mg/dl.

STANDARD DEVIATION : $\frac{3.8 - 2.6}{4} \Rightarrow \frac{1.2}{4} \Rightarrow 0.3$

+3SD = 3.2 + 3 x 0.3 \Rightarrow 4.1

+2SD = 3.2 + 2 x 0.3 \Rightarrow 3.8

+1SD = 3.2 + 1 x 0.3 \Rightarrow 3.5

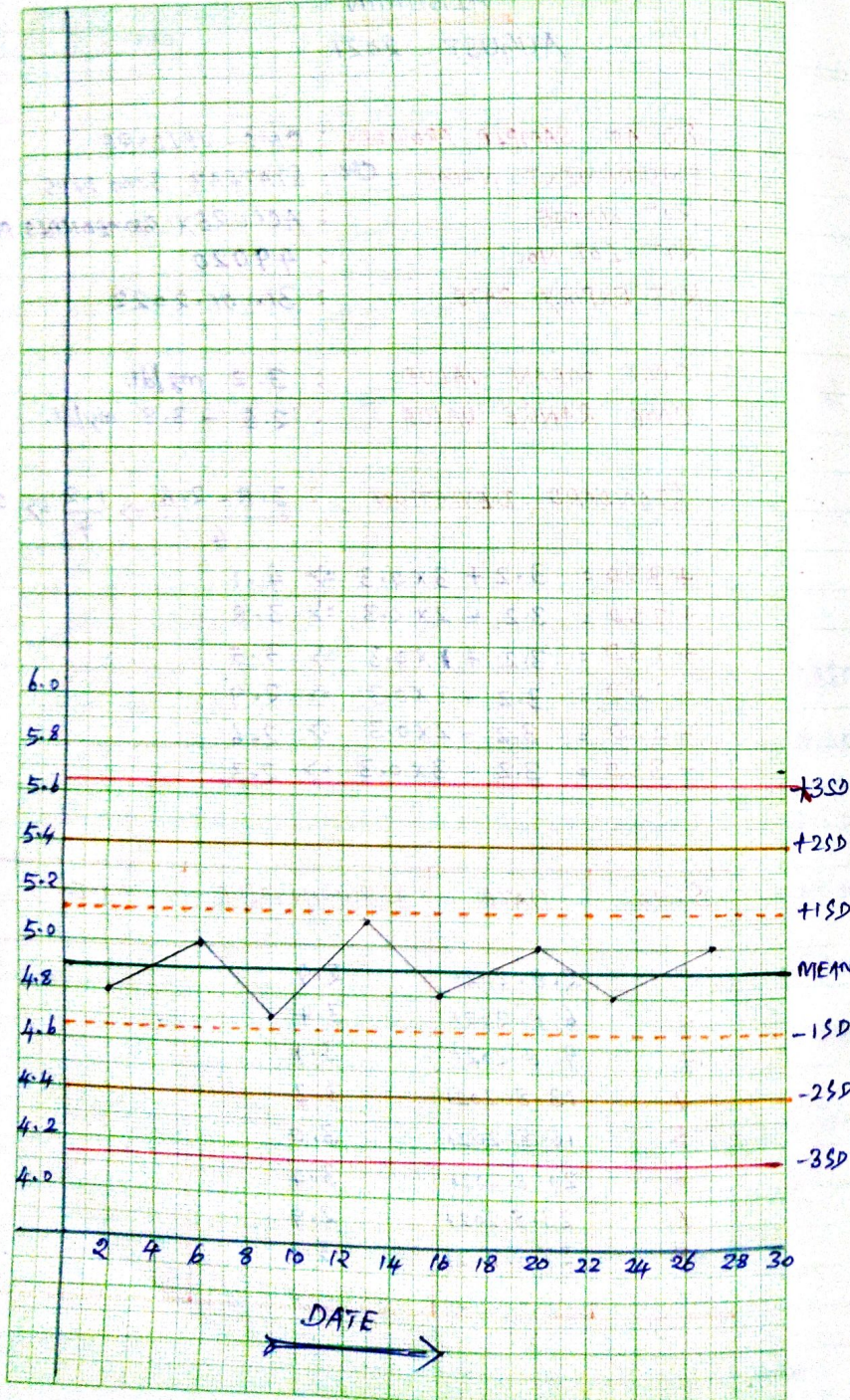
-1SD = 3.2 - 1 x 0.3 \Rightarrow 2.9

-2SD = 3.2 - 2 x 0.3 \Rightarrow 2.6

-3SD = 3.2 - 3 x 0.3 \Rightarrow 2.3

S.No.	DATE	ALBUMIN VALUE	COMMENTS
1	2.8.2021	2.9	
2	6.8.2021	3.4	
3	9.8.2021	3.1	
4	13.8.2021	3.2	
5	16.8.2021	3.0	
6	20.8.2021	3.4	
7	23.8.2021	2.9	
8	27.8.2021	3.3	

URIC ACID - AUGUST - 2021



INTERNAL QUALITY CONTROL

URIC ACID

Ex. No. AUGUST - 2021

DATE

IQ AS SAMPLE PROVIDER: CMC - VELLORE
 INSTRUMENT NAME : CPC STATFAX 3000 PLUS
 KIT NAME : BIOSYSTEM DIAGNOSTICS PVT LTD.
 KIT LOT No. : 147
 KIT EXPIRY DATE : 31.03.2023

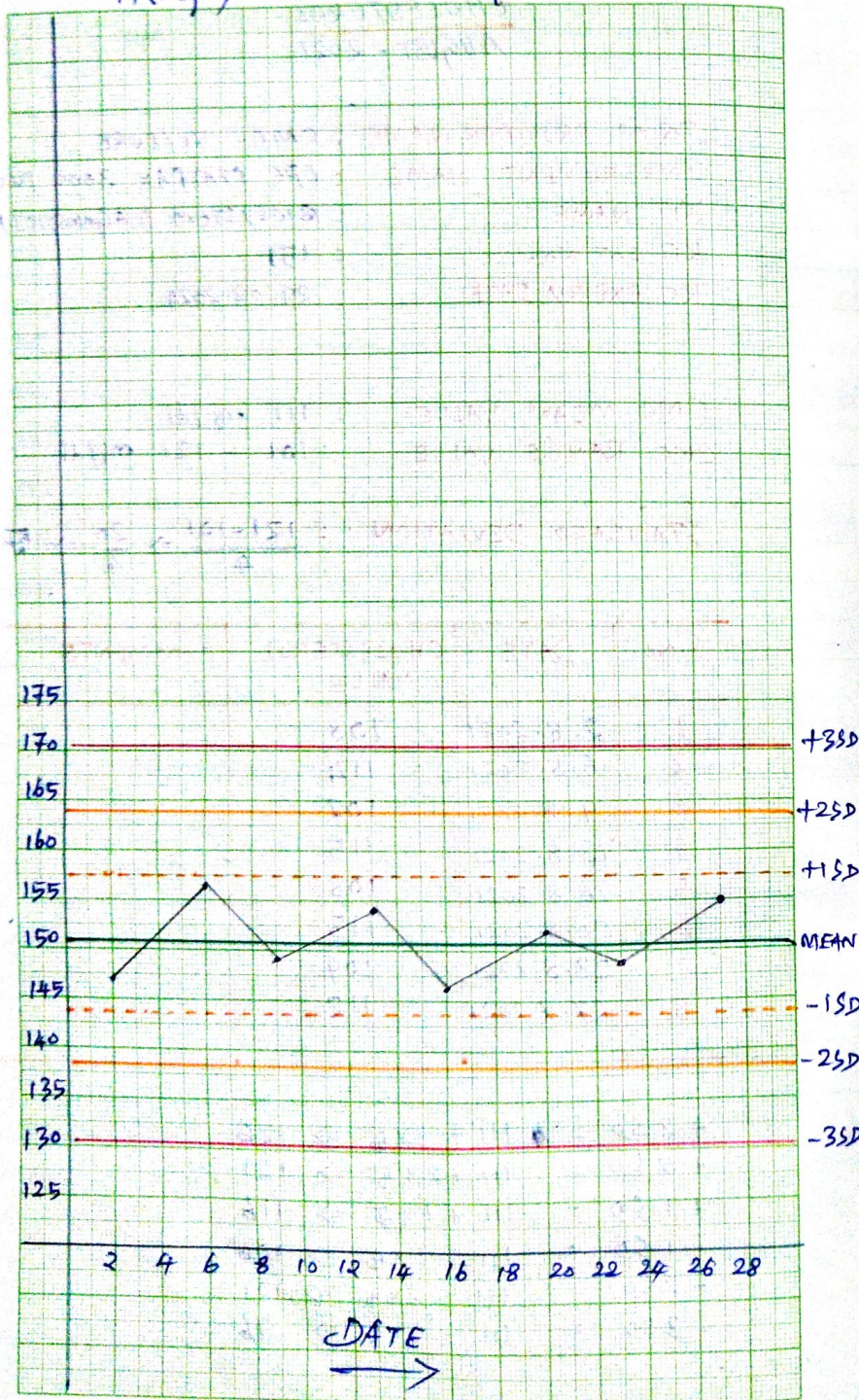
CMC MEAN VALUE : 4.9 mg/dl.
 CMC RANGE VALUE : 4.4 - 5.4 mg/dl.

STANDARD DEVIATION : $\frac{5.4 - 4.4}{4} \Rightarrow \frac{1}{4} \Rightarrow 0.25$

S.No.	DATE	URIC ACID VALUE	COMMENTS
1	2.8.2021	4.8	
2	6.8.2021	5.0	
3	9.8.2021	4.7	
4	13.8.2021	5.1	
5	16.8.2021	4.8	
6	20.8.2021	5.0	
7	23.8.2021	4.8	
8	27.8.2021	5.0	

$+3SD = 4.9 + 3 \times 0.25 \Rightarrow 5.65$
 $+2SD = 4.9 + 2 \times 0.25 \Rightarrow 5.4$
 $+1SD = 4.9 + 1 \times 0.25 \Rightarrow 5.15$
 $-1SD = 4.9 - 1 \times 0.25 \Rightarrow 4.65$
 $-2SD = 4.9 - 2 \times 0.25 \Rightarrow 4.4$
 $-3SD = 4.9 - 3 \times 0.25 \Rightarrow 4.15$

TRIGLYCERIDES - AUGUST - 2021



INTERNAL QUALITY CONTROL

TRIGLYCERIDES

Ex. No.

DATE

AUGUST - 2021

IQA PROVIDER NAME : CMC - VELLORE

INSTRUMENT NAME : STATFAX 3000 PLUS

KIT NAME : BIOSYSTEM DIAGNOSTICS PRIVATE

KIT LOT No. : 147

KIT EXPIRY DATE : 28.02.2023

CMC MEAN VALUE : 151 mg/dl.

CMC RANGE VALUE : 138 - 164 mg/dl.

$$\text{STANDARD DEVIATION} = \frac{164 - 138}{4} \Rightarrow \frac{26}{4} \Rightarrow 6.5$$

S.No.	DATE	TRIGLYCERIDES VALUE	COMMENTS
1	2.8.2021	147	
2	6.8.2021	156	
3	9.8.2021	149	
4	13.8.2021	154	
5	16.8.2021	146	
6	20.8.2021	152	
7	23.8.2021	149	
8	27.8.2021	155	

$$+3SD = 151 + 3 \times 6.5 \Rightarrow 170.5$$

$$+2SD = 151 + 2 \times 6.5 \Rightarrow 164$$

$$+1SD = 151 + 1 \times 6.5 \Rightarrow 157.5$$

$$-1SD = 151 - 1 \times 6.5 \Rightarrow 144.5$$

$$-2SD = 151 - 2 \times 6.5 \Rightarrow 138$$

$$-3SD = 151 - 3 \times 6.5 \Rightarrow 131.5$$