

Date: 01/07/2022

CURRENT CALIBRATION CERTIFICATE OF A15C

CUSTOMER NAME –Raasi Diagnostic Centre, Thurayur

Serial Number = 83105C0782

Firmware = 6.19

A15 - Configuration checksum value = 0x44DD

A15 - Configuration checksum size = 988

Rotor Temperature = 37.47

Probe Temperature = 38.2

System Liquid Scale Sensivity = 142

Waste Scale Sensivity = 189

Level Detection Improved Rack = 1

Sensitivity: (Tube Rack) = 42

Sensitivity: (Pediatric Rack) = 111

Sensitivity: (Out Fridge Reagent Rack) = 12

Sensitivity: (Fridge Reagent Rack) = 20

Sensitivity: (Stool Collector) = 110

X - Origin = 41

Y - Origin = 262

Z - Origin = 430

X - Washing Station = 361

Y - Washing Station = 90

Z - Washing Station = 540

X - Reactions Rotor = 89

Y - Reactions Rotor = 1038

Z - Reactions Rotor = 600

Tray XYZ- Pediatric Rack

X1 (Rack3, 4) = 1608, 1055

X2 (Rack3, 4) = 1607, 1055

Y1 (Rack3, 4) = 96, 98

Y2 (Rack3, 4) = 1449, 1449

Z1 (Rack3, 4) = 735, 735

Z2 (Rack3, 4) = 720, 721

Z Relation Pediatric-Tube = 457

Z Pediatric -> Stool tube = -500

Tray XYZ- Reagent Rack

X1 (Rack3, 4) = 1337, 796

X2 (Rack3, 4) = 1343, 786

Y1 (Rack3, 4) = 115, 116

Y2 (Rack3, 4) = 1439, 1438

Z1 (Rack3, 4) = 1200, 1203

Z2 (Rack3, 4) = 1183, 1183

Tray XYZ- Fridge

X1 (Rack1, 2) = 2524, 2030

X2 (Rack1, 2) = 2518, 2024

Y1 (Rack1, 2) = 51, 49

Y2 (Rack1, 2) = 1396, 1394

Z1 (Rack1, 2) = 1229, 1241

Z2 (Rack1, 2) = 1240, 1242

Rotor Position correction regarding to the dispensation point = 115

Rotor Position correction regarding to the optical system = -13

Filters wheel correction = -1

Filter 0 = 0 (nm) IT = 10.2 (ms) Ref. IT = 9.7 (ms)

Filter 1 = 340 (nm) IT = 450 (ms) Ref. IT = 449.5 (ms)

Filter 2 = 405 (nm) IT = 150 (ms) Ref. IT = 149.5 (ms)

Filter 3 = 505 (nm) IT = 123.9 (ms)Ref. IT = 123.4 (ms)

Filter 4 = 535 (nm) IT = 134.1 (ms)Ref. IT = 133.6 (ms)

Filter 5 = 560 (nm) IT = 143.4 (ms)Ref. IT = 143.4 (ms)

Filter 6 = 600 (nm) IT = 135.2 (ms)Ref. IT = 135.2 (ms)

Filter 7 = 635 (nm) IT = 130 (ms) Ref. IT = 129.5 (ms)

Filter 8 = 670 (nm) IT = 163.3 (ms)Ref. IT = 162.8 (ms)

Filter 9 = 0 (nm) IT = 10.2 (ms) Ref. IT = 9.7 (ms)

X - axis = 74349 (x1000 steps)

Y - axis = 46722 (x1000 steps)

Z - axis = 112057 (x1000 steps)

Reaction Rotor = 5046 (x10000 steps)

Filter Wheel = 202044 (x100 steps)

Dispensing Pump = 99522 (x10000 steps)
Membrane pumps = 21541 (Commutation)
3-way electrovalve = 82962 (Commutation)
Lamp = 3271 (Hours)
Biochemical preparation = 7537 (Cicles)
Turbidimetry preparation = 911 (Cicles)
Bireagent Biochemical preparation = 1704 (Cicles)
Bireagent Turbidimetry preparation = 123 (Cicles)
Predilution = 0 (Cicles)
Start/End Washings = 280 (Cicles)
WS Washings = 4360 (Cicles)
H2O Washings = 587 (Cicles)
New Rotor = 90 (Rotors)
Contaminations detected = 14 Contaminations detected

Next Calibration due on – 31/06/2023

For BIOSYSTEMS DIAGNOSTICS PVT. LTD.



AUTHORISED SIGNATORY

Quality control

27/07/2022 12:47

Test GLUCOSE-1

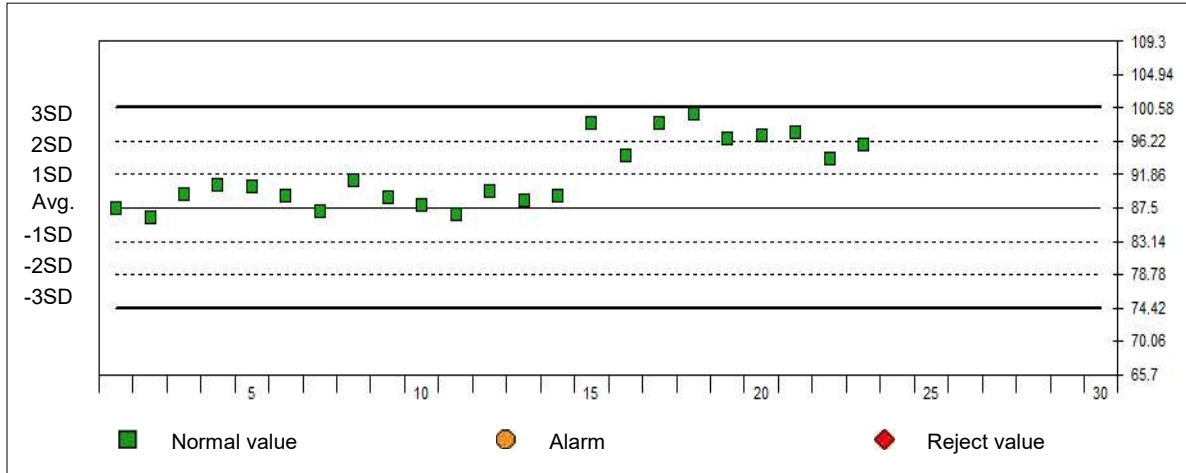
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|-----|-----|-------------------|-------------------|
| 87.5 | 4.4 | 5.0 | 74.4 | 100.6 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-----------|-----------|-----------|-------|
| 1 | 04/07/2022 09:16:48 | 87.6 | 0.1 | 0.0 | |
| 2 | 05/07/2022 09:22:41 | 86.3 | -1.2 | -0.3 | |
| 3 | 06/07/2022 09:39:50 | 89.4 | 1.9 | 0.4 | |
| 4 | 07/07/2022 09:24:15 | 90.6 | 3.1 | 0.7 | |
| 5 | 08/07/2022 09:41:21 | 90.3 | 2.8 | 0.6 | |
| 6 | 09/07/2022 09:27:11 | 89.1 | 1.6 | 0.4 | |
| 7 | 10/07/2022 09:14:50 | 87.2 | -0.3 | -0.1 | |
| 8 | 11/07/2022 09:31:51 | 91.2 | 3.7 | 0.8 | |
| 9 | 12/07/2022 09:48:01 | 88.8 | 1.3 | 0.3 | |
| 10 | 14/07/2022 09:22:25 | 87.9 | 0.4 | 0.1 | |
| 11 | 15/07/2022 09:29:20 | 86.8 | -0.7 | -0.2 | |
| 12 | 16/07/2022 09:32:27 | 89.8 | 2.3 | 0.5 | |
| 13 | 17/07/2022 09:18:57 | 88.5 | 1.0 | 0.2 | |
| 14 | 18/07/2022 09:41:56 | 89.2 | 1.7 | 0.4 | |
| 15 | 19/07/2022 09:45:29 | 98.6 | 11.1 | 2.5 | |
| 16 | 20/07/2022 09:25:59 | 94.4 | 6.9 | 1.6 | |
| 17 | 21/07/2022 09:29:15 | 98.8 | 11.3 | 2.6 | |
| 18 | 22/07/2022 09:44:46 | 99.8 | 12.3 | 2.8 | |
| 19 | 23/07/2022 09:42:16 | 96.6 | 9.1 | 2.1 | |
| 20 | 24/07/2022 09:32:39 | 97.1 | 9.6 | 2.2 | |
| 21 | 25/07/2022 08:53:11 | 97.5 | 10.0 | 2.3 | |
| 22 | 26/07/2022 09:58:11 | 94.0 | 6.5 | 1.5 | |
| 23 | 27/07/2022 09:41:19 | 95.8 | 8.3 | 1.9 | |

Quality control

27/07/2022 12:48

Test UREA UV-1

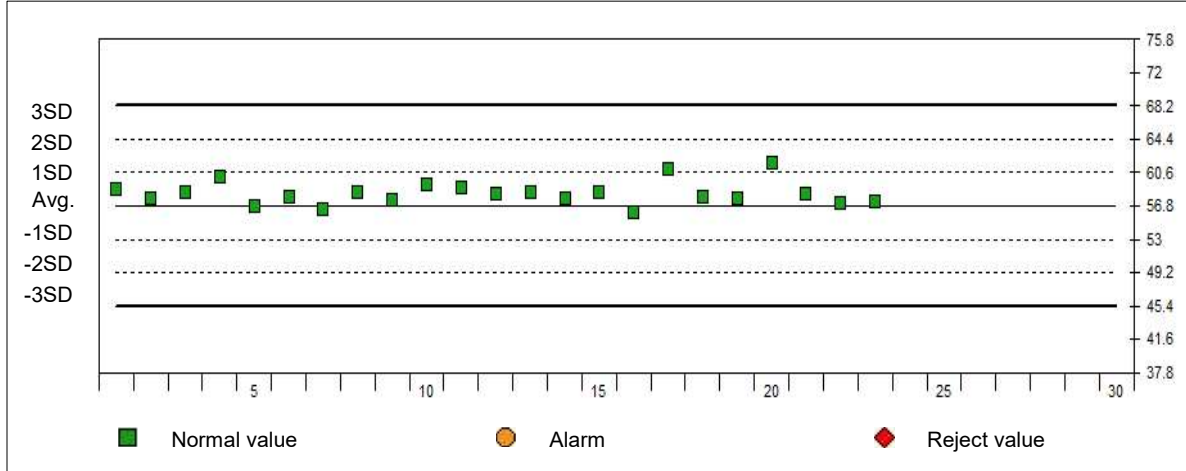
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|-----|-----|-------------------|-------------------|
| 56.8 | 3.8 | 6.7 | 45.4 | 68.2 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-----------|-----------|-----------|-------|
| 1 | 04/07/2022 09:15:35 | 58.8 | 2.0 | 0.5 | |
| 2 | 05/07/2022 09:21:29 | 57.7 | 0.9 | 0.2 | |
| 3 | 06/07/2022 09:38:14 | 58.5 | 1.7 | 0.4 | |
| 4 | 07/07/2022 09:23:27 | 60.2 | 3.4 | 0.9 | |
| 5 | 08/07/2022 09:39:45 | 56.9 | 0.1 | 0.0 | |
| 6 | 09/07/2022 09:26:23 | 57.8 | 1.0 | 0.3 | |
| 7 | 10/07/2022 09:14:02 | 56.5 | -0.3 | -0.1 | |
| 8 | 11/07/2022 09:47:37 | 58.5 | 1.7 | 0.4 | |
| 9 | 12/07/2022 09:46:25 | 57.4 | 0.6 | 0.2 | |
| 10 | 14/07/2022 09:21:36 | 59.2 | 2.4 | 0.6 | |
| 11 | 15/07/2022 09:27:44 | 59.0 | 2.2 | 0.6 | |
| 12 | 16/07/2022 09:31:15 | 58.2 | 1.4 | 0.4 | |
| 13 | 17/07/2022 09:17:45 | 58.4 | 1.6 | 0.4 | |
| 14 | 18/07/2022 09:41:08 | 57.6 | 0.8 | 0.2 | |
| 15 | 19/07/2022 09:43:53 | 58.3 | 1.5 | 0.4 | |
| 16 | 20/07/2022 09:24:23 | 56.2 | -0.6 | -0.2 | |
| 17 | 21/07/2022 09:30:13 | 61.1 | 4.3 | 1.1 | |
| 18 | 22/07/2022 09:43:10 | 57.9 | 1.1 | 0.3 | |
| 19 | 23/07/2022 09:40:40 | 57.7 | 0.9 | 0.2 | |
| 20 | 24/07/2022 09:31:27 | 61.7 | 4.9 | 1.3 | |
| 21 | 25/07/2022 08:51:34 | 58.2 | 1.4 | 0.4 | |
| 22 | 26/07/2022 09:57:23 | 57.1 | 0.3 | 0.1 | |
| 23 | 27/07/2022 09:40:55 | 57.3 | 0.5 | 0.1 | |

Quality control

27/07/2022 12:48

Test CREATININE-1

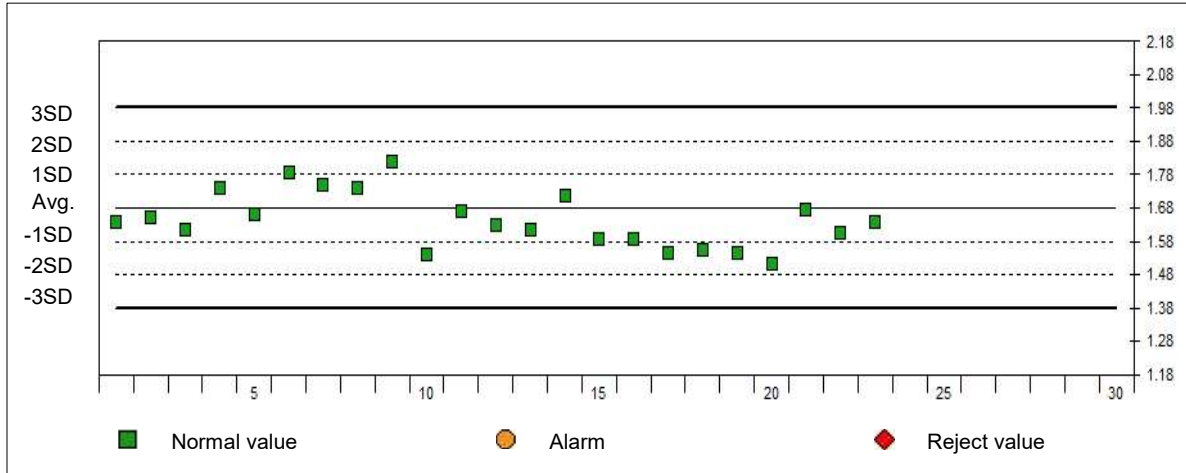
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|------|------|-------------------|-------------------|
| 1.68 | 0.10 | 5.95 | 1.38 | 1.98 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-------------|-----------|-----------|-------|
| 1 | 04/07/2022 09:15:11 | 1.64 | -0.04 | -0.44 | |
| 2 | 05/07/2022 09:21:05 | 1.65 | -0.03 | -0.29 | |
| 3 | 06/07/2022 09:37:50 | 1.61 | -0.07 | -0.66 | |
| 4 | 07/07/2022 09:23:03 | 1.74 | 0.06 | 0.60 | |
| 5 | 08/07/2022 09:39:21 | 1.66 | -0.02 | -0.18 | |
| 6 | 09/07/2022 09:25:59 | 1.79 | 0.11 | 1.08 | |
| 7 | 10/07/2022 09:13:39 | 1.75 | 0.07 | 0.70 | |
| 8 | 11/07/2022 09:47:13 | 1.74 | 0.06 | 0.61 | |
| 9 | 12/07/2022 09:46:01 | 1.82 | 0.14 | 1.39 | |
| 10 | 14/07/2022 09:21:13 | 1.54 | -0.14 | -1.39 | |
| 11 | 15/07/2022 09:27:20 | 1.67 | -0.01 | -0.10 | |
| 12 | 16/07/2022 09:30:51 | 1.63 | -0.05 | -0.51 | |
| 13 | 17/07/2022 09:17:21 | 1.62 | -0.06 | -0.64 | |
| 14 | 18/07/2022 09:40:44 | 1.72 | 0.04 | 0.36 | |
| 15 | 19/07/2022 09:43:29 | 1.59 | -0.09 | -0.92 | |
| 16 | 20/07/2022 09:23:59 | 1.59 | -0.09 | -0.94 | |
| 17 | 21/07/2022 09:29:15 | 1.54 | -0.14 | -1.37 | |
| 18 | 22/07/2022 09:42:46 | 1.55 | -0.13 | -1.27 | |
| 19 | 23/07/2022 09:40:16 | 1.55 | -0.13 | -1.33 | |
| 20 | 24/07/2022 09:31:03 | 1.51 | -0.17 | -1.68 | |
| 21 | 25/07/2022 08:51:10 | 1.68 | -0.01 | -0.05 | |
| 22 | 26/07/2022 09:56:59 | 1.61 | -0.07 | -0.72 | |
| 23 | 27/07/2022 09:40:31 | 1.64 | -0.04 | -0.42 | |

Quality control

27/07/2022 12:50

Test URIC ACID-1

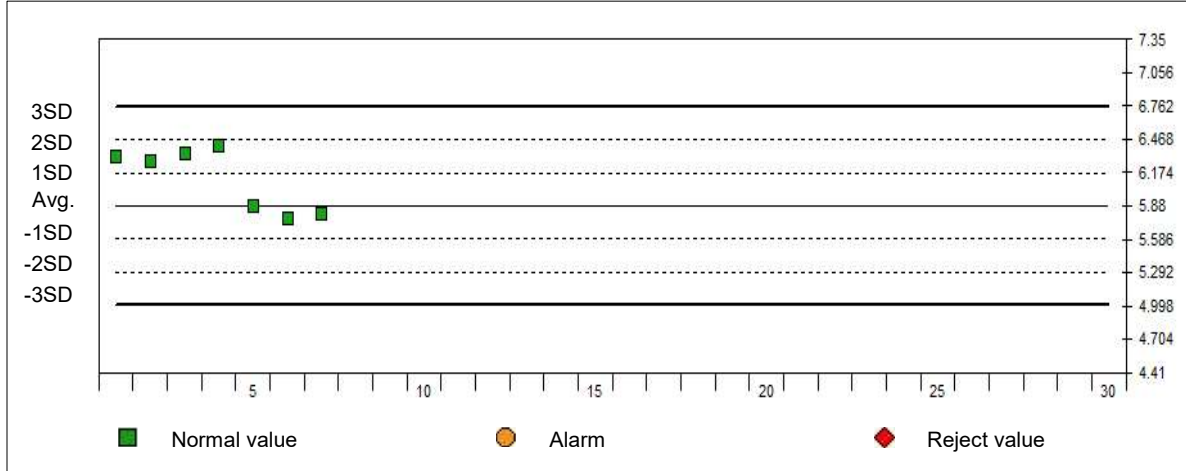
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|------|------|-------------------|-------------------|
| 5.88 | 0.29 | 4.99 | 5.00 | 6.76 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-------------|-----------|-----------|-------|
| 1 | 07/07/2022 09:25:51 | 6.31 | 0.43 | 1.48 | |
| 2 | 09/07/2022 09:28:48 | 6.28 | 0.40 | 1.37 | |
| 3 | 10/07/2022 09:16:27 | 6.34 | 0.46 | 1.57 | |
| 4 | 18/07/2022 09:43:32 | 6.41 | 0.53 | 1.82 | |
| 5 | 19/07/2022 13:48:20 | 5.88 | 0.00 | 0.00 | |
| 6 | 26/07/2022 09:59:47 | 5.77 | -0.11 | -0.39 | |
| 7 | 27/07/2022 09:42:55 | 5.81 | -0.07 | -0.23 | |

Quality control

27/07/2022 12:49

Test BILIRUBIN TOTAL-1

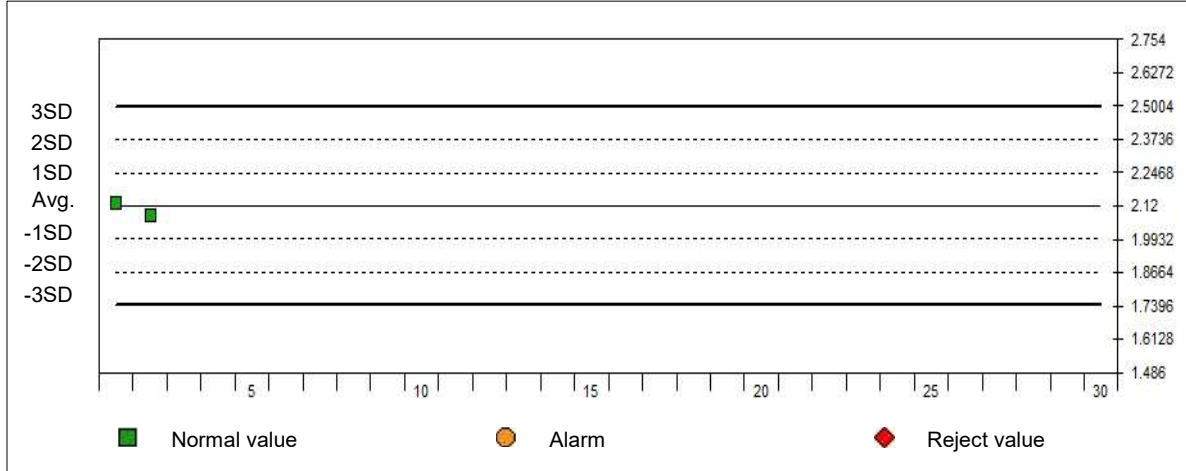
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|------|------|-------------------|-------------------|
| 2.12 | 0.13 | 5.98 | 1.74 | 2.50 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-------------|-----------|-----------|-------|
| 1 | 19/07/2022 13:47:32 | 2.13 | 0.01 | 0.10 | |
| 2 | 27/07/2022 09:42:07 | 2.09 | -0.03 | -0.26 | |

Quality control

27/07/2022 12:50

Test PROTEIN TOTAL-1

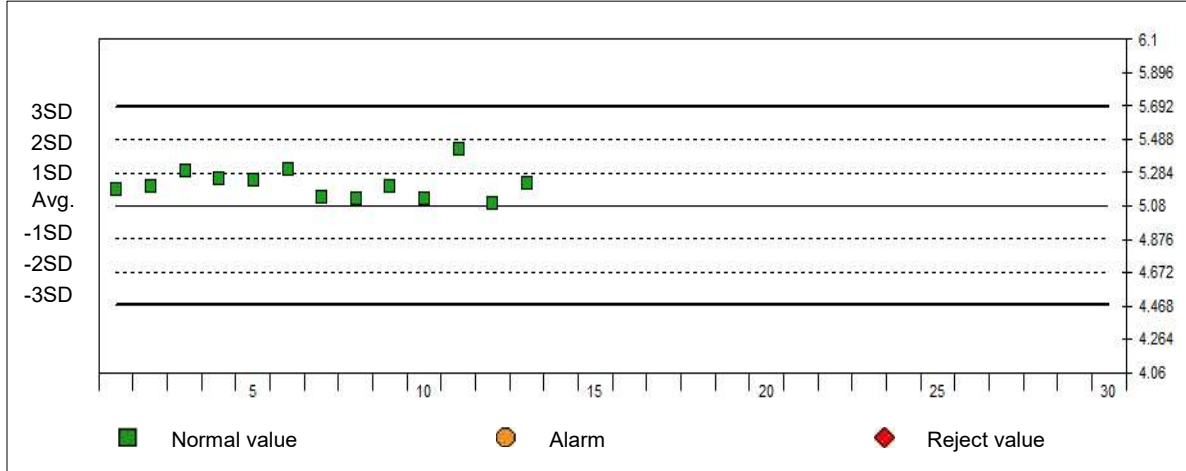
Units g/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|------|------|-------------------|-------------------|
| 5.08 | 0.20 | 4.00 | 4.47 | 5.69 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-----------|-----------|-----------|-------|
| 1 | 04/07/2022 09:18:00 | 5.18 | 0.10 | 0.49 | |
| 2 | 05/07/2022 09:23:53 | 5.21 | 0.13 | 0.62 | |
| 3 | 07/07/2022 09:25:27 | 5.30 | 0.22 | 1.10 | |
| 4 | 09/07/2022 09:28:24 | 5.25 | 0.17 | 0.84 | |
| 5 | 10/07/2022 09:16:03 | 5.24 | 0.16 | 0.79 | |
| 6 | 16/07/2022 09:33:39 | 5.31 | 0.23 | 1.12 | |
| 7 | 17/07/2022 09:20:09 | 5.14 | 0.06 | 0.30 | |
| 8 | 18/07/2022 09:43:08 | 5.12 | 0.04 | 0.22 | |
| 9 | 19/07/2022 13:47:56 | 5.20 | 0.12 | 0.61 | |
| 10 | 21/07/2022 09:31:29 | 5.13 | 0.05 | 0.25 | |
| 11 | 24/07/2022 09:33:51 | 5.43 | 0.35 | 1.74 | |
| 12 | 26/07/2022 09:59:23 | 5.10 | 0.02 | 0.08 | |
| 13 | 27/07/2022 09:42:31 | 5.22 | 0.14 | 0.71 | |

Quality control

27/07/2022 12:50

Test ALBUMIN-1

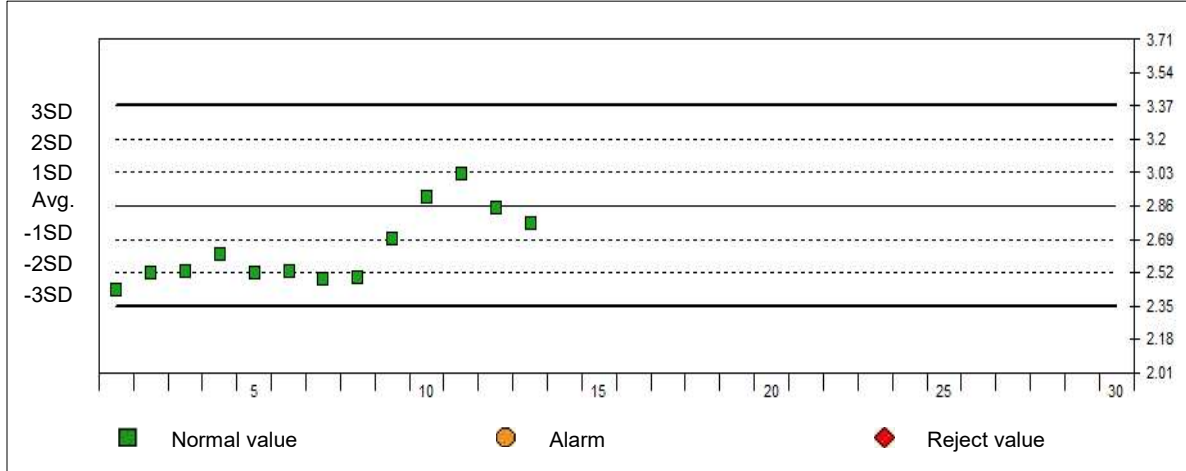
Units g/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|------|------|-------------------|-------------------|
| 2.86 | 0.17 | 5.94 | 2.35 | 3.37 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-------------|-----------|-----------|-------|
| 1 | 04/07/2022 09:15:36 | 2.43 | -0.43 | -2.52 | |
| 2 | 05/07/2022 09:21:29 | 2.52 | -0.34 | -2.00 | |
| 3 | 07/07/2022 09:23:27 | 2.53 | -0.33 | -1.94 | |
| 4 | 09/07/2022 09:26:23 | 2.62 | -0.24 | -1.43 | |
| 5 | 10/07/2022 09:14:02 | 2.52 | -0.34 | -2.02 | |
| 6 | 16/07/2022 09:31:15 | 2.53 | -0.33 | -1.95 | |
| 7 | 17/07/2022 09:17:45 | 2.49 | -0.37 | -2.19 | |
| 8 | 18/07/2022 09:41:08 | 2.49 | -0.37 | -2.16 | |
| 9 | 19/07/2022 13:45:08 | 2.69 | -0.17 | -0.99 | |
| 10 | 21/07/2022 09:30:37 | 2.90 | 0.04 | 0.26 | |
| 11 | 24/07/2022 09:31:27 | 3.02 | 0.16 | 0.96 | |
| 12 | 26/07/2022 09:57:23 | 2.85 | -0.01 | -0.05 | |
| 13 | 27/07/2022 09:41:19 | 2.77 | -0.09 | -0.53 | |

Quality control

27/07/2022 12:48

Test CHOLESTEROL-1

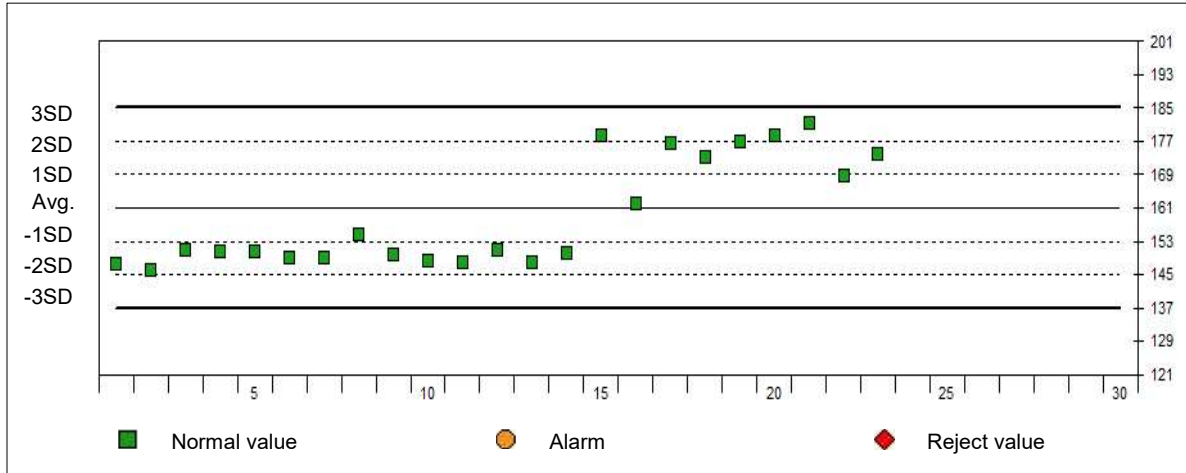
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|-----|-----|-------------------|-------------------|
| 161.0 | 8.0 | 5.0 | 137.0 | 185.0 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|--------------|-----------|-----------|-------|
| 1 | 04/07/2022 09:17:12 | 147.5 | -13.5 | -1.7 | |
| 2 | 05/07/2022 09:23:05 | 146.0 | -15.0 | -1.9 | |
| 3 | 06/07/2022 09:40:14 | 150.8 | -10.2 | -1.3 | |
| 4 | 07/07/2022 09:24:39 | 150.7 | -10.3 | -1.3 | |
| 5 | 08/07/2022 09:41:45 | 150.4 | -10.6 | -1.3 | |
| 6 | 09/07/2022 09:27:35 | 148.9 | -12.1 | -1.5 | |
| 7 | 10/07/2022 09:15:15 | 149.1 | -11.9 | -1.5 | |
| 8 | 11/07/2022 09:32:15 | 154.7 | -6.3 | -0.8 | |
| 9 | 12/07/2022 09:48:25 | 149.8 | -11.2 | -1.4 | |
| 10 | 14/07/2022 09:22:49 | 148.5 | -12.5 | -1.6 | |
| 11 | 15/07/2022 09:29:45 | 147.8 | -13.2 | -1.7 | |
| 12 | 16/07/2022 09:32:51 | 150.8 | -10.2 | -1.3 | |
| 13 | 17/07/2022 09:19:21 | 148.1 | -12.9 | -1.6 | |
| 14 | 18/07/2022 09:42:20 | 150.4 | -10.6 | -1.3 | |
| 15 | 19/07/2022 09:45:53 | 178.5 | 17.5 | 2.2 | |
| 16 | 20/07/2022 09:26:23 | 162.1 | 1.1 | 0.1 | |
| 17 | 21/07/2022 09:30:13 | 176.7 | 15.7 | 2.0 | |
| 18 | 22/07/2022 09:45:10 | 173.4 | 12.4 | 1.5 | |
| 19 | 23/07/2022 09:42:40 | 177.1 | 16.1 | 2.0 | |
| 20 | 24/07/2022 09:33:03 | 178.4 | 17.4 | 2.2 | |
| 21 | 25/07/2022 08:53:35 | 181.4 | 20.4 | 2.6 | |
| 22 | 26/07/2022 09:58:35 | 168.7 | 7.7 | 1.0 | |
| 23 | 27/07/2022 09:41:43 | 174.2 | 13.2 | 1.7 | |

Quality control

27/07/2022 12:49

Test TRIGLYCERIDES-1

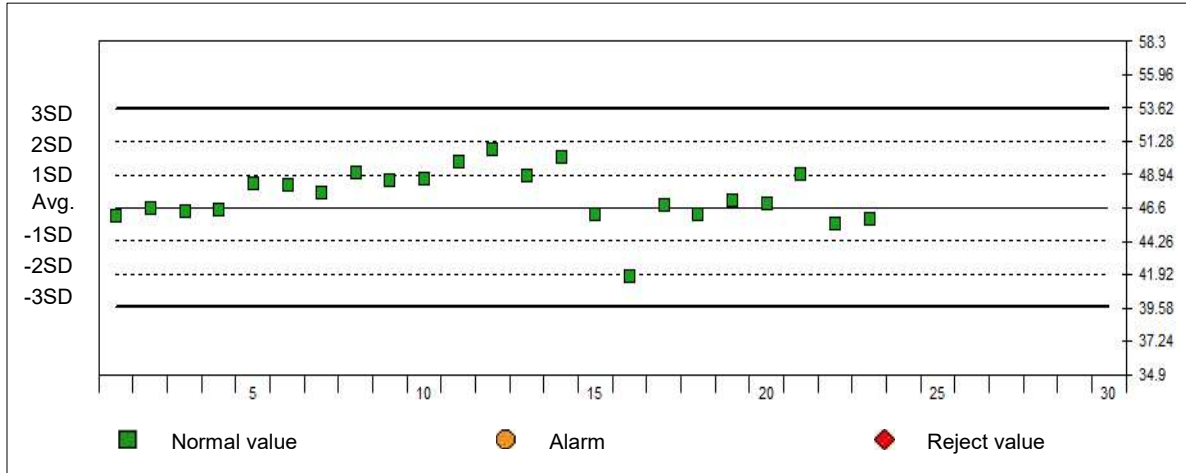
Units mg/dL

Run rejection criterion 3SD

Control 1

First Name QC 100

Lot 100



| Average | SD | CV | Minimum to reject | Maximum to reject |
|---------|-----|-----|-------------------|-------------------|
| 46.6 | 2.3 | 5.0 | 39.6 | 53.6 |

| Run | Date | Control 1 | Abs. Err. | Rel. Err. | Alarm |
|-----|---------------------|-----------|-----------|-----------|-------|
| 1 | 04/07/2022 09:17:36 | 46.1 | -0.5 | -0.2 | |
| 2 | 05/07/2022 09:23:29 | 46.6 | 0.0 | 0.0 | |
| 3 | 06/07/2022 09:40:38 | 46.4 | -0.2 | -0.1 | |
| 4 | 07/07/2022 09:25:03 | 46.5 | -0.1 | 0.0 | |
| 5 | 08/07/2022 09:42:09 | 48.4 | 1.8 | 0.8 | |
| 6 | 09/07/2022 09:28:00 | 48.2 | 1.6 | 0.7 | |
| 7 | 10/07/2022 09:15:39 | 47.7 | 1.1 | 0.5 | |
| 8 | 11/07/2022 09:32:39 | 49.1 | 2.5 | 1.1 | |
| 9 | 12/07/2022 09:48:49 | 48.5 | 1.9 | 0.8 | |
| 10 | 14/07/2022 09:32:25 | 48.6 | 2.0 | 0.9 | |
| 11 | 15/07/2022 09:30:09 | 49.8 | 3.2 | 1.4 | |
| 12 | 16/07/2022 09:33:15 | 50.7 | 4.1 | 1.8 | |
| 13 | 17/07/2022 09:19:45 | 48.9 | 2.3 | 1.0 | |
| 14 | 18/07/2022 09:42:44 | 50.2 | 3.6 | 1.5 | |
| 15 | 19/07/2022 09:46:17 | 46.1 | -0.5 | -0.2 | |
| 16 | 20/07/2022 09:26:47 | 41.8 | -4.8 | -2.1 | |
| 17 | 21/07/2022 09:31:01 | 46.9 | 0.3 | 0.1 | |
| 18 | 22/07/2022 09:45:34 | 46.2 | -0.4 | -0.2 | |
| 19 | 23/07/2022 09:43:04 | 47.1 | 0.5 | 0.2 | |
| 20 | 24/07/2022 09:33:27 | 46.9 | 0.3 | 0.1 | |
| 21 | 25/07/2022 08:53:59 | 48.9 | 2.3 | 1.0 | |
| 22 | 26/07/2022 09:58:59 | 45.5 | -1.1 | -0.5 | |
| 23 | 27/07/2022 09:42:07 | 45.9 | -0.7 | -0.3 | |