

## PRODUCT INFORMATION

CAL2351

1449UE

Please note: AST in reconstituted serum is stable for 3 days at +2°C to +8°C if kept capped in original container and free from contamination.

Should you require any further information, please contact [Technical.Services@Randox.com](mailto:Technical.Services@Randox.com).

CCS INC 2157

## **CALIBRATION SERUM LEVEL 3 (CAL 3)**

**CAT. NO.** CAL 235I**LOT NO.** I449UE**SIZE:** 20 x 5ml**EXPIRY:** 2028-02-28**GTIN:** 05055273200966

### **INTENDED USE**

For use as a Calibrator in clinical chemistry assays. RANDOX Calibration Sera are based on lyophilised human serum. The concentrations and activities are suitable for calibration of clinical chemistry assays on a wide range of automatic analysers. Constituent concentrations are available at 2 levels.

### **SAFETY PRECAUTIONS AND WARNINGS**

Human source material, from which this product has been derived, has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly. For *in vitro* diagnostic use only.

### **STORAGE AND STABILITY**

Unreconstituted serum is stable up to the expiry date shown on the side of each individual bottle. Once reconstituted, the components of the Calibration Sera are stable for 8 hours at +15°C to +25°C, 7 days at +2°C to +8°C, and 28 days at -20°C when frozen once (see limitations).

### **PREPARATION FOR USE**

Serum must only be reconstituted using the following procedure:

1. Open the vial carefully, avoiding any loss of material.
2. Reconstitute by pipetting exactly 5 ml of distilled water at +15°C to +25°C, into the vial.
3. Replace the rubber stopper and leave to stand for 30 minutes out of bright light before use.
4. Swirl gently several times during the reconstitution period to ensure that the contents are completely dissolved.
5. Prior to use, mix the contents by inverting the vial. Do not shake the vial as the formation of foam should be avoided. Ensure that no lyophilised material remains unreconstituted.
6. The serum is then ready for use with either a manual test or with an automated instrument.

### **MATERIALS PROVIDED**

Calibration Serum - Level 3

Cat No. CAL 235I 20 x 5ml

### **MATERIALS REQUIRED BUT NOT PROVIDED**

Calibrated pipette, double deionised water.

### **LIMITATIONS**

After reconstitution, Bicarbonate is stable for 8 hours in the closed bottle and 1 hour in the open bottle. For Total and Prostatic Acid Phosphatase, the material should be stabilised by adding 1 drop (25 µl - 30 µl) of 0.7M Acetic acid solution to 1 ml of the serum exactly 30 minutes after reconstitution. After stabilisation, Total & Prostatic Acid Phosphatase are stable for 2 hours at +15°C to +25°C, 2 days at +2°C to +8°C, and 28 days when frozen once at -20°C.

Alkaline Phosphatase is stable for 3 days at +2 °C to +8°C and levels in the reconstituted serum will rise over the stability period. It is recommended that the reconstituted serum be allowed to stand for 1 hour at +15°C to +25°C before measurement.

Bilirubin in the serum is light sensitive and it is recommended that the serum is stored in the dark. Stored in the dark, it is stable for 1 day at +2°C to +8°C. Do not store at +15°C to +25°C. Do not freeze.

GLDH is stable for 1 day at +2°C to +8°C

AST in reconstituted serum is stable for 3 days at +2°C to +8°C

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. Different lot numbers of this calibrator should not be interchanged, as the values assigned to the calibrators vary from lot to lot.

Due to the zinc content in some batches of rubber stoppers, the QC material should be aliquoted into suitable containers without rubber stoppers and stored at +2°C to +8°C to ensure stable zinc levels throughout the stability period.

**VALUE ASSIGNMENT**

Each batch of serum is distributed to approximately 3000 laboratories worldwide and values are assigned by a consensus of results obtained by these laboratories. The Calibration values for each instrument have been determined in at least 10 independent laboratories. Values are verified against a master lot of calibrator, which is traceable to reference methods or reference materials. In some cases values may be assigned at Randox Laboratories in comparison to a master lot of calibrator, which is traceable to reference methods or reference materials.

If an instrument specific value is not available, refer to the Method section. If necessary, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email [Technical.Services@randox.com](mailto:Technical.Services@randox.com).

**NOTES**

® All trademarks recognised.

- (1) Values established by reference laboratories officially recognised by the Federal Chamber of Physicians in Germany.
- (2) DGKC: German Society for Clinical Chemistry.
- (3) IFCC: International Federation of Clinical Chemistry.
- (4) SCE: Scandinavian Committee on Enzymes.



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| Abbott Alinity c                                    |        | Calibration Serum Level 3 (CAL 3) |                                       |
|-----------------------------------------------------|--------|-----------------------------------|---------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                       |
| Size: 20 x 5 ml                                     |        |                                   |                                       |
| Analyte                                             | Unit   | Target                            | Method                                |
| Albumin                                             | g/dl   | 3.06                              | Abbott Alinity Albumin BCG 2          |
|                                                     | g/l    | 30.6                              |                                       |
|                                                     | g/dl   | 2.91                              | Abbott Alinity Albumin BCP 2          |
|                                                     | g/l    | 29.1                              |                                       |
|                                                     | g/dl   | 3.07                              | Bromocresol Green                     |
|                                                     | g/l    | 30.7                              |                                       |
|                                                     | g/dl   | 2.95                              | Bromocresol Purple                    |
|                                                     | g/l    | 29.5                              |                                       |
| Alkaline Phosphatase                                | U/l    | 318                               | Abbott Alinity Alkaline Phosphatase 2 |
|                                                     | U/l    | 319                               | AMP non-optimised                     |
|                                                     | U/l    | 317                               | AMP optimised to IFCC                 |
|                                                     | U/l    | 333                               | Colorimetric                          |
| ALT (GPT)                                           | U/l    | 122                               | Abbott Alinity ALT 2                  |
|                                                     | U/l    | 140                               | Tris Buffer With P5P                  |
|                                                     | U/l    | 125                               | Tris Buffer Without P5P               |
| Amylase Pancreatic                                  | U/l    | 228                               | Immunoinhibition, EPS substrate       |
| Amylase Total                                       | U/l    | 274                               | Abbott Alinity Amylase 2              |
| AST (GOT)                                           | U/l    | 137                               | Abbott Alinity AST 2                  |
|                                                     | U/l    | 179                               | Tris Buffer With P5P                  |
|                                                     | U/l    | 140                               | Tris Buffer Without P5P               |
| Bicarbonate                                         | mmol/l | 13.5                              | Enzymatic                             |
|                                                     | mmol/l | 13.0                              | PEP Carboxylase                       |
| Bile Acids                                          | µmol/l | 42.8                              | Enzymatic Colorimetric                |
|                                                     | µmol/l | 44.5                              | Enzymatic Colorimetric - Sentinel     |
| Bilirubin Direct                                    | mg/dl  | 1.73                              | Diazo with Dichloroaniline            |
|                                                     | µmol/l | 29.5                              |                                       |
|                                                     | mg/dl  | 1.71                              | Diazo With Sulphanilic Acid           |
|                                                     | µmol/l | 29.3                              |                                       |
|                                                     | mg/dl  | 1.75                              | Dichlorophenyl Diazonium              |
|                                                     | µmol/l | 29.9                              |                                       |
| Bilirubin Total                                     | mg/dl  | 5.31                              | Abbott Alinity Total Bilirubin 2      |
|                                                     | µmol/l | 90.8                              |                                       |
|                                                     | mg/dl  | 5.32                              | Diazo With Dichloroaniline            |
|                                                     | µmol/l | 91.0                              |                                       |
|                                                     | mg/dl  | 5.29                              | Diazo With Sulphanilic Acid           |
|                                                     | µmol/l | 90.5                              |                                       |
|                                                     | mg/dl  | 5.32                              | Diazonium Ion                         |
| µmol/l                                              | 90.9   |                                   |                                       |

| Abbott Alinity c                                    |        | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                      |
| Size: 20 x 5 ml                                     |        |                                   |                                      |
| Analyte                                             | Unit   | Target                            | Method                               |
| Calcium                                             | mg/dl  | 11.7                              | Arsenazo III                         |
|                                                     | mmol/l | 2.93                              |                                      |
| Chloride                                            | mmol/l | 113                               | ISE Indirect                         |
| Cholesterol                                         | mg/dl  | 275                               | Abbott Alinity Cholesterol 2         |
|                                                     | mmol/l | 7.13                              |                                      |
|                                                     | mg/dl  | 274                               | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.09                              |                                      |
| Cholinesterase                                      | U/l    | 6823                              | Colorimetric - Butyrylthiocholine    |
| CK Total                                            | U/l    | 548                               | Abbott CK-NAC (IFCC)                 |
|                                                     | U/l    | 553                               | CK-NAC (IFCC)                        |
|                                                     | U/l    | 539                               | CK-NAC serum start (DGKC)            |
| Copper                                              | µg/dl  | 159                               | Colorimetric                         |
|                                                     | µmol/l | 25.0                              |                                      |
| Creatinine                                          | mg/dl  | 4.03                              | Abbott Alinity Creatinine 2          |
|                                                     | µmol/l | 357                               |                                      |
|                                                     | mg/dl  | 4.05                              | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 358                               |                                      |
|                                                     | mg/dl  | 4.09                              | Enzymatic                            |
|                                                     | µmol/l | 362                               |                                      |
|                                                     | mg/dl  | 4.08                              | IDMS Traceable                       |
|                                                     | µmol/l | 361                               |                                      |
| gamma-GT                                            | U/l    | 199                               | Abbott Alinity GGT 2                 |
|                                                     | U/l    | 200                               | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 197                               | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl  | 265                               | Glucose Oxidase                      |
|                                                     | mmol/l | 14.7                              |                                      |
|                                                     | mg/dl  | 270                               | Hexokinase                           |
|                                                     | mmol/l | 15.0                              |                                      |
| Iron                                                | µg/dl  | 227                               | Abbott Alinity Iron 2                |
|                                                     | µmol/l | 40.6                              |                                      |
|                                                     | µg/dl  | 227                               | Colorimetric with ppt.               |
|                                                     | µmol/l | 40.6                              |                                      |
|                                                     | µg/dl  | 227                               | Colorimetric without ppt.            |
|                                                     | µmol/l | 40.6                              |                                      |
| Lactate                                             | mg/dl  | 52.0                              | Colorimetric - Lactate oxidase       |
|                                                     | mmol/l | 5.77                              |                                      |
| LD (LDH)                                            | U/l    | 323                               | Abbott Alinity LD 2                  |
|                                                     | U/l    | 325                               | L to P, IFCC                         |
|                                                     | U/l    | 321                               | Lactate to Pyruvate methods          |

| Abbott Alinity c                                    |             | Calibration Serum Level 3 (CAL 3) |                                  |
|-----------------------------------------------------|-------------|-----------------------------------|----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                  |
| Size: 20 x 5 ml                                     |             |                                   |                                  |
| Analyte                                             | Unit        | Target                            | Method                           |
| Lipase                                              | U/l         | 63                                | Other Colorimetric               |
| Lithium                                             | mg/dl       | 1.30                              | Spectrophotometric               |
|                                                     | mmol/l      | 1.87                              |                                  |
| Magnesium                                           | mg/dl       | 4.33                              | Arsenazo III                     |
|                                                     | mmol/l      | 1.78                              |                                  |
|                                                     | mg/dl       | 4.33                              | Enzymatic                        |
|                                                     | mmol/l      | 1.78                              |                                  |
|                                                     | mg/dl       | 4.20                              | Xylidyl Blue                     |
|                                                     | mmol/l      | 1.73                              |                                  |
| Phosphate Inorganic                                 | mg/dl       | 7.41                              | Phosphomolybdate Enzymatic       |
|                                                     | mmol/l      | 2.39                              |                                  |
|                                                     | mg/dl       | 7.38                              | Phosphomolybdate UV              |
|                                                     | mmol/l      | 2.38                              |                                  |
| Potassium                                           | mmol/l      | 6.20                              | Ion Selective Electrode Method   |
| Protein Total                                       | g/dl        | 4.95                              | Abbott Alinity Total Protein 2   |
|                                                     | g/l         | 49.5                              |                                  |
|                                                     | g/dl        | 4.93                              | Biuret reaction, end point       |
|                                                     | g/l         | 49.3                              |                                  |
| Sodium                                              | mmol/l      | 159                               | Ion Selective Electrode Method   |
| TIBC                                                | µg/dl       | 234                               | Calculated from Transferrin      |
|                                                     | µmol/l      | 41.8                              |                                  |
|                                                     | µg/dl       | 249                               | FE+UIBC(saturation with iron)    |
|                                                     | µmol/l      | 44.6                              |                                  |
| Triglycerides                                       | mg/dl       | 235                               | Abbott Alinity i                 |
|                                                     | mmol/l      | 2.66                              |                                  |
|                                                     | mg/dl       | 235                               | Lipase/GPO-PAP No Correction     |
|                                                     | mmol/l      | 2.65                              |                                  |
| Urea                                                | mg/dl       | 121                               | Abbott Architect Urea Nitrogen 2 |
|                                                     | mg/dl (BUN) | 56.3                              |                                  |
|                                                     | mmol/l      | 20.1                              |                                  |
|                                                     | mg/dl       | 119                               | Urease, end point                |
|                                                     | mg/dl (BUN) | 55.4                              |                                  |
|                                                     | mmol/l      | 19.8                              |                                  |
|                                                     | mg/dl       | 122                               | Urease, kinetic                  |
|                                                     | mg/dl (BUN) | 56.8                              |                                  |
|                                                     | mmol/l      | 20.3                              |                                  |
|                                                     |             |                                   |                                  |

| Abbott Alinity c                                    |        | Calibration Serum Level 3 (CAL 3) |                                |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                |
| Size: 20 x 5 ml                                     |        |                                   |                                |
| Analyte                                             | Unit   | Target                            | Method                         |
| Uric Acid (Urate)                                   | mg/dl  | 8.89                              | Abbott Alinity Uric Acid 2     |
|                                                     | mmol/l | 0.529                             |                                |
|                                                     | μmol/l | 529                               |                                |
|                                                     | mg/dl  | 8.97                              | Uricase perox. no ascorb. ox.  |
|                                                     | mmol/l | 0.534                             |                                |
|                                                     | μmol/l | 534                               |                                |
|                                                     | mg/dl  | 8.89                              | Uricase Perox. with ascorb. ox |
|                                                     | mmol/l | 0.529                             |                                |
|                                                     | μmol/l | 529                               |                                |

| Abbott Architect c Systems                          |        |        | Calibration Serum Level 3 (CAL 3)        |
|-----------------------------------------------------|--------|--------|------------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                          |
| Size: 20 x 5 ml                                     |        |        |                                          |
| Analyte                                             | Unit   | Target | Method                                   |
| Albumin                                             | g/dl   | 3.02   | Abbott Alinity Albumin BCG 2             |
|                                                     | g/l    | 30.2   |                                          |
|                                                     | g/dl   | 3.08   | Abbott Architect Albumin BCG 2           |
|                                                     | g/l    | 30.8   |                                          |
|                                                     | g/dl   | 2.92   | Abbott Architect Albumin BCP 2           |
|                                                     | g/l    | 29.2   |                                          |
|                                                     | g/dl   | 3.07   | Bromocresol Green                        |
|                                                     | g/l    | 30.7   |                                          |
| Albumin                                             | g/dl   | 2.97   | Bromocresol Purple                       |
|                                                     | g/l    | 29.7   |                                          |
|                                                     |        |        |                                          |
| Alkaline Phosphatase                                | U/l    | 320    | Abbott Architect Alkaline Phosphatase 2  |
|                                                     | U/l    | 321    | AMP non-optimised                        |
|                                                     | U/l    | 319    | AMP optimised to IFCC                    |
|                                                     | U/l    | 321    | Other AMP kits                           |
| ALT (GPT)                                           | U/l    | 125    | Abbott Architect ALT 2                   |
|                                                     | U/l    | 135    | Tris Buffer With P5P                     |
|                                                     | U/l    | 125    | Tris Buffer Without P5P                  |
| Amylase Pancreatic                                  | U/l    | 232    | Immunoinhibition, EPS substrate          |
| Amylase Total                                       | U/l    | 274    | Abbott Architect Amylase 2               |
|                                                     | U/l    | 272    | Abbott Architect/Alinity cal factor 3431 |
|                                                     | U/l    | 265    | Abbott blocked pNPG7                     |
| AST (GOT)                                           | U/l    | 140    | Abbott Architect AST 2                   |
|                                                     | U/l    | 171    | Tris Buffer With P5P                     |
|                                                     | U/l    | 139    | Tris Buffer Without P5P                  |
| Bicarbonate                                         | mmol/l | 12.1   | PEP Carboxylase                          |
| Bile Acids                                          | µmol/l | 43.7   | Enzymatic Colorimetric                   |
| Bilirubin Direct                                    | mg/dl  | 1.77   | Diazo with Dichloroaniline               |
|                                                     | µmol/l | 30.2   |                                          |
|                                                     | mg/dl  | 1.74   | Diazo With Sulphanilic Acid              |
|                                                     | µmol/l | 29.7   |                                          |
|                                                     | mg/dl  | 1.73   | Dichlorophenyl Diazonium                 |
|                                                     | µmol/l | 29.5   |                                          |
| Bilirubin Total                                     | mg/dl  | 5.25   | Abbott Alin/Arch cal batch no >97447/8/9 |
|                                                     | µmol/l | 89.7   |                                          |
|                                                     | mg/dl  | 5.32   | Abbott Architect Total Bilirubin 2       |
|                                                     | µmol/l | 91.0   |                                          |
|                                                     | mg/dl  | 5.34   | Diazo With Dichloroaniline               |
|                                                     | µmol/l | 91.2   |                                          |

| Abbott Architect c Systems                          |        |        | Calibration Serum Level 3 (CAL 3)    |
|-----------------------------------------------------|--------|--------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                      |
| Size: 20 x 5 ml                                     |        |        |                                      |
| Analyte                                             | Unit   | Target | Method                               |
| Bilirubin Total                                     | mg/dl  | 5.38   | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 91.9   |                                      |
|                                                     | mg/dl  | 5.31   | Diazonium Ion                        |
|                                                     | µmol/l | 90.8   |                                      |
| Calcium                                             | mg/dl  | 11.9   | Arsenazo III                         |
|                                                     | mmol/l | 2.97   |                                      |
| Chloride                                            | mmol/l | 113    | ISE Indirect                         |
| Cholesterol                                         | mg/dl  | 277    | Abbott Architect Cholesterol 2       |
|                                                     | mmol/l | 7.18   |                                      |
|                                                     | mg/dl  | 276    | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.16   |                                      |
| Cholinesterase                                      | U/l    | 6827   | Colorimetric - Butyrylthiocholine    |
| CK Total                                            | U/l    | 533    | Abbott CK-NAC (IFCC)                 |
|                                                     | U/l    | 529    | CK-NAC (IFCC)                        |
|                                                     | U/l    | 545    | CK-NAC serum start (DGKC)            |
|                                                     | U/l    | 540    | CK-NAC substrate start (DGKC)        |
| Creatinine                                          | mg/dl  | 4.02   | Abbott Architect Creatinine 2        |
|                                                     | µmol/l | 356    |                                      |
|                                                     | mg/dl  | 3.99   | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 353    |                                      |
|                                                     | mg/dl  | 4.11   | Enzymatic                            |
|                                                     | µmol/l | 364    |                                      |
|                                                     | mg/dl  | 3.88   | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 343    |                                      |
| gamma-GT                                            | U/l    | 199    | Abbott Architect GGT 2               |
|                                                     | U/l    | 199    | DCL, gamma glut.-3-carb.-4-nitro.    |
|                                                     | U/l    | 199    | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 199    | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl  | 270    | Glucose Dehydrogenase                |
|                                                     | mmol/l | 15.0   |                                      |
|                                                     | mg/dl  | 276    | Glucose Oxidase                      |
|                                                     | mmol/l | 15.3   |                                      |
|                                                     | mg/dl  | 274    | Hexokinase                           |
|                                                     | mmol/l | 15.2   |                                      |
| Iron                                                | µg/dl  | 225    | Abbott Architect Chemilum            |
|                                                     | µmol/l | 40.3   |                                      |
|                                                     | µg/dl  | 231    | Colorimetric with ppt.               |
|                                                     | µmol/l | 41.4   |                                      |

| Abbott Architect c Systems                          |        |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                   |
| Size: 20 x 5 ml                                     |        |        |                                   |
| Analyte                                             | Unit   | Target | Method                            |
| Iron                                                | µg/dl  | 223    | Colorimetric without ppt.         |
|                                                     | µmol/l | 39.9   |                                   |
| Lactate                                             | mg/dl  | 52.6   | Colorimetric - Lactate oxidase    |
|                                                     | mmol/l | 5.84   |                                   |
| LD (LDH)                                            | U/l    | 321    | Abbott Architect LD 2             |
|                                                     | U/l    | 321    | L to P, IFCC                      |
|                                                     | U/l    | 317    | Lactate to Pyruvate methods       |
| Lipase                                              | U/l    | 61     | Other Colorimetric                |
| Lithium                                             | mg/dl  | 1.31   | Spectrophotometric                |
|                                                     | mmol/l | 1.89   |                                   |
| Magnesium                                           | mg/dl  | 4.18   | Arsenazo III                      |
|                                                     | mmol/l | 1.72   |                                   |
|                                                     | mg/dl  | 4.23   | Enzymatic                         |
|                                                     | mmol/l | 1.74   |                                   |
|                                                     | mg/dl  | 4.20   | Xylidyl Blue                      |
|                                                     | mmol/l | 1.73   |                                   |
| Phosphate Inorganic                                 | mg/dl  | 7.41   | Phosphomolybdate Enzymatic        |
|                                                     | mmol/l | 2.39   |                                   |
|                                                     | mg/dl  | 7.44   | Phosphomolybdate UV               |
|                                                     | mmol/l | 2.40   |                                   |
| Potassium                                           | mmol/l | 6.16   | Ion Selective Electrode Method    |
| Protein Total                                       | g/dl   | 5.01   | Abbott Architect total Protein 2  |
|                                                     | g/l    | 50.1   |                                   |
|                                                     | g/dl   | 5.01   | Biuret reaction, end point        |
|                                                     | g/l    | 50.1   |                                   |
|                                                     | g/dl   | 4.98   | Biuret reaction, kinetic          |
|                                                     | g/l    | 49.8   |                                   |
| Sodium                                              | mmol/l | 158    | Ion Selective Electrode Method    |
| TIBC                                                | µg/dl  | 249    | FE+UIBC(saturation with iron)     |
|                                                     | µmol/l | 44.6   |                                   |
| Triglycerides                                       | mg/dl  | 235    | Abbott Architect Triglyceride 2   |
|                                                     | mmol/l | 2.65   |                                   |
|                                                     | mg/dl  | 238    | Lipase/Glycerol Dehydrogenase     |
|                                                     | mmol/l | 2.69   |                                   |
|                                                     | mg/dl  | 234    | Lipase/GPO-PAP No Correction      |
|                                                     | mmol/l | 2.64   |                                   |

| Abbott Architect c Systems                          |             |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|-------------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                        |
| Size: 20 x 5 ml                                     |             |        |                                        |
| Analyte                                             | Unit        | Target | Method                                 |
| Urea                                                | mg/dl       | 122    | Abbott Architect Urea Nitrogen 2       |
|                                                     | mg/dl (BUN) | 56.8   |                                        |
|                                                     | mmol/l      | 20.3   |                                        |
|                                                     | mg/dl       | 123    | Urease, end point                      |
|                                                     | mg/dl (BUN) | 57.1   |                                        |
|                                                     | mmol/l      | 20.4   |                                        |
|                                                     | mg/dl       | 123    | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 57.1   |                                        |
|                                                     | mmol/l      | 20.4   |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 8.87   | Abbott Architect Uric Acid 2           |
|                                                     | mmol/l      | 0.528  |                                        |
|                                                     | µmol/l      | 528    |                                        |
|                                                     | mg/dl       | 8.86   | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.527  |                                        |
|                                                     | µmol/l      | 527    |                                        |
|                                                     | mg/dl       | 8.81   | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.524  |                                        |
|                                                     | µmol/l      | 524    |                                        |
|                                                     | mg/dl       | 9.06   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.539  |                                        |
|                                                     | µmol/l      | 539    |                                        |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3)   |
|-----------------------------------------------------|--------|--------|-------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                     |
| Size: 20 x 5 ml                                     |        |        |                                     |
| Analyte                                             | Unit   | Target | Method                              |
| Albumin                                             | g/dl   | 3.06   | Bromocresol Green                   |
|                                                     | g/l    | 30.6   |                                     |
|                                                     | g/dl   | 3.00   | Bromocresol Purple                  |
|                                                     | g/l    | 30.0   |                                     |
|                                                     | g/dl   | 3.10   | Nephelometric Assays                |
|                                                     | g/l    | 31.0   |                                     |
| Alkaline Phosphatase                                | U/l    | 323    | AMP non-optimised                   |
|                                                     | U/l    | 332    | AMP optimised to IFCC               |
|                                                     | U/l    | 337    | Beckman AMP (Calibrator)            |
|                                                     | U/l    | 323    | Beckman AMP (Extinction Coeff)      |
|                                                     | U/l    | 324    | Diethanolamine buffer, DEA          |
| ALT (GPT)                                           | U/l    | 139    | Agappe - IFCC                       |
|                                                     | U/l    | 141    | Beckman IFCC Ref. with P5P          |
|                                                     | U/l    | 138    | Beckman Mod. IFCC Ref. without P5P  |
|                                                     | U/l    | 142    | Tris Buffer With P5P                |
|                                                     | U/l    | 137    | Tris buffer with P5P, NVKC          |
|                                                     | U/l    | 142    | Tris Buffer Without P5P             |
| Amylase Total                                       | U/l    | 239    | Agappe - CNPG3                      |
|                                                     | U/l    | 262    | Amylolytic Methods                  |
|                                                     | U/l    | 261    | Beckman blocked pNPG7               |
|                                                     | U/l    | 260    | Beckman CNPG3 (Extinction Coeff)    |
|                                                     | U/l    | 259    | Beckman CNPG3 (Master Cal)          |
|                                                     | U/l    | 262    | Beckman maltotetraose               |
|                                                     | U/l    | 272    | Beckman Synchron AMY7               |
|                                                     | U/l    | 304    | bioMerieux 2-chloro-pNPG3           |
|                                                     | U/l    | 263    | Human CNPG3 (IFCC)                  |
|                                                     | U/l    | 241    | pNP Maltotrioxide substrates        |
|                                                     | U/l    | 278    | Randox Liquid Ethylidene pNPG7      |
|                                                     | U/l    | 249    | Roche Liquid Stable pNPG7           |
|                                                     | U/l    | 256    | Siemens/Dade Behring 2-chloro-pNPG3 |
| AST (GOT)                                           | U/l    | 129    | Agappe - IFCC                       |
|                                                     | U/l    | 137    | Beckman IFCC Ref. with P5P          |
|                                                     | U/l    | 136    | Beckman Mod. IFCC Ref. without P5P  |
|                                                     | U/l    | 130    | Phosphate buffer, DGKC              |
|                                                     | U/l    | 135    | Tris Buffer With P5P                |
|                                                     | U/l    | 132    | Tris buffer with P5P, NVKC          |
|                                                     | U/l    | 135    | Tris Buffer Without P5P             |
| Bicarbonate                                         | mmol/l | 14.2   | Enzymatic                           |
|                                                     | mmol/l | 14.7   | PEP Carboxylase                     |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3)   |
|-----------------------------------------------------|--------|--------|-------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                     |
| Size: 20 x 5 ml                                     |        |        |                                     |
| Analyte                                             | Unit   | Target | Method                              |
| Bile Acids                                          | µmol/l | 44.7   | Enzymatic Colorimetric              |
|                                                     | µmol/l | 47.8   | Enzymatic Colorimetric - Sentinel   |
| Bilirubin Direct                                    | mg/dl  | 1.45   | Diazo/Sulphanilic Beckman DxC       |
|                                                     | µmol/l | 24.8   |                                     |
|                                                     | mg/dl  | 1.49   | Dichlorophenyl Diazonium            |
|                                                     | µmol/l | 25.4   |                                     |
| Bilirubin Total                                     | mg/dl  | 5.67   | Diazo With Dichloroaniline          |
|                                                     | µmol/l | 96.9   |                                     |
|                                                     | mg/dl  | 5.46   | Diazo With Sulphanilic Acid         |
|                                                     | µmol/l | 93.3   |                                     |
|                                                     | mg/dl  | 5.44   | Diazonium Ion                       |
|                                                     | µmol/l | 93.0   |                                     |
|                                                     | mg/dl  | 5.49   | Dichlorophenyl Diazonium            |
|                                                     | µmol/l | 93.9   |                                     |
| Calcium                                             | mg/dl  | 5.42   | DPD (Beckman AU)                    |
|                                                     | µmol/l | 92.7   |                                     |
|                                                     | mg/dl  | 12.3   | Arsenazo III                        |
|                                                     | mmol/l | 3.06   |                                     |
|                                                     | mg/dl  | 12.1   | Cresolphthalein Complexone          |
|                                                     | mmol/l | 3.03   |                                     |
|                                                     | mg/dl  | 12.2   | Ion Selective Electrode             |
|                                                     | mmol/l | 3.04   |                                     |
| Cholesterol                                         | mg/dl  | 12.3   | NM-BAPTA                            |
|                                                     | mmol/l | 3.07   |                                     |
|                                                     | mmol/l | 111    | ISE Indirect                        |
|                                                     |        |        |                                     |
| Cholesterol                                         | mg/dl  | 278    | Agappe - CHOD-PAP                   |
|                                                     | mmol/l | 7.21   |                                     |
|                                                     | mg/dl  | 279    | Cholesterol Dehydrogenase           |
|                                                     | mmol/l | 7.23   |                                     |
|                                                     | mg/dl  | 281    | Cholesterol Oxidase - Abell Kendall |
|                                                     | mmol/l | 7.27   |                                     |
|                                                     | mg/dl  | 282    | Cholesterol Oxidase - IDMS          |
|                                                     | mmol/l | 7.30   |                                     |
| Cholinesterase                                      | U/l    | 5450   | Colorimetric - Butyrylthiocholine   |
| CK Total                                            | U/l    | 536    | Abbott CK-NAC (IFCC)                |
|                                                     | U/l    | 585    | Beckman CK-NAC (Extinction Coeff)   |
|                                                     | U/l    | 563    | Beckman CK-NAC (IFCC)               |
|                                                     | U/l    | 554    | CK-NAC (IFCC)                       |
|                                                     | U/l    | 566    | CK-NAC serum start (DGKC)           |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|--------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                        |
| Size: 20 x 5 ml                                     |        |        |                                        |
| Analyte                                             | Unit   | Target | Method                                 |
| CK Total                                            | U/l    | 493    | CK-NAC substrate start (DGKC)          |
|                                                     | U/l    | 536    | Creatine Phosphate Substrate Start     |
|                                                     | U/l    | 589    | Monothioglycerol                       |
| Copper                                              | µg/dl  | 162    | Colorimetric                           |
|                                                     | µmol/l | 25.5   |                                        |
| Creatinine                                          | mg/dl  | 3.74   | Alkaline picrate no deproteinisation   |
|                                                     | µmol/l | 331    |                                        |
|                                                     | mg/dl  | 3.79   | Alkaline Picrate With Deproteinisation |
|                                                     | µmol/l | 335    |                                        |
|                                                     | mg/dl  | 4.05   | Enzymatic                              |
|                                                     | µmol/l | 358    |                                        |
|                                                     | mg/dl  | 3.94   | IDMS Traceable                         |
|                                                     | µmol/l | 349    |                                        |
|                                                     | mg/dl  | 3.75   | Jaffe Rate Blanked                     |
|                                                     | µmol/l | 332    |                                        |
|                                                     | mg/dl  | 3.76   | Jaffe rate blanked comp. (-26umol/l)   |
|                                                     | µmol/l | 333    |                                        |
|                                                     | mg/dl  | 3.73   | Jaffe rate blanked comp. (-33umol/l)   |
|                                                     | µmol/l | 330    |                                        |
|                                                     | mg/dl  | 3.86   | Jaffe rate comp. (-18umol/l)           |
|                                                     | µmol/l | 342    |                                        |
| D-3-Hydroxybutyrate                                 | mmol/l | 1.25   | Phosphate buffer 20mmol pH 7.0         |
|                                                     | mmol/l | 1.20   | Tris buffer 100mmol pH 8.5             |
| gamma-GT                                            | U/l    | 191    | Beckman Szasz (Extinction Coeff.)      |
|                                                     | U/l    | 193    | DCL, gamma glut.-3-carb.-4-nitro.      |
|                                                     | U/l    | 184    | Gamma glut.-3-carb.-4-nitro.           |
|                                                     | U/l    | 195    | Gamma glut'3-carb'4-nitro(IFCC)        |
|                                                     | U/l    | 190    | Gamma Glutamyl-4-Nitroanilide          |
| GLDH                                                | U/l    | 24     | Triethanolamine buffer                 |
| Glucose                                             | mg/dl  | 276    | Glucose Dehydrogenase                  |
|                                                     | mmol/l | 15.3   |                                        |
|                                                     | mg/dl  | 274    | Glucose Oxidase                        |
|                                                     | mmol/l | 15.2   |                                        |
|                                                     | mg/dl  | 274    | GOD/02-Beckman method                  |
|                                                     | mmol/l | 15.2   |                                        |
|                                                     | mg/dl  | 270    | Hexokinase                             |
|                                                     | mmol/l | 15.0   |                                        |
|                                                     | µg/dl  | 221    | Colorimetric with ppt.                 |
| Iron                                                | µmol/l | 39.6   |                                        |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                   |
| Size: 20 x 5 ml                                     |        |        |                                   |
| Analyte                                             | Unit   | Target | Method                            |
| Iron                                                | µg/dl  | 220    | Colorimetric without ppt.         |
|                                                     | µmol/l | 39.4   |                                   |
|                                                     | µg/dl  | 219    | Optical Emission Spectroscopy     |
|                                                     | µmol/l | 39.1   |                                   |
| Lactate                                             | mg/dl  | 48.6   | Colorimetric - Lactate oxidase    |
|                                                     | mmol/l | 5.39   |                                   |
|                                                     | mg/dl  | 48.3   | Enzymatic Electrode               |
|                                                     | mmol/l | 5.36   |                                   |
|                                                     | mg/dl  | 44.4   | UV-LDH                            |
|                                                     | mmol/l | 4.93   |                                   |
| LD (LDH)                                            | U/l    | 302    | L to P Beckman (Extinction Coeff) |
|                                                     | U/l    | 322    | L to P, IFCC                      |
|                                                     | U/l    | 330    | Lactate to Pyruvate methods       |
|                                                     | U/l    | 701    | P to L Scandinavian & Dutch       |
|                                                     | U/l    | 326    | Pyruvate 1.4 mM - Beckman LD-P    |
| Lipase                                              | U/l    | 63     | Other Colorimetric                |
| Lithium                                             | mg/dl  | 1.32   | Spectrophotometric                |
|                                                     | mmol/l | 1.90   |                                   |
| Magnesium                                           | mg/dl  | 4.28   | Arsenazo III                      |
|                                                     | mmol/l | 1.76   |                                   |
|                                                     | mg/dl  | 4.18   | Calmagite                         |
|                                                     | mmol/l | 1.72   |                                   |
|                                                     | mg/dl  | 4.18   | Methylthymol Blue                 |
|                                                     | mmol/l | 1.72   |                                   |
|                                                     | mg/dl  | 4.20   | Xylidyl Blue                      |
|                                                     | mmol/l | 1.73   |                                   |
| Phosphate Inorganic                                 | mg/dl  | 7.35   | Beckman PHOSm kit (365nm)         |
|                                                     | mmol/l | 2.37   |                                   |
|                                                     | mg/dl  | 7.28   | Phosphomolybdate Enzymatic        |
|                                                     | mmol/l | 2.35   |                                   |
|                                                     | mg/dl  | 7.32   | Phosphomolybdate UV               |
|                                                     | mmol/l | 2.36   |                                   |
| Potassium                                           | mmol/l | 6.12   | Ion Selective Electrode Method    |
| Protein Total                                       | g/dl   | 4.90   | Biuret reaction, CX4/5/7          |
|                                                     | g/l    | 49.0   |                                   |
|                                                     | g/dl   | 4.86   | Biuret reaction, end point        |
|                                                     | g/l    | 48.6   |                                   |
|                                                     | g/dl   | 4.83   | Biuret reaction, kinetic          |
|                                                     | g/l    | 48.3   |                                   |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3)     |
|-----------------------------------------------------|--------|--------|---------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                       |
| Size: 20 x 5 ml                                     |        |        |                                       |
| Analyte                                             | Unit   | Target | Method                                |
| Sodium                                              | mmol/l | 158    | Ion Selective Electrode Method        |
| TIBC                                                | µg/dl  | 233    | Calculated from Transferrin           |
|                                                     | µmol/l | 41.7   |                                       |
|                                                     | µg/dl  | 245    | Direct Colorimetric                   |
|                                                     | µmol/l | 43.9   |                                       |
|                                                     | µg/dl  | 252    | FE+UIBC(saturation with iron)         |
|                                                     | µmol/l | 45.0   |                                       |
| Triglycerides                                       | mg/dl  | 227    | Abbott Architect Triglyceride 2       |
|                                                     | mmol/l | 2.57   |                                       |
|                                                     | mg/dl  | 241    | Lipase/GK UV. no correction           |
|                                                     | mmol/l | 2.72   |                                       |
|                                                     | mg/dl  | 237    | Lipase/GK UV., 0.11 mmol/l correction |
|                                                     | mmol/l | 2.68   |                                       |
|                                                     | mg/dl  | 244    | Lipase/Glycerol Dehydrogenase         |
|                                                     | mmol/l | 2.76   |                                       |
|                                                     | mg/dl  | 241    | Lipase/GPO-PAP No Correction          |
|                                                     | mmol/l | 2.72   |                                       |
|                                                     | mg/dl  | 238    | Lipase/GPO-PAP, 0.11mmol/l correction |
|                                                     | mmol/l | 2.69   |                                       |
|                                                     | mg/dl  | 246    | Quidel Triage Meter Plus              |
|                                                     | mmol/l | 2.78   |                                       |
| Urea                                                | mg/dl  | 118    | Beckman - Conductivity                |
|                                                     | mg/dl  | 54.9   |                                       |
|                                                     | (BUN)  |        |                                       |
|                                                     | mmol/l | 19.6   |                                       |
|                                                     | mg/dl  | 119    | Urease - hypochlorite                 |
|                                                     | mg/dl  | 55.4   |                                       |
|                                                     | (BUN)  |        |                                       |
|                                                     | mmol/l | 19.8   |                                       |
|                                                     | mg/dl  | 120    | Urease, end point                     |
|                                                     | mg/dl  | 55.7   |                                       |
|                                                     | (BUN)  |        |                                       |
|                                                     | mmol/l | 19.9   |                                       |
|                                                     | mg/dl  | 120    | Urease, kinetic                       |
|                                                     | mg/dl  | 56.0   |                                       |
|                                                     | (BUN)  |        |                                       |
|                                                     | mmol/l | 20.0   |                                       |

| Beckman Coulter AU Series                           |        |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|--------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                        |
| Size: 20 x 5 ml                                     |        |        |                                        |
| Analyte                                             | Unit   | Target | Method                                 |
| Uric Acid (Urate)                                   | mg/dl  | 9.09   | Beckman AU Non US calibrator (66300)   |
|                                                     | mmol/l | 0.541  |                                        |
|                                                     | µmol/l | 541    |                                        |
|                                                     | mg/dl  | 8.97   | Beckman AU US calibrator (DR0070)      |
|                                                     | mmol/l | 0.534  |                                        |
|                                                     | µmol/l | 534    |                                        |
|                                                     | mg/dl  | 9.19   | Reduction Methods                      |
|                                                     | mmol/l | 0.547  |                                        |
|                                                     | µmol/l | 547    |                                        |
|                                                     | mg/dl  | 9.23   | Uricase @ 293 nm                       |
|                                                     | mmol/l | 0.549  |                                        |
|                                                     | µmol/l | 549    |                                        |
|                                                     | mg/dl  | 9.04   | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l | 0.538  |                                        |
|                                                     | µmol/l | 538    |                                        |
|                                                     | mg/dl  | 9.11   | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l | 0.542  |                                        |
|                                                     | µmol/l | 542    |                                        |
|                                                     | mg/dl  | 8.96   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.533  |                                        |
|                                                     | µmol/l | 533    |                                        |
|                                                     | mg/dl  | 9.36   | Uricase, catalase 340nm.               |
|                                                     | mmol/l | 0.557  |                                        |
|                                                     | µmol/l | 557    |                                        |

| Beckman Coulter DxC600/DxC800                       |      |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |      |        |                                   |
| Size: 20 x 5 ml                                     |      |        |                                   |
| Analyte                                             | Unit | Target | Method                            |
| Albumin                                             | g/dl | 3.08   | Bromocresol Purple                |
|                                                     | g/l  | 30.8   |                                   |
| Alkaline Phosphatase                                | U/l  | 290    | AMP optimised to IFCC             |

| Method                                              |              | Calibration Serum Level 3 (CAL 3) |                                         |                         |
|-----------------------------------------------------|--------------|-----------------------------------|-----------------------------------------|-------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |              |                                   |                                         |                         |
| Size: 20 x 5 ml                                     |              |                                   |                                         |                         |
| Analyte                                             | Unit         | Target                            | Method                                  |                         |
| Acid Phosphatase (Total)                            | U/l          | 21                                | Naphthyl phos. sub., end point          |                         |
| Albumin                                             | g/dl         | 3.06                              | Abbott Alinity Albumin BCG 2            |                         |
|                                                     | g/l          | 30.6                              |                                         |                         |
|                                                     | g/dl         | 2.91                              | Abbott Alinity Albumin BCP 2            |                         |
|                                                     | g/l          | 29.1                              |                                         |                         |
|                                                     | g/dl         | 3.08                              | Abbott Architect Albumin BCG 2          |                         |
|                                                     | g/l          | 30.8                              |                                         |                         |
|                                                     | g/dl         | 2.92                              | Abbott Architect Albumin BCP 2          |                         |
|                                                     | g/l          | 29.2                              |                                         |                         |
|                                                     | g/dl         | 3.48                              | Agappe - Bromocresol Green              |                         |
|                                                     | g/l          | 34.8                              |                                         |                         |
|                                                     | g/dl         | 3.17                              | Bromocresol Green                       |                         |
|                                                     | g/l          | 31.7                              |                                         |                         |
|                                                     | g/dl         | 3.02                              | Bromocresol Purple                      |                         |
|                                                     | g/l          | 30.2                              |                                         |                         |
|                                                     | g/dl         | 3.05                              | Nephelometric Assays                    |                         |
|                                                     | g/l          | 30.5                              |                                         |                         |
| Alkaline Phosphatase                                | g/dl         | 3.28                              | Ortho Vitros Microslide Systems         |                         |
|                                                     | g/l          | 32.8                              |                                         |                         |
|                                                     | g/dl         | 3.10                              | Turbidimetric Assays                    |                         |
|                                                     | g/l          | 31.0                              |                                         |                         |
|                                                     | U/l          | 318                               | Abbott Alinity Alkaline Phosphatase 2   |                         |
|                                                     | U/l          | 320                               | Abbott Architect Alkaline Phosphatase 2 |                         |
|                                                     | U/l          | 318                               | AMP non-optimised                       |                         |
|                                                     | U/l          | 316                               | AMP optimised to IFCC                   |                         |
|                                                     | U/l          | 337                               | Beckman AMP (Calibrator)                |                         |
|                                                     | U/l          | 284                               | Colorimetric                            |                         |
|                                                     | U/l          | 268                               | Ortho Vitros Microslide Systems         |                         |
|                                                     | U/l          | 274                               | Roche AMP buffer IFCC                   |                         |
|                                                     | U/l          | 293                               | Siemens/Dade Dimension AMP buffer       |                         |
|                                                     | alpha - HBDH | U/l                               | 342                                     | Oxobutyrate < 10 mmol/l |
|                                                     | ALT (GPT)    | U/l                               | 122                                     | Abbott Alinity ALT 2    |
|                                                     |              | U/l                               | 125                                     | Abbott Architect ALT 2  |
| U/l                                                 |              | 141                               | Beckman IFCC Ref. with P5P              |                         |
| U/l                                                 |              | 139                               | Beckman Mod. IFCC Ref. without P5P      |                         |
| U/l                                                 |              | 152                               | Ortho Vitros Microslide Systems         |                         |
| U/l                                                 |              | 153                               | Ortho Vitros MicroSlide visible         |                         |
| U/l                                                 |              | 141                               | Tris Buffer With P5P                    |                         |

| Method                                              |        | Calibration Serum Level 3 (CAL 3) |                                          |
|-----------------------------------------------------|--------|-----------------------------------|------------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                          |
| Size: 20 x 5 ml                                     |        |                                   |                                          |
| Analyte                                             | Unit   | Target                            | Method                                   |
| ALT (GPT)                                           | U/l    | 139                               | Tris Buffer Without P5P                  |
| Amylase Pancreatic                                  | U/l    | 232                               | Immunoinhibition, EPS substrate          |
|                                                     | U/l    | 224                               | Roche Liquid Stable pNPG7                |
| Amylase Total                                       | U/l    | 274                               | Abbott Alinity Amylase 2                 |
|                                                     | U/l    | 274                               | Abbott Architect Amylase 2               |
|                                                     | U/l    | 273                               | Abbott Architect/Alinity cal factor 3431 |
|                                                     | U/l    | 294                               | Agappe - CNPG3                           |
|                                                     | U/l    | 261                               | Beckman blocked pNPG7                    |
|                                                     | U/l    | 260                               | Beckman CNPG3 (Extinction Coeff)         |
|                                                     | U/l    | 259                               | Beckman CNPG3 (Master Cal)               |
|                                                     | U/l    | 262                               | Beckman maltotetraose                    |
|                                                     | U/l    | 250                               | BM/Roche, Colorimetric pNPG7             |
|                                                     | U/l    | 158                               | Ortho Vitros Microslide Systems          |
|                                                     | U/l    | 249                               | Other Roche 2-chloro-pNPG7               |
|                                                     | U/l    | 265                               | pNP Maltotrioside substrates             |
|                                                     | U/l    | 251                               | Roche Integra 2-chloro-pNPG7             |
|                                                     | U/l    | 250                               | Roche Liquid Stable pNPG7                |
|                                                     | U/l    | 287                               | Siemens - blocked pNPG7                  |
|                                                     | U/l    | 288                               | Siemens/Dade Behring 2-chloro-pNPG3      |
| AST (GOT)                                           | U/l    | 138                               | Abbott Alinity AST 2                     |
|                                                     | U/l    | 140                               | Abbott Architect AST 2                   |
|                                                     | U/l    | 136                               | Beckman Mod. IFCC Ref. without P5P       |
|                                                     | U/l    | 169                               | Ortho Vitros MicroSlide visible          |
|                                                     | U/l    | 131                               | Tris Buffer Without P5P                  |
| Bicarbonate                                         | mmol/l | 13.6                              | Enzymatic                                |
| Bile Acids                                          | µmol/l | 43.4                              | Enzymatic Colorimetric                   |
| Bilirubin Direct                                    | mg/dl  | 1.24                              | Diazo/ Sulphanilic Siemens Dimension     |
|                                                     | µmol/l | 21.2                              |                                          |
|                                                     | mg/dl  | 1.45                              | Diazo/Sulphanilic Beckman DxC            |
|                                                     | µmol/l | 24.8                              |                                          |
|                                                     | mg/dl  | 1.81                              | Oxidation to Biliverdin/Vanadate         |
|                                                     | µmol/l | 30.9                              |                                          |
| mg/dl                                               | 1.85   | Roche DPD Doumas standardised     |                                          |
|                                                     | µmol/l |                                   | 31.6                                     |
| mg/dl                                               | 2.10   | Roche DPD JG standardised         |                                          |
|                                                     | µmol/l |                                   | 35.9                                     |
| Bilirubin Total                                     | mg/dl  | 5.31                              | Abbott Alinity Total Bilirubin 2         |
|                                                     | µmol/l | 90.8                              |                                          |

| Method                                              |         | Calibration Serum Level 3 (CAL 3) |                                     |              |
|-----------------------------------------------------|---------|-----------------------------------|-------------------------------------|--------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |         |                                   |                                     |              |
| Size: 20 x 5 ml                                     |         |                                   |                                     |              |
| Analyte                                             | Unit    | Target                            | Method                              |              |
| Bilirubin Total                                     | mg/dl   | 5.34                              | Abbott Architect Total Bilirubin 2  |              |
|                                                     | µmol/l  | 91.2                              |                                     |              |
|                                                     | mg/dl   | 5.31                              | Diazo With Dichloroaniline          |              |
|                                                     | µmol/l  | 90.8                              |                                     |              |
|                                                     | mg/dl   | 5.41                              | Diazo With Sulphanilic Acid         |              |
|                                                     | µmol/l  | 92.4                              |                                     |              |
|                                                     | mg/dl   | 4.94                              | Diazonium Ion                       |              |
|                                                     | µmol/l  | 84.4                              |                                     |              |
|                                                     | mg/dl   | 4.96                              | Dichlorophenyl Diazonium            |              |
|                                                     | µmol/l  | 84.8                              |                                     |              |
|                                                     | mg/dl   | 5.42                              | DPD (Beckman AU)                    |              |
|                                                     | µmol/l  | 92.6                              |                                     |              |
|                                                     | mg/dl   | 5.25                              | Ortho Vitros MicroSlide Total Bil   |              |
|                                                     | µmol/l  | 89.7                              |                                     |              |
|                                                     | mg/dl   | 5.71                              | Oxidation to Biliverdin/Vanadate    |              |
|                                                     | µmol/l  | 97.6                              |                                     |              |
|                                                     | Calcium | mg/dl                             | 12.1                                | Arsenazo III |
|                                                     |         | mmol/l                            | 3.02                                |              |
| mg/dl                                               |         | 12.1                              | Cresolphthalein Complexone          |              |
| mmol/l                                              |         | 3.03                              |                                     |              |
| mg/dl                                               |         | 12.3                              | NM-BAPTA                            |              |
| mmol/l                                              |         | 3.06                              |                                     |              |
| mg/dl                                               |         | 12.2                              | Ortho Vitros Microslide Systems     |              |
| mmol/l                                              |         | 3.04                              |                                     |              |
| Chloride                                            | mmol/l  | 111                               | ISE Indirect                        |              |
|                                                     | mmol/l  | 113                               | Ortho Vitros Microslide Systems     |              |
| Cholesterol                                         | mg/dl   | 275                               | Abbott Alinity Cholesterol 2        |              |
|                                                     | mmol/l  | 7.13                              |                                     |              |
|                                                     | mg/dl   | 277                               | Abbott Architect Cholesterol 2      |              |
|                                                     | mmol/l  | 7.18                              |                                     |              |
|                                                     | mg/dl   | 279                               | Cholesterol Dehydrogenase           |              |
|                                                     | mmol/l  | 7.22                              |                                     |              |
|                                                     | mg/dl   | 280                               | Cholesterol Oxidase - Abell Kendall |              |
|                                                     | mmol/l  | 7.25                              |                                     |              |
|                                                     | mg/dl   | 280                               | Cholesterol Oxidase - IDMS          |              |
|                                                     | mmol/l  | 7.25                              |                                     |              |
|                                                     | mg/dl   | 275                               | Ortho Vitros Microslide Systems     |              |
|                                                     | mmol/l  | 7.12                              |                                     |              |

| Method                                              |        | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                      |
| Size: 20 x 5 ml                                     |        |                                   |                                      |
| Analyte                                             | Unit   | Target                            | Method                               |
| Cholesterol                                         | mg/dl  | 268                               | Siemens Dimension                    |
|                                                     | mmol/l | 6.95                              |                                      |
| Cholinesterase                                      | U/l    | 5723                              | Colorimetric - Butyrylthiocholine    |
|                                                     | U/l    | 8742                              | Siemens Atellica Cholinesterase_2    |
| CK Total                                            | U/l    | 544                               | Abbott CK-NAC (IFCC)                 |
|                                                     | U/l    | 563                               | Beckman CK-NAC (IFCC)                |
|                                                     | U/l    | 518                               | CK-NAC (IFCC)                        |
|                                                     | U/l    | 529                               | CK-NAC substrate start (DGKC)        |
|                                                     | U/l    | 515                               | Creatine Phosphate Substrate Start   |
|                                                     | U/l    | 421                               | Ortho Vitros Microslide Systems      |
| Creatinine                                          | mg/dl  | 4.03                              | Abbott Alinity Creatinine 2          |
|                                                     | µmol/l | 357                               |                                      |
|                                                     | mg/dl  | 4.01                              | Abbott Architect Creatinine 2        |
|                                                     | µmol/l | 355                               |                                      |
|                                                     | mg/dl  | 3.81                              | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 337                               |                                      |
|                                                     | mg/dl  | 3.98                              | IDMS Traceable                       |
|                                                     | µmol/l | 352                               |                                      |
|                                                     | mg/dl  | 3.77                              | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 334                               |                                      |
|                                                     | mg/dl  | 3.98                              | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l | 352                               |                                      |
|                                                     | mg/dl  | 3.90                              | Jaffe rate comp. (-18µmol/l)         |
|                                                     | µmol/l | 345                               |                                      |
|                                                     | mg/dl  | 4.15                              | Roche Creatinine Plus                |
|                                                     | µmol/l | 367                               |                                      |
|                                                     | mg/dl  | 4.03                              | Vitros, IDMS traceable               |
|                                                     | µmol/l | 357                               |                                      |
| D-3-Hydroxybutyrate                                 | mmol/l | 1.21                              | Tris buffer 100mmol pH 8.5           |
| gamma-GT                                            | U/l    | 199                               | Abbott Alinity GGT 2                 |
|                                                     | U/l    | 199                               | Abbott Architect GGT 2               |
|                                                     | U/l    | 189                               | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 197                               | Gamma glut'3-carb'4-nitro(IFCC)      |
|                                                     | U/l    | 211                               | Ortho Vitros Microslide Systems      |
| GLDH                                                | U/l    | 25                                | Triethanolamine buffer               |
| Glucose                                             | mg/dl  | 276                               | Glucose Oxidase                      |
|                                                     | mmol/l | 15.3                              |                                      |
|                                                     | mg/dl  | 272                               | Hexokinase                           |
|                                                     | mmol/l | 15.1                              |                                      |

| Method                                              |        | Calibration Serum Level 3 (CAL 3) |                                 |
|-----------------------------------------------------|--------|-----------------------------------|---------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                 |
| Size: 20 x 5 ml                                     |        |                                   |                                 |
| Analyte                                             | Unit   | Target                            | Method                          |
| Glucose                                             | mg/dl  | 258                               | Ortho Vitros Microslide Systems |
|                                                     | mmol/l | 14.3                              |                                 |
| Iron                                                | µg/dl  | 227                               | Abbott Alinity Iron 2           |
|                                                     | µmol/l | 40.6                              |                                 |
|                                                     | µg/dl  | 225                               | Abbott Architect Chemilum       |
|                                                     | µmol/l | 40.3                              |                                 |
|                                                     | µg/dl  | 220                               | Colorimetric with ppt.          |
|                                                     | µmol/l | 39.3                              |                                 |
| µg/dl                                               | 219    | Colorimetric without ppt.         |                                 |
| µmol/l                                              | 39.1   |                                   |                                 |
| µg/dl                                               | 215    | Ortho Vitros Microslide Systems   |                                 |
| µmol/l                                              | 38.5   |                                   |                                 |
| Lactate                                             | mg/dl  | 49.5                              | Colorimetric - Lactate oxidase  |
|                                                     | mmol/l | 5.49                              |                                 |
|                                                     | mg/dl  | 49.5                              | Enzymatic Electrode             |
|                                                     | mmol/l | 5.49                              |                                 |
| mg/dl                                               | 51.6   | Ion Selective Electrode           |                                 |
| mmol/l                                              | 5.73   |                                   |                                 |
| LD (LDH)                                            | U/l    | 323                               | Abbott Alinity LD 2             |
|                                                     | U/l    | 321                               | Abbott Architect LD 2           |
|                                                     | U/l    | 332                               | L to P, IFCC                    |
|                                                     | U/l    | 332                               | Lactate to Pyruvate methods     |
|                                                     | U/l    | 381                               | Ortho Vitros IFCC Traceable     |
|                                                     | U/l    | 687                               | P to L Scandinavian & Dutch     |
|                                                     | U/l    | 670                               | P to L, German methods          |
|                                                     | U/l    | 648                               | P to L, SFBC                    |
| Lipase                                              | U/l    | 66                                | Colorimetric Roche              |
|                                                     | U/l    | 555                               | Ortho Vitros Microslide Systems |
|                                                     | U/l    | 64                                | Other Colorimetric              |
| Lithium                                             | mg/dl  | 1.35                              | Ion Selective Electrode         |
|                                                     | mmol/l | 1.94                              |                                 |
|                                                     | mg/dl  | 1.33                              | Spectrophotometric              |
|                                                     | mmol/l | 1.91                              |                                 |
| Magnesium                                           | mg/dl  | 4.23                              | Arsenazo III                    |
|                                                     | mmol/l | 1.74                              |                                 |
|                                                     | mg/dl  | 4.20                              | Chlorphosphonazo III            |
|                                                     | mmol/l | 1.73                              |                                 |
|                                                     | mg/dl  | 4.28                              | Enzymatic                       |
|                                                     | mmol/l | 1.76                              |                                 |

| Method                                              |         | Calibration Serum Level 3 (CAL 3) |                                  |
|-----------------------------------------------------|---------|-----------------------------------|----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |         |                                   |                                  |
| Size: 20 x 5 ml                                     |         |                                   |                                  |
| Analyte                                             | Unit    | Target                            | Method                           |
| Magnesium                                           | mg/dl   | 4.23                              | Methylthymol Blue                |
|                                                     | mmol/l  | 1.74                              |                                  |
|                                                     | mg/dl   | 4.35                              | Ortho Vitros Microslide Systems  |
|                                                     | mmol/l  | 1.79                              |                                  |
|                                                     | mg/dl   | 4.20                              | Xylidyl Blue                     |
|                                                     | mmol/l  | 1.73                              |                                  |
| Osmolality                                          | mOsm/Kg | 344                               | Calculated                       |
|                                                     | mOsm/Kg | 384                               | Freezing Point Depression        |
| Phosphate Inorganic                                 | mg/dl   | 7.10                              | Ortho Vitros Microslide Systems  |
|                                                     | mmol/l  | 2.29                              |                                  |
|                                                     | mg/dl   | 7.35                              | Phosphomolybdate Enzymatic       |
|                                                     | mmol/l  | 2.37                              |                                  |
|                                                     | mg/dl   | 7.32                              | Phosphomolybdate UV              |
|                                                     | mmol/l  | 2.36                              |                                  |
| Potassium                                           | mmol/l  | 6.13                              | Ion Selective Electrode Method   |
| Protein Total                                       | g/dl    | 4.95                              | Abbott Alinity Total Protein 2   |
|                                                     | g/l     | 49.5                              |                                  |
|                                                     | g/dl    | 5.01                              | Abbott Architect total Protein 2 |
|                                                     | g/l     | 50.1                              |                                  |
|                                                     | g/dl    | 4.85                              | Biuret reaction, end point       |
|                                                     | g/l     | 48.5                              |                                  |
|                                                     | g/dl    | 4.84                              | Biuret reaction, kinetic         |
|                                                     | g/l     | 48.4                              |                                  |
|                                                     | g/dl    | 4.97                              | Ortho Vitros Microslide Systems  |
|                                                     | g/l     | 49.7                              |                                  |
| Sodium                                              | mmol/l  | 157                               | Ion Selective Electrode Method   |
| TIBC                                                | µg/dl   | 243                               | Calculated from Transferrin      |
|                                                     | µmol/l  | 43.5                              |                                  |
|                                                     | µg/dl   | 260                               | Direct Colorimetric              |
|                                                     | µmol/l  | 46.6                              |                                  |
|                                                     | µg/dl   | 247                               | FE+UIBC(saturation with iron)    |
|                                                     | µmol/l  | 44.1                              |                                  |
| Triglycerides                                       | mg/dl   | 235                               | Abbott Architect Triglyceride 2  |
|                                                     | mmol/l  | 2.65                              |                                  |
|                                                     | mg/dl   | 242                               | Lipase/GK UV. no correction      |
|                                                     | mmol/l  | 2.74                              |                                  |

| Method                                              |                   | Calibration Serum Level 3 (CAL 3) |                                       |                                  |
|-----------------------------------------------------|-------------------|-----------------------------------|---------------------------------------|----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |                   |                                   |                                       |                                  |
| Size: 20 x 5 ml                                     |                   |                                   |                                       |                                  |
| Analyte                                             | Unit              | Target                            | Method                                |                                  |
| Triglycerides                                       | mg/dl             | 242                               | Lipase/Glycerol Dehydrogenase         |                                  |
|                                                     | mmol/l            | 2.74                              |                                       |                                  |
|                                                     | mg/dl             | 242                               | Lipase/GPO-PAP No Correction          |                                  |
|                                                     | mmol/l            | 2.74                              |                                       |                                  |
|                                                     | mg/dl             | 242                               | Lipase/GPO-PAP, 0.11mmol/l correction |                                  |
|                                                     | mmol/l            | 2.74                              |                                       |                                  |
| Urea                                                | mg/dl             | 280                               | Ortho Vitros Microslide Systems       |                                  |
|                                                     | mmol/l            | 3.16                              |                                       |                                  |
|                                                     | mg/dl             | 257                               | Siemens Atellica TRIG_ 2              |                                  |
|                                                     | mmol/l            | 2.90                              |                                       |                                  |
|                                                     | Urea              | mg/dl                             | 122                                   | Abbott Architect Urea Nitrogen 2 |
|                                                     |                   | mg/dl                             | 56.8                                  |                                  |
| (BUN)                                               |                   |                                   |                                       |                                  |
| mmol/l                                              |                   | 20.3                              | Ortho Vitros Microslide Systems       |                                  |
| mg/dl                                               |                   | 109                               |                                       |                                  |
| mg/dl                                               |                   | 51.0                              |                                       |                                  |
| (BUN)                                               |                   |                                   |                                       |                                  |
| mmol/l                                              |                   | 18.2                              |                                       |                                  |
| mg/dl                                               |                   | 118                               |                                       |                                  |
| Urea                                                |                   | mg/dl                             | 55.2                                  | Urease, end point                |
|                                                     |                   | (BUN)                             |                                       |                                  |
|                                                     |                   | mmol/l                            | 19.7                                  |                                  |
|                                                     | mg/dl             | 120                               | Urease, kinetic                       |                                  |
|                                                     | mg/dl             | 55.7                              |                                       |                                  |
|                                                     | (BUN)             |                                   |                                       |                                  |
| mmol/l                                              | 19.9              |                                   |                                       |                                  |
| Uric Acid (Urate)                                   | mg/dl             | 8.89                              | Abbott Alinity Uric Acid 2            |                                  |
|                                                     | mmol/l            | 0.529                             |                                       |                                  |
|                                                     | µmol/l            | 529                               |                                       |                                  |
|                                                     | mg/dl             | 8.87                              | Abbott Architect Uric Acid 2          |                                  |
|                                                     | mmol/l            | 0.528                             |                                       |                                  |
|                                                     | µmol/l            | 528                               |                                       |                                  |
|                                                     | mg/dl             | 9.09                              | Beckman AU Non US calibrator (66300)  |                                  |
|                                                     | mmol/l            | 0.541                             |                                       |                                  |
|                                                     | µmol/l            | 541                               |                                       |                                  |
|                                                     | Uric Acid (Urate) | mg/dl                             | 8.57                                  | Ortho Vitros Microslide Systems  |
|                                                     |                   | mmol/l                            | 0.510                                 |                                  |
|                                                     |                   | µmol/l                            | 510                                   |                                  |

| Method                                              |        | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|--------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                        |
| Size: 20 x 5 ml                                     |        |                                   |                                        |
| Analyte                                             | Unit   | Target                            | Method                                 |
| Uric Acid (Urate)                                   | mg/dl  | 8.92                              | Uricase @ 293 nm                       |
|                                                     | mmol/l | 0.531                             |                                        |
|                                                     | µmol/l | 531                               |                                        |
|                                                     | mg/dl  | 8.96                              | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l | 0.533                             |                                        |
|                                                     | µmol/l | 533                               |                                        |
|                                                     | mg/dl  | 8.97                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l | 0.534                             |                                        |
|                                                     | µmol/l | 534                               |                                        |
|                                                     | mg/dl  | 8.84                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.526                             |                                        |
|                                                     | µmol/l | 526                               |                                        |
| Zinc                                                | µg/dl  | 195                               | Colorimetric with deprot.              |
|                                                     | µmol/l | 29.9                              |                                        |
|                                                     | µg/dl  | 202                               | Colorimetric without deprot.           |
|                                                     | µmol/l | 31.0                              |                                        |

| Mindray BA BA 88A                                       |        | Calibration Serum Level 3 (CAL 3) |                                     |
|---------------------------------------------------------|--------|-----------------------------------|-------------------------------------|
| Lot. No: 1449UE   Cat. No: CAL2351   Expiry: 2028/02/28 |        |                                   |                                     |
| Size: 20 x 5 ml                                         |        |                                   |                                     |
| Analyte                                                 | Unit   | Target                            | Method                              |
| Cholesterol                                             | mg/dl  | 272                               | Cholesterol Oxidase - Abell Kendall |
|                                                         | mmol/l | 7.05                              |                                     |
| Glucose                                                 | mg/dl  | 270                               | Glucose Oxidase                     |
|                                                         | mmol/l | 15.0                              |                                     |

| Mindray BS Series                                   |        |        | Calibration Serum Level 3 (CAL 3)  |
|-----------------------------------------------------|--------|--------|------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                    |
| Size: 20 x 5 ml                                     |        |        |                                    |
| Analyte                                             | Unit   | Target | Method                             |
| Albumin                                             | g/dl   | 3.32   | Agappe - Bromocresol Green         |
|                                                     | g/l    | 33.2   |                                    |
|                                                     | g/dl   | 3.10   | Bromocresol Green                  |
|                                                     | g/l    | 31.0   |                                    |
| Alkaline Phosphatase                                | U/l    | 337    | AMP optimised to IFCC              |
| ALT (GPT)                                           | U/l    | 150    | Beckman Mod. IFCC Ref. without P5P |
| Amylase Total                                       | U/l    | 301    | Agappe - CNPG3                     |
|                                                     | U/l    | 263    | Amyloclastic Methods               |
|                                                     | U/l    | 261    | Beckman CNPG3 (Master Cal)         |
|                                                     | U/l    | 266    | Human CNPG3 (IFCC)                 |
|                                                     | U/l    | 272    | I.L. 2-chloro-pNPG3                |
|                                                     | U/l    | 274    | pNP Maltotrioxide substrates       |
|                                                     | U/l    | 269    | Roche Liquid Stable pNPG7          |
| AST (GOT)                                           | U/l    | 128    | Agappe - IFCC                      |
|                                                     | U/l    | 137    | Beckman IFCC Ref. with P5P         |
|                                                     | U/l    | 133    | Beckman Mod. IFCC Ref. without P5P |
|                                                     | U/l    | 136    | Tris Buffer With P5P               |
|                                                     | U/l    | 132    | Tris Buffer Without P5P            |
| Bicarbonate                                         | mmol/l | 14.4   | Enzymatic                          |
|                                                     | mmol/l | 14.5   | PEP Carboxylase                    |
| Bilirubin Direct                                    | mg/dl  | 1.85   | Diazo With Sulphanilic Acid        |
|                                                     | µmol/l | 31.7   |                                    |
|                                                     | mg/dl  | 1.74   | Oxidation to Biliverdin/Vanadate   |
|                                                     | µmol/l | 29.7   |                                    |
| Bilirubin Total                                     | mg/dl  | 4.95   | Agappe - TAB                       |
|                                                     | µmol/l | 84.6   |                                    |
|                                                     | mg/dl  | 5.75   | Diazo With Sulphanilic Acid        |
|                                                     | µmol/l | 98.3   |                                    |
|                                                     | mg/dl  | 5.74   | Diazonium Ion                      |
|                                                     | µmol/l | 98.1   |                                    |
|                                                     | mg/dl  | 5.44   | Dichlorophenyl Diazonium           |
|                                                     | µmol/l | 93.0   |                                    |
| Calcium                                             | mg/dl  | 11.9   | Agappe - ARSENAZO                  |
|                                                     | mmol/l | 2.96   |                                    |
|                                                     | mg/dl  | 12.2   | Arsenazo III                       |
|                                                     | mmol/l | 3.04   |                                    |

| Mindray BS Series                                   |        | Calibration Serum Level 3 (CAL 3)    |                                      |
|-----------------------------------------------------|--------|--------------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                      |                                      |
| Size: 20 x 5 ml                                     |        |                                      |                                      |
| Analyte                                             | Unit   | Target                               | Method                               |
| Calcium                                             | mg/dl  | 12.3                                 | Cresolphthalein Complexone           |
|                                                     | mmol/l | 3.07                                 |                                      |
| Chloride                                            | mmol/l | 112                                  | ISE Indirect                         |
| Cholesterol                                         | mg/dl  | 272                                  | Agappe - CHOD-PAP                    |
|                                                     | mmol/l | 7.04                                 |                                      |
|                                                     | mg/dl  | 270                                  | Cholesterol Dehydrogenase            |
|                                                     | mmol/l | 6.99                                 |                                      |
|                                                     | mg/dl  | 276                                  | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.14                                 |                                      |
|                                                     | mg/dl  | 274                                  | Cholesterol Oxidase - IDMS           |
|                                                     | mmol/l | 7.10                                 |                                      |
| Cholinesterase                                      | U/l    | 5975                                 | Colorimetric - Butyrylthiocholine    |
| CK Total                                            | U/l    | 548                                  | CK-NAC (IFCC)                        |
|                                                     | U/l    | 582                                  | Gel Agglutination                    |
| Creatinine                                          | mg/dl  | 3.89                                 | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 344                                  |                                      |
|                                                     | mg/dl  | 4.19                                 | Enzymatic                            |
|                                                     | µmol/l | 371                                  |                                      |
|                                                     | mg/dl  | 4.31                                 | IDMS Traceable                       |
|                                                     | µmol/l | 381                                  |                                      |
|                                                     | mg/dl  | 3.86                                 | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 342                                  |                                      |
| mg/dl                                               | 4.07   | Jaffe rate blanked comp. (-26µmol/l) |                                      |
| µmol/l                                              | 360    |                                      |                                      |
| mg/dl                                               | 3.79   | Jaffe rate comp. (-18µmol/l)         |                                      |
| µmol/l                                              | 335    |                                      |                                      |
| gamma-GT                                            | U/l    | 185                                  | Beckman Szasz (Extinction Coeff.)    |
|                                                     | U/l    | 192                                  | DCL, gamma glut.-3-carb.-4-nitro.    |
|                                                     | U/l    | 189                                  | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 191                                  | Gamma glut'3-carb'4-nitro(IFCC)      |
|                                                     | U/l    | 190                                  | Gamma Glutamyl-4-Nitroanilide        |
| Glucose                                             | mg/dl  | 276                                  | Agappe - GOD-PAP                     |
|                                                     | mmol/l | 15.3                                 |                                      |
|                                                     | mg/dl  | 274                                  | Glucose Oxidase                      |
|                                                     | mmol/l | 15.2                                 |                                      |
|                                                     | mg/dl  | 276                                  | Hexokinase                           |
|                                                     | mmol/l | 15.3                                 |                                      |
| Iron                                                | µg/dl  | 216                                  | Colorimetric with ppt.               |
|                                                     | µmol/l | 38.6                                 |                                      |

| Mindray BS Series                                   |        | Calibration Serum Level 3 (CAL 3)     |                                       |
|-----------------------------------------------------|--------|---------------------------------------|---------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                       |                                       |
| Size: 20 x 5 ml                                     |        |                                       |                                       |
| Analyte                                             | Unit   | Target                                | Method                                |
| Iron                                                | µg/dl  | 215                                   | Colorimetric without ppt.             |
|                                                     | µmol/l | 38.5                                  |                                       |
| LD (LDH)                                            | U/l    | 330                                   | L to P, IFCC                          |
|                                                     | U/l    | 335                                   | Lactate to Pyruvate methods           |
|                                                     | U/l    | 671                                   | P to L, German methods                |
|                                                     | U/l    | 719                                   | P to L, SFBC                          |
| Lipase                                              | U/l    | 62                                    | Other Colorimetric                    |
| Magnesium                                           | mg/dl  | 4.33                                  | Enzymatic                             |
|                                                     | mmol/l | 1.78                                  |                                       |
|                                                     | mg/dl  | 4.20                                  | Xylidyl Blue                          |
|                                                     | mmol/l | 1.73                                  |                                       |
| Phosphate Inorganic                                 | mg/dl  | 7.25                                  | Phosphomolybdate Enzymatic            |
|                                                     | mmol/l | 2.34                                  |                                       |
|                                                     | mg/dl  | 7.01                                  | Phosphomolybdate UV                   |
|                                                     | mmol/l | 2.26                                  |                                       |
| Potassium                                           | mmol/l | 6.16                                  | Ion Selective Electrode Method        |
| Protein Total                                       | g/dl   | 5.08                                  | Agappe Ultra Stik                     |
|                                                     | g/l    | 50.8                                  |                                       |
|                                                     | g/dl   | 4.93                                  | Biuret reaction, end point            |
|                                                     | g/l    | 49.3                                  |                                       |
|                                                     | g/dl   | 4.97                                  | Biuret reaction, kinetic              |
|                                                     | g/l    | 49.7                                  |                                       |
| Sodium                                              | mmol/l | 158                                   | Ion Selective Electrode Method        |
| TIBC                                                | µg/dl  | 231                                   | FE+UIBC(saturation with iron)         |
|                                                     | µmol/l | 41.4                                  |                                       |
| Triglycerides                                       | mg/dl  | 236                                   | Lipase/GK UV. no correction           |
|                                                     | mmol/l | 2.67                                  |                                       |
|                                                     | mg/dl  | 259                                   | Lipase/GK UV., 0.11 mmol/l correction |
|                                                     | mmol/l | 2.93                                  |                                       |
|                                                     | mg/dl  | 230                                   | Lipase/Glycerol Dehydrogenase         |
|                                                     | mmol/l | 2.60                                  |                                       |
|                                                     | mg/dl  | 237                                   | Lipase/GPO-PAP No Correction          |
|                                                     | mmol/l | 2.68                                  |                                       |
| mg/dl                                               | 240    | Lipase/GPO-PAP, 0.11mmol/l correction |                                       |
| mmol/l                                              | 2.71   |                                       |                                       |
| mg/dl                                               | 219    | Quidel Triage Meter Plus              |                                       |
| mmol/l                                              | 2.47   |                                       |                                       |

| Mindray BS Series                                   |             | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|-------------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                        |
| Size: 20 x 5 ml                                     |             |                                   |                                        |
| Analyte                                             | Unit        | Target                            | Method                                 |
| Urea                                                | mg/dl       | 114                               | Agappe - BERTHELOT                     |
|                                                     | mg/dl (BUN) | 52.9                              |                                        |
|                                                     | mmol/l      | 18.9                              |                                        |
|                                                     | mg/dl       | 121                               | Agappe Ultra Stik                      |
|                                                     | mg/dl (BUN) | 56.6                              |                                        |
|                                                     | mmol/l      | 20.2                              |                                        |
|                                                     | mg/dl       | 120                               | Urease - hypochlorite                  |
|                                                     | mg/dl (BUN) | 56.0                              |                                        |
|                                                     | mmol/l      | 20.0                              |                                        |
|                                                     | mg/dl       | 120                               | Urease, end point                      |
|                                                     | mg/dl (BUN) | 56.0                              |                                        |
|                                                     | mmol/l      | 20.0                              |                                        |
|                                                     | mg/dl       | 120                               | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 56.0                              |                                        |
|                                                     | mmol/l      | 20.0                              |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 9.01                              | Agappe - URICASE - PAP                 |
|                                                     | mmol/l      | 0.536                             |                                        |
|                                                     | µmol/l      | 536                               |                                        |
|                                                     | mg/dl       | 8.81                              | Agappe - URICASE - TOPS                |
|                                                     | mmol/l      | 0.524                             |                                        |
|                                                     | µmol/l      | 524                               |                                        |
|                                                     | mg/dl       | 9.06                              | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.539                             |                                        |
|                                                     | µmol/l      | 539                               |                                        |
|                                                     | mg/dl       | 8.87                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.528                             |                                        |
|                                                     | µmol/l      | 528                               |                                        |
|                                                     | mg/dl       | 8.91                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.530                             |                                        |
|                                                     | µmol/l      | 530                               |                                        |

| Ortho Clinical Diagnostics 46/56/XT<br>7600 (Microtip/well) |        |        | Calibration Serum Level 3 (CAL 3) |
|-------------------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28         |        |        |                                   |
| Size: 20 x 5 ml                                             |        |        |                                   |
| Analyte                                                     | Unit   | Target | Method                            |
| Alkaline Phosphatase                                        | U/l    | 269    | Ortho Vitros Microslide Systems   |
| Amylase Total                                               | U/l    | 160    | Ortho Vitros Microslide Systems   |
| AST (GOT)                                                   | U/l    | 171    | Ortho Vitros MicroSlide visible   |
| Bilirubin Total                                             | mg/dl  | 5.24   | Ortho Vitros MicroSlide Total Bil |
|                                                             | µmol/l | 89.6   |                                   |
| Calcium                                                     | mg/dl  | 12.1   | Ortho Vitros Microslide Systems   |
|                                                             | mmol/l | 3.03   |                                   |
| Chloride                                                    | mmol/l | 114    | Ortho Vitros Microslide Systems   |
| Cholesterol                                                 | mg/dl  | 273    | Ortho Vitros Microslide Systems   |
|                                                             | mmol/l | 7.06   |                                   |
| CK Total                                                    | U/l    | 422    | Ortho Vitros Microslide Systems   |

**Ortho Clinical Diagnostics VITROS  
(no gen. #)**

**Calibration Serum Level 3 (CAL 3)**

Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28

Size: 20 x 5 ml

| Analyte              | Unit | Target | Method                          |
|----------------------|------|--------|---------------------------------|
| Alkaline Phosphatase | U/l  | 279    | Ortho Vitros Microslide Systems |

| Randox RX series                                    |        | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                      |
| Size: 20 x 5 ml                                     |        |                                   |                                      |
| Analyte                                             | Unit   | Target                            | Method                               |
| Albumin                                             | g/dl   | 3.28                              | Bromocresol Green                    |
|                                                     | g/l    | 32.8                              |                                      |
| Alkaline Phosphatase                                | U/l    | 345                               | AMP optimised to IFCC                |
| ALT (GPT)                                           | U/l    | 152                               | Tris Buffer Without P5P              |
| Amylase Total                                       | U/l    | 281                               | Randox Liquid Ethylidene pNPG7       |
| AST (GOT)                                           | U/l    | 145                               | Tris Buffer Without P5P              |
| Bilirubin Direct                                    | mg/dl  | 2.04                              | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 34.9                              |                                      |
|                                                     | mg/dl  | 1.97                              | Oxidation to Biliverdin/Vanadate     |
|                                                     | µmol/l | 33.7                              |                                      |
| Bilirubin Total                                     | mg/dl  | 5.57                              | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 95.2                              |                                      |
|                                                     | mg/dl  | 5.76                              | Oxidation to Biliverdin/Vanadate     |
|                                                     | µmol/l | 98.5                              |                                      |
| Calcium                                             | mg/dl  | 12.4                              | Arsenazo III                         |
|                                                     | mmol/l | 3.09                              |                                      |
| CK Total                                            | U/l    | 559                               | CK-NAC (IFCC)                        |
|                                                     | U/l    | 560                               | CK-NAC substrate start (DGKC)        |
| Creatinine                                          | mg/dl  | 3.57                              | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 316                               |                                      |
| gamma-GT                                            | U/l    | 213                               | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl  | 286                               | Glucose Oxidase                      |
|                                                     | mmol/l | 15.9                              |                                      |
|                                                     | mg/dl  | 276                               | Hexokinase                           |
|                                                     | mmol/l | 15.3                              |                                      |
| Iron                                                | µg/dl  | 226                               | Colorimetric without ppt.            |
|                                                     | µmol/l | 40.4                              |                                      |
| Lactate                                             | mg/dl  | 49.6                              | Colorimetric - Lactate oxidase       |
|                                                     | mmol/l | 5.51                              |                                      |
| LD (LDH)                                            | U/l    | 339                               | L to P, IFCC                         |
|                                                     | U/l    | 672                               | P to L, German methods               |
| Lipase                                              | U/l    | 78                                | Colorimetric Randox                  |
| Magnesium                                           | mg/dl  | 4.20                              | Xylidyl Blue                         |
|                                                     | mmol/l | 1.73                              |                                      |
| Phosphate Inorganic                                 | mg/dl  | 7.16                              | Phosphomolybdate UV                  |
|                                                     | mmol/l | 2.31                              |                                      |
| Protein Total                                       | g/dl   | 4.94                              | Biuret reaction, end point           |
|                                                     | g/l    | 49.4                              |                                      |

| Randox RX series                                    |             | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|-------------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                        |
| Size: 20 x 5 ml                                     |             |                                   |                                        |
| Analyte                                             | Unit        | Target                            | Method                                 |
| TIBC                                                | µg/dl       | 275                               | Direct Colorimetric                    |
|                                                     | µmol/l      | 49.2                              |                                        |
| Triglycerides                                       | mg/dl       | 247                               | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l      | 2.79                              |                                        |
| Urea                                                | mg/dl       | 116                               | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 54.0                              |                                        |
|                                                     | mmol/l      | 19.3                              |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 9.16                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.545                             |                                        |
|                                                     | µmol/l      | 545                               |                                        |

| Roche Cobas c111                                    |            | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|------------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |            |                                   |                                      |
| Size: 20 x 5 ml                                     |            |                                   |                                      |
| Analyte                                             | Unit       | Target                            | Method                               |
| Albumin                                             | g/dl       | 3.20                              | Bromocresol Green                    |
|                                                     | g/l        | 32.0                              |                                      |
| Alkaline Phosphatase                                | U/l        | 283                               | AMP optimised to IFCC                |
|                                                     | U/l        | 285                               | Roche AMP buffer IFCC                |
| ALT (GPT)                                           | U/l        | 124                               | Tris Buffer With P5P                 |
|                                                     | U/l        | 124                               | Tris Buffer Without P5P              |
| Amylase Total                                       | U/l        | 253                               | Roche Liquid Stable pNPG7            |
| AST (GOT)                                           | U/l        | 122                               | Tris Buffer With P5P                 |
|                                                     | U/l        | 123                               | Tris Buffer Without P5P              |
| Bilirubin Direct                                    | mg/dl      | 2.09                              | Diazo with Dichloroaniline           |
|                                                     | µmol/l     | 35.8                              |                                      |
|                                                     | mg/dl      | 2.25                              | Dichlorophenyl Diazonium             |
|                                                     | µmol/l     | 38.5                              |                                      |
| Bilirubin Total                                     | mg/dl      | 2.23                              | Roche DPD JG standardised            |
|                                                     | µmol/l     | 38.1                              |                                      |
|                                                     | mg/dl      | 5.32                              | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l     | 90.9                              |                                      |
| Calcium                                             | mg/dl      | 4.62                              | Diazonium Ion                        |
|                                                     | µmol/l     | 78.9                              |                                      |
|                                                     | mg/dl      | 4.83                              | Dichlorophenyl Diazonium             |
|                                                     | µmol/l     | 82.5                              |                                      |
| Cholesterol                                         | mg/dl      | 11.9                              | Arsenazo III                         |
|                                                     | mmol/l     | 2.98                              |                                      |
|                                                     | mg/dl      | 12.3                              | NM-BAPTA                             |
|                                                     | mmol/l     | 3.07                              |                                      |
| CK Total                                            | mg/dl      | 274                               | Cholesterol Dehydrogenase            |
|                                                     | mmol/l     | 7.09                              |                                      |
|                                                     | mg/dl      | 273                               | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l     | 7.07                              |                                      |
| Creatinine                                          | mg/dl      | 269                               | Cholesterol Oxidase - IDMS           |
|                                                     | mmol/l     | 6.98                              |                                      |
|                                                     | U/l        | 508                               | CK-NAC (IFCC)                        |
|                                                     | Creatinine | mg/dl                             | 3.86                                 |
| µmol/l                                              |            | 342                               |                                      |
| mg/dl                                               |            | 3.90                              | Jaffe rate blanked comp. (-26µmol/l) |
| µmol/l                                              |            | 345                               |                                      |
| Creatinine                                          | mg/dl      | 3.97                              | Jaffe rate comp. (-18µmol/l)         |
|                                                     | µmol/l     | 351                               |                                      |

| Roche Cobas c111                                    |             | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|-------------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                        |
| Size: 20 x 5 ml                                     |             |                                   |                                        |
| Analyte                                             | Unit        | Target                            | Method                                 |
| Creatinine                                          | mg/dl       | 3.86                              | Roche Creatinine Plus                  |
|                                                     | µmol/l      | 342                               |                                        |
| Glucose                                             | mg/dl       | 274                               | Glucose Oxidase                        |
|                                                     | mmol/l      | 15.2                              |                                        |
|                                                     | mg/dl       | 277                               | Hexokinase                             |
|                                                     | mmol/l      | 15.4                              |                                        |
| LD (LDH)                                            | U/l         | 344                               | L to P, IFCC                           |
| Protein Total                                       | g/dl        | 4.86                              | Biuret reaction, end point             |
|                                                     | g/l         | 48.6                              |                                        |
| Triglycerides                                       | mg/dl       | 250                               | Lipase/GK UV. no correction            |
|                                                     | mmol/l      | 2.82                              |                                        |
|                                                     | mg/dl       | 239                               | Lipase/Glycerol Dehydrogenase          |
|                                                     | mmol/l      | 2.70                              |                                        |
|                                                     | mg/dl       | 239                               | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l      | 2.70                              |                                        |
|                                                     | mg/dl       | 243                               | Lipase/GPO-PAP, 0.11mmol/l correction  |
|                                                     | mmol/l      | 2.75                              |                                        |
| Urea                                                | mg/dl       | 113                               | Urease, end point                      |
|                                                     | mg/dl (BUN) | 52.6                              |                                        |
|                                                     | mmol/l      | 18.8                              |                                        |
|                                                     | mg/dl       | 115                               | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 53.8                              |                                        |
|                                                     | mmol/l      | 19.2                              |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 8.82                              | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.525                             |                                        |
|                                                     | µmol/l      | 525                               |                                        |
|                                                     | mg/dl       | 8.82                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.525                             |                                        |
|                                                     | µmol/l      | 525                               |                                        |
|                                                     | mg/dl       | 8.76                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.521                             |                                        |
|                                                     | µmol/l      | 521                               |                                        |

| Roche Cobas c303/c503                               |        |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                   |
| Size: 20 x 5 ml                                     |        |        |                                   |
| Analyte                                             | Unit   | Target | Method                            |
| Albumin                                             | g/dl   | 3.31   | Bromocresol Green                 |
|                                                     | g/l    | 33.1   |                                   |
|                                                     | g/dl   | 2.95   | Bromocresol Purple                |
|                                                     | g/l    | 29.5   |                                   |
|                                                     | g/dl   | 3.01   | Turbidimetric Assays              |
|                                                     | g/l    | 30.1   |                                   |
| Alkaline Phosphatase                                | U/l    | 260    | AMP optimised to IFCC             |
|                                                     | U/l    | 260    | Colorimetric                      |
|                                                     | U/l    | 261    | Roche AMP buffer IFCC             |
| ALT (GPT)                                           | U/l    | 145    | Colorimetric                      |
|                                                     | U/l    | 141    | Tris Buffer With P5P              |
|                                                     | U/l    | 142    | Tris Buffer Without P5P           |
| Amylase Pancreatic                                  | U/l    | 219    | Immunoinhibition, EPS substrate   |
|                                                     | U/l    | 220    | Randox Liquid Stable pNPG7        |
|                                                     | U/l    | 222    | Roche Liquid Stable pNPG7         |
| Amylase Total                                       | U/l    | 248    | BM/Roche, Colorimetric pNPG7      |
|                                                     | U/l    | 248    | Other Roche 2-chloro-pNPG7        |
|                                                     | U/l    | 248    | Roche Integra 2-chloro-pNPG7      |
|                                                     | U/l    | 249    | Roche Liquid Stable pNPG7         |
| AST (GOT)                                           | U/l    | 157    | Colorimetric                      |
|                                                     | U/l    | 161    | Tris Buffer With P5P              |
|                                                     | U/l    | 159    | Tris buffer with P5P, NVKC        |
|                                                     | U/l    | 161    | Tris Buffer Without P5P           |
| Bicarbonate                                         | mmol/l | 13.3   | Colorimetric                      |
|                                                     | mmol/l | 13.0   | Enzymatic                         |
|                                                     | mmol/l | 13.2   | PEP Carboxylase                   |
| Bile Acids                                          | µmol/l | 44.0   | Enzymatic Colorimetric            |
|                                                     | µmol/l | 45.4   | Enzymatic Colorimetric - Sentinel |
| Bilirubin Direct                                    | mg/dl  | 2.16   | Dichlorophenyl Diazonium          |
|                                                     | µmol/l | 37.0   |                                   |
|                                                     | mg/dl  | 1.90   | Roche DPD Dumas standardised      |
|                                                     | µmol/l | 32.4   |                                   |
|                                                     | mg/dl  | 2.25   | Roche DPD JG standardised         |
|                                                     | µmol/l | 38.5   |                                   |
| Bilirubin Total                                     | mg/dl  | 4.77   | Diazo With Dichloroaniline        |
|                                                     | µmol/l | 81.6   |                                   |
|                                                     | mg/dl  | 4.64   | Diazo With Sulphanilic Acid       |
|                                                     | µmol/l | 79.4   |                                   |

| Roche Cobas c303/c503                               |        | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|--------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                        |
| Size: 20 x 5 ml                                     |        |                                   |                                        |
| Analyte                                             | Unit   | Target                            | Method                                 |
| Bilirubin Total                                     | mg/dl  | 4.64                              | Diazonium Ion                          |
|                                                     | µmol/l | 79.3                              |                                        |
|                                                     | mg/dl  | 4.65                              | Dichlorophenyl Diazonium               |
|                                                     | µmol/l | 79.5                              |                                        |
| Calcium                                             | mg/dl  | 12.5                              | Arsenazo III                           |
|                                                     | mmol/l | 3.11                              |                                        |
|                                                     | mg/dl  | 12.2                              | Cresolphthalein Complexone             |
|                                                     | mmol/l | 3.05                              |                                        |
|                                                     | mg/dl  | 12.3                              | NM-BAPTA                               |
|                                                     | mmol/l | 3.06                              |                                        |
| Chloride                                            | mmol/l | 108                               | ISE Indirect                           |
| Cholesterol                                         | mg/dl  | 281                               | Cholesterol Dehydrogenase              |
|                                                     | mmol/l | 7.27                              |                                        |
|                                                     | mg/dl  | 279                               | Cholesterol Oxidase - Abell Kendall    |
|                                                     | mmol/l | 7.22                              |                                        |
|                                                     | mg/dl  | 278                               | Cholesterol Oxidase - IDMS             |
|                                                     | mmol/l | 7.20                              |                                        |
| Cholinesterase                                      | U/l    | 5576                              | Colorimetric - Butyrylthiocholine      |
| CK Total                                            | U/l    | 507                               | CK-NAC (IFCC)                          |
|                                                     | U/l    | 515                               | CK-NAC substrate start (DGKC)          |
|                                                     | U/l    | 513                               | Creatine Phosphate Substrate Start     |
| Copper                                              | µg/dl  | 162                               | Colorimetric                           |
|                                                     | µmol/l | 25.4                              |                                        |
| Creatinine                                          | mg/dl  | 4.08                              | Alkaline picrate no deproteinisation   |
|                                                     | µmol/l | 361                               |                                        |
|                                                     | mg/dl  | 3.94                              | Alkaline Picrate With Deproteinisation |
|                                                     | µmol/l | 349                               |                                        |
|                                                     | mg/dl  | 4.19                              | Enzymatic                              |
|                                                     | µmol/l | 371                               |                                        |
|                                                     | mg/dl  | 4.28                              | IDMS Traceable                         |
|                                                     | µmol/l | 379                               |                                        |
|                                                     | mg/dl  | 4.03                              | Jaffe Rate Blanked                     |
|                                                     | µmol/l | 357                               |                                        |
|                                                     | mg/dl  | 4.01                              | Jaffe rate blanked comp. (-26µmol/l)   |
|                                                     | µmol/l | 355                               |                                        |
| mg/dl                                               | 4.07   | Jaffe rate comp. (-18µmol/l)      |                                        |
| µmol/l                                              | 360    |                                   |                                        |
| mg/dl                                               | 4.17   | Roche Creatinine Plus             |                                        |
| µmol/l                                              | 369    |                                   |                                        |

| Roche Cobas c303/c503                               |         |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|---------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |         |        |                                   |
| Size: 20 x 5 ml                                     |         |        |                                   |
| Analyte                                             | Unit    | Target | Method                            |
| gamma-GT                                            | U/l     | 192    | Gamma glut.-3-carb.-4-nitro.      |
|                                                     | U/l     | 202    | Gamma glut'3-carb'4-nitro(IFCC)   |
|                                                     | U/l     | 202    | Gamma Glutamyl-4-Nitroanilide     |
| Glucose                                             | mg/dl   | 272    | Glucose Dehydrogenase             |
|                                                     | mmol/l  | 15.1   |                                   |
|                                                     | mg/dl   | 274    | Glucose Oxidase                   |
|                                                     | mmol/l  | 15.2   |                                   |
|                                                     | mg/dl   | 274    | Hexokinase                        |
|                                                     | mmol/l  | 15.2   |                                   |
| Iron                                                | µg/dl   | 217    | Colorimetric with ppt.            |
|                                                     | µmol/l  | 38.9   |                                   |
|                                                     | µg/dl   | 217    | Colorimetric without ppt.         |
|                                                     | µmol/l  | 38.8   |                                   |
| Lactate                                             | mg/dl   | 49.5   | Colorimetric - Lactate oxidase    |
|                                                     | mmol/l  | 5.50   |                                   |
| LD (LDH)                                            | U/l     | 338    | L to P, IFCC                      |
|                                                     | U/l     | 339    | Lactate to Pyruvate methods       |
| Lipase                                              | U/l     | 67     | Colorimetric Roche                |
|                                                     | U/l     | 66     | Other Colorimetric                |
|                                                     | U/l     | 66     | Roche Turbidimetric with colipase |
| Lithium                                             | mg/dl   | 1.33   | Spectrophotometric                |
|                                                     | mmol/l  | 1.91   |                                   |
| Magnesium                                           | mg/dl   | 4.23   | Atomic Absorption                 |
|                                                     | mmol/l  | 1.74   |                                   |
|                                                     | mg/dl   | 4.23   | Chlorphosphonazo III              |
|                                                     | mmol/l  | 1.74   |                                   |
|                                                     | mg/dl   | 4.23   | Enzymatic                         |
|                                                     | mmol/l  | 1.74   |                                   |
|                                                     | mg/dl   | 4.33   | Methylthymol Blue                 |
|                                                     | mmol/l  | 1.78   |                                   |
|                                                     | mg/dl   | 4.23   | Xylidyl Blue                      |
|                                                     | mmol/l  | 1.74   |                                   |
| Osmolality                                          | mOsm/Kg | 344    | Calculated                        |
| Phosphate Inorganic                                 | mg/dl   | 7.28   | Phosphomolybdate Enzymatic        |
|                                                     | mmol/l  | 2.35   |                                   |
|                                                     | mg/dl   | 7.25   | Phosphomolybdate UV               |
|                                                     | mmol/l  | 2.34   |                                   |
| Potassium                                           | mmol/l  | 6.23   | Ion Selective Electrode Method    |

| Roche Cobas c303/c503                               |             | Calibration Serum Level 3 (CAL 3) |                                       |
|-----------------------------------------------------|-------------|-----------------------------------|---------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                       |
| Size: 20 x 5 ml                                     |             |                                   |                                       |
| Analyte                                             | Unit        | Target                            | Method                                |
| Protein Total                                       | g/dl        | 4.71                              | Biuret reaction, CX4/5/7              |
|                                                     | g/l         | 47.1                              |                                       |
|                                                     | g/dl        | 4.74                              | Biuret reaction, end point            |
|                                                     | g/l         | 47.4                              |                                       |
|                                                     | g/dl        | 4.73                              | Biuret reaction, kinetic              |
|                                                     | g/l         | 47.3                              |                                       |
| Sodium                                              | mmol/l      | 158                               | Ion Selective Electrode Method        |
| TIBC                                                | µg/dl       | 244                               | Calculated from Transferrin           |
|                                                     | µmol/l      | 43.7                              |                                       |
|                                                     | µg/dl       | 243                               | FE+UIBC(saturation with iron)         |
|                                                     | µmol/l      | 43.5                              |                                       |
| Triglycerides                                       | mg/dl       | 244                               | Lipase/GK UV. no correction           |
|                                                     | mmol/l      | 2.76                              |                                       |
|                                                     | mg/dl       | 246                               | Lipase/GK UV., 0.11 mmol/l correction |
|                                                     | mmol/l      | 2.78                              |                                       |
|                                                     | mg/dl       | 242                               | Lipase/Glycerol Dehydrogenase         |
|                                                     | mmol/l      | 2.74                              |                                       |
|                                                     | mg/dl       | 244                               | Lipase/GPO-PAP No Correction          |
|                                                     | mmol/l      | 2.76                              |                                       |
|                                                     | mg/dl       | 243                               | Lipase/GPO-PAP, 0.11mmol/l correction |
|                                                     | mmol/l      | 2.75                              |                                       |
| Urea                                                | mg/dl       | 119                               | Urease, end point                     |
|                                                     | mg/dl (BUN) | 55.4                              |                                       |
|                                                     | mmol/l      | 19.8                              |                                       |
|                                                     | mg/dl       | 118                               | Urease, kinetic                       |
|                                                     | mg/dl (BUN) | 54.9                              |                                       |
|                                                     | mmol/l      | 19.6                              |                                       |
| Uric Acid (Urate)                                   | mg/dl       | 8.74                              | Uricase @ 293 nm                      |
|                                                     | mmol/l      | 0.520                             |                                       |
|                                                     | µmol/l      | 520                               |                                       |
|                                                     | mg/dl       | 8.72                              | Uricase perox. no ascorb. ox.         |
|                                                     | mmol/l      | 0.519                             |                                       |
|                                                     | µmol/l      | 519                               |                                       |
|                                                     | mg/dl       | 8.69                              | Uricase Perox. with ascorb. ox        |
|                                                     | mmol/l      | 0.517                             |                                       |
|                                                     | µmol/l      | 517                               |                                       |

| Roche Cobas c303/c503                               |        |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|--------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                        |
| Size: 20 x 5 ml                                     |        |        |                                        |
| Analyte                                             | Unit   | Target | Method                                 |
| Uric Acid (Urate)                                   | mg/dl  | 8.72   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.519  |                                        |
|                                                     | µmol/l | 519    |                                        |
|                                                     | mg/dl  | 8.64   | Uricase, catalase 340nm.               |
|                                                     | mmol/l | 0.514  |                                        |
|                                                     | µmol/l | 514    |                                        |

| Roche Cobas c311                                    |        | Calibration Serum Level 3 (CAL 3) |                              |
|-----------------------------------------------------|--------|-----------------------------------|------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                              |
| Size: 20 x 5 ml                                     |        |                                   |                              |
| Analyte                                             | Unit   | Target                            | Method                       |
| Albumin                                             | g/dl   | 3.29                              | Bromocresol Green            |
|                                                     | g/l    | 32.9                              |                              |
|                                                     | g/dl   | 3.23                              | Bromocresol Purple           |
|                                                     | g/l    | 32.3                              |                              |
|                                                     | g/dl   | 3.21                              | Turbidimetric Assays         |
|                                                     | g/l    | 32.1                              |                              |
| Alkaline Phosphatase                                | U/l    | 286                               | AMP optimised to IFCC        |
|                                                     | U/l    | 280                               | Colorimetric                 |
|                                                     | U/l    | 282                               | Roche AMP buffer IFCC        |
| ALT (GPT)                                           | U/l    | 133                               | Tris Buffer With P5P         |
|                                                     | U/l    | 130                               | Tris Buffer Without P5P      |
| Amylase Total                                       | U/l    | 250                               | BM/Roche, Colorimetric pNPG7 |
|                                                     | U/l    | 247                               | Other Roche 2-chloro-pNPG7   |
|                                                     | U/l    | 250                               | Roche Integra 2-chloro-pNPG7 |
|                                                     | U/l    | 252                               | Roche Liquid Stable pNPG7    |
| AST (GOT)                                           | U/l    | 125                               | Tris Buffer Without P5P      |
| Bilirubin Direct                                    | mg/dl  | 1.95                              | Diazo With Sulphanilic Acid  |
|                                                     | µmol/l | 33.3                              |                              |
|                                                     | mg/dl  | 1.91                              | Dichlorophenyl Diazonium     |
|                                                     | µmol/l | 32.6                              |                              |
|                                                     | mg/dl  | 1.92                              | Roche DPD JG standardised    |
|                                                     | µmol/l | 32.8                              |                              |
| Bilirubin Total                                     | mg/dl  | 4.84                              | Diazo With Dichloroaniline   |
|                                                     | µmol/l | 82.7                              |                              |
|                                                     | mg/dl  | 4.80                              | Diazo With Sulphanilic Acid  |
|                                                     | µmol/l | 82.0                              |                              |
|                                                     | mg/dl  | 4.82                              | Diazonium Ion                |
|                                                     | µmol/l | 82.4                              |                              |
|                                                     | mg/dl  | 4.78                              | Dichlorophenyl Diazonium     |
|                                                     | µmol/l | 81.7                              |                              |
| Calcium                                             | mg/dl  | 12.4                              | Arsenazo III                 |
|                                                     | mmol/l | 3.09                              |                              |
|                                                     | mg/dl  | 12.3                              | Cresolphthalein Complexone   |
|                                                     | mmol/l | 3.06                              |                              |
|                                                     | mg/dl  | 12.3                              | NM-BAPTA                     |
|                                                     | mmol/l | 3.08                              |                              |
| Chloride                                            | mmol/l | 108                               | ISE Indirect                 |
| Cholesterol                                         | mg/dl  | 278                               | Cholesterol Dehydrogenase    |
|                                                     | mmol/l | 7.21                              |                              |

| Roche Cobas c311                                    |        | Calibration Serum Level 3 (CAL 3)    |                                      |
|-----------------------------------------------------|--------|--------------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                      |                                      |
| Size: 20 x 5 ml                                     |        |                                      |                                      |
| Analyte                                             | Unit   | Target                               | Method                               |
| Cholesterol                                         | mg/dl  | 280                                  | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.24                                 |                                      |
|                                                     | mg/dl  | 280                                  | Cholesterol Oxidase - IDMS           |
|                                                     | mmol/l | 7.24                                 |                                      |
| CK Total                                            | U/l    | 516                                  | CK-NAC (IFCC)                        |
|                                                     | U/l    | 519                                  | CK-NAC substrate start (DGKC)        |
|                                                     | U/l    | 521                                  | Creatine Phosphate Substrate Start   |
| Creatinine                                          | mg/dl  | 3.99                                 | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 353                                  |                                      |
|                                                     | mg/dl  | 4.12                                 | Enzymatic                            |
|                                                     | µmol/l | 365                                  |                                      |
|                                                     | mg/dl  | 4.05                                 | IDMS Traceable                       |
|                                                     | µmol/l | 358                                  |                                      |
|                                                     | mg/dl  | 4.01                                 | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 355                                  |                                      |
| mg/dl                                               | 4.00   | Jaffe rate blanked comp. (-26µmol/l) |                                      |
| µmol/l                                              | 354    |                                      |                                      |
| mg/dl                                               | 4.08   | Jaffe rate comp. (-18µmol/l)         |                                      |
| µmol/l                                              | 361    |                                      |                                      |
| mg/dl                                               | 4.09   | Roche Creatinine Plus                |                                      |
| µmol/l                                              | 362    |                                      |                                      |
| gamma-GT                                            | U/l    | 202                                  | DCL, gamma glut.-3-carb.-4-nitro.    |
|                                                     | U/l    | 186                                  | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 201                                  | Gamma glut'3-carb'4-nitro(IFCC)      |
|                                                     | U/l    | 189                                  | Gamma Glutamyl-4-Nitroanilide        |
| Glucose                                             | mg/dl  | 272                                  | Glucose Oxidase                      |
|                                                     | mmol/l | 15.1                                 |                                      |
|                                                     | mg/dl  | 274                                  | Hexokinase                           |
|                                                     | mmol/l | 15.2                                 |                                      |
| Iron                                                | µg/dl  | 221                                  | Colorimetric with ppt.               |
|                                                     | µmol/l | 39.5                                 |                                      |
|                                                     | µg/dl  | 220                                  | Colorimetric without ppt.            |
|                                                     | µmol/l | 39.3                                 |                                      |
| Lactate                                             | mg/dl  | 49.5                                 | Colorimetric - Lactate oxidase       |
|                                                     | mmol/l | 5.50                                 |                                      |
| LD (LDH)                                            | U/l    | 337                                  | L to P, IFCC                         |
|                                                     | U/l    | 338                                  | Lactate to Pyruvate methods          |
| Lipase                                              | U/l    | 67                                   | Colorimetric Roche                   |
|                                                     | U/l    | 66                                   | Other Colorimetric                   |

| Roche Cobas c311                                    |                     | Calibration Serum Level 3 (CAL 3) |                                       |                            |
|-----------------------------------------------------|---------------------|-----------------------------------|---------------------------------------|----------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |                     |                                   |                                       |                            |
| Size: 20 x 5 ml                                     |                     |                                   |                                       |                            |
| Analyte                                             | Unit                | Target                            | Method                                |                            |
| Lipase                                              | U/l                 | 66                                | Roche Turbidimetric with colipase     |                            |
| Magnesium                                           | mg/dl               | 4.23                              | Atomic Absorption                     |                            |
|                                                     | mmol/l              | 1.74                              |                                       |                            |
|                                                     | mg/dl               | 4.13                              | Chlorphosphonazo III                  |                            |
|                                                     | mmol/l              | 1.70                              |                                       |                            |
|                                                     | mg/dl               | 4.18                              | Enzymatic                             |                            |
|                                                     | mmol/l              | 1.72                              |                                       |                            |
| Magnesium                                           | mg/dl               | 4.18                              | Xylidyl Blue                          |                            |
|                                                     | mmol/l              | 1.72                              |                                       |                            |
|                                                     | Phosphate Inorganic | mg/dl                             | 7.35                                  | Phosphomolybdate Enzymatic |
|                                                     |                     | mmol/l                            | 2.37                                  |                            |
|                                                     |                     | mg/dl                             | 7.32                                  | Phosphomolybdate UV        |
|                                                     |                     | mmol/l                            | 2.36                                  |                            |
| Potassium                                           | mmol/l              | 6.19                              | Ion Selective Electrode Method        |                            |
| Protein Total                                       | g/dl                | 4.75                              | Biuret reaction, end point            |                            |
|                                                     | g/l                 | 47.5                              |                                       |                            |
|                                                     | g/dl                | 4.80                              | Biuret reaction, kinetic              |                            |
|                                                     | g/l                 | 48.0                              |                                       |                            |
| Sodium                                              | mmol/l              | 158                               | Ion Selective Electrode Method        |                            |
| Triglycerides                                       | mg/dl               | 243                               | Lipase/GK UV. no correction           |                            |
|                                                     | mmol/l              | 2.75                              |                                       |                            |
|                                                     | mg/dl               | 242                               | Lipase/Glycerol Dehydrogenase         |                            |
|                                                     | mmol/l              | 2.74                              |                                       |                            |
|                                                     | mg/dl               | 243                               | Lipase/GPO-PAP No Correction          |                            |
|                                                     | mmol/l              | 2.75                              |                                       |                            |
|                                                     | mg/dl               | 241                               | Lipase/GPO-PAP, 0.11mmol/l correction |                            |
|                                                     | mmol/l              | 2.72                              |                                       |                            |
| Urea                                                | mg/dl               | 119                               | Urease, end point                     |                            |
|                                                     | mg/dl (BUN)         | 55.4                              |                                       |                            |
|                                                     | mmol/l              | 19.8                              |                                       |                            |
|                                                     | mg/dl               | 119                               | Urease, kinetic                       |                            |
|                                                     | mg/dl (BUN)         | 55.4                              |                                       |                            |
|                                                     | mmol/l              | 19.8                              |                                       |                            |
| Uric Acid (Urate)                                   | mg/dl               | 8.79                              | Uricase perox. no ascorb. ox.         |                            |
|                                                     | mmol/l              | 0.523                             |                                       |                            |
|                                                     | µmol/l              | 523                               |                                       |                            |

| Roche Cobas c311                                    |        | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|--------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                        |
| Size: 20 x 5 ml                                     |        |                                   |                                        |
| Analyte                                             | Unit   | Target                            | Method                                 |
| Uric Acid (Urate)                                   | mg/dl  | 8.76                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l | 0.521                             |                                        |
|                                                     | µmol/l | 521                               |                                        |
|                                                     | mg/dl  | 8.82                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.525                             |                                        |
|                                                     | µmol/l | 525                               |                                        |
|                                                     | mg/dl  | 8.89                              | Uricase, catalase 340nm.               |
|                                                     | mmol/l | 0.529                             |                                        |
|                                                     | µmol/l | 529                               |                                        |

| Roche Cobas c501/c502                               |        |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                   |
| Size: 20 x 5 ml                                     |        |        |                                   |
| Analyte                                             | Unit   | Target | Method                            |
| Albumin                                             | g/dl   | 3.30   | Bromocresol Green                 |
|                                                     | g/l    | 33.0   |                                   |
|                                                     | g/dl   | 3.15   | Bromocresol Purple                |
|                                                     | g/l    | 31.5   |                                   |
| Alkaline Phosphatase                                | U/l    | 287    | AMP optimised to IFCC             |
|                                                     | U/l    | 280    | Colorimetric                      |
|                                                     | U/l    | 288    | Roche AMP buffer IFCC             |
| ALT (GPT)                                           | U/l    | 135    | Tris Buffer With P5P              |
|                                                     | U/l    | 129    | Tris Buffer Without P5P           |
| Amylase Pancreatic                                  | U/l    | 224    | Immunoinhibition, EPS substrate   |
|                                                     | U/l    | 224    | Roche Liquid Stable pNPG7         |
| Amylase Total                                       | U/l    | 249    | BM/Roche, Colorimetric pNPG7      |
|                                                     | U/l    | 247    | Other Roche 2-chloro-pNPG7        |
|                                                     | U/l    | 249    | Roche Integra 2-chloro-pNPG7      |
|                                                     | U/l    | 250    | Roche Liquid Stable pNPG7         |
| AST (GOT)                                           | U/l    | 177    | Tris Buffer With P5P              |
|                                                     | U/l    | 125    | Tris Buffer Without P5P           |
| Bicarbonate                                         | mmol/l | 13.4   | Enzymatic                         |
|                                                     | mmol/l | 12.8   | PEP Carboxylase                   |
| Bile Acids                                          | µmol/l | 45.2   | Enzymatic Colorimetric            |
| Bilirubin Direct                                    | mg/dl  | 1.97   | Diazo with Dichloroaniline        |
|                                                     | µmol/l | 33.7   |                                   |
|                                                     | mg/dl  | 1.95   | Diazo With Sulphanilic Acid       |
|                                                     | µmol/l | 33.4   |                                   |
|                                                     | mg/dl  | 1.99   | Dichlorophenyl Diazonium          |
|                                                     | µmol/l | 34.1   |                                   |
|                                                     | mg/dl  | 1.98   | Roche DPD JG standardised         |
|                                                     | µmol/l | 33.8   |                                   |
| Bilirubin Total                                     | mg/dl  | 4.80   | Diazo With Dichloroaniline        |
|                                                     | µmol/l | 82.1   |                                   |
|                                                     | mg/dl  | 4.76   | Diazo With Sulphanilic Acid       |
|                                                     | µmol/l | 81.3   |                                   |
|                                                     | mg/dl  | 4.76   | Diazonium Ion                     |
|                                                     | µmol/l | 81.4   |                                   |
|                                                     | mg/dl  | 4.78   | Dichlorophenyl Diazonium          |
|                                                     | µmol/l | 81.7   |                                   |
| Calcium                                             | mg/dl  | 12.2   | Arsenazo III                      |
|                                                     | mmol/l | 3.04   |                                   |

| Roche Cobas c501/c502                               |        | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|--------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                        |
| Size: 20 x 5 ml                                     |        |                                   |                                        |
| Analyte                                             | Unit   | Target                            | Method                                 |
| Calcium                                             | mg/dl  | 12.3                              | Cresolphthalein Complexone             |
|                                                     | mmol/l | 3.06                              |                                        |
|                                                     | mg/dl  | 12.3                              | NM-BAPTA                               |
|                                                     | mmol/l | 3.06                              |                                        |
| Chloride                                            | mmol/l | 108                               | ISE Indirect                           |
| Cholesterol                                         | mg/dl  | 277                               | Cholesterol Oxidase - Abell Kendall    |
|                                                     | mmol/l | 7.18                              |                                        |
|                                                     | mg/dl  | 276                               | Cholesterol Oxidase - IDMS             |
|                                                     | mmol/l | 7.14                              |                                        |
| Cholinesterase                                      | U/l    | 5653                              | Colorimetric - Butyrylthiocholine      |
| CK Total                                            | U/l    | 514                               | CK-NAC (IFCC)                          |
|                                                     | U/l    | 518                               | CK-NAC serum start (DGKC)              |
|                                                     | U/l    | 513                               | CK-NAC substrate start (DGKC)          |
|                                                     | U/l    | 515                               | Creatine Phosphate Substrate Start     |
| Creatinine                                          | mg/dl  | 4.02                              | Alkaline picrate no deproteinisation   |
|                                                     | µmol/l | 356                               |                                        |
|                                                     | mg/dl  | 3.89                              | Alkaline Picrate With Deproteinisation |
|                                                     | µmol/l | 344                               |                                        |
|                                                     | mg/dl  | 4.08                              | Enzymatic                              |
|                                                     | µmol/l | 361                               |                                        |
|                                                     | mg/dl  | 3.95                              | Jaffe Rate Blanked                     |
|                                                     | µmol/l | 350                               |                                        |
|                                                     | mg/dl  | 3.99                              | Jaffe rate blanked comp. (-26µmol/l)   |
|                                                     | µmol/l | 353                               |                                        |
| mg/dl                                               | 3.95   | Jaffe rate comp. (-18µmol/l)      |                                        |
| µmol/l                                              | 350    |                                   |                                        |
| mg/dl                                               | 4.14   | Roche Creatinine Plus             |                                        |
| µmol/l                                              | 366    |                                   |                                        |
| gamma-GT                                            | U/l    | 183                               | Gamma glut.-3-carb.-4-nitro.           |
|                                                     | U/l    | 200                               | Gamma glut'3-carb'4-nitro(IFCC)        |
|                                                     | U/l    | 199                               | Gamma Glutamyl-4-Nitroanilide          |
| Glucose                                             | mg/dl  | 267                               | Glucose Dehydrogenase                  |
|                                                     | mmol/l | 14.8                              |                                        |
|                                                     | mg/dl  | 272                               | Glucose Oxidase                        |
|                                                     | mmol/l | 15.1                              |                                        |
|                                                     | mg/dl  | 272                               | Hexokinase                             |
|                                                     | mmol/l | 15.1                              |                                        |
| Iron                                                | µg/dl  | 221                               | Colorimetric with ppt.                 |
|                                                     | µmol/l | 39.6                              |                                        |

| Roche Cobas c501/c502                               |        |        | Calibration Serum Level 3 (CAL 3)     |
|-----------------------------------------------------|--------|--------|---------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                       |
| Size: 20 x 5 ml                                     |        |        |                                       |
| Analyte                                             | Unit   | Target | Method                                |
| Iron                                                | µg/dl  | 222    | Colorimetric without ppt.             |
|                                                     | µmol/l | 39.8   |                                       |
| Lactate                                             | mg/dl  | 49.9   | Colorimetric - Lactate oxidase        |
|                                                     | mmol/l | 5.54   |                                       |
| LD (LDH)                                            | U/l    | 338    | L to P, IFCC                          |
|                                                     | U/l    | 336    | Lactate to Pyruvate methods           |
| Lipase                                              | U/l    | 67     | Colorimetric Roche                    |
|                                                     | U/l    | 67     | Roche Turbidimetric with colipase     |
| Lithium                                             | mg/dl  | 1.34   | Spectrophotometric                    |
|                                                     | mmol/l | 1.93   |                                       |
| Magnesium                                           | mg/dl  | 4.16   | Arsenazo III                          |
|                                                     | mmol/l | 1.71   |                                       |
|                                                     | mg/dl  | 4.25   | Atomic Absorption                     |
|                                                     | mmol/l | 1.75   |                                       |
|                                                     | mg/dl  | 4.23   | Chlorphosphonazo III                  |
|                                                     | mmol/l | 1.74   |                                       |
|                                                     | mg/dl  | 4.20   | Xylidyl Blue                          |
|                                                     | mmol/l | 1.73   |                                       |
| Phosphate Inorganic                                 | mg/dl  | 7.22   | Phosphomolybdate Enzymatic            |
|                                                     | mmol/l | 2.33   |                                       |
|                                                     | mg/dl  | 7.28   | Phosphomolybdate UV                   |
|                                                     | mmol/l | 2.35   |                                       |
| Potassium                                           | mmol/l | 6.20   | Ion Selective Electrode Method        |
| Protein Total                                       | g/dl   | 4.75   | Biuret reaction, end point            |
|                                                     | g/l    | 47.5   |                                       |
|                                                     | g/dl   | 4.74   | Biuret reaction, kinetic              |
|                                                     | g/l    | 47.4   |                                       |
| Sodium                                              | mmol/l | 158    | Ion Selective Electrode Method        |
| TIBC                                                | µg/dl  | 259    | Calculated from Transferrin           |
|                                                     | µmol/l | 46.4   |                                       |
|                                                     | µg/dl  | 242    | FE+UIBC(saturation with iron)         |
|                                                     | µmol/l | 43.3   |                                       |
| Triglycerides                                       | mg/dl  | 243    | Lipase/GK UV. no correction           |
|                                                     | mmol/l | 2.75   |                                       |
|                                                     | mg/dl  | 239    | Lipase/GK UV., 0.11 mmol/l correction |
|                                                     | mmol/l | 2.70   |                                       |
|                                                     | mg/dl  | 242    | Lipase/Glycerol Dehydrogenase         |
|                                                     | mmol/l | 2.74   |                                       |

| Roche Cobas c501/c502                               |             | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|-------------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |                                   |                                        |
| Size: 20 x 5 ml                                     |             |                                   |                                        |
| Analyte                                             | Unit        | Target                            | Method                                 |
| Triglycerides                                       | mg/dl       | 242                               | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l      | 2.74                              |                                        |
|                                                     | mg/dl       | 242                               | Lipase/GPO-PAP, 0.11mmol/l correction  |
|                                                     | mmol/l      | 2.74                              |                                        |
| Urea                                                | mg/dl       | 120                               | Urease, end point                      |
|                                                     | mg/dl (BUN) | 56.0                              |                                        |
|                                                     | mmol/l      | 20.0                              |                                        |
|                                                     | mg/dl       | 119                               | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 55.4                              |                                        |
|                                                     | mmol/l      | 19.8                              |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 8.67                              | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.516                             |                                        |
|                                                     | µmol/l      | 516                               |                                        |
|                                                     | mg/dl       | 8.71                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.518                             |                                        |
|                                                     | µmol/l      | 518                               |                                        |
|                                                     | mg/dl       | 8.71                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.518                             |                                        |
|                                                     | µmol/l      | 518                               |                                        |
|                                                     | mg/dl       | 8.74                              | Uricase, catalase 340nm.               |
|                                                     | mmol/l      | 0.520                             |                                        |
|                                                     | µmol/l      | 520                               |                                        |

| Roche Cobas c701 / c702 / c711                      |        |        | Calibration Serum Level 3 (CAL 3)   |
|-----------------------------------------------------|--------|--------|-------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                     |
| Size: 20 x 5 ml                                     |        |        |                                     |
| Analyte                                             | Unit   | Target | Method                              |
| Albumin                                             | g/dl   | 3.29   | Bromocresol Green                   |
|                                                     | g/l    | 32.9   |                                     |
|                                                     | g/dl   | 2.99   | Bromocresol Purple                  |
|                                                     | g/l    | 29.9   |                                     |
|                                                     | g/dl   | 3.34   | Turbidimetric Assays                |
|                                                     | g/l    | 33.4   |                                     |
| Alkaline Phosphatase                                | U/l    | 275    | Roche AMP buffer IFCC               |
| ALT (GPT)                                           | U/l    | 143    | Tris Buffer With P5P                |
|                                                     | U/l    | 129    | Tris Buffer Without P5P             |
| Amylase Pancreatic                                  | U/l    | 222    | Roche Liquid Stable pNPG7           |
| Amylase Total                                       | U/l    | 251    | Roche Liquid Stable pNPG7           |
| AST (GOT)                                           | U/l    | 163    | Tris Buffer With P5P                |
|                                                     | U/l    | 125    | Tris Buffer Without P5P             |
| Bicarbonate                                         | mmol/l | 12.5   | Colorimetric                        |
|                                                     | mmol/l | 13.4   | Enzymatic                           |
| Bile Acids                                          | µmol/l | 45.5   | Enzymatic Colorimetric              |
| Bilirubin Direct                                    | mg/dl  | 2.07   | Dichlorophenyl Diazonium            |
|                                                     | µmol/l | 35.4   |                                     |
|                                                     | mg/dl  | 1.70   | Roche DPD Doumas standardised       |
|                                                     | µmol/l | 29.0   |                                     |
|                                                     | mg/dl  | 2.11   | Roche DPD JG standardised           |
|                                                     | µmol/l | 36.0   |                                     |
| Bilirubin Total                                     | mg/dl  | 4.92   | Diazo With Sulphanilic Acid         |
|                                                     | µmol/l | 84.1   |                                     |
|                                                     | mg/dl  | 4.77   | Diazonium Ion                       |
|                                                     | µmol/l | 81.6   |                                     |
|                                                     | mg/dl  | 4.74   | Dichlorophenyl Diazonium            |
|                                                     | µmol/l | 81.0   |                                     |
| Calcium                                             | mg/dl  | 12.3   | Cresolphthalein Complexone          |
|                                                     | mmol/l | 3.06   |                                     |
|                                                     | mg/dl  | 12.3   | NM-BAPTA                            |
|                                                     | mmol/l | 3.06   |                                     |
| Chloride                                            | mmol/l | 109    | ISE Indirect                        |
| Cholesterol                                         | mg/dl  | 277    | Cholesterol Oxidase - Abell Kendall |
|                                                     | mmol/l | 7.18   |                                     |
|                                                     | mg/dl  | 279    | Cholesterol Oxidase - IDMS          |
|                                                     | mmol/l | 7.23   |                                     |
| Cholinesterase                                      | U/l    | 5588   | Colorimetric - Butyrylthiocholine   |

| Roche Cobas c701 / c702 / c711                      |        |        | Calibration Serum Level 3 (CAL 3)    |
|-----------------------------------------------------|--------|--------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                      |
| Size: 20 x 5 ml                                     |        |        |                                      |
| Analyte                                             | Unit   | Target | Method                               |
| CK Total                                            | U/l    | 510    | CK-NAC (IFCC)                        |
|                                                     | U/l    | 509    | CK-NAC substrate start (DGKC)        |
| Creatinine                                          | mg/dl  | 4.15   | Enzymatic                            |
|                                                     | µmol/l | 367    |                                      |
|                                                     | mg/dl  | 4.00   | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l | 354    |                                      |
|                                                     | mg/dl  | 4.05   | Jaffe rate comp. (-18µmol/l)         |
|                                                     | µmol/l | 358    |                                      |
|                                                     | mg/dl  | 4.17   | Roche Creatinine Plus                |
|                                                     | µmol/l | 369    |                                      |
| gamma-GT                                            | U/l    | 189    | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 200    | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl  | 272    | Hexokinase                           |
|                                                     | mmol/l | 15.1   |                                      |
| Iron                                                | µg/dl  | 215    | Colorimetric with ppt.               |
|                                                     | µmol/l | 38.5   |                                      |
|                                                     | µg/dl  | 216    | Colorimetric without ppt.            |
|                                                     | µmol/l | 38.6   |                                      |
| Lactate                                             | mg/dl  | 49.2   | Colorimetric - Lactate oxidase       |
|                                                     | mmol/l | 5.46   |                                      |
| LD (LDH)                                            | U/l    | 337    | L to P, IFCC                         |
| Lipase                                              | U/l    | 67     | Colorimetric Roche                   |
| Lithium                                             | mg/dl  | 1.35   | Spectrophotometric                   |
|                                                     | mmol/l | 1.94   |                                      |
| Magnesium                                           | mg/dl  | 4.18   | Chlorphosphonazo III                 |
|                                                     | mmol/l | 1.72   |                                      |
|                                                     | mg/dl  | 4.20   | Xylidyl Blue                         |
|                                                     | mmol/l | 1.73   |                                      |
| Phosphate Inorganic                                 | mg/dl  | 7.22   | Phosphomolybdate UV                  |
|                                                     | mmol/l | 2.33   |                                      |
| Potassium                                           | mmol/l | 6.23   | Ion Selective Electrode Method       |
| Protein Total                                       | g/dl   | 4.76   | Biuret reaction, end point           |
|                                                     | g/l    | 47.6   |                                      |
| Sodium                                              | mmol/l | 159    | Ion Selective Electrode Method       |
| TIBC                                                | µg/dl  | 239    | FE+UIBC(saturation with iron)        |
|                                                     | µmol/l | 42.7   |                                      |
| Triglycerides                                       | mg/dl  | 250    | Lipase/GK UV. no correction          |
|                                                     | mmol/l | 2.82   |                                      |

| Roche Cobas c701 / c702 / c711                      |             |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|-------------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                        |
| Size: 20 x 5 ml                                     |             |        |                                        |
| Analyte                                             | Unit        | Target | Method                                 |
| Triglycerides                                       | mg/dl       | 242    | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l      | 2.74   |                                        |
|                                                     | mg/dl       | 242    | Lipase/GPO-PAP, 0.11mmol/l correction  |
|                                                     | mmol/l      | 2.74   |                                        |
| Urea                                                | mg/dl       | 118    | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 55.2   |                                        |
|                                                     | mmol/l      | 19.7   |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 8.69   | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.517  |                                        |
|                                                     | µmol/l      | 517    |                                        |
|                                                     | mg/dl       | 8.61   | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.512  |                                        |
|                                                     | µmol/l      | 512    |                                        |
|                                                     | mg/dl       | 8.64   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.514  |                                        |
|                                                     | µmol/l      | 514    |                                        |

| Roche Integra                                       |        | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                      |
| Size: 20 x 5 ml                                     |        |                                   |                                      |
| Analyte                                             | Unit   | Target                            | Method                               |
| Albumin                                             | g/dl   | 3.25                              | Bromocresol Green                    |
|                                                     | g/l    | 32.5                              |                                      |
| Alkaline Phosphatase                                | U/l    | 283                               | AMP optimised to IFCC                |
|                                                     | U/l    | 287                               | Roche AMP buffer IFCC                |
| ALT (GPT)                                           | U/l    | 125                               | Tris Buffer With P5P                 |
|                                                     | U/l    | 126                               | Tris Buffer Without P5P              |
| Amylase Total                                       | U/l    | 256                               | Roche Integra 2-chloro-pNPG7         |
|                                                     | U/l    | 252                               | Roche Liquid Stable pNPG7            |
| AST (GOT)                                           | U/l    | 123                               | Tris Buffer Without P5P              |
| Bilirubin Direct                                    | mg/dl  | 1.99                              | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 34.0                              |                                      |
|                                                     | mg/dl  | 2.04                              | Dichlorophenyl Diazonium             |
|                                                     | µmol/l | 34.9                              |                                      |
|                                                     | mg/dl  | 2.03                              | Roche DPD JG standardised            |
|                                                     | µmol/l | 34.7                              |                                      |
| Bilirubin Total                                     | mg/dl  | 4.83                              | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 82.5                              |                                      |
|                                                     | mg/dl  | 4.87                              | Diazonium Ion                        |
|                                                     | µmol/l | 83.2                              |                                      |
|                                                     | mg/dl  | 4.82                              | Dichlorophenyl Diazonium             |
|                                                     | µmol/l | 82.4                              |                                      |
| Calcium                                             | mg/dl  | 12.3                              | Cresolphthalein Complexone           |
|                                                     | mmol/l | 3.06                              |                                      |
|                                                     |        | mg/dl                             | 12.3                                 |
|                                                     | mmol/l | 3.06                              |                                      |
| Chloride                                            | mmol/l | 110                               | ISE Indirect                         |
| Cholesterol                                         | mg/dl  | 277                               | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.18                              |                                      |
|                                                     |        | mg/dl                             | 275                                  |
|                                                     | mmol/l | 7.13                              |                                      |
| CK Total                                            | U/l    | 518                               | CK-NAC (IFCC)                        |
| Creatinine                                          | mg/dl  | 3.99                              | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 353                               |                                      |
|                                                     | mg/dl  | 3.90                              | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l | 345                               |                                      |
|                                                     | mg/dl  | 3.83                              | Jaffe rate comp. (-18µmol/l)         |
|                                                     | µmol/l | 339                               |                                      |
|                                                     | mg/dl  | 4.06                              | Roche Creatinine Plus                |
|                                                     | µmol/l | 359                               |                                      |

| Roche Integra                                       |        | Calibration Serum Level 3 (CAL 3) |                                        |
|-----------------------------------------------------|--------|-----------------------------------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                        |
| Size: 20 x 5 ml                                     |        |                                   |                                        |
| Analyte                                             | Unit   | Target                            | Method                                 |
| gamma-GT                                            | U/l    | 185                               | Gamma glut.-3-carb.-4-nitro.           |
|                                                     | U/l    | 199                               | Gamma glut'3-carb'4-nitro(IFCC)        |
| Glucose                                             | mg/dl  | 279                               | Hexokinase                             |
|                                                     | mmol/l | 15.5                              |                                        |
| Iron                                                | µg/dl  | 221                               | Colorimetric without ppt.              |
|                                                     | µmol/l | 39.5                              |                                        |
| LD (LDH)                                            | U/l    | 343                               | L to P, IFCC                           |
| Lipase                                              | U/l    | 64                                | Colorimetric Roche                     |
| Magnesium                                           | mg/dl  | 4.11                              | Chlorphosphonazo III                   |
|                                                     | mmol/l | 1.69                              |                                        |
|                                                     | mg/dl  | 4.13                              | Xylidyl Blue                           |
|                                                     | mmol/l | 1.70                              |                                        |
| Phosphate Inorganic                                 | mg/dl  | 7.41                              | Phosphomolybdate Enzymatic             |
|                                                     | mmol/l | 2.39                              |                                        |
|                                                     | mg/dl  | 7.50                              | Phosphomolybdate UV                    |
|                                                     | mmol/l | 2.42                              |                                        |
| Potassium                                           | mmol/l | 6.15                              | Ion Selective Electrode Method         |
| Protein Total                                       | g/dl   | 4.59                              | Biuret reaction, end point             |
|                                                     | g/l    | 45.9                              |                                        |
| Sodium                                              | mmol/l | 157                               | Ion Selective Electrode Method         |
| Triglycerides                                       | mg/dl  | 244                               | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l | 2.76                              |                                        |
| Urea                                                | mg/dl  | 115                               | Urease, kinetic                        |
|                                                     | mg/dl  | 53.8                              |                                        |
|                                                     | (BUN)  |                                   |                                        |
|                                                     | mmol/l | 19.2                              |                                        |
| Uric Acid (Urate)                                   | mg/dl  | 8.94                              | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l | 0.532                             |                                        |
|                                                     | µmol/l | 532                               |                                        |
|                                                     | mg/dl  | 8.92                              | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l | 0.531                             |                                        |
|                                                     | µmol/l | 531                               |                                        |
|                                                     | mg/dl  | 9.04                              | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.538                             |                                        |
|                                                     | µmol/l | 538                               |                                        |

| Siemens ADVIA Chemistry Instruments                 |             |        | Calibration Serum Level 3 (CAL 3)    |
|-----------------------------------------------------|-------------|--------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                      |
| Size: 20 x 5 ml                                     |             |        |                                      |
| Analyte                                             | Unit        | Target | Method                               |
| Albumin                                             | g/dl        | 3.26   | Bromocresol Green                    |
|                                                     | g/l         | 32.6   |                                      |
| ALT (GPT)                                           | U/l         | 152    | Tris Buffer Without P5P              |
| Amylase Total                                       | U/l         | 273    | Siemens - blocked pNPG7              |
| AST (GOT)                                           | U/l         | 138    | Tris Buffer Without P5P              |
| Bilirubin Direct                                    | mg/dl       | 1.68   | Oxidation to Biliverdin/Vanadate     |
|                                                     | µmol/l      | 28.8   |                                      |
| Bilirubin Total                                     | mg/dl       | 5.85   | Oxidation to Biliverdin/Vanadate     |
|                                                     | µmol/l      | 100    |                                      |
| Calcium                                             | mg/dl       | 12.3   | Arsenazo III                         |
|                                                     | mmol/l      | 3.06   |                                      |
| Chloride                                            | mmol/l      | 111    | ISE Indirect                         |
| Cholesterol                                         | mg/dl       | 289    | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l      | 7.48   |                                      |
| Creatinine                                          | mg/dl       | 3.89   | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l      | 344    |                                      |
| gamma-GT                                            | U/l         | 191    | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl       | 265    | Hexokinase                           |
|                                                     | mmol/l      | 14.7   |                                      |
| Magnesium                                           | mg/dl       | 4.20   | Xylidyl Blue                         |
|                                                     | mmol/l      | 1.73   |                                      |
| Potassium                                           | mmol/l      | 6.26   | Ion Selective Electrode Method       |
| Protein Total                                       | g/dl        | 4.86   | Biuret reaction, end point           |
|                                                     | g/l         | 48.6   |                                      |
| Sodium                                              | mmol/l      | 159    | Ion Selective Electrode Method       |
| Triglycerides                                       | mg/dl       | 261    | Lipase/GPO-PAP No Correction         |
|                                                     | mmol/l      | 2.95   |                                      |
| Urea                                                | mg/dl       | 122    | Urease, kinetic                      |
|                                                     | mg/dl (BUN) | 56.8   |                                      |
|                                                     | mmol/l      | 20.3   |                                      |
| Uric Acid (Urate)                                   | mg/dl       | 9.26   | Uricase perox. no ascorb. ox.        |
|                                                     | mmol/l      | 0.551  |                                      |
|                                                     | µmol/l      | 551    |                                      |

| Siemens Atellica Solution                           |        |        | Calibration Serum Level 3 (CAL 3)        |
|-----------------------------------------------------|--------|--------|------------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                          |
| Size: 20 x 5 ml                                     |        |        |                                          |
| Analyte                                             | Unit   | Target | Method                                   |
| Albumin                                             | g/dl   | 3.13   | Bromocresol Green                        |
|                                                     | g/l    | 31.3   |                                          |
|                                                     | g/dl   | 3.01   | Bromocresol Purple                       |
|                                                     | g/l    | 30.1   |                                          |
| Alkaline Phosphatase                                | U/l    | 286    | AMP optimised to IFCC                    |
|                                                     | U/l    | 287    | Siemens/Dade Dimension AMP buffer        |
| ALT (GPT)                                           | U/l    | 151    | Siemens/Dade standard nonIFCC correlated |
|                                                     | U/l    | 147    | Tris Buffer With P5P                     |
|                                                     | U/l    | 149    | Tris Buffer Without P5P                  |
| Amylase Total                                       | U/l    | 287    | Siemens - blocked pNPG7                  |
|                                                     | U/l    | 289    | Siemens/Dade Behring 2-chloro-pNPG3      |
| AST (GOT)                                           | U/l    | 138    | Siemens/Dade standard non IFCC corr.     |
|                                                     | U/l    | 138    | Tris Buffer Without P5P                  |
| Bicarbonate                                         | mmol/l | 14.4   | Enzymatic                                |
|                                                     | mmol/l | 14.6   | PEP Carboxylase                          |
| Bilirubin Direct                                    | mg/dl  | 1.85   | Diazo/ Sulphanilic Siemens Dimension     |
|                                                     | µmol/l | 31.6   |                                          |
|                                                     | mg/dl  | 1.78   | Oxidation to Biliverdin/Vanadate         |
|                                                     | µmol/l | 30.4   |                                          |
| Bilirubin Total                                     | mg/dl  | 4.88   | Diazo With Dichloroaniline               |
|                                                     | µmol/l | 83.5   |                                          |
|                                                     | mg/dl  | 5.83   | Diazo With Sulphanilic Acid              |
|                                                     | µmol/l | 99.7   |                                          |
|                                                     | mg/dl  | 5.77   | Oxidation to Biliverdin/Vanadate         |
|                                                     | µmol/l | 98.6   |                                          |
| Calcium                                             | mg/dl  | 12.2   | Arsenazo III                             |
|                                                     | mmol/l | 3.04   |                                          |
|                                                     | mg/dl  | 12.3   | Cresolphthalein Complexone               |
|                                                     | mmol/l | 3.07   |                                          |
| Chloride                                            | mmol/l | 112    | ISE Indirect                             |
| Cholesterol                                         | mg/dl  | 285    | Cholesterol Oxidase - Abell Kendall      |
|                                                     | mmol/l | 7.37   |                                          |
|                                                     | mg/dl  | 285    | Cholesterol Oxidase - IDMS               |
|                                                     | mmol/l | 7.38   |                                          |
|                                                     | mg/dl  | 286    | Siemens Dimension                        |
|                                                     | mmol/l | 7.41   |                                          |
| Cholinesterase                                      | U/l    | 8563   | Colorimetric - Butyrylthiocholine        |
|                                                     | U/l    | 8742   | Siemens Atellica Cholinesterase_2        |
| CK Total                                            | U/l    | 501    | CK-NAC (IFCC)                            |

| Siemens Atellica Solution                           |        | Calibration Serum Level 3 (CAL 3) |                                      |
|-----------------------------------------------------|--------|-----------------------------------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |                                   |                                      |
| Size: 20 x 5 ml                                     |        |                                   |                                      |
| Analyte                                             | Unit   | Target                            | Method                               |
| CK Total                                            | U/l    | 502                               | Creatine Phosphate Substrate Start   |
| Creatinine                                          | mg/dl  | 3.99                              | Alkaline picrate no deproteinisation |
|                                                     | µmol/l | 353                               |                                      |
|                                                     | mg/dl  | 4.12                              | Enzymatic                            |
|                                                     | µmol/l | 365                               |                                      |
|                                                     | mg/dl  | 4.03                              | IDMS Traceable                       |
|                                                     | µmol/l | 357                               |                                      |
| gamma-GT                                            | mg/dl  | 4.02                              | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 356                               |                                      |
|                                                     | mg/dl  | 4.00                              | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l | 354                               |                                      |
|                                                     | U/l    | 209                               | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 208                               | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | U/l    | 207                               | Siemens Dimension                    |
|                                                     | mg/dl  | 274                               | Glucose Oxidase                      |
|                                                     | mmol/l | 15.2                              |                                      |
|                                                     | mg/dl  | 268                               | Hexokinase                           |
| Iron                                                | mmol/l | 14.9                              |                                      |
|                                                     | µg/dl  | 220                               | Colorimetric with ppt.               |
|                                                     | µmol/l | 39.3                              |                                      |
|                                                     | µg/dl  | 221                               | Colorimetric without ppt.            |
| Lactate                                             | µmol/l | 39.5                              |                                      |
|                                                     | mg/dl  | 48.7                              | Colorimetric - Lactate oxidase       |
|                                                     | mmol/l | 5.41                              |                                      |
|                                                     | mg/dl  | 49.6                              | UV-LDH                               |
| LD (LDH)                                            | mmol/l | 5.51                              |                                      |
|                                                     | U/l    | 329                               | L to P Siemens/Dade, non-IFCC        |
|                                                     | U/l    | 327                               | L to P, IFCC                         |
|                                                     | U/l    | 327                               | Lactate to Pyruvate methods          |
| Lipase                                              | U/l    | 69                                | Colorimetric Dimension (LIP Kit)     |
|                                                     | U/l    | 67                                | Other Colorimetric                   |
| Magnesium                                           | mg/dl  | 4.20                              | Methylthymol Blue                    |
|                                                     | mmol/l | 1.73                              |                                      |
|                                                     | mg/dl  | 4.23                              | Xylidyl Blue                         |
|                                                     | mmol/l | 1.74                              |                                      |
| Phosphate Inorganic                                 | mg/dl  | 7.22                              | Phosphomolybdate Enzymatic           |
|                                                     | mmol/l | 2.33                              |                                      |
|                                                     | mg/dl  | 7.53                              | Phosphomolybdate UV                  |
|                                                     | mmol/l | 2.43                              |                                      |

| Siemens Atellica Solution                           |             |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|-------------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                   |
| Size: 20 x 5 ml                                     |             |        |                                   |
| Analyte                                             | Unit        | Target | Method                            |
| Potassium                                           | mmol/l      | 6.06   | Ion Selective Electrode Method    |
| Protein Total                                       | g/dl        | 4.84   | Biuret reaction, end point        |
|                                                     | g/l         | 48.4   |                                   |
|                                                     | g/dl        | 4.84   | Biuret reaction, kinetic          |
|                                                     | g/l         | 48.4   |                                   |
| Sodium                                              | mmol/l      | 156    | Ion Selective Electrode Method    |
| TIBC                                                | µg/dl       | 267    | Direct Colorimetric               |
|                                                     | µmol/l      | 47.7   |                                   |
|                                                     | µg/dl       | 264    | FE+UIBC(saturation with iron)     |
|                                                     | µmol/l      | 47.2   |                                   |
|                                                     | µg/dl       | 270    | Removal Of Excess Free Iron       |
|                                                     | µmol/l      | 48.3   |                                   |
| Triglycerides                                       | mg/dl       | 253    | Lipase/GK UV. no correction       |
|                                                     | mmol/l      | 2.86   |                                   |
|                                                     | mg/dl       | 253    | Lipase/GPO-PAP No Correction      |
|                                                     | mmol/l      | 2.86   |                                   |
|                                                     | mg/dl       | 257    | Siemens Atellica TRIG_2           |
|                                                     | mmol/l      | 2.90   |                                   |
| Urea                                                | mg/dl       | 120    | Urease - hypochlorite             |
|                                                     | mg/dl (BUN) | 56.0   |                                   |
|                                                     | mmol/l      | 20.0   |                                   |
|                                                     | mg/dl       | 121    | Urease, end point                 |
|                                                     | mg/dl (BUN) | 56.6   |                                   |
|                                                     | mmol/l      | 20.2   |                                   |
|                                                     | mg/dl       | 120    | Urease, kinetic                   |
|                                                     | mg/dl (BUN) | 55.7   |                                   |
|                                                     | mmol/l      | 19.9   |                                   |
| Uric Acid (Urate)                                   | mg/dl       | 9.09   | Uricase @ 293 nm                  |
|                                                     | mmol/l      | 0.541  |                                   |
|                                                     | µmol/l      | 541    |                                   |
|                                                     | mg/dl       | 9.16   | Uricase perox. no ascorb. ox.     |
|                                                     | mmol/l      | 0.545  |                                   |
|                                                     | µmol/l      | 545    |                                   |
|                                                     | mg/dl       | 9.13   | Uricase Perox. with ascorb. ox    |
|                                                     | mmol/l      | 0.543  |                                   |
|                                                     | µmol/l      | 543    |                                   |

| Siemens Atellica Solution                           |        |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|--------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                        |
| Size: 20 x 5 ml                                     |        |        |                                        |
| Analyte                                             | Unit   | Target | Method                                 |
| Uric Acid (Urate)                                   | mg/dl  | 9.24   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l | 0.550  |                                        |
|                                                     | µmol/l | 550    |                                        |
|                                                     | mg/dl  | 9.23   | Uricase, catalase 340nm.               |
|                                                     | mmol/l | 0.549  |                                        |
|                                                     | µmol/l | 549    |                                        |

| Siemens Dimension EXL/200                           |        |        | Calibration Serum Level 3 (CAL 3)        |
|-----------------------------------------------------|--------|--------|------------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                          |
| Size: 20 x 5 ml                                     |        |        |                                          |
| Analyte                                             | Unit   | Target | Method                                   |
| Albumin                                             | g/dl   | 3.08   | Bromocresol Green                        |
|                                                     | g/l    | 30.8   |                                          |
|                                                     | g/dl   | 3.01   | Bromocresol Purple                       |
|                                                     | g/l    | 30.1   |                                          |
| Alkaline Phosphatase                                | U/l    | 297    | AMP optimised to IFCC                    |
|                                                     | U/l    | 296    | Siemens/Dade Dimension AMP buffer        |
| ALT (GPT)                                           | U/l    | 150    | Siemens/Dade standard nonIFCC correlated |
|                                                     | U/l    | 151    | Tris Buffer With P5P                     |
| Amylase Total                                       | U/l    | 293    | Siemens/Dade Behring 2-chloro-pNPG3      |
| AST (GOT)                                           | U/l    | 166    | Siemens/Dade standard non IFCC corr.     |
|                                                     | U/l    | 165    | Tris Buffer With P5P                     |
| Bilirubin Direct                                    | mg/dl  | 1.26   | Diazo With Sulphanilic Acid              |
|                                                     | µmol/l | 21.5   |                                          |
|                                                     | mg/dl  | 1.23   | Diazo/ Sulphanilic Siemens Dimension     |
|                                                     | µmol/l | 21.0   |                                          |
| Bilirubin Total                                     | mg/dl  | 5.52   | Diazo With Sulphanilic Acid              |
|                                                     | µmol/l | 94.3   |                                          |
| Calcium                                             | mg/dl  | 11.9   | Cresolphthalein Complexone               |
|                                                     | mmol/l | 2.98   |                                          |
| Chloride                                            | mmol/l | 110    | ISE Indirect                             |
| Cholesterol                                         | mg/dl  | 269    | Cholesterol Oxidase - Abell Kendall      |
|                                                     | mmol/l | 6.96   |                                          |
|                                                     | mg/dl  | 264    | Siemens Dimension                        |
|                                                     | mmol/l | 6.83   |                                          |
| CK Total                                            | U/l    | 502    | CK-NAC (IFCC)                            |
| Creatinine                                          | mg/dl  | 4.01   | Alkaline picrate no deproteinisation     |
|                                                     | µmol/l | 355    |                                          |
|                                                     | mg/dl  | 4.07   | Enzymatic                                |
|                                                     | µmol/l | 360    |                                          |
|                                                     | mg/dl  | 4.06   | IDMS Traceable                           |
|                                                     | µmol/l | 359    |                                          |
|                                                     | mg/dl  | 4.14   | Jaffe Rate Blanked                       |
|                                                     | µmol/l | 366    |                                          |
| gamma-GT                                            | U/l    | 209    | Gamma glut'3-carb'4-nitro(IFCC)          |
|                                                     | U/l    | 232    | Siemens Dimension                        |
| Glucose                                             | mg/dl  | 272    | Hexokinase                               |
|                                                     | mmol/l | 15.1   |                                          |
| Iron                                                | µg/dl  | 207    | Colorimetric with ppt.                   |
|                                                     | µmol/l | 37.0   |                                          |

| Siemens Dimension EXL/200                           |             |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|-------------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                   |
| Size: 20 x 5 ml                                     |             |        |                                   |
| Analyte                                             | Unit        | Target | Method                            |
| Iron                                                | µg/dl       | 207    | Colorimetric without ppt.         |
|                                                     | µmol/l      | 37.0   |                                   |
| LD (LDH)                                            | U/l         | 318    | L to P Siemens/Dade, non-IFCC     |
|                                                     | U/l         | 327    | L to P, IFCC                      |
| Magnesium                                           | mg/dl       | 4.23   | Methylthymol Blue                 |
|                                                     | mmol/l      | 1.74   |                                   |
| Phosphate Inorganic                                 | mg/dl       | 7.47   | Phosphomolybdate Enzymatic        |
|                                                     | mmol/l      | 2.41   |                                   |
|                                                     | mg/dl       | 7.47   | Phosphomolybdate UV               |
|                                                     | mmol/l      | 2.41   |                                   |
| Potassium                                           | mmol/l      | 6.17   | Ion Selective Electrode Method    |
| Protein Total                                       | g/dl        | 4.92   | Biuret reaction, end point        |
|                                                     | g/l         | 49.2   |                                   |
|                                                     | g/dl        | 4.98   | Biuret reaction, kinetic          |
|                                                     | g/l         | 49.8   |                                   |
| Sodium                                              | mmol/l      | 158    | Ion Selective Electrode Method    |
| Triglycerides                                       | mg/dl       | 243    | Lipase/GK UV. no correction       |
|                                                     | mmol/l      | 2.75   |                                   |
|                                                     | mg/dl       | 243    | Lipase/Glycerol Dehydrogenase     |
|                                                     | mmol/l      | 2.75   |                                   |
|                                                     | mg/dl       | 242    | Lipase/GPO-PAP No Correction      |
|                                                     | mmol/l      | 2.74   |                                   |
|                                                     | mg/dl       | 244    | Siemens Dimension                 |
|                                                     | mmol/l      | 2.76   |                                   |
| Urea                                                | mg/dl       | 123    | Urease, end point                 |
|                                                     | mg/dl (BUN) | 57.4   |                                   |
|                                                     | mmol/l      | 20.5   |                                   |
|                                                     | mg/dl       | 123    | Urease, kinetic                   |
|                                                     | mg/dl (BUN) | 57.1   |                                   |
|                                                     | mmol/l      | 20.4   |                                   |
|                                                     | mg/dl       | 8.89   |                                   |
|                                                     | mmol/l      | 0.529  |                                   |
| Uric Acid (Urate)                                   | µmol/l      | 529    |                                   |
|                                                     | mg/dl       | 8.86   | Uricase perox. no ascorb. ox.     |
|                                                     | mmol/l      | 0.527  |                                   |
|                                                     | µmol/l      | 527    |                                   |
|                                                     |             |        |                                   |
|                                                     |             |        |                                   |

| Siemens Dimension EXL/200                           |        |       | Calibration Serum Level 3 (CAL 3) |        |  |
|-----------------------------------------------------|--------|-------|-----------------------------------|--------|--|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |       |                                   |        |  |
| Size: 20 x 5 ml                                     |        |       |                                   |        |  |
| Analyte                                             |        | Unit  | Target                            | Method |  |
| Uric Acid (Urate)                                   | mg/dl  | 9.13  | Uricase Perox. with ascorb. ox    |        |  |
|                                                     | mmol/l | 0.543 |                                   |        |  |
|                                                     | µmol/l | 543   |                                   |        |  |
|                                                     | mg/dl  | 9.11  | Uricase, catalase 340nm.          |        |  |
|                                                     | mmol/l | 0.542 |                                   |        |  |
|                                                     | µmol/l | 542   |                                   |        |  |

| Siemens Dimension RxL/Max/Xpand                     |        |        | Calibration Serum Level 3 (CAL 3) |
|-----------------------------------------------------|--------|--------|-----------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                   |
| Size: 20 x 5 ml                                     |        |        |                                   |
| Analyte                                             | Unit   | Target | Method                            |
| Bilirubin Total                                     | mg/dl  | 5.55   | Diazo With Sulphanilic Acid       |
|                                                     | μmol/l | 94.8   |                                   |

| Thermo Fisher Scientific Konelab<br>20/30/60/Indiko |        |        | Calibration Serum Level 3 (CAL 3)    |
|-----------------------------------------------------|--------|--------|--------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |        |        |                                      |
| Size: 20 x 5 ml                                     |        |        |                                      |
| Analyte                                             | Unit   | Target | Method                               |
| Albumin                                             | g/dl   | 3.11   | Bromocresol Green                    |
|                                                     | g/l    | 31.1   |                                      |
| Alkaline Phosphatase                                | U/l    | 298    | AMP optimised to IFCC                |
|                                                     | U/l    | 319    | Colorimetric                         |
| ALT (GPT)                                           | U/l    | 144    | Tris Buffer With P5P                 |
|                                                     | U/l    | 144    | Tris Buffer Without P5P              |
| AST (GOT)                                           | U/l    | 137    | Tris Buffer Without P5P              |
| Bilirubin Total                                     | mg/dl  | 5.28   | Diazo With Dichloroaniline           |
|                                                     | µmol/l | 90.2   |                                      |
|                                                     | mg/dl  | 5.35   | Diazo With Sulphanilic Acid          |
|                                                     | µmol/l | 91.4   |                                      |
|                                                     | mg/dl  | 5.36   | Dichlorophenyl Diazonium             |
|                                                     | µmol/l | 91.7   |                                      |
|                                                     | mg/dl  | 5.20   | Nitrobenzenediazonium Salt           |
|                                                     | µmol/l | 88.9   |                                      |
| Calcium                                             | mg/dl  | 12.3   | Arsenazo III                         |
|                                                     | mmol/l | 3.07   |                                      |
| Cholesterol                                         | mg/dl  | 291    | Cholesterol Dehydrogenase            |
|                                                     | mmol/l | 7.54   |                                      |
|                                                     | mg/dl  | 293    | Cholesterol Oxidase - Abell Kendall  |
|                                                     | mmol/l | 7.59   |                                      |
|                                                     | mg/dl  | 293    | Cholesterol Oxidase - IDMS           |
|                                                     | mmol/l | 7.59   |                                      |
| CK Total                                            | U/l    | 540    | CK-NAC (IFCC)                        |
| Creatinine                                          | mg/dl  | 4.15   | Enzymatic                            |
|                                                     | µmol/l | 367    |                                      |
|                                                     | mg/dl  | 3.75   | Jaffe Rate Blanked                   |
|                                                     | µmol/l | 332    |                                      |
|                                                     | mg/dl  | 3.85   | Jaffe rate blanked comp. (-26µmol/l) |
|                                                     | µmol/l | 341    |                                      |
| gamma-GT                                            | U/l    | 181    | Gamma glut.-3-carb.-4-nitro.         |
|                                                     | U/l    | 195    | Gamma glut'3-carb'4-nitro(IFCC)      |
| Glucose                                             | mg/dl  | 281    | Glucose Oxidase                      |
|                                                     | mmol/l | 15.6   |                                      |
|                                                     | mg/dl  | 285    | Hexokinase                           |
|                                                     | mmol/l | 15.8   |                                      |
| Iron                                                | µg/dl  | 222    | Colorimetric with ppt.               |
|                                                     | µmol/l | 39.8   |                                      |

| Thermo Fisher Scientific Konelab<br>20/30/60/Indiko |             |        | Calibration Serum Level 3 (CAL 3)      |
|-----------------------------------------------------|-------------|--------|----------------------------------------|
| Lot. No: 1449UE Cat. No: CAL2351 Expiry: 2028/02/28 |             |        |                                        |
| Size: 20 x 5 ml                                     |             |        |                                        |
| Analyte                                             | Unit        | Target | Method                                 |
| Iron                                                | µg/dl       | 226    | Colorimetric without ppt.              |
|                                                     | µmol/l      | 40.5   |                                        |
| Magnesium                                           | mg/dl       | 4.16   | Xylidyl Blue                           |
|                                                     | mmol/l      | 1.71   |                                        |
| Phosphate Inorganic                                 | mg/dl       | 7.53   | Phosphomolybdate Enzymatic             |
|                                                     | mmol/l      | 2.43   |                                        |
|                                                     | mg/dl       | 7.32   | Phosphomolybdate UV                    |
|                                                     | mmol/l      | 2.36   |                                        |
| Protein Total                                       | g/dl        | 4.97   | Biuret reaction, end point             |
|                                                     | g/l         | 49.7   |                                        |
|                                                     | g/dl        | 5.17   | Biuret reaction, kinetic               |
|                                                     | g/l         | 51.7   |                                        |
| Triglycerides                                       | mg/dl       | 246    | Lipase/Glycerol Dehydrogenase          |
|                                                     | mmol/l      | 2.78   |                                        |
|                                                     | mg/dl       | 258    | Lipase/GPO-PAP No Correction           |
|                                                     | mmol/l      | 2.92   |                                        |
| Urea                                                | mg/dl       | 123    | Urease, end point                      |
|                                                     | mg/dl (BUN) | 57.4   |                                        |
|                                                     | mmol/l      | 20.5   |                                        |
|                                                     | mg/dl       | 120    | Urease, kinetic                        |
|                                                     | mg/dl (BUN) | 56.0   |                                        |
|                                                     | mmol/l      | 20.0   |                                        |
| Uric Acid (Urate)                                   | mg/dl       | 9.19   | Uricase perox. no ascorb. ox.          |
|                                                     | mmol/l      | 0.547  |                                        |
|                                                     | µmol/l      | 547    |                                        |
|                                                     | mg/dl       | 9.19   | Uricase Perox. with ascorb. ox         |
|                                                     | mmol/l      | 0.547  |                                        |
|                                                     | µmol/l      | 547    |                                        |
|                                                     | mg/dl       | 9.29   | Uricase Perox. with ascorb. ox @ 546nm |
|                                                     | mmol/l      | 0.553  |                                        |
|                                                     | µmol/l      | 553    |                                        |