

# MEDICAL LABORATORY EVALUATION

## PARTICIPANT SUMMARY

2 • 0 • 1 • 6

Chemistry  
2016 MLE-M2



Total Commitment to Education and Service  
Provided by ACP, Inc.

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| Creatine Kinase.....                       | 58       | Theophylline.....                            | 86  |
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| Glucose (IST Specimens).....               | 6        | Urine Chemistry .....                        | 125 |
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## EVALUATION CRITERIA

For quantitative procedures, a mean and standard deviation (SD) are calculated for each peer group. Acceptable performance is established on a target value mean  $\pm$  the limits listed below.

|                                  |                          |                                        |                            |
|----------------------------------|--------------------------|----------------------------------------|----------------------------|
| Acetaminophen                    | $\pm 3$ SD or 10% *      | Homocysteine                           | $\pm 25\%$                 |
| Acetone                          | 80% Consensus            | Insulin                                | $\pm 2$ SD                 |
| Albumin                          | $\pm 10\%$               | Iron                                   | $\pm 20\%$                 |
| Alcohol                          | $\pm 25\%$               | Lactate Dehydrogenase                  | $\pm 20\%$                 |
| Alpha-fetoprotein                | $\pm 3$ SD               | Lactic Acid                            | $\pm 0.4$ mmol/L or 3 SD * |
| Alkaline Phosphatase             | $\pm 30\%$               | LDL Cholesterol                        | $\pm 2$ SD or 30% *        |
| ALT (SGPT)                       | $\pm 20\%$               | Lipase                                 | $\pm 30\%$                 |
| Ammonia                          | $\pm 2$ SD or 5% *       | LH                                     | $\pm 2$ SD                 |
| Amylase                          | $\pm 30\%$               | Lithium                                | $\pm 0.3$ mmol/L or 20% *  |
| Anti-Microsomal Antibody         | $\pm 2$ SD               | Magnesium                              | $\pm 25\%$                 |
| Anti-Thyroglobulin Antibody      | $\pm 2$ SD               | Myoglobin                              | $\pm 2$ SD or 30% *        |
| Apolipoprotein A1                | $\pm 30\%$               | NT-proBNP                              | $\pm 2$ SD or 25% *        |
| Apolipoprotein B                 | $\pm 25\%$               | Parathyroid Hormone                    | $\pm 2$ SD                 |
| AST (SGOT)                       | $\pm 20\%$               | Phenobarbital                          | $\pm 20\%$                 |
| B-Type Natriuretic Peptide (BNP) | $\pm 2$ SD or 25% *      | Phenytoin                              | $\pm 25\%$                 |
| Beta-2 Microglobulin             | $\pm 3$ SD               | Phosphorus                             | $\pm 0.3$ mg/dL or 10.7% * |
| Bilirubin, Direct                | $\pm 2$ SD               | Potassium                              | $\pm 0.5$ mmol/L           |
| Bilirubin, Total                 | $\pm 0.4$ mg/dL or 20% * | Progesterone                           | $\pm 30\%$                 |
| Bilirubin, Neonatal (Total)      | $\pm 0.4$ mg/dL or 20% * | Prolactin                              | $\pm 3.6$ ng/mL or 30% *   |
| C-Peptide                        | $\pm 2$ SD               | Protein, Total (Serum)                 | $\pm 10\%$                 |
| CA 125                           | $\pm 30\%$               | Protein, Total (Urine)                 | $\pm 44\%$                 |
| CA 15-3                          | $\pm 3$ SD               | PSA                                    | $\pm 0.9$ ng/mL or 30% *   |
| CA 19-9                          | $\pm 3$ SD               | PSA, Free                              | $\pm 0.9$ ng/mL or 30% *   |
| CA 27/29                         | $\pm 3$ SD               | pCO <sub>2</sub>                       | $\pm 5$ mmHg or 8% *       |
| Calcium                          | $\pm 1.0$ mg/dL          | pH                                     | $\pm 0.04$                 |
| Calcium, Ionized                 | $\pm 3$ SD               | pO <sub>2</sub>                        | $\pm 3$ SD                 |
| Carbamazepine                    | $\pm 25\%$               | Salicylate                             | $\pm 3$ SD or 10% *        |
| CEA                              | $\pm 1.2$ ng/mL 30%      | SHBG                                   | $\pm 4.0$ mmol/L           |
| Chloride                         | $\pm 5\%$                | Sodium                                 | $\pm 3$ SD                 |
| Cholesterol                      | $\pm 10\%$               | T <sub>3</sub> Uptake (% Uptake)       | $\pm 3$ SD                 |
| CK-MB (Quantitative)             | $\pm 3$ SD               | T <sub>3</sub> , Free                  | $\pm 3$ SD                 |
| CO <sub>2</sub>                  | $\pm 20\%$               | T <sub>4</sub> , Free                  | $\pm 3$ SD                 |
| Cortisol                         | $\pm 25\%$               | tCO <sub>2</sub>                       | $\pm 20\%$                 |
| Creatine Kinase                  | $\pm 30\%$               | Testosterone                           | $\pm 30\%$                 |
| Creatinine (Serum)               | $\pm 0.3$ mg/dL or 15% * | Testosterone, Bioavailable             | $\pm 3$ SD                 |
| Creatinine (Urine)               | $\pm 17\%$               | Testosterone, Free                     | $\pm 3$ SD                 |
| D-Dimer                          | $\pm 2$ SD or 30% *      | Theophylline                           | $\pm 25\%$                 |
| DHEA-S                           | $\pm 25\%$               | Thyroglobulin                          | $\pm 2$ SD                 |
| Digoxin                          | $\pm 0.2$ mg/dL or 20% * | Thyroxine, Total T <sub>4</sub>        | $\pm 1.0$ µg/dL or 20% *   |
| Estradiol                        | $\pm 2$ SD               | TIBC                                   | $\pm 2$ SD or 20% *        |
| Ferritin                         | $\pm 30\%$               | Transferrin                            | $\pm 10\%$                 |
| Folate                           | $\pm 0.9$ ng/mL or 30%*  | Triglyceride                           | $\pm 25\%$                 |
| Fructosamine (mmol/L)            | $\pm 0.45$ or 30% *      | Triiodothyronine, Total T <sub>3</sub> | $\pm 3$ SD                 |
| Fructosamine (µmol/L)            | $\pm 45$ or 30% *        | Troponin I                             | $\pm 2$ SD or 30% *        |
| FSH                              | $\pm 25\%$               | Troponin T                             | $\pm 30\%$                 |
| Gentamicin                       | $\pm 25\%$               | TSH                                    | $\pm 3$ SD                 |
| GGT                              | $\pm 2$ SD or 20% *      | UIBC                                   | $\pm 2$ SD or 20% *        |
| Glucose, Serum                   | $\pm 6$ mg/dL or 10% *   | Urea Nitrogen                          | $\pm 2.0$ mg/dL or 9% *    |
| Glucose, Whole Blood             | $\pm 12$ mg/dL or 20% *  | Uric Acid                              | $\pm 17\%$                 |
| Glycohemoglobin                  | $\pm 10\%$               | Urine Drug Screen                      | 80% Consensus              |
| HDL Cholesterol                  | $\pm 30\%$               | Valproic Acid                          | $\pm 25\%$                 |
| HCG, Serum—Qualitative           | 80% Consensus            | Vancomycin                             | $\pm 3$ SD or 10% *        |
| HCG, Serum—Quantitative          | $\pm 3$ SD               | Vitamin B <sub>12</sub>                | $\pm 30\%$                 |
| Hematocrit                       | $\pm 6\%$                | Vitamin D                              | $\pm 2$ SD                 |
| Hemoglobin                       | $\pm 7\%$                | Troponin I                             | $\pm 2$ SD or 30% *        |
| Homocysteine                     | $\pm 25\%$               | Troponin T                             | $\pm 30\%$                 |

\*Whichever is greater

## Sodium (mmol/L)

| <u>Instrument</u>      | Specimen IST-6 |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 94             | 113.0       | 0.5       | 0.5       | 113           | 109 - 118    | 93             | 154.5       | 0.7       | 0.4       | 155           | 150 - 159    |
| All i-STAT Instruments | 94             | 113.0       | 0.5       | 0.5       | 113           | 109 - 118    | 93             | 154.5       | 0.7       | 0.4       | 155           | 150 - 159    |
| i-STAT - moderate      | 11             | 113.0       | 0.8       | 0.7       | 113           | 109 - 117    | 11             | 154.5       | 0.8       | 0.5       | 155           | 150 - 159    |
| i-STAT - waived        | 84             | 113.0       | 0.5       | 0.5       | 113           | 109 - 118    | 82             | 154.4       | 0.7       | 0.4       | 155           | 150 - 159    |

  

| <u>Instrument</u>      | Specimen IST-8 |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 80             | 123.1       | 0.5       | 0.4       | 123           | 119 - 128    | 81             | 167.8       | 0.7       | 0.4       | 168           | 163 - 172    |
| All i-STAT Instruments | 80             | 123.1       | 0.5       | 0.4       | 123           | 119 - 128    | 81             | 167.8       | 0.7       | 0.4       | 168           | 163 - 172    |
| i-STAT - moderate      | 11             | 123.2       | 0.9       | 0.7       | 123           | 119 - 128    | 11             | 167.8       | 0.9       | 0.5       | 168           | 163 - 172    |
| i-STAT - waived        | 70             | 123.0       | 0.5       | 0.4       | 123           | 119 - 128    | 69             | 167.8       | 0.7       | 0.4       | 168           | 163 - 172    |

  

| <u>Instrument</u>      | Specimen IST-10 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 79              | 125.6       | 0.6       | 0.5       | 126           | 121 - 130    |
| All i-STAT Instruments | 79              | 125.6       | 0.6       | 0.5       | 126           | 121 - 130    |
| i-STAT - moderate      | 11              | 125.2       | 1.8       | 1.4       | 126           | 121 - 130    |
| i-STAT - waived        | 69              | 125.6       | 0.6       | 0.5       | 126           | 121 - 130    |

## Potassium (mmol/L)

| <u>Instrument</u>      | Specimen IST-6 |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 95             | 2.05        | 0.05      | 2.4       | 2.0           | 1.5 - 2.6    | 89             | 4.50        | 0.01      | 0.0       | 4.5           | 4.0 - 5.0    |
| All i-STAT Instruments | 95             | 2.05        | 0.05      | 2.4       | 2.0           | 1.5 - 2.6    | 89             | 4.50        | 0.01      | 0.0       | 4.5           | 4.0 - 5.0    |
| i-STAT - moderate      | 11             | 2.05        | 0.05      | 2.6       | 2.0           | 1.5 - 2.6    | 11             | 4.50        | 0.01      | 0.0       | 4.5           | 4.0 - 5.0    |
| i-STAT - waived        | 84             | 2.05        | 0.05      | 2.4       | 2.0           | 1.5 - 2.6    | 78             | 4.50        | 0.01      | 0.0       | 4.5           | 4.0 - 5.0    |

  

| <u>Instrument</u>      | Specimen IST-8 |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 81             | 3.21        | 0.03      | 1.0       | 3.2           | 2.7 - 3.8    | 81             | 6.61        | 0.05      | 0.7       | 6.6           | 6.1 - 7.2    |
| All i-STAT Instruments | 81             | 3.21        | 0.03      | 1.0       | 3.2           | 2.7 - 3.8    | 81             | 6.61        | 0.05      | 0.7       | 6.6           | 6.1 - 7.2    |
| i-STAT - moderate      | 11             | 3.20        | 0.01      | 0.0       | 3.2           | 2.7 - 3.7    | 11             | 6.63        | 0.05      | 0.7       | 6.6           | 6.1 - 7.2    |
| i-STAT - waived        | 70             | 3.21        | 0.04      | 1.1       | 3.2           | 2.7 - 3.8    | 70             | 6.61        | 0.04      | 0.7       | 6.6           | 6.1 - 7.2    |

  

| <u>Instrument</u>      | Specimen IST-10 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 81              | 2.72        | 0.04      | 1.5       | 2.7           | 2.2 - 3.3    |
| All i-STAT Instruments | 81              | 2.72        | 0.04      | 1.5       | 2.7           | 2.2 - 3.3    |
| i-STAT - moderate      | 11              | 2.71        | 0.05      | 2.0       | 2.7           | 2.2 - 3.3    |
| i-STAT - waived        | 70              | 2.72        | 0.04      | 1.4       | 2.7           | 2.2 - 3.3    |

## Chloride (mmol/L)

| <u>Instrument</u>      | Specimen IST-6 |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 92             | 71.7        | 0.7       | 0.9       | 72            | 68 - 76      | 90             | 98.3        | 0.7       | 0.7       | 98            | 93 - 104     |
| All i-STAT Instruments | 92             | 71.7        | 0.7       | 0.9       | 72            | 68 - 76      | 90             | 98.3        | 0.7       | 0.7       | 98            | 93 - 104     |
| i-STAT - moderate      | 10             | 71.6        | 1.3       | 1.8       | 71            | 68 - 76      | 10             | 98.3        | 0.7       | 0.7       | 98            | 93 - 104     |
| i-STAT - waived        | 83             | 71.7        | 0.7       | 0.9       | 72            | 68 - 76      | 82             | 98.4        | 0.8       | 0.8       | 98            | 93 - 104     |

  

| <u>Instrument</u>      | Specimen IST-8 |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 79             | 100.4       | 0.6       | 0.6       | 100           | 95 - 106     | 78             | 116.2       | 0.9       | 0.8       | 116           | 110 - 122    |
| All i-STAT Instruments | 79             | 100.4       | 0.6       | 0.6       | 100           | 95 - 106     | 78             | 116.2       | 0.9       | 0.8       | 116           | 110 - 122    |
| i-STAT - moderate      | 10             | 100.3       | 0.8       | 0.8       | 100           | 95 - 106     | 10             | 115.6       | 1.0       | 0.8       | 116           | 109 - 122    |
| i-STAT - waived        | 69             | 100.4       | 0.6       | 0.6       | 100           | 95 - 106     | 68             | 116.3       | 0.9       | 0.8       | 116           | 110 - 123    |

  

| <u>Instrument</u>      | Specimen IST-10 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 80              | 76.1        | 0.8       | 1.0       | 76            | 72 - 80      |
| All i-STAT Instruments | 80              | 76.1        | 0.8       | 1.0       | 76            | 72 - 80      |
| i-STAT - moderate      | 10              | 75.9        | 0.3       | 0.4       | 76            | 72 - 80      |
| i-STAT - waived        | 70              | 76.1        | 0.8       | 1.1       | 76            | 72 - 80      |

## tCO<sub>2</sub> (mmol/L)

| <u>Instrument</u>      | Specimen IST-6 |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 88             | 18.5        | 0.7       | 3.8       | 19            | 14 - 23      | 89             | 21.6        | 1.0       | 4.5       | 22            | 17 - 26      |
| All i-STAT Instruments | 88             | 18.5        | 0.7       | 3.8       | 19            | 14 - 23      | 89             | 21.6        | 1.0       | 4.5       | 22            | 17 - 26      |
| i-STAT - moderate      | 10             | 18.6        | 0.5       | 2.8       | 19            | 14 - 23      | 10             | 21.9        | 0.9       | 4.0       | 22            | 17 - 27      |
| i-STAT - waived        | 78             | 18.5        | 0.7       | 3.9       | 18            | 14 - 23      | 79             | 21.6        | 1.0       | 4.6       | 22            | 17 - 26      |

  

| <u>Instrument</u>      | Specimen IST-8 |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 75             | 16.8        | 0.7       | 4.0       | 17            | 13 - 21      | 78             | 21.3        | 0.9       | 4.3       | 21            | 17 - 26      |
| All i-STAT Instruments | 75             | 16.8        | 0.7       | 4.0       | 17            | 13 - 21      | 78             | 21.3        | 0.9       | 4.3       | 21            | 17 - 26      |
| i-STAT - moderate      | 10             | 16.9        | 0.7       | 4.4       | 17            | 13 - 21      | 10             | 21.6        | 1.1       | 5.0       | 22            | 17 - 26      |
| i-STAT - waived        | 66             | 16.8        | 0.7       | 4.3       | 17            | 13 - 21      | 68             | 21.3        | 0.9       | 4.2       | 21            | 17 - 26      |

  

| <u>Instrument</u>      | Specimen IST-10 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 78              | 22.1        | 0.8       | 3.5       | 22            | 17 - 27      |
| All i-STAT Instruments | 78              | 22.1        | 0.8       | 3.5       | 22            | 17 - 27      |
| i-STAT - moderate      | 10              | 22.5        | 1.0       | 4.3       | 22            | 18 - 27      |
| i-STAT - waived        | 68              | 22.0        | 0.7       | 3.3       | 22            | 17 - 27      |

## Urea Nitrogen (BUN) (mg/dL)

| <u>Instrument</u>      | Specimen IST-6  |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 94              | 8.1         | 0.4       | 4.4       | 8             | 6 - 11       | 94             | 57.0        | 1.0       | 1.8       | 57            | 51 - 63      |
| All i-STAT Instruments | 94              | 8.1         | 0.4       | 4.4       | 8             | 6 - 11       | 94             | 57.0        | 1.0       | 1.8       | 57            | 51 - 63      |
| i-STAT - moderate      | 10              | 8.3         | 0.5       | 5.8       | 8             | 6 - 11       | 10             | 57.1        | 1.0       | 1.7       | 57            | 51 - 63      |
| i-STAT - waived        | 84              | 8.1         | 0.3       | 4.2       | 8             | 6 - 11       | 84             | 57.0        | 1.0       | 1.8       | 57            | 51 - 63      |
|                        | Specimen IST-8  |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 80              | 6.5         | 0.5       | 7.8       | 6             | 4 - 9        | 78             | 46.5        | 0.9       | 2.0       | 46            | 42 - 51      |
| All i-STAT Instruments | 80              | 6.5         | 0.5       | 7.8       | 6             | 4 - 9        | 78             | 46.5        | 0.9       | 2.0       | 46            | 42 - 51      |
| i-STAT - moderate      | 10              | 6.3         | 0.5       | 7.7       | 6             | 4 - 9        | 10             | 46.8        | 0.8       | 1.7       | 47            | 42 - 52      |
| i-STAT - waived        | 70              | 6.5         | 0.5       | 7.8       | 6             | 4 - 9        | 68             | 46.4        | 1.0       | 2.0       | 46            | 42 - 51      |
|                        | Specimen IST-10 |             |           |           |               |              |                |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method             | 79              | 66.3        | 1.2       | 1.8       | 66            | 60 - 73      |                |             |           |           |               |              |
| All i-STAT Instruments | 79              | 66.3        | 1.2       | 1.8       | 66            | 60 - 73      |                |             |           |           |               |              |
| i-STAT - moderate      | 10              | 66.3        | 1.3       | 2.0       | 66            | 60 - 73      |                |             |           |           |               |              |
| i-STAT - waived        | 69              | 66.2        | 1.2       | 1.8       | 66            | 60 - 73      |                |             |           |           |               |              |

## Glucose (mg/dL)

| <u>Instrument</u>      | Specimen IST-6  |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 95              | 52.5        | 1.8       | 3.5       | 52            | 46 - 59      | 92             | 192.4       | 1.7       | 0.9       | 192           | 173 - 212    |
| All i-STAT Instruments | 95              | 52.5        | 1.8       | 3.5       | 52            | 46 - 59      | 92             | 192.4       | 1.7       | 0.9       | 192           | 173 - 212    |
| i-STAT - moderate      | 10              | 53.4        | 2.3       | 4.3       | 54            | 47 - 60      | 10             | 191.1       | 1.1       | 0.6       | 191           | 171 - 211    |
| i-STAT - waived        | 85              | 52.4        | 1.8       | 3.3       | 52            | 46 - 59      | 83             | 192.6       | 1.8       | 0.9       | 193           | 173 - 212    |
|                        | Specimen IST-8  |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 80              | 39.6        | 2.0       | 5.0       | 40            | 33 - 46      | 79             | 238.2       | 2.5       | 1.0       | 238           | 214 - 263    |
| All i-STAT Instruments | 80              | 39.6        | 2.0       | 5.0       | 40            | 33 - 46      | 79             | 238.2       | 2.5       | 1.0       | 238           | 214 - 263    |
| i-STAT - moderate      | 10              | 40.1        | 2.1       | 5.3       | 41            | 34 - 47      | 10             | 236.6       | 2.7       | 1.1       | 237           | 212 - 261    |
| i-STAT - waived        | 70              | 39.6        | 2.0       | 4.9       | 40            | 33 - 46      | 68             | 238.5       | 2.2       | 0.9       | 238           | 214 - 263    |
|                        | Specimen IST-10 |             |           |           |               |              |                |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method             | 78              | 185.5       | 1.3       | 0.7       | 185           | 166 - 205    |                |             |           |           |               |              |
| All i-STAT Instruments | 78              | 185.5       | 1.3       | 0.7       | 185           | 166 - 205    |                |             |           |           |               |              |
| i-STAT - moderate      | 10              | 184.4       | 1.5       | 0.8       | 185           | 165 - 203    |                |             |           |           |               |              |
| i-STAT - waived        | 69              | 185.6       | 1.3       | 0.7       | 186           | 167 - 205    |                |             |           |           |               |              |

## Hematocrit (percent)

| <u>Instrument</u>      | Specimen IST-6  |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 18              | 12.9        | 0.5       | 4.2       | 13            | 12 - 14      | 18             | 32.6        | 0.6       | 1.9       | 33            | 30 - 35      |
| All i-STAT Instruments | 18              | 12.9        | 0.5       | 4.2       | 13            | 12 - 14      | 18             | 32.6        | 0.6       | 1.9       | 33            | 30 - 35      |
| i-STAT - waived        | 14              | 12.9        | 0.5       | 3.7       | 13            | 12 - 14      | 14             | 32.5        | 0.7       | 2.0       | 32            | 30 - 35      |
|                        | Specimen IST-8  |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 7               | 20.4        | 0.5       | 2.6       | 20            | 19 - 22      | 7              | 29.9        | 0.4       | 1.3       | 30            | 28 - 32      |
| All i-STAT Instruments | 7               | 20.4        | 0.5       | 2.6       | 20            | 19 - 22      | 7              | 29.9        | 0.4       | 1.3       | 30            | 28 - 32      |
| i-STAT - waived        | 3               | -           | -         | -         | 20            | 19 - 22      | 3              | -           | -         | -         | 30            | 28 - 32      |
|                        | Specimen IST-10 |             |           |           |               |              |                |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method             | 7               | 20.9        | 0.4       | 1.8       | 21            | 19 - 23      |                |             |           |           |               |              |
| All i-STAT Instruments | 7               | 20.9        | 0.4       | 1.8       | 21            | 19 - 23      |                |             |           |           |               |              |
| i-STAT - waived        | 3               | -           | -         | -         | 21            | 19 - 23      |                |             |           |           |               |              |

## Hemoglobin (g/dL)

| <u>Instrument</u>      | Specimen IST-6  |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 18              | 4.39        | 0.19      | 4.2       | 4.4           | 4.0 - 4.8    | 18             | 11.09       | 0.20      | 1.8       | 11.2          | 10.3 - 11.9  |
| All i-STAT Instruments | 18              | 4.39        | 0.19      | 4.2       | 4.4           | 4.0 - 4.8    | 18             | 11.09       | 0.20      | 1.8       | 11.2          | 10.3 - 11.9  |
| i-STAT - waived        | 14              | 4.39        | 0.16      | 3.7       | 4.4           | 4.0 - 4.7    | 14             | 11.06       | 0.21      | 1.9       | 10.9          | 10.2 - 11.9  |
|                        | Specimen IST-8  |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 7               | 6.93        | 0.16      | 2.3       | 6.8           | 6.4 - 7.5    | 7              | 10.16       | 0.11      | 1.1       | 10.2          | 9.4 - 10.9   |
| All i-STAT Instruments | 7               | 6.93        | 0.16      | 2.3       | 6.8           | 6.4 - 7.5    | 7              | 10.16       | 0.11      | 1.1       | 10.2          | 9.4 - 10.9   |
| i-STAT - waived        | 3               | -           | -         | -         | 6.8           | 6.4 - 7.5    | 3              | -           | -         | -         | 10.2          | 9.4 - 10.9   |
|                        | Specimen IST-10 |             |           |           |               |              |                |             |           |           |               |              |
|                        | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method             | 7               | 7.06        | 0.11      | 1.6       | 7.1           | 6.5 - 7.6    |                |             |           |           |               |              |
| All i-STAT Instruments | 7               | 7.06        | 0.11      | 1.6       | 7.1           | 6.5 - 7.6    |                |             |           |           |               |              |
| i-STAT - waived        | 3               | -           | -         | -         | 7.1           | 6.5 - 7.6    |                |             |           |           |               |              |

## Creatinine (mg/dL)

| Specimen IST-6         |             |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 107         | 0.34        | 0.05      | 15.6      | 0.3           | 0.0 - 0.7    | 107            | 4.69        | 0.13      | 2.8       | 4.7           | 3.9 - 5.4    |
| All i-STAT Instruments | 107         | 0.34        | 0.05      | 15.6      | 0.3           | 0.0 - 0.7    | 107            | 4.69        | 0.13      | 2.8       | 4.7           | 3.9 - 5.4    |
| i-STAT - moderate      | 13          | 0.35        | 0.07      | 19.1      | 0.3           | 0.0 - 0.7    | 13             | 4.75        | 0.18      | 3.8       | 4.7           | 4.0 - 5.5    |
| i-STAT - waived        | 94          | 0.34        | 0.05      | 15.1      | 0.3           | 0.0 - 0.7    | 95             | 4.68        | 0.13      | 2.8       | 4.7           | 3.9 - 5.4    |
| Specimen IST-8         |             |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
| All Method             | 82          | 6.60        | 0.22      | 3.3       | 6.6           | 5.6 - 7.6    | 81             | 2.67        | 0.09      | 3.5       | 2.7           | 2.2 - 3.1    |
| All i-STAT Instruments | 82          | 6.60        | 0.22      | 3.3       | 6.6           | 5.6 - 7.6    | 81             | 2.67        | 0.09      | 3.5       | 2.7           | 2.2 - 3.1    |
| i-STAT - moderate      | 13          | 6.66        | 0.27      | 4.0       | 6.7           | 5.6 - 7.7    | 13             | 2.70        | 0.10      | 3.7       | 2.7           | 2.2 - 3.2    |
| i-STAT - waived        | 69          | 6.59        | 0.21      | 3.1       | 6.6           | 5.5 - 7.6    | 68             | 2.67        | 0.09      | 3.4       | 2.7           | 2.2 - 3.1    |
| Specimen IST-10        |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method             | 82          | 3.84        | 0.13      | 3.3       | 3.9           | 3.2 - 4.5    |                |             |           |           |               |              |
| All i-STAT Instruments | 82          | 3.84        | 0.13      | 3.3       | 3.9           | 3.2 - 4.5    |                |             |           |           |               |              |
| i-STAT - moderate      | 13          | 3.90        | 0.12      | 3.0       | 3.9           | 3.3 - 4.5    |                |             |           |           |               |              |
| i-STAT - waived        | 69          | 3.83        | 0.13      | 3.3       | 3.8           | 3.2 - 4.5    |                |             |           |           |               |              |

## Ionized Calcium (mmol/L)

| Specimen IST-6         |             |             |           |           |               |              | Specimen IST-7 |             |           |           |               |              |
|------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument</u>      | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method             | 85          | 0.562       | 0.008     | 1.4       | 0.56          | 0.53 - 0.59  | 86             | 1.033       | 0.012     | 1.1       | 1.03          | 0.99 - 1.07  |
| All i-STAT Instruments | 85          | 0.562       | 0.008     | 1.4       | 0.56          | 0.53 - 0.59  | 86             | 1.033       | 0.012     | 1.1       | 1.03          | 0.99 - 1.07  |
| i-STAT - waived        | 77          | 0.561       | 0.008     | 1.4       | 0.56          | 0.53 - 0.59  | 77             | 1.033       | 0.012     | 1.2       | 1.03          | 0.99 - 1.07  |
| Specimen IST-8         |             |             |           |           |               |              | Specimen IST-9 |             |           |           |               |              |
| All Method             | 76          | 2.339       | 0.023     | 1.0       | 2.34          | 2.26 - 2.41  | 75             | 0.599       | 0.006     | 1.1       | 0.60          | 0.57 - 0.62  |
| All i-STAT Instruments | 76          | 2.339       | 0.023     | 1.0       | 2.34          | 2.26 - 2.41  | 75             | 0.599       | 0.006     | 1.1       | 0.60          | 0.57 - 0.62  |
| i-STAT - waived        | 67          | 2.339       | 0.024     | 1.0       | 2.34          | 2.26 - 2.41  | 67             | 0.599       | 0.006     | 1.1       | 0.60          | 0.57 - 0.62  |
| Specimen IST-10        |             |             |           |           |               |              |                |             |           |           |               |              |
| All Method             | 76          | 2.135       | 0.025     | 1.2       | 2.14          | 2.06 - 2.21  |                |             |           |           |               |              |
| All i-STAT Instruments | 76          | 2.135       | 0.025     | 1.2       | 2.14          | 2.06 - 2.21  |                |             |           |           |               |              |
| i-STAT - waived        | 67          | 2.135       | 0.024     | 1.1       | 2.14          | 2.06 - 2.21  |                |             |           |           |               |              |

**Albumin (g/dL)**

| <u>Reagent/Instrument</u>       | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                 | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 284           | 4.34        | 0.54      | 12.5      | 4.5           | 3.9 - 4.8    | 281           | 3.10        | 0.40      | 12.8      | 3.3           | 2.7 - 3.5    |
| All Bromocresol Green Reagents  | 195           | 4.67        | 0.21      | 4.6       | 4.7           | 4.2 - 5.2    | 194           | 3.34        | 0.14      | 4.3       | 3.3           | 3.0 - 3.7    |
| All Bromocresol Purple Reagents | 84            | 3.57        | 0.16      | 4.4       | 3.6           | 3.2 - 4.0    | 81            | 2.52        | 0.08      | 3.0       | 2.5           | 2.2 - 2.8    |
| Abaxis Piccolo                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 20            | 3.41        | 0.13      | 3.9       | 3.4           | 3.0 - 3.8    | 17            | 2.48        | 0.07      | 2.7       | 2.5           | 2.2 - 2.8    |
| All Chemistry Instruments       | 26            | 3.38        | 0.09      | 2.6       | 3.4           | 3.0 - 3.8    | 24            | 2.48        | 0.06      | 2.5       | 2.5           | 2.2 - 2.8    |
| Alfa Wassermann - New           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 11            | 4.54        | 0.11      | 2.5       | 4.5           | 4.0 - 5.0    | 11            | 3.33        | 0.06      | 1.9       | 3.3           | 2.9 - 3.7    |
| Alfa Wassermann                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 33            | 4.53        | 0.13      | 2.9       | 4.5           | 4.0 - 5.0    | 31            | 3.32        | 0.08      | 2.3       | 3.3           | 2.9 - 3.7    |
| Beckman AU                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems              | 34            | 4.67        | 0.12      | 2.5       | 4.7           | 4.2 - 5.2    | 33            | 3.33        | 0.07      | 2.2       | 3.3           | 2.9 - 3.7    |
| Horiba ABX Pentra               |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400           | 20            | 4.39        | 0.14      | 3.3       | 4.4           | 3.9 - 4.9    | 20            | 3.28        | 0.10      | 2.9       | 3.3           | 2.9 - 3.7    |
| Roche Integra                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                   | 18            | 4.85        | 0.10      | 2.0       | 4.8           | 4.3 - 5.4    | 18            | 3.56        | 0.09      | 2.4       | 3.6           | 3.2 - 4.0    |
| All Chemistry Instruments       | 19            | 4.85        | 0.10      | 2.0       | 4.8           | 4.3 - 5.4    | 19            | 3.55        | 0.08      | 2.4       | 3.6           | 3.1 - 4.0    |
| Siemens Healthcare              |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension               | 47            | 3.63        | 0.09      | 2.4       | 3.6           | 3.2 - 4.0    | 47            | 2.53        | 0.06      | 2.4       | 2.5           | 2.2 - 2.8    |
| Vital Diagnostics               |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 16            | 4.60        | 0.18      | 4.0       | 4.6           | 4.1 - 5.1    | 16            | 3.38        | 0.11      | 3.3       | 3.4           | 3.0 - 3.8    |
| All Chemistry Instruments       | 17            | 4.59        | 0.18      | 3.9       | 4.6           | 4.1 - 5.1    | 17            | 3.38        | 0.11      | 3.2       | 3.4           | 3.0 - 3.8    |
| VITROS                          |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 36            | 4.85        | 0.15      | 3.1       | 4.9           | 4.3 - 5.4    | 36            | 3.19        | 0.10      | 3.2       | 3.2           | 2.8 - 3.6    |
| All Chemistry Instruments       | 42            | 4.86        | 0.16      | 3.2       | 4.9           | 4.3 - 5.4    | 42            | 3.20        | 0.11      | 3.3       | 3.2           | 2.8 - 3.6    |

## Albumin (g/dL)

| <u>Reagent/Instrument</u>       | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|---------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                 | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 268           | 2.10        | 0.31      | 14.6      | 2.2           | 1.8 - 2.4    | 269           | 4.13        | 0.49      | 12.0      | 4.3           | 3.7 - 4.6    |
| All Bromocresol Green Reagents  | 195           | 2.26        | 0.17      | 7.7       | 2.3           | 2.0 - 2.5    | 194           | 4.41        | 0.20      | 4.5       | 4.4           | 3.9 - 4.9    |
| All Bromocresol Purple Reagents | 67            | 1.65        | 0.07      | 4.3       | 1.6           | 1.4 - 1.9    | 68            | 3.36        | 0.13      | 3.9       | 3.4           | 3.0 - 3.8    |
| Abaxis Piccolo                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 4             | -           | -         | -         | 1.7           | 1.5 - 1.9    | 4             | -           | -         | -         | 3.2           | 2.8 - 3.5    |
| All Chemistry Instruments       | 11            | 1.69        | 0.05      | 3.2       | 1.7           | 1.5 - 1.9    | 11            | 3.18        | 0.08      | 2.4       | 3.2           | 2.8 - 3.5    |
| Alfa Wassermann - New           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 11            | 2.32        | 0.06      | 2.6       | 2.3           | 2.0 - 2.6    | 11            | 4.29        | 0.10      | 2.4       | 4.3           | 3.8 - 4.8    |
| Alfa Wassermann                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 33            | 2.32        | 0.08      | 3.4       | 2.3           | 2.0 - 2.6    | 33            | 4.26        | 0.11      | 2.7       | 4.3           | 3.8 - 4.7    |
| Beckman AU                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems              | 33            | 2.24        | 0.07      | 3.0       | 2.2           | 2.0 - 2.5    | 33            | 4.39        | 0.10      | 2.2       | 4.4           | 3.9 - 4.9    |
| Horiba ABX Pentra               |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400           | 20            | 2.29        | 0.07      | 3.1       | 2.3           | 2.0 - 2.6    | 20            | 4.19        | 0.13      | 3.0       | 4.2           | 3.7 - 4.7    |
| Roche Integra                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                   | 18            | 2.46        | 0.07      | 2.9       | 2.5           | 2.2 - 2.8    | 18            | 4.59        | 0.10      | 2.2       | 4.6           | 4.1 - 5.1    |
| All Chemistry Instruments       | 19            | 2.45        | 0.07      | 2.8       | 2.5           | 2.2 - 2.7    | 19            | 4.58        | 0.10      | 2.2       | 4.6           | 4.1 - 5.1    |
| Siemens Healthcare              |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension               | 47            | 1.63        | 0.05      | 3.3       | 1.6           | 1.4 - 1.8    | 46            | 3.39        | 0.08      | 2.5       | 3.4           | 3.0 - 3.8    |
| Vital Diagnostics               |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 16            | 2.40        | 0.10      | 4.3       | 2.4           | 2.1 - 2.7    | 16            | 4.28        | 0.24      | 5.6       | 4.3           | 3.8 - 4.8    |
| All Chemistry Instruments       | 17            | 2.41        | 0.10      | 4.3       | 2.4           | 2.1 - 2.7    | 17            | 4.27        | 0.23      | 5.4       | 4.3           | 3.8 - 4.7    |
| VITROS                          |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 36            | 1.99        | 0.07      | 3.8       | 2.0           | 1.7 - 2.2    | 36            | 4.59        | 0.15      | 3.3       | 4.6           | 4.1 - 5.1    |
| All Chemistry Instruments       | 42            | 1.99        | 0.07      | 3.7       | 2.0           | 1.7 - 2.2    | 42            | 4.59        | 0.15      | 3.3       | 4.6           | 4.1 - 5.1    |

## Albumin (g/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                      | 268         | 4.99        | 0.58      | 11.7      | 5.2           | 4.4 - 5.5    |
| All Bromocresol Green Reagents  | 194         | 5.30        | 0.27      | 5.2       | 5.3           | 4.7 - 5.9    |
| All Bromocresol Purple Reagents | 68          | 4.13        | 0.18      | 4.3       | 4.2           | 3.7 - 4.6    |
| Abaxis Piccolo                  |             |             |           |           |               |              |
| Abaxis Piccolo - waived         | 4           | -           | -         | -         | 3.8           | 3.4 - 4.3    |
| All Chemistry Instruments       | 11          | 3.82        | 0.06      | 1.6       | 3.8           | 3.4 - 4.3    |
| Alfa Wassermann - New           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 11          | 5.13        | 0.12      | 2.3       | 5.1           | 4.6 - 5.7    |
| Alfa Wassermann                 |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 33          | 5.12        | 0.15      | 3.0       | 5.1           | 4.6 - 5.7    |
| Beckman AU                      |             |             |           |           |               |              |
| Beckman AU systems              | 34          | 5.30        | 0.15      | 2.8       | 5.3           | 4.7 - 5.9    |
| Horiba ABX Pentra               |             |             |           |           |               |              |
| Horiba ABX Pentra 400           | 20          | 4.95        | 0.14      | 2.8       | 5.0           | 4.4 - 5.5    |
| Roche Integra                   |             |             |           |           |               |              |
| Roche Integra                   | 18          | 5.44        | 0.11      | 2.0       | 5.5           | 4.8 - 6.0    |
| All Chemistry Instruments       | 19          | 5.43        | 0.11      | 2.0       | 5.4           | 4.8 - 6.0    |
| Siemens Healthcare              |             |             |           |           |               |              |
| Siemens Dimension               | 47          | 4.16        | 0.09      | 2.2       | 4.2           | 3.7 - 4.6    |
| Vital Diagnostics               |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 16          | 5.06        | 0.27      | 5.4       | 5.0           | 4.5 - 5.6    |
| All Chemistry Instruments       | 17          | 5.06        | 0.26      | 5.2       | 5.0           | 4.5 - 5.6    |
| VITROS                          |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 36          | 5.63        | 0.17      | 3.1       | 5.7           | 5.0 - 6.2    |
| All Chemistry Instruments       | 42          | 5.63        | 0.17      | 3.1       | 5.6           | 5.0 - 6.2    |

## Bilirubin, Direct (mg/dL)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 180         | 1.03        | 0.31      | 30.4      | 1.1           | 0.4 - 1.7    | 183           | 0.60        | 0.21      | 36.1      | 0.6           | 0.1 - 1.1    |
| All Alfa Wassermann Reagents              | 24          | 1.33        | 0.07      | 5.1       | 1.3           | 1.1 - 1.5    | 25            | 0.84        | 0.07      | 8.4       | 0.8           | 0.6 - 1.0    |
| All Roche Integra/c111/c301/c501 Reagents | 19          | 0.78        | 0.09      | 11.8      | 0.8           | 0.5 - 1.0    | 19            | 0.42        | 0.05      | 12.7      | 0.4           | 0.3 - 0.6    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 23          | 1.32        | 0.07      | 5.1       | 1.3           | 1.1 - 1.5    | 24            | 0.83        | 0.06      | 7.6       | 0.8           | 0.7 - 1.0    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 26          | 1.11        | 0.11      | 10.0      | 1.1           | 0.8 - 1.4    | 26            | 0.64        | 0.07      | 10.9      | 0.6           | 0.4 - 0.8    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 14          | 1.20        | 0.07      | 5.7       | 1.2           | 1.0 - 1.4    | 15            | 0.71        | 0.07      | 10.4      | 0.7           | 0.5 - 0.9    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 12          | 0.83        | 0.05      | 5.9       | 0.8           | 0.7 - 1.0    | 12            | 0.44        | 0.05      | 11.7      | 0.4           | 0.3 - 0.6    |
| All Chemistry Instruments                 | 13          | 0.82        | 0.06      | 7.3       | 0.8           | 0.7 - 1.0    | 13            | 0.44        | 0.05      | 11.5      | 0.4           | 0.3 - 0.6    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 35          | 0.74        | 0.09      | 11.4      | 0.7           | 0.5 - 1.0    | 35            | 0.42        | 0.05      | 12.9      | 0.4           | 0.3 - 0.6    |
| All Chemistry Instruments                 | 37          | 0.75        | 0.08      | 11.2      | 0.8           | 0.5 - 1.0    | 37            | 0.43        | 0.06      | 13.1      | 0.4           | 0.3 - 0.6    |
| Vital Diagnostics                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 10          | 1.34        | 0.11      | 8.0       | 1.4           | 1.1 - 1.6    | 10            | 0.78        | 0.04      | 5.4       | 0.8           | 0.6 - 0.9    |
| VITROS-BuBc and Bc                        |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 22          | 1.11        | 0.54      | 48.7      | 1.2           | 0.0 - 2.2    | 22            | 0.58        | 0.34      | 59.2      | 0.6           | 0.0 - 1.3    |
| All Chemistry Instruments                 | 26          | 1.13        | 0.50      | 44.2      | 1.2           | 0.1 - 2.2    | 26            | 0.59        | 0.32      | 54.0      | 0.6           | 0.0 - 1.3    |
| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                                | 183         | 0.19        | 0.09      | 49.4      | 0.2           | 0.0 - 0.4    | 179           | 0.92        | 0.27      | 29.6      | 1.0           | 0.3 - 1.5    |
| All Alfa Wassermann Reagents              | 25          | 0.31        | 0.04      | 13.0      | 0.3           | 0.2 - 0.4    | 25            | 1.22        | 0.11      | 9.2       | 1.2           | 0.9 - 1.5    |
| All Roche Integra/c111/c301/c501 Reagents | 18          | 0.10        | 0.01      | 0.0       | 0.1           | 0.0 - 0.2    | 19            | 0.72        | 0.08      | 11.7      | 0.7           | 0.5 - 0.9    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 24          | 0.31        | 0.04      | 13.2      | 0.3           | 0.2 - 0.4    | 24            | 1.23        | 0.12      | 9.4       | 1.2           | 0.9 - 1.5    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 24          | 0.20        | 0.01      | 0.0       | 0.2           | 0.1 - 0.3    | 26            | 1.02        | 0.12      | 11.4      | 1.0           | 0.7 - 1.3    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 15          | 0.20        | 0.01      | 0.0       | 0.2           | 0.1 - 0.3    | 14            | 1.09        | 0.05      | 4.9       | 1.1           | 0.9 - 1.2    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 12          | 0.10        | 0.01      | 0.0       | 0.1           | 0.0 - 0.2    | 12            | 0.76        | 0.05      | 6.8       | 0.8           | 0.6 - 0.9    |
| All Chemistry Instruments                 | 13          | 0.10        | 0.01      | 0.0       | 0.1           | 0.0 - 0.2    | 13            | 0.75        | 0.05      | 6.9       | 0.8           | 0.6 - 0.9    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 35          | 0.11        | 0.04      | 31.1      | 0.1           | 0.0 - 0.2    | 35            | 0.66        | 0.07      | 10.0      | 0.7           | 0.5 - 0.8    |
| All Chemistry Instruments                 | 37          | 0.12        | 0.04      | 32.2      | 0.1           | 0.0 - 0.2    | 37            | 0.66        | 0.06      | 9.8       | 0.7           | 0.5 - 0.8    |
| Vital Diagnostics                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 10          | 0.23        | 0.05      | 21.0      | 0.2           | 0.1 - 0.4    | 10            | 1.21        | 0.07      | 6.1       | 1.2           | 1.0 - 1.4    |
| VITROS-BuBc and Bc                        |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 22          | 0.23        | 0.15      | 66.8      | 0.3           | 0.0 - 0.6    | 22            | 0.98        | 0.54      | 55.1      | 1.1           | 0.0 - 2.1    |
| All Chemistry Instruments                 | 26          | 0.24        | 0.15      | 61.7      | 0.3           | 0.0 - 0.6    | 26            | 0.98        | 0.49      | 50.5      | 1.0           | 0.0 - 2.0    |

**Bilirubin, Direct (mg/dL)****Specimen CH-10**

| <b><u>Reagent/Instrument</u></b>          | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 182                | 1.19               | 0.35             | 29.9             | 1.3                  | 0.4 - 1.9           |
| All Alfa Wassermann Reagents              | 25                 | 1.52               | 0.10             | 6.8              | 1.5                  | 1.3 - 1.8           |
| All Roche Integra/c111/c301/c501 Reagents | 19                 | 0.89               | 0.12             | 13.5             | 0.9                  | 0.6 - 1.2           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 24                 | 1.51               | 0.10             | 6.8              | 1.5                  | 1.3 - 1.8           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 26                 | 1.24               | 0.13             | 10.5             | 1.3                  | 0.9 - 1.5           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 15                 | 1.43               | 0.09             | 6.3              | 1.4                  | 1.2 - 1.7           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 12                 | 0.96               | 0.07             | 7.0              | 1.0                  | 0.8 - 1.1           |
| All Chemistry Instruments                 | 13                 | 0.95               | 0.08             | 8.2              | 0.9                  | 0.7 - 1.2           |
| Siemens Healthcare                        |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 35                 | 0.85               | 0.09             | 10.5             | 0.9                  | 0.6 - 1.1           |
| All Chemistry Instruments                 | 37                 | 0.85               | 0.09             | 10.6             | 0.9                  | 0.6 - 1.1           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 10                 | 1.52               | 0.06             | 4.2              | 1.5                  | 1.3 - 1.7           |
| VITROS-BuBc and Bc                        |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 22                 | 1.37               | 0.63             | 45.9             | 1.4                  | 0.1 - 2.7           |
| All Chemistry Instruments                 | 26                 | 1.39               | 0.58             | 41.7             | 1.5                  | 0.2 - 2.6           |

**Bilirubin, Total (mg/dL)**

| <u>Reagent/Instrument</u>          | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                    | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                         | 286           | 3.14        | 0.29      | 9.2       | 3.1           | 2.5 - 3.8    | 283           | 1.70        | 0.18      | 10.6      | 1.7           | 1.3 - 2.2    |
| All Alfa Wassermann Reagents       | 43            | 3.58        | 0.15      | 4.1       | 3.6           | 2.8 - 4.3    | 43            | 1.96        | 0.10      | 5.1       | 1.9           | 1.5 - 2.4    |
| All Horiba Pentra Reagents         | 20            | 3.01        | 0.13      | 4.2       | 3.0           | 2.4 - 3.7    | 21            | 1.63        | 0.12      | 7.1       | 1.6           | 1.2 - 2.1    |
| All Roche T. bili Special Reagents | 23            | 2.80        | 0.16      | 5.6       | 2.8           | 2.2 - 3.4    | 23            | 1.50        | 0.09      | 5.9       | 1.5           | 1.0 - 1.9    |
| All Vital Diagnostics Reagents     | 19            | 2.98        | 0.21      | 7.0       | 3.0           | 2.3 - 3.6    | 19            | 1.55        | 0.14      | 8.9       | 1.5           | 1.1 - 2.0    |
| Abaxis Piccolo                     |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived            | 19            | 3.02        | 0.11      | 3.6       | 3.0           | 2.4 - 3.7    | 16            | 1.68        | 0.05      | 3.2       | 1.7           | 1.2 - 2.1    |
| All Chemistry Instruments          | 26            | 3.04        | 0.11      | 3.7       | 3.0           | 2.4 - 3.7    | 23            | 1.70        | 0.06      | 3.8       | 1.7           | 1.2 - 2.1    |
| Alfa Wassermann                    |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel    | 41            | 3.58        | 0.15      | 4.2       | 3.6           | 2.8 - 4.3    | 41            | 1.96        | 0.10      | 5.1       | 1.9           | 1.5 - 2.4    |
| Beckman AU                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                 | 32            | 3.27        | 0.12      | 3.6       | 3.3           | 2.6 - 4.0    | 32            | 1.80        | 0.08      | 4.2       | 1.8           | 1.4 - 2.2    |
| Horiba ABX Pentra                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400              | 19            | 3.00        | 0.13      | 4.3       | 3.0           | 2.4 - 3.6    | 20            | 1.64        | 0.12      | 7.2       | 1.6           | 1.2 - 2.1    |
| Roche Integra-T. bili Gen.3        |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                      | 10            | 2.76        | 0.13      | 4.6       | 2.8           | 2.2 - 3.4    | 10            | 1.47        | 0.07      | 4.6       | 1.5           | 1.0 - 1.9    |
| All Chemistry Instruments          | 12            | 2.78        | 0.13      | 4.6       | 2.8           | 2.2 - 3.4    | 12            | 1.48        | 0.07      | 4.8       | 1.5           | 1.0 - 1.9    |
| Siemens Healthcare                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                  | 47            | 2.97        | 0.21      | 7.0       | 3.0           | 2.3 - 3.6    | 47            | 1.58        | 0.10      | 6.2       | 1.6           | 1.1 - 2.0    |
| Vital Diagnostics                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500        | 17            | 2.96        | 0.21      | 7.0       | 2.9           | 2.3 - 3.6    | 17            | 1.54        | 0.13      | 8.6       | 1.5           | 1.1 - 2.0    |
| All Chemistry Instruments          | 18            | 2.96        | 0.20      | 6.8       | 3.0           | 2.3 - 3.6    | 18            | 1.54        | 0.13      | 8.4       | 1.5           | 1.1 - 2.0    |
| VITROS - TBIL                      |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950     | 35            | 3.22        | 0.16      | 4.9       | 3.2           | 2.5 - 3.9    | 35            | 1.77        | 0.11      | 6.5       | 1.8           | 1.3 - 2.2    |
| All Chemistry Instruments          | 41            | 3.21        | 0.15      | 4.7       | 3.2           | 2.5 - 3.9    | 41            | 1.77        | 0.11      | 6.4       | 1.8           | 1.3 - 2.2    |

**Bilirubin, Total (mg/dL)**

| <u>Reagent/Instrument</u>          | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                    | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                         | 265           | 0.52        | 0.10      | 19.5      | 0.5           | 0.1 - 1.0    | 270           | 2.84        | 0.26      | 9.2       | 2.8           | 2.2 - 3.5    |
| All Alfa Wassermann Reagents       | 43            | 0.63        | 0.05      | 8.1       | 0.6           | 0.2 - 1.1    | 44            | 3.20        | 0.15      | 4.7       | 3.2           | 2.5 - 3.9    |
| All Horiba Pentra Reagents         | 20            | 0.50        | 0.04      | 8.0       | 0.5           | 0.0 - 0.9    | 21            | 2.71        | 0.16      | 6.0       | 2.7           | 2.1 - 3.3    |
| All Roche T. bili Special Reagents | 22            | 0.42        | 0.04      | 9.4       | 0.4           | 0.0 - 0.9    | 23            | 2.53        | 0.14      | 5.7       | 2.6           | 2.0 - 3.1    |
| All Vital Diagnostics Reagents     | 19            | 0.44        | 0.07      | 15.7      | 0.4           | 0.0 - 0.9    | 19            | 2.67        | 0.16      | 6.0       | 2.7           | 2.1 - 3.3    |
| Abaxis Piccolo                     |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived            | 4             | -           | -         | -         | 0.6           | 0.2 - 1.1    | 4             | -           | -         | -         | 2.8           | 2.2 - 3.4    |
| All Chemistry Instruments          | 10            | 0.62        | 0.06      | 10.2      | 0.6           | 0.2 - 1.1    | 11            | 2.78        | 0.10      | 3.5       | 2.8           | 2.2 - 3.4    |
| Alfa Wassermann                    |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel    | 41            | 0.63        | 0.05      | 8.3       | 0.6           | 0.2 - 1.1    | 42            | 3.20        | 0.15      | 4.8       | 3.2           | 2.5 - 3.9    |
| Beckman AU                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                 | 32            | 0.59        | 0.03      | 5.7       | 0.6           | 0.1 - 1.0    | 31            | 2.94        | 0.10      | 3.3       | 2.9           | 2.3 - 3.6    |
| Horiba ABX Pentra                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400              | 19            | 0.49        | 0.04      | 8.2       | 0.5           | 0.0 - 0.9    | 20            | 2.72        | 0.17      | 6.1       | 2.7           | 2.1 - 3.3    |
| Roche Integra-T. bili Gen.3        |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                      | 10            | 0.41        | 0.03      | 7.7       | 0.4           | 0.0 - 0.9    | 10            | 2.52        | 0.16      | 6.4       | 2.5           | 2.0 - 3.1    |
| All Chemistry Instruments          | 12            | 0.42        | 0.04      | 9.3       | 0.4           | 0.0 - 0.9    | 12            | 2.53        | 0.15      | 5.9       | 2.6           | 2.0 - 3.1    |
| Siemens Healthcare                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                  | 46            | 0.44        | 0.05      | 12.2      | 0.4           | 0.0 - 0.9    | 47            | 2.69        | 0.17      | 6.4       | 2.7           | 2.1 - 3.3    |
| Vital Diagnostics                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500        | 17            | 0.44        | 0.07      | 16.1      | 0.4           | 0.0 - 0.9    | 17            | 2.66        | 0.16      | 6.0       | 2.7           | 2.1 - 3.2    |
| All Chemistry Instruments          | 18            | 0.44        | 0.07      | 15.9      | 0.4           | 0.0 - 0.9    | 18            | 2.66        | 0.15      | 5.8       | 2.7           | 2.1 - 3.2    |
| VITROS - TBIL                      |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950     | 35            | 0.53        | 0.09      | 16.9      | 0.5           | 0.1 - 1.0    | 35            | 2.89        | 0.15      | 5.3       | 2.9           | 2.3 - 3.5    |
| All Chemistry Instruments          | 41            | 0.52        | 0.09      | 17.4      | 0.5           | 0.1 - 1.0    | 41            | 2.87        | 0.15      | 5.3       | 2.9           | 2.2 - 3.5    |

**Bilirubin, Total (mg/dL)****Specimen CH-10**

| <b><u>Reagent/Instrument</u></b>   | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                         | 270                | 3.73               | 0.34             | 9.2              | 3.7                  | 2.9 - 4.5           |
| All Alfa Wassermann Reagents       | 43                 | 4.23               | 0.16             | 3.8              | 4.2                  | 3.3 - 5.1           |
| All Horiba Pentra Reagents         | 21                 | 3.62               | 0.23             | 6.3              | 3.6                  | 2.8 - 4.4           |
| All Roche T. bili Special Reagents | 23                 | 3.35               | 0.21             | 6.2              | 3.4                  | 2.6 - 4.1           |
| All Vital Diagnostics Reagents     | 19                 | 3.60               | 0.23             | 6.5              | 3.6                  | 2.8 - 4.4           |
| Abaxis Piccolo                     |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived            | 4                  | -                  | -                | -                | 3.5                  | 2.8 - 4.4           |
| All Chemistry Instruments          | 11                 | 3.61               | 0.11             | 3.1              | 3.6                  | 2.8 - 4.4           |
| Alfa Wassermann                    |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel    | 41                 | 4.23               | 0.16             | 3.9              | 4.2                  | 3.3 - 5.1           |
| Beckman AU                         |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                 | 32                 | 3.83               | 0.12             | 3.2              | 3.8                  | 3.0 - 4.6           |
| Horiba ABX Pentra                  |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400              | 20                 | 3.63               | 0.24             | 6.5              | 3.6                  | 2.9 - 4.4           |
| Roche Integra-T. bili Gen.3        |                    |                    |                  |                  |                      |                     |
| Roche Integra                      | 10                 | 3.29               | 0.17             | 5.1              | 3.3                  | 2.6 - 4.0           |
| All Chemistry Instruments          | 12                 | 3.33               | 0.17             | 5.1              | 3.4                  | 2.6 - 4.0           |
| Siemens Healthcare                 |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                  | 47                 | 3.55               | 0.25             | 6.9              | 3.6                  | 2.8 - 4.3           |
| Vital Diagnostics                  |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500        | 17                 | 3.58               | 0.24             | 6.7              | 3.5                  | 2.8 - 4.3           |
| All Chemistry Instruments          | 18                 | 3.59               | 0.24             | 6.6              | 3.6                  | 2.8 - 4.4           |
| VITROS - TBIL                      |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950     | 35                 | 3.77               | 0.20             | 5.4              | 3.8                  | 3.0 - 4.6           |
| All Chemistry Instruments          | 41                 | 3.76               | 0.20             | 5.3              | 3.7                  | 3.0 - 4.6           |

## Calcium (mg/dL)

| <u>Reagent/Instrument</u>       | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                 | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 286           | 11.27       | 0.36      | 3.2       | 11.3          | 10.2 - 12.3  | 283           | 8.45        | 0.28      | 3.4       | 8.5           | 7.4 - 9.5    |
| All Arsenazo Methods            | 148           | 11.32       | 0.34      | 3.0       | 11.4          | 10.3 - 12.4  | 142           | 8.55        | 0.23      | 2.7       | 8.6           | 7.5 - 9.6    |
| All CPC Methods                 | 130           | 11.23       | 0.39      | 3.5       | 11.2          | 10.2 - 12.3  | 130           | 8.33        | 0.29      | 3.4       | 8.4           | 7.3 - 9.4    |
| Abaxis Piccolo                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 20            | 11.32       | 0.23      | 2.0       | 11.3          | 10.3 - 12.4  | 17            | 8.72        | 0.13      | 1.5       | 8.7           | 7.7 - 9.8    |
| All Chemistry Instruments       | 26            | 11.30       | 0.21      | 1.8       | 11.3          | 10.3 - 12.4  | 23            | 8.64        | 0.20      | 2.3       | 8.7           | 7.6 - 9.7    |
| Alfa Wassermann                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 43            | 11.15       | 0.30      | 2.7       | 11.2          | 10.1 - 12.2  | 42            | 8.64        | 0.21      | 2.4       | 8.6           | 7.6 - 9.7    |
| Beckman AU                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems              | 34            | 11.54       | 0.31      | 2.7       | 11.5          | 10.5 - 12.6  | 32            | 8.57        | 0.12      | 1.4       | 8.6           | 7.5 - 9.6    |
| Horiba ABX Pentra               |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400           | 18            | 11.09       | 0.31      | 2.8       | 11.0          | 10.0 - 12.1  | 18            | 8.15        | 0.29      | 3.6       | 8.1           | 7.1 - 9.2    |
| Roche Integra                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                   | 18            | 11.42       | 0.20      | 1.7       | 11.4          | 10.4 - 12.5  | 18            | 8.47        | 0.17      | 2.0       | 8.5           | 7.4 - 9.5    |
| All Chemistry Instruments       | 19            | 11.43       | 0.19      | 1.7       | 11.4          | 10.4 - 12.5  | 19            | 8.47        | 0.16      | 1.9       | 8.5           | 7.4 - 9.5    |
| Siemens Healthcare              |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension               | 46            | 10.92       | 0.27      | 2.5       | 10.9          | 9.9 - 12.0   | 46            | 8.13        | 0.21      | 2.5       | 8.1           | 7.1 - 9.2    |
| All Chemistry Instruments       | 47            | 10.92       | 0.27      | 2.5       | 10.9          | 9.9 - 12.0   | 47            | 8.14        | 0.20      | 2.5       | 8.1           | 7.1 - 9.2    |
| Vital Diagnostics               |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 17            | 11.08       | 0.25      | 2.3       | 11.1          | 10.0 - 12.1  | 17            | 8.27        | 0.30      | 3.7       | 8.2           | 7.2 - 9.3    |
| All Chemistry Instruments       | 18            | 11.11       | 0.28      | 2.5       | 11.1          | 10.1 - 12.2  | 18            | 8.28        | 0.30      | 3.6       | 8.3           | 7.2 - 9.3    |
| VITROS                          |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 36            | 11.61       | 0.24      | 2.1       | 11.6          | 10.6 - 12.7  | 35            | 8.59        | 0.14      | 1.6       | 8.6           | 7.5 - 9.6    |
| All Chemistry Instruments       | 42            | 11.57       | 0.27      | 2.4       | 11.6          | 10.5 - 12.6  | 41            | 8.56        | 0.16      | 1.9       | 8.6           | 7.5 - 9.6    |

## Calcium (mg/dL)

| <u>Reagent/Instrument</u>       | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|---------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                 | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 268           | 6.17        | 0.24      | 3.8       | 6.2           | 5.1 - 7.2    | 269           | 10.70       | 0.34      | 3.2       | 10.7          | 9.7 - 11.8   |
| All Arsenazo Methods            | 129           | 6.23        | 0.22      | 3.5       | 6.2           | 5.2 - 7.3    | 131           | 10.79       | 0.31      | 2.9       | 10.8          | 9.7 - 11.8   |
| All CPC Methods                 | 131           | 6.11        | 0.24      | 3.9       | 6.1           | 5.1 - 7.2    | 129           | 10.62       | 0.35      | 3.3       | 10.7          | 9.6 - 11.7   |
| Abaxis Piccolo                  |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 4             | -           | -         | -         | 6.3           | 5.3 - 7.3    | 4             | -           | -         | -         | 10.9          | 9.7 - 11.8   |
| All Chemistry Instruments       | 10            | 6.30        | 0.18      | 2.9       | 6.3           | 5.3 - 7.3    | 10            | 10.79       | 0.15      | 1.4       | 10.8          | 9.7 - 11.8   |
| Alfa Wassermann                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 43            | 6.42        | 0.23      | 3.6       | 6.4           | 5.4 - 7.5    | 43            | 10.74       | 0.27      | 2.5       | 10.7          | 9.7 - 11.8   |
| Beckman AU                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems              | 33            | 6.25        | 0.11      | 1.7       | 6.3           | 5.2 - 7.3    | 34            | 10.89       | 0.25      | 2.3       | 10.9          | 9.8 - 11.9   |
| Horiba ABX Pentra               |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400           | 18            | 5.82        | 0.22      | 3.8       | 5.9           | 4.8 - 6.9    | 18            | 10.47       | 0.34      | 3.2       | 10.4          | 9.4 - 11.5   |
| Roche Integra                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                   | 18            | 6.19        | 0.13      | 2.1       | 6.2           | 5.1 - 7.2    | 18            | 10.76       | 0.23      | 2.1       | 10.8          | 9.7 - 11.8   |
| All Chemistry Instruments       | 19            | 6.19        | 0.13      | 2.1       | 6.2           | 5.1 - 7.2    | 19            | 10.76       | 0.22      | 2.0       | 10.8          | 9.7 - 11.8   |
| Siemens Healthcare              |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension               | 47            | 6.05        | 0.23      | 3.8       | 6.0           | 5.0 - 7.1    | 46            | 10.35       | 0.24      | 2.3       | 10.4          | 9.3 - 11.4   |
| All Chemistry Instruments       | 48            | 6.06        | 0.23      | 3.8       | 6.0           | 5.0 - 7.1    | 47            | 10.36       | 0.24      | 2.3       | 10.4          | 9.3 - 11.4   |
| Vital Diagnostics               |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 17            | 5.96        | 0.14      | 2.3       | 5.9           | 4.9 - 7.0    | 17            | 10.40       | 0.33      | 3.2       | 10.5          | 9.4 - 11.4   |
| All Chemistry Instruments       | 18            | 5.97        | 0.14      | 2.3       | 6.0           | 4.9 - 7.0    | 18            | 10.42       | 0.33      | 3.2       | 10.5          | 9.4 - 11.5   |
| VITROS                          |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 35            | 6.23        | 0.15      | 2.4       | 6.2           | 5.2 - 7.3    | 36            | 11.03       | 0.23      | 2.1       | 11.1          | 10.0 - 12.1  |
| All Chemistry Instruments       | 42            | 6.20        | 0.17      | 2.7       | 6.2           | 5.2 - 7.2    | 42            | 11.00       | 0.24      | 2.2       | 11.0          | 10.0 - 12.1  |

## Calcium (mg/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                      | 269         | 12.72       | 0.43      | 3.4       | 12.7          | 11.7 - 13.8  |
| All Arsenazo Methods            | 132         | 12.76       | 0.45      | 3.6       | 12.7          | 11.7 - 13.8  |
| All CPC Methods                 | 129         | 12.69       | 0.41      | 3.3       | 12.7          | 11.6 - 13.7  |
| Abaxis Piccolo                  |             |             |           |           |               |              |
| Abaxis Piccolo - waived         | 4           | -           | -         | -         | 12.5          | 11.4 - 13.5  |
| All Chemistry Instruments       | 10          | 12.46       | 0.32      | 2.6       | 12.5          | 11.4 - 13.5  |
| Alfa Wassermann                 |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 43          | 12.54       | 0.37      | 2.9       | 12.5          | 11.5 - 13.6  |
| Beckman AU                      |             |             |           |           |               |              |
| Beckman AU systems              | 34          | 12.99       | 0.38      | 2.9       | 13.0          | 11.9 - 14.0  |
| Horiba ABX Pentra               |             |             |           |           |               |              |
| Horiba ABX Pentra 400           | 18          | 12.57       | 0.37      | 2.9       | 12.7          | 11.5 - 13.6  |
| Roche Integra                   |             |             |           |           |               |              |
| Roche Integra                   | 18          | 12.86       | 0.21      | 1.6       | 12.8          | 11.8 - 13.9  |
| All Chemistry Instruments       | 19          | 12.85       | 0.20      | 1.6       | 12.8          | 11.8 - 13.9  |
| Siemens Healthcare              |             |             |           |           |               |              |
| Siemens Dimension               | 46          | 12.40       | 0.30      | 2.4       | 12.4          | 11.3 - 13.4  |
| All Chemistry Instruments       | 47          | 12.40       | 0.29      | 2.4       | 12.4          | 11.4 - 13.4  |
| Vital Diagnostics               |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 17          | 12.46       | 0.29      | 2.3       | 12.5          | 11.4 - 13.5  |
| All Chemistry Instruments       | 18          | 12.48       | 0.29      | 2.3       | 12.6          | 11.4 - 13.5  |
| VITROS                          |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 36          | 13.21       | 0.26      | 2.0       | 13.3          | 12.2 - 14.3  |
| All Chemistry Instruments       | 42          | 13.16       | 0.29      | 2.2       | 13.2          | 12.1 - 14.2  |

**Creatinine (mg/dL)**

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 289           | 4.05        | 0.25      | 6.2       | 4.1           | 3.4 - 4.7    | 281           | 2.50        | 0.11      | 4.6       | 2.5           | 2.1 - 2.9    |
| All Alfa Wassermann Reagents              | 45            | 3.98        | 0.20      | 5.1       | 3.9           | 3.3 - 4.6    | 45            | 2.56        | 0.13      | 5.2       | 2.5           | 2.1 - 3.0    |
| All Roche Integra/c111/c301/c501 Reagents | 28            | 3.93        | 0.25      | 6.4       | 3.9           | 3.3 - 4.6    | 28            | 2.41        | 0.11      | 4.7       | 2.4           | 2.0 - 2.8    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 20            | 4.28        | 0.17      | 3.9       | 4.3           | 3.6 - 5.0    | 17            | 2.60        | 0.14      | 5.3       | 2.6           | 2.2 - 3.0    |
| All Chemistry Instruments                 | 25            | 4.31        | 0.12      | 2.8       | 4.3           | 3.6 - 5.0    | 23            | 2.59        | 0.14      | 5.3       | 2.5           | 2.1 - 3.0    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 43            | 3.97        | 0.19      | 4.7       | 3.9           | 3.3 - 4.6    | 43            | 2.56        | 0.13      | 5.1       | 2.5           | 2.1 - 3.0    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 4.13        | 0.10      | 2.4       | 4.2           | 3.5 - 4.8    | 34            | 2.49        | 0.06      | 2.3       | 2.5           | 2.1 - 2.9    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 3.94        | 0.21      | 5.4       | 3.9           | 3.3 - 4.6    | 20            | 2.37        | 0.13      | 5.5       | 2.4           | 2.0 - 2.8    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 3.84        | 0.23      | 5.9       | 3.8           | 3.2 - 4.5    | 19            | 2.39        | 0.10      | 4.4       | 2.4           | 2.0 - 2.8    |
| All Chemistry Instruments                 | 20            | 3.85        | 0.23      | 5.9       | 3.8           | 3.2 - 4.5    | 20            | 2.40        | 0.11      | 4.4       | 2.4           | 2.0 - 2.8    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 44            | 4.26        | 0.10      | 2.4       | 4.3           | 3.6 - 5.0    | 45            | 2.52        | 0.09      | 3.5       | 2.5           | 2.1 - 2.9    |
| All Chemistry Instruments                 | 45            | 4.26        | 0.10      | 2.4       | 4.3           | 3.6 - 5.0    | 46            | 2.52        | 0.09      | 3.5       | 2.5           | 2.1 - 2.9    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 17            | 4.02        | 0.19      | 4.8       | 4.0           | 3.4 - 4.7    | 16            | 2.44        | 0.12      | 4.9       | 2.4           | 2.0 - 2.9    |
| All Chemistry Instruments                 | 18            | 4.03        | 0.19      | 4.7       | 4.0           | 3.4 - 4.7    | 17            | 2.44        | 0.12      | 4.8       | 2.4           | 2.0 - 2.9    |
| VITROS - CREA                             |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 25            | 3.73        | 0.14      | 3.8       | 3.7           | 3.1 - 4.3    | 25            | 2.50        | 0.10      | 3.9       | 2.5           | 2.1 - 2.9    |
| All Chemistry Instruments                 | 30            | 3.74        | 0.14      | 3.6       | 3.7           | 3.1 - 4.4    | 30            | 2.50        | 0.09      | 3.7       | 2.5           | 2.1 - 2.9    |
| VITROS - CRSC (DT)                        |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 10            | 3.82        | 0.16      | 4.2       | 3.9           | 3.2 - 4.4    | 10            | 2.53        | 0.13      | 4.9       | 2.6           | 2.1 - 3.0    |
| All Chemistry Instruments                 | 12            | 3.82        | 0.15      | 4.0       | 3.9           | 3.2 - 4.4    | 12            | 2.53        | 0.12      | 4.6       | 2.6           | 2.1 - 3.0    |

## Creatinine (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 270           | 1.22        | 0.10      | 7.8       | 1.2           | 0.9 - 1.6    | 270           | 3.71        | 0.21      | 5.7       | 3.7           | 3.1 - 4.3    |
| All Alfa Wassermann Reagents              | 44            | 1.31        | 0.08      | 6.1       | 1.3           | 1.0 - 1.7    | 44            | 3.66        | 0.14      | 3.9       | 3.7           | 3.1 - 4.3    |
| All Roche Integra/c111/c301/c501 Reagents | 28            | 1.17        | 0.09      | 7.4       | 1.2           | 0.8 - 1.5    | 28            | 3.60        | 0.21      | 5.9       | 3.6           | 3.0 - 4.2    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 1.3           | 1.0 - 1.6    | 4             | -           | -         | -         | 3.9           | 3.2 - 4.5    |
| All Chemistry Instruments                 | 10            | 1.30        | 0.11      | 8.1       | 1.3           | 1.0 - 1.6    | 10            | 3.86        | 0.29      | 7.5       | 3.9           | 3.2 - 4.5    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 42            | 1.31        | 0.08      | 6.2       | 1.3           | 1.0 - 1.7    | 42            | 3.66        | 0.13      | 3.5       | 3.7           | 3.1 - 4.3    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 1.17        | 0.06      | 4.8       | 1.2           | 0.8 - 1.5    | 33            | 3.77        | 0.08      | 2.1       | 3.8           | 3.2 - 4.4    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 1.13        | 0.11      | 9.5       | 1.1           | 0.8 - 1.5    | 20            | 3.57        | 0.20      | 5.7       | 3.5           | 3.0 - 4.1    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 1.15        | 0.09      | 7.9       | 1.1           | 0.8 - 1.5    | 19            | 3.53        | 0.19      | 5.2       | 3.5           | 2.9 - 4.1    |
| All Chemistry Instruments                 | 20            | 1.16        | 0.09      | 7.7       | 1.1           | 0.8 - 1.5    | 20            | 3.54        | 0.19      | 5.4       | 3.5           | 3.0 - 4.1    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 44            | 1.26        | 0.07      | 5.4       | 1.3           | 0.9 - 1.6    | 45            | 3.87        | 0.13      | 3.3       | 3.9           | 3.2 - 4.5    |
| All Chemistry Instruments                 | 45            | 1.26        | 0.07      | 5.7       | 1.3           | 0.9 - 1.6    | 46            | 3.87        | 0.13      | 3.2       | 3.9           | 3.2 - 4.5    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 17            | 1.21        | 0.09      | 7.5       | 1.2           | 0.9 - 1.6    | 17            | 3.72        | 0.18      | 4.8       | 3.7           | 3.1 - 4.3    |
| All Chemistry Instruments                 | 18            | 1.20        | 0.09      | 7.6       | 1.2           | 0.9 - 1.5    | 18            | 3.72        | 0.17      | 4.7       | 3.7           | 3.1 - 4.3    |
| VITROS - CREA                             |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 25            | 1.21        | 0.04      | 3.6       | 1.2           | 0.9 - 1.6    | 25            | 3.49        | 0.14      | 4.1       | 3.5           | 2.9 - 4.1    |
| All Chemistry Instruments                 | 30            | 1.21        | 0.04      | 3.6       | 1.2           | 0.9 - 1.6    | 30            | 3.50        | 0.14      | 3.9       | 3.5           | 2.9 - 4.1    |
| VITROS - CRSC (DT)                        |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 10            | 1.21        | 0.03      | 2.6       | 1.2           | 0.9 - 1.6    | 10            | 3.57        | 0.19      | 5.3       | 3.6           | 3.0 - 4.2    |
| All Chemistry Instruments                 | 12            | 1.22        | 0.04      | 3.2       | 1.2           | 0.9 - 1.6    | 12            | 3.57        | 0.17      | 4.8       | 3.6           | 3.0 - 4.2    |

**Creatinine (mg/dL)****Specimen CH-10**

| <b><u>Reagent/Instrument</u></b>          | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 273                | 4.74               | 0.38             | 8.0              | 4.8                  | 4.0 - 5.5           |
| All Alfa Wassermann Reagents              | 45                 | 4.63               | 0.24             | 5.2              | 4.6                  | 3.9 - 5.4           |
| All Roche Integra/c111/c301/c501 Reagents | 28                 | 4.59               | 0.35             | 7.6              | 4.5                  | 3.9 - 5.3           |
| Abaxis Piccolo                            |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                   | 4                  | -                  | -                | -                | 5.0                  | 4.3 - 5.9           |
| All Chemistry Instruments                 | 10                 | 5.10               | 0.14             | 2.8              | 5.2                  | 4.3 - 5.9           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 43                 | 4.63               | 0.23             | 5.0              | 4.6                  | 3.9 - 5.4           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 33                 | 4.89               | 0.11             | 2.2              | 4.9                  | 4.1 - 5.7           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 20                 | 4.68               | 0.24             | 5.1              | 4.7                  | 3.9 - 5.4           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 19                 | 4.46               | 0.31             | 6.9              | 4.4                  | 3.7 - 5.2           |
| All Chemistry Instruments                 | 20                 | 4.48               | 0.31             | 6.9              | 4.4                  | 3.8 - 5.2           |
| Siemens Healthcare                        |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 45                 | 5.10               | 0.14             | 2.7              | 5.1                  | 4.3 - 5.9           |
| All Chemistry Instruments                 | 46                 | 5.10               | 0.14             | 2.7              | 5.1                  | 4.3 - 5.9           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 17                 | 4.84               | 0.23             | 4.8              | 4.8                  | 4.1 - 5.6           |
| All Chemistry Instruments                 | 18                 | 4.83               | 0.23             | 4.7              | 4.8                  | 4.1 - 5.6           |
| VITROS - CREA                             |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 25                 | 4.17               | 0.17             | 4.0              | 4.2                  | 3.5 - 4.8           |
| All Chemistry Instruments                 | 30                 | 4.18               | 0.16             | 3.8              | 4.2                  | 3.5 - 4.9           |
| VITROS - CRSC (DT)                        |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 10                 | 4.28               | 0.23             | 5.4              | 4.3                  | 3.6 - 5.0           |
| All Chemistry Instruments                 | 12                 | 4.28               | 0.21             | 5.0              | 4.3                  | 3.6 - 5.0           |

**Glucose (mg/dL)**

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 302           | 202.9       | 7.7       | 3.8       | 202           | 182 - 224    | 302           | 132.4       | 6.5       | 4.9       | 132           | 119 - 146    |
| All Alfa Wassermann Reagents              | 48            | 209.9       | 6.1       | 2.9       | 210           | 188 - 231    | 48            | 139.3       | 3.5       | 2.5       | 140           | 125 - 154    |
| All Horiba Pentra Reagents                | 21            | 202.3       | 6.1       | 3.0       | 203           | 182 - 223    | 21            | 130.4       | 6.3       | 4.8       | 132           | 117 - 144    |
| All Roche Integra/c111/c301/c501 Reagents | 28            | 201.2       | 4.1       | 2.0       | 201           | 181 - 222    | 28            | 132.3       | 2.4       | 1.8       | 132           | 119 - 146    |
| All Vital Diagnostics Reagents            | 18            | 213.7       | 8.6       | 4.0       | 214           | 192 - 236    | 19            | 140.1       | 5.0       | 3.6       | 140           | 126 - 155    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 20            | 195.7       | 1.9       | 1.0       | 196           | 176 - 216    | 17            | 128.2       | 1.5       | 1.2       | 129           | 115 - 142    |
| All Chemistry Instruments                 | 26            | 195.5       | 1.8       | 0.9       | 196           | 175 - 216    | 23            | 128.0       | 1.4       | 1.1       | 128           | 115 - 141    |
| Alere Cholestech LDX                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 12            | 208.8       | 10.4      | 5.0       | 211           | 187 - 230    | 12            | 130.8       | 4.3       | 3.3       | 131           | 117 - 144    |
| All Chemistry Instruments                 | 13            | 207.3       | 11.2      | 5.4       | 208           | 186 - 229    | 13            | 130.2       | 4.5       | 3.5       | 130           | 117 - 144    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 46            | 210.1       | 6.0       | 2.9       | 210           | 189 - 232    | 46            | 139.4       | 3.5       | 2.5       | 140           | 125 - 154    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 200.8       | 4.7       | 2.3       | 201           | 180 - 221    | 34            | 131.6       | 3.6       | 2.7       | 132           | 118 - 145    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 202.3       | 6.2       | 3.1       | 204           | 182 - 223    | 20            | 130.5       | 6.5       | 5.0       | 132           | 117 - 144    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 200.3       | 4.3       | 2.2       | 199           | 180 - 221    | 19            | 132.1       | 2.6       | 2.0       | 132           | 118 - 146    |
| All Chemistry Instruments                 | 20            | 200.4       | 4.2       | 2.1       | 200           | 180 - 221    | 20            | 132.1       | 2.6       | 1.9       | 132           | 118 - 146    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 44            | 205.3       | 4.5       | 2.2       | 205           | 184 - 226    | 46            | 134.3       | 3.8       | 2.8       | 135           | 120 - 148    |
| All Chemistry Instruments                 | 45            | 205.1       | 4.5       | 2.2       | 205           | 184 - 226    | 46            | 134.5       | 3.4       | 2.5       | 135           | 121 - 148    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16            | 214.5       | 8.5       | 4.0       | 214           | 193 - 236    | 17            | 140.8       | 4.4       | 3.2       | 141           | 126 - 155    |
| All Chemistry Instruments                 | 17            | 213.8       | 8.8       | 4.1       | 214           | 192 - 236    | 18            | 140.2       | 5.1       | 3.7       | 141           | 126 - 155    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 37            | 197.0       | 4.6       | 2.4       | 197           | 177 - 217    | 37            | 124.1       | 3.3       | 2.6       | 125           | 111 - 137    |
| All Chemistry Instruments                 | 43            | 196.7       | 4.6       | 2.3       | 197           | 177 - 217    | 43            | 123.9       | 3.2       | 2.6       | 124           | 111 - 137    |

**Glucose (mg/dL)**

| <u>Reagent/Instrument</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 279           | 78.4        | 4.4       | 5.6       | 78            | 70 - 87      | 276           | 187.7       | 7.5       | 4.0       | 187           | 168 - 207    |
| All Alfa Wassermann Reagents              | 47            | 83.4        | 2.2       | 2.6       | 84            | 75 - 92      | 48            | 194.4       | 5.3       | 2.8       | 194           | 174 - 214    |
| All Horiba Pentra Reagents                | 21            | 77.0        | 4.3       | 5.6       | 78            | 69 - 85      | 21            | 187.4       | 6.7       | 3.6       | 187           | 168 - 207    |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 77.6        | 1.3       | 1.6       | 77            | 69 - 86      | 28            | 186.6       | 4.0       | 2.1       | 187           | 167 - 206    |
| All Vital Diagnostics Reagents            | 19            | 82.5        | 4.3       | 5.2       | 83            | 74 - 91      | 19            | 197.6       | 6.0       | 3.1       | 197           | 177 - 218    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 75            | 68 - 84      | 4             | -           | -         | -         | 179           | 161 - 198    |
| All Chemistry Instruments                 | 10            | 75.6        | 0.7       | 0.9       | 76            | 68 - 84      | 10            | 179.1       | 1.7       | 0.9       | 179           | 161 - 198    |
| Alere Cholestech LDX                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 2             | -           | -         | -         | 77            | 70 - 87      | 2             | -           | -         | -         | 181           | 168 - 207    |
| All Chemistry Instruments                 | 3             | -           | -         | -         | 76            | 67 - 83      | 3             | -           | -         | -         | 180           | 162 - 199    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 44            | 83.7        | 1.9       | 2.3       | 84            | 75 - 93      | 46            | 194.7       | 5.1       | 2.6       | 194           | 175 - 215    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 77.4        | 2.4       | 3.1       | 77            | 69 - 86      | 34            | 185.5       | 4.0       | 2.1       | 185           | 166 - 205    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 76.9        | 4.4       | 5.7       | 78            | 69 - 85      | 20            | 187.5       | 6.8       | 3.6       | 187           | 168 - 207    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 77.9        | 1.9       | 2.4       | 78            | 70 - 86      | 19            | 185.9       | 4.1       | 2.2       | 185           | 167 - 205    |
| All Chemistry Instruments                 | 20            | 77.9        | 1.8       | 2.3       | 78            | 70 - 86      | 20            | 185.9       | 4.0       | 2.1       | 186           | 167 - 205    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 46            | 79.4        | 2.5       | 3.1       | 80            | 71 - 88      | 45            | 189.2       | 4.9       | 2.6       | 190           | 170 - 209    |
| All Chemistry Instruments                 | 47            | 79.4        | 2.5       | 3.1       | 80            | 71 - 88      | 46            | 189.1       | 4.9       | 2.6       | 190           | 170 - 208    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 17            | 82.8        | 4.2       | 5.1       | 83            | 74 - 92      | 17            | 198.4       | 5.5       | 2.8       | 198           | 178 - 219    |
| All Chemistry Instruments                 | 18            | 82.4        | 4.4       | 5.3       | 83            | 74 - 91      | 18            | 197.7       | 6.2       | 3.1       | 198           | 177 - 218    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 73.0        | 1.9       | 2.5       | 73            | 65 - 81      | 37            | 180.4       | 4.7       | 2.6       | 181           | 162 - 199    |
| All Chemistry Instruments                 | 42            | 72.8        | 1.8       | 2.5       | 73            | 65 - 81      | 43            | 180.2       | 4.6       | 2.6       | 180           | 162 - 199    |

**Glucose (mg/dL)****Specimen CH-10**

| <b><u>Reagent/Instrument</u></b>          | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 275                | 239.5              | 8.5              | 3.5              | 238                  | 215 - 264           |
| All Alfa Wassermann Reagents              | 47                 | 246.4              | 6.6              | 2.7              | 247                  | 221 - 271           |
| All Horiba Pentra Reagents                | 21                 | 237.7              | 7.2              | 3.0              | 238                  | 213 - 262           |
| All Roche Integra/c111/c301/c501 Reagents | 28                 | 235.6              | 5.2              | 2.2              | 236                  | 212 - 260           |
| All Vital Diagnostics Reagents            | 19                 | 252.9              | 9.5              | 3.7              | 253                  | 227 - 279           |
| Abaxis Piccolo                            |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                   | 4                  | -                  | -                | -                | 228                  | 204 - 251           |
| All Chemistry Instruments                 | 10                 | 227.7              | 1.9              | 0.9              | 228                  | 204 - 251           |
| Alere Cholestech LDX                      |                    |                    |                  |                  |                      |                     |
| Alere Cholestech LDX - waived             | 2                  | -                  | -                | -                | 247                  | 215 - 264           |
| All Chemistry Instruments                 | 3                  | -                  | -                | -                | 242                  | 220 - 270           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 45                 | 246.7              | 6.3              | 2.6              | 247                  | 222 - 272           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 34                 | 234.8              | 5.2              | 2.2              | 235                  | 211 - 259           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 20                 | 238.0              | 7.3              | 3.1              | 239                  | 214 - 262           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 19                 | 234.2              | 5.1              | 2.2              | 233                  | 210 - 258           |
| All Chemistry Instruments                 | 20                 | 234.3              | 5.0              | 2.1              | 234                  | 210 - 258           |
| Siemens Healthcare                        |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 45                 | 241.0              | 5.4              | 2.2              | 242                  | 216 - 266           |
| All Chemistry Instruments                 | 46                 | 240.9              | 5.5              | 2.3              | 242                  | 216 - 265           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 17                 | 253.9              | 8.1              | 3.2              | 253                  | 228 - 280           |
| All Chemistry Instruments                 | 18                 | 252.6              | 9.7              | 3.8              | 253                  | 227 - 278           |
| VITROS                                    |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 37                 | 235.7              | 5.7              | 2.4              | 236                  | 212 - 260           |
| All Chemistry Instruments                 | 43                 | 235.5              | 5.6              | 2.4              | 236                  | 211 - 260           |

**Iron (µg/dL)**

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 103         | 187.3       | 18.7      | 10.0      | 181           | 149 - 225    | 104           | 116.4       | 10.7      | 9.2       | 113           | 93 - 140     |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 184.7       | 3.8       | 2.1       | 186           | 147 - 222    | 11            | 116.3       | 3.0       | 2.6       | 118           | 93 - 140     |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 20          | 201.7       | 3.8       | 1.9       | 202           | 161 - 243    | 20            | 123.9       | 2.7       | 2.2       | 125           | 99 - 149     |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 22          | 176.3       | 2.5       | 1.4       | 176           | 141 - 212    | 22            | 110.0       | 1.8       | 1.6       | 110           | 88 - 132     |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 10          | 224.4       | 8.0       | 3.6       | 224           | 179 - 270    | 10            | 135.9       | 6.4       | 4.7       | 138           | 108 - 164    |
| All Chemistry Instruments                 | 15          | 220.4       | 9.7       | 4.4       | 221           | 176 - 265    | 15            | 135.1       | 5.8       | 4.3       | 136           | 108 - 163    |
| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                                | 103         | 61.1        | 5.2       | 8.5       | 60            | 48 - 74      | 103           | 172.9       | 17.5      | 10.1      | 168           | 138 - 208    |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 63.0        | 3.5       | 5.5       | 63            | 50 - 76      | 11            | 173.4       | 5.5       | 3.2       | 172           | 138 - 209    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 20          | 65.3        | 2.5       | 3.9       | 66            | 52 - 79      | 20            | 184.1       | 3.9       | 2.1       | 184           | 147 - 221    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 21          | 59.2        | 1.3       | 2.1       | 59            | 47 - 72      | 22            | 162.1       | 2.5       | 1.5       | 162           | 129 - 195    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 10          | 66.5        | 4.0       | 6.1       | 67            | 53 - 80      | 10            | 206.9       | 7.0       | 3.4       | 209           | 165 - 249    |
| All Chemistry Instruments                 | 15          | 66.9        | 4.7       | 7.1       | 67            | 53 - 81      | 15            | 203.1       | 8.6       | 4.2       | 203           | 162 - 244    |
| Specimen CH-10                            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                                | 104         | 223.5       | 23.8      | 10.6      | 218           | 178 - 269    |               |             |           |           |               |              |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 219.7       | 5.1       | 2.3       | 219           | 175 - 264    |               |             |           |           |               |              |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 20          | 241.2       | 5.1       | 2.1       | 242           | 192 - 290    |               |             |           |           |               |              |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 22          | 209.2       | 2.6       | 1.3       | 209           | 167 - 252    |               |             |           |           |               |              |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 10          | 265.6       | 10.7      | 4.0       | 265           | 212 - 319    |               |             |           |           |               |              |
| All Chemistry Instruments                 | 15          | 262.7       | 11.4      | 4.3       | 264           | 210 - 316    |               |             |           |           |               |              |

## Lactic Acid (mmol/L)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 5.46        | 0.38      | 6.9       | 5.6           | 4.3 - 6.6    | 5             | 3.28        | 0.13      | 4.0       | 3.3           | 2.8 - 3.7    |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 1.54        | 0.09      | 5.8       | 1.5           | 1.2 - 1.9    | 5             | 5.08        | 0.33      | 6.4       | 5.2           | 4.0 - 6.1    |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 5              | 6.64        | 0.50      | 7.6       | 6.8           | 5.1 - 8.2    |               |             |           |           |               |              |

## Magnesium (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 132           | 3.71        | 0.17      | 4.5       | 3.7           | 2.7 - 4.7    | 131           | 2.60        | 0.15      | 5.8       | 2.6           | 1.9 - 3.3    |
| All Horiba Pentra Reagents                | 18            | 3.64        | 0.19      | 5.3       | 3.6           | 2.7 - 4.6    | 18            | 2.54        | 0.16      | 6.4       | 2.5           | 1.9 - 3.2    |
| All Roche Integra/c111/c301/c501 Reagents | 20            | 3.70        | 0.10      | 2.7       | 3.7           | 2.7 - 4.7    | 20            | 2.60        | 0.08      | 2.9       | 2.6           | 1.9 - 3.3    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 20            | 3.74        | 0.11      | 3.0       | 3.8           | 2.8 - 4.7    | 20            | 2.63        | 0.13      | 4.8       | 2.6           | 1.9 - 3.3    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 17            | 3.65        | 0.19      | 5.1       | 3.6           | 2.7 - 4.6    | 18            | 2.51        | 0.24      | 9.5       | 2.5           | 1.8 - 3.2    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13            | 3.68        | 0.11      | 3.0       | 3.7           | 2.7 - 4.6    | 13            | 2.59        | 0.09      | 3.3       | 2.6           | 1.9 - 3.3    |
| All Chemistry Instruments                 | 14            | 3.67        | 0.11      | 2.9       | 3.7           | 2.7 - 4.6    | 14            | 2.59        | 0.09      | 3.3       | 2.6           | 1.9 - 3.3    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 25            | 3.76        | 0.13      | 3.5       | 3.7           | 2.8 - 4.7    | 25            | 2.64        | 0.10      | 3.9       | 2.6           | 1.9 - 3.3    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 16            | 3.85        | 0.10      | 2.5       | 3.8           | 2.8 - 4.9    | 16            | 2.75        | 0.11      | 4.0       | 2.8           | 2.0 - 3.5    |
| All Chemistry Instruments                 | 20            | 3.85        | 0.09      | 2.3       | 3.8           | 2.8 - 4.9    | 20            | 2.75        | 0.10      | 3.6       | 2.7           | 2.0 - 3.5    |

**Magnesium (mg/dL)**

| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 131         | 1.72        | 0.12      | 7.1       | 1.7           | 1.2 - 2.2    | 131           | 3.47        | 0.17      | 4.8       | 3.5           | 2.6 - 4.4    |
| All Horiba Pentra Reagents                | 19          | 1.70        | 0.25      | 14.7      | 1.7           | 1.2 - 2.2    | 18            | 3.41        | 0.20      | 5.8       | 3.4           | 2.5 - 4.3    |
| All Roche Integra/c111/c301/c501 Reagents | 20          | 1.74        | 0.06      | 3.4       | 1.7           | 1.3 - 2.2    | 20            | 3.46        | 0.09      | 2.7       | 3.5           | 2.5 - 4.4    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 18          | 1.73        | 0.05      | 2.8       | 1.7           | 1.2 - 2.2    | 19            | 3.51        | 0.08      | 2.3       | 3.5           | 2.6 - 4.4    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 18          | 1.71        | 0.26      | 15.0      | 1.7           | 1.2 - 2.2    | 17            | 3.43        | 0.19      | 5.4       | 3.4           | 2.5 - 4.3    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13          | 1.74        | 0.07      | 3.7       | 1.7           | 1.3 - 2.2    | 13            | 3.44        | 0.10      | 3.0       | 3.4           | 2.5 - 4.3    |
| All Chemistry Instruments                 | 14          | 1.74        | 0.06      | 3.6       | 1.7           | 1.3 - 2.2    | 14            | 3.44        | 0.10      | 2.9       | 3.4           | 2.5 - 4.3    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 25          | 1.69        | 0.08      | 4.8       | 1.7           | 1.2 - 2.2    | 25            | 3.52        | 0.10      | 3.0       | 3.5           | 2.6 - 4.4    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 16          | 1.85        | 0.09      | 4.8       | 1.9           | 1.3 - 2.4    | 16            | 3.61        | 0.11      | 2.9       | 3.6           | 2.7 - 4.6    |
| All Chemistry Instruments                 | 19          | 1.86        | 0.06      | 3.2       | 1.9           | 1.3 - 2.4    | 20            | 3.60        | 0.10      | 2.7       | 3.6           | 2.7 - 4.5    |
| Specimen CH-10                            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                                | 131         | 4.25        | 0.21      | 5.0       | 4.3           | 3.1 - 5.4    |               |             |           |           |               |              |
| All Horiba Pentra Reagents                | 18          | 4.12        | 0.21      | 5.2       | 4.1           | 3.0 - 5.2    |               |             |           |           |               |              |
| All Roche Integra/c111/c301/c501 Reagents | 20          | 4.23        | 0.11      | 2.5       | 4.2           | 3.1 - 5.3    |               |             |           |           |               |              |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 20          | 4.33        | 0.17      | 4.0       | 4.3           | 3.2 - 5.5    |               |             |           |           |               |              |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 17          | 4.14        | 0.20      | 4.9       | 4.1           | 3.1 - 5.2    |               |             |           |           |               |              |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13          | 4.19        | 0.10      | 2.3       | 4.2           | 3.1 - 5.3    |               |             |           |           |               |              |
| All Chemistry Instruments                 | 14          | 4.19        | 0.09      | 2.3       | 4.2           | 3.1 - 5.3    |               |             |           |           |               |              |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 25          | 4.36        | 0.14      | 3.1       | 4.4           | 3.2 - 5.5    |               |             |           |           |               |              |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 16          | 4.41        | 0.10      | 2.3       | 4.4           | 3.3 - 5.6    |               |             |           |           |               |              |
| All Chemistry Instruments                 | 20          | 4.40        | 0.09      | 2.1       | 4.4           | 3.2 - 5.5    |               |             |           |           |               |              |

**Phosphorus (mg/dL)**

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 116         | 4.42        | 0.24      | 5.4       | 4.4           | 3.9 - 4.9    | 116           | 3.13        | 0.19      | 6.1       | 3.1           | 2.7 - 3.5    |
| All Alfa Wassermann Reagents              | 13          | 4.20        | 0.24      | 5.8       | 4.2           | 3.7 - 4.7    | 13            | 3.05        | 0.17      | 5.4       | 3.1           | 2.7 - 3.4    |
| All Roche Integra/c111/c301/c501 Reagents | 15          | 4.33        | 0.09      | 2.1       | 4.3           | 3.8 - 4.8    | 15            | 3.04        | 0.09      | 3.0       | 3.0           | 2.7 - 3.4    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 13          | 4.20        | 0.24      | 5.8       | 4.2           | 3.7 - 4.7    | 13            | 3.05        | 0.17      | 5.4       | 3.1           | 2.7 - 3.4    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 21          | 4.22        | 0.12      | 2.9       | 4.2           | 3.7 - 4.7    | 21            | 2.94        | 0.12      | 4.1       | 3.0           | 2.6 - 3.3    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 11          | 4.54        | 0.10      | 2.3       | 4.6           | 4.0 - 5.1    | 11            | 3.22        | 0.11      | 3.4       | 3.2           | 2.8 - 3.6    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 10          | 4.32        | 0.08      | 1.8       | 4.3           | 3.8 - 4.8    | 10            | 3.02        | 0.06      | 2.1       | 3.0           | 2.6 - 3.4    |
| All Chemistry Instruments                 | 11          | 4.31        | 0.08      | 1.9       | 4.3           | 3.8 - 4.8    | 11            | 3.01        | 0.07      | 2.3       | 3.0           | 2.6 - 3.4    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 17          | 4.57        | 0.21      | 4.6       | 4.6           | 4.0 - 5.1    | 17            | 3.23        | 0.15      | 4.7       | 3.2           | 2.8 - 3.6    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 12          | 4.63        | 0.15      | 3.2       | 4.6           | 4.1 - 5.2    | 12            | 3.38        | 0.09      | 2.8       | 3.4           | 3.0 - 3.8    |
| All Chemistry Instruments                 | 17          | 4.62        | 0.17      | 3.7       | 4.6           | 4.1 - 5.2    | 17            | 3.36        | 0.11      | 3.2       | 3.4           | 2.9 - 3.8    |

  

| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 116         | 2.11        | 0.17      | 7.9       | 2.1           | 1.8 - 2.5    | 116           | 4.15        | 0.22      | 5.3       | 4.2           | 3.7 - 4.6    |
| All Alfa Wassermann Reagents              | 13          | 2.12        | 0.12      | 5.5       | 2.1           | 1.8 - 2.5    | 13            | 3.96        | 0.21      | 5.2       | 4.0           | 3.5 - 4.4    |
| All Roche Integra/c111/c301/c501 Reagents | 15          | 2.01        | 0.05      | 2.6       | 2.0           | 1.7 - 2.4    | 15            | 4.05        | 0.09      | 2.3       | 4.0           | 3.6 - 4.5    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 13          | 2.12        | 0.12      | 5.5       | 2.1           | 1.8 - 2.5    | 13            | 3.96        | 0.21      | 5.2       | 4.0           | 3.5 - 4.4    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 21          | 1.95        | 0.09      | 4.8       | 2.0           | 1.6 - 2.3    | 21            | 3.97        | 0.11      | 2.7       | 4.0           | 3.5 - 4.4    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 11          | 2.15        | 0.12      | 5.6       | 2.1           | 1.8 - 2.5    | 11            | 4.27        | 0.12      | 2.8       | 4.2           | 3.8 - 4.8    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 10          | 2.01        | 0.06      | 2.8       | 2.0           | 1.7 - 2.4    | 10            | 4.03        | 0.08      | 2.0       | 4.0           | 3.5 - 4.5    |
| All Chemistry Instruments                 | 11          | 2.01        | 0.05      | 2.7       | 2.0           | 1.7 - 2.4    | 11            | 4.03        | 0.08      | 2.0       | 4.0           | 3.5 - 4.5    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 17          | 2.17        | 0.14      | 6.3       | 2.2           | 1.8 - 2.5    | 17            | 4.29        | 0.20      | 4.6       | 4.3           | 3.8 - 4.8    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 12          | 2.38        | 0.07      | 3.0       | 2.4           | 2.0 - 2.7    | 12            | 4.36        | 0.11      | 2.5       | 4.4           | 3.8 - 4.9    |
| All Chemistry Instruments                 | 17          | 2.35        | 0.09      | 4.0       | 2.4           | 2.0 - 2.7    | 17            | 4.34        | 0.13      | 3.0       | 4.4           | 3.8 - 4.8    |

## Phosphorus (mg/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 114         | 5.08        | 0.27      | 5.2       | 5.1           | 4.5 - 5.7    |
| All Alfa Wassermann Reagents              | 13          | 4.75        | 0.28      | 5.9       | 4.8           | 4.2 - 5.3    |
| All Roche Integra/c111/c301/c501 Reagents | 15          | 4.94        | 0.12      | 2.4       | 4.9           | 4.4 - 5.5    |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 13          | 4.75        | 0.28      | 5.9       | 4.8           | 4.2 - 5.3    |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 21          | 4.87        | 0.13      | 2.7       | 4.9           | 4.3 - 5.4    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 11          | 5.22        | 0.15      | 2.9       | 5.2           | 4.6 - 5.8    |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 10          | 4.89        | 0.09      | 1.8       | 4.9           | 4.3 - 5.5    |
| All Chemistry Instruments                 | 11          | 4.89        | 0.08      | 1.7       | 4.9           | 4.3 - 5.5    |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 17          | 5.22        | 0.22      | 4.2       | 5.2           | 4.6 - 5.8    |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 12          | 5.33        | 0.18      | 3.3       | 5.4           | 4.7 - 6.0    |
| All Chemistry Instruments                 | 17          | 5.33        | 0.20      | 3.7       | 5.4           | 4.7 - 5.9    |

**Protein, Total (g/dL)**

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 282           | 7.97        | 0.28      | 3.5       | 8.0           | 7.1 - 8.8    | 278           | 5.54        | 0.17      | 3.1       | 5.5           | 4.9 - 6.1    |
| All Alfa Wassermann Reagents              | 44            | 8.06        | 0.23      | 2.9       | 8.1           | 7.2 - 8.9    | 43            | 5.61        | 0.16      | 2.9       | 5.6           | 5.0 - 6.2    |
| All Horiba Pentra Reagents                | 21            | 7.83        | 0.21      | 2.6       | 7.8           | 7.0 - 8.7    | 21            | 5.43        | 0.15      | 2.7       | 5.4           | 4.8 - 6.0    |
| All Roche Integra/c111/c301/c501 Reagents | 28            | 7.91        | 0.18      | 2.3       | 7.9           | 7.1 - 8.7    | 28            | 5.52        | 0.14      | 2.6       | 5.5           | 4.9 - 6.1    |
| All Vital Diagnostics Reagents            | 17            | 8.02        | 0.31      | 3.9       | 8.0           | 7.2 - 8.9    | 16            | 5.49        | 0.22      | 4.0       | 5.5           | 4.9 - 6.1    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 19            | 8.08        | 0.14      | 1.7       | 8.1           | 7.2 - 8.9    | 16            | 5.60        | 0.12      | 2.1       | 5.6           | 5.0 - 6.2    |
| All Chemistry Instruments                 | 27            | 8.07        | 0.13      | 1.6       | 8.1           | 7.2 - 8.9    | 24            | 5.60        | 0.10      | 1.8       | 5.6           | 5.0 - 6.2    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 42            | 8.06        | 0.23      | 2.8       | 8.1           | 7.2 - 8.9    | 41            | 5.62        | 0.16      | 2.8       | 5.6           | 5.0 - 6.2    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 33            | 7.94        | 0.16      | 2.0       | 7.9           | 7.1 - 8.8    | 33            | 5.45        | 0.09      | 1.7       | 5.5           | 4.9 - 6.0    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 7.83        | 0.21      | 2.7       | 7.8           | 7.0 - 8.7    | 20            | 5.42        | 0.13      | 2.5       | 5.4           | 4.8 - 6.0    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 7.83        | 0.15      | 1.9       | 7.8           | 7.0 - 8.7    | 19            | 5.46        | 0.11      | 2.1       | 5.5           | 4.9 - 6.1    |
| All Chemistry Instruments                 | 20            | 7.85        | 0.16      | 2.0       | 7.8           | 7.0 - 8.7    | 20            | 5.47        | 0.12      | 2.2       | 5.5           | 4.9 - 6.1    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 45            | 8.28        | 0.15      | 1.8       | 8.3           | 7.4 - 9.2    | 45            | 5.71        | 0.10      | 1.7       | 5.7           | 5.1 - 6.3    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15            | 8.04        | 0.31      | 3.8       | 8.0           | 7.2 - 8.9    | 15            | 5.59        | 0.35      | 6.3       | 5.6           | 5.0 - 6.2    |
| All Chemistry Instruments                 | 16            | 8.01        | 0.32      | 4.0       | 8.0           | 7.2 - 8.9    | 16            | 5.56        | 0.35      | 6.3       | 5.6           | 5.0 - 6.2    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 7.60        | 0.21      | 2.7       | 7.6           | 6.8 - 8.4    | 36            | 5.43        | 0.13      | 2.5       | 5.4           | 4.8 - 6.0    |
| All Chemistry Instruments                 | 42            | 7.60        | 0.21      | 2.7       | 7.6           | 6.8 - 8.4    | 42            | 5.44        | 0.14      | 2.7       | 5.4           | 4.8 - 6.0    |

**Protein, Total (g/dL)**

| <u>Reagent/Instrument</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 266           | 3.63        | 0.13      | 3.5       | 3.6           | 3.2 - 4.0    | 262           | 7.44        | 0.24      | 3.3       | 7.4           | 6.6 - 8.2    |
| All Alfa Wassermann Reagents              | 44            | 3.66        | 0.13      | 3.5       | 3.7           | 3.2 - 4.1    | 44            | 7.57        | 0.20      | 2.6       | 7.6           | 6.8 - 8.4    |
| All Horiba Pentra Reagents                | 21            | 3.57        | 0.12      | 3.4       | 3.6           | 3.2 - 4.0    | 21            | 7.30        | 0.22      | 3.0       | 7.3           | 6.5 - 8.1    |
| All Roche Integra/c111/c301/c501 Reagents | 28            | 3.60        | 0.09      | 2.6       | 3.6           | 3.2 - 4.0    | 28            | 7.40        | 0.16      | 2.1       | 7.4           | 6.6 - 8.2    |
| All Vital Diagnostics Reagents            | 17            | 3.62        | 0.16      | 4.3       | 3.6           | 3.2 - 4.0    | 17            | 7.36        | 0.43      | 5.8       | 7.3           | 6.6 - 8.1    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 3.7           | 3.3 - 4.1    | 4             | -           | -         | -         | 7.4           | 6.6 - 8.2    |
| All Chemistry Instruments                 | 11            | 3.69        | 0.05      | 1.5       | 3.7           | 3.3 - 4.1    | 11            | 7.43        | 0.13      | 1.8       | 7.4           | 6.6 - 8.2    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 42            | 3.66        | 0.13      | 3.5       | 3.7           | 3.2 - 4.1    | 42            | 7.57        | 0.20      | 2.6       | 7.6           | 6.8 - 8.4    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 33            | 3.55        | 0.08      | 2.2       | 3.6           | 3.1 - 4.0    | 33            | 7.40        | 0.17      | 2.3       | 7.4           | 6.6 - 8.2    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 3.56        | 0.11      | 3.1       | 3.6           | 3.1 - 4.0    | 20            | 7.31        | 0.22      | 3.0       | 7.3           | 6.5 - 8.1    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 3.58        | 0.10      | 2.7       | 3.6           | 3.2 - 4.0    | 19            | 7.34        | 0.14      | 1.9       | 7.3           | 6.6 - 8.1    |
| All Chemistry Instruments                 | 20            | 3.59        | 0.10      | 2.8       | 3.6           | 3.2 - 4.0    | 20            | 7.35        | 0.15      | 2.0       | 7.3           | 6.6 - 8.1    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 45            | 3.73        | 0.07      | 2.0       | 3.7           | 3.3 - 4.2    | 45            | 7.70        | 0.14      | 1.8       | 7.7           | 6.9 - 8.5    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15            | 3.60        | 0.15      | 4.1       | 3.6           | 3.2 - 4.0    | 15            | 7.35        | 0.45      | 6.2       | 7.3           | 6.6 - 8.1    |
| All Chemistry Instruments                 | 16            | 3.61        | 0.14      | 4.0       | 3.6           | 3.2 - 4.0    | 16            | 7.34        | 0.44      | 6.0       | 7.3           | 6.6 - 8.1    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 3.64        | 0.11      | 3.0       | 3.6           | 3.2 - 4.1    | 36            | 7.20        | 0.20      | 2.7       | 7.2           | 6.4 - 8.0    |
| All Chemistry Instruments                 | 42            | 3.65        | 0.12      | 3.2       | 3.6           | 3.2 - 4.1    | 42            | 7.20        | 0.20      | 2.8       | 7.2           | 6.4 - 8.0    |

## Protein, Total (g/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 263         | 9.18        | 0.34      | 3.7       | 9.2           | 8.2 - 10.2   |
| All Alfa Wassermann Reagents              | 43          | 9.28        | 0.32      | 3.4       | 9.3           | 8.3 - 10.3   |
| All Horiba Pentra Reagents                | 21          | 9.04        | 0.25      | 2.7       | 9.0           | 8.1 - 10.0   |
| All Roche Integra/c111/c301/c501 Reagents | 28          | 9.09        | 0.21      | 2.3       | 9.1           | 8.1 - 10.1   |
| All Vital Diagnostics Reagents            | 17          | 9.29        | 0.36      | 3.9       | 9.3           | 8.3 - 10.3   |
| Abaxis Piccolo                            |             |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4           | -           | -         | -         | 9.3           | 8.3 - 10.2   |
| All Chemistry Instruments                 | 11          | 9.25        | 0.14      | 1.6       | 9.2           | 8.3 - 10.2   |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 41          | 9.28        | 0.32      | 3.5       | 9.3           | 8.3 - 10.3   |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 33          | 9.15        | 0.20      | 2.2       | 9.2           | 8.2 - 10.1   |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20          | 9.03        | 0.25      | 2.8       | 9.0           | 8.1 - 10.0   |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 19          | 9.01        | 0.17      | 1.9       | 9.0           | 8.1 - 10.0   |
| All Chemistry Instruments                 | 20          | 9.02        | 0.18      | 2.0       | 9.0           | 8.1 - 10.0   |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 46          | 9.55        | 0.19      | 2.0       | 9.5           | 8.5 - 10.6   |
| Vital Diagnostics                         |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15          | 9.30        | 0.37      | 4.0       | 9.3           | 8.3 - 10.3   |
| All Chemistry Instruments                 | 16          | 9.28        | 0.37      | 4.0       | 9.2           | 8.3 - 10.3   |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36          | 8.80        | 0.26      | 3.0       | 8.8           | 7.9 - 9.7    |
| All Chemistry Instruments                 | 42          | 8.78        | 0.27      | 3.0       | 8.7           | 7.9 - 9.7    |

## Urea Nitrogen (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 284           | 35.1        | 2.2       | 6.2       | 35            | 31 - 39      | 281           | 21.4        | 1.7       | 7.8       | 22            | 19 - 24      |
| All Alfa Wassermann Reagents              | 44            | 35.3        | 1.5       | 4.3       | 35            | 32 - 39      | 44            | 22.2        | 1.1       | 4.8       | 22            | 20 - 25      |
| All Horiba Pentra Reagents                | 21            | 35.0        | 1.1       | 3.2       | 35            | 31 - 39      | 21            | 21.0        | 0.8       | 4.0       | 21            | 19 - 23      |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 35.4        | 1.1       | 3.1       | 36            | 32 - 39      | 27            | 21.7        | 0.7       | 3.1       | 22            | 19 - 24      |
| All Vital Diagnostics Reagents            | 17            | 36.5        | 1.2       | 3.2       | 36            | 33 - 40      | 17            | 22.5        | 0.7       | 3.2       | 23            | 20 - 25      |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 19            | 33.0        | 0.7       | 2.3       | 33            | 30 - 36      | 16            | 19.8        | 0.5       | 2.7       | 20            | 17 - 22      |
| All Chemistry Instruments                 | 26            | 32.8        | 0.8       | 2.5       | 33            | 29 - 36      | 23            | 19.8        | 0.5       | 2.6       | 20            | 17 - 22      |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 35            | 35.4        | 1.6       | 4.5       | 35            | 32 - 39      | 35            | 22.2        | 1.1       | 5.1       | 22            | 20 - 25      |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 36.5        | 1.0       | 2.8       | 37            | 33 - 40      | 34            | 22.4        | 0.7       | 3.1       | 22            | 20 - 25      |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 35.2        | 1.0       | 3.0       | 35            | 31 - 39      | 20            | 21.1        | 0.8       | 3.9       | 21            | 19 - 24      |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 35.4        | 1.1       | 3.2       | 36            | 32 - 39      | 18            | 21.7        | 0.6       | 2.6       | 22            | 19 - 24      |
| All Chemistry Instruments                 | 19            | 35.4        | 1.1       | 3.2       | 36            | 32 - 39      | 19            | 21.7        | 0.6       | 2.6       | 22            | 19 - 24      |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 46            | 36.5        | 1.7       | 4.5       | 36            | 33 - 40      | 46            | 22.4        | 1.1       | 4.8       | 22            | 20 - 25      |
| All Chemistry Instruments                 | 47            | 36.6        | 1.7       | 4.6       | 36            | 33 - 40      | 47            | 22.4        | 1.1       | 4.8       | 22            | 20 - 25      |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15            | 36.4        | 1.2       | 3.3       | 36            | 33 - 40      | 15            | 22.6        | 0.7       | 3.3       | 23            | 20 - 25      |
| All Chemistry Instruments                 | 16            | 36.4        | 1.1       | 3.2       | 36            | 33 - 40      | 16            | 22.6        | 0.7       | 3.2       | 23            | 20 - 25      |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 37            | 31.8        | 0.9       | 2.7       | 32            | 28 - 35      | 36            | 18.7        | 0.7       | 3.8       | 19            | 16 - 21      |
| All Chemistry Instruments                 | 43            | 31.7        | 0.9       | 2.9       | 32            | 28 - 35      | 42            | 18.6        | 0.7       | 3.9       | 19            | 16 - 21      |

## Urea Nitrogen (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 269           | 11.0        | 1.0       | 9.5       | 11            | 8 - 13       | 266           | 32.2        | 2.2       | 6.7       | 33            | 29 - 36      |
| All Alfa Wassermann Reagents              | 45            | 11.3        | 0.8       | 6.7       | 11            | 9 - 14       | 44            | 32.7        | 1.7       | 5.1       | 33            | 29 - 36      |
| All Horiba Pentra Reagents                | 21            | 10.8        | 0.6       | 5.8       | 11            | 8 - 13       | 20            | 31.8        | 1.1       | 3.5       | 32            | 28 - 35      |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 10.9        | 0.5       | 4.3       | 11            | 8 - 13       | 27            | 32.2        | 1.0       | 3.1       | 32            | 29 - 36      |
| All Vital Diagnostics Reagents            | 16            | 11.9        | 0.8       | 6.8       | 12            | 9 - 14       | 17            | 33.5        | 1.1       | 3.2       | 33            | 30 - 37      |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 10            | 8 - 13       | 4             | -           | -         | -         | 30            | 27 - 33      |
| All Chemistry Instruments                 | 10            | 10.2        | 0.6       | 6.2       | 10            | 8 - 13       | 10            | 29.7        | 0.7       | 2.3       | 30            | 27 - 33      |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 36            | 11.4        | 0.8       | 7.0       | 11            | 9 - 14       | 35            | 32.8        | 1.8       | 5.6       | 33            | 29 - 36      |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 11.5        | 0.6       | 5.4       | 11            | 9 - 14       | 34            | 33.5        | 1.1       | 3.3       | 33            | 30 - 37      |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 10.8        | 0.6       | 5.7       | 11            | 8 - 13       | 19            | 31.9        | 1.0       | 3.3       | 32            | 29 - 35      |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 10.9        | 0.5       | 4.3       | 11            | 8 - 13       | 18            | 32.1        | 1.0       | 3.0       | 32            | 29 - 36      |
| All Chemistry Instruments                 | 19            | 10.9        | 0.5       | 4.2       | 11            | 8 - 13       | 19            | 32.2        | 1.0       | 3.0       | 32            | 29 - 36      |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 46            | 11.4        | 0.7       | 6.5       | 11            | 9 - 14       | 46            | 33.6        | 1.3       | 4.0       | 34            | 30 - 37      |
| All Chemistry Instruments                 | 47            | 11.4        | 0.7       | 6.5       | 11            | 9 - 14       | 47            | 33.6        | 1.3       | 3.9       | 34            | 30 - 37      |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15            | 11.9        | 0.8       | 6.7       | 12            | 9 - 14       | 15            | 33.5        | 1.1       | 3.4       | 33            | 30 - 37      |
| All Chemistry Instruments                 | 15            | 11.9        | 0.8       | 6.7       | 12            | 9 - 14       | 16            | 33.5        | 1.1       | 3.3       | 33            | 30 - 37      |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 37            | 9.3         | 0.5       | 5.1       | 9             | 7 - 12       | 37            | 28.8        | 0.8       | 2.9       | 29            | 26 - 32      |
| All Chemistry Instruments                 | 43            | 9.3         | 0.5       | 4.9       | 9             | 7 - 12       | 43            | 28.7        | 0.9       | 3.0       | 29            | 26 - 32      |

## Urea Nitrogen (mg/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 265         | 42.3        | 2.4       | 5.6       | 42            | 38 - 47      |
| All Alfa Wassermann Reagents              | 43          | 42.7        | 1.9       | 4.5       | 42            | 38 - 47      |
| All Horiba Pentra Reagents                | 21          | 42.3        | 1.4       | 3.4       | 43            | 38 - 47      |
| All Roche Integra/c111/c301/c501 Reagents | 27          | 42.4        | 1.2       | 2.7       | 42            | 38 - 47      |
| All Vital Diagnostics Reagents            | 17          | 43.1        | 1.5       | 3.4       | 43            | 39 - 47      |
| Abaxis Piccolo                            |             |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4           | -           | -         | -         | 39            | 35 - 43      |
| All Chemistry Instruments                 | 10          | 39.0        | 0.7       | 1.7       | 39            | 35 - 43      |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34          | 42.6        | 2.1       | 4.8       | 42            | 38 - 47      |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 34          | 43.6        | 1.4       | 3.1       | 44            | 39 - 48      |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20          | 42.5        | 1.4       | 3.2       | 43            | 38 - 47      |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 18          | 42.3        | 1.3       | 3.0       | 42            | 38 - 47      |
| All Chemistry Instruments                 | 19          | 42.4        | 1.3       | 3.0       | 42            | 38 - 47      |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 46          | 43.8        | 1.8       | 4.1       | 44            | 39 - 48      |
| All Chemistry Instruments                 | 47          | 43.8        | 1.8       | 4.1       | 44            | 39 - 48      |
| Vital Diagnostics                         |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15          | 43.3        | 1.4       | 3.3       | 43            | 39 - 48      |
| All Chemistry Instruments                 | 16          | 43.3        | 1.4       | 3.2       | 43            | 39 - 48      |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36          | 39.0        | 0.9       | 2.3       | 39            | 35 - 43      |
| All Chemistry Instruments                 | 42          | 38.9        | 1.0       | 2.5       | 39            | 35 - 43      |

## Uric Acid (mg/dL)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 180         | 8.57        | 0.31      | 3.7       | 8.6           | 7.1 - 10.1   | 182           | 5.33        | 0.24      | 4.5       | 5.3           | 4.4 - 6.3    |
| All Alfa Wassermann Reagents              | 27          | 8.66        | 0.50      | 5.8       | 8.7           | 7.1 - 10.2   | 27            | 5.58        | 0.26      | 4.6       | 5.6           | 4.6 - 6.6    |
| All Roche Integra/c111/c301/c501 Reagents | 19          | 8.69        | 0.18      | 2.1       | 8.7           | 7.2 - 10.2   | 19            | 5.33        | 0.11      | 2.1       | 5.3           | 4.4 - 6.3    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 27          | 8.66        | 0.50      | 5.8       | 8.7           | 7.1 - 10.2   | 27            | 5.58        | 0.26      | 4.6       | 5.6           | 4.6 - 6.6    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 28          | 8.69        | 0.11      | 1.2       | 8.7           | 7.2 - 10.2   | 30            | 5.43        | 0.15      | 2.7       | 5.4           | 4.5 - 6.4    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 16          | 8.30        | 0.20      | 2.4       | 8.3           | 6.8 - 9.8    | 16            | 5.09        | 0.16      | 3.1       | 5.1           | 4.2 - 6.0    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 12          | 8.64        | 0.15      | 1.7       | 8.7           | 7.1 - 10.2   | 12            | 5.31        | 0.10      | 1.9       | 5.3           | 4.4 - 6.3    |
| All Chemistry Instruments                 | 13          | 8.63        | 0.15      | 1.7       | 8.7           | 7.1 - 10.1   | 13            | 5.30        | 0.10      | 1.9       | 5.3           | 4.3 - 6.3    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 31          | 8.42        | 0.19      | 2.2       | 8.4           | 6.9 - 9.9    | 33            | 5.15        | 0.15      | 2.9       | 5.1           | 4.2 - 6.1    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 23          | 8.61        | 0.16      | 1.9       | 8.6           | 7.1 - 10.1   | 22            | 5.27        | 0.08      | 1.5       | 5.3           | 4.3 - 6.2    |
| All Chemistry Instruments                 | 29          | 8.61        | 0.18      | 2.1       | 8.6           | 7.1 - 10.1   | 29            | 5.28        | 0.11      | 2.2       | 5.3           | 4.3 - 6.2    |

  

| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 177         | 2.80        | 0.29      | 10.3      | 2.7           | 2.3 - 3.3    | 178           | 7.85        | 0.28      | 3.5       | 7.8           | 6.5 - 9.2    |
| All Alfa Wassermann Reagents              | 27          | 3.45        | 0.19      | 5.6       | 3.4           | 2.8 - 4.1    | 27            | 7.93        | 0.33      | 4.2       | 7.9           | 6.5 - 9.3    |
| All Roche Integra/c111/c301/c501 Reagents | 19          | 2.68        | 0.07      | 2.6       | 2.7           | 2.2 - 3.2    | 19            | 7.95        | 0.19      | 2.4       | 7.9           | 6.5 - 9.3    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 27          | 3.45        | 0.19      | 5.6       | 3.4           | 2.8 - 4.1    | 27            | 7.93        | 0.33      | 4.2       | 7.9           | 6.5 - 9.3    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 28          | 2.79        | 0.07      | 2.6       | 2.8           | 2.3 - 3.3    | 29            | 8.00        | 0.17      | 2.2       | 8.0           | 6.6 - 9.4    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 16          | 2.62        | 0.12      | 4.5       | 2.6           | 2.1 - 3.1    | 16            | 7.60        | 0.23      | 3.0       | 7.6           | 6.3 - 8.9    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 12          | 2.67        | 0.05      | 1.8       | 2.7           | 2.2 - 3.2    | 12            | 7.90        | 0.14      | 1.8       | 7.9           | 6.5 - 9.3    |
| All Chemistry Instruments                 | 13          | 2.66        | 0.05      | 1.9       | 2.7           | 2.2 - 3.2    | 13            | 7.89        | 0.14      | 1.8       | 7.9           | 6.5 - 9.3    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 31          | 2.65        | 0.09      | 3.5       | 2.6           | 2.1 - 3.1    | 32            | 7.68        | 0.19      | 2.5       | 7.7           | 6.3 - 9.0    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 22          | 2.63        | 0.09      | 3.6       | 2.6           | 2.1 - 3.1    | 23            | 7.82        | 0.15      | 1.9       | 7.8           | 6.4 - 9.2    |
| All Chemistry Instruments                 | 28          | 2.64        | 0.09      | 3.3       | 2.6           | 2.1 - 3.1    | 29            | 7.81        | 0.16      | 2.0       | 7.8           | 6.4 - 9.2    |

## Uric Acid (mg/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 175         | 10.24       | 0.35      | 3.4       | 10.2          | 8.5 - 12.0   |
| All Alfa Wassermann Reagents              | 27          | 10.23       | 0.48      | 4.7       | 10.1          | 8.4 - 12.0   |
| All Roche Integra/c111/c301/c501 Reagents | 19          | 10.31       | 0.23      | 2.3       | 10.2          | 8.5 - 12.1   |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 27          | 10.23       | 0.48      | 4.7       | 10.1          | 8.4 - 12.0   |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 28          | 10.32       | 0.17      | 1.6       | 10.3          | 8.5 - 12.1   |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 16          | 9.89        | 0.26      | 2.6       | 9.9           | 8.2 - 11.6   |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 12          | 10.23       | 0.20      | 1.9       | 10.2          | 8.4 - 12.0   |
| All Chemistry Instruments                 | 13          | 10.22       | 0.19      | 1.9       | 10.2          | 8.4 - 12.0   |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 30          | 10.08       | 0.25      | 2.5       | 10.1          | 8.3 - 11.8   |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 23          | 10.47       | 0.20      | 1.9       | 10.4          | 8.6 - 12.3   |
| All Chemistry Instruments                 | 29          | 10.43       | 0.22      | 2.1       | 10.4          | 8.6 - 12.3   |

## Chloride (mmol/L)

| Specimen CH-6                           |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>                | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 275         | 115.9       | 7.4       | 6.4       | 113           | 110 - 122    | 277           | 103.9       | 3.8       | 3.7       | 103           | 98 - 110     |
| Abaxis Piccolo                          |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 14          | 110.3       | 1.6       | 1.5       | 110           | 104 - 116    | 14            | 103.9       | 1.6       | 1.6       | 104           | 98 - 110     |
| All Chemistry Instruments               | 20          | 109.9       | 1.7       | 1.5       | 110           | 104 - 116    | 20            | 103.4       | 2.1       | 2.1       | 104           | 98 - 109     |
| ISE Diluted                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 30          | 108.2       | 2.0       | 1.8       | 108           | 102 - 114    | 29            | 100.8       | 1.1       | 1.1       | 101           | 95 - 106     |
| Roche Integra                           | 15          | 113.1       | 2.8       | 2.5       | 112           | 107 - 119    | 16            | 103.6       | 3.1       | 3.0       | 102           | 98 - 109     |
| Siemens Dimension QuickLyte - Xpand/EXL | 32          | 111.3       | 1.5       | 1.3       | 112           | 105 - 117    | 32            | 100.4       | 1.2       | 1.2       | 101           | 95 - 106     |
| Vital Diagnostics Envoy 500             | 10          | 116.5       | 4.4       | 3.8       | 116           | 110 - 123    | 10            | 104.0       | 2.9       | 2.8       | 104           | 98 - 110     |
| All Chemistry Instruments               | 125         | 110.8       | 3.1       | 2.8       | 111           | 105 - 117    | 127           | 101.1       | 2.4       | 2.3       | 101           | 96 - 107     |
| ISE Undiluted                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 41          | 128.2       | 1.8       | 1.4       | 128           | 121 - 135    | 40            | 109.7       | 1.2       | 1.1       | 110           | 104 - 116    |
| Horiba ABX Pentra 400                   | 12          | 123.0       | 6.7       | 5.5       | 122           | 116 - 130    | 12            | 106.6       | 4.2       | 3.9       | 106           | 101 - 112    |
| All Chemistry Instruments               | 69          | 124.5       | 6.4       | 5.2       | 127           | 118 - 131    | 72            | 107.6       | 3.6       | 3.3       | 108           | 102 - 113    |
| VITROS                                  |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 36          | 117.8       | 1.7       | 1.5       | 118           | 111 - 124    | 37            | 105.8       | 1.6       | 1.6       | 106           | 100 - 112    |
| All Chemistry Instruments               | 42          | 117.9       | 1.7       | 1.4       | 118           | 111 - 124    | 43            | 105.8       | 1.6       | 1.5       | 106           | 100 - 112    |

  

| Specimen CH-8                           |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>                | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 266         | 95.1        | 2.8       | 2.9       | 95            | 90 - 100     | 264           | 113.2       | 6.0       | 5.3       | 112           | 107 - 119    |
| Abaxis Piccolo                          |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 4           | -           | -         | -         | 98            | 92 - 102     | 4             | -           | -         | -         | 109           | 102 - 114    |
| All Chemistry Instruments               | 10          | 97.1        | 2.2       | 2.2       | 97            | 92 - 102     | 10            | 108.2       | 2.4       | 2.3       | 108           | 102 - 114    |
| ISE Diluted                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 29          | 95.0        | 1.2       | 1.3       | 95            | 90 - 100     | 29            | 106.7       | 1.6       | 1.5       | 107           | 101 - 113    |
| Roche Integra                           | 15          | 96.2        | 2.7       | 2.8       | 95            | 91 - 102     | 16            | 111.8       | 4.5       | 4.0       | 111           | 106 - 118    |
| Siemens Dimension QuickLyte - Xpand/EXL | 32          | 92.1        | 1.0       | 1.1       | 92            | 87 - 97      | 32            | 108.4       | 1.4       | 1.3       | 109           | 102 - 114    |
| Vital Diagnostics Envoy 500             | 10          | 94.6        | 2.2       | 2.3       | 94            | 89 - 100     | 10            | 114.1       | 2.6       | 2.3       | 114           | 108 - 120    |
| All Chemistry Instruments               | 129         | 93.6        | 2.6       | 2.8       | 93            | 88 - 99      | 126           | 108.9       | 3.0       | 2.7       | 108           | 103 - 115    |
| ISE Undiluted                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 42          | 96.9        | 1.7       | 1.8       | 97            | 92 - 102     | 41            | 122.5       | 1.6       | 1.3       | 123           | 116 - 129    |
| Horiba ABX Pentra 400                   | 12          | 95.6        | 2.5       | 2.7       | 95            | 90 - 101     | 12            | 117.8       | 5.0       | 4.2       | 118           | 111 - 124    |
| All Chemistry Instruments               | 72          | 96.2        | 2.1       | 2.2       | 96            | 91 - 101     | 69            | 119.5       | 5.2       | 4.3       | 121           | 113 - 126    |
| VITROS                                  |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 37          | 97.0        | 1.2       | 1.3       | 97            | 92 - 102     | 36            | 115.1       | 1.6       | 1.4       | 115           | 109 - 121    |
| All Chemistry Instruments               | 43          | 97.1        | 1.2       | 1.3       | 97            | 92 - 102     | 42            | 115.2       | 1.6       | 1.4       | 115           | 109 - 121    |

**Chloride (mmol/L)****Specimen CH-10**

| <b><u>Method/Instrument</u></b>         | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-----------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                              | 261                | 122.7              | 9.3              | 7.6              | 120                  | 116 - 129           |
| Abaxis Piccolo                          |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                 | 4                  | -                  | -                | -                | 115                  | 108 - 120           |
| All Chemistry Instruments               | 10                 | 113.8              | 2.0              | 1.7              | 115                  | 108 - 120           |
| ISE Diluted                             |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                      | 29                 | 112.3              | 1.6              | 1.4              | 112                  | 106 - 118           |
| Roche Integra                           | 15                 | 118.5              | 3.4              | 2.9              | 117                  | 112 - 125           |
| Siemens Dimension QuickLyte - Xpand/EXL | 32                 | 116.5              | 1.3              | 1.1              | 117                  | 110 - 123           |
| Vital Diagnostics Envoy 500             | 10                 | 122.0              | 3.7              | 3.0              | 122                  | 115 - 129           |
| All Chemistry Instruments               | 124                | 115.8              | 3.3              | 2.9              | 116                  | 109 - 122           |
| ISE Undiluted                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel         | 40                 | 137.7              | 2.1              | 1.6              | 138                  | 130 - 145           |
| Horiba ABX Pentra 400                   | 12                 | 130.1              | 6.8              | 5.2              | 131                  | 123 - 137           |
| All Chemistry Instruments               | 66                 | 133.7              | 7.7              | 5.8              | 136                  | 127 - 141           |
| VITROS                                  |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950          | 36                 | 125.2              | 1.7              | 1.4              | 125                  | 118 - 132           |
| All Chemistry Instruments               | 42                 | 125.2              | 1.8              | 1.4              | 125                  | 118 - 132           |

**CO<sub>2</sub> (mmol/L)**

| Specimen CH-6                   |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>        | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 268         | 24.0        | 2.8       | 11.6      | 24            | 19 - 29      | 270           | 17.2        | 2.6       | 15.4      | 18            | 13 - 21      |
| Enzymatic Reagent               |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 15          | 22.9        | 2.5       | 11.0      | 24            | 18 - 28      | 15            | 15.7        | 2.3       | 14.8      | 17            | 12 - 19      |
| Alfa Wassermann ACE Alera/Axcel | 25          | 24.4        | 2.9       | 12.0      | 25            | 19 - 30      | 24            | 18.3        | 2.0       | 10.7      | 19            | 14 - 22      |
| Beckman AU systems              | 27          | 25.0        | 2.5       | 9.8       | 25            | 19 - 30      | 28            | 17.5        | 2.6       | 14.9      | 18            | 13 - 21      |
| Horiba ABX Pentra 400           | 13          | 24.2        | 1.9       | 7.9       | 25            | 19 - 29      | 13            | 17.1        | 1.8       | 10.3      | 18            | 13 - 21      |
| Roche Integra                   | 14          | 23.0        | 1.8       | 7.8       | 23            | 18 - 28      | 14            | 17.0        | 2.3       | 13.5      | 17            | 13 - 21      |
| Siemens Dimension               | 36          | 24.7        | 2.6       | 10.7      | 25            | 19 - 30      | 36            | 18.1        | 2.8       | 15.2      | 19            | 14 - 22      |
| All Chemistry Instruments       | 160         | 24.2        | 2.6       | 10.7      | 25            | 19 - 30      | 161           | 17.3        | 2.7       | 15.4      | 18            | 13 - 21      |
| ISE Diluted                     |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments       | 26          | 23.7        | 3.1       | 13.3      | 24            | 18 - 29      | 26            | 16.8        | 2.9       | 17.3      | 18            | 13 - 21      |
| ISE Undiluted                   |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 14          | 24.5        | 3.5       | 14.3      | 26            | 19 - 30      | 14            | 18.0        | 2.1       | 11.9      | 19            | 14 - 22      |
| All Chemistry Instruments       | 28          | 24.7        | 3.9       | 15.8      | 26            | 19 - 30      | 28            | 17.6        | 2.7       | 15.5      | 18            | 14 - 22      |
| VITROS                          |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 37          | 22.7        | 1.7       | 7.7       | 23            | 18 - 28      | 37            | 16.5        | 2.0       | 11.9      | 17            | 13 - 20      |
| All Chemistry Instruments       | 43          | 22.5        | 1.9       | 8.6       | 23            | 18 - 28      | 43            | 16.4        | 2.0       | 12.5      | 17            | 13 - 20      |

  

| Specimen CH-8                   |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>        | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 258         | 12.3        | 2.1       | 17.2      | 12            | 9 - 15       | 258           | 21.3        | 3.4       | 15.9      | 22            | 17 - 26      |
| Enzymatic Reagent               |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived         | 4           | -           | -         | -         | 11            | 9 - 15       | 4             | -           | -         | -         | 18            | 17 - 26      |
| Alfa Wassermann ACE Alera/Axcel | 25          | 12.5        | 2.2       | 17.3      | 13            | 9 - 15       | 25            | 22.2        | 3.6       | 16.0      | 23            | 17 - 27      |
| Beckman AU systems              | 28          | 12.4        | 2.1       | 16.7      | 13            | 9 - 15       | 26            | 21.8        | 2.9       | 13.4      | 23            | 17 - 27      |
| Horiba ABX Pentra 400           | 13          | 11.8        | 1.6       | 13.7      | 12            | 9 - 15       | 13            | 22.5        | 2.1       | 9.2       | 23            | 18 - 28      |
| Roche Integra                   | 14          | 11.6        | 1.9       | 16.4      | 12            | 9 - 14       | 14            | 19.9        | 3.5       | 17.3      | 21            | 15 - 24      |
| Siemens Dimension               | 36          | 13.3        | 2.0       | 15.3      | 14            | 10 - 16      | 36            | 21.2        | 4.0       | 18.8      | 22            | 16 - 26      |
| All Chemistry Instruments       | 150         | 12.4        | 2.1       | 17.0      | 13            | 9 - 15       | 149           | 21.5        | 3.3       | 15.3      | 22            | 17 - 26      |
| ISE Diluted                     |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments       | 26          | 12.2        | 2.5       | 20.4      | 13            | 9 - 15       | 25            | 21.8        | 3.0       | 13.8      | 23            | 17 - 27      |
| ISE Undiluted                   |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 13          | 13.0        | 1.7       | 12.9      | 13            | 10 - 16      | 14            | 21.5        | 3.8       | 17.5      | 23            | 17 - 26      |
| All Chemistry Instruments       | 27          | 12.7        | 1.8       | 13.8      | 13            | 10 - 16      | 29            | 21.6        | 3.5       | 16.3      | 22            | 17 - 26      |
| VITROS                          |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 37          | 11.3        | 1.9       | 16.9      | 12            | 9 - 14       | 37            | 19.1        | 2.7       | 14.4      | 20            | 15 - 23      |
| All Chemistry Instruments       | 43          | 11.4        | 1.8       | 15.9      | 12            | 9 - 14       | 43            | 19.0        | 2.8       | 14.5      | 20            | 15 - 23      |

**CO<sub>2</sub> (mmol/L)****Specimen CH-10**

| <b><u>Method/Instrument</u></b> | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|---------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                      | 259                | 26.6               | 3.0              | 11.4             | 27                   | 21 - 32             |
| Enzymatic Reagent               |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived         | 4                  | -                  | -                | -                | 26                   | 21 - 33             |
| Alfa Wassermann ACE Alera/Axcel | 24                 | 27.9               | 1.9              | 6.9              | 28                   | 22 - 34             |
| Beckman AU systems              | 28                 | 27.3               | 2.9              | 10.8             | 28                   | 21 - 33             |
| Horiba ABX Pentra 400           | 13                 | 25.5               | 2.9              | 11.5             | 26                   | 20 - 31             |
| Roche Integra                   | 13                 | 25.5               | 1.1              | 4.1              | 26                   | 20 - 31             |
| Siemens Dimension               | 36                 | 27.9               | 2.3              | 8.2              | 29                   | 22 - 34             |
| All Chemistry Instruments       | 150                | 27.0               | 2.7              | 10.1             | 27                   | 21 - 33             |
| ISE Diluted                     |                    |                    |                  |                  |                      |                     |
| All Chemistry Instruments       | 26                 | 26.9               | 2.7              | 10.1             | 27                   | 21 - 33             |
| ISE Undiluted                   |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel | 14                 | 26.5               | 3.3              | 12.3             | 27                   | 21 - 32             |
| All Chemistry Instruments       | 29                 | 27.1               | 3.9              | 14.4             | 28                   | 21 - 33             |
| VITROS                          |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950  | 36                 | 23.4               | 1.8              | 7.7              | 24                   | 18 - 29             |
| All Chemistry Instruments       | 42                 | 23.5               | 1.9              | 8.0              | 24                   | 18 - 29             |

# Potassium (mmol/L)

| <u>Method/Instrument</u>                | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-----------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                         | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 284           | 5.88        | 0.55      | 9.4       | 5.6           | 5.3 - 6.4    | 284           | 4.26        | 0.25      | 5.8       | 4.2           | 3.7 - 4.8    |
| Abaxis Piccolo                          |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 14            | 5.72        | 0.20      | 3.6       | 5.8           | 5.2 - 6.3    | 14            | 4.20        | 0.22      | 5.2       | 4.2           | 3.7 - 4.7    |
| All Chemistry Instruments               | 20            | 5.76        | 0.24      | 4.2       | 5.8           | 5.2 - 6.3    | 20            | 4.30        | 0.29      | 6.6       | 4.3           | 3.7 - 4.8    |
| ISE Diluted                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 29            | 5.33        | 0.08      | 1.5       | 5.3           | 4.8 - 5.9    | 30            | 4.03        | 0.05      | 1.3       | 4.0           | 3.5 - 4.6    |
| Roche Integra                           | 17            | 5.58        | 0.06      | 1.1       | 5.6           | 5.0 - 6.1    | 17            | 4.16        | 0.05      | 1.2       | 4.2           | 3.6 - 4.7    |
| Siemens Dimension QuickLyte - Xpand/EXL | 31            | 5.52        | 0.04      | 0.7       | 5.5           | 5.0 - 6.1    | 32            | 4.11        | 0.04      | 1.1       | 4.1           | 3.6 - 4.7    |
| All Chemistry Instruments               | 122           | 5.46        | 0.13      | 2.3       | 5.5           | 4.9 - 6.0    | 126           | 4.09        | 0.08      | 2.0       | 4.1           | 3.5 - 4.6    |
| ISE Undiluted                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 43            | 6.24        | 0.10      | 1.5       | 6.2           | 5.7 - 6.8    | 42            | 4.42        | 0.08      | 1.9       | 4.4           | 3.9 - 5.0    |
| Horiba ABX Pentra 400                   | 13            | 6.00        | 0.20      | 3.3       | 6.0           | 5.5 - 6.5    | 13            | 4.32        | 0.11      | 2.5       | 4.3           | 3.8 - 4.9    |
| All Chemistry Instruments               | 78            | 5.99        | 0.37      | 6.2       | 6.2           | 5.4 - 6.5    | 78            | 4.31        | 0.17      | 4.0       | 4.3           | 3.8 - 4.9    |
| VITROS                                  |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 38            | 6.92        | 0.13      | 1.9       | 6.9           | 6.4 - 7.5    | 38            | 4.68        | 0.08      | 1.8       | 4.7           | 4.1 - 5.2    |
| All Chemistry Instruments               | 44            | 6.91        | 0.14      | 2.0       | 6.9           | 6.4 - 7.5    | 44            | 4.67        | 0.09      | 1.8       | 4.7           | 4.1 - 5.2    |

  

| <u>Method/Instrument</u>                | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-----------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                         | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 271           | 3.09        | 0.11      | 3.7       | 3.1           | 2.5 - 3.6    | 273           | 5.49        | 0.45      | 8.2       | 5.3           | 4.9 - 6.0    |
| Abaxis Piccolo                          |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 4             | -           | -         | -         | 3.0           | 2.5 - 3.6    | 4             | -           | -         | -         | 5.4           | 4.9 - 6.0    |
| All Chemistry Instruments               | 10            | 3.08        | 0.18      | 5.7       | 3.1           | 2.5 - 3.6    | 10            | 5.47        | 0.18      | 3.2       | 5.5           | 4.9 - 6.0    |
| ISE Diluted                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 30            | 3.03        | 0.05      | 1.8       | 3.0           | 2.5 - 3.6    | 29            | 5.06        | 0.07      | 1.5       | 5.1           | 4.5 - 5.6    |
| Roche Integra                           | 16            | 3.10        | 0.01      | 0.0       | 3.1           | 2.6 - 3.6    | 17            | 5.24        | 0.05      | 1.0       | 5.2           | 4.7 - 5.8    |
| Siemens Dimension QuickLyte - Xpand/EXL | 32            | 3.03        | 0.05      | 1.6       | 3.0           | 2.5 - 3.6    | 31            | 5.19        | 0.05      | 1.0       | 5.2           | 4.6 - 5.7    |
| All Chemistry Instruments               | 128           | 3.04        | 0.07      | 2.3       | 3.0           | 2.5 - 3.6    | 121           | 5.16        | 0.10      | 1.9       | 5.2           | 4.6 - 5.7    |
| ISE Undiluted                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 42            | 3.12        | 0.08      | 2.6       | 3.1           | 2.6 - 3.7    | 41            | 5.74        | 0.07      | 1.2       | 5.7           | 5.2 - 6.3    |
| Horiba ABX Pentra 400                   | 13            | 3.16        | 0.19      | 6.1       | 3.1           | 2.6 - 3.7    | 13            | 5.59        | 0.12      | 2.1       | 5.6           | 5.0 - 6.1    |
| All Chemistry Instruments               | 76            | 3.09        | 0.10      | 3.4       | 3.1           | 2.5 - 3.6    | 78            | 5.57        | 0.27      | 4.9       | 5.7           | 5.0 - 6.1    |
| VITROS                                  |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 38            | 3.25        | 0.06      | 2.0       | 3.2           | 2.7 - 3.8    | 38            | 6.32        | 0.12      | 1.9       | 6.3           | 5.8 - 6.9    |
| All Chemistry Instruments               | 44            | 3.24        | 0.07      | 2.0       | 3.2           | 2.7 - 3.8    | 44            | 6.32        | 0.12      | 1.8       | 6.3           | 5.8 - 6.9    |

**Potassium (mmol/L)****Specimen CH-10**

| <b><u>Method/Instrument</u></b>         | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-----------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                              | 266                | 6.74               | 0.77             | 11.4             | 6.3                  | 6.2 - 7.3           |
| Abaxis Piccolo                          |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                 | 4                  | -                  | -                | -                | 6.5                  | 6.1 - 7.1           |
| All Chemistry Instruments               | 10                 | 6.60               | 0.19             | 2.9              | 6.6                  | 6.1 - 7.1           |
| ISE Diluted                             |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                      | 30                 | 6.02               | 0.11             | 1.9              | 6.0                  | 5.5 - 6.6           |
| Roche Integra                           | 17                 | 6.26               | 0.06             | 1.0              | 6.3                  | 5.7 - 6.8           |
| Siemens Dimension QuickLyte - Xpand/EXL | 32                 | 6.20               | 0.09             | 1.4              | 6.2                  | 5.7 - 6.7           |
| All Chemistry Instruments               | 121                | 6.15               | 0.14             | 2.3              | 6.2                  | 5.6 - 6.7           |
| ISE Undiluted                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel         | 41                 | 7.18               | 0.12             | 1.6              | 7.2                  | 6.6 - 7.7           |
| Horiba ABX Pentra 400                   | 13                 | 6.97               | 0.13             | 1.8              | 7.0                  | 6.4 - 7.5           |
| All Chemistry Instruments               | 71                 | 6.98               | 0.41             | 5.9              | 7.1                  | 6.4 - 7.5           |
| VITROS                                  |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950          | 38                 | 8.14               | 0.17             | 2.1              | 8.2                  | 7.6 - 8.7           |
| All Chemistry Instruments               | 44                 | 8.12               | 0.19             | 2.3              | 8.2                  | 7.6 - 8.7           |

## Sodium (mmol/L)

**Technical tip:** Incomplete or incorrect method reporting is a common cause of proficiency test failure, especially when it comes to the electrolytes. If your test method is "ISE Direct", it should be reported as ISE Undiluted on your MLE test result form (TRF). If your test method is "ISE Indirect", it should be reported as ISE Diluted on your MLE TRF. Be sure to check your package insert for the correct test method, or contact the manufacturer of the instrument or reagent.

| Specimen CH-6                           |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>                | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 255         | 161.6       | 14.6      | 9.1       | 153           | 157 - 166    | 270           | 141.5       | 7.1       | 5.0       | 138           | 137 - 146    |
| Abaxis Piccolo                          |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 14          | 154.5       | 2.8       | 1.8       | 155           | 150 - 159    | 14            | 137.9       | 2.2       | 1.6       | 138           | 133 - 142    |
| All Chemistry Instruments               | 20          | 154.4       | 2.6       | 1.7       | 155           | 150 - 159    | 20            | 137.9       | 2.1       | 1.5       | 138           | 133 - 142    |
| ISE Diluted                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 29          | 146.1       | 2.0       | 1.4       | 146           | 142 - 151    | 28            | 133.5       | 1.1       | 0.8       | 133           | 129 - 138    |
| Roche Integra                           | 16          | 153.2       | 1.4       | 0.9       | 153           | 149 - 158    | 16            | 137.1       | 1.2       | 0.9       | 137           | 133 - 142    |
| Siemens Dimension QuickLyte - Xpand/EXL | 34          | 151.1       | 1.7       | 1.1       | 151           | 147 - 156    | 33            | 137.8       | 1.2       | 0.8       | 138           | 133 - 142    |
| All Chemistry Instruments               | 121         | 149.7       | 2.9       | 1.9       | 150           | 145 - 154    | 120           | 135.9       | 2.0       | 1.5       | 136           | 131 - 140    |
| ISE Undiluted                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 42          | 177.5       | 2.1       | 1.2       | 178           | 173 - 182    | 43            | 147.2       | 1.1       | 0.7       | 147           | 143 - 152    |
| Horiba ABX Pentra 400                   | 12          | 172.9       | 2.5       | 1.4       | 173           | 168 - 177    | 13            | 145.8       | 1.8       | 1.3       | 146           | 141 - 150    |
| All Chemistry Instruments               | 59          | 176.6       | 3.2       | 1.8       | 177           | 172 - 181    | 62            | 146.7       | 1.8       | 1.2       | 147           | 142 - 151    |
| VITROS                                  |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 28          | 184.0       | 3.0       | 1.6       | 184           | 180 - 189    | 38            | 152.4       | 3.7       | 2.4       | 153           | 148 - 157    |
| All Chemistry Instruments               | 34          | 184.1       | 3.1       | 1.7       | 184           | 180 - 189    | 44            | 152.5       | 3.7       | 2.4       | 153           | 148 - 157    |

  

| Specimen CH-8                           |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-----------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u>                | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                              | 270         | 126.3       | 3.0       | 2.4       | 126           | 122 - 131    | 255           | 157.0       | 11.9      | 7.6       | 150           | 153 - 162    |
| Abaxis Piccolo                          |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                 | 4           | -           | -         | -         | 125           | 121 - 130    | 4             | -           | -         | -         | 150           | 145 - 154    |
| All Chemistry Instruments               | 10          | 125.5       | 2.4       | 1.9       | 125           | 121 - 130    | 10            | 149.6       | 2.2       | 1.5       | 150           | 145 - 154    |
| ISE Diluted                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                      | 29          | 122.9       | 1.0       | 0.8       | 123           | 118 - 127    | 28            | 143.9       | 1.5       | 1.0       | 144           | 139 - 148    |
| Roche Integra                           | 16          | 125.1       | 1.4       | 1.1       | 125           | 121 - 130    | 16            | 149.0       | 1.1       | 0.7       | 149           | 145 - 153    |
| Siemens Dimension QuickLyte - Xpand/EXL | 34          | 127.3       | 1.1       | 0.9       | 128           | 123 - 132    | 34            | 148.3       | 1.5       | 1.0       | 148           | 144 - 153    |
| All Chemistry Instruments               | 128         | 125.1       | 2.2       | 1.7       | 125           | 121 - 130    | 120           | 147.0       | 2.3       | 1.6       | 148           | 143 - 152    |
| ISE Undiluted                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel         | 43          | 126.4       | 1.0       | 0.8       | 126           | 122 - 131    | 43            | 167.9       | 1.3       | 0.8       | 168           | 163 - 172    |
| Horiba ABX Pentra 400                   | 13          | 126.7       | 1.4       | 1.1       | 126           | 122 - 131    | 13            | 166.0       | 2.0       | 1.2       | 165           | 162 - 170    |
| All Chemistry Instruments               | 76          | 126.1       | 1.6       | 1.3       | 126           | 122 - 131    | 61            | 167.4       | 2.1       | 1.3       | 168           | 163 - 172    |
| VITROS                                  |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950          | 38          | 131.2       | 2.5       | 1.9       | 132           | 127 - 136    | 34            | 174.7       | 3.6       | 2.1       | 176           | 170 - 179    |
| All Chemistry Instruments               | 44          | 131.5       | 2.7       | 2.0       | 132           | 127 - 136    | 40            | 175.0       | 3.7       | 2.1       | 176           | 170 - 179    |

**Sodium (mmol/L)****Specimen CH-10**

| <b><u>Method/Instrument</u></b>         | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-----------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                              | 244                | 172.5              | 18.6             | 10.8             | 161                  | 168 - 177           |
| Abaxis Piccolo                          |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                 | 4                  | -                  | -                | -                | 163                  | 158 - 167           |
| All Chemistry Instruments               | 10                 | 162.7              | 1.7              | 1.0              | 163                  | 158 - 167           |
| ISE Diluted                             |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                      | 29                 | 153.8              | 2.2              | 1.4              | 154                  | 149 - 158           |
| Roche Integra                           | 16                 | 160.4              | 1.2              | 0.7              | 161                  | 156 - 165           |
| Siemens Dimension QuickLyte - Xpand/EXL | 34                 | 158.2              | 1.6              | 1.0              | 158                  | 154 - 163           |
| All Chemistry Instruments               | 120                | 157.2              | 2.9              | 1.8              | 158                  | 153 - 162           |
| ISE Undiluted                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel         | 41                 | 192.3              | 2.3              | 1.2              | 192                  | 188 - 197           |
| Horiba ABX Pentra 400                   | 13                 | 188.0              | 2.2              | 1.2              | 188                  | 184 - 192           |
| All Chemistry Instruments               | 59                 | 190.9              | 3.4              | 1.8              | 191                  | 186 - 195           |
| VITROS                                  |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950          | 26                 | 201.4              | 3.1              | 1.5              | 201                  | 197 - 206           |
| All Chemistry Instruments               | 32                 | 201.3              | 3.2              | 1.6              | 201                  | 197 - 206           |

### TIBC – Calculated (µg/dL)

| <u>Method/Instrument</u>   | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|----------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                            | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                 | 22             | 371.5       | 125.4     | 33.7      | 419           | 120 - 623    | 22            | 250.3       | 75.9      | 30.3      | 279           | 98 - 403     |
| Calculated TIBC (TRF x CF) |                |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments  | 22             | 371.5       | 125.4     | 33.7      | 419           | 120 - 623    | 22            | 250.3       | 75.9      | 30.3      | 279           | 98 - 403     |
|                            | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|                            | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                 | 20             | 155.8       | 43.4      | 27.9      | 174           | 68 - 243     | 22            | 344.1       | 110.4     | 32.1      | 384           | 123 - 565    |
| Calculated TIBC (TRF x CF) |                |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments  | 20             | 155.8       | 43.4      | 27.9      | 174           | 68 - 243     | 22            | 344.1       | 110.4     | 32.1      | 384           | 123 - 565    |
|                            | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|                            | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                 | 22             | 434.5       | 139.5     | 32.1      | 483           | 155 - 714    |               |             |           |           |               |              |
| Calculated TIBC (TRF x CF) |                |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments  | 22             | 434.5       | 139.5     | 32.1      | 483           | 155 - 714    |               |             |           |           |               |              |

### TIBC – Direct (µg/dL)

| <u>Method/Instrument</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|--------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 29             | 332.2       | 19.1      | 5.8       | 336           | 265 - 399    | 30            | 225.7       | 24.7      | 11.0      | 221           | 176 - 276    |
| Siemens Healthcare       |                |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension        | 18             | 332.4       | 10.6      | 3.2       | 332           | 265 - 399    | 18            | 213.4       | 9.1       | 4.3       | 214           | 170 - 257    |
|                          | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 30             | 146.0       | 33.2      | 22.8      | 132           | 79 - 213     | 28            | 308.3       | 18.2      | 5.9       | 310           | 246 - 370    |
| Siemens Healthcare       |                |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension        | 18             | 122.9       | 7.9       | 6.4       | 124           | 98 - 148     | 18            | 303.3       | 10.3      | 3.4       | 302           | 242 - 364    |
|                          | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 29             | 380.6       | 28.1      | 7.4       | 391           | 304 - 457    |               |             |           |           |               |              |
| Siemens Healthcare       |                |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension        | 18             | 392.2       | 10.5      | 2.7       | 393           | 313 - 471    |               |             |           |           |               |              |

**UIBC – Direct (µg/dL)**

| Specimen CH-6            |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|--------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method/Instrument</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 28          | 242.9       | 13.1      | 5.4       | 245           | 194 - 292    | 28            | 170.1       | 11.4      | 6.7       | 171           | 136 - 205    |
| Beckman AU               |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems       | 15          | 251.7       | 7.6       | 3.0       | 249           | 201 - 303    | 15            | 177.1       | 8.6       | 4.9       | 175           | 141 - 213    |
| Specimen CH-8            |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method               | 28          | 113.7       | 8.6       | 7.5       | 114           | 90 - 137     | 28            | 227.1       | 13.3      | 5.9       | 229           | 181 - 273    |
| Beckman AU               |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems       | 15          | 118.3       | 7.6       | 6.4       | 116           | 94 - 142     | 15            | 236.7       | 7.9       | 3.3       | 235           | 189 - 285    |
| Specimen CH-10           |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method               | 28          | 277.1       | 12.6      | 4.5       | 281           | 221 - 333    |               |             |           |           |               |              |
| Beckman AU               |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems       | 15          | 286.6       | 5.9       | 2.1       | 286           | 229 - 344    |               |             |           |           |               |              |

# ALT (SGPT) (IU/L)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 272         | 134.7       | 44.1      | 32.7      | 115           | 107 - 162    | 272           | 87.7        | 27.7      | 31.5      | 93            | 70 - 106     |
| All Alfa Wassermann Reagents              | 43          | 107.3       | 32.7      | 30.5      | 89            | 85 - 129     | 43            | 73.6        | 22.7      | 30.8      | 85            | 58 - 89      |
| All Horiba Pentra Reagents                | 21          | 157.2       | 49.3      | 31.4      | 121           | 125 - 189    | 21            | 98.6        | 30.1      | 30.5      | 116           | 78 - 119     |
| All Roche Integra/c111/c301/c501 Reagents | 28          | 136.5       | 40.6      | 29.8      | 110           | 109 - 164    | 28            | 82.9        | 28.2      | 34.1      | 95            | 66 - 100     |
| All Vital Diagnostics Reagents            | 18          | 142.0       | 49.9      | 35.1      | 114           | 113 - 171    | 18            | 102.5       | 25.0      | 24.4      | 112           | 82 - 123     |
| Abaxis Piccolo                            |             |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 15          | 118.0       | 33.4      | 28.3      | 102           | 94 - 142     | 15            | 79.8        | 23.2      | 29.1      | 83            | 63 - 96      |
| All Chemistry Instruments                 | 22          | 121.2       | 35.5      | 29.3      | 103           | 96 - 146     | 22            | 85.3        | 21.2      | 24.9      | 91            | 68 - 103     |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34          | 109.0       | 34.1      | 31.3      | 88            | 87 - 131     | 34            | 73.7        | 23.3      | 31.6      | 86            | 58 - 89      |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34          | 125.6       | 38.8      | 30.9      | 101           | 100 - 151    | 34            | 81.1        | 25.2      | 31.1      | 95            | 64 - 98      |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20          | 160.0       | 48.9      | 30.6      | 142           | 128 - 192    | 20            | 98.9        | 30.8      | 31.1      | 117           | 79 - 119     |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19          | 133.2       | 37.6      | 28.2      | 112           | 106 - 160    | 19            | 81.4        | 27.9      | 34.2      | 92            | 65 - 98      |
| Siemens Healthcare ALTi                   |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 38          | 156.7       | 46.5      | 29.7      | 133           | 125 - 188    | 38            | 98.4        | 31.4      | 32.0      | 118           | 78 - 119     |
| Vital Diagnostics                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16          | 147.3       | 50.2      | 34.1      | 118           | 117 - 177    | 16            | 102.3       | 26.4      | 25.8      | 113           | 81 - 123     |
| All Chemistry Instruments                 | 17          | 145.4       | 49.2      | 33.9      | 115           | 116 - 175    | 17            | 102.9       | 25.7      | 25.0      | 113           | 82 - 124     |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36          | 125.8       | 36.5      | 29.0      | 106           | 100 - 151    | 36            | 95.0        | 23.2      | 24.4      | 111           | 76 - 114     |
| All Chemistry Instruments                 | 42          | 129.5       | 37.9      | 29.2      | 106           | 103 - 156    | 42            | 93.6        | 24.0      | 25.7      | 110           | 74 - 113     |

Due to excessive variability of data, ALT is not graded. Published stats are for self-comparison only.

# ALT (SGPT) (IU/L)

| <u>Instrument/Reagent</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 259           | 40.1        | 9.7       | 24.2      | 38            | 32 - 49      | 260           | 152.8       | 35.5      | 23.3      | 162           | 122 - 184    |
| All Alfa Wassermann Reagents              | 43            | 32.1        | 5.3       | 16.7      | 34            | 25 - 39      | 43            | 139.0       | 24.5      | 17.6      | 151           | 111 - 167    |
| All Horiba Pentra Reagents                | 21            | 42.4        | 6.7       | 15.9      | 41            | 33 - 51      | 21            | 168.8       | 34.9      | 20.7      | 188           | 135 - 203    |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 35.3        | 6.1       | 17.4      | 34            | 28 - 43      | 28            | 145.1       | 38.3      | 26.4      | 166           | 116 - 175    |
| All Vital Diagnostics Reagents            | 18            | 41.6        | 10.7      | 25.6      | 41            | 33 - 50      | 18            | 149.6       | 52.1      | 34.8      | 170           | 119 - 180    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 33            | 27 - 42      | 4             | -           | -         | -         | 95            | 86 - 131     |
| All Chemistry Instruments                 | 11            | 38.0        | 7.0       | 18.4      | 35            | 30 - 46      | 11            | 132.5       | 34.8      | 26.2      | 158           | 105 - 159    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34            | 31.7        | 5.8       | 18.2      | 34            | 25 - 39      | 34            | 141.6       | 24.3      | 17.2      | 152           | 113 - 170    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 33.9        | 6.0       | 17.9      | 35            | 27 - 41      | 34            | 140.6       | 31.1      | 22.1      | 158           | 112 - 169    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 42.7        | 6.8       | 16.0      | 42            | 34 - 52      | 20            | 169.5       | 35.7      | 21.1      | 189           | 135 - 204    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 19            | 33.8        | 5.6       | 16.6      | 32            | 27 - 41      | 19            | 136.4       | 38.5      | 28.2      | 132           | 109 - 164    |
| Siemens Healthcare ALTi                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 38            | 43.5        | 7.3       | 16.7      | 44            | 34 - 53      | 38            | 166.8       | 39.3      | 23.5      | 188           | 133 - 201    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16            | 40.1        | 8.2       | 20.5      | 41            | 32 - 49      | 16            | 154.7       | 41.3      | 26.7      | 170           | 123 - 186    |
| All Chemistry Instruments                 | 17            | 39.9        | 8.0       | 20.0      | 39            | 31 - 48      | 17            | 157.4       | 41.5      | 26.4      | 171           | 125 - 189    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 53.9        | 7.8       | 14.5      | 55            | 43 - 65      | 36            | 158.3       | 27.7      | 17.5      | 170           | 126 - 190    |
| All Chemistry Instruments                 | 42            | 53.3        | 7.7       | 14.5      | 54            | 42 - 64      | 42            | 156.5       | 28.3      | 18.1      | 169           | 125 - 188    |

Due to excessive variability of data, ALT is not graded. Published stats are for self-comparison only.

**ALT (SGPT) (IU/L)****Specimen CH-10**

| <b><u>Instrument/Reagent</u></b>          | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 258                | 211.0              | 38.0             | 18.0             | 220                  | 168 - 254           |
| All Alfa Wassermann Reagents              | 41                 | 201.2              | 13.3             | 6.6              | 206                  | 160 - 242           |
| All Horiba Pentra Reagents                | 20                 | 228.5              | 39.3             | 17.2             | 248                  | 182 - 275           |
| All Roche Integra/c111/c301/c501 Reagents | 28                 | 193.0              | 44.1             | 22.8             | 199                  | 154 - 232           |
| All Vital Diagnostics Reagents            | 17                 | 216.4              | 38.5             | 17.8             | 236                  | 173 - 260           |
| Abaxis Piccolo                            |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                   | 4                  | -                  | -                | -                | 173                  | 136 - 205           |
| All Chemistry Instruments                 | 11                 | 177.5              | 45.0             | 25.3             | 212                  | 142 - 214           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 32                 | 201.9              | 12.6             | 6.2              | 206                  | 161 - 243           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 34                 | 206.0              | 31.2             | 15.1             | 221                  | 164 - 248           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 19                 | 227.5              | 40.1             | 17.6             | 249                  | 181 - 273           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 19                 | 181.1              | 42.9             | 23.7             | 174                  | 144 - 218           |
| Siemens Healthcare ALTi                   |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 38                 | 237.0              | 41.3             | 17.4             | 256                  | 189 - 285           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 16                 | 214.2              | 38.7             | 18.1             | 234                  | 171 - 258           |
| All Chemistry Instruments                 | 17                 | 216.4              | 38.5             | 17.8             | 236                  | 173 - 260           |
| VITROS                                    |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 36                 | 211.7              | 28.5             | 13.5             | 222                  | 169 - 255           |
| All Chemistry Instruments                 | 42                 | 210.0              | 27.9             | 13.3             | 222                  | 168 - 253           |

Due to excessive variability of data, ALT is not graded. Published stats are for self-comparison only.

## Alkaline Phosphatase (IU/L)

| <u>Instrument/Reagent</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 279           | 275.0       | 38.8      | 14.1      | 283           | 192 - 358    | 278           | 167.8       | 18.2      | 10.9      | 168           | 117 - 219    |
| All Alfa Wassermann Reagents              | 43            | 285.7       | 20.4      | 7.2       | 290           | 200 - 372    | 43            | 170.9       | 12.1      | 7.1       | 174           | 119 - 223    |
| All Horiba Pentra Reagents                | 21            | 313.6       | 15.8      | 5.0       | 314           | 219 - 408    | 21            | 187.1       | 10.5      | 5.6       | 188           | 130 - 244    |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 287.8       | 9.0       | 3.1       | 286           | 201 - 375    | 27            | 171.1       | 5.6       | 3.3       | 171           | 119 - 223    |
| All Vital Diagnostics Reagents            | 17            | 262.4       | 9.5       | 3.6       | 263           | 183 - 342    | 17            | 158.6       | 7.6       | 4.8       | 160           | 111 - 207    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 15            | 208.2       | 6.2       | 3.0       | 207           | 145 - 271    | 15            | 132.9       | 4.4       | 3.3       | 133           | 93 - 173     |
| All Chemistry Instruments                 | 22            | 207.7       | 6.8       | 3.3       | 207           | 145 - 271    | 22            | 132.5       | 4.1       | 3.1       | 133           | 92 - 173     |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34            | 286.5       | 22.0      | 7.7       | 290           | 200 - 373    | 34            | 171.1       | 12.8      | 7.5       | 175           | 119 - 223    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 31            | 275.6       | 17.3      | 6.3       | 273           | 192 - 359    | 31            | 161.9       | 10.2      | 6.3       | 159           | 113 - 211    |
| All Chemistry Instruments                 | 32            | 275.3       | 17.2      | 6.2       | 273           | 192 - 358    | 32            | 161.7       | 10.1      | 6.3       | 159           | 113 - 211    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 311.9       | 13.9      | 4.5       | 311           | 218 - 406    | 20            | 186.9       | 10.7      | 5.7       | 187           | 130 - 243    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 288.4       | 10.1      | 3.5       | 285           | 201 - 375    | 18            | 171.8       | 6.3       | 3.7       | 171           | 120 - 224    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 13            | 319.8       | 10.6      | 3.3       | 323           | 223 - 416    | 13            | 188.3       | 6.2       | 3.3       | 188           | 131 - 245    |
| Siemens Healthcare ALPi                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 35            | 319.2       | 10.6      | 3.3       | 319           | 223 - 415    | 34            | 188.0       | 5.7       | 3.0       | 187           | 131 - 245    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16            | 263.0       | 9.4       | 3.6       | 264           | 184 - 342    | 16            | 158.6       | 7.9       | 5.0       | 159           | 110 - 207    |
| All Chemistry Instruments                 | 17            | 262.4       | 9.5       | 3.6       | 263           | 183 - 342    | 17            | 158.6       | 7.6       | 4.8       | 160           | 111 - 207    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 230.2       | 11.8      | 5.1       | 229           | 161 - 300    | 36            | 160.1       | 6.7       | 4.2       | 160           | 112 - 209    |
| All Chemistry Instruments                 | 42            | 229.3       | 11.9      | 5.2       | 229           | 160 - 299    | 42            | 159.2       | 7.1       | 4.5       | 159           | 111 - 207    |

## Alkaline Phosphatase (IU/L)

| <u>Instrument/Reagent</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 265           | 75.0        | 6.8       | 9.1       | 75            | 52 - 98      | 266           | 256.7       | 31.7      | 12.4      | 260           | 179 - 334    |
| All Alfa Wassermann Reagents              | 43            | 74.9        | 5.6       | 7.5       | 75            | 52 - 98      | 43            | 261.7       | 18.8      | 7.2       | 265           | 183 - 341    |
| All Horiba Pentra Reagents                | 21            | 81.4        | 7.7       | 9.5       | 82            | 56 - 106     | 21            | 288.4       | 13.7      | 4.7       | 290           | 201 - 375    |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 74.2        | 2.5       | 3.3       | 74            | 51 - 97      | 27            | 264.5       | 8.5       | 3.2       | 261           | 185 - 344    |
| All Vital Diagnostics Reagents            | 17            | 70.9        | 2.5       | 3.6       | 70            | 49 - 93      | 17            | 240.1       | 10.3      | 4.3       | 240           | 168 - 313    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 63            | 43 - 82      | 4             | -           | -         | -         | 198           | 134 - 251    |
| All Chemistry Instruments                 | 11            | 62.5        | 3.2       | 5.2       | 64            | 43 - 82      | 11            | 192.7       | 4.9       | 2.5       | 194           | 134 - 251    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34            | 75.0        | 6.0       | 8.1       | 76            | 52 - 98      | 34            | 262.7       | 20.4      | 7.8       | 266           | 183 - 342    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 31            | 70.4        | 4.5       | 6.4       | 70            | 49 - 92      | 32            | 254.0       | 20.6      | 8.1       | 250           | 177 - 331    |
| All Chemistry Instruments                 | 32            | 70.4        | 4.4       | 6.2       | 70            | 49 - 92      | 33            | 253.5       | 20.4      | 8.1       | 248           | 177 - 330    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 81.1        | 7.8       | 9.6       | 82            | 56 - 106     | 20            | 287.2       | 12.8      | 4.5       | 288           | 201 - 374    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 74.5        | 2.7       | 3.6       | 74            | 52 - 97      | 18            | 265.9       | 9.5       | 3.6       | 261           | 186 - 346    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 13            | 80.9        | 3.7       | 4.6       | 80            | 56 - 106     | 13            | 291.8       | 9.7       | 3.3       | 289           | 204 - 380    |
| Siemens Healthcare ALPi                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 35            | 81.7        | 4.1       | 5.0       | 81            | 57 - 107     | 35            | 294.6       | 9.8       | 3.3       | 294           | 206 - 384    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16            | 71.0        | 2.6       | 3.7       | 70            | 49 - 93      | 16            | 240.2       | 10.6      | 4.4       | 240           | 168 - 313    |
| All Chemistry Instruments                 | 17            | 70.9        | 2.5       | 3.6       | 70            | 49 - 93      | 17            | 240.1       | 10.3      | 4.3       | 240           | 168 - 313    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 76.4        | 3.8       | 5.0       | 76            | 53 - 100     | 36            | 219.8       | 11.5      | 5.2       | 219           | 153 - 286    |
| All Chemistry Instruments                 | 42            | 75.9        | 4.0       | 5.3       | 75            | 53 - 99      | 42            | 219.5       | 11.1      | 5.0       | 218           | 153 - 286    |

## Alkaline Phosphatase (IU/L)

### Specimen CH-10

| <u><b>Instrument/Reagent</b></u>          | <u><b>Labs</b></u> | <u><b>Mean</b></u> | <u><b>SD</b></u> | <u><b>CV</b></u> | <u><b>Median</b></u> | <u><b>Range</b></u> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 267                | 328.9              | 49.2             | 15.0             | 340                  | 230 - 428           |
| All Alfa Wassermann Reagents              | 43                 | 340.0              | 23.6             | 6.9              | 344                  | 238 - 443           |
| All Horiba Pentra Reagents                | 20                 | 375.7              | 17.6             | 4.7              | 373                  | 262 - 489           |
| All Roche Integra/c111/c301/c501 Reagents | 27                 | 345.5              | 10.3             | 3.0              | 344                  | 241 - 450           |
| All Vital Diagnostics Reagents            | 18                 | 308.8              | 25.6             | 8.3              | 311                  | 216 - 402           |
| Abaxis Piccolo                            |                    |                    |                  |                  |                      |                     |
| Abaxis Piccolo - waived                   | 4                  | -                  | -                | -                | 244                  | 169 - 315           |
| All Chemistry Instruments                 | 11                 | 241.7              | 6.1              | 2.5              | 244                  | 169 - 315           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 34                 | 341.1              | 25.3             | 7.4              | 347                  | 238 - 444           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 32                 | 331.7              | 26.5             | 8.0              | 329                  | 232 - 432           |
| All Chemistry Instruments                 | 33                 | 331.3              | 26.2             | 7.9              | 329                  | 231 - 431           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 19                 | 374.1              | 16.5             | 4.4              | 372                  | 261 - 487           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 18                 | 346.1              | 11.2             | 3.2              | 344                  | 242 - 450           |
| Siemens Healthcare                        |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 13                 | 383.8              | 10.4             | 2.7              | 381                  | 268 - 500           |
| Siemens Healthcare ALPi                   |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 34                 | 382.9              | 8.4              | 2.2              | 383                  | 268 - 498           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 16                 | 312.6              | 23.2             | 7.4              | 314                  | 218 - 407           |
| All Chemistry Instruments                 | 17                 | 311.8              | 22.7             | 7.3              | 312                  | 218 - 406           |
| VITROS                                    |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 36                 | 255.9              | 14.1             | 5.5              | 255                  | 179 - 333           |
| All Chemistry Instruments                 | 42                 | 255.3              | 13.6             | 5.3              | 255                  | 178 - 332           |

**AST (SGOT) (IU/L)**

| <u>Instrument/Reagent</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 231           | 155.0       | 26.8      | 17.3      | 164           | 124 - 187    | 228           | 104.6       | 10.9      | 10.4      | 108           | 83 - 126     |
| All Alfa Wassermann Reagents              | 43            | 136.7       | 20.9      | 15.3      | 125           | 109 - 165    | 42            | 96.8        | 6.8       | 7.0       | 97            | 77 - 117     |
| All Horiba Pentra Reagents                | 21            | 157.8       | 23.8      | 15.1      | 158           | 126 - 190    | 21            | 107.6       | 8.6       | 8.0       | 110           | 86 - 130     |
| All Roche Integra/c111/c301/c501 Reagents | 27            | 156.3       | 23.1      | 14.8      | 150           | 125 - 188    | 27            | 104.0       | 8.7       | 8.4       | 105           | 83 - 125     |
| All Vital Diagnostics Reagents            | 18            | 162.4       | 30.1      | 18.5      | 149           | 129 - 195    | 18            | 112.9       | 12.1      | 10.7      | 113           | 90 - 136     |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 15            | 145.7       | 19.7      | 13.5      | 137           | 116 - 175    | 15            | 103.5       | 6.5       | 6.3       | 106           | 82 - 125     |
| All Chemistry Instruments                 | 22            | 146.5       | 20.5      | 14.0      | 138           | 117 - 176    | 22            | 104.6       | 5.6       | 5.3       | 107           | 83 - 126     |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 34            | 138.4       | 21.8      | 15.8      | 128           | 110 - 167    | 34            | 96.7        | 7.1       | 7.4       | 97            | 77 - 117     |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 138.0       | 20.3      | 14.7      | 131           | 110 - 166    | 34            | 94.3        | 7.7       | 8.1       | 96            | 75 - 114     |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 158.9       | 23.8      | 15.0      | 167           | 127 - 191    | 20            | 107.4       | 8.8       | 8.2       | 110           | 85 - 129     |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 155.2       | 23.1      | 14.9      | 153           | 124 - 187    | 18            | 102.8       | 8.3       | 8.1       | 105           | 82 - 124     |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 48            | 203.2       | 13.2      | 6.5       | 204           | 162 - 244    | 47            | 118.9       | 5.7       | 4.8       | 119           | 95 - 143     |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16            | 165.6       | 30.4      | 18.4      | 158           | 132 - 199    | 16            | 113.9       | 12.4      | 10.9      | 115           | 91 - 137     |
| All Chemistry Instruments                 | 17            | 163.8       | 30.4      | 18.6      | 152           | 131 - 197    | 17            | 113.6       | 12.1      | 10.7      | 114           | 90 - 137     |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 176.3       | 19.9      | 11.3      | 170           | 141 - 212    | 36            | 117.4       | 4.9       | 4.1       | 117           | 93 - 141     |
| All Chemistry Instruments                 | 42            | 178.7       | 20.4      | 11.4      | 171           | 142 - 215    | 42            | 117.4       | 5.0       | 4.2       | 117           | 93 - 141     |

**AST (SGOT) (IU/L)**

| <u>Instrument/Reagent</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 218           | 45.7        | 4.5       | 9.8       | 47            | 36 - 55      | 218           | 160.1       | 17.3      | 10.8      | 164           | 128 - 193    |
| All Alfa Wassermann Reagents              | 42            | 40.5        | 2.3       | 5.7       | 40            | 32 - 49      | 40            | 151.5       | 6.1       | 4.0       | 151           | 121 - 182    |
| All Horiba Pentra Reagents                | 21            | 47.1        | 2.1       | 4.4       | 47            | 37 - 57      | 21            | 161.3       | 9.8       | 6.1       | 164           | 129 - 194    |
| All Roche Integra/c111/c301/c501 Reagents | 26            | 46.3        | 1.8       | 3.8       | 47            | 37 - 56      | 27            | 158.6       | 14.7      | 9.3       | 161           | 126 - 191    |
| All Vital Diagnostics Reagents            | 17            | 48.2        | 2.5       | 5.2       | 48            | 38 - 58      | 18            | 166.4       | 18.1      | 10.9      | 170           | 133 - 200    |
| Abaxis Piccolo                            |               |             |           |           |               |              |               |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4             | -           | -         | -         | 48            | 38 - 58      | 4             | -           | -         | -         | 153           | 121 - 183    |
| All Chemistry Instruments                 | 11            | 48.0        | 2.0       | 4.3       | 48            | 38 - 58      | 11            | 152.3       | 9.9       | 6.5       | 155           | 121 - 183    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 33            | 40.3        | 2.4       | 5.9       | 40            | 32 - 49      | 34            | 149.7       | 11.1      | 7.4       | 151           | 119 - 180    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 34            | 41.4        | 1.6       | 3.9       | 42            | 33 - 50      | 34            | 144.9       | 11.6      | 8.0       | 146           | 115 - 174    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 20            | 47.2        | 2.1       | 4.5       | 47            | 37 - 57      | 20            | 160.4       | 9.1       | 5.7       | 164           | 128 - 193    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 18            | 45.8        | 1.7       | 3.7       | 47            | 36 - 55      | 18            | 154.6       | 15.3      | 9.9       | 159           | 123 - 186    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 45            | 49.9        | 2.0       | 4.0       | 50            | 39 - 60      | 47            | 191.2       | 7.1       | 3.7       | 192           | 152 - 230    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 15            | 48.7        | 2.2       | 4.4       | 48            | 38 - 59      | 16            | 166.6       | 18.9      | 11.4      | 170           | 133 - 200    |
| All Chemistry Instruments                 | 16            | 48.5        | 2.2       | 4.5       | 48            | 38 - 59      | 17            | 167.1       | 18.4      | 11.0      | 171           | 133 - 201    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 36            | 50.9        | 1.5       | 3.0       | 51            | 40 - 62      | 36            | 182.8       | 8.6       | 4.7       | 183           | 146 - 220    |
| All Chemistry Instruments                 | 42            | 50.9        | 1.6       | 3.1       | 51            | 40 - 62      | 41            | 183.9       | 8.9       | 4.8       | 184           | 147 - 221    |

# AST (SGOT) (IU/L)

## Specimen CH-10

| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 218         | 206.8       | 25.7      | 12.4      | 211           | 165 - 249    |
| All Alfa Wassermann Reagents              | 40          | 195.5       | 5.0       | 2.6       | 194           | 156 - 235    |
| All Horiba Pentra Reagents                | 20          | 206.8       | 18.1      | 8.8       | 210           | 165 - 249    |
| All Roche Integra/c111/c301/c501 Reagents | 27          | 197.4       | 25.2      | 12.8      | 205           | 157 - 237    |
| All Vital Diagnostics Reagents            | 18          | 209.8       | 22.0      | 10.5      | 216           | 167 - 252    |
| Abaxis Piccolo                            |             |             |           |           |               |              |
| Abaxis Piccolo - waived                   | 4           | -           | -         | -         | 186           | 149 - 224    |
| All Chemistry Instruments                 | 11          | 186.5       | 25.1      | 13.5      | 201           | 149 - 224    |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 32          | 195.2       | 6.1       | 3.1       | 194           | 156 - 235    |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 32          | 190.3       | 8.5       | 4.5       | 191           | 152 - 229    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 19          | 206.2       | 18.4      | 8.9       | 209           | 164 - 248    |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 18          | 189.4       | 26.0      | 13.7      | 199           | 151 - 228    |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 48          | 256.4       | 15.5      | 6.0       | 260           | 205 - 308    |
| Vital Diagnostics                         |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 16          | 209.9       | 23.4      | 11.1      | 219           | 167 - 252    |
| All Chemistry Instruments                 | 17          | 210.1       | 22.7      | 10.8      | 217           | 168 - 253    |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 33          | 246.2       | 9.4       | 3.8       | 248           | 196 - 296    |
| All Chemistry Instruments                 | 39          | 246.6       | 9.2       | 3.7       | 247           | 197 - 296    |

## Creatine Kinase (IU/L)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 119         | 297.1       | 25.2      | 8.5       | 301           | 207 - 387    | 119           | 166.6       | 11.7      | 7.0       | 171           | 116 - 217    |
| All Alfa Wassermann Reagents              | 17          | 289.1       | 11.1      | 3.9       | 293           | 202 - 376    | 17            | 165.9       | 5.8       | 3.5       | 168           | 116 - 216    |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 320.2       | 17.1      | 5.3       | 318           | 224 - 417    | 11            | 177.6       | 10.3      | 5.8       | 177           | 124 - 231    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 12          | 287.6       | 11.0      | 3.8       | 292           | 201 - 374    | 12            | 165.9       | 5.4       | 3.2       | 168           | 116 - 216    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 21          | 278.7       | 9.0       | 3.2       | 279           | 195 - 363    | 21            | 151.8       | 6.3       | 4.2       | 153           | 106 - 198    |
| Siemens Healthcare CKI                    |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 21          | 318.7       | 6.0       | 1.9       | 320           | 223 - 415    | 21            | 174.0       | 3.2       | 1.8       | 174           | 121 - 227    |
| All Chemistry Instruments                 | 22          | 318.5       | 5.9       | 1.9       | 320           | 222 - 414    | 22            | 174.2       | 3.2       | 1.8       | 174           | 121 - 227    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 14          | 264.1       | 17.4      | 6.6       | 264           | 184 - 344    | 14            | 163.1       | 12.7      | 7.8       | 164           | 114 - 213    |
| All Chemistry Instruments                 | 17          | 262.1       | 16.5      | 6.3       | 261           | 183 - 341    | 17            | 162.9       | 12.0      | 7.4       | 163           | 114 - 212    |

  

| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 119         | 61.1        | 5.2       | 8.4       | 62            | 42 - 80      | 118           | 269.8       | 20.5      | 7.6       | 271           | 188 - 351    |
| All Alfa Wassermann Reagents              | 17          | 65.5        | 4.4       | 6.7       | 66            | 45 - 86      | 17            | 263.5       | 9.4       | 3.6       | 265           | 184 - 343    |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 64.8        | 3.7       | 5.8       | 65            | 45 - 85      | 11            | 287.1       | 13.6      | 4.8       | 286           | 200 - 374    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 12          | 65.9        | 4.0       | 6.0       | 66            | 46 - 86      | 12            | 263.4       | 11.0      | 4.2       | 265           | 184 - 343    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 21          | 54.0        | 2.3       | 4.3       | 54            | 37 - 71      | 21            | 252.4       | 8.2       | 3.2       | 252           | 176 - 329    |
| Siemens Healthcare CKI                    |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 21          | 62.2        | 2.2       | 3.6       | 62            | 43 - 81      | 21            | 288.3       | 7.4       | 2.6       | 287           | 201 - 375    |
| All Chemistry Instruments                 | 22          | 62.2        | 2.2       | 3.5       | 62            | 43 - 81      | 22            | 288.2       | 7.3       | 2.5       | 287           | 201 - 375    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 14          | 61.3        | 5.4       | 8.8       | 60            | 42 - 80      | 14            | 248.4       | 18.5      | 7.4       | 250           | 173 - 323    |
| All Chemistry Instruments                 | 17          | 61.2        | 5.2       | 8.5       | 60            | 42 - 80      | 17            | 248.5       | 18.2      | 7.3       | 250           | 173 - 324    |

## Creatine Kinase (IU/L)

### Specimen CH-10

| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 119         | 357.9       | 33.2      | 9.3       | 362           | 250 - 466    |
| All Alfa Wassermann Reagents              | 17          | 350.2       | 11.7      | 3.4       | 352           | 245 - 456    |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 385.1       | 24.3      | 6.3       | 384           | 269 - 501    |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 12          | 351.9       | 11.7      | 3.3       | 356           | 246 - 458    |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 21          | 339.2       | 11.2      | 3.3       | 340           | 237 - 442    |
| Siemens Healthcare CKI                    |             |             |           |           |               |              |
| Siemens Dimension                         | 21          | 388.1       | 9.0       | 2.3       | 388           | 271 - 505    |
| All Chemistry Instruments                 | 22          | 388.1       | 8.8       | 2.3       | 388           | 271 - 505    |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 14          | 308.0       | 19.1      | 6.2       | 308           | 215 - 401    |
| All Chemistry Instruments                 | 17          | 307.4       | 19.1      | 6.2       | 307           | 215 - 400    |

# GGT (IU/L)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 76          | 150.2       | 29.2      | 19.4      | 141           | 91 - 209     | 76            | 90.9        | 20.7      | 22.8      | 86            | 49 - 133     |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 134.1       | 3.4       | 2.5       | 133           | 107 - 161    | 11            | 78.4        | 1.9       | 2.4       | 78            | 62 - 95      |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 14          | 121.4       | 4.4       | 3.6       | 121           | 97 - 146     | 14            | 71.1        | 2.6       | 3.7       | 71            | 56 - 86      |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 13          | 177.5       | 5.0       | 2.8       | 178           | 141 - 213    | 13            | 107.8       | 2.7       | 2.5       | 107           | 86 - 130     |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments                 | 10          | 200.2       | 5.1       | 2.6       | 199           | 160 - 241    | 10            | 130.8       | 2.7       | 2.1       | 130           | 104 - 157    |
| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                                | 73          | 42.0        | 10.7      | 25.6      | 38            | 20 - 64      | 73            | 138.8       | 29.8      | 21.5      | 130           | 79 - 199     |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 34.4        | 1.2       | 3.5       | 34            | 27 - 42      | 11            | 121.5       | 2.5       | 2.1       | 121           | 97 - 146     |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 14          | 31.4        | 1.3       | 4.3       | 32            | 25 - 38      | 14            | 110.6       | 3.4       | 3.1       | 110           | 88 - 133     |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 13          | 52.2        | 2.3       | 4.4       | 52            | 41 - 63      | 13            | 162.9       | 3.8       | 2.4       | 163           | 130 - 196    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments                 | 10          | 61.0        | 1.8       | 3.0       | 61            | 48 - 74      | 10            | 187.4       | 4.6       | 2.4       | 186           | 149 - 225    |
| Specimen CH-10                            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                                | 73          | 178.6       | 32.7      | 18.3      | 170           | 113 - 245    |               |             |           |           |               |              |
| All Roche Integra/c111/c301/c501 Reagents | 11          | 160.1       | 3.9       | 2.4       | 159           | 128 - 193    |               |             |           |           |               |              |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 14          | 146.4       | 4.6       | 3.1       | 146           | 117 - 176    |               |             |           |           |               |              |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 13          | 212.2       | 5.5       | 2.6       | 213           | 169 - 255    |               |             |           |           |               |              |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments                 | 10          | 229.7       | 6.2       | 2.7       | 228           | 183 - 276    |               |             |           |           |               |              |

## Amylase (IU/L)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 89          | 125.8       | 31.3      | 24.9      | 138           | 88 - 164     | 90            | 73.2        | 20.2      | 27.6      | 81            | 51 - 96      |
| All Roche Integra/c111/c301/c501 Reagents | 10          | 139.2       | 3.4       | 2.4       | 140           | 97 - 181     | 10            | 81.0        | 1.4       | 1.7       | 81            | 56 - 106     |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 17          | 110.5       | 6.9       | 6.2       | 109           | 77 - 144     | 17            | 64.8        | 4.5       | 6.9       | 65            | 45 - 85      |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 16          | 151.4       | 2.9       | 1.9       | 152           | 106 - 197    | 16            | 88.9        | 2.4       | 2.7       | 89            | 62 - 116     |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 14          | 69.8        | 5.9       | 8.5       | 71            | 48 - 91      | 14            | 39.4        | 6.0       | 15.2      | 39            | 27 - 52      |
| All Chemistry Instruments                 | 16          | 70.1        | 5.9       | 8.4       | 71            | 49 - 92      | 16            | 39.2        | 5.9       | 15.0      | 39            | 27 - 51      |
| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                                | 84          | 35.7        | 5.6       | 15.7      | 37            | 24 - 47      | 87            | 115.5       | 29.4      | 25.5      | 127           | 80 - 151     |
| All Roche Integra/c111/c301/c501 Reagents | 10          | 37.1        | 1.2       | 3.2       | 37            | 25 - 49      | 10            | 126.5       | 2.8       | 2.2       | 126           | 88 - 165     |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 17          | 28.7        | 2.0       | 6.9       | 29            | 20 - 38      | 17            | 101.1       | 6.5       | 6.4       | 100           | 70 - 132     |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 16          | 39.8        | 1.2       | 3.0       | 40            | 27 - 52      | 16            | 137.8       | 2.4       | 1.8       | 138           | 96 - 180     |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 13          | 30.0        | 0.1       | 0.0       | 30            | 21 - 39      | 14            | 64.2        | 5.2       | 8.2       | 65            | 44 - 84      |
| All Chemistry Instruments                 | 14          | 30.0        | 0.1       | 0.0       | 30            | 21 - 39      | 16            | 64.8        | 5.6       | 8.7       | 65            | 45 - 85      |
| Specimen CH-10                            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                                | 86          | 152.6       | 37.3      | 24.5      | 168           | 106 - 199    |               |             |           |           |               |              |
| All Roche Integra/c111/c301/c501 Reagents | 10          | 167.3       | 4.3       | 2.6       | 166           | 117 - 218    |               |             |           |           |               |              |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 17          | 133.7       | 7.6       | 5.7       | 133           | 93 - 174     |               |             |           |           |               |              |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 16          | 181.8       | 3.8       | 2.1       | 182           | 127 - 237    |               |             |           |           |               |              |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 14          | 87.9        | 4.2       | 4.8       | 89            | 61 - 115     |               |             |           |           |               |              |
| All Chemistry Instruments                 | 16          | 88.1        | 4.5       | 5.1       | 89            | 61 - 115     |               |             |           |           |               |              |

## Lactate Dehydrogenase (IU/L)

| <u>Instrument/Reagent</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 73            | 340.4       | 104.6     | 30.7      | 396           | 272 - 409    | 74            | 231.3       | 34.5      | 14.9      | 243           | 185 - 278    |
| All Alfa Wassermann Reagents              | 9             | 197.7       | 63.2      | 32.0      | 174           | 158 - 238    | 9             | 182.8       | 14.6      | 8.0       | 188           | 146 - 220    |
| All Horiba Pentra Reagents                | 8             | 365.5       | 124.1     | 34.0      | 437           | 292 - 439    | 8             | 256.3       | 24.7      | 9.6       | 257           | 205 - 308    |
| All Roche Integra/c111/c301/c501 Reagents | 15            | 360.8       | 81.4      | 22.6      | 369           | 288 - 433    | 15            | 261.9       | 22.8      | 8.7       | 274           | 209 - 315    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 9             | 197.7       | 63.2      | 32.0      | 174           | 158 - 238    | 9             | 182.8       | 14.6      | 8.0       | 188           | 146 - 220    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 17            | 314.2       | 95.7      | 30.5      | 364           | 251 - 378    | 17            | 221.6       | 19.3      | 8.7       | 224           | 177 - 266    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 7             | 391.7       | 107.5     | 27.4      | 439           | 313 - 471    | 7             | 262.1       | 19.7      | 7.5       | 261           | 209 - 315    |
| Roche cobas c 501                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche cobas 6000 / c 501                  | 5             | 365.8       | 103.3     | 28.2      | 395           | 292 - 439    | 5             | 263.0       | 29.1      | 11.1      | 275           | 210 - 316    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 9             | 371.2       | 66.0      | 17.8      | 369           | 296 - 446    | 9             | 260.3       | 21.7      | 8.3       | 274           | 208 - 313    |
| Siemens Healthcare LDI                    |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 6             | 421.7       | 18.8      | 4.5       | 422           | 337 - 507    | 7             | 221.3       | 37.2      | 16.8      | 228           | 177 - 266    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 8             | 1064.9      | 350.0     | 32.9      | 909           | 851 - 1278   | 8             | 881.3       | 40.5      | 4.6       | 891           | 705 - 1058   |
| All Chemistry Instruments                 | 12            | 1080.3      | 359.8     | 33.3      | 909           | 864 - 1297   | 12            | 863.7       | 60.2      | 7.0       | 879           | 690 - 1037   |
| <u>Instrument/Reagent</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 74            | 105.2       | 11.2      | 10.7      | 108           | 84 - 127     | 73            | 366.8       | 47.0      | 12.8      | 383           | 293 - 441    |
| All Alfa Wassermann Reagents              | 9             | 89.2        | 4.8       | 5.3       | 89            | 71 - 108     | 9             | 295.0       | 13.7      | 4.6       | 294           | 236 - 354    |
| All Horiba Pentra Reagents                | 8             | 117.5       | 11.0      | 9.4       | 119           | 94 - 141     | 8             | 403.8       | 31.2      | 7.7       | 399           | 323 - 485    |
| All Roche Integra/c111/c301/c501 Reagents | 15            | 114.9       | 5.8       | 5.0       | 114           | 91 - 138     | 13            | 407.9       | 17.4      | 4.3       | 407           | 326 - 490    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 9             | 89.2        | 4.8       | 5.3       | 89            | 71 - 108     | 9             | 295.0       | 13.7      | 4.6       | 294           | 236 - 354    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 17            | 97.4        | 5.5       | 5.7       | 98            | 77 - 117     | 17            | 346.2       | 17.0      | 4.9       | 346           | 276 - 416    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 7             | 119.9       | 9.4       | 7.9       | 119           | 95 - 144     | 7             | 411.4       | 24.2      | 5.9       | 400           | 329 - 494    |
| Roche cobas c 501                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche cobas 6000 / c 501                  | 5             | 114.0       | 7.8       | 6.8       | 113           | 91 - 137     | 5             | 412.2       | 22.2      | 5.4       | 401           | 329 - 495    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 9             | 115.8       | 5.0       | 4.3       | 115           | 92 - 139     | 8             | 393.5       | 43.8      | 11.1      | 411           | 314 - 473    |
| Siemens Healthcare LDI                    |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 7             | 105.6       | 4.9       | 4.6       | 106           | 84 - 127     | 7             | 366.3       | 57.8      | 15.8      | 391           | 293 - 440    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 8             | 385.5       | 14.5      | 3.8       | 386           | 308 - 463    | 8             | 1341.1      | 66.1      | 4.9       | 1364          | 1072 - 1610  |
| All Chemistry Instruments                 | 12            | 388.7       | 13.9      | 3.6       | 387           | 310 - 467    | 12            | 1320.3      | 86.1      | 6.5       | 1352          | 1056 - 1585  |

## Lactate Dehydrogenase (IU/L)

### Specimen CH-10

|                                           |    |        |      |      |      |             |
|-------------------------------------------|----|--------|------|------|------|-------------|
| All Method                                | 72 | 482.8  | 60.9 | 12.6 | 507  | 386 - 580   |
| All Alfa Wassermann Reagents              | 9  | 378.9  | 33.8 | 8.9  | 392  | 303 - 455   |
| All Horiba Pentra Reagents                | 7  | 521.6  | 28.0 | 5.4  | 510  | 417 - 626   |
| All Roche Integra/c111/c301/c501 Reagents | 15 | 508.3  | 51.4 | 10.1 | 522  | 406 - 610   |
| Alfa Wassermann                           |    |        |      |      |      |             |
| Alfa Wassermann ACE Alera/Axcel           | 9  | 378.9  | 33.8 | 8.9  | 392  | 303 - 455   |
| Beckman AU                                |    |        |      |      |      |             |
| Beckman AU systems                        | 17 | 468.1  | 19.5 | 4.2  | 468  | 374 - 562   |
| Horiba ABX Pentra                         |    |        |      |      |      |             |
| Horiba ABX Pentra 400                     | 6  | 527.2  | 26.0 | 4.9  | 525  | 421 - 633   |
| Roche cobas c 501                         |    |        |      |      |      |             |
| Roche cobas 6000 / c 501                  | 5  | 535.8  | 27.0 | 5.0  | 522  | 428 - 643   |
| Roche Integra                             |    |        |      |      |      |             |
| Roche Integra                             | 9  | 491.1  | 58.5 | 11.9 | 495  | 392 - 590   |
| Siemens Healthcare LDI                    |    |        |      |      |      |             |
| Siemens Dimension                         | 7  | 552.4  | 88.9 | 16.1 | 528  | 441 - 663   |
| VITROS                                    |    |        |      |      |      |             |
| VITROS 250,350,500,700,750,950            | 8  | 1815.3 | 68.9 | 3.8  | 1801 | 1452 - 2179 |
| All Chemistry Instruments                 | 12 | 1792.8 | 71.6 | 4.0  | 1787 | 1434 - 2152 |

## Lipase (IU/L)

| Specimen CH-6                             |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Instrument/Reagent</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 28          | 49.3        | 4.0       | 8.0       | 52            | 34 - 65      | 29            | 32.4        | 3.8       | 11.8      | 35            | 22 - 43      |
| All Roche Integra/c111/c301/c501 Reagents | 7           | 48.9        | 2.2       | 4.5       | 49            | 34 - 64      | 7             | 33.3        | 1.6       | 4.8       | 33            | 23 - 44      |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 10          | 48.6        | 1.6       | 3.2       | 49            | 34 - 64      | 10            | 30.4        | 2.1       | 6.8       | 30            | 21 - 40      |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 11          | 213.1       | 6.4       | 3.0       | 212           | 149 - 278    | 11            | 143.5       | 3.5       | 2.5       | 142           | 100 - 187    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 7           | 556.0       | 21.3      | 3.8       | 553           | 389 - 723    | 7             | 393.6       | 19.1      | 4.9       | 394           | 275 - 512    |
| All Chemistry Instruments                 | 9           | 549.3       | 23.9      | 4.4       | 549           | 384 - 715    | 9             | 388.7       | 20.4      | 5.2       | 386           | 272 - 506    |
| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                                | 28          | 19.2        | 4.8       | 24.8      | 22            | 13 - 25      | 29            | 45.2        | 4.8       | 10.7      | 49            | 31 - 59      |
| All Roche Integra/c111/c301/c501 Reagents | 7           | 20.0        | 1.3       | 6.5       | 20            | 14 - 26      | 7             | 45.9        | 1.9       | 4.1       | 46            | 32 - 60      |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 10          | 17.0        | 2.4       | 14.1      | 17            | 11 - 23      | 10            | 44.0        | 2.1       | 4.8       | 44            | 30 - 58      |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 11          | 86.7        | 3.8       | 4.4       | 86            | 60 - 113     | 11            | 196.9       | 5.3       | 2.7       | 198           | 137 - 256    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 7           | 221.3       | 11.5      | 5.2       | 217           | 154 - 288    | 7             | 525.1       | 23.1      | 4.4       | 529           | 367 - 683    |
| All Chemistry Instruments                 | 9           | 218.1       | 12.8      | 5.9       | 217           | 152 - 284    | 9             | 520.3       | 24.2      | 4.6       | 523           | 364 - 677    |
| Specimen CH-10                            |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                                | 29          | 55.9        | 6.5       | 11.7      | 61            | 39 - 73      |               |             |           |           |               |              |
| All Roche Integra/c111/c301/c501 Reagents | 7           | 55.7        | 2.1       | 3.8       | 56            | 38 - 73      |               |             |           |           |               |              |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 10          | 56.5        | 2.6       | 4.7       | 57            | 39 - 74      |               |             |           |           |               |              |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 11          | 243.1       | 7.5       | 3.1       | 244           | 170 - 317    |               |             |           |           |               |              |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 7           | 627.6       | 22.0      | 3.5       | 621           | 439 - 816    |               |             |           |           |               |              |
| All Chemistry Instruments                 | 9           | 621.4       | 25.8      | 4.2       | 621           | 435 - 808    |               |             |           |           |               |              |

## Alpha-fetoprotein (AFP) (ng/mL)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 6              | 1.43        | 0.08      | 5.7       | 1.5           | 1.1 - 1.7    | 4             | 1.00        | 0.01      | 0.0       | 1.0           | 0.9 - 1.1    |
| TOSOH ST AIA  | 4              | 1.43        | 0.10      | 6.7       | 1.5           | 1.1 - 1.8    | 2             | -           | -         | -         | 1.0           | 0.9 - 1.1    |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 4              | 0.85        | 0.19      | 22.5      | 0.9           | 0.2 - 1.5    | 6             | 1.32        | 0.13      | 10.1      | 1.4           | 0.9 - 1.8    |
| TOSOH ST AIA  | 2              | -           | -         | -         | 1.0           | 0.2 - 1.5    | 4             | 1.35        | 0.10      | 7.4       | 1.4           | 1.0 - 1.7    |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 6              | 1.67        | 0.16      | 9.8       | 1.7           | 1.1 - 2.2    |               |             |           |           |               |              |
| TOSOH ST AIA  | 4              | 1.70        | 0.18      | 10.7      | 1.7           | 1.1 - 2.3    |               |             |           |           |               |              |

## Cortisol (µg/dL)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 15             | 30.09       | 3.39      | 11.3      | 29.2          | 22.5 - 37.7  | 16            | 18.47       | 1.83      | 9.9       | 18.7          | 13.8 - 23.1  |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 16             | 9.06        | 1.00      | 11.0      | 9.2           | 6.7 - 11.4   | 16            | 27.16       | 2.69      | 9.9       | 26.6          | 20.3 - 34.0  |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 16             | 34.09       | 4.18      | 12.3      | 33.7          | 25.5 - 42.7  |               |             |           |           |               |              |

### T<sub>3</sub> Uptake (percent)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 22             | 43.18       | 4.23      | 9.8       | 42.0          | 30.5 - 55.9  | 22            | 46.97       | 4.66      | 9.9       | 46.8          | 32.9 - 61.0  |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 22             | 50.33       | 5.40      | 10.7      | 50.6          | 34.1 - 66.6  | 22            | 44.00       | 4.68      | 10.6      | 42.8          | 29.9 - 58.1  |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 22             | 42.03       | 4.00      | 9.5       | 41.5          | 30.0 - 54.1  |               |             |           |           |               |              |

### Triiodothyronine (ng/mL)

| <u>Method</u>            | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|--------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 32             | 2.06        | 0.46      | 22.3      | 2.2           | 0.6 - 3.5    | 33            | 1.65        | 0.48      | 29.3      | 1.6           | 0.2 - 3.2    |
| All Abbott Instruments   | 7              | 3.31        | 4.84      | 146.2     | 1.5           | 0.0 - 17.9   | 7             | 2.89        | 4.20      | 145.4     | 1.3           | 0.0 - 15.5   |
| All TOSOH Instruments    | 7              | 4.26        | 0.21      | 5.0       | 4.2           | 3.6 - 5.0    | 7             | 3.56        | 0.17      | 4.8       | 3.5           | 3.0 - 4.1    |
| Abbott Architect         | 7              | 3.31        | 4.84      | 146.2     | 1.5           | 0.0 - 17.9   | 7             | 2.89        | 4.20      | 145.4     | 1.3           | 0.0 - 15.5   |
| Beckman ACCESS / 2 / Dxl | 16             | 2.24        | 0.34      | 15.2      | 2.2           | 1.2 - 3.3    | 16            | 1.59        | 0.16      | 10.0      | 1.6           | 1.1 - 2.1    |
| TOSOH ST AIA             | 5              | 4.22        | 0.23      | 5.4       | 4.2           | 3.5 - 5.0    | 5             | 3.48        | 0.08      | 2.4       | 3.5           | 3.2 - 3.8    |
|                          | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 33             | 1.29        | 0.33      | 25.6      | 1.3           | 0.2 - 2.3    | 33            | 2.02        | 0.65      | 32.5      | 2.1           | 0.0 - 4.0    |
| All Abbott Instruments   | 7              | 2.81        | 4.05      | 144.0     | 1.3           | 0.0 - 15.0   | 7             | 3.20        | 4.59      | 143.3     | 1.5           | 0.0 - 17.0   |
| All TOSOH Instruments    | 7              | 2.79        | 0.16      | 5.6       | 2.7           | 2.3 - 3.3    | 7             | 4.13        | 0.21      | 5.0       | 4.0           | 3.5 - 4.8    |
| Abbott Architect         | 7              | 2.81        | 4.05      | 144.0     | 1.3           | 0.0 - 15.0   | 7             | 3.20        | 4.59      | 143.3     | 1.5           | 0.0 - 17.0   |
| Beckman ACCESS / 2 / Dxl | 15             | 1.21        | 0.07      | 5.8       | 1.2           | 0.9 - 1.5    | 16            | 2.14        | 0.33      | 15.2      | 2.1           | 1.1 - 3.2    |
| TOSOH ST AIA             | 5              | 2.74        | 0.15      | 5.5       | 2.7           | 2.2 - 3.2    | 5             | 4.06        | 0.19      | 4.8       | 4.0           | 3.4 - 4.7    |
|                          | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method               | 33             | 2.45        | 0.87      | 35.3      | 2.7           | 0.0 - 5.1    |               |             |           |           |               |              |
| All Abbott Instruments   | 7              | 3.56        | 5.09      | 143.1     | 1.6           | 0.0 - 18.9   |               |             |           |           |               |              |
| All TOSOH Instruments    | 6              | 4.62        | 0.20      | 4.4       | 4.6           | 4.0 - 5.3    |               |             |           |           |               |              |
| Abbott Architect         | 7              | 3.56        | 5.09      | 143.1     | 1.6           | 0.0 - 18.9   |               |             |           |           |               |              |
| Beckman ACCESS / 2 / Dxl | 16             | 2.69        | 0.43      | 16.1      | 2.7           | 1.3 - 4.0    |               |             |           |           |               |              |
| TOSOH ST AIA             | 5              | 4.62        | 0.23      | 4.9       | 4.6           | 3.9 - 5.4    |               |             |           |           |               |              |

### Free T<sub>3</sub> (pg/mL)

| Specimen CH-6            |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|--------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>            | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 36          | 5.31        | 0.84      | 15.8      | 5.3           | 2.7 - 7.9    | 36            | 4.53        | 0.74      | 16.4      | 4.5           | 2.2 - 6.8    |
| All TOSOH Instruments    | 12          | 9.88        | 0.55      | 5.6       | 10.0          | 8.2 - 11.6   | 12            | 8.15        | 0.54      | 6.6       | 8.1           | 6.5 - 9.8    |
| Beckman ACCESS / 2 / Dxl | 15          | 5.01        | 0.24      | 4.9       | 5.1           | 4.2 - 5.8    | 15            | 4.21        | 0.22      | 5.2       | 4.3           | 3.5 - 4.9    |
| Specimen CH-8            |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method               | 36          | 3.86        | 0.76      | 19.5      | 4.1           | 1.5 - 6.2    | 36            | 5.14        | 0.72      | 14.0      | 5.1           | 2.9 - 7.3    |
| All TOSOH Instruments    | 12          | 6.57        | 0.39      | 6.0       | 6.7           | 5.3 - 7.8    | 12            | 9.52        | 0.48      | 5.0       | 9.5           | 8.0 - 11.0   |
| Beckman ACCESS / 2 / Dxl | 15          | 3.49        | 0.12      | 3.5       | 3.5           | 3.1 - 3.9    | 15            | 4.87        | 0.23      | 4.7       | 4.9           | 4.1 - 5.6    |
| Specimen CH-10           |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method               | 36          | 5.71        | 0.81      | 14.2      | 5.8           | 3.2 - 8.2    |               |             |           |           |               |              |
| All TOSOH Instruments    | 12          | 10.92       | 0.73      | 6.6       | 10.9          | 8.7 - 13.1   |               |             |           |           |               |              |
| Beckman ACCESS / 2 / Dxl | 15          | 5.47        | 0.26      | 4.7       | 5.5           | 4.7 - 6.3    |               |             |           |           |               |              |

### Thyroxine (µg/dL)

| Specimen CH-6            |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|--------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>            | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 22          | 14.64       | 1.88      | 12.8      | 14.2          | 11.7 - 17.6  | 22            | 10.43       | 0.81      | 7.8       | 10.7          | 8.3 - 12.6   |
| Beckman ACCESS / 2 / Dxl | 13          | 13.94       | 0.72      | 5.2       | 13.7          | 11.1 - 16.8  | 13            | 11.12       | 0.63      | 5.7       | 11.1          | 8.8 - 13.4   |
| Specimen CH-8            |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method               | 22          | 7.32        | 0.57      | 7.8       | 7.5           | 5.8 - 8.8    | 22            | 13.67       | 1.51      | 11.0      | 13.4          | 10.9 - 16.5  |
| Beckman ACCESS / 2 / Dxl | 13          | 8.00        | 0.57      | 7.2       | 8.1           | 6.4 - 9.6    | 13            | 13.21       | 0.61      | 4.6       | 13.1          | 10.5 - 15.9  |
| Specimen CH-10           |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method               | 22          | 16.62       | 2.25      | 13.5      | 15.5          | 13.2 - 20.0  |               |             |           |           |               |              |
| Beckman ACCESS / 2 / Dxl | 13          | 15.19       | 0.64      | 4.2       | 15.3          | 12.1 - 18.3  |               |             |           |           |               |              |

## Free Thyroxine (ng/dL)

| Specimen CH-6                       |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 175         | 3.47        | 0.67      | 19.3      | 3.6           | 1.4 - 5.5    | 175           | 3.07        | 0.55      | 17.9      | 3.1           | 1.4 - 4.8    |
| All Roche Elecsys/Cobas Instruments | 11          | 3.87        | 0.39      | 10.0      | 3.7           | 2.7 - 5.1    | 11            | 3.29        | 0.27      | 8.1       | 3.2           | 2.4 - 4.1    |
| All TOSOH Instruments               | 38          | 4.04        | 0.29      | 7.2       | 4.0           | 3.1 - 5.0    | 38            | 3.61        | 0.24      | 6.8       | 3.7           | 2.8 - 4.4    |
| Abbott Architect                    | 16          | 4.07        | 0.30      | 7.3       | 4.1           | 3.1 - 5.0    | 16            | 3.23        | 0.19      | 5.9       | 3.2           | 2.6 - 3.8    |
| Beckman ACCESS / 2 / Dxl            | 46          | 2.67        | 0.14      | 5.4       | 2.7           | 2.2 - 3.1    | 45            | 2.39        | 0.12      | 5.0       | 2.4           | 2.0 - 2.8    |
| bioMerieux Vidas, Mini Vidas        | 12          | 2.93        | 0.08      | 2.6       | 2.9           | 2.6 - 3.2    | 12            | 2.84        | 0.11      | 3.8       | 2.8           | 2.5 - 3.2    |
| Siemens Dimension                   | 30          | 3.81        | 0.30      | 8.0       | 3.8           | 2.9 - 4.8    | 29            | 3.38        | 0.23      | 6.9       | 3.4           | 2.6 - 4.1    |
| TOSOH AIA                           | 19          | 4.00        | 0.35      | 8.7       | 4.0           | 2.9 - 5.1    | 19            | 3.57        | 0.30      | 8.4       | 3.6           | 2.6 - 4.5    |
| TOSOH ST AIA                        | 19          | 4.08        | 0.23      | 5.6       | 4.1           | 3.4 - 4.8    | 19            | 3.64        | 0.17      | 4.8       | 3.7           | 3.1 - 4.2    |
| Specimen CH-8                       |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                          | 175         | 2.73        | 0.50      | 18.3      | 2.8           | 1.2 - 4.3    | 175           | 3.37        | 0.63      | 18.6      | 3.5           | 1.4 - 5.3    |
| All Roche Elecsys/Cobas Instruments | 11          | 2.85        | 0.25      | 8.8       | 2.8           | 2.1 - 3.7    | 11            | 3.70        | 0.33      | 8.8       | 3.6           | 2.7 - 4.7    |
| All TOSOH Instruments               | 37          | 3.29        | 0.21      | 6.3       | 3.3           | 2.6 - 4.0    | 38            | 3.91        | 0.29      | 7.3       | 3.9           | 3.0 - 4.8    |
| Abbott Architect                    | 16          | 2.34        | 0.14      | 5.8       | 2.3           | 1.9 - 2.8    | 16            | 3.98        | 0.30      | 7.6       | 3.9           | 3.0 - 4.9    |
| Beckman ACCESS / 2 / Dxl            | 46          | 2.20        | 0.12      | 5.4       | 2.2           | 1.8 - 2.6    | 46            | 2.59        | 0.13      | 5.1       | 2.6           | 2.1 - 3.0    |
| bioMerieux Vidas, Mini Vidas        | 12          | 2.81        | 0.10      | 3.5       | 2.8           | 2.5 - 3.2    | 12            | 2.95        | 0.11      | 3.7       | 2.9           | 2.6 - 3.3    |
| Siemens Dimension                   | 30          | 2.97        | 0.19      | 6.5       | 3.0           | 2.3 - 3.6    | 30            | 3.65        | 0.28      | 7.6       | 3.7           | 2.8 - 4.5    |
| TOSOH AIA                           | 19          | 3.21        | 0.30      | 9.3       | 3.2           | 2.3 - 4.2    | 19            | 3.89        | 0.36      | 9.3       | 3.9           | 2.8 - 5.0    |
| TOSOH ST AIA                        | 19          | 3.32        | 0.16      | 4.8       | 3.3           | 2.8 - 3.8    | 19            | 3.94        | 0.19      | 5.0       | 4.0           | 3.3 - 4.6    |
| Specimen CH-10                      |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                          | 173         | 3.65        | 0.73      | 20.1      | 3.8           | 1.4 - 5.9    |               |             |           |           |               |              |
| All Roche Elecsys/Cobas Instruments | 11          | 4.11        | 0.39      | 9.4       | 4.0           | 2.9 - 5.3    |               |             |           |           |               |              |
| All TOSOH Instruments               | 37          | 4.21        | 0.28      | 6.7       | 4.2           | 3.3 - 5.1    |               |             |           |           |               |              |
| Abbott Architect                    | 16          | 4.56        | 0.36      | 8.0       | 4.6           | 3.4 - 5.7    |               |             |           |           |               |              |
| Beckman ACCESS / 2 / Dxl            | 45          | 2.78        | 0.15      | 5.5       | 2.8           | 2.3 - 3.3    |               |             |           |           |               |              |
| bioMerieux Vidas, Mini Vidas        | 12          | 3.03        | 0.11      | 3.8       | 3.0           | 2.6 - 3.4    |               |             |           |           |               |              |
| Siemens Dimension                   | 31          | 3.95        | 0.41      | 10.3      | 4.0           | 2.7 - 5.2    |               |             |           |           |               |              |
| TOSOH AIA                           | 18          | 4.13        | 0.33      | 7.9       | 4.1           | 3.1 - 5.2    |               |             |           |           |               |              |
| TOSOH ST AIA                        | 19          | 4.28        | 0.22      | 5.1       | 4.3           | 3.6 - 5.0    |               |             |           |           |               |              |

**TSH (μU/mL)**

| Specimen CH-6                       |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 241         | 7.74        | 2.36      | 30.5      | 8.1           | 0.6 - 14.9   | 241           | 5.09        | 1.53      | 30.0      | 5.3           | 0.5 - 9.7    |
| All Abbott Instruments              | 19          | 7.78        | 0.34      | 4.3       | 7.7           | 6.7 - 8.8    | 19            | 5.29        | 0.22      | 4.2       | 5.3           | 4.6 - 6.0    |
| All Roche Elecsys/Cobas Instruments | 13          | 8.15        | 0.37      | 4.5       | 8.3           | 7.0 - 9.3    | 13            | 5.65        | 0.18      | 3.2       | 5.6           | 5.1 - 6.2    |
| All TOSOH Instruments               | 50          | 10.25       | 0.63      | 6.1       | 10.2          | 8.3 - 12.2   | 51            | 6.76        | 0.43      | 6.3       | 6.8           | 5.4 - 8.1    |
| Abbott Architect                    | 19          | 7.78        | 0.34      | 4.3       | 7.7           | 6.7 - 8.8    | 19            | 5.29        | 0.22      | 4.2       | 5.3           | 4.6 - 6.0    |
| Beckman ACCESS / 2 / Dxl            | 56          | 7.91        | 0.44      | 5.6       | 7.9           | 6.5 - 9.3    | 55            | 5.21        | 0.23      | 4.5       | 5.2           | 4.5 - 6.0    |
| bioMerieux Vidas, Mini Vidas        | 28          | 9.22        | 0.51      | 5.6       | 9.1           | 7.6 - 10.8   | 28            | 5.94        | 0.35      | 5.9       | 6.0           | 4.8 - 7.0    |
| Roche cobas e 411                   | 10          | 8.11        | 0.40      | 5.0       | 8.1           | 6.8 - 9.4    | 10            | 5.63        | 0.18      | 3.1       | 5.6           | 5.0 - 6.2    |
| Siemens Dimension                   | 38          | 3.67        | 0.40      | 10.8      | 3.6           | 2.4 - 4.9    | 38            | 2.36        | 0.27      | 11.4      | 2.3           | 1.5 - 3.2    |
| TOSOH AIA                           | 22          | 10.18       | 0.59      | 5.8       | 10.2          | 8.4 - 12.0   | 23            | 6.65        | 0.44      | 6.6       | 6.6           | 5.3 - 8.0    |
| TOSOH ST AIA                        | 28          | 10.31       | 0.66      | 6.4       | 10.2          | 8.3 - 12.3   | 28            | 6.85        | 0.40      | 5.9       | 6.9           | 5.6 - 8.1    |

  

| Specimen CH-8                       |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 241         | 2.69        | 0.82      | 30.5      | 2.9           | 0.2 - 5.2    | 241           | 7.16        | 2.12      | 29.6      | 7.5           | 0.8 - 13.6   |
| All Abbott Instruments              | 19          | 2.87        | 0.11      | 4.0       | 2.9           | 2.5 - 3.3    | 19            | 7.34        | 0.29      | 3.9       | 7.3           | 6.4 - 8.3    |
| All Roche Elecsys/Cobas Instruments | 13          | 3.14        | 0.09      | 2.8       | 3.1           | 2.8 - 3.4    | 13            | 7.65        | 0.38      | 5.0       | 7.8           | 6.5 - 8.9    |
| All TOSOH Instruments               | 51          | 3.55        | 0.24      | 6.9       | 3.5           | 2.8 - 4.3    | 51            | 9.44        | 0.56      | 5.9       | 9.4           | 7.7 - 11.2   |
| Abbott Architect                    | 19          | 2.87        | 0.11      | 4.0       | 2.9           | 2.5 - 3.3    | 19            | 7.34        | 0.29      | 3.9       | 7.3           | 6.4 - 8.3    |
| Beckman ACCESS / 2 / Dxl            | 54          | 2.76        | 0.14      | 4.9       | 2.8           | 2.3 - 3.2    | 55            | 7.27        | 0.36      | 5.0       | 7.3           | 6.1 - 8.4    |
| bioMerieux Vidas, Mini Vidas        | 28          | 3.14        | 0.19      | 5.9       | 3.2           | 2.5 - 3.7    | 28            | 8.38        | 0.45      | 5.3       | 8.5           | 7.0 - 9.8    |
| Roche cobas e 411                   | 10          | 3.13        | 0.09      | 3.0       | 3.1           | 2.8 - 3.5    | 10            | 7.61        | 0.42      | 5.6       | 7.7           | 6.3 - 8.9    |
| Siemens Dimension                   | 38          | 1.23        | 0.13      | 10.9      | 1.2           | 0.8 - 1.7    | 38            | 3.36        | 0.40      | 11.9      | 3.3           | 2.1 - 4.6    |
| TOSOH AIA                           | 23          | 3.47        | 0.26      | 7.4       | 3.4           | 2.6 - 4.3    | 23            | 9.39        | 0.50      | 5.3       | 9.3           | 7.8 - 10.9   |
| TOSOH ST AIA                        | 28          | 3.61        | 0.22      | 6.0       | 3.6           | 2.9 - 4.3    | 28            | 9.48        | 0.60      | 6.4       | 9.5           | 7.6 - 11.3   |

  

| Specimen CH-10                      |             |             |           |           |               |              |
|-------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                       | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 240         | 8.83        | 2.63      | 29.8      | 9.0           | 0.9 - 16.8   |
| All Abbott Instruments              | 19          | 8.79        | 0.39      | 4.5       | 8.8           | 7.6 - 10.0   |
| All Roche Elecsys/Cobas Instruments | 13          | 9.07        | 0.49      | 5.4       | 9.1           | 7.5 - 10.6   |
| All TOSOH Instruments               | 50          | 11.61       | 0.67      | 5.7       | 11.6          | 9.6 - 13.7   |
| Abbott Architect                    | 19          | 8.79        | 0.39      | 4.5       | 8.8           | 7.6 - 10.0   |
| Beckman ACCESS / 2 / Dxl            | 57          | 8.85        | 0.68      | 7.6       | 8.8           | 6.8 - 10.9   |
| bioMerieux Vidas, Mini Vidas        | 28          | 10.40       | 0.57      | 5.5       | 10.5          | 8.6 - 12.2   |
| Roche cobas e 411                   | 10          | 9.00        | 0.52      | 5.8       | 8.9           | 7.4 - 10.6   |
| Siemens Dimension                   | 38          | 4.28        | 0.50      | 11.8      | 4.3           | 2.7 - 5.8    |
| TOSOH AIA                           | 22          | 11.44       | 0.65      | 5.7       | 11.4          | 9.4 - 13.4   |
| TOSOH ST AIA                        | 28          | 11.74       | 0.66      | 5.6       | 11.8          | 9.7 - 13.8   |

**Serum hCG – Qualitative**

|                                | Specimen HCG-6  |                 | Specimen HCG-7  |                 |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| <u>Method</u>                  | <u>Positive</u> | <u>Negative</u> | <u>Positive</u> | <u>Negative</u> |
| ALL METHODS                    | 142             | -               | 141             | 1               |
| AimStep Combo Pregnancy        | 1               | -               | 1               | -               |
| Beckman Coulter ICON 25 hCG    | 6               | -               | 6               | -               |
| bioMerieux Vidas, Mini Vidas   | 1               | -               | 1               | -               |
| Cardinal Health SP Brand combo | 7               | -               | 7               | -               |
| CONSULT diagnostics hCG Combo  | 16              | -               | 15              | 1               |
| Henry Schein One Step + Combo  | 6               | -               | 6               | -               |
| LifeSign Status hCG            | 1               | -               | 1               | -               |
| McKesson hCG Combo Cassette    | 1               | -               | 1               | -               |
| NDC Pro Advantage              | 1               | -               | 1               | -               |
| Polymedco Poly stat hCG        | 1               | -               | 1               | -               |
| PSS Select hCG Combo           | 2               | -               | 2               | -               |
| Quidel QuickVue + One-Step     | 11              | -               | 11              | -               |
| Quidel QuickVue One-Step Combo | 76              | -               | 76              | -               |
| Quidel QuickVue Semi-Q hCG     | 1               | -               | 1               | -               |
| Sekisui OSOM hCG Combo Test    | 2               | -               | 2               | -               |
| Stanbio QUPID Plus             | 3               | -               | 3               | -               |
| Sure-Vue hCG-STAT              | 2               | -               | 1               | 1               |

|                                | Specimen HCG-8 |     | Specimen HCG-9 |   |
|--------------------------------|----------------|-----|----------------|---|
| ALL METHODS                    | 1              | 141 | 142            | - |
| AimStep Combo Pregnancy        | -              | 1   | 1              | - |
| Beckman Coulter ICON 25 hCG    | -              | 6   | 6              | - |
| bioMerieux Vidas, Mini Vidas   | -              | 1   | 1              | - |
| Cardinal Health SP Brand combo | -              | 7   | 7              | - |
| CONSULT diagnostics hCG Combo  | 1              | 15  | 16             | - |
| Henry Schein One Step + Combo  | -              | 6   | 6              | - |
| LifeSign Status hCG            | -              | 1   | 1              | - |
| McKesson hCG Combo Cassette    | -              | 1   | 1              | - |
| NDC Pro Advantage              | -              | 1   | 1              | - |
| Polymedco Poly stat hCG        | -              | 1   | 1              | - |
| PSS Select hCG Combo           | -              | 2   | 2              | - |
| Quidel QuickVue + One-Step     | -              | 11  | 11             | - |
| Quidel QuickVue One-Step Combo | -              | 76  | 76             | - |
| Quidel QuickVue Semi-Q hCG     | -              | 1   | 1              | - |
| Sekisui OSOM hCG Combo Test    | -              | 2   | 2              | - |
| Stanbio QUPID Plus             | -              | 3   | 3              | - |
| Sure-Vue hCG-STAT              | -              | 2   | 2              | - |

## Serum hCG – Qualitative

### Specimen HCG-10

| <u>Method</u>                  | <u>Positive</u> | <u>Negative</u> |
|--------------------------------|-----------------|-----------------|
| ALL METHODS                    | 142             | -               |
| AimStep Combo Pregnancy        | 1               | -               |
| Beckman Coulter ICON 25 hCG    | 6               | -               |
| bioMerieux Vidas, Mini Vidas   | 1               | -               |
| Cardinal Health SP Brand combo | 7               | -               |
| CONSULT diagnostics hCG Combo  | 16              | -               |
| Henry Schein One Step + Combo  | 6               | -               |
| LifeSign Status hCG            | 1               | -               |
| McKesson hCG Combo Cassette    | 1               | -               |
| NDC Pro Advantage              | 1               | -               |
| Polymedco Poly stat hCG        | 1               | -               |
| PSS Select hCG Combo           | 2               | -               |
| Quidel QuickVue + One-Step     | 11              | -               |
| Quidel QuickVue One-Step Combo | 76              | -               |
| Quidel QuickVue Semi-Q hCG     | 1               | -               |
| Sekisui OSOM hCG Combo Test    | 2               | -               |
| Stanbio QUPID Plus             | 3               | -               |
| Sure-View hCG-STAT             | 2               | -               |

## Serum hCG – Quantitative (mIU/mL)

| <u>Method</u> | Specimen HCG-6  |             |           |           |               |              | Specimen HCG-7 |             |           |           |               |              |
|---------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 18              | 2878.4      | 769.1     | 26.7      | 2556          | 571 - 5186   | 22             | 126.6       | 38.3      | 30.3      | 128           | 11 - 242     |
| <u>Method</u> | Specimen HCG-8  |             |           |           |               |              | Specimen HCG-9 |             |           |           |               |              |
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 27              | 1.4         | 1.3       | 90.6      | 1             | 0 - 6        | 19             | 311.9       | 93.7      | 30.1      | 319           | 30 - 594     |
| <u>Method</u> | Specimen HCG-10 |             |           |           |               |              |                |             |           |           |               |              |
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method    | 21              | 864.4       | 259.2     | 30.0      | 773           | 86 - 1643    |                |             |           |           |               |              |

## Cholesterol, Total (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 263           | 203.0       | 7.5       | 3.7       | 202           | 182 - 224    | 261           | 159.4       | 5.3       | 3.3       | 159           | 143 - 176    |
| All Alfa Wassermann Reagents              | 39            | 202.4       | 4.5       | 2.2       | 202           | 182 - 223    | 39            | 160.1       | 3.6       | 2.2       | 159           | 144 - 177    |
| All Horiba Pentra Reagents                | 15            | 198.7       | 7.6       | 3.8       | 199           | 178 - 219    | 16            | 156.4       | 4.0       | 2.5       | 158           | 140 - 173    |
| All Roche Integra/c111/c301/c501 Reagents | 21            | 199.5       | 4.3       | 2.2       | 199           | 179 - 220    | 21            | 158.8       | 3.7       | 2.3       | 159           | 142 - 175    |
| All Vital Diagnostics Reagents            | 14            | 206.9       | 5.0       | 2.4       | 207           | 186 - 228    | 14            | 163.5       | 6.6       | 4.0       | 163           | 147 - 180    |
| Alere Cholestech LDX                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 33            | 215.2       | 9.8       | 4.6       | 216           | 193 - 237    | 33            | 164.8       | 7.9       | 4.8       | 163           | 148 - 182    |
| All Chemistry Instruments                 | 37            | 214.8       | 9.4       | 4.4       | 215           | 193 - 237    | 37            | 164.2       | 7.7       | 4.7       | 162           | 147 - 181    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 38            | 202.4       | 4.6       | 2.3       | 202           | 182 - 223    | 38            | 160.1       | 3.6       | 2.3       | 160           | 144 - 177    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 29            | 196.5       | 3.4       | 1.7       | 197           | 176 - 217    | 29            | 154.9       | 3.6       | 2.3       | 154           | 139 - 171    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 14            | 197.4       | 6.1       | 3.1       | 199           | 177 - 218    | 15            | 156.2       | 4.0       | 2.6       | 157           | 140 - 172    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13            | 198.2       | 4.1       | 2.1       | 198           | 178 - 219    | 13            | 158.5       | 3.5       | 2.2       | 158           | 142 - 175    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 44            | 199.0       | 4.0       | 2.0       | 199           | 179 - 219    | 44            | 158.2       | 4.0       | 2.5       | 158           | 142 - 175    |
| All Chemistry Instruments                 | 45            | 199.1       | 4.0       | 2.0       | 199           | 179 - 220    | 45            | 158.2       | 3.9       | 2.5       | 158           | 142 - 175    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 13            | 207.2       | 5.1       | 2.5       | 207           | 186 - 228    | 13            | 163.9       | 6.6       | 4.0       | 163           | 147 - 181    |
| All Chemistry Instruments                 | 14            | 206.9       | 5.0       | 2.4       | 207           | 186 - 228    | 14            | 163.5       | 6.6       | 4.0       | 163           | 147 - 180    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 28            | 206.3       | 7.3       | 3.6       | 205           | 185 - 227    | 28            | 158.1       | 5.3       | 3.3       | 159           | 142 - 174    |
| All Chemistry Instruments                 | 33            | 206.7       | 6.9       | 3.4       | 205           | 186 - 228    | 33            | 157.8       | 5.0       | 3.2       | 158           | 141 - 174    |

# Cholesterol, Total (mg/dL)

| Specimen CH-8                             |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 234         | 125.4       | 4.7       | 3.7       | 126           | 112 - 138    | 231           | 192.0       | 5.8       | 3.0       | 192           | 172 - 212    |
| All Alfa Wassermann Reagents              | 39          | 128.0       | 3.0       | 2.4       | 127           | 115 - 141    | 39            | 192.2       | 4.5       | 2.3       | 192           | 172 - 212    |
| All Horiba Pentra Reagents                | 16          | 124.2       | 3.8       | 3.1       | 124           | 111 - 137    | 16            | 187.5       | 5.2       | 2.8       | 187           | 168 - 207    |
| All Roche Integra/c111/c301/c501 Reagents | 21          | 126.1       | 2.7       | 2.1       | 126           | 113 - 139    | 21            | 190.6       | 3.7       | 1.9       | 191           | 171 - 210    |
| All Vital Diagnostics Reagents            | 14          | 130.8       | 6.3       | 4.8       | 131           | 117 - 144    | 15            | 197.7       | 6.5       | 3.3       | 197           | 177 - 218    |
| Alere Cholestech LDX                      |             |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 11          | 125.0       | 4.7       | 3.8       | 126           | 112 - 138    | 10            | 201.7       | 10.7      | 5.3       | 201           | 181 - 222    |
| All Chemistry Instruments                 | 12          | 124.3       | 5.2       | 4.2       | 125           | 111 - 137    | 11            | 200.1       | 11.5      | 5.7       | 201           | 180 - 221    |
| Alfa Wassermann                           |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 38          | 128.0       | 3.1       | 2.4       | 128           | 115 - 141    | 38            | 192.2       | 4.5       | 2.4       | 192           | 173 - 212    |
| Beckman AU                                |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 29          | 123.4       | 3.2       | 2.6       | 122           | 111 - 136    | 29            | 187.5       | 4.3       | 2.3       | 187           | 168 - 207    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 15          | 124.5       | 3.8       | 3.0       | 124           | 112 - 137    | 15            | 187.4       | 5.3       | 2.9       | 185           | 168 - 207    |
| Roche Integra                             |             |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13          | 126.2       | 2.6       | 2.1       | 126           | 113 - 139    | 13            | 189.7       | 3.3       | 1.8       | 189           | 170 - 209    |
| Siemens Healthcare                        |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 44          | 126.8       | 3.2       | 2.6       | 127           | 114 - 140    | 43            | 189.9       | 4.3       | 2.3       | 190           | 170 - 209    |
| All Chemistry Instruments                 | 45          | 126.7       | 3.2       | 2.5       | 127           | 114 - 140    | 44            | 189.9       | 4.3       | 2.3       | 190           | 170 - 209    |
| Vital Diagnostics                         |             |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 13          | 131.2       | 6.4       | 4.9       | 131           | 118 - 145    | 13            | 198.7       | 6.4       | 3.2       | 199           | 178 - 219    |
| All Chemistry Instruments                 | 14          | 130.8       | 6.3       | 4.8       | 131           | 117 - 144    | 14            | 198.1       | 6.5       | 3.3       | 198           | 178 - 218    |
| VITROS                                    |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 28          | 118.7       | 3.5       | 2.9       | 119           | 106 - 131    | 27            | 196.0       | 4.1       | 2.1       | 196           | 176 - 216    |
| All Chemistry Instruments                 | 33          | 118.4       | 3.3       | 2.8       | 119           | 106 - 131    | 32            | 196.5       | 4.2       | 2.1       | 196           | 176 - 217    |

## Cholesterol, Total (mg/dL)

### Specimen CH-10

| <u>Reagent/Instrument</u>                 | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                                | 231         | 223.1       | 8.4       | 3.8       | 222           | 200 - 246    |
| All Alfa Wassermann Reagents              | 38          | 221.6       | 5.1       | 2.3       | 221           | 199 - 244    |
| All Horiba Pentra Reagents                | 16          | 218.2       | 6.6       | 3.0       | 220           | 196 - 241    |
| All Roche Integra/c111/c301/c501 Reagents | 21          | 221.6       | 5.4       | 2.5       | 221           | 199 - 244    |
| All Vital Diagnostics Reagents            | 14          | 233.1       | 9.8       | 4.2       | 233           | 209 - 257    |
| Alere Cholestech LDX                      |             |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 11          | 236.6       | 11.1      | 4.7       | 235           | 212 - 261    |
| All Chemistry Instruments                 | 12          | 235.7       | 11.1      | 4.7       | 235           | 212 - 260    |
| Alfa Wassermann                           |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 37          | 221.6       | 5.2       | 2.3       | 221           | 199 - 244    |
| Beckman AU                                |             |             |           |           |               |              |
| Beckman AU systems                        | 29          | 217.2       | 4.1       | 1.9       | 217           | 195 - 239    |
| Horiba ABX Pentra                         |             |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 15          | 218.1       | 6.8       | 3.1       | 220           | 196 - 240    |
| Roche Integra                             |             |             |           |           |               |              |
| Roche Integra                             | 13          | 220.1       | 5.3       | 2.4       | 220           | 198 - 243    |
| Siemens Healthcare                        |             |             |           |           |               |              |
| Siemens Dimension                         | 43          | 218.6       | 5.3       | 2.4       | 219           | 196 - 241    |
| All Chemistry Instruments                 | 44          | 218.5       | 5.2       | 2.4       | 219           | 196 - 241    |
| Vital Diagnostics                         |             |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 13          | 233.5       | 10.1      | 4.3       | 233           | 210 - 257    |
| All Chemistry Instruments                 | 14          | 233.1       | 9.8       | 4.2       | 233           | 209 - 257    |
| VITROS                                    |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 28          | 230.9       | 8.7       | 3.8       | 229           | 207 - 255    |
| All Chemistry Instruments                 | 33          | 231.5       | 9.3       | 4.0       | 230           | 208 - 255    |

# LDL Cholesterol - Calculated (mg/dL)

| Specimen CH-6                   |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                   | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 190         | 88.9        | 11.7      | 13.2      | 89            | 62 - 116     | 189           | 65.3        | 9.4       | 14.4      | 64            | 45 - 85      |
| Calculated-Trig/5               |             |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived   | 23          | 105.6       | 18.1      | 17.1      | 105           | 69 - 142     | 23            | 82.7        | 12.0      | 14.6      | 80            | 57 - 108     |
| Alfa Wassermann ACE Alera/Axcel | 27          | 86.8        | 5.0       | 5.8       | 87            | 60 - 113     | 27            | 66.1        | 4.1       | 6.2       | 66            | 46 - 86      |
| Beckman AU systems              | 19          | 78.4        | 11.0      | 14.0      | 75            | 54 - 102     | 19            | 60.9        | 8.5       | 14.0      | 59            | 42 - 80      |
| Horiba ABX Pentra 400           | 11          | 89.3        | 5.6       | 6.3       | 89            | 62 - 117     | 11            | 68.0        | 6.2       | 9.2       | 65            | 47 - 89      |
| Siemens Dimension               | 22          | 93.5        | 5.3       | 5.6       | 94            | 65 - 122     | 22            | 62.2        | 4.0       | 6.5       | 63            | 43 - 81      |
| Vital Diagnostics Envoy 500     | 11          | 104.4       | 65.4      | 62.7      | 86            | 0 - 236      | 11            | 61.5        | 11.8      | 19.2      | 64            | 37 - 86      |
| VITROS 250,350,500,700,750,950  | 19          | 77.1        | 6.0       | 7.8       | 78            | 53 - 101     | 20            | 58.6        | 7.4       | 12.6      | 59            | 40 - 77      |
| All Chemistry Instruments       | 169         | 88.6        | 11.3      | 12.8      | 88            | 62 - 116     | 169           | 64.9        | 9.3       | 14.3      | 64            | 45 - 85      |
| Specimen CH-8                   |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                      | 168         | 46.1        | 8.0       | 17.5      | 45            | 29 - 63      | 167           | 80.4        | 8.7       | 10.9      | 81            | 56 - 105     |
| Calculated-Trig/5               |             |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived   | 5           | -           | -         | -         | 56            | 29 - 62      | 7             | -           | -         | -         | 93            | 56 - 105     |
| Alfa Wassermann ACE Alera/Axcel | 27          | 50.4        | 4.3       | 8.5       | 50            | 35 - 66      | 27            | 81.8        | 5.0       | 6.1       | 82            | 57 - 107     |
| Beckman AU systems              | 19          | 46.4        | 5.4       | 11.8      | 45            | 32 - 61      | 19            | 74.6        | 9.6       | 12.9      | 71            | 52 - 97      |
| Horiba ABX Pentra 400           | 11          | 53.1        | 6.0       | 11.3      | 52            | 37 - 70      | 11            | 83.0        | 7.2       | 8.7       | 84            | 58 - 108     |
| Siemens Dimension               | 23          | 41.9        | 5.1       | 12.2      | 42            | 29 - 55      | 22            | 84.9        | 6.2       | 7.3       | 87            | 59 - 111     |
| Vital Diagnostics Envoy 500     | 11          | 47.8        | 11.7      | 24.5      | 42            | 24 - 72      | 11            | 77.0        | 13.6      | 17.7      | 76            | 49 - 105     |
| VITROS 250,350,500,700,750,950  | 21          | 37.7        | 6.3       | 16.6      | 38            | 25 - 51      | 20            | 74.0        | 8.2       | 11.1      | 75            | 51 - 97      |
| All Chemistry Instruments       | 151         | 45.8        | 8.0       | 17.5      | 45            | 29 - 62      | 151           | 80.4        | 8.8       | 11.0      | 81            | 56 - 105     |
| Specimen CH-10                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                      | 167         | 99.0        | 11.4      | 11.5      | 99            | 69 - 129     |               |             |           |           |               |              |
| Calculated-Trig/5               |             |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived   | 6           | -           | -         | -         | 117           | 69 - 129     |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel | 27          | 96.5        | 5.9       | 6.1       | 98            | 67 - 126     |               |             |           |           |               |              |
| Beckman AU systems              | 18          | 87.1        | 8.2       | 9.5       | 86            | 60 - 114     |               |             |           |           |               |              |
| Horiba ABX Pentra 400           | 11          | 97.0        | 8.2       | 8.4       | 95            | 67 - 127     |               |             |           |           |               |              |
| Siemens Dimension               | 23          | 108.3       | 6.4       | 5.9       | 110           | 75 - 141     |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500     | 11          | 94.7        | 14.8      | 15.6      | 99            | 65 - 125     |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950  | 21          | 89.1        | 15.5      | 17.4      | 88            | 58 - 121     |               |             |           |           |               |              |
| All Chemistry Instruments       | 151         | 99.2        | 11.6      | 11.7      | 99            | 69 - 129     |               |             |           |           |               |              |

## LDL Cholesterol - Direct (mg/dL)

| Specimen CH-6               |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-----------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>               | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 73          | 72.9        | 10.4      | 14.3      | 74            | 51 - 95      | 74            | 51.3        | 9.9       | 19.2      | 52            | 31 - 72      |
| Beckman AU Direct HDL / LDL |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems          | 12          | 61.8        | 2.9       | 4.6       | 62            | 43 - 81      | 12            | 40.7        | 2.7       | 6.7       | 41            | 28 - 53      |
| Siemens Automated LDL       |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension           | 22          | 78.1        | 3.9       | 5.0       | 78            | 54 - 102     | 21            | 55.6        | 4.1       | 7.3       | 56            | 38 - 73      |
| Specimen CH-8               |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method                  | 73          | 34.0        | 7.6       | 22.3      | 34            | 18 - 50      | 73            | 68.4        | 10.7      | 15.7      | 69            | 46 - 90      |
| Beckman AU Direct HDL / LDL |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems          | 12          | 26.0        | 1.8       | 6.8       | 26            | 18 - 34      | 12            | 56.3        | 3.1       | 5.5       | 56            | 39 - 74      |
| Siemens Automated LDL       |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension           | 21          | 37.3        | 3.3       | 8.9       | 38            | 26 - 49      | 22            | 73.9        | 4.8       | 6.5       | 75            | 51 - 97      |
| Specimen CH-10              |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method                  | 75          | 84.3        | 12.9      | 15.3      | 83            | 58 - 111     |               |             |           |           |               |              |
| Beckman AU Direct HDL / LDL |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems          | 12          | 70.2        | 4.0       | 5.6       | 72            | 49 - 92      |               |             |           |           |               |              |
| Siemens Automated LDL       |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension           | 22          | 89.7        | 5.8       | 6.4       | 91            | 62 - 117     |               |             |           |           |               |              |

# Cholesterol, HDL (mg/dL)

| <u>Reagent/Instrument</u>         | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-----------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                   | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 252           | 80.8        | 9.0       | 11.2      | 81            | 56 - 105     | 253           | 69.3        | 7.4       | 10.6      | 70            | 48 - 91      |
| All Dex-Sulfate 50,000 MW Methods | 55            | 77.6        | 12.7      | 16.3      | 78            | 54 - 101     | 55            | 61.0        | 10.6      | 17.5      | 63            | 42 - 80      |
| All Direct Methods                | 145           | 79.7        | 8.2       | 10.3      | 79            | 55 - 104     | 145           | 70.8        | 5.5       | 7.7       | 71            | 49 - 93      |
| All Phosphotungstic Acid Methods  | 11            | 76.6        | 8.5       | 11.1      | 75            | 53 - 100     | 11            | 68.2        | 10.6      | 15.6      | 72            | 47 - 89      |
| Alere Cholestech LDX              |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived     | 32            | 72.4        | 12.4      | 17.2      | 70            | 50 - 95      | 32            | 56.3        | 9.7       | 17.2      | 58            | 39 - 74      |
| All Chemistry Instruments         | 36            | 72.7        | 12.1      | 16.7      | 71            | 50 - 95      | 36            | 55.9        | 9.3       | 16.6      | 57            | 39 - 73      |
| Alfa Wass. ACE HDL-C / LDL-C      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 22            | 81.8        | 5.3       | 6.4       | 82            | 57 - 107     | 22            | 68.4        | 4.7       | 6.8       | 68            | 47 - 89      |
| Alfa Wassermann                   |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 12            | 82.1        | 4.4       | 5.4       | 82            | 56 - 105     | 12            | 68.3        | 3.8       | 5.6       | 69            | 48 - 91      |
| Beckman AU Direct HDL / LDL       |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                | 19            | 86.7        | 5.7       | 6.5       | 88            | 60 - 113     | 19            | 71.3        | 4.9       | 6.9       | 71            | 49 - 93      |
| Horiba ABX Pentra                 |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400             | 15            | 77.1        | 4.5       | 5.9       | 77            | 53 - 101     | 15            | 64.9        | 3.6       | 5.6       | 65            | 45 - 85      |
| Roche HDL Direct                  |               |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments         | 15            | 74.0        | 3.8       | 5.2       | 73            | 51 - 97      | 15            | 72.8        | 3.8       | 5.2       | 72            | 50 - 95      |
| Siemens Automated HDL             |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                 | 34            | 74.1        | 4.5       | 6.0       | 74            | 51 - 97      | 35            | 72.9        | 3.8       | 5.3       | 73            | 51 - 95      |
| All Chemistry Instruments         | 35            | 74.2        | 4.4       | 6.0       | 74            | 51 - 97      | 36            | 72.9        | 3.8       | 5.2       | 73            | 51 - 95      |
| Vital Diagnostics Direct          |               |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments         | 10            | 89.1        | 11.1      | 12.5      | 89            | 62 - 116     | 10            | 73.7        | 9.1       | 12.3      | 75            | 51 - 96      |
| VITROS dHDL Slide                 |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950    | 21            | 91.0        | 5.5       | 6.1       | 90            | 63 - 119     | 21            | 73.8        | 4.5       | 6.1       | 73            | 51 - 96      |
| All Chemistry Instruments         | 25            | 90.8        | 5.9       | 6.5       | 90            | 63 - 119     | 25            | 73.7        | 4.9       | 6.6       | 73            | 51 - 96      |

## Cholesterol, HDL (mg/dL)

| Specimen CH-8                     |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Reagent/Instrument</u>         | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                        | 231         | 61.3        | 7.4       | 12.2      | 61            | 42 - 80      | 230           | 79.5        | 7.9       | 9.9       | 79            | 55 - 104     |
| All Dex-Sulfate 50,000 MW Methods | 30          | 54.5        | 8.5       | 15.6      | 57            | 38 - 71      | 29            | 77.8        | 10.2      | 13.1      | 78            | 54 - 102     |
| All Direct Methods                | 146         | 62.2        | 7.5       | 12.1      | 61            | 43 - 81      | 144           | 78.2        | 6.5       | 8.3       | 78            | 54 - 102     |
| All Phosphotungstic Acid Methods  | 11          | 65.6        | 5.0       | 7.6       | 67            | 45 - 86      | 11            | 77.5        | 8.6       | 11.1      | 76            | 54 - 101     |
| Alere Cholestech LDX              |             |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived     | 10          | 45.3        | 5.0       | 11.0      | 46            | 31 - 59      | 9             | -           | -         | -         | 68            | 48 - 91      |
| All Chemistry Instruments         | 11          | 45.3        | 4.7       | 10.5      | 45            | 31 - 59      | 10            | 69.3        | 9.6       | 13.9      | 68            | 48 - 91      |
| Alfa Wass. ACE HDL-C / LDL-C      |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 22          | 57.5        | 4.1       | 7.1       | 58            | 40 - 75      | 22            | 78.9        | 4.8       | 6.1       | 78            | 55 - 103     |
| Alfa Wassermann                   |             |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 12          | 58.5        | 4.4       | 7.6       | 58            | 42 - 80      | 12            | 77.7        | 3.9       | 5.0       | 78            | 55 - 104     |
| Beckman AU Direct HDL / LDL       |             |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                | 19          | 60.5        | 4.4       | 7.3       | 61            | 42 - 79      | 19            | 83.5        | 4.5       | 5.4       | 83            | 58 - 109     |
| Horiba ABX Pentra                 |             |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400             | 15          | 54.3        | 3.8       | 7.1       | 55            | 37 - 71      | 15            | 74.7        | 4.9       | 6.5       | 76            | 52 - 98      |
| Roche HDL Direct                  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments         | 14          | 68.9        | 2.2       | 3.2       | 69            | 48 - 90      | 15            | 74.7        | 3.8       | 5.1       | 74            | 52 - 98      |
| Siemens Automated HDL             |             |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                 | 36          | 68.8        | 4.8       | 7.0       | 69            | 48 - 90      | 34            | 75.4        | 4.1       | 5.4       | 75            | 52 - 98      |
| All Chemistry Instruments         | 37          | 68.8        | 4.8       | 7.0       | 69            | 48 - 90      | 35            | 75.4        | 4.0       | 5.4       | 76            | 52 - 98      |
| Vital Diagnostics Direct          |             |             |           |           |               |              |               |             |           |           |               |              |
| All Chemistry Instruments         | 10          | 63.5        | 8.9       | 14.0      | 64            | 44 - 83      | 10            | 86.7        | 12.3      | 14.2      | 87            | 60 - 113     |
| VITROS dHDL Slide                 |             |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950    | 21          | 61.9        | 3.0       | 4.8       | 61            | 43 - 81      | 21            | 88.6        | 5.3       | 5.9       | 87            | 61 - 116     |
| All Chemistry Instruments         | 25          | 61.7        | 3.2       | 5.3       | 61            | 43 - 81      | 25            | 88.4        | 6.0       | 6.8       | 87            | 61 - 115     |

# Cholesterol, HDL (mg/dL)

## Specimen CH-10

| <u>Reagent/Instrument</u>         | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
|-----------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|
| All Method                        | 231         | 86.1        | 10.8      | 12.5      | 87            | 60 - 112     |
| All Dex-Sulfate 50,000 MW Methods | 30          | 89.4        | 9.8       | 11.0      | 88            | 62 - 117     |
| All Direct Methods                | 147         | 84.3        | 10.4      | 12.4      | 84            | 58 - 110     |
| All Phosphotungstic Acid Methods  | 11          | 81.5        | 13.1      | 16.1      | 77            | 57 - 107     |
| Alere Cholestech LDX              |             |             |           |           |               |              |
| Alere Cholestech LDX - waived     | 10          | 84.8        | 10.2      | 12.0      | 82            | 59 - 111     |
| All Chemistry Instruments         | 11          | 84.5        | 9.7       | 11.5      | 82            | 59 - 110     |
| Alfa Wass. ACE HDL-C / LDL-C      |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 22          | 86.6        | 5.4       | 6.3       | 88            | 60 - 113     |
| Alfa Wassermann                   |             |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel   | 12          | 87.1        | 5.3       | 6.0       | 87            | 60 - 112     |
| Beckman AU Direct HDL / LDL       |             |             |           |           |               |              |
| Beckman AU systems                | 19          | 93.0        | 6.0       | 6.5       | 91            | 65 - 121     |
| Horiba ABX Pentra                 |             |             |           |           |               |              |
| Horiba ABX Pentra 400             | 15          | 84.8        | 6.2       | 7.3       | 84            | 59 - 111     |
| Roche HDL Direct                  |             |             |           |           |               |              |
| All Chemistry Instruments         | 15          | 73.2        | 3.7       | 5.0       | 73            | 51 - 96      |
| Siemens Automated HDL             |             |             |           |           |               |              |
| Siemens Dimension                 | 36          | 74.1        | 5.6       | 7.6       | 74            | 51 - 97      |
| All Chemistry Instruments         | 37          | 74.1        | 5.6       | 7.5       | 74            | 51 - 97      |
| Vital Diagnostics Direct          |             |             |           |           |               |              |
| All Chemistry Instruments         | 10          | 97.9        | 12.0      | 12.2      | 99            | 68 - 128     |
| VITROS dHDL Slide                 |             |             |           |           |               |              |
| VITROS 250,350,500,700,750,950    | 19          | 96.4        | 5.9       | 6.1       | 95            | 67 - 126     |
| All Chemistry Instruments         | 23          | 96.0        | 6.3       | 6.5       | 95            | 67 - 125     |

# Triglycerides (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-6 |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 253           | 172.1       | 8.6       | 5.0       | 171           | 129 - 216    | 256           | 127.4       | 5.2       | 4.1       | 128           | 95 - 160     |
| All Alfa Wassermann Reagents              | 38            | 169.7       | 5.6       | 3.3       | 170           | 127 - 213    | 38            | 130.1       | 4.0       | 3.1       | 130           | 97 - 163     |
| All Horiba Pentra Reagents                | 15            | 166.9       | 4.5       | 2.7       | 169           | 125 - 209    | 16            | 125.9       | 4.4       | 3.5       | 126           | 94 - 158     |
| All Roche Integra/c111/c301/c501 Reagents | 21            | 165.9       | 5.4       | 3.3       | 165           | 124 - 208    | 21            | 127.0       | 4.0       | 3.2       | 127           | 95 - 159     |
| All Vital Diagnostics Reagents            | 15            | 173.5       | 11.6      | 6.7       | 171           | 130 - 217    | 15            | 130.3       | 10.2      | 7.8       | 129           | 97 - 163     |
| Alere Cholestech LDX                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 29            | 176.8       | 5.6       | 3.2       | 176           | 132 - 222    | 29            | 127.8       | 4.4       | 3.4       | 129           | 95 - 160     |
| All Chemistry Instruments                 | 33            | 176.2       | 5.8       | 3.3       | 175           | 132 - 221    | 33            | 127.5       | 4.4       | 3.4       | 128           | 95 - 160     |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 37            | 169.6       | 5.7       | 3.3       | 169           | 127 - 213    | 37            | 130.1       | 4.1       | 3.1       | 129           | 97 - 163     |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 28            | 171.9       | 3.8       | 2.2       | 172           | 128 - 215    | 29            | 128.1       | 3.5       | 2.7       | 128           | 96 - 161     |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 14            | 167.4       | 4.2       | 2.5       | 169           | 125 - 210    | 15            | 126.3       | 4.3       | 3.4       | 127           | 94 - 158     |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13            | 163.2       | 2.8       | 1.7       | 163           | 122 - 204    | 13            | 125.5       | 3.2       | 2.5       | 125           | 94 - 157     |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 40            | 167.3       | 3.6       | 2.1       | 168           | 125 - 210    | 43            | 123.1       | 3.3       | 2.7       | 123           | 92 - 154     |
| All Chemistry Instruments                 | 42            | 167.7       | 4.2       | 2.5       | 168           | 125 - 210    | 44            | 123.1       | 3.3       | 2.7       | 123           | 92 - 154     |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 12            | 173.0       | 11.8      | 6.8       | 171           | 129 - 217    | 12            | 131.3       | 11.2      | 8.5       | 131           | 98 - 165     |
| All Chemistry Instruments                 | 14            | 174.1       | 11.8      | 6.8       | 171           | 130 - 218    | 14            | 130.9       | 10.3      | 7.9       | 129           | 98 - 164     |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 28            | 184.8       | 5.5       | 2.9       | 184           | 138 - 232    | 28            | 129.6       | 3.2       | 2.5       | 130           | 97 - 163     |
| All Chemistry Instruments                 | 33            | 184.2       | 6.3       | 3.4       | 184           | 138 - 231    | 33            | 129.2       | 3.8       | 3.0       | 129           | 96 - 162     |

# Triglycerides (mg/dL)

| <u>Reagent/Instrument</u>                 | Specimen CH-8 |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|-------------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                           | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 232           | 93.7        | 5.3       | 5.6       | 94            | 70 - 118     | 232           | 162.2       | 7.5       | 4.6       | 162           | 121 - 203    |
| All Alfa Wassermann Reagents              | 38            | 99.4        | 3.6       | 3.6       | 99            | 74 - 125     | 38            | 160.6       | 5.3       | 3.3       | 160           | 120 - 201    |
| All Horiba Pentra Reagents                | 16            | 93.3        | 4.0       | 4.2       | 93            | 69 - 117     | 16            | 158.3       | 5.6       | 3.5       | 160           | 118 - 198    |
| All Roche Integra/c111/c301/c501 Reagents | 21            | 95.8        | 3.0       | 3.1       | 96            | 71 - 120     | 21            | 158.5       | 5.0       | 3.2       | 158           | 118 - 199    |
| All Vital Diagnostics Reagents            | 15            | 93.2        | 15.9      | 17.0      | 95            | 69 - 117     | 15            | 166.8       | 10.7      | 6.4       | 164           | 125 - 209    |
| Alere Cholestech LDX                      |               |             |           |           |               |              |               |             |           |           |               |              |
| Alere Cholestech LDX - waived             | 10            | 93.0        | 3.5       | 3.8       | 94            | 69 - 117     | 9             | -           | -         | -         | 164           | 122 - 204    |
| All Chemistry Instruments                 | 11            | 92.6        | 3.5       | 3.8       | 93            | 69 - 116     | 10            | 162.8       | 7.2       | 4.4       | 164           | 122 - 204    |
| Alfa Wassermann                           |               |             |           |           |               |              |               |             |           |           |               |              |
| Alfa Wassermann ACE Alera/Axcel           | 37            | 99.4        | 3.6       | 3.6       | 99            | 74 - 125     | 37            | 160.6       | 5.4       | 3.4       | 160           | 120 - 201    |
| Beckman AU                                |               |             |           |           |               |              |               |             |           |           |               |              |
| Beckman AU systems                        | 29            | 94.8        | 2.8       | 2.9       | 95            | 71 - 119     | 29            | 162.0       | 4.7       | 2.9       | 163           | 121 - 203    |
| Horiba ABX Pentra                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Horiba ABX Pentra 400                     | 15            | 93.3        | 4.1       | 4.4       | 93            | 69 - 117     | 15            | 158.5       | 5.7       | 3.6       | 160           | 118 - 199    |
| Roche Integra                             |               |             |           |           |               |              |               |             |           |           |               |              |
| Roche Integra                             | 13            | 95.2        | 2.9       | 3.1       | 95            | 71 - 119     | 13            | 156.0       | 3.8       | 2.4       | 155           | 117 - 195    |
| Siemens Healthcare                        |               |             |           |           |               |              |               |             |           |           |               |              |
| Siemens Dimension                         | 41            | 87.6        | 2.8       | 3.2       | 88            | 65 - 110     | 42            | 158.7       | 3.5       | 2.2       | 159           | 119 - 199    |
| All Chemistry Instruments                 | 43            | 88.0        | 3.2       | 3.6       | 88            | 65 - 110     | 43            | 158.8       | 3.5       | 2.2       | 159           | 119 - 199    |
| Vital Diagnostics                         |               |             |           |           |               |              |               |             |           |           |               |              |
| Vital Diagnostics Envoy 500               | 12            | 94.8        | 17.4      | 18.3      | 96            | 71 - 119     | 12            | 167.5       | 11.2      | 6.7       | 165           | 125 - 210    |
| All Chemistry Instruments                 | 14            | 93.7        | 16.4      | 17.5      | 95            | 70 - 118     | 14            | 167.6       | 10.6      | 6.4       | 165           | 125 - 210    |
| VITROS                                    |               |             |           |           |               |              |               |             |           |           |               |              |
| VITROS 250,350,500,700,750,950            | 28            | 91.5        | 2.5       | 2.7       | 92            | 68 - 115     | 28            | 172.7       | 4.4       | 2.6       | 174           | 129 - 216    |
| All Chemistry Instruments                 | 32            | 91.4        | 2.6       | 2.8       | 92            | 68 - 115     | 32            | 172.6       | 4.2       | 2.5       | 173           | 129 - 216    |

**Triglycerides (mg/dL)****Specimen CH-10**

| <b><u>Reagent/Instrument</u></b>          | <b><u>Labs</u></b> | <b><u>Mean</u></b> | <b><u>SD</u></b> | <b><u>CV</u></b> | <b><u>Median</u></b> | <b><u>Range</u></b> |
|-------------------------------------------|--------------------|--------------------|------------------|------------------|----------------------|---------------------|
| All Method                                | 233                | 194.1              | 11.4             | 5.9              | 192                  | 145 - 243           |
| All Alfa Wassermann Reagents              | 38                 | 190.3              | 7.5              | 3.9              | 190                  | 142 - 238           |
| All Horiba Pentra Reagents                | 16                 | 186.2              | 5.9              | 3.2              | 186                  | 139 - 233           |
| All Roche Integra/c111/c301/c501 Reagents | 21                 | 185.5              | 7.1              | 3.8              | 184                  | 139 - 232           |
| All Vital Diagnostics Reagents            | 15                 | 197.7              | 12.5             | 6.3              | 197                  | 148 - 248           |
| Alere Cholestech LDX                      |                    |                    |                  |                  |                      |                     |
| Alere Cholestech LDX - waived             | 10                 | 200.5              | 7.7              | 3.8              | 204                  | 150 - 251           |
| All Chemistry Instruments                 | 11                 | 199.8              | 7.6              | 3.8              | 203                  | 149 - 250           |
| Alfa Wassermann                           |                    |                    |                  |                  |                      |                     |
| Alfa Wassermann ACE Alera/Axcel           | 37                 | 190.4              | 7.6              | 4.0              | 190                  | 142 - 238           |
| Beckman AU                                |                    |                    |                  |                  |                      |                     |
| Beckman AU systems                        | 29                 | 192.4              | 4.9              | 2.6              | 193                  | 144 - 241           |
| Horiba ABX Pentra                         |                    |                    |                  |                  |                      |                     |
| Horiba ABX Pentra 400                     | 15                 | 186.7              | 5.8              | 3.1              | 186                  | 140 - 234           |
| Roche Integra                             |                    |                    |                  |                  |                      |                     |
| Roche Integra                             | 13                 | 181.8              | 4.7              | 2.6              | 181                  | 136 - 228           |
| Siemens Healthcare                        |                    |                    |                  |                  |                      |                     |
| Siemens Dimension                         | 41                 | 190.0              | 4.1              | 2.1              | 190                  | 142 - 238           |
| All Chemistry Instruments                 | 43                 | 190.6              | 4.9              | 2.6              | 190                  | 142 - 239           |
| Vital Diagnostics                         |                    |                    |                  |                  |                      |                     |
| Vital Diagnostics Envoy 500               | 12                 | 199.3              | 13.1             | 6.6              | 201                  | 149 - 250           |
| All Chemistry Instruments                 | 14                 | 198.9              | 12.1             | 6.1              | 199                  | 149 - 249           |
| VITROS                                    |                    |                    |                  |                  |                      |                     |
| VITROS 250,350,500,700,750,950            | 28                 | 214.3              | 5.1              | 2.4              | 214                  | 160 - 268           |
| All Chemistry Instruments                 | 32                 | 214.5              | 5.2              | 2.4              | 214                  | 160 - 269           |

**Acetaminophen (µg/mL)**

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-6  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-7 |           |               |              |
|---------------|-------------|-------------|----------------|-----------|---------------|--------------|-------------|-------------|---------------|-----------|---------------|--------------|
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5           | 92.38       | 1.14           | 1.2       | 92.2          | 83.1 - 101.7 | 5           | 54.40       | 1.74          | 3.2       | 54.4          | 48.9 - 59.9  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-8  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-9 |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5           | 24.95       | 5.34           | 21.4      | 24.6          | 8.9 - 41.0   | 5           | 83.15       | 3.13          | 3.8       | 83.3          | 73.7 - 92.6  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-10 |           |               |              | <u>Labs</u> | <u>Mean</u> |               |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             |               |           |               |              |
| All Method    | 5           | 118.00      | 12.69          | 10.8      | 112.0         | 79.9 - 156.1 |             |             |               |           |               |              |

**Carbamazepine (µg/mL)**

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-6  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-7 |           |               |              |
|---------------|-------------|-------------|----------------|-----------|---------------|--------------|-------------|-------------|---------------|-----------|---------------|--------------|
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5           | 12.40       | 0.80           | 6.5       | 12.1          | 9.3 - 15.5   | 5           | 7.73        | 0.46          | 5.9       | 7.7           | 5.7 - 9.7    |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-8  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-9 |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5           | 4.15        | 0.25           | 6.1       | 4.1           | 3.1 - 5.2    | 5           | 11.23       | 0.30          | 2.7       | 11.2          | 8.4 - 14.1   |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-10 |           |               |              | <u>Labs</u> | <u>Mean</u> |               |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             |               |           |               |              |
| All Method    | 5           | 14.50       | 0.42           | 2.9       | 14.5          | 10.8 - 18.2  |             |             |               |           |               |              |

**Digoxin (ng/mL)**

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-6  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-7 |           |               |              |
|---------------|-------------|-------------|----------------|-----------|---------------|--------------|-------------|-------------|---------------|-----------|---------------|--------------|
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 17          | 2.25        | 0.20           | 9.0       | 2.3           | 1.8 - 2.8    | 17          | 1.52        | 0.12          | 7.9       | 1.5           | 1.2 - 1.9    |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-8  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen CH-9 |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 17          | 1.04        | 0.11           | 10.2      | 1.0           | 0.8 - 1.3    | 17          | 2.12        | 0.20          | 9.5       | 2.2           | 1.6 - 2.6    |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen CH-10 |           |               |              | <u>Labs</u> | <u>Mean</u> |               |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             |               |           |               |              |
| All Method    | 17          | 2.63        | 0.27           | 10.4      | 2.7           | 2.1 - 3.2    |             |             |               |           |               |              |

Gentamicin (µg/mL)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 8.80        | 0.14      | 1.6       | 8.8           | 6.6 - 11.0   | 5             | 5.05        | 0.21      | 4.2       | 5.1           | 3.7 - 6.4    |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 2.25        | 0.07      | 3.1       | 2.3           | 1.6 - 2.9    | 5             | 8.25        | 0.07      | 0.9       | 8.3           | 6.1 - 10.4   |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 5              | 10.90       | 0.14      | 1.3       | 10.9          | 8.1 - 13.7   |               |             |           |           |               |              |

Lithium (mmol/L)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 2.07        | 0.06      | 2.8       | 2.1           | 1.6 - 2.5    | 5             | 1.27        | 0.06      | 4.6       | 1.3           | 0.9 - 1.6    |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 0.70        | 0.01      | 0.0       | 0.7           | 0.4 - 1.0    | 5             | 1.83        | 0.06      | 3.1       | 1.8           | 1.4 - 2.2    |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 5              | 2.43        | 0.12      | 4.7       | 2.5           | 1.9 - 3.0    |               |             |           |           |               |              |

## Phenobarbital (µg/mL)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 1              | -           | -         | -         | 41.0          | Not graded   | 1             | -           | -         | -         | 22.2          | Not graded   |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 1              | -           | -         | -         | 10.4          | Not graded   | 1             | -           | -         | -         | 34.5          | Not graded   |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 1              | -           | -         | -         | 47.4          | Not graded   |               |             |           |           |               |              |

## Phenytoin (µg/mL)

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 6              | 22.33       | 2.46      | 11.0      | 22.4          | 16.7 - 28.0  | 6             | 15.10       | 1.60      | 10.6      | 15.0          | 11.3 - 18.9  |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 6              | 9.35        | 0.75      | 8.0       | 9.4           | 7.0 - 11.7   | 6             | 21.07       | 2.35      | 11.2      | 21.0          | 15.8 - 26.4  |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 6              | 26.43       | 3.85      | 14.5      | 26.8          | 19.8 - 33.1  |               |             |           |           |               |              |

**Salicylate (mg/dL)**

| Specimen CH-6  |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method     | 5           | 27.55       | 0.07      | 0.3       | 27.6          | 24.7 - 30.4  | 5             | 17.80       | 1.13      | 6.4       | 17.8          | 14.4 - 21.2  |
| Specimen CH-8  |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method     | 5           | 9.65        | 1.06      | 11.0      | 9.7           | 6.4 - 12.9   | 5             | 25.50       | 0.42      | 1.7       | 25.5          | 22.9 - 28.1  |
| Specimen CH-10 |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method     | 5           | 35.20       | 3.11      | 8.8       | 35.2          | 25.8 - 44.6  |               |             |           |           |               |              |

**Theophylline (µg/mL)**

| Specimen CH-6  |             |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method     | 5           | 34.50       | 2.55      | 7.4       | 34.5          | 25.8 - 43.2  | 5             | 22.40       | 0.99      | 4.4       | 22.4          | 16.8 - 28.0  |
| Specimen CH-8  |             |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
| All Method     | 5           | 14.65       | 1.34      | 9.2       | 14.7          | 10.9 - 18.4  | 5             | 32.20       | 3.39      | 10.5      | 32.2          | 24.1 - 40.3  |
| Specimen CH-10 |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method     | 5           | 38.65       | 1.06      | 2.7       | 38.7          | 28.9 - 48.4  |               |             |           |           |               |              |

**Valproic Acid (µg/mL)**

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 107.25      | 4.36      | 4.1       | 106.3         | 80.4 - 134.1 | 5             | 75.98       | 4.62      | 6.1       | 74.3          | 56.9 - 95.0  |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 52.10       | 0.64      | 1.2       | 52.1          | 39.0 - 65.2  | 5             | 102.10      | 2.34      | 2.3       | 101.9         | 76.5 - 127.7 |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 5              | 122.30      | 4.60      | 3.8       | 121.2         | 91.7 - 152.9 |               |             |           |           |               |              |

**Vancomycin (µg/mL)**

| <u>Method</u> | Specimen CH-6  |             |           |           |               |              | Specimen CH-7 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 44.70       | 4.24      | 9.5       | 44.7          | 31.9 - 57.5  | 5             | 24.20       | 1.56      | 6.4       | 24.2          | 19.5 - 28.9  |
|               | Specimen CH-8  |             |           |           |               |              | Specimen CH-9 |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 8.30        | 0.01      | 0.0       | 8.3           | 7.4 - 9.2    | 5             | 39.35       | 4.17      | 10.6      | 39.4          | 26.8 - 51.9  |
|               | Specimen CH-10 |             |           |           |               |              |               |             |           |           |               |              |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method    | 5              | 55.10       | 2.69      | 4.9       | 55.1          | 47.0 - 63.2  |               |             |           |           |               |              |

### Apolipoprotein A1 (mg/dL)

| <u>Method</u> | Specimen LP-3 |             |           |           |               |              | Specimen LP-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5             | 190.5       | 13.4      | 7.1       | 191           | 133 - 248    | 5             | 45.5        | 6.4       | 14.0      | 46            | 31 - 60      |

### Apolipoprotein B (mg/dL)

| <u>Method</u> | Specimen LP-3 |             |           |           |               |              | Specimen LP-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5             | 92.5        | 11.8      | 12.8      | 95            | 69 - 116     | 5             | 21.0        | 4.9       | 23.3      | 22            | 15 - 27      |

### Neonatal Bilirubin, Total (mg/dL)

| <u>Method</u>             | Specimen NB-6  |             |           |           |               |              | Specimen NB-7 |             |           |           |               |              |
|---------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                           | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                | 25             | 11.40       | 0.86      | 7.5       | 11.5          | 9.1 - 13.7   | 25            | 0.10        | 0.15      | 157.6     | 0.0           | 0.0 - 0.5    |
| No Reagent Required       |                |             |           |           |               |              |               |             |           |           |               |              |
| Bilirubinometer / Unistat | 13             | 11.51       | 0.86      | 7.4       | 11.7          | 9.2 - 13.9   | 13            | 0.00        | 0.01      | 0.0       | 0.0           | 0.0 - 0.4    |
| All Chemistry Instruments | 17             | 11.51       | 0.93      | 8.1       | 11.7          | 9.2 - 13.9   | 17            | 0.08        | 0.15      | 193.6     | 0.0           | 0.0 - 0.5    |
| <u>Method</u>             | Specimen NB-8  |             |           |           |               |              | Specimen NB-9 |             |           |           |               |              |
|                           | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                | 25             | 18.45       | 1.16      | 6.3       | 18.7          | 14.7 - 22.2  | 25            | 5.76        | 0.70      | 12.2      | 5.8           | 4.6 - 7.0    |
| No Reagent Required       |                |             |           |           |               |              |               |             |           |           |               |              |
| Bilirubinometer / Unistat | 13             | 18.48       | 1.27      | 6.9       | 18.9          | 14.7 - 22.2  | 13            | 5.62        | 0.56      | 9.9       | 5.6           | 4.4 - 6.8    |
| All Chemistry Instruments | 17             | 18.41       | 1.22      | 6.6       | 18.8          | 14.7 - 22.1  | 17            | 5.77        | 0.65      | 11.2      | 5.8           | 4.6 - 7.0    |
| <u>Method</u>             | Specimen NB-10 |             |           |           |               |              |               |             |           |           |               |              |
|                           | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method                | 25             | 15.25       | 1.37      | 9.0       | 15.1          | 12.2 - 18.4  |               |             |           |           |               |              |
| No Reagent Required       |                |             |           |           |               |              |               |             |           |           |               |              |
| Bilirubinometer / Unistat | 13             | 15.59       | 1.76      | 11.3      | 16.0          | 12.4 - 18.8  |               |             |           |           |               |              |
| All Chemistry Instruments | 17             | 15.52       | 1.54      | 9.9       | 15.6          | 12.4 - 18.7  |               |             |           |           |               |              |

**Bilirubin, Direct (mg/dL)**

| Specimen NB-6  |             |             |           |           |               |              | Specimen NB-7 |             |           |           |               |              |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method     | 11          | 4.65        | 0.30      | 6.5       | 4.6           | 4.0 - 5.3    | 11            | 0.04        | 0.05      | 138.7     | 0.0           | 0.0 - 0.2    |
| Specimen NB-8  |             |             |           |           |               |              | Specimen NB-9 |             |           |           |               |              |
| All Method     | 11          | 3.67        | 0.20      | 5.3       | 3.6           | 3.2 - 4.1    | 11            | 1.32        | 0.18      | 13.9      | 1.3           | 0.9 - 1.7    |
| Specimen NB-10 |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method     | 11          | 5.17        | 0.31      | 6.1       | 5.1           | 4.5 - 5.8    |               |             |           |           |               |              |

## Blood Gases – pH

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-6  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen BG-7 |           |               |              |
|---------------|-------------|-------------|----------------|-----------|---------------|--------------|-------------|-------------|---------------|-----------|---------------|--------------|
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 11          | 7.327       | 0.005          | 0.1       | 7.33          | 7.28 - 7.37  | 11          | 7.287       | 0.005         | 0.1       | 7.29          | 7.24 - 7.33  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-8  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen BG-9 |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 11          | 6.954       | 0.005          | 0.1       | 6.95          | 6.91 - 7.00  | 11          | 7.224       | 0.005         | 0.1       | 7.22          | 7.18 - 7.27  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-10 |           |               |              | <u>Labs</u> | <u>Mean</u> |               |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             |               |           |               |              |
| All Method    | 11          | 7.176       | 0.005          | 0.1       | 7.18          | 7.13 - 7.22  |             |             |               |           |               |              |

## Blood Gases - pCO<sub>2</sub> (mmHg)

| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-6  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen BG-7 |           |               |              |
|---------------|-------------|-------------|----------------|-----------|---------------|--------------|-------------|-------------|---------------|-----------|---------------|--------------|
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 11          | 34.83       | 1.23           | 3.5       | 34.5          | 29.8 - 39.9  | 11          | 43.77       | 2.31          | 5.3       | 44.8          | 38.7 - 48.8  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-8  |           |               |              | <u>Labs</u> | <u>Mean</u> | Specimen BG-9 |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             | <u>SD</u>     | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 11          | 68.80       | 3.25           | 4.7       | 69.7          | 63.2 - 74.4  | 11          | 50.38       | 2.22          | 4.4       | 50.5          | 45.3 - 55.4  |
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | Specimen BG-10 |           |               |              | <u>Labs</u> | <u>Mean</u> |               |           |               |              |
|               |             |             | <u>SD</u>      | <u>CV</u> | <u>Median</u> | <u>Range</u> |             |             |               |           |               |              |
| All Method    | 11          | 58.64       | 2.41           | 4.1       | 57.7          | 53.6 - 63.7  |             |             |               |           |               |              |

### Blood Gases - pO<sub>2</sub> (mmHg)

| <u>Method</u> | Specimen BG-6  |             |           |           |               |              | Specimen BG-7 |             |           |           |               |               |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|---------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 11             | 80.17       | 3.60      | 4.5       | 80.0          | 69.3 - 91.0  | 11            | 167.50      | 10.99     | 6.6       | 164.0         | 134.5 - 200.5 |
|               | Specimen BG-8  |             |           |           |               |              | Specimen BG-9 |             |           |           |               |               |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 11             | 60.80       | 5.17      | 8.5       | 59.0          | 45.2 - 76.4  | 11            | 186.40      | 11.55     | 6.2       | 182.0         | 151.7 - 221.1 |
|               | Specimen BG-10 |             |           |           |               |              |               |             |           |           |               |               |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |               |
| All Method    | 11             | 81.20       | 3.90      | 4.8       | 79.0          | 69.5 - 92.9  |               |             |           |           |               |               |

### Blood Gases – Ionized Calcium (mmol/L)

One participant reported results for Blood Gases-Ionized Calcium. The vendor mean assay values for specimens BG-6 through BG-10 are: 0.57 mmol/L , 1.05 mmol/L, 2.3 mmol/L, 0.59 mmol/L, 2.1 mmol/L, respectively.

### Blood Gases - Chloride (mmol/L)

One participant reported results for Blood Gases-Chloride. The vendor mean assay values for specimens BG-6 through BG-10 are: 71 mmol/L, 98 mmol/L, 101 mmol/L, 117 mmol/L, 76 mmol/L, respectively.

### Blood Gases - Potassium (mmol/L)

One participant reported results for Blood Gases-Potassium. The vendor mean assay values for specimens BG-6 through BG-10 are: 2.0 mmol/L, 4.5 mmol/L, 3.3 mmol/L, 6.6 mmol/L, 2.7 mmol/L, respectively.

### Blood Gases – Sodium (mmol/L)

One participant reported results for Blood Gases-Sodium. The vendor mean assay values for specimens BG-6 through BG-10 are: 114 mmol/L, 156 mmol/L , 123 mmol/L , 167 mmol/L , 125 mmol/L, respectively.

### Blood Gases – Lactic Acid (mmol/L)

One participant reported results for Blood Gases-Lactic Acid. The vendor mean assay values for specimens BG-6 through BG-10 are: 6.1 mmol/L, 2.3 mmol/L , 4.8 mmol/L , 3.2 mmol/L , 4.5 mmol/L , respectively.

**C-Peptide (ng/mL)**

| <u>Method</u> | Specimen CIP-3 |             |           |           |               |              | Specimen CIP-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 6              | 8.790       | 1.089     | 12.4      | 8.60          | 6.61 - 10.97 | 6              | 5.927       | 0.708     | 11.9      | 5.65          | 4.51 - 7.35  |

**Insulin (μU/mL)**

| <u>Method</u> | Specimen CIP-3 |             |           |           |               |              | Specimen CIP-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 16             | 159.74      | 46.41     | 29.1      | 170.2         | 66.9 - 252.6 | 16             | 120.29      | 34.89     | 29.0      | 127.7         | 50.5 - 190.1 |

**Parathyroid hormone (pg/mL)**

| <u>Method</u>            | Specimen CIP-3 |             |           |           |               |              | Specimen CIP-4 |             |           |           |               |              |
|--------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 43             | 77.8        | 13.9      | 17.9      | 75            | 49 - 106     | 41             | 25.7        | 3.2       | 12.6      | 25            | 19 - 33      |
| All TOSOH Instruments    | 11             | 78.0        | 10.0      | 12.8      | 79            | 57 - 99      | 11             | 28.4        | 3.9       | 13.8      | 29            | 20 - 37      |
| Beckman ACCESS / 2 / Dxl | 15             | 71.7        | 9.6       | 13.5      | 68            | 52 - 91      | 15             | 23.8        | 1.5       | 6.2       | 24            | 20 - 27      |

**Vitamin D (25-Hydroxy) (ng/mL)**

| <u>Method</u>                         | Specimen CIP-3 |             |           |           |               |              | Specimen CIP-4 |             |           |           |               |              |
|---------------------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                                       | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                            | 108            | 60.77       | 14.60     | 24.0      | 61.1          | 31.5 - 90.0  | 108            | 44.85       | 10.32     | 23.0      | 44.4          | 24.2 - 65.5  |
| All Roche Instruments                 | 10             | 38.61       | 3.24      | 8.4       | 38.7          | 32.1 - 45.1  | 10             | 29.10       | 3.51      | 12.1      | 30.0          | 22.0 - 36.2  |
| All TOSOH Instruments                 | 17             | 72.65       | 5.96      | 8.2       | 75.0          | 60.7 - 84.6  | 17             | 54.76       | 4.47      | 8.2       | 55.4          | 45.8 - 63.8  |
| Abbott Architect                      | 15             | 56.49       | 5.44      | 9.6       | 56.5          | 45.6 - 67.4  | 15             | 40.41       | 3.53      | 8.7       | 40.2          | 33.3 - 47.5  |
| Beckman ACCESS / 2 / Dxl              | 34             | 63.10       | 5.41      | 8.6       | 63.0          | 52.2 - 74.0  | 32             | 44.96       | 2.32      | 5.2       | 44.9          | 40.3 - 49.7  |
| Immuno Diagnostic Systems (IDS) - EIA | 5              | 63.20       | 19.28     | 30.5      | 55.3          | 24.6 - 101.8 | 5              | 43.96       | 9.67      | 22.0      | 39.2          | 24.6 - 63.4  |
| Qualigen FastPack                     | 11             | 45.98       | 4.26      | 9.3       | 44.8          | 37.4 - 54.5  | 10             | 37.71       | 4.15      | 11.0      | 38.8          | 29.4 - 46.1  |
| Roche cobas e 411                     | 9              | 38.60       | 3.44      | 8.9       | 38.7          | 31.7 - 45.5  | 9              | 28.92       | 3.68      | 12.7      | 29.9          | 21.5 - 36.3  |
| Siemens ADVIA Centaur / CP            | 5              | 97.46       | 11.04     | 11.3      | 95.1          | 75.3 - 119.6 | 5              | 63.96       | 5.35      | 8.4       | 66.3          | 53.2 - 74.7  |
| TOSOH AIA                             | 9              | 72.52       | 6.26      | 8.6       | 76.0          | 60.0 - 85.1  | 9              | 54.68       | 5.03      | 9.2       | 55.8          | 44.6 - 64.8  |
| TOSOH ST AIA                          | 8              | 72.79       | 6.03      | 8.3       | 74.4          | 60.7 - 84.9  | 8              | 54.86       | 4.09      | 7.5       | 55.3          | 46.6 - 63.1  |

**Bioavailable Testosterone (ng/dL)**

| <u>Method</u> | Specimen SHB-3 |             |           |           |               |              | Specimen SHB-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 1              | -           | -         | -         | 43.5          | Not graded   | 1              | -           | -         | -         | 32.9          | Not graded   |

### Free Testosterone (pg/mL)

| <u>Method</u> | Specimen SHB-3 |             |           |           |               |              | Specimen SHB-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 4.30        | 2.82      | 65.5      | 3.6           | 0.0 - 12.8   | 5              | 5.33        | 4.54      | 85.1      | 4.3           | 0.0 - 19.0   |

### Sex Hormone Binding Globulin (SHBG) (nmol/L)

| <u>Method</u>         | Specimen SHB-3 |             |           |           |               |               | Specimen SHB-6 |             |           |           |               |               |
|-----------------------|----------------|-------------|-----------|-----------|---------------|---------------|----------------|-------------|-----------|-----------|---------------|---------------|
|                       | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method            | 9              | 35.573      | 4.697     | 13.2      | 33.90         | 21.48 - 49.67 | 9              | 56.391      | 9.139     | 16.2      | 54.60         | 28.97 - 83.81 |
| Siemens Immulite/1000 | 5              | 33.980      | 1.802     | 5.3       | 33.70         | 28.57 - 39.39 | 5              | 51.960      | 3.393     | 6.5       | 52.00         | 41.78 - 62.14 |

### Testosterone (ng/dL)

| <u>Method</u> | Specimen SHB-3 |             |           |           |               |              | Specimen SHB-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 291.0       | 63.2      | 21.7      | 282           | 203 - 379    | 5              | 554.5       | 88.1      | 15.9      | 559           | 388 - 721    |

### Glycohemoglobin (percent)

| <u>Method</u>              | Specimen GH-3 |             |           |           |               |              | Specimen GH-4 |             |           |           |               |              |
|----------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                            | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                 | 198           | 8.48        | 0.29      | 3.4       | 8.5           | 7.6 - 9.4    | 198           | 5.72        | 0.20      | 3.5       | 5.7           | 5.1 - 6.3    |
| All Hemoglobin A1c Methods | 195           | 8.48        | 0.28      | 3.3       | 8.5           | 7.6 - 9.4    | 196           | 5.72        | 0.20      | 3.5       | 5.7           | 5.1 - 6.3    |
| All TOSOH Methods          | 19            | 8.51        | 0.15      | 1.7       | 8.5           | 7.6 - 9.4    | 19            | 5.81        | 0.11      | 1.9       | 5.8           | 5.2 - 6.4    |
| Beckman AU A1c             | 11            | 8.24        | 0.20      | 2.4       | 8.2           | 7.4 - 9.1    | 11            | 5.55        | 0.20      | 3.5       | 5.5           | 4.9 - 6.2    |
| Siemens DCA Vantage        | 87            | 8.55        | 0.18      | 2.2       | 8.6           | 7.6 - 9.5    | 88            | 5.75        | 0.13      | 2.2       | 5.8           | 5.1 - 6.4    |
| Siemens Dimension HB1C     | 36            | 8.14        | 0.30      | 3.6       | 8.2           | 7.3 - 9.0    | 35            | 5.59        | 0.18      | 3.2       | 5.6           | 5.0 - 6.2    |
| TOSOH G8                   | 17            | 8.49        | 0.14      | 1.6       | 8.5           | 7.6 - 9.4    | 17            | 5.80        | 0.12      | 2.0       | 5.8           | 5.2 - 6.4    |

### Afinion Glycohemoglobin (percent)

| <u>Method</u>             | Specimen AFN-3 |             |           |           |               |              | Specimen AFN-4 |             |           |           |               |              |
|---------------------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|                           | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| Axis-Shield Afinion AS100 | 61             | 8.14        | 0.16      | 2.0       | 8.1           | 7.3 - 9.0    | 61             | 6.18        | 0.16      | 2.6       | 6.2           | 5.5 - 6.9    |

**BNP (pg/mL)**

| <u>Method</u>                  | Specimen CK-6  |             |           |           |               |                 | Specimen CK-7 |             |           |           |               |                |
|--------------------------------|----------------|-------------|-----------|-----------|---------------|-----------------|---------------|-------------|-----------|-----------|---------------|----------------|
|                                | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>    | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>   |
| All Method                     | 7              | 407.10      | 133.51    | 32.8      | 400.5         | 140.0 - 674.2   | 7             | 1391.87     | 381.02    | 27.4      | 1180.0        | 629.8 - 2154.0 |
| All Non-Biosite Triage Methods | 4              | 395.18      | 184.35    | 46.6      | 417.2         | 26.4 - 763.9    | 4             | 1305.28     | 498.60    | 38.2      | 1527.7        | 308.0 - 2302.5 |
| Alere Triage                   | 43             | 397.95      | 51.23     | 12.9      | 395.0         | 295.4 - 500.5   | 41            | 1194.27     | 156.90    | 13.1      | 1170.0        | 880.4 - 1508.1 |
|                                | Specimen CK-8  |             |           |           |               |                 | Specimen CK-9 |             |           |           |               |                |
|                                | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>    | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>   |
| All Method                     | 4              | 66.18       | 29.69     | 44.9      | 59.9          | 6.8 - 125.6     | 4             | 861.53      | 93.21     | 10.8      | 735.0         | 646.1 - 1077.0 |
| All Non-Biosite Triage Methods | 1              | -           | -         | -         | 110.7         | 83.0 - 138.4    | 1             | -           | -         | -         | 951.1         | 713.3 - 1188.9 |
| Alere Triage                   | 24             | 59.52       | 8.95      | 15.0      | 60.1          | 41.6 - 77.5     | 25            | 699.96      | 100.76    | 14.4      | 698.0         | 498.4 - 901.5  |
|                                | Specimen CK-10 |             |           |           |               |                 |               |             |           |           |               |                |
|                                | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>    |               |             |           |           |               |                |
| All Method                     | 4              | 2371.43     | 94.32     | 4.0       | 1850.0        | 1778.5 - 2964.3 |               |             |           |           |               |                |
| All Non-Biosite Triage Methods | 1              | -           | -         | -         | 2296.7        | 1722.5 - 2870.9 |               |             |           |           |               |                |
| Alere Triage                   | 24             | 1787.50     | 276.47    | 15.5      | 1835.0        | 1234.5 - 2340.5 |               |             |           |           |               |                |

**CK-MB (ng/mL)**

| <u>Method</u>   | Specimen CK-6  |             |           |           |               |              | Specimen CK-7 |             |           |           |               |              |
|-----------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                 | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method      | 12             | 16.19       | 1.41      | 8.7       | 8.5           | 11.9 - 20.5  | 12            | 51.11       | 4.15      | 8.1       | 28.7          | 38.6 - 63.6  |
| Alere Triage    | 29             | 8.25        | 1.26      | 15.2      | 8.1           | 4.4 - 12.1   | 29            | 25.33       | 4.50      | 17.8      | 26.2          | 11.8 - 38.9  |
| Dade Stratus CS | 6              | 15.73       | 0.41      | 2.6       | 15.8          | 14.5 - 17.0  | 6             | 47.70       | 1.13      | 2.4       | 48.1          | 44.2 - 51.2  |
|                 | Specimen CK-8  |             |           |           |               |              | Specimen CK-9 |             |           |           |               |              |
|                 | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method      | 12             | 5.84        | 0.79      | 13.5      | 3.0           | 3.4 - 8.3    | 12            | 27.88       | 2.53      | 9.1       | 14.6          | 20.2 - 35.5  |
| Alere Triage    | 29             | 2.83        | 0.68      | 23.9      | 2.8           | 0.8 - 4.9    | 29            | 13.27       | 2.08      | 15.7      | 13.1          | 7.0 - 19.6   |
| Dade Stratus CS | 6              | 5.93        | 0.14      | 2.3       | 5.9           | 5.5 - 6.4    | 6             | 26.20       | 0.70      | 2.7       | 26.4          | 24.1 - 28.3  |
|                 | Specimen CK-10 |             |           |           |               |              |               |             |           |           |               |              |
|                 | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method      | 12             | 100.33      | 11.27     | 11.2      | 48.2          | 66.5 - 134.2 |               |             |           |           |               |              |
| Alere Triage    | 28             | 43.49       | 7.33      | 16.8      | 45.1          | 21.5 - 65.5  |               |             |           |           |               |              |
| Dade Stratus CS | 6              | 90.75       | 3.07      | 3.4       | 91.0          | 81.5 - 100.0 |               |             |           |           |               |              |

**D-Dimer (ng/mL)**

| Specimen CK-6   |             |             |           |           |               |              | Specimen CK-7 |             |           |           |               |              |
|-----------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>   | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method      | 10          | 1102.3      | 502.4     | 45.6      | 834           | 97 - 2108    | 10            | 1912.6      | 779.5     | 40.8      | 1430          | 353 - 3472   |
| Alere Triage    | 28          | 817.8       | 73.0      | 8.9       | 811           | 572 - 1064   | 28            | 1397.9      | 134.5     | 9.6       | 1385          | 978 - 1818   |
| Dade Stratus CS | 5           | 955.6       | 26.7      | 2.8       | 964           | 668 - 1243   | 5             | 1810.0      | 36.6      | 2.0       | 1821          | 1267 - 2353  |
| Specimen CK-8   |             |             |           |           |               |              | Specimen CK-9 |             |           |           |               |              |
| All Method      | 7           | 771.9       | 341.3     | 44.2      | 632           | 89 - 1455    | 7             | 1418.7      | 406.7     | 28.7      | 1065          | 605 - 2233   |
| Alere Triage    | 27          | 655.7       | 60.4      | 9.2       | 632           | 458 - 853    | 27            | 1021.9      | 89.5      | 8.8       | 1040          | 715 - 1329   |
| Dade Stratus CS | 5           | 638.4       | 48.8      | 7.6       | 624           | 446 - 830    | 5             | 1258.2      | 73.1      | 5.8       | 1255          | 880 - 1636   |
| Specimen CK-10  |             |             |           |           |               |              |               |             |           |           |               |              |
| All Method      | 7           | 3010.9      | 578.2     | 19.2      | 2110          | 1854 - 4168  |               |             |           |           |               |              |
| Alere Triage    | 27          | 2061.7      | 195.8     | 9.5       | 2050          | 1443 - 2681  |               |             |           |           |               |              |
| Dade Stratus CS | 5           | 2773.2      | 162.9     | 5.9       | 2836          | 1941 - 3606  |               |             |           |           |               |              |

**D-Dimer (µgFEU/mL)**

| Specimen CK-6 |             |             |           |           |               |               | Specimen CK-7 |             |           |           |               |               |
|---------------|-------------|-------------|-----------|-----------|---------------|---------------|---------------|-------------|-----------|-----------|---------------|---------------|
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 5           | 0.6000      | 0.1400    | 23.3      | 0.60          | 0.320 - 0.880 | 5             | 1.2000      | 0.1400    | 11.6      | 1.20          | 0.840 - 1.560 |

## Myoglobin (ng/mL)

| <u>Method</u> | Specimen CK-6  |             |           |           |               |               | Specimen CK-7 |             |           |           |               |               |
|---------------|----------------|-------------|-----------|-----------|---------------|---------------|---------------|-------------|-----------|-----------|---------------|---------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 4              | 68.78       | 14.55     | 21.2      | 99.1          | 39.6 - 97.9   | 4             | 200.68      | 47.24     | 23.5      | 236.5         | 106.1 - 295.2 |
| Alere Triage  | 24             | 99.82       | 14.55     | 14.6      | 102.0         | 69.8 - 129.8  | 24            | 257.08      | 54.47     | 21.2      | 242.0         | 148.1 - 366.1 |
|               | Specimen CK-8  |             |           |           |               |               | Specimen CK-9 |             |           |           |               |               |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 4              | 25.65       | 4.25      | 16.6      | 32.3          | 17.1 - 34.2   | 4             | 114.88      | 27.64     | 24.1      | 151.0         | 59.5 - 170.2  |
| Alere Triage  | 24             | 34.60       | 8.12      | 23.5      | 32.6          | 18.3 - 50.9   | 25            | 159.40      | 32.03     | 20.1      | 158.0         | 95.3 - 223.5  |
|               | Specimen CK-10 |             |           |           |               |               |               |             |           |           |               |               |
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |               |             |           |           |               |               |
| All Method    | 4              | 378.25      | 97.63     | 25.8      | 399.0         | 182.9 - 573.6 |               |             |           |           |               |               |
| Alere Triage  | 22             | 411.23      | 74.20     | 18.0      | 409.5         | 262.8 - 559.7 |               |             |           |           |               |               |

## NT-proBNP (pg/mL)

| <u>Method</u>               | Specimen CK-6  |             |           |           |               |              | Specimen CK-7 |             |           |           |               |              |
|-----------------------------|----------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 6              | 349.2       | 220.0     | 63.0      | 250           | 0 - 790      | 6             | 1611.0      | 768.9     | 47.7      | 1365          | 73 - 3149    |
| Siemens Dimension NT-proBNP | 4              | 212.3       | 66.3      | 31.2      | 184           | 79 - 345     | 4             | 1159.8      | 391.3     | 33.7      | 977           | 377 - 1943   |
|                             | Specimen CK-8  |             |           |           |               |              | Specimen CK-9 |             |           |           |               |              |
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                  | 3              | -           | -         | -         | 15            | 7 - 27       | 3             | -           | -         | -         | 412           | 92 - 966     |
| Siemens Dimension NT-proBNP | 3              | -           | -         | -         | 15            | 7 - 27       | 3             | -           | -         | -         | 412           | 92 - 966     |
|                             | Specimen CK-10 |             |           |           |               |              |               |             |           |           |               |              |
|                             | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |               |             |           |           |               |              |
| All Method                  | 3              | -           | -         | -         | 2263          | 416 - 5474   |               |             |           |           |               |              |
| Siemens Dimension NT-proBNP | 3              | -           | -         | -         | 2263          | 416 - 5474   |               |             |           |           |               |              |

## Troponin I (ng/mL)

| <u>Method</u>     | Specimen CK-6  |             |           |           |               |               | Specimen CK-7 |             |           |           |               |               |
|-------------------|----------------|-------------|-----------|-----------|---------------|---------------|---------------|-------------|-----------|-----------|---------------|---------------|
|                   | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method        | 47             | 1.866       | 1.688     | 90.4      | 0.82          | 0.00 - 5.25   | 46            | 6.499       | 4.125     | 63.5      | 5.59          | 0.00 - 14.75  |
| Alere Triage      | 30             | 0.774       | 0.112     | 14.5      | 0.79          | 0.54 - 1.01   | 30            | 6.165       | 1.154     | 18.7      | 6.26          | 3.85 - 8.48   |
| Dade Stratus CS   | 6              | 0.875       | 0.036     | 4.1       | 0.88          | 0.61 - 1.14   | 6             | 3.602       | 0.120     | 3.3       | 3.58          | 2.52 - 4.69   |
| i-STAT - moderate | 5              | 4.388       | 0.315     | 7.2       | 4.39          | 3.07 - 5.71   | 5             | 19.320      | 2.087     | 10.8      | 19.91         | 13.52 - 25.12 |
| Siemens Dimension | 5              | 0.754       | 0.146     | 19.4      | 0.79          | 0.46 - 1.05   | 5             | 2.894       | 0.315     | 10.9      | 3.00          | 2.02 - 3.77   |
| <u>Method</u>     | Specimen CK-8  |             |           |           |               |               | Specimen CK-9 |             |           |           |               |               |
|                   | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method        | 47             | 0.079       | 0.090     | 114.9     | 0.05          | 0.00 - 0.26   | 46            | 2.570       | 1.907     | 74.2      | 1.99          | 0.00 - 6.39   |
| Alere Triage      | 30             | 0.050       | 0.001     | 0.0       | 0.05          | 0.03 - 0.07   | 29            | 2.136       | 0.414     | 19.4      | 2.08          | 1.30 - 2.97   |
| Dade Stratus CS   | 6              | 0.038       | 0.012     | 30.5      | 0.04          | 0.01 - 0.07   | 6             | 1.807       | 0.075     | 4.2       | 1.81          | 1.26 - 2.35   |
| i-STAT - moderate | 5              | 0.332       | 0.053     | 15.9      | 0.33          | 0.22 - 0.44   | 5             | 10.042      | 1.030     | 10.3      | 9.73          | 7.02 - 13.06  |
| Siemens Dimension | 5              | 0.048       | 0.023     | 47.5      | 0.05          | 0.00 - 0.10   | 5             | 1.472       | 0.208     | 14.1      | 1.53          | 1.03 - 1.92   |
| <u>Method</u>     | Specimen CK-10 |             |           |           |               |               |               |             |           |           |               |               |
|                   | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |               |             |           |           |               |               |
| All Method        | 46             | 13.131      | 7.310     | 55.7      | 12.20         | 0.00 - 27.76  |               |             |           |           |               |               |
| Alere Triage      | 29             | 13.669      | 2.300     | 16.8      | 14.20         | 9.06 - 18.27  |               |             |           |           |               |               |
| Dade Stratus CS   | 6              | 7.053       | 0.319     | 4.5       | 7.04          | 4.93 - 9.17   |               |             |           |           |               |               |
| i-STAT - moderate | 5              | 34.566      | 6.895     | 19.9      | 34.35         | 20.77 - 48.36 |               |             |           |           |               |               |
| Siemens Dimension | 5              | 5.748       | 0.598     | 10.4      | 6.10          | 4.02 - 7.48   |               |             |           |           |               |               |

## PSA (ng/mL)

| <u>Method</u>                | Specimen PS-3 |             |           |           |               |               | Specimen PS-4 |             |           |           |               |               |
|------------------------------|---------------|-------------|-----------|-----------|---------------|---------------|---------------|-------------|-----------|-----------|---------------|---------------|
|                              | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method                   | 152           | 25.323      | 3.459     | 13.7      | 25.00         | 17.72 - 32.93 | 153           | 17.365      | 2.604     | 15.0      | 16.98         | 12.15 - 22.58 |
| All TOSOH Instruments        | 36            | 21.607      | 0.848     | 3.9       | 21.51         | 15.12 - 28.09 | 36            | 14.838      | 0.701     | 4.7       | 14.79         | 10.38 - 19.29 |
| Abbott Architect             | 15            | 21.845      | 1.272     | 5.8       | 21.71         | 15.29 - 28.40 | 16            | 14.835      | 1.188     | 8.0       | 14.77         | 10.38 - 19.29 |
| Beckman ACCESS / 2 / Dxl     | 20            | 27.845      | 2.144     | 7.7       | 27.84         | 19.49 - 36.20 | 20            | 19.204      | 1.380     | 7.2       | 19.25         | 13.44 - 24.97 |
| Beckman ACCESS Hybritech PSA | 21            | 28.964      | 1.351     | 4.7       | 28.88         | 20.27 - 37.66 | 21            | 19.903      | 1.002     | 5.0       | 19.65         | 13.93 - 25.88 |
| bioMerieux Vidas, Mini Vidas | 16            | 28.418      | 2.210     | 7.8       | 27.76         | 19.89 - 36.95 | 16            | 18.521      | 1.092     | 5.9       | 18.14         | 12.96 - 24.08 |
| Siemens Dimension TPSA       | 24            | 24.029      | 1.324     | 5.5       | 23.85         | 16.82 - 31.24 | 24            | 16.149      | 0.676     | 4.2       | 16.19         | 11.30 - 21.00 |
| TOSOH AIA                    | 16            | 21.832      | 0.708     | 3.2       | 21.64         | 15.28 - 28.39 | 16            | 14.983      | 0.511     | 3.4       | 15.00         | 10.48 - 19.48 |
| TOSOH ST AIA                 | 21            | 21.597      | 1.191     | 5.5       | 21.43         | 15.11 - 28.08 | 20            | 14.723      | 0.818     | 5.6       | 14.53         | 10.30 - 19.14 |

**Beta-2 microglobulin**

| <u>Method</u> | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 7             | 6.236       | 0.639     | 10.3      | 6.20          | 4.31 - 8.16  | 7             | 3.067       | 0.345     | 11.3      | 3.20          | 2.03 - 4.11  |

**CA 125 (U/mL)**

| <u>Method</u>         | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 11            | 39.0        | 9.4       | 24.2      | 67            | 27 - 51      | 11            | 143.5       | 32.4      | 22.6      | 264           | 100 - 187    |
| All TOSOH Instruments | 11            | 86.6        | 4.2       | 4.8       | 88            | 60 - 113     | 11            | 353.7       | 15.6      | 4.4       | 354           | 247 - 460    |
| TOSOH ST AIA          | 10            | 86.4        | 4.4       | 5.0       | 88            | 60 - 113     | 10            | 352.1       | 15.4      | 4.4       | 353           | 246 - 458    |

**CA 15-3 (U/mL)**

| <u>Method</u> | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 10            | 38.3        | 24.3      | 63.6      | 31            | 0 - 112      | 10            | 44.2        | 25.1      | 56.8      | 36            | 0 - 120      |

**CA 19-9 (U/mL)**

| <u>Method</u> | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 10            | 98.4        | 70.1      | 71.2      | 85            | 0 - 309      | 10            | 240.6       | 172.4     | 71.7      | 215           | 0 - 758      |

**CA 27/29 (U/mL)**

| <u>Method</u>         | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 13            | 124.6       | 25.3      | 20.3      | 127           | 48 - 201     | 12            | 154.6       | 32.8      | 21.2      | 155           | 56 - 254     |
| All TOSOH Instruments | 12            | 130.5       | 14.3      | 11.0      | 130           | 87 - 174     | 11            | 163.0       | 15.8      | 9.7       | 155           | 115 - 211    |
| TOSOH ST AIA          | 11            | 129.5       | 14.6      | 11.3      | 127           | 85 - 174     | 10            | 160.8       | 14.7      | 9.2       | 155           | 116 - 206    |

**CEA (ng/mL)**

| <u>Method</u>         | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 12            | 13.94       | 3.71      | 26.6      | 30.7          | 9.7 - 18.2   | 12            | 45.82       | 8.81      | 19.2      | 64.3          | 32.0 - 59.6  |
| All TOSOH Instruments | 13            | 32.42       | 1.17      | 3.6       | 32.4          | 22.6 - 42.2  | 13            | 69.29       | 3.10      | 4.5       | 69.4          | 48.5 - 90.1  |
| TOSOH ST AIA          | 11            | 32.32       | 1.25      | 3.9       | 32.2          | 22.6 - 42.1  | 11            | 69.49       | 3.31      | 4.8       | 69.8          | 48.6 - 90.4  |

**Free PSA (ng/mL)**

| <u>Method</u> | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 17            | 4.012       | 0.799     | 19.9      | 3.63          | 2.80 - 5.22  | 18            | 11.501      | 1.916     | 16.7      | 10.68         | 8.05 - 14.96 |

**PSA (ng/mL)**

| <u>Method</u>         | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 42            | 12.150      | 1.877     | 15.4      | 12.04         | 8.50 - 15.80 | 42            | 12.793      | 2.387     | 18.7      | 13.29         | 8.95 - 16.64 |
| All TOSOH Instruments | 12            | 11.563      | 0.440     | 3.8       | 11.55         | 8.09 - 15.04 | 12            | 11.634      | 0.697     | 6.0       | 11.47         | 8.14 - 15.13 |
| TOSOH ST AIA          | 10            | 11.583      | 0.301     | 2.6       | 11.55         | 8.10 - 15.06 | 10            | 11.692      | 0.712     | 6.1       | 11.47         | 8.18 - 15.20 |

**Thyroglobulin (ng/mL)**

| <u>Method</u> | Specimen TM-3 |             |           |           |               |              | Specimen TM-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5             | 53.92       | 1.93      | 3.6       | 54.7          | 50.0 - 57.8  | 5             | 115.60      | 35.38     | 30.6      | 96.8          | 44.8 - 186.4 |

## CEA (ng/mL)

| <u>Method</u>         | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 11            | 21.33       | 2.62      | 12.3      | 29.9          | 14.9 - 27.8  | 11            | 15.25       | 2.69      | 17.7      | 22.0          | 10.6 - 19.9  |
| All TOSOH Instruments | 7             | 31.16       | 1.06      | 3.4       | 31.6          | 21.8 - 40.6  | 7             | 22.51       | 0.91      | 4.0       | 22.1          | 15.7 - 29.3  |
| TOSOH ST AIA          | 4             | 31.48       | 1.10      | 3.5       | 31.8          | 21.8 - 40.6  | 4             | 22.78       | 1.19      | 5.2       | 22.8          | 15.7 - 29.3  |

## DHEA-S (µg/dL)

| <u>Method</u> | Specimen SC-3 |             |           |           |               |               | Specimen SC-4 |             |           |           |               |               |
|---------------|---------------|-------------|-----------|-----------|---------------|---------------|---------------|-------------|-----------|-----------|---------------|---------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  |
| All Method    | 11            | 419.12      | 51.00     | 12.2      | 412.0         | 314.3 - 523.9 | 11            | 307.38      | 52.34     | 17.0      | 281.0         | 230.5 - 384.3 |

## Estradiol (pg/mL)

| <u>Method</u>         | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 40            | 477.5       | 157.2     | 32.9      | 424           | 163 - 792    | 40            | 374.7       | 128.6     | 34.3      | 331           | 117 - 632    |
| All TOSOH Instruments | 11            | 692.1       | 81.2      | 11.7      | 707           | 529 - 855    | 11            | 556.1       | 71.2      | 12.8      | 565           | 413 - 699    |

## Ferritin (ng/mL)

| <u>Method</u>            | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|--------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 51            | 216.1       | 37.5      | 17.3      | 169           | 151 - 281    | 51            | 157.3       | 27.6      | 17.6      | 121           | 110 - 205    |
| All TOSOH Instruments    | 27            | 151.2       | 5.7       | 3.8       | 151           | 105 - 197    | 27            | 106.3       | 5.0       | 4.7       | 106           | 74 - 139     |
| Beckman ACCESS / 2 / Dxl | 34            | 166.4       | 9.6       | 5.7       | 166           | 116 - 217    | 33            | 117.2       | 5.6       | 4.7       | 118           | 82 - 153     |
| Siemens Dimension        | 13            | 221.2       | 9.1       | 4.1       | 219           | 154 - 288    | 13            | 159.2       | 4.8       | 3.0       | 160           | 111 - 207    |
| TOSOH AIA                | 13            | 147.8       | 13.4      | 9.1       | 151           | 103 - 193    | 12            | 106.6       | 5.6       | 5.3       | 107           | 74 - 139     |
| TOSOH ST AIA             | 15            | 151.2       | 5.4       | 3.6       | 151           | 105 - 197    | 16            | 107.2       | 6.5       | 6.0       | 106           | 75 - 140     |

**Folate (ng/mL)**

| <u>Method</u>                       | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|-------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                     | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 32            | 7.26        | 1.69      | 23.3      | 8.0           | 5.0 - 9.5    | 32            | 4.73        | 0.96      | 20.4      | 5.2           | 3.3 - 6.2    |
| All Roche Elecsys/Cobas Instruments | 8             | 7.81        | 1.34      | 17.1      | 7.8           | 5.4 - 10.2   | 8             | 5.13        | 0.93      | 18.2      | 5.2           | 3.5 - 6.7    |
| All Siemens Dimension Instruments   | 5             | 4.06        | 0.83      | 20.5      | 4.3           | 2.8 - 5.3    | 5             | 3.18        | 0.59      | 18.7      | 3.1           | 2.2 - 4.2    |
| All TOSOH Instruments               | 11            | 5.17        | 0.97      | 18.7      | 5.1           | 3.6 - 6.8    | 11            | 3.94        | 0.67      | 17.1      | 4.1           | 2.7 - 5.2    |
| Abbott Architect                    | 7             | 8.17        | 0.60      | 7.4       | 8.0           | 5.7 - 10.7   | 7             | 5.21        | 0.57      | 10.9      | 5.3           | 3.6 - 6.8    |
| Beckman ACCESS / 2 / Dxl            | 32            | 8.28        | 0.38      | 4.6       | 8.3           | 5.7 - 10.8   | 32            | 5.43        | 0.28      | 5.2       | 5.4           | 3.7 - 7.1    |
| Roche cobas e 411                   | 6             | 8.20        | 1.12      | 13.6      | 7.9           | 5.7 - 10.7   | 6             | 5.40        | 0.61      | 11.3      | 5.2           | 3.7 - 7.1    |
| TOSOH AIA                           | 9             | 5.08        | 1.04      | 20.4      | 5.0           | 3.5 - 6.7    | 9             | 3.92        | 0.75      | 19.2      | 4.1           | 2.7 - 5.1    |

**FSH (mIU/mL)**

| <u>Method</u>            | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|--------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 47            | 44.37       | 4.11      | 9.3       | 44.6          | 33.2 - 55.5  | 45            | 31.74       | 2.49      | 7.8       | 32.0          | 23.8 - 39.7  |
| All TOSOH Instruments    | 11            | 46.15       | 4.26      | 9.2       | 47.0          | 34.6 - 57.7  | 11            | 34.73       | 4.16      | 12.0      | 34.1          | 26.0 - 43.5  |
| Beckman ACCESS / 2 / Dxl | 12            | 43.57       | 2.79      | 6.4       | 43.8          | 32.6 - 54.5  | 12            | 31.36       | 1.34      | 4.3       | 31.0          | 23.5 - 39.2  |

**Homocysteine (μmol/L)**

| <u>Method</u> | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 12            | 35.1        | 5.9       | 16.7      | 37            | 26 - 44      | 12            | 25.7        | 4.2       | 16.4      | 28            | 19 - 33      |

**LH (mIU/mL)**

| <u>Method</u>            | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|--------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 44            | 50.18       | 16.39     | 32.7      | 44.5          | 17.4 - 83.0  | 44            | 35.58       | 10.78     | 30.3      | 32.0          | 14.0 - 57.2  |
| Beckman ACCESS / 2 / Dxl | 13            | 42.87       | 3.09      | 7.2       | 43.3          | 36.6 - 49.1  | 13            | 30.22       | 2.12      | 7.0       | 29.4          | 25.9 - 34.5  |

**Progesterone (ng/mL)**

| <u>Method</u>         | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|-----------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                       | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method            | 31            | 32.66       | 5.74      | 17.6      | 33.9          | 22.8 - 42.5  | 31            | 25.58       | 5.31      | 20.7      | 26.3          | 17.9 - 33.3  |
| All TOSOH Instruments | 10            | 36.44       | 3.62      | 9.9       | 36.9          | 25.5 - 47.4  | 10            | 30.18       | 2.99      | 9.9       | 29.9          | 21.1 - 39.3  |

**Prolactin (ng/mL)**

| <u>Method</u> | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 30            | 57.08       | 5.23      | 9.2       | 57.2          | 39.9 - 74.3  | 30            | 40.18       | 3.51      | 8.7       | 39.9          | 28.1 - 52.3  |

**Testosterone (ng/dL)**

| <u>Method</u>            | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|--------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                          | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method               | 76            | 1648.8      | 319.2     | 19.4      | 1577          | 1154 - 2144  | 79            | 1424.1      | 271.7     | 19.1      | 1385          | 996 - 1852   |
| All TOSOH Instruments    | 16            | 2133.2      | 315.8     | 14.8      | 2200          | 1493 - 2774  | 17            | 1752.2      | 93.2      | 5.3       | 1764          | 1226 - 2278  |
| Beckman ACCESS / 2 / Dxl | 29            | 1542.5      | 98.4      | 6.4       | 1561          | 1079 - 2006  | 29            | 1282.1      | 95.7      | 7.5       | 1284          | 897 - 1667   |
| TOSOH ST AIA             | 10            | 2123.0      | 125.3     | 5.9       | 2200          | 1486 - 2760  | 11            | 1758.9      | 98.9      | 5.6       | 1764          | 1231 - 2287  |

**Transferrin (mg/dL)**

| <u>Method</u> | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|---------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 17            | 248.7       | 10.0      | 4.0       | 248           | 223 - 274    | 17            | 188.8       | 7.9       | 4.2       | 188           | 169 - 208    |

**Vitamin B<sub>12</sub> (pg/mL)**

| <u>Method</u>                       | Specimen SC-3 |             |           |           |               |              | Specimen SC-4 |             |           |           |               |              |
|-------------------------------------|---------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
|                                     | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                          | 94            | 1084.5      | 151.8     | 14.0      | 1054          | 759 - 1410   | 94            | 813.8       | 92.4      | 11.4      | 802           | 569 - 1058   |
| All Roche Elecsys/Cobas Instruments | 10            | 1245.1      | 83.7      | 6.7       | 1247          | 871 - 1619   | 10            | 891.5       | 62.7      | 7.0       | 894           | 624 - 1159   |
| All TOSOH Instruments               | 17            | 1170.5      | 186.4     | 15.9      | 1146          | 819 - 1522   | 17            | 901.9       | 100.1     | 11.1      | 900           | 631 - 1173   |
| Abbott Architect                    | 12            | 1226.5      | 90.7      | 7.4       | 1232          | 858 - 1595   | 12            | 851.0       | 37.8      | 4.4       | 846           | 595 - 1107   |
| Beckman ACCESS / 2 / Dxl            | 38            | 968.2       | 52.8      | 5.5       | 972           | 677 - 1259   | 38            | 728.1       | 27.9      | 3.8       | 730           | 509 - 947    |
| TOSOH AIA                           | 15            | 1196.7      | 176.5     | 14.7      | 1209          | 837 - 1556   | 15            | 920.3       | 90.3      | 9.8       | 905           | 644 - 1197   |

## Serum Alcohol (mg/dL)

| <u>Method</u> | Specimen ETH-6  |             |           |           |               |              | Specimen ETH-7 |             |           |           |               |              |
|---------------|-----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 10              | 68.3        | 2.3       | 3.4       | 67            | 51 - 86      | 10             | 19.7        | 2.1       | 10.6      | 19            | 14 - 25      |
|               | Specimen ETH-8  |             |           |           |               |              | Specimen ETH-9 |             |           |           |               |              |
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 10              | 95.7        | 5.7       | 5.9       | 94            | 71 - 120     | 10             | 63.3        | 2.5       | 4.0       | 63            | 47 - 80      |
|               | Specimen ETH-10 |             |           |           |               |              |                |             |           |           |               |              |
|               | <u>Labs</u>     | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |                |             |           |           |               |              |
| All Method    | 10              | 321.0       | 28.6      | 8.9       | 330           | 240 - 402    |                |             |           |           |               |              |

## Acetone

| <u>Method</u>   | Specimen ETH-6  |                 |              |                 |              | Specimen ETH-7 |                 |              |                 |              |
|-----------------|-----------------|-----------------|--------------|-----------------|--------------|----------------|-----------------|--------------|-----------------|--------------|
|                 | <u>Labs</u>     | <u>Negative</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> | <u>Labs</u>    | <u>Negative</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> |
| Siemens Acetest | 10              | -               | 7            | 2               | 1            | 10             | 10              | -            | -               | -            |
|                 | Specimen ETH-8  |                 |              |                 |              | Specimen ETH-9 |                 |              |                 |              |
|                 | <u>Labs</u>     | <u>Negative</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> | <u>Labs</u>    | <u>Negative</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> |
| Siemens Acetest | 10              | 10              | -            | -               | -            | 10             | -               | -            | 3               | 7            |
|                 | Specimen ETH-10 |                 |              |                 |              |                |                 |              |                 |              |
|                 | <u>Labs</u>     | <u>Negative</u> | <u>Small</u> | <u>Moderate</u> | <u>Large</u> |                |                 |              |                 |              |
| Siemens Acetest | 10              | 10              | -            | -               | -            |                |                 |              |                 |              |

Anti-Thyroglobulin Antibody (IU/mL)

| Specimen THY-3 |             |             |           |           |               |              | Specimen THY-4 |             |           |           |               |                |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|----------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>   |
| All Method     | 19          | 3.583       | 7.007     | 195.5     | 0.04          | 0.00 - 17.60 | 19             | 296.507     | 112.970   | 38.1      | 325.50        | 70.56 - 522.45 |

Anti-Microsomal Antibody (IU/mL)

| Specimen THY-3 |             |             |           |           |               |              | Specimen THY-4 |             |           |           |               |              |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method     | 20          | 4.916       | 9.420     | 191.6     | 0.10          | 0.00 - 23.76 | 20             | 19.614      | 14.970    | 76.3      | 12.00         | 0.00 - 49.56 |

Ammonia (µmol/L)

| Specimen AMM-3 |             |             |           |           |               |              | Specimen AMM-4 |             |           |           |               |              |
|----------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>  | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method     | 6           | 52.2        | 8.6       | 16.6      | 56            | 34 - 70      | 6              | 20.5        | 5.9       | 28.7      | 23            | 8 - 33       |

Urine Drug Screen

Acetaminophen (µg/mL)

| Specimen UDS-3 |             |                 |                 | Specimen UDS-4 |                 |                 |
|----------------|-------------|-----------------|-----------------|----------------|-----------------|-----------------|
| <u>Method</u>  | <u>Labs</u> | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods    | 5           | 4               | 1               | 5              | 4               | 1               |

**Amphetamines (ng/mL)**

| <b><u>Method</u></b>            | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|---------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                 | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                     | 82                    | 2                      | 80                     | 82                    | 79                     | 3                      |
| Cut-off 250                     |                       |                        |                        |                       |                        |                        |
| Medica EasyRA                   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| All Cut-off 250                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Cut-off 300                     |                       |                        |                        |                       |                        |                        |
| Alere iCup                      | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| All Cut-off 300                 | 3                     | -                      | 3                      | 3                     | 2                      | 1                      |
| Cut-off 500                     |                       |                        |                        |                       |                        |                        |
| Beckman AU                      | 3                     | 1                      | 2                      | 3                     | 2                      | 1                      |
| Immunalysis                     | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Indiko Plus                     | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| MEDTOX Diagnostics              | 3                     | -                      | 3                      | 3                     | 3                      | -                      |
| Roche Integra                   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Siemens Dimension               | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Synermed IR 500                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| All Cut-off 500                 | 11                    | 1                      | 10                     | 11                    | 10                     | 1                      |
| Cut-off 1000                    |                       |                        |                        |                       |                        |                        |
| Alere iCassette                 | 5                     | -                      | 5                      | 5                     | 5                      | -                      |
| Alere iCup                      | 5                     | -                      | 5                      | 5                     | 5                      | -                      |
| Alere iScreen                   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Alere Triage                    | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| AMBC Rapid Drug/Tox             | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Amedica Biotech                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Beckman AU                      | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| Bio-Rad TOX/See                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| BMC QuickTox Drug Screen        | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| Carolina Chemistries BioLis 24i | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| Innovacon Multi-Drug One Step   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Lin-Zhi International           | 7                     | -                      | 7                      | 7                     | 7                      | -                      |
| MEDTOX Diagnostics              | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Microgenics DRI                 | 4                     | -                      | 4                      | 4                     | 4                      | -                      |
| Mindray BS-200                  | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Noble Medical Inc.              | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| USDiagnostics Proscreen         | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| USDiagnostics UScreen Cup       | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| All Cut-off 1000                | 52                    | -                      | 52                     | 52                    | 52                     | -                      |

# Amphetamines/Methamphetamines (ng/mL)

| <u>Method</u>        | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|----------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                      | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods          | 17             | -               | 17              | 17             | 11              | 6               |
| Cut-off 300          |                |                 |                 |                |                 |                 |
| Siemens EMIT II Plus | 1              | -               | 1               | 1              | 1               | -               |
| All Cut-off 300      | 1              | -               | 1               | 1              | 1               | -               |
| Cut-off 500          |                |                 |                 |                |                 |                 |
| Beckman AU           | 2              | -               | 2               | 2              | 2               | -               |
| All Cut-off 500      | 3              | -               | 3               | 3              | 3               | -               |
| Cut-off 1000         |                |                 |                 |                |                 |                 |
| Abbott Architect     | 1              | -               | 1               | 1              | 1               | -               |
| Alere iCassette      | 1              | -               | 1               | 1              | -               | 1               |
| AMBC Rapid Drug/Tox  | 1              | -               | 1               | 1              | -               | 1               |
| Microgenics DRI      | 2              | -               | 2               | 2              | 2               | -               |
| Siemens EMIT II Plus | 1              | -               | 1               | 1              | 1               | -               |
| All Cut-off 1000     | 7              | -               | 7               | 7              | 5               | 2               |

**Barbiturates (ng/mL)**

| <u>Method</u>                   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                     | 78             | 1               | 77              | 78             | -               | 78              |
| Cut-off 200                     |                |                 |                 |                |                 |                 |
| Abbott Architect                | 1              | -               | 1               | 1              | -               | 1               |
| Beckman AU                      | 5              | -               | 5               | 5              | -               | 5               |
| Carolina Chemistries BioLis 24i | 2              | -               | 2               | 2              | -               | 2               |
| Indiko Plus                     | 1              | -               | 1               | 1              | -               | 1               |
| Lin-Zhi International           | 4              | -               | 4               | 4              | -               | 4               |
| Medica EasyRA                   | 1              | -               | 1               | 1              | -               | 1               |
| MEDTOX Diagnostics              | 4              | -               | 4               | 4              | -               | 4               |
| Microgenics DRI                 | 2              | -               | 2               | 2              | -               | 2               |
| Roche Integra                   | 2              | -               | 2               | 2              | -               | 2               |
| Siemens Dimension               | 1              | -               | 1               | 1              | -               | 1               |
| Siemens EMIT II Plus            | 2              | -               | 2               | 2              | -               | 2               |
| Synermed IR 500                 | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 200                 | 27             | -               | 27              | 27             | -               | 27              |
| Cut-off 300                     |                |                 |                 |                |                 |                 |
| Alere iCassette                 | 5              | -               | 5               | 5              | -               | 5               |
| Alere iCup                      | 5              | -               | 5               | 5              | -               | 5               |
| Alere iScreen                   | 1              | -               | 1               | 1              | -               | 1               |
| Alere Triage                    | 2              | -               | 2               | 2              | -               | 2               |
| Amedica Biotech                 | 2              | -               | 2               | 2              | -               | 2               |
| Beckman AU                      | 2              | -               | 2               | 2              | -               | 2               |
| Bio-Rad TOX/See                 | 1              | -               | 1               | 1              | -               | 1               |
| BMC QuickTox Drug Screen        | 2              | -               | 2               | 2              | -               | 2               |
| Microgenics DRI                 | 1              | -               | 1               | 1              | -               | 1               |
| Noble Medical Inc.              | 1              | -               | 1               | 1              | -               | 1               |
| USDiagnostics Proscreen         | 2              | -               | 2               | 2              | -               | 2               |
| USDiagnostics UScreen Cup       | 2              | -               | 2               | 2              | -               | 2               |
| All Cut-off 300                 | 36             | -               | 36              | 36             | -               | 36              |

**Benzodiazepines (ng/mL)**

| <u>Method</u>                   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                     | 88             | 83              | 5               | 87             | 2               | 85              |
| Cut-off 100                     |                |                 |                 |                |                 |                 |
| Beckman AU                      | 2              | 1               | 1               | 2              | 1               | 1               |
| Roche Integra                   | 1              | 1               | -               | 1              | -               | 1               |
| All Cut-off 100                 | 3              | 2               | 1               | 3              | 1               | 2               |
| Cut-off 150                     |                |                 |                 |                |                 |                 |
| Medica EasyRA                   | 1              | 1               | -               | 1              | -               | 1               |
| MEDTOX Diagnostics              | 3              | 1               | 2               | 3              | -               | 3               |
| All Cut-off 150                 | 4              | 2               | 2               | 4              | -               | 4               |
| Cut-off 200                     |                |                 |                 |                |                 |                 |
| Abbott Architect                | 1              | 1               | -               | 1              | -               | 1               |
| Beckman AU                      | 3              | 3               | -               | 3              | -               | 3               |
| Carolina Chemistries BioLis 24i | 2              | 2               | -               | 2              | -               | 2               |
| Immunalysis                     | 1              | 1               | -               | 1              | -               | 1               |
| Indiko Plus                     | 1              | 1               | -               | 1              | -               | 1               |
| Lin-Zhi International           | 7              | 7               | -               | 7              | -               | 7               |
| Microgenics DRI                 | 4              | 4               | -               | 4              | -               | 4               |
| Mindray BS-200                  | 1              | 1               | -               | 1              | -               | 1               |
| Siemens Dimension               | 1              | 1               | -               | 1              | -               | 1               |
| Siemens EMIT II Plus            | 2              | 2               | -               | 2              | -               | 2               |
| Synermed IR 500                 | 1              | 1               | -               | 1              | -               | 1               |
| All Cut-off 200                 | 26             | 26              | -               | 26             | -               | 26              |
| Cut-off 300                     |                |                 |                 |                |                 |                 |
| Alere iCassette                 | 5              | 5               | -               | 5              | -               | 5               |
| Alere iCup                      | 6              | 6               | -               | 6              | -               | 6               |
| Alere iScreen                   | 2              | 2               | -               | 2              | -               | 2               |
| Alere Triage                    | 2              | 2               | -               | 2              | -               | 2               |
| Alfa Scientific Instant-View    | 1              | 1               | -               | 1              | -               | 1               |
| Amedica Biotech                 | 1              | 1               | -               | 1              | -               | 1               |
| Beckman AU                      | 1              | 1               | -               | 1              | -               | 1               |
| Bio-Rad TOX/See                 | 1              | 1               | -               | 1              | -               | 1               |
| BMC QuickTox Drug Screen        | 3              | 3               | -               | 3              | -               | 3               |
| MEDTOX Diagnostics              | 1              | 1               | -               | 1              | -               | 1               |
| Microgenics DRI                 | 1              | 1               | -               | 1              | -               | 1               |
| Noble Medical Inc.              | 1              | 1               | -               | 1              | -               | 1               |
| USDiagnostics Proscreen         | 2              | 2               | -               | 2              | -               | 2               |
| USDiagnostics UScreen Cup       | 2              | 2               | -               | 2              | -               | 2               |
| All Cut-off 300                 | 40             | 39              | 1               | 40             | -               | 40              |

**Buprenorphine (ng/mL)**

| <u>Method</u>                   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                     | 43             | 2               | 41              | 42             | -               | 42              |
| Cut-off 5                       |                |                 |                 |                |                 |                 |
| Beckman AU                      | 4              | -               | 4               | 4              | -               | 4               |
| Carolina Chemistries BioLis 24i | 1              | -               | 1               | 1              | -               | 1               |
| Immunalysis                     | 1              | -               | 1               | 1              | -               | 1               |
| Lin-Zhi International           | 7              | -               | 7               | 7              | -               | 7               |
| Medica EasyRA                   | 1              | -               | 1               | 1              | -               | 1               |
| Microgenics CEDIA               | 3              | -               | 3               | 3              | -               | 3               |
| Siemens EMIT II Plus            | 1              | -               | 1               | 1              | -               | 1               |
| Synermed IR 500                 | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 5                   | 19             | -               | 19              | 19             | -               | 19              |
| Cut-off 10                      |                |                 |                 |                |                 |                 |
| Alere iCup                      | 1              | -               | 1               | 1              | -               | 1               |
| Alere iScreen                   | 1              | -               | 1               | 1              | -               | 1               |
| MEDTOX Diagnostics              | 3              | -               | 3               | 3              | -               | 3               |
| Mindray BS-200                  | 1              | -               | 1               | 1              | -               | 1               |
| Noble Medical Inc.              | 1              | -               | 1               | 1              | -               | 1               |
| USDiagnostics UScreen Cup       | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 10                  | 14             | -               | 14              | 14             | -               | 14              |
| Cut-off 20                      |                |                 |                 |                |                 |                 |
| Indiko Plus                     | 1              | -               | 1               | 1              | -               | 1               |
| Microgenics CEDIA               | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 20                  | 2              | -               | 2               | 2              | -               | 2               |

**Cannabinoids (THC) (ng/mL)**

| <u>Method</u>                     | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                   | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                       | 97             | 95              | 2               | 96             | 1               | 95              |
| Cut-off 20                        |                |                 |                 |                |                 |                 |
| Siemens EMIT II Plus              | 1              | 1               | -               | 1              | -               | 1               |
| All Cut-off 20                    | 1              | 1               | -               | 1              | -               | 1               |
| Cut-off 50                        |                |                 |                 |                |                 |                 |
| Abbott Architect                  | 1              | 1               | -               | 1              | -               | 1               |
| Alere iCassette                   | 5              | 5               | -               | 5              | -               | 5               |
| Alere iCup                        | 6              | 6               | -               | 6              | -               | 6               |
| Alere iScreen                     | 1              | 1               | -               | 1              | -               | 1               |
| Alere Triage                      | 2              | 2               | -               | 2              | -               | 2               |
| Alfa Scientific Instant-View      | 3              | 3               | -               | 3              | -               | 3               |
| Amedica Biotech                   | 1              | 1               | -               | 1              | -               | 1               |
| Beckman AU                        | 6              | 6               | -               | 6              | -               | 6               |
| Bio-Rad TOX/See                   | 1              | 1               | -               | 1              | -               | 1               |
| BMC QuickTox Drug Screen          | 3              | 3               | -               | 3              | -               | 3               |
| Carolina Chemistries BioLis 24i   | 2              | 2               | -               | 2              | -               | 2               |
| Germaine Laboratories AimScreen   | 2              | 2               | -               | 2              | -               | 2               |
| Immunalysis                       | 1              | 1               | -               | 1              | -               | 1               |
| Indiko Plus                       | 1              | 1               | -               | 1              | -               | 1               |
| Innovacon Multi-Drug One Step     | 1              | 1               | -               | 1              | -               | 1               |
| Integrated E-Z Split Key Cup / II | 1              | 1               | -               | 1              | -               | 1               |
| Lin-Zhi International             | 7              | 7               | -               | 7              | -               | 7               |
| MEDTOX Diagnostics                | 4              | 4               | -               | 4              | -               | 4               |
| Microgenics DRI                   | 6              | 6               | -               | 6              | -               | 6               |
| Noble Medical Inc.                | 2              | 2               | -               | 2              | -               | 2               |
| Roche Integra                     | 1              | -               | 1               | 1              | -               | 1               |
| Siemens EMIT II Plus              | 1              | 1               | -               | 1              | -               | 1               |
| USDiagnostics Proscreen           | 2              | 2               | -               | 2              | -               | 2               |
| USDiagnostics UScreen Cup         | 2              | 2               | -               | 2              | -               | 2               |
| All Cut-off 50                    | 74             | 73              | 1               | 74             | -               | 74              |

**Cocaine Metabolites (ng/mL)**

| <b><u>Method</u></b>              | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|-----------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                   | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                       | 102                   | -                      | 102                    | 103                   | -                      | 103                    |
| Cut-off 50                        |                       |                        |                        |                       |                        |                        |
| All Cut-off 50                    | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Cut-off 100                       |                       |                        |                        |                       |                        |                        |
| Beckman AU                        | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Medica EasyRA                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 100                   | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Cut-off 150                       |                       |                        |                        |                       |                        |                        |
| Alere iCup                        | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Beckman AU                        | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Immunalysis                       | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Indiko Plus                       | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Lin-Zhi International             | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| MEDTOX Diagnostics                | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Siemens Dimension                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Siemens EMIT II Plus              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Synermed IR 500                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 150                   | 14                    | -                      | 14                     | 14                    | -                      | 14                     |
| Cut-off 300                       |                       |                        |                        |                       |                        |                        |
| Abbott Architect                  | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere iCassette                   | 5                     | -                      | 5                      | 5                     | -                      | 5                      |
| Alere iCup                        | 5                     | -                      | 5                      | 5                     | -                      | 5                      |
| Alere iScreen                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere Triage                      | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Alfa Scientific Instant-View      | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Amedica Biotech                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Beckman AU                        | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Bio-Rad TOX/See                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| BMC QuickTox Drug Screen          | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Carolina Chemistries BioLis 24i   | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Germaine Laboratories AimScreen   | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Innovacon Multi-Drug One Step     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Integrated E-Z Split Key Cup / II | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Lin-Zhi International             | 7                     | -                      | 7                      | 7                     | -                      | 7                      |
| MEDTOX Diagnostics                | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Microgenics DRI                   | 5                     | -                      | 5                      | 5                     | -                      | 5                      |
| Mindray BS-200                    | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Noble Medical Inc.                | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Roche Integra                     | 1                     | -                      | 1                      | 2                     | -                      | 2                      |
| Siemens EMIT II Plus              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| USDiagnostics Proscreen           | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| USDiagnostics UScreen Cup         | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| All Cut-off 300                   | 63                    | -                      | 63                     | 64                    | -                      | 64                     |

**Cotinine (ng/mL)**

| <u>Method</u>   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods     | 4              | -               | 4               | 4              | -               | 4               |
| Cut-off 500     |                |                 |                 |                |                 |                 |
| Beckman AU      | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 500 | 1              | -               | 1               | 1              | -               | 1               |

**EDDP (ng/mL)**

| <u>Method</u>   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods     | 4              | -               | 4               | 4              | -               | 4               |
| Cut-off 300     |                |                 |                 |                |                 |                 |
| Microgenics DRI | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 300 | 1              | -               | 1               | 1              | -               | 1               |

**Ethanol (Alcohol) (mg/dL)**

| <u>Method</u>                   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                     | 19             | 15              | 4               | 19             | 15              | 4               |
| Cut-off 20                      |                |                 |                 |                |                 |                 |
| Microgenics DRI                 | 1              | 1               | -               | 1              | 1               | -               |
| Siemens EMIT II Plus            | 1              | 1               | -               | 1              | 1               | -               |
| All Cut-off 20                  | 2              | 2               | -               | 2              | 2               | -               |
| Cut-off 100                     |                |                 |                 |                |                 |                 |
| Beckman AU                      | 2              | 2               | -               | 2              | 2               | -               |
| Carolina Chemistries BioLis 24i | 1              | 1               | -               | 1              | 1               | -               |
| Lin-Zhi International           | 7              | 7               | -               | 7              | 7               | -               |
| Microgenics DRI                 | 1              | 1               | -               | 1              | 1               | -               |
| Synermed IR 500                 | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 100                 | 12             | 11              | 1               | 12             | 11              | 1               |
| Cut-off 3                       |                |                 |                 |                |                 |                 |
| All Cut-off 3                   | 1              | 1               | -               | 1              | 1               | -               |

**Fentanyl (ng/mL)**

| <u>Method</u>   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods     | 7              | -               | 7               | 7              | -               | 7               |
| Cut-off 100     |                |                 |                 |                |                 |                 |
| All Cut-off 100 | 1              | -               | 1               | 1              | -               | 1               |
| Cut-off 2       |                |                 |                 |                |                 |                 |
| Beckman AU      | 1              | -               | 1               | 1              | -               | 1               |
| Immunalysis     | 1              | -               | 1               | 1              | -               | 1               |
| Medica EasyRA   | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 2   | 3              | -               | 3               | 3              | -               | 3               |

**LSD (ng/mL)**

| <u>Method</u> | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|               | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| ALL METHODS   | 2              | -               | 2               | 2              | -               | 2               |

**MDMA (ng/mL)**

| <u>Method</u>            | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|--------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                          | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods              | 38             | -               | 38              | 38             | -               | 38              |
| Cut-off 100              |                |                 |                 |                |                 |                 |
| All Cut-off 100          | 1              | -               | 1               | 1              | -               | 1               |
| Cut-off 500              |                |                 |                 |                |                 |                 |
| Alere iCassette          | 2              | -               | 2               | 2              | -               | 2               |
| Alere iCup               | 4              | -               | 4               | 4              | -               | 4               |
| Amedica Biotech          | 2              | -               | 2               | 2              | -               | 2               |
| Beckman AU               | 1              | -               | 1               | 1              | -               | 1               |
| Bio-Rad TOX/See          | 1              | -               | 1               | 1              | -               | 1               |
| BMC QuickTox Drug Screen | 2              | -               | 2               | 2              | -               | 2               |
| Lin-Zhi International    | 2              | -               | 2               | 2              | -               | 2               |
| Microgenics DRI          | 2              | -               | 2               | 2              | -               | 2               |
| Siemens EMIT II Plus     | 1              | -               | 1               | 1              | -               | 1               |
| USDiagnosics Proscreen   | 2              | -               | 2               | 2              | -               | 2               |
| USDiagnosics UScreen Cup | 2              | -               | 2               | 2              | -               | 2               |
| All Cut-off 500          | 29             | -               | 29              | 29             | -               | 29              |

**Methadone (ng/mL)**

| <b><u>Method</u></b>            | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|---------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                 | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                     | 77                    | -                      | 77                     | 77                    | -                      | 77                     |
| Cut-off 150                     |                       |                        |                        |                       |                        |                        |
| Medica EasyRA                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Siemens EMIT II Plus            | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 150                 | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Cut-off 200                     |                       |                        |                        |                       |                        |                        |
| MEDTOX Diagnostics              | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| All Cut-off 200                 | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Cut-off 300                     |                       |                        |                        |                       |                        |                        |
| Abbott Architect                | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere iCassette                 | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Alere iCup                      | 4                     | -                      | 4                      | 4                     | -                      | 4                      |
| Alere iScreen                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Amedica Biotech                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Beckman AU                      | 6                     | -                      | 6                      | 6                     | -                      | 6                      |
| Bio-Rad TOX/See                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| BMC QuickTox Drug Screen        | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Carolina Chemistries BioLis 24i | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Immunalysis                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Indiko Plus                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Lin-Zhi International           | 7                     | -                      | 7                      | 7                     | -                      | 7                      |
| Microgenics DRI                 | 7                     | -                      | 7                      | 7                     | -                      | 7                      |
| Mindray BS-200                  | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Noble Medical Inc.              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Roche Integra                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Siemens EMIT II Plus            | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Synermed IR 500                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| USDiagnostics UScreen Cup       | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| All Cut-off 300                 | 56                    | -                      | 56                     | 56                    | -                      | 56                     |
| Cut-off 1000                    |                       |                        |                        |                       |                        |                        |
| Alere iCup                      | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 1000                | 1                     | -                      | 1                      | 1                     | -                      | 1                      |

**Methamphetamines (ng/mL)**

| <b><u>Method</u></b>              | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|-----------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                   | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                       | 54                    | -                      | 54                     | 54                    | 2                      | 52                     |
| Cut-off 250                       |                       |                        |                        |                       |                        |                        |
| Medica EasyRA                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 250                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Cut-off 500                       |                       |                        |                        |                       |                        |                        |
| Alere iCup                        | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere iScreen                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Beckman AU                        | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| BMC QuickTox Drug Screen          | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Lin-Zhi International             | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| MEDTOX Diagnostics                | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Microgenics DRI                   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Siemens EMIT II Plus              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 500                   | 14                    | -                      | 14                     | 14                    | 1                      | 13                     |
| Cut-off 1000                      |                       |                        |                        |                       |                        |                        |
| Alere iCassette                   | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Alere iCup                        | 4                     | -                      | 4                      | 4                     | -                      | 4                      |
| Alfa Scientific Instant-View      | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| AMBC Rapid Drug/Tox               | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Amedica Biotech                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Bio-Rad TOX/See                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Innovacon Multi-Drug One Step     | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Integrated E-Z Split Key Cup / II | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Noble Medical Inc.                | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| USDiagnostics Proscreen           | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| USDiagnostics UScreen Cup         | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| All Cut-off 1000                  | 27                    | -                      | 27                     | 27                    | -                      | 27                     |

**Methanol (mg/dL)**

|             | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|             | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods | 2              | -               | 2               | 2              | -               | 2               |

**Methaqualone (ng/mL)**

| <u>Method</u>   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods     | 5              | 3               | 2               | 5              | 3               | 2               |
| Cut-off 300     |                |                 |                 |                |                 |                 |
| Beckman AU      | 2              | 2               | -               | 2              | 2               | -               |
| Microgenics DRI | 1              | 1               | -               | 1              | 1               | -               |
| All Cut-off 300 | 3              | 3               | -               | 3              | 3               | -               |

**6-MAM (ng/mL)**

| <u>Method</u>        | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|----------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                      | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods          | 7              | -               | 7               | 7              | -               | 7               |
| Cut-off 10           |                |                 |                 |                |                 |                 |
| Beckman AU           | 2              | -               | 2               | 2              | -               | 2               |
| Indiko Plus          | 1              | -               | 1               | 1              | -               | 1               |
| Microgenics DRI      | 1              | -               | 1               | 1              | -               | 1               |
| Siemens EMIT II Plus | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 10       | 5              | -               | 5               | 5              | -               | 5               |

**Opiates (Morphine Trihydrate) (ng/mL)**

| <b><u>Method</u></b>            | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|---------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                 | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                     | 104                   | -                      | 104                    | 104                   | 1                      | 103                    |
| Cut-off 100                     |                       |                        |                        |                       |                        |                        |
| Beckman AU                      | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Medica EasyRA                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| MEDTOX Diagnostics              | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Microgenics DRI                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 100                 | 7                     | -                      | 7                      | 7                     | -                      | 7                      |
| Cut-off 300                     |                       |                        |                        |                       |                        |                        |
| Abbott Architect                | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere iCup                      | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Alere iScreen                   | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Alere Triage                    | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Alfa Scientific Instant-View    | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Beckman AU                      | 3                     | -                      | 3                      | 3                     | -                      | 3                      |
| Bio-Rad TOX/See                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| BMC QuickTox Drug Screen        | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Carolina Chemistries BioLis 24i | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Immunalysis                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Indiko Plus                     | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Lin-Zhi International           | 8                     | -                      | 8                      | 8                     | -                      | 8                      |
| MEDTOX Diagnostics              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Microgenics DRI                 | 5                     | -                      | 5                      | 5                     | -                      | 5                      |
| Mindray BS-200                  | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Noble Medical Inc.              | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Roche Integra                   | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| Siemens Dimension               | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Siemens EMIT II Plus            | 2                     | -                      | 2                      | 2                     | -                      | 2                      |
| Synermed IR 500                 | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| USDiagnostics UScreen Cup       | 1                     | -                      | 1                      | 1                     | -                      | 1                      |
| All Cut-off 300                 | 44                    | -                      | 44                     | 44                    | 1                      | 43                     |

**Opiates (Morphine Trihydrate) (ng/mL) cont'd**

|                                   | Specimen UDS-3 |                 |                 |    | Specimen UDS-4 |                 |                 |
|-----------------------------------|----------------|-----------------|-----------------|----|----------------|-----------------|-----------------|
|                                   | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |    | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| Cut-off 2000                      |                |                 |                 |    |                |                 |                 |
| Alere iCassette                   | 5              | -               | 5               |    | 5              | -               | 5               |
| Alere iCup                        | 5              | -               | 5               |    | 5              | -               | 5               |
| Alfa Scientific Instant-View      | 2              | -               | 2               |    | 2              | -               | 2               |
| Amedica Biotech                   | 1              | -               | 1               |    | 1              | -               | 1               |
| Beckman AU                        | 2              | -               | 2               |    | 2              | -               | 2               |
| BMC QuickTox Drug Screen          | 1              | -               | 1               |    | 1              | -               | 1               |
| Germaine Laboratories             |                |                 |                 |    |                |                 |                 |
| AimScreen                         | 2              | -               | 2               |    | 2              | -               | 2               |
| Innovacon Multi-Drug One          |                |                 |                 |    |                |                 |                 |
| Step                              | 1              | -               | 1               |    | 1              | -               | 1               |
| Integrated E-Z Split Key Cup / II | 1              | -               | 1               |    | 1              | -               | 1               |
| Microgenics DRI                   | 1              | -               | 1               |    | 1              | -               | 1               |
| Noble Medical Inc.                | 1              | -               | 1               |    | 1              | -               | 1               |
| USDiagnosics Proscreen            | 2              | -               | 2               |    | 2              | -               | 2               |
| USDiagnosics UScreen Cup          | 1              | -               | 1               |    | 1              | -               | 1               |
| All Cut-off 2000                  | 32             | -               | 32              | 32 | -              | 32              | 32              |

**Oxycodone (ng/mL)**

| <b><u>Method</u></b>            | <b>Specimen UDS-3</b> |                        |                        | <b>Specimen UDS-4</b> |                        |                        |
|---------------------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|
|                                 | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> | <b><u>Labs</u></b>    | <b><u>Positive</u></b> | <b><u>Negative</u></b> |
| All Methods                     | 73                    | 1                      | 72                     | 73                    | 72                     | 1                      |
| Cut-off 100                     |                       |                        |                        |                       |                        |                        |
| Alere iCassette                 | 3                     | -                      | 3                      | 3                     | 3                      | -                      |
| Alere iCup                      | 6                     | -                      | 6                      | 6                     | 6                      | -                      |
| Alere iScreen                   | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| Amedica Biotech                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Beckman AU                      | 5                     | 1                      | 4                      | 5                     | 4                      | 1                      |
| Bio-Rad TOX/See                 | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| BMC QuickTox Drug Screen        | 3                     | -                      | 3                      | 3                     | 3                      | -                      |
| Carolina Chemistries BioLis 24i | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Immunalysis                     | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Lin-Zhi International           | 7                     | -                      | 7                      | 7                     | 7                      | -                      |
| Medica EasyRA                   | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| MEDTOX Diagnostics              | 3                     | -                      | 3                      | 3                     | 3                      | -                      |
| Microgenics DRI                 | 8                     | -                      | 8                      | 8                     | 8                      | -                      |
| Mindray BS-200                  | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Noble Medical Inc.              | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Roche Integra                   | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| Siemens EMIT II Plus            | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| USDiagnostics Proscreen         | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| USDiagnostics UScreen Cup       | 2                     | -                      | 2                      | 2                     | 2                      | -                      |
| All Cut-off 100                 | 60                    | 1                      | 59                     | 60                    | 59                     | 1                      |
| Cut-off 300                     |                       |                        |                        |                       |                        |                        |
| Alere iCassette                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Carolina Chemistries BioLis 24i | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Indiko Plus                     | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| Microgenics DRI                 | 1                     | -                      | 1                      | 1                     | 1                      | -                      |
| All Cut-off 300                 | 4                     | -                      | 4                      | 4                     | 4                      | -                      |

**Phencyclidine (PCP) (ng/mL)**

| <u>Method</u>                     | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|-----------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                   | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                       | 68             | 67              | 1               | 68             | 1               | 67              |
| Cut-off 25                        |                |                 |                 |                |                 |                 |
| Abbott Architect                  | 1              | 1               | -               | 1              | -               | 1               |
| Alere iCassette                   | 5              | 5               | -               | 5              | -               | 5               |
| Alere iCup                        | 2              | 2               | -               | 2              | -               | 2               |
| Alere Triage                      | 2              | 2               | -               | 2              | -               | 2               |
| Amedica Biotech                   | 1              | 1               | -               | 1              | -               | 1               |
| Beckman AU                        | 6              | 5               | 1               | 6              | 1               | 5               |
| Bio-Rad TOX/See                   | 1              | 1               | -               | 1              | -               | 1               |
| BMC QuickTox Drug Screen          | 3              | 3               | -               | 3              | -               | 3               |
| Carolina Chemistries BioLis 24i   | 1              | 1               | -               | 1              | -               | 1               |
| Innovacon Multi-Drug One Step     | 1              | 1               | -               | 1              | -               | 1               |
| Integrated E-Z Split Key Cup / II | 1              | 1               | -               | 1              | -               | 1               |
| MEDTOX Diagnostics                | 4              | 4               | -               | 4              | -               | 4               |
| Microgenics DRI                   | 4              | 4               | -               | 4              | -               | 4               |
| Noble Medical Inc.                | 2              | 2               | -               | 2              | -               | 2               |
| Siemens EMIT II Plus              | 2              | 2               | -               | 2              | -               | 2               |
| Synermed IR 500                   | 1              | 1               | -               | 1              | -               | 1               |
| USDiagnostics Proscreen           | 2              | 2               | -               | 2              | -               | 2               |
| USDiagnostics UScreen Cup         | 1              | 1               | -               | 1              | -               | 1               |
| All Cut-off 25                    | 51             | 50              | 1               | 51             | 1               | 50              |
| Cut-off 100                       |                |                 |                 |                |                 |                 |
| USDiagnostics UScreen Cup         | 1              | 1               | -               | 1              | -               | 1               |
| All Cut-off 100                   | 1              | 1               | -               | 1              | -               | 1               |

**Propoxyphene (ng/mL)**

| <u>Method</u>                   | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                                 | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods                     | 20             | -               | 20              | 20             | -               | 20              |
| Cut-off 300                     |                |                 |                 |                |                 |                 |
| Alere iCassette                 | 3              | -               | 3               | 3              | -               | 3               |
| Alere iCup                      | 2              | -               | 2               | 2              | -               | 2               |
| Beckman AU                      | 2              | -               | 2               | 2              | -               | 2               |
| Carolina Chemistries BioLis 24i | 1              | -               | 1               | 1              | -               | 1               |
| MEDTOX Diagnostics              | 3              | -               | 3               | 3              | -               | 3               |
| Microgenics DRI                 | 2              | -               | 2               | 2              | -               | 2               |
| Siemens EMIT II Plus            | 2              | -               | 2               | 2              | -               | 2               |
| All Cut-off 300                 | 15             | -               | 15              | 15             | -               | 15              |

**Propoxyphene (ng/mL)**

|                      | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|----------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                      | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods          | 8              | -               | 8               | 8              | -               | 8               |
| Cut-off 100          |                |                 |                 |                |                 |                 |
| All Cut-off 100      | 1              | -               | 1               | 1              | -               | 1               |
| Cut-off 200          |                |                 |                 |                |                 |                 |
| Beckman AU           | 3              | -               | 3               | 3              | -               | 3               |
| Siemens EMIT II Plus | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 200      | 4              | -               | 4               | 4              | -               | 4               |

**Tricyclic Antidepressants (ng/mL)**

| <u>Method</u>             | Specimen UDS-3 |                 |                 | Specimen UDS-4 |                 |                 |
|---------------------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|
|                           | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> | <u>Labs</u>    | <u>Positive</u> | <u>Negative</u> |
| All Methods               | 29             | -               | 29              | 29             | -               | 29              |
| Cut-off 300               |                |                 |                 |                |                 |                 |
| Beckman AU                | 2              | -               | 2               | 2              | -               | 2               |
| MEDTOX Diagnostics        | 3              | -               | 3               | 3              | -               | 3               |
| All Cut-off 300           | 5              | -               | 5               | 5              | -               | 5               |
| Cut-off 1000              |                |                 |                 |                |                 |                 |
| Alere iCassette           | 2              | -               | 2               | 2              | -               | 2               |
| Alere iCup                | 2              | -               | 2               | 2              | -               | 2               |
| Alere iScreen             | 1              | -               | 1               | 1              | -               | 1               |
| Alere Triage              | 2              | -               | 2               | 2              | -               | 2               |
| Amedica Biotech           | 2              | -               | 2               | 2              | -               | 2               |
| Bio-Rad TOX/See           | 1              | -               | 1               | 1              | -               | 1               |
| BMC QuickTox Drug Screen  | 1              | -               | 1               | 1              | -               | 1               |
| Noble Medical Inc.        | 1              | -               | 1               | 1              | -               | 1               |
| USDiagnostics UScreen Cup | 1              | -               | 1               | 1              | -               | 1               |
| All Cut-off 1000          | 16             | -               | 16              | 16             | -               | 16              |

## Whole Blood Glucose (mg/dL)

| Specimen WBG-6                            |             |             |           |           |               |              | Specimen WBG-7 |             |           |           |               |              |
|-------------------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                             | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                                | 323         | 210.9       | 41.7      | 19.8      | 216           | 168 - 254    | 320            | 332.7       | 63.4      | 19.1      | 335           | 266 - 400    |
| All Abbott Methods                        | 24          | 222.2       | 22.0      | 9.9       | 224           | 177 - 267    | 25             | 358.5       | 49.5      | 13.8      | 356           | 286 - 431    |
| All Arkray Methods                        | 17          | 266.2       | 43.2      | 16.2      | 248           | 212 - 320    | 15             | 422.4       | 62.8      | 14.9      | 403           | 337 - 507    |
| All Bayer Methods                         | 63          | 165.0       | 10.5      | 6.3       | 162           | 132 - 199    | 63             | 288.0       | 17.2      | 6.0       | 285           | 230 - 346    |
| All Hemocue Methods                       | 66          | 242.8       | 6.6       | 2.7       | 243           | 194 - 292    | 66             | 367.2       | 10.0      | 2.7       | 368           | 293 - 441    |
| All Lifescan Methods                      | 36          | 234.3       | 16.9      | 7.2       | 241           | 187 - 282    | 36             | 367.2       | 27.2      | 7.4       | 376           | 293 - 441    |
| All Roche Methods                         | 33          | 202.5       | 5.5       | 2.7       | 202           | 162 - 244    | 32             | 320.0       | 9.4       | 2.9       | 320           | 256 - 384    |
| Abbott FreeStyle Lite/Freedom Lite        | 9           | 198.6       | 3.8       | 1.9       | 199           | 158 - 239    | 9              | 324.1       | 9.9       | 3.0       | 320           | 259 - 389    |
| Abbott PreciS. Xtra/Optium                | 6           | 244.3       | 12.9      | 5.3       | 244           | 195 - 294    | 6              | 404.3       | 32.7      | 8.1       | 404           | 323 - 486    |
| Abbott Precision XceedPro                 | 10          | 242.9       | 39.4      | 16.2      | 230           | 194 - 292    | 10             | 361.9       | 57.0      | 15.7      | 371           | 289 - 435    |
| Arkray Platinum                           | 15          | 263.5       | 40.7      | 15.5      | 248           | 210 - 317    | 12             | 396.8       | 18.2      | 4.6       | 401           | 317 - 477    |
| Bayer Contour                             | 63          | 165.0       | 10.5      | 6.3       | 162           | 132 - 199    | 63             | 288.0       | 17.2      | 6.0       | 285           | 230 - 346    |
| HemoCue 201                               | 65          | 242.8       | 6.6       | 2.7       | 243           | 194 - 292    | 65             | 367.3       | 10.1      | 2.7       | 368           | 293 - 441    |
| Home Diagnostics True Balance / TrueTrack | 21          | 534.8       | 14.0      | 2.6       | 538           | 427 - 642    | 11             | 600.0       | 0.4       | 0.1       | 600           | 480 - 720    |
| Home Diagnostics True Result              | 18          | 132.3       | 18.4      | 13.9      | 134           | 105 - 159    | 18             | 186.1       | 21.2      | 11.4      | 185           | 148 - 224    |
| Lifescan One Touch Ultra/2/Mini           | 27          | 240.7       | 10.4      | 4.3       | 245           | 192 - 289    | 26             | 378.2       | 15.1      | 4.0       | 380           | 302 - 454    |
| LifeScan OneTouch Verio                   | 7           | 207.1       | 8.1       | 3.9       | 207           | 165 - 249    | 7              | 328.0       | 15.6      | 4.8       | 328           | 262 - 394    |
| Medline EvenCare G2 / G3                  | 11          | 250.5       | 8.2       | 3.3       | 250           | 200 - 301    | 11             | 385.5       | 32.3      | 8.4       | 392           | 308 - 463    |
| NOVA Biomedical StatStrip                 | 22          | 183.5       | 12.2      | 6.6       | 184           | 146 - 221    | 21             | 283.8       | 22.1      | 7.8       | 283           | 227 - 341    |
| PSS Quintet Glucose Monitoring System     | 21          | 249.0       | 23.1      | 9.3       | 256           | 199 - 299    | 21             | 410.0       | 35.5      | 8.7       | 423           | 328 - 492    |
| Roche Accu-Chek Aviva                     | 5           | 202.8       | 7.9       | 3.9       | 200           | 162 - 244    | 5              | 315.8       | 10.5      | 3.3       | 316           | 252 - 379    |
| Roche Accu-Chek Inform II                 | 16          | 202.2       | 5.2       | 2.6       | 201           | 161 - 243    | 15             | 318.2       | 9.8       | 3.1       | 316           | 254 - 382    |
| Roche Accu-Chek Performa                  | 12          | 202.8       | 5.1       | 2.5       | 202           | 162 - 244    | 12             | 324.0       | 7.5       | 2.3       | 325           | 259 - 389    |

  

| Specimen WBG-8                  |             |             |           |           |               |              | Specimen WBG-9 |             |           |           |               |              |
|---------------------------------|-------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u>                   | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method                      | 14          | 123.4       | 14.2      | 11.5      | 121           | 98 - 149     | 14             | 77.7        | 9.3       | 11.9      | 77            | 62 - 94      |
| All Abbott Methods              | 2           | -           | -         | -         | 133           | 106 - 160    | 2              | -           | -         | -         | 87            | 69 - 104     |
| All Lifescan Methods            | 8           | 120.9       | 7.2       | 6.0       | 121           | 96 - 146     | 8              | 74.0        | 6.0       | 8.1       | 74            | 59 - 89      |
| All Roche Methods               | 2           | -           | -         | -         | 116           | 92 - 140     | 2              | -           | -         | -         | 77            | 61 - 92      |
| Abbott PreciS. Xtra/Optium      | 2           | -           | -         | -         | 133           | 98 - 149     | 2              | -           | -         | -         | 87            | 62 - 94      |
| Lifescan One Touch Ultra/2/Mini | 7           | 121.6       | 7.5       | 6.2       | 121           | 97 - 146     | 7              | 73.0        | 5.7       | 7.8       | 73            | 58 - 88      |
| LifeScan OneTouch Verio         | 1           | -           | -         | -         | 116           | 96 - 146     | 1              | -           | -         | -         | 81            | 59 - 89      |
| Medline EvenCare G2 / G3        | 1           | -           | -         | -         | 160           | 98 - 149     | 1              | -           | -         | -         | 100           | 62 - 94      |
| Roche Accu-Chek Inform II       | 1           | -           | -         | -         | 114           | 98 - 149     | 1              | -           | -         | -         | 74            | 62 - 94      |
| Roche Accu-Chek Performa        | 1           | -           | -         | -         | 118           | 98 - 149     | 1              | -           | -         | -         | 79            | 62 - 94      |

Whole Blood Glucose (mg/dL) cont'd

| Specimen WBG-10                 |    |       |      |     |     |           |
|---------------------------------|----|-------|------|-----|-----|-----------|
| All Method                      | 14 | 279.5 | 27.2 | 9.7 | 291 | 223 - 336 |
| All Abbott Methods              | 2  | -     | -    | -   | 302 | 241 - 362 |
| All Lifescan Methods            | 8  | 287.3 | 16.7 | 5.8 | 292 | 229 - 345 |
| All Roche Methods               | 2  | -     | -    | -   | 247 | 197 - 296 |
| Abbott Precis. Xtra/Optium      | 2  | -     | -    | -   | 302 | 223 - 336 |
| Lifescan One Touch Ultra/2/Mini | 7  | 291.9 | 11.3 | 3.9 | 293 | 233 - 351 |
| LifeScan OneTouch Verio         | 1  | -     | -    | -   | 255 | 229 - 345 |
| Medline EvenCare G2 / G3        | 1  | -     | -    | -   | 298 | 223 - 336 |
| Roche Accu-Chek Inform II       | 1  | -     | -    | -   | 242 | 223 - 336 |
| Roche Accu-Chek Performa        | 1  | -     | -    | -   | 251 | 223 - 336 |

Fructosamine (mmol/L)

| Specimen FR-3 |             |             |           |           |               |              | Specimen FR-4 |             |           |           |               |              |
|---------------|-------------|-------------|-----------|-----------|---------------|--------------|---------------|-------------|-----------|-----------|---------------|--------------|
| <u>Method</u> | <u>Labs</u> | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>   | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 2           | -           | -         | -         | 1118          | Not graded   | 2             | -           | -         | -         | 1070          | Not graded   |

### Urine Amylase (U/L)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 2              | -           | -         | -         | 409           | Not graded   | 2              | -           | -         | -         | 160           | Not graded   |

### Urine Calcium (mg/dL)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 4.33        | 0.59      | 13.5      | 4.1           | 2.9 - 5.7    | 5              | 8.67        | 0.15      | 1.8       | 8.7           | 5.9 - 11.4   |

### Urine Chloride (mmol/L)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 266.5       | 3.1       | 1.2       | 267           | 197 - 336    | 5              | 97.3        | 1.0       | 1.0       | 98            | 71 - 123     |

### Urine Creatinine (mg/dL)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |               | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|---------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u>  | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 15             | 187.73      | 9.94      | 5.3       | 188.4         | 155.8 - 219.7 | 15             | 70.32       | 3.98      | 5.7       | 69.6          | 58.3 - 82.3  |

### Urine Glucose (mg/dL)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 272.0       | 11.3      | 4.2       | 272           | 217 - 327    | 5              | 24.0        | 1.4       | 5.9       | 24            | 18 - 30      |

### Urine Magnesium (mg/dL)

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 7.40        | 1.70      | 22.9      | 7.4           | 5.5 - 9.3    | 5              | 2.35        | 0.78      | 33.1      | 2.4           | 1.7 - 3.0    |

**Urine Osmolality (mOsm/kg)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 854.0       | 4.2       | 0.5       | 854           | 841 - 867    | 5              | 399.0       | 1.4       | 0.4       | 399           | 394 - 404    |

**Urine Phosphorus (mg/dL)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 58.80       | 1.27      | 2.2       | 58.8          | 45.2 - 72.4  | 5              | 18.90       | 0.99      | 5.2       | 18.9          | 14.5 - 23.3  |

**Urine Potassium (mmol/L)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 101.18      | 4.80      | 4.7       | 101.5         | 71.8 - 130.6 | 5              | 22.18       | 0.93      | 4.2       | 22.4          | 15.7 - 28.7  |

**Urine Sodium (mmol/L)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 6              | 177.2       | 3.1       | 1.7       | 176           | 131 - 224    | 6              | 79.3        | 3.0       | 3.8       | 79            | 58 - 100     |

**Urine Total Protein (mg/dL)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 14             | 107.75      | 8.34      | 7.7       | 108.0         | 60.3 - 155.2 | 14             | 11.56       | 3.77      | 32.6      | 10.5          | 6.4 - 16.7   |

**Urine Urea Nitrogen (mg/dL)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 5              | 697.0       | 13.2      | 1.9       | 692           | 550 - 844    | 5              | 400.3       | 5.1       | 1.3       | 399           | 316 - 485    |

**Urine Uric Acid (mg/dL)**

| <u>Method</u> | Specimen UCH-3 |             |           |           |               |              | Specimen UCH-4 |             |           |           |               |              |
|---------------|----------------|-------------|-----------|-----------|---------------|--------------|----------------|-------------|-----------|-----------|---------------|--------------|
|               | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> | <u>Labs</u>    | <u>Mean</u> | <u>SD</u> | <u>CV</u> | <u>Median</u> | <u>Range</u> |
| All Method    | 2              | -           | -         | -         | 7.7           | Not graded   | 2              | -           | -         | -         | 3.8           | Not graded   |

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