

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Analyte Proficiency From All Labs

Sample # 210812

18-46-0 DAP

### Statistical Summary

# Analytes: 33

# Labs Reporting: 92

Issue Date : 09/30/2021

| Analyte Code | Analyte<br>Sample # 210812    | # Tests<br>Submitted | # Tests in Robust<br>Calculations | Raw Mean | Raw SD | Assigned Value<br>Robust Mean | IA at Analyte<br>Value | Robust sd | Robust<br>Uncertainty (U) | Robust % RSD | Analyte IA Ratio | Average Range<br>(R-bar) | Howitz %RSD |
|--------------|-------------------------------|----------------------|-----------------------------------|----------|--------|-------------------------------|------------------------|-----------|---------------------------|--------------|------------------|--------------------------|-------------|
| 001          | Ammoniacal N (%)              | 35                   | 34                                | 16.82    | 4.233  | 17.78                         |                        | 0.4006    | 0.0859                    | 2.25%        |                  | 0.1665                   | 2.37%       |
| 002          | Nitrate N (%)                 | 1                    |                                   | 18.10    |        |                               |                        |           |                           |              |                  |                          |             |
| 010          | Total N (18%)                 | 74                   | 72                                | 17.76    | 0.8875 | 17.90                         | 0.6984                 | 0.2676    | 0.0394                    | 1.50%        | 0.89             | 0.1338                   | 2.36%       |
| 020          | Total P2O5 (%)                | 45                   | 43                                | 45.89    | 4.179  | 46.56                         |                        | 0.7062    | 0.1346                    | 1.52%        |                  | 0.3247                   | 1.47%       |
| 030          | Citrate Insoluble P2O5 (%)    | 3                    | 2                                 | 30.84    | 26.70  | 46.26                         |                        | 0.3571    | 0.3156                    | 0.77%        |                  | 0.1750                   | 1.47%       |
| 040          | Indirect Available P2O5 (46%) | 1                    |                                   | 47.16    |        |                               |                        |           |                           |              |                  |                          |             |
| 041          | Direct Available P2O5 (46%)   | 55                   | 55                                | 46.31    | 1.119  | 46.35                         | 1.0053                 | 0.7034    | 0.1186                    | 1.52%        | 1.63             | 0.3366                   | 1.47%       |
| 048          | Water Soluble P2O5 (%)        | 7                    | 6                                 | 43.25    | 2.138  | 43.73                         |                        | 1.973     | 1.007                     | 4.51%        |                  | 0.0633                   | 1.51%       |
| 050          | Soluble K2O (%)               | 13                   | 10                                | 0.2877   | 0.4618 | 0.1772                        | 0.4100                 | 0.0166    | 0.0066                    | 9.38%        | 0.09             | 0.0068                   | 5.19%       |
| 060          | Water (Free) (%)              | 1                    |                                   | 0.6350   |        |                               |                        |           |                           |              |                  |                          |             |
| 101          | Acid Soluble Ca (%)           | 9                    | 9                                 | 0.1879   | 0.0709 | 0.1947                        | 0.2097                 | 0.0499    | 0.0208                    | 25.65%       | 0.55             | 0.0044                   | 5.12%       |
| 121          | Acid Soluble Mg (%)           | 11                   | 11                                | 0.9614   | 0.4450 | 0.8114                        | 0.2406                 | 0.1242    | 0.0468                    | 15.31%       | 1.20             | 0.0224                   | 4.13%       |
| 143          | Elemental S (%)               | 1                    |                                   | 2.335    |        |                               |                        |           |                           |              |                  |                          |             |
| 145          | Sulfate S, HCl soluble (%)    | 1                    |                                   | 2.420    |        |                               |                        |           |                           |              |                  |                          |             |
| 146          | Total S in Liquid (%)         | 1                    |                                   | 2.575    |        |                               |                        |           |                           |              |                  |                          |             |
| 148          | Total S (%)                   | 7                    | 6                                 | 1.972    | 0.5988 | 2.178                         | 0.3089                 | 0.3561    | 0.1817                    | 16.35%       | 2.69             | 0.0119                   | 3.56%       |
| 149          | S - HNO3 soluble (%)          | 2                    | 2                                 | 2.470    | 0.1485 |                               |                        |           |                           |              |                  |                          |             |
| 151          | Acid Soluble As (ppm)         | 14                   | 10                                | 2.331    | 4.032  | 1.284                         |                        | 0.4426    | 0.1750                    | 34.46%       |                  | 0.2154                   | 15.41%      |
| 165          | Acid Soluble B (%)            | 9                    | 8                                 | 0.0111   | 0.0054 | 0.0115                        | 0.0047                 | 0.0063    | 0.0028                    | 54.95%       | 3.12             | 0.0001                   | 7.83%       |
| 181          | Acid Soluble Cd (ppm)         | 20                   | 19                                | 28.28    | 7.643  | 26.81                         |                        | 3.001     | 0.8605                    | 11.19%       |                  | 0.6684                   | 9.75%       |
| 190          | Water Soluble Cl (%)          | 1                    |                                   | 0.1000   |        |                               |                        |           |                           |              |                  |                          |             |
| 191          | Acid Soluble Cr (ppm)         | 17                   | 17                                | 185.8    | 30.32  | 181.4                         |                        | 14.88     | 4.511                     | 8.20%        |                  | 4.302                    | 7.31%       |
| 202          | Acid Soluble Co (ppm)         | 13                   | 10                                | 2.732    | 5.930  | 0.7512                        | 1.2253                 | 0.4536    | 0.1793                    | 60.38%       | 0.86             | 0.0876                   | 16.70%      |
| 221          | Acid Soluble Cu (%)           | 14                   | 5                                 | 0.0019   | 0.0028 | 0.0010                        | 0.0051                 | 0.0011    | 0.0006                    | 107.10%      | 0.48             | 0.0003                   | 11.33%      |
| 241          | Acid Soluble Fe (%)           | 12                   | 11                                | 0.5831   | 0.4186 | 0.4221                        | 0.0472                 | 0.0319    | 0.0120                    | 7.56%        | 1.58             | 0.0083                   | 4.55%       |
| 251          | Acid Soluble Pb (ppm)         | 15                   | 8                                 | 2.452    | 6.080  | 0.6973                        |                        | 0.7642    | 0.3377                    | 109.60%      |                  | 0.0375                   | 16.89%      |
| 261          | Acid Soluble Mn (%)           | 11                   | 9                                 | 0.0088   | 0.0044 | 0.0067                        | 0.0057                 | 0.0006    | 0.0002                    | 8.62%        | 0.24             | 0.0003                   | 8.49%       |
| 281          | Acid Soluble Hg (ppm)         | 10                   | 3                                 | 0.0188   | 0.0322 | 0.0032                        |                        | 0.0046    | 0.0033                    | 144.12%      |                  | 0.0031                   | 22.00%      |
| 289          | Acid Soluble Mo (ppm)         | 13                   | 11                                | 4.545    | 5.046  | 2.972                         | 1.8915                 | 0.4450    | 0.1677                    | 14.97%       | 0.55             | 0.2680                   | 13.58%      |
| 291          | Acid Soluble Ni (ppm)         | 18                   | 17                                | 9.710    | 10.28  | 6.729                         |                        | 1.872     | 0.5675                    | 27.82%       |                  | 0.3755                   | 12.01%      |
| 301          | Acid Soluble Se (ppm)         | 10                   | 6                                 | 2.755    | 4.888  | 1.498                         |                        | 0.7938    | 0.4051                    | 52.99%       |                  | 0.1169                   | 15.05%      |
| 311          | Sodium (%)                    | 5                    | 5                                 | 0.1751   | 0.0123 | 0.1751                        | 0.0225                 | 0.0123    | 0.0069                    | 7.04%        | 1.28             | 0.0043                   | 5.20%       |
| 321          | Acid Soluble Zn (%)           | 26                   | 25                                | 11.12    | 56.45  | 0.0412                        | 0.0091                 | 0.0065    | 0.0016                    | 15.81%       | 1.66             | 0.0032                   | 6.46%       |

|              |                            |                      |                                   |          |        |                               |                        |           |                           |              |                  |                          |              |
|--------------|----------------------------|----------------------|-----------------------------------|----------|--------|-------------------------------|------------------------|-----------|---------------------------|--------------|------------------|--------------------------|--------------|
| Analyte Code | Analyte<br>Sample # 210812 | # Tests<br>Submitted | # Tests in Robust<br>Calculations | Raw Mean | Raw SD | Assigned Value<br>Robust Mean | IA at Analyte<br>Value | Robust sd | Robust<br>Uncertainty (U) | Robust % RSD | Analyte IA Ratio | Average Range<br>(R-bar) | Horwitz %RSD |
|--------------|----------------------------|----------------------|-----------------------------------|----------|--------|-------------------------------|------------------------|-----------|---------------------------|--------------|------------------|--------------------------|--------------|

The Analyte IA Ratio =  $2.33 * \text{Robust SD} / \text{IA at the Analyte Assigned Value}$ . IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting. The Horwitz %RSD is calculated using the Thompson Modification, Analyst,2000,125,385-386.

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Sample # 210812

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### Lab Values

# Analytes: 33

# Labs Reporting: 92

Issue Date : 09/30/2021

| Analyte Group | Analyte (Units)  | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                  |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 001           | Ammoniacal N (%) | 0524     | 0.0017   | 0.0001 | 17.78         | 0.4006 | 0.1665 | 34      | -44.39              | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0553     | 0.0040   | 0.0000 | 17.78         | 0.4006 | 0.1665 | 34      | -44.38              | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0136     | 16.25    | 0.9000 | 17.78         | 0.4006 | 0.1665 | 34      | -3.82               | 001.10      | 0    |
| 001           | Ammoniacal N (%) | 0117     | 16.76    | 0.4500 | 17.78         | 0.4006 | 0.1665 | 34      | -2.56               | 001.10      | 0    |
| 001           | Ammoniacal N (%) | 0451     | 17.20    | 0.6100 | 17.78         | 0.4006 | 0.1665 | 34      | -1.47               | 001.10      | 0    |
| 001           | Ammoniacal N (%) | 0255     | 17.38    | 0.1600 | 17.78         | 0.4006 | 0.1665 | 34      | -1.00               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0533     | 17.39    | 0.0200 | 17.78         | 0.4006 | 0.1665 | 34      | -0.98               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0567     | 17.55    | 0.1000 | 17.78         | 0.4006 | 0.1665 | 34      | -0.58               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0200     | 17.57    | 0.0800 | 17.78         | 0.4006 | 0.1665 | 34      | -0.53               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0564     | 17.63    | 0.0200 | 17.78         | 0.4006 | 0.1665 | 34      | -0.38               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0574     | 17.65    | 0.1000 | 17.78         | 0.4006 | 0.1665 | 34      | -0.33               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0562     | 17.68    | 0.1500 | 17.78         | 0.4006 | 0.1665 | 34      | -0.27               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0220     | 17.74    | 0.0600 | 17.78         | 0.4006 | 0.1665 | 34      | -0.10               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0368     | 17.74    | 0.0330 | 17.78         | 0.4006 | 0.1665 | 34      | -0.10               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0559     | 17.75    | 0.0100 | 17.78         | 0.4006 | 0.1665 | 34      | -0.09               | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0405     | 17.79    | 0.1400 | 17.78         | 0.4006 | 0.1665 | 34      | 0.02                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0493     | 17.87    | 0.1000 | 17.78         | 0.4006 | 0.1665 | 34      | 0.22                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0548     | 17.90    | 0.0500 | 17.78         | 0.4006 | 0.1665 | 34      | 0.28                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0535     | 17.90    | 0.2000 | 17.78         | 0.4006 | 0.1665 | 34      | 0.29                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0513     | 17.91    | 0.0400 | 17.78         | 0.4006 | 0.1665 | 34      | 0.32                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0532     | 17.91    | 0.0600 | 17.78         | 0.4006 | 0.1665 | 34      | 0.32                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0546     | 17.92    | 0.1000 | 17.78         | 0.4006 | 0.1665 | 34      | 0.34                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0551     | 17.93    | 0.0600 | 17.78         | 0.4006 | 0.1665 | 34      | 0.37                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0536     | 17.96    | 0.0200 | 17.78         | 0.4006 | 0.1665 | 34      | 0.44                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0539     | 17.98    | 0.0300 | 17.78         | 0.4006 | 0.1665 | 34      | 0.48                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0549     | 17.98    | 0.2300 | 17.78         | 0.4006 | 0.1665 | 34      | 0.48                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0394     | 17.98    | 0.2070 | 17.78         | 0.4006 | 0.1665 | 34      | 0.49                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0027     | 18.00    | 0.2900 | 17.78         | 0.4006 | 0.1665 | 34      | 0.53                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0569     | 18.03    | 0.0900 | 17.78         | 0.4006 | 0.1665 | 34      | 0.61                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0531     | 18.03    | 0.0200 | 17.78         | 0.4006 | 0.1665 | 34      | 0.62                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0444     | 18.44    | 0.6400 | 17.78         | 0.4006 | 0.1665 | 34      | 1.64                | 001.10      | 0    |
| 001           | Ammoniacal N (%) | 0444     | 18.44    | 0.6400 | 17.78         | 0.4006 | 0.1665 | 34      | 1.64                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0522     | 18.49    | 0.0200 | 17.78         | 0.4006 | 0.1665 | 34      | 1.77                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0545     | 19.59    | 0.0300 | 17.78         | 0.4006 | 0.1665 | 34      | 4.50                | 001.99      | 0    |
| 001           | Ammoniacal N (%) | 0563     | 18.30    | 1.180  | 17.78         | 0.4006 | 0.1665 | 34      | 1.29                | 001.10      | 1    |
| 002           | Nitrate N (%)    | 0553     | 18.10    | 0.6000 |               |        |        | 1       |                     | 002.99      | 0    |

| Analyte Group | Analyte (Units) | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                 |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 010           | Total N (18%)   | 0023     | 15.85†   | 0.2200 | 17.90         | 0.2676 | 0.1338 | 72      | -7.66               | 010.60      | 0    |
| 010           | Total N (18%)   | 0521     | 17.05†   | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | -3.14               | 010.60      | 0    |
| 010           | Total N (18%)   | 0523     | 17.30    | 0.0400 | 17.90         | 0.2676 | 0.1338 | 72      | -2.23               | 010.60      | 0    |
| 010           | Total N (18%)   | 0117     | 17.40    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | -1.85               | 010.60      | 0    |
| 010           | Total N (18%)   | 0443     | 17.50    | 0.0900 | 17.90         | 0.2676 | 0.1338 | 72      | -1.50               | 010.60      | 0    |
| 010           | Total N (18%)   | 0524     | 17.55    | 0.0029 | 17.90         | 0.2676 | 0.1338 | 72      | -1.31               | 010.99      | 0    |
| 010           | Total N (18%)   | 0422     | 17.55    | 0.3000 | 17.90         | 0.2676 | 0.1338 | 72      | -1.29               | 010.60      | 0    |
| 010           | Total N (18%)   | 0042     | 17.55    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -1.29               | 010.60      | 0    |
| 010           | Total N (18%)   | 0402     | 17.62    | 0.1200 | 17.90         | 0.2676 | 0.1338 | 72      | -1.03               | 010.60      | 0    |
| 010           | Total N (18%)   | 0568     | 17.65    | 0.7000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.92               | 010.12      | 0    |
| 010           | Total N (18%)   | 0157     | 17.65    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.92               | 010.60      | 0    |
| 010           | Total N (18%)   | 0231     | 17.65    | 0.0200 | 17.90         | 0.2676 | 0.1338 | 72      | -0.92               | 010.60      | 0    |
| 010           | Total N (18%)   | 0567     | 17.65    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.92               | 010.99      | 0    |
| 010           | Total N (18%)   | 0574     | 17.65    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.92               | 010.99      | 0    |
| 010           | Total N (18%)   | 0073     | 17.70    | 0.0700 | 17.90         | 0.2676 | 0.1338 | 72      | -0.75               | 010.60      | 0    |
| 010           | Total N (18%)   | 0136     | 17.70    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.73               | 010.60      | 0    |
| 010           | Total N (18%)   | 0324     | 17.70    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.73               | 010.60      | 0    |
| 010           | Total N (18%)   | 0390     | 17.72    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.66               | 010.60      | 0    |
| 010           | Total N (18%)   | 0572     | 17.73    | 0.3900 | 17.90         | 0.2676 | 0.1338 | 72      | -0.64               | 010.12      | 0    |
| 010           | Total N (18%)   | 0564     | 17.73    | 0.0300 | 17.90         | 0.2676 | 0.1338 | 72      | -0.64               | 010.99      | 0    |
| 010           | Total N (18%)   | 0485     | 17.73    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.62               | 010.60      | 0    |
| 010           | Total N (18%)   | 0494     | 17.74    | 0.2500 | 17.90         | 0.2676 | 0.1338 | 72      | -0.60               | 010.60      | 0    |
| 010           | Total N (18%)   | 0018     | 17.75    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.54               | 010.60      | 0    |
| 010           | Total N (18%)   | 0534     | 17.75    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.54               | 010.60      | 0    |
| 010           | Total N (18%)   | 0559     | 17.76    | 0.0100 | 17.90         | 0.2676 | 0.1338 | 72      | -0.53               | 010.99      | 0    |
| 010           | Total N (18%)   | 0234     | 17.78    | 0.1870 | 17.90         | 0.2676 | 0.1338 | 72      | -0.42               | 010.60      | 0    |
| 010           | Total N (18%)   | 0423     | 17.80    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | -0.36               | 010.60      | 0    |
| 010           | Total N (18%)   | 0292     | 17.81    | 0.0100 | 17.90         | 0.2676 | 0.1338 | 72      | -0.34               | 010.60      | 0    |
| 010           | Total N (18%)   | 0055     | 17.83    | 0.0300 | 17.90         | 0.2676 | 0.1338 | 72      | -0.26               | 010.60      | 0    |
| 010           | Total N (18%)   | 0547     | 17.83    | 0.0300 | 17.90         | 0.2676 | 0.1338 | 72      | -0.26               | 010.60      | 0    |
| 010           | Total N (18%)   | 0562     | 17.83    | 0.1500 | 17.90         | 0.2676 | 0.1338 | 72      | -0.26               | 010.99      | 0    |
| 010           | Total N (18%)   | 0169     | 17.85    | 0.0500 | 17.90         | 0.2676 | 0.1338 | 72      | -0.19               | 010.60      | 0    |
| 010           | Total N (18%)   | 0291     | 17.85    | 0.0100 | 17.90         | 0.2676 | 0.1338 | 72      | -0.19               | 010.60      | 0    |
| 010           | Total N (18%)   | 0548     | 17.85    | 0.3200 | 17.90         | 0.2676 | 0.1338 | 72      | -0.17               | 010.11      | 0    |
| 010           | Total N (18%)   | 0501     | 17.88    | 0.0600 | 17.90         | 0.2676 | 0.1338 | 72      | -0.06               | 010.60      | 0    |
| 010           | Total N (18%)   | 0007     | 17.90    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.02                | 010.60      | 0    |
| 010           | Total N (18%)   | 0102     | 17.91    | 0.0500 | 17.90         | 0.2676 | 0.1338 | 72      | 0.03                | 010.60      | 0    |
| 010           | Total N (18%)   | 0561     | 17.91    | 0.1100 | 17.90         | 0.2676 | 0.1338 | 72      | 0.03                | 010.60      | 0    |
| 010           | Total N (18%)   | 0451     | 17.91    | 0.1400 | 17.90         | 0.2676 | 0.1338 | 72      | 0.05                | 010.60      | 0    |
| 010           | Total N (18%)   | 0043     | 17.92    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.09                | 010.60      | 0    |
| 010           | Total N (18%)   | 0535     | 17.95    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.20                | 010.11      | 0    |
| 010           | Total N (18%)   | 0371     | 17.95    | 0.1000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.20                | 010.60      | 0    |
| 010           | Total N (18%)   | 0389     | 17.98    | 0.5700 | 17.90         | 0.2676 | 0.1338 | 72      | 0.30                | 010.60      | 0    |
| 010           | Total N (18%)   | 0486     | 17.98    | 0.0900 | 17.90         | 0.2676 | 0.1338 | 72      | 0.30                | 010.60      | 0    |
| 010           | Total N (18%)   | 0394     | 17.98    | 0.2070 | 17.90         | 0.2676 | 0.1338 | 72      | 0.31                | 010.99      | 0    |
| 010           | Total N (18%)   | 0095     | 17.99    | 0.2500 | 17.90         | 0.2676 | 0.1338 | 72      | 0.33                | 010.60      | 0    |
| 010           | Total N (18%)   | 0027     | 18.00    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.39                | 010.60      | 0    |

| Analyte Group | Analyte (Units) | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                 |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 010           | Total N (18%)   | 0035     | 18.00    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.39                | 010.60      | 0    |
| 010           | Total N (18%)   | 0040     | 18.00    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.39                | 010.60      | 0    |
| 010           | Total N (18%)   | 0230     | 18.00    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.39                | 010.60      | 0    |
| 010           | Total N (18%)   | 0356     | 18.02    | 0.0270 | 17.90         | 0.2676 | 0.1338 | 72      | 0.45                | 010.60      | 0    |
| 010           | Total N (18%)   | 0377     | 18.03    | 0.0700 | 17.90         | 0.2676 | 0.1338 | 72      | 0.48                | 010.60      | 0    |
| 010           | Total N (18%)   | 0405     | 18.03    | 0.0400 | 17.90         | 0.2676 | 0.1338 | 72      | 0.50                | 010.60      | 0    |
| 010           | Total N (18%)   | 0177     | 18.03    | 0.0060 | 17.90         | 0.2676 | 0.1338 | 72      | 0.52                | 010.60      | 0    |
| 010           | Total N (18%)   | 0452     | 18.06    | 0.0900 | 17.90         | 0.2676 | 0.1338 | 72      | 0.60                | 010.60      | 0    |
| 010           | Total N (18%)   | 0576     | 18.10    | 0.6000 | 17.90         | 0.2676 | 0.1338 | 72      | 0.76                | 010.99      | 0    |
| 010           | Total N (18%)   | 0025     | 18.11    | 0.4400 | 17.90         | 0.2676 | 0.1338 | 72      | 0.80                | 010.60      | 0    |
| 010           | Total N (18%)   | 0421     | 18.12    | 0.1700 | 17.90         | 0.2676 | 0.1338 | 72      | 0.82                | 010.60      | 0    |
| 010           | Total N (18%)   | 0444     | 18.16    | 0.0200 | 17.90         | 0.2676 | 0.1338 | 72      | 0.99                | 010.60      | 0    |
| 010           | Total N (18%)   | 0444     | 18.16    | 0.0200 | 17.90         | 0.2676 | 0.1338 | 72      | 0.99                | 010.99      | 0    |
| 010           | Total N (18%)   | 0255     | 18.17    | 0.2570 | 17.90         | 0.2676 | 0.1338 | 72      | 1.03                | 010.60      | 0    |
| 010           | Total N (18%)   | 0563     | 18.19    | 0.4400 | 17.90         | 0.2676 | 0.1338 | 72      | 1.10                | 010.99      | 0    |
| 010           | Total N (18%)   | 0354     | 18.20    | 0.2000 | 17.90         | 0.2676 | 0.1338 | 72      | 1.14                | 010.60      | 0    |
| 010           | Total N (18%)   | 0029     | 18.21    | 0.2600 | 17.90         | 0.2676 | 0.1338 | 72      | 1.17                | 010.60      | 0    |
| 010           | Total N (18%)   | 0518     | 18.26    | 0.2100 | 17.90         | 0.2676 | 0.1338 | 72      | 1.34                | 010.99      | 0    |
| 010           | Total N (18%)   | 0537     | 18.27    | 0.2600 | 17.90         | 0.2676 | 0.1338 | 72      | 1.40                | 010.99      | 0    |
| 010           | Total N (18%)   | 0049     | 18.30    | 0.0300 | 17.90         | 0.2676 | 0.1338 | 72      | 1.49                | 010.60      | 0    |
| 010           | Total N (18%)   | 0220     | 18.34    | 0.0200 | 17.90         | 0.2676 | 0.1338 | 72      | 1.66                | 010.60      | 0    |
| 010           | Total N (18%)   | 0368     | 18.35    | 0.0470 | 17.90         | 0.2676 | 0.1338 | 72      | 1.68                | 010.60      | 0    |
| 010           | Total N (18%)   | 0527     | 18.39    | 0.0120 | 17.90         | 0.2676 | 0.1338 | 72      | 1.83                | 010.60      | 0    |
| 010           | Total N (18%)   | 0114     | 18.53    | 0.0100 | 17.90         | 0.2676 | 0.1338 | 72      | 2.35                | 010.60      | 0    |
| 010           | Total N (18%)   | 0571     | 18.57    | 0.0000 | 17.90         | 0.2676 | 0.1338 | 72      | 2.52                | 010.99      | 0    |
| 010           | Total N (18%)   | 0325     | 16.43†   | 1.680  | 17.90         | 0.2676 | 0.1338 | 72      | -5.48               | 010.60      | 1    |
| 010           | Total N (18%)   | 0472     | 11.03†   | 0.0300 | 17.90         | 0.2676 | 0.1338 | 72      | -25.67              | 010.60      | 2    |
| 020           | Total P2O5 (%)  | 0389     | 40.84    | 0.6300 | 46.56         | 0.7062 | 0.3247 | 43      | -8.10               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0255     | 41.35    | 0.3900 | 46.56         | 0.7062 | 0.3247 | 43      | -7.38               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0390     | 41.60    | 0.4000 | 46.56         | 0.7062 | 0.3247 | 43      | -7.02               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0572     | 45.74    | 1.260  | 46.56         | 0.7062 | 0.3247 | 43      | -1.15               | 020.99      | 0    |
| 020           | Total P2O5 (%)  | 0444     | 45.80    | 0.2400 | 46.56         | 0.7062 | 0.3247 | 43      | -1.07               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0433     | 45.85    | 0.6700 | 46.56         | 0.7062 | 0.3247 | 43      | -1.01               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0035     | 45.93    | 0.4500 | 46.56         | 0.7062 | 0.3247 | 43      | -0.89               | 020.40      | 0    |
| 020           | Total P2O5 (%)  | 0522     | 45.96    | 0.0200 | 46.56         | 0.7062 | 0.3247 | 43      | -0.84               | 020.20      | 0    |
| 020           | Total P2O5 (%)  | 0371     | 46.05    | 0.1000 | 46.56         | 0.7062 | 0.3247 | 43      | -0.72               | 020.20      | 0    |
| 020           | Total P2O5 (%)  | 0527     | 46.07    | 0.1298 | 46.56         | 0.7062 | 0.3247 | 43      | -0.69               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0574     | 46.15    | 0.1000 | 46.56         | 0.7062 | 0.3247 | 43      | -0.57               | 020.10      | 0    |
| 020           | Total P2O5 (%)  | 0169     | 46.16    | 0.1100 | 46.56         | 0.7062 | 0.3247 | 43      | -0.57               | 020.20      | 0    |
| 020           | Total P2O5 (%)  | 0521     | 46.17    | 0.0000 | 46.56         | 0.7062 | 0.3247 | 43      | -0.54               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0534     | 46.20    | 0.0000 | 46.56         | 0.7062 | 0.3247 | 43      | -0.50               | 020.20      | 0    |
| 020           | Total P2O5 (%)  | 0546     | 46.21    | 0.4950 | 46.56         | 0.7062 | 0.3247 | 43      | -0.49               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0451     | 46.21    | 1.040  | 46.56         | 0.7062 | 0.3247 | 43      | -0.49               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0564     | 46.27    | 0.0300 | 46.56         | 0.7062 | 0.3247 | 43      | -0.41               | 020.99      | 0    |
| 020           | Total P2O5 (%)  | 0548     | 46.32    | 0.3000 | 46.56         | 0.7062 | 0.3247 | 43      | -0.33               | 020.20      | 0    |
| 020           | Total P2O5 (%)  | 0402     | 46.39    | 0.3900 | 46.56         | 0.7062 | 0.3247 | 43      | -0.24               | 020.50      | 0    |
| 020           | Total P2O5 (%)  | 0561     | 46.41    | 0.1900 | 46.56         | 0.7062 | 0.3247 | 43      | -0.21               | 020.20      | 0    |



| Analyte Group | Analyte (Units)               | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-------------------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                               |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 020           | Total P2O5 (%)                | 0444     | 46.51    | 0.2200 | 46.56         | 0.7062 | 0.3247 | 43      | -0.06               | 020.99      | 0    |
| 020           | Total P2O5 (%)                | 0513     | 46.52    | 0.1100 | 46.56         | 0.7062 | 0.3247 | 43      | -0.06               | 020.99      | 0    |
| 020           | Total P2O5 (%)                | 0114     | 46.53    | 0.1300 | 46.56         | 0.7062 | 0.3247 | 43      | -0.04               | 020.10      | 0    |
| 020           | Total P2O5 (%)                | 0231     | 46.59    | 0.0600 | 46.56         | 0.7062 | 0.3247 | 43      | 0.05                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0292     | 46.62    | 0.0500 | 46.56         | 0.7062 | 0.3247 | 43      | 0.08                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0523     | 46.65    | 0.5000 | 46.56         | 0.7062 | 0.3247 | 43      | 0.13                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0493     | 46.65    | 0.1000 | 46.56         | 0.7062 | 0.3247 | 43      | 0.13                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0356     | 46.69    | 0.5810 | 46.56         | 0.7062 | 0.3247 | 43      | 0.19                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0493     | 46.70    | 0.1000 | 46.56         | 0.7062 | 0.3247 | 43      | 0.20                | 020.10      | 0    |
| 020           | Total P2O5 (%)                | 0291     | 46.75    | 0.0100 | 46.56         | 0.7062 | 0.3247 | 43      | 0.27                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0049     | 46.79    | 1.000  | 46.56         | 0.7062 | 0.3247 | 43      | 0.33                | 020.10      | 0    |
| 020           | Total P2O5 (%)                | 0405     | 46.88    | 0.1300 | 46.56         | 0.7062 | 0.3247 | 43      | 0.45                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0444     | 47.13    | 0.0400 | 46.56         | 0.7062 | 0.3247 | 43      | 0.81                | 020.10      | 0    |
| 020           | Total P2O5 (%)                | 0220     | 47.16    | 0.2300 | 46.56         | 0.7062 | 0.3247 | 43      | 0.85                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0177     | 47.32    | 0.2316 | 46.56         | 0.7062 | 0.3247 | 43      | 1.09                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0394     | 47.35    | 0.3960 | 46.56         | 0.7062 | 0.3247 | 43      | 1.12                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0547     | 47.40    | 0.2000 | 46.56         | 0.7062 | 0.3247 | 43      | 1.20                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0472     | 47.43    | 0.1400 | 46.56         | 0.7062 | 0.3247 | 43      | 1.24                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0524     | 47.44    | 0.7218 | 46.56         | 0.7062 | 0.3247 | 43      | 1.25                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0423     | 47.73    | 1.047  | 46.56         | 0.7062 | 0.3247 | 43      | 1.66                | 020.50      | 0    |
| 020           | Total P2O5 (%)                | 0571     | 49.46    | 0.0000 | 46.56         | 0.7062 | 0.3247 | 43      | 4.11                | 020.20      | 0    |
| 020           | Total P2O5 (%)                | 0443     | 49.85    | 0.1800 | 46.56         | 0.7062 | 0.3247 | 43      | 4.67                | 020.99      | 0    |
| 020           | Total P2O5 (%)                | 0515     | 50.40    | 0.8381 | 46.56         | 0.7062 | 0.3247 | 43      | 5.45                | 020.99      | 0    |
| 020           | Total P2O5 (%)                | 0422     | 47.90    | 5.840  | 46.56         | 0.7062 | 0.3247 | 43      | 1.90                | 020.50      | 1    |
| 020           | Total P2O5 (%)                | 0324     | 20.90    | 0.0000 | 46.56         | 0.7062 | 0.3247 | 43      | -36.33              | 020.20      | 2    |
| 030           | Citrate Insoluble P2O5 (%)    | 0537     | 46.01    | 0.1300 |               |        |        | 2       |                     | 030.99      | 0    |
| 030           | Citrate Insoluble P2O5 (%)    | 0444     | 46.51    | 0.2200 |               |        |        | 2       |                     | 030.10      | 0    |
| 030           | Citrate Insoluble P2O5 (%)    | 0220     | < 0.01   |        |               |        |        | 2       |                     | 030.20      | 5    |
| 040           | Indirect Available P2O5 (46%) | 0220     | 47.16±   | 0.2300 |               |        |        | 1       |                     | 040.20      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0472     | 40.70†   | 0.2600 | 46.35         | 0.7034 | 0.3366 | 55      | -8.03               | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0230     | 44.65†   | 0.7000 | 46.35         | 0.7034 | 0.3366 | 55      | -2.42               | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0095     | 44.76†   | 0.2600 | 46.35         | 0.7034 | 0.3366 | 55      | -2.26               | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0553     | 45.15†   | 1.500  | 46.35         | 0.7034 | 0.3366 | 55      | -1.71               | 041.20      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0568     | 45.15†   | 0.3000 | 46.35         | 0.7034 | 0.3366 | 55      | -1.71               | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0102     | 45.37    | 0.1200 | 46.35         | 0.7034 | 0.3366 | 55      | -1.39               | 041.10      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0576     | 45.51    | 0.9800 | 46.35         | 0.7034 | 0.3366 | 55      | -1.20               | 041.20      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0007     | 45.70    | 0.6000 | 46.35         | 0.7034 | 0.3366 | 55      | -0.93               | 041.50      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0536     | 45.73    | 0.0400 | 46.35         | 0.7034 | 0.3366 | 55      | -0.88               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0535     | 45.75    | 0.1000 | 46.35         | 0.7034 | 0.3366 | 55      | -0.85               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0522     | 45.81    | 0.0400 | 46.35         | 0.7034 | 0.3366 | 55      | -0.77               | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0532     | 45.89    | 0.0600 | 46.35         | 0.7034 | 0.3366 | 55      | -0.66               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0025     | 45.90    | 1.000  | 46.35         | 0.7034 | 0.3366 | 55      | -0.64               | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0551     | 45.93    | 0.0500 | 46.35         | 0.7034 | 0.3366 | 55      | -0.61               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0549     | 45.94    | 0.1400 | 46.35         | 0.7034 | 0.3366 | 55      | -0.58               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0569     | 45.95    | 0.1200 | 46.35         | 0.7034 | 0.3366 | 55      | -0.57               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0531     | 46.02    | 0.0000 | 46.35         | 0.7034 | 0.3366 | 55      | -0.47               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%)   | 0325     | 46.05    | 1.100  | 46.35         | 0.7034 | 0.3366 | 55      | -0.43               | 041.50      | 0    |

| Analyte Group | Analyte (Units)             | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                             |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 041           | Direct Available P2O5 (46%) | 0562     | 46.05    | 0.2000 | 46.35         | 0.7034 | 0.3366 | 55      | -0.43               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0377     | 46.09    | 0.3800 | 46.35         | 0.7034 | 0.3366 | 55      | -0.37               | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%) | 0539     | 46.13    | 0.0500 | 46.35         | 0.7034 | 0.3366 | 55      | -0.32               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0486     | 46.15    | 0.5900 | 46.35         | 0.7034 | 0.3366 | 55      | -0.29               | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%) | 0545     | 46.23    | 0.1400 | 46.35         | 0.7034 | 0.3366 | 55      | -0.17               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0518     | 46.26    | 0.3900 | 46.35         | 0.7034 | 0.3366 | 55      | -0.14               | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0200     | 46.35    | 0.2700 | 46.35         | 0.7034 | 0.3366 | 55      | -0.01               | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0018     | 46.35    | 0.1000 | 46.35         | 0.7034 | 0.3366 | 55      | 0.00                | 041.40      | 0    |
| 041           | Direct Available P2O5 (46%) | 0421     | 46.35    | 0.1000 | 46.35         | 0.7034 | 0.3366 | 55      | 0.00                | 041.50      | 0    |
| 041           | Direct Available P2O5 (46%) | 0559     | 46.36    | 0.0100 | 46.35         | 0.7034 | 0.3366 | 55      | 0.01                | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0177     | 46.37    | 0.4782 | 46.35         | 0.7034 | 0.3366 | 55      | 0.03                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0452     | 46.38    | 0.1600 | 46.35         | 0.7034 | 0.3366 | 55      | 0.04                | 041.50      | 0    |
| 041           | Direct Available P2O5 (46%) | 0394     | 46.41    | 0.1800 | 46.35         | 0.7034 | 0.3366 | 55      | 0.08                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0055     | 46.42    | 0.6900 | 46.35         | 0.7034 | 0.3366 | 55      | 0.09                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0405     | 46.43    | 0.0400 | 46.35         | 0.7034 | 0.3366 | 55      | 0.11                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0136     | 46.45    | 0.7000 | 46.35         | 0.7034 | 0.3366 | 55      | 0.14                | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%) | 0494     | 46.47    | 0.8800 | 46.35         | 0.7034 | 0.3366 | 55      | 0.17                | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%) | 0405     | 46.56    | 0.0300 | 46.35         | 0.7034 | 0.3366 | 55      | 0.29                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0423     | 46.60    | 0.4000 | 46.35         | 0.7034 | 0.3366 | 55      | 0.35                | 041.51      | 0    |
| 041           | Direct Available P2O5 (46%) | 0040     | 46.60    | 0.2000 | 46.35         | 0.7034 | 0.3366 | 55      | 0.35                | 041.10      | 0    |
| 041           | Direct Available P2O5 (46%) | 0055     | 46.63    | 0.0300 | 46.35         | 0.7034 | 0.3366 | 55      | 0.39                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0177     | 46.69    | 0.3429 | 46.35         | 0.7034 | 0.3366 | 55      | 0.48                | 041.10      | 0    |
| 041           | Direct Available P2O5 (46%) | 0485     | 46.75    | 0.2100 | 46.35         | 0.7034 | 0.3366 | 55      | 0.56                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0513     | 46.75    | 0.0700 | 46.35         | 0.7034 | 0.3366 | 55      | 0.56                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0086     | 46.77    | 0.0223 | 46.35         | 0.7034 | 0.3366 | 55      | 0.60                | 041.10      | 0    |
| 041           | Direct Available P2O5 (46%) | 0220     | 46.81    | 0.0400 | 46.35         | 0.7034 | 0.3366 | 55      | 0.65                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0231     | 46.91    | 0.0400 | 46.35         | 0.7034 | 0.3366 | 55      | 0.79                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0073     | 47.01    | 0.2100 | 46.35         | 0.7034 | 0.3366 | 55      | 0.93                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0027     | 47.02    | 0.0100 | 46.35         | 0.7034 | 0.3366 | 55      | 0.94                | 041.20      | 0    |
| 041           | Direct Available P2O5 (46%) | 0043     | 47.26    | 0.1600 | 46.35         | 0.7034 | 0.3366 | 55      | 1.29                | 041.11      | 0    |
| 041           | Direct Available P2O5 (46%) | 0533     | 47.30    | 0.1700 | 46.35         | 0.7034 | 0.3366 | 55      | 1.34                | 041.99      | 0    |
| 041           | Direct Available P2O5 (46%) | 0494     | 47.42‡   | 0.0600 | 46.35         | 0.7034 | 0.3366 | 55      | 1.52                | 041.10      | 0    |
| 041           | Direct Available P2O5 (46%) | 0368     | 47.67‡   | 0.3674 | 46.35         | 0.7034 | 0.3366 | 55      | 1.88                | 041.50      | 0    |
| 041           | Direct Available P2O5 (46%) | 0354     | 48.20‡   | 0.2000 | 46.35         | 0.7034 | 0.3366 | 55      | 2.63                | 041.21      | 0    |
| 041           | Direct Available P2O5 (46%) | 0029     | 48.22‡   | 0.7700 | 46.35         | 0.7034 | 0.3366 | 55      | 2.65                | 041.40      | 0    |
| 041           | Direct Available P2O5 (46%) | 0034     | 48.32‡   | 1.550  | 46.35         | 0.7034 | 0.3366 | 55      | 2.79                | 041.40      | 0    |
| 041           | Direct Available P2O5 (46%) | 0023     | 48.65‡   | 0.9000 | 46.35         | 0.7034 | 0.3366 | 55      | 3.27                | 041.51      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0472     | 39.38    | 0.0200 | 43.73         | 1.973  | 0.0633 | 6       | -1.96               | 048.20      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0513     | 43.28    | 0.0700 | 43.73         | 1.973  | 0.0633 | 6       | -0.20               | 048.99      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0444     | 43.92    | 0.1300 | 43.73         | 1.973  | 0.0633 | 6       | 0.09                | 048.10      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0444     | 43.92    | 0.1300 | 43.73         | 1.973  | 0.0633 | 6       | 0.09                | 048.99      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0444     | 44.38    | 0.0100 | 43.73         | 1.973  | 0.0633 | 6       | 0.29                | 048.50      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0567     | 46.11    | 0.0200 | 43.73         | 1.973  | 0.0633 | 6       | 1.08                | 048.99      | 0    |
| 048           | Water Soluble P2O5 (%)      | 0572     | 41.80    | 0.8500 | 43.73         | 1.973  | 0.0633 | 6       | -0.87               | 048.99      | 1    |
| 050           | Soluble K2O (%)             | 0568     | 0.1600   | 0.0000 | 0.1772        | 0.0166 | 0.0068 | 10      | -1.04               | 050.51      | 0    |
| 050           | Soluble K2O (%)             | 0423     | 0.1605   | 0.0030 | 0.1772        | 0.0166 | 0.0068 | 10      | -1.01               | 050.52      | 0    |
| 050           | Soluble K2O (%)             | 0553     | 0.1645   | 0.0030 | 0.1772        | 0.0166 | 0.0068 | 10      | -0.77               | 050.99      | 0    |

| Analyte Group | Analyte (Units)            | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|----------------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                            |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 050           | Soluble K2O (%)            | 0524     | 0.1704   | 0.0036 | 0.1772        | 0.0166 | 0.0068 | 10      | -0.41               | 050.99      | 0    |
| 050           | Soluble K2O (%)            | 0422     | 0.1705   | 0.0230 | 0.1772        | 0.0166 | 0.0068 | 10      | -0.40               | 050.50      | 0    |
| 050           | Soluble K2O (%)            | 0354     | 0.1795   | 0.0030 | 0.1772        | 0.0166 | 0.0068 | 10      | 0.14                | 050.52      | 0    |
| 050           | Soluble K2O (%)            | 0389     | 0.1800   | 0.0000 | 0.1772        | 0.0166 | 0.0068 | 10      | 0.17                | 050.99      | 0    |
| 050           | Soluble K2O (%)            | 0527     | 0.1897   | 0.0013 | 0.1772        | 0.0166 | 0.0068 | 10      | 0.75                | 050.99      | 0    |
| 050           | Soluble K2O (%)            | 0472     | 0.1950   | 0.0300 | 0.1772        | 0.0166 | 0.0068 | 10      | 1.07                | 050.32      | 0    |
| 050           | Soluble K2O (%)            | 0023     | 0.2585   | 0.0010 | 0.1772        | 0.0166 | 0.0068 | 10      | 4.89                | 050.52      | 0    |
| 050           | Soluble K2O (%)            | 0515     | 1.812    | 0.3051 | 0.1772        | 0.0166 | 0.0068 | 10      | 98.30               | 050.99      | 2    |
| 050           | Soluble K2O (%)            | 0571     | 0.0000   | 0.0000 | 0.1772        | 0.0166 | 0.0068 | 10      |                     | 050.99      | 4    |
| 050           | Soluble K2O (%)            | 0325     | < 0.1    |        | 0.1772        | 0.0166 | 0.0068 | 10      |                     | 050.99      | 5    |
| 060           | Water (Free) (%)           | 0513     | 0.6350   | 0.0100 |               |        |        | 1       |                     | 060.00      | 0    |
| 101           | Acid Soluble Ca (%)        | 0553     | 0.0330   | 0.0000 | 0.1947        | 0.0499 | 0.0044 | 9       | -2.99               | 101.00      | 0    |
| 101           | Acid Soluble Ca (%)        | 0527     | 0.1440   | 0.0068 | 0.1947        | 0.0499 | 0.0044 | 9       | -0.94               | 101.33      | 0    |
| 101           | Acid Soluble Ca (%)        | 0389     | 0.1700   | 0.0000 | 0.1947        | 0.0499 | 0.0044 | 9       | -0.46               | 101.99      | 0    |
| 101           | Acid Soluble Ca (%)        | 0494     | 0.2037   | 0.0105 | 0.1947        | 0.0499 | 0.0044 | 9       | 0.17                | 101.33      | 0    |
| 101           | Acid Soluble Ca (%)        | 0568     | 0.2060   | 0.0020 | 0.1947        | 0.0499 | 0.0044 | 9       | 0.21                | 101.30      | 0    |
| 101           | Acid Soluble Ca (%)        | 0035     | 0.2090   | 0.0080 | 0.1947        | 0.0499 | 0.0044 | 9       | 0.26                | 101.30      | 0    |
| 101           | Acid Soluble Ca (%)        | 0423     | 0.2100   | 0.0020 | 0.1947        | 0.0499 | 0.0044 | 9       | 0.28                | 101.32      | 0    |
| 101           | Acid Soluble Ca (%)        | 0354     | 0.2200   | 0.0000 | 0.1947        | 0.0499 | 0.0044 | 9       | 0.47                | 101.30      | 0    |
| 101           | Acid Soluble Ca (%)        | 0472     | 0.2950   | 0.0100 | 0.1947        | 0.0499 | 0.0044 | 9       | 1.85                | 101.33      | 0    |
| 121           | Acid Soluble Mg (%)        | 0568     | 0.6275   | 0.0350 | 0.8114        | 0.1242 | 0.0224 | 11      | -1.39               | 121.30      | 0    |
| 121           | Acid Soluble Mg (%)        | 0524     | 0.6962   | 0.0003 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.87               | 121.99      | 0    |
| 121           | Acid Soluble Mg (%)        | 0423     | 0.7665   | 0.0030 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.34               | 121.32      | 0    |
| 121           | Acid Soluble Mg (%)        | 0494     | 0.7896   | 0.0914 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.16               | 121.33      | 0    |
| 121           | Acid Soluble Mg (%)        | 0527     | 0.7941   | 0.0125 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.13               | 121.33      | 0    |
| 121           | Acid Soluble Mg (%)        | 0354     | 0.7950   | 0.0100 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.12               | 121.30      | 0    |
| 121           | Acid Soluble Mg (%)        | 0389     | 0.8100   | 0.0000 | 0.8114        | 0.1242 | 0.0224 | 11      | -0.01               | 121.99      | 0    |
| 121           | Acid Soluble Mg (%)        | 0035     | 0.8235   | 0.0070 | 0.8114        | 0.1242 | 0.0224 | 11      | 0.09                | 121.30      | 0    |
| 121           | Acid Soluble Mg (%)        | 0553     | 0.8275   | 0.0350 | 0.8114        | 0.1242 | 0.0224 | 11      | 0.12                | 121.00      | 0    |
| 121           | Acid Soluble Mg (%)        | 0515     | 1.565    | 0.0523 | 0.8114        | 0.1242 | 0.0224 | 11      | 5.68                | 121.99      | 0    |
| 121           | Acid Soluble Mg (%)        | 0472     | 2.080    | 0.0000 | 0.8114        | 0.1242 | 0.0224 | 11      | 9.56                | 121.33      | 0    |
| 143           | Elemental S (%)            | 0389     | 2.335    | 0.0100 |               |        |        | 1       |                     | 143.99      | 0    |
| 145           | Sulfate S, HCl soluble (%) | 0553     | 2.420    | 0.1200 |               |        |        | 1       |                     | 145.99      | 0    |
| 146           | Total S in Liquid (%)      | 0522     | 2.575    | 0.0100 |               |        |        | 1       |                     | 146.00      | 0    |
| 148           | Total S (%)                | 0472     | 1.570    | 0.0000 | 2.178         | 0.3561 | 0.0119 | 6       | -1.52               | 148.07      | 0    |
| 148           | Total S (%)                | 0521     | 2.002    | 0.0000 | 2.178         | 0.3561 | 0.0119 | 6       | -0.44               | 148.07      | 0    |
| 148           | Total S (%)                | 0527     | 2.166    | 0.0529 | 2.178         | 0.3561 | 0.0119 | 6       | -0.03               | 148.07      | 0    |
| 148           | Total S (%)                | 0354     | 2.390    | 0.0000 | 2.178         | 0.3561 | 0.0119 | 6       | 0.53                | 148.99      | 0    |
| 148           | Total S (%)                | 0494     | 2.415    | 0.0068 | 2.178         | 0.3561 | 0.0119 | 6       | 0.59                | 148.07      | 0    |
| 148           | Total S (%)                | 0563     | 2.454    | 0.0114 | 2.178         | 0.3561 | 0.0119 | 6       | 0.69                | 148.07      | 0    |
| 148           | Total S (%)                | 0515     | 0.8108   | 0.5908 | 2.178         | 0.3561 | 0.0119 | 6       | -3.42               | 148.07      | 1    |
| 149           | S - HNO3 soluble (%)       | 0423     | 2.365    | 0.0300 |               |        |        | 2       |                     | 149.04      | 0    |
| 149           | S - HNO3 soluble (%)       | 0524     | 2.575    | 0.0161 |               |        |        | 2       |                     | 149.04      | 0    |
| 151           | Acid Soluble As (ppm)      | 0534     | 0.2850   | 0.0100 | 1.284         | 0.4426 | 0.2154 | 10      | -2.26               | 151.00      | 0    |
| 151           | Acid Soluble As (ppm)      | 0572     | 0.9250   | 0.0500 | 1.284         | 0.4426 | 0.2154 | 10      | -0.81               | 151.99      | 0    |
| 151           | Acid Soluble As (ppm)      | 0136     | 1.015    | 0.1100 | 1.284         | 0.4426 | 0.2154 | 10      | -0.61               | 151.33      | 0    |
| 151           | Acid Soluble As (ppm)      | 0501     | 1.100    | 0.0000 | 1.284         | 0.4426 | 0.2154 | 10      | -0.42               | 151.30      | 0    |



| Analyte Group | Analyte (Units)       | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                       |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 151           | Acid Soluble As (ppm) | 0524     | 1.229    | 0.1024 | 1.284         | 0.4426 | 0.2154 | 10      | -0.13               | 151.30      | 0    |
| 151           | Acid Soluble As (ppm) | 0563     | 1.337    | 0.0181 | 1.284         | 0.4426 | 0.2154 | 10      | 0.12                | 151.33      | 0    |
| 151           | Acid Soluble As (ppm) | 0169     | 1.465    | 0.5030 | 1.284         | 0.4426 | 0.2154 | 10      | 0.41                | 151.30      | 0    |
| 151           | Acid Soluble As (ppm) | 0405     | 1.500    | 1.000  | 1.284         | 0.4426 | 0.2154 | 10      | 0.49                | 151.99      | 0    |
| 151           | Acid Soluble As (ppm) | 0548     | 1.705    | 0.0700 | 1.284         | 0.4426 | 0.2154 | 10      | 0.95                | 151.33      | 0    |
| 151           | Acid Soluble As (ppm) | 0494     | 6.615    | 0.2900 | 1.284         | 0.4426 | 0.2154 | 10      | 12.04               | 151.33      | 0    |
| 151           | Acid Soluble As (ppm) | 0515     | 15.16    | 14.83  | 1.284         | 0.4426 | 0.2154 | 10      | 31.35               | 151.34      | 1    |
| 151           | Acid Soluble As (ppm) | 0255     | 0.0000   | 0.0000 | 1.284         | 0.4426 | 0.2154 | 10      |                     | 151.30      | 4    |
| 151           | Acid Soluble As (ppm) | 0527     | < 0.0001 |        | 1.284         | 0.4426 | 0.2154 | 10      |                     | 151.33      | 5    |
| 151           | Acid Soluble As (ppm) | 0368     | < 0.3    |        | 1.284         | 0.4426 | 0.2154 | 10      |                     | 151.34      | 5    |
| 165           | Acid Soluble B (%)    | 0527     | 0.0052   | 0.0002 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.91               | 165.99      | 0    |
| 165           | Acid Soluble B (%)    | 0524     | 0.0074   | 0.0003 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.60               | 165.99      | 0    |
| 165           | Acid Soluble B (%)    | 0423     | 0.0080   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.51               | 165.99      | 0    |
| 165           | Acid Soluble B (%)    | 0563     | 0.0098   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.25               | 165.99      | 0    |
| 165           | Acid Soluble B (%)    | 0472     | 0.0100   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.22               | 165.99      | 0    |
| 165           | Acid Soluble B (%)    | 0553     | 0.0120   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | 0.07                | 165.00      | 0    |
| 165           | Acid Soluble B (%)    | 0354     | 0.0200   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | 1.22                | 165.30      | 0    |
| 165           | Acid Soluble B (%)    | 0389     | 0.0200   | 0.0000 | 0.0115        | 0.0063 | 0.0001 | 8       | 1.22                | 165.30      | 0    |
| 165           | Acid Soluble B (%)    | 0515     | 0.0076   | 0.0017 | 0.0115        | 0.0063 | 0.0001 | 8       | -0.58               | 165.99      | 1    |
| 181           | Acid Soluble Cd (ppm) | 0534     | 18.30    | 2.600  | 26.81         | 3.001  | 0.6684 | 19      | -2.84               | 181.00      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0444     | 23.14    | 0.0500 | 26.81         | 3.001  | 0.6684 | 19      | -1.22               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0501     | 23.50    | 1.000  | 26.81         | 3.001  | 0.6684 | 19      | -1.10               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0524     | 23.67    | 0.0314 | 26.81         | 3.001  | 0.6684 | 19      | -1.05               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0255     | 24.64    | 0.0100 | 26.81         | 3.001  | 0.6684 | 19      | -0.72               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0389     | 24.70    | 0.7500 | 26.81         | 3.001  | 0.6684 | 19      | -0.70               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0027     | 25.50    | 1.000  | 26.81         | 3.001  | 0.6684 | 19      | -0.44               | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0405     | 26.20    | 1.200  | 26.81         | 3.001  | 0.6684 | 19      | -0.20               | 181.99      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0169     | 26.80    | 0.0860 | 26.81         | 3.001  | 0.6684 | 19      | 0.00                | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0394     | 27.39    | 0.3100 | 26.81         | 3.001  | 0.6684 | 19      | 0.19                | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0485     | 27.65    | 1.280  | 26.81         | 3.001  | 0.6684 | 19      | 0.28                | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0548     | 27.85    | 0.0400 | 26.81         | 3.001  | 0.6684 | 19      | 0.35                | 181.33      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0572     | 28.05    | 1.210  | 26.81         | 3.001  | 0.6684 | 19      | 0.41                | 181.99      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0136     | 28.20    | 0.2000 | 26.81         | 3.001  | 0.6684 | 19      | 0.46                | 181.33      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0035     | 28.70    | 0.2000 | 26.81         | 3.001  | 0.6684 | 19      | 0.63                | 181.30      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0494     | 29.08    | 0.9667 | 26.81         | 3.001  | 0.6684 | 19      | 0.76                | 181.33      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0368     | 29.80    | 0.6000 | 26.81         | 3.001  | 0.6684 | 19      | 1.00                | 181.34      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0527     | 30.89    | 0.3768 | 26.81         | 3.001  | 0.6684 | 19      | 1.36                | 181.33      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0563     | 34.14    | 0.7896 | 26.81         | 3.001  | 0.6684 | 19      | 2.44                | 181.33      | 0    |
| 181           | Acid Soluble Cd (ppm) | 0515     | 57.50    | 19.97  | 26.81         | 3.001  | 0.6684 | 19      | 10.23               | 181.34      | 1    |
| 190           | Water Soluble Cl (%)  | 0553     | < 0.1    |        |               |        |        | 0       |                     | 190.00      | 5    |
| 191           | Acid Soluble Cr (ppm) | 0572     | 146.4    | 0.0600 | 181.4         | 14.88  | 4.302  | 17      | -2.35               | 191.99      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0444     | 161.0    | 0.0000 | 181.4         | 14.88  | 4.302  | 17      | -1.37               | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0389     | 162.2    | 5.950  | 181.4         | 14.88  | 4.302  | 17      | -1.29               | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0136     | 166.0    | 16.00  | 181.4         | 14.88  | 4.302  | 17      | -1.03               | 191.33      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0524     | 172.1    | 12.48  | 181.4         | 14.88  | 4.302  | 17      | -0.63               | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0405     | 181.5    | 3.000  | 181.4         | 14.88  | 4.302  | 17      | 0.01                | 191.99      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0169     | 181.8    | 0.0280 | 181.4         | 14.88  | 4.302  | 17      | 0.03                | 191.30      | 0    |

| Analyte Group | Analyte (Units)       | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                       |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 191           | Acid Soluble Cr (ppm) | 0035     | 182.5    | 3.000  | 181.4         | 14.88  | 4.302  | 17      | 0.08                | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0548     | 182.6    | 0.0800 | 181.4         | 14.88  | 4.302  | 17      | 0.08                | 191.33      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0394     | 183.9    | 1.280  | 181.4         | 14.88  | 4.302  | 17      | 0.17                | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0368     | 185.0    | 2.000  | 181.4         | 14.88  | 4.302  | 17      | 0.24                | 191.34      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0563     | 189.5    | 2.764  | 181.4         | 14.88  | 4.302  | 17      | 0.55                | 191.33      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0501     | 190.0    | 0.0000 | 181.4         | 14.88  | 4.302  | 17      | 0.58                | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0494     | 192.5    | 11.00  | 181.4         | 14.88  | 4.302  | 17      | 0.75                | 191.33      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0527     | 194.8    | 1.003  | 181.4         | 14.88  | 4.302  | 17      | 0.90                | 191.33      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0027     | 195.0    | 10.00  | 181.4         | 14.88  | 4.302  | 17      | 0.92                | 191.30      | 0    |
| 191           | Acid Soluble Cr (ppm) | 0515     | 291.2    | 4.482  | 181.4         | 14.88  | 4.302  | 17      | 7.38                | 191.34      | 0    |
| 202           | Acid Soluble Co (ppm) | 0527     | 0.3719   | 0.0173 | 0.7512        | 0.4536 | 0.0876 | 10      | -0.84               | 202.33      | 0    |
| 202           | Acid Soluble Co (ppm) | 0572     | 0.3750   | 0.0500 | 0.7512        | 0.4536 | 0.0876 | 10      | -0.83               | 202.99      | 0    |
| 202           | Acid Soluble Co (ppm) | 0405     | 0.4000   | 0.2000 | 0.7512        | 0.4536 | 0.0876 | 10      | -0.77               | 202.99      | 0    |
| 202           | Acid Soluble Co (ppm) | 0563     | 0.4358   | 0.0085 | 0.7512        | 0.4536 | 0.0876 | 10      | -0.70               | 202.33      | 0    |
| 202           | Acid Soluble Co (ppm) | 0501     | 0.4800   | 0.0000 | 0.7512        | 0.4536 | 0.0876 | 10      | -0.60               | 202.34      | 0    |
| 202           | Acid Soluble Co (ppm) | 0035     | 0.8675   | 0.0130 | 0.7512        | 0.4536 | 0.0876 | 10      | 0.26                | 202.30      | 0    |
| 202           | Acid Soluble Co (ppm) | 0368     | 0.9000   | 0.4000 | 0.7512        | 0.4536 | 0.0876 | 10      | 0.33                | 202.34      | 0    |
| 202           | Acid Soluble Co (ppm) | 0548     | 0.9250   | 0.1300 | 0.7512        | 0.4536 | 0.0876 | 10      | 0.38                | 202.33      | 0    |
| 202           | Acid Soluble Co (ppm) | 0389     | 1.325    | 0.0100 | 0.7512        | 0.4536 | 0.0876 | 10      | 1.27                | 202.30      | 0    |
| 202           | Acid Soluble Co (ppm) | 0524     | 1.698    | 0.0473 | 0.7512        | 0.4536 | 0.0876 | 10      | 2.09                | 202.30      | 0    |
| 202           | Acid Soluble Co (ppm) | 0515     | 22.04    | 9.674  | 0.7512        | 0.4536 | 0.0876 | 10      | 46.93               | 202.34      | 1    |
| 202           | Acid Soluble Co (ppm) | 0255     | 0.6965   | 1.393  | 0.7512        | 0.4536 | 0.0876 | 10      |                     | 202.99      | 4    |
| 202           | Acid Soluble Co (ppm) | 0136     | < 5      |        | 0.7512        | 0.4536 | 0.0876 | 10      |                     | 202.33      | 5    |
| 221           | Acid Soluble Cu (%)   | 0368     | 0.0003   | 0.0001 | 0.0010        | 0.0011 | 0.0003 | 5       | -0.70               | 221.99      | 0    |
| 221           | Acid Soluble Cu (%)   | 0527     | 0.0003   | 0.0000 | 0.0010        | 0.0011 | 0.0003 | 5       | -0.65               | 221.33      | 0    |
| 221           | Acid Soluble Cu (%)   | 0548     | 0.0006   | 0.0003 | 0.0010        | 0.0011 | 0.0003 | 5       | -0.41               | 221.33      | 0    |
| 221           | Acid Soluble Cu (%)   | 0394     | 0.0011   | 0.0009 | 0.0010        | 0.0011 | 0.0003 | 5       | 0.06                | 221.32      | 0    |
| 221           | Acid Soluble Cu (%)   | 0402     | 0.0028   | 0.0004 | 0.0010        | 0.0011 | 0.0003 | 5       | 1.71                | 221.30      | 0    |
| 221           | Acid Soluble Cu (%)   | 0515     | 0.0036   | 0.0045 | 0.0010        | 0.0011 | 0.0003 | 5       | 2.41                | 221.99      | 1    |
| 221           | Acid Soluble Cu (%)   | 0255     | 0.0000   | 0.0000 | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.30      | 4    |
| 221           | Acid Soluble Cu (%)   | 0472     | 0.0000   | 0.0000 | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.33      | 4    |
| 221           | Acid Soluble Cu (%)   | 0563     | < 0.0001 |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.33      | 5    |
| 221           | Acid Soluble Cu (%)   | 0405     | < 0.0001 |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.99      | 5    |
| 221           | Acid Soluble Cu (%)   | 0572     | < 0.0001 |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.99      | 5    |
| 221           | Acid Soluble Cu (%)   | 0136     | < 0.0025 |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.33      | 5    |
| 221           | Acid Soluble Cu (%)   | 0553     | < 0.005  |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.00      | 5    |
| 221           | Acid Soluble Cu (%)   | 0354     | < 0.01   |        | 0.0010        | 0.0011 | 0.0003 | 5       |                     | 221.30      | 5    |
| 241           | Acid Soluble Fe (%)   | 0553     | 0.2550   | 0.0040 | 0.4221        | 0.0319 | 0.0083 | 11      | -5.24               | 241.00      | 0    |
| 241           | Acid Soluble Fe (%)   | 0423     | 0.3955   | 0.0010 | 0.4221        | 0.0319 | 0.0083 | 11      | -0.83               | 241.32      | 0    |
| 241           | Acid Soluble Fe (%)   | 0035     | 0.4015   | 0.0070 | 0.4221        | 0.0319 | 0.0083 | 11      | -0.64               | 241.30      | 0    |
| 241           | Acid Soluble Fe (%)   | 0524     | 0.4056   | 0.0128 | 0.4221        | 0.0319 | 0.0083 | 11      | -0.52               | 241.99      | 0    |
| 241           | Acid Soluble Fe (%)   | 0527     | 0.4082   | 0.0084 | 0.4221        | 0.0319 | 0.0083 | 11      | -0.43               | 241.33      | 0    |
| 241           | Acid Soluble Fe (%)   | 0494     | 0.4199   | 0.0329 | 0.4221        | 0.0319 | 0.0083 | 11      | -0.07               | 241.33      | 0    |
| 241           | Acid Soluble Fe (%)   | 0563     | 0.4331   | 0.0053 | 0.4221        | 0.0319 | 0.0083 | 11      | 0.34                | 241.33      | 0    |
| 241           | Acid Soluble Fe (%)   | 0389     | 0.4400   | 0.0000 | 0.4221        | 0.0319 | 0.0083 | 11      | 0.56                | 241.99      | 0    |
| 241           | Acid Soluble Fe (%)   | 0444     | 0.4450   | 0.0100 | 0.4221        | 0.0319 | 0.0083 | 11      | 0.72                | 241.30      | 0    |
| 241           | Acid Soluble Fe (%)   | 0354     | 0.4500   | 0.0000 | 0.4221        | 0.0319 | 0.0083 | 11      | 0.87                | 241.30      | 0    |

| Analyte Group | Analyte (Units)       | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                       |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 241           | Acid Soluble Fe (%)   | 0472     | 1.515    | 0.0100 | 0.4221        | 0.0319 | 0.0083 | 11      | 34.25               | 241.33      | 0    |
| 241           | Acid Soluble Fe (%)   | 0515     | 1.428    | 0.2450 | 0.4221        | 0.0319 | 0.0083 | 11      | 31.53               | 241.99      | 1    |
| 251           | Acid Soluble Pb (ppm) | 0524     | 0.1225   | 0.0234 | 0.6973        | 0.7642 | 0.0375 | 8       | -0.75               | 251.30      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0563     | 0.1685   | 0.0112 | 0.6973        | 0.7642 | 0.0375 | 8       | -0.69               | 251.33      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0501     | 0.2000   | 0.0000 | 0.6973        | 0.7642 | 0.0375 | 8       | -0.65               | 251.30      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0405     | 0.3000   | 0.0000 | 0.6973        | 0.7642 | 0.0375 | 8       | -0.52               | 251.99      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0394     | 0.5585   | 0.0670 | 0.6973        | 0.7642 | 0.0375 | 8       | -0.18               | 251.30      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0548     | 0.7800   | 0.0800 | 0.6973        | 0.7642 | 0.0375 | 8       | 0.11                | 251.33      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0035     | 1.605    | 0.0500 | 0.6973        | 0.7642 | 0.0375 | 8       | 1.19                | 251.30      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0169     | 3.269    | 0.0680 | 0.6973        | 0.7642 | 0.0375 | 8       | 3.37                | 251.30      | 0    |
| 251           | Acid Soluble Pb (ppm) | 0515     | 24.08    | 2.659  | 0.6973        | 0.7642 | 0.0375 | 8       | 30.60               | 251.34      | 2    |
| 251           | Acid Soluble Pb (ppm) | 0255     | 0.0000   | 0.0000 | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.30      | 4    |
| 251           | Acid Soluble Pb (ppm) | 0527     | < 0.0001 |        | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.33      | 5    |
| 251           | Acid Soluble Pb (ppm) | 0572     | < 0.09   |        | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.99      | 5    |
| 251           | Acid Soluble Pb (ppm) | 0368     | < 0.6    |        | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.34      | 5    |
| 251           | Acid Soluble Pb (ppm) | 0534     | < 2      |        | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.00      | 5    |
| 251           | Acid Soluble Pb (ppm) | 0136     | < 3      |        | 0.6973        | 0.7642 | 0.0375 | 8       |                     | 251.33      | 5    |
| 261           | Acid Soluble Mn (%)   | 0553     | 0.0060   | 0.0000 | 0.0067        | 0.0006 | 0.0003 | 9       | -1.14               | 261.00      | 0    |
| 261           | Acid Soluble Mn (%)   | 0524     | 0.0060   | 0.0004 | 0.0067        | 0.0006 | 0.0003 | 9       | -1.14               | 261.99      | 0    |
| 261           | Acid Soluble Mn (%)   | 0389     | 0.0065   | 0.0000 | 0.0067        | 0.0006 | 0.0003 | 9       | -0.34               | 261.99      | 0    |
| 261           | Acid Soluble Mn (%)   | 0527     | 0.0066   | 0.0001 | 0.0067        | 0.0006 | 0.0003 | 9       | -0.26               | 261.35      | 0    |
| 261           | Acid Soluble Mn (%)   | 0035     | 0.0069   | 0.0003 | 0.0067        | 0.0006 | 0.0003 | 9       | 0.22                | 261.30      | 0    |
| 261           | Acid Soluble Mn (%)   | 0494     | 0.0070   | 0.0013 | 0.0067        | 0.0006 | 0.0003 | 9       | 0.38                | 261.35      | 0    |
| 261           | Acid Soluble Mn (%)   | 0423     | 0.0070   | 0.0000 | 0.0067        | 0.0006 | 0.0003 | 9       | 0.45                | 261.34      | 0    |
| 261           | Acid Soluble Mn (%)   | 0563     | 0.0070   | 0.0002 | 0.0067        | 0.0006 | 0.0003 | 9       | 0.45                | 261.35      | 0    |
| 261           | Acid Soluble Mn (%)   | 0472     | 0.0200   | 0.0000 | 0.0067        | 0.0006 | 0.0003 | 9       | 21.18               | 261.35      | 0    |
| 261           | Acid Soluble Mn (%)   | 0515     | 0.0137   | 0.0086 | 0.0067        | 0.0006 | 0.0003 | 9       | 11.14               | 261.99      | 1    |
| 261           | Acid Soluble Mn (%)   | 0354     | < 0.01   |        | 0.0067        | 0.0006 | 0.0003 | 9       |                     | 261.30      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0368     | 0.0001   | 0.0000 | 0.0032        | 0.0046 | 0.0031 | 3       | -0.55               | 281.99      | 0    |
| 281           | Acid Soluble Hg (ppm) | 0524     | 0.0010   | 0.0002 | 0.0032        | 0.0046 | 0.0031 | 3       | -0.39               | 281.99      | 0    |
| 281           | Acid Soluble Hg (ppm) | 0035     | 0.0085   | 0.0090 | 0.0032        | 0.0046 | 0.0031 | 3       | 0.93                | 281.99      | 0    |
| 281           | Acid Soluble Hg (ppm) | 0515     | 0.0000   | 0.0000 | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.30      | 4    |
| 281           | Acid Soluble Hg (ppm) | 0527     | < 0.0001 |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.30      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0572     | < 0.008  |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.99      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0563     | < 0.01   |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.30      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0405     | < 0.01   |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.99      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0534     | < 0.05   |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.00      | 5    |
| 281           | Acid Soluble Hg (ppm) | 0501     | < 0.1    |        | 0.0032        | 0.0046 | 0.0031 | 3       |                     | 281.30      | 5    |
| 289           | Acid Soluble Mo (ppm) | 0035     | 2.430    | 0.3800 | 2.972         | 0.4450 | 0.2680 | 11      | -1.22               | 289.30      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0563     | 2.507    | 0.0069 | 2.972         | 0.4450 | 0.2680 | 11      | -1.05               | 289.33      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0255     | 2.585    | 0.5700 | 2.972         | 0.4450 | 0.2680 | 11      | -0.87               | 289.30      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0494     | 2.655    | 0.2500 | 2.972         | 0.4450 | 0.2680 | 11      | -0.71               | 289.33      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0524     | 2.866    | 0.1884 | 2.972         | 0.4450 | 0.2680 | 11      | -0.24               | 289.30      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0405     | 3.005    | 0.2100 | 2.972         | 0.4450 | 0.2680 | 11      | 0.07                | 289.99      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0548     | 3.175    | 0.1300 | 2.972         | 0.4450 | 0.2680 | 11      | 0.46                | 289.33      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0527     | 3.228    | 0.1132 | 2.972         | 0.4450 | 0.2680 | 11      | 0.58                | 289.33      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0402     | 3.300    | 0.4000 | 2.972         | 0.4450 | 0.2680 | 11      | 0.74                | 289.30      | 0    |

| Analyte Group | Analyte (Units)       | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|-----------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                       |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 289           | Acid Soluble Mo (ppm) | 0501     | 3.300    | 0.0000 | 2.972         | 0.4450 | 0.2680 | 11      | 0.74                | 289.34      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0368     | 3.850    | 0.7000 | 2.972         | 0.4450 | 0.2680 | 11      | 1.97                | 289.34      | 0    |
| 289           | Acid Soluble Mo (ppm) | 0515     | 21.19    | 39.27  | 2.972         | 0.4450 | 0.2680 | 11      | 40.93               | 289.34      | 2    |
| 289           | Acid Soluble Mo (ppm) | 0136     | < 5      |        | 2.972         | 0.4450 | 0.2680 | 11      |                     | 289.33      | 5    |
| 291           | Acid Soluble Ni (ppm) | 0485     | 2.426    | 0.0170 | 6.729         | 1.872  | 0.3755 | 17      | -2.30               | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0169     | 4.740    | 0.2180 | 6.729         | 1.872  | 0.3755 | 17      | -1.06               | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0572     | 5.240    | 0.6800 | 6.729         | 1.872  | 0.3755 | 17      | -0.80               | 291.99      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0563     | 5.368    | 0.0586 | 6.729         | 1.872  | 0.3755 | 17      | -0.73               | 291.33      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0444     | 5.740    | 0.3200 | 6.729         | 1.872  | 0.3755 | 17      | -0.53               | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0524     | 5.873    | 0.0950 | 6.729         | 1.872  | 0.3755 | 17      | -0.46               | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0389     | 5.900    | 0.2000 | 6.729         | 1.872  | 0.3755 | 17      | -0.44               | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0136     | 6.110    | 0.5200 | 6.729         | 1.872  | 0.3755 | 17      | -0.33               | 291.33      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0394     | 6.905    | 0.2150 | 6.729         | 1.872  | 0.3755 | 17      | 0.09                | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0405     | 7.000    | 0.0000 | 6.729         | 1.872  | 0.3755 | 17      | 0.14                | 291.99      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0527     | 7.097    | 0.1094 | 6.729         | 1.872  | 0.3755 | 17      | 0.20                | 291.33      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0501     | 7.150    | 0.3000 | 6.729         | 1.872  | 0.3755 | 17      | 0.22                | 291.34      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0035     | 7.290    | 0.1800 | 6.729         | 1.872  | 0.3755 | 17      | 0.30                | 291.30      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0368     | 7.450    | 0.5000 | 6.729         | 1.872  | 0.3755 | 17      | 0.39                | 291.34      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0494     | 9.765    | 2.670  | 6.729         | 1.872  | 0.3755 | 17      | 1.62                | 291.33      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0548     | 14.08    | 0.0200 | 6.729         | 1.872  | 0.3755 | 17      | 3.93                | 291.33      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0255     | 18.33    | 0.2800 | 6.729         | 1.872  | 0.3755 | 17      | 6.20                | 291.99      | 0    |
| 291           | Acid Soluble Ni (ppm) | 0515     | 48.32    | 36.62  | 6.729         | 1.872  | 0.3755 | 17      | 22.22               | 291.34      | 1    |
| 301           | Acid Soluble Se (ppm) | 0524     | 0.6745   | 0.0546 | 1.498         | 0.7938 | 0.1169 | 6       | -0.92               | 301.30      | 0    |
| 301           | Acid Soluble Se (ppm) | 0548     | 1.155    | 0.0700 | 1.498         | 0.7938 | 0.1169 | 6       | -0.38               | 301.33      | 0    |
| 301           | Acid Soluble Se (ppm) | 0572     | 1.165    | 0.0100 | 1.498         | 0.7938 | 0.1169 | 6       | -0.37               | 301.99      | 0    |
| 301           | Acid Soluble Se (ppm) | 0563     | 1.454    | 0.0298 | 1.498         | 0.7938 | 0.1169 | 6       | -0.05               | 301.33      | 0    |
| 301           | Acid Soluble Se (ppm) | 0501     | 1.850    | 0.1000 | 1.498         | 0.7938 | 0.1169 | 6       | 0.40                | 301.30      | 0    |
| 301           | Acid Soluble Se (ppm) | 0527     | 2.738    | 0.4367 | 1.498         | 0.7938 | 0.1169 | 6       | 1.39                | 301.33      | 0    |
| 301           | Acid Soluble Se (ppm) | 0515     | 16.52    | 11.71  | 1.498         | 0.7938 | 0.1169 | 6       | 16.85               | 301.34      | 1    |
| 301           | Acid Soluble Se (ppm) | 0255     | 0.0000   | 0.0000 | 1.498         | 0.7938 | 0.1169 | 6       |                     | 301.99      | 4    |
| 301           | Acid Soluble Se (ppm) | 0368     | < 1      |        | 1.498         | 0.7938 | 0.1169 | 6       |                     | 301.34      | 5    |
| 301           | Acid Soluble Se (ppm) | 0405     | < 1      |        | 1.498         | 0.7938 | 0.1169 | 6       |                     | 301.99      | 5    |
| 311           | Sodium (%)            | 0423     | 0.1590   | 0.0020 | 0.1751        | 0.0123 | 0.0043 | 5       | -1.30               | 311.33      | 0    |
| 311           | Sodium (%)            | 0527     | 0.1658   | 0.0063 | 0.1751        | 0.0123 | 0.0043 | 5       | -0.76               | 311.33      | 0    |
| 311           | Sodium (%)            | 0553     | 0.1780   | 0.0020 | 0.1751        | 0.0123 | 0.0043 | 5       | 0.24                | 311.00      | 0    |
| 311           | Sodium (%)            | 0354     | 0.1850   | 0.0100 | 0.1751        | 0.0123 | 0.0043 | 5       | 0.81                | 311.99      | 0    |
| 311           | Sodium (%)            | 0035     | 0.1875   | 0.0010 | 0.1751        | 0.0123 | 0.0043 | 5       | 1.01                | 311.33      | 0    |
| 321           | Acid Soluble Zn (%)   | 0402     | 0.0262   | 0.0026 | 0.0412        | 0.0065 | 0.0032 | 25      | -2.30               | 321.30      | 0    |
| 321           | Acid Soluble Zn (%)   | 0501     | 0.0280   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | -2.02               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%)   | 0136     | 0.0350   | 0.0040 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.95               | 321.33      | 0    |
| 321           | Acid Soluble Zn (%)   | 0572     | 0.0356   | 0.0051 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.86               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%)   | 0255     | 0.0360   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.79               | 321.30      | 0    |
| 321           | Acid Soluble Zn (%)   | 0494     | 0.0365   | 0.0034 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.72               | 321.33      | 0    |
| 321           | Acid Soluble Zn (%)   | 0368     | 0.0370   | 0.0006 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.64               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%)   | 0027     | 0.0385   | 0.0010 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.41               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%)   | 0405     | 0.0389   | 0.0020 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.35               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%)   | 0524     | 0.0391   | 0.0001 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.33               | 321.99      | 0    |

| Analyte Group | Analyte (Units)     | Lab Code | Lab Data |        | Method Values |        |        | # Tests | Magruder CS Z Score | Your Method | Flag |
|---------------|---------------------|----------|----------|--------|---------------|--------|--------|---------|---------------------|-------------|------|
|               |                     |          | Value    | Range  | Rob Mean      | Rob SD | R-bar  |         |                     |             |      |
| 321           | Acid Soluble Zn (%) | 0394     | 0.0395   | 0.0022 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.26               | 321.32      | 0    |
| 321           | Acid Soluble Zn (%) | 0354     | 0.0400   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.18               | 321.30      | 0    |
| 321           | Acid Soluble Zn (%) | 0043     | 0.0400   | 0.0040 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.18               | 321.33      | 0    |
| 321           | Acid Soluble Zn (%) | 0389     | 0.0400   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.18               | 321.99      | 0    |
| 321           | Acid Soluble Zn (%) | 0553     | 0.0410   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | -0.03               | 321.00      | 0    |
| 321           | Acid Soluble Zn (%) | 0527     | 0.0421   | 0.0005 | 0.0412        | 0.0065 | 0.0032 | 25      | 0.14                | 321.33      | 0    |
| 321           | Acid Soluble Zn (%) | 0534     | 0.0430   | 0.0020 | 0.0412        | 0.0065 | 0.0032 | 25      | 0.28                | 321.00      | 0    |
| 321           | Acid Soluble Zn (%) | 0444     | 0.0430   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | 0.28                | 321.30      | 0    |
| 321           | Acid Soluble Zn (%) | 0423     | 0.0455   | 0.0010 | 0.0412        | 0.0065 | 0.0032 | 25      | 0.67                | 321.32      | 0    |
| 321           | Acid Soluble Zn (%) | 0563     | 0.0471   | 0.0012 | 0.0412        | 0.0065 | 0.0032 | 25      | 0.91                | 321.33      | 0    |
| 321           | Acid Soluble Zn (%) | 0234     | 0.0478   | 0.0003 | 0.0412        | 0.0065 | 0.0032 | 25      | 1.01                | 321.30      | 0    |
| 321           | Acid Soluble Zn (%) | 0035     | 0.0483   | 0.0077 | 0.0412        | 0.0065 | 0.0032 | 25      | 1.09                | 321.30      | 0    |
| 321           | Acid Soluble Zn (%) | 0548     | 0.0550   | 0.0300 | 0.0412        | 0.0065 | 0.0032 | 25      | 2.12                | 321.33      | 0    |
| 321           | Acid Soluble Zn (%) | 0515     | 0.0879   | 0.0126 | 0.0412        | 0.0065 | 0.0032 | 25      | 7.18                | 321.99      | 0    |
| 321           | Acid Soluble Zn (%) | 0472     | 0.0900   | 0.0000 | 0.0412        | 0.0065 | 0.0032 | 25      | 7.50                | 321.33      | 0    |
| 321           | Acid Soluble Zn (%) | 0485     | 287.9    | 5.600  | 0.0412        | 0.0065 | 0.0032 | 25      | 44228.86            | 321.00      | 2    |

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. Your offset values are higher (‡) or lower (†) than the Robust Analyte value ± Investigational Allowance. Analyte codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.