ALP Round 11 May 2010

Agriculture Laboratory Proficiency (ALP) Program Individual Performance Analysis Report

The ALP Program is operated by Collaborative Testing Services, Inc. in cooperation with Robert O. Miller, PhD, Program Technical Director



The Agriculture Laboratory Proficiency (ALP) Program Spring 2010 Round cycle 11 was completed May 18, 2010, with results provided by fifty-seven labs from the United States, Canada, Greece and South Africa. Proficiency samples consisted of five soils, three botanical and three water samples. Analytical methods evaluated are base on those published by AOAC, four regional soil work groups, the Soil Plant Analysis Council and Forestry Canada.

Standard Reference Soils (SRS), materials used for the soils and environmental programs were: SRS-1001 a silt loam from near Owens borough, KY; SRS-1002 series a loam collected near Twin Falls, ID; SRS-1003 series Platte loam collected from a vine-yard near Sebastpol, CA; SRS-1004 a silty clay loam collected DeKalb, IL; and SRS-1005 series sandy loam collected near Brookings, SD.

Standard Reference Botanical (SRB) materials were: corn stalk from Iowa, orchard grass from Michigan and grass hay mixture. Standard Reference Water (SRW) solutions represent agriculture water samples collected from: Windsor, CO; Kettleman City, CA and Cheyenne, WY.

This Individual Performance Analysis report presents results that are particular to your laboratory. All properties and samples for which your laboratory reported results are presented in this report. An analysis between and within laboratory performance for soild, botanicals, water and environmental properties will follow this page. A summary of results follows immediately after the analysis for each sample type. This summary condenses your between laboratory performance on a single page; this summary may be a the best place to start the review of your results. In the future, this report will also present historical results to provide a more complete understanding of laboratory performance.

It is important to remember that all ALP Program evaluations are based on comparative and consensus statistics; users must be aware that small group statistics are inherently less robust than large group statistics, even though robust evaluations have been preferentially chosen. No comparative results are provided for analyses with fewer than 4 reported results. Results of all laboratories that reported for each property may be found in the web-based summary report posted on the CTS Web site.

Quick Key to your Performance Analysis Report

Lab Mean	The mean of the triplicate determinations submitted for each sample-property.
Grand Median	The median of all included Lab Means submitted for each sample-property.
MAD	The median of the differences (absolute values) between the Grand Median and the Lab Means.
95% Conf Interval	The estimated range of value which is likely to include the sample-property value, calculated from the Grand Median and the M.A.D.
WithinLab Performance, k	The ratio (standard or z-score) of each laboratory standard deviation within each sample-property and the WithinLab Avg STD (see below). A score of 1 indicates that variation within a laboratory for that sample-property was the same as the average variation.
WithinLab Avg STD	The average (sum of squares) of the standard deviations of the triplicate determinations submitted for each sample-property.
Laboratory-Sample Bias (from summary page)	The ratio (standard or z-score) of each laboratory difference, between the Lab Mean and the Grand Median, and the M.A.D. A score of 0 indicates agreement of the laboratory with the consensus average.



Performance Analysis Report - Test Cycle 11

CTS Lab Code: U6291A

Analysis # 801: Soil Properties

101 Saturated Paste Moisture Percent 551001 551002 44.0 × 38.0 2.03 32.1 43.9 0.54 1.1 15 103 Sats 003 35.1 29.6 2.11 23.5 35.7 0.90 1.3 18 103 Scats 003 34.8 X 7.7 2.23 31.4 44.3 1.53 1.2 18 103 Scats 004 34.0 47.9 3.40 37.9 2.23 1.4 4.3 1.53 1.2 18 103 Scats 004 3.44 0.47 7 3.0 0.79 9.28 0.07 1.44 3.43 3.23 X 0.07 1.44 3.4 0.42 0.44 0.27 0.55 0.28 0.06 1.9 3.55 0.06 0.07 0.06 3.04 2.2 3.2 1.37 2.14 0.24 2.6 0.06 0.04 3.0 0.05 0.2 1.2 1.8 3.2 1.37 <	Te Co	est Analysis Units	Samples	Lab Mean	Grand Median	MAD	95% Conf Interval	WithinLab Performance, k	WithinLab Avg STD	Labs Rpt
Percent Sis1002 35.1 29.6 21.1 22.3 31.4 13.3 13.2 18 Sis1000 54.0 47.9 34.6 37.9 58.0 0.93 1.2 18 103 E6-sp 385100 0.98 1.37 0.14 0.791 0.75 0.07 19 585100 1.07 0.10 0.72-1.36 3.22 0.03 19 5851003 0.44 0.41 0.030 0.23 - 0.42 0.03 0.03 19 5851003 0.42 0.42 0.48 0.13 0.23 - 0.42 0.06 19 5851003 0.42 0.42 0.42 0.42 0.03 1.03 0.03 1.03 0.03	101	Saturated Paste Moisture	SRS1001	44.0 X	38.0	2.03	32.1 - 43.9	0.54	1.1	18
SS1003 45.8 X 77.9 2.23 31.4 4.43 1.53 1.2 18 SS1004 54.0 37.9 2.45 32.8 4.70 0.28 1.5 18 103 ECe - sp SS1001 0.78 1.07 0.14 0.99 1.77 0.75 0.07 19 dSm SS1003 0.44 0.41 0.030 0.32 0.46 0.32 0.46 0.04 0.97 0.85 0.04 0.97 0.66 0.28 0.06 19 SS1005 0.42 0.46 0.13 0.30 1.07 0.16 0.24 2.8 0.66 0.28 0.06 1.05 0.24 2.8 2.9 6.16 0.51 0.34 4.22 2.9 6.16 0.51 0.34 4.2 2.9 1.05 0.42 0.8 2.8 1.05 0.28 0.01 3.23 X 1.0 1.0 2.8 1.0 0.4 2.9 1.0 <td>101</td> <td>Percent</td> <td>SRS1002</td> <td>35.1</td> <td>29.6</td> <td>2.11</td> <td>23.5 - 35.7</td> <td>0.90</td> <td>1.3</td> <td>18</td>	101	Percent	SRS1002	35.1	29.6	2.11	23.5 - 35.7	0.90	1.3	18
SR1004 54.0 47.9 34.6 37.9 - 58.0 0.93 1.2 18 103 ECe - sp 5K51001 0.78 1.37 0.14 0.96 - 1.77 0.75 0.07 19 45/m SK51001 0.78 1.37 0.14 0.96 - 1.77 0.75 0.07 19 5K51004 0.37 0.42 0.049 0.27 0.56 0.03 0.32 0.04 0.37 0.42 0.049 0.28 0.06 19 5K51005 0.42 0.68 0.15 0.024 0.28 0.06 3.08 0.24 2.24 1.05 0.24 2.85 0.46 0.31 0.32 0.43 0.42 2.45 1.55 0.46 0.51 0.33 0.24 2.55 0.45 0.49 32 2.24 1.25 8.18 1.0 3.22 1.16 0.31 0.31 3.22 1.55 0.33 0.43 2.85 0.33 1.40 4.32 1.15 0.44			SRS1003	45.8 X	37.9	2.23	31.4 - 44.3	1.53	1.2	18
SR51005 60.1 X 39.9 2.45 32.8.4.47.0 0.28 1.5 18 103 ECe - sp SR51002 1.15 1.17 0.14 0.064 1.77 0.25 0.07 1.90 103 ECe - sp dS/m SR51002 1.15 1.07 0.14 0.024 0.27 0.66 0.28 0.06 1.9 SR51005 0.42 0.42 0.42 0.24 0.28 0.06 0.28 0.06 0.19 SR51005 0.42 0.42 0.48 0.13 0.30 0.16 0.24 2.8 0.33 0.33 0.16 0.44 2.2 3.8 3.9 <td< td=""><td></td><td></td><td>SRS1004</td><td>54.0</td><td>47.9</td><td>3.46</td><td>37.9 - 58.0</td><td>0.93</td><td>1.2</td><td>18</td></td<>			SRS1004	54.0	47.9	3.46	37.9 - 58.0	0.93	1.2	18
103 ECe - sp ds/m 3851001 S851003 0.19 1.15 1.07 1.07 0.10 0.030 0.32.14 0.24.133 0.23.1 0.07 19 3.23.X 124 NO3.N Cd. Rd. 3851003 0.44 0.41 0.030 0.32.0.49 2.66.X 0.03 19 126 NO3.N Cd. Rd. 3851001 54.4 64.8 2.96 46.2 63.4 0.34 2.2 32.3 126 NO3.N Cd. Rd. 3851001 54.4 64.8 2.96 46.2 63.4 0.34 2.2 32.3 126 NO3.N Cd. Rd. 3851003 4.20 4.56 0.55 2.96 61.6 0.51 0.34 32.3 124 PO4-P Oisen/§licorb (1:20) 3851001 15.0 16.2 2.16 9.9 7.27 0.53 1.3 32.3 124 PO4-P Oisen/§licorb (1:20) 3851001 15.0 16.2 2.16 9.9 2.7 0.59 2.0 2.8 2.8 1.8 1.0 <td< td=""><td></td><td></td><td>SRS1005</td><td>50.1 <mark>X</mark></td><td>39.9</td><td>2.45</td><td>32.8 - 47.0</td><td>0.28</td><td>1.5</td><td>18</td></td<>			SRS1005	50.1 <mark>X</mark>	39.9	2.45	32.8 - 47.0	0.28	1.5	18
dS/m SR:1002 1.15 1.07 0.10 0.78 + 1.36 2.33 × 0.05 19 SR:1004 0.44 0.41 0.030 0.22 + 0.46 0.28 0.06 19 SR:1005 0.42 0.64 0.13 0.30 + 107 0.16 0.04 19 126 NO3-N Cd. Rd. SR:1002 2.83 1.05 0.70 0.00 - 3.06 1.05 0.24 2.82 SR:1002 2.83 1.05 0.70 0.00 - 3.06 1.05 0.24 2.82 SR:1002 1.73 10.3 0.75 8.2 + 12.5 0.43 0.49 32 134 PO4-P Olsen/Bicorb (120) SR:1002 1.75 1.92 2.44 1.15 - 2.66 1.18 1.0 2.88 SR:1003 6.10 3.97 4.13 3.93 2.99 - 52.7 0.59 2.0 2.88 SR:1004 3.97 4.13 3.93 2.99 - 52.7 0.59 2.0 2.88 0.03 1.117 <td>103</td> <td>ECe - sp</td> <td>SRS1001</td> <td>0.98</td> <td>1.37</td> <td>0.14</td> <td>0.96 - 1.77</td> <td>0.75</td> <td>0.07</td> <td>19</td>	103	ECe - sp	SRS1001	0.98	1.37	0.14	0.96 - 1.77	0.75	0.07	19
S851003 0.44 0.41 0.030 0.32-0.49 2.46 X 0.03 19 S851004 0.37 0.42 0.049 0.27-0.56 0.28 0.06 19 S851005 0.42 0.68 0.031 0.301-07 0.16 0.04 19 126 NO3-N Cd. Rd. S851001 54.4 64.8 2.96 462-63.4 0.34 2.2 32 136 PO4-P Otsen/Bicarb 2.83 10.5 0.70 0.003-306 0.05 0.24 2.85 0.05 1.3 2.2 32 32 10.5 0.42 2.85 0.05 1.3 2.2 32 10.5 32 32 10.5 32 32 10.5 32 32 32 10.5 32 32 32 10.5 32 32 10.5 32 32 10.5 32 32 10.5 32 32 10.5 32 32 10.5 32 32 32 <t< td=""><td></td><td>dS/m</td><td>SRS1002</td><td>1.15</td><td>1.07</td><td>0.10</td><td>0.78 - 1.36</td><td>3.23 X</td><td>0.05</td><td>19</td></t<>		dS/m	SRS1002	1.15	1.07	0.10	0.78 - 1.36	3.23 X	0.05	19
SR51004 0.37 0.42 0.049 0.27 0.56 0.28 0.064 19 126 NO3-N Cd. Rd. SR51001 5.4.4 5.4.8 0.76 0.06 0.33 2.2 32 mg/kg SR51002 2.83 1.05 0.70 0.00<-3.06			SRS1003	0.44	0.41	0.030	0.32 - 0.49	2.66 X	0.03	19
N3.N Cd. Rd. SR51001 0.42 0.48 0.13 0.30-1.07 0.16 0.04 19 126 NO3.N Cd. Rd. SR51001 54.4 54.8 2.96 46.2-63.4 0.34 2.2 32 Mg/kg SR51003 4.20 4.56 0.55 2.96-61.6 0.51 0.34 32 SR51005 21.3 22.4 1.22 188-25.9 0.05 1.3 32 134 PO4-P Olsen/Biorb (1:20) SK51003 6.10 6.90 1.27 323-10.57 0.36 0.73 28 SK51003 6.10 6.90 1.27 323-10.67 0.36 0.73 28 SK51004 39.7 1.33 3.33 29.9 52.7 0.92 0.64 28 140 Kammonium Aceterie SK51003 250.3 240.3 11.9 205.8 7.44 1.4 4.3 1.1 141 Ca Ammonium Aceterie SK51001 1.61.8 12.2 1.63.44.8			SRS1004	0.37	0.42	0.049	0.27 - 0.56	0.28	0.06	19
126 NO3-N Cd. Rd. mg/kg SRS1002 2.83 1.05 0.70 0.00 - 3.08 1.05 0.24 28 126 NG SRS1002 2.83 1.05 0.70 0.00 - 3.08 1.05 0.24 28 SRS1002 2.83 1.05 0.75 82.125 0.43 0.49 32 SRS1005 21.3 22.4 1.22 188.25.9 0.05 1.3 32 134 PO4-P Olsen/Bicarb (1:20) SRS1001 15.0 16.2 2.16 9.9-22.4 0.23 1.0 28 SRS1003 6.10 6.90 1.27 32.3 1.057 0.36 0.73 28 SRS1004 39.7 41.3 3.93 29.9 + 92.7 0.59 2.0 28 SRS1001 137.7 138.0 10.00 1090-0167.0 0.93 8.1 31 SRS1002 118.7 129.4 13.2 91.1<167.6			SRS1005	0.42	0.68	0.13	0.30 - 1.07	0.16	0.04	19
mg/kg SRS1002 2.83 1.05 0.70 0.00.3008 1.05 0.24 28 SRS1003 4.20 4.36 0.55 2.96 - 6.16 0.51 0.34 32 SRS1003 2.13 2.24 1.22 18.2 - 12.5 0.43 0.49 32 SRS1003 1.50 1.62 2.16 9.9 -22.4 0.23 1.00 28 sRS1003 6.10 6.90 1.27 3.23 - 10.57 0.59 2.0 28 sRS1004 3.97 4.13 3.33 2.9.9 - 52.7 0.56 0.3 8.1 31 sRS1005 1.10 1.87 1.29 2.04 1.75 7.90 0.27 0.64 28 sRS1005 1.10 1.817 1.80 1.000 1075 - 167.0 0.37 0.31 31 sRS1003 1.031.3 1.281 1.11 2.927 1.82 8.7 31 sRS1004 2.73.3 2.32 2.76 1.77	126	NO3-N Cd. Rd.	SRS1001	54.4	54.8	2.96	46.2 - 63.4	0.34	2.2	32
SRS1003 4.20 4.56 0.55 2.96 - 6.16 0.51 0.34 32 134 PO4-P Olsen/Bicarb (1:20) mg/kg SRS1004 9.37 10.3 0.75 8.2 - 125 0.43 0.49 32 134 PO4-P Olsen/Bicarb (1:20) mg/kg SRS1001 15.0 16.2 2.16 9.9 - 22.4 0.23 1.0 28 134 PO4-P Olsen/Bicarb (1:20) mg/kg SRS1002 17.5 19.2 2.64 11.5 - 26.8 1.18 1.0 28 140 K Ammonium Acetate mg/kg SRS1001 137.7 138.0 10.00 109.0 - 167.0 0.93 8.1 31 141 Ca Ammonium Acetate mg/kg SRS1001 131.3 1.264 111.2 963.7 - 1,608.5 1.04 69.7 38 141 Ca Ammonium Acetate mg/kg SRS1001 1,313 1,266.1 111.2 963.7 - 1,608.5 1.04 69.7 2.8 33 142 Mg Ammonium Acetate mg/kg SRS1000 2,47.3 2		mg/kg	SRS1002	2.83	1.05	0.70	0.00 - 3.08	1.05	0.24	28
SRS1004 9.37 10.3 0.75 8.2 · 12.5 0.43 0.49 32 134 PO4-P Olsen/Bicarb (1:20) SSS1001 15.0 16.0 2.16 9.9 · 22.4 0.23 1.0 28 mg/kg SSS1002 17.5 19.2 2.64 11.5 · 26.8 1.18 1.0 28 SS1004 39.7 41.3 3.9 29.9 · 52.7 0.36 0.73 28 SS1004 39.7 41.3 3.93 29.9 · 52.7 0.59 2.0 28 SS1004 39.7 138.0 10.00 109.0 · 167.0 0.93 8.1 31 140 K Ammonium Acetate SS1000 11.8.7 129.4 13.2 11.1 · 167.6 1.44 8.4 31 SS1003 250.3 240.3 11.9 2058 · 274.8 1.06 7.6 31 SS1004 278.3 2380.0 210.1 2.16.3 · 197.2 1.82 8.7 31 Mg SS1005			SRS1003	4.20	4.56	0.55	2.96 - 6.16	0.51	0.34	32
SRS1005 21.3 22.4 1.22 18.8 - 25.9 0.05 1.3 32 134 PO4-P Olser/Bicorb (1:20) SRS1001 15.0 16.2 2.16 9.9 - 22.4 0.23 1.0 28 mg/kg SRS1002 1.7.5 19.2 2.44 11.5 - 26.8 1.18 1.0 28 SRS1003 6.10 6.90 1.27 3.23 - 10.57 0.36 0.73 28 SRS1005 4.10 4.82 1.06 17.5 - 7.90 0.27 0.64 28 140 K Ammonium Acetote SRS1001 137.7 138.0 10.00 109.0 - 167.0 0.93 8.1 31 sRS1004 250.3 240.3 11.9 205.8 - 274.8 1.06 7.6 31 sRS1005 190.3 161.8 12.2 126.3 - 197.2 1.82 8.7 31 141 Ca Ammonium Acetote SRS1001 1,313.3 1,286.1 111.2 963.7 - 1,608.5 1.04 69.7			SRS1004	9.37	10.3	0.75	8.2 - 12.5	0.43	0.49	32
134 PO4-P Olsen/Bicarb (1:20) mg/kg SR51001 15.0 16.2 2.16 9.9 -22.4 0.23 1.0 28 Mag/kg SR51002 17.5 19.2 2.64 11.5 -26.6 1.18 1.0 28 SR51004 39.7 41.3 3.93 29.9 52.7 0.59 2.0 28 SR51004 39.7 41.3 3.93 29.9 52.7 0.59 2.0 28 SR51004 4.10 4.82 1.06 1.7.5 0.90 0.64 28 Mag/kg SR51001 13.7 138.0 10.00 10.90 167.0 0.93 8.1 31 SR51002 118.7 129.4 13.2 91.1 1.67.6 1.44 8.4 31 SR51003 250.3 240.3 1.18 12.2 126.3 1.97.2 1.82 8.7 31 SR51004 2.783.3 2.864.0 2010 2.283.1 3.44.9			SRS1005	21.3	22.4	1.22	18.8 - 25.9	0.05	1.3	32
 mg/kg SRS1002 17.5 19.2 2.64 11.5 - 26.8 1.18 1.0 28 SRS1004 39.7 41.3 3.93 29.9 - 52.7 0.36 0.73 28 SRS1005 4.10 4.82 1.06 1.75 - 7.90 0.27 0.64 28 SRS1005 4.10 4.82 1.06 1.75 - 7.90 0.27 0.64 28 SRS1002 118.7 129.4 137.7 138.0 10.00 109.0 - 167.0 0.93 8.1 31 31.9 205.8 - 274.8 1.06 7.6 31 SRS1004 247.3 232.7 18.7 176.5 - 286.8 1.96 7.2 31 141 Ca Ammonium Acetate SRS1001 1,31.3 1,286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 8851003 1,030.0 1,74.3 135.5 781.4 - 1,567.3 1.42 4.9 2.783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 2851005 2,986.7 2,623.0 201.2 2,299.4 - 3,215.4 2.48 9.7 28 29.5 1,01.4 43.9 28 2851005 369.3 355.5 223.2 290.7 - 420.3 1.56 1.03 2.5 221.9 367.3 367.3 367.3 367	134	PO4-P Olsen/Bicarb (1:20)	SRS1001	15.0	16.2	2.16	9.9 - 22.4	0.23	1.0	28
SR1003 6.10 6.90 1.27 3.23 - 10.57 0.36 0.73 28 SR1004 39.7 41.3 3.93 29.9 - 52.7 0.59 2.0 28 140 K Ammonium Acetate SR51001 137.7 138.0 10.00 109.0 - 167.0 0.93 8.1 31 mg/kg SR51002 218.7 129.4 13.2 91.1 - 167.6 1.44 8.4 31 SR51004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 SR51004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 SR51004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 SR51001 Ja3.3 1.286.1 111.2 963.7 - 1.608.5 1.04 69.7 28 mg/kg SR51002 3.466.0 201.0 2.283.1 - 3.449.9 2.18 105.1 28 SR51004 29.753.2 2.60.0 2.01.0		mg/kg	SRS1002	17.5	19.2	2.64	11.5 - 26.8	1.18	1.0	28
SRS1004 39.7 41.3 3.93 29.9 - 52.7 0.59 2.0 28 140 K Ammonium Acetate SRS1001 13.7 1380 10.00 1070 - 167.0 0.93 8.1 31 140 K Ammonium Acetate SRS1002 118.7 129.4 13.2 91.1 - 167.6 1.44 8.4 31 SRS1005 250.3 260.3 240.3 11.9 206.8 - 274.8 1.06 7.6 31 SRS1005 190.3 161.8 12.2 126.3 - 197.2 1.82 8.7 31 141 Ca Ammonium Acetate SRS1002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 SRS1004 2,967.7 X 187.3 9,67 159.3 - 215.4 2.48 9.7 28 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9,67		3, 3	SRS1003	6.10	6.90	1.27	3.23 - 10.57	0.36	0.73	28
SR51005 4.10 4.82 1.06 1.75 - 7.90 0.27 0.64 28 140 K Ammonium Acetate SR51001 137.7 138.0 10.00 109.0 - 167.0 0.93 8.1 31 140 K Ammonium Acetate SR51002 118.7 129.4 13.2 91.1 - 167.6 1.44 8.4 31 SR51004 247.3 220.3 141.8 12.2 18.7 178.5 - 286.8 1.96 7.2 31 141 Ca Ammonium Acetate SR51001 131.3 1.1286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 mg/kg SR51002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SR51004 2,788.3 2,866.0 201.0 2,283.1 - 3,44.9 2.18 105.1 28 SR51005 2,986.7 2,623.0 201.2 2,039.6 - 3,206.4 0.18 112.6 28 Mg Ammonium Acetate SR51002 95.0 1,051.7			SRS1004	39.7	41.3	3.93	29.9 - 52.7	0.59	2.0	28
140 K Ammonium Acetate mg/kg SRS1001 137.7 138.0 10.00 109.0 167.0 0.93 8.1 31 140 K Ammonium Acetate mg/kg SRS1002 118.7 129.4 13.2 91.1 167.0 0.93 8.1 31 187 178.5 205.8 240.3 11.9 205.8 274.8 1.06 7.6 31 187 178.5 266.8 1.96 7.2 31 35 31 31 31.8 31.9 205.8 274.8 1.06 7.6 31 141 Ca Ammonium Acetate SRS1001 1,31.3 1,286.1 111.2 96.7 1,608.5 1.04 69.7 28 mg/kg SRS1002 1,33.3 2,866.0 201.0 2,203.7 3,440.9 2.18 105.1 28 142 Mg Ammonium Acetate SRS1001 266.7 187.3 9.67 159.3 215.4 2.48 9.7 28 142 Mg Ammonium A			SRS1005	4.10	4.82	1.06	1.75 - 7.90	0.27	0.64	28
mg/kg 5R51002 118.7 129.4 13.2 91.1 - 167.6 1.44 8.4 31 SR51003 250.3 240.3 11.9 205.8 - 274.8 1.06 7.6 31 SR51004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 141 Ca Ammonium Acetate SR51001 1.313.3 1.286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 mg/kg SR51002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SR51004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 SR51005 2,986.7 X 18.3 9.67 159.3 - 215.4 2.48 9.7 28 mg/kg SR51001 266.7 X 18.3 9.67 159.3 - 215.4 2.48 9.7 28 SR51004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28	140	K Ammonium Acetate	SRS1001	137.7	138.0	10.00	109.0 - 167.0	0.93	8.1	31
SRS1003 250.3 240.3 11.9 205.8 - 274.8 1.06 7.6 31 SRS1004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 141 Ca Ammonium Acetate mg/kg SRS1001 1,313.3 1,286.1 111.2 963.71.60.05 1.04 69.7 28 141 Ca Ammonium Acetate mg/kg SRS1001 1,313.3 1,286.1 111.2 963.71.60.05 1.04 69.7 28 SRS1003 1,030.0 1,174.3 135.5 781.4 - 1,567.3 1.42 43.9 28 SRS1004 2,783.3 2,866.0 201.0 2,283.7 - 3,448.9 2.18 105.1 28 142 Mg Ammonium Acetate mg/kg SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 143 Mg Ammonium Acetate SRS1003 434.0 449.3 355.9 366.3 - 1,005.4 1.90 40.8 28 143 Na Ammonium Acetate SRS1001 41.		mg/kg	SRS1002	118.7	129.4	13.2	91.1 - 167.6	1.44	8.4	31
SRS1004 247.3 232.7 18.7 178.5 - 286.8 1.96 7.2 31 141 Ca Ammonium Acetate SRS1001 1,313.3 1,286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 mg/kg SRS1002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 SRS1004 2,783.3 2,866.0 201.0 2,039.6 - 3,206.4 0.18 112.6 28 Mg Ammonium Acetate SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 SRS1003 434.0 449.3 355.5 22.3 290.7 + 420.3 1.56 17.1 28 SRS1003 434.0 449.3 355.5 26.3 - 1,005.4 1.90 40.8 28 SRS1003 807.7 832.8 59.5 646.3 - 1,005.4 1.90 40.2 2.5		3, 3	SRS1003	250.3	240.3	11.9	205.8 - 274.8	1.06	7.6	31
SRS1005 190.3 161.8 12.2 126.3 - 197.2 1.82 8.7 31 141 Ca Ammonium Acetate mg/kg SRS1001 1,313.3 1,286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 SRS1002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 SRS1005 2,986.7 2,623.0 201.2 2,039.6 - 3,206.4 0.18 112.6 28 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9.67 1.65.6 1.051.4 2.48 X 9.7 28 SRS1004 SRS1003 33.40 449.3 35.9 345.3 - 553.4 0.54 2.7.4 28 SRS1004 SRS1003 35.7 X<			SRS1004	247.3	232.7	18.7	178.5 - 286.8	1.96	7.2	31
141 Ca Ammonium Acetate mg/kg SRS1001 1,313.3 1,286.1 111.2 963.7 - 1,608.5 1.04 69.7 28 Mage SRS1002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 SRS1004 2,783.3 2,866.0 201.2 2,039.6 - 3,206.4 0.18 112.6 28 142 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 142 Mg Ammonium Acetate SRS1003 434.0 449.3 35.9 345.3 - 553.4 0.54 27.4 28 SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 SRS1004 41.3 18.5 4.66 5.0 - 32.1 1.03 2.5 22 143 Na Ammonium Acetate SRS1001 41.3			SRS1005	190.3	161.8	12.2	126.3 - 197.2	1.82	8.7	31
mg/kg SRS1002 3,496.7 3,564.0 754.2 1,376.9 - 5,751.1 0.73 200.8 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 142 Mg Ammonium Acetate SRS1001 2,667.7 X 187.3 9,67 159.3 - 215.4 2.48 9.7 28 142 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9,67 159.3 - 215.4 2.48 9.7 28 mg/kg SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 SRS1003 434.0 449.3 35.9 345.3 - 553.4 0.54 27.4 28 SRS1004 807.7 S82.8 59.5 660.3 - 1,005.4 1.90 40.8 28 143 Na Ammonium Acetate SRS1001 141.3 1.8.5 4.66 5.0 - 32.1 1.03 2.5 222 mg/kg SRS1001 193.7 <	141	Ca Ammonium Acetate	SRS1001	1,313.3	1,286.1	111.2	963.7 - 1,608.5	1.04	69.7	28
SRS1003 1,030.0 1,174.3 135.5 781.4 - 1,567.3 1.42 43.9 28 SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 142 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 142 Mg Ammonium Acetate SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 mg/kg SRS1003 434.0 449.3 35.9 345.5 - 553.4 0.54 27.4 28 SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 143 Na Ammonium Acetate SRS1001 41.3 X 18.5 4.66 5.0 - 32.1 1.03 2.5 22 mg/kg SRS1001 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 2.9 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9		mg/kg	SRS1002	3,496.7	3,564.0	754.2	1,376.9 - 5,751.	.1 0.73	200.8	28
SRS1004 2,783.3 2,866.0 201.0 2,283.1 - 3,448.9 2.18 105.1 28 142 Mg Ammonium Acetate mg/kg SRS1002 2,986.7 2,623.0 201.2 2,039.6 - 3,206.4 0.18 112.6 28 142 Mg Ammonium Acetate mg/kg SRS1002 2955.0 1,051.7 112.3 725.9 - 1,377.4 2.48 X 9.7 28 SRS1004 807.7 S832.8 S9.5 660.3 - 1,005.4 1.90 40.8 28 SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 143 Na Ammonium Acetate mg/kg SRS1002 193.7 165.6 272.2 86.7 - 244.5 0.62 6.5 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 X 3.6 22 145 K- Bicarb. SRS1001 146.3 1		0. 0	SRS1003	1,030.0	1,174.3	135.5	781.4 - 1,567.3	1.42	43.9	28
SRS1005 2,986.7 2,623.0 201.2 2,039.6 - 3,206.4 0.18 112.6 28 142 Mg Ammonium Acetate mg/kg SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 mg/kg SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 Mg Ammonium Acetate SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 Mg SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 </td <td></td> <td></td> <td>SRS1004</td> <td>2,783.3</td> <td>2,866.0</td> <td>201.0</td> <td>2,283.1 - 3,448.</td> <td>9 2.18</td> <td>105.1</td> <td>28</td>			SRS1004	2,783.3	2,866.0	201.0	2,283.1 - 3,448.	9 2.18	105.1	28
142 Mg Ammonium Acetate mg/kg SRS1001 266.7 X 187.3 9.67 159.3 - 215.4 2.48 X 9.7 28 Mg Ammonium Acetate mg/kg SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 SRS1003 434.0 449.3 35.9 345.3 - 553.4 0.54 27.4 28 SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 143 Na Ammonium Acetate mg/kg SRS1001 41.3 X 18.5 4.66 5032.1 1.03 2.5 22 mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 2.9 22 SRS1005 44.0 X 10.8 2.97 22 - 19.4 3.58 3.6 22 SRS1004 212.3 187.0 n/a n/			SRS1005	2,986.7	2,623.0	201.2	2,039.6 - 3,206.	.4 0.18	112.6	28
mg/kg SRS1002 955.0 1,051.7 112.3 725.9 - 1,377.4 1.46 64.0 28 SRS1003 434.0 449.3 35.9 345.3 - 553.4 0.54 27.4 28 SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 Mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 3.6 22 SRS1005 87.03 237.3 207.3 n/a n/a 0.42 3.6 33 SRS1004 212.3	142	Mg Ammonium Acetate	SRS1001	266.7 X	187.3	9.67	159.3 - 215.4	2.48 X	9.7	28
SRS1003 434.0 449.3 35.9 345.3 - 55.4 0.54 27.4 28 SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 143 Na Ammonium Acetate SRS1001 41.3 X 18.5 4.66 5.0 - 32.1 1.03 2.5 22 mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 3.6 22 SRS1003 237.3 207.3 n/a n/a 0.38 1.5 3 SRS1003		mg/kg	SRS1002	955.0	1,051.7	112.3	725.9 - 1,377.4	1.46	64.0	28
SRS1004 807.7 832.8 59.5 660.3 - 1,005.4 1.90 40.8 28 143 Na Ammonium Acetate SRS1001 41.3 X 18.5 4.66 5.0 - 32.1 1.03 2.5 22 mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 3.6 22 SRS1001 146.3 134.7 n/a n/a 0.38 1.5 3 145 K- Bicarb. mg/kg SRS1001 146.3 134.7 n/a n/a 0.38 1.5 3 145 SRS1001 237.3 207.3 n/a n/a 0.42			SRS1003	434.0	449.3	35.9	345.3 - 553.4	0.54	27.4	28
SRS1005 369.3 355.5 22.3 290.7 - 420.3 1.56 17.1 28 143<			SRS1004	807.7	832.8	59.5	660.3 - 1,005.4	1.90	40.8	28
143 Na Ammonium Acetate mg/kg SRS1001 41,3 X 18.5 4.66 5.0 - 32.1 1.03 2.5 22 mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 X 3.6 22 145 K- Bicarb. SRS1001 146.3 134.7 n/a n/a 0.38 1.5 3 145 K- Bicarb. Mg/kg SRS1002 84.7 79.3 n/a n/a 0.38 1.5 3 145 SRS1004 212.3 187.0 n/a n/a 0.42 3.6 3 169 Zn - DTPA SRS1001 <t< td=""><td></td><td></td><td>SRS1005</td><td>369.3</td><td>355.5</td><td>22.3</td><td>290.7 - 420.3</td><td>1.56</td><td>17.1</td><td>28</td></t<>			SRS1005	369.3	355.5	22.3	290.7 - 420.3	1.56	17.1	28
mg/kg SRS1002 193.7 165.6 27.2 86.7 - 244.5 0.62 6.5 22 SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 X 3.6 222 145 K- Bicarb. Mg/kg SRS1001 146.3 134.7 n/a n/a 1.70 X 2.8 3 145 K- Bicarb. Mg/kg SRS1002 84.7 79.3 n/a n/a 0.42 3.6 33 SRS1003 237.3 207.3 n/a n/a 0.82 2.5 3 SRS1004 212.3 187.0 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 <td< td=""><td>143</td><td>Na Ammonium Acetate</td><td>SRS1001</td><td>41.3 X</td><td>18.5</td><td>4.66</td><td>5.0 - 32.1</td><td>1.03</td><td>2.5</td><td>22</td></td<>	143	Na Ammonium Acetate	SRS1001	41.3 X	18.5	4.66	5.0 - 32.1	1.03	2.5	22
SRS1003 57.3 X 31.0 3.97 19.5 - 42.6 2.27 X 3.4 22 SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 X 3.6 22 145 K- Bicarb. SRS1001 146.3 134.7 n/a n/a 0.38 1.5 3 Mg/kg SRS1002 84.7 79.3 n/a n/a 0.38 1.5 3 SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 SRS1003		mg/kg	SRS1002	193.7	165.6	27.2	86.7 - 244.5	0.62	6.5	22
SRS1004 29.7 X 16.3 2.91 7.9 - 24.8 2.36 X 2.9 22 145 K - Bicarb. Mg/kg SRS1001 146.3 134.7 n/a n/a 1.70 X 2.8 3.6 22 145 K - Bicarb. Mg/kg SRS1001 146.3 134.7 n/a n/a 0.38 1.5 3 SRS1002 84.7 79.3 n/a n/a 0.42 3.6 3 SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 <td></td> <td></td> <td>SRS1003</td> <td>57.3 <mark>X</mark></td> <td>31.0</td> <td>3.97</td> <td>19.5 - 42.6</td> <td>2.27 X</td> <td>3.4</td> <td>22</td>			SRS1003	57.3 <mark>X</mark>	31.0	3.97	19.5 - 42.6	2.27 X	3.4	22
SRS1005 44.0 X 10.8 2.97 2.2 - 19.4 3.58 X 3.6 22 145 K - Bicarb. SRS1001 146.3 134.7 n/a n/a 1.70 X 2.8 3 mg/kg SRS1002 84.7 79.3 n/a n/a 0.38 1.5 3 SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 <t< td=""><td></td><td></td><td>SRS1004</td><td>29.7 <mark>X</mark></td><td>16.3</td><td>2.91</td><td>7.9 - 24.8</td><td>2.36 <mark>X</mark></td><td>2.9</td><td>22</td></t<>			SRS1004	29.7 <mark>X</mark>	16.3	2.91	7.9 - 24.8	2.36 <mark>X</mark>	2.9	22
145 K- Bicarb. SRS1001 146.3 134.7 n/a n/a 1.70 X 2.8 3 mg/kg SRS1002 84.7 79.3 n/a n/a 0.38 1.5 3 SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10			SRS1005	44.0 X	10.8	2.97	2.2 - 19.4	3.58 <mark>X</mark>	3.6	22
mg/kg SRS1002 84.7 79.3 n/a n/a 0.38 1.5 3 SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27	145	K- Bicarb.	SRS1001	146.3	134.7	n/a	n/a	1.70 <mark>X</mark>	2.8	3
SRS1003 237.3 207.3 n/a n/a 0.42 3.6 3 SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27		mg/kg	SRS1002	84.7	79.3	n/a	n/a	0.38	1.5	3
SRS1004 212.3 187.0 n/a n/a 0.82 2.5 3 SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27			SRS1003	237.3	207.3	n/a	n/a	0.42	3.6	3
SRS1005 173.0 120.3 n/a n/a 0.80 3.3 3 169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27			SRS1004	212.3	187.0	n/a	n/a	0.82	2.5	3
169 Zn - DTPA SRS1001 0.81 0.60 0.09 0.34 - 0.86 0.30 0.13 27 mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27			SRS1005	173.0	120.3	n/a	n/a	0.80	3.3	3
mg/kg SRS1002 2.96 2.88 0.44 1.62 - 4.15 0.37 0.22 27 SRS1003 1.22 1.05 0.09 0.80 - 1.30 0.66 0.09 27 SRS1004 2.21 2.08 0.16 1.63 - 2.54 0.63 0.11 27 SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27	169	Zn - DTPA	SRS1001	0.81	0.60	0.09	0.34 - 0.86	0.30	0.13	27
SRS10031.221.050.090.80 - 1.300.660.0927SRS10042.212.080.161.63 - 2.540.630.1127SRS10050.710.500.100.21 - 0.790.360.0627		mg/kg	SRS1002	2.96	2.88	0.44	1.62 - 4.15	0.37	0.22	27
SRS10042.212.080.161.63 - 2.540.630.1127SRS10050.710.500.100.21 - 0.790.360.0627			SRS1003	1.22	1.05	0.09	0.80 - 1.30	0.66	0.09	27
SRS1005 0.71 0.50 0.10 0.21 - 0.79 0.36 0.06 27			SRS1004	2.21	2.08	0.16	1.63 - 2.54	0.63	0.11	27
			SRS1005	0.71	0.50	0.10	0.21 - 0.79	0.36	0.06	27



Performance Analysis Report - Test Cycle 11

CTS Lab Code: U6291A

Analysis # 801: Soil Properties

Te Co	est ode	Analysis	Units	Samples	Lab Mean	Grand Median	MAD	95% Conf Interval	WithinLab Performance, k	WithinLab Avg STD	Labs Rpt
170	Mn - D	DTPA		SRS1001	24.1	13.3	4.82	0.0 - 27.3	0.37	2.1	25
			mg/kg	SRS1002	1.66	1.48	0.35	0.46 - 2.50	0.30	0.22	25
				SRS1003	23.3	19.6	1.61	14.9 - 24.2	0.24	1.1	25
				SRS1004	15.5	11.7	2.86	3.4 - 20.0	0.45	1.0	25
				SRS1005	16.0	6.83	4.63	0.00 - 20.27	0.04	1.2	25
171	Fe - D	TPA		SRS1001	74.5	78.8	19.0	23.9 - 133.8	1.37	6.6	25
			mg/kg	SRS1002	4.27	3.37	1.03	0.37 - 6.36	0.21	1.11	25
				SRS1003	30.7	33.1	7.10	12.5 - 53.7	1.31	2.0	25
				SRS1004	28.1	33.6	5.57	17.4 - 49.7	0.87	1.7	25
				SRS1005	20.9	16.4	2.95	7.8 - 24.9	1.01	1.0	25
172	Cu - D	TPA		SRS1001	1.28	1.13	0.19	0.59 - 1.67	0.07	0.61	25
			mg/kg	SRS1002	0.31	0.31	0.037	0.20 - 0.42	0.11	0.30	25
				SRS1003	0.47	0.52	0.08	0.28 - 0.77	0.17	0.24	25
				SRS1004	0.87	0.87	0.09	0.62 - 1.12	0.24	0.19	25
				SRS1005	0.78	0.59	0.12	0.23 - 0.95	0.25	0.14	25



Performance Analysis Report - Test Cycle 11

CTS Lab Code: U6291A

	Laboratory Performance Summary - Soil Properties									
Test		Perfe	Performance Review of Laboratory-Sample Biases							
Code	Analysis	SRS1001	SRS1002	SRS1003	SRS1004	SRS1005				
101	Saturated Paste Moisture	2.94	2.62	3.57	1.77	4.14				
103	ECe - sp	-2.73	0.80	1.00	-1.00	-1.99				
126	NO3-N Cd. Rd.	-0.13	2.55	-0.66	-1.28	-0.84				
134	PO4-P Olsen/Bicarb (1:20)	-0.52	-0.65	-0.63	-0.40	-0.68				
140	K Ammonium Acetate	-0.03	-0.81	0.84	0.79	2.34				
141	Ca Ammonium Acetate	0.24	-0.09	-1.07	-0.41	1.81				
142	Mg Ammonium Acetate	8.21	-0.86	-0.43	-0.42	0.62				
143	Na Ammonium Acetate	4.89	1.03	6.62	4.58	11.21				
169	Zn - DTPA	2.37	0.18	1.92	0.80	2.13				
170	Mn - DTPA	2.24	0.50	2.32	1.31	1.97				
171	Fe - DTPA	-0.23	0.87	-0.35	-0.98	1.53				
172	Cu - DTPA	0.79	-0.09	-0.64	0.00	1.54				