

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - IV

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | | |
|---------------------------------------|-----|------|------|-------------|-------------|--------------------|--------|--------|--------|--------------------|-------------------|
| | | | | | | | C99-10 | C99-11 | C99-12 | R _p (%) | Mean ¹ |
| Dry Matter Content (%) | 30 | 94.3 | 97.9 | 97.2 | <i>0.26</i> | 0.21 | | | | | |
| Saturated Paste Constituents | | | | | | | | | | | |
| pH (Unit) | 33 | 6.00 | 7.90 | 6.30 | <i>0.10</i> | 0.92 | | | | | |
| ECe (dS/m) | 24 | 15.5 | 21.8 | 19.0 | <i>1.16</i> | 4.7 | | | | | |
| Ca (mmolc/L) | 18 | 1.4 | 14.5 | 12.1 | <i>1.2</i> | 3.2 | | | | | |
| Mg (mmolc/L) | 18 | 4.1 | 41.9 | 31.5 | <i>5.3</i> | 5.6 | | | | | |
| Na (mmolc/L) | 18 | 3.6 | 32.9 | 28.7 | <i>3.4</i> | 5.8 | | | | | |
| SAR (value) | 12 | 2.1 | 6.7 | 6.2 | <i>0.3</i> | 3.5 | | | | | |
| Extractable Constituents (1:5) | | | | | | | | | | | |
| EC (1:5) (dS/m) | 12 | 1.6 | 7.7 | 3.0 | <i>0.53</i> | 9.6 | | | | | |
| Cl (mmolc/L) | 9 | 3.0 | 33.1 | 11.2 | <i>8.2</i> | 11.0 | | | | | |
| SO ₄ (mmolc/L) | 9 | 2.3 | 50 | 13.6 | <i>11.0</i> | 3.7 | | | | | |
| Carbon, Nitrogen & Sulfur | | | | | | | | | | | |
| N- Kjeldahl (%) | 21 | 0.80 | 1.61 | 1.03 | <i>0.03</i> | 9.5 | | | | | |
| N - Combustion (%) | 21 | 0.87 | 1.63 | 1.09 | <i>0.05</i> | 6.0 | | | | | |
| TOC (%) | 24 | 6.7 | 9.5 | 8.0 | <i>0.54</i> | 8.2 | | | | | |
| C:N (Ratio) | 21 | 6.5 | 9.0 | 7.6 | <i>0.60</i> | 1.7 | | | | | |
| TIC (%) | 6 | 0.00 | 3.75 | 0.23 | <i>0.04</i> | 11.8 | | | | | |
| S - Combustion (%) | 9 | 0.20 | 0.37 | 0.22 | <i>0.02</i> | 6.0 | | | | | |
| NH ₄ -N (mg/kg) | 9 | 22.0 | 45.0 | 42.0 | <i>5.0</i> | 4.0 | | | | | |
| Cation Exch. Capacity (cmol/kg) | 6 | 9.4 | 24.8 | 20.9 | <i>3.22</i> | 17.2 | | | | | |

¹ Mean reported lab value, flagged exceeding warning Limits "***" based on 2.5 x MAD units from Median. "<" recorded as a null value.

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - IV

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | | |
|--|-----|-------|-------|-------------|--------------|--------------------|--------|--------|--------|--------------------|-------------------|
| | | | | | | | C99-10 | C99-11 | C99-12 | R _p (%) | Mean ¹ |
| Total Analysis (EPA-3050 or 3051) | | | | | | | | | | | |
| Ca (%) | 33 | 1.21 | 2.75 | 1.73 | <i>0.16</i> | 6.1 | | | | | |
| K (%) | 33 | 0.44 | 2.43 | 0.66 | <i>0.05</i> | 5.2 | | | | | |
| Mg (%) | 33 | 0.25 | 0.53 | 0.30 | <i>0.03</i> | 5.0 | | | | | |
| Na (%) | 30 | 0.07 | 0.53 | 0.09 | <i>0.010</i> | 6.7 | | | | | |
| P (%) | 33 | 0.60 | 1.85 | 0.79 | <i>0.07</i> | 5.7 | | | | | |
| Al (mg/kg) | 24 | 1573 | 16880 | 2178 | <i>759</i> | 3.6 | | | | | |
| Ag (mg/kg) | 5 | 0.01 | 0.05 | 0.05 | <i>0.00</i> | 50 | | | | | |
| B (mg/kg) | 24 | 6.4 | 33 | 17 | <i>6.6</i> | 4.1 | | | | | |
| Ba (mg/kg) | 15 | 29 | 46 | 34 | <i>2.2</i> | 5.2 | | | | | |
| Cd (mg/kg) | 15 | 0.00 | 0.90 | 0.55 | <i>0.24</i> | 12.5 | | | | | |
| Co (mg/kg) | 15 | 0.40 | 2.49 | 1.00 | <i>0.40</i> | 12.7 | | | | | |
| Cr (mg/kg) | 21 | 4.10 | 10.40 | 5.4 | <i>0.9</i> | 4.4 | | | | | |
| Cu (mg/kg) | 33 | 37.5 | 59.4 | 47.4 | <i>4.4</i> | 4.9 | | | | | |
| Fe (mg/kg) | 30 | 3050 | 6883 | 4502 | <i>494</i> | 4.2 | | | | | |
| Mn (mg/kg) | 33 | 130 | 287 | 179 | <i>16</i> | 4.4 | | | | | |
| Mo (mg/kg) | 21 | 1.20 | 4.60 | 1.94 | <i>0.50</i> | 5.6 | | | | | |
| Ni (mg/kg) | 21 | 3.5 | 9.9 | 5.0 | <i>0.7</i> | 4.8 | | | | | |
| Pb (mg/kg) | 18 | 0.0 | 4.1 | 3.2 | <i>0.4</i> | 3.0 | | | | | |
| Sb (mg/kg) | 6 | 1.9 | 14.1 | 7.0 | <i>5.0</i> | 6.0 | | | | | |
| Sr (mg/kg) | 12 | 41 | 59 | 54 | <i>0.9</i> | 5.0 | | | | | |
| V (mg/kg) | 15 | 8.8 | 13.0 | 11.5 | <i>0.9</i> | 5.4 | | | | | |
| Zn (mg/kg) | 33 | 160.0 | 301 | 257 | <i>16</i> | 4.9 | | | | | |
| As (ug/kg) | 15 | 0.95 | 4955 | 1190 | <i>1189</i> | 14 | | | | | |
| Hg (ug/kg) | 0 | | | | | | | | | | |
| Se (ug/kg) | 9 | 0.3 | 10790 | 655 | <i>400.0</i> | 6.1 | | | | | |

¹ Mean reported lab value, flagged exceeding warning Limits "***" based on 2.5 x MAD units from Median. "<" recorded as a null value.

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - V

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | | |
|---------------------------------------|-----|------|-------|-------------|------|--------------------|--------|--------|--------|--------------------|-------------------|
| | | | | | | | C99-13 | C99-14 | C99-15 | R _p (%) | Mean ¹ |
| Dry Matter Content | 30 | 85.0 | 89.4 | 87.8 | 0.39 | 0.33 | | | | | |
| Saturated Paste Constituents | | | | | | | | | | | |
| pH (Unit) | 33 | 8.18 | 9.49 | 8.60 | 0.25 | 0.67 | | | | | |
| ECe (dS/m) | 24 | 12.8 | 31.0 | 23.8 | 4.75 | 5.6 | | | | | |
| Ca (mmolc/L) | 18 | 0.4 | 11.9 | 4.8 | 1.68 | 11.0 | | | | | |
| Mg (mmolc/L) | 18 | 0.2 | 8.3 | 4.4 | 1.99 | 17.2 | | | | | |
| Na (mmolc/L) | 18 | 4.9 | 123.0 | 92.0 | 17.8 | 5.4 | | | | | |
| SAR (value) | 12 | 8.5 | 46.5 | 33.9 | 5.75 | 3.0 | | | | | |
| Extractable Constituents (1:5) | | | | | | | | | | | |
| EC (1:5) (dS/m) | 12 | 1.1 | 13.0 | 5.3 | 1.38 | 6.1 | | | | | |
| Cl (mmolc/L) | 9 | 7.0 | 109.5 | 37.2 | 30.0 | 1.8 | | | | | |
| SO ₄ (mmolc/L) | 9 | 8 | 304.0 | 19.4 | 10.7 | 2.5 | | | | | |
| Carbon, Nitrogen & Sulfur | | | | | | | | | | | |
| N- Kjeldahl (%) | 21 | 1.20 | 1.62 | 1.41 | 0.09 | 3.7 | | | | | |
| N - Combustion (%) | 21 | 1.29 | 1.62 | 1.43 | 0.08 | 2.6 | | | | | |
| TOC (%) | 24 | 11.3 | 17.7 | 15.5 | 1.50 | 3.4 | | | | | |
| C:N (Ratio) | 21 | 9.3 | 16.5 | 11.0 | 0.80 | 3.9 | | | | | |
| TIC (%) | 6 | 9.27 | 16.5 | 1.2 | 0.73 | 3.3 | | | | | |
| S - Combustion (%) | 9 | 0.39 | 0.85 | 0.51 | 0.10 | 5.9 | | | | | |
| NH ₄ -N (mg/kg) | 9 | 184 | 840 | 259 | 65 | 8.3 | | | | | |
| Cation Exch. Capacity (cmol/kg) | 6 | 23.4 | 57.10 | 31.9 | 7.5 | 25 | | | | | |

¹ Mean reported lab value, flagged exceeding warning Limits "***" based on 2.5 x MAD units from Median. "<" recorded as a null value.

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - V

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | R _p (%) | Mean |
|--|-----|------|-------|-------------|------|--------------------|--------|--------|--------|--------------------|------|
| | | | | | | | C99-13 | C99-14 | C99-15 | | |
| Total Analysis (EPA-3050 or 3051) | | | | | | | | | | | |
| Ca (%) | 33 | 2.12 | 3.37 | 2.74 | 0.25 | 4.0 | | | | | |
| K (%) | 33 | 1.52 | 3.32 | 1.86 | 0.18 | 2.9 | | | | | |
| Mg (%) | 33 | 0.75 | 1.22 | 0.94 | 0.09 | 2.2 | | | | | |
| Na (%) | 30 | 0.38 | 0.87 | 0.52 | 0.06 | 3.2 | | | | | |
| P (%) | 33 | 0.53 | 0.93 | 0.65 | 0.05 | 2.8 | | | | | |
| Al (mg/kg) | 24 | 4020 | 24420 | 6616 | 1671 | 4.9 | | | | | |
| Ag (mg/kg) | 5 | 0.01 | 0.11 | 0.10 | 0.01 | 2.4 | | | | | |
| B (mg/kg) | 24 | 17 | 89 | 41 | 9.5 | 2.4 | | | | | |
| Ba (mg/kg) | 15 | 73 | 225 | 88 | 4.5 | 3.3 | | | | | |
| Cd (mg/kg) | 15 | 0.00 | 1.62 | 0.42 | 0.37 | 5.6 | | | | | |
| Co (mg/kg) | 18 | 4.27 | 8.5 | 5.73 | 0.35 | 2.0 | | | | | |
| Cr (mg/kg) | 21 | 7.48 | 18.4 | 10.5 | 1.2 | 2.9 | | | | | |
| Cu (mg/kg) | 33 | 69.9 | 112.2 | 91.9 | 10.6 | 2.6 | | | | | |
| Fe (mg/kg) | 30 | 6380 | 10760 | 8500 | 1031 | 3.0 | | | | | |
| Mn (mg/kg) | 33 | 170 | 331 | 255 | 35 | 2.5 | | | | | |
| Mo (mg/kg) | 21 | 1.78 | 8.80 | 2.67 | 0.37 | 3.6 | | | | | |
| Ni (mg/kg) | 21 | 5.4 | 12.9 | 7.7 | 1.0 | 5.3 | | | | | |
| Pb (mg/kg) | 21 | 0.0 | 6.8 | 4.2 | 1.1 | 5.8 | | | | | |
| Sb (mg/kg) | 6 | 2.0 | 17.8 | 8.6 | 6.4 | 7.6 | | | | | |
| Sr (mg/kg) | 12 | 73 | 144 | 138 | 5 | 2.1 | | | | | |
| V (mg/kg) | 15 | 11.6 | 17.7 | 15.4 | 2.0 | 3.3 | | | | | |
| Zn (mg/kg) | 33 | 140 | 284 | 230 | 16 | 2.4 | | | | | |
| As (ug/kg) | 15 | 2.38 | 8788 | 1750 | | | | | | | |

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - VI

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | | |
|---------------------------------------|-----|------|-------|-------------|-------------|--------------------|--------|--------|--------|--------------------|-------------------|
| | | | | | | | C99-16 | C99-17 | C99-18 | R _p (%) | Mean ¹ |
| Dry Matter Content | 30 | 90.8 | 93.9 | 92.4 | <i>0.42</i> | 0.37 | | | | | |
| Saturated Paste Constituents | | | | | | | | | | | |
| pH (Unit) | 33 | 6.63 | 7.70 | 7.16 | <i>0.17</i> | 2.2 | | | | | |
| ECe (dS/m) | 24 | 7.6 | 12.7 | 10.8 | <i>0.8</i> | 5.4 | | | | | |
| Ca (mmolc/L) | 18 | 1.2 | 19.2 | 14.8 | <i>2.5</i> | 12.0 | | | | | |
| Mg (mmolc/L) | 18 | 0.9 | 13.9 | 10.8 | <i>2.4</i> | 13.1 | | | | | |
| Na (mmolc/L) | 18 | 2.3 | 33.9 | 26.1 | <i>3.4</i> | 13.3 | | | | | |
| SAR (value) | 12 | 2.2 | 9.1 | 7.0 | <i>1.3</i> | 18.4 | | | | | |
| Extractable Constituents (1:5) | | | | | | | | | | | |
| EC (1:5) (dS/m) | 12 | 0.9 | 6.1 | 5.7 | <i>0.32</i> | 6.9 | | | | | |
| Cl (mmolc/L) | 9 | 5.2 | 84.3 | 22.7 | <i>17.5</i> | 2.4 | | | | | |
| SO ₄ (mmolc/L) | 9 | 15.8 | 162.0 | 99.6 | <i>37.4</i> | 14.8 | | | | | |
| Carbon, Nitrogen & Sulfur | | | | | | | | | | | |
| N- Kjeldahl (%) | 19 | 0.65 | 2.28 | 1.92 | <i>0.20</i> | 11.7 | | | | | |
| N - Combustion (%) | 21 | 1.61 | 2.22 | 1.96 | <i>0.12</i> | 6.0 | | | | | |
| TOC (%) | 24 | 12.8 | 47.4 | 27.1 | <i>2.63</i> | 4.2 | | | | | |
| C:N (Ratio) | 20 | 10.9 | 30.8 | 13.8 | <i>1.0</i> | 6.7 | | | | | |
| TIC (%) | 5 | 10.9 | 30.8 | 0.70 | <i>0.16</i> | 13.4 | | | | | |
| S - Combustion (%) | 9 | 0.52 | 1.20 | 0.64 | <i>0.10</i> | 10.7 | | | | | |
| NH ₄ -N (mg/kg) | 9 | 1520 | 3970 | 2490 | <i>480</i> | 24 | | | | | |
| Cation Exch. Capacity (cmol/kg) | 6 | 20.9 | 60.6 | 35.4 | <i>12.7</i> | 14.2 | | | | | |

¹ Mean reported lab value, flagged exceeding warning Limits "***" based on 2.5 x MAD units from Median. "<" recorded as a null value.

COMPOST PROFICIENCY TESTING PROGRAM REPORT: 2nd EXCHANGE 1999/2000

Sample CAP 99 - VI

May 26, 2000

| Analysis | No. | Min | Max | Median | MAD | R _d (%) | | | | | |
|--|-----|-------|-------|--------------|-------|--------------------|--------|--------|--------|--------------------|-------------------|
| | | | | | | | C99-16 | C99-17 | C99-18 | R _p (%) | Mean ¹ |
| Total Analysis (EPA-3050 or 3051) | | | | | | | | | | | |
| Ca (%) | 33 | 1.57 | 3.03 | 2.52 | 0.18 | 5.0 | | | | | |
| K (%) | 33 | 0.53 | 1.45 | 0.90 | 0.12 | 11.1 | | | | | |
| Mg (%) | 33 | 0.39 | 0.56 | 0.49 | 0.04 | 5.5 | | | | | |
| Na (%) | 30 | 0.18 | 0.45 | 0.26 | 0.045 | 12.8 | | | | | |
| P (%) | 33 | 0.80 | 1.36 | 1.08 | 0.05 | 9.8 | | | | | |
| Al (mg/kg) | 24 | 3820 | 17930 | 7507 | 1338 | 6.6 | | | | | |
| Ag (mg/kg) | 12 | 4.69 | 27.7 | 17.2 | 4.1 | 33 | | | | | |
| B (mg/kg) | 24 | 15.1 | 84 | 29.9 | 8.6 | 6.7 | | | | | |
| Ba (mg/kg) | 15 | 150 | 245 | 186 | 17.8 | 10.9 | | | | | |
| Cd (mg/kg) | 21 | 0.45 | 3.10 | 1.53 | 0.29 | 11.0 | | | | | |
| Co (mg/kg) | 18 | 2.30 | 5.2 | 2.96 | 0.30 | 5.3 | | | | | |
| Cr (mg/kg) | 21 | 17.71 | 35.8 | 24.4 | 3.6 | 9.4 | | | | | |
| Cu (mg/kg) | 33 | 140 | 304 | 211 | 27 | 12.5 | | | | | |
| Fe (mg/kg) | 30 | 137 | 13591 | 11029 | 781 | 8.9 | | | | | |
| Mn (mg/kg) | 33 | 180 | 314 | 237 | 25 | 1.5 | | | | | |
| Mo (mg/kg) | 21 | 5.86 | 14.1 | 9.01 | 1.68 | 15.1 | | | | | |
| Ni (mg/kg) | 21 | 8.9 | 18.8 | 12.7 | 1.8 | 8.0 | | | | | |
| Pb (mg/kg) | 21 | 19.9 | 48.6 | 29.2 | 5.4 | 13.7 | | | | | |
| Sb (mg/kg) | 6 | 2.8 | 21.7 | 9.5 | 6.5 | 6.5 | | | | | |
| Sr (mg/kg) | 12 | 81 | 181 | 160 | 12.7 | 2.1 | | | | | |
| V (mg/kg) | 15 | 9.3 | 13.9 | 10.8 | 0.8 | 2.7 | | | | | |
| Zn (mg/kg) | 33 | 200 | 485 | 334 | 40 | 7.4 | | | | | |
| As (ug/kg) | 15 | 3.26 | 9336 | 2944 | 906 | 12.3 | | | | | |
| Hg (ug/kg) | 6 | 53 | 1020 | 657 | 42 | 77 | | | | | |
| Se (ug/kg) | 9 | 3 | 11843 | 2210 | 2207 | 21 | | | | | |

¹ Mean reported lab value, flagged exceeding warning Limits "***" based on 2.5 x MAD units from Median. "<" recorded as a null value.