### National Atmospheric Deposition Program/National Trends Network

**1988 Annual & Seasonal Data Summary for Site KY22**

**Page 1: Summary of Sample Validity and Completeness Criteria**

(Printed 08/29/2000)

<table>
<thead>
<tr>
<th>Site Identification</th>
<th>Sample Validity for Annual Period</th>
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<td>Site Name</td>
<td>Lilley Cornett Woods</td>
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<tr>
<td>Site ID</td>
<td>KY22</td>
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<tr>
<td>State</td>
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</tr>
<tr>
<td>County</td>
<td>Letcher</td>
</tr>
<tr>
<td>Operating Agency</td>
<td>Eastern Kentucky University</td>
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<td>Sponsoring Agency</td>
<td>NOAA-Air Resources Laboratory</td>
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<td>Longitude</td>
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<tr>
<td>Valid Samples</td>
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<tr>
<td>with precipitation</td>
<td>47</td>
</tr>
<tr>
<td>with full chemistry**</td>
<td>47</td>
</tr>
<tr>
<td>without chemistry</td>
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<tr>
<td>without precipitation</td>
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<tr>
<td>Invalid Samples</td>
<td>4</td>
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<tr>
<td>with precipitation</td>
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<td>missing precipitation data</td>
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#### Summary Period Information

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<th></th>
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<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Fall</th>
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<tr>
<td>First summary period day</td>
<td>12/29/1987</td>
<td>12/01/1987</td>
<td>03/01/1988</td>
<td>05/31/1988</td>
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<td>Summary period duration</td>
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<td>91</td>
<td>91</td>
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<tr>
<td>Number of samples</td>
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<td>13</td>
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<tr>
<td>Measured precipitation (cm)</td>
<td>83.1</td>
<td>22.7</td>
<td>21.3</td>
<td>15.6</td>
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<tr>
<td>Valid samples with full chemistry**</td>
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<td>11</td>
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<td>12</td>
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<td>Valid field pH measurements</td>
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<td>10</td>
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#### NADP/NTN Completeness Criteria

<table>
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<tr>
<th></th>
<th>Annual</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary period with valid samples (%)</td>
<td>92.5</td>
<td>92.3</td>
<td>92.3</td>
<td>76.9</td>
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<tr>
<td>2. Summary period with precip coverage (%)</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<tr>
<td>3. Measured precipitation with valid samples (%)</td>
<td>91.3</td>
<td>94.9</td>
<td>82.4</td>
<td>77.8</td>
<td>100.0</td>
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<td>4. Collector efficiency (%)</td>
<td>98.9</td>
<td>95.1</td>
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<td>Precip with full chemistry and valid field pH (%)</td>
<td>66.8</td>
<td>91.2</td>
<td>76.4</td>
<td>60.4</td>
<td>64.1</td>
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</table>

* = Data do not meet NADP/NTN Completeness Criteria for this period.

** = Valid samples for which all Laboratory Chemical measurements were made (The ONLY samples described by the percentile distributions in the Statistical Summary of Precipitation Chemistry for Valid Samples).

*** = Measured precipitation for sample periods during which precipitation occurred and for which complete valid laboratory chemistry data are available.
### Precipitation-Weighted Mean Concentrations

<table>
<thead>
<tr>
<th></th>
<th>Ca</th>
<th>Mg</th>
<th>K</th>
<th>Na</th>
<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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<tbody>
<tr>
<td>Annual</td>
<td>0.23</td>
<td>0.026</td>
<td>0.020</td>
<td>0.065</td>
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<td>1.19</td>
<td>0.12</td>
<td>2.14</td>
<td>3.61E-02</td>
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<tr>
<td>Winter</td>
<td>0.15</td>
<td>0.017</td>
<td>0.006</td>
<td>0.050</td>
<td>0.04</td>
<td>0.71</td>
<td>0.08</td>
<td>1.09</td>
<td>1.94E-02</td>
<td>2.64E-02</td>
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<tr>
<td>Spring</td>
<td>0.41</td>
<td>0.044</td>
<td>0.040</td>
<td>0.088</td>
<td>0.16</td>
<td>1.58</td>
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<td>2.80</td>
<td>3.78E-02</td>
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<tr>
<td>Summer</td>
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<td>0.033</td>
<td>0.039</td>
<td>0.064</td>
<td>0.11</td>
<td>2.06</td>
<td>0.15</td>
<td>4.82</td>
<td>8.77E-02</td>
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<tr>
<td>Fall</td>
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<td>0.013</td>
<td>0.006</td>
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### Deposition

<table>
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<tr>
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<th>K</th>
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<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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<tbody>
<tr>
<td>Annual</td>
<td>1.88</td>
<td>0.216</td>
<td>0.166</td>
<td>0.540</td>
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<td>0.97</td>
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<tr>
<td>Winter</td>
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<tr>
<td>Spring</td>
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<td>0.094</td>
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<tr>
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<td>0.061</td>
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<tr>
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### Weekly Sample Concentrations

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<th>K</th>
<th>Na</th>
<th>NH4</th>
<th>NO3</th>
<th>Cl</th>
<th>SO4</th>
<th>H(lab)</th>
<th>H(fld)</th>
<th>pH(lab)</th>
<th>pH(fld)</th>
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<tr>
<td>Minimum value</td>
<td>0.02</td>
<td>0.005</td>
<td>0.003</td>
<td>0.016</td>
<td>0.02</td>
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<td>0.011</td>
<td>0.003</td>
<td>0.022</td>
<td>0.02</td>
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### Other Parameters

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<th>Annual and Seasonal Equivalence Ratios</th>
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<td><strong>uS/cm</strong></td>
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<td><strong>SO4+NO3</strong></td>
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<td>1.02</td>
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Please see page 1 for footnotes.