Aiken Technical College
Radiation Protection Technology Program
Air Sample Data Sheet
(For Training Purposes Only—No Actual Hazards Exist)

Location: Room 509 outside A-509-B

Date: Today
RP Technician (s): John Avery

Sampler Information
Model: STAPLEX TF1A
Serial Number: Z3849K
Media: Filter Paper
Calibration Due Date: 12-31-11

Sampling Information
1 cubic foot = 2.8316 E5 cubic centimeters

<table>
<thead>
<tr>
<th>Sampling Time</th>
<th>Sample Flow Rate (CFM)</th>
<th>Sample Type: particulate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>1015/1025</td>
<td>25/25</td>
<td></td>
</tr>
</tbody>
</table>

Total Volume (cc): 7.08E6

Counting Data
Model: WD1000
Serial Number: CMC009663
Background (cpm): 100
Calibration Due Date: 1-27-12

Model: WD1000
Serial Number: CMC009674
Background (cpm): 0
Calibration Due Date: 1-27-12

<table>
<thead>
<tr>
<th>Type</th>
<th>Counter Efficiency cpm/dpm</th>
<th>Background Count Rate cpm</th>
<th>Quick Count net cpm</th>
<th>6 Hour Count Rate net cpm</th>
<th>24 Hour Count Rate net cpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>0.4</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta</td>
<td>0.1</td>
<td>100</td>
<td>4500</td>
<td></td>
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</tbody>
</table>

\[
\text{Activity } \frac{\mu Ci}{cc} = \frac{\text{cpm}}{\text{eff}(\frac{cpm}{dpm}) \times \text{volume}(cc) \times 0.99 \times 2.22E6 \left(\frac{dpm}{\mu Ci}\right)}
\]

\[
\alpha \frac{\mu Ci}{cc} = \text{ND} 
\]

\[
\beta \frac{\mu Ci}{cc} = 2.9 \times 10^{-9} \frac{\mu Ci}{\alpha}
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