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:	**RP Technician (s):**
today	JOHN AVERY J. Avery

Sampler Information

Model: STAPLEX TFIA	**Serial Number:** 23899R
Media: filter paper	**Calibration Due Date:** 12-31-11

Sampling Information

1 cubic foot = 2.8316 E^5 cubic centimeters

Sampling Time		Sample Flow Rate (CFM)		Sample Type: particulate
ON	OFF	ON	OFF	Total Volume (cc): 7.08 E6
1015	1025	25	25	

Counting Data

β **Model:** Ludlum Model 12 w/ SAV489-110C **Serial Number:** CMC009663

Background (cpm): 100 **Calibration Due Date:** 1-27-12

α **Model:** Ludlum Model 12 w/ AC3-7MHV-LV **Serial Number:** CMC009674

Background (cpm): 0 **Calibration Due Date:** 1-27-12

Type	Counter Efficiency cpm/dpm	Background Count Rate cpm	Quick Count net cpm	6 Hour Count Rate net cpm	24 Hour Count Rate net cpm
Alpha	0.4	0	0		
Beta	0.1	100	4500		

$$Activity\ \frac{\mu Ci}{cc} = \frac{cpm}{eff\left(\frac{cpm}{dpm}\right) * volume(cc) * 0.99 * 2.22E^{6}\left(\frac{dpm}{\mu Ci}\right)}$$

$\alpha \frac{\mu Ci}{cc}$ = ND

$\beta \frac{\mu Ci}{cc}$ = 2.9 E^{-9} μCi/cc