

## **Technical Note No. 002**

### **Example Calibration Curves for Model 202 and 205 Ozone Monitors**

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**Author:** John Birks

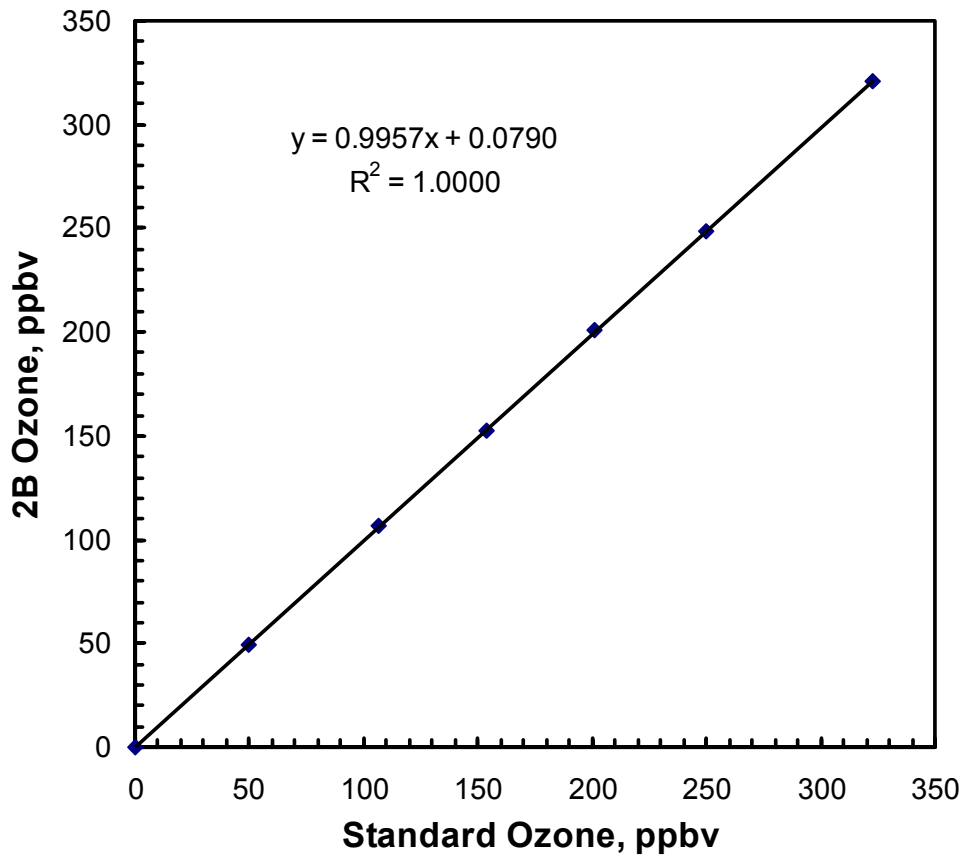
#### **Background**

As expected for the analytical method of UV absorbance, 2B Tech Ozone Monitors are extremely linear with respect to ozone concentration. Both Model 202 and Model 205 Ozone Monitors are linear over the range 1 ppb to 100,000 ppb (100 ppm); i.e., they are linear over 5 orders of magnitude. The large dynamic range compared to conventional ozone monitors is due to two factors: 1) the logarithm of the Beer-Lambert Law is calculated in the microprocessor and not approximated by  $\Delta I/I$  as is done in many ozone monitors, and 2) the instrument has a much shorter absorption cell, which further extends the dynamic range. For atmospheric purposes the Ozone Monitors are calibrated over the range 0-300 ppb relative to a NIST-certified standard instrument, and the calibration data are provided with the instrument. The following are example calibration curves for the most recent Model 202 and Model 205 instruments sold at the time of writing of this Technical Note.

**Model 202 Ozone Monitor**

**Serial No. 393, Calibrated on 26 July 2006**

**Calibration Curve with Cal Factors Applied**



**Model 205 Ozone Monitor**

**Serial No. 389DB, Calibrated on 10 July 2006**

**Calibration Curve with Cal Factors Applied**

