Sodium Permanganate Testing

Set Spectrophotometer, DR800 series or use a Pocket Colorimeter (PCII) to desired program, Free and Total Chlorine. Take sample at the top of filter. Fill two (2) 10 mil sample cells with sample from top of the filter. Zero device with one sample cell. Place a DPD Free Chlorine Powder Pillow for 10 mil sample and place into second square cell. Shake to mix and let stand for 45 seconds. Place into device and hit READ. Record value. (This value is permanganate and free chlorine combined)

Take your zero sample and place 1 drop of sodium thiosulfate 0.0246N or 1 sodium thiosulfate powder pillow into sample. Swirl to mix. Insert one DPD Free Chlorine Powder Pillow for 10 mil into sample cell. Place into spec and hit READ. Record value. (This value is your permanganate residual. This value should not exceed 0.1 ppm)

Subtract the two values to get Free Chlorine results.