What is the stability of the APHA/Pt-Co/Hazen liquid color standards?

Per Section 6.2 of ASTM D1209 Standard Test Method for Color of Clear Liquids (Platinum Cobalt Scale):

"When properly sealed and stored the standards are stable for at least a year and do not degrade markedly for 2 years."

Our industrial experience is that if kept properly stoppered in amber bottles, the APHA/Pt-Co/Hazen visual color standards do not degrade significantly for longer than 2 years but this is the time frame that most sources reference as optimal.

If you have a dated APHA/Pt-Co/Hazen 500 liquid color standard, one validation method would be to see if it still meets the absorbance tolerance limits of ASTM D1209 Table 1, and is effectively clear (ASTM D1003 Haze% < 2).

A literature reference on stability of the APHA/Pt-Co/Hazen color standards can be found at:

Scharf, W. W., Ferber, K. H., and White, R. G., "Stability of Platinum-Cobalt Color Standards," Materials Research and Standards, Vol. 6, No 6, June 1966 pp 302-304.