GENERAL ELECTRIC COMPANY, SCHENECTADY, N.Y.

TITLE.....DETERMINATION OF COLOR BY THE A. P. H. METHOD

SCOPE: Applies to the determination of color of water white liquids.

PREPARATION OF A. P. H. STANDARDS:

"Dissolve 1.245 grams of potassium chlorplatinate (K_2PtCl_6) containing 0.5 gram platinum, and 1 gram of crystallized cobaltous chloride ($CoCl_2.6H_2O$) containing about 0.25 gram cobalt in water with 100 cc. of concentrated HCl. Dilute to one litre with distilled water. This solutionhas a color of 500 A.P.H."

"To prepare standards having a color of 5, 10, 15, 20, 25, 30, 35, --, --, dilute 0.5, 1, 1.5 cc., etc., of the above solution to 50 ml. in 50 ml. tall form Nessler tubes. Protect the tubes from evaporation when not in use."

The unit of color is that color produced by 1 mg. platinum per litre.

PROCEDURE:

"The color of the sample shall be observed by filling a matched Nessler tube to a height equal to that in the standard tubes with the liquid to be examined and comparing it with the standards. The determination shall be made by looking vertically downward through the tubes upon a white or mirrored surface placed at such an angle that light is reflected through the column of the liquid."

This method is good only up to a color intensity of about 100 A.P.H. For reading higher values, the sample should be diluted with 1478 Pyranol (maximum A.P.H. color = 5), and the color obtained by multiplying by the dilution ratio.

RECORDING COLORS:

Colors between 1 and 100 are recorded to the nearest 5.
Colors between 101 and 200 are recorded to the nearest 10.

REFERENCE:

Standard Methods for the Examination of Water and Sewage. Sixth Edition, 1925, Page 8. Published by the A.P.H.A. Method developed by A. Hazen.

PITTSFIELD WORKS
Engineering Dept.

dwc/mp
DATE 10/29/40 Prepared by D.W. Caird Sketch No. H-6871825
Copied 8-26-41 by RR

DSW 330661

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The unit of color is that color produced by 1 mg. platinum per litre.

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This method is good only up to a color intensity of about 100 A.P.H. For reading higher values, the sample should be diluted with 14% Pyranol (maximum A.P.H. color = 5), and the color obtained by multiplying by the dilution ratio.

RECORDING COLORS:

Colors between 1 and 100 are recorded to the nearest 5.
Colors between 101 and 500 are recorded to the nearest 10.

REFERENCE:

Standard Methods for the Examination of Water and Sewage. Sixth Edition, 1925, Page 8. Published by the A.P.H.A. Method developed by A. Hazen.

PITTSFIELD WORKS
Engineering Dept.
Sketch No. H-88718S5

Prepared by D.W. Caird

DATE 12/29/40

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