Comparison chart for estimating volume percentages of constituents in rocks and concentrates in the range of 1.0 to 0.1 volume percent

JEFFREY C. REID
ARCO Resources Technology
P.O. Box 2819, Dallas, Texas 75221

Abstract
Charts were prepared to aid the visual estimation of trace and accessory constituents in the range of 1.0 to 0.1 volume percent. The charts assist accurate and consistent estimates in this range for hand specimens, microscope slides, and heavy mineral concentrates. Applications include economic geology, sedimentology, and petrology.

Chart documentation
The visual estimation of the volume percent of accessory and trace minerals is important in economic geology, sedimentology, and petrology. Most workers tend to overestimate small percentages (particularly in the case of highly conspicuous minerals like mica); comparison with these charts may help to reduce such errors.

Previous charts (Folk, 1951; Shvetsov, 1954; Terry and Chilingar, 1955) aided visual estimates of essential constit-

Fig. 1. Comparison chart for estimating percentage composition in the range of 1.0 to 0.8 volume percent for coarse and fine grains.

Fig. 2. Comparison chart for estimating percentage composition in the range of 0.7 to 0.5 volume percent for coarse and fine grains.
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Fig. 3. Comparison chart for estimating percentage composition in the range of 0.4 to 0.25 volume percent for coarse and fine grains.

Fig. 4. Comparison chart for estimating percentage composition in the range of 0.2 to 0.1 volume percent for coarse and fine grains.

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References


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