

MAP SHOWING LITHOSTRATIGRAPHIC AND STRUCTURAL SETTING OF STRATABOUND

(MASSIVE) SULFIDE DEPOSITS IN U.S. APPALACHIANS

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INTRODUCTION

This geologic map shows the lithostratigraphic and structural setting of stratabound (massive) sulfide deposits of the U.S. Appalachians; it is accompanied by a mineral-deposit table containing information about the 103 deposits or deposits/districts shown on the map. The map and tables are on four sheets. Layered rock units are established by grouping according to age and sedimentary vs. volcanic lithology, with provisions being made for mixed and uncertain categories of age and lithology. Deposits are shown in three size categories and by base-metal and iron sulfide content with respect to sulfur content, as detailed in the Explanation on Sheet 2. Only deposits having either a history of production or evidence of significant mine openings or mineralization are listed. An effort has been made to exclude quartz (gold)-vein deposits not associated intimately with stratabound sulfide mineralization. Meager descriptions of some long-unworked gold or copper deposits, particularly in New Hampshire and in the Carolina slate belt and Alabama, make problematical the categorization of such deposits as vein or stratabound deposits. Thus, a few deposits listed herein might have been excluded by other workers, and some deposits not included here might have been added to our list. Deposits of greater than 1 million tons are shown in Quebec, on extensions of the mineralized belts of New England, to demonstrate the extension and continuity of the mineralized zones.

The map and table are a product of the International Geological Correlation Programme (IGCP), Project No. 60, on the Correlation of Caledonian Stratabound Sulphides. They correspond to similar maps and tables for the Appalachian-Caledonian orogen already released or in preparation for Canada, Greenland, Ireland, Scotland, Norway, and Sweden--products of the several national working groups involved in Project No. 60. Members of the U.S. Working Group and several other individuals assisted substantially in putting together some parts of the U.S. map or in providing information about specific deposits, as noted in our Acknowledgments.

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