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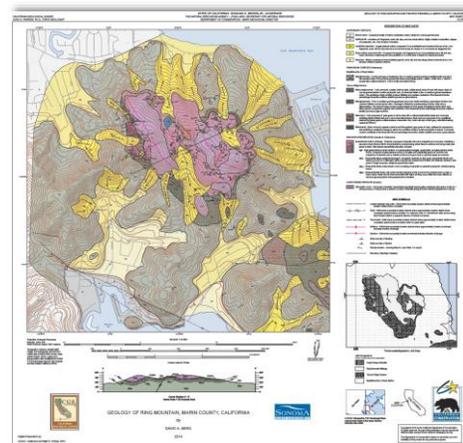
PUBLICATION RELEASE MAP SHEET SERIES

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Map Sheet 62 Geology of Ring Mountain and Tiburon Peninsula, Marin County, California

by:
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New, highly detailed geologic maps by David Bero of Sonoma State University cover the classic locality of Ring Mountain as well as the Tiburon Peninsula, located in southern Marin County, California. This area is well known for the number and variety of high-grade metamorphic blocks within the Franciscan Complex. The variety of temperature and pressure conditions recorded by the metamorphic blocks at Ring Mountain have made this area a key laboratory for the understanding of the subduction process represented by the surrounding Franciscan Complex. Detailed geologic mapping and petrographic analyses reveal that Ring Mountain and the Tiburon Peninsula are underlain by four distinct structural units separated by low-angle faults. The structurally highest unit consists of partially serpentinized peridotite (harzburgite), a possible remnant of the Coast Range Ophiolite. The underlying unit is the structurally thin Ring Mountain serpentinite-matrix mélangé. Entrained within, and commonly eroded from, the mélangé matrix are exotic blocks of variable size, shape, and metamorphic grade. The Ring Mountain serpentinite-matrix mélangé is underlain by the Tiburon Ridge Terrane, consisting of blueschist facies, schistose metagraywacke and related lithologies. The structurally lowest unit within the area, referred to as the Metalitharenite of Reed Station, is dominated by prehnite-pumpellyite facies metalitharenite. These maps, focused on the geology and structure of Ring Mountain and the adjoining Tiburon Peninsula, provide background and context for numerous detailed studies.



This report is available as printed maps at 1:6,000 and 1:12,000 scales with an accompanying 34 page pamphlet. A limited number of rolled maps are available on request (please specify when ordering; additional shipping and handling costs apply).

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