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**SPECIAL ASPECTS OF CENOZOIC HISTORY OF SOUTHERN IDAHO AND THEIR
GEOHERMAL IMPLICATIONS**

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Regional plate tectonics of the Pacific basin are directly related to these features in southern Idaho: basin development, four major geothermal belts, over 200 hot springs and wells, and a large left lateral rift that coincides generally with the present Snake River course.

The Snake River rift is indicated by 16 different lines of evidence, 12 of which are offset geologic features, each with a displacement of approximately 50 miles. The regional setting, along with local rifting, Cenozoic volcanism, graben development, thermal waters, much faulting, good reservoir conditions, and abundant surface water and ground water supplies makes southern Idaho an ideal region for geothermal exploration. Fish, mollusk and plant fossils, plus stratigraphic and structural correlation, enables reconstruction of eight chronological events in Cenozoic history, including: an early Tertiary basin, the Snake River graben, two major shifts in the Snake River course, a long period of composite volcanism, late Cenozoic rifting, and great Pleistocene uplift. Calcareous oolites appear to be fair indexes to geothermal anomalies in southern Idaho.