Cliffs of the Miocene Monterey Formation, Naples Beach, California. These finely laminated sedimentary rocks rich in organic matter were deposited during a period of worldwide cooling about 14 million years ago. A record of this climate change is revealed by the carbon isotopic signatures of certain molecules synthesized by organisms, such as marine algae and bacteria, and subsequently fossilized after the sediments were deposited. See page 1122. [Photo: Kevin Irwin, Chevron Petroleum Technology Company]

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