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## The Sharktooth Hill Bone Bed- A Kern County Paleontologic Treasure

by

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### ABSTRACT

The Sharktooth Hill area of Kern County, California, is one of the most famous locations of Miocene marine vertebrate fossils in the world. The fossils outcrops in drainage dissected hills 8-10 miles northeast of Bakersfield. The most prolific concentration of fossils is in the Sharktooth Hill Bone Bed, a thin layer within the Middle Miocene Round Mountain Silt. A portion of the Bone Bed was declared a National Natural Landmark in 1976. An amazing variety of fossils of marine and land animals have been recovered, along with some terrestrial flora. Marine fossils include those of sharks, whales, sea lions, turtles, dolphins, and other large and small vertebrates. The area has long been a collecting location for both trained paleontologists and amateur collectors. The first documentation of fossils is generally attributed to geologist William P. Blake in 1853. Blake found the fossils while doing railroad survey work for the federal government. The California Academy of Sciences did significant research there early in the 20th century. Research continues today, spearheaded by the University of California Museum of Paleontology (UCMP), Natural History Museum of Los Angeles County (LACMNH), San Diego Museum of Natural History, and other institutions. One of the mysteries of the Bone Bed has been its' origin. In 2009, researchers associated with LACMNH and UCMP published an article regarding the Bone Bed. They tied its' origin to a transgressive/regressive cycle 15-16 million years ago during the middle Miocene Climatic Optimum. The area of Bone Bed outcrops is owned by several private landowners, plus an area overseen by Bakersfield College. One of the major landowners, Bob Ernst passed away in 2007. Ernst owned 342 acres of in heart of prolific Bone Bed outcrops, and he actively quarried the Bone Bed. He had ongoing relationships with many paleontologic groups, including Bakersfield's Buena Vista Museum of Natural History. The Museum was formed in 1995 to showcase Ernst's fossils, and continues to do so, thanks to the generosity of the Ernst family.

### BIOGRAPHY

*Tim Elam is a staff geologist with Chevron in Bakersfield, and a member of SJGS. He received a B.S. in Environmental Science from Georgetown (Kentucky) College, and an M.S. in Geology from the University of Kentucky. He has worked a variety of petroleum exploration and production assignments since joining Chevron in 1981, including offshore Alaska, offshore Louisiana, east Texas, and the San Joaquin Valley. He moved to Bakersfield in 1990, and since 1996 has been doing mostly development/production work in Cymric and McKittrick fields. He is a volunteer and docent with the Buena Vista Museum of Natural History in Bakersfield.*