

P. Copy of Chemical and Engineering articles on polystrate fossil whale

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Workers find whale in diatomaceous earth quarry

Workers at the Dicalite division of *Gen* Inc. have found the fossil skeleton of a baleen whale some 10 to 12 million years old in the company's diatomaceous earth quarries in Lompoc, Calif. They've found fossils there before; in fact, the machine operators have learned a good deal about them and carefully annotate any they find with the name of the collector, the date, and the exact place found. Each discovery is turned over to Lawrence G. Barnes at the Natural History Museum of Los Angeles County. The whale, however, is one of the largest fossils ever collected there. It was spotted by operator Jim Darrah, and Dr. Barnes is directing excavation.

The whale is standing on end in the quarry and is being exposed gradually as the diatomite is mined. Only the head and a small part of the body are visible as yet. The modern baleen whale is 80 to 90 ft long and has a head of similar size, indicating that the fossil may be close to 100 feet long.

The diatomaceous earth must be taken care of around the fossil with great caution because the bones are fragile and disintegrate quickly when exposed to air. When sections of bone are exposed, they are coated with a plastic cement, which hardens, and covered and reinforced with bandages of plaster and burlap. The back and forepart of the whale required 24000 lbs of plaster and 700 yards of burlap 3 inches wide.

Another recent find at the Dicalite quarries was the skeleton of a small seal or sea lion, one of the few known specimens of the species. Smaller whales have been found, too, as well as fish and birds. On the whole, the discoveries are providing a valuable look at life along the coast of California 10 million years ago. The fossils will be used for public display and research at the Natural History Museum.

Strange phenomena

SIR: K. M. Reese (Newsletters, C&EN, Oct. 11, 1976) made no comment concerning the implications of the unique discovery of a baleen whale skeleton in a vertical orientation in a diatomaceous earth quarry in Lompoc, Calif. However, the fact that the whale is standing on end as well as the fact that it is buried in diatomaceous earth would strongly suggest that it was buried under very unusual and rapid catastrophic conditions. The vertical orientation of the whale is also reminiscent of observations of vertical tree trunks extending through several successive coal seams. Such phenomena cannot easily be explained by uniformitarian theories, but fit readily into an historical framework based upon the recent and dynamic universal flood described in Genesis, chapters 6-9.

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