

THE AMERICAN MINERALOGIST, VOL. 56, MAY-JUNE, 1971

TYPE LOCALITY FOR BAKERITE

H. EARL PEMBERTON, *Mineral Research Society of California,*
1638 Hill Street, Santa Monica, Calif.

ABSTRACT

Comparison of the original description with known occurrences of borate minerals indicates that the type material came from the Furnace Creek borate area, Death Valley, California. The locality at Borate, California, attributed by the finder, does not contain bakerite.

Bakerite was first described by Giles in 1903. The material was found and given to Giles by R. C. Baker, Nutfield, Surrey, one of the managing directors of Borax Consolidated, Limited. Giles described the occurrence (p. 353) "... as veins and nodules of considerable size in the mines (of the company) situated in the Mohave Desert, sixteen miles northeast of Daggett in San Bernardino County, California." This is the locality known as Borate.

This identification of the type locality for bakerite probably is in error. The type locality is apparently the Furnace Creek borate area in Death Valley, Inyo County, California.

William Foshag (1922, p. 209) visited Borate about 1920 and "... diligent search failed to reveal any (bakerite), and it is possible that this mineral is an impure form of howlite." Many hours of search by members of the Mineral Research Society of California have also yielded no evidence of bakerite at this locality.

Further doubt as to the accuracy of Giles' locality report arose from his description (p. 353) of an "... external coating or matrix of calcite ..." on the bakerite. The minerals associated with the borates at the Borate locality include strontianite, celestite, and gypsum—but diligent search has yielded no calcite.

Giles' knowledge of the locality is also questioned on the basis of the report in his article that howlite found there (p. 354) "... has been used commercially in the manufacture of borax and boric acid." The only mineral processed commercially at Borate was colemanite; at no time was howlite used as an ore mineral (*p.c.*, U. S. Borax and Chemical Corp., 1968).

Bakerite has been reported from two other California localities: the Furnace Creek borate area and Tick Canyon, Los Angeles County (Kramer and Allen, 1956, p. 690; Murdoch and Webb, 1966, p. 95). The colemanite deposits of Tick Canyon were not discovered until 1907 and,

in any case, the bakerite from that locality does not resemble the material described by Giles. However, the material from the Furnace Creek borate area fits precisely his description of the mineral (p. 353)—“ . . . white amorphous masses (resembling) in appearance unglazed porcelain or fine white marble. Sometimes the mineral has a faint tinge of sea-green colour.” In some cases the material collected by the writer in the Furnace Creek area has the coating of calcite mentioned by Giles.

In situ at this locality the bakerite occurs as nodules and veins in the altered volcanics of the Black Mountains capping the borate-bearing beds. Float from these occurrences was seen in the washes which drain the area and in Furnace Creek Wash into which these washes empty. Float was observed by the writer as far north as Mount Blanco (sec. 6, T.26 N., R.2 E.) and as far south as section 22 (T.26 N., R.2 E.). It appeared to occur commonly only in Corkscrew Canyon Wash (secs. 9, 16, 21, T.26 N., R.2 E.)

The error in identification of the type locality probably resulted from the fact that, at the time the specimens were found by managing director Baker, Borax Consolidated was active at both Borate and the Furnace Creek area of Death Valley. Mr. Baker apparently got his saddlebags mixed.

REFERENCES

- FOSHAG, W. F. (1922) Calico Hills, San Bernardino Co., California *Amer. Mineral.* **7**, 208-209
- GILES, W. B. (1903) Bakerite (a new borosilicate of calcium) and howlite from California. *Mineral. Mag.* **13**, 353-355.
- KRAMER, HENRY, AND R. D. ALLEN (1956) A restudy of bakerite, priceite, and veatchite. *Amer. Mineral.* **41**, 689-700.
- MURDOCH, JOSEPH, AND ROBERT W. WEBB (1966) Minerals of California. *Calif. Div. Mines Geol. Bull.* **189**, 559 p.

Manuscript received, February 2, 1969; accepted for publication, January 18, 1971.