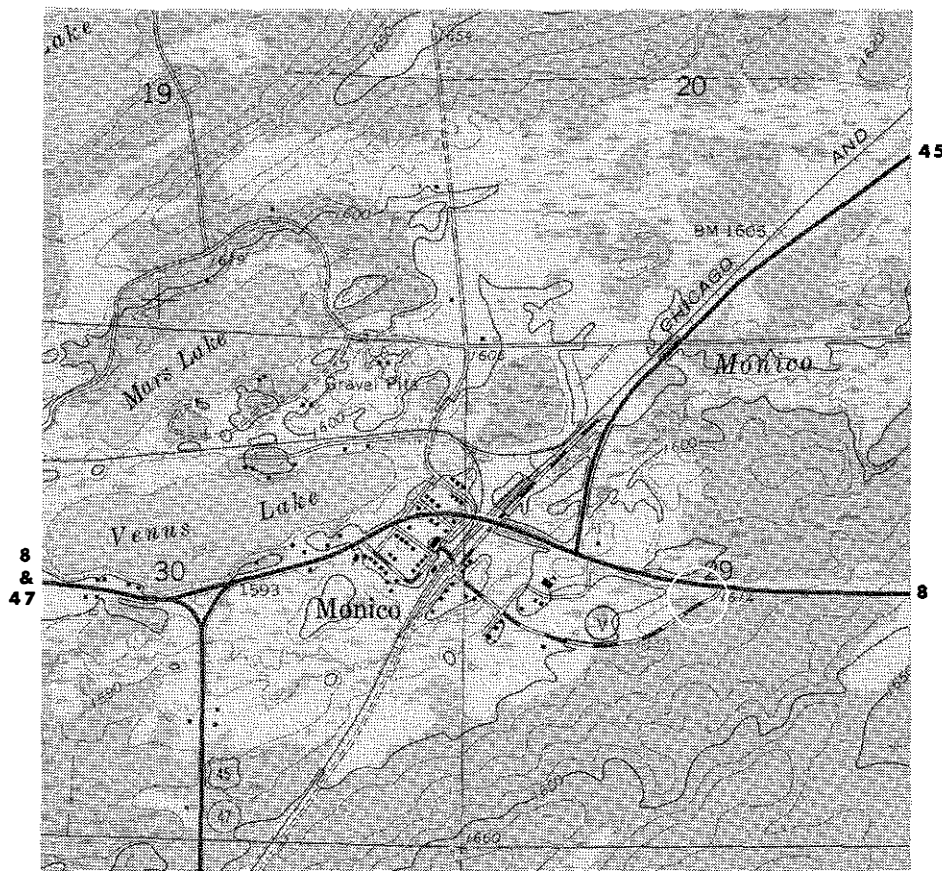


Title: Monico East - Mafic Pillow Basalt

Location: Intersection of U.S. 8 and County V, center of Sec. 29, T.36N., R.11E., Oneida County (Monico 7½-minute topographic quadrangle, 1965).



Author: M.G. Mudrey, Jr. (1978)

Description: A large outcrop is in the southwest corner of the intersection. The rock consists predominantly of sulfide-bearing, gray-green, chloritic pillow basalt trending N. 85° E., and dipping 80° SE. The two-foot thick by three-foot long pillows are slightly stretched and top to the south. Original pyroxene has altered to hornblende and chlorite. Plagioclase is extensively altered. The southeast edge of the outcrop is a ten-foot thick massive flow or sill. Diabasic texture in this unit is well developed.

Discussion: Two supracrustal sequences characterize the Middle Precambrian succession in northern Wisconsin and Michigan, a dominantly sedimentary unit including iron formations to the north, and a dominantly volcanic sequence including massive sulfide deposits to the south. Inasmuch as bedrock exposures are poor south of the Gogebic Range area, geologic maps of northern Wisconsin are based dominantly on geophysical interpretation. Units defined in the few areas of outcrop are extrapolated into the poorly exposed areas. The belt of rocks from Ladysmith on the west to Pembine on the east appears to be dominantly volcanic, with few intrusives. The volcanics in the Monico area are among the least deformed and better exposed in this belt. Pillows and other indicators of subaqueous deposition are evident in the volcanic rocks exposed in the Monico area. These features are well preserved because of the low metamorphic grade. The sequence around Monico appears

ON 36/11E/29 (2)

to young to the south, and the sequence is known to be repeated by faulting that trends east-northeast. This particular outcrop appears to lie stratigraphically above the massive sulfide deposit at Pelican River to the west, and possibly above the Crandon deposit to the east. It is representative of the basaltic rocks in the Monico area.