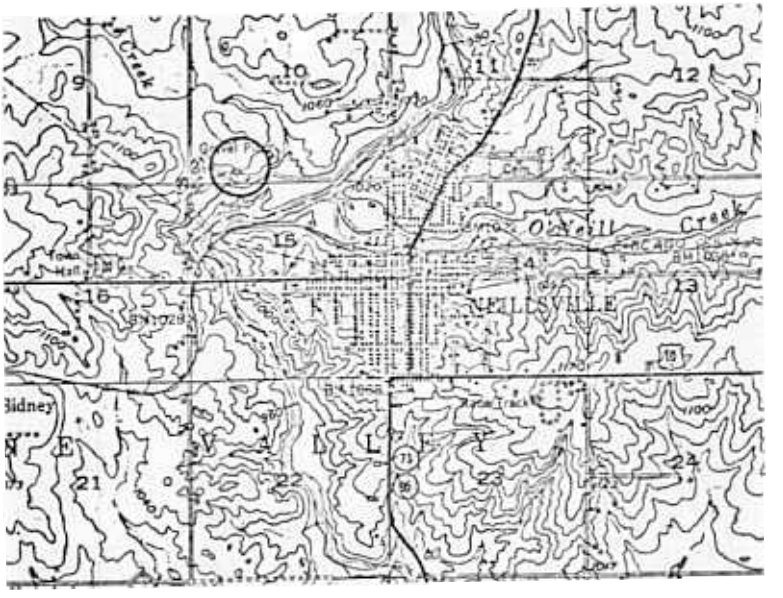
_____: Spheroidal Weathering - Neillsville, Granite (?)

LOCATION: SE 1/4, SW 1/4, Sec. 10, T 24 N, R 2 W, Neillsville 15' quadrangle



AUTHOR: P. E. Myers, UW - Eau Claire

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SUMMARY OF FEATURES:

Spheroidally weathered, coarse-grained, gneissic biotite granite(?) is quarried here for road construction materials. Foliation (N40°W, 35°SW) has had no obvious effect on development of residual spheroids up to four meters in diameter. The zone of spheroidal weathering is about 5 meters thick as exposed in this quarry. The largest spheroids have two and even three concentric exfoliation rinds, which spall off in large concavo-convex slabs. The most intensely weathered granite(?) at the top of the outcrop spalls as thin, lenticular chips 5-10 cm in diameter. Downward diminution in extent of exfoliation can be readily seen here. The spheroids developed by sequential weathering of first corners, then edges, then faces of joint blocks (Figure 1).

Specimens of fresh granite(?) are medium gray and are composed of quartz, sodic plagioclase, K-feldspar, and brown biotite, which occurs in small, lenticular clusters. Based on study of mineral grains only, the rock is tentatively classified as an adamellite.

Figure