



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 21 1984

MEMORANDUM FOR: James P. Knight, Assistant Director for
Components & Structures Engineering
Division of Engineering

FROM: Stephan Brocoum, Acting Chief
Geosciences Branch
Division of Engineering

SUBJECT: RECENT SMALL EARTHQUAKES NEAR MINEVILLE, NEW YORK

This past summer some earthquakes were felt near Mineville, New York (44.1N, 73.5W), which lies on the eastern edge of the Adirondack Mountains. The largest event was about magnitude 2 1/2. Leonardo Seeber of Lamont-Doherty Geological Observatory monitored the seismic activity over a four day period (September 8 through 11) and recorded about a thousand events. Most of the events were centered less than 3,000 feet deep and all were less than about magnitude 2 1/2. The seismicity has been associated with an ore mine, which was abandoned in 1971. The mine is 3,000 feet deep and half filled with water.

Stations of the Lamont-Doherty Seismic Network recorded small earthquakes (magnitudes of 1.4 to 3.0) near Mineville in 1981 (4 events) and 1982 (3 events). No seismicity was recorded near Mineville in the 1970's. The closest seismic stations are Middlebury, Vermont (30 km) and Wilmington, New York (43 km). Lamont, the U. S. Geological Survey and the New York State Geological Survey are investigating the possibility of further seismic monitoring and a geodetic survey across the area to investigate the possibility of elevation changes.

Mineville is about 160 km northwest of Yankee Rowe and Vermont Yankee and about 230 km east of Nine Mile Point and Fitzpatrick. The earthquakes at Minesville were not felt these sites.

We will keep you informed of any additional information available regarding these earthquakes. Phyllis Sobel (x24416) is the technical contact for this review.

A handwritten signature in cursive script, reading "Stephan Brocoum", is written over the typed name.

Stephan Brocoum, Acting Chief
Geosciences Branch
Division of Engineering

cc: See next page

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