## 5.9 by UC Berkeley Figures

## State Settles the Quake Dispute

So what WAS the magnitude of Monday's earthquake — 5.7 or 5.9 on the Richter scale?

In the face of disagreement from several laboratories over the size of the quake near Gilroy, state earthquake officials have decided to accept the 5.9 from the University of California at Berkeley over the 5.7 from the United States Geological Survey.

"We generally adopt the Berkeley reading because they use the same type of instrument that Charles Richter originally based the scale on," said seismologist Tousson R. Toppozada of the California Division of Mines and Geology.

A geophysicist at the National Earthquake Information Center in Golden, Colorado, which does its own calculation of earthquake magnitude came up with the same 5.7 as the USGS scientists in Menlo Park. But the Colorado group agreed with Toppozada.

"In Northern California, the best reading is probably the seismographic station in Berkeley," said geophysicist Leroy Irby at the federal earthquake center. "In Southern California, it's Pasadena (the Caifornia Institute of Technology."

Both Caltech in Pasadena and the Berkeley Seismographic Station use instruments called Wood-Anderson Seismographs, the same as used by Caltech seismologist Charles Richter when he developed the Richter scale in the 1930s.

The geological survey, Toppozada said, uses more sensitive instruments, that often reveal more details of ground motion from earthquakes. However, he said, to translate their readings into Richter magnitude, correction factors have to be computed in.

The final figure usually isn't much different from calculations based on the Wood-Anderson seismographs, he said, "but if you want the final figure, you should use a machine that doesn't need any correction. That's what they use at Berkeley."