UNCORRECTED ACCELEROGRAM FROM
FREITAS BUILDING, SANTA BARBARA

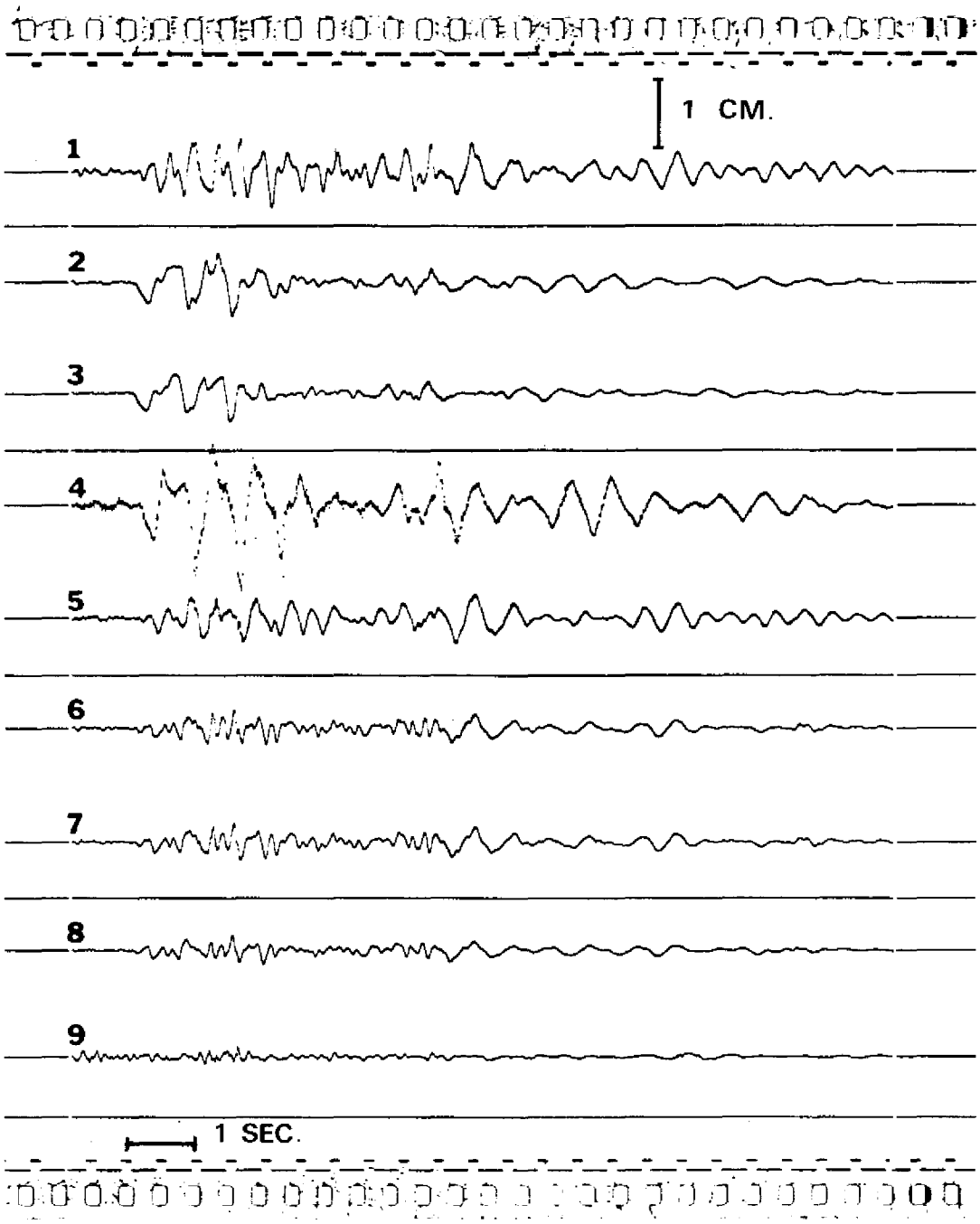

Fig. 3.8 Uncorrected Raw Accelerogram Recorded at Freitas Building, Santa Barbara. 1.8 cm $\cong$ 1g. (Provided by Office of Strong Motion Studies, California Division of Mines and Geology.)

The strong motion records recorded at Building 340 are shown in Fig. 3.10. Again it appears that the duration of strongest ground motion was approximately 2 to 3 seconds. The peak acceleration appears to be about 0.39g.

Goleta Substation, Southern California Edison Company

The Goleta Substation of the Southern California Edison Company is located approximately 1.6 kilometers north of U.S. Highway 101 on Glenn Annie Road. Details of the location of the instrument within the substation were not available at the time this report was written.

The accelerogram recorded at this site was corrected, digitized, and plotted at Kinemetrics, Inc. of Pasadena, California. A copy of the corrected accelerogram is shown in Figs. 3.11 a, b, and c. The duration of strongest ground motion was again approximately 2 to 3 seconds. The maximum acceleration at this site near the base of the Santa Ynez Mountains is reported as 0.286g.

Santa Barbara County Courthouse

The Santa Barbara County Courthouse is located at the corner of Anacapa and Anapamu Streets in downtown Santa Barbara (Figs. 3.1 and 1.3). A photograph of the structure is shown in Fig. 3.12. The accelerograph was located in the basement.

The strong motion records from this location are shown in Figs. 3.13 a, b, and c. The duration of strongest motion appears to have been approximately 2 seconds. The peak acceleration is 0.20g in the S 42^{o} W direction.

Bradbury, Juncal, and Gibraltar Dams

The accelerograms recorded at these locations had very small amplitudes and are not included in this report.

Seismoscope Records

Seismoscope records of strong motion were obtained from instruments at two locations. One record was obtained from a seismoscope in the basement of Biological Sciences II on the UCSB campus (see Fig. 3.2). A photograph of this multistory reinforced concrete structure is shown in Fig. 3.14. A copy of the seismoscope record from this instrument is shown in Fig. 3.15. The unusual high frequency motion in the lower right of the figure is believed to have resulted when a 3 ft by 7 ft unhung door fell on the instrument during the earthquake. This loose door was propped against a nearby wall before the earthquake, and was found lying on top of the instrument by an elevator inspector after the earthquake. The door was evidently removed by maintenance personnel before the U.S.G.S. inspector arrived, and it made no marks on the instrument case.

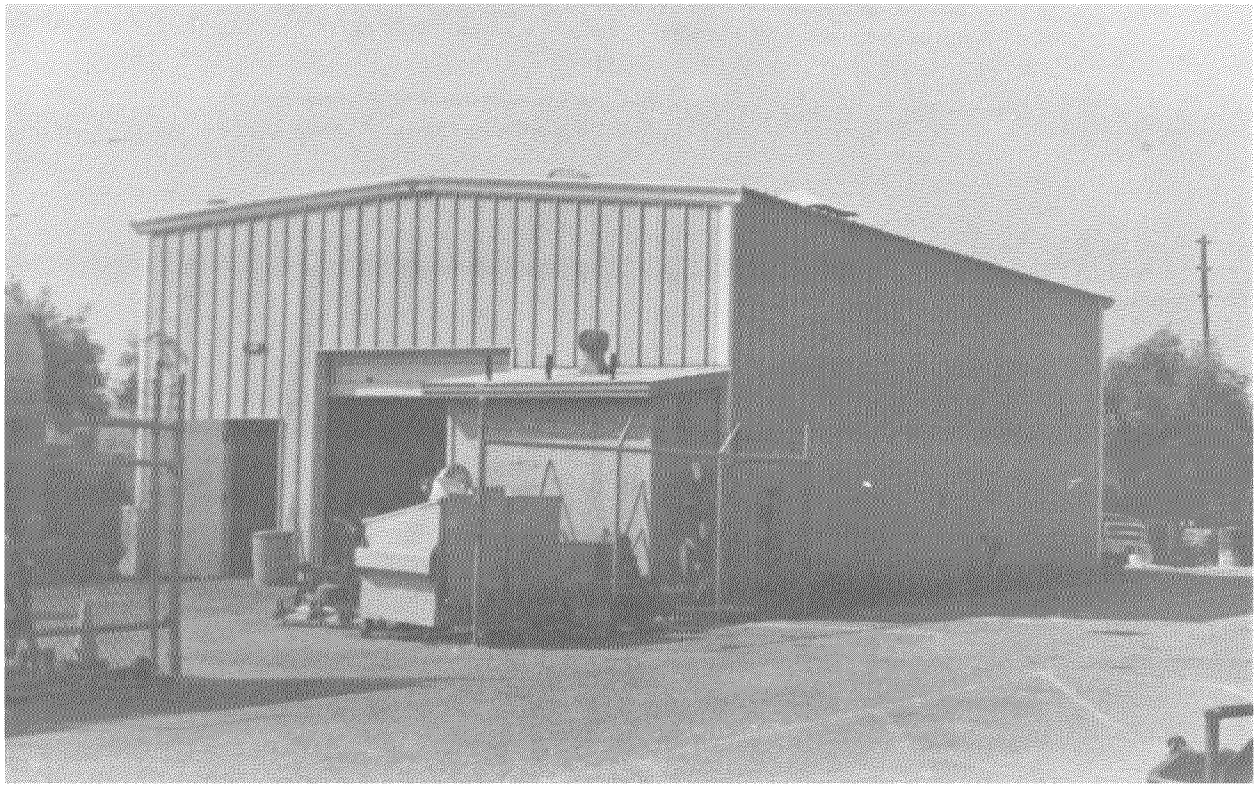

Fig. 3.9 Building 340, UCSB campus. (Location of Goleta Free Field instrument).

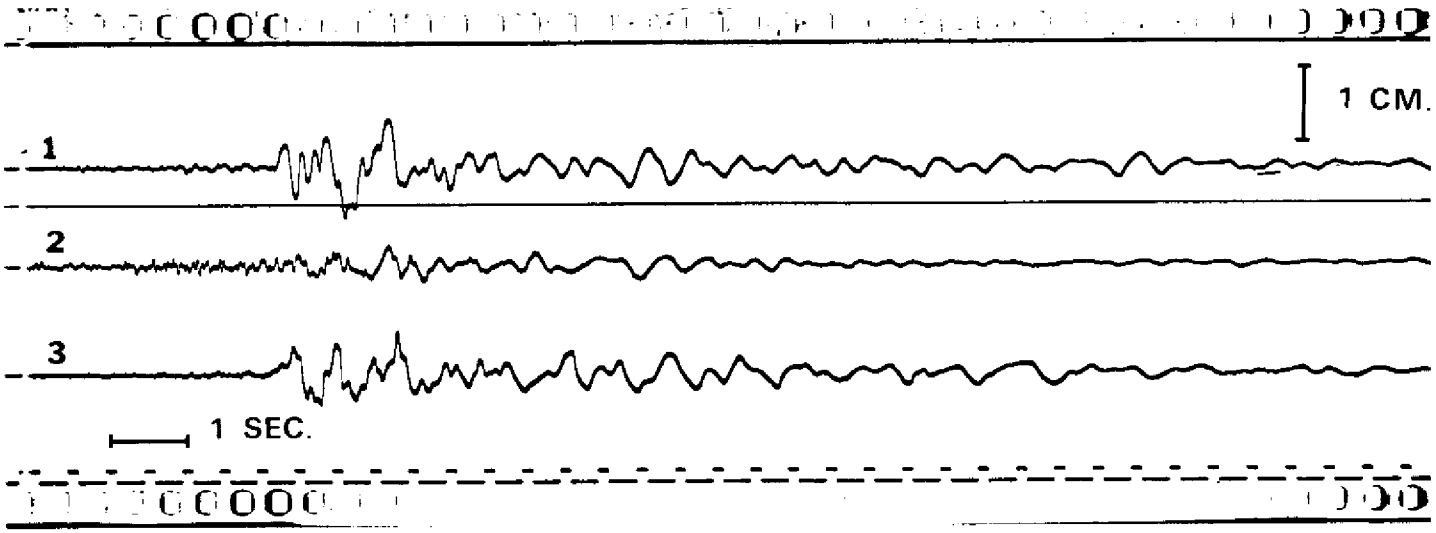

Fig. 3.10 Uncorrected Raw Accelerogram Recorded at Building 340, UCSB (Goleta Free-Field.) Traces 1 and 3 are horizontal and 2 is vertical. 1.8 cm $\cong$ 1g. (Provided by Office of Strong Motion Studies, California Division of Mines and Geology.)