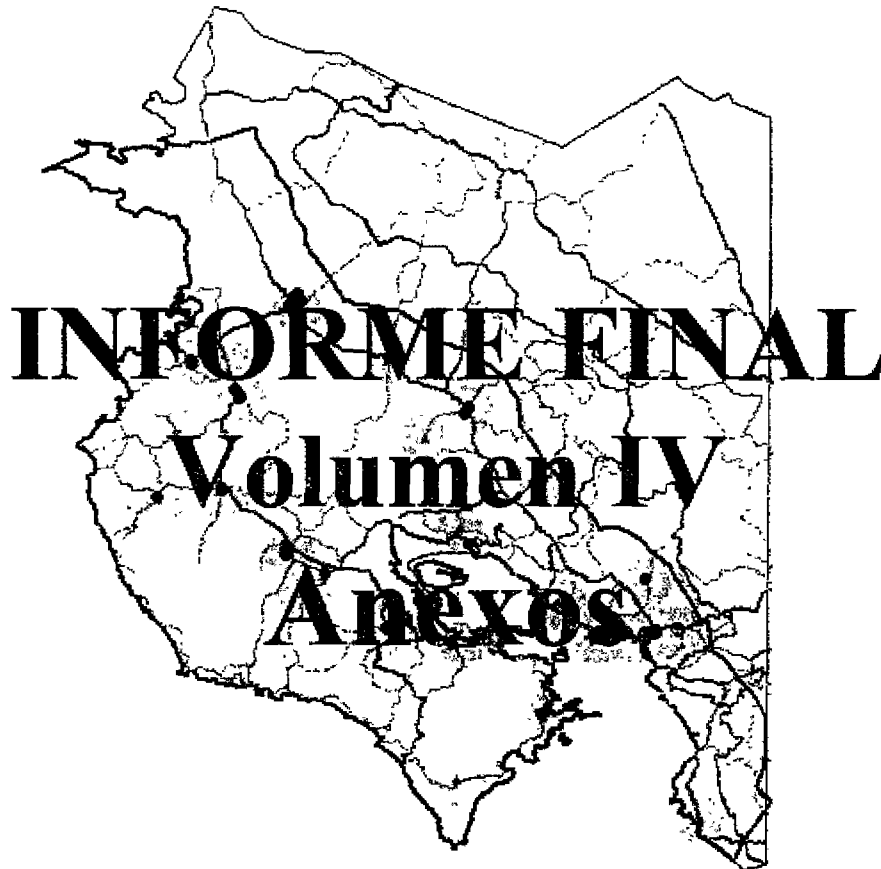


Evaluación del Impacto Ingenieril de un Terremoto en la Península de Nicoya



Preparado por
Programa de Ingeniería Sísmica, LANAMME
Universidad de Costa Rica
Coordinador del Proyecto: Ing. Guillermo Santana, Ph.D.

para
Comisión Nacional de Emergencias

Setiembre 1999

ANEXO 1

INFORMACIÓN GENERAL DE LOS MOVIMIENTOS SÍSMICOS UTILIZADOS

SISMO DE LIMÓN (22 ABRIL, 1991; LIMÓN, COSTA RICA)

SISMO DE LOMA PRIETA (17 OCTUBRE, 1989; CALIFORNIA, ESTADOS UNIDOS)

ProShake Report

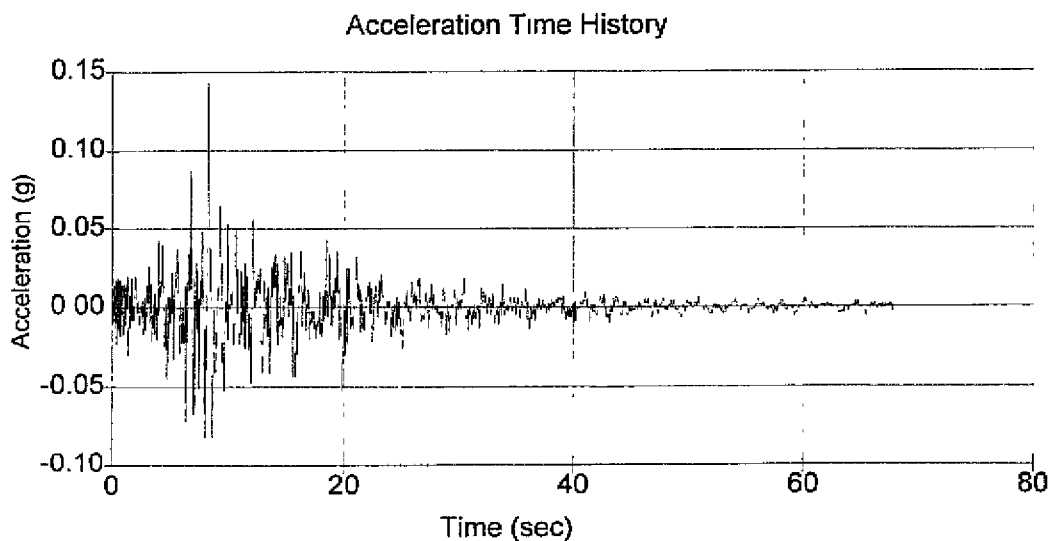
Input Motion

Number of Motions:2
Number of Iterations:10
Strain Ratio: 0.65
Tolerance: 2.00%

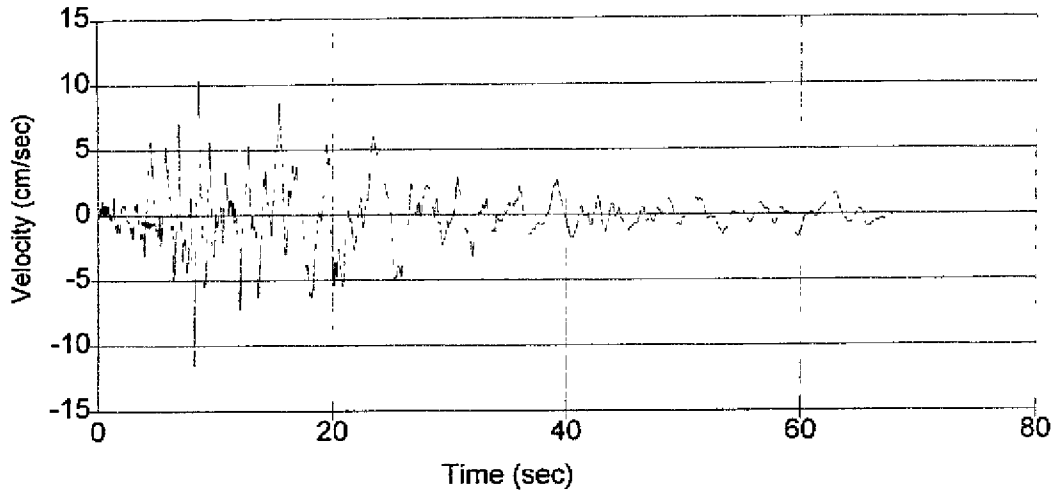
File Name	N° of Acc. Values	Max. Acc. (g)	Time Step (sec)	Cutoff Freq. (Hz)	No of Fourier Terms
C:\PROGRA~1\PROSHAKE\CACHI.EQ	3393	0.144	0.020	20.00	4096
C:\PROGRA~1\PROSHAKE\YERBA.EQ	2000	0.065	0.020	20.00	2048

Motion 1. Limon Earthquake april 22, 1991 (Limón, Costa Rica) recorded Cachí station on rock outcrop

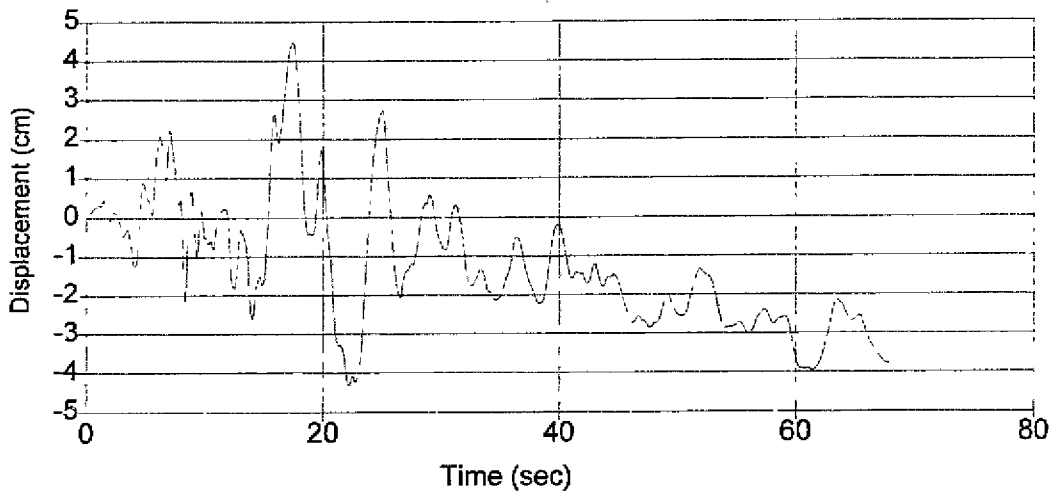
Earthquake File:	C:\PROGRA~1\PROSHAKE\CACHI.EQ
Peak Acceleration (g):	0.1436
Peak Velocity (cm/sec):	11.56
Peak Displacement (cm):	4.48
RMS Acceleration (g):	0.0273
Arias Intensity (cm/sec):	20.12
Response Spectrum Intensity (g ²):	0.0007
Predominant Period (sec):	0.55
Bracketed Duration (sec):	13.42



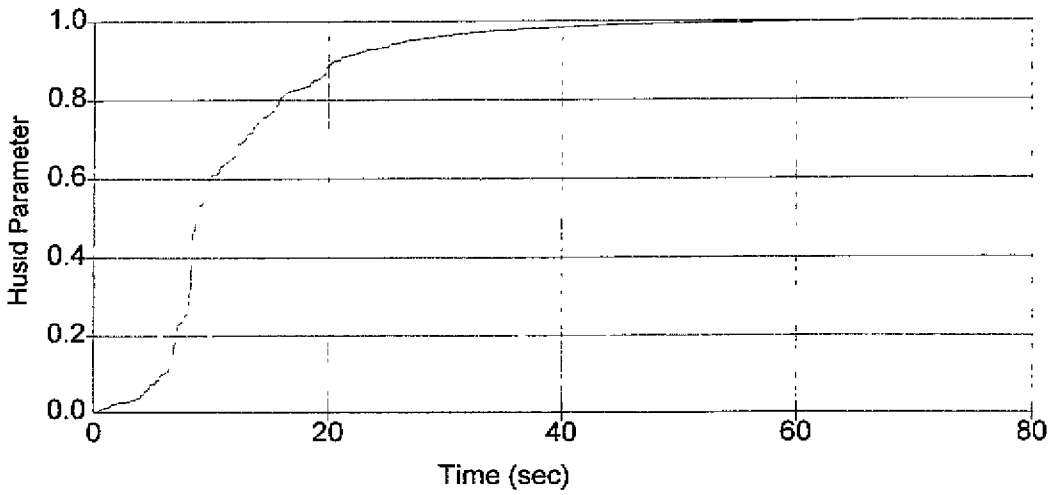
Velocity Time History



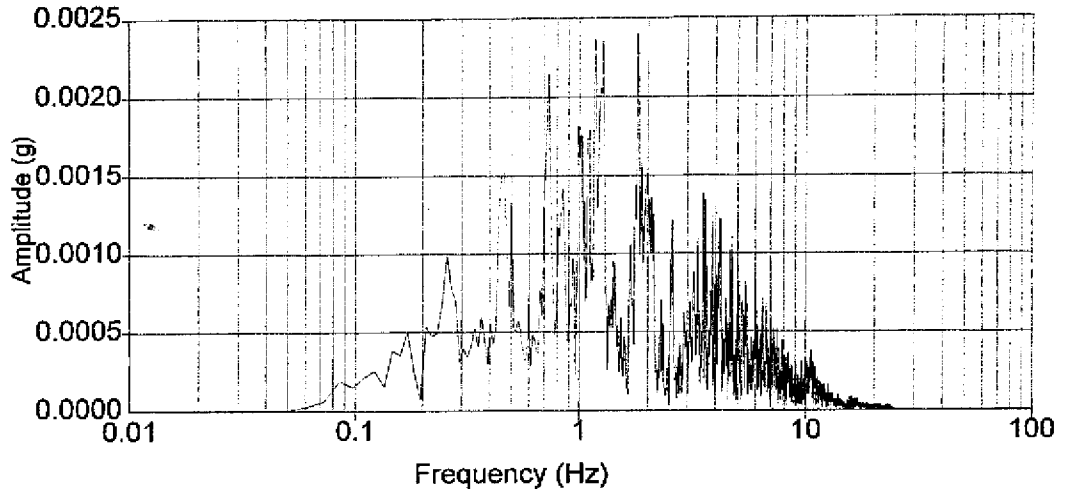
Displacement Time History



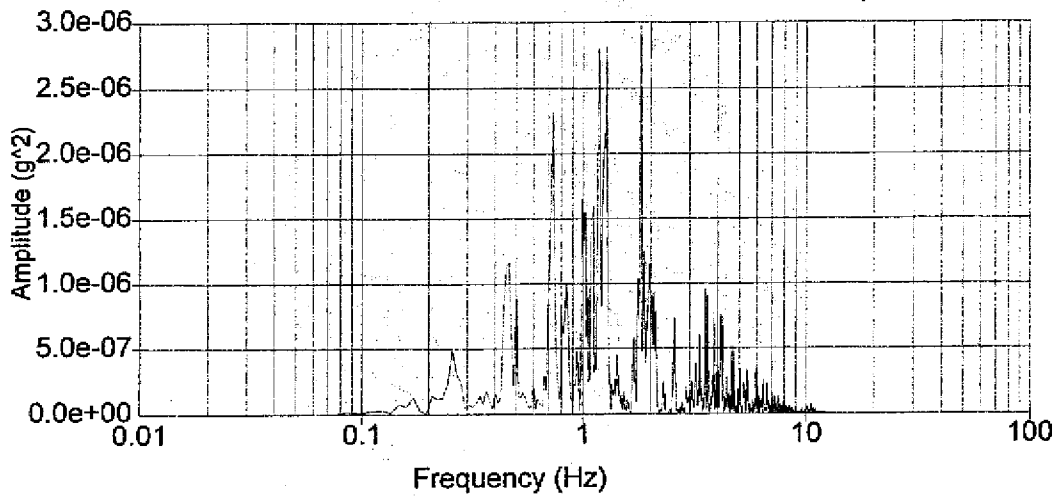
Husid Plot of Acceleration



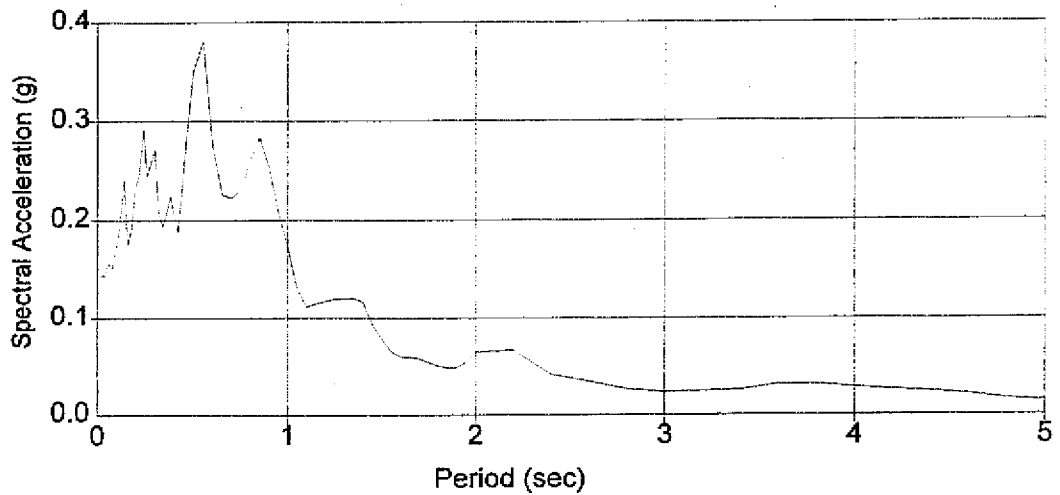
Acceleration Fourier Spectrum

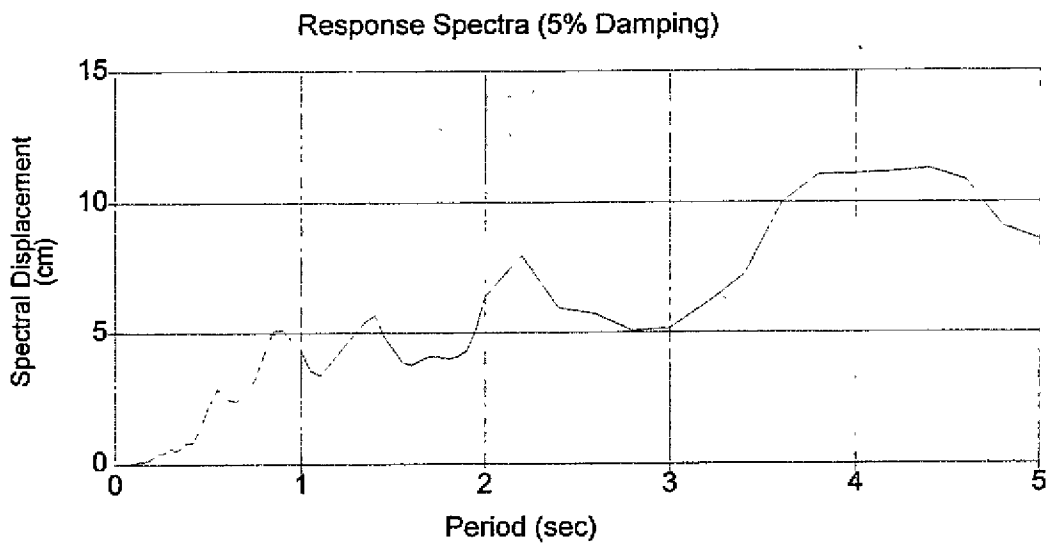
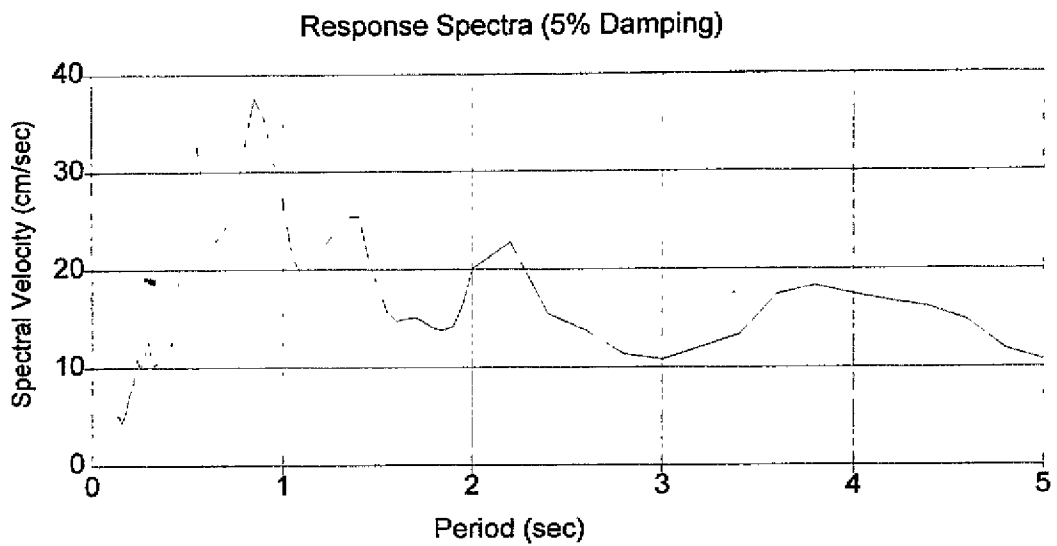


Acceleration Power Spectrum



Response Spectra (5% Damping)

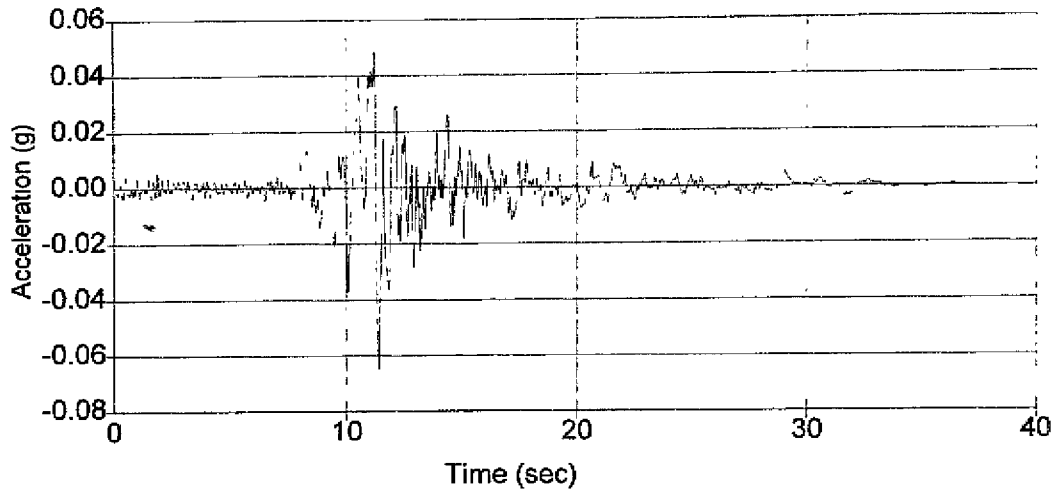




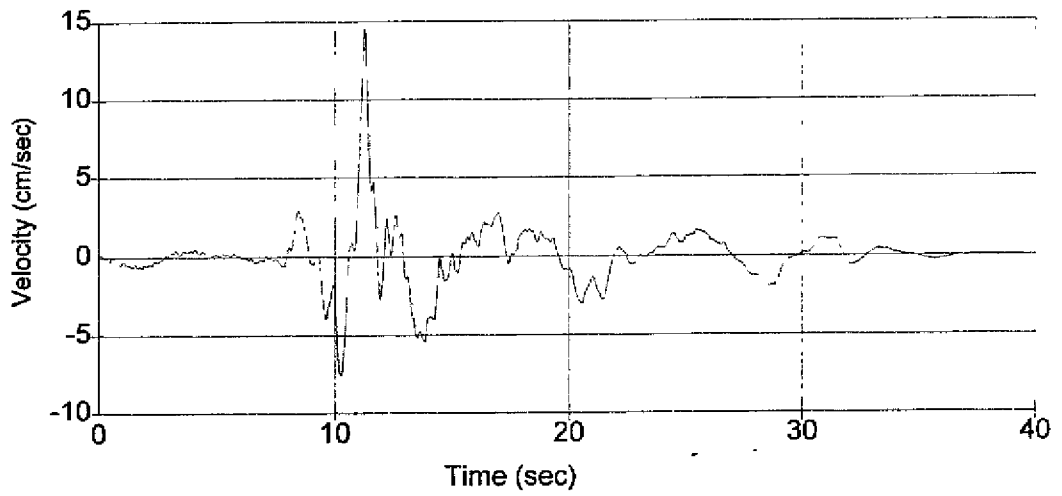
Motion 2. Loma Prieta Earthquake, october 17, 1989 (California, E.U.A.) recorded Yerva Buena Island station on rock outcrop

Earthquake File:	C:\PROGRA~1\PROSHAKE\YERBA.EQ
Peak Acceleration (g):	0.0651
Peak Velocity (cm/sec):	14.55
Peak Displacement (cm):	3.85
RMS Acceleration (g):	0.0609
Arias Intensity (cm/sec):	3.96
Response Spectrum Intensity (g ²):	0.0037
Predominant Period (sec):	1.41
Bracketed Duration (sec):	0.08

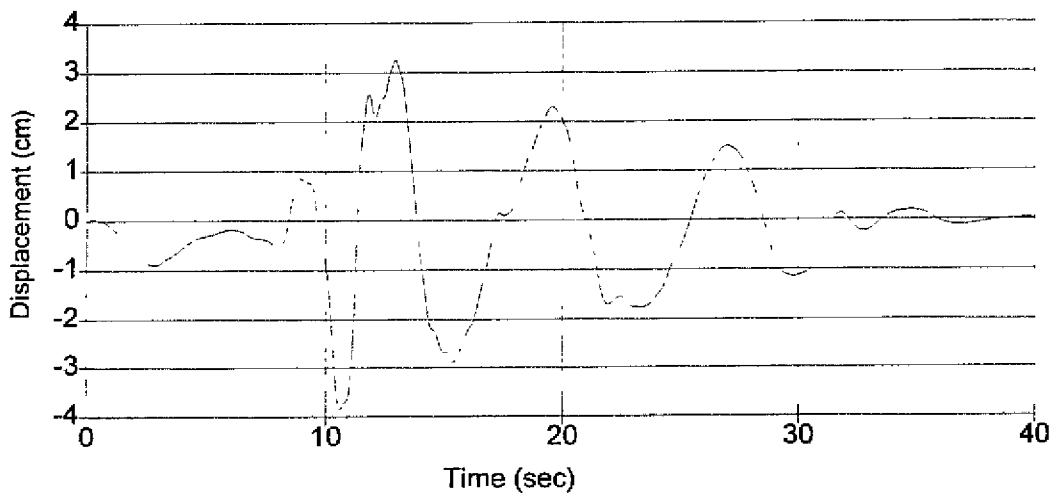
Acceleration Time History



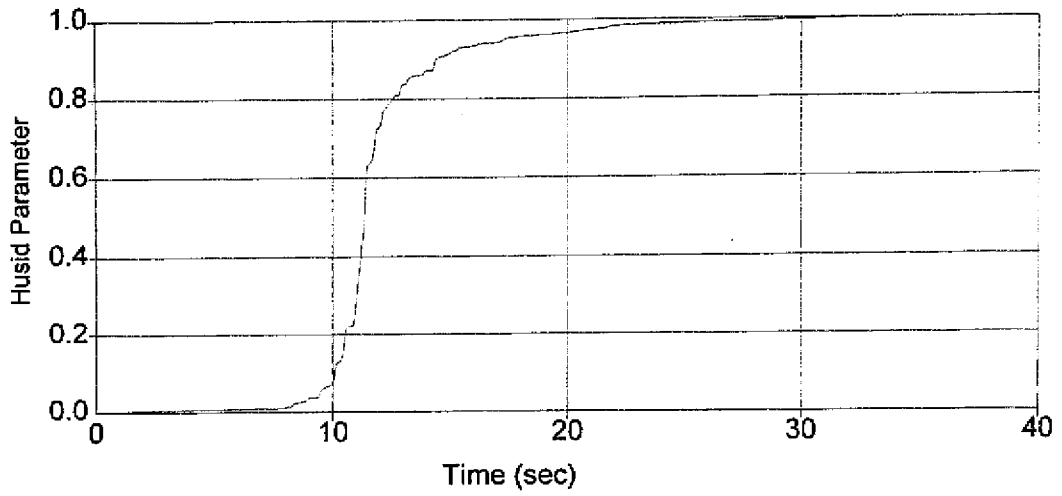
Velocity Time History



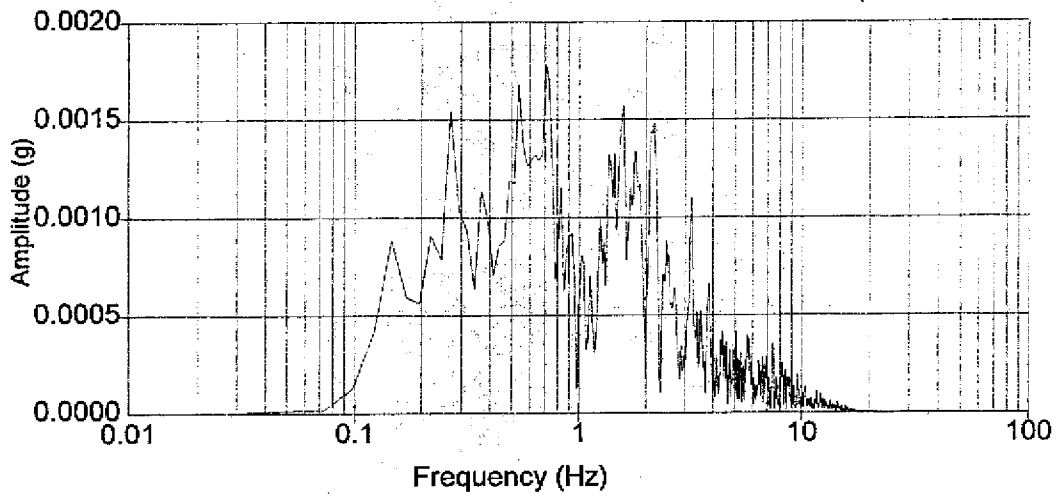
Displacement Time History



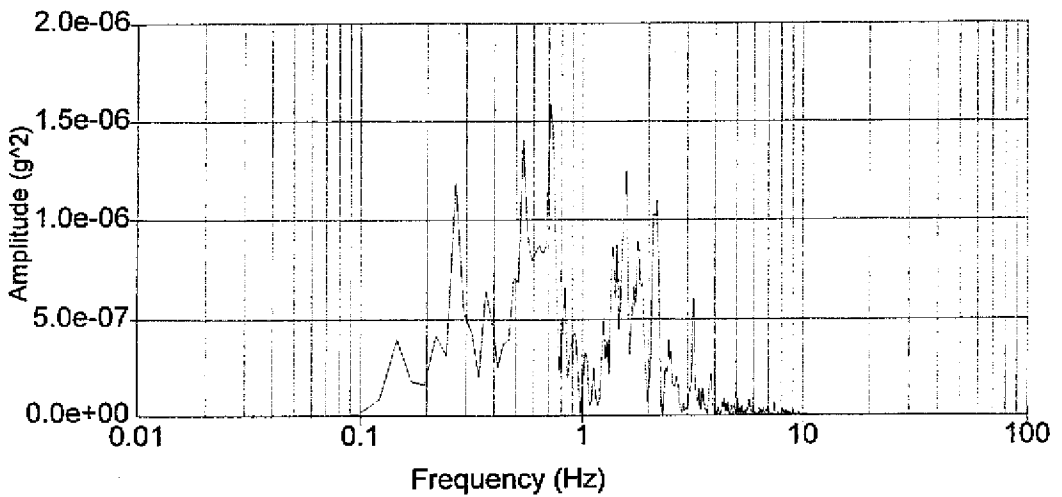
Husid Plot of Acceleration



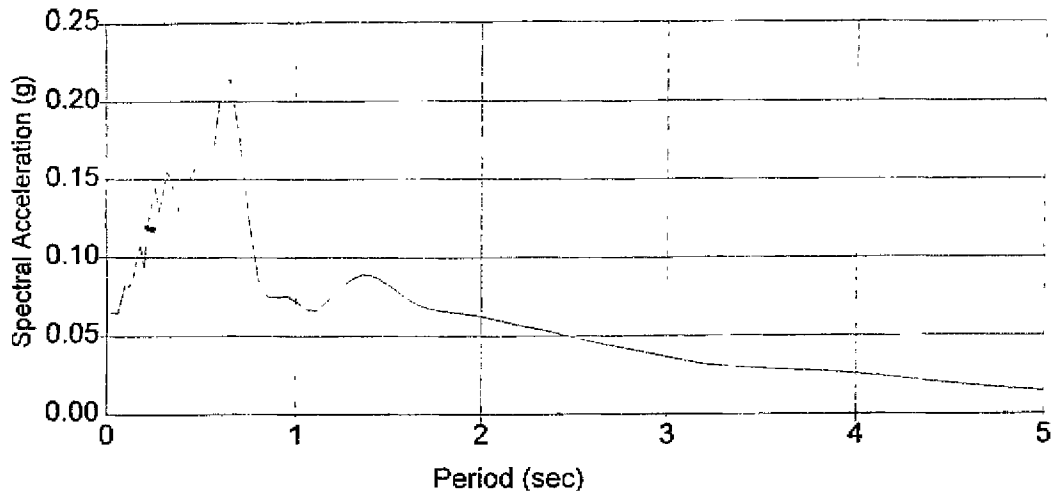
Acceleration Fourier Spectrum



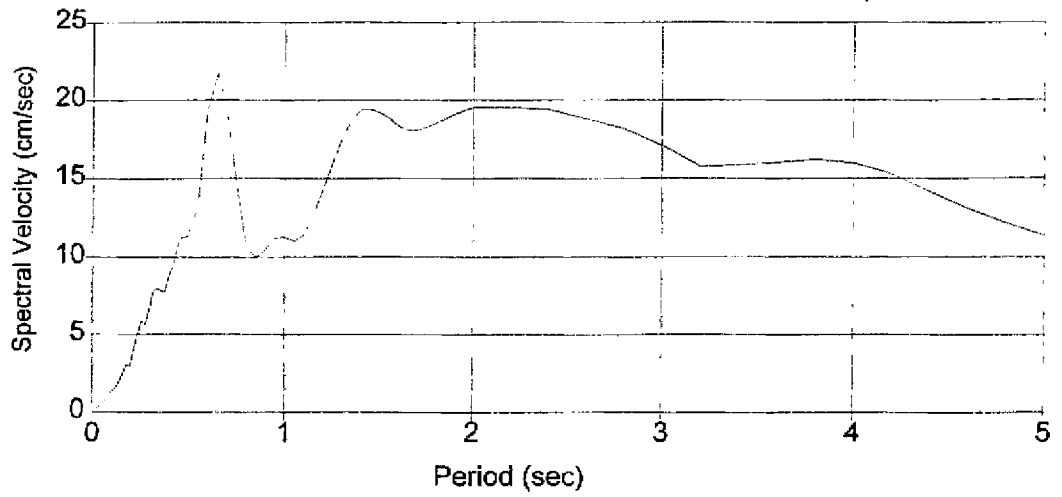
Acceleration Power Spectrum



Response Spectra (5% Damping)



Response Spectra (5% Damping)



Response Spectra (5% Damping)

