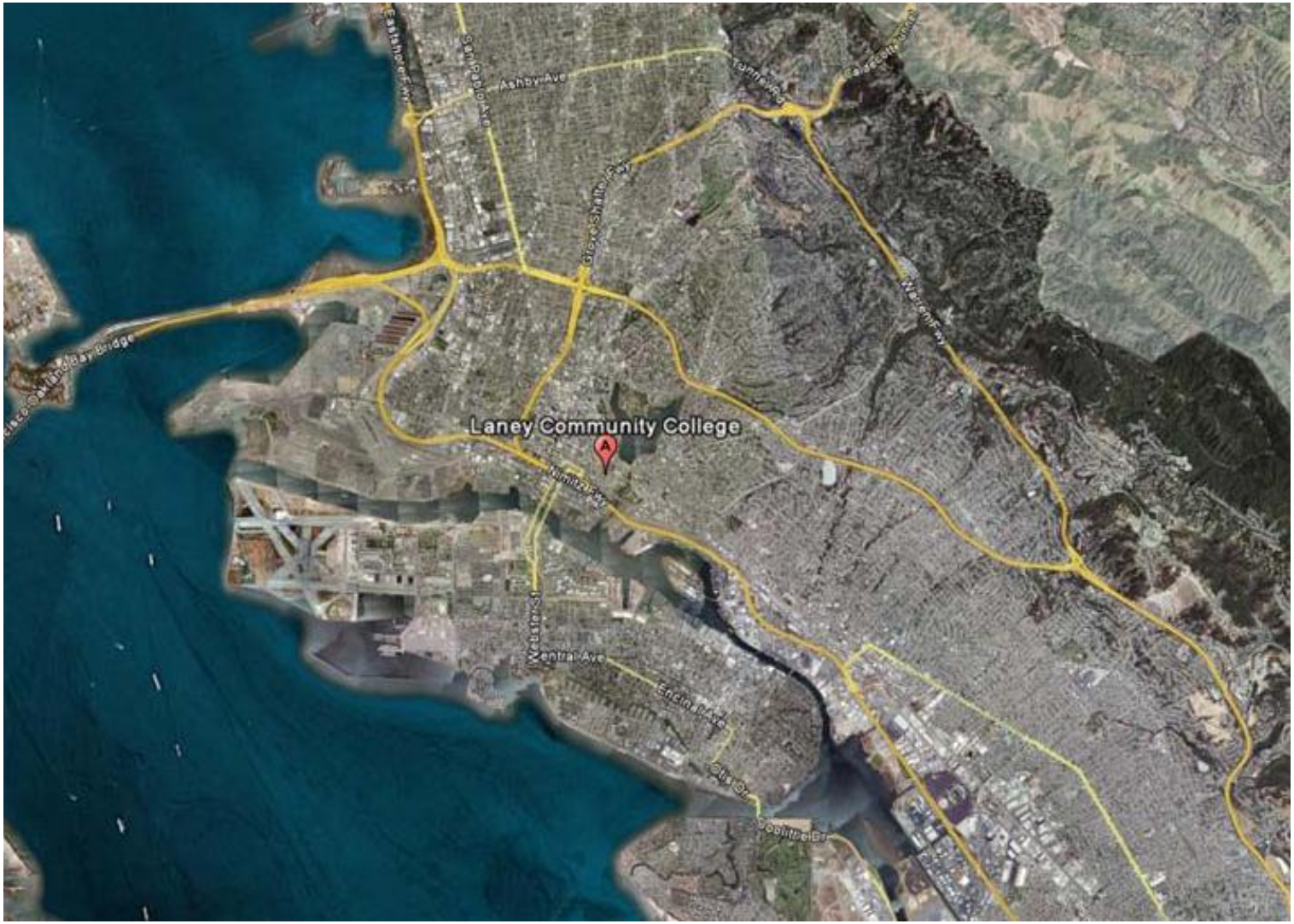

10,000 ft

Source: GoogleEarth Professional

SAFETY FIRST	CLIENT: Peralta Community College	**Site Location**
terraphase engineering	PROJECT: Laney College Student Center	
	PROJECT NUMBER: 0034.001.001	**FIGURE 1**

File Name: figure 1 - site location drawn by: jrr checked by: ag

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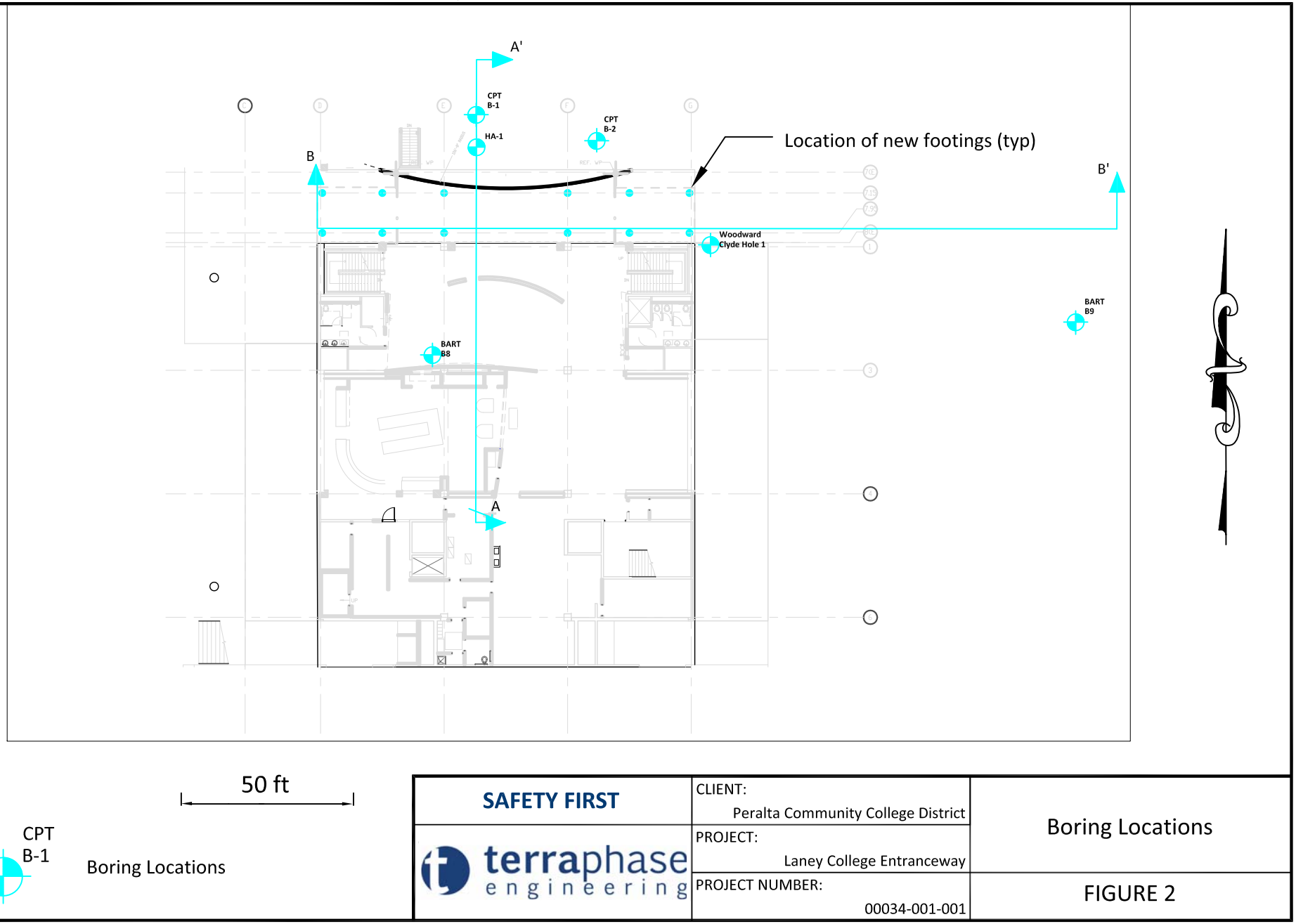
J:\CADD FILES\0034 Peralta\Figure 2 - Boring Locations.dwg Drawn by: jrr ; Checked by: em



SAFETY FIRST	CLIENT: Peralta Community College District	Boring Locations
terraphase engineering	PROJECT: Laney College Entranceway	
	PROJECT NUMBER: 00034-001-001	FIGURE 2

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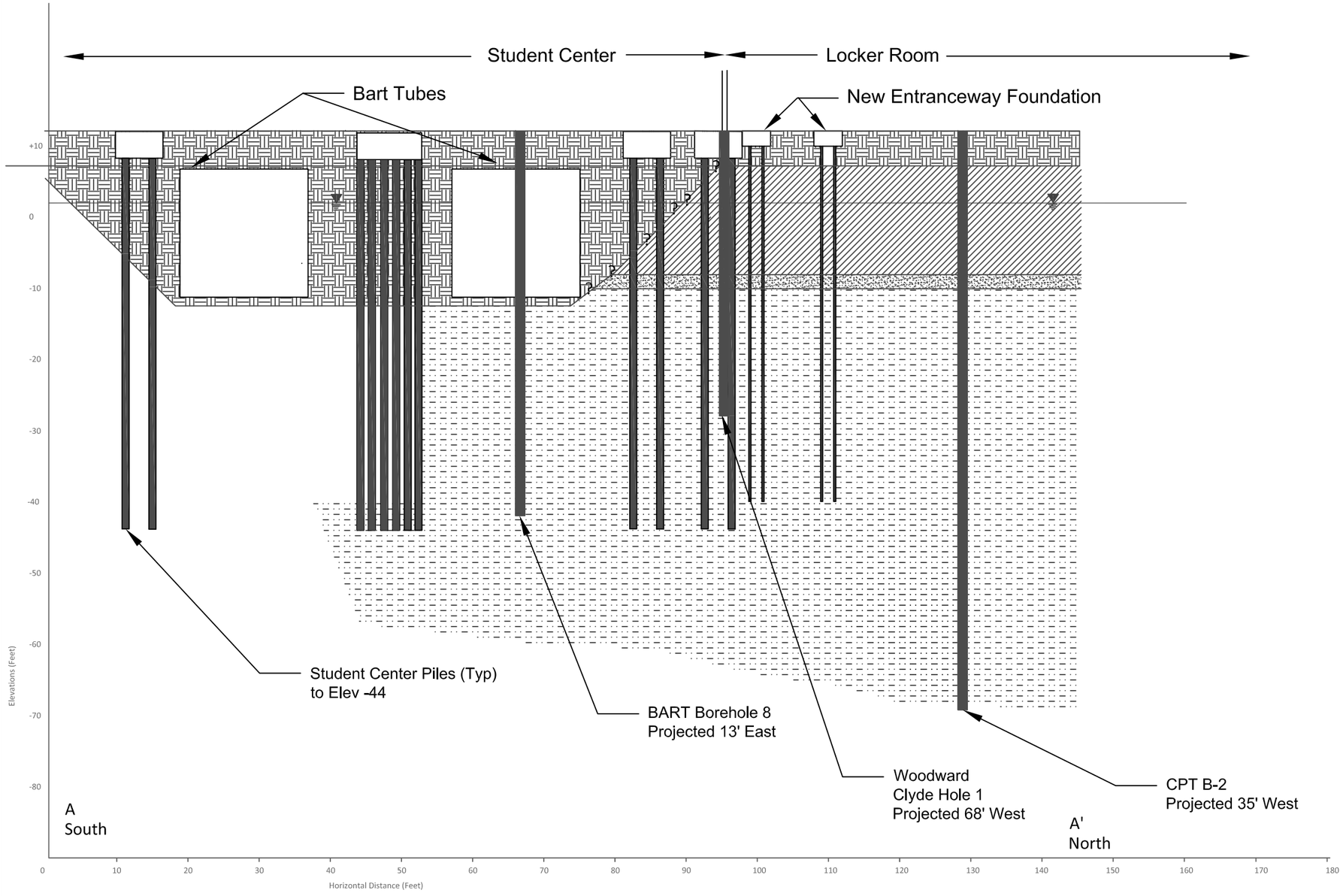


Notes:

Fill

Sand

Younger Bay Mud (soft, organic with peat)

Old Bay Mud (stiff)

Approximate groundwater March 2012

CPT B-1 is directly on the section at the location of CPT B-2

New piles shown schematically, actual depths will be selected in field, minimum of 14' into stiff clay

? Queried where uncertain

BART Tubes become pile supported approximately 300 feet east of the Student Center - BART piles are between 29 and 42 feet long

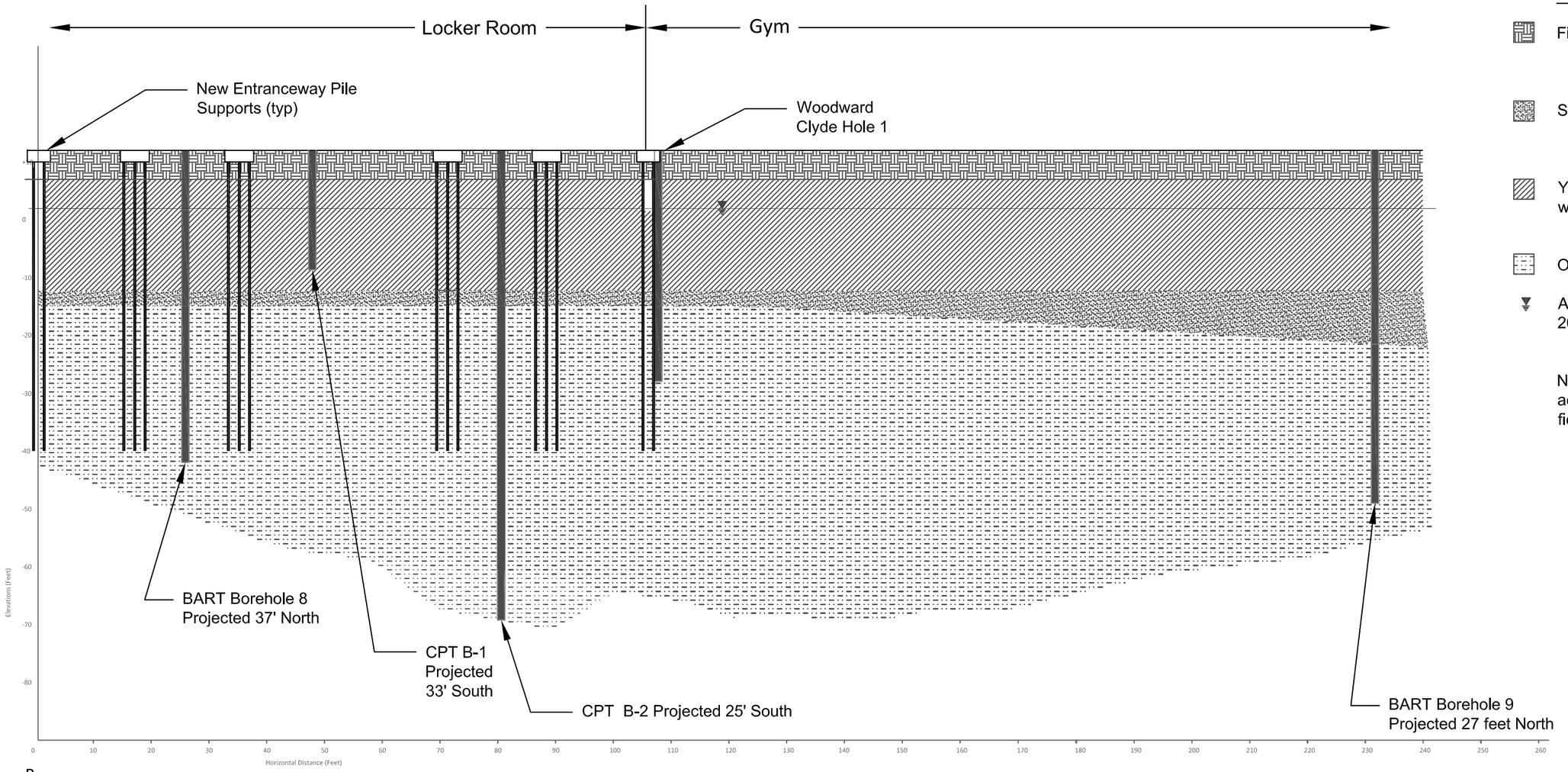
0' 8' 16' 32'

Approximate Scale in Feet

Sources: BART Drawing CT2-2-16, CT3-3-17, SE102-1-75, SE103-2-76, SE107-1-80, SE123-2-96 (all 5-23-68) and KPW Structural Plan S2.1 dated 7-27-2009, LFR 2009

J:\CADD FILES\0034 Peralta\X-SECTION a-a laney college.dwg Drawn by: JRR ; Checked by: EM

SAFETY FIRST	CLIENT: PERALTA COMMUNITY COLLEGE DIST.	CROSS SECTION A-A'
terraphase engineering	PROJECT: LANEY COLLEGE OAKLAND, CALIFORNIA	
	PROJECT NUMBER: 0034.001.001	FIGURE 3



Notes:

- Fill
- Sand
- Younger Bay Mud (soft, organic with peat)
- Old Bay Mud (stiff)
- Approximate groundwater March 2012

New piles shown schematically, actual depths will be selected in field, minimum of 14' into stiff clay

Sources: BART Drawing CT2-2-16, CT3-3-17, SE102-1-75, SE103-2-76, SE107-1-80, SE123-2-96 (all 5-23-68) and KPW Structural Plan S2.1 dated 7-27-2009

SAFETY FIRST	CLIENT: PERALTA COMMUNITY COLLEGE DIST.	CROSS SECTION B-B'
terraphase engineering	PROJECT: LANEY COLLEGE OAKLAND, CALIFORNIA	
	PROJECT NUMBER: 0034.001.001	FIGURE 4

J:\CADD FILES\0034 Peralta\X-SECTION a-a laney college.dwg Drawn by: JRR ; Checked by: EM

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1000 ft

SAFETY FIRST	CLIENT: Peralta Community College	Site Topography
terraphase engineering	PROJECT: Laney College Student Center	
	PROJECT NUMBER: 0034.001.001	FIGURE 5

File Name: figure 1 - site location drawn by: jrr checked by: ag

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Explanation

Approximate Location of Future Student Center

Source: Oakland Historical Society

SAFETY FIRST	CLIENT: Peralta Community College	**Filling the Estuary**
terraphase engineering	PROJECT: Laney College Student Center	
	PROJECT NUMBER: 0034.001.001	**FIGURE 6**

File Name: figure 6 - filling the estuary drawn by: jrr checked by: em

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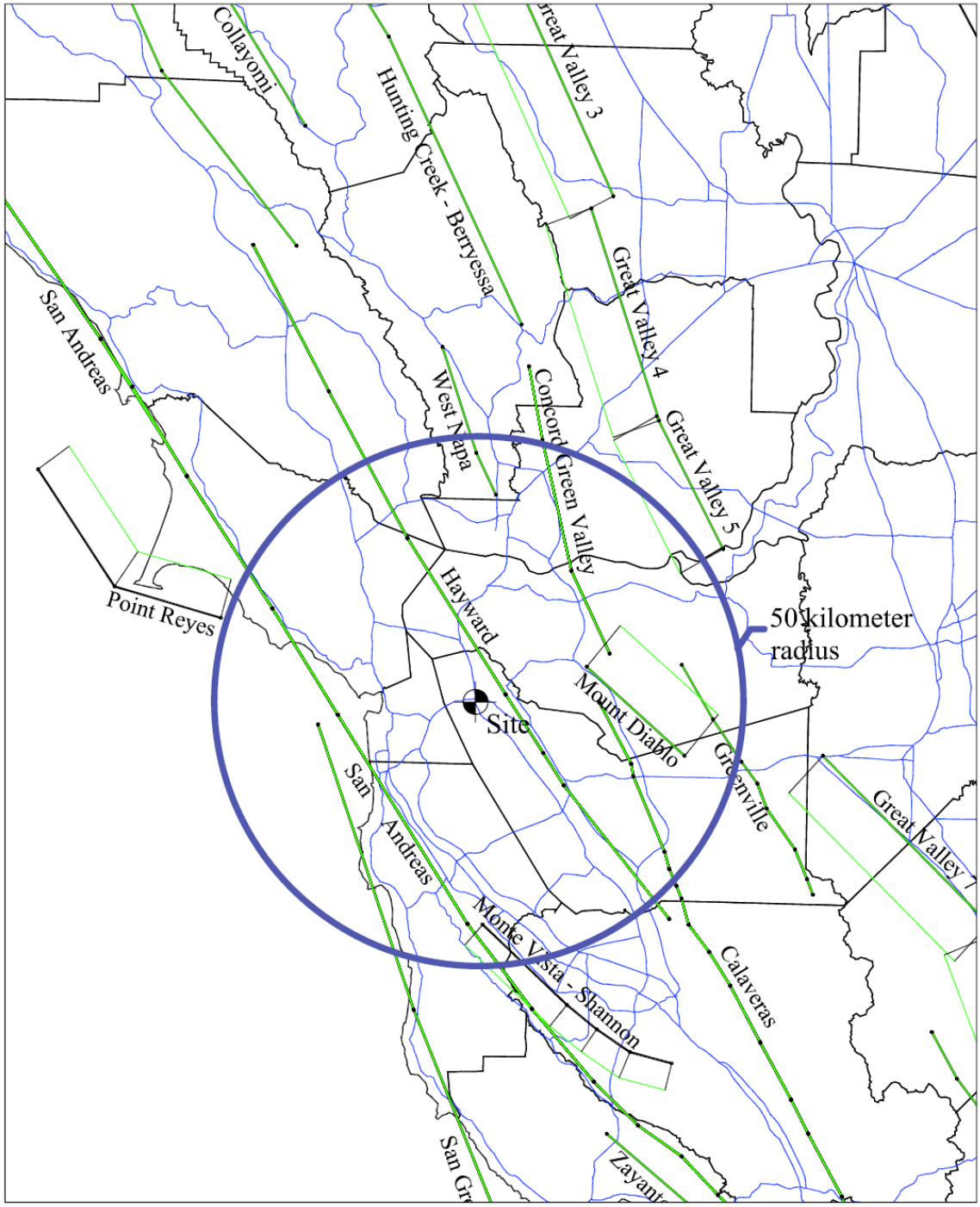

Source: Cao et al, 2003

Fault Bend

Fault Trace

Fault Bottom

County Line

Major Road

N

SAFETY FIRST	CLIENT: Peralta Community College	
terraphase engineering	PROJECT: Laney College Student Center New Entranceway	FAULT MAP
	PROJECT NUMBER: 0034-001-001	FIGURE 7

File Name: figure 7 - fault map drawn by: jrr checked by: em

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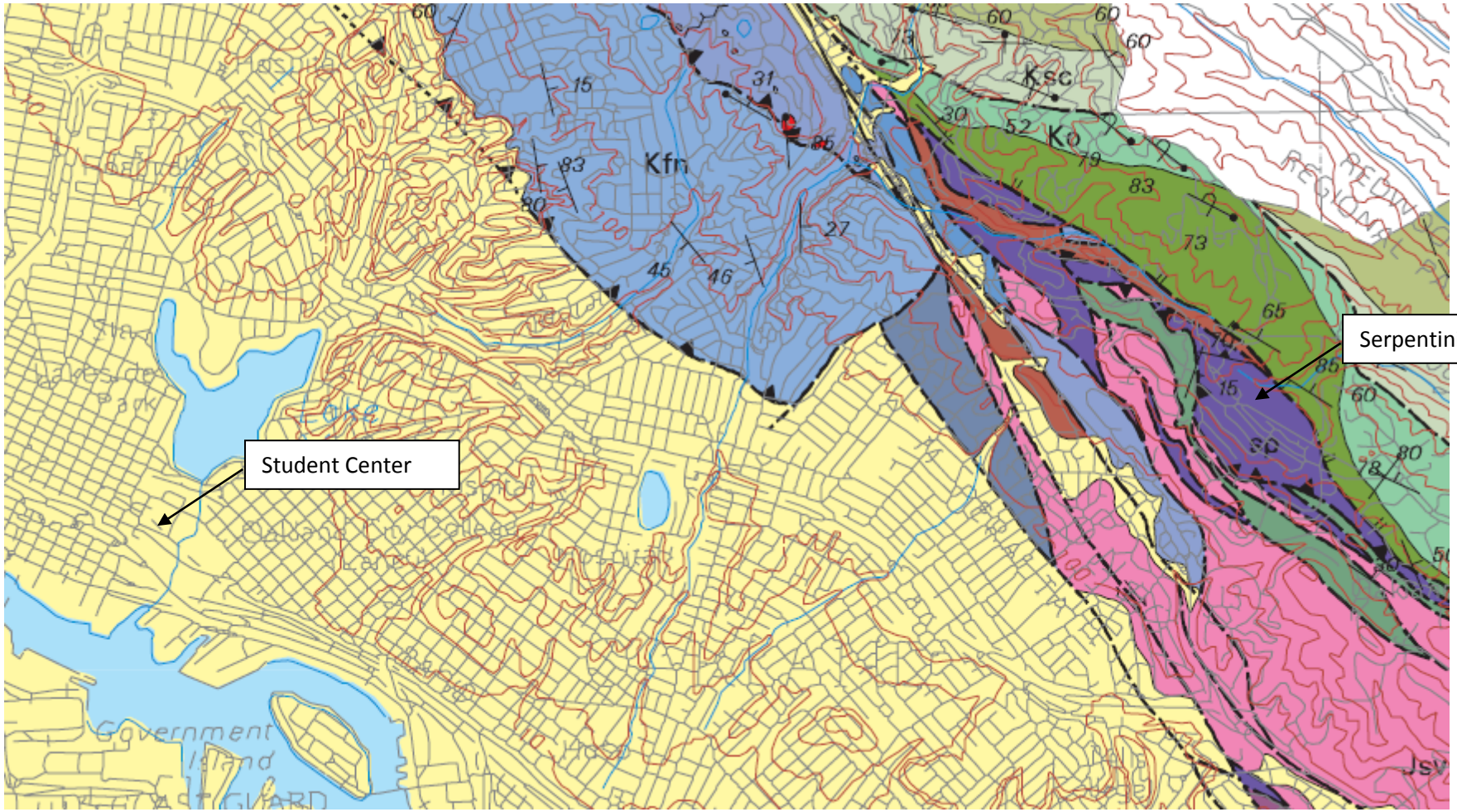

Jsv Keratophyre and quartz keratophyre

Qu Undivided surficial deposits

Kfn Novato Quarry terrane – sandstone and siltstone

sp Serpentinite

KJf Undivided Franciscan rocks

Source: Graymer et al. 1996

Oblique fault with thrust or reverse component, approximately located

5,000 ft

SAFETY FIRST	CLIENT: Peralta Community College	GEOLOGICAL MAP
terraphase engineering	PROJECT: Laney College Student Center	
	PROJECT NUMBER: 0034.001.001	FIGURE 8

File Name: figure 8 - geological map drawn by: jrr checked by: em

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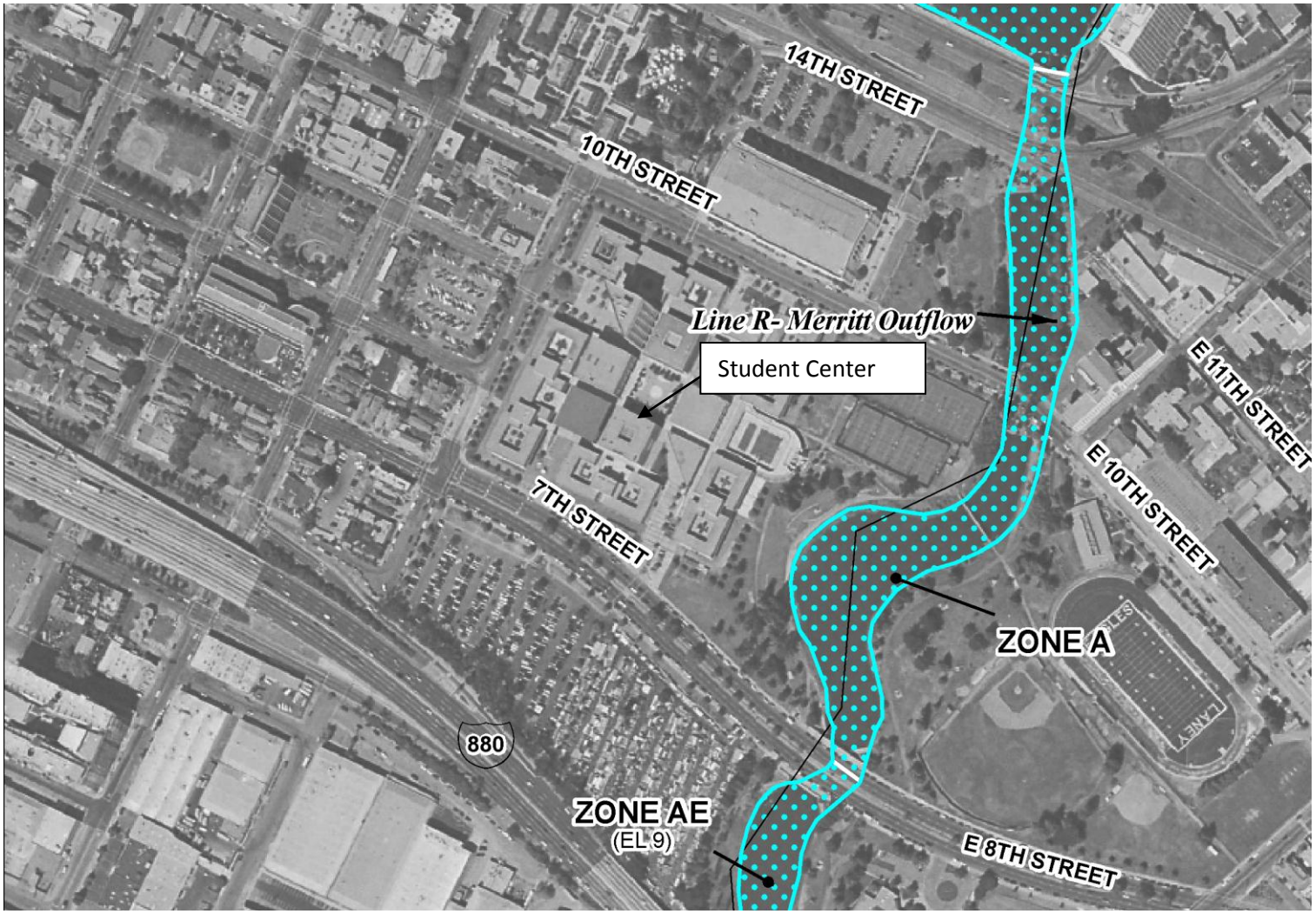

500 ft

Source: FEMA 2009

SAFETY FIRST	CLIENT: Peralta Community College	FLOOD MAP
terraphase engineering	PROJECT: Laney College Student Center	
	PROJECT NUMBER: 0034.001.00	FIGURE 9

File Name: figure 9 - flood map drawn by: jrr checked by: em

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APPENDIX A
SITE SPECIFIC SEISMIC HAZARD ASSESSMENT

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A.1 Introduction

This Appendix provides general ground motion parameters, as required by the 2007 California Building Code (CBC). It also includes a site-specific ground motion analysis, as required by 2007 CBC 1614A.1.2 for sites located within 10 kilometers (km) of an active fault. The ground motion analysis was conducted in accordance with American Society of Civil Engineers (ASCE) Standard 7-05, Sections 21.2 to 21.4 (ASCE 2005).

The evaluation addressed fundamental building periods ranging from 0 to 4 seconds.

A.2 ASCE 7-05, Section 11.4: Seismic Ground Motion Parameters

The Site Class was determined based on previous investigations conducted by Woodward Clyde (1966) and interpretation of the 82 foot deep CPT probe installed by Terraphase in 2012. Other ground motion parameters were obtained using the U.S. Geological Survey's "Earthquake Ground Motion Tool", version 5.09 (USGS 2008a), using the following options:

- Geographic Region = 48 Conterminous States
- Data Edition= 2005 ASCE 7 Standard
- Latitude (Degrees) = 37.79604° North
- Longitude (Degrees) = 122.26299° West

The resulting ground motion parameters may be summarized as follows:

- $\mathbf{S_S}$ = 1.505
- $\mathbf{S_1}$ = 0.600
- **Site Class: E** (soft clay soil, see note below on Site Classification)
- $\mathbf{F_a}$ = 0.9
- $\mathbf{F_v}$ = 2.4
- $\mathbf{S_{MS}} = F_a \times S_S$ = 1.35 (This number changes – see Section A.7)
- $\mathbf{S_{M1}} = F_v \times S_1$ = 1.44
- $\mathbf{S_{DS}} = (2/3) \times S_{MS} = (2/3) \times 1.35$ = 0.90 (This number changes – see Section A.7)
- $\mathbf{S_{D1}} = (2/3) \times S_{M1} = (2/3) \times 1.44$ = 0.96
- $\mathbf{T_0 = 0.2 * S_{D1}/S_{DS}}$ = 0.21 seconds
- $\mathbf{T_s = S_{D1}/S_{DS}}$ = 1.063 seconds
- **Average Shear Wave Velocity of top 30 meters:** 175 meters/second (see note)

- **Depth to 1,000 meter per second shear wave velocity:** 213 meters (Rogers 1997)

Revised Values per ASCE 7 Section 21.4

- $\mathbf{S_{DS}}$ = 1.14 (spectral acceleration at 0.2 second not less than 90% of all higher period spectral accelerations)
- $\mathbf{S_{D1}}$ = 1.0 (the greater of the spectral acceleration at 1 second or twice the spectral acceleration at 2.0 seconds)
- $\mathbf{S_{MS}}$ = 1.71
- $\mathbf{S_{M1}}$ = 1.51

The soil at the Site was classified as Site Class E (see Table 20.3-1 in the CBC) because the average equivalent SPT blow counts in the top 100 feet of the soil profile were less than 15. A shear wave velocity of 175 meters per second (upper end of the building code range for Site Class E soils) was used in the Next Generation of Attenuation (NGA) attenuation relations that required a shear wave velocity.

A.3 Probabilistic MCE Response Spectrum

Section 21.2.1 of ASCE (2005) requires a probabilistic maximum considered earthquake (MCE) response spectrum. A probabilistic response spectra was generated using the program EZ-Frisk version 7.62 (Risk Engineering 2012). The resulting spectra is shown in Table A-1 and on Figure A-1. Appendix B contains an abridged copy of the EZ-Frisk output.

This analysis was performed using the three NGA Equations: Abrahamson and Silva (2008), Chiou and Youngs (2008), and Boore et al. (2008) – the output selected was the maximum rotated component. The USGS (2008b) seismic model was used to delineate active earthquake faults within 200 kilometers of the Site, including gridded faults representing earthquakes occurring on non-mapped faults.

A.4 ASCE 7-05, Section 21.2.2: Deterministic MCE Response Spectrum

Section 21.2.2 of ASCE (2005) requires a deterministic MCE response spectrum, based on 150% of the largest spectral accelerations associated with active faults within the region. DSA (2009) has modified this requirement by requiring that, when using the NGA equations, the 84th percentile spectra be reported. The local faults with the highest associated peak ground accelerations ($\geq$ 0.17 g) and Modified Mercalli Intensities ($\geq$ VIII) are summarized in Table 3 in the main text. The USGS (2008b) model includes gridded seismic sources intended to represent earthquakes occurring in places other than on mapped faults. These gridded faults are included in recognition that not all significant earthquakes occur on mapped faults.

A deterministic response spectra (84th percentile maximum rotated horizontal component) was generated for the Site using EZ-Frisk, the USGS (2008b) seismic model and the three NGA relations listed above. Different attenuation relations were used for the gridded deep earthquake source. The seismic hazard at the Site was dominated by the nearby Hayward Fault (5.6 km from the Site) and the gridded characteristic reverse fault (5.0 km from the Site).

The 84th percentile Deterministic Response Spectra (maximum rotated horizontal component) for the Site is presented in Table A-2 and shown on Figure A-2A. A lower limit deterministic MCE response spectra were then generated, in accordance with Section 21.2.2 and Figure 21.2-1 of ASCE (2005) based on the previously determined values of F_a and F_v (Section A.2) with $S_s = 1.5$ and $S_1 = 0.6$. The resulting Lower Limit Deterministic MCE Response Spectrum is shown in Table A-2 and on Figure A-2B. A Final Deterministic MCE Response Spectrum was then generated, using the greater of the Maximum and Lower Limit Deterministic MCE Response Spectra. The resulting Final Deterministic MCE Response Spectrum is shown in Table A-2 and on Figure A-2B.

A.5 ASCE 7-05, Section 21.2.3: Site Specific MCE Response Spectrum

Section 21.2.3 of ASCE (2005) requires a Site-Specific MCE Response Spectrum, to be taken as the lesser of the Probabilistic MCE Response Spectrum (from Figure A-1) and the Deterministic MCE Response Spectrum (from Figure A-2B). These two spectra are plotted together on Figure A-3.

The deterministic MCE spectral accelerations are typically lower, and therefore govern the Site-Specific MCE Response Spectrum at most periods (Figure A-3). The probabilistic spectra is lower than the deterministic spectra below spectral periods of 0.03 second.

A.6 ASCE 7-05, Section 21.2.3: Design Response Spectrum

Section 21.3 of ASCE (2005) requires a design response spectrum, where the design response accelerations are two-thirds of the site-specific MCE response accelerations (from Figure 3). The Site-Specific MCE Response Spectrum and the corresponding Final Design Response Spectrum are shown in Table A-4 and on Figure A-4.

Section 21.3 of ASCE (2005) defines a lower limit on the Final Design Response Spectrum, based on the Lower Limit Probabilistic Design Response Spectrum generated using the parameters presented in Section A.2. The Lower Limit Design Response Spectrum is 80% of the Probabilistic Design Response Spectrum; it is shown on Table A-4 and on Figure A-4.

A.7 ASCE 7-05, Section 21.4: Design Acceleration Parameters

Section 21.4 of ASCE (2005) requires recalculation of design acceleration parameters, based on the final design response accelerations at periods of 0.2, 1, and 2 seconds.

The design acceleration parameters as required by ASCE (2005), Section 21.4 are slightly different than those defined above in Section A.1 and are greater than 80% of the previously calculated values:

- $\mathbf{S_{DS}}$ = 1.14 (spectral acceleration at 0.2 second not less than 90% of all higher period spectral accelerations)
- $\mathbf{S_{D1}}$ = 1.0 (the greater of the spectral acceleration at 1 second or twice the spectral acceleration at 2.0 seconds)
- $\mathbf{S_{MS}}$ = 1.71
- $\mathbf{S_{M1}}$ = 1.51

Table A-1
Probabilistic Response Spectrum
2,475 Year Return Period
Laney College, Oakland, California

Period (sec)	Acceleration (g)
0	1.083
0.05	1.171
0.1	1.550
0.2	2.108
0.3	2.202
0.4	2.139
0.5	2.046
0.75	1.789
1	1.566
2	1.075
3	0.747
4	0.547

Response Spectra shown graphically in Figure 1

Source: EZ Frisk v. 7.62 Build 001

Seismic Model: USGS 2008

Attenuation Relations:

Abrahamson-Silva (2008) NGA MRC

Boore-Atkinson (2008) NGA USGS 2008 MRC

Chiou-Youngs (2008) NGA MRC

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Figure A-1. Probabilistic MCE Response Spectrum
Laney College Student Center
2% Exceedance in 50 Years, 5% Damping

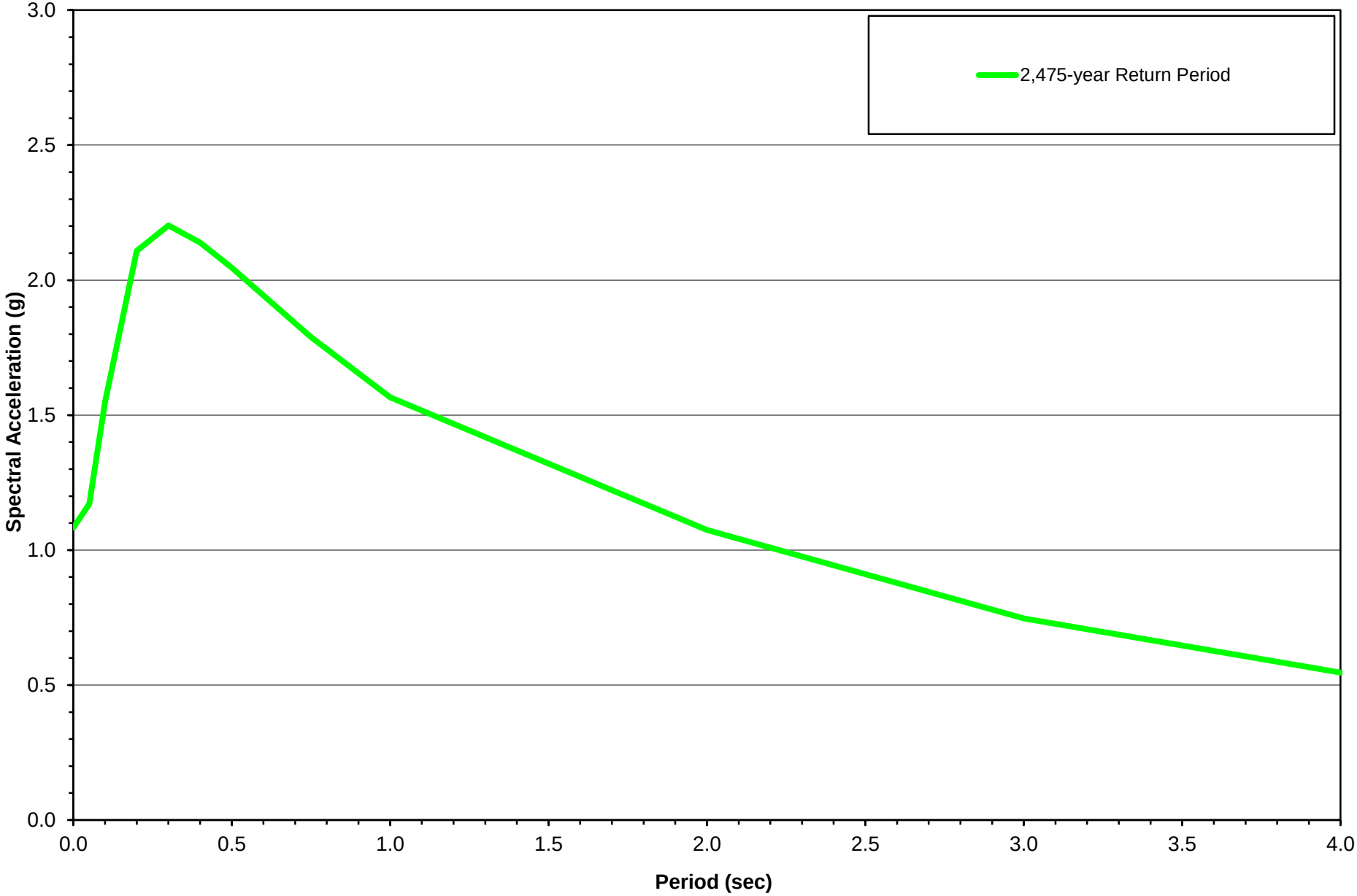

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Table A-2
Final Deterministic MCE Response Spectrum
Laney College, Oakland, California

Period (sec)	Deterministic Spectral Acceleration		
	Fault-Based MCE (g)	Lower-Limit MCE (g)	Final MCE (g)
0	0.790	*1.35*	1.350
0.01	0.842	*1.35*	1.350
0.02	0.893	*1.35*	1.350
0.03	0.944	*1.35*	1.350
0.04	0.994	*1.35*	1.350
0.05	1.045	*1.35*	1.350
0.06	1.097	*1.35*	1.350
0.075	1.176	*1.35*	1.350
0.09	1.251	*1.35*	1.350
0.1	1.295	*1.35*	1.350
0.11	1.332	*1.35*	1.350
0.12	*1.364*	1.35	1.364
0.13	*1.391*	1.35	1.391
0.14	*1.414*	1.35	1.414
0.15	*1.434*	1.35	1.434
0.16	*1.451*	1.35	1.451
0.17	*1.467*	1.35	1.467
0.18	*1.482*	1.35	1.482
0.19	*1.496*	1.35	1.496
0.213	*1.530*	1.35	1.530
0.22	*1.539*	1.35	1.539
0.24	*1.561*	1.35	1.561
0.26	*1.578*	1.35	1.578
0.28	*1.593*	1.35	1.593
0.3	*1.606*	1.35	1.606
0.32	*1.618*	1.35	1.618
0.34	*1.627*	1.35	1.627
0.36	*1.634*	1.35	1.634
0.38	*1.637*	1.35	1.637
0.4	*1.637*	1.35	1.637
0.42	*1.632*	1.35	1.632
0.44	*1.623*	1.35	1.623
0.46	*1.611*	1.35	1.611
0.48	*1.598*	1.35	1.598
0.5	*1.586*	1.35	1.586
0.55	*1.555*	1.35	1.555
0.6	*1.519*	1.35	1.519
0.65	*1.482*	1.35	1.482

Period (sec)	Deterministic Spectral Acceleration		
	Fault-Based MCE (g)	Lower-Limit MCE (g)	Final MCE (g)
0.7	*1.443*	1.35	1.443
0.75	*1.405*	1.35	1.405
0.8	*1.368*	1.35	1.368
0.85	1.329	*1.35*	1.350
0.9	1.291	*1.35*	1.350
0.95	1.254	*1.35*	1.350
1	1.218	*1.35*	1.350
1.063	1.175	*1.35*	1.350
1.067	1.173	*1.35*	1.350
1.1	1.152	*1.31*	1.309
1.2	1.091	*1.20*	1.200
1.3	1.035	*1.11*	1.108
1.4	0.983	*1.03*	1.029
1.5	0.936	*0.96*	0.960
1.6	0.892	*0.90*	0.900
1.7	0.851	*0.85*	0.851
1.8	0.812	*0.80*	0.812
1.9	*0.775*	0.76	0.775
2	*0.739*	0.72	0.739
3	*0.514*	0.48	0.514
4	*0.379*	0.36	0.379

Fault-Based MCE Spectral Accelerations: EZ-Frisk v. 7.62

Lower-Limit Deterministic MCE Spectral Accelerations: As per ASCE (2005), sec. 21.2.2

Governing Values: Based on maximum, as shown in *italic* font

Response Spectra shown graphically in Figure 2B

Fig. A-2A. Deterministic Response Spectra - 84th Percentile Maximum Horizontal Component
Laney College Student Center
5% Damping

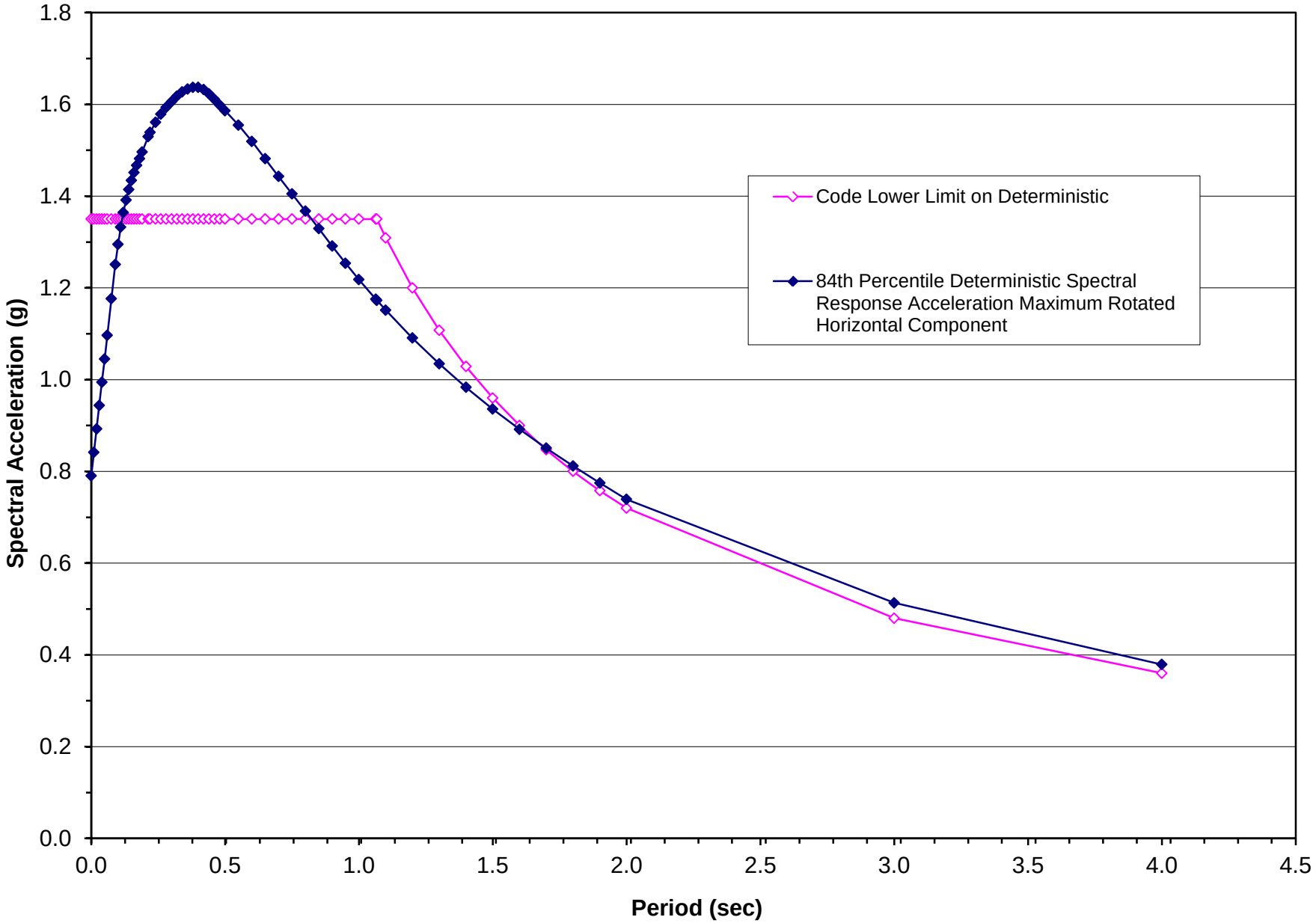

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Figure A-2B. Final Deterministic MCE Response Spectrum - 84th Percentile Max Rotated Component
Laney College Student Center
5% Damping

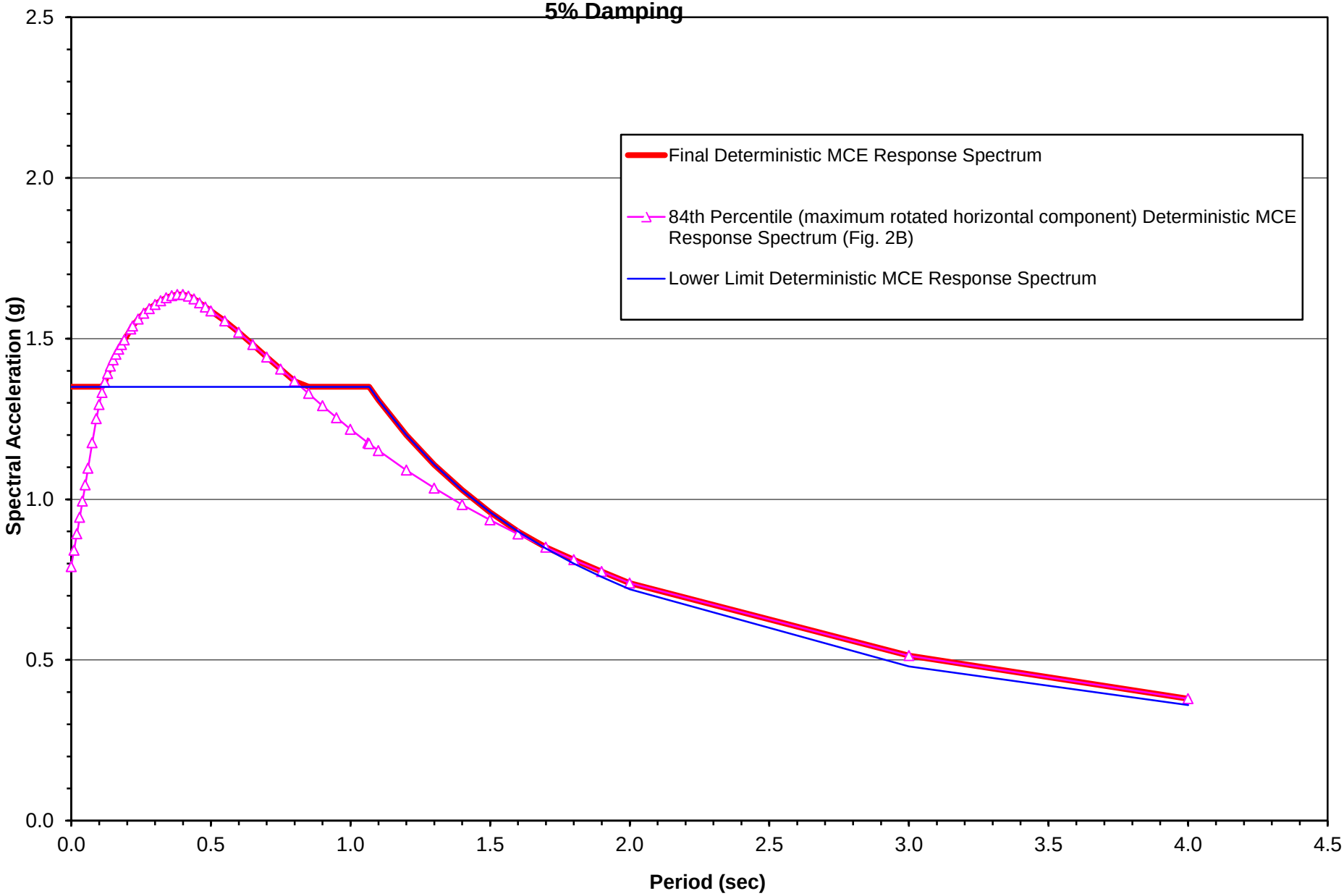

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Table A-3
Site-Specific MCE Response Spectrum
Laney College, Oakland, California

Period (sec)	Spectral Acceleration		
	Deterministic MCE (g)	Probabilistic MCE (g)	Site-Specific MCE (g)
0	1.350	1.083	1.083
0.01	1.350	1.101	1.101
0.02	1.350	1.118	1.118
0.03	1.350	1.136	1.136
0.04	1.350	1.153	1.153
0.05	1.350	1.171	1.171
0.06	1.350	1.247	1.247
0.075	1.350	1.361	1.350
0.09	1.350	1.474	1.350
0.1	1.350	1.550	1.350
0.11	1.350	1.606	1.350
0.12	1.389	1.662	1.389
0.13	1.440	1.717	1.440
0.14	1.487	1.773	1.487
0.15	1.531	1.829	1.531
0.16	1.572	1.885	1.572
0.17	1.611	1.941	1.611
0.18	1.646	1.996	1.646
0.19	1.679	2.052	1.679
0.213	1.743	2.120	1.743
0.22	1.758	2.127	1.758
0.24	1.794	2.146	1.794
0.26	1.819	2.164	1.819
0.28	1.836	2.183	1.836
0.3	1.848	2.202	1.848
0.32	1.853	2.189	1.853
0.34	1.850	2.177	1.850
0.36	1.840	2.164	1.840
0.38	1.827	2.152	1.827
0.4	1.812	2.139	1.812
0.42	1.794	2.120	1.794
0.44	1.772	2.102	1.772
0.46	1.747	2.083	1.747
0.48	1.721	2.065	1.721
0.5	1.697	2.046	1.697
0.55	1.639	1.995	1.639
0.6	1.581	1.943	1.581
0.65	1.523	1.892	1.523

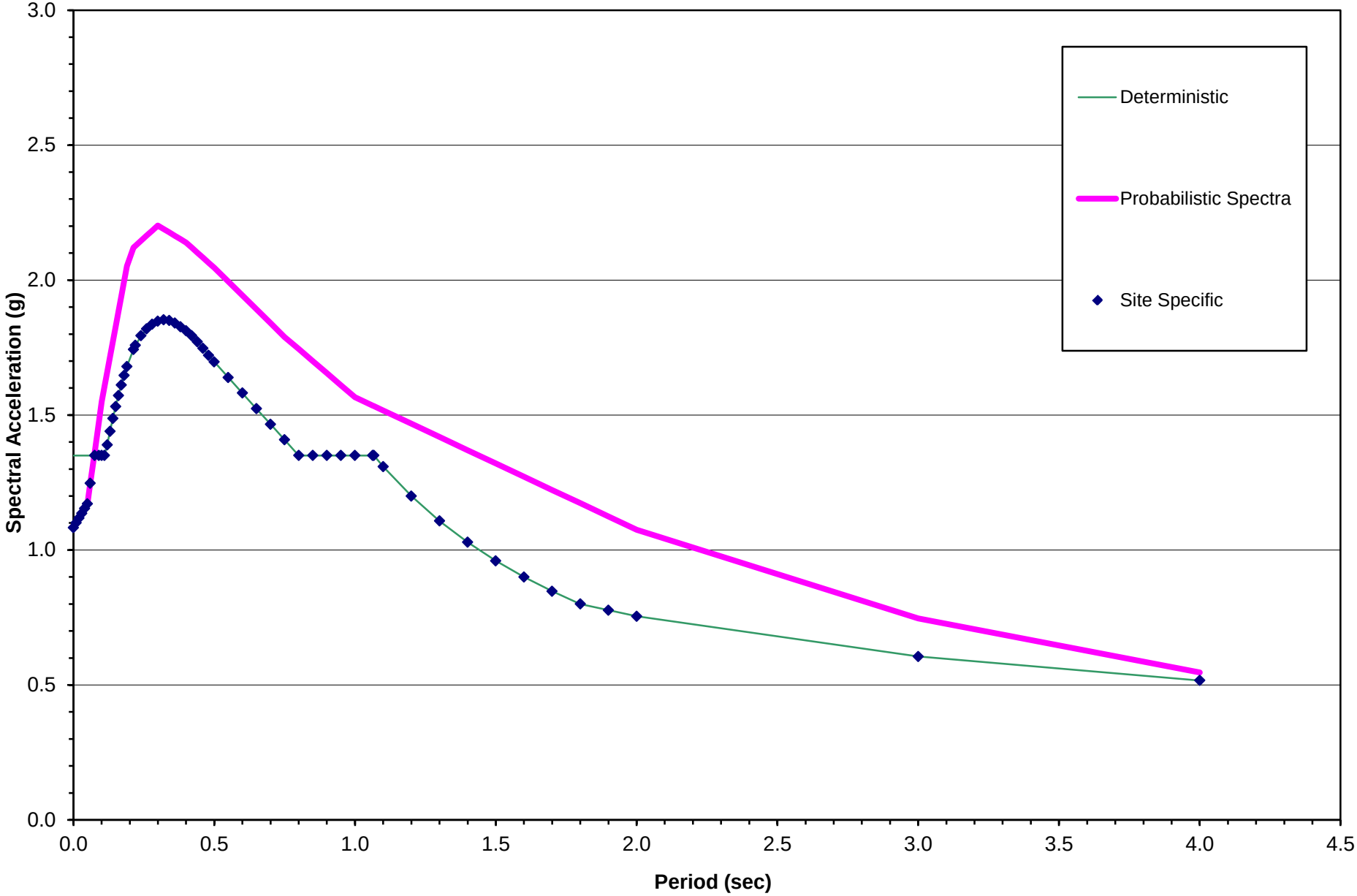
Period (sec)	Spectral Acceleration		
	Deterministic MCE (g)	Probabilistic MCE (g)	Site-Specific MCE (g)
0.7	1.466	1.840	1.466
0.75	1.408	1.789	1.408
0.8	1.350	1.744	1.350
0.85	1.350	1.700	1.350
0.9	1.350	1.655	1.350
0.95	1.350	1.611	1.350
1	1.350	1.566	1.350
1.063	1.350	1.535	1.350
1.067	1.350	1.533	1.350
1.1	1.309	1.517	1.309
1.2	1.200	1.468	1.200
1.3	1.108	1.419	1.108
1.4	1.029	1.370	1.029
1.5	0.960	1.321	0.960
1.6	0.900	1.271	0.900
1.7	0.847	1.222	0.847
1.8	0.800	1.173	0.800
1.9	0.777	1.124	0.777
2	0.754	1.075	0.754
3	0.606	0.747	0.606
4	0.517	0.547	0.517

Probabilistic MCE Spectral Response Accelerations: From Table 1

Deterministic MCE Spectral Response Accelerations: From Table 2

Response Spectra shown graphically in Figure 3

Figure A-3. Site-Specific MCE Response Spectrum
Laney College Student Center
5% Damping



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TableA- 4

Final Design Response Spectrum

Laney College, Oakland, California

Period (sec)	Spectral Acceleration		
	Site-Specific MCE (g)	Lower-Limit Design (g)	Final Design (2/3 Site-Specific MCE) (g)
0	1.08	0.29	0.72
0.01	1.10	0.31	0.73
0.02	1.12	0.33	0.75
0.03	1.14	0.35	0.76
0.04	1.15	0.37	0.77
0.05	1.17	0.39	0.78
0.06	1.25	0.41	0.83
0.075	1.35	0.44	0.90
0.09	1.35	0.47	0.90
0.1	1.35	0.49	0.90
0.11	1.35	0.51	0.90
0.12	1.39	0.53	0.93
0.13	1.44	0.55	0.96
0.14	1.49	0.57	0.99
0.15	1.53	0.59	1.02
0.16	1.57	0.62	1.05
0.17	1.61	0.64	1.07
0.18	1.65	0.66	1.10
0.19	1.68	0.68	1.12
0.213	1.74	0.72	1.16
0.22	1.76	0.72	1.17
0.24	1.79	0.72	1.20
0.26	1.82	0.72	1.21
0.28	1.84	0.72	1.22
0.3	1.85	0.72	1.23
0.32	1.85	0.72	1.24
0.34	1.85	0.72	1.23
0.36	1.84	0.72	1.23
0.38	1.83	0.72	1.22
0.4	1.81	0.72	1.21
0.42	1.79	0.72	1.20
0.44	1.77	0.72	1.18
0.46	1.75	0.72	1.16
0.48	1.72	0.72	1.15
0.5	1.70	0.72	1.13
0.55	1.64	0.72	1.09
0.6	1.58	0.72	1.05
0.65	1.52	0.72	1.02

Period (sec)	Spectral Acceleration		
	Site-Specific MCE (g)	Lower-Limit Design (g)	Final Design (2/3 Site-Specific MCE) (g)
0.7	1.47	0.72	0.98
0.75	1.41	0.72	0.94
0.8	1.35	0.72	0.90
0.85	1.35	0.72	0.90
0.9	1.35	0.72	0.90
0.95	1.35	0.72	0.90
1	1.35	0.72	0.90
1.063	1.35	0.72	0.90
1.067	1.35	0.72	0.90
1.1	1.31	0.70	0.87
1.2	1.20	0.64	0.80
1.3	1.11	0.59	0.74
1.4	1.03	0.55	0.69
1.5	0.96	0.51	0.64
1.6	0.90	0.48	0.60
1.7	0.85	0.45	0.56
1.8	0.80	0.43	0.53
1.9	0.78	0.40	0.52
2	0.754	0.38	0.503
3	0.606	0.26	0.404
4	0.517	0.19	0.344

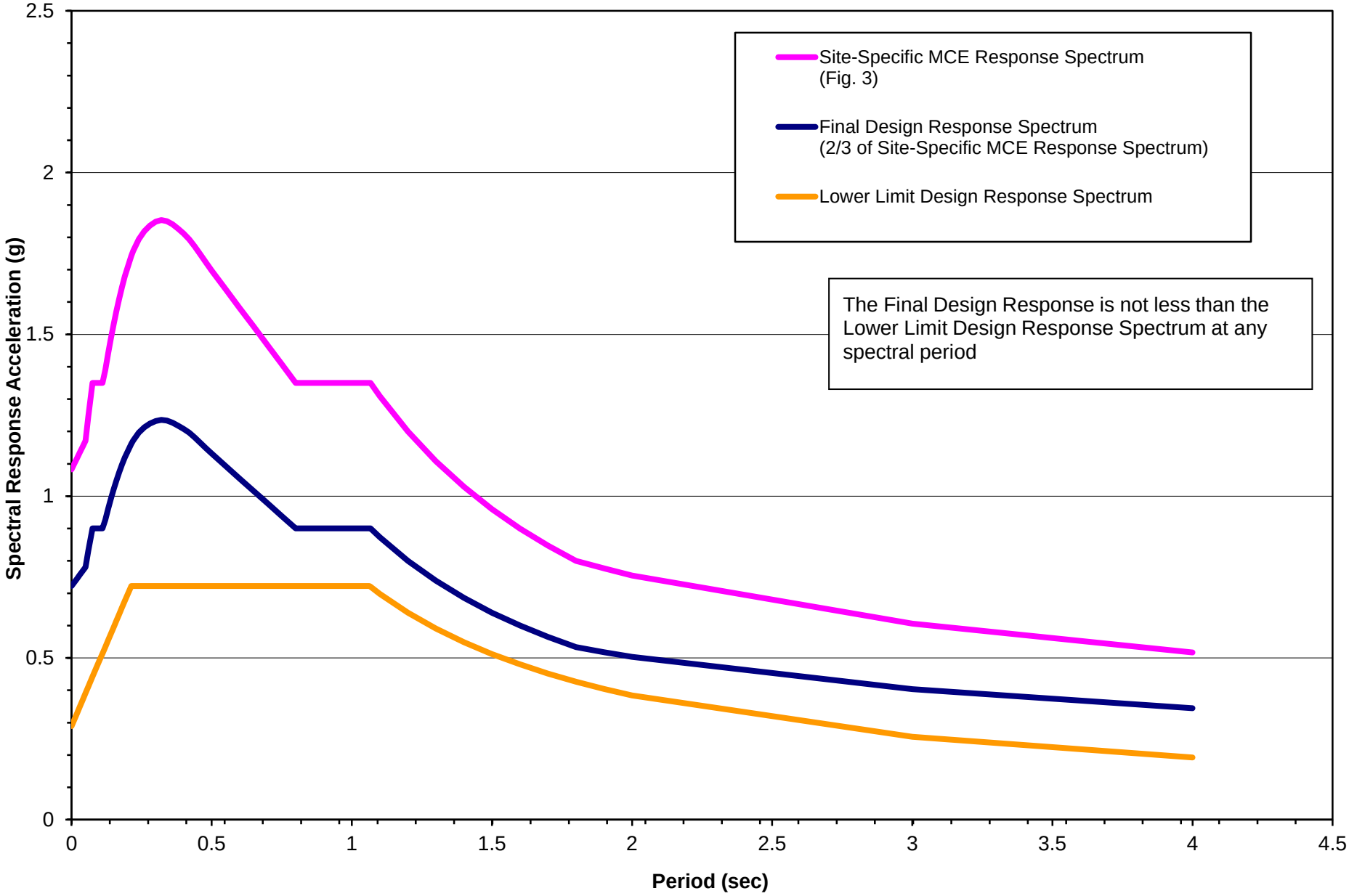
Site-Specific MCE Spectral Response Accelerations: From Table 3

Lower-Limit Design Spectral Response Accelerations: 80% of the ASCE 7, Section 11.4.5 Design Spectra

Final Design Spectral Response Accelerations: 2/3 of Site-Specific MCE Spectral Response Accelerations, as per ASCE (2005), Section 21.3

Response Spectra shown graphically in Figure 4

Figure A-4. Final Design Response Spectrum
Laney College Student Center
5% Damping



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```
                ********************************************
                *****               EZ-FRISK               *****
                ***** SEISMIC HAZARD ANALYSIS DEFINITION  *****
                *****       RISK ENGINEERING, INC.         *****
                *****          BOULDER, CO  USA            *****
                ********************************************

PROGRAM VERSION
  EZ-FRISK 7.62 Build 001

ANALYSIS TITLE:
  Seismic Hazard Analysis 1

ANALYSIS TYPE:
  Single Site Analysis

SITE COORDINATES
  Latitude 37.796
  Longitude -122.263

INTENSITY TYPE:  Maximum Rotated Component of Spectral Response @ 5% Damping

HAZARD DEAGGREGATION
  Status: OFF

SOIL AMPLIFICATION
  Method: Do not use soil amplification

ATTENUATION EQUATION SITE PARAMETERS
  Depth[Vs=1000m/s] (m): 213
  Estimate Z1 from Vs30 for AS NGA: 0
  Estimate Z1 from Vs30 for CY NGA: 0
  Vs30 (m/s): 175
  Vs30 Is Measured: 0
  Z25 (km): 2

AMPLITUDES - Acceleration (g)
  0.0001
  0.001
  0.01
  0.02
  0.05
  0.07
  0.1
  0.2
  0.3
  0.4
  0.5
  0.7
  1
  2
  3

PERIODS (s)
  PGA
  0.05
  0.1
  0.2
  0.3
  0.4
  0.5
  0.75
  1
  2
  3
  4

DETERMINISTIC FRACTILES
  0.5
  0.84
```

```
PLOTTING PARAMETERS
  Period at which to plot PGA: 0.030303

CALCULATIONAL PARAMETERS
  Fault Seismic Sources -
    Maximum inclusion distance           :   1000 km
    Down dip integration increment       :   1 km
    Horizontal integration increment     :   1 km
    Number rupture length per earthquake :   1
  Subduction Interface Seismic Sources -
    Maximum inclusion distance           :   1000 km
    Down dip integration increment       :   5 km
    Horizontal integration increment     :   5 km
    Number rupture length per earthquake :   1
  Subduction Slab Seismic Sources -
    Maximum inclusion distance           :   1000 km
    Down dip integration increment       :   5 km
    Horizontal integration increment     :   20 km
    Number rupture length per earthquake :   1
  Area Seismic Sources -
    Maximum inclusion distance           :   1000 km
    Vertical integration increment       :   3 km
    Number of rupture azimuths           :   3
    Minimum epicentral distance step     :   0.5 km
    Maximum epicentral distance step     :   10 km
  Gridded Seismic Sources -
    Maximum inclusion distance            :   200 km
    Default number of rupture azimuths    :   10
    Maximum distance for default azimuths :   20 km
    Minimum distance for one azimuth      :   70
    Use binned calcuations if possible    :   true
    Bins per decade in distance (km)      :   20
  All Seismic Sources -
    Magnitude integration step           :   0.1 M
    Apply magnitude scaling              :   NO
    Include near-source directivity      :   NO

ATTENUATION EQUATIONS

  Name: Abrahamson-Silva (2008) NGA MRC
  Database: C:\Program Files (x86)\EZ-FRISK 7.62\Files\standard.bin-attendb
  Base: FEMA P-750 Table C21.2-1
  Truncation Type: No Truncation
  Truncation Value: 0
  Magnitude Scale: Moment Magnitude
  Distance Type: Distance To Rupture

  Name: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
  Database: C:\Program Files (x86)\EZ-FRISK 7.62\Files\standard.bin-attendb
  Base: FEMA P-750 Table C21.2-1
  Truncation Type: No Truncation
  Truncation Value: 0
  Magnitude Scale: Moment Magnitude
  Distance Type: Distance To Rupture

  Name: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Database: C:\Program Files (x86)\EZ-FRISK 7.62\Files\standard.bin-attendb
  Base: FEMA P-750 Table C21.2-1
  Truncation Type: No Truncation
  Truncation Value: 0
  Magnitude Scale: Moment Magnitude
  Distance Type: Distance To Rupture

  Name: Chiou-Youngs (2007) NGA USGS 2008 MRC
  Database: C:\Program Files (x86)\EZ-FRISK 7.62\Files\standard.bin-attendb
  Base: FEMA P-750 Table C21.2-1
  Truncation Type: No Truncation
  Truncation Value: 0
  Magnitude Scale: Moment Magnitude
  Distance Type: Distance To Rupture
```

Name: Youngs (1997) Subduction USGS 2008 MRC
Database: C:\Program Files (x86)\EZ-FRISK 7.62\Files\standard.bin-attendb
Base: FEMA P-750 Table C21.2-1
Truncation Type: No Truncation
Truncation Value: 0
Magnitude Scale: Moment Magnitude
Distance Type: Distance To Rupture

SEISMIC SOURCE SUMMARY TABLE

Source	Region	Closest Distance	Deterministic Magnitude	Fault Mechanism	Dip Angle	Dips To	Site Lies
San Andreas Creeping Section Gridded	USGS 2008 California	91.95	6.0000	Strike Slip	90.0000	--	NW
Great Valley 3, Mysterious Ridge	USGS 2008 California	95.17	7.1000	Reverse	20.0000	SW	S
Great Valley 4a, Trout Creek	USGS 2008 California	77.79	6.6000	Reverse	20.0000	SW	S
Great Valley 4b, Gordon Valley	USGS 2008 California	53.09	6.8000	Reverse	20.0000	W	S
Great Valley 5, Pittsburg Kirby Hills	USGS 2008 California	45.20	6.7000	Strike Slip	90.0000	--	SW
Great Valley 7	USGS 2008 California	60.60	6.9000	Reverse	15.0000	SW	W
Great Valley 8	USGS 2008 California	99.06	6.8000	Reverse	15.0000	W	NW
Green Valley Connected	USGS 2008 California	26.90	6.8000	Strike Slip	90.0000	--	SW
Greenville Connected	USGS 2008 California	39.01	7.0000	Strike Slip	90.0000	--	W
Greenville Connected U	USGS 2008 California	39.01	7.0000	Strike Slip	90.0000	--	W
Hunting Creek-Berryessa	USGS 2008 California	73.24	7.1000	Strike Slip	90.0000	--	S
Maacama-Garberville	USGS 2008 California	94.45	7.4000	Strike Slip	90.0000	--	SE
Monte Vista-Shannon	USGS 2008 California	39.86	6.5010	Reverse	45.0000	SW	N
Monterey Bay-Tularcitos	USGS 2008 California	98.01	7.3000	Strike Slip	90.0000	--	N
Mount Diablo Thrust	USGS 2008 California	23.08	6.7000	Reverse	38.0000	NE	SW
Point Reyes	USGS 2008 California	52.68	6.9000	Reverse	50.0000	NE	E
San Gregorio Connected	USGS 2008 California	30.21	7.500	Strike Slip	90.0000	--	E
West Napa	USGS 2008 California	40.98	6.7000	Strike Slip	90.0000	--	S
Zayante-Vergeles	USGS 2008 California	82.65	7.0000	Strike Slip	90.0000	--	N
California Gridded	USGS 2008 California	0.00	7.0000	SS|R	90.0000	--	Above
Calaveras	USGS 2008 California	22.43	7.0250	Strike Slip	90.0000	--	W
Hayward-Rodgers Creek	USGS 2008 California	5.66	7.3340	Strike Slip	90.0000	--	SW
Northern San Andreas	USGS 2008 California	23.41	8.050	Strike Slip	90.0000	--	NE
California Gridded Deep	USGS 2008 California	34.34	7.2000	Intraslab	90.0000	--	S

SEISMIC SOURCES

Minor Sources Omitted

```
Name: San Andreas Creeping Section Gridded
Region: USGS 2008 California
Category:Gridded
Database: C:\Users\JRaines\AppData\Local\Risk Engineering\EZ-FRISK\Regions\USGS2008 Lower 48
v2.00\Files\USGS 2008 Lower 48.bin-ssdb
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 1
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1
  Fault Mechanism: Strike Slip
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 6
  Rate at Minimum Magnitude, events per year: 0   Yes
  Beta: 2.07233
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Fixed Strike
  Rupture Strike Angle, degrees : -42.5
Attenuation Equations for Source:
  Raw Weight  Normalized Weight  Name
         1      0.333333          Boore-Atkinson (2008) NGA USGS 2008 MRC
         1      0.333333          Abrahamson-Silva (2008) NGA MRC
         1      0.333333          Chiou-Youngs (2007) NGA USGS 2008 MRC

*****************************************

Name: California Gridded
Region: USGS 2008 California
Category:Composite Seismic Source
Database: C:\Users\JRaines\AppData\Local\Risk Engineering\EZ-FRISK\Regions\USGS2008 Lower 48
v2.00\Files\USGS 2008 Lower 48.bin-ssdb
Magnitude Scale: Moment Magnitude
Probability of Activity: 1
 ------ Start Nested Sources forCalifornia Gridded -------
Name: California Gridded, Char, 2.1, Reverse
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.1666
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Reverse
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0   Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
```

```
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, Char, 2.1, Strike Slip
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.1666
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Strike Slip
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, Char, 2.4, Reverse
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.1666
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Reverse
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, Char, 2.4, Strike Slip
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.1666
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Strike Slip
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
```

```
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, GR, 2.1, Reverse
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.0833
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Reverse
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, GR, 2.1, Strike Slip
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.0833
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Strike Slip
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, GR, 2.4, Reverse
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.0833
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Reverse
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0  Yes
  Beta: 1.84207
```

```
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

Name: California Gridded, GR, 2.4, Strike Slip
Region: USGS 2008 California
Category:Gridded
  FileType: USGS2008

General Parameters
  Magnitude Scale: Moment Magnitude
  Probability of Activity: 0.0833
  Latitude Increment, degrees:   0.1
  Longitude Increment, degrees:  0.1
  Magnitude Threshold for Weighting: 6.5

Earthquake Model Parameters               (Varies point to point?)
  Cell Weight: 1                                 Yes
  Fault Mechanism: Strike Slip
  Depth to Top of Rupture, km: 5
  Minimum Magnitude: 5
  Maximum Magnitude: 7                           Yes
  Rate at Minimum Magnitude, events per year: 0   Yes
  Beta: 1.84207
  Horizontal Rupture Length, A parameter: -3.22
  Horizontal Rupture Length, B parameter: 0.69
  Rupture Strike Azimuth Model: Random Strike

 ------ End Nested Sources for California Gridded -------

Attenuation Equations for Source:
  Raw Weight  Normalized Weight  Name
         1      0.333333          Boore-Atkinson (2008) NGA USGS 2008 MRC
         1      0.333333          Abrahamson-Silva (2008) NGA MRC
         1      0.333333          Chiou-Youngs (2007) NGA USGS 2008 MRC

****************************************

Name: Calaveras
Region: USGS 2008 California
Category:Composite Seismic Source
Database: C:\Users\JRaines\AppData\Local\Risk Engineering\EZ-FRISK\Regions\USGS2008 Lower 48
v2.00\Files\USGS 2008 Lower 48.bin-ssdb
Magnitude Scale: Moment Magnitude
Probability of Activity: 1
 ------ Start Nested Sources forCalaveras -------
Name: Calaveras
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.10000000
Deterministic Magnitude: 7

Fault Profile Parameters:
        Dip1      Dip2    Depth1    Depth2    Depth3
          90        90       2.2     2.201       7.2

Magnitude Recurrence Distributions:
ModelType Weight RateType  Rate       MinMag    MaxMag      Beta      Mean     Sigma    Delta1    Delta2
      Exponential      0.25  Activity  9.303e-003  6.50  7.000000  0.000000  0.000000  0.000000  0.000000
0.000000
      Exponential  0.100000  Activity  9.303e-003  6.50  7.000000  0.000000  0.000000  0.000000  0.000000
0.000000
      Exponential  0.15000  Activity  9.303e-003  6.50  7.000000  0.000000  0.000000  0.000000  0.000000
0.000000
      Exponential  0.25000  Activity  1.419e-002  6.50  6.800000  0.000000  0.000000  0.000000  0.000000
0.000000
      Exponential  0.100000  Activity  1.419e-002  6.50  6.800000  0.000000  0.000000  0.000000  0.000000
0.000000
```

```
      Exponential  0.15000  Activity  1.419e-002  6.50  6.800000  0.000000  0.000000  0.000000  0.000000
0.000000

Rupture Length Parameters
Rupture Dimensioning  Al        Al        Bl      Sigl        Aw        Bw      Sigw        Aa        Ba
Sigw
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000

Trace Coordinates:
  Latitude   Longitude
    37.8173  -122.0094
    37.7149  -121.9379
    37.6939  -121.9327
    37.5675  -121.8620
    37.5385  -121.8511
    37.5101  -121.8349
    37.4888  -121.8235
    37.4450  -121.8071
    37.3996  -121.7618
    37.3430  -121.7149
    37.2481  -121.6483
    37.1523  -121.5801
    37.0958  -121.5424
    36.9898  -121.4678
    36.8257  -121.3956

Name: Calaveras;CC
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.392

Fault Profile Parameters:
        Dip1      Dip2    Depth1    Depth2    Depth3
          90        90       4.2     4.201       7.2

Magnitude Recurrence Distributions:
ModelType Weight RateType  Rate       MinMag    MaxMag      Beta      Mean     Sigma    Delta1    Delta2
  Normal 0.25  Activity  7.706e-003  6.152000  6.632000  2.300000  6.392000  0.120000  0.010000 10.000000
Normal0.25000  Activity  7.706e-003  5.932000  6.412000  2.300000  6.172000  0.120000  0.010000 10.000000
Normal0.12500  Activity  1.474e-002  5.932000  6.412000  2.300000  6.172000  0.120000  0.010000 10.000000
Normal0.05000  Activity  1.474e-002  5.932000  6.412000  2.300000  6.172000  0.120000  0.010000 10.000000
Normal0.07500  Activity  1.474e-002  5.932000  6.412000  2.300000  6.172000  0.120000  0.010000 10.000000
Normal0.12500  Activity  6.885e-003  6.152000  6.632000  2.300000  6.392000  0.120000  0.010000 10.000000
Normal0.05000  Activity  6.885e-003  6.152000  6.632000  2.300000  6.392000  0.120000  0.010000 10.000000
Normal0.07500  Activity  6.885e-003  6.152000  6.632000  2.300000  6.392000  0.120000  0.010000 10.000000

Rupture Length Parameters
Rupture Dimensioning  Al        Al        Bl      Sigl        Aw        Bw      Sigw        Aa        Ba
Sigw
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
Length and Width 4.000000  0.000000  0.001000  4.000000  0.000000  0.001000        --        --        --
```

Trace Coordinates:

Latitude	Longitude
37.4450	-121.8071
37.3996	-121.7618
37.3430	-121.7149
37.2481	-121.6483
37.1523	-121.5801
37.0958	-121.5424
36.9898	-121.4678

Name: Calaveras;CC+CS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.497

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	4.2	4.201	7.2

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	2.622e-003	6.257000	6.737000	2.300000	6.497000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	2.622e-003	6.037000	6.517000	2.300000	6.277000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	6.406e-003	6.037000	6.517000	2.300000	6.277000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	6.406e-003	6.037000	6.517000	2.300000	6.277000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	6.406e-003	6.037000	6.517000	2.300000	6.277000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	3.301e-003	6.257000	6.737000	2.300000	6.497000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	3.301e-003	6.257000	6.737000	2.300000	6.497000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	3.301e-003	6.257000	6.737000	2.300000	6.497000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
37.4450	-121.8071
37.3996	-121.7618
37.3430	-121.7149
37.2481	-121.6483
37.1523	-121.5801
37.0958	-121.5424
36.9898	-121.4678
36.8257	-121.3956

Name: Calaveras;CN
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.872

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	1.3	1.301	11.3

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2

Normal	0.25	Activity	1.038e-003	6.632000	7.112000	2.300000	6.872000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	1.038e-003	6.412000	6.892000	2.300000	6.652000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.296e-003	6.412000	6.892000	2.300000	6.652000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.296e-003	6.412000	6.892000	2.300000	6.652000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.296e-003	6.412000	6.892000	2.300000	6.652000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.312e-003	6.632000	7.112000	2.300000	6.872000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.312e-003	6.632000	7.112000	2.300000	6.872000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.312e-003	6.632000	7.112000	2.300000	6.872000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
37.8173	-122.0094
37.7149	-121.9379
37.6939	-121.9327
37.5675	-121.8620
37.5385	-121.8511
37.5101	-121.8349
37.4888	-121.8235
37.4450	-121.8071

Name: Calaveras;CN+CC
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.996

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	2	2.001	8

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	1.295e-004	6.756000	7.236000	2.300000	6.996000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	1.295e-004	6.558000	7.038000	2.300000	6.798000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.593e-004	6.558000	7.038000	2.300000	6.798000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.593e-004	6.558000	7.038000	2.300000	6.798000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.593e-004	6.558000	7.038000	2.300000	6.798000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.346e-004	6.756000	7.236000	2.300000	6.996000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.346e-004	6.756000	7.236000	2.300000	6.996000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.346e-004	6.756000	7.236000	2.300000	6.996000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
37.8173	-122.0094
37.7149	-121.9379

37.6939	-121.9327
37.5675	-121.8620
37.5385	-121.8511
37.5101	-121.8349
37.4888	-121.8235
37.4450	-121.8071
37.3996	-121.7618
37.3430	-121.7149
37.2481	-121.6483
37.1523	-121.5801
37.0958	-121.5424
36.9898	-121.4678

Name: Calaveras;CN+CC+CS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.025

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	2.2	2.201	7.2

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	9.126e-004	6.78500	7.26500	2.300000	7.02500	0.120000	0.010000	10.000000
Normal	0.25000	Activity	9.126e-004	6.597000	7.077000	2.300000	6.837000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.835e-003	6.597000	7.077000	2.300000	6.837000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.835e-003	6.597000	7.077000	2.300000	6.837000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.835e-003	6.597000	7.077000	2.300000	6.837000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.244e-003	6.78500	7.26500	2.300000	7.02500	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.244e-003	6.78500	7.26500	2.300000	7.02500	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.244e-003	6.78500	7.26500	2.300000	7.02500	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
37.8173	-122.0094
37.7149	-121.9379
37.6939	-121.9327
37.5675	-121.8620
37.5385	-121.8511
37.5101	-121.8349
37.4888	-121.8235
37.4450	-121.8071
37.3996	-121.7618
37.3430	-121.7149
37.2481	-121.6483
37.1523	-121.5801
37.0958	-121.5424
36.9898	-121.4678
36.8257	-121.3956

Name: Calaveras;CS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude

Probability of Activity: 0.90000000
Deterministic Magnitude: 5.829

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	4.4	4.401	6.4

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	1.058e-002	5.589000	6.069000	2.300000	5.829000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	1.058e-002	5.369000	5.849000	2.300000	5.609000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	4.262e-002	5.369000	5.849000	2.300000	5.609000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	4.262e-002	5.369000	5.849000	2.300000	5.609000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	4.262e-002	5.369000	5.849000	2.300000	5.609000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.977e-002	5.589000	6.069000	2.300000	5.829000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.977e-002	5.589000	6.069000	2.300000	5.829000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.977e-002	5.589000	6.069000	2.300000	5.829000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
36.8257	-121.3956
36.9898	-121.4678

------ End Nested Sources for Calaveras -------

Attenuation Equations for Source:

Raw Weight	Normalized Weight	Name
1	0.333333	Boore-Atkinson (2008) NGA USGS 2008 MRC
1	0.333333	Abrahamson-Silva (2008) NGA MRC
1	0.333333	Chiou-Youngs (2007) NGA USGS 2008 MRC

****

Name: Hayward-Rodgers Creek
Region: USGS 2008 California
Category:Composite Seismic Source
Database: C:\Users\JRaines\AppData\Local\Risk Engineering\EZ-FRISK\Regions\USGS2008 Lower 48 v2.00\Files\USGS 2008 Lower 48.bin-ssdb
Magnitude Scale: Moment Magnitude
Probability of Activity: 1
------ Start Nested Sources forHayward-Rodgers Creek -------
Name: Hayward-Rodgers Creek
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.10000000
Deterministic Magnitude: 7.3

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	1.2	1.201	10.2

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Exponential	0.25	Activity	9.815e-003	6.50	7.300000	0.000000	0.000000	0.000000	0.000000	0.000000
Exponential	0.100000	Activity	9.815e-003	6.50	7.300000	0.000000	0.000000	0.000000	0.000000	0.000000

Exponential	0.15000	Activity	9.815e-003	6.50	7.300000	0.000000	0.000000	0.000000	0.000000	0.000000
Exponential	0.25000	Activity	1.248e-002	6.50	7.200000	0.000000	0.000000	0.000000	0.000000	0.000000
Exponential	0.100000	Activity	1.248e-002	6.50	7.200000	0.000000	0.000000	0.000000	0.000000	0.000000
Exponential	0.15000	Activity	1.248e-002	6.50	7.200000	0.000000	0.000000	0.000000	0.000000	0.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Area	--	--	--	--	--	--	-4.153061	1.020408	0.240000	
Area	--	--	--	--	--	--	-4.153061	1.020408	0.240000	
Area	--	--	--	--	--	--	-4.153061	1.020408	0.240000	
Area	--	--	--	--	--	--	-4.153061	1.020408	0.240000	
Area	--	--	--	--	--	--	-4.153061	1.020408	0.240000	

Trace Coordinates:

Latitude	Longitude
38.5752	-122.7883
38.3315	-122.6136
38.0875	-122.4342
37.8273	-122.2128
37.7299	-122.1284
37.6760	-122.0824
37.4540	-121.8490

Name: Hayward-Rodgers Creek;HN
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.599

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	2.4	2.401	9.4

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	3.507e-003	6.359000	6.839000	2.300000	6.599000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	3.507e-003	6.139000	6.619000	2.300000	6.379000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	4.322e-003	6.139000	6.619000	2.300000	6.379000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	4.322e-003	6.139000	6.619000	2.300000	6.379000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	4.322e-003	6.139000	6.619000	2.300000	6.379000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.749e-003	6.359000	6.839000	2.300000	6.599000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.749e-003	6.359000	6.839000	2.300000	6.599000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.749e-003	6.359000	6.839000	2.300000	6.599000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
37.8273	-122.2128
38.0875	-122.4342

Name: Hayward-Rodgers Creek;HN+HS
Region: USGS 2008 California
Category:Fault

Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.998

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	2.4	2.401	9.4

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	2.654e-003	6.758000	7.238000	2.300000	6.998000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	2.654e-003	6.561000	7.041000	2.300000	6.801000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	3.998e-003	6.561000	7.041000	2.300000	6.801000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	3.998e-003	6.561000	7.041000	2.300000	6.801000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	3.998e-003	6.561000	7.041000	2.300000	6.801000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.435e-003	6.758000	7.238000	2.300000	6.998000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.435e-003	6.758000	7.238000	2.300000	6.998000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.435e-003	6.758000	7.238000	2.300000	6.998000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
38.0875	-122.4342
37.8273	-122.2128
37.7299	-122.1284
37.6760	-122.0824
37.4540	-121.8490

Name: Hayward-Rodgers Creek;HS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 6.777

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	2.4	2.401	9.4

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	3.747e-003	6.537000	7.017000	2.300000	6.777000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	3.747e-003	6.317000	6.797000	2.300000	6.557000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	4.550e-003	6.317000	6.797000	2.300000	6.557000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	4.550e-003	6.317000	6.797000	2.300000	6.557000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	4.550e-003	6.317000	6.797000	2.300000	6.557000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.903e-003	6.537000	7.017000	2.300000	6.777000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.903e-003	6.537000	7.017000	2.300000	6.777000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.903e-003	6.537000	7.017000	2.300000	6.777000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
37.4540	-121.8490
37.6760	-122.0824
37.7299	-122.1284
37.8273	-122.2128

Name: Hayward-Rodgers Creek;RC
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.066

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	12.1

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	4.390e-003	6.826000	7.306000	2.300000	7.066000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	4.390e-003	6.651000	7.131000	2.300000	6.891000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	5.261e-003	6.651000	7.131000	2.300000	6.891000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	5.261e-003	6.651000	7.131000	2.300000	6.891000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	5.261e-003	6.651000	7.131000	2.300000	6.891000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.739e-003	6.826000	7.306000	2.300000	7.066000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.739e-003	6.826000	7.306000	2.300000	7.066000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.739e-003	6.826000	7.306000	2.300000	7.066000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
38.0875	-122.4342
38.3315	-122.6136
38.5752	-122.7883

Name: Hayward-Rodgers Creek;RC+HN
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.194

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.7	0.701	10.7

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	5.251e-004	6.954000	7.434000	2.300000	7.194000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	5.251e-004	6.821000	7.301000	2.300000	7.061000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	5.787e-004	6.821000	7.301000	2.300000	7.061000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	5.787e-004	6.821000	7.301000	2.300000	7.061000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	5.787e-004	6.821000	7.301000	2.300000	7.061000	0.120000	0.010000	10.000000

Normal0.12500	Activity	4.710e-004	6.954000	7.434000	2.300000	7.194000	0.120000	0.010000	10.000000
Normal0.05000	Activity	4.710e-004	6.954000	7.434000	2.300000	7.194000	0.120000	0.010000	10.000000
Normal0.07500	Activity	4.710e-004	6.954000	7.434000	2.300000	7.194000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
38.5752	-122.7883
38.3315	-122.6136
38.0875	-122.4342
37.8273	-122.2128

Name: Hayward-Rodgers Creek;RC+HN+HS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.334

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	1.2	1.201	10.2

Magnitude Recurrence Distributions:

ModelType Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal 0.25	Activity	3.108e-004	7.094000	7.574000	2.300000	7.334000	0.120000	0.010000	10.000000
Normal0.25000	Activity	3.108e-004	7.009000	7.489000	2.300000	7.249000	0.120000	0.010000	10.000000
Normal0.12500	Activity	3.614e-004	7.009000	7.489000	2.300000	7.249000	0.120000	0.010000	10.000000
Normal0.05000	Activity	3.614e-004	7.009000	7.489000	2.300000	7.249000	0.120000	0.010000	10.000000
Normal0.07500	Activity	3.614e-004	7.009000	7.489000	2.300000	7.249000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.736e-004	7.094000	7.574000	2.300000	7.334000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.736e-004	7.094000	7.574000	2.300000	7.334000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.736e-004	7.094000	7.574000	2.300000	7.334000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
38.5752	-122.7883
38.3315	-122.6136
38.0875	-122.4342
37.8273	-122.2128
37.7299	-122.1284
37.6760	-122.0824
37.4540	-121.8490

------ End Nested Sources for Hayward-Rodgers Creek -------

Attenuation Equations for Source:

Raw Weight	Normalized Weight	Name
1	0.333333	Boore-Atkinson (2008) NGA USGS 2008 MRC
1	0.333333	Abrahamson-Silva (2008) NGA MRC
1	0.333333	Chiou-Youngs (2007) NGA USGS 2008 MRC

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Name: Northern San Andreas
Region: USGS 2008 California
Category:Composite Seismic Source
Database: C:\Users\JRaines\AppData\Local\Risk Engineering\EZ-FRISK\Regions\USGS2008 Lower 48 v2.00\Files\USGS 2008 Lower 48.bin-ssdb
Magnitude Scale: Moment Magnitude
Probability of Activity: 1
------ Start Nested Sources forNorthern San Andreas -------
Name: N. San Andreas; Exp 8.0
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.050
Deterministic Magnitude: 8

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.2	0.201	12.2

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Exponential	1	Activity	1.473e-002	6.50	8.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Area	--	--	--	--	--	--	--	-4.153061	1.020408	0.240000

Trace Coordinates:

Latitude	Longitude
40.2440	-124.4032
40.0965	-124.1381
40.0506	-124.0635
40.0259	-124.0490
39.9135	-124.0067
39.6730	-123.9953
39.3965	-123.9224
39.2589	-123.8726
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036
37.1040	-121.9070
37.0530	-121.8120
36.9890	-121.7330
36.9260	-121.6520
36.8701	-121.5645
36.8059	-121.4816

Name: N. San Andreas;SAN
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude

Probability of Activity: 0.90000000
Deterministic Magnitude: 7.511

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	11.1

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	2.100e-005	7.271000	7.751000	2.300000	7.511000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	2.100e-005	7.244000	7.724000	2.300000	7.484000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.017e-005	7.244000	7.724000	2.300000	7.484000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.017e-005	7.244000	7.724000	2.300000	7.484000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.017e-005	7.244000	7.724000	2.300000	7.484000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.011e-005	7.271000	7.751000	2.300000	7.511000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	2.011e-005	7.271000	7.751000	2.300000	7.511000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	2.011e-005	7.271000	7.751000	2.300000	7.511000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
37.7856	-122.5741
37.9617	-122.7224
38.1810	-122.9170
38.3290	-123.0419
38.4080	-123.1144
39.1014	-123.7894
39.1706	-123.8407

Name: N. San Andreas;SAN+SAP
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.450
Deterministic Magnitude: 7.729

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	11.1

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	2.100e-006	7.489000	7.969000	2.300000	7.729000	0.120000	0.010000	10.000000
Normal	0.100000	Activity	2.100e-006	7.489000	7.969000	2.300000	7.729000	0.120000	0.010000	10.000000
Normal	0.15000	Activity	2.100e-006	7.489000	7.969000	2.300000	7.729000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	2.100e-006	7.45500	7.93500	2.300000	7.69500	0.120000	0.010000	10.000000
Normal	0.100000	Activity	2.100e-006	7.45500	7.93500	2.300000	7.69500	0.120000	0.010000	10.000000
Normal	0.15000	Activity	2.100e-006	7.45500	7.93500	2.300000	7.69500	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036

Name: N. San Andreas;SAN+SAP+SAS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.867

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.2	0.201	12.2

Magnitude Recurrence Distributions:

ModelType Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal 0.25	Activity	2.539e-005	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.25000	Activity	2.539e-005	7.627000	8.107000	2.300000	7.867000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.310e-005	7.627000	8.107000	2.300000	7.867000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.310e-005	7.627000	8.107000	2.300000	7.867000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.310e-005	7.627000	8.107000	2.300000	7.867000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.338e-005	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.338e-005	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.338e-005	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width 4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036
37.1040	-121.9070
37.0530	-121.8120
36.9890	-121.7330
36.9260	-121.6520
36.8701	-121.5645
36.8059	-121.4816

Name: N. San Andreas;SAO

Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.367

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	11.1

Magnitude Recurrence Distributions:

ModelType Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal 0.25	Activity	4.960e-004	7.127000	7.607000	2.300000	7.367000	0.120000	0.010000	10.000000
Normal0.25000	Activity	4.960e-004	7.053000	7.533000	2.300000	7.293000	0.120000	0.010000	10.000000
Normal0.12500	Activity	1.023e-003	7.053000	7.533000	2.300000	7.293000	0.120000	0.010000	10.000000
Normal0.05000	Activity	1.023e-003	7.053000	7.533000	2.300000	7.293000	0.120000	0.010000	10.000000
Normal0.07500	Activity	1.023e-003	7.053000	7.533000	2.300000	7.293000	0.120000	0.010000	10.000000
Normal0.12500	Activity	1.182e-003	7.127000	7.607000	2.300000	7.367000	0.120000	0.010000	10.000000
Normal0.05000	Activity	1.182e-003	7.127000	7.607000	2.300000	7.367000	0.120000	0.010000	10.000000
Normal0.07500	Activity	1.182e-003	7.127000	7.607000	2.300000	7.367000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
39.1706	-123.8407
39.2589	-123.8726
39.3965	-123.9224
39.6730	-123.9953
39.9135	-124.0067
40.0259	-124.0490
40.0506	-124.0635
40.0965	-124.1381
40.2440	-124.4032

Name: N. San Andreas;SAO+SAN
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.798

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	11.1

Magnitude Recurrence Distributions:

ModelType Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal 0.25	Activity	1.075e-003	7.506000	7.986000	2.300000	7.746000	0.120000	0.010000	10.000000
Normal0.25000	Activity	1.075e-003	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.12500	Activity	3.008e-003	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.05000	Activity	3.008e-003	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.07500	Activity	3.008e-003	7.558000	8.038000	2.300000	7.798000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.771e-003	7.506000	7.986000	2.300000	7.746000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.771e-003	7.506000	7.986000	2.300000	7.746000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.771e-003	7.506000	7.986000	2.300000	7.746000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
40.2440	-124.4032
40.0965	-124.1381
40.0506	-124.0635
40.0259	-124.0490
39.9135	-124.0067
39.6730	-123.9953
39.3965	-123.9224
39.2589	-123.8726
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741

Name: N. San Andreas;SAO+SAN+SAP
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.953

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	11.1

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	8.267e-005	7.622000	8.102000	2.300000	7.862000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	8.267e-005	7.713000	8.193000	2.300000	7.953000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	4.886e-005	7.713000	8.193000	2.300000	7.953000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	4.886e-005	7.713000	8.193000	2.300000	7.953000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	4.886e-005	7.713000	8.193000	2.300000	7.953000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	7.232e-005	7.622000	8.102000	2.300000	7.862000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	7.232e-005	7.622000	8.102000	2.300000	7.862000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	7.232e-005	7.622000	8.102000	2.300000	7.862000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
40.2440	-124.4032
40.0965	-124.1381
40.0506	-124.0635
40.0259	-124.0490
39.9135	-124.0067

39.6730	-123.9953
39.3965	-123.9224
39.2589	-123.8726
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036

Name: N. San Andreas;SAO+SAN+SAP+SAS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 8.05

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.2	0.201	12.2

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	2.855e-003	7.69500	8.17500	2.300000	7.93500	0.120000	0.010000	10.000000
Normal	0.25000	Activity	2.855e-003	7.810000	8.290000	2.300000	8.05000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	3.082e-004	7.810000	8.290000	2.300000	8.05000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	3.082e-004	7.810000	8.290000	2.300000	8.05000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	3.082e-004	7.810000	8.290000	2.300000	8.05000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	9.918e-004	7.69500	8.17500	2.300000	7.93500	0.120000	0.010000	10.000000
Normal	0.05000	Activity	9.918e-004	7.69500	8.17500	2.300000	7.93500	0.120000	0.010000	10.000000
Normal	0.07500	Activity	9.918e-004	7.69500	8.17500	2.300000	7.93500	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
40.2440	-124.4032
40.0965	-124.1381
40.0506	-124.0635
40.0259	-124.0490
39.9135	-124.0067
39.6730	-123.9953
39.3965	-123.9224
39.2589	-123.8726
39.1706	-123.8407
39.1014	-123.7894
38.4080	-123.1144
38.3290	-123.0419
38.1810	-122.9170
37.9617	-122.7224
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036

37.1040	-121.9070
37.0530	-121.8120
36.9890	-121.7330
36.9260	-121.6520
36.8701	-121.5645
36.8059	-121.4816

Name: N. San Andreas;SAP
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.233

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.1	0.101	13.1

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	5.348e-004	6.993000	7.473000	2.300000	7.233000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	5.348e-004	6.874000	7.354000	2.300000	7.114000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.050e-005	6.874000	7.354000	2.300000	7.114000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.050e-005	6.874000	7.354000	2.300000	7.114000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.050e-005	6.874000	7.354000	2.300000	7.114000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	1.209e-004	6.993000	7.473000	2.300000	7.233000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	1.209e-004	6.993000	7.473000	2.300000	7.233000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	1.209e-004	6.993000	7.473000	2.300000	7.233000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
37.1762	-122.0036
37.2970	-122.1400
37.3670	-122.2100
37.4380	-122.2830
37.7856	-122.5741

Name: N. San Andreas;SAP+SAS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.483

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.4	0.401	13.4

Magnitude Recurrence Distributions:

ModelType	Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal	0.25	Activity	1.040e-003	7.243000	7.723000	2.300000	7.483000	0.120000	0.010000	10.000000
Normal	0.25000	Activity	1.040e-003	7.207000	7.687000	2.300000	7.447000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	3.633e-003	7.207000	7.687000	2.300000	7.447000	0.120000	0.010000	10.000000
Normal	0.05000	Activity	3.633e-003	7.207000	7.687000	2.300000	7.447000	0.120000	0.010000	10.000000
Normal	0.07500	Activity	3.633e-003	7.207000	7.687000	2.300000	7.447000	0.120000	0.010000	10.000000
Normal	0.12500	Activity	2.217e-003	7.243000	7.723000	2.300000	7.483000	0.120000	0.010000	10.000000

Normal0.05000	Activity	2.217e-003	7.243000	7.723000	2.300000	7.483000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.217e-003	7.243000	7.723000	2.300000	7.483000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--	

Trace Coordinates:

Latitude	Longitude
37.7856	-122.5741
37.4380	-122.2830
37.3670	-122.2100
37.2970	-122.1400
37.1762	-122.0036
37.1040	-121.9070
37.0530	-121.8120
36.9890	-121.7330
36.9260	-121.6520
36.8701	-121.5645
36.8059	-121.4816

Name: N. San Andreas;SAS
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.90000000
Deterministic Magnitude: 7.123

Fault Profile Parameters:

Dip1	Dip2	Depth1	Depth2	Depth3
90	90	0.8	0.801	14.8

Magnitude Recurrence Distributions:

ModelType Weight	RateType	Rate	MinMag	MaxMag	Beta	Mean	Sigma	Delta1	Delta2
Normal 0.25	Activity	7.693e-004	6.883000	7.363000	2.300000	7.123000	0.120000	0.010000	10.000000
Normal0.25000	Activity	7.693e-004	6.728000	7.208000	2.300000	6.968000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.438e-003	6.728000	7.208000	2.300000	6.968000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.438e-003	6.728000	7.208000	2.300000	6.968000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.438e-003	6.728000	7.208000	2.300000	6.968000	0.120000	0.010000	10.000000
Normal0.12500	Activity	2.091e-003	6.883000	7.363000	2.300000	7.123000	0.120000	0.010000	10.000000
Normal0.05000	Activity	2.091e-003	6.883000	7.363000	2.300000	7.123000	0.120000	0.010000	10.000000
Normal0.07500	Activity	2.091e-003	6.883000	7.363000	2.300000	7.123000	0.120000	0.010000	10.000000

Rupture Length Parameters

Rupture Dimensioning	Al	Bl	Sigl	Aw	Bw	Sigw	Aa	Ba	Sigw
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--
Length and Width	4.000000	0.000000	0.001000	4.000000	0.000000	0.001000	--	--	--

Trace Coordinates:

Latitude	Longitude
36.8059	-121.4816
36.8701	-121.5645
36.9260	-121.6520
36.9890	-121.7330
37.0530	-121.8120
37.1040	-121.9070

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    37.1762  -122.0036

Name: N. San Andreas; Exp 7.9
Region: USGS 2008 California
Category:Fault
Fault Mechanism: Strike Slip
Magnitude Scale: Moment Magnitude
Probability of Activity: 0.050
Deterministic Magnitude: 7.9

Fault Profile Parameters:
        Dip1      Dip2    Depth1    Depth2    Depth3
          90        90       0.2     0.201      12.2

Magnitude Recurrence Distributions:
ModelType Weight RateType  Rate       MinMag    MaxMag      Beta      Mean     Sigma    Delta1    Delta2
      Exponential         1  Activity  1.947e-002  6.50  7.900000  0.000000  0.000000  0.000000  0.000000
0.000000

Rupture Length Parameters
Rupture Dimensioning  Al        Al        Bl      Sigl        Aw        Bw      Sigw        Aa        Ba
Sigw
                  Area        --        --        --        --        --        -- -4.153061  1.020408
0.240000

Trace Coordinates:
  Latitude   Longitude
    40.2440  -124.4032
    40.0965  -124.1381
    40.0506  -124.0635
    40.0259  -124.0490
    39.9135  -124.0067
    39.6730  -123.9953
    39.3965  -123.9224
    39.2589  -123.8726
    39.1706  -123.8407
    39.1014  -123.7894
    38.4080  -123.1144
    38.3290  -123.0419
    38.1810  -122.9170
    37.9617  -122.7224
    37.7856  -122.5741
    37.4380  -122.2830
    37.3670  -122.2100
    37.2970  -122.1400
    37.1762  -122.0036
    37.1040  -121.9070
    37.0530  -121.8120
    36.9890  -121.7330
    36.9260  -121.6520
    36.8701  -121.5645
    36.8059  -121.4816

 ------ End Nested Sources for Northern San Andreas -------

Attenuation Equations for Source:
  Raw Weight  Normalized Weight  Name
           1          0.333333          Boore-Atkinson (2008) NGA USGS 2008 MRC
           1          0.333333          Abrahamson-Silva (2008) NGA MRC
           1          0.333333          Chiou-Youngs (2007) NGA USGS 2008 MRC
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MAGNITUDE CONVERSIONS

This analysis does not require any magnitude conversions.
Note:  Your analysis may indirectly use magnitude conversions that are not listed here.

Echo File Creation Time: 17:08:26 Thursday, March 29, 2012
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Probabilistic Spectra results for EZ-FRISK 7.62 Build 001

ANNUAL FREQUENCY OF EXCEEDANCE: 4.041e-004
RETURN PERIOD: 2474.9
PROBABILITY OF EXCEEDENCE: 2.0% IN 50.0 YEARS
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Mean
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC
  Column 6: Acceleration (g) for: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
  Column 7: Acceleration (g) for: Youngs (1997) Subduction USGS 2008 MRC

1	2	3	4	5	6	7
PGA	1.083e+000	9.360e-001	1.158e+000	1.120e+000	4.899e-003	3.159e-002
0.05	1.171e+000	1.046e+000	1.192e+000	1.256e+000	7.781e-003	3.980e-002
0.1	1.550e+000	1.501e+000	1.505e+000	1.638e+000	9.568e-003	4.861e-002
0.2	2.108e+000	2.169e+000	2.047e+000	2.104e+000	1.112e-002	6.459e-002
0.3	2.202e+000	2.242e+000	2.192e+000	2.170e+000	9.698e-003	6.272e-002
0.4	2.139e+000	2.241e+000	2.033e+000	2.136e+000	9.093e-003	5.765e-002
0.5	2.046e+000	2.255e+000	1.668e+000	2.072e+000	7.539e-003	4.835e-002
0.75	1.789e+000	1.999e+000	1.239e+000	1.963e+000	5.411e-003	3.400e-002
1	1.566e+000	1.629e+000	1.040e+000	1.832e+000	4.349e-003	2.383e-002
2	1.075e+000	9.978e-001	5.667e-001	1.347e+000	1.224e-003	4.264e-003
3	7.466e-001	6.814e-001	3.696e-001	9.768e-001	5.522e-004	1.833e-003
4	5.465e-001	5.140e-001	2.563e-001	7.140e-001	4.227e-004	1.470e-003

ANNUAL FREQUENCY OF EXCEEDANCE: 1.026e-003
RETURN PERIOD: 974.8
PROBABILITY OF EXCEEDENCE: 5.0% IN 50.0 YEARS
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Mean
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC
  Column 6: Acceleration (g) for: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
  Column 7: Acceleration (g) for: Youngs (1997) Subduction USGS 2008 MRC

1	2	3	4	5	6	7
PGA	8.493e-001	7.504e-001	9.156e-001	8.792e-001	1.809e-003	1.369e-002
0.05	9.325e-001	8.373e-001	9.501e-001	1.007e+000	2.494e-003	1.689e-002
0.1	1.222e+000	1.198e+000	1.186e+000	1.278e+000	2.768e-003	2.038e-002
0.2	1.628e+000	1.685e+000	1.577e+000	1.618e+000	3.112e-003	2.577e-002
0.3	1.710e+000	1.749e+000	1.707e+000	1.671e+000	2.740e-003	2.508e-002
0.4	1.652e+000	1.743e+000	1.566e+000	1.642e+000	2.607e-003	2.332e-002
0.5	1.563e+000	1.749e+000	1.317e+000	1.586e+000	2.284e-003	1.980e-002
0.75	1.361e+000	1.508e+000	1.008e+000	1.480e+000	1.751e-003	1.365e-002
1	1.202e+000	1.255e+000	8.103e-001	1.388e+000	1.436e-003	8.874e-003
2	7.868e-001	7.490e-001	4.278e-001	1.028e+000	3.029e-004	1.365e-003
3	5.345e-001	5.083e-001	2.747e-001	7.131e-001	1.440e-004	4.423e-004
4	3.894e-001	3.807e-001	1.908e-001	5.145e-001	1.136e-004	3.379e-004

ANNUAL FREQUENCY OF EXCEEDANCE: 2.107e-003
RETURN PERIOD: 474.6
PROBABILITY OF EXCEEDENCE: 10.0% IN 50.0 YEARS
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Mean
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC
  Column 6: Acceleration (g) for: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
  Column 7: Acceleration (g) for: Youngs (1997) Subduction USGS 2008 MRC

1	2	3	4	5	6	7
PGA	6.883e-001	6.191e-001	7.345e-001	7.076e-001	3.045e-004	1.751e-003
0.05	7.522e-001	6.973e-001	7.613e-001	8.006e-001	1.035e-003	2.038e-003
0.1	1.016e+000	1.006e+000	9.821e-001	1.055e+000	1.062e-003	2.408e-003
0.2	1.315e+000	1.358e+000	1.281e+000	1.302e+000	1.106e-003	3.628e-003
0.3	1.371e+000	1.404e+000	1.373e+000	1.334e+000	1.032e-003	3.430e-003
0.4	1.329e+000	1.394e+000	1.275e+000	1.314e+000	9.288e-004	2.995e-003
0.5	1.262e+000	1.395e+000	1.097e+000	1.275e+000	4.710e-004	2.293e-003
0.75	1.102e+000	1.212e+000	8.113e-001	1.190e+000	2.371e-004	1.709e-003
1	9.720e-001	1.026e+000	6.520e-001	1.120e+000	1.855e-004	1.365e-003
2	5.922e-001	5.833e-001	3.299e-001	7.829e-001	* 9.584e-005	1.641e-004
3	3.973e-001	3.920e-001	2.111e-001	5.334e-001	* 5.097e-005	* 9.241e-005
4	2.857e-001	2.921e-001	1.418e-001	3.820e-001	* 4.118e-005	* 8.244e-005

Deterministic Spectra Results using EZ-FRISK 7.62 Build 001

Largest Amplitudes of Ground Motions Considering All Sources Calculated using Weighted Mean of Attenuation Equations
Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	4.362e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	5.378e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	6.538e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.2	8.103e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	8.825e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	9.125e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	8.896e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	7.768e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	6.724e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	3.799e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
3	2.584e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	1.876e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	7.904e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	1.045e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	1.295e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.2	1.511e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.3	1.606e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	1.637e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	1.586e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	1.405e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	1.218e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	7.391e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
3	5.135e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	3.791e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Largest Amplitudes of Ground Motions Considering Sources Calculated with Boore-Atkinson (2008) NGA USGS 2008 MRC
Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	3.424e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	3.948e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	5.775e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	9.579e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	1.021e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	1.046e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	1.026e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	8.700e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	6.995e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	3.731e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
3	2.478e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
4	1.870e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	6.205e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	7.155e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	1.057e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	1.736e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	1.869e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	1.905e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	1.891e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	1.652e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded

1	1.331e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	7.484e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
3	4.947e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
4	3.744e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded

Largest Amplitudes of Ground Motions Considering Sources Calculated with Abrahamson-Silva (2008) NGA MRC

Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	4.894e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	4.705e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	5.510e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	7.191e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	8.153e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	8.209e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	7.310e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	5.448e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	4.336e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	2.291e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
3	1.508e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	1.055e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	8.868e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	8.526e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	9.984e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	1.303e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	1.477e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	1.459e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	1.275e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	9.558e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	7.648e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	4.389e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
3	2.920e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	2.051e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Largest Amplitudes of Ground Motions Considering Sources Calculated with Chiou-Youngs (2007) NGA USGS 2008 MRC

Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	4.776e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	5.226e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	6.201e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	7.540e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	8.112e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	8.708e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.5	9.120e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	9.158e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	8.841e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	5.700e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
3	3.876e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	2.746e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	8.655e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.05	9.471e-001	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.1	1.124e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.2	1.366e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.3	1.470e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.4	1.547e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded

0.5	1.591e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
0.75	1.607e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
1	1.559e+000	7.00 Mw	5.00	USGS 2008 California	California Gridded
2	1.092e+000	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
3	7.756e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek
4	5.662e-001	7.33 Mw	5.66	USGS 2008 California	Hayward-Rodgers Creek

Largest Amplitudes of Ground Motions Considering Sources Calculated with Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC

Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	3.884e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.05	5.696e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	6.754e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.2	7.589e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.3	7.189e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.4	7.233e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.5	7.147e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.75	6.784e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
1	6.538e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
2	2.162e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
3	1.162e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
4	8.984e-002	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	7.208e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.05	1.044e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	1.282e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.2	1.441e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.3	1.365e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.4	1.373e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.5	1.365e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.75	1.308e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
1	1.270e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
2	4.298e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
3	2.310e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
4	1.786e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep

Largest Amplitudes of Ground Motions Considering Sources Calculated with Youngs (1997) Subduction USGS 2008 MRC

Amplitude Units: Acceleration (g)

Fractile: 0.5

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	3.315e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.05	5.061e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	6.323e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.2	7.652e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.3	7.081e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.4	6.264e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.5	5.527e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.75	4.016e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
1	2.868e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
2	7.674e-002	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
3	4.171e-002	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
4	3.244e-002	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep

Fractile: 0.84

Period	Amplitude	Magnitude	Closest Distance(km)	Region	Controlling Source
PGA	6.851e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.05	1.046e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.1	1.307e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep

0.2	1.581e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.3	1.463e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.4	1.295e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.5	1.142e+000	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
0.75	8.299e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
1	5.928e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
2	1.752e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
3	1.052e-001	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep
4	8.180e-002	7.20 Mw	50.65	USGS 2008 California	California Gridded Deep

Largest Amplitudes of Ground Motions for Each Source

Source: San Andreas Creeping Section Gridded
Region: USGS 2008 California
Closest Distance: 92.06 km
Amplitude Units: Acceleration (g)
Magnitude: 6.00 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.673e-002	4.751e-002	3.643e-002	2.624e-002
0.05	4.063e-002	5.320e-002	3.956e-002	2.912e-002
0.1	5.696e-002	7.312e-002	5.480e-002	4.296e-002
0.2	8.393e-002	1.031e-001	8.425e-002	6.440e-002
0.3	8.913e-002	1.136e-001	8.672e-002	6.709e-002
0.4	8.094e-002	1.025e-001	7.497e-002	6.532e-002
0.5	7.277e-002	9.882e-002	5.870e-002	6.077e-002
0.75	5.268e-002	7.631e-002	3.468e-002	4.706e-002
1	3.972e-002	5.853e-002	2.307e-002	3.757e-002
2	1.585e-002	2.517e-002	6.661e-003	1.571e-002
3	8.707e-003	1.422e-002	3.417e-003	8.483e-003
4	5.412e-003	8.917e-003	2.061e-003	5.258e-003

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	6.725e-002	8.609e-002	6.812e-002	4.755e-002
0.05	7.561e-002	9.641e-002	7.590e-002	5.451e-002
0.1	1.074e-001	1.339e-001	1.069e-001	8.138e-002
0.2	1.580e-001	1.869e-001	1.653e-001	1.219e-001
0.3	1.683e-001	2.079e-001	1.703e-001	1.268e-001
0.4	1.524e-001	1.868e-001	1.471e-001	1.234e-001
0.5	1.376e-001	1.822e-001	1.153e-001	1.152e-001
0.75	1.010e-001	1.449e-001	6.806e-002	9.003e-002
1	7.640e-002	1.114e-001	4.519e-002	7.264e-002
2	3.159e-002	5.049e-002	1.307e-002	3.121e-002
3	1.745e-002	2.839e-002	6.684e-003	1.727e-002
4	1.094e-002	1.785e-002	4.021e-003	1.096e-002

Source: Great Valley 3, Mysterious Ridge
Region: USGS 2008 California
Closest Distance: 95.21 km
Amplitude Units: Acceleration (g)
Magnitude: 7.10 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations

Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.128e-001	1.074e-001	1.389e-001	9.212e-002
0.05	1.159e-001	1.108e-001	1.343e-001	1.026e-001
0.1	1.517e-001	1.365e-001	1.706e-001	1.481e-001
0.2	2.401e-001	1.997e-001	3.076e-001	2.131e-001
0.3	2.790e-001	2.385e-001	3.772e-001	2.212e-001
0.4	2.739e-001	2.468e-001	3.562e-001	2.189e-001
0.5	2.529e-001	2.580e-001	2.920e-001	2.088e-001
0.75	1.961e-001	2.312e-001	1.843e-001	1.727e-001
1	1.529e-001	1.855e-001	1.276e-001	1.455e-001
2	6.245e-002	8.173e-002	4.199e-002	6.363e-002
3	3.596e-002	4.924e-002	2.260e-002	3.603e-002
4	2.417e-002	3.465e-002	1.419e-002	2.368e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.044e-001	1.946e-001	2.516e-001	1.669e-001
0.05	2.101e-001	2.008e-001	2.434e-001	1.860e-001
0.1	2.758e-001	2.498e-001	3.092e-001	2.683e-001
0.2	4.352e-001	3.619e-001	5.573e-001	3.862e-001
0.3	5.070e-001	4.366e-001	6.835e-001	4.008e-001
0.4	4.904e-001	4.495e-001	6.329e-001	3.889e-001
0.5	4.529e-001	4.756e-001	5.189e-001	3.642e-001
0.75	3.610e-001	4.391e-001	3.365e-001	3.073e-001
1	2.853e-001	3.529e-001	2.371e-001	2.657e-001
2	1.228e-001	1.639e-001	8.061e-002	1.238e-001
3	7.148e-002	9.829e-002	4.376e-002	7.238e-002
4	4.861e-002	6.936e-002	2.760e-002	4.886e-002

Source: Great Valley 4a, Trout Creek
Region: USGS 2008 California
Closest Distance: 77.83 km
Amplitude Units: Acceleration (g)
Magnitude: 6.60 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	9.676e-002	1.045e-001	1.092e-001	7.660e-002
0.05	1.024e-001	1.091e-001	1.114e-001	8.668e-002
0.1	1.384e-001	1.419e-001	1.467e-001	1.268e-001
0.2	2.151e-001	2.191e-001	2.473e-001	1.788e-001
0.3	2.390e-001	2.530e-001	2.828e-001	1.812e-001
0.4	2.262e-001	2.466e-001	2.564e-001	1.755e-001
0.5	2.052e-001	2.475e-001	2.038e-001	1.642e-001
0.75	1.519e-001	2.034e-001	1.222e-001	1.302e-001
1	1.145e-001	1.560e-001	8.169e-002	1.059e-001
2	4.292e-002	6.224e-002	2.448e-002	4.205e-002
3	2.318e-002	3.425e-002	1.260e-002	2.268e-002
4	1.512e-002	2.325e-002	7.689e-003	1.443e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC

Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.753e-001	1.894e-001	1.978e-001	1.388e-001
0.05	1.855e-001	1.976e-001	2.019e-001	1.571e-001
0.1	2.517e-001	2.597e-001	2.658e-001	2.297e-001
0.2	3.897e-001	3.970e-001	4.481e-001	3.240e-001
0.3	4.346e-001	4.630e-001	5.124e-001	3.284e-001
0.4	4.087e-001	4.491e-001	4.651e-001	3.119e-001
0.5	3.742e-001	4.562e-001	3.742e-001	2.921e-001
0.75	2.841e-001	3.862e-001	2.286e-001	2.375e-001
1	2.162e-001	2.969e-001	1.545e-001	1.972e-001
2	8.490e-002	1.248e-001	4.737e-002	8.249e-002
3	4.622e-002	6.836e-002	2.450e-002	4.580e-002
4	3.047e-002	4.655e-002	1.497e-002	2.989e-002

Source: Great Valley 4b, Gordon Valley
Region: USGS 2008 California
Closest Distance: 53.12 km
Amplitude Units: Acceleration (g)
Magnitude: 6.80 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.563e-001	1.643e-001	1.730e-001	1.315e-001
0.05	1.648e-001	1.697e-001	1.732e-001	1.516e-001
0.1	2.212e-001	2.216e-001	2.231e-001	2.189e-001
0.2	3.346e-001	3.397e-001	3.709e-001	2.933e-001
0.3	3.669e-001	3.776e-001	4.317e-001	2.915e-001
0.4	3.522e-001	3.758e-001	3.997e-001	2.809e-001
0.5	3.205e-001	3.753e-001	3.231e-001	2.632e-001
0.75	2.394e-001	3.072e-001	1.995e-001	2.114e-001
1	1.825e-001	2.369e-001	1.365e-001	1.743e-001
2	7.082e-002	9.623e-002	4.406e-002	7.216e-002
3	3.873e-002	5.339e-002	2.329e-002	3.952e-002
4	2.589e-002	3.785e-002	1.439e-002	2.543e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.832e-001	2.977e-001	3.136e-001	2.383e-001
0.05	2.987e-001	3.075e-001	3.139e-001	2.747e-001
0.1	4.022e-001	4.057e-001	4.043e-001	3.966e-001
0.2	6.064e-001	6.155e-001	6.721e-001	5.316e-001
0.3	6.672e-001	6.912e-001	7.822e-001	5.283e-001
0.4	6.313e-001	6.846e-001	7.103e-001	4.991e-001
0.5	5.744e-001	6.918e-001	5.722e-001	4.592e-001
0.75	4.407e-001	5.835e-001	3.639e-001	3.747e-001
1	3.406e-001	4.507e-001	2.536e-001	3.175e-001
2	1.395e-001	1.930e-001	8.485e-002	1.406e-001
3	7.710e-002	1.066e-001	4.520e-002	7.956e-002
4	5.211e-002	7.577e-002	2.801e-002	5.257e-002

Source: Great Valley 5, Pittsburg Kirby Hills
Region: USGS 2008 California
Closest Distance: 45.22 km

Amplitude Units: Acceleration (g)
Magnitude: 6.70 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.674e-001	1.716e-001	1.953e-001	1.354e-001
0.05	1.775e-001	1.800e-001	1.958e-001	1.567e-001
0.1	2.389e-001	2.386e-001	2.520e-001	2.262e-001
0.2	3.501e-001	3.537e-001	3.969e-001	2.998e-001
0.3	3.708e-001	3.682e-001	4.484e-001	2.958e-001
0.4	3.528e-001	3.683e-001	4.067e-001	2.835e-001
0.5	3.158e-001	3.611e-001	3.218e-001	2.644e-001
0.75	2.297e-001	2.849e-001	1.932e-001	2.110e-001
1	1.779e-001	2.286e-001	1.304e-001	1.748e-001
2	7.632e-002	1.077e-001	4.095e-002	8.030e-002
3	4.275e-002	6.220e-002	2.116e-002	4.490e-002
4	2.907e-002	4.565e-002	1.283e-002	2.873e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.034e-001	3.110e-001	3.539e-001	2.454e-001
0.05	3.217e-001	3.261e-001	3.548e-001	2.840e-001
0.1	4.344e-001	4.367e-001	4.566e-001	4.099e-001
0.2	6.345e-001	6.410e-001	7.192e-001	5.432e-001
0.3	6.742e-001	6.741e-001	8.126e-001	5.361e-001
0.4	6.324e-001	6.709e-001	7.226e-001	5.037e-001
0.5	5.648e-001	6.656e-001	5.675e-001	4.613e-001
0.75	4.225e-001	5.410e-001	3.516e-001	3.750e-001
1	3.320e-001	4.350e-001	2.420e-001	3.191e-001
2	1.505e-001	2.160e-001	7.895e-002	1.565e-001
3	8.524e-002	1.242e-001	4.110e-002	9.047e-002
4	5.861e-002	9.140e-002	2.499e-002	5.945e-002

Source: Great Valley 7
Region: USGS 2008 California
Closest Distance: 60.63 km
Amplitude Units: Acceleration (g)
Magnitude: 6.90 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.375e-001	1.538e-001	1.450e-001	1.137e-001
0.05	1.451e-001	1.589e-001	1.458e-001	1.306e-001
0.1	1.943e-001	2.041e-001	1.887e-001	1.901e-001
0.2	2.949e-001	3.061e-001	3.192e-001	2.593e-001
0.3	3.263e-001	3.453e-001	3.739e-001	2.597e-001
0.4	3.158e-001	3.459e-001	3.500e-001	2.513e-001
0.5	2.912e-001	3.489e-001	2.883e-001	2.363e-001
0.75	2.227e-001	2.923e-001	1.843e-001	1.915e-001
1	1.719e-001	2.273e-001	1.291e-001	1.594e-001
2	6.897e-002	9.442e-002	4.394e-002	6.855e-002
3	3.894e-002	5.384e-002	2.416e-002	3.883e-002
4	2.634e-002	3.810e-002	1.539e-002	2.552e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.492e-001	2.787e-001	2.627e-001	2.060e-001
0.05	2.630e-001	2.880e-001	2.643e-001	2.367e-001
0.1	3.534e-001	3.736e-001	3.419e-001	3.446e-001
0.2	5.343e-001	5.547e-001	5.784e-001	4.699e-001
0.3	5.934e-001	6.321e-001	6.776e-001	4.707e-001
0.4	5.662e-001	6.301e-001	6.219e-001	4.466e-001
0.5	5.230e-001	6.432e-001	5.137e-001	4.123e-001
0.75	4.108e-001	5.551e-001	3.372e-001	3.401e-001
1	3.212e-001	4.325e-001	2.404e-001	2.906e-001
2	1.358e-001	1.894e-001	8.451e-002	1.334e-001
3	7.745e-002	1.075e-001	4.683e-002	7.808e-002
4	5.297e-002	7.628e-002	2.995e-002	5.270e-002

Source: Great Valley 8
Region: USGS 2008 California
Closest Distance: 99.11 km
Amplitude Units: Acceleration (g)
Magnitude: 6.80 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	7.998e-002	8.610e-002	9.127e-002	6.257e-002
0.05	8.283e-002	8.725e-002	9.175e-002	6.948e-002
0.1	1.104e-001	1.102e-001	1.198e-001	1.013e-001
0.2	1.791e-001	1.781e-001	2.101e-001	1.492e-001
0.3	2.059e-001	2.145e-001	2.473e-001	1.559e-001
0.4	2.016e-001	2.209e-001	2.296e-001	1.542e-001
0.5	1.875e-001	2.280e-001	1.878e-001	1.466e-001
0.75	1.445e-001	1.951e-001	1.184e-001	1.199e-001
1	1.117e-001	1.533e-001	8.193e-002	9.998e-002
2	4.430e-002	6.368e-002	2.661e-002	4.262e-002
3	2.460e-002	3.530e-002	1.441e-002	2.409e-002
4	1.669e-002	2.514e-002	9.127e-003	1.579e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.449e-001	1.560e-001	1.654e-001	1.134e-001
0.05	1.501e-001	1.581e-001	1.663e-001	1.259e-001
0.1	2.008e-001	2.017e-001	2.171e-001	1.835e-001
0.2	3.246e-001	3.228e-001	3.808e-001	2.703e-001
0.3	3.744e-001	3.926e-001	4.481e-001	2.825e-001
0.4	3.639e-001	4.024e-001	4.153e-001	2.740e-001
0.5	3.414e-001	4.202e-001	3.437e-001	2.602e-001
0.75	2.698e-001	3.705e-001	2.207e-001	2.181e-001
1	2.107e-001	2.918e-001	1.545e-001	1.856e-001
2	8.748e-002	1.277e-001	5.133e-002	8.338e-002
3	4.899e-002	7.047e-002	2.795e-002	4.854e-002
4	3.358e-002	5.034e-002	1.776e-002	3.265e-002

Source: Green Valley Connected
Region: USGS 2008 California
  Closest Distance: 26.91 km
  Amplitude Units: Acceleration (g)
  Magnitude: 6.80 Mw
  Fractile: 0.50
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.915e-001	2.033e-001	1.957e-001	1.753e-001
0.05	2.081e-001	2.150e-001	2.039e-001	2.053e-001
0.1	2.842e-001	2.930e-001	2.657e-001	2.939e-001
0.2	4.074e-001	4.411e-001	3.983e-001	3.829e-001
0.3	4.225e-001	4.498e-001	4.377e-001	3.799e-001
0.4	4.105e-001	4.552e-001	4.076e-001	3.685e-001
0.5	3.784e-001	4.453e-001	3.407e-001	3.493e-001
0.75	2.905e-001	3.543e-001	2.271e-001	2.900e-001
1	2.340e-001	2.876e-001	1.657e-001	2.487e-001
2	1.110e-001	1.404e-001	6.336e-002	1.292e-001
3	6.620e-002	8.328e-002	3.688e-002	7.845e-002
4	4.647e-002	6.238e-002	2.434e-002	5.270e-002

  Fractile: 0.84
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.469e-001	3.685e-001	3.546e-001	3.177e-001
0.05	3.770e-001	3.895e-001	3.695e-001	3.721e-001
0.1	5.168e-001	5.363e-001	4.815e-001	5.325e-001
0.2	7.383e-001	7.994e-001	7.217e-001	6.939e-001
0.3	7.683e-001	8.234e-001	7.931e-001	6.885e-001
0.4	7.361e-001	8.292e-001	7.243e-001	6.548e-001
0.5	6.761e-001	8.209e-001	5.981e-001	6.093e-001
0.75	5.311e-001	6.729e-001	4.117e-001	5.088e-001
1	4.335e-001	5.474e-001	3.065e-001	4.467e-001
2	2.180e-001	2.816e-001	1.219e-001	2.505e-001
3	1.318e-001	1.662e-001	7.156e-002	1.577e-001
4	9.372e-002	1.249e-001	4.738e-002	1.089e-001

Source: Greenville Connected
Region: USGS 2008 California
  Closest Distance: 39.03 km
  Amplitude Units: Acceleration (g)
  Magnitude: 7.00 Mw
  Fractile: 0.50
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.508e-001	1.892e-001	1.354e-001	1.277e-001
0.05	1.638e-001	1.995e-001	1.417e-001	1.501e-001
0.1	2.230e-001	2.622e-001	1.861e-001	2.208e-001
0.2	3.204e-001	3.739e-001	2.921e-001	2.953e-001
0.3	3.363e-001	3.888e-001	3.269e-001	2.933e-001
0.4	3.290e-001	3.942e-001	3.095e-001	2.834e-001
0.5	3.081e-001	3.908e-001	2.659e-001	2.675e-001

0.75	2.433e-001	3.221e-001	1.863e-001	2.215e-001
1	1.983e-001	2.637e-001	1.406e-001	1.907e-001
2	9.780e-002	1.332e-001	5.764e-002	1.026e-001
3	6.124e-002	8.328e-002	3.554e-002	6.491e-002
4	4.394e-002	6.231e-002	2.460e-002	4.492e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.732e-001	3.428e-001	2.454e-001	2.315e-001
0.05	2.968e-001	3.616e-001	2.569e-001	2.719e-001
0.1	4.058e-001	4.799e-001	3.373e-001	4.001e-001
0.2	5.806e-001	6.775e-001	5.293e-001	5.351e-001
0.3	6.119e-001	7.118e-001	5.923e-001	5.315e-001
0.4	5.905e-001	7.180e-001	5.500e-001	5.035e-001
0.5	5.534e-001	7.204e-001	4.732e-001	4.666e-001
0.75	4.471e-001	6.117e-001	3.405e-001	3.893e-001
1	3.693e-001	5.017e-001	2.615e-001	3.447e-001
2	1.922e-001	2.671e-001	1.107e-001	1.988e-001
3	1.218e-001	1.662e-001	6.883e-002	1.303e-001
4	8.841e-002	1.247e-001	4.784e-002	9.265e-002

Source: Greenville Connected U
Region: USGS 2008 California
Closest Distance: 39.03 km
Amplitude Units: Acceleration (g)
Magnitude: 7.00 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.508e-001	1.892e-001	1.354e-001	1.277e-001
0.05	1.638e-001	1.995e-001	1.417e-001	1.501e-001
0.1	2.230e-001	2.622e-001	1.861e-001	2.208e-001
0.2	3.204e-001	3.739e-001	2.921e-001	2.953e-001
0.3	3.363e-001	3.888e-001	3.269e-001	2.933e-001
0.4	3.290e-001	3.942e-001	3.095e-001	2.834e-001
0.5	3.081e-001	3.908e-001	2.659e-001	2.675e-001
0.75	2.433e-001	3.221e-001	1.863e-001	2.215e-001
1	1.983e-001	2.637e-001	1.406e-001	1.907e-001
2	9.780e-002	1.332e-001	5.764e-002	1.026e-001
3	6.124e-002	8.328e-002	3.554e-002	6.491e-002
4	4.394e-002	6.231e-002	2.460e-002	4.492e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.732e-001	3.428e-001	2.454e-001	2.315e-001
0.05	2.968e-001	3.616e-001	2.569e-001	2.719e-001
0.1	4.058e-001	4.799e-001	3.373e-001	4.001e-001
0.2	5.806e-001	6.775e-001	5.293e-001	5.351e-001
0.3	6.119e-001	7.118e-001	5.923e-001	5.315e-001
0.4	5.905e-001	7.180e-001	5.500e-001	5.035e-001
0.5	5.534e-001	7.204e-001	4.732e-001	4.666e-001
0.75	4.471e-001	6.117e-001	3.405e-001	3.893e-001

1	3.693e-001	5.017e-001	2.615e-001	3.447e-001
2	1.922e-001	2.671e-001	1.107e-001	1.988e-001
3	1.218e-001	1.662e-001	6.883e-002	1.303e-001
4	8.841e-002	1.247e-001	4.784e-002	9.265e-002

Source: Hunting Creek-Berryessa
Region: USGS 2008 California
Closest Distance: 73.28 km
Amplitude Units: Acceleration (g)
Magnitude: 7.10 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.001e-001	1.416e-001	8.463e-002	7.420e-002
0.05	1.065e-001	1.476e-001	8.679e-002	8.520e-002
0.1	1.416e-001	1.842e-001	1.137e-001	1.269e-001
0.2	2.089e-001	2.559e-001	1.905e-001	1.802e-001
0.3	2.280e-001	2.802e-001	2.200e-001	1.838e-001
0.4	2.269e-001	2.904e-001	2.106e-001	1.797e-001
0.5	2.164e-001	2.958e-001	1.831e-001	1.705e-001
0.75	1.755e-001	2.537e-001	1.307e-001	1.420e-001
1	1.443e-001	2.106e-001	9.955e-002	1.229e-001
2	7.195e-002	1.080e-001	4.111e-002	6.673e-002
3	4.567e-002	6.846e-002	2.573e-002	4.284e-002
4	3.293e-002	5.075e-002	1.807e-002	2.998e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.815e-001	2.566e-001	1.534e-001	1.345e-001
0.05	1.931e-001	2.676e-001	1.573e-001	1.544e-001
0.1	2.577e-001	3.372e-001	2.060e-001	2.300e-001
0.2	3.785e-001	4.638e-001	3.452e-001	3.266e-001
0.3	4.149e-001	5.129e-001	3.987e-001	3.331e-001
0.4	4.085e-001	5.289e-001	3.775e-001	3.192e-001
0.5	3.918e-001	5.452e-001	3.323e-001	2.978e-001
0.75	3.262e-001	4.817e-001	2.419e-001	2.550e-001
1	2.711e-001	4.007e-001	1.868e-001	2.256e-001
2	1.418e-001	2.166e-001	7.902e-002	1.298e-001
3	9.083e-002	1.366e-001	4.982e-002	8.604e-002
4	6.620e-002	1.016e-001	3.515e-002	6.184e-002

Source: Maacama-Garberville
Region: USGS 2008 California
Closest Distance: 94.50 km
Amplitude Units: Acceleration (g)
Magnitude: 7.40 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.036e-001	1.240e-001	1.065e-001	8.031e-002
0.05	1.085e-001	1.306e-001	1.046e-001	9.022e-002

0.1	1.408e-001	1.565e-001	1.336e-001	1.322e-001
0.2	2.105e-001	2.027e-001	2.358e-001	1.929e-001
0.3	2.389e-001	2.298e-001	2.854e-001	2.016e-001
0.4	2.406e-001	2.447e-001	2.766e-001	2.006e-001
0.5	2.300e-001	2.576e-001	2.394e-001	1.929e-001
0.75	1.903e-001	2.378e-001	1.689e-001	1.641e-001
1	1.586e-001	2.046e-001	1.274e-001	1.439e-001
2	8.147e-002	1.131e-001	5.146e-002	7.985e-002
3	5.355e-002	7.796e-002	3.153e-002	5.115e-002
4	3.821e-002	5.711e-002	2.178e-002	3.573e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.878e-001	2.248e-001	1.930e-001	1.455e-001
0.05	1.966e-001	2.367e-001	1.896e-001	1.635e-001
0.1	2.561e-001	2.865e-001	2.421e-001	2.396e-001
0.2	3.814e-001	3.674e-001	4.272e-001	3.495e-001
0.3	4.344e-001	4.207e-001	5.172e-001	3.652e-001
0.4	4.312e-001	4.458e-001	4.914e-001	3.565e-001
0.5	4.141e-001	4.749e-001	4.308e-001	3.365e-001
0.75	3.518e-001	4.516e-001	3.110e-001	2.927e-001
1	2.967e-001	3.893e-001	2.381e-001	2.629e-001
2	1.603e-001	2.269e-001	9.886e-002	1.550e-001
3	1.065e-001	1.556e-001	6.107e-002	1.027e-001
4	7.680e-002	1.143e-001	4.237e-002	7.371e-002

Source: Monte Vista-Shannon
Region: USGS 2008 California
Closest Distance: 39.88 km
Amplitude Units: Acceleration (g)
Magnitude: 6.50 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.170e-001	1.658e-001	8.951e-002	9.579e-002
0.05	1.302e-001	1.793e-001	9.819e-002	1.130e-001
0.1	1.819e-001	2.427e-001	1.337e-001	1.691e-001
0.2	2.619e-001	3.521e-001	2.062e-001	2.272e-001
0.3	2.749e-001	3.808e-001	2.206e-001	2.232e-001
0.4	2.580e-001	3.575e-001	2.041e-001	2.124e-001
0.5	2.399e-001	3.494e-001	1.730e-001	1.973e-001
0.75	1.840e-001	2.775e-001	1.175e-001	1.571e-001
1	1.419e-001	2.103e-001	8.627e-002	1.291e-001
2	5.682e-002	8.206e-002	3.257e-002	5.581e-002
3	3.243e-002	4.526e-002	1.940e-002	3.264e-002
4	2.150e-002	2.955e-002	1.315e-002	2.180e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.121e-001	3.004e-001	1.622e-001	1.736e-001
0.05	2.359e-001	3.250e-001	1.779e-001	2.048e-001
0.1	3.310e-001	4.444e-001	2.423e-001	3.065e-001

0.2	4.745e-001	6.381e-001	3.737e-001	4.118e-001
0.3	5.013e-001	6.971e-001	4.024e-001	4.044e-001
0.4	4.683e-001	6.512e-001	3.763e-001	3.774e-001
0.5	4.383e-001	6.441e-001	3.221e-001	3.487e-001
0.75	3.446e-001	5.270e-001	2.220e-001	2.849e-001
1	2.680e-001	4.003e-001	1.643e-001	2.395e-001
2	1.124e-001	1.646e-001	6.320e-002	1.094e-001
3	6.468e-002	9.033e-002	3.776e-002	6.595e-002
4	4.333e-002	5.915e-002	2.562e-002	4.521e-002

Source: Monterey Bay-Tularcitos
Region: USGS 2008 California
Closest Distance: 98.06 km
Amplitude Units: Acceleration (g)
Magnitude: 7.30 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	8.554e-002	1.131e-001	7.943e-002	6.413e-002
0.05	8.989e-002	1.183e-001	7.939e-002	7.197e-002
0.1	1.172e-001	1.427e-001	1.026e-001	1.063e-001
0.2	1.761e-001	1.912e-001	1.797e-001	1.575e-001
0.3	1.994e-001	2.180e-001	2.144e-001	1.657e-001
0.4	2.020e-001	2.323e-001	2.083e-001	1.653e-001
0.5	1.954e-001	2.440e-001	1.830e-001	1.592e-001
0.75	1.636e-001	2.222e-001	1.329e-001	1.358e-001
1	1.372e-001	1.901e-001	1.022e-001	1.194e-001
2	7.116e-002	1.031e-001	4.317e-002	6.721e-002
3	4.677e-002	6.907e-002	2.734e-002	4.388e-002
4	3.373e-002	5.077e-002	1.938e-002	3.103e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.550e-001	2.049e-001	1.439e-001	1.162e-001
0.05	1.629e-001	2.144e-001	1.439e-001	1.304e-001
0.1	2.132e-001	2.611e-001	1.860e-001	1.926e-001
0.2	3.192e-001	3.465e-001	3.256e-001	2.854e-001
0.3	3.626e-001	3.991e-001	3.885e-001	3.002e-001
0.4	3.637e-001	4.232e-001	3.741e-001	2.938e-001
0.5	3.539e-001	4.497e-001	3.328e-001	2.791e-001
0.75	3.042e-001	4.220e-001	2.463e-001	2.442e-001
1	2.577e-001	3.617e-001	1.920e-001	2.195e-001
2	1.402e-001	2.068e-001	8.297e-002	1.307e-001
3	9.298e-002	1.379e-001	5.295e-002	8.813e-002
4	6.778e-002	1.016e-001	3.769e-002	6.401e-002

Source: Mount Diablo Thrust
Region: USGS 2008 California
Closest Distance: 23.09 km
Amplitude Units: Acceleration (g)
Magnitude: 6.70 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC

Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.391e-001	2.093e-001	2.710e-001	2.370e-001
0.05	2.563e-001	2.232e-001	2.726e-001	2.731e-001
0.1	3.435e-001	3.101e-001	3.460e-001	3.745e-001
0.2	4.949e-001	4.819e-001	5.246e-001	4.782e-001
0.3	5.283e-001	5.132e-001	5.931e-001	4.786e-001
0.4	5.100e-001	5.047e-001	5.553e-001	4.701e-001
0.5	4.675e-001	4.961e-001	4.560e-001	4.504e-001
0.75	3.561e-001	3.996e-001	2.905e-001	3.780e-001
1	2.782e-001	3.096e-001	2.043e-001	3.207e-001
2	1.138e-001	1.271e-001	7.247e-002	1.418e-001
3	6.312e-002	7.106e-002	3.928e-002	7.902e-002
4	4.167e-002	4.957e-002	2.443e-002	5.101e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	4.333e-001	3.792e-001	4.911e-001	4.295e-001
0.05	4.644e-001	4.044e-001	4.939e-001	4.949e-001
0.1	6.244e-001	5.677e-001	6.269e-001	6.786e-001
0.2	8.968e-001	8.733e-001	9.507e-001	8.665e-001
0.3	9.605e-001	9.394e-001	1.075e+000	8.673e-001
0.4	9.138e-001	9.192e-001	9.868e-001	8.353e-001
0.5	8.319e-001	9.144e-001	7.955e-001	7.858e-001
0.75	6.469e-001	7.589e-001	5.186e-001	6.632e-001
1	5.113e-001	5.892e-001	3.737e-001	5.710e-001
2	2.231e-001	2.550e-001	1.395e-001	2.749e-001
3	1.257e-001	1.418e-001	7.631e-002	1.590e-001
4	8.411e-002	9.923e-002	4.756e-002	1.055e-001

Source: Point Reyes
Region: USGS 2008 California
Closest Distance: 52.70 km
Amplitude Units: Acceleration (g)
Magnitude: 6.90 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.191e-001	1.660e-001	9.519e-002	9.601e-002
0.05	1.281e-001	1.721e-001	1.002e-001	1.120e-001
0.1	1.742e-001	2.229e-001	1.329e-001	1.667e-001
0.2	2.602e-001	3.335e-001	2.189e-001	2.283e-001
0.3	2.829e-001	3.721e-001	2.486e-001	2.280e-001
0.4	2.762e-001	3.712e-001	2.374e-001	2.200e-001
0.5	2.620e-001	3.728e-001	2.061e-001	2.070e-001
0.75	2.086e-001	3.107e-001	1.457e-001	1.694e-001
1	1.647e-001	2.412e-001	1.098e-001	1.429e-001
2	7.033e-002	1.003e-001	4.436e-002	6.634e-002
3	4.171e-002	5.732e-002	2.739e-002	4.042e-002
4	2.915e-002	4.059e-002	1.904e-002	2.781e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.158e-001	3.008e-001	1.725e-001	1.740e-001
0.05	2.322e-001	3.119e-001	1.816e-001	2.030e-001
0.1	3.170e-001	4.080e-001	2.408e-001	3.022e-001
0.2	4.716e-001	6.043e-001	3.967e-001	4.137e-001
0.3	5.149e-001	6.811e-001	4.506e-001	4.131e-001
0.4	4.977e-001	6.761e-001	4.259e-001	3.909e-001
0.5	4.743e-001	6.871e-001	3.746e-001	3.611e-001
0.75	3.876e-001	5.900e-001	2.701e-001	3.027e-001
1	3.090e-001	4.591e-001	2.063e-001	2.617e-001
2	1.386e-001	2.011e-001	8.541e-002	1.292e-001
3	8.293e-002	1.144e-001	5.310e-002	8.128e-002
4	5.857e-002	8.126e-002	3.704e-002	5.741e-002

Source: San Gregorio Connected
Region: USGS 2008 California
  Closest Distance: 30.23 km
  Amplitude Units: Acceleration (g)
  Magnitude: 7.50 Mw
  Fractile: 0.50
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.058e-001	2.183e-001	2.014e-001	1.979e-001
0.05	2.234e-001	2.366e-001	2.032e-001	2.305e-001
0.1	2.976e-001	3.084e-001	2.580e-001	3.265e-001
0.2	4.134e-001	4.016e-001	4.093e-001	4.291e-001
0.3	4.435e-001	4.188e-001	4.775e-001	4.341e-001
0.4	4.410e-001	4.247e-001	4.684e-001	4.299e-001
0.5	4.192e-001	4.275e-001	4.140e-001	4.161e-001
0.75	3.497e-001	3.816e-001	3.049e-001	3.627e-001
1	2.952e-001	3.218e-001	2.387e-001	3.250e-001
2	1.628e-001	1.850e-001	1.091e-001	1.942e-001
3	1.118e-001	1.368e-001	7.032e-002	1.282e-001
4	8.131e-002	1.033e-001	4.986e-002	9.079e-002

  Fractile: 0.84
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.730e-001	3.955e-001	3.650e-001	3.586e-001
0.05	4.049e-001	4.287e-001	3.682e-001	4.178e-001
0.1	5.413e-001	5.646e-001	4.675e-001	5.917e-001
0.2	7.491e-001	7.278e-001	7.418e-001	7.776e-001
0.3	8.062e-001	7.666e-001	8.653e-001	7.867e-001
0.4	7.899e-001	7.736e-001	8.322e-001	7.638e-001
0.5	7.454e-001	7.880e-001	7.222e-001	7.260e-001
0.75	6.364e-001	7.246e-001	5.481e-001	6.364e-001
1	5.419e-001	6.124e-001	4.387e-001	5.746e-001
2	3.181e-001	3.712e-001	2.092e-001	3.740e-001
3	2.220e-001	2.730e-001	1.362e-001	2.569e-001
4	1.637e-001	2.068e-001	9.697e-002	1.872e-001

Source: West Napa
Region: USGS 2008 California
  Closest Distance: 41.00 km
  Amplitude Units: Acceleration (g)
  Magnitude: 6.70 Mw

Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.255e-001	1.766e-001	1.020e-001	9.801e-002
0.05	1.370e-001	1.856e-001	1.099e-001	1.156e-001
0.1	1.892e-001	2.472e-001	1.475e-001	1.728e-001
0.2	2.751e-001	3.666e-001	2.259e-001	2.328e-001
0.3	2.844e-001	3.798e-001	2.438e-001	2.296e-001
0.4	2.751e-001	3.797e-001	2.263e-001	2.194e-001
0.5	2.563e-001	3.717e-001	1.923e-001	2.049e-001
0.75	1.970e-001	2.929e-001	1.323e-001	1.658e-001
1	1.579e-001	2.352e-001	9.859e-002	1.400e-001
2	7.379e-002	1.110e-001	3.877e-002	7.159e-002
3	4.404e-002	6.422e-002	2.356e-002	4.435e-002
4	3.120e-002	4.715e-002	1.619e-002	3.027e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.275e-001	3.199e-001	1.848e-001	1.776e-001
0.05	2.483e-001	3.363e-001	1.991e-001	2.095e-001
0.1	3.443e-001	4.525e-001	2.673e-001	3.132e-001
0.2	4.985e-001	6.643e-001	4.093e-001	4.219e-001
0.3	5.177e-001	6.953e-001	4.418e-001	4.160e-001
0.4	4.970e-001	6.916e-001	4.096e-001	3.899e-001
0.5	4.653e-001	6.852e-001	3.523e-001	3.584e-001
0.75	3.672e-001	5.563e-001	2.470e-001	2.982e-001
1	2.971e-001	4.475e-001	1.862e-001	2.578e-001
2	1.458e-001	2.227e-001	7.492e-002	1.397e-001
3	8.777e-002	1.282e-001	4.577e-002	8.936e-002
4	6.284e-002	9.438e-002	3.151e-002	6.263e-002

Source: Zayante-Vergeles
Region: USGS 2008 California
Closest Distance: 82.70 km
Amplitude Units: Acceleration (g)
Magnitude: 7.00 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	8.407e-002	1.205e-001	7.119e-002	6.051e-002
0.05	8.888e-002	1.246e-001	7.316e-002	6.887e-002
0.1	1.182e-001	1.556e-001	9.622e-002	1.026e-001
0.2	1.783e-001	2.244e-001	1.618e-001	1.486e-001
0.3	1.962e-001	2.494e-001	1.861e-001	1.531e-001
0.4	1.958e-001	2.599e-001	1.773e-001	1.504e-001
0.5	1.872e-001	2.652e-001	1.535e-001	1.429e-001
0.75	1.512e-001	2.257e-001	1.087e-001	1.191e-001
1	1.240e-001	1.868e-001	8.230e-002	1.028e-001
2	6.090e-002	9.413e-002	3.333e-002	5.522e-002
3	3.795e-002	5.793e-002	2.067e-002	3.523e-002
4	2.735e-002	4.305e-002	1.445e-002	2.455e-002

Fractile: 0.84

Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	1.524e-001	2.184e-001	1.290e-001	1.097e-001
0.05	1.611e-001	2.258e-001	1.326e-001	1.248e-001
0.1	2.151e-001	2.849e-001	1.744e-001	1.860e-001
0.2	3.231e-001	4.067e-001	2.933e-001	2.692e-001
0.3	3.571e-001	4.566e-001	3.372e-001	2.774e-001
0.4	3.534e-001	4.734e-001	3.196e-001	2.672e-001
0.5	3.403e-001	4.889e-001	2.799e-001	2.520e-001
0.75	2.820e-001	4.286e-001	2.019e-001	2.153e-001
1	2.334e-001	3.555e-001	1.548e-001	1.899e-001
2	1.202e-001	1.888e-001	6.408e-002	1.076e-001
3	7.548e-002	1.156e-001	4.004e-002	7.078e-002
4	5.498e-002	8.618e-002	2.810e-002	5.064e-002

Source: California Gridded
Region: USGS 2008 California
Closest Distance: 5.00 km
Amplitude Units: Acceleration (g)
Magnitude: 7.00 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	4.362e-001	3.424e-001	4.894e-001	4.776e-001
0.05	4.618e-001	3.948e-001	4.705e-001	5.226e-001
0.1	5.818e-001	5.775e-001	5.510e-001	6.201e-001
0.2	8.103e-001	9.579e-001	7.191e-001	7.540e-001
0.3	8.825e-001	1.021e+000	8.153e-001	8.112e-001
0.4	9.125e-001	1.046e+000	8.209e-001	8.708e-001
0.5	8.896e-001	1.026e+000	7.310e-001	9.120e-001
0.75	7.768e-001	8.700e-001	5.448e-001	9.158e-001
1	6.724e-001	6.995e-001	4.336e-001	8.841e-001
2	3.799e-001	3.731e-001	2.246e-001	5.594e-001
3	2.447e-001	2.478e-001	1.379e-001	3.589e-001
4	1.717e-001	1.870e-001	9.056e-002	2.446e-001

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	7.904e-001	6.205e-001	8.868e-001	8.655e-001
0.05	8.368e-001	7.155e-001	8.526e-001	9.471e-001
0.1	1.058e+000	1.057e+000	9.984e-001	1.124e+000
0.2	1.468e+000	1.736e+000	1.303e+000	1.366e+000
0.3	1.606e+000	1.869e+000	1.477e+000	1.470e+000
0.4	1.637e+000	1.905e+000	1.459e+000	1.547e+000
0.5	1.586e+000	1.891e+000	1.275e+000	1.591e+000
0.75	1.405e+000	1.652e+000	9.558e-001	1.607e+000
1	1.218e+000	1.331e+000	7.648e-001	1.559e+000
2	7.391e-001	7.484e-001	4.303e-001	1.072e+000
3	4.865e-001	4.947e-001	2.670e-001	7.182e-001
4	3.471e-001	3.744e-001	1.761e-001	5.043e-001

Source: Calaveras
Region: USGS 2008 California
  Closest Distance: 22.44 km
  Amplitude Units: Acceleration (g)
  Magnitude: 7.03 Mw
  Fractile: 0.50
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.158e-001	2.185e-001	2.190e-001	2.100e-001
0.05	2.351e-001	2.341e-001	2.262e-001	2.450e-001
0.1	3.181e-001	3.191e-001	2.911e-001	3.442e-001
0.2	4.487e-001	4.682e-001	4.361e-001	4.460e-001
0.3	4.697e-001	4.765e-001	4.867e-001	4.480e-001
0.4	4.619e-001	4.829e-001	4.636e-001	4.413e-001
0.5	4.319e-001	4.732e-001	3.976e-001	4.250e-001
0.75	3.444e-001	3.905e-001	2.777e-001	3.651e-001
1	2.843e-001	3.213e-001	2.097e-001	3.219e-001
2	1.453e-001	1.667e-001	8.803e-002	1.810e-001
3	9.169e-002	1.068e-001	5.374e-002	1.145e-001
4	6.527e-002	8.043e-002	3.659e-002	7.880e-002

  Fractile: 0.84
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.911e-001	3.959e-001	3.968e-001	3.806e-001
0.05	4.260e-001	4.242e-001	4.098e-001	4.439e-001
0.1	5.785e-001	5.842e-001	5.275e-001	6.237e-001
0.2	8.131e-001	8.485e-001	7.902e-001	8.082e-001
0.3	8.541e-001	8.722e-001	8.819e-001	8.119e-001
0.4	8.278e-001	8.796e-001	8.238e-001	7.841e-001
0.5	7.691e-001	8.723e-001	6.936e-001	7.414e-001
0.75	6.263e-001	7.415e-001	4.969e-001	6.406e-001
1	5.216e-001	6.114e-001	3.842e-001	5.693e-001
2	2.840e-001	3.344e-001	1.687e-001	3.489e-001
3	1.823e-001	2.132e-001	1.041e-001	2.295e-001
4	1.316e-001	1.610e-001	7.117e-002	1.625e-001

Source: Hayward-Rodgers Creek
Region: USGS 2008 California
  Closest Distance: 5.66 km
  Amplitude Units: Acceleration (g)
  Magnitude: 7.33 Mw
  Fractile: 0.50
  Column 1: Spectral Period
  Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
  Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
  Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
  Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	3.682e-001	2.856e-001	4.108e-001	4.084e-001
0.05	3.943e-001	3.191e-001	4.093e-001	4.563e-001
0.1	5.080e-001	4.663e-001	4.974e-001	5.666e-001
0.2	6.888e-001	7.237e-001	6.524e-001	7.030e-001
0.3	7.418e-001	7.429e-001	7.329e-001	7.496e-001
0.4	7.639e-001	7.617e-001	7.368e-001	7.954e-001
0.5	7.459e-001	7.470e-001	6.659e-001	8.248e-001
0.75	6.615e-001	6.500e-001	5.143e-001	8.201e-001
1	5.889e-001	5.446e-001	4.210e-001	8.012e-001

2	3.737e-001	3.219e-001	2.291e-001	5.700e-001
3	2.584e-001	2.370e-001	1.508e-001	3.876e-001
4	1.876e-001	1.828e-001	1.055e-001	2.746e-001

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	6.673e-001	5.175e-001	7.444e-001	7.401e-001
0.05	7.146e-001	5.783e-001	7.418e-001	8.268e-001
0.1	9.234e-001	8.535e-001	9.014e-001	1.027e+000
0.2	1.248e+000	1.312e+000	1.182e+000	1.274e+000
0.3	1.349e+000	1.360e+000	1.328e+000	1.358e+000
0.4	1.369e+000	1.387e+000	1.309e+000	1.413e+000
0.5	1.326e+000	1.377e+000	1.162e+000	1.439e+000
0.75	1.192e+000	1.235e+000	9.023e-001	1.439e+000
1	1.066e+000	1.036e+000	7.488e-001	1.413e+000
2	7.256e-001	6.457e-001	4.389e-001	1.092e+000
3	5.135e-001	4.730e-001	2.920e-001	7.756e-001
4	3.791e-001	3.660e-001	2.051e-001	5.662e-001

Source: Northern San Andreas
Region: USGS 2008 California
Closest Distance: 23.42 km
Amplitude Units: Acceleration (g)
Magnitude: 8.05 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	2.650e-001	2.487e-001	2.715e-001	2.749e-001
0.05	2.856e-001	2.767e-001	2.645e-001	3.155e-001
0.1	3.699e-001	3.581e-001	3.249e-001	4.267e-001
0.2	4.981e-001	4.508e-001	5.131e-001	5.521e-001
0.3	5.478e-001	4.645e-001	6.172e-001	5.726e-001
0.4	5.561e-001	4.701e-001	6.252e-001	5.850e-001
0.5	5.399e-001	4.676e-001	5.680e-001	5.840e-001
0.75	4.783e-001	4.544e-001	4.394e-001	5.411e-001
1	4.189e-001	3.931e-001	3.567e-001	5.068e-001
2	2.600e-001	2.607e-001	1.817e-001	3.376e-001
3	1.952e-001	2.323e-001	1.217e-001	2.315e-001
4	1.444e-001	1.786e-001	8.793e-002	1.668e-001

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Boore-Atkinson (2008) NGA USGS 2008 MRC
Column 4: Acceleration (g) for: Abrahamson-Silva (2008) NGA MRC
Column 5: Acceleration (g) for: Chiou-Youngs (2007) NGA USGS 2008 MRC

1	2	3	4	5
PGA	4.803e-001	4.506e-001	4.921e-001	4.981e-001
0.05	5.175e-001	5.014e-001	4.792e-001	5.718e-001
0.1	6.725e-001	6.555e-001	5.888e-001	7.732e-001
0.2	9.026e-001	8.169e-001	9.298e-001	1.000e+000
0.3	9.955e-001	8.502e-001	1.118e+000	1.038e+000
0.4	9.950e-001	8.562e-001	1.111e+000	1.039e+000
0.5	9.572e-001	8.619e-001	9.910e-001	1.019e+000
0.75	8.630e-001	8.630e-001	7.766e-001	9.493e-001
1	7.632e-001	7.481e-001	6.476e-001	8.937e-001
2	5.062e-001	5.230e-001	3.481e-001	6.474e-001

3	3.876e-001	4.638e-001	2.357e-001	4.635e-001
4	2.908e-001	3.575e-001	1.710e-001	3.440e-001

Source: California Gridded Deep
Region: USGS 2008 California
Closest Distance: 50.65 km
Amplitude Units: Acceleration (g)
Magnitude: 7.20 Mw
Fractile: 0.50
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
Column 4: Acceleration (g) for: Youngs (1997) Subduction USGS 2008 MRC

1	2	3	4
PGA	3.600e-001	3.884e-001	3.315e-001
0.05	5.378e-001	5.696e-001	5.061e-001
0.1	6.538e-001	6.754e-001	6.323e-001
0.2	7.620e-001	7.589e-001	7.652e-001
0.3	7.135e-001	7.189e-001	7.081e-001
0.4	6.749e-001	7.233e-001	6.264e-001
0.5	6.337e-001	7.147e-001	5.527e-001
0.75	5.400e-001	6.784e-001	4.016e-001
1	4.703e-001	6.538e-001	2.868e-001
2	1.465e-001	2.162e-001	7.674e-002
3	7.897e-002	1.162e-001	4.171e-002
4	6.114e-002	8.984e-002	3.244e-002

Fractile: 0.84
Column 1: Spectral Period
Column 2: Acceleration (g) for: Weighted Mean of Attenuation Equations
Column 3: Acceleration (g) for: Atkinson-Boore (2003) Worldwide Subduction USGS 2008 MRC
Column 4: Acceleration (g) for: Youngs (1997) Subduction USGS 2008 MRC

1	2	3	4
PGA	7.029e-001	7.208e-001	6.851e-001
0.05	1.045e+000	1.044e+000	1.046e+000
0.1	1.295e+000	1.282e+000	1.307e+000
0.2	1.511e+000	1.441e+000	1.581e+000
0.3	1.414e+000	1.365e+000	1.463e+000
0.4	1.334e+000	1.373e+000	1.295e+000
0.5	1.253e+000	1.365e+000	1.142e+000
0.75	1.069e+000	1.308e+000	8.299e-001
1	9.314e-001	1.270e+000	5.928e-001
2	3.025e-001	4.298e-001	1.752e-001
3	1.681e-001	2.310e-001	1.052e-001
4	1.302e-001	1.786e-001	8.180e-002