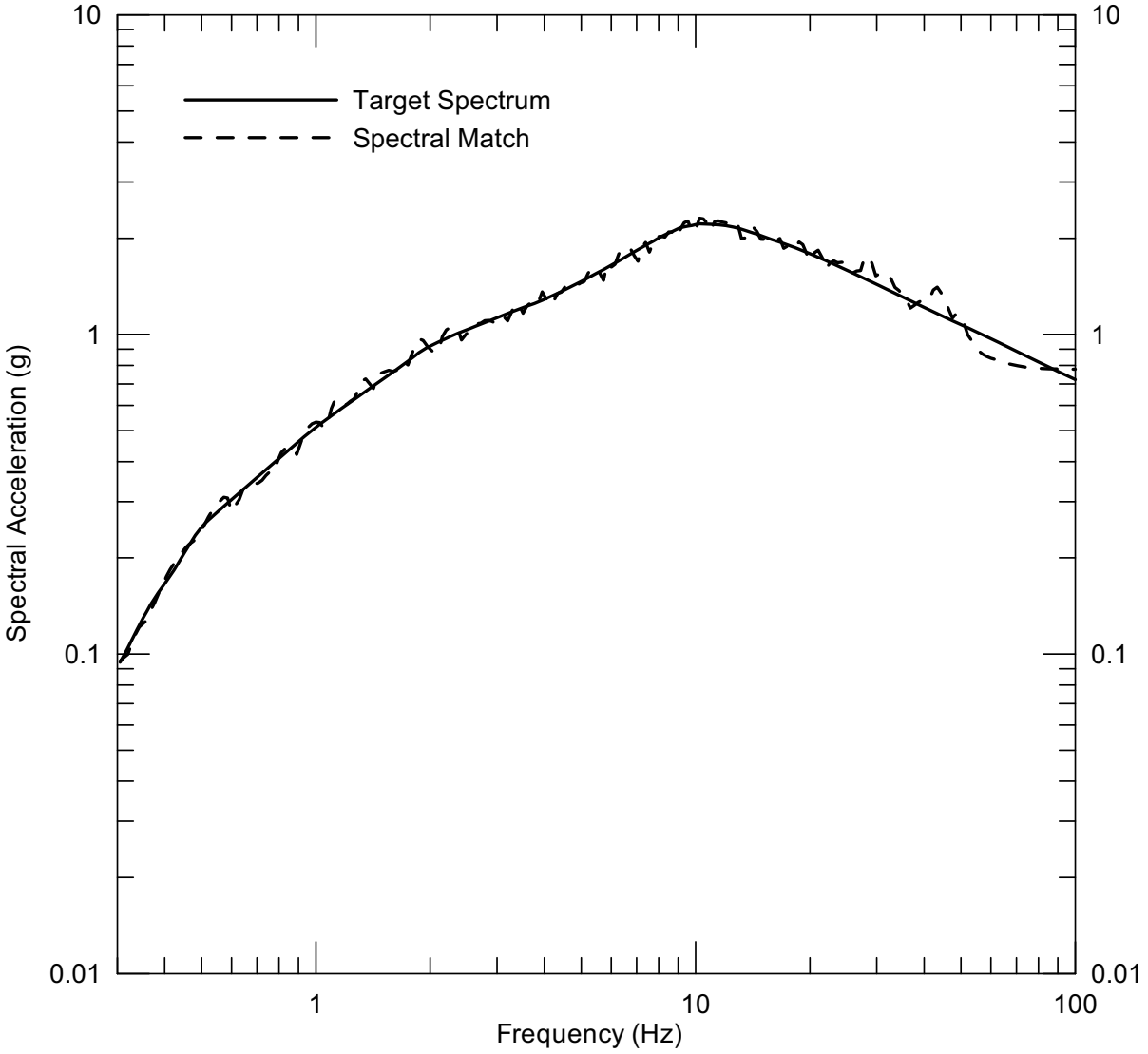
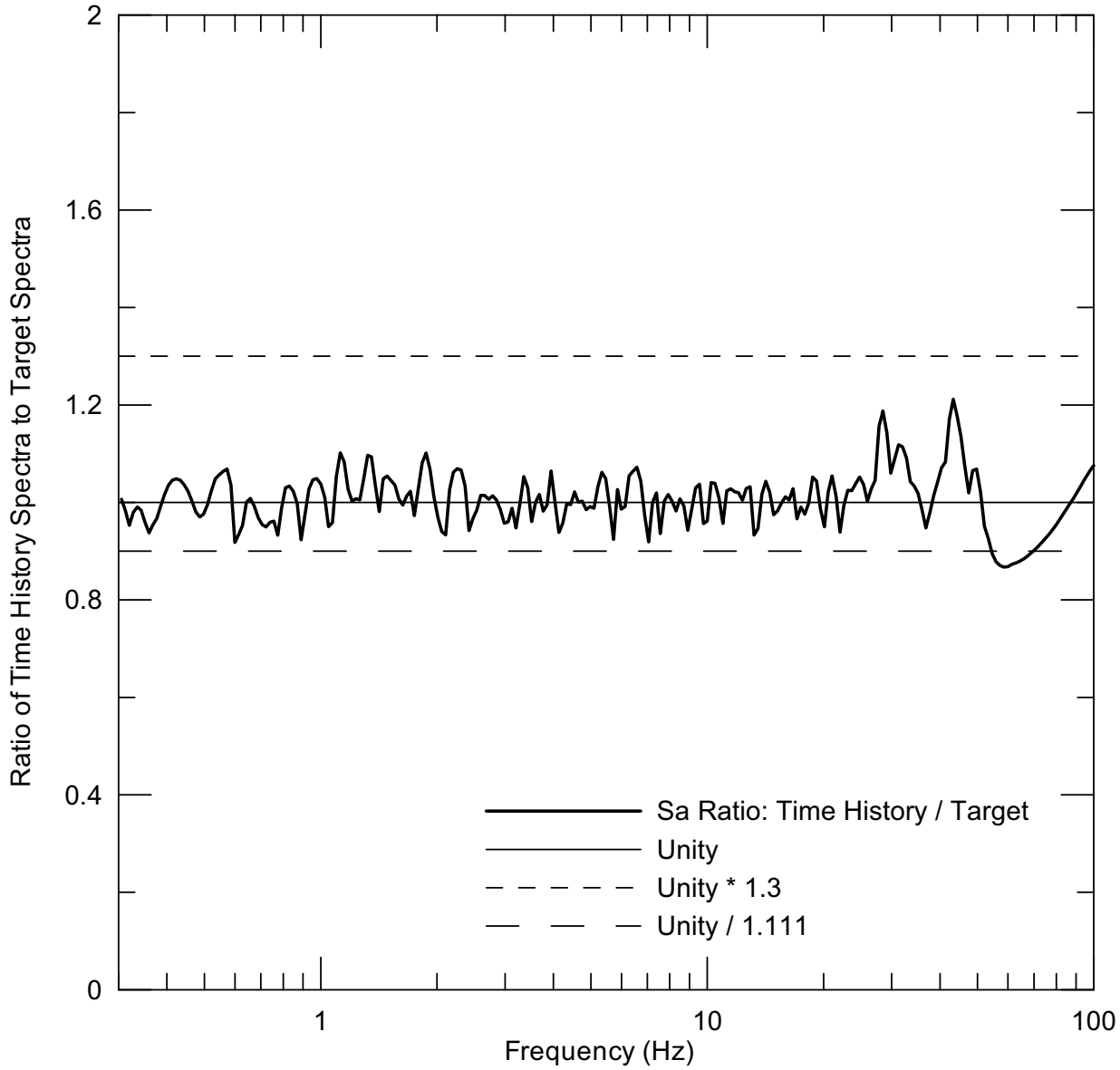


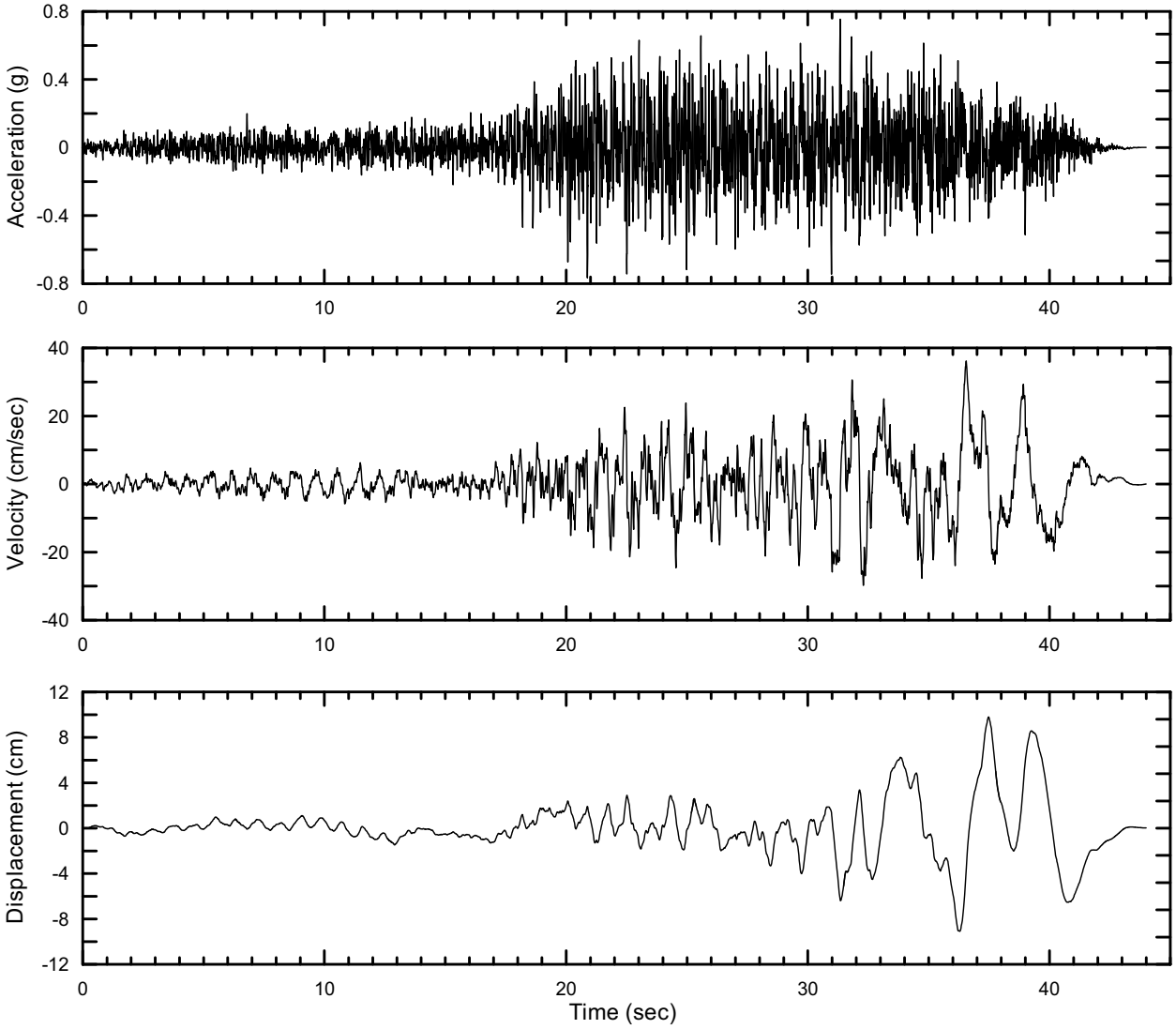

Source: Appendix D, Table D-1

Figure 6.5.2-228. Spectral Match to SFA Design Spectrum at $10^{-4}$ AFE, Vertical, Set 5



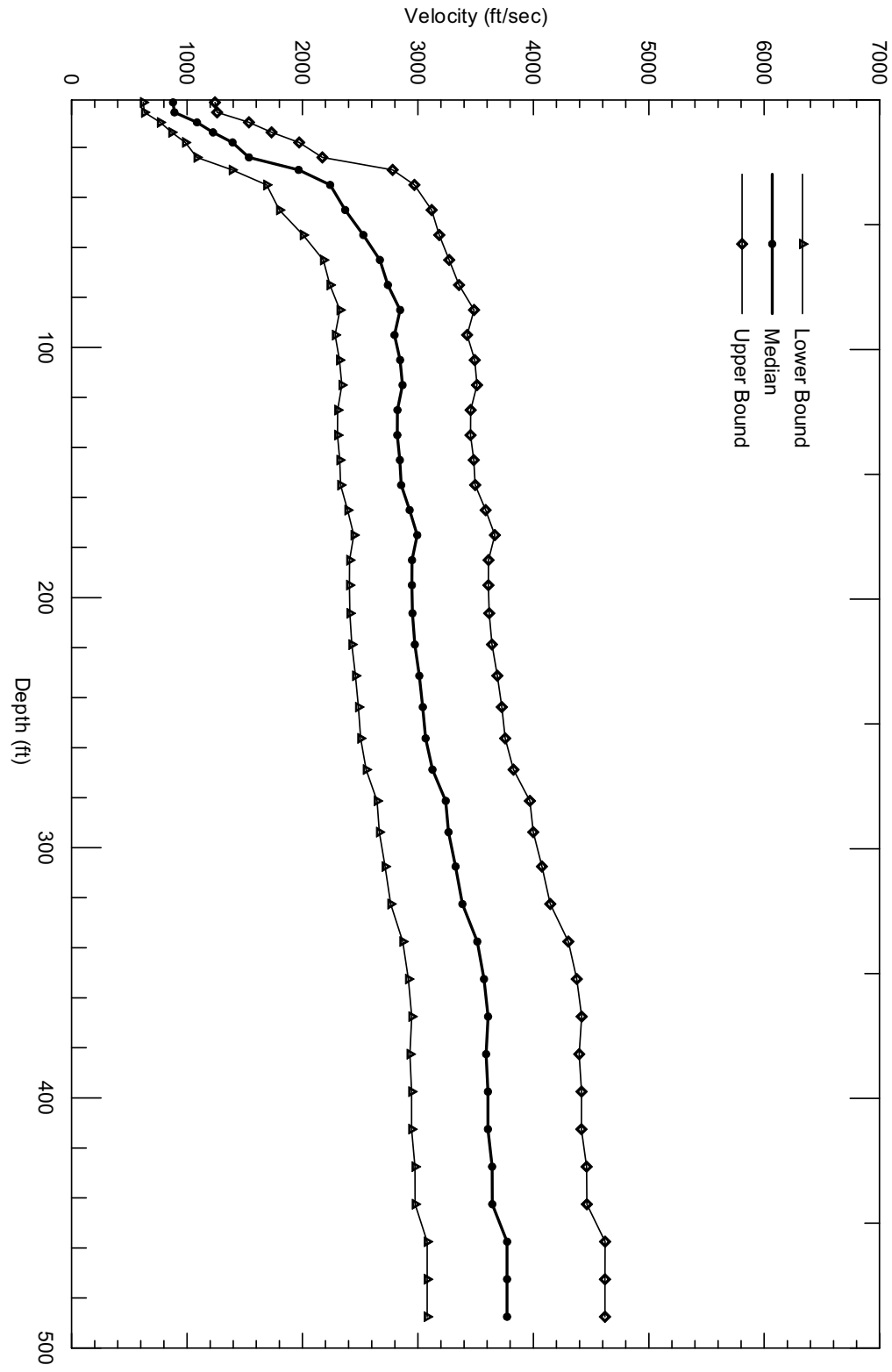

Source: Appendix D, Table D-1

Figure 6.5.2-229. Ratio of SFA Design Spectrum to Spectral Match at $10^{-4}$ AFE, Vertical, Set 5



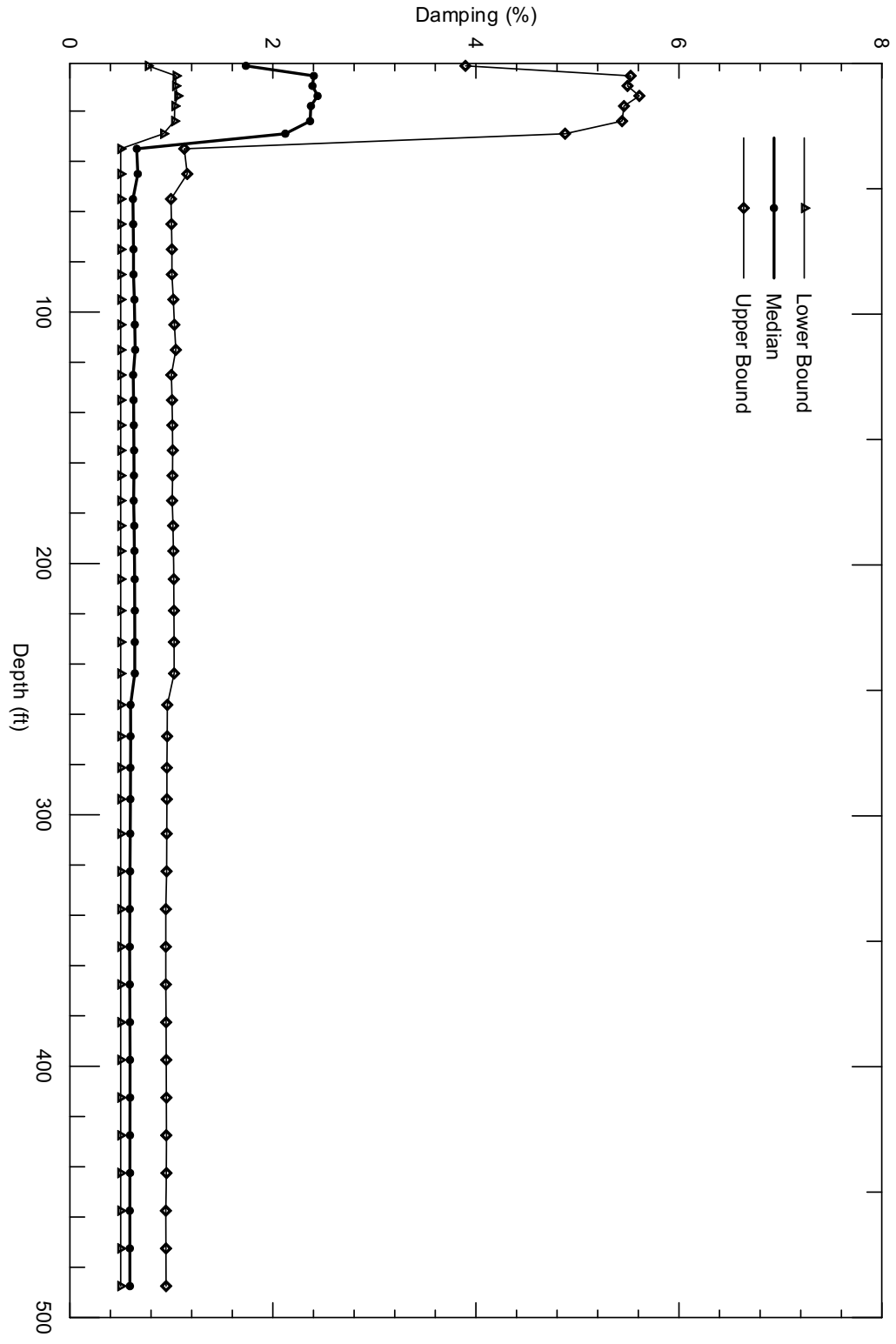

Source: Appendix D, Table D-1

Figure 6.5.2-230. Spectrally Matched Acceleration, Velocity, and Displacement Time Histories for the SFA, $10^{-4}$ AFE, Vertical, Set 5



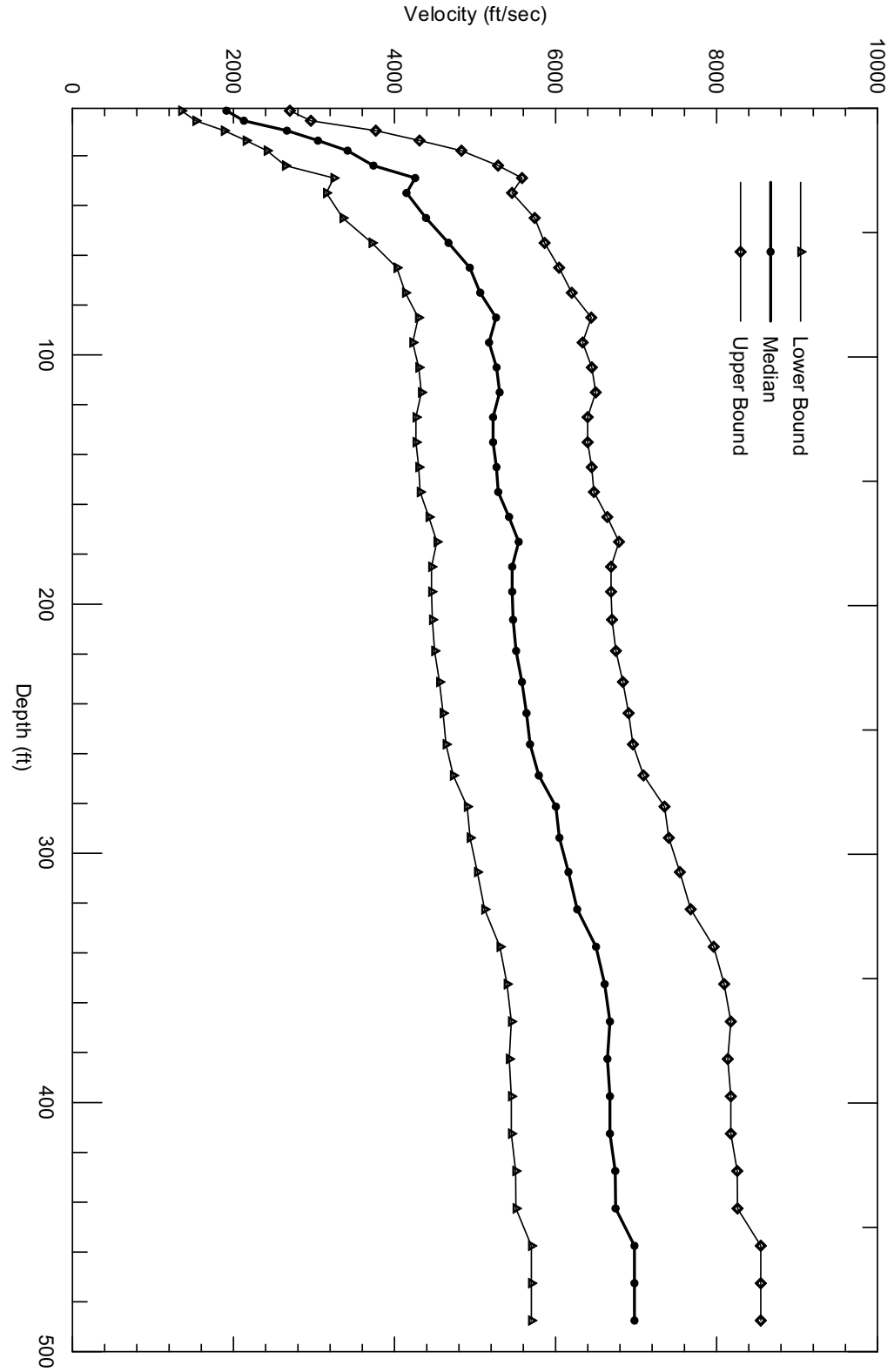

Source: Appendix D, Table D-1

Figure 6.5.2-231. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



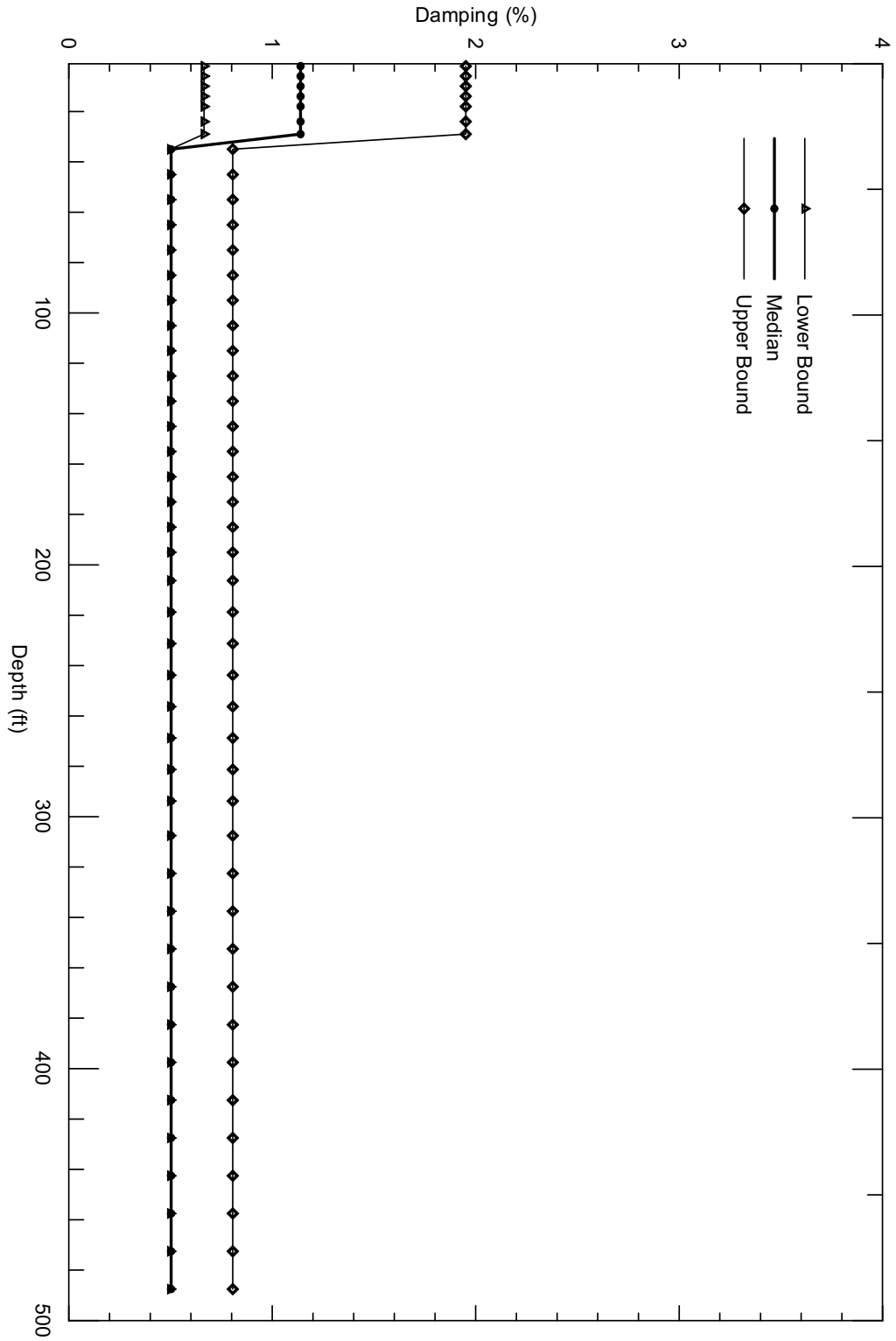

Source: Appendix D, Table D-1

Figure 6.5.2-232. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



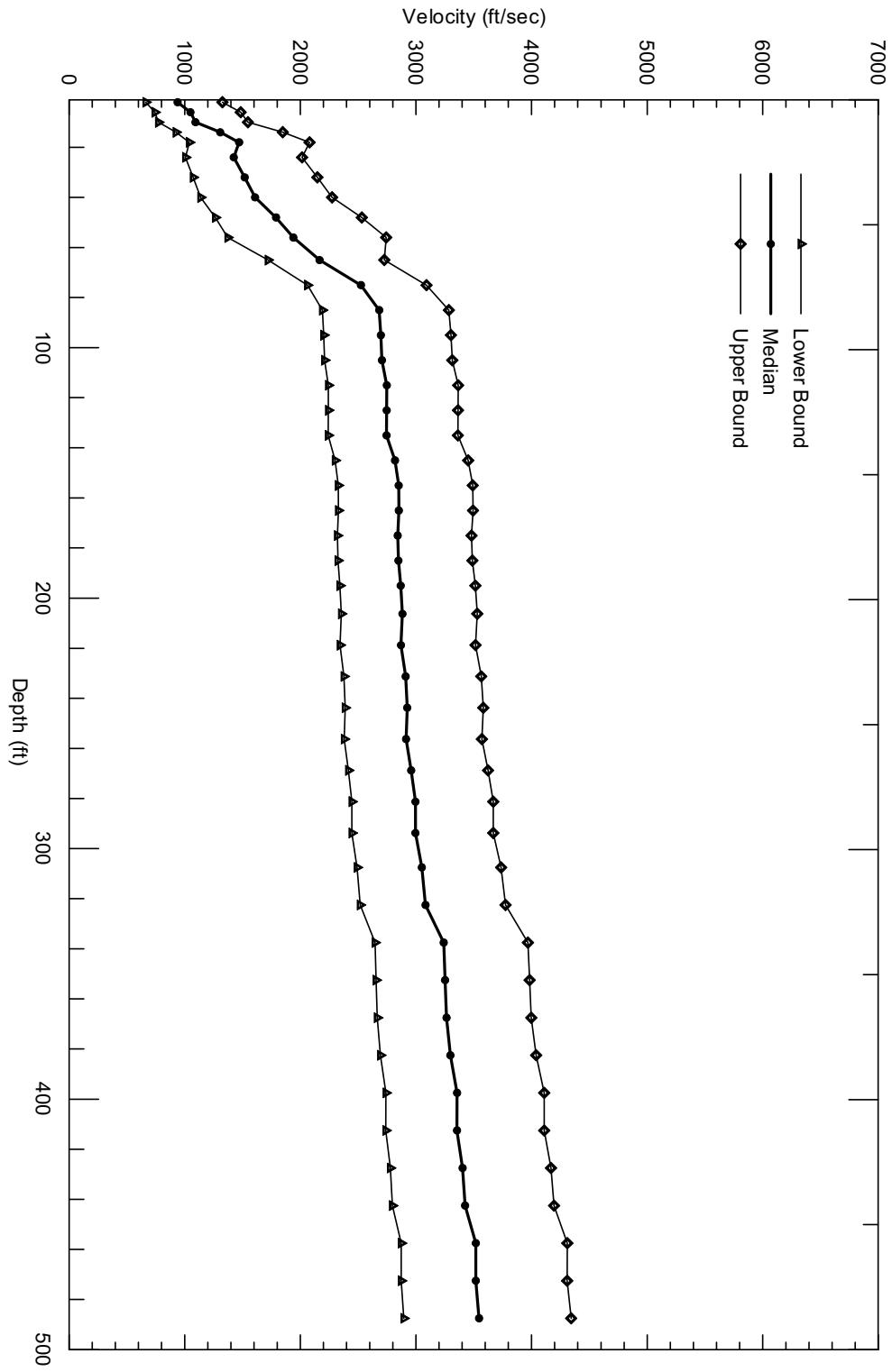

Source: Appendix D, Table D-1

Figure 6.5.2-233. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



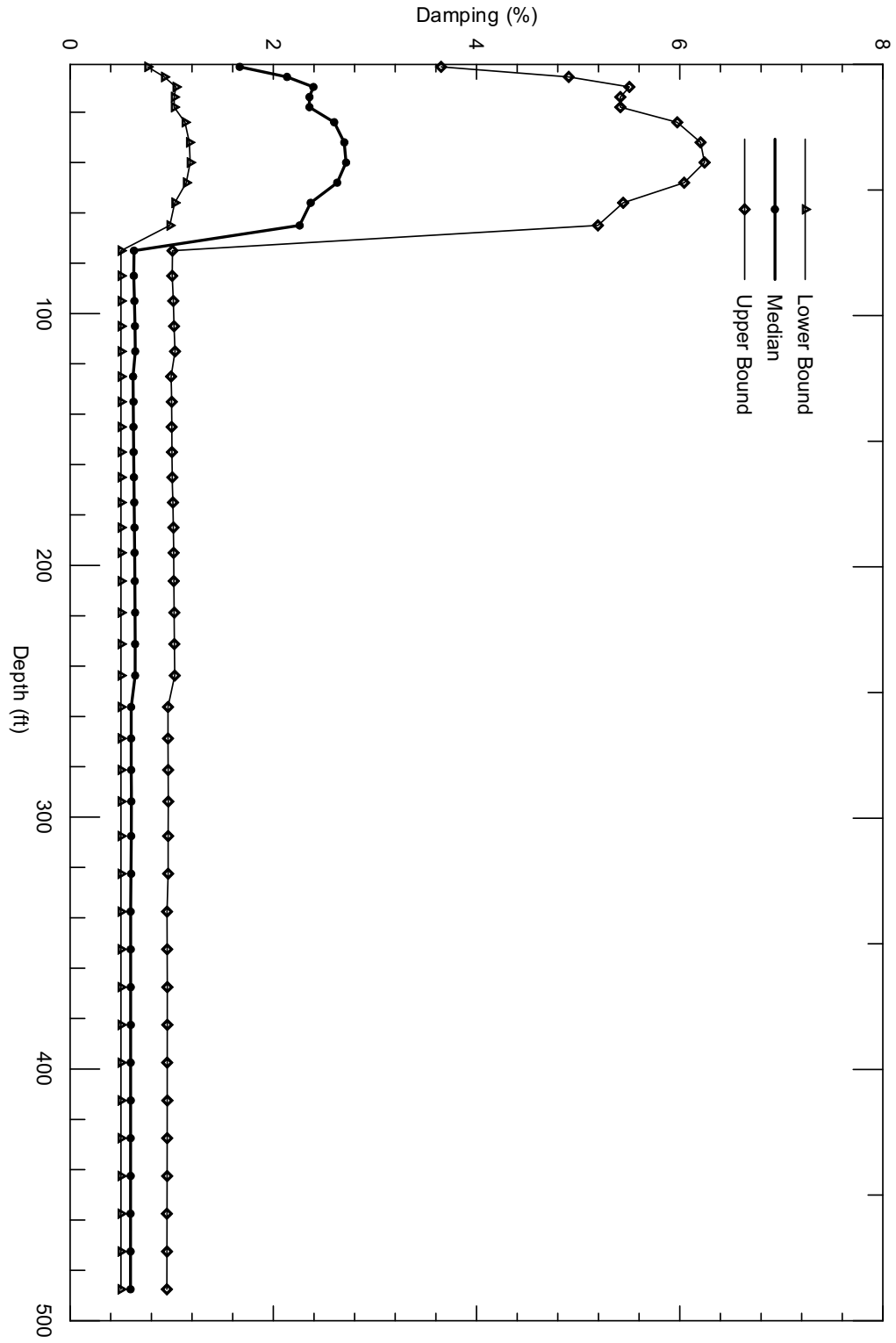

Source: Appendix D, Table D-1

Figure 6.5.2-234. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



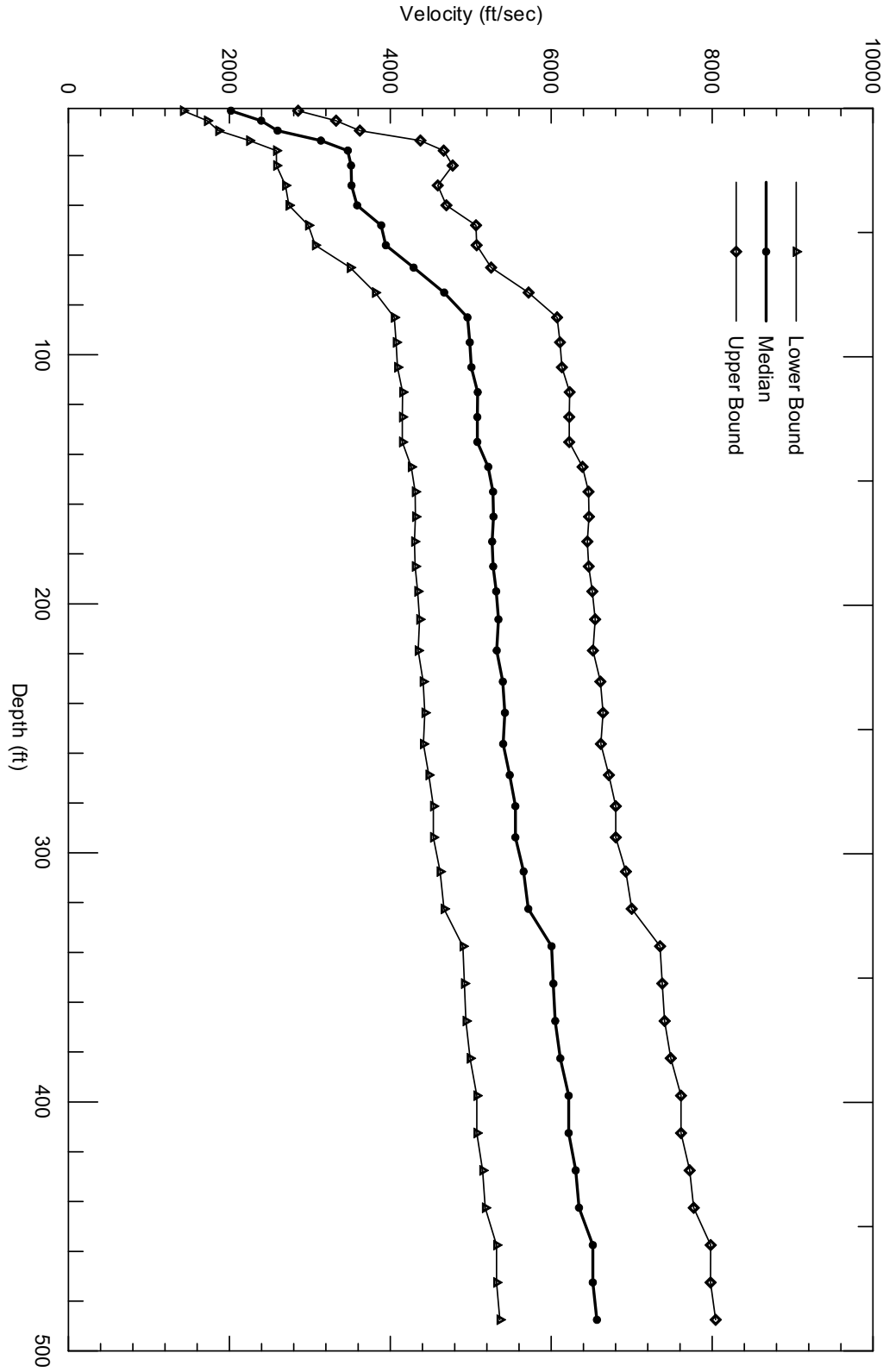

Source: Appendix D, Table D-1

Figure 6.5.2-235. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



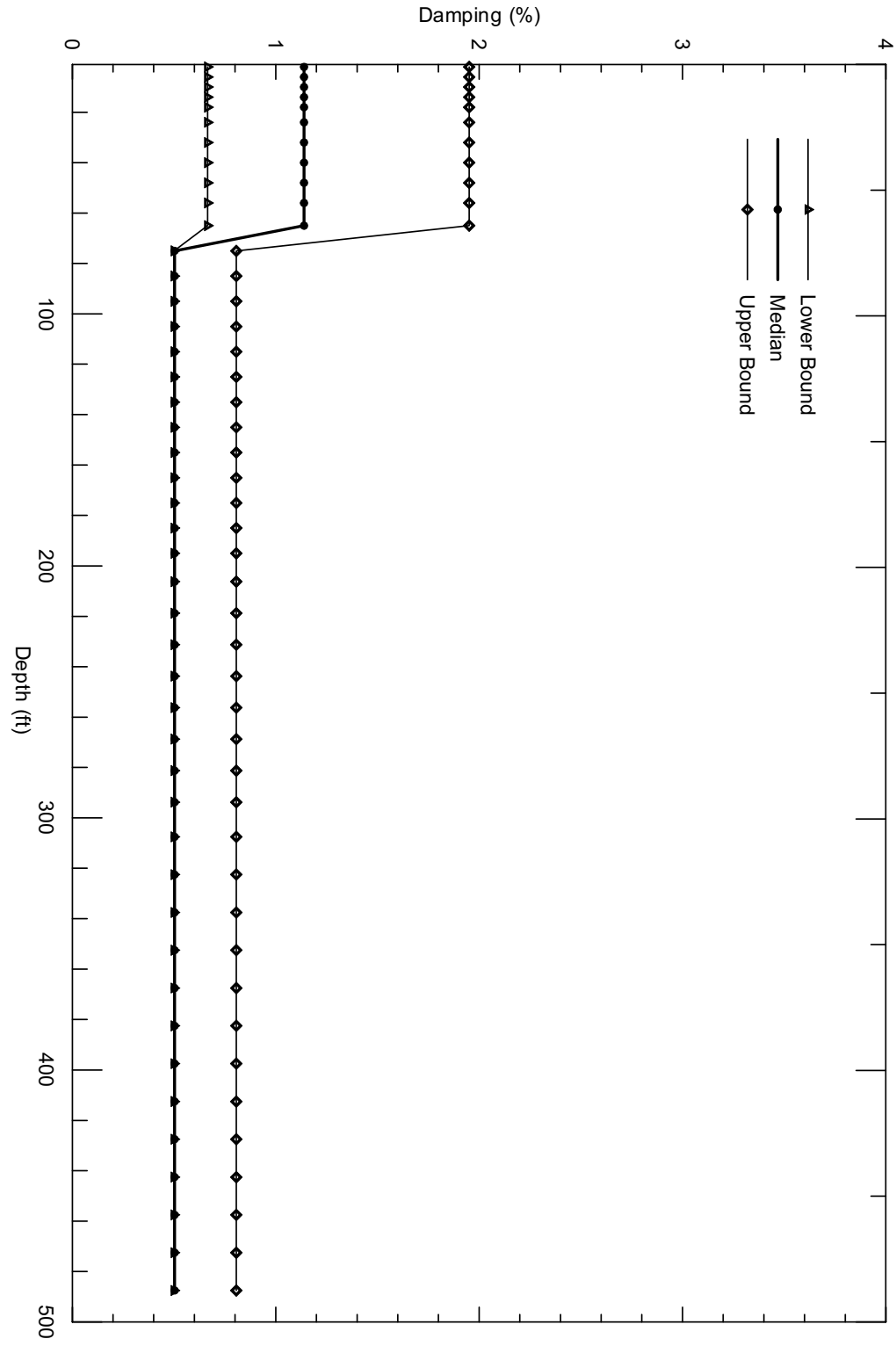

Source: Appendix D, Table D-1

Figure 6.5.2-236. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



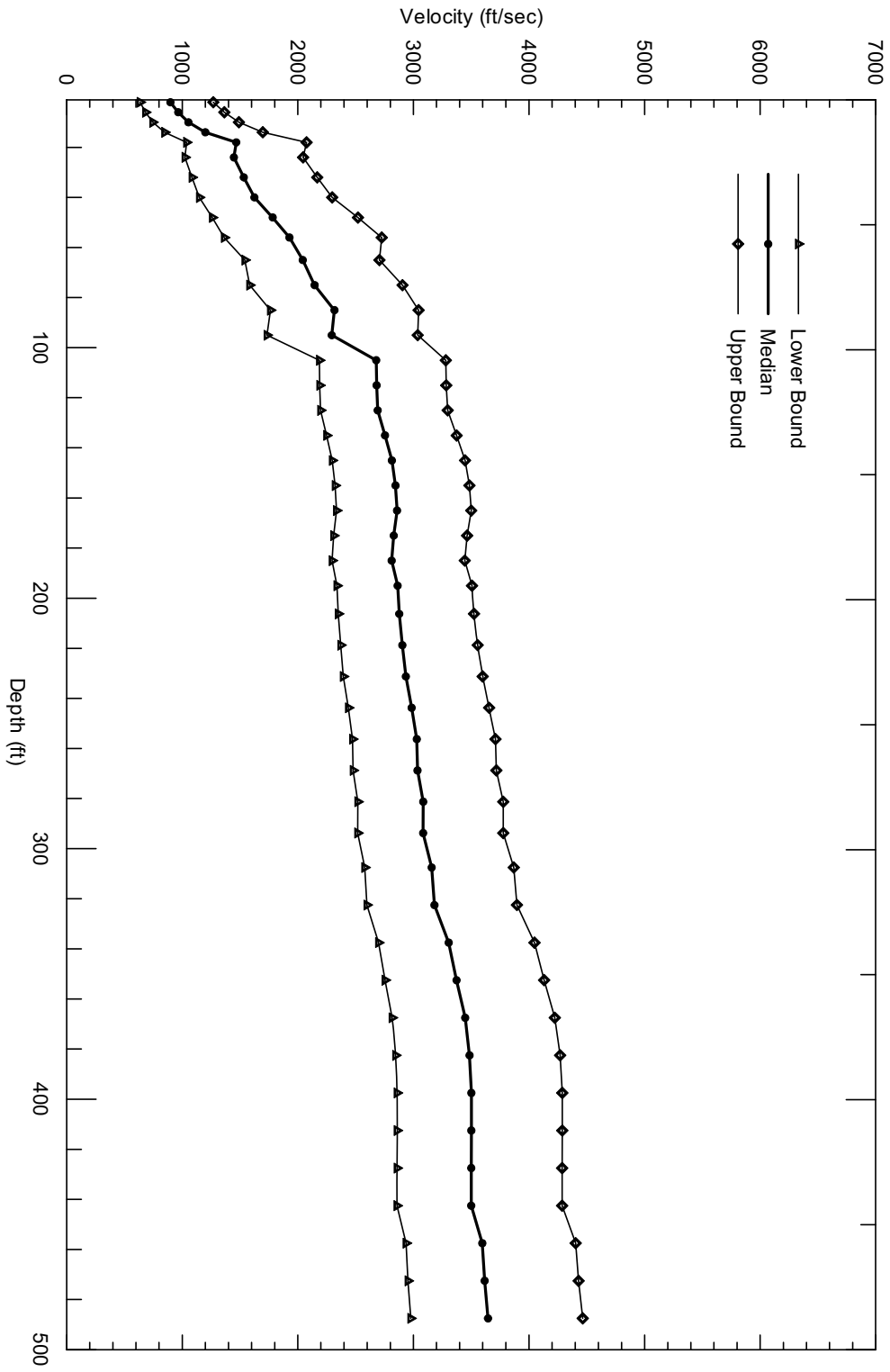

Source: Appendix D, Table D-1

Figure 6.5.2-237. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



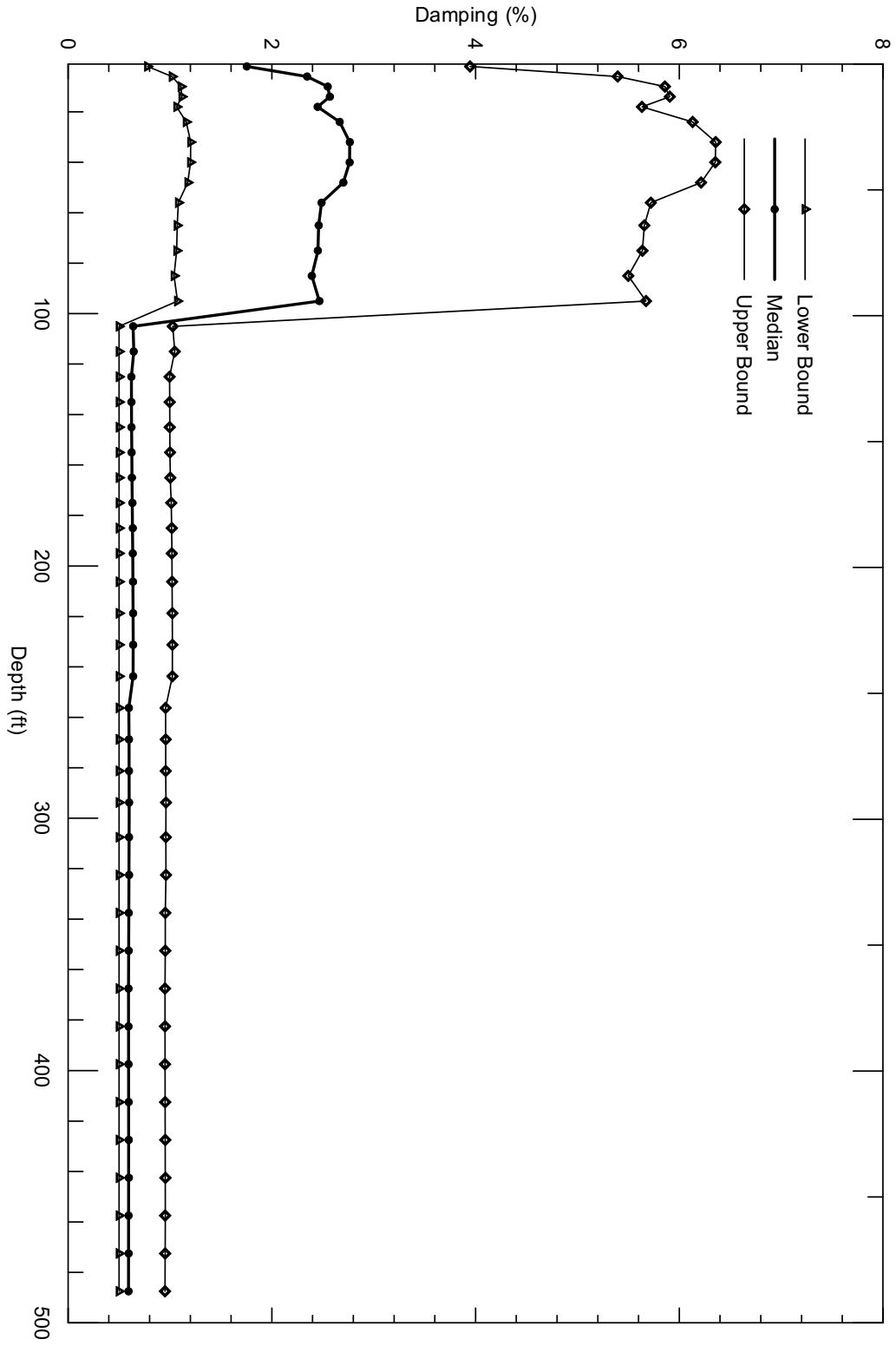

Source: Appendix D, Table D-1

Figure 6.5.2-238. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



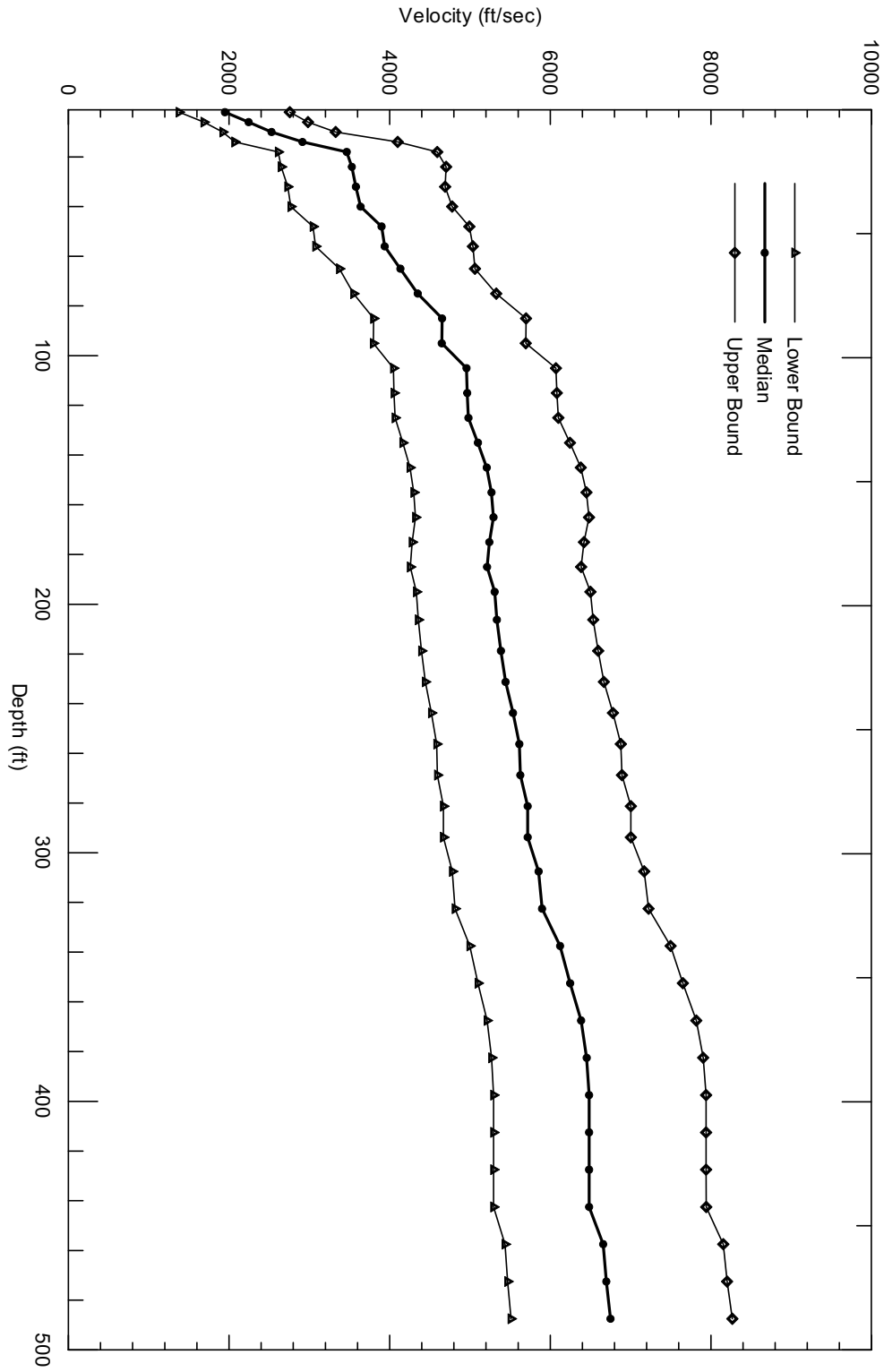

Source: Appendix D, Table D-1

Figure 6.5.2-239. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



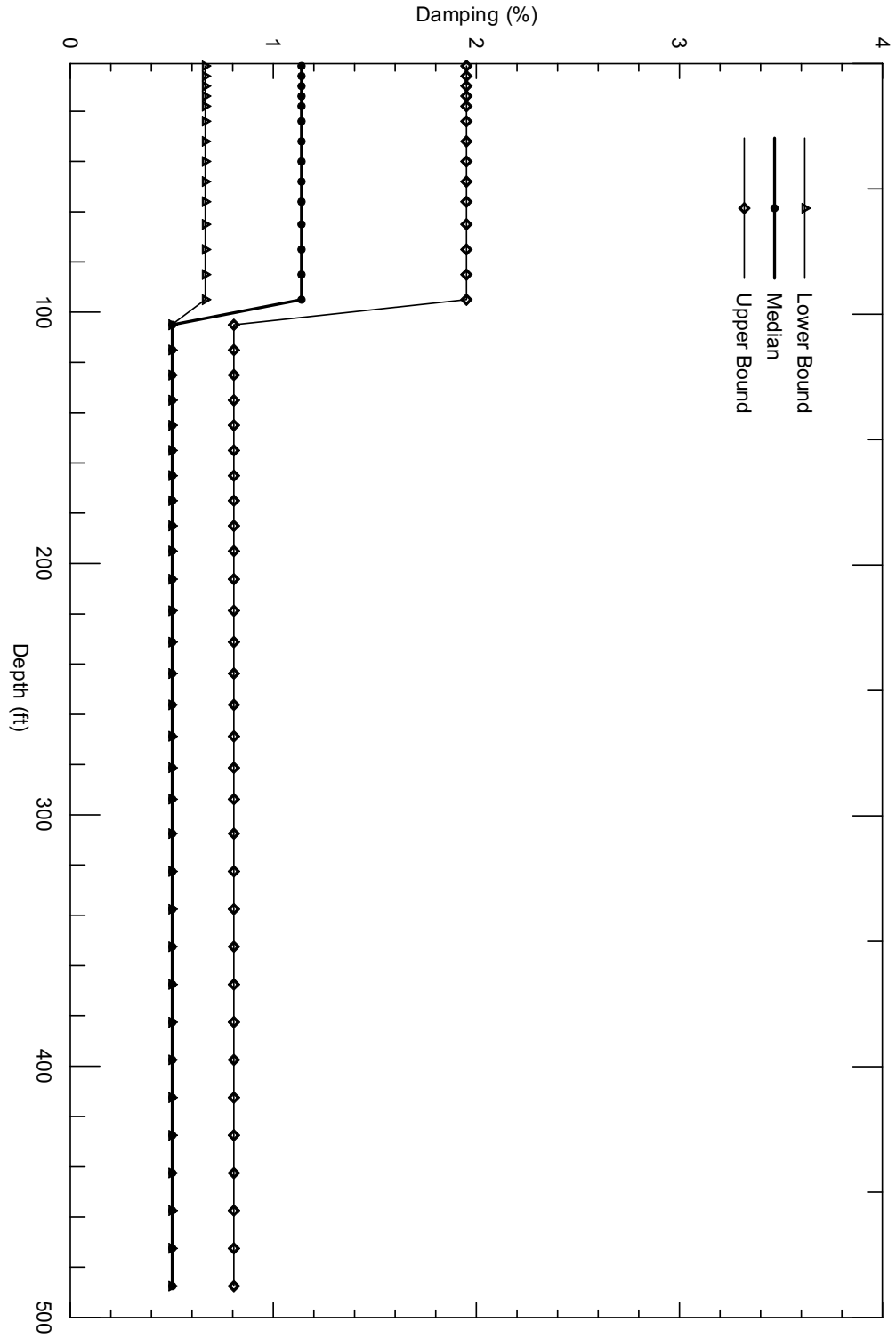

Source: Appendix D, Table D-1

Figure 6.5.2-240. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



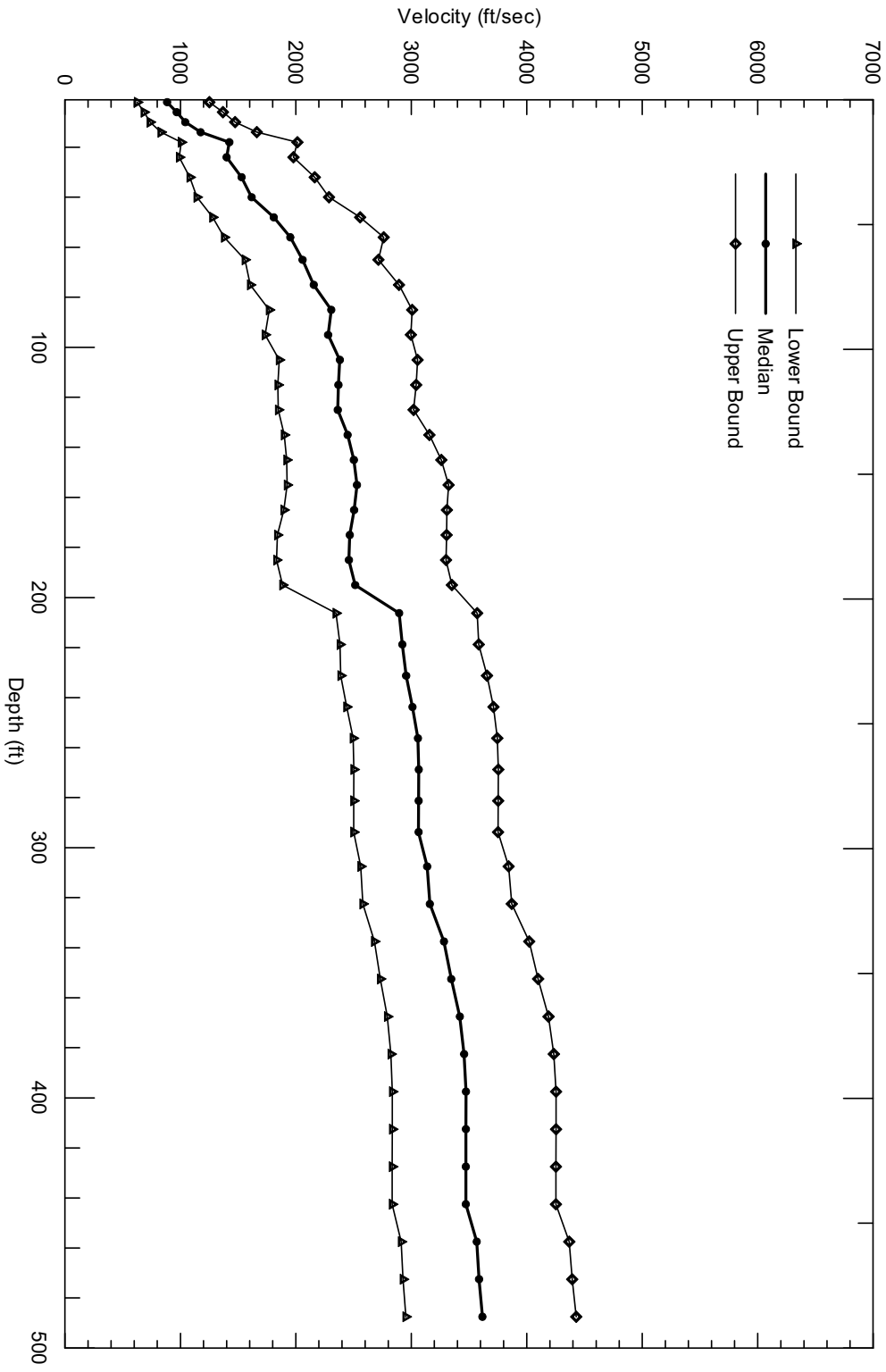

Source: Appendix D, Table D-1

Figure 6.5.2-241. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



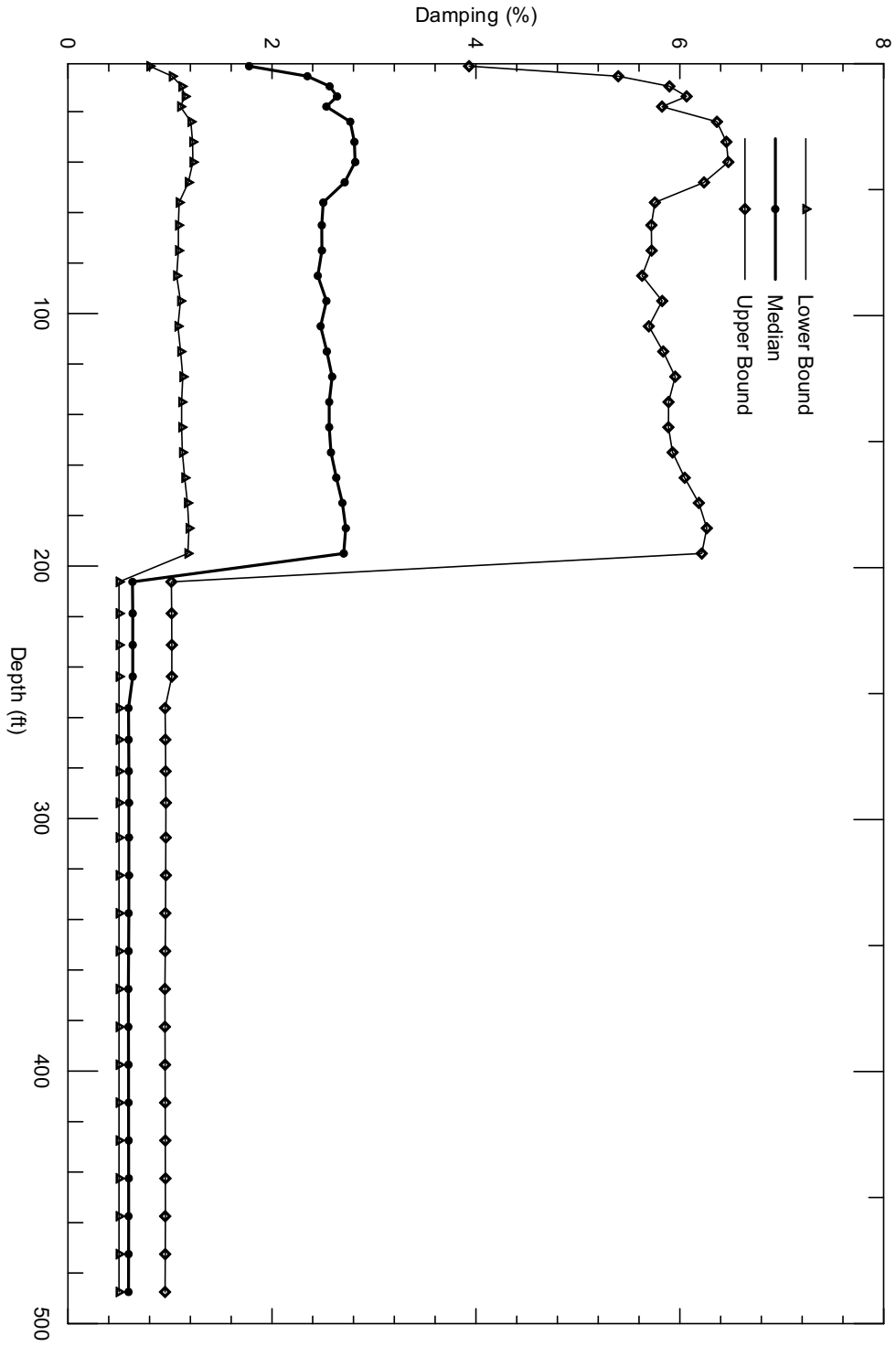

Source: Appendix D, Table D-1

Figure 6.5.2-242. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



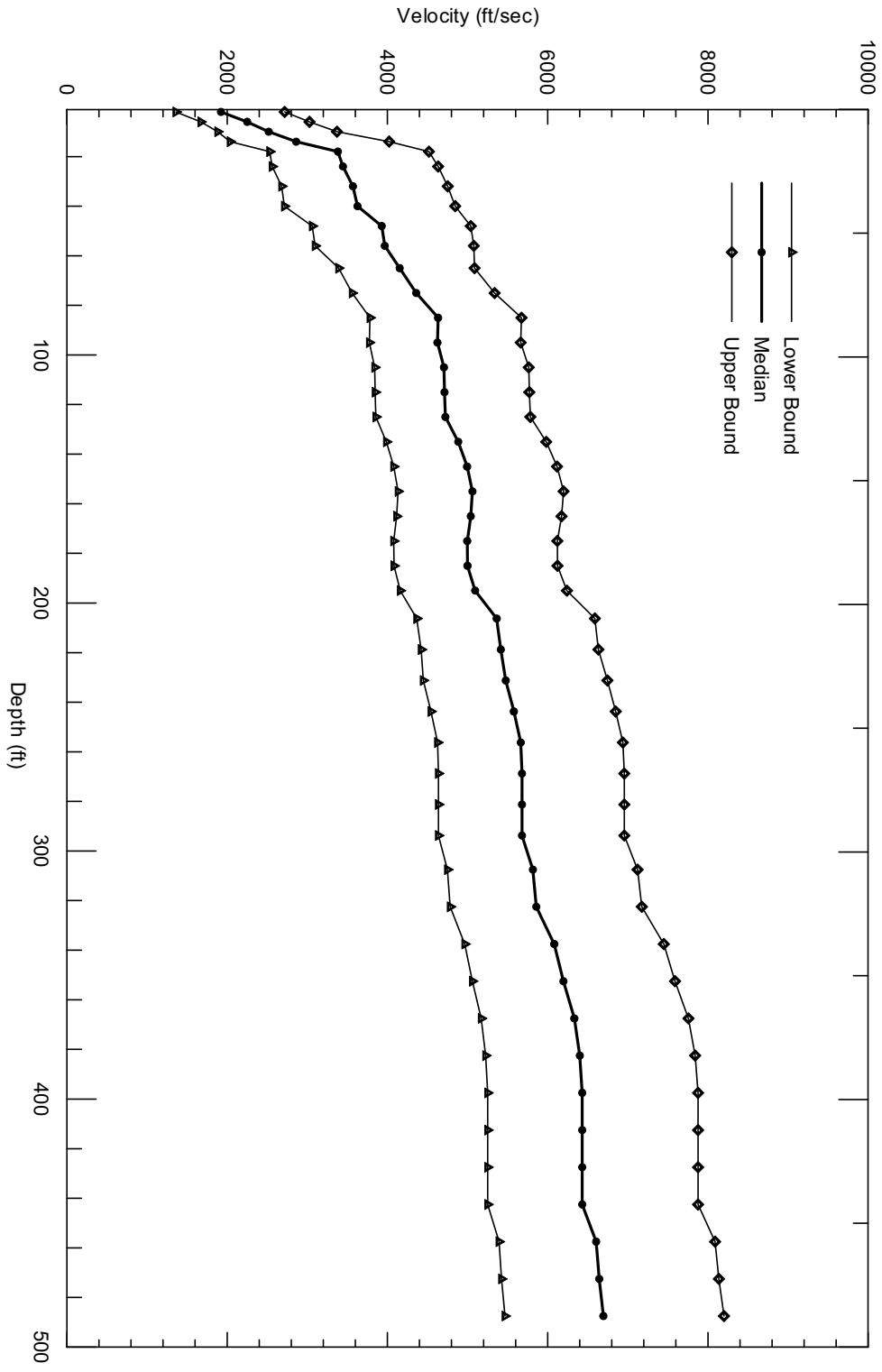

Source: Appendix D, Table D-1

Figure 6.5.2-243. SFA Strain Compatible Soil Properties S-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



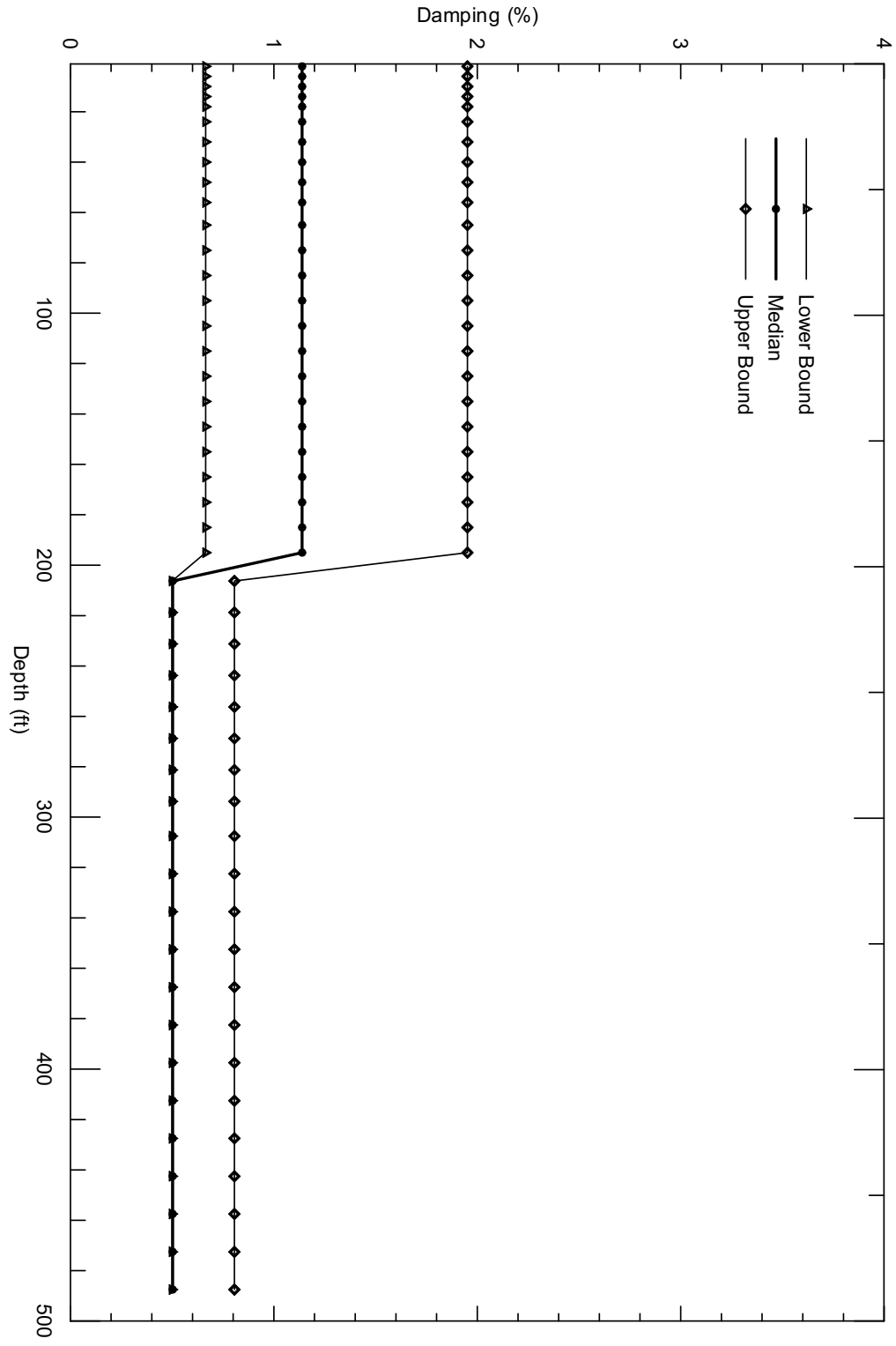

Source: Appendix D, Table D-1

Figure 6.5.2-244. SFA Strain Compatible Soil Properties S-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



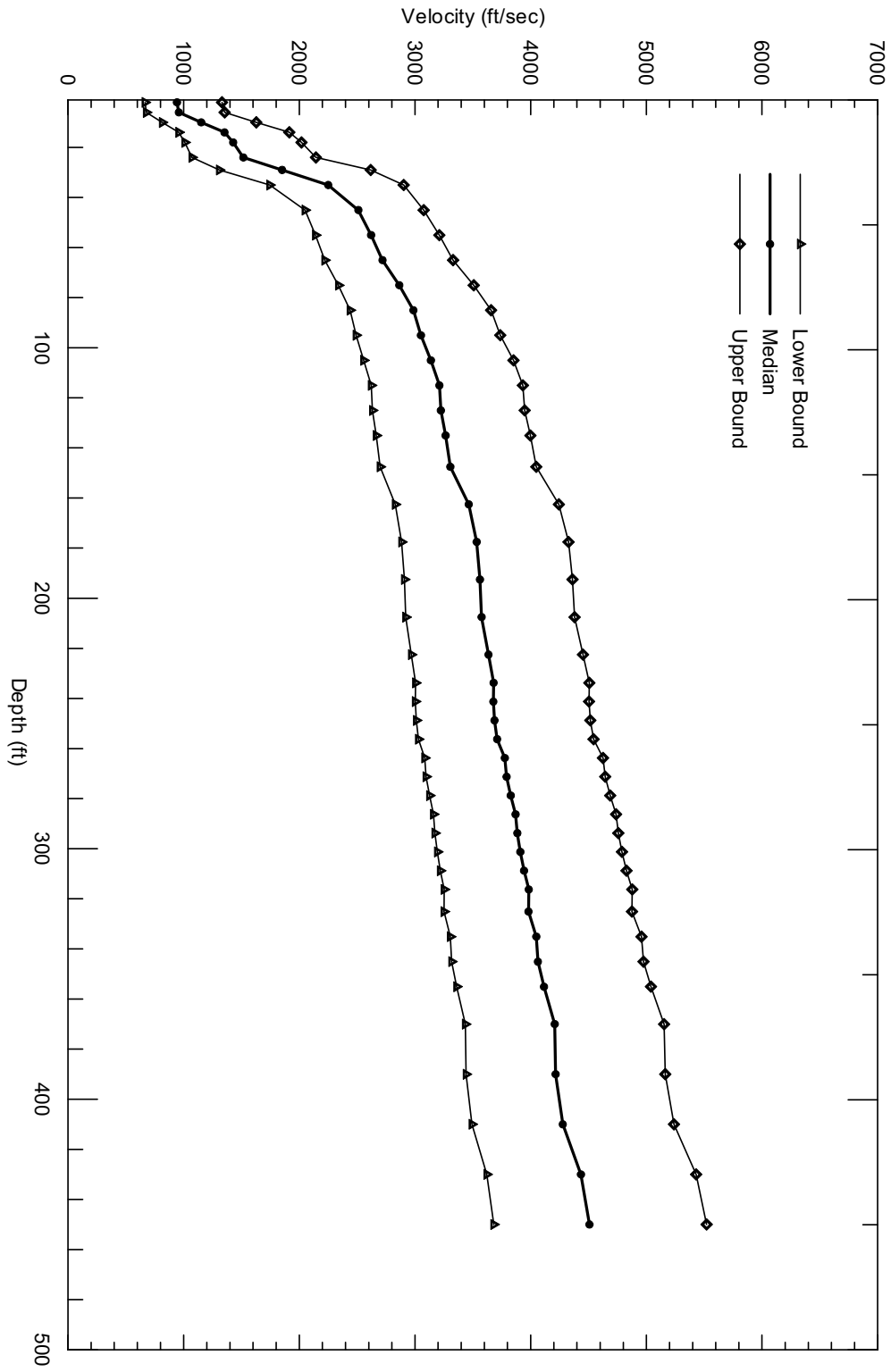

Source: Appendix D, Table D-1

Figure 6.5.2-245. SFA Strain Compatible Soil Properties P-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



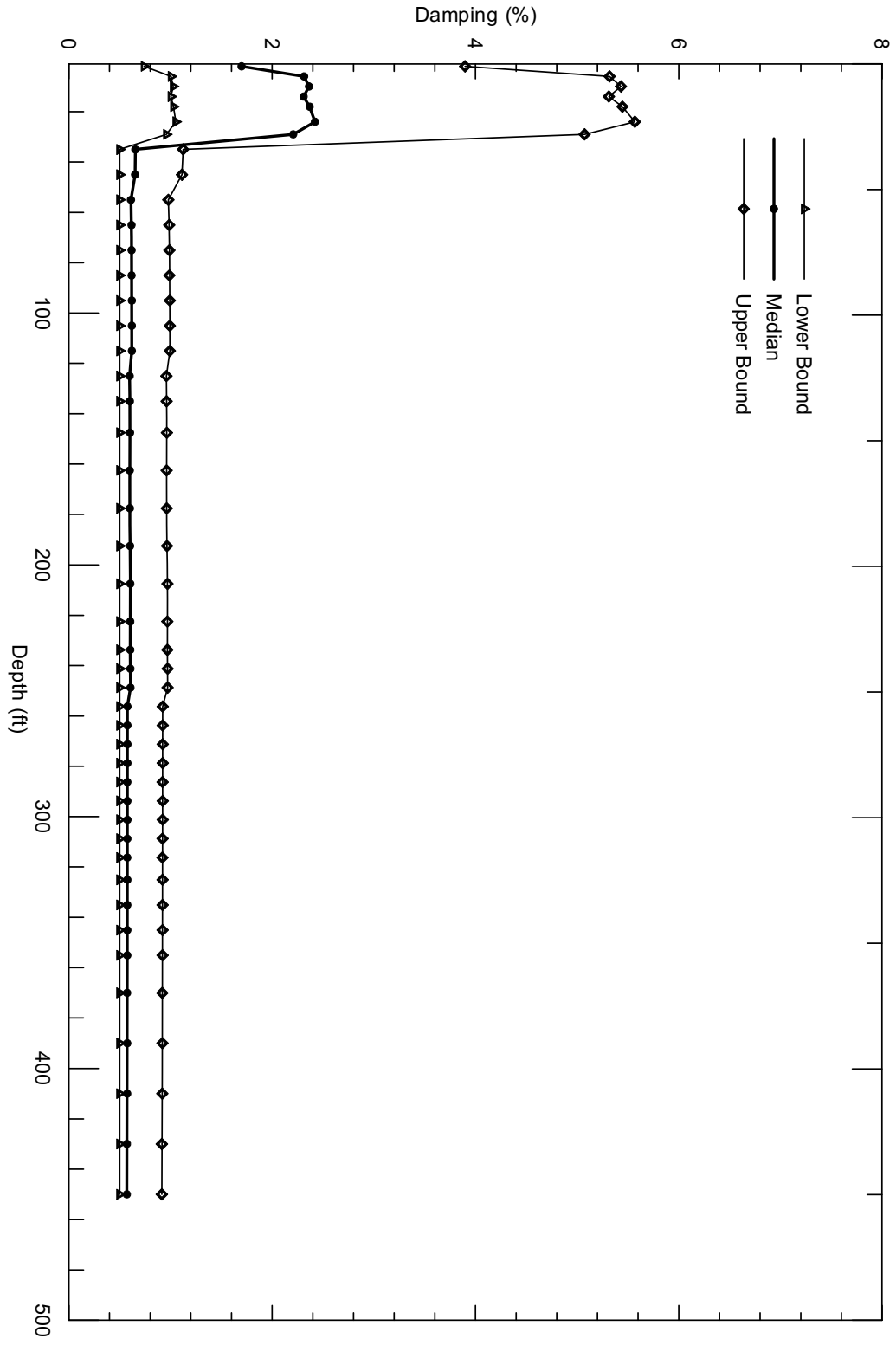

Source: Appendix D, Table D-1

Figure 6.5.2-246. SFA Strain Compatible Soil Properties P-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-3}$ AFE



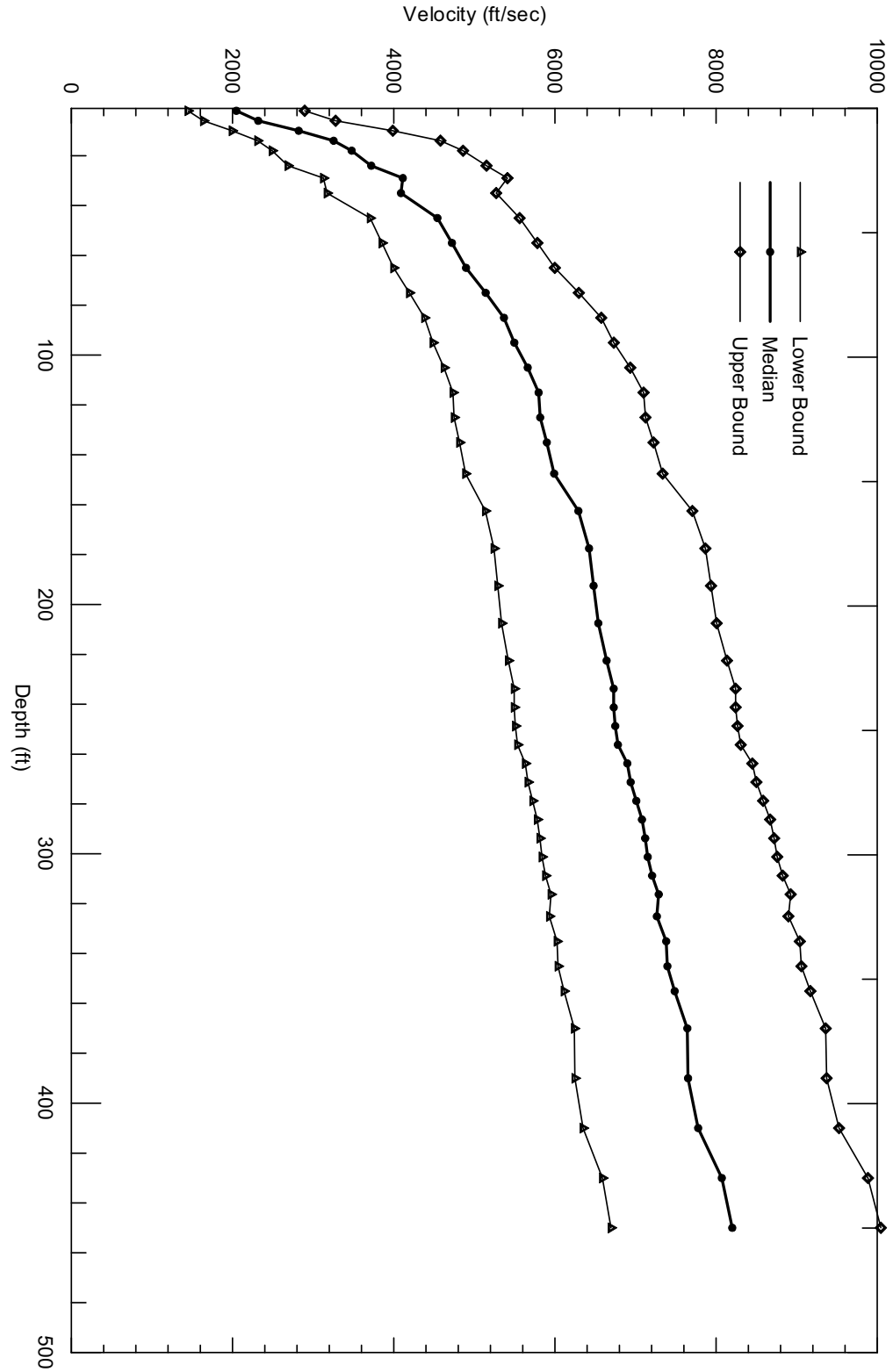

Source: Appendix D, Table D-1

Figure 6.5.2-247. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



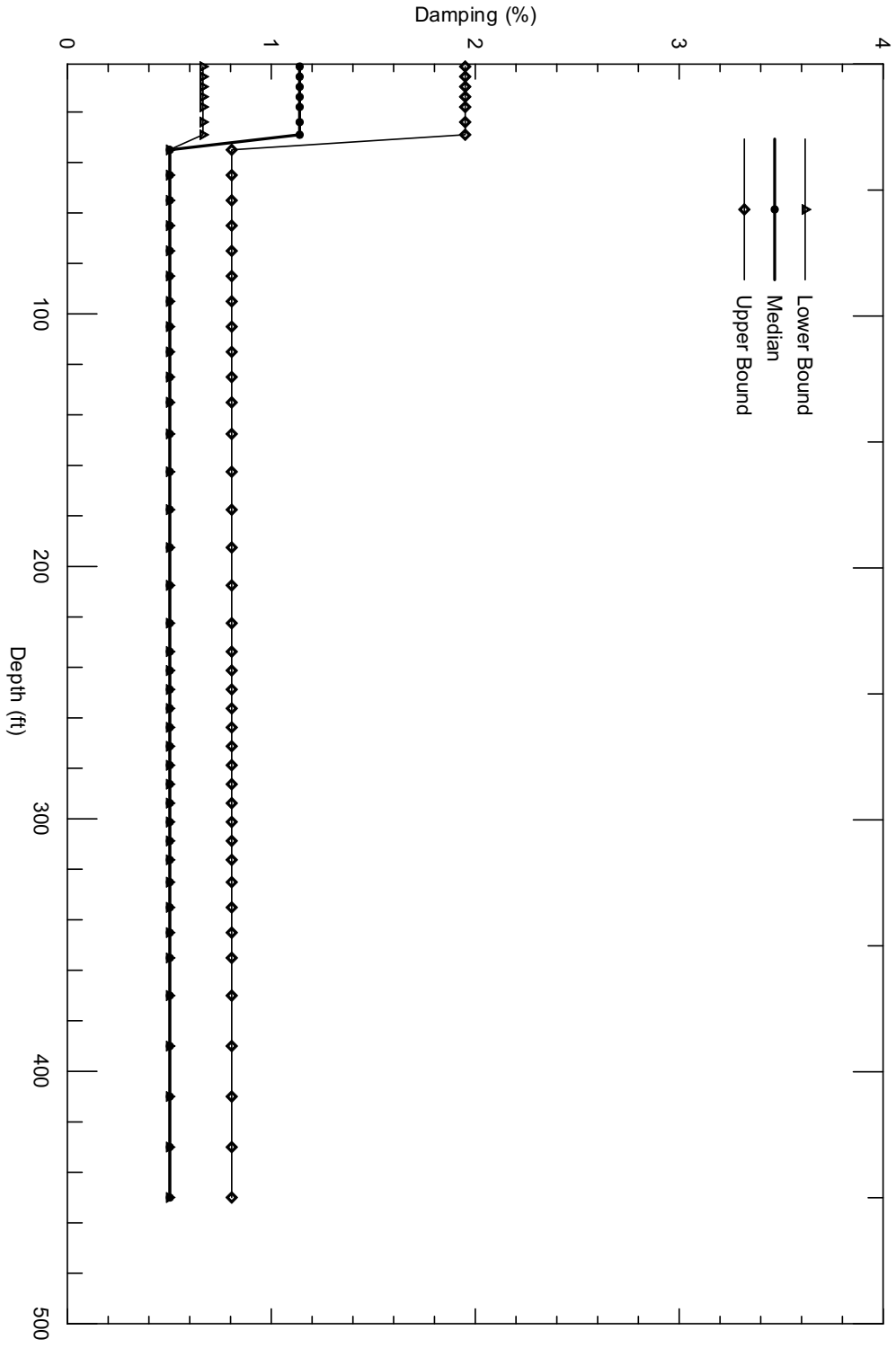

Source: Appendix D, Table D-1

Figure 6.5.2-248. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



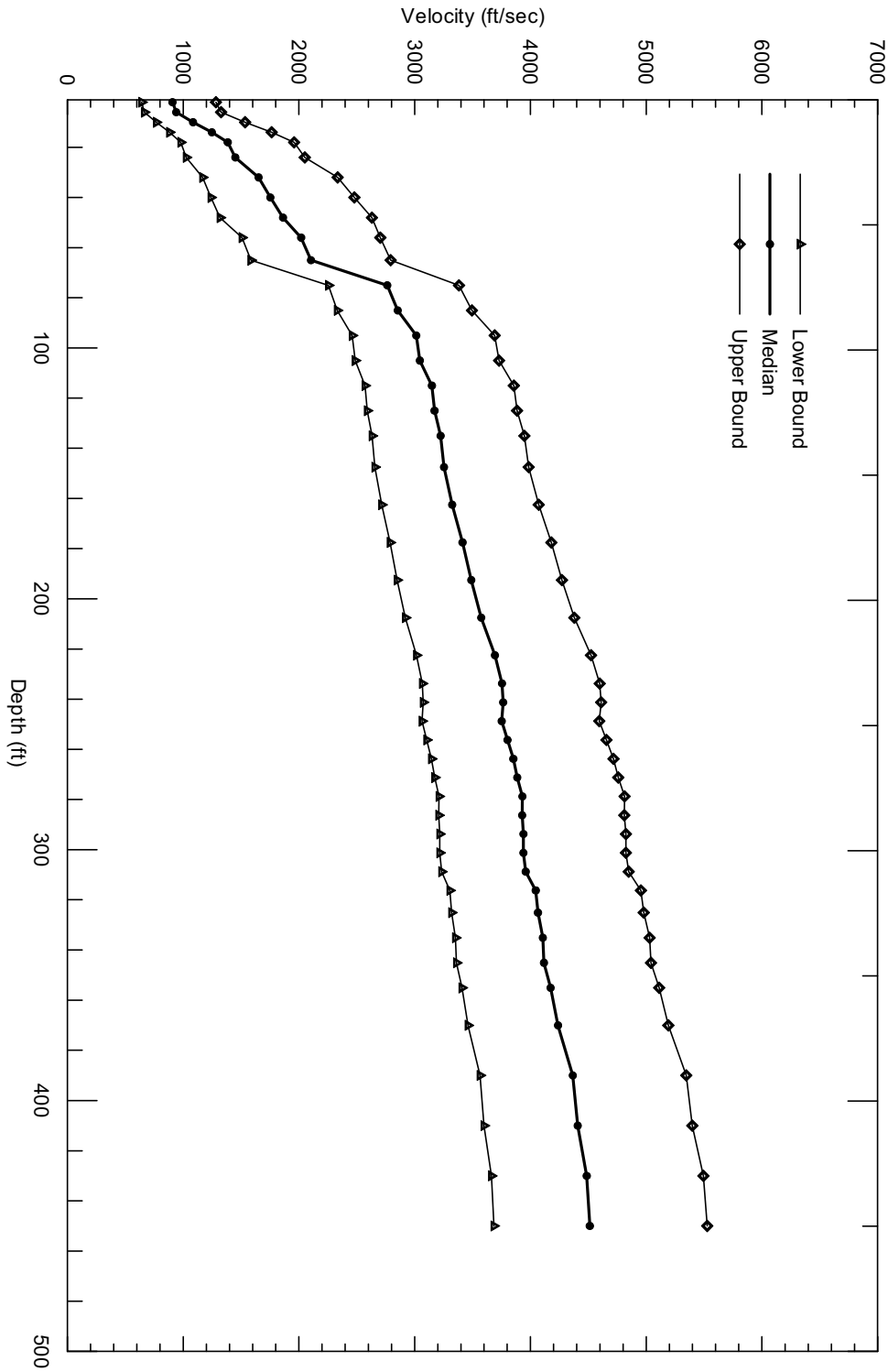

Source: Appendix D, Table D-1

Figure 6.5.2-249. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



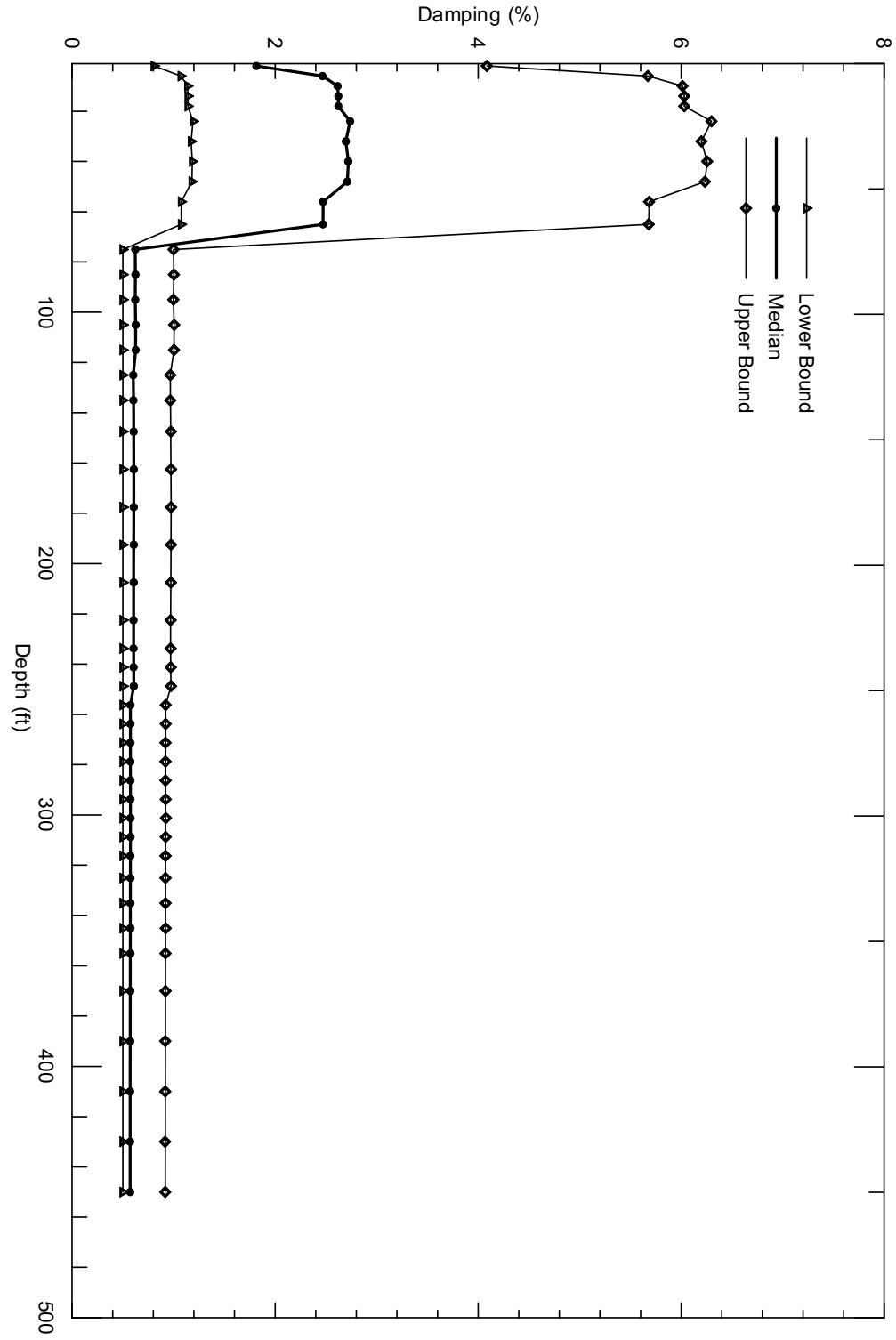

Source: Appendix D, Table D-1

Figure 6.5.2-250. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



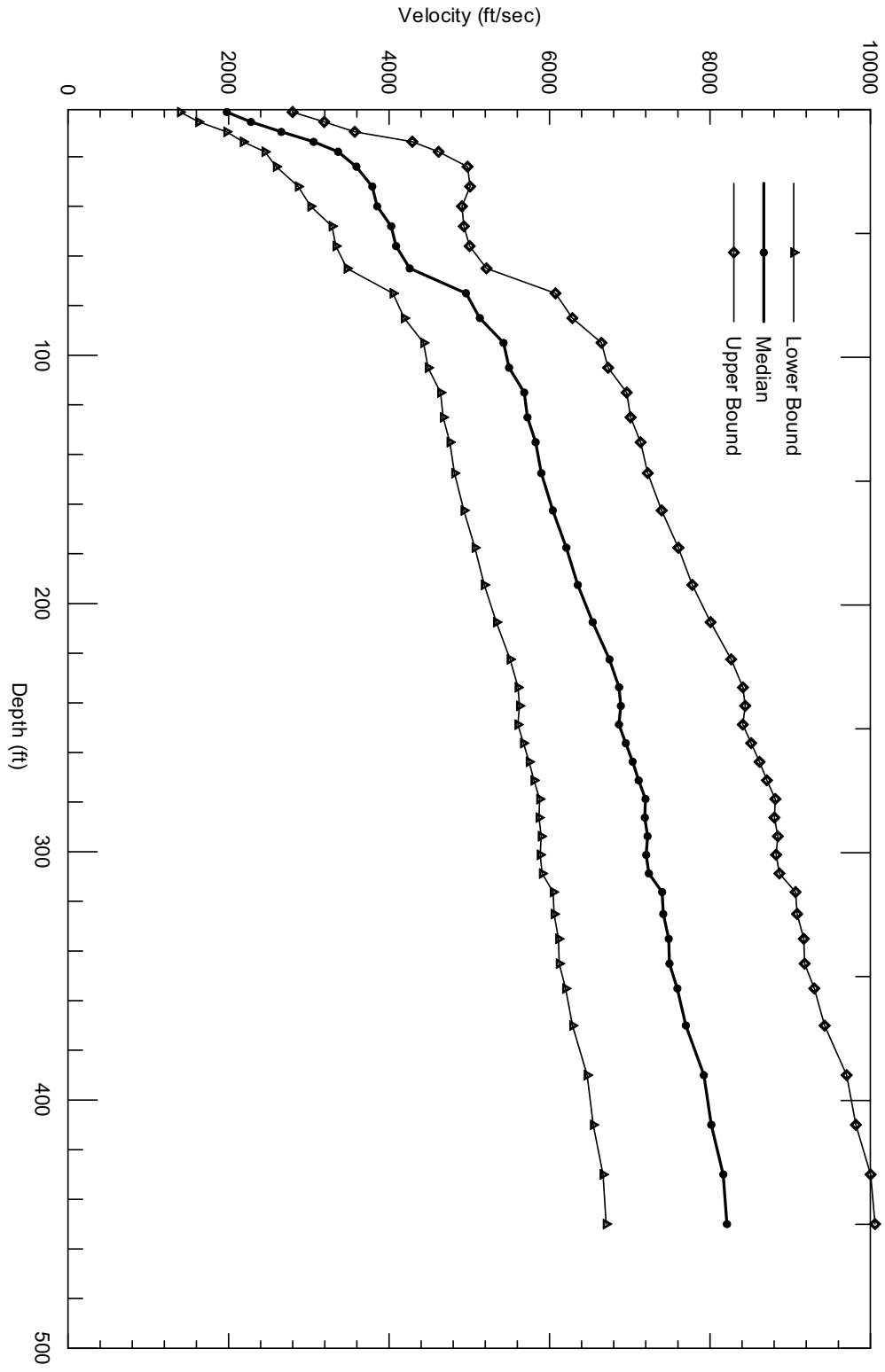

Source: Appendix D, Table D-1

Figure 6.5.2-251. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



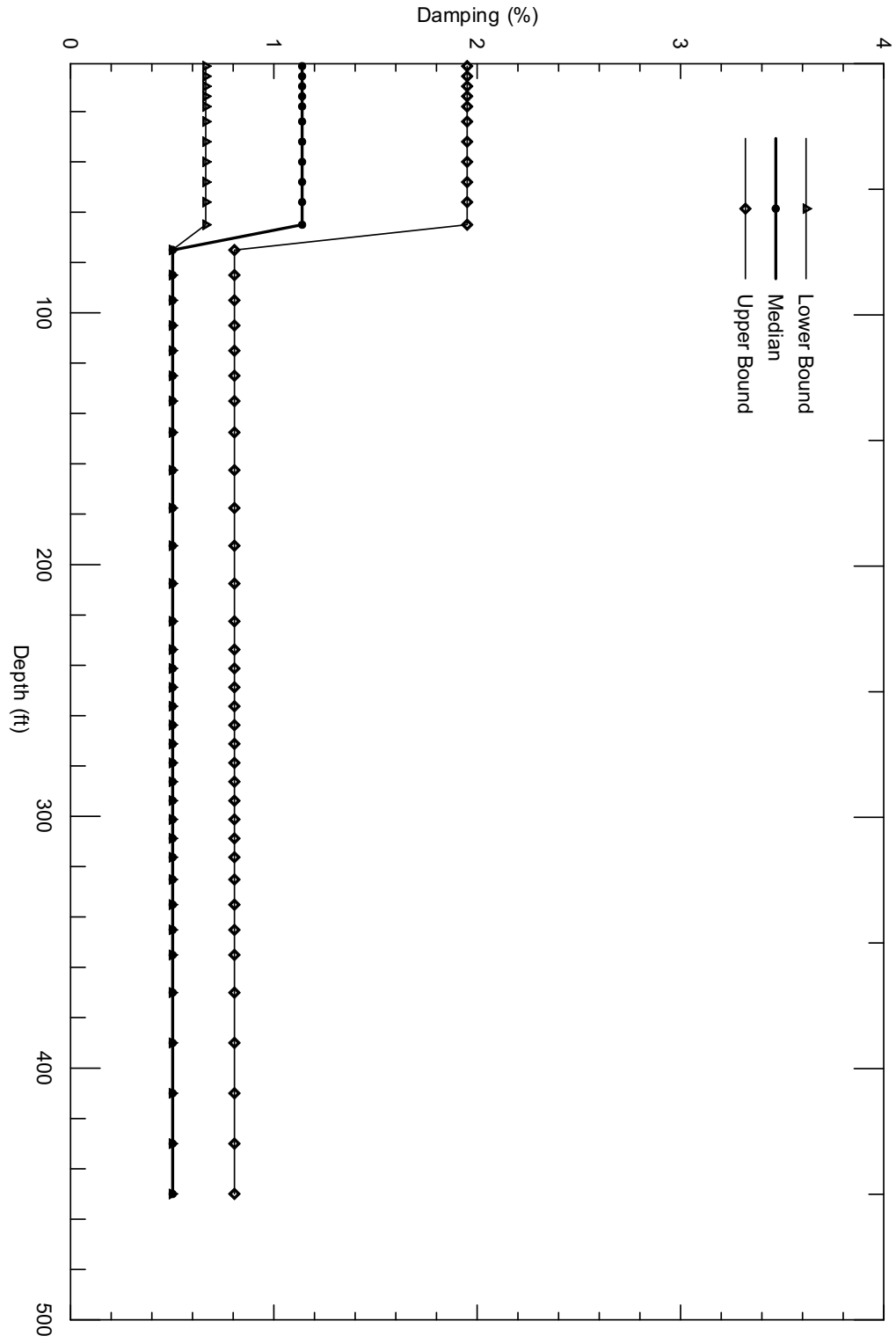

Source: Appendix D, Table D-1

Figure 6.5.2-252. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



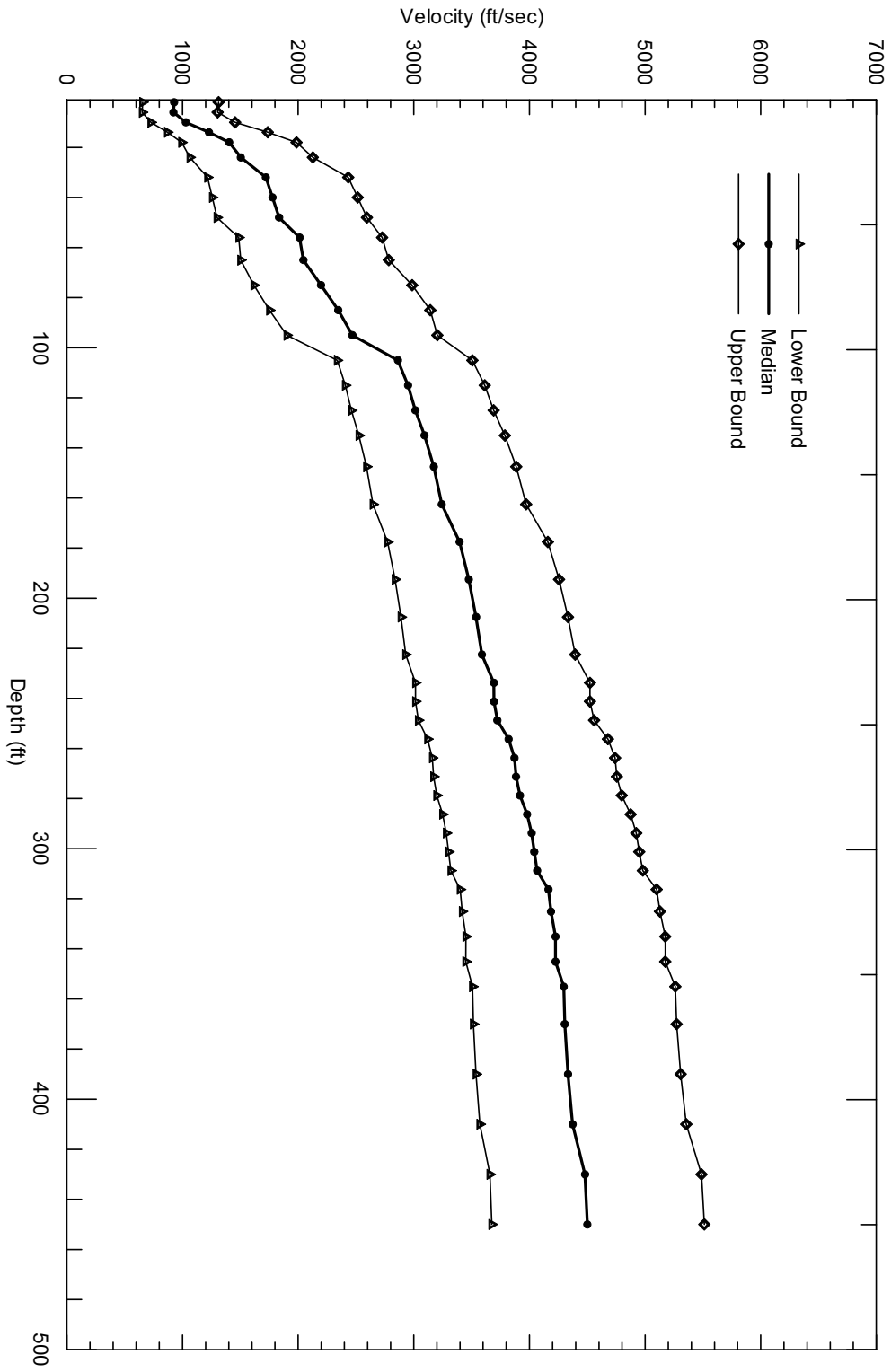

Source: Appendix D, Table D-1

Figure 6.5.2-253. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



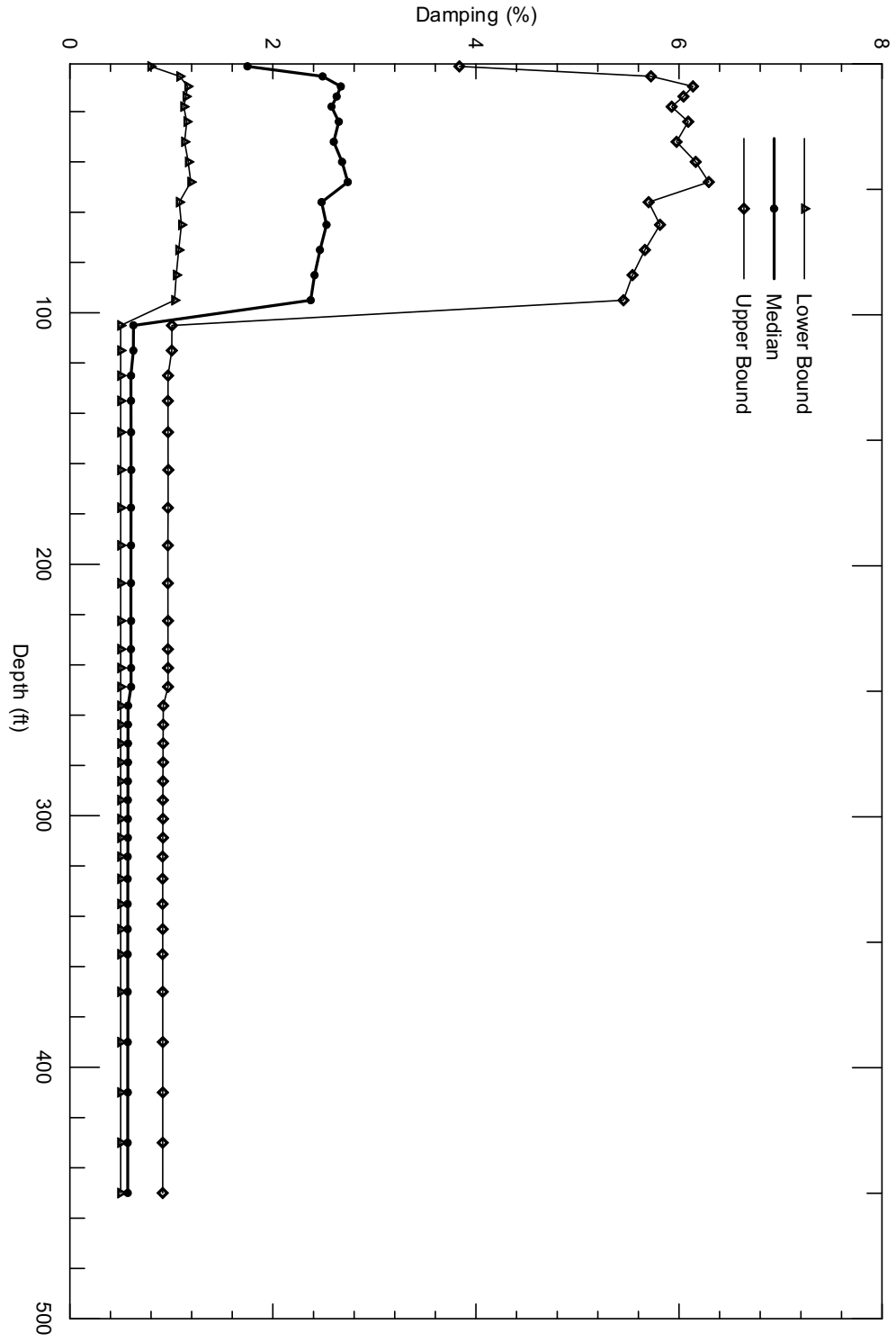

Source: Appendix D, Table D-1

Figure 6.5.2-254. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



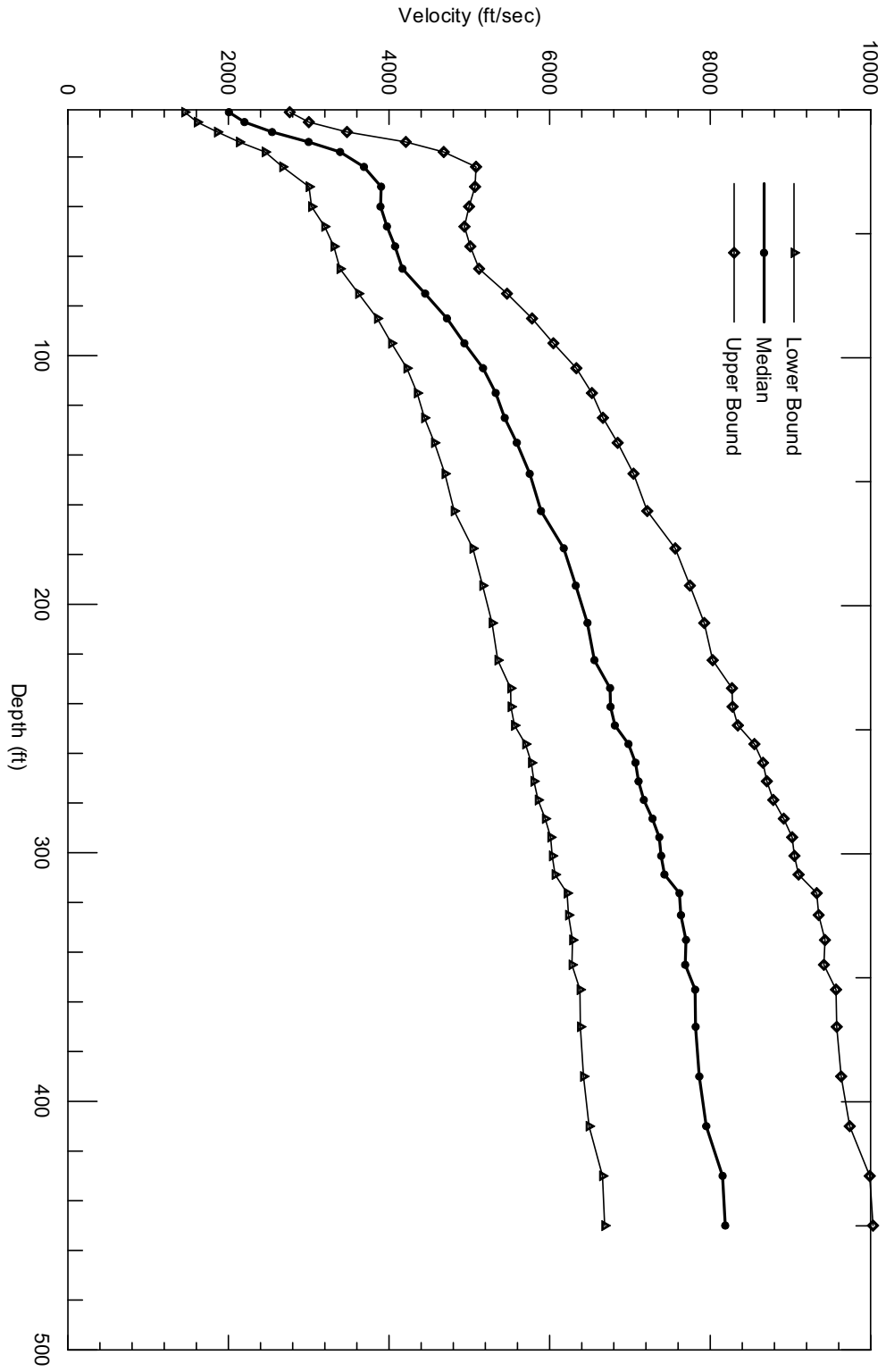

Source: Appendix D, Table D-1

Figure 6.5.2-255. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



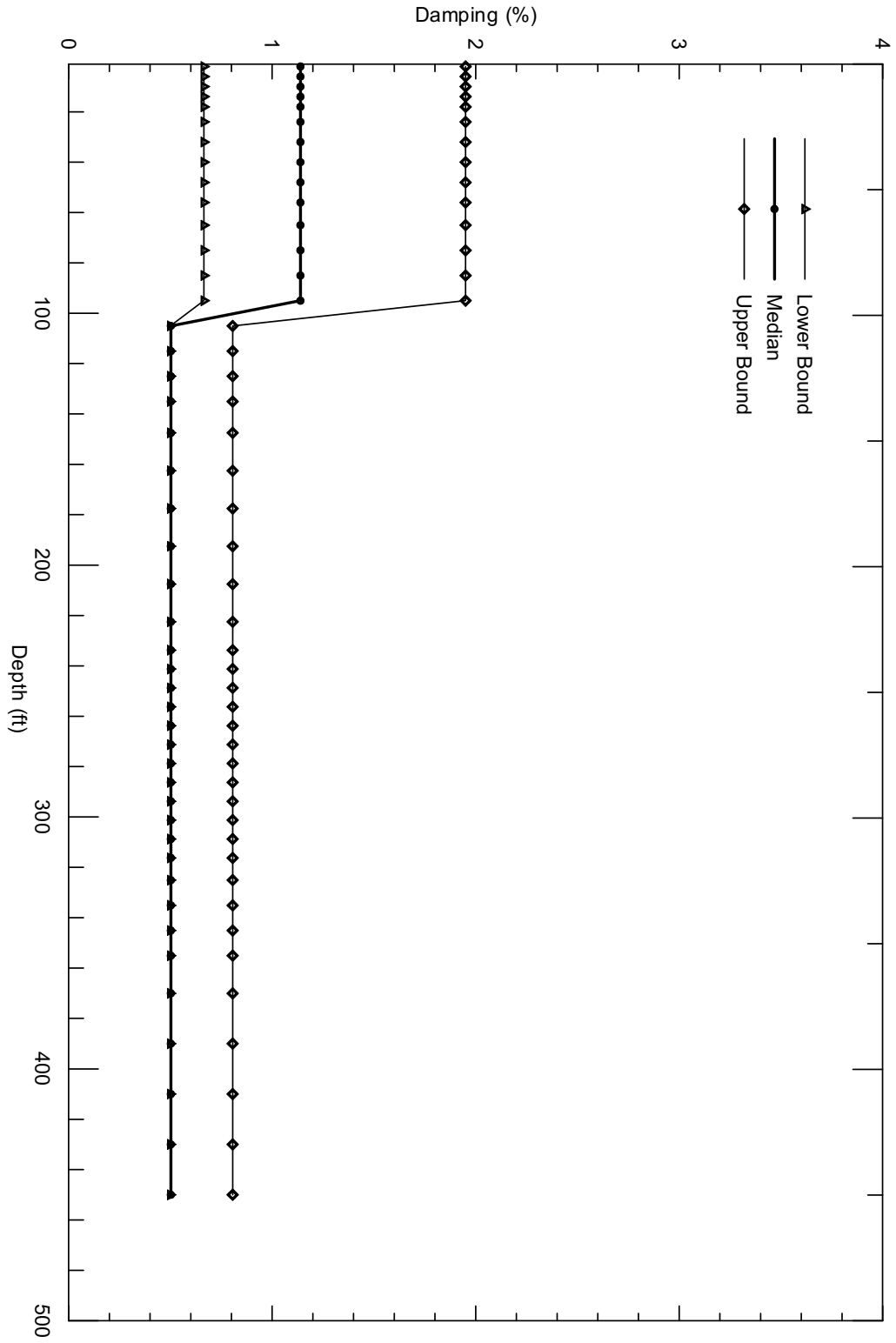

Source: Appendix D, Table D-1

Figure 6.5.2-256. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



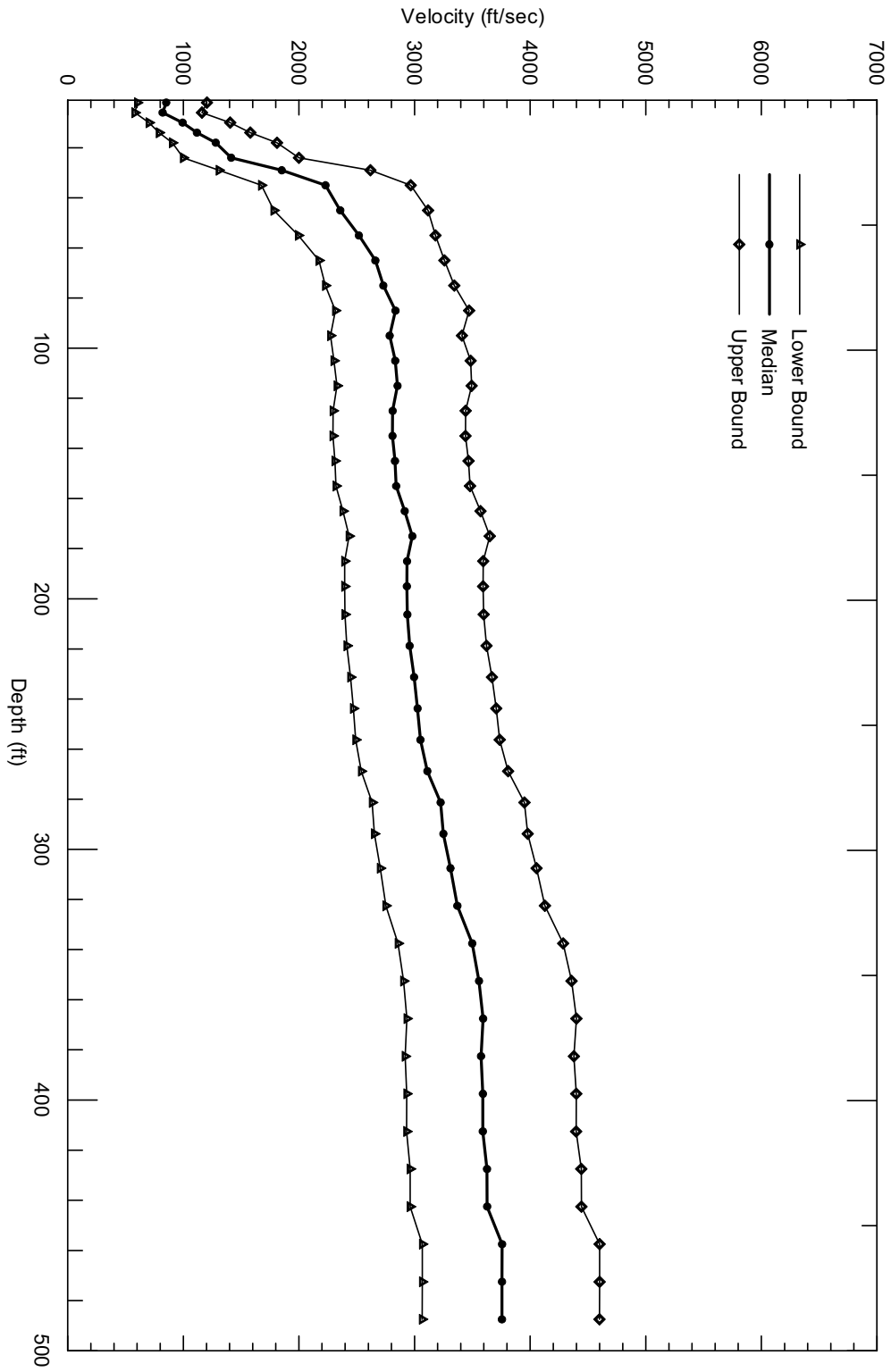

Source: Appendix D, Table D-1

Figure 6.5.2-257. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



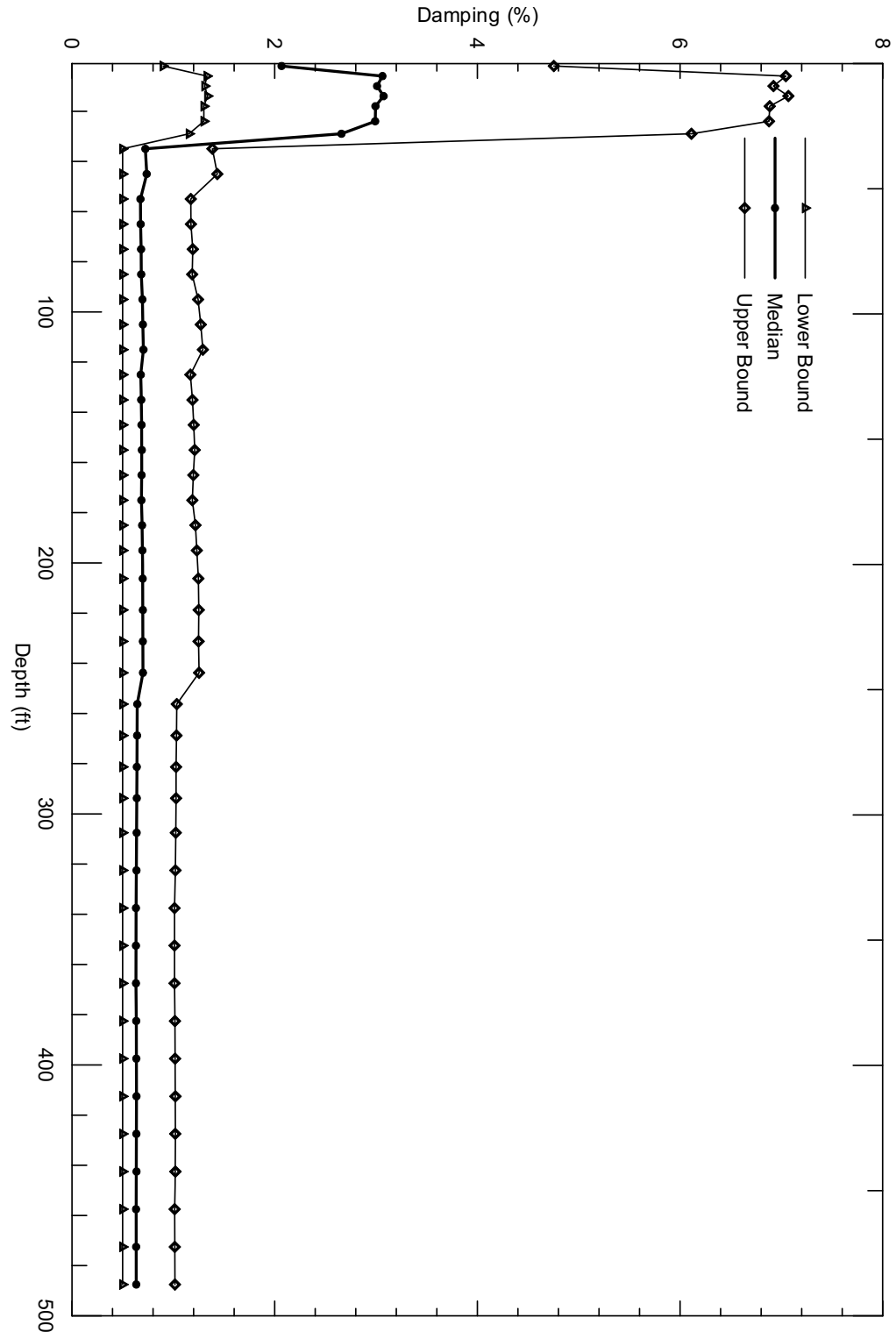

Source: Appendix D, Table D-1

Figure 6.5.2-258. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-3}$ AFE



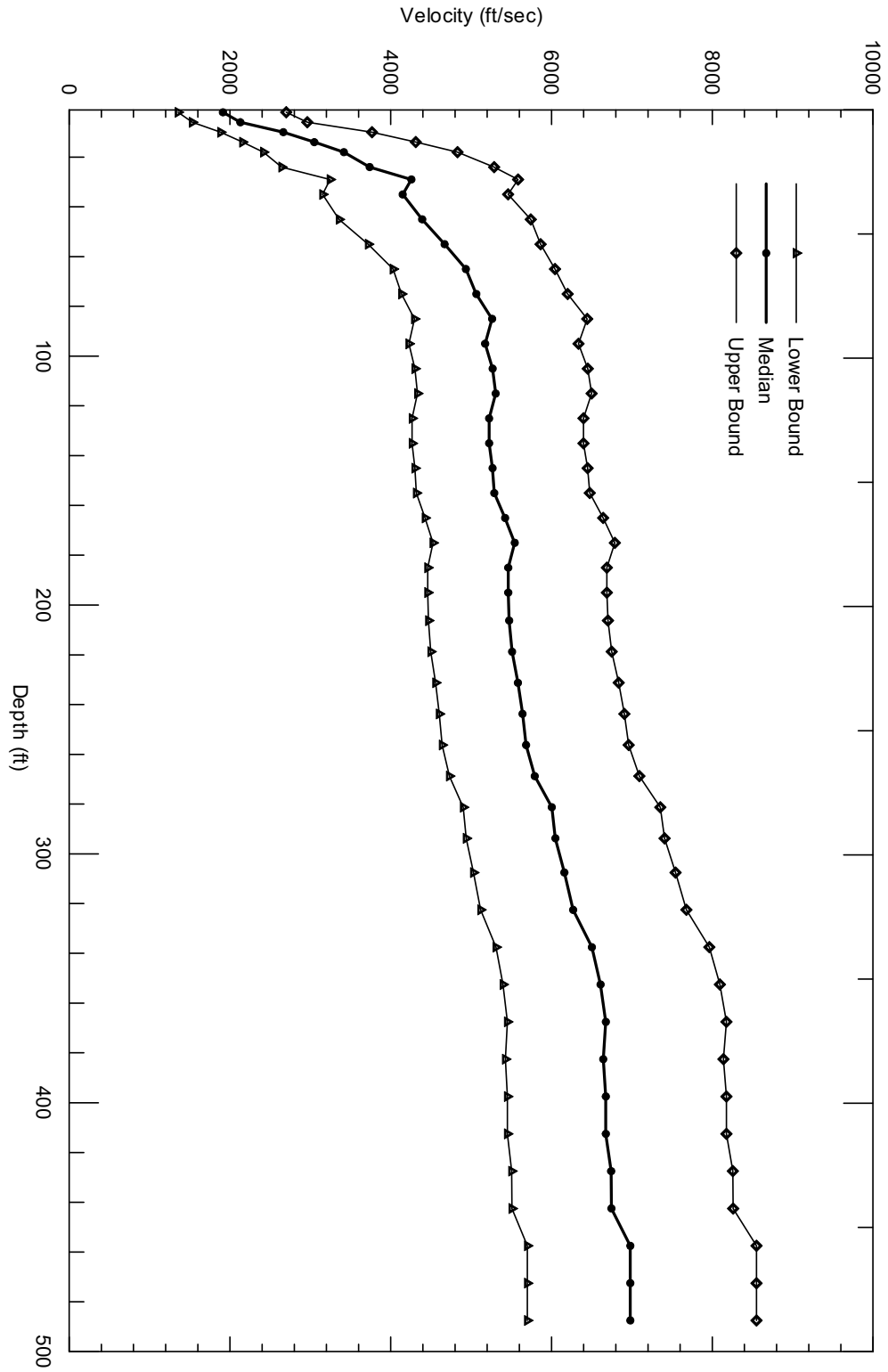

Source: Appendix D, Table D-1

Figure 6.5.2-259. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



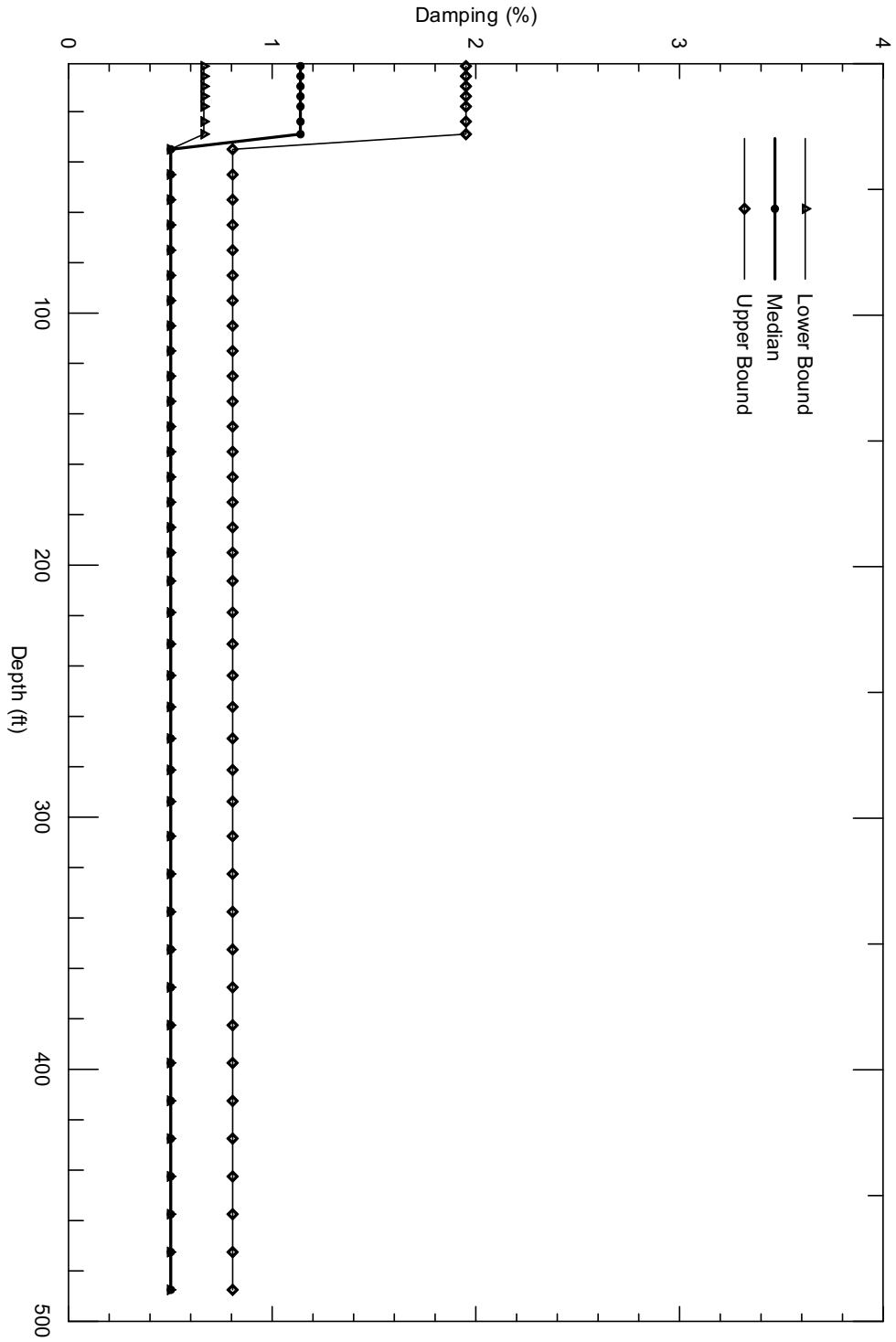

Source: Appendix D, Table D-1

Figure 6.5.2-260. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



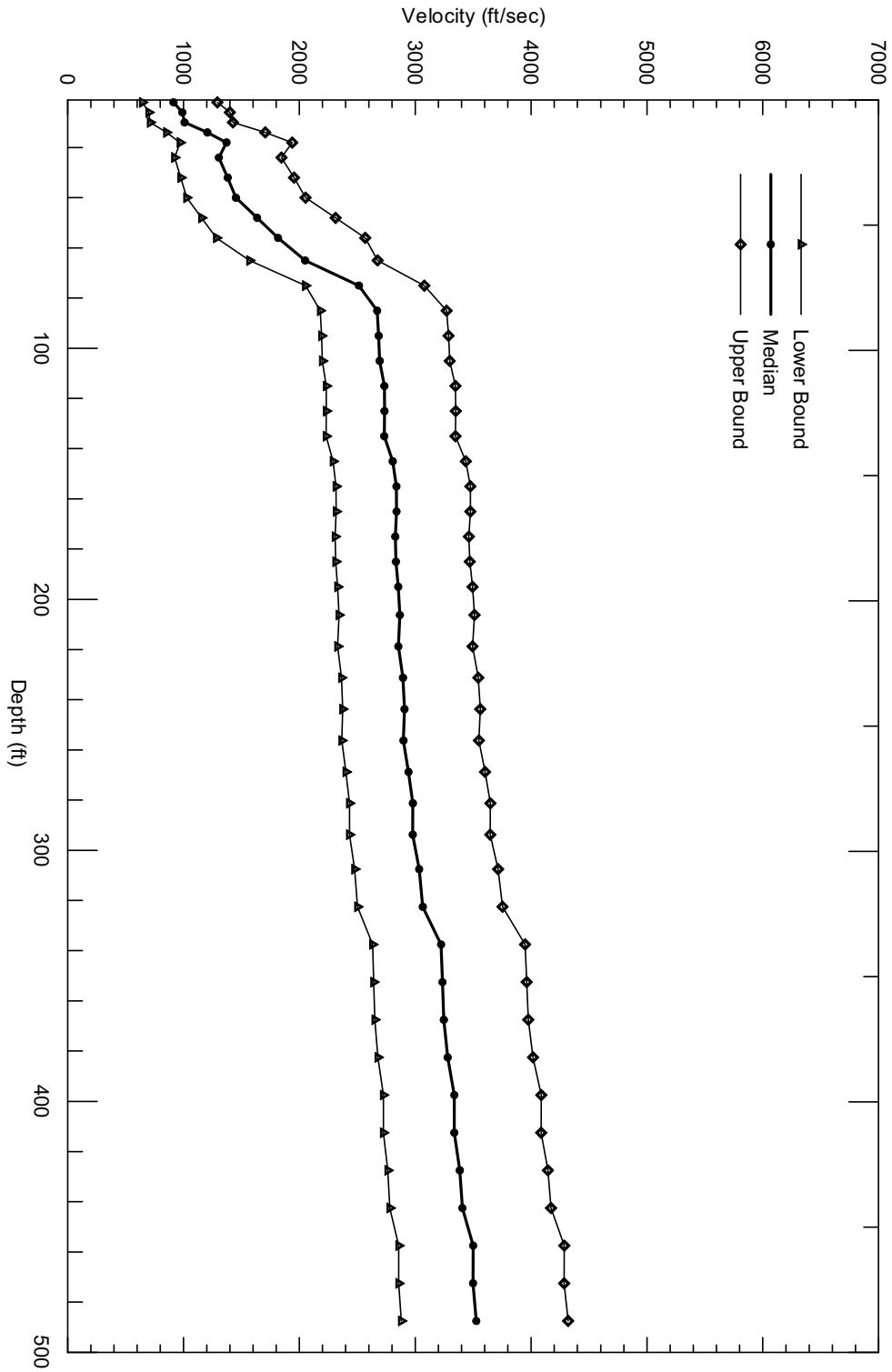

Source: Appendix D, Table D-1

Figure 6.5.2-261. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



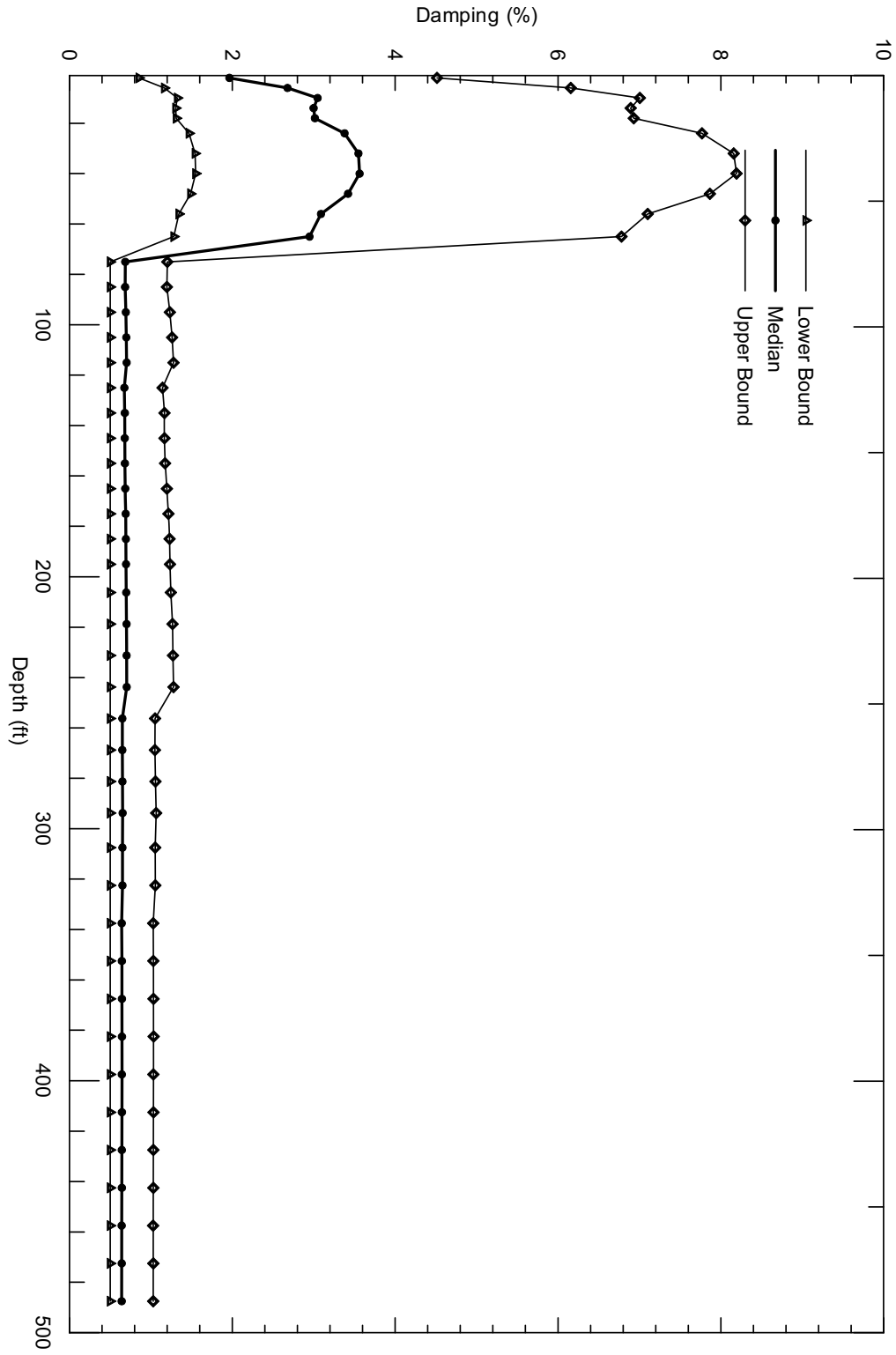

Source: Appendix D, Table D-1

Figure 6.5.2-262. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



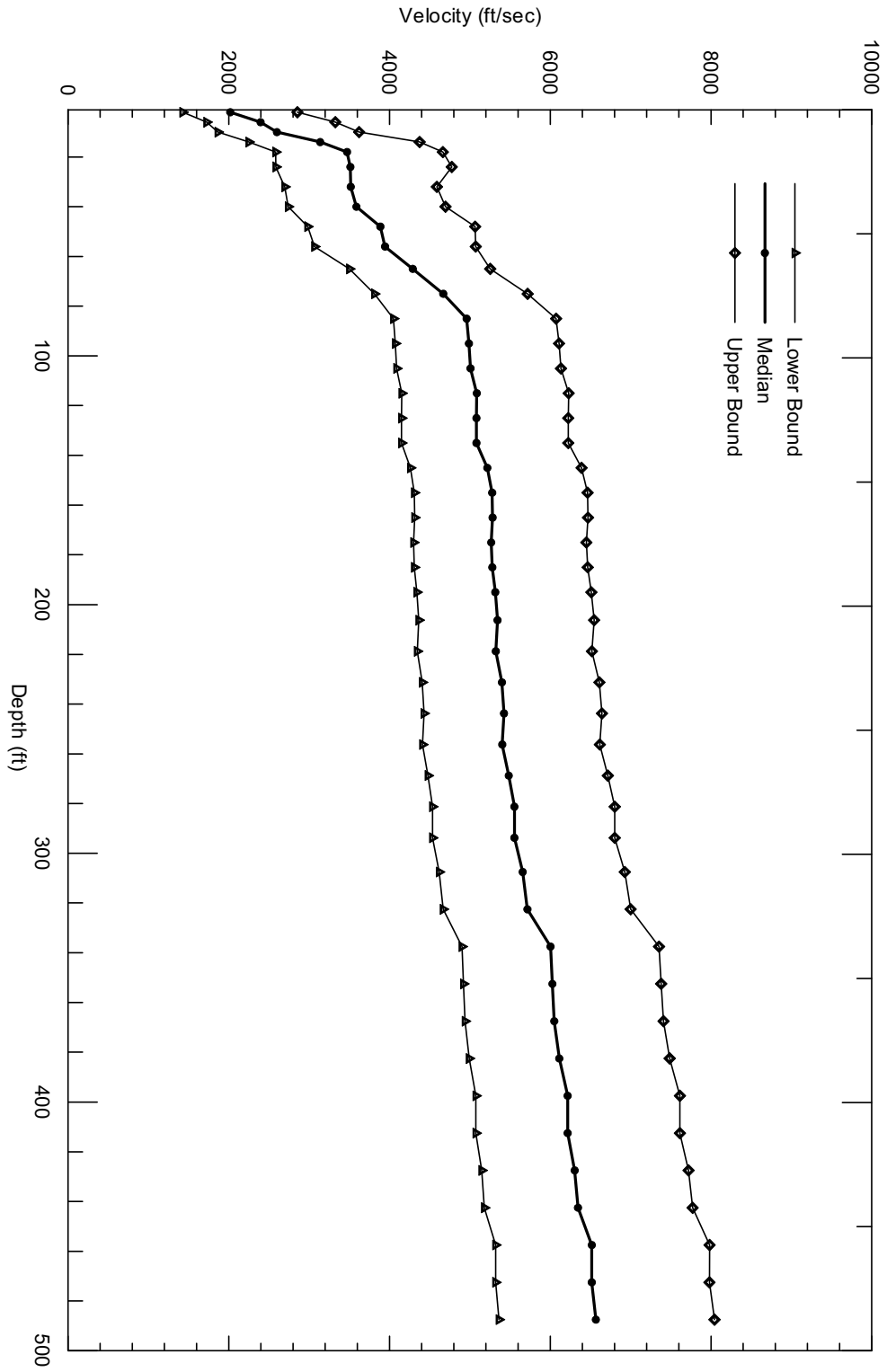

Source: Appendix D, Table D-1

Figure 6.5.2-263. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



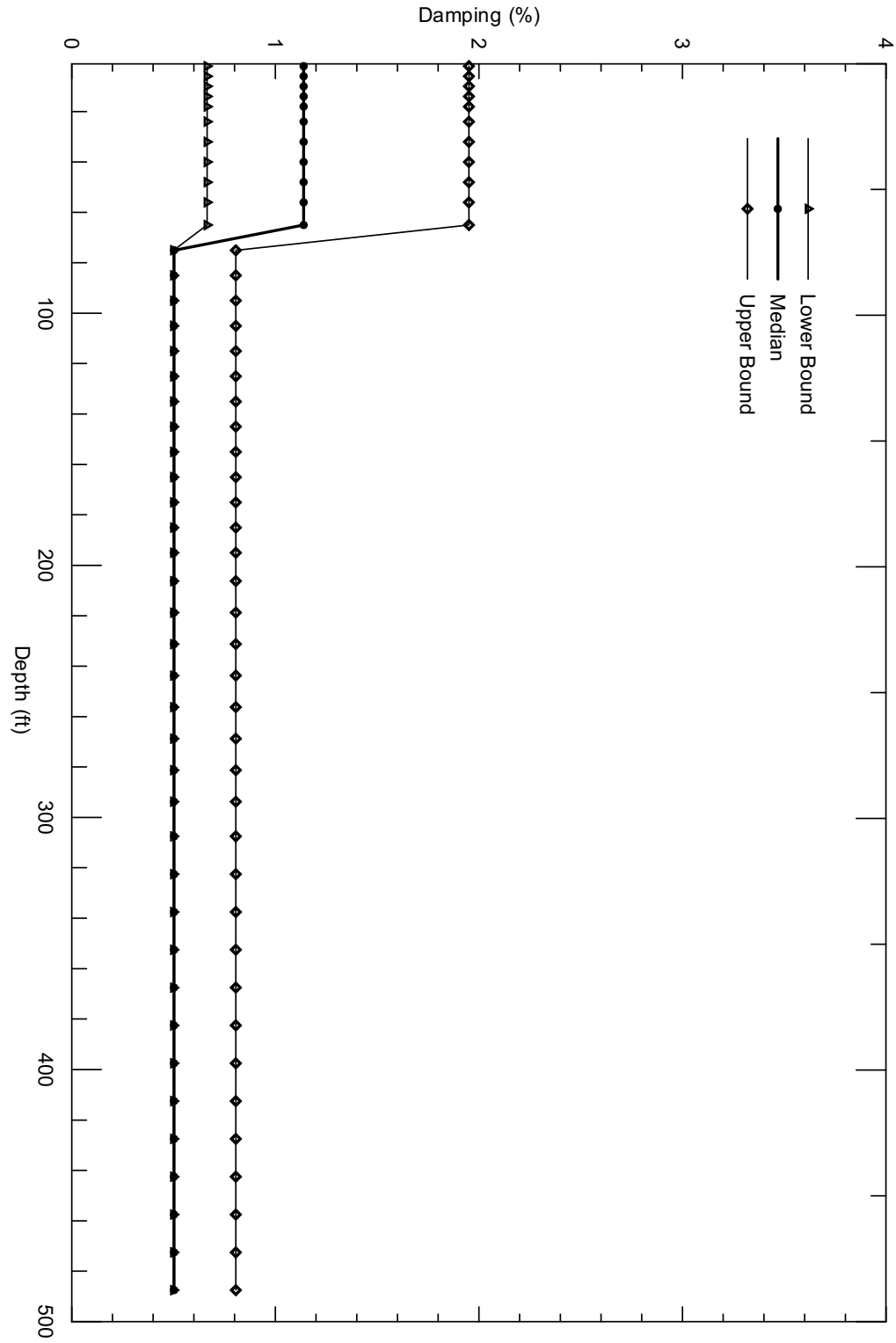

Source: Appendix D, Table D-1

Figure 6.5.2-264. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



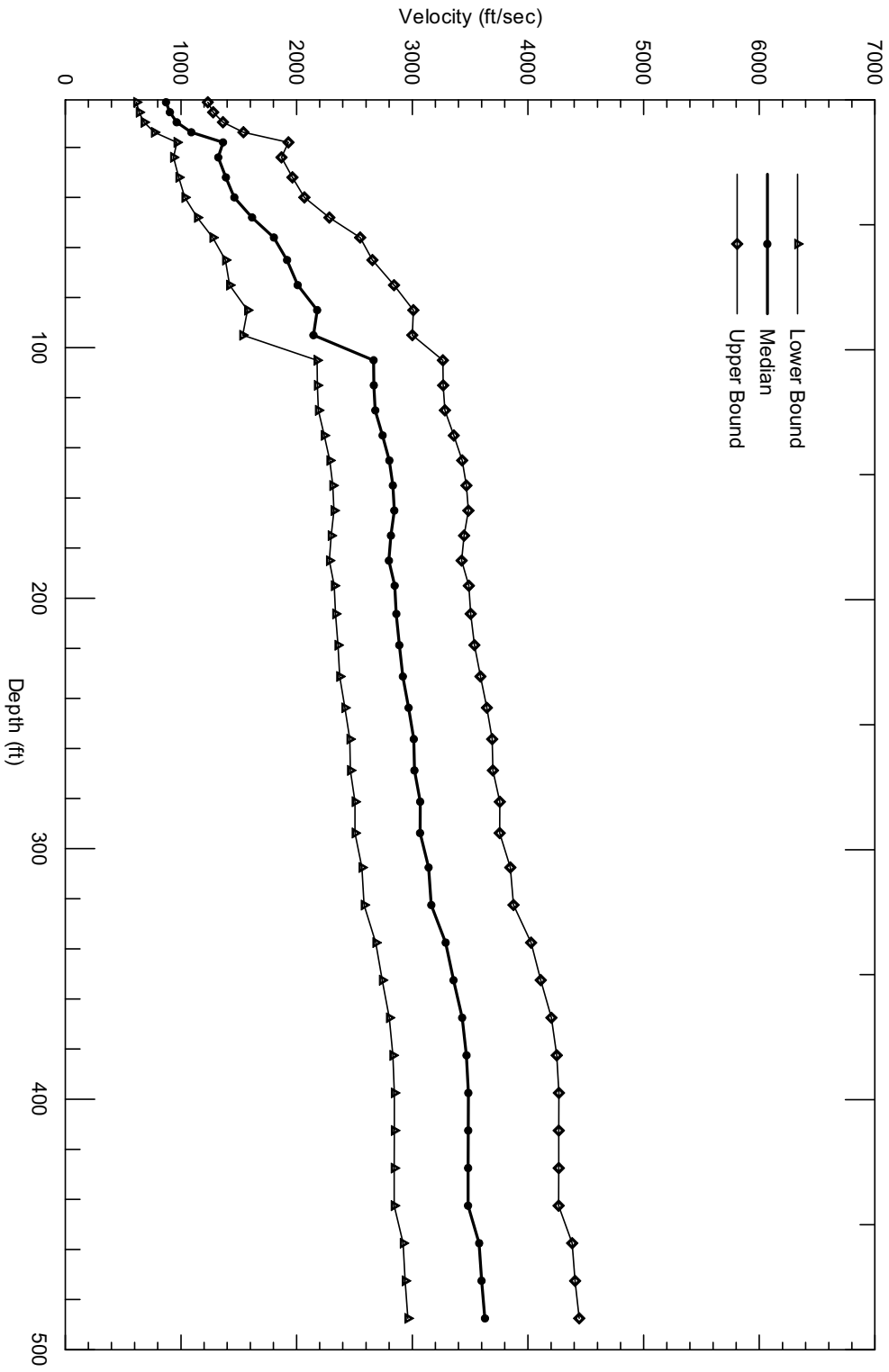

Source: Appendix D, Table D-1

Figure 6.5.2-265. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



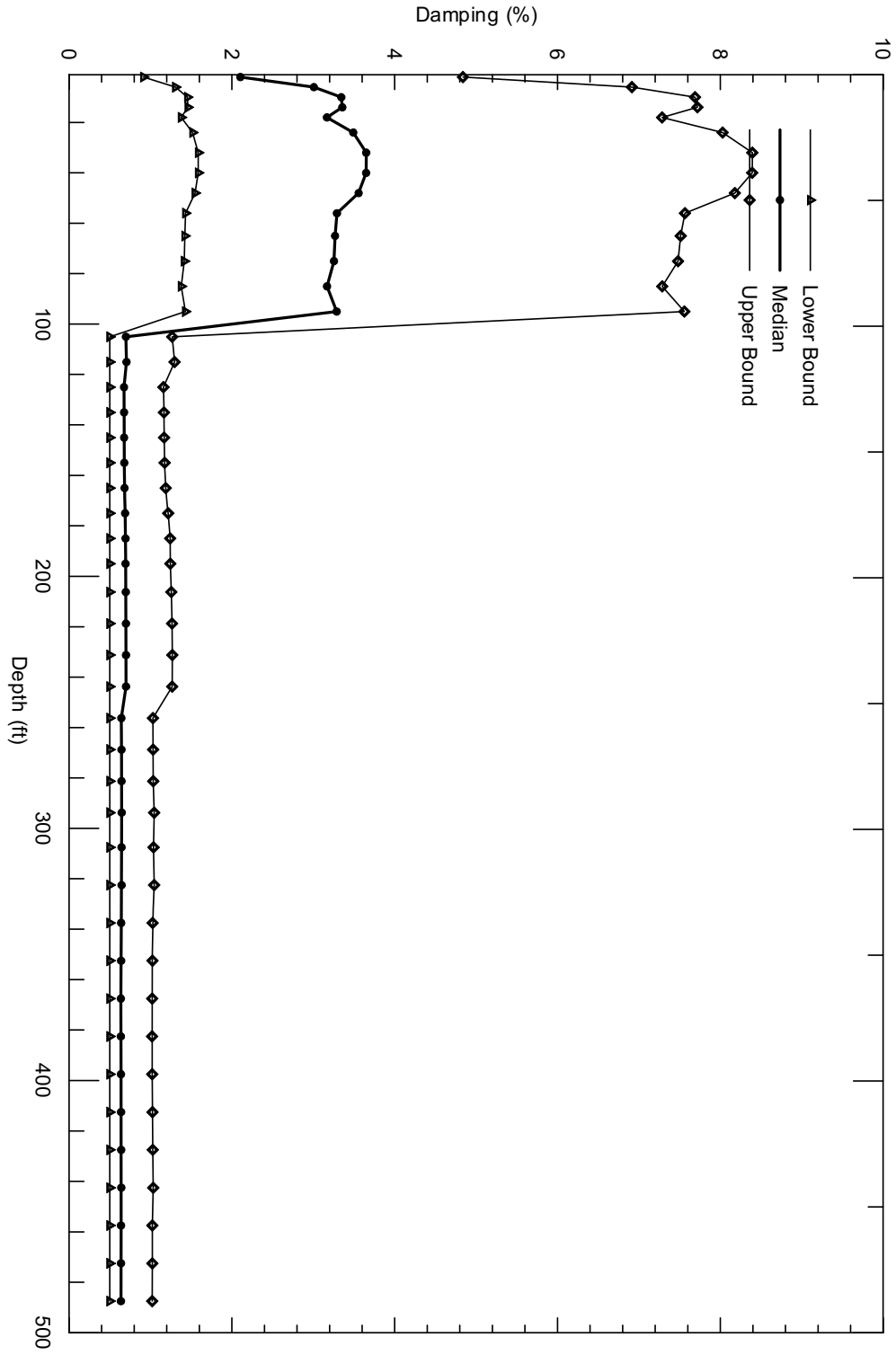

Source: Appendix D, Table D-1

Figure 6.5.2-266. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



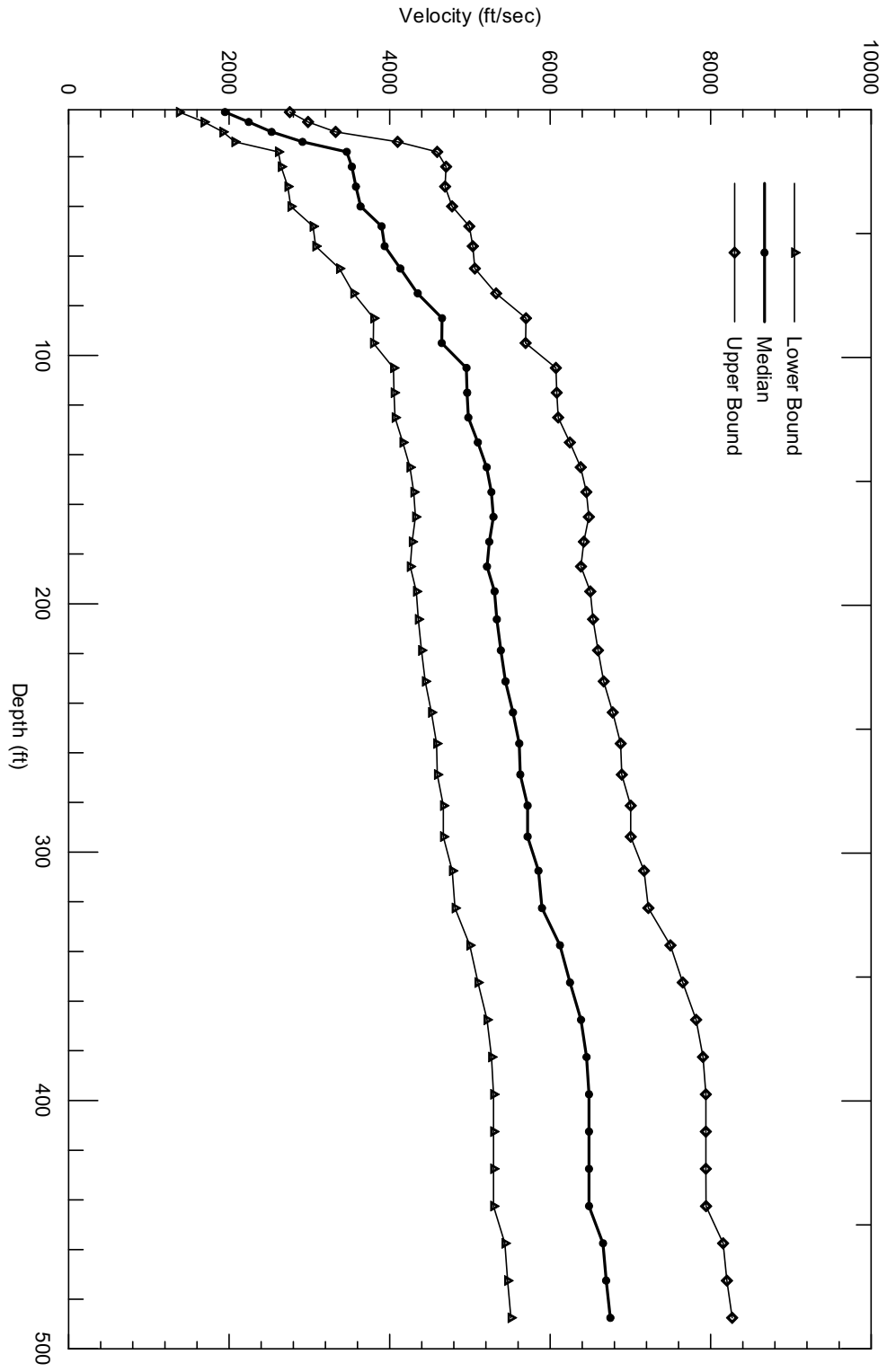

Source: Appendix D, Table D-1

Figure 6.5.2-267. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



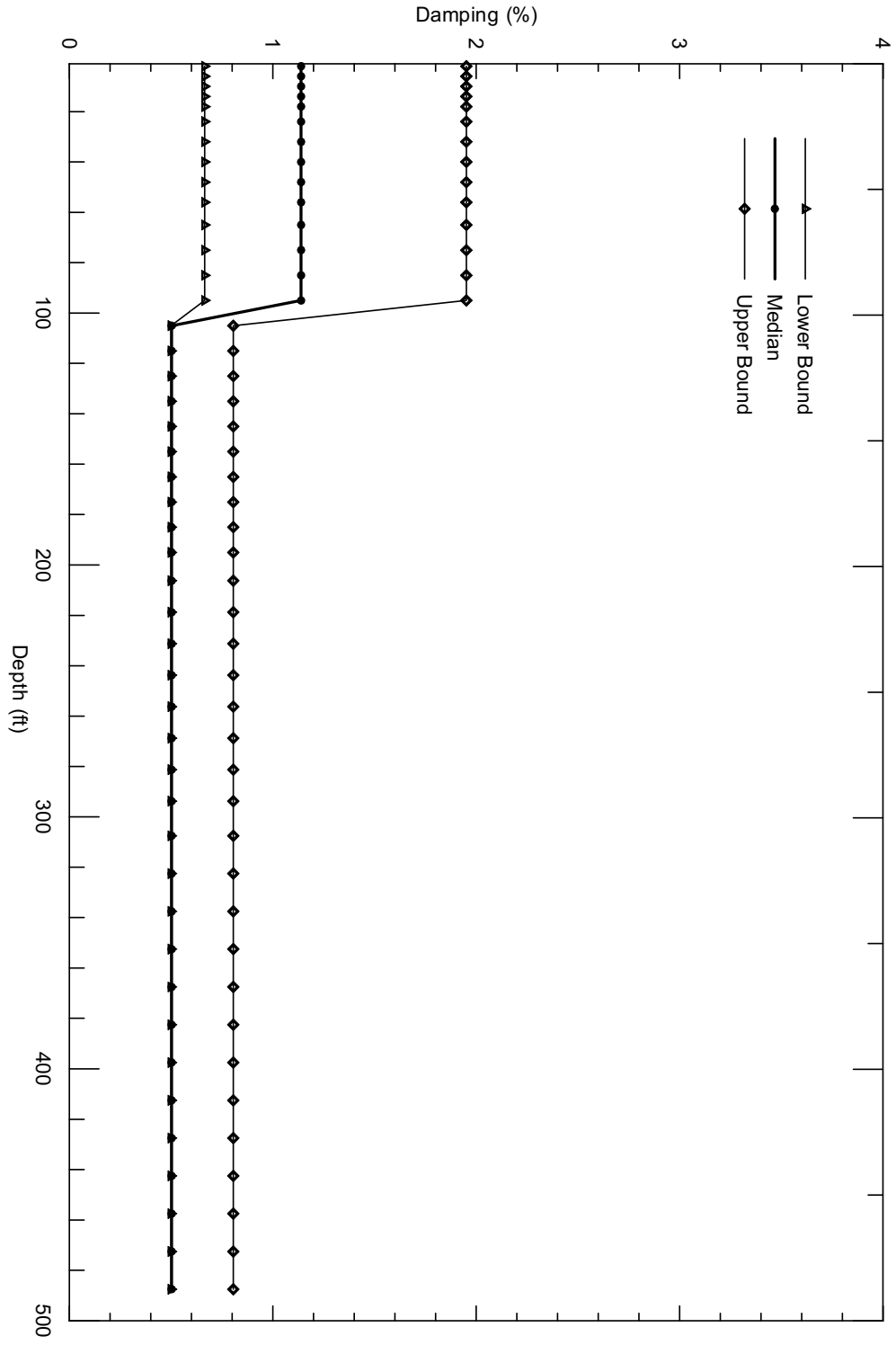

Source: Appendix D, Table D-1

Figure 6.5.2-268. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



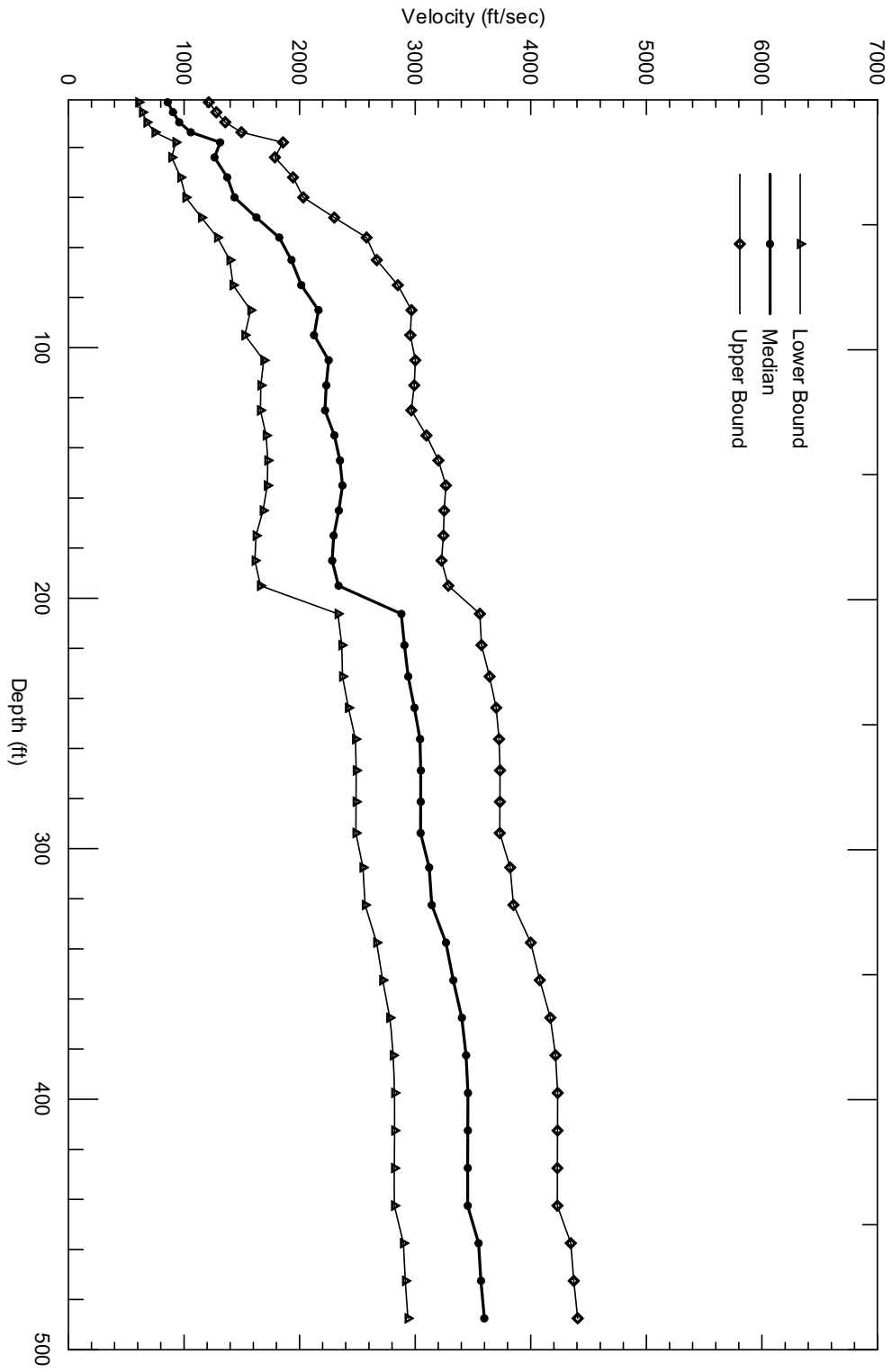

Source: Appendix D, Table D-1

Figure 6.5.2-269. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



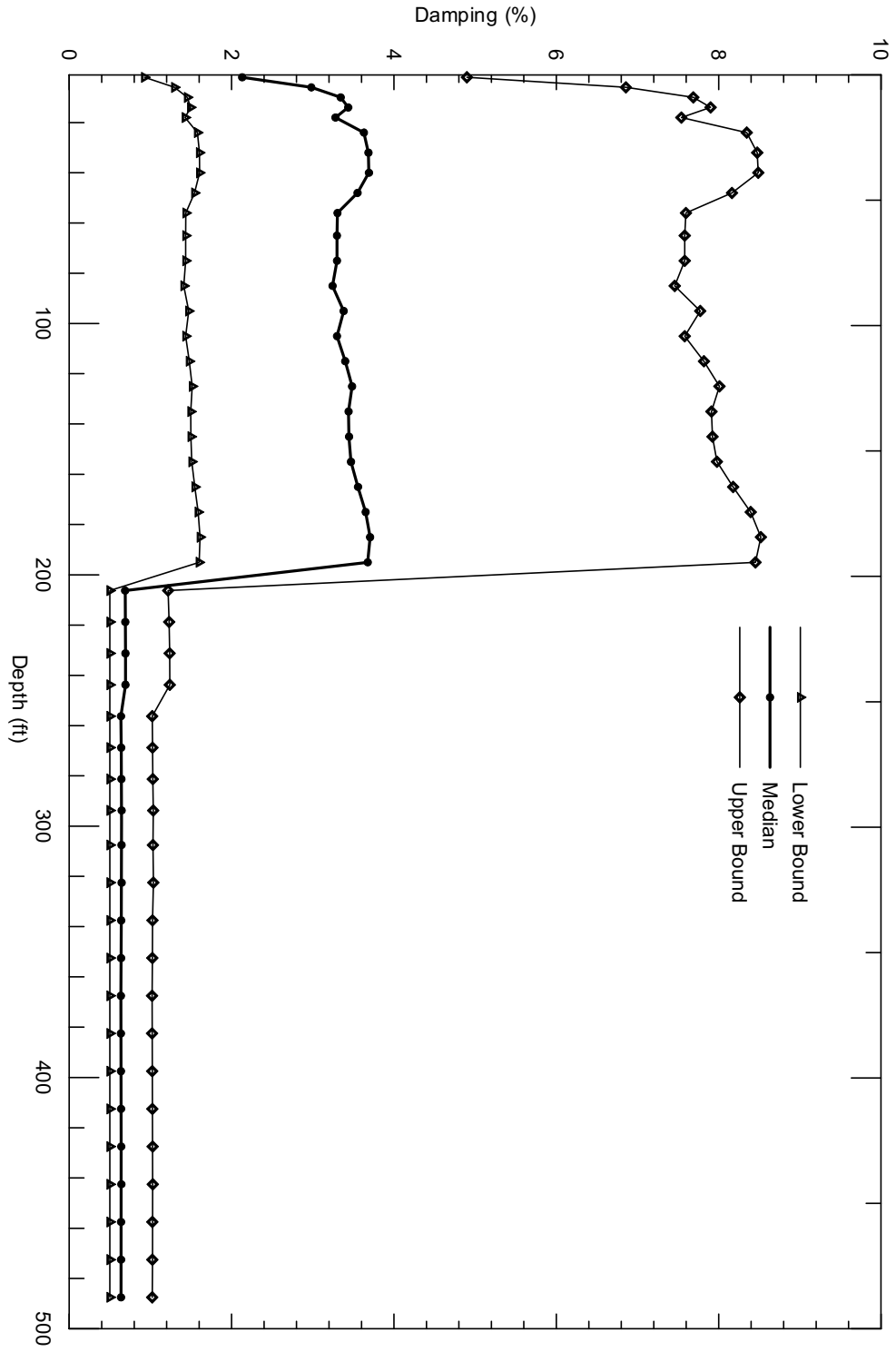

Source: Appendix D, Table D-1

Figure 6.5.2-270. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



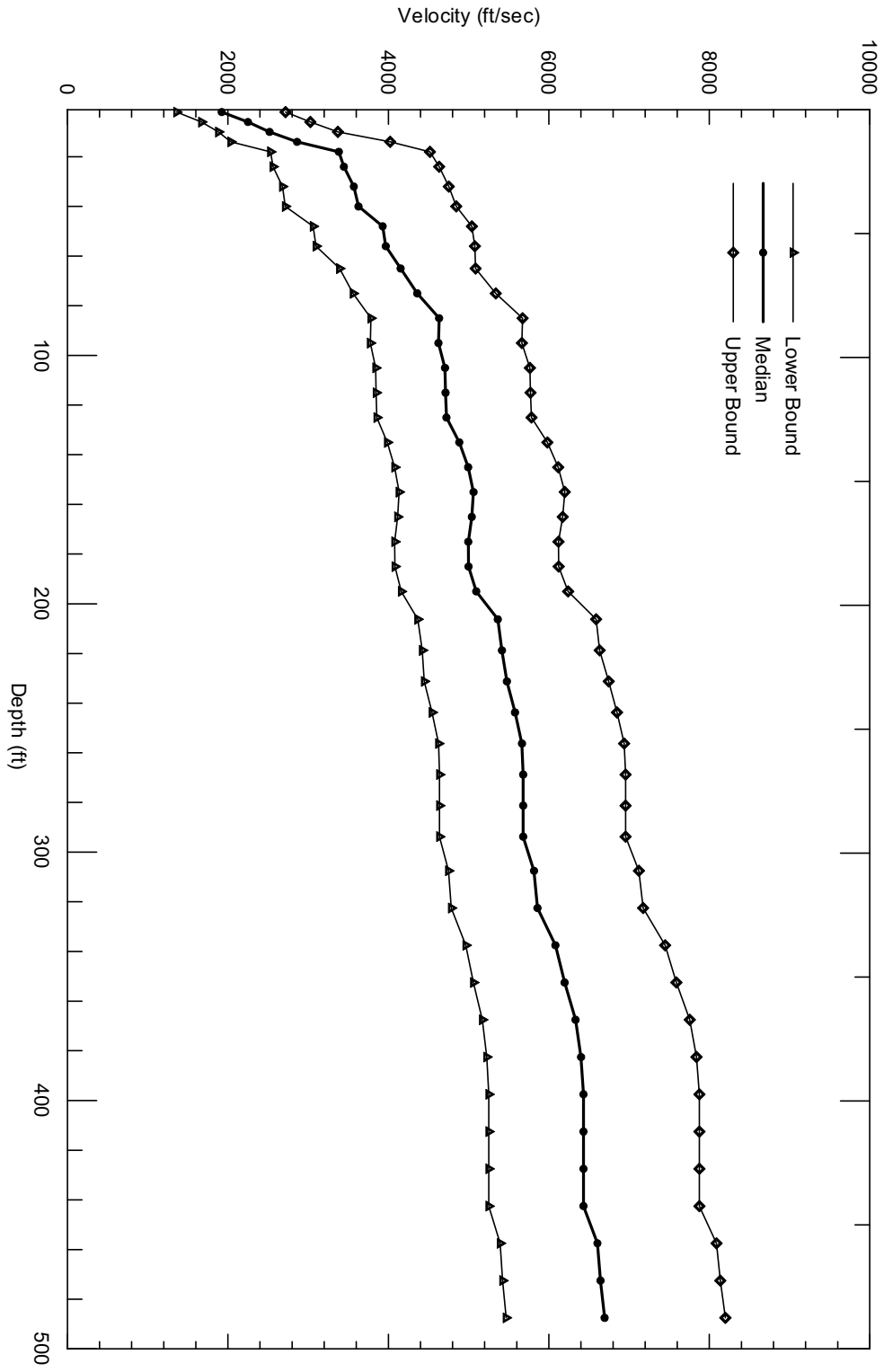

Source: Appendix D, Table D-1

Figure 6.5.2-271. SFA Strain Compatible Soil Properties S-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



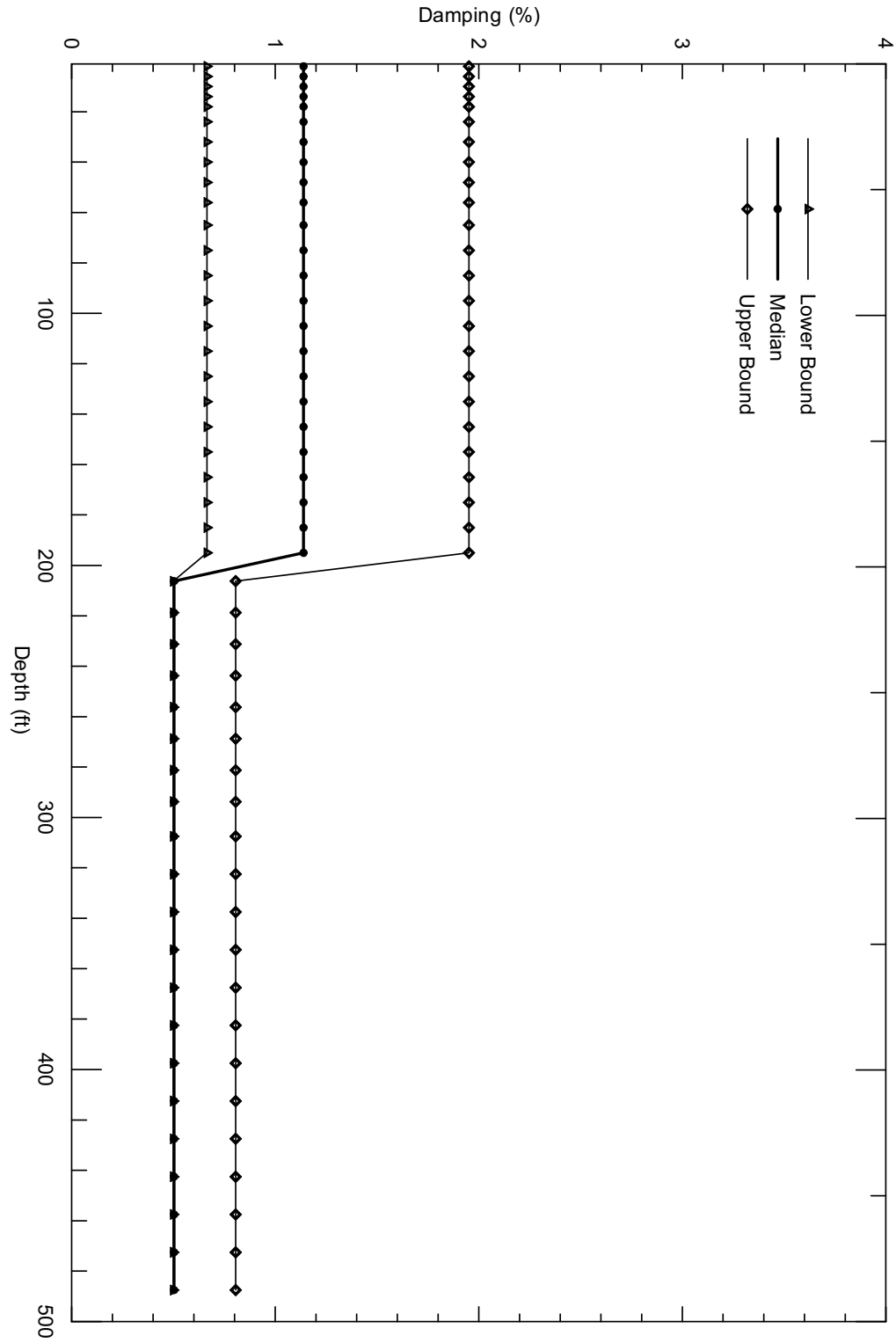

Source: Appendix D, Table D-1

Figure 6.5.2-272. SFA Strain Compatible Soil Properties S-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



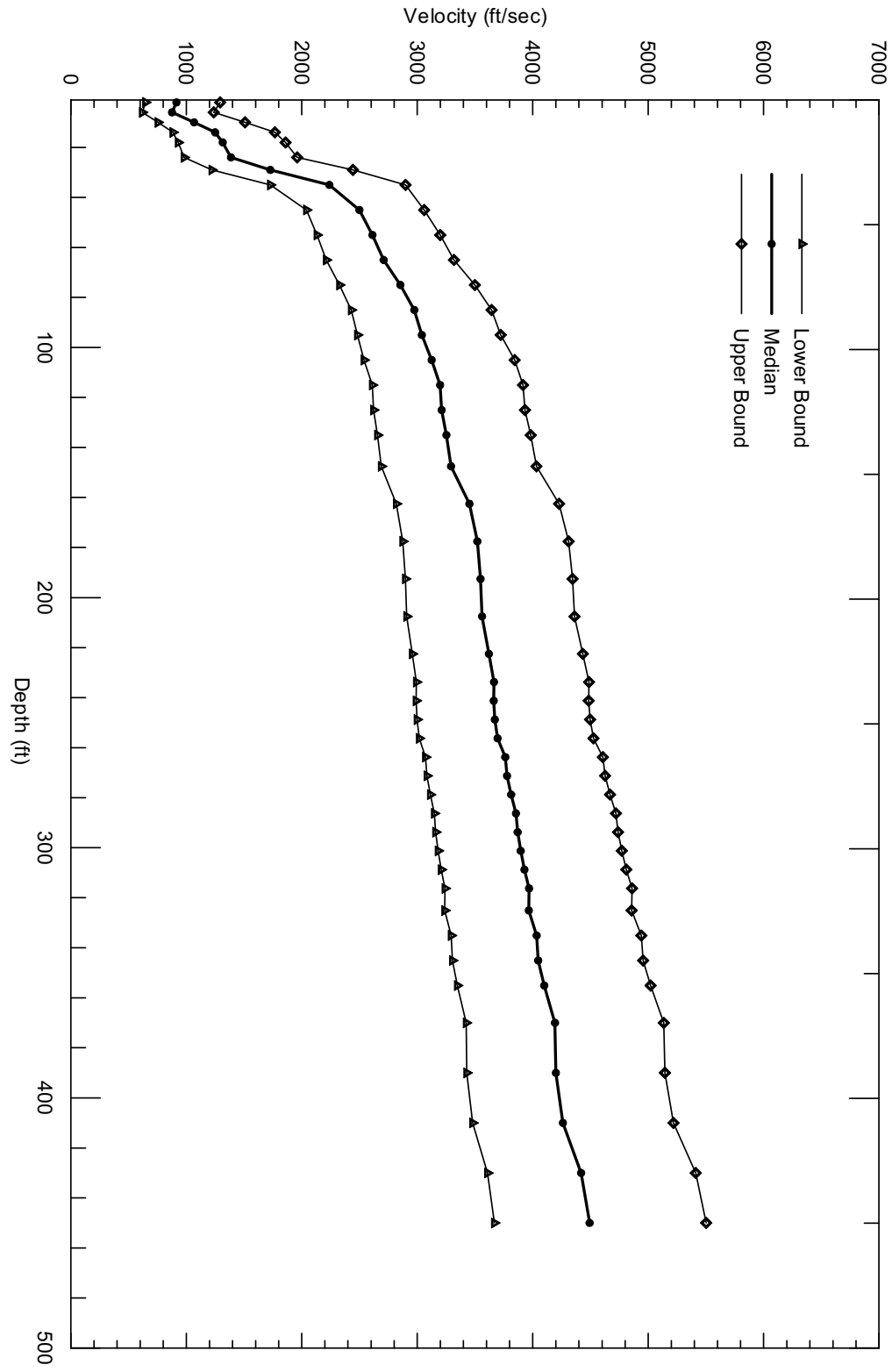

Source: Appendix D, Table D-1

Figure 6.5.2-273. SFA Strain Compatible Soil Properties P-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



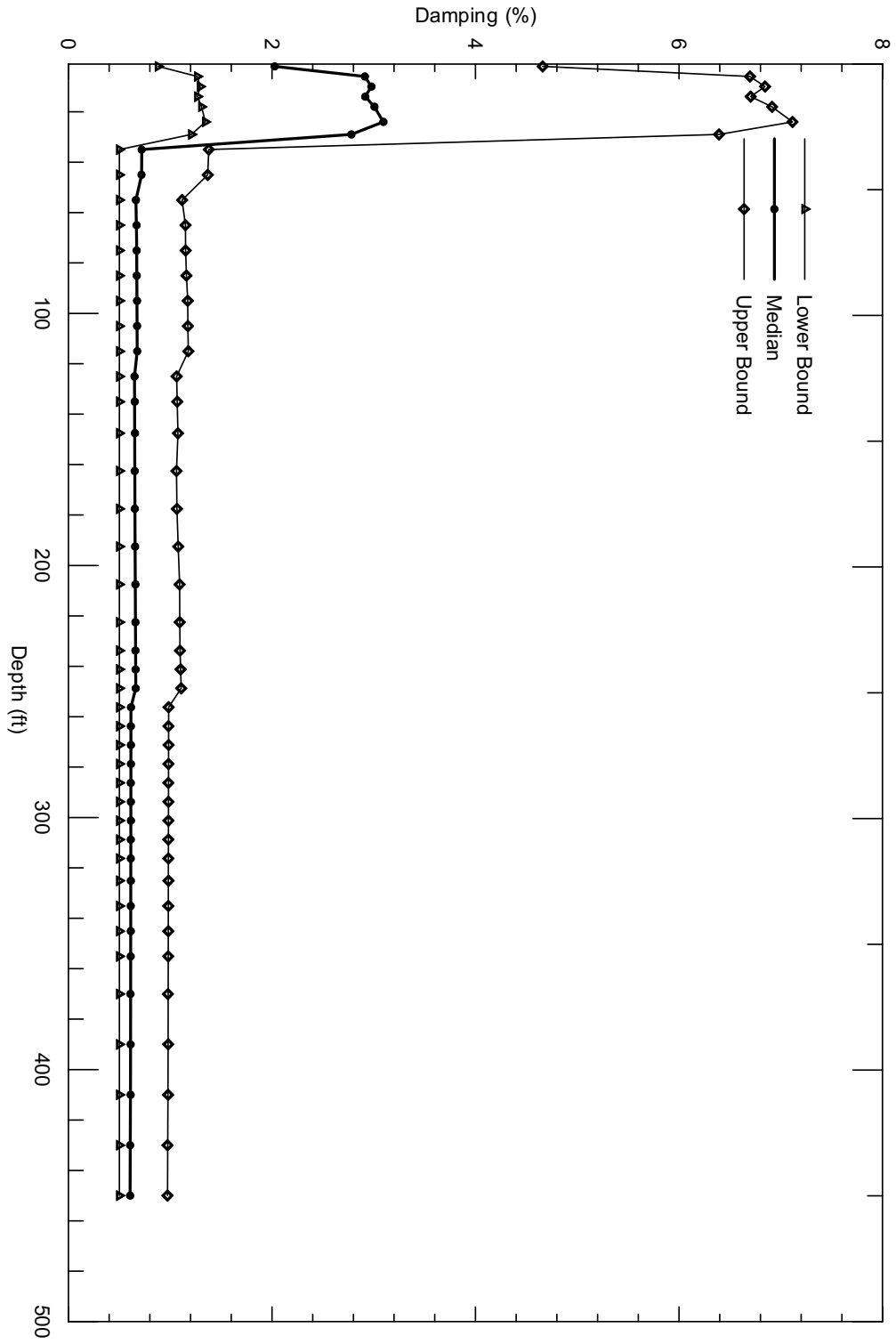

Source: Appendix D, Table D-1

Figure 6.5.2-274. SFA Strain Compatible Soil Properties P-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $5x10^{-4}$ AFE



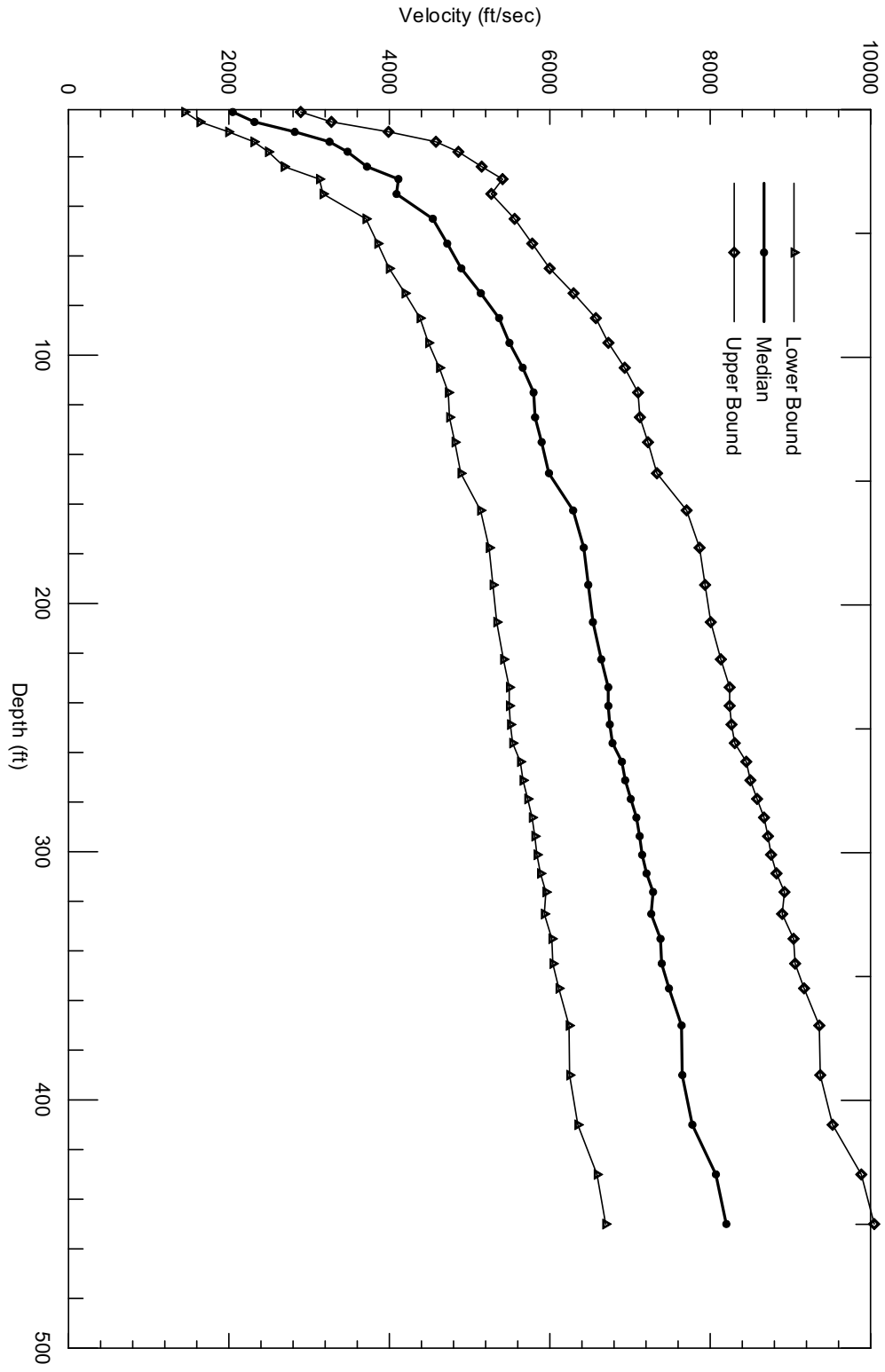

Source: Appendix D, Table D-1

Figure 6.5.2-275. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



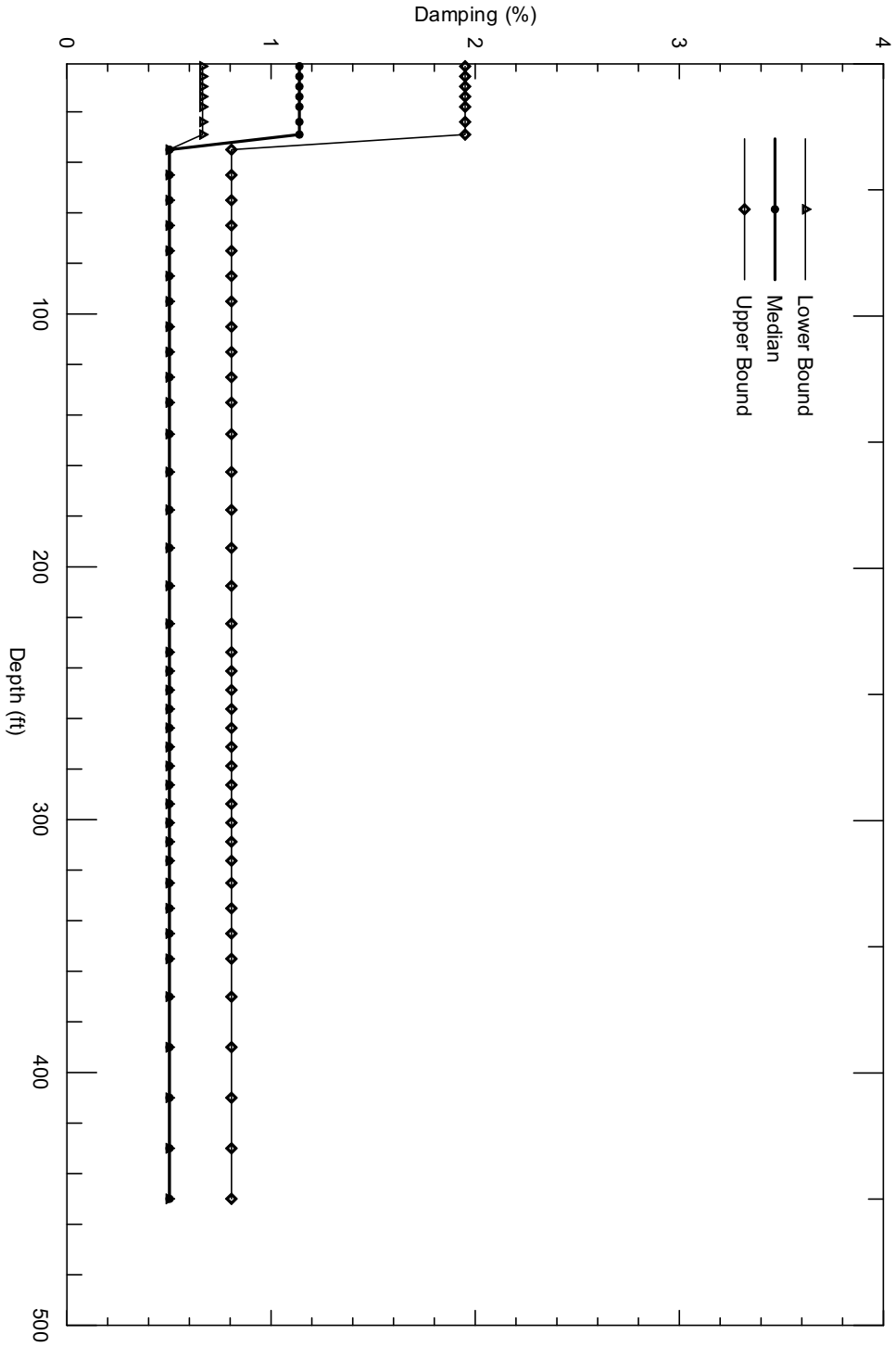

Source: Appendix D, Table D-1

Figure 6.5.2-276. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



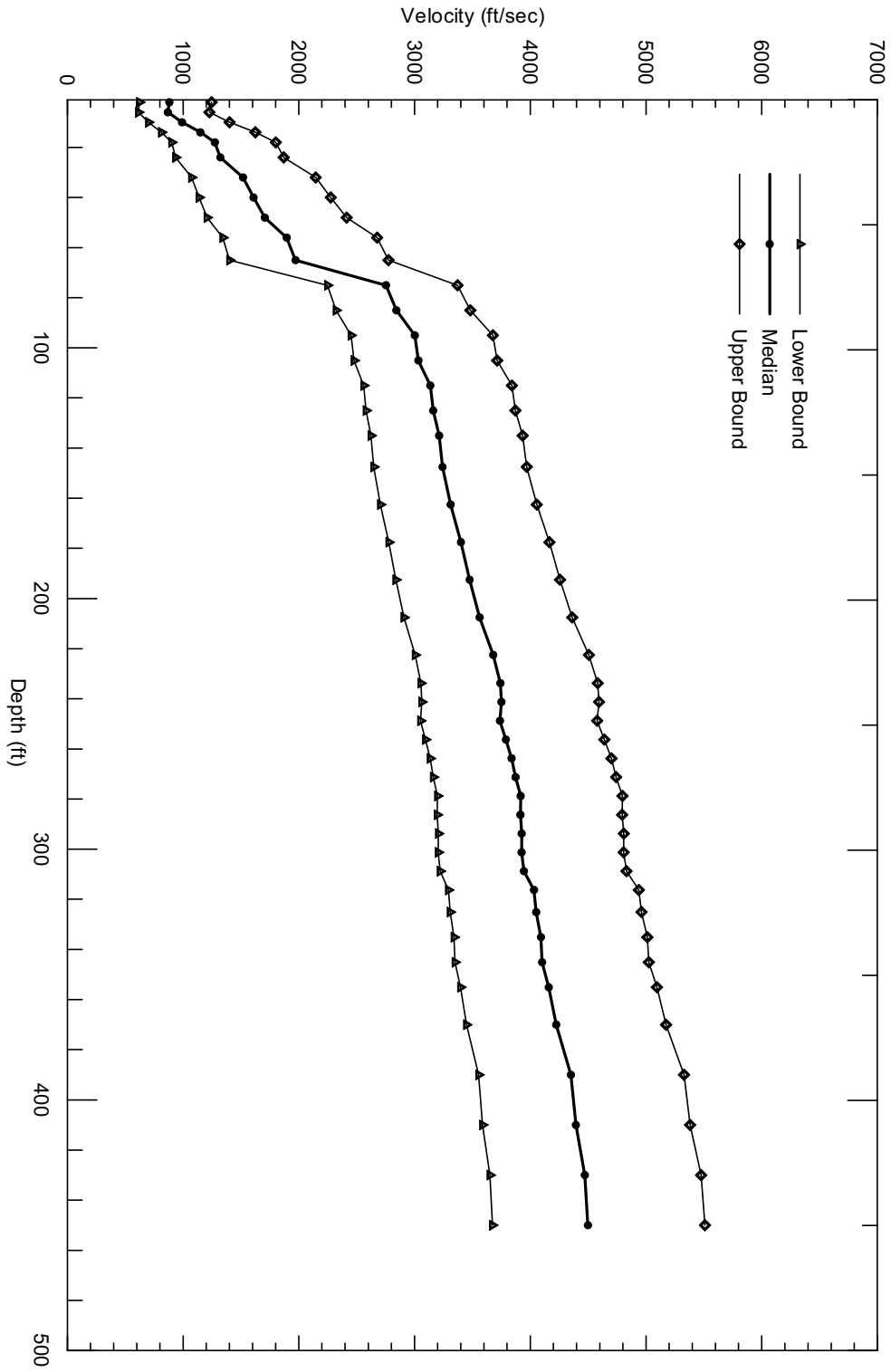

Source: Appendix D, Table D-1

Figure 6.5.2-277. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



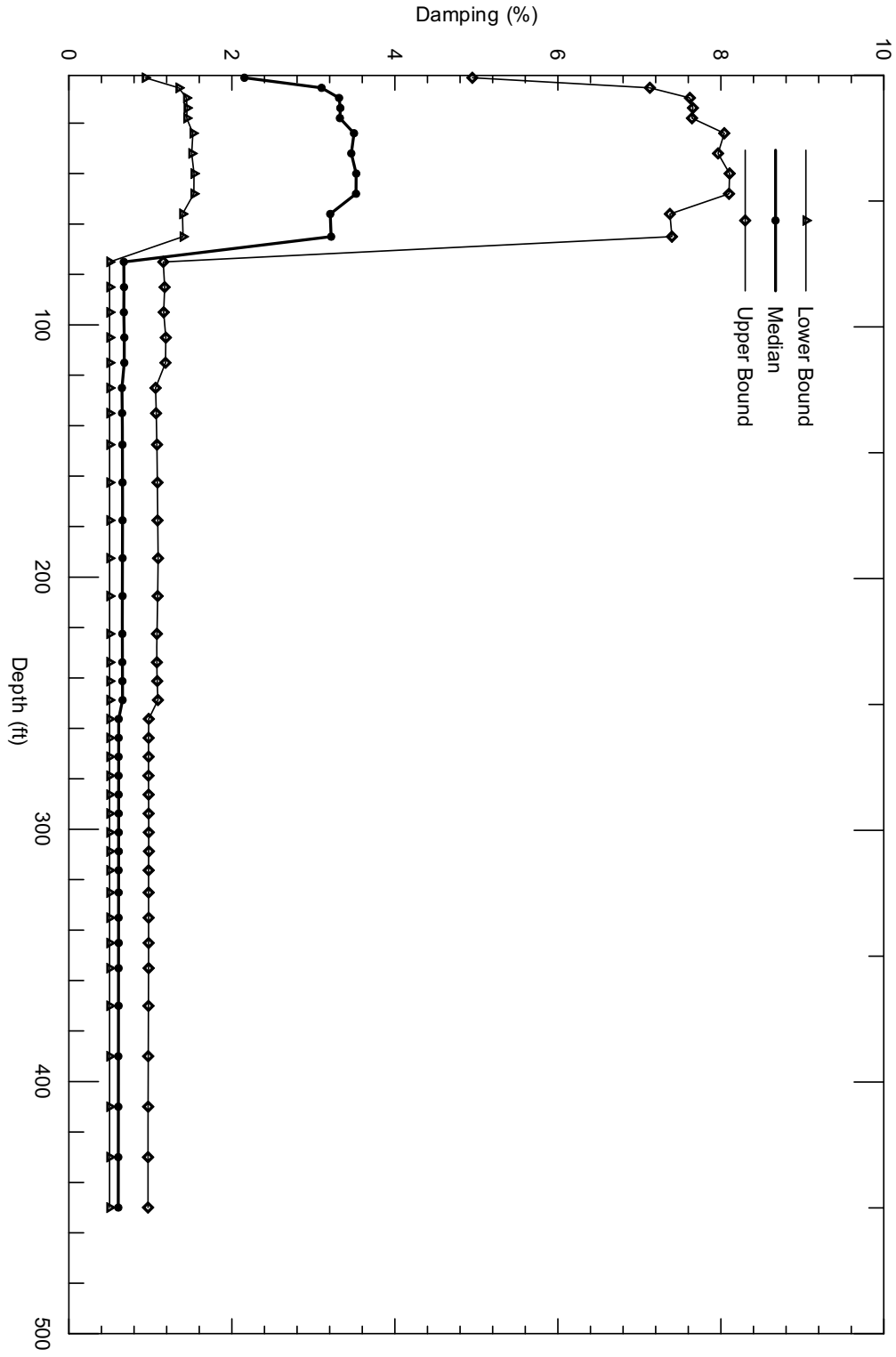

Source: Appendix D, Table D-1

Figure 6.5.2-278. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



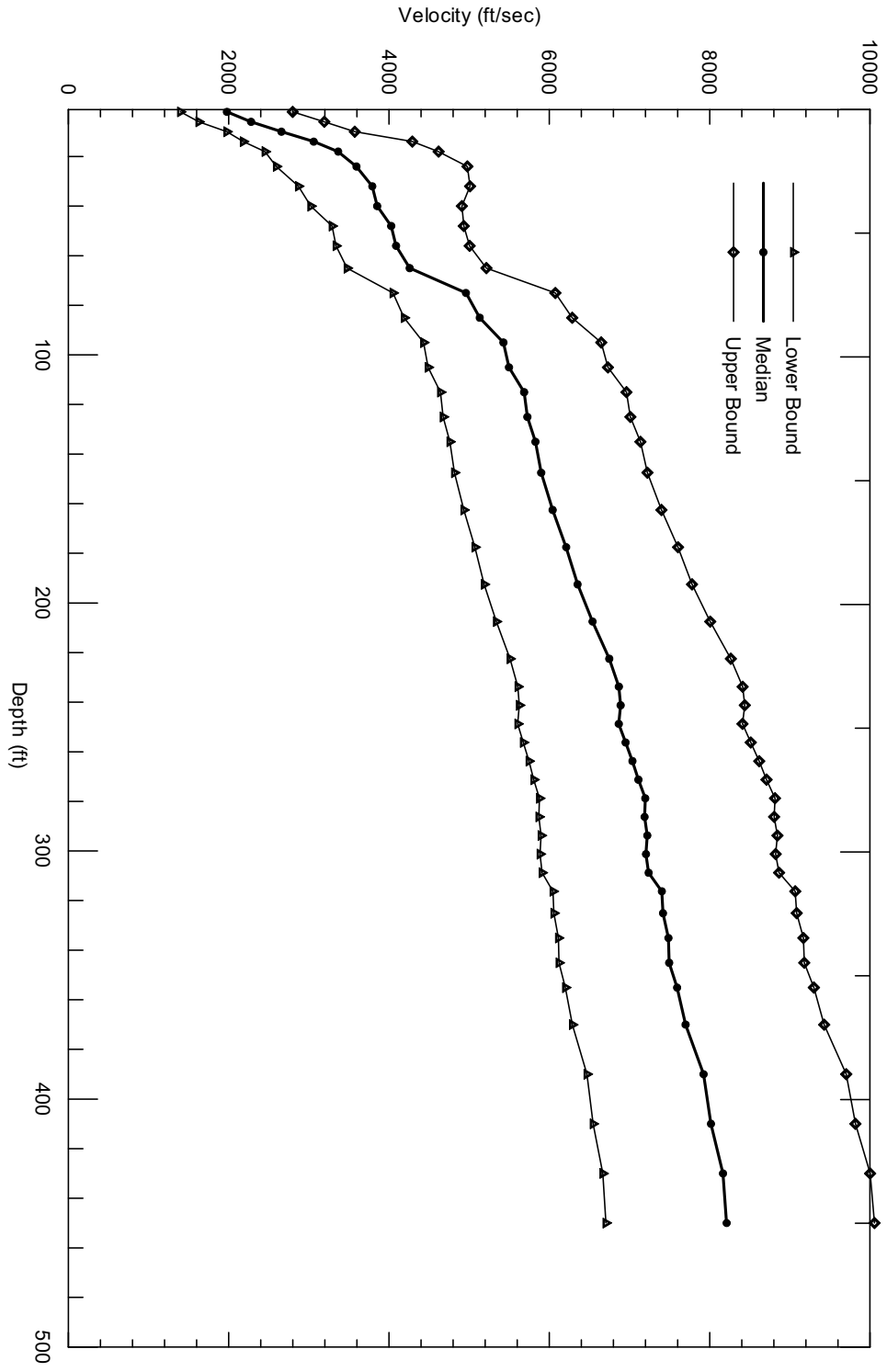

Source: Appendix D, Table D-1

Figure 6.5.2-279. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



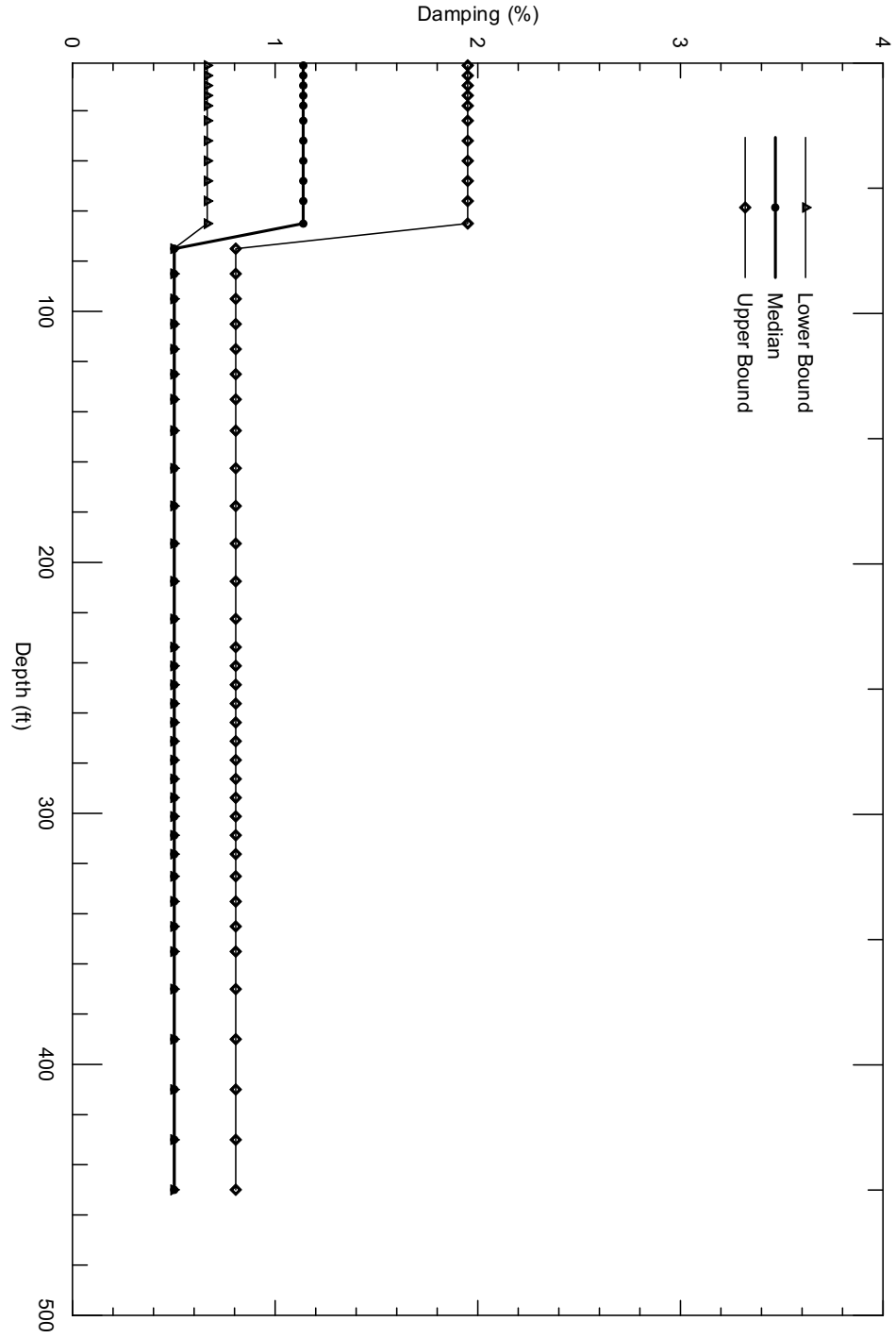

Source: Appendix D, Table D-1

Figure 6.5.2-280. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



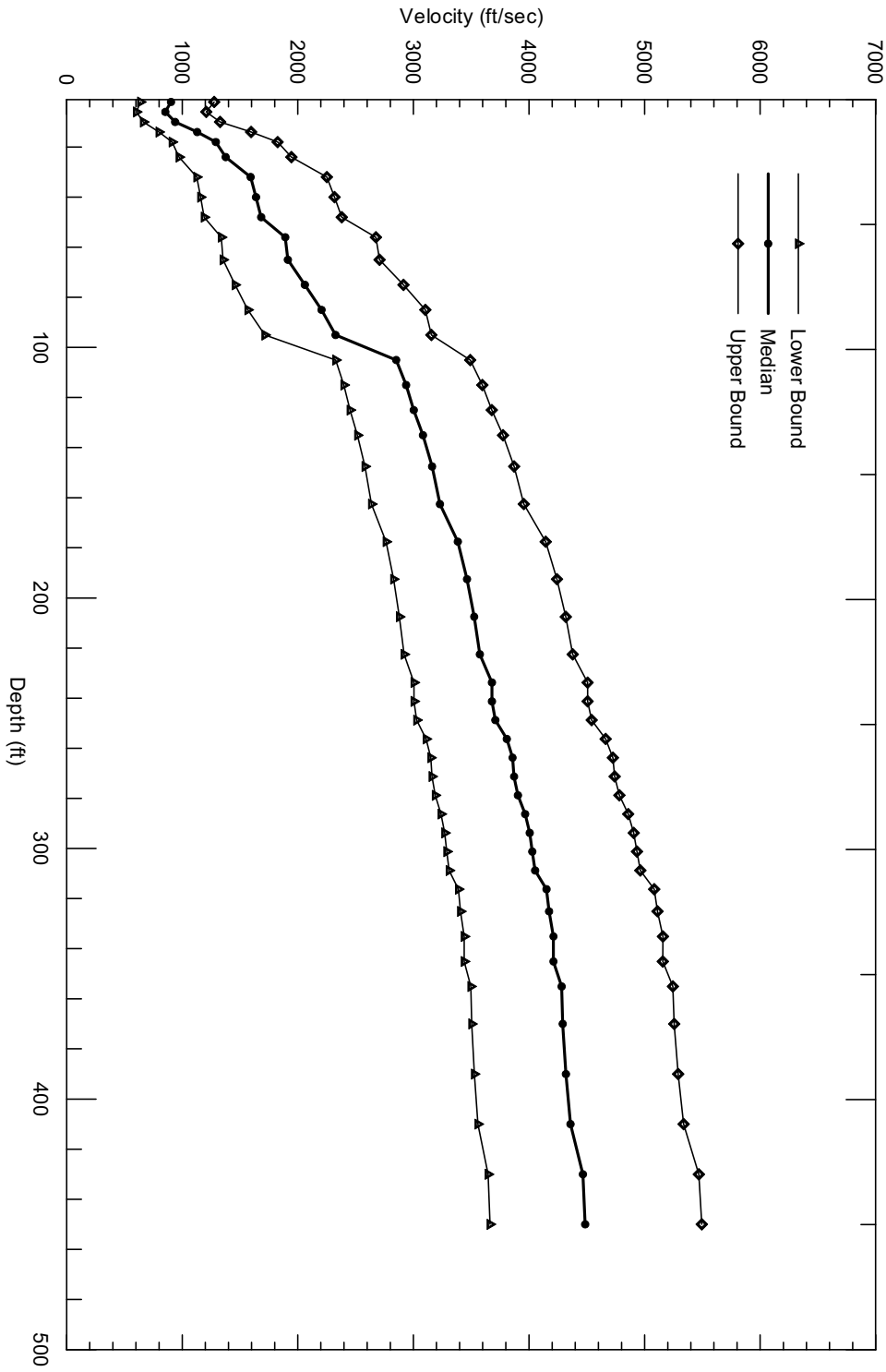

Source: Appendix D, Table D-1

Figure 6.5.2-281. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



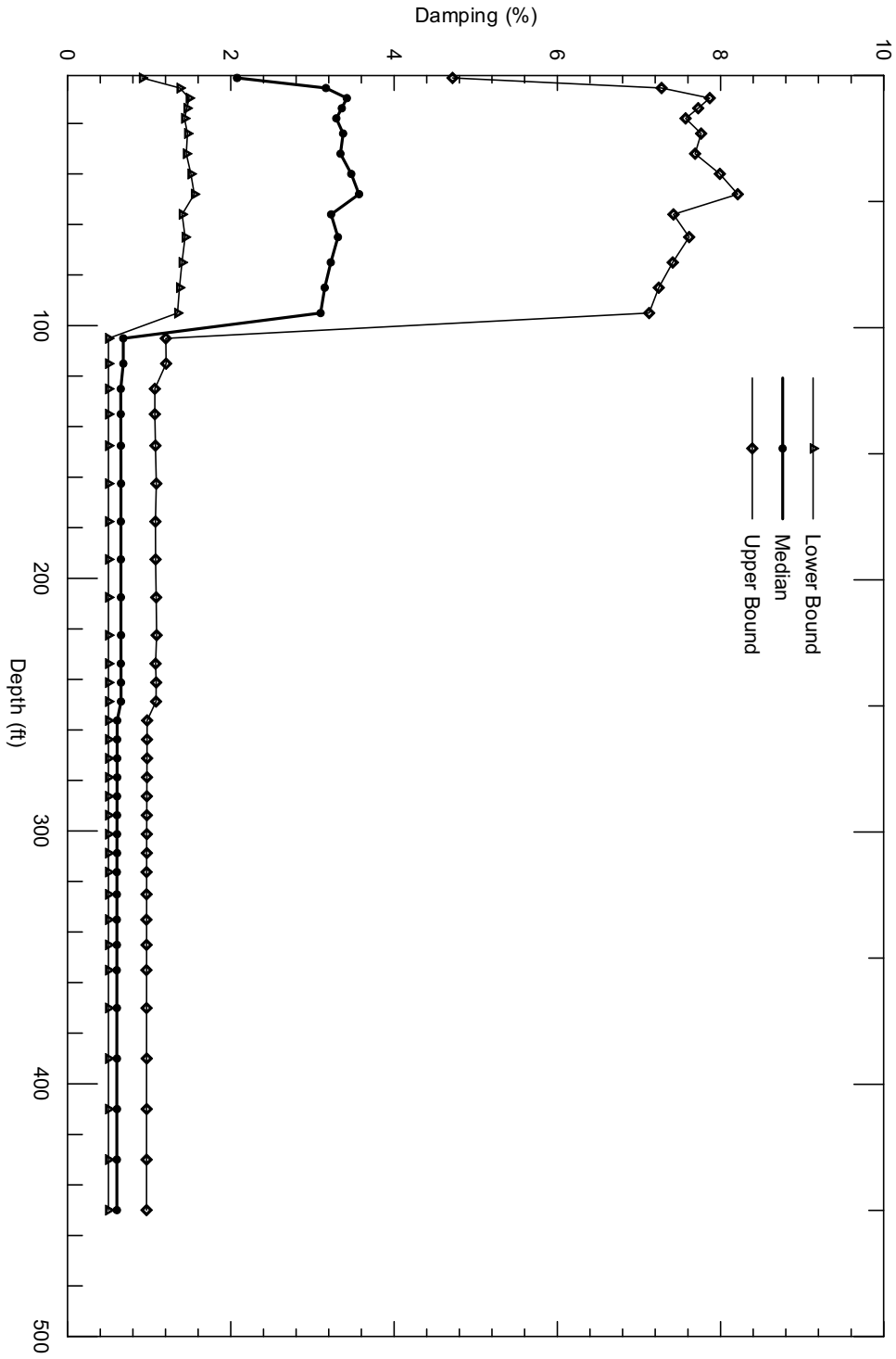

Source: Appendix D, Table D-1

Figure 6.5.2-282. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



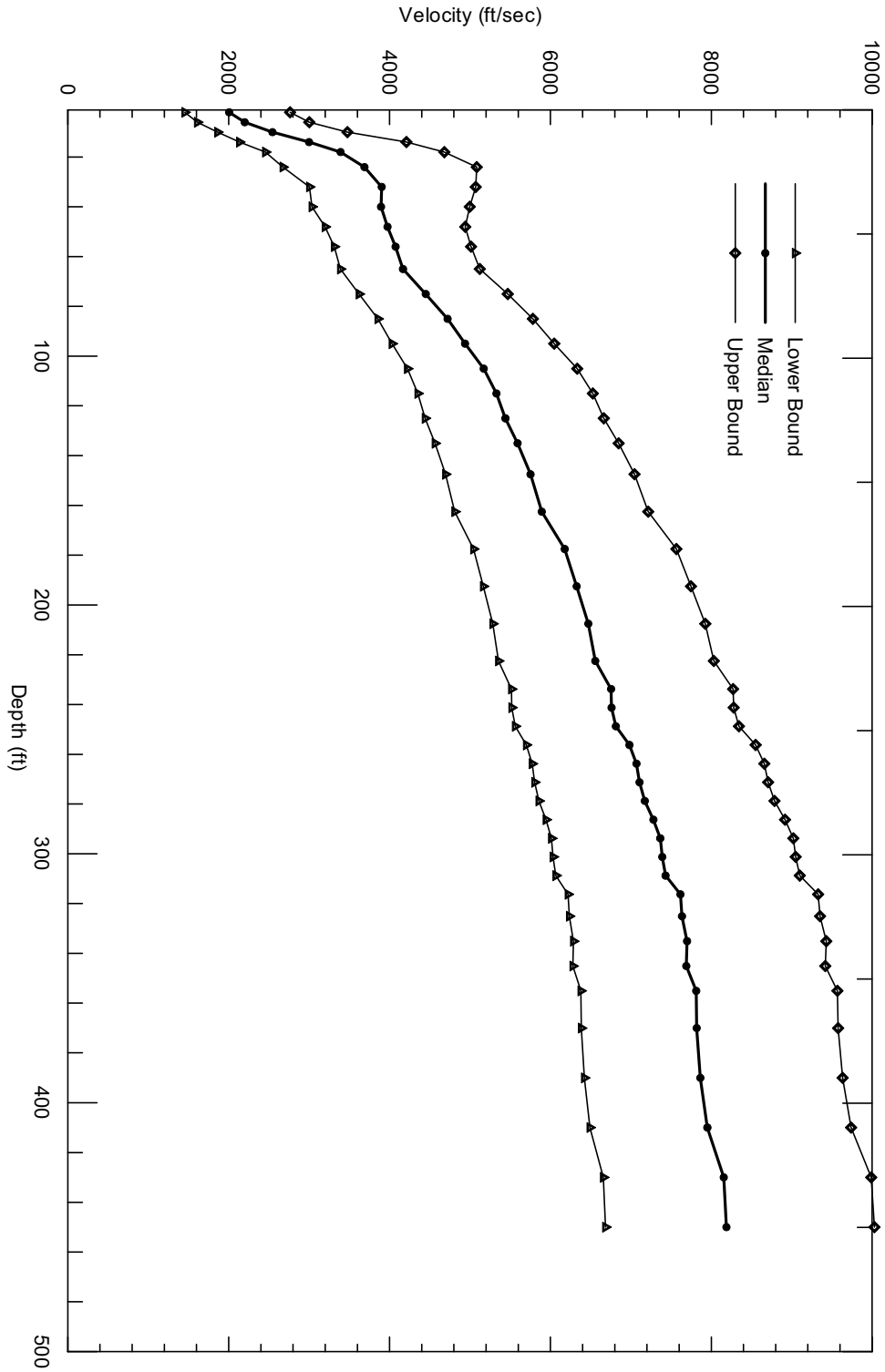

Source: Appendix D, Table D-1

Figure 6.5.2-283. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



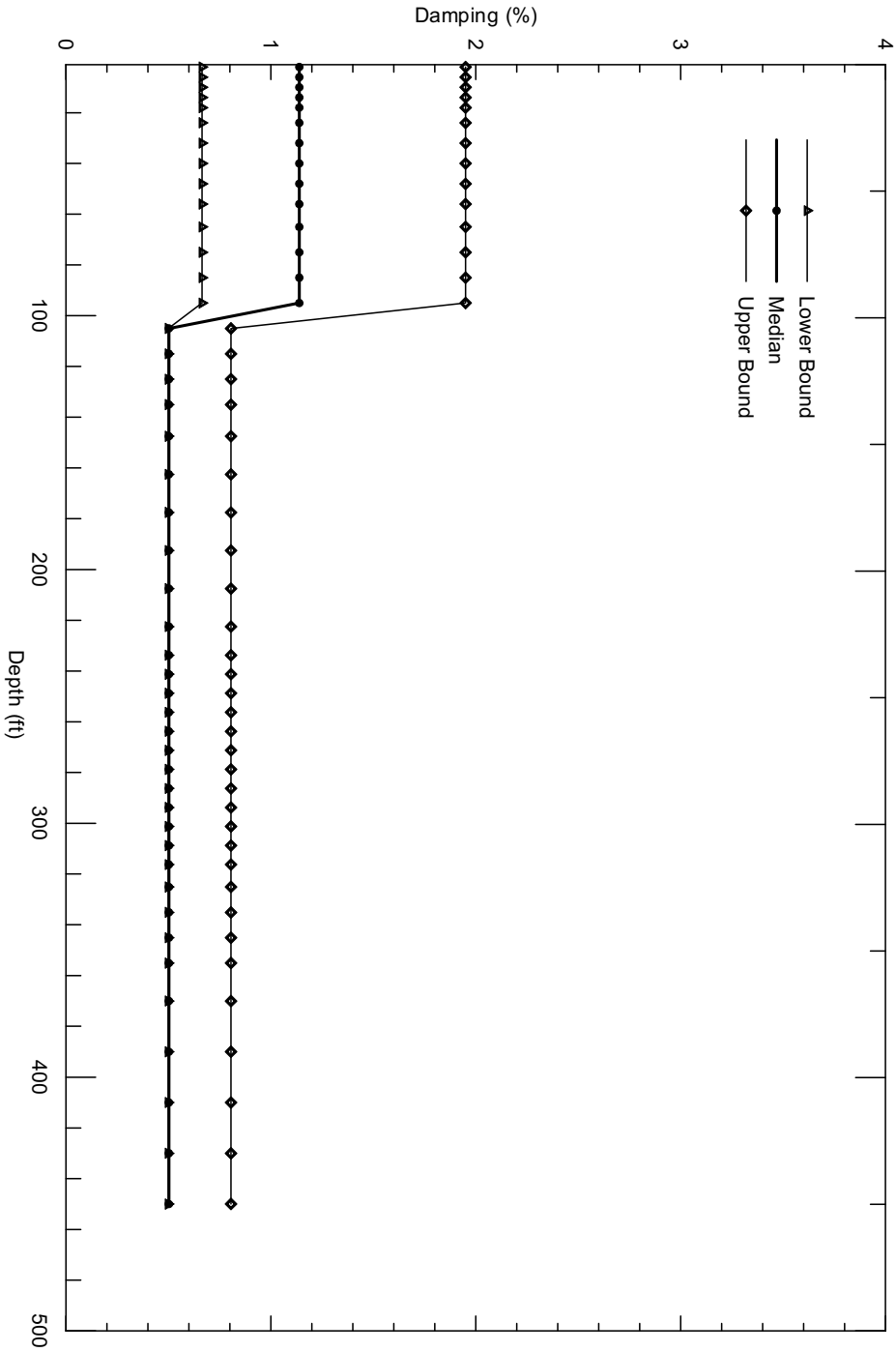

Source: Appendix D, Table D-1

Figure 6.5.2-284. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $5 \times 10^{-4}$ AFE



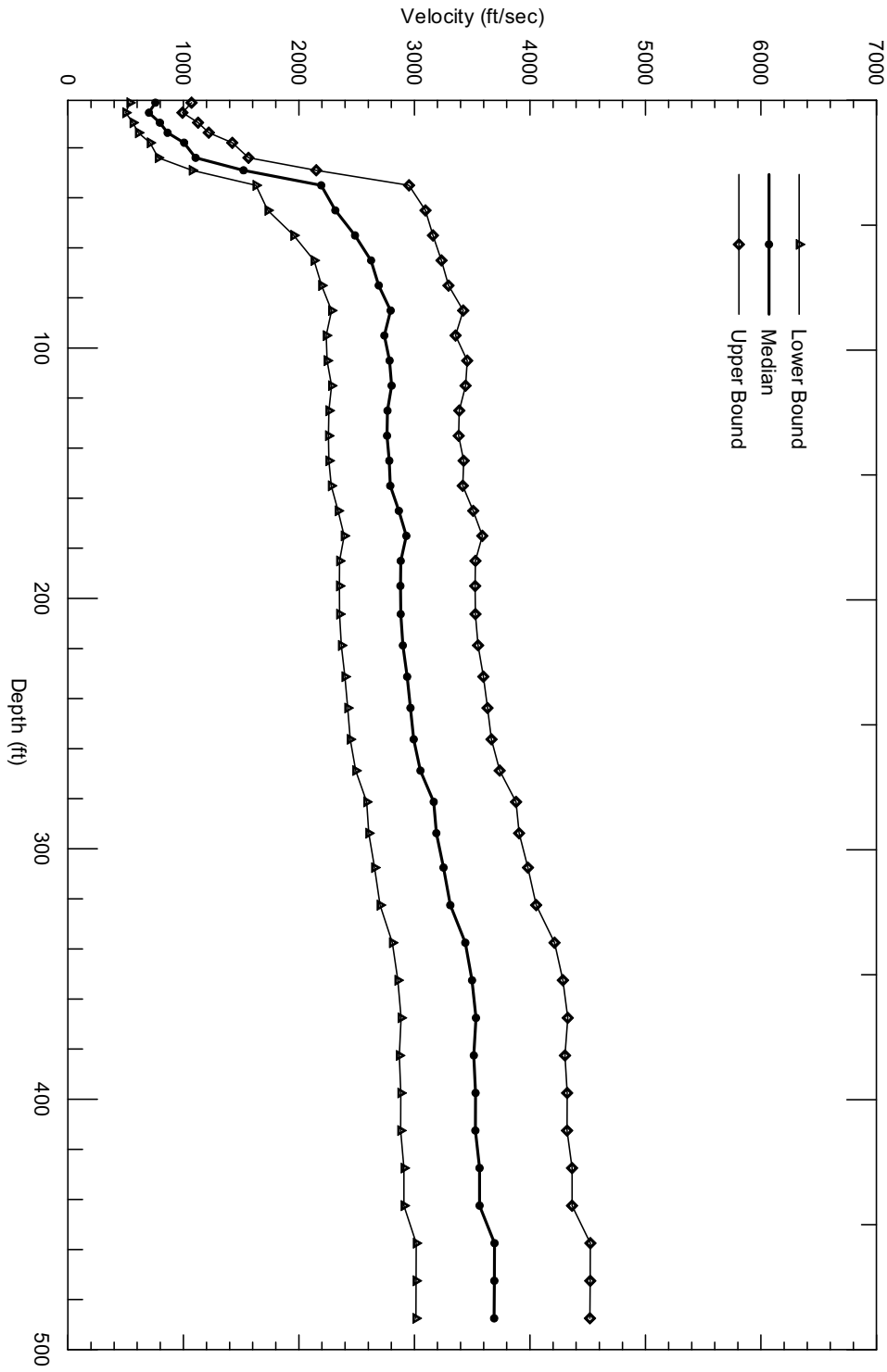

Source: Appendix D, Table D-1

Figure 6.5.2-285. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



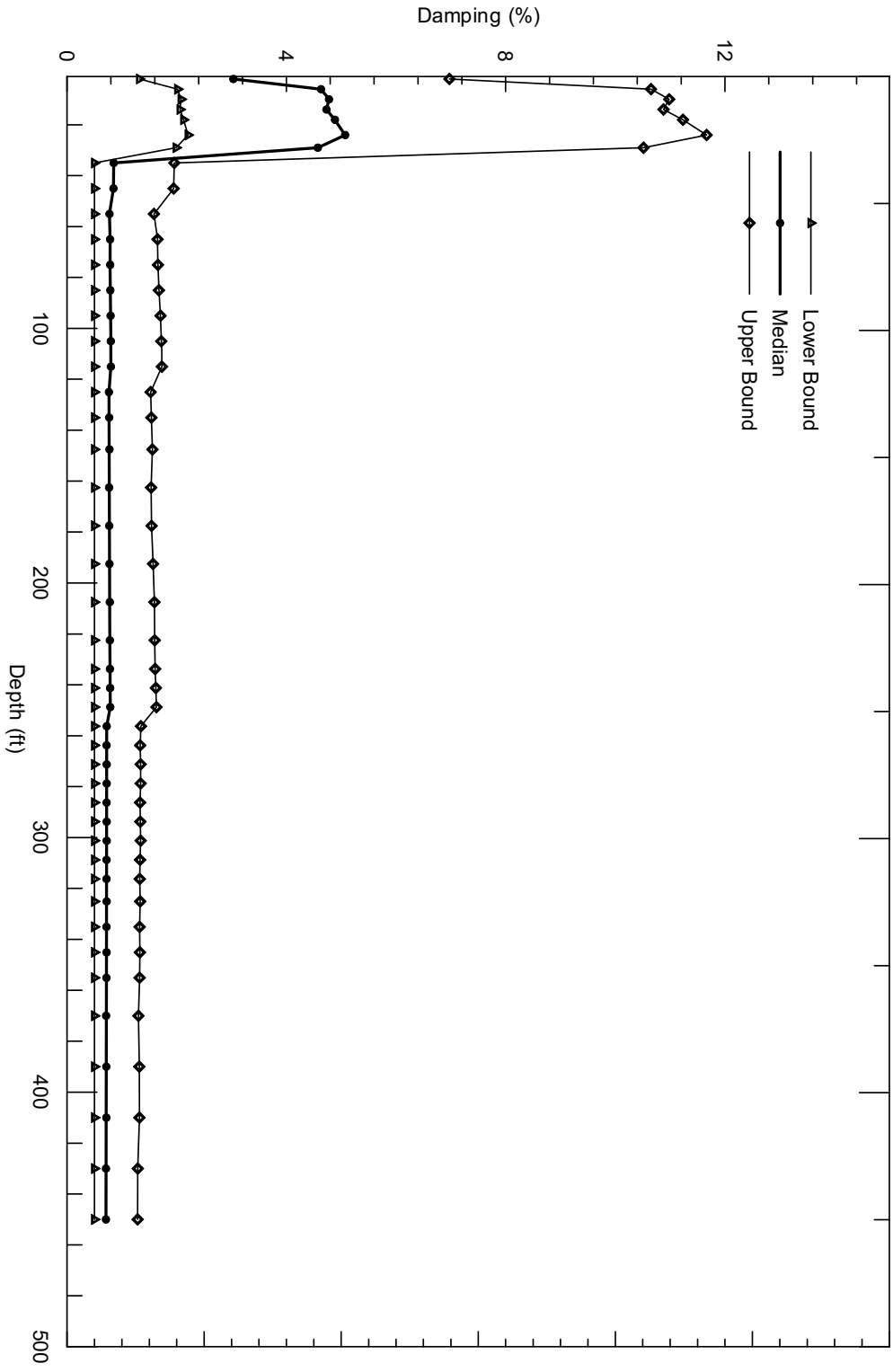

Source: Appendix D, Table D-1

Figure 6.5.2-286. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $5x10^{-4}$ AFE



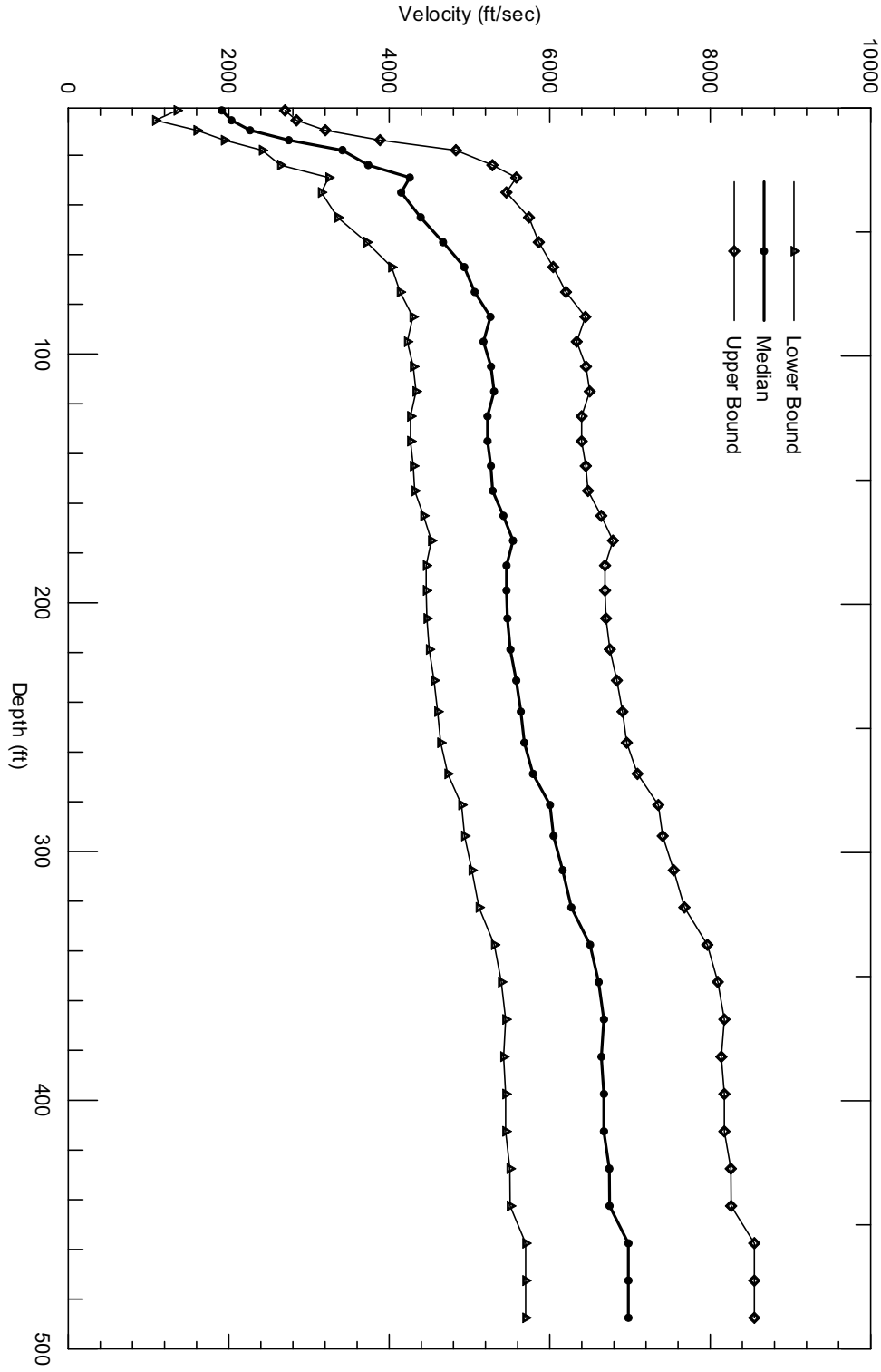

Source: Appendix D, Table D-1

Figure 6.5.2-287. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



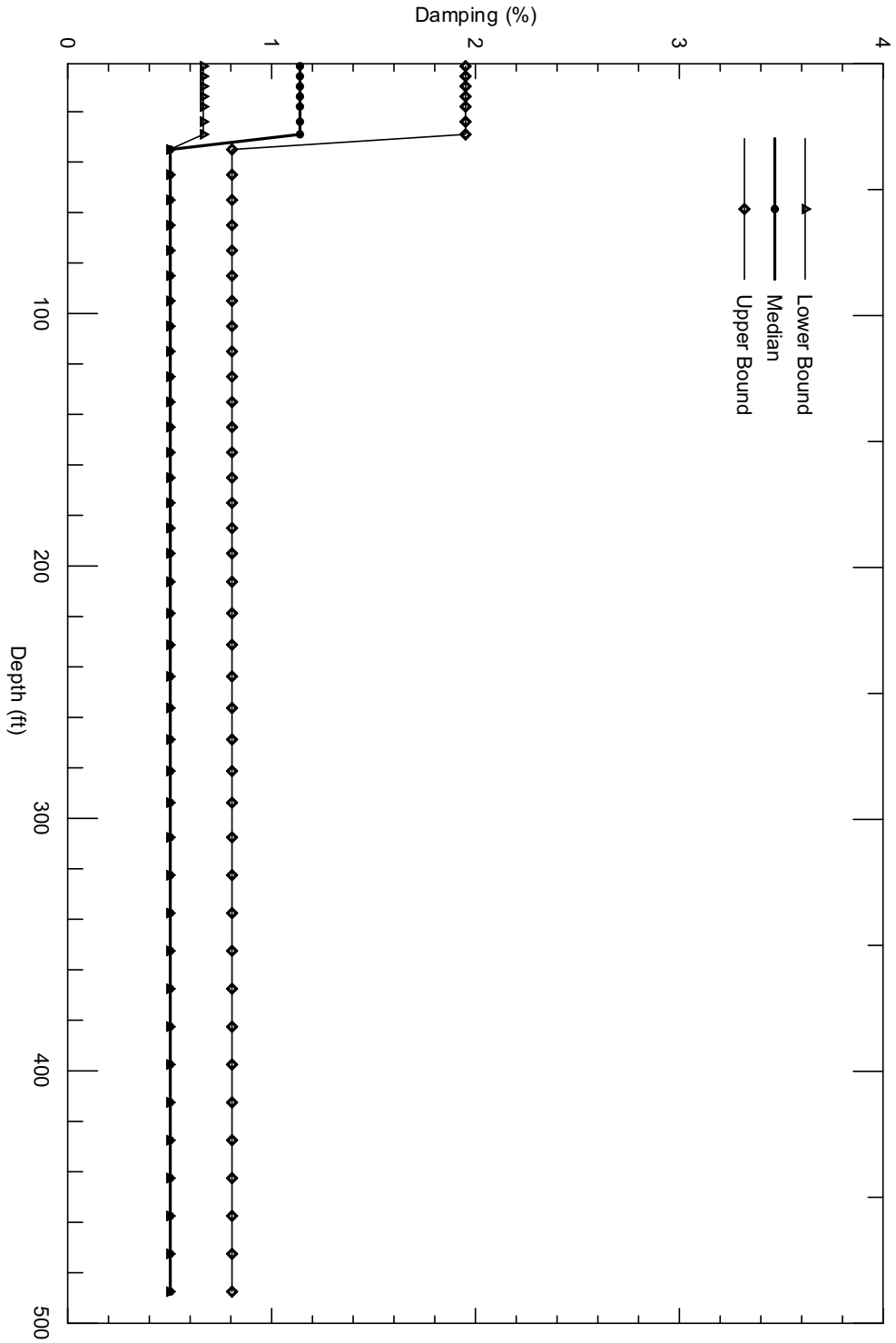

Source: Appendix D, Table D-1

Figure 6.5.2-288. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



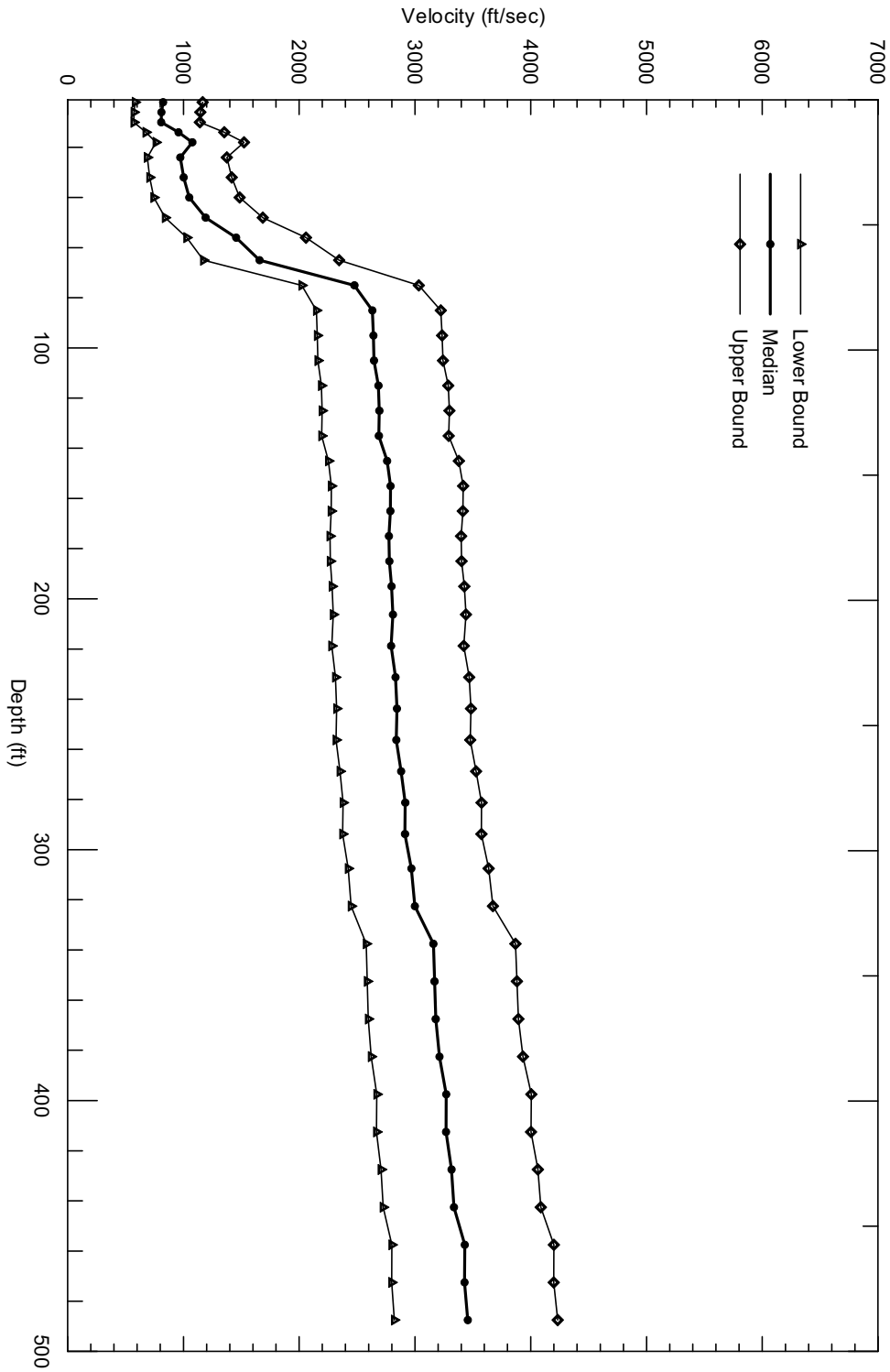

Source: Appendix D, Table D-1

Figure 6.5.2-289. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



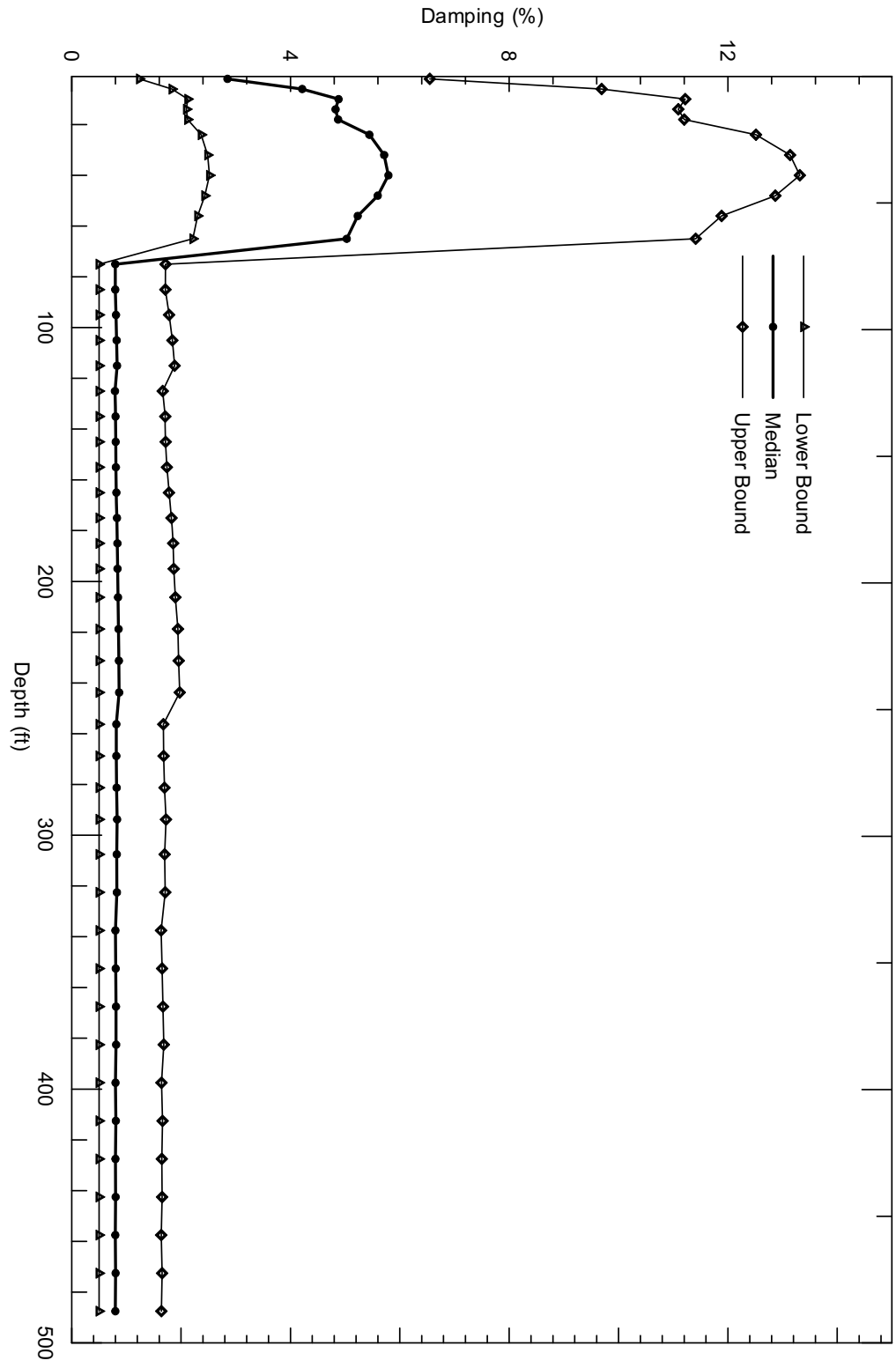

Source: Appendix D, Table D-1

Figure 6.5.2-290. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



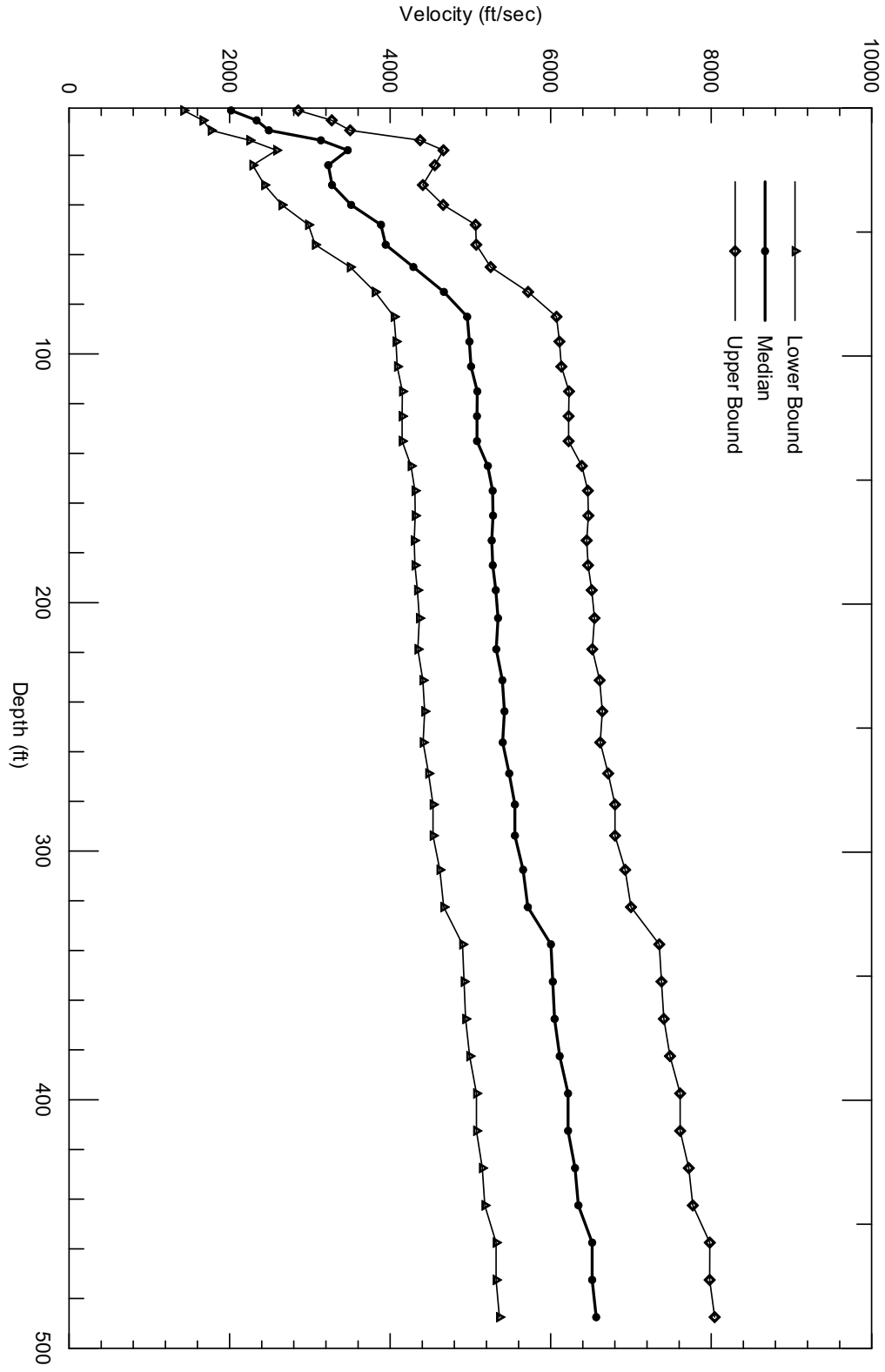

Source: Appendix D, Table D-1

Figure 6.5.2-291. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



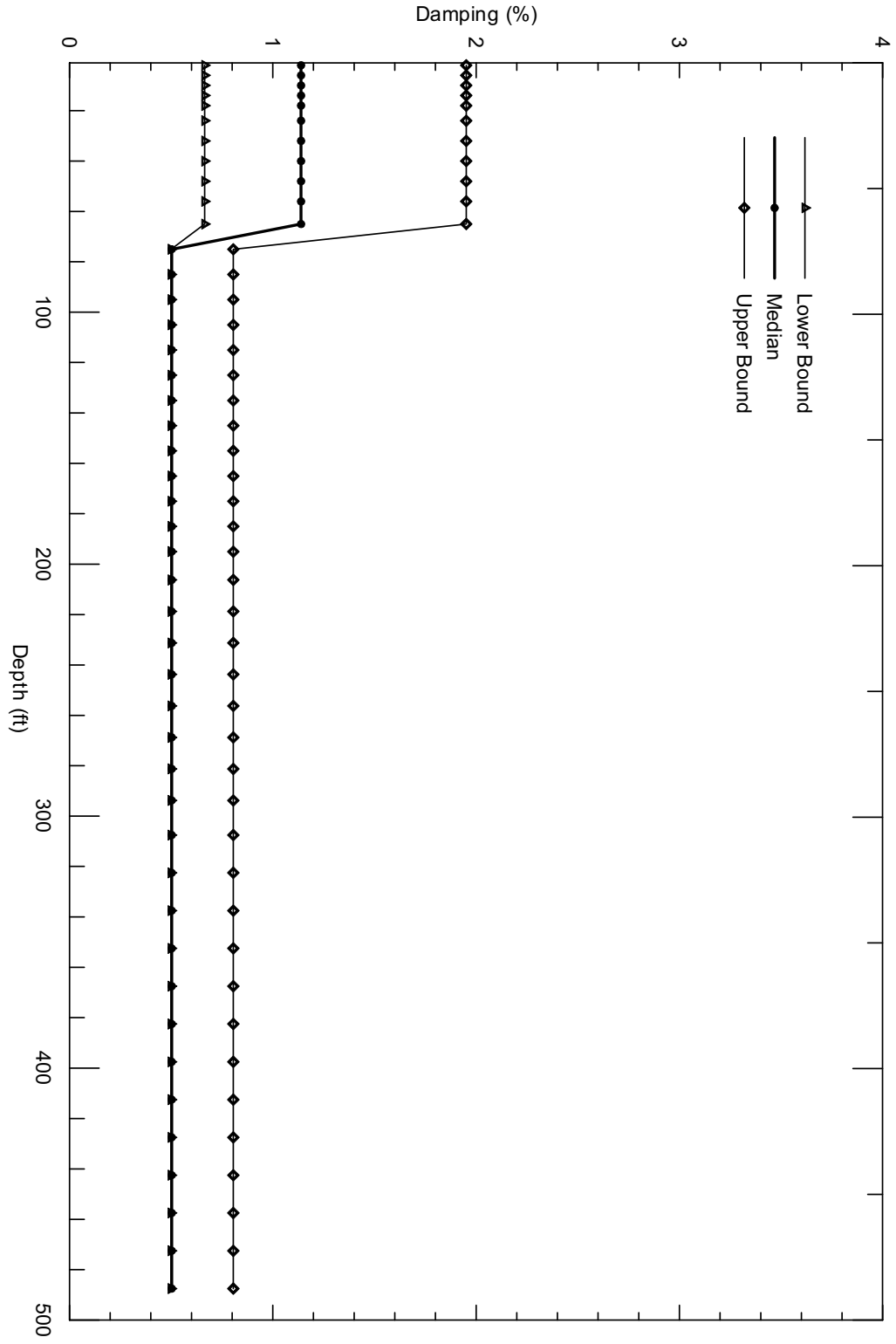

Source: Appendix D, Table D-1

Figure 6.5.2-292. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



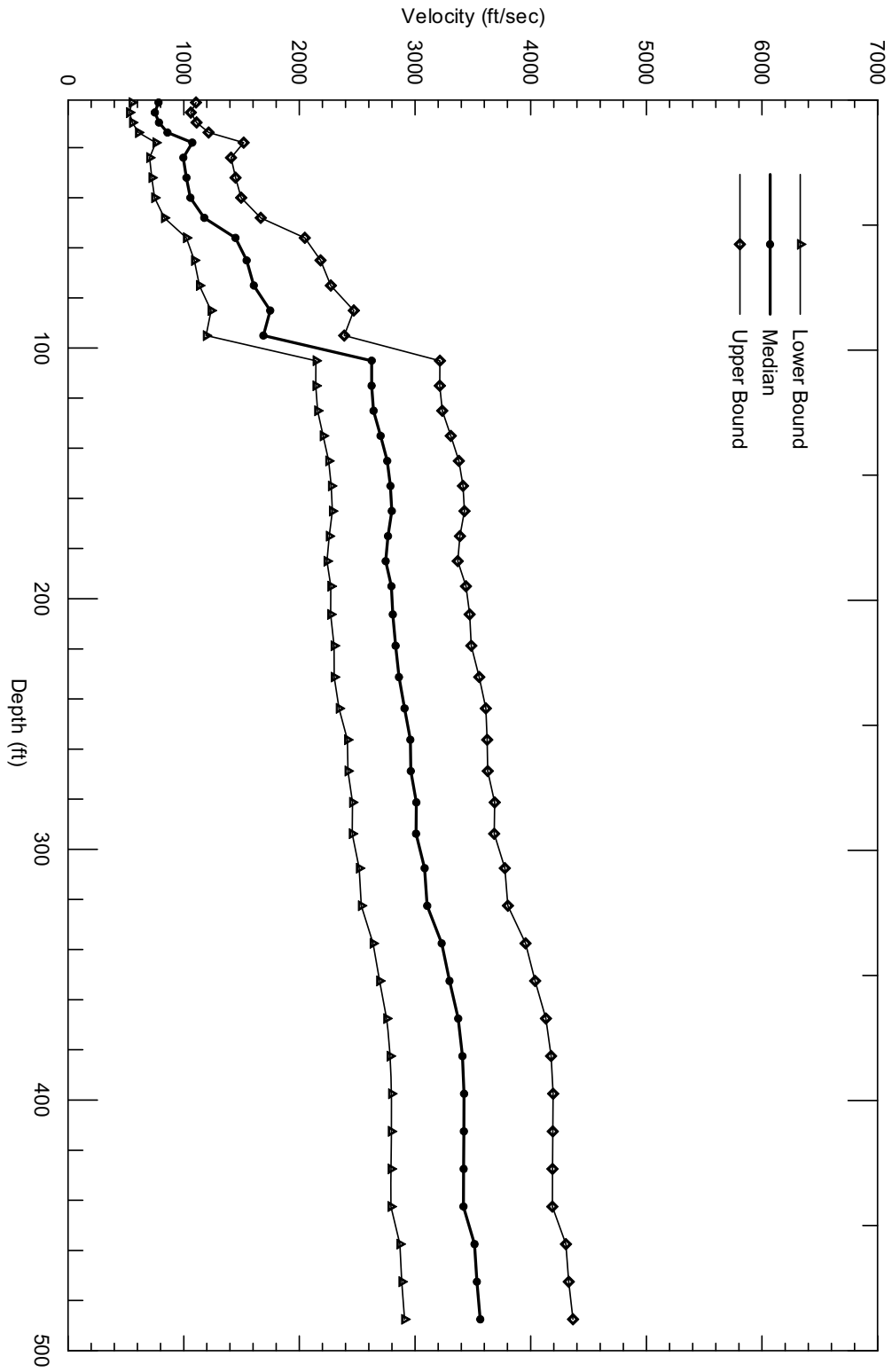

Source: Appendix D, Table D-1

Figure 6.5.2-293. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



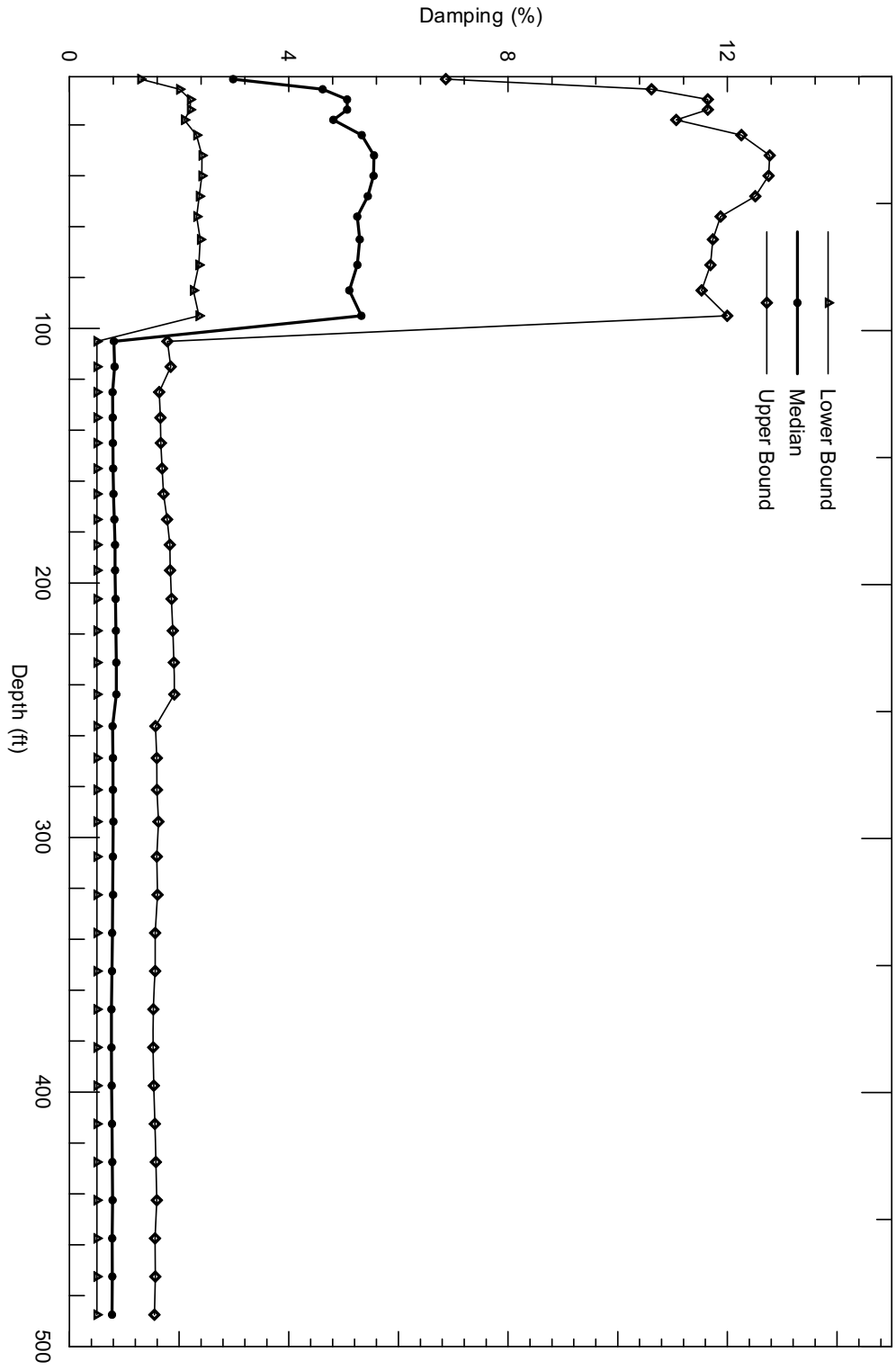

Source: Appendix D, Table D-1

Figure 6.5.2-294. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



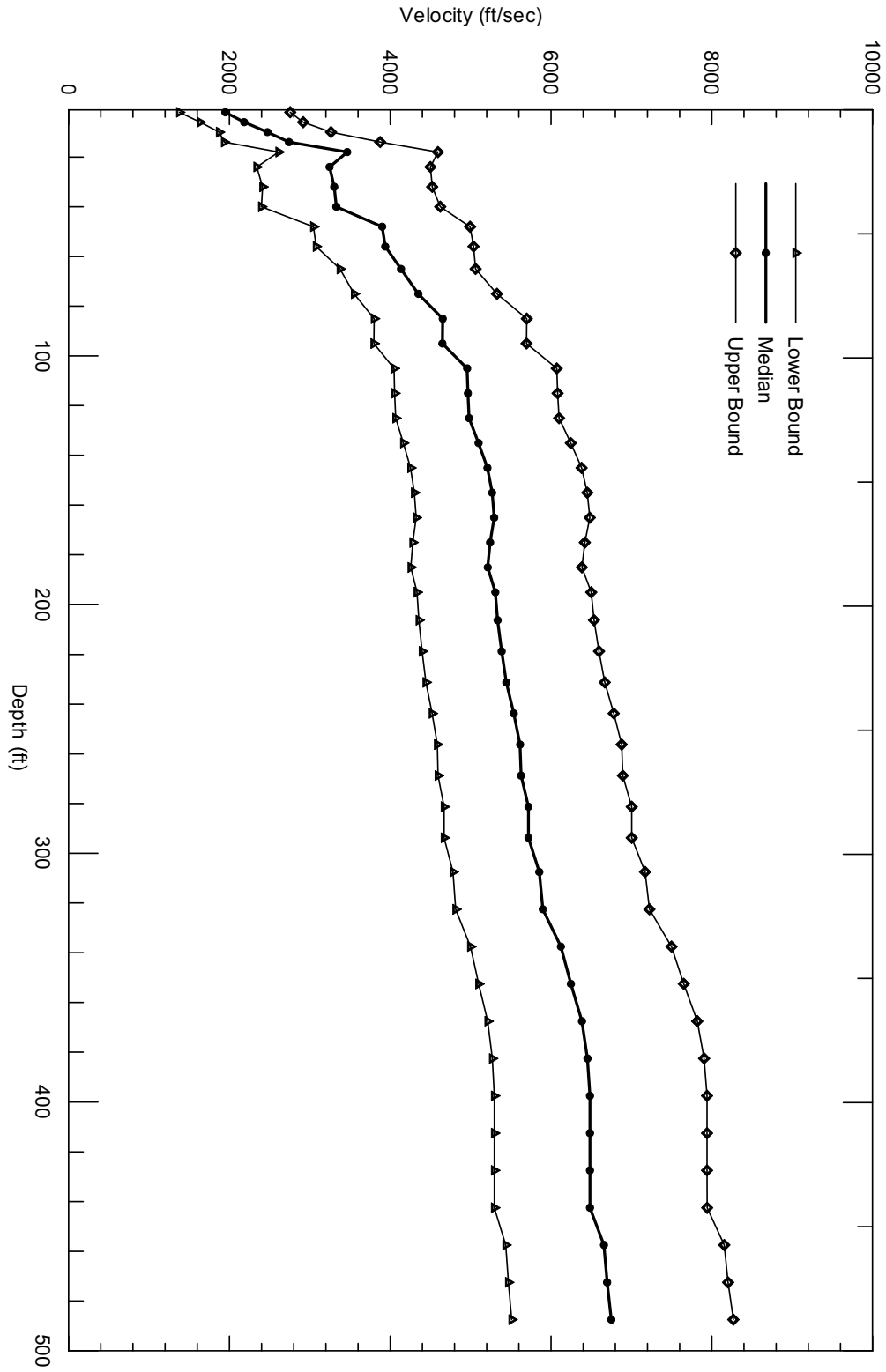

Source: Appendix D, Table D-1

Figure 6.5.2-295. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



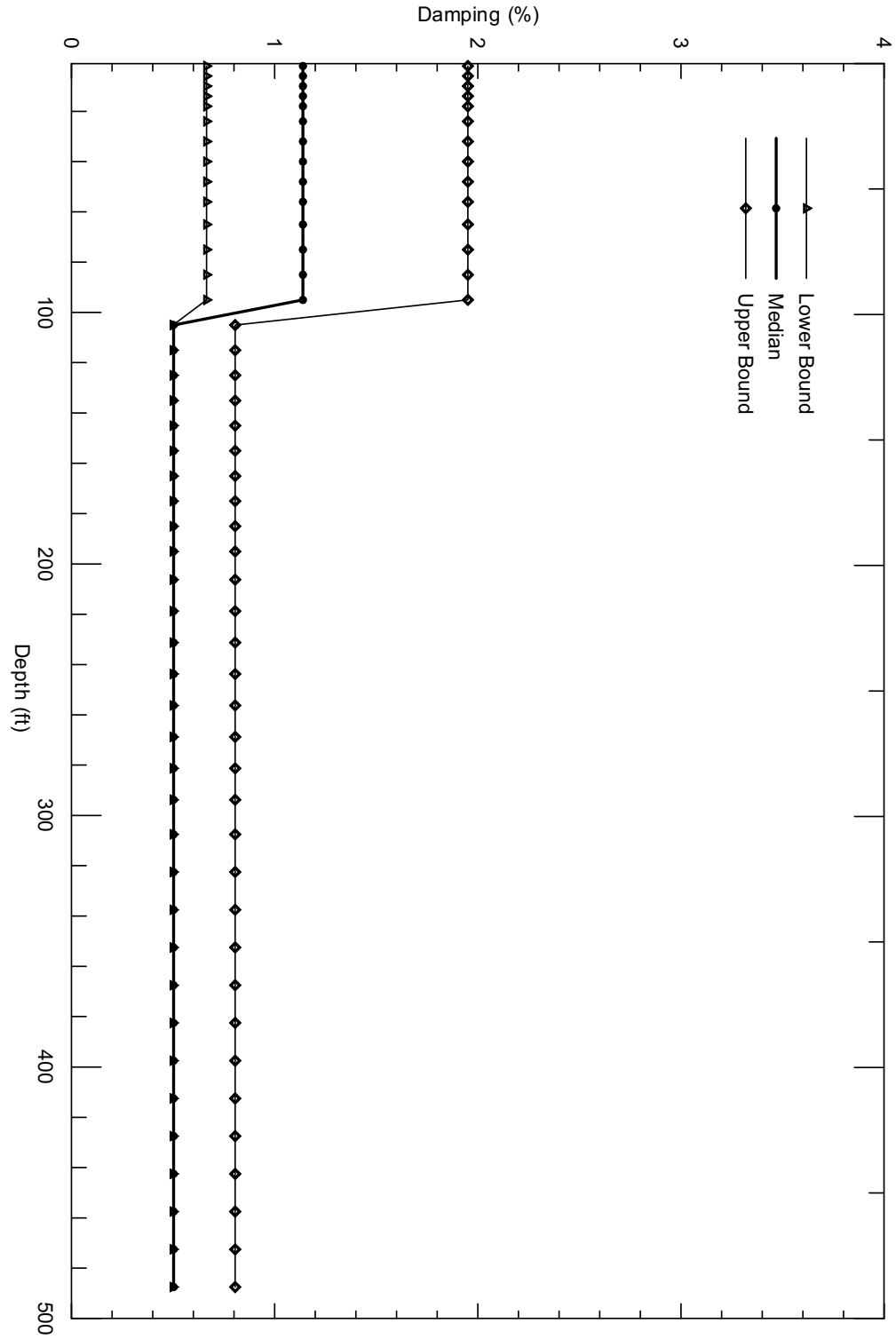

Source: Appendix D, Table D-1

Figure 6.5.2-296. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



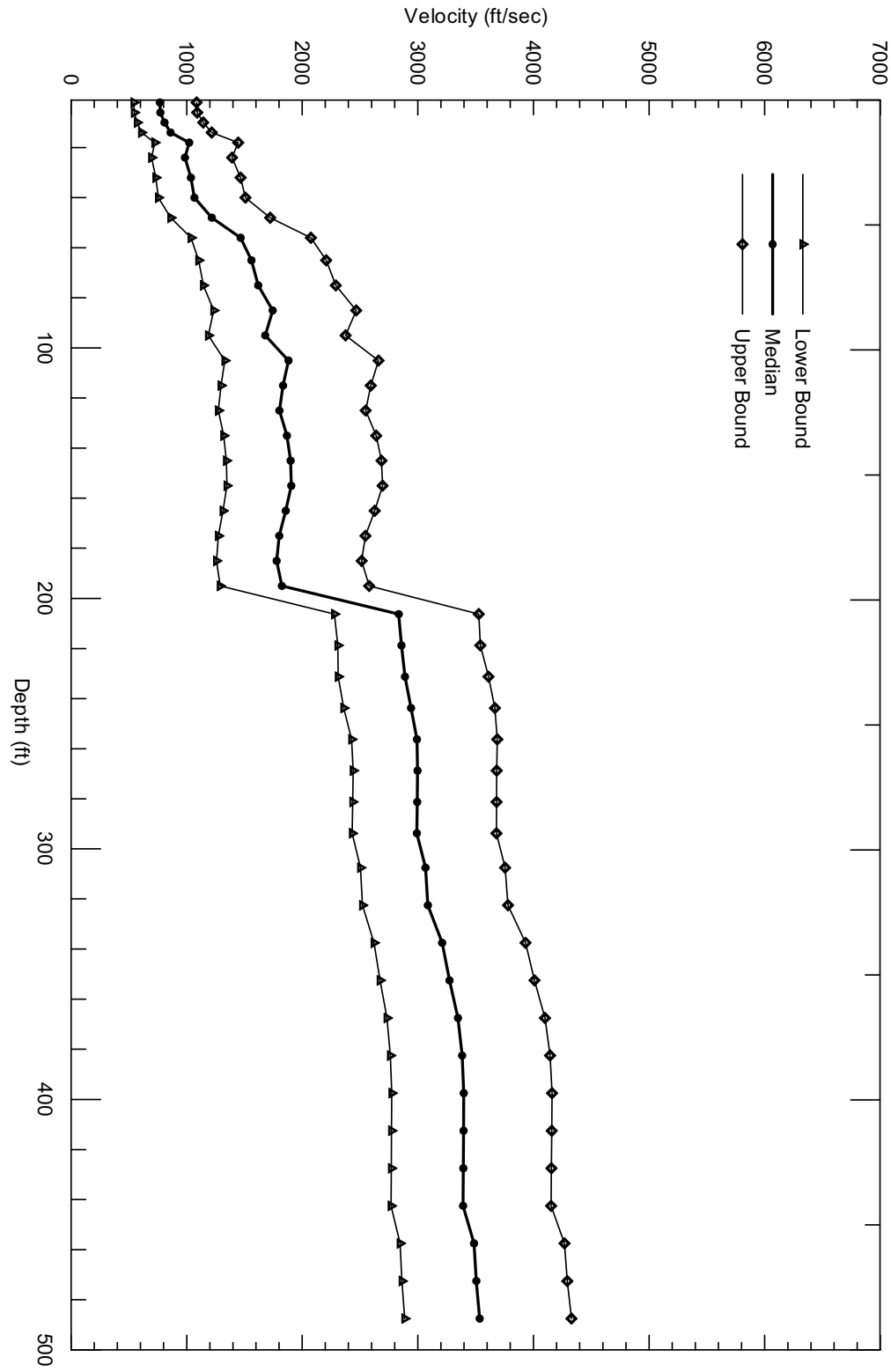

Source: Appendix D, Table D-1

Figure 6.5.2-297. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



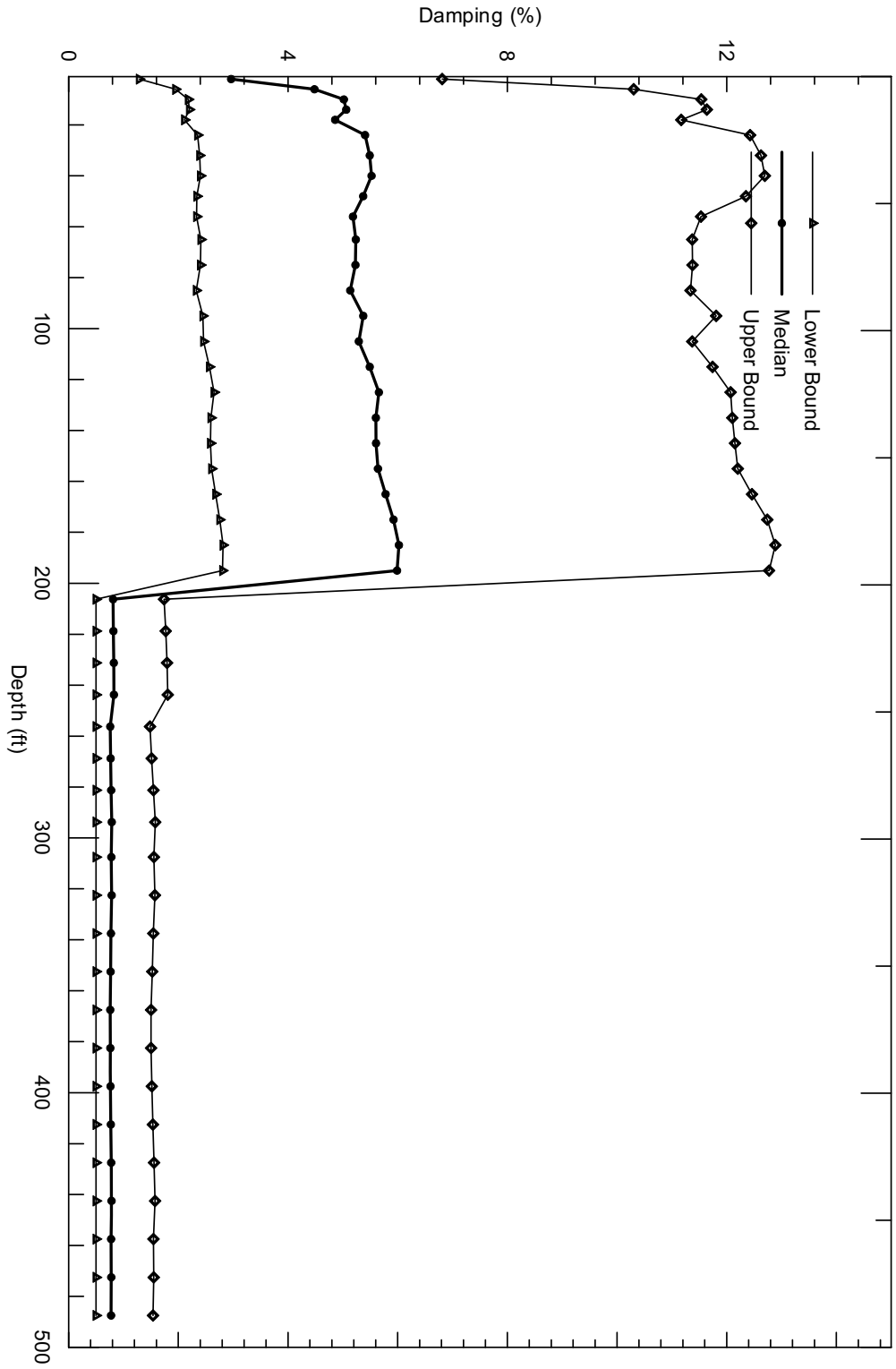

Source: Appendix D, Table D-1

Figure 6.5.2-298. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



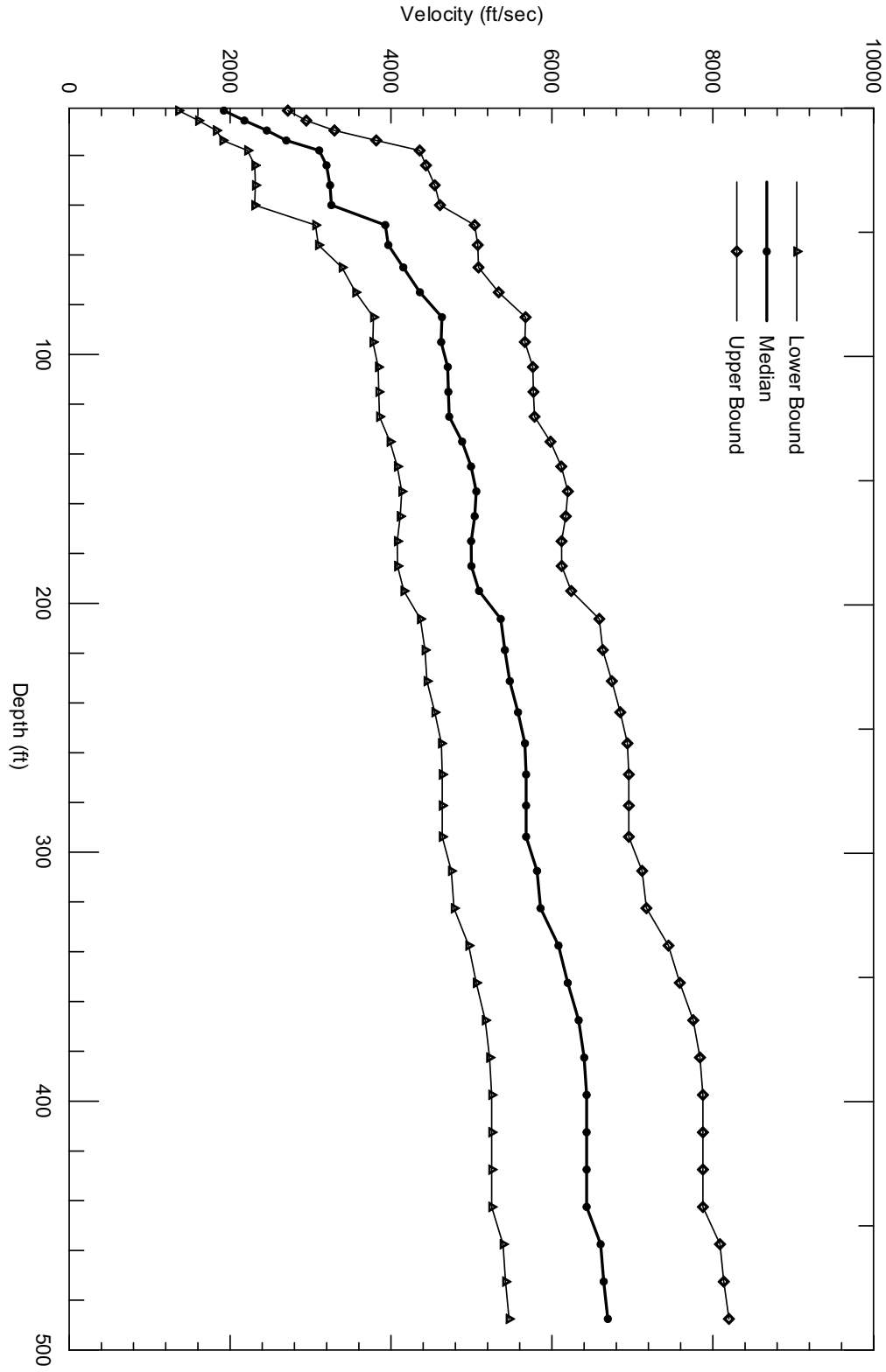

Source: Appendix D, Table D-1

Figure 6.5.2-299. SFA Strain Compatible Soil Properties S-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



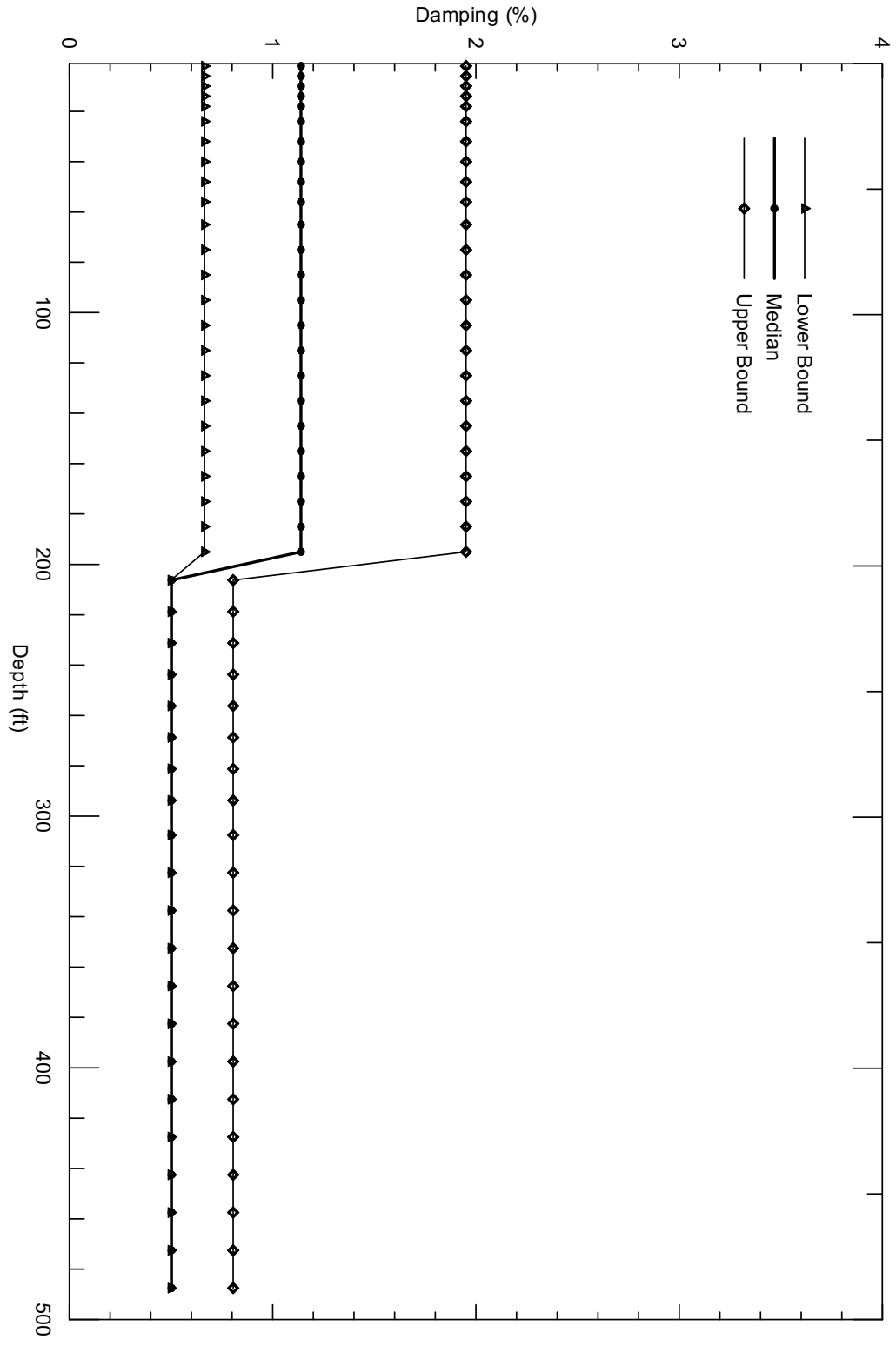

Source: Appendix D, Table D-1

Figure 6.5.2-300. SFA Strain Compatible Soil Properties S-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



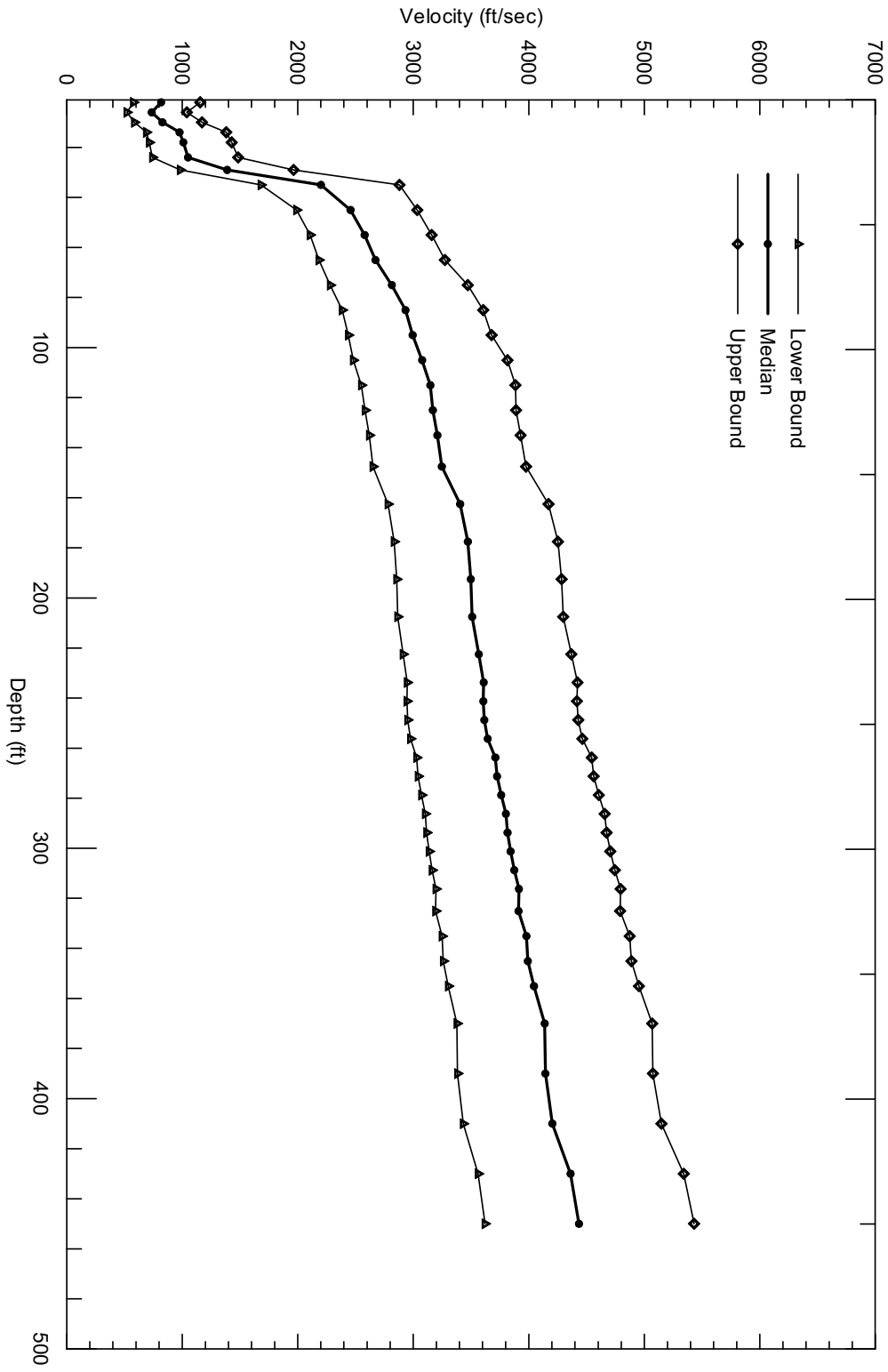

Source: Appendix D, Table D-1

Figure 6.5.2-301. SFA Strain Compatible Soil Properties P-wave Velocity, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



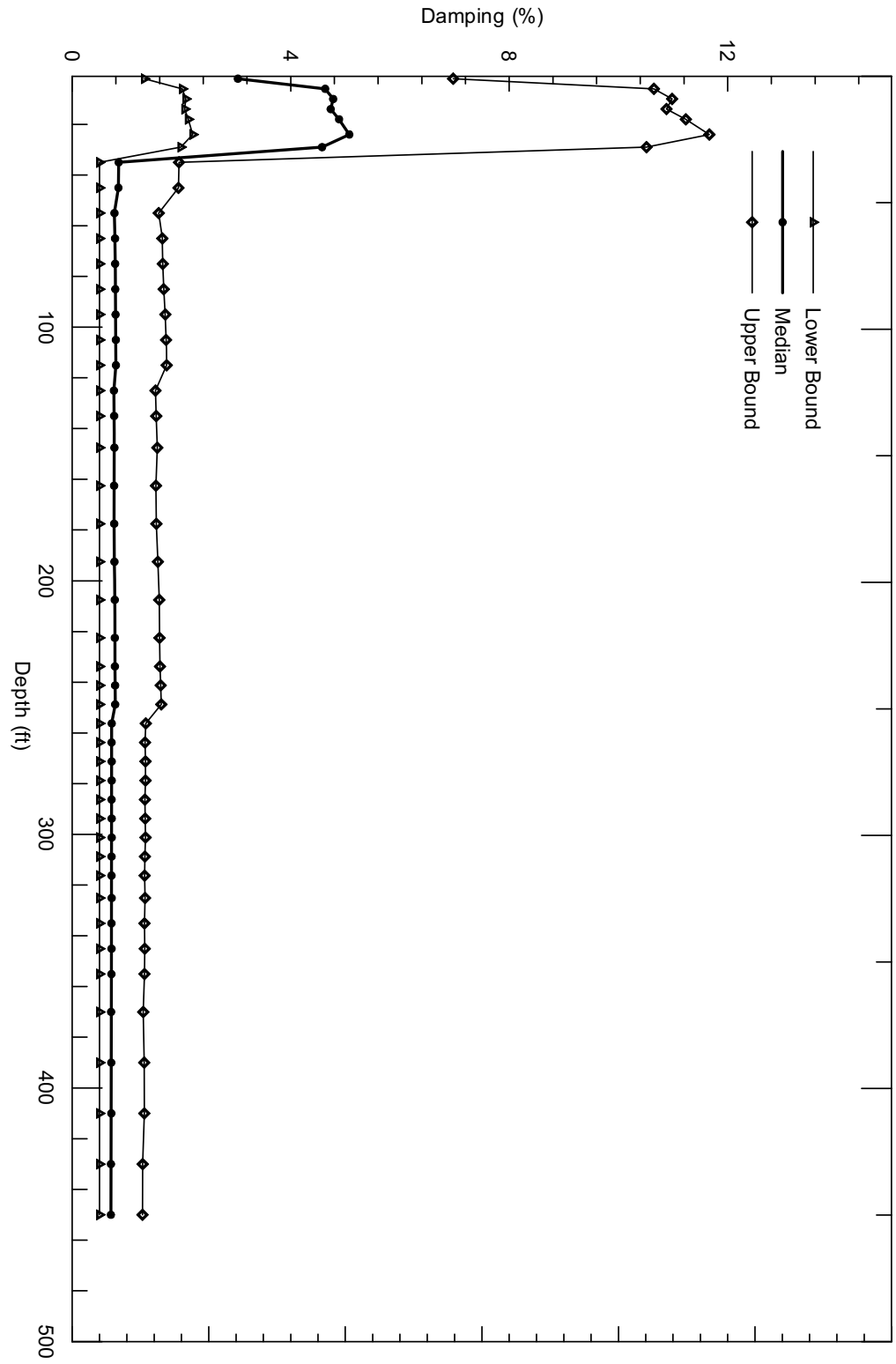

Source: Appendix D, Table D-1

Figure 6.5.2-302. SFA Strain Compatible Soil Properties P-wave Damping, 200 ft of Alluvium Over Tuff, Northeast of the Fault $10^{-4}$ AFE



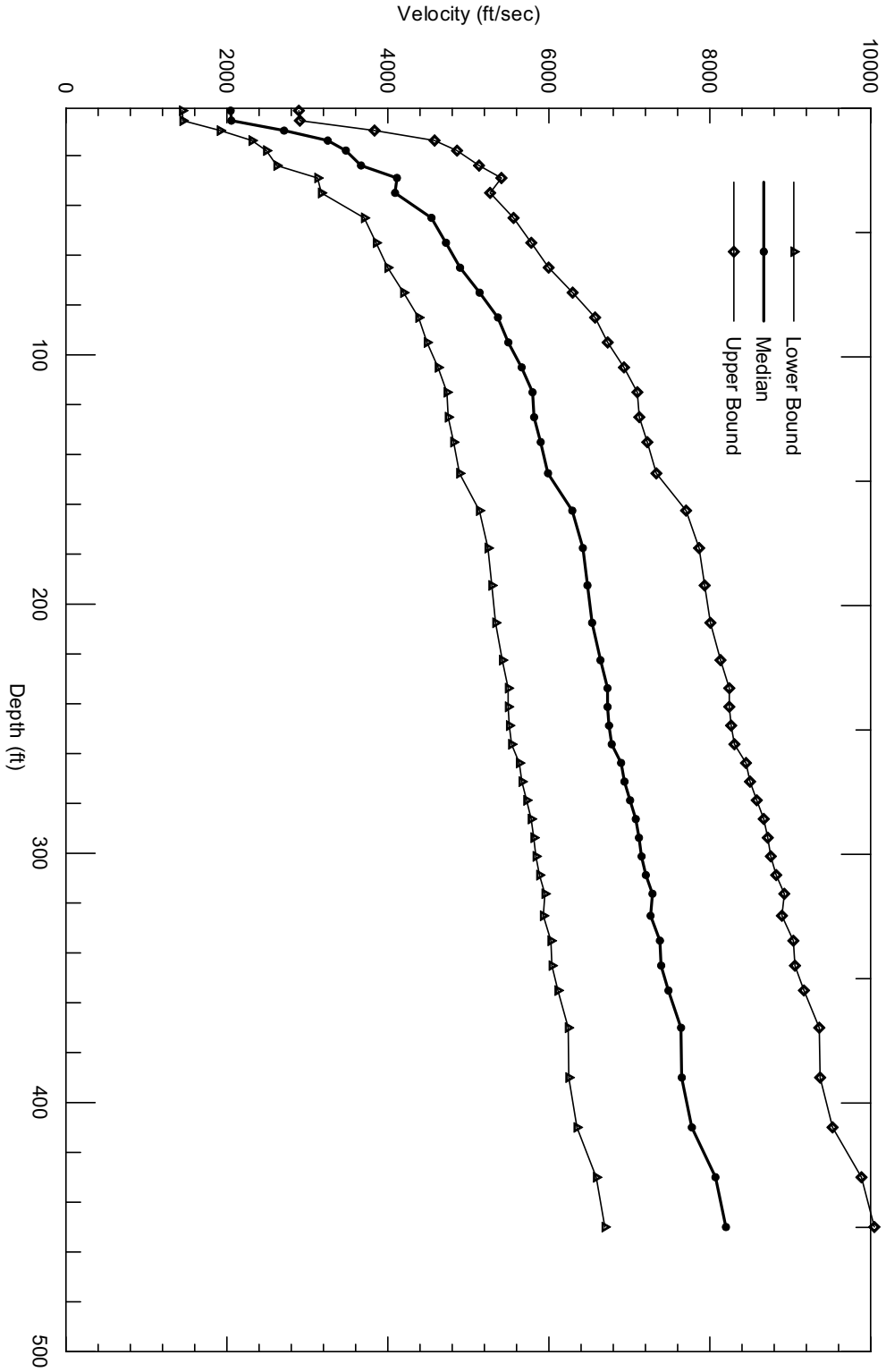

Source: Appendix D, Table D-1

Figure 6.5.2-303. SFA Strain Compatible Soil Properties S-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



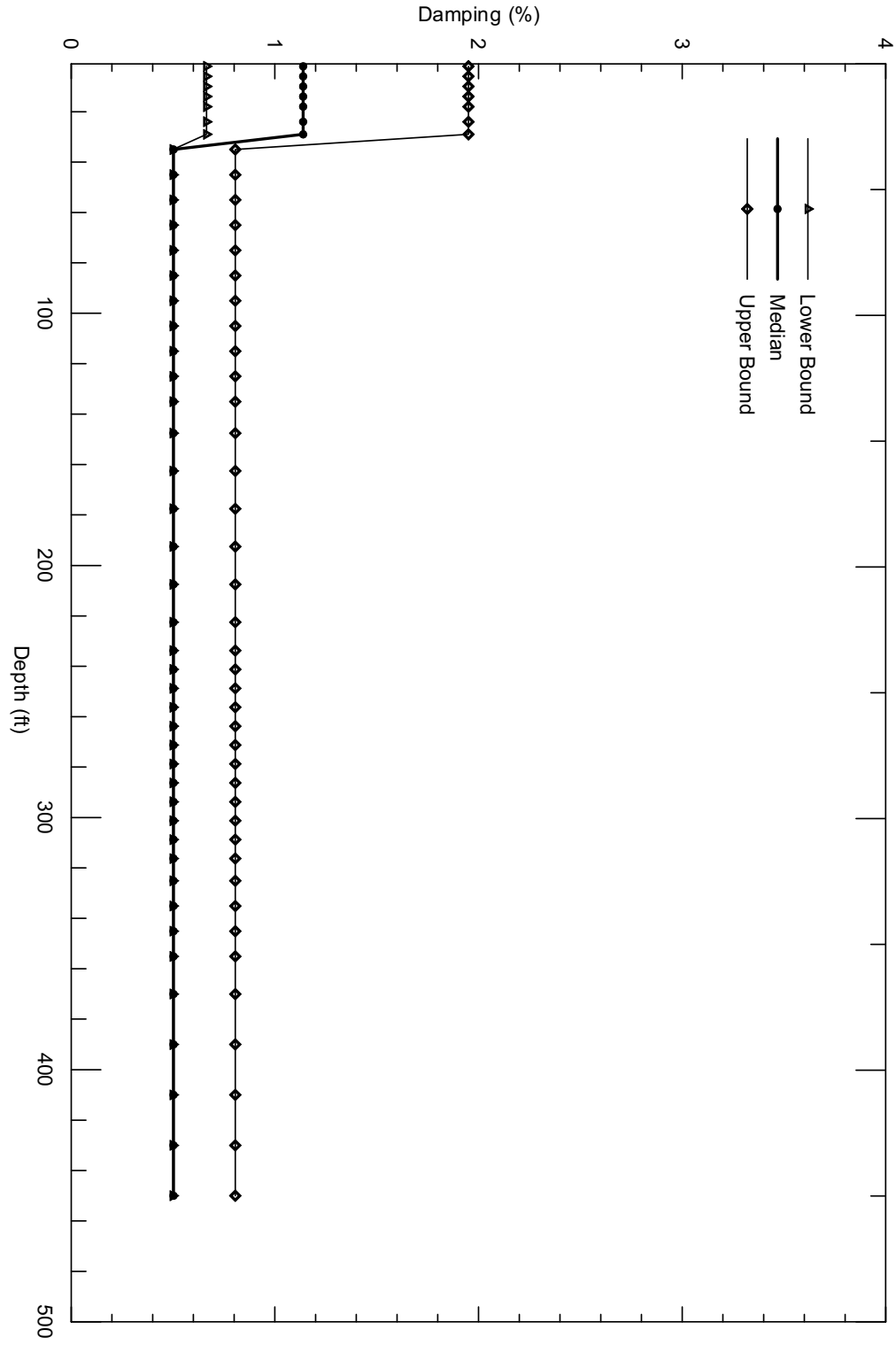

Source: Appendix D, Table D-1

Figure 6.5.2-304. SFA Strain Compatible Soil Properties S-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



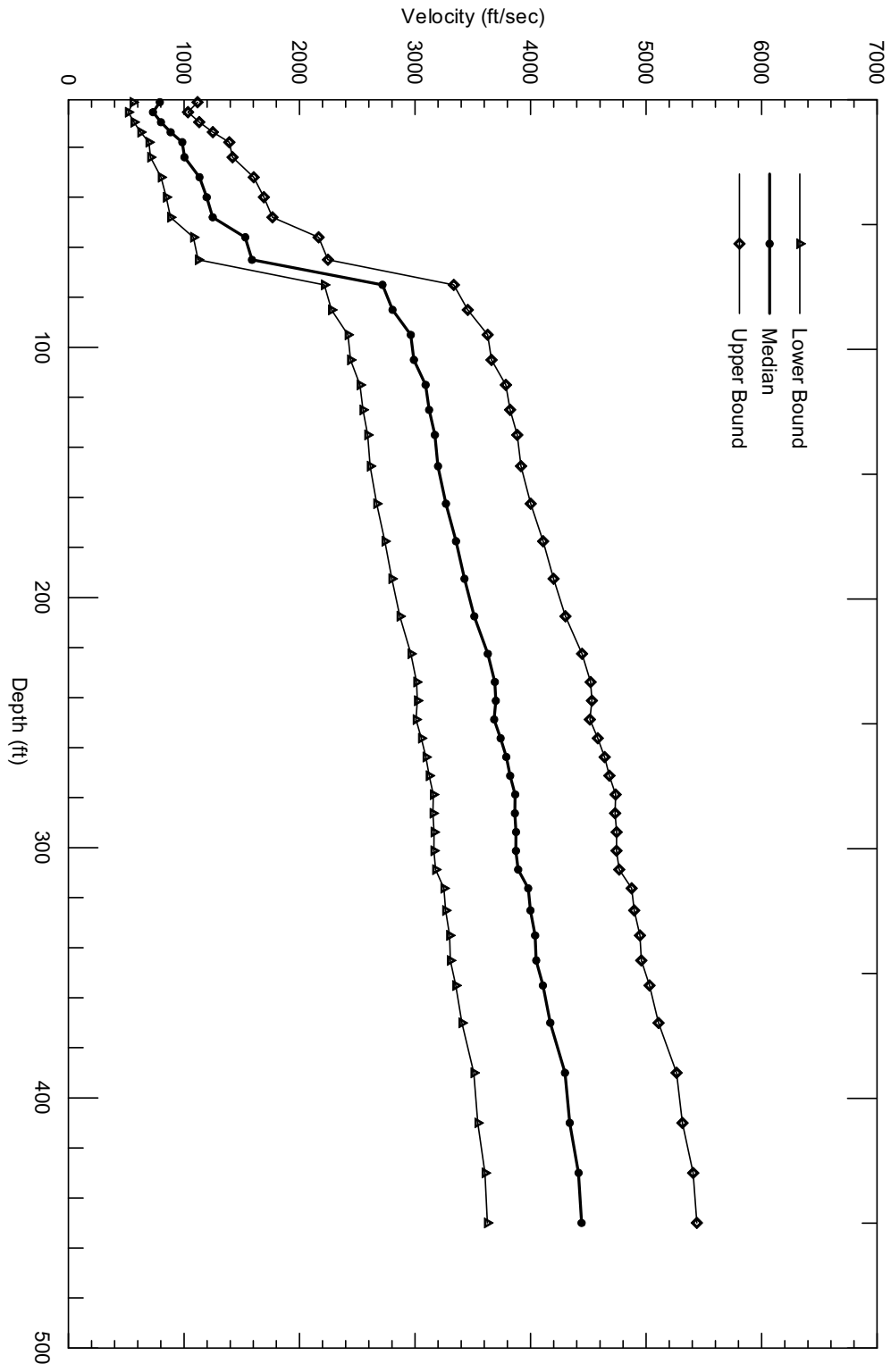

Source: Appendix D, Table D-1

Figure 6.5.2-305. SFA Strain Compatible Soil Properties P-wave Velocity, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



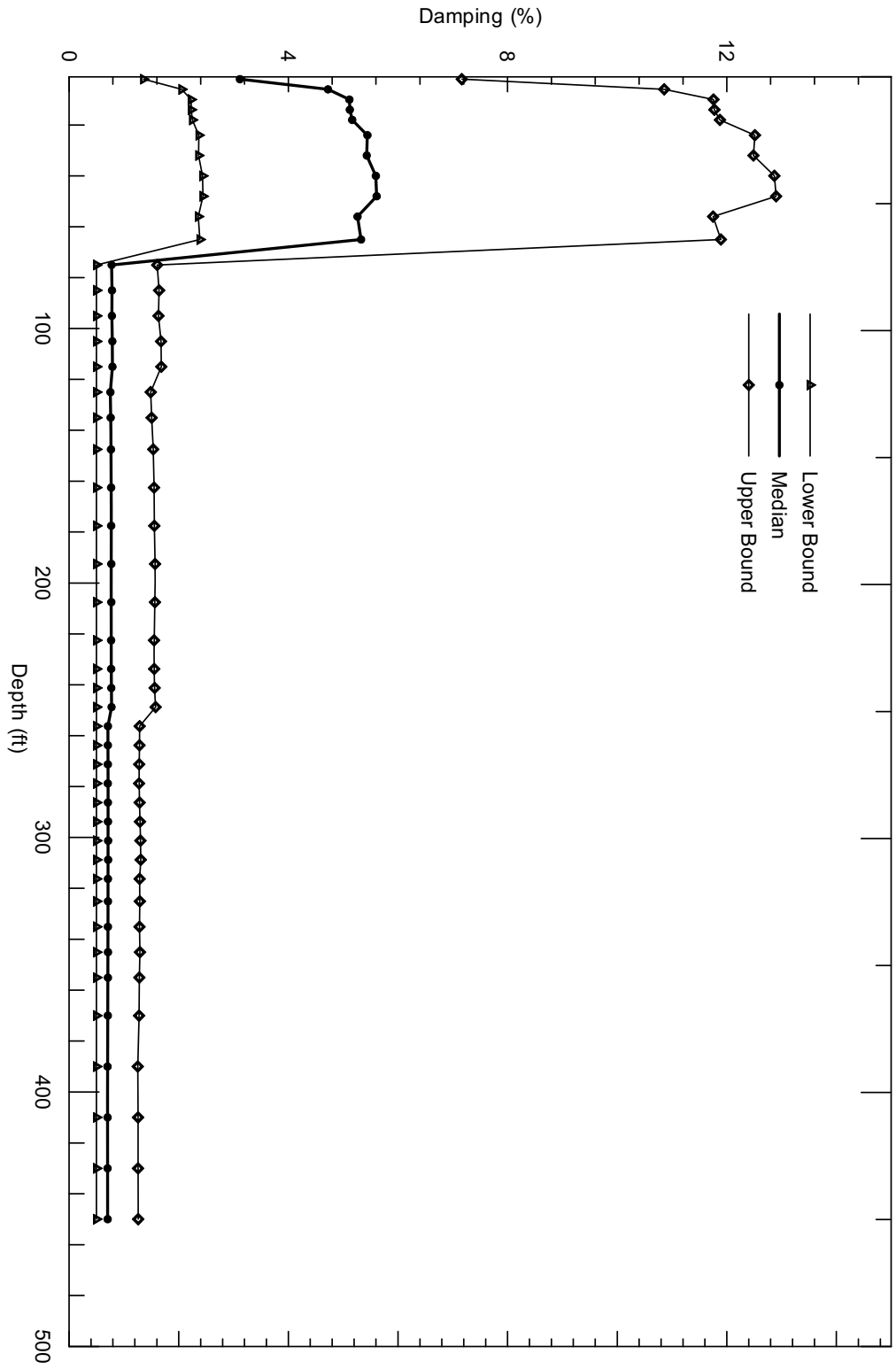

Source: Appendix D, Table D-1

Figure 6.5.2-306. SFA Strain Compatible Soil Properties P-wave Damping, 30 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



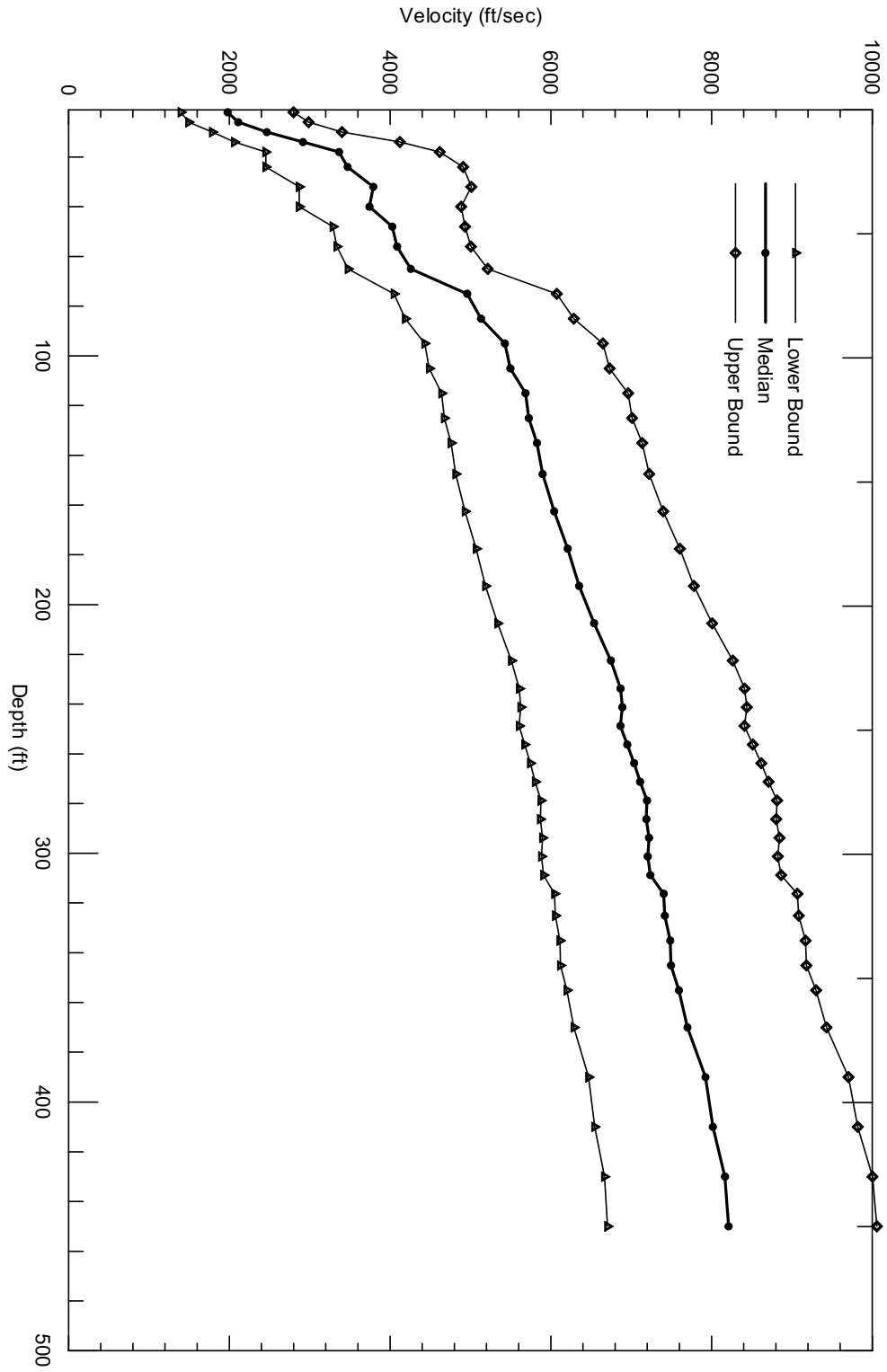

Source: Appendix D, Table D-1

Figure 6.5.2-307. SFA Strain Compatible Soil Properties S-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



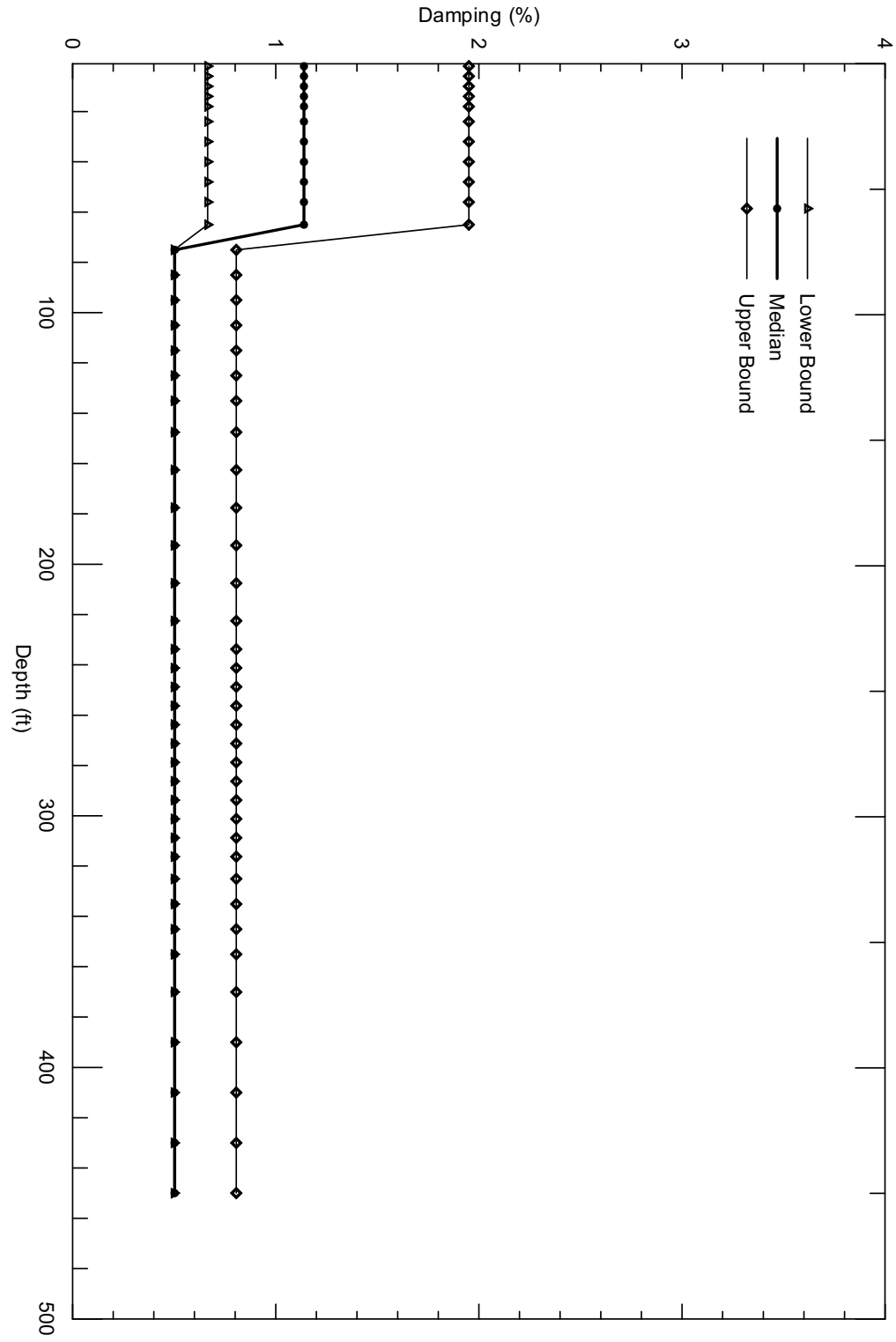

Source: Appendix D, Table D-1

Figure 6.5.2-308. SFA Strain Compatible Soil Properties S-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



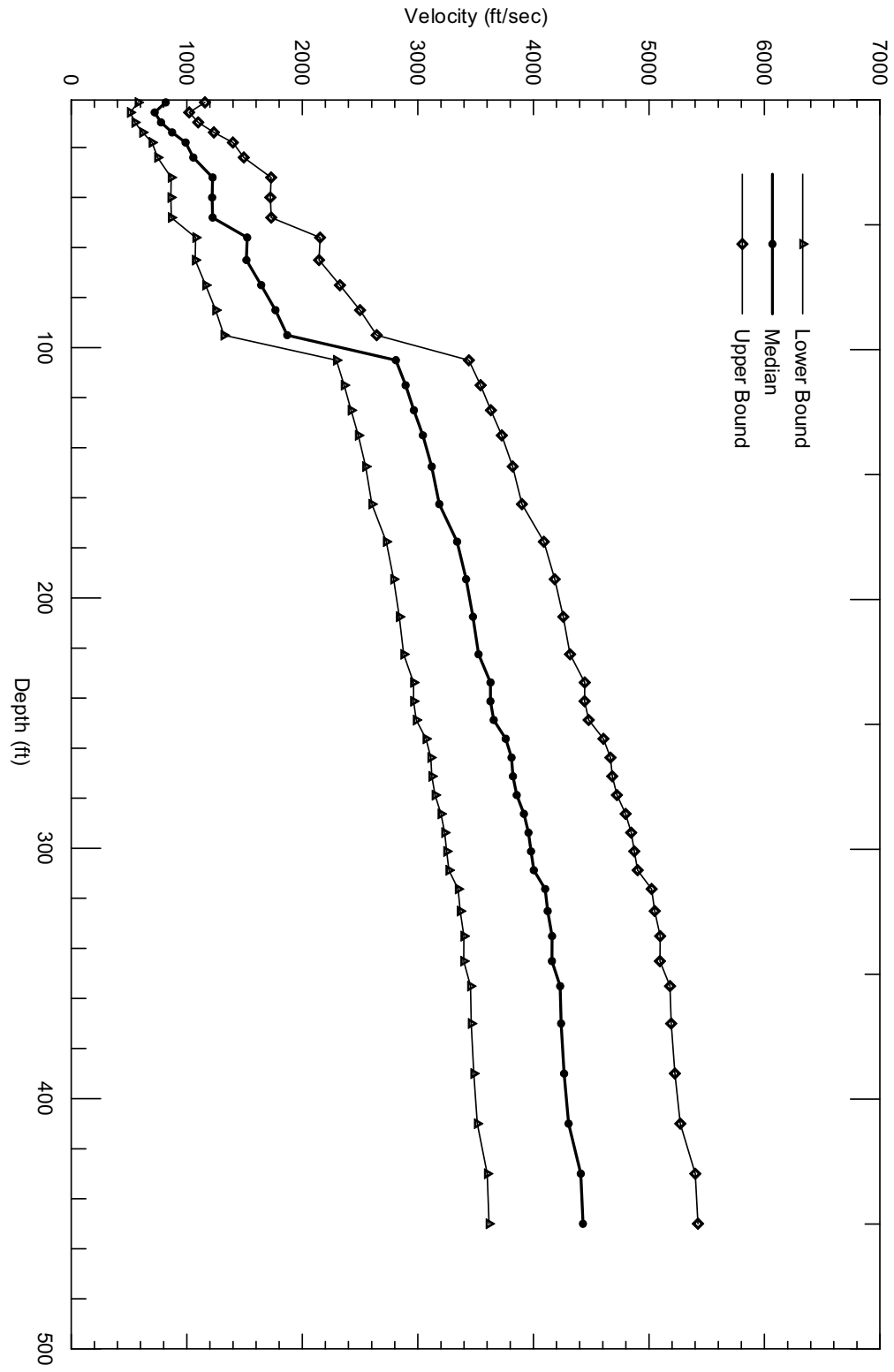

Source: Appendix D, Table D-1

Figure 6.5.2-309. SFA Strain Compatible Soil Properties P-wave Velocity, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



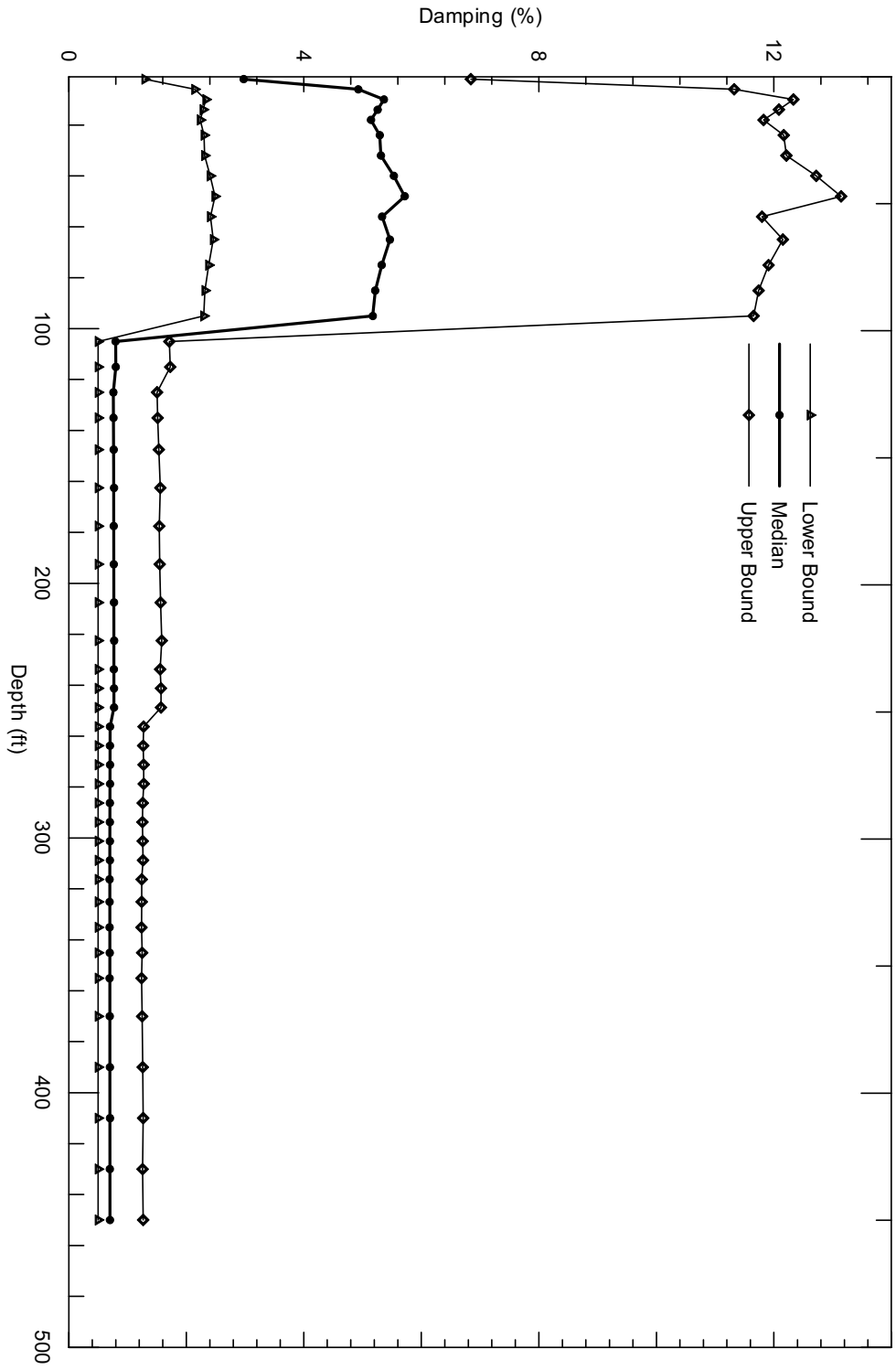

Source: Appendix D, Table D-1

Figure 6.5.2-310. SFA Strain Compatible Soil Properties P-wave Damping, 70 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



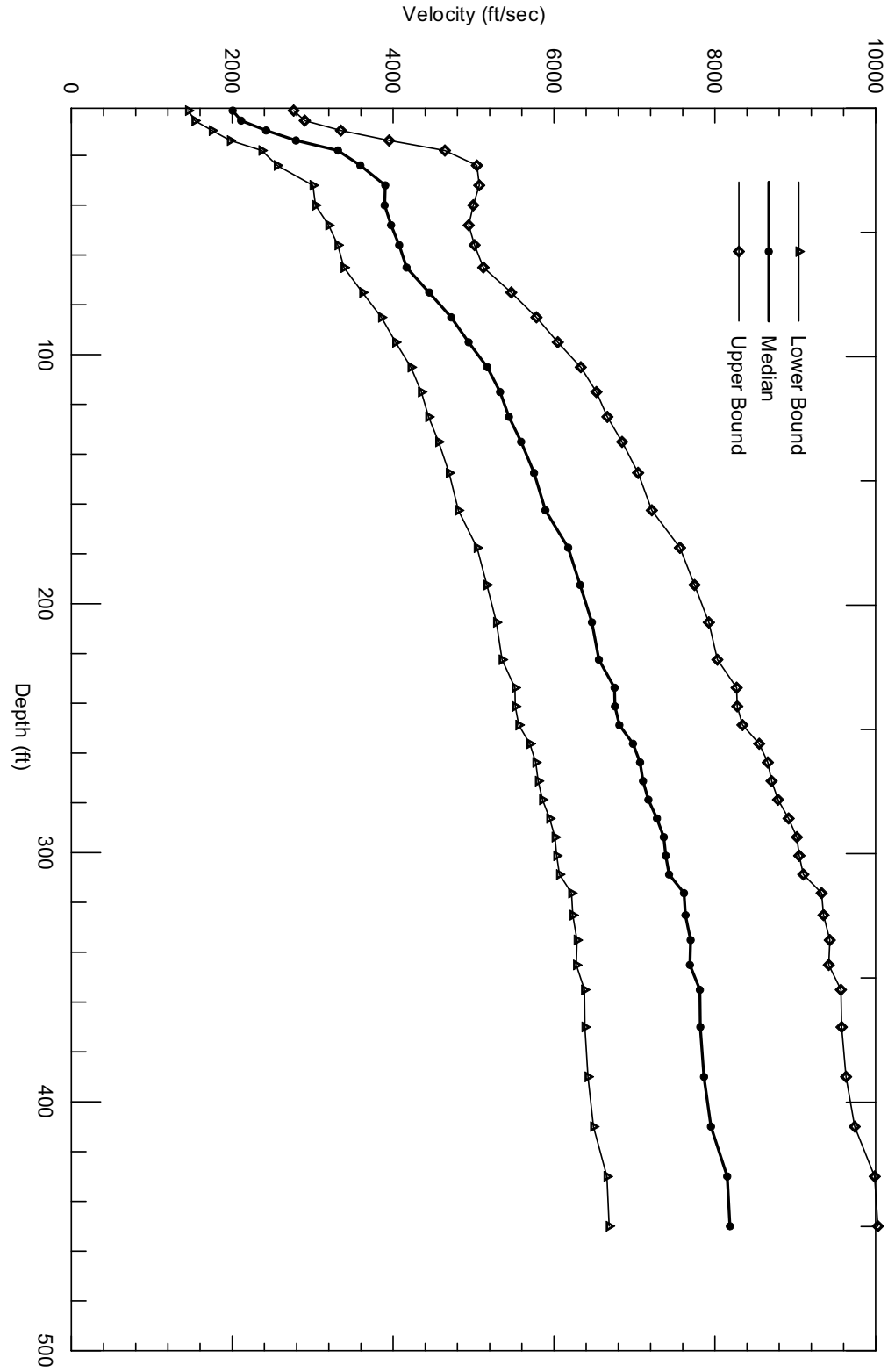

Source: Appendix D, Table D-1

Figure 6.5.2-311. SFA Strain Compatible Soil Properties S-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



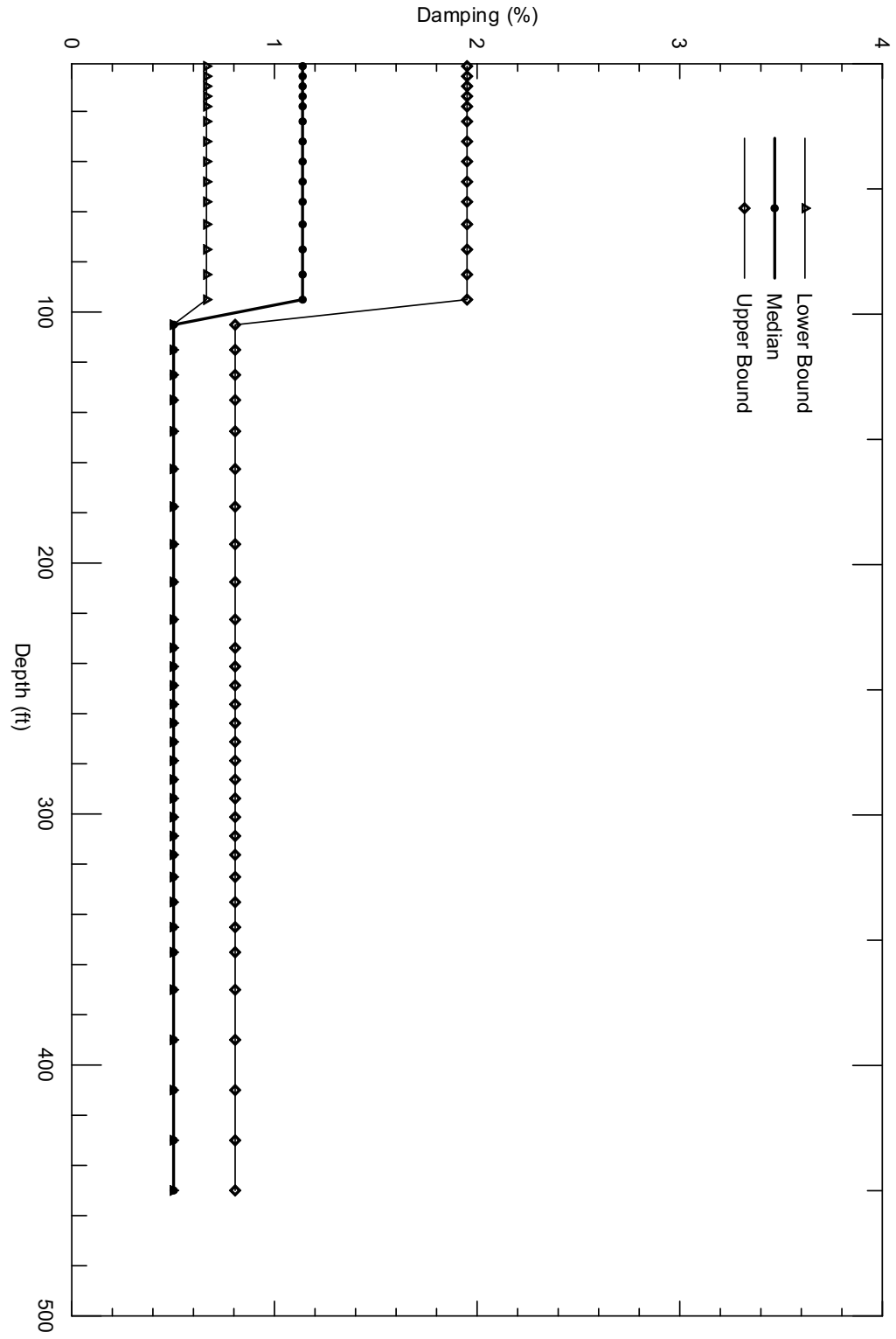

Source: Appendix D, Table D-1

Figure 6.5.2-312. SFA Strain Compatible Soil Properties S-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE



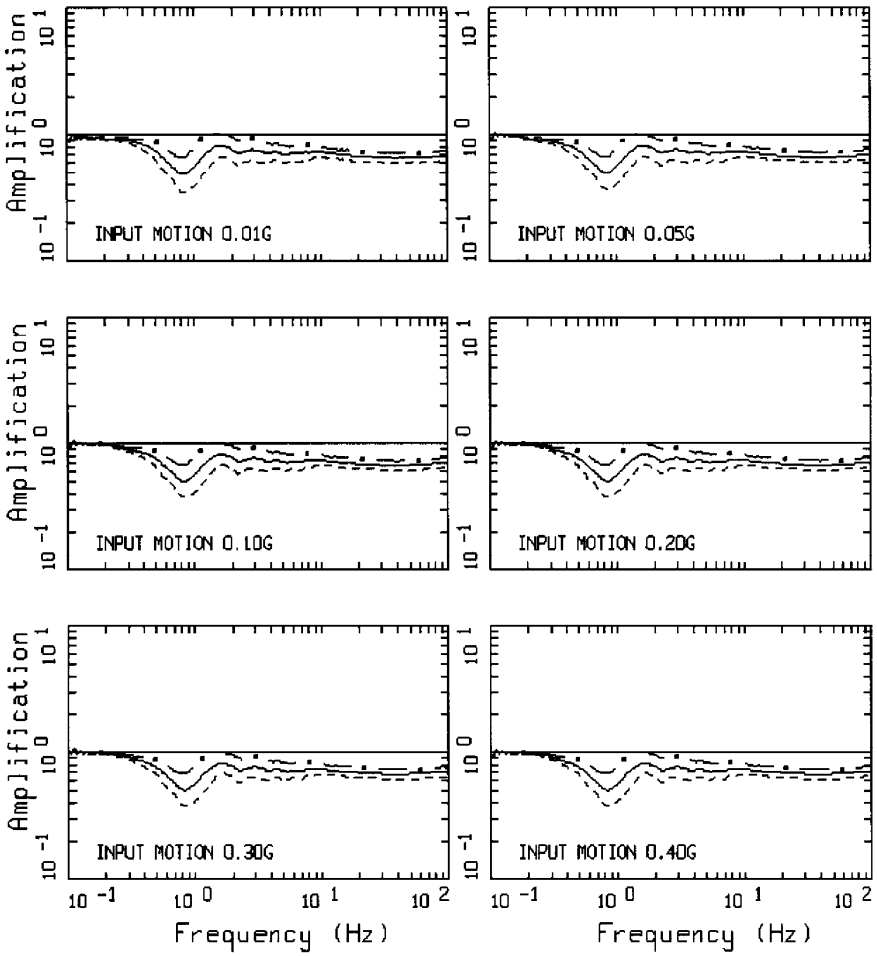

Source: Appendix D, Table D-1

Figure 6.5.2-313. SFA Strain Compatible Soil Properties P-wave Velocity, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE




Source: Appendix D, Table D-1

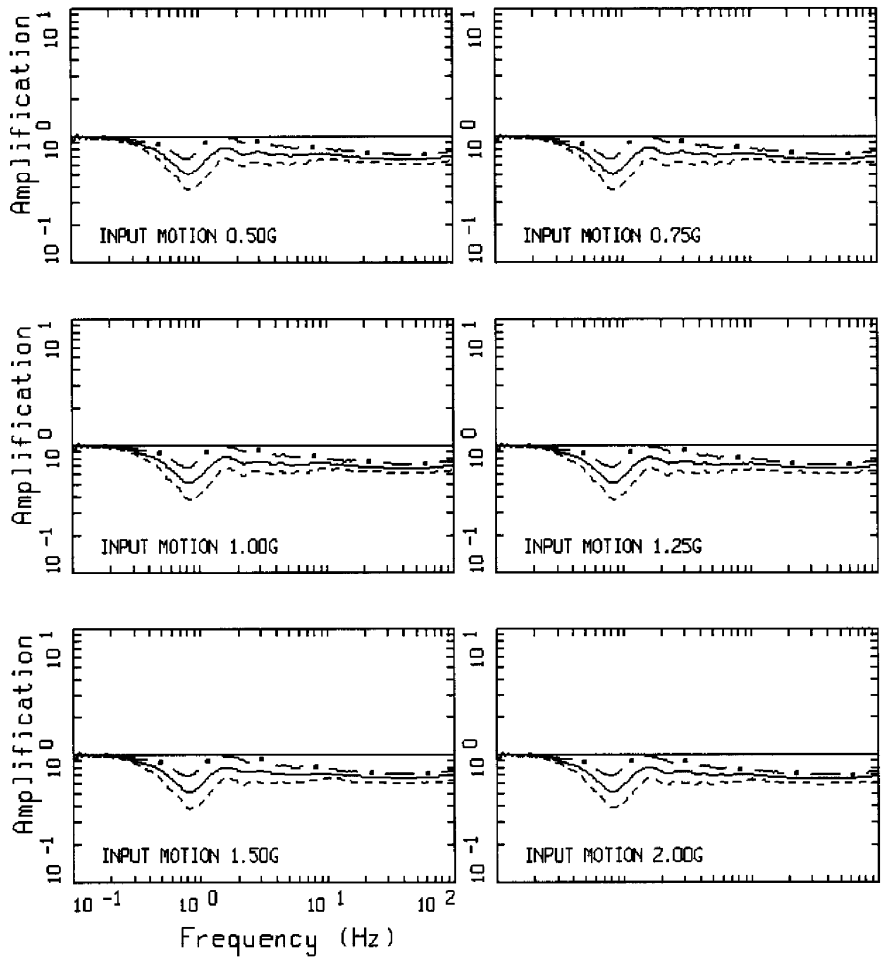
Figure 6.5.2-314. SFA Strain Compatible Soil Properties P-wave Damping, 100 ft of Alluvium Over Tuff, South of the Fault $10^{-4}$ AFE




Source: Appendix D, Table D-1

Note: Transfer functions computed for the RB soft zone velocity profile and UMT dynamic property curves; 5 to 10 Hz RE control motions: median and + 1 sigma estimates

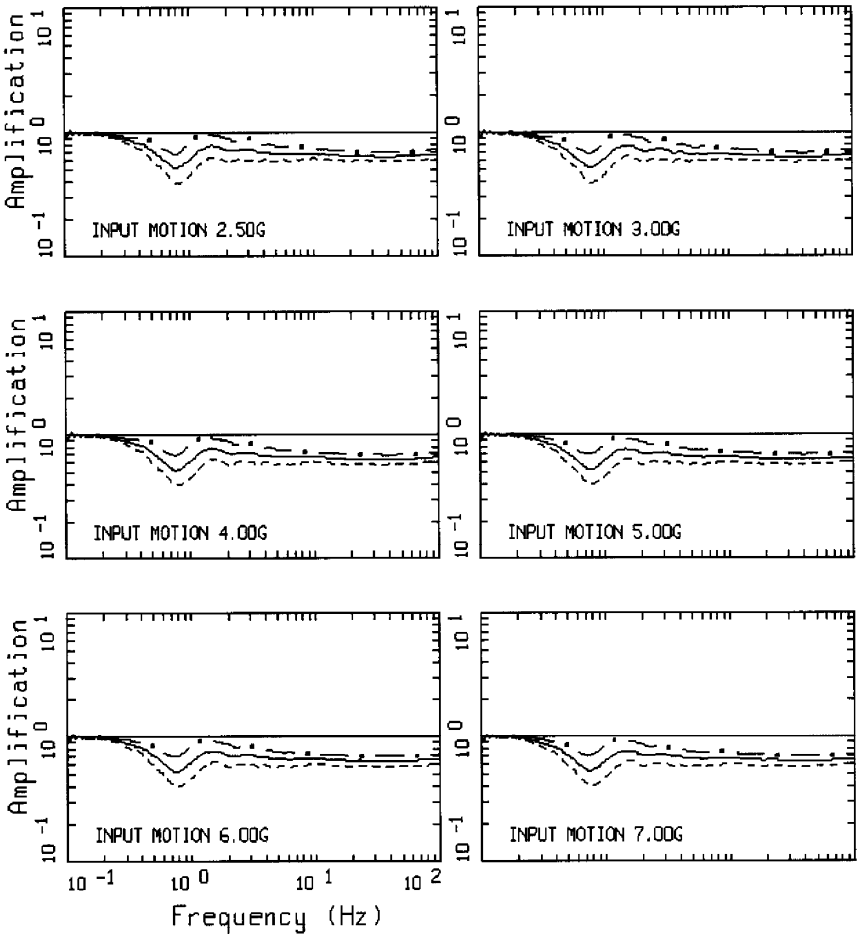
Figure 6.5.3-1a. Example of horizontal transfer functions (amplification factors): 5 to 10 Hz RE.




Source: Appendix D, Table D-1

Note: Transfer functions computed for the RB soft zone velocity profile and UMT dynamic property curves; 5 to 10 Hz RE control motions: median and + 1 sigma estimates

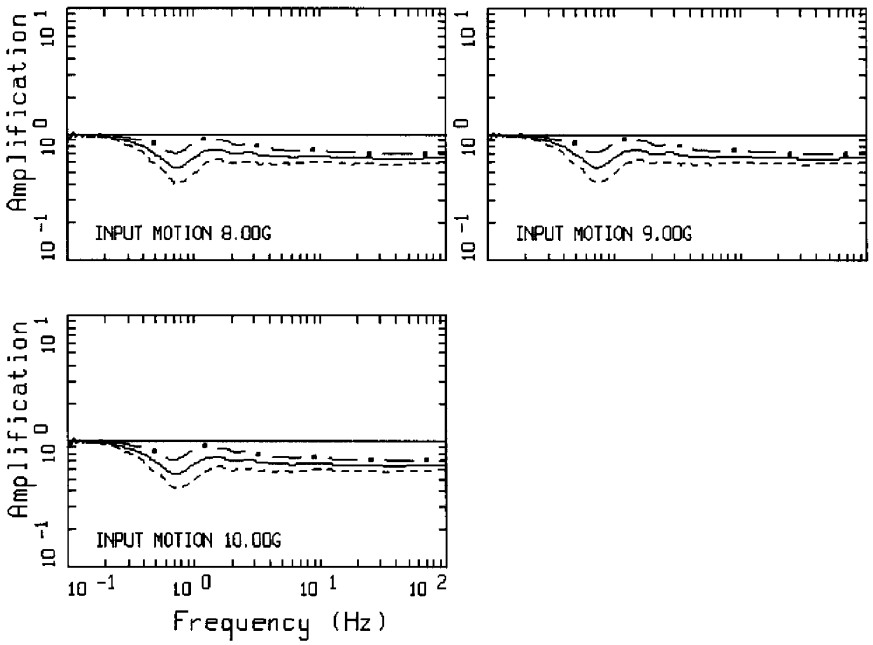
Figure 6.5.3-1b. Example of horizontal transfer functions (amplification factors): 5 to 10 Hz RE (continued).




Source: Appendix D, Table D-1

Note: Transfer functions computed for the RB soft zone velocity profile and UMT dynamic property curves; 5 to 10 Hz RE control motions: median and + 1 sigma estimates

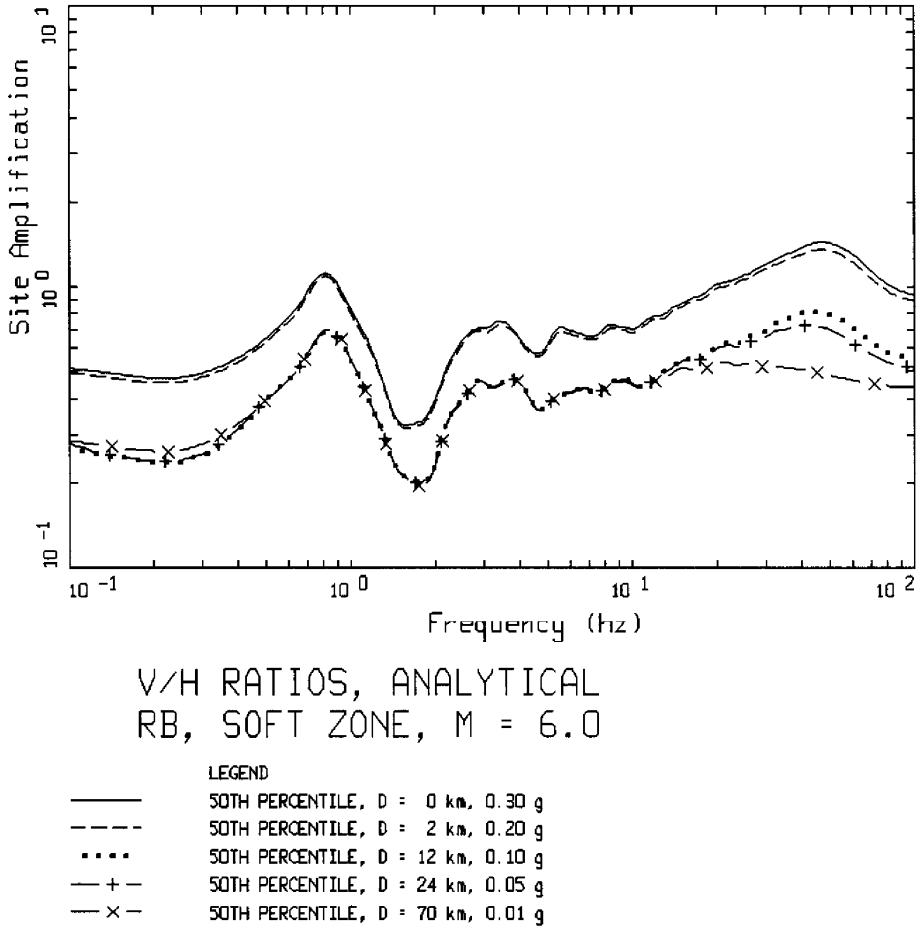
Figure 6.5.3-1c. Example of horizontal transfer functions (amplification factors): 5 to 10 Hz RE (continued).




Source: Appendix D, Table D-1

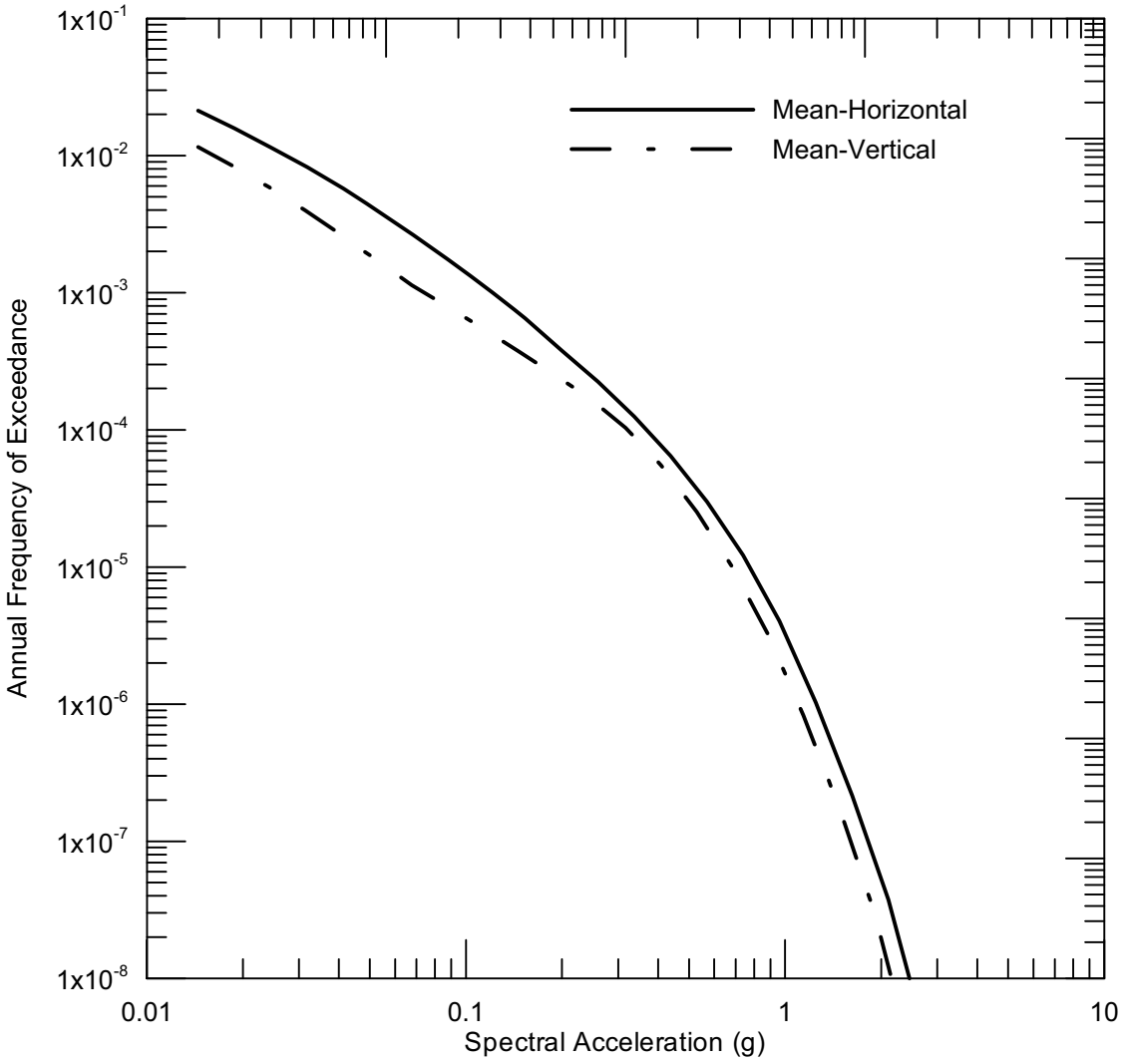
Note: Transfer functions computed for the RB soft zone velocity profile and UMT dynamic property curves; 5 to 10 Hz RE control motions: median and + 1 sigma estimates

Figure 6.5.3-1d. Example of horizontal transfer functions (amplification factors): 5 to 10 Hz RE.



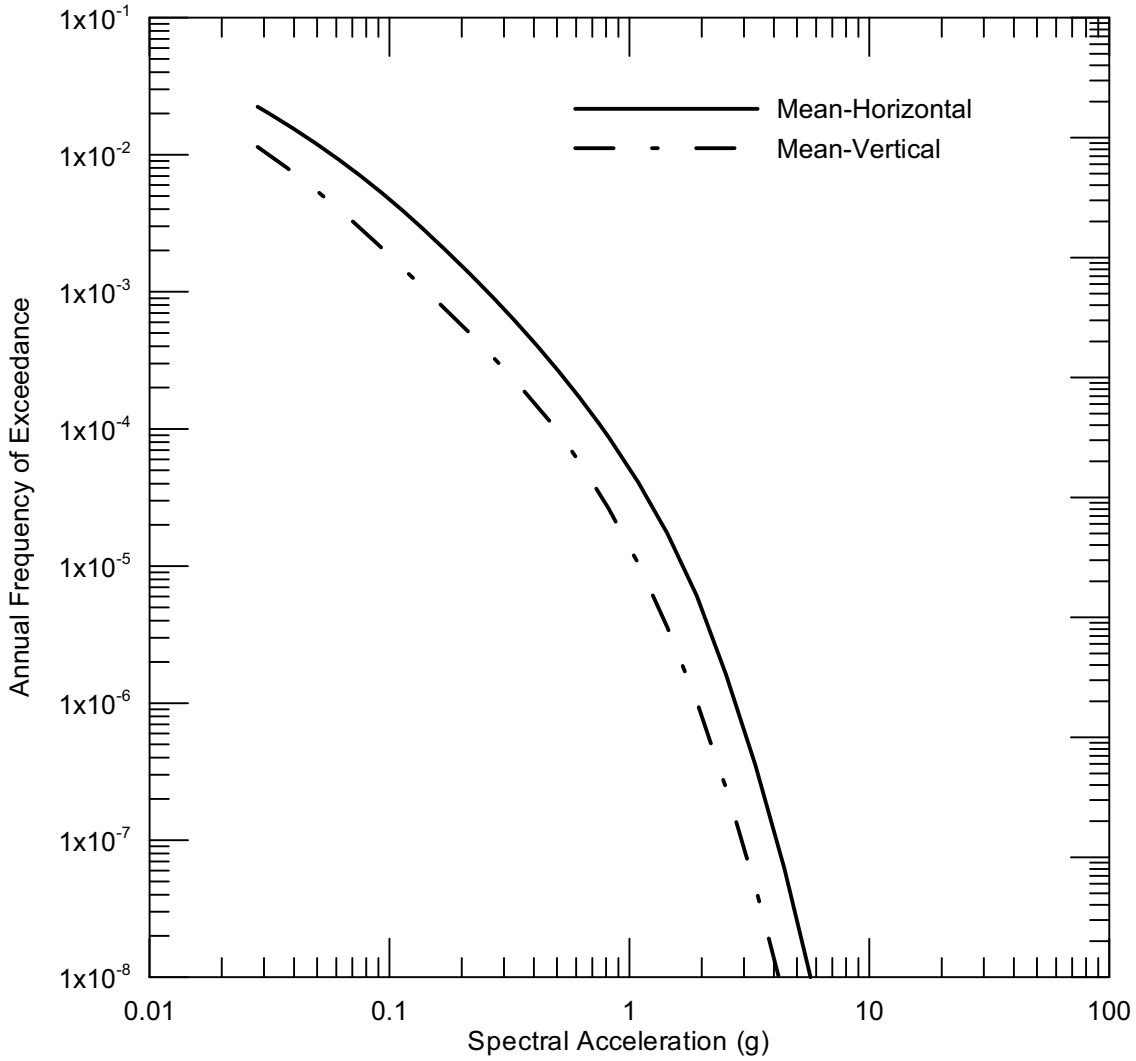

Source: Appendix D, Table D-1

Figure 6.5.3-2. Example of analytical V/H ratios computed for the RB soft zone velocity profile and UMT dynamic property curves; 5 to 10 Hz RE control motions: median and ± 1 sigma estimates.



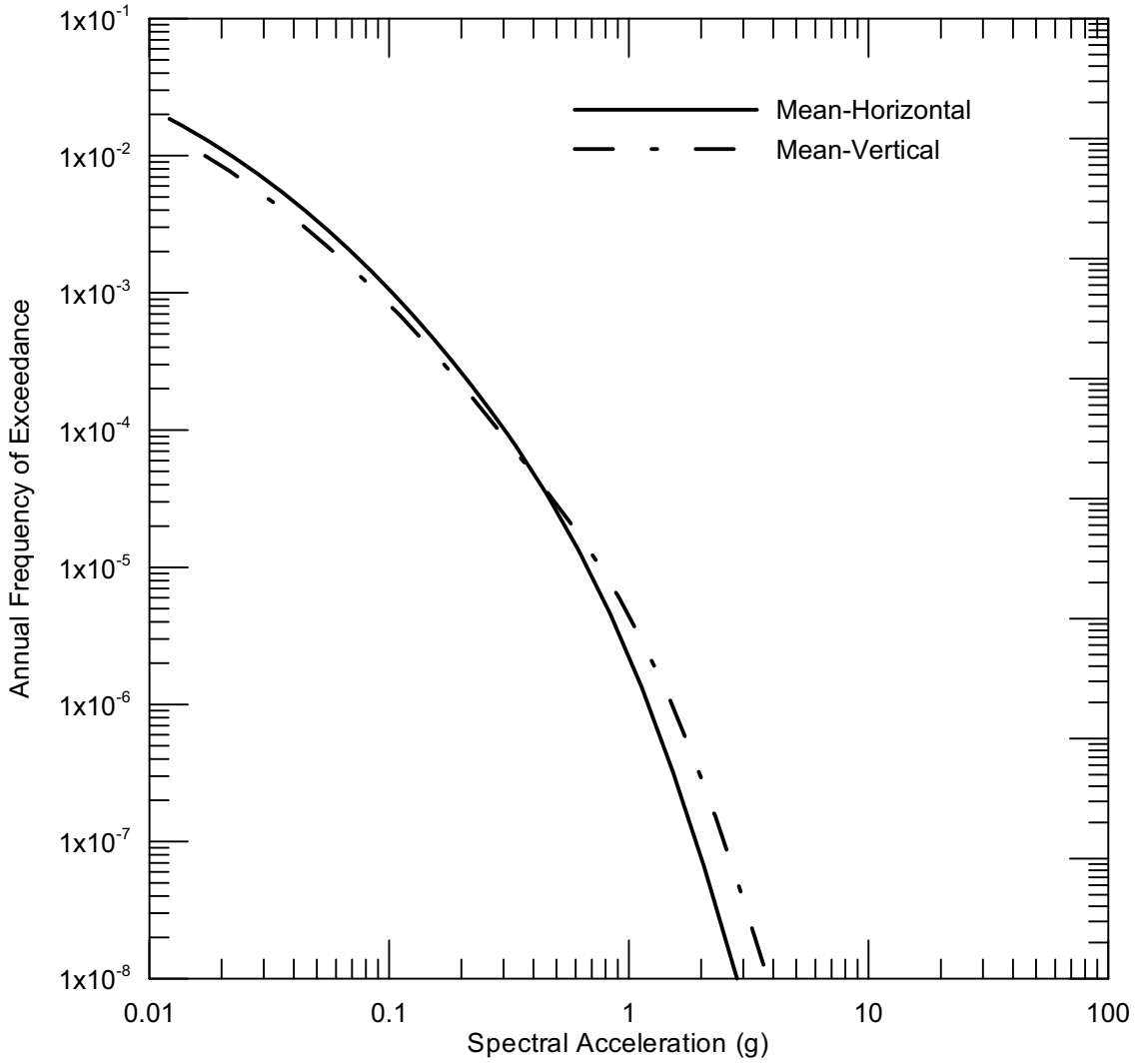

Source: Appendix D, Table D-1

Figure 6.5.3-3. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Soft” Sites, for PGA at the RB



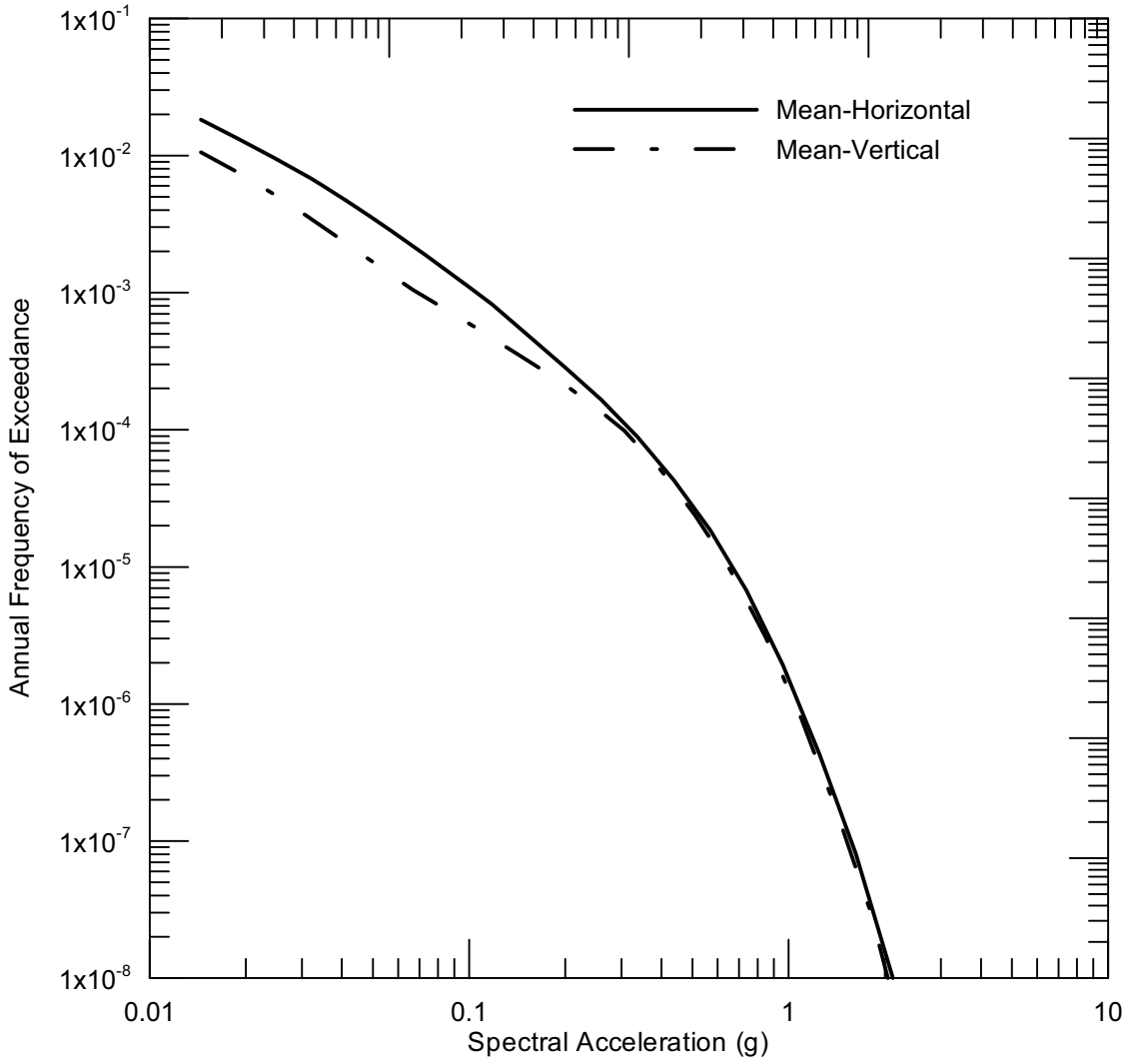

Source: Appendix D, Table D-1

Figure 6.5.3-4. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Soft” Sites, for 0.2 Sec SA at the RB



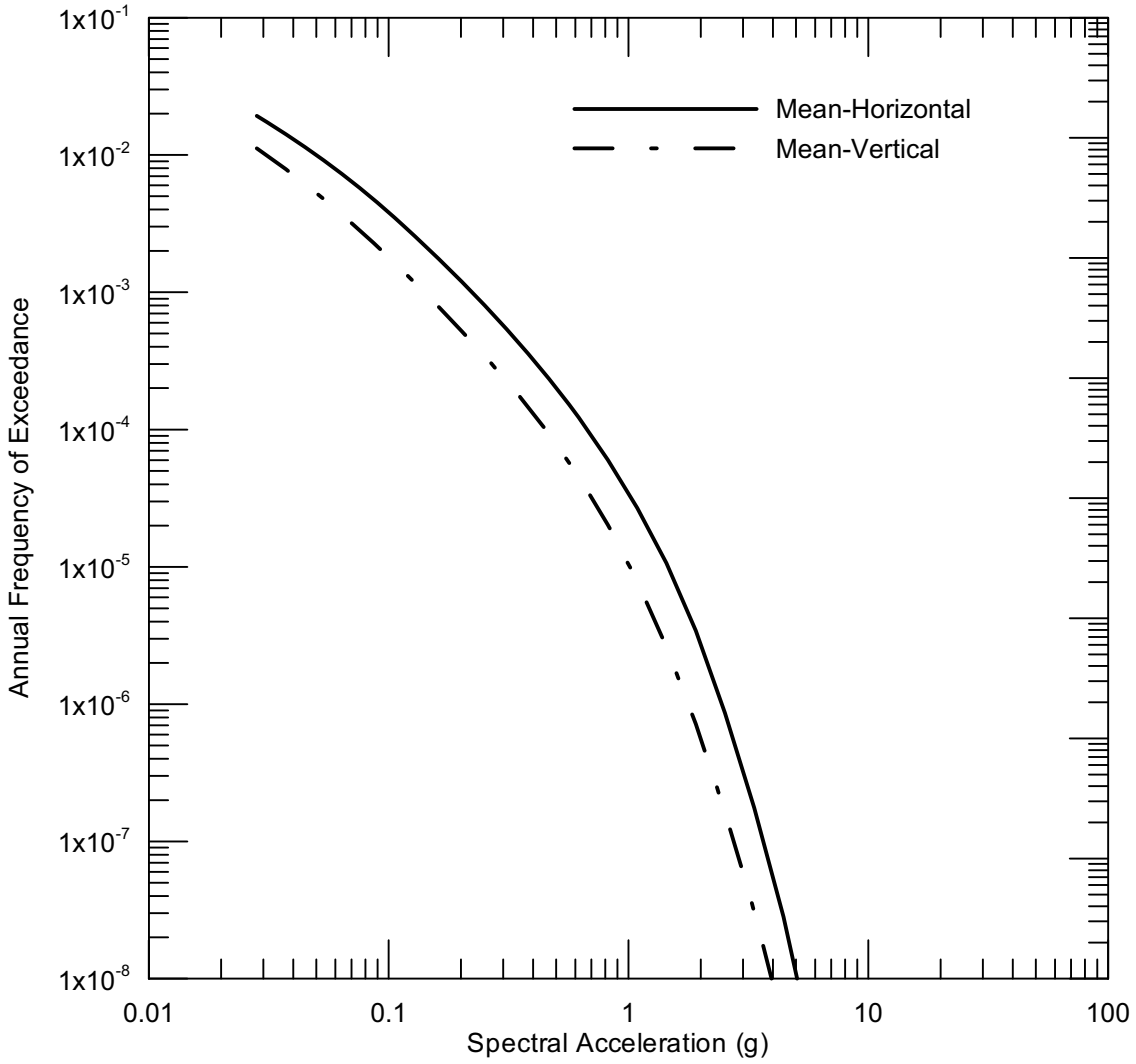

Source: Appendix D, Table D-1

Figure 6.5.3-5. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Soft” Sites, for 1.0 Sec SA at the RB



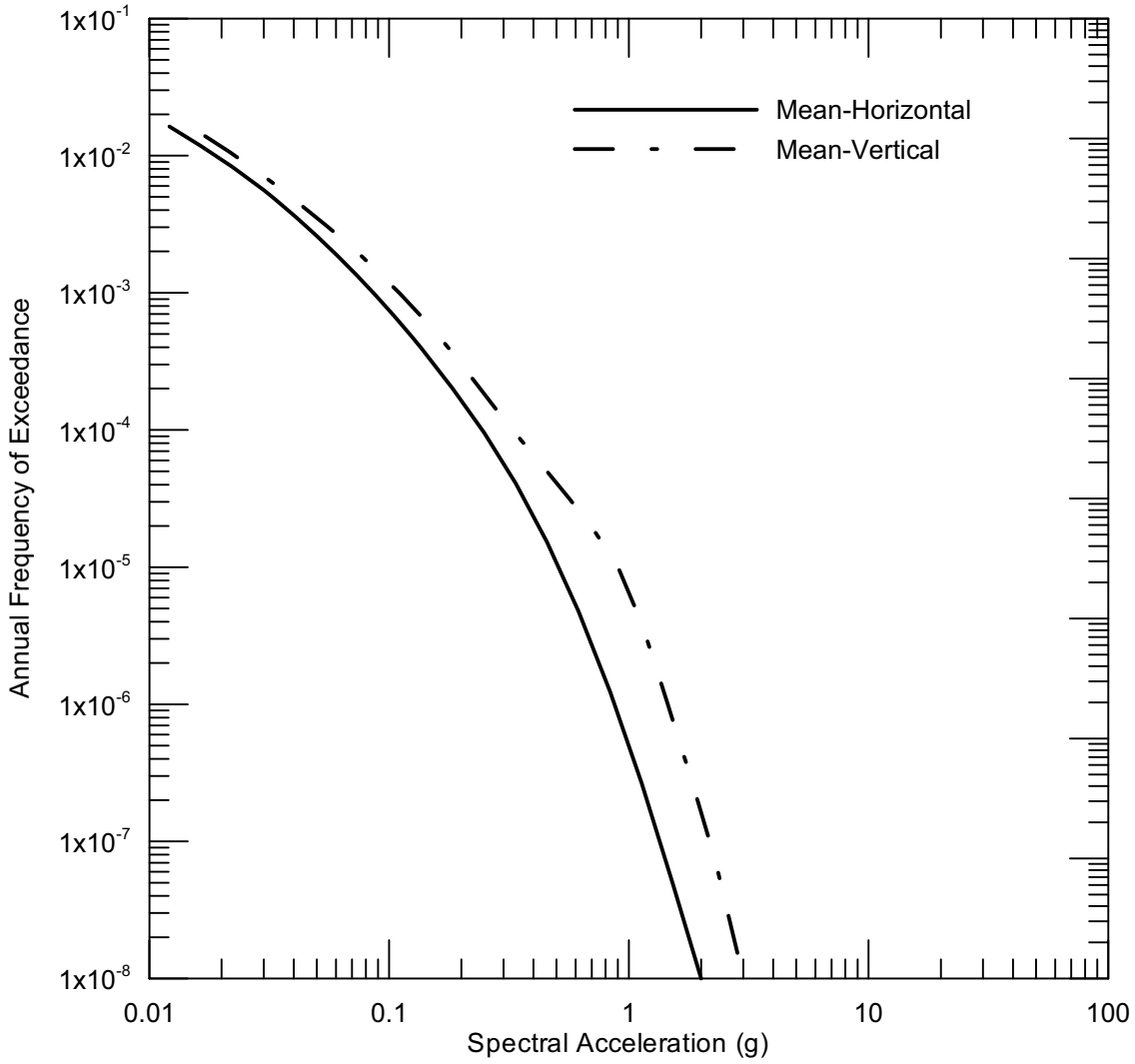

Source: Appendix D, Table D-1

Figure 6.5.3-6. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Stiff” Sites, for PGA at the RB



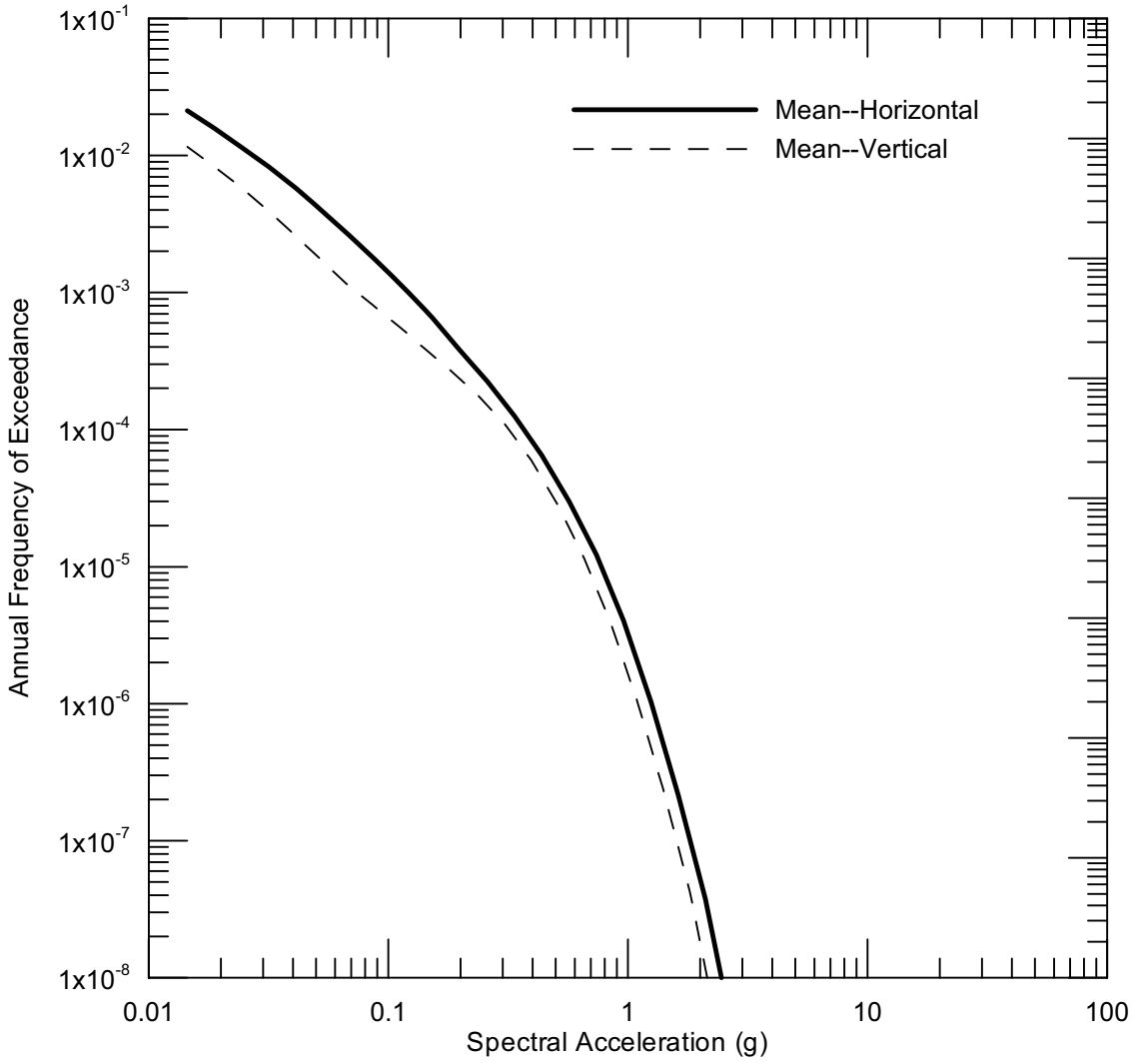

Source: Appendix D, Table D-1

Figure 6.5.3-7. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Stiff” Sites, for 0.2 Sec SA at the RB



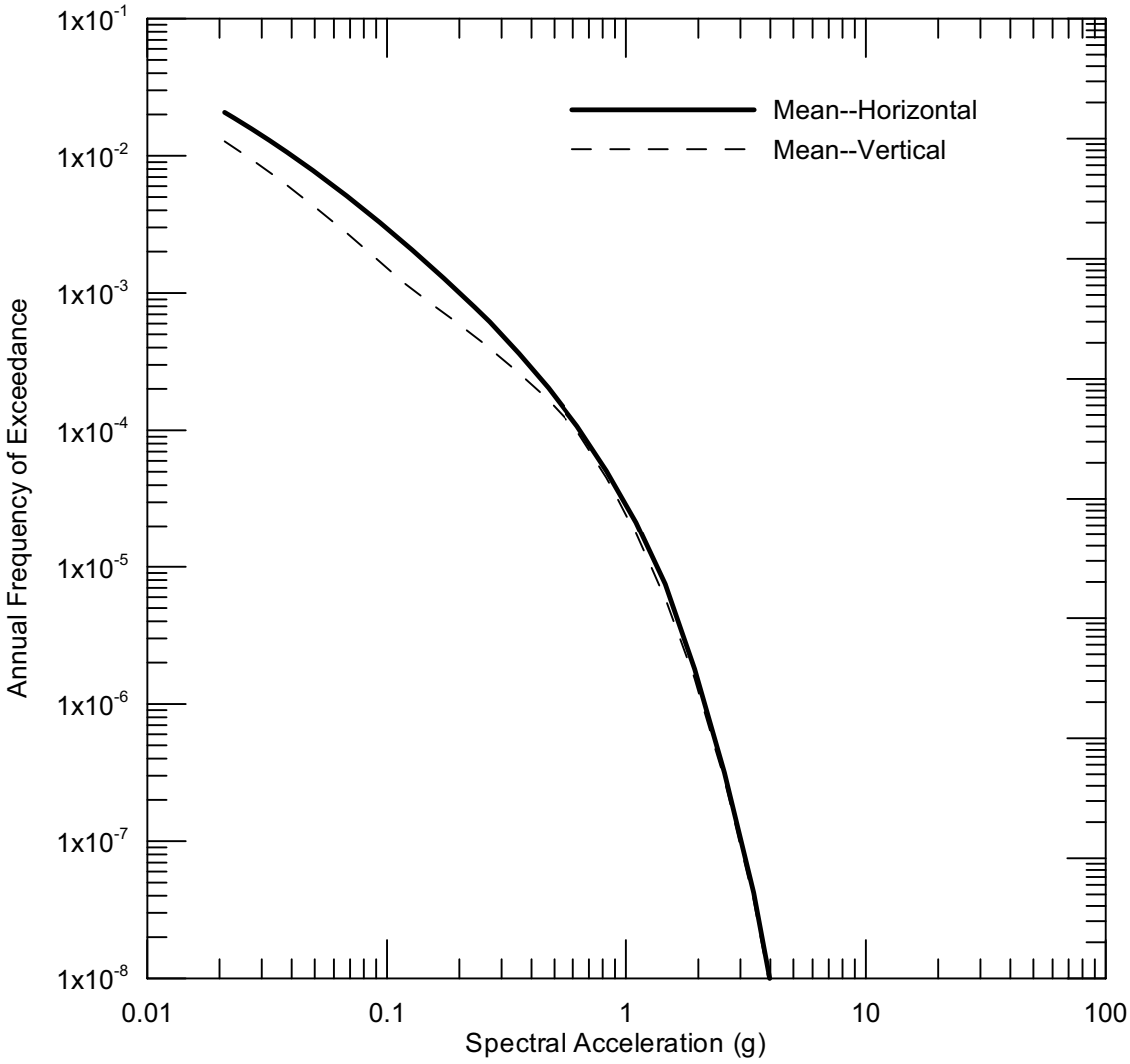

Source: Appendix D, Table D-1

Figure 6.5.3-8. Mean Horizontal and Vertical Seismic Hazard Curves for Tuff, “Stiff” Sites, for 1.0 Sec SA at the RB



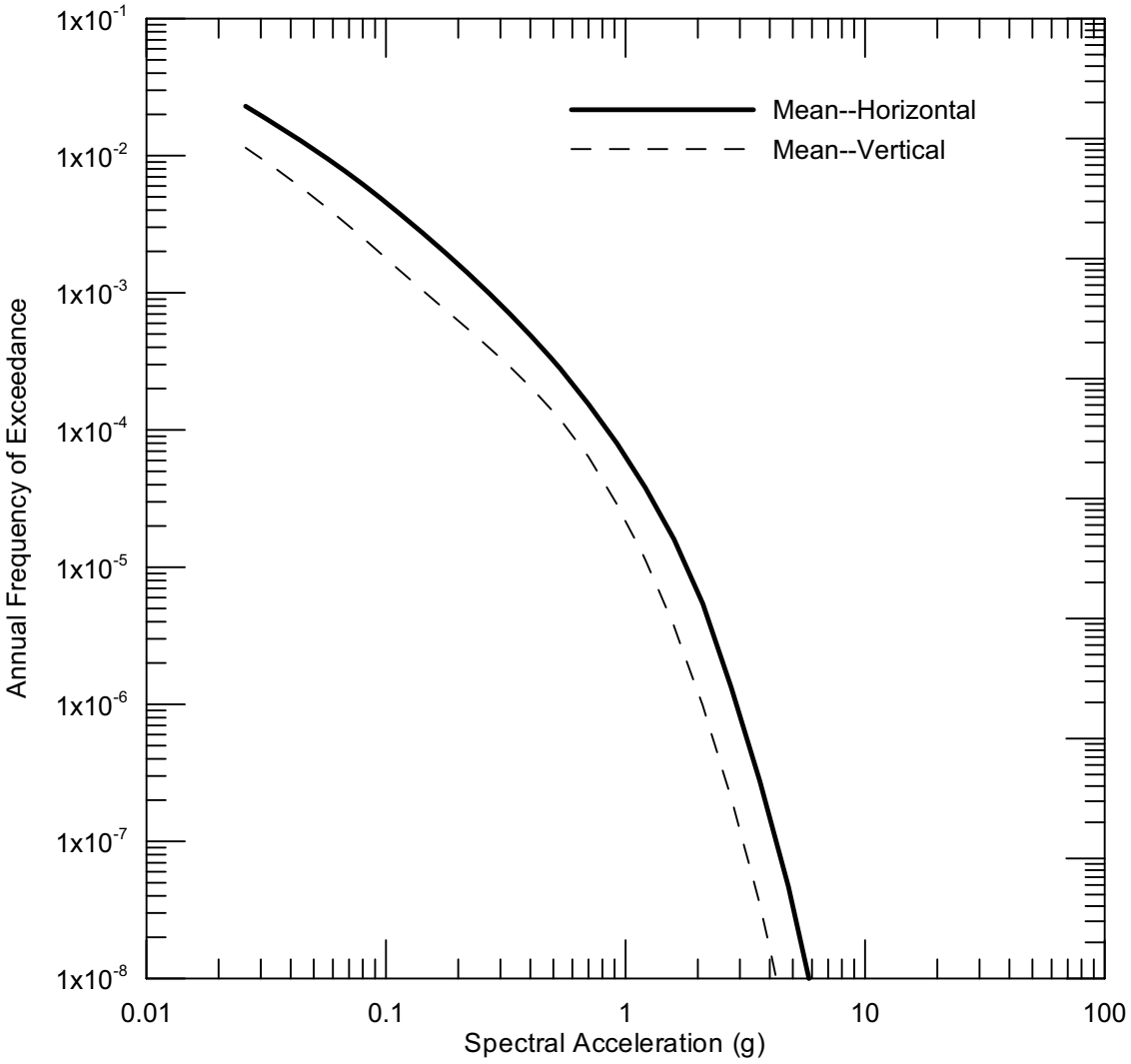

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-9. Mean Horizontal and Vertical Seismic Hazard Curves for PGA at the RB



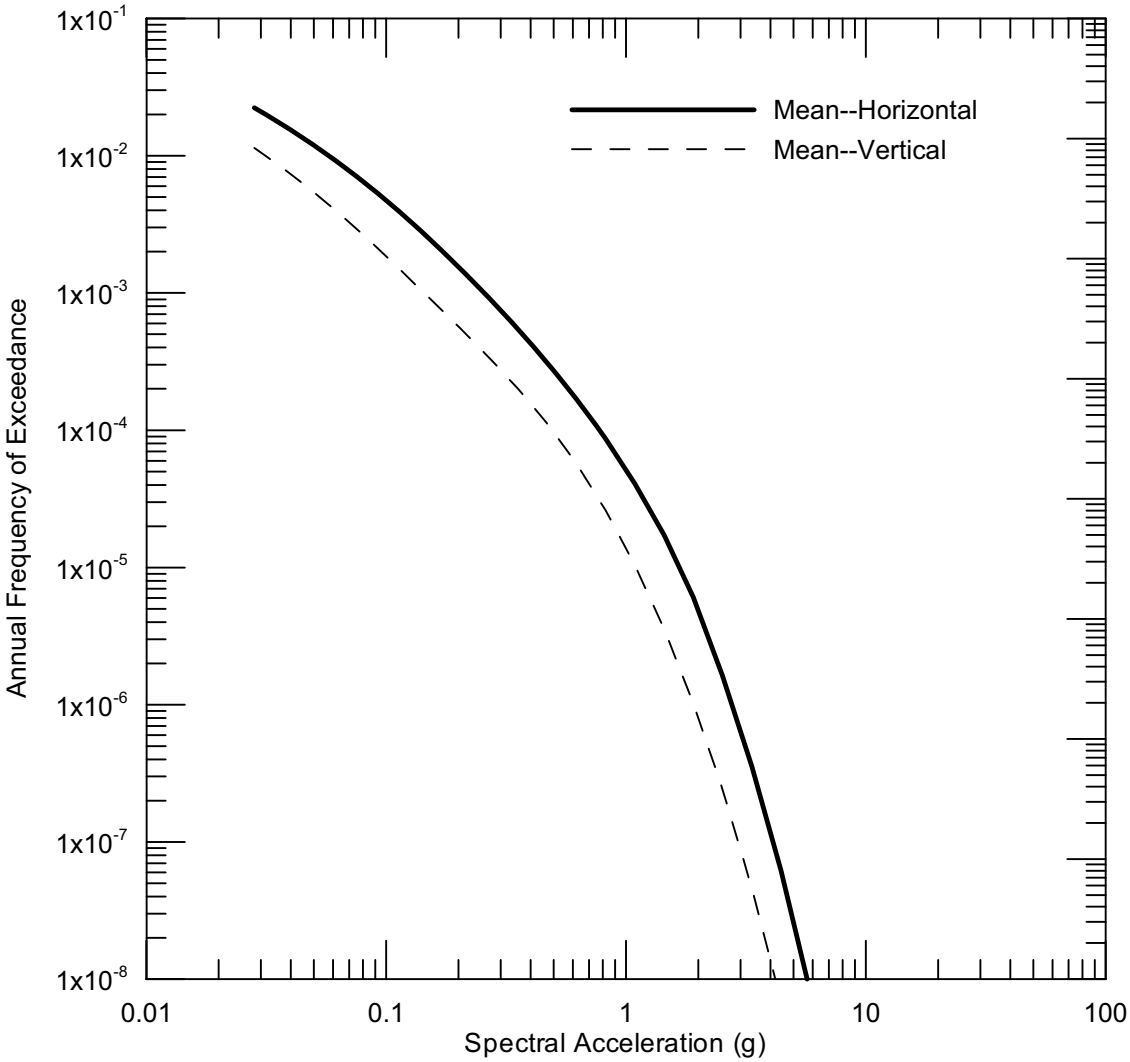

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-10. Mean Horizontal and Vertical Seismic Hazard Curves for 0.05 Sec SA at the RB



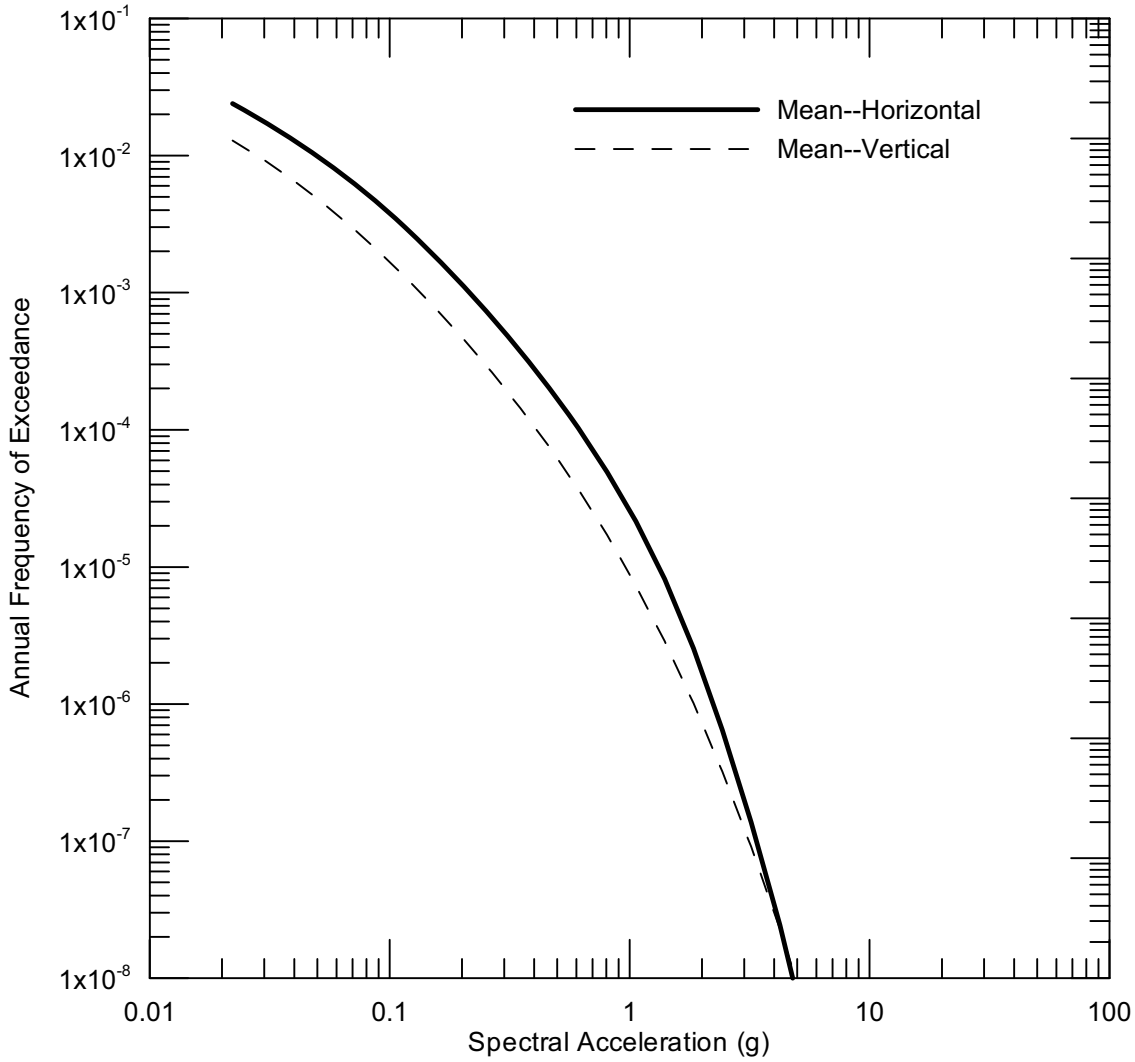

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-11. Mean Horizontal and Vertical Seismic Hazard Curves for 0.1 Sec SA at the RB



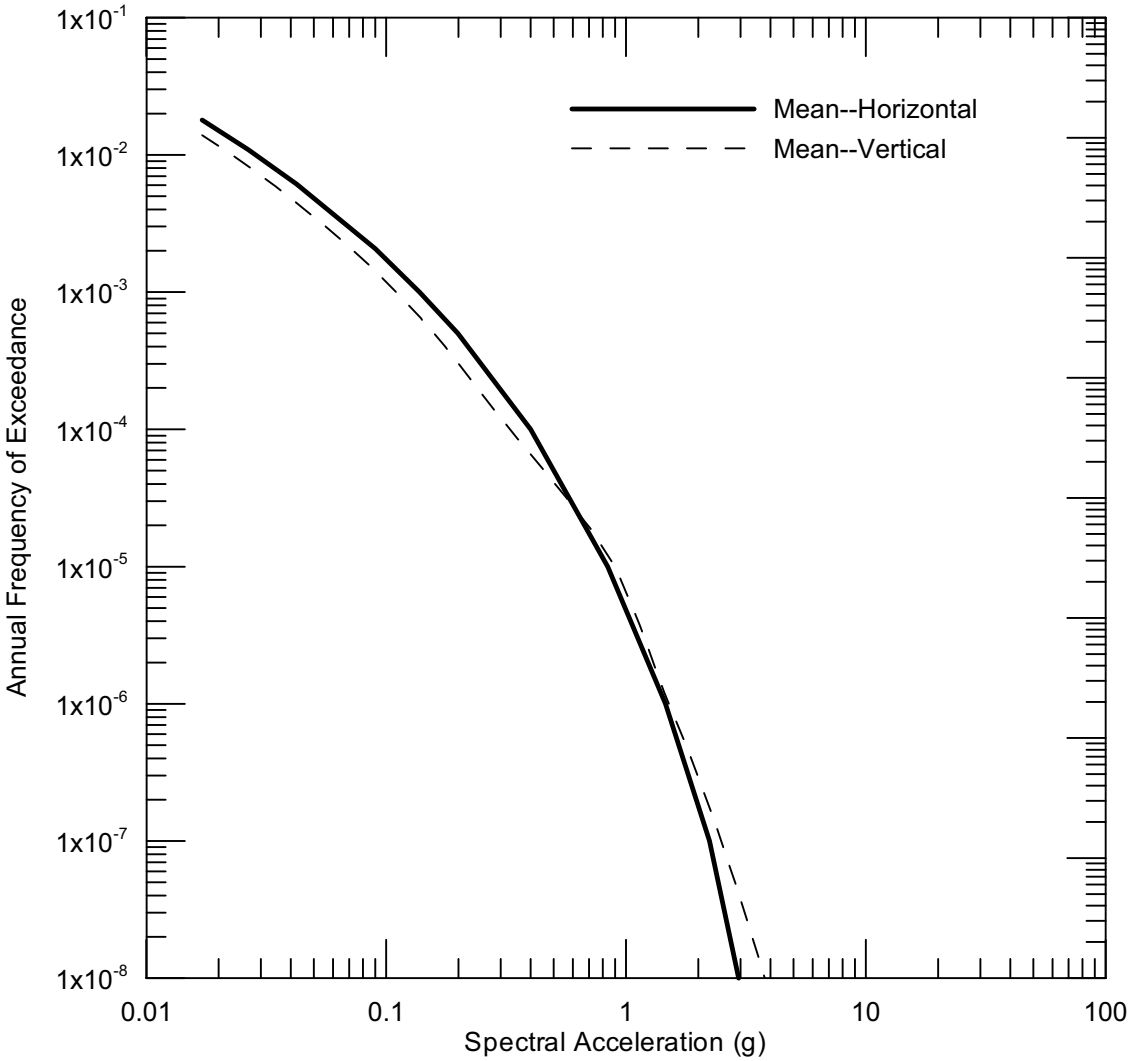

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-12. Mean Horizontal and Vertical Seismic Hazard Curves for 0.2 Sec SA at the RB



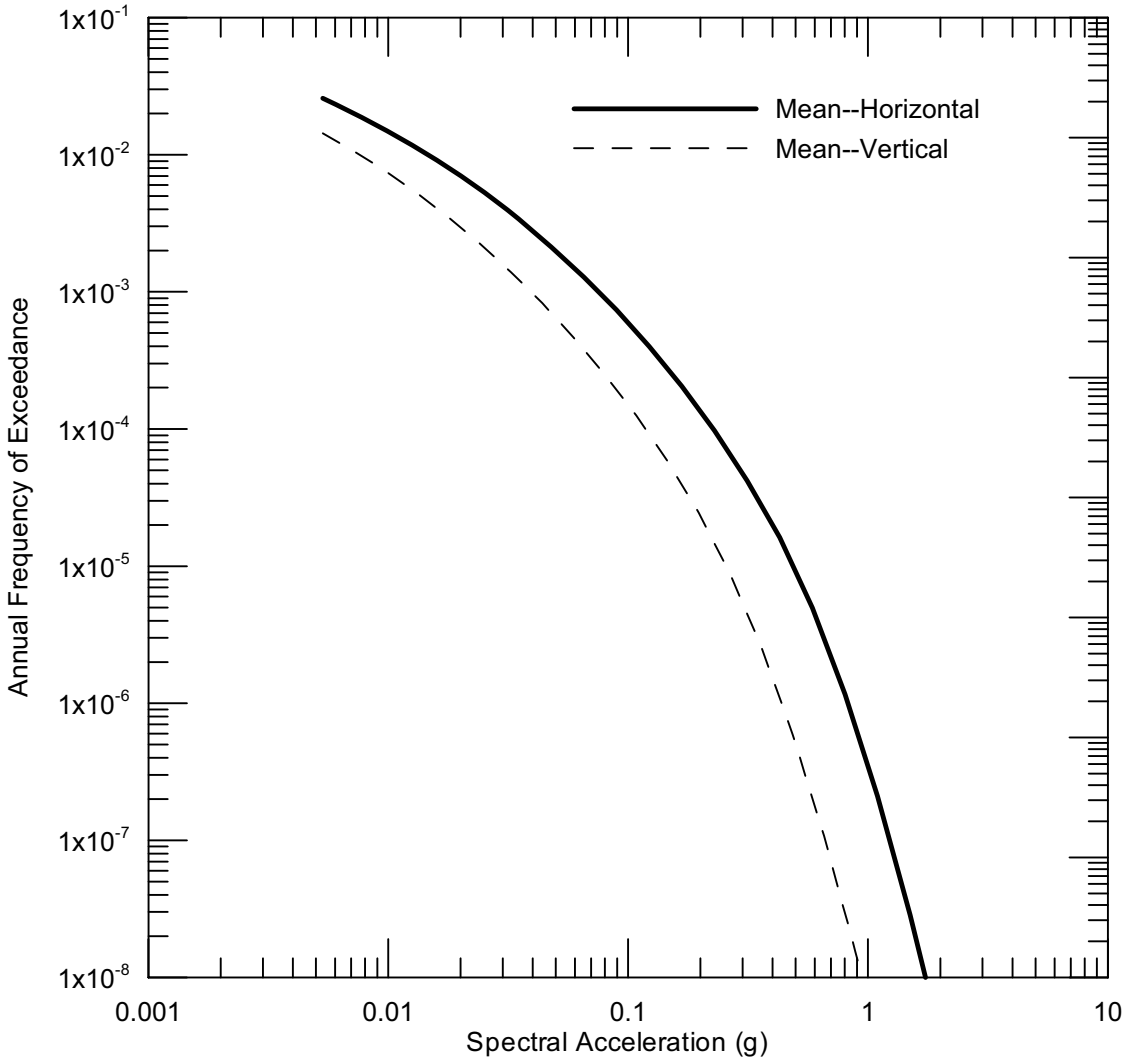

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-13. Mean Horizontal and Vertical Seismic Hazard Curves for 0.5 Sec SA at the RB



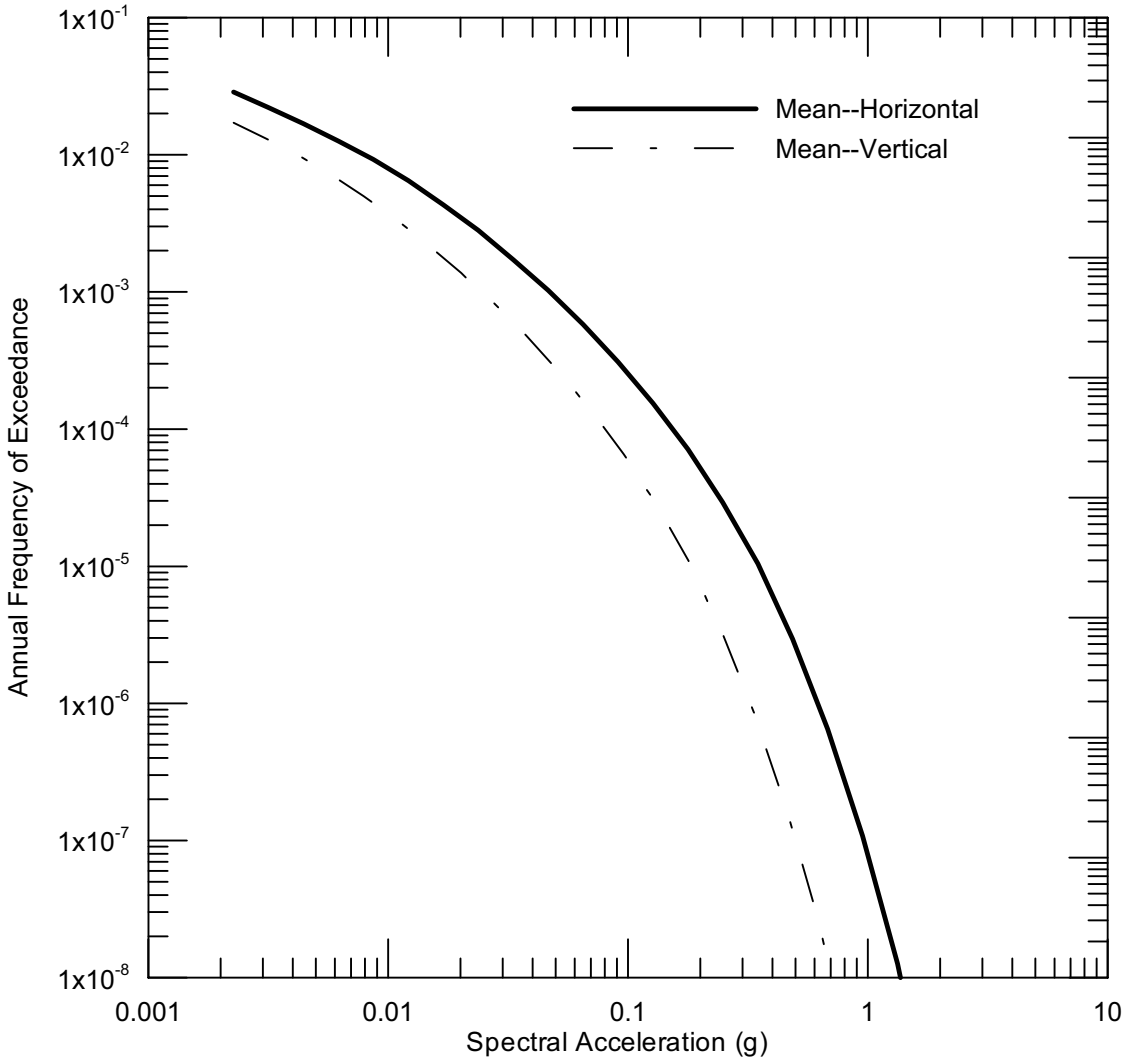

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-14. Mean Horizontal and Vertical Seismic Hazard Curves for 1.0 Sec SA at the RB



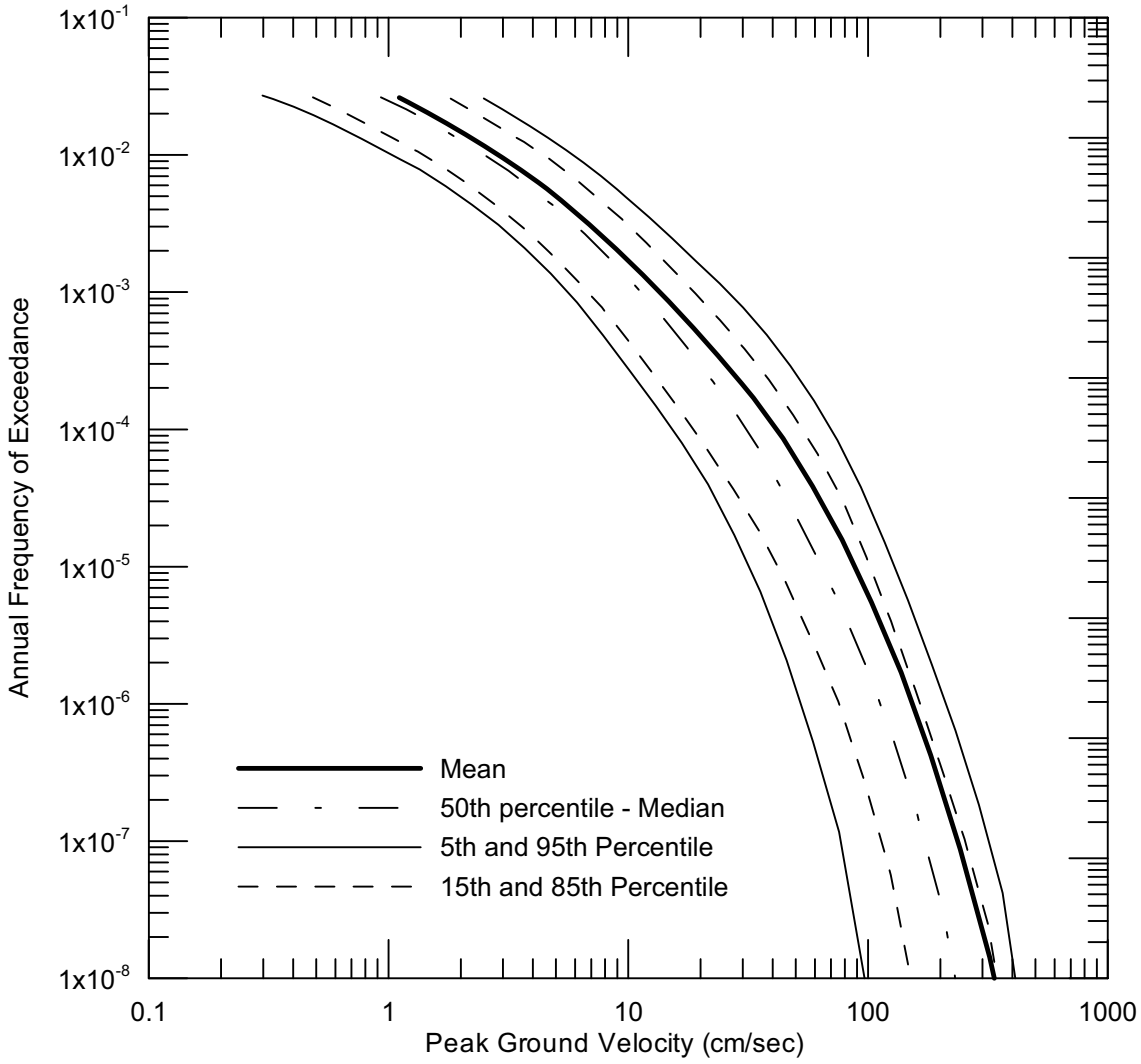

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-15. Mean Horizontal and Vertical Seismic Hazard Curves for 2.0 Sec SA at the RB



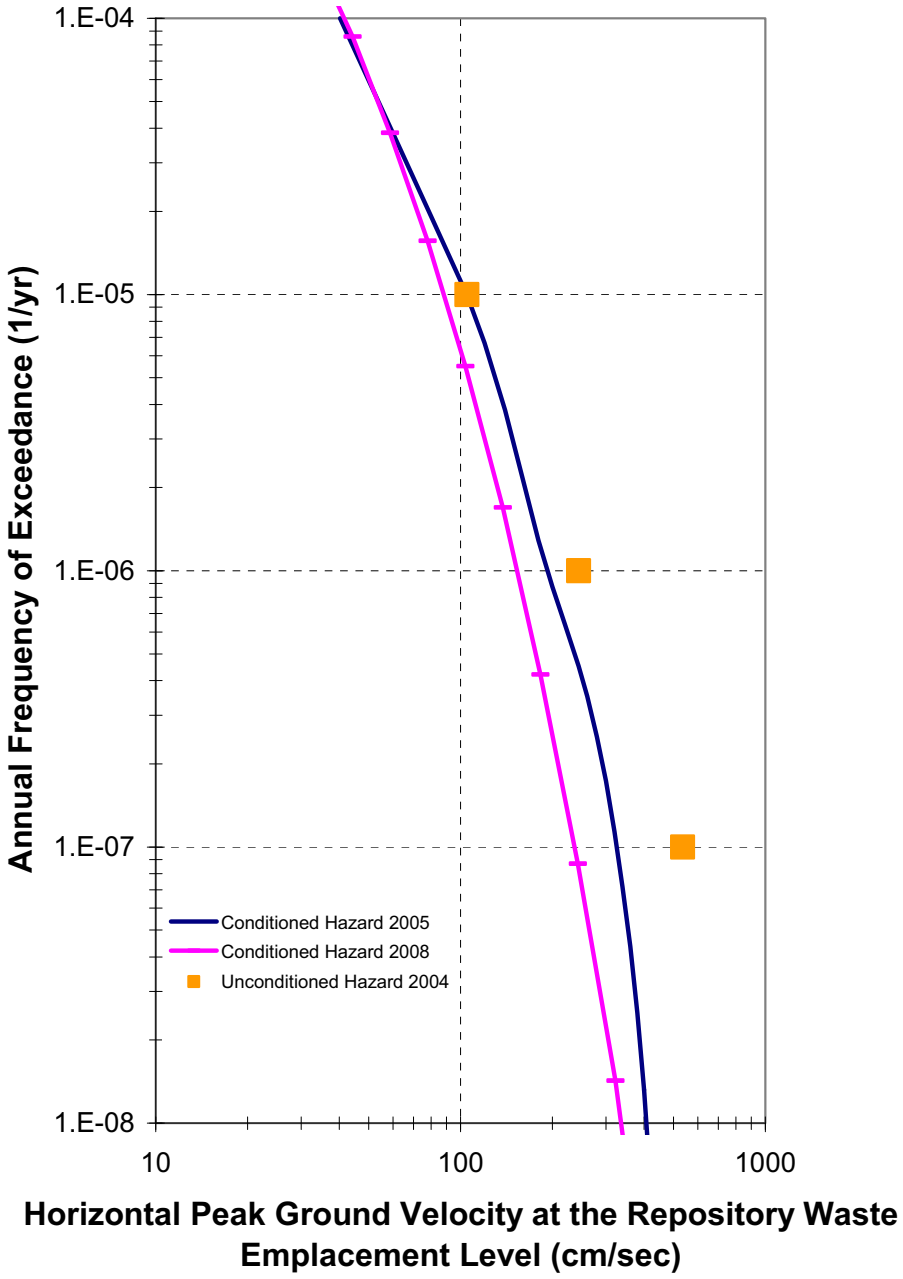

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-16. Mean Horizontal and Vertical Seismic Hazard Curves for 3.3 Sec SA at the RB



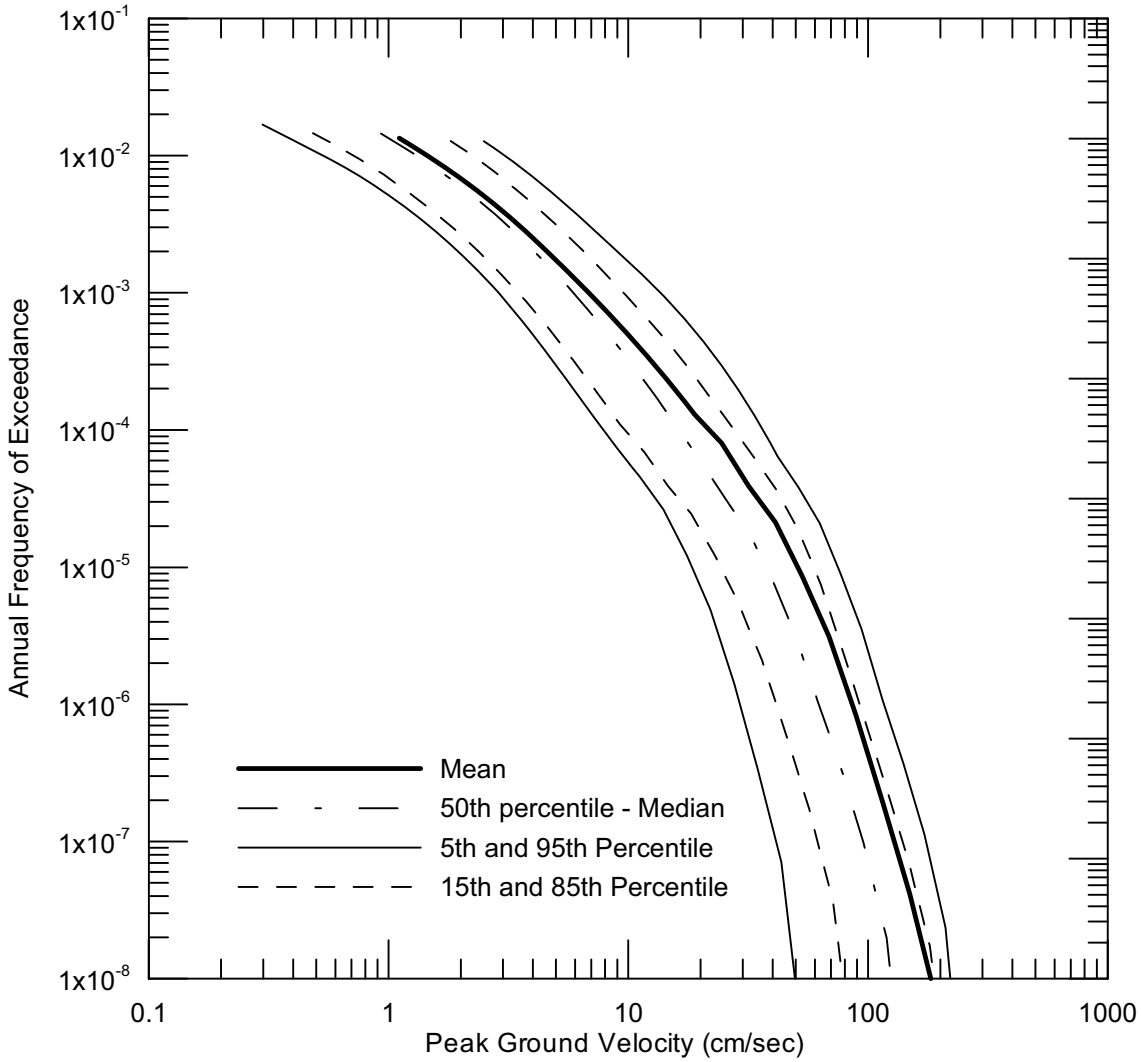

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-17a. Mean and Fractile Horizontal Seismic Hazard Curves for PGV at the RB



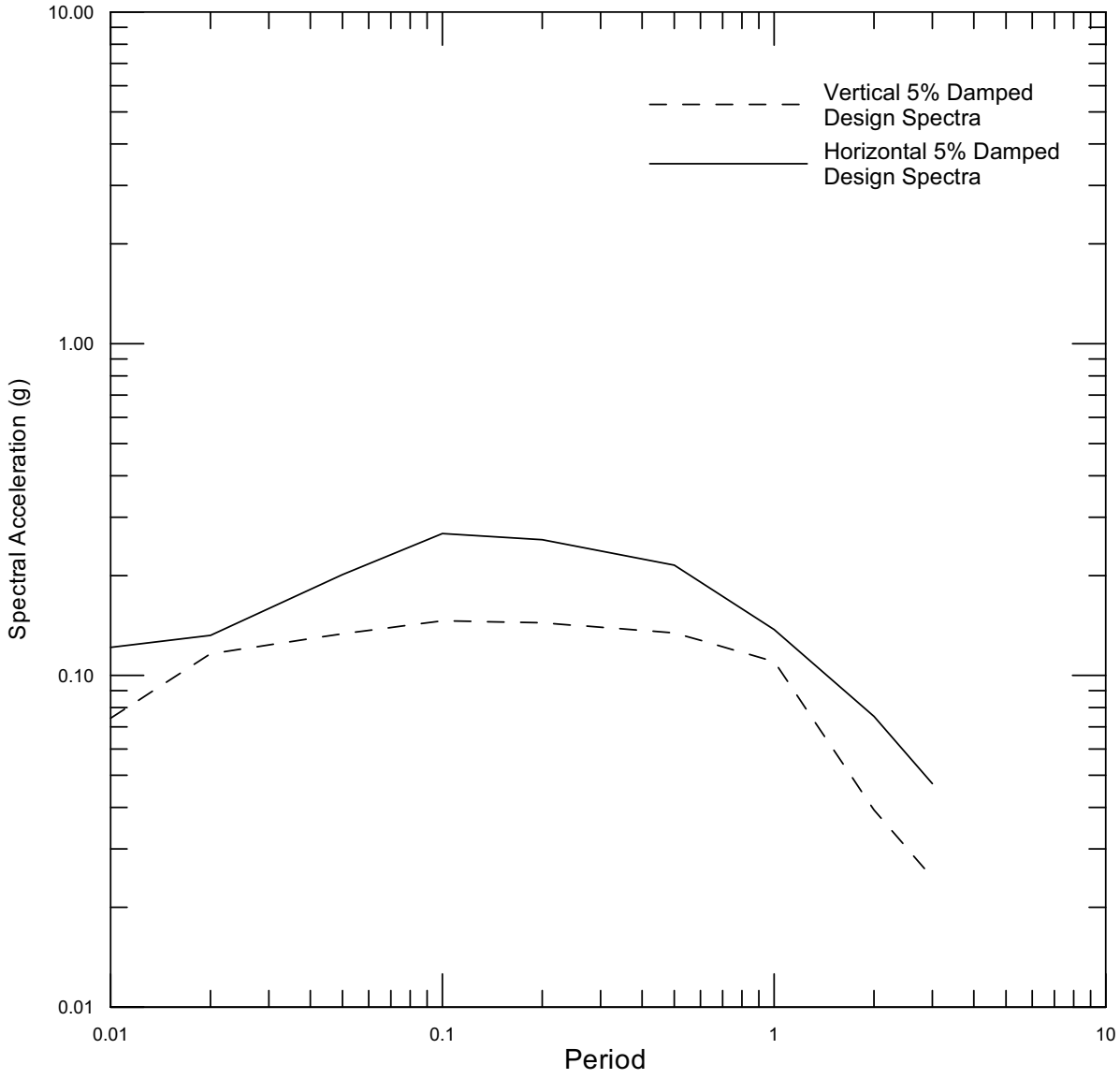

Sources: DTN MO0501BPVELEMP.001 [DIRS 172682] (Conditioned Hazard 2005), DTN MO0801HCUHSREB.001 [DIRS 184803] (Conditioned Hazard 2008), DTNs MO0401SEPPGVRL.022 [DIRS 169099], MO0303DPGVB106.002 [DIRS 162712], MO0210PGVPB107.000 [DIRS 162713] (Unconditioned Hazard 2004)

Figure 6.5.3-17b. Comparison of Horizontal PGV Hazard at Repository Waste Emplacement Level



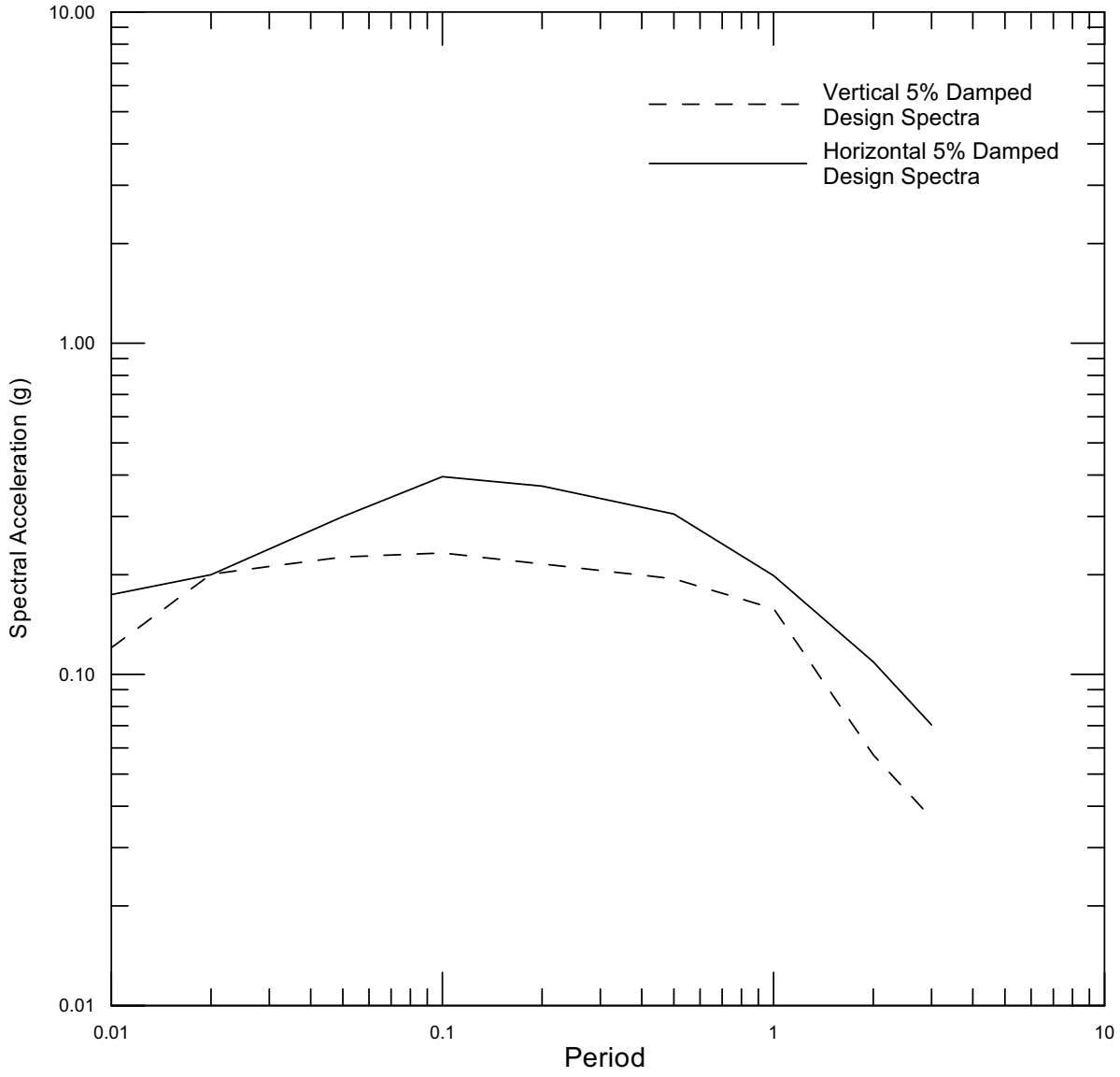

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-18. Mean and Fractile Vertical Seismic Hazard Curves for PGV at the RB



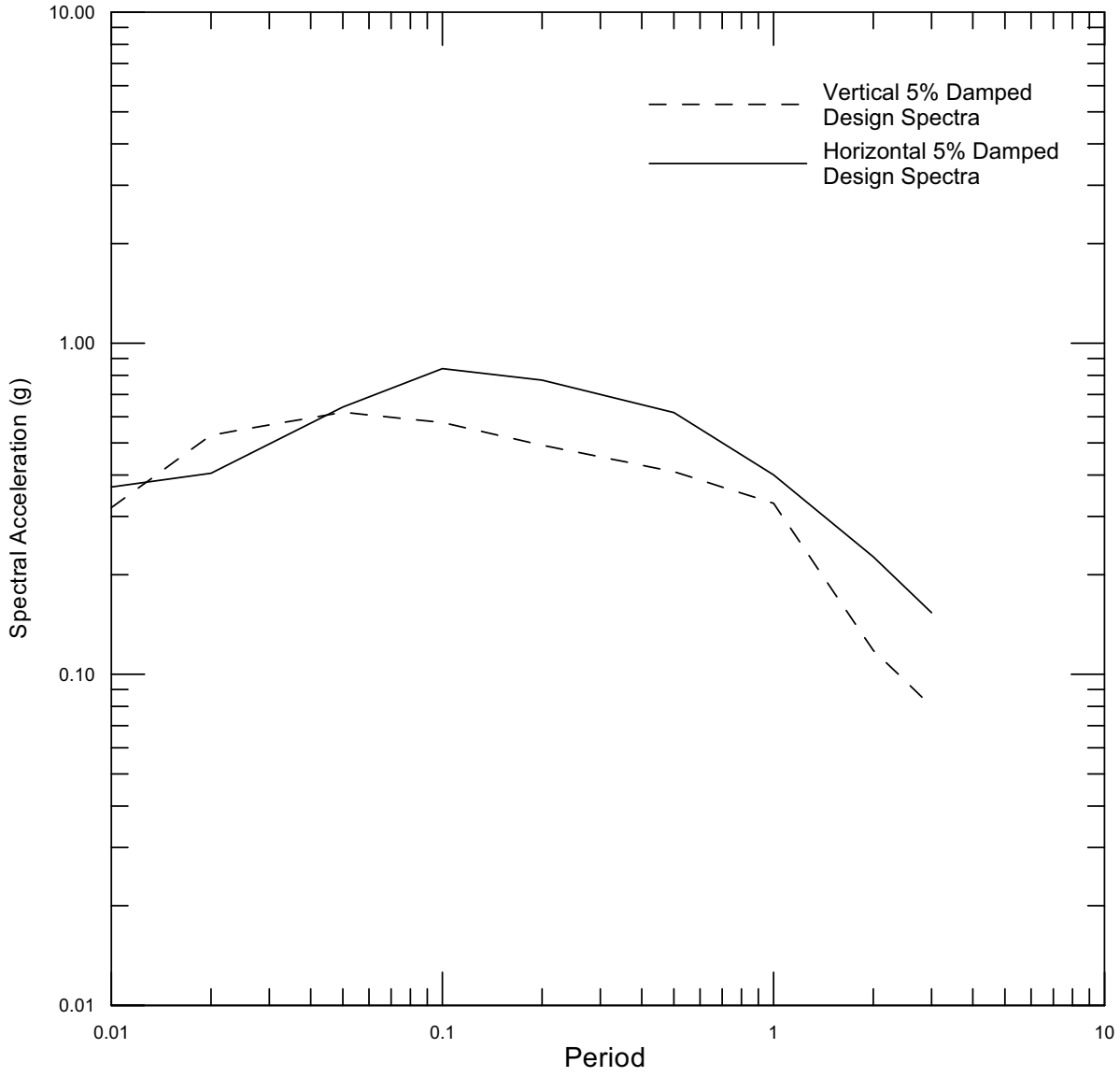

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-19. Horizontal and Vertical UHS at $10^{-3}$ AFE at the RB



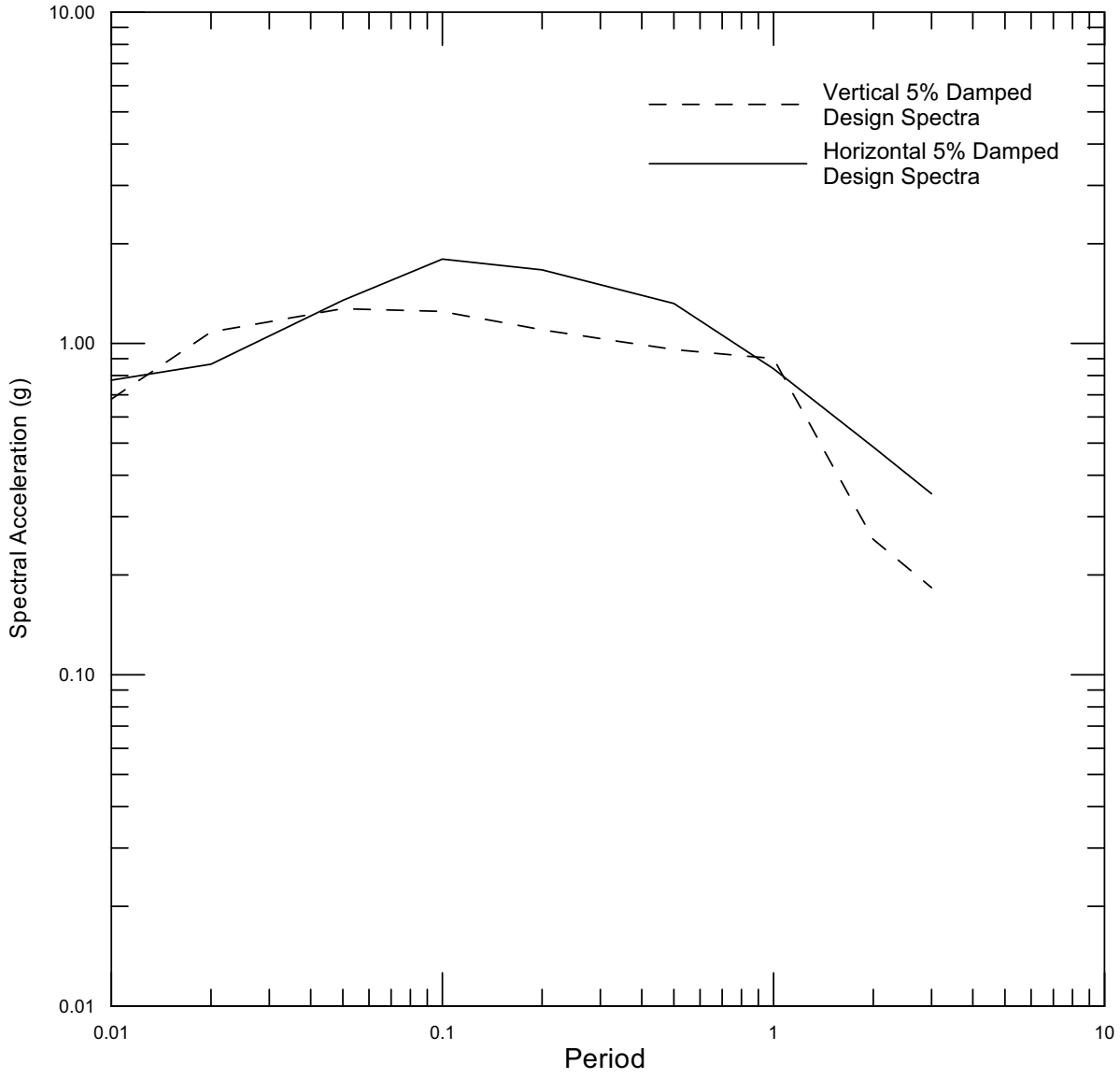

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-20. Horizontal and Vertical UHS at $5x10^{-4}$ AFE at the RB



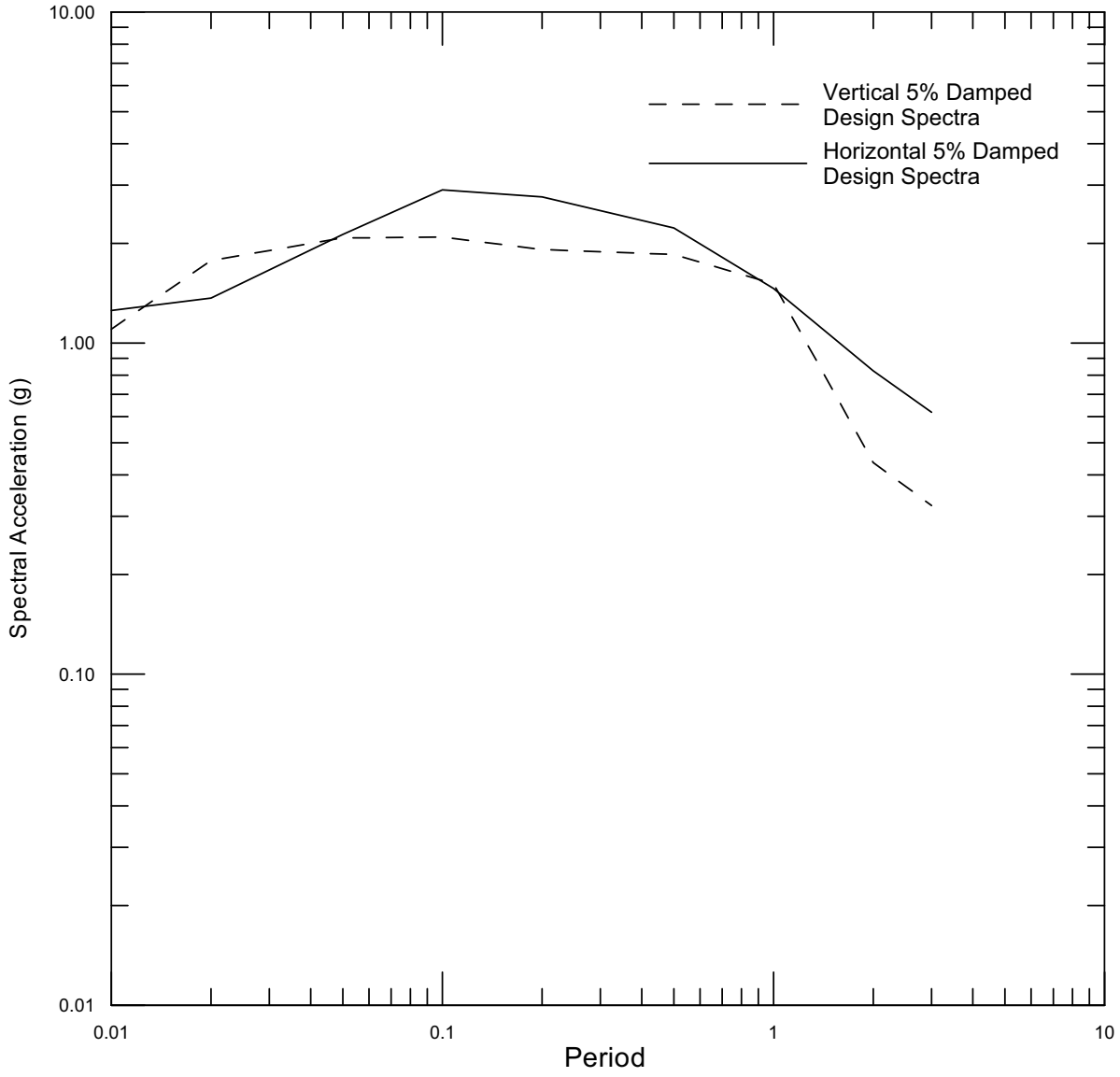

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-21. Horizontal and Vertical UHS at $10^{-4}$ AFE at the RB



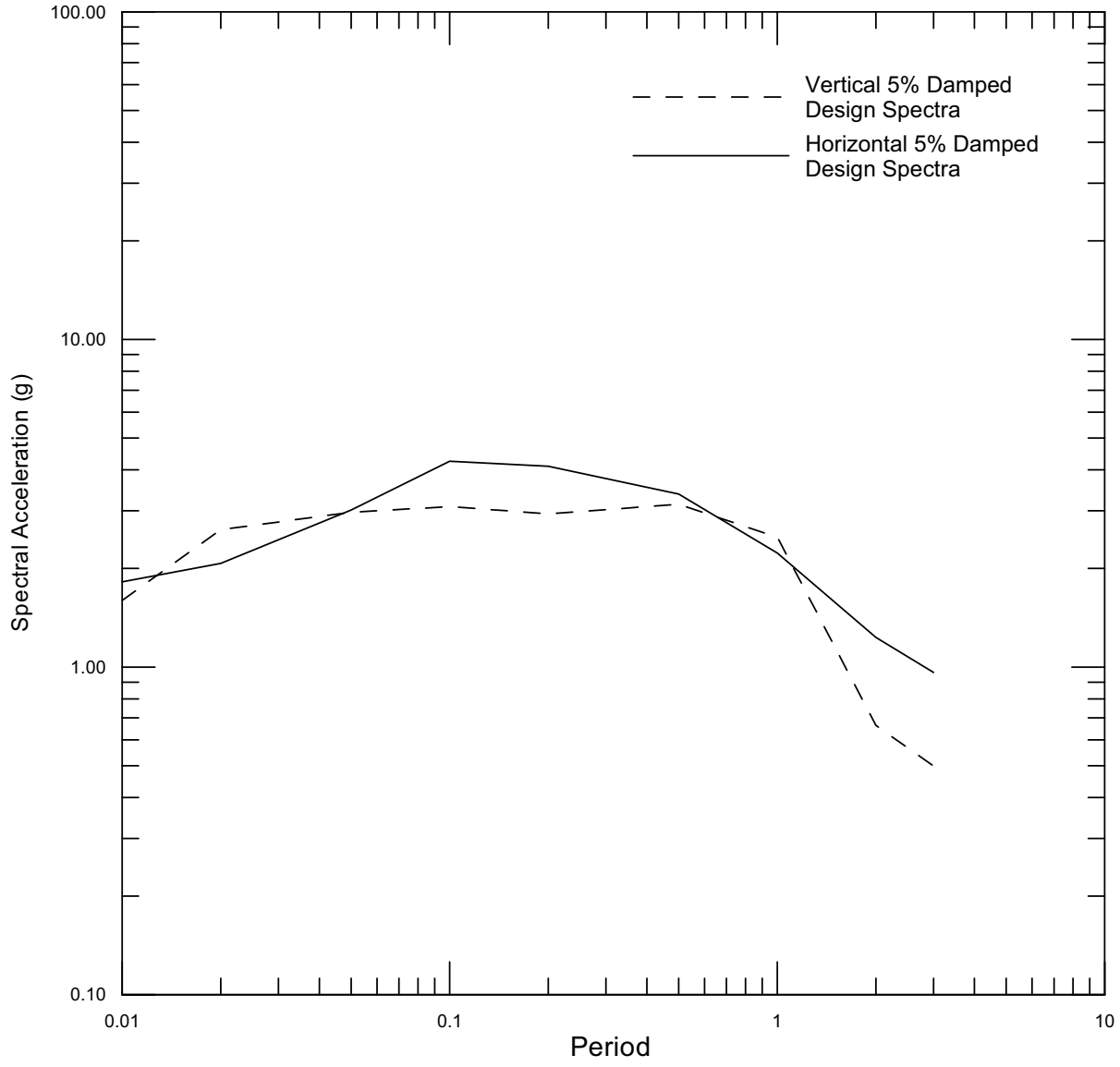

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-22. Horizontal and Vertical UHS at $10^{-5}$ AFE at the RB



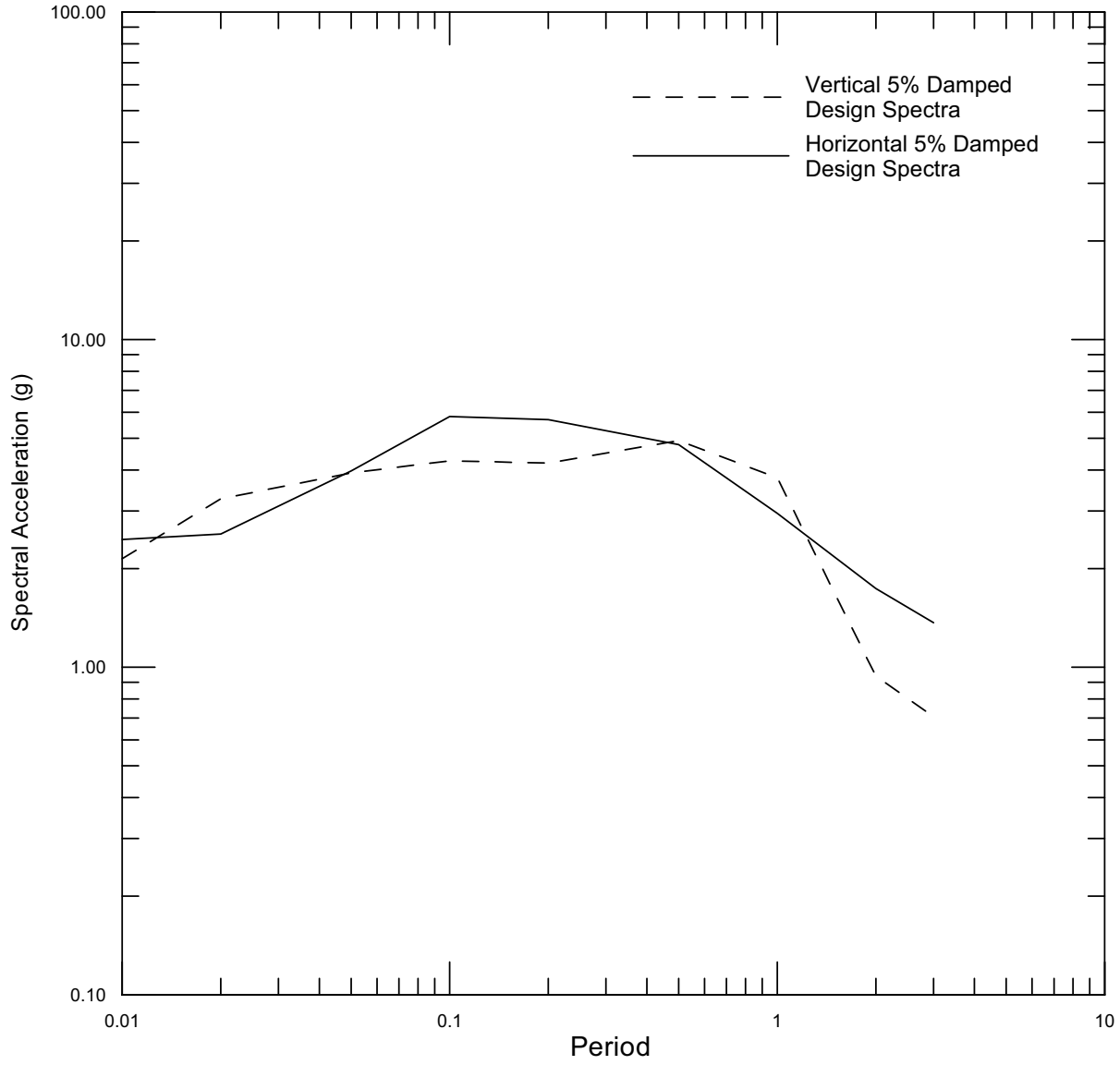

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-23. Horizontal and Vertical UHS at $10^{-6}$ AFE at the RB



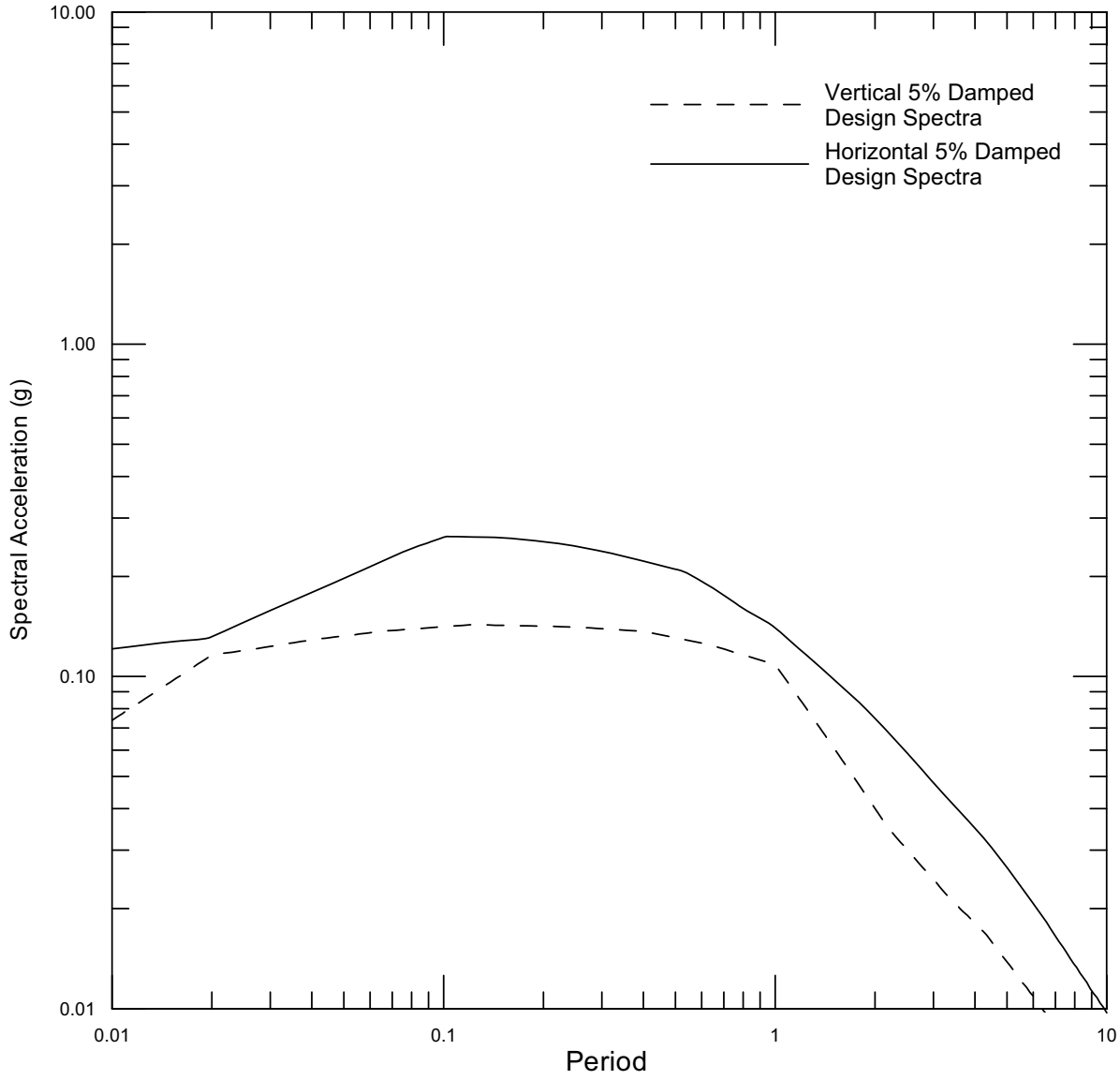

Source: Appendix D, Table D-1, DTN MO0801HCUHSREB.001 [DIRS 184803]

Figure 6.5.3-24. Horizontal and Vertical UHS at $10^{-7}$ AFE at the RB



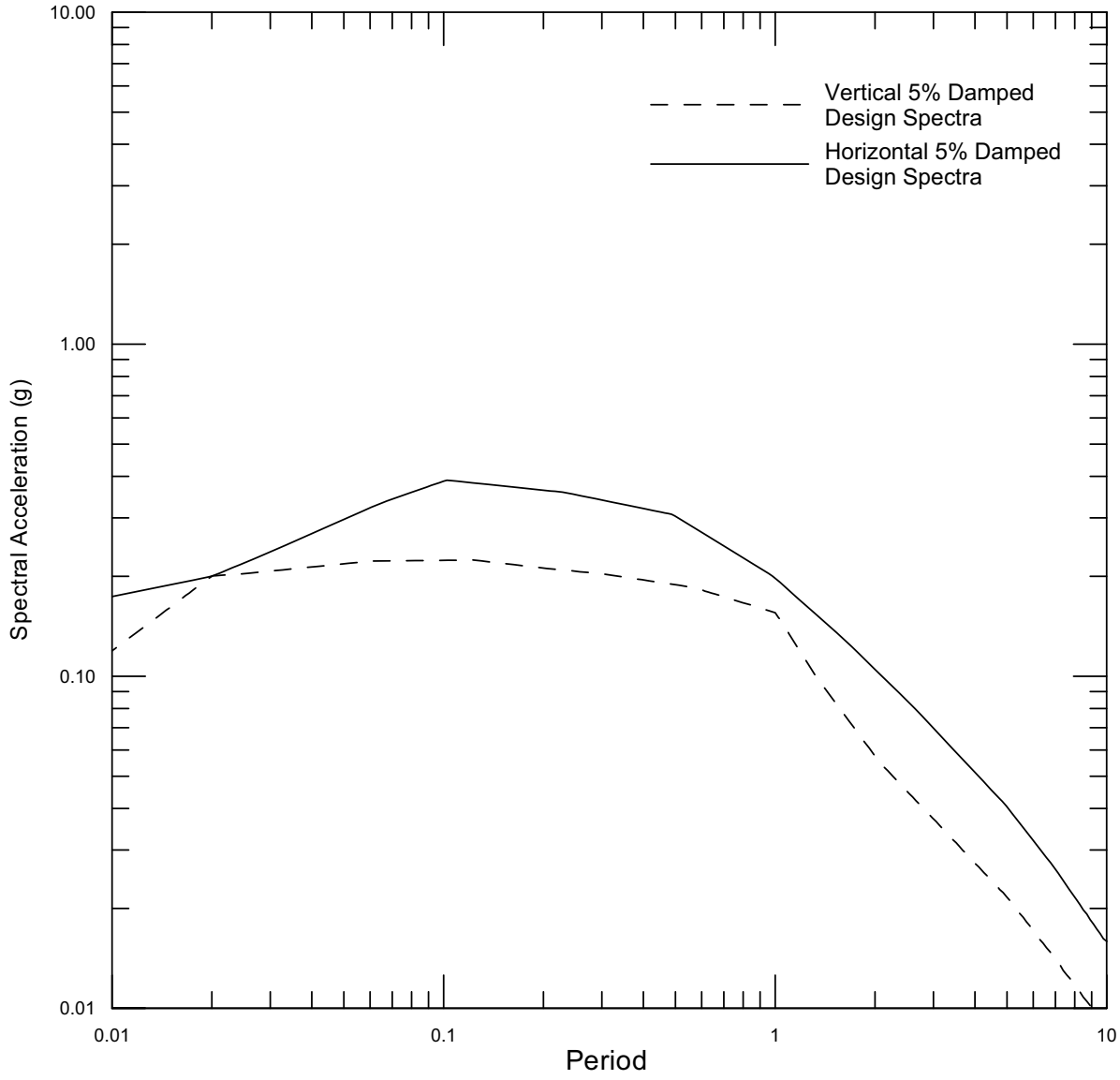

Source: Appendix D, Table D-1

Figure 6.5.3-25. Horizontal and Vertical UHS at $10^{-8}$ AFE at the RB



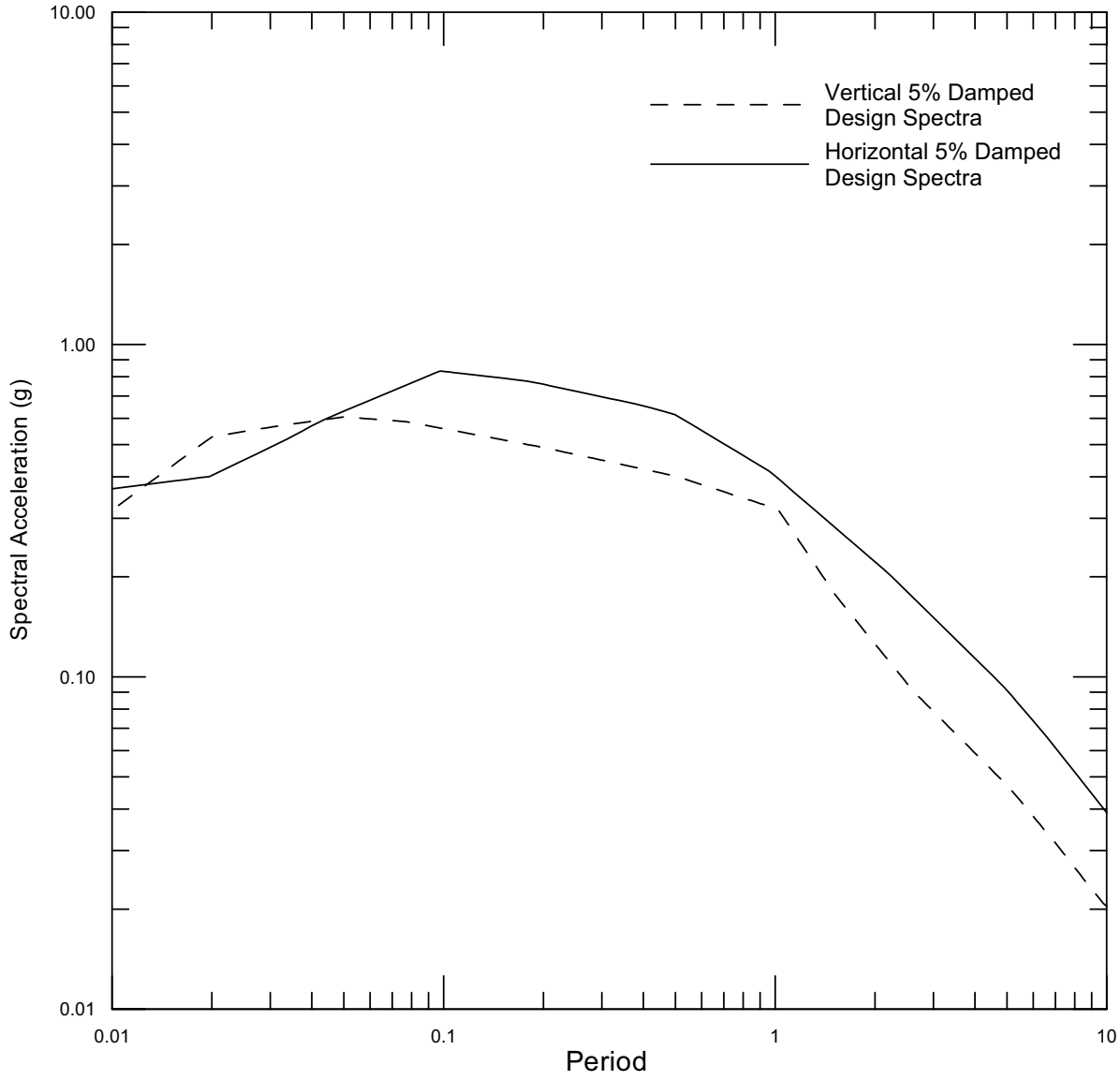

Source: Appendix D, Table D-1

Figure 6.5.3-26. Horizontal and Vertical 5%-Damped Design Spectra at $10^{-3}$ AFE at the RB



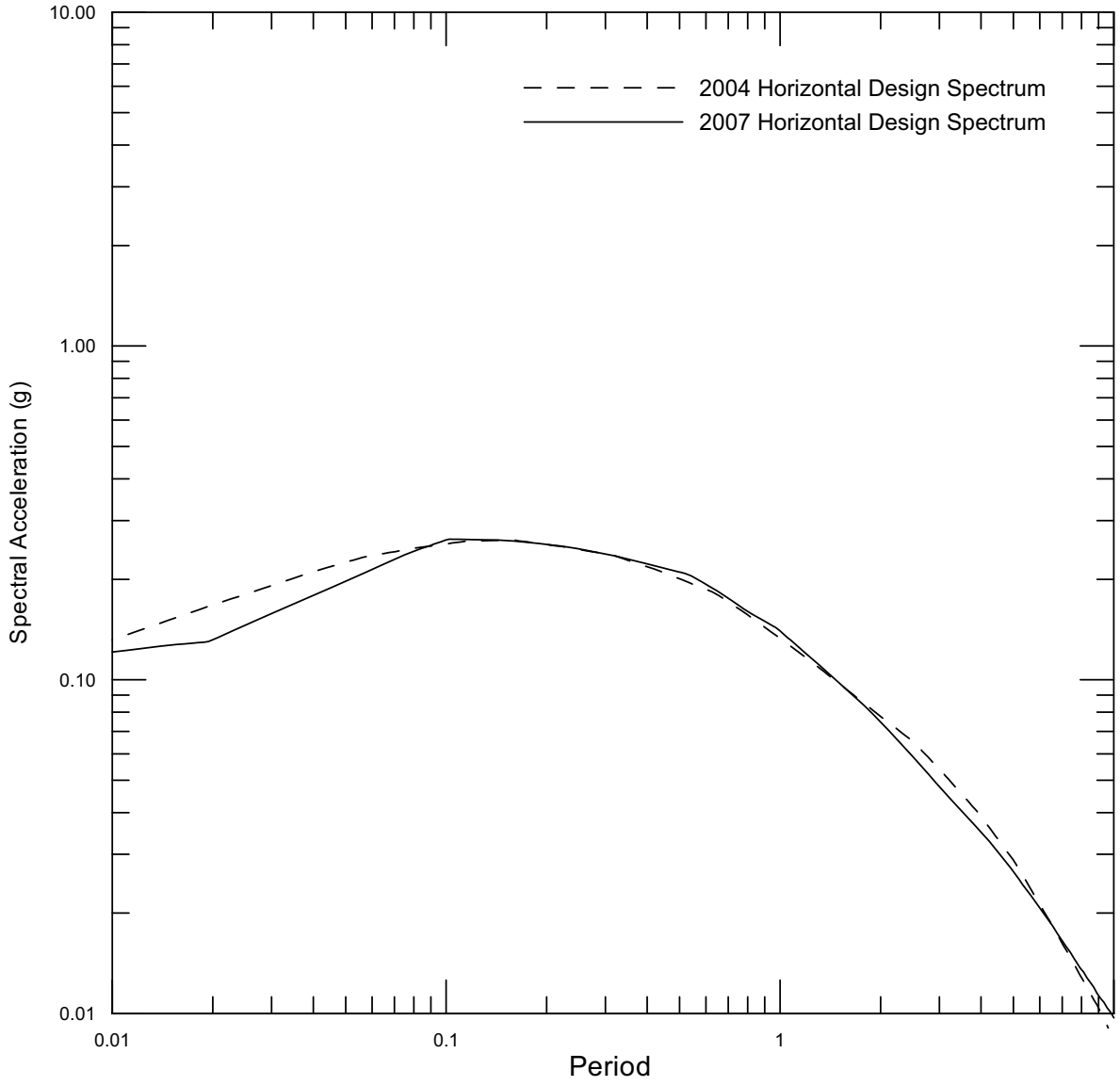

Source: Appendix D, Table D-1

Figure 6.5.3-27. Horizontal and Vertical 5%-Damped Design Spectra at $5x10^{-4}$ AFE at the RB



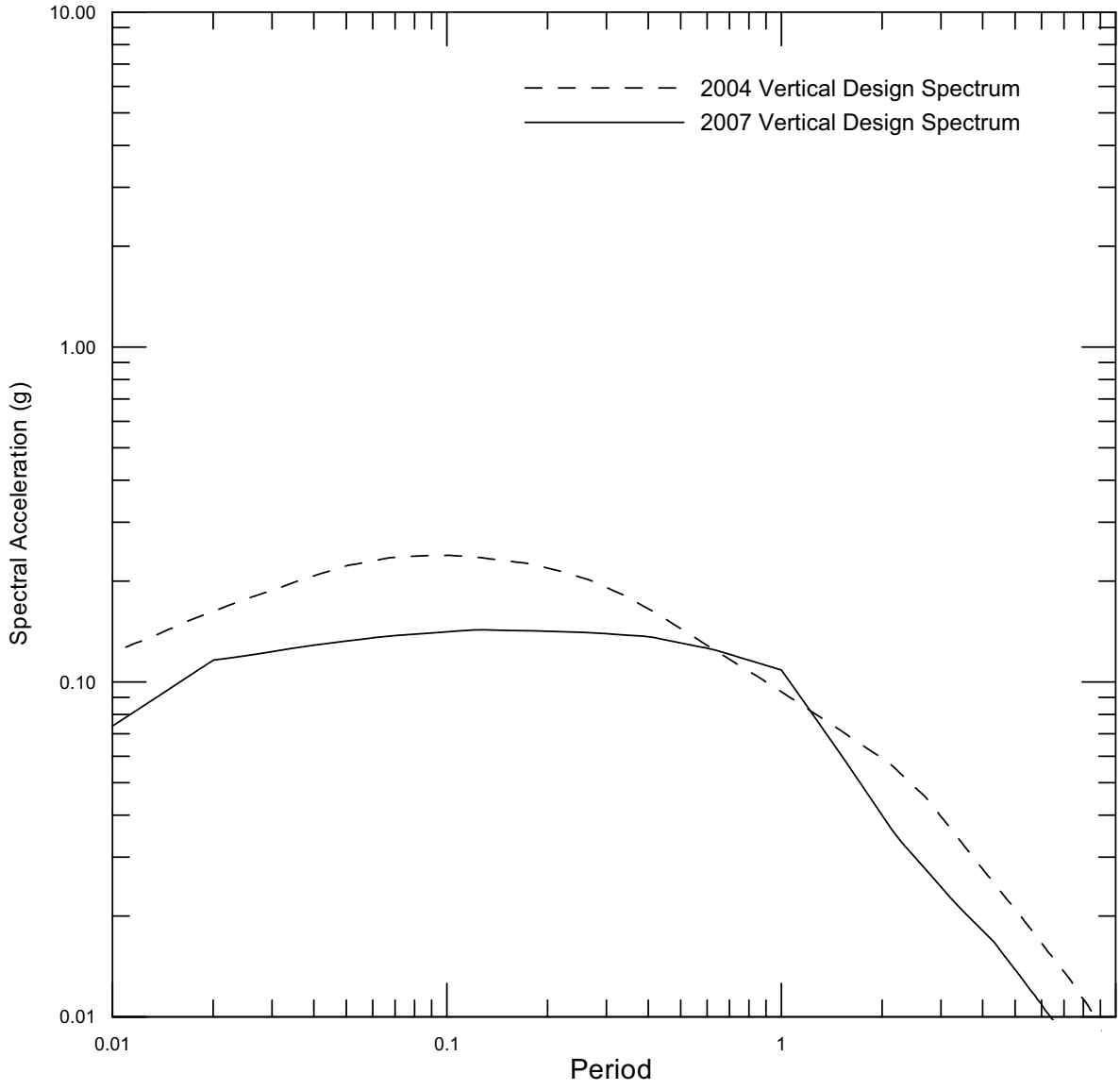

Source: Appendix D, Table D-1

Figure 6.5.3-28. Horizontal and Vertical 5%-Damped Design Spectra at $10^{-4}$ AFE at the RB



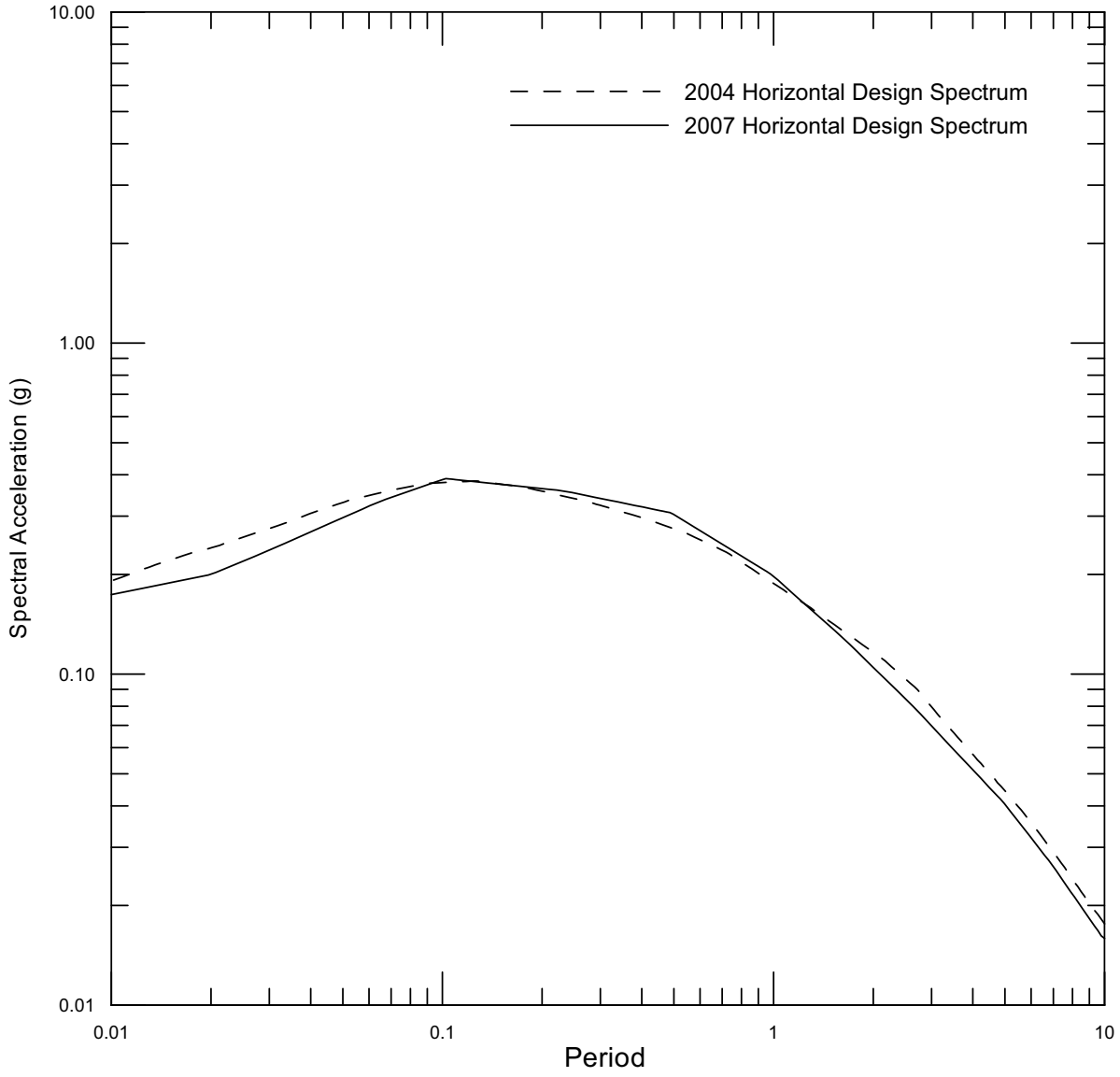

Source: Appendix D, Table D-1, DTN MO0405SDSTPNTB.001 [DIRS 169851]

Figure 6.5.3-29. Comparison of 2004 and 2007 Horizontal RB Design Spectra at $10^{-3}$ AFE



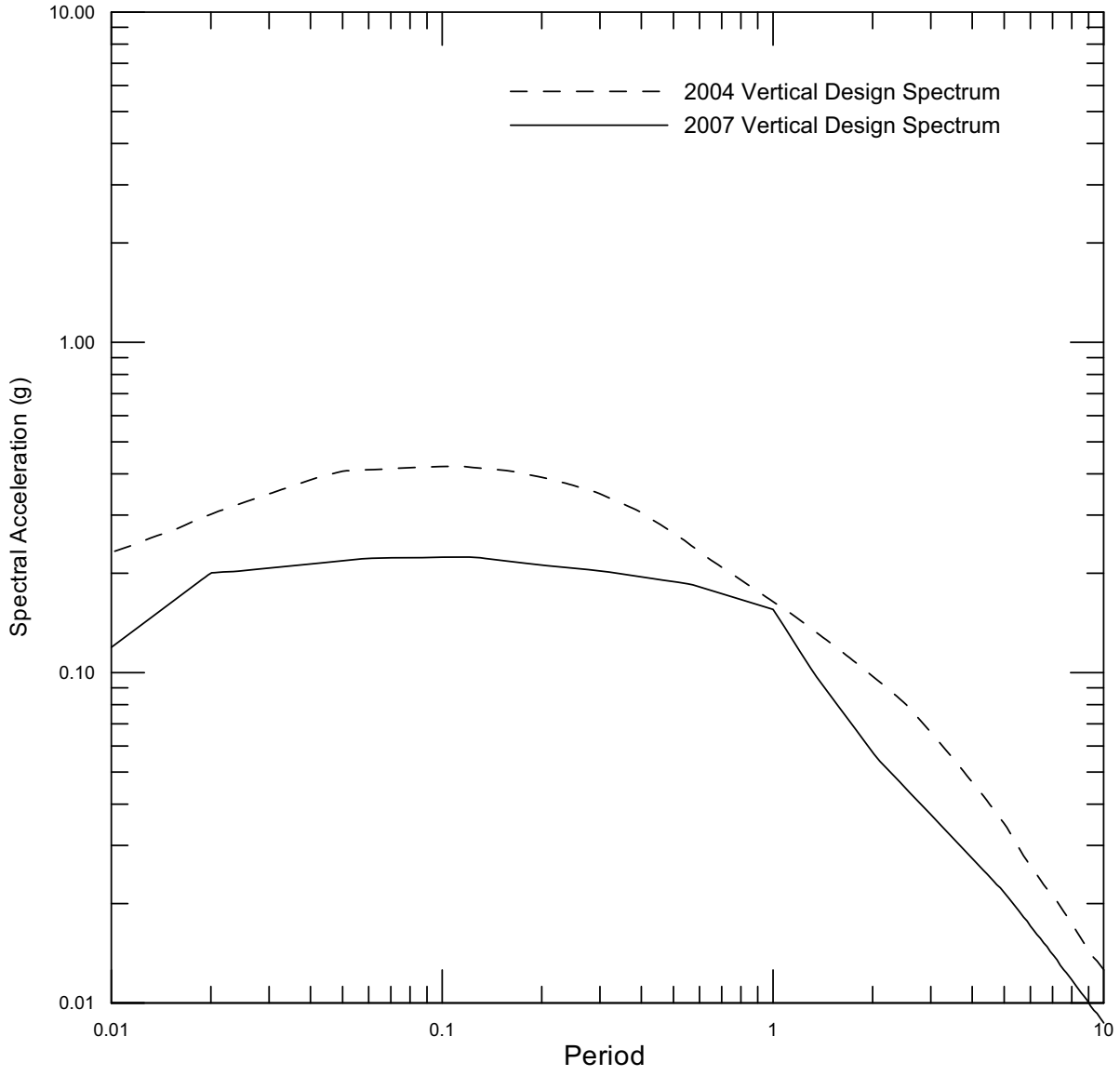

Source: Appendix D, Table D-1, DTN MO0405SDSTPNTB.001 [DIRS 169851]

Figure 6.5.3-30. Comparison of 2004 and 2007 Vertical RB Design Spectra at $10^{-3}$ AFE



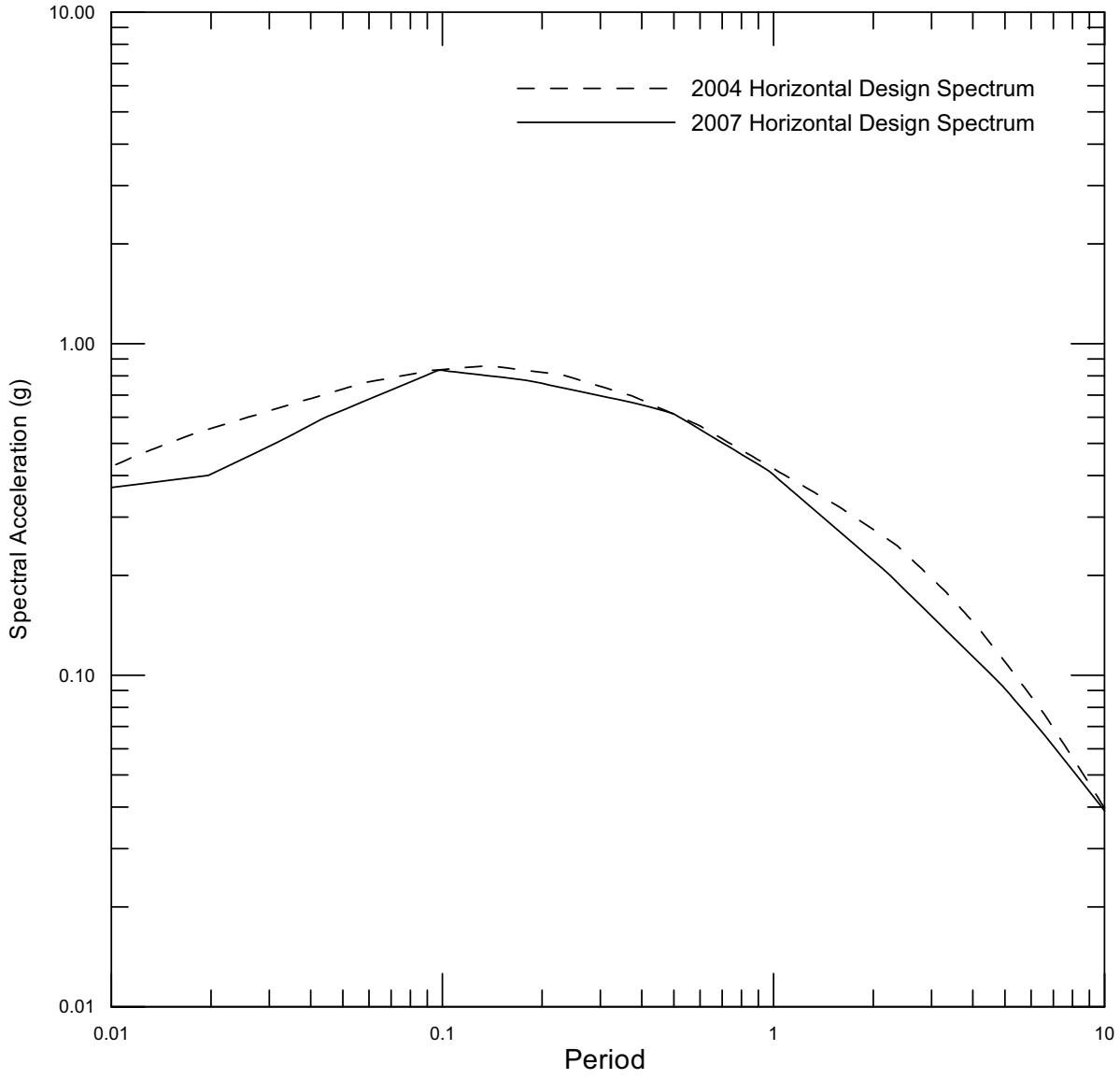

Source: Appendix D, Table D-1, DTN MO0407SDARS104.001 [DIRS 170683]

Figure 6.5.3-31. Comparison of 2004 and 2007 Horizontal RB Design Spectra at $5 \times 10^{-4}$ AFE



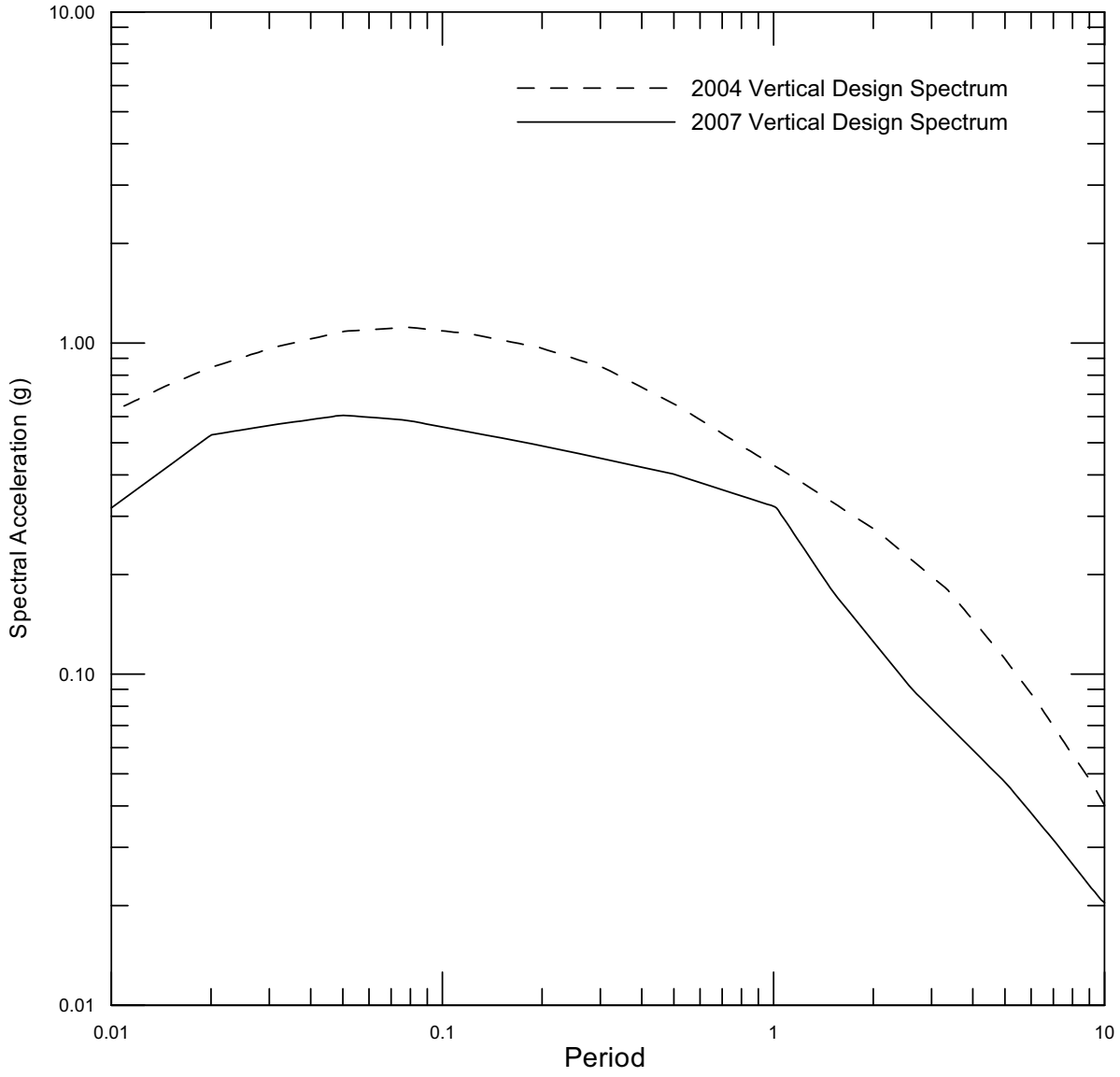

Source: Appendix D, Table D-1, DTN MO0407SDARS104.001 [DIRS 170683]

Figure 6.5.3-32. Comparison of 2004 and 2007 Vertical RB Design Spectra at $5 \times 10^{-4}$ AFE



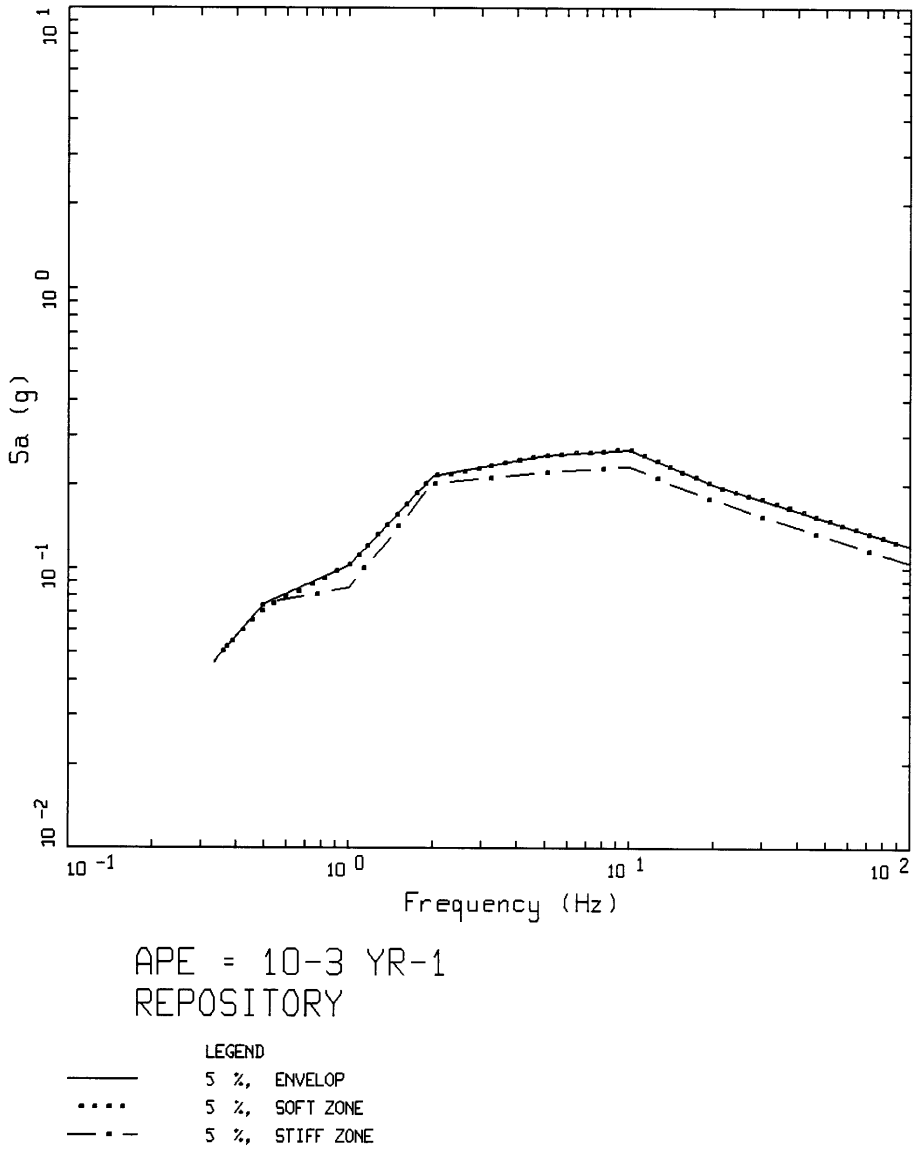

Source: Appendix D, Table D-1, DTN MO0306SDSAVDTH.000 [DIRS 164033]

Figure 6.5.3-33. Comparison of 2004 and 2007 Horizontal RB Design Spectra $10^{-4}$ AFE



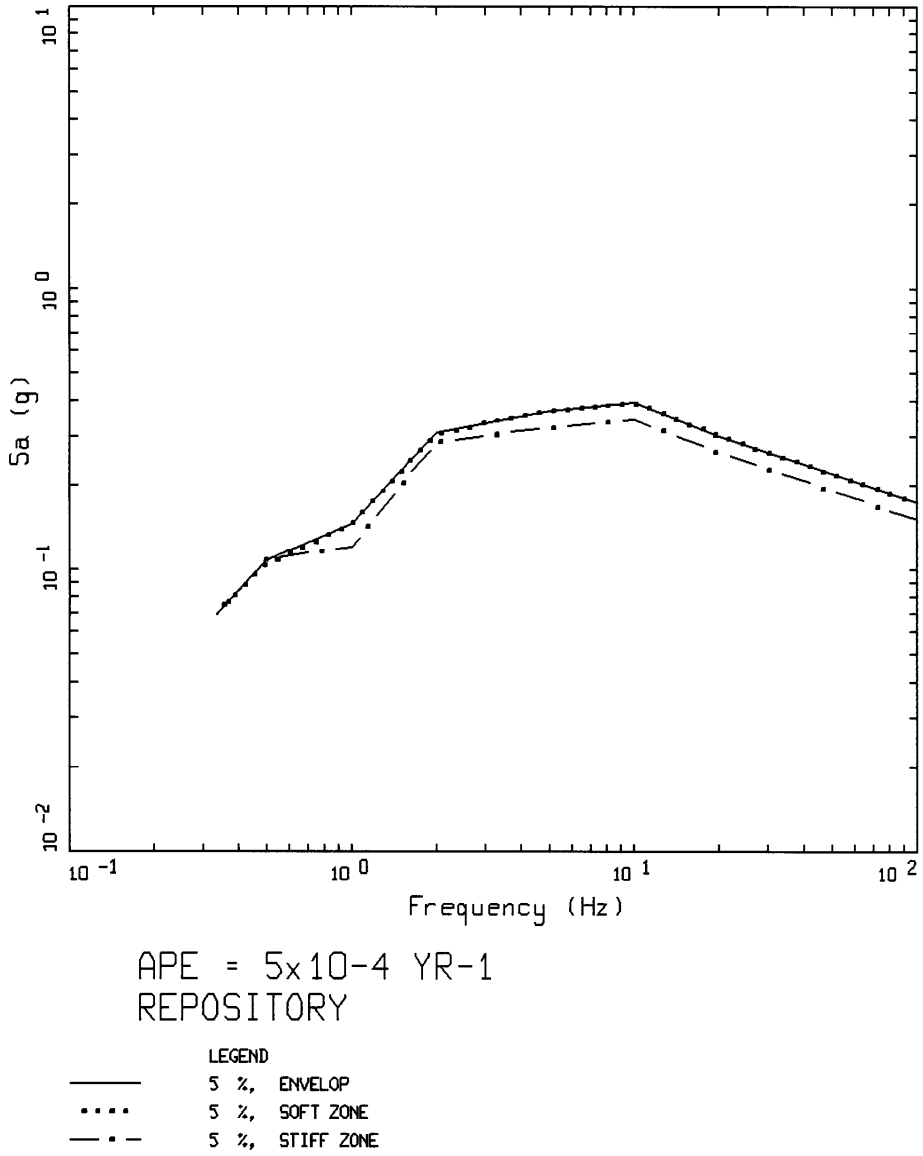

Source: Appendix D, Table D-1, DTN MO0306SDSAVDTH.000 [DIRS 164033]

Figure 6.5.3-34. Comparison of 2004 and 2007 Vertical RB Design Spectra $10^{-4}$ AFE



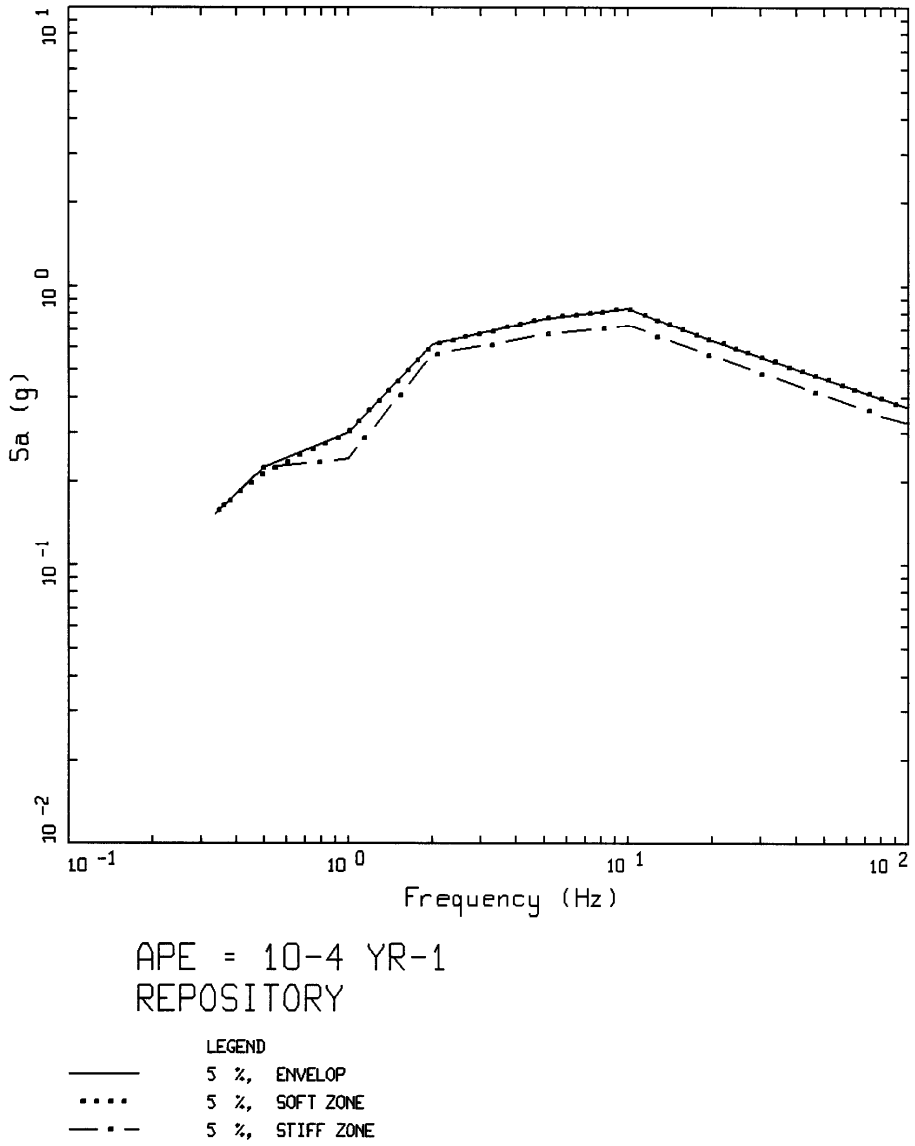

Source: Appendix D, Table D-1

Figure 6.5.3-35. Comparison of Mean UHS for $10^{-3}$ AFE Computed for the Stiff and Soft RB Profiles



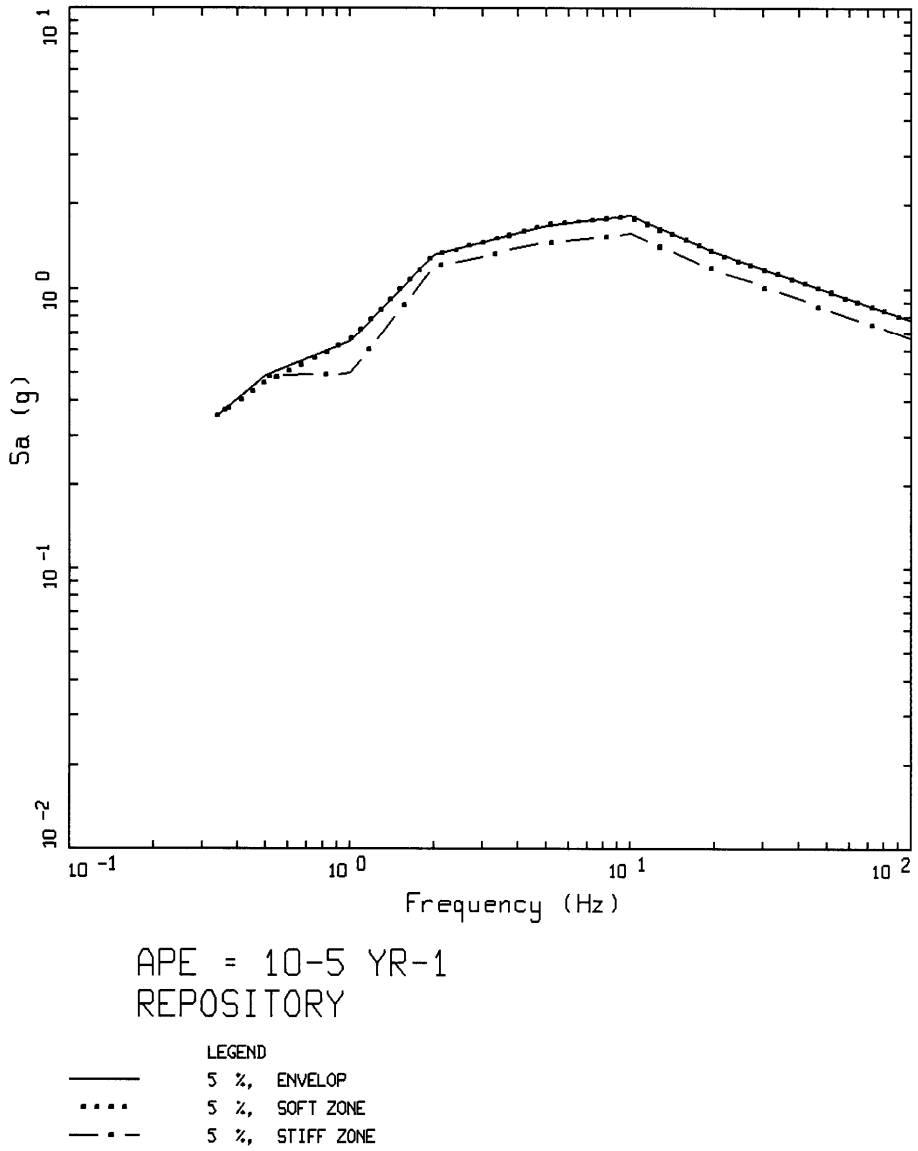

Source: Appendix D, Table D-1

Figure 6.5.3-36. Comparison of Mean UHS for $5x10^{-4}$ AFE Computed for the Stiff and Soft RB Profiles



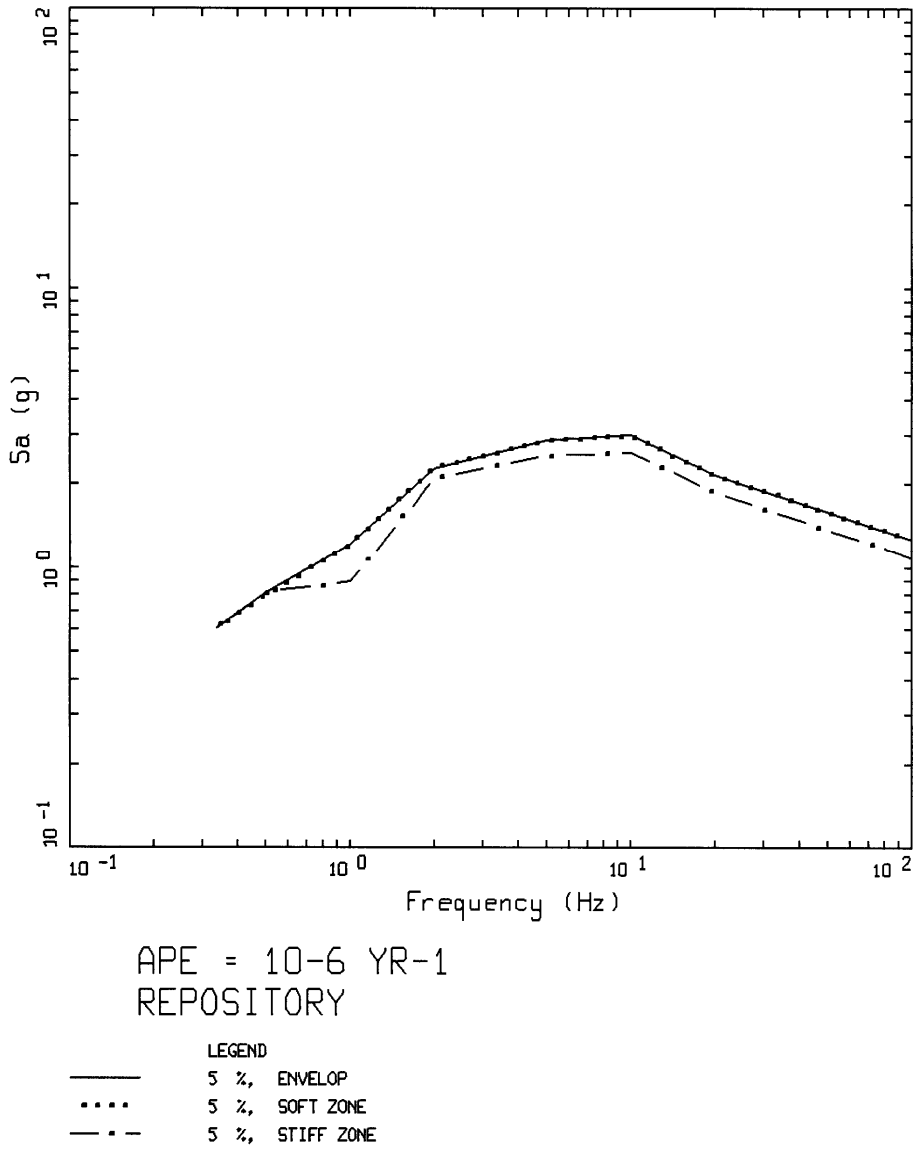

Source: Appendix D, Table D-1

Figure 6.5.3-37. Comparison of Mean UHS for $10^{-4}$ AFE Computed for the Stiff and Soft RB Profiles



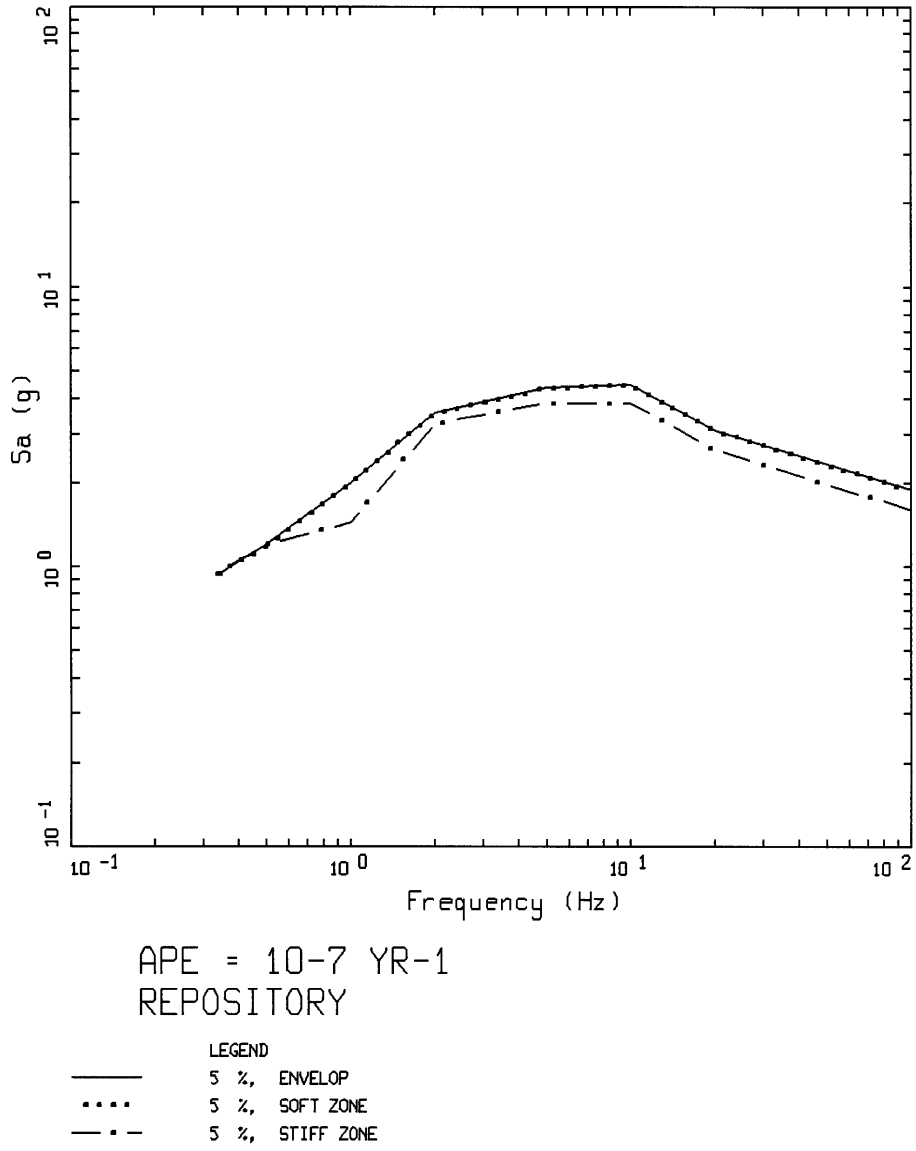

Source: Appendix D, Table D-1

Figure 6.5.3-38. Comparison of Mean UHS for $10^{-5}$ AFE Computed for the Stiff and Soft RB Profiles



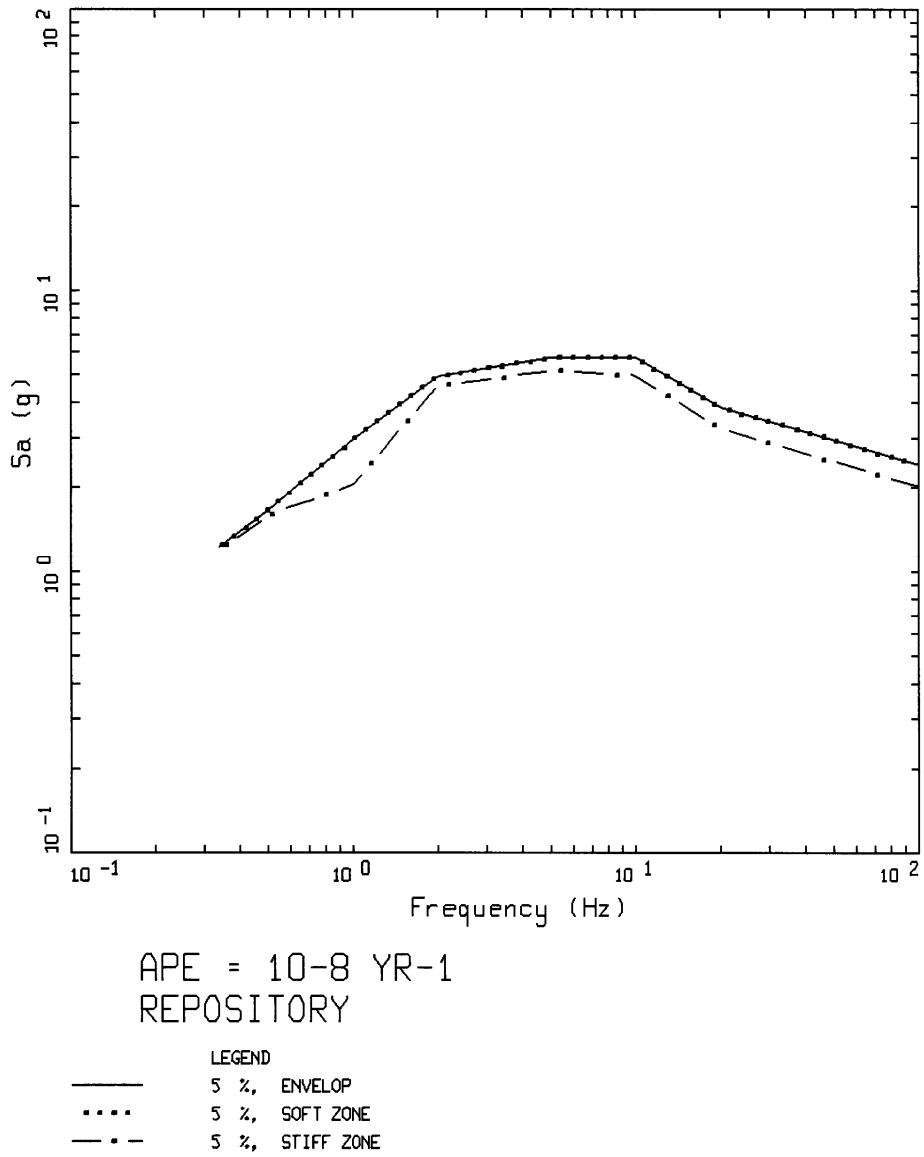

Source: Appendix D, Table D-1

Figure 6.5.3-39. Comparison of Mean UHS for $10^{-6}$ AFE Computed for the Stiff and Soft RB Profiles



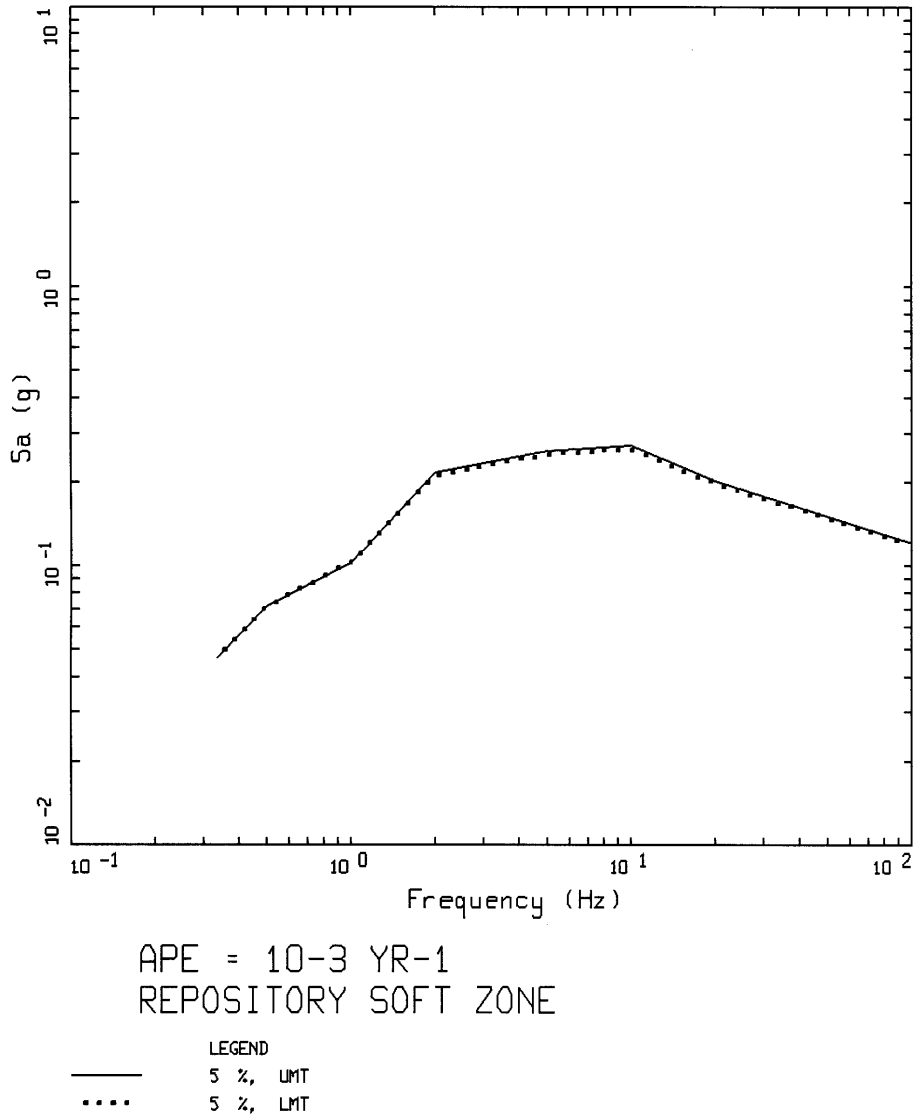

Source: Appendix D, Table D-1

Figure 6.5.3-40. Comparison of Mean UHS for $10^{-7}$ AFE Computed for the Stiff and Soft RB Profiles



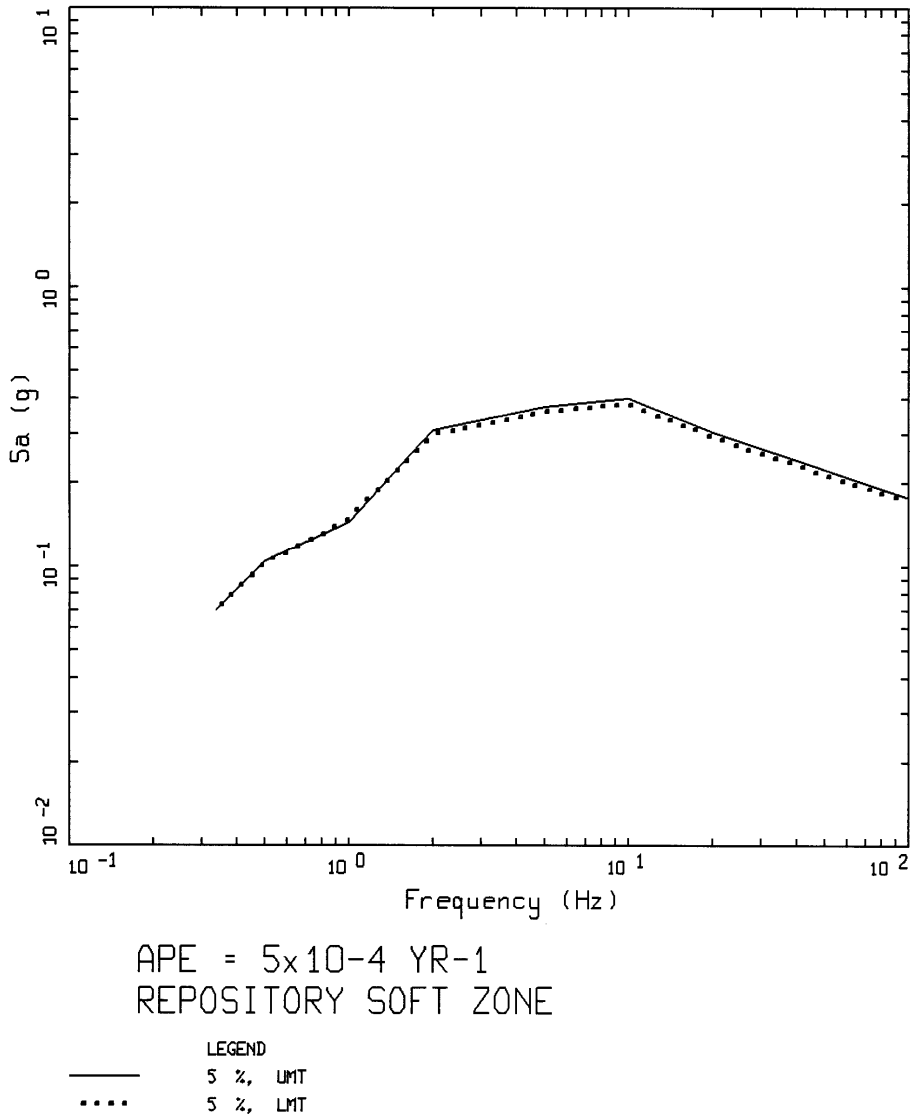

Source: Appendix D, Table D-1

Figure 6.5.3-41. Comparison of Mean UHS for $10^{-8}$ AFE Computed for the Stiff and Soft RB Profiles



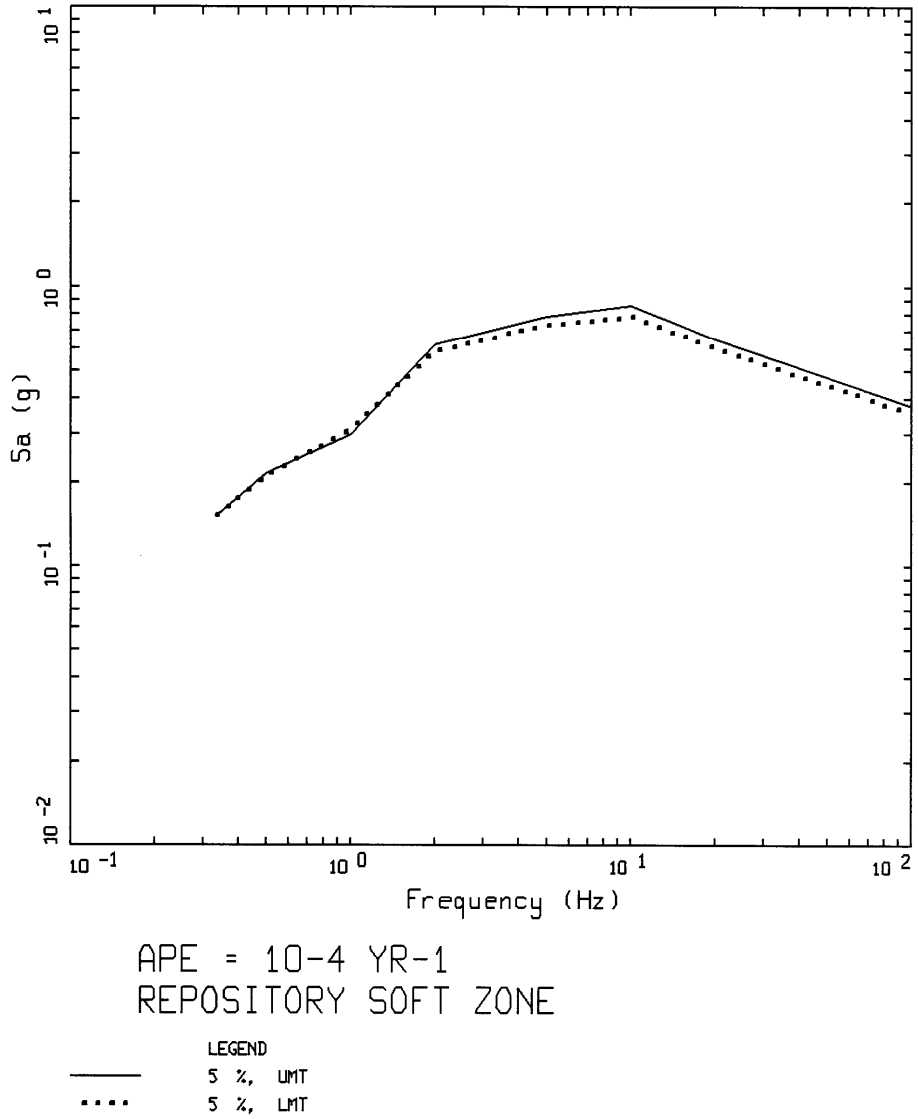

Source: Appendix D, Table D-1

Figure 6.5.3-42. Comparison of Mean UHS for $10^{-3}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



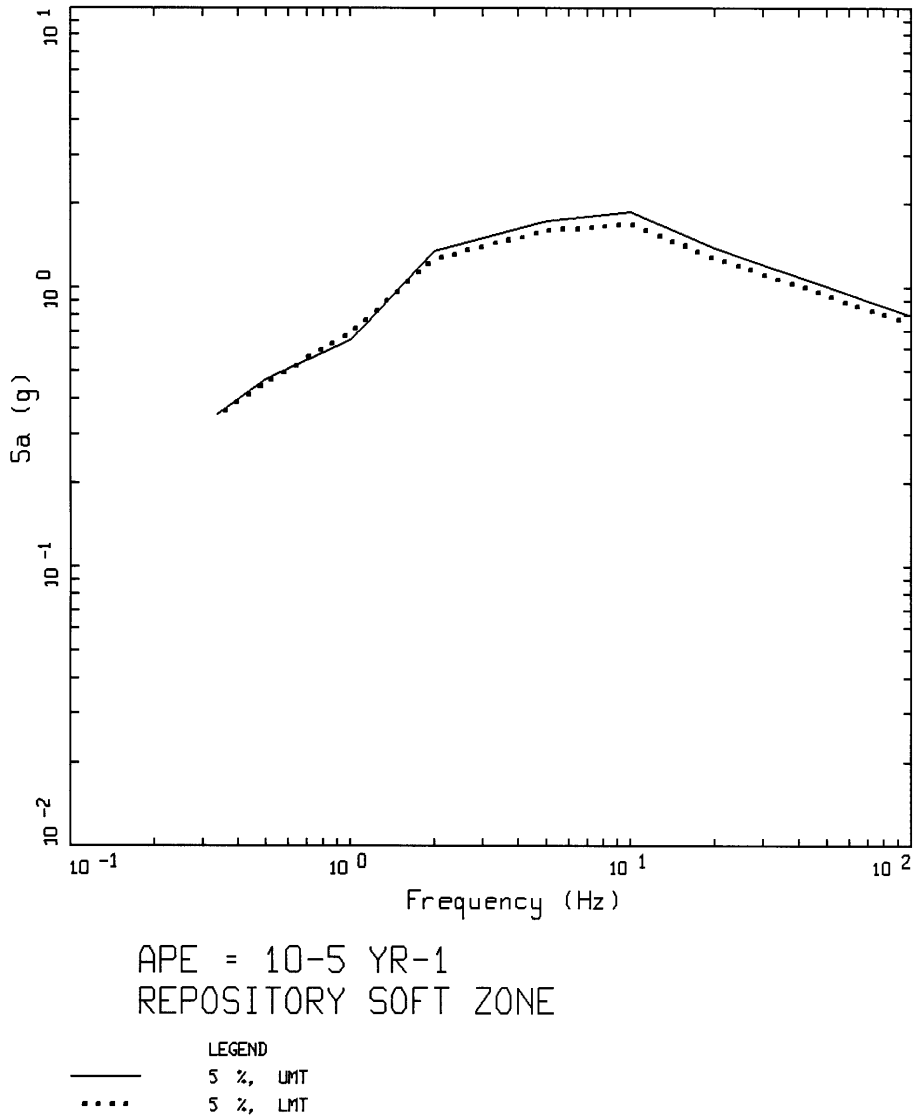

Source: Appendix D, Table D-1

Figure 6.5.3-43. Comparison of Mean UHS for 5x10 $^{-4}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



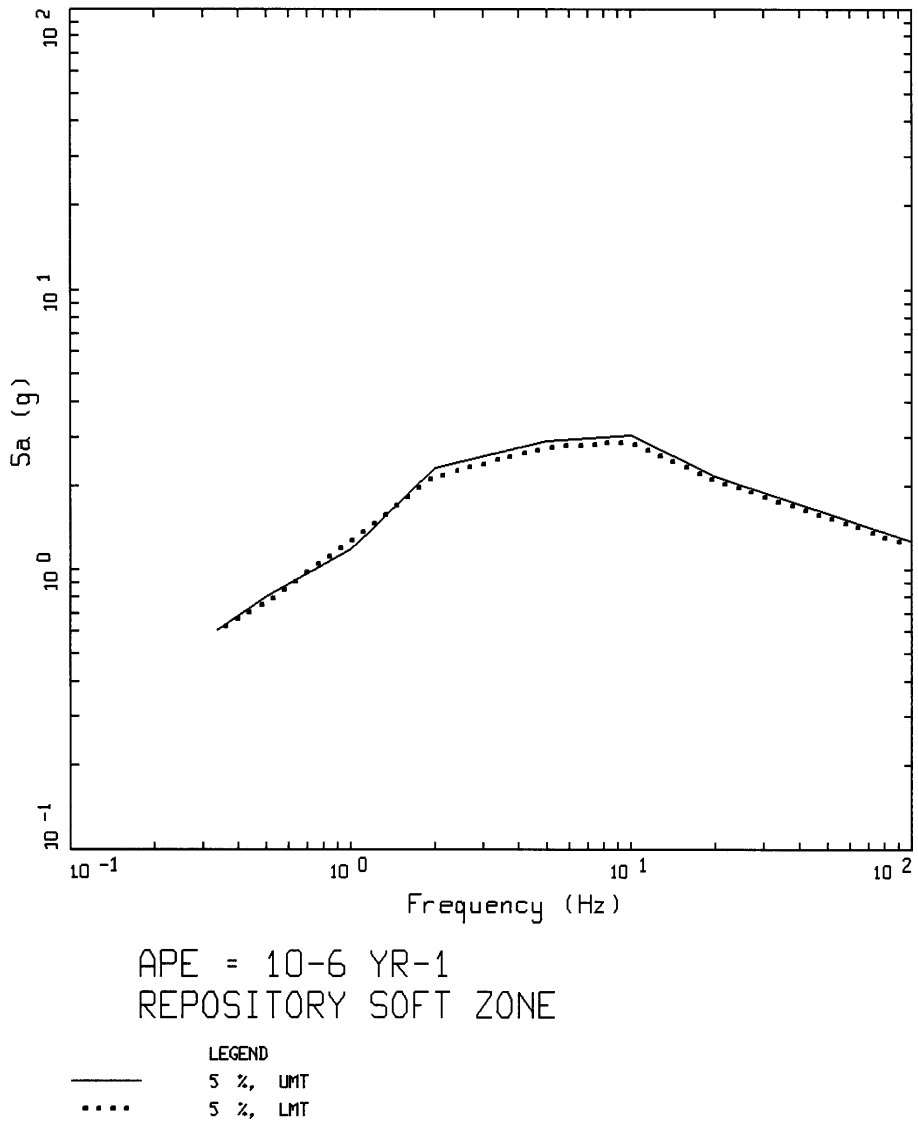

Source: Appendix D, Table D-1

Figure 6.5.3-44. Comparison of Mean UHS for $10^{-4}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



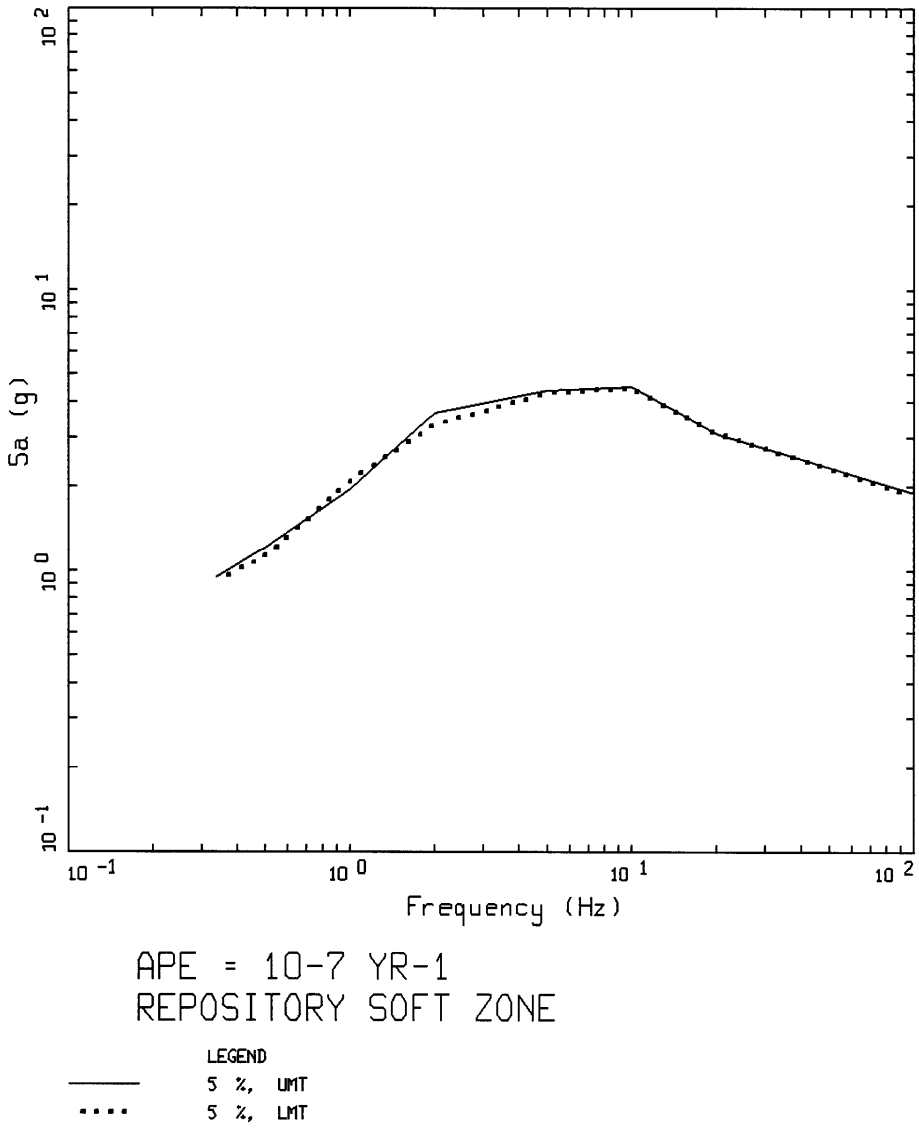

Source: Appendix D, Table D-1

Figure 6.5.3-45. Comparison of Mean UHS for $10^{-5}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



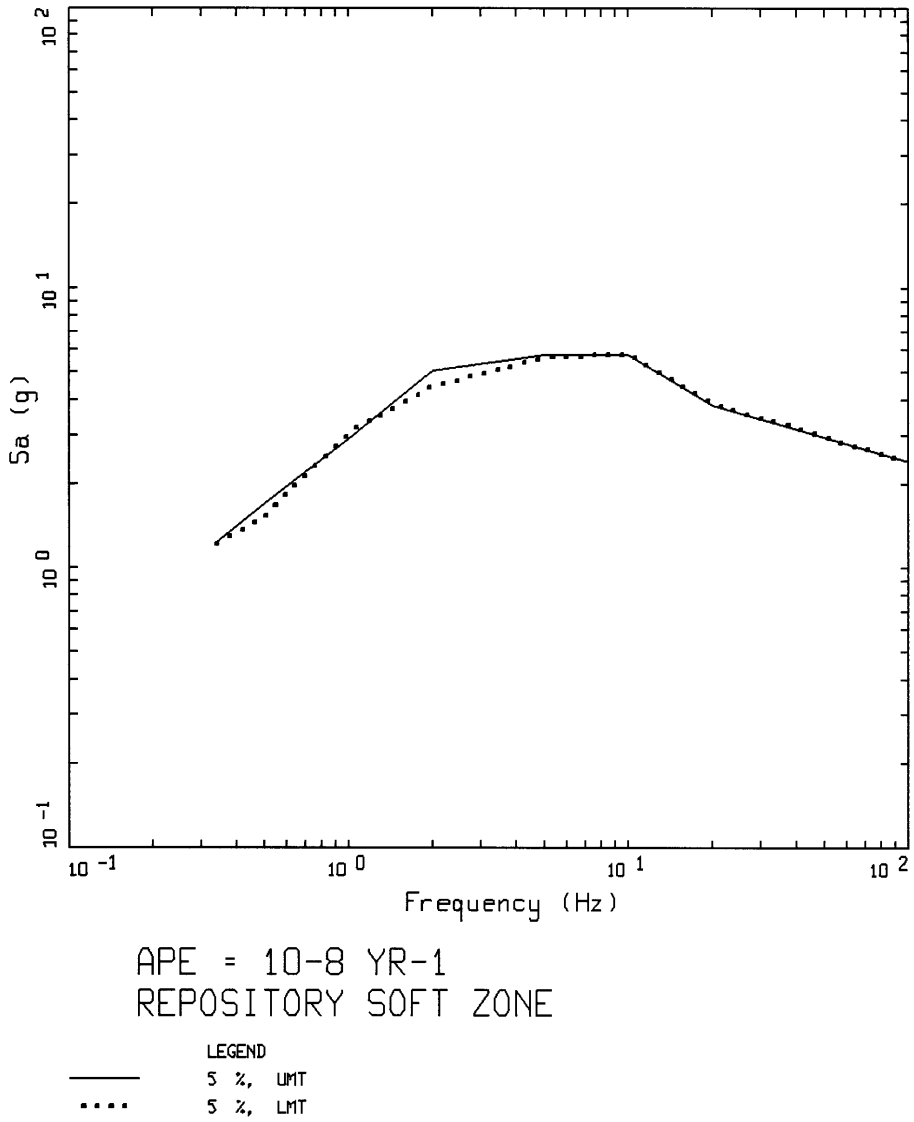

Source: Appendix D, Table D-1

Figure 6.5.3-46. Comparison of Mean UHS for $10^{-6}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



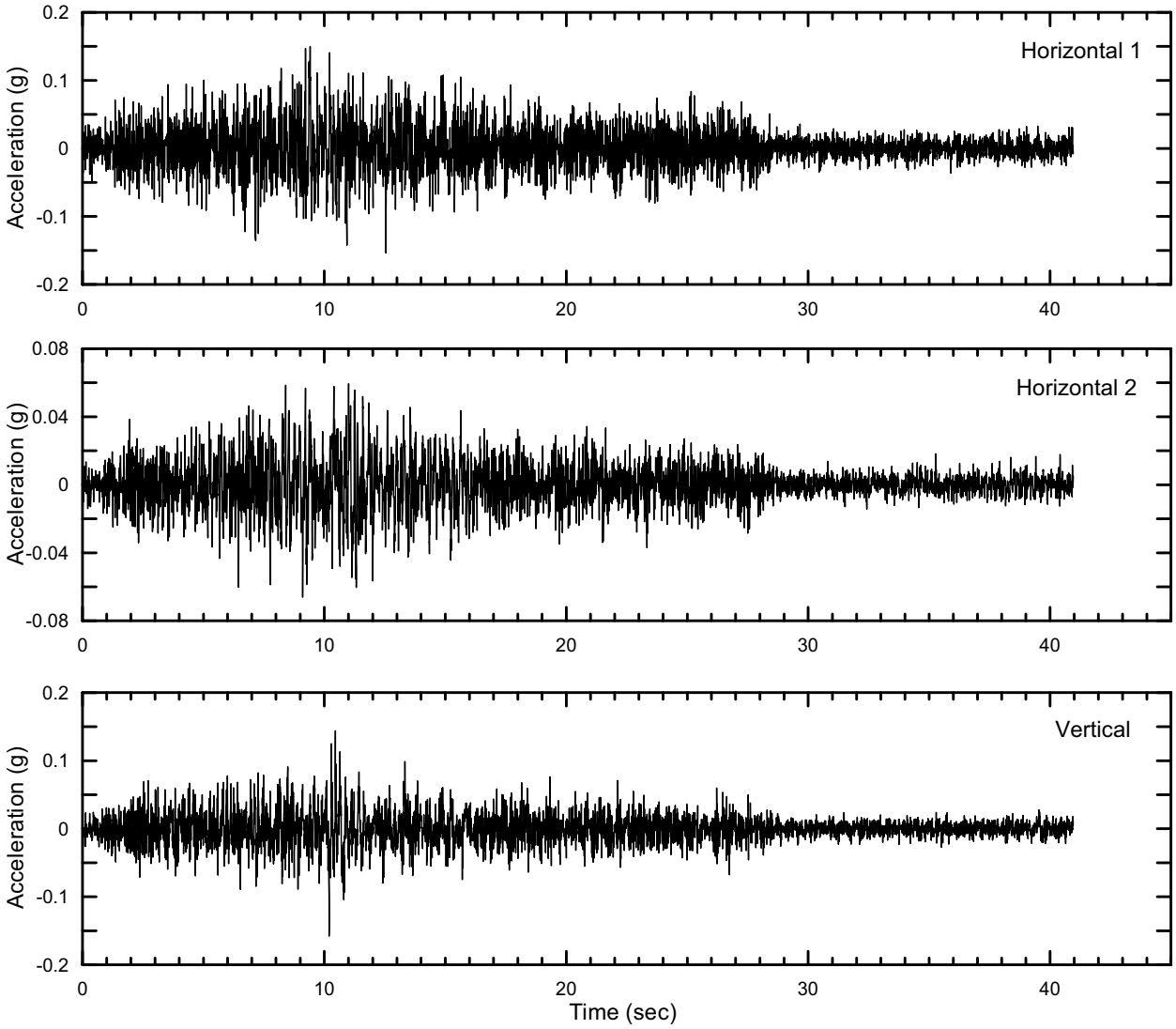

Source: Appendix D, Table D-1

Figure 6.5.3-47. Comparison of Mean UHS for $10^{-7}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



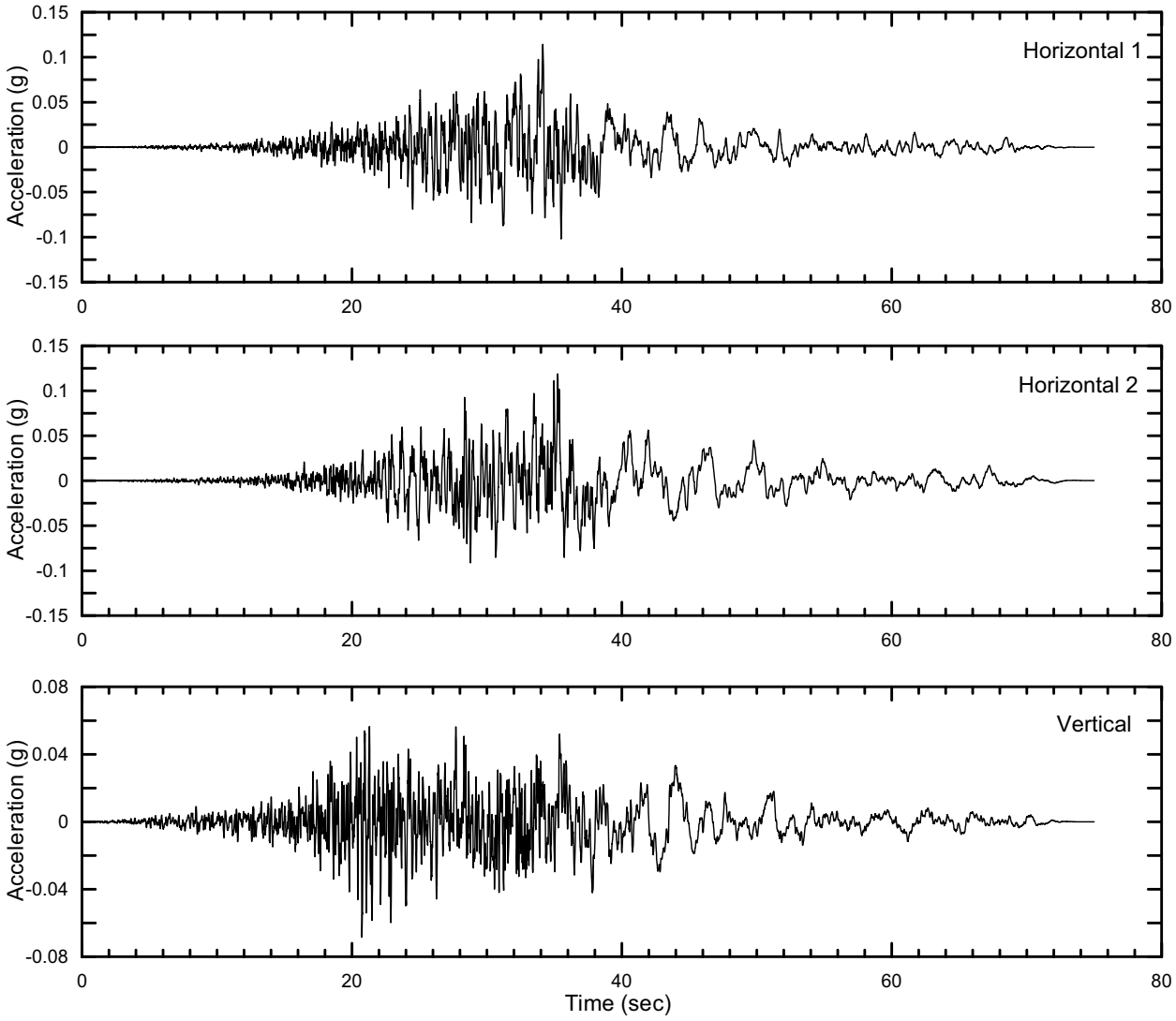

Source: Appendix D, Table D-1

Figure 6.5.3-48. Comparison of Mean UHS for $10^{-8}$ AFE Computed for the UMT and LMT G/Gmax and Hysteretic Damping Curves Using the RB Soft Profile



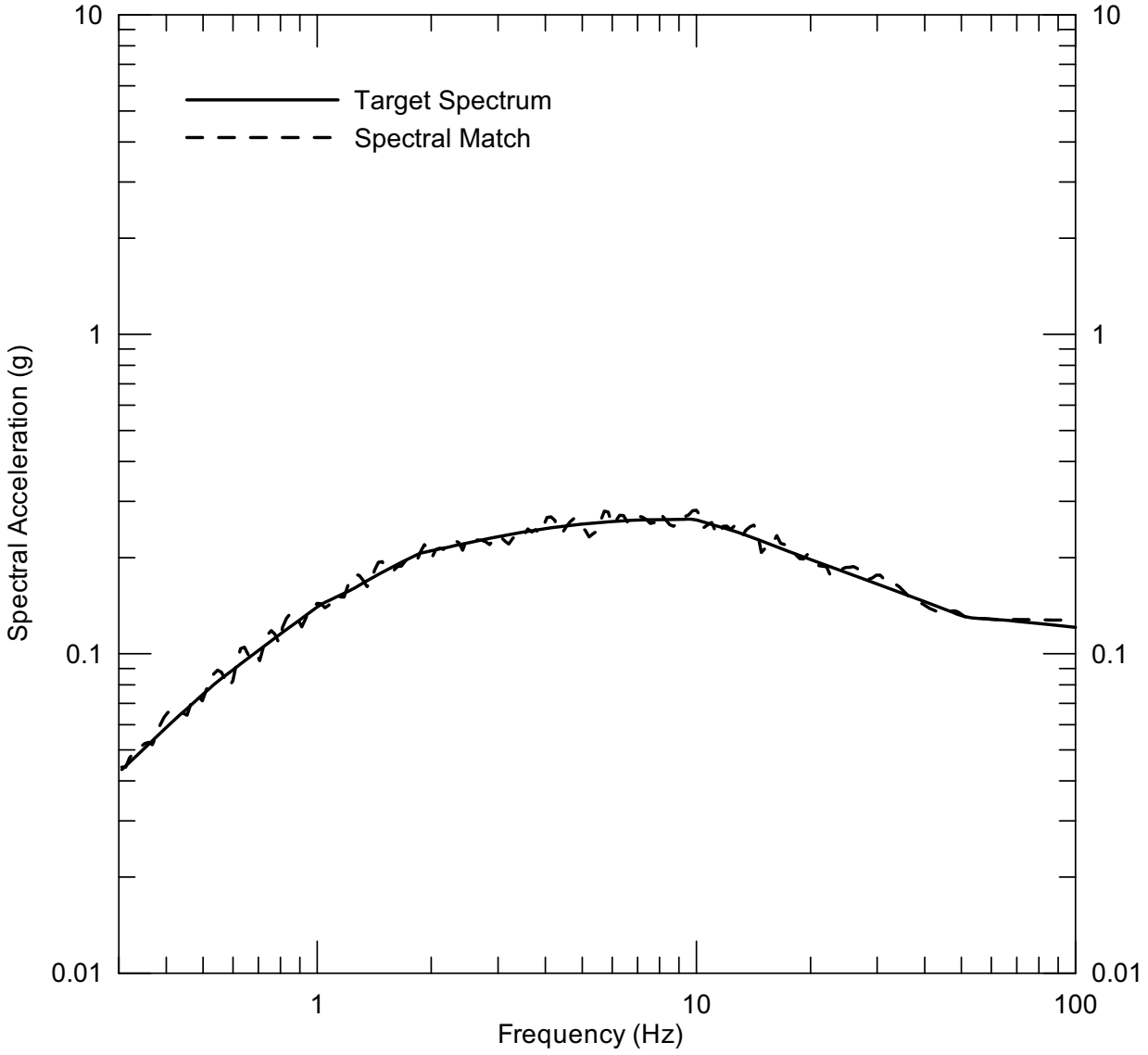

Source: Appendix D, Table D-1

Figure 6.5.3-49. Seed Time Histories, Set #1 at $10^{-3}$ and $5x10^{-4}$ AFE at the RB



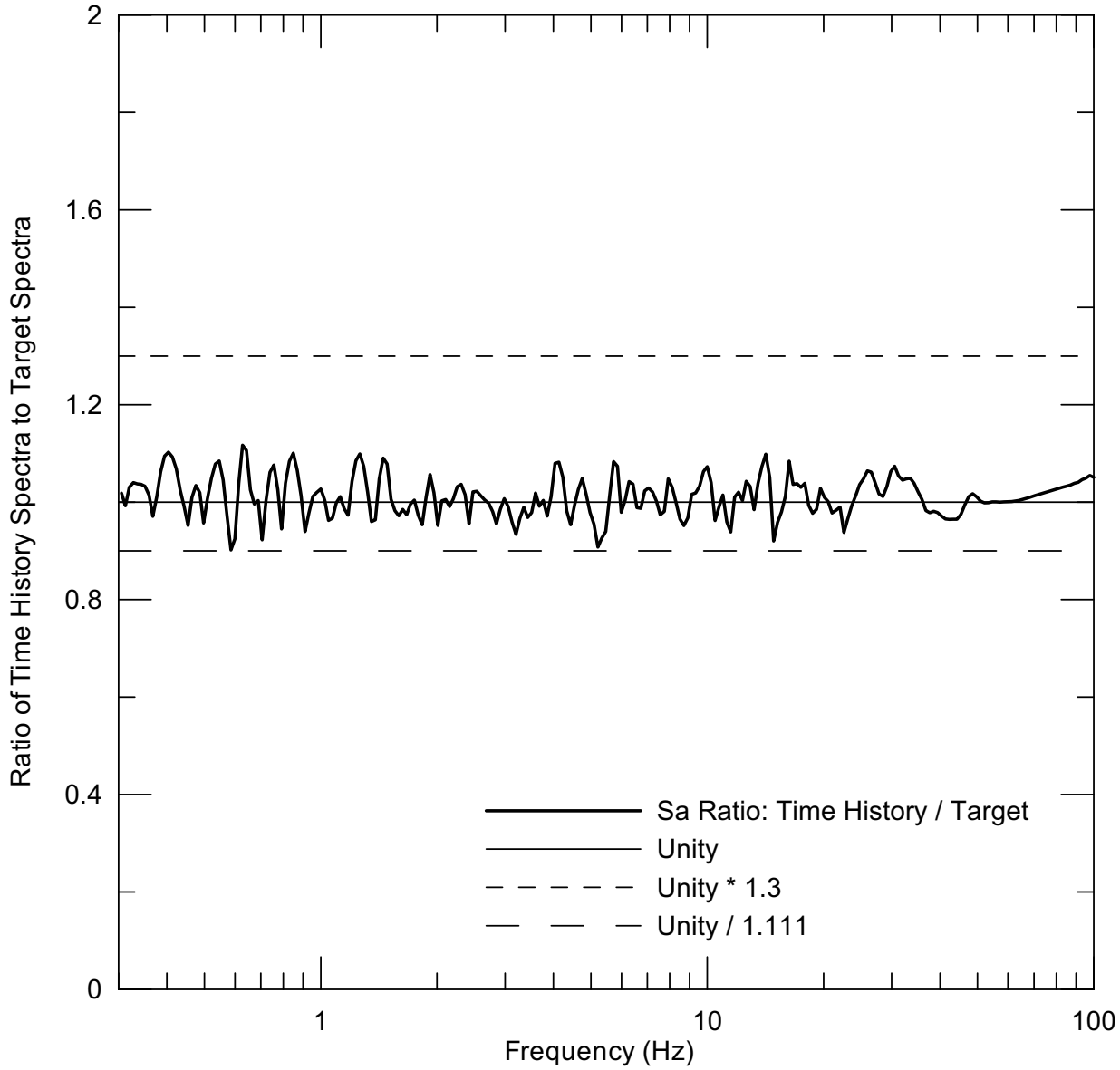

Source: Appendix D, Table D-1

Figure 6.5.3-50. Seed Time Histories, Set #1 at $10^{-4}$ AFE at the RB



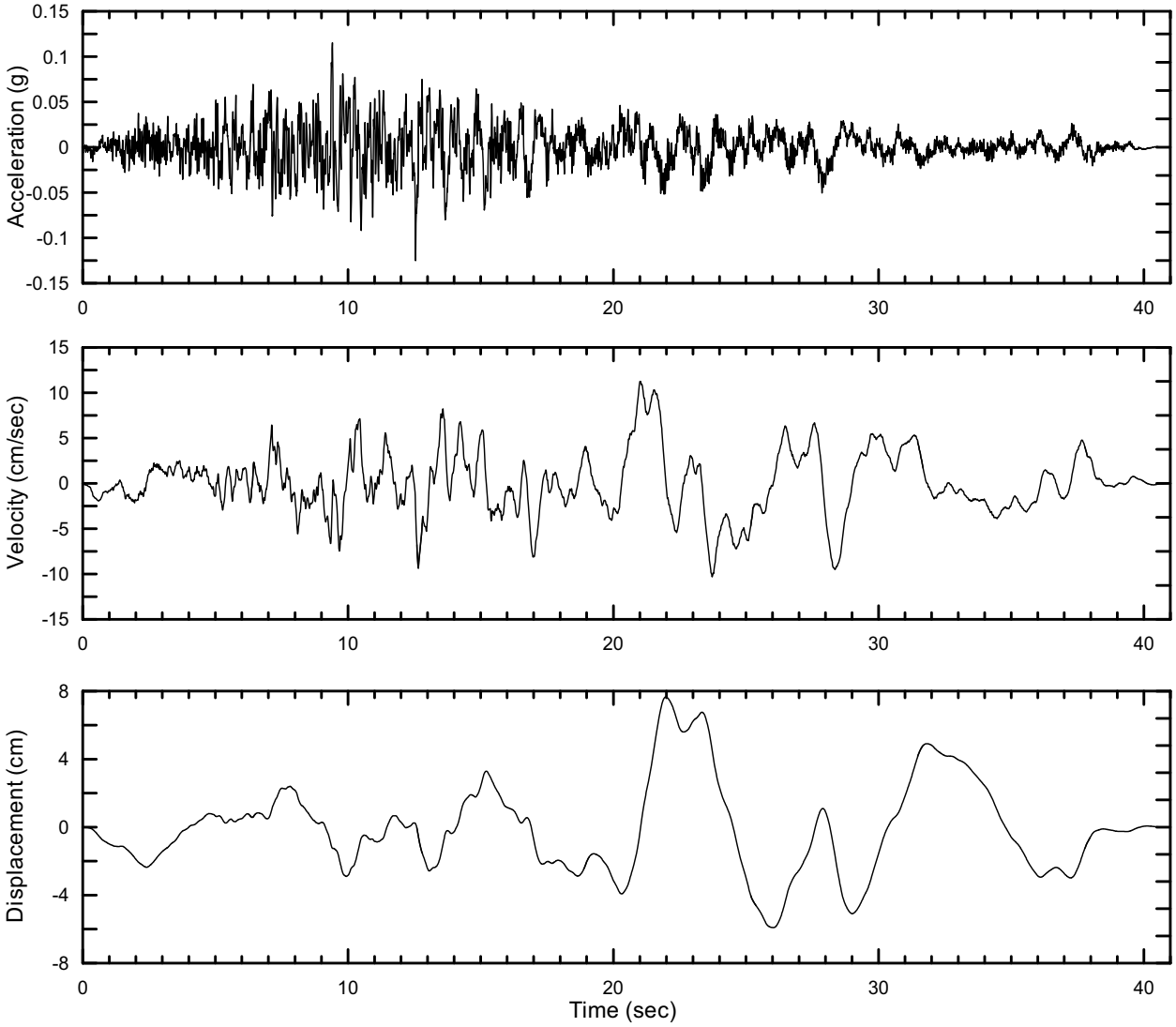

Source: Appendix D, Table D-1

Figure 6.5.3-51. Spectral Match to RB Design Spectrum at $10^{-3}$ AFE, Horizontal 1, Set 1



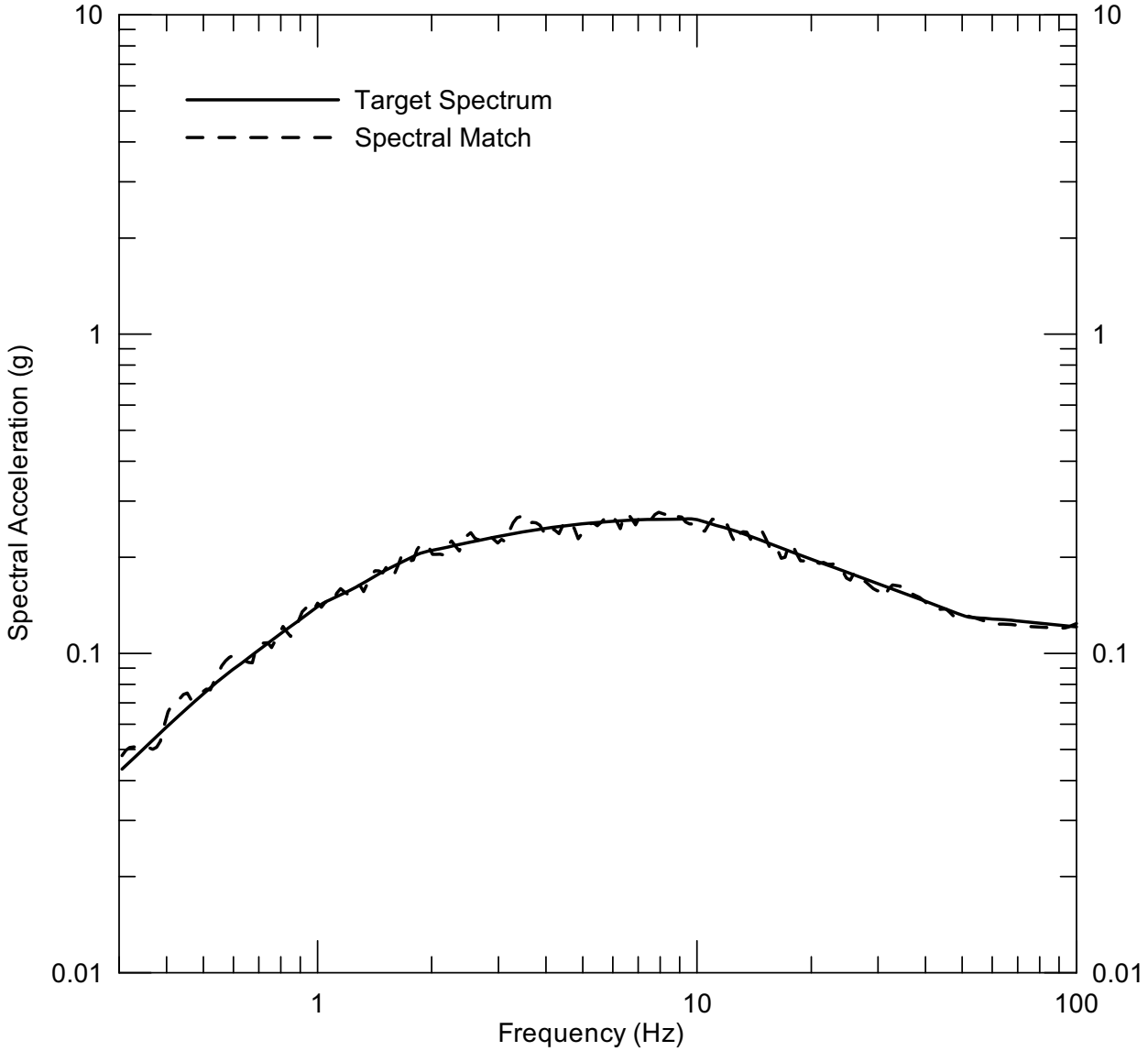

Source: Appendix D, Table D-1

Figure 6.5.3-52. Ratio of RB Design Spectrum to Spectral Match at $10^{-3}$ AFE, Horizontal 1, Set 1



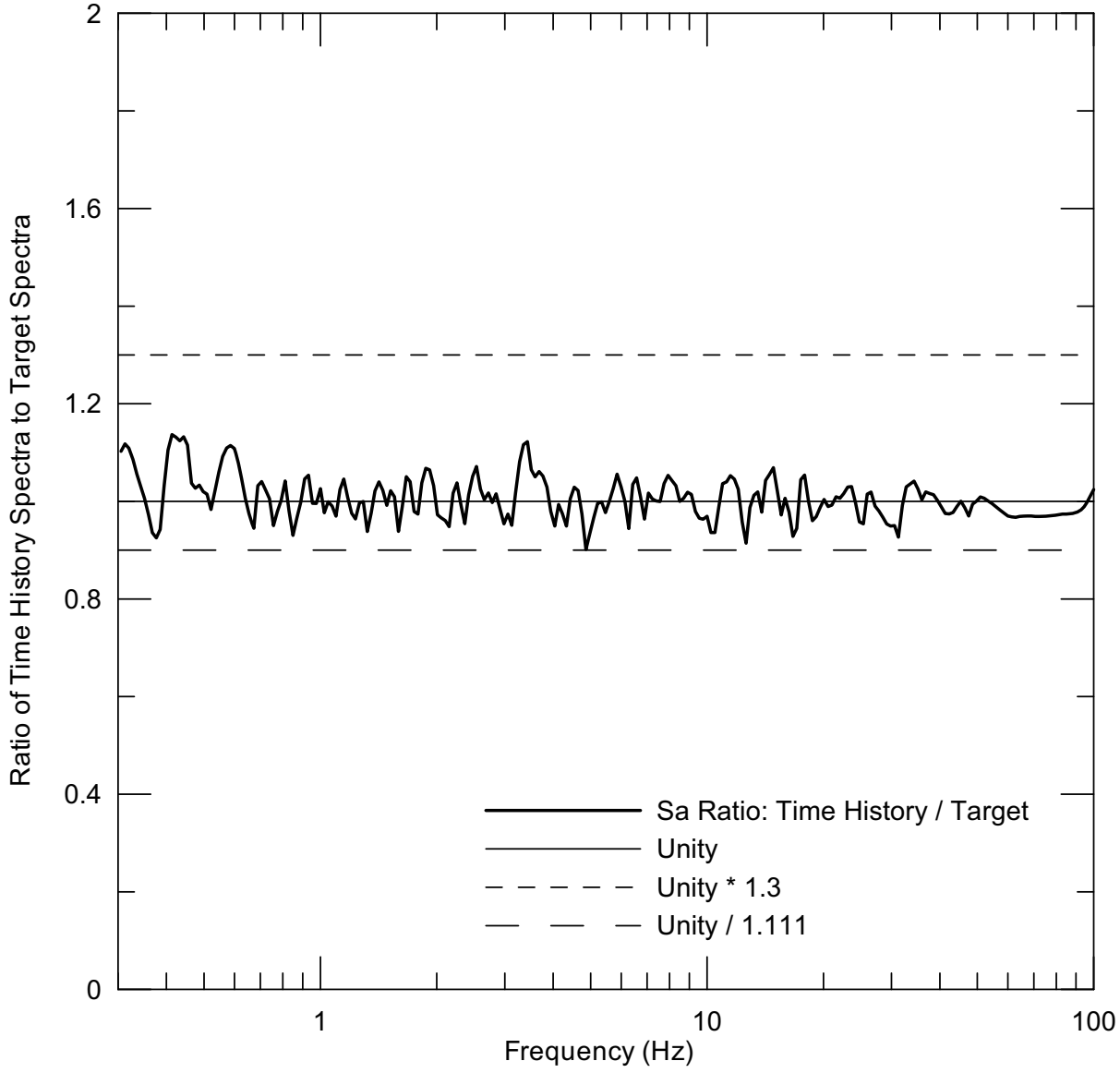

Source: Appendix D, Table D-1

Figure 6.5.3-53. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-3}$ AFE, Horizontal 1, Set 1



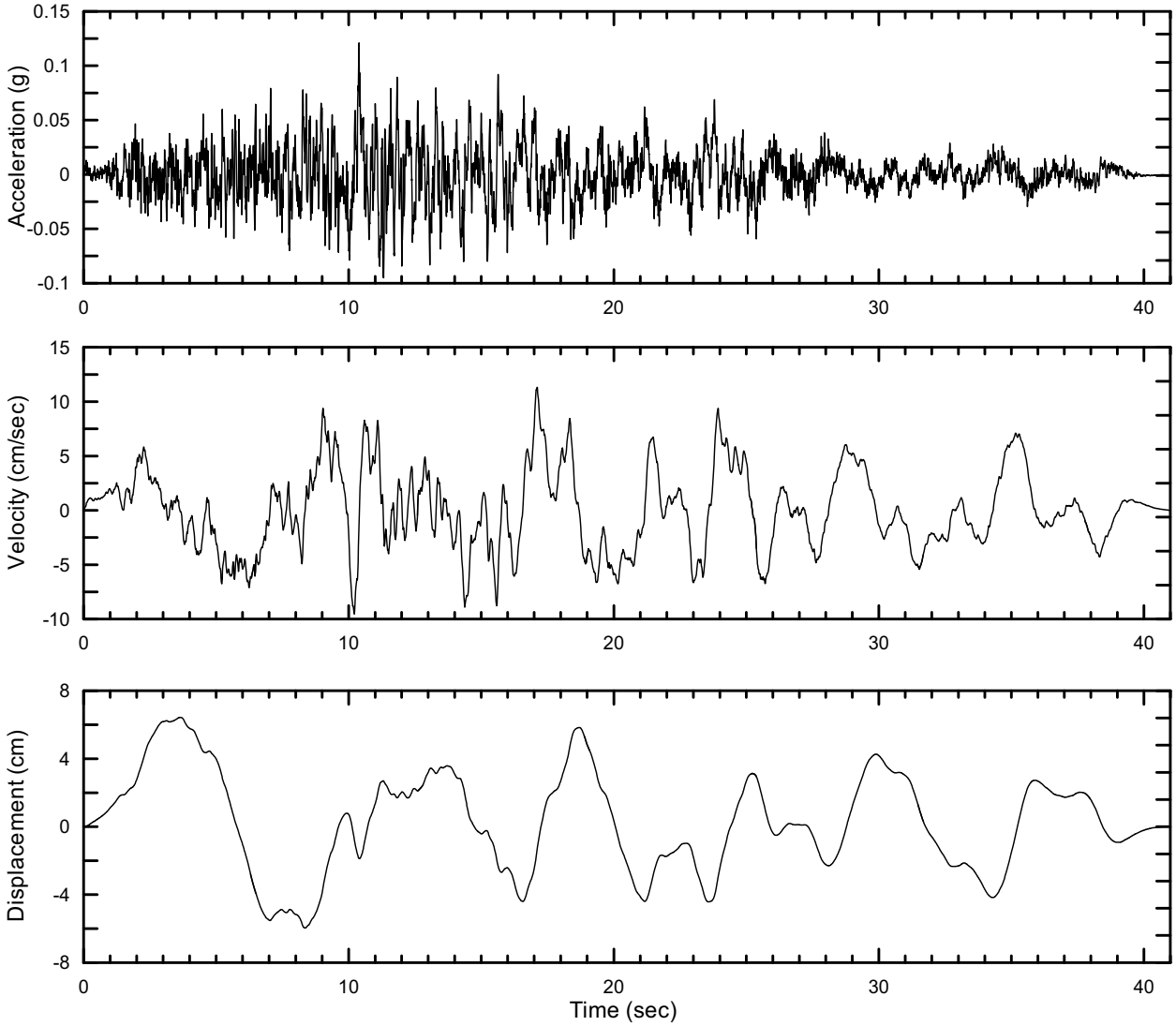

Source: Appendix D, Table D-1

Figure 6.5.3-54. Spectral Match to RB Design Spectrum at $10^{-3}$ AFE, Horizontal 2, Set 1



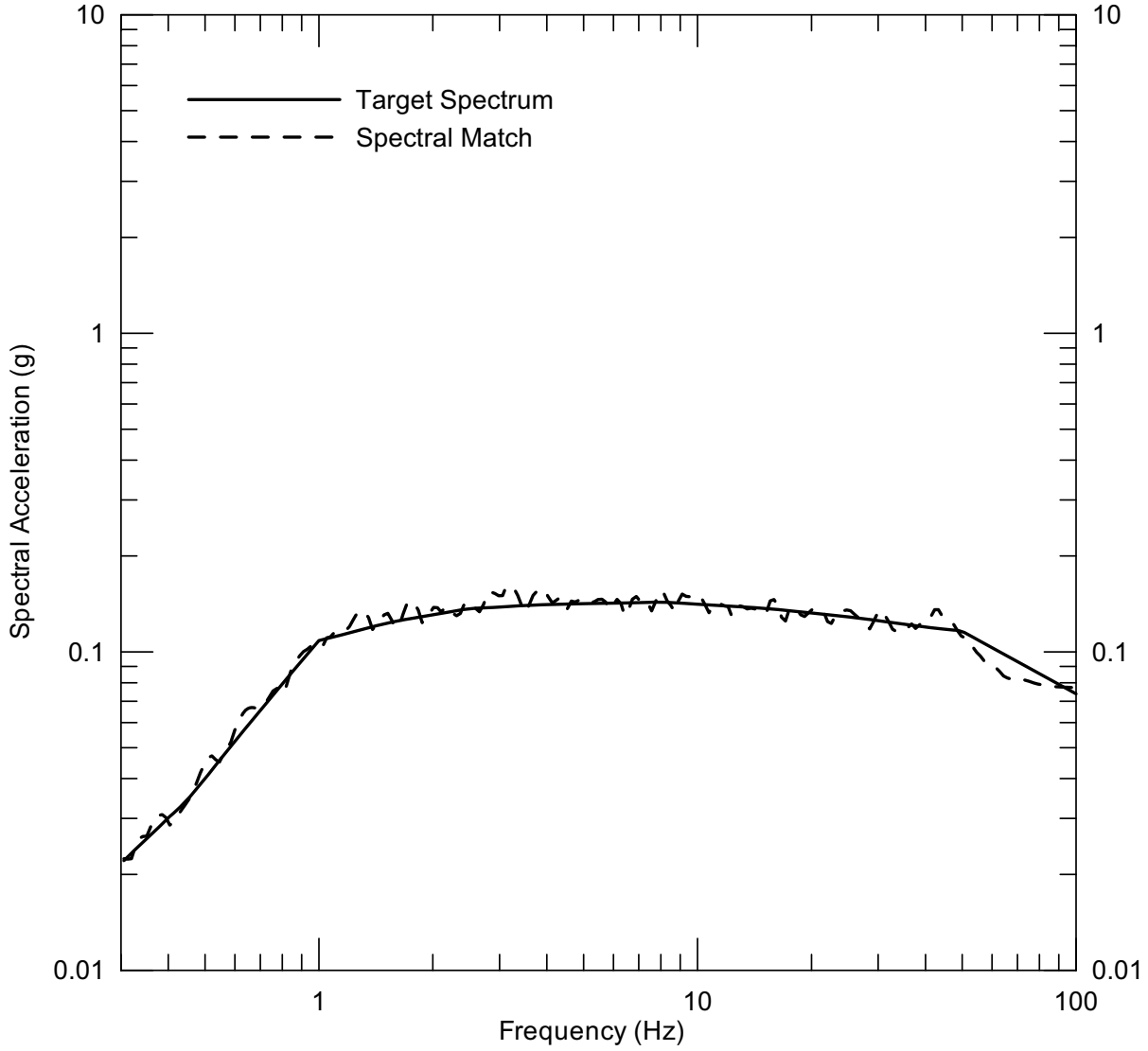

Source: Appendix D, Table D-1

Figure 6.5.3-55. Ratio of RB Design Spectrum to Spectral Match at $10^{-3}$ AFE, Horizontal 2, Set 1



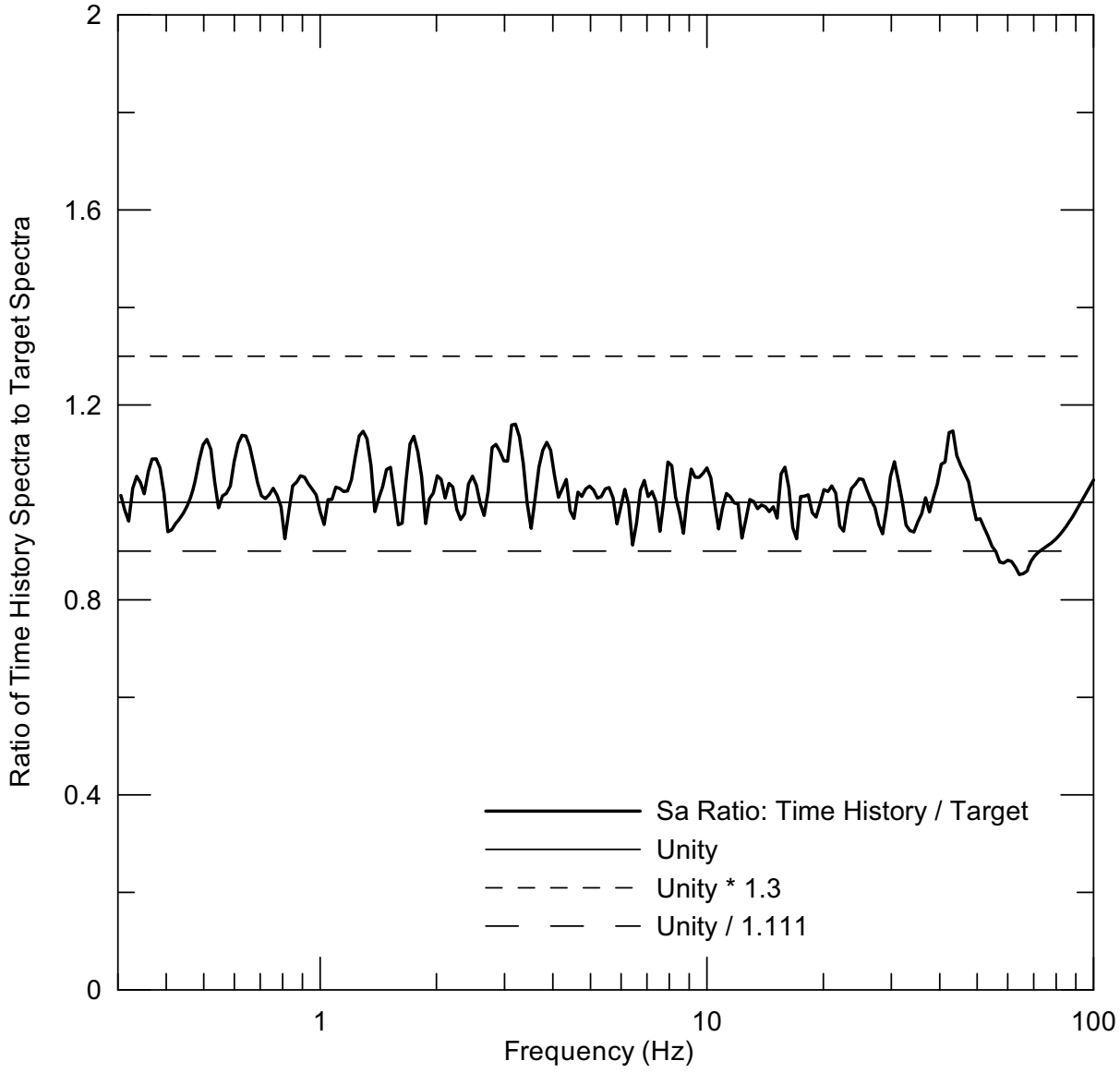

Source: Appendix D, Table D-1

Figure 6.5.3-56. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-3}$ AFE, Horizontal 2, Set 1



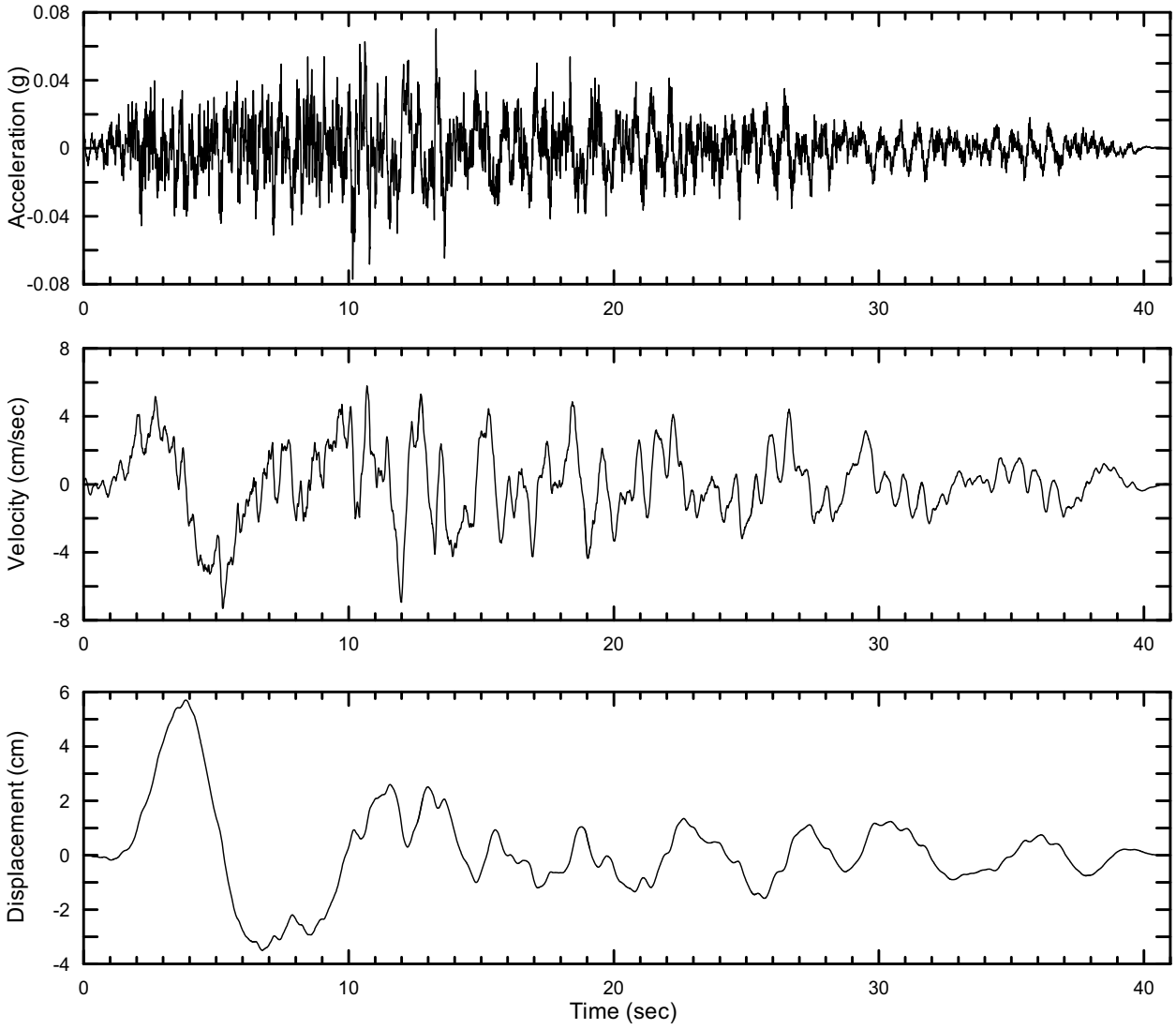

Source: Appendix D, Table D-1

Figure 6.5.3-57. Spectral Match to RB Design Spectrum at $10^{-3}$ AFE, Vertical, Set 1



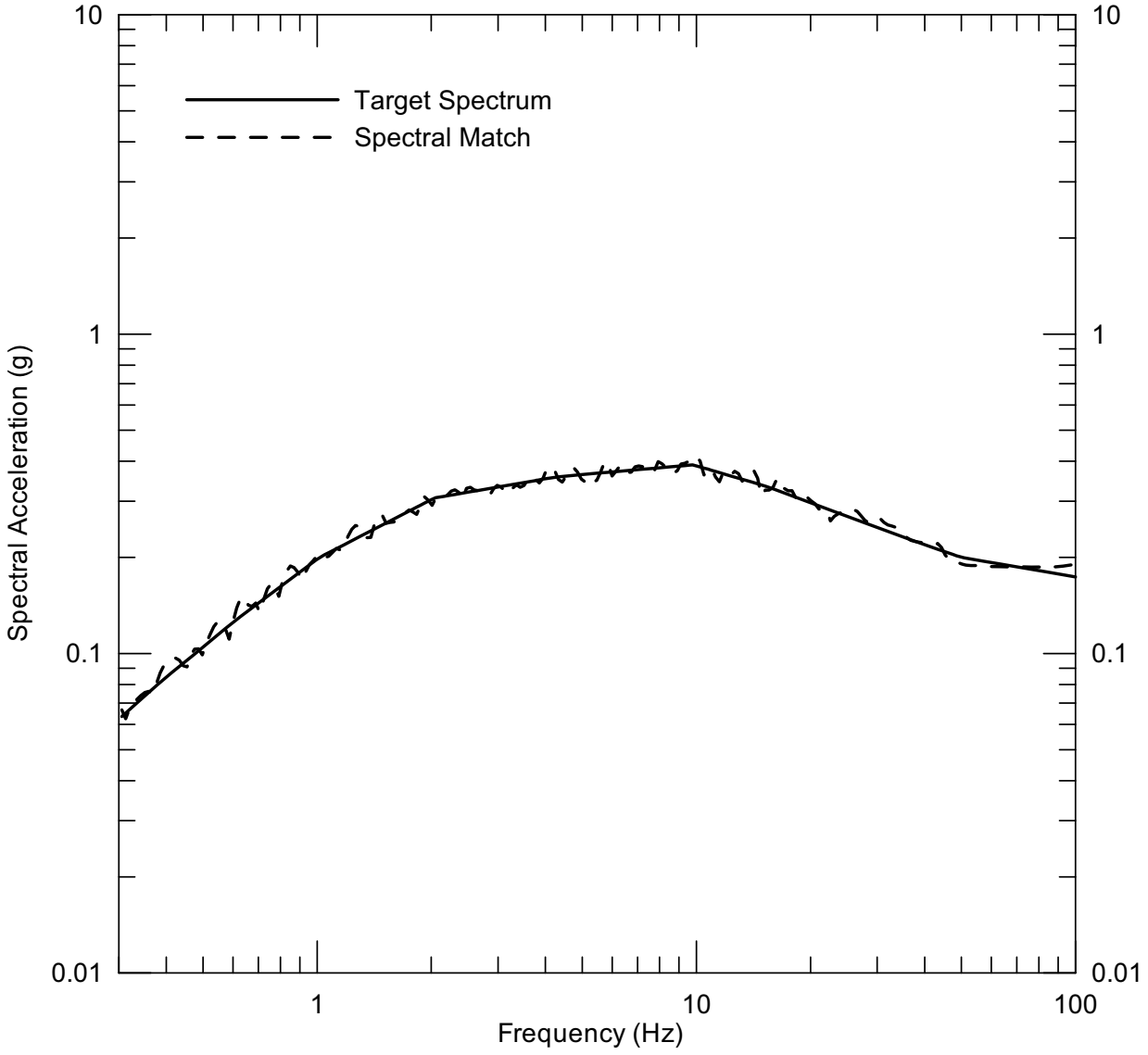

Source: Appendix D, Table D-1

Figure 6.5.3-58. Ratio of RB Design Spectrum to Spectral Match at $10^{-3}$ AFE, Vertical, Set 1



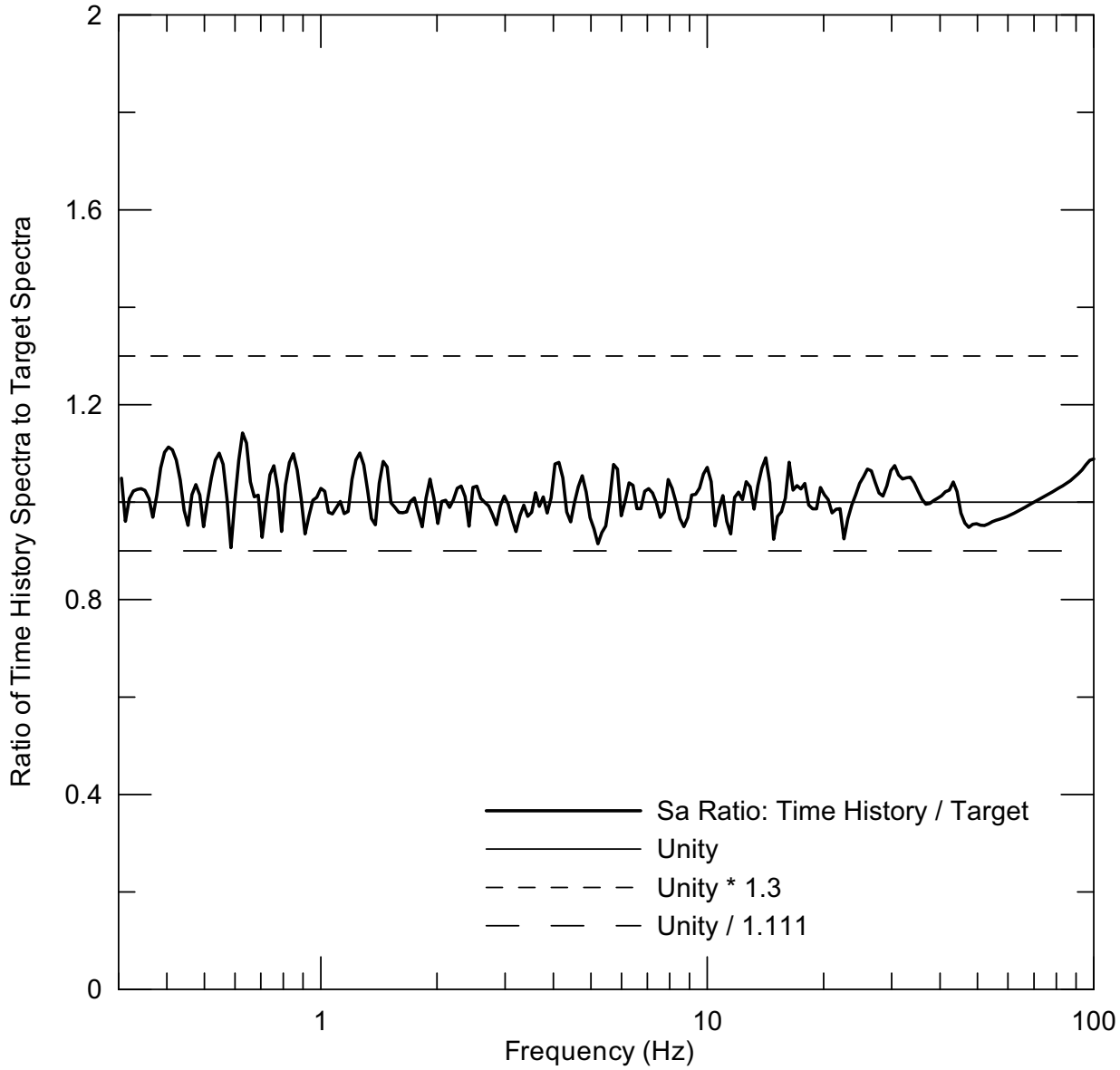

Source: Appendix D, Table D-1

Figure 6.5.3-59. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-3}$ AFE, Vertical, Set 1



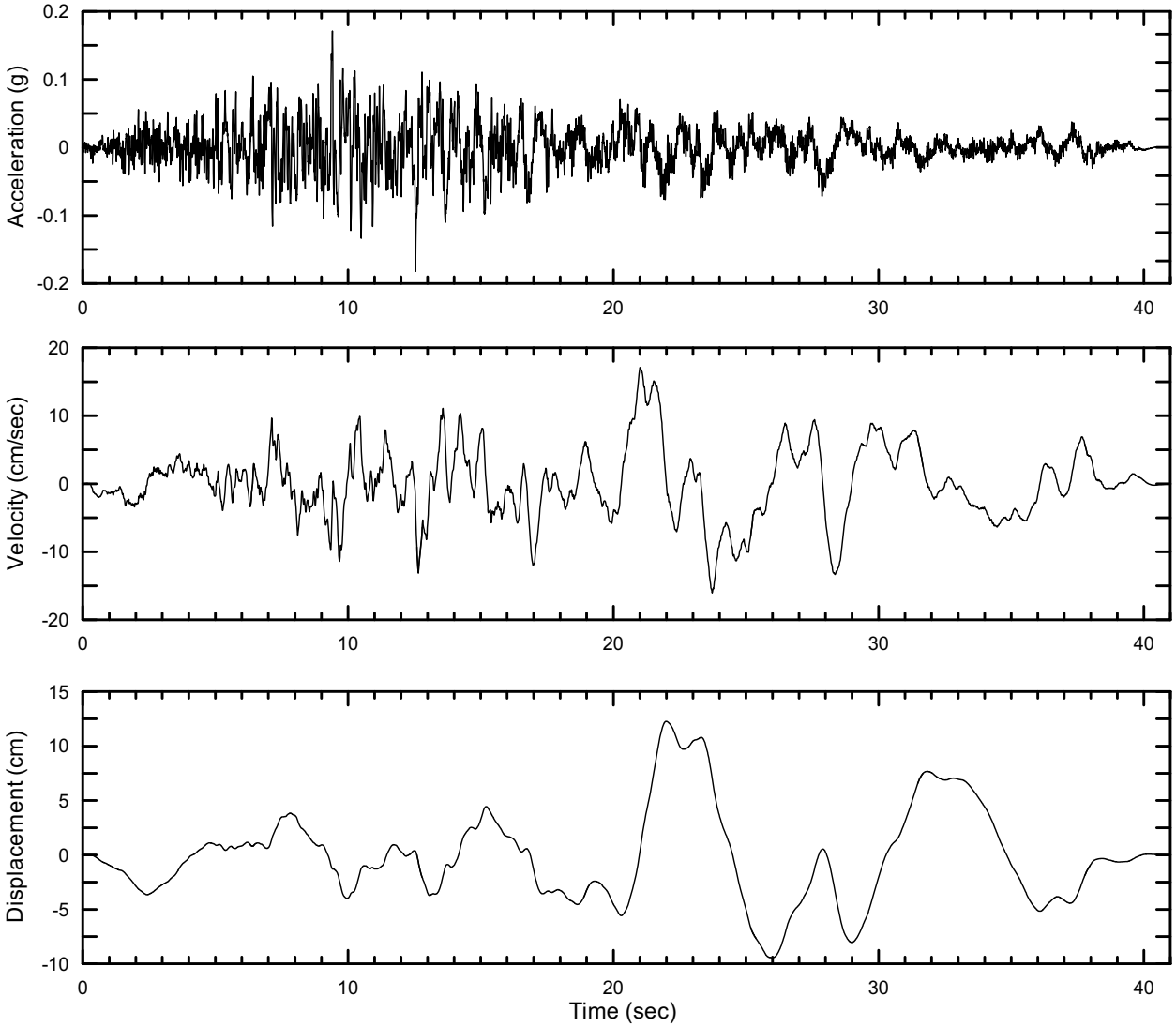

Source: Appendix D, Table D-1

Figure 6.5.3-60. Spectral Match to RB Design Spectrum at $5 \times 10^{-4}$ AFE, Horizontal 1, Set 1



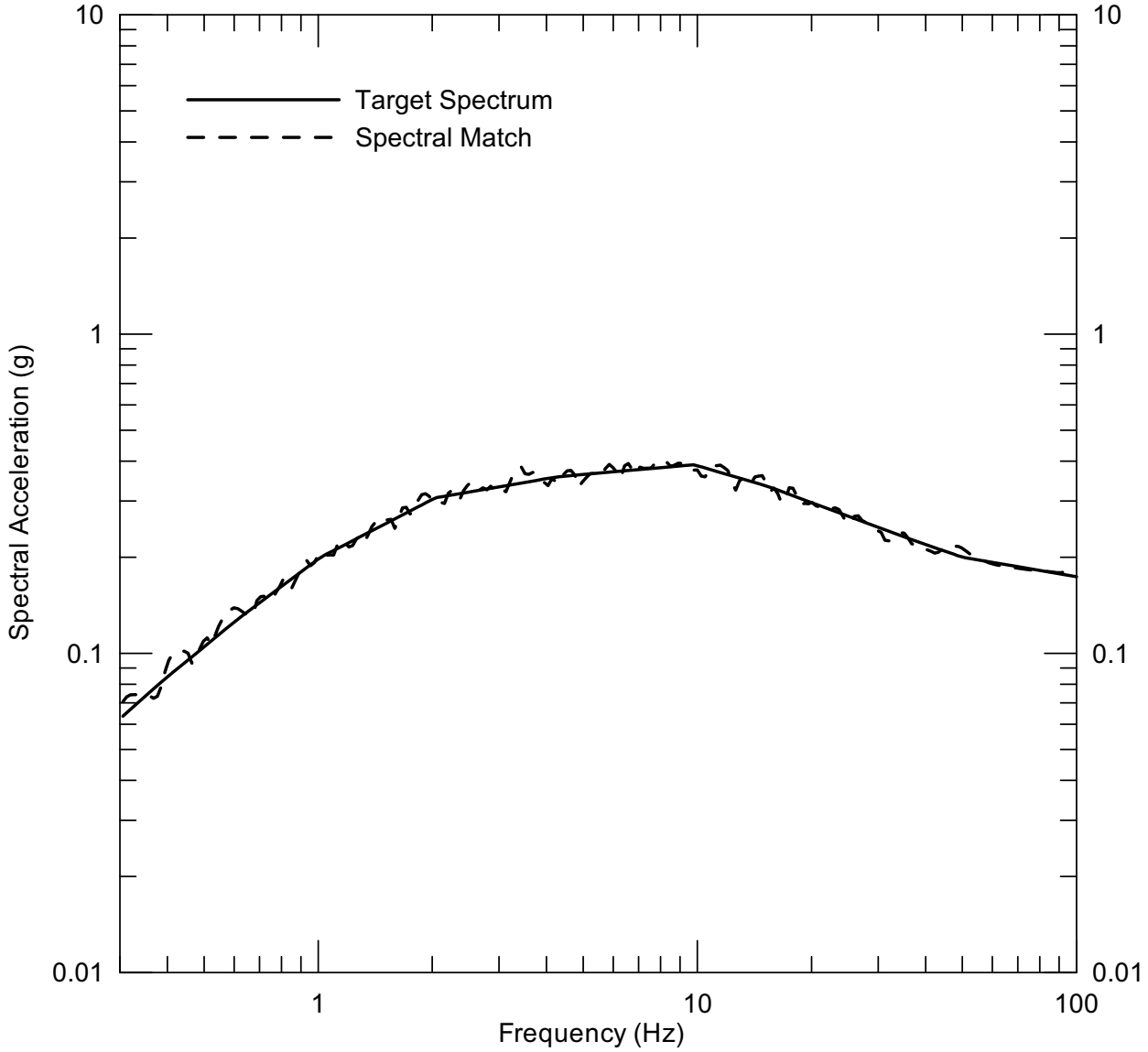

Source: Appendix D, Table D-1

Figure 6.5.3-61. Ratio of RB Design Spectrum to Spectral Match at $5x10^{-4}$ AFE, Horizontal 1, Set 1



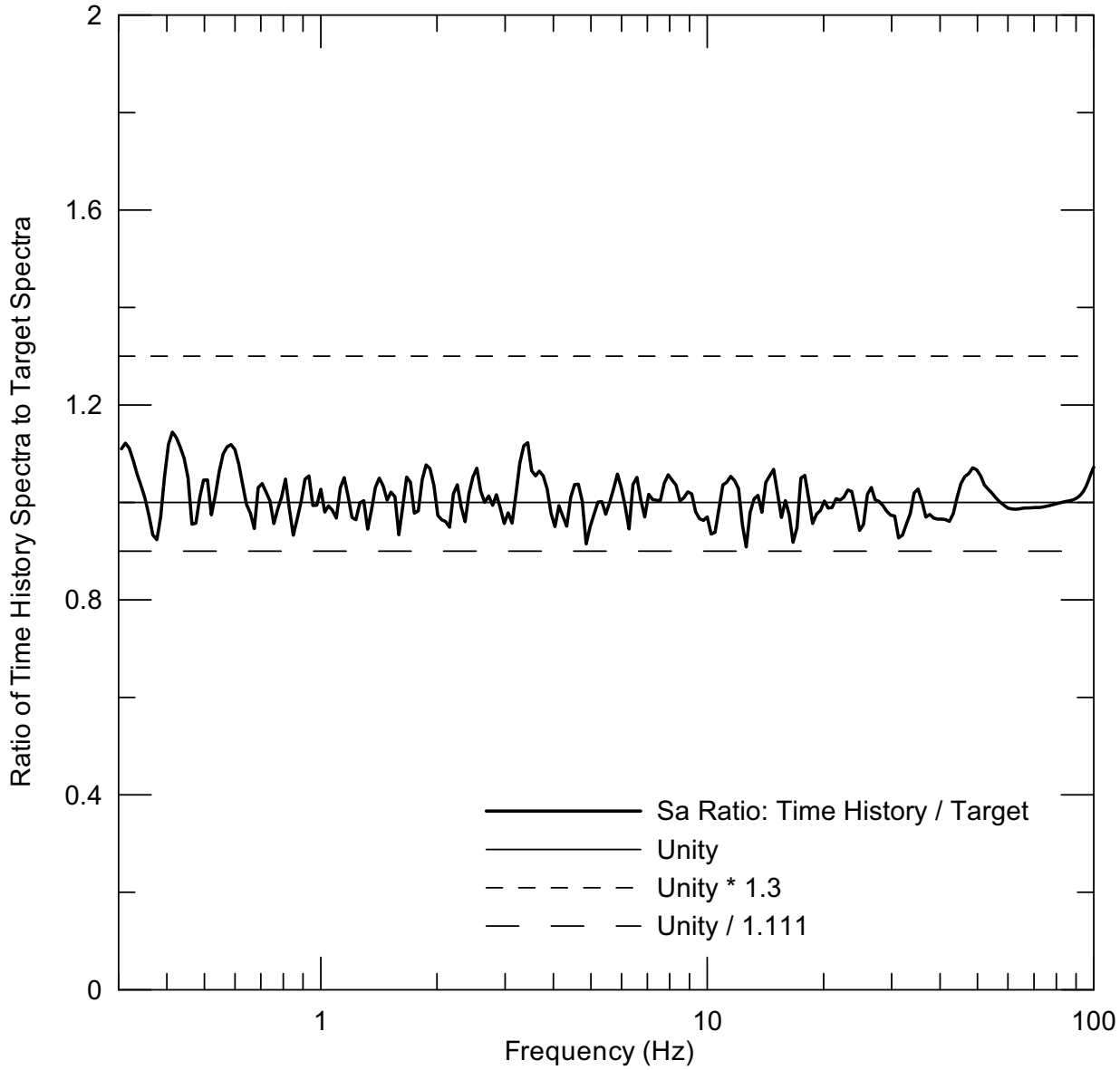

Source: Appendix D, Table D-1

Figure 6.5.3-62. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $5x10^{-4}$ AFE, Horizontal 1, Set 1



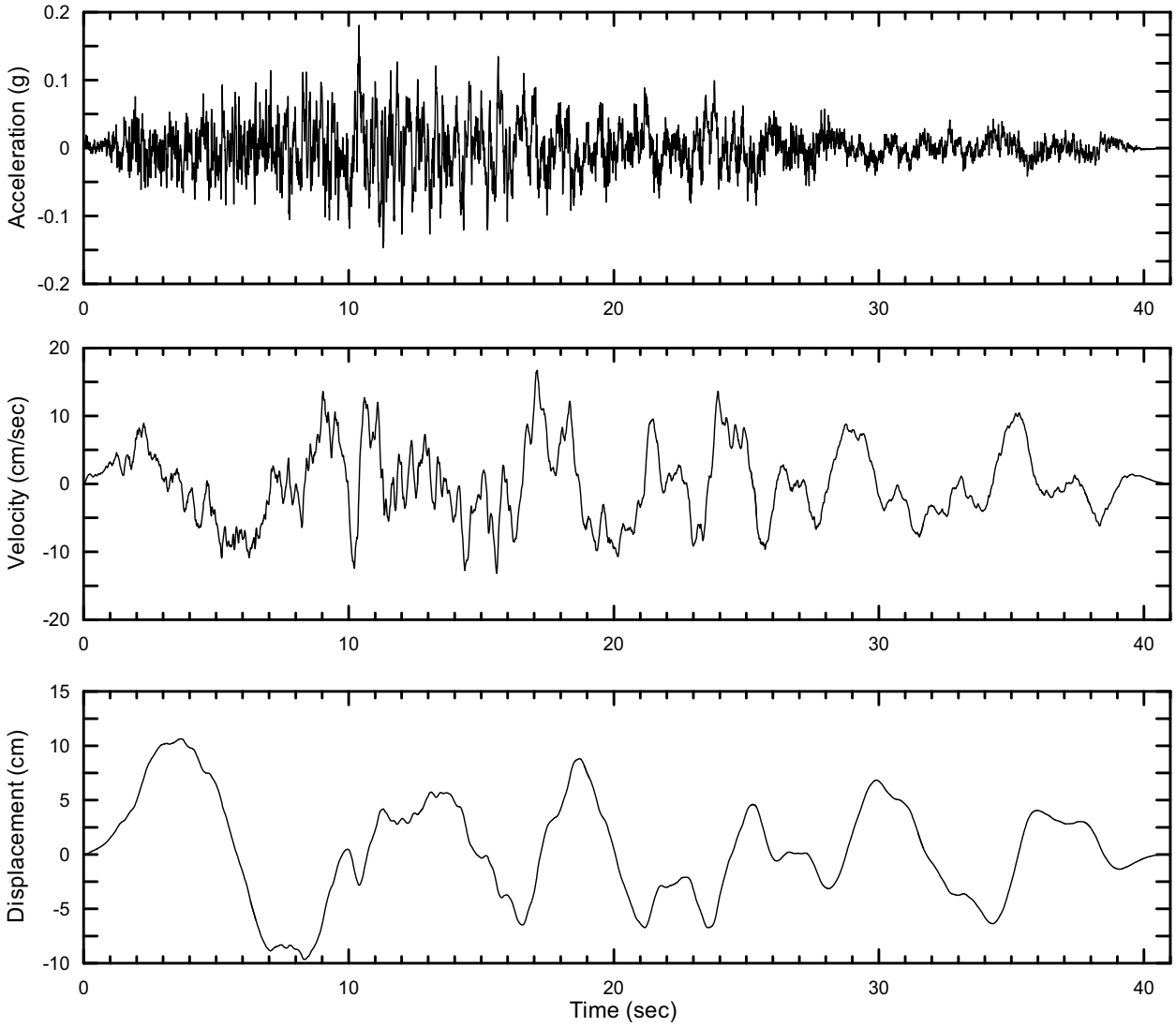

Source: Appendix D, Table D-1

Figure 6.5.3-63. Spectral Match to RB Design Spectrum at $5 \times 10^{-4}$ AFE, Horizontal 2, Set 1



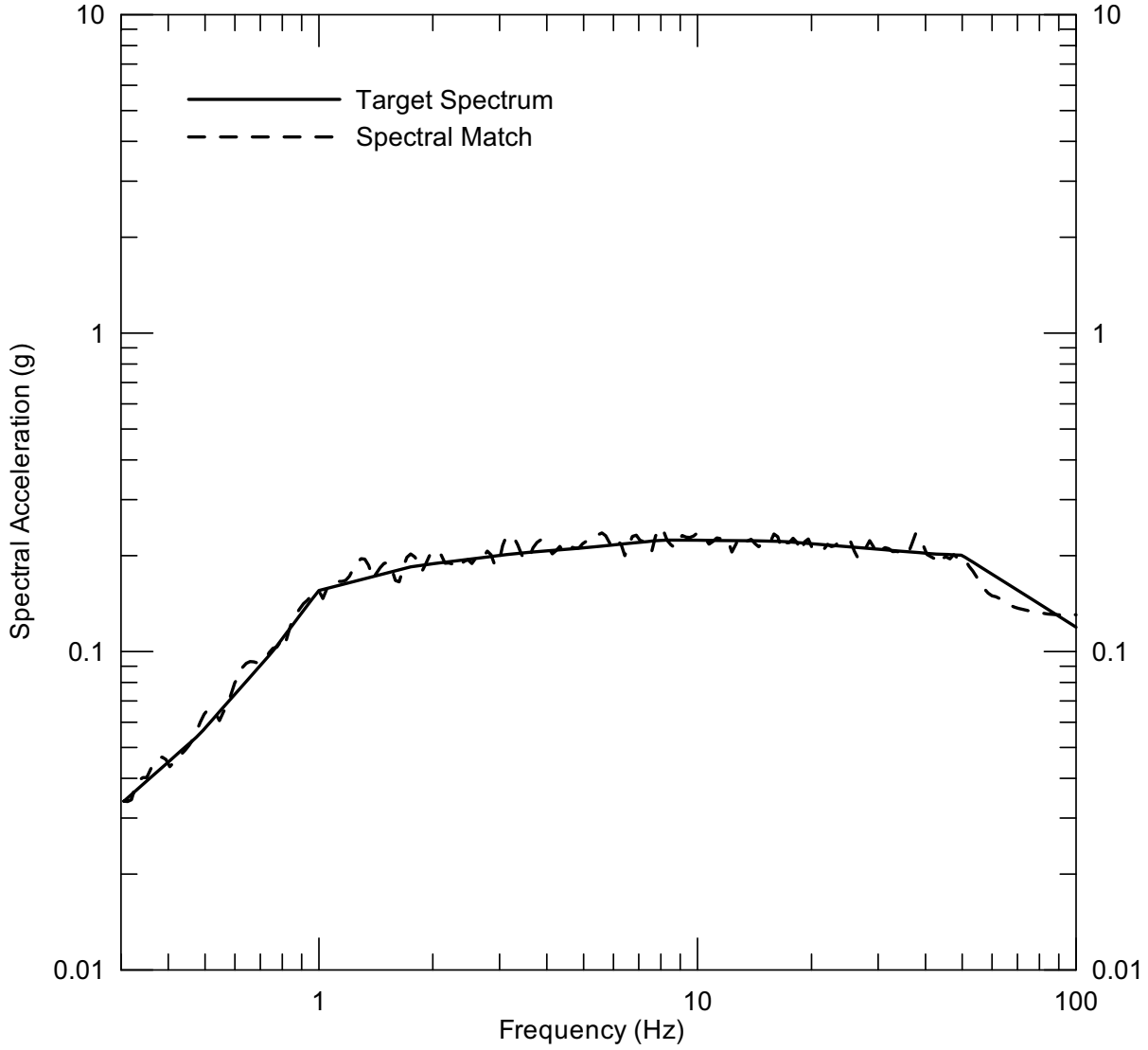

Source: Appendix D, Table D-1

Figure 6.5.3-64. Ratio of RB Design Spectrum to Spectral Match at $5x10^{-4}$ AFE, Horizontal 2, Set 1



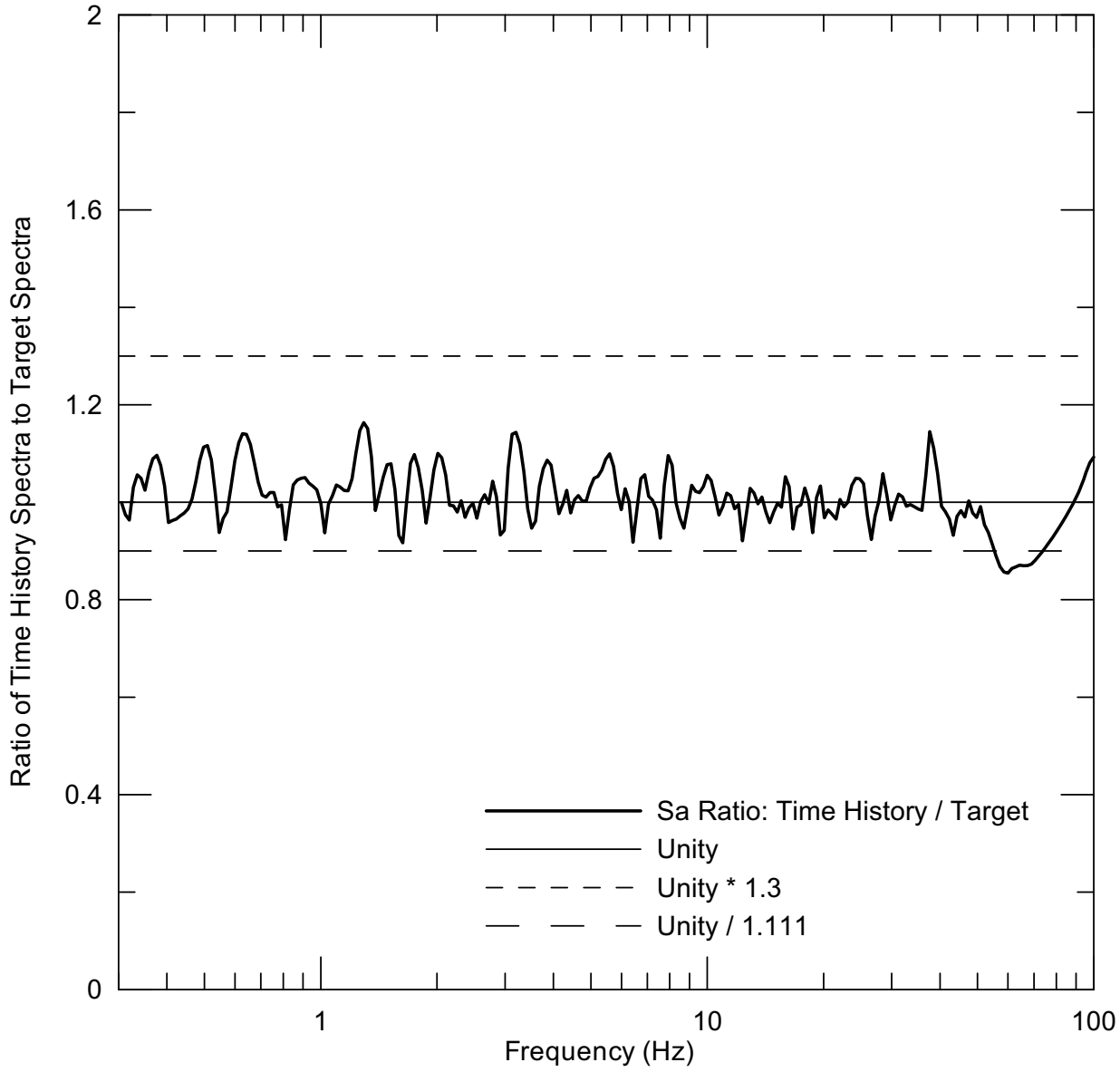

Source: Appendix D, Table D-1

Figure 6.5.3-65. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $5x10^{-4}$ AFE, Horizontal 2, Set 1



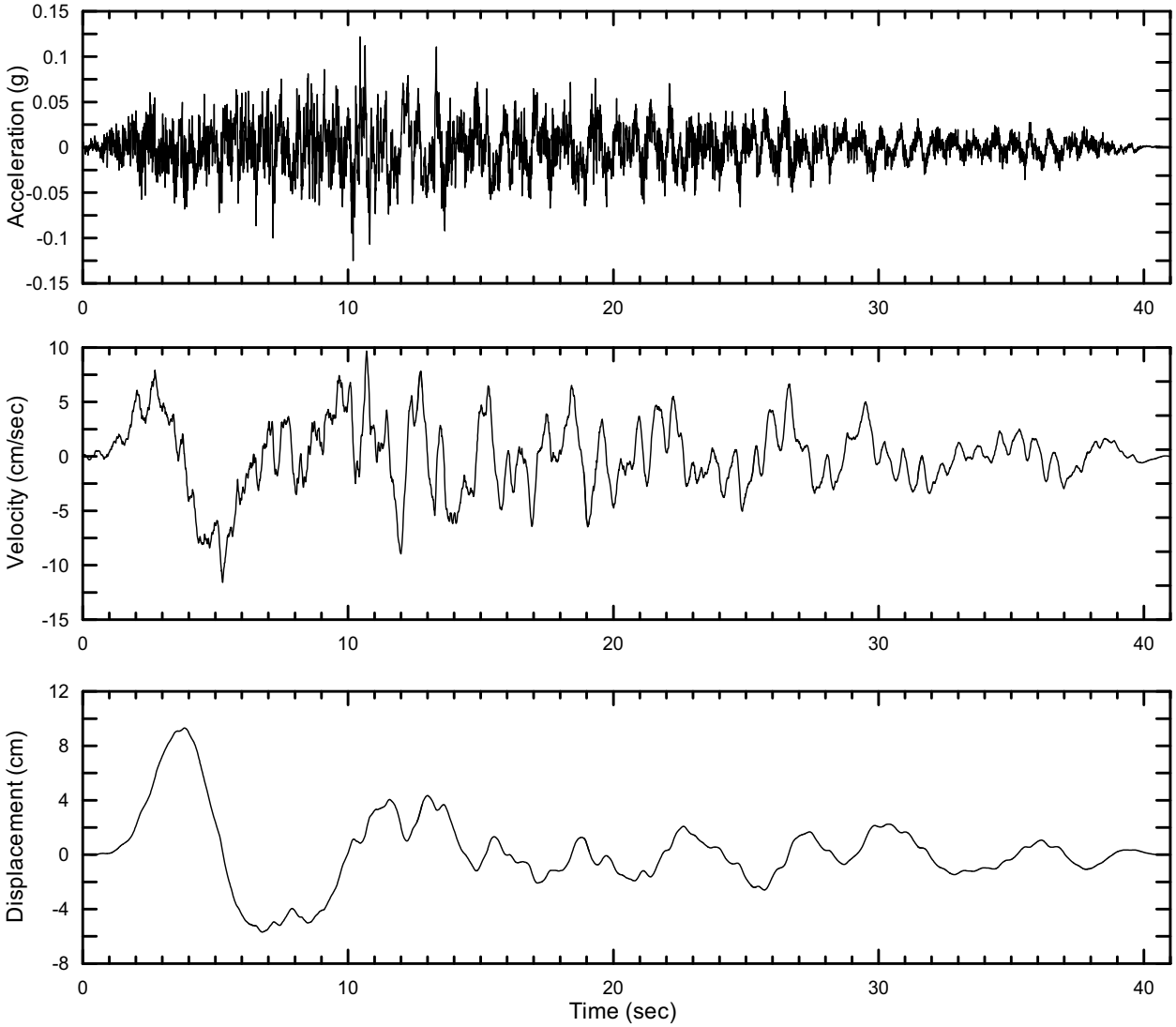

Source: Appendix D, Table D-1

Figure 6.5.3-66. Spectral Match to RB Design Spectrum at $5x10^{-4}$ AFE, Vertical, Set 1



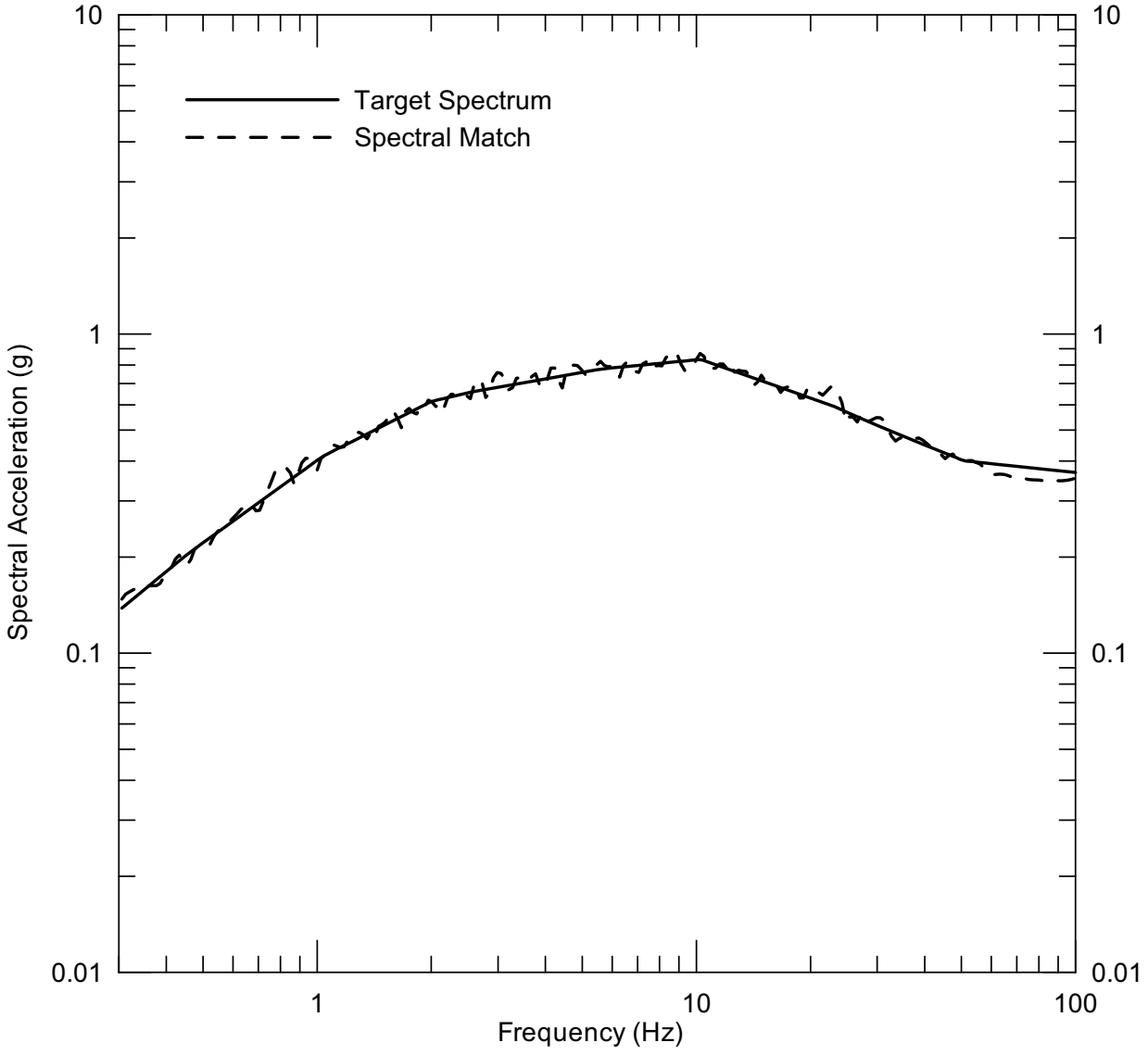

Source: Appendix D, Table D-1

Figure 6.5.3-67. Ratio of RB Design Spectrum to Spectral Match at $5x10^{-4}$ AFE, Vertical, Set 1



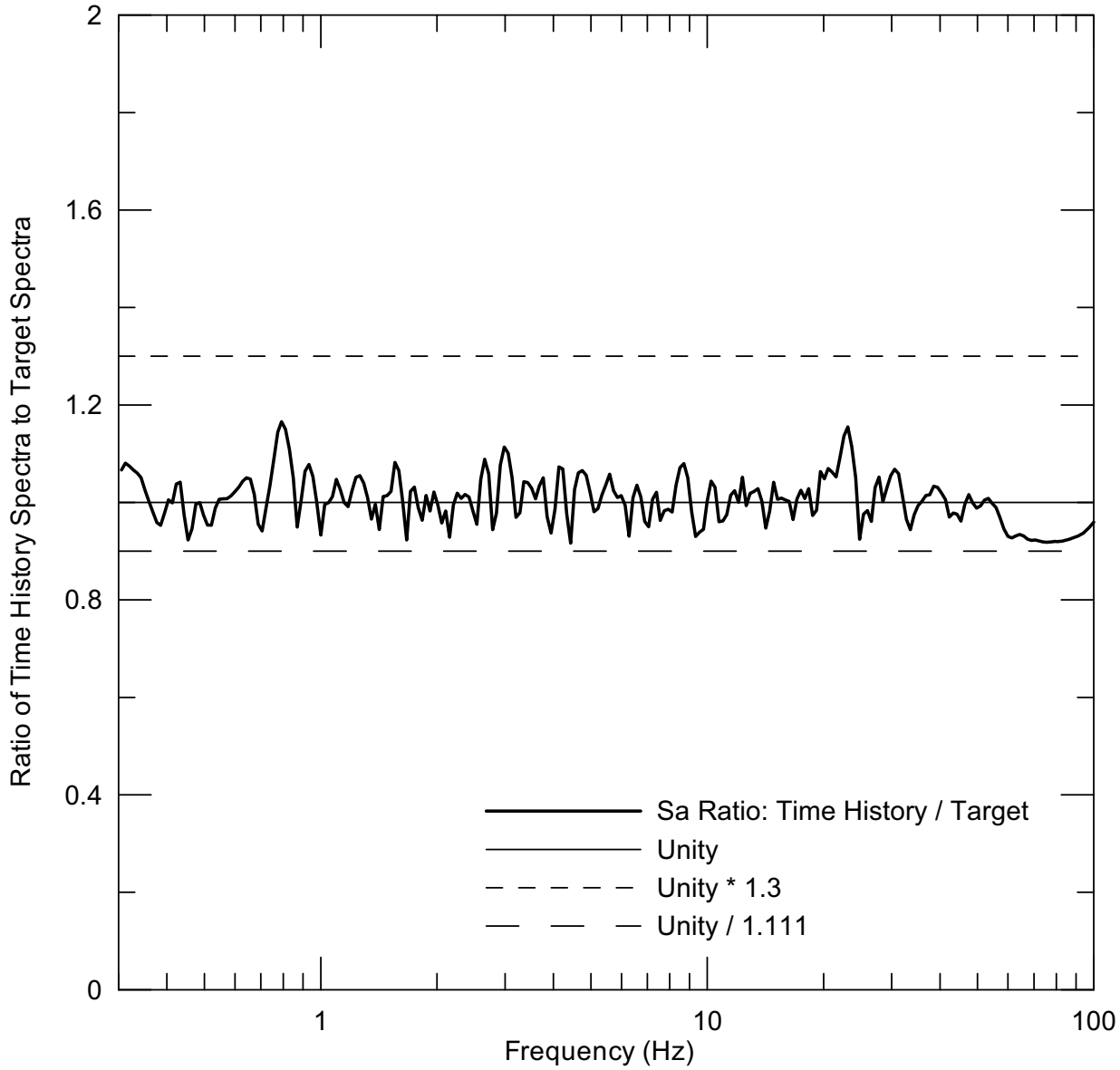

Source: Appendix D, Table D-1

Figure 6.5.3-68. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $5x10^{-4}$ AFE, Vertical, Set 1



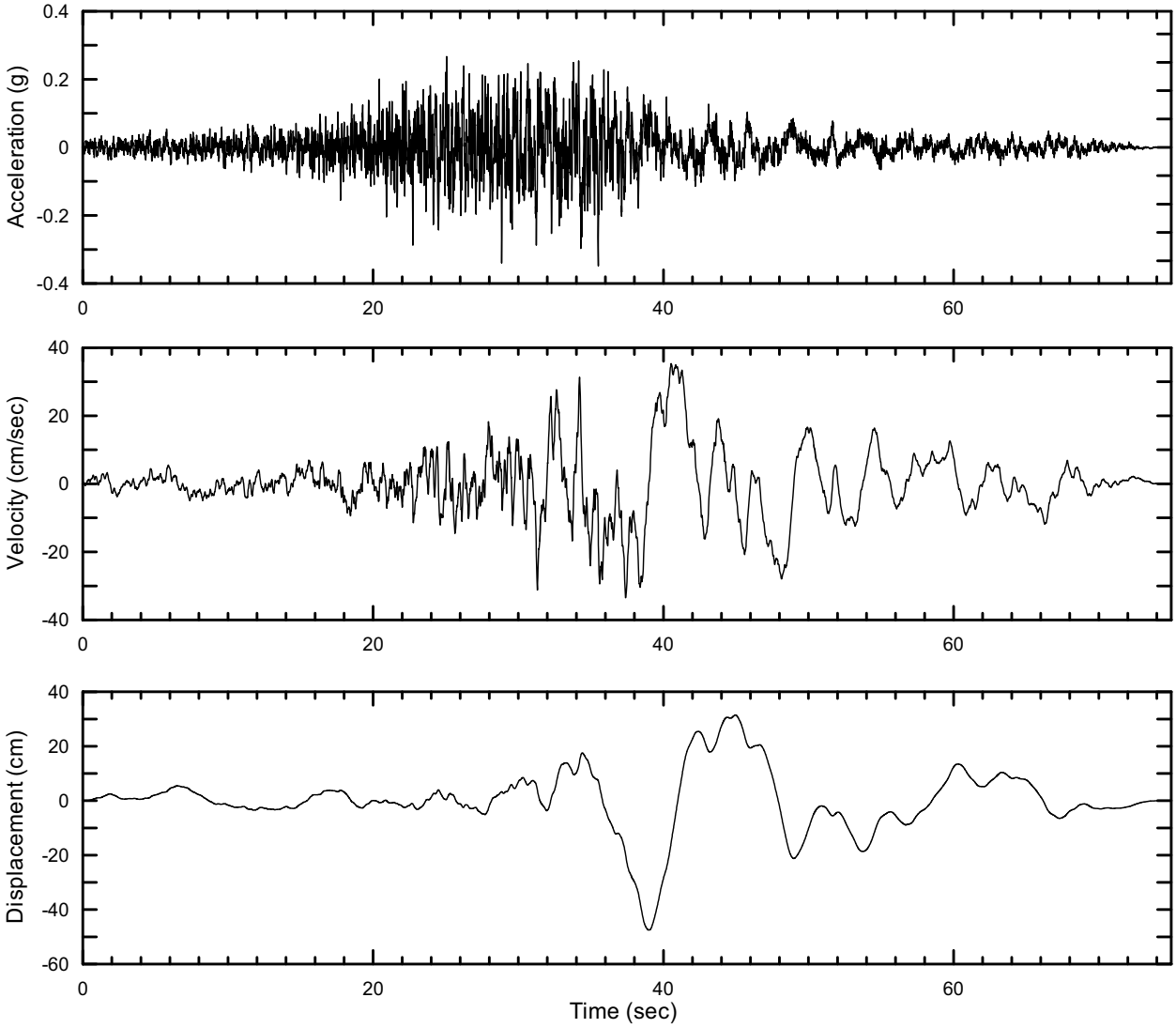

Source: Appendix D, Table D-1

Figure 6.5.3-69. Spectral Match to RB Design Spectrum at $10^{-4}$ AFE, Horizontal 1, Set 1



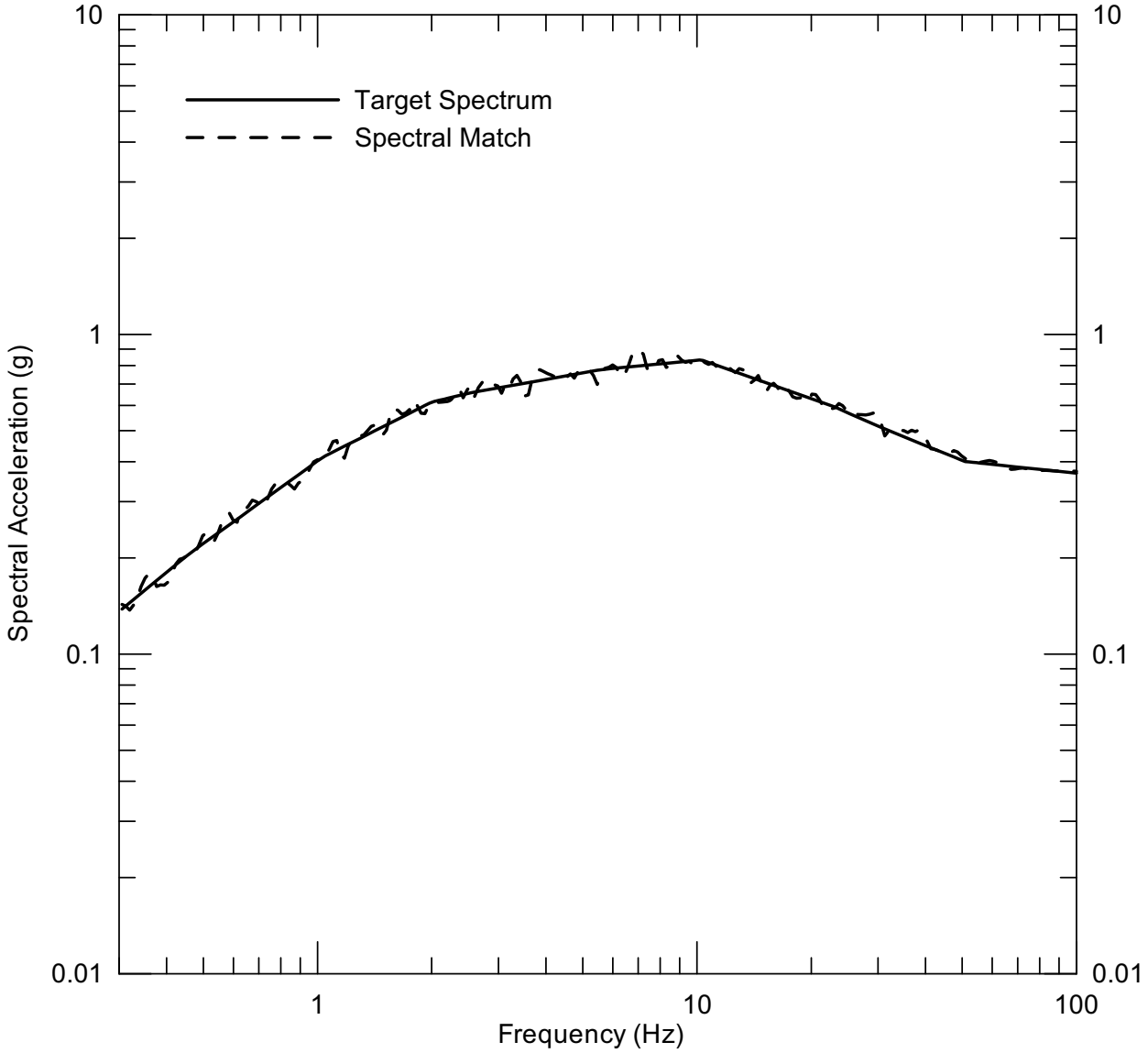

Source: Appendix D, Table D-1

Figure 6.5.3-70. Ratio of RB Design Spectrum to Spectral Match at $10^{-4}$ AFE, Horizontal 1, Set 1



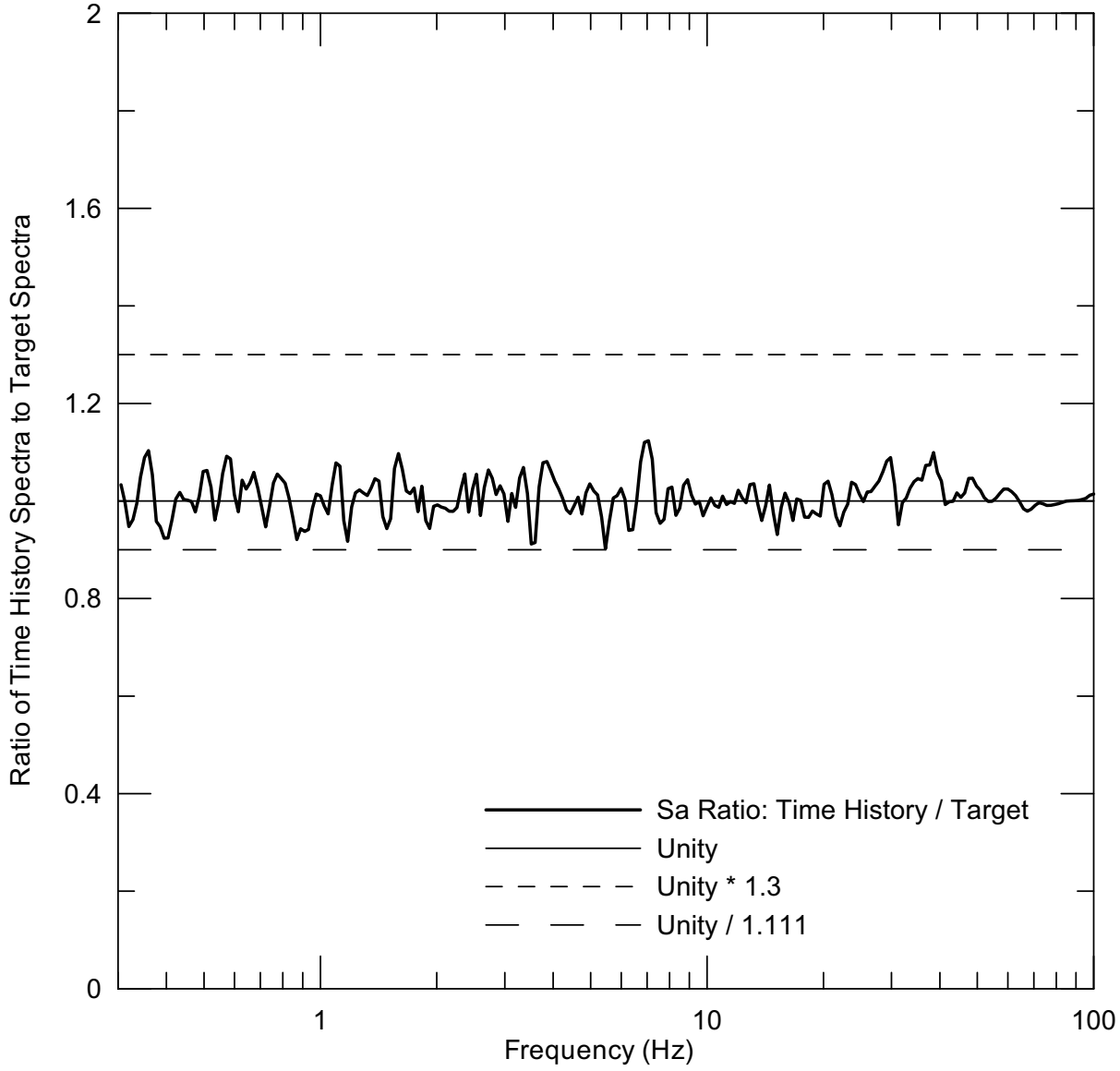

Source: Appendix D, Table D-1

Figure 6.5.3-71. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-4}$ AFE, Horizontal 1, Set 1



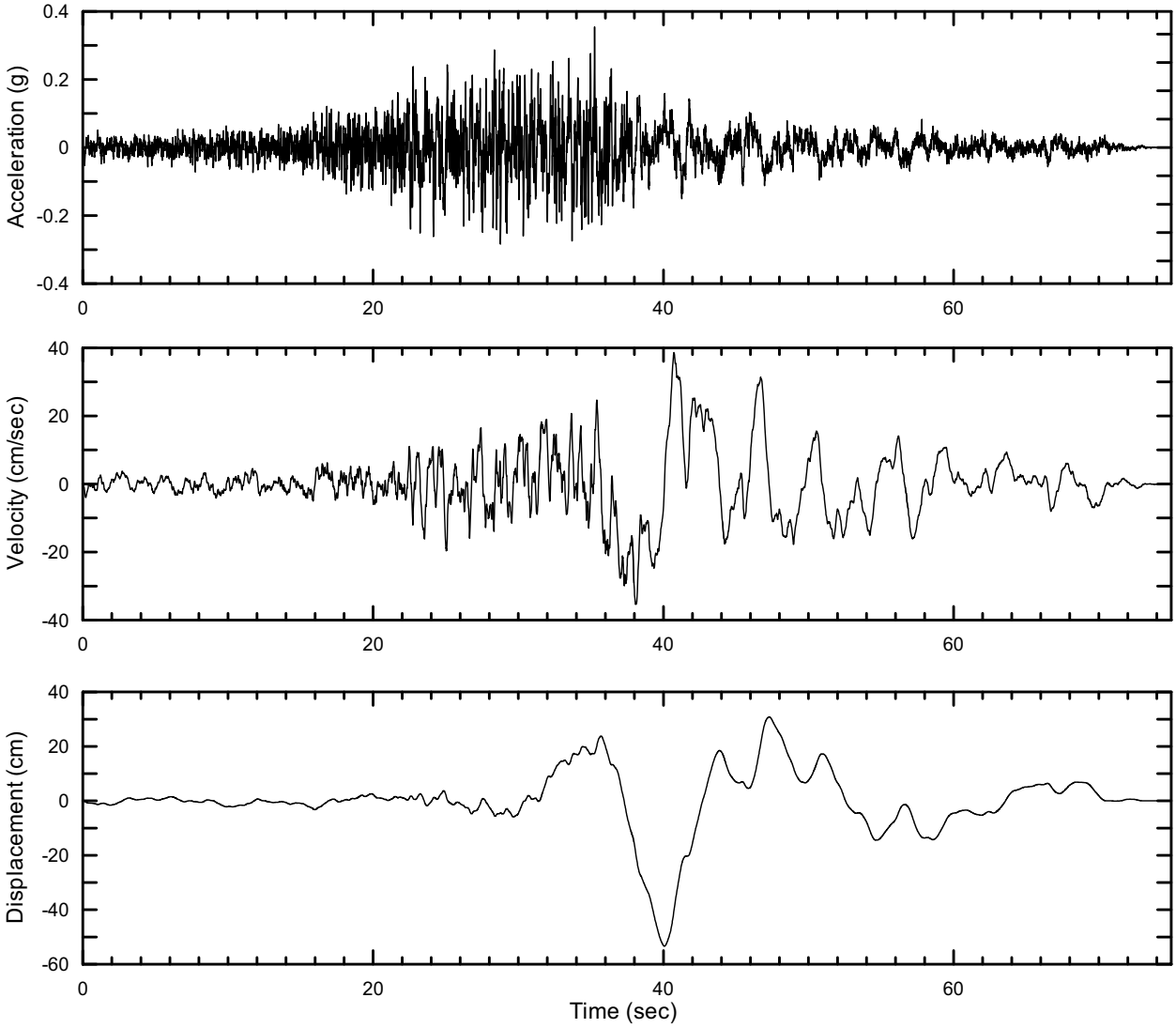

Source: Appendix D, Table D-1

Figure 6.5.3-72. Spectral Match to RB Design Spectrum at $10^{-4}$ AFE, Horizontal 2, Set 1



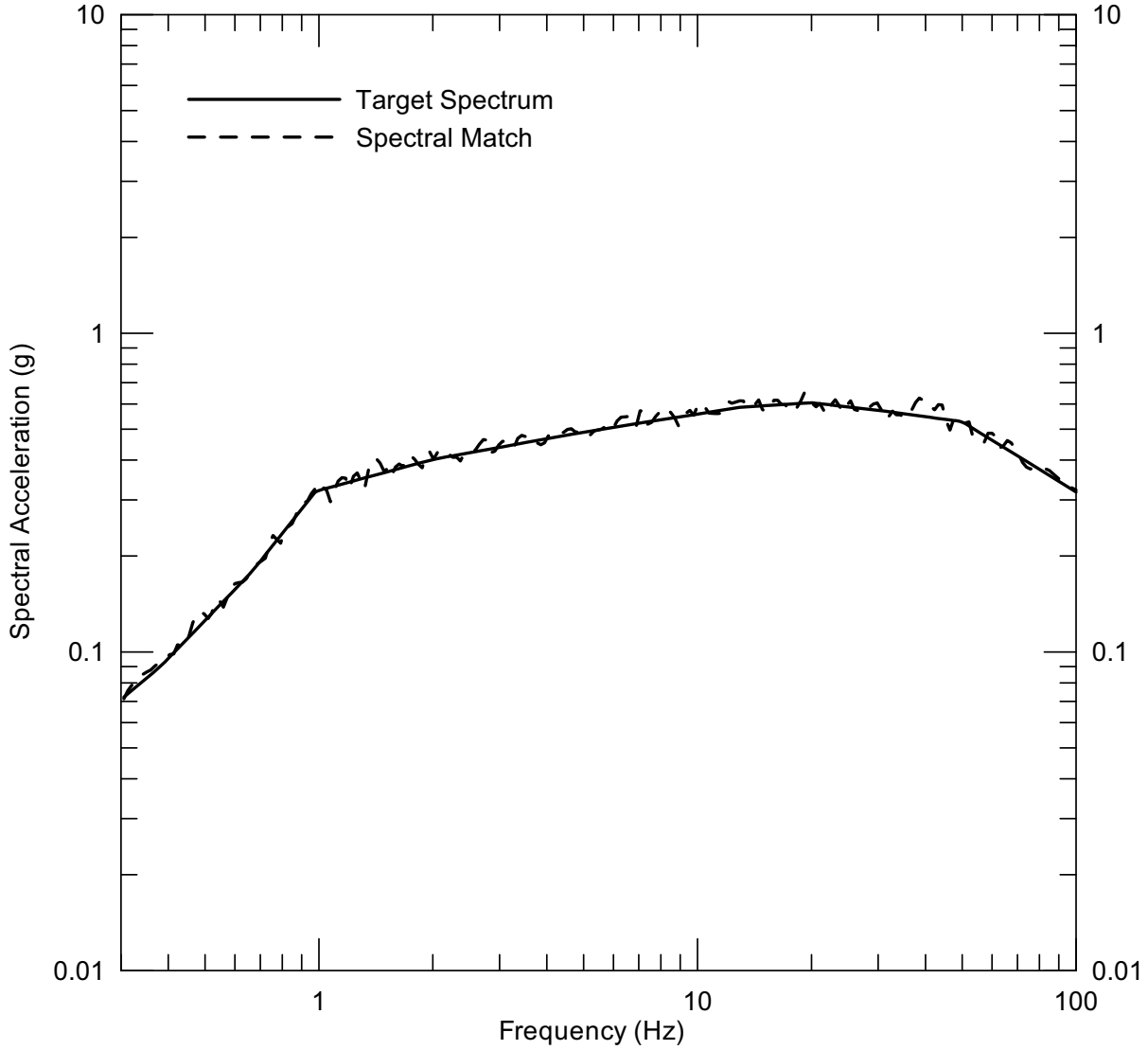

Source: Appendix D, Table D-1

Figure 6.5.3-73. Ratio of RB Design Spectrum to Spectral Match at $10^{-4}$ AFE, Horizontal 2, Set 1



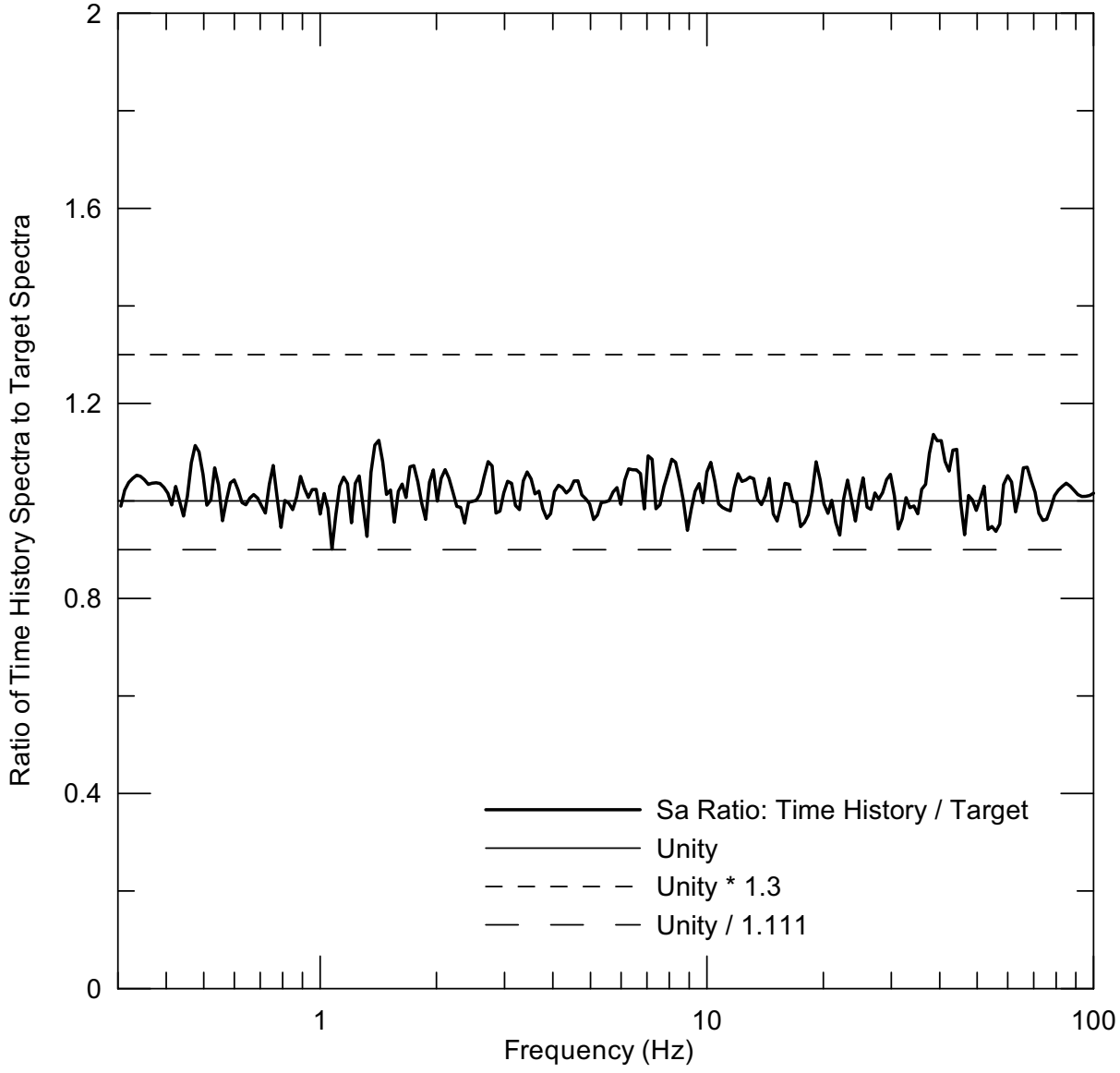

Source: Appendix D, Table D-1

Figure 6.5.3-74. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-4}$ AFE, Horizontal 2, Set 1



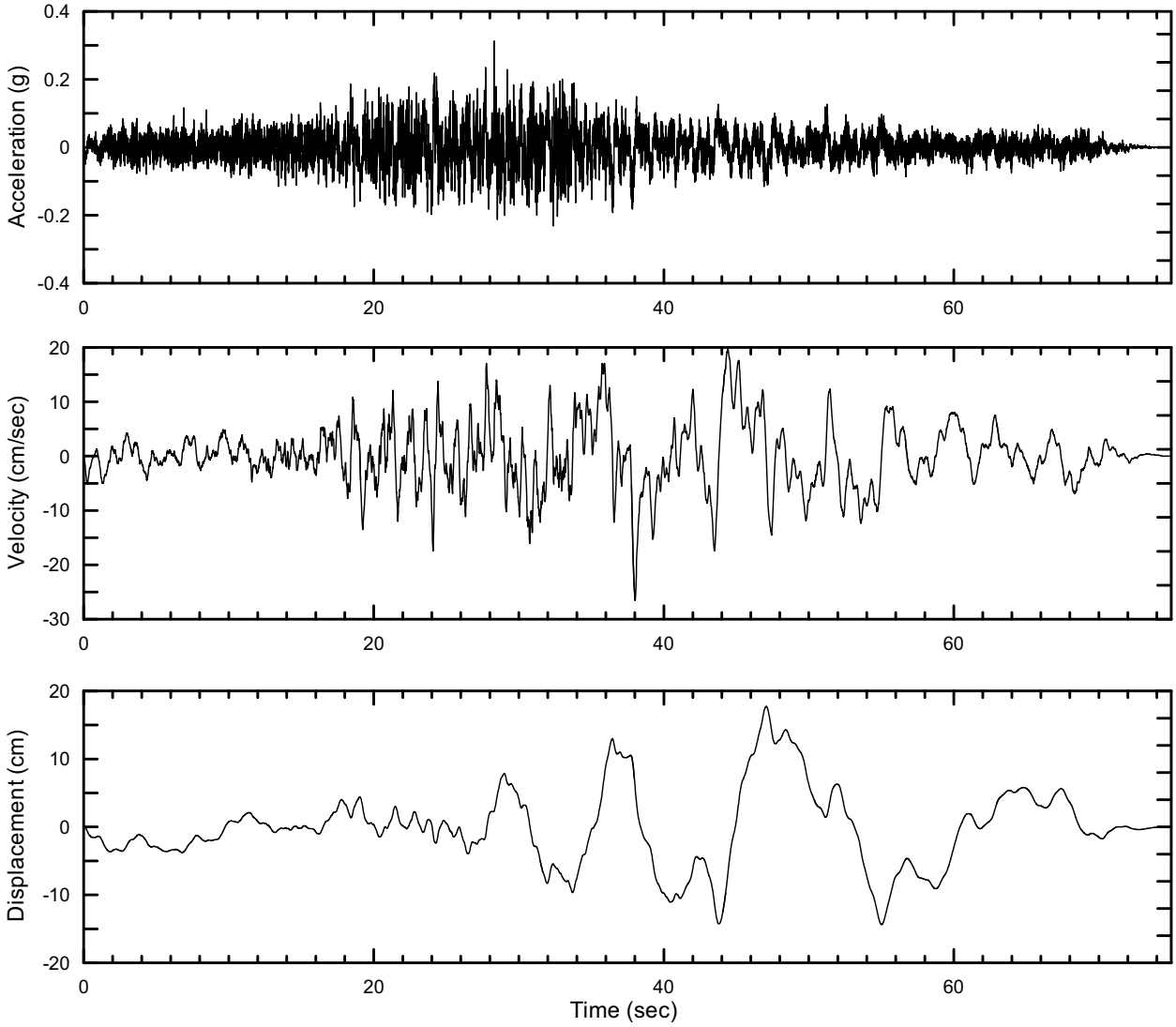

Source: Appendix D, Table D-1

Figure 6.5.3-75. Spectral Match to RB Design Spectrum at $10^{-4}$ AFE, Vertical, Set 1



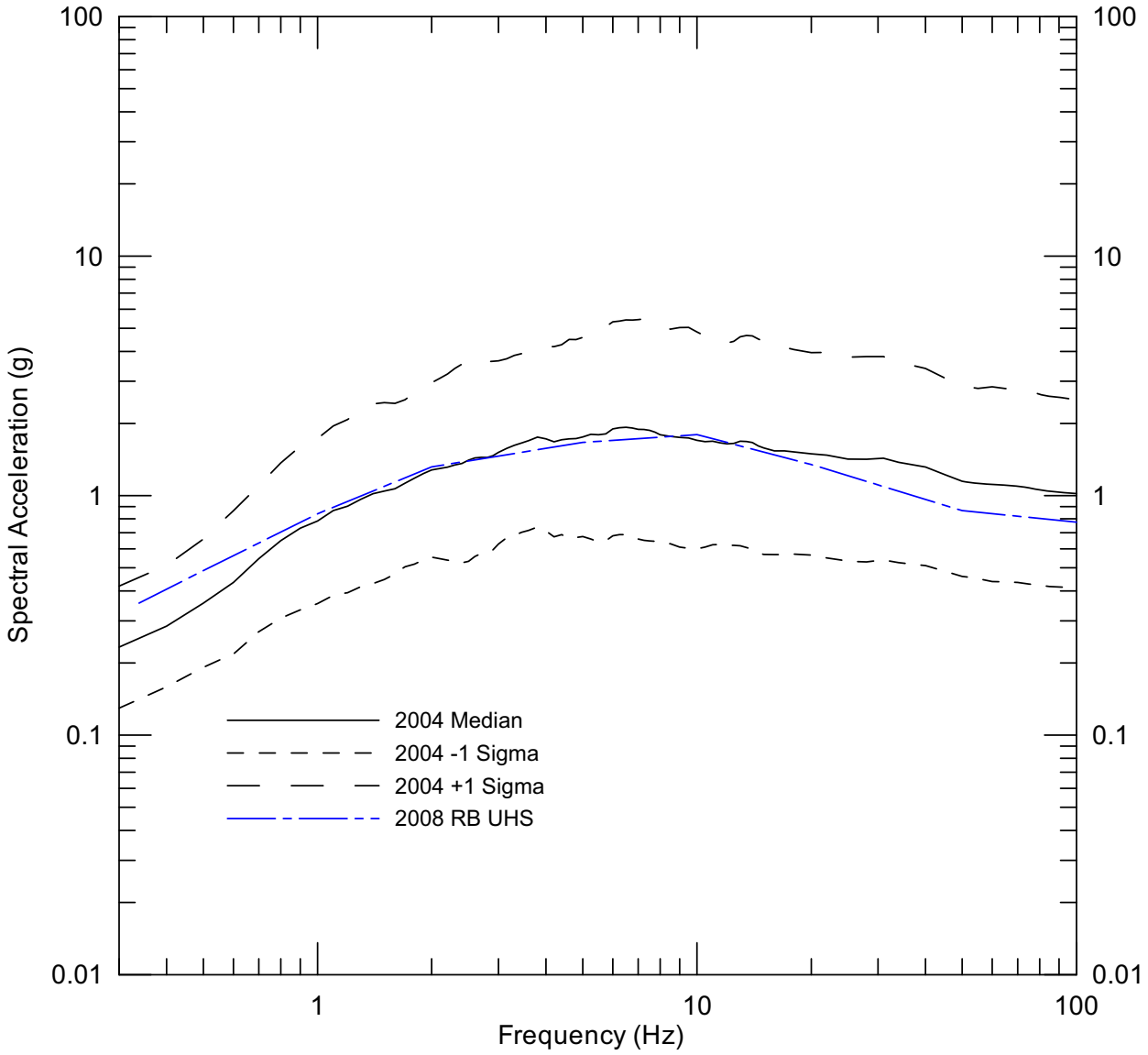

Source: Appendix D, Table D-1

Figure 6.5.3-76. Ratio of RB Design Spectrum to Spectral Match at $10^{-4}$ AFE, Vertical, Set 1




Source: Appendix D, Table D-1

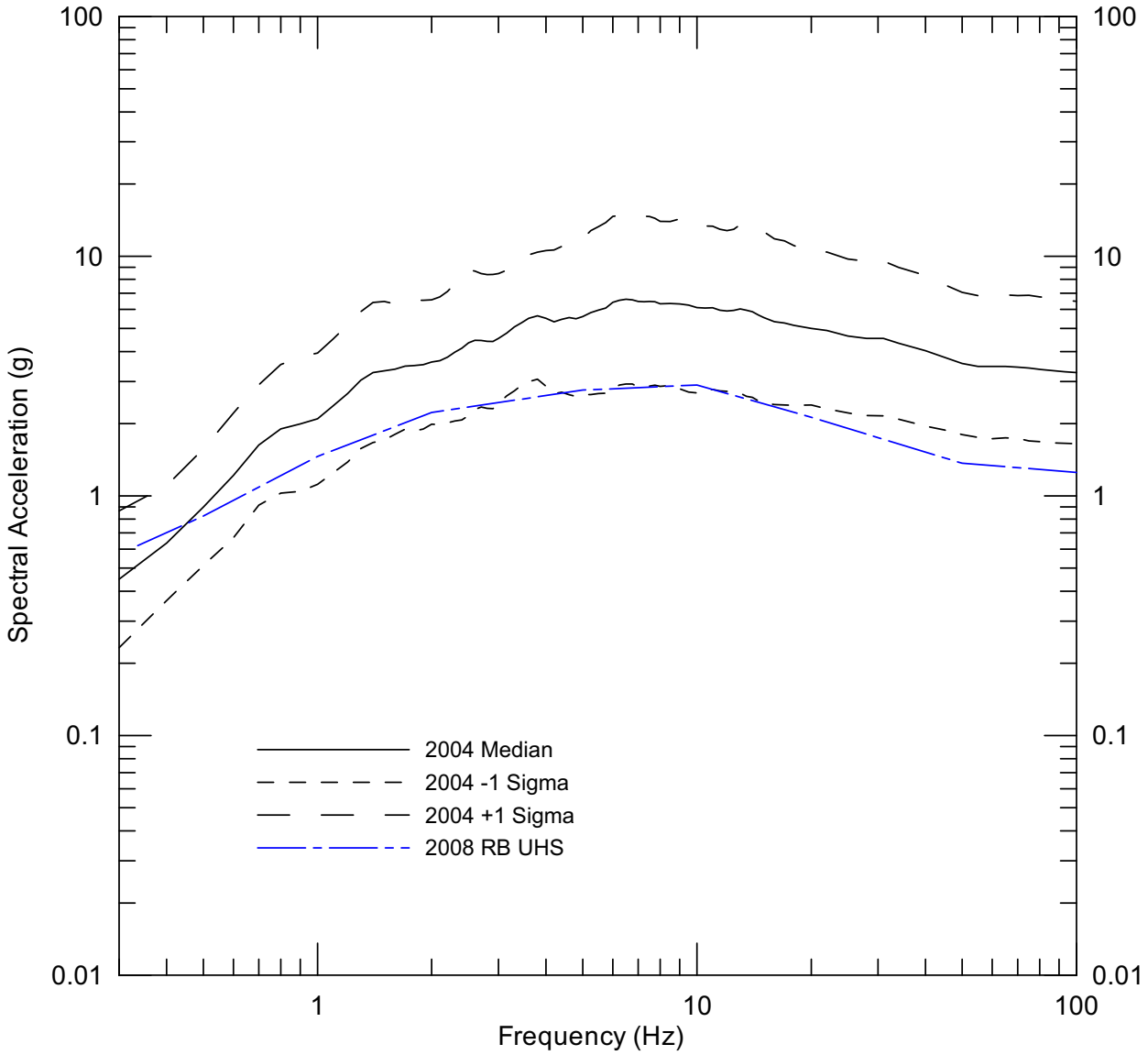
Figure 6.5.3-77. Spectrally Matched RB Acceleration, Velocity, and Displacement Time Histories, $10^{-4}$ AFE, Vertical, Set 1




Source: Appendix D, Table D-1; BSC (2004 [DIRS 170027], Figure 6.3-145)

Note: Before being scaled to the site-specific PGV, the seed time histories used in BSC (2004 [DIRS 170027], Section 6.3.2.3.3) were first spectrally conditioned to the repository waste emplacement level target spectrum.

Figure 6.5.3-78. Comparison of 2004 Median and ± 1σ Horizontal Time History Response Spectra and 2008 RB UHS: $10^{-5}$ AFE




Source: Appendix D, Table D-1; BSC (2004 [DIRS 170027], Figure 6.3-133)

Note: Before being scaled to the site-specific PGV, the seed time histories used in BSC (2004 [DIRS 170027], Section 6.3.2.3.1) were first spectrally conditioned to the reference rock outcrop target spectrum.

Figure 6.5.3-79. Comparison of 2004 Median and $\pm$ 1σ Horizontal Time History Response Spectra and 2008 RB UHS: $10^{-6}$ AFE