

# Comanche Peak (32.30° N, 97.79° E), Control Point Hazard

SA (g)	AFE 0.5 Hz	AFE 1 Hz	AFE 2.5 Hz	AFE 5 Hz	AFE 10 Hz	AFE 25 Hz	AFE 100 Hz
0.001000	4.089680e-03	5.703966e-03	7.940491e-03	8.365972e-03	8.399536e-03	8.310605e-03	7.664022e-03
0.001122	4.088075e-03	5.702422e-03	7.939616e-03	8.264019e-03	8.299439e-03	8.203507e-03	7.663899e-03
0.001259	4.069564e-03	5.687047e-03	7.929664e-03	8.140653e-03	8.180946e-03	8.072974e-03	7.564118e-03
0.001413	4.019766e-03	5.626960e-03	7.891548e-03	7.997786e-03	8.041202e-03	7.922873e-03	7.326010e-03
0.001585	3.930417e-03	5.506218e-03	7.802148e-03	7.832746e-03	7.878068e-03	7.749249e-03	7.079390e-03
0.001778	3.805330e-03	5.337440e-03	7.642930e-03	7.644694e-03	7.690391e-03	7.550852e-03	6.808335e-03
0.001995	3.669352e-03	5.140589e-03	7.449242e-03	7.433014e-03	7.476966e-03	7.327684e-03	6.513748e-03
0.002239	3.532625e-03	4.932710e-03	7.238786e-03	7.196920e-03	7.236960e-03	7.079064e-03	6.197847e-03
0.002512	3.395772e-03	4.724349e-03	7.012170e-03	6.935938e-03	6.970499e-03	6.805338e-03	5.863963e-03
0.002818	3.257539e-03	4.519515e-03	6.770512e-03	6.650667e-03	6.678831e-03	6.507840e-03	5.514426e-03
0.003162	3.116561e-03	4.318734e-03	6.515316e-03	6.342345e-03	6.363878e-03	6.189368e-03	5.152559e-03
0.003548	2.971491e-03	4.121361e-03	6.247907e-03	6.012659e-03	6.028423e-03	5.853002e-03	4.782850e-03
0.003981	2.821270e-03	3.926371e-03	5.969474e-03	5.664211e-03	5.675979e-03	5.502699e-03	4.410190e-03
0.004467	2.665103e-03	3.732470e-03	5.681286e-03	5.300104e-03	5.310799e-03	5.142935e-03	4.039447e-03
0.005012	2.502705e-03	3.538248e-03	5.384602e-03	4.924632e-03	4.937685e-03	4.778371e-03	3.675090e-03
0.005623	2.334125e-03	3.342260e-03	5.080373e-03	4.542411e-03	4.561694e-03	4.414109e-03	3.321890e-03
0.006310	2.160059e-03	3.143226e-03	4.769569e-03	4.158941e-03	4.187869e-03	4.054597e-03	2.983254e-03
0.007079	1.981639e-03	2.940182e-03	4.453063e-03	3.779398e-03	3.820951e-03	3.704308e-03	2.662953e-03
0.007943	1.800663e-03	2.732672e-03	4.132136e-03	3.409254e-03	3.465324e-03	3.366530e-03	2.362802e-03
0.008913	1.619352e-03	2.520876e-03	3.808317e-03	3.053275e-03	3.124629e-03	3.044491e-03	2.084839e-03
0.010000	1.440302e-03	2.305662e-03	3.483770e-03	2.715621e-03	2.801759e-03	2.740061e-03	1.829281e-03
0.011220	1.265950e-03	2.088657e-03	3.161130e-03	2.399341e-03	2.498757e-03	2.454829e-03	1.596649e-03
0.012589	1.098690e-03	1.872134e-03	2.843526e-03	2.106568e-03	2.216895e-03	2.189319e-03	1.385487e-03
0.014125	9.409617e-04	1.658897e-03	2.534598e-03	1.838330e-03	1.956621e-03	1.937070e-03	1.144831e-03
0.015849	7.949587e-04	1.452021e-03	2.237866e-03	1.594659e-03	1.717823e-03	1.653540e-03	9.363159e-04
0.017783	6.623176e-04	1.254631e-03	1.956920e-03	1.375161e-03	1.497985e-03	1.395774e-03	7.586243e-04
0.019953	5.439450e-04	1.069455e-03	1.694551e-03	1.178709e-03	1.291998e-03	1.171179e-03	6.066608e-04
0.022387	4.402827e-04	8.987486e-04	1.453219e-03	1.002611e-03	1.102144e-03	9.735110e-04	4.808084e-04
0.025119	3.511825e-04	7.443021e-04	1.234010e-03	8.438313e-04	9.321147e-04	8.018965e-04	3.776350e-04
0.028184	2.761075e-04	6.073037e-04	1.037459e-03	7.036976e-04	7.820444e-04	6.550670e-04	2.937875e-04
0.031623	2.139664e-04	4.881802e-04	8.633333e-04	5.817489e-04	6.506695e-04	5.302739e-04	2.265253e-04
0.035481	1.634402e-04	3.866084e-04	7.110353e-04	4.764664e-04	5.366090e-04	4.253298e-04	1.731784e-04
0.039811	1.230477e-04	3.016379e-04	5.795947e-04	3.863877e-04	4.384822e-04	3.381926e-04	1.314051e-04
0.044668	9.133729e-05	2.318714e-04	4.678639e-04	3.100268e-04	3.549217e-04	2.666879e-04	9.908437e-05
0.050119	6.684210e-05	1.756474e-04	3.739701e-04	2.460489e-04	2.845439e-04	2.087695e-04	7.410011e-05
0.056234	4.824016e-05	1.311730e-04	2.959581e-04	1.930652e-04	2.259550e-04	1.627600e-04	5.480845e-05
0.063096	3.433442e-05	9.661708e-05	2.318075e-04	1.497910e-04	1.777706e-04	1.265931e-04	4.023678e-05
0.070795	2.411604e-05	7.021488e-05	1.796559e-04	1.149108e-04	1.386709e-04	9.828260e-05	2.936773e-05
0.079433	1.671836e-05	5.036720e-05	1.377126e-04	8.727314e-05	1.074403e-04	7.638522e-05	2.133278e-05
0.089125	1.144683e-05	3.567979e-05	1.043933e-04	6.573635e-05	8.286188e-05	5.922200e-05	1.546905e-05
0.100000	7.743368e-06	2.497382e-05	7.823575e-05	4.913641e-05	6.367235e-05	4.584629e-05	1.121172e-05
0.112202	5.180558e-06	1.728137e-05	5.798405e-05	3.644231e-05	4.872987e-05	3.552003e-05	8.123875e-06
0.125893	3.429960e-06	1.183122e-05	4.250434e-05	2.685189e-05	3.713200e-05	2.748763e-05	5.881572e-06
0.141254	2.250831e-06	8.022185e-06	3.083316e-05	1.968032e-05	2.818683e-05	2.123641e-05	4.259799e-06
0.158489	1.465797e-06	5.394787e-06	2.214077e-05	1.437454e-05	2.134067e-05	1.639102e-05	3.094503e-06

0.177828	9.491654e-07	3.604050e-06	1.575218e-05	1.048511e-05	1.613487e-05	1.263547e-05	2.256049e-06
0.199526	6.124248e-07	2.396589e-06	1.111458e-05	7.652896e-06	1.219552e-05	9.733973e-06	1.648159e-06
0.223872	3.950790e-07	1.589824e-06	7.791531e-06	5.596928e-06	9.223653e-06	7.495865e-06	1.206027e-06
0.251189	2.556385e-07	1.054630e-06	5.434879e-06	4.105321e-06	6.984560e-06	5.771442e-06	8.826891e-07
0.281838	1.665419e-07	7.013315e-07	3.780255e-06	3.022361e-06	5.297933e-06	4.445958e-06	6.449794e-07
0.316228	1.096704e-07	4.686880e-07	2.627517e-06	2.234947e-06	4.026344e-06	3.426262e-06	4.701054e-07
0.354813	7.328573e-08	3.154139e-07	1.829026e-06	1.660002e-06	3.065092e-06	2.639881e-06	3.411945e-07
0.398107	4.986226e-08	2.141209e-07	1.277040e-06	1.236939e-06	2.335838e-06	2.032730e-06	2.463945e-07
0.446684	3.458499e-08	1.469136e-07	8.959204e-07	9.236822e-07	1.780876e-06	1.564257e-06	1.766994e-07
0.501187	2.442730e-08	1.019902e-07	6.323499e-07	6.903569e-07	1.357226e-06	1.202793e-06	1.258158e-07
0.562341	1.750459e-08	7.159368e-08	4.490742e-07	5.157473e-07	1.032970e-06	9.234884e-07	8.886653e-08
0.630957	1.266481e-08	5.071308e-08	3.208740e-07	3.847681e-07	7.844424e-07	7.073759e-07	6.220199e-08
0.707946	9.213569e-09	3.616287e-08	2.304402e-07	2.862327e-07	5.938738e-07	5.400400e-07	4.315806e-08
0.794328	6.734395e-09	2.592775e-08	1.662478e-07	2.118377e-07	4.478235e-07	4.104374e-07	2.967989e-08
0.891251	4.948001e-09	1.868546e-08	1.202321e-07	1.558321e-07	3.361340e-07	3.103143e-07	2.019577e-08
1.000000	3.654118e-09	1.350384e-08	8.700706e-08	1.138478e-07	2.509691e-07	2.332778e-07	1.361194e-08
1.122019	2.707430e-09	9.727331e-09	6.288464e-08	8.258923e-08	1.862253e-07	1.741629e-07	9.067060e-09
1.258925	2.008140e-09	6.936319e-09	4.532615e-08	5.947817e-08	1.372072e-07	1.289989e-07	5.958265e-09
1.412538	1.487429e-09	4.908775e-09	3.254577e-08	4.249020e-08	1.003042e-07	9.475290e-08	3.851714e-09
1.584893	1.096793e-09	3.472673e-09	2.325647e-08	3.008752e-08	7.271107e-08	6.900873e-08	2.443809e-09
1.778279	8.023421e-10	2.461388e-09	1.652307e-08	2.108286e-08	5.222314e-08	4.978378e-08	1.515899e-09
1.995262	5.808574e-10	1.745506e-09	1.165956e-08	1.461679e-08	3.711163e-08	3.548642e-08	9.099251e-10
2.238721	4.158640e-10	1.235342e-09	8.165714e-09	1.003087e-08	2.603849e-08	2.489326e-08	5.163280e-10
2.511886	2.945512e-10	8.698263e-10	5.675252e-09	6.804632e-09	1.798553e-08	1.713910e-08	2.619457e-10
2.818383	2.065200e-10	6.071970e-10	3.915645e-09	4.549072e-09	1.218415e-08	1.160419e-08	1.159236e-10
3.162278	1.433332e-10	4.189274e-10	2.679090e-09	2.985009e-09	8.053289e-09	7.613280e-09	4.665646e-11
3.548134	9.842870e-11	2.852556e-10	1.814314e-09	1.912493e-09	5.146295e-09	4.743877e-09	8.427162e-12
3.981072	6.681099e-11	1.915637e-10	1.212483e-09	1.191357e-09	3.119506e-09	2.868614e-09	1.548519e-13
4.466836	4.477320e-11	1.267034e-10	7.974244e-10	7.132656e-10	1.726526e-09	1.697758e-09	1.425081e-16
5.011872	2.957269e-11	8.236718e-11	5.142803e-10	3.969869e-10	8.246565e-10	8.952465e-10	5.765135e-21
5.623413	2.090901e-11	5.751571e-11	3.563993e-10	2.255533e-10	4.551660e-10	4.896033e-10	2.882568e-21
6.309573	1.224533e-11	3.266424e-11	1.985184e-10	5.411972e-11	8.567560e-11	8.396011e-11	0.000000e+00

## Comanche Peak (32.30° N, 97.79° E), Response Spectra

Frequency (Hz)	UHRS 1E-4 (g)	GMRS (g)	UHRS 1E-5 (g)
0.500000	0.043132	0.047746	0.092744
0.561009	0.046049	0.051080	0.099270
0.629463	0.049268	0.054637	0.106176
0.706269	0.052203	0.057798	0.112275
0.792447	0.054760	0.060390	0.117193
0.889140	0.057679	0.063384	0.122894
0.997631	0.062175	0.068171	0.132102
1.000000	0.062283	0.068287	0.132324
1.122019	0.067833	0.076055	0.148205
1.258925	0.072567	0.082530	0.161396
1.412538	0.078390	0.090065	0.176580
1.584893	0.084004	0.097057	0.190554

1.778279	0.087739	0.101593	0.199569
1.995262	0.090626	0.105033	0.206374
2.238721	0.091361	0.105891	0.208062
2.500000	0.090668	0.105085	0.206478
2.805046	0.087129	0.102456	0.202043
3.147313	0.082945	0.098768	0.195381
3.531344	0.078618	0.094389	0.187105
3.962233	0.075324	0.090945	0.180531
4.445698	0.074430	0.090087	0.178936
4.988156	0.075034	0.091038	0.180935
5.000000	0.075053	0.091065	0.180992
5.610092	0.075942	0.093525	0.186575
6.294627	0.076465	0.095576	0.191373
7.062688	0.077847	0.098685	0.198295
7.924466	0.079251	0.101671	0.204907
8.891397	0.080902	0.104785	0.211687
9.976312	0.081988	0.106959	0.216468
10.000000	0.082000	0.106989	0.216537
11.220185	0.080285	0.105153	0.213025
12.589254	0.080328	0.105877	0.214831
14.125375	0.079705	0.105980	0.215511
15.848932	0.080040	0.107806	0.219931
17.782794	0.077211	0.104687	0.213923
19.952623	0.074191	0.101610	0.208158
22.387211	0.070239	0.096235	0.197166
25.000000	0.066609	0.089400	0.182220
28.050461	0.063552	0.083167	0.168448
31.473135	0.061110	0.077918	0.156794
35.313439	0.060042	0.075093	0.150382
39.622330	0.059442	0.073217	0.146066
44.456985	0.059394	0.072349	0.143933
49.881558	0.059146	0.071353	0.141609
55.968028	0.058379	0.069601	0.137727
62.797161	0.057065	0.067273	0.132744
70.459573	0.055376	0.064935	0.127963
79.056942	0.053178	0.062267	0.122660
88.703347	0.050565	0.059398	0.117101
99.526793	0.047860	0.056759	0.112166
100.000000	0.044501	0.052726	0.104172