

Map Description

Magnitude ≥ 3.0

MAG

- 3.0 - 4.0
- 4.1 - 5.0
- 5.1 - 6.0
- 6.1 - 7.0
- 7.1 - 8.0

★ SITE

• Magnitude < 3.0

— Q 768

— Q 726

— Q603

— Q 602

— Q 601

— Q 3501

■ N Utah

■ Tetons

■ Yellowstone

■ SW Montana

■ Lost River - Lemhi

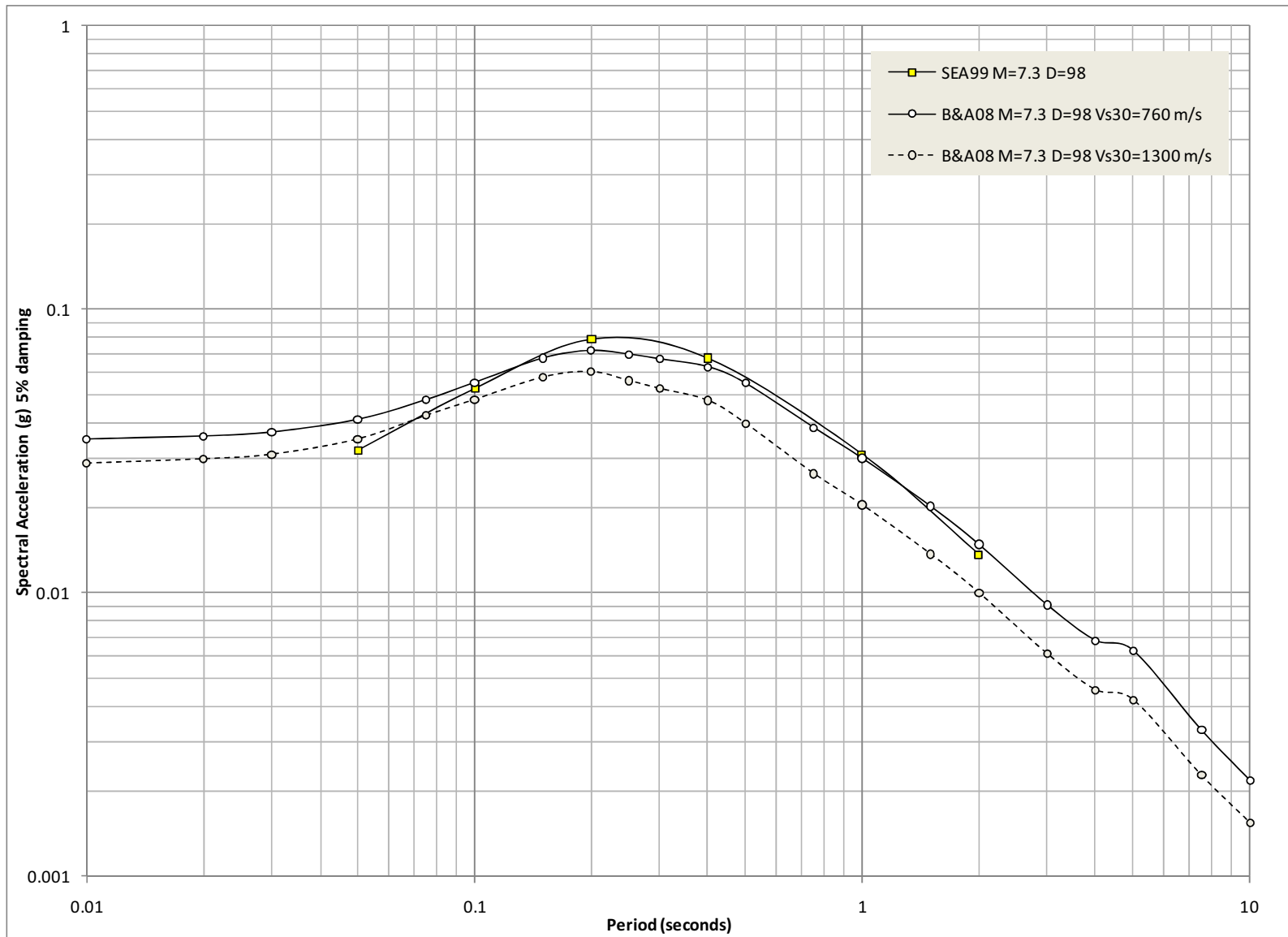
■ Snake River Plain

■ INL

0 50 100 200 Miles

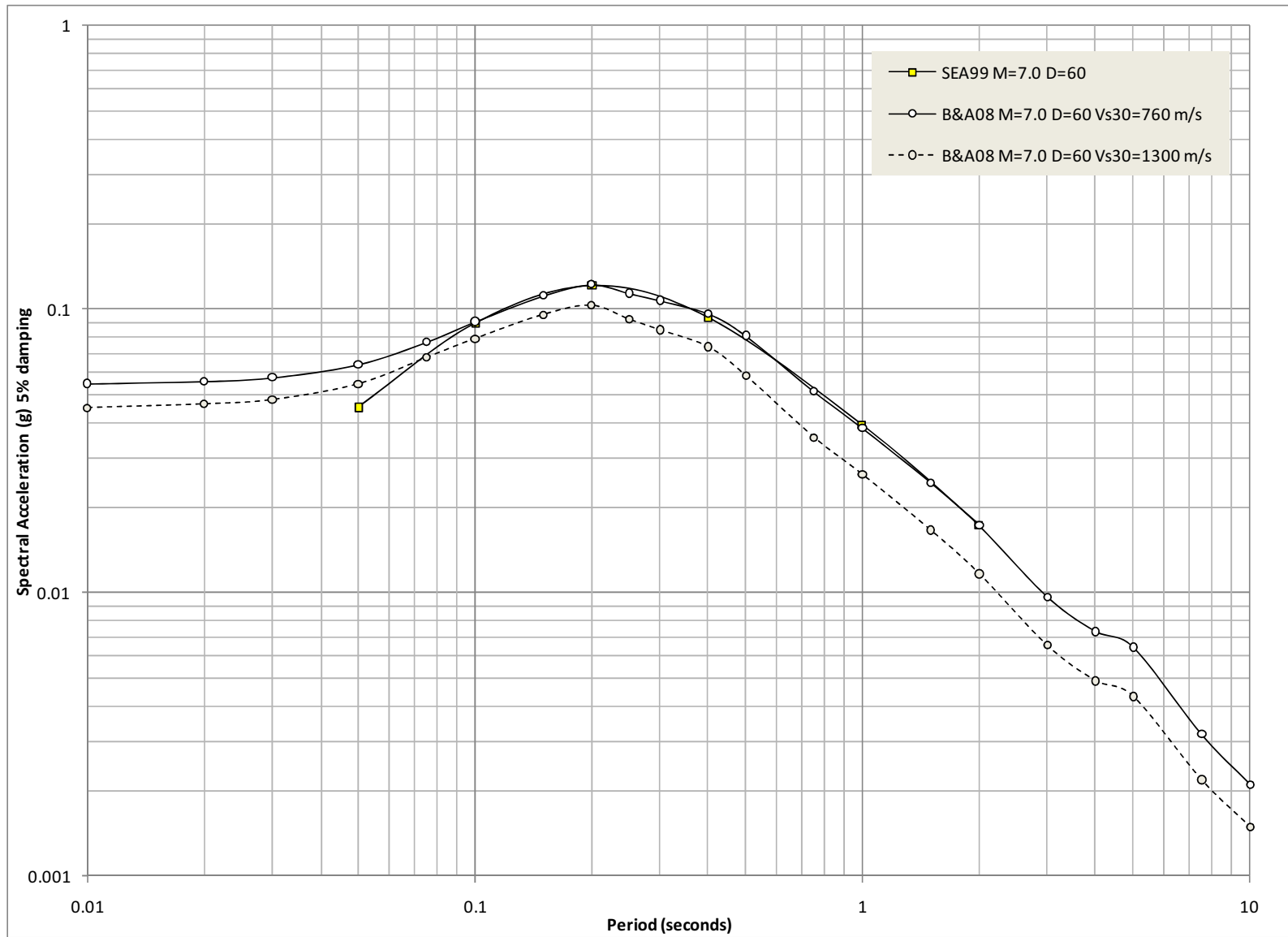
0 50 100 200 Kilometers

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility	Seismic Source Zone Model 3
WGE, Inc. Oct. 28, 2008	FIGURE 10



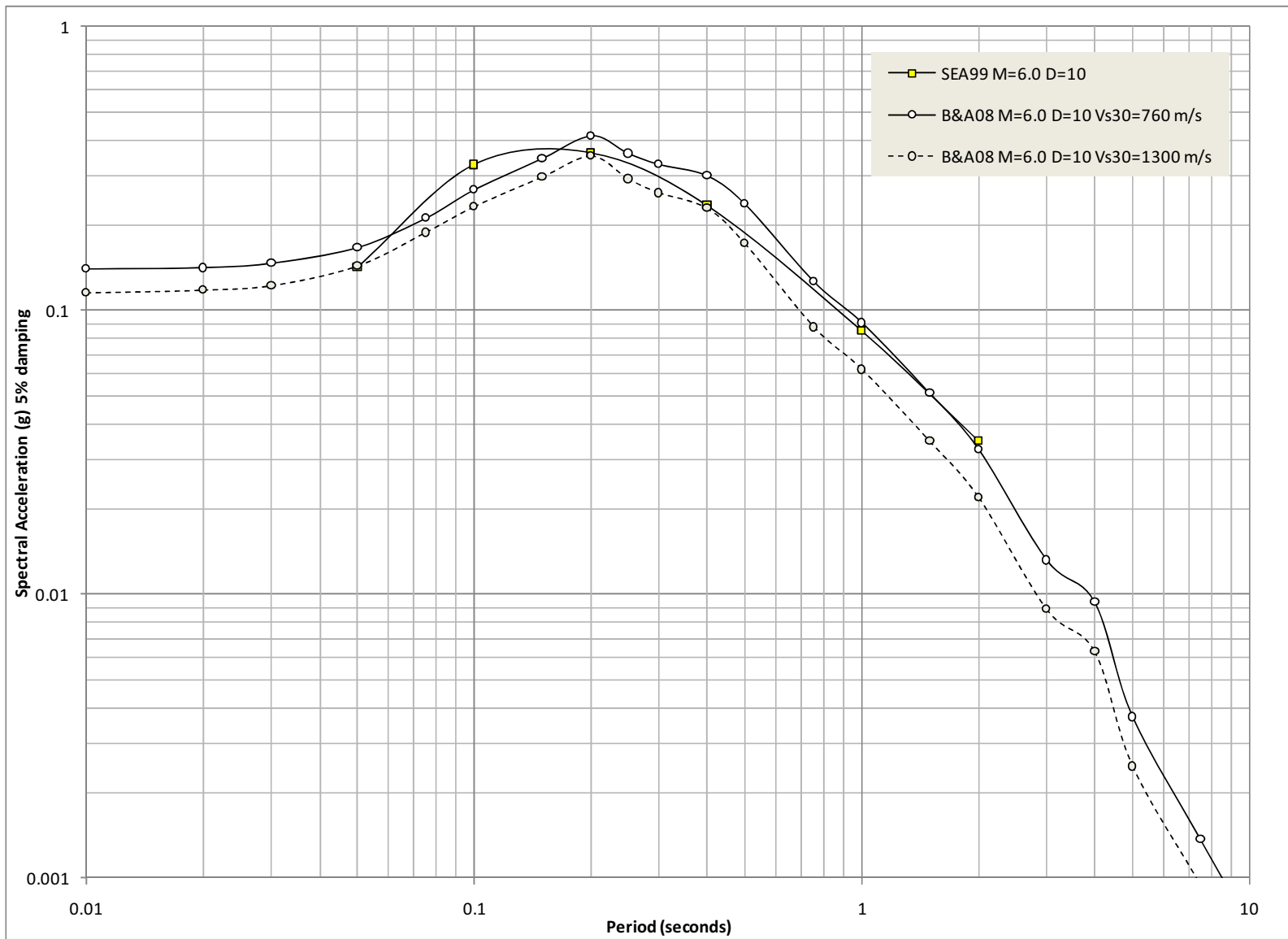
Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Deterministic Earthquake Scenario 1, M=7.3, D=98 km
WGE, Inc. Oct. 28, 2008	FIGURE 11



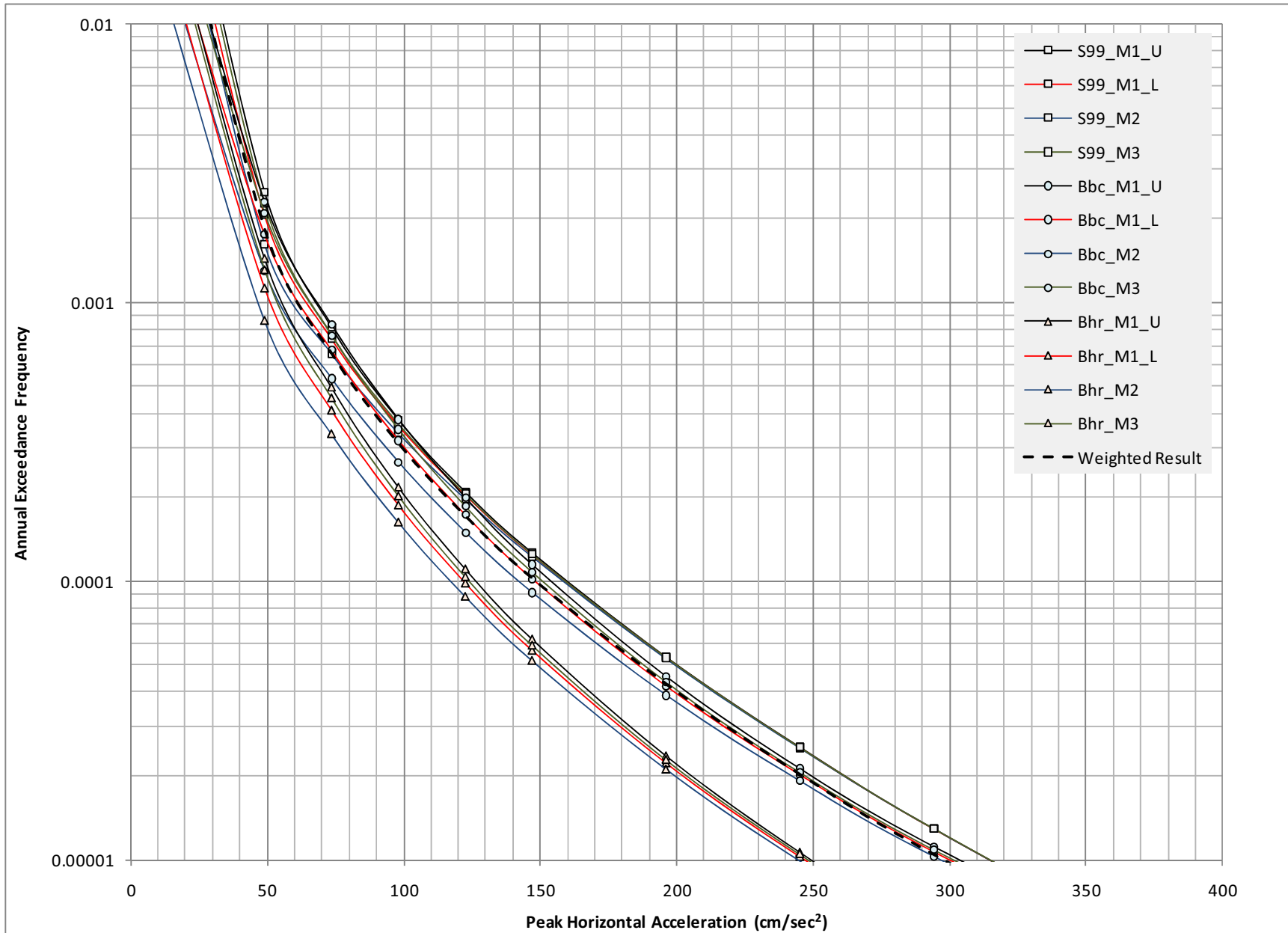
Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Deterministic Earthquake Scenario 2, M=7.0, D=60 km
WGE, Inc. Oct. 28, 2008	FIGURE 12

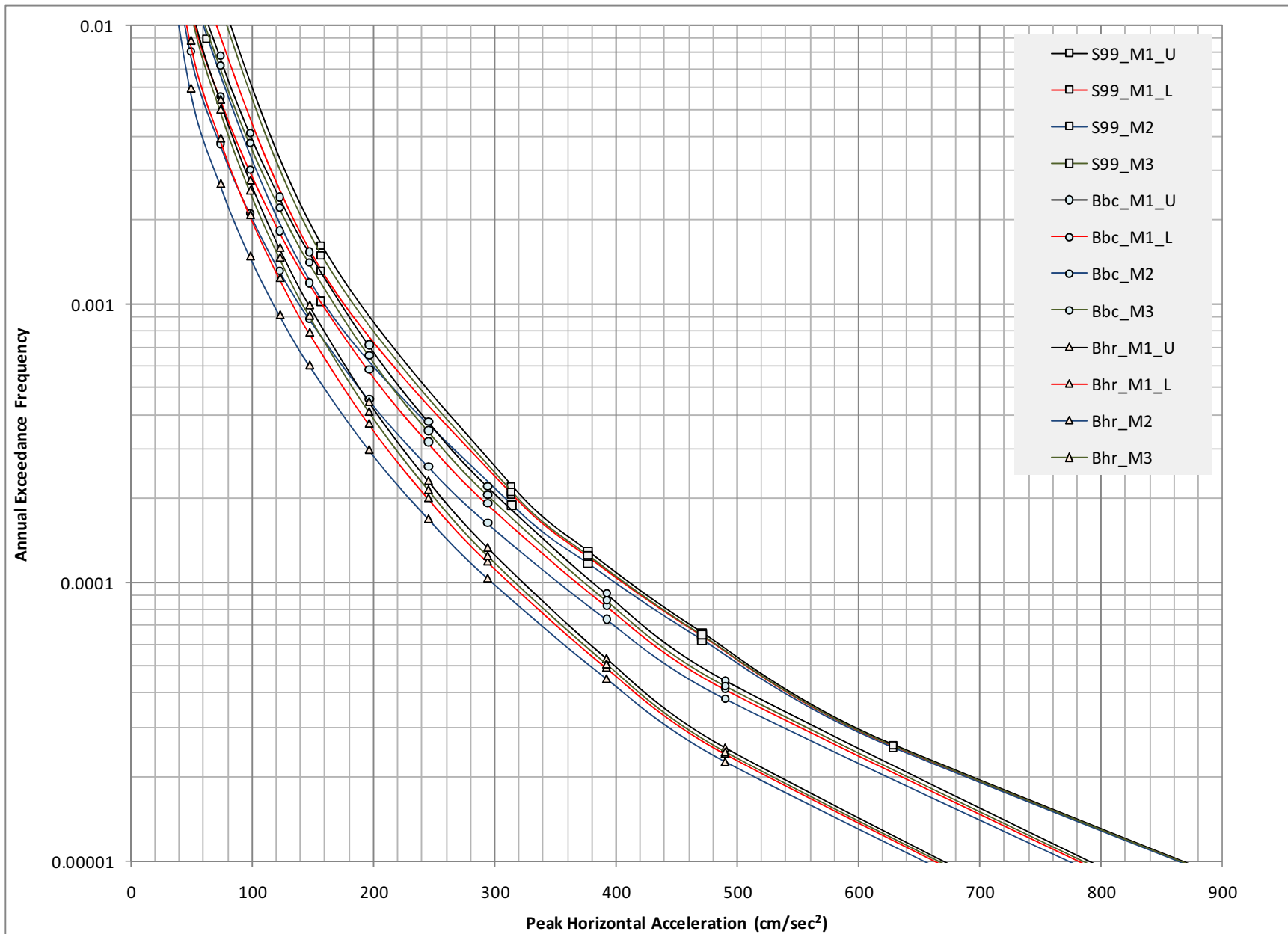


Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Deterministic Earthquake Scenario 3, M=6.0, D=10 km
WGE, Inc. Oct. 28, 2008	FIGURE 13

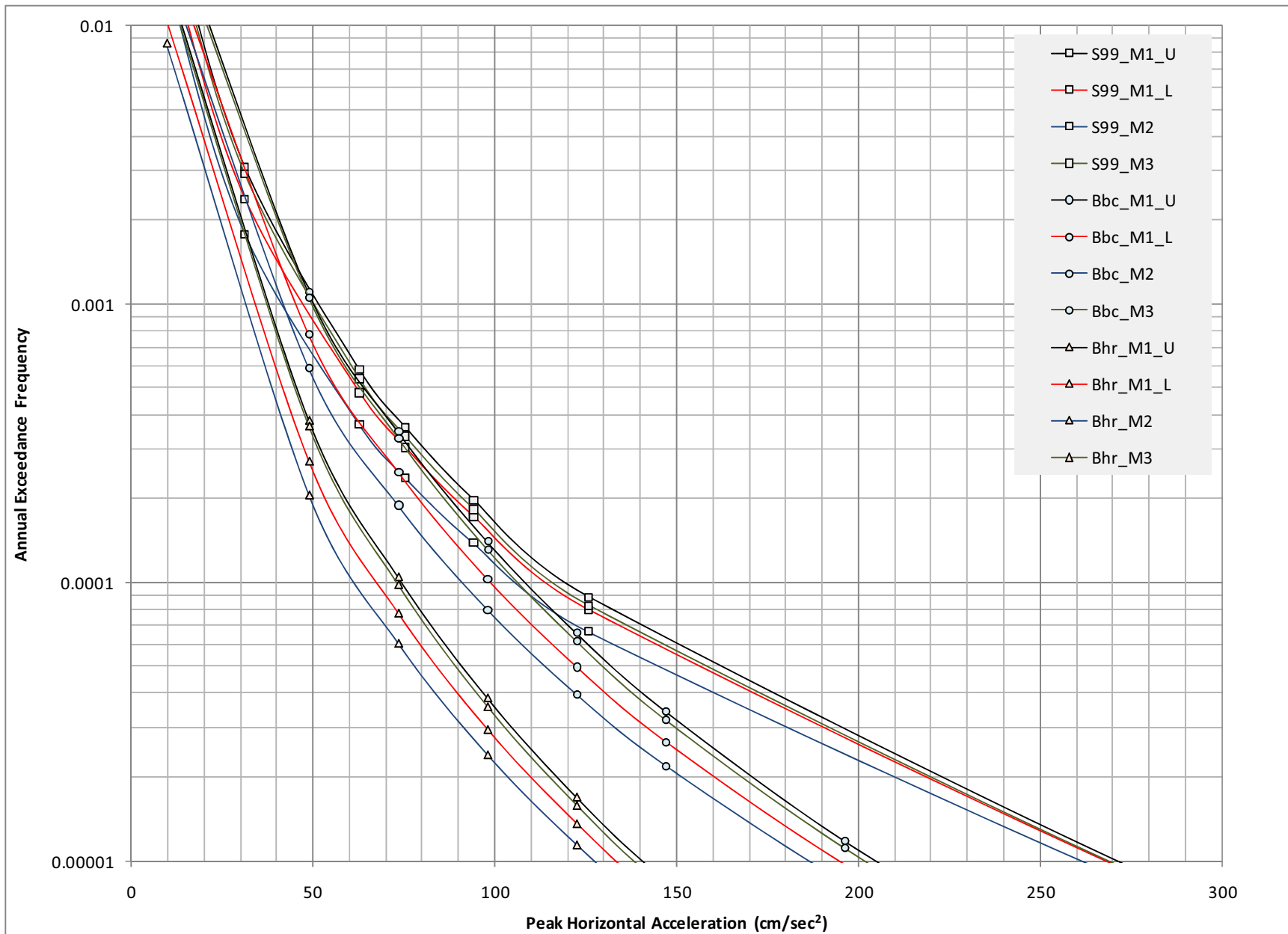


Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020



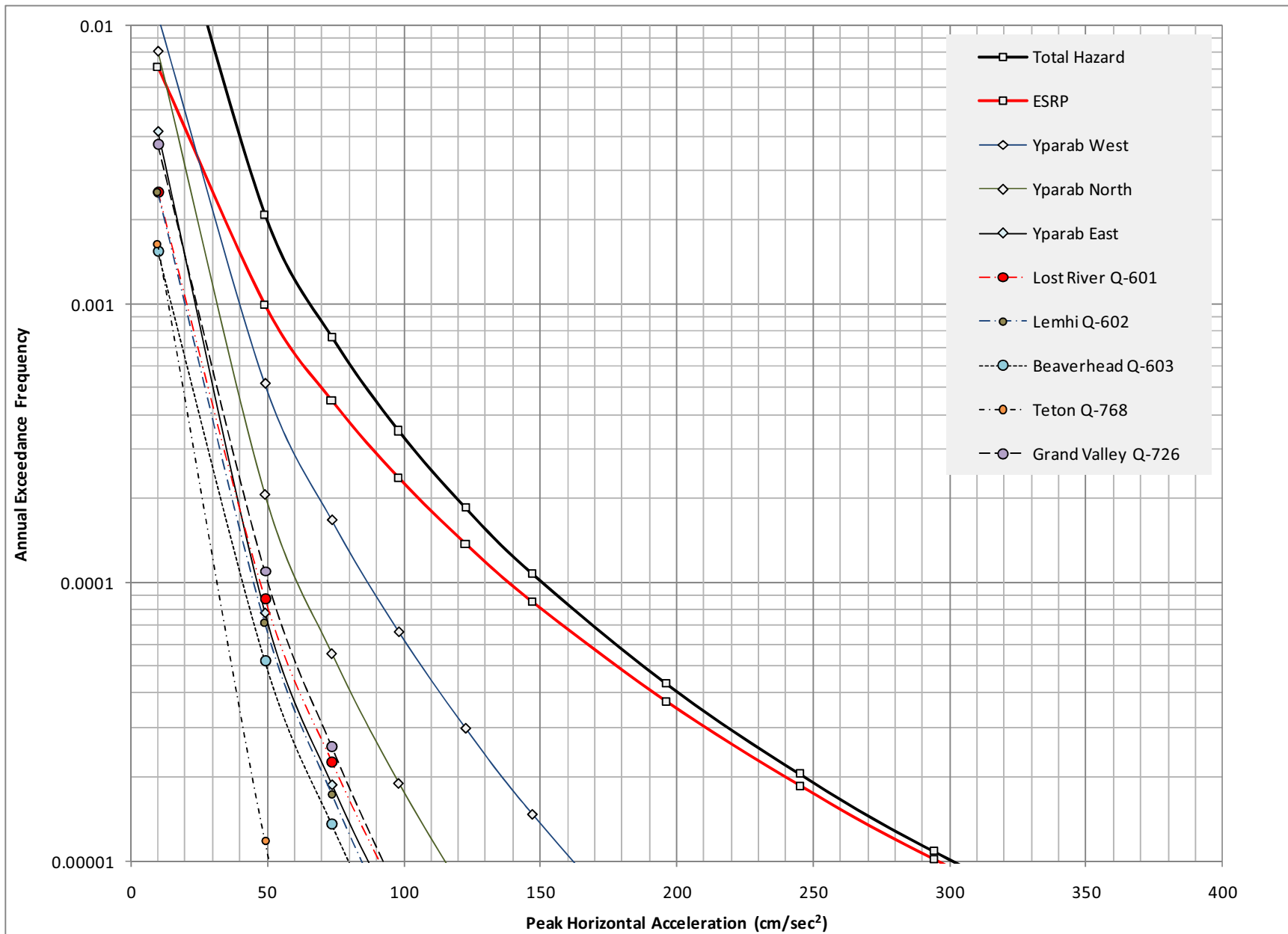
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Seismic Hazard Curves for Spectral Acceleration at 5Hz
WGE, Inc. Oct. 28, 2008	FIGURE 15



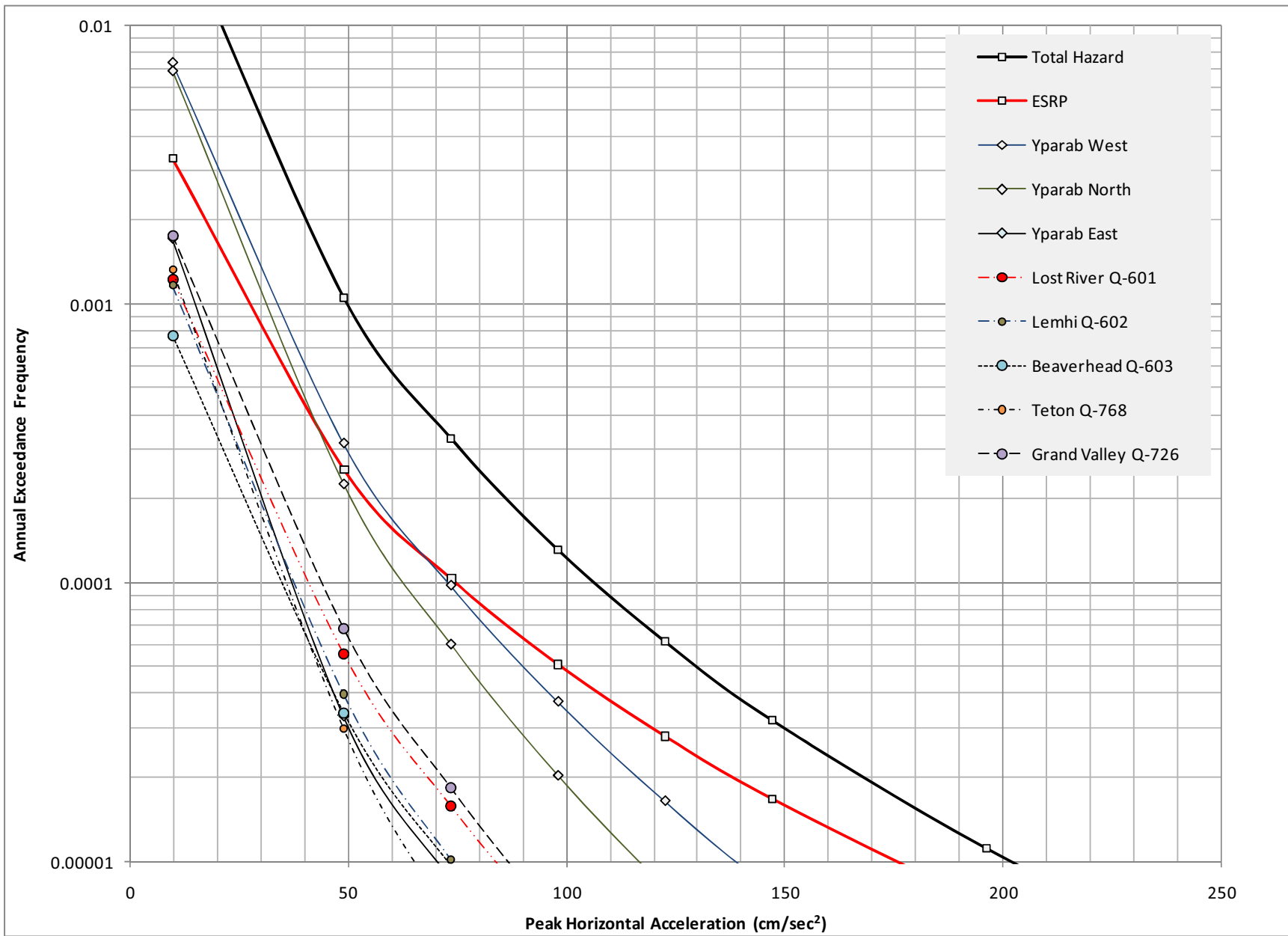
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Seismic Hazard Curves for Spectral Acceleration at 1Hz
WGE, Inc. Oct. 28, 2008	FIGURE 16

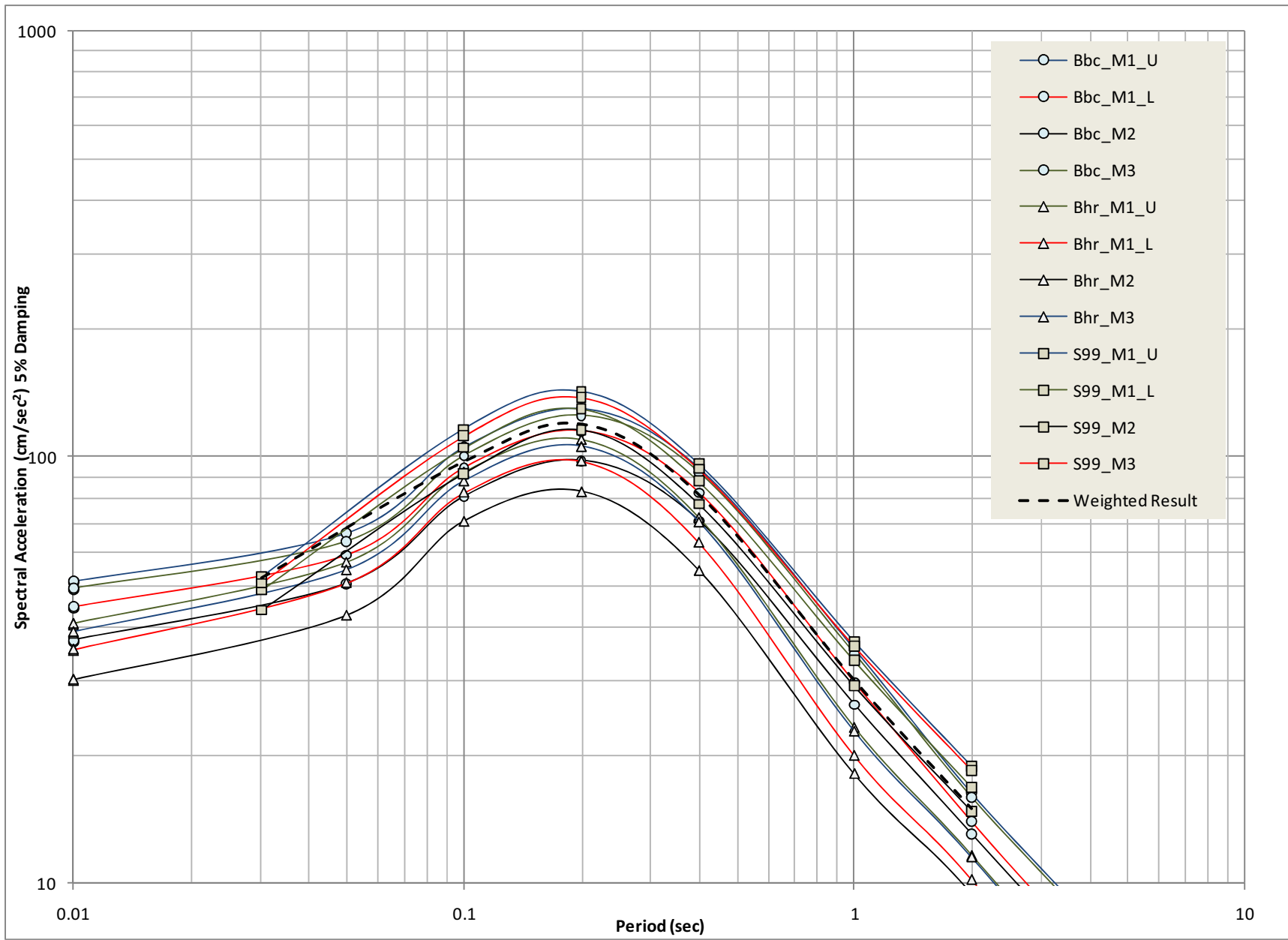


Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Source Zone Contributions to Total PGA Seismic Hazard
WGE, Inc. Oct. 28, 2008	FIGURE 17

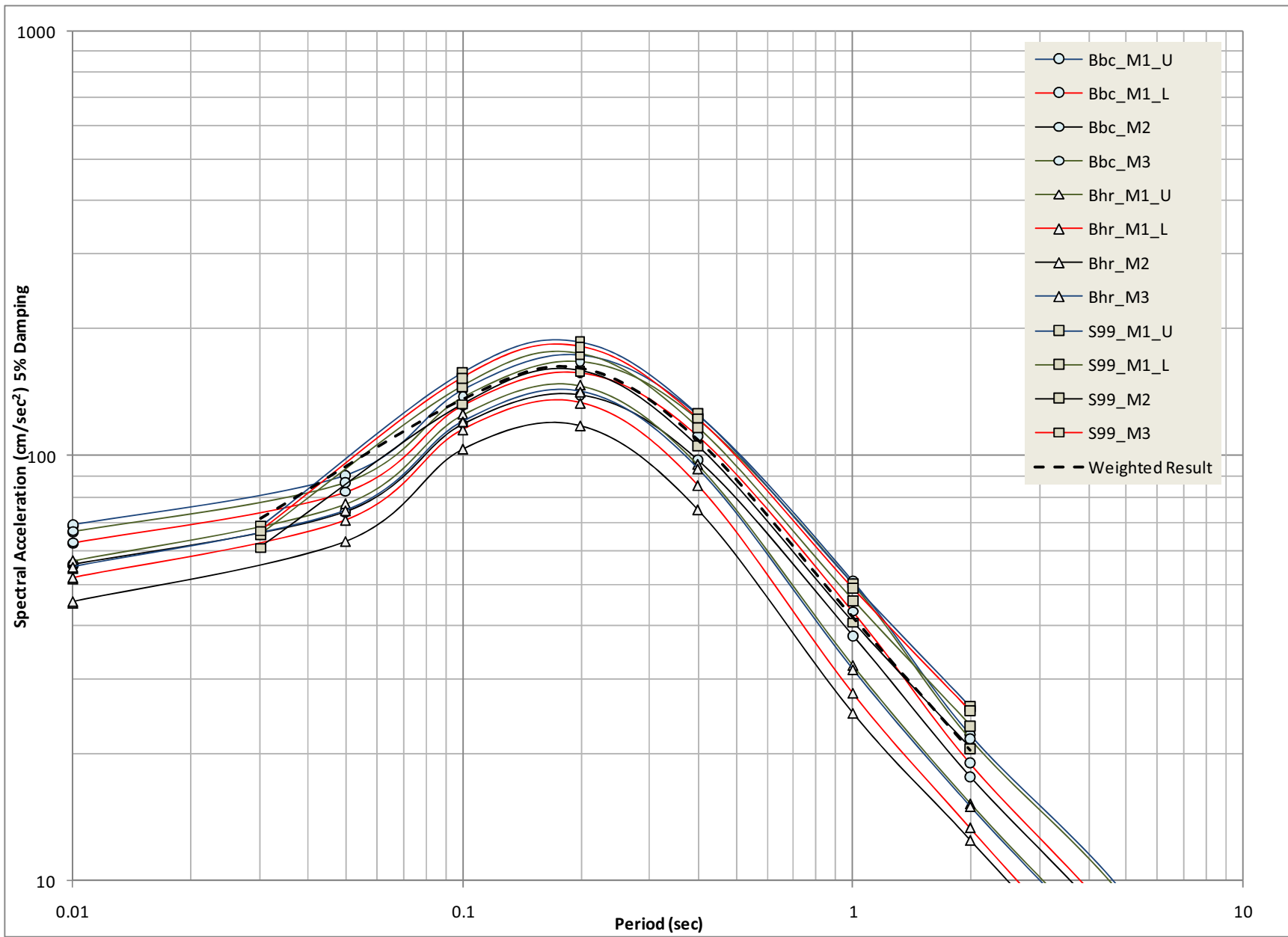


Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020



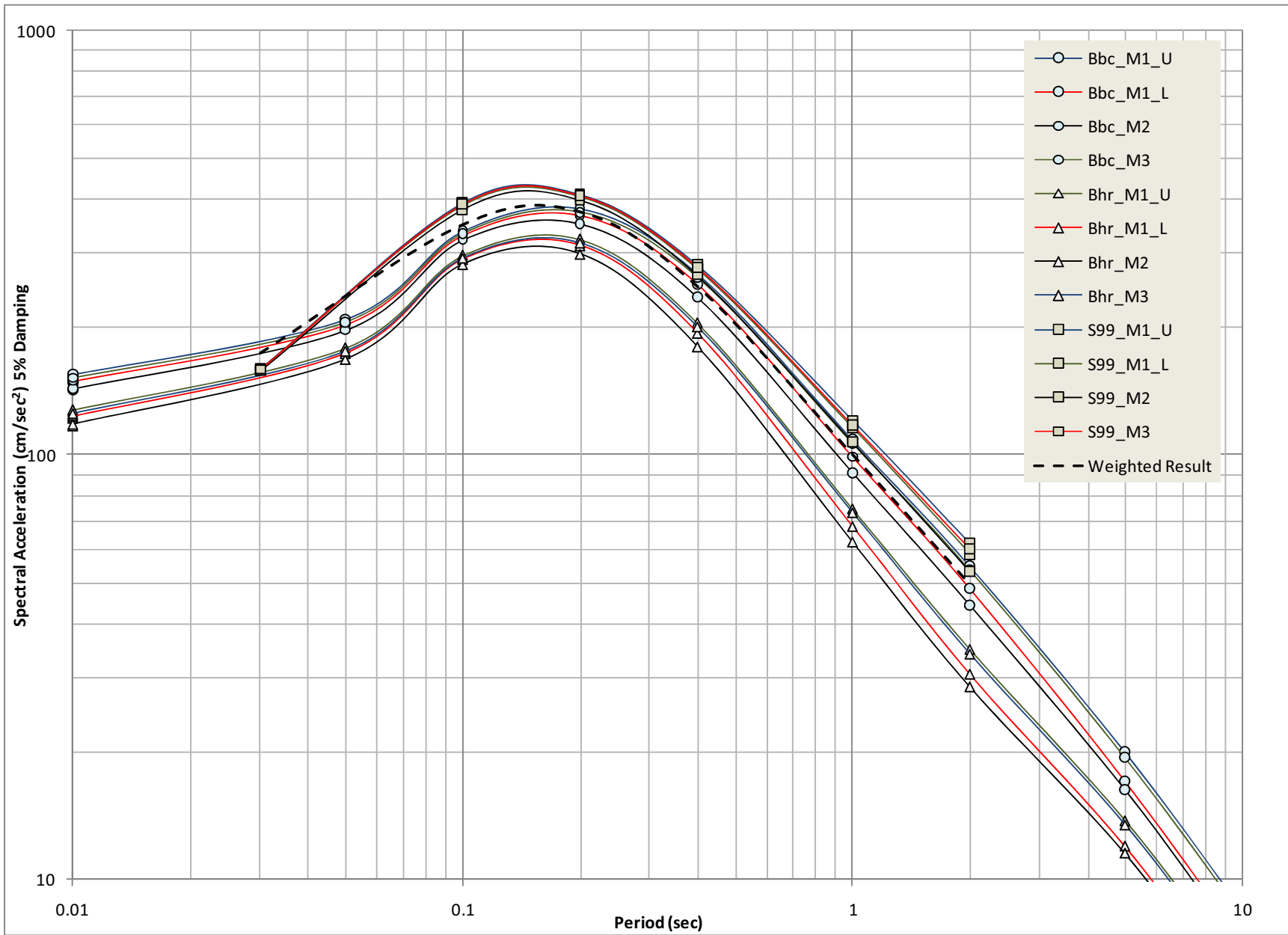
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho WGE, Inc. Oct. 28, 2008	UHRS in Bedrock for Annual Exceedance Frequency of 2.1×10^{-3} (475 yr earthquake) FIGURE 19
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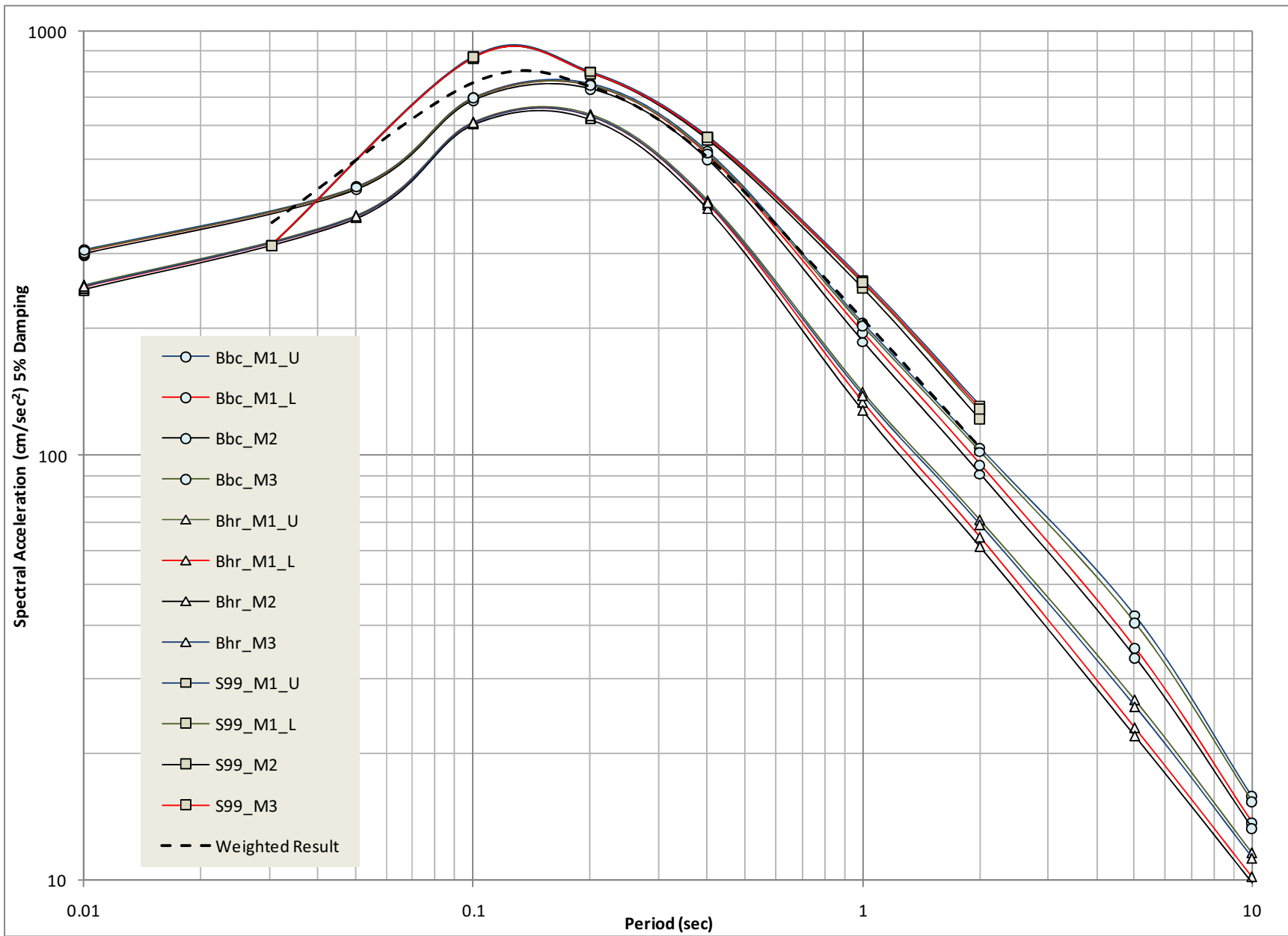
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho WGE, Inc. Oct. 28, 2008	UHRS in Bedrock for Annual Exceedance Frequency of 10^{-3} (1,000 yr earthquake) FIGURE 20
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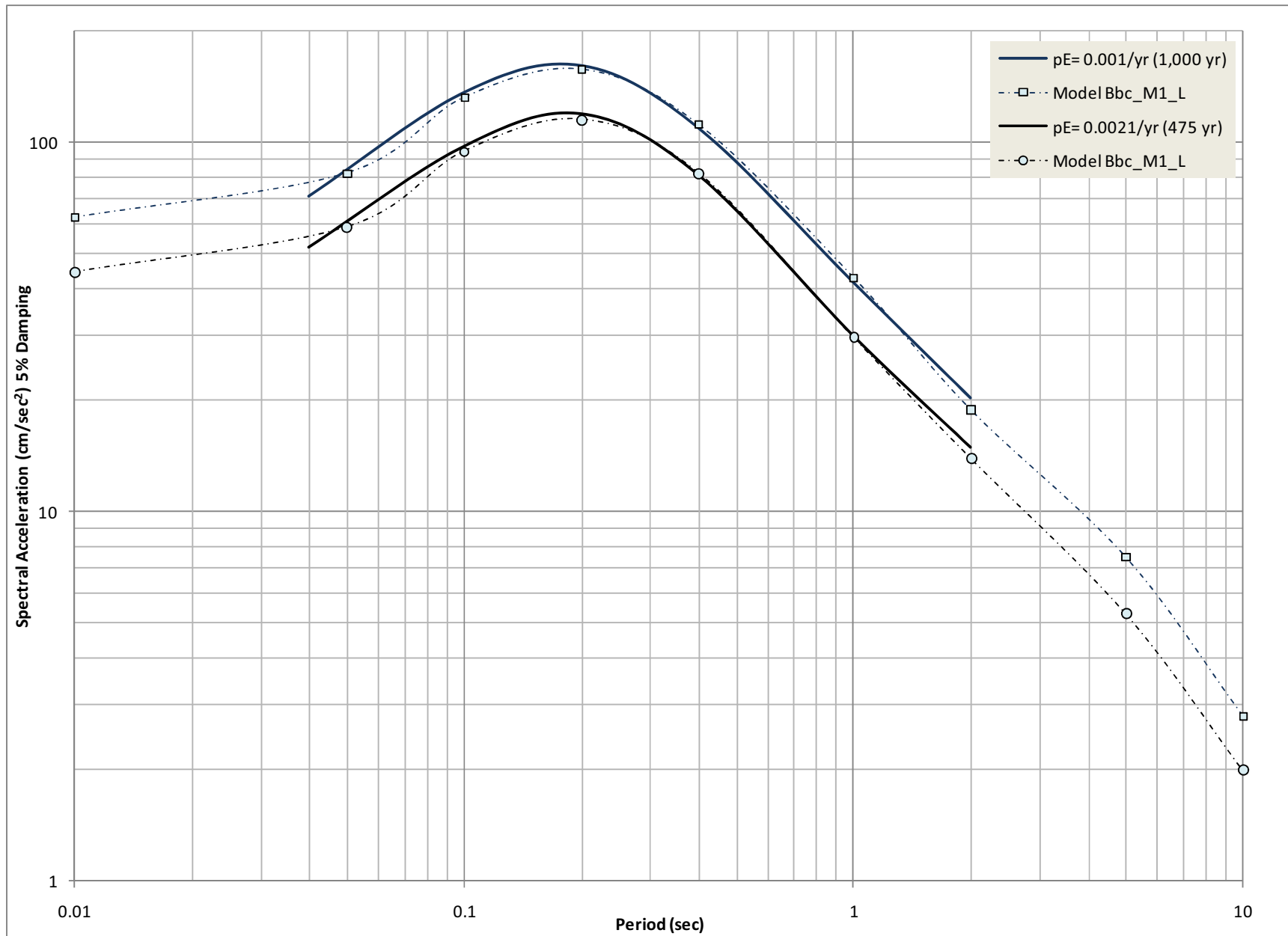
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	UHS in Bedrock for Annual Exceedance Frequency of 10 ⁻⁴ (10,000 yr Earthquake)
WGE, Inc. Oct. 28, 2008	FIGURE 21

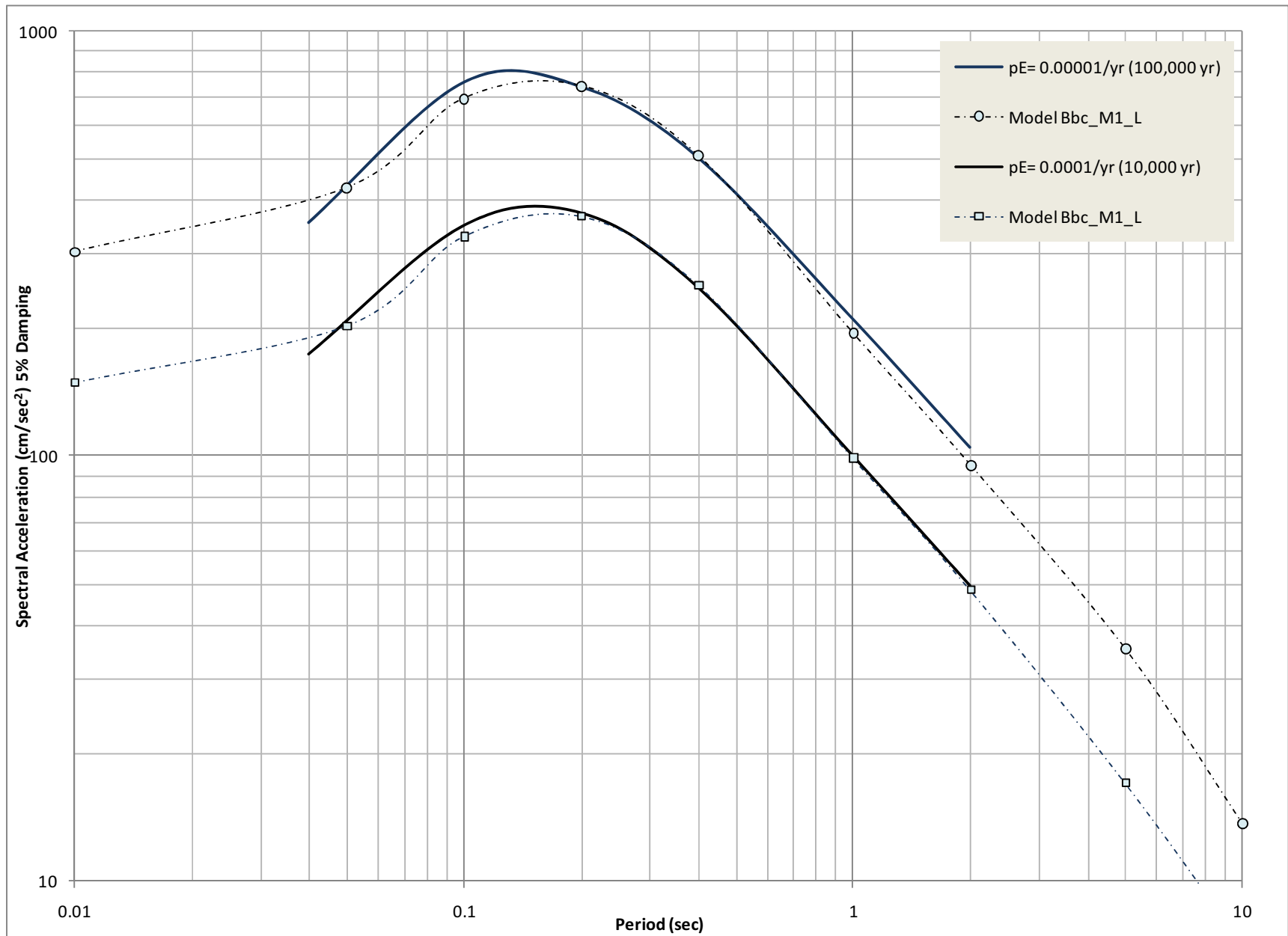


Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	UHRs in Bedrock for Annual Exceedance Frequency of 10 ⁻⁵ (100,000 yr earthquake)
WGE, Inc. Oct. 28, 2008	FIGURE 22

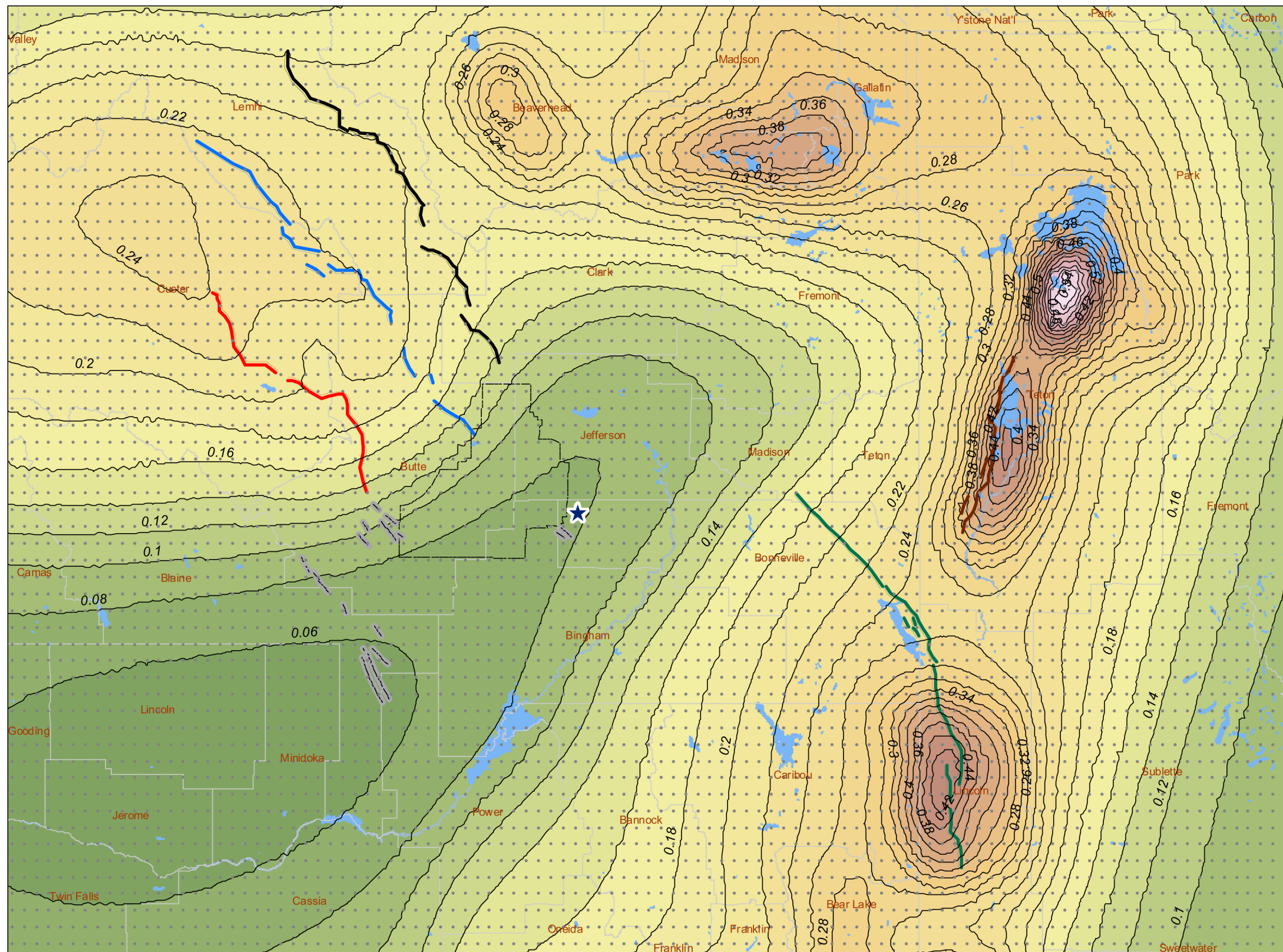


Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020



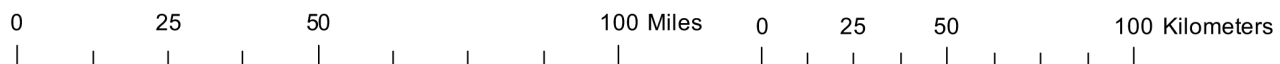
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Horizontal Component UHRS for 10,000 year and 100,000 year Earthquakes
WGE, Inc. Oct. 28, 2008	FIGURE 24

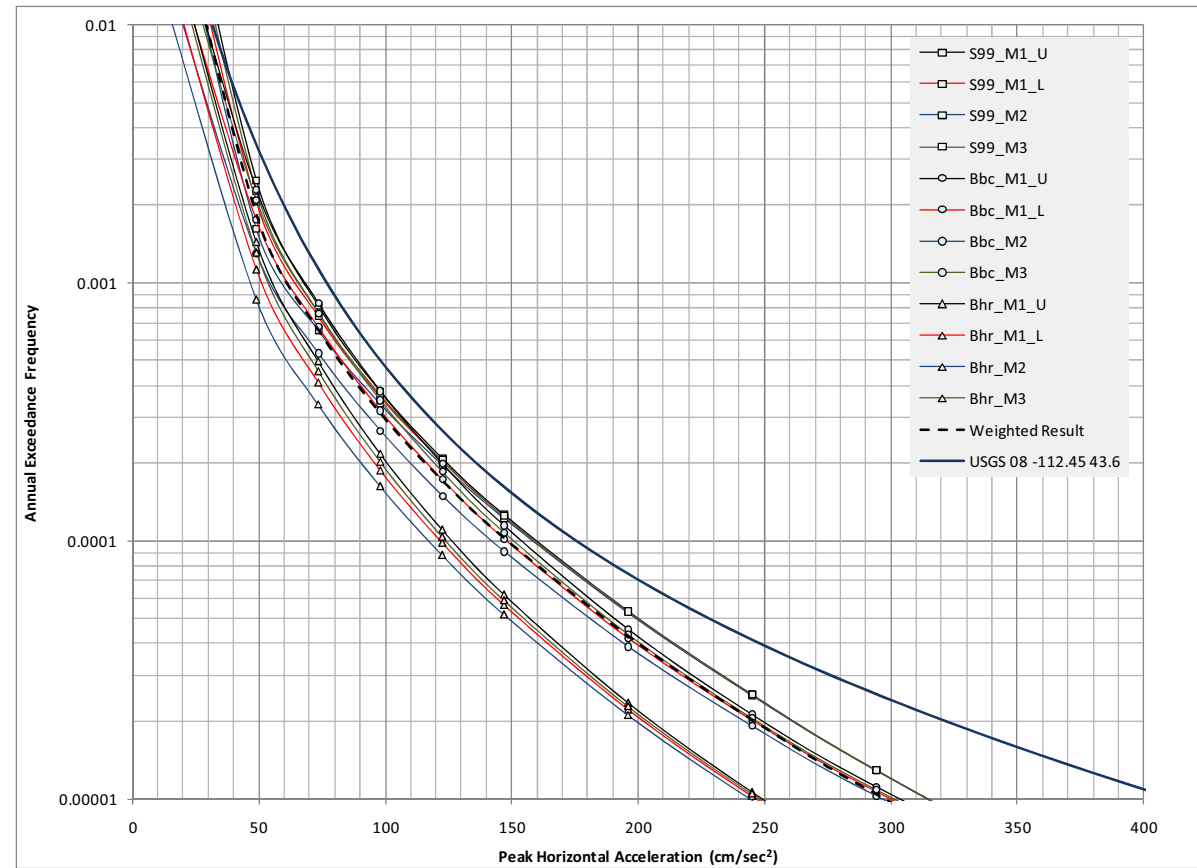


Map Description

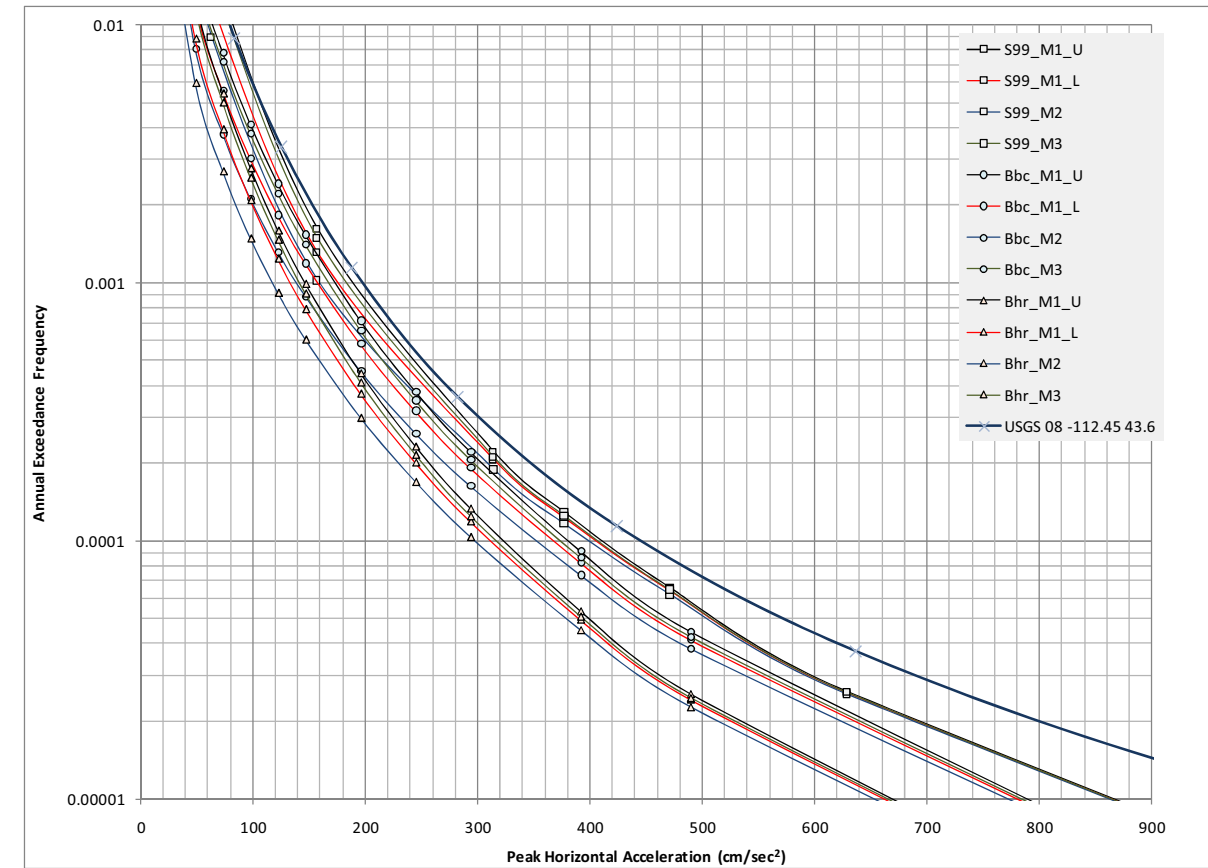
- ★ SITE
- INL
- 1,000 Yr pga (g)
- Q 601 Lost River F.
- Q 602 Lemhi F.
- Q 603 Beaverhead F.
- Q 726 Grand Valley F.
- Q 768 Teton F.
- Q 3501 Idaho Rift System F.
- USGS 08 Hazard Grid Points



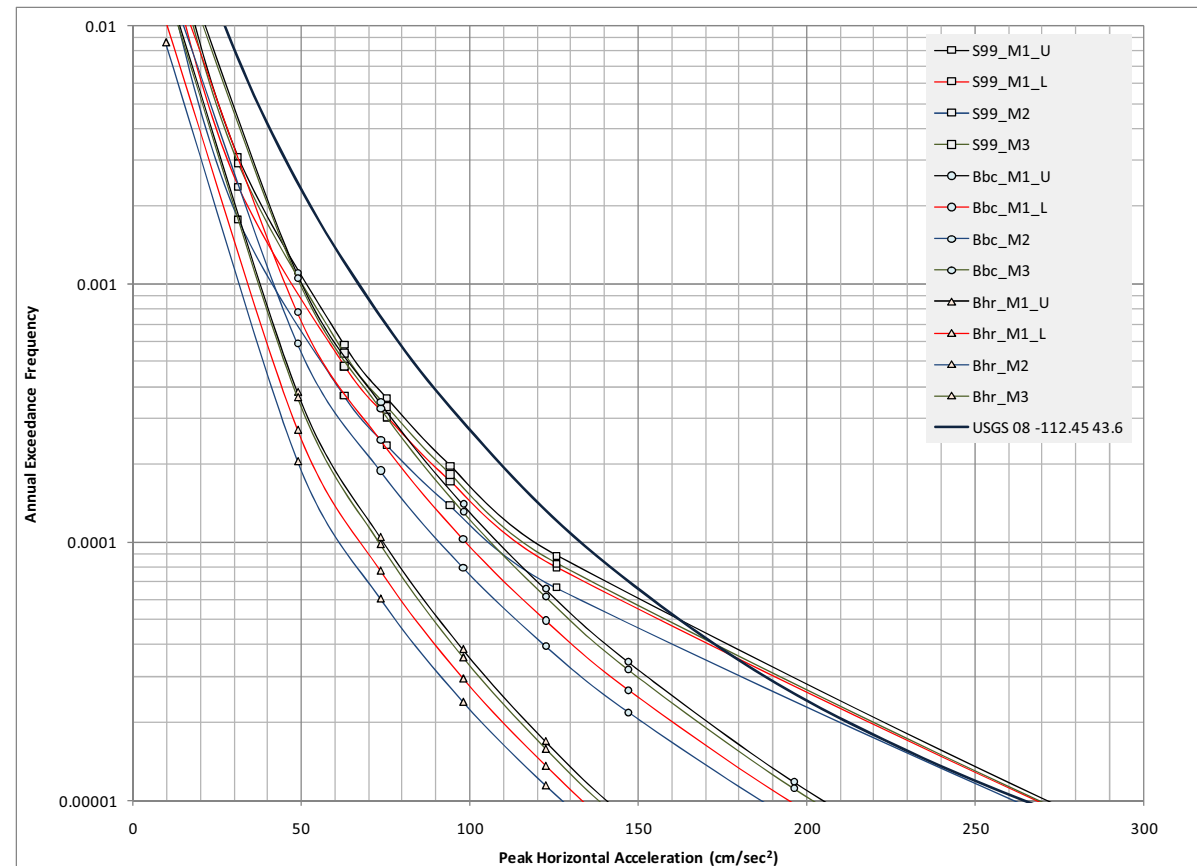
Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility	USGS 2008 PGA Hazard 5% Exceedance in 50 Yr Annual Exceedance Frequency of 10^{-3}
WGE, Inc. Oct. 28, 2008	FIGURE 25



Peak Horizontal Ground Acceleration



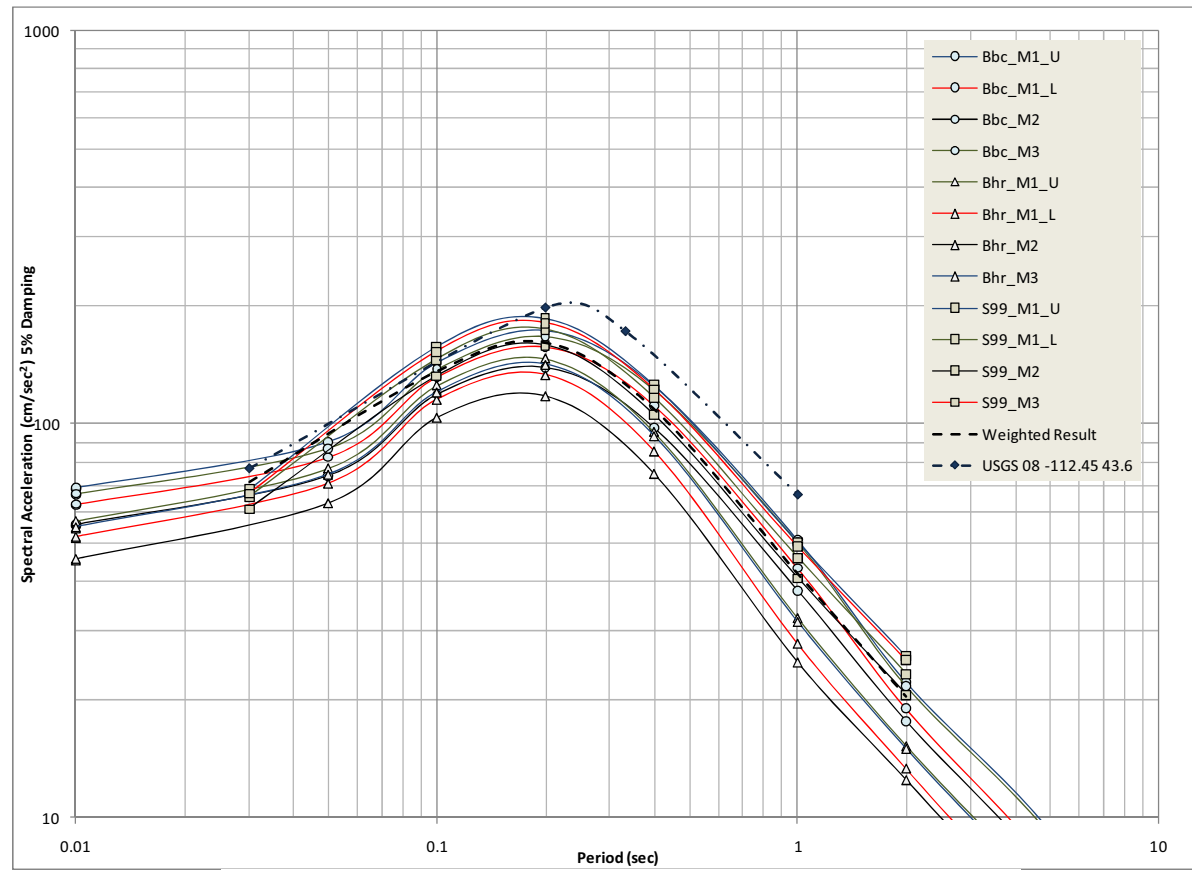
Spectral Acceleration at 5 Hz



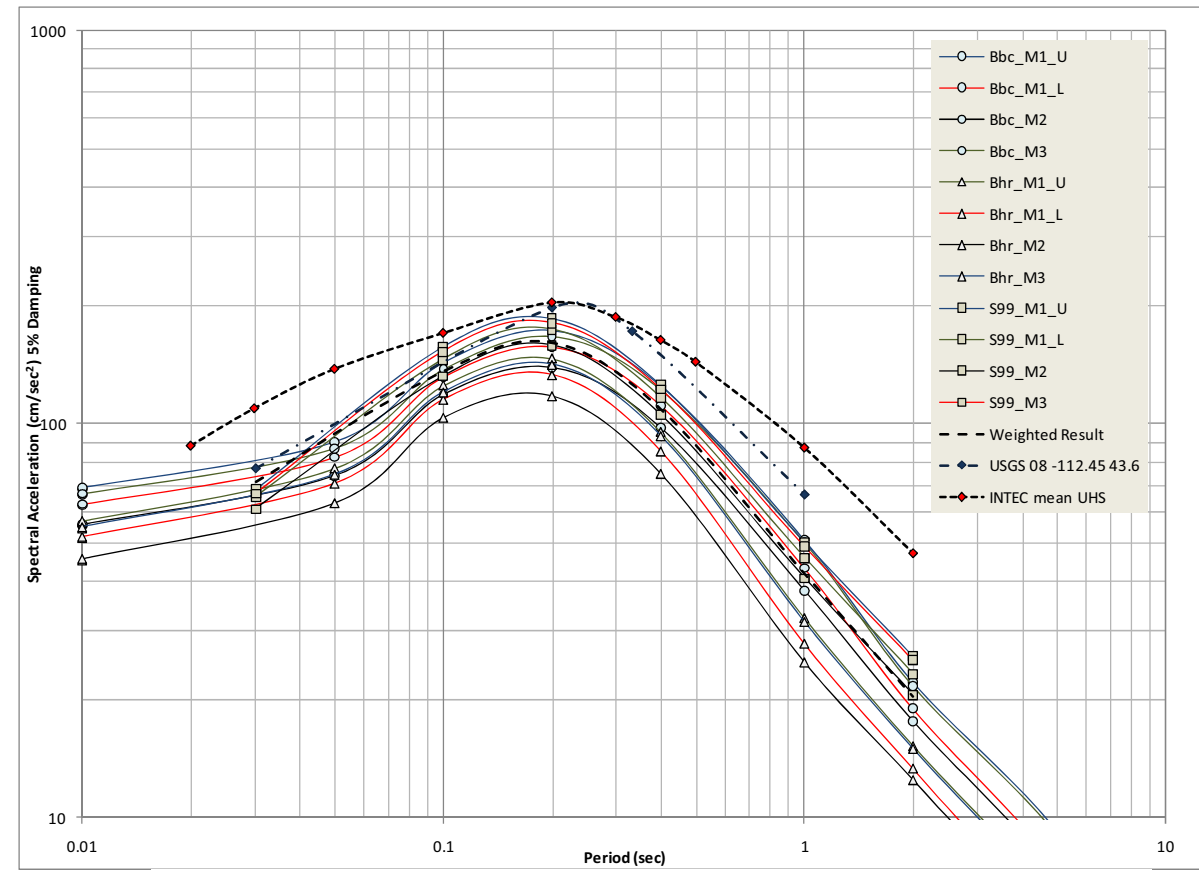
Spectral Acceleration at 1 Hz

Conversions for metric and customary acceleration units					
cm/sec ²	in/sec ²	g-units	cm/sec ²	in/sec ²	g-units
0.0	0.00	0.0000	0.00	0.00	0.00
50.0	19.69	0.0510	49.03	19.30	0.05
100.0	39.37	0.1020	98.07	38.61	0.10
150.0	59.06	0.1530	147.10	57.91	0.15
200.0	78.74	0.2039	196.13	77.22	0.20
250.0	98.43	0.2549	245.17	96.52	0.25
300.0	118.11	0.3059	294.20	115.83	0.30
350.0	137.80	0.3569	343.23	135.13	0.35
400.0	157.48	0.4079	392.27	154.44	0.40
450.0	177.17	0.4589	441.30	173.74	0.45
500.0	196.85	0.5099	490.33	193.04	0.50
550.0	216.54	0.5608	539.37	212.35	0.55
600.0	236.22	0.6118	588.40	231.65	0.60
650.0	255.91	0.6628	637.43	250.96	0.65
700.0	275.59	0.7138	686.47	270.26	0.70
750.0	295.28	0.7648	735.50	289.57	0.75
800.0	314.96	0.8158	784.53	308.87	0.80
850.0	334.65	0.8668	833.57	328.18	0.85
900.0	354.33	0.9177	882.60	347.48	0.90
950.0	374.02	0.9687	931.63	366.78	0.95
1000.0	393.70	1.0197	980.67	386.09	1.00

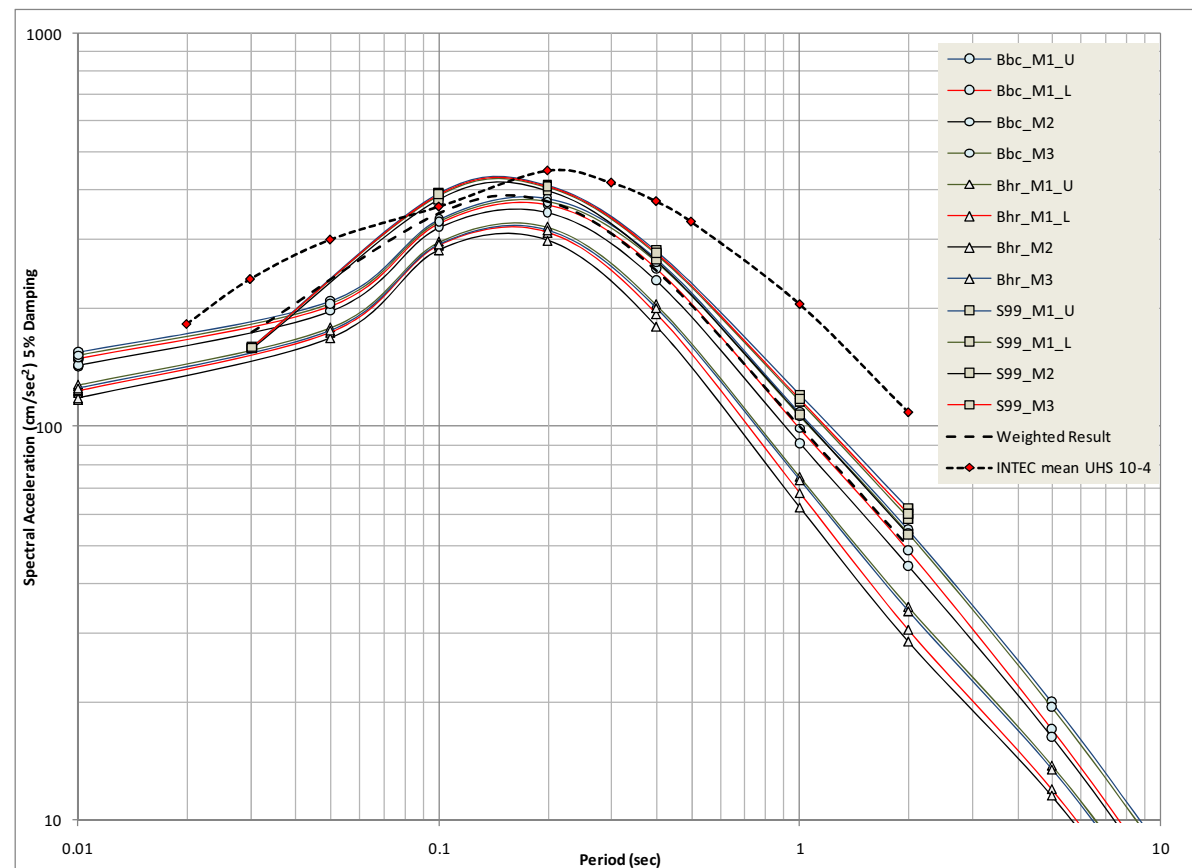
1 in = 2.54 cm, 1 g = 980.665 cm/sec²



Comparison with USGS at 10^{-3} per year Exceedance Probability



Comparison with USGS and INTEC UHS at 10^{-3} per year Exceedance Probability



Comparison with INTEC UHS at 10^{-4} per year Exceedance Probability

Conversions for metric and customary acceleration units					
cm/sec ²	in/sec ²	g-units	cm/sec ²	in/sec ²	g-units
0.0	0.00	0.0000	0.00	0.00	0.00
50.0	19.69	0.0510	49.03	19.30	0.05
100.0	39.37	0.1020	98.07	38.61	0.10
150.0	59.06	0.1530	147.10	57.91	0.15
200.0	78.74	0.2039	196.13	77.22	0.20
250.0	98.43	0.2549	245.17	96.52	0.25
300.0	118.11	0.3059	294.20	115.83	0.30
350.0	137.80	0.3569	343.23	135.13	0.35
400.0	157.48	0.4079	392.27	154.44	0.40
450.0	177.17	0.4589	441.30	173.74	0.45
500.0	196.85	0.5099	490.33	193.04	0.50
550.0	216.54	0.5608	539.37	212.35	0.55
600.0	236.22	0.6118	588.40	231.65	0.60
650.0	255.91	0.6628	637.43	250.96	0.65
700.0	275.59	0.7138	686.47	270.26	0.70
750.0	295.28	0.7648	735.50	289.57	0.75
800.0	314.96	0.8158	784.53	308.87	0.80
850.0	334.65	0.8668	833.57	328.18	0.85
900.0	354.33	0.9177	882.60	347.48	0.90
950.0	374.02	0.9687	931.63	366.78	0.95
1000.0	393.70	1.0197	980.67	386.09	1.00

1 in = 2.54 cm, 1 g = 980.665 cm/sec²