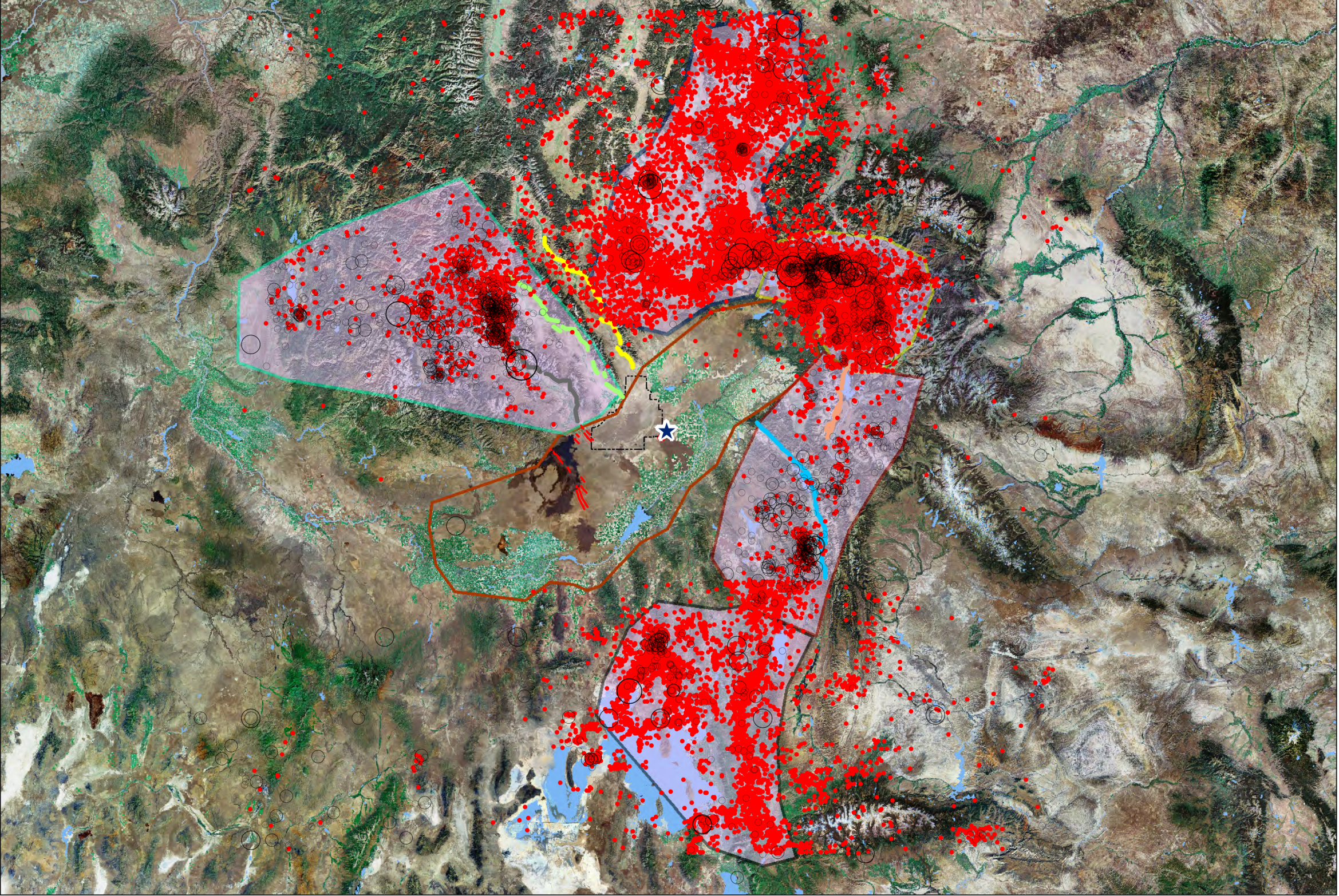




Map Description

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

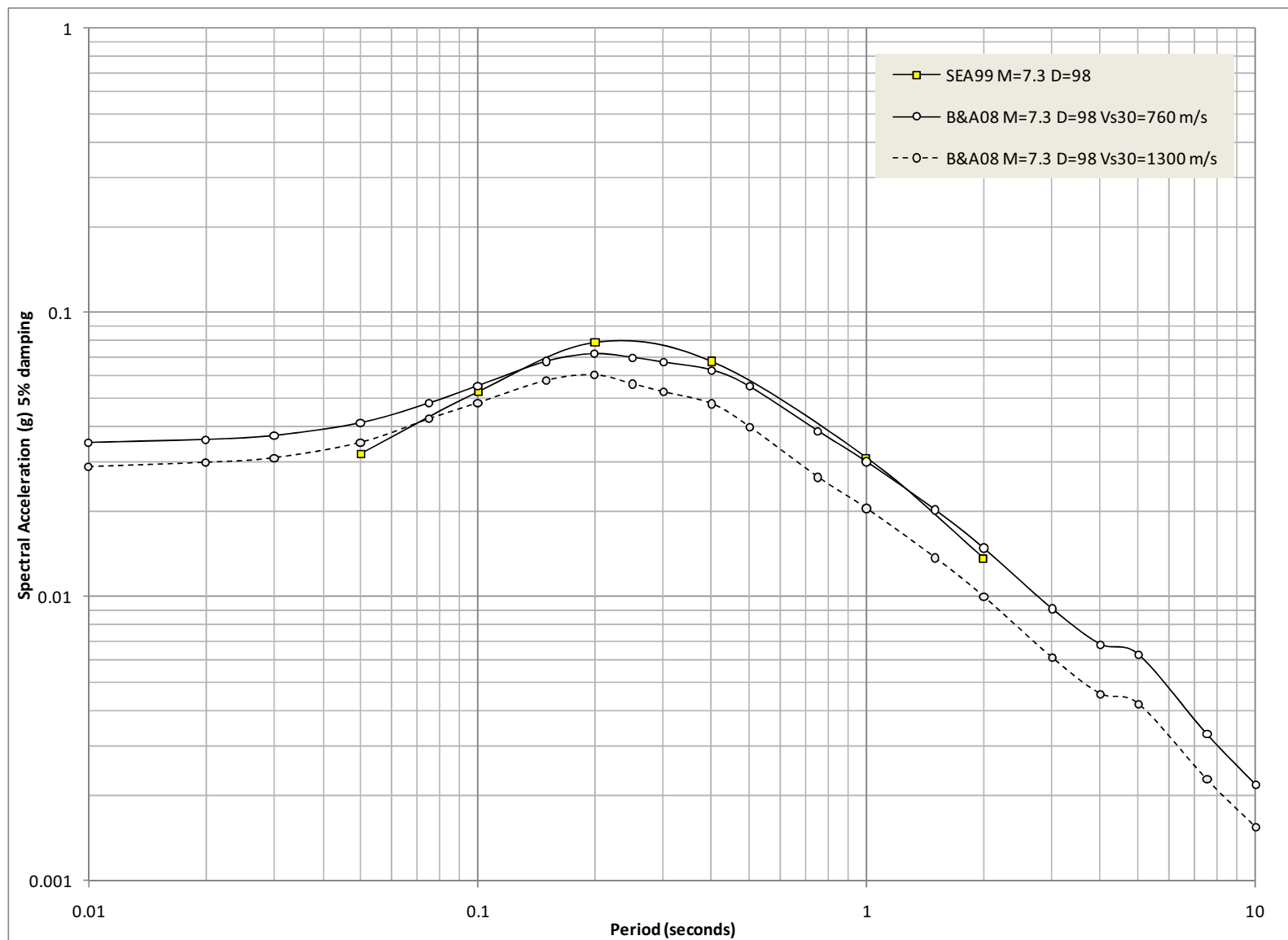
□ Snake River Plain

□ INL

0 50 100 200 Miles

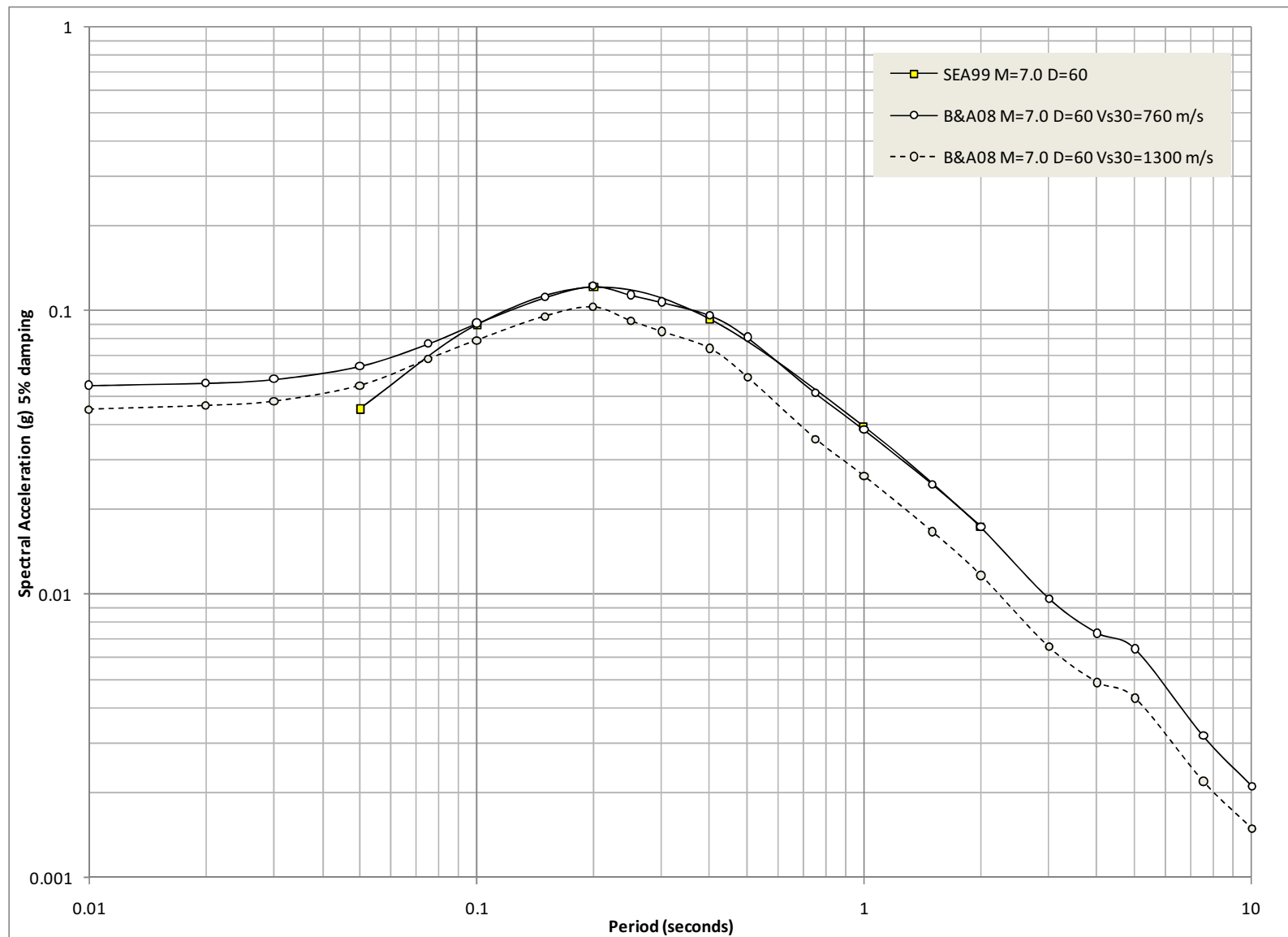
0 50 100 200 Kilometers

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



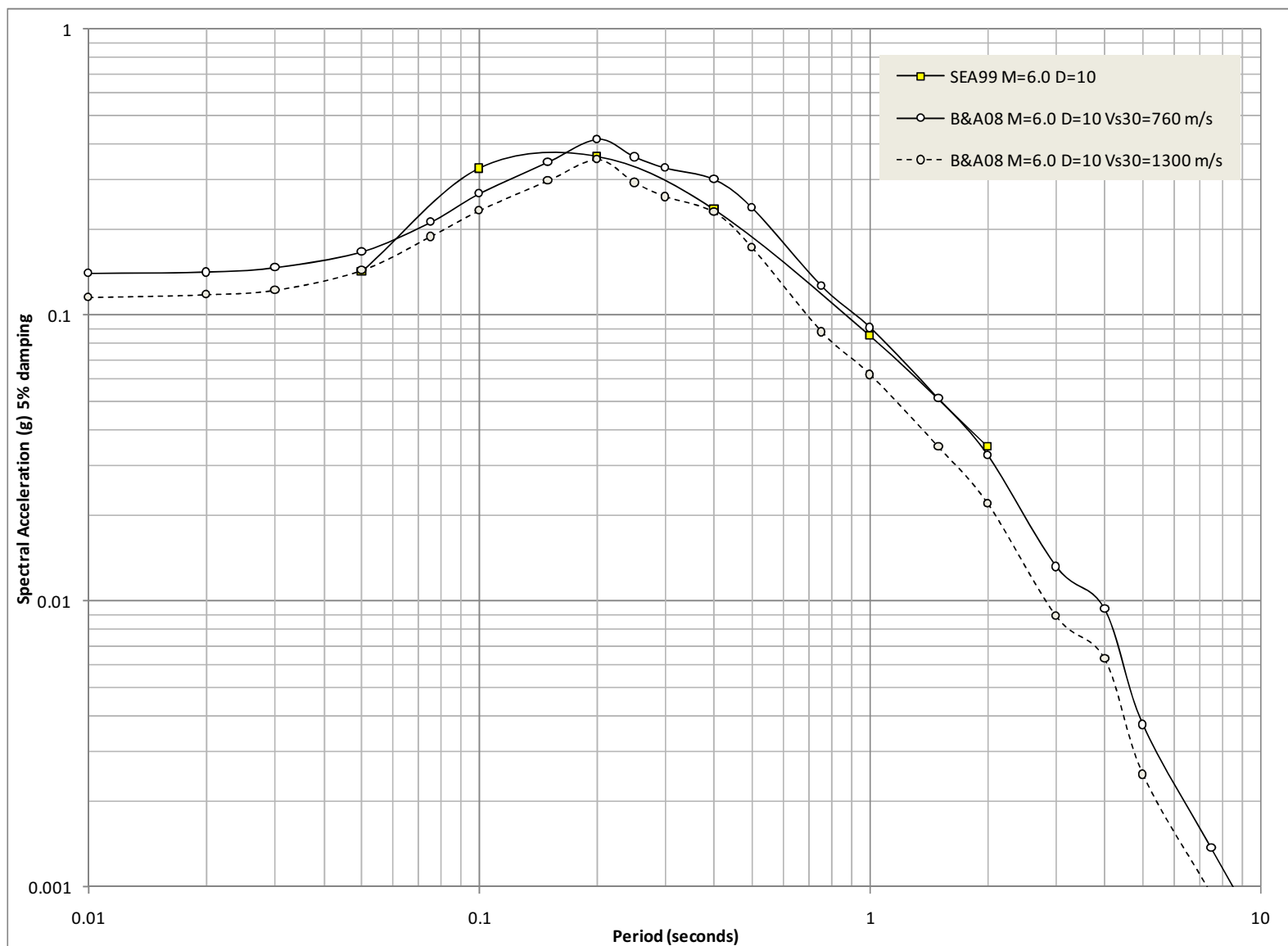
Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

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



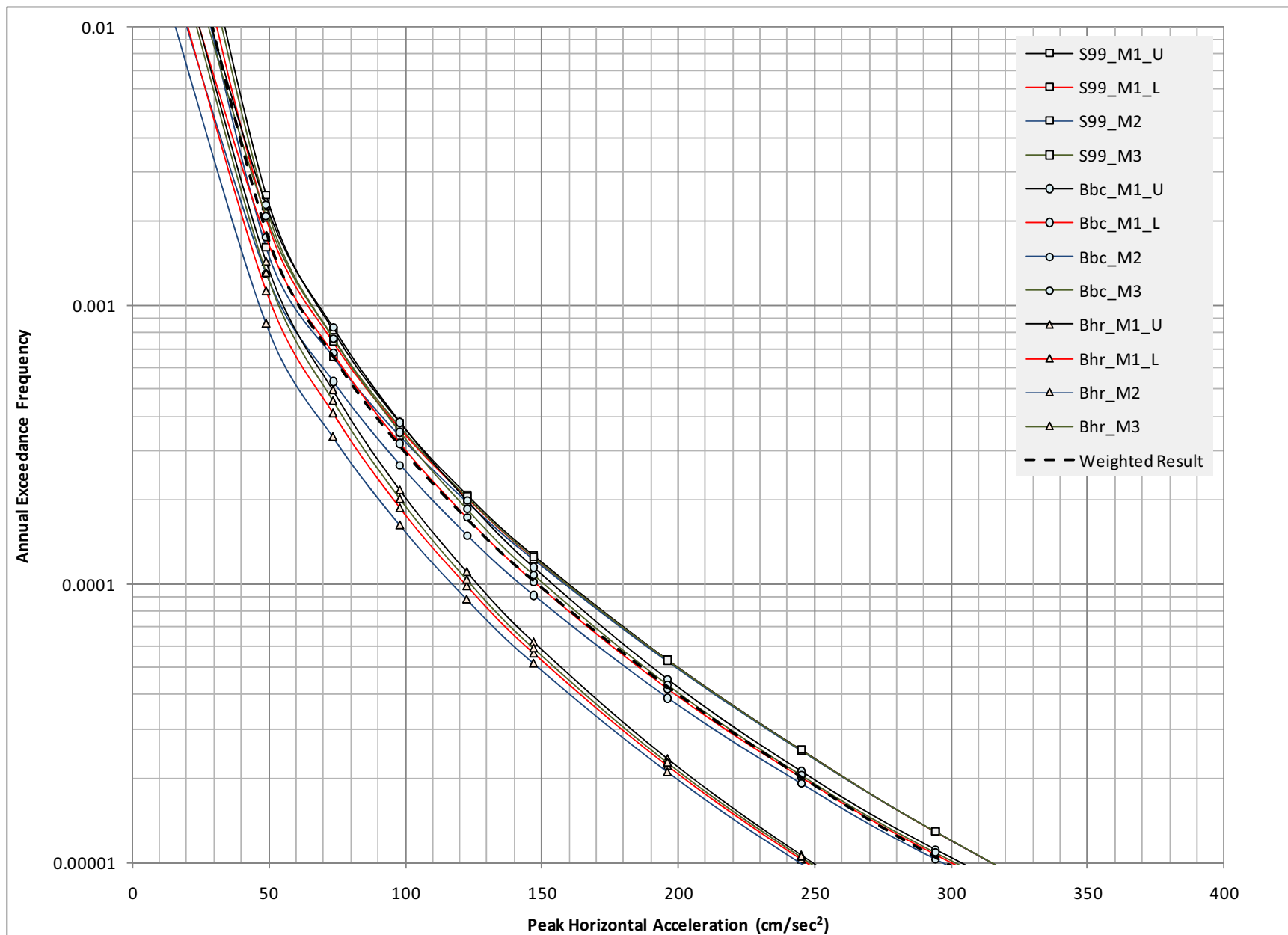
Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

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



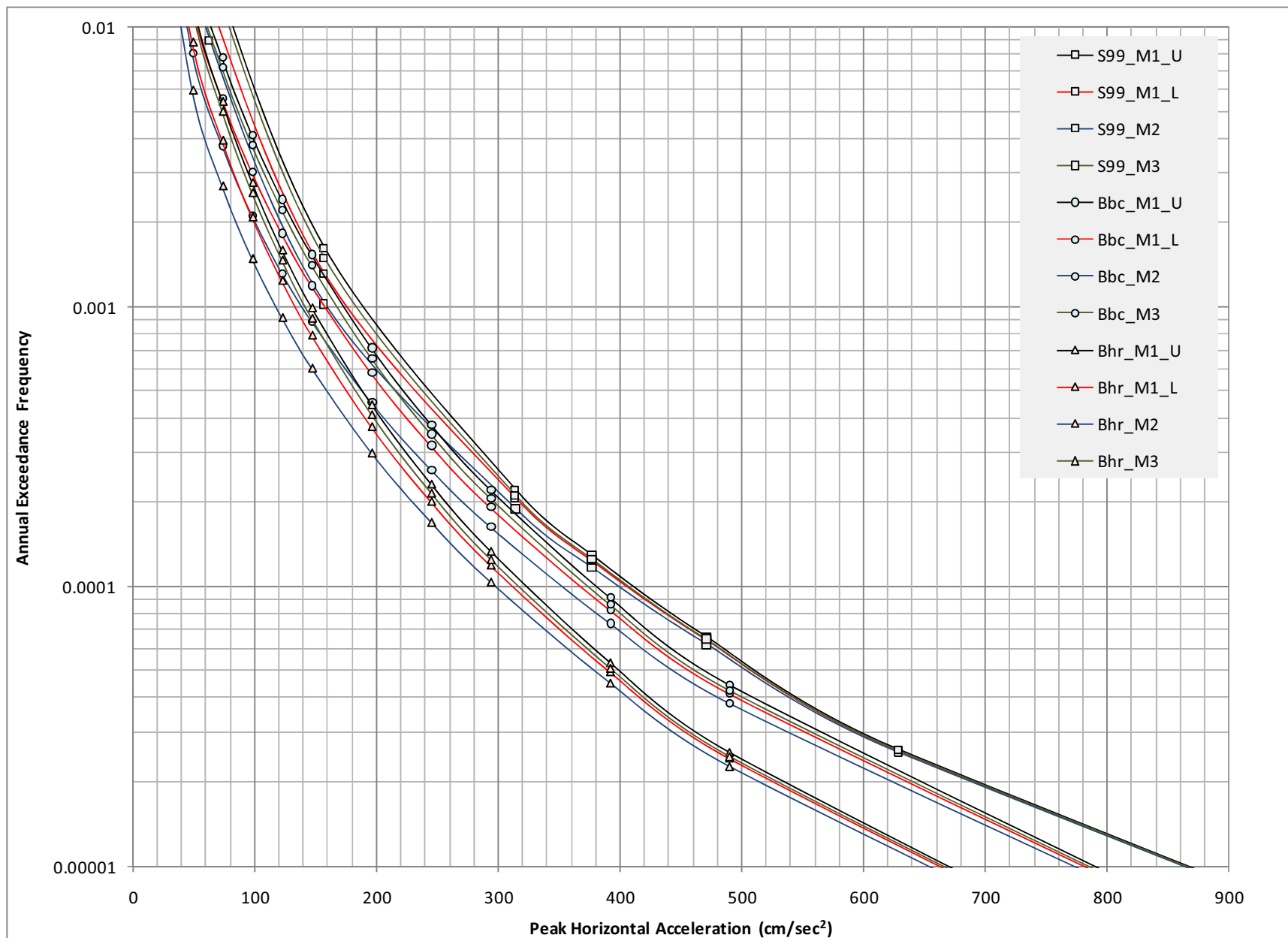
Conversions for metric and customary acceleration units								
g-units	0.00	0.001	0.05	0.10	0.15	0.20	0.50	1.00
cm/sec ²	0.00	0.981	49.03	98.07	147.10	196.13	490.33	980.67
in/sec ²	0.00	0.386	19.30	38.61	57.91	77.22	193.04	386.09

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



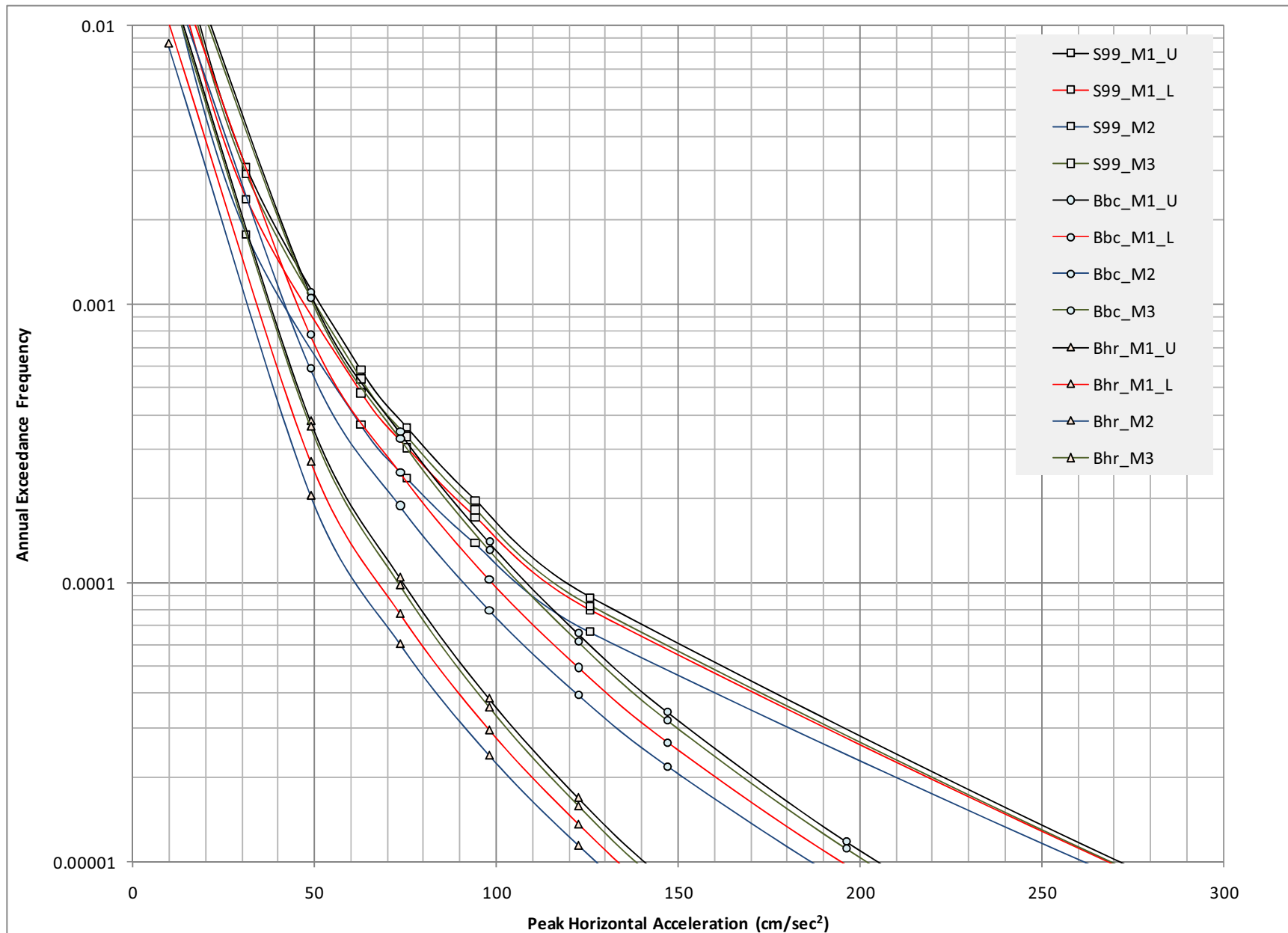
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	PGA Seismic Hazard Curves
WGE, Inc. Oct. 28, 2008	FIGURE 14



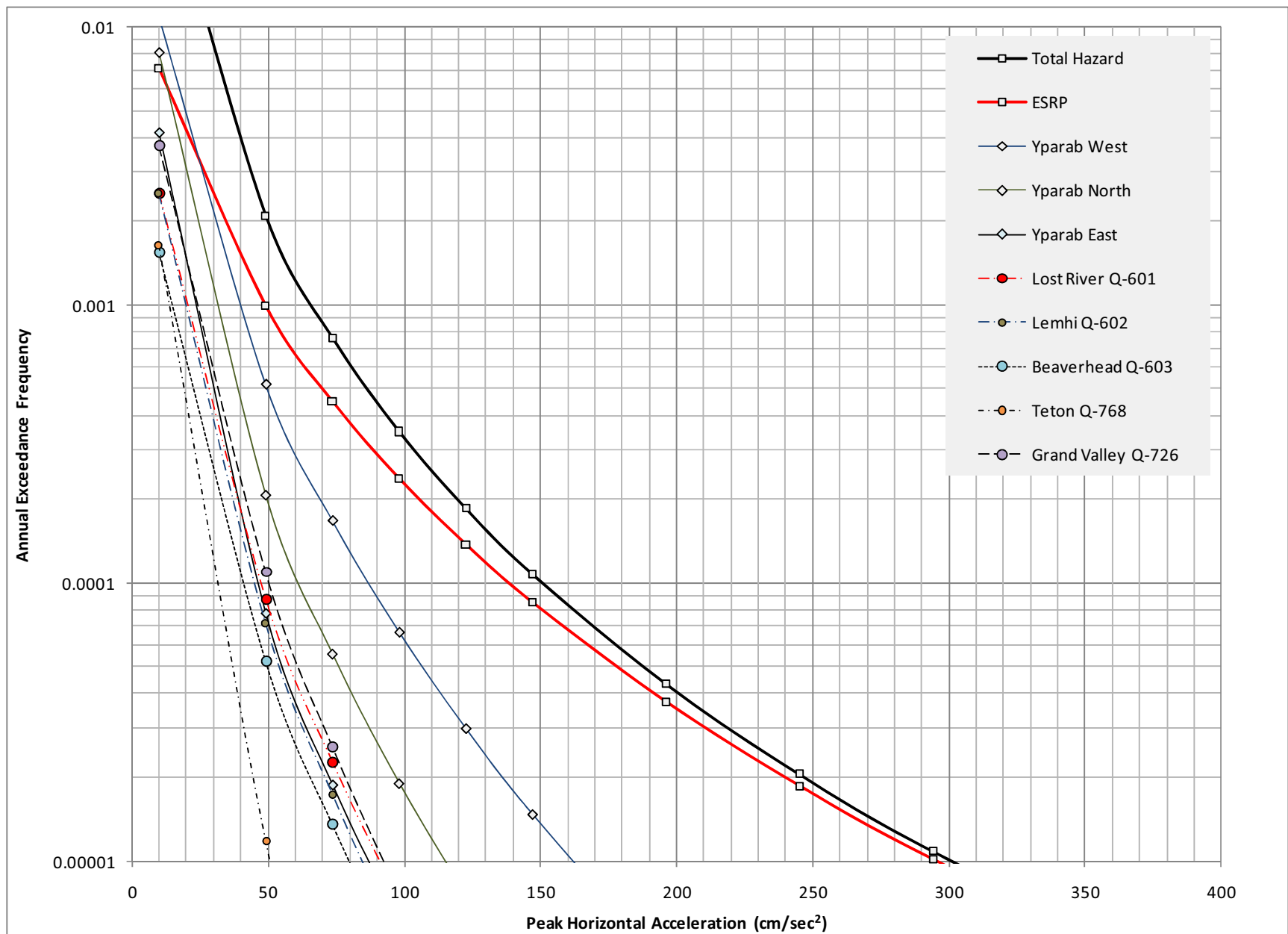
Conversions for metric and customary acceleration units										
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0 1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3 393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918 1.020

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



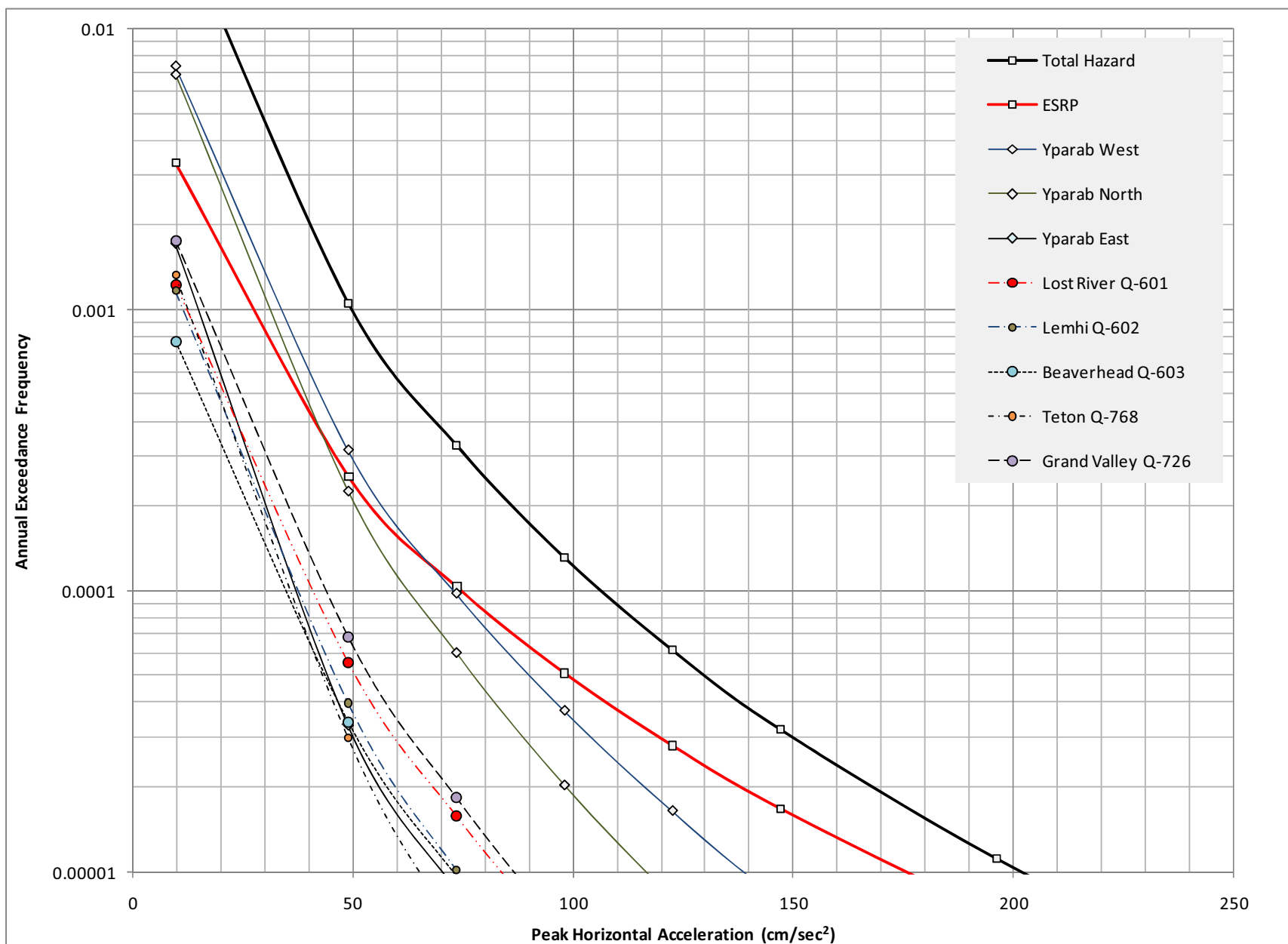
Conversions for metric and customary acceleration units										
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	1.020

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



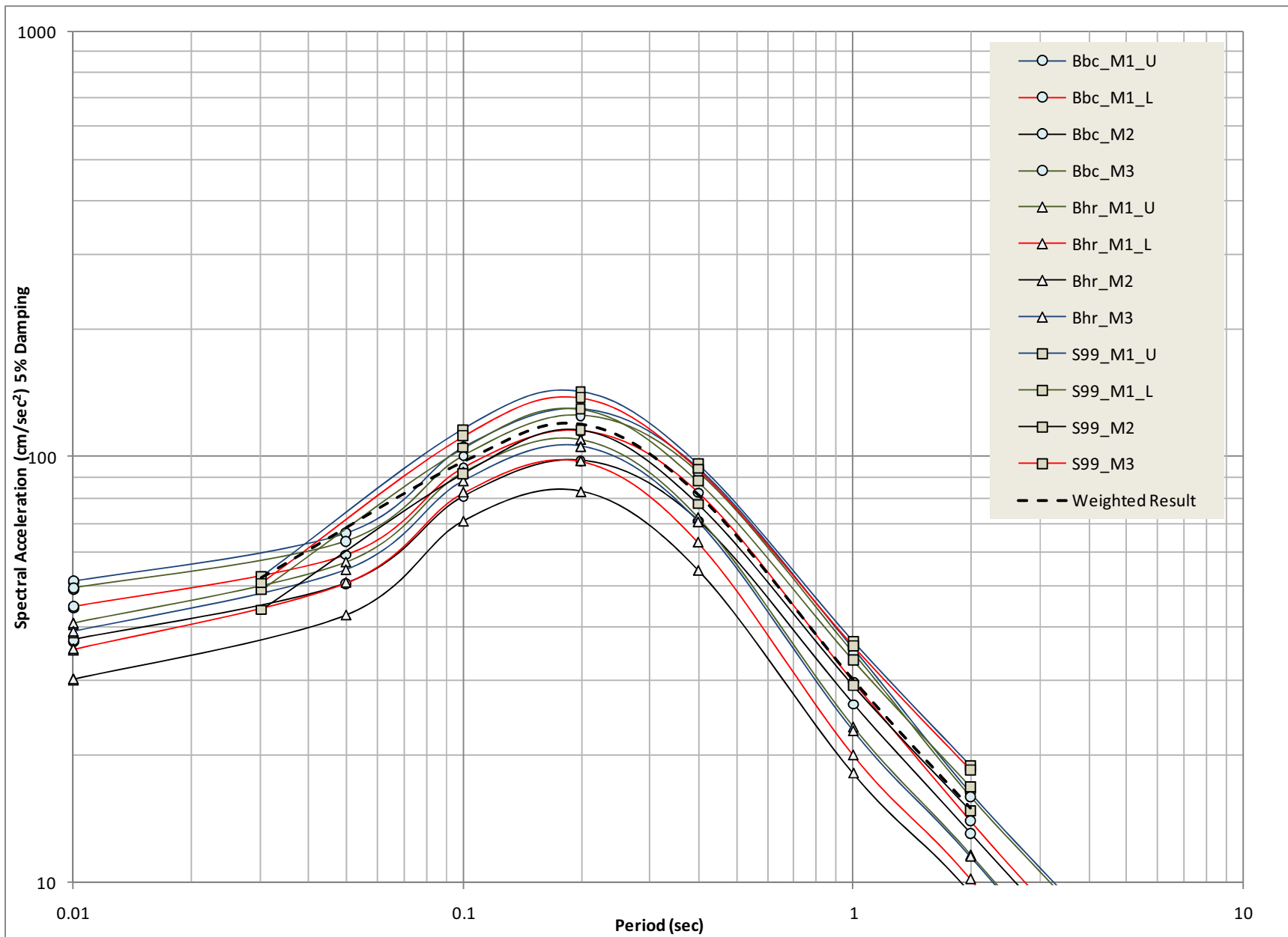
Conversions for metric and customary acceleration units										
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	1.020

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



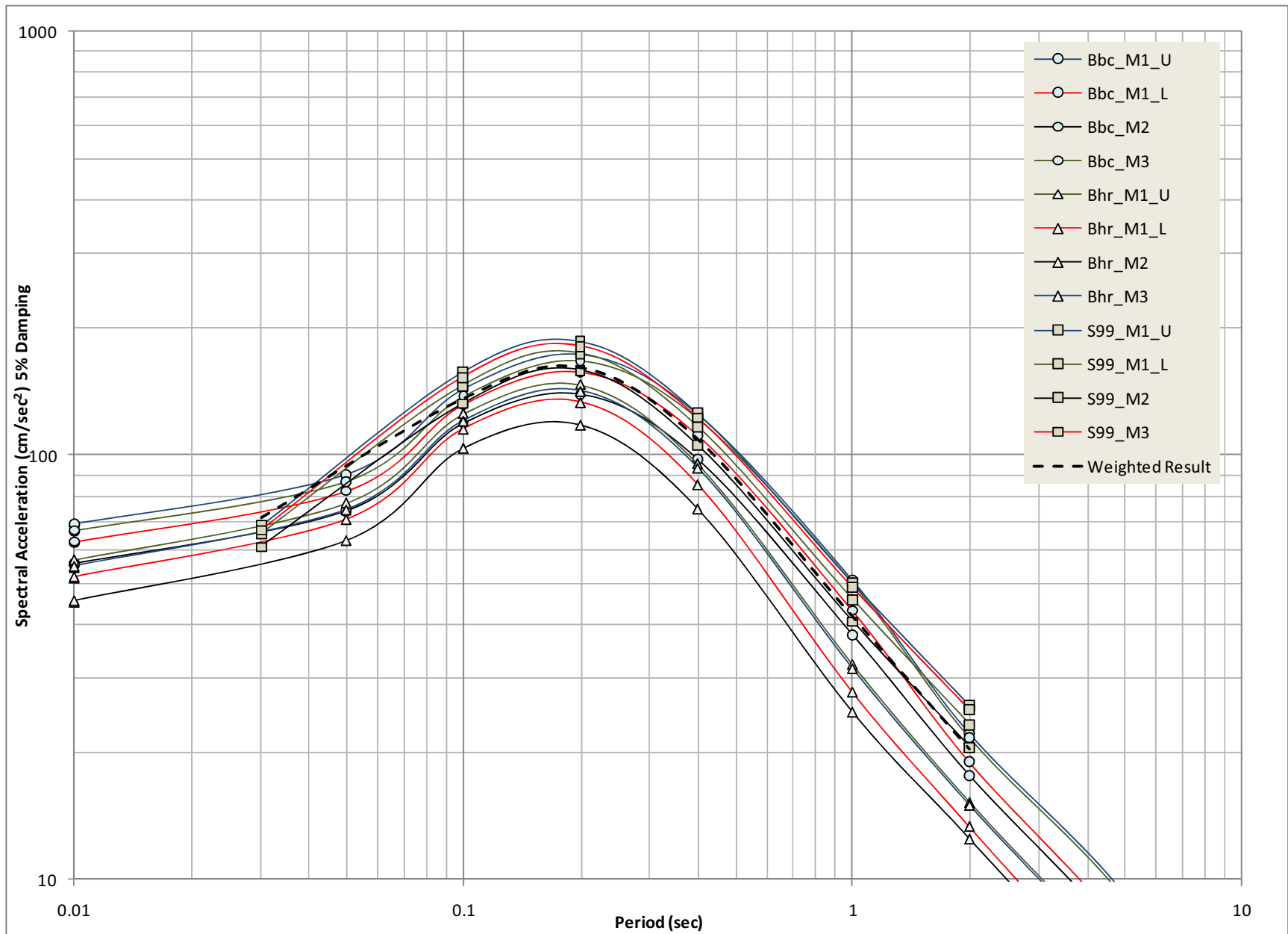
Conversions for metric and customary acceleration units										
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Source Zone Contributions to Total SA (1 Hz) Seismic Hazard
WGE, Inc. Oct. 28, 2008	FIGURE 18



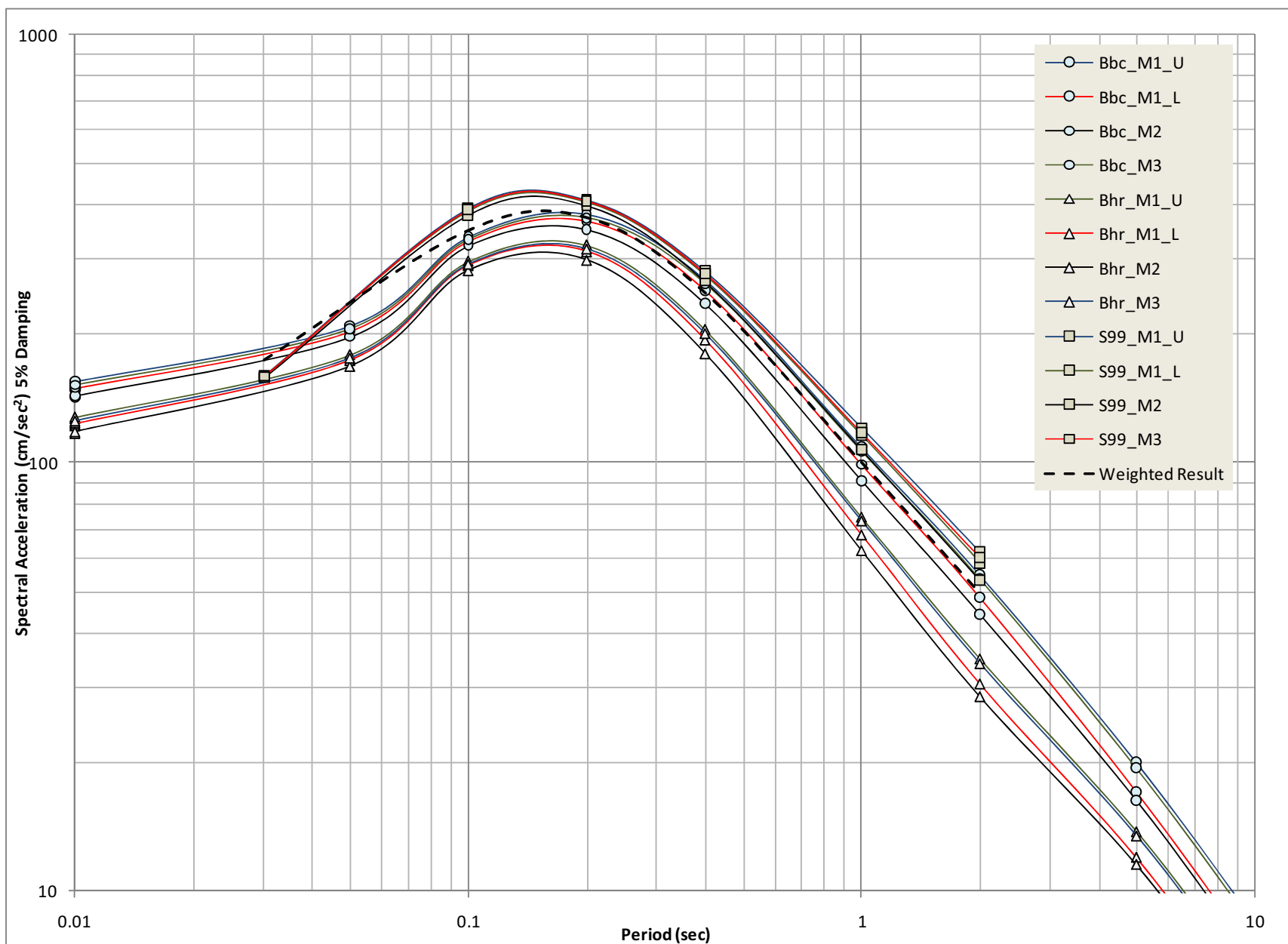
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	UHRs in Bedrock for Annual Exceedance Frequency of 2.1×10^{-3} (475 yr earthquake)
WGE, Inc. Oct. 28, 2008	FIGURE 19



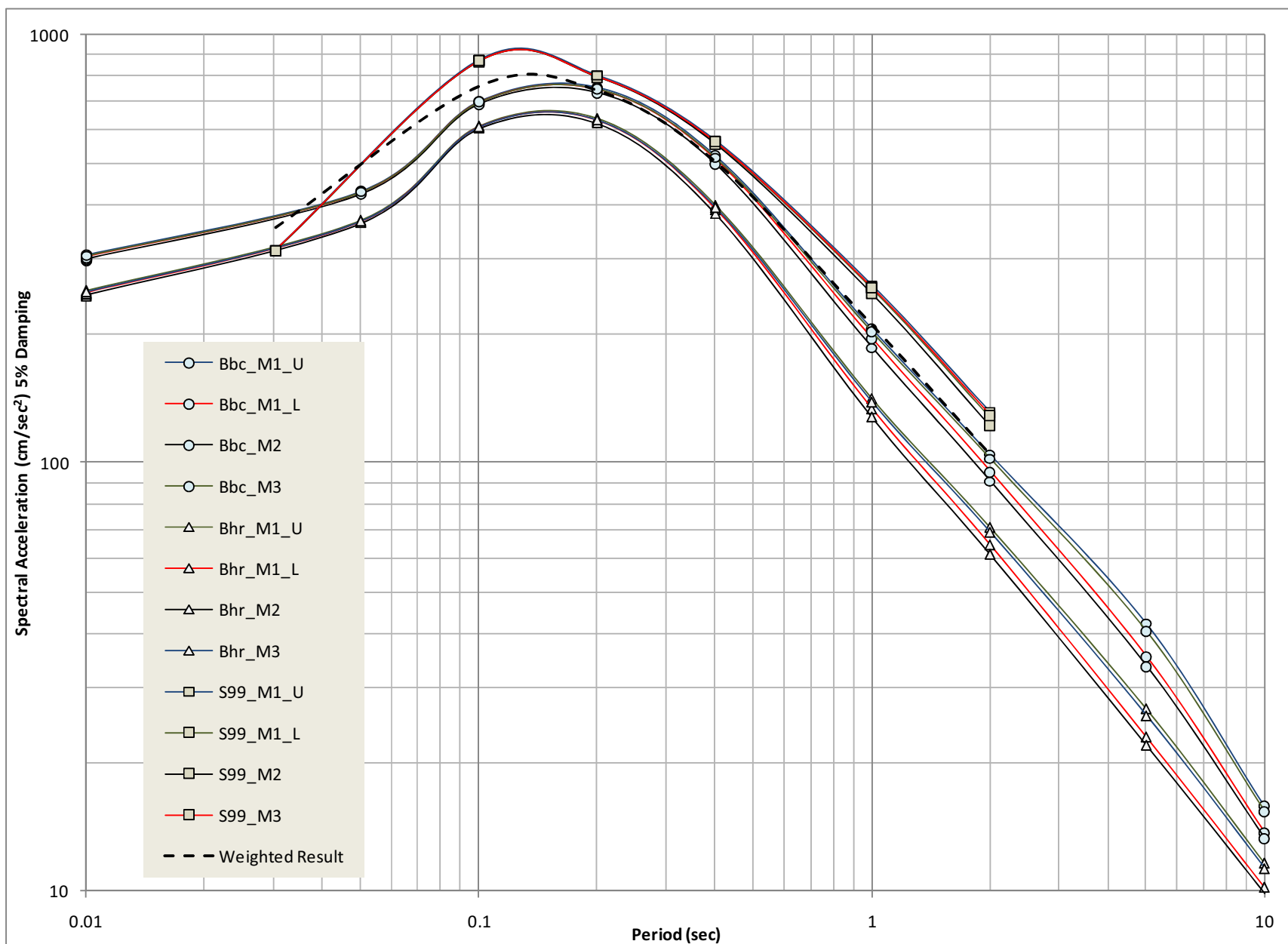
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	UHRS in Bedrock for Annual Exceedance Frequency of 10 ⁻³ (1,000 yr earthquake)
WGE, Inc. Oct. 28, 2008	FIGURE 20



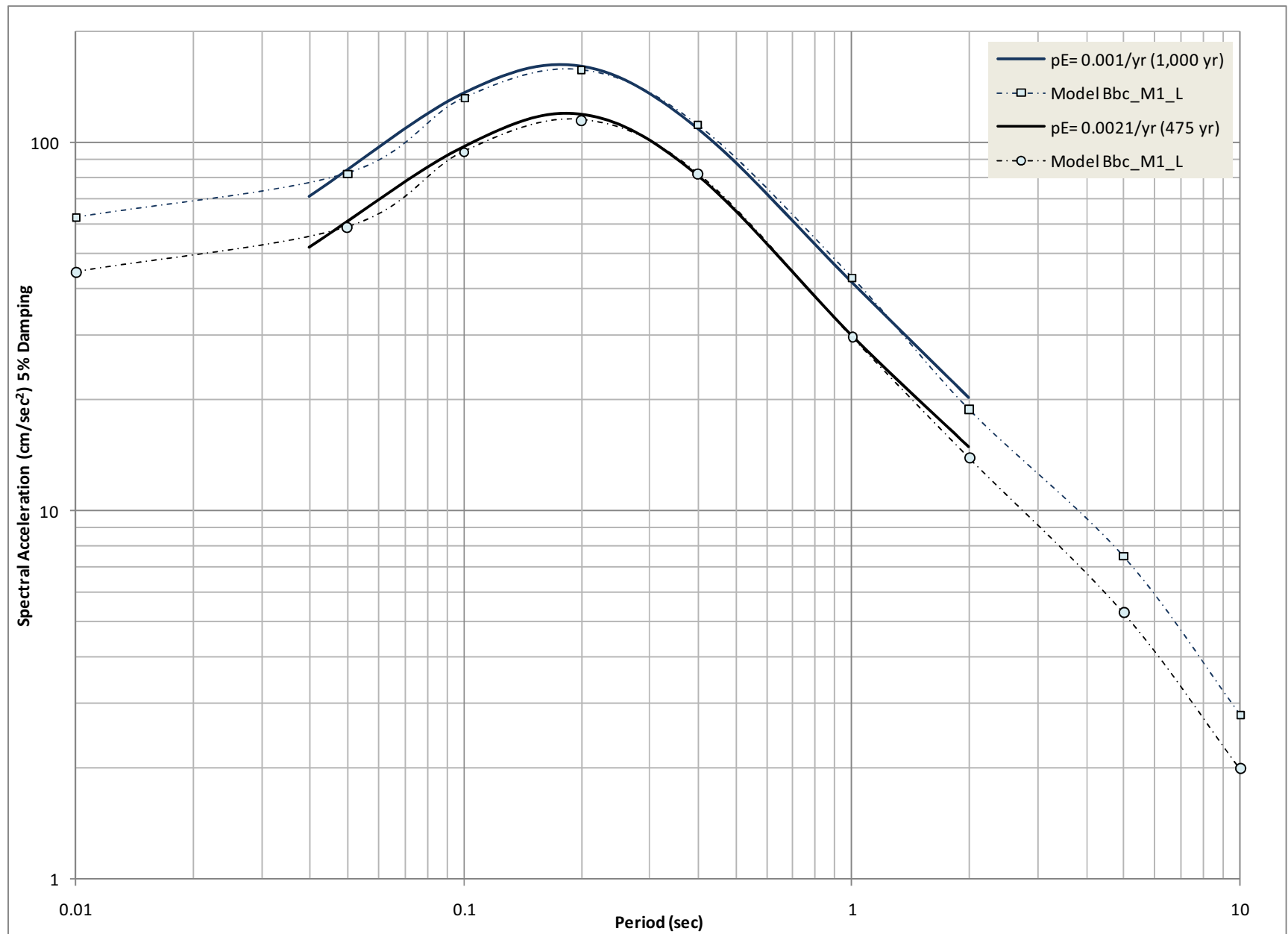
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

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



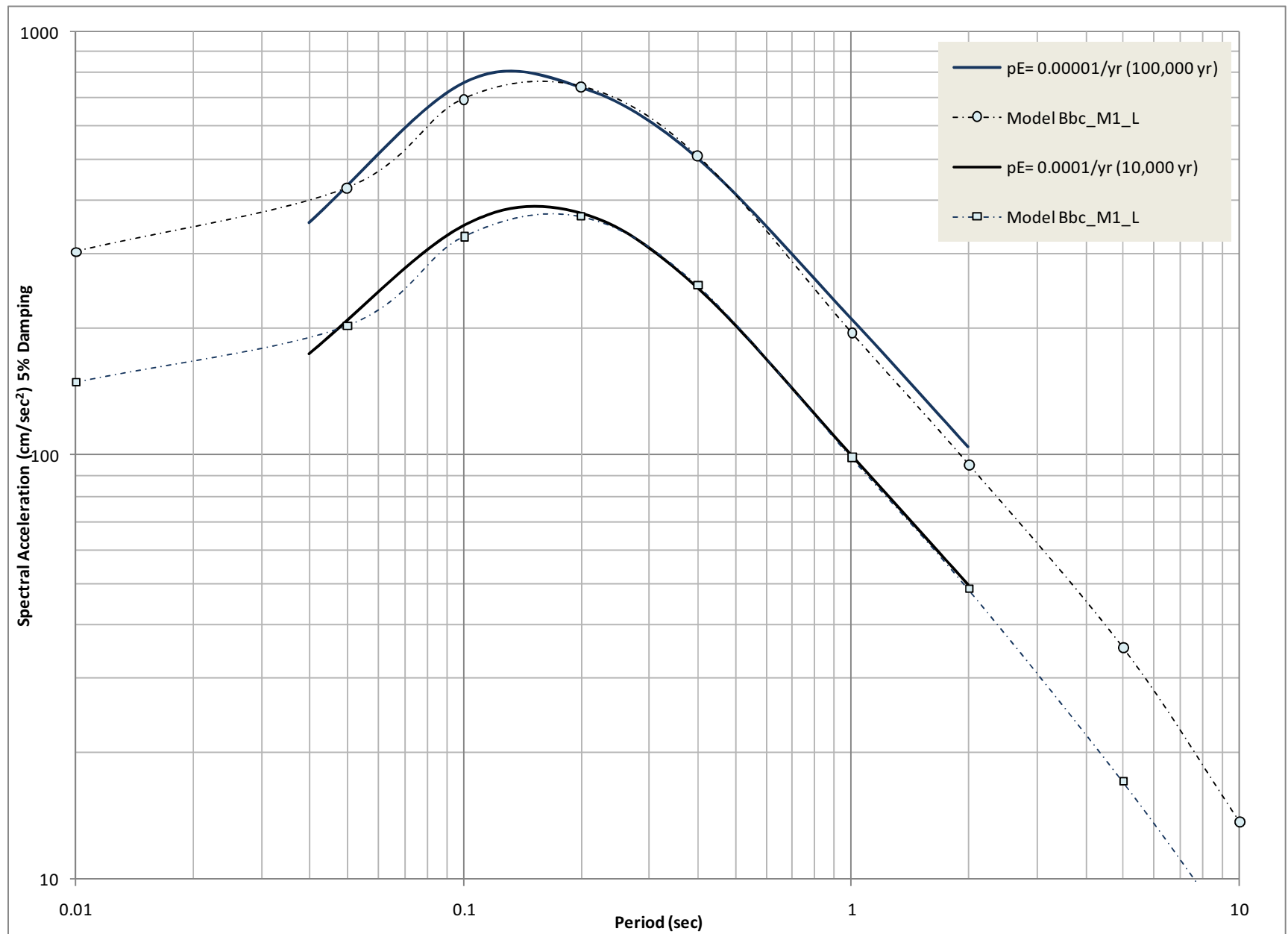
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

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



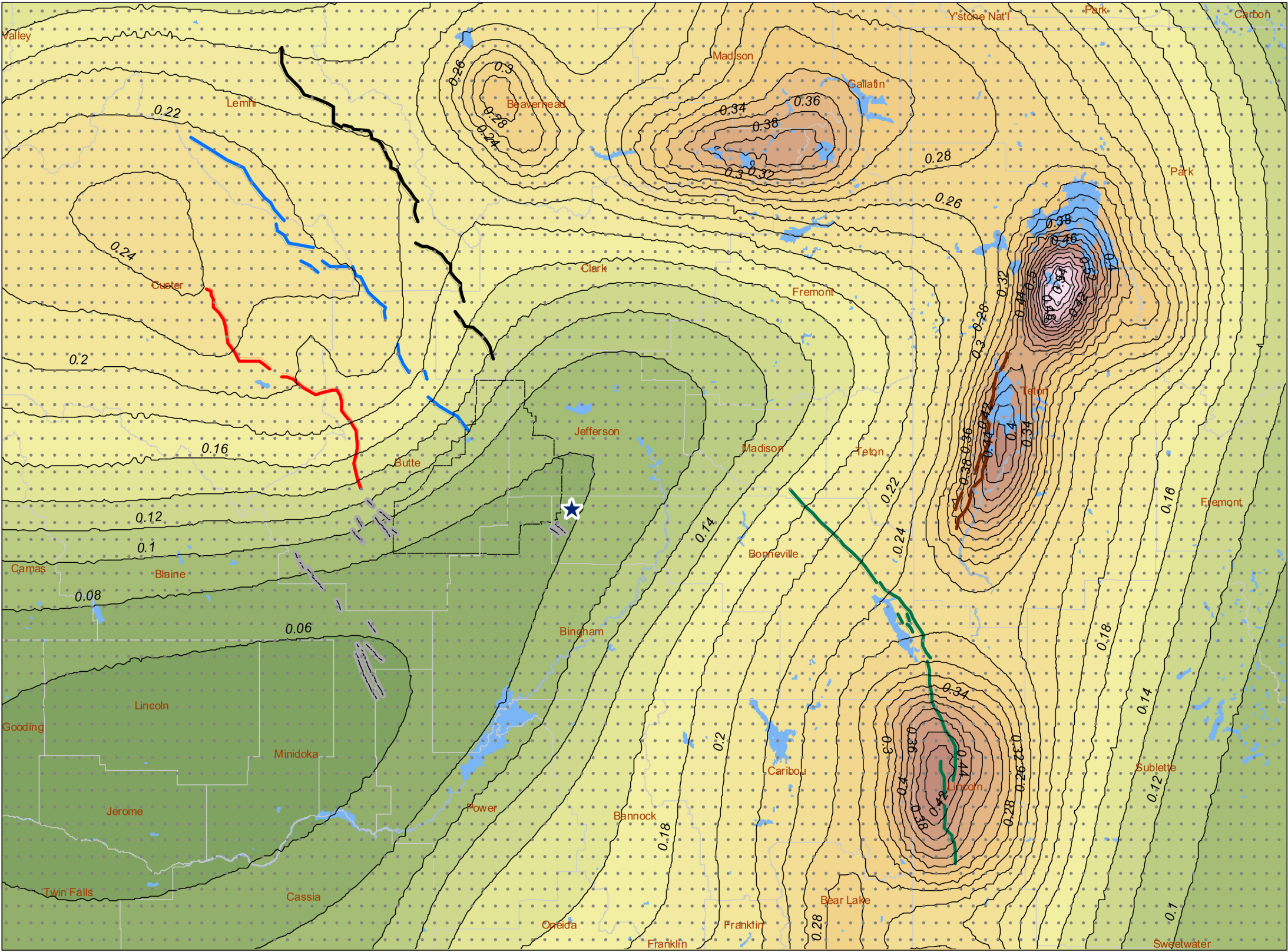
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility, Idaho	Horizontal Component UHRs for 475 year and 1,000 year Earthquakes
WGE, Inc. Oct. 28, 2008	FIGURE 23



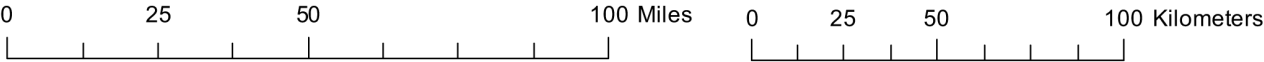
Conversions for metric and customary acceleration units											
cm/sec ²	0.0	100.0	200.0	300.0	400.0	500.0	600.0	700.0	800.0	900.0	1000.0
in/sec ²	0.0	39.4	78.7	118.1	157.5	196.9	236.2	275.6	315.0	354.3	393.7
g-units	0.000	0.102	0.204	0.306	0.408	0.510	0.612	0.714	0.816	0.918	1.020

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

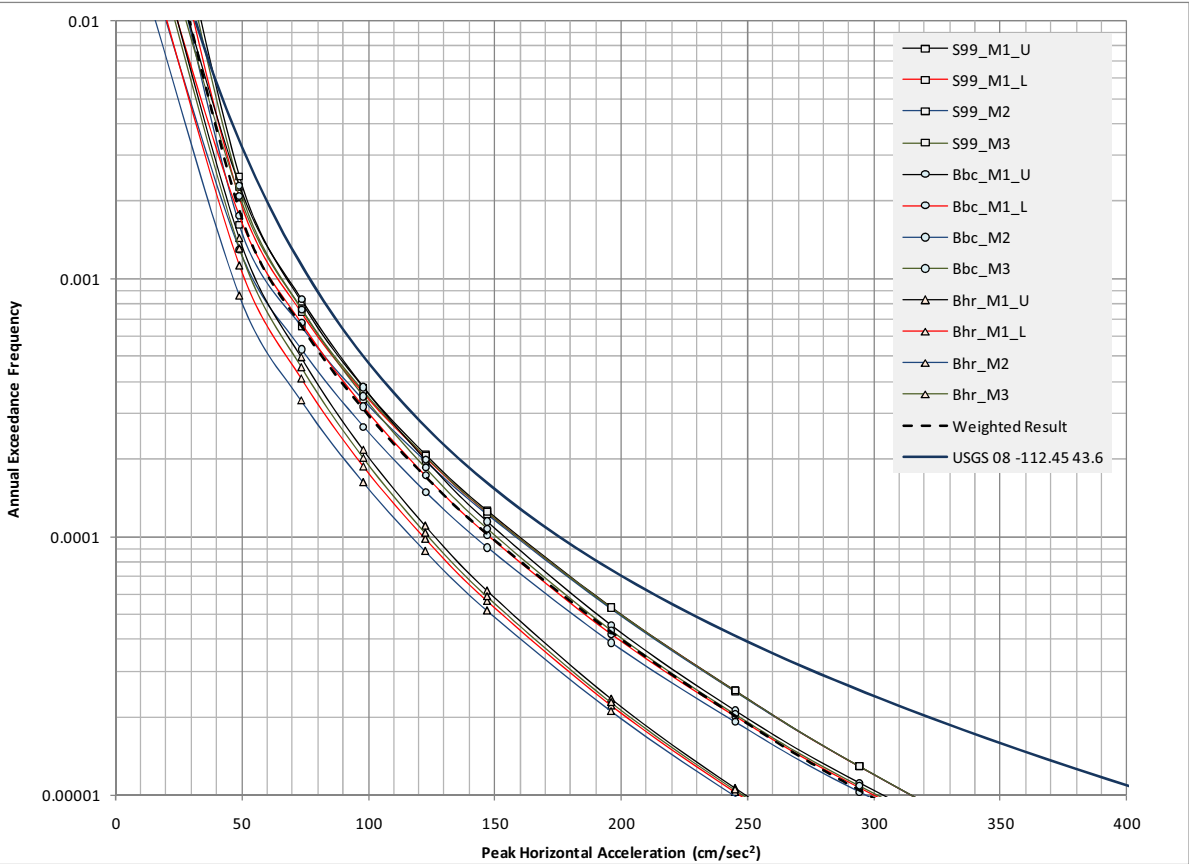


Map Description

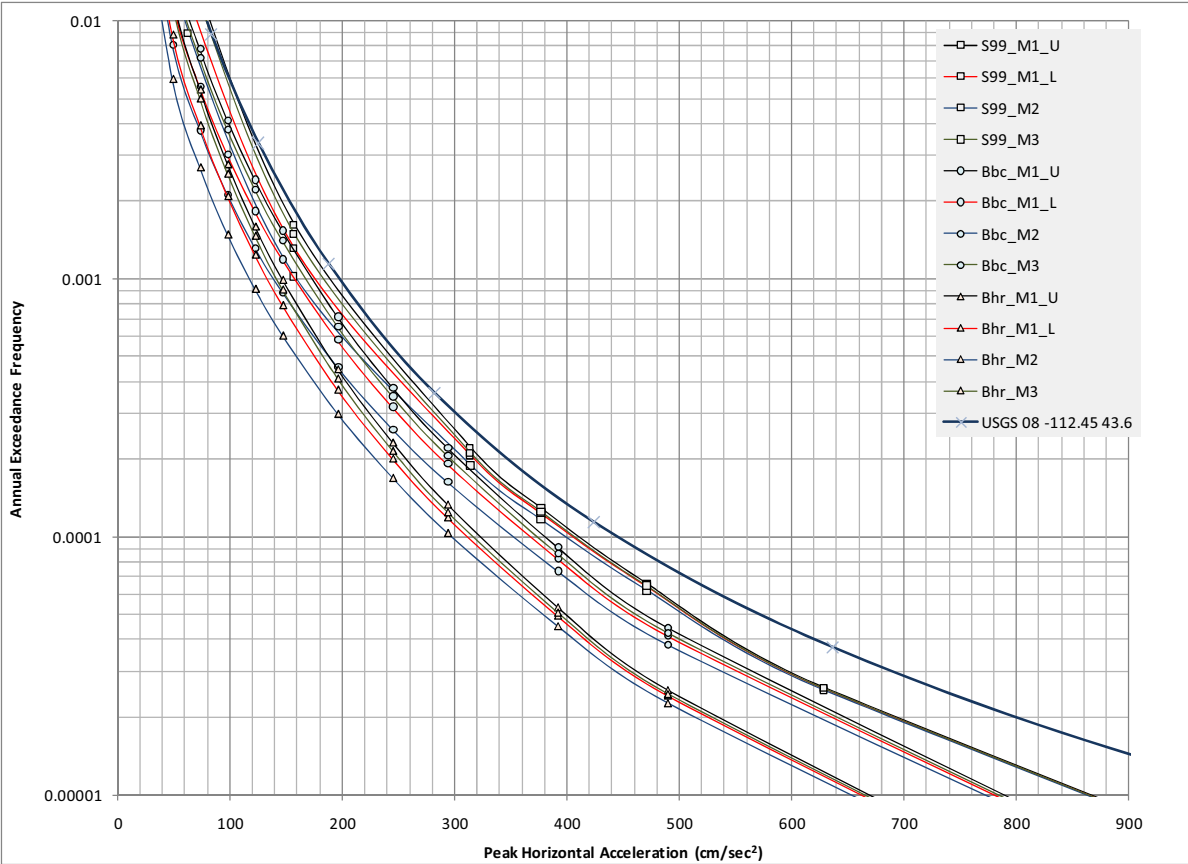
- ★ SITE
- INL
- 1,000 Yr pga (g)
- Q 601 Lost River F.
- Q 602 Lemhi F.
- Q 603 Beaverhead F.
- Q 726 Grand Valley F.
- Q 768 Teton F.
- Q 3501 Idaho Rift System F.
- USGS 08 Hazard Grid Points



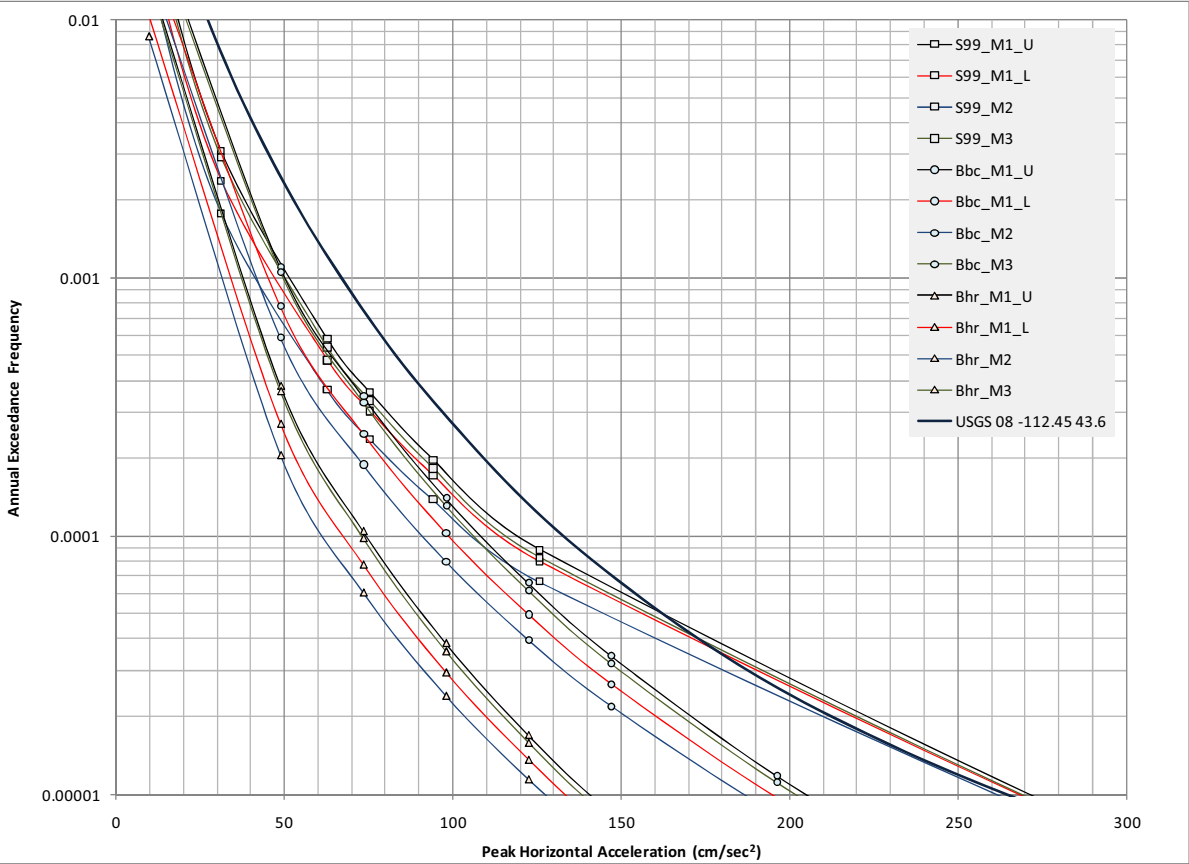
Probabilistic Seismic Hazard Assessment for the Eagle Rock Enrichment Facility	USGS 2008 PGA Hazard 5% Exceedance in 50 Yr Annual Exceedance Frequency of 10 ⁻³
WGE, Inc. Oct. 28, 2008	FIGURE 25



Peak Horizontal Ground Acceleration

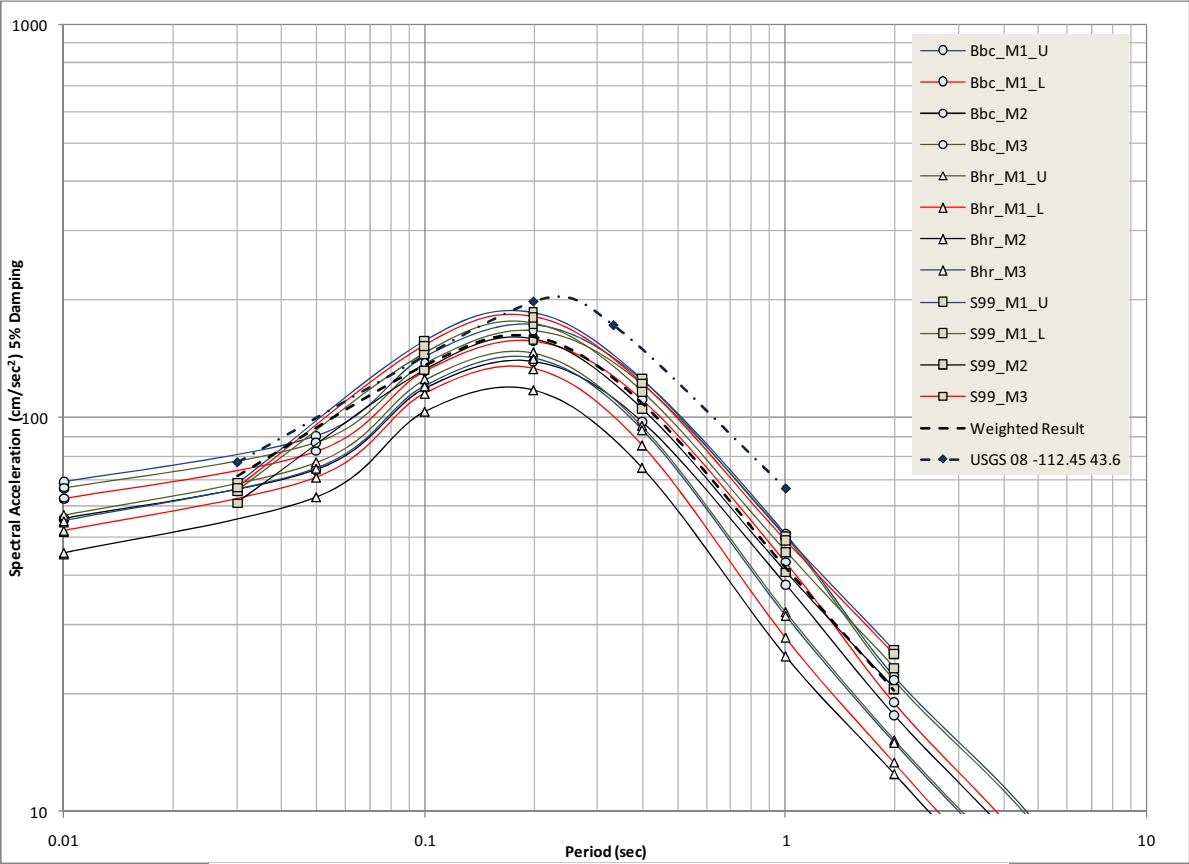


Spectral Acceleration at 5 Hz

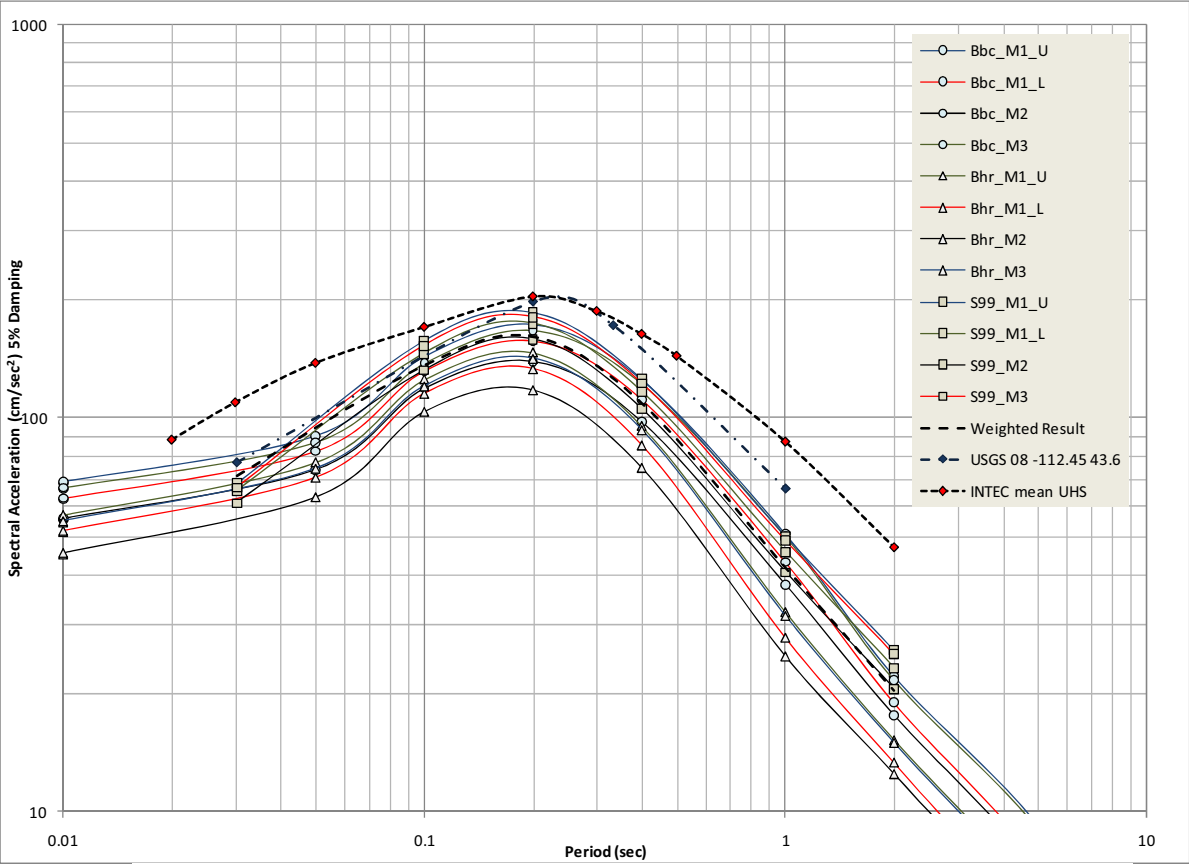


Spectral Acceleration at 1 Hz

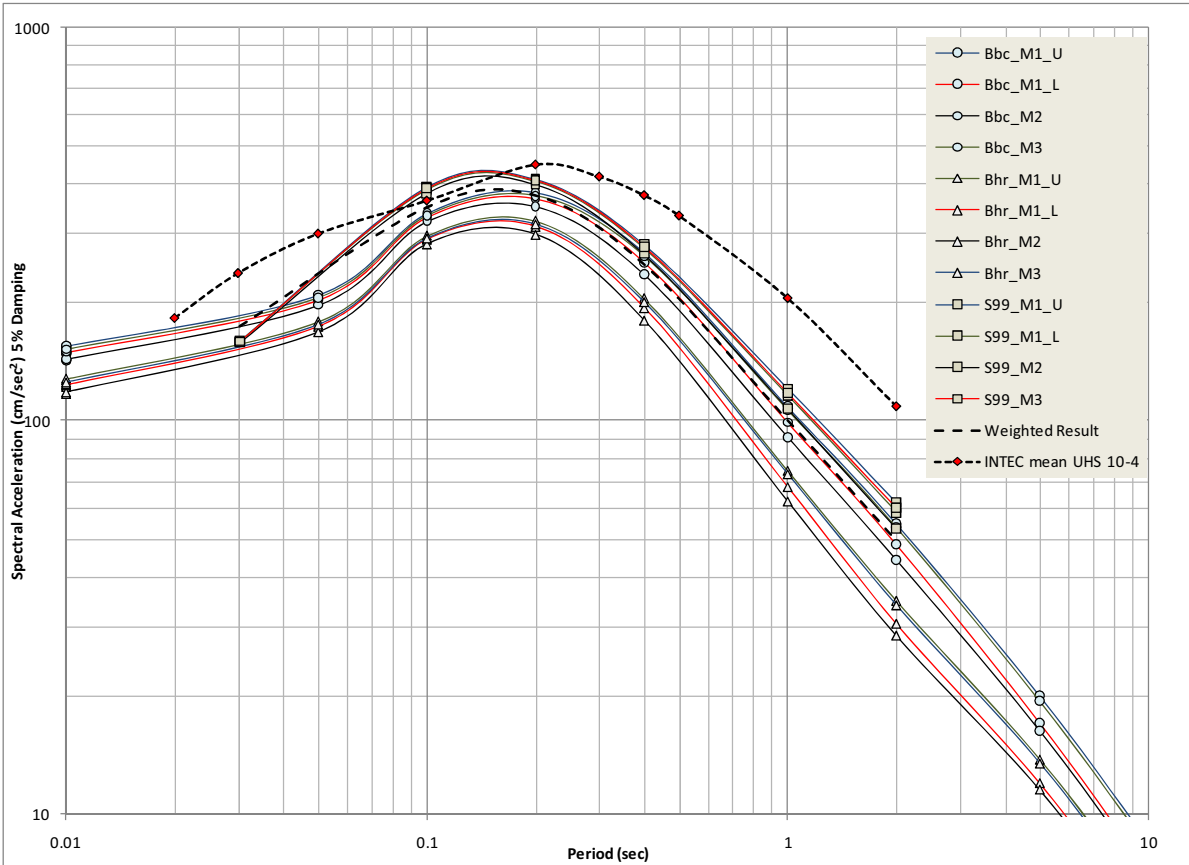
Conversions for metric and customary acceleration units						
cm/sec ²	in/sec ²	g-units		cm/sec ²	in/sec ²	g-units
0.0	0.00	0.0000		0.00	0.00	0.00
50.0	19.69	0.0510		49.03	19.30	0.05
100.0	39.37	0.1020		98.07	38.61	0.10
150.0	59.06	0.1530		147.10	57.91	0.15
200.0	78.74	0.2039		196.13	77.22	0.20
250.0	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/sec ²						



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

Probabilistic Seismic Hazard
Assessment for the Eagle Rock
Enrichment Facility

WGE, Inc. Oct. 28, 2008

Comparison of UHS
for Annual Exceedance
Frequencies of 10⁻³ and 10⁻⁴

FIGURE 27