

APPENDIX C

NI STRUCTURES STRUCTURAL RESPONSE FORCES AND MOMENTS

Table C- 1 CASE01C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S01C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	7.86E+03	7.64E+03	4.91E+03	1.08E+05	1.11E+05	6.91E+03
2	CS: CUT AT EL. 281'	281	1.52E+04	1.46E+04	9.52E+03	4.49E+05	4.59E+05	2.39E+04
3	CS: CUT AT EL. 254.5'	254.5	2.00E+04	1.93E+04	1.28E+04	9.61E+05	9.89E+05	3.94E+04
4	CS: CUT AT EL. 241'	241	2.27E+04	2.22E+04	1.48E+04	1.29E+06	1.33E+06	4.87E+04
5	CS: CUT AT EL. 220'	220	2.94E+04	2.99E+04	1.92E+04	2.00E+06	2.02E+06	7.41E+04
6	CS: CUT AT EL. 200'	200	3.33E+04	3.44E+04	2.26E+04	2.70E+06	2.70E+06	8.88E+04
7	CS: CUT AT EL. 178'	178	3.67E+04	3.83E+04	2.59E+04	3.55E+06	3.53E+06	1.02E+05
8	CS: CUT AT EL. 156'	156	3.97E+04	4.12E+04	2.89E+04	4.48E+06	4.42E+06	1.13E+05
9	CS: CUT AT EL. 136'	136	4.17E+04	4.28E+04	3.11E+04	5.36E+06	5.27E+06	1.19E+05
10	CS: CUT AT EL. 130'	130	4.25E+04	4.33E+04	3.19E+04	5.63E+06	5.53E+06	1.22E+05
11	CS: CUT AT EL. 125'	125	4.25E+04	4.33E+04	3.19E+04	5.85E+06	5.74E+06	1.22E+05
12	CS: CUT AT EL. 114'	114	4.39E+04	4.47E+04	3.35E+04	6.36E+06	6.25E+06	1.27E+05
13	CS: CUT AT EL. 100'	100	4.49E+04	4.57E+04	3.47E+04	7.01E+06	6.89E+06	1.30E+05
14	CS: CUT AT EL. 78'	78	4.57E+04	4.65E+04	3.58E+04	8.02E+06	7.90E+06	1.32E+05
15	PSW: CUT AT EL. 156'	156	1.28E+03	2.40E+03	7.98E+02	5.62E+04	2.68E+04	2.76E+04
16	PSW: CUT AT EL. 136.5'	136.5	3.20E+03	3.16E+03	2.29E+03	1.06E+05	1.02E+05	4.45E+04
17	PSW: CUT AT EL. 130'	130	3.92E+03	3.69E+03	2.94E+03	1.23E+05	1.39E+05	5.05E+04
18	PSW: CUT AT EL. 114'	114	5.43E+03	4.91E+03	4.44E+03	1.86E+05	2.39E+05	6.71E+04
19	PSW: CUT AT EL. 100'	100	6.82E+03	6.27E+03	6.02E+03	2.64E+05	3.47E+05	8.21E+04
20	PSW: CUT AT EL. 78'	78	8.06E+03	7.72E+03	7.75E+03	4.13E+05	5.14E+05	7.14E+04
21	PSW: CUT AT EL. 66'	66	8.35E+03	8.07E+03	8.18E+03	5.05E+05	6.14E+05	6.77E+04
22	SSW: CUT AT EL. 191'	191	1.10E+02	1.15E+02	6.02E+01	2.21E+03	2.97E+03	4.34E+03
23	SSW: CUT AT EL. 156'	156	2.73E+03	2.67E+03	1.56E+03	8.47E+04	7.79E+04	2.87E+04
24	SSW: CUT AT EL. 136.5'	136.5	5.88E+03	4.44E+03	3.83E+03	1.75E+05	2.22E+05	4.65E+04
25	SSW: CUT AT EL. 130'	130	7.23E+03	5.55E+03	5.01E+03	2.11E+05	2.90E+05	5.86E+04
26	SSW: CUT AT EL. 114'	114	8.32E+03	6.51E+03	6.07E+03	2.94E+05	4.18E+05	7.04E+04
27	SSW: CUT AT EL. 100'	100	9.43E+03	7.59E+03	7.30E+03	3.97E+05	5.59E+05	8.23E+04
28	SSW: CUT AT EL. 78'	78	1.49E+04	1.37E+04	1.38E+04	6.80E+05	9.15E+05	9.36E+04

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 2 CASE01C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S01C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	2.064E+03	2.380E+03	1.474E+03	1.467E+05	1.084E+05	2.089E+05
30	AB-EAST: CUT AT EL. 213'	213	5.206E+03	5.113E+03	4.309E+03	3.529E+05	5.382E+05	5.952E+05
31	AB-EAST: CUT AT EL. 195'	195	6.854E+03	6.833E+03	5.356E+03	4.905E+05	6.815E+05	7.952E+05
32	AB-WEST: CUT AT EL. 195'	195	3.378E+03	2.606E+03	2.567E+03	6.510E+04	2.788E+05	2.422E+05
33	AB: CUT AT EL. 174'	174	2.579E+04	2.412E+04	1.957E+04	1.084E+06	1.237E+06	8.413E+05
34	AB: CUT AT EL. 156'	156	4.204E+04	4.130E+04	3.580E+04	1.922E+06	2.354E+06	1.247E+06
35	AB: CUT AT EL. 137.5'	137.5	6.378E+04	6.579E+04	5.759E+04	3.169E+06	3.797E+06	1.556E+06
36	AB: CUT AT EL. 120'	120	8.562E+04	9.278E+04	8.139E+04	4.816E+06	5.590E+06	1.933E+06
37	AB: CUT AT EL. 98.5'	98.5	1.091E+05	1.213E+05	1.072E+05	7.287E+06	8.149E+06	2.325E+06
38	AB: CUT AT EL. 77'	77	1.367E+05	1.507E+05	1.384E+05	1.070E+07	1.103E+07	2.476E+06
39	AB: CUT AT EL. 67'	67	1.528E+05	1.667E+05	1.579E+05	1.250E+07	1.253E+07	2.552E+06
40	AB: CUT AT EL. 55'	55	1.647E+05	1.761E+05	1.703E+05	1.473E+07	1.433E+07	2.623E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j) =$ The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j) =$ The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 3 CASE01C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S01C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	7.86E+03	7.64E+03	4.91E+03	0.90	0.88	0.57
CS: 2	281	307.5	7.29E+03	7.00E+03	4.61E+03	0.81	0.77	0.51
CS: 3	254.5	281	4.85E+03	4.68E+03	3.32E+03	0.71	0.68	0.48
CS: 4	241	254.5	2.65E+03	2.89E+03	1.96E+03	0.64	0.69	0.47
CS: 5	220	241	6.74E+03	7.73E+03	4.43E+03	0.57	0.66	0.38
CS: 6	200	220	3.88E+03	4.49E+03	3.42E+03	0.48	0.55	0.42
CS: 7	178	200	3.45E+03	3.88E+03	3.28E+03	0.41	0.46	0.39
CS: 8	156	178	2.96E+03	2.93E+03	3.00E+03	0.35	0.35	0.35
CS: 9	136	156	2.02E+03	1.59E+03	2.14E+03	0.30	0.23	0.32
CS: 10	130	136	7.57E+02	5.00E+02	8.23E+02	0.27	0.18	0.29
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	1.40E+03	1.34E+03	1.58E+03	0.24	0.23	0.27
CS: 13	100	114	1.01E+03	1.02E+03	1.21E+03	0.20	0.20	0.24
CS: 14	78	100	8.30E+02	8.11E+02	1.16E+03	0.14	0.14	0.20
PSW: 1	156	191	1.28E+03	2.40E+03	7.98E+02	0.47	0.80	0.29
PSW: 2	136.5	156	1.92E+03	7.53E+02	1.49E+03	0.38	0.15	0.29
PSW: 3	130	136.5	7.21E+02	5.32E+02	6.53E+02	0.33	0.24	0.30
PSW: 4	114	130	1.51E+03	1.23E+03	1.50E+03	0.29	0.24	0.29
PSW: 5	100	114	1.38E+03	1.35E+03	1.58E+03	0.25	0.24	0.28
PSW: 6	78	100	1.25E+03	1.45E+03	1.73E+03	0.19	0.22	0.27
PSW: 7	66	78	2.89E+02	3.50E+02	4.32E+02	0.17	0.21	0.26
SSW: 1	191	200	1.10E+02	1.15E+02	6.02E+01	0.72	0.75	0.39
SSW: 2	156	191	2.62E+03	2.56E+03	1.50E+03	0.55	0.51	0.31
SSW: 3	136.5	156	3.15E+03	1.76E+03	2.27E+03	0.41	0.23	0.30
SSW: 4	130	136.5	1.34E+03	1.11E+03	1.18E+03	0.34	0.28	0.30
SSW: 5	114	130	1.09E+03	9.63E+02	1.06E+03	0.30	0.27	0.29
SSW: 6	100	114	1.11E+03	1.07E+03	1.24E+03	0.25	0.25	0.28
SSW: 7	78	100	5.43E+03	6.11E+03	6.46E+03	0.20	0.23	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 4 CASE01C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S01C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	2.064E+03	2.380E+03	1.474E+03	0.53	0.61	0.38
AB-FHA: 2	213	213.5	3.142E+03	2.732E+03	2.835E+03	0.54	0.48	0.49
AB-FHA: 3	195	213	1.648E+03	1.720E+03	1.047E+03	0.49	0.51	0.31
AB-MCR: 1	195	213	3.378E+03	2.606E+03	2.567E+03	0.49	0.38	0.37
AB: 1	174	195	1.556E+04	1.468E+04	1.164E+04	0.40	0.38	0.30
AB: 2	156	174	1.625E+04	1.718E+04	1.624E+04	0.35	0.37	0.35
AB: 3	137.5	156	2.174E+04	2.448E+04	2.179E+04	0.31	0.35	0.32
AB: 4	120	137.5	2.184E+04	2.699E+04	2.380E+04	0.27	0.33	0.30
AB: 5	98.5	120	2.349E+04	2.851E+04	2.579E+04	0.26	0.31	0.28
AB: 6	77	98.5	2.761E+04	2.943E+04	3.122E+04	0.24	0.26	0.26
AB: 7	67	77	1.604E+04	1.602E+04	1.946E+04	0.22	0.22	0.27
AB: 8	55	67	1.195E+04	9.385E+03	1.240E+04	0.25	0.20	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 5 CASE01C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S01C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	0.90	0.88	0.57
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	0.81	0.77	0.51
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.71	0.68	0.48
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.64	0.69	0.47
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.57	0.66	0.38
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.48	0.55	0.42
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.41	0.46	0.39
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.35	0.35	0.35
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.30	0.23	0.32
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.27	0.18	0.29
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.24	0.23	0.27
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.20	0.20	0.24
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.14	0.14	0.20
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.47	0.80	0.29
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.38	0.15	0.29
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.33	0.24	0.30
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.29	0.24	0.29
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.25	0.24	0.28
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.19	0.22	0.27
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.17	0.21	0.26
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.72	0.75	0.39
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.55	0.51	0.31
SSW: 3	136.5	156	7.60E+03	7.59E+03	7.59E+03	0.41	0.23	0.30
SSW: 4	130	136.5	3.96E+03	3.97E+03	3.97E+03	0.34	0.28	0.30
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.30	0.27	0.29
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.25	0.25	0.28
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.20	0.23	0.26
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. ΔW_x , ΔW_y , ΔW_z are from Table H-64
12. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 6 CASE01C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S01C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.53	0.61	0.38
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.54	0.48	0.49
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.49	0.51	0.31
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	0.49	0.38	0.37
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.40	0.38	0.30
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.35	0.37	0.35
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.31	0.35	0.32
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.27	0.33	0.30
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.26	0.31	0.28
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.24	0.26	0.26
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.22	0.22	0.27
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.25	0.20	0.26
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_{ij}/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_{ij}/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 7 CASE02C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S02C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	7.24E+03	7.54E+03	5.47E+03	1.06E+05	1.02E+05	7.69E+03
2	CS: CUT AT EL. 281'	281	1.40E+04	1.45E+04	1.07E+04	4.41E+05	4.20E+05	2.66E+04
3	CS: CUT AT EL. 254.5'	254.5	1.84E+04	1.90E+04	1.44E+04	9.47E+05	9.07E+05	4.37E+04
4	CS: CUT AT EL. 241'	241	2.09E+04	2.14E+04	1.66E+04	1.27E+06	1.22E+06	5.40E+04
5	CS: CUT AT EL. 220'	220	2.72E+04	2.81E+04	2.18E+04	1.90E+06	1.85E+06	8.05E+04
6	CS: CUT AT EL. 200'	200	3.09E+04	3.23E+04	2.57E+04	2.55E+06	2.48E+06	9.67E+04
7	CS: CUT AT EL. 178'	178	3.42E+04	3.60E+04	2.94E+04	3.33E+06	3.25E+06	1.12E+05
8	CS: CUT AT EL. 156'	156	3.70E+04	3.89E+04	3.28E+04	4.21E+06	4.07E+06	1.24E+05
9	CS: CUT AT EL. 136'	136	3.89E+04	4.06E+04	3.53E+04	5.04E+06	4.85E+06	1.31E+05
10	CS: CUT AT EL. 130'	130	3.95E+04	4.14E+04	3.63E+04	5.31E+06	5.10E+06	1.34E+05
11	CS: CUT AT EL. 125'	125	3.95E+04	4.14E+04	3.63E+04	5.50E+06	5.29E+06	1.34E+05
12	CS: CUT AT EL. 114'	114	4.08E+04	4.28E+04	3.81E+04	5.99E+06	5.76E+06	1.39E+05
13	CS: CUT AT EL. 100'	100	4.17E+04	4.38E+04	3.96E+04	6.60E+06	6.35E+06	1.42E+05
14	CS: CUT AT EL. 78'	78	4.25E+04	4.45E+04	4.11E+04	7.56E+06	7.30E+06	1.44E+05
15	PSW: CUT AT EL. 156'	156	1.33E+03	2.13E+03	8.86E+02	4.72E+04	2.77E+04	2.37E+04
16	PSW: CUT AT EL. 136.5'	136.5	3.35E+03	3.16E+03	2.56E+03	9.97E+04	1.05E+05	4.13E+04
17	PSW: CUT AT EL. 130'	130	4.12E+03	3.83E+03	3.28E+03	1.20E+05	1.44E+05	5.17E+04
18	PSW: CUT AT EL. 114'	114	5.76E+03	5.34E+03	4.97E+03	1.83E+05	2.49E+05	7.44E+04
19	PSW: CUT AT EL. 100'	100	7.30E+03	6.82E+03	6.77E+03	2.73E+05	3.62E+05	9.05E+04
20	PSW: CUT AT EL. 78'	78	8.72E+03	8.35E+03	8.77E+03	4.43E+05	5.40E+05	7.90E+04
21	PSW: CUT AT EL. 66'	66	9.03E+03	8.71E+03	9.28E+03	5.47E+05	6.48E+05	7.53E+04
22	SSW: CUT AT EL. 191'	191	1.10E+02	1.16E+02	6.17E+01	2.33E+03	2.91E+03	4.66E+03
23	SSW: CUT AT EL. 156'	156	2.87E+03	2.41E+03	1.69E+03	8.24E+04	7.40E+04	2.90E+04
24	SSW: CUT AT EL. 136.5'	136.5	6.24E+03	4.90E+03	4.21E+03	1.91E+05	2.13E+05	4.54E+04
25	SSW: CUT AT EL. 130'	130	7.70E+03	6.11E+03	5.52E+03	2.38E+05	2.80E+05	5.85E+04
26	SSW: CUT AT EL. 114'	114	8.90E+03	7.15E+03	6.70E+03	3.40E+05	4.29E+05	7.12E+04
27	SSW: CUT AT EL. 100'	100	1.01E+04	8.31E+03	8.10E+03	4.39E+05	5.85E+05	8.43E+04
28	SSW: CUT AT EL. 78'	78	1.64E+04	1.48E+04	1.57E+04	7.49E+05	9.65E+05	9.25E+04

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 8 CASE02C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S02C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	1.971E+03	2.449E+03	1.537E+03	1.506E+05	1.149E+05	2.358E+05
30	AB-EAST: CUT AT EL. 213'	213	5.046E+03	4.972E+03	4.525E+03	3.735E+05	5.660E+05	6.167E+05
31	AB-EAST: CUT AT EL. 195'	195	6.599E+03	6.592E+03	5.626E+03	5.252E+05	7.247E+05	8.222E+05
32	AB-WEST: CUT AT EL. 195'	195	3.474E+03	2.636E+03	2.535E+03	7.510E+04	2.765E+05	2.427E+05
33	AB: CUT AT EL. 174'	174	2.605E+04	2.292E+04	2.074E+04	1.214E+06	1.382E+06	9.198E+05
34	AB: CUT AT EL. 156'	156	4.285E+04	3.933E+04	3.656E+04	2.132E+06	2.495E+06	1.192E+06
35	AB: CUT AT EL. 137.5'	137.5	6.495E+04	6.222E+04	5.903E+04	3.471E+06	3.996E+06	1.402E+06
36	AB: CUT AT EL. 120'	120	8.799E+04	8.735E+04	8.404E+04	5.225E+06	5.703E+06	1.604E+06
37	AB: CUT AT EL. 98.5'	98.5	1.112E+05	1.140E+05	1.123E+05	7.663E+06	8.271E+06	1.899E+06
38	AB: CUT AT EL. 77'	77	1.352E+05	1.413E+05	1.486E+05	1.061E+07	1.156E+07	2.028E+06
39	AB: CUT AT EL. 67'	67	1.485E+05	1.555E+05	1.695E+05	1.218E+07	1.331E+07	2.194E+06
40	AB: CUT AT EL. 55'	55	1.557E+05	1.635E+05	1.829E+05	1.404E+07	1.540E+07	2.337E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_{i/x}), \text{Max}(F_{i/y}), \text{Max}(F_{i/z}))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_{i/x}), \text{Max}(M_{i/y}), \text{Max}(M_{i/z}))$ - (kips-ft)
3. $\text{MAX}(F_{i/j})$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_{i/j})$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 9 CASE02C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S02C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	7.24E+03	7.54E+03	5.47E+03	0.83	0.87	0.63
CS: 2	281	307.5	6.73E+03	6.91E+03	5.18E+03	0.74	0.76	0.57
CS: 3	254.5	281	4.47E+03	4.52E+03	3.72E+03	0.65	0.66	0.54
CS: 4	241	254.5	2.48E+03	2.41E+03	2.20E+03	0.60	0.58	0.53
CS: 5	220	241	6.30E+03	6.70E+03	5.25E+03	0.54	0.57	0.45
CS: 6	200	220	3.67E+03	4.27E+03	3.86E+03	0.45	0.53	0.48
CS: 7	178	200	3.30E+03	3.71E+03	3.72E+03	0.39	0.44	0.44
CS: 8	156	178	2.79E+03	2.85E+03	3.43E+03	0.33	0.34	0.41
CS: 9	136	156	1.87E+03	1.72E+03	2.48E+03	0.28	0.25	0.37
CS: 10	130	136	6.89E+02	7.89E+02	9.61E+02	0.24	0.28	0.34
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	1.28E+03	1.43E+03	1.85E+03	0.22	0.24	0.32
CS: 13	100	114	9.23E+02	9.64E+02	1.44E+03	0.18	0.19	0.28
CS: 14	78	100	7.78E+02	7.46E+02	1.60E+03	0.13	0.13	0.27
PSW: 1	156	191	1.33E+03	2.13E+03	8.86E+02	0.49	0.71	0.33
PSW: 2	136.5	156	2.02E+03	1.03E+03	1.67E+03	0.40	0.20	0.33
PSW: 3	130	136.5	7.73E+02	6.78E+02	7.28E+02	0.35	0.31	0.33
PSW: 4	114	130	1.64E+03	1.50E+03	1.69E+03	0.32	0.29	0.32
PSW: 5	100	114	1.53E+03	1.48E+03	1.80E+03	0.27	0.26	0.32
PSW: 6	78	100	1.42E+03	1.53E+03	2.00E+03	0.22	0.24	0.31
PSW: 7	66	78	3.08E+02	3.63E+02	5.10E+02	0.19	0.22	0.31
SSW: 1	191	200	1.10E+02	1.16E+02	6.17E+01	0.72	0.75	0.40
SSW: 2	156	191	2.76E+03	2.29E+03	1.63E+03	0.58	0.46	0.34
SSW: 3	136.5	156	3.37E+03	2.48E+03	2.52E+03	0.44	0.33	0.33
SSW: 4	130	136.5	1.46E+03	1.22E+03	1.31E+03	0.37	0.31	0.33
SSW: 5	114	130	1.20E+03	1.04E+03	1.18E+03	0.33	0.29	0.32
SSW: 6	100	114	1.25E+03	1.16E+03	1.39E+03	0.29	0.26	0.32
SSW: 7	78	100	6.21E+03	6.48E+03	7.63E+03	0.23	0.24	0.30

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 10 CASE02C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S02C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	1.971E+03	2.449E+03	1.537E+03	0.51	0.63	0.39
AB-FHA: 2	213	213.5	3.074E+03	2.523E+03	2.988E+03	0.53	0.44	0.52
AB-FHA: 3	195	213	1.553E+03	1.620E+03	1.101E+03	0.46	0.48	0.33
AB-MCR: 1	195	213	3.474E+03	2.636E+03	2.535E+03	0.51	0.38	0.37
AB: 1	174	195	1.598E+04	1.369E+04	1.257E+04	0.41	0.35	0.32
AB: 2	156	174	1.680E+04	1.641E+04	1.582E+04	0.36	0.35	0.34
AB: 3	137.5	156	2.209E+04	2.289E+04	2.247E+04	0.32	0.33	0.33
AB: 4	120	137.5	2.305E+04	2.514E+04	2.501E+04	0.28	0.31	0.31
AB: 5	98.5	120	2.323E+04	2.661E+04	2.829E+04	0.25	0.29	0.31
AB: 6	77	98.5	2.403E+04	2.731E+04	3.623E+04	0.21	0.24	0.30
AB: 7	67	77	1.327E+04	1.425E+04	2.098E+04	0.18	0.20	0.29
AB: 8	55	67	7.147E+03	8.014E+03	1.333E+04	0.15	0.17	0.28

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 11 CASE02C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S02C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	0.83	0.87	0.63
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	0.74	0.76	0.57
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.65	0.66	0.54
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.60	0.58	0.53
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.54	0.57	0.45
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.45	0.53	0.48
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.39	0.44	0.44
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.33	0.34	0.41
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.28	0.25	0.37
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.24	0.28	0.34
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.22	0.24	0.32
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.18	0.19	0.28
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.13	0.13	0.27
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.49	0.71	0.33
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.40	0.20	0.33
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.35	0.31	0.33
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.32	0.29	0.32
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.27	0.26	0.32
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.22	0.24	0.31
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.19	0.22	0.31
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.72	0.75	0.40
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.58	0.46	0.34
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.44	0.33	0.33
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.37	0.31	0.33
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.33	0.29	0.32
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.29	0.26	0.32
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.23	0.24	0.30
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

- $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
- Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
- $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
- For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
- The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
- Moments are calculated about the geometric center of the CS.
- Moments and Forces due to RCS elements are not included.
- Hydrodynamic impulsive masses are included.
- Hydrodynamic convective masses are not included.
- Accidental Torsion is not included within the calculations.
- ΔW_x , ΔW_y , ΔW_z are from Table H-64
- Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 12 CASE02C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S02C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.51	0.63	0.39
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.53	0.44	0.52
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.46	0.48	0.33
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	0.51	0.38	0.37
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.41	0.35	0.32
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.36	0.35	0.34
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.32	0.33	0.33
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.28	0.31	0.31
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.25	0.29	0.31
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.21	0.24	0.30
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.18	0.20	0.29
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.15	0.17	0.28
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 13 CASE03C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S03C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.03E+04	1.05E+04	5.12E+03	1.50E+05	1.49E+05	1.07E+04
2	CS: CUT AT EL. 281'	281	1.99E+04	2.03E+04	1.00E+04	6.14E+05	6.08E+05	3.52E+04
3	CS: CUT AT EL. 254.5'	254.5	2.65E+04	2.68E+04	1.35E+04	1.32E+06	1.30E+06	5.58E+04
4	CS: CUT AT EL. 241'	241	3.02E+04	3.03E+04	1.56E+04	1.77E+06	1.75E+06	6.75E+04
5	CS: CUT AT EL. 220'	220	3.96E+04	3.96E+04	2.06E+04	2.68E+06	2.67E+06	9.57E+04
6	CS: CUT AT EL. 200'	200	4.50E+04	4.49E+04	2.42E+04	3.61E+06	3.58E+06	1.15E+05
7	CS: CUT AT EL. 178'	178	4.96E+04	4.94E+04	2.76E+04	4.71E+06	4.69E+06	1.33E+05
8	CS: CUT AT EL. 156'	156	5.37E+04	5.30E+04	3.09E+04	5.89E+06	5.87E+06	1.52E+05
9	CS: CUT AT EL. 136'	136	5.64E+04	5.51E+04	3.31E+04	7.00E+06	7.01E+06	1.64E+05
10	CS: CUT AT EL. 130'	130	5.74E+04	5.57E+04	3.40E+04	7.35E+06	7.37E+06	1.69E+05
11	CS: CUT AT EL. 125'	125	5.74E+04	5.57E+04	3.40E+04	7.62E+06	7.65E+06	1.69E+05
12	CS: CUT AT EL. 114'	114	5.97E+04	5.70E+04	3.57E+04	8.27E+06	8.33E+06	1.77E+05
13	CS: CUT AT EL. 100'	100	6.16E+04	5.78E+04	3.70E+04	9.09E+06	9.19E+06	1.83E+05
14	CS: CUT AT EL. 78'	78	6.33E+04	5.92E+04	3.84E+04	1.04E+07	1.06E+07	1.86E+05
15	PSW: CUT AT EL. 156'	156	1.25E+03	2.38E+03	9.82E+02	5.42E+04	2.71E+04	2.94E+04
16	PSW: CUT AT EL. 136.5'	136.5	3.11E+03	2.99E+03	2.81E+03	1.09E+05	1.05E+05	5.01E+04
17	PSW: CUT AT EL. 130'	130	3.79E+03	3.62E+03	3.61E+03	1.29E+05	1.44E+05	6.62E+04
18	PSW: CUT AT EL. 114'	114	5.14E+03	4.99E+03	5.46E+03	1.80E+05	2.42E+05	9.07E+04
19	PSW: CUT AT EL. 100'	100	6.75E+03	6.39E+03	7.44E+03	2.51E+05	3.43E+05	1.08E+05
20	PSW: CUT AT EL. 78'	78	8.44E+03	8.00E+03	9.64E+03	3.99E+05	4.89E+05	9.65E+04
21	PSW: CUT AT EL. 66'	66	8.84E+03	8.40E+03	1.02E+04	4.93E+05	5.74E+05	9.27E+04
22	SSW: CUT AT EL. 191'	191	1.15E+02	1.53E+02	7.58E+01	2.79E+03	3.46E+03	5.45E+03
23	SSW: CUT AT EL. 156'	156	2.92E+03	2.64E+03	1.92E+03	9.08E+04	8.18E+04	3.71E+04
24	SSW: CUT AT EL. 136.5'	136.5	6.25E+03	4.86E+03	4.73E+03	2.12E+05	2.35E+05	5.47E+04
25	SSW: CUT AT EL. 130'	130	7.55E+03	6.03E+03	6.18E+03	2.64E+05	3.08E+05	6.61E+04
26	SSW: CUT AT EL. 114'	114	8.56E+03	7.05E+03	7.49E+03	3.73E+05	4.56E+05	7.82E+04
27	SSW: CUT AT EL. 100'	100	9.73E+03	8.15E+03	9.01E+03	4.76E+05	6.09E+05	9.29E+04
28	SSW: CUT AT EL. 78'	78	1.57E+04	1.49E+04	1.74E+04	7.21E+05	9.33E+05	1.02E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 14 CASE03C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S03C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	2.432E+03	2.768E+03	1.627E+03	1.597E+05	1.197E+05	3.036E+05
30	AB-EAST: CUT AT EL. 213'	213	6.186E+03	5.601E+03	4.834E+03	3.978E+05	6.335E+05	7.574E+05
31	AB-EAST: CUT AT EL. 195'	195	8.076E+03	7.436E+03	5.970E+03	5.378E+05	7.798E+05	1.010E+06
32	AB-WEST: CUT AT EL. 195'	195	5.612E+03	3.703E+03	2.681E+03	1.188E+05	2.937E+05	3.299E+05
33	AB: CUT AT EL. 174'	174	3.309E+04	2.853E+04	2.066E+04	1.358E+06	1.396E+06	1.400E+06
34	AB: CUT AT EL. 156'	156	5.348E+04	4.901E+04	3.655E+04	2.460E+06	2.595E+06	2.079E+06
35	AB: CUT AT EL. 137.5'	137.5	8.212E+04	7.531E+04	5.884E+04	3.822E+06	4.188E+06	2.652E+06
36	AB: CUT AT EL. 120'	120	1.113E+05	1.040E+05	8.430E+04	5.755E+06	6.126E+06	3.229E+06
37	AB: CUT AT EL. 98.5'	98.5	1.400E+05	1.345E+05	1.127E+05	8.574E+06	9.041E+06	3.872E+06
38	AB: CUT AT EL. 77'	77	1.687E+05	1.694E+05	1.491E+05	1.221E+07	1.277E+07	4.296E+06
39	AB: CUT AT EL. 67'	67	1.854E+05	1.894E+05	1.705E+05	1.410E+07	1.476E+07	4.527E+06
40	AB: CUT AT EL. 55'	55	1.958E+05	2.016E+05	1.840E+05	1.636E+07	1.723E+07	4.612E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_{i/x}), \text{Max}(F_{i/y}), \text{Max}(F_{i/z}))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_{i/x}), \text{Max}(M_{i/y}), \text{Max}(M_{i/z}))$ - (kips-ft)
3. $\text{MAX}(F_{i/j})$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_{i/j})$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 15 CASE03C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S03C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.03E+04	1.05E+04	5.12E+03	1.18	1.21	0.59
CS: 2	281	307.5	9.61E+03	9.83E+03	4.88E+03	1.06	1.09	0.54
CS: 3	254.5	281	6.58E+03	6.49E+03	3.52E+03	0.96	0.95	0.51
CS: 4	241	254.5	3.68E+03	3.51E+03	2.07E+03	0.89	0.84	0.50
CS: 5	220	241	9.42E+03	9.33E+03	5.00E+03	0.80	0.80	0.43
CS: 6	200	220	5.37E+03	5.27E+03	3.62E+03	0.66	0.65	0.45
CS: 7	178	200	4.67E+03	4.51E+03	3.46E+03	0.56	0.54	0.41
CS: 8	156	178	4.03E+03	3.64E+03	3.21E+03	0.48	0.43	0.38
CS: 9	136	156	2.70E+03	2.04E+03	2.29E+03	0.40	0.30	0.34
CS: 10	130	136	1.06E+03	6.59E+02	8.84E+02	0.37	0.23	0.31
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	2.30E+03	1.20E+03	1.69E+03	0.39	0.21	0.29
CS: 13	100	114	1.85E+03	8.66E+02	1.31E+03	0.36	0.17	0.25
CS: 14	78	100	1.73E+03	1.41E+03	1.36E+03	0.30	0.24	0.23
PSW: 1	156	191	1.25E+03	2.38E+03	9.82E+02	0.46	0.80	0.36
PSW: 2	136.5	156	1.86E+03	6.10E+02	1.83E+03	0.37	0.12	0.36
PSW: 3	130	136.5	6.84E+02	6.30E+02	7.99E+02	0.31	0.29	0.36
PSW: 4	114	130	1.35E+03	1.37E+03	1.85E+03	0.26	0.26	0.36
PSW: 5	100	114	1.60E+03	1.40E+03	1.97E+03	0.29	0.25	0.35
PSW: 6	78	100	1.69E+03	1.61E+03	2.20E+03	0.26	0.25	0.34
PSW: 7	66	78	4.04E+02	3.99E+02	5.64E+02	0.24	0.24	0.34
SSW: 1	191	200	1.15E+02	1.53E+02	7.58E+01	0.75	1.00	0.49
SSW: 2	156	191	2.80E+03	2.48E+03	1.84E+03	0.59	0.49	0.39
SSW: 3	136.5	156	3.33E+03	2.22E+03	2.81E+03	0.44	0.29	0.37
SSW: 4	130	136.5	1.30E+03	1.17E+03	1.46E+03	0.33	0.29	0.37
SSW: 5	114	130	1.00E+03	1.02E+03	1.30E+03	0.28	0.28	0.36
SSW: 6	100	114	1.17E+03	1.10E+03	1.53E+03	0.27	0.25	0.35
SSW: 7	78	100	6.02E+03	6.72E+03	8.42E+03	0.22	0.25	0.33

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 16 CASE03C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S03C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	2.432E+03	2.768E+03	1.627E+03	0.62	0.71	0.42
AB-FHA: 2	213	213.5	3.754E+03	2.834E+03	3.207E+03	0.64	0.50	0.56
AB-FHA: 3	195	213	1.890E+03	1.834E+03	1.136E+03	0.56	0.54	0.34
AB-MCR: 1	195	213	5.612E+03	3.703E+03	2.681E+03	0.82	0.54	0.39
AB: 1	174	195	1.940E+04	1.739E+04	1.200E+04	0.50	0.45	0.31
AB: 2	156	174	2.039E+04	2.048E+04	1.589E+04	0.43	0.44	0.34
AB: 3	137.5	156	2.864E+04	2.630E+04	2.229E+04	0.41	0.38	0.32
AB: 4	120	137.5	2.914E+04	2.873E+04	2.546E+04	0.36	0.35	0.32
AB: 5	98.5	120	2.871E+04	3.043E+04	2.835E+04	0.31	0.33	0.31
AB: 6	77	98.5	2.874E+04	3.496E+04	3.643E+04	0.25	0.31	0.30
AB: 7	67	77	1.672E+04	1.996E+04	2.137E+04	0.23	0.27	0.29
AB: 8	55	67	1.037E+04	1.219E+04	1.354E+04	0.22	0.25	0.28

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 17 CASE03C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S03C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.18	1.21	0.59
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.06	1.09	0.54
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.96	0.95	0.51
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.89	0.84	0.50
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.80	0.80	0.43
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.66	0.65	0.45
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.56	0.54	0.41
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.48	0.43	0.38
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.40	0.30	0.34
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.37	0.23	0.31
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.39	0.21	0.29
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.36	0.17	0.25
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.30	0.24	0.23
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.46	0.80	0.36
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.37	0.12	0.36
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.31	0.29	0.36
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.26	0.26	0.36
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.29	0.25	0.35
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.26	0.25	0.34
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.24	0.24	0.34
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.75	1.00	0.49
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.59	0.49	0.39
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.44	0.29	0.37
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.33	0.29	0.37
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.28	0.28	0.36
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.27	0.25	0.35
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.22	0.25	0.33
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

- $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
- Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
- $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
- For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
- The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
- Moments are calculated about the geometric center of the CS.
- Moments and Forces due to RCS elements are not included.
- Hydrodynamic impulsive masses are included.
- Hydrodynamic convective masses are not included.
- Accidental Torsion is not included within the calculations.
- ΔW_x , ΔW_y , ΔW_z are from Table H-64
- Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 18 CASE03C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S03C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.62	0.71	0.42
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.64	0.50	0.56
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.56	0.54	0.34
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	0.82	0.54	0.39
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.50	0.45	0.31
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.43	0.44	0.34
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.41	0.38	0.32
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.36	0.35	0.32
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.31	0.33	0.31
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.25	0.31	0.30
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.23	0.27	0.29
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.22	0.25	0.28
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 19 CASE04C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S04C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.04E+04	9.78E+03	4.95E+03	1.40E+05	1.51E+05	1.12E+04
2	CS: CUT AT EL. 281'	281	2.01E+04	1.90E+04	9.30E+03	5.74E+05	6.19E+05	3.73E+04
3	CS: CUT AT EL. 254.5'	254.5	2.68E+04	2.52E+04	1.23E+04	1.24E+06	1.33E+06	6.02E+04
4	CS: CUT AT EL. 241'	241	3.05E+04	2.86E+04	1.40E+04	1.66E+06	1.78E+06	7.39E+04
5	CS: CUT AT EL. 220'	220	4.01E+04	3.77E+04	1.92E+04	2.52E+06	2.72E+06	1.03E+05
6	CS: CUT AT EL. 200'	200	4.57E+04	4.30E+04	2.27E+04	3.40E+06	3.66E+06	1.25E+05
7	CS: CUT AT EL. 178'	178	5.06E+04	4.76E+04	2.61E+04	4.46E+06	4.79E+06	1.43E+05
8	CS: CUT AT EL. 156'	156	5.47E+04	5.15E+04	2.94E+04	5.60E+06	6.00E+06	1.64E+05
9	CS: CUT AT EL. 136'	136	5.73E+04	5.37E+04	3.20E+04	6.68E+06	7.16E+06	1.78E+05
10	CS: CUT AT EL. 130'	130	5.83E+04	5.45E+04	3.30E+04	7.01E+06	7.52E+06	1.84E+05
11	CS: CUT AT EL. 125'	125	5.83E+04	5.45E+04	3.30E+04	7.28E+06	7.81E+06	1.84E+05
12	CS: CUT AT EL. 114'	114	6.00E+04	5.57E+04	3.51E+04	7.91E+06	8.49E+06	1.93E+05
13	CS: CUT AT EL. 100'	100	6.14E+04	5.64E+04	3.68E+04	8.70E+06	9.36E+06	1.99E+05
14	CS: CUT AT EL. 78'	78	6.31E+04	5.68E+04	3.86E+04	9.96E+06	1.07E+07	2.04E+05
15	PSW: CUT AT EL. 156'	156	1.20E+03	2.09E+03	9.99E+02	5.11E+04	2.71E+04	2.72E+04
16	PSW: CUT AT EL. 136.5'	136.5	2.95E+03	3.04E+03	2.87E+03	8.58E+04	1.05E+05	5.11E+04
17	PSW: CUT AT EL. 130'	130	3.59E+03	3.78E+03	3.70E+03	1.01E+05	1.43E+05	6.84E+04
18	PSW: CUT AT EL. 114'	114	4.92E+03	5.40E+03	5.60E+03	1.75E+05	2.37E+05	9.45E+04
19	PSW: CUT AT EL. 100'	100	6.17E+03	7.03E+03	7.63E+03	2.67E+05	3.28E+05	1.14E+05
20	PSW: CUT AT EL. 78'	78	7.69E+03	8.75E+03	9.89E+03	4.44E+05	4.61E+05	1.01E+05
21	PSW: CUT AT EL. 66'	66	8.10E+03	9.17E+03	1.05E+04	5.52E+05	5.41E+05	9.65E+04
22	SSW: CUT AT EL. 191'	191	1.14E+02	1.49E+02	7.38E+01	2.66E+03	3.50E+03	5.32E+03
23	SSW: CUT AT EL. 156'	156	2.89E+03	2.71E+03	1.89E+03	9.18E+04	8.13E+04	3.77E+04
24	SSW: CUT AT EL. 136.5'	136.5	6.14E+03	5.08E+03	4.73E+03	2.00E+05	2.31E+05	5.60E+04
25	SSW: CUT AT EL. 130'	130	7.45E+03	6.35E+03	6.21E+03	2.49E+05	3.02E+05	6.81E+04
26	SSW: CUT AT EL. 114'	114	8.52E+03	7.46E+03	7.55E+03	3.52E+05	4.36E+05	7.90E+04
27	SSW: CUT AT EL. 100'	100	9.57E+03	8.66E+03	9.13E+03	4.54E+05	5.79E+05	9.24E+04
28	SSW: CUT AT EL. 78'	78	1.45E+04	1.56E+04	1.79E+04	7.68E+05	8.88E+05	1.01E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x) , \text{Max}(F_i/y) , \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x) , \text{Max}(M_i/y) , \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 20 CASE04C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S04C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	2.492E+03	3.112E+03	1.711E+03	1.604E+05	1.254E+05	2.994E+05
30	AB-EAST: CUT AT EL. 213'	213	6.285E+03	6.430E+03	5.237E+03	4.153E+05	6.731E+05	7.785E+05
31	AB-EAST: CUT AT EL. 195'	195	8.314E+03	8.565E+03	6.248E+03	5.466E+05	8.227E+05	1.028E+06
32	AB-WEST: CUT AT EL. 195'	195	4.896E+03	3.679E+03	2.705E+03	8.974E+04	2.905E+05	3.337E+05
33	AB: CUT AT EL. 174'	174	3.313E+04	3.107E+04	2.248E+04	1.341E+06	1.236E+06	1.225E+06
34	AB: CUT AT EL. 156'	156	5.507E+04	5.247E+04	3.957E+04	2.492E+06	2.396E+06	1.784E+06
35	AB: CUT AT EL. 137.5'	137.5	8.403E+04	7.896E+04	6.362E+04	4.076E+06	3.860E+06	2.333E+06
36	AB: CUT AT EL. 120'	120	1.140E+05	1.110E+05	9.148E+04	6.094E+06	5.912E+06	2.898E+06
37	AB: CUT AT EL. 98.5'	98.5	1.438E+05	1.450E+05	1.221E+05	8.900E+06	9.118E+06	3.575E+06
38	AB: CUT AT EL. 77'	77	1.745E+05	1.820E+05	1.612E+05	1.258E+07	1.290E+07	3.935E+06
39	AB: CUT AT EL. 67'	67	1.929E+05	2.028E+05	1.841E+05	1.448E+07	1.493E+07	4.192E+06
40	AB: CUT AT EL. 55'	55	2.045E+05	2.152E+05	1.988E+05	1.709E+07	1.745E+07	4.303E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_{i/x}), \text{Max}(F_{i/y}), \text{Max}(F_{i/z}))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_{i/x}), \text{Max}(M_{i/y}), \text{Max}(M_{i/z}))$ - (kips-ft)
3. $\text{MAX}(F_{i/j})$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_{i/j})$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 21 CASE04C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S04C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.04E+04	9.78E+03	4.95E+03	1.20	1.13	0.57
CS: 2	281	307.5	9.72E+03	9.21E+03	4.35E+03	1.07	1.02	0.48
CS: 3	254.5	281	6.67E+03	6.17E+03	3.00E+03	0.97	0.90	0.44
CS: 4	241	254.5	3.75E+03	3.42E+03	1.75E+03	0.90	0.82	0.42
CS: 5	220	241	9.60E+03	9.11E+03	5.19E+03	0.82	0.78	0.44
CS: 6	200	220	5.59E+03	5.27E+03	3.44E+03	0.69	0.65	0.42
CS: 7	178	200	4.85E+03	4.67E+03	3.44E+03	0.58	0.56	0.41
CS: 8	156	178	4.11E+03	3.82E+03	3.33E+03	0.48	0.45	0.39
CS: 9	136	156	2.66E+03	2.24E+03	2.54E+03	0.39	0.33	0.37
CS: 10	130	136	9.63E+02	7.88E+02	1.03E+03	0.34	0.28	0.36
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	1.73E+03	1.23E+03	2.06E+03	0.30	0.21	0.35
CS: 13	100	114	1.39E+03	6.67E+02	1.73E+03	0.27	0.13	0.34
CS: 14	78	100	1.70E+03	3.77E+02	1.85E+03	0.29	0.06	0.32
PSW: 1	156	191	1.20E+03	2.09E+03	9.99E+02	0.44	0.70	0.37
PSW: 2	136.5	156	1.74E+03	9.53E+02	1.87E+03	0.34	0.19	0.37
PSW: 3	130	136.5	6.48E+02	7.39E+02	8.23E+02	0.29	0.33	0.37
PSW: 4	114	130	1.33E+03	1.63E+03	1.90E+03	0.26	0.31	0.37
PSW: 5	100	114	1.25E+03	1.63E+03	2.03E+03	0.22	0.29	0.36
PSW: 6	78	100	1.52E+03	1.71E+03	2.26E+03	0.23	0.26	0.35
PSW: 7	66	78	4.13E+02	4.24E+02	5.72E+02	0.25	0.26	0.34
SSW: 1	191	200	1.14E+02	1.49E+02	7.38E+01	0.74	0.97	0.48
SSW: 2	156	191	2.78E+03	2.56E+03	1.82E+03	0.58	0.51	0.38
SSW: 3	136.5	156	3.24E+03	2.37E+03	2.84E+03	0.43	0.31	0.37
SSW: 4	130	136.5	1.31E+03	1.27E+03	1.48E+03	0.33	0.32	0.37
SSW: 5	114	130	1.07E+03	1.10E+03	1.34E+03	0.29	0.31	0.37
SSW: 6	100	114	1.06E+03	1.20E+03	1.59E+03	0.24	0.27	0.36
SSW: 7	78	100	4.93E+03	6.99E+03	8.74E+03	0.18	0.26	0.35

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 22 CASE04C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S04C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	2.492E+03	3.112E+03	1.711E+03	0.64	0.80	0.44
AB-FHA: 2	213	213.5	3.793E+03	3.318E+03	3.526E+03	0.65	0.58	0.61
AB-FHA: 3	195	213	2.028E+03	2.135E+03	1.011E+03	0.60	0.63	0.30
AB-MCR: 1	195	213	4.896E+03	3.679E+03	2.705E+03	0.71	0.54	0.39
AB: 1	174	195	1.992E+04	1.882E+04	1.352E+04	0.51	0.49	0.35
AB: 2	156	174	2.194E+04	2.141E+04	1.709E+04	0.47	0.46	0.36
AB: 3	137.5	156	2.896E+04	2.649E+04	2.405E+04	0.41	0.38	0.35
AB: 4	120	137.5	2.997E+04	3.201E+04	2.786E+04	0.37	0.39	0.35
AB: 5	98.5	120	2.975E+04	3.406E+04	3.058E+04	0.32	0.37	0.33
AB: 6	77	98.5	3.071E+04	3.696E+04	3.911E+04	0.27	0.33	0.32
AB: 7	67	77	1.840E+04	2.079E+04	2.295E+04	0.25	0.28	0.31
AB: 8	55	67	1.160E+04	1.243E+04	1.463E+04	0.24	0.26	0.31

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 23 CASE04C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S04C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.20	1.13	0.57
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.07	1.02	0.48
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.97	0.90	0.44
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.90	0.82	0.42
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.82	0.78	0.44
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.69	0.65	0.42
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.58	0.56	0.41
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.48	0.45	0.39
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.39	0.33	0.37
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.34	0.28	0.36
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.30	0.21	0.35
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.27	0.13	0.34
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.29	0.06	0.32
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.44	0.70	0.37
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.34	0.19	0.37
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.29	0.33	0.37
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.26	0.31	0.37
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.22	0.29	0.36
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.23	0.26	0.35
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.25	0.26	0.34
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.74	0.97	0.48
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.58	0.51	0.38
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.43	0.31	0.37
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.33	0.32	0.37
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.29	0.31	0.37
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.24	0.27	0.36
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.18	0.26	0.35
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. ΔW_x , ΔW_y , ΔW_z are from Table H-64
12. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 24 CASE04C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S04C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.64	0.80	0.44
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.65	0.58	0.61
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.60	0.63	0.30
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	0.71	0.54	0.39
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.51	0.49	0.35
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.47	0.46	0.36
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.41	0.38	0.35
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.37	0.39	0.35
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.32	0.37	0.33
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.27	0.33	0.32
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.25	0.28	0.31
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.24	0.26	0.31
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 25 CASE05C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S05C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.08E+04	1.19E+04	6.95E+03	1.67E+05	1.51E+05	8.93E+03
2	CS: CUT AT EL. 281'	281	2.10E+04	2.29E+04	1.34E+04	6.93E+05	6.16E+05	2.54E+04
3	CS: CUT AT EL. 254.5'	254.5	2.81E+04	3.05E+04	1.79E+04	1.49E+06	1.33E+06	3.70E+04
4	CS: CUT AT EL. 241'	241	3.21E+04	3.47E+04	2.06E+04	2.00E+06	1.80E+06	4.28E+04
5	CS: CUT AT EL. 220'	220	4.24E+04	4.56E+04	2.68E+04	3.06E+06	2.78E+06	5.70E+04
6	CS: CUT AT EL. 200'	200	4.78E+04	5.15E+04	3.14E+04	4.10E+06	3.75E+06	6.90E+04
7	CS: CUT AT EL. 178'	178	5.27E+04	5.68E+04	3.59E+04	5.34E+06	4.93E+06	8.33E+04
8	CS: CUT AT EL. 156'	156	5.77E+04	6.16E+04	3.99E+04	6.68E+06	6.21E+06	9.03E+04
9	CS: CUT AT EL. 136'	136	6.12E+04	6.55E+04	4.28E+04	7.95E+06	7.44E+06	9.42E+04
10	CS: CUT AT EL. 130'	130	6.25E+04	6.72E+04	4.40E+04	8.35E+06	7.83E+06	9.42E+04
11	CS: CUT AT EL. 125'	125	6.25E+04	6.72E+04	4.40E+04	8.68E+06	8.14E+06	9.42E+04
12	CS: CUT AT EL. 114'	114	6.46E+04	7.01E+04	4.61E+04	9.45E+06	8.87E+06	9.26E+04
13	CS: CUT AT EL. 100'	100	6.58E+04	7.20E+04	4.78E+04	1.05E+07	9.81E+06	9.20E+04
14	CS: CUT AT EL. 78'	78	6.65E+04	7.38E+04	4.95E+04	1.21E+07	1.13E+07	9.57E+04
15	PSW: CUT AT EL. 156'	156	1.65E+03	3.33E+03	1.30E+03	7.85E+04	3.56E+04	4.18E+04
16	PSW: CUT AT EL. 136.5'	136.5	4.14E+03	4.57E+03	3.75E+03	1.55E+05	1.30E+05	6.53E+04
17	PSW: CUT AT EL. 130'	130	5.10E+03	5.04E+03	4.83E+03	1.86E+05	1.78E+05	8.10E+04
18	PSW: CUT AT EL. 114'	114	7.12E+03	6.52E+03	7.21E+03	2.71E+05	3.00E+05	1.02E+05
19	PSW: CUT AT EL. 100'	100	8.98E+03	8.02E+03	9.71E+03	3.57E+05	4.31E+05	1.18E+05
20	PSW: CUT AT EL. 78'	78	1.05E+04	9.96E+03	1.23E+04	5.41E+05	6.37E+05	1.12E+05
21	PSW: CUT AT EL. 66'	66	1.08E+04	1.05E+04	1.30E+04	6.53E+05	7.66E+05	1.11E+05
22	SSW: CUT AT EL. 191'	191	1.62E+02	1.95E+02	1.13E+02	3.39E+03	4.58E+03	8.15E+03
23	SSW: CUT AT EL. 156'	156	3.98E+03	3.86E+03	2.86E+03	1.32E+05	1.05E+05	4.81E+04
24	SSW: CUT AT EL. 136.5'	136.5	8.43E+03	6.30E+03	6.88E+03	3.01E+05	2.90E+05	6.67E+04
25	SSW: CUT AT EL. 130'	130	1.03E+04	7.58E+03	8.92E+03	3.67E+05	3.77E+05	8.31E+04
26	SSW: CUT AT EL. 114'	114	1.19E+04	8.66E+03	1.07E+04	4.73E+05	5.73E+05	9.95E+04
27	SSW: CUT AT EL. 100'	100	1.35E+04	9.74E+03	1.28E+04	5.71E+05	7.77E+05	1.14E+05
28	SSW: CUT AT EL. 78'	78	2.05E+04	1.82E+04	2.29E+04	8.79E+05	1.24E+06	1.37E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 26 CASE05C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis (SRSS) for AB

APR1400-RCBAB-B2-R6(0928)-S05C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	Fx	Fy	Fz	Mx	My	Mz
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.772E+03	3.860E+03	1.816E+03	1.804E+05	1.292E+05	3.694E+05
30	AB-EAST: CUT AT EL. 213'	213	9.941E+03	7.160E+03	4.867E+03	3.915E+05	6.277E+05	8.256E+05
31	AB-EAST: CUT AT EL. 195'	195	1.293E+04	9.514E+03	5.789E+03	5.503E+05	7.656E+05	1.092E+06
32	AB-WEST: CUT AT EL. 195'	195	8.229E+03	5.445E+03	3.541E+03	1.439E+05	3.904E+05	4.508E+05
33	AB: CUT AT EL. 174'	174	5.080E+04	3.908E+04	2.568E+04	1.512E+06	1.811E+06	2.060E+06
34	AB: CUT AT EL. 156'	156	7.685E+04	6.581E+04	4.580E+04	2.841E+06	3.540E+06	3.313E+06
35	AB: CUT AT EL. 137.5'	137.5	1.032E+05	9.710E+04	7.247E+04	4.458E+06	5.643E+06	4.421E+06
36	AB: CUT AT EL. 120'	120	1.268E+05	1.333E+05	1.028E+05	6.389E+06	8.137E+06	5.615E+06
37	AB: CUT AT EL. 98.5'	98.5	1.559E+05	1.626E+05	1.348E+05	9.704E+06	1.156E+07	6.658E+06
38	AB: CUT AT EL. 77'	77	1.889E+05	1.859E+05	1.730E+05	1.362E+07	1.540E+07	7.326E+06
39	AB: CUT AT EL. 67'	67	2.085E+05	1.993E+05	1.936E+05	1.558E+07	1.730E+07	7.609E+06
40	AB: CUT AT EL. 55'	55	2.205E+05	2.076E+05	2.056E+05	1.798E+07	1.957E+07	7.726E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j) =$ The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j) =$ The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 27 CASE05C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S05C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.08E+04	1.19E+04	6.95E+03	1.25	1.37	0.80
CS: 2	281	307.5	1.02E+04	1.11E+04	6.48E+03	1.12	1.22	0.72
CS: 3	254.5	281	7.05E+03	7.56E+03	4.50E+03	1.03	1.10	0.66
CS: 4	241	254.5	4.03E+03	4.21E+03	2.66E+03	0.97	1.01	0.64
CS: 5	220	241	1.03E+04	1.09E+04	6.23E+03	0.88	0.93	0.53
CS: 6	200	220	5.48E+03	5.92E+03	4.63E+03	0.68	0.73	0.57
CS: 7	178	200	4.85E+03	5.24E+03	4.43E+03	0.58	0.63	0.53
CS: 8	156	178	4.99E+03	4.82E+03	4.06E+03	0.59	0.57	0.48
CS: 9	136	156	3.55E+03	3.96E+03	2.91E+03	0.53	0.59	0.43
CS: 10	130	136	1.24E+03	1.62E+03	1.12E+03	0.44	0.57	0.40
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	2.13E+03	2.91E+03	2.17E+03	0.36	0.50	0.37
CS: 13	100	114	1.21E+03	1.95E+03	1.70E+03	0.24	0.38	0.33
CS: 14	78	100	6.71E+02	1.80E+03	1.67E+03	0.12	0.31	0.29
PSW: 1	156	191	1.65E+03	3.33E+03	1.30E+03	0.61	1.11	0.48
PSW: 2	136.5	156	2.49E+03	1.24E+03	2.46E+03	0.49	0.24	0.48
PSW: 3	130	136.5	9.60E+02	4.68E+02	1.07E+03	0.44	0.21	0.49
PSW: 4	114	130	2.02E+03	1.48E+03	2.39E+03	0.39	0.28	0.46
PSW: 5	100	114	1.87E+03	1.50E+03	2.50E+03	0.33	0.27	0.44
PSW: 6	78	100	1.56E+03	1.94E+03	2.61E+03	0.24	0.30	0.40
PSW: 7	66	78	3.00E+02	5.07E+02	6.36E+02	0.18	0.31	0.38
SSW: 1	191	200	1.62E+02	1.95E+02	1.13E+02	1.06	1.27	0.73
SSW: 2	156	191	3.82E+03	3.67E+03	2.75E+03	0.80	0.73	0.58
SSW: 3	136.5	156	4.45E+03	2.43E+03	4.02E+03	0.59	0.32	0.53
SSW: 4	130	136.5	1.89E+03	1.28E+03	2.04E+03	0.48	0.32	0.51
SSW: 5	114	130	1.54E+03	1.08E+03	1.82E+03	0.42	0.30	0.50
SSW: 6	100	114	1.64E+03	1.08E+03	2.10E+03	0.37	0.25	0.48
SSW: 7	78	100	6.97E+03	8.44E+03	1.01E+04	0.26	0.31	0.40

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 28 CASE05C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S05C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec^2)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.772E+03	3.860E+03	1.816E+03	0.97	0.99	0.47
AB-FHA: 2	213	213.5	6.169E+03	3.301E+03	3.051E+03	1.06	0.58	0.53
AB-FHA: 3	195	213	2.992E+03	2.354E+03	9.214E+02	0.89	0.70	0.27
AB-MCR: 1	195	213	8.229E+03	5.445E+03	3.541E+03	1.20	0.79	0.52
AB: 1	174	195	2.964E+04	2.412E+04	1.635E+04	0.76	0.62	0.42
AB: 2	156	174	2.605E+04	2.673E+04	2.013E+04	0.56	0.57	0.43
AB: 3	137.5	156	2.639E+04	3.129E+04	2.667E+04	0.38	0.45	0.39
AB: 4	120	137.5	2.360E+04	3.619E+04	3.034E+04	0.29	0.45	0.38
AB: 5	98.5	120	2.906E+04	2.931E+04	3.202E+04	0.32	0.31	0.35
AB: 6	77	98.5	3.304E+04	2.325E+04	3.814E+04	0.29	0.20	0.32
AB: 7	67	77	1.954E+04	1.343E+04	2.064E+04	0.27	0.18	0.28
AB: 8	55	67	1.206E+04	8.342E+03	1.201E+04	0.25	0.17	0.25

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 29 CASE05C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S05C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.25	1.37	0.80
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.12	1.22	0.72
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	1.03	1.10	0.66
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.97	1.01	0.64
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.88	0.93	0.53
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.68	0.73	0.57
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.58	0.63	0.53
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.59	0.57	0.48
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.53	0.59	0.43
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.44	0.57	0.40
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.36	0.50	0.37
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.24	0.38	0.33
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.12	0.31	0.29
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.61	1.11	0.48
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.49	0.24	0.48
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.44	0.21	0.49
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.39	0.28	0.46
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.33	0.27	0.44
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.24	0.30	0.40
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.18	0.31	0.38
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	1.06	1.27	0.73
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.80	0.73	0.58
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.59	0.32	0.53
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.48	0.32	0.51
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.42	0.30	0.50
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.37	0.25	0.48
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.26	0.31	0.40
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. ΔW_x , ΔW_y , ΔW_z are from Table H-64
12. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 30 CASE05C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S05C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.97	0.99	0.47
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	1.06	0.58	0.53
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.89	0.70	0.27
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	1.20	0.79	0.52
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.76	0.62	0.42
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.56	0.57	0.43
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.38	0.45	0.39
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.29	0.45	0.38
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.32	0.31	0.35
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.29	0.20	0.32
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.27	0.18	0.28
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.25	0.17	0.25
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 31 CASE06C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S06C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.01E+04	1.09E+04	5.51E+03	1.53E+05	1.44E+05	1.01E+04
2	CS: CUT AT EL. 281'	281	1.96E+04	2.13E+04	1.06E+04	6.35E+05	5.93E+05	3.09E+04
3	CS: CUT AT EL. 254.5'	254.5	2.62E+04	2.85E+04	1.41E+04	1.37E+06	1.28E+06	4.54E+04
4	CS: CUT AT EL. 241'	241	2.99E+04	3.26E+04	1.62E+04	1.84E+06	1.72E+06	5.29E+04
5	CS: CUT AT EL. 220'	220	3.97E+04	4.32E+04	2.16E+04	2.81E+06	2.65E+06	6.68E+04
6	CS: CUT AT EL. 200'	200	4.57E+04	4.95E+04	2.53E+04	3.82E+06	3.58E+06	7.15E+04
7	CS: CUT AT EL. 178'	178	5.13E+04	5.54E+04	2.90E+04	5.04E+06	4.72E+06	7.52E+04
8	CS: CUT AT EL. 156'	156	5.62E+04	6.08E+04	3.24E+04	6.37E+06	5.96E+06	7.64E+04
9	CS: CUT AT EL. 136'	136	5.93E+04	6.47E+04	3.49E+04	7.65E+06	7.15E+06	8.24E+04
10	CS: CUT AT EL. 130'	130	6.03E+04	6.61E+04	3.59E+04	8.05E+06	7.53E+06	8.51E+04
11	CS: CUT AT EL. 125'	125	6.03E+04	6.61E+04	3.59E+04	8.38E+06	7.83E+06	8.51E+04
12	CS: CUT AT EL. 114'	114	6.19E+04	6.86E+04	3.79E+04	9.14E+06	8.53E+06	8.98E+04
13	CS: CUT AT EL. 100'	100	6.28E+04	7.03E+04	3.96E+04	1.01E+07	9.42E+06	9.29E+04
14	CS: CUT AT EL. 78'	78	6.35E+04	7.19E+04	4.13E+04	1.17E+07	1.08E+07	9.62E+04
15	PSW: CUT AT EL. 156'	156	1.14E+03	2.49E+03	1.21E+03	5.81E+04	2.40E+04	3.37E+04
16	PSW: CUT AT EL. 136.5'	136.5	2.94E+03	3.69E+03	3.44E+03	1.15E+05	9.50E+04	5.55E+04
17	PSW: CUT AT EL. 130'	130	3.64E+03	4.20E+03	4.41E+03	1.41E+05	1.30E+05	6.84E+04
18	PSW: CUT AT EL. 114'	114	5.15E+03	5.48E+03	6.65E+03	2.17E+05	2.12E+05	8.91E+04
19	PSW: CUT AT EL. 100'	100	6.62E+03	6.79E+03	9.03E+03	2.96E+05	3.09E+05	1.03E+05
20	PSW: CUT AT EL. 78'	78	8.20E+03	8.53E+03	1.17E+04	4.53E+05	4.63E+05	9.59E+04
21	PSW: CUT AT EL. 66'	66	8.62E+03	8.98E+03	1.23E+04	5.54E+05	5.62E+05	9.33E+04
22	SSW: CUT AT EL. 191'	191	1.10E+02	1.32E+02	8.94E+01	2.82E+03	3.74E+03	5.09E+03
23	SSW: CUT AT EL. 156'	156	2.69E+03	3.13E+03	2.48E+03	1.09E+05	7.12E+04	3.29E+04
24	SSW: CUT AT EL. 136.5'	136.5	5.77E+03	5.35E+03	6.01E+03	2.40E+05	1.97E+05	4.93E+04
25	SSW: CUT AT EL. 130'	130	7.10E+03	6.50E+03	7.80E+03	2.94E+05	2.58E+05	6.16E+04
26	SSW: CUT AT EL. 114'	114	8.19E+03	7.49E+03	9.39E+03	3.94E+05	3.90E+05	7.67E+04
27	SSW: CUT AT EL. 100'	100	9.30E+03	8.54E+03	1.13E+04	4.79E+05	5.28E+05	9.40E+04
28	SSW: CUT AT EL. 78'	78	1.56E+04	1.59E+04	2.07E+04	7.48E+05	8.43E+05	1.09E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x) , \text{Max}(F_i/y) , \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x) , \text{Max}(M_i/y) , \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 32 CASE06C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S06C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.183E+03	3.466E+03	1.737E+03	1.749E+05	1.236E+05	3.644E+05
30	AB-EAST: CUT AT EL. 213'	213	8.189E+03	7.010E+03	4.946E+03	3.971E+05	6.471E+05	9.205E+05
31	AB-EAST: CUT AT EL. 195'	195	1.079E+04	9.338E+03	5.937E+03	5.622E+05	8.103E+05	1.225E+06
32	AB-WEST: CUT AT EL. 195'	195	6.914E+03	4.069E+03	3.291E+03	9.679E+04	3.568E+05	3.672E+05
33	AB: CUT AT EL. 174'	174	4.322E+04	3.481E+04	2.430E+04	1.488E+06	1.475E+06	1.630E+06
34	AB: CUT AT EL. 156'	156	6.788E+04	6.010E+04	4.323E+04	2.849E+06	2.804E+06	2.274E+06
35	AB: CUT AT EL. 137.5'	137.5	1.010E+05	9.078E+04	6.897E+04	4.699E+06	4.561E+06	2.697E+06
36	AB: CUT AT EL. 120'	120	1.371E+05	1.211E+05	9.768E+04	7.083E+06	6.992E+06	3.210E+06
37	AB: CUT AT EL. 98.5'	98.5	1.728E+05	1.517E+05	1.283E+05	1.034E+07	1.075E+07	3.869E+06
38	AB: CUT AT EL. 77'	77	2.070E+05	1.819E+05	1.647E+05	1.396E+07	1.522E+07	4.315E+06
39	AB: CUT AT EL. 67'	67	2.263E+05	1.973E+05	1.851E+05	1.581E+07	1.756E+07	4.551E+06
40	AB: CUT AT EL. 55'	55	2.382E+05	2.073E+05	1.974E+05	1.806E+07	2.045E+07	4.666E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 33 CASE06C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S06C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.01E+04	1.09E+04	5.51E+03	1.16	1.26	0.63
CS: 2	281	307.5	9.55E+03	1.04E+04	5.06E+03	1.06	1.15	0.56
CS: 3	254.5	281	6.55E+03	7.21E+03	3.55E+03	0.95	1.05	0.52
CS: 4	241	254.5	3.76E+03	4.05E+03	2.08E+03	0.90	0.97	0.50
CS: 5	220	241	9.74E+03	1.07E+04	5.44E+03	0.83	0.91	0.46
CS: 6	200	220	5.99E+03	6.26E+03	3.71E+03	0.74	0.77	0.46
CS: 7	178	200	5.69E+03	5.89E+03	3.62E+03	0.68	0.70	0.43
CS: 8	156	178	4.89E+03	5.44E+03	3.41E+03	0.58	0.64	0.40
CS: 9	136	156	3.03E+03	3.84E+03	2.53E+03	0.45	0.57	0.37
CS: 10	130	136	1.02E+03	1.41E+03	1.02E+03	0.36	0.50	0.36
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	1.62E+03	2.46E+03	2.00E+03	0.28	0.42	0.34
CS: 13	100	114	9.15E+02	1.79E+03	1.63E+03	0.18	0.35	0.32
CS: 14	78	100	6.63E+02	1.59E+03	1.69E+03	0.11	0.27	0.29
PSW: 1	156	191	1.14E+03	2.49E+03	1.21E+03	0.42	0.83	0.45
PSW: 2	136.5	156	1.80E+03	1.20E+03	2.23E+03	0.35	0.24	0.44
PSW: 3	130	136.5	7.00E+02	5.11E+02	9.69E+02	0.32	0.23	0.44
PSW: 4	114	130	1.51E+03	1.29E+03	2.24E+03	0.29	0.25	0.43
PSW: 5	100	114	1.47E+03	1.31E+03	2.38E+03	0.26	0.23	0.42
PSW: 6	78	100	1.59E+03	1.73E+03	2.65E+03	0.24	0.27	0.41
PSW: 7	66	78	4.21E+02	4.56E+02	6.50E+02	0.25	0.28	0.39
SSW: 1	191	200	1.10E+02	1.32E+02	8.94E+01	0.72	0.86	0.58
SSW: 2	156	191	2.58E+03	3.00E+03	2.39E+03	0.54	0.60	0.50
SSW: 3	136.5	156	3.08E+03	2.21E+03	3.53E+03	0.41	0.29	0.47
SSW: 4	130	136.5	1.33E+03	1.15E+03	1.79E+03	0.34	0.29	0.45
SSW: 5	114	130	1.09E+03	9.90E+02	1.60E+03	0.30	0.27	0.44
SSW: 6	100	114	1.10E+03	1.05E+03	1.86E+03	0.25	0.24	0.42
SSW: 7	78	100	6.34E+03	7.33E+03	9.46E+03	0.23	0.27	0.38

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 34 CASE06C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S06C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.183E+03	3.466E+03	1.737E+03	0.82	0.89	0.45
AB-FHA: 2	213	213.5	5.006E+03	3.544E+03	3.209E+03	0.86	0.62	0.56
AB-FHA: 3	195	213	2.600E+03	2.328E+03	9.908E+02	0.77	0.69	0.29
AB-MCR: 1	195	213	6.914E+03	4.069E+03	3.291E+03	1.01	0.59	0.48
AB: 1	174	195	2.552E+04	2.141E+04	1.508E+04	0.66	0.55	0.39
AB: 2	156	174	2.466E+04	2.529E+04	1.893E+04	0.53	0.54	0.40
AB: 3	137.5	156	3.313E+04	3.068E+04	2.574E+04	0.47	0.44	0.37
AB: 4	120	137.5	3.610E+04	3.029E+04	2.871E+04	0.45	0.37	0.36
AB: 5	98.5	120	3.571E+04	3.063E+04	3.060E+04	0.39	0.33	0.34
AB: 6	77	98.5	3.421E+04	3.020E+04	3.645E+04	0.30	0.27	0.30
AB: 7	67	77	1.927E+04	1.537E+04	2.036E+04	0.26	0.21	0.28
AB: 8	55	67	1.187E+04	1.003E+04	1.233E+04	0.25	0.21	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 35 CASE06C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S06C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.16	1.26	0.63
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.06	1.15	0.56
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.95	1.05	0.52
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.90	0.97	0.50
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.83	0.91	0.46
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.74	0.77	0.46
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.68	0.70	0.43
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.58	0.64	0.40
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.45	0.57	0.37
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.36	0.50	0.36
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.28	0.42	0.34
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.18	0.35	0.32
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.11	0.27	0.29
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.42	0.83	0.45
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.35	0.24	0.44
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.32	0.23	0.44
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.29	0.25	0.43
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.26	0.23	0.42
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.24	0.27	0.41
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.25	0.28	0.39
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.72	0.86	0.58
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.54	0.60	0.50
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.41	0.29	0.47
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.34	0.29	0.45
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.30	0.27	0.44
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.25	0.24	0.42
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.23	0.27	0.38
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. ΔW_x , ΔW_y , ΔW_z are from Table H-64
12. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 36 CASE06C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S06C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.82	0.89	0.45
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.86	0.62	0.56
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.77	0.69	0.29
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	1.01	0.59	0.48
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.66	0.55	0.39
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.53	0.54	0.40
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.47	0.44	0.37
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.45	0.37	0.36
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.39	0.33	0.34
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.30	0.27	0.30
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.26	0.21	0.28
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.25	0.21	0.26
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 37 CASE07C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S07C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	9.93E+03	1.09E+04	6.31E+03	1.55E+05	1.44E+05	9.28E+03
2	CS: CUT AT EL. 281'	281	1.93E+04	2.09E+04	1.18E+04	6.43E+05	5.89E+05	2.85E+04
3	CS: CUT AT EL. 254.5'	254.5	2.57E+04	2.80E+04	1.55E+04	1.38E+06	1.26E+06	4.32E+04
4	CS: CUT AT EL. 241'	241	2.94E+04	3.19E+04	1.78E+04	1.85E+06	1.70E+06	5.06E+04
5	CS: CUT AT EL. 220'	220	3.89E+04	4.24E+04	2.34E+04	2.81E+06	2.61E+06	6.53E+04
6	CS: CUT AT EL. 200'	200	4.49E+04	4.87E+04	2.76E+04	3.78E+06	3.52E+06	7.05E+04
7	CS: CUT AT EL. 178'	178	5.06E+04	5.46E+04	3.17E+04	4.96E+06	4.64E+06	7.55E+04
8	CS: CUT AT EL. 156'	156	5.54E+04	6.01E+04	3.56E+04	6.27E+06	5.86E+06	7.63E+04
9	CS: CUT AT EL. 136'	136	5.85E+04	6.38E+04	3.84E+04	7.53E+06	7.03E+06	8.28E+04
10	CS: CUT AT EL. 130'	130	5.95E+04	6.52E+04	3.95E+04	7.93E+06	7.40E+06	8.60E+04
11	CS: CUT AT EL. 125'	125	5.95E+04	6.52E+04	3.95E+04	8.25E+06	7.70E+06	8.60E+04
12	CS: CUT AT EL. 114'	114	6.11E+04	6.75E+04	4.17E+04	9.01E+06	8.39E+06	9.23E+04
13	CS: CUT AT EL. 100'	100	6.20E+04	6.92E+04	4.36E+04	9.99E+06	9.27E+06	9.59E+04
14	CS: CUT AT EL. 78'	78	6.25E+04	7.07E+04	4.55E+04	1.15E+07	1.06E+07	9.97E+04
15	PSW: CUT AT EL. 156'	156	1.06E+03	2.37E+03	1.15E+03	5.50E+04	2.19E+04	2.90E+04
16	PSW: CUT AT EL. 136.5'	136.5	2.71E+03	3.43E+03	3.25E+03	1.03E+05	8.57E+04	5.23E+04
17	PSW: CUT AT EL. 130'	130	3.35E+03	4.01E+03	4.16E+03	1.27E+05	1.17E+05	6.81E+04
18	PSW: CUT AT EL. 114'	114	4.69E+03	5.20E+03	6.27E+03	2.00E+05	1.97E+05	9.10E+04
19	PSW: CUT AT EL. 100'	100	6.00E+03	6.53E+03	8.51E+03	2.80E+05	2.85E+05	1.06E+05
20	PSW: CUT AT EL. 78'	78	7.57E+03	8.32E+03	1.10E+04	4.27E+05	4.25E+05	9.93E+04
21	PSW: CUT AT EL. 66'	66	7.96E+03	8.77E+03	1.16E+04	5.16E+05	5.14E+05	9.70E+04
22	SSW: CUT AT EL. 191'	191	9.95E+01	1.37E+02	8.48E+01	2.55E+03	3.52E+03	5.46E+03
23	SSW: CUT AT EL. 156'	156	2.24E+03	2.91E+03	2.31E+03	1.02E+05	6.76E+04	3.21E+04
24	SSW: CUT AT EL. 136.5'	136.5	4.90E+03	5.09E+03	5.58E+03	2.32E+05	1.81E+05	4.72E+04
25	SSW: CUT AT EL. 130'	130	6.07E+03	6.15E+03	7.24E+03	2.85E+05	2.33E+05	6.16E+04
26	SSW: CUT AT EL. 114'	114	7.04E+03	7.05E+03	8.72E+03	3.79E+05	3.32E+05	7.79E+04
27	SSW: CUT AT EL. 100'	100	8.08E+03	8.00E+03	1.04E+04	4.80E+05	4.52E+05	9.51E+04
28	SSW: CUT AT EL. 78'	78	1.46E+04	1.55E+04	1.96E+04	7.08E+05	7.33E+05	1.13E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 38 CASE07C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S07C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.308E+03	3.708E+03	1.715E+03	1.759E+05	1.228E+05	3.778E+05
30	AB-EAST: CUT AT EL. 213'	213	8.390E+03	7.613E+03	5.015E+03	4.070E+05	6.416E+05	9.608E+05
31	AB-EAST: CUT AT EL. 195'	195	1.107E+04	1.014E+04	6.064E+03	5.853E+05	8.221E+05	1.274E+06
32	AB-WEST: CUT AT EL. 195'	195	6.641E+03	4.404E+03	3.307E+03	9.943E+04	3.542E+05	3.984E+05
33	AB: CUT AT EL. 174'	174	4.436E+04	3.823E+04	2.463E+04	1.558E+06	1.559E+06	1.545E+06
34	AB: CUT AT EL. 156'	156	6.992E+04	6.654E+04	4.394E+04	3.000E+06	2.981E+06	2.133E+06
35	AB: CUT AT EL. 137.5'	137.5	1.026E+05	1.003E+05	7.082E+04	5.026E+06	5.043E+06	2.630E+06
36	AB: CUT AT EL. 120'	120	1.385E+05	1.330E+05	1.001E+05	7.637E+06	7.575E+06	3.231E+06
37	AB: CUT AT EL. 98.5'	98.5	1.738E+05	1.657E+05	1.313E+05	1.124E+07	1.136E+07	3.886E+06
38	AB: CUT AT EL. 77'	77	2.077E+05	1.969E+05	1.684E+05	1.526E+07	1.553E+07	4.337E+06
39	AB: CUT AT EL. 67'	67	2.272E+05	2.115E+05	1.890E+05	1.724E+07	1.783E+07	4.497E+06
40	AB: CUT AT EL. 55'	55	2.391E+05	2.195E+05	2.015E+05	1.979E+07	2.077E+07	4.594E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 39 CASE07C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S07C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	9.93E+03	1.09E+04	6.31E+03	1.14	1.25	0.73
CS: 2	281	307.5	9.36E+03	1.01E+04	5.46E+03	1.03	1.12	0.60
CS: 3	254.5	281	6.43E+03	7.02E+03	3.77E+03	0.94	1.02	0.55
CS: 4	241	254.5	3.66E+03	3.94E+03	2.21E+03	0.88	0.95	0.53
CS: 5	220	241	9.55E+03	1.05E+04	5.69E+03	0.81	0.90	0.48
CS: 6	200	220	5.98E+03	6.26E+03	4.17E+03	0.74	0.77	0.51
CS: 7	178	200	5.65E+03	5.95E+03	4.10E+03	0.67	0.71	0.49
CS: 8	156	178	4.88E+03	5.45E+03	3.85E+03	0.58	0.64	0.45
CS: 9	136	156	3.03E+03	3.75E+03	2.81E+03	0.45	0.55	0.42
CS: 10	130	136	9.75E+02	1.34E+03	1.09E+03	0.34	0.48	0.39
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	1.60E+03	2.36E+03	2.21E+03	0.27	0.40	0.38
CS: 13	100	114	9.10E+02	1.67E+03	1.88E+03	0.18	0.32	0.37
CS: 14	78	100	5.37E+02	1.50E+03	1.98E+03	0.09	0.26	0.34
PSW: 1	156	191	1.06E+03	2.37E+03	1.15E+03	0.39	0.79	0.42
PSW: 2	136.5	156	1.65E+03	1.07E+03	2.10E+03	0.33	0.21	0.41
PSW: 3	130	136.5	6.38E+02	5.80E+02	9.08E+02	0.29	0.26	0.41
PSW: 4	114	130	1.34E+03	1.19E+03	2.11E+03	0.26	0.23	0.40
PSW: 5	100	114	1.31E+03	1.33E+03	2.25E+03	0.23	0.24	0.40
PSW: 6	78	100	1.57E+03	1.79E+03	2.51E+03	0.24	0.28	0.39
PSW: 7	66	78	3.93E+02	4.52E+02	6.00E+02	0.24	0.27	0.36
SSW: 1	191	200	9.95E+01	1.37E+02	8.48E+01	0.65	0.89	0.55
SSW: 2	156	191	2.14E+03	2.78E+03	2.22E+03	0.45	0.55	0.47
SSW: 3	136.5	156	2.66E+03	2.18E+03	3.27E+03	0.35	0.29	0.43
SSW: 4	130	136.5	1.17E+03	1.06E+03	1.66E+03	0.29	0.27	0.42
SSW: 5	114	130	9.69E+02	9.01E+02	1.48E+03	0.27	0.25	0.41
SSW: 6	100	114	1.04E+03	9.47E+02	1.72E+03	0.24	0.22	0.39
SSW: 7	78	100	6.52E+03	7.50E+03	9.16E+03	0.24	0.28	0.36

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 40 CASE07C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S07C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.308E+03	3.708E+03	1.715E+03	0.85	0.95	0.44
AB-FHA: 2	213	213.5	5.082E+03	3.905E+03	3.300E+03	0.87	0.69	0.58
AB-FHA: 3	195	213	2.681E+03	2.527E+03	1.049E+03	0.80	0.75	0.31
AB-MCR: 1	195	213	6.641E+03	4.404E+03	3.307E+03	0.97	0.64	0.48
AB: 1	174	195	2.665E+04	2.369E+04	1.526E+04	0.69	0.61	0.39
AB: 2	156	174	2.557E+04	2.831E+04	1.931E+04	0.55	0.60	0.41
AB: 3	137.5	156	3.267E+04	3.373E+04	2.688E+04	0.47	0.48	0.39
AB: 4	120	137.5	3.590E+04	3.277E+04	2.928E+04	0.44	0.40	0.37
AB: 5	98.5	120	3.530E+04	3.269E+04	3.121E+04	0.38	0.35	0.34
AB: 6	77	98.5	3.395E+04	3.116E+04	3.709E+04	0.30	0.27	0.31
AB: 7	67	77	1.943E+04	1.461E+04	2.063E+04	0.27	0.20	0.28
AB: 8	55	67	1.193E+04	7.950E+03	1.244E+04	0.25	0.17	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 41 CASE07C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S07C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.14	1.25	0.73
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.03	1.12	0.60
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	0.94	1.02	0.55
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.88	0.95	0.53
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.81	0.90	0.48
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.74	0.77	0.51
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.67	0.71	0.49
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.58	0.64	0.45
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.45	0.55	0.42
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.34	0.48	0.39
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.27	0.40	0.38
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.18	0.32	0.37
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.09	0.26	0.34
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.39	0.79	0.42
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.33	0.21	0.41
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.29	0.26	0.41
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.26	0.23	0.40
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.23	0.24	0.40
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.24	0.28	0.39
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.24	0.27	0.36
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	0.65	0.89	0.55
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.45	0.55	0.47
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.35	0.29	0.43
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.29	0.27	0.42
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.27	0.25	0.41
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.24	0.22	0.39
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.24	0.28	0.36
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. ΔW_x , ΔW_y , ΔW_z are from Table H-64
12. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 42 CASE07C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S07C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.85	0.95	0.44
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	0.87	0.69	0.58
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.80	0.75	0.31
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	0.97	0.64	0.48
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.69	0.61	0.39
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.55	0.60	0.41
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.47	0.48	0.39
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.44	0.40	0.37
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.38	0.35	0.34
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.30	0.27	0.31
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.27	0.20	0.28
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.25	0.17	0.26
$\Sigma =$			562445	564395	567535			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 43 CASE08C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S08C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.12E+04	1.22E+04	8.91E+03	1.76E+05	1.64E+05	9.71E+03
2	CS: CUT AT EL. 281'	281	2.20E+04	2.37E+04	1.68E+04	7.28E+05	6.67E+05	2.79E+04
3	CS: CUT AT EL. 254.5'	254.5	2.95E+04	3.15E+04	2.24E+04	1.56E+06	1.43E+06	3.79E+04
4	CS: CUT AT EL. 241'	241	3.37E+04	3.59E+04	2.57E+04	2.10E+06	1.93E+06	4.08E+04
5	CS: CUT AT EL. 220'	220	4.45E+04	4.72E+04	3.30E+04	3.22E+06	2.95E+06	4.15E+04
6	CS: CUT AT EL. 200'	200	5.01E+04	5.33E+04	3.87E+04	4.33E+06	3.98E+06	3.99E+04
7	CS: CUT AT EL. 178'	178	5.44E+04	5.82E+04	4.39E+04	5.63E+06	5.20E+06	4.26E+04
8	CS: CUT AT EL. 156'	156	5.81E+04	6.21E+04	4.86E+04	7.02E+06	6.50E+06	4.28E+04
9	CS: CUT AT EL. 136'	136	6.13E+04	6.49E+04	5.17E+04	8.31E+06	7.71E+06	4.45E+04
10	CS: CUT AT EL. 130'	130	6.25E+04	6.60E+04	5.29E+04	8.71E+06	8.09E+06	4.42E+04
11	CS: CUT AT EL. 125'	125	6.25E+04	6.60E+04	5.29E+04	9.04E+06	8.40E+06	4.42E+04
12	CS: CUT AT EL. 114'	114	6.50E+04	6.88E+04	5.50E+04	9.78E+06	9.12E+06	4.35E+04
13	CS: CUT AT EL. 100'	100	6.66E+04	7.09E+04	5.65E+04	1.07E+07	1.00E+07	4.30E+04
14	CS: CUT AT EL. 78'	78	6.76E+04	7.25E+04	5.79E+04	1.22E+07	1.15E+07	4.29E+04
15	PSW: CUT AT EL. 156'	156	1.88E+03	3.78E+03	1.46E+03	9.03E+04	4.20E+04	4.55E+04
16	PSW: CUT AT EL. 136.5'	136.5	4.57E+03	4.91E+03	4.15E+03	1.73E+05	1.51E+05	8.07E+04
17	PSW: CUT AT EL. 130'	130	5.52E+03	5.20E+03	5.31E+03	2.06E+05	2.06E+05	9.70E+04
18	PSW: CUT AT EL. 114'	114	7.45E+03	6.72E+03	7.85E+03	2.94E+05	3.48E+05	1.17E+05
19	PSW: CUT AT EL. 100'	100	9.33E+03	8.51E+03	1.04E+04	3.78E+05	4.92E+05	1.30E+05
20	PSW: CUT AT EL. 78'	78	1.12E+04	1.07E+04	1.29E+04	5.65E+05	7.08E+05	1.26E+05
21	PSW: CUT AT EL. 66'	66	1.16E+04	1.12E+04	1.35E+04	6.85E+05	8.40E+05	1.26E+05
22	SSW: CUT AT EL. 191'	191	1.92E+02	2.23E+02	1.22E+02	3.79E+03	5.52E+03	8.67E+03
23	SSW: CUT AT EL. 156'	156	4.47E+03	4.24E+03	3.13E+03	1.28E+05	1.26E+05	6.07E+04
24	SSW: CUT AT EL. 136.5'	136.5	9.28E+03	6.96E+03	7.51E+03	2.97E+05	3.34E+05	8.52E+04
25	SSW: CUT AT EL. 130'	130	1.12E+04	8.07E+03	9.68E+03	3.67E+05	4.31E+05	9.88E+04
26	SSW: CUT AT EL. 114'	114	1.28E+04	9.20E+03	1.16E+04	4.92E+05	6.45E+05	1.13E+05
27	SSW: CUT AT EL. 100'	100	1.45E+04	1.04E+04	1.37E+04	6.36E+05	8.64E+05	1.28E+05
28	SSW: CUT AT EL. 78'	78	2.23E+04	1.97E+04	2.34E+04	9.36E+05	1.35E+06	1.44E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 44 CASE08C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S08C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.543E+03	4.964E+03	1.922E+03	1.781E+05	1.446E+05	4.239E+05
30	AB-EAST: CUT AT EL. 213'	213	9.548E+03	9.028E+03	4.958E+03	4.099E+05	6.300E+05	1.007E+06
31	AB-EAST: CUT AT EL. 195'	195	1.242E+04	1.191E+04	6.021E+03	5.774E+05	7.629E+05	1.306E+06
32	AB-WEST: CUT AT EL. 195'	195	8.381E+03	6.645E+03	3.773E+03	1.844E+05	3.869E+05	5.440E+05
33	AB: CUT AT EL. 174'	174	5.059E+04	5.116E+04	2.574E+04	1.829E+06	1.579E+06	1.494E+06
34	AB: CUT AT EL. 156'	156	7.661E+04	8.455E+04	4.590E+04	3.514E+06	3.164E+06	2.475E+06
35	AB: CUT AT EL. 137.5'	137.5	1.028E+05	1.170E+05	7.299E+04	5.681E+06	4.979E+06	3.015E+06
36	AB: CUT AT EL. 120'	120	1.270E+05	1.489E+05	1.040E+05	8.328E+06	7.144E+06	3.619E+06
37	AB: CUT AT EL. 98.5'	98.5	1.517E+05	1.728E+05	1.368E+05	1.180E+07	1.025E+07	4.050E+06
38	AB: CUT AT EL. 77'	77	1.785E+05	1.924E+05	1.760E+05	1.538E+07	1.356E+07	4.353E+06
39	AB: CUT AT EL. 67'	67	1.984E+05	2.096E+05	1.977E+05	1.707E+07	1.531E+07	4.497E+06
40	AB: CUT AT EL. 55'	55	2.107E+05	2.208E+05	2.103E+05	1.906E+07	1.738E+07	4.560E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 45 CASE08C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S08C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.12E+04	1.22E+04	8.91E+03	1.29	1.41	1.03
CS: 2	281	307.5	1.08E+04	1.14E+04	7.92E+03	1.19	1.26	0.88
CS: 3	254.5	281	7.49E+03	7.82E+03	5.61E+03	1.09	1.14	0.82
CS: 4	241	254.5	4.20E+03	4.39E+03	3.30E+03	1.01	1.06	0.79
CS: 5	220	241	1.08E+04	1.14E+04	7.29E+03	0.92	0.97	0.62
CS: 6	200	220	5.60E+03	6.04E+03	5.62E+03	0.69	0.75	0.69
CS: 7	178	200	4.39E+03	4.96E+03	5.26E+03	0.52	0.59	0.63
CS: 8	156	178	3.62E+03	3.82E+03	4.65E+03	0.43	0.45	0.55
CS: 9	136	156	3.23E+03	2.82E+03	3.13E+03	0.48	0.42	0.46
CS: 10	130	136	1.27E+03	1.12E+03	1.16E+03	0.45	0.40	0.41
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	2.43E+03	2.79E+03	2.12E+03	0.42	0.48	0.36
CS: 13	100	114	1.63E+03	2.07E+03	1.50E+03	0.32	0.40	0.29
CS: 14	78	100	1.01E+03	1.64E+03	1.42E+03	0.17	0.28	0.24
PSW: 1	156	191	1.88E+03	3.78E+03	1.46E+03	0.69	1.27	0.54
PSW: 2	136.5	156	2.70E+03	1.12E+03	2.69E+03	0.53	0.22	0.53
PSW: 3	130	136.5	9.49E+02	2.97E+02	1.16E+03	0.43	0.13	0.53
PSW: 4	114	130	1.93E+03	1.52E+03	2.53E+03	0.37	0.29	0.49
PSW: 5	100	114	1.88E+03	1.79E+03	2.55E+03	0.33	0.32	0.45
PSW: 6	78	100	1.83E+03	2.15E+03	2.49E+03	0.28	0.33	0.38
PSW: 7	66	78	3.93E+02	5.50E+02	5.88E+02	0.24	0.33	0.35
SSW: 1	191	200	1.92E+02	2.23E+02	1.22E+02	1.25	1.45	0.79
SSW: 2	156	191	4.28E+03	4.02E+03	3.01E+03	0.90	0.80	0.63
SSW: 3	136.5	156	4.81E+03	2.72E+03	4.38E+03	0.63	0.36	0.58
SSW: 4	130	136.5	1.90E+03	1.10E+03	2.17E+03	0.48	0.28	0.55
SSW: 5	114	130	1.61E+03	1.13E+03	1.89E+03	0.44	0.31	0.52
SSW: 6	100	114	1.75E+03	1.16E+03	2.15E+03	0.40	0.27	0.49
SSW: 7	78	100	7.75E+03	9.30E+03	9.71E+03	0.29	0.34	0.39

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 46 CASE08C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S08C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.543E+03	4.964E+03	1.922E+03	0.91	1.27	0.49
AB-FHA: 2	213	213.5	6.005E+03	4.064E+03	3.036E+03	1.03	0.72	0.53
AB-FHA: 3	195	213	2.871E+03	2.886E+03	1.063E+03	0.85	0.86	0.32
AB-MCR: 1	195	213	8.381E+03	6.645E+03	3.773E+03	1.22	0.97	0.55
AB: 1	174	195	2.979E+04	3.260E+04	1.594E+04	0.77	0.84	0.41
AB: 2	156	174	2.602E+04	3.338E+04	2.017E+04	0.55	0.71	0.43
AB: 3	137.5	156	2.619E+04	3.241E+04	2.709E+04	0.37	0.46	0.39
AB: 4	120	137.5	2.418E+04	3.199E+04	3.097E+04	0.30	0.39	0.39
AB: 5	98.5	120	2.475E+04	2.387E+04	3.289E+04	0.27	0.26	0.36
AB: 6	77	98.5	2.673E+04	1.957E+04	3.915E+04	0.24	0.17	0.32
AB: 7	67	77	1.992E+04	1.725E+04	2.167E+04	0.27	0.24	0.30
AB: 8	55	67	1.237E+04	1.114E+04	1.262E+04	0.26	0.23	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 47 CASE08C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S08C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.29	1.41	1.03
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.19	1.26	0.88
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	1.09	1.14	0.82
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	1.01	1.06	0.79
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.92	0.97	0.62
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.69	0.75	0.69
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.52	0.59	0.63
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.43	0.45	0.55
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.48	0.42	0.46
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.45	0.40	0.41
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.42	0.48	0.36
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.32	0.40	0.29
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.17	0.28	0.24
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.69	1.27	0.54
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.53	0.22	0.53
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.43	0.13	0.53
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.37	0.29	0.49
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.33	0.32	0.45
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.28	0.33	0.38
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.24	0.33	0.35
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	1.25	1.45	0.79
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.90	0.80	0.63
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.63	0.36	0.58
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.48	0.28	0.55
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.44	0.31	0.52
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.40	0.27	0.49
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.29	0.34	0.39
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

- $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
- Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
- $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
- For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
- The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
- Moments are calculated about the geometric center of the CS.
- Moments and Forces due to RCS elements are not included.
- Hydrodynamic impulsive masses are included.
- Hydrodynamic convective masses are not included.
- Accidental Torsion is not included within the calculations.
- ΔW_x , ΔW_y , ΔW_z are from Table H-64
- Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 48 CASE08C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S08C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.91	1.27	0.49
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	1.03	0.72	0.53
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.85	0.86	0.32
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	1.22	0.97	0.55
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.77	0.84	0.41
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.55	0.71	0.43
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.37	0.46	0.39
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.30	0.39	0.39
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.27	0.26	0.36
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.24	0.17	0.32
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.27	0.24	0.30
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.26	0.23	0.26
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 49 CASE09C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S09C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.10E+04	1.20E+04	8.75E+03	1.71E+05	1.54E+05	1.13E+04
2	CS: CUT AT EL. 281'	281	2.14E+04	2.31E+04	1.66E+04	7.08E+05	6.30E+05	3.05E+04
3	CS: CUT AT EL. 254.5'	254.5	2.87E+04	3.07E+04	2.22E+04	1.52E+06	1.37E+06	3.99E+04
4	CS: CUT AT EL. 241'	241	3.27E+04	3.49E+04	2.55E+04	2.04E+06	1.85E+06	4.20E+04
5	CS: CUT AT EL. 220'	220	4.30E+04	4.59E+04	3.28E+04	3.12E+06	2.84E+06	4.17E+04
6	CS: CUT AT EL. 200'	200	4.83E+04	5.17E+04	3.85E+04	4.18E+06	3.83E+06	4.19E+04
7	CS: CUT AT EL. 178'	178	5.27E+04	5.65E+04	4.38E+04	5.44E+06	5.01E+06	5.30E+04
8	CS: CUT AT EL. 156'	156	5.73E+04	6.08E+04	4.85E+04	6.77E+06	6.27E+06	5.63E+04
9	CS: CUT AT EL. 136'	136	6.07E+04	6.42E+04	5.17E+04	8.02E+06	7.49E+06	5.72E+04
10	CS: CUT AT EL. 130'	130	6.19E+04	6.56E+04	5.29E+04	8.41E+06	7.87E+06	5.62E+04
11	CS: CUT AT EL. 125'	125	6.19E+04	6.56E+04	5.29E+04	8.73E+06	8.18E+06	5.62E+04
12	CS: CUT AT EL. 114'	114	6.42E+04	6.86E+04	5.51E+04	9.46E+06	8.91E+06	5.24E+04
13	CS: CUT AT EL. 100'	100	6.57E+04	7.05E+04	5.72E+04	1.04E+07	9.84E+06	5.04E+04
14	CS: CUT AT EL. 78'	78	6.64E+04	7.20E+04	5.93E+04	1.20E+07	1.13E+07	5.04E+04
15	PSW: CUT AT EL. 156'	156	1.74E+03	3.59E+03	1.26E+03	8.50E+04	3.65E+04	4.44E+04
16	PSW: CUT AT EL. 136.5'	136.5	4.34E+03	4.78E+03	3.62E+03	1.65E+05	1.35E+05	7.21E+04
17	PSW: CUT AT EL. 130'	130	5.30E+03	5.14E+03	4.65E+03	1.97E+05	1.86E+05	8.60E+04
18	PSW: CUT AT EL. 114'	114	7.37E+03	6.63E+03	6.94E+03	2.84E+05	3.18E+05	1.02E+05
19	PSW: CUT AT EL. 100'	100	9.31E+03	8.52E+03	9.27E+03	3.69E+05	4.54E+05	1.18E+05
20	PSW: CUT AT EL. 78'	78	1.10E+04	1.10E+04	1.17E+04	5.52E+05	6.72E+05	1.12E+05
21	PSW: CUT AT EL. 66'	66	1.14E+04	1.15E+04	1.23E+04	6.64E+05	8.07E+05	1.12E+05
22	SSW: CUT AT EL. 191'	191	1.71E+02	2.06E+02	1.17E+02	3.54E+03	4.84E+03	9.01E+03
23	SSW: CUT AT EL. 156'	156	4.18E+03	3.96E+03	2.78E+03	1.43E+05	1.10E+05	5.49E+04
24	SSW: CUT AT EL. 136.5'	136.5	8.86E+03	6.71E+03	6.66E+03	3.28E+05	3.04E+05	7.33E+04
25	SSW: CUT AT EL. 130'	130	1.08E+04	7.75E+03	8.62E+03	4.01E+05	3.94E+05	8.69E+04
26	SSW: CUT AT EL. 114'	114	1.24E+04	8.85E+03	1.04E+04	5.15E+05	5.97E+05	1.02E+05
27	SSW: CUT AT EL. 100'	100	1.41E+04	9.98E+03	1.23E+04	6.18E+05	8.11E+05	1.15E+05
28	SSW: CUT AT EL. 78'	78	2.16E+04	2.00E+04	2.17E+04	8.99E+05	1.30E+06	1.35E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 50 CASE09C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S09C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.581E+03	4.126E+03	1.947E+03	1.955E+05	1.374E+05	4.003E+05
30	AB-EAST: CUT AT EL. 213'	213	9.709E+03	7.555E+03	4.973E+03	4.063E+05	6.328E+05	9.028E+05
31	AB-EAST: CUT AT EL. 195'	195	1.262E+04	1.002E+04	6.054E+03	5.837E+05	7.839E+05	1.167E+06
32	AB-WEST: CUT AT EL. 195'	195	8.149E+03	5.961E+03	3.860E+03	1.564E+05	3.976E+05	4.770E+05
33	AB: CUT AT EL. 174'	174	5.076E+04	4.390E+04	2.624E+04	1.637E+06	1.705E+06	1.896E+06
34	AB: CUT AT EL. 156'	156	7.695E+04	7.372E+04	4.657E+04	3.119E+06	3.352E+06	2.986E+06
35	AB: CUT AT EL. 137.5'	137.5	1.040E+05	1.017E+05	7.409E+04	4.975E+06	5.356E+06	3.683E+06
36	AB: CUT AT EL. 120'	120	1.284E+05	1.344E+05	1.051E+05	7.233E+06	7.723E+06	4.453E+06
37	AB: CUT AT EL. 98.5'	98.5	1.519E+05	1.652E+05	1.380E+05	1.017E+07	1.110E+07	4.983E+06
38	AB: CUT AT EL. 77'	77	1.849E+05	1.897E+05	1.769E+05	1.352E+07	1.475E+07	5.440E+06
39	AB: CUT AT EL. 67'	67	2.042E+05	2.040E+05	1.981E+05	1.546E+07	1.663E+07	5.680E+06
40	AB: CUT AT EL. 55'	55	2.166E+05	2.132E+05	2.104E+05	1.793E+07	1.884E+07	5.749E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 51 CASE09C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S09C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.10E+04	1.20E+04	8.75E+03	1.27	1.38	1.01
CS: 2	281	307.5	1.04E+04	1.11E+04	7.81E+03	1.15	1.23	0.86
CS: 3	254.5	281	7.20E+03	7.59E+03	5.61E+03	1.05	1.11	0.82
CS: 4	241	254.5	4.03E+03	4.25E+03	3.32E+03	0.97	1.02	0.80
CS: 5	220	241	1.03E+04	1.10E+04	7.35E+03	0.88	0.94	0.63
CS: 6	200	220	5.36E+03	5.81E+03	5.68E+03	0.66	0.72	0.70
CS: 7	178	200	4.35E+03	4.80E+03	5.32E+03	0.52	0.57	0.64
CS: 8	156	178	4.57E+03	4.30E+03	4.70E+03	0.54	0.51	0.56
CS: 9	136	156	3.46E+03	3.33E+03	3.17E+03	0.51	0.49	0.47
CS: 10	130	136	1.22E+03	1.48E+03	1.17E+03	0.43	0.52	0.41
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	2.28E+03	2.91E+03	2.20E+03	0.39	0.50	0.38
CS: 13	100	114	1.44E+03	1.93E+03	2.10E+03	0.28	0.38	0.41
CS: 14	78	100	7.90E+02	1.53E+03	2.08E+03	0.14	0.26	0.36
PSW: 1	156	191	1.74E+03	3.59E+03	1.26E+03	0.64	1.20	0.46
PSW: 2	136.5	156	2.60E+03	1.19E+03	2.36E+03	0.51	0.23	0.46
PSW: 3	130	136.5	9.59E+02	3.61E+02	1.03E+03	0.44	0.16	0.47
PSW: 4	114	130	2.07E+03	1.49E+03	2.29E+03	0.40	0.29	0.44
PSW: 5	100	114	1.95E+03	1.89E+03	2.33E+03	0.35	0.34	0.41
PSW: 6	78	100	1.69E+03	2.44E+03	2.40E+03	0.26	0.38	0.37
PSW: 7	66	78	3.80E+02	5.55E+02	5.83E+02	0.23	0.34	0.35
SSW: 1	191	200	1.71E+02	2.06E+02	1.17E+02	1.11	1.34	0.76
SSW: 2	156	191	4.01E+03	3.75E+03	2.67E+03	0.84	0.75	0.56
SSW: 3	136.5	156	4.67E+03	2.75E+03	3.88E+03	0.62	0.36	0.51
SSW: 4	130	136.5	1.94E+03	1.04E+03	1.96E+03	0.49	0.26	0.49
SSW: 5	114	130	1.62E+03	1.11E+03	1.73E+03	0.45	0.31	0.48
SSW: 6	100	114	1.71E+03	1.13E+03	1.99E+03	0.39	0.26	0.45
SSW: 7	78	100	7.48E+03	9.99E+03	9.39E+03	0.28	0.37	0.37

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 52 CASE09C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S09C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.581E+03	4.126E+03	1.947E+03	0.92	1.06	0.50
AB-FHA: 2	213	213.5	6.128E+03	3.429E+03	3.026E+03	1.05	0.60	0.53
AB-FHA: 3	195	213	2.915E+03	2.464E+03	1.081E+03	0.87	0.73	0.32
AB-MCR: 1	195	213	8.149E+03	5.961E+03	3.860E+03	1.19	0.87	0.56
AB: 1	174	195	2.999E+04	2.792E+04	1.633E+04	0.77	0.72	0.42
AB: 2	156	174	2.619E+04	2.982E+04	2.033E+04	0.56	0.64	0.43
AB: 3	137.5	156	2.706E+04	2.796E+04	2.751E+04	0.39	0.40	0.40
AB: 4	120	137.5	2.440E+04	3.275E+04	3.104E+04	0.30	0.40	0.39
AB: 5	98.5	120	2.352E+04	3.074E+04	3.287E+04	0.26	0.33	0.36
AB: 6	77	98.5	3.295E+04	2.456E+04	3.889E+04	0.29	0.22	0.32
AB: 7	67	77	1.937E+04	1.424E+04	2.117E+04	0.26	0.20	0.29
AB: 8	55	67	1.232E+04	9.246E+03	1.237E+04	0.26	0.19	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 53 CASE09C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S09C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.27	1.38	1.01
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.15	1.23	0.86
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	1.05	1.11	0.82
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.97	1.02	0.80
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.88	0.94	0.63
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.66	0.72	0.70
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.52	0.57	0.64
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.54	0.51	0.56
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.51	0.49	0.47
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.43	0.52	0.41
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.39	0.50	0.38
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.28	0.38	0.41
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.14	0.26	0.36
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.64	1.20	0.46
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.51	0.23	0.46
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.44	0.16	0.47
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.40	0.29	0.44
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.35	0.34	0.41
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.26	0.38	0.37
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.23	0.34	0.35
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	1.11	1.34	0.76
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	0.84	0.75	0.56
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.62	0.36	0.51
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.49	0.26	0.49
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.45	0.31	0.48
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.39	0.26	0.45
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.28	0.37	0.37
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

- $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
- Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
- $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
- For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
- The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
- Moments are calculated about the geometric center of the CS.
- Moments and Forces due to RCS elements are not included.
- Hydrodynamic impulsive masses are included.
- Hydrodynamic convective masses are not included.
- Accidental Torsion is not included within the calculations.
- ΔW_x , ΔW_y , ΔW_z are from Table H-64
- Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 54 CASE09C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S09C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	0.92	1.06	0.50
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	1.05	0.60	0.53
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	0.87	0.73	0.32
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	1.19	0.87	0.56
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	0.77	0.72	0.42
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.56	0.64	0.43
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.39	0.40	0.40
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.30	0.40	0.39
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.26	0.33	0.36
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.29	0.22	0.32
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.26	0.20	0.29
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.26	0.19	0.26
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 55 CASE10C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for RCB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S10C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
1	CS: CUT AT EL. 307.5'	307.5	1.20E+04	1.20E+04	1.17E+04	1.76E+05	1.78E+05	6.77E+03
2	CS: CUT AT EL. 281'	281	2.30E+04	2.32E+04	2.19E+04	7.22E+05	7.24E+05	1.48E+04
3	CS: CUT AT EL. 254.5'	254.5	3.05E+04	3.07E+04	2.89E+04	1.54E+06	1.54E+06	2.15E+04
4	CS: CUT AT EL. 241'	241	3.46E+04	3.48E+04	3.29E+04	2.07E+06	2.07E+06	2.48E+04
5	CS: CUT AT EL. 220'	220	4.54E+04	4.55E+04	4.17E+04	3.16E+06	3.12E+06	3.62E+04
6	CS: CUT AT EL. 200'	200	5.12E+04	5.12E+04	4.84E+04	4.23E+06	4.18E+06	3.83E+04
7	CS: CUT AT EL. 178'	178	5.59E+04	5.60E+04	5.46E+04	5.50E+06	5.46E+06	3.46E+04
8	CS: CUT AT EL. 156'	156	5.96E+04	5.95E+04	6.00E+04	6.85E+06	6.80E+06	3.63E+04
9	CS: CUT AT EL. 136'	136	6.16E+04	6.14E+04	6.36E+04	8.11E+06	8.05E+06	3.97E+04
10	CS: CUT AT EL. 130'	130	6.23E+04	6.20E+04	6.49E+04	8.50E+06	8.44E+06	4.05E+04
11	CS: CUT AT EL. 125'	125	6.23E+04	6.20E+04	6.49E+04	8.81E+06	8.75E+06	4.05E+04
12	CS: CUT AT EL. 114'	114	6.44E+04	6.30E+04	6.73E+04	9.54E+06	9.46E+06	3.93E+04
13	CS: CUT AT EL. 100'	100	6.63E+04	6.35E+04	6.91E+04	1.04E+07	1.04E+07	4.18E+04
14	CS: CUT AT EL. 78'	78	6.80E+04	6.53E+04	7.10E+04	1.18E+07	1.18E+07	4.38E+04
15	PSW: CUT AT EL. 156'	156	2.21E+03	4.33E+03	1.63E+03	1.04E+05	5.27E+04	5.21E+04
16	PSW: CUT AT EL. 136.5'	136.5	5.14E+03	5.07E+03	4.60E+03	1.88E+05	1.88E+05	9.74E+04
17	PSW: CUT AT EL. 130'	130	6.24E+03	5.76E+03	5.86E+03	2.14E+05	2.54E+05	1.18E+05
18	PSW: CUT AT EL. 114'	114	8.53E+03	7.18E+03	8.58E+03	2.98E+05	4.09E+05	1.42E+05
19	PSW: CUT AT EL. 100'	100	1.05E+04	8.98E+03	1.13E+04	3.99E+05	5.53E+05	1.57E+05
20	PSW: CUT AT EL. 78'	78	1.18E+04	1.09E+04	1.39E+04	5.92E+05	7.70E+05	1.53E+05
21	PSW: CUT AT EL. 66'	66	1.22E+04	1.13E+04	1.44E+04	7.24E+05	9.09E+05	1.52E+05
22	SSW: CUT AT EL. 191'	191	2.41E+02	2.64E+02	1.39E+02	4.40E+03	6.69E+03	1.00E+04
23	SSW: CUT AT EL. 156'	156	5.26E+03	5.17E+03	3.51E+03	1.58E+05	1.62E+05	7.57E+04
24	SSW: CUT AT EL. 136.5'	136.5	1.04E+04	7.64E+03	8.32E+03	3.26E+05	4.25E+05	1.15E+05
25	SSW: CUT AT EL. 130'	130	1.24E+04	8.64E+03	1.07E+04	3.87E+05	5.44E+05	1.31E+05
26	SSW: CUT AT EL. 114'	114	1.39E+04	9.77E+03	1.27E+04	5.31E+05	7.64E+05	1.47E+05
27	SSW: CUT AT EL. 100'	100	1.53E+04	1.10E+04	1.51E+04	6.85E+05	9.77E+05	1.63E+05
28	SSW: CUT AT EL. 78'	78	2.20E+04	2.01E+04	2.52E+04	9.99E+05	1.46E+06	1.81E+05

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 56 CASE10C (CRACKED)
Seismic Forces and Moments at Each Floor from SASSI Analysis for AB (SRSS)

APR1400-RCBAB-B2-R6(0928)-S10C			SRSS - SEISMIC SHEAR FORCE AND MOMENT (kips,ft)					
ID #	DESCRIPTION	ELEVATION (ft)	F _x	F _y	F _z	M _x	M _y	M _z
29	AB-EAST: CUT AT EL. 213.5'	213.5	5.425E+03	7.174E+03	2.920E+03	3.142E+05	1.980E+05	6.371E+05
30	AB-EAST: CUT AT EL. 213'	213	1.479E+04	1.313E+04	5.504E+03	4.782E+05	7.113E+05	1.502E+06
31	AB-EAST: CUT AT EL. 195'	195	1.926E+04	1.740E+04	6.656E+03	7.653E+05	9.458E+05	1.981E+06
32	AB-WEST: CUT AT EL. 195'	195	1.017E+04	7.661E+03	5.262E+03	1.709E+05	5.506E+05	7.065E+05
33	AB: CUT AT EL. 174'	174	6.823E+04	6.636E+04	3.074E+04	2.431E+06	2.519E+06	2.257E+06
34	AB: CUT AT EL. 156'	156	1.016E+05	1.114E+05	5.452E+04	4.762E+06	4.780E+06	3.154E+06
35	AB: CUT AT EL. 137.5'	137.5	1.433E+05	1.653E+05	8.873E+04	7.929E+06	7.730E+06	3.595E+06
36	AB: CUT AT EL. 120'	120	1.933E+05	2.226E+05	1.249E+05	1.201E+07	1.120E+07	4.348E+06
37	AB: CUT AT EL. 98.5'	98.5	2.402E+05	2.826E+05	1.629E+05	1.811E+07	1.660E+07	5.503E+06
38	AB: CUT AT EL. 77'	77	2.772E+05	3.359E+05	2.038E+05	2.511E+07	2.251E+07	6.211E+06
39	AB: CUT AT EL. 67'	67	2.932E+05	3.586E+05	2.259E+05	2.840E+07	2.543E+07	6.478E+06
40	AB: CUT AT EL. 55'	55	3.009E+05	3.696E+05	2.383E+05	3.239E+07	2.892E+07	6.597E+06

Notes

1. $F_i = \text{SRSS}(\text{Max}(F_i/x), \text{Max}(F_i/y), \text{Max}(F_i/z))$ - (kips)
2. $M_i = \text{SRSS}(\text{Max}(M_i/x), \text{Max}(M_i/y), \text{Max}(M_i/z))$ - (kips-ft)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. $\text{MAX}(M_i/j)$ = The Maximum Value of the Moment about the i direction due to a seismic ground motion in the j direction. - (kips-ft)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 57 CASE10C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for RCB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔFx (kips)	ΔFy (kips)	ΔFz (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	1.20E+04	1.20E+04	1.17E+04	1.38	1.38	1.35
CS: 2	281	307.5	1.11E+04	1.12E+04	1.02E+04	1.23	1.23	1.12
CS: 3	254.5	281	7.42E+03	7.49E+03	7.01E+03	1.08	1.09	1.02
CS: 4	241	254.5	4.12E+03	4.13E+03	4.07E+03	0.99	0.99	0.98
CS: 5	220	241	1.08E+04	1.07E+04	8.77E+03	0.92	0.91	0.75
CS: 6	200	220	5.74E+03	5.72E+03	6.71E+03	0.71	0.71	0.83
CS: 7	178	200	4.69E+03	4.78E+03	6.19E+03	0.56	0.57	0.74
CS: 8	156	178	3.73E+03	3.50E+03	5.39E+03	0.44	0.41	0.64
CS: 9	136	156	2.03E+03	1.95E+03	3.58E+03	0.30	0.29	0.53
CS: 10	130	136	6.39E+02	6.07E+02	1.32E+03	0.23	0.21	0.47
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	2.16E+03	9.48E+02	2.37E+03	0.37	0.16	0.41
CS: 13	100	114	1.87E+03	5.23E+02	1.81E+03	0.36	0.10	0.35
CS: 14	78	100	1.66E+03	1.77E+03	1.91E+03	0.29	0.30	0.33
PSW: 1	156	191	2.21E+03	4.33E+03	1.63E+03	0.81	1.45	0.60
PSW: 2	136.5	156	2.93E+03	7.43E+02	2.97E+03	0.58	0.15	0.58
PSW: 3	130	136.5	1.11E+03	6.86E+02	1.26E+03	0.50	0.31	0.57
PSW: 4	114	130	2.29E+03	1.42E+03	2.72E+03	0.44	0.27	0.52
PSW: 5	100	114	1.95E+03	1.80E+03	2.70E+03	0.35	0.32	0.48
PSW: 6	78	100	1.32E+03	1.87E+03	2.58E+03	0.20	0.29	0.40
PSW: 7	66	78	4.30E+02	4.61E+02	5.92E+02	0.26	0.28	0.36
SSW: 1	191	200	2.41E+02	2.64E+02	1.39E+02	1.57	1.72	0.91
SSW: 2	156	191	5.02E+03	4.91E+03	3.37E+03	1.05	0.97	0.71
SSW: 3	136.5	156	5.19E+03	2.47E+03	4.81E+03	0.68	0.32	0.63
SSW: 4	130	136.5	2.00E+03	1.01E+03	2.38E+03	0.50	0.25	0.60
SSW: 5	114	130	1.50E+03	1.12E+03	2.05E+03	0.41	0.31	0.57
SSW: 6	100	114	1.37E+03	1.27E+03	2.32E+03	0.31	0.29	0.53
SSW: 7	78	100	6.71E+03	9.07E+03	1.01E+04	0.25	0.33	0.40

Notes

1. ΔFj = The absolute difference in calculated SRSS shear values of Fj from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. MAX(Fi/j) = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔFj includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.
11. Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 58 CASE10C (CRACKED)
Total Equivalent Seismic Inertia Force and Acceleration for AB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING SEISMIC EQUIVALENT ACCELERATIONS - SRSS ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔF_x (kips)	ΔF_y (kips)	ΔF_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	5.425E+03	7.174E+03	2.920E+03	1.39	1.84	0.75
AB-FHA: 2	213	213.5	9.362E+03	5.953E+03	2.584E+03	1.60	1.05	0.45
AB-FHA: 3	195	213	4.476E+03	4.274E+03	1.152E+03	1.33	1.27	0.34
AB-MCR: 1	195	213	1.017E+04	7.661E+03	5.262E+03	1.48	1.12	0.77
AB: 1	174	195	3.880E+04	4.130E+04	1.882E+04	1.00	1.07	0.49
AB: 2	156	174	3.335E+04	4.505E+04	2.378E+04	0.71	0.96	0.51
AB: 3	137.5	156	4.169E+04	5.389E+04	3.422E+04	0.60	0.77	0.50
AB: 4	120	137.5	5.003E+04	5.727E+04	3.613E+04	0.62	0.71	0.45
AB: 5	98.5	120	4.689E+04	5.999E+04	3.803E+04	0.51	0.64	0.42
AB: 6	77	98.5	3.705E+04	5.338E+04	4.087E+04	0.33	0.47	0.34
AB: 7	67	77	1.601E+04	2.269E+04	2.217E+04	0.22	0.31	0.30
AB: 8	55	67	7.662E+03	1.097E+04	1.234E+04	0.16	0.23	0.26

Notes

1. ΔF_j = The absolute difference in calculated SRSS shear values of F_j from the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a seismic ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔF_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 59 CASE10C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for RCB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	1.38	1.38	1.35
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	1.23	1.23	1.12
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	1.08	1.09	1.02
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	0.99	0.99	0.98
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	0.92	0.91	0.75
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	0.71	0.71	0.83
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	0.56	0.57	0.74
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	0.44	0.41	0.64
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	0.30	0.29	0.53
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	0.23	0.21	0.47
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	N/A	N/A	N/A
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	0.37	0.16	0.41
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	0.36	0.10	0.35
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	0.29	0.30	0.33
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04			
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	0.81	1.45	0.60
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	0.58	0.15	0.58
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	0.50	0.31	0.57
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	0.44	0.27	0.52
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	0.35	0.32	0.48
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	0.20	0.29	0.40
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	0.26	0.28	0.36
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04			
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	1.57	1.72	0.91
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	1.05	0.97	0.71
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	0.68	0.32	0.63
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	0.50	0.25	0.60
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	0.41	0.31	0.57
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	0.31	0.29	0.53
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	0.25	0.33	0.40
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04			

Notes

- $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
- Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
- $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
- For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
- The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
- Moments are calculated about the geometric center of the CS.
- Moments and Forces due to RCS elements are not included.
- Hydrodynamic impulsive masses are included.
- Hydrodynamic convective masses are not included.
- Accidental Torsion is not included within the calculations.
- ΔW_x , ΔW_y , ΔW_z are from Table H-64
- Equivalent accelerations for CS: 11 are not available because the building weight of the CS between elevations 125' and 130' is zero.

Table C- 60 CASE10C (CRACKED)
Total Equivalent Weight and Seismic Acceleration Summary for AB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING SEISMIC EQUIVALENT WEIGHT AND ACCELERATION SUMMARY TABLE					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	Acc. X (g)	Acc. Y (g)	Acc. Z (g)
AB-FHA: 1	213.5	226.5	3.895E+03	3.895E+03	3.895E+03	1.39	1.84	0.75
AB-FHA: 2	213	213.5	5.834E+03	5.677E+03	5.735E+03	1.60	1.05	0.45
AB-FHA: 3	195	213	3.361E+03	3.368E+03	3.370E+03	1.33	1.27	0.34
$\Sigma =$			13090	12940	13000			
AB-MCR: 1	195	213	6.865E+03	6.865E+03	6.865E+03	1.48	1.12	0.77
$\Sigma =$			6865	6865	6865			
AB: 1	174	195	3.876E+04	3.876E+04	3.875E+04	1.00	1.07	0.49
AB: 2	156	174	4.689E+04	4.684E+04	4.689E+04	0.71	0.96	0.51
AB: 3	137.5	156	6.990E+04	7.000E+04	6.880E+04	0.60	0.77	0.50
AB: 4	120	137.5	8.100E+04	8.110E+04	8.010E+04	0.62	0.71	0.45
AB: 5	98.5	120	9.210E+04	9.330E+04	9.130E+04	0.51	0.64	0.42
AB: 6	77	98.5	1.128E+05	1.135E+05	1.208E+05	0.33	0.47	0.34
AB: 7	67	77	7.310E+04	7.300E+04	7.310E+04	0.22	0.31	0.30
AB: 8	55	67	4.790E+04	4.790E+04	4.780E+04	0.16	0.23	0.26
$\Sigma =$			562450	564400	567540			

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. Acc. j = The equivalent acceleration in the j direction calculated between the top and bottom listed elevations. - (g)
3. $\text{MAX}(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 61 (CRACKED)**Static Forces and Moments at Each Floor from SASSI Analysis for RCB (X-Direction)**

APR1400-RCBAB-B2-R6(0928)-S10C			X-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(F _x /x)	MAX(F _y /x)	MAX(F _z /x)	MAX(M _x /x)	MAX(M _y /x)	MAX(M _z /x)
1	CS: CUT AT EL. 307.5'	307.5	8.69E+03	2.00E-04	2.70E-04	-2.03E-03	9.73E+04	-1.38E+01
2	CS: CUT AT EL. 281'	281	1.77E+04	4.18E-04	5.42E-04	-9.16E-03	4.31E+05	-1.38E+01
3	CS: CUT AT EL. 254.5'	254.5	2.46E+04	5.99E-04	7.39E-04	-2.20E-02	1.00E+06	-1.37E+01
4	CS: CUT AT EL. 241'	241	2.88E+04	7.22E-04	8.59E-04	-3.10E-02	1.39E+06	-1.37E+01
5	CS: CUT AT EL. 220'	220	4.05E+04	-2.62E-03	2.17E-03	2.27E-03	2.19E+06	7.30E+03
6	CS: CUT AT EL. 200'	200	4.86E+04	-2.35E-03	2.39E-03	5.25E-02	3.08E+06	7.13E+03
7	CS: CUT AT EL. 178'	178	5.70E+04	-2.10E-03	5.02E-04	1.35E-01	4.23E+06	1.25E+04
8	CS: CUT AT EL. 156'	156	6.54E+04	-2.01E-03	1.40E-03	1.58E-01	5.57E+06	8.77E+03
9	CS: CUT AT EL. 136'	136	7.22E+04	-2.02E-03	-1.39E-03	1.91E-01	6.93E+06	6.90E+03
10	CS: CUT AT EL. 130'	130	7.50E+04	-2.04E-03	-1.35E-03	2.02E-01	7.37E+06	6.89E+03
11	CS: CUT AT EL. 125'	125	7.50E+04	-2.04E-03	-1.35E-03	2.12E-01	7.74E+06	6.89E+03
12	CS: CUT AT EL. 114'	114	8.09E+04	-2.04E-03	-7.78E-04	2.28E-01	8.61E+06	5.05E+03
13	CS: CUT AT EL. 100'	100	8.60E+04	-2.08E-03	-1.31E-03	2.64E-01	9.76E+06	7.20E+03
14	CS: CUT AT EL. 78'	78	9.18E+04	-2.09E-03	-1.70E-03	3.16E-01	1.17E+07	9.58E+03
15	PSW: CUT AT EL. 156'	156	2.71E+03	3.58E-04	6.00E-05	-9.79E-03	4.86E+04	3.38E+02
16	PSW: CUT AT EL. 136.5'	136.5	7.80E+03	5.28E-04	-1.28E-03	-3.40E-02	1.63E+05	-1.03E+04
17	PSW: CUT AT EL. 130'	130	1.00E+04	5.82E-04	-2.06E-03	-4.86E-02	2.25E+05	-1.94E+04
18	PSW: CUT AT EL. 114'	114	1.52E+04	6.91E-04	-3.26E-03	-7.39E-02	4.39E+05	-3.16E+04
19	PSW: CUT AT EL. 100'	100	2.08E+04	7.40E-04	-4.17E-03	-9.46E-02	7.06E+05	-4.09E+04
20	PSW: CUT AT EL. 78'	78	2.73E+04	7.06E-04	-3.24E-03	-1.11E-01	1.25E+06	-4.08E+04
21	PSW: CUT AT EL. 66'	66	2.90E+04	7.02E-04	-3.05E-03	-1.19E-01	1.59E+06	-4.08E+04
22	SSW: CUT AT EL. 191'	191	1.54E+02	-8.21E-05	1.71E-04	5.60E-03	1.38E+03	-4.29E+03
23	SSW: CUT AT EL. 156'	156	4.91E+03	9.13E-05	1.71E-03	4.03E-02	9.57E+04	-3.48E+04
24	SSW: CUT AT EL. 136.5'	136.5	1.25E+04	1.79E-04	3.35E-03	6.80E-02	3.07E+05	-3.47E+04
25	SSW: CUT AT EL. 130'	130	1.65E+04	4.15E-04	4.50E-03	9.25E-02	4.08E+05	-4.42E+04
26	SSW: CUT AT EL. 114'	114	2.01E+04	5.73E-04	5.40E-03	1.08E-01	7.09E+05	-6.76E+04
27	SSW: CUT AT EL. 100'	100	2.45E+04	5.93E-04	6.39E-03	1.19E-01	1.04E+06	-8.85E+04
28	SSW: CUT AT EL. 78'	78	5.16E+04	4.47E-04	6.90E-03	1.23E-01	1.98E+06	-1.20E+05

Notes

1. X-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_X.OUT
2. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(M_i/j) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 62 (CRACKED)**Static Forces and Moments at Each Floor from SASSI Analysis for RCB (Y-Direction)**

APR1400-RCBAB-B2-R6(0928)-S10C			Y-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(Fx/y)	MAX(Fy/y)	MAX(Fz/y)	MAX(Mx/y)	MAX(My/y)	MAX(Mz/y)
1	CS: CUT AT EL. 307.5'	307.5	1.26E-04	8.69E+03	1.19E-05	-9.73E+04	3.38E-04	1.57E+01
2	CS: CUT AT EL. 281'	281	2.71E-04	1.77E+04	3.70E-05	-4.31E+05	3.70E-03	1.63E+01
3	CS: CUT AT EL. 254.5'	254.5	3.78E-04	2.46E+04	6.12E-05	-1.00E+06	1.15E-02	1.67E+01
4	CS: CUT AT EL. 241'	241	4.58E-04	2.88E+04	7.16E-05	-1.39E+06	1.70E-02	1.65E+01
5	CS: CUT AT EL. 220'	220	-2.43E-03	4.05E+04	8.12E-04	-2.19E+06	-1.18E-02	-1.15E+04
6	CS: CUT AT EL. 200'	200	-2.25E-03	4.86E+04	8.09E-04	-3.08E+06	-5.92E-02	-1.13E+04
7	CS: CUT AT EL. 178'	178	-2.13E-03	5.70E+04	1.25E-03	-4.23E+06	-1.39E-01	1.41E+04
8	CS: CUT AT EL. 156'	156	-2.05E-03	6.54E+04	9.66E-04	-5.57E+06	-1.64E-01	4.49E+03
9	CS: CUT AT EL. 136'	136	-2.14E-03	7.22E+04	7.92E-04	-6.93E+06	-1.99E-01	5.01E+04
10	CS: CUT AT EL. 130'	130	-2.17E-03	7.50E+04	7.81E-04	-7.37E+06	-2.12E-01	5.03E+04
11	CS: CUT AT EL. 125'	125	-2.17E-03	7.50E+04	7.81E-04	-7.74E+06	-2.23E-01	5.03E+04
12	CS: CUT AT EL. 114'	114	-2.16E-03	8.09E+04	6.77E-04	-8.61E+06	-2.40E-01	4.00E+04
13	CS: CUT AT EL. 100'	100	-2.24E-03	8.60E+04	7.68E-04	-9.76E+06	-2.78E-01	5.20E+04
14	CS: CUT AT EL. 78'	78	-2.29E-03	9.18E+04	8.34E-04	-1.17E+07	-3.34E-01	6.55E+04
15	PSW: CUT AT EL. 156'	156	-1.22E-04	2.99E+03	1.46E-04	-5.37E+04	-1.94E-03	1.12E+04
16	PSW: CUT AT EL. 136.5'	136.5	-6.07E-04	8.08E+03	-3.64E-05	-1.74E+05	1.14E-02	8.98E+04
17	PSW: CUT AT EL. 130'	130	-6.86E-04	1.03E+04	-2.18E-04	-2.37E+05	2.11E-02	1.34E+05
18	PSW: CUT AT EL. 114'	114	-7.40E-04	1.55E+04	-4.52E-04	-4.56E+05	3.04E-02	2.06E+05
19	PSW: CUT AT EL. 100'	100	-7.34E-04	2.11E+04	-6.18E-04	-7.27E+05	3.54E-02	2.63E+05
20	PSW: CUT AT EL. 78'	78	-7.93E-04	2.76E+04	-5.13E-04	-1.27E+06	1.87E-02	2.13E+05
21	PSW: CUT AT EL. 66'	66	-7.99E-04	2.92E+04	-5.00E-04	-1.62E+06	9.27E-03	1.95E+05
22	SSW: CUT AT EL. 191'	191	7.08E-05	1.54E+02	-1.42E-04	-1.38E+03	-4.57E-03	-5.72E+03
23	SSW: CUT AT EL. 156'	156	3.35E-04	5.19E+03	-1.68E-03	-1.01E+05	-4.00E-02	-5.31E+04
24	SSW: CUT AT EL. 136.5'	136.5	5.98E-04	1.28E+04	-2.26E-03	-3.18E+05	-6.30E-02	-1.10E+05
25	SSW: CUT AT EL. 130'	130	7.06E-04	1.68E+04	-2.84E-03	-4.20E+05	-8.83E-02	-1.52E+05
26	SSW: CUT AT EL. 114'	114	7.39E-04	2.04E+04	-3.65E-03	-7.26E+05	-1.06E-01	-1.94E+05
27	SSW: CUT AT EL. 100'	100	8.16E-04	2.48E+04	-4.31E-03	-1.06E+06	-1.15E-01	-2.41E+05
28	SSW: CUT AT EL. 78'	78	7.46E-04	5.19E+04	-4.98E-03	-2.01E+06	-1.09E-01	-2.49E+05

Notes

1. Y-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_Y.OUT
2. MAX(Fi/j) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(Mi/j) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 63 (CRACKED)
Static Forces and Moments at Each Floor from SASSI Analysis for RCB (Z-Direction)

APR1400-RCBAB-B2-R6(0928)-S10C			Z-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(Fx/z)	MAX(Fy/z)	MAX(Fz/z)	MAX(Mx/z)	MAX(My/z)	MAX(Mz/z)
1	CS: CUT AT EL. 307.5'	307.5	-1.58E-04	1.26E-05	8.68E+03	1.38E+01	-1.57E+01	6.15E-05
2	CS: CUT AT EL. 281'	281	-3.10E-04	1.76E-05	1.77E+04	1.38E+01	-1.63E+01	2.23E-04
3	CS: CUT AT EL. 254.5'	254.5	-4.24E-04	1.68E-05	2.46E+04	1.38E+01	-1.67E+01	3.85E-04
4	CS: CUT AT EL. 241'	241	-4.94E-04	1.27E-05	2.88E+04	1.38E+01	-1.65E+01	4.86E-04
5	CS: CUT AT EL. 220'	220	-5.87E-04	-5.91E-05	4.05E+04	-7.30E+03	1.15E+04	8.91E-04
6	CS: CUT AT EL. 200'	200	-6.58E-04	-7.48E-05	4.86E+04	-7.13E+03	1.13E+04	1.06E-03
7	CS: CUT AT EL. 178'	178	-7.63E-04	-8.26E-05	5.70E+04	-1.25E+04	-1.41E+04	1.51E-03
8	CS: CUT AT EL. 156'	156	-8.74E-04	-9.98E-05	6.54E+04	-8.77E+03	-4.49E+03	1.63E-03
9	CS: CUT AT EL. 136'	136	-9.65E-04	-1.24E-04	7.22E+04	-6.90E+03	-5.01E+04	1.69E-03
10	CS: CUT AT EL. 130'	130	-9.72E-04	-1.32E-04	7.50E+04	-6.89E+03	-5.03E+04	1.73E-03
11	CS: CUT AT EL. 125'	125	-9.72E-04	-1.32E-04	7.50E+04	-6.89E+03	-5.03E+04	1.73E-03
12	CS: CUT AT EL. 114'	114	-9.72E-04	-1.51E-04	8.09E+04	-5.05E+03	-4.00E+04	1.79E-03
13	CS: CUT AT EL. 100'	100	-1.01E-03	-1.57E-04	8.60E+04	-7.20E+03	-5.20E+04	1.87E-03
14	CS: CUT AT EL. 78'	78	-1.04E-03	-1.62E-04	9.18E+04	-9.58E+03	-6.55E+04	1.92E-03
15	PSW: CUT AT EL. 156'	156	8.38E-05	-2.51E-04	2.71E+03	-3.38E+02	-2.82E+03	-2.19E-04
16	PSW: CUT AT EL. 136.5'	136.5	2.39E-05	-5.51E-04	7.80E+03	1.03E+04	-8.14E+04	-3.06E-03
17	PSW: CUT AT EL. 130'	130	1.83E-05	-6.39E-04	1.00E+04	1.94E+04	-1.25E+05	-4.60E-03
18	PSW: CUT AT EL. 114'	114	4.95E-05	-7.87E-04	1.52E+04	3.16E+04	-1.98E+05	-7.10E-03
19	PSW: CUT AT EL. 100'	100	9.26E-05	-8.71E-04	2.08E+04	4.09E+04	-2.55E+05	-8.69E-03
20	PSW: CUT AT EL. 78'	78	9.55E-05	-8.98E-04	2.73E+04	4.08E+04	-2.05E+05	-8.51E-03
21	PSW: CUT AT EL. 66'	66	1.01E-04	-8.99E-04	2.90E+04	4.08E+04	-1.87E+05	-8.49E-03
22	SSW: CUT AT EL. 191'	191	3.30E-05	-7.72E-05	1.54E+02	4.29E+03	5.72E+03	1.89E-03
23	SSW: CUT AT EL. 156'	156	4.55E-04	-6.32E-04	4.91E+03	3.48E+04	6.15E+04	4.78E-03
24	SSW: CUT AT EL. 136.5'	136.5	6.70E-04	-1.09E-03	1.25E+04	3.47E+04	1.18E+05	8.59E-03
25	SSW: CUT AT EL. 130'	130	7.41E-04	-1.25E-03	1.65E+04	4.42E+04	1.61E+05	9.94E-03
26	SSW: CUT AT EL. 114'	114	8.30E-04	-1.40E-03	2.01E+04	6.76E+04	2.03E+05	1.02E-02
27	SSW: CUT AT EL. 100'	100	9.23E-04	-1.48E-03	2.45E+04	8.85E+04	2.50E+05	1.04E-02
28	SSW: CUT AT EL. 78'	78	9.70E-04	-1.64E-03	4.97E+04	1.20E+05	2.61E+05	9.82E-03

Notes

1. Z-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_Z.OUT
2. MAX(Fi/j) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(Mi/j) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 64 (CRACKED)
Static Forces and Moments at Each Floor from SASSI Analysis for AB (X-Direction)

APR1400-RCBAB-B2-R6(0928)-S10C			X-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(F _x /x)	MAX(F _y /x)	MAX(F _z /x)	MAX(M _x /x)	MAX(M _y /x)	MAX(M _z /x)
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.895E+03	3.558E-03	1.214E-03	5.661E-02	1.745E+04	-3.728E+05
30	AB-EAST: CUT AT EL. 213'	213	9.729E+03	1.529E-02	-6.194E-03	-6.597E-01	2.232E+04	-7.899E+05
31	AB-EAST: CUT AT EL. 195'	195	1.309E+04	2.021E-02	-8.468E-03	-1.239E+00	2.309E+05	-1.078E+06
32	AB-WEST: CUT AT EL. 195'	195	6.865E+03	-6.914E-04	1.168E-03	3.064E-02	9.881E+04	-1.278E+02
33	AB: CUT AT EL. 174'	174	5.871E+04	2.598E-02	-4.277E-03	-1.978E+00	1.388E+06	-1.694E+06
34	AB: CUT AT EL. 156'	156	1.056E+05	2.557E-02	3.337E-03	-2.371E+00	3.148E+06	-2.130E+06
35	AB: CUT AT EL. 137.5'	137.5	1.755E+05	2.972E-02	3.567E-03	-2.929E+00	6.156E+06	-2.228E+06
36	AB: CUT AT EL. 120'	120	2.565E+05	3.033E-02	5.607E-03	-3.390E+00	1.044E+07	-2.360E+06
37	AB: CUT AT EL. 98.5'	98.5	3.486E+05	3.292E-02	6.493E-03	-4.039E+00	1.758E+07	-2.661E+06
38	AB: CUT AT EL. 77'	77	4.614E+05	3.411E-02	1.018E-02	-4.690E+00	2.717E+07	-2.724E+06
39	AB: CUT AT EL. 67'	67	5.345E+05	3.484E-02	9.998E-03	-5.062E+00	3.251E+07	-2.600E+06
40	AB: CUT AT EL. 55'	55	5.824E+05	3.520E-02	9.728E-03	-5.497E+00	3.950E+07	-2.530E+06

Notes

1. X-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_X.OUT
2. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(M_i/j) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 65 (CRACKED)
Static Forces and Moments at Each Floor from SASSI Analysis for AB (Y-Direction)

APR1400-RCBAB-B2-R6(0928)-S10C			Y-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(F _x /y)	MAX(F _y /y)	MAX(F _z /y)	MAX(M _x /y)	MAX(M _y /y)	MAX(M _z /y)
29	AB-EAST: CUT AT EL. 213.5'	213.5	4.564E-03	3.895E+03	-1.095E-03	-1.745E+04	1.241E-01	2.823E+05
30	AB-EAST: CUT AT EL. 213'	213	7.488E-03	9.572E+03	-5.108E-03	-2.224E+04	7.221E-01	1.096E+06
31	AB-EAST: CUT AT EL. 195'	195	1.043E-02	1.294E+04	-7.685E-03	-2.280E+05	1.212E+00	1.499E+06
32	AB-WEST: CUT AT EL. 195'	195	1.308E-03	6.865E+03	-1.560E-05	-9.881E+04	1.681E-02	-7.085E+05
33	AB: CUT AT EL. 174'	174	2.142E-02	5.856E+04	-1.036E-02	-1.382E+06	2.104E+00	-1.530E+05
34	AB: CUT AT EL. 156'	156	3.011E-02	1.054E+05	-1.204E-02	-3.139E+06	2.903E+00	-1.686E+06
35	AB: CUT AT EL. 137.5'	137.5	3.210E-02	1.754E+05	-1.032E-02	-6.144E+06	3.355E+00	-3.603E+05
36	AB: CUT AT EL. 120'	120	3.312E-02	2.565E+05	-1.001E-02	-1.043E+07	3.870E+00	5.839E+05
37	AB: CUT AT EL. 98.5'	98.5	3.385E-02	3.498E+05	-6.724E-03	-1.759E+07	4.182E+00	2.621E+06
38	AB: CUT AT EL. 77'	77	3.391E-02	4.633E+05	-7.407E-03	-2.722E+07	5.012E+00	2.410E+06
39	AB: CUT AT EL. 67'	67	3.457E-02	5.363E+05	-6.688E-03	-3.258E+07	5.258E+00	3.312E+06
40	AB: CUT AT EL. 55'	55	3.478E-02	5.842E+05	-6.499E-03	-3.959E+07	5.662E+00	3.955E+06

Notes

1. Y-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_Y.OUT
2. MAX(F_i/j) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(M_i/j) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 66 (CRACKED)
Static Forces and Moments at Each Floor from SASSI Analysis for AB (Z-Direction)

APR1400-RCBAB-B2-R6(0928)-S10C			Z-DIRECTION STATIC SHEAR FORCE AND MOMENT (kips, kips-ft)					
ID #	DESCRIPTION	ELEVATION (ft)	MAX(F _{x/z})	MAX(F _{y/z})	MAX(F _{z/z})	MAX(M _{x/z})	MAX(M _{y/z})	MAX(M _{z/z})
29	AB-EAST: CUT AT EL. 213.5'	213.5	3.712E-04	-1.179E-04	3.895E+03	3.727E+05	-2.823E+05	-3.501E-02
30	AB-EAST: CUT AT EL. 213'	213	1.476E-03	-1.593E-04	9.630E+03	7.829E+05	-1.104E+06	-9.716E-02
31	AB-EAST: CUT AT EL. 195'	195	1.841E-03	-2.046E-04	1.300E+04	1.071E+06	-1.507E+06	-1.146E-01
32	AB-WEST: CUT AT EL. 195'	195	-7.400E-04	-6.996E-06	6.865E+03	1.278E+02	7.085E+05	1.747E-03
33	AB: CUT AT EL. 174'	174	-5.775E-04	-4.960E-04	5.861E+04	1.687E+06	1.448E+05	-1.348E-01
34	AB: CUT AT EL. 156'	156	-1.473E-03	-8.364E-04	1.055E+05	2.123E+06	1.678E+06	-1.472E-01
35	AB: CUT AT EL. 137.5'	137.5	1.061E-03	-1.527E-03	1.743E+05	2.177E+06	4.891E+05	-1.222E-01
36	AB: CUT AT EL. 120'	120	3.335E-03	-1.900E-03	2.544E+05	2.267E+06	-3.181E+05	-1.029E-01
37	AB: CUT AT EL. 98.5'	98.5	4.279E-03	-2.551E-03	3.457E+05	2.697E+06	-2.894E+06	-1.361E-01
38	AB: CUT AT EL. 77'	77	4.132E-03	-2.992E-03	4.665E+05	2.759E+06	-2.523E+06	-1.785E-01
39	AB: CUT AT EL. 67'	67	4.257E-03	-3.033E-03	5.396E+05	2.636E+06	-3.425E+06	-1.784E-01
40	AB: CUT AT EL. 55'	55	4.239E-03	-2.994E-03	5.874E+05	2.565E+06	-4.068E+06	-1.695E-01

Notes

1. Z-DIRECTION STATIC SHEAR FORCE AND MOMENT DATA IS RETRIEVED FROM: STATIC_S10C_Z.OUT
2. MAX(F_{i/j}) = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
3. MAX(M_{i/j}) = The Maximum Value of the Moment about the i direction due to a 1g ground motion in the j direction. - (kips-ft)
4. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
5. Moments are calculated about the geometric center of the CS.
6. Moments and Forces due to RCS elements are not included.
7. Hydrodynamic impulsive masses are included.
8. Hydrodynamic convective masses are not included.
9. Accidental Torsion is not included within the calculations.

Table C- 67 (CRACKED)
Building Mass and Weight at Each Floor from SASSI Analysis for RCB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING MASS AND WEIGHT - ($g = 32.17 \text{ ft/sec}^2$)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	$\Delta MASS_x$	$\Delta MASS_y$	$\Delta MASS_z$
CS: 1	307.5	331.75	8.69E+03	8.69E+03	8.68E+03	269.97	269.97	269.94
CS: 2	281	307.5	9.05E+03	9.05E+03	9.05E+03	281.16	281.16	281.19
CS: 3	254.5	281	6.86E+03	6.86E+03	6.86E+03	213.24	213.24	213.24
CS: 4	241	254.5	4.16E+03	4.16E+03	4.16E+03	129.31	129.31	129.31
CS: 5	220	241	1.17E+04	1.17E+04	1.17E+04	364.63	364.63	364.63
CS: 6	200	220	8.10E+03	8.10E+03	8.10E+03	251.79	251.79	251.79
CS: 7	178	200	8.38E+03	8.38E+03	8.38E+03	260.49	260.49	260.49
CS: 8	156	178	8.47E+03	8.47E+03	8.46E+03	263.29	263.29	262.98
CS: 9	136	156	6.76E+03	6.76E+03	6.77E+03	210.13	210.13	210.44
CS: 10	130	136	2.83E+03	2.83E+03	2.83E+03	87.97	87.97	87.97
CS: 11	125	130	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00
CS: 12	114	125	5.85E+03	5.85E+03	5.85E+03	181.85	181.85	181.85
CS: 13	100	114	5.14E+03	5.14E+03	5.14E+03	159.78	159.78	159.78
CS: 14	78	100	5.81E+03	5.81E+03	5.81E+03	180.60	180.60	180.60
$\Sigma =$			9.18E+04	9.18E+04	9.18E+04	2854.21	2854.21	2854.21
PSW: 1	156	191	2.71E+03	2.99E+03	2.71E+03	84.27	92.85	84.27
PSW: 2	136.5	156	5.09E+03	5.09E+03	5.09E+03	158.16	158.16	158.16
PSW: 3	130	136.5	2.20E+03	2.21E+03	2.20E+03	68.42	68.54	68.42
PSW: 4	114	130	5.21E+03	5.20E+03	5.21E+03	161.95	161.64	161.95
PSW: 5	100	114	5.62E+03	5.63E+03	5.62E+03	174.70	175.01	174.70
PSW: 6	78	100	6.48E+03	6.48E+03	6.48E+03	201.43	201.43	201.43
PSW: 7	66	78	1.66E+03	1.65E+03	1.66E+03	51.60	51.29	51.60
$\Sigma =$			2.90E+04	2.92E+04	2.90E+04	900.53	908.92	900.53
SSW: 1	191	200	1.54E+02	1.54E+02	1.54E+02	4.77	4.77	4.77
SSW: 2	156	191	4.76E+03	5.03E+03	4.76E+03	147.91	156.46	147.91
SSW: 3	136.5	156	7.59E+03	7.59E+03	7.59E+03	235.87	236.03	235.87
SSW: 4	130	136.5	3.97E+03	3.97E+03	3.97E+03	123.41	123.41	123.41
SSW: 5	114	130	3.63E+03	3.62E+03	3.63E+03	112.84	112.53	112.84
SSW: 6	100	114	4.38E+03	4.38E+03	4.38E+03	136.15	136.15	136.15
SSW: 7	78	100	2.71E+04	2.71E+04	2.52E+04	842.40	842.71	783.96
$\Sigma =$			5.16E+04	5.19E+04	4.97E+04	1603.36	1612.06	1544.92

Notes

1. $\Delta W_j = \Delta \text{MAX}(F_{ij})$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. ΔMASS_j = The absolute Mass in the j direction between the top and bottom elevations. - (kips * sec^2 / ft)
3. $\text{MAX}(F_{ij})$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

Table C- 68 (CRACKED)
Building Mass and Weight at Each Floor from SASSI Analysis for AB

APR1400-RCBAB-B2-R6(0928)-S10C			BUILDING MASS AND WEIGHT - (g = 32.17 ft/sec ²)					
ID #	BOTTOM EL. (ft)	TOP EL. (ft)	ΔW_x (kips)	ΔW_y (kips)	ΔW_z (kips)	$\Delta MASS_x$	$\Delta MASS_y$	$\Delta MASS_z$
AB-FHA: 1	213.5	226.5	3895.00	3895.00	3895.00	121.08	121.08	121.08
AB-FHA: 2	213	213.5	5834.00	5677.00	5735.00	181.35	176.47	178.27
AB-FHA: 3	195	213	3361.00	3368.00	3370.00	104.48	104.69	104.76
$\Sigma =$			13090.00	12940.00	13000.00	406.90	402.24	404.10
AB-MCR: 1	195	213	6865.00	6865.00	6865.00	213.40	213.40	213.40
$\Sigma =$			6865.00	6865.00	6865.00	213.40	213.40	213.40
AB: 1	174	195	38755.00	38755.00	38745.00	1204.69	1204.69	1204.38
AB: 2	156	174	46890.00	46840.00	46890.00	1457.57	1456.01	1457.57
AB: 3	137.5	156	69900.00	70000.00	68800.00	2172.83	2175.94	2138.64
AB: 4	120	137.5	81000.00	81100.00	80100.00	2517.87	2520.98	2489.90
AB: 5	98.5	120	92100.00	93300.00	91300.00	2862.92	2900.22	2838.05
AB: 6	77	98.5	112800.00	113500.00	120800.00	3506.37	3528.13	3755.05
AB: 7	67	77	73100.00	73000.00	73100.00	2272.30	2269.19	2272.30
AB: 8	55	67	47900.00	47900.00	47800.00	1488.96	1488.96	1485.86
$\Sigma =$			562445.00	564395.00	567535.00	17483.53	17544.14	17641.75

Notes

1. $\Delta W_j = \Delta MAX(F_j/j)$ = The absolute Weight in the j direction between the top and bottom elevations. - (kips)
2. $\Delta MASS_j$ = The absolute Mass in the j direction between the top and bottom elevations. - (kips * sec² / ft)
3. $MAX(F_i/j)$ = The Maximum Value of the Force in the i direction due to a 1g ground motion in the j direction. - (kips)
4. For the calculation of AB:1, ΔW_j includes the differences from shear cuts with ID# 32 and ID# 31 (MCR and FHA structures)
5. The X,Y,Z axes point in the East, North, and vertically upward directions respectively.
6. Moments are calculated about the geometric center of the CS.
7. Moments and Forces due to RCS elements are not included.
8. Hydrodynamic impulsive masses are included.
9. Hydrodynamic convective masses are not included.
10. Accidental Torsion is not included within the calculations.

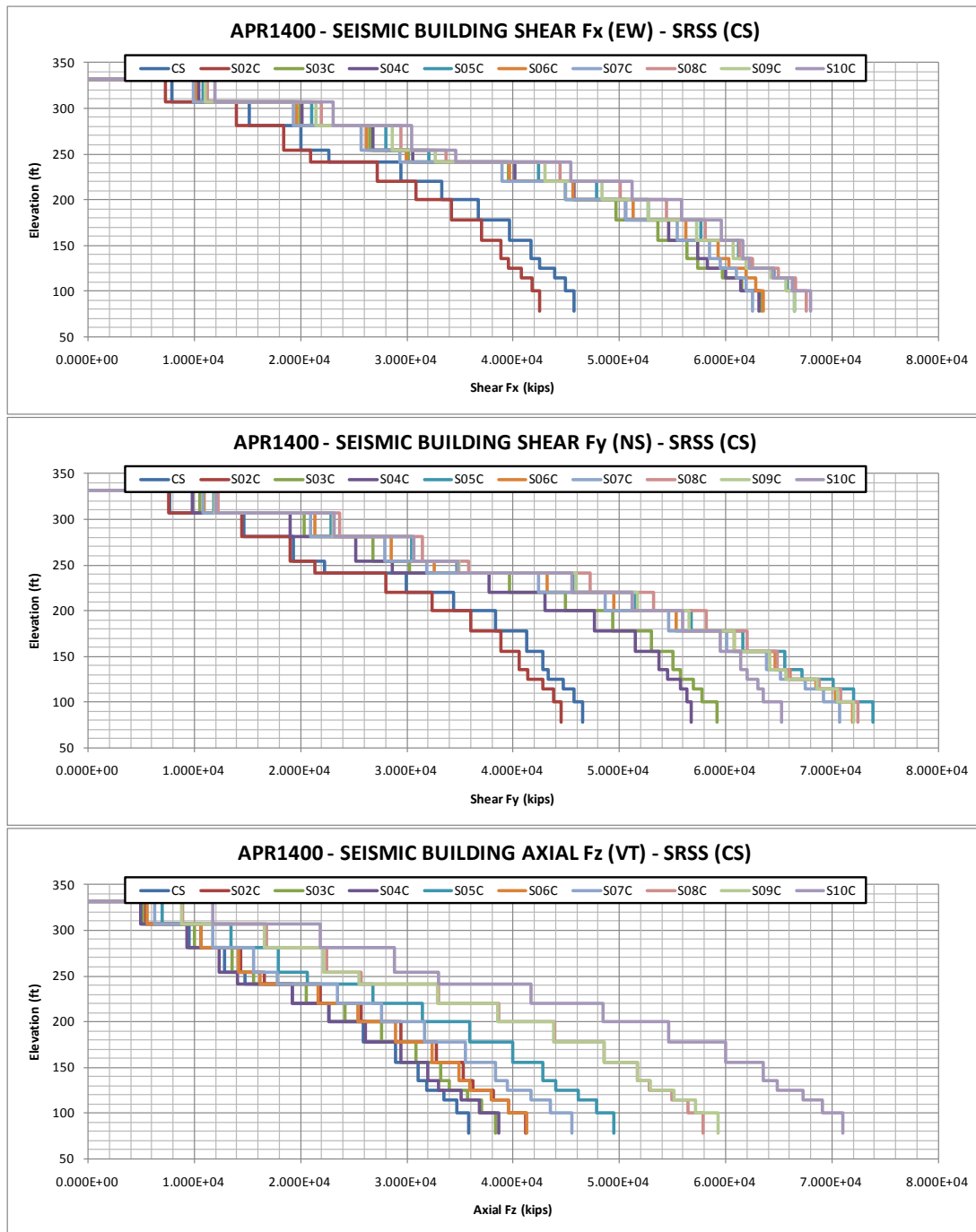


Figure C- 1 Maximum Building Shear Forces in CS – All Soil Profiles with Cracked Concrete Condition

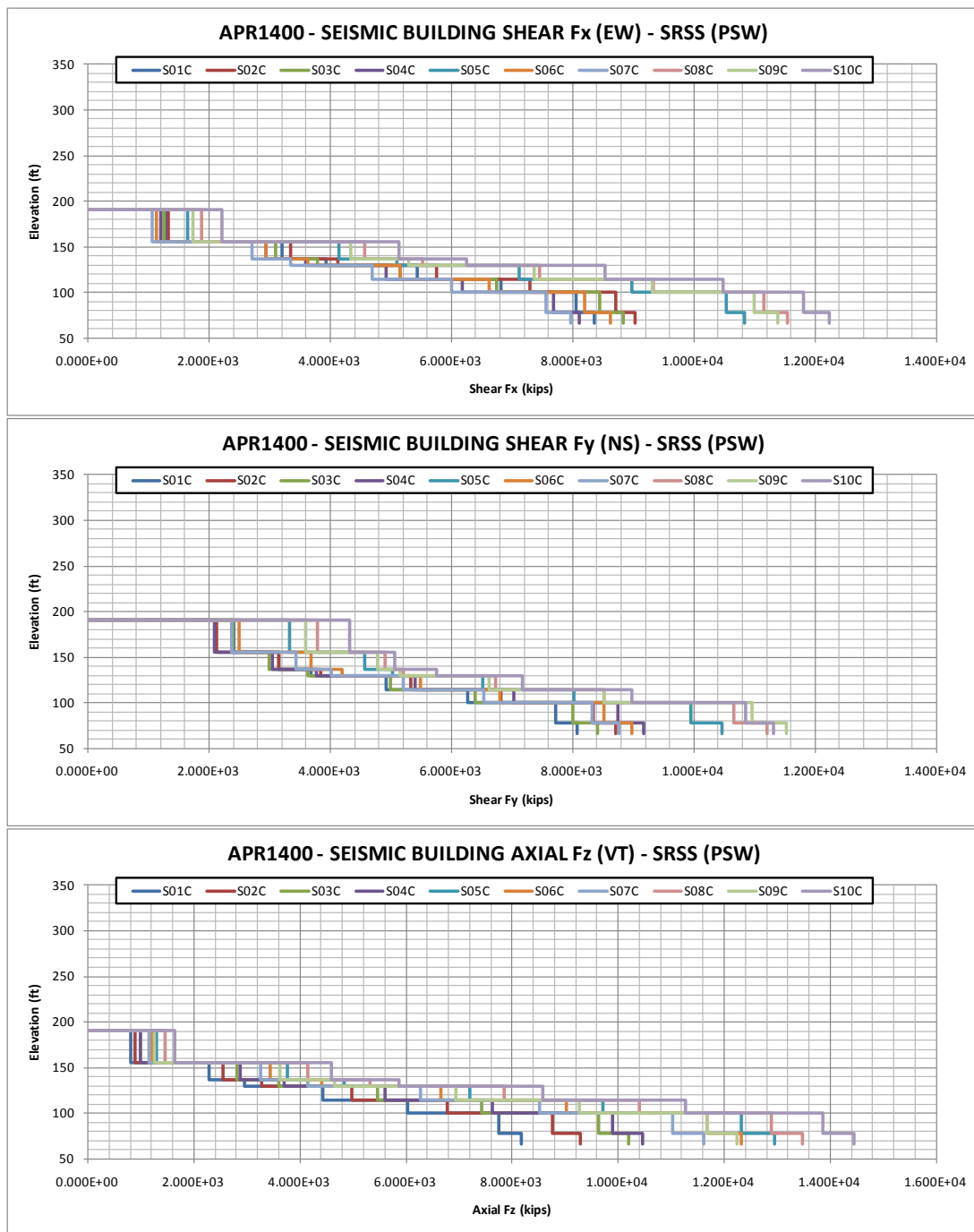


Figure C- 2 Maximum Building Shear Forces in PSW – All Soil Profiles with Cracked Concrete Condition

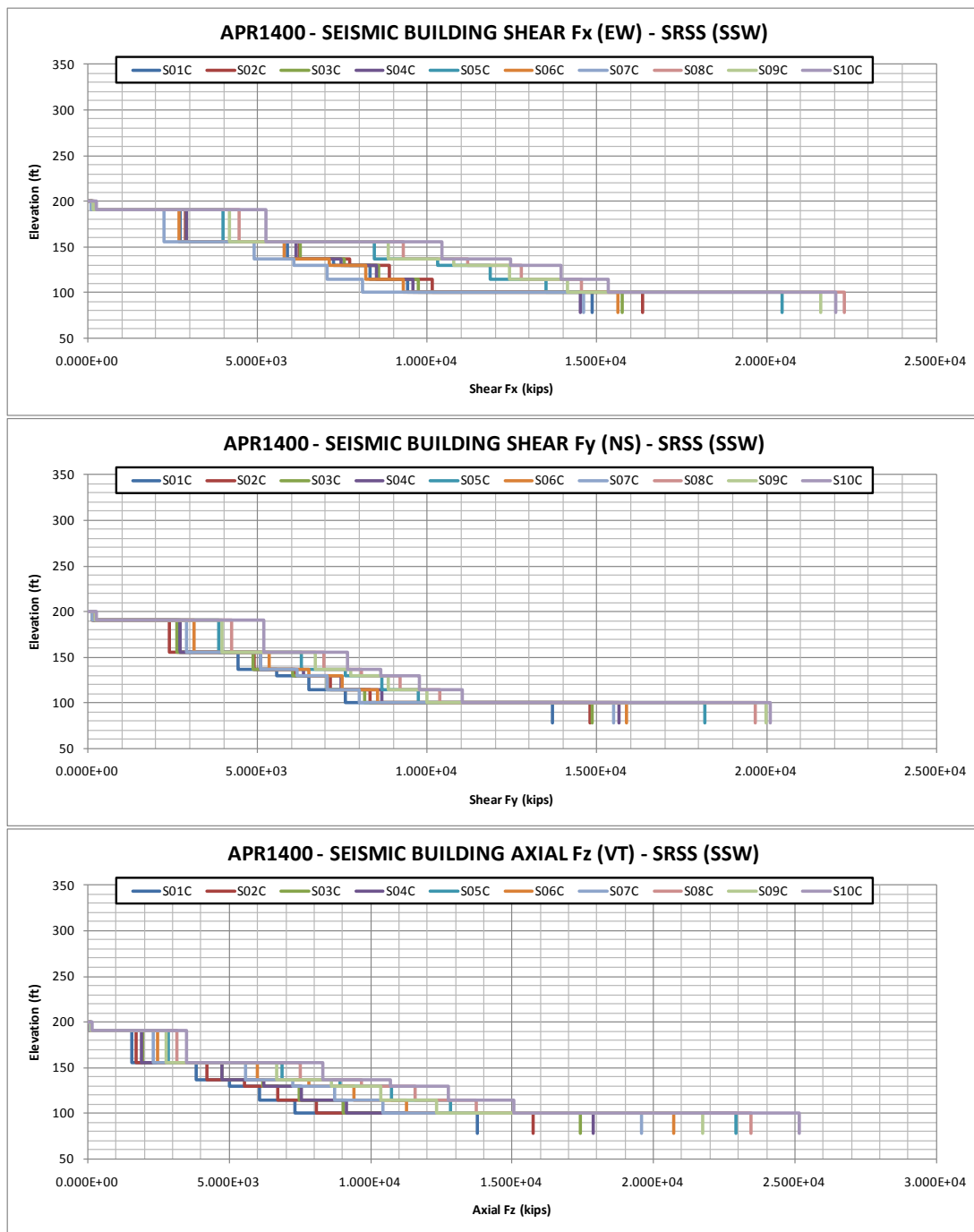


Figure C- 3 Maximum Building Shear Forces in SSW – All Soil Profiles with Cracked Concrete Condition

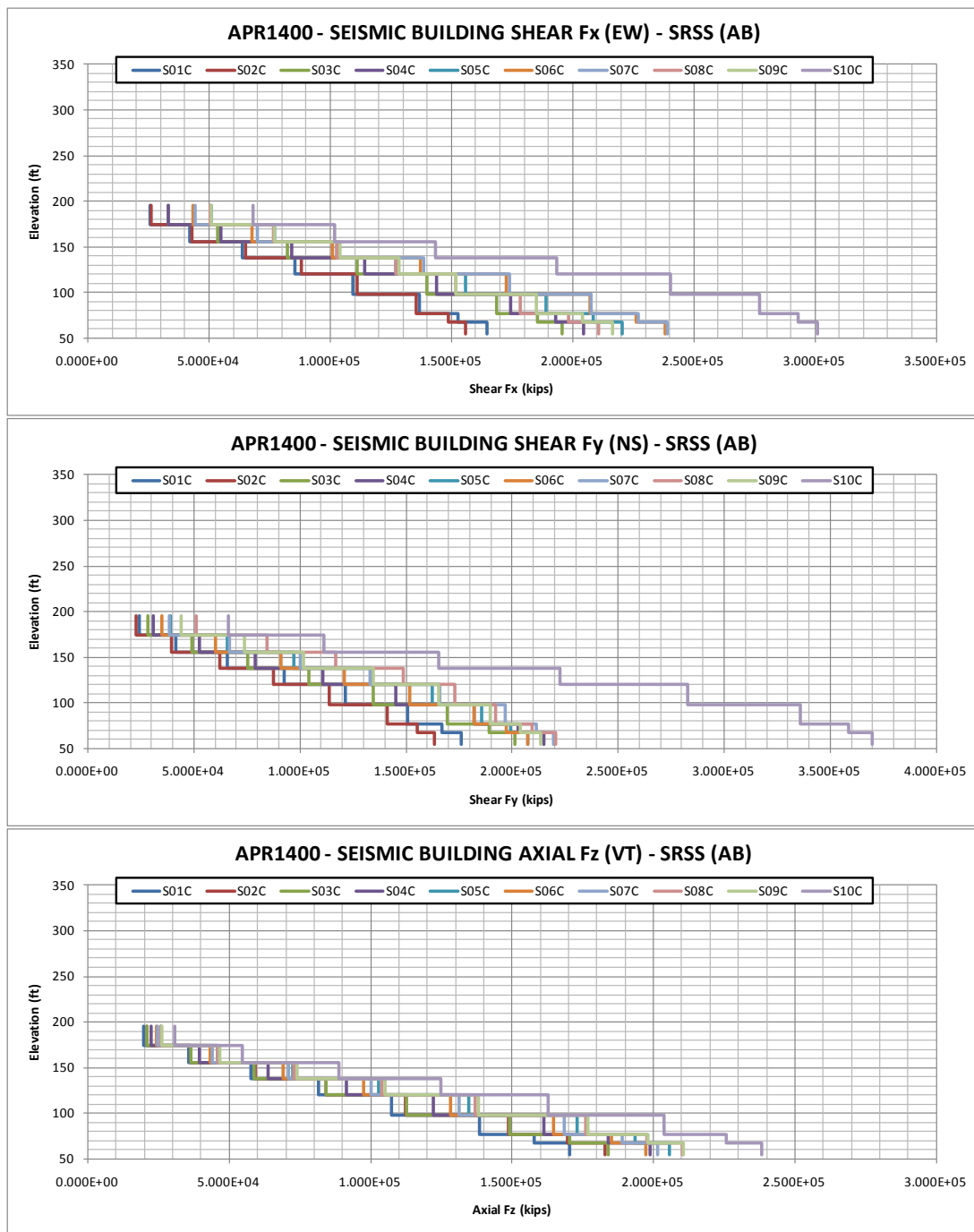


Figure C- 4 Maximum Building Shear Forces in AB – All Soil Profiles with Cracked Concrete Condition

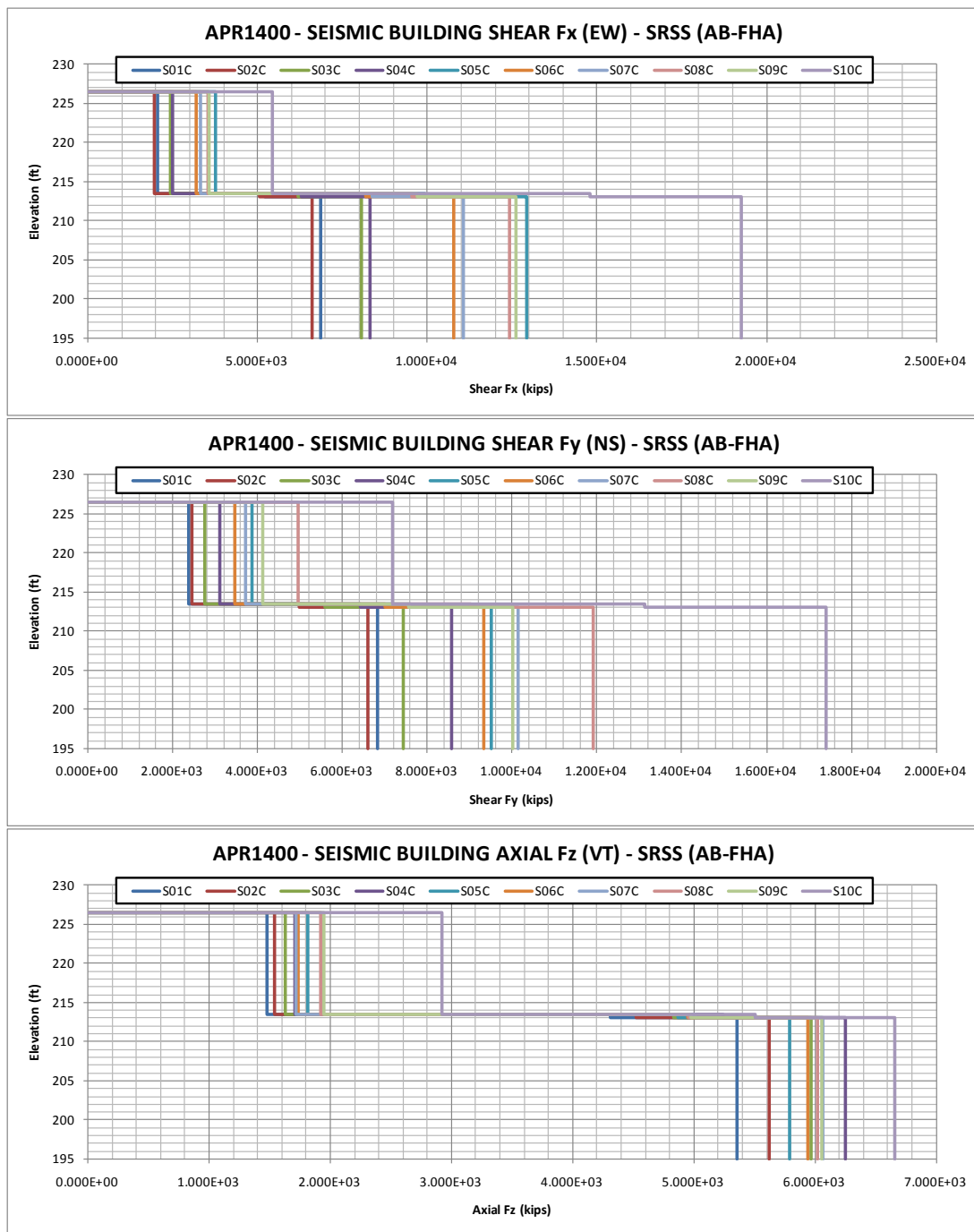


Figure C- 5 Maximum Building Shear Forces in AB FHA Area – All Soil Profiles with Cracked Concrete Condition

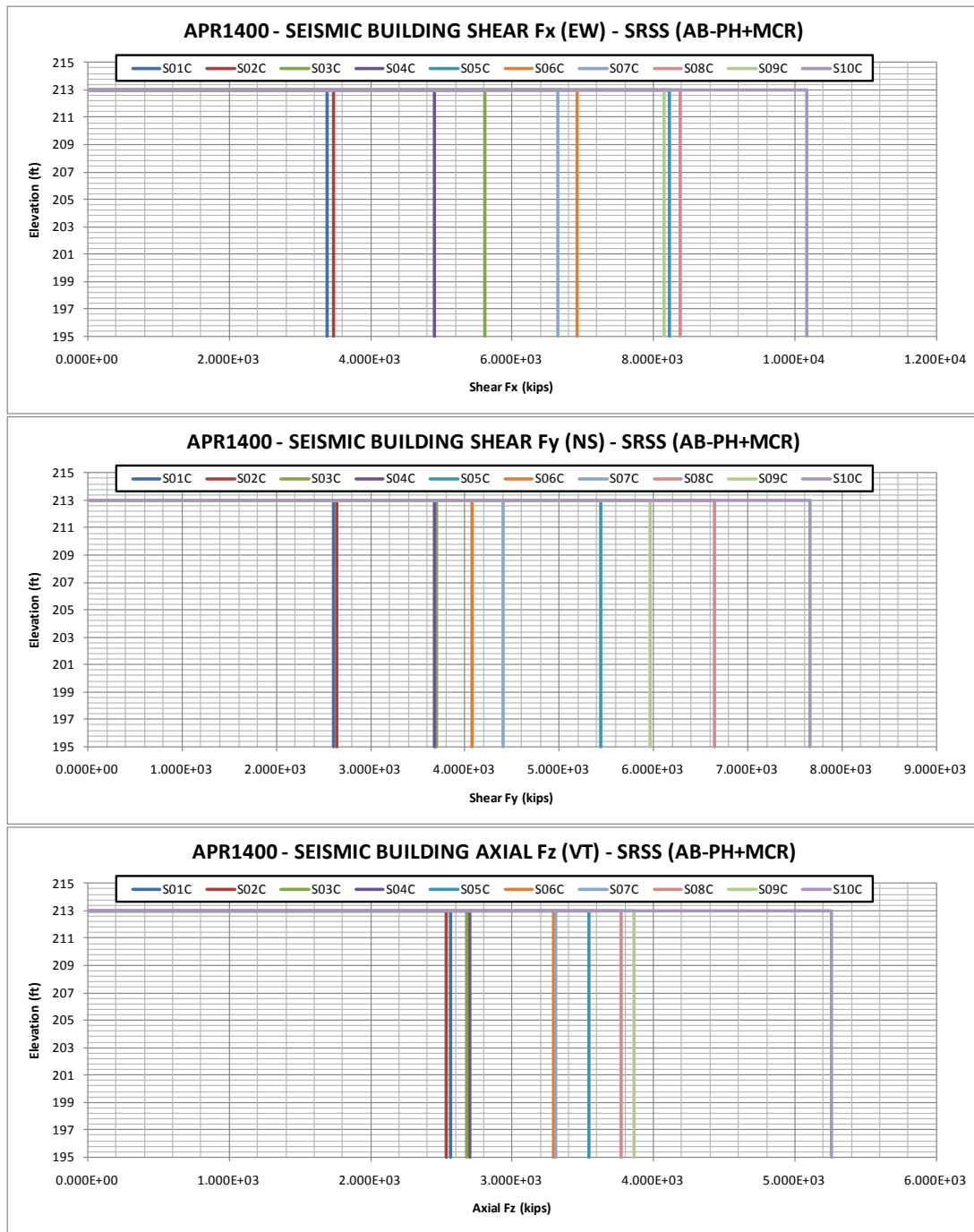


Figure C- 6 Maximum Building Shear Forces in AB PH+MCR Areas – All Soil Profiles with Cracked Concrete Condition

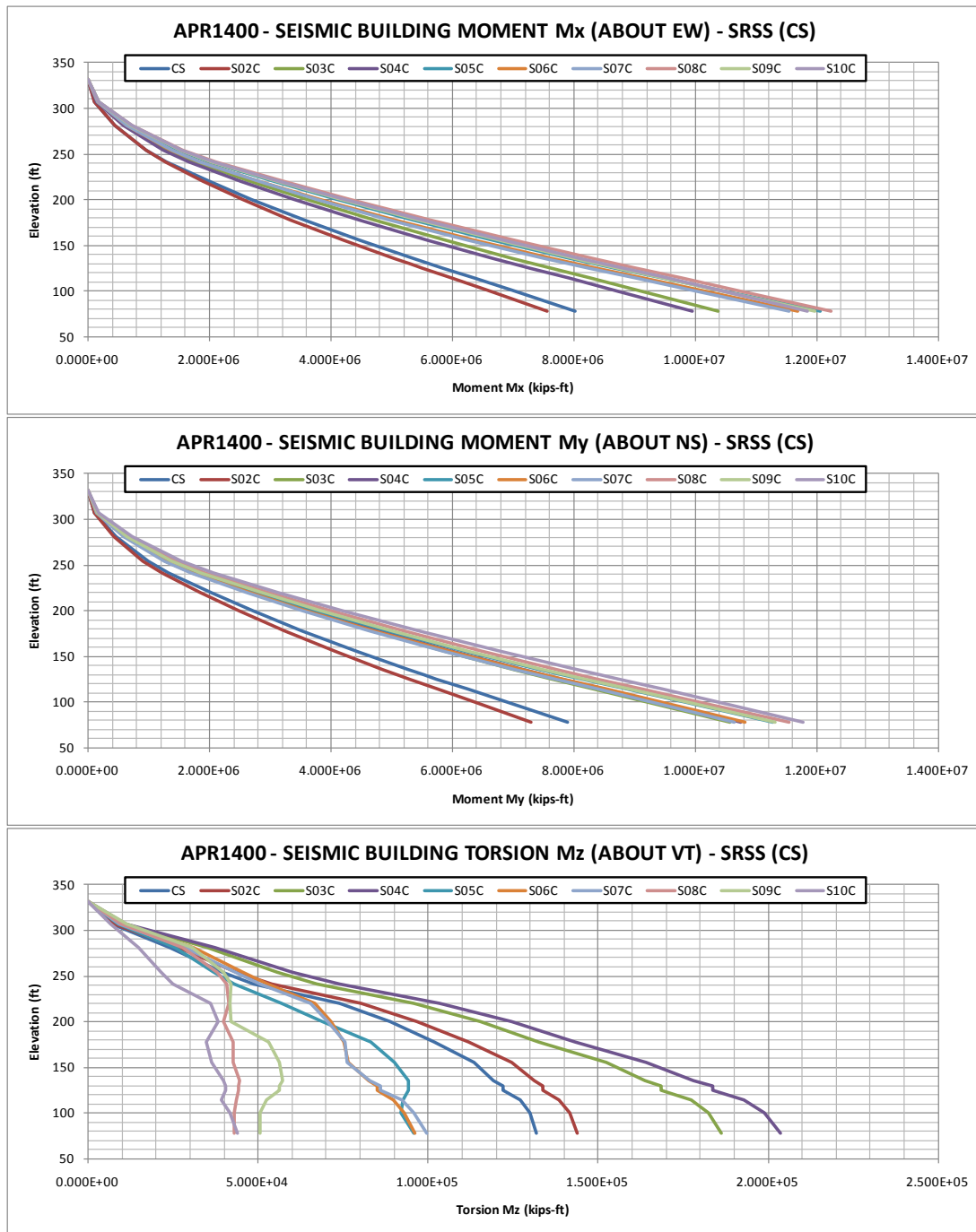


Figure C- 7 Maximum Building Moments in CS – All Soil Profiles with Cracked Concrete Condition

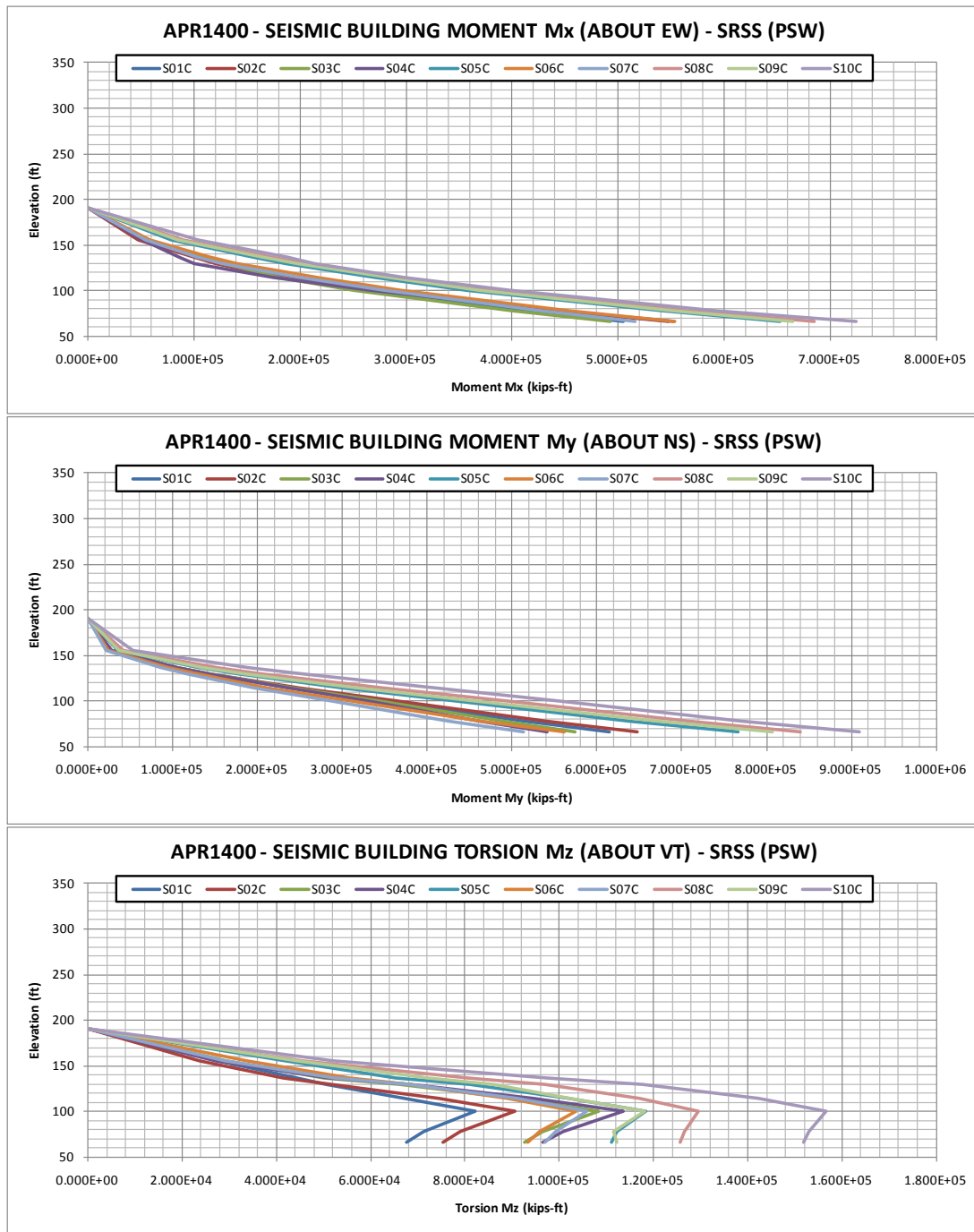


Figure C- 8 Maximum Building Moments in PSW – All Soil Profiles with Cracked Concrete Condition

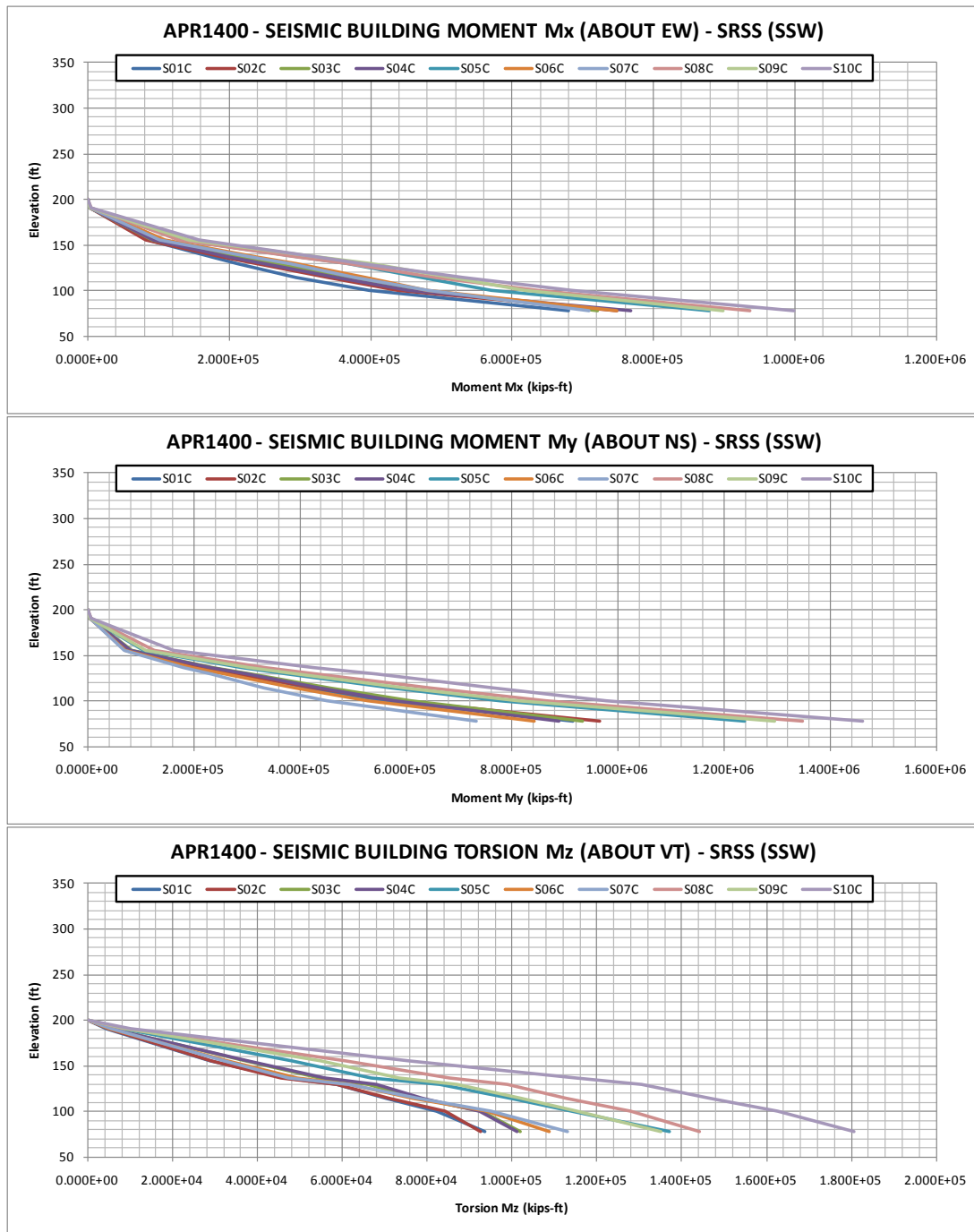


Figure C- 9 Maximum Building Moments in SSW – All Soil Profiles with Cracked Concrete Condition

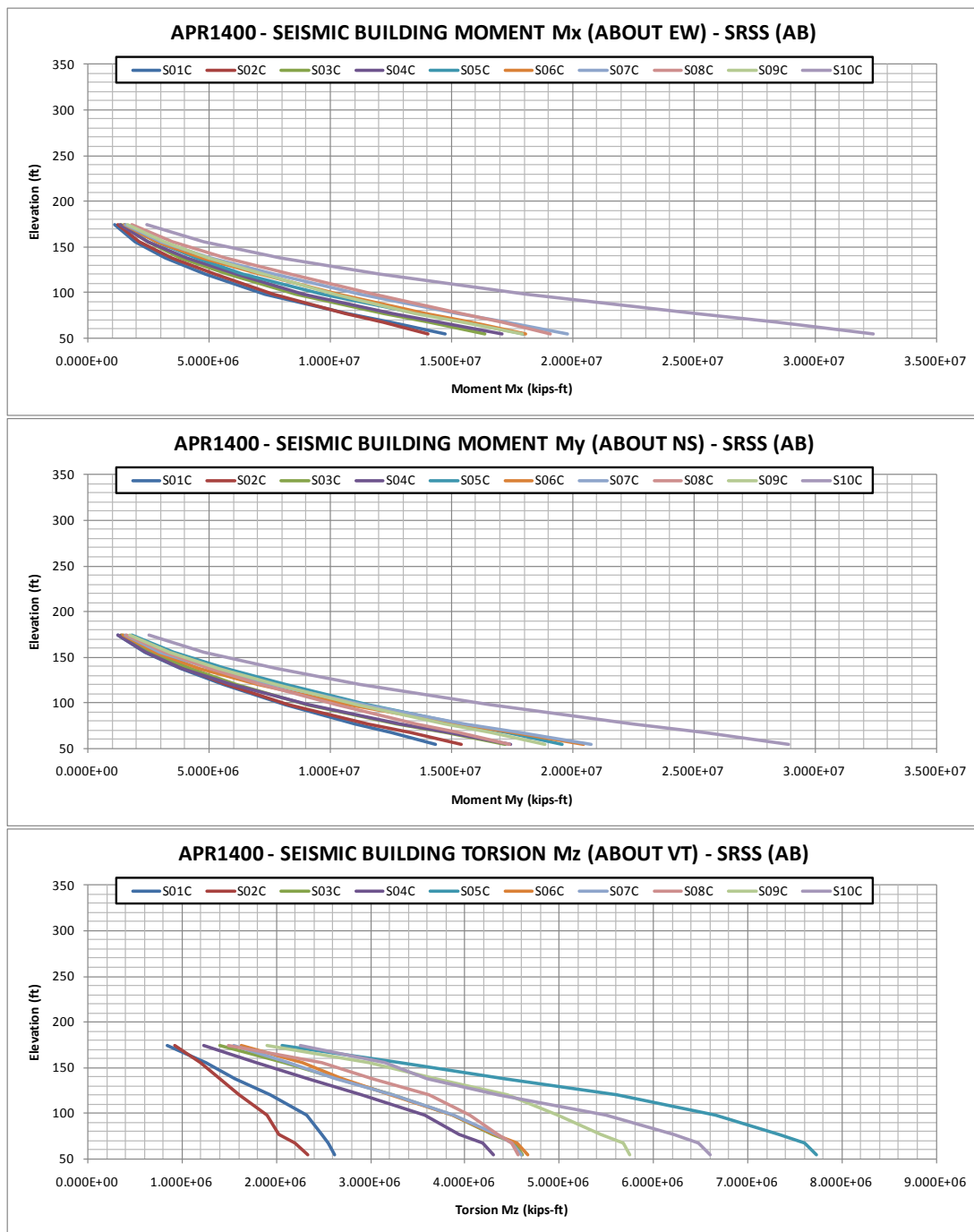


Figure C- 10 Maximum Building Moments in AB – All Soil Profiles with Cracked Concrete Condition

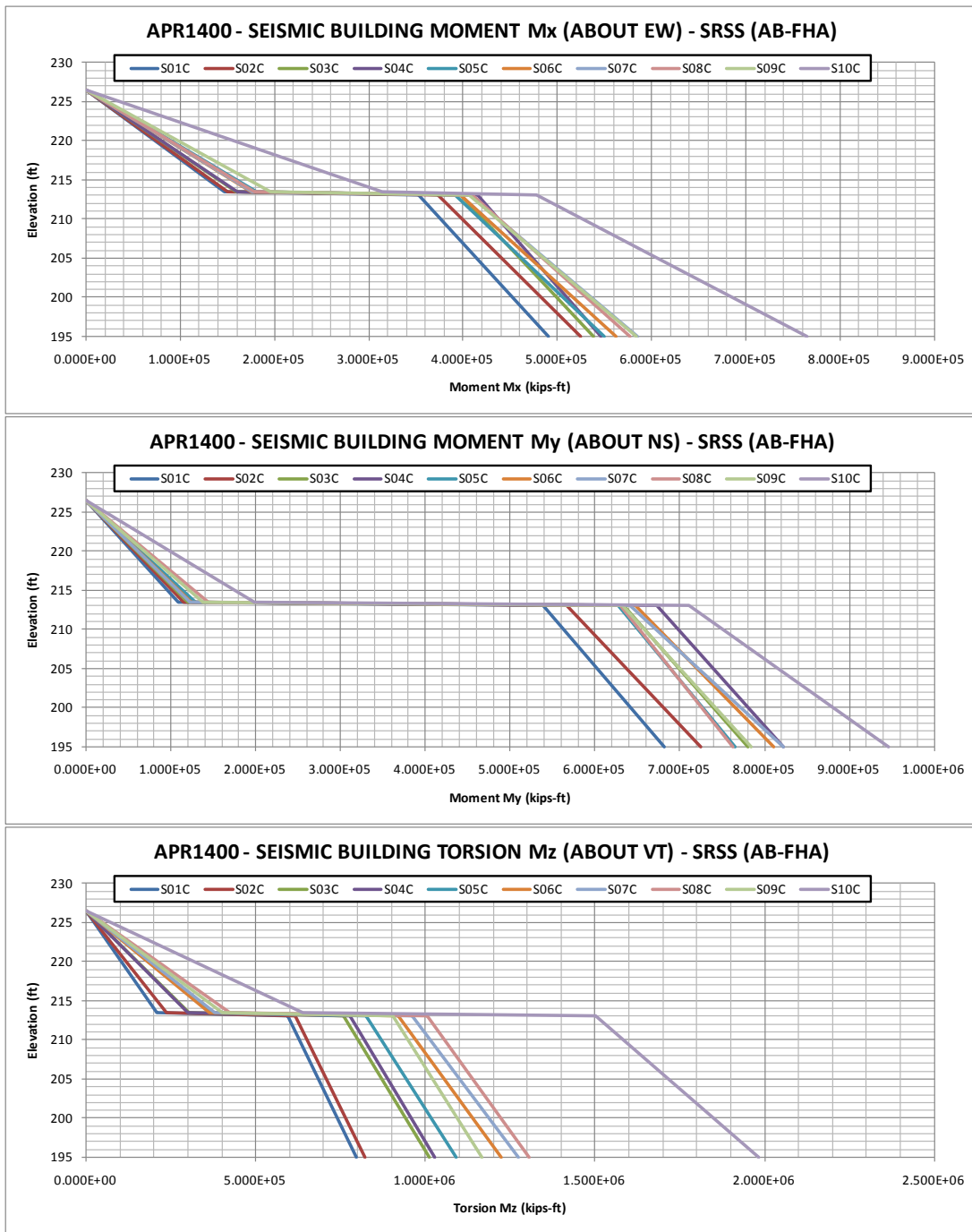


Figure C- 11 Maximum Building Moments in AB FHA Area – All Soil Profiles with Cracked Concrete Condition

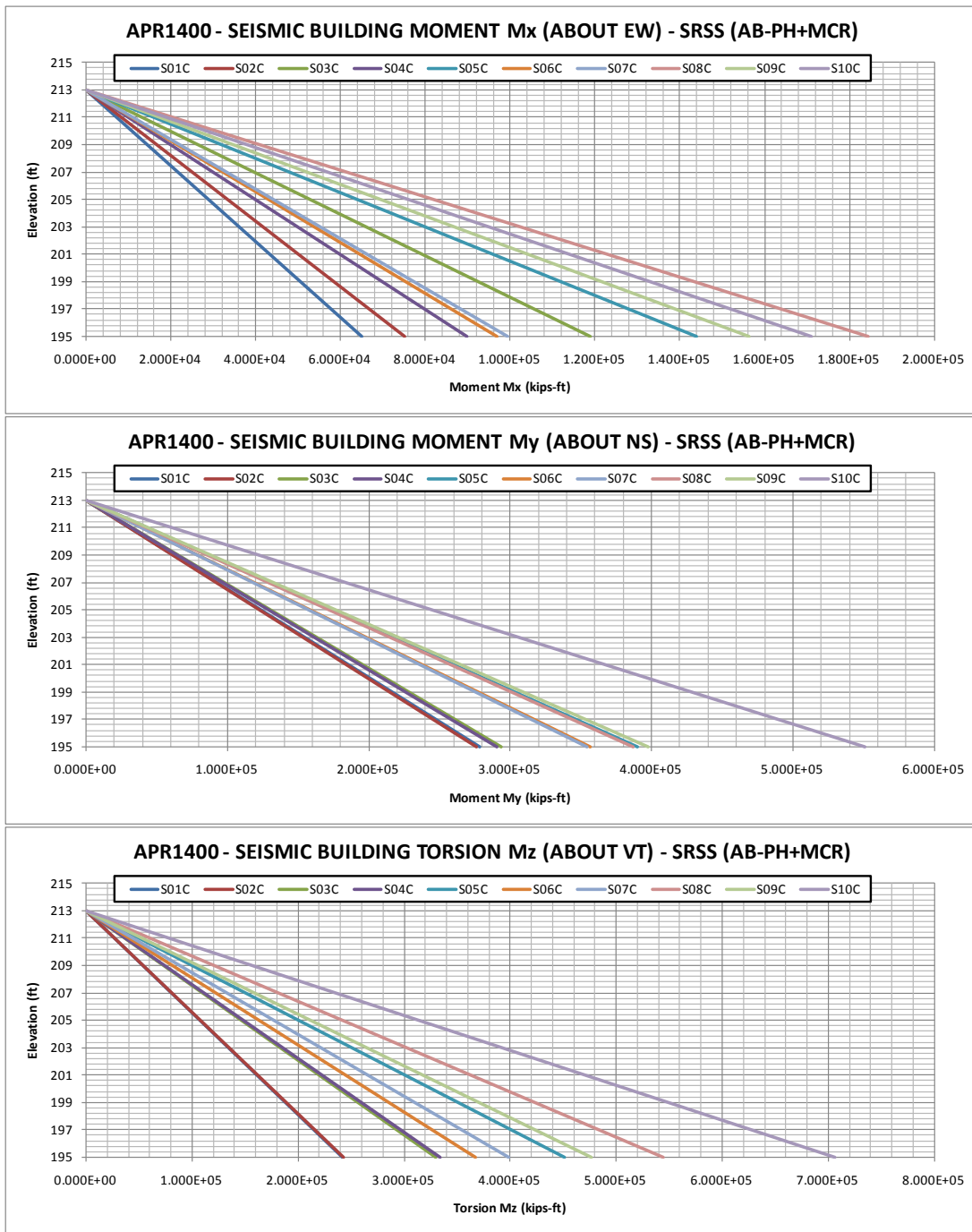


Figure C- 12 Maximum Building Moments in AB PH+MCR Areas – All Soil Profiles with Cracked Concrete Condition