

Continuation of historic catalog of western Puerto Rico:
listing contains events of all depths of magnitude ≥ 4.0
for the area bounded by 15.0-21.0N and 66.5-68.0W

A 5

Src	Date	Origin	Lat	Lon	Dep	mb	#mb	Ms	#Ms
ISC	07-Apr-64	104131	17.78	-67.99	121	4.2	5	0	0
ISC	16-Jun-64	195445	19.56	-66.74	25	4.5	8	0	0
ISC	10-Aug-64	11014	19	-67.28	49	5.3	23	0	0
ISC	06-Sep-65	45942	18.6	-67.6	33	5.7	2	0	0
ISC	15-Nov-65	192205	18.6	-67.5	22	4	4	0	0
ISC	16-Nov-65	33200	18.73	-67.5	100	5.2	0	0	0
ISC	21-Nov-65	230313	19.3	-67.4	21	5.1	3	0	0
ISC	10-Sep-66	215849	19.09	-67.94	53	4.6	6	0	0
ISC	14-Oct-66	14928	19.26	-67.84	38	4.6	13	0	0
ISC	31-Oct-66	51202	19.29	-67.63	58	4.3	8	0	0
ISC	31-Oct-66	64642	19.5	-67.67	33	4	1	0	0
ISC	31-Oct-66	182354	19.38	-67.75	55	4.5	12	0	0
ISC	03-Nov-66	113722	19.13	-67.87	39	5.1	18	0	0
ISC	03-Nov-66	162431	19.17	-67.92	22	5.6	35	0	0
ISC	04-Nov-66	105259	19.25	-67.74	49	4.5	11	0	0
ISC	09-Nov-66	203716	19.36	-67.82	13	4.1	3	0	0
ISC	09-Nov-66	215541	19.2	-67.87	42	4.7	11	0	0
ISC	22-Nov-66	121410	19.18	-67.87	37	4.6	16	0	0
ISC	25-Nov-66	33149	19.64	-67.5	10	4	4	0	0
ISC	02-Jan-67	45613	19.6	-67.6	96	4	2	0	0
ISC	18-Feb-67	125127	19.17	-67.86	57	4.3	10	0	0
ISC	21-Feb-67	41621	19.14	-67.97	44	4.9	18	0	0
ISC	14-Jun-67	220920	19.61	-66.53	0	4.2	4	0	0
ISC	28-Dec-67	14627	19.03	-67.42	49	4.2	4	0	0
ISC	21-Jan-68	121700	18.6	-67	33	4.1	2	0	0
ISC	28-Feb-68	150439	19.38	-67.77	41	4.2	12	0	0
ISC	13-Apr-68	11531	19.03	-66.86	33	5.2	29	0	0
ISC	10-May-68	72118	19.02	-66.85	48	4	4	0	0
ISC	08-Jun-68	72957	18.24	-67.58	154	4.2	7	0	0
ISC	31-Oct-68	143059	17.96	-67.53	45	4.5	10	0	0
ISC	02-Nov-68	124002	19.53	-67.66	27	4	4	0	0
ISC	02-Nov-68	143105	19.39	-67.53	68	4.3	8	0	0
ISC	03-Mar-69	202439	18.9	-67.7	83	4.1	5	0	0
ISC	17-Jun-69	53257	19.1	-66.55	40	4.3	9	0	0
ISC	04-Mar-70	53509	19	-66.8	64	4.1	2	0	0
ISC	09-Nov-70	75910	19.18	-67.43	39	4.3	6	0	0
ISC	15-Nov-70	91903	19.11	-66.8	36	4.7	18	0	0
ISC	27-Jun-71	83118	19.096	-67.97	33.8	5.1	26	0	0
ISC	08-Jul-71	55414	19.207	-67.974	49.6	4.9	19	0	0
ISC	21-Aug-71	35537	18.363	-67.825	88.6	4.3	7	0	0
ISC	26-Aug-71	24749	19.066	-67.726	37.7	4.8	17	0	0
ISC	03-Jan-72	75432	18.841	-67.699	47.6	4	3	0	0
ISC	23-May-72	23516	18.585	-66.903	14	4.7	4	0	0
ISC	16-Mar-74	120202	18.477	-67.03	95	4.3	8	0	0
ISC	13-Apr-74	53806	18.57	-67.573	85.9	4.2	8	0	0
ISC	19-May-74	80343	19.366	-66.581	43.6	4.2	5	0	0
ISC	01-Jun-74	42317	18.19	-67.983	81.5	4.3	8	0	0
ISC	21-Jun-74	61048	18.976	-67.022	43.1	4.7	15	0	0
ISC	04-Nov-74	100701	17.783	-66.636	0	4.2	3	0	0
ISC	13-Jun-76	190627	19.071	-67.914	42.6	5.4	51	0	0
ISC	14-Jun-76	43707	19.246	-67.947	17	4.5	3	0	0
ISC	16-Jun-76	163526	19.022	-67.92	49.4	5	31	0	0
ISC	05-Apr-77	22704	18.747	-67.866	101	4.4	8	0	0
ISC	02-May-77	160059	18.696	-67.388	50	4.8	13	0	0
ISC	02-Jan-78	140353	18.538	-67.748	39	4.9	5	3.8	1
ISC	15-May-78	192515	18.686	-67.421	37.2	4.6	6	0	0
ISC	19-Jul-79	142655	19.038	-67.495	56.2	4.5	4	0	0
ISC	19-Aug-79	4638	19.197	-67.882	2.9	4.6	11	0	0

ISC	02-Oct-79	215511	19.077	-67.787	44.1	4.8	19	0	0
ISC	03-Oct-79	3159	18.998	-67.833	56.9	4.9	50	4.4	1
ISC	28-Feb-80	13906	17.709	-66.671	3.6	4.3	3	0	0
ISC	30-May-80	145918	19.307	-66.901	33	4.5	2	0	0
ISC	15-Aug-80	204318	19.39	-67.33	40	5.3	0	0	0
ISC	09-Jan-81	80004	18.261	-67.946	92	4.4	3	0	0
ISC	18-Jan-82	183221	19.202	-66.82	33	4.4	4	0	0
ISC	21-Mar-82	152140	19.261	-66.502	33	4.6	1	0	0
ISC	09-Mar-83	52133	18.97	-67.581	42.9	4.7	14	0	0
ISC	09-Mar-83	65844	19.007	-67.637	33	4.8	1	0	0
ISC	19-Dec-83	51539	19.027	-67.511	49.5	5	22	4.1	2
ISC	20-Aug-84	91105	19.328	-67.418	33	4.6	1	0	0
ISC	02-Oct-84	151324	17.809	-66.657	17	4.4	5	0	0
ISC	21-Jul-85	131034	19.106	-67.927	21.6	5.6	92	5.4	22
ISC	30-Jul-85	52027	19.334	-67.433	86.4	4.2	2	0	0
ISC	30-Jul-85	52259	19.245	-67.78	58.6	4.4	18	4.1	2
ISC	29-Oct-85	61217	18.915	-67.13	37.2	4.8	2	4	1
ISC	13-Feb-86	111719	19.127	-67.908	35.1	4.8	22	3.7	2
ISC	05-Jun-86	183059	18.051	-66.848	22.5	4.1	2	0	0
ISC	31-Mar-87	130037	19.407	-67.824	33	4.3	2	0	0
ISC	30-May-87	175508	17.961	-67.148	3.3	4.4	13	4	2
ISC	13-May-88	65918	18.401	-67.619	102	4.7	1	0	0
ISC	03-Nov-88	194218	19.093	-67.26	29	5.4	65	5.7	22
ISC	04-Nov-88	23805	19.239	-67.247	35	4.5	10	0	0
ISC	04-Nov-88	24707	19.141	-67.202	39	4.6	4	0	0
ISC	06-Nov-88	233021	19.733	-66.844	33	4.4	1	0	0
GS	28-Aug-90	133531	17.836	-67.893	127	4	2	0	0

The site consists of 2 layers w/ depths, saturated and wet densities:

1	2.0 (ft)	135.0 (pcf)	111.5 (pcf)
2	18.0 (ft)	127.0 (pcf)	127.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	10.0	661.9	1285.9	927.1	1239.1	13.0	0.54	gravelly
2	4.0	274.3	523.9	477.1	477.1	8.0	0.54	gravelly
3	10.0	661.9	1285.9	927.1	1239.1	13.0	0.57	gravelly
4	12.0	791.1	1539.9	1056.3	1493.1	12.0	0.68	gravelly
5	14.0	920.3	1793.9	1185.5	1747.1	2.0	0.53	gravelly
6	18.0	1178.7	2301.9	1443.9	2255.1	5.0	0.68	gravelly

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	14.1	0.56	0.22	0.21	0.95	-0.01(NA)	1.96(NA)	shallow
2	8.1	0.42	0.22	0.12	0.55	-0.01(NA)	2.88(NA)	shallow
3	14.1	0.56	0.22	0.22	0.97	-0.01(NA)	1.96(NA)	shallow
4	12.3	0.52	0.22	0.22	0.98	-0.01(NA)	2.24(NA)	
5	1.9	0.16	0.22	0.02	0.11	-0.01(NA)	8.00(NA)	
6	4.4	0.29	0.22	0.08	0.35	-0.01(NA)	4.36(NA)	

Int. PR-114 Mayaguez with PR-2 80. #3

The site consists of 2 layers w/ depths, saturated and wet densities:

1	20.0 (ft)	116.9 (pcf)	84.8 (pcf)
2	22.0 (ft)	107.0 (pcf)	107.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 2.5 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	20.0	1090.0	2338.0	1165.8	2257.8	13.0	0.91	
2	20.0	1090.0	2338.0	1165.8	2257.8	20.5	0.00	
3	22.0	1179.2	2552.0	1254.9	2471.8	12.0	0.91	
4	22.0	1179.2	2552.0	1254.9	2471.8	19.5	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	12.7	0.53	0.24	0.22	0.94	1.00	2.19(NA)	
2	20.0	0.67	0.24	0.22	0.93	1.00	1.19	
3	11.3	0.50	0.24	0.20	0.85	1.00	2.40(NA)	
4	18.3	0.64	0.24	0.20	0.84	1.00	1.62	

EL MAHI S-5

The site consists of 2 layers w/ depths, saturated and wet densities:

1	1.5 (ft)	161.8 (pcf)	157.8 (pcf)
2	40.0 (ft)	125.4 (pcf)	125.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 4.3 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	15.3	1031.1	1998.3	1289.2	1991.2	9.0	0.00	
2	20.0	1314.6	2562.6	1572.7	2555.5	12.0	0.00	
3	25.0	1692.6	3315.0	1950.7	3307.9	4.0	0.00	
4	30.0	1944.6	3816.6	2202.7	3809.5	4.0	0.00	
5	36.0	2322.6	4569.0	2580.7	4561.9	4.0	0.00	
6	40.0	2574.6	5070.6	2832.7	5063.5	4.0	0.00	
7	40.0	2574.6	5070.6	2832.7	5063.5	4.0	0.10	

count	modified bc-W1,50	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	8.3	0.43	0.22	0.09	0.42	1.00	2.84	
2	10.2	0.47	0.22	0.11	0.52	1.00	2.56	
3	3.1	0.23	0.21	0.03	0.14	1.00	5.56	
4	2.9	0.22	0.21	0.03	0.14	1.00	5.95	
5	2.7	0.21	0.21	0.03	0.13	1.00	6.41	
6	2.6	0.20	0.20	0.03	0.13	1.00	6.66	
7	2.6	0.20	0.20	0.05	0.26	1.00	6.66	

HOSTOS & LLORENS INT. 80.86

The site consists of 2 layers w/ depths, saturated and wet densities:

1	6.0 (ft)	140.6 (pcf)	123.9 (pcf)
2	9.0 (ft)	144.2 (pcf)	144.2 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 6.3 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	469.2	843.6	743.4	743.4	30.0	0.00	
2	9.0	714.6	1276.2	1004.4	1176.0	4.0	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	30.4	0.80	0.21	0.58	2.79	0.02	0.00	shallow
2	3.1	0.23	0.21	0.03	0.16	1.00	5.38	shallow

INDIA 80.1

The site consists of 2 layers w/ depths, saturated and wet densities:

1	13.0 (ft)	144.0 (pcf)	143.0 (pcf)
2	40.0 (ft)	119.0 (pcf)	119.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	12.0	979.2	1728.0	1286.2	1723.0	12.0	0.65	gravelly
2	12.0	979.2	1728.0	1286.2	1723.0	12.0	0.80	gravelly
3	25.0	1740.0	3300.0	2047.0	3295.0	11.0	0.20	
4	25.0	1740.0	3300.0	2047.0	3295.0	11.0	0.35	
5	30.0	2023.0	3895.0	2330.0	3890.0	12.0	0.65	gravelly
6	30.0	2023.0	3895.0	2330.0	3890.0	12.0	0.80	gravelly

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	11.1	0.49	0.20	0.19	0.94	-0.01(NA)	2.41(NA)	
2	11.1	0.49	0.20	0.23	1.13	-0.01(NA)	0.16(NA)	
3	8.2	0.42	0.21	0.15	0.71	1.00	2.86(NA)	
4	8.2	0.42	0.21	0.16	0.79	1.00	2.86(NA)	
5	8.4	0.43	0.21	0.15	0.70	-0.01(NA)	2.82(NA)	
6	8.4	0.43	0.21	0.17	0.84	-0.01(NA)	2.82(NA)	

HOSTOS & LLORENS TORRES INT. B0#19

The site consists of 2 layers w/ depths, saturated and wet densities:

1	8.0 (ft)	122.0 (pcf)	94.5 (pcf)
2	19.0 (ft)	130.1 (pcf)	130.1 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 4.0 ft.

testing ground water table depth = 21.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	10.0	751.8	1126.2	1016.2	1016.2	17.0	0.50	gravelly
2	10.0	751.8	1126.2	1016.2	1016.2	17.0	0.65	gravelly
3	15.0	1090.3	1776.7	1666.7	1666.7	44.0	0.50	gravelly
4	15.0	1090.3	1776.7	1666.7	1666.7	44.0	0.65	gravelly

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	17.7	0.63	0.17	0.26	1.49	-0.01(NA)	0.02(NA)	shallow
2	17.7	0.63	0.17	0.30	1.75	-0.01(NA)	0.01(NA)	shallow
3	36.2	0.86	0.18	1.99(NA)	4.99(NA)	0.00(NA)	0.00(NA)	
4	36.2	0.86	0.18	1.99(NA)	4.99(NA)	0.00(NA)	0.00(NA)	

HOSTOS & LLORENS INT. B04

The site consists of 2 layers w/ depths, saturated and wet densities:

1	6.0 (ft)	140.6 (pcf)	123.9 (pcf)
2	9.0 (ft)	144.2 (pcf)	144.2 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 3.5 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	469.2	843.6	629.2	785.2	33.0	0.00	
2	7.0	551.0	987.8	711.0	929.4	20.0	0.00	
3	8.0	632.8	1132.0	792.8	1073.6	18.0	0.00	
4	9.0	714.6	1276.2	874.6	1217.8	4.3	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	38.5	0.88	0.21	1.99(NA)	4.99(NA)	0.00	0.00	shallow
2	20.2	0.67	0.21	0.23	1.09	0.58	0.21	shallow
3	16.0	0.60	0.21	0.18	0.85	1.00	1.56	shallow
4	3.4	0.24	0.21	0.03	0.17	1.00	4.97	shallow

EL MANI S-1

the site consists of 2 layers w/ depths, saturated and wet densities:

1	5.0 (ft)	153.0 (pcf)	144.0 (pcf)
2	40.0 (ft)	135.0 (pcf)	135.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	5.0	525.6	900.0	792.6	855.0	15.0	0.00	
2	16.0	1251.6	2250.0	1518.6	2205.0	8.0	0.00	
3	26.0	1977.6	3600.0	2244.6	3555.0	4.0	0.00	
4	36.0	2703.6	4950.0	2970.6	4905.0	6.0	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	13.3	0.54	0.20	0.15	0.74	1.00	2.06	shallow
2	6.9	0.39	0.20	0.08	0.38	1.00	3.17	
3	2.9	0.22	0.20	0.03	0.14	1.00	6.00	
4	3.7	0.26	0.19	0.04	0.20	1.00	4.75	

EL MANI S-2

the site consists of 4 layers w/ depths, saturated and wet densities:

1	6.0 (ft)	157.5 (pcf)	151.0 (pcf)
2	16.0 (ft)	121.0 (pcf)	121.0 (pcf)
3	26.0 (ft)	124.7 (pcf)	124.7 (pcf)
4	40.0 (ft)	125.0 (pcf)	125.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	3.5	332.9	551.3	528.5	528.5	11.0	0.00	
2	6.0	570.6	945.0	850.1	912.5	19.0	0.00	
3	12.5	951.5	1731.5	1231.0	1699.0	35.0	0.00	
4	16.0	1156.6	2155.0	1436.1	2122.5	13.0	0.00	
5	26.0	1779.6	3402.0	2059.1	3369.5	4.0	0.00	
6	36.0	2405.6	4652.0	2685.1	4619.5	5.0	0.00	
7	40.0	2656.0	5152.0	2935.5	5119.5	4.0	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	11.1	0.49	0.19	0.12	0.64	1.00	2.39	shallow
2	16.3	0.60	0.19	0.18	0.93	1.00	1.32	shallow
3	33.2	0.83	0.21	1.99(MA)	4.99(MA)	0.00	0.00	
4	11.5	0.50	0.21	0.13	0.61	1.00	2.35	
5	3.0	0.22	0.21	0.03	0.14	1.00	5.73	
6	3.3	0.24	0.20	0.03	0.17	1.00	5.08	
7	2.5	0.20	0.20	0.02	0.12	1.00	6.76	

EL MANI S-3

The site consists of 3 layers w/ depths, saturated and wet densities:

1	3.0 (ft)	160.0 (pcf)	155.0 (pcf)
2	30.0 (ft)	127.0 (pcf)	127.0 (pcf)
3	40.0 (ft)	111.7 (pcf)	111.7 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	486.6	861.0	783.6	846.0	16.0	0.00	
2	15.0	1068.0	2004.0	1365.0	1989.0	31.0	0.00	
3	25.0	1714.0	3274.0	2011.0	3259.0	4.0	0.00	
4	30.0	2037.0	3909.0	2334.0	3894.0	5.0	0.00	
5	35.0	2283.6	4467.5	2580.6	4452.5	4.0	0.00	
6	40.0	2530.1	5026.1	2827.1	5011.1	3.0	0.00	

count	modified bc=M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	14.3	0.56	0.20	0.16	0.77	1.00	1.89	shallow
2	28.0	0.78	0.21	0.36	1.70	0.01	0.01	
3	3.0	0.22	0.21	0.03	0.15	1.00	5.65	
4	3.5	0.25	0.21	0.04	0.17	1.00	4.89	
5	2.7	0.21	0.21	0.03	0.13	1.00	6.41	
6	1.9	0.16	0.20	0.02	0.09	1.00	8.04	

EL MANI S-4

The site consists of 2 layers w/ depths, saturated and wet densities:

1	3.5 (ft)	149.0 (pcf)	137.5 (pcf)
2	40.0 (ft)	120.0 (pcf)	120.8 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	3.5	303.1	521.5	481.7	481.7	8.0	0.00	
2	6.5	475.9	881.5	749.3	842.9	20.0	0.00	
3	8.5	591.1	1121.5	864.5	1052.9	21.0	0.00	
4	16.0	1023.1	2021.5	1296.5	1982.9	17.0	0.00	
5	20.0	1253.5	2501.5	1526.9	2462.9	16.0	0.00	
6	26.0	1599.1	3221.5	1872.5	3182.9	2.0	0.00	
7	34.0	2059.9	4181.5	2333.3	4142.9	5.0	0.00	
8	34.0	2059.9	4181.5	2333.3	4142.9	5.0	0.10	

count	modified bc=M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	8.1	0.42	0.20	0.09	0.45	1.00	2.87	shallow
2	20.2	0.67	0.21	0.23	1.05	0.68	0.37	shallow
3	17.8	0.63	0.22	0.20	0.90	1.00	1.33	shallow
4	15.7	0.59	0.22	0.17	0.77	1.00	1.71	
5	13.8	0.55	0.22	0.15	0.68	1.00	2.01	
6	1.6	0.14	0.22	0.01	0.06	1.00	8.82	
7	3.5	0.25	0.22	0.04	0.17	1.00	4.89	
8	3.5	0.25	0.22	0.06	0.29	1.00	4.89	

EL MANI S-3

The site consists of 3 layers w/ depths, saturated and wet densities:

1	3.0 (ft)	160.0 (pcf)	155.0 (pcf)
2	30.0 (ft)	127.0 (pcf)	127.0 (pcf)
3	40.0 (ft)	111.7 (pcf)	111.7 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	486.6	861.0	783.6	846.0	16.0	0.00	
2	15.0	1068.0	2004.0	1365.0	1989.0	31.0	0.00	
3	25.0	1714.0	3274.0	2011.0	3259.0	4.0	0.00	
4	30.0	2037.0	3909.0	2334.0	3894.0	5.0	0.00	
5	35.0	2283.6	4467.5	2580.6	4452.5	4.0	0.00	
6	40.0	2530.1	5026.1	2827.1	5011.1	3.0	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	14.3	0.56	0.20	0.16	0.77	1.00	1.89	shallow
2	28.0	0.78	0.21	0.36	1.70	0.01	0.01	
3	3.0	0.22	0.21	0.03	0.15	1.00	5.65	
4	3.5	0.25	0.21	0.04	0.17	1.00	4.89	
5	2.7	0.21	0.21	0.03	0.13	1.00	6.41	
6	1.9	0.16	0.20	0.02	0.09	1.00	8.04	

EL MANI S-4

The site consists of 2 layers w/ depths, saturated and wet densities:

1	3.5 (ft)	149.0 (pcf)	137.5 (pcf)
2	40.0 (ft)	120.0 (pcf)	120.3 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	3.5	303.1	521.5	481.7	481.7	8.0	0.00	
2	6.5	475.9	881.5	749.3	842.9	20.0	0.00	
3	8.5	591.1	1121.5	864.5	1082.9	21.0	0.00	
4	16.0	1023.1	2021.5	1296.5	1982.9	17.0	0.00	
5	20.0	1253.5	2501.5	1526.9	2462.9	16.0	0.00	
6	26.0	1599.1	3221.5	1872.5	3182.9	2.0	0.00	
7	34.0	2059.9	4181.5	2333.3	4142.9	5.0	0.00	
8	34.0	2059.9	4181.5	2333.3	4142.9	5.0	0.10	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	8.1	0.42	0.20	0.09	0.45	1.00	2.87	shallow
2	20.2	0.67	0.21	0.23	1.05	0.68	0.37	shallow
3	17.8	0.63	0.22	0.20	0.90	1.00	1.33	shallow
4	15.7	0.59	0.22	0.17	0.77	1.00	1.71	
5	13.8	0.55	0.22	0.15	0.68	1.00	2.01	
6	1.6	0.14	0.22	0.01	0.06	1.00	8.82	
7	3.5	0.25	0.22	0.04	0.17	1.00	4.89	
8	3.5	0.25	0.22	0.06	0.29	1.00	4.89	

EL MANI S-5

The site consists of 2 layers w/ depths, saturated and wet densities:

1	1.5 (ft)	161.8 (pcf)	157.8 (pcf)
2	40.0 (ft)	125.4 (pcf)	125.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 4.3 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	15.5	1031.1	1998.3	1289.2	1991.2	9.0	0.00	
2	20.0	1314.6	2562.6	1572.7	2555.5	12.0	0.00	
3	26.0	1692.6	3315.0	1950.7	3307.9	4.0	0.00	
4	30.0	1944.6	3816.6	2202.7	3809.5	4.0	0.00	
5	36.0	2322.6	4569.0	2580.7	4561.9	4.0	0.00	
6	40.0	2574.6	5070.6	2832.7	5063.5	4.0	0.00	
7	40.0	2574.6	5070.6	2832.7	5063.5	4.0	0.10	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	8.3	0.43	0.22	0.09	0.42	1.00	2.84	
2	10.2	0.47	0.22	0.11	0.52	1.00	2.56	
3	3.1	0.23	0.21	0.03	0.14	1.00	5.56	
4	2.9	0.22	0.21	0.03	0.14	1.00	5.95	
5	2.7	0.21	0.21	0.03	0.13	1.00	6.41	
6	2.6	0.20	0.20	0.03	0.13	1.00	6.66	
7	2.6	0.20	0.20	0.05	0.26	1.00	6.66	

HOSTOS & LLORENS INT. 80.96

The site consists of 2 layers w/ depths, saturated and wet densities:

1	6.0 (ft)	140.6 (pcf)	123.9 (pcf)
2	9.0 (ft)	144.2 (pcf)	144.2 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
correction factor (to M=7.5) = 1.00
design ground water table depth = 0.0 ft.
testing ground water table depth = 6.3 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	469.2	843.6	743.4	743.4	30.0	0.00	
2	9.0	714.6	1276.2	1004.4	1176.0	4.0	0.00	

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	30.4	0.80	0.21	0.58	2.79	0.02	0.00	shallow
2	3.1	0.23	0.21	0.03	0.16	1.00	5.38	shallow

INDIA 80.1

The site consists of 2 layers w/ depths, saturated and wet densities:

1	13.0 (ft)	144.0 (pcf)	143.0 (pcf)
2	40.0 (ft)	119.0 (pcf)	119.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
correction factor (to M=7.5) = 1.00
design ground water table depth = 0.0 ft.
testing ground water table depth = 5.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	12.0	979.2	1728.0	1286.2	1723.0	12.0	0.65	gravelly
2	12.0	979.2	1728.0	1286.2	1723.0	12.0	0.80	gravelly
3	25.0	1740.0	3300.0	2047.0	3295.0	11.0	0.20	
4	25.0	1740.0	3300.0	2047.0	3295.0	11.0	0.35	
5	30.0	2023.0	3895.0	2330.0	3890.0	12.0	0.65	gravelly
6	30.0	2023.0	3895.0	2330.0	3890.0	12.0	0.80	gravelly

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	11.1	0.49	0.20	0.19	0.94	-0.01(NA)	2.41(NA)	
2	11.1	0.49	0.20	0.23	1.13	-0.01(NA)	0.16(NA)	
3	8.2	0.42	0.21	0.15	0.71	1.00	2.86(NA)	
4	8.2	0.42	0.21	0.16	0.79	1.00	2.86(NA)	
5	8.4	0.43	0.21	0.15	0.70	-0.01(NA)	2.82(NA)	
6	8.4	0.43	0.21	0.17	0.84	-0.01(NA)	2.82(NA)	

HOSTOS & LLORENS TORRES INT. B0#19

The site consists of 2 layers w/ depths, saturated and wet densities:

1	8.0 (ft)	122.0 (pcf)	94.5 (pcf)
2	19.0 (ft)	130.1 (pcf)	130.1 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 4.0 ft.
 testing ground water table depth = 21.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	10.0	751.8	1126.2	1016.2	1016.2	17.0	0.50	gravelly
2	10.0	751.8	1126.2	1016.2	1016.2	17.0	0.65	gravelly
3	15.0	1090.3	1776.7	1666.7	1666.7	44.0	0.50	gravelly
4	15.0	1090.3	1776.7	1666.7	1666.7	44.0	0.65	gravelly

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	17.7	0.63	0.17	0.26	1.49	-0.01(NA)	0.02(NA)	shallow
2	17.7	0.63	0.17	0.30	1.75	-0.01(NA)	0.01(NA)	shallow
3	36.2	0.86	0.18	1.99(NA)	4.99(NA)	0.00(NA)	0.00(NA)	
4	36.2	0.86	0.18	1.99(NA)	4.99(NA)	0.00(NA)	0.00(NA)	

HOSTOS & LLORENS INT. B04

The site consists of 2 layers w/ depths, saturated and wet densities:

1	6.0 (ft)	140.6 (pcf)	123.9 (pcf)
2	9.0 (ft)	144.2 (pcf)	144.2 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 3.5 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	6.0	469.2	843.6	629.2	785.2	38.0	0.00	
2	7.0	551.0	987.8	711.0	929.4	20.0	0.00	
3	8.0	632.8	1132.0	792.8	1073.6	18.0	0.00	
4	9.0	714.6	1276.2	874.6	1217.8	4.0	0.00	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	38.5	0.88	0.21	1.99(NA)	4.99(NA)	0.00	0.00	shallow
2	20.2	0.67	0.21	0.23	1.09	0.58	0.21	shallow
3	16.0	0.60	0.21	0.18	0.85	1.00	1.56	shallow
4	3.4	0.24	0.21	0.03	0.17	1.00	4.97	shallow

Capacete's Data. 3o.4 (Pueblo Nuevo)

The site consists of 2 layers w/ depths, saturated and wet densities:

1	12.0 (ft)	106.9 (pcf)	71.3 (pcf)
2	52.0 (ft)	112.4 (pcf)	112.4 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 3.5 ft.
 testing ground water table depth = 10.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	5.0	316.3	409.9	356.5	356.5	17.0	0.20	silty sand
2	5.0	316.3	409.9	356.5	356.5	17.0	0.35	"
3	12.0	627.9	1158.3	802.0	926.8	8.0	0.20	silty clay & clayey silt
4	12.0	627.9	1158.3	802.0	926.8	8.0	0.35	"
5	30.0	1527.9	3181.5	1702.0	2950.0	0.0	1.00	"
6	30.0	1527.9	3181.5	1702.0	2950.0	0.0	1.00	"
7	30.0	1527.9	3181.5	1702.0	2950.0	7.5	0.00	"
8	30.0	1527.9	3181.5	1702.0	2950.0	7.5	1.00	"

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	17.2	0.62	0.15	0.23	1.84	0.00	3.00(NA)	shallow
2	17.2	0.62	0.15	0.30	1.98	0.00	0.00(NA)	shallow
3	9.4	0.45	0.21	0.16	0.77	1.00	2.67(NA)	
4	9.4	0.45	0.21	0.18	0.85	1.00	2.67(NA)	
5	0.0	0.00	0.23	0.07	0.32	1.00	10.00(NA)	
6	0.0	0.00	0.23	0.07	0.32	1.00	10.00(NA)	
7	6.1	0.36	0.23	0.07	0.30	1.00	3.52	
8	6.1	0.36	0.23	0.14	0.61	1.00	3.52(NA)	

Capacete's Data. 3o.5 (WORA)

The site consists of 2 layers w/ depths, saturated and wet densities:

1	8.0 (ft)	112.5 (pcf)	81.5 (pcf)
2	44.0 (ft)	111.5 (pcf)	111.5 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 2.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	11.0	548.1	1234.5	610.9	1172.5	0.0	1.00	silt
2	11.0	548.1	1234.5	610.9	1172.5	7.5	0.00	"
3	15.0	744.5	1680.5	807.3	1618.5	7.5	0.00	"
4	20.0	990.0	2238.0	1052.8	2176.0	7.5	0.00	"
5	25.0	1235.5	2795.5	1298.3	2733.5	7.5	0.00	"
6	33.0	1628.3	3687.5	1691.1	3625.5	7.5	0.00	"
7	40.0	1972.0	4468.0	2034.8	4406.0	7.5	0.00	"

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	0.0	0.00	0.26	0.07	0.28	1.00	10.00(NA)	
2	10.1	0.47	0.26	0.11	0.44	1.00	2.58	
3	8.8	0.44	0.26	0.10	0.39	1.00	2.78	
4	7.7	0.41	0.25	0.09	0.34	1.00	2.94	
5	6.9	0.39	0.25	0.08	0.31	1.00	3.17	
6	6.1	0.36	0.24	0.07	0.28	1.00	3.31	
7	5.6	0.34	0.23	0.06	0.27	1.00	3.73	

PR-102, Puente prop. Rio Guanajibo Mayaguez. So.1

The site consists of 2 layers w/ depths, saturated and wet densities:

1	8.0 (ft)	133.8 (pcf)	113.4 (pcf)
2	25.0 (ft)	118.7 (pcf)	118.7 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 8.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	9.0	627.4	1189.0	963.3	1025.7	5.0	0.10	
2	9.0	627.4	1189.0	963.3	1025.7	5.0	0.20	
3	9.0	627.4	1189.0	963.3	1025.7	5.0	0.22	
4	12.0	796.3	1545.1	1132.2	1381.8	7.0	0.70	
5	15.0	965.2	1901.2	1301.1	1737.9	3.0	0.13	
6	16.0	1021.5	2019.9	1357.4	1856.6	8.0	0.14	
7	18.0	1134.1	2257.3	1470.0	2094.0	4.0	0.27	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	4.0	0.27	0.22	0.07	0.32	1.00	4.60	shallow
2	4.0	0.27	0.22	0.10	0.47	1.00	4.60(NA)	shallow
3	4.0	0.27	0.22	0.11	0.49	1.00	4.60(NA)	shallow
4	6.9	0.39	0.22	0.15	0.66	1.00	3.15(NA)	
5	2.8	0.21	0.22	0.07	0.30	1.00	6.21	
6	7.2	0.40	0.22	0.12	0.54	1.00	3.02	
7	3.5	0.25	0.22	0.11	0.49	1.00	4.89(NA)	

PR-102 Pte. prop. Rio Guanajibo, Mayaguez So.#2

The site consists of 2 layers w/ depths, saturated and wet densities:

1	9.0 (ft)	129.1 (pcf)	105.9 (pcf)
2	25.0 (ft)	121.9 (pcf)	121.9 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 0.0 ft.
 testing ground water table depth = 8.0 ft.
 SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	10.0	659.8	1283.8	973.8	1098.6	4.0	0.35	gravelly
2	10.0	659.8	1283.8	973.8	1098.6	4.0	0.50	gravelly
3	15.0	957.3	1893.3	1271.3	1708.1	2.0	0.35	gravelly
4	15.0	957.3	1893.3	1271.3	1708.1	2.0	0.50	gravelly
5	19.0	1195.3	2380.9	1509.3	2195.7	1.0	0.35	gravelly
6	19.0	1195.3	2380.9	1509.3	2195.7	1.0	0.50	gravelly
7	20.0	1254.8	2502.8	1568.8	2317.6	1.0	0.35	gravelly
8	20.0	1254.8	2502.8	1568.8	2317.6	1.0	0.50	gravelly

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	4.2	0.28	0.22	0.06	0.25	-0.01(NA)	4.46(NA)	shallow
2	4.2	0.28	0.22	0.06	0.26	-0.01(NA)	4.46(NA)	shallow
3	1.9	0.16	0.22	0.02	0.10	-0.01(NA)	8.16(NA)	
4	1.9	0.16	0.22	0.02	0.10	-0.01(NA)	8.16(NA)	
5	0.9	0.09	0.22	0.01	0.03	-0.01(NA)	10.00(NA)	
6	0.9	0.09	0.22	0.01	0.03	-0.01(NA)	10.00(NA)	
7	0.8	0.08	0.22	0.01	0.03	-0.01(NA)	10.00(NA)	
8	0.8	0.08	0.22	0.01	0.03	-0.01(NA)	10.00(NA)	

PRETREATMENT PLANT AT INDIA 80.4

The site consists of 2 layers w/ depths, saturated and wet densities:

1	18.5 (ft)	123.0 (pcf)	94.2 (pcf)
2	30.0 (ft)	110.7 (pcf)	110.7 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 2.0 ft.
 testing ground water table depth = 20.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	24.0	1453.9	2826.7	2102.9	2352.5	7.0	0.20	
2	24.0	1453.9	2826.7	2102.9	2352.5	7.0	0.35	
3	26.0	1550.5	3048.1	2199.5	2573.9	7.0	0.20	
4	26.0	1550.5	3048.1	2199.5	2573.9	7.0	0.35	
5	30.0	1743.8	3491.0	2392.8	3016.8	7.0	0.20	
6	30.0	1743.8	3491.0	2392.8	3016.8	7.0	0.35	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	5.2	0.32	0.21	0.12	0.54	1.00	3.94(NA)	
2	5.2	0.32	0.21	0.13	0.60	1.00	3.94(NA)	
3	5.0	0.32	0.22	0.11	0.53	1.00	3.99(NA)	
4	5.0	0.32	0.22	0.13	0.59	1.00	3.99(NA)	
5	4.8	0.31	0.22	0.11	0.52	1.00	4.10(NA)	
6	4.3	0.31	0.22	0.13	0.58	1.00	4.10(NA)	

PRETREATMENT PLANT AT INDIA 80.5

The site consists of 2 layers w/ depths, saturated and wet densities:

1	24.0 (ft)	146.6 (pcf)	101.1 (pcf)
2	33.0 (ft)	136.5 (pcf)	136.5 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g
 correction factor (to M=7.5) = 1.00
 design ground water table depth = 1.0 ft.
 testing ground water table depth = 15.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	30.0	2482.4	4292.0	2719.0	3655.0	20.0	0.20	
2	30.0	2482.4	4292.0	2719.0	3655.0	20.0	0.35	
3	33.0	2704.7	4701.5	2941.3	4064.5	20.0	0.20	
4	33.0	2704.7	4701.5	2941.3	4064.5	20.0	0.35	

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	13.0	0.53	0.19	0.21	1.13	0.45	0.16(NA)	
2	13.0	0.53	0.19	0.23	1.22	0.22	0.10(NA)	
3	12.5	0.52	0.19	0.20	1.10	0.54	0.20(NA)	
4	12.5	0.52	0.19	0.22	1.19	0.27	0.11(NA)	

PRETREATMENT PLANT AT INDIA 80.6

The site consists of 2 layers w/ depths, saturated and wet densities:

1	23.0 (ft)	120.2 (pcf)	90.0 (pcf)
2	33.0 (ft)	127.8 (pcf)	127.8 (pcf)

input eq. mag. = 7.20 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.05

design ground water table depth = 0.0 ft.

testing ground water table depth = 15.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	30.0	1787.7	3659.7	2270.6	3206.6	5.0	0.20	
2	30.0	1787.7	3659.7	2270.6	3206.6	5.0	0.35	
3	33.0	1984.0	4043.2	2466.9	3590.1	5.0	0.20	
4	33.0	1984.0	4043.2	2466.9	3590.1	5.0	0.35	

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	3.6	0.25	0.22	0.10	0.46	1.00	4.86(NA)	
2	3.6	0.25	0.22	0.12	0.53	1.00	4.86(NA)	
3	3.4	0.24	0.22	0.10	0.47	1.00	4.94(NA)	
4	3.4	0.24	0.22	0.11	0.53	1.00	4.94(NA)	

Casacete's Data. Bo.#2 (Darlington)

The site consists of 3 layers w/ depths, saturated and wet densities:

1	9.0 (ft)	111.5 (pcf)	75.6 (pcf)
2	30.0 (ft)	98.1 (pcf)	97.3 (pcf)
3	43.0 (ft)	127.0 (pcf)	127.0 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 2.0 ft.

testing ground water table depth = 8.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	15.0	709.2	1520.4	868.2	1305.0	1.0	0.20	silty clay
2	15.0	709.2	1520.4	868.2	1305.0	1.0	0.35	"
3	15.0	709.2	1520.4	868.2	1305.0	8.5	0.00	"
4	32.0	1374.0	3246.0	1533.0	3030.6	61.0	0.00	coarse sand
5	42.0	2020.0	4516.0	2179.0	4300.6	53.0	0.00	"

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	1.1	0.11	0.24	0.07	0.30	1.00	9.76(NA)	
2	1.1	0.11	0.24	0.08	0.35	1.00	9.76(NA)	
3	9.6	0.46	0.24	0.11	0.44	1.00	2.66	
4	52.4	0.99	0.25	1.99(NA)	4.99(NA)	0.00	0.00	
5	38.8	0.88	0.22	1.99(NA)	4.99(NA)	0.00	0.00	

Capacete's Data No. #6 (Marina Septentrional)

The site consists of 3 layers w/ depths, saturated and wet densities:

1	5.0 (ft)	121.0 (pcf)	93.0 (pcf)
2	16.0 (ft)	107.5 (pcf)	107.5 (pcf)
3	52.0 (ft)	107.5 (pcf)	107.5 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 1.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	4.5	263.7	544.5	298.1	516.5	12.0	0.00	
2	5.0	293.0	605.0	327.4	577.0	12.0	0.00	coarse to fine silty sand
3	10.0	518.5	1142.5	552.9	1114.5	0.0	0.20	"
4	10.0	518.5	1142.5	552.9	1114.5	1.0	0.20	"
5	10.0	518.5	1142.5	552.9	1114.5	1.0	0.35	"
6	16.0	789.1	1787.5	823.5	1759.5	0.0	0.20	"
7	16.0	789.1	1787.5	823.5	1759.5	0.0	0.35	"
8	33.0	1556.5	3615.7	1590.9	3587.7	0.0	1.00	
9	33.0	1556.5	3615.7	1590.9	3587.7	7.5	1.00	

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	12.1	0.52	0.24	0.13	0.56	1.00	2.27	shallow
2	12.1	0.52	0.24	0.13	0.56	1.00	2.27	shallow
3	0.0	0.00	0.25	0.06	0.23	1.00	10.00(NA)	shallow
4	1.3	0.12	0.25	0.07	0.29	1.00	9.28(NA)	shallow
5	1.3	0.12	0.25	0.09	0.34	1.00	9.28(NA)	shallow
6	0.0	0.00	0.26	0.06	0.23	1.00	10.00(NA)	
7	0.0	0.00	0.26	0.07	0.28	1.00	10.00(NA)	
8	0.0	0.00	0.25	0.07	0.29	1.00	10.00(NA)	
9	6.3	0.37	0.25	0.14	0.57	1.00	3.43(NA)	

Capacete's Data Bo.#1 (Faro)

The site consists of 2 layers w/ depths, saturated and wet densities:

1	10.0 (ft)	121.0 (pcf)	93.0 (pcf)
2	30.0 (ft)	113.4 (pcf)	113.4 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 3.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	5.0	293.0	605.0	396.2	521.0	27.0	0.00	
2	10.0	586.0	1210.0	689.2	1126.0	12.0	0.00	silty clayey sand
3	12.0	688.0	1436.8	791.2	1352.8	3.0	0.20	"
4	12.0	688.0	1436.8	791.2	1352.8	3.0	0.35	"
5	20.0	1096.0	2344.0	1199.2	2260.0	0.0	0.20	"
6	20.0	1096.0	2344.0	1199.2	2260.0	0.0	0.35	"
7	20.0	1096.0	2344.0	1199.2	2260.0	7.5	0.00	"
8	30.0	1606.0	3478.0	1709.2	3394.0	1.0	0.20	"
9	30.0	1606.0	3478.0	1709.2	3394.0	1.0	0.35	"

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	27.3	0.77	0.24	0.34	1.43	0.05	0.03	shallow
2	16.2	0.60	0.24	0.18	0.75	1.00	1.69	shallow
3	3.6	0.25	0.24	0.10	0.41	1.00	4.86(NA)	
4	3.6	0.25	0.24	0.11	0.47	1.00	4.86(NA)	
5	0.0	0.00	0.24	0.06	0.25	1.00	10.00(NA)	
6	0.0	0.00	0.24	0.07	0.30	1.00	10.00(NA)	
7	7.2	0.40	0.24	0.08	0.34	1.00	3.03	
8	0.8	0.08	0.23	0.07	0.29	1.00	10.00(NA)	
9	0.8	0.08	0.23	0.08	0.35	1.00	10.00(NA)	

Capacete's Data, Bo.#3 (Urb. San Jose)

The site consists of 3 layers w/ depths, saturated and wet densities:

1	13.0 (ft)	110.0 (pcf)	75.6 (pcf)
2	24.0 (ft)	143.0 (pcf)	143.0 (pcf)
3	33.0 (ft)	107.5 (pcf)	107.5 (pcf)

input eq. mag.= 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 2.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	15.0	720.0	1716.0	836.0	1647.2	2.0	0.80	sandy silt
2	15.0	780.0	1716.0	836.0	1647.2	2.0	0.65	"
3	15.0	780.0	1716.0	836.0	1647.2	9.5	0.00	"
4	20.0	1183.0	2431.0	1239.0	2362.2	19.0	0.00	sand, silt traces
5	20.0	1183.0	2431.0	1239.0	2362.2	19.0	0.10	"
6	24.0	1505.4	3003.0	1561.4	2934.2	5.0	0.80	sandy silt
7	24.0	1505.4	3003.0	1561.4	2934.2	5.0	0.65	"
8	24.0	1505.4	3003.0	1561.4	2934.2	12.5	0.00	"
9	31.0	1821.1	3755.5	1877.1	3686.7	1.0	0.80	"
10	31.0	1821.1	3755.5	1877.1	3686.7	1.0	0.65	"
11	31.0	1821.1	3755.5	1877.1	3686.7	8.5	0.00	"

count	modified bc-M1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	2.3	0.19	0.25	0.10	0.39	1.00	7.21(NA)	
2	2.3	0.19	0.25	0.10	0.39	1.00	7.21(NA)	
3	10.9	0.49	0.25	0.12	0.49	1.00	2.46	
4	18.0	0.63	0.23	0.20	0.86	1.00	1.40	
5	18.0	0.63	0.23	0.23	1.00	1.00	0.71	
6	4.3	0.28	0.22	0.12	0.54	1.00	4.45(NA)	
7	4.3	0.28	0.22	0.12	0.54	1.00	4.45(NA)	
8	10.6	0.48	0.22	0.12	0.54	1.00	2.49	
9	0.8	0.08	0.22	0.08	0.36	1.00	10.00(NA)	
10	0.8	0.08	0.22	0.08	0.36	1.00	10.00(NA)	
11	6.6	0.38	0.22	0.07	0.33	1.00	3.29	

PR-102 Pte. prop. Rio Guanajibo, Mayaguez Bo.#3

The site consists of 2 layers w/ depths, saturated and wet densities:

1	8.0 (ft)	121.5 (pcf)	96.1 (pcf)
2	30.0 (ft)	116.2 (pcf)	116.2 (pcf)

input eq. mag. = 7.50 max. acc. = 0.18 g

correction factor (to M=7.5) = 1.00

design ground water table depth = 0.0 ft.

testing ground water table depth = 8.0 ft.

SPT hammer efficiency assigned = 0.45

count	depth (ft)	design stress (psf) effective	total	testing stress (psf) effective	total	SPT blow count	fine/gravel content	remark
1	9.0	526.7	1088.3	822.3	884.7	10.0	0.00	gravelly
2	9.0	526.7	1088.3	822.3	884.7	10.0	0.10	gravelly
3	11.0	634.3	1320.7	929.9	1117.1	3.0	0.00	gravelly
4	11.0	634.3	1320.7	929.9	1117.1	3.0	0.10	gravelly
5	15.0	849.5	1785.5	1145.1	1581.9	2.0	0.20	
6	15.0	849.5	1785.5	1145.1	1581.9	2.0	0.35	

count	modified bc-N1,60	relative density	shear s. ratio	liq. resistance	factor safety	pore press. ratio	%, vol. strain	correction applied
1	8.7	0.44	0.24	0.10	0.41	-0.01(NA)	2.79(NA)	shallow
2	8.7	0.44	0.24	0.10	0.44	-0.01(NA)	2.79(NA)	shallow
3	3.2	0.24	0.24	0.03	0.14	-0.01(NA)	5.15(NA)	
4	3.2	0.24	0.24	0.04	0.15	-0.01(NA)	5.15(NA)	
5	2.0	0.16	0.24	0.08	0.34	1.00	7.93(NA)	
6	2.0	0.16	0.24	0.09	0.40	1.00	7.93(NA)	

acceleration dependent upon magnitude and distance as per DONOVAN

assumed Magn 5 assumed Magn 5.5 assumed Magn 6 assumed Magn 6.5

(c/s)(km)			(c/s)(km)			(c/s)(km)			(c/s)(km)		
%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.
0.1836	180	0	0.2454	240	0	0.3280	321	0	0.4383	430	0
0.1392	136	5	0.1860	182	5	0.2486	244	5	0.3322	326	5
0.1101	108	10	0.1472	144	10	0.1967	193	10	0.2628	258	10
0.0899	88	15	0.1201	118	15	0.1605	157	15	0.2145	210	15
0.0751	74	20	0.1004	98	20	0.1342	132	20	0.1794	176	20
0.0640	63	25	0.0856	84	25	0.1144	112	25	0.1528	150	25
0.0554	54	30	0.0740	73	30	0.0989	97	30	0.1322	130	30
0.0485	48	35	0.0649	64	35	0.0867	85	35	0.1158	114	35
0.0430	42	40	0.0574	56	40	0.0767	75	40	0.1026	101	40
0.0384	38	45	0.0513	50	45	0.0686	67	45	0.0916	90	45
0.0346	34	50	0.0462	45	50	0.0617	61	50	0.0825	81	50
0.0313	31	55	0.0419	41	55	0.0560	55	55	0.0748	73	55
0.0286	28	60	0.0382	37	60	0.0510	50	60	0.0682	67	60
0.0262	26	65	0.0350	34	65	0.0468	46	65	0.0625	61	65
0.0241	24	70	0.0323	32	70	0.0431	42	70	0.0576	56	70
0.0223	22	75	0.0298	29	75	0.0399	39	75	0.0533	52	75
0.0207	20	80	0.0277	27	80	0.0370	36	80	0.0495	48	80
0.0193	19	85	0.0258	25	85	0.0345	34	85	0.0461	45	85
0.0181	18	90	0.0241	24	90	0.0322	32	90	0.0431	42	90
0.0169	17	95	0.0226	22	95	0.0302	30	95	0.0404	40	95
0.0159	16	100	0.0213	21	100	0.0284	28	100	0.0380	37	100
0.0150	15	105	0.0200	20	105	0.0268	26	105	0.0358	35	105
0.0141	14	110	0.0189	19	110	0.0253	25	110	0.0338	33	110
0.0134	13	115	0.0179	18	115	0.0239	23	115	0.0320	31	115
0.0127	12	120	0.0170	17	120	0.0227	22	120	0.0303	30	120
0.0121	12	125	0.0161	16	125	0.0215	21	125	0.0288	28	125
0.0115	11	130	0.0153	15	130	0.0205	20	130	0.0274	27	130
0.0109	11	135	0.0146	14	135	0.0195	19	135	0.0261	26	135
0.0104	10	140	0.0139	14	140	0.0186	18	140	0.0249	24	140
0.0100	10	145	0.0133	13	145	0.0178	17	145	0.0238	23	145
0.0095	9	150	0.0127	12	150	0.0170	17	150	0.0228	22	150
0.0091	9	155	0.0122	12	155	0.0163	16	155	0.0218	21	155
0.0088	9	160	0.0117	11	160	0.0157	15	160	0.0209	21	160
0.0084	8	165	0.0112	11	165	0.0150	15	165	0.0201	20	165
0.0081	8	170	0.0108	11	170	0.0144	14	170	0.0193	19	170
0.0078	8	175	0.0104	10	175	0.0139	14	175	0.0186	18	175
0.0075	7	180	0.0100	10	180	0.0134	13	180	0.0179	18	180

acceleration dependent upon magnitude and distance as per DONOVAN

assumed Magn5.25 assumed Magn5.75 assumed Magn6.25 assumed Magn6.75

(c/s)(km)			(c/s)(km)			(c/s)(km)			(c/s)(km)		
%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.
0.2123	208	0	0.2837	278	0	0.3791	372	0	0.5067	497	0
0.1609	158	5	0.2150	211	5	0.2874	282	5	0.3840	376	5
0.1273	125	10	0.1701	167	10	0.2273	223	10	0.3038	298	10
0.1039	102	15	0.1389	136	15	0.1856	182	15	0.2480	243	15
0.0869	85	20	0.1161	114	20	0.1552	152	20	0.2074	203	20
0.0740	73	25	0.0989	97	25	0.1322	130	25	0.1767	173	25
0.0640	63	30	0.0856	84	30	0.1144	112	30	0.1528	150	30
0.0561	55	35	0.0750	73	35	0.1002	98	35	0.1339	131	35
0.0497	49	40	0.0664	65	40	0.0887	87	40	0.1186	116	40
0.0444	43	45	0.0593	58	45	0.0793	78	45	0.1059	104	45
0.0400	39	50	0.0534	52	50	0.0714	70	50	0.0954	93	50
0.0362	36	55	0.0484	47	55	0.0647	63	55	0.0865	85	55
0.0330	32	60	0.0442	43	60	0.0590	58	60	0.0789	77	60
0.0303	30	65	0.0405	40	65	0.0541	53	65	0.0723	71	65
0.0279	27	70	0.0373	37	70	0.0498	49	70	0.0666	65	70
0.0258	25	75	0.0345	34	75	0.0461	45	75	0.0616	60	75
0.0240	23	80	0.0320	31	80	0.0428	42	80	0.0572	56	80
0.0223	22	85	0.0298	29	85	0.0399	39	85	0.0533	52	85
0.0209	20	90	0.0279	27	90	0.0373	37	90	0.0498	49	90
0.0196	19	95	0.0261	26	95	0.0349	34	95	0.0467	46	95
0.0184	18	100	0.0246	24	100	0.0328	32	100	0.0439	43	100
0.0173	17	105	0.0231	23	105	0.0309	30	105	0.0413	41	105
0.0164	16	110	0.0219	21	110	0.0292	29	110	0.0390	38	110
0.0155	15	115	0.0207	20	115	0.0276	27	115	0.0369	36	115
0.0147	14	120	0.0196	19	120	0.0262	26	120	0.0350	34	120
0.0139	14	125	0.0186	18	125	0.0249	24	125	0.0333	33	125
0.0133	13	130	0.0177	17	130	0.0237	23	130	0.0316	31	130
0.0126	12	135	0.0169	17	135	0.0226	22	135	0.0302	30	135
0.0121	12	140	0.0161	16	140	0.0215	21	140	0.0288	28	140
0.0115	11	145	0.0154	15	145	0.0206	20	145	0.0275	27	145
0.0110	11	150	0.0147	14	150	0.0197	19	150	0.0263	26	150
0.0106	10	155	0.0141	14	155	0.0189	18	155	0.0252	25	155
0.0101	10	160	0.0135	13	160	0.0181	18	160	0.0242	24	160
0.0097	10	165	0.0130	13	165	0.0174	17	165	0.0232	23	165
0.0094	9	170	0.0125	12	170	0.0167	16	170	0.0223	22	170
0.0090	9	175	0.0120	12	175	0.0161	16	175	0.0215	21	175
0.0087	8	180	0.0116	11	180	0.0155	15	180	0.0207	20	180

acceleration dependent upon magnitude and distance as per DONOVAN

assumed Magn 7 assumed Magn 7.5 assumed Magn 8 assumed Magn 8.5

(c/s)(km)			(c/s)(km)			(c/s)(km)			(c/s)(km)		
Xg	acc.	DIST.	Xg	acc.	DIST.	Xg	acc.	DIST.	Xg	acc.	DIST.
0.5858	574	0	0.7828	767	0	1.0462	1025	0	1.3981	1370	0
0.4440	435	5	0.5933	581	5	0.7930	777	5	1.0597	1039	5
0.3512	344	10	0.4694	460	10	0.6273	615	10	0.8384	822	10
0.2867	281	15	0.3832	376	15	0.5121	502	15	0.6844	671	15
0.2397	235	20	0.3204	314	20	0.4281	420	20	0.5722	561	20
0.2042	200	25	0.2730	267	25	0.3648	357	25	0.4875	478	25
0.1767	173	30	0.2361	231	30	0.3156	309	30	0.4218	413	30
0.1548	152	35	0.2069	203	35	0.2765	271	35	0.3695	362	35
0.1371	134	40	0.1832	180	40	0.2448	240	40	0.3272	321	40
0.1225	120	45	0.1637	160	45	0.2187	214	45	0.2923	286	45
0.1103	108	50	0.1474	144	50	0.1970	193	50	0.2632	258	50
0.1000	98	55	0.1336	131	55	0.1786	175	55	0.2386	234	55
0.0912	89	60	0.1218	119	60	0.1628	160	60	0.2176	213	60
0.0836	82	65	0.1117	109	65	0.1493	146	65	0.1995	196	65
0.0770	75	70	0.1029	101	70	0.1375	135	70	0.1838	180	70
0.0712	70	75	0.0952	93	75	0.1272	125	75	0.1700	167	75
0.0661	65	80	0.0884	87	80	0.1181	116	80	0.1578	155	80
0.0616	60	85	0.0823	81	85	0.1100	108	85	0.1471	144	85
0.0576	56	90	0.0770	75	90	0.1029	101	90	0.1375	135	90
0.0540	53	95	0.0721	71	95	0.0964	94	95	0.1288	126	95
0.0507	50	100	0.0678	66	100	0.0906	89	100	0.1211	119	100
0.0478	47	105	0.0639	63	105	0.0854	84	105	0.1141	112	105
0.0451	44	110	0.0603	59	110	0.0806	79	110	0.1077	106	110
0.0427	42	115	0.0571	56	115	0.0763	75	115	0.1019	100	115
0.0405	40	120	0.0541	53	120	0.0723	71	120	0.0966	95	120
0.0385	38	125	0.0514	50	125	0.0687	67	125	0.0918	90	125
0.0366	36	130	0.0489	48	130	0.0653	64	130	0.0873	86	130
0.0349	34	135	0.0466	46	135	0.0623	61	135	0.0832	82	135
0.0333	33	140	0.0445	44	140	0.0594	58	140	0.0794	78	140
0.0318	31	145	0.0425	42	145	0.0568	56	145	0.0759	74	145
0.0304	30	150	0.0407	40	150	0.0543	53	150	0.0726	71	150
0.0291	29	155	0.0390	38	155	0.0521	51	155	0.0696	68	155
0.0280	27	160	0.0374	37	160	0.0499	49	160	0.0667	65	160
0.0268	26	165	0.0359	35	165	0.0479	47	165	0.0641	63	165
0.0258	25	170	0.0345	34	170	0.0461	45	170	0.0616	60	170
0.0248	24	175	0.0332	33	175	0.0444	43	175	0.0593	58	175
0.0239	23	180	0.0320	31	180	0.0427	42	180	0.0571	56	180

acceleration dependent upon magnitude and distance as per DONOVAN
assumed Magn7.25 assumed Magn7.75 assumed Magn8.25 assumed Magn4.75

(c/s)(km)			(c/s)(km)			(c/s)(km)			(c/s)(km)		
%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.	%g	acc.	DIST.
0.6772	664	0	0.9050	887	0	1.2094	1185	0	0.1588	156	0
0.5133	503	5	0.6859	672	5	0.9167	898	5	0.1204	118	5
0.4060	398	10	0.5426	532	10	0.7252	711	10	0.0952	93	10
0.3315	325	15	0.4430	434	15	0.5920	580	15	0.0777	76	15
0.2771	272	20	0.3704	363	20	0.4950	485	20	0.0650	64	20
0.2361	231	25	0.3155	309	25	0.4217	413	25	0.0554	54	25
0.2043	200	30	0.2730	268	30	0.3648	358	30	0.0479	47	30
0.1790	175	35	0.2392	234	35	0.3196	313	35	0.0420	41	35
0.1585	155	40	0.2118	208	40	0.2830	277	40	0.0372	36	40
0.1416	139	45	0.1892	185	45	0.2529	248	45	0.0332	33	45
0.1275	125	50	0.1704	167	50	0.2277	223	50	0.0299	29	50
0.1156	113	55	0.1545	151	55	0.2064	202	55	0.0271	27	55
0.1054	103	60	0.1409	138	60	0.1882	184	60	0.0247	24	60
0.0966	95	65	0.1291	127	65	0.1726	169	65	0.0227	22	65
0.0890	87	70	0.1189	117	70	0.1590	156	70	0.0209	20	70
0.0823	81	75	0.1100	108	75	0.1470	144	75	0.0193	19	75
0.0764	75	80	0.1022	100	80	0.1365	134	80	0.0179	18	80
0.0712	70	85	0.0952	93	85	0.1272	125	85	0.0167	16	85
0.0666	65	90	0.0890	87	90	0.1189	117	90	0.0156	15	90
0.0624	61	95	0.0834	82	95	0.1115	109	95	0.0146	14	95
0.0586	57	100	0.0784	77	100	0.1047	103	100	0.0138	13	100
0.0553	54	105	0.0738	72	105	0.0987	97	105	0.0130	13	105
0.0522	51	110	0.0697	68	110	0.0932	91	110	0.0122	12	110
0.0494	48	115	0.0660	65	115	0.0882	86	115	0.0116	11	115
0.0468	46	120	0.0625	61	120	0.0836	82	120	0.0110	11	120
0.0445	44	125	0.0594	58	125	0.0794	78	125	0.0104	10	125
0.0423	41	130	0.0565	55	130	0.0755	74	130	0.0099	10	130
0.0403	39	135	0.0539	53	135	0.0720	71	135	0.0095	9	135
0.0385	38	140	0.0514	50	140	0.0687	67	140	0.0090	9	140
0.0368	36	145	0.0491	48	145	0.0656	64	145	0.0086	8	145
0.0352	34	150	0.0470	46	150	0.0628	62	150	0.0082	8	150
0.0337	33	155	0.0450	44	155	0.0602	59	155	0.0079	8	155
0.0323	32	160	0.0432	42	160	0.0577	57	160	0.0076	7	160
0.0310	30	165	0.0415	41	165	0.0554	54	165	0.0073	7	165
0.0298	29	170	0.0399	39	170	0.0533	52	170	0.0070	7	170
0.0287	28	175	0.0384	38	175	0.0513	50	175	0.0067	7	175
0.0276	27	180	0.0370	36	180	0.0494	48	180	0.0065	6	180