:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
49	8.04	135.89	1.72	1.08	0.53	193.80	1.05	204.31	4.000	No	No	2.00
50	8.20	138.06	1.72	1.07	0.53	195.43	1.05	205.17	4.000	No	No	2.00
51	8.37	141.64	1.71	1.06	0.53	198.84	1.04	207.47	4.000	No	No	2.00
52	8.53	141.12	1.71	1.06	0.53	197.18	1.05	206.15	4.000	No	No	2.00
53	8.69	135.63	1.72	1.03	0.53	188.80	1.05	198.20	0.804	No	No	0.99
54	8.86	128.12	1.73	1.03	0.54	178.15	1.06	188.92	0.707	No	No	0.87
55	9.02	116.33	1.80	1.15	0.56	163.55	1.10	180.43	0.626	No	No	0.76
56	9.19	110.38	1.86	1.36	0.58	156.94	1.15	180.80	0.630	No	No	0.76
57	9.35	113.36	1.88	1.49	0.59	161.17	1.17	188.65	0.704	No	No	0.84
58	9.51	130.79	1.82	1.36	0.57	181.86	1.12	203.31	4.000	No	No	2.00
59	9.68	148.17	1.76	1.25	0.54	201.95	1.08	217.51	4.000	No	No	2.00
60	9.84	156.62	1.73	1.19	0.53	210.87	1.06	223.18	4.000	No	No	2.00
61	10.01	154.21	1.74	1.20	0.54	206.86	1.06	219.83	4.000	No	No	2.00
62	10.17	145.50	1.76	1.21	0.55	195.15	1.08	210.25	4.000	No	No	2.00
63	10.33	133.72	1.79	1.24	0.56	179.72	1.10	197.53	0.797	No	No	0.91
64	10.50	121.74	1.82	1.27	0.57	164.08	1.13	184.62	0.665	No	No	0.76
65	10.66	108.79	1.86	1.30	0.59	147.13	1.16	170.20	0.539	No	No	0.61
66	10.83	93.56	1.92	1.35	0.61	127.38	1.21	153.80	0.418	No	No	0.47
67	10.99	77.97	1.99	1.42	0.63	107.17	1.29	137.81	0.323	No	No	0.36
68	11.15	66.34	2.05	1.49	0.66	91.85	1.37	126.17	0.267	No	No	0.30
69	11.32	60.66	2.08	1.50	0.67	84.04	1.42	119.65	0.239	No	No	0.26
70	11.48	57.94	2.09	1.43	0.67	79.84	1.43	114.08	0.218	No	No	0.24
71	11.65	53.66	2.10	1.39	0.68	73.77	1.46	107.70	0.196	No	No	0.21
72	11.81	47.23	2.14	1.34	0.69	64.94	1.52	99.02	4.000	Yes	No	2.00
73	11.98	38.24	2.21	1.36	0.72	52.94	1.69	89.38	4.000	Yes	No	2.00
74	12.14	30.64	2.32	1.58	0.76	42.99	2.02	86.82	4.000	Yes	No	2.00
75	12.30	23.82	2.47	2.07	0.82	34.07	2.63	89.72	4.000	Yes	No	2.00
76	12.47	19.29	2.62	2.84	0.88	28.09	3.48	97.68	4.000	Yes	Yes	2.00
77	12.63	16.29	2.74	3.51	0.92	23.92	4.27	102.11	4.000	Yes	Yes	2.00
78	12.80	15.69	2.75	3.44	0.92	22.89	4.34	99.36	4.000	No	Yes	2.00
79	12.96	16.15	2.73	3.29	0.91	23.35	4.19	97.89	4.000	No	Yes	2.00
80	13.12	15.40	2.74	3.21	0.92	22.12	4.29	94.80	4.000	No	Yes	2.00
81	13.29	12.86	2.84	3.68	0.96	18.50	5.10	94.27	4.000	No	Yes	2.00
82	13.45	9.51	2.98	4.17	1.00	13.56	6.47	87.79	4.000	No	Yes	2.00
83	13.62	7.38	3.09	4.36	1.00	10.18	7.75	78.84	4.000	No	Yes	2.00
84	13.78	8.84	2.94	3.26	1.00	12.33	6.14	75.65	4.000	Yes	Yes	2.00
85	13.94	14.64	2.70	2.47	0.90	20.20	3.99	80.64	4.000	Yes	Yes	2.00
86	14.11	21.01	2.54	2.12	0.84	28.50	2.98	84.91	4.000	Yes	No	2.00
87	14.27	28.16	2.44	2.12	0.81	37.74	2.50	94.45	4.000	Yes	No	2.00
88	14.44	30.65	2.48	2.65	0.82	41.19	2.66	109.67	0.203	No	No	0.20
89	14.60	30.60	2.53	3.19	0.84	41.27	2.93	121.02	0.245	No	No	0.24
90	14.76	29.42	2.56	3.32	0.85	39.56	3.07	121.64	0.247	No	No	0.25
91	14.93	54.68	2.16	1.59	0.70	69.33	1.58	109.44	0.202	No	No	0.20
92	15.09	90.76	1.87	0.96	0.59	109.76	1.16	127.41	0.272	No	No	0.27
93	15.26	126.35	1.69	0.74	0.52	148.28	1.03	153.27	0.415	No	No	0.41
94	15.42	135.86	1.69	0.78	0.52	158.80	1.03	163.65	0.488	No	No	0.48
95	15.58	136.02	1.72	0.87	0.53	159.14	1.05	167.26	0.515	No	No	0.50
96	15.75	139.76	1.73	0.94	0.54	163.30	1.06	173.26	0.564	No	No	0.55

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
97	15.91	149.33	1.70	0.89	0.52	172.96	1.04	179.54	0.618	No	No	0.60
98	16.08	164.45	1.64	0.80	0.50	188.18	1.00	187.60	0.694	No	No	0.67
99	16.24	178.77	1.59	0.75	0.50	203.89	1.00	203.89	4.000	No	No	2.00
100	16.40	190.11	1.57	0.73	0.50	216.10	1.00	216.10	4.000	No	No	2.00
101	16.57	199.35	1.56	0.74	0.50	225.83	1.00	225.83	4.000	No	No	2.00
102	16.73	207.50	1.56	0.77	0.50	234.26	1.00	234.26	4.000	No	No	2.00
103	16.90	215.34	1.56	0.80	0.50	242.26	1.00	242.26	4.000	No	No	2.00
104	17.06	223.71	1.56	0.82	0.50	250.80	1.00	250.80	4.000	No	No	2.00
105	17.22	234.22	1.54	0.80	0.50	261.68	1.00	261.68	4.000	No	No	2.00
106	17.39	244.92	1.51	0.76	0.50	272.70	1.00	272.70	4.000	No	No	2.00
107	17.55	252.47	1.47	0.68	0.50	280.15	1.00	280.15	4.000	No	No	2.00
108	17.72	252.01	1.44	0.62	0.50	278.65	1.00	278.65	4.000	No	No	2.00
109	17.88	242.20	1.44	0.59	0.50	266.84	1.00	266.84	4.000	No	No	2.00
110	18.04	223.06	1.52	0.70	0.50	244.81	1.00	244.81	4.000	No	No	2.00
111	18.21	202.32	1.67	1.04	0.51	221.93	1.02	225.84	4.000	No	No	2.00
112	18.37	196.41	1.73	1.22	0.53	216.11	1.06	228.92	4.000	No	No	2.00
113	18.54	204.60	1.73	1.26	0.53	224.29	1.06	237.41	4.000	No	No	2.00
114	18.70	217.26	1.68	1.13	0.51	236.04	1.02	241.63	4.000	No	No	2.00
115	18.86	220.43	1.69	1.17	0.52	238.87	1.03	246.06	4.000	No	No	2.00
116	19.03	215.44	1.70	1.19	0.52	232.91	1.04	242.05	4.000	No	No	2.00
117	19.19	206.46	1.71	1.18	0.53	222.55	1.05	232.64	4.000	No	No	2.00
118	19.36	193.03	1.72	1.12	0.53	207.34	1.05	217.40	4.000	Yes	No	2.00
119	19.52	170.73	1.78	1.24	0.55	183.77	1.10	201.24	4.000	Yes	No	2.00
120	19.69	140.06	1.90	1.49	0.60	151.57	1.19	180.05	4.000	Yes	No	2.00
121	19.85	98.01	2.11	2.11	0.68	107.28	1.47	158.19	4.000	Yes	No	2.00
122	20.01	70.18	2.29	2.70	0.75	77.28	1.91	147.51	4.000	Yes	No	2.00
123	20.18	49.36	2.48	3.53	0.82	54.56	2.65	144.45	4.000	Yes	No	2.00
124	20.34	40.18	2.56	3.73	0.85	44.24	3.07	135.86	4.000	Yes	No	2.00
125	20.51	31.90	2.64	3.86	0.88	34.89	3.59	125.33	4.000	Yes	Yes	2.00
126	20.67	40.23	2.45	2.53	0.81	43.48	2.52	109.43	0.202	No	No	0.18
127	20.83	49.96	2.34	2.20	0.77	53.64	2.08	111.47	0.209	No	No	0.19
128	21.00	51.55	2.35	2.38	0.77	55.21	2.13	117.48	0.231	No	No	0.21
129	21.16	42.62	2.51	3.27	0.83	45.70	2.80	128.18	0.276	No	No	0.25
130	21.33	39.40	2.57	3.68	0.85	42.11	3.14	132.13	0.295	No	No	0.27
131	21.49	42.07	2.51	3.27	0.83	44.67	2.84	126.91	0.270	No	No	0.24
132	21.65	46.71	2.42	2.69	0.80	49.24	2.42	119.01	0.237	No	No	0.21
133	21.82	48.33	2.39	2.44	0.78	50.65	2.26	114.57	4.000	Yes	No	2.00
134	21.98	40.76	2.48	2.80	0.82	42.56	2.69	114.26	4.000	Yes	No	2.00
135	22.15	27.36	2.66	3.22	0.89	28.26	3.70	104.45	4.000	Yes	Yes	2.00
136	22.31	15.34	2.89	3.53	0.98	15.34	5.58	85.61	4.000	Yes	Yes	2.00
137	22.47	12.16	2.92	2.81	0.99	11.82	5.91	69.86	4.000	Yes	Yes	2.00
138	22.64	18.74	2.74	2.64	0.92	18.74	4.32	80.96	4.000	Yes	Yes	2.00
139	22.80	54.77	2.22	1.54	0.72	55.79	1.73	96.44	4.000	Yes	No	2.00
140	22.97	111.19	1.91	1.15	0.60	112.48	1.20	135.02	4.000	Yes	No	2.00
141	23.13	170.19	1.72	0.93	0.53	170.68	1.05	178.94	4.000	Yes	No	2.00
142	23.29	195.10	1.67	0.91	0.51	194.83	1.02	197.93	0.801	No	No	0.71
143	23.46	190.68	1.71	1.03	0.53	190.20	1.05	199.21	0.815	No	No	0.72
144	23.62	168.62	1.84	1.38	0.58	168.42	1.14	191.78	0.736	No	No	0.65

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
145	23.79	141.82	2.01	1.96	0.64	141.86	1.31	185.63	0.675	No	No	0.59
146	23.95	120.43	2.16	2.70	0.70	120.48	1.57	189.26	0.710	No	No	0.63
147	24.11	103.44	2.28	3.40	0.74	103.28	1.88	194.15	0.761	No	No	0.67
148	24.28	101.01	2.28	3.33	0.74	100.38	1.88	188.92	0.707	No	No	0.62
149	24.44	115.29	2.15	2.52	0.69	113.83	1.55	176.91	0.595	No	No	0.52
150	24.61	132.88	2.00	1.80	0.64	130.35	1.30	169.85	0.536	No	No	0.47
151	24.77	142.54	1.91	1.42	0.60	139.08	1.20	166.41	0.509	No	No	0.45
152	24.93	133.19	1.94	1.48	0.62	129.54	1.23	159.63	0.458	No	No	0.40
153	25.10	118.78	2.06	1.91	0.66	115.28	1.38	159.65	0.458	No	No	0.40
154	25.26	101.72	2.20	2.61	0.72	98.44	1.68	165.22	0.499	No	No	0.44
155	25.43	89.94	2.30	3.11	0.75	86.67	1.94	168.42	0.524	No	No	0.46
156	25.59	89.11	2.29	2.97	0.75	85.49	1.91	163.21	0.484	No	No	0.42
157	25.75	95.39	2.23	2.65	0.73	91.18	1.75	159.42	0.457	No	No	0.40
158	25.92	88.20	2.27	2.73	0.74	83.89	1.84	154.77	0.425	No	No	0.37
159	26.08	73.55	2.35	2.99	0.77	69.50	2.12	147.39	0.378	No	No	0.33
160	26.25	73.11	2.34	2.84	0.77	68.79	2.08	142.77	0.351	No	No	0.31
161	26.41	75.92	2.33	2.86	0.76	71.19	2.05	145.84	0.368	No	No	0.32
162	26.57	69.82	2.39	3.19	0.79	65.11	2.28	148.21	0.383	No	No	0.33
163	26.74	50.81	2.58	4.29	0.86	46.79	3.22	150.83	4.000	Yes	No	2.00
164	26.90	52.49	2.53	3.77	0.84	48.19	2.95	141.99	4.000	Yes	No	2.00
165	27.07	85.73	2.24	2.42	0.73	79.36	1.78	141.56	4.000	Yes	No	2.00
166	27.23	130.02	2.01	1.74	0.64	120.77	1.32	159.30	4.000	Yes	No	2.00
167	27.40	169.97	1.90	1.55	0.60	157.91	1.19	187.59	4.000	Yes	No	2.00
168	27.56	191.94	1.87	1.59	0.59	177.99	1.16	207.15	4.000	No	No	2.00
169	27.72	202.35	1.89	1.72	0.59	187.11	1.18	219.95	4.000	No	No	2.00
170	27.89	205.49	1.89	1.77	0.60	189.42	1.18	223.58	4.000	No	No	2.00
171	28.05	200.75	1.87	1.63	0.59	184.48	1.16	214.36	4.000	No	No	2.00
172	28.22	183.51	1.86	1.45	0.58	168.01	1.15	193.65	4.000	Yes	No	2.00
173	28.38	151.44	1.91	1.43	0.60	137.85	1.20	165.78	4.000	Yes	No	2.00
174	28.54	111.66	2.10	1.90	0.67	100.58	1.45	145.77	4.000	Yes	No	2.00
175	28.71	78.20	2.33	2.82	0.76	69.40	2.06	142.82	4.000	Yes	No	2.00
176	28.87	53.04	2.57	4.07	0.85	46.14	3.15	145.44	4.000	Yes	No	2.00
177	29.04	37.85	2.72	4.66	0.91	32.22	4.17	134.20	4.000	Yes	Yes	2.00
178	29.20	26.02	2.87	4.98	0.97	21.48	5.43	116.59	4.000	Yes	Yes	2.00
179	29.36	22.53	2.84	3.67	0.96	18.33	5.12	93.86	4.000	Yes	Yes	2.00
180	29.53	23.28	2.79	3.18	0.94	18.94	4.69	88.76	4.000	Yes	Yes	2.00
181	29.69	28.03	2.70	2.91	0.90	23.10	3.97	91.82	4.000	Yes	Yes	2.00
182	29.86	46.79	2.45	2.28	0.81	39.79	2.51	100.04	4.000	Yes	No	2.00
183	30.02	64.68	2.33	2.22	0.76	55.63	2.05	113.90	4.000	Yes	No	2.00
184	30.18	70.30	2.34	2.50	0.77	60.37	2.08	125.52	4.000	Yes	No	2.00
185	30.35	60.21	2.47	3.26	0.82	51.04	2.63	134.23	4.000	Yes	No	2.00
186	30.51	44.59	2.64	4.08	0.88	37.01	3.58	132.45	4.000	Yes	Yes	2.00
187	30.68	35.57	2.72	4.15	0.91	28.98	4.16	120.55	4.000	Yes	Yes	2.00
188	30.84	27.91	2.80	3.99	0.94	22.24	4.76	105.81	4.000	Yes	Yes	2.00
189	31.00	28.58	2.72	3.07	0.91	22.80	4.11	93.80	4.000	No	Yes	2.00
190	31.17	26.97	2.73	2.97	0.92	21.33	4.22	89.92	4.000	No	Yes	2.00
191	31.33	26.61	2.77	3.39	0.93	20.90	4.55	95.17	4.000	Yes	Yes	2.00
192	31.50	33.28	2.71	3.63	0.91	26.51	4.09	108.39	4.000	Yes	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
193	31.66	52.35	2.52	3.17	0.83	42.88	2.86	122.59	4.000	Yes	No	2.00
194	31.82	78.46	2.33	2.66	0.76	65.44	2.06	134.61	4.000	Yes	No	2.00
195	31.99	105.70	2.18	2.21	0.71	89.12	1.62	144.49	4.000	Yes	No	2.00
196	32.15	132.41	2.07	1.93	0.66	112.36	1.40	157.62	4.000	Yes	No	2.00
197	32.32	154.70	2.00	1.80	0.64	131.66	1.30	171.14	4.000	Yes	No	2.00
198	32.48	168.03	1.98	1.82	0.63	142.89	1.27	182.06	0.641	No	No	0.53
199	32.64	176.33	1.97	1.86	0.63	149.65	1.27	189.50	0.713	No	No	0.59
200	32.81	185.86	1.96	1.86	0.62	157.50	1.25	196.90	0.790	No	No	0.66
201	32.97	196.72	1.94	1.85	0.62	166.49	1.23	205.04	4.000	No	No	2.00
202	33.14	209.68	1.93	1.86	0.61	177.24	1.21	215.14	4.000	No	No	2.00
203	33.30	222.25	1.91	1.87	0.60	187.60	1.20	225.13	4.000	No	No	2.00
204	33.46	235.00	1.89	1.85	0.60	198.12	1.18	234.44	4.000	No	No	2.00
205	33.63	238.73	1.89	1.86	0.60	200.75	1.18	237.12	4.000	No	No	2.00
206	33.79	234.35	1.90	1.87	0.60	196.38	1.19	233.39	4.000	No	No	2.00
207	33.96	229.28	1.91	1.88	0.60	191.44	1.20	229.05	4.000	No	No	2.00
208	34.12	235.56	1.89	1.84	0.60	196.37	1.18	232.44	4.000	No	No	2.00
209	34.28	245.66	1.88	1.84	0.59	204.45	1.17	240.15	4.000	No	No	2.00
210	34.45	253.67	1.87	1.81	0.59	210.81	1.16	245.09	4.000	No	No	2.00
211	34.61	255.94	1.86	1.78	0.58	212.28	1.16	245.29	4.000	No	No	2.00
212	34.78	251.93	1.86	1.74	0.58	208.40	1.15	240.43	4.000	No	No	2.00
213	34.94	235.39	1.89	1.80	0.60	193.60	1.18	228.41	4.000	No	No	2.00
214	35.10	216.56	1.93	1.87	0.61	176.92	1.22	215.24	4.000	No	No	2.00
215	35.27	209.83	1.94	1.90	0.62	170.66	1.23	210.58	4.000	No	No	2.00
216	35.43	223.14	1.93	1.94	0.61	181.26	1.22	221.67	4.000	No	No	2.00
217	35.60	242.86	1.91	1.94	0.60	197.28	1.20	236.81	4.000	No	No	2.00
218	35.76	260.10	1.88	1.88	0.59	211.41	1.17	247.94	4.000	No	No	2.00
219	35.93	271.94	1.85	1.77	0.58	221.23	1.14	253.15	4.000	No	No	2.00
220	36.09	280.16	1.82	1.66	0.57	228.02	1.12	255.58	4.000	No	No	2.00
221	36.25	281.55	1.81	1.62	0.57	228.76	1.11	255.04	4.000	No	No	2.00
222	36.42	276.23	1.81	1.61	0.57	223.79	1.12	249.94	4.000	No	No	2.00
223	36.58	266.45	1.83	1.64	0.57	214.88	1.13	242.88	4.000	No	No	2.00
224	36.75	259.73	1.84	1.66	0.58	208.63	1.14	237.89	4.000	No	No	2.00
225	36.91	261.33	1.85	1.69	0.58	209.29	1.14	239.44	4.000	No	No	2.00
226	37.07	272.82	1.83	1.68	0.57	218.34	1.13	247.35	4.000	No	No	2.00
227	37.24	295.16	1.79	1.57	0.56	236.89	1.10	260.60	4.000	No	No	2.00
228	37.40	325.60	1.72	1.39	0.53	262.84	1.05	276.61	4.000	No	No	2.00
229	37.57	353.40	1.64	1.18	0.50	287.31	1.00	286.42	4.000	No	No	2.00
230	37.73	369.71	1.56	0.96	0.50	300.07	1.00	300.07	4.000	No	No	2.00
231	37.89	366.60	1.53	0.88	0.50	296.91	1.00	296.91	4.000	No	No	2.00
232	38.06	349.01	1.57	0.93	0.50	281.99	1.00	281.99	4.000	No	No	2.00
233	38.22	337.71	1.64	1.14	0.50	272.13	1.00	271.64	4.000	No	No	2.00
234	38.39	340.48	1.66	1.20	0.51	273.24	1.01	276.17	4.000	No	No	2.00
235	38.55	359.37	1.63	1.14	0.50	288.60	1.00	288.60	4.000	No	No	2.00
236	38.71	375.96	1.57	1.00	0.50	301.38	1.00	301.38	4.000	No	No	2.00
237	38.88	387.57	1.53	0.91	0.50	310.12	1.00	310.12	4.000	No	No	2.00
238	39.04	396.09	1.49	0.83	0.50	316.33	1.00	316.33	4.000	No	No	2.00
239	39.21	405.84	1.53	0.94	0.50	323.51	1.00	323.51	4.000	No	No	2.00
240	39.37	410.70	1.56	1.03	0.50	326.74	1.00	326.74	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
241	39.53	413.25	1.60	1.16	0.50	328.09	1.00	328.09	4.000	No	No	2.00
242	39.70	412.20	1.56	1.03	0.50	326.58	1.00	326.58	4.000	No	No	2.00
243	39.86	415.84	1.53	0.94	0.50	328.82	1.00	328.82	4.000	No	No	2.00
244	40.03	417.85	1.48	0.82	0.50	329.77	1.00	329.77	4.000	No	No	2.00
245	40.19	412.41	1.47	0.77	0.50	324.81	1.00	324.81	4.000	No	No	2.00
246	40.35	390.85	1.46	0.73	0.50	307.13	1.00	307.13	4.000	No	No	2.00
247	40.52	289.81	1.63	0.94	0.50	226.78	1.00	226.78	4.000	No	No	2.00
248	40.68	175.52	1.95	1.52	0.62	130.59	1.24	161.76	4.000	Yes	No	2.00
249	40.85	67.08	2.55	3.64	0.85	44.71	3.01	134.71	4.000	Yes	No	2.00
250	41.01	38.05	2.82	4.63	0.95	23.60	4.96	117.04	4.000	Yes	Yes	2.00
251	41.17	27.41	2.86	3.48	0.97	16.37	5.34	87.44	4.000	Yes	Yes	2.00
252	41.34	25.81	2.67	1.50	0.89	15.70	3.77	59.20	4.000	No	Yes	2.00
253	41.50	26.48	2.44	0.53	0.80	16.66	2.48	41.36	0.084	No	No	0.07
254	41.67	27.79	2.48	0.73	0.82	17.44	2.66	46.34	0.089	No	No	0.07
255	41.83	28.37	2.54	1.03	0.84	17.62	3.00	52.79	0.094	No	No	0.08
256	41.99	27.12	2.61	1.27	0.87	16.56	3.40	56.26	4.000	No	Yes	2.00
257	42.16	25.71	2.63	1.25	0.88	15.52	3.53	54.82	4.000	No	Yes	2.00
258	42.32	23.76	2.63	1.05	0.88	14.18	3.52	49.89	4.000	No	Yes	2.00
259	42.49	22.67	2.63	0.94	0.88	13.42	3.51	47.03	4.000	No	Yes	2.00
260	42.65	22.41	2.61	0.84	0.87	13.24	3.41	45.11	4.000	No	Yes	2.00
261	42.81	22.74	2.58	0.73	0.86	13.50	3.19	43.10	0.086	No	No	0.07
262	42.98	22.72	2.55	0.63	0.85	13.51	3.05	41.20	0.084	No	No	0.07
263	43.14	21.95	2.57	0.64	0.86	12.92	3.16	40.81	0.084	No	No	0.07
264	43.31	21.60	2.60	0.71	0.87	12.61	3.33	42.00	4.000	No	Yes	2.00
265	43.47	21.96	2.60	0.74	0.87	12.81	3.34	42.81	4.000	No	Yes	2.00
266	43.64	23.11	2.61	0.88	0.87	13.52	3.41	46.07	4.000	No	Yes	2.00
267	43.80	23.60	2.64	1.05	0.88	13.76	3.58	49.32	4.000	No	Yes	2.00
268	43.96	24.33	2.67	1.29	0.89	14.13	3.81	53.87	4.000	No	Yes	2.00
269	44.13	30.11	2.53	1.02	0.84	18.28	2.91	53.14	0.094	No	No	0.08
270	44.29	37.44	2.41	0.93	0.79	23.56	2.36	55.53	0.096	No	No	0.08
271	44.46	41.95	2.38	0.99	0.78	26.70	2.22	59.29	0.099	No	No	0.08
272	44.62	41.20	2.58	2.11	0.86	25.28	3.21	81.17	0.130	No	No	0.11
273	44.78	46.02	2.62	2.78	0.87	28.21	3.43	96.77	4.000	No	Yes	2.00
274	44.95	74.05	2.39	2.35	0.79	48.09	2.28	109.80	0.203	No	No	0.17
275	45.11	97.76	2.28	2.20	0.74	65.14	1.88	122.26	0.250	No	No	0.21
276	45.28	104.65	2.29	2.43	0.75	69.59	1.90	132.48	0.296	No	No	0.25
277	45.44	91.68	2.40	2.97	0.79	59.46	2.30	136.53	0.317	No	No	0.26
278	45.60	88.55	2.41	2.99	0.79	57.07	2.36	134.48	0.306	No	No	0.26
279	45.77	84.31	2.44	3.14	0.81	53.78	2.50	134.62	0.307	No	No	0.26
280	45.93	81.37	2.49	3.50	0.83	51.28	2.73	139.97	4.000	Yes	No	2.00
281	46.10	100.51	2.38	3.04	0.78	64.89	2.22	144.05	4.000	Yes	No	2.00
282	46.26	135.63	2.20	2.41	0.71	90.67	1.67	151.79	4.000	Yes	No	2.00
283	46.42	154.68	2.13	2.22	0.69	104.67	1.52	159.08	4.000	Yes	No	2.00
284	46.59	130.87	2.21	2.36	0.72	86.89	1.69	146.84	0.374	No	No	0.31
285	46.75	112.33	2.27	2.45	0.74	73.29	1.87	136.71	0.318	No	No	0.27
286	46.92	127.23	2.13	1.80	0.69	85.19	1.52	129.06	0.280	No	No	0.24
287	47.08	156.88	2.01	1.53	0.64	107.58	1.31	141.29	0.342	No	No	0.29
288	47.24	162.99	1.99	1.47	0.63	112.11	1.28	143.67	4.000	Yes	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
289	47.41	129.92	2.18	2.11	0.71	85.69	1.62	138.56	4.000	Yes	No	2.00
290	47.57	94.49	2.40	2.98	0.79	59.21	2.31	136.49	4.000	Yes	No	2.00
291	47.74	66.26	2.64	4.30	0.88	39.07	3.57	139.49	4.000	Yes	Yes	2.00
292	47.90	64.22	2.64	4.16	0.88	37.69	3.58	134.86	4.000	No	Yes	2.00
293	48.06	61.76	2.64	4.03	0.88	36.04	3.61	130.13	4.000	Yes	Yes	2.00
294	48.23	93.93	2.35	2.54	0.77	58.75	2.13	125.05	4.000	Yes	No	2.00
295	48.39	136.67	2.07	1.54	0.66	90.95	1.40	126.94	4.000	Yes	No	2.00
296	48.56	178.95	1.88	1.14	0.59	123.78	1.17	144.81	4.000	Yes	No	2.00
297	48.72	174.95	1.91	1.25	0.60	119.91	1.20	144.28	4.000	Yes	No	2.00
298	48.88	136.56	2.12	1.83	0.68	89.32	1.50	133.64	4.000	Yes	No	2.00
299	49.05	95.64	2.37	2.74	0.78	58.86	2.21	130.23	4.000	Yes	No	2.00
300	49.21	65.16	2.60	3.64	0.87	37.69	3.33	125.32	4.000	Yes	No	2.00
301	49.38	48.09	2.75	4.07	0.92	26.49	4.34	114.90	4.000	Yes	Yes	2.00
302	49.54	42.53	2.77	3.74	0.93	23.06	4.51	103.99	4.000	No	Yes	2.00
303	49.70	39.93	2.76	3.36	0.93	21.51	4.45	95.75	4.000	No	Yes	2.00
304	49.87	41.03	2.70	2.84	0.90	22.35	4.01	89.53	4.000	No	Yes	2.00
305	50.03	36.75	2.76	2.97	0.93	19.55	4.45	86.97	4.000	No	Yes	2.00

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.16	2.00	0.00	0.00	0.00	0.00	0.33	2.00	0.00	0.00	0.00	0.00
0.49	2.00	0.00	0.00	0.00	0.00	0.66	2.00	0.00	0.00	0.00	0.00
0.82	2.00	0.00	0.00	0.00	0.00	0.98	2.00	0.00	0.00	0.00	0.00
1.15	2.00	0.00	0.00	0.00	0.00	1.31	2.00	0.00	0.00	0.00	0.00
1.48	2.00	0.00	0.00	0.00	0.00	1.64	2.00	0.00	0.00	0.00	0.00
1.80	2.00	0.00	0.00	0.00	0.00	1.97	2.00	0.00	0.00	0.00	0.00
2.13	2.00	0.00	0.00	0.00	0.00	2.30	2.00	0.00	0.00	0.00	0.00
2.46	2.00	0.00	0.00	0.00	0.00	2.62	2.00	0.00	0.00	0.00	0.00
2.79	2.00	0.00	0.00	0.00	0.00	2.95	2.00	0.00	0.00	0.00	0.00
3.12	2.00	0.00	0.00	0.00	0.00	3.28	2.00	0.00	0.00	0.00	0.00
3.44	2.00	0.00	0.00	0.00	0.00	3.61	2.00	0.00	0.00	0.00	0.00
3.77	2.00	0.00	0.00	0.00	0.00	3.94	2.00	0.00	0.00	0.00	0.00
4.10	2.00	0.00	0.00	0.00	0.00	4.27	2.00	0.00	0.00	0.00	0.00
4.43	2.00	0.00	0.00	0.00	0.00	4.59	2.00	0.00	0.00	0.00	0.00
4.76	2.00	0.00	0.00	0.00	0.00	4.92	2.00	0.00	0.00	0.00	0.00
5.09	2.00	0.00	9.22	0.16	0.00	5.25	2.00	0.00	9.20	0.16	0.00
5.41	2.00	0.00	9.17	0.16	0.00	5.58	2.00	0.00	9.15	0.16	0.00
5.74	2.00	0.00	9.12	0.16	0.00	5.91	2.00	0.00	9.10	0.16	0.00
6.07	2.00	0.00	9.07	0.16	0.00	6.23	2.00	0.00	9.05	0.16	0.00
6.40	2.00	0.00	9.02	0.16	0.00	6.56	2.00	0.00	9.00	0.16	0.00
6.73	2.00	0.00	8.97	0.16	0.00	6.89	2.00	0.00	8.95	0.16	0.00
7.05	2.00	0.00	8.92	0.16	0.00	7.22	2.00	0.00	8.90	0.16	0.00
7.38	2.00	0.00	8.87	0.16	0.00	7.55	2.00	0.00	8.85	0.16	0.00
7.71	2.00	0.00	8.82	0.16	0.00	7.87	2.00	0.00	8.80	0.16	0.00
8.04	2.00	0.00	8.77	0.16	0.00	8.20	2.00	0.00	8.75	0.16	0.00
8.37	2.00	0.00	8.72	0.16	0.00	8.53	2.00	0.00	8.70	0.16	0.00
8.69	0.99	0.01	8.67	0.16	0.00	8.86	0.87	0.13	8.65	0.16	0.06
9.02	0.76	0.24	8.62	0.16	0.10	9.19	0.76	0.24	8.60	0.16	0.10
9.35	0.84	0.16	8.57	0.16	0.07	9.51	2.00	0.00	8.55	0.16	0.00
9.68	2.00	0.00	8.52	0.16	0.00	9.84	2.00	0.00	8.50	0.16	0.00
10.01	2.00	0.00	8.47	0.16	0.00	10.17	2.00	0.00	8.45	0.16	0.00
10.33	0.91	0.09	8.42	0.16	0.04	10.50	0.76	0.24	8.40	0.16	0.10
10.66	0.61	0.39	8.37	0.16	0.16	10.83	0.47	0.53	8.35	0.16	0.22
10.99	0.36	0.64	8.32	0.16	0.27	11.15	0.30	0.70	8.30	0.16	0.29
11.32	0.26	0.74	8.27	0.16	0.30	11.48	0.24	0.76	8.25	0.16	0.31
11.65	0.21	0.79	8.22	0.16	0.32	11.81	2.00	0.00	8.20	0.16	0.00
11.98	2.00	0.00	8.17	0.16	0.00	12.14	2.00	0.00	8.15	0.16	0.00
12.30	2.00	0.00	8.12	0.16	0.00	12.47	2.00	0.00	8.10	0.16	0.00
12.63	2.00	0.00	8.07	0.16	0.00	12.80	2.00	0.00	8.05	0.16	0.00
12.96	2.00	0.00	8.02	0.16	0.00	13.12	2.00	0.00	8.00	0.16	0.00
13.29	2.00	0.00	7.97	0.16	0.00	13.45	2.00	0.00	7.95	0.16	0.00
13.62	2.00	0.00	7.92	0.16	0.00	13.78	2.00	0.00	7.90	0.16	0.00
13.94	2.00	0.00	7.87	0.16	0.00	14.11	2.00	0.00	7.85	0.16	0.00
14.27	2.00	0.00	7.82	0.16	0.00	14.44	0.20	0.80	7.80	0.16	0.31
14.60	0.24	0.76	7.77	0.16	0.29	14.76	0.25	0.75	7.75	0.16	0.29
14.93	0.20	0.80	7.72	0.16	0.31	15.09	0.27	0.73	7.70	0.16	0.28
15.26	0.41	0.59	7.67	0.16	0.23	15.42	0.48	0.52	7.65	0.16	0.20
15.58	0.50	0.50	7.62	0.16	0.19	15.75	0.55	0.45	7.60	0.16	0.17

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
15.91	0.60	0.40	7.57	0.16	0.15	16.08	0.67	0.33	7.55	0.16	0.12
16.24	2.00	0.00	7.52	0.16	0.00	16.40	2.00	0.00	7.50	0.16	0.00
16.57	2.00	0.00	7.47	0.16	0.00	16.73	2.00	0.00	7.45	0.16	0.00
16.90	2.00	0.00	7.42	0.16	0.00	17.06	2.00	0.00	7.40	0.16	0.00
17.22	2.00	0.00	7.37	0.16	0.00	17.39	2.00	0.00	7.35	0.16	0.00
17.55	2.00	0.00	7.32	0.16	0.00	17.72	2.00	0.00	7.30	0.16	0.00
17.88	2.00	0.00	7.27	0.16	0.00	18.04	2.00	0.00	7.25	0.16	0.00
18.21	2.00	0.00	7.22	0.16	0.00	18.37	2.00	0.00	7.20	0.16	0.00
18.54	2.00	0.00	7.17	0.16	0.00	18.70	2.00	0.00	7.15	0.16	0.00
18.86	2.00	0.00	7.12	0.16	0.00	19.03	2.00	0.00	7.10	0.16	0.00
19.19	2.00	0.00	7.07	0.16	0.00	19.36	2.00	0.00	7.05	0.16	0.00
19.52	2.00	0.00	7.02	0.16	0.00	19.69	2.00	0.00	7.00	0.16	0.00
19.85	2.00	0.00	6.97	0.16	0.00	20.01	2.00	0.00	6.95	0.16	0.00
20.18	2.00	0.00	6.92	0.16	0.00	20.34	2.00	0.00	6.90	0.16	0.00
20.51	2.00	0.00	6.87	0.16	0.00	20.67	0.18	0.82	6.85	0.16	0.28
20.83	0.19	0.81	6.82	0.16	0.28	21.00	0.21	0.79	6.80	0.16	0.27
21.16	0.25	0.75	6.77	0.16	0.25	21.33	0.27	0.73	6.75	0.16	0.25
21.49	0.24	0.76	6.72	0.16	0.25	21.65	0.21	0.79	6.70	0.16	0.26
21.82	2.00	0.00	6.67	0.16	0.00	21.98	2.00	0.00	6.65	0.16	0.00
22.15	2.00	0.00	6.62	0.16	0.00	22.31	2.00	0.00	6.60	0.16	0.00
22.47	2.00	0.00	6.57	0.16	0.00	22.64	2.00	0.00	6.55	0.16	0.00
22.80	2.00	0.00	6.52	0.16	0.00	22.97	2.00	0.00	6.50	0.16	0.00
23.13	2.00	0.00	6.47	0.16	0.00	23.29	0.71	0.29	6.45	0.16	0.09
23.46	0.72	0.28	6.42	0.16	0.09	23.62	0.65	0.35	6.40	0.16	0.11
23.79	0.59	0.41	6.37	0.16	0.13	23.95	0.63	0.37	6.35	0.16	0.12
24.11	0.67	0.33	6.32	0.16	0.10	24.28	0.62	0.38	6.30	0.16	0.12
24.44	0.52	0.48	6.27	0.16	0.15	24.61	0.47	0.53	6.25	0.16	0.17
24.77	0.45	0.55	6.22	0.16	0.17	24.93	0.40	0.60	6.20	0.16	0.19
25.10	0.40	0.60	6.17	0.16	0.18	25.26	0.44	0.56	6.15	0.16	0.17
25.43	0.46	0.54	6.12	0.16	0.17	25.59	0.42	0.58	6.10	0.16	0.18
25.75	0.40	0.60	6.07	0.16	0.18	25.92	0.37	0.63	6.05	0.16	0.19
26.08	0.33	0.67	6.02	0.16	0.20	26.25	0.31	0.69	6.00	0.16	0.21
26.41	0.32	0.68	5.97	0.16	0.20	26.57	0.33	0.67	5.95	0.16	0.20
26.74	2.00	0.00	5.92	0.16	0.00	26.90	2.00	0.00	5.90	0.16	0.00
27.07	2.00	0.00	5.87	0.16	0.00	27.23	2.00	0.00	5.85	0.16	0.00
27.40	2.00	0.00	5.82	0.16	0.00	27.56	2.00	0.00	5.80	0.16	0.00
27.72	2.00	0.00	5.77	0.16	0.00	27.89	2.00	0.00	5.75	0.16	0.00
28.05	2.00	0.00	5.72	0.16	0.00	28.22	2.00	0.00	5.70	0.16	0.00
28.38	2.00	0.00	5.67	0.16	0.00	28.54	2.00	0.00	5.65	0.16	0.00
28.71	2.00	0.00	5.62	0.16	0.00	28.87	2.00	0.00	5.60	0.16	0.00
29.04	2.00	0.00	5.57	0.16	0.00	29.20	2.00	0.00	5.55	0.16	0.00
29.36	2.00	0.00	5.52	0.16	0.00	29.53	2.00	0.00	5.50	0.16	0.00
29.69	2.00	0.00	5.47	0.16	0.00	29.86	2.00	0.00	5.45	0.16	0.00
30.02	2.00	0.00	5.42	0.16	0.00	30.18	2.00	0.00	5.40	0.16	0.00
30.35	2.00	0.00	5.37	0.16	0.00	30.51	2.00	0.00	5.35	0.16	0.00
30.68	2.00	0.00	5.32	0.16	0.00	30.84	2.00	0.00	5.30	0.16	0.00
31.00	2.00	0.00	5.27	0.16	0.00	31.17	2.00	0.00	5.25	0.16	0.00
31.33	2.00	0.00	5.22	0.16	0.00	31.50	2.00	0.00	5.20	0.16	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.66	2.00	0.00	5.17	0.16	0.00	31.82	2.00	0.00	5.15	0.16	0.00
31.99	2.00	0.00	5.12	0.16	0.00	32.15	2.00	0.00	5.10	0.16	0.00
32.32	2.00	0.00	5.07	0.16	0.00	32.48	0.53	0.47	5.05	0.16	0.12
32.64	0.59	0.41	5.02	0.16	0.10	32.81	0.66	0.34	5.00	0.16	0.09
32.97	2.00	0.00	4.97	0.16	0.00	33.14	2.00	0.00	4.95	0.16	0.00
33.30	2.00	0.00	4.92	0.16	0.00	33.46	2.00	0.00	4.90	0.16	0.00
33.63	2.00	0.00	4.87	0.16	0.00	33.79	2.00	0.00	4.85	0.16	0.00
33.96	2.00	0.00	4.82	0.16	0.00	34.12	2.00	0.00	4.80	0.16	0.00
34.28	2.00	0.00	4.77	0.16	0.00	34.45	2.00	0.00	4.75	0.16	0.00
34.61	2.00	0.00	4.72	0.16	0.00	34.78	2.00	0.00	4.70	0.16	0.00
34.94	2.00	0.00	4.67	0.16	0.00	35.10	2.00	0.00	4.65	0.16	0.00
35.27	2.00	0.00	4.62	0.16	0.00	35.43	2.00	0.00	4.60	0.16	0.00
35.60	2.00	0.00	4.57	0.16	0.00	35.76	2.00	0.00	4.55	0.16	0.00
35.93	2.00	0.00	4.52	0.16	0.00	36.09	2.00	0.00	4.50	0.16	0.00
36.25	2.00	0.00	4.47	0.16	0.00	36.42	2.00	0.00	4.45	0.16	0.00
36.58	2.00	0.00	4.42	0.16	0.00	36.75	2.00	0.00	4.40	0.16	0.00
36.91	2.00	0.00	4.37	0.16	0.00	37.07	2.00	0.00	4.35	0.16	0.00
37.24	2.00	0.00	4.32	0.16	0.00	37.40	2.00	0.00	4.30	0.16	0.00
37.57	2.00	0.00	4.27	0.16	0.00	37.73	2.00	0.00	4.25	0.16	0.00
37.89	2.00	0.00	4.22	0.16	0.00	38.06	2.00	0.00	4.20	0.16	0.00
38.22	2.00	0.00	4.17	0.16	0.00	38.39	2.00	0.00	4.15	0.16	0.00
38.55	2.00	0.00	4.12	0.16	0.00	38.71	2.00	0.00	4.10	0.16	0.00
38.88	2.00	0.00	4.07	0.16	0.00	39.04	2.00	0.00	4.05	0.16	0.00
39.21	2.00	0.00	4.02	0.16	0.00	39.37	2.00	0.00	4.00	0.16	0.00
39.53	2.00	0.00	3.97	0.16	0.00	39.70	2.00	0.00	3.95	0.16	0.00
39.86	2.00	0.00	3.92	0.16	0.00	40.03	2.00	0.00	3.90	0.16	0.00
40.19	2.00	0.00	3.87	0.16	0.00	40.35	2.00	0.00	3.85	0.16	0.00
40.52	2.00	0.00	3.82	0.16	0.00	40.68	2.00	0.00	3.80	0.16	0.00
40.85	2.00	0.00	3.77	0.16	0.00	41.01	2.00	0.00	3.75	0.16	0.00
41.17	2.00	0.00	3.72	0.16	0.00	41.34	2.00	0.00	3.70	0.16	0.00
41.50	0.07	0.93	3.67	0.16	0.17	41.67	0.07	0.93	3.65	0.16	0.17
41.83	0.08	0.92	3.62	0.16	0.17	41.99	2.00	0.00	3.60	0.16	0.00
42.16	2.00	0.00	3.57	0.16	0.00	42.32	2.00	0.00	3.55	0.16	0.00
42.49	2.00	0.00	3.52	0.16	0.00	42.65	2.00	0.00	3.50	0.16	0.00
42.81	0.07	0.93	3.47	0.16	0.16	42.98	0.07	0.93	3.45	0.16	0.16
43.14	0.07	0.93	3.42	0.16	0.16	43.31	2.00	0.00	3.40	0.16	0.00
43.47	2.00	0.00	3.37	0.16	0.00	43.64	2.00	0.00	3.35	0.16	0.00
43.80	2.00	0.00	3.32	0.16	0.00	43.96	2.00	0.00	3.30	0.16	0.00
44.13	0.08	0.92	3.27	0.16	0.15	44.29	0.08	0.92	3.25	0.16	0.15
44.46	0.08	0.92	3.22	0.16	0.15	44.62	0.11	0.89	3.20	0.16	0.14
44.78	2.00	0.00	3.17	0.16	0.00	44.95	0.17	0.83	3.15	0.16	0.13
45.11	0.21	0.79	3.12	0.16	0.12	45.28	0.25	0.75	3.10	0.16	0.12
45.44	0.26	0.74	3.07	0.16	0.11	45.60	0.26	0.74	3.05	0.16	0.11
45.77	0.26	0.74	3.02	0.16	0.11	45.93	2.00	0.00	3.00	0.16	0.00
46.10	2.00	0.00	2.97	0.16	0.00	46.26	2.00	0.00	2.95	0.16	0.00
46.42	2.00	0.00	2.92	0.16	0.00	46.59	0.31	0.69	2.90	0.16	0.10
46.75	0.27	0.73	2.87	0.16	0.11	46.92	0.24	0.76	2.85	0.16	0.11
47.08	0.29	0.71	2.82	0.16	0.10	47.24	2.00	0.00	2.80	0.16	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
47.41	2.00	0.00	2.77	0.16	0.00	47.57	2.00	0.00	2.75	0.16	0.00
47.74	2.00	0.00	2.72	0.16	0.00	47.90	2.00	0.00	2.70	0.16	0.00
48.06	2.00	0.00	2.67	0.16	0.00	48.23	2.00	0.00	2.65	0.16	0.00
48.39	2.00	0.00	2.62	0.16	0.00	48.56	2.00	0.00	2.60	0.16	0.00
48.72	2.00	0.00	2.57	0.16	0.00	48.88	2.00	0.00	2.55	0.16	0.00
49.05	2.00	0.00	2.52	0.16	0.00	49.21	2.00	0.00	2.50	0.16	0.00
49.38	2.00	0.00	2.47	0.16	0.00	49.54	2.00	0.00	2.45	0.16	0.00
49.70	2.00	0.00	2.42	0.16	0.00	49.87	2.00	0.00	2.40	0.16	0.00
50.03	2.00	0.00	2.37	0.16	0.00						

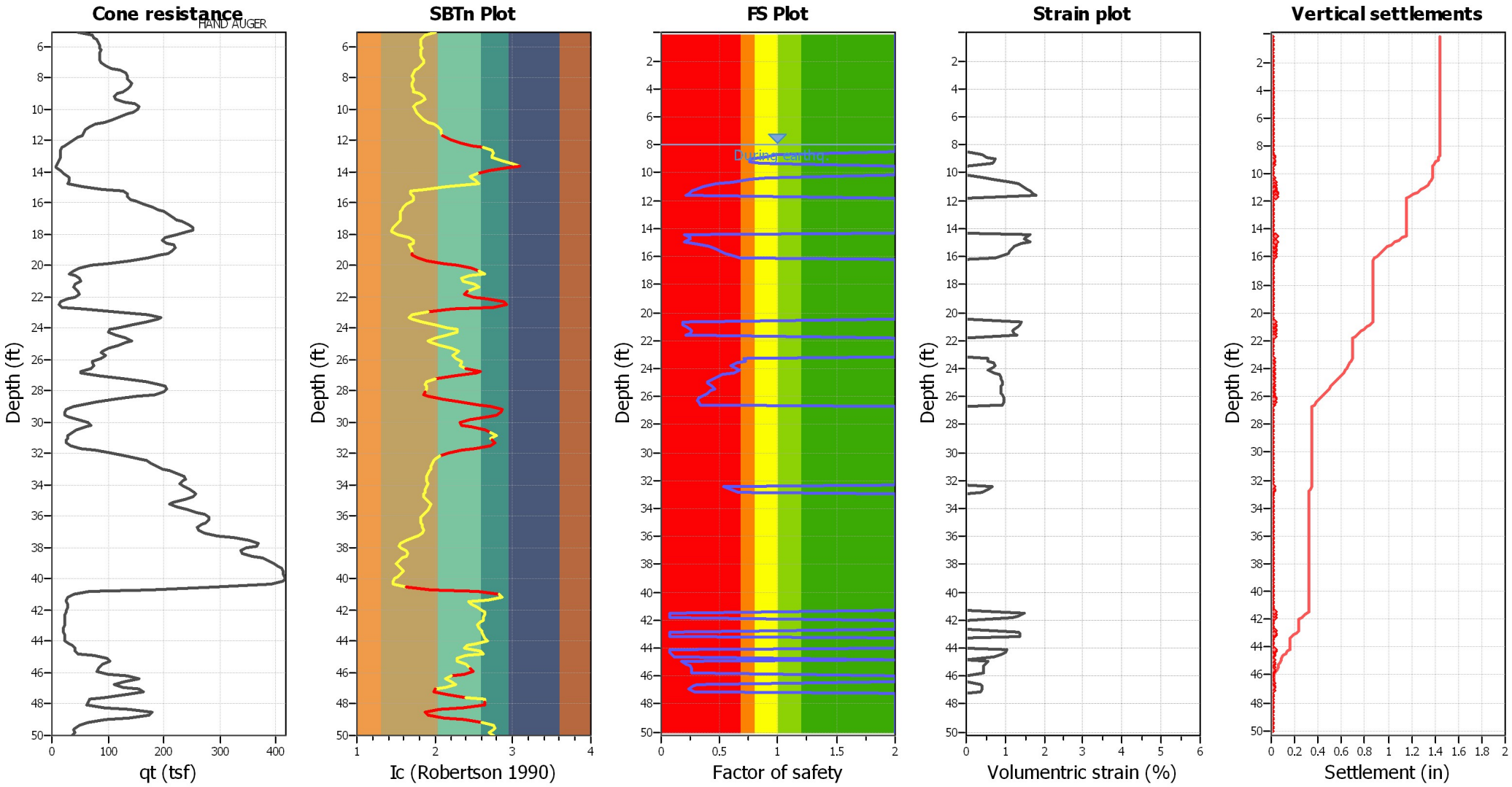
Overall liquefaction potential: 13.10

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)
LPI: Liquefaction potential index value for test point

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
8.04	204.31	2.00	0.00	0.87	0.00	8.20	205.17	2.00	0.00	0.86	0.00
8.37	207.47	2.00	0.00	0.86	0.00	8.53	206.15	2.00	0.00	0.86	0.00
8.69	198.20	0.99	0.40	0.86	0.01	8.86	188.92	0.87	0.52	0.85	0.01
9.02	180.43	0.76	0.73	0.85	0.01	9.19	180.80	0.76	0.72	0.85	0.01
9.35	188.65	0.84	0.68	0.84	0.01	9.51	203.31	2.00	0.00	0.84	0.00
9.68	217.51	2.00	0.00	0.84	0.00	9.84	223.18	2.00	0.00	0.84	0.00
10.01	219.83	2.00	0.00	0.83	0.00	10.17	210.25	2.00	0.00	0.83	0.00
10.33	197.53	0.91	0.47	0.83	0.01	10.50	184.62	0.76	0.68	0.83	0.01
10.66	170.20	0.61	1.15	0.82	0.02	10.83	153.80	0.47	1.35	0.82	0.03
10.99	137.81	0.36	1.47	0.82	0.03	11.15	126.17	0.30	1.57	0.81	0.03
11.32	119.65	0.26	1.64	0.81	0.03	11.48	114.08	0.24	1.70	0.81	0.03
11.65	107.70	0.21	1.77	0.81	0.03	11.81	99.02	2.00	0.00	0.80	0.00
11.98	89.38	2.00	0.00	0.80	0.00	12.14	86.82	2.00	0.00	0.80	0.00
12.30	89.72	2.00	0.00	0.79	0.00	12.47	97.68	2.00	0.00	0.79	0.00
12.63	102.11	2.00	0.00	0.79	0.00	12.80	99.36	2.00	0.00	0.79	0.00
12.96	97.89	2.00	0.00	0.78	0.00	13.12	94.80	2.00	0.00	0.78	0.00
13.29	94.27	2.00	0.00	0.78	0.00	13.45	87.79	2.00	0.00	0.78	0.00
13.62	78.84	2.00	0.00	0.77	0.00	13.78	75.65	2.00	0.00	0.77	0.00
13.94	80.64	2.00	0.00	0.77	0.00	14.11	84.91	2.00	0.00	0.76	0.00
14.27	94.45	2.00	0.00	0.76	0.00	14.44	109.67	0.20	1.65	0.76	0.03
14.60	121.02	0.24	1.51	0.76	0.03	14.76	121.64	0.25	1.50	0.75	0.03
14.93	109.44	0.20	1.63	0.75	0.03	15.09	127.41	0.27	1.43	0.75	0.03
15.26	153.27	0.41	1.23	0.75	0.02	15.42	163.65	0.48	1.16	0.74	0.02
15.58	167.26	0.50	1.13	0.74	0.02	15.75	173.26	0.55	1.10	0.74	0.02
15.91	179.54	0.60	0.95	0.73	0.02	16.08	187.60	0.67	0.74	0.73	0.01
16.24	203.89	2.00	0.00	0.73	0.00	16.40	216.10	2.00	0.00	0.73	0.00
16.57	225.83	2.00	0.00	0.72	0.00	16.73	234.26	2.00	0.00	0.72	0.00
16.90	242.26	2.00	0.00	0.72	0.00	17.06	250.80	2.00	0.00	0.72	0.00
17.22	261.68	2.00	0.00	0.71	0.00	17.39	272.70	2.00	0.00	0.71	0.00
17.55	280.15	2.00	0.00	0.71	0.00	17.72	278.65	2.00	0.00	0.70	0.00
17.88	266.84	2.00	0.00	0.70	0.00	18.04	244.81	2.00	0.00	0.70	0.00
18.21	225.84	2.00	0.00	0.70	0.00	18.37	228.92	2.00	0.00	0.69	0.00
18.54	237.41	2.00	0.00	0.69	0.00	18.70	241.63	2.00	0.00	0.69	0.00
18.86	246.06	2.00	0.00	0.69	0.00	19.03	242.05	2.00	0.00	0.68	0.00
19.19	232.64	2.00	0.00	0.68	0.00	19.36	217.40	2.00	0.00	0.68	0.00
19.52	201.24	2.00	0.00	0.67	0.00	19.69	180.05	2.00	0.00	0.67	0.00
19.85	158.19	2.00	0.00	0.67	0.00	20.01	147.51	2.00	0.00	0.67	0.00
20.18	144.45	2.00	0.00	0.66	0.00	20.34	135.86	2.00	0.00	0.66	0.00
20.51	125.33	2.00	0.00	0.66	0.00	20.67	109.43	0.18	1.42	0.66	0.03
20.83	111.47	0.19	1.40	0.65	0.03	21.00	117.48	0.21	1.33	0.65	0.03
21.16	128.18	0.25	1.23	0.65	0.02	21.33	132.13	0.27	1.20	0.64	0.02
21.49	126.91	0.24	1.23	0.64	0.02	21.65	119.01	0.21	1.29	0.64	0.03
21.82	114.57	2.00	0.00	0.64	0.00	21.98	114.26	2.00	0.00	0.63	0.00
22.15	104.45	2.00	0.00	0.63	0.00	22.31	85.61	2.00	0.00	0.63	0.00
22.47	69.86	2.00	0.00	0.63	0.00	22.64	80.96	2.00	0.00	0.62	0.00
22.80	96.44	2.00	0.00	0.62	0.00	22.97	135.02	2.00	0.00	0.62	0.00
23.13	178.94	2.00	0.00	0.61	0.00	23.29	197.93	0.71	0.57	0.61	0.01
23.46	199.21	0.72	0.56	0.61	0.01	23.62	191.78	0.65	0.72	0.61	0.01

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
23.79	185.63	0.59	0.75	0.60	0.01	23.95	189.26	0.63	0.72	0.60	0.01
24.11	194.15	0.67	0.57	0.60	0.01	24.28	188.92	0.62	0.72	0.60	0.01
24.44	176.91	0.52	0.87	0.59	0.02	24.61	169.85	0.47	0.89	0.59	0.02
24.77	166.41	0.45	0.90	0.59	0.02	24.93	159.63	0.40	0.93	0.58	0.02
25.10	159.65	0.40	0.93	0.58	0.02	25.26	165.22	0.44	0.90	0.58	0.02
25.43	168.42	0.46	0.88	0.58	0.02	25.59	163.21	0.42	0.90	0.57	0.02
25.75	159.42	0.40	0.91	0.57	0.02	25.92	154.77	0.37	0.93	0.57	0.02
26.08	147.39	0.33	0.96	0.57	0.02	26.25	142.77	0.31	0.98	0.56	0.02
26.41	145.84	0.32	0.96	0.56	0.02	26.57	148.21	0.33	0.94	0.56	0.02
26.74	150.83	2.00	0.00	0.55	0.00	26.90	141.99	2.00	0.00	0.55	0.00
27.07	141.56	2.00	0.00	0.55	0.00	27.23	159.30	2.00	0.00	0.55	0.00
27.40	187.59	2.00	0.00	0.54	0.00	27.56	207.15	2.00	0.00	0.54	0.00
27.72	219.95	2.00	0.00	0.54	0.00	27.89	223.58	2.00	0.00	0.54	0.00
28.05	214.36	2.00	0.00	0.53	0.00	28.22	193.65	2.00	0.00	0.53	0.00
28.38	165.78	2.00	0.00	0.53	0.00	28.54	145.77	2.00	0.00	0.52	0.00
28.71	142.82	2.00	0.00	0.52	0.00	28.87	145.44	2.00	0.00	0.52	0.00
29.04	134.20	2.00	0.00	0.52	0.00	29.20	116.59	2.00	0.00	0.51	0.00
29.36	93.86	2.00	0.00	0.51	0.00	29.53	88.76	2.00	0.00	0.51	0.00
29.69	91.82	2.00	0.00	0.51	0.00	29.86	100.04	2.00	0.00	0.50	0.00
30.02	113.90	2.00	0.00	0.50	0.00	30.18	125.52	2.00	0.00	0.50	0.00
30.35	134.23	2.00	0.00	0.49	0.00	30.51	132.45	2.00	0.00	0.49	0.00
30.68	120.55	2.00	0.00	0.49	0.00	30.84	105.81	2.00	0.00	0.49	0.00
31.00	93.80	2.00	0.00	0.48	0.00	31.17	89.92	2.00	0.00	0.48	0.00
31.33	95.17	2.00	0.00	0.48	0.00	31.50	108.39	2.00	0.00	0.48	0.00
31.66	122.59	2.00	0.00	0.47	0.00	31.82	134.61	2.00	0.00	0.47	0.00
31.99	144.49	2.00	0.00	0.47	0.00	32.15	157.62	2.00	0.00	0.46	0.00
32.32	171.14	2.00	0.00	0.46	0.00	32.48	182.06	0.53	0.66	0.46	0.01
32.64	189.50	0.59	0.55	0.46	0.01	32.81	196.90	0.66	0.43	0.45	0.01
32.97	205.04	2.00	0.00	0.45	0.00	33.14	215.14	2.00	0.00	0.45	0.00
33.30	225.13	2.00	0.00	0.44	0.00	33.46	234.44	2.00	0.00	0.44	0.00
33.63	237.12	2.00	0.00	0.44	0.00	33.79	233.39	2.00	0.00	0.44	0.00
33.96	229.05	2.00	0.00	0.43	0.00	34.12	232.44	2.00	0.00	0.43	0.00
34.28	240.15	2.00	0.00	0.43	0.00	34.45	245.09	2.00	0.00	0.43	0.00
34.61	245.29	2.00	0.00	0.42	0.00	34.78	240.43	2.00	0.00	0.42	0.00
34.94	228.41	2.00	0.00	0.42	0.00	35.10	215.24	2.00	0.00	0.41	0.00
35.27	210.58	2.00	0.00	0.41	0.00	35.43	221.67	2.00	0.00	0.41	0.00
35.60	236.81	2.00	0.00	0.41	0.00	35.76	247.94	2.00	0.00	0.40	0.00
35.93	253.15	2.00	0.00	0.40	0.00	36.09	255.58	2.00	0.00	0.40	0.00
36.25	255.04	2.00	0.00	0.40	0.00	36.42	249.94	2.00	0.00	0.39	0.00
36.58	242.88	2.00	0.00	0.39	0.00	36.75	237.89	2.00	0.00	0.39	0.00
36.91	239.44	2.00	0.00	0.38	0.00	37.07	247.35	2.00	0.00	0.38	0.00
37.24	260.60	2.00	0.00	0.38	0.00	37.40	276.61	2.00	0.00	0.38	0.00
37.57	286.42	2.00	0.00	0.37	0.00	37.73	300.07	2.00	0.00	0.37	0.00
37.89	296.91	2.00	0.00	0.37	0.00	38.06	281.99	2.00	0.00	0.37	0.00
38.22	271.64	2.00	0.00	0.36	0.00	38.39	276.17	2.00	0.00	0.36	0.00
38.55	288.60	2.00	0.00	0.36	0.00	38.71	301.38	2.00	0.00	0.35	0.00
38.88	310.12	2.00	0.00	0.35	0.00	39.04	316.33	2.00	0.00	0.35	0.00
39.21	323.51	2.00	0.00	0.35	0.00	39.37	326.74	2.00	0.00	0.34	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
39.53	328.09	2.00	0.00	0.34	0.00	39.70	326.58	2.00	0.00	0.34	0.00
39.86	328.82	2.00	0.00	0.34	0.00	40.03	329.77	2.00	0.00	0.33	0.00
40.19	324.81	2.00	0.00	0.33	0.00	40.35	307.13	2.00	0.00	0.33	0.00
40.52	226.78	2.00	0.00	0.32	0.00	40.68	161.76	2.00	0.00	0.32	0.00
40.85	134.71	2.00	0.00	0.32	0.00	41.01	117.04	2.00	0.00	0.32	0.00
41.17	87.44	2.00	0.00	0.31	0.00	41.34	59.20	2.00	0.00	0.31	0.00
41.50	41.36	0.07	1.49	0.31	0.03	41.67	46.34	0.07	1.34	0.31	0.03
41.83	52.79	0.08	1.19	0.30	0.02	41.99	56.26	2.00	0.00	0.30	0.00
42.16	54.82	2.00	0.00	0.30	0.00	42.32	49.89	2.00	0.00	0.29	0.00
42.49	47.03	2.00	0.00	0.29	0.00	42.65	45.11	2.00	0.00	0.29	0.00
42.81	43.10	0.07	1.33	0.29	0.03	42.98	41.20	0.07	1.37	0.28	0.03
43.14	40.81	0.07	1.37	0.28	0.03	43.31	42.00	2.00	0.00	0.28	0.00
43.47	42.81	2.00	0.00	0.28	0.00	43.64	46.07	2.00	0.00	0.27	0.00
43.80	49.32	2.00	0.00	0.27	0.00	43.96	53.87	2.00	0.00	0.27	0.00
44.13	53.14	0.08	1.04	0.26	0.02	44.29	55.53	0.08	0.99	0.26	0.02
44.46	59.29	0.08	0.93	0.26	0.02	44.62	81.17	0.11	0.71	0.26	0.01
44.78	96.77	2.00	0.00	0.25	0.00	44.95	109.80	0.17	0.54	0.25	0.01
45.11	122.26	0.21	0.49	0.25	0.01	45.28	132.48	0.25	0.46	0.25	0.01
45.44	136.53	0.26	0.44	0.24	0.01	45.60	134.48	0.26	0.44	0.24	0.01
45.77	134.62	0.26	0.43	0.24	0.01	45.93	139.97	2.00	0.00	0.23	0.00
46.10	144.05	2.00	0.00	0.23	0.00	46.26	151.79	2.00	0.00	0.23	0.00
46.42	159.08	2.00	0.00	0.23	0.00	46.59	146.84	0.31	0.38	0.22	0.01
46.75	136.71	0.27	0.40	0.22	0.01	46.92	129.06	0.24	0.41	0.22	0.01
47.08	141.29	0.29	0.38	0.22	0.01	47.24	143.67	2.00	0.00	0.21	0.00
47.41	138.56	2.00	0.00	0.21	0.00	47.57	136.49	2.00	0.00	0.21	0.00
47.74	139.49	2.00	0.00	0.20	0.00	47.90	134.86	2.00	0.00	0.20	0.00
48.06	130.13	2.00	0.00	0.20	0.00	48.23	125.05	2.00	0.00	0.20	0.00
48.39	126.94	2.00	0.00	0.19	0.00	48.56	144.81	2.00	0.00	0.19	0.00
48.72	144.28	2.00	0.00	0.19	0.00	48.88	133.64	2.00	0.00	0.19	0.00
49.05	130.23	2.00	0.00	0.18	0.00	49.21	125.32	2.00	0.00	0.18	0.00
49.38	114.90	2.00	0.00	0.18	0.00	49.54	103.99	2.00	0.00	0.17	0.00
49.70	95.75	2.00	0.00	0.17	0.00	49.87	89.53	2.00	0.00	0.17	0.00
50.03	86.97	2.00	0.00	0.17	0.00						

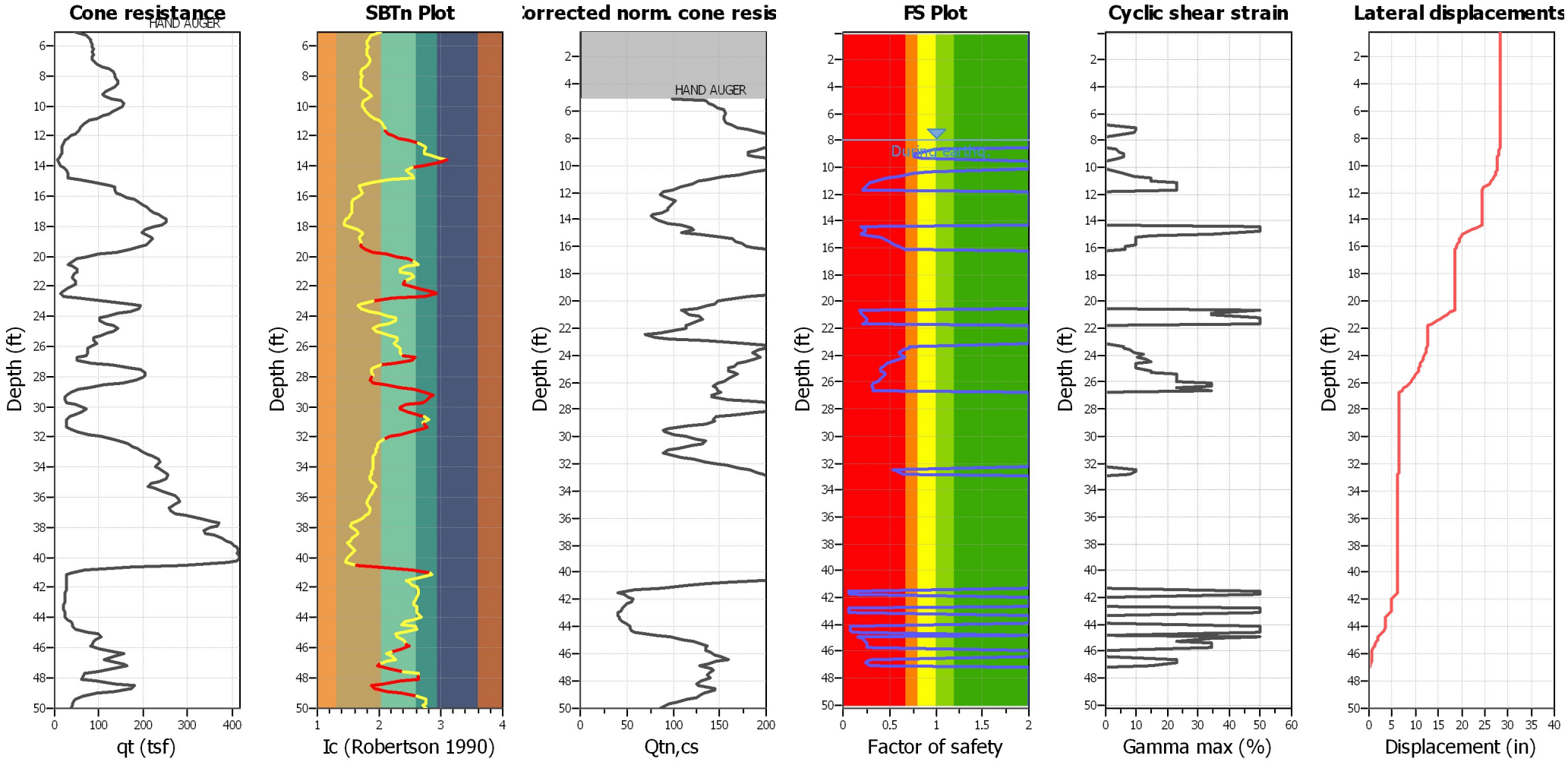
Total estimated settlement: 1.44

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

Estimation of post-earthquake lateral Displacements

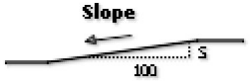
Geometric parameters: Gently sloping ground without free face (Slope 1.30 %)



Abbreviations

q_t: Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
γ_{max}: Maximum cyclic shear strain
LDI: Lateral displacement index

Surface condition



:: Lateral displacement index calculation ::

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
8.04	135.89	193.80	1.08	204.31	2.00	88.84	0.00	0.00
8.20	138.06	195.43	1.07	205.17	2.00	89.11	0.00	0.00
8.37	141.64	198.84	1.05	207.47	2.00	89.69	0.00	0.00
8.53	141.12	197.18	1.05	206.15	2.00	89.41	0.00	0.00
8.69	135.63	188.80	1.03	198.20	0.99	87.98	3.30	0.08
8.86	128.12	178.15	1.02	188.92	0.87	86.06	4.23	0.11
9.02	116.33	163.55	1.15	180.43	0.76	83.24	5.70	0.14
9.19	110.38	156.94	1.35	180.80	0.76	81.88	5.73	0.14
9.35	113.36	161.17	1.48	188.65	0.84	82.75	4.62	0.12
9.51	130.79	181.86	1.35	203.31	2.00	86.74	0.00	0.00
9.68	148.17	201.95	1.24	217.51	2.00	90.20	0.00	0.00
9.84	156.62	210.87	1.19	223.18	2.00	91.63	0.00	0.00
10.01	154.21	206.86	1.19	219.83	2.00	90.99	0.00	0.00
10.17	145.50	195.15	1.21	210.25	2.00	89.07	0.00	0.00
10.33	133.72	179.72	1.23	197.53	0.91	86.35	3.86	0.09
10.50	121.74	164.08	1.27	184.62	0.76	83.34	5.77	0.14
10.66	108.79	147.13	1.29	170.20	0.61	79.75	9.08	0.22
10.83	93.56	127.38	1.34	153.80	0.47	74.99	14.50	0.35
10.99	77.97	107.17	1.41	137.81	0.36	69.28	14.50	0.35
11.15	66.34	91.85	1.47	126.17	0.30	64.20	22.70	0.55
11.32	60.66	84.04	1.48	119.65	0.26	61.26	22.70	0.54
11.48	57.94	79.84	1.41	114.08	0.24	59.57	22.70	0.54
11.65	53.66	73.77	1.37	107.70	0.21	56.96	22.70	0.54
11.81	47.23	64.94	1.32	99.02	2.00	52.75	0.00	0.00
11.98	38.24	52.94	1.33	89.38	2.00	46.01	0.00	0.00
12.14	30.64	42.99	1.55	86.82	2.00	39.14	0.00	0.00
12.30	23.82	34.07	2.00	89.72	2.00	31.46	0.00	0.00
12.47	19.29	28.09	2.73	97.68	2.00	25.08	0.00	0.00
12.63	16.29	23.92	3.34	102.11	2.00	19.79	0.00	0.00
12.80	15.69	22.89	3.27	99.36	2.00	18.33	0.00	0.00
12.96	16.15	23.35	3.13	97.89	2.00	18.99	0.00	0.00
13.12	15.40	22.12	3.05	94.80	2.00	17.21	0.00	0.00
13.29	12.86	18.50	3.45	94.27	2.00	11.31	0.00	0.00
13.45	9.51	13.56	3.82	87.79	2.00	1.06	0.00	0.00
13.62	7.38	10.18	3.87	78.84	2.00	0.00	0.00	0.00
13.78	8.84	12.33	2.95	75.65	2.00	0.00	0.00	0.00
13.94	14.64	20.20	2.33	80.64	2.00	14.21	0.00	0.00
14.11	21.01	28.50	2.03	84.91	2.00	25.57	0.00	0.00
14.27	28.16	37.74	2.05	94.45	2.00	34.84	0.00	0.00
14.44	30.65	41.19	2.58	109.67	0.20	37.72	50.00	1.12
14.60	30.60	41.27	3.09	121.02	0.24	37.79	50.00	1.12
14.76	29.42	39.56	3.22	121.64	0.25	36.39	50.00	1.11
14.93	54.68	69.33	1.56	109.44	0.20	54.91	34.10	0.76
15.09	90.76	109.76	0.95	127.41	0.27	70.07	14.50	0.32
15.26	126.35	148.28	0.73	153.27	0.41	80.00	10.00	0.22
15.42	135.86	158.80	0.78	163.65	0.48	82.27	10.00	0.22
15.58	136.02	159.14	0.87	167.26	0.50	82.34	10.00	0.22
15.75	139.76	163.30	0.94	173.26	0.55	83.19	10.00	0.22

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
15.91	149.33	172.96	0.89	179.54	0.60	85.08	6.20	0.13
16.08	164.45	188.18	0.80	187.60	0.67	87.87	6.20	0.13
16.24	178.77	203.89	0.74	203.89	2.00	90.51	0.00	0.00
16.40	190.11	216.10	0.73	216.10	2.00	92.43	0.00	0.00
16.57	199.35	225.83	0.74	225.83	2.00	93.89	0.00	0.00
16.73	207.50	234.26	0.76	234.26	2.00	95.10	0.00	0.00
16.90	215.34	242.26	0.79	242.26	2.00	96.21	0.00	0.00
17.06	223.71	250.80	0.82	250.80	2.00	97.35	0.00	0.00
17.22	234.22	261.68	0.80	261.68	2.00	98.75	0.00	0.00
17.39	244.92	272.70	0.76	272.70	2.00	100.00	0.00	0.00
17.55	252.47	280.15	0.68	280.15	2.00	100.00	0.00	0.00
17.72	252.01	278.65	0.61	278.65	2.00	100.00	0.00	0.00
17.88	242.20	266.84	0.59	266.84	2.00	99.39	0.00	0.00
18.04	223.06	244.81	0.69	244.81	2.00	96.55	0.00	0.00
18.21	202.32	221.93	1.03	225.84	2.00	93.31	0.00	0.00
18.37	196.41	216.11	1.22	228.92	2.00	92.44	0.00	0.00
18.54	204.60	224.29	1.25	237.41	2.00	93.66	0.00	0.00
18.70	217.26	236.04	1.12	241.63	2.00	95.35	0.00	0.00
18.86	220.43	238.87	1.16	246.06	2.00	95.74	0.00	0.00
19.03	215.44	232.91	1.19	242.05	2.00	94.91	0.00	0.00
19.19	206.46	222.55	1.17	232.64	2.00	93.40	0.00	0.00
19.36	193.03	207.34	1.12	217.40	2.00	91.07	0.00	0.00
19.52	170.73	183.77	1.23	201.24	2.00	87.08	0.00	0.00
19.69	140.06	151.57	1.48	180.05	2.00	80.73	0.00	0.00
19.85	98.01	107.28	2.08	158.19	2.00	69.32	0.00	0.00
20.01	70.18	77.28	2.66	147.51	2.00	58.49	0.00	0.00
20.18	49.36	54.56	3.44	144.45	2.00	47.00	0.00	0.00
20.34	40.18	44.24	3.61	135.86	2.00	40.08	0.00	0.00
20.51	31.90	34.89	3.71	125.33	2.00	32.25	0.00	0.00
20.67	40.23	43.48	2.45	109.43	0.18	39.51	50.00	0.97
20.83	49.96	53.64	2.14	111.47	0.19	46.44	34.10	0.66
21.00	51.55	55.21	2.32	117.48	0.21	47.39	34.10	0.65
21.16	42.62	45.70	3.17	128.18	0.25	41.15	50.00	0.96
21.33	39.40	42.11	3.56	132.13	0.27	38.45	50.00	0.95
21.49	42.07	44.67	3.17	126.91	0.24	40.40	50.00	0.95
21.65	46.71	49.24	2.61	119.01	0.21	43.62	50.00	0.94
21.82	48.33	50.65	2.37	114.57	2.00	44.55	0.00	0.00
21.98	40.76	42.56	2.70	114.26	2.00	38.80	0.00	0.00
22.15	27.36	28.26	3.06	104.45	2.00	25.29	0.00	0.00
22.31	15.34	15.34	3.21	85.61	2.00	5.11	0.00	0.00
22.47	12.16	11.82	2.50	69.86	2.00	0.00	0.00	0.00
22.64	18.74	18.74	2.45	80.96	2.00	11.73	0.00	0.00
22.80	54.77	55.79	1.50	96.44	2.00	47.74	0.00	0.00
22.97	111.19	112.48	1.14	135.02	2.00	70.88	0.00	0.00
23.13	170.19	170.68	0.92	178.94	2.00	84.65	0.00	0.00
23.29	195.10	194.83	0.90	197.93	0.71	89.01	6.07	0.11
23.46	190.68	190.20	1.02	199.21	0.72	88.22	5.89	0.11
23.62	168.62	168.42	1.37	191.78	0.65	84.21	7.91	0.14

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
23.79	141.82	141.86	1.94	185.63	0.59	78.54	9.49	0.17
23.95	120.43	120.48	2.67	189.26	0.63	73.15	12.42	0.22
24.11	103.44	103.28	3.35	194.15	0.67	68.06	10.22	0.18
24.28	101.01	100.38	3.28	188.92	0.62	67.13	12.66	0.22
24.44	115.29	113.83	2.48	176.91	0.52	71.28	14.50	0.25
24.61	132.88	130.35	1.78	169.85	0.47	75.75	10.00	0.17
24.77	142.54	139.08	1.40	166.41	0.45	77.89	10.00	0.17
24.93	133.19	129.54	1.46	159.63	0.40	75.54	10.00	0.17
25.10	118.78	115.28	1.89	159.65	0.40	71.69	14.50	0.25
25.26	101.72	98.44	2.57	165.22	0.44	66.48	14.50	0.25
25.43	89.94	86.67	3.06	168.42	0.46	62.28	22.70	0.39
25.59	89.11	85.49	2.92	163.21	0.42	61.82	22.70	0.38
25.75	95.39	91.18	2.61	159.42	0.40	63.95	22.70	0.38
25.92	88.20	83.89	2.68	154.77	0.37	61.20	22.70	0.38
26.08	73.55	69.50	2.92	147.39	0.33	54.99	34.10	0.57
26.25	73.11	68.79	2.78	142.77	0.31	54.65	34.10	0.57
26.41	75.92	71.19	2.80	145.84	0.32	55.79	22.70	0.38
26.57	69.82	65.11	3.12	148.21	0.33	52.84	34.10	0.56
26.74	50.81	46.79	4.15	150.83	2.00	41.93	0.00	0.00
26.90	52.49	48.19	3.65	141.99	2.00	42.90	0.00	0.00
27.07	85.73	79.36	2.37	141.56	2.00	59.37	0.00	0.00
27.23	130.02	120.77	1.71	159.30	2.00	73.23	0.00	0.00
27.40	169.97	157.91	1.54	187.59	2.00	82.08	0.00	0.00
27.56	191.94	177.99	1.57	207.15	2.00	86.03	0.00	0.00
27.72	202.35	187.11	1.71	219.95	2.00	87.68	0.00	0.00
27.89	205.49	189.42	1.75	223.58	2.00	88.08	0.00	0.00
28.05	200.75	184.48	1.61	214.36	2.00	87.21	0.00	0.00
28.22	183.51	168.01	1.44	193.65	2.00	84.13	0.00	0.00
28.38	151.44	137.85	1.42	165.78	2.00	77.59	0.00	0.00
28.54	111.66	100.58	1.87	145.77	2.00	67.19	0.00	0.00
28.71	78.20	69.40	2.75	142.82	2.00	54.94	0.00	0.00
28.87	53.04	46.14	3.93	145.44	2.00	41.47	0.00	0.00
29.04	37.85	32.22	4.44	134.20	2.00	29.62	0.00	0.00
29.20	26.02	21.48	4.64	116.59	2.00	16.24	0.00	0.00
29.36	22.53	18.33	3.38	93.86	2.00	11.00	0.00	0.00
29.53	23.28	18.94	2.93	88.76	2.00	12.07	0.00	0.00
29.69	28.03	23.10	2.72	91.82	2.00	18.64	0.00	0.00
29.86	46.79	39.79	2.19	100.04	2.00	36.58	0.00	0.00
30.02	64.68	55.63	2.16	113.90	2.00	47.64	0.00	0.00
30.18	70.30	60.37	2.43	125.52	2.00	50.34	0.00	0.00
30.35	60.21	51.04	3.16	134.23	2.00	44.80	0.00	0.00
30.51	44.59	37.01	3.91	132.45	2.00	34.19	0.00	0.00
30.68	35.57	28.98	3.93	120.55	2.00	26.12	0.00	0.00
30.84	27.91	22.24	3.72	105.81	2.00	17.38	0.00	0.00
31.00	28.58	22.80	2.87	93.80	2.00	18.20	0.00	0.00
31.17	26.97	21.33	2.76	89.92	2.00	16.00	0.00	0.00
31.33	26.61	20.90	3.15	95.17	2.00	15.34	0.00	0.00
31.50	33.28	26.51	3.42	108.39	2.00	23.18	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
31.66	52.35	42.88	3.05	122.59	2.00	39.05	0.00	0.00
31.82	78.46	65.44	2.59	134.61	2.00	53.01	0.00	0.00
31.99	105.70	89.12	2.17	144.49	2.00	63.20	0.00	0.00
32.15	132.41	112.36	1.91	157.62	2.00	70.85	0.00	0.00
32.32	154.70	131.66	1.78	171.14	2.00	76.08	0.00	0.00
32.48	168.03	142.89	1.80	182.06	0.53	78.78	10.00	0.14
32.64	176.33	149.65	1.83	189.50	0.59	80.31	9.59	0.13
32.81	185.86	157.50	1.84	196.90	0.66	81.99	7.76	0.10
32.97	196.72	166.49	1.83	205.04	2.00	83.82	0.00	0.00
33.14	209.68	177.24	1.84	215.14	2.00	85.89	0.00	0.00
33.30	222.25	187.60	1.85	225.13	2.00	87.77	0.00	0.00
33.46	235.00	198.12	1.83	234.44	2.00	89.57	0.00	0.00
33.63	238.73	200.75	1.84	237.12	2.00	90.00	0.00	0.00
33.79	234.35	196.38	1.85	233.39	2.00	89.28	0.00	0.00
33.96	229.28	191.44	1.86	229.05	2.00	88.43	0.00	0.00
34.12	235.56	196.37	1.82	232.44	2.00	89.27	0.00	0.00
34.28	245.66	204.45	1.83	240.15	2.00	90.60	0.00	0.00
34.45	253.67	210.81	1.80	245.09	2.00	91.62	0.00	0.00
34.61	255.94	212.28	1.77	245.29	2.00	91.84	0.00	0.00
34.78	251.93	208.40	1.73	240.43	2.00	91.24	0.00	0.00
34.94	235.39	193.60	1.78	228.41	2.00	88.81	0.00	0.00
35.10	216.56	176.92	1.85	215.24	2.00	85.83	0.00	0.00
35.27	209.83	170.66	1.88	210.58	2.00	84.64	0.00	0.00
35.43	223.14	181.26	1.92	221.67	2.00	86.63	0.00	0.00
35.60	242.86	197.28	1.93	236.81	2.00	89.43	0.00	0.00
35.76	260.10	211.41	1.86	247.94	2.00	91.71	0.00	0.00
35.93	271.94	221.23	1.75	253.15	2.00	93.21	0.00	0.00
36.09	280.16	228.02	1.65	255.58	2.00	94.21	0.00	0.00
36.25	281.55	228.76	1.61	255.04	2.00	94.31	0.00	0.00
36.42	276.23	223.79	1.60	249.94	2.00	93.59	0.00	0.00
36.58	266.45	214.88	1.63	242.88	2.00	92.25	0.00	0.00
36.75	259.73	208.63	1.65	237.89	2.00	91.27	0.00	0.00
36.91	261.33	209.29	1.68	239.44	2.00	91.38	0.00	0.00
37.07	272.82	218.34	1.66	247.35	2.00	92.77	0.00	0.00
37.24	295.16	236.89	1.56	260.60	2.00	95.46	0.00	0.00
37.40	325.60	262.84	1.38	276.61	2.00	98.90	0.00	0.00
37.57	353.40	287.31	1.17	286.42	2.00	100.00	0.00	0.00
37.73	369.71	300.07	0.96	300.07	2.00	100.00	0.00	0.00
37.89	366.60	296.91	0.88	296.91	2.00	100.00	0.00	0.00
38.06	349.01	281.99	0.93	281.99	2.00	100.00	0.00	0.00
38.22	337.71	272.13	1.13	271.64	2.00	100.00	0.00	0.00
38.39	340.48	273.24	1.19	276.17	2.00	100.00	0.00	0.00
38.55	359.37	288.60	1.14	288.60	2.00	100.00	0.00	0.00
38.71	375.96	301.38	0.99	301.38	2.00	100.00	0.00	0.00
38.88	387.57	310.12	0.90	310.12	2.00	100.00	0.00	0.00
39.04	396.09	316.33	0.82	316.33	2.00	100.00	0.00	0.00
39.21	405.84	323.51	0.94	323.51	2.00	100.00	0.00	0.00
39.37	410.70	326.74	1.03	326.74	2.00	100.00	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
39.53	413.25	328.09	1.15	328.09	2.00	100.00	0.00	0.00
39.70	412.20	326.58	1.02	326.58	2.00	100.00	0.00	0.00
39.86	415.84	328.82	0.93	328.82	2.00	100.00	0.00	0.00
40.03	417.85	329.77	0.82	329.77	2.00	100.00	0.00	0.00
40.19	412.41	324.81	0.77	324.81	2.00	100.00	0.00	0.00
40.35	390.85	307.13	0.72	307.13	2.00	100.00	0.00	0.00
40.52	289.81	226.78	0.93	226.78	2.00	94.03	0.00	0.00
40.68	175.52	130.59	1.50	161.76	2.00	75.81	0.00	0.00
40.85	67.08	44.71	3.50	134.71	2.00	40.43	0.00	0.00
41.01	38.05	23.60	4.32	117.04	2.00	19.34	0.00	0.00
41.17	27.41	16.37	3.16	87.44	2.00	7.27	0.00	0.00
41.34	25.81	15.70	1.35	59.20	2.00	5.89	0.00	0.00
41.50	26.48	16.66	0.48	41.36	0.07	7.85	50.00	0.46
41.67	27.79	17.44	0.66	46.34	0.07	9.35	50.00	0.45
41.83	28.37	17.62	0.94	52.79	0.08	9.70	50.00	0.45
41.99	27.12	16.56	1.15	56.26	2.00	7.65	0.00	0.00
42.16	25.71	15.52	1.12	54.82	2.00	5.51	0.00	0.00
42.32	23.76	14.18	0.94	49.89	2.00	2.53	0.00	0.00
42.49	22.67	13.42	0.83	47.03	2.00	0.70	0.00	0.00
42.65	22.41	13.24	0.74	45.11	2.00	0.27	0.00	0.00
42.81	22.74	13.50	0.64	43.10	0.07	0.91	50.00	0.42
42.98	22.72	13.51	0.56	41.20	0.07	0.94	50.00	0.42
43.14	21.95	12.92	0.56	40.81	0.07	0.00	50.00	0.41
43.31	21.60	12.61	0.62	42.00	2.00	0.00	0.00	0.00
43.47	21.96	12.81	0.65	42.81	2.00	0.00	0.00	0.00
43.64	23.11	13.52	0.78	46.07	2.00	0.96	0.00	0.00
43.80	23.60	13.76	0.93	49.32	2.00	1.54	0.00	0.00
43.96	24.33	14.13	1.15	53.87	2.00	2.41	0.00	0.00
44.13	30.11	18.28	0.93	53.14	0.08	10.91	50.00	0.39
44.29	37.44	23.56	0.86	55.53	0.08	19.28	50.00	0.39
44.46	41.95	26.70	0.92	59.29	0.08	23.42	50.00	0.38
44.62	41.20	25.28	1.97	81.17	0.11	21.61	50.00	0.38
44.78	46.02	28.21	2.61	96.77	2.00	25.23	0.00	0.00
44.95	74.05	48.09	2.26	109.80	0.17	42.83	50.00	0.37
45.11	97.76	65.14	2.14	122.26	0.21	52.85	34.10	0.25
45.28	104.65	69.59	2.36	132.48	0.25	55.03	22.70	0.16
45.44	91.68	59.46	2.88	136.53	0.26	49.84	34.10	0.24
45.60	88.55	57.07	2.89	134.48	0.26	48.49	34.10	0.24
45.77	84.31	53.78	3.04	134.62	0.26	46.53	34.10	0.24
45.93	81.37	51.28	3.38	139.97	2.00	44.96	0.00	0.00
46.10	100.51	64.89	2.96	144.05	2.00	52.72	0.00	0.00
46.26	135.63	90.67	2.36	151.79	2.00	63.77	0.00	0.00
46.42	154.68	104.67	2.18	159.08	2.00	68.51	0.00	0.00
46.59	130.87	86.89	2.31	146.84	0.31	62.36	22.70	0.15
46.75	112.33	73.29	2.39	136.71	0.27	56.74	22.70	0.15
46.92	127.23	85.19	1.75	129.06	0.24	61.71	22.70	0.15
47.08	156.88	107.58	1.50	141.29	0.29	69.41	14.50	0.09
47.24	162.99	112.11	1.44	143.67	2.00	70.77	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
47.41	129.92	85.69	2.06	138.56	2.00	61.90	0.00	0.00
47.57	94.49	59.21	2.89	136.49	2.00	49.70	0.00	0.00
47.74	66.26	39.07	4.10	139.49	2.00	35.98	0.00	0.00
47.90	64.22	37.69	3.97	134.86	2.00	34.79	0.00	0.00
48.06	61.76	36.04	3.84	130.13	2.00	33.31	0.00	0.00
48.23	93.93	58.75	2.46	125.05	2.00	49.44	0.00	0.00
48.39	136.67	90.95	1.51	126.94	2.00	63.87	0.00	0.00
48.56	178.95	123.78	1.13	144.81	2.00	74.04	0.00	0.00
48.72	174.95	119.91	1.23	144.28	2.00	72.99	0.00	0.00
48.88	136.56	89.32	1.79	133.64	2.00	63.27	0.00	0.00
49.05	95.64	58.86	2.65	130.23	2.00	49.51	0.00	0.00
49.21	65.16	37.69	3.47	125.32	2.00	34.79	0.00	0.00
49.38	48.09	26.49	3.81	114.90	2.00	23.16	0.00	0.00
49.54	42.53	23.06	3.47	103.99	2.00	18.57	0.00	0.00
49.70	39.93	21.51	3.10	95.75	2.00	16.28	0.00	0.00
49.87	41.03	22.35	2.63	89.53	2.00	17.54	0.00	0.00
50.03	36.75	19.55	2.72	86.97	2.00	13.12	0.00	0.00

Total estimated displacement: 28.16

Abbreviations

q_t:	Total cone resistance
Q_{tn}:	Adjusted cone resistance to an effective overburden stress of 1 atm
R_f:	Friction ration
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
FS:	Calculated factor of safety against liquefaction
D_r:	Calculated relative density
$Gamma_{max}$:	Calculated maximum cyclic shear strain
Lat. disp.:	Lateral displacement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.16	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.33	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.49	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.66	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.82	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.98	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.15	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.31	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.48	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.64	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.80	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.97	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.13	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.30	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.46	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.62	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.79	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.95	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.12	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.28	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.44	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.61	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.77	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.94	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.10	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.27	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.43	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.59	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.76	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.92	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
5.09	47.26	75.43	1.32	99.37	2.01	0.79	0.79
5.25	72.63	116.18	1.16	134.77	1.87	0.85	0.85
5.41	75.82	121.29	1.14	138.31	1.84	0.85	0.85
5.58	80.03	128.03	1.12	143.35	1.82	0.86	0.86
5.74	82.67	132.27	1.12	147.65	1.81	0.87	0.87
5.91	86.10	137.76	1.12	153.99	1.82	0.87	0.87
6.07	85.98	137.55	1.13	155.51	1.83	0.87	0.87
6.23	87.39	139.80	1.12	156.45	1.82	0.88	0.88
6.40	86.55	138.44	1.12	154.77	1.82	0.87	0.87
6.56	86.87	138.93	1.12	155.27	1.81	0.87	0.87
6.73	85.82	137.23	1.14	156.04	1.84	0.87	0.87
6.89	86.34	138.06	1.15	158.29	1.85	0.87	0.87
7.05	88.42	141.38	1.15	162.47	1.85	0.88	0.88
7.22	96.31	150.49	1.13	169.37	1.83	0.89	0.89
7.38	107.50	163.93	1.10	180.15	1.79	0.90	0.90
7.55	122.48	181.47	1.06	192.79	1.74	0.91	0.91
7.71	131.54	191.38	1.05	201.04	1.72	0.92	0.92
7.87	135.53	194.71	1.05	204.07	1.72	0.93	0.93

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.04	135.89	193.80	1.05	204.31	1.72	0.92	0.92
8.20	138.06	195.43	1.05	205.17	1.72	0.93	0.93
8.37	141.64	198.84	1.04	207.47	1.71	0.93	0.93
8.53	141.12	197.18	1.05	206.15	1.71	0.93	0.93
8.69	135.63	188.80	1.05	198.20	1.72	0.92	0.92
8.86	128.12	178.15	1.06	188.92	1.73	0.91	0.91
9.02	116.33	163.55	1.10	180.43	1.80	0.90	0.90
9.19	110.38	156.94	1.15	180.80	1.86	0.89	0.89
9.35	113.36	161.17	1.17	188.65	1.88	0.90	0.90
9.51	130.79	181.86	1.12	203.31	1.82	0.91	0.91
9.68	148.17	201.95	1.08	217.51	1.76	0.93	0.93
9.84	156.62	210.87	1.06	223.18	1.73	0.94	0.94
10.01	154.21	206.86	1.06	219.83	1.74	0.93	0.93
10.17	145.50	195.15	1.08	210.25	1.76	0.93	0.93
10.33	133.72	179.72	1.10	197.53	1.79	0.91	0.91
10.50	121.74	164.08	1.13	184.62	1.82	0.90	0.90
10.66	108.79	147.13	1.16	170.20	1.86	0.88	0.88
10.83	93.56	127.38	1.21	153.80	1.92	0.86	0.86
10.99	77.97	107.17	1.29	137.81	1.99	0.84	0.84
11.15	66.34	91.85	1.37	126.17	2.05	0.82	0.82
11.32	60.66	84.04	1.42	119.65	2.08	0.80	0.80
11.48	57.94	79.84	1.43	114.08	2.09	0.80	0.80
11.65	53.66	73.77	1.46	107.70	2.10	0.79	0.79
11.81	47.23	64.94	1.52	99.02	2.14	0.77	0.77
11.98	38.24	52.94	1.69	89.38	2.21	0.74	0.74
12.14	30.64	42.99	2.02	86.82	2.32	0.72	0.72
12.30	23.82	34.07	2.63	89.72	2.47	0.69	0.69
12.47	19.29	28.09	3.48	97.68	2.62	2.00	2.00
12.63	16.29	23.92	4.27	102.11	2.74	1.67	1.67
12.80	15.69	22.89	4.34	99.36	2.75	1.59	1.59
12.96	16.15	23.35	4.19	97.89	2.73	1.63	1.63
13.12	15.40	22.12	4.29	94.80	2.74	1.54	1.54
13.29	12.86	18.50	5.10	94.27	2.84	1.26	1.26
13.45	9.51	13.56	6.47	87.79	2.98	0.90	0.90
13.62	7.38	10.18	7.75	78.84	3.09	0.68	0.68
13.78	8.84	12.33	6.14	75.65	2.94	0.82	0.82
13.94	14.64	20.20	3.99	80.64	2.70	1.41	1.41
14.11	21.01	28.50	2.98	84.91	2.54	0.66	0.66
14.27	28.16	37.74	2.50	94.45	2.44	0.70	0.70
14.44	30.65	41.19	2.66	109.67	2.48	0.71	0.71
14.60	30.60	41.27	2.93	121.02	2.53	0.71	0.71
14.76	29.42	39.56	3.07	121.64	2.56	0.70	0.70
14.93	54.68	69.33	1.58	109.44	2.16	0.78	0.78
15.09	90.76	109.76	1.16	127.41	1.87	0.84	0.84
15.26	126.35	148.28	1.03	153.27	1.69	0.88	0.88
15.42	135.86	158.80	1.03	163.65	1.69	0.89	0.89
15.58	136.02	159.14	1.05	167.26	1.72	0.89	0.89
15.75	139.76	163.30	1.06	173.26	1.73	0.90	0.90

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.91	149.33	172.96	1.04	179.54	1.70	0.91	0.91
16.08	164.45	188.18	1.00	187.60	1.64	0.92	0.92
16.24	178.77	203.89	1.00	203.89	1.59	0.93	0.93
16.40	190.11	216.10	1.00	216.10	1.57	0.94	0.94
16.57	199.35	225.83	1.00	225.83	1.56	0.95	0.95
16.73	207.50	234.26	1.00	234.26	1.56	0.95	0.95
16.90	215.34	242.26	1.00	242.26	1.56	0.96	0.96
17.06	223.71	250.80	1.00	250.80	1.56	0.97	0.97
17.22	234.22	261.68	1.00	261.68	1.54	0.97	0.97
17.39	244.92	272.70	1.00	272.70	1.51	0.98	0.98
17.55	252.47	280.15	1.00	280.15	1.47	0.98	0.98
17.72	252.01	278.65	1.00	278.65	1.44	0.98	0.98
17.88	242.20	266.84	1.00	266.84	1.44	0.98	0.98
18.04	223.06	244.81	1.00	244.81	1.52	0.96	0.96
18.21	202.32	221.93	1.02	225.84	1.67	0.95	0.95
18.37	196.41	216.11	1.06	228.92	1.73	0.94	0.94
18.54	204.60	224.29	1.06	237.41	1.73	0.95	0.95
18.70	217.26	236.04	1.02	241.63	1.68	0.96	0.96
18.86	220.43	238.87	1.03	246.06	1.69	0.96	0.96
19.03	215.44	232.91	1.04	242.05	1.70	0.95	0.95
19.19	206.46	222.55	1.05	232.64	1.71	0.95	0.95
19.36	193.03	207.34	1.05	217.40	1.72	0.94	0.94
19.52	170.73	183.77	1.10	201.24	1.78	0.92	0.92
19.69	140.06	151.57	1.19	180.05	1.90	0.89	0.89
19.85	98.01	107.28	1.47	158.19	2.11	0.84	0.84
20.01	70.18	77.28	1.91	147.51	2.29	0.79	0.79
20.18	49.36	54.56	2.65	144.45	2.48	0.75	0.75
20.34	40.18	44.24	3.07	135.86	2.56	0.72	0.72
20.51	31.90	34.89	3.59	125.33	2.64	2.38	2.38
20.67	40.23	43.48	2.52	109.43	2.45	0.72	0.72
20.83	49.96	53.64	2.08	111.47	2.34	0.74	0.74
21.00	51.55	55.21	2.13	117.48	2.35	0.75	0.75
21.16	42.62	45.70	2.80	128.18	2.51	0.72	0.72
21.33	39.40	42.11	3.14	132.13	2.57	0.71	0.71
21.49	42.07	44.67	2.84	126.91	2.51	0.72	0.72
21.65	46.71	49.24	2.42	119.01	2.42	0.73	0.73
21.82	48.33	50.65	2.26	114.57	2.39	0.74	0.74
21.98	40.76	42.56	2.69	114.26	2.48	0.71	0.71
22.15	27.36	28.26	3.70	104.45	2.66	1.92	1.92
22.31	15.34	15.34	5.58	85.61	2.89	1.03	1.03
22.47	12.16	11.82	5.91	69.86	2.92	0.26	0.79
22.64	18.74	18.74	4.32	80.96	2.74	1.26	1.26
22.80	54.77	55.79	1.73	96.44	2.22	0.75	0.75
22.97	111.19	112.48	1.20	135.02	1.91	0.84	0.84
23.13	170.19	170.68	1.05	178.94	1.72	0.91	0.91
23.29	195.10	194.83	1.02	197.93	1.67	0.93	0.93
23.46	190.68	190.20	1.05	199.21	1.71	0.92	0.92
23.62	168.62	168.42	1.14	191.78	1.84	0.90	0.90

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
23.79	141.82	141.86	1.31	185.63	2.01	0.88	0.88
23.95	120.43	120.48	1.57	189.26	2.16	0.85	0.85
24.11	103.44	103.28	1.88	194.15	2.28	0.83	0.83
24.28	101.01	100.38	1.88	188.92	2.28	0.83	0.83
24.44	115.29	113.83	1.55	176.91	2.15	0.85	0.85
24.61	132.88	130.35	1.30	169.85	2.00	0.87	0.87
24.77	142.54	139.08	1.20	166.41	1.91	0.87	0.87
24.93	133.19	129.54	1.23	159.63	1.94	0.86	0.86
25.10	118.78	115.28	1.38	159.65	2.06	0.85	0.85
25.26	101.72	98.44	1.68	165.22	2.20	0.83	0.83
25.43	89.94	86.67	1.94	168.42	2.30	0.81	0.81
25.59	89.11	85.49	1.91	163.21	2.29	0.81	0.81
25.75	95.39	91.18	1.75	159.42	2.23	0.81	0.81
25.92	88.20	83.89	1.84	154.77	2.27	0.80	0.80
26.08	73.55	69.50	2.12	147.39	2.35	0.78	0.78
26.25	73.11	68.79	2.08	142.77	2.34	0.78	0.78
26.41	75.92	71.19	2.05	145.84	2.33	0.78	0.78
26.57	69.82	65.11	2.28	148.21	2.39	0.77	0.77
26.74	50.81	46.79	3.22	150.83	2.58	0.73	0.73
26.90	52.49	48.19	2.95	141.99	2.53	0.73	0.73
27.07	85.73	79.36	1.78	141.56	2.24	0.80	0.80
27.23	130.02	120.77	1.32	159.30	2.01	0.85	0.85
27.40	169.97	157.91	1.19	187.59	1.90	0.89	0.89
27.56	191.94	177.99	1.16	207.15	1.87	0.91	0.91
27.72	202.35	187.11	1.18	219.95	1.89	0.92	0.92
27.89	205.49	189.42	1.18	223.58	1.89	0.92	0.92
28.05	200.75	184.48	1.16	214.36	1.87	0.92	0.92
28.22	183.51	168.01	1.15	193.65	1.86	0.90	0.90
28.38	151.44	137.85	1.20	165.78	1.91	0.87	0.87
28.54	111.66	100.58	1.45	145.77	2.10	0.83	0.83
28.71	78.20	69.40	2.06	142.82	2.33	0.78	0.78
28.87	53.04	46.14	3.15	145.44	2.57	0.72	0.72
29.04	37.85	32.22	4.17	134.20	2.72	2.14	2.14
29.20	26.02	21.48	5.43	116.59	2.87	1.43	1.43
29.36	22.53	18.33	5.12	93.86	2.84	1.22	1.22
29.53	23.28	18.94	4.69	88.76	2.79	1.26	1.26
29.69	28.03	23.10	3.97	91.82	2.70	1.53	1.53
29.86	46.79	39.79	2.51	100.04	2.45	0.71	0.71
30.02	64.68	55.63	2.05	113.90	2.33	0.75	0.75
30.18	70.30	60.37	2.08	125.52	2.34	0.76	0.76
30.35	60.21	51.04	2.63	134.23	2.47	0.74	0.74
30.51	44.59	37.01	3.58	132.45	2.64	2.44	2.44
30.68	35.57	28.98	4.16	120.55	2.72	1.91	1.91
30.84	27.91	22.24	4.76	105.81	2.80	1.47	1.47
31.00	28.58	22.80	4.11	93.80	2.72	1.50	1.50
31.17	26.97	21.33	4.22	89.92	2.73	1.41	1.41
31.33	26.61	20.90	4.55	95.17	2.77	1.38	1.38
31.50	33.28	26.51	4.09	108.39	2.71	1.75	1.75

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.66	52.35	42.88	2.86	122.59	2.52	0.71	0.71
31.82	78.46	65.44	2.06	134.61	2.33	0.77	0.77
31.99	105.70	89.12	1.62	144.49	2.18	0.81	0.81
32.15	132.41	112.36	1.40	157.62	2.07	0.84	0.84
32.32	154.70	131.66	1.30	171.14	2.00	0.87	0.87
32.48	168.03	142.89	1.27	182.06	1.98	0.88	0.88
32.64	176.33	149.65	1.27	189.50	1.97	0.89	0.89
32.81	185.86	157.50	1.25	196.90	1.96	0.89	0.89
32.97	196.72	166.49	1.23	205.04	1.94	0.90	0.90
33.14	209.68	177.24	1.21	215.14	1.93	0.91	0.91
33.30	222.25	187.60	1.20	225.13	1.91	0.92	0.92
33.46	235.00	198.12	1.18	234.44	1.89	0.93	0.93
33.63	238.73	200.75	1.18	237.12	1.89	0.93	0.93
33.79	234.35	196.38	1.19	233.39	1.90	0.93	0.93
33.96	229.28	191.44	1.20	229.05	1.91	0.92	0.92
34.12	235.56	196.37	1.18	232.44	1.89	0.93	0.93
34.28	245.66	204.45	1.17	240.15	1.88	0.93	0.93
34.45	253.67	210.81	1.16	245.09	1.87	0.94	0.94
34.61	255.94	212.28	1.16	245.29	1.86	0.94	0.94
34.78	251.93	208.40	1.15	240.43	1.86	0.94	0.94
34.94	235.39	193.60	1.18	228.41	1.89	0.92	0.92
35.10	216.56	176.92	1.22	215.24	1.93	0.91	0.91
35.27	209.83	170.66	1.23	210.58	1.94	0.91	0.91
35.43	223.14	181.26	1.22	221.67	1.93	0.91	0.91
35.60	242.86	197.28	1.20	236.81	1.91	0.93	0.93
35.76	260.10	211.41	1.17	247.94	1.88	0.94	0.94
35.93	271.94	221.23	1.14	253.15	1.85	0.95	0.95
36.09	280.16	228.02	1.12	255.58	1.82	0.95	0.95
36.25	281.55	228.76	1.11	255.04	1.81	0.95	0.95
36.42	276.23	223.79	1.12	249.94	1.81	0.95	0.95
36.58	266.45	214.88	1.13	242.88	1.83	0.94	0.94
36.75	259.73	208.63	1.14	237.89	1.84	0.94	0.94
36.91	261.33	209.29	1.14	239.44	1.85	0.94	0.94
37.07	272.82	218.34	1.13	247.35	1.83	0.94	0.94
37.24	295.16	236.89	1.10	260.60	1.79	0.96	0.96
37.40	325.60	262.84	1.05	276.61	1.72	0.97	0.97
37.57	353.40	287.31	1.00	286.42	1.64	0.99	0.99
37.73	369.71	300.07	1.00	300.07	1.56	0.99	0.99
37.89	366.60	296.91	1.00	296.91	1.53	0.99	0.99
38.06	349.01	281.99	1.00	281.99	1.57	0.98	0.98
38.22	337.71	272.13	1.00	271.64	1.64	0.98	0.98
38.39	340.48	273.24	1.01	276.17	1.66	0.98	0.98
38.55	359.37	288.60	1.00	288.60	1.63	0.99	0.99
38.71	375.96	301.38	1.00	301.38	1.57	1.00	1.00
38.88	387.57	310.12	1.00	310.12	1.53	1.00	1.00
39.04	396.09	316.33	1.00	316.33	1.49	1.00	1.00
39.21	405.84	323.51	1.00	323.51	1.53	1.01	1.01
39.37	410.70	326.74	1.00	326.74	1.56	1.01	1.01

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
39.53	413.25	328.09	1.00	328.09	1.60	1.01	1.01
39.70	412.20	326.58	1.00	326.58	1.56	1.01	1.01
39.86	415.84	328.82	1.00	328.82	1.53	1.01	1.01
40.03	417.85	329.77	1.00	329.77	1.48	1.01	1.01
40.19	412.41	324.81	1.00	324.81	1.47	1.01	1.01
40.35	390.85	307.13	1.00	307.13	1.46	1.00	1.00
40.52	289.81	226.78	1.00	226.78	1.63	0.95	0.95
40.68	175.52	130.59	1.24	161.76	1.95	0.87	0.87
40.85	67.08	44.71	3.01	134.71	2.55	0.72	0.72
41.01	38.05	23.60	4.96	117.04	2.82	1.54	1.54
41.17	27.41	16.37	5.34	87.44	2.86	1.08	1.08
41.34	25.81	15.70	3.77	59.20	2.67	0.07	1.01
41.50	26.48	16.66	2.48	41.36	2.44	0.05	0.60
41.67	27.79	17.44	2.66	46.34	2.48	0.05	0.61
41.83	28.37	17.62	3.00	52.79	2.54	0.07	0.61
41.99	27.12	16.56	3.40	56.26	2.61	0.23	1.05
42.16	25.71	15.52	3.53	54.82	2.63	0.19	0.99
42.32	23.76	14.18	3.52	49.89	2.63	0.13	0.90
42.49	22.67	13.42	3.51	47.03	2.63	0.10	0.85
42.65	22.41	13.24	3.41	45.11	2.61	0.12	0.84
42.81	22.74	13.50	3.19	43.10	2.58	0.05	0.58
42.98	22.72	13.51	3.05	41.20	2.55	0.05	0.58
43.14	21.95	12.92	3.16	40.81	2.57	0.05	0.57
43.31	21.60	12.61	3.33	42.00	2.60	0.08	0.80
43.47	21.96	12.81	3.34	42.81	2.60	0.09	0.81
43.64	23.11	13.52	3.41	46.07	2.61	0.10	0.86
43.80	23.60	13.76	3.58	49.32	2.64	0.15	0.87
43.96	24.33	14.13	3.81	53.87	2.67	0.16	0.90
44.13	30.11	18.28	2.91	53.14	2.53	0.07	0.61
44.29	37.44	23.56	2.36	55.53	2.41	0.07	0.64
44.46	41.95	26.70	2.22	59.29	2.38	0.09	0.66
44.62	41.20	25.28	3.21	81.17	2.58	0.65	0.65
44.78	46.02	28.21	3.43	96.77	2.62	1.78	1.78
44.95	74.05	48.09	2.28	109.80	2.39	0.73	0.73
45.11	97.76	65.14	1.88	122.26	2.28	0.77	0.77
45.28	104.65	69.59	1.90	132.48	2.29	0.78	0.78
45.44	91.68	59.46	2.30	136.53	2.40	0.76	0.76
45.60	88.55	57.07	2.36	134.48	2.41	0.75	0.75
45.77	84.31	53.78	2.50	134.62	2.44	0.74	0.74
45.93	81.37	51.28	2.73	139.97	2.49	0.74	0.74
46.10	100.51	64.89	2.22	144.05	2.38	0.77	0.77
46.26	135.63	90.67	1.67	151.79	2.20	0.81	0.81
46.42	154.68	104.67	1.52	159.08	2.13	0.83	0.83
46.59	130.87	86.89	1.69	146.84	2.21	0.81	0.81
46.75	112.33	73.29	1.87	136.71	2.27	0.78	0.78
46.92	127.23	85.19	1.52	129.06	2.13	0.81	0.81
47.08	156.88	107.58	1.31	141.29	2.01	0.84	0.84
47.24	162.99	112.11	1.28	143.67	1.99	0.84	0.84

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.41	129.92	85.69	1.62	138.56	2.18	0.81	0.81
47.57	94.49	59.21	2.31	136.49	2.40	0.76	0.76
47.74	66.26	39.07	3.57	139.49	2.64	2.46	2.46
47.90	64.22	37.69	3.58	134.86	2.64	2.37	2.37
48.06	61.76	36.04	3.61	130.13	2.64	2.27	2.27
48.23	93.93	58.75	2.13	125.05	2.35	0.76	0.76
48.39	136.67	90.95	1.40	126.94	2.07	0.81	0.81
48.56	178.95	123.78	1.17	144.81	1.88	0.86	0.86
48.72	174.95	119.91	1.20	144.28	1.91	0.85	0.85
48.88	136.56	89.32	1.50	133.64	2.12	0.81	0.81
49.05	95.64	58.86	2.21	130.23	2.37	0.76	0.76
49.21	65.16	37.69	3.33	125.32	2.60	0.70	0.70
49.38	48.09	26.49	4.34	114.90	2.75	1.70	1.70
49.54	42.53	23.06	4.51	103.99	2.77	1.48	1.48
49.70	39.93	21.51	4.45	95.75	2.76	1.38	1.38
49.87	41.03	22.35	4.01	89.53	2.70	1.42	1.42
50.03	36.75	19.55	4.45	86.97	2.76	1.25	1.25

Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

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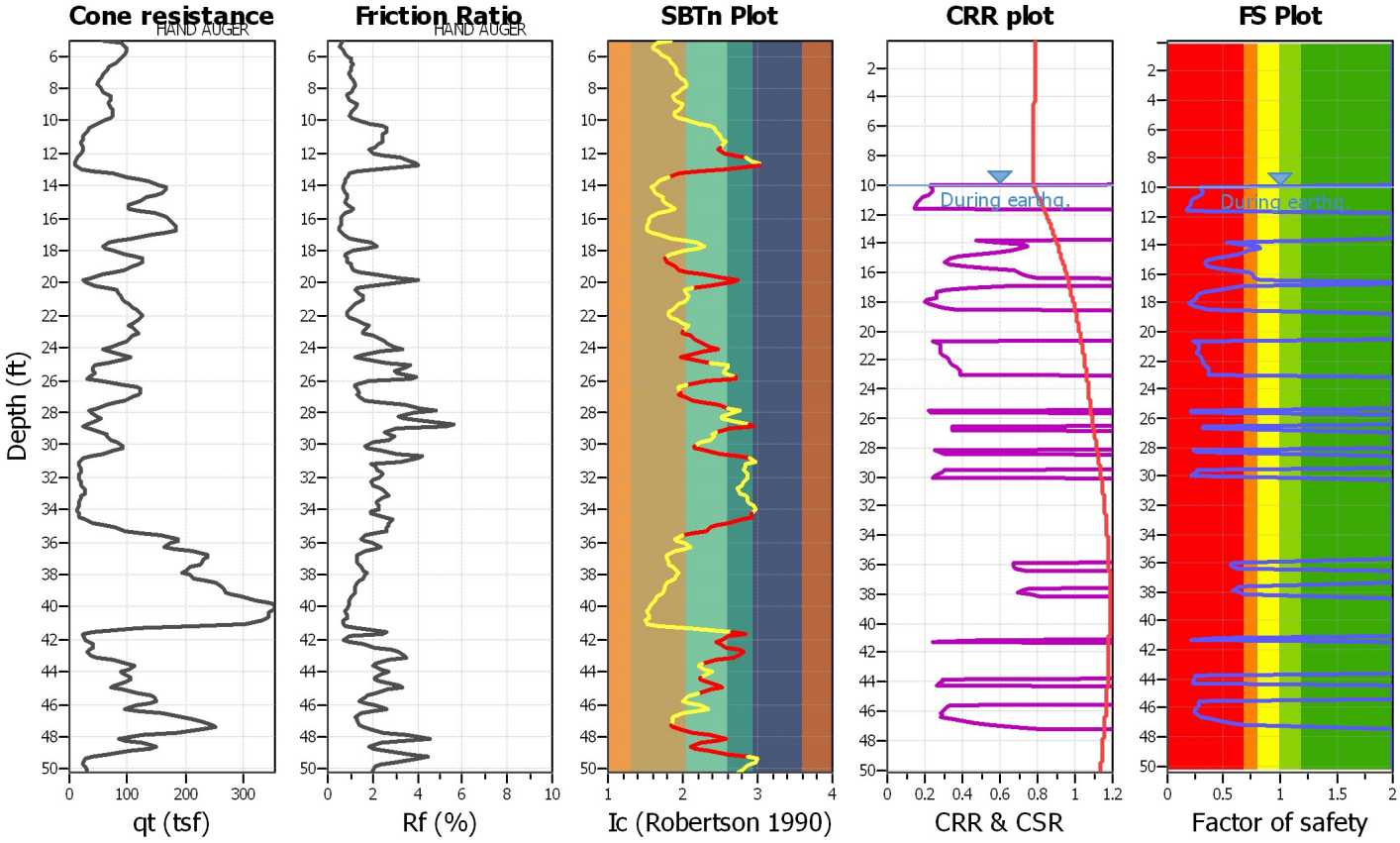
LIQUEFACTION ANALYSIS REPORT

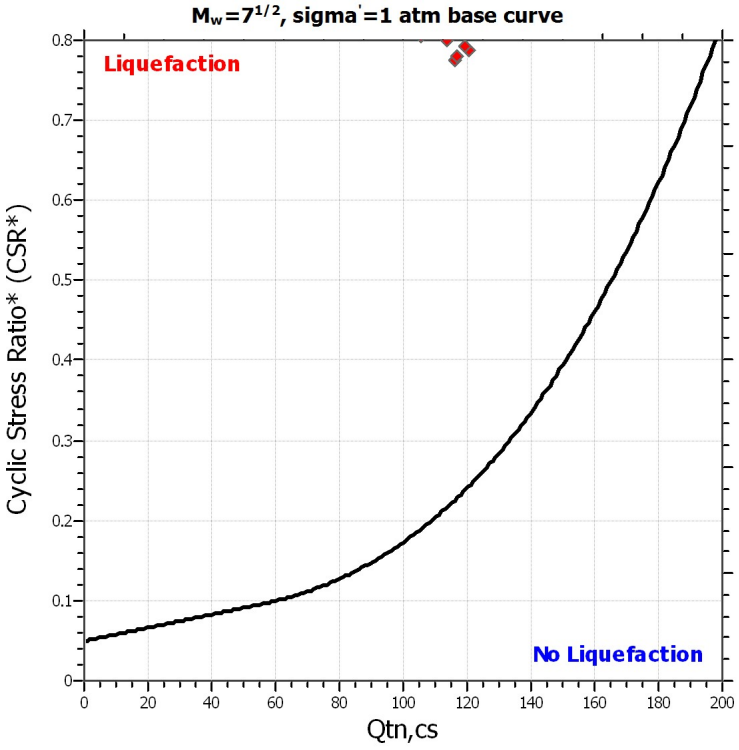
Project title : 14-108 Aqua Del Vista **Location : Coachella - NCEER 2001 MEthods**

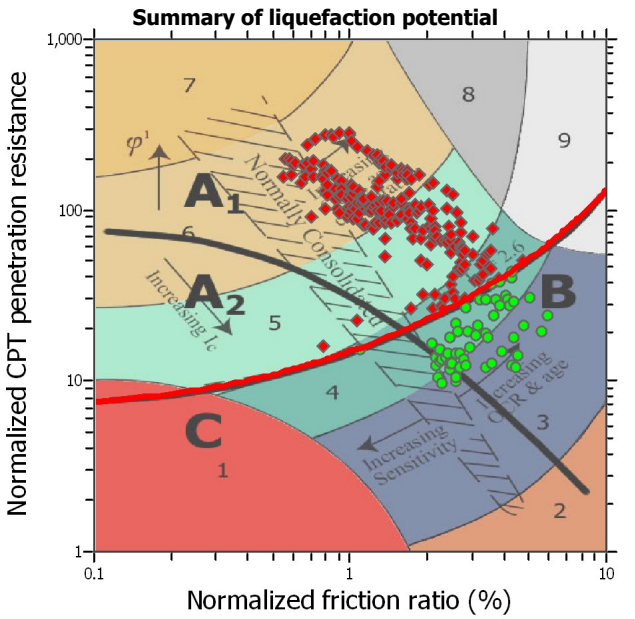
CPT file : 075C04

Input parameters and analysis data

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	10.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	7.80	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	1.10	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

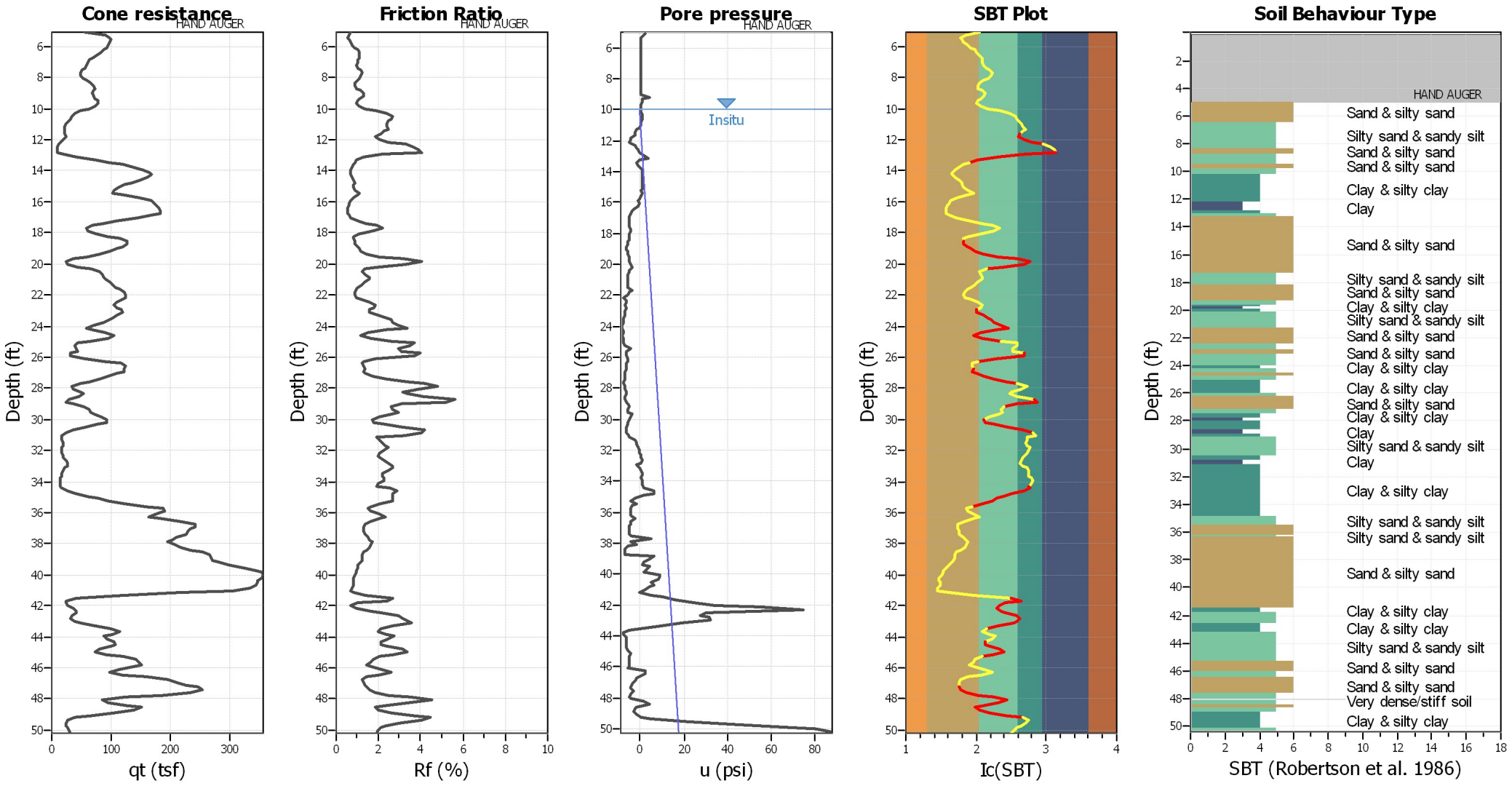






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



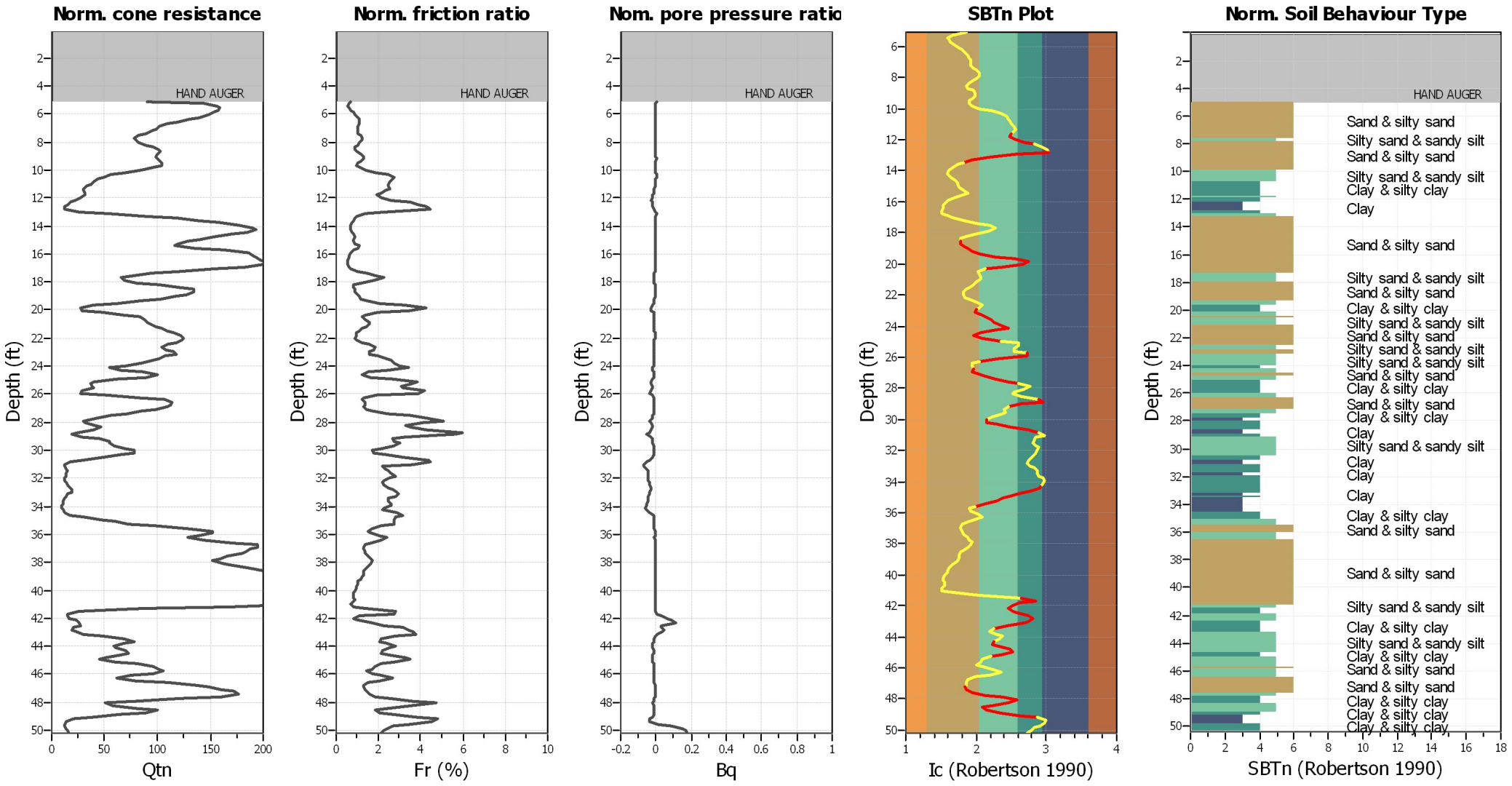
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



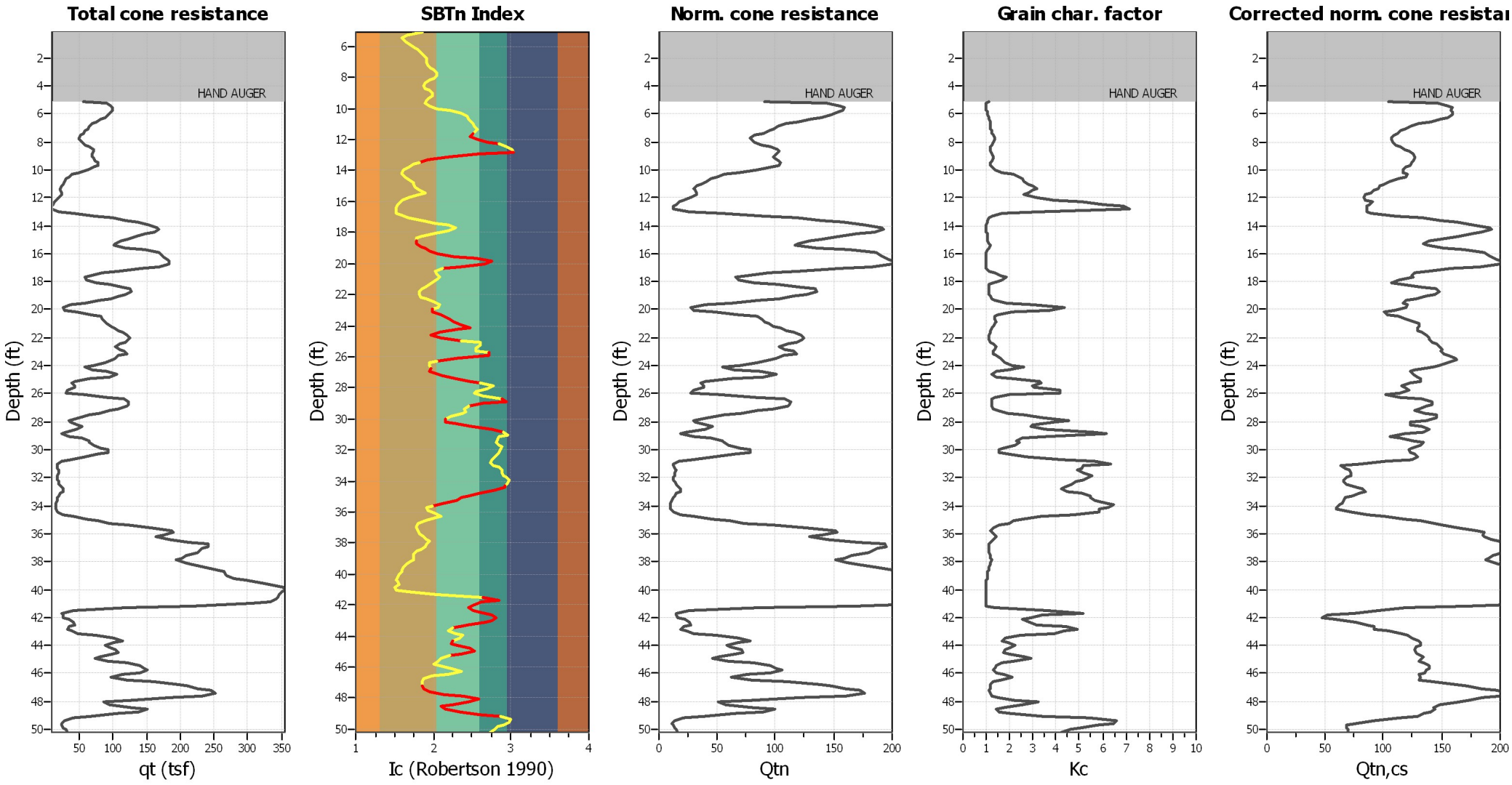
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

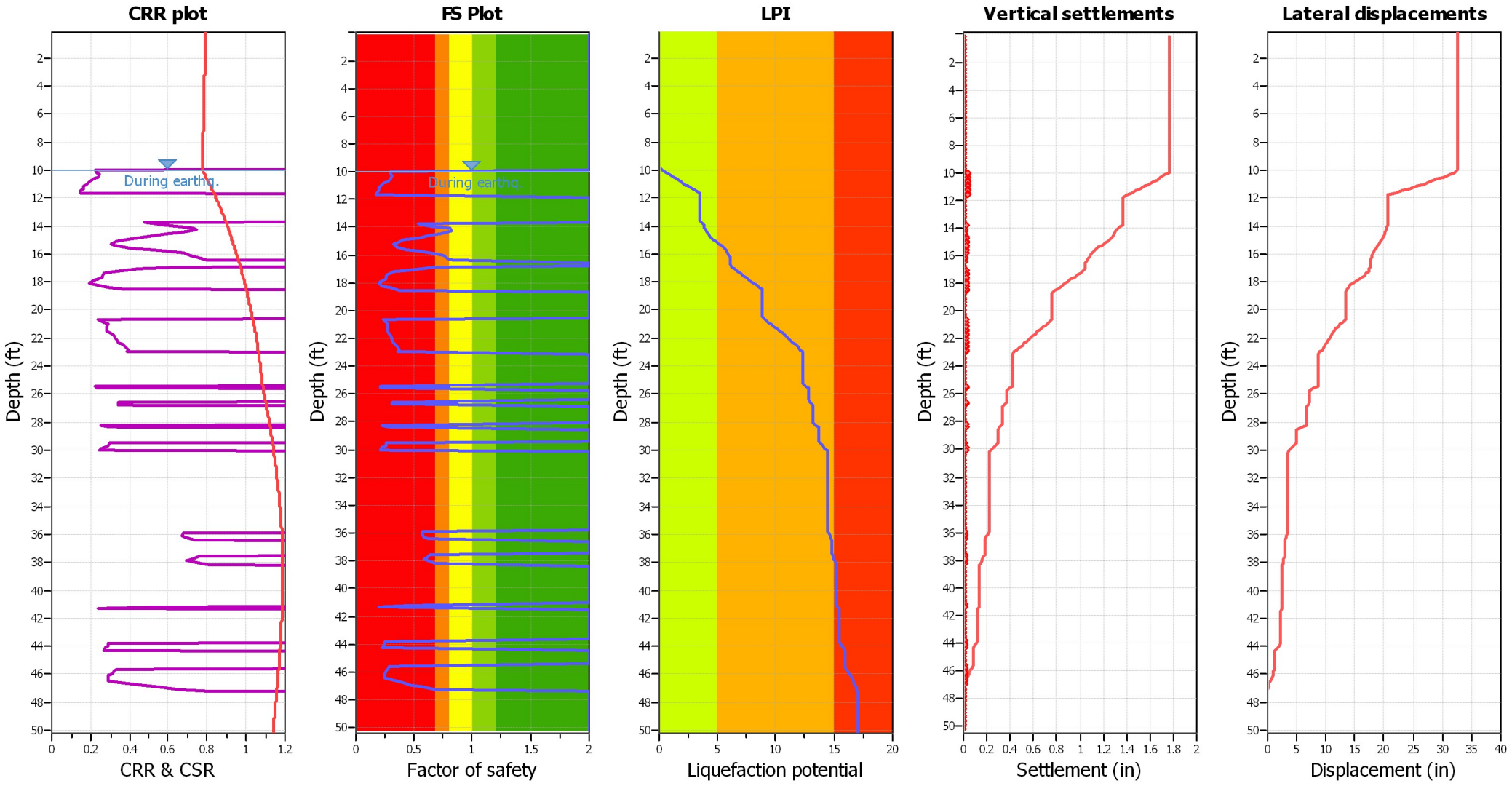
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	N/A

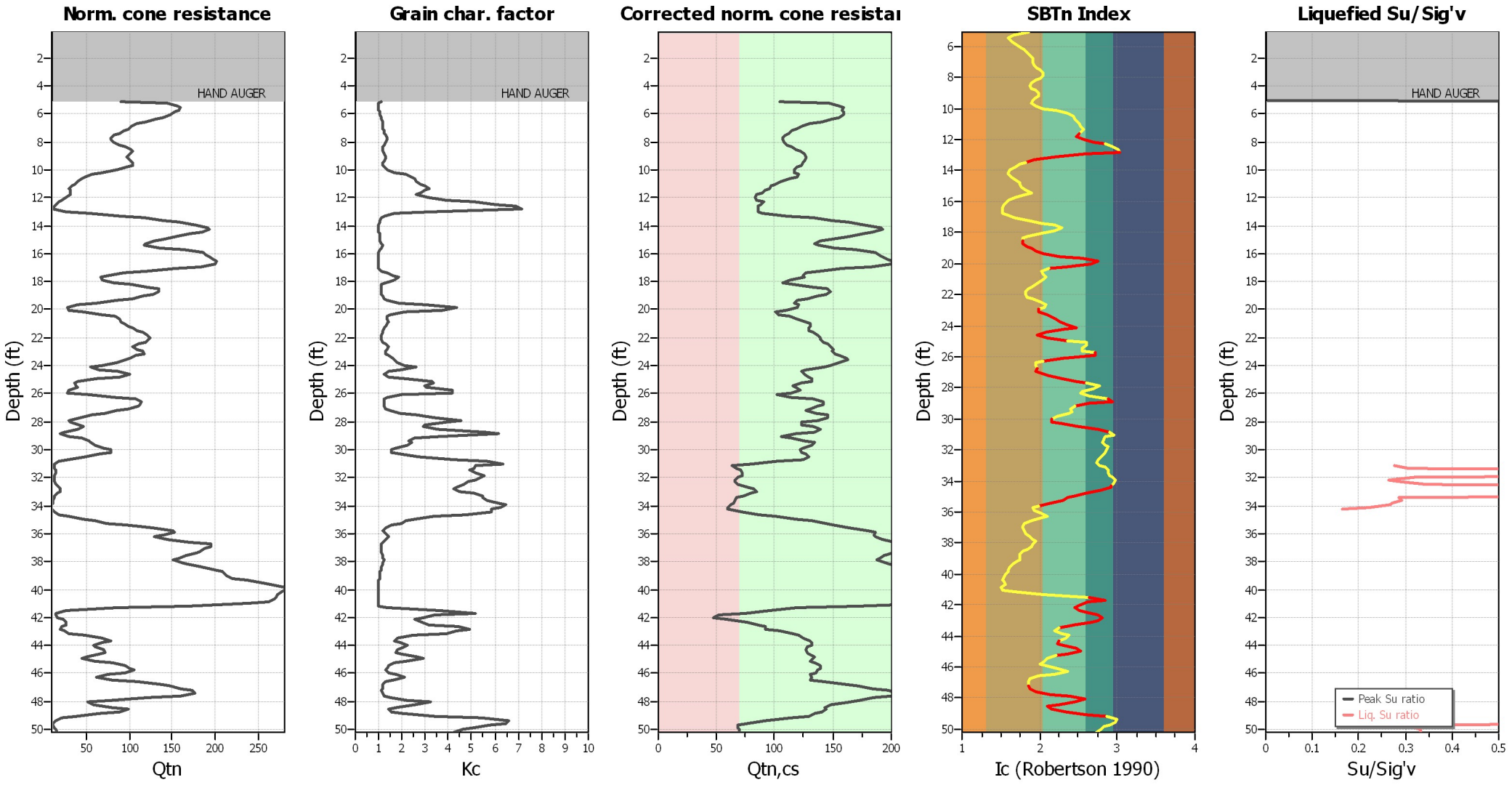
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

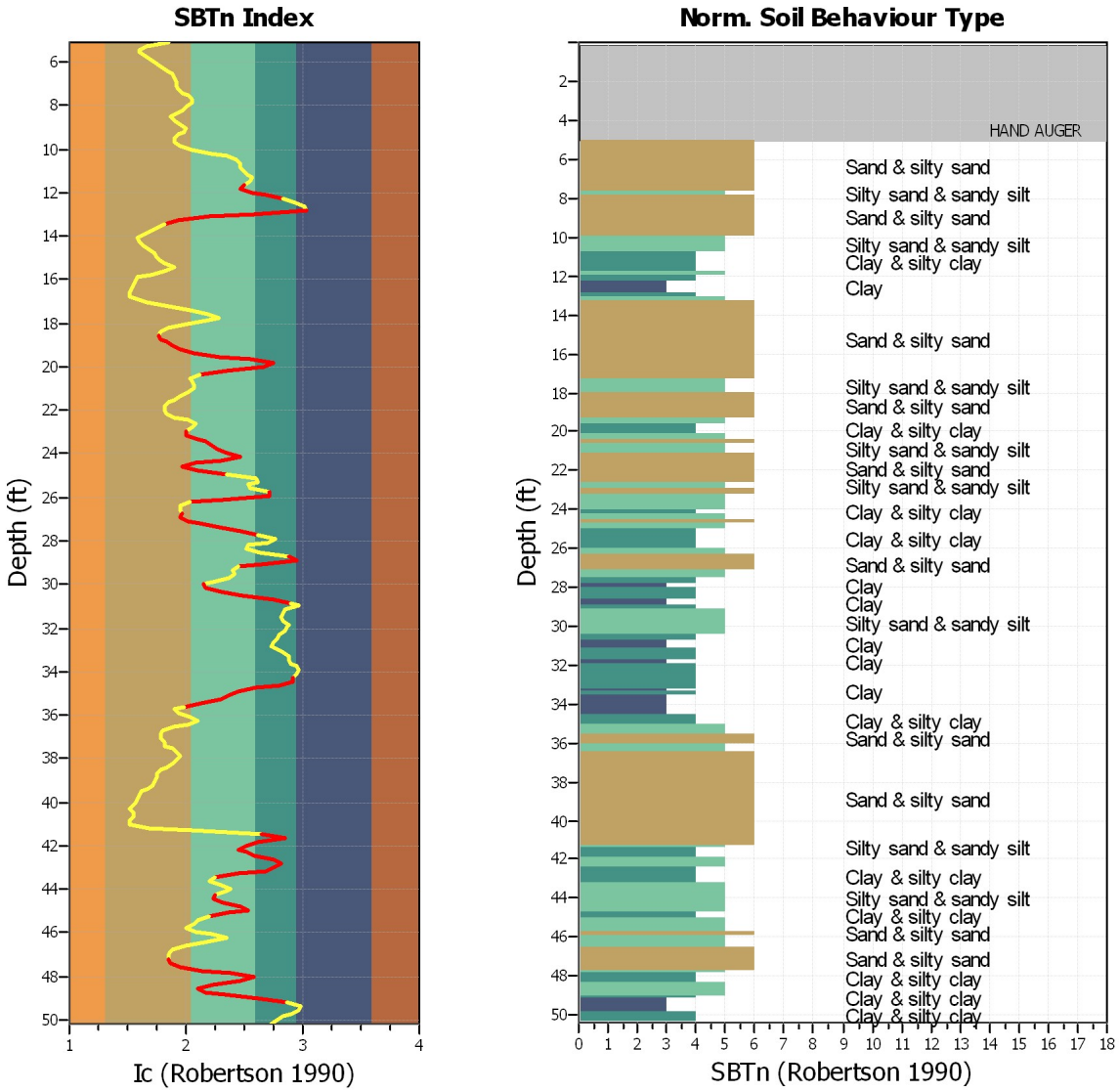
Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 ft	Fill height:	N/A	Limit depth:	N/A

TRANSITION LAYER DETECTION ALGORITHM REPORT
Summary Details & Plots

Short description

The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of I_c values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of I_c. Transitions typically occur when the rate of change of I_c is fast (i.e. delta I_c is small).

The SBT_n plot below, displays in red the detected transition layers based on the parameters listed below the graphs.



Transition layer algorithm properties		General statistics	
I_c minimum check value:	1.70	Total points in CPT file:	306
I_c maximum check value:	3.00	Total points excluded:	106
I_c change ratio value:	0.0200	Exclusion percentage:	34.64%
Minimum number of points in layer:	4	Number of layers detected:	20

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.16	-9999.00	-9999.00	-9999.00	N/A	120.90
2	0.33	-9999.00	-9999.00	-9999.00	N/A	120.90
3	0.49	-9999.00	-9999.00	-9999.00	N/A	120.90
4	0.66	-9999.00	-9999.00	-9999.00	N/A	120.90
5	0.82	-9999.00	-9999.00	-9999.00	N/A	120.90
6	0.98	-9999.00	-9999.00	-9999.00	N/A	120.90
7	1.15	-9999.00	-9999.00	-9999.00	N/A	120.90
8	1.31	-9999.00	-9999.00	-9999.00	N/A	120.90
9	1.48	-9999.00	-9999.00	-9999.00	N/A	120.90
10	1.64	-9999.00	-9999.00	-9999.00	N/A	120.90
11	1.80	-9999.00	-9999.00	-9999.00	N/A	120.90
12	1.97	-9999.00	-9999.00	-9999.00	N/A	120.90
13	2.13	-9999.00	-9999.00	-9999.00	N/A	120.90
14	2.30	-9999.00	-9999.00	-9999.00	N/A	120.90
15	2.46	-9999.00	-9999.00	-9999.00	N/A	120.90
16	2.62	-9999.00	-9999.00	-9999.00	N/A	120.90
17	2.79	-9999.00	-9999.00	-9999.00	N/A	120.90
18	2.95	-9999.00	-9999.00	-9999.00	N/A	120.90
19	3.12	-9999.00	-9999.00	-9999.00	N/A	120.90
20	3.28	-9999.00	-9999.00	-9999.00	N/A	120.90
21	3.44	-9999.00	-9999.00	-9999.00	N/A	120.90
22	3.61	-9999.00	-9999.00	-9999.00	N/A	120.90
23	3.77	-9999.00	-9999.00	-9999.00	N/A	120.90
24	3.94	-9999.00	-9999.00	-9999.00	N/A	120.90
25	4.10	-9999.00	-9999.00	-9999.00	N/A	120.90
26	4.27	-9999.00	-9999.00	-9999.00	N/A	120.90
27	4.43	-9999.00	-9999.00	-9999.00	N/A	120.90
28	4.59	-9999.00	-9999.00	-9999.00	N/A	120.90
29	4.76	-9999.00	-9999.00	-9999.00	N/A	120.90
30	4.92	-9999.00	-9999.00	-9999.00	N/A	120.90
31	5.09	77.26	0.72	2.63	9.31	113.43
32	5.25	92.83	0.48	0.70	5.56	117.28
33	5.41	99.50	0.54	0.41	4.32	116.78
34	5.58	99.01	0.57	0.04	4.49	117.49
35	5.74	99.10	0.63	0.14	5.15	118.35
36	5.91	96.74	0.77	0.14	6.15	119.34
37	6.07	91.91	0.87	0.16	7.25	120.06
38	6.23	88.22	0.90	0.13	8.25	120.28
39	6.40	81.93	0.89	0.16	9.09	120.03
40	6.56	74.86	0.84	0.11	9.92	119.37
41	6.73	67.64	0.74	0.09	10.53	118.45
42	6.89	63.28	0.66	0.14	10.82	117.45
43	7.05	60.79	0.60	0.11	10.82	116.73
44	7.22	60.36	0.58	0.04	11.13	116.29
45	7.38	55.91	0.58	0.05	12.02	116.15
46	7.55	51.09	0.60	0.05	13.33	116.06
47	7.71	48.38	0.60	0.07	14.24	116.01
48	7.87	48.57	0.59	0.14	14.11	116.02

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
49	8.04	52.31	0.59	0.20	13.16	116.10
50	8.20	58.15	0.58	0.20	11.86	116.43
51	8.37	65.28	0.62	0.20	10.32	116.58
52	8.53	72.74	0.56	0.23	9.76	117.19
53	8.69	73.33	0.69	0.18	10.23	118.05
54	8.86	69.52	0.84	0.11	11.85	119.15
55	9.02	65.49	0.93	0.18	12.80	119.68
56	9.19	69.03	0.89	4.09	12.46	119.79
57	9.35	75.91	0.85	1.12	11.32	119.41
58	9.51	76.46	0.75	0.77	10.51	119.11
59	9.68	77.78	0.76	0.58	10.29	118.79
60	9.84	76.21	0.74	0.45	11.46	118.80
61	10.01	61.62	0.81	0.32	14.36	119.04
62	10.17	48.94	0.96	0.27	19.46	119.14
63	10.33	36.96	0.99	1.03	24.67	118.88
64	10.50	32.07	0.92	1.24	27.59	118.18
65	10.66	33.27	0.82	0.86	28.86	117.08
66	10.83	27.06	0.69	0.47	29.35	115.75
67	10.99	24.42	0.57	0.40	30.76	114.63
68	11.15	24.91	0.59	-0.41	32.31	113.69
69	11.32	20.00	0.52	-1.80	33.90	113.10
70	11.48	19.29	0.48	-2.59	32.68	112.70
71	11.65	26.26	0.50	-2.50	30.83	112.61
72	11.81	23.93	0.47	-4.00	29.52	111.77
73	11.98	19.63	0.32	-4.50	33.46	110.68
74	12.14	14.78	0.39	-4.77	39.88	109.97
75	12.30	12.32	0.44	-2.61	48.17	109.95
76	12.47	10.66	0.41	-1.35	54.09	108.91
77	12.63	8.36	0.29	-1.22	59.46	107.92
78	12.80	7.80	0.35	-0.18	60.97	107.95
79	12.96	9.98	0.42	1.64	34.58	111.44
80	13.12	41.44	0.53	3.73	19.21	115.10
81	13.29	73.82	0.72	-0.45	11.27	118.22
82	13.45	106.07	0.87	-1.94	8.55	120.36
83	13.62	115.20	0.99	-0.97	6.93	121.60
84	13.78	133.44	1.02	0.65	5.83	122.46
85	13.94	156.98	1.09	0.76	4.75	123.03
86	14.11	167.94	1.10	0.83	4.20	123.63
87	14.27	172.37	1.20	0.90	4.36	124.10
88	14.44	164.07	1.29	0.97	5.04	124.40
89	14.60	148.99	1.30	1.01	5.92	124.16
90	14.76	133.38	1.18	0.94	6.83	123.49
91	14.93	119.25	1.09	0.95	6.93	121.82
92	15.09	111.63	0.67	0.95	7.37	121.02
93	15.26	107.64	0.95	0.36	8.61	121.04
94	15.42	92.13	1.17	0.76	10.24	122.45
95	15.58	104.05	1.29	0.31	8.58	123.38
96	15.75	159.96	1.21	-0.47	5.99	123.67

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
97	15.91	173.01	1.07	-0.79	4.17	123.45
98	16.08	169.54	1.02	-0.41	3.72	123.15
99	16.24	173.23	1.05	-1.13	3.48	123.04
100	16.40	182.13	1.00	-2.81	3.26	123.16
101	16.57	184.81	1.04	-3.62	3.10	123.19
102	16.73	183.61	1.04	-4.50	3.10	123.15
103	16.90	181.58	0.98	-4.66	3.87	122.85
104	17.06	139.37	1.00	-5.09	5.61	122.49
105	17.22	106.75	1.06	-5.17	9.28	122.28
106	17.39	79.99	1.18	-5.08	13.81	122.34
107	17.55	66.57	1.32	-4.70	18.70	122.34
108	17.72	55.33	1.34	-4.45	21.75	122.16
109	17.88	54.77	1.25	-4.41	18.91	120.72
110	18.04	73.39	0.58	-4.86	13.33	119.43
111	18.21	95.29	0.66	-5.20	9.07	119.20
112	18.37	114.89	0.99	-4.64	7.84	121.12
113	18.54	130.71	1.07	-5.31	7.59	122.64
114	18.70	131.42	1.18	-5.76	7.87	123.16
115	18.86	118.82	1.22	-6.00	9.02	123.40
116	19.03	108.25	1.26	-6.01	10.18	123.01
117	19.19	100.05	1.10	-5.94	11.55	122.37
118	19.36	83.83	1.04	-5.55	14.76	121.86
119	19.52	56.49	1.25	-5.24	21.61	121.39
120	19.69	33.70	1.25	-5.20	32.59	120.26
121	19.85	22.46	1.01	-5.15	43.13	118.41
122	20.01	20.40	0.84	-4.47	38.65	117.61
123	20.18	39.69	0.86	-3.73	24.45	118.51
124	20.34	74.77	0.90	-4.77	16.48	119.58
125	20.51	83.37	0.89	-5.26	13.77	120.92
126	20.67	84.72	1.19	-5.38	14.16	122.17
127	20.83	87.12	1.40	-5.44	15.02	123.39
128	21.00	90.56	1.48	-5.35	14.78	123.90
129	21.16	95.94	1.42	-5.55	13.35	123.58
130	21.33	102.60	1.14	-5.80	11.81	123.15
131	21.49	108.25	1.17	-5.82	10.37	122.61
132	21.65	112.99	1.09	-3.84	9.36	122.62
133	21.82	123.68	1.07	-5.28	8.64	122.73
134	21.98	126.99	1.16	-5.92	8.40	122.95
135	22.15	123.74	1.17	-7.27	8.94	123.36
136	22.31	119.47	1.28	-6.27	10.59	124.44
137	22.47	113.08	1.79	-6.25	13.28	125.73
138	22.64	99.59	2.10	-7.04	15.37	126.43
139	22.80	100.11	1.91	-6.25	14.47	126.55
140	22.97	129.63	1.78	-6.68	12.86	126.20
141	23.13	120.60	1.72	-6.84	12.77	126.55
142	23.29	109.51	2.12	-7.17	15.75	127.33
143	23.46	96.09	2.63	-7.63	18.02	128.09
144	23.62	103.68	2.56	-7.62	19.46	128.30

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
145	23.79	95.81	2.45	-7.89	21.08	127.38
146	23.95	63.31	2.00	-8.26	24.63	126.22
147	24.11	56.52	1.93	-7.98	29.10	124.93
148	24.28	52.87	1.83	-7.78	22.58	123.97
149	24.44	95.38	1.01	-7.81	15.07	123.51
150	24.61	125.24	1.23	-8.14	12.00	123.35
151	24.77	96.30	1.55	-7.54	15.61	124.52
152	24.93	61.59	1.84	-7.78	24.65	124.46
153	25.10	38.80	1.78	-7.54	35.07	122.88
154	25.26	29.86	1.17	-6.82	35.78	121.65
155	25.43	50.81	1.22	-4.57	32.56	121.02
156	25.59	46.08	1.36	-6.25	32.88	121.39
157	25.75	31.49	1.34	-6.57	41.51	120.61
158	25.92	20.21	1.16	-6.34	41.43	119.60
159	26.08	41.29	0.92	-5.49	22.96	120.33
160	26.25	106.93	1.02	-5.73	14.08	122.35
161	26.41	125.21	1.53	-6.41	11.67	124.56
162	26.57	117.96	1.78	-6.54	11.76	125.65
163	26.74	127.61	1.62	-6.55	12.14	125.84
164	26.90	122.36	1.68	-6.93	11.73	125.14
165	27.07	111.94	1.34	-6.90	13.33	124.73
166	27.23	91.73	1.52	-7.13	16.42	124.78
167	27.40	79.19	1.93	-7.18	21.94	125.75
168	27.56	68.29	2.33	-7.42	29.05	126.08
169	27.72	44.17	2.25	-7.36	35.90	125.00
170	27.89	35.36	1.54	-7.15	44.33	122.85
171	28.05	26.51	1.31	-6.93	40.07	121.69
172	28.22	48.72	1.44	-6.03	32.39	122.81
173	28.38	69.82	1.82	-6.59	31.77	124.34
174	28.54	42.61	2.18	-6.84	37.14	124.32
175	28.71	26.36	1.70	-7.04	51.22	122.12
176	28.87	19.26	1.03	-6.45	54.95	119.55
177	29.04	25.77	0.98	-5.58	37.58	119.54
178	29.20	61.32	1.23	-4.91	28.57	122.23
179	29.36	72.25	1.88	-5.94	26.50	124.32
180	29.53	57.91	2.01	-5.65	27.39	125.26
181	29.69	66.32	1.89	-3.58	25.38	125.29
182	29.86	86.38	1.77	-4.52	20.31	124.84
183	30.02	94.37	1.39	-5.08	17.28	124.56
184	30.18	94.86	1.52	-5.56	17.65	124.80
185	30.35	86.14	1.93	-5.92	22.23	125.17
186	30.51	54.25	1.92	-6.28	30.18	124.46
187	30.68	33.45	1.55	-6.34	42.76	122.07
188	30.84	21.26	1.08	-5.96	51.81	117.66
189	31.00	16.19	0.25	-5.42	56.00	112.92
190	31.17	14.47	0.34	-4.97	48.67	108.82
191	31.33	19.66	0.38	-2.39	47.99	110.09
192	31.50	19.88	0.40	-1.57	46.80	111.31

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
193	31.66	19.05	0.51	-1.37	48.29	111.68
194	31.82	18.80	0.45	-0.94	50.83	111.49
195	31.99	16.47	0.40	-0.59	50.27	110.37
196	32.15	17.11	0.33	-0.22	48.47	109.81
197	32.32	19.60	0.35	0.36	46.48	110.20
198	32.48	19.91	0.43	0.36	45.19	111.08
199	32.64	21.20	0.44	0.76	42.94	113.62
200	32.81	30.87	0.77	0.27	42.30	114.86
201	32.97	25.59	0.69	-1.60	43.84	115.46
202	33.14	20.77	0.61	-0.23	48.21	113.71
203	33.30	18.19	0.43	0.45	50.52	111.88
204	33.46	17.60	0.36	0.97	50.46	110.40
205	33.63	17.30	0.38	1.13	51.82	109.72
206	33.79	15.30	0.35	0.63	54.99	109.38
207	33.96	13.95	0.34	0.68	56.69	108.59
208	34.12	14.38	0.29	0.79	55.15	107.50
209	34.28	14.72	0.21	1.22	52.82	108.07
210	34.45	17.11	0.39	1.84	52.89	111.57
211	34.61	21.84	0.76	6.32	45.76	115.97
212	34.78	37.81	1.06	6.27	35.34	119.86
213	34.94	61.28	1.42	1.39	28.74	123.75
214	35.10	81.38	2.35	-2.47	25.13	126.25
215	35.27	90.96	2.47	-4.23	22.67	128.02
216	35.43	109.76	2.64	-1.84	17.04	128.94
217	35.60	170.12	2.61	-3.92	12.72	129.76
218	35.76	195.25	2.70	-4.07	10.49	130.57
219	35.93	195.68	3.10	-4.43	11.19	131.35
220	36.09	176.02	3.53	-4.55	13.67	132.09
221	36.25	152.21	3.96	-4.55	15.66	132.54
222	36.42	163.86	4.01	-2.59	13.61	132.70
223	36.58	230.70	3.37	-4.41	10.41	132.59
224	36.75	246.15	3.21	-4.57	8.00	132.19
225	36.91	244.83	3.07	-4.82	7.67	131.86
226	37.07	231.65	2.94	-5.04	7.86	131.55
227	37.24	224.68	2.91	-5.17	8.31	131.62
228	37.40	229.20	3.22	-5.18	8.59	131.73
229	37.57	225.11	3.11	-4.61	9.91	131.73
230	37.73	174.49	3.15	4.86	10.66	131.79
231	37.89	206.34	3.42	-4.38	11.57	131.96
232	38.06	203.15	3.46	-1.53	10.80	132.30
233	38.22	212.51	3.42	-5.56	10.14	132.35
234	38.39	231.78	3.35	-6.63	8.82	132.47
235	38.55	260.25	3.34	-6.90	7.70	132.61
236	38.71	270.05	3.35	-6.95	7.17	132.70
237	38.88	263.57	3.34	6.50	7.12	132.80
238	39.04	268.42	3.44	4.03	6.89	132.70
239	39.21	277.52	3.17	1.50	6.33	132.64
240	39.37	293.24	3.15	0.95	5.37	132.52

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
241	39.53	322.37	3.08	4.47	4.71	132.88
242	39.70	346.97	3.41	2.85	4.28	133.35
243	39.86	358.55	3.56	1.60	4.19	133.73
244	40.03	355.76	3.50	8.98	3.71	133.11
245	40.19	351.40	2.55	8.90	3.36	132.44
246	40.35	348.66	2.74	7.98	3.19	131.89
247	40.52	339.17	2.90	4.82	3.55	132.38
248	40.68	348.36	3.14	6.46	3.64	132.37
249	40.85	340.68	2.75	4.56	2.97	130.92
250	41.01	314.35	1.37	2.54	3.11	129.55
251	41.17	260.90	2.09	-0.18	5.68	127.35
252	41.34	76.55	1.69	5.08	14.25	125.58
253	41.50	24.61	1.14	10.14	37.60	120.08
254	41.67	22.70	0.48	15.57	48.45	114.23
255	41.83	25.22	0.15	23.88	36.16	107.90
256	41.99	25.62	0.10	34.01	31.75	105.90
257	42.16	25.71	0.30	55.21	28.59	111.27
258	42.32	52.81	0.65	74.38	31.21	116.44
259	42.49	43.47	1.07	29.82	34.17	118.62
260	42.65	29.18	0.97	27.49	43.54	118.94
261	42.81	28.84	0.97	31.74	46.63	118.70
262	42.98	35.67	1.05	32.00	43.07	121.38
263	43.14	52.13	2.00	19.12	39.71	123.49
264	43.31	53.94	1.99	9.33	28.21	125.81
265	43.47	114.58	1.99	5.15	20.83	126.96
266	43.64	133.32	2.33	-4.64	18.93	127.90
267	43.80	94.65	2.55	-8.03	22.25	127.92
268	43.96	75.91	2.30	-7.04	25.75	127.62
269	44.13	95.35	2.36	-6.28	24.23	127.34
270	44.29	104.17	2.20	-6.25	20.70	127.41
271	44.46	113.72	2.07	-6.16	20.28	127.59
272	44.62	103.86	2.47	-6.01	22.86	127.76
273	44.78	78.79	2.55	-6.10	29.56	127.71
274	44.95	56.46	2.55	-5.71	31.99	127.27
275	45.11	82.60	2.25	-4.54	25.03	127.86
276	45.28	138.97	2.54	-4.88	19.07	128.66
277	45.44	138.14	2.72	-4.95	15.74	129.04
278	45.60	144.60	2.25	-4.91	14.64	128.91
279	45.77	157.01	2.31	-4.95	13.03	128.18
280	45.93	153.53	1.95	-4.97	15.22	128.50
281	46.10	109.05	2.72	-5.55	19.80	128.29
282	46.26	81.77	2.57	2.36	24.52	128.17
283	46.42	99.07	2.25	2.41	18.63	128.30
284	46.59	180.01	2.32	-0.16	12.79	128.76
285	46.75	198.69	2.36	-1.49	9.93	129.75
286	46.92	207.97	2.73	-2.61	9.48	130.57
287	47.08	224.62	3.00	-3.47	9.35	131.72
288	47.24	248.73	3.50	-4.23	9.23	132.84

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
289	47.41	261.27	3.99	-4.34	9.70	133.73
290	47.57	246.15	4.24	-2.81	11.77	134.21
291	47.74	191.23	4.63	-4.52	16.77	134.14
292	47.90	116.95	4.88	-4.63	25.45	132.87
293	48.06	66.45	3.67	-4.30	34.72	131.13
294	48.23	74.86	3.20	1.57	28.87	130.01
295	48.39	143.83	2.88	4.00	20.34	130.09
296	48.56	161.00	2.88	-1.62	15.64	129.96
297	48.72	149.94	2.54	-2.61	17.65	129.81
298	48.88	104.32	2.96	-2.93	23.90	128.89
299	49.05	59.87	2.61	-1.57	36.01	127.02
300	49.21	35.05	1.74	0.13	50.03	123.55
301	49.38	25.47	1.02	4.01	57.68	119.27
302	49.54	23.01	0.62	21.21	56.61	115.67
303	49.70	23.04	0.53	44.19	52.40	113.99
304	49.87	25.07	0.58	68.08	47.81	114.15
305	50.03	29.83	0.60	80.03	44.86	114.68
306	50.20	30.53	0.60	86.97	42.23	114.95

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.16	0.01	0.00	0.01	1.00	0.716	0.90	0.791	1.00	1.00	2.000	No
2	0.33	0.02	0.00	0.02	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
3	0.49	0.03	0.00	0.03	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
4	0.66	0.04	0.00	0.04	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
5	0.82	0.05	0.00	0.05	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
6	0.98	0.06	0.00	0.06	1.00	0.715	0.90	0.790	1.00	1.00	2.000	No
7	1.15	0.07	0.00	0.07	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
8	1.31	0.08	0.00	0.08	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
9	1.48	0.09	0.00	0.09	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
10	1.64	0.10	0.00	0.10	1.00	0.714	0.90	0.789	1.00	1.00	2.000	No
11	1.80	0.11	0.00	0.11	1.00	0.713	0.90	0.789	1.00	1.00	2.000	No
12	1.97	0.12	0.00	0.12	1.00	0.713	0.90	0.789	1.00	1.00	2.000	No
13	2.13	0.13	0.00	0.13	1.00	0.713	0.90	0.788	1.00	1.00	2.000	No
14	2.30	0.14	0.00	0.14	1.00	0.713	0.90	0.788	1.00	1.00	2.000	No
15	2.46	0.15	0.00	0.15	1.00	0.712	0.90	0.788	1.00	1.00	2.000	No
16	2.62	0.16	0.00	0.16	1.00	0.712	0.90	0.788	1.00	1.00	2.000	No
17	2.79	0.17	0.00	0.17	1.00	0.712	0.90	0.787	1.00	1.00	2.000	No
18	2.95	0.18	0.00	0.18	1.00	0.711	0.90	0.787	1.00	1.00	2.000	No
19	3.12	0.19	0.00	0.19	0.99	0.711	0.90	0.787	1.00	1.00	2.000	No
20	3.28	0.20	0.00	0.20	0.99	0.711	0.90	0.786	1.00	1.00	2.000	No
21	3.44	0.21	0.00	0.21	0.99	0.711	0.90	0.786	1.00	1.00	2.000	No
22	3.61	0.22	0.00	0.22	0.99	0.710	0.90	0.786	1.00	1.00	2.000	No
23	3.77	0.23	0.00	0.23	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
24	3.94	0.24	0.00	0.24	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
25	4.10	0.25	0.00	0.25	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
26	4.27	0.26	0.00	0.26	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
27	4.43	0.27	0.00	0.27	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
28	4.59	0.28	0.00	0.28	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
29	4.76	0.29	0.00	0.29	0.99	0.708	0.90	0.784	1.00	1.00	2.000	No
30	4.92	0.30	0.00	0.30	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
31	5.09	0.31	0.00	0.31	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
32	5.25	0.32	0.00	0.32	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
33	5.41	0.33	0.00	0.33	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
34	5.58	0.34	0.00	0.34	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
35	5.74	0.35	0.00	0.35	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
36	5.91	0.36	0.00	0.36	0.99	0.707	0.90	0.781	1.00	1.00	2.000	No
37	6.07	0.36	0.00	0.36	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
38	6.23	0.37	0.00	0.37	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
39	6.40	0.38	0.00	0.38	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
40	6.56	0.39	0.00	0.39	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
41	6.73	0.40	0.00	0.40	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
42	6.89	0.41	0.00	0.41	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
43	7.05	0.42	0.00	0.42	0.99	0.705	0.90	0.779	1.00	1.00	2.000	No
44	7.22	0.43	0.00	0.43	0.99	0.704	0.90	0.779	1.00	1.00	2.000	No
45	7.38	0.44	0.00	0.44	0.98	0.704	0.90	0.779	1.00	1.00	2.000	No
46	7.55	0.45	0.00	0.45	0.98	0.704	0.90	0.779	1.00	1.00	2.000	No
47	7.71	0.46	0.00	0.46	0.98	0.704	0.90	0.778	1.00	1.00	2.000	No
48	7.87	0.47	0.00	0.47	0.98	0.703	0.90	0.778	1.00	1.00	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
49	8.04	0.48	0.00	0.48	0.98	0.703	0.90	0.778	1.00	1.00	2.000	No
50	8.20	0.49	0.00	0.49	0.98	0.703	0.90	0.777	1.00	1.00	2.000	No
51	8.37	0.50	0.00	0.50	0.98	0.703	0.90	0.777	1.00	1.00	2.000	No
52	8.53	0.51	0.00	0.51	0.98	0.702	0.90	0.777	1.00	1.00	2.000	No
53	8.69	0.52	0.00	0.52	0.98	0.702	0.90	0.777	1.00	1.00	2.000	No
54	8.86	0.53	0.00	0.53	0.98	0.702	0.90	0.776	1.00	1.00	2.000	No
55	9.02	0.54	0.00	0.54	0.98	0.702	0.90	0.776	1.00	1.00	2.000	No
56	9.19	0.55	0.00	0.55	0.98	0.701	0.90	0.776	1.00	1.00	2.000	No
57	9.35	0.56	0.00	0.56	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
58	9.51	0.57	0.00	0.57	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
59	9.68	0.58	0.00	0.58	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
60	9.84	0.59	0.00	0.59	0.98	0.700	0.90	0.775	1.00	1.00	2.000	No
61	10.01	0.60	0.00	0.60	0.98	0.700	0.90	0.775	1.00	1.00	0.775	No
62	10.17	0.61	0.01	0.60	0.98	0.706	0.90	0.781	1.00	1.00	0.781	No
63	10.33	0.62	0.01	0.61	0.98	0.712	0.90	0.787	1.00	1.00	0.787	No
64	10.50	0.63	0.02	0.61	0.98	0.717	0.90	0.793	1.00	1.00	0.793	No
65	10.66	0.64	0.02	0.62	0.98	0.723	0.90	0.799	1.00	1.00	0.799	No
66	10.83	0.65	0.03	0.62	0.98	0.728	0.90	0.805	1.00	1.00	0.805	No
67	10.99	0.65	0.03	0.62	0.98	0.733	0.90	0.811	1.00	1.00	0.811	No
68	11.15	0.66	0.04	0.63	0.98	0.738	0.90	0.817	1.00	1.00	0.817	No
69	11.32	0.67	0.04	0.63	0.98	0.744	0.90	0.822	1.00	1.00	0.822	No
70	11.48	0.68	0.05	0.64	0.98	0.749	0.90	0.828	1.00	1.00	0.828	No
71	11.65	0.69	0.05	0.64	0.98	0.754	0.90	0.833	1.00	1.00	0.833	No
72	11.81	0.70	0.06	0.64	0.98	0.758	0.90	0.839	1.00	1.00	2.000	Yes
73	11.98	0.71	0.06	0.65	0.97	0.763	0.90	0.844	1.00	1.00	2.000	Yes
74	12.14	0.72	0.07	0.65	0.97	0.768	0.90	0.850	1.00	1.00	2.000	Yes
75	12.30	0.73	0.07	0.66	0.97	0.773	0.90	0.855	1.00	1.00	2.000	Yes
76	12.47	0.74	0.08	0.66	0.97	0.778	0.90	0.860	1.00	1.00	2.000	Yes
77	12.63	0.75	0.08	0.66	0.97	0.782	0.90	0.865	1.00	1.00	0.865	No
78	12.80	0.75	0.09	0.67	0.97	0.787	0.90	0.870	1.00	1.00	0.870	No
79	12.96	0.76	0.09	0.67	0.97	0.791	0.90	0.875	1.00	1.00	2.000	Yes
80	13.12	0.77	0.10	0.68	0.97	0.796	0.90	0.880	1.00	1.00	2.000	Yes
81	13.29	0.78	0.10	0.68	0.97	0.800	0.90	0.885	1.00	1.00	2.000	Yes
82	13.45	0.79	0.11	0.69	0.97	0.804	0.90	0.889	1.00	1.00	2.000	Yes
83	13.62	0.80	0.11	0.69	0.97	0.808	0.90	0.894	1.00	1.00	2.000	Yes
84	13.78	0.81	0.12	0.70	0.97	0.812	0.90	0.898	1.00	1.00	0.898	No
85	13.94	0.82	0.12	0.70	0.97	0.816	0.90	0.903	1.00	1.00	0.903	No
86	14.11	0.83	0.13	0.71	0.97	0.820	0.90	0.907	1.00	1.00	0.907	No
87	14.27	0.84	0.13	0.71	0.97	0.824	0.90	0.911	1.00	1.00	0.911	No
88	14.44	0.85	0.14	0.72	0.97	0.828	0.90	0.915	1.00	1.00	0.915	No
89	14.60	0.86	0.14	0.72	0.97	0.831	0.90	0.919	1.00	1.00	0.919	No
90	14.76	0.87	0.15	0.73	0.97	0.835	0.90	0.923	1.00	1.00	0.923	No
91	14.93	0.88	0.15	0.73	0.97	0.838	0.90	0.927	1.00	1.00	0.927	No
92	15.09	0.89	0.16	0.74	0.97	0.842	0.90	0.931	1.00	1.00	0.931	No
93	15.26	0.90	0.16	0.74	0.97	0.846	0.90	0.935	1.00	1.00	0.935	No
94	15.42	0.91	0.17	0.74	0.97	0.849	0.90	0.939	1.00	1.00	0.939	No
95	15.58	0.92	0.17	0.75	0.97	0.852	0.90	0.943	1.00	1.00	0.943	No
96	15.75	0.93	0.18	0.75	0.97	0.856	0.90	0.946	1.00	1.00	0.946	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
97	15.91	0.94	0.18	0.76	0.97	0.859	0.90	0.950	1.00	1.00	0.950	No
98	16.08	0.95	0.19	0.76	0.97	0.862	0.90	0.953	1.00	1.00	0.953	No
99	16.24	0.96	0.19	0.77	0.97	0.865	0.90	0.957	1.00	1.00	0.957	No
100	16.40	0.97	0.20	0.77	0.97	0.868	0.90	0.960	1.00	1.00	0.960	No
101	16.57	0.98	0.20	0.78	0.97	0.871	0.90	0.964	1.00	1.00	0.964	No
102	16.73	0.99	0.21	0.78	0.96	0.874	0.90	0.967	1.00	1.00	0.967	No
103	16.90	1.00	0.22	0.79	0.96	0.877	0.90	0.970	1.00	1.00	0.970	No
104	17.06	1.01	0.22	0.79	0.96	0.880	0.90	0.974	1.00	1.00	0.974	No
105	17.22	1.02	0.23	0.80	0.96	0.883	0.90	0.977	1.00	1.00	0.977	No
106	17.39	1.03	0.23	0.80	0.96	0.886	0.90	0.980	1.00	1.00	0.980	No
107	17.55	1.04	0.24	0.81	0.96	0.889	0.90	0.983	1.00	1.00	0.983	No
108	17.72	1.05	0.24	0.81	0.96	0.892	0.90	0.986	1.00	1.00	0.986	No
109	17.88	1.06	0.25	0.82	0.96	0.894	0.90	0.989	1.00	1.00	0.989	No
110	18.04	1.07	0.25	0.82	0.96	0.897	0.90	0.992	1.00	1.00	0.992	No
111	18.21	1.08	0.26	0.83	0.96	0.900	0.90	0.995	1.00	1.00	0.995	No
112	18.37	1.09	0.26	0.83	0.96	0.902	0.90	0.998	1.00	1.00	0.998	No
113	18.54	1.10	0.27	0.84	0.96	0.905	0.90	1.001	1.00	1.00	1.001	No
114	18.70	1.11	0.27	0.84	0.96	0.908	0.90	1.004	1.00	1.00	2.000	Yes
115	18.86	1.12	0.28	0.85	0.96	0.910	0.90	1.006	1.00	1.00	2.000	Yes
116	19.03	1.13	0.28	0.85	0.96	0.912	0.90	1.009	1.00	1.00	2.000	Yes
117	19.19	1.14	0.29	0.86	0.96	0.915	0.90	1.012	1.00	1.00	2.000	Yes
118	19.36	1.15	0.29	0.86	0.96	0.917	0.90	1.014	1.00	1.00	2.000	Yes
119	19.52	1.16	0.30	0.87	0.96	0.920	0.90	1.017	1.00	1.00	2.000	Yes
120	19.69	1.17	0.30	0.87	0.96	0.922	0.90	1.020	1.00	1.00	2.000	Yes
121	19.85	1.18	0.31	0.88	0.96	0.924	0.90	1.022	1.00	1.00	2.000	Yes
122	20.01	1.19	0.31	0.88	0.96	0.927	0.90	1.025	1.00	1.00	2.000	Yes
123	20.18	1.20	0.32	0.89	0.96	0.929	0.90	1.027	1.00	1.00	2.000	Yes
124	20.34	1.21	0.32	0.89	0.96	0.931	0.90	1.030	1.00	1.00	2.000	Yes
125	20.51	1.22	0.33	0.90	0.96	0.933	0.90	1.032	1.00	1.00	2.000	Yes
126	20.67	1.23	0.33	0.90	0.96	0.935	0.90	1.035	1.00	1.00	1.035	No
127	20.83	1.24	0.34	0.91	0.95	0.937	0.90	1.037	1.00	1.00	1.037	No
128	21.00	1.25	0.34	0.91	0.95	0.939	0.90	1.039	1.00	1.00	1.039	No
129	21.16	1.26	0.35	0.92	0.95	0.941	0.90	1.041	1.00	1.00	1.041	No
130	21.33	1.27	0.35	0.92	0.95	0.943	0.90	1.043	1.00	1.00	1.043	No
131	21.49	1.28	0.36	0.93	0.95	0.945	0.90	1.045	1.00	1.00	1.045	No
132	21.65	1.29	0.36	0.93	0.95	0.947	0.90	1.047	1.00	1.00	1.047	No
133	21.82	1.30	0.37	0.94	0.95	0.949	0.90	1.050	1.00	1.00	1.050	No
134	21.98	1.31	0.37	0.94	0.95	0.951	0.90	1.052	1.00	1.00	1.052	No
135	22.15	1.32	0.38	0.95	0.95	0.953	0.90	1.054	1.00	1.00	1.054	No
136	22.31	1.33	0.38	0.95	0.95	0.954	0.90	1.055	1.00	1.00	1.055	No
137	22.47	1.34	0.39	0.96	0.95	0.956	0.90	1.057	1.00	1.00	1.057	No
138	22.64	1.36	0.39	0.96	0.95	0.958	0.90	1.059	1.00	1.00	1.059	No
139	22.80	1.37	0.40	0.97	0.95	0.959	0.90	1.061	1.00	1.00	1.061	No
140	22.97	1.38	0.40	0.97	0.95	0.961	0.90	1.062	1.00	1.00	1.062	No
141	23.13	1.39	0.41	0.98	0.95	0.962	0.90	1.064	1.00	1.00	2.000	Yes
142	23.29	1.40	0.41	0.98	0.95	0.964	0.90	1.066	1.00	1.00	2.000	Yes
143	23.46	1.41	0.42	0.99	0.95	0.965	0.90	1.067	1.00	1.00	2.000	Yes
144	23.62	1.42	0.43	0.99	0.95	0.966	0.90	1.069	1.00	1.00	2.000	Yes

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
145	23.79	1.43	0.43	1.00	0.95	0.968	0.90	1.070	1.00	1.00	2.000	Yes
146	23.95	1.44	0.44	1.00	0.95	0.969	0.90	1.072	1.00	1.00	2.000	Yes
147	24.11	1.45	0.44	1.01	0.94	0.971	0.90	1.073	1.00	1.00	2.000	Yes
148	24.28	1.46	0.45	1.01	0.94	0.972	0.90	1.075	1.00	1.00	2.000	Yes
149	24.44	1.47	0.45	1.02	0.94	0.973	0.90	1.076	1.00	1.00	2.000	Yes
150	24.61	1.48	0.46	1.02	0.94	0.975	0.90	1.078	1.00	1.00	2.000	Yes
151	24.77	1.49	0.46	1.03	0.94	0.976	0.90	1.079	1.00	1.00	2.000	Yes
152	24.93	1.50	0.47	1.03	0.94	0.977	0.90	1.081	1.00	1.00	2.000	Yes
153	25.10	1.51	0.47	1.04	0.94	0.978	0.90	1.082	1.00	1.00	2.000	Yes
154	25.26	1.52	0.48	1.04	0.94	0.980	0.90	1.084	1.00	1.00	1.084	No
155	25.43	1.53	0.48	1.05	0.94	0.981	0.90	1.085	1.00	1.00	1.085	No
156	25.59	1.54	0.49	1.05	0.94	0.982	0.90	1.086	1.00	1.00	1.086	No
157	25.75	1.55	0.49	1.06	0.94	0.983	0.90	1.088	1.00	1.00	1.088	No
158	25.92	1.56	0.50	1.06	0.94	0.985	0.90	1.089	1.00	1.00	2.000	Yes
159	26.08	1.57	0.50	1.07	0.94	0.986	0.90	1.090	1.00	1.00	2.000	Yes
160	26.25	1.58	0.51	1.07	0.94	0.987	0.90	1.091	1.00	1.00	2.000	Yes
161	26.41	1.59	0.51	1.08	0.94	0.988	0.90	1.093	1.00	1.00	2.000	Yes
162	26.57	1.60	0.52	1.08	0.94	0.989	0.90	1.094	0.99	1.00	1.099	No
163	26.74	1.61	0.52	1.09	0.94	0.990	0.90	1.095	0.99	1.00	1.102	No
164	26.90	1.62	0.53	1.09	0.93	0.991	0.90	1.096	0.99	1.00	2.000	Yes
165	27.07	1.63	0.53	1.10	0.93	0.992	0.90	1.097	0.99	1.00	2.000	Yes
166	27.23	1.64	0.54	1.10	0.93	0.992	0.90	1.098	0.99	1.00	2.000	Yes
167	27.40	1.65	0.54	1.11	0.93	0.993	0.90	1.099	0.99	1.00	2.000	Yes
168	27.56	1.66	0.55	1.11	0.93	0.994	0.90	1.099	0.99	1.00	2.000	Yes
169	27.72	1.67	0.55	1.12	0.93	0.995	0.90	1.100	0.99	1.00	2.000	Yes
170	27.89	1.68	0.56	1.12	0.93	0.996	0.90	1.101	0.99	1.00	2.000	Yes
171	28.05	1.69	0.56	1.13	0.93	0.997	0.90	1.102	0.99	1.00	1.119	No
172	28.22	1.70	0.57	1.13	0.93	0.997	0.90	1.103	0.98	1.00	1.121	No
173	28.38	1.71	0.57	1.14	0.93	0.998	0.90	1.104	0.98	1.00	1.123	No
174	28.54	1.72	0.58	1.14	0.93	0.999	0.90	1.105	0.98	1.00	1.125	No
175	28.71	1.73	0.58	1.15	0.93	0.999	0.90	1.105	0.98	1.00	1.126	No
176	28.87	1.74	0.59	1.15	0.93	1.000	0.90	1.106	0.98	1.00	2.000	Yes
177	29.04	1.75	0.59	1.16	0.93	1.001	0.90	1.107	0.98	1.00	2.000	Yes
178	29.20	1.76	0.60	1.16	0.92	1.002	0.90	1.108	0.98	1.00	2.000	Yes
179	29.36	1.77	0.60	1.17	0.92	1.002	0.90	1.108	0.98	1.00	2.000	Yes
180	29.53	1.78	0.61	1.17	0.92	1.003	0.90	1.109	0.98	1.00	1.136	No
181	29.69	1.79	0.61	1.18	0.92	1.003	0.90	1.109	0.98	1.00	1.137	No
182	29.86	1.80	0.62	1.18	0.92	1.004	0.90	1.110	0.97	1.00	1.139	No
183	30.02	1.81	0.62	1.19	0.92	1.004	0.90	1.110	0.97	1.00	1.141	No
184	30.18	1.82	0.63	1.19	0.92	1.004	0.90	1.111	0.97	1.00	2.000	Yes
185	30.35	1.83	0.63	1.20	0.92	1.005	0.90	1.111	0.97	1.00	2.000	Yes
186	30.51	1.84	0.64	1.20	0.92	1.005	0.90	1.112	0.97	1.00	2.000	Yes
187	30.68	1.85	0.65	1.21	0.92	1.006	0.90	1.112	0.97	1.00	2.000	Yes
188	30.84	1.86	0.65	1.21	0.92	1.006	0.90	1.113	0.97	1.00	2.000	Yes
189	31.00	1.87	0.66	1.22	0.92	1.007	0.90	1.113	0.97	1.00	2.000	Yes
190	31.17	1.88	0.66	1.22	0.91	1.007	0.90	1.114	0.97	1.00	1.152	No
191	31.33	1.89	0.67	1.23	0.91	1.008	0.90	1.115	0.97	1.00	1.153	No
192	31.50	1.90	0.67	1.23	0.91	1.009	0.90	1.115	0.97	1.00	1.155	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
193	31.66	1.91	0.68	1.23	0.91	1.009	0.90	1.116	0.97	1.00	1.156	No
194	31.82	1.92	0.68	1.24	0.91	1.010	0.90	1.117	0.96	1.00	1.157	No
195	31.99	1.93	0.69	1.24	0.91	1.010	0.90	1.117	0.96	1.00	1.159	No
196	32.15	1.94	0.69	1.25	0.91	1.011	0.90	1.118	0.96	1.00	1.160	No
197	32.32	1.95	0.70	1.25	0.91	1.011	0.90	1.118	0.96	1.00	1.162	No
198	32.48	1.95	0.70	1.25	0.91	1.011	0.90	1.119	0.96	1.00	1.163	No
199	32.64	1.96	0.71	1.26	0.91	1.012	0.90	1.119	0.96	1.00	1.164	No
200	32.81	1.97	0.71	1.26	0.90	1.012	0.90	1.119	0.96	1.00	1.166	No
201	32.97	1.98	0.72	1.27	0.90	1.012	0.90	1.120	0.96	1.00	1.167	No
202	33.14	1.99	0.72	1.27	0.90	1.013	0.90	1.120	0.96	1.00	1.168	No
203	33.30	2.00	0.73	1.27	0.90	1.013	0.90	1.120	0.96	1.00	1.169	No
204	33.46	2.01	0.73	1.28	0.90	1.013	0.90	1.120	0.96	1.00	1.170	No
205	33.63	2.02	0.74	1.28	0.90	1.013	0.90	1.121	0.96	1.00	1.171	No
206	33.79	2.03	0.74	1.29	0.90	1.014	0.90	1.121	0.96	1.00	1.172	No
207	33.96	2.04	0.75	1.29	0.90	1.014	0.90	1.121	0.96	1.00	1.174	No
208	34.12	2.05	0.75	1.29	0.90	1.014	0.90	1.122	0.95	1.00	1.175	No
209	34.28	2.05	0.76	1.30	0.90	1.014	0.90	1.122	0.95	1.00	1.176	No
210	34.45	2.06	0.76	1.30	0.89	1.014	0.90	1.122	0.95	1.00	2.000	Yes
211	34.61	2.07	0.77	1.31	0.89	1.014	0.90	1.122	0.95	1.00	2.000	Yes
212	34.78	2.08	0.77	1.31	0.89	1.014	0.90	1.122	0.95	1.00	2.000	Yes
213	34.94	2.09	0.78	1.32	0.89	1.014	0.90	1.122	0.95	1.00	2.000	Yes
214	35.10	2.10	0.78	1.32	0.89	1.014	0.90	1.121	0.95	1.00	2.000	Yes
215	35.27	2.11	0.79	1.33	0.89	1.013	0.90	1.121	0.95	1.00	2.000	Yes
216	35.43	2.12	0.79	1.33	0.89	1.013	0.90	1.120	0.95	1.00	2.000	Yes
217	35.60	2.14	0.80	1.34	0.89	1.012	0.90	1.120	0.95	1.00	2.000	Yes
218	35.76	2.15	0.80	1.34	0.89	1.012	0.90	1.119	0.95	1.00	2.000	Yes
219	35.93	2.16	0.81	1.35	0.88	1.011	0.90	1.119	0.95	1.00	1.183	No
220	36.09	2.17	0.81	1.35	0.88	1.011	0.90	1.118	0.94	1.00	1.183	No
221	36.25	2.18	0.82	1.36	0.88	1.010	0.90	1.117	0.94	1.00	1.183	No
222	36.42	2.19	0.82	1.37	0.88	1.009	0.90	1.116	0.94	1.00	1.184	No
223	36.58	2.20	0.83	1.37	0.88	1.009	0.90	1.116	0.94	1.00	1.184	No
224	36.75	2.21	0.83	1.38	0.88	1.008	0.90	1.115	0.94	1.00	1.185	No
225	36.91	2.22	0.84	1.38	0.88	1.007	0.90	1.114	0.94	1.00	1.185	No
226	37.07	2.23	0.84	1.39	0.88	1.007	0.90	1.113	0.94	1.00	1.185	No
227	37.24	2.24	0.85	1.39	0.87	1.006	0.90	1.113	0.94	1.00	1.185	No
228	37.40	2.25	0.85	1.40	0.87	1.005	0.90	1.112	0.94	1.00	1.186	No
229	37.57	2.27	0.86	1.41	0.87	1.004	0.90	1.111	0.94	1.00	1.186	No
230	37.73	2.28	0.87	1.41	0.87	1.004	0.90	1.110	0.94	1.00	1.186	No
231	37.89	2.29	0.87	1.42	0.87	1.003	0.90	1.109	0.94	1.00	1.186	No
232	38.06	2.30	0.88	1.42	0.87	1.002	0.90	1.108	0.93	1.00	1.186	No
233	38.22	2.31	0.88	1.43	0.87	1.001	0.90	1.107	0.93	1.00	1.186	No
234	38.39	2.32	0.89	1.43	0.86	1.000	0.90	1.106	0.93	1.00	1.186	No
235	38.55	2.33	0.89	1.44	0.86	0.999	0.90	1.105	0.93	1.00	1.186	No
236	38.71	2.34	0.90	1.45	0.86	0.998	0.90	1.104	0.93	1.00	1.186	No
237	38.88	2.35	0.90	1.45	0.86	0.998	0.90	1.103	0.93	1.00	1.186	No
238	39.04	2.36	0.91	1.46	0.86	0.997	0.90	1.102	0.93	1.00	1.186	No
239	39.21	2.37	0.91	1.46	0.86	0.996	0.90	1.101	0.93	1.00	1.186	No
240	39.37	2.38	0.92	1.47	0.86	0.995	0.90	1.100	0.93	1.00	1.186	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
241	39.53	2.40	0.92	1.47	0.86	0.994	0.90	1.099	0.93	1.00	1.186	No
242	39.70	2.41	0.93	1.48	0.85	0.993	0.90	1.098	0.93	1.00	1.186	No
243	39.86	2.42	0.93	1.49	0.85	0.991	0.90	1.097	0.92	1.00	1.186	No
244	40.03	2.43	0.94	1.49	0.85	0.990	0.90	1.095	0.92	1.00	1.185	No
245	40.19	2.44	0.94	1.50	0.85	0.989	0.90	1.094	0.92	1.00	1.185	No
246	40.35	2.45	0.95	1.50	0.85	0.988	0.90	1.093	0.92	1.00	1.185	No
247	40.52	2.46	0.95	1.51	0.85	0.987	0.90	1.092	0.92	1.00	1.185	No
248	40.68	2.47	0.96	1.51	0.84	0.986	0.90	1.091	0.92	1.00	1.184	No
249	40.85	2.48	0.96	1.52	0.84	0.985	0.90	1.089	0.92	1.00	1.184	No
250	41.01	2.49	0.97	1.53	0.84	0.984	0.90	1.088	0.92	1.00	1.184	No
251	41.17	2.50	0.97	1.53	0.84	0.983	0.90	1.087	0.92	1.00	1.183	No
252	41.34	2.51	0.98	1.54	0.84	0.982	0.90	1.086	0.92	1.00	1.183	No
253	41.50	2.52	0.98	1.54	0.84	0.981	0.90	1.085	0.92	1.00	1.183	No
254	41.67	2.53	0.99	1.55	0.84	0.980	0.90	1.084	0.92	1.00	2.000	Yes
255	41.83	2.54	0.99	1.55	0.83	0.979	0.90	1.083	0.92	1.00	2.000	Yes
256	41.99	2.55	1.00	1.55	0.83	0.978	0.90	1.082	0.92	1.00	2.000	Yes
257	42.16	2.56	1.00	1.56	0.83	0.978	0.90	1.081	0.92	1.00	2.000	Yes
258	42.32	2.57	1.01	1.56	0.83	0.977	0.90	1.080	0.91	1.00	2.000	Yes
259	42.49	2.58	1.01	1.57	0.83	0.976	0.90	1.079	0.91	1.00	2.000	Yes
260	42.65	2.59	1.02	1.57	0.83	0.975	0.90	1.078	0.91	1.00	2.000	Yes
261	42.81	2.60	1.02	1.57	0.83	0.973	0.90	1.077	0.91	1.00	2.000	Yes
262	42.98	2.61	1.03	1.58	0.82	0.972	0.90	1.075	0.91	1.00	2.000	Yes
263	43.14	2.62	1.03	1.58	0.82	0.971	0.90	1.074	0.91	1.00	2.000	Yes
264	43.31	2.63	1.04	1.59	0.82	0.970	0.90	1.073	0.91	1.00	2.000	Yes
265	43.47	2.64	1.04	1.60	0.82	0.969	0.90	1.071	0.91	1.00	2.000	Yes
266	43.64	2.65	1.05	1.60	0.82	0.967	0.90	1.070	0.91	1.00	2.000	Yes
267	43.80	2.66	1.05	1.61	0.82	0.966	0.90	1.068	0.91	1.00	1.176	No
268	43.96	2.67	1.06	1.61	0.81	0.965	0.90	1.067	0.91	1.00	1.175	No
269	44.13	2.68	1.06	1.62	0.81	0.963	0.90	1.065	0.91	1.00	1.175	No
270	44.29	2.69	1.07	1.62	0.81	0.962	0.90	1.064	0.91	1.00	1.174	No
271	44.46	2.70	1.08	1.63	0.81	0.961	0.90	1.062	0.91	1.00	2.000	Yes
272	44.62	2.71	1.08	1.63	0.81	0.959	0.90	1.061	0.91	1.00	2.000	Yes
273	44.78	2.72	1.09	1.64	0.81	0.958	0.90	1.059	0.90	1.00	2.000	Yes
274	44.95	2.73	1.09	1.64	0.80	0.956	0.90	1.058	0.90	1.00	2.000	Yes
275	45.11	2.74	1.10	1.65	0.80	0.955	0.90	1.056	0.90	1.00	2.000	Yes
276	45.28	2.75	1.10	1.65	0.80	0.954	0.90	1.055	0.90	1.00	2.000	Yes
277	45.44	2.77	1.11	1.66	0.80	0.952	0.90	1.053	0.90	1.00	2.000	Yes
278	45.60	2.78	1.11	1.66	0.80	0.951	0.90	1.052	0.90	1.00	1.167	No
279	45.77	2.79	1.12	1.67	0.80	0.949	0.90	1.050	0.90	1.00	1.166	No
280	45.93	2.80	1.12	1.68	0.79	0.948	0.90	1.048	0.90	1.00	1.165	No
281	46.10	2.81	1.13	1.68	0.79	0.946	0.90	1.047	0.90	1.00	1.164	No
282	46.26	2.82	1.13	1.69	0.79	0.945	0.90	1.045	0.90	1.00	1.163	No
283	46.42	2.83	1.14	1.69	0.79	0.943	0.90	1.043	0.90	1.00	1.162	No
284	46.59	2.84	1.14	1.70	0.79	0.942	0.90	1.042	0.90	1.00	1.161	No
285	46.75	2.85	1.15	1.70	0.79	0.940	0.90	1.040	0.90	1.00	1.160	No
286	46.92	2.86	1.15	1.71	0.78	0.939	0.90	1.038	0.90	1.00	1.159	No
287	47.08	2.87	1.16	1.71	0.78	0.937	0.90	1.037	0.89	1.00	1.158	No
288	47.24	2.88	1.16	1.72	0.78	0.936	0.90	1.035	0.89	1.00	1.157	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
289	47.41	2.89	1.17	1.73	0.78	0.934	0.90	1.033	0.89	1.00	2.000	Yes
290	47.57	2.90	1.17	1.73	0.78	0.932	0.90	1.031	0.89	1.00	2.000	Yes
291	47.74	2.92	1.18	1.74	0.78	0.931	0.90	1.029	0.89	1.00	2.000	Yes
292	47.90	2.93	1.18	1.74	0.77	0.929	0.90	1.027	0.89	1.00	2.000	Yes
293	48.06	2.94	1.19	1.75	0.77	0.927	0.90	1.026	0.89	1.00	2.000	Yes
294	48.23	2.95	1.19	1.75	0.77	0.926	0.90	1.024	0.89	1.00	2.000	Yes
295	48.39	2.96	1.20	1.76	0.77	0.924	0.90	1.022	0.89	1.00	2.000	Yes
296	48.56	2.97	1.20	1.77	0.77	0.923	0.90	1.020	0.89	1.00	2.000	Yes
297	48.72	2.98	1.21	1.77	0.77	0.921	0.90	1.019	0.89	1.00	2.000	Yes
298	48.88	2.99	1.21	1.78	0.76	0.919	0.90	1.017	0.89	1.00	2.000	Yes
299	49.05	3.00	1.22	1.78	0.76	0.918	0.90	1.015	0.89	1.00	2.000	Yes
300	49.21	3.01	1.22	1.79	0.76	0.916	0.90	1.013	0.89	1.00	2.000	Yes
301	49.38	3.02	1.23	1.79	0.76	0.915	0.90	1.012	0.89	1.00	2.000	Yes
302	49.54	3.03	1.23	1.80	0.76	0.914	0.90	1.010	0.89	1.00	1.141	No
303	49.70	3.04	1.24	1.80	0.76	0.912	0.90	1.009	0.88	1.00	1.140	No
304	49.87	3.05	1.24	1.80	0.75	0.911	0.90	1.007	0.88	1.00	1.139	No
305	50.03	3.06	1.25	1.81	0.75	0.909	0.90	1.006	0.88	1.00	1.138	No
306	50.20	3.07	1.25	1.81	0.75	0.908	0.90	1.004	0.88	1.00	1.137	No

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.16	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
2	0.33	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
3	0.49	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
4	0.66	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
5	0.82	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
6	0.98	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
7	1.15	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
8	1.31	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
9	1.48	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
10	1.64	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
11	1.80	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
12	1.97	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
13	2.13	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
14	2.30	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
15	2.46	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
16	2.62	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
17	2.79	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
18	2.95	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
19	3.12	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
20	3.28	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
21	3.44	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
22	3.61	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
23	3.77	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
24	3.94	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
25	4.10	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
26	4.27	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
27	4.43	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
28	4.59	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
29	4.76	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
30	4.92	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
31	5.09	56.71	1.85	0.71	0.58	90.62	1.15	104.05	4.000	No	No	2.00
32	5.25	89.88	1.67	0.65	0.51	143.90	1.02	146.35	4.000	No	No	2.00
33	5.41	97.12	1.60	0.55	0.50	155.51	1.00	155.51	4.000	No	No	2.00
34	5.58	99.21	1.61	0.59	0.50	158.85	1.00	158.85	4.000	No	No	2.00
35	5.74	98.28	1.65	0.67	0.50	157.35	1.00	157.51	4.000	No	No	2.00
36	5.91	95.92	1.70	0.79	0.52	153.54	1.04	159.53	4.000	No	No	2.00
37	6.07	92.29	1.76	0.92	0.54	147.69	1.08	159.07	4.000	No	No	2.00
38	6.23	87.36	1.81	1.02	0.56	139.75	1.11	155.26	4.000	No	No	2.00
39	6.40	81.67	1.84	1.08	0.58	130.60	1.14	148.92	4.000	No	No	2.00
40	6.56	74.81	1.88	1.11	0.59	119.56	1.17	139.98	4.000	No	No	2.00
41	6.73	68.59	1.91	1.09	0.60	109.56	1.19	130.85	4.000	No	No	2.00
42	6.89	63.90	1.92	1.05	0.61	102.01	1.21	123.00	4.000	No	No	2.00
43	7.05	61.48	1.92	1.00	0.61	98.09	1.21	118.30	4.000	No	No	2.00
44	7.22	59.02	1.93	1.00	0.61	94.13	1.22	114.68	4.000	No	No	2.00
45	7.38	55.79	1.96	1.06	0.62	88.92	1.26	111.74	4.000	No	No	2.00
46	7.55	51.79	2.01	1.15	0.64	82.49	1.32	108.80	4.000	No	No	2.00
47	7.71	49.35	2.05	1.22	0.65	78.54	1.37	107.28	4.000	No	No	2.00
48	7.87	49.76	2.04	1.21	0.65	79.02	1.36	107.37	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
49	8.04	53.01	2.01	1.12	0.64	82.31	1.31	107.85	4.000	No	No	2.00
50	8.20	58.58	1.96	1.03	0.62	88.62	1.25	110.75	4.000	No	No	2.00
51	8.37	65.39	1.90	0.91	0.60	96.04	1.19	113.89	4.000	No	No	2.00
52	8.53	70.45	1.87	0.89	0.59	101.67	1.16	118.40	4.000	No	No	2.00
53	8.69	71.87	1.89	0.98	0.60	103.13	1.18	121.97	4.000	No	No	2.00
54	8.86	69.45	1.96	1.19	0.62	100.23	1.25	125.20	4.000	No	No	2.00
55	9.02	68.03	1.99	1.31	0.64	97.95	1.29	126.65	4.000	No	No	2.00
56	9.19	70.17	1.98	1.28	0.63	99.56	1.28	127.13	4.000	No	No	2.00
57	9.35	73.83	1.94	1.13	0.61	102.51	1.23	125.71	4.000	No	No	2.00
58	9.51	76.73	1.90	1.03	0.60	104.61	1.19	124.84	4.000	No	No	2.00
59	9.68	76.83	1.90	0.99	0.60	103.44	1.18	122.56	4.000	No	No	2.00
60	9.84	71.88	1.94	1.08	0.62	96.78	1.23	119.29	4.000	No	No	2.00
61	10.01	62.26	2.05	1.36	0.66	84.85	1.37	116.42	0.227	No	No	0.29
62	10.17	49.18	2.21	1.89	0.72	68.88	1.70	117.18	0.230	No	No	0.29
63	10.33	39.34	2.36	2.46	0.77	56.28	2.14	120.63	0.243	No	No	0.31
64	10.50	34.12	2.43	2.71	0.80	49.13	2.43	119.51	0.239	No	No	0.30
65	10.66	30.81	2.46	2.68	0.81	44.28	2.57	113.66	0.217	No	No	0.27
66	10.83	28.26	2.47	2.51	0.82	40.38	2.62	105.81	0.190	No	No	0.24
67	10.99	25.47	2.50	2.49	0.83	36.31	2.78	100.83	0.175	No	No	0.22
68	11.15	23.10	2.54	2.50	0.84	32.88	2.96	97.21	0.165	No	No	0.20
69	11.32	21.38	2.57	2.56	0.85	30.37	3.15	95.55	0.161	No	No	0.20
70	11.48	21.82	2.54	2.36	0.84	30.68	3.00	92.03	0.152	No	No	0.18
71	11.65	23.12	2.50	2.15	0.83	32.13	2.79	89.47	0.147	No	No	0.18
72	11.81	23.22	2.47	1.91	0.82	31.91	2.64	84.21	4.000	Yes	No	2.00
73	11.98	19.38	2.56	2.11	0.85	26.76	3.09	82.76	4.000	Yes	No	2.00
74	12.14	15.52	2.69	2.60	0.90	21.61	3.92	84.69	4.000	Yes	Yes	2.00
75	12.30	12.54	2.84	3.48	0.96	17.63	5.11	90.08	4.000	Yes	Yes	2.00
76	12.47	10.42	2.93	3.92	0.99	14.62	6.03	88.13	4.000	Yes	Yes	2.00
77	12.63	8.93	3.01	4.27	1.00	12.32	6.91	85.10	4.000	No	Yes	2.00
78	12.80	8.71	3.04	4.45	1.00	11.92	7.16	85.33	4.000	No	Yes	2.00
79	12.96	19.76	2.58	2.28	0.86	26.55	3.23	85.76	4.000	Yes	No	2.00
80	13.12	41.77	2.21	1.36	0.72	53.39	1.68	89.85	4.000	Yes	No	2.00
81	13.29	73.78	1.94	0.97	0.61	90.40	1.22	110.67	4.000	Yes	No	2.00
82	13.45	98.35	1.82	0.88	0.57	118.01	1.12	132.35	4.000	Yes	No	2.00
83	13.62	118.23	1.74	0.82	0.54	139.70	1.07	148.97	4.000	Yes	No	2.00
84	13.78	135.21	1.68	0.77	0.52	157.83	1.03	162.17	0.477	No	No	0.53
85	13.94	152.80	1.62	0.70	0.50	176.57	1.00	176.57	0.592	No	No	0.66
86	14.11	165.78	1.59	0.69	0.50	190.96	1.00	190.96	0.728	No	No	0.80
87	14.27	168.14	1.60	0.72	0.50	192.99	1.00	192.99	0.748	No	No	0.82
88	14.44	161.82	1.64	0.79	0.50	185.04	1.00	184.35	0.663	No	No	0.72
89	14.60	148.83	1.69	0.85	0.52	170.71	1.03	175.95	0.587	No	No	0.64
90	14.76	133.89	1.74	0.89	0.54	153.96	1.06	163.64	0.488	No	No	0.53
91	14.93	121.43	1.74	0.81	0.54	139.13	1.07	148.36	0.384	No	No	0.41
92	15.09	112.85	1.76	0.80	0.55	129.15	1.08	139.66	0.333	No	No	0.36
93	15.26	103.81	1.82	0.90	0.57	119.24	1.12	133.96	0.304	No	No	0.32
94	15.42	101.28	1.89	1.13	0.60	116.96	1.18	138.35	0.326	No	No	0.35
95	15.58	118.72	1.82	1.04	0.57	135.43	1.12	152.03	0.407	No	No	0.43
96	15.75	145.67	1.69	0.82	0.52	163.07	1.03	168.49	0.525	No	No	0.55

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
97	15.91	167.50	1.59	0.66	0.50	185.75	1.00	185.75	0.676	No	No	0.71
98	16.08	171.92	1.56	0.61	0.50	190.05	1.00	190.05	0.718	No	No	0.75
99	16.24	174.95	1.54	0.59	0.50	192.78	1.00	192.78	0.746	No	No	0.78
100	16.40	180.02	1.53	0.58	0.50	197.75	1.00	197.75	0.799	No	No	0.83
101	16.57	183.46	1.52	0.56	0.50	200.90	1.00	200.90	4.000	No	No	2.00
102	16.73	183.27	1.52	0.56	0.50	200.04	1.00	200.04	4.000	No	No	2.00
103	16.90	168.12	1.57	0.60	0.50	182.82	1.00	182.82	0.648	No	No	0.67
104	17.06	142.50	1.67	0.72	0.51	154.85	1.02	157.82	0.446	No	No	0.46
105	17.22	108.63	1.85	1.01	0.58	119.68	1.15	137.28	0.321	No	No	0.33
106	17.39	84.36	2.03	1.42	0.65	94.09	1.34	126.35	0.268	No	No	0.27
107	17.55	67.23	2.19	1.93	0.71	75.66	1.65	124.49	0.259	No	No	0.26
108	17.72	58.82	2.28	2.26	0.74	66.34	1.88	124.93	0.261	No	No	0.26
109	17.88	61.10	2.20	1.76	0.71	68.10	1.66	113.11	0.215	No	No	0.22
110	18.04	74.41	2.01	1.13	0.64	81.41	1.32	107.34	0.195	No	No	0.20
111	18.21	94.45	1.84	0.80	0.58	101.64	1.14	115.84	0.225	No	No	0.23
112	18.37	113.56	1.79	0.81	0.56	121.39	1.10	133.16	0.300	No	No	0.30
113	18.54	125.60	1.77	0.87	0.55	133.79	1.09	145.64	0.367	No	No	0.37
114	18.70	126.90	1.79	0.92	0.56	134.90	1.10	148.14	4.000	Yes	No	2.00
115	18.86	119.41	1.84	1.03	0.58	127.00	1.14	144.50	4.000	Yes	No	2.00
116	19.03	108.95	1.89	1.11	0.60	115.85	1.18	136.75	4.000	Yes	No	2.00
117	19.19	97.29	1.95	1.18	0.62	103.41	1.24	127.82	4.000	Yes	No	2.00
118	19.36	80.04	2.06	1.43	0.66	85.33	1.39	118.96	4.000	Yes	No	2.00
119	19.52	57.93	2.28	2.08	0.74	62.16	1.87	116.34	4.000	Yes	No	2.00
120	19.69	37.48	2.54	3.22	0.84	40.37	2.99	120.66	4.000	Yes	No	2.00
121	19.85	25.45	2.75	4.26	0.92	27.27	4.37	119.13	4.000	Yes	Yes	2.00
122	20.01	27.45	2.67	3.44	0.89	29.20	3.75	109.55	4.000	Yes	Yes	2.00
123	20.18	44.89	2.35	1.99	0.77	47.34	2.12	100.47	4.000	Yes	No	2.00
124	20.34	65.88	2.12	1.37	0.68	68.74	1.50	102.85	4.000	Yes	No	2.00
125	20.51	80.88	2.03	1.24	0.65	83.88	1.34	112.49	4.000	Yes	No	2.00
126	20.67	84.99	2.04	1.38	0.65	87.96	1.36	119.77	0.240	No	No	0.23
127	20.83	87.39	2.07	1.57	0.67	90.30	1.41	127.18	0.271	No	No	0.26
128	21.00	91.13	2.07	1.59	0.66	93.82	1.40	130.90	0.289	No	No	0.28
129	21.16	96.29	2.01	1.42	0.64	98.55	1.32	130.08	0.285	No	No	0.27
130	21.33	102.18	1.96	1.23	0.62	103.97	1.25	129.71	0.283	No	No	0.27
131	21.49	107.87	1.90	1.06	0.60	109.14	1.19	129.64	0.283	No	No	0.27
132	21.65	114.90	1.86	0.98	0.58	115.71	1.15	133.06	0.299	No	No	0.29
133	21.82	121.15	1.82	0.93	0.57	121.50	1.12	136.62	0.317	No	No	0.30
134	21.98	124.71	1.81	0.92	0.57	124.67	1.12	139.18	0.331	No	No	0.31
135	22.15	123.31	1.84	0.98	0.58	123.00	1.14	139.63	0.333	No	No	0.32
136	22.31	118.67	1.91	1.20	0.60	118.29	1.20	141.56	0.344	No	No	0.33
137	22.47	110.62	2.01	1.58	0.64	110.25	1.32	145.08	0.364	No	No	0.34
138	22.64	104.17	2.09	1.88	0.67	103.64	1.43	148.09	0.382	No	No	0.36
139	22.80	109.68	2.05	1.78	0.66	108.67	1.38	149.79	0.393	No	No	0.37
140	22.97	116.69	2.00	1.57	0.64	115.06	1.30	149.08	0.388	No	No	0.37
141	23.13	119.81	1.99	1.58	0.63	117.76	1.29	152.06	4.000	Yes	No	2.00
142	23.29	108.63	2.10	2.01	0.67	106.57	1.45	154.67	4.000	Yes	No	2.00
143	23.46	102.99	2.17	2.40	0.70	100.78	1.60	160.99	4.000	Yes	No	2.00
144	23.62	98.42	2.21	2.62	0.72	95.96	1.70	163.22	4.000	Yes	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
145	23.79	87.49	2.26	2.71	0.74	84.90	1.83	155.16	4.000	Yes	No	2.00
146	23.95	71.76	2.36	3.02	0.77	69.25	2.14	148.13	4.000	Yes	No	2.00
147	24.11	57.45	2.46	3.43	0.81	55.04	2.59	142.71	4.000	Yes	No	2.00
148	24.28	68.14	2.30	2.39	0.75	65.09	1.95	127.18	4.000	Yes	No	2.00
149	24.44	91.05	2.08	1.51	0.67	86.83	1.41	122.55	4.000	Yes	No	2.00
150	24.61	105.53	1.96	1.22	0.62	100.39	1.26	126.08	4.000	Yes	No	2.00
151	24.77	94.26	2.09	1.66	0.67	89.36	1.44	128.92	4.000	Yes	No	2.00
152	24.93	65.45	2.36	2.70	0.77	61.54	2.14	131.79	4.000	Yes	No	2.00
153	25.10	43.31	2.59	3.82	0.86	40.14	3.29	132.10	4.000	Yes	No	2.00
154	25.26	39.73	2.61	3.63	0.87	36.55	3.38	123.56	4.000	No	Yes	2.00
155	25.43	42.17	2.54	3.07	0.84	38.70	2.99	115.57	0.224	No	No	0.21
156	25.59	42.71	2.55	3.18	0.85	39.06	3.02	118.09	0.233	No	No	0.21
157	25.75	32.50	2.72	4.16	0.91	29.25	4.14	121.15	4.000	No	Yes	2.00
158	25.92	30.91	2.72	3.88	0.91	27.63	4.13	114.13	4.000	Yes	Yes	2.00
159	26.08	56.06	2.31	1.90	0.76	51.16	1.99	101.67	4.000	Yes	No	2.00
160	26.25	91.06	2.04	1.29	0.65	83.83	1.36	113.79	4.000	Yes	No	2.00
161	26.41	116.61	1.95	1.25	0.62	107.49	1.24	133.45	4.000	Yes	No	2.00
162	26.57	123.50	1.95	1.35	0.62	113.58	1.25	141.45	0.343	No	No	0.31
163	26.74	122.55	1.97	1.40	0.63	112.33	1.26	141.78	0.345	No	No	0.31
164	26.90	120.54	1.95	1.30	0.62	110.15	1.24	137.04	4.000	Yes	No	2.00
165	27.07	108.58	2.01	1.41	0.64	98.69	1.32	130.15	4.000	Yes	No	2.00
166	27.23	94.18	2.12	1.72	0.68	85.00	1.49	126.86	4.000	Yes	No	2.00
167	27.40	79.63	2.28	2.47	0.75	71.19	1.90	135.20	4.000	Yes	No	2.00
168	27.56	63.78	2.46	3.49	0.81	56.31	2.59	145.71	4.000	Yes	No	2.00
169	27.72	49.17	2.61	4.30	0.87	42.76	3.40	145.21	4.000	Yes	Yes	2.00
170	27.89	35.24	2.77	5.07	0.93	29.99	4.54	136.21	4.000	Yes	Yes	2.00
171	28.05	36.77	2.69	4.08	0.90	31.28	3.94	123.35	4.000	No	Yes	2.00
172	28.22	48.26	2.54	3.27	0.84	41.52	2.97	123.13	0.254	No	No	0.23
173	28.38	53.62	2.52	3.50	0.84	46.14	2.89	133.50	0.301	No	No	0.27
174	28.54	46.17	2.64	4.28	0.88	39.22	3.55	139.41	4.000	No	Yes	2.00
175	28.71	29.31	2.89	5.94	0.98	24.06	5.58	134.19	4.000	No	Yes	2.00
176	28.87	23.71	2.95	5.64	1.00	19.05	6.17	117.48	4.000	Yes	Yes	2.00
177	29.04	35.37	2.64	3.22	0.88	29.34	3.61	105.97	4.000	Yes	Yes	2.00
178	29.20	53.03	2.45	2.66	0.81	44.89	2.54	113.82	4.000	Yes	No	2.00
179	29.36	63.75	2.40	2.76	0.79	54.17	2.32	125.76	4.000	Yes	No	2.00
180	29.53	65.42	2.42	3.03	0.80	55.39	2.41	133.56	0.302	No	No	0.27
181	29.69	70.14	2.37	2.76	0.78	59.39	2.21	131.32	0.291	No	No	0.26
182	29.86	82.29	2.24	2.09	0.73	70.12	1.77	123.84	0.257	No	No	0.23
183	30.02	91.80	2.15	1.74	0.69	78.46	1.55	121.42	0.246	No	No	0.22
184	30.18	91.71	2.16	1.80	0.70	78.10	1.57	122.81	4.000	Yes	No	2.00
185	30.35	78.33	2.29	2.34	0.75	65.85	1.92	126.68	4.000	Yes	No	2.00
186	30.51	57.86	2.49	3.21	0.82	47.60	2.71	129.11	4.000	Yes	No	2.00
187	30.68	36.23	2.74	4.41	0.92	28.74	4.32	124.08	4.000	Yes	Yes	2.00
188	30.84	23.55	2.90	4.42	0.98	17.92	5.67	101.62	4.000	Yes	Yes	2.00
189	31.00	17.23	2.96	3.62	1.00	12.61	6.34	79.93	4.000	Yes	Yes	2.00
190	31.17	16.71	2.85	2.16	0.96	12.21	5.18	63.33	4.000	No	Yes	2.00
191	31.33	17.96	2.83	2.32	0.95	13.20	5.08	67.10	4.000	No	Yes	2.00
192	31.50	19.50	2.81	2.43	0.95	14.44	4.90	70.80	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
193	31.66	19.22	2.84	2.61	0.96	14.13	5.13	72.47	4.000	No	Yes	2.00
194	31.82	18.09	2.88	2.78	0.97	13.13	5.52	72.42	4.000	No	Yes	2.00
195	31.99	17.45	2.87	2.52	0.97	12.57	5.43	68.24	4.000	No	Yes	2.00
196	32.15	17.72	2.84	2.28	0.96	12.77	5.15	65.80	4.000	No	Yes	2.00
197	32.32	18.88	2.81	2.20	0.95	13.68	4.86	66.42	4.000	No	Yes	2.00
198	32.48	20.24	2.79	2.24	0.94	14.75	4.67	68.85	4.000	No	Yes	2.00
199	32.64	24.00	2.75	2.49	0.92	17.77	4.34	77.15	4.000	No	Yes	2.00
200	32.81	25.88	2.73	2.65	0.92	19.23	4.25	81.79	4.000	No	Yes	2.00
201	32.97	25.74	2.76	2.90	0.93	19.01	4.47	85.00	4.000	No	Yes	2.00
202	33.14	21.51	2.84	2.95	0.96	15.49	5.11	79.23	4.000	No	Yes	2.00
203	33.30	18.86	2.88	2.78	0.97	13.30	5.47	72.74	4.000	No	Yes	2.00
204	33.46	17.71	2.88	2.49	0.97	12.35	5.46	67.42	4.000	No	Yes	2.00
205	33.63	16.75	2.90	2.46	0.98	11.53	5.67	65.41	4.000	No	Yes	2.00
206	33.79	15.53	2.95	2.63	1.00	10.50	6.17	64.85	4.000	No	Yes	2.00
207	33.96	14.55	2.97	2.60	1.00	9.71	6.45	62.60	4.000	No	Yes	2.00
208	34.12	14.36	2.95	2.29	1.00	9.53	6.20	59.05	4.000	No	Yes	2.00
209	34.28	15.42	2.91	2.22	0.99	10.34	5.83	60.24	4.000	No	Yes	2.00
210	34.45	17.94	2.91	2.87	0.99	12.24	5.84	71.44	4.000	Yes	Yes	2.00
211	34.61	25.66	2.80	3.13	0.94	18.29	4.75	86.89	4.000	Yes	Yes	2.00
212	34.78	40.38	2.60	2.82	0.87	30.08	3.32	100.00	4.000	Yes	No	2.00
213	34.94	60.18	2.46	2.77	0.81	46.02	2.55	117.56	4.000	Yes	No	2.00
214	35.10	77.85	2.37	2.75	0.78	60.26	2.19	131.78	4.000	Yes	No	2.00
215	35.27	93.99	2.30	2.71	0.75	73.27	1.96	143.71	4.000	Yes	No	2.00
216	35.43	123.57	2.14	2.12	0.69	97.94	1.53	150.00	4.000	Yes	No	2.00
217	35.60	158.33	1.99	1.70	0.63	127.28	1.29	164.05	4.000	Yes	No	2.00
218	35.76	186.96	1.90	1.52	0.60	151.40	1.19	180.59	4.000	Yes	No	2.00
219	35.93	188.92	1.93	1.66	0.61	152.21	1.22	185.88	0.677	No	No	0.57
220	36.09	174.57	2.03	2.05	0.65	138.91	1.34	185.56	0.674	No	No	0.57
221	36.25	163.97	2.10	2.37	0.67	129.16	1.45	186.75	0.686	No	No	0.58
222	36.42	182.20	2.02	2.10	0.65	144.28	1.33	192.30	0.741	No	No	0.63
223	36.58	213.51	1.90	1.67	0.60	170.99	1.19	203.39	4.000	No	No	2.00
224	36.75	240.49	1.79	1.35	0.56	194.40	1.10	214.31	4.000	No	No	2.00
225	36.91	240.81	1.78	1.29	0.55	194.50	1.09	212.29	4.000	No	No	2.00
226	37.07	233.65	1.79	1.29	0.56	188.05	1.10	206.46	4.000	No	No	2.00
227	37.24	228.44	1.81	1.34	0.56	182.99	1.11	203.68	4.000	No	No	2.00
228	37.40	226.26	1.82	1.38	0.57	180.55	1.12	202.71	4.000	No	No	2.00
229	37.57	209.58	1.88	1.53	0.59	165.67	1.17	193.90	0.758	No	No	0.64
230	37.73	201.96	1.91	1.62	0.60	158.65	1.20	190.30	0.721	No	No	0.61
231	37.89	194.65	1.95	1.74	0.62	151.85	1.24	187.83	0.696	No	No	0.59
232	38.06	207.28	1.92	1.67	0.61	161.96	1.20	195.16	0.771	No	No	0.65
233	38.22	215.75	1.89	1.60	0.60	168.76	1.18	198.97	0.813	No	No	0.68
234	38.39	234.76	1.83	1.45	0.57	184.56	1.13	208.71	4.000	No	No	2.00
235	38.55	253.93	1.78	1.33	0.55	200.53	1.09	219.08	4.000	No	No	2.00
236	38.71	264.59	1.75	1.27	0.54	209.21	1.07	224.78	4.000	No	No	2.00
237	38.88	267.36	1.75	1.27	0.54	211.02	1.07	226.36	4.000	No	No	2.00
238	39.04	269.89	1.74	1.24	0.54	212.86	1.06	226.69	4.000	No	No	2.00
239	39.21	279.76	1.71	1.17	0.53	221.02	1.05	231.08	4.000	No	No	2.00
240	39.37	297.74	1.66	1.06	0.51	236.39	1.01	238.72	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
241	39.53	320.90	1.62	1.01	0.50	255.02	1.00	255.02	4.000	No	No	2.00
242	39.70	342.67	1.59	0.98	0.50	271.91	1.00	271.91	4.000	No	No	2.00
243	39.86	353.82	1.59	0.99	0.50	280.26	1.00	280.26	4.000	No	No	2.00
244	40.03	355.33	1.56	0.91	0.50	280.91	1.00	280.91	4.000	No	No	2.00
245	40.19	352.06	1.54	0.84	0.50	277.76	1.00	277.76	4.000	No	No	2.00
246	40.35	346.51	1.52	0.79	0.50	272.83	1.00	272.83	4.000	No	No	2.00
247	40.52	345.49	1.55	0.85	0.50	271.49	1.00	271.49	4.000	No	No	2.00
248	40.68	342.81	1.55	0.86	0.50	268.85	1.00	268.85	4.000	No	No	2.00
249	40.85	334.53	1.51	0.73	0.50	261.81	1.00	261.81	4.000	No	No	2.00
250	41.01	305.34	1.52	0.68	0.50	238.36	1.00	238.36	4.000	No	No	2.00
251	41.17	217.30	1.68	0.80	0.51	167.90	1.02	171.57	0.550	No	No	0.46
252	41.34	120.76	2.05	1.39	0.65	87.54	1.37	119.58	0.239	No	No	0.20
253	41.50	41.43	2.64	2.84	0.88	26.39	3.61	95.35	4.000	No	Yes	2.00
254	41.67	24.41	2.84	2.71	0.96	14.39	5.15	74.11	4.000	Yes	Yes	2.00
255	41.83	24.87	2.62	1.11	0.87	15.13	3.43	51.87	4.000	Yes	Yes	2.00
256	41.99	26.06	2.52	0.79	0.84	16.12	2.89	46.59	4.000	Yes	No	2.00
257	42.16	35.50	2.45	1.06	0.81	22.77	2.54	57.80	4.000	Yes	No	2.00
258	42.32	41.43	2.51	1.73	0.83	26.57	2.83	75.17	4.000	Yes	No	2.00
259	42.49	42.45	2.58	2.25	0.86	26.94	3.18	85.65	4.000	Yes	No	2.00
260	42.65	34.26	2.76	3.18	0.93	20.77	4.43	91.96	4.000	Yes	Yes	2.00
261	42.81	31.67	2.81	3.44	0.95	18.86	4.88	91.99	4.000	Yes	Yes	2.00
262	42.98	39.28	2.75	3.66	0.92	23.95	4.36	104.43	4.000	Yes	Yes	2.00
263	43.14	47.54	2.69	3.74	0.90	29.53	3.90	115.03	4.000	Yes	Yes	2.00
264	43.31	73.71	2.44	2.81	0.81	48.38	2.50	120.84	4.000	Yes	No	2.00
265	43.47	100.66	2.25	2.15	0.73	68.55	1.81	123.93	4.000	Yes	No	2.00
266	43.64	114.15	2.20	2.06	0.71	78.46	1.66	130.43	4.000	Yes	No	2.00
267	43.80	101.20	2.29	2.43	0.75	68.14	1.93	131.21	0.290	No	No	0.25
268	43.96	88.53	2.38	2.80	0.78	58.37	2.25	131.15	0.290	No	No	0.25
269	44.13	91.72	2.35	2.57	0.77	60.75	2.10	127.70	0.274	No	No	0.23
270	44.29	104.32	2.25	2.17	0.73	70.26	1.80	126.24	0.267	No	No	0.23
271	44.46	107.16	2.24	2.15	0.73	72.18	1.76	127.33	4.000	Yes	No	2.00
272	44.62	98.70	2.31	2.46	0.75	65.39	1.98	129.35	4.000	Yes	No	2.00
273	44.78	79.62	2.47	3.28	0.82	50.82	2.64	134.33	4.000	Yes	No	2.00
274	44.95	72.54	2.53	3.51	0.84	45.60	2.92	133.07	4.000	Yes	No	2.00
275	45.11	92.60	2.37	2.72	0.78	60.19	2.18	131.03	4.000	Yes	No	2.00
276	45.28	119.83	2.20	2.14	0.71	80.42	1.67	134.49	4.000	Yes	No	2.00
277	45.44	140.50	2.10	1.82	0.67	96.10	1.45	139.37	4.000	Yes	No	2.00
278	45.60	146.51	2.06	1.69	0.66	100.70	1.39	139.73	0.334	No	No	0.29
279	45.77	151.64	2.00	1.46	0.64	105.12	1.30	137.05	0.319	No	No	0.27
280	45.93	139.79	2.08	1.70	0.67	95.24	1.42	135.23	0.310	No	No	0.27
281	46.10	114.74	2.22	2.16	0.72	75.71	1.73	130.77	0.288	No	No	0.25
282	46.26	96.63	2.35	2.68	0.77	61.87	2.13	131.70	0.292	No	No	0.25
283	46.42	120.31	2.19	2.03	0.71	79.58	1.64	130.57	0.287	No	No	0.25
284	46.59	159.26	1.99	1.48	0.64	109.50	1.29	141.53	0.344	No	No	0.30
285	46.75	195.54	1.88	1.28	0.59	137.42	1.17	160.91	0.467	No	No	0.40
286	46.92	210.39	1.86	1.30	0.58	148.23	1.15	171.14	0.546	No	No	0.47
287	47.08	227.06	1.86	1.37	0.58	159.98	1.15	183.95	0.659	No	No	0.57
288	47.24	244.82	1.85	1.44	0.58	172.48	1.15	197.57	0.797	No	No	0.69

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
289	47.41	252.00	1.87	1.57	0.59	176.56	1.16	205.28	4.000	Yes	No	2.00
290	47.57	232.83	1.96	1.86	0.62	160.09	1.25	199.44	4.000	Yes	No	2.00
291	47.74	184.72	2.13	2.52	0.69	122.19	1.51	185.01	4.000	Yes	No	2.00
292	47.90	124.81	2.38	3.60	0.78	78.01	2.22	173.00	4.000	Yes	No	2.00
293	48.06	86.05	2.59	4.71	0.86	50.95	3.25	165.48	4.000	Yes	No	2.00
294	48.23	95.05	2.46	3.53	0.81	57.73	2.57	148.25	4.000	Yes	No	2.00
295	48.39	126.58	2.24	2.42	0.73	80.65	1.77	142.64	4.000	Yes	No	2.00
296	48.56	151.59	2.09	1.86	0.67	99.50	1.44	143.77	4.000	Yes	No	2.00
297	48.72	138.39	2.16	2.06	0.70	89.33	1.57	140.42	4.000	Yes	No	2.00
298	48.88	104.68	2.34	2.66	0.77	64.63	2.07	133.89	4.000	Yes	No	2.00
299	49.05	66.39	2.61	3.85	0.87	38.04	3.41	129.67	4.000	Yes	Yes	2.00
300	49.21	40.14	2.87	4.83	0.97	21.13	5.39	113.95	4.000	Yes	Yes	2.00
301	49.38	27.97	2.99	4.52	1.00	13.92	6.61	92.04	4.000	Yes	Yes	2.00
302	49.54	24.17	2.97	3.42	1.00	11.77	6.44	75.77	4.000	No	Yes	2.00
303	49.70	24.35	2.91	2.69	0.98	11.95	5.76	68.83	4.000	No	Yes	2.00
304	49.87	26.90	2.83	2.38	0.95	13.55	5.05	68.48	4.000	No	Yes	2.00
305	50.03	29.34	2.78	2.25	0.93	15.05	4.62	69.48	4.000	No	Yes	2.00
306	50.20	31.52	2.73	2.11	0.92	16.41	4.24	69.61	4.000	No	Yes	2.00

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.16	2.00	0.00	0.00	0.00	0.00	0.33	2.00	0.00	0.00	0.00	0.00
0.49	2.00	0.00	0.00	0.00	0.00	0.66	2.00	0.00	0.00	0.00	0.00
0.82	2.00	0.00	0.00	0.00	0.00	0.98	2.00	0.00	0.00	0.00	0.00
1.15	2.00	0.00	0.00	0.00	0.00	1.31	2.00	0.00	0.00	0.00	0.00
1.48	2.00	0.00	0.00	0.00	0.00	1.64	2.00	0.00	0.00	0.00	0.00
1.80	2.00	0.00	0.00	0.00	0.00	1.97	2.00	0.00	0.00	0.00	0.00
2.13	2.00	0.00	0.00	0.00	0.00	2.30	2.00	0.00	0.00	0.00	0.00
2.46	2.00	0.00	0.00	0.00	0.00	2.62	2.00	0.00	0.00	0.00	0.00
2.79	2.00	0.00	0.00	0.00	0.00	2.95	2.00	0.00	0.00	0.00	0.00
3.12	2.00	0.00	0.00	0.00	0.00	3.28	2.00	0.00	0.00	0.00	0.00
3.44	2.00	0.00	0.00	0.00	0.00	3.61	2.00	0.00	0.00	0.00	0.00
3.77	2.00	0.00	0.00	0.00	0.00	3.94	2.00	0.00	0.00	0.00	0.00
4.10	2.00	0.00	0.00	0.00	0.00	4.27	2.00	0.00	0.00	0.00	0.00
4.43	2.00	0.00	0.00	0.00	0.00	4.59	2.00	0.00	0.00	0.00	0.00
4.76	2.00	0.00	0.00	0.00	0.00	4.92	2.00	0.00	0.00	0.00	0.00
5.09	2.00	0.00	9.22	0.16	0.00	5.25	2.00	0.00	9.20	0.16	0.00
5.41	2.00	0.00	9.17	0.16	0.00	5.58	2.00	0.00	9.15	0.16	0.00
5.74	2.00	0.00	9.12	0.16	0.00	5.91	2.00	0.00	9.10	0.16	0.00
6.07	2.00	0.00	9.07	0.16	0.00	6.23	2.00	0.00	9.05	0.16	0.00
6.40	2.00	0.00	9.02	0.16	0.00	6.56	2.00	0.00	9.00	0.16	0.00
6.73	2.00	0.00	8.97	0.16	0.00	6.89	2.00	0.00	8.95	0.16	0.00
7.05	2.00	0.00	8.92	0.16	0.00	7.22	2.00	0.00	8.90	0.16	0.00
7.38	2.00	0.00	8.87	0.16	0.00	7.55	2.00	0.00	8.85	0.16	0.00
7.71	2.00	0.00	8.82	0.16	0.00	7.87	2.00	0.00	8.80	0.16	0.00
8.04	2.00	0.00	8.77	0.16	0.00	8.20	2.00	0.00	8.75	0.16	0.00
8.37	2.00	0.00	8.72	0.16	0.00	8.53	2.00	0.00	8.70	0.16	0.00
8.69	2.00	0.00	8.67	0.16	0.00	8.86	2.00	0.00	8.65	0.16	0.00
9.02	2.00	0.00	8.62	0.16	0.00	9.19	2.00	0.00	8.60	0.16	0.00
9.35	2.00	0.00	8.57	0.16	0.00	9.51	2.00	0.00	8.55	0.16	0.00
9.68	2.00	0.00	8.52	0.16	0.00	9.84	2.00	0.00	8.50	0.16	0.00
10.01	0.29	0.71	8.47	0.16	0.30	10.17	0.29	0.71	8.45	0.16	0.30
10.33	0.31	0.69	8.42	0.16	0.29	10.50	0.30	0.70	8.40	0.16	0.29
10.66	0.27	0.73	8.37	0.16	0.31	10.83	0.24	0.76	8.35	0.16	0.32
10.99	0.22	0.78	8.32	0.16	0.33	11.15	0.20	0.80	8.30	0.16	0.33
11.32	0.20	0.80	8.27	0.16	0.33	11.48	0.18	0.82	8.25	0.16	0.34
11.65	0.18	0.82	8.22	0.16	0.34	11.81	2.00	0.00	8.20	0.16	0.00
11.98	2.00	0.00	8.17	0.16	0.00	12.14	2.00	0.00	8.15	0.16	0.00
12.30	2.00	0.00	8.12	0.16	0.00	12.47	2.00	0.00	8.10	0.16	0.00
12.63	2.00	0.00	8.07	0.16	0.00	12.80	2.00	0.00	8.05	0.16	0.00
12.96	2.00	0.00	8.02	0.16	0.00	13.12	2.00	0.00	8.00	0.16	0.00
13.29	2.00	0.00	7.97	0.16	0.00	13.45	2.00	0.00	7.95	0.16	0.00
13.62	2.00	0.00	7.92	0.16	0.00	13.78	0.53	0.47	7.90	0.16	0.19
13.94	0.66	0.34	7.87	0.16	0.14	14.11	0.80	0.20	7.85	0.16	0.08
14.27	0.82	0.18	7.82	0.16	0.07	14.44	0.72	0.28	7.80	0.16	0.11
14.60	0.64	0.36	7.77	0.16	0.14	14.76	0.53	0.47	7.75	0.16	0.18
14.93	0.41	0.59	7.72	0.16	0.23	15.09	0.36	0.64	7.70	0.16	0.25
15.26	0.32	0.68	7.67	0.16	0.26	15.42	0.35	0.65	7.65	0.16	0.25
15.58	0.43	0.57	7.62	0.16	0.22	15.75	0.55	0.45	7.60	0.16	0.17

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
15.91	0.71	0.29	7.57	0.16	0.11	16.08	0.75	0.25	7.55	0.16	0.09
16.24	0.78	0.22	7.52	0.16	0.08	16.40	0.83	0.17	7.50	0.16	0.06
16.57	2.00	0.00	7.47	0.16	0.00	16.73	2.00	0.00	7.45	0.16	0.00
16.90	0.67	0.33	7.42	0.16	0.12	17.06	0.46	0.54	7.40	0.16	0.20
17.22	0.33	0.67	7.37	0.16	0.25	17.39	0.27	0.73	7.35	0.16	0.27
17.55	0.26	0.74	7.32	0.16	0.27	17.72	0.26	0.74	7.30	0.16	0.27
17.88	0.22	0.78	7.27	0.16	0.28	18.04	0.20	0.80	7.25	0.16	0.29
18.21	0.23	0.77	7.22	0.16	0.28	18.37	0.30	0.70	7.20	0.16	0.25
18.54	0.37	0.63	7.17	0.16	0.23	18.70	2.00	0.00	7.15	0.16	0.00
18.86	2.00	0.00	7.12	0.16	0.00	19.03	2.00	0.00	7.10	0.16	0.00
19.19	2.00	0.00	7.07	0.16	0.00	19.36	2.00	0.00	7.05	0.16	0.00
19.52	2.00	0.00	7.02	0.16	0.00	19.69	2.00	0.00	7.00	0.16	0.00
19.85	2.00	0.00	6.97	0.16	0.00	20.01	2.00	0.00	6.95	0.16	0.00
20.18	2.00	0.00	6.92	0.16	0.00	20.34	2.00	0.00	6.90	0.16	0.00
20.51	2.00	0.00	6.87	0.16	0.00	20.67	0.23	0.77	6.85	0.16	0.26
20.83	0.26	0.74	6.82	0.16	0.25	21.00	0.28	0.72	6.80	0.16	0.25
21.16	0.27	0.73	6.77	0.16	0.25	21.33	0.27	0.73	6.75	0.16	0.25
21.49	0.27	0.73	6.72	0.16	0.25	21.65	0.29	0.71	6.70	0.16	0.24
21.82	0.30	0.70	6.67	0.16	0.23	21.98	0.31	0.69	6.65	0.16	0.23
22.15	0.32	0.68	6.62	0.16	0.23	22.31	0.33	0.67	6.60	0.16	0.22
22.47	0.34	0.66	6.57	0.16	0.22	22.64	0.36	0.64	6.55	0.16	0.21
22.80	0.37	0.63	6.52	0.16	0.21	22.97	0.37	0.63	6.50	0.16	0.21
23.13	2.00	0.00	6.47	0.16	0.00	23.29	2.00	0.00	6.45	0.16	0.00
23.46	2.00	0.00	6.42	0.16	0.00	23.62	2.00	0.00	6.40	0.16	0.00
23.79	2.00	0.00	6.37	0.16	0.00	23.95	2.00	0.00	6.35	0.16	0.00
24.11	2.00	0.00	6.32	0.16	0.00	24.28	2.00	0.00	6.30	0.16	0.00
24.44	2.00	0.00	6.27	0.16	0.00	24.61	2.00	0.00	6.25	0.16	0.00
24.77	2.00	0.00	6.22	0.16	0.00	24.93	2.00	0.00	6.20	0.16	0.00
25.10	2.00	0.00	6.17	0.16	0.00	25.26	2.00	0.00	6.15	0.16	0.00
25.43	0.21	0.79	6.12	0.16	0.24	25.59	0.21	0.79	6.10	0.16	0.24
25.75	2.00	0.00	6.07	0.16	0.00	25.92	2.00	0.00	6.05	0.16	0.00
26.08	2.00	0.00	6.02	0.16	0.00	26.25	2.00	0.00	6.00	0.16	0.00
26.41	2.00	0.00	5.97	0.16	0.00	26.57	0.31	0.69	5.95	0.16	0.20
26.74	0.31	0.69	5.92	0.16	0.20	26.90	2.00	0.00	5.90	0.16	0.00
27.07	2.00	0.00	5.87	0.16	0.00	27.23	2.00	0.00	5.85	0.16	0.00
27.40	2.00	0.00	5.82	0.16	0.00	27.56	2.00	0.00	5.80	0.16	0.00
27.72	2.00	0.00	5.77	0.16	0.00	27.89	2.00	0.00	5.75	0.16	0.00
28.05	2.00	0.00	5.72	0.16	0.00	28.22	0.23	0.77	5.70	0.16	0.22
28.38	0.27	0.73	5.67	0.16	0.21	28.54	2.00	0.00	5.65	0.16	0.00
28.71	2.00	0.00	5.62	0.16	0.00	28.87	2.00	0.00	5.60	0.16	0.00
29.04	2.00	0.00	5.57	0.16	0.00	29.20	2.00	0.00	5.55	0.16	0.00
29.36	2.00	0.00	5.52	0.16	0.00	29.53	0.27	0.73	5.50	0.16	0.20
29.69	0.26	0.74	5.47	0.16	0.20	29.86	0.23	0.77	5.45	0.16	0.21
30.02	0.22	0.78	5.42	0.16	0.21	30.18	2.00	0.00	5.40	0.16	0.00
30.35	2.00	0.00	5.37	0.16	0.00	30.51	2.00	0.00	5.35	0.16	0.00
30.68	2.00	0.00	5.32	0.16	0.00	30.84	2.00	0.00	5.30	0.16	0.00
31.00	2.00	0.00	5.27	0.16	0.00	31.17	2.00	0.00	5.25	0.16	0.00
31.33	2.00	0.00	5.22	0.16	0.00	31.50	2.00	0.00	5.20	0.16	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.66	2.00	0.00	5.17	0.16	0.00	31.82	2.00	0.00	5.15	0.16	0.00
31.99	2.00	0.00	5.12	0.16	0.00	32.15	2.00	0.00	5.10	0.16	0.00
32.32	2.00	0.00	5.07	0.16	0.00	32.48	2.00	0.00	5.05	0.16	0.00
32.64	2.00	0.00	5.02	0.16	0.00	32.81	2.00	0.00	5.00	0.16	0.00
32.97	2.00	0.00	4.97	0.16	0.00	33.14	2.00	0.00	4.95	0.16	0.00
33.30	2.00	0.00	4.92	0.16	0.00	33.46	2.00	0.00	4.90	0.16	0.00
33.63	2.00	0.00	4.87	0.16	0.00	33.79	2.00	0.00	4.85	0.16	0.00
33.96	2.00	0.00	4.82	0.16	0.00	34.12	2.00	0.00	4.80	0.16	0.00
34.28	2.00	0.00	4.77	0.16	0.00	34.45	2.00	0.00	4.75	0.16	0.00
34.61	2.00	0.00	4.72	0.16	0.00	34.78	2.00	0.00	4.70	0.16	0.00
34.94	2.00	0.00	4.67	0.16	0.00	35.10	2.00	0.00	4.65	0.16	0.00
35.27	2.00	0.00	4.62	0.16	0.00	35.43	2.00	0.00	4.60	0.16	0.00
35.60	2.00	0.00	4.57	0.16	0.00	35.76	2.00	0.00	4.55	0.16	0.00
35.93	0.57	0.43	4.52	0.16	0.10	36.09	0.57	0.43	4.50	0.16	0.10
36.25	0.58	0.42	4.47	0.16	0.09	36.42	0.63	0.37	4.45	0.16	0.08
36.58	2.00	0.00	4.42	0.16	0.00	36.75	2.00	0.00	4.40	0.16	0.00
36.91	2.00	0.00	4.37	0.16	0.00	37.07	2.00	0.00	4.35	0.16	0.00
37.24	2.00	0.00	4.32	0.16	0.00	37.40	2.00	0.00	4.30	0.16	0.00
37.57	0.64	0.36	4.27	0.16	0.08	37.73	0.61	0.39	4.25	0.16	0.08
37.89	0.59	0.41	4.22	0.16	0.09	38.06	0.65	0.35	4.20	0.16	0.07
38.22	0.68	0.32	4.17	0.16	0.07	38.39	2.00	0.00	4.15	0.16	0.00
38.55	2.00	0.00	4.12	0.16	0.00	38.71	2.00	0.00	4.10	0.16	0.00
38.88	2.00	0.00	4.07	0.16	0.00	39.04	2.00	0.00	4.05	0.16	0.00
39.21	2.00	0.00	4.02	0.16	0.00	39.37	2.00	0.00	4.00	0.16	0.00
39.53	2.00	0.00	3.97	0.16	0.00	39.70	2.00	0.00	3.95	0.16	0.00
39.86	2.00	0.00	3.92	0.16	0.00	40.03	2.00	0.00	3.90	0.16	0.00
40.19	2.00	0.00	3.87	0.16	0.00	40.35	2.00	0.00	3.85	0.16	0.00
40.52	2.00	0.00	3.82	0.16	0.00	40.68	2.00	0.00	3.80	0.16	0.00
40.85	2.00	0.00	3.77	0.16	0.00	41.01	2.00	0.00	3.75	0.16	0.00
41.17	0.46	0.54	3.72	0.16	0.10	41.34	0.20	0.80	3.70	0.16	0.15
41.50	2.00	0.00	3.67	0.16	0.00	41.67	2.00	0.00	3.65	0.16	0.00
41.83	2.00	0.00	3.62	0.16	0.00	41.99	2.00	0.00	3.60	0.16	0.00
42.16	2.00	0.00	3.57	0.16	0.00	42.32	2.00	0.00	3.55	0.16	0.00
42.49	2.00	0.00	3.52	0.16	0.00	42.65	2.00	0.00	3.50	0.16	0.00
42.81	2.00	0.00	3.47	0.16	0.00	42.98	2.00	0.00	3.45	0.16	0.00
43.14	2.00	0.00	3.42	0.16	0.00	43.31	2.00	0.00	3.40	0.16	0.00
43.47	2.00	0.00	3.37	0.16	0.00	43.64	2.00	0.00	3.35	0.16	0.00
43.80	0.25	0.75	3.32	0.16	0.13	43.96	0.25	0.75	3.30	0.16	0.12
44.13	0.23	0.77	3.27	0.16	0.13	44.29	0.23	0.77	3.25	0.16	0.13
44.46	2.00	0.00	3.22	0.16	0.00	44.62	2.00	0.00	3.20	0.16	0.00
44.78	2.00	0.00	3.17	0.16	0.00	44.95	2.00	0.00	3.15	0.16	0.00
45.11	2.00	0.00	3.12	0.16	0.00	45.28	2.00	0.00	3.10	0.16	0.00
45.44	2.00	0.00	3.07	0.16	0.00	45.60	0.29	0.71	3.05	0.16	0.11
45.77	0.27	0.73	3.02	0.16	0.11	45.93	0.27	0.73	3.00	0.16	0.11
46.10	0.25	0.75	2.97	0.16	0.11	46.26	0.25	0.75	2.95	0.16	0.11
46.42	0.25	0.75	2.92	0.16	0.11	46.59	0.30	0.70	2.90	0.16	0.10
46.75	0.40	0.60	2.87	0.16	0.09	46.92	0.47	0.53	2.85	0.16	0.08
47.08	0.57	0.43	2.82	0.16	0.06	47.24	0.69	0.31	2.80	0.16	0.04

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
47.41	2.00	0.00	2.77	0.16	0.00	47.57	2.00	0.00	2.75	0.16	0.00
47.74	2.00	0.00	2.72	0.16	0.00	47.90	2.00	0.00	2.70	0.16	0.00
48.06	2.00	0.00	2.67	0.16	0.00	48.23	2.00	0.00	2.65	0.16	0.00
48.39	2.00	0.00	2.62	0.16	0.00	48.56	2.00	0.00	2.60	0.16	0.00
48.72	2.00	0.00	2.57	0.16	0.00	48.88	2.00	0.00	2.55	0.16	0.00
49.05	2.00	0.00	2.52	0.16	0.00	49.21	2.00	0.00	2.50	0.16	0.00
49.38	2.00	0.00	2.47	0.16	0.00	49.54	2.00	0.00	2.45	0.16	0.00
49.70	2.00	0.00	2.42	0.16	0.00	49.87	2.00	0.00	2.40	0.16	0.00
50.03	2.00	0.00	2.37	0.16	0.00	50.20	2.00	0.00	2.35	0.16	0.00

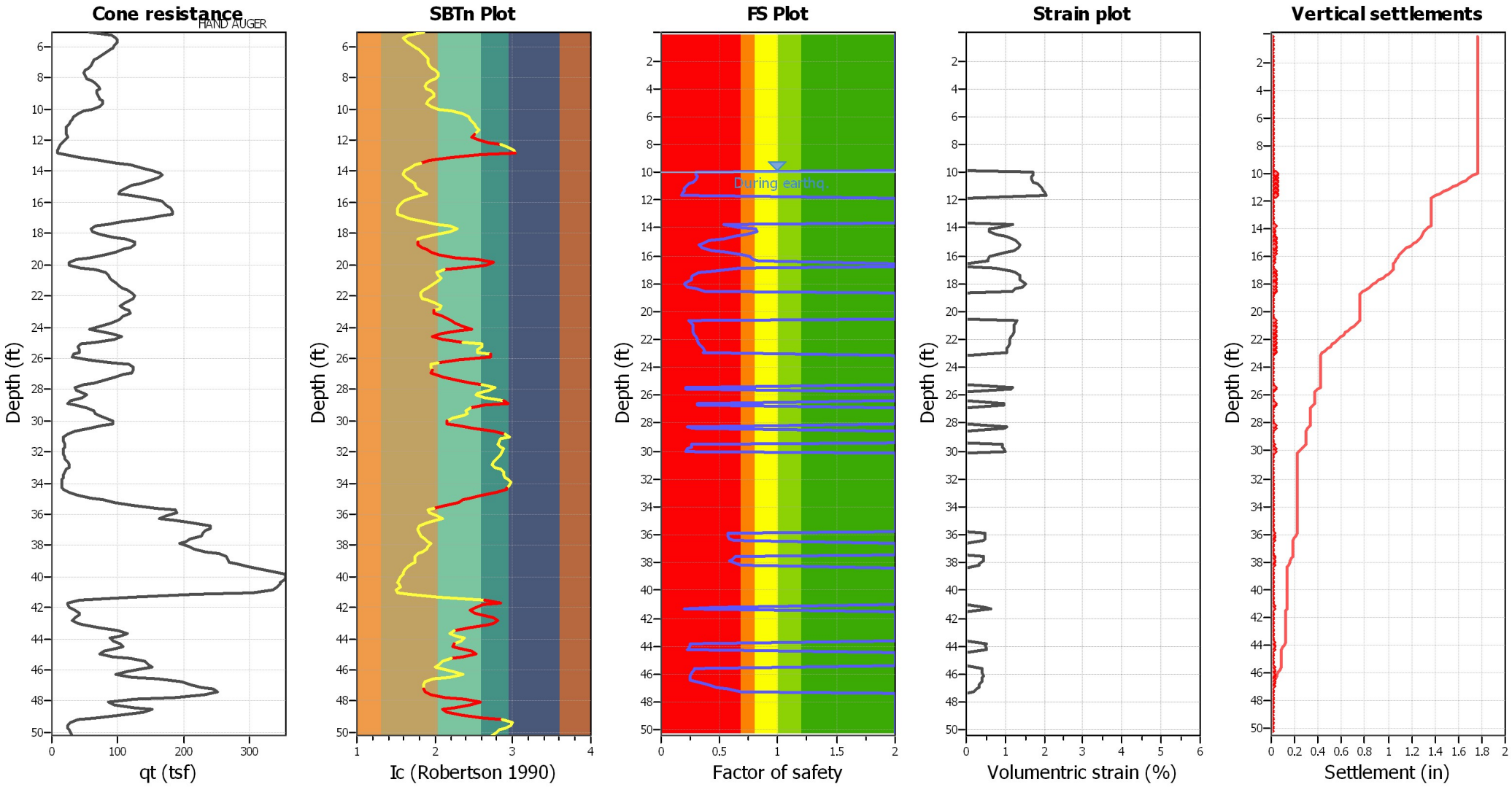
Overall liquefaction potential: 16.97

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)
LPI: Liquefaction potential index value for test point

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
10.01	116.42	0.29	1.72	0.83	0.03	10.17	117.18	0.29	1.70	0.83	0.03
10.33	120.63	0.31	1.66	0.83	0.03	10.50	119.51	0.30	1.67	0.83	0.03
10.66	113.66	0.27	1.73	0.82	0.03	10.83	105.81	0.24	1.83	0.82	0.04
10.99	100.83	0.22	1.90	0.82	0.04	11.15	97.21	0.20	1.95	0.81	0.04
11.32	95.55	0.20	1.97	0.81	0.04	11.48	92.03	0.18	2.02	0.81	0.04
11.65	89.47	0.18	2.06	0.81	0.04	11.81	84.21	2.00	0.00	0.80	0.00
11.98	82.76	2.00	0.00	0.80	0.00	12.14	84.69	2.00	0.00	0.80	0.00
12.30	90.08	2.00	0.00	0.79	0.00	12.47	88.13	2.00	0.00	0.79	0.00
12.63	85.10	2.00	0.00	0.79	0.00	12.80	85.33	2.00	0.00	0.79	0.00
12.96	85.76	2.00	0.00	0.78	0.00	13.12	89.85	2.00	0.00	0.78	0.00
13.29	110.67	2.00	0.00	0.78	0.00	13.45	132.35	2.00	0.00	0.78	0.00
13.62	148.97	2.00	0.00	0.77	0.00	13.78	162.17	0.53	1.21	0.77	0.02
13.94	176.57	0.66	0.84	0.77	0.02	14.11	190.96	0.80	0.60	0.76	0.01
14.27	192.99	0.82	0.59	0.76	0.01	14.44	184.35	0.72	0.78	0.76	0.02
14.60	175.95	0.64	1.01	0.76	0.02	14.76	163.64	0.53	1.18	0.75	0.02
14.93	148.36	0.41	1.27	0.75	0.03	15.09	139.66	0.36	1.33	0.75	0.03
15.26	133.96	0.32	1.37	0.75	0.03	15.42	138.35	0.35	1.33	0.74	0.03
15.58	152.03	0.43	1.23	0.74	0.02	15.75	168.49	0.55	1.05	0.74	0.02
15.91	185.75	0.71	0.75	0.73	0.01	16.08	190.05	0.75	0.58	0.73	0.01
16.24	192.78	0.78	0.57	0.73	0.01	16.40	197.75	0.83	0.55	0.73	0.01
16.57	200.90	2.00	0.00	0.72	0.00	16.73	200.04	2.00	0.00	0.72	0.00
16.90	182.82	0.67	0.75	0.72	0.01	17.06	157.82	0.46	1.15	0.72	0.02
17.22	137.28	0.33	1.28	0.71	0.03	17.39	126.35	0.27	1.37	0.71	0.03
17.55	124.49	0.26	1.38	0.71	0.03	17.72	124.93	0.26	1.37	0.70	0.03
17.88	113.11	0.22	1.48	0.70	0.03	18.04	107.34	0.20	1.54	0.70	0.03
18.21	115.84	0.23	1.44	0.70	0.03	18.37	133.16	0.30	1.28	0.69	0.03
18.54	145.64	0.37	1.19	0.69	0.02	18.70	148.14	2.00	0.00	0.69	0.00
18.86	144.50	2.00	0.00	0.69	0.00	19.03	136.75	2.00	0.00	0.68	0.00
19.19	127.82	2.00	0.00	0.68	0.00	19.36	118.96	2.00	0.00	0.68	0.00
19.52	116.34	2.00	0.00	0.67	0.00	19.69	120.66	2.00	0.00	0.67	0.00
19.85	119.13	2.00	0.00	0.67	0.00	20.01	109.55	2.00	0.00	0.67	0.00
20.18	100.47	2.00	0.00	0.66	0.00	20.34	102.85	2.00	0.00	0.66	0.00
20.51	112.49	2.00	0.00	0.66	0.00	20.67	119.77	0.23	1.32	0.66	0.03
20.83	127.18	0.26	1.25	0.65	0.02	21.00	130.90	0.28	1.22	0.65	0.02
21.16	130.08	0.27	1.22	0.65	0.02	21.33	129.71	0.27	1.22	0.64	0.02
21.49	129.64	0.27	1.21	0.64	0.02	21.65	133.06	0.29	1.18	0.64	0.02
21.82	136.62	0.30	1.15	0.64	0.02	21.98	139.18	0.31	1.13	0.63	0.02
22.15	139.63	0.32	1.12	0.63	0.02	22.31	141.56	0.33	1.10	0.63	0.02
22.47	145.08	0.34	1.08	0.63	0.02	22.64	148.09	0.36	1.05	0.62	0.02
22.80	149.79	0.37	1.04	0.62	0.02	22.97	149.08	0.37	1.04	0.62	0.02
23.13	152.06	2.00	0.00	0.61	0.00	23.29	154.67	2.00	0.00	0.61	0.00
23.46	160.99	2.00	0.00	0.61	0.00	23.62	163.22	2.00	0.00	0.61	0.00
23.79	155.16	2.00	0.00	0.60	0.00	23.95	148.13	2.00	0.00	0.60	0.00
24.11	142.71	2.00	0.00	0.60	0.00	24.28	127.18	2.00	0.00	0.60	0.00
24.44	122.55	2.00	0.00	0.59	0.00	24.61	126.08	2.00	0.00	0.59	0.00
24.77	128.92	2.00	0.00	0.59	0.00	24.93	131.79	2.00	0.00	0.58	0.00
25.10	132.10	2.00	0.00	0.58	0.00	25.26	123.56	2.00	0.00	0.58	0.00
25.43	115.57	0.21	1.20	0.58	0.02	25.59	118.09	0.21	1.17	0.57	0.02

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
25.75	121.15	2.00	0.00	0.57	0.00	25.92	114.13	2.00	0.00	0.57	0.00
26.08	101.67	2.00	0.00	0.57	0.00	26.25	113.79	2.00	0.00	0.56	0.00
26.41	133.45	2.00	0.00	0.56	0.00	26.57	141.45	0.31	0.98	0.56	0.02
26.74	141.78	0.31	0.97	0.55	0.02	26.90	137.04	2.00	0.00	0.55	0.00
27.07	130.15	2.00	0.00	0.55	0.00	27.23	126.86	2.00	0.00	0.55	0.00
27.40	135.20	2.00	0.00	0.54	0.00	27.56	145.71	2.00	0.00	0.54	0.00
27.72	145.21	2.00	0.00	0.54	0.00	27.89	136.21	2.00	0.00	0.54	0.00
28.05	123.35	2.00	0.00	0.53	0.00	28.22	123.13	0.23	1.04	0.53	0.02
28.38	133.50	0.27	0.97	0.53	0.02	28.54	139.41	2.00	0.00	0.52	0.00
28.71	134.19	2.00	0.00	0.52	0.00	28.87	117.48	2.00	0.00	0.52	0.00
29.04	105.97	2.00	0.00	0.52	0.00	29.20	113.82	2.00	0.00	0.51	0.00
29.36	125.76	2.00	0.00	0.51	0.00	29.53	133.56	0.27	0.94	0.51	0.02
29.69	131.32	0.26	0.94	0.51	0.02	29.86	123.84	0.23	0.99	0.50	0.02
30.02	121.42	0.22	1.00	0.50	0.02	30.18	122.81	2.00	0.00	0.50	0.00
30.35	126.68	2.00	0.00	0.49	0.00	30.51	129.11	2.00	0.00	0.49	0.00
30.68	124.08	2.00	0.00	0.49	0.00	30.84	101.62	2.00	0.00	0.49	0.00
31.00	79.93	2.00	0.00	0.48	0.00	31.17	63.33	2.00	0.00	0.48	0.00
31.33	67.10	2.00	0.00	0.48	0.00	31.50	70.80	2.00	0.00	0.48	0.00
31.66	72.47	2.00	0.00	0.47	0.00	31.82	72.42	2.00	0.00	0.47	0.00
31.99	68.24	2.00	0.00	0.47	0.00	32.15	65.80	2.00	0.00	0.46	0.00
32.32	66.42	2.00	0.00	0.46	0.00	32.48	68.85	2.00	0.00	0.46	0.00
32.64	77.15	2.00	0.00	0.46	0.00	32.81	81.79	2.00	0.00	0.45	0.00
32.97	85.00	2.00	0.00	0.45	0.00	33.14	79.23	2.00	0.00	0.45	0.00
33.30	72.74	2.00	0.00	0.44	0.00	33.46	67.42	2.00	0.00	0.44	0.00
33.63	65.41	2.00	0.00	0.44	0.00	33.79	64.85	2.00	0.00	0.44	0.00
33.96	62.60	2.00	0.00	0.43	0.00	34.12	59.05	2.00	0.00	0.43	0.00
34.28	60.24	2.00	0.00	0.43	0.00	34.45	71.44	2.00	0.00	0.43	0.00
34.61	86.89	2.00	0.00	0.42	0.00	34.78	100.00	2.00	0.00	0.42	0.00
34.94	117.56	2.00	0.00	0.42	0.00	35.10	131.78	2.00	0.00	0.41	0.00
35.27	143.71	2.00	0.00	0.41	0.00	35.43	150.00	2.00	0.00	0.41	0.00
35.60	164.05	2.00	0.00	0.41	0.00	35.76	180.59	2.00	0.00	0.40	0.00
35.93	185.88	0.57	0.50	0.40	0.01	36.09	185.56	0.57	0.49	0.40	0.01
36.25	186.75	0.58	0.49	0.40	0.01	36.42	192.30	0.63	0.46	0.39	0.01
36.58	203.39	2.00	0.00	0.39	0.00	36.75	214.31	2.00	0.00	0.39	0.00
36.91	212.29	2.00	0.00	0.38	0.00	37.07	206.46	2.00	0.00	0.38	0.00
37.24	203.68	2.00	0.00	0.38	0.00	37.40	202.71	2.00	0.00	0.38	0.00
37.57	193.90	0.64	0.43	0.37	0.01	37.73	190.30	0.61	0.44	0.37	0.01
37.89	187.83	0.59	0.45	0.37	0.01	38.06	195.16	0.65	0.35	0.37	0.01
38.22	198.97	0.68	0.34	0.36	0.01	38.39	208.71	2.00	0.00	0.36	0.00
38.55	219.08	2.00	0.00	0.36	0.00	38.71	224.78	2.00	0.00	0.35	0.00
38.88	226.36	2.00	0.00	0.35	0.00	39.04	226.69	2.00	0.00	0.35	0.00
39.21	231.08	2.00	0.00	0.35	0.00	39.37	238.72	2.00	0.00	0.34	0.00
39.53	255.02	2.00	0.00	0.34	0.00	39.70	271.91	2.00	0.00	0.34	0.00
39.86	280.26	2.00	0.00	0.34	0.00	40.03	280.91	2.00	0.00	0.33	0.00
40.19	277.76	2.00	0.00	0.33	0.00	40.35	272.83	2.00	0.00	0.33	0.00
40.52	271.49	2.00	0.00	0.32	0.00	40.68	268.85	2.00	0.00	0.32	0.00
40.85	261.81	2.00	0.00	0.32	0.00	41.01	238.36	2.00	0.00	0.32	0.00
41.17	171.57	0.46	0.47	0.31	0.01	41.34	119.58	0.20	0.63	0.31	0.01

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
41.50	95.35	2.00	0.00	0.31	0.00	41.67	74.11	2.00	0.00	0.31	0.00
41.83	51.87	2.00	0.00	0.30	0.00	41.99	46.59	2.00	0.00	0.30	0.00
42.16	57.80	2.00	0.00	0.30	0.00	42.32	75.17	2.00	0.00	0.29	0.00
42.49	85.65	2.00	0.00	0.29	0.00	42.65	91.96	2.00	0.00	0.29	0.00
42.81	91.99	2.00	0.00	0.29	0.00	42.98	104.43	2.00	0.00	0.28	0.00
43.14	115.03	2.00	0.00	0.28	0.00	43.31	120.84	2.00	0.00	0.28	0.00
43.47	123.93	2.00	0.00	0.28	0.00	43.64	130.43	2.00	0.00	0.27	0.00
43.80	131.21	0.25	0.50	0.27	0.01	43.96	131.15	0.25	0.50	0.27	0.01
44.13	127.70	0.23	0.51	0.26	0.01	44.29	126.24	0.23	0.51	0.26	0.01
44.46	127.33	2.00	0.00	0.26	0.00	44.62	129.35	2.00	0.00	0.26	0.00
44.78	134.33	2.00	0.00	0.25	0.00	44.95	133.07	2.00	0.00	0.25	0.00
45.11	131.03	2.00	0.00	0.25	0.00	45.28	134.49	2.00	0.00	0.25	0.00
45.44	139.37	2.00	0.00	0.24	0.00	45.60	139.73	0.29	0.43	0.24	0.01
45.77	137.05	0.27	0.43	0.24	0.01	45.93	135.23	0.27	0.43	0.23	0.01
46.10	130.77	0.25	0.43	0.23	0.01	46.26	131.70	0.25	0.43	0.23	0.01
46.42	130.57	0.25	0.42	0.23	0.01	46.59	141.53	0.30	0.39	0.22	0.01
46.75	160.91	0.40	0.35	0.22	0.01	46.92	171.14	0.47	0.33	0.22	0.01
47.08	183.95	0.57	0.27	0.22	0.01	47.24	197.57	0.69	0.20	0.21	0.00
47.41	205.28	2.00	0.00	0.21	0.00	47.57	199.44	2.00	0.00	0.21	0.00
47.74	185.01	2.00	0.00	0.20	0.00	47.90	173.00	2.00	0.00	0.20	0.00
48.06	165.48	2.00	0.00	0.20	0.00	48.23	148.25	2.00	0.00	0.20	0.00
48.39	142.64	2.00	0.00	0.19	0.00	48.56	143.77	2.00	0.00	0.19	0.00
48.72	140.42	2.00	0.00	0.19	0.00	48.88	133.89	2.00	0.00	0.19	0.00
49.05	129.67	2.00	0.00	0.18	0.00	49.21	113.95	2.00	0.00	0.18	0.00
49.38	92.04	2.00	0.00	0.18	0.00	49.54	75.77	2.00	0.00	0.17	0.00
49.70	68.83	2.00	0.00	0.17	0.00	49.87	68.48	2.00	0.00	0.17	0.00
50.03	69.48	2.00	0.00	0.17	0.00	50.20	69.61	2.00	0.00	0.16	0.00

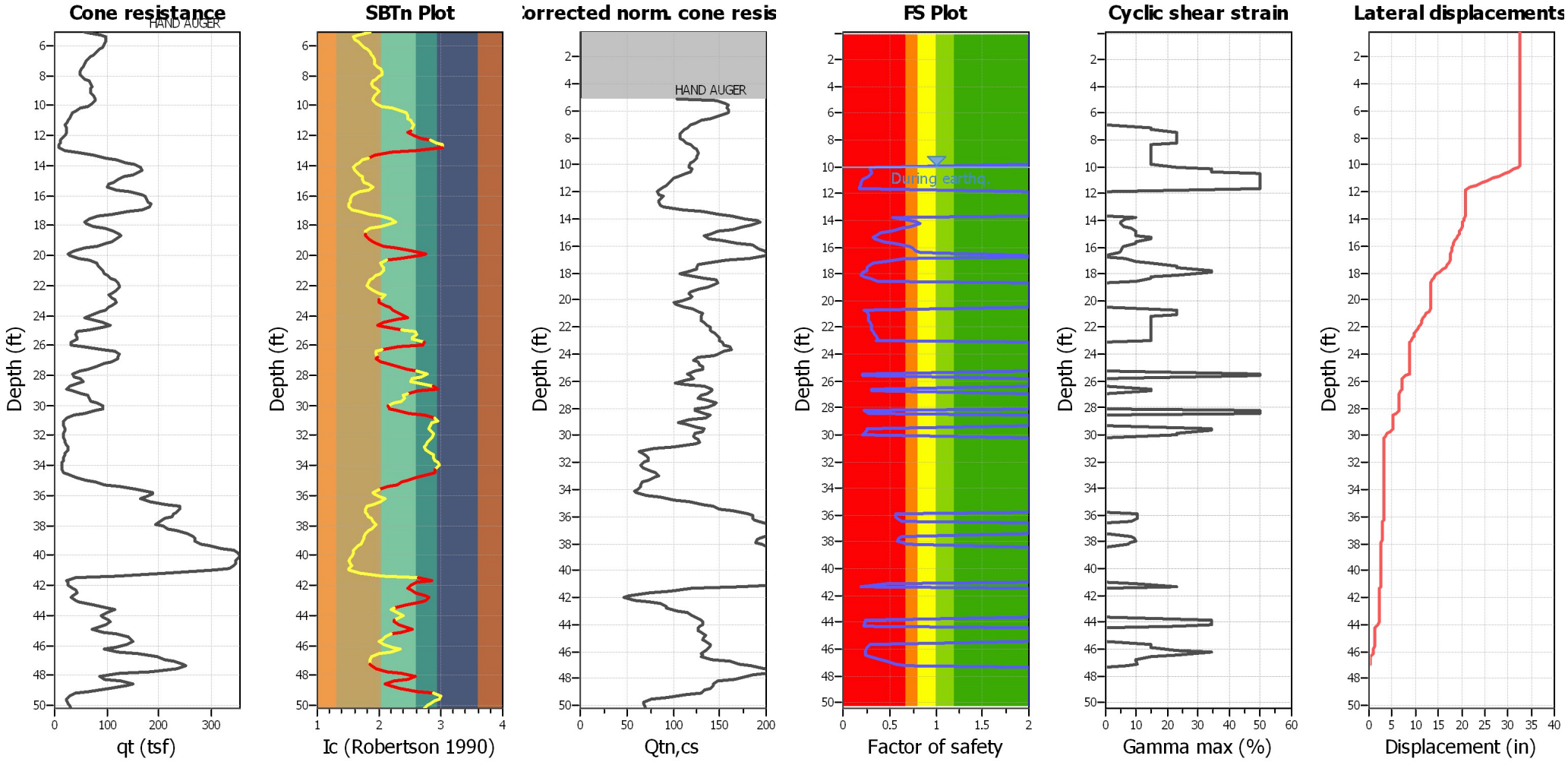
Total estimated settlement: 1.76

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

Estimation of post-earthquake lateral Displacements

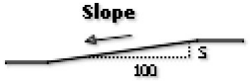
Geometric parameters: Gently sloping ground without free face (Slope 1.30 %)



Abbreviations

q_t: Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
γ_{max}: Maximum cyclic shear strain
LDI: Lateral displacement index

Surface condition



:: Lateral displacement index calculation ::

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
10.01	62.26	84.85	1.34	116.42	0.29	61.58	22.70	0.56
10.17	49.18	68.88	1.86	117.18	0.29	54.69	34.10	0.84
10.33	39.34	56.28	2.42	120.63	0.31	48.03	34.10	0.83
10.50	34.12	49.13	2.66	119.51	0.30	43.54	50.00	1.22
10.66	30.81	44.28	2.63	113.66	0.27	40.11	50.00	1.21
10.83	28.26	40.38	2.46	105.81	0.24	37.07	50.00	1.21
10.99	25.47	36.31	2.42	100.83	0.22	33.57	50.00	1.21
11.15	23.10	32.88	2.43	97.21	0.20	30.29	50.00	1.20
11.32	21.38	30.37	2.48	95.55	0.20	27.67	50.00	1.20
11.48	21.82	30.68	2.29	92.03	0.18	28.00	50.00	1.19
11.65	23.12	32.13	2.09	89.47	0.18	29.52	50.00	1.19
11.81	23.22	31.91	1.85	84.21	2.00	29.30	0.00	0.00
11.98	19.38	26.76	2.03	82.76	2.00	23.49	0.00	0.00
12.14	15.52	21.61	2.48	84.69	2.00	16.44	0.00	0.00
12.30	12.54	17.63	3.28	90.08	2.00	9.72	0.00	0.00
12.47	10.42	14.62	3.65	88.13	2.00	3.53	0.00	0.00
12.63	8.93	12.32	3.92	85.10	2.00	0.00	0.00	0.00
12.80	8.71	11.92	4.06	85.33	2.00	0.00	0.00	0.00
12.96	19.76	26.55	2.19	85.76	2.00	23.22	0.00	0.00
13.12	41.77	53.39	1.34	89.85	2.00	46.29	0.00	0.00
13.29	73.78	90.40	0.96	110.67	2.00	63.67	0.00	0.00
13.45	98.35	118.01	0.87	132.35	2.00	72.47	0.00	0.00
13.62	118.23	139.70	0.81	148.97	2.00	78.04	0.00	0.00
13.78	135.21	157.83	0.76	162.17	0.53	82.06	10.00	0.23
13.94	152.80	176.57	0.70	176.57	0.66	85.77	6.20	0.14
14.11	165.78	190.96	0.68	190.96	0.80	88.35	4.85	0.11
14.27	168.14	192.99	0.71	192.99	0.82	88.70	4.64	0.10
14.44	161.82	185.04	0.78	184.35	0.72	87.31	5.83	0.13
14.60	148.83	170.71	0.85	175.95	0.64	84.65	8.20	0.18
14.76	133.89	153.96	0.89	163.64	0.53	81.24	10.00	0.22
14.93	121.43	139.13	0.81	148.36	0.41	77.90	10.00	0.22
15.09	112.85	129.15	0.80	139.66	0.36	75.44	10.00	0.22
15.26	103.81	119.24	0.89	133.96	0.32	72.81	14.50	0.32
15.42	101.28	116.96	1.12	138.35	0.35	72.17	14.50	0.32
15.58	118.72	135.43	1.03	152.03	0.43	77.01	10.00	0.22
15.75	145.67	163.07	0.81	168.49	0.55	83.14	10.00	0.22
15.91	167.50	185.75	0.66	185.75	0.71	87.44	6.01	0.13
16.08	171.92	190.05	0.61	190.05	0.75	88.19	5.43	0.12
16.24	174.95	192.78	0.58	192.78	0.78	88.66	5.10	0.11
16.40	180.02	197.75	0.57	197.75	0.83	89.51	4.54	0.10
16.57	183.46	200.90	0.56	200.90	2.00	90.03	0.00	0.00
16.73	183.27	200.04	0.56	200.04	2.00	89.88	0.00	0.00
16.90	168.12	182.82	0.60	182.82	0.67	86.91	6.20	0.13
17.06	142.50	154.85	0.71	157.82	0.46	81.43	10.00	0.21
17.22	108.63	119.68	1.00	137.28	0.33	72.93	14.50	0.31
17.39	84.36	94.09	1.41	126.35	0.27	64.99	22.70	0.48
17.55	67.23	75.66	1.90	124.49	0.26	57.80	22.70	0.47
17.72	58.82	66.34	2.22	124.93	0.26	53.46	34.10	0.71

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
17.88	61.10	68.10	1.73	113.11	0.22	54.32	34.10	0.71
18.04	74.41	81.41	1.12	107.34	0.20	60.21	22.70	0.47
18.21	94.45	101.64	0.79	115.84	0.23	67.54	14.50	0.30
18.37	113.56	121.39	0.80	133.16	0.30	73.40	14.50	0.30
18.54	125.60	133.79	0.86	145.64	0.37	76.61	10.00	0.20
18.70	126.90	134.90	0.91	148.14	2.00	76.88	0.00	0.00
18.86	119.41	127.00	1.02	144.50	2.00	74.89	0.00	0.00
19.03	108.95	115.85	1.10	136.75	2.00	71.85	0.00	0.00
19.19	97.29	103.41	1.17	127.82	2.00	68.11	0.00	0.00
19.36	80.04	85.33	1.41	118.96	2.00	61.77	0.00	0.00
19.52	57.93	62.16	2.04	116.34	2.00	51.31	0.00	0.00
19.69	37.48	40.37	3.12	120.66	2.00	37.06	0.00	0.00
19.85	25.45	27.27	4.06	119.13	2.00	24.11	0.00	0.00
20.01	27.45	29.20	3.29	109.55	2.00	26.37	0.00	0.00
20.18	44.89	47.34	1.93	100.47	2.00	42.31	0.00	0.00
20.34	65.88	68.74	1.34	102.85	2.00	54.63	0.00	0.00
20.51	80.88	83.88	1.23	112.49	2.00	61.20	0.00	0.00
20.67	84.99	87.96	1.36	119.77	0.23	62.77	22.70	0.44
20.83	87.39	90.30	1.55	127.18	0.26	63.63	22.70	0.44
21.00	91.13	93.82	1.57	130.90	0.28	64.89	22.70	0.44
21.16	96.29	98.55	1.40	130.08	0.27	66.52	14.50	0.28
21.33	102.18	103.97	1.22	129.71	0.27	68.29	14.50	0.28
21.49	107.87	109.14	1.05	129.64	0.27	69.89	14.50	0.27
21.65	114.90	115.71	0.97	133.06	0.29	71.82	14.50	0.27
21.82	121.15	121.50	0.92	136.62	0.30	73.43	14.50	0.27
21.98	124.71	124.67	0.91	139.18	0.31	74.28	14.50	0.27
22.15	123.31	123.00	0.97	139.63	0.32	73.83	14.50	0.27
22.31	118.67	118.29	1.19	141.56	0.33	72.54	14.50	0.27
22.47	110.62	110.25	1.56	145.08	0.34	70.22	14.50	0.27
22.64	104.17	103.64	1.86	148.09	0.36	68.18	14.50	0.27
22.80	109.68	108.67	1.76	149.79	0.37	69.75	14.50	0.27
22.97	116.69	115.06	1.55	149.08	0.37	71.63	14.50	0.26
23.13	119.81	117.76	1.57	152.06	2.00	72.39	0.00	0.00
23.29	108.63	106.57	1.99	154.67	2.00	69.10	0.00	0.00
23.46	102.99	100.78	2.37	160.99	2.00	67.25	0.00	0.00
23.62	98.42	95.96	2.59	163.22	2.00	65.64	0.00	0.00
23.79	87.49	84.90	2.67	155.16	2.00	61.60	0.00	0.00
23.95	71.76	69.25	2.96	148.13	2.00	54.87	0.00	0.00
24.11	57.45	55.04	3.34	142.71	2.00	47.29	0.00	0.00
24.28	68.14	65.09	2.34	127.18	2.00	52.83	0.00	0.00
24.44	91.05	86.83	1.49	122.55	2.00	62.34	0.00	0.00
24.61	105.53	100.39	1.20	126.08	2.00	67.13	0.00	0.00
24.77	94.26	89.36	1.64	128.92	2.00	63.29	0.00	0.00
24.93	65.45	61.54	2.64	131.79	2.00	50.98	0.00	0.00
25.10	43.31	40.14	3.68	132.10	2.00	36.87	0.00	0.00
25.26	39.73	36.55	3.49	123.56	2.00	33.78	0.00	0.00
25.43	42.17	38.70	2.96	115.57	0.21	35.67	50.00	0.85
25.59	42.71	39.06	3.06	118.09	0.21	35.97	50.00	0.85

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
25.75	32.50	29.25	3.96	121.15	2.00	26.43	0.00	0.00
25.92	30.91	27.63	3.69	114.13	2.00	24.54	0.00	0.00
26.08	56.06	51.16	1.84	101.67	2.00	44.88	0.00	0.00
26.25	91.06	83.83	1.27	113.79	2.00	61.18	0.00	0.00
26.41	116.61	107.49	1.24	133.45	2.00	69.38	0.00	0.00
26.57	123.50	113.58	1.33	141.45	0.31	71.20	14.50	0.24
26.74	122.55	112.33	1.38	141.78	0.31	70.84	14.50	0.24
26.90	120.54	110.15	1.28	137.04	2.00	70.19	0.00	0.00
27.07	108.58	98.69	1.39	130.15	2.00	66.57	0.00	0.00
27.23	94.18	85.00	1.69	126.86	2.00	61.64	0.00	0.00
27.40	79.63	71.19	2.42	135.20	2.00	55.78	0.00	0.00
27.56	63.78	56.31	3.40	145.71	2.00	48.05	0.00	0.00
27.72	49.17	42.76	4.16	145.21	2.00	38.96	0.00	0.00
27.89	35.24	29.99	4.83	136.21	2.00	27.25	0.00	0.00
28.05	36.77	31.28	3.89	123.35	2.00	28.64	0.00	0.00
28.22	48.26	41.52	3.16	123.13	0.23	37.99	50.00	0.78
28.38	53.62	46.14	3.38	133.50	0.27	41.47	50.00	0.78
28.54	46.17	39.22	4.12	139.41	2.00	36.11	0.00	0.00
28.71	29.31	24.06	5.59	134.19	2.00	19.98	0.00	0.00
28.87	23.71	19.05	5.22	117.48	2.00	12.27	0.00	0.00
29.04	35.37	29.34	3.06	105.97	2.00	26.53	0.00	0.00
29.20	53.03	44.89	2.57	113.82	2.00	40.56	0.00	0.00
29.36	63.75	54.17	2.68	125.76	2.00	46.77	0.00	0.00
29.53	65.42	55.39	2.94	133.56	0.27	47.50	34.10	0.51
29.69	70.14	59.39	2.69	131.32	0.26	49.80	34.10	0.51
29.86	82.29	70.12	2.05	123.84	0.23	55.28	22.70	0.34
30.02	91.80	78.46	1.70	121.42	0.22	58.99	22.70	0.33
30.18	91.71	78.10	1.76	122.81	2.00	58.84	0.00	0.00
30.35	78.33	65.85	2.29	126.68	2.00	53.21	0.00	0.00
30.51	57.86	47.60	3.11	129.11	2.00	42.50	0.00	0.00
30.68	36.23	28.74	4.18	124.08	2.00	25.85	0.00	0.00
30.84	23.55	17.92	4.07	101.62	2.00	10.26	0.00	0.00
31.00	17.23	12.61	3.23	79.93	2.00	0.00	0.00	0.00
31.17	16.71	12.21	1.92	63.33	2.00	0.00	0.00	0.00
31.33	17.96	13.20	2.07	67.10	2.00	0.17	0.00	0.00
31.50	19.50	14.44	2.20	70.80	2.00	3.12	0.00	0.00
31.66	19.22	14.13	2.35	72.47	2.00	2.42	0.00	0.00
31.82	18.09	13.13	2.49	72.42	2.00	0.00	0.00	0.00
31.99	17.45	12.57	2.24	68.24	2.00	0.00	0.00	0.00
32.15	17.72	12.77	2.03	65.80	2.00	0.00	0.00	0.00
32.32	18.88	13.68	1.97	66.42	2.00	1.34	0.00	0.00
32.48	20.24	14.75	2.03	68.85	2.00	3.84	0.00	0.00
32.64	24.00	17.77	2.28	77.15	2.00	9.97	0.00	0.00
32.81	25.88	19.23	2.44	81.79	2.00	12.59	0.00	0.00
32.97	25.74	19.01	2.67	85.00	2.00	12.20	0.00	0.00
33.14	21.51	15.49	2.68	79.23	2.00	5.45	0.00	0.00
33.30	18.86	13.30	2.48	72.74	2.00	0.42	0.00	0.00
33.46	17.71	12.35	2.20	67.42	2.00	0.00	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
33.63	16.75	11.53	2.16	65.41	2.00	0.00	0.00	0.00
33.79	15.53	10.50	2.29	64.85	2.00	0.00	0.00	0.00
33.96	14.55	9.71	2.24	62.60	2.00	0.00	0.00	0.00
34.12	14.36	9.53	1.96	59.05	2.00	0.00	0.00	0.00
34.28	15.42	10.34	1.93	60.24	2.00	0.00	0.00	0.00
34.45	17.94	12.24	2.54	71.44	2.00	0.00	0.00	0.00
34.61	25.66	18.29	2.88	86.89	2.00	10.93	0.00	0.00
34.78	40.38	30.08	2.68	100.00	2.00	27.35	0.00	0.00
34.94	60.18	46.02	2.68	117.56	2.00	41.39	0.00	0.00
35.10	77.85	60.26	2.67	131.78	2.00	50.28	0.00	0.00
35.27	93.99	73.27	2.65	143.71	2.00	56.73	0.00	0.00
35.43	123.57	97.94	2.08	150.00	2.00	66.31	0.00	0.00
35.60	158.33	127.28	1.67	164.05	2.00	74.96	0.00	0.00
35.76	186.96	151.40	1.50	180.59	2.00	80.69	0.00	0.00
35.93	188.92	152.21	1.65	185.88	0.57	80.87	10.26	0.12
36.09	174.57	138.91	2.02	185.56	0.57	77.85	10.37	0.12
36.25	163.97	129.16	2.34	186.75	0.58	75.44	10.02	0.12
36.42	182.20	144.28	2.08	192.30	0.63	79.10	8.52	0.10
36.58	213.51	170.99	1.65	203.39	2.00	84.71	0.00	0.00
36.75	240.49	194.40	1.34	214.31	2.00	88.94	0.00	0.00
36.91	240.81	194.50	1.28	212.29	2.00	88.96	0.00	0.00
37.07	233.65	188.05	1.27	206.46	2.00	87.84	0.00	0.00
37.24	228.44	182.99	1.33	203.68	2.00	86.94	0.00	0.00
37.40	226.26	180.55	1.36	202.71	2.00	86.50	0.00	0.00
37.57	209.58	165.67	1.51	193.90	0.64	83.66	8.17	0.09
37.73	201.96	158.65	1.60	190.30	0.61	82.23	9.07	0.10
37.89	194.65	151.85	1.72	187.83	0.59	80.79	9.75	0.11
38.06	207.28	161.96	1.66	195.16	0.65	82.92	7.88	0.09
38.22	215.75	168.76	1.58	198.97	0.68	84.27	7.07	0.08
38.39	234.76	184.56	1.43	208.71	2.00	87.23	0.00	0.00
38.55	253.93	200.53	1.32	219.08	2.00	89.97	0.00	0.00
38.71	264.59	209.21	1.26	224.78	2.00	91.36	0.00	0.00
38.88	267.36	211.02	1.26	226.36	2.00	91.65	0.00	0.00
39.04	269.89	212.86	1.23	226.69	2.00	91.94	0.00	0.00
39.21	279.76	221.02	1.16	231.08	2.00	93.18	0.00	0.00
39.37	297.74	236.39	1.05	238.72	2.00	95.40	0.00	0.00
39.53	320.90	255.02	1.00	255.02	2.00	97.90	0.00	0.00
39.70	342.67	271.91	0.98	271.91	2.00	100.00	0.00	0.00
39.86	353.82	280.26	0.99	280.26	2.00	100.00	0.00	0.00
40.03	355.33	280.91	0.90	280.91	2.00	100.00	0.00	0.00
40.19	352.06	277.76	0.83	277.76	2.00	100.00	0.00	0.00
40.35	346.51	272.83	0.79	272.83	2.00	100.00	0.00	0.00
40.52	345.49	271.49	0.85	271.49	2.00	99.97	0.00	0.00
40.68	342.81	268.85	0.85	268.85	2.00	99.64	0.00	0.00
40.85	334.53	261.81	0.72	261.81	2.00	98.77	0.00	0.00
41.01	305.34	238.36	0.68	238.36	2.00	95.67	0.00	0.00
41.17	217.30	167.90	0.79	171.57	0.46	84.10	10.00	0.09
41.34	120.76	87.54	1.36	119.58	0.20	62.61	22.70	0.21

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
41.50	41.43	26.39	2.67	95.35	2.00	23.02	0.00	0.00
41.67	24.41	14.39	2.43	74.11	2.00	3.01	0.00	0.00
41.83	24.87	15.13	1.00	51.87	2.00	4.67	0.00	0.00
41.99	26.06	16.12	0.71	46.59	2.00	6.76	0.00	0.00
42.16	35.50	22.77	0.98	57.80	2.00	18.16	0.00	0.00
42.32	41.43	26.57	1.62	75.17	2.00	23.25	0.00	0.00
42.49	42.45	26.94	2.11	85.65	2.00	23.71	0.00	0.00
42.65	34.26	20.77	2.94	91.96	2.00	15.13	0.00	0.00
42.81	31.67	18.86	3.16	91.99	2.00	11.94	0.00	0.00
42.98	39.28	23.95	3.42	104.43	2.00	19.82	0.00	0.00
43.14	47.54	29.53	3.54	115.03	2.00	26.74	0.00	0.00
43.31	73.71	48.38	2.71	120.84	2.00	43.03	0.00	0.00
43.47	100.66	68.55	2.09	123.93	2.00	54.54	0.00	0.00
43.64	114.15	78.46	2.01	130.43	2.00	58.99	0.00	0.00
43.80	101.20	68.14	2.37	131.21	0.25	54.34	34.10	0.27
43.96	88.53	58.37	2.71	131.15	0.25	49.23	34.10	0.27
44.13	91.72	60.75	2.49	127.70	0.23	50.55	34.10	0.27
44.29	104.32	70.26	2.12	126.24	0.23	55.35	22.70	0.18
44.46	107.16	72.18	2.10	127.33	2.00	56.24	0.00	0.00
44.62	98.70	65.39	2.39	129.35	2.00	52.98	0.00	0.00
44.78	79.62	50.82	3.17	134.33	2.00	44.66	0.00	0.00
44.95	72.54	45.60	3.37	133.07	2.00	41.08	0.00	0.00
45.11	92.60	60.19	2.64	131.03	2.00	50.24	0.00	0.00
45.28	119.83	80.42	2.09	134.49	2.00	59.81	0.00	0.00
45.44	140.50	96.10	1.78	139.37	2.00	65.69	0.00	0.00
45.60	146.51	100.70	1.65	139.73	0.29	67.23	14.50	0.10
45.77	151.64	105.12	1.43	137.05	0.27	68.65	14.50	0.10
45.93	139.79	95.24	1.67	135.23	0.27	65.39	14.50	0.10
46.10	114.74	75.71	2.10	130.77	0.25	57.82	22.70	0.16
46.26	96.63	61.87	2.60	131.70	0.25	51.15	34.10	0.23
46.42	120.31	79.58	1.98	130.57	0.25	59.46	22.70	0.15
46.59	159.26	109.50	1.45	141.53	0.30	70.00	14.50	0.10
46.75	195.54	137.42	1.26	160.91	0.40	77.49	10.00	0.07
46.92	210.39	148.23	1.28	171.14	0.47	79.99	10.00	0.06
47.08	227.06	159.98	1.35	183.95	0.57	82.51	10.41	0.07
47.24	244.82	172.48	1.43	197.57	0.69	84.99	6.99	0.04
47.41	252.00	176.56	1.55	205.28	2.00	85.76	0.00	0.00
47.57	232.83	160.09	1.84	199.44	2.00	82.53	0.00	0.00
47.74	184.72	122.19	2.48	185.01	2.00	73.61	0.00	0.00
47.90	124.81	78.01	3.52	173.00	2.00	58.80	0.00	0.00
48.06	86.05	50.95	4.55	165.48	2.00	44.75	0.00	0.00
48.23	95.05	57.73	3.42	148.25	2.00	48.87	0.00	0.00
48.39	126.58	80.65	2.36	142.64	2.00	59.90	0.00	0.00
48.56	151.59	99.50	1.82	143.77	2.00	66.84	0.00	0.00
48.72	138.39	89.33	2.02	140.42	2.00	63.27	0.00	0.00
48.88	104.68	64.63	2.58	133.89	2.00	52.59	0.00	0.00
49.05	66.39	38.04	3.67	129.67	2.00	35.10	0.00	0.00
49.21	40.14	21.13	4.47	113.95	2.00	15.69	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
49.38	27.97	13.92	4.03	92.04	2.00	1.92	0.00	0.00
49.54	24.17	11.77	2.99	75.77	2.00	0.00	0.00	0.00
49.70	24.35	11.95	2.35	68.83	2.00	0.00	0.00	0.00
49.87	26.90	13.55	2.11	68.48	2.00	1.02	0.00	0.00
50.03	29.34	15.05	2.02	69.48	2.00	4.49	0.00	0.00
50.20	31.52	16.41	1.90	69.61	2.00	7.35	0.00	0.00

Total estimated displacement: 32.60

Abbreviations

q_t: Total cone resistance
Q_{tn}: Adjusted cone resistance to an effective overburden stress of 1 atm
R_f: Friction ration
$Q_{tn,cs}$: Adjusted and corrected cone resistance due to fines
FS: Calculated factor of safety against liquefaction
D_r: Calculated relative density
$Gamma_{max}$: Calculated maximum cyclic shear strain
Lat. disp.: Lateral displacement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.16	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.33	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.49	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.66	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.82	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.98	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.15	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.31	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.48	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.64	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.80	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.97	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.13	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.30	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.46	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.62	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.79	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.95	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.12	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.28	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.44	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.61	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.77	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.94	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.10	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.27	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.43	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.59	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.76	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.92	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
5.09	56.71	90.62	1.15	104.05	1.85	0.81	0.81
5.25	89.88	143.90	1.02	146.35	1.67	0.88	0.88
5.41	97.12	155.51	1.00	155.51	1.60	0.89	0.89
5.58	99.21	158.85	1.00	158.85	1.61	0.89	0.89
5.74	98.28	157.35	1.00	157.51	1.65	0.89	0.89
5.91	95.92	153.54	1.04	159.53	1.70	0.89	0.89
6.07	92.29	147.69	1.08	159.07	1.76	0.88	0.88
6.23	87.36	139.75	1.11	155.26	1.81	0.88	0.88
6.40	81.67	130.60	1.14	148.92	1.84	0.87	0.87
6.56	74.81	119.56	1.17	139.98	1.88	0.85	0.85
6.73	68.59	109.56	1.19	130.85	1.91	0.84	0.84
6.89	63.90	102.01	1.21	123.00	1.92	0.83	0.83
7.05	61.48	98.09	1.21	118.30	1.92	0.82	0.82
7.22	59.02	94.13	1.22	114.68	1.93	0.82	0.82
7.38	55.79	88.92	1.26	111.74	1.96	0.81	0.81
7.55	51.79	82.49	1.32	108.80	2.01	0.80	0.80
7.71	49.35	78.54	1.37	107.28	2.05	0.79	0.79
7.87	49.76	79.02	1.36	107.37	2.04	0.79	0.79

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.04	53.01	82.31	1.31	107.85	2.01	0.80	0.80
8.20	58.58	88.62	1.25	110.75	1.96	0.81	0.81
8.37	65.39	96.04	1.19	113.89	1.90	0.82	0.82
8.53	70.45	101.67	1.16	118.40	1.87	0.83	0.83
8.69	71.87	103.13	1.18	121.97	1.89	0.83	0.83
8.86	69.45	100.23	1.25	125.20	1.96	0.83	0.83
9.02	68.03	97.95	1.29	126.65	1.99	0.82	0.82
9.19	70.17	99.56	1.28	127.13	1.98	0.83	0.83
9.35	73.83	102.51	1.23	125.71	1.94	0.83	0.83
9.51	76.73	104.61	1.19	124.84	1.90	0.83	0.83
9.68	76.83	103.44	1.18	122.56	1.90	0.83	0.83
9.84	71.88	96.78	1.23	119.29	1.94	0.82	0.82
10.01	62.26	84.85	1.37	116.42	2.05	0.80	0.80
10.17	49.18	68.88	1.70	117.18	2.21	0.78	0.78
10.33	39.34	56.28	2.14	120.63	2.36	0.75	0.75
10.50	34.12	49.13	2.43	119.51	2.43	0.73	0.73
10.66	30.81	44.28	2.57	113.66	2.46	0.72	0.72
10.83	28.26	40.38	2.62	105.81	2.47	0.71	0.71
10.99	25.47	36.31	2.78	100.83	2.50	0.69	0.69
11.15	23.10	32.88	2.96	97.21	2.54	0.68	0.68
11.32	21.38	30.37	3.15	95.55	2.57	0.67	0.67
11.48	21.82	30.68	3.00	92.03	2.54	0.67	0.67
11.65	23.12	32.13	2.79	89.47	2.50	0.68	0.68
11.81	23.22	31.91	2.64	84.21	2.47	0.68	0.68
11.98	19.38	26.76	3.09	82.76	2.56	0.66	0.66
12.14	15.52	21.61	3.92	84.69	2.69	1.51	1.51
12.30	12.54	17.63	5.11	90.08	2.84	1.20	1.20
12.47	10.42	14.62	6.03	88.13	2.93	0.98	0.98
12.63	8.93	12.32	6.91	85.10	3.01	0.82	0.82
12.80	8.71	11.92	7.16	85.33	3.04	0.79	0.79
12.96	19.76	26.55	3.23	85.76	2.58	0.66	0.66
13.12	41.77	53.39	1.68	89.85	2.21	0.74	0.74
13.29	73.78	90.40	1.22	110.67	1.94	0.81	0.81
13.45	98.35	118.01	1.12	132.35	1.82	0.85	0.85
13.62	118.23	139.70	1.07	148.97	1.74	0.88	0.88
13.78	135.21	157.83	1.03	162.17	1.68	0.89	0.89
13.94	152.80	176.57	1.00	176.57	1.62	0.91	0.91
14.11	165.78	190.96	1.00	190.96	1.59	0.92	0.92
14.27	168.14	192.99	1.00	192.99	1.60	0.92	0.92
14.44	161.82	185.04	1.00	184.35	1.64	0.92	0.92
14.60	148.83	170.71	1.03	175.95	1.69	0.91	0.91
14.76	133.89	153.96	1.06	163.64	1.74	0.89	0.89
14.93	121.43	139.13	1.07	148.36	1.74	0.87	0.87
15.09	112.85	129.15	1.08	139.66	1.76	0.86	0.86
15.26	103.81	119.24	1.12	133.96	1.82	0.85	0.85
15.42	101.28	116.96	1.18	138.35	1.89	0.85	0.85
15.58	118.72	135.43	1.12	152.03	1.82	0.87	0.87
15.75	145.67	163.07	1.03	168.49	1.69	0.90	0.90

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.91	167.50	185.75	1.00	185.75	1.59	0.92	0.92
16.08	171.92	190.05	1.00	190.05	1.56	0.92	0.92
16.24	174.95	192.78	1.00	192.78	1.54	0.92	0.92
16.40	180.02	197.75	1.00	197.75	1.53	0.93	0.93
16.57	183.46	200.90	1.00	200.90	1.52	0.93	0.93
16.73	183.27	200.04	1.00	200.04	1.52	0.93	0.93
16.90	168.12	182.82	1.00	182.82	1.57	0.92	0.92
17.06	142.50	154.85	1.02	157.82	1.67	0.89	0.89
17.22	108.63	119.68	1.15	137.28	1.85	0.85	0.85
17.39	84.36	94.09	1.34	126.35	2.03	0.82	0.82
17.55	67.23	75.66	1.65	124.49	2.19	0.79	0.79
17.72	58.82	66.34	1.88	124.93	2.28	0.77	0.77
17.88	61.10	68.10	1.66	113.11	2.20	0.77	0.77
18.04	74.41	81.41	1.32	107.34	2.01	0.80	0.80
18.21	94.45	101.64	1.14	115.84	1.84	0.83	0.83
18.37	113.56	121.39	1.10	133.16	1.79	0.85	0.85
18.54	125.60	133.79	1.09	145.64	1.77	0.87	0.87
18.70	126.90	134.90	1.10	148.14	1.79	0.87	0.87
18.86	119.41	127.00	1.14	144.50	1.84	0.86	0.86
19.03	108.95	115.85	1.18	136.75	1.89	0.85	0.85
19.19	97.29	103.41	1.24	127.82	1.95	0.83	0.83
19.36	80.04	85.33	1.39	118.96	2.06	0.81	0.81
19.52	57.93	62.16	1.87	116.34	2.28	0.76	0.76
19.69	37.48	40.37	2.99	120.66	2.54	0.71	0.71
19.85	25.45	27.27	4.37	119.13	2.75	1.84	1.84
20.01	27.45	29.20	3.75	109.55	2.67	1.99	1.99
20.18	44.89	47.34	2.12	100.47	2.35	0.73	0.73
20.34	65.88	68.74	1.50	102.85	2.12	0.78	0.78
20.51	80.88	83.88	1.34	112.49	2.03	0.80	0.80
20.67	84.99	87.96	1.36	119.77	2.04	0.81	0.81
20.83	87.39	90.30	1.41	127.18	2.07	0.81	0.81
21.00	91.13	93.82	1.40	130.90	2.07	0.82	0.82
21.16	96.29	98.55	1.32	130.08	2.01	0.83	0.83
21.33	102.18	103.97	1.25	129.71	1.96	0.83	0.83
21.49	107.87	109.14	1.19	129.64	1.90	0.84	0.84
21.65	114.90	115.71	1.15	133.06	1.86	0.85	0.85
21.82	121.15	121.50	1.12	136.62	1.82	0.86	0.86
21.98	124.71	124.67	1.12	139.18	1.81	0.86	0.86
22.15	123.31	123.00	1.14	139.63	1.84	0.86	0.86
22.31	118.67	118.29	1.20	141.56	1.91	0.85	0.85
22.47	110.62	110.25	1.32	145.08	2.01	0.84	0.84
22.64	104.17	103.64	1.43	148.09	2.09	0.83	0.83
22.80	109.68	108.67	1.38	149.79	2.05	0.84	0.84
22.97	116.69	115.06	1.30	149.08	2.00	0.85	0.85
23.13	119.81	117.76	1.29	152.06	1.99	0.85	0.85
23.29	108.63	106.57	1.45	154.67	2.10	0.84	0.84
23.46	102.99	100.78	1.60	160.99	2.17	0.83	0.83
23.62	98.42	95.96	1.70	163.22	2.21	0.82	0.82

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
23.79	87.49	84.90	1.83	155.16	2.26	0.80	0.80
23.95	71.76	69.25	2.14	148.13	2.36	0.78	0.78
24.11	57.45	55.04	2.59	142.71	2.46	0.75	0.75
24.28	68.14	65.09	1.95	127.18	2.30	0.77	0.77
24.44	91.05	86.83	1.41	122.55	2.08	0.81	0.81
24.61	105.53	100.39	1.26	126.08	1.96	0.83	0.83
24.77	94.26	89.36	1.44	128.92	2.09	0.81	0.81
24.93	65.45	61.54	2.14	131.79	2.36	0.76	0.76
25.10	43.31	40.14	3.29	132.10	2.59	0.71	0.71
25.26	39.73	36.55	3.38	123.56	2.61	2.44	2.44
25.43	42.17	38.70	2.99	115.57	2.54	0.70	0.70
25.59	42.71	39.06	3.02	118.09	2.55	0.70	0.70
25.75	32.50	29.25	4.14	121.15	2.72	1.95	1.95
25.92	30.91	27.63	4.13	114.13	2.72	1.84	1.84
26.08	56.06	51.16	1.99	101.67	2.31	0.74	0.74
26.25	91.06	83.83	1.36	113.79	2.04	0.80	0.80
26.41	116.61	107.49	1.24	133.45	1.95	0.84	0.84
26.57	123.50	113.58	1.25	141.45	1.95	0.85	0.85
26.74	122.55	112.33	1.26	141.78	1.97	0.84	0.84
26.90	120.54	110.15	1.24	137.04	1.95	0.84	0.84
27.07	108.58	98.69	1.32	130.15	2.01	0.83	0.83
27.23	94.18	85.00	1.49	126.86	2.12	0.80	0.80
27.40	79.63	71.19	1.90	135.20	2.28	0.78	0.78
27.56	63.78	56.31	2.59	145.71	2.46	0.75	0.75
27.72	49.17	42.76	3.40	145.21	2.61	2.83	2.83
27.89	35.24	29.99	4.54	136.21	2.77	1.99	1.99
28.05	36.77	31.28	3.94	123.35	2.69	2.07	2.07
28.22	48.26	41.52	2.97	123.13	2.54	0.71	0.71
28.38	53.62	46.14	2.89	133.50	2.52	0.72	0.72
28.54	46.17	39.22	3.55	139.41	2.64	2.59	2.59
28.71	29.31	24.06	5.58	134.19	2.89	1.60	1.60
28.87	23.71	19.05	6.17	117.48	2.95	1.27	1.27
29.04	35.37	29.34	3.61	105.97	2.64	1.94	1.94
29.20	53.03	44.89	2.54	113.82	2.45	0.72	0.72
29.36	63.75	54.17	2.32	125.76	2.40	0.74	0.74
29.53	65.42	55.39	2.41	133.56	2.42	0.75	0.75
29.69	70.14	59.39	2.21	131.32	2.37	0.76	0.76
29.86	82.29	70.12	1.77	123.84	2.24	0.78	0.78
30.02	91.80	78.46	1.55	121.42	2.15	0.79	0.79
30.18	91.71	78.10	1.57	122.81	2.16	0.79	0.79
30.35	78.33	65.85	1.92	126.68	2.29	0.77	0.77
30.51	57.86	47.60	2.71	129.11	2.49	0.73	0.73
30.68	36.23	28.74	4.32	124.08	2.74	1.90	1.90
30.84	23.55	17.92	5.67	101.62	2.90	1.19	1.19
31.00	17.23	12.61	6.34	79.93	2.96	0.84	0.84
31.17	16.71	12.21	5.18	63.33	2.85	0.28	0.81
31.33	17.96	13.20	5.08	67.10	2.83	0.31	0.87
31.50	19.50	14.44	4.90	70.80	2.81	0.95	0.95

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.66	19.22	14.13	5.13	72.47	2.84	0.94	0.94
31.82	18.09	13.13	5.52	72.42	2.88	0.87	0.87
31.99	17.45	12.57	5.43	68.24	2.87	0.32	0.83
32.15	17.72	12.77	5.15	65.80	2.84	0.26	0.85
32.32	18.88	13.68	4.86	66.42	2.81	0.28	0.90
32.48	20.24	14.75	4.67	68.85	2.79	0.34	0.97
32.64	24.00	17.77	4.34	77.15	2.75	1.17	1.17
32.81	25.88	19.23	4.25	81.79	2.73	1.26	1.26
32.97	25.74	19.01	4.47	85.00	2.76	1.25	1.25
33.14	21.51	15.49	5.11	79.23	2.84	1.02	1.02
33.30	18.86	13.30	5.47	72.74	2.88	0.88	0.88
33.46	17.71	12.35	5.46	67.42	2.88	0.29	0.82
33.63	16.75	11.53	5.67	65.41	2.90	0.29	0.77
33.79	15.53	10.50	6.17	64.85	2.95	0.27	0.70
33.96	14.55	9.71	6.45	62.60	2.97	0.27	0.65
34.12	14.36	9.53	6.20	59.05	2.95	0.22	0.63
34.28	15.42	10.34	5.83	60.24	2.91	0.17	0.69
34.45	17.94	12.24	5.84	71.44	2.91	0.81	0.81
34.61	25.66	18.29	4.75	86.89	2.80	1.20	1.20
34.78	40.38	30.08	3.32	100.00	2.60	0.67	0.67
34.94	60.18	46.02	2.55	117.56	2.46	0.72	0.72
35.10	77.85	60.26	2.19	131.78	2.37	0.76	0.76
35.27	93.99	73.27	1.96	143.71	2.30	0.78	0.78
35.43	123.57	97.94	1.53	150.00	2.14	0.82	0.82
35.60	158.33	127.28	1.29	164.05	1.99	0.86	0.86
35.76	186.96	151.40	1.19	180.59	1.90	0.89	0.89
35.93	188.92	152.21	1.22	185.88	1.93	0.89	0.89
36.09	174.57	138.91	1.34	185.56	2.03	0.87	0.87
36.25	163.97	129.16	1.45	186.75	2.10	0.86	0.86
36.42	182.20	144.28	1.33	192.30	2.02	0.88	0.88
36.58	213.51	170.99	1.19	203.39	1.90	0.91	0.91
36.75	240.49	194.40	1.10	214.31	1.79	0.93	0.93
36.91	240.81	194.50	1.09	212.29	1.78	0.93	0.93
37.07	233.65	188.05	1.10	206.46	1.79	0.92	0.92
37.24	228.44	182.99	1.11	203.68	1.81	0.92	0.92
37.40	226.26	180.55	1.12	202.71	1.82	0.91	0.91
37.57	209.58	165.67	1.17	193.90	1.88	0.90	0.90
37.73	201.96	158.65	1.20	190.30	1.91	0.89	0.89
37.89	194.65	151.85	1.24	187.83	1.95	0.89	0.89
38.06	207.28	161.96	1.20	195.16	1.92	0.90	0.90
38.22	215.75	168.76	1.18	198.97	1.89	0.90	0.90
38.39	234.76	184.56	1.13	208.71	1.83	0.92	0.92
38.55	253.93	200.53	1.09	219.08	1.78	0.93	0.93
38.71	264.59	209.21	1.07	224.78	1.75	0.94	0.94
38.88	267.36	211.02	1.07	226.36	1.75	0.94	0.94
39.04	269.89	212.86	1.06	226.69	1.74	0.94	0.94
39.21	279.76	221.02	1.05	231.08	1.71	0.95	0.95
39.37	297.74	236.39	1.01	238.72	1.66	0.96	0.96

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
39.53	320.90	255.02	1.00	255.02	1.62	0.97	0.97
39.70	342.67	271.91	1.00	271.91	1.59	0.98	0.98
39.86	353.82	280.26	1.00	280.26	1.59	0.98	0.98
40.03	355.33	280.91	1.00	280.91	1.56	0.98	0.98
40.19	352.06	277.76	1.00	277.76	1.54	0.98	0.98
40.35	346.51	272.83	1.00	272.83	1.52	0.98	0.98
40.52	345.49	271.49	1.00	271.49	1.55	0.98	0.98
40.68	342.81	268.85	1.00	268.85	1.55	0.98	0.98
40.85	334.53	261.81	1.00	261.81	1.51	0.97	0.97
41.01	305.34	238.36	1.00	238.36	1.52	0.96	0.96
41.17	217.30	167.90	1.02	171.57	1.68	0.90	0.90
41.34	120.76	87.54	1.37	119.58	2.05	0.81	0.81
41.50	41.43	26.39	3.61	95.35	2.64	1.68	1.68
41.67	24.41	14.39	5.15	74.11	2.84	0.94	0.94
41.83	24.87	15.13	3.43	51.87	2.62	0.10	0.96
41.99	26.06	16.12	2.89	46.59	2.52	0.05	0.60
42.16	35.50	22.77	2.54	57.80	2.45	0.08	0.64
42.32	41.43	26.57	2.83	75.17	2.51	0.66	0.66
42.49	42.45	26.94	3.18	85.65	2.58	0.66	0.66
42.65	34.26	20.77	4.43	91.96	2.76	1.34	1.34
42.81	31.67	18.86	4.88	91.99	2.81	1.23	1.23
42.98	39.28	23.95	4.36	104.43	2.75	1.55	1.55
43.14	47.54	29.53	3.90	115.03	2.69	1.89	1.89
43.31	73.71	48.38	2.50	120.84	2.44	0.73	0.73
43.47	100.66	68.55	1.81	123.93	2.25	0.78	0.78
43.64	114.15	78.46	1.66	130.43	2.20	0.79	0.79
43.80	101.20	68.14	1.93	131.21	2.29	0.77	0.77
43.96	88.53	58.37	2.25	131.15	2.38	0.75	0.75
44.13	91.72	60.75	2.10	127.70	2.35	0.76	0.76
44.29	104.32	70.26	1.80	126.24	2.25	0.78	0.78
44.46	107.16	72.18	1.76	127.33	2.24	0.78	0.78
44.62	98.70	65.39	1.98	129.35	2.31	0.77	0.77
44.78	79.62	50.82	2.64	134.33	2.47	0.74	0.74
44.95	72.54	45.60	2.92	133.07	2.53	0.72	0.72
45.11	92.60	60.19	2.18	131.03	2.37	0.76	0.76
45.28	119.83	80.42	1.67	134.49	2.20	0.80	0.80
45.44	140.50	96.10	1.45	139.37	2.10	0.82	0.82
45.60	146.51	100.70	1.39	139.73	2.06	0.83	0.83
45.77	151.64	105.12	1.30	137.05	2.00	0.83	0.83
45.93	139.79	95.24	1.42	135.23	2.08	0.82	0.82
46.10	114.74	75.71	1.73	130.77	2.22	0.79	0.79
46.26	96.63	61.87	2.13	131.70	2.35	0.76	0.76
46.42	120.31	79.58	1.64	130.57	2.19	0.80	0.80
46.59	159.26	109.50	1.29	141.53	1.99	0.84	0.84
46.75	195.54	137.42	1.17	160.91	1.88	0.87	0.87
46.92	210.39	148.23	1.15	171.14	1.86	0.88	0.88
47.08	227.06	159.98	1.15	183.95	1.86	0.90	0.90
47.24	244.82	172.48	1.15	197.57	1.85	0.91	0.91

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.41	252.00	176.56	1.16	205.28	1.87	0.91	0.91
47.57	232.83	160.09	1.25	199.44	1.96	0.90	0.90
47.74	184.72	122.19	1.51	185.01	2.13	0.86	0.86
47.90	124.81	78.01	2.22	173.00	2.38	0.79	0.79
48.06	86.05	50.95	3.25	165.48	2.59	0.74	0.74
48.23	95.05	57.73	2.57	148.25	2.46	0.75	0.75
48.39	126.58	80.65	1.77	142.64	2.24	0.80	0.80
48.56	151.59	99.50	1.44	143.77	2.09	0.83	0.83
48.72	138.39	89.33	1.57	140.42	2.16	0.81	0.81
48.88	104.68	64.63	2.07	133.89	2.34	0.77	0.77
49.05	66.39	38.04	3.41	129.67	2.61	2.37	2.37
49.21	40.14	21.13	5.39	113.95	2.87	1.39	1.39
49.38	27.97	13.92	6.61	92.04	2.99	0.93	0.93
49.54	24.17	11.77	6.44	75.77	2.97	0.78	0.78
49.70	24.35	11.95	5.76	68.83	2.91	0.29	0.79
49.87	26.90	13.55	5.05	68.48	2.83	0.32	0.88
50.03	29.34	15.05	4.62	69.48	2.78	0.33	0.97
50.20	31.52	16.41	4.24	69.61	2.73	0.33	1.05

Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

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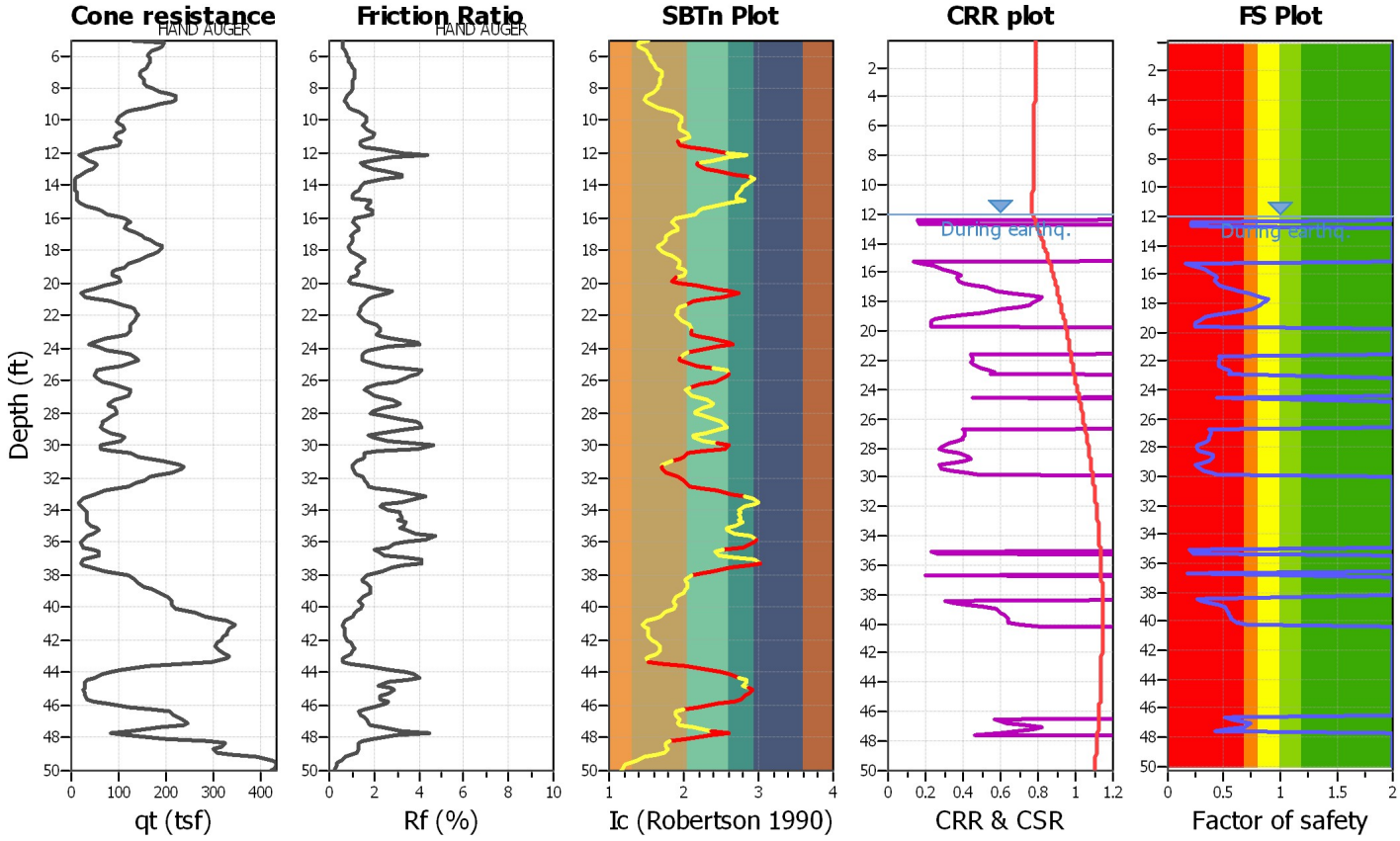
LIQUEFACTION ANALYSIS REPORT

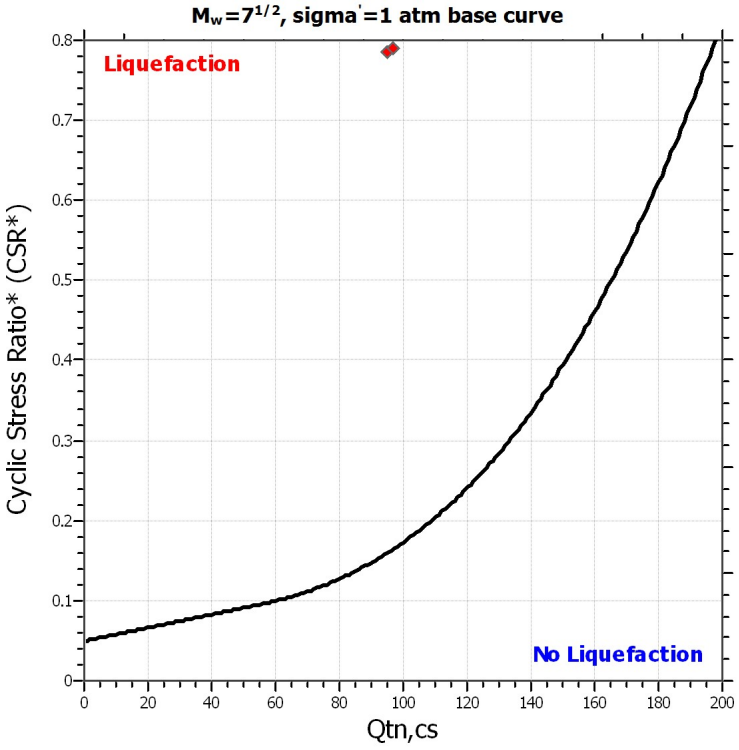
Project title : 14-108 Aqua Del Vista **Location : Coachella - NCEER 2001 MEthods**

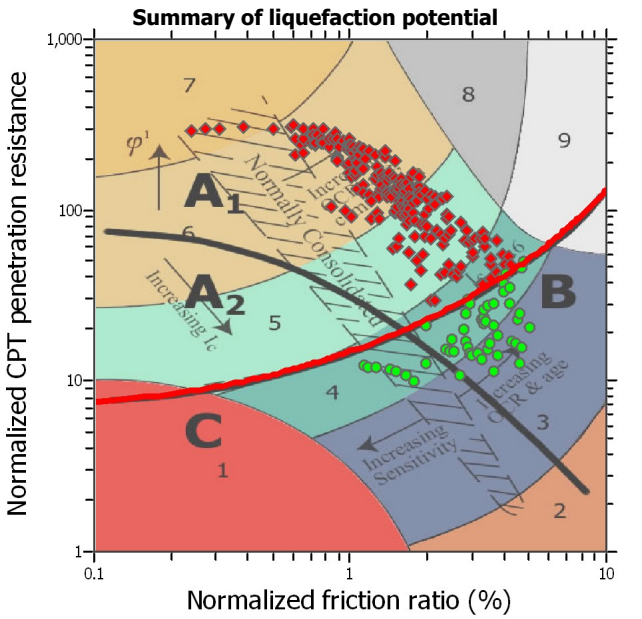
CPT file : 075C05

Input parameters and analysis data

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	12.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	12.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	7.80	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	1.10	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

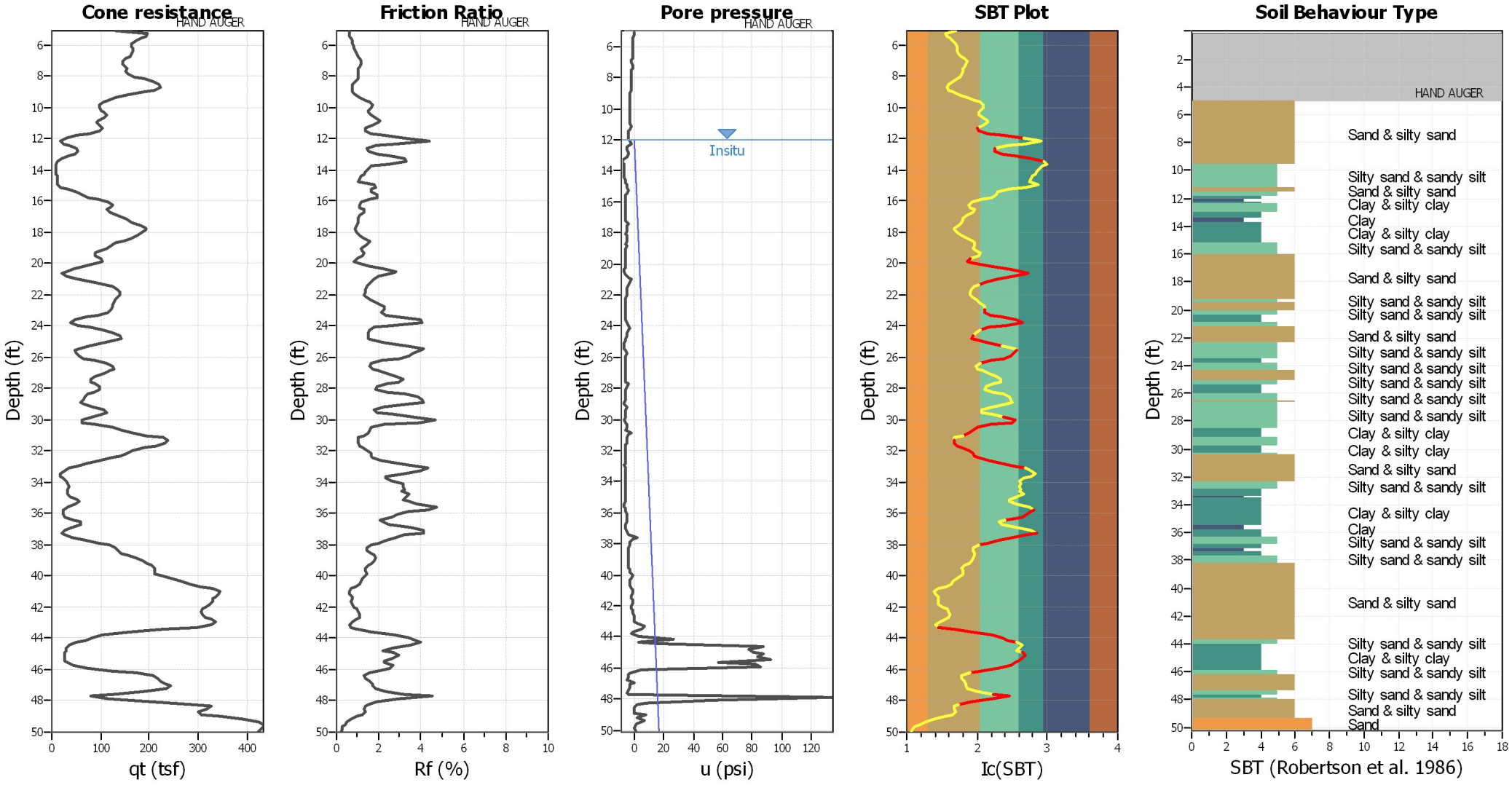






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



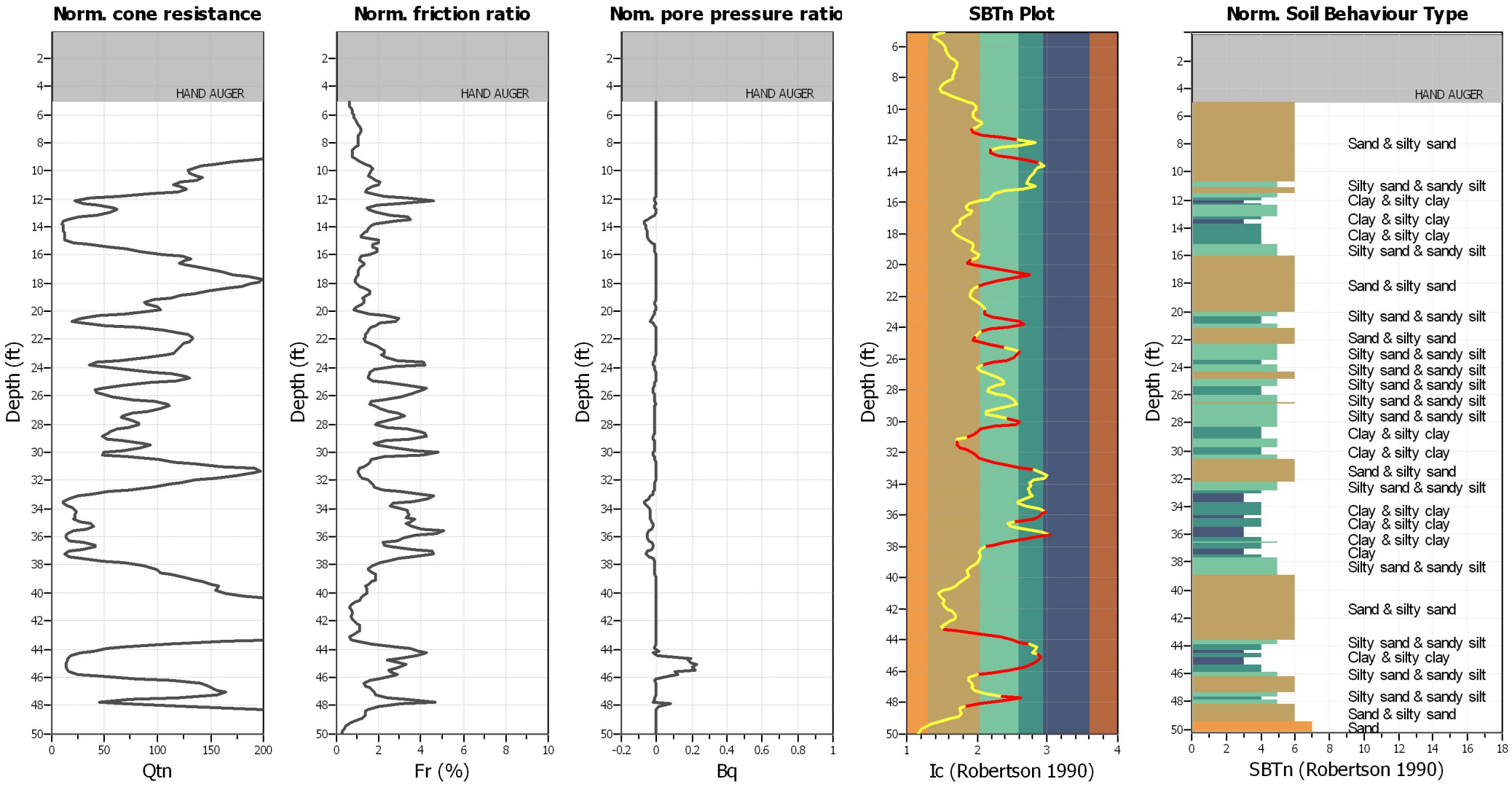
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	12.00 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



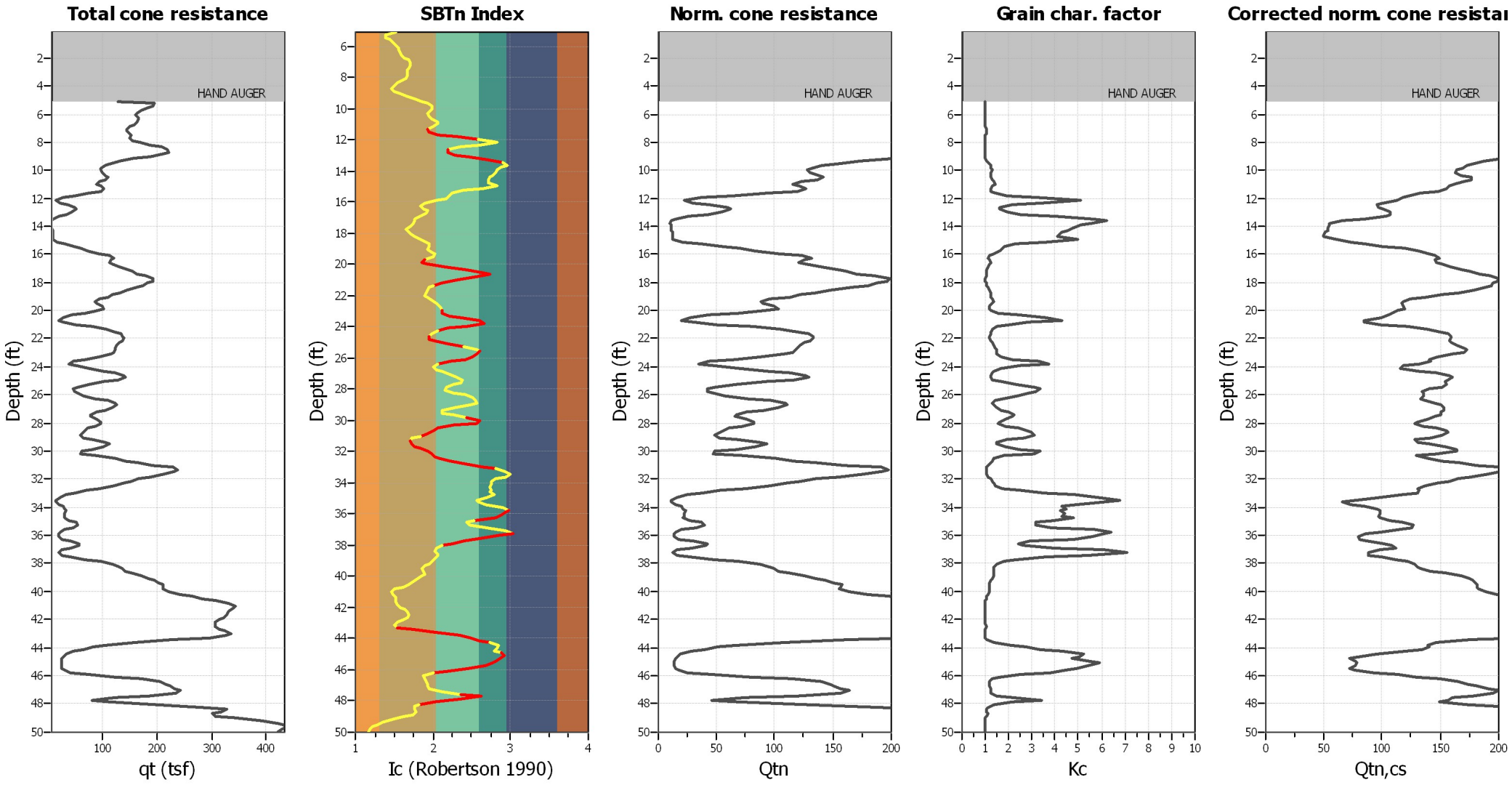
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	12.00 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

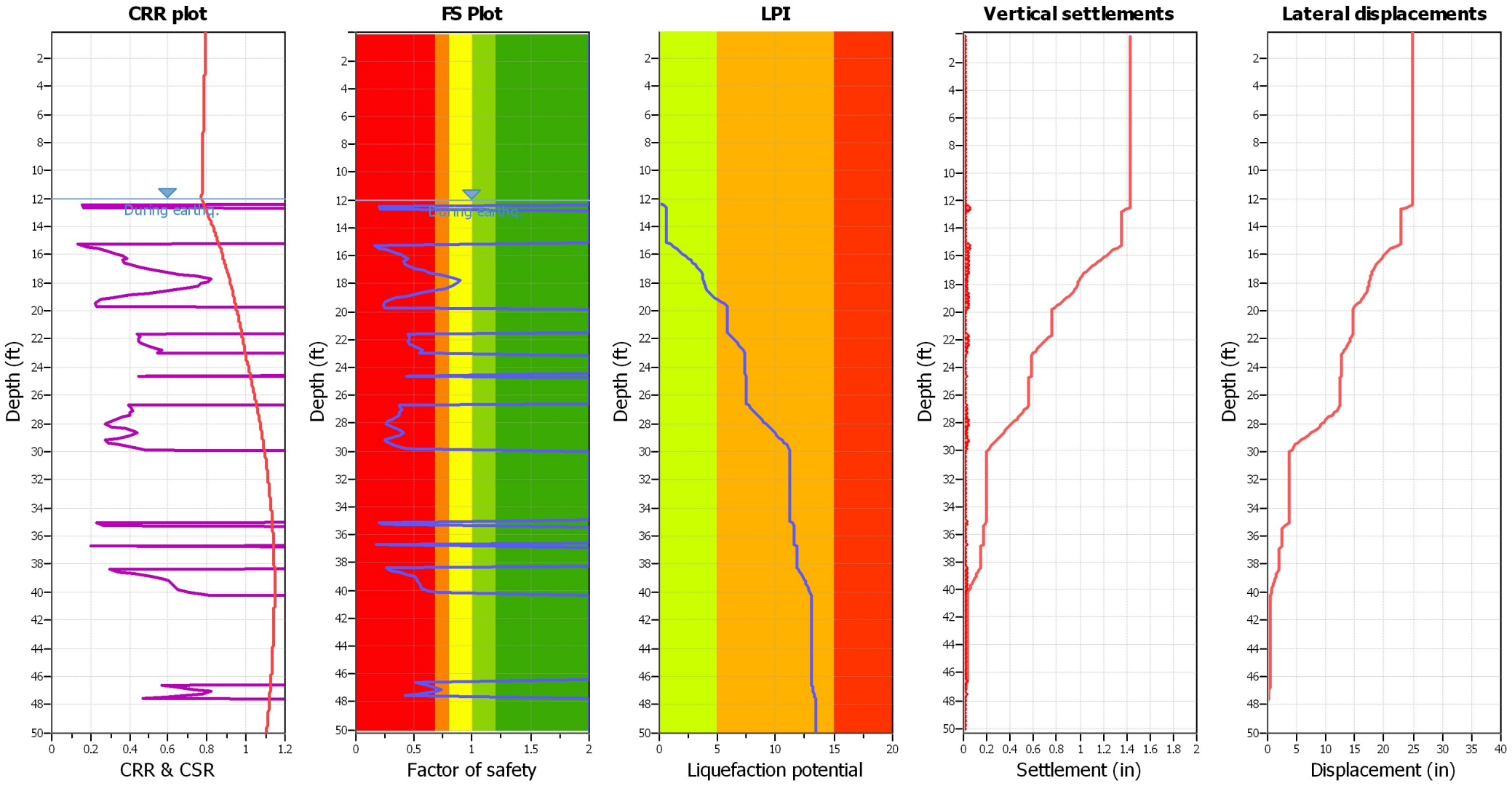
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	12.00 ft	Fill height:	N/A	Limit depth:	N/A

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	12.00 ft	Fill height:	N/A	Limit depth:	N/A

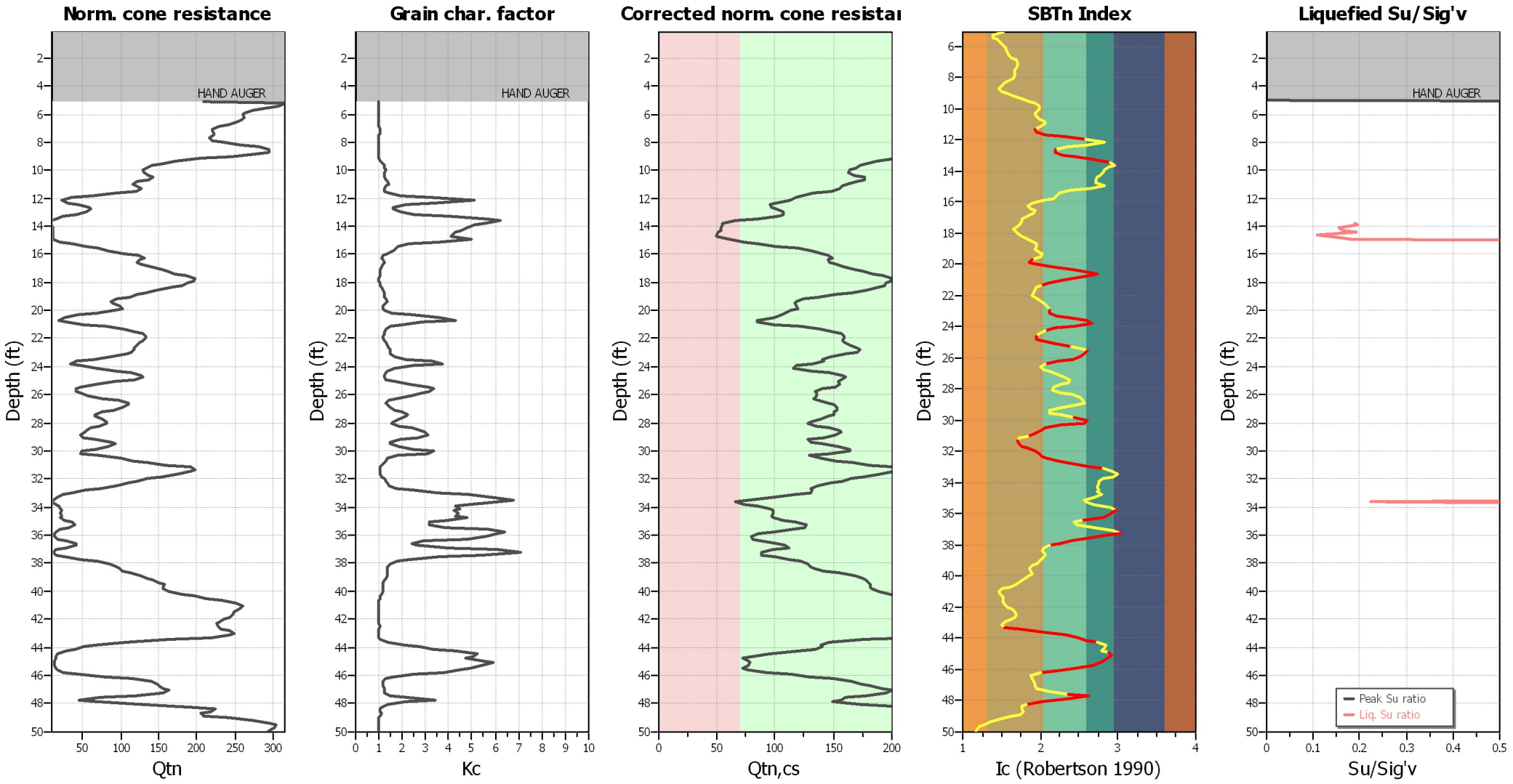
F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

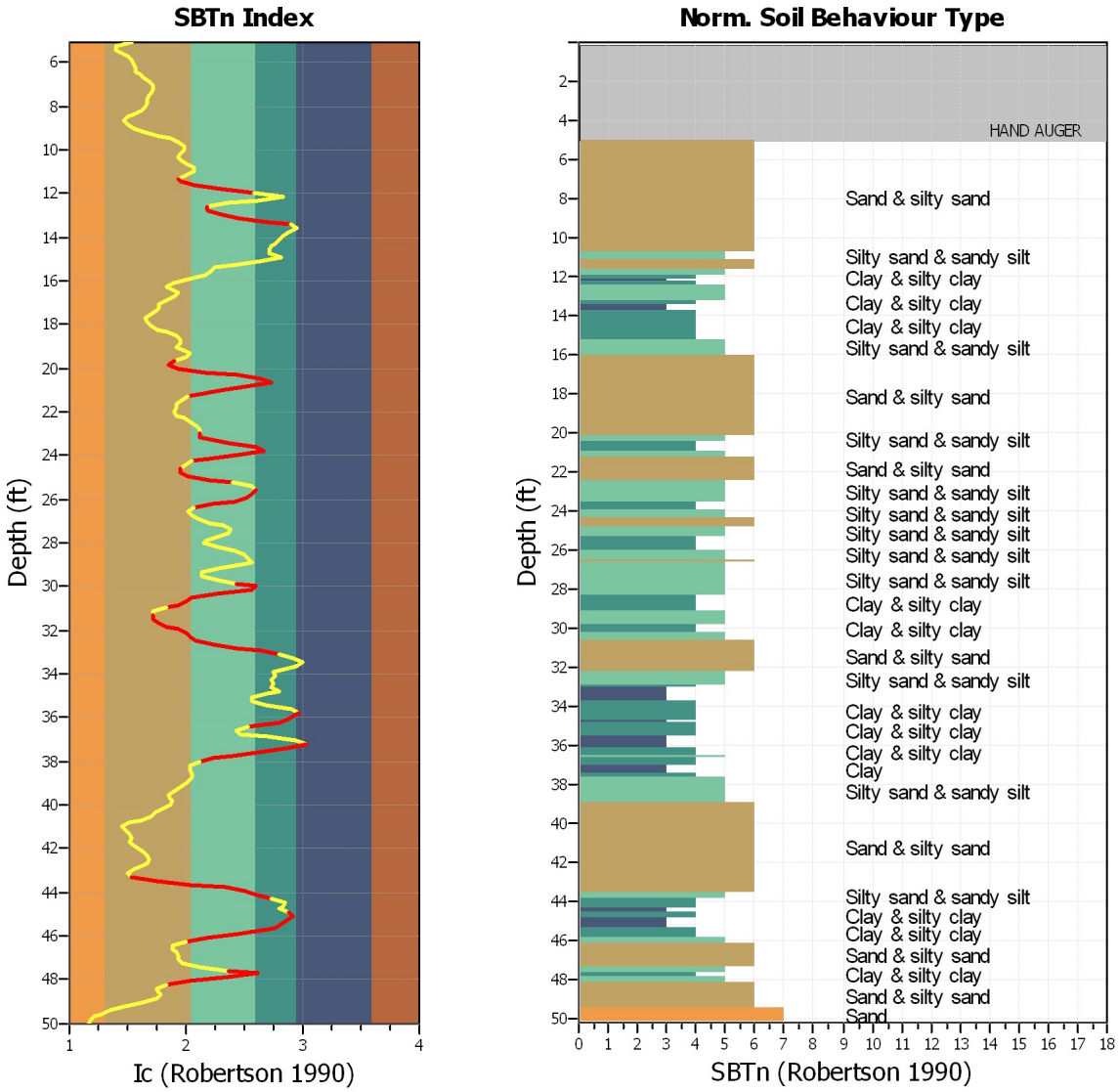
Analysis method:	NCEER (1998)	Depth to water table (erthq.):	12.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	12.00 ft	Fill height:	N/A	Limit depth:	N/A

TRANSITION LAYER DETECTION ALGORITHM REPORT
Summary Details & Plots

Short description

The software will delete data when the cone is in transition from either clay to sand or vise-versa. To do this the software requires a range of I_c values over which the transition will be defined (typically somewhere between $1.80 < I_c < 3.0$) and a rate of change of I_c. Transitions typically occur when the rate of change of I_c is fast (i.e. delta I_c is small).

The SBT_n plot below, displays in red the detected transition layers based on the parameters listed below the graphs.



Transition layer algorithm properties	
I_c minimum check value:	1.70
I_c maximum check value:	3.00
I_c change ratio value:	0.0200
Minimum number of points in layer:	5

General statistics	
Total points in CPT file:	305
Total points excluded:	96
Exclusion percentage:	31.48%
Number of layers detected:	15

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.16	-9999.00	-9999.00	-9999.00	N/A	120.90
2	0.33	-9999.00	-9999.00	-9999.00	N/A	120.90
3	0.49	-9999.00	-9999.00	-9999.00	N/A	120.90
4	0.66	-9999.00	-9999.00	-9999.00	N/A	120.90
5	0.82	-9999.00	-9999.00	-9999.00	N/A	120.90
6	0.98	-9999.00	-9999.00	-9999.00	N/A	120.90
7	1.15	-9999.00	-9999.00	-9999.00	N/A	120.90
8	1.31	-9999.00	-9999.00	-9999.00	N/A	120.90
9	1.48	-9999.00	-9999.00	-9999.00	N/A	120.90
10	1.64	-9999.00	-9999.00	-9999.00	N/A	120.90
11	1.80	-9999.00	-9999.00	-9999.00	N/A	120.90
12	1.97	-9999.00	-9999.00	-9999.00	N/A	120.90
13	2.13	-9999.00	-9999.00	-9999.00	N/A	120.90
14	2.30	-9999.00	-9999.00	-9999.00	N/A	120.90
15	2.46	-9999.00	-9999.00	-9999.00	N/A	120.90
16	2.62	-9999.00	-9999.00	-9999.00	N/A	120.90
17	2.79	-9999.00	-9999.00	-9999.00	N/A	120.90
18	2.95	-9999.00	-9999.00	-9999.00	N/A	120.90
19	3.12	-9999.00	-9999.00	-9999.00	N/A	120.90
20	3.28	-9999.00	-9999.00	-9999.00	N/A	120.90
21	3.44	-9999.00	-9999.00	-9999.00	N/A	120.90
22	3.61	-9999.00	-9999.00	-9999.00	N/A	120.90
23	3.77	-9999.00	-9999.00	-9999.00	N/A	120.90
24	3.94	-9999.00	-9999.00	-9999.00	N/A	120.90
25	4.10	-9999.00	-9999.00	-9999.00	N/A	120.90
26	4.27	-9999.00	-9999.00	-9999.00	N/A	120.90
27	4.43	-9999.00	-9999.00	-9999.00	N/A	120.90
28	4.59	-9999.00	-9999.00	-9999.00	N/A	120.90
29	4.76	-9999.00	-9999.00	-9999.00	N/A	120.90
30	4.92	-9999.00	-9999.00	-9999.00	N/A	120.90
31	5.09	195.13	1.40	0.25	3.21	120.48
32	5.25	197.16	0.99	0.23	1.47	124.40
33	5.41	196.57	1.18	-0.34	1.49	124.05
34	5.58	182.47	1.26	-0.22	2.02	124.34
35	5.74	173.38	1.17	-0.86	2.74	124.34
36	5.91	156.76	1.27	-1.03	3.25	124.38
37	6.07	159.40	1.34	-0.59	3.60	124.86
38	6.23	172.12	1.43	-0.72	3.71	125.32
39	6.40	168.53	1.49	-1.01	3.93	125.64
40	6.56	161.92	1.52	-1.08	4.37	125.84
41	6.73	162.11	1.59	-1.01	5.03	126.10
42	6.89	152.37	1.71	-1.24	5.75	126.23
43	7.05	139.40	1.69	-1.35	6.40	126.32
44	7.22	143.52	1.72	-1.04	6.39	126.42
45	7.38	157.37	1.75	-1.10	6.03	126.41
46	7.55	154.52	1.63	-1.53	5.71	126.10
47	7.71	149.11	1.49	-1.57	5.62	125.73
48	7.87	152.52	1.53	-1.46	5.49	125.93

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
49	8.04	167.11	1.71	-1.21	5.18	126.77
50	8.20	189.23	1.92	-1.26	4.59	127.65
51	8.37	210.03	1.99	-1.42	3.49	127.58
52	8.53	223.97	1.48	-1.60	2.82	127.42
53	8.69	225.73	1.71	-1.76	2.44	126.89
54	8.86	216.60	1.61	-1.87	2.80	126.64
55	9.02	193.44	1.40	-2.54	3.58	125.85
56	9.19	155.44	1.39	-2.70	5.12	125.07
57	9.35	126.75	1.40	-2.72	7.35	124.88
58	9.51	113.75	1.54	-2.20	9.58	125.09
59	9.68	105.37	1.73	-2.38	11.35	125.34
60	9.84	97.38	1.71	-2.54	12.38	125.23
61	10.01	95.08	1.57	-2.58	12.40	124.85
62	10.17	99.56	1.50	-2.59	11.76	124.67
63	10.33	106.35	1.55	-2.56	11.27	125.25
64	10.50	115.81	1.84	-2.68	11.63	126.18
65	10.66	112.56	2.09	-2.83	12.85	126.63
66	10.83	94.28	1.97	-3.13	14.76	126.36
67	10.99	81.93	1.84	-2.83	14.88	125.58
68	11.15	98.92	1.58	-2.11	13.15	125.07
69	11.32	111.85	1.50	-3.06	11.22	124.40
70	11.48	103.80	1.30	-3.26	11.60	123.75
71	11.65	81.93	1.29	-3.49	14.91	122.61
72	11.81	49.00	1.20	-3.65	22.39	121.00
73	11.98	24.02	1.00	-3.82	34.28	118.19
74	12.14	15.73	0.66	-2.68	48.00	115.36
75	12.30	13.21	0.65	-2.02	35.79	115.15
76	12.47	43.53	0.72	-4.23	24.87	116.18
77	12.63	52.96	0.66	-5.01	18.70	117.39
78	12.80	53.79	0.77	-3.24	18.60	118.15
79	12.96	50.72	0.92	-3.17	22.25	118.78
80	13.12	35.73	0.98	-4.20	28.81	117.86
81	13.29	19.05	0.69	-7.56	40.20	115.09
82	13.45	10.26	0.41	-7.22	51.72	109.88
83	13.62	8.54	0.12	-6.91	55.22	104.83
84	13.78	9.00	0.15	-6.55	50.73	101.19
85	13.94	8.82	0.15	-6.36	48.00	101.41
86	14.11	10.60	0.12	-6.23	46.00	101.24
87	14.27	10.29	0.13	-6.16	44.40	101.36
88	14.44	10.26	0.15	-6.12	42.66	100.74
89	14.60	11.31	0.09	-6.05	41.64	100.33
90	14.76	10.72	0.11	-6.07	40.99	100.26
91	14.93	10.81	0.15	-4.57	47.13	104.36
92	15.09	11.80	0.34	-4.47	37.14	109.50
93	15.26	32.16	0.54	-3.73	26.51	114.23
94	15.42	52.81	0.74	-4.47	20.75	118.54
95	15.58	65.86	1.24	-5.15	19.68	121.71
96	15.75	69.15	1.63	-5.56	17.83	123.50

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
97	15.91	90.41	1.47	-5.53	13.92	124.43
98	16.08	126.93	1.45	-5.37	10.24	124.05
99	16.24	126.19	1.14	-5.64	9.02	123.99
100	16.40	116.79	1.34	-5.80	9.68	123.90
101	16.57	110.62	1.46	-5.73	11.01	124.60
102	16.73	113.26	1.59	-5.47	10.59	125.00
103	16.90	133.72	1.51	-5.24	8.80	125.08
104	17.06	154.52	1.33	-5.28	7.47	125.38
105	17.22	158.66	1.62	-5.29	7.43	126.00
106	17.39	151.94	1.85	-3.91	7.18	126.71
107	17.55	183.36	1.71	-4.32	6.25	127.03
108	17.72	203.82	1.69	-4.70	5.29	127.02
109	17.88	193.75	1.71	-4.99	5.42	127.04
110	18.04	178.94	1.74	-5.24	6.19	127.27
111	18.21	178.76	1.94	-5.04	7.25	127.81
112	18.37	170.49	2.20	-4.86	8.87	128.33
113	18.54	140.88	2.33	-5.04	10.89	128.28
114	18.70	122.32	2.16	-5.15	11.58	127.30
115	18.86	130.99	1.55	-5.06	11.57	125.79
116	19.03	108.19	1.35	-5.15	11.00	123.85
117	19.19	95.69	1.08	-5.29	12.75	122.73
118	19.36	82.48	1.18	-5.38	13.68	122.10
119	19.52	85.95	1.14	-5.40	13.02	121.76
120	19.69	100.30	0.91	-5.47	10.35	121.09
121	19.85	114.95	0.78	-5.49	9.33	120.66
122	20.01	98.49	0.94	-5.74	11.39	120.80
123	20.18	66.72	1.07	-5.96	17.73	121.06
124	20.34	42.88	1.19	-6.14	27.50	119.64
125	20.51	23.75	0.80	-6.14	37.29	116.83
126	20.67	19.26	0.42	-5.24	42.51	113.19
127	20.83	19.51	0.41	-3.28	31.72	114.84
128	21.00	52.62	0.96	-1.46	22.62	119.49
129	21.16	86.01	1.45	-2.27	16.55	123.39
130	21.33	112.74	1.70	-3.55	13.34	125.28
131	21.49	127.70	1.73	-4.16	11.88	126.32
132	21.65	134.24	1.94	-4.63	10.98	126.73
133	21.82	141.89	1.88	-4.88	10.64	126.89
134	21.98	140.08	1.80	-5.11	10.39	126.74
135	22.15	137.16	1.82	-5.20	10.97	126.90
136	22.31	132.58	2.04	-5.28	12.39	127.60
137	22.47	126.22	2.44	-5.44	14.04	128.50
138	22.64	126.13	2.71	-5.53	15.46	129.29
139	22.80	125.52	2.90	-5.58	16.06	129.65
140	22.97	124.75	2.86	-5.60	16.30	129.47
141	23.13	118.51	2.55	-5.69	16.31	128.45
142	23.29	103.95	1.97	-5.85	19.17	127.24
143	23.46	63.96	2.15	-6.05	25.01	125.70
144	23.62	42.88	1.88	-5.89	35.04	124.33

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
145	23.79	36.22	1.63	-4.95	38.67	122.59
146	23.95	38.68	1.25	-3.37	28.18	122.31
147	24.11	82.39	1.27	-2.34	18.87	123.02
148	24.28	108.53	1.51	-3.62	14.57	125.09
149	24.44	121.46	2.05	-4.23	12.86	126.74
150	24.61	144.04	2.14	-4.45	11.83	127.72
151	24.77	152.98	2.09	-5.51	11.60	127.90
152	24.93	131.72	2.16	-5.89	13.62	128.03
153	25.10	105.34	2.46	-6.14	18.76	128.22
154	25.26	76.71	2.78	-6.30	26.14	127.61
155	25.43	48.84	2.30	-6.25	33.78	126.14
156	25.59	42.24	1.78	-5.42	35.59	124.57
157	25.75	54.96	1.72	-4.45	33.84	124.08
158	25.92	52.22	1.89	-5.17	31.39	124.73
159	26.08	59.53	2.07	-5.35	27.02	125.42
160	26.25	87.30	1.92	-5.44	19.86	125.86
161	26.41	117.35	1.68	-5.38	14.85	126.19
162	26.57	129.67	1.89	-5.42	13.36	126.98
163	26.74	129.45	2.31	-5.64	14.15	127.84
164	26.90	122.05	2.38	-5.73	16.20	128.34
165	27.07	106.32	2.51	-5.91	19.23	128.52
166	27.23	90.41	2.78	-5.98	22.90	128.02
167	27.40	72.83	2.29	-6.01	25.74	127.71
168	27.56	76.89	2.48	-5.80	25.15	127.17
169	27.72	88.04	2.27	-3.40	21.27	126.87
170	27.89	103.92	1.73	-4.52	17.89	126.04
171	28.05	101.40	1.61	-5.17	17.58	125.71
172	28.22	86.97	2.04	-5.60	21.50	126.47
173	28.38	73.08	2.54	-5.94	27.37	127.27
174	28.54	63.83	2.69	-6.00	31.00	127.66
175	28.71	68.14	2.67	-5.89	32.39	127.69
176	28.87	65.65	2.68	-6.12	33.80	126.95
177	29.04	48.41	2.12	-6.16	30.06	126.35
178	29.20	82.42	1.90	-4.57	21.99	125.69
179	29.36	117.01	1.65	-5.38	16.60	126.20
180	29.53	117.38	2.05	-5.69	16.59	127.52
181	29.69	107.73	2.83	-5.87	21.21	128.95
182	29.86	84.39	3.33	-6.01	27.83	129.25
183	30.02	59.13	3.01	-6.10	35.50	128.18
184	30.18	45.34	2.38	-5.91	33.40	126.74
185	30.35	79.87	1.83	-4.75	21.07	126.22
186	30.51	141.74	1.73	-4.90	14.42	127.11
187	30.68	149.79	2.45	-5.29	12.90	128.30
188	30.84	137.04	2.56	-1.39	11.28	129.38
189	31.00	210.09	2.43	-3.67	8.88	129.70
190	31.17	233.74	2.38	-4.36	6.55	130.02
191	31.33	245.26	2.47	-4.75	6.29	130.26
192	31.50	233.56	2.58	-5.09	6.48	130.04

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
193	31.66	215.99	2.23	-5.29	7.44	129.65
194	31.82	187.45	2.29	-5.53	8.91	129.21
195	31.99	163.06	2.44	-5.64	11.19	129.36
196	32.15	152.09	2.66	-5.65	12.75	129.17
197	32.32	143.98	2.33	-5.76	13.85	128.46
198	32.48	122.05	1.97	-5.89	15.48	127.38
199	32.64	98.64	1.98	-5.96	20.09	126.73
200	32.81	70.07	2.25	-6.07	27.85	126.14
201	32.97	46.60	2.09	-6.16	37.14	124.84
202	33.14	37.26	1.58	-6.01	46.32	122.13
203	33.30	22.89	0.94	-6.05	52.77	118.13
204	33.46	15.79	0.47	-5.87	58.58	113.28
205	33.63	15.18	0.31	-5.74	54.80	110.53
206	33.79	20.46	0.42	-5.49	46.95	113.10
207	33.96	32.19	0.83	-5.40	42.75	116.38
208	34.12	34.47	1.00	-5.96	43.69	118.63
209	34.28	28.75	1.14	-5.96	42.13	119.41
210	34.45	39.87	1.08	-5.85	43.52	119.20
211	34.61	30.29	0.95	-6.01	42.70	119.05
212	34.78	30.07	1.06	-5.73	45.80	119.17
213	34.94	33.70	1.19	-5.71	40.07	121.33
214	35.10	56.58	1.72	-5.56	34.09	123.63
215	35.27	68.69	2.05	-5.92	34.14	125.00
216	35.43	46.20	2.07	-6.28	39.26	124.19
217	35.60	28.85	1.42	-6.43	51.63	121.62
218	35.76	20.00	0.99	-5.94	56.33	118.52
219	35.93	25.22	0.78	-5.31	54.39	115.99
220	36.09	22.95	0.55	-4.95	51.20	114.76
221	36.25	20.49	0.62	-4.88	46.00	115.58
222	36.42	36.31	0.90	-4.32	32.05	118.70
223	36.58	74.92	1.17	-4.38	27.64	122.22
224	36.75	68.93	1.85	-5.24	29.43	123.17
225	36.91	35.73	1.45	-5.80	40.18	122.32
226	37.07	24.05	1.14	-5.80	54.26	118.88
227	37.24	19.84	0.67	-4.75	60.55	116.57
228	37.40	19.20	0.76	-3.85	50.15	117.10
229	37.57	40.30	1.13	2.25	37.36	120.71
230	37.73	68.01	1.69	-0.90	26.30	124.29
231	37.89	103.31	2.11	-2.32	20.37	126.35
232	38.06	120.24	2.07	-3.15	16.16	126.99
233	38.22	134.92	1.81	-3.60	14.01	126.96
234	38.39	139.53	1.90	-3.74	13.71	127.38
235	38.55	135.62	2.33	-3.92	14.48	128.65
236	38.71	150.80	2.87	-3.87	14.42	130.07
237	38.88	177.80	3.17	-3.92	13.68	131.28
238	39.04	188.43	3.49	-3.92	12.86	131.83
239	39.21	190.06	3.36	-3.98	11.66	131.67
240	39.37	207.17	2.79	-4.00	10.41	131.35

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
241	39.53	216.72	2.93	-3.76	9.37	130.95
242	39.70	212.27	2.78	-2.27	9.73	131.26
243	39.86	206.31	3.15	-2.76	10.05	131.51
244	40.03	215.43	3.25	-0.29	9.45	131.76
245	40.19	244.65	2.94	-1.42	8.01	131.79
246	40.35	267.78	2.92	-2.18	6.83	131.90
247	40.52	278.90	3.13	-2.54	6.04	132.09
248	40.68	298.22	2.97	-2.43	4.56	131.57
249	40.85	339.76	2.08	-1.73	3.00	130.47
250	41.01	350.81	1.82	-0.59	2.24	129.87
251	41.17	340.74	2.34	-0.88	2.57	130.31
252	41.34	332.20	2.48	-1.69	3.14	130.91
253	41.50	329.49	2.43	-1.59	3.22	130.81
254	41.67	328.63	2.27	-0.77	3.07	130.46
255	41.83	327.38	2.17	-0.65	3.31	130.53
256	41.99	311.83	2.53	-1.22	4.04	131.22
257	42.16	304.98	3.03	-1.22	5.03	132.21
258	42.32	306.45	3.35	-0.31	5.64	132.83
259	42.49	305.90	3.34	-0.22	5.96	133.28
260	42.65	309.83	3.63	0.11	5.66	133.25
261	42.81	325.44	3.24	0.58	4.79	132.80
262	42.98	342.58	2.61	0.54	3.50	131.40
263	43.14	337.36	1.91	2.52	2.79	129.80
264	43.31	301.33	1.76	7.06	3.35	128.99
265	43.47	250.02	2.14	4.90	6.96	129.46
266	43.64	138.42	2.83	-0.67	13.79	129.68
267	43.80	92.99	2.86	-2.11	24.10	129.27
268	43.96	83.43	2.85	3.38	30.34	128.81
269	44.13	76.25	2.92	26.97	35.41	127.38
270	44.29	43.25	1.85	2.83	42.58	124.77
271	44.46	28.11	1.15	15.65	48.73	120.17
272	44.62	29.55	0.57	87.63	47.71	116.72
273	44.78	28.45	0.62	77.30	45.63	114.86
274	44.95	23.72	0.65	80.54	50.53	116.00
275	45.11	25.53	0.92	87.15	53.27	116.18
276	45.28	24.88	0.71	83.15	50.18	116.02
277	45.44	27.89	0.56	92.57	46.76	115.02
278	45.60	28.17	0.62	56.93	43.88	116.42
279	45.77	36.40	1.01	81.38	38.95	120.69
280	45.93	64.30	1.90	85.53	28.55	125.46
281	46.10	120.91	2.77	5.09	18.43	128.49
282	46.26	187.48	2.57	-1.85	13.11	130.13
283	46.42	208.43	2.80	-3.20	10.00	130.55
284	46.59	224.59	2.73	-3.46	10.04	131.44
285	46.75	220.13	3.47	-4.43	10.79	132.55
286	46.92	226.12	4.18	0.74	11.26	133.65
287	47.08	254.05	4.24	-2.39	11.16	134.30
288	47.24	253.10	4.38	-2.88	11.88	134.27

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
289	47.41	199.24	4.29	-4.09	16.40	133.77
290	47.57	105.92	4.37	-4.91	24.90	132.12
291	47.74	65.65	3.27	-3.35	36.25	130.50
292	47.90	70.44	3.35	133.55	24.82	130.88
293	48.06	207.32	3.68	54.38	13.86	133.11
294	48.23	320.34	4.59	8.55	8.73	134.73
295	48.39	336.68	4.59	2.41	7.25	135.26
296	48.56	321.97	4.08	0.74	7.28	134.84
297	48.72	293.77	3.96	0.02	7.74	134.38
298	48.88	284.34	4.05	0.11	7.05	133.99
299	49.05	340.49	3.38	8.08	4.95	133.46
300	49.21	404.51	2.76	2.59	2.61	132.12
301	49.38	425.55	1.99	6.82	1.03	130.45
302	49.54	438.09	1.55	2.70	0.17	128.79
303	49.70	435.29	1.45	0.95	0.00	127.17
304	49.87	423.89	1.00	0.36	0.00	126.06
305	50.03	417.57	1.00	0.90	0.00	125.00

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.16	0.01	0.00	0.01	1.00	0.716	0.90	0.791	1.00	1.00	2.000	No
2	0.33	0.02	0.00	0.02	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
3	0.49	0.03	0.00	0.03	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
4	0.66	0.04	0.00	0.04	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
5	0.82	0.05	0.00	0.05	1.00	0.715	0.90	0.791	1.00	1.00	2.000	No
6	0.98	0.06	0.00	0.06	1.00	0.715	0.90	0.790	1.00	1.00	2.000	No
7	1.15	0.07	0.00	0.07	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
8	1.31	0.08	0.00	0.08	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
9	1.48	0.09	0.00	0.09	1.00	0.714	0.90	0.790	1.00	1.00	2.000	No
10	1.64	0.10	0.00	0.10	1.00	0.714	0.90	0.789	1.00	1.00	2.000	No
11	1.80	0.11	0.00	0.11	1.00	0.713	0.90	0.789	1.00	1.00	2.000	No
12	1.97	0.12	0.00	0.12	1.00	0.713	0.90	0.789	1.00	1.00	2.000	No
13	2.13	0.13	0.00	0.13	1.00	0.713	0.90	0.788	1.00	1.00	2.000	No
14	2.30	0.14	0.00	0.14	1.00	0.713	0.90	0.788	1.00	1.00	2.000	No
15	2.46	0.15	0.00	0.15	1.00	0.712	0.90	0.788	1.00	1.00	2.000	No
16	2.62	0.16	0.00	0.16	1.00	0.712	0.90	0.788	1.00	1.00	2.000	No
17	2.79	0.17	0.00	0.17	1.00	0.712	0.90	0.787	1.00	1.00	2.000	No
18	2.95	0.18	0.00	0.18	1.00	0.711	0.90	0.787	1.00	1.00	2.000	No
19	3.12	0.19	0.00	0.19	0.99	0.711	0.90	0.787	1.00	1.00	2.000	No
20	3.28	0.20	0.00	0.20	0.99	0.711	0.90	0.786	1.00	1.00	2.000	No
21	3.44	0.21	0.00	0.21	0.99	0.711	0.90	0.786	1.00	1.00	2.000	No
22	3.61	0.22	0.00	0.22	0.99	0.710	0.90	0.786	1.00	1.00	2.000	No
23	3.77	0.23	0.00	0.23	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
24	3.94	0.24	0.00	0.24	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
25	4.10	0.25	0.00	0.25	0.99	0.710	0.90	0.785	1.00	1.00	2.000	No
26	4.27	0.26	0.00	0.26	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
27	4.43	0.27	0.00	0.27	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
28	4.59	0.28	0.00	0.28	0.99	0.709	0.90	0.784	1.00	1.00	2.000	No
29	4.76	0.29	0.00	0.29	0.99	0.708	0.90	0.784	1.00	1.00	2.000	No
30	4.92	0.30	0.00	0.30	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
31	5.09	0.31	0.00	0.31	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
32	5.25	0.32	0.00	0.32	0.99	0.708	0.90	0.783	1.00	1.00	2.000	No
33	5.41	0.33	0.00	0.33	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
34	5.58	0.34	0.00	0.34	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
35	5.74	0.35	0.00	0.35	0.99	0.707	0.90	0.782	1.00	1.00	2.000	No
36	5.91	0.36	0.00	0.36	0.99	0.707	0.90	0.781	1.00	1.00	2.000	No
37	6.07	0.37	0.00	0.37	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
38	6.23	0.38	0.00	0.38	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
39	6.40	0.39	0.00	0.39	0.99	0.706	0.90	0.781	1.00	1.00	2.000	No
40	6.56	0.40	0.00	0.40	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
41	6.73	0.41	0.00	0.41	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
42	6.89	0.42	0.00	0.42	0.99	0.705	0.90	0.780	1.00	1.00	2.000	No
43	7.05	0.43	0.00	0.43	0.99	0.705	0.90	0.779	1.00	1.00	2.000	No
44	7.22	0.44	0.00	0.44	0.99	0.704	0.90	0.779	1.00	1.00	2.000	No
45	7.38	0.45	0.00	0.45	0.98	0.704	0.90	0.779	1.00	1.00	2.000	No
46	7.55	0.46	0.00	0.46	0.98	0.704	0.90	0.779	1.00	1.00	2.000	No
47	7.71	0.47	0.00	0.47	0.98	0.704	0.90	0.778	1.00	1.00	2.000	No
48	7.87	0.48	0.00	0.48	0.98	0.703	0.90	0.778	1.00	1.00	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
49	8.04	0.49	0.00	0.49	0.98	0.703	0.90	0.778	1.00	1.00	2.000	No
50	8.20	0.50	0.00	0.50	0.98	0.703	0.90	0.777	1.00	1.00	2.000	No
51	8.37	0.51	0.00	0.51	0.98	0.703	0.90	0.777	1.00	1.00	2.000	No
52	8.53	0.52	0.00	0.52	0.98	0.702	0.90	0.777	1.00	1.00	2.000	No
53	8.69	0.53	0.00	0.53	0.98	0.702	0.90	0.777	1.00	1.00	2.000	No
54	8.86	0.54	0.00	0.54	0.98	0.702	0.90	0.776	1.00	1.00	2.000	No
55	9.02	0.56	0.00	0.56	0.98	0.702	0.90	0.776	1.00	1.00	2.000	No
56	9.19	0.57	0.00	0.57	0.98	0.701	0.90	0.776	1.00	1.00	2.000	No
57	9.35	0.58	0.00	0.58	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
58	9.51	0.59	0.00	0.59	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
59	9.68	0.60	0.00	0.60	0.98	0.701	0.90	0.775	1.00	1.00	2.000	No
60	9.84	0.61	0.00	0.61	0.98	0.700	0.90	0.775	1.00	1.00	2.000	No
61	10.01	0.62	0.00	0.62	0.98	0.700	0.90	0.774	1.00	1.00	2.000	No
62	10.17	0.63	0.00	0.63	0.98	0.700	0.90	0.774	1.00	1.00	2.000	No
63	10.33	0.64	0.00	0.64	0.98	0.700	0.90	0.774	1.00	1.00	2.000	No
64	10.50	0.65	0.00	0.65	0.98	0.699	0.90	0.773	1.00	1.00	2.000	No
65	10.66	0.66	0.00	0.66	0.98	0.699	0.90	0.773	1.00	1.00	2.000	No
66	10.83	0.67	0.00	0.67	0.98	0.699	0.90	0.773	1.00	1.00	2.000	No
67	10.99	0.68	0.00	0.68	0.98	0.699	0.90	0.773	1.00	1.00	2.000	No
68	11.15	0.69	0.00	0.69	0.98	0.698	0.90	0.772	1.00	1.00	2.000	No
69	11.32	0.70	0.00	0.70	0.98	0.698	0.90	0.772	1.00	1.00	2.000	No
70	11.48	0.71	0.00	0.71	0.98	0.698	0.90	0.772	1.00	1.00	2.000	Yes
71	11.65	0.72	0.00	0.72	0.98	0.698	0.90	0.772	1.00	1.00	2.000	Yes
72	11.81	0.73	0.00	0.73	0.98	0.697	0.90	0.771	1.00	1.00	2.000	Yes
73	11.98	0.74	0.00	0.74	0.97	0.697	0.90	0.771	1.00	1.00	2.000	Yes
74	12.14	0.75	0.00	0.74	0.97	0.701	0.90	0.775	1.00	1.00	2.000	Yes
75	12.30	0.76	0.01	0.75	0.97	0.705	0.90	0.780	1.00	1.00	0.780	No
76	12.47	0.77	0.01	0.75	0.97	0.710	0.90	0.785	1.00	1.00	0.785	No
77	12.63	0.78	0.02	0.76	0.97	0.714	0.90	0.790	1.00	1.00	0.790	No
78	12.80	0.79	0.02	0.76	0.97	0.719	0.90	0.795	1.00	1.00	2.000	Yes
79	12.96	0.80	0.03	0.77	0.97	0.723	0.90	0.799	1.00	1.00	2.000	Yes
80	13.12	0.81	0.04	0.77	0.97	0.727	0.90	0.804	1.00	1.00	2.000	Yes
81	13.29	0.82	0.04	0.78	0.97	0.731	0.90	0.809	1.00	1.00	2.000	Yes
82	13.45	0.82	0.05	0.78	0.97	0.735	0.90	0.813	1.00	1.00	2.000	Yes
83	13.62	0.83	0.05	0.78	0.97	0.739	0.90	0.818	1.00	1.00	2.000	Yes
84	13.78	0.84	0.06	0.79	0.97	0.743	0.90	0.822	1.00	1.00	0.822	No
85	13.94	0.85	0.06	0.79	0.97	0.747	0.90	0.827	1.00	1.00	0.827	No
86	14.11	0.86	0.07	0.79	0.97	0.751	0.90	0.831	1.00	1.00	0.831	No
87	14.27	0.87	0.07	0.80	0.97	0.755	0.90	0.836	1.00	1.00	0.836	No
88	14.44	0.87	0.08	0.80	0.97	0.759	0.90	0.840	1.00	1.00	0.840	No
89	14.60	0.88	0.08	0.80	0.97	0.763	0.90	0.844	1.00	1.00	0.844	No
90	14.76	0.89	0.09	0.80	0.97	0.767	0.90	0.848	1.00	1.00	0.848	No
91	14.93	0.90	0.09	0.81	0.97	0.771	0.90	0.853	1.00	1.00	0.853	No
92	15.09	0.91	0.10	0.81	0.97	0.775	0.90	0.857	1.00	1.00	0.857	No
93	15.26	0.92	0.10	0.82	0.97	0.778	0.90	0.861	1.00	1.00	0.861	No
94	15.42	0.93	0.11	0.82	0.97	0.782	0.90	0.865	1.00	1.00	0.865	No
95	15.58	0.94	0.11	0.83	0.97	0.785	0.90	0.869	1.00	1.00	0.869	No
96	15.75	0.95	0.12	0.83	0.97	0.789	0.90	0.872	1.00	1.00	0.872	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
97	15.91	0.96	0.12	0.84	0.97	0.792	0.90	0.876	1.00	1.00	0.876	No
98	16.08	0.97	0.13	0.84	0.97	0.795	0.90	0.880	1.00	1.00	0.880	No
99	16.24	0.98	0.13	0.85	0.97	0.799	0.90	0.883	1.00	1.00	0.883	No
100	16.40	0.99	0.14	0.85	0.97	0.802	0.90	0.887	1.00	1.00	0.887	No
101	16.57	1.00	0.14	0.86	0.97	0.805	0.90	0.890	1.00	1.00	0.890	No
102	16.73	1.01	0.15	0.86	0.96	0.808	0.90	0.894	1.00	1.00	0.894	No
103	16.90	1.02	0.15	0.87	0.96	0.811	0.90	0.897	1.00	1.00	0.897	No
104	17.06	1.03	0.16	0.87	0.96	0.814	0.90	0.900	1.00	1.00	0.900	No
105	17.22	1.04	0.16	0.88	0.96	0.817	0.90	0.904	1.00	1.00	0.904	No
106	17.39	1.05	0.17	0.88	0.96	0.820	0.90	0.907	1.00	1.00	0.907	No
107	17.55	1.06	0.17	0.89	0.96	0.823	0.90	0.910	1.00	1.00	0.910	No
108	17.72	1.07	0.18	0.89	0.96	0.826	0.90	0.913	1.00	1.00	0.913	No
109	17.88	1.08	0.18	0.90	0.96	0.828	0.90	0.916	1.00	1.00	0.916	No
110	18.04	1.09	0.19	0.90	0.96	0.831	0.90	0.919	1.00	1.00	0.919	No
111	18.21	1.10	0.19	0.91	0.96	0.834	0.90	0.922	1.00	1.00	0.922	No
112	18.37	1.11	0.20	0.91	0.96	0.837	0.90	0.925	1.00	1.00	0.925	No
113	18.54	1.12	0.20	0.92	0.96	0.839	0.90	0.928	1.00	1.00	0.928	No
114	18.70	1.13	0.21	0.92	0.96	0.842	0.90	0.931	1.00	1.00	0.931	No
115	18.86	1.14	0.21	0.93	0.96	0.844	0.90	0.934	1.00	1.00	0.934	No
116	19.03	1.15	0.22	0.94	0.96	0.847	0.90	0.937	1.00	1.00	0.937	No
117	19.19	1.16	0.22	0.94	0.96	0.849	0.90	0.939	1.00	1.00	0.939	No
118	19.36	1.17	0.23	0.94	0.96	0.852	0.90	0.942	1.00	1.00	0.942	No
119	19.52	1.18	0.23	0.95	0.96	0.854	0.90	0.945	1.00	1.00	0.945	No
120	19.69	1.19	0.24	0.95	0.96	0.857	0.90	0.948	1.00	1.00	0.948	No
121	19.85	1.20	0.24	0.96	0.96	0.859	0.90	0.950	1.00	1.00	2.000	Yes
122	20.01	1.21	0.25	0.96	0.96	0.862	0.90	0.953	1.00	1.00	2.000	Yes
123	20.18	1.22	0.26	0.97	0.96	0.864	0.90	0.955	1.00	1.00	2.000	Yes
124	20.34	1.23	0.26	0.97	0.96	0.866	0.90	0.958	1.00	1.00	2.000	Yes
125	20.51	1.24	0.27	0.98	0.96	0.869	0.90	0.961	1.00	1.00	2.000	Yes
126	20.67	1.25	0.27	0.98	0.96	0.871	0.90	0.963	1.00	1.00	2.000	Yes
127	20.83	1.26	0.28	0.99	0.95	0.873	0.90	0.966	1.00	1.00	2.000	Yes
128	21.00	1.27	0.28	0.99	0.95	0.875	0.90	0.968	1.00	1.00	2.000	Yes
129	21.16	1.28	0.29	1.00	0.95	0.878	0.90	0.971	1.00	1.00	2.000	Yes
130	21.33	1.29	0.29	1.00	0.95	0.880	0.90	0.973	1.00	1.00	2.000	Yes
131	21.49	1.30	0.30	1.01	0.95	0.882	0.90	0.975	1.00	1.00	2.000	Yes
132	21.65	1.31	0.30	1.01	0.95	0.884	0.90	0.977	1.00	1.00	0.977	No
133	21.82	1.32	0.31	1.02	0.95	0.886	0.90	0.979	1.00	1.00	0.979	No
134	21.98	1.33	0.31	1.02	0.95	0.887	0.90	0.982	1.00	1.00	0.982	No
135	22.15	1.34	0.32	1.03	0.95	0.889	0.90	0.984	1.00	1.00	0.984	No
136	22.31	1.35	0.32	1.03	0.95	0.891	0.90	0.986	1.00	1.00	0.986	No
137	22.47	1.37	0.33	1.04	0.95	0.893	0.90	0.988	1.00	1.00	0.988	No
138	22.64	1.38	0.33	1.04	0.95	0.895	0.90	0.990	1.00	1.00	0.990	No
139	22.80	1.39	0.34	1.05	0.95	0.896	0.90	0.991	1.00	1.00	0.991	No
140	22.97	1.40	0.34	1.06	0.95	0.898	0.90	0.993	1.00	1.00	0.993	No
141	23.13	1.41	0.35	1.06	0.95	0.900	0.90	0.995	1.00	1.00	2.000	Yes
142	23.29	1.42	0.35	1.07	0.95	0.901	0.90	0.997	1.00	1.00	2.000	Yes
143	23.46	1.43	0.36	1.07	0.95	0.903	0.90	0.999	1.00	1.00	2.000	Yes
144	23.62	1.44	0.36	1.08	0.95	0.905	0.90	1.001	1.00	1.00	2.000	Yes

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
145	23.79	1.45	0.37	1.08	0.95	0.906	0.90	1.003	1.00	1.00	2.000	Yes
146	23.95	1.46	0.37	1.09	0.95	0.908	0.90	1.004	0.99	1.00	2.000	Yes
147	24.11	1.47	0.38	1.09	0.94	0.910	0.90	1.006	0.99	1.00	2.000	Yes
148	24.28	1.48	0.38	1.10	0.94	0.911	0.90	1.008	0.99	1.00	2.000	Yes
149	24.44	1.49	0.39	1.10	0.94	0.913	0.90	1.009	0.99	1.00	2.000	Yes
150	24.61	1.50	0.39	1.11	0.94	0.914	0.90	1.011	0.99	1.00	1.021	No
151	24.77	1.51	0.40	1.11	0.94	0.915	0.90	1.013	0.99	1.00	2.000	Yes
152	24.93	1.52	0.40	1.12	0.94	0.917	0.90	1.014	0.99	1.00	2.000	Yes
153	25.10	1.53	0.41	1.12	0.94	0.918	0.90	1.015	0.99	1.00	2.000	Yes
154	25.26	1.54	0.41	1.13	0.94	0.919	0.90	1.017	0.99	1.00	2.000	Yes
155	25.43	1.55	0.42	1.13	0.94	0.921	0.90	1.018	0.98	1.00	2.000	Yes
156	25.59	1.56	0.42	1.14	0.94	0.922	0.90	1.020	0.98	1.00	1.037	No
157	25.75	1.57	0.43	1.14	0.94	0.923	0.90	1.021	0.98	1.00	2.000	Yes
158	25.92	1.58	0.43	1.15	0.94	0.925	0.90	1.023	0.98	1.00	2.000	Yes
159	26.08	1.59	0.44	1.15	0.94	0.926	0.90	1.024	0.98	1.00	2.000	Yes
160	26.25	1.60	0.44	1.16	0.94	0.927	0.90	1.025	0.98	1.00	2.000	Yes
161	26.41	1.61	0.45	1.16	0.94	0.928	0.90	1.027	0.98	1.00	2.000	Yes
162	26.57	1.62	0.45	1.17	0.94	0.929	0.90	1.028	0.98	1.00	2.000	Yes
163	26.74	1.63	0.46	1.18	0.94	0.930	0.90	1.029	0.98	1.00	1.054	No
164	26.90	1.65	0.46	1.18	0.93	0.931	0.90	1.030	0.98	1.00	1.056	No
165	27.07	1.66	0.47	1.19	0.93	0.932	0.90	1.031	0.97	1.00	1.059	No
166	27.23	1.67	0.48	1.19	0.93	0.933	0.90	1.032	0.97	1.00	1.061	No
167	27.40	1.68	0.48	1.20	0.93	0.934	0.90	1.034	0.97	1.00	1.063	No
168	27.56	1.69	0.49	1.20	0.93	0.935	0.90	1.035	0.97	1.00	1.065	No
169	27.72	1.70	0.49	1.21	0.93	0.936	0.90	1.036	0.97	1.00	1.068	No
170	27.89	1.71	0.50	1.21	0.93	0.937	0.90	1.037	0.97	1.00	1.070	No
171	28.05	1.72	0.50	1.22	0.93	0.938	0.90	1.038	0.97	1.00	1.072	No
172	28.22	1.73	0.51	1.22	0.93	0.939	0.90	1.039	0.97	1.00	1.074	No
173	28.38	1.74	0.51	1.23	0.93	0.940	0.90	1.040	0.97	1.00	1.076	No
174	28.54	1.75	0.52	1.23	0.93	0.941	0.90	1.040	0.97	1.00	1.078	No
175	28.71	1.76	0.52	1.24	0.93	0.942	0.90	1.041	0.96	1.00	1.080	No
176	28.87	1.77	0.53	1.24	0.93	0.942	0.90	1.042	0.96	1.00	1.082	No
177	29.04	1.78	0.53	1.25	0.93	0.943	0.90	1.043	0.96	1.00	1.084	No
178	29.20	1.79	0.54	1.25	0.92	0.944	0.90	1.044	0.96	1.00	1.086	No
179	29.36	1.80	0.54	1.26	0.92	0.944	0.90	1.045	0.96	1.00	1.087	No
180	29.53	1.81	0.55	1.27	0.92	0.945	0.90	1.045	0.96	1.00	1.089	No
181	29.69	1.82	0.55	1.27	0.92	0.946	0.90	1.046	0.96	1.00	1.091	No
182	29.86	1.83	0.56	1.28	0.92	0.946	0.90	1.047	0.96	1.00	1.093	No
183	30.02	1.84	0.56	1.28	0.92	0.947	0.90	1.047	0.96	1.00	2.000	Yes
184	30.18	1.85	0.57	1.29	0.92	0.947	0.90	1.048	0.96	1.00	2.000	Yes
185	30.35	1.86	0.57	1.29	0.92	0.948	0.90	1.049	0.96	1.00	2.000	Yes
186	30.51	1.87	0.58	1.30	0.92	0.949	0.90	1.049	0.95	1.00	2.000	Yes
187	30.68	1.89	0.58	1.30	0.92	0.949	0.90	1.050	0.95	1.00	2.000	Yes
188	30.84	1.90	0.59	1.31	0.92	0.949	0.90	1.050	0.95	1.00	2.000	Yes
189	31.00	1.91	0.59	1.31	0.92	0.950	0.90	1.051	0.95	1.00	2.000	Yes
190	31.17	1.92	0.60	1.32	0.91	0.950	0.90	1.051	0.95	1.00	2.000	Yes
191	31.33	1.93	0.60	1.32	0.91	0.951	0.90	1.051	0.95	1.00	1.107	No
192	31.50	1.94	0.61	1.33	0.91	0.951	0.90	1.052	0.95	1.00	2.000	Yes

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
193	31.66	1.95	0.61	1.34	0.91	0.951	0.90	1.052	0.95	1.00	2.000	Yes
194	31.82	1.96	0.62	1.34	0.91	0.951	0.90	1.052	0.95	1.00	2.000	Yes
195	31.99	1.97	0.62	1.35	0.91	0.952	0.90	1.053	0.95	1.00	2.000	Yes
196	32.15	1.98	0.63	1.35	0.91	0.952	0.90	1.053	0.95	1.00	2.000	Yes
197	32.32	1.99	0.63	1.36	0.91	0.952	0.90	1.053	0.94	1.00	2.000	Yes
198	32.48	2.00	0.64	1.36	0.91	0.952	0.90	1.053	0.94	1.00	2.000	Yes
199	32.64	2.01	0.64	1.37	0.91	0.953	0.90	1.054	0.94	1.00	2.000	Yes
200	32.81	2.02	0.65	1.37	0.90	0.953	0.90	1.054	0.94	1.00	2.000	Yes
201	32.97	2.03	0.65	1.38	0.90	0.953	0.90	1.054	0.94	1.00	2.000	Yes
202	33.14	2.04	0.66	1.38	0.90	0.953	0.90	1.054	0.94	1.00	2.000	Yes
203	33.30	2.05	0.66	1.39	0.90	0.954	0.90	1.055	0.94	1.00	2.000	Yes
204	33.46	2.06	0.67	1.39	0.90	0.954	0.90	1.055	0.94	1.00	1.124	No
205	33.63	2.07	0.67	1.40	0.90	0.954	0.90	1.055	0.94	1.00	1.125	No
206	33.79	2.08	0.68	1.40	0.90	0.955	0.90	1.056	0.94	1.00	1.126	No
207	33.96	2.09	0.69	1.40	0.90	0.955	0.90	1.056	0.94	1.00	1.127	No
208	34.12	2.10	0.69	1.41	0.90	0.955	0.90	1.056	0.94	1.00	1.128	No
209	34.28	2.11	0.70	1.41	0.90	0.955	0.90	1.056	0.94	1.00	1.129	No
210	34.45	2.12	0.70	1.42	0.89	0.955	0.90	1.056	0.93	1.00	1.130	No
211	34.61	2.13	0.71	1.42	0.89	0.955	0.90	1.057	0.93	1.00	1.131	No
212	34.78	2.14	0.71	1.43	0.89	0.955	0.90	1.057	0.93	1.00	1.132	No
213	34.94	2.15	0.72	1.43	0.89	0.955	0.90	1.057	0.93	1.00	1.133	No
214	35.10	2.16	0.72	1.44	0.89	0.955	0.90	1.056	0.93	1.00	1.134	No
215	35.27	2.17	0.73	1.44	0.89	0.955	0.90	1.056	0.93	1.00	1.135	No
216	35.43	2.18	0.73	1.45	0.89	0.955	0.90	1.056	0.93	1.00	1.135	No
217	35.60	2.19	0.74	1.45	0.89	0.955	0.90	1.056	0.93	1.00	1.136	No
218	35.76	2.20	0.74	1.46	0.89	0.955	0.90	1.056	0.93	1.00	1.137	No
219	35.93	2.21	0.75	1.46	0.88	0.955	0.90	1.056	0.93	1.00	2.000	Yes
220	36.09	2.22	0.75	1.47	0.88	0.955	0.90	1.056	0.93	1.00	2.000	Yes
221	36.25	2.23	0.76	1.47	0.88	0.955	0.90	1.056	0.93	1.00	2.000	Yes
222	36.42	2.24	0.76	1.48	0.88	0.954	0.90	1.056	0.93	1.00	2.000	Yes
223	36.58	2.25	0.77	1.48	0.88	0.954	0.90	1.055	0.93	1.00	2.000	Yes
224	36.75	2.26	0.77	1.49	0.88	0.954	0.90	1.055	0.92	1.00	1.141	No
225	36.91	2.27	0.78	1.49	0.88	0.954	0.90	1.055	0.92	1.00	1.141	No
226	37.07	2.28	0.78	1.49	0.88	0.953	0.90	1.054	0.92	1.00	1.142	No
227	37.24	2.29	0.79	1.50	0.87	0.953	0.90	1.054	0.92	1.00	1.142	No
228	37.40	2.30	0.79	1.50	0.87	0.953	0.90	1.054	0.92	1.00	2.000	Yes
229	37.57	2.31	0.80	1.51	0.87	0.953	0.90	1.054	0.92	1.00	2.000	Yes
230	37.73	2.32	0.80	1.51	0.87	0.952	0.90	1.053	0.92	1.00	2.000	Yes
231	37.89	2.33	0.81	1.52	0.87	0.952	0.90	1.053	0.92	1.00	2.000	Yes
232	38.06	2.34	0.81	1.52	0.87	0.951	0.90	1.052	0.92	1.00	2.000	Yes
233	38.22	2.35	0.82	1.53	0.87	0.951	0.90	1.051	0.92	1.00	2.000	Yes
234	38.39	2.36	0.82	1.53	0.86	0.950	0.90	1.051	0.92	1.00	1.145	No
235	38.55	2.37	0.83	1.54	0.86	0.949	0.90	1.050	0.92	1.00	1.145	No
236	38.71	2.38	0.83	1.55	0.86	0.949	0.90	1.049	0.92	1.00	1.145	No
237	38.88	2.39	0.84	1.55	0.86	0.948	0.90	1.049	0.92	1.00	1.145	No
238	39.04	2.40	0.84	1.56	0.86	0.947	0.90	1.048	0.91	1.00	1.145	No
239	39.21	2.41	0.85	1.56	0.86	0.947	0.90	1.047	0.91	1.00	1.145	No
240	39.37	2.42	0.85	1.57	0.86	0.946	0.90	1.046	0.91	1.00	1.145	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
241	39.53	2.43	0.86	1.57	0.86	0.945	0.90	1.045	0.91	1.00	1.145	No
242	39.70	2.44	0.86	1.58	0.85	0.944	0.90	1.044	0.91	1.00	1.145	No
243	39.86	2.45	0.87	1.59	0.85	0.943	0.90	1.044	0.91	1.00	1.145	No
244	40.03	2.47	0.87	1.59	0.85	0.943	0.90	1.043	0.91	1.00	1.145	No
245	40.19	2.48	0.88	1.60	0.85	0.942	0.90	1.042	0.91	1.00	1.145	No
246	40.35	2.49	0.88	1.60	0.85	0.941	0.90	1.041	0.91	1.00	1.145	No
247	40.52	2.50	0.89	1.61	0.85	0.940	0.90	1.040	0.91	1.00	1.145	No
248	40.68	2.51	0.89	1.61	0.84	0.939	0.90	1.039	0.91	1.00	1.145	No
249	40.85	2.52	0.90	1.62	0.84	0.938	0.90	1.038	0.91	1.00	1.144	No
250	41.01	2.53	0.91	1.62	0.84	0.937	0.90	1.037	0.91	1.00	1.144	No
251	41.17	2.54	0.91	1.63	0.84	0.936	0.90	1.036	0.91	1.00	1.144	No
252	41.34	2.55	0.92	1.64	0.84	0.935	0.90	1.035	0.90	1.00	1.144	No
253	41.50	2.56	0.92	1.64	0.84	0.934	0.90	1.034	0.90	1.00	1.143	No
254	41.67	2.57	0.93	1.65	0.84	0.934	0.90	1.032	0.90	1.00	1.143	No
255	41.83	2.58	0.93	1.65	0.83	0.933	0.90	1.031	0.90	1.00	1.143	No
256	41.99	2.59	0.94	1.66	0.83	0.931	0.90	1.030	0.90	1.00	1.142	No
257	42.16	2.61	0.94	1.66	0.83	0.930	0.90	1.029	0.90	1.00	1.142	No
258	42.32	2.62	0.95	1.67	0.83	0.929	0.90	1.028	0.90	1.00	1.142	No
259	42.49	2.63	0.95	1.68	0.83	0.928	0.90	1.027	0.90	1.00	1.141	No
260	42.65	2.64	0.96	1.68	0.83	0.927	0.90	1.025	0.90	1.00	1.141	No
261	42.81	2.65	0.96	1.69	0.83	0.926	0.90	1.024	0.90	1.00	1.140	No
262	42.98	2.66	0.97	1.69	0.82	0.925	0.90	1.023	0.90	1.00	1.140	No
263	43.14	2.67	0.97	1.70	0.82	0.924	0.90	1.022	0.90	1.00	1.139	No
264	43.31	2.68	0.98	1.70	0.82	0.923	0.90	1.021	0.90	1.00	1.139	No
265	43.47	2.69	0.98	1.71	0.82	0.922	0.90	1.019	0.90	1.00	2.000	Yes
266	43.64	2.70	0.99	1.72	0.82	0.920	0.90	1.018	0.89	1.00	2.000	Yes
267	43.80	2.71	0.99	1.72	0.82	0.919	0.90	1.017	0.89	1.00	2.000	Yes
268	43.96	2.72	1.00	1.73	0.81	0.918	0.90	1.016	0.89	1.00	2.000	Yes
269	44.13	2.73	1.00	1.73	0.81	0.917	0.90	1.014	0.89	1.00	2.000	Yes
270	44.29	2.74	1.01	1.74	0.81	0.916	0.90	1.013	0.89	1.00	2.000	Yes
271	44.46	2.75	1.01	1.74	0.81	0.915	0.90	1.012	0.89	1.00	2.000	Yes
272	44.62	2.76	1.02	1.75	0.81	0.914	0.90	1.011	0.89	1.00	1.134	No
273	44.78	2.77	1.02	1.75	0.81	0.913	0.90	1.010	0.89	1.00	1.134	No
274	44.95	2.78	1.03	1.75	0.80	0.912	0.90	1.009	0.89	1.00	1.133	No
275	45.11	2.79	1.03	1.76	0.80	0.911	0.90	1.007	0.89	1.00	2.000	Yes
276	45.28	2.80	1.04	1.76	0.80	0.910	0.90	1.006	0.89	1.00	2.000	Yes
277	45.44	2.81	1.04	1.77	0.80	0.909	0.90	1.005	0.89	1.00	2.000	Yes
278	45.60	2.82	1.05	1.77	0.80	0.908	0.90	1.004	0.89	1.00	2.000	Yes
279	45.77	2.83	1.05	1.78	0.80	0.907	0.90	1.003	0.89	1.00	2.000	Yes
280	45.93	2.84	1.06	1.78	0.79	0.905	0.90	1.001	0.89	1.00	2.000	Yes
281	46.10	2.85	1.06	1.79	0.79	0.904	0.90	1.000	0.89	1.00	2.000	Yes
282	46.26	2.86	1.07	1.79	0.79	0.903	0.90	0.998	0.89	1.00	2.000	Yes
283	46.42	2.87	1.07	1.80	0.79	0.901	0.90	0.997	0.89	1.00	2.000	Yes
284	46.59	2.88	1.08	1.80	0.79	0.900	0.90	0.995	0.88	1.00	1.125	No
285	46.75	2.89	1.08	1.81	0.79	0.899	0.90	0.994	0.88	1.00	1.124	No
286	46.92	2.91	1.09	1.82	0.78	0.897	0.90	0.992	0.88	1.00	1.123	No
287	47.08	2.92	1.09	1.82	0.78	0.896	0.90	0.991	0.88	1.00	1.123	No
288	47.24	2.93	1.10	1.83	0.78	0.894	0.90	0.989	0.88	1.00	1.122	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
289	47.41	2.94	1.10	1.83	0.78	0.893	0.90	0.988	0.88	1.00	1.121	No
290	47.57	2.95	1.11	1.84	0.78	0.891	0.90	0.986	0.88	1.00	1.120	No
291	47.74	2.96	1.11	1.84	0.78	0.890	0.90	0.984	0.88	1.00	2.000	Yes
292	47.90	2.97	1.12	1.85	0.77	0.889	0.90	0.983	0.88	1.00	2.000	Yes
293	48.06	2.98	1.13	1.86	0.77	0.887	0.90	0.981	0.88	1.00	2.000	Yes
294	48.23	2.99	1.13	1.86	0.77	0.886	0.90	0.980	0.88	1.00	2.000	Yes
295	48.39	3.00	1.14	1.87	0.77	0.884	0.90	0.978	0.88	1.00	2.000	Yes
296	48.56	3.01	1.14	1.87	0.77	0.883	0.90	0.976	0.88	1.00	1.113	No
297	48.72	3.03	1.15	1.88	0.77	0.881	0.90	0.975	0.88	1.00	1.112	No
298	48.88	3.04	1.15	1.89	0.76	0.880	0.90	0.973	0.88	1.00	1.111	No
299	49.05	3.05	1.16	1.89	0.76	0.878	0.90	0.971	0.87	1.00	1.110	No
300	49.21	3.06	1.16	1.90	0.76	0.877	0.90	0.970	0.87	1.00	1.109	No
301	49.38	3.07	1.17	1.90	0.76	0.875	0.90	0.968	0.87	1.00	1.108	No
302	49.54	3.08	1.17	1.91	0.76	0.874	0.90	0.967	0.87	1.00	1.107	No
303	49.70	3.09	1.18	1.91	0.76	0.873	0.90	0.965	0.87	1.00	1.106	No
304	49.87	3.10	1.18	1.92	0.75	0.871	0.90	0.963	0.87	1.00	1.105	No
305	50.03	3.11	1.19	1.92	0.75	0.870	0.90	0.962	0.87	1.00	1.104	No

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.16	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
2	0.33	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
3	0.49	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
4	0.66	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
5	0.82	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
6	0.98	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
7	1.15	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
8	1.31	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
9	1.48	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
10	1.64	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
11	1.80	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
12	1.97	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
13	2.13	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
14	2.30	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
15	2.46	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
16	2.62	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
17	2.79	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
18	2.95	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
19	3.12	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
20	3.28	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
21	3.44	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
22	3.61	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
23	3.77	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
24	3.94	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
25	4.10	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
26	4.27	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
27	4.43	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
28	4.59	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
29	4.76	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
30	4.92	0.00	N/A	0.00	1.00	-1.00	1.00	N/A	4.000	No	No	2.00
31	5.09	130.77	1.53	0.61	0.50	209.60	1.00	209.60	4.000	No	No	2.00
32	5.25	196.29	1.40	0.61	0.50	314.85	1.00	314.85	4.000	No	No	2.00
33	5.41	192.07	1.40	0.59	0.50	308.05	1.00	308.05	4.000	No	No	2.00
34	5.58	184.13	1.44	0.65	0.50	295.29	1.00	295.29	4.000	No	No	2.00
35	5.74	170.86	1.49	0.72	0.50	273.95	1.00	273.95	4.000	No	No	2.00
36	5.91	163.17	1.53	0.77	0.50	261.58	1.00	261.58	4.000	No	No	2.00
37	6.07	162.75	1.55	0.83	0.50	260.01	1.00	260.01	4.000	No	No	2.00
38	6.23	166.67	1.56	0.85	0.50	262.64	1.00	262.64	4.000	No	No	2.00
39	6.40	167.51	1.57	0.89	0.50	260.43	1.00	260.43	4.000	No	No	2.00
40	6.56	164.17	1.60	0.94	0.50	251.90	1.00	251.90	4.000	No	No	2.00
41	6.73	158.78	1.64	1.01	0.50	240.50	1.00	240.50	4.000	No	No	2.00
42	6.89	151.28	1.68	1.10	0.52	229.60	1.02	235.20	4.000	No	No	2.00
43	7.05	145.08	1.71	1.18	0.53	219.99	1.05	230.50	4.000	No	No	2.00
44	7.22	146.75	1.71	1.18	0.53	219.72	1.05	230.17	4.000	No	No	2.00
45	7.38	151.79	1.70	1.12	0.52	222.95	1.03	230.69	4.000	No	No	2.00
46	7.55	153.65	1.68	1.06	0.51	221.80	1.02	226.85	4.000	No	No	2.00
47	7.71	152.03	1.67	1.02	0.51	216.64	1.02	220.86	4.000	No	No	2.00
48	7.87	156.23	1.67	1.01	0.51	219.69	1.01	222.86	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
49	8.04	169.60	1.65	1.02	0.50	234.82	1.00	235.27	4.000	No	No	2.00
50	8.20	188.77	1.61	1.00	0.50	258.03	1.00	258.03	4.000	No	No	2.00
51	8.37	207.72	1.54	0.87	0.50	281.08	1.00	281.08	4.000	No	No	2.00
52	8.53	219.89	1.50	0.79	0.50	294.58	1.00	294.58	4.000	No	No	2.00
53	8.69	222.07	1.47	0.72	0.50	294.60	1.00	294.60	4.000	No	No	2.00
54	8.86	211.89	1.50	0.74	0.50	278.35	1.00	278.35	4.000	No	No	2.00
55	9.02	188.46	1.55	0.78	0.50	245.16	1.00	245.16	4.000	No	No	2.00
56	9.19	158.51	1.64	0.88	0.50	204.44	1.00	204.37	4.000	No	No	2.00
57	9.35	131.94	1.76	1.10	0.55	173.18	1.08	187.13	4.000	No	No	2.00
58	9.51	115.25	1.87	1.36	0.59	153.21	1.16	177.43	4.000	No	No	2.00
59	9.68	105.47	1.94	1.58	0.61	140.94	1.23	173.02	4.000	No	No	2.00
60	9.84	99.24	1.98	1.69	0.63	132.29	1.27	168.44	4.000	No	No	2.00
61	10.01	97.30	1.98	1.65	0.63	128.34	1.27	163.54	4.000	No	No	2.00
62	10.17	100.29	1.95	1.55	0.62	130.29	1.25	162.27	4.000	No	No	2.00
63	10.33	107.20	1.94	1.53	0.61	137.40	1.22	168.23	4.000	No	No	2.00
64	10.50	111.53	1.95	1.65	0.62	141.94	1.24	175.94	4.000	No	No	2.00
65	10.66	107.51	2.00	1.84	0.64	136.59	1.30	176.95	4.000	No	No	2.00
66	10.83	96.21	2.06	2.06	0.66	122.38	1.39	170.62	4.000	No	No	2.00
67	10.99	91.67	2.07	1.98	0.66	115.46	1.40	161.70	4.000	No	No	2.00
68	11.15	97.53	2.01	1.70	0.64	120.45	1.31	157.79	4.000	No	No	2.00
69	11.32	104.82	1.93	1.40	0.61	126.80	1.22	154.95	4.000	No	No	2.00
70	11.48	99.15	1.95	1.38	0.62	119.10	1.24	147.48	4.000	Yes	No	2.00
71	11.65	78.19	2.07	1.63	0.66	94.60	1.40	132.68	4.000	Yes	No	2.00
72	11.81	51.60	2.30	2.29	0.75	63.56	1.94	123.11	4.000	Yes	No	2.00
73	11.98	29.53	2.58	3.31	0.86	37.03	3.19	118.22	4.000	Yes	No	2.00
74	12.14	17.61	2.83	4.57	0.96	22.31	5.08	113.41	4.000	Yes	Yes	2.00
75	12.30	24.11	2.61	2.89	0.87	29.83	3.38	100.84	4.000	No	Yes	2.00
76	12.47	36.51	2.36	1.89	0.77	43.98	2.16	95.08	0.160	No	No	0.20
77	12.63	50.03	2.19	1.46	0.71	59.03	1.65	97.12	0.165	No	No	0.21
78	12.80	52.44	2.19	1.52	0.71	61.61	1.64	100.92	4.000	Yes	No	2.00
79	12.96	46.70	2.29	1.94	0.75	55.22	1.93	106.31	4.000	Yes	No	2.00
80	13.12	35.10	2.46	2.51	0.81	41.90	2.56	107.35	4.000	Yes	No	2.00
81	13.29	21.59	2.70	3.34	0.90	25.99	3.96	102.95	4.000	Yes	Yes	2.00
82	13.45	12.51	2.90	3.49	0.98	14.90	5.66	84.27	4.000	Yes	Yes	2.00
83	13.62	9.17	2.95	2.72	1.00	10.65	6.21	66.14	4.000	Yes	Yes	2.00
84	13.78	8.69	2.88	1.79	0.97	9.91	5.50	54.49	4.000	No	Yes	2.00
85	13.94	9.38	2.83	1.66	0.96	10.67	5.08	54.25	4.000	No	Yes	2.00
86	14.11	9.81	2.80	1.52	0.94	11.12	4.78	53.18	4.000	No	Yes	2.00
87	14.27	10.29	2.77	1.44	0.93	11.62	4.55	52.91	4.000	No	Yes	2.00
88	14.44	10.53	2.74	1.28	0.92	11.82	4.30	50.87	4.000	No	Yes	2.00
89	14.60	10.68	2.72	1.19	0.91	11.92	4.16	49.58	4.000	No	Yes	2.00
90	14.76	10.87	2.71	1.15	0.91	12.09	4.07	49.18	4.000	No	Yes	2.00
91	14.93	11.04	2.82	1.98	0.95	12.37	4.95	61.29	4.000	No	Yes	2.00
92	15.09	18.20	2.64	1.98	0.88	20.62	3.55	73.27	4.000	No	Yes	2.00
93	15.26	32.20	2.40	1.73	0.79	36.29	2.32	84.27	0.136	No	No	0.16
94	15.42	50.21	2.25	1.70	0.73	56.10	1.80	101.04	0.176	No	No	0.20
95	15.58	62.53	2.22	1.95	0.72	69.61	1.72	119.58	0.239	No	No	0.28
96	15.75	75.06	2.16	1.95	0.70	82.96	1.58	131.48	0.291	No	No	0.33

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
97	15.91	95.42	2.04	1.60	0.65	104.07	1.35	140.34	0.337	No	No	0.38
98	16.08	114.43	1.89	1.19	0.60	122.98	1.18	145.47	0.366	No	No	0.42
99	16.24	123.22	1.84	1.07	0.58	131.43	1.14	149.54	0.391	No	No	0.44
100	16.40	117.78	1.87	1.12	0.59	125.44	1.16	145.73	0.368	No	No	0.41
101	16.57	113.48	1.93	1.30	0.61	120.92	1.21	146.72	0.374	No	No	0.42
102	16.73	119.12	1.91	1.29	0.60	126.35	1.20	151.20	0.401	No	No	0.45
103	16.90	133.76	1.83	1.11	0.57	140.66	1.13	158.94	0.453	No	No	0.51
104	17.06	148.89	1.77	1.01	0.55	155.43	1.08	168.58	0.526	No	No	0.58
105	17.22	154.97	1.77	1.04	0.55	161.26	1.08	174.69	0.576	No	No	0.64
106	17.39	164.59	1.75	1.06	0.54	170.62	1.07	183.36	0.653	No	No	0.72
107	17.55	179.64	1.71	0.98	0.53	185.12	1.04	192.99	0.748	No	No	0.82
108	17.72	193.58	1.65	0.89	0.51	198.26	1.01	199.56	0.819	No	No	0.90
109	17.88	192.10	1.66	0.90	0.51	196.23	1.01	198.51	0.808	No	No	0.88
110	18.04	183.74	1.70	0.98	0.52	187.55	1.04	195.15	0.771	No	No	0.84
111	18.21	175.99	1.76	1.12	0.55	179.58	1.08	193.40	0.753	No	No	0.82
112	18.37	163.30	1.83	1.33	0.57	166.71	1.13	188.78	0.706	No	No	0.76
113	18.54	144.49	1.92	1.56	0.61	147.54	1.21	178.30	0.607	No	No	0.65
114	18.70	131.32	1.95	1.55	0.62	133.70	1.24	165.44	0.501	No	No	0.54
115	18.86	120.43	1.95	1.41	0.62	122.07	1.24	151.01	0.400	No	No	0.43
116	19.03	111.55	1.92	1.20	0.61	112.48	1.21	136.43	0.316	No	No	0.34
117	19.19	95.38	1.99	1.28	0.63	95.98	1.29	123.87	0.257	No	No	0.27
118	19.36	87.96	2.03	1.30	0.65	88.25	1.34	117.92	0.232	No	No	0.25
119	19.52	89.50	2.00	1.22	0.64	89.42	1.30	116.54	0.227	No	No	0.24
120	19.69	100.32	1.90	0.95	0.60	99.63	1.19	118.29	0.234	No	No	0.25
121	19.85	104.50	1.85	0.85	0.58	103.35	1.15	118.75	4.000	Yes	No	2.00
122	20.01	93.30	1.94	1.01	0.61	92.15	1.23	113.28	4.000	Yes	No	2.00
123	20.18	69.28	2.16	1.56	0.70	68.39	1.58	107.89	4.000	Yes	No	2.00
124	20.34	44.36	2.43	2.36	0.80	43.56	2.42	105.57	4.000	Yes	No	2.00
125	20.51	28.55	2.64	2.94	0.88	27.65	3.57	98.81	4.000	Yes	Yes	2.00
126	20.67	20.77	2.74	2.78	0.92	19.75	4.28	84.55	4.000	Yes	Yes	2.00
127	20.83	30.42	2.52	2.05	0.84	29.21	2.89	84.33	4.000	Yes	No	2.00
128	21.00	52.68	2.30	1.83	0.75	51.03	1.96	99.87	4.000	Yes	No	2.00
129	21.16	83.76	2.12	1.66	0.68	81.22	1.50	121.85	4.000	Yes	No	2.00
130	21.33	108.77	2.01	1.52	0.64	105.23	1.32	138.83	4.000	Yes	No	2.00
131	21.49	124.83	1.96	1.45	0.62	120.42	1.25	150.59	4.000	Yes	No	2.00
132	21.65	134.54	1.92	1.39	0.61	129.37	1.21	156.84	0.439	No	No	0.45
133	21.82	138.67	1.91	1.36	0.60	132.91	1.20	159.29	0.456	No	No	0.47
134	21.98	139.64	1.90	1.32	0.60	133.41	1.19	158.57	0.451	No	No	0.46
135	22.15	136.53	1.92	1.39	0.61	130.04	1.21	157.59	0.444	No	No	0.45
136	22.31	131.91	1.98	1.61	0.63	125.25	1.27	159.52	0.458	No	No	0.46
137	22.47	128.23	2.04	1.89	0.65	121.36	1.36	164.44	0.494	No	No	0.50
138	22.64	125.88	2.09	2.15	0.67	118.72	1.43	170.21	0.539	No	No	0.54
139	22.80	125.39	2.11	2.28	0.68	117.83	1.47	173.22	0.563	No	No	0.57
140	22.97	122.85	2.12	2.28	0.68	115.00	1.48	170.72	0.543	No	No	0.55
141	23.13	115.65	2.12	2.16	0.68	107.80	1.49	160.13	4.000	Yes	No	2.00
142	23.29	95.39	2.21	2.37	0.72	88.35	1.68	148.40	4.000	Yes	No	2.00
143	23.46	70.18	2.37	2.91	0.78	64.36	2.18	140.02	4.000	Yes	No	2.00
144	23.62	47.61	2.59	4.08	0.86	43.00	3.29	141.32	4.000	Yes	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
145	23.79	39.19	2.67	4.20	0.89	34.99	3.76	131.42	4.000	Yes	Yes	2.00
146	23.95	52.38	2.44	2.72	0.81	47.13	2.49	117.55	4.000	Yes	No	2.00
147	24.11	76.49	2.20	1.79	0.71	69.37	1.66	115.01	4.000	Yes	No	2.00
148	24.28	104.08	2.06	1.57	0.66	94.73	1.38	131.08	4.000	Yes	No	2.00
149	24.44	124.62	2.00	1.54	0.64	113.44	1.30	146.98	4.000	Yes	No	2.00
150	24.61	139.43	1.96	1.52	0.62	126.76	1.25	158.25	0.449	No	No	0.44
151	24.77	142.84	1.95	1.51	0.62	129.52	1.24	160.41	4.000	Yes	No	2.00
152	24.93	129.93	2.02	1.74	0.65	117.15	1.33	156.19	4.000	Yes	No	2.00
153	25.10	104.50	2.19	2.40	0.71	93.29	1.65	153.89	4.000	Yes	No	2.00
154	25.26	76.87	2.39	3.34	0.79	67.69	2.29	154.72	4.000	Yes	No	2.00
155	25.43	55.84	2.57	4.22	0.85	48.38	3.13	151.54	4.000	Yes	No	2.00
156	25.59	48.60	2.60	4.11	0.87	41.72	3.36	140.02	4.000	No	Yes	2.00
157	25.75	49.73	2.57	3.73	0.85	42.59	3.14	133.72	4.000	Yes	No	2.00
158	25.92	55.50	2.52	3.51	0.83	47.58	2.85	135.56	4.000	Yes	No	2.00
159	26.08	66.27	2.41	3.03	0.80	57.06	2.37	135.44	4.000	Yes	No	2.00
160	26.25	87.98	2.23	2.19	0.72	76.43	1.73	132.35	4.000	Yes	No	2.00
161	26.41	111.36	2.07	1.67	0.66	97.35	1.40	136.20	4.000	Yes	No	2.00
162	26.57	125.41	2.02	1.58	0.64	109.69	1.32	144.81	4.000	Yes	No	2.00
163	26.74	126.98	2.04	1.75	0.65	110.61	1.36	150.54	0.397	No	No	0.38
164	26.90	119.19	2.11	2.04	0.68	103.12	1.48	152.46	0.410	No	No	0.39
165	27.07	106.18	2.21	2.45	0.72	91.04	1.68	153.30	0.415	No	No	0.39
166	27.23	89.77	2.31	2.87	0.76	76.13	1.98	150.88	0.399	No	No	0.38
167	27.40	79.96	2.38	3.21	0.78	67.19	2.25	150.92	0.400	No	No	0.38
168	27.56	79.18	2.37	3.03	0.78	66.33	2.19	145.19	0.365	No	No	0.34
169	27.72	89.55	2.27	2.46	0.74	75.33	1.84	138.84	0.329	No	No	0.31
170	27.89	97.72	2.17	1.95	0.70	82.49	1.59	131.05	0.289	No	No	0.27
171	28.05	97.36	2.16	1.88	0.70	81.96	1.57	128.45	0.277	No	No	0.26
172	28.22	87.07	2.27	2.42	0.74	72.45	1.86	134.95	0.309	No	No	0.29
173	28.38	74.54	2.42	3.33	0.80	61.08	2.41	147.19	0.377	No	No	0.35
174	28.54	68.26	2.51	3.96	0.83	55.34	2.80	155.23	0.428	No	No	0.40
175	28.71	65.79	2.54	4.18	0.84	52.98	2.97	157.13	0.441	No	No	0.41
176	28.87	60.65	2.57	4.23	0.85	48.46	3.13	151.87	0.406	No	No	0.38
177	29.04	65.41	2.49	3.51	0.82	52.45	2.70	141.57	0.344	No	No	0.32
178	29.20	82.54	2.29	2.34	0.75	67.20	1.90	127.92	0.275	No	No	0.25
179	29.36	105.53	2.13	1.80	0.69	86.98	1.50	130.78	0.288	No	No	0.26
180	29.53	113.96	2.13	1.94	0.69	93.77	1.50	140.95	0.340	No	No	0.31
181	29.69	103.08	2.26	2.71	0.74	83.61	1.84	153.71	0.418	No	No	0.38
182	29.86	83.66	2.43	3.74	0.80	66.54	2.46	163.55	0.487	No	No	0.45
183	30.02	62.87	2.60	4.77	0.87	48.85	3.34	163.38	4.000	Yes	Yes	2.00
184	30.18	61.37	2.56	4.04	0.85	47.62	3.09	146.96	4.000	Yes	No	2.00
185	30.35	88.91	2.26	2.28	0.74	71.01	1.83	129.76	4.000	Yes	No	2.00
186	30.51	123.73	2.05	1.64	0.66	100.72	1.38	138.53	4.000	Yes	No	2.00
187	30.68	142.80	2.00	1.60	0.64	116.66	1.30	151.40	4.000	Yes	No	2.00
188	30.84	165.59	1.94	1.51	0.61	135.83	1.22	166.38	4.000	Yes	No	2.00
189	31.00	193.58	1.83	1.28	0.57	159.98	1.13	181.24	4.000	Yes	No	2.00
190	31.17	229.64	1.72	1.07	0.53	191.39	1.05	201.60	4.000	Yes	No	2.00
191	31.33	237.45	1.71	1.05	0.53	197.75	1.04	206.45	4.000	No	No	2.00
192	31.50	231.53	1.72	1.06	0.53	192.17	1.05	201.94	4.000	Yes	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
193	31.66	212.26	1.77	1.13	0.55	174.90	1.08	189.49	4.000	Yes	No	2.00
194	31.82	188.75	1.84	1.24	0.57	154.03	1.13	174.69	4.000	Yes	No	2.00
195	31.99	167.45	1.93	1.49	0.61	134.94	1.22	164.78	4.000	Yes	No	2.00
196	32.15	152.96	1.99	1.64	0.63	122.12	1.29	157.62	4.000	Yes	No	2.00
197	32.32	139.29	2.03	1.69	0.65	110.34	1.35	148.44	4.000	Yes	No	2.00
198	32.48	121.47	2.09	1.75	0.67	95.25	1.44	136.72	4.000	Yes	No	2.00
199	32.64	96.83	2.23	2.18	0.73	74.35	1.75	130.08	4.000	Yes	No	2.00
200	32.81	71.68	2.43	3.02	0.80	53.39	2.46	131.30	4.000	Yes	No	2.00
201	32.97	51.22	2.64	4.01	0.88	36.83	3.55	130.91	4.000	Yes	Yes	2.00
202	33.14	35.50	2.81	4.60	0.94	24.54	4.83	118.60	4.000	Yes	Yes	2.00
203	33.30	25.23	2.91	4.31	0.98	16.76	5.82	97.56	4.000	Yes	Yes	2.00
204	33.46	17.87	3.00	3.65	1.00	11.35	6.76	76.74	4.000	No	Yes	2.00
205	33.63	17.06	2.94	2.69	1.00	10.74	6.14	66.00	4.000	No	Yes	2.00
206	33.79	22.53	2.82	2.55	0.95	14.81	4.93	72.97	4.000	No	Yes	2.00
207	33.96	28.96	2.74	2.79	0.92	19.56	4.32	84.43	4.000	No	Yes	2.00
208	34.12	31.72	2.76	3.34	0.93	21.46	4.45	95.49	4.000	No	Yes	2.00
209	34.28	34.28	2.73	3.34	0.92	23.31	4.23	98.56	4.000	No	Yes	2.00
210	34.45	32.88	2.76	3.44	0.93	22.16	4.43	98.07	4.000	No	Yes	2.00
211	34.61	33.33	2.74	3.31	0.92	22.44	4.31	96.69	4.000	No	Yes	2.00
212	34.78	31.27	2.80	3.67	0.94	20.76	4.76	98.74	4.000	No	Yes	2.00
213	34.94	40.04	2.69	3.50	0.90	27.24	3.94	107.42	4.000	No	Yes	2.00
214	35.10	52.91	2.57	3.26	0.86	36.88	3.17	116.91	0.229	No	No	0.20
215	35.27	57.07	2.57	3.54	0.86	39.78	3.18	126.30	0.267	No	No	0.24
216	35.43	47.82	2.68	4.04	0.90	32.57	3.83	124.86	4.000	No	Yes	2.00
217	35.60	31.59	2.89	5.07	0.98	20.38	5.64	114.95	4.000	No	Yes	2.00
218	35.76	24.61	2.97	4.74	1.00	15.37	6.39	98.23	4.000	No	Yes	2.00
219	35.93	22.65	2.94	3.78	0.99	14.00	6.08	85.10	4.000	Yes	Yes	2.00
220	36.09	22.81	2.89	3.16	0.98	14.16	5.57	78.93	4.000	Yes	Yes	2.00
221	36.25	26.52	2.80	2.85	0.94	16.83	4.78	80.54	4.000	Yes	Yes	2.00
222	36.42	43.84	2.53	2.16	0.84	29.74	2.93	87.02	4.000	Yes	No	2.00
223	36.58	59.99	2.43	2.27	0.80	41.70	2.44	101.65	4.000	Yes	No	2.00
224	36.75	59.79	2.47	2.59	0.82	41.21	2.63	108.35	0.198	No	No	0.17
225	36.91	42.82	2.69	3.66	0.90	28.14	3.96	111.40	4.000	No	Yes	2.00
226	37.07	26.46	2.94	4.50	0.99	16.21	6.06	98.18	4.000	No	Yes	2.00
227	37.24	20.96	3.03	4.60	1.00	12.46	7.09	88.27	4.000	No	Yes	2.00
228	37.40	26.42	2.87	3.54	0.97	16.22	5.41	87.76	4.000	Yes	Yes	2.00
229	37.57	42.49	2.64	2.97	0.88	27.78	3.58	99.55	4.000	Yes	Yes	2.00
230	37.73	70.54	2.40	2.41	0.79	48.61	2.30	111.87	4.000	Yes	No	2.00
231	37.89	97.16	2.24	2.06	0.73	68.87	1.77	121.99	4.000	Yes	No	2.00
232	38.06	119.45	2.11	1.70	0.68	86.36	1.48	127.49	4.000	Yes	No	2.00
233	38.22	131.51	2.04	1.49	0.65	96.01	1.35	129.94	4.000	Yes	No	2.00
234	38.39	136.64	2.03	1.50	0.65	99.74	1.34	133.44	0.301	No	No	0.26
235	38.55	141.93	2.05	1.69	0.66	103.02	1.38	142.03	0.346	No	No	0.30
236	38.71	154.68	2.05	1.83	0.66	112.19	1.38	154.33	0.422	No	No	0.37
237	38.88	172.29	2.03	1.87	0.65	125.34	1.34	167.48	0.517	No	No	0.45
238	39.04	185.37	2.00	1.82	0.64	135.26	1.30	175.24	0.580	No	No	0.51
239	39.21	195.16	1.95	1.67	0.62	143.12	1.24	177.60	0.601	No	No	0.52
240	39.37	204.59	1.90	1.50	0.60	150.91	1.19	179.54	0.618	No	No	0.54

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
241	39.53	212.01	1.86	1.35	0.58	157.15	1.15	180.80	0.630	No	No	0.55
242	39.70	211.72	1.87	1.41	0.59	156.23	1.16	181.80	0.639	No	No	0.56
243	39.86	211.31	1.89	1.46	0.59	155.26	1.18	182.55	0.646	No	No	0.56
244	40.03	222.11	1.86	1.42	0.58	163.59	1.15	188.67	0.705	No	No	0.62
245	40.19	242.60	1.79	1.26	0.56	180.30	1.10	198.86	0.811	No	No	0.71
246	40.35	263.75	1.74	1.15	0.54	197.58	1.06	209.98	4.000	No	No	2.00
247	40.52	281.60	1.70	1.08	0.52	212.05	1.04	219.51	4.000	No	No	2.00
248	40.68	305.59	1.61	0.90	0.50	231.94	1.00	231.94	4.000	No	No	2.00
249	40.85	329.57	1.51	0.70	0.50	249.85	1.00	249.85	4.000	No	No	2.00
250	41.01	343.75	1.46	0.61	0.50	260.23	1.00	260.23	4.000	No	No	2.00
251	41.17	341.23	1.48	0.65	0.50	257.86	1.00	257.86	4.000	No	No	2.00
252	41.34	334.12	1.52	0.73	0.50	252.00	1.00	252.00	4.000	No	No	2.00
253	41.50	330.09	1.53	0.73	0.50	248.50	1.00	248.50	4.000	No	No	2.00
254	41.67	328.49	1.52	0.70	0.50	246.85	1.00	246.85	4.000	No	No	2.00
255	41.83	322.60	1.53	0.73	0.50	241.98	1.00	241.98	4.000	No	No	2.00
256	41.99	314.72	1.58	0.83	0.50	235.61	1.00	235.61	4.000	No	No	2.00
257	42.16	307.74	1.64	0.97	0.50	229.94	1.00	229.94	4.000	No	No	2.00
258	42.32	305.77	1.67	1.07	0.51	226.70	1.02	231.25	4.000	No	No	2.00
259	42.49	307.39	1.69	1.13	0.52	226.80	1.03	234.09	4.000	No	No	2.00
260	42.65	313.73	1.67	1.09	0.51	231.76	1.02	236.59	4.000	No	No	2.00
261	42.81	325.96	1.63	0.98	0.50	241.95	1.00	241.95	4.000	No	No	2.00
262	42.98	335.14	1.55	0.78	0.50	248.40	1.00	248.40	4.000	No	No	2.00
263	43.14	327.14	1.50	0.64	0.50	242.02	1.00	242.02	4.000	No	No	2.00
264	43.31	296.31	1.54	0.66	0.50	218.66	1.00	218.66	4.000	No	No	2.00
265	43.47	229.98	1.74	0.99	0.54	165.82	1.07	176.95	4.000	Yes	No	2.00
266	43.64	160.49	2.03	1.66	0.65	109.00	1.34	146.26	4.000	Yes	No	2.00
267	43.80	104.95	2.34	2.78	0.77	66.53	2.09	139.03	4.000	Yes	No	2.00
268	43.96	84.36	2.49	3.52	0.83	51.52	2.73	140.65	4.000	Yes	No	2.00
269	44.13	67.80	2.60	3.90	0.87	40.13	3.33	133.78	4.000	Yes	Yes	2.00
270	44.29	49.42	2.74	4.23	0.92	27.98	4.29	120.06	4.000	Yes	Yes	2.00
271	44.46	34.15	2.85	3.80	0.96	18.39	5.19	95.52	4.000	Yes	Yes	2.00
272	44.62	29.57	2.83	2.91	0.95	15.72	5.04	79.21	4.000	No	Yes	2.00
273	44.78	28.42	2.79	2.39	0.94	15.10	4.73	71.46	4.000	No	Yes	2.00
274	44.95	27.08	2.88	3.00	0.97	14.05	5.47	76.85	4.000	No	Yes	2.00
275	45.11	25.91	2.92	3.28	0.99	13.23	5.90	78.04	4.000	Yes	Yes	2.00
276	45.28	27.36	2.87	2.96	0.97	14.15	5.42	76.65	4.000	Yes	Yes	2.00
277	45.44	28.10	2.81	2.49	0.95	14.70	4.90	71.98	4.000	Yes	Yes	2.00
278	45.60	31.93	2.76	2.51	0.93	17.05	4.48	76.31	4.000	Yes	Yes	2.00
279	45.77	44.03	2.67	2.85	0.89	24.51	3.79	92.94	4.000	Yes	Yes	2.00
280	45.93	74.70	2.45	2.63	0.81	44.54	2.53	112.84	4.000	Yes	No	2.00
281	46.10	124.66	2.18	1.98	0.71	79.46	1.63	129.22	4.000	Yes	No	2.00
282	46.26	172.27	2.01	1.60	0.64	114.28	1.31	149.43	4.000	Yes	No	2.00
283	46.42	206.79	1.88	1.32	0.59	140.71	1.17	165.17	4.000	Yes	No	2.00
284	46.59	217.66	1.89	1.40	0.59	147.89	1.18	173.79	0.568	No	No	0.50
285	46.75	223.58	1.92	1.57	0.61	150.70	1.20	181.54	0.636	No	No	0.57
286	46.92	233.40	1.94	1.72	0.61	156.49	1.22	191.52	0.733	No	No	0.65
287	47.08	244.40	1.93	1.77	0.61	163.76	1.22	199.74	0.821	No	No	0.73
288	47.24	235.42	1.96	1.85	0.62	156.42	1.25	195.62	0.776	No	No	0.69

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	I_c	Fr (%)	n	Q_{tn}	K_c	$Q_{tn,cs}$	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
289	47.41	186.03	2.12	2.37	0.68	118.89	1.49	177.26	0.598	No	No	0.53
290	47.57	123.54	2.36	3.30	0.78	74.25	2.16	160.72	0.466	No	No	0.42
291	47.74	81.27	2.62	4.68	0.87	45.55	3.44	156.71	4.000	Yes	Yes	2.00
292	47.90	115.36	2.36	3.06	0.77	68.90	2.16	148.61	4.000	Yes	No	2.00
293	48.06	200.31	2.03	1.96	0.65	129.44	1.35	174.15	4.000	Yes	No	2.00
294	48.23	288.43	1.83	1.50	0.57	195.28	1.13	220.17	4.000	Yes	No	2.00
295	48.39	326.39	1.76	1.37	0.55	224.19	1.08	241.49	4.000	Yes	No	2.00
296	48.56	317.49	1.76	1.34	0.55	217.57	1.08	234.58	4.000	No	No	2.00
297	48.72	300.03	1.78	1.36	0.55	204.13	1.09	223.27	4.000	No	No	2.00
298	48.88	306.24	1.75	1.25	0.54	209.59	1.07	224.31	4.000	No	No	2.00
299	49.05	343.17	1.64	1.00	0.50	240.41	1.00	240.41	4.000	No	No	2.00
300	49.21	390.27	1.48	0.70	0.50	273.28	1.00	273.28	4.000	No	No	2.00
301	49.38	422.77	1.36	0.50	0.50	295.78	1.00	295.78	4.000	No	No	2.00
302	49.54	433.03	1.28	0.39	0.50	302.57	1.00	302.57	4.000	No	No	2.00
303	49.70	432.44	1.22	0.31	0.50	301.73	1.00	301.73	4.000	No	No	2.00
304	49.87	427.70	1.19	0.27	0.50	297.98	1.00	297.98	4.000	No	No	2.00
305	50.03	419.69	1.17	0.24	0.50	291.96	1.00	291.96	4.000	No	No	2.00

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.16	2.00	0.00	0.00	0.00	0.00	0.33	2.00	0.00	0.00	0.00	0.00
0.49	2.00	0.00	0.00	0.00	0.00	0.66	2.00	0.00	0.00	0.00	0.00
0.82	2.00	0.00	0.00	0.00	0.00	0.98	2.00	0.00	0.00	0.00	0.00
1.15	2.00	0.00	0.00	0.00	0.00	1.31	2.00	0.00	0.00	0.00	0.00
1.48	2.00	0.00	0.00	0.00	0.00	1.64	2.00	0.00	0.00	0.00	0.00
1.80	2.00	0.00	0.00	0.00	0.00	1.97	2.00	0.00	0.00	0.00	0.00
2.13	2.00	0.00	0.00	0.00	0.00	2.30	2.00	0.00	0.00	0.00	0.00
2.46	2.00	0.00	0.00	0.00	0.00	2.62	2.00	0.00	0.00	0.00	0.00
2.79	2.00	0.00	0.00	0.00	0.00	2.95	2.00	0.00	0.00	0.00	0.00
3.12	2.00	0.00	0.00	0.00	0.00	3.28	2.00	0.00	0.00	0.00	0.00
3.44	2.00	0.00	0.00	0.00	0.00	3.61	2.00	0.00	0.00	0.00	0.00
3.77	2.00	0.00	0.00	0.00	0.00	3.94	2.00	0.00	0.00	0.00	0.00
4.10	2.00	0.00	0.00	0.00	0.00	4.27	2.00	0.00	0.00	0.00	0.00
4.43	2.00	0.00	0.00	0.00	0.00	4.59	2.00	0.00	0.00	0.00	0.00
4.76	2.00	0.00	0.00	0.00	0.00	4.92	2.00	0.00	0.00	0.00	0.00
5.09	2.00	0.00	9.22	0.16	0.00	5.25	2.00	0.00	9.20	0.16	0.00
5.41	2.00	0.00	9.17	0.16	0.00	5.58	2.00	0.00	9.15	0.16	0.00
5.74	2.00	0.00	9.12	0.16	0.00	5.91	2.00	0.00	9.10	0.16	0.00
6.07	2.00	0.00	9.07	0.16	0.00	6.23	2.00	0.00	9.05	0.16	0.00
6.40	2.00	0.00	9.02	0.16	0.00	6.56	2.00	0.00	9.00	0.16	0.00
6.73	2.00	0.00	8.97	0.16	0.00	6.89	2.00	0.00	8.95	0.16	0.00
7.05	2.00	0.00	8.92	0.16	0.00	7.22	2.00	0.00	8.90	0.16	0.00
7.38	2.00	0.00	8.87	0.16	0.00	7.55	2.00	0.00	8.85	0.16	0.00
7.71	2.00	0.00	8.82	0.16	0.00	7.87	2.00	0.00	8.80	0.16	0.00
8.04	2.00	0.00	8.77	0.16	0.00	8.20	2.00	0.00	8.75	0.16	0.00
8.37	2.00	0.00	8.72	0.16	0.00	8.53	2.00	0.00	8.70	0.16	0.00
8.69	2.00	0.00	8.67	0.16	0.00	8.86	2.00	0.00	8.65	0.16	0.00
9.02	2.00	0.00	8.62	0.16	0.00	9.19	2.00	0.00	8.60	0.16	0.00
9.35	2.00	0.00	8.57	0.16	0.00	9.51	2.00	0.00	8.55	0.16	0.00
9.68	2.00	0.00	8.52	0.16	0.00	9.84	2.00	0.00	8.50	0.16	0.00
10.01	2.00	0.00	8.47	0.16	0.00	10.17	2.00	0.00	8.45	0.16	0.00
10.33	2.00	0.00	8.42	0.16	0.00	10.50	2.00	0.00	8.40	0.16	0.00
10.66	2.00	0.00	8.37	0.16	0.00	10.83	2.00	0.00	8.35	0.16	0.00
10.99	2.00	0.00	8.32	0.16	0.00	11.15	2.00	0.00	8.30	0.16	0.00
11.32	2.00	0.00	8.27	0.16	0.00	11.48	2.00	0.00	8.25	0.16	0.00
11.65	2.00	0.00	8.22	0.16	0.00	11.81	2.00	0.00	8.20	0.16	0.00
11.98	2.00	0.00	8.17	0.16	0.00	12.14	2.00	0.00	8.15	0.16	0.00
12.30	2.00	0.00	8.12	0.16	0.00	12.47	0.20	0.80	8.10	0.16	0.32
12.63	0.21	0.79	8.07	0.16	0.32	12.80	2.00	0.00	8.05	0.16	0.00
12.96	2.00	0.00	8.02	0.16	0.00	13.12	2.00	0.00	8.00	0.16	0.00
13.29	2.00	0.00	7.97	0.16	0.00	13.45	2.00	0.00	7.95	0.16	0.00
13.62	2.00	0.00	7.92	0.16	0.00	13.78	2.00	0.00	7.90	0.16	0.00
13.94	2.00	0.00	7.87	0.16	0.00	14.11	2.00	0.00	7.85	0.16	0.00
14.27	2.00	0.00	7.82	0.16	0.00	14.44	2.00	0.00	7.80	0.16	0.00
14.60	2.00	0.00	7.77	0.16	0.00	14.76	2.00	0.00	7.75	0.16	0.00
14.93	2.00	0.00	7.72	0.16	0.00	15.09	2.00	0.00	7.70	0.16	0.00
15.26	0.16	0.84	7.67	0.16	0.32	15.42	0.20	0.80	7.65	0.16	0.30
15.58	0.28	0.72	7.62	0.16	0.28	15.75	0.33	0.67	7.60	0.16	0.25

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
15.91	0.38	0.62	7.57	0.16	0.23	16.08	0.42	0.58	7.55	0.16	0.22
16.24	0.44	0.56	7.52	0.16	0.21	16.40	0.41	0.59	7.50	0.16	0.22
16.57	0.42	0.58	7.47	0.16	0.22	16.73	0.45	0.55	7.45	0.16	0.21
16.90	0.51	0.49	7.42	0.16	0.18	17.06	0.58	0.42	7.40	0.16	0.15
17.22	0.64	0.36	7.37	0.16	0.13	17.39	0.72	0.28	7.35	0.16	0.10
17.55	0.82	0.18	7.32	0.16	0.07	17.72	0.90	0.10	7.30	0.16	0.04
17.88	0.88	0.12	7.27	0.16	0.04	18.04	0.84	0.16	7.25	0.16	0.06
18.21	0.82	0.18	7.22	0.16	0.07	18.37	0.76	0.24	7.20	0.16	0.09
18.54	0.65	0.35	7.17	0.16	0.12	18.70	0.54	0.46	7.15	0.16	0.17
18.86	0.43	0.57	7.12	0.16	0.20	19.03	0.34	0.66	7.10	0.16	0.24
19.19	0.27	0.73	7.07	0.16	0.26	19.36	0.25	0.75	7.05	0.16	0.27
19.52	0.24	0.76	7.02	0.16	0.27	19.69	0.25	0.75	7.00	0.16	0.26
19.85	2.00	0.00	6.97	0.16	0.00	20.01	2.00	0.00	6.95	0.16	0.00
20.18	2.00	0.00	6.92	0.16	0.00	20.34	2.00	0.00	6.90	0.16	0.00
20.51	2.00	0.00	6.87	0.16	0.00	20.67	2.00	0.00	6.85	0.16	0.00
20.83	2.00	0.00	6.82	0.16	0.00	21.00	2.00	0.00	6.80	0.16	0.00
21.16	2.00	0.00	6.77	0.16	0.00	21.33	2.00	0.00	6.75	0.16	0.00
21.49	2.00	0.00	6.72	0.16	0.00	21.65	0.45	0.55	6.70	0.16	0.18
21.82	0.47	0.53	6.67	0.16	0.18	21.98	0.46	0.54	6.65	0.16	0.18
22.15	0.45	0.55	6.62	0.16	0.18	22.31	0.46	0.54	6.60	0.16	0.18
22.47	0.50	0.50	6.57	0.16	0.16	22.64	0.54	0.46	6.55	0.16	0.15
22.80	0.57	0.43	6.52	0.16	0.14	22.97	0.55	0.45	6.50	0.16	0.15
23.13	2.00	0.00	6.47	0.16	0.00	23.29	2.00	0.00	6.45	0.16	0.00
23.46	2.00	0.00	6.42	0.16	0.00	23.62	2.00	0.00	6.40	0.16	0.00
23.79	2.00	0.00	6.37	0.16	0.00	23.95	2.00	0.00	6.35	0.16	0.00
24.11	2.00	0.00	6.32	0.16	0.00	24.28	2.00	0.00	6.30	0.16	0.00
24.44	2.00	0.00	6.27	0.16	0.00	24.61	0.44	0.56	6.25	0.16	0.18
24.77	2.00	0.00	6.22	0.16	0.00	24.93	2.00	0.00	6.20	0.16	0.00
25.10	2.00	0.00	6.17	0.16	0.00	25.26	2.00	0.00	6.15	0.16	0.00
25.43	2.00	0.00	6.12	0.16	0.00	25.59	2.00	0.00	6.10	0.16	0.00
25.75	2.00	0.00	6.07	0.16	0.00	25.92	2.00	0.00	6.05	0.16	0.00
26.08	2.00	0.00	6.02	0.16	0.00	26.25	2.00	0.00	6.00	0.16	0.00
26.41	2.00	0.00	5.97	0.16	0.00	26.57	2.00	0.00	5.95	0.16	0.00
26.74	0.38	0.62	5.92	0.16	0.18	26.90	0.39	0.61	5.90	0.16	0.18
27.07	0.39	0.61	5.87	0.16	0.18	27.23	0.38	0.62	5.85	0.16	0.18
27.40	0.38	0.62	5.82	0.16	0.18	27.56	0.34	0.66	5.80	0.16	0.19
27.72	0.31	0.69	5.77	0.16	0.20	27.89	0.27	0.73	5.75	0.16	0.21
28.05	0.26	0.74	5.72	0.16	0.21	28.22	0.29	0.71	5.70	0.16	0.20
28.38	0.35	0.65	5.67	0.16	0.18	28.54	0.40	0.60	5.65	0.16	0.17
28.71	0.41	0.59	5.62	0.16	0.17	28.87	0.38	0.62	5.60	0.16	0.17
29.04	0.32	0.68	5.57	0.16	0.19	29.20	0.25	0.75	5.55	0.16	0.21
29.36	0.26	0.74	5.52	0.16	0.20	29.53	0.31	0.69	5.50	0.16	0.19
29.69	0.38	0.62	5.47	0.16	0.17	29.86	0.45	0.55	5.45	0.16	0.15
30.02	2.00	0.00	5.42	0.16	0.00	30.18	2.00	0.00	5.40	0.16	0.00
30.35	2.00	0.00	5.37	0.16	0.00	30.51	2.00	0.00	5.35	0.16	0.00
30.68	2.00	0.00	5.32	0.16	0.00	30.84	2.00	0.00	5.30	0.16	0.00
31.00	2.00	0.00	5.27	0.16	0.00	31.17	2.00	0.00	5.25	0.16	0.00
31.33	2.00	0.00	5.22	0.16	0.00	31.50	2.00	0.00	5.20	0.16	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.66	2.00	0.00	5.17	0.16	0.00	31.82	2.00	0.00	5.15	0.16	0.00
31.99	2.00	0.00	5.12	0.16	0.00	32.15	2.00	0.00	5.10	0.16	0.00
32.32	2.00	0.00	5.07	0.16	0.00	32.48	2.00	0.00	5.05	0.16	0.00
32.64	2.00	0.00	5.02	0.16	0.00	32.81	2.00	0.00	5.00	0.16	0.00
32.97	2.00	0.00	4.97	0.16	0.00	33.14	2.00	0.00	4.95	0.16	0.00
33.30	2.00	0.00	4.92	0.16	0.00	33.46	2.00	0.00	4.90	0.16	0.00
33.63	2.00	0.00	4.87	0.16	0.00	33.79	2.00	0.00	4.85	0.16	0.00
33.96	2.00	0.00	4.82	0.16	0.00	34.12	2.00	0.00	4.80	0.16	0.00
34.28	2.00	0.00	4.77	0.16	0.00	34.45	2.00	0.00	4.75	0.16	0.00
34.61	2.00	0.00	4.72	0.16	0.00	34.78	2.00	0.00	4.70	0.16	0.00
34.94	2.00	0.00	4.67	0.16	0.00	35.10	0.20	0.80	4.65	0.16	0.19
35.27	0.24	0.76	4.62	0.16	0.18	35.43	2.00	0.00	4.60	0.16	0.00
35.60	2.00	0.00	4.57	0.16	0.00	35.76	2.00	0.00	4.55	0.16	0.00
35.93	2.00	0.00	4.52	0.16	0.00	36.09	2.00	0.00	4.50	0.16	0.00
36.25	2.00	0.00	4.47	0.16	0.00	36.42	2.00	0.00	4.45	0.16	0.00
36.58	2.00	0.00	4.42	0.16	0.00	36.75	0.17	0.83	4.40	0.16	0.18
36.91	2.00	0.00	4.37	0.16	0.00	37.07	2.00	0.00	4.35	0.16	0.00
37.24	2.00	0.00	4.32	0.16	0.00	37.40	2.00	0.00	4.30	0.16	0.00
37.57	2.00	0.00	4.27	0.16	0.00	37.73	2.00	0.00	4.25	0.16	0.00
37.89	2.00	0.00	4.22	0.16	0.00	38.06	2.00	0.00	4.20	0.16	0.00
38.22	2.00	0.00	4.17	0.16	0.00	38.39	0.26	0.74	4.15	0.16	0.15
38.55	0.30	0.70	4.12	0.16	0.14	38.71	0.37	0.63	4.10	0.16	0.13
38.88	0.45	0.55	4.07	0.16	0.11	39.04	0.51	0.49	4.05	0.16	0.10
39.21	0.52	0.48	4.02	0.16	0.10	39.37	0.54	0.46	4.00	0.16	0.09
39.53	0.55	0.45	3.97	0.16	0.09	39.70	0.56	0.44	3.95	0.16	0.09
39.86	0.56	0.44	3.92	0.16	0.09	40.03	0.62	0.38	3.90	0.16	0.08
40.19	0.71	0.29	3.87	0.16	0.06	40.35	2.00	0.00	3.85	0.16	0.00
40.52	2.00	0.00	3.82	0.16	0.00	40.68	2.00	0.00	3.80	0.16	0.00
40.85	2.00	0.00	3.77	0.16	0.00	41.01	2.00	0.00	3.75	0.16	0.00
41.17	2.00	0.00	3.72	0.16	0.00	41.34	2.00	0.00	3.70	0.16	0.00
41.50	2.00	0.00	3.67	0.16	0.00	41.67	2.00	0.00	3.65	0.16	0.00
41.83	2.00	0.00	3.62	0.16	0.00	41.99	2.00	0.00	3.60	0.16	0.00
42.16	2.00	0.00	3.57	0.16	0.00	42.32	2.00	0.00	3.55	0.16	0.00
42.49	2.00	0.00	3.52	0.16	0.00	42.65	2.00	0.00	3.50	0.16	0.00
42.81	2.00	0.00	3.47	0.16	0.00	42.98	2.00	0.00	3.45	0.16	0.00
43.14	2.00	0.00	3.42	0.16	0.00	43.31	2.00	0.00	3.40	0.16	0.00
43.47	2.00	0.00	3.37	0.16	0.00	43.64	2.00	0.00	3.35	0.16	0.00
43.80	2.00	0.00	3.32	0.16	0.00	43.96	2.00	0.00	3.30	0.16	0.00
44.13	2.00	0.00	3.27	0.16	0.00	44.29	2.00	0.00	3.25	0.16	0.00
44.46	2.00	0.00	3.22	0.16	0.00	44.62	2.00	0.00	3.20	0.16	0.00
44.78	2.00	0.00	3.17	0.16	0.00	44.95	2.00	0.00	3.15	0.16	0.00
45.11	2.00	0.00	3.12	0.16	0.00	45.28	2.00	0.00	3.10	0.16	0.00
45.44	2.00	0.00	3.07	0.16	0.00	45.60	2.00	0.00	3.05	0.16	0.00
45.77	2.00	0.00	3.02	0.16	0.00	45.93	2.00	0.00	3.00	0.16	0.00
46.10	2.00	0.00	2.97	0.16	0.00	46.26	2.00	0.00	2.95	0.16	0.00
46.42	2.00	0.00	2.92	0.16	0.00	46.59	0.50	0.50	2.90	0.16	0.07
46.75	0.57	0.43	2.87	0.16	0.06	46.92	0.65	0.35	2.85	0.16	0.05
47.08	0.73	0.27	2.82	0.16	0.04	47.24	0.69	0.31	2.80	0.16	0.04

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
47.41	0.53	0.47	2.77	0.16	0.06	47.57	0.42	0.58	2.75	0.16	0.08
47.74	2.00	0.00	2.72	0.16	0.00	47.90	2.00	0.00	2.70	0.16	0.00
48.06	2.00	0.00	2.67	0.16	0.00	48.23	2.00	0.00	2.65	0.16	0.00
48.39	2.00	0.00	2.62	0.16	0.00	48.56	2.00	0.00	2.60	0.16	0.00
48.72	2.00	0.00	2.57	0.16	0.00	48.88	2.00	0.00	2.55	0.16	0.00
49.05	2.00	0.00	2.52	0.16	0.00	49.21	2.00	0.00	2.50	0.16	0.00
49.38	2.00	0.00	2.47	0.16	0.00	49.54	2.00	0.00	2.45	0.16	0.00
49.70	2.00	0.00	2.42	0.16	0.00	49.87	2.00	0.00	2.40	0.16	0.00
50.03	2.00	0.00	2.37	0.16	0.00						

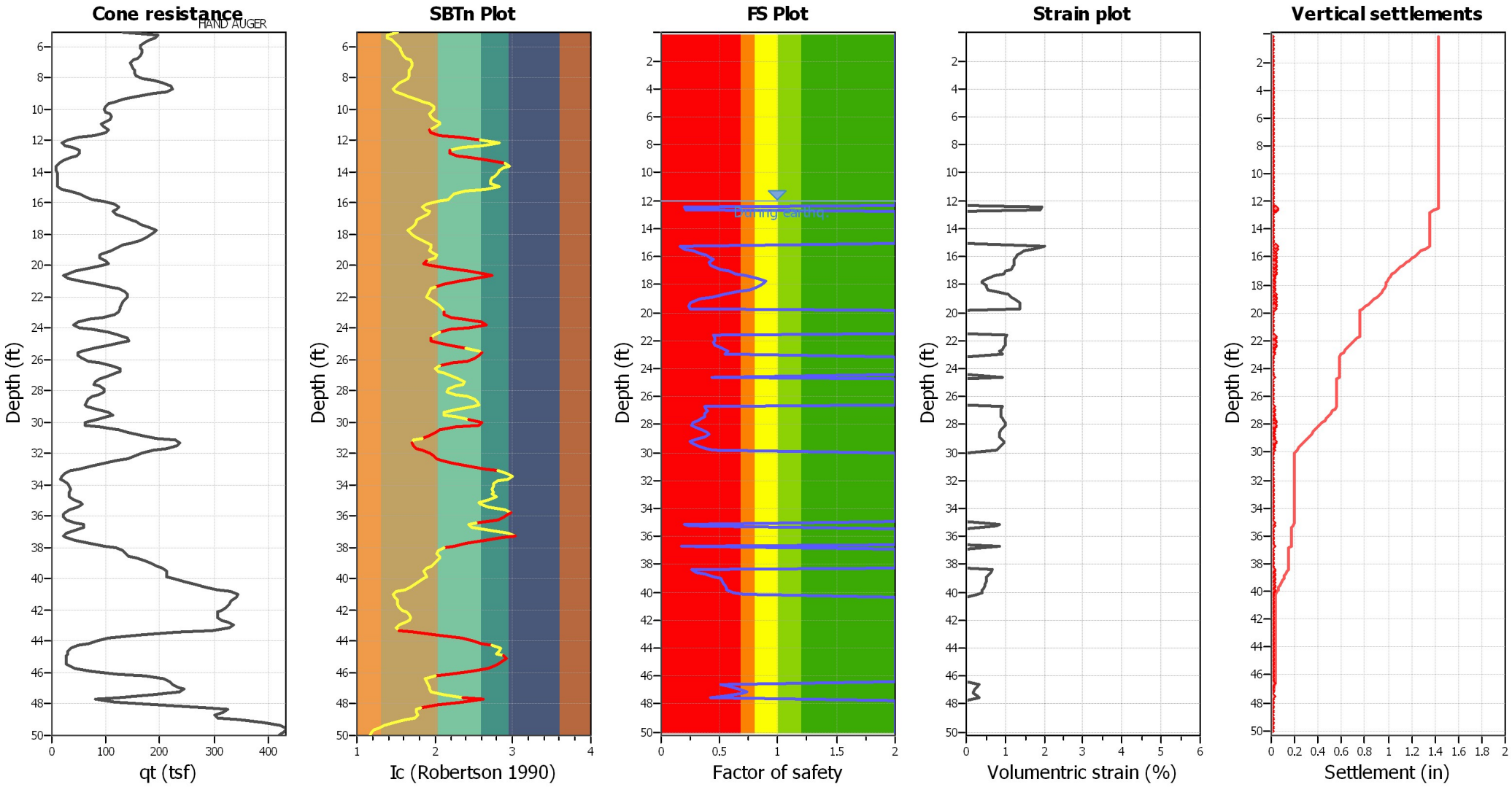
Overall liquefaction potential: 13.40

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)
LPI: Liquefaction potential index value for test point

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
12.14	113.41	2.00	0.00	0.80	0.00	12.30	100.84	2.00	0.00	0.79	0.00
12.47	95.08	0.20	1.93	0.79	0.04	12.63	97.12	0.21	1.89	0.79	0.04
12.80	100.92	2.00	0.00	0.79	0.00	12.96	106.31	2.00	0.00	0.78	0.00
13.12	107.35	2.00	0.00	0.78	0.00	13.29	102.95	2.00	0.00	0.78	0.00
13.45	84.27	2.00	0.00	0.78	0.00	13.62	66.14	2.00	0.00	0.77	0.00
13.78	54.49	2.00	0.00	0.77	0.00	13.94	54.25	2.00	0.00	0.77	0.00
14.11	53.18	2.00	0.00	0.76	0.00	14.27	52.91	2.00	0.00	0.76	0.00
14.44	50.87	2.00	0.00	0.76	0.00	14.60	49.58	2.00	0.00	0.76	0.00
14.76	49.18	2.00	0.00	0.75	0.00	14.93	61.29	2.00	0.00	0.75	0.00
15.09	73.27	2.00	0.00	0.75	0.00	15.26	84.27	0.16	2.01	0.75	0.04
15.42	101.04	0.20	1.72	0.74	0.03	15.58	119.58	0.28	1.49	0.74	0.03
15.75	131.48	0.33	1.38	0.74	0.03	15.91	140.34	0.38	1.30	0.73	0.03
16.08	145.47	0.42	1.26	0.73	0.02	16.24	149.54	0.44	1.23	0.73	0.02
16.40	145.73	0.41	1.25	0.73	0.02	16.57	146.72	0.42	1.24	0.72	0.02
16.73	151.20	0.45	1.20	0.72	0.02	16.90	158.94	0.51	1.15	0.72	0.02
17.06	168.58	0.58	1.02	0.72	0.02	17.22	174.69	0.64	0.96	0.71	0.02
17.39	183.36	0.72	0.74	0.71	0.01	17.55	192.99	0.82	0.55	0.71	0.01
17.72	199.56	0.90	0.40	0.70	0.01	17.88	198.51	0.88	0.40	0.70	0.01
18.04	195.15	0.84	0.54	0.70	0.01	18.21	193.40	0.82	0.54	0.70	0.01
18.37	188.78	0.76	0.56	0.69	0.01	18.54	178.30	0.65	0.75	0.69	0.01
18.70	165.44	0.54	1.06	0.69	0.02	18.86	151.01	0.43	1.14	0.69	0.02
19.03	136.43	0.34	1.24	0.68	0.02	19.19	123.87	0.27	1.33	0.68	0.03
19.36	117.92	0.25	1.38	0.68	0.03	19.52	116.54	0.24	1.39	0.67	0.03
19.69	118.29	0.25	1.37	0.67	0.03	19.85	118.75	2.00	0.00	0.67	0.00
20.01	113.28	2.00	0.00	0.67	0.00	20.18	107.89	2.00	0.00	0.66	0.00
20.34	105.57	2.00	0.00	0.66	0.00	20.51	98.81	2.00	0.00	0.66	0.00
20.67	84.55	2.00	0.00	0.66	0.00	20.83	84.33	2.00	0.00	0.65	0.00
21.00	99.87	2.00	0.00	0.65	0.00	21.16	121.85	2.00	0.00	0.65	0.00
21.33	138.83	2.00	0.00	0.64	0.00	21.49	150.59	2.00	0.00	0.64	0.00
21.65	156.84	0.45	1.03	0.64	0.02	21.82	159.29	0.47	1.02	0.64	0.02
21.98	158.57	0.46	1.01	0.63	0.02	22.15	157.59	0.45	1.02	0.63	0.02
22.31	159.52	0.46	1.00	0.63	0.02	22.47	164.44	0.50	0.97	0.63	0.02
22.64	170.21	0.54	0.94	0.62	0.02	22.80	173.22	0.57	0.85	0.62	0.02
22.97	170.72	0.55	0.93	0.62	0.02	23.13	160.13	2.00	0.00	0.61	0.00
23.29	148.40	2.00	0.00	0.61	0.00	23.46	140.02	2.00	0.00	0.61	0.00
23.62	141.32	2.00	0.00	0.61	0.00	23.79	131.42	2.00	0.00	0.60	0.00
23.95	117.55	2.00	0.00	0.60	0.00	24.11	115.01	2.00	0.00	0.60	0.00
24.28	131.08	2.00	0.00	0.60	0.00	24.44	146.98	2.00	0.00	0.59	0.00
24.61	158.25	0.44	0.95	0.59	0.02	24.77	160.41	2.00	0.00	0.59	0.00
24.93	156.19	2.00	0.00	0.58	0.00	25.10	153.89	2.00	0.00	0.58	0.00
25.26	154.72	2.00	0.00	0.58	0.00	25.43	151.54	2.00	0.00	0.58	0.00
25.59	140.02	2.00	0.00	0.57	0.00	25.75	133.72	2.00	0.00	0.57	0.00
25.92	135.56	2.00	0.00	0.57	0.00	26.08	135.44	2.00	0.00	0.57	0.00
26.25	132.35	2.00	0.00	0.56	0.00	26.41	136.20	2.00	0.00	0.56	0.00
26.57	144.81	2.00	0.00	0.56	0.00	26.74	150.54	0.38	0.93	0.55	0.02
26.90	152.46	0.39	0.91	0.55	0.02	27.07	153.30	0.39	0.90	0.55	0.02
27.23	150.88	0.38	0.91	0.55	0.02	27.40	150.92	0.38	0.91	0.54	0.02
27.56	145.19	0.34	0.93	0.54	0.02	27.72	138.84	0.31	0.96	0.54	0.02

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
27.89	131.05	0.27	1.00	0.54	0.02	28.05	128.45	0.26	1.01	0.53	0.02
28.22	134.95	0.29	0.97	0.53	0.02	28.38	147.19	0.35	0.90	0.53	0.02
28.54	155.23	0.40	0.85	0.52	0.02	28.71	157.13	0.41	0.84	0.52	0.02
28.87	151.87	0.38	0.86	0.52	0.02	29.04	141.57	0.32	0.91	0.52	0.02
29.20	127.92	0.25	0.98	0.51	0.02	29.36	130.78	0.26	0.96	0.51	0.02
29.53	140.95	0.31	0.90	0.51	0.02	29.69	153.71	0.38	0.83	0.51	0.02
29.86	163.55	0.45	0.78	0.50	0.02	30.02	163.38	2.00	0.00	0.50	0.00
30.18	146.96	2.00	0.00	0.50	0.00	30.35	129.76	2.00	0.00	0.49	0.00
30.51	138.53	2.00	0.00	0.49	0.00	30.68	151.40	2.00	0.00	0.49	0.00
30.84	166.38	2.00	0.00	0.49	0.00	31.00	181.24	2.00	0.00	0.48	0.00
31.17	201.60	2.00	0.00	0.48	0.00	31.33	206.45	2.00	0.00	0.48	0.00
31.50	201.94	2.00	0.00	0.48	0.00	31.66	189.49	2.00	0.00	0.47	0.00
31.82	174.69	2.00	0.00	0.47	0.00	31.99	164.78	2.00	0.00	0.47	0.00
32.15	157.62	2.00	0.00	0.46	0.00	32.32	148.44	2.00	0.00	0.46	0.00
32.48	136.72	2.00	0.00	0.46	0.00	32.64	130.08	2.00	0.00	0.46	0.00
32.81	131.30	2.00	0.00	0.45	0.00	32.97	130.91	2.00	0.00	0.45	0.00
33.14	118.60	2.00	0.00	0.45	0.00	33.30	97.56	2.00	0.00	0.44	0.00
33.46	76.74	2.00	0.00	0.44	0.00	33.63	66.00	2.00	0.00	0.44	0.00
33.79	72.97	2.00	0.00	0.44	0.00	33.96	84.43	2.00	0.00	0.43	0.00
34.12	95.49	2.00	0.00	0.43	0.00	34.28	98.56	2.00	0.00	0.43	0.00
34.45	98.07	2.00	0.00	0.43	0.00	34.61	96.69	2.00	0.00	0.42	0.00
34.78	98.74	2.00	0.00	0.42	0.00	34.94	107.42	2.00	0.00	0.42	0.00
35.10	116.91	0.20	0.85	0.41	0.02	35.27	126.30	0.24	0.80	0.41	0.02
35.43	124.86	2.00	0.00	0.41	0.00	35.60	114.95	2.00	0.00	0.41	0.00
35.76	98.23	2.00	0.00	0.40	0.00	35.93	85.10	2.00	0.00	0.40	0.00
36.09	78.93	2.00	0.00	0.40	0.00	36.25	80.54	2.00	0.00	0.40	0.00
36.42	87.02	2.00	0.00	0.39	0.00	36.58	101.65	2.00	0.00	0.39	0.00
36.75	108.35	0.17	0.85	0.39	0.02	36.91	111.40	2.00	0.00	0.38	0.00
37.07	98.18	2.00	0.00	0.38	0.00	37.24	88.27	2.00	0.00	0.38	0.00
37.40	87.76	2.00	0.00	0.38	0.00	37.57	99.55	2.00	0.00	0.37	0.00
37.73	111.87	2.00	0.00	0.37	0.00	37.89	121.99	2.00	0.00	0.37	0.00
38.06	127.49	2.00	0.00	0.37	0.00	38.22	129.94	2.00	0.00	0.36	0.00
38.39	133.44	0.26	0.66	0.36	0.01	38.55	142.03	0.30	0.63	0.36	0.01
38.71	154.33	0.37	0.58	0.35	0.01	38.88	167.48	0.45	0.54	0.35	0.01
39.04	175.24	0.51	0.52	0.35	0.01	39.21	177.60	0.52	0.51	0.35	0.01
39.37	179.54	0.54	0.50	0.34	0.01	39.53	180.80	0.55	0.49	0.34	0.01
39.70	181.80	0.56	0.43	0.34	0.01	39.86	182.55	0.56	0.43	0.34	0.01
40.03	188.67	0.62	0.40	0.33	0.01	40.19	198.86	0.71	0.31	0.33	0.01
40.35	209.98	2.00	0.00	0.33	0.00	40.52	219.51	2.00	0.00	0.32	0.00
40.68	231.94	2.00	0.00	0.32	0.00	40.85	249.85	2.00	0.00	0.32	0.00
41.01	260.23	2.00	0.00	0.32	0.00	41.17	257.86	2.00	0.00	0.31	0.00
41.34	252.00	2.00	0.00	0.31	0.00	41.50	248.50	2.00	0.00	0.31	0.00
41.67	246.85	2.00	0.00	0.31	0.00	41.83	241.98	2.00	0.00	0.30	0.00
41.99	235.61	2.00	0.00	0.30	0.00	42.16	229.94	2.00	0.00	0.30	0.00
42.32	231.25	2.00	0.00	0.29	0.00	42.49	234.09	2.00	0.00	0.29	0.00
42.65	236.59	2.00	0.00	0.29	0.00	42.81	241.95	2.00	0.00	0.29	0.00
42.98	248.40	2.00	0.00	0.28	0.00	43.14	242.02	2.00	0.00	0.28	0.00
43.31	218.66	2.00	0.00	0.28	0.00	43.47	176.95	2.00	0.00	0.28	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$Q_{tn,cs}$	FS	e_v (%)	DF	Settlement (in)
43.64	146.26	2.00	0.00	0.27	0.00	43.80	139.03	2.00	0.00	0.27	0.00
43.96	140.65	2.00	0.00	0.27	0.00	44.13	133.78	2.00	0.00	0.26	0.00
44.29	120.06	2.00	0.00	0.26	0.00	44.46	95.52	2.00	0.00	0.26	0.00
44.62	79.21	2.00	0.00	0.26	0.00	44.78	71.46	2.00	0.00	0.25	0.00
44.95	76.85	2.00	0.00	0.25	0.00	45.11	78.04	2.00	0.00	0.25	0.00
45.28	76.65	2.00	0.00	0.25	0.00	45.44	71.98	2.00	0.00	0.24	0.00
45.60	76.31	2.00	0.00	0.24	0.00	45.77	92.94	2.00	0.00	0.24	0.00
45.93	112.84	2.00	0.00	0.23	0.00	46.10	129.22	2.00	0.00	0.23	0.00
46.26	149.43	2.00	0.00	0.23	0.00	46.42	165.17	2.00	0.00	0.23	0.00
46.59	173.79	0.50	0.33	0.22	0.01	46.75	181.54	0.57	0.28	0.22	0.01
46.92	191.52	0.65	0.21	0.22	0.00	47.08	199.74	0.73	0.20	0.22	0.00
47.24	195.62	0.69	0.20	0.21	0.00	47.41	177.26	0.53	0.31	0.21	0.01
47.57	160.72	0.42	0.33	0.21	0.01	47.74	156.71	2.00	0.00	0.20	0.00
47.90	148.61	2.00	0.00	0.20	0.00	48.06	174.15	2.00	0.00	0.20	0.00
48.23	220.17	2.00	0.00	0.20	0.00	48.39	241.49	2.00	0.00	0.19	0.00
48.56	234.58	2.00	0.00	0.19	0.00	48.72	223.27	2.00	0.00	0.19	0.00
48.88	224.31	2.00	0.00	0.19	0.00	49.05	240.41	2.00	0.00	0.18	0.00
49.21	273.28	2.00	0.00	0.18	0.00	49.38	295.78	2.00	0.00	0.18	0.00
49.54	302.57	2.00	0.00	0.17	0.00	49.70	301.73	2.00	0.00	0.17	0.00
49.87	297.98	2.00	0.00	0.17	0.00	50.03	291.96	2.00	0.00	0.17	0.00

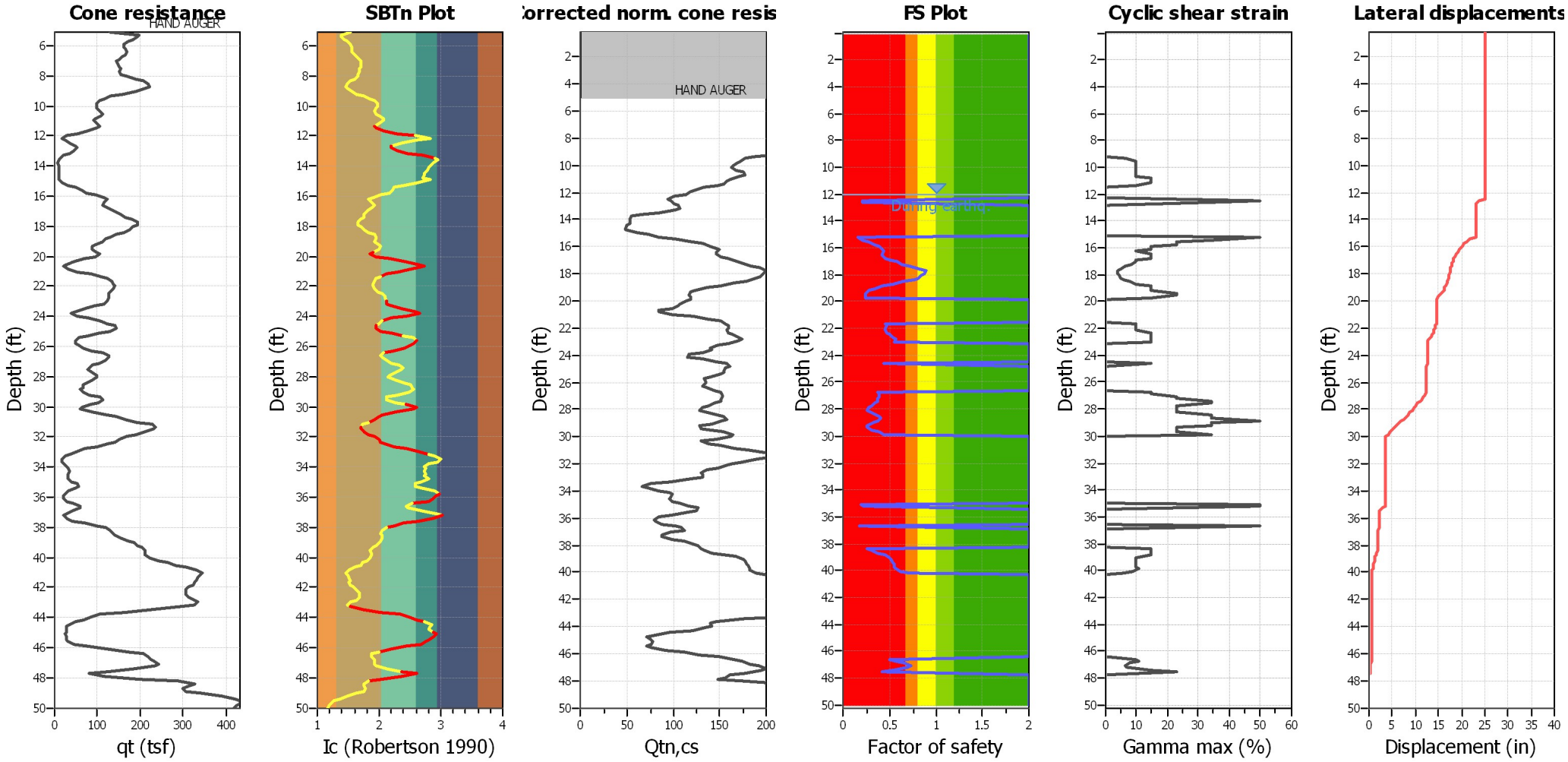
Total estimated settlement: 1.43

Abbreviations

$Q_{tn,cs}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

Estimation of post-earthquake lateral Displacements

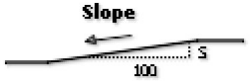
Geometric parameters: Gently sloping ground without free face (Slope 1.30 %)



Abbreviations

q_t: Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c: Soil Behaviour Type Index
$Q_{tn,cs}$: Equivalent clean sand normalized CPT total cone resistance
F.S.: Factor of safety
γ_{max}: Maximum cyclic shear strain
LDI: Lateral displacement index

Surface condition



:: Lateral displacement index calculation ::

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
12.14	17.61	22.31	4.37	113.41	2.00	17.49	0.00	0.00
12.30	24.11	29.83	2.80	100.84	2.00	27.07	0.00	0.00
12.47	36.51	43.98	1.85	95.08	0.20	39.89	50.00	1.17
12.63	50.03	59.03	1.44	97.12	0.21	49.60	34.10	0.79
12.80	52.44	61.61	1.50	100.92	2.00	51.01	0.00	0.00
12.96	46.70	55.22	1.90	106.31	2.00	47.40	0.00	0.00
13.12	35.10	41.90	2.45	107.35	2.00	38.29	0.00	0.00
13.29	21.59	25.99	3.21	102.95	2.00	22.52	0.00	0.00
13.45	12.51	14.90	3.26	84.27	2.00	4.16	0.00	0.00
13.62	9.17	10.65	2.48	66.14	2.00	0.00	0.00	0.00
13.78	8.69	9.91	1.62	54.49	2.00	0.00	0.00	0.00
13.94	9.38	10.67	1.51	54.25	2.00	0.00	0.00	0.00
14.11	9.81	11.12	1.39	53.18	2.00	0.00	0.00	0.00
14.27	10.29	11.62	1.32	52.91	2.00	0.00	0.00	0.00
14.44	10.53	11.82	1.18	50.87	2.00	0.00	0.00	0.00
14.60	10.68	11.92	1.09	49.58	2.00	0.00	0.00	0.00
14.76	10.87	12.09	1.06	49.18	2.00	0.00	0.00	0.00
14.93	11.04	12.37	1.82	61.29	2.00	0.00	0.00	0.00
15.09	18.20	20.62	1.88	73.27	2.00	14.88	0.00	0.00
15.26	32.20	36.29	1.68	84.27	0.16	33.54	50.00	1.10
15.42	50.21	56.10	1.67	101.04	0.20	47.92	34.10	0.75
15.58	62.53	69.61	1.92	119.58	0.28	55.04	22.70	0.50
15.75	75.06	82.96	1.93	131.48	0.33	60.84	22.70	0.49
15.91	95.42	104.07	1.59	140.34	0.38	68.32	14.50	0.31
16.08	114.43	122.98	1.18	145.47	0.42	73.83	14.50	0.31
16.24	123.22	131.43	1.06	149.54	0.44	76.02	10.00	0.22
16.40	117.78	125.44	1.12	145.73	0.41	74.48	14.50	0.31
16.57	113.48	120.92	1.29	146.72	0.42	73.27	14.50	0.31
16.73	119.12	126.35	1.28	151.20	0.45	74.72	14.50	0.31
16.90	133.76	140.66	1.11	158.94	0.51	78.26	10.00	0.21
17.06	148.89	155.43	1.00	168.58	0.58	81.56	9.87	0.21
17.22	154.97	161.26	1.03	174.69	0.64	82.77	8.22	0.17
17.39	164.59	170.62	1.05	183.36	0.72	84.64	6.37	0.13
17.55	179.64	185.12	0.97	192.99	0.82	87.33	4.64	0.10
17.72	193.58	198.26	0.88	199.56	0.90	89.59	3.96	0.08
17.88	192.10	196.23	0.89	198.51	0.88	89.25	4.09	0.08
18.04	183.74	187.55	0.98	195.15	0.84	87.76	4.47	0.09
18.21	175.99	179.58	1.11	193.40	0.82	86.32	4.70	0.10
18.37	163.30	166.71	1.32	188.78	0.76	83.87	5.66	0.12
18.54	144.49	147.54	1.54	178.30	0.65	79.84	7.78	0.16
18.70	131.32	133.70	1.54	165.44	0.54	76.59	10.00	0.20
18.86	120.43	122.07	1.40	151.01	0.43	73.58	14.50	0.29
19.03	111.55	112.48	1.19	136.43	0.34	70.88	14.50	0.29
19.19	95.38	95.98	1.26	123.87	0.27	65.65	14.50	0.29
19.36	87.96	88.25	1.29	117.92	0.25	62.88	22.70	0.45
19.52	89.50	89.42	1.20	116.54	0.24	63.31	22.70	0.45
19.69	100.32	99.63	0.94	118.29	0.25	66.88	14.50	0.29
19.85	104.50	103.35	0.84	118.75	2.00	68.09	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
20.01	93.30	92.15	1.00	113.28	2.00	64.30	0.00	0.00
20.18	69.28	68.39	1.53	107.89	2.00	54.46	0.00	0.00
20.34	44.36	43.56	2.29	105.57	2.00	39.57	0.00	0.00
20.51	28.55	27.65	2.81	98.81	2.00	24.57	0.00	0.00
20.67	20.77	19.75	2.61	84.55	2.00	13.46	0.00	0.00
20.83	30.42	29.21	1.97	84.33	2.00	26.38	0.00	0.00
21.00	52.68	51.03	1.78	99.87	2.00	44.79	0.00	0.00
21.16	83.76	81.22	1.64	121.85	2.00	60.13	0.00	0.00
21.33	108.77	105.23	1.50	138.83	2.00	68.68	0.00	0.00
21.49	124.83	120.42	1.44	150.59	2.00	73.13	0.00	0.00
21.65	134.54	129.37	1.38	156.84	0.45	75.50	10.00	0.19
21.82	138.67	132.91	1.35	159.29	0.47	76.39	10.00	0.19
21.98	139.64	133.41	1.31	158.57	0.46	76.51	10.00	0.19
22.15	136.53	130.04	1.38	157.59	0.45	75.67	10.00	0.19
22.31	131.91	125.25	1.59	159.52	0.46	74.43	14.50	0.27
22.47	128.23	121.36	1.87	164.44	0.50	73.39	14.50	0.27
22.64	125.88	118.72	2.13	170.21	0.54	72.66	14.50	0.27
22.80	125.39	117.83	2.25	173.22	0.57	72.42	14.50	0.27
22.97	122.85	115.00	2.26	170.72	0.55	71.61	14.50	0.26
23.13	115.65	107.80	2.13	160.13	2.00	69.48	0.00	0.00
23.29	95.39	88.35	2.33	148.40	2.00	62.91	0.00	0.00
23.46	70.18	64.36	2.85	140.02	2.00	52.46	0.00	0.00
23.62	47.61	43.00	3.96	141.32	2.00	39.14	0.00	0.00
23.79	39.19	34.99	4.05	131.42	2.00	32.34	0.00	0.00
23.95	52.38	47.13	2.64	117.55	2.00	42.17	0.00	0.00
24.11	76.49	69.37	1.76	115.01	2.00	54.93	0.00	0.00
24.28	104.08	94.73	1.55	131.08	2.00	65.21	0.00	0.00
24.44	124.62	113.44	1.52	146.98	2.00	71.16	0.00	0.00
24.61	139.43	126.76	1.50	158.25	0.44	74.83	14.50	0.25
24.77	142.84	129.52	1.49	160.41	2.00	75.54	0.00	0.00
24.93	129.93	117.15	1.72	156.19	2.00	72.22	0.00	0.00
25.10	104.50	93.29	2.36	153.89	2.00	64.71	0.00	0.00
25.26	76.87	67.69	3.27	154.72	2.00	54.12	0.00	0.00
25.43	55.84	48.38	4.10	151.54	2.00	43.04	0.00	0.00
25.59	48.60	41.72	3.98	140.02	2.00	38.14	0.00	0.00
25.75	49.73	42.59	3.61	133.72	2.00	38.83	0.00	0.00
25.92	55.50	47.58	3.41	135.56	2.00	42.48	0.00	0.00
26.08	66.27	57.06	2.96	135.44	2.00	48.48	0.00	0.00
26.25	87.98	76.43	2.15	132.35	2.00	58.13	0.00	0.00
26.41	111.36	97.35	1.64	136.20	2.00	66.11	0.00	0.00
26.57	125.41	109.69	1.56	144.81	2.00	70.05	0.00	0.00
26.74	126.98	110.61	1.73	150.54	0.38	70.33	14.50	0.24
26.90	119.19	103.12	2.02	152.46	0.39	68.02	14.50	0.24
27.07	106.18	91.04	2.41	153.30	0.39	63.90	22.70	0.37
27.23	89.77	76.13	2.81	150.88	0.38	58.00	22.70	0.37
27.40	79.96	67.19	3.15	150.92	0.38	53.87	34.10	0.55
27.56	79.18	66.33	2.96	145.19	0.34	53.45	34.10	0.54
27.72	89.55	75.33	2.41	138.84	0.31	57.65	22.70	0.36

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
27.89	97.72	82.49	1.92	131.05	0.27	60.65	22.70	0.36
28.05	97.36	81.96	1.84	128.45	0.26	60.43	22.70	0.36
28.22	87.07	72.45	2.37	134.95	0.29	56.36	22.70	0.36
28.38	74.54	61.08	3.25	147.19	0.35	50.73	34.10	0.53
28.54	68.26	55.34	3.86	155.23	0.40	47.47	34.10	0.53
28.71	65.79	52.98	4.07	157.13	0.41	46.04	34.10	0.53
28.87	60.65	48.46	4.10	151.87	0.38	43.09	50.00	0.77
29.04	65.41	52.45	3.42	141.57	0.32	45.70	34.10	0.52
29.20	82.54	67.20	2.29	127.92	0.25	53.88	34.10	0.52
29.36	105.53	86.98	1.77	130.78	0.26	62.40	22.70	0.34
29.53	113.96	93.77	1.91	140.95	0.31	64.88	22.70	0.34
29.69	103.08	83.61	2.66	153.71	0.38	61.09	22.70	0.34
29.86	83.66	66.54	3.66	163.55	0.45	53.55	34.10	0.51
30.02	62.87	48.85	4.63	163.38	2.00	43.35	0.00	0.00
30.18	61.37	47.62	3.92	146.96	2.00	42.51	0.00	0.00
30.35	88.91	71.01	2.23	129.76	2.00	55.70	0.00	0.00
30.51	123.73	100.72	1.62	138.53	2.00	67.24	0.00	0.00
30.68	142.80	116.66	1.57	151.40	2.00	72.09	0.00	0.00
30.84	165.59	135.83	1.50	166.38	2.00	77.11	0.00	0.00
31.00	193.58	159.98	1.27	181.24	2.00	82.51	0.00	0.00
31.17	229.64	191.39	1.06	201.60	2.00	88.43	0.00	0.00
31.33	237.45	197.75	1.04	206.45	2.00	89.50	0.00	0.00
31.50	231.53	192.17	1.05	201.94	2.00	88.56	0.00	0.00
31.66	212.26	174.90	1.12	189.49	2.00	85.45	0.00	0.00
31.82	188.75	154.03	1.23	174.69	2.00	81.26	0.00	0.00
31.99	167.45	134.94	1.47	164.78	2.00	76.89	0.00	0.00
32.15	152.96	122.12	1.62	157.62	2.00	73.60	0.00	0.00
32.32	139.29	110.34	1.66	148.44	2.00	70.25	0.00	0.00
32.48	121.47	95.25	1.72	136.72	2.00	65.39	0.00	0.00
32.64	96.83	74.35	2.13	130.08	2.00	57.22	0.00	0.00
32.81	71.68	53.39	2.94	131.30	2.00	46.29	0.00	0.00
32.97	51.22	36.83	3.85	130.91	2.00	34.03	0.00	0.00
33.14	35.50	24.54	4.34	118.60	2.00	20.63	0.00	0.00
33.30	25.23	16.76	3.96	97.56	2.00	8.05	0.00	0.00
33.46	17.87	11.35	3.23	76.74	2.00	0.00	0.00	0.00
33.63	17.06	10.74	2.36	66.00	2.00	0.00	0.00	0.00
33.79	22.53	14.81	2.31	72.97	2.00	3.97	0.00	0.00
33.96	28.96	19.56	2.59	84.43	2.00	13.15	0.00	0.00
34.12	31.72	21.46	3.12	95.49	2.00	16.21	0.00	0.00
34.28	34.28	23.31	3.13	98.56	2.00	18.93	0.00	0.00
34.45	32.88	22.16	3.22	98.07	2.00	17.27	0.00	0.00
34.61	33.33	22.44	3.10	96.69	2.00	17.68	0.00	0.00
34.78	31.27	20.76	3.42	98.74	2.00	15.11	0.00	0.00
34.94	40.04	27.24	3.31	107.42	2.00	24.08	0.00	0.00
35.10	52.91	36.88	3.12	116.91	0.20	34.08	50.00	0.61
35.27	57.07	39.78	3.41	126.30	0.24	36.57	50.00	0.61
35.43	47.82	32.57	3.86	124.86	2.00	29.97	0.00	0.00
35.60	31.59	20.38	4.72	114.95	2.00	14.50	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
35.76	24.61	15.37	4.31	98.23	2.00	5.19	0.00	0.00
35.93	22.65	14.00	3.41	85.10	2.00	2.11	0.00	0.00
36.09	22.81	14.16	2.85	78.93	2.00	2.48	0.00	0.00
36.25	26.52	16.83	2.61	80.54	2.00	8.19	0.00	0.00
36.42	43.84	29.74	2.05	87.02	2.00	26.98	0.00	0.00
36.58	59.99	41.70	2.18	101.65	2.00	38.13	0.00	0.00
36.75	59.79	41.21	2.49	108.35	0.17	37.74	50.00	0.57
36.91	42.82	28.14	3.46	111.40	2.00	25.15	0.00	0.00
37.07	26.46	16.21	4.12	98.18	2.00	6.95	0.00	0.00
37.24	20.96	12.46	4.09	88.27	2.00	0.00	0.00	0.00
37.40	26.42	16.22	3.23	87.76	2.00	6.96	0.00	0.00
37.57	42.49	27.78	2.81	99.55	2.00	24.73	0.00	0.00
37.73	70.54	48.61	2.33	111.87	2.00	43.19	0.00	0.00
37.89	97.16	68.87	2.01	121.99	2.00	54.69	0.00	0.00
38.06	119.45	86.36	1.67	127.49	2.00	62.16	0.00	0.00
38.22	131.51	96.01	1.46	129.94	2.00	65.66	0.00	0.00
38.39	136.64	99.74	1.47	133.44	0.26	66.91	14.50	0.15
38.55	141.93	103.02	1.67	142.03	0.30	67.98	14.50	0.15
38.71	154.68	112.19	1.80	154.33	0.37	70.80	14.50	0.15
38.88	172.29	125.34	1.84	167.48	0.45	74.45	14.50	0.15
39.04	185.37	135.26	1.80	175.24	0.51	76.97	10.00	0.10
39.21	195.16	143.12	1.65	177.60	0.52	78.83	10.00	0.10
39.37	204.59	150.91	1.48	179.54	0.54	80.58	10.00	0.10
39.53	212.01	157.15	1.34	180.80	0.55	81.92	10.00	0.10
39.70	211.72	156.23	1.40	181.80	0.56	81.73	10.00	0.10
39.86	211.31	155.26	1.45	182.55	0.56	81.52	10.60	0.11
40.03	222.11	163.59	1.40	188.67	0.62	83.25	8.84	0.09
40.19	242.60	180.30	1.25	198.86	0.71	86.46	6.06	0.06
40.35	263.75	197.58	1.14	209.98	2.00	89.48	0.00	0.00
40.52	281.60	212.05	1.07	219.51	2.00	91.81	0.00	0.00
40.68	305.59	231.94	0.89	231.94	2.00	94.77	0.00	0.00
40.85	329.57	249.85	0.69	249.85	2.00	97.22	0.00	0.00
41.01	343.75	260.23	0.60	260.23	2.00	98.57	0.00	0.00
41.17	341.23	257.86	0.65	257.86	2.00	98.26	0.00	0.00
41.34	334.12	252.00	0.72	252.00	2.00	97.51	0.00	0.00
41.50	330.09	248.50	0.73	248.50	2.00	97.04	0.00	0.00
41.67	328.49	246.85	0.70	246.85	2.00	96.83	0.00	0.00
41.83	322.60	241.98	0.72	241.98	2.00	96.17	0.00	0.00
41.99	314.72	235.61	0.82	235.61	2.00	95.29	0.00	0.00
42.16	307.74	229.94	0.97	229.94	2.00	94.48	0.00	0.00
42.32	305.77	226.70	1.06	231.25	2.00	94.01	0.00	0.00
42.49	307.39	226.80	1.12	234.09	2.00	94.03	0.00	0.00
42.65	313.73	231.76	1.08	236.59	2.00	94.74	0.00	0.00
42.81	325.96	241.95	0.97	241.95	2.00	96.16	0.00	0.00
42.98	335.14	248.40	0.77	248.40	2.00	97.03	0.00	0.00
43.14	327.14	242.02	0.64	242.02	2.00	96.17	0.00	0.00
43.31	296.31	218.66	0.65	218.66	2.00	92.82	0.00	0.00
43.47	229.98	165.82	0.98	176.95	2.00	83.69	0.00	0.00

:: Estimation of post-earthquake lateral Displacements :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	R_f (%)	$Q_{tn,cs}$	FS	D_r	$Gamma_{max}$ (%)	Lat. disp. (in)
43.64	160.49	109.00	1.63	146.26	2.00	69.84	0.00	0.00
43.80	104.95	66.53	2.71	139.03	2.00	53.55	0.00	0.00
43.96	84.36	51.52	3.41	140.65	2.00	45.11	0.00	0.00
44.13	67.80	40.13	3.75	133.78	2.00	36.87	0.00	0.00
44.29	49.42	27.98	4.00	120.06	2.00	24.96	0.00	0.00
44.46	34.15	18.39	3.49	95.52	2.00	11.11	0.00	0.00
44.62	29.57	15.72	2.64	79.21	2.00	5.93	0.00	0.00
44.78	28.42	15.10	2.16	71.46	2.00	4.61	0.00	0.00
44.95	27.08	14.05	2.69	76.85	2.00	2.22	0.00	0.00
45.11	25.91	13.23	2.93	78.04	2.00	0.23	0.00	0.00
45.28	27.36	14.15	2.66	76.65	2.00	2.46	0.00	0.00
45.44	28.10	14.70	2.24	71.98	2.00	3.71	0.00	0.00
45.60	31.93	17.05	2.29	76.31	2.00	8.61	0.00	0.00
45.77	44.03	24.51	2.67	92.94	2.00	20.58	0.00	0.00
45.93	74.70	44.54	2.53	112.84	2.00	40.31	0.00	0.00
46.10	124.66	79.46	1.94	129.22	2.00	59.41	0.00	0.00
46.26	172.27	114.28	1.58	149.43	2.00	71.40	0.00	0.00
46.42	206.79	140.71	1.31	165.17	2.00	78.27	0.00	0.00
46.59	217.66	147.89	1.38	173.79	0.50	79.91	10.00	0.07
46.75	223.58	150.70	1.55	181.54	0.57	80.54	10.52	0.07
46.92	233.40	156.49	1.70	191.52	0.65	81.78	7.82	0.05
47.08	244.40	163.76	1.75	199.74	0.73	83.28	6.17	0.04
47.24	235.42	156.42	1.83	195.62	0.69	81.77	6.92	0.04
47.41	186.03	118.89	2.34	177.26	0.53	72.71	14.50	0.09
47.57	123.54	74.25	3.22	160.72	0.42	57.17	22.70	0.14
47.74	81.27	45.55	4.51	156.71	2.00	41.05	0.00	0.00
47.90	115.36	68.90	2.98	148.61	2.00	54.70	0.00	0.00
48.06	200.31	129.44	1.93	174.15	2.00	75.52	0.00	0.00
48.23	288.43	195.28	1.49	220.17	2.00	89.09	0.00	0.00
48.39	326.39	224.19	1.35	241.49	2.00	93.65	0.00	0.00
48.56	317.49	217.57	1.33	234.58	2.00	92.66	0.00	0.00
48.72	300.03	204.13	1.34	223.27	2.00	90.55	0.00	0.00
48.88	306.24	209.59	1.24	224.31	2.00	91.42	0.00	0.00
49.05	343.17	240.41	0.99	240.41	2.00	95.95	0.00	0.00
49.21	390.27	273.28	0.69	273.28	2.00	100.00	0.00	0.00
49.38	422.77	295.78	0.50	295.78	2.00	100.00	0.00	0.00
49.54	433.03	302.57	0.38	302.57	2.00	100.00	0.00	0.00
49.70	432.44	301.73	0.31	301.73	2.00	100.00	0.00	0.00
49.87	427.70	297.98	0.27	297.98	2.00	100.00	0.00	0.00
50.03	419.69	291.96	0.24	291.96	2.00	100.00	0.00	0.00

Total estimated displacement: 24.94

Abbreviations

q_t: Total cone resistance
Q_{tn}: Adjusted cone resistance to an effective overburden stress of 1 atm
R_f: Friction ration
$Q_{tn,cs}$: Adjusted and corrected cone resistance due to fines
FS: Calculated factor of safety against liquefaction
D_r: Calculated relative density
$Gamma_{max}$: Calculated maximum cyclic shear strain
Lat. disp.: Lateral displacement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.16	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.33	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.49	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.66	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.82	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
0.98	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.15	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.31	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.48	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.64	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.80	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
1.97	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.13	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.30	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.46	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.62	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.79	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
2.95	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.12	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.28	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.44	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.61	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.77	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
3.94	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.10	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.27	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.43	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.59	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.76	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
4.92	0.00	-1.00	1.00	-1.00	-1.00	N/A	N/A
5.09	130.77	209.60	1.00	209.60	1.53	0.94	0.94
5.25	196.29	314.85	1.00	314.85	1.40	1.00	1.00
5.41	192.07	308.05	1.00	308.05	1.40	1.00	1.00
5.58	184.13	295.29	1.00	295.29	1.44	0.99	0.99
5.74	170.86	273.95	1.00	273.95	1.49	0.98	0.98
5.91	163.17	261.58	1.00	261.58	1.53	0.97	0.97
6.07	162.75	260.01	1.00	260.01	1.55	0.97	0.97
6.23	166.67	262.64	1.00	262.64	1.56	0.97	0.97
6.40	167.51	260.43	1.00	260.43	1.57	0.97	0.97
6.56	164.17	251.90	1.00	251.90	1.60	0.97	0.97
6.73	158.78	240.50	1.00	240.50	1.64	0.96	0.96
6.89	151.28	229.60	1.02	235.20	1.68	0.95	0.95
7.05	145.08	219.99	1.05	230.50	1.71	0.94	0.94
7.22	146.75	219.72	1.05	230.17	1.71	0.94	0.94
7.38	151.79	222.95	1.03	230.69	1.70	0.95	0.95
7.55	153.65	221.80	1.02	226.85	1.68	0.95	0.95
7.71	152.03	216.64	1.02	220.86	1.67	0.94	0.94
7.87	156.23	219.69	1.01	222.86	1.67	0.94	0.94

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.04	169.60	234.82	1.00	235.27	1.65	0.95	0.95
8.20	188.77	258.03	1.00	258.03	1.61	0.97	0.97
8.37	207.72	281.08	1.00	281.08	1.54	0.98	0.98
8.53	219.89	294.58	1.00	294.58	1.50	0.99	0.99
8.69	222.07	294.60	1.00	294.60	1.47	0.99	0.99
8.86	211.89	278.35	1.00	278.35	1.50	0.98	0.98
9.02	188.46	245.16	1.00	245.16	1.55	0.96	0.96
9.19	158.51	204.44	1.00	204.37	1.64	0.93	0.93
9.35	131.94	173.18	1.08	187.13	1.76	0.91	0.91
9.51	115.25	153.21	1.16	177.43	1.87	0.89	0.89
9.68	105.47	140.94	1.23	173.02	1.94	0.88	0.88
9.84	99.24	132.29	1.27	168.44	1.98	0.87	0.87
10.01	97.30	128.34	1.27	163.54	1.98	0.86	0.86
10.17	100.29	130.29	1.25	162.27	1.95	0.87	0.87
10.33	107.20	137.40	1.22	168.23	1.94	0.87	0.87
10.50	111.53	141.94	1.24	175.94	1.95	0.88	0.88
10.66	107.51	136.59	1.30	176.95	2.00	0.87	0.87
10.83	96.21	122.38	1.39	170.62	2.06	0.86	0.86
10.99	91.67	115.46	1.40	161.70	2.07	0.85	0.85
11.15	97.53	120.45	1.31	157.79	2.01	0.85	0.85
11.32	104.82	126.80	1.22	154.95	1.93	0.86	0.86
11.48	99.15	119.10	1.24	147.48	1.95	0.85	0.85
11.65	78.19	94.60	1.40	132.68	2.07	0.82	0.82
11.81	51.60	63.56	1.94	123.11	2.30	0.77	0.77
11.98	29.53	37.03	3.19	118.22	2.58	0.70	0.70
12.14	17.61	22.31	5.08	113.41	2.83	1.51	1.51
12.30	24.11	29.83	3.38	100.84	2.61	2.08	2.08
12.47	36.51	43.98	2.16	95.08	2.36	0.72	0.72
12.63	50.03	59.03	1.65	97.12	2.19	0.76	0.76
12.80	52.44	61.61	1.64	100.92	2.19	0.76	0.76
12.96	46.70	55.22	1.93	106.31	2.29	0.75	0.75
13.12	35.10	41.90	2.56	107.35	2.46	0.71	0.71
13.29	21.59	25.99	3.96	102.95	2.70	1.79	1.79
13.45	12.51	14.90	5.66	84.27	2.90	1.00	1.00
13.62	9.17	10.65	6.21	66.14	2.95	0.15	0.71
13.78	8.69	9.91	5.50	54.49	2.88	0.19	0.67
13.94	9.38	10.67	5.08	54.25	2.83	0.20	0.72
14.11	9.81	11.12	4.78	53.18	2.80	0.15	0.75
14.27	10.29	11.62	4.55	52.91	2.77	0.17	0.79
14.44	10.53	11.82	4.30	50.87	2.74	0.19	0.81
14.60	10.68	11.92	4.16	49.58	2.72	0.11	0.81
14.76	10.87	12.09	4.07	49.18	2.71	0.14	0.83
14.93	11.04	12.37	4.95	61.29	2.82	0.18	0.84
15.09	18.20	20.62	3.55	73.27	2.64	1.42	1.42
15.26	32.20	36.29	2.32	84.27	2.40	0.69	0.69
15.42	50.21	56.10	1.80	101.04	2.25	0.75	0.75
15.58	62.53	69.61	1.72	119.58	2.22	0.78	0.78
15.75	75.06	82.96	1.58	131.48	2.16	0.80	0.80

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.91	95.42	104.07	1.35	140.34	2.04	0.83	0.83
16.08	114.43	122.98	1.18	145.47	1.89	0.86	0.86
16.24	123.22	131.43	1.14	149.54	1.84	0.87	0.87
16.40	117.78	125.44	1.16	145.73	1.87	0.86	0.86
16.57	113.48	120.92	1.21	146.72	1.93	0.85	0.85
16.73	119.12	126.35	1.20	151.20	1.91	0.86	0.86
16.90	133.76	140.66	1.13	158.94	1.83	0.88	0.88
17.06	148.89	155.43	1.08	168.58	1.77	0.89	0.89
17.22	154.97	161.26	1.08	174.69	1.77	0.90	0.90
17.39	164.59	170.62	1.07	183.36	1.75	0.91	0.91
17.55	179.64	185.12	1.04	192.99	1.71	0.92	0.92
17.72	193.58	198.26	1.01	199.56	1.65	0.93	0.93
17.88	192.10	196.23	1.01	198.51	1.66	0.93	0.93
18.04	183.74	187.55	1.04	195.15	1.70	0.92	0.92
18.21	175.99	179.58	1.08	193.40	1.76	0.91	0.91
18.37	163.30	166.71	1.13	188.78	1.83	0.90	0.90
18.54	144.49	147.54	1.21	178.30	1.92	0.88	0.88
18.70	131.32	133.70	1.24	165.44	1.95	0.87	0.87
18.86	120.43	122.07	1.24	151.01	1.95	0.86	0.86
19.03	111.55	112.48	1.21	136.43	1.92	0.84	0.84
19.19	95.38	95.98	1.29	123.87	1.99	0.82	0.82
19.36	87.96	88.25	1.34	117.92	2.03	0.81	0.81
19.52	89.50	89.42	1.30	116.54	2.00	0.81	0.81
19.69	100.32	99.63	1.19	118.29	1.90	0.83	0.83
19.85	104.50	103.35	1.15	118.75	1.85	0.83	0.83
20.01	93.30	92.15	1.23	113.28	1.94	0.82	0.82
20.18	69.28	68.39	1.58	107.89	2.16	0.78	0.78
20.34	44.36	43.56	2.42	105.57	2.43	0.72	0.72
20.51	28.55	27.65	3.57	98.81	2.64	1.86	1.86
20.67	20.77	19.75	4.28	84.55	2.74	1.32	1.32
20.83	30.42	29.21	2.89	84.33	2.52	0.67	0.67
21.00	52.68	51.03	1.96	99.87	2.30	0.74	0.74
21.16	83.76	81.22	1.50	121.85	2.12	0.80	0.80
21.33	108.77	105.23	1.32	138.83	2.01	0.83	0.83
21.49	124.83	120.42	1.25	150.59	1.96	0.85	0.85
21.65	134.54	129.37	1.21	156.84	1.92	0.86	0.86
21.82	138.67	132.91	1.20	159.29	1.91	0.87	0.87
21.98	139.64	133.41	1.19	158.57	1.90	0.87	0.87
22.15	136.53	130.04	1.21	157.59	1.92	0.86	0.86
22.31	131.91	125.25	1.27	159.52	1.98	0.86	0.86
22.47	128.23	121.36	1.36	164.44	2.04	0.85	0.85
22.64	125.88	118.72	1.43	170.21	2.09	0.85	0.85
22.80	125.39	117.83	1.47	173.22	2.11	0.85	0.85
22.97	122.85	115.00	1.48	170.72	2.12	0.85	0.85
23.13	115.65	107.80	1.49	160.13	2.12	0.84	0.84
23.29	95.39	88.35	1.68	148.40	2.21	0.81	0.81
23.46	70.18	64.36	2.18	140.02	2.37	0.77	0.77
23.62	47.61	43.00	3.29	141.32	2.59	0.72	0.72

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
23.79	39.19	34.99	3.76	131.42	2.67	2.33	2.33
23.95	52.38	47.13	2.49	117.55	2.44	0.73	0.73
24.11	76.49	69.37	1.66	115.01	2.20	0.78	0.78
24.28	104.08	94.73	1.38	131.08	2.06	0.82	0.82
24.44	124.62	113.44	1.30	146.98	2.00	0.85	0.85
24.61	139.43	126.76	1.25	158.25	1.96	0.86	0.86
24.77	142.84	129.52	1.24	160.41	1.95	0.86	0.86
24.93	129.93	117.15	1.33	156.19	2.02	0.85	0.85
25.10	104.50	93.29	1.65	153.89	2.19	0.82	0.82
25.26	76.87	67.69	2.29	154.72	2.39	0.77	0.77
25.43	55.84	48.38	3.13	151.54	2.57	0.73	0.73
25.59	48.60	41.72	3.36	140.02	2.60	2.75	2.75
25.75	49.73	42.59	3.14	133.72	2.57	0.71	0.71
25.92	55.50	47.58	2.85	135.56	2.52	0.73	0.73
26.08	66.27	57.06	2.37	135.44	2.41	0.75	0.75
26.25	87.98	76.43	1.73	132.35	2.23	0.79	0.79
26.41	111.36	97.35	1.40	136.20	2.07	0.82	0.82
26.57	125.41	109.69	1.32	144.81	2.02	0.84	0.84
26.74	126.98	110.61	1.36	150.54	2.04	0.84	0.84
26.90	119.19	103.12	1.48	152.46	2.11	0.83	0.83
27.07	106.18	91.04	1.68	153.30	2.21	0.81	0.81
27.23	89.77	76.13	1.98	150.88	2.31	0.79	0.79
27.40	79.96	67.19	2.25	150.92	2.38	0.77	0.77
27.56	79.18	66.33	2.19	145.19	2.37	0.77	0.77
27.72	89.55	75.33	1.84	138.84	2.27	0.79	0.79
27.89	97.72	82.49	1.59	131.05	2.17	0.80	0.80
28.05	97.36	81.96	1.57	128.45	2.16	0.80	0.80
28.22	87.07	72.45	1.86	134.95	2.27	0.78	0.78
28.38	74.54	61.08	2.41	147.19	2.42	0.76	0.76
28.54	68.26	55.34	2.80	155.23	2.51	0.75	0.75
28.71	65.79	52.98	2.97	157.13	2.54	0.74	0.74
28.87	60.65	48.46	3.13	151.87	2.57	0.73	0.73
29.04	65.41	52.45	2.70	141.57	2.49	0.74	0.74
29.20	82.54	67.20	1.90	127.92	2.29	0.77	0.77
29.36	105.53	86.98	1.50	130.78	2.13	0.81	0.81
29.53	113.96	93.77	1.50	140.95	2.13	0.82	0.82
29.69	103.08	83.61	1.84	153.71	2.26	0.80	0.80
29.86	83.66	66.54	2.46	163.55	2.43	0.77	0.77
30.02	62.87	48.85	3.34	163.38	2.60	3.17	3.17
30.18	61.37	47.62	3.09	146.96	2.56	0.73	0.73
30.35	88.91	71.01	1.83	129.76	2.26	0.78	0.78
30.51	123.73	100.72	1.38	138.53	2.05	0.83	0.83
30.68	142.80	116.66	1.30	151.40	2.00	0.85	0.85
30.84	165.59	135.83	1.22	166.38	1.94	0.87	0.87
31.00	193.58	159.98	1.13	181.24	1.83	0.90	0.90
31.17	229.64	191.39	1.05	201.60	1.72	0.92	0.92
31.33	237.45	197.75	1.04	206.45	1.71	0.93	0.93
31.50	231.53	192.17	1.05	201.94	1.72	0.92	0.92

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.66	212.26	174.90	1.08	189.49	1.77	0.91	0.91
31.82	188.75	154.03	1.13	174.69	1.84	0.89	0.89
31.99	167.45	134.94	1.22	164.78	1.93	0.87	0.87
32.15	152.96	122.12	1.29	157.62	1.99	0.86	0.86
32.32	139.29	110.34	1.35	148.44	2.03	0.84	0.84
32.48	121.47	95.25	1.44	136.72	2.09	0.82	0.82
32.64	96.83	74.35	1.75	130.08	2.23	0.79	0.79
32.81	71.68	53.39	2.46	131.30	2.43	0.74	0.74
32.97	51.22	36.83	3.55	130.91	2.64	2.38	2.38
33.14	35.50	24.54	4.83	118.60	2.81	1.61	1.61
33.30	25.23	16.76	5.82	97.56	2.91	1.11	1.11
33.46	17.87	11.35	6.76	76.74	3.00	0.76	0.76
33.63	17.06	10.74	6.14	66.00	2.94	0.22	0.72
33.79	22.53	14.81	4.93	72.97	2.82	0.97	0.97
33.96	28.96	19.56	4.32	84.43	2.74	1.27	1.27
34.12	31.72	21.46	4.45	95.49	2.76	1.40	1.40
34.28	34.28	23.31	4.23	98.56	2.73	1.52	1.52
34.45	32.88	22.16	4.43	98.07	2.76	1.45	1.45
34.61	33.33	22.44	4.31	96.69	2.74	1.46	1.46
34.78	31.27	20.76	4.76	98.74	2.80	1.36	1.36
34.94	40.04	27.24	3.94	107.42	2.69	1.76	1.76
35.10	52.91	36.88	3.17	116.91	2.57	0.70	0.70
35.27	57.07	39.78	3.18	126.30	2.57	0.71	0.71
35.43	47.82	32.57	3.83	124.86	2.68	2.10	2.10
35.60	31.59	20.38	5.64	114.95	2.89	1.35	1.35
35.76	24.61	15.37	6.39	98.23	2.97	1.02	1.02
35.93	22.65	14.00	6.08	85.10	2.94	0.93	0.93
36.09	22.81	14.16	5.57	78.93	2.89	0.94	0.94
36.25	26.52	16.83	4.78	80.54	2.80	1.10	1.10
36.42	43.84	29.74	2.93	87.02	2.53	0.67	0.67
36.58	59.99	41.70	2.44	101.65	2.43	0.71	0.71
36.75	59.79	41.21	2.63	108.35	2.47	0.71	0.71
36.91	42.82	28.14	3.96	111.40	2.69	1.81	1.81
37.07	26.46	16.21	6.06	98.18	2.94	1.08	1.08
37.24	20.96	12.46	7.09	88.27	3.03	0.83	0.83
37.40	26.42	16.22	5.41	87.76	2.87	1.07	1.07
37.57	42.49	27.78	3.58	99.55	2.64	1.78	1.78
37.73	70.54	48.61	2.30	111.87	2.40	0.73	0.73
37.89	97.16	68.87	1.77	121.99	2.24	0.78	0.78
38.06	119.45	86.36	1.48	127.49	2.11	0.81	0.81
38.22	131.51	96.01	1.35	129.94	2.04	0.82	0.82
38.39	136.64	99.74	1.34	133.44	2.03	0.83	0.83
38.55	141.93	103.02	1.38	142.03	2.05	0.83	0.83
38.71	154.68	112.19	1.38	154.33	2.05	0.84	0.84
38.88	172.29	125.34	1.34	167.48	2.03	0.86	0.86
39.04	185.37	135.26	1.30	175.24	2.00	0.87	0.87
39.21	195.16	143.12	1.24	177.60	1.95	0.88	0.88
39.37	204.59	150.91	1.19	179.54	1.90	0.89	0.89

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
39.53	212.01	157.15	1.15	180.80	1.86	0.89	0.89
39.70	211.72	156.23	1.16	181.80	1.87	0.89	0.89
39.86	211.31	155.26	1.18	182.55	1.89	0.89	0.89
40.03	222.11	163.59	1.15	188.67	1.86	0.90	0.90
40.19	242.60	180.30	1.10	198.86	1.79	0.91	0.91
40.35	263.75	197.58	1.06	209.98	1.74	0.93	0.93
40.52	281.60	212.05	1.04	219.51	1.70	0.94	0.94
40.68	305.59	231.94	1.00	231.94	1.61	0.95	0.95
40.85	329.57	249.85	1.00	249.85	1.51	0.96	0.96
41.01	343.75	260.23	1.00	260.23	1.46	0.97	0.97
41.17	341.23	257.86	1.00	257.86	1.48	0.97	0.97
41.34	334.12	252.00	1.00	252.00	1.52	0.97	0.97
41.50	330.09	248.50	1.00	248.50	1.53	0.96	0.96
41.67	328.49	246.85	1.00	246.85	1.52	0.96	0.96
41.83	322.60	241.98	1.00	241.98	1.53	0.96	0.96
41.99	314.72	235.61	1.00	235.61	1.58	0.96	0.96
42.16	307.74	229.94	1.00	229.94	1.64	0.95	0.95
42.32	305.77	226.70	1.02	231.25	1.67	0.95	0.95
42.49	307.39	226.80	1.03	234.09	1.69	0.95	0.95
42.65	313.73	231.76	1.02	236.59	1.67	0.95	0.95
42.81	325.96	241.95	1.00	241.95	1.63	0.96	0.96
42.98	335.14	248.40	1.00	248.40	1.55	0.96	0.96
43.14	327.14	242.02	1.00	242.02	1.50	0.96	0.96
43.31	296.31	218.66	1.00	218.66	1.54	0.94	0.94
43.47	229.98	165.82	1.07	176.95	1.74	0.90	0.90
43.64	160.49	109.00	1.34	146.26	2.03	0.84	0.84
43.80	104.95	66.53	2.09	139.03	2.34	0.77	0.77
43.96	84.36	51.52	2.73	140.65	2.49	0.74	0.74
44.13	67.80	40.13	3.33	133.78	2.60	2.51	2.51
44.29	49.42	27.98	4.29	120.06	2.74	1.79	1.79
44.46	34.15	18.39	5.19	95.52	2.85	1.20	1.20
44.62	29.57	15.72	5.04	79.21	2.83	1.02	1.02
44.78	28.42	15.10	4.73	71.46	2.79	0.98	0.98
44.95	27.08	14.05	5.47	76.85	2.88	0.92	0.92
45.11	25.91	13.23	5.90	78.04	2.92	0.88	0.88
45.28	27.36	14.15	5.42	76.65	2.87	0.93	0.93
45.44	28.10	14.70	4.90	71.98	2.81	0.95	0.95
45.60	31.93	17.05	4.48	76.31	2.76	1.10	1.10
45.77	44.03	24.51	3.79	92.94	2.67	1.55	1.55
45.93	74.70	44.54	2.53	112.84	2.45	0.72	0.72
46.10	124.66	79.46	1.63	129.22	2.18	0.80	0.80
46.26	172.27	114.28	1.31	149.43	2.01	0.85	0.85
46.42	206.79	140.71	1.17	165.17	1.88	0.88	0.88
46.59	217.66	147.89	1.18	173.79	1.89	0.88	0.88
46.75	223.58	150.70	1.20	181.54	1.92	0.89	0.89
46.92	233.40	156.49	1.22	191.52	1.94	0.89	0.89
47.08	244.40	163.76	1.22	199.74	1.93	0.90	0.90
47.24	235.42	156.42	1.25	195.62	1.96	0.89	0.89

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.41	186.03	118.89	1.49	177.26	2.12	0.85	0.85
47.57	123.54	74.25	2.16	160.72	2.36	0.79	0.79
47.74	81.27	45.55	3.44	156.71	2.62	2.83	2.83
47.90	115.36	68.90	2.16	148.61	2.36	0.78	0.78
48.06	200.31	129.44	1.35	174.15	2.03	0.86	0.86
48.23	288.43	195.28	1.13	220.17	1.83	0.93	0.93
48.39	326.39	224.19	1.08	241.49	1.76	0.95	0.95
48.56	317.49	217.57	1.08	234.58	1.76	0.94	0.94
48.72	300.03	204.13	1.09	223.27	1.78	0.93	0.93
48.88	306.24	209.59	1.07	224.31	1.75	0.94	0.94
49.05	343.17	240.41	1.00	240.41	1.64	0.96	0.96
49.21	390.27	273.28	1.00	273.28	1.48	0.98	0.98
49.38	422.77	295.78	1.00	295.78	1.36	0.99	0.99
49.54	433.03	302.57	1.00	302.57	1.28	1.00	1.00
49.70	432.44	301.73	1.00	301.73	1.22	1.00	1.00
49.87	427.70	297.98	1.00	297.98	1.19	0.99	0.99
50.03	419.69	291.96	1.00	291.96	1.17	0.99	0.99

Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

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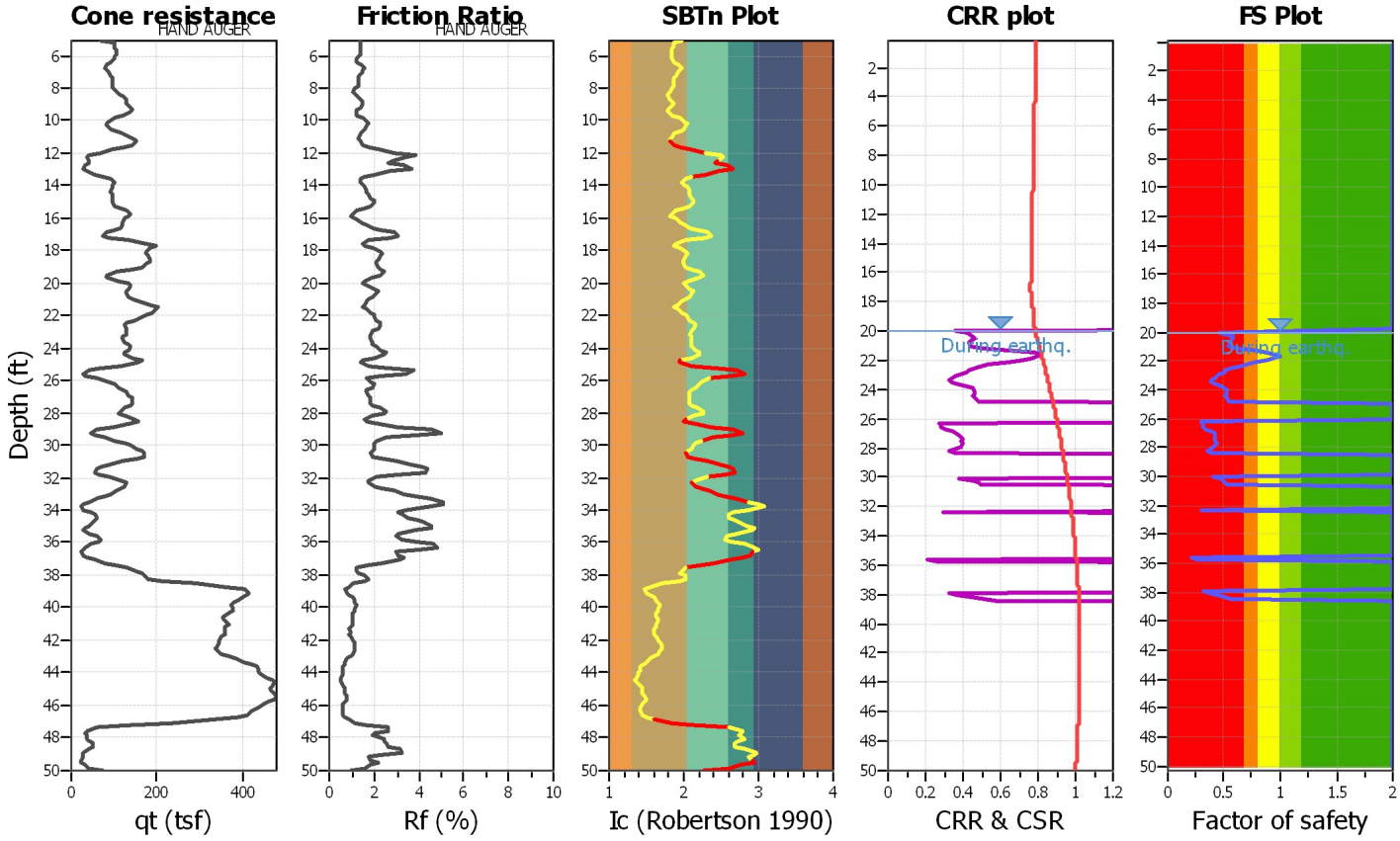
LIQUEFACTION ANALYSIS REPORT

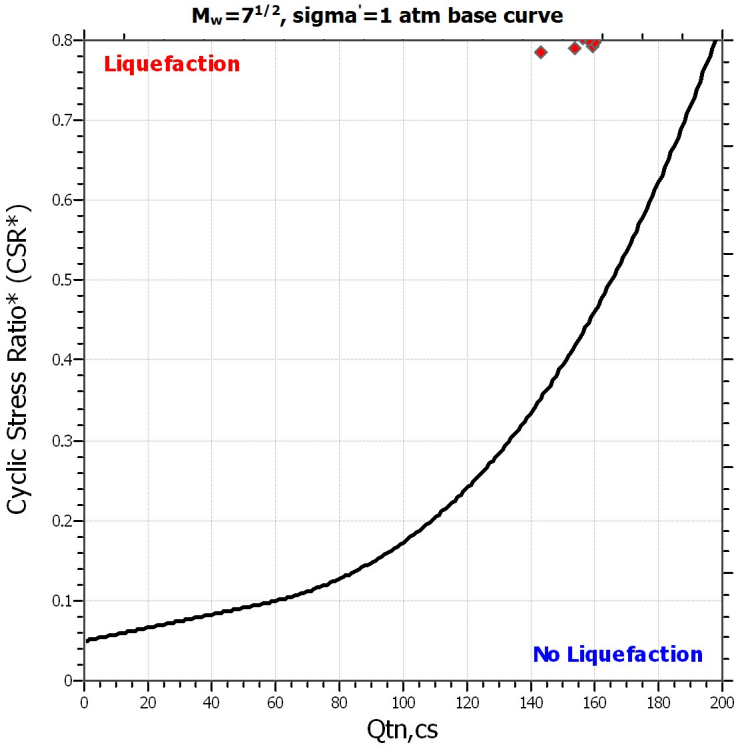
Project title : 14-108 Aqua Del Vista **Location : Coachella - NCEER 2001 MEthods**

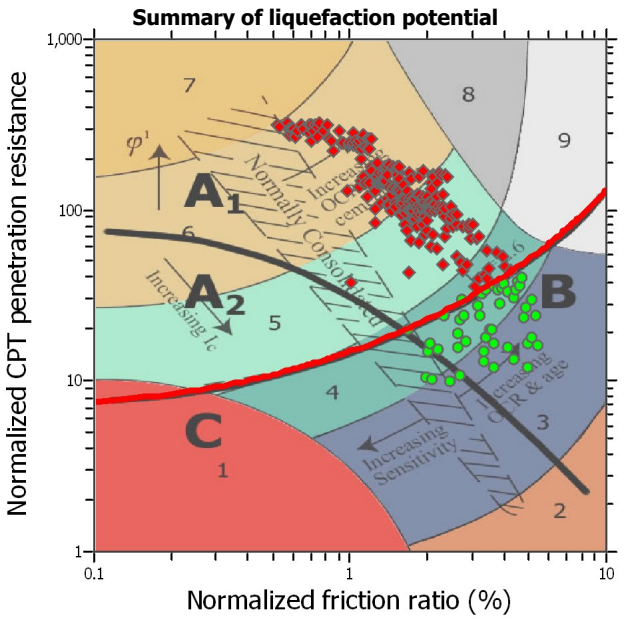
CPT file : 075C06

Input parameters and analysis data

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	20.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	20.00 ft	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	7.80	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	1.10	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

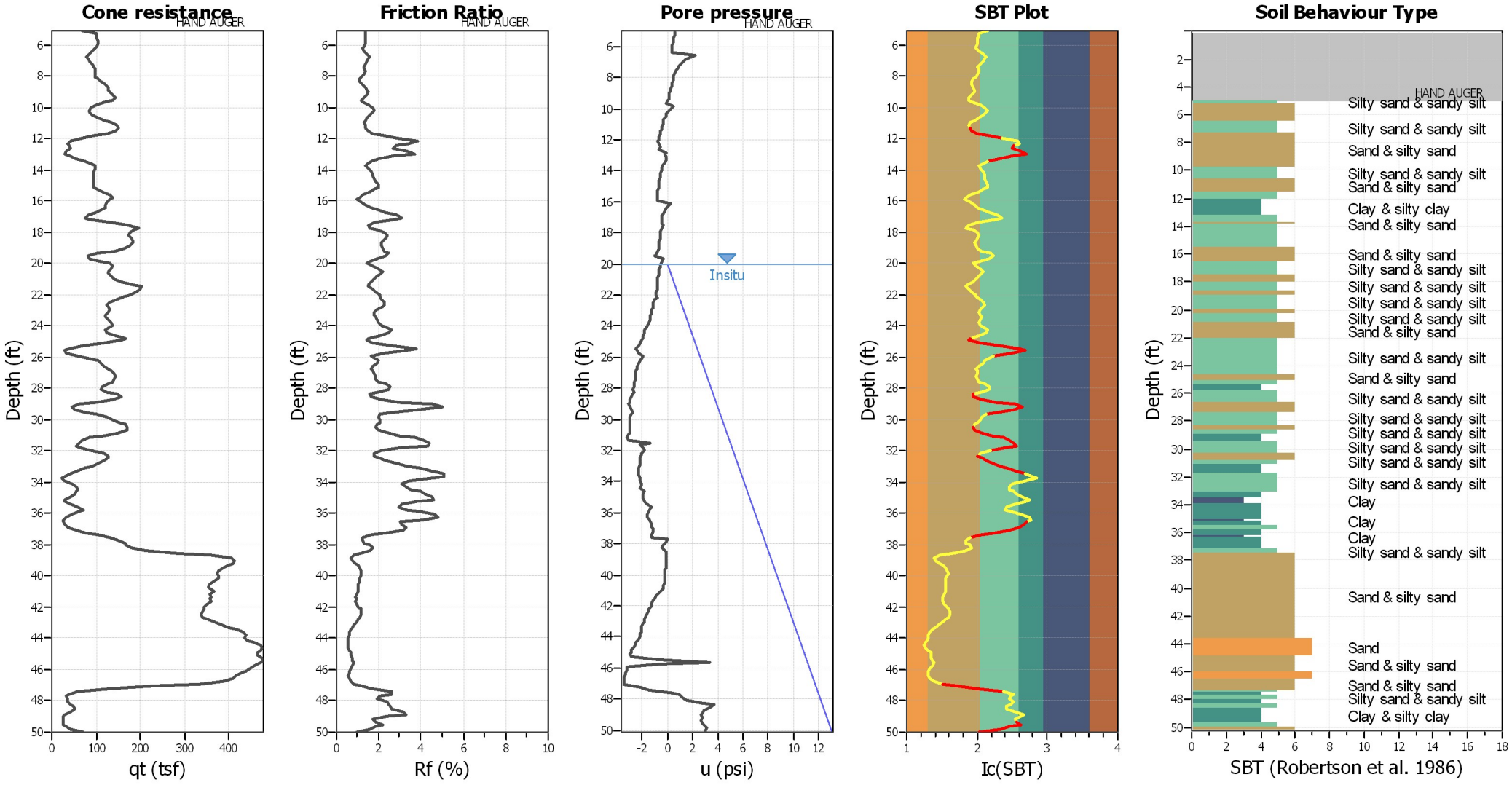






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



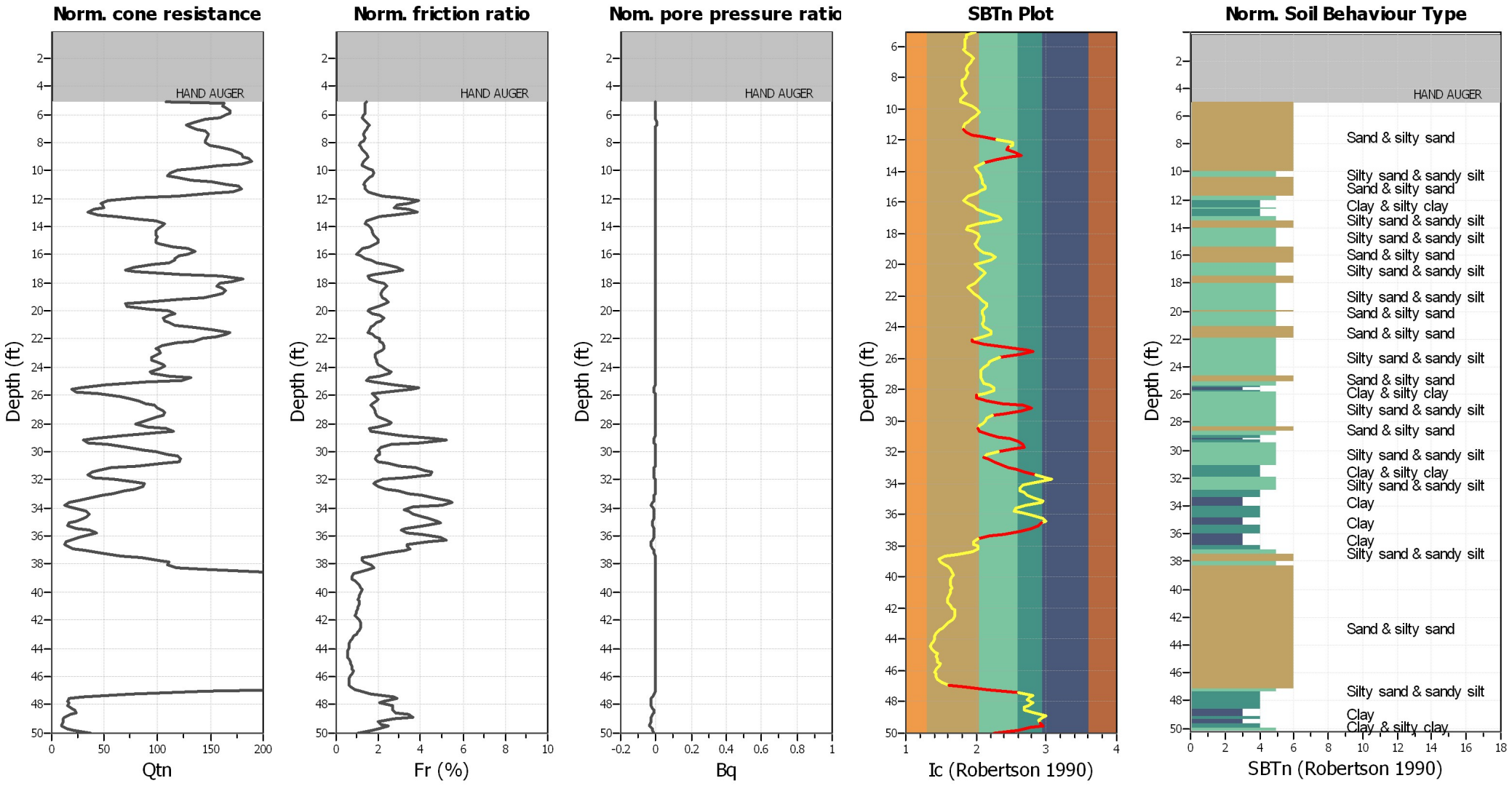
Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	20.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	20.00 ft	Fill height:	N/A	Limit depth:	N/A

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	20.00 ft	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.80	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.10	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	20.00 ft	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained