

LIQUEFACTION ANALYSIS REPORT

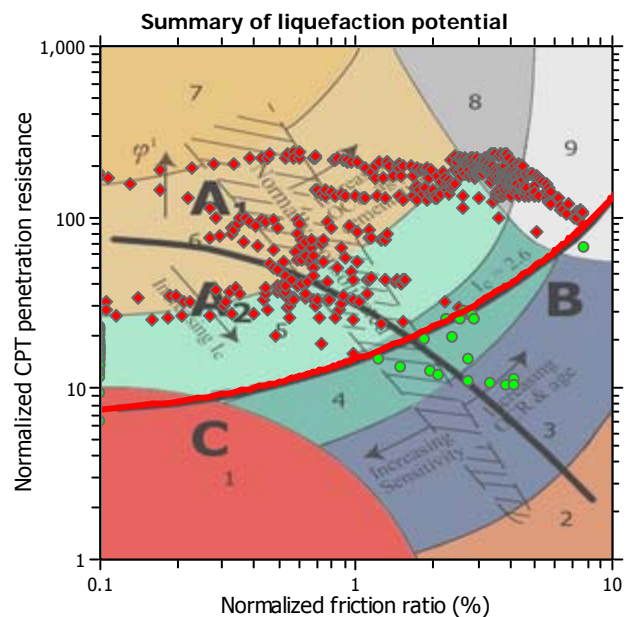
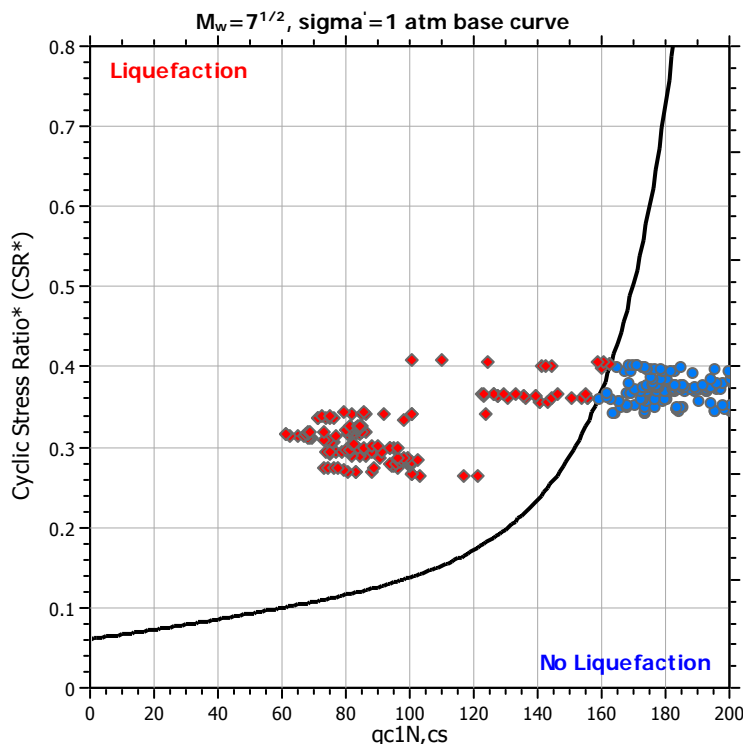
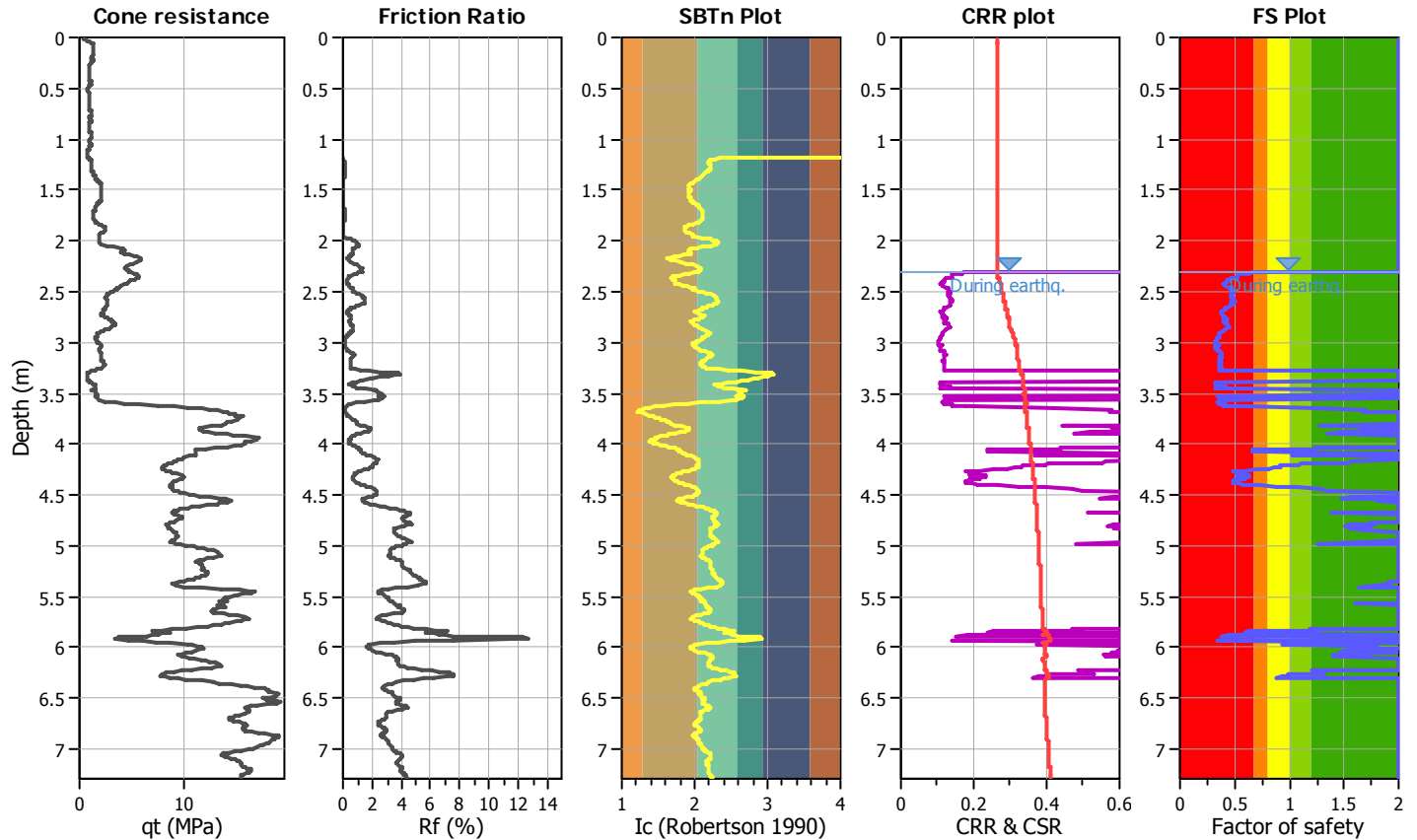
Project title : 24 - 26 Hutt Road

Location : Thorndon, Wellington

CPT file : CPT_03

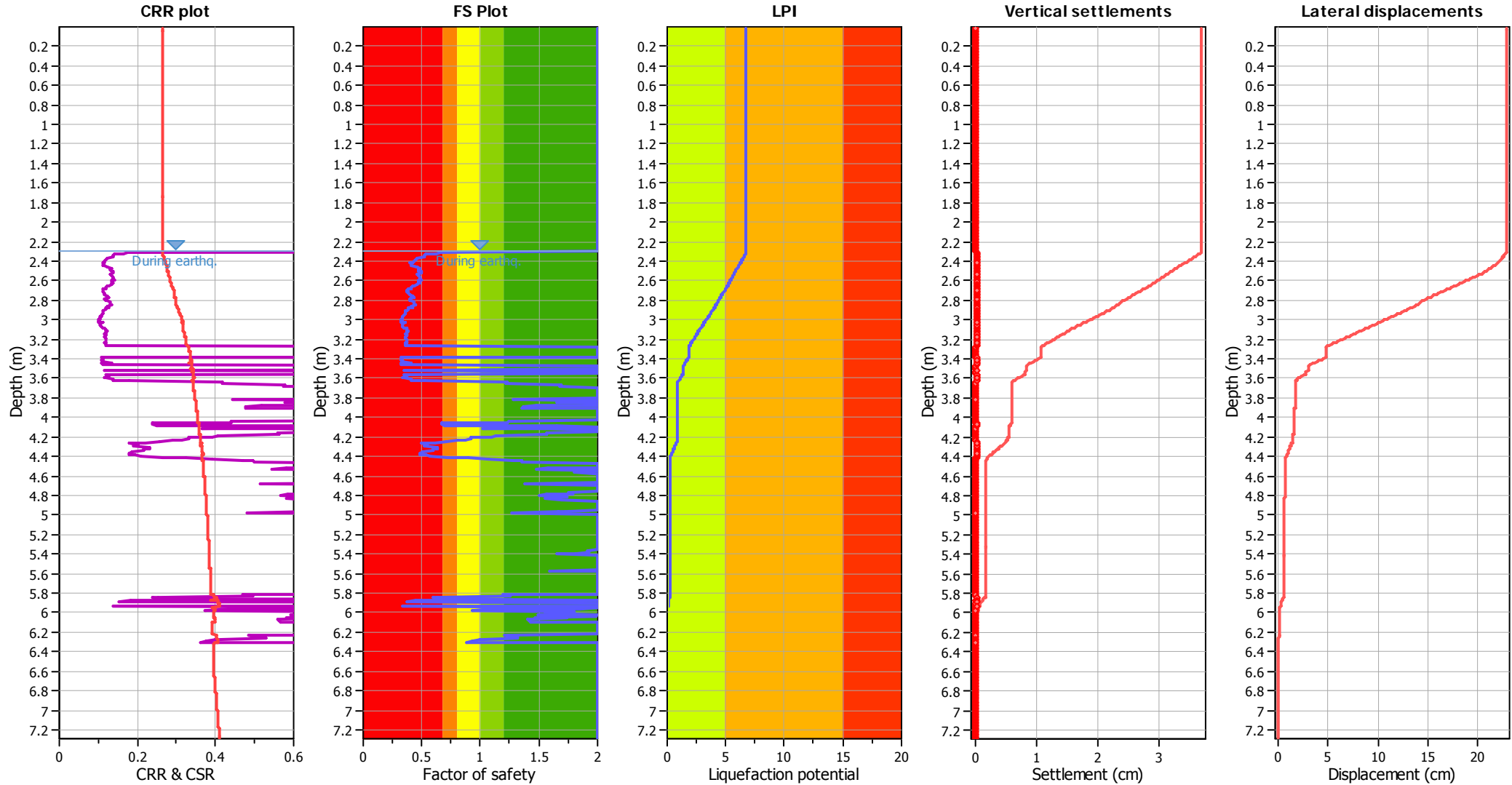
Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	2.30 m	Use fill:	No	Clay like behavior applied:	Sand & Clay
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	2.30 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	5	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w :	7.50	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method
Peak ground acceleration:	0.45	Unit weight calculation:	Based on SBT	K_g applied:	Yes		



Zone A₁: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A₂: 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

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method: B&I (2014)
Fines correction method: B&I (2014)
Points to test: Based on Ic value
Earthquake magnitude M_w : 7.50
Peak ground acceleration: 0.45
Depth to water table (insitu): 2.30 m

Depth to GWT (earthq.): 2.30 m
Average results interval: 5
Ic cut-off value: 2.60
Unit weight calculation: Based on SBT
Use fill: No
Fill height: N/A

Fill weight: N/A
Transition detect. applied: No
 K_g applied: Yes
Clay like behavior applied: Sand & Clay
Limit depth applied: No
Limit depth: N/A

F.S. color scheme

Red: Almost certain it will liquefy
Orange: Very likely to liquefy
Yellow: Liquefaction and no liq. are equally likely
Light Green: Unlike to liquefy
Dark Green: Almost certain it will not liquefy

LPI color scheme

Red: Very high risk
Orange: High risk
Yellow: Low risk