Aleanna Resources LLC

Procedimento V.I.A. (ex D. Lgs. 152/06 e s.m.i.)
Progetto di Concessione di Coltivazione di idrocarburi
“Gradizza”

INTEGRAZIONI AL S.I.A.

Nota MATTM n° 1621 del 22/01/2016 e
Regione Emilia-Romagna n° PG.2015.860060 del 03/12/2015

ALLEGATO 9

REGIONE EMILIA ROMAGNA

COMUNE DI COPPARO E FORMIGNANA

Provincia di Ferrara (FE)

"CONCESSIONE DI COLTIVAZIONE IDROCARBURI GRADIZZA"

OPERE PER LA MESSA IN PRODUZIONE DEL GIACIMENTO GRADIZZA

INTEGRAZIONI

allo STUDIO DI IMPATTO AMBIENTALE

ed ai DOCUMENTI PROGETTUALI

A seguito della richiesta del M.A.T.T.M. del 22.01.2016

26 – Analisi della suscettibilità alla liquefazione dei terreni

MARZO 2016

IdroGeo
ENGINEERING&CONSULTING

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1 Premessa

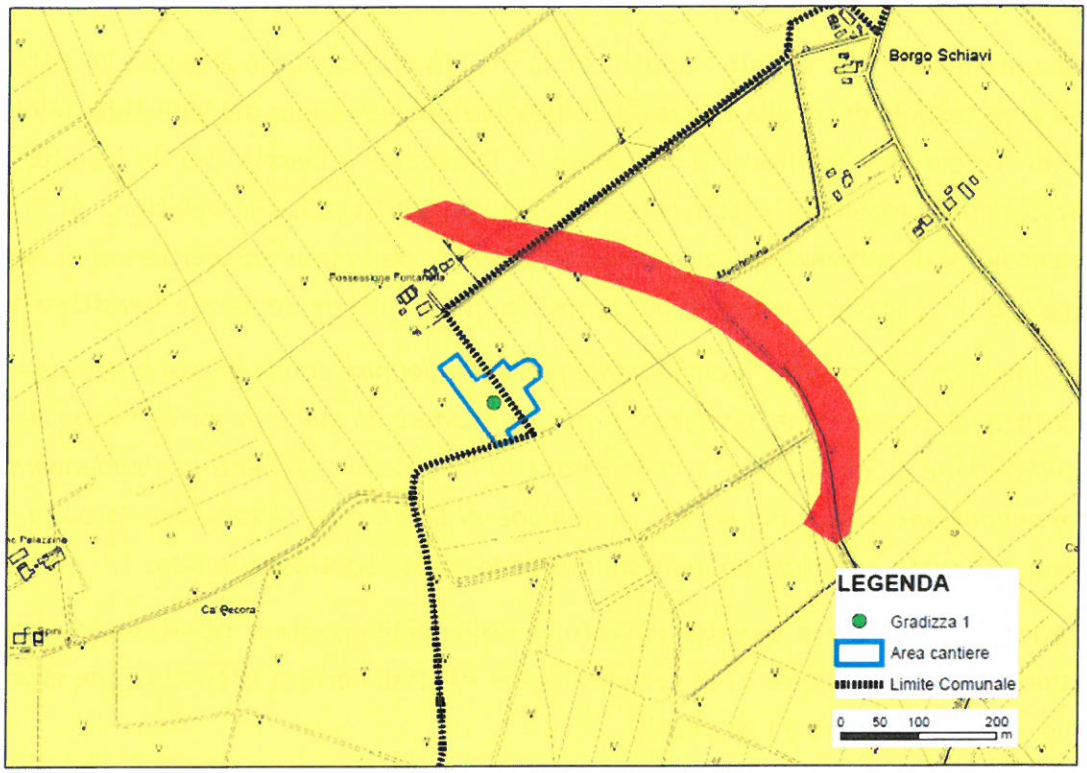
Il presente documento è stato redatto con la finalità di rispondere al punto 26 della sezione Suolo e sottosuolo di cui alla Richiesta di Integrazioni pervenuta dal Ministero dell'Ambiente e della Tutela del Territorio e del Mare – Direzione generale per le valutazioni e le autorizzazioni ambientali – con nota n° 1621 del 22/01/2016 in relazione al Progetto di "Concessione di coltivazione idrocarburi Gradizza – derivante dal permesso di ricerca "**La Prospera**" – realizzazione opere per la messa in produzione del pozzo **Gradizza 1**".

Nello specifico, si richiede: "*poiché non è possibile definire con la giusta precisione se l'area di istanza di concessione Gradizza 1 possa ricadere in porzioni di territorio soggette a 'amplificazione e liquefazione, con conseguenti potenziali cedimenti per addensamento e/o ri-consolidazione indotti dal sisma', si richiede di definire correttamente l'area in studio su mappa adeguata, effettuando eventualmente indagine specifiche in sito...*".

Pertanto, in relazione a quanto richiesto, è stata digitalizzata e riportata ad una scala di maggiore dettaglio (figura 1) la cartografia del PTCP di Ferrara (Zonizzazione sismica di 1° livello, di cui alla figura 71 del SIA).

Nella figura 1 si evidenzia che il sito del pozzo Gradizza 1 è localizzato al di fuori di un "*paleoalveo certo*", mentre per presenza di depositi prevalentemente fini poco consistenti è soggetto a potenziale "*amplificazione con conseguenti potenziali cedimenti per riconsolidazione indotti dal sisma*". Tale cartografia corrisponde a quella del Piano Strutturale Comunale di cui alla Tav. 6.1 del SIA.

Sono quindi state realizzate nell'area indagini *in situ* integrative, sia geotecniche che sismiche, le quali, unitamente all'analisi della risposta sismica locale del sito di Gradizza 1 (elaborato 27), hanno consentito di eseguire opportune verifiche della suscettibilità alla liquefazione dei terreni.



ELEMENTI GEOMORFOLOGICI

TIPO

paleoalvei certi

paleoalvei incerti

conoidi, ventagli di rotta, ecc

	EFFETTI ATTESI	LIVELLO DI APPROFONDIMENTO RICHIESTO
	Amplificazione stratigrafica – Amplificazione topografica	Analisi semplificata (I livello di approfondimento) Art.36 – Art. 37 comma 1 punto 1
	Amplificazione con conseguenti potenziali Cedimenti per ri-cosonsolidazione indotti da sisma	Analisi semplificata (II livello di approfondimento) Art.36 – Art. 37 comma 1 punto 2
	Amplificazione e liquefazione con Conseguenti potenziali cedimenti per Addensamento e\o ri-consolidazione Indotti dal sisma	Analisi semplificata (III livello di approfondimento) Art.36 – Art. 37 comma 1 punto 3

Figura 1: Carta della zonizzazione sismica di 1° livello (Fonte PTCP Ferrara)

2 Indagini geognostiche in situ

Tenendo in considerazione le condizioni geologiche, geomorfologiche ed idrogeologiche del luogo di intervento, in relazione alle specifiche prescrizioni e richiesta di integrazioni da parte del MATTM, per la definizione del modello geologico e geotecnico del sottosuolo e per la definizione dell'azione sismica, è stata eseguita un'indagine geognostica integrativa, con indagini sismiche e geotecniche *in situ*, finalizzate alla determinazione delle caratteristiche litostratigrafiche dei terreni e alla loro parametrizzazione geotecnica, alla verifica della suscettibilità alla liquefazione dei terreni e alla valutazione della risposta simica locale. In particolare, sono stati eseguiti i seguenti approfondimenti d'indagine (ubicazione punti d'indagine in fig. 2):

- Realizzazione di n° 2 prove penetrometriche con piezocono digitale CPTU (allegato 1);
- Esecuzione di indagine simica a rifrazione e MASW e misura HVSR (allegato 2).

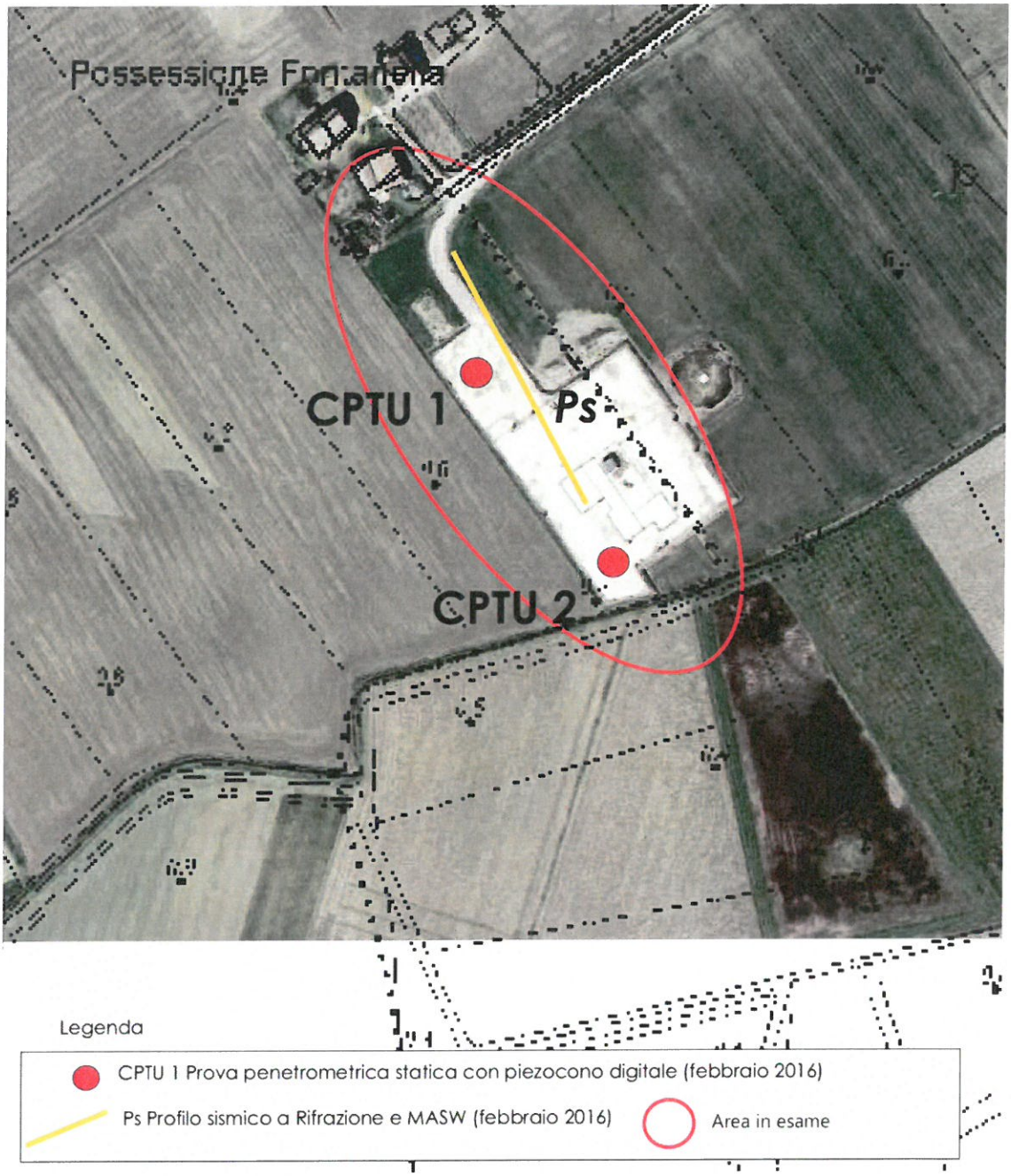


Figura 2: ubicazione indagini geognostiche integrative

2.1 DESCRIZIONE DELLE INDAGINI CON STANDARDS DI RIFERIMENTO DELLE VARIE PROVE

2.1.1 Prove penetrometriche

L'apparecchio utilizzato per l'esecuzione delle prove penetrometriche statiche CPTU è un penetrometro statico da 20 tonnellate dotato di piezocono digitale.

La CPTU consente l'infissione nel terreno, a mezzo di un martinetto idraulico, della punta elettrica digitale, registrando ogni 2 cm la resistenza alla penetrazione, l'attrito laterale locale, il rapporto di attrito e le sovrappressioni interstiziali. Elaborando le letture di campagna, è possibile risalire alle principali caratteristiche dei terreni attraversati (caratteristiche fisico meccaniche e pressione neutra).

I fori penetrometrici CPTU1 e CPTU2 sono stati spinti alle profondità rispettivamente di -24,00 m e -25,36 m da p.c. e sono stati attrezzati con tubo piezometrico per rilevare eventuali livelli acquiferi.

I certificati delle prove penetrometriche sono riportati in allegato 1.

2.1.2 Indagine sismica: rifrazione, MASW e HVSR

La linea di sismica a rifrazione e la linea sismica Masw sono state realizzate con un gruppo di 24 geofoni spaziati tra loro di 5 metri. Questa spaziatura geofonica ha permesso di realizzare una linea di 120 metri, adeguata per la definizione della Vs30 e che ha consentito di indagare in profondità per circa 25 metri.

Accanto alle tecniche basate sull'impiego di array sismico esistono altre tecniche basate sull'uso di una singola stazione di misura. In questo caso vengono misurate le vibrazioni ambientali nelle tre direzioni dello spazio attraverso un unico sensore tridirezionale posto sulla superficie del terreno. In particolare viene valutato il rapporto di ampiezza fra le componenti orizzontali e verticali del moto (metodo HVSR ovvero "Horizontal to Vertical Spectral Ratios") [Bard., 1998]. Analizzando misure di questo tipo è possibile identificare le modalità di vibrazione del terreno e individuare la frequenza fondamentale f di questa vibrazione definita di "Risonanza". Sapendo che in generale esiste una relazione semplice fra f, lo spessore della parte più soffice del terreno e la velocità media delle onde sismiche nel sottosuolo (ricavata per esempio dai metodi passivi ad antenna, o attivi come Masw e Rifrazione), attraverso le misure HVSR è possibile risalire allo spessore di questo strato.

L'indagine di sismica a rifrazione ha permesso di caratterizzare dinamicamente le unità litologiche presenti nell'area tramite la misura della velocità di propagazione delle onde di taglio.

I dati acquisiti sono stati elaborati in tecnica tomografica, utilizzando il software Rayfract.

Nel profilo che ha raggiunto la profondità di circa 25 m., le elaborazioni hanno messo in evidenza una distribuzione delle velocità delle onde sismiche molto omogenea, senza evidenze di rifrattori e una velocità media delle onde di taglio stimabile in Vs 150 m/sec.

L'indagine Masw ha consentito la definizione del parametro Vs30 e la definizione della categoria di sottosuolo che in base alla velocità media stimata di Vs30= 135 m/s risulta essere di categoria D, coerentemente a quanto evidenziato anche con la rifrazione.

Nell'area di indagine, sono state effettuate tre misure di sismica passiva HVSR che sono servite a definire le frequenze di risonanza del sottosuolo in maniera tale da prevenire, al verificarsi di un evento sismico, possibili interferenze risonanti tra il suolo e le strutture da realizzare.

Le curve ricavate, oltre ad una serie di disturbi elettromagnetici, mettono in evidenza deboli contrasti di impedenza rappresenti da ripetuti picchi di bassa ampiezza circa (2-3) intorno alla frequenza di 4 hz, che descrivono l'esistenza di alternanze tra livelli sabbiosi e argillosi superficiali.

Dopodiché la curva si mantiene piuttosto bassa per risalire progressivamente verso le basse frequenze ma senza evidenziare picchi chiari.

Nel tentativo di estrapolare informazioni più in profondità, è stato stimato un profilo di Vs, fino alla profondità di 300 m, realizzando un'inversione congiunta tra la curva di dispersione ottenuta con tecnica Masw e la misura di H/V T1 realizzata nello stesso sito utilizzando la procedura agli "algoritmi genetici".

La procedura di inversione ha permesso di identificare un profilo compatibile con le osservazioni di campagna e le tecniche più superficiali, rifrazione e masw, che meglio soddisfa il match con le curve di dispersione e H/V sperimentali. Inoltre il profilo è compatibile anche con la stratigrafia del pozzo, ricavata dalla documentazione fornita.

Per i dettagli delle metodologie d'indagine, delle operazioni di campagna e dei risultati ottenuti, si rimanda all'allegato 2 (Report dell'indagine sismica).

Si precisa che oltre alla stima delle Vs, per un attribuzione della categoria di sottosuolo con il metodo semplificato, i dati sismici sono stati utilizzati per l'analisi della Risposta Sismica Locale (RSL), riportata nello specifico elaborato (elaborato n.27).

2.1.3 Caratteristiche litologico-stratigrafiche dell'area d'intervento

Dalle risultanze stratigrafiche delle indagini geognostiche condotte in corrispondenza del comparto d'intervento è stato possibile ricostruire verosimilmente il seguente assetto stratigrafico e litologico per il comparto interessato dall'intervento in progetto.

Nel comparto d'intervento sono stati individuati depositi alluvionali a composizione argilloso limosi alternati a livelli sabbioso limosi, di caratteristiche fisico-meccaniche variabili, che migliorano con l'aumentare della profondità.

Nella prova penetrometrica con piezocono digitale CPTU1, al di sotto dell'orizzonte superficiale di suolo/terreno rimaneggiato, di spessore di circa 0,70 m, sono state incontrate argille e argille limose poco consistenti, fino alla profondità di -6,00 m da p.c.. Al di sotto di tale orizzonte, sono state incontrate limi sabbiosi e sabbie limose da poco addensate a mediamente addensate fino a -7,00 m da p.c.; procedendo in profondità, sono state trovate argille e argille limose poco consistenti fino a -11,00 m da p.c. e da tale profondità e fino a -12,20 m da p.c. sono state trovati limi sabbiosi e sabbie limose mediamente addensate. Da tale profondità e fino a -14,00 m da p.c. sono state trovate argille e argille limose poco consistenti. Procedendo, sono stati trovati limi sabbiosi e sabbie limose da mediamente addensate a addensate fino a -15,00 m da p.c. e al di sotto di tale orizzonte si sono incontrate argille e argille limose poco consistenti fino a -19,60 m da p.c.. Da tale profondità e fino a -22,50 m da p.c. sono state trovate sabbie e sabbie limose addensate per poi passare a argille e argille limose mediamente consistenti fino a -23,60 m da p.c.; da tale profondità e fino alla massima profondità indagata di -24,00 m da p.c. attuale, sono stati trovati limi sabbiosi e sabbie limose addensate.

Nella prova penetrometrica con piezocono digitale CPTU2, al di sotto dell'orizzonte superficiale di suolo/terreno rimaneggiato, di spessore di circa 0,80 m, sono state incontrate argille e argille limose poco consistenti fino alla profondità di -3,90 m da p.c. attuale. Al di sotto di tale orizzonte, sono stati incontrati limi sabbiosi e sabbie limose da poco addensate a mediamente addensate fino a -5,10 m da p.c.; procedendo in profondità, sono state

trovate argille e argille limose poco consistenti fino a -6,00 m da p.c. e da tale profondità e fino a -7,10 m da p.c. sono stati trovati limi sabbiosi e sabbie limose da poco addensate a mediamente addensate. Da tale profondità e fino a -10,20 m da p.c. sono state trovate argille e argille limose poco consistenti. Procedendo, sono stati trovati limi sabbiosi e sabbie limose mediamente addensate fino a -11,30 m da p.c. e al di sotto di tale orizzonte si sono incontrate argille e argille limose poco consistenti fino a -17,30 m da p.c.; da tale profondità e fino a -18,00 m da p.c. sono stati trovati limi sabbiosi e sabbie limose mediamente addensate per poi passare a argille e argille limose poco consistenti fino a -19,10 m da p.c.; da tale profondità e fino a -21,90 m da p.c. si sono incontrate sabbie e sabbie limose addensate e fino alla massima profondità indagata di -25,36 m da p.c. attuale, sono state trovate argille e argille limose mediamente consistenti.

In sintesi nell'area in esame si possono raggruppare i seguenti orizzonti litologico-stratigrafici principali incontrati:

1 – suolo/terreno rimaneggiato *(spessore massimo rilevato pari a 0,80 m in CPTU2);*

2 – argille e argille limose poco consistenti con livelli di limi sabbiosi e sabbie limose da poco addensate a mediamente addensate *(dalla base dell'orizzonte 1 fino a una profondità di circa -6,00 m da p.c. in CPTU2);*

3 – limi sabbiosi e sabbie limose da poco addensate a mediamente addensate *(dalla base dell'orizzonte 2 fino a una profondità di circa -7,10 m da p.c. in CPTU2);*

3 –argille e argille limose poco consistenti con livelli di limi sabbiosi e sabbie limose mediamente addensate *(dalla base dell'orizzonte 2 fino a una profondità di circa -19,10 m da p.c. in CPTU1);*

5 – sabbie e sabbie limose addensate *(dalla base dell'orizzonte 3 fino a una profondità di circa -22,50 m da p.c. in CPTU1);*

6 –argille e argille limose mediamente consistenti alternate con livelli di limi sabbiosi e sabbie limose addensate *(dalla base dell'orizzonte 5 fino alla massima profondità indagata di -25,36 m da p.c. in CPTU2).*

2.1.4 Condizioni piezometriche di dettaglio

Dalle misure piezometriche effettuate nel febbraio 2016 all'interno dei fori piezometrici CPTU1 e CPT2, la falda si attesta alla profondità compresa fra circa -0,90 e -1,33 m da p.c. attuale.

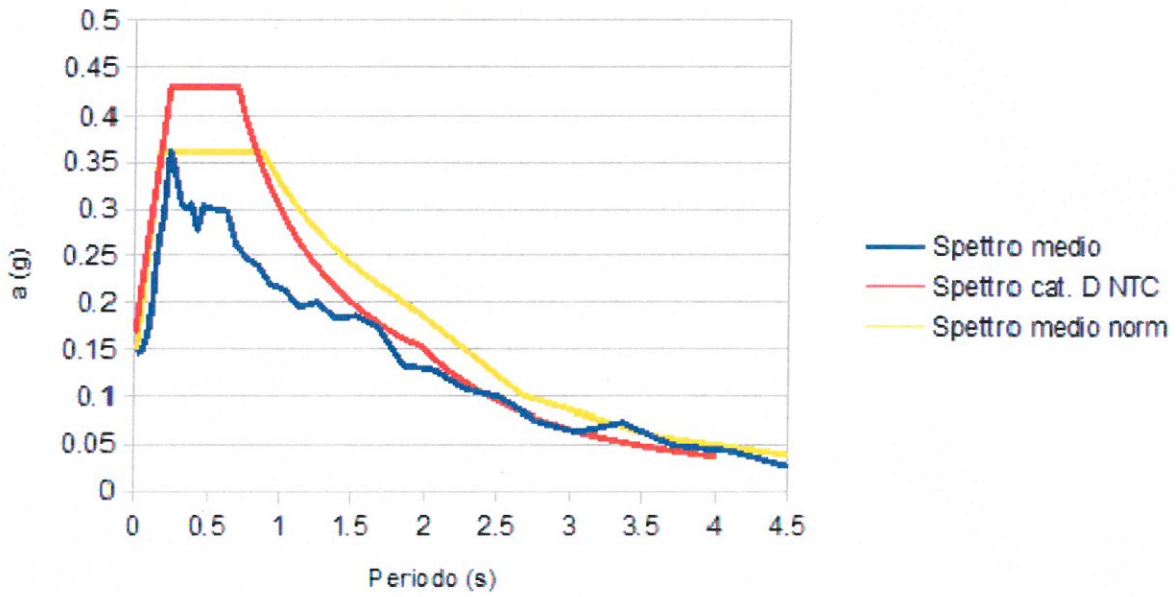
3 Aspetti sismici ed azione sismica

L'indagine MASW, coerentemente a quanto evidenziato anche con la rifrazione, ha individuato una velocità media della Vs30= 135 m/sec, corrispondente alla categoria di sottosuolo D (NTC 2008 - punto 3.2.2).

Come predetto, tuttavia, sulla base delle indagini eseguite, in accordo con quanto richiesto dal MATTM, è stata valutata la risposta sismica locale, ai fini della definizione dell'azione sismica di progetto.

3.1 RISPOSTA SISMICA LOCALE

Di seguito viene riportato lo spettro di risposta in accelerazione, derivante dalla media degli spettri ottenuti dai 7 accelerogrammi utilizzati (per un Tr di 475 anni). Si riporta inoltre il confronto con lo spettro di normativa per la corrispondente categoria di sottosuolo (D) e lo spettro di risposta derivato dalla RSL, normalizzato (con i relativi parametri).



Parametri indipendenti	
a(g)	0.093
F0	2.573
T*c	0.312 s

Parametri dipendenti	
Tb	0.234
Tc	1.157
S	1.513

Per i dettagli dell'analisi della risposta sismica locale si rimanda allo specifico elaborato n.27.

L'analisi della risposta sismica locale forniscono i dati simici di base per la verifica della suscettibilità alla liquefazione dei terreni.

4 Analisi del rischio di liquefazione dei terreni

Si è proceduto alla verifica a liquefazione, nelle due sequenze litostratigrafiche e litotecniche individuate nelle prove CPTU 1 e 2, impostando parametri epicentrali pari a Magnitudo M=5,5 (corrispondente alla magnitudo massima attesa per la Struttura sismogenetica che interessa il sito di Gradizza: ITCS050 Poggio Rusco-Migliarino e confermato dal processo di disaggregazione dei terremoti eseguito per l'analisi della RSL), accelerazione ag=0,15 (ottenuta dall'analisi della risposta sismica locale per lo stato limite di salvaguardia della Vita – SLV per un Tr 475 anni), e con livello di falda pari a rispettivamente a -0,90 m da p.c. in CPTU1 e -1,33 m da p.c. in CPTU2.

La verifica di liquefazione dei terreni, è stata eseguita sui livelli potenzialmente liquefacibili, secondo il metodo di Robertson e Wride (1998).

E' noto che nei sedimenti granulari la presenza di percentuali di argilla riduce in maniera rilevante la suscettibilità alla liquefazione dei depositi. Anche la presenza di strati superficiali non liquefacibili con spessore maggiore di 3 metri può ulteriormente contrastare la liquefazione degli strati sottostanti.

Con le indagini geognostiche eseguite sono state evidenziate le disomogeneità stratigrafiche verticali. Il calcolo del coefficiente di sicurezza Fs individua con Fs < 1,0 la possibilità che avvenga la liquefazione, mentre Fs > 1,0 esclude la possibilità del fenomeno. Nel caso specifico la verifica alla liquefazione è stata effettuata sui livelli totalmente o parzialmente incoerenti intercettati.

4.1 Procedura Di Calcolo Del Fattore Di Sicurezza

La verifica è stata articolata secondo le seguenti fasi:

- Determinazione dei parametri necessari ai calcoli, dall'elaborazione della prova penetrometrica statica; nello specifico si tratta delle resistenze di punta qc e laterale fs, della pressione atmosferica Pa, della tensione litostatica totale σv0 e tensione litostatica efficace σ'v0.

- Definizione del tipo di suolo attraverso l'indice Ic (Robertson e Wride, 1998), definito come:

$$I_c = [(3{,}47 - \log Q)_2 + (1{,}22 + \log F)_2]_{0{,}5}$$

Con:

$$Q = [(q_c - \sigma_{V0}) / P_a] * [(P_a / \sigma'_{V0})_n]$$

$$F = [f_s / (q_c - \sigma_{V0})] * 100\%$$

- Calcolo della resistenza conica normalizzata Q, con adeguato esponente n
- Calcolo della resistenza penetrometrica statica normalizzata q_{c1N}

$$(q_{c1N}) = C_q * (q_c / P_a)$$

Con $C_q = (P_a / \sigma'_{V0})_n$, in cui n = è l'esponente utilizzato per calcolare Ic.

- Trasformazione della resistenza penetrometrica statica normalizzata q_{c1N} in resistenza penetrometrica statica normalizzata equivalente a sabbia pulita $(q_{c1N})_{CS}$ attraverso la relazione:

$$(q_{c1N})_{CS} = K_c * (q_{c1N})$$

In cui Kc, nel caso Ic > 1,64 rispetta la seguente equazione, proposta da Robertson e Wride (1998):

$$K_c = -0{,}403\, I_c^4 + 5{,}581\, I_c^3 - 21{,}63\, I_c^2 + 33{,}75\, I_c - 17{,}88$$

- Calcolo della capacità del terreno di resistere alla liquefazione, CRR_M, a partire dalla definizione della resistenza a liquefazione per un terremoto di magnitudo 7,5 (CRR7,5),dalla definizione del fattore di correzione della Magnitudo MSF (da Idriss,1995):

$$CRR_{7,5} = 93\, [(q_{c1N})_{CS} / 1000]_3 + 0{,}08$$

$$MSF = 10_{0,99} / M_{1,13}$$

$$CRR_M = CRR_{7,5}\, MSF$$

Dove M è la magnitudine di riferimento per l'area di intervento (nel caso specifico è stata usata la magnitudine M = 5,5).

- Correzione della CRR_M in CRR_{eq} per il fattore $K\alpha$ (funzione della topografia) e $K\sigma$ (funzione della pressione litostatica efficace).

$$CRR_{eq} = CRR_M K\alpha K\sigma$$

- Calcolo del fattore di sicurezza a liquefazione come rapporto tra la capacità di resistenza a liquefazione e la domanda richiesta per il sito in esame:

$$\mathbf{Fs_{liq} = CRR_{eq} / CSR}$$

In cui:

$$CSR = 0{,}65\ (a_{max} / g) * (\sigma_{V0} / \sigma'_{V0}) * r_d$$

In cui, a sua volta, a_{max} ottenuto dalla RSL, **rd** è un coefficiente di riduzione con la profondità.

4.2 RISULTATI VERIFICHE LIQUEFAZIONE

I risultati delle verifiche a liquefazione, eseguite rispettivamente per la prova CPTU1 e CPTU2, vengono riportate negli Allegati 1 e 2.

Le elaborazioni sono state effettuate fino alle profondità raggiunte di 24,0 m (CPTU1) e 25,36 m (CPTU2), attraverso il software *Cliq v. 1.7.5.27 della Geologismiki Geotechnical Engineers - Serrai (Grecia).*

In particolare, i fattori di sicurezza Fs, calcolati ogni 20 cm, risultano tutti > 1, come mostrano i log dell'andamento dell'Fs.

Per quanto riguarda la quantificazione del potenziale a liquefazione (IL o LPI), la cumulata dei singoli IL fornisce un valore complessivo pari a IL = 0, il rischio pertanto risulta basso.

Le stratigrafie ottenute con le correlazioni di Robertson risultano nel complesso in accordo con quelle ricavate dalla correlazione di Schmertmann ed utilizzate per il modello stratigrafico e geotecnico dell'area di intervento.

In sintesi, dall'analisi eseguita, i depositi del sito di Gradizza 1 risultano non liquefacibili in caso di sisma.

Le elaborazioni hanno fornito anche una stima dei cedimenti verticali e degli assestamenti laterali post sismici.

Nello specifico per entrambe le verticali indagate sono stati stimati cedimenti post sismici di poco superiore ad 1 cm nei primi 6 metri di profondità ed assestamenti laterali dei terreni di circa 0,7 cm fino ad un massimo di circa 14 metri da piano campagna. Tali cedimenti risultano del tutto compatibili con le opere previste dal progetto.

Negli Allegati 1 e 2 si riportano i report completi delle verifiche eseguite, comprensivi delle elaborazioni per ogni singola lettura.

Marzo, 2016

Dott. Geol. Alessandro Murratzu

Dott. Geol. Simone Fiaschi

ALLEGATO 1 – Verifica alla liquefazione dei terreni in CPTU1

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LIQUEFACTION ANALYSIS REPORT

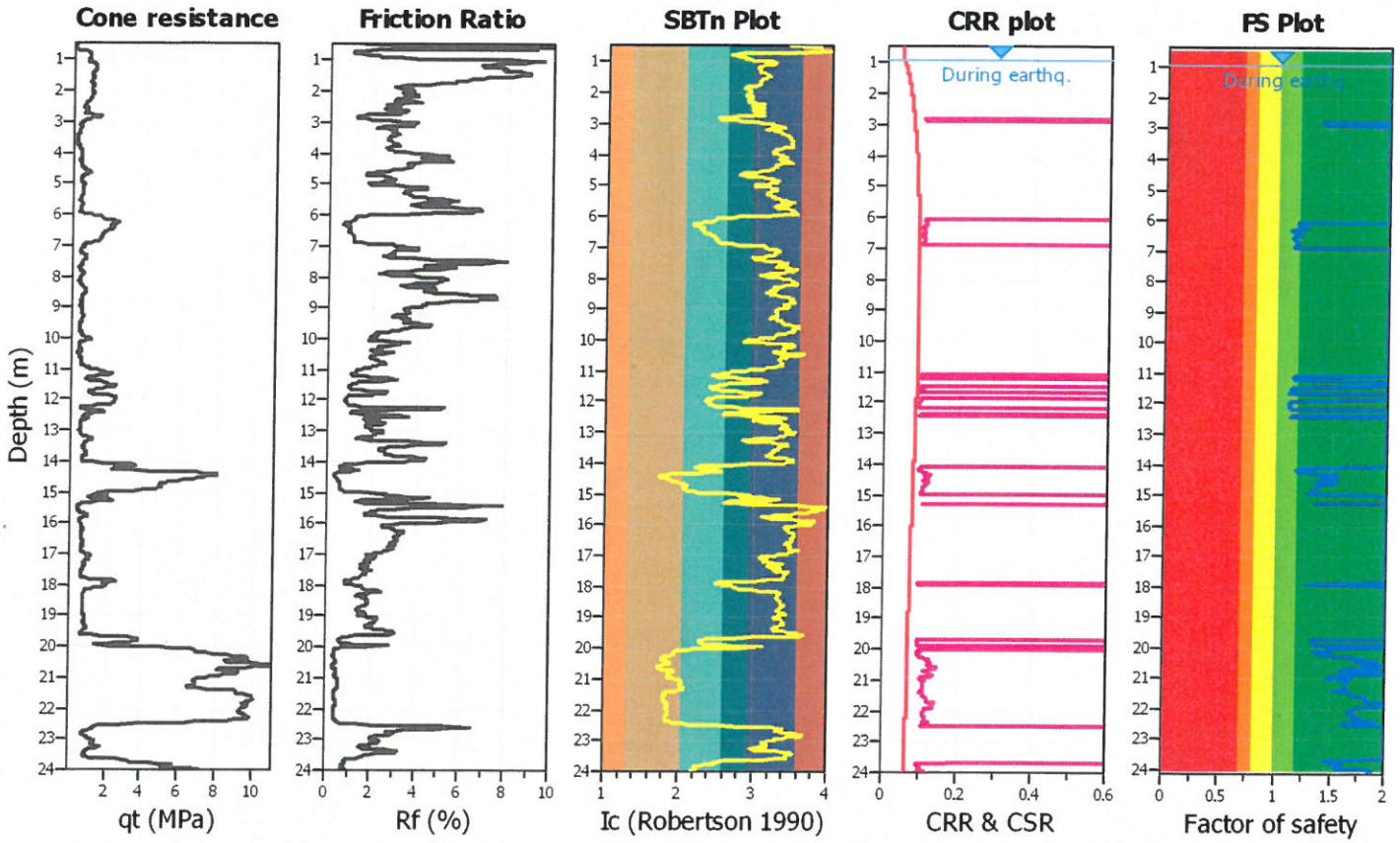
Project title : Pozzo Gradizza 1

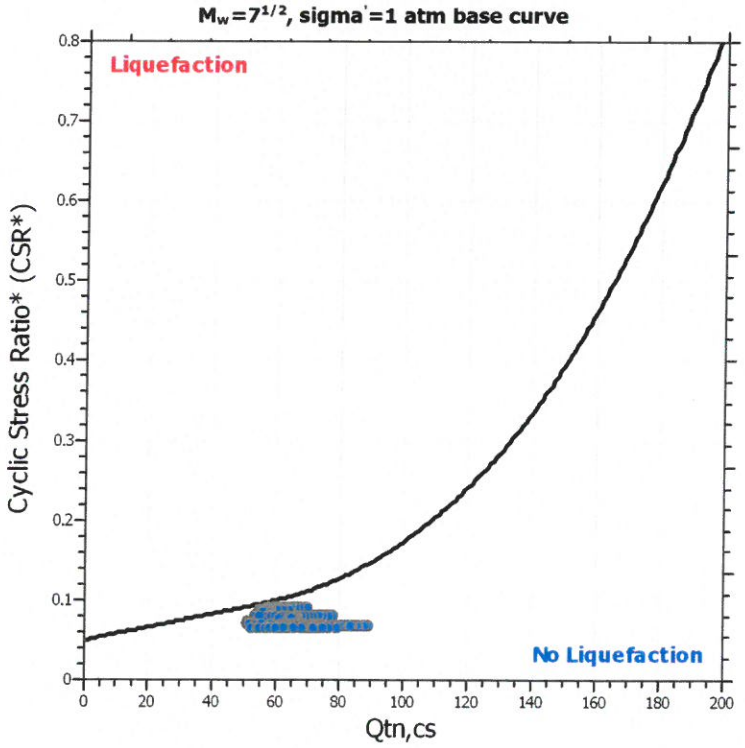
Location : Comune di Copparo, loc. Gradizza - Ferrara

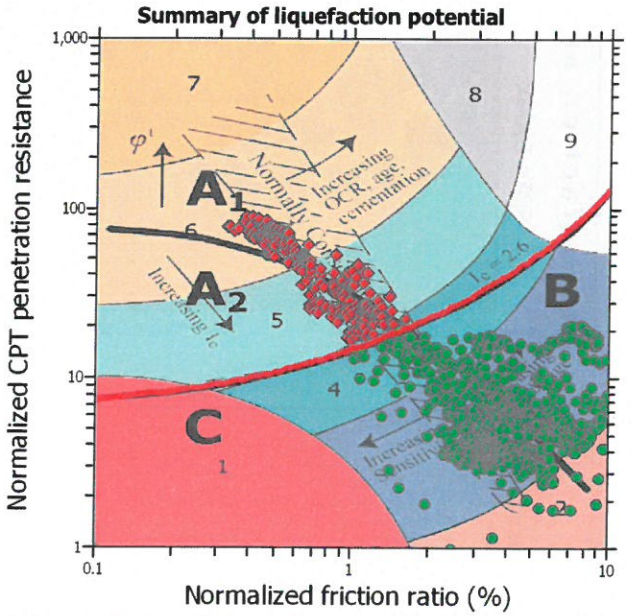
CPT file : gradizza cptu 1

Input parameters and analysis data

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	0.90 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	0.90 m	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:	5.50	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.15	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

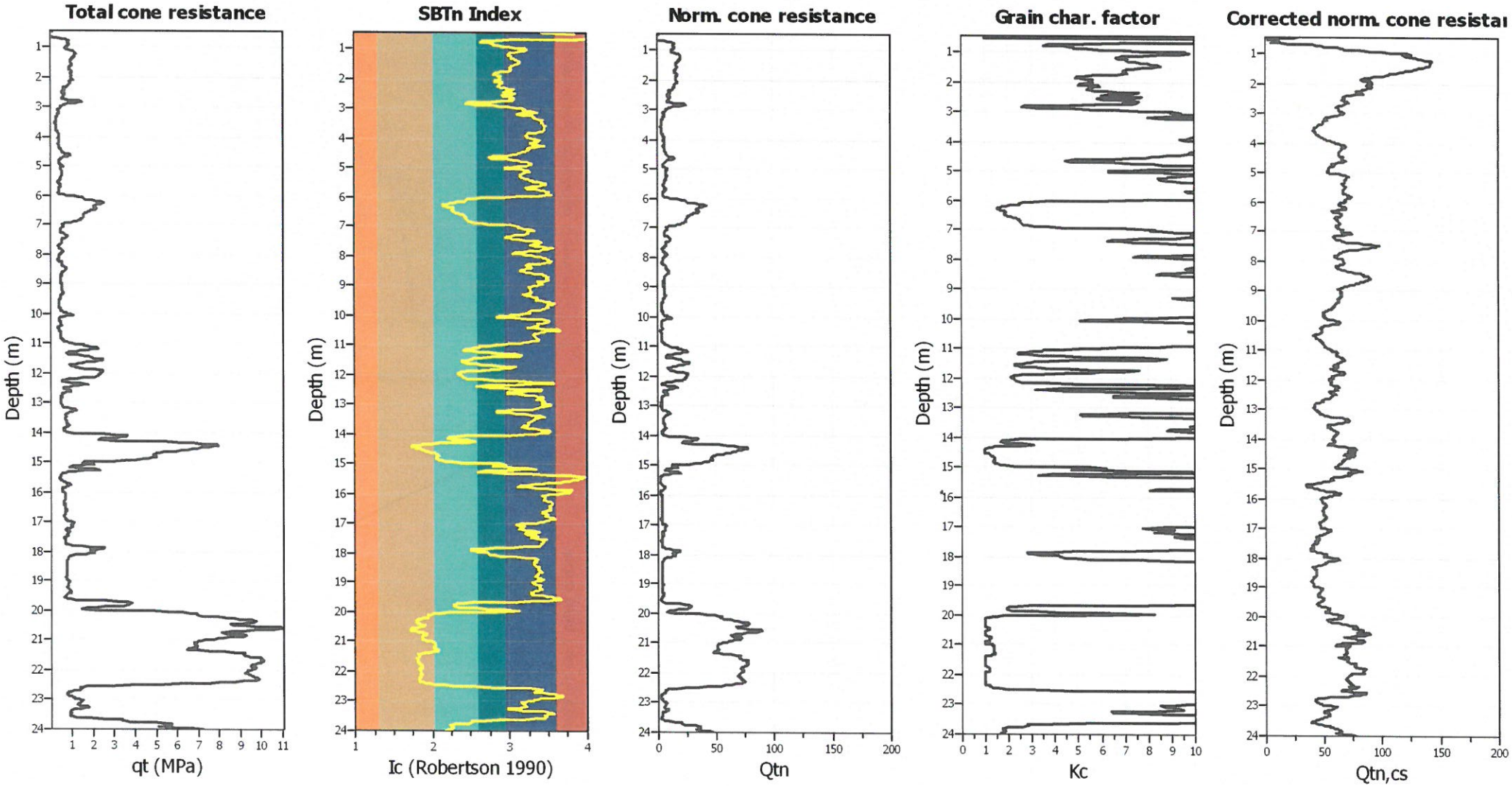






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and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

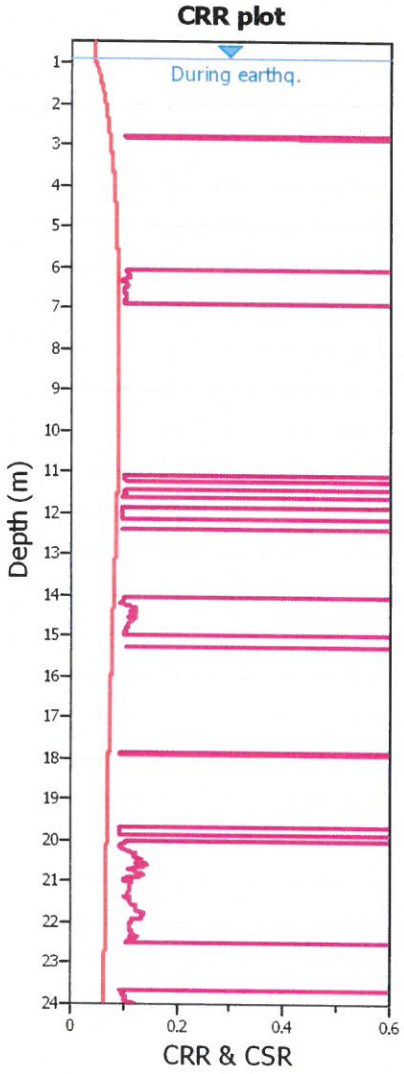
Liquefaction analysis overall plots (intermediate results)

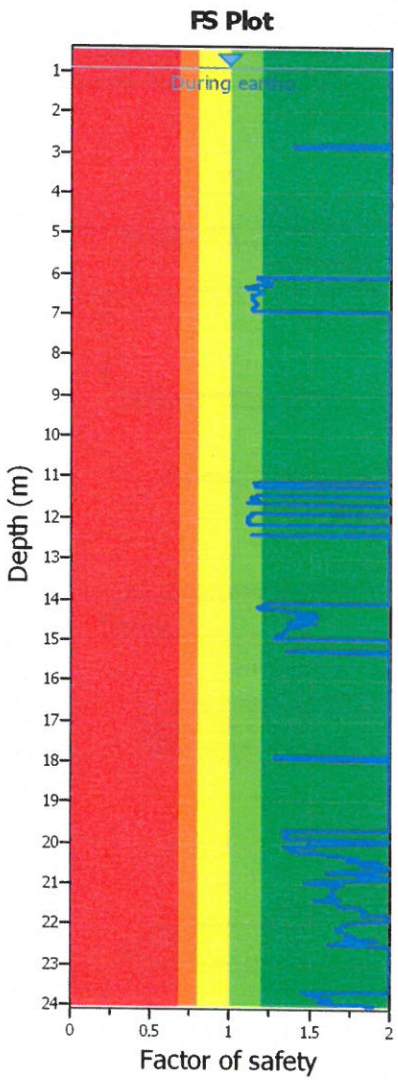


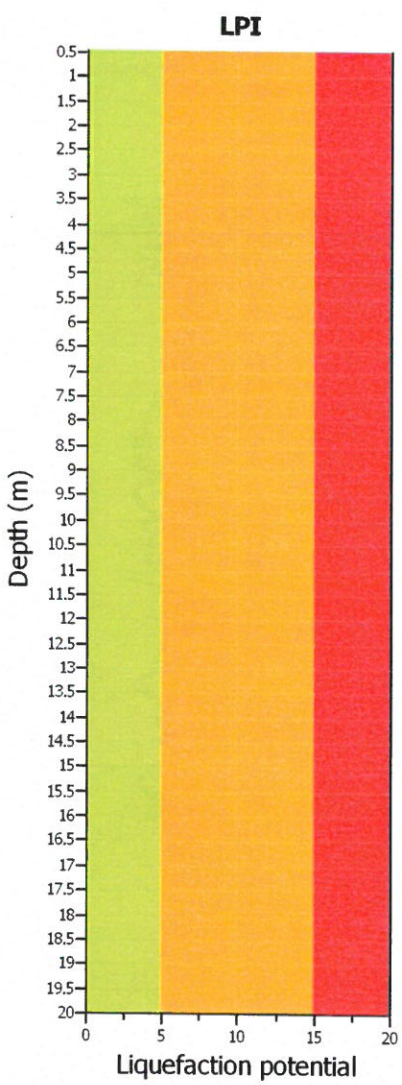
Input parameters and analysis data

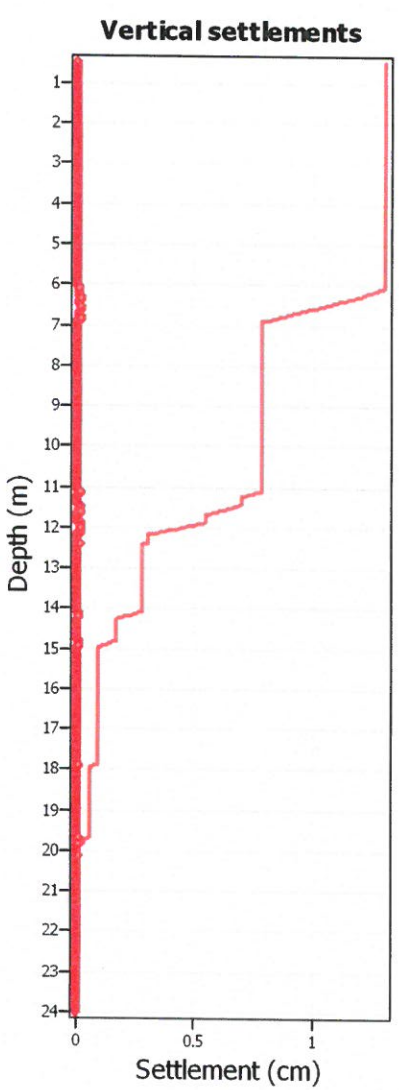
Analysis method:	NCEER (1998)	Depth to water table (erthq.):	0.90 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	0.90 m	Fill height:	N/A	Limit depth:	N/A

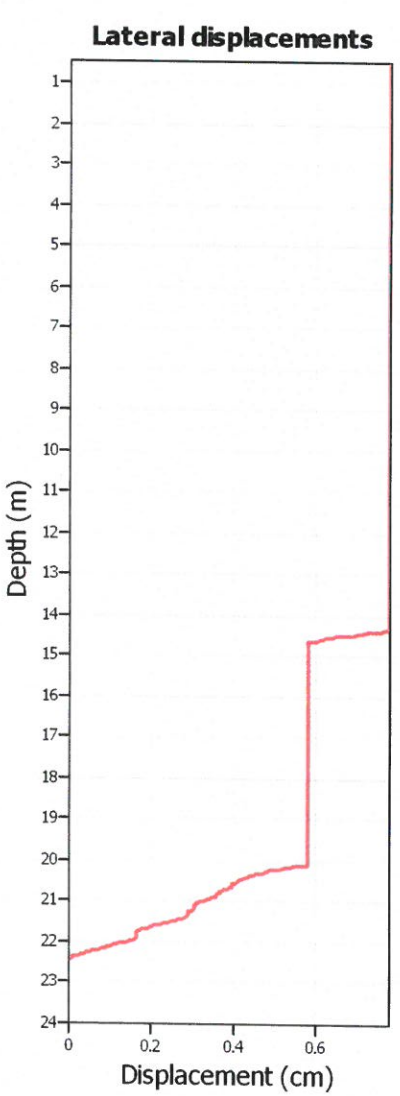
Liquefaction analysis overall plots











Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	0.90 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	0.90 m	Fill height:	N/A	Limit depth:	N/A

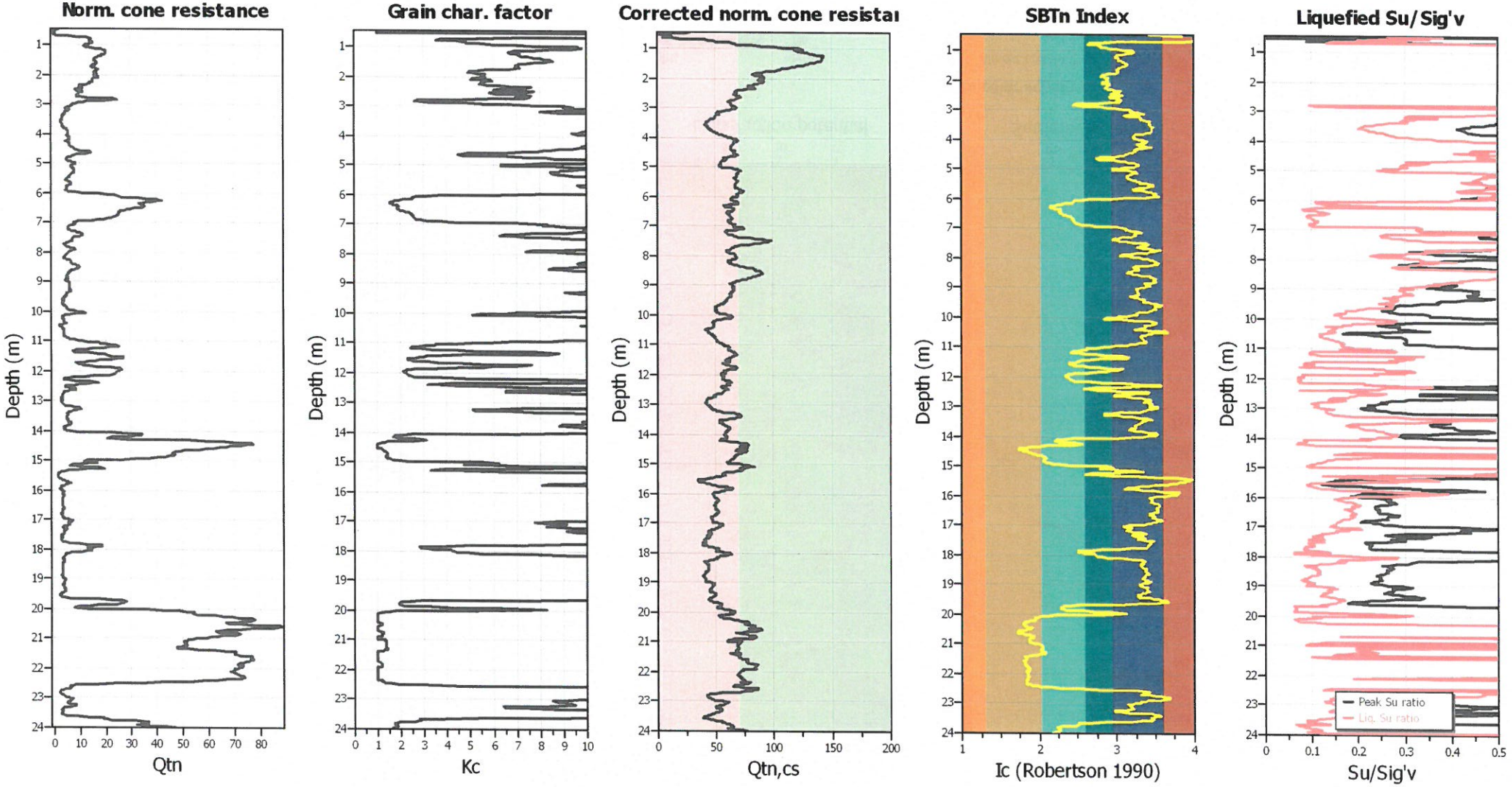
F.S. color scheme

- 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.):	0.90 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	0.90 m	Fill height:	N/A	Limit depth:	N/A

:: Liquefaction Potential Index calculation data ::

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
0.46	2.00	0.00	9.77	0.02	0.00	0.48	2.00	0.00	9.76	0.02	0.00
0.50	2.00	0.00	9.75	0.02	0.00	0.52	2.00	0.00	9.74	0.02	0.00
0.54	2.00	0.00	9.73	0.02	0.00	0.56	2.00	0.00	9.72	0.02	0.00
0.58	2.00	0.00	9.71	0.02	0.00	0.60	2.00	0.00	9.70	0.02	0.00
0.62	2.00	0.00	9.69	0.02	0.00	0.64	2.00	0.00	9.68	0.02	0.00
0.66	2.00	0.00	9.67	0.02	0.00	0.68	2.00	0.00	9.66	0.02	0.00
0.70	2.00	0.00	9.65	0.02	0.00	0.72	2.00	0.00	9.64	0.02	0.00
0.74	2.00	0.00	9.63	0.02	0.00	0.76	2.00	0.00	9.62	0.02	0.00
0.78	2.00	0.00	9.61	0.02	0.00	0.80	2.00	0.00	9.60	0.02	0.00
0.82	2.00	0.00	9.59	0.02	0.00	0.84	2.00	0.00	9.58	0.02	0.00
0.86	2.00	0.00	9.57	0.02	0.00	0.88	2.00	0.00	9.56	0.02	0.00
0.90	2.00	0.00	9.55	0.02	0.00	0.92	2.00	0.00	9.54	0.02	0.00
0.94	2.00	0.00	9.53	0.02	0.00	0.96	2.00	0.00	9.52	0.02	0.00
0.98	2.00	0.00	9.51	0.02	0.00	1.00	2.00	0.00	9.50	0.02	0.00
1.02	2.00	0.00	9.49	0.02	0.00	1.04	2.00	0.00	9.48	0.02	0.00
1.06	2.00	0.00	9.47	0.02	0.00	1.08	2.00	0.00	9.46	0.02	0.00
1.10	2.00	0.00	9.45	0.02	0.00	1.12	2.00	0.00	9.44	0.02	0.00
1.14	2.00	0.00	9.43	0.02	0.00	1.16	2.00	0.00	9.42	0.02	0.00
1.18	2.00	0.00	9.41	0.02	0.00	1.20	2.00	0.00	9.40	0.02	0.00
1.22	2.00	0.00	9.39	0.02	0.00	1.24	2.00	0.00	9.38	0.02	0.00
1.26	2.00	0.00	9.37	0.02	0.00	1.28	2.00	0.00	9.36	0.02	0.00
1.30	2.00	0.00	9.35	0.02	0.00	1.32	2.00	0.00	9.34	0.02	0.00
1.34	2.00	0.00	9.33	0.02	0.00	1.36	2.00	0.00	9.32	0.02	0.00
1.38	2.00	0.00	9.31	0.02	0.00	1.40	2.00	0.00	9.30	0.02	0.00
1.42	2.00	0.00	9.29	0.02	0.00	1.44	2.00	0.00	9.28	0.02	0.00
1.46	2.00	0.00	9.27	0.02	0.00	1.48	2.00	0.00	9.26	0.02	0.00
1.50	2.00	0.00	9.25	0.02	0.00	1.52	2.00	0.00	9.24	0.02	0.00
1.54	2.00	0.00	9.23	0.02	0.00	1.56	2.00	0.00	9.22	0.02	0.00
1.58	2.00	0.00	9.21	0.02	0.00	1.60	2.00	0.00	9.20	0.02	0.00
1.62	2.00	0.00	9.19	0.02	0.00	1.64	2.00	0.00	9.18	0.02	0.00
1.66	2.00	0.00	9.17	0.02	0.00	1.68	2.00	0.00	9.16	0.02	0.00
1.70	2.00	0.00	9.15	0.02	0.00	1.72	2.00	0.00	9.14	0.02	0.00
1.74	2.00	0.00	9.13	0.02	0.00	1.76	2.00	0.00	9.12	0.02	0.00
1.78	2.00	0.00	9.11	0.02	0.00	1.80	2.00	0.00	9.10	0.02	0.00
1.82	2.00	0.00	9.09	0.02	0.00	1.84	2.00	0.00	9.08	0.02	0.00
1.86	2.00	0.00	9.07	0.02	0.00	1.88	2.00	0.00	9.06	0.02	0.00
1.90	2.00	0.00	9.05	0.02	0.00	1.92	2.00	0.00	9.04	0.02	0.00
1.94	2.00	0.00	9.03	0.02	0.00	1.96	2.00	0.00	9.02	0.02	0.00
1.98	2.00	0.00	9.01	0.02	0.00	2.00	2.00	0.00	9.00	0.02	0.00
2.02	2.00	0.00	8.99	0.02	0.00	2.04	2.00	0.00	8.98	0.02	0.00
2.06	2.00	0.00	8.97	0.02	0.00	2.08	2.00	0.00	8.96	0.02	0.00
2.10	2.00	0.00	8.95	0.02	0.00	2.12	2.00	0.00	8.94	0.02	0.00
2.14	2.00	0.00	8.93	0.02	0.00	2.16	2.00	0.00	8.92	0.02	0.00
2.18	2.00	0.00	8.91	0.02	0.00	2.20	2.00	0.00	8.90	0.02	0.00
2.22	2.00	0.00	8.89	0.02	0.00	2.24	2.00	0.00	8.88	0.02	0.00
2.26	2.00	0.00	8.87	0.02	0.00	2.28	2.00	0.00	8.86	0.02	0.00
2.30	2.00	0.00	8.85	0.02	0.00	2.32	2.00	0.00	8.84	0.02	0.00
2.34	2.00	0.00	8.83	0.02	0.00	2.36	2.00	0.00	8.82	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
2.38	2.00	0.00	8.81	0.02	0.00	2.40	2.00	0.00	8.80	0.02	0.00
2.42	2.00	0.00	8.79	0.02	0.00	2.44	2.00	0.00	8.78	0.02	0.00
2.46	2.00	0.00	8.77	0.02	0.00	2.48	2.00	0.00	8.76	0.02	0.00
2.50	2.00	0.00	8.75	0.02	0.00	2.52	2.00	0.00	8.74	0.02	0.00
2.54	2.00	0.00	8.73	0.02	0.00	2.56	2.00	0.00	8.72	0.02	0.00
2.58	2.00	0.00	8.71	0.02	0.00	2.60	2.00	0.00	8.70	0.02	0.00
2.62	2.00	0.00	8.69	0.02	0.00	2.64	2.00	0.00	8.68	0.02	0.00
2.66	2.00	0.00	8.67	0.02	0.00	2.68	2.00	0.00	8.66	0.02	0.00
2.70	2.00	0.00	8.65	0.02	0.00	2.72	2.00	0.00	8.64	0.02	0.00
2.74	2.00	0.00	8.63	0.02	0.00	2.76	2.00	0.00	8.62	0.02	0.00
2.78	2.00	0.00	8.61	0.02	0.00	2.80	1.39	0.00	8.60	0.02	0.00
2.82	1.40	0.00	8.59	0.02	0.00	2.84	1.41	0.00	8.58	0.02	0.00
2.86	1.40	0.00	8.57	0.02	0.00	2.88	2.00	0.00	8.56	0.02	0.00
2.90	2.00	0.00	8.55	0.02	0.00	2.92	2.00	0.00	8.54	0.02	0.00
2.94	2.00	0.00	8.53	0.02	0.00	2.96	2.00	0.00	8.52	0.02	0.00
2.98	2.00	0.00	8.51	0.02	0.00	3.00	2.00	0.00	8.50	0.02	0.00
3.02	2.00	0.00	8.49	0.02	0.00	3.04	2.00	0.00	8.48	0.02	0.00
3.06	2.00	0.00	8.47	0.02	0.00	3.08	2.00	0.00	8.46	0.02	0.00
3.10	2.00	0.00	8.45	0.02	0.00	3.12	2.00	0.00	8.44	0.02	0.00
3.14	2.00	0.00	8.43	0.02	0.00	3.16	2.00	0.00	8.42	0.02	0.00
3.18	2.00	0.00	8.41	0.02	0.00	3.20	2.00	0.00	8.40	0.02	0.00
3.22	2.00	0.00	8.39	0.02	0.00	3.24	2.00	0.00	8.38	0.02	0.00
3.26	2.00	0.00	8.37	0.02	0.00	3.28	2.00	0.00	8.36	0.02	0.00
3.30	2.00	0.00	8.35	0.02	0.00	3.32	2.00	0.00	8.34	0.02	0.00
3.34	2.00	0.00	8.33	0.02	0.00	3.36	2.00	0.00	8.32	0.02	0.00
3.38	2.00	0.00	8.31	0.02	0.00	3.40	2.00	0.00	8.30	0.02	0.00
3.42	2.00	0.00	8.29	0.02	0.00	3.44	2.00	0.00	8.28	0.02	0.00
3.46	2.00	0.00	8.27	0.02	0.00	3.48	2.00	0.00	8.26	0.02	0.00
3.50	2.00	0.00	8.25	0.02	0.00	3.52	2.00	0.00	8.24	0.02	0.00
3.54	2.00	0.00	8.23	0.02	0.00	3.56	2.00	0.00	8.22	0.02	0.00
3.58	2.00	0.00	8.21	0.02	0.00	3.60	2.00	0.00	8.20	0.02	0.00
3.62	2.00	0.00	8.19	0.02	0.00	3.64	2.00	0.00	8.18	0.02	0.00
3.66	2.00	0.00	8.17	0.02	0.00	3.68	2.00	0.00	8.16	0.02	0.00
3.70	2.00	0.00	8.15	0.02	0.00	3.72	2.00	0.00	8.14	0.02	0.00
3.74	2.00	0.00	8.13	0.02	0.00	3.76	2.00	0.00	8.12	0.02	0.00
3.78	2.00	0.00	8.11	0.02	0.00	3.80	2.00	0.00	8.10	0.02	0.00
3.82	2.00	0.00	8.09	0.02	0.00	3.84	2.00	0.00	8.08	0.02	0.00
3.86	2.00	0.00	8.07	0.02	0.00	3.88	2.00	0.00	8.06	0.02	0.00
3.90	2.00	0.00	8.05	0.02	0.00	3.92	2.00	0.00	8.04	0.02	0.00
3.94	2.00	0.00	8.03	0.02	0.00	3.96	2.00	0.00	8.02	0.02	0.00
3.98	2.00	0.00	8.01	0.02	0.00	4.00	2.00	0.00	8.00	0.02	0.00
4.02	2.00	0.00	7.99	0.02	0.00	4.04	2.00	0.00	7.98	0.02	0.00
4.06	2.00	0.00	7.97	0.02	0.00	4.08	2.00	0.00	7.96	0.02	0.00
4.10	2.00	0.00	7.95	0.02	0.00	4.12	2.00	0.00	7.94	0.02	0.00
4.14	2.00	0.00	7.93	0.02	0.00	4.16	2.00	0.00	7.92	0.02	0.00
4.18	2.00	0.00	7.91	0.02	0.00	4.20	2.00	0.00	7.90	0.02	0.00
4.22	2.00	0.00	7.89	0.02	0.00	4.24	2.00	0.00	7.88	0.02	0.00
4.26	2.00	0.00	7.87	0.02	0.00	4.28	2.00	0.00	7.86	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
4.30	2.00	0.00	7.85	0.02	0.00	4.32	2.00	0.00	7.84	0.02	0.00
4.34	2.00	0.00	7.83	0.02	0.00	4.36	2.00	0.00	7.82	0.02	0.00
4.38	2.00	0.00	7.81	0.02	0.00	4.40	2.00	0.00	7.80	0.02	0.00
4.42	2.00	0.00	7.79	0.02	0.00	4.44	2.00	0.00	7.78	0.02	0.00
4.46	2.00	0.00	7.77	0.02	0.00	4.48	2.00	0.00	7.76	0.02	0.00
4.50	2.00	0.00	7.75	0.02	0.00	4.52	2.00	0.00	7.74	0.02	0.00
4.54	2.00	0.00	7.73	0.02	0.00	4.56	2.00	0.00	7.72	0.02	0.00
4.58	2.00	0.00	7.71	0.02	0.00	4.60	2.00	0.00	7.70	0.02	0.00
4.62	2.00	0.00	7.69	0.02	0.00	4.64	2.00	0.00	7.68	0.02	0.00
4.66	2.00	0.00	7.67	0.02	0.00	4.68	2.00	0.00	7.66	0.02	0.00
4.70	2.00	0.00	7.65	0.02	0.00	4.72	2.00	0.00	7.64	0.02	0.00
4.74	2.00	0.00	7.63	0.02	0.00	4.76	2.00	0.00	7.62	0.02	0.00
4.78	2.00	0.00	7.61	0.02	0.00	4.80	2.00	0.00	7.60	0.02	0.00
4.82	2.00	0.00	7.59	0.02	0.00	4.84	2.00	0.00	7.58	0.02	0.00
4.86	2.00	0.00	7.57	0.02	0.00	4.88	2.00	0.00	7.56	0.02	0.00
4.90	2.00	0.00	7.55	0.02	0.00	4.92	2.00	0.00	7.54	0.02	0.00
4.94	2.00	0.00	7.53	0.02	0.00	4.96	2.00	0.00	7.52	0.02	0.00
4.98	2.00	0.00	7.51	0.02	0.00	5.00	2.00	0.00	7.50	0.02	0.00
5.02	2.00	0.00	7.49	0.02	0.00	5.04	2.00	0.00	7.48	0.02	0.00
5.06	2.00	0.00	7.47	0.02	0.00	5.08	2.00	0.00	7.46	0.02	0.00
5.10	2.00	0.00	7.45	0.02	0.00	5.12	2.00	0.00	7.44	0.02	0.00
5.14	2.00	0.00	7.43	0.02	0.00	5.16	2.00	0.00	7.42	0.02	0.00
5.18	2.00	0.00	7.41	0.02	0.00	5.20	2.00	0.00	7.40	0.02	0.00
5.22	2.00	0.00	7.39	0.02	0.00	5.24	2.00	0.00	7.38	0.02	0.00
5.26	2.00	0.00	7.37	0.02	0.00	5.28	2.00	0.00	7.36	0.02	0.00
5.30	2.00	0.00	7.35	0.02	0.00	5.32	2.00	0.00	7.34	0.02	0.00
5.34	2.00	0.00	7.33	0.02	0.00	5.36	2.00	0.00	7.32	0.02	0.00
5.38	2.00	0.00	7.31	0.02	0.00	5.40	2.00	0.00	7.30	0.02	0.00
5.42	2.00	0.00	7.29	0.02	0.00	5.44	2.00	0.00	7.28	0.02	0.00
5.46	2.00	0.00	7.27	0.02	0.00	5.48	2.00	0.00	7.26	0.02	0.00
5.50	2.00	0.00	7.25	0.02	0.00	5.52	2.00	0.00	7.24	0.02	0.00
5.54	2.00	0.00	7.23	0.02	0.00	5.56	2.00	0.00	7.22	0.02	0.00
5.58	2.00	0.00	7.21	0.02	0.00	5.60	2.00	0.00	7.20	0.02	0.00
5.62	2.00	0.00	7.19	0.02	0.00	5.64	2.00	0.00	7.18	0.02	0.00
5.66	2.00	0.00	7.17	0.02	0.00	5.68	2.00	0.00	7.16	0.02	0.00
5.70	2.00	0.00	7.15	0.02	0.00	5.72	2.00	0.00	7.14	0.02	0.00
5.74	2.00	0.00	7.13	0.02	0.00	5.76	2.00	0.00	7.12	0.02	0.00
5.78	2.00	0.00	7.11	0.02	0.00	5.80	2.00	0.00	7.10	0.02	0.00
5.82	2.00	0.00	7.09	0.02	0.00	5.84	2.00	0.00	7.08	0.02	0.00
5.86	2.00	0.00	7.07	0.02	0.00	5.88	2.00	0.00	7.06	0.02	0.00
5.90	2.00	0.00	7.05	0.02	0.00	5.92	2.00	0.00	7.04	0.02	0.00
5.94	2.00	0.00	7.03	0.02	0.00	5.96	2.00	0.00	7.02	0.02	0.00
5.98	2.00	0.00	7.01	0.02	0.00	6.00	2.00	0.00	7.00	0.02	0.00
6.02	2.00	0.00	6.99	0.02	0.00	6.04	2.00	0.00	6.98	0.02	0.00
6.06	1.17	0.00	6.97	0.02	0.00	6.08	1.17	0.00	6.96	0.02	0.00
6.10	1.17	0.00	6.95	0.02	0.00	6.12	1.18	0.00	6.94	0.02	0.00
6.14	1.20	0.00	6.93	0.02	0.00	6.16	1.22	0.00	6.92	0.02	0.00
6.18	1.23	0.00	6.91	0.02	0.00	6.20	1.25	0.00	6.90	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
6.22	1.26	0.00	6.89	0.02	0.00	6.24	1.26	0.00	6.88	0.02	0.00
6.26	1.22	0.00	6.87	0.02	0.00	6.28	1.17	0.00	6.86	0.02	0.00
6.30	1.12	0.00	6.85	0.02	0.00	6.32	1.10	0.00	6.84	0.02	0.00
6.34	1.11	0.00	6.83	0.02	0.00	6.36	1.14	0.00	6.82	0.02	0.00
6.38	1.16	0.00	6.81	0.02	0.00	6.40	1.18	0.00	6.80	0.02	0.00
6.42	1.19	0.00	6.79	0.02	0.00	6.44	1.20	0.00	6.78	0.02	0.00
6.46	1.21	0.00	6.77	0.02	0.00	6.48	1.19	0.00	6.76	0.02	0.00
6.50	1.16	0.00	6.75	0.02	0.00	6.52	1.13	0.00	6.74	0.02	0.00
6.54	1.12	0.00	6.73	0.02	0.00	6.56	1.13	0.00	6.72	0.02	0.00
6.58	1.13	0.00	6.71	0.02	0.00	6.60	1.14	0.00	6.70	0.02	0.00
6.62	1.14	0.00	6.69	0.02	0.00	6.64	1.15	0.00	6.68	0.02	0.00
6.66	1.15	0.00	6.67	0.02	0.00	6.68	1.16	0.00	6.66	0.02	0.00
6.70	1.16	0.00	6.65	0.02	0.00	6.72	1.17	0.00	6.64	0.02	0.00
6.74	1.17	0.00	6.63	0.02	0.00	6.76	1.17	0.00	6.62	0.02	0.00
6.78	1.16	0.00	6.61	0.02	0.00	6.80	1.15	0.00	6.60	0.02	0.00
6.82	1.14	0.00	6.59	0.02	0.00	6.84	1.13	0.00	6.58	0.02	0.00
6.86	1.13	0.00	6.57	0.02	0.00	6.88	1.15	0.00	6.56	0.02	0.00
6.90	2.00	0.00	6.55	0.02	0.00	6.92	2.00	0.00	6.54	0.02	0.00
6.94	2.00	0.00	6.53	0.02	0.00	6.96	2.00	0.00	6.52	0.02	0.00
6.98	2.00	0.00	6.51	0.02	0.00	7.00	2.00	0.00	6.50	0.02	0.00
7.02	2.00	0.00	6.49	0.02	0.00	7.04	2.00	0.00	6.48	0.02	0.00
7.06	2.00	0.00	6.47	0.02	0.00	7.08	2.00	0.00	6.46	0.02	0.00
7.10	2.00	0.00	6.45	0.02	0.00	7.12	2.00	0.00	6.44	0.02	0.00
7.14	2.00	0.00	6.43	0.02	0.00	7.16	2.00	0.00	6.42	0.02	0.00
7.18	2.00	0.00	6.41	0.02	0.00	7.20	2.00	0.00	6.40	0.02	0.00
7.22	2.00	0.00	6.39	0.02	0.00	7.24	2.00	0.00	6.38	0.02	0.00
7.26	2.00	0.00	6.37	0.02	0.00	7.28	2.00	0.00	6.36	0.02	0.00
7.30	2.00	0.00	6.35	0.02	0.00	7.32	2.00	0.00	6.34	0.02	0.00
7.34	2.00	0.00	6.33	0.02	0.00	7.36	2.00	0.00	6.32	0.02	0.00
7.38	2.00	0.00	6.31	0.02	0.00	7.40	2.00	0.00	6.30	0.02	0.00
7.42	2.00	0.00	6.29	0.02	0.00	7.44	2.00	0.00	6.28	0.02	0.00
7.46	2.00	0.00	6.27	0.02	0.00	7.48	2.00	0.00	6.26	0.02	0.00
7.50	2.00	0.00	6.25	0.02	0.00	7.52	2.00	0.00	6.24	0.02	0.00
7.54	2.00	0.00	6.23	0.02	0.00	7.56	2.00	0.00	6.22	0.02	0.00
7.58	2.00	0.00	6.21	0.02	0.00	7.60	2.00	0.00	6.20	0.02	0.00
7.62	2.00	0.00	6.19	0.02	0.00	7.64	2.00	0.00	6.18	0.02	0.00
7.66	2.00	0.00	6.17	0.02	0.00	7.68	2.00	0.00	6.16	0.02	0.00
7.70	2.00	0.00	6.15	0.02	0.00	7.72	2.00	0.00	6.14	0.02	0.00
7.74	2.00	0.00	6.13	0.02	0.00	7.76	2.00	0.00	6.12	0.02	0.00
7.78	2.00	0.00	6.11	0.02	0.00	7.80	2.00	0.00	6.10	0.02	0.00
7.82	2.00	0.00	6.09	0.02	0.00	7.84	2.00	0.00	6.08	0.02	0.00
7.86	2.00	0.00	6.07	0.02	0.00	7.88	2.00	0.00	6.06	0.02	0.00
7.90	2.00	0.00	6.05	0.02	0.00	7.92	2.00	0.00	6.04	0.02	0.00
7.94	2.00	0.00	6.03	0.02	0.00	7.96	2.00	0.00	6.02	0.02	0.00
7.98	2.00	0.00	6.01	0.02	0.00	8.00	2.00	0.00	6.00	0.02	0.00
8.02	2.00	0.00	5.99	0.02	0.00	8.04	2.00	0.00	5.98	0.02	0.00
8.06	2.00	0.00	5.97	0.02	0.00	8.08	2.00	0.00	5.96	0.02	0.00
8.10	2.00	0.00	5.95	0.02	0.00	8.12	2.00	0.00	5.94	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
8.14	2.00	0.00	5.93	0.02	0.00	8.16	2.00	0.00	5.92	0.02	0.00
8.18	2.00	0.00	5.91	0.02	0.00	8.20	2.00	0.00	5.90	0.02	0.00
8.22	2.00	0.00	5.89	0.02	0.00	8.24	2.00	0.00	5.88	0.02	0.00
8.26	2.00	0.00	5.87	0.02	0.00	8.28	2.00	0.00	5.86	0.02	0.00
8.30	2.00	0.00	5.85	0.02	0.00	8.32	2.00	0.00	5.84	0.02	0.00
8.34	2.00	0.00	5.83	0.02	0.00	8.36	2.00	0.00	5.82	0.02	0.00
8.38	2.00	0.00	5.81	0.02	0.00	8.40	2.00	0.00	5.80	0.02	0.00
8.42	2.00	0.00	5.79	0.02	0.00	8.44	2.00	0.00	5.78	0.02	0.00
8.46	2.00	0.00	5.77	0.02	0.00	8.48	2.00	0.00	5.76	0.02	0.00
8.50	2.00	0.00	5.75	0.02	0.00	8.52	2.00	0.00	5.74	0.02	0.00
8.54	2.00	0.00	5.73	0.02	0.00	8.56	2.00	0.00	5.72	0.02	0.00
8.58	2.00	0.00	5.71	0.02	0.00	8.60	2.00	0.00	5.70	0.02	0.00
8.62	2.00	0.00	5.69	0.02	0.00	8.64	2.00	0.00	5.68	0.02	0.00
8.66	2.00	0.00	5.67	0.02	0.00	8.68	2.00	0.00	5.66	0.02	0.00
8.70	2.00	0.00	5.65	0.02	0.00	8.72	2.00	0.00	5.64	0.02	0.00
8.74	2.00	0.00	5.63	0.02	0.00	8.76	2.00	0.00	5.62	0.02	0.00
8.78	2.00	0.00	5.61	0.02	0.00	8.80	2.00	0.00	5.60	0.02	0.00
8.82	2.00	0.00	5.59	0.02	0.00	8.84	2.00	0.00	5.58	0.02	0.00
8.86	2.00	0.00	5.57	0.02	0.00	8.88	2.00	0.00	5.56	0.02	0.00
8.90	2.00	0.00	5.55	0.02	0.00	8.92	2.00	0.00	5.54	0.02	0.00
8.94	2.00	0.00	5.53	0.02	0.00	8.96	2.00	0.00	5.52	0.02	0.00
8.98	2.00	0.00	5.51	0.02	0.00	9.00	2.00	0.00	5.50	0.02	0.00
9.02	2.00	0.00	5.49	0.02	0.00	9.04	2.00	0.00	5.48	0.02	0.00
9.06	2.00	0.00	5.47	0.02	0.00	9.08	2.00	0.00	5.46	0.02	0.00
9.10	2.00	0.00	5.45	0.02	0.00	9.12	2.00	0.00	5.44	0.02	0.00
9.14	2.00	0.00	5.43	0.02	0.00	9.16	2.00	0.00	5.42	0.02	0.00
9.18	2.00	0.00	5.41	0.02	0.00	9.20	2.00	0.00	5.40	0.02	0.00
9.22	2.00	0.00	5.39	0.02	0.00	9.24	2.00	0.00	5.38	0.02	0.00
9.26	2.00	0.00	5.37	0.02	0.00	9.28	2.00	0.00	5.36	0.02	0.00
9.30	2.00	0.00	5.35	0.02	0.00	9.32	2.00	0.00	5.34	0.02	0.00
9.34	2.00	0.00	5.33	0.02	0.00	9.36	2.00	0.00	5.32	0.02	0.00
9.38	2.00	0.00	5.31	0.02	0.00	9.40	2.00	0.00	5.30	0.02	0.00
9.42	2.00	0.00	5.29	0.02	0.00	9.44	2.00	0.00	5.28	0.02	0.00
9.46	2.00	0.00	5.27	0.02	0.00	9.48	2.00	0.00	5.26	0.02	0.00
9.50	2.00	0.00	5.25	0.02	0.00	9.52	2.00	0.00	5.24	0.02	0.00
9.54	2.00	0.00	5.23	0.02	0.00	9.56	2.00	0.00	5.22	0.02	0.00
9.58	2.00	0.00	5.21	0.02	0.00	9.60	2.00	0.00	5.20	0.02	0.00
9.62	2.00	0.00	5.19	0.02	0.00	9.64	2.00	0.00	5.18	0.02	0.00
9.66	2.00	0.00	5.17	0.02	0.00	9.68	2.00	0.00	5.16	0.02	0.00
9.70	2.00	0.00	5.15	0.02	0.00	9.72	2.00	0.00	5.14	0.02	0.00
9.74	2.00	0.00	5.13	0.02	0.00	9.76	2.00	0.00	5.12	0.02	0.00
9.78	2.00	0.00	5.11	0.02	0.00	9.80	2.00	0.00	5.10	0.02	0.00
9.82	2.00	0.00	5.09	0.02	0.00	9.84	2.00	0.00	5.08	0.02	0.00
9.86	2.00	0.00	5.07	0.02	0.00	9.88	2.00	0.00	5.06	0.02	0.00
9.90	2.00	0.00	5.05	0.02	0.00	9.92	2.00	0.00	5.04	0.02	0.00
9.94	2.00	0.00	5.03	0.02	0.00	9.96	2.00	0.00	5.02	0.02	0.00
9.98	2.00	0.00	5.01	0.02	0.00	10.00	2.00	0.00	5.00	0.02	0.00
10.02	2.00	0.00	4.99	0.02	0.00	10.04	2.00	0.00	4.98	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
10.06	2.00	0.00	4.97	0.02	0.00	10.08	2.00	0.00	4.96	0.02	0.00
10.10	2.00	0.00	4.95	0.02	0.00	10.12	2.00	0.00	4.94	0.02	0.00
10.14	2.00	0.00	4.93	0.02	0.00	10.16	2.00	0.00	4.92	0.02	0.00
10.18	2.00	0.00	4.91	0.02	0.00	10.20	2.00	0.00	4.90	0.02	0.00
10.22	2.00	0.00	4.89	0.02	0.00	10.24	2.00	0.00	4.88	0.02	0.00
10.26	2.00	0.00	4.87	0.02	0.00	10.28	2.00	0.00	4.86	0.02	0.00
10.30	2.00	0.00	4.85	0.02	0.00	10.32	2.00	0.00	4.84	0.02	0.00
10.34	2.00	0.00	4.83	0.02	0.00	10.36	2.00	0.00	4.82	0.02	0.00
10.38	2.00	0.00	4.81	0.02	0.00	10.40	2.00	0.00	4.80	0.02	0.00
10.42	2.00	0.00	4.79	0.02	0.00	10.44	2.00	0.00	4.78	0.02	0.00
10.46	2.00	0.00	4.77	0.02	0.00	10.48	2.00	0.00	4.76	0.02	0.00
10.50	2.00	0.00	4.75	0.02	0.00	10.52	2.00	0.00	4.74	0.02	0.00
10.54	2.00	0.00	4.73	0.02	0.00	10.56	2.00	0.00	4.72	0.02	0.00
10.58	2.00	0.00	4.71	0.02	0.00	10.60	2.00	0.00	4.70	0.02	0.00
10.62	2.00	0.00	4.69	0.02	0.00	10.64	2.00	0.00	4.68	0.02	0.00
10.66	2.00	0.00	4.67	0.02	0.00	10.68	2.00	0.00	4.66	0.02	0.00
10.70	2.00	0.00	4.65	0.02	0.00	10.72	2.00	0.00	4.64	0.02	0.00
10.74	2.00	0.00	4.63	0.02	0.00	10.76	2.00	0.00	4.62	0.02	0.00
10.78	2.00	0.00	4.61	0.02	0.00	10.80	2.00	0.00	4.60	0.02	0.00
10.82	2.00	0.00	4.59	0.02	0.00	10.84	2.00	0.00	4.58	0.02	0.00
10.86	2.00	0.00	4.57	0.02	0.00	10.88	2.00	0.00	4.56	0.02	0.00
10.90	2.00	0.00	4.55	0.02	0.00	10.92	2.00	0.00	4.54	0.02	0.00
10.94	2.00	0.00	4.53	0.02	0.00	10.96	2.00	0.00	4.52	0.02	0.00
10.98	2.00	0.00	4.51	0.02	0.00	11.00	2.00	0.00	4.50	0.02	0.00
11.02	2.00	0.00	4.49	0.02	0.00	11.04	2.00	0.00	4.48	0.02	0.00
11.06	2.00	0.00	4.47	0.02	0.00	11.08	2.00	0.00	4.46	0.02	0.00
11.10	1.15	0.00	4.45	0.02	0.00	11.12	1.15	0.00	4.44	0.02	0.00
11.14	1.15	0.00	4.43	0.02	0.00	11.16	1.15	0.00	4.42	0.02	0.00
11.18	1.15	0.00	4.41	0.02	0.00	11.20	1.16	0.00	4.40	0.02	0.00
11.22	1.19	0.00	4.39	0.02	0.00	11.24	2.00	0.00	4.38	0.02	0.00
11.26	2.00	0.00	4.37	0.02	0.00	11.28	2.00	0.00	4.36	0.02	0.00
11.30	2.00	0.00	4.35	0.02	0.00	11.32	2.00	0.00	4.34	0.02	0.00
11.34	2.00	0.00	4.33	0.02	0.00	11.36	2.00	0.00	4.32	0.02	0.00
11.38	2.00	0.00	4.31	0.02	0.00	11.40	2.00	0.00	4.30	0.02	0.00
11.42	2.00	0.00	4.29	0.02	0.00	11.44	1.17	0.00	4.28	0.02	0.00
11.46	1.16	0.00	4.27	0.02	0.00	11.48	1.14	0.00	4.26	0.02	0.00
11.50	1.13	0.00	4.25	0.02	0.00	11.52	1.15	0.00	4.24	0.02	0.00
11.54	1.17	0.00	4.23	0.02	0.00	11.56	1.18	0.00	4.22	0.02	0.00
11.58	1.15	0.00	4.21	0.02	0.00	11.60	1.12	0.00	4.20	0.02	0.00
11.62	1.10	0.00	4.19	0.02	0.00	11.64	1.11	0.00	4.18	0.02	0.00
11.66	2.00	0.00	4.17	0.02	0.00	11.68	2.00	0.00	4.16	0.02	0.00
11.70	2.00	0.00	4.15	0.02	0.00	11.72	2.00	0.00	4.14	0.02	0.00
11.74	2.00	0.00	4.13	0.02	0.00	11.76	2.00	0.00	4.12	0.02	0.00
11.78	2.00	0.00	4.11	0.02	0.00	11.80	2.00	0.00	4.10	0.02	0.00
11.82	2.00	0.00	4.09	0.02	0.00	11.84	2.00	0.00	4.08	0.02	0.00
11.86	2.00	0.00	4.07	0.02	0.00	11.88	1.13	0.00	4.06	0.02	0.00
11.90	1.13	0.00	4.05	0.02	0.00	11.92	1.14	0.00	4.04	0.02	0.00
11.94	1.14	0.00	4.03	0.02	0.00	11.96	1.12	0.00	4.02	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
11.98	1.10	0.00	4.01	0.02	0.00	12.00	1.10	0.00	4.00	0.02	0.00
12.02	1.11	0.00	3.99	0.02	0.00	12.04	1.12	0.00	3.98	0.02	0.00
12.06	1.12	0.00	3.97	0.02	0.00	12.08	1.11	0.00	3.96	0.02	0.00
12.10	1.11	0.00	3.95	0.02	0.00	12.12	1.12	0.00	3.94	0.02	0.00
12.14	1.12	0.00	3.93	0.02	0.00	12.16	1.12	0.00	3.92	0.02	0.00
12.18	2.00	0.00	3.91	0.02	0.00	12.20	2.00	0.00	3.90	0.02	0.00
12.22	2.00	0.00	3.89	0.02	0.00	12.24	2.00	0.00	3.88	0.02	0.00
12.26	2.00	0.00	3.87	0.02	0.00	12.28	2.00	0.00	3.86	0.02	0.00
12.30	2.00	0.00	3.85	0.02	0.00	12.32	2.00	0.00	3.84	0.02	0.00
12.34	2.00	0.00	3.83	0.02	0.00	12.36	2.00	0.00	3.82	0.02	0.00
12.38	1.15	0.00	3.81	0.02	0.00	12.40	1.13	0.00	3.80	0.02	0.00
12.42	2.00	0.00	3.79	0.02	0.00	12.44	2.00	0.00	3.78	0.02	0.00
12.46	2.00	0.00	3.77	0.02	0.00	12.48	2.00	0.00	3.76	0.02	0.00
12.50	2.00	0.00	3.75	0.02	0.00	12.52	2.00	0.00	3.74	0.02	0.00
12.54	2.00	0.00	3.73	0.02	0.00	12.56	2.00	0.00	3.72	0.02	0.00
12.58	2.00	0.00	3.71	0.02	0.00	12.60	2.00	0.00	3.70	0.02	0.00
12.62	2.00	0.00	3.69	0.02	0.00	12.64	2.00	0.00	3.68	0.02	0.00
12.66	2.00	0.00	3.67	0.02	0.00	12.68	2.00	0.00	3.66	0.02	0.00
12.70	2.00	0.00	3.65	0.02	0.00	12.72	2.00	0.00	3.64	0.02	0.00
12.74	2.00	0.00	3.63	0.02	0.00	12.76	2.00	0.00	3.62	0.02	0.00
12.78	2.00	0.00	3.61	0.02	0.00	12.80	2.00	0.00	3.60	0.02	0.00
12.82	2.00	0.00	3.59	0.02	0.00	12.84	2.00	0.00	3.58	0.02	0.00
12.86	2.00	0.00	3.57	0.02	0.00	12.88	2.00	0.00	3.56	0.02	0.00
12.90	2.00	0.00	3.55	0.02	0.00	12.92	2.00	0.00	3.54	0.02	0.00
12.94	2.00	0.00	3.53	0.02	0.00	12.96	2.00	0.00	3.52	0.02	0.00
12.98	2.00	0.00	3.51	0.02	0.00	13.00	2.00	0.00	3.50	0.02	0.00
13.02	2.00	0.00	3.49	0.02	0.00	13.04	2.00	0.00	3.48	0.02	0.00
13.06	2.00	0.00	3.47	0.02	0.00	13.08	2.00	0.00	3.46	0.02	0.00
13.10	2.00	0.00	3.45	0.02	0.00	13.12	2.00	0.00	3.44	0.02	0.00
13.14	2.00	0.00	3.43	0.02	0.00	13.16	2.00	0.00	3.42	0.02	0.00
13.18	2.00	0.00	3.41	0.02	0.00	13.20	2.00	0.00	3.40	0.02	0.00
13.22	2.00	0.00	3.39	0.02	0.00	13.24	2.00	0.00	3.38	0.02	0.00
13.26	2.00	0.00	3.37	0.02	0.00	13.28	2.00	0.00	3.36	0.02	0.00
13.30	2.00	0.00	3.35	0.02	0.00	13.32	2.00	0.00	3.34	0.02	0.00
13.34	2.00	0.00	3.33	0.02	0.00	13.36	2.00	0.00	3.32	0.02	0.00
13.38	2.00	0.00	3.31	0.02	0.00	13.40	2.00	0.00	3.30	0.02	0.00
13.42	2.00	0.00	3.29	0.02	0.00	13.44	2.00	0.00	3.28	0.02	0.00
13.46	2.00	0.00	3.27	0.02	0.00	13.48	2.00	0.00	3.26	0.02	0.00
13.50	2.00	0.00	3.25	0.02	0.00	13.52	2.00	0.00	3.24	0.02	0.00
13.54	2.00	0.00	3.23	0.02	0.00	13.56	2.00	0.00	3.22	0.02	0.00
13.58	2.00	0.00	3.21	0.02	0.00	13.60	2.00	0.00	3.20	0.02	0.00
13.62	2.00	0.00	3.19	0.02	0.00	13.64	2.00	0.00	3.18	0.02	0.00
13.66	2.00	0.00	3.17	0.02	0.00	13.68	2.00	0.00	3.16	0.02	0.00
13.70	2.00	0.00	3.15	0.02	0.00	13.72	2.00	0.00	3.14	0.02	0.00
13.74	2.00	0.00	3.13	0.02	0.00	13.76	2.00	0.00	3.12	0.02	0.00
13.78	2.00	0.00	3.11	0.02	0.00	13.80	2.00	0.00	3.10	0.02	0.00
13.82	2.00	0.00	3.09	0.02	0.00	13.84	2.00	0.00	3.08	0.02	0.00
13.86	2.00	0.00	3.07	0.02	0.00	13.88	2.00	0.00	3.06	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
13.90	2.00	0.00	3.05	0.02	0.00	13.92	2.00	0.00	3.04	0.02	0.00
13.94	2.00	0.00	3.03	0.02	0.00	13.96	2.00	0.00	3.02	0.02	0.00
13.98	2.00	0.00	3.01	0.02	0.00	14.00	2.00	0.00	3.00	0.02	0.00
14.02	2.00	0.00	2.99	0.02	0.00	14.04	2.00	0.00	2.98	0.02	0.00
14.06	2.00	0.00	2.97	0.02	0.00	14.08	1.22	0.00	2.96	0.02	0.00
14.10	1.23	0.00	2.95	0.02	0.00	14.12	1.23	0.00	2.94	0.02	0.00
14.14	1.21	0.00	2.93	0.02	0.00	14.16	1.18	0.00	2.92	0.02	0.00
14.18	1.17	0.00	2.91	0.02	0.00	14.20	1.18	0.00	2.90	0.02	0.00
14.22	1.23	0.00	2.89	0.02	0.00	14.24	1.30	0.00	2.88	0.02	0.00
14.26	1.37	0.00	2.87	0.02	0.00	14.28	1.43	0.00	2.86	0.02	0.00
14.30	1.46	0.00	2.85	0.02	0.00	14.32	1.52	0.00	2.84	0.02	0.00
14.34	1.54	0.00	2.83	0.02	0.00	14.36	1.56	0.00	2.82	0.02	0.00
14.38	1.41	0.00	2.81	0.02	0.00	14.40	1.48	0.00	2.80	0.02	0.00
14.42	1.53	0.00	2.79	0.02	0.00	14.44	1.54	0.00	2.78	0.02	0.00
14.46	1.50	0.00	2.77	0.02	0.00	14.48	1.45	0.00	2.76	0.02	0.00
14.50	1.41	0.00	2.75	0.02	0.00	14.52	1.38	0.00	2.74	0.02	0.00
14.54	1.36	0.00	2.73	0.02	0.00	14.56	1.54	0.00	2.72	0.02	0.00
14.58	1.51	0.00	2.71	0.02	0.00	14.60	1.48	0.00	2.70	0.02	0.00
14.62	1.45	0.00	2.69	0.02	0.00	14.64	1.42	0.00	2.68	0.02	0.00
14.66	1.40	0.00	2.67	0.02	0.00	14.68	1.38	0.00	2.66	0.02	0.00
14.70	1.37	0.00	2.65	0.02	0.00	14.72	1.36	0.00	2.64	0.02	0.00
14.74	1.35	0.00	2.63	0.02	0.00	14.76	1.35	0.00	2.62	0.02	0.00
14.78	1.35	0.00	2.61	0.02	0.00	14.80	1.34	0.00	2.60	0.02	0.00
14.82	1.34	0.00	2.59	0.02	0.00	14.84	1.33	0.00	2.58	0.02	0.00
14.86	1.32	0.00	2.57	0.02	0.00	14.88	1.31	0.00	2.56	0.02	0.00
14.90	1.30	0.00	2.55	0.02	0.00	14.92	1.28	0.00	2.54	0.02	0.00
14.94	1.28	0.00	2.53	0.02	0.00	14.96	1.29	0.00	2.52	0.02	0.00
14.98	2.00	0.00	2.51	0.02	0.00	15.00	2.00	0.00	2.50	0.02	0.00
15.02	2.00	0.00	2.49	0.02	0.00	15.04	2.00	0.00	2.48	0.02	0.00
15.06	2.00	0.00	2.47	0.02	0.00	15.08	2.00	0.00	2.46	0.02	0.00
15.10	2.00	0.00	2.45	0.02	0.00	15.12	2.00	0.00	2.44	0.02	0.00
15.14	2.00	0.00	2.43	0.02	0.00	15.16	2.00	0.00	2.42	0.02	0.00
15.18	2.00	0.00	2.41	0.02	0.00	15.20	2.00	0.00	2.40	0.02	0.00
15.22	2.00	0.00	2.39	0.02	0.00	15.24	2.00	0.00	2.38	0.02	0.00
15.26	1.36	0.00	2.37	0.02	0.00	15.28	2.00	0.00	2.36	0.02	0.00
15.30	2.00	0.00	2.35	0.02	0.00	15.32	2.00	0.00	2.34	0.02	0.00
15.34	2.00	0.00	2.33	0.02	0.00	15.36	2.00	0.00	2.32	0.02	0.00
15.38	2.00	0.00	2.31	0.02	0.00	15.40	2.00	0.00	2.30	0.02	0.00
15.42	2.00	0.00	2.29	0.02	0.00	15.44	2.00	0.00	2.28	0.02	0.00
15.46	2.00	0.00	2.27	0.02	0.00	15.48	2.00	0.00	2.26	0.02	0.00
15.50	2.00	0.00	2.25	0.02	0.00	15.52	2.00	0.00	2.24	0.02	0.00
15.54	2.00	0.00	2.23	0.02	0.00	15.56	2.00	0.00	2.22	0.02	0.00
15.58	2.00	0.00	2.21	0.02	0.00	15.60	2.00	0.00	2.20	0.02	0.00
15.62	2.00	0.00	2.19	0.02	0.00	15.64	2.00	0.00	2.18	0.02	0.00
15.66	2.00	0.00	2.17	0.02	0.00	15.68	2.00	0.00	2.16	0.02	0.00
15.70	2.00	0.00	2.15	0.02	0.00	15.72	2.00	0.00	2.14	0.02	0.00
15.74	2.00	0.00	2.13	0.02	0.00	15.76	2.00	0.00	2.12	0.02	0.00
15.78	2.00	0.00	2.11	0.02	0.00	15.80	2.00	0.00	2.10	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
15.82	2.00	0.00	2.09	0.02	0.00	15.84	2.00	0.00	2.08	0.02	0.00
15.86	2.00	0.00	2.07	0.02	0.00	15.88	2.00	0.00	2.06	0.02	0.00
15.90	2.00	0.00	2.05	0.02	0.00	15.92	2.00	0.00	2.04	0.02	0.00
15.94	2.00	0.00	2.03	0.02	0.00	15.96	2.00	0.00	2.02	0.02	0.00
15.98	2.00	0.00	2.01	0.02	0.00	16.00	2.00	0.00	2.00	0.02	0.00
16.02	2.00	0.00	1.99	0.02	0.00	16.04	2.00	0.00	1.98	0.02	0.00
16.06	2.00	0.00	1.97	0.02	0.00	16.08	2.00	0.00	1.96	0.02	0.00
16.10	2.00	0.00	1.95	0.02	0.00	16.12	2.00	0.00	1.94	0.02	0.00
16.14	2.00	0.00	1.93	0.02	0.00	16.16	2.00	0.00	1.92	0.02	0.00
16.18	2.00	0.00	1.91	0.02	0.00	16.20	2.00	0.00	1.90	0.02	0.00
16.22	2.00	0.00	1.89	0.02	0.00	16.24	2.00	0.00	1.88	0.02	0.00
16.26	2.00	0.00	1.87	0.02	0.00	16.28	2.00	0.00	1.86	0.02	0.00
16.30	2.00	0.00	1.85	0.02	0.00	16.32	2.00	0.00	1.84	0.02	0.00
16.34	2.00	0.00	1.83	0.02	0.00	16.36	2.00	0.00	1.82	0.02	0.00
16.38	2.00	0.00	1.81	0.02	0.00	16.40	2.00	0.00	1.80	0.02	0.00
16.42	2.00	0.00	1.79	0.02	0.00	16.44	2.00	0.00	1.78	0.02	0.00
16.46	2.00	0.00	1.77	0.02	0.00	16.48	2.00	0.00	1.76	0.02	0.00
16.50	2.00	0.00	1.75	0.02	0.00	16.52	2.00	0.00	1.74	0.02	0.00
16.54	2.00	0.00	1.73	0.02	0.00	16.56	2.00	0.00	1.72	0.02	0.00
16.58	2.00	0.00	1.71	0.02	0.00	16.60	2.00	0.00	1.70	0.02	0.00
16.62	2.00	0.00	1.69	0.02	0.00	16.64	2.00	0.00	1.68	0.02	0.00
16.66	2.00	0.00	1.67	0.02	0.00	16.68	2.00	0.00	1.66	0.02	0.00
16.70	2.00	0.00	1.65	0.02	0.00	16.72	2.00	0.00	1.64	0.02	0.00
16.74	2.00	0.00	1.63	0.02	0.00	16.76	2.00	0.00	1.62	0.02	0.00
16.78	2.00	0.00	1.61	0.02	0.00	16.80	2.00	0.00	1.60	0.02	0.00
16.82	2.00	0.00	1.59	0.02	0.00	16.84	2.00	0.00	1.58	0.02	0.00
16.86	2.00	0.00	1.57	0.02	0.00	16.88	2.00	0.00	1.56	0.02	0.00
16.90	2.00	0.00	1.55	0.02	0.00	16.92	2.00	0.00	1.54	0.02	0.00
16.94	2.00	0.00	1.53	0.02	0.00	16.96	2.00	0.00	1.52	0.02	0.00
16.98	2.00	0.00	1.51	0.02	0.00	17.00	2.00	0.00	1.50	0.02	0.00
17.02	2.00	0.00	1.49	0.02	0.00	17.04	2.00	0.00	1.48	0.02	0.00
17.06	2.00	0.00	1.47	0.02	0.00	17.08	2.00	0.00	1.46	0.02	0.00
17.10	2.00	0.00	1.45	0.02	0.00	17.12	2.00	0.00	1.44	0.02	0.00
17.14	2.00	0.00	1.43	0.02	0.00	17.16	2.00	0.00	1.42	0.02	0.00
17.18	2.00	0.00	1.41	0.02	0.00	17.20	2.00	0.00	1.40	0.02	0.00
17.22	2.00	0.00	1.39	0.02	0.00	17.24	2.00	0.00	1.38	0.02	0.00
17.26	2.00	0.00	1.37	0.02	0.00	17.28	2.00	0.00	1.36	0.02	0.00
17.30	2.00	0.00	1.35	0.02	0.00	17.32	2.00	0.00	1.34	0.02	0.00
17.34	2.00	0.00	1.33	0.02	0.00	17.36	2.00	0.00	1.32	0.02	0.00
17.38	2.00	0.00	1.31	0.02	0.00	17.40	2.00	0.00	1.30	0.02	0.00
17.42	2.00	0.00	1.29	0.02	0.00	17.44	2.00	0.00	1.28	0.02	0.00
17.46	2.00	0.00	1.27	0.02	0.00	17.48	2.00	0.00	1.26	0.02	0.00
17.50	2.00	0.00	1.25	0.02	0.00	17.52	2.00	0.00	1.24	0.02	0.00
17.54	2.00	0.00	1.23	0.02	0.00	17.56	2.00	0.00	1.22	0.02	0.00
17.58	2.00	0.00	1.21	0.02	0.00	17.60	2.00	0.00	1.20	0.02	0.00
17.62	2.00	0.00	1.19	0.02	0.00	17.64	2.00	0.00	1.18	0.02	0.00
17.66	2.00	0.00	1.17	0.02	0.00	17.68	2.00	0.00	1.16	0.02	0.00
17.70	2.00	0.00	1.15	0.02	0.00	17.72	2.00	0.00	1.14	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
17.74	2.00	0.00	1.13	0.02	0.00	17.76	2.00	0.00	1.12	0.02	0.00
17.78	2.00	0.00	1.11	0.02	0.00	17.80	2.00	0.00	1.10	0.02	0.00
17.82	2.00	0.00	1.09	0.02	0.00	17.84	2.00	0.00	1.08	0.02	0.00
17.86	1.27	0.00	1.07	0.02	0.00	17.88	1.29	0.00	1.06	0.02	0.00
17.90	1.29	0.00	1.05	0.02	0.00	17.92	1.28	0.00	1.04	0.02	0.00
17.94	2.00	0.00	1.03	0.02	0.00	17.96	2.00	0.00	1.02	0.02	0.00
17.98	2.00	0.00	1.01	0.02	0.00	18.00	2.00	0.00	1.00	0.02	0.00
18.02	2.00	0.00	0.99	0.02	0.00	18.04	2.00	0.00	0.98	0.02	0.00
18.06	2.00	0.00	0.97	0.02	0.00	18.08	2.00	0.00	0.96	0.02	0.00
18.10	2.00	0.00	0.95	0.02	0.00	18.12	2.00	0.00	0.94	0.02	0.00
18.14	2.00	0.00	0.93	0.02	0.00	18.16	2.00	0.00	0.92	0.02	0.00
18.18	2.00	0.00	0.91	0.02	0.00	18.20	2.00	0.00	0.90	0.02	0.00
18.22	2.00	0.00	0.89	0.02	0.00	18.24	2.00	0.00	0.88	0.02	0.00
18.26	2.00	0.00	0.87	0.02	0.00	18.28	2.00	0.00	0.86	0.02	0.00
18.30	2.00	0.00	0.85	0.02	0.00	18.32	2.00	0.00	0.84	0.02	0.00
18.34	2.00	0.00	0.83	0.02	0.00	18.36	2.00	0.00	0.82	0.02	0.00
18.38	2.00	0.00	0.81	0.02	0.00	18.40	2.00	0.00	0.80	0.02	0.00
18.42	2.00	0.00	0.79	0.02	0.00	18.44	2.00	0.00	0.78	0.02	0.00
18.46	2.00	0.00	0.77	0.02	0.00	18.48	2.00	0.00	0.76	0.02	0.00
18.50	2.00	0.00	0.75	0.02	0.00	18.52	2.00	0.00	0.74	0.02	0.00
18.54	2.00	0.00	0.73	0.02	0.00	18.56	2.00	0.00	0.72	0.02	0.00
18.58	2.00	0.00	0.71	0.02	0.00	18.60	2.00	0.00	0.70	0.02	0.00
18.62	2.00	0.00	0.69	0.02	0.00	18.64	2.00	0.00	0.68	0.02	0.00
18.66	2.00	0.00	0.67	0.02	0.00	18.68	2.00	0.00	0.66	0.02	0.00
18.70	2.00	0.00	0.65	0.02	0.00	18.72	2.00	0.00	0.64	0.02	0.00
18.74	2.00	0.00	0.63	0.02	0.00	18.76	2.00	0.00	0.62	0.02	0.00
18.78	2.00	0.00	0.61	0.02	0.00	18.80	2.00	0.00	0.60	0.02	0.00
18.82	2.00	0.00	0.59	0.02	0.00	18.84	2.00	0.00	0.58	0.02	0.00
18.86	2.00	0.00	0.57	0.02	0.00	18.88	2.00	0.00	0.56	0.02	0.00
18.90	2.00	0.00	0.55	0.02	0.00	18.92	2.00	0.00	0.54	0.02	0.00
18.94	2.00	0.00	0.53	0.02	0.00	18.96	2.00	0.00	0.52	0.02	0.00
18.98	2.00	0.00	0.51	0.02	0.00	19.00	2.00	0.00	0.50	0.02	0.00
19.02	2.00	0.00	0.49	0.02	0.00	19.04	2.00	0.00	0.48	0.02	0.00
19.06	2.00	0.00	0.47	0.02	0.00	19.08	2.00	0.00	0.46	0.02	0.00
19.10	2.00	0.00	0.45	0.02	0.00	19.12	2.00	0.00	0.44	0.02	0.00
19.14	2.00	0.00	0.43	0.02	0.00	19.16	2.00	0.00	0.42	0.02	0.00
19.18	2.00	0.00	0.41	0.02	0.00	19.20	2.00	0.00	0.40	0.02	0.00
19.22	2.00	0.00	0.39	0.02	0.00	19.24	2.00	0.00	0.38	0.02	0.00
19.26	2.00	0.00	0.37	0.02	0.00	19.28	2.00	0.00	0.36	0.02	0.00
19.30	2.00	0.00	0.35	0.02	0.00	19.32	2.00	0.00	0.34	0.02	0.00
19.34	2.00	0.00	0.33	0.02	0.00	19.36	2.00	0.00	0.32	0.02	0.00
19.38	2.00	0.00	0.31	0.02	0.00	19.40	2.00	0.00	0.30	0.02	0.00
19.42	2.00	0.00	0.29	0.02	0.00	19.44	2.00	0.00	0.28	0.02	0.00
19.46	2.00	0.00	0.27	0.02	0.00	19.48	2.00	0.00	0.26	0.02	0.00
19.50	2.00	0.00	0.25	0.02	0.00	19.52	2.00	0.00	0.24	0.02	0.00
19.54	2.00	0.00	0.23	0.02	0.00	19.56	2.00	0.00	0.22	0.02	0.00
19.58	2.00	0.00	0.21	0.02	0.00	19.60	2.00	0.00	0.20	0.02	0.00
19.62	2.00	0.00	0.19	0.02	0.00	19.64	2.00	0.00	0.18	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
19.66	2.00	0.00	0.17	0.02	0.00	19.68	1.33	0.00	0.16	0.02	0.00
19.70	1.35	0.00	0.15	0.02	0.00	19.72	1.37	0.00	0.14	0.02	0.00
19.74	1.37	0.00	0.13	0.02	0.00	19.76	1.36	0.00	0.12	0.02	0.00
19.78	1.35	0.00	0.11	0.02	0.00	19.80	1.34	0.00	0.10	0.02	0.00
19.82	1.34	0.00	0.09	0.02	0.00	19.84	1.34	0.00	0.08	0.02	0.00
19.86	1.35	0.00	0.07	0.02	0.00	19.88	1.37	0.00	0.06	0.02	0.00
19.90	2.00	0.00	0.05	0.02	0.00	19.92	2.00	0.00	0.04	0.02	0.00
19.94	2.00	0.00	0.03	0.02	0.00	19.96	2.00	0.00	0.02	0.02	0.00
19.98	2.00	0.00	0.01	0.02	0.00	20.00	1.49	0.00	0.00	0.02	0.00
20.02	1.49	0.00	0.00	0.00	0.00	20.04	1.51	0.00	0.00	0.00	0.00
20.06	1.53	0.00	0.00	0.00	0.00	20.08	1.35	0.00	0.00	0.00	0.00
20.10	1.37	0.00	0.00	0.00	0.00	20.12	1.38	0.00	0.00	0.00	0.00
20.14	1.38	0.00	0.00	0.00	0.00	20.16	1.38	0.00	0.00	0.00	0.00
20.18	1.40	0.00	0.00	0.00	0.00	20.20	1.44	0.00	0.00	0.00	0.00
20.22	1.49	0.00	0.00	0.00	0.00	20.24	1.55	0.00	0.00	0.00	0.00
20.26	1.61	0.00	0.00	0.00	0.00	20.28	1.67	0.00	0.00	0.00	0.00
20.30	1.72	0.00	0.00	0.00	0.00	20.32	1.78	0.00	0.00	0.00	0.00
20.34	1.81	0.00	0.00	0.00	0.00	20.36	1.81	0.00	0.00	0.00	0.00
20.38	1.78	0.00	0.00	0.00	0.00	20.40	1.73	0.00	0.00	0.00	0.00
20.42	1.94	0.00	0.00	0.00	0.00	20.44	1.89	0.00	0.00	0.00	0.00
20.46	1.86	0.00	0.00	0.00	0.00	20.48	1.88	0.00	0.00	0.00	0.00
20.50	1.96	0.00	0.00	0.00	0.00	20.52	1.81	0.00	0.00	0.00	0.00
20.54	1.97	0.00	0.00	0.00	0.00	20.56	2.00	0.00	0.00	0.00	0.00
20.58	2.00	0.00	0.00	0.00	0.00	20.60	2.00	0.00	0.00	0.00	0.00
20.62	2.00	0.00	0.00	0.00	0.00	20.64	1.91	0.00	0.00	0.00	0.00
20.66	1.81	0.00	0.00	0.00	0.00	20.68	1.70	0.00	0.00	0.00	0.00
20.70	1.60	0.00	0.00	0.00	0.00	20.72	1.80	0.00	0.00	0.00	0.00
20.74	1.80	0.00	0.00	0.00	0.00	20.76	1.83	0.00	0.00	0.00	0.00
20.78	1.89	0.00	0.00	0.00	0.00	20.80	1.97	0.00	0.00	0.00	0.00
20.82	2.00	0.00	0.00	0.00	0.00	20.84	2.00	0.00	0.00	0.00	0.00
20.86	1.95	0.00	0.00	0.00	0.00	20.88	1.62	0.00	0.00	0.00	0.00
20.90	1.57	0.00	0.00	0.00	0.00	20.92	1.53	0.00	0.00	0.00	0.00
20.94	1.50	0.00	0.00	0.00	0.00	20.96	1.47	0.00	0.00	0.00	0.00
20.98	1.70	0.00	0.00	0.00	0.00	21.00	1.70	0.00	0.00	0.00	0.00
21.02	1.69	0.00	0.00	0.00	0.00	21.04	1.67	0.00	0.00	0.00	0.00
21.06	1.65	0.00	0.00	0.00	0.00	21.08	1.64	0.00	0.00	0.00	0.00
21.10	1.64	0.00	0.00	0.00	0.00	21.12	1.64	0.00	0.00	0.00	0.00
21.14	1.64	0.00	0.00	0.00	0.00	21.16	1.65	0.00	0.00	0.00	0.00
21.18	1.65	0.00	0.00	0.00	0.00	21.20	1.65	0.00	0.00	0.00	0.00
21.22	1.65	0.00	0.00	0.00	0.00	21.24	1.65	0.00	0.00	0.00	0.00
21.26	1.63	0.00	0.00	0.00	0.00	21.28	1.62	0.00	0.00	0.00	0.00
21.30	1.61	0.00	0.00	0.00	0.00	21.32	1.62	0.00	0.00	0.00	0.00
21.34	1.64	0.00	0.00	0.00	0.00	21.36	1.69	0.00	0.00	0.00	0.00
21.38	1.52	0.00	0.00	0.00	0.00	21.40	1.61	0.00	0.00	0.00	0.00
21.42	1.66	0.00	0.00	0.00	0.00	21.44	1.68	0.00	0.00	0.00	0.00
21.46	1.68	0.00	0.00	0.00	0.00	21.48	1.68	0.00	0.00	0.00	0.00
21.50	1.68	0.00	0.00	0.00	0.00	21.52	1.69	0.00	0.00	0.00	0.00
21.54	1.73	0.00	0.00	0.00	0.00	21.56	1.79	0.00	0.00	0.00	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
21.58	1.83	0.00	0.00	0.00	0.00	21.60	1.84	0.00	0.00	0.00	0.00
21.62	1.83	0.00	0.00	0.00	0.00	21.64	1.83	0.00	0.00	0.00	0.00
21.66	1.84	0.00	0.00	0.00	0.00	21.68	1.85	0.00	0.00	0.00	0.00
21.70	1.85	0.00	0.00	0.00	0.00	21.72	1.83	0.00	0.00	0.00	0.00
21.74	2.00	0.00	0.00	0.00	0.00	21.76	2.00	0.00	0.00	0.00	0.00
21.78	2.00	0.00	0.00	0.00	0.00	21.80	2.00	0.00	0.00	0.00	0.00
21.82	2.00	0.00	0.00	0.00	0.00	21.84	2.00	0.00	0.00	0.00	0.00
21.86	2.00	0.00	0.00	0.00	0.00	21.88	2.00	0.00	0.00	0.00	0.00
21.90	2.00	0.00	0.00	0.00	0.00	21.92	1.77	0.00	0.00	0.00	0.00
21.94	1.76	0.00	0.00	0.00	0.00	21.96	1.74	0.00	0.00	0.00	0.00
21.98	1.72	0.00	0.00	0.00	0.00	22.00	1.70	0.00	0.00	0.00	0.00
22.02	1.70	0.00	0.00	0.00	0.00	22.04	1.70	0.00	0.00	0.00	0.00
22.06	1.69	0.00	0.00	0.00	0.00	22.08	1.67	0.00	0.00	0.00	0.00
22.10	1.67	0.00	0.00	0.00	0.00	22.12	1.68	0.00	0.00	0.00	0.00
22.14	1.70	0.00	0.00	0.00	0.00	22.16	1.72	0.00	0.00	0.00	0.00
22.18	1.73	0.00	0.00	0.00	0.00	22.20	1.73	0.00	0.00	0.00	0.00
22.22	1.73	0.00	0.00	0.00	0.00	22.24	1.76	0.00	0.00	0.00	0.00
22.26	1.78	0.00	0.00	0.00	0.00	22.28	1.79	0.00	0.00	0.00	0.00
22.30	1.78	0.00	0.00	0.00	0.00	22.32	1.76	0.00	0.00	0.00	0.00
22.34	1.72	0.00	0.00	0.00	0.00	22.36	1.93	0.00	0.00	0.00	0.00
22.38	1.86	0.00	0.00	0.00	0.00	22.40	1.80	0.00	0.00	0.00	0.00
22.42	1.74	0.00	0.00	0.00	0.00	22.44	1.69	0.00	0.00	0.00	0.00
22.46	1.64	0.00	0.00	0.00	0.00	22.48	1.61	0.00	0.00	0.00	0.00
22.50	1.67	0.00	0.00	0.00	0.00	22.52	2.00	0.00	0.00	0.00	0.00
22.54	2.00	0.00	0.00	0.00	0.00	22.56	2.00	0.00	0.00	0.00	0.00
22.58	2.00	0.00	0.00	0.00	0.00	22.60	2.00	0.00	0.00	0.00	0.00
22.62	2.00	0.00	0.00	0.00	0.00	22.64	2.00	0.00	0.00	0.00	0.00
22.66	2.00	0.00	0.00	0.00	0.00	22.68	2.00	0.00	0.00	0.00	0.00
22.70	2.00	0.00	0.00	0.00	0.00	22.72	2.00	0.00	0.00	0.00	0.00
22.74	2.00	0.00	0.00	0.00	0.00	22.76	2.00	0.00	0.00	0.00	0.00
22.78	2.00	0.00	0.00	0.00	0.00	22.80	2.00	0.00	0.00	0.00	0.00
22.82	2.00	0.00	0.00	0.00	0.00	22.84	2.00	0.00	0.00	0.00	0.00
22.86	2.00	0.00	0.00	0.00	0.00	22.88	2.00	0.00	0.00	0.00	0.00
22.90	2.00	0.00	0.00	0.00	0.00	22.92	2.00	0.00	0.00	0.00	0.00
22.94	2.00	0.00	0.00	0.00	0.00	22.96	2.00	0.00	0.00	0.00	0.00
22.98	2.00	0.00	0.00	0.00	0.00	23.00	2.00	0.00	0.00	0.00	0.00
23.02	2.00	0.00	0.00	0.00	0.00	23.04	2.00	0.00	0.00	0.00	0.00
23.06	2.00	0.00	0.00	0.00	0.00	23.08	2.00	0.00	0.00	0.00	0.00
23.10	2.00	0.00	0.00	0.00	0.00	23.12	2.00	0.00	0.00	0.00	0.00
23.14	2.00	0.00	0.00	0.00	0.00	23.16	2.00	0.00	0.00	0.00	0.00
23.18	2.00	0.00	0.00	0.00	0.00	23.20	2.00	0.00	0.00	0.00	0.00
23.22	2.00	0.00	0.00	0.00	0.00	23.24	2.00	0.00	0.00	0.00	0.00
23.26	2.00	0.00	0.00	0.00	0.00	23.28	2.00	0.00	0.00	0.00	0.00
23.30	2.00	0.00	0.00	0.00	0.00	23.32	2.00	0.00	0.00	0.00	0.00
23.34	2.00	0.00	0.00	0.00	0.00	23.36	2.00	0.00	0.00	0.00	0.00
23.38	2.00	0.00	0.00	0.00	0.00	23.40	2.00	0.00	0.00	0.00	0.00
23.42	2.00	0.00	0.00	0.00	0.00	23.44	2.00	0.00	0.00	0.00	0.00
23.46	2.00	0.00	0.00	0.00	0.00	23.48	2.00	0.00	0.00	0.00	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
23.50	2.00	0.00	0.00	0.00	0.00	23.52	2.00	0.00	0.00	0.00	0.00
23.54	2.00	0.00	0.00	0.00	0.00	23.56	2.00	0.00	0.00	0.00	0.00
23.58	2.00	0.00	0.00	0.00	0.00	23.60	2.00	0.00	0.00	0.00	0.00
23.62	2.00	0.00	0.00	0.00	0.00	23.64	2.00	0.00	0.00	0.00	0.00
23.66	1.45	0.00	0.00	0.00	0.00	23.68	1.47	0.00	0.00	0.00	0.00
23.70	1.48	0.00	0.00	0.00	0.00	23.72	1.50	0.00	0.00	0.00	0.00
23.74	1.53	0.00	0.00	0.00	0.00	23.76	1.56	0.00	0.00	0.00	0.00
23.78	1.56	0.00	0.00	0.00	0.00	23.80	1.58	0.00	0.00	0.00	0.00
23.82	1.61	0.00	0.00	0.00	0.00	23.84	1.64	0.00	0.00	0.00	0.00
23.86	1.64	0.00	0.00	0.00	0.00	23.88	1.60	0.00	0.00	0.00	0.00
23.90	1.56	0.00	0.00	0.00	0.00	23.92	1.56	0.00	0.00	0.00	0.00
23.94	1.65	0.00	0.00	0.00	0.00	23.96	1.79	0.00	0.00	0.00	0.00
23.98	1.90	0.00	0.00	0.00	0.00	24.00	1.86	0.00	0.00	0.00	0.00

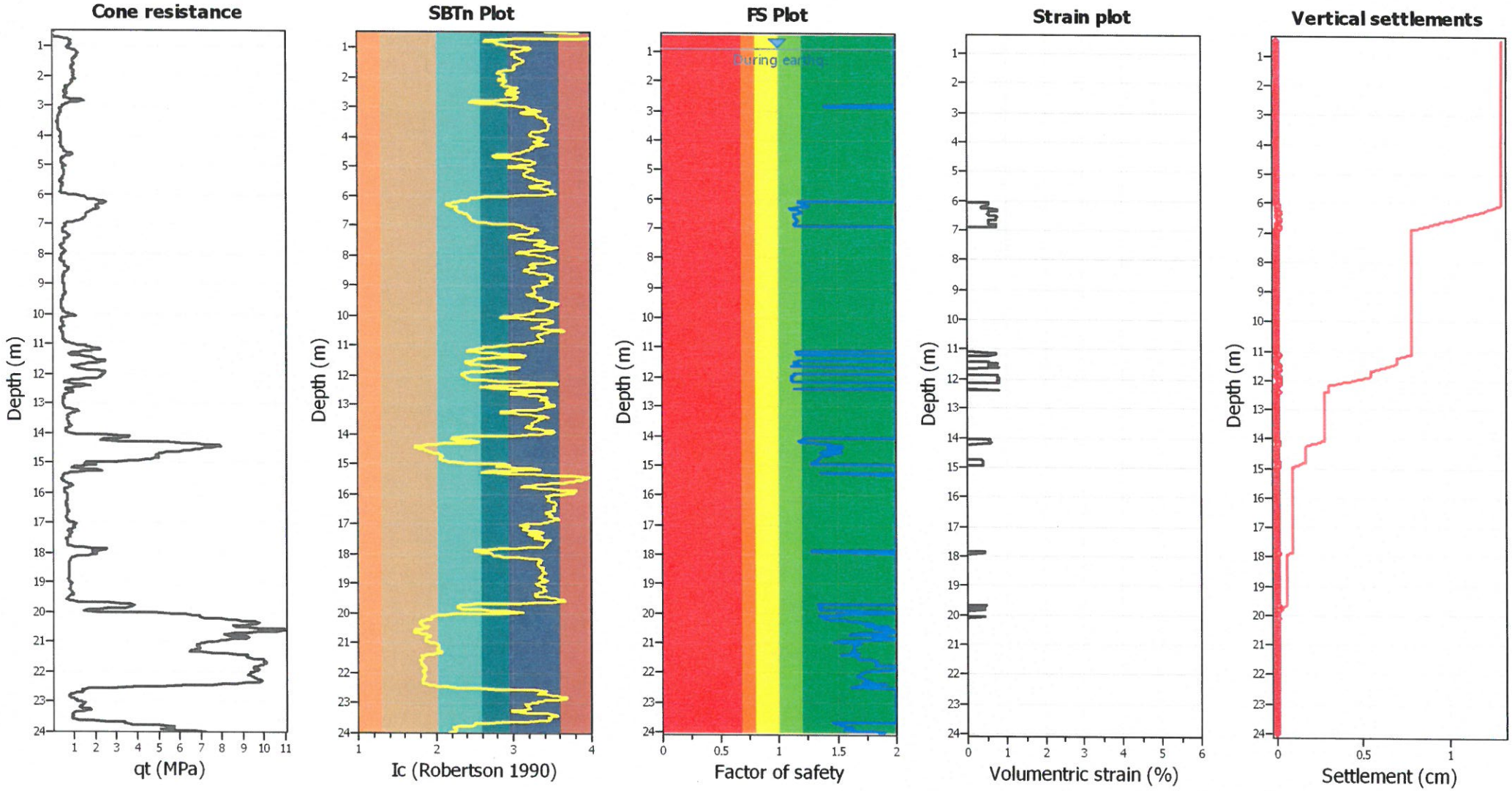
Overall liquefaction potential: 0.00

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 (m)
LPI: Liquefaction potential index value for test point

Estimation of post-earthquake settlements

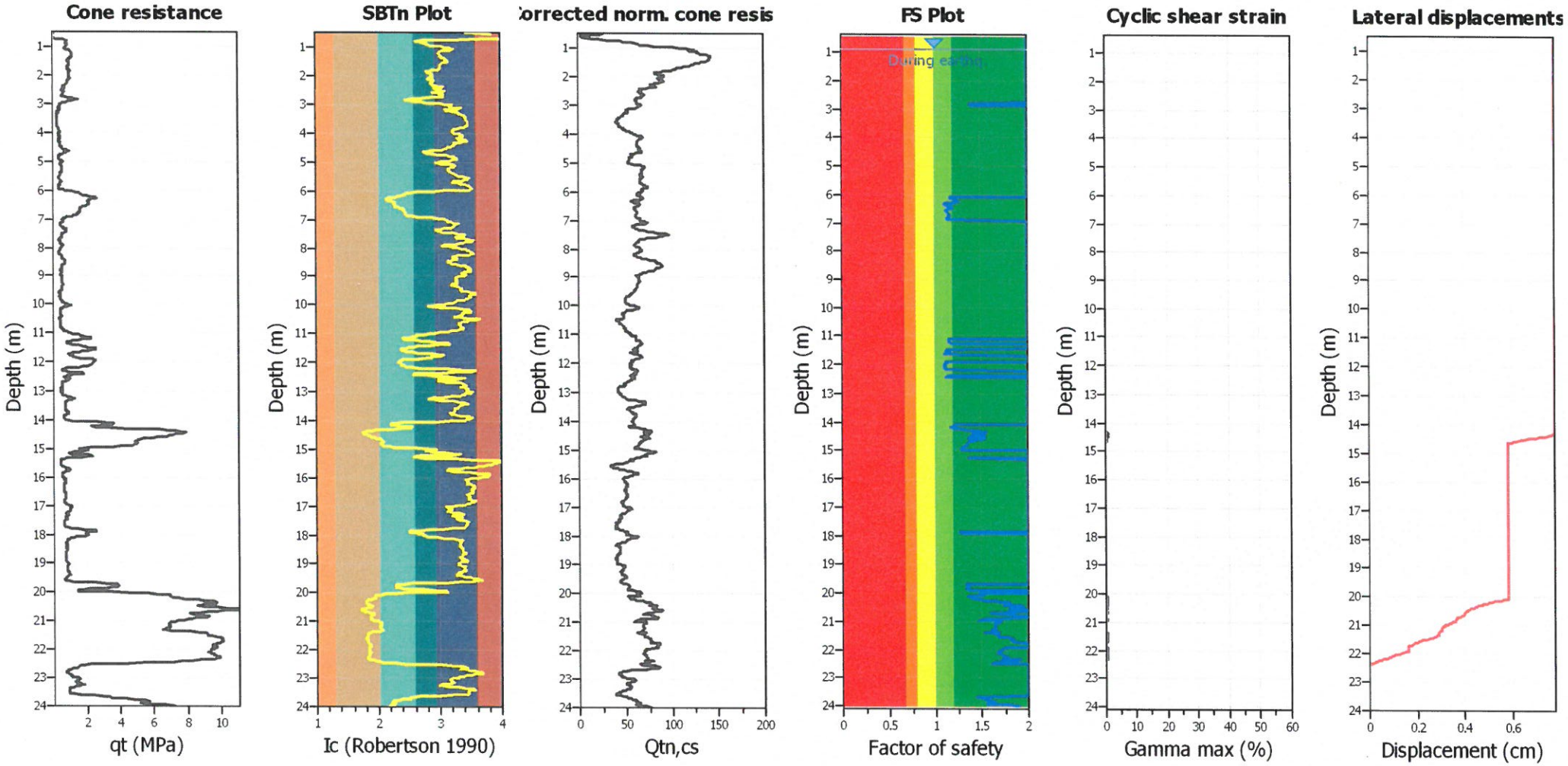


Abbreviations

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

Estimation of post-earthquake lateral Displacements

Geometric parameters: Gently sloping ground without free face (Slope 1.00 %)

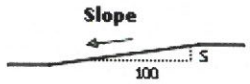


Abbreviations

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



ALLEGATO 2 - Verifica alla liquefazione dei terreni in CPTU2

PENETRATIO SNC di Lotti Giuseppe e Giani Paolo
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56028 San Miniato PI
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LIQUEFACTION ANALYSIS REPORT

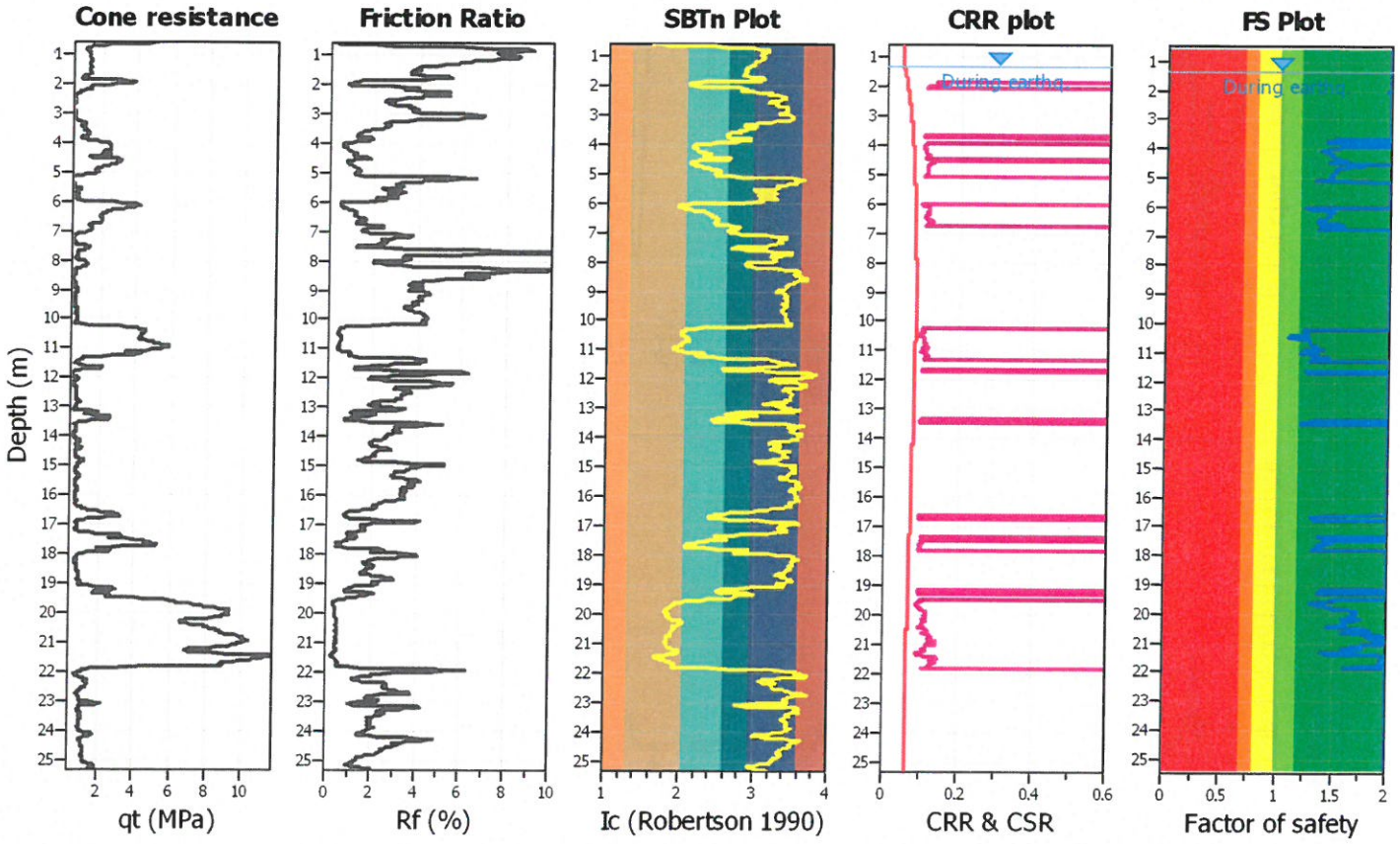
Project title : Pozzo Gradizza 1

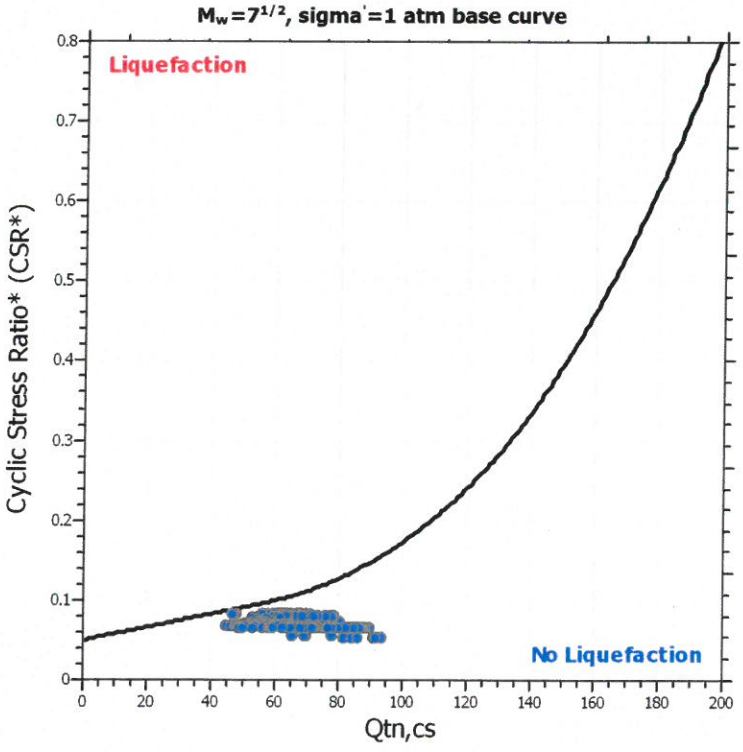
Location : Comune di Copparo, loc. Gradizza - Ferrara

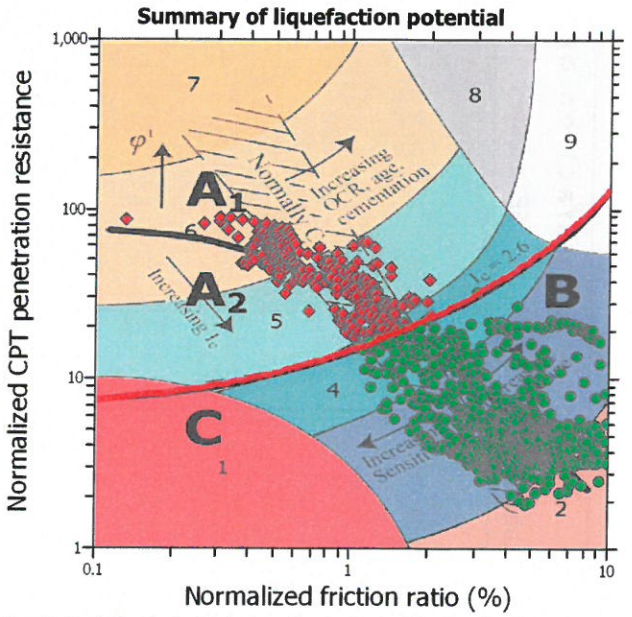
CPT file : gradizza cptu2

Input parameters and analysis data

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	1.33 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	1.33 m	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:	5.50	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.15	Unit weight calculation:	Based on SBT	K_o applied:	Yes		

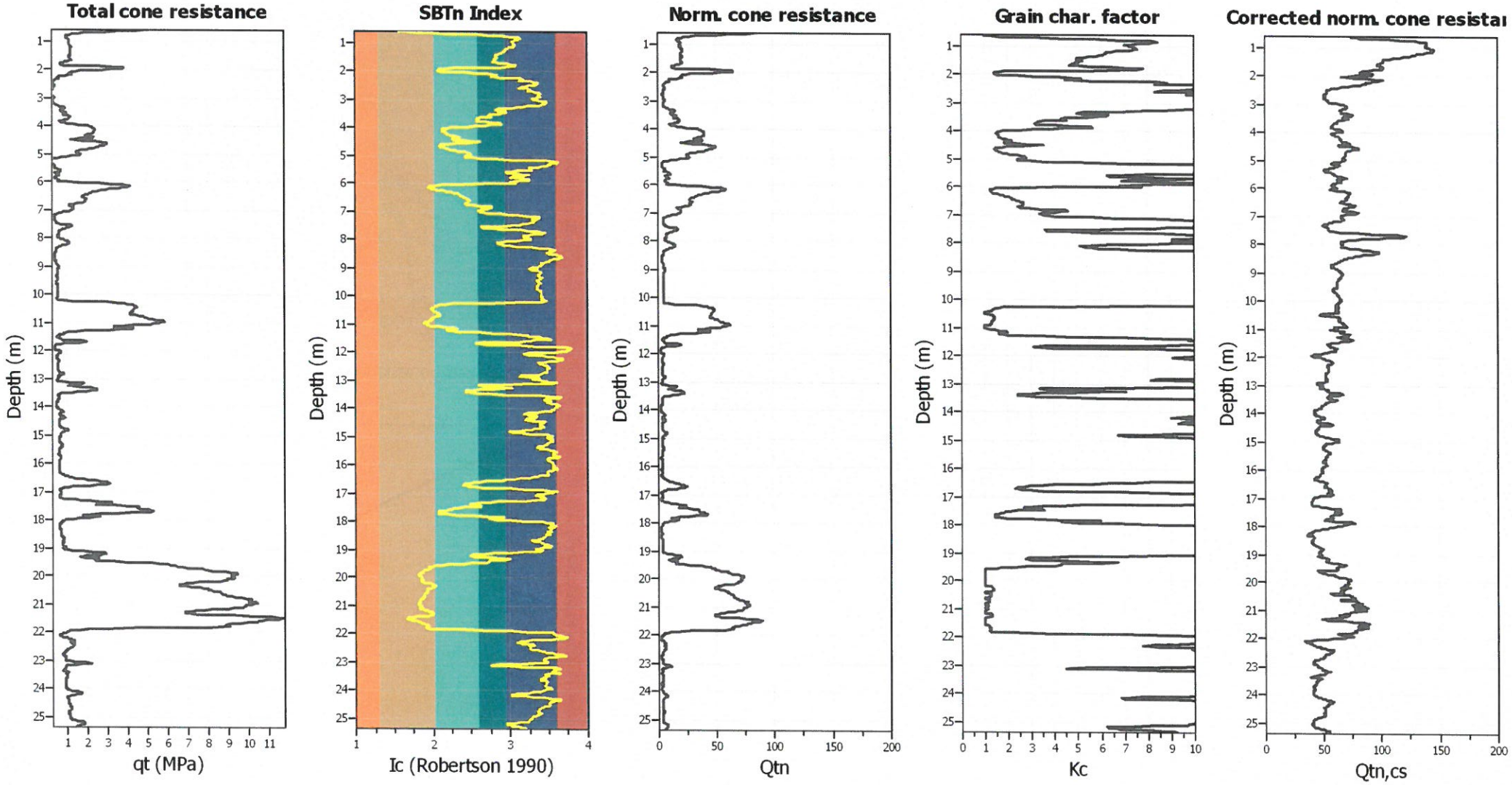






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and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

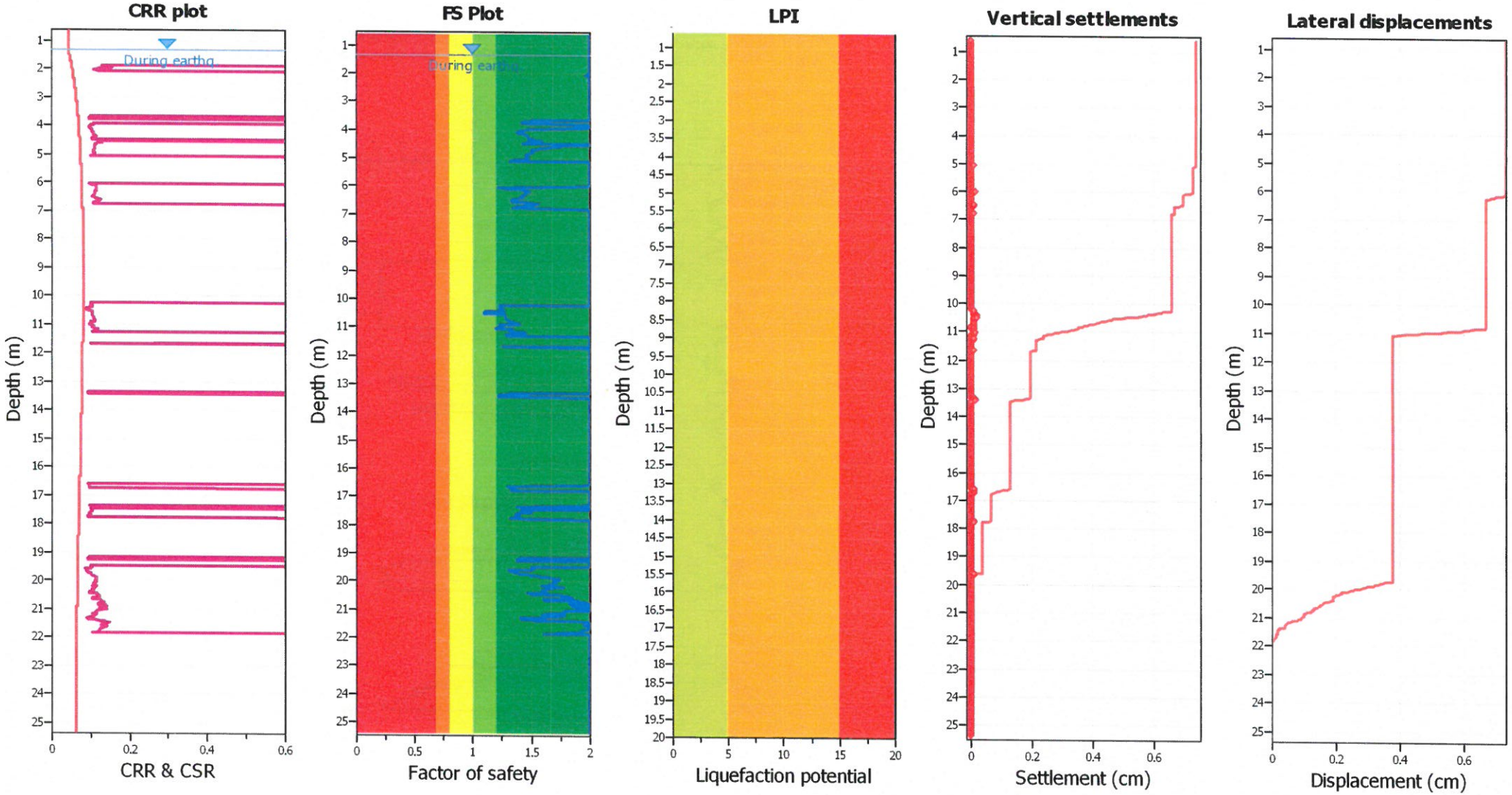
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	1.33 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.33 m	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.):	1.33 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.33 m	Fill height:	N/A	Limit depth:	N/A

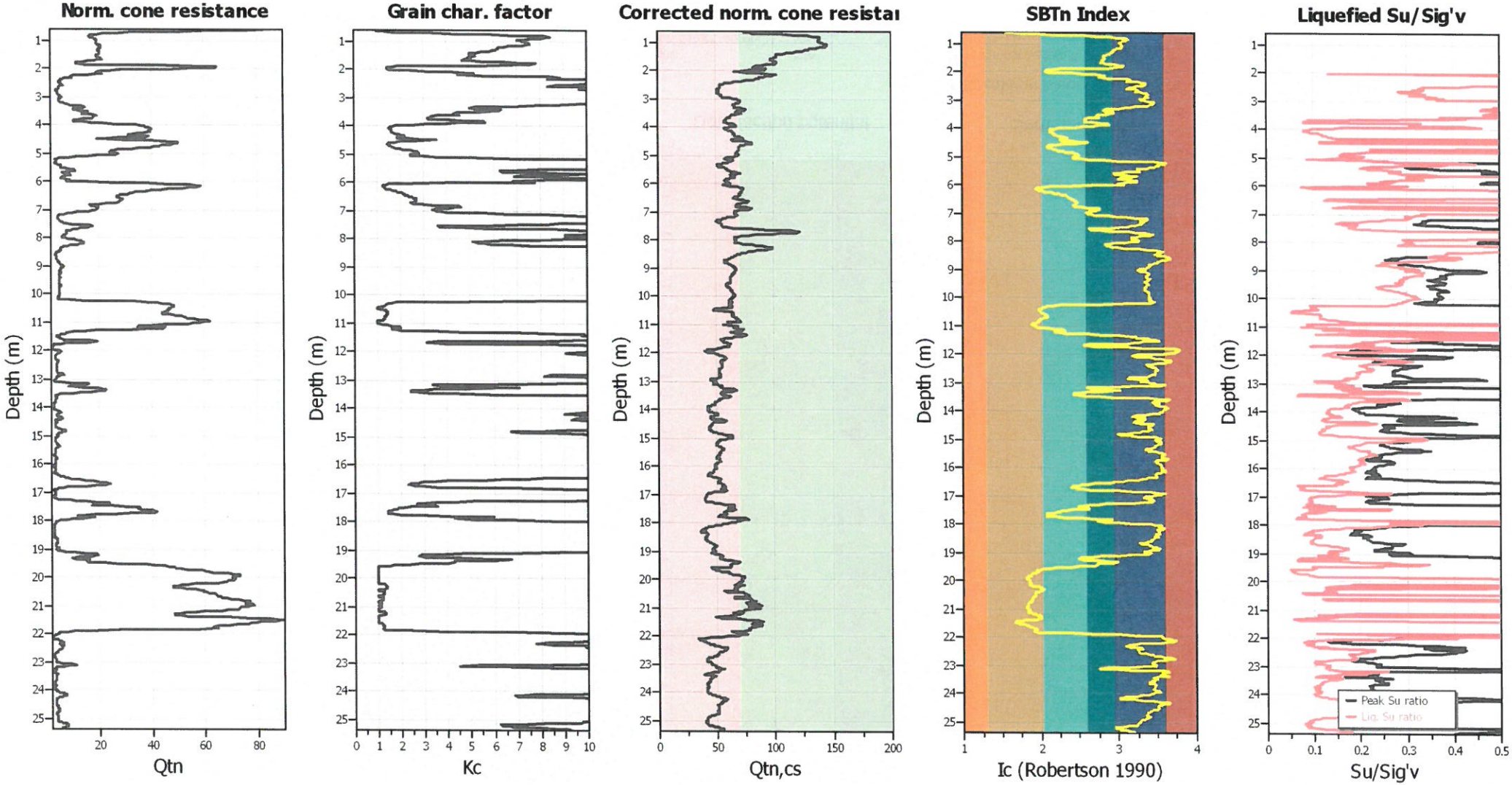
F.S. color scheme

- 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.):	1.33 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	5.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.15	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.33 m	Fill height:	N/A	Limit depth:	N/A

:: Liquefaction Potential Index calculation data ::

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
0.60	2.00	0.00	9.70	0.02	0.00	0.62	2.00	0.00	9.69	0.02	0.00
0.64	2.00	0.00	9.68	0.02	0.00	0.66	2.00	0.00	9.67	0.02	0.00
0.68	2.00	0.00	9.66	0.02	0.00	0.70	2.00	0.00	9.65	0.02	0.00
0.72	2.00	0.00	9.64	0.02	0.00	0.74	2.00	0.00	9.63	0.02	0.00
0.76	2.00	0.00	9.62	0.02	0.00	0.78	2.00	0.00	9.61	0.02	0.00
0.80	2.00	0.00	9.60	0.02	0.00	0.82	2.00	0.00	9.59	0.02	0.00
0.84	2.00	0.00	9.58	0.02	0.00	0.86	2.00	0.00	9.57	0.02	0.00
0.88	2.00	0.00	9.56	0.02	0.00	0.90	2.00	0.00	9.55	0.02	0.00
0.92	2.00	0.00	9.54	0.02	0.00	0.94	2.00	0.00	9.53	0.02	0.00
0.96	2.00	0.00	9.52	0.02	0.00	0.98	2.00	0.00	9.51	0.02	0.00
1.00	2.00	0.00	9.50	0.02	0.00	1.02	2.00	0.00	9.49	0.02	0.00
1.04	2.00	0.00	9.48	0.02	0.00	1.06	2.00	0.00	9.47	0.02	0.00
1.08	2.00	0.00	9.46	0.02	0.00	1.10	2.00	0.00	9.45	0.02	0.00
1.12	2.00	0.00	9.44	0.02	0.00	1.14	2.00	0.00	9.43	0.02	0.00
1.16	2.00	0.00	9.42	0.02	0.00	1.18	2.00	0.00	9.41	0.02	0.00
1.20	2.00	0.00	9.40	0.02	0.00	1.22	2.00	0.00	9.39	0.02	0.00
1.24	2.00	0.00	9.38	0.02	0.00	1.26	2.00	0.00	9.37	0.02	0.00
1.28	2.00	0.00	9.36	0.02	0.00	1.30	2.00	0.00	9.35	0.02	0.00
1.32	2.00	0.00	9.34	0.02	0.00	1.34	2.00	0.00	9.33	0.02	0.00
1.36	2.00	0.00	9.32	0.02	0.00	1.38	2.00	0.00	9.31	0.02	0.00
1.40	2.00	0.00	9.30	0.02	0.00	1.42	2.00	0.00	9.29	0.02	0.00
1.44	2.00	0.00	9.28	0.02	0.00	1.46	2.00	0.00	9.27	0.02	0.00
1.48	2.00	0.00	9.26	0.02	0.00	1.50	2.00	0.00	9.25	0.02	0.00
1.52	2.00	0.00	9.24	0.02	0.00	1.54	2.00	0.00	9.23	0.02	0.00
1.56	2.00	0.00	9.22	0.02	0.00	1.58	2.00	0.00	9.21	0.02	0.00
1.60	2.00	0.00	9.20	0.02	0.00	1.62	2.00	0.00	9.19	0.02	0.00
1.64	2.00	0.00	9.18	0.02	0.00	1.66	2.00	0.00	9.17	0.02	0.00
1.68	2.00	0.00	9.16	0.02	0.00	1.70	2.00	0.00	9.15	0.02	0.00
1.72	2.00	0.00	9.14	0.02	0.00	1.74	2.00	0.00	9.13	0.02	0.00
1.76	2.00	0.00	9.12	0.02	0.00	1.78	2.00	0.00	9.11	0.02	0.00
1.80	2.00	0.00	9.10	0.02	0.00	1.82	2.00	0.00	9.09	0.02	0.00
1.84	2.00	0.00	9.08	0.02	0.00	1.86	2.00	0.00	9.07	0.02	0.00
1.88	2.00	0.00	9.06	0.02	0.00	1.90	2.00	0.00	9.05	0.02	0.00
1.92	2.00	0.00	9.04	0.02	0.00	1.94	2.00	0.00	9.03	0.02	0.00
1.96	2.00	0.00	9.02	0.02	0.00	1.98	2.00	0.00	9.01	0.02	0.00
2.00	2.00	0.00	9.00	0.02	0.00	2.02	2.00	0.00	8.99	0.02	0.00
2.04	1.96	0.00	8.98	0.02	0.00	2.06	2.00	0.00	8.97	0.02	0.00
2.08	2.00	0.00	8.96	0.02	0.00	2.10	2.00	0.00	8.95	0.02	0.00
2.12	2.00	0.00	8.94	0.02	0.00	2.14	2.00	0.00	8.93	0.02	0.00
2.16	2.00	0.00	8.92	0.02	0.00	2.18	2.00	0.00	8.91	0.02	0.00
2.20	2.00	0.00	8.90	0.02	0.00	2.22	2.00	0.00	8.89	0.02	0.00
2.24	2.00	0.00	8.88	0.02	0.00	2.26	2.00	0.00	8.87	0.02	0.00
2.28	2.00	0.00	8.86	0.02	0.00	2.30	2.00	0.00	8.85	0.02	0.00
2.32	2.00	0.00	8.84	0.02	0.00	2.34	2.00	0.00	8.83	0.02	0.00
2.36	2.00	0.00	8.82	0.02	0.00	2.38	2.00	0.00	8.81	0.02	0.00
2.40	2.00	0.00	8.80	0.02	0.00	2.42	2.00	0.00	8.79	0.02	0.00
2.44	2.00	0.00	8.78	0.02	0.00	2.46	2.00	0.00	8.77	0.02	0.00
2.48	2.00	0.00	8.76	0.02	0.00	2.50	2.00	0.00	8.75	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
2.52	2.00	0.00	8.74	0.02	0.00	2.54	2.00	0.00	8.73	0.02	0.00
2.56	2.00	0.00	8.72	0.02	0.00	2.58	2.00	0.00	8.71	0.02	0.00
2.60	2.00	0.00	8.70	0.02	0.00	2.62	2.00	0.00	8.69	0.02	0.00
2.64	2.00	0.00	8.68	0.02	0.00	2.66	2.00	0.00	8.67	0.02	0.00
2.68	2.00	0.00	8.66	0.02	0.00	2.70	2.00	0.00	8.65	0.02	0.00
2.72	2.00	0.00	8.64	0.02	0.00	2.74	2.00	0.00	8.63	0.02	0.00
2.76	2.00	0.00	8.62	0.02	0.00	2.78	2.00	0.00	8.61	0.02	0.00
2.80	2.00	0.00	8.60	0.02	0.00	2.82	2.00	0.00	8.59	0.02	0.00
2.84	2.00	0.00	8.58	0.02	0.00	2.86	2.00	0.00	8.57	0.02	0.00
2.88	2.00	0.00	8.56	0.02	0.00	2.90	2.00	0.00	8.55	0.02	0.00
2.92	2.00	0.00	8.54	0.02	0.00	2.94	2.00	0.00	8.53	0.02	0.00
2.96	2.00	0.00	8.52	0.02	0.00	2.98	2.00	0.00	8.51	0.02	0.00
3.00	2.00	0.00	8.50	0.02	0.00	3.02	2.00	0.00	8.49	0.02	0.00
3.04	2.00	0.00	8.48	0.02	0.00	3.06	2.00	0.00	8.47	0.02	0.00
3.08	2.00	0.00	8.46	0.02	0.00	3.10	2.00	0.00	8.45	0.02	0.00
3.12	2.00	0.00	8.44	0.02	0.00	3.14	2.00	0.00	8.43	0.02	0.00
3.16	2.00	0.00	8.42	0.02	0.00	3.18	2.00	0.00	8.41	0.02	0.00
3.20	2.00	0.00	8.40	0.02	0.00	3.22	2.00	0.00	8.39	0.02	0.00
3.24	2.00	0.00	8.38	0.02	0.00	3.26	2.00	0.00	8.37	0.02	0.00
3.28	2.00	0.00	8.36	0.02	0.00	3.30	2.00	0.00	8.35	0.02	0.00
3.32	2.00	0.00	8.34	0.02	0.00	3.34	2.00	0.00	8.33	0.02	0.00
3.36	2.00	0.00	8.32	0.02	0.00	3.38	2.00	0.00	8.31	0.02	0.00
3.40	2.00	0.00	8.30	0.02	0.00	3.42	2.00	0.00	8.29	0.02	0.00
3.44	2.00	0.00	8.28	0.02	0.00	3.46	2.00	0.00	8.27	0.02	0.00
3.48	2.00	0.00	8.26	0.02	0.00	3.50	2.00	0.00	8.25	0.02	0.00
3.52	2.00	0.00	8.24	0.02	0.00	3.54	2.00	0.00	8.23	0.02	0.00
3.56	2.00	0.00	8.22	0.02	0.00	3.58	2.00	0.00	8.21	0.02	0.00
3.60	2.00	0.00	8.20	0.02	0.00	3.62	2.00	0.00	8.19	0.02	0.00
3.64	2.00	0.00	8.18	0.02	0.00	3.66	1.50	0.00	8.17	0.02	0.00
3.68	1.48	0.00	8.16	0.02	0.00	3.70	1.45	0.00	8.15	0.02	0.00
3.72	1.42	0.00	8.14	0.02	0.00	3.74	1.42	0.00	8.13	0.02	0.00
3.76	1.41	0.00	8.12	0.02	0.00	3.78	2.00	0.00	8.11	0.02	0.00
3.80	2.00	0.00	8.10	0.02	0.00	3.82	2.00	0.00	8.09	0.02	0.00
3.84	2.00	0.00	8.08	0.02	0.00	3.86	2.00	0.00	8.07	0.02	0.00
3.88	2.00	0.00	8.06	0.02	0.00	3.90	2.00	0.00	8.05	0.02	0.00
3.92	2.00	0.00	8.04	0.02	0.00	3.94	1.55	0.00	8.03	0.02	0.00
3.96	1.52	0.00	8.02	0.02	0.00	3.98	1.48	0.00	8.01	0.02	0.00
4.00	1.44	0.00	8.00	0.02	0.00	4.02	1.41	0.00	7.99	0.02	0.00
4.04	1.39	0.00	7.98	0.02	0.00	4.06	1.37	0.00	7.97	0.02	0.00
4.08	1.38	0.00	7.96	0.02	0.00	4.10	1.40	0.00	7.95	0.02	0.00
4.12	1.42	0.00	7.94	0.02	0.00	4.14	1.43	0.00	7.93	0.02	0.00
4.16	1.45	0.00	7.92	0.02	0.00	4.18	1.46	0.00	7.91	0.02	0.00
4.20	1.46	0.00	7.90	0.02	0.00	4.22	1.46	0.00	7.89	0.02	0.00
4.24	1.47	0.00	7.88	0.02	0.00	4.26	1.48	0.00	7.87	0.02	0.00
4.28	1.48	0.00	7.86	0.02	0.00	4.30	1.48	0.00	7.85	0.02	0.00
4.32	1.49	0.00	7.84	0.02	0.00	4.34	1.52	0.00	7.83	0.02	0.00
4.36	1.56	0.00	7.82	0.02	0.00	4.38	1.59	0.00	7.81	0.02	0.00
4.40	1.59	0.00	7.80	0.02	0.00	4.42	1.55	0.00	7.79	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
4.44	1.48	0.00	7.78	0.02	0.00	4.46	1.43	0.00	7.77	0.02	0.00
4.48	1.43	0.00	7.76	0.02	0.00	4.50	2.00	0.00	7.75	0.02	0.00
4.52	2.00	0.00	7.74	0.02	0.00	4.54	1.69	0.00	7.73	0.02	0.00
4.56	1.75	0.00	7.72	0.02	0.00	4.58	1.75	0.00	7.71	0.02	0.00
4.60	1.70	0.00	7.70	0.02	0.00	4.62	1.63	0.00	7.69	0.02	0.00
4.64	1.57	0.00	7.68	0.02	0.00	4.66	1.54	0.00	7.67	0.02	0.00
4.68	1.51	0.00	7.66	0.02	0.00	4.70	1.50	0.00	7.65	0.02	0.00
4.72	1.51	0.00	7.64	0.02	0.00	4.74	1.51	0.00	7.63	0.02	0.00
4.76	1.51	0.00	7.62	0.02	0.00	4.78	1.51	0.00	7.61	0.02	0.00
4.80	1.50	0.00	7.60	0.02	0.00	4.82	1.49	0.00	7.59	0.02	0.00
4.84	1.48	0.00	7.58	0.02	0.00	4.86	1.47	0.00	7.57	0.02	0.00
4.88	1.46	0.00	7.56	0.02	0.00	4.90	1.46	0.00	7.55	0.02	0.00
4.92	1.45	0.00	7.54	0.02	0.00	4.94	1.46	0.00	7.53	0.02	0.00
4.96	1.47	0.00	7.52	0.02	0.00	4.98	1.48	0.00	7.51	0.02	0.00
5.00	1.47	0.00	7.50	0.02	0.00	5.02	1.44	0.00	7.49	0.02	0.00
5.04	1.40	0.00	7.48	0.02	0.00	5.06	1.35	0.00	7.47	0.02	0.00
5.08	1.32	0.00	7.46	0.02	0.00	5.10	2.00	0.00	7.45	0.02	0.00
5.12	2.00	0.00	7.44	0.02	0.00	5.14	2.00	0.00	7.43	0.02	0.00
5.16	2.00	0.00	7.42	0.02	0.00	5.18	2.00	0.00	7.41	0.02	0.00
5.20	2.00	0.00	7.40	0.02	0.00	5.22	2.00	0.00	7.39	0.02	0.00
5.24	2.00	0.00	7.38	0.02	0.00	5.26	2.00	0.00	7.37	0.02	0.00
5.28	2.00	0.00	7.36	0.02	0.00	5.30	2.00	0.00	7.35	0.02	0.00
5.32	2.00	0.00	7.34	0.02	0.00	5.34	2.00	0.00	7.33	0.02	0.00
5.36	2.00	0.00	7.32	0.02	0.00	5.38	2.00	0.00	7.31	0.02	0.00
5.40	2.00	0.00	7.30	0.02	0.00	5.42	2.00	0.00	7.29	0.02	0.00
5.44	2.00	0.00	7.28	0.02	0.00	5.46	2.00	0.00	7.27	0.02	0.00
5.48	2.00	0.00	7.26	0.02	0.00	5.50	2.00	0.00	7.25	0.02	0.00
5.52	2.00	0.00	7.24	0.02	0.00	5.54	2.00	0.00	7.23	0.02	0.00
5.56	2.00	0.00	7.22	0.02	0.00	5.58	2.00	0.00	7.21	0.02	0.00
5.60	2.00	0.00	7.20	0.02	0.00	5.62	2.00	0.00	7.19	0.02	0.00
5.64	2.00	0.00	7.18	0.02	0.00	5.66	2.00	0.00	7.17	0.02	0.00
5.68	2.00	0.00	7.16	0.02	0.00	5.70	2.00	0.00	7.15	0.02	0.00
5.72	2.00	0.00	7.14	0.02	0.00	5.74	2.00	0.00	7.13	0.02	0.00
5.76	2.00	0.00	7.12	0.02	0.00	5.78	2.00	0.00	7.11	0.02	0.00
5.80	2.00	0.00	7.10	0.02	0.00	5.82	2.00	0.00	7.09	0.02	0.00
5.84	2.00	0.00	7.08	0.02	0.00	5.86	2.00	0.00	7.07	0.02	0.00
5.88	2.00	0.00	7.06	0.02	0.00	5.90	2.00	0.00	7.05	0.02	0.00
5.92	2.00	0.00	7.04	0.02	0.00	5.94	2.00	0.00	7.03	0.02	0.00
5.96	2.00	0.00	7.02	0.02	0.00	5.98	2.00	0.00	7.01	0.02	0.00
6.00	2.00	0.00	7.00	0.02	0.00	6.02	1.22	0.00	6.99	0.02	0.00
6.04	1.24	0.00	6.98	0.02	0.00	6.06	1.30	0.00	6.97	0.02	0.00
6.08	1.36	0.00	6.96	0.02	0.00	6.10	1.40	0.00	6.95	0.02	0.00
6.12	1.44	0.00	6.94	0.02	0.00	6.14	1.47	0.00	6.93	0.02	0.00
6.16	1.49	0.00	6.92	0.02	0.00	6.18	1.48	0.00	6.91	0.02	0.00
6.20	1.46	0.00	6.90	0.02	0.00	6.22	1.45	0.00	6.89	0.02	0.00
6.24	1.45	0.00	6.88	0.02	0.00	6.26	1.45	0.00	6.87	0.02	0.00
6.28	1.45	0.00	6.86	0.02	0.00	6.30	1.43	0.00	6.85	0.02	0.00
6.32	1.42	0.00	6.84	0.02	0.00	6.34	1.41	0.00	6.83	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
6.36	1.43	0.00	6.82	0.02	0.00	6.38	1.42	0.00	6.81	0.02	0.00
6.40	1.41	0.00	6.80	0.02	0.00	6.42	1.38	0.00	6.79	0.02	0.00
6.44	1.36	0.00	6.78	0.02	0.00	6.46	1.34	0.00	6.77	0.02	0.00
6.48	1.33	0.00	6.76	0.02	0.00	6.50	1.33	0.00	6.75	0.02	0.00
6.52	1.35	0.00	6.74	0.02	0.00	6.54	1.39	0.00	6.73	0.02	0.00
6.56	1.46	0.00	6.72	0.02	0.00	6.58	1.52	0.00	6.71	0.02	0.00
6.60	1.57	0.00	6.70	0.02	0.00	6.62	1.56	0.00	6.69	0.02	0.00
6.64	1.53	0.00	6.68	0.02	0.00	6.66	1.46	0.00	6.67	0.02	0.00
6.68	1.42	0.00	6.66	0.02	0.00	6.70	1.39	0.00	6.65	0.02	0.00
6.72	1.37	0.00	6.64	0.02	0.00	6.74	1.35	0.00	6.63	0.02	0.00
6.76	1.34	0.00	6.62	0.02	0.00	6.78	2.00	0.00	6.61	0.02	0.00
6.80	2.00	0.00	6.60	0.02	0.00	6.82	2.00	0.00	6.59	0.02	0.00
6.84	2.00	0.00	6.58	0.02	0.00	6.86	2.00	0.00	6.57	0.02	0.00
6.88	2.00	0.00	6.56	0.02	0.00	6.90	2.00	0.00	6.55	0.02	0.00
6.92	2.00	0.00	6.54	0.02	0.00	6.94	2.00	0.00	6.53	0.02	0.00
6.96	2.00	0.00	6.52	0.02	0.00	6.98	2.00	0.00	6.51	0.02	0.00
7.00	2.00	0.00	6.50	0.02	0.00	7.02	2.00	0.00	6.49	0.02	0.00
7.04	2.00	0.00	6.48	0.02	0.00	7.06	2.00	0.00	6.47	0.02	0.00
7.08	2.00	0.00	6.46	0.02	0.00	7.10	2.00	0.00	6.45	0.02	0.00
7.12	2.00	0.00	6.44	0.02	0.00	7.14	2.00	0.00	6.43	0.02	0.00
7.16	2.00	0.00	6.42	0.02	0.00	7.18	2.00	0.00	6.41	0.02	0.00
7.20	2.00	0.00	6.40	0.02	0.00	7.22	2.00	0.00	6.39	0.02	0.00
7.24	2.00	0.00	6.38	0.02	0.00	7.26	2.00	0.00	6.37	0.02	0.00
7.28	2.00	0.00	6.36	0.02	0.00	7.30	2.00	0.00	6.35	0.02	0.00
7.32	2.00	0.00	6.34	0.02	0.00	7.34	2.00	0.00	6.33	0.02	0.00
7.36	2.00	0.00	6.32	0.02	0.00	7.38	2.00	0.00	6.31	0.02	0.00
7.40	2.00	0.00	6.30	0.02	0.00	7.42	2.00	0.00	6.29	0.02	0.00
7.44	2.00	0.00	6.28	0.02	0.00	7.46	2.00	0.00	6.27	0.02	0.00
7.48	2.00	0.00	6.26	0.02	0.00	7.50	2.00	0.00	6.25	0.02	0.00
7.52	2.00	0.00	6.24	0.02	0.00	7.54	2.00	0.00	6.23	0.02	0.00
7.56	2.00	0.00	6.22	0.02	0.00	7.58	2.00	0.00	6.21	0.02	0.00
7.60	2.00	0.00	6.20	0.02	0.00	7.62	2.00	0.00	6.19	0.02	0.00
7.64	2.00	0.00	6.18	0.02	0.00	7.66	2.00	0.00	6.17	0.02	0.00
7.68	2.00	0.00	6.16	0.02	0.00	7.70	2.00	0.00	6.15	0.02	0.00
7.72	2.00	0.00	6.14	0.02	0.00	7.74	2.00	0.00	6.13	0.02	0.00
7.76	2.00	0.00	6.12	0.02	0.00	7.78	2.00	0.00	6.11	0.02	0.00
7.80	2.00	0.00	6.10	0.02	0.00	7.82	2.00	0.00	6.09	0.02	0.00
7.84	2.00	0.00	6.08	0.02	0.00	7.86	2.00	0.00	6.07	0.02	0.00
7.88	2.00	0.00	6.06	0.02	0.00	7.90	2.00	0.00	6.05	0.02	0.00
7.92	2.00	0.00	6.04	0.02	0.00	7.94	2.00	0.00	6.03	0.02	0.00
7.96	2.00	0.00	6.02	0.02	0.00	7.98	2.00	0.00	6.01	0.02	0.00
8.00	2.00	0.00	6.00	0.02	0.00	8.02	2.00	0.00	5.99	0.02	0.00
8.04	2.00	0.00	5.98	0.02	0.00	8.06	2.00	0.00	5.97	0.02	0.00
8.08	2.00	0.00	5.96	0.02	0.00	8.10	2.00	0.00	5.95	0.02	0.00
8.12	2.00	0.00	5.94	0.02	0.00	8.14	2.00	0.00	5.93	0.02	0.00
8.16	2.00	0.00	5.92	0.02	0.00	8.18	2.00	0.00	5.91	0.02	0.00
8.20	2.00	0.00	5.90	0.02	0.00	8.22	2.00	0.00	5.89	0.02	0.00
8.24	2.00	0.00	5.88	0.02	0.00	8.26	2.00	0.00	5.87	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
8.28	2.00	0.00	5.86	0.02	0.00	8.30	2.00	0.00	5.85	0.02	0.00
8.32	2.00	0.00	5.84	0.02	0.00	8.34	2.00	0.00	5.83	0.02	0.00
8.36	2.00	0.00	5.82	0.02	0.00	8.38	2.00	0.00	5.81	0.02	0.00
8.40	2.00	0.00	5.80	0.02	0.00	8.42	2.00	0.00	5.79	0.02	0.00
8.44	2.00	0.00	5.78	0.02	0.00	8.46	2.00	0.00	5.77	0.02	0.00
8.48	2.00	0.00	5.76	0.02	0.00	8.50	2.00	0.00	5.75	0.02	0.00
8.52	2.00	0.00	5.74	0.02	0.00	8.54	2.00	0.00	5.73	0.02	0.00
8.56	2.00	0.00	5.72	0.02	0.00	8.58	2.00	0.00	5.71	0.02	0.00
8.60	2.00	0.00	5.70	0.02	0.00	8.62	2.00	0.00	5.69	0.02	0.00
8.64	2.00	0.00	5.68	0.02	0.00	8.66	2.00	0.00	5.67	0.02	0.00
8.68	2.00	0.00	5.66	0.02	0.00	8.70	2.00	0.00	5.65	0.02	0.00
8.72	2.00	0.00	5.64	0.02	0.00	8.74	2.00	0.00	5.63	0.02	0.00
8.76	2.00	0.00	5.62	0.02	0.00	8.78	2.00	0.00	5.61	0.02	0.00
8.80	2.00	0.00	5.60	0.02	0.00	8.82	2.00	0.00	5.59	0.02	0.00
8.84	2.00	0.00	5.58	0.02	0.00	8.86	2.00	0.00	5.57	0.02	0.00
8.88	2.00	0.00	5.56	0.02	0.00	8.90	2.00	0.00	5.55	0.02	0.00
8.92	2.00	0.00	5.54	0.02	0.00	8.94	2.00	0.00	5.53	0.02	0.00
8.96	2.00	0.00	5.52	0.02	0.00	8.98	2.00	0.00	5.51	0.02	0.00
9.00	2.00	0.00	5.50	0.02	0.00	9.02	2.00	0.00	5.49	0.02	0.00
9.04	2.00	0.00	5.48	0.02	0.00	9.06	2.00	0.00	5.47	0.02	0.00
9.08	2.00	0.00	5.46	0.02	0.00	9.10	2.00	0.00	5.45	0.02	0.00
9.12	2.00	0.00	5.44	0.02	0.00	9.14	2.00	0.00	5.43	0.02	0.00
9.16	2.00	0.00	5.42	0.02	0.00	9.18	2.00	0.00	5.41	0.02	0.00
9.20	2.00	0.00	5.40	0.02	0.00	9.22	2.00	0.00	5.39	0.02	0.00
9.24	2.00	0.00	5.38	0.02	0.00	9.26	2.00	0.00	5.37	0.02	0.00
9.28	2.00	0.00	5.36	0.02	0.00	9.30	2.00	0.00	5.35	0.02	0.00
9.32	2.00	0.00	5.34	0.02	0.00	9.34	2.00	0.00	5.33	0.02	0.00
9.36	2.00	0.00	5.32	0.02	0.00	9.38	2.00	0.00	5.31	0.02	0.00
9.40	2.00	0.00	5.30	0.02	0.00	9.42	2.00	0.00	5.29	0.02	0.00
9.44	2.00	0.00	5.28	0.02	0.00	9.46	2.00	0.00	5.27	0.02	0.00
9.48	2.00	0.00	5.26	0.02	0.00	9.50	2.00	0.00	5.25	0.02	0.00
9.52	2.00	0.00	5.24	0.02	0.00	9.54	2.00	0.00	5.23	0.02	0.00
9.56	2.00	0.00	5.22	0.02	0.00	9.58	2.00	0.00	5.21	0.02	0.00
9.60	2.00	0.00	5.20	0.02	0.00	9.62	2.00	0.00	5.19	0.02	0.00
9.64	2.00	0.00	5.18	0.02	0.00	9.66	2.00	0.00	5.17	0.02	0.00
9.68	2.00	0.00	5.16	0.02	0.00	9.70	2.00	0.00	5.15	0.02	0.00
9.72	2.00	0.00	5.14	0.02	0.00	9.74	2.00	0.00	5.13	0.02	0.00
9.76	2.00	0.00	5.12	0.02	0.00	9.78	2.00	0.00	5.11	0.02	0.00
9.80	2.00	0.00	5.10	0.02	0.00	9.82	2.00	0.00	5.09	0.02	0.00
9.84	2.00	0.00	5.08	0.02	0.00	9.86	2.00	0.00	5.07	0.02	0.00
9.88	2.00	0.00	5.06	0.02	0.00	9.90	2.00	0.00	5.05	0.02	0.00
9.92	2.00	0.00	5.04	0.02	0.00	9.94	2.00	0.00	5.03	0.02	0.00
9.96	2.00	0.00	5.02	0.02	0.00	9.98	2.00	0.00	5.01	0.02	0.00
10.00	2.00	0.00	5.00	0.02	0.00	10.02	2.00	0.00	4.99	0.02	0.00
10.04	2.00	0.00	4.98	0.02	0.00	10.06	2.00	0.00	4.97	0.02	0.00
10.08	2.00	0.00	4.96	0.02	0.00	10.10	2.00	0.00	4.95	0.02	0.00
10.12	2.00	0.00	4.94	0.02	0.00	10.14	2.00	0.00	4.93	0.02	0.00
10.16	2.00	0.00	4.92	0.02	0.00	10.18	2.00	0.00	4.91	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
10.20	2.00	0.00	4.90	0.02	0.00	10.22	2.00	0.00	4.89	0.02	0.00
10.24	1.23	0.00	4.88	0.02	0.00	10.26	1.23	0.00	4.87	0.02	0.00
10.28	1.24	0.00	4.86	0.02	0.00	10.30	1.24	0.00	4.85	0.02	0.00
10.32	1.23	0.00	4.84	0.02	0.00	10.34	1.24	0.00	4.83	0.02	0.00
10.36	1.26	0.00	4.82	0.02	0.00	10.38	1.27	0.00	4.81	0.02	0.00
10.40	1.27	0.00	4.80	0.02	0.00	10.42	1.10	0.00	4.79	0.02	0.00
10.44	1.10	0.00	4.78	0.02	0.00	10.46	1.10	0.00	4.77	0.02	0.00
10.48	1.09	0.00	4.76	0.02	0.00	10.50	1.09	0.00	4.75	0.02	0.00
10.52	1.25	0.00	4.74	0.02	0.00	10.54	1.27	0.00	4.73	0.02	0.00
10.56	1.28	0.00	4.72	0.02	0.00	10.58	1.28	0.00	4.71	0.02	0.00
10.60	1.28	0.00	4.70	0.02	0.00	10.62	1.28	0.00	4.69	0.02	0.00
10.64	1.28	0.00	4.68	0.02	0.00	10.66	1.28	0.00	4.67	0.02	0.00
10.68	1.28	0.00	4.66	0.02	0.00	10.70	1.28	0.00	4.65	0.02	0.00
10.72	1.29	0.00	4.64	0.02	0.00	10.74	1.31	0.00	4.63	0.02	0.00
10.76	1.32	0.00	4.62	0.02	0.00	10.78	1.33	0.00	4.61	0.02	0.00
10.80	1.34	0.00	4.60	0.02	0.00	10.82	1.34	0.00	4.59	0.02	0.00
10.84	1.35	0.00	4.58	0.02	0.00	10.86	1.38	0.00	4.57	0.02	0.00
10.88	1.40	0.00	4.56	0.02	0.00	10.90	1.23	0.00	4.55	0.02	0.00
10.92	1.25	0.00	4.54	0.02	0.00	10.94	1.26	0.00	4.53	0.02	0.00
10.96	1.25	0.00	4.52	0.02	0.00	10.98	1.24	0.00	4.51	0.02	0.00
11.00	1.21	0.00	4.50	0.02	0.00	11.02	1.19	0.00	4.49	0.02	0.00
11.04	1.35	0.00	4.48	0.02	0.00	11.06	1.33	0.00	4.47	0.02	0.00
11.08	1.31	0.00	4.46	0.02	0.00	11.10	1.30	0.00	4.45	0.02	0.00
11.12	1.33	0.00	4.44	0.02	0.00	11.14	1.38	0.00	4.43	0.02	0.00
11.16	1.42	0.00	4.42	0.02	0.00	11.18	1.45	0.00	4.41	0.02	0.00
11.20	1.43	0.00	4.40	0.02	0.00	11.22	1.37	0.00	4.39	0.02	0.00
11.24	1.30	0.00	4.38	0.02	0.00	11.26	1.28	0.00	4.37	0.02	0.00
11.28	1.29	0.00	4.36	0.02	0.00	11.30	2.00	0.00	4.35	0.02	0.00
11.32	2.00	0.00	4.34	0.02	0.00	11.34	2.00	0.00	4.33	0.02	0.00
11.36	2.00	0.00	4.32	0.02	0.00	11.38	2.00	0.00	4.31	0.02	0.00
11.40	2.00	0.00	4.30	0.02	0.00	11.42	2.00	0.00	4.29	0.02	0.00
11.44	2.00	0.00	4.28	0.02	0.00	11.46	2.00	0.00	4.27	0.02	0.00
11.48	2.00	0.00	4.26	0.02	0.00	11.50	2.00	0.00	4.25	0.02	0.00
11.52	2.00	0.00	4.24	0.02	0.00	11.54	2.00	0.00	4.23	0.02	0.00
11.56	2.00	0.00	4.22	0.02	0.00	11.58	2.00	0.00	4.21	0.02	0.00
11.60	2.00	0.00	4.20	0.02	0.00	11.62	2.00	0.00	4.19	0.02	0.00
11.64	2.00	0.00	4.18	0.02	0.00	11.66	1.25	0.00	4.17	0.02	0.00
11.68	1.27	0.00	4.16	0.02	0.00	11.70	2.00	0.00	4.15	0.02	0.00
11.72	2.00	0.00	4.14	0.02	0.00	11.74	2.00	0.00	4.13	0.02	0.00
11.76	2.00	0.00	4.12	0.02	0.00	11.78	2.00	0.00	4.11	0.02	0.00
11.80	2.00	0.00	4.10	0.02	0.00	11.82	2.00	0.00	4.09	0.02	0.00
11.84	2.00	0.00	4.08	0.02	0.00	11.86	2.00	0.00	4.07	0.02	0.00
11.88	2.00	0.00	4.06	0.02	0.00	11.90	2.00	0.00	4.05	0.02	0.00
11.92	2.00	0.00	4.04	0.02	0.00	11.94	2.00	0.00	4.03	0.02	0.00
11.96	2.00	0.00	4.02	0.02	0.00	11.98	2.00	0.00	4.01	0.02	0.00
12.00	2.00	0.00	4.00	0.02	0.00	12.02	2.00	0.00	3.99	0.02	0.00
12.04	2.00	0.00	3.98	0.02	0.00	12.06	2.00	0.00	3.97	0.02	0.00
12.08	2.00	0.00	3.96	0.02	0.00	12.10	2.00	0.00	3.95	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
12.12	2.00	0.00	3.94	0.02	0.00	12.14	2.00	0.00	3.93	0.02	0.00
12.16	2.00	0.00	3.92	0.02	0.00	12.18	2.00	0.00	3.91	0.02	0.00
12.20	2.00	0.00	3.90	0.02	0.00	12.22	2.00	0.00	3.89	0.02	0.00
12.24	2.00	0.00	3.88	0.02	0.00	12.26	2.00	0.00	3.87	0.02	0.00
12.28	2.00	0.00	3.86	0.02	0.00	12.30	2.00	0.00	3.85	0.02	0.00
12.32	2.00	0.00	3.84	0.02	0.00	12.34	2.00	0.00	3.83	0.02	0.00
12.36	2.00	0.00	3.82	0.02	0.00	12.38	2.00	0.00	3.81	0.02	0.00
12.40	2.00	0.00	3.80	0.02	0.00	12.42	2.00	0.00	3.79	0.02	0.00
12.44	2.00	0.00	3.78	0.02	0.00	12.46	2.00	0.00	3.77	0.02	0.00
12.48	2.00	0.00	3.76	0.02	0.00	12.50	2.00	0.00	3.75	0.02	0.00
12.52	2.00	0.00	3.74	0.02	0.00	12.54	2.00	0.00	3.73	0.02	0.00
12.56	2.00	0.00	3.72	0.02	0.00	12.58	2.00	0.00	3.71	0.02	0.00
12.60	2.00	0.00	3.70	0.02	0.00	12.62	2.00	0.00	3.69	0.02	0.00
12.64	2.00	0.00	3.68	0.02	0.00	12.66	2.00	0.00	3.67	0.02	0.00
12.68	2.00	0.00	3.66	0.02	0.00	12.70	2.00	0.00	3.65	0.02	0.00
12.72	2.00	0.00	3.64	0.02	0.00	12.74	2.00	0.00	3.63	0.02	0.00
12.76	2.00	0.00	3.62	0.02	0.00	12.78	2.00	0.00	3.61	0.02	0.00
12.80	2.00	0.00	3.60	0.02	0.00	12.82	2.00	0.00	3.59	0.02	0.00
12.84	2.00	0.00	3.58	0.02	0.00	12.86	2.00	0.00	3.57	0.02	0.00
12.88	2.00	0.00	3.56	0.02	0.00	12.90	2.00	0.00	3.55	0.02	0.00
12.92	2.00	0.00	3.54	0.02	0.00	12.94	2.00	0.00	3.53	0.02	0.00
12.96	2.00	0.00	3.52	0.02	0.00	12.98	2.00	0.00	3.51	0.02	0.00
13.00	2.00	0.00	3.50	0.02	0.00	13.02	2.00	0.00	3.49	0.02	0.00
13.04	2.00	0.00	3.48	0.02	0.00	13.06	2.00	0.00	3.47	0.02	0.00
13.08	2.00	0.00	3.46	0.02	0.00	13.10	2.00	0.00	3.45	0.02	0.00
13.12	2.00	0.00	3.44	0.02	0.00	13.14	2.00	0.00	3.43	0.02	0.00
13.16	2.00	0.00	3.42	0.02	0.00	13.18	2.00	0.00	3.41	0.02	0.00
13.20	2.00	0.00	3.40	0.02	0.00	13.22	2.00	0.00	3.39	0.02	0.00
13.24	2.00	0.00	3.38	0.02	0.00	13.26	2.00	0.00	3.37	0.02	0.00
13.28	2.00	0.00	3.36	0.02	0.00	13.30	2.00	0.00	3.35	0.02	0.00
13.32	2.00	0.00	3.34	0.02	0.00	13.34	1.32	0.00	3.33	0.02	0.00
13.36	1.26	0.00	3.32	0.02	0.00	13.38	1.23	0.00	3.31	0.02	0.00
13.40	1.22	0.00	3.30	0.02	0.00	13.42	1.22	0.00	3.29	0.02	0.00
13.44	1.22	0.00	3.28	0.02	0.00	13.46	2.00	0.00	3.27	0.02	0.00
13.48	2.00	0.00	3.26	0.02	0.00	13.50	2.00	0.00	3.25	0.02	0.00
13.52	2.00	0.00	3.24	0.02	0.00	13.54	2.00	0.00	3.23	0.02	0.00
13.56	2.00	0.00	3.22	0.02	0.00	13.58	2.00	0.00	3.21	0.02	0.00
13.60	2.00	0.00	3.20	0.02	0.00	13.62	2.00	0.00	3.19	0.02	0.00
13.64	2.00	0.00	3.18	0.02	0.00	13.66	2.00	0.00	3.17	0.02	0.00
13.68	2.00	0.00	3.16	0.02	0.00	13.70	2.00	0.00	3.15	0.02	0.00
13.72	2.00	0.00	3.14	0.02	0.00	13.74	2.00	0.00	3.13	0.02	0.00
13.76	2.00	0.00	3.12	0.02	0.00	13.78	2.00	0.00	3.11	0.02	0.00
13.80	2.00	0.00	3.10	0.02	0.00	13.82	2.00	0.00	3.09	0.02	0.00
13.84	2.00	0.00	3.08	0.02	0.00	13.86	2.00	0.00	3.07	0.02	0.00
13.88	2.00	0.00	3.06	0.02	0.00	13.90	2.00	0.00	3.05	0.02	0.00
13.92	2.00	0.00	3.04	0.02	0.00	13.94	2.00	0.00	3.03	0.02	0.00
13.96	2.00	0.00	3.02	0.02	0.00	13.98	2.00	0.00	3.01	0.02	0.00
14.00	2.00	0.00	3.00	0.02	0.00	14.02	2.00	0.00	2.99	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
14.04	2.00	0.00	2.98	0.02	0.00	14.06	2.00	0.00	2.97	0.02	0.00
14.08	2.00	0.00	2.96	0.02	0.00	14.10	2.00	0.00	2.95	0.02	0.00
14.12	2.00	0.00	2.94	0.02	0.00	14.14	2.00	0.00	2.93	0.02	0.00
14.16	2.00	0.00	2.92	0.02	0.00	14.18	2.00	0.00	2.91	0.02	0.00
14.20	2.00	0.00	2.90	0.02	0.00	14.22	2.00	0.00	2.89	0.02	0.00
14.24	2.00	0.00	2.88	0.02	0.00	14.26	2.00	0.00	2.87	0.02	0.00
14.28	2.00	0.00	2.86	0.02	0.00	14.30	2.00	0.00	2.85	0.02	0.00
14.32	2.00	0.00	2.84	0.02	0.00	14.34	2.00	0.00	2.83	0.02	0.00
14.36	2.00	0.00	2.82	0.02	0.00	14.38	2.00	0.00	2.81	0.02	0.00
14.40	2.00	0.00	2.80	0.02	0.00	14.42	2.00	0.00	2.79	0.02	0.00
14.44	2.00	0.00	2.78	0.02	0.00	14.46	2.00	0.00	2.77	0.02	0.00
14.48	2.00	0.00	2.76	0.02	0.00	14.50	2.00	0.00	2.75	0.02	0.00
14.52	2.00	0.00	2.74	0.02	0.00	14.54	2.00	0.00	2.73	0.02	0.00
14.56	2.00	0.00	2.72	0.02	0.00	14.58	2.00	0.00	2.71	0.02	0.00
14.60	2.00	0.00	2.70	0.02	0.00	14.62	2.00	0.00	2.69	0.02	0.00
14.64	2.00	0.00	2.68	0.02	0.00	14.66	2.00	0.00	2.67	0.02	0.00
14.68	2.00	0.00	2.66	0.02	0.00	14.70	2.00	0.00	2.65	0.02	0.00
14.72	2.00	0.00	2.64	0.02	0.00	14.74	2.00	0.00	2.63	0.02	0.00
14.76	2.00	0.00	2.62	0.02	0.00	14.78	2.00	0.00	2.61	0.02	0.00
14.80	2.00	0.00	2.60	0.02	0.00	14.82	2.00	0.00	2.59	0.02	0.00
14.84	2.00	0.00	2.58	0.02	0.00	14.86	2.00	0.00	2.57	0.02	0.00
14.88	2.00	0.00	2.56	0.02	0.00	14.90	2.00	0.00	2.55	0.02	0.00
14.92	2.00	0.00	2.54	0.02	0.00	14.94	2.00	0.00	2.53	0.02	0.00
14.96	2.00	0.00	2.52	0.02	0.00	14.98	2.00	0.00	2.51	0.02	0.00
15.00	2.00	0.00	2.50	0.02	0.00	15.02	2.00	0.00	2.49	0.02	0.00
15.04	2.00	0.00	2.48	0.02	0.00	15.06	2.00	0.00	2.47	0.02	0.00
15.08	2.00	0.00	2.46	0.02	0.00	15.10	2.00	0.00	2.45	0.02	0.00
15.12	2.00	0.00	2.44	0.02	0.00	15.14	2.00	0.00	2.43	0.02	0.00
15.16	2.00	0.00	2.42	0.02	0.00	15.18	2.00	0.00	2.41	0.02	0.00
15.20	2.00	0.00	2.40	0.02	0.00	15.22	2.00	0.00	2.39	0.02	0.00
15.24	2.00	0.00	2.38	0.02	0.00	15.26	2.00	0.00	2.37	0.02	0.00
15.28	2.00	0.00	2.36	0.02	0.00	15.30	2.00	0.00	2.35	0.02	0.00
15.32	2.00	0.00	2.34	0.02	0.00	15.34	2.00	0.00	2.33	0.02	0.00
15.36	2.00	0.00	2.32	0.02	0.00	15.38	2.00	0.00	2.31	0.02	0.00
15.40	2.00	0.00	2.30	0.02	0.00	15.42	2.00	0.00	2.29	0.02	0.00
15.44	2.00	0.00	2.28	0.02	0.00	15.46	2.00	0.00	2.27	0.02	0.00
15.48	2.00	0.00	2.26	0.02	0.00	15.50	2.00	0.00	2.25	0.02	0.00
15.52	2.00	0.00	2.24	0.02	0.00	15.54	2.00	0.00	2.23	0.02	0.00
15.56	2.00	0.00	2.22	0.02	0.00	15.58	2.00	0.00	2.21	0.02	0.00
15.60	2.00	0.00	2.20	0.02	0.00	15.62	2.00	0.00	2.19	0.02	0.00
15.64	2.00	0.00	2.18	0.02	0.00	15.66	2.00	0.00	2.17	0.02	0.00
15.68	2.00	0.00	2.16	0.02	0.00	15.70	2.00	0.00	2.15	0.02	0.00
15.72	2.00	0.00	2.14	0.02	0.00	15.74	2.00	0.00	2.13	0.02	0.00
15.76	2.00	0.00	2.12	0.02	0.00	15.78	2.00	0.00	2.11	0.02	0.00
15.80	2.00	0.00	2.10	0.02	0.00	15.82	2.00	0.00	2.09	0.02	0.00
15.84	2.00	0.00	2.08	0.02	0.00	15.86	2.00	0.00	2.07	0.02	0.00
15.88	2.00	0.00	2.06	0.02	0.00	15.90	2.00	0.00	2.05	0.02	0.00
15.92	2.00	0.00	2.04	0.02	0.00	15.94	2.00	0.00	2.03	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
15.96	2.00	0.00	2.02	0.02	0.00	15.98	2.00	0.00	2.01	0.02	0.00
16.00	2.00	0.00	2.00	0.02	0.00	16.02	2.00	0.00	1.99	0.02	0.00
16.04	2.00	0.00	1.98	0.02	0.00	16.06	2.00	0.00	1.97	0.02	0.00
16.08	2.00	0.00	1.96	0.02	0.00	16.10	2.00	0.00	1.95	0.02	0.00
16.12	2.00	0.00	1.94	0.02	0.00	16.14	2.00	0.00	1.93	0.02	0.00
16.16	2.00	0.00	1.92	0.02	0.00	16.18	2.00	0.00	1.91	0.02	0.00
16.20	2.00	0.00	1.90	0.02	0.00	16.22	2.00	0.00	1.89	0.02	0.00
16.24	2.00	0.00	1.88	0.02	0.00	16.26	2.00	0.00	1.87	0.02	0.00
16.28	2.00	0.00	1.86	0.02	0.00	16.30	2.00	0.00	1.85	0.02	0.00
16.32	2.00	0.00	1.84	0.02	0.00	16.34	2.00	0.00	1.83	0.02	0.00
16.36	2.00	0.00	1.82	0.02	0.00	16.38	2.00	0.00	1.81	0.02	0.00
16.40	2.00	0.00	1.80	0.02	0.00	16.42	2.00	0.00	1.79	0.02	0.00
16.44	2.00	0.00	1.78	0.02	0.00	16.46	2.00	0.00	1.77	0.02	0.00
16.48	2.00	0.00	1.76	0.02	0.00	16.50	2.00	0.00	1.75	0.02	0.00
16.52	2.00	0.00	1.74	0.02	0.00	16.54	2.00	0.00	1.73	0.02	0.00
16.56	2.00	0.00	1.72	0.02	0.00	16.58	2.00	0.00	1.71	0.02	0.00
16.60	1.30	0.00	1.70	0.02	0.00	16.62	1.32	0.00	1.69	0.02	0.00
16.64	1.33	0.00	1.68	0.02	0.00	16.66	1.32	0.00	1.67	0.02	0.00
16.68	1.32	0.00	1.66	0.02	0.00	16.70	1.34	0.00	1.65	0.02	0.00
16.72	1.36	0.00	1.64	0.02	0.00	16.74	1.36	0.00	1.63	0.02	0.00
16.76	1.33	0.00	1.62	0.02	0.00	16.78	2.00	0.00	1.61	0.02	0.00
16.80	2.00	0.00	1.60	0.02	0.00	16.82	2.00	0.00	1.59	0.02	0.00
16.84	2.00	0.00	1.58	0.02	0.00	16.86	2.00	0.00	1.57	0.02	0.00
16.88	2.00	0.00	1.56	0.02	0.00	16.90	2.00	0.00	1.55	0.02	0.00
16.92	2.00	0.00	1.54	0.02	0.00	16.94	2.00	0.00	1.53	0.02	0.00
16.96	2.00	0.00	1.52	0.02	0.00	16.98	2.00	0.00	1.51	0.02	0.00
17.00	2.00	0.00	1.50	0.02	0.00	17.02	2.00	0.00	1.49	0.02	0.00
17.04	2.00	0.00	1.48	0.02	0.00	17.06	2.00	0.00	1.47	0.02	0.00
17.08	2.00	0.00	1.46	0.02	0.00	17.10	2.00	0.00	1.45	0.02	0.00
17.12	2.00	0.00	1.44	0.02	0.00	17.14	2.00	0.00	1.43	0.02	0.00
17.16	2.00	0.00	1.42	0.02	0.00	17.18	2.00	0.00	1.41	0.02	0.00
17.20	2.00	0.00	1.40	0.02	0.00	17.22	2.00	0.00	1.39	0.02	0.00
17.24	2.00	0.00	1.38	0.02	0.00	17.26	2.00	0.00	1.37	0.02	0.00
17.28	2.00	0.00	1.36	0.02	0.00	17.30	2.00	0.00	1.35	0.02	0.00
17.32	2.00	0.00	1.34	0.02	0.00	17.34	1.38	0.00	1.33	0.02	0.00
17.36	1.45	0.00	1.32	0.02	0.00	17.38	1.49	0.00	1.31	0.02	0.00
17.40	1.48	0.00	1.30	0.02	0.00	17.42	2.00	0.00	1.29	0.02	0.00
17.44	2.00	0.00	1.28	0.02	0.00	17.46	1.42	0.00	1.27	0.02	0.00
17.48	1.43	0.00	1.26	0.02	0.00	17.50	1.46	0.00	1.25	0.02	0.00
17.52	1.50	0.00	1.24	0.02	0.00	17.54	1.50	0.00	1.23	0.02	0.00
17.56	1.46	0.00	1.22	0.02	0.00	17.58	1.41	0.00	1.21	0.02	0.00
17.60	1.37	0.00	1.20	0.02	0.00	17.62	1.37	0.00	1.19	0.02	0.00
17.64	1.39	0.00	1.18	0.02	0.00	17.66	1.40	0.00	1.17	0.02	0.00
17.68	1.41	0.00	1.16	0.02	0.00	17.70	1.39	0.00	1.15	0.02	0.00
17.72	1.37	0.00	1.14	0.02	0.00	17.74	1.33	0.00	1.13	0.02	0.00
17.76	1.32	0.00	1.12	0.02	0.00	17.78	1.35	0.00	1.11	0.02	0.00
17.80	2.00	0.00	1.10	0.02	0.00	17.82	2.00	0.00	1.09	0.02	0.00
17.84	2.00	0.00	1.08	0.02	0.00	17.86	2.00	0.00	1.07	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
17.88	2.00	0.00	1.06	0.02	0.00	17.90	2.00	0.00	1.05	0.02	0.00
17.92	2.00	0.00	1.04	0.02	0.00	17.94	2.00	0.00	1.03	0.02	0.00
17.96	2.00	0.00	1.02	0.02	0.00	17.98	2.00	0.00	1.01	0.02	0.00
18.00	2.00	0.00	1.00	0.02	0.00	18.02	2.00	0.00	0.99	0.02	0.00
18.04	2.00	0.00	0.98	0.02	0.00	18.06	2.00	0.00	0.97	0.02	0.00
18.08	2.00	0.00	0.96	0.02	0.00	18.10	2.00	0.00	0.95	0.02	0.00
18.12	2.00	0.00	0.94	0.02	0.00	18.14	2.00	0.00	0.93	0.02	0.00
18.16	2.00	0.00	0.92	0.02	0.00	18.18	2.00	0.00	0.91	0.02	0.00
18.20	2.00	0.00	0.90	0.02	0.00	18.22	2.00	0.00	0.89	0.02	0.00
18.24	2.00	0.00	0.88	0.02	0.00	18.26	2.00	0.00	0.87	0.02	0.00
18.28	2.00	0.00	0.86	0.02	0.00	18.30	2.00	0.00	0.85	0.02	0.00
18.32	2.00	0.00	0.84	0.02	0.00	18.34	2.00	0.00	0.83	0.02	0.00
18.36	2.00	0.00	0.82	0.02	0.00	18.38	2.00	0.00	0.81	0.02	0.00
18.40	2.00	0.00	0.80	0.02	0.00	18.42	2.00	0.00	0.79	0.02	0.00
18.44	2.00	0.00	0.78	0.02	0.00	18.46	2.00	0.00	0.77	0.02	0.00
18.48	2.00	0.00	0.76	0.02	0.00	18.50	2.00	0.00	0.75	0.02	0.00
18.52	2.00	0.00	0.74	0.02	0.00	18.54	2.00	0.00	0.73	0.02	0.00
18.56	2.00	0.00	0.72	0.02	0.00	18.58	2.00	0.00	0.71	0.02	0.00
18.60	2.00	0.00	0.70	0.02	0.00	18.62	2.00	0.00	0.69	0.02	0.00
18.64	2.00	0.00	0.68	0.02	0.00	18.66	2.00	0.00	0.67	0.02	0.00
18.68	2.00	0.00	0.66	0.02	0.00	18.70	2.00	0.00	0.65	0.02	0.00
18.72	2.00	0.00	0.64	0.02	0.00	18.74	2.00	0.00	0.63	0.02	0.00
18.76	2.00	0.00	0.62	0.02	0.00	18.78	2.00	0.00	0.61	0.02	0.00
18.80	2.00	0.00	0.60	0.02	0.00	18.82	2.00	0.00	0.59	0.02	0.00
18.84	2.00	0.00	0.58	0.02	0.00	18.86	2.00	0.00	0.57	0.02	0.00
18.88	2.00	0.00	0.56	0.02	0.00	18.90	2.00	0.00	0.55	0.02	0.00
18.92	2.00	0.00	0.54	0.02	0.00	18.94	2.00	0.00	0.53	0.02	0.00
18.96	2.00	0.00	0.52	0.02	0.00	18.98	2.00	0.00	0.51	0.02	0.00
19.00	2.00	0.00	0.50	0.02	0.00	19.02	2.00	0.00	0.49	0.02	0.00
19.04	2.00	0.00	0.48	0.02	0.00	19.06	2.00	0.00	0.47	0.02	0.00
19.08	2.00	0.00	0.46	0.02	0.00	19.10	2.00	0.00	0.45	0.02	0.00
19.12	2.00	0.00	0.44	0.02	0.00	19.14	2.00	0.00	0.43	0.02	0.00
19.16	1.41	0.00	0.42	0.02	0.00	19.18	1.40	0.00	0.41	0.02	0.00
19.20	1.38	0.00	0.40	0.02	0.00	19.22	1.38	0.00	0.39	0.02	0.00
19.24	1.38	0.00	0.38	0.02	0.00	19.26	2.00	0.00	0.37	0.02	0.00
19.28	2.00	0.00	0.36	0.02	0.00	19.30	2.00	0.00	0.35	0.02	0.00
19.32	2.00	0.00	0.34	0.02	0.00	19.34	2.00	0.00	0.33	0.02	0.00
19.36	2.00	0.00	0.32	0.02	0.00	19.38	2.00	0.00	0.31	0.02	0.00
19.40	2.00	0.00	0.30	0.02	0.00	19.42	2.00	0.00	0.29	0.02	0.00
19.44	2.00	0.00	0.28	0.02	0.00	19.46	2.00	0.00	0.27	0.02	0.00
19.48	1.51	0.00	0.26	0.02	0.00	19.50	1.52	0.00	0.25	0.02	0.00
19.52	1.53	0.00	0.24	0.02	0.00	19.54	1.53	0.00	0.23	0.02	0.00
19.56	1.51	0.00	0.22	0.02	0.00	19.58	1.30	0.00	0.21	0.02	0.00
19.60	1.32	0.00	0.20	0.02	0.00	19.62	1.34	0.00	0.19	0.02	0.00
19.64	1.34	0.00	0.18	0.02	0.00	19.66	1.36	0.00	0.17	0.02	0.00
19.68	1.37	0.00	0.16	0.02	0.00	19.70	1.41	0.00	0.15	0.02	0.00
19.72	1.45	0.00	0.14	0.02	0.00	19.74	1.48	0.00	0.13	0.02	0.00
19.76	1.50	0.00	0.12	0.02	0.00	19.78	1.51	0.00	0.11	0.02	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
19.80	1.55	0.00	0.10	0.02	0.00	19.82	1.59	0.00	0.09	0.02	0.00
19.84	1.65	0.00	0.08	0.02	0.00	19.86	1.69	0.00	0.07	0.02	0.00
19.88	1.72	0.00	0.06	0.02	0.00	19.90	1.74	0.00	0.05	0.02	0.00
19.92	1.74	0.00	0.04	0.02	0.00	19.94	1.73	0.00	0.03	0.02	0.00
19.96	1.71	0.00	0.02	0.02	0.00	19.98	1.69	0.00	0.01	0.02	0.00
20.00	1.69	0.00	0.00	0.02	0.00	20.02	1.71	0.00	0.00	0.00	0.00
20.04	1.72	0.00	0.00	0.00	0.00	20.06	1.71	0.00	0.00	0.00	0.00
20.08	1.68	0.00	0.00	0.00	0.00	20.10	1.66	0.00	0.00	0.00	0.00
20.12	1.65	0.00	0.00	0.00	0.00	20.14	1.64	0.00	0.00	0.00	0.00
20.16	1.59	0.00	0.00	0.00	0.00	20.18	1.77	0.00	0.00	0.00	0.00
20.20	1.71	0.00	0.00	0.00	0.00	20.22	1.67	0.00	0.00	0.00	0.00
20.24	1.64	0.00	0.00	0.00	0.00	20.26	1.63	0.00	0.00	0.00	0.00
20.28	1.61	0.00	0.00	0.00	0.00	20.30	1.60	0.00	0.00	0.00	0.00
20.32	1.59	0.00	0.00	0.00	0.00	20.34	1.60	0.00	0.00	0.00	0.00
20.36	1.61	0.00	0.00	0.00	0.00	20.38	1.64	0.00	0.00	0.00	0.00
20.40	1.46	0.00	0.00	0.00	0.00	20.42	1.49	0.00	0.00	0.00	0.00
20.44	1.50	0.00	0.00	0.00	0.00	20.46	1.75	0.00	0.00	0.00	0.00
20.48	1.77	0.00	0.00	0.00	0.00	20.50	1.79	0.00	0.00	0.00	0.00
20.52	1.81	0.00	0.00	0.00	0.00	20.54	1.84	0.00	0.00	0.00	0.00
20.56	1.85	0.00	0.00	0.00	0.00	20.58	1.85	0.00	0.00	0.00	0.00
20.60	1.60	0.00	0.00	0.00	0.00	20.62	1.61	0.00	0.00	0.00	0.00
20.64	1.62	0.00	0.00	0.00	0.00	20.66	1.89	0.00	0.00	0.00	0.00
20.68	1.91	0.00	0.00	0.00	0.00	20.70	1.92	0.00	0.00	0.00	0.00
20.72	1.95	0.00	0.00	0.00	0.00	20.74	1.99	0.00	0.00	0.00	0.00
20.76	2.00	0.00	0.00	0.00	0.00	20.78	1.82	0.00	0.00	0.00	0.00
20.80	1.86	0.00	0.00	0.00	0.00	20.82	1.87	0.00	0.00	0.00	0.00
20.84	1.85	0.00	0.00	0.00	0.00	20.86	2.00	0.00	0.00	0.00	0.00
20.88	2.00	0.00	0.00	0.00	0.00	20.90	2.00	0.00	0.00	0.00	0.00
20.92	2.00	0.00	0.00	0.00	0.00	20.94	1.91	0.00	0.00	0.00	0.00
20.96	1.89	0.00	0.00	0.00	0.00	20.98	2.00	0.00	0.00	0.00	0.00
21.00	2.00	0.00	0.00	0.00	0.00	21.02	2.00	0.00	0.00	0.00	0.00
21.04	1.79	0.00	0.00	0.00	0.00	21.06	1.79	0.00	0.00	0.00	0.00
21.08	1.78	0.00	0.00	0.00	0.00	21.10	1.74	0.00	0.00	0.00	0.00
21.12	1.70	0.00	0.00	0.00	0.00	21.14	1.65	0.00	0.00	0.00	0.00
21.16	1.60	0.00	0.00	0.00	0.00	21.18	1.78	0.00	0.00	0.00	0.00
21.20	1.73	0.00	0.00	0.00	0.00	21.22	1.68	0.00	0.00	0.00	0.00
21.24	1.64	0.00	0.00	0.00	0.00	21.26	1.62	0.00	0.00	0.00	0.00
21.28	1.61	0.00	0.00	0.00	0.00	21.30	1.40	0.00	0.00	0.00	0.00
21.32	1.42	0.00	0.00	0.00	0.00	21.34	1.46	0.00	0.00	0.00	0.00
21.36	1.54	0.00	0.00	0.00	0.00	21.38	1.69	0.00	0.00	0.00	0.00
21.40	1.88	0.00	0.00	0.00	0.00	21.42	2.00	0.00	0.00	0.00	0.00
21.44	2.00	0.00	0.00	0.00	0.00	21.46	2.00	0.00	0.00	0.00	0.00
21.48	2.00	0.00	0.00	0.00	0.00	21.50	2.00	0.00	0.00	0.00	0.00
21.52	2.00	0.00	0.00	0.00	0.00	21.54	2.00	0.00	0.00	0.00	0.00
21.56	1.95	0.00	0.00	0.00	0.00	21.58	2.00	0.00	0.00	0.00	0.00
21.60	2.00	0.00	0.00	0.00	0.00	21.62	2.00	0.00	0.00	0.00	0.00
21.64	2.00	0.00	0.00	0.00	0.00	21.66	2.00	0.00	0.00	0.00	0.00
21.68	1.98	0.00	0.00	0.00	0.00	21.70	1.94	0.00	0.00	0.00	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
21.72	1.92	0.00	0.00	0.00	0.00	21.74	1.93	0.00	0.00	0.00	0.00
21.76	1.94	0.00	0.00	0.00	0.00	21.78	1.90	0.00	0.00	0.00	0.00
21.80	1.79	0.00	0.00	0.00	0.00	21.82	1.65	0.00	0.00	0.00	0.00
21.84	1.61	0.00	0.00	0.00	0.00	21.86	2.00	0.00	0.00	0.00	0.00
21.88	2.00	0.00	0.00	0.00	0.00	21.90	2.00	0.00	0.00	0.00	0.00
21.92	2.00	0.00	0.00	0.00	0.00	21.94	2.00	0.00	0.00	0.00	0.00
21.96	2.00	0.00	0.00	0.00	0.00	21.98	2.00	0.00	0.00	0.00	0.00
22.00	2.00	0.00	0.00	0.00	0.00	22.02	2.00	0.00	0.00	0.00	0.00
22.04	2.00	0.00	0.00	0.00	0.00	22.06	2.00	0.00	0.00	0.00	0.00
22.08	2.00	0.00	0.00	0.00	0.00	22.10	2.00	0.00	0.00	0.00	0.00
22.12	2.00	0.00	0.00	0.00	0.00	22.14	2.00	0.00	0.00	0.00	0.00
22.16	2.00	0.00	0.00	0.00	0.00	22.18	2.00	0.00	0.00	0.00	0.00
22.20	2.00	0.00	0.00	0.00	0.00	22.22	2.00	0.00	0.00	0.00	0.00
22.24	2.00	0.00	0.00	0.00	0.00	22.26	2.00	0.00	0.00	0.00	0.00
22.28	2.00	0.00	0.00	0.00	0.00	22.30	2.00	0.00	0.00	0.00	0.00
22.32	2.00	0.00	0.00	0.00	0.00	22.34	2.00	0.00	0.00	0.00	0.00
22.36	2.00	0.00	0.00	0.00	0.00	22.38	2.00	0.00	0.00	0.00	0.00
22.40	2.00	0.00	0.00	0.00	0.00	22.42	2.00	0.00	0.00	0.00	0.00
22.44	2.00	0.00	0.00	0.00	0.00	22.46	2.00	0.00	0.00	0.00	0.00
22.48	2.00	0.00	0.00	0.00	0.00	22.50	2.00	0.00	0.00	0.00	0.00
22.52	2.00	0.00	0.00	0.00	0.00	22.54	2.00	0.00	0.00	0.00	0.00
22.56	2.00	0.00	0.00	0.00	0.00	22.58	2.00	0.00	0.00	0.00	0.00
22.60	2.00	0.00	0.00	0.00	0.00	22.62	2.00	0.00	0.00	0.00	0.00
22.64	2.00	0.00	0.00	0.00	0.00	22.66	2.00	0.00	0.00	0.00	0.00
22.68	2.00	0.00	0.00	0.00	0.00	22.70	2.00	0.00	0.00	0.00	0.00
22.72	2.00	0.00	0.00	0.00	0.00	22.74	2.00	0.00	0.00	0.00	0.00
22.76	2.00	0.00	0.00	0.00	0.00	22.78	2.00	0.00	0.00	0.00	0.00
22.80	2.00	0.00	0.00	0.00	0.00	22.82	2.00	0.00	0.00	0.00	0.00
22.84	2.00	0.00	0.00	0.00	0.00	22.86	2.00	0.00	0.00	0.00	0.00
22.88	2.00	0.00	0.00	0.00	0.00	22.90	2.00	0.00	0.00	0.00	0.00
22.92	2.00	0.00	0.00	0.00	0.00	22.94	2.00	0.00	0.00	0.00	0.00
22.96	2.00	0.00	0.00	0.00	0.00	22.98	2.00	0.00	0.00	0.00	0.00
23.00	2.00	0.00	0.00	0.00	0.00	23.02	2.00	0.00	0.00	0.00	0.00
23.04	2.00	0.00	0.00	0.00	0.00	23.06	2.00	0.00	0.00	0.00	0.00
23.08	2.00	0.00	0.00	0.00	0.00	23.10	2.00	0.00	0.00	0.00	0.00
23.12	2.00	0.00	0.00	0.00	0.00	23.14	2.00	0.00	0.00	0.00	0.00
23.16	2.00	0.00	0.00	0.00	0.00	23.18	2.00	0.00	0.00	0.00	0.00
23.20	2.00	0.00	0.00	0.00	0.00	23.22	2.00	0.00	0.00	0.00	0.00
23.24	2.00	0.00	0.00	0.00	0.00	23.26	2.00	0.00	0.00	0.00	0.00
23.28	2.00	0.00	0.00	0.00	0.00	23.30	2.00	0.00	0.00	0.00	0.00
23.32	2.00	0.00	0.00	0.00	0.00	23.34	2.00	0.00	0.00	0.00	0.00
23.36	2.00	0.00	0.00	0.00	0.00	23.38	2.00	0.00	0.00	0.00	0.00
23.40	2.00	0.00	0.00	0.00	0.00	23.42	2.00	0.00	0.00	0.00	0.00
23.44	2.00	0.00	0.00	0.00	0.00	23.46	2.00	0.00	0.00	0.00	0.00
23.48	2.00	0.00	0.00	0.00	0.00	23.50	2.00	0.00	0.00	0.00	0.00
23.52	2.00	0.00	0.00	0.00	0.00	23.54	2.00	0.00	0.00	0.00	0.00
23.56	2.00	0.00	0.00	0.00	0.00	23.58	2.00	0.00	0.00	0.00	0.00
23.60	2.00	0.00	0.00	0.00	0.00	23.62	2.00	0.00	0.00	0.00	0.00

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI
23.64	2.00	0.00	0.00	0.00	0.00	23.66	2.00	0.00	0.00	0.00	0.00
23.68	2.00	0.00	0.00	0.00	0.00	23.70	2.00	0.00	0.00	0.00	0.00
23.72	2.00	0.00	0.00	0.00	0.00	23.74	2.00	0.00	0.00	0.00	0.00
23.76	2.00	0.00	0.00	0.00	0.00	23.78	2.00	0.00	0.00	0.00	0.00
23.80	2.00	0.00	0.00	0.00	0.00	23.82	2.00	0.00	0.00	0.00	0.00
23.84	2.00	0.00	0.00	0.00	0.00	23.86	2.00	0.00	0.00	0.00	0.00
23.88	2.00	0.00	0.00	0.00	0.00	23.90	2.00	0.00	0.00	0.00	0.00
23.92	2.00	0.00	0.00	0.00	0.00	23.94	2.00	0.00	0.00	0.00	0.00
23.96	2.00	0.00	0.00	0.00	0.00	23.98	2.00	0.00	0.00	0.00	0.00
24.00	2.00	0.00	0.00	0.00	0.00	24.02	2.00	0.00	0.00	0.00	0.00
24.04	2.00	0.00	0.00	0.00	0.00	24.06	2.00	0.00	0.00	0.00	0.00
24.08	2.00	0.00	0.00	0.00	0.00	24.10	2.00	0.00	0.00	0.00	0.00
24.12	2.00	0.00	0.00	0.00	0.00	24.14	2.00	0.00	0.00	0.00	0.00
24.16	2.00	0.00	0.00	0.00	0.00	24.18	2.00	0.00	0.00	0.00	0.00
24.20	2.00	0.00	0.00	0.00	0.00	24.22	2.00	0.00	0.00	0.00	0.00
24.24	2.00	0.00	0.00	0.00	0.00	24.26	2.00	0.00	0.00	0.00	0.00
24.28	2.00	0.00	0.00	0.00	0.00	24.30	2.00	0.00	0.00	0.00	0.00
24.32	2.00	0.00	0.00	0.00	0.00	24.34	2.00	0.00	0.00	0.00	0.00
24.36	2.00	0.00	0.00	0.00	0.00	24.38	2.00	0.00	0.00	0.00	0.00
24.40	2.00	0.00	0.00	0.00	0.00	24.42	2.00	0.00	0.00	0.00	0.00
24.44	2.00	0.00	0.00	0.00	0.00	24.46	2.00	0.00	0.00	0.00	0.00
24.48	2.00	0.00	0.00	0.00	0.00	24.50	2.00	0.00	0.00	0.00	0.00
24.52	2.00	0.00	0.00	0.00	0.00	24.54	2.00	0.00	0.00	0.00	0.00
24.56	2.00	0.00	0.00	0.00	0.00	24.58	2.00	0.00	0.00	0.00	0.00
24.60	2.00	0.00	0.00	0.00	0.00	24.62	2.00	0.00	0.00	0.00	0.00
24.64	2.00	0.00	0.00	0.00	0.00	24.66	2.00	0.00	0.00	0.00	0.00
24.68	2.00	0.00	0.00	0.00	0.00	24.70	2.00	0.00	0.00	0.00	0.00
24.72	2.00	0.00	0.00	0.00	0.00	24.74	2.00	0.00	0.00	0.00	0.00
24.76	2.00	0.00	0.00	0.00	0.00	24.78	2.00	0.00	0.00	0.00	0.00
24.80	2.00	0.00	0.00	0.00	0.00	24.82	2.00	0.00	0.00	0.00	0.00
24.84	2.00	0.00	0.00	0.00	0.00	24.86	2.00	0.00	0.00	0.00	0.00
24.88	2.00	0.00	0.00	0.00	0.00	24.90	2.00	0.00	0.00	0.00	0.00
24.92	2.00	0.00	0.00	0.00	0.00	24.94	2.00	0.00	0.00	0.00	0.00
24.96	2.00	0.00	0.00	0.00	0.00	24.98	2.00	0.00	0.00	0.00	0.00
25.00	2.00	0.00	0.00	0.00	0.00	25.02	2.00	0.00	0.00	0.00	0.00
25.04	2.00	0.00	0.00	0.00	0.00	25.06	2.00	0.00	0.00	0.00	0.00
25.08	2.00	0.00	0.00	0.00	0.00	25.10	2.00	0.00	0.00	0.00	0.00
25.12	2.00	0.00	0.00	0.00	0.00	25.14	2.00	0.00	0.00	0.00	0.00
25.16	2.00	0.00	0.00	0.00	0.00	25.18	2.00	0.00	0.00	0.00	0.00
25.20	2.00	0.00	0.00	0.00	0.00	25.22	2.00	0.00	0.00	0.00	0.00
25.24	2.00	0.00	0.00	0.00	0.00	25.26	2.00	0.00	0.00	0.00	0.00
25.28	2.00	0.00	0.00	0.00	0.00	25.30	2.00	0.00	0.00	0.00	0.00
25.32	2.00	0.00	0.00	0.00	0.00	25.34	2.00	0.00	0.00	0.00	0.00
25.36	2.00	0.00	0.00	0.00	0.00						

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

Depth (m)	FS	F_L	w_z	d_z	LPI	Depth (m)	FS	F_L	w_z	d_z	LPI

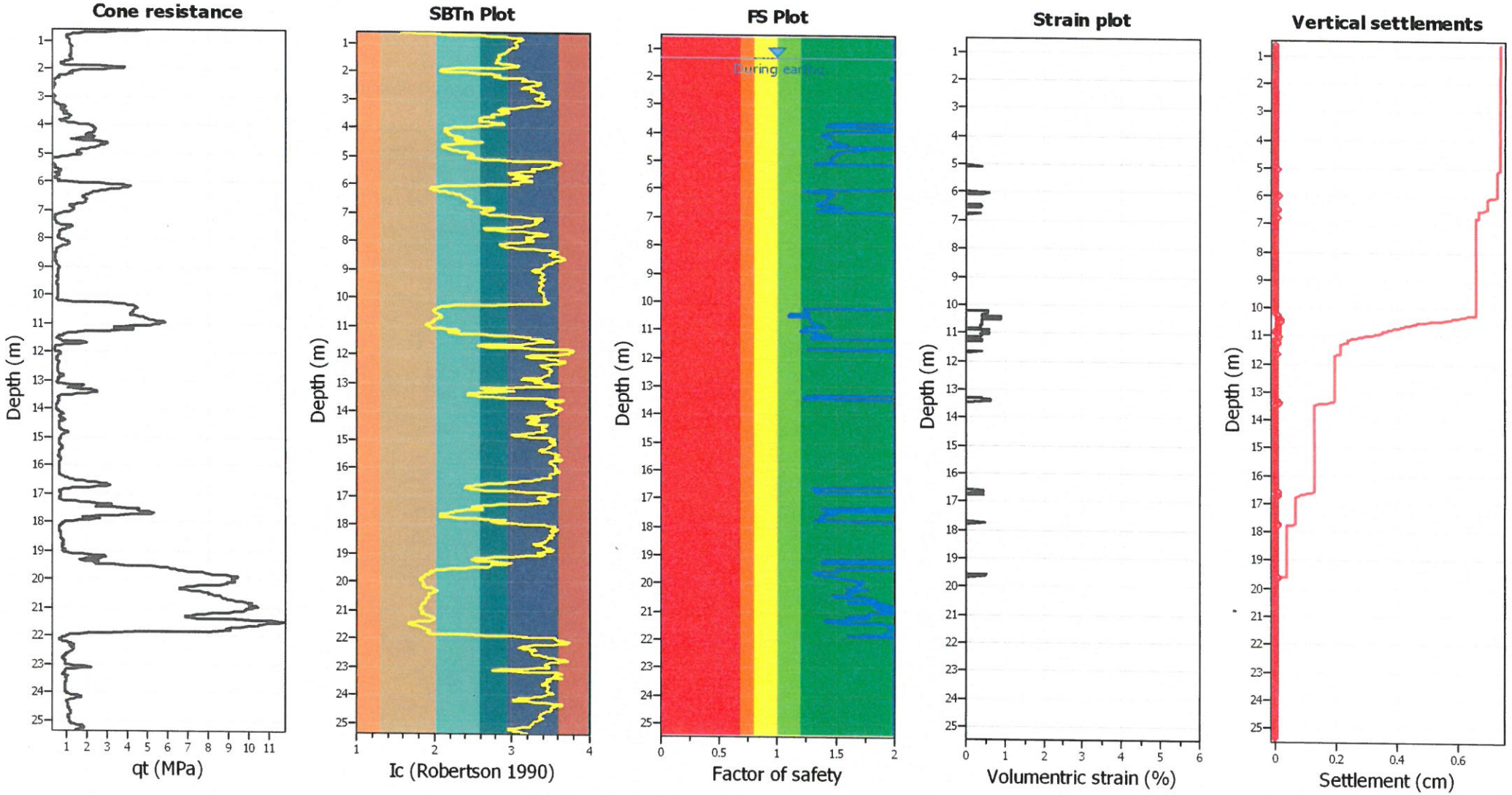
Overall liquefaction potential: 0.00

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 (m)
LPI: Liquefaction potential index value for test point

Estimation of post-earthquake settlements

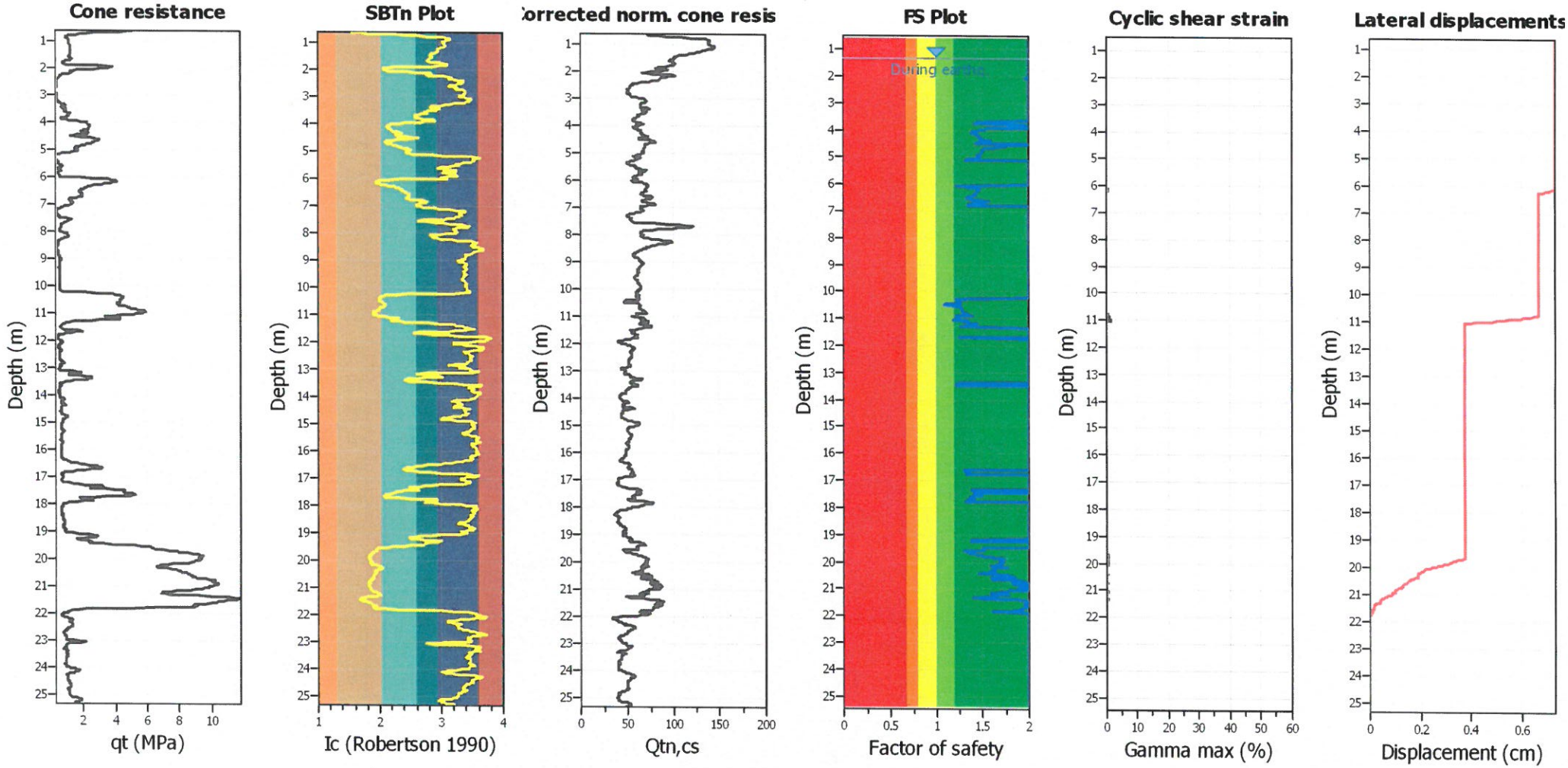


Abbreviations

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

Estimation of post-earthquake lateral Displacements

Geometric parameters: Gently sloping ground without free face (Slope 1.00 %)



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