



# **AUTOSTRADA A14 BOLOGNA - BARI - TARANTO**

**TRATTO BOLOGNA S.LAZZARO – NUOVO SVINCOLO DI PONTE RIZZOLI  
NUOVA STAZIONE DI PONTE RIZZOLI E  
REALIZZAZIONE DELLA COMPLANARE NORD**

## **PROGETTO DEFINITIVO**

**ALANISI DEL POTENZIALE DI LIQUEFAZIONE**



Milano, Gennaio 2017

## INDICE

<b>1. GENERALITA'</b> .....	<b>3</b>
1.1. OGGETTO.....	3
1.2. RIFERIMENTI NORMATIVI.....	4
1.3. CODICE DI CALCOLO .....	5
1.4. RIFERIMENTI BIBLIOGRAFICI.....	5
<b>2. METODO DI CALCOLO.....</b>	<b>7</b>
2.1. RAPPORTO DI TENSIONE CICLICA (CSR).....	7
2.2. FATTORI DI SCALA DELLA MAGNITUDO.....	8
2.3. RAPPORTO DI RESISTENZA CICLICA (CRR).....	8
2.4. INDICE DEL POTENZIALE DI LIQUEFAZIONE (LPI) .....	11
<b>3. IPOTESI DI CALCOLO.....</b>	<b>13</b>
3.1. PARAMETRI DI PERICOLOSITÀ SISMICA.....	13
3.2. LIVELLO DELLA FALDA .....	13
<b>4. RISULTATI .....</b>	<b>14</b>
<b>5. CONSIDERAZIONI CONCLUSIVE .....</b>	<b>16</b>
<b>6. ALLEGATO “A” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-02 .....</b>	<b>18</b>
<b>7. ALLEGATO “B” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-09 .....</b>	<b>19</b>
<b>8. ALLEGATO “C” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-10 .....</b>	<b>20</b>

## 1. GENERALITA'

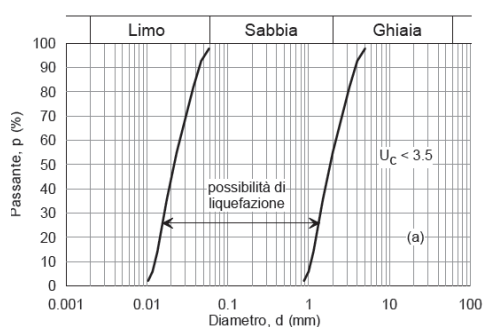
### 1.1. OGGETTO

Oggetto della presente relazione sono le analisi volte a definire il potenziale di liquefazione del terreno in sito in corrispondenza delle aree di intervento.

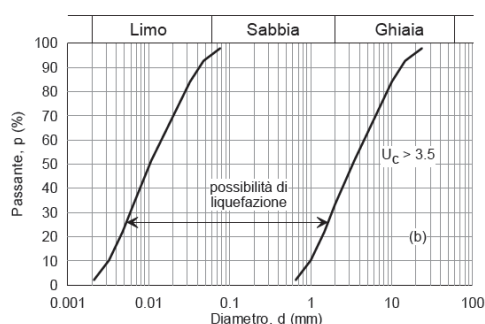
Con il termine liquefazione si intende una serie di fenomeni associati alla perdita di resistenza al taglio o ad accumulo di deformazioni plastiche, in terreni saturi sabbiosi sollecitati in condizioni non drenate da azioni sismiche (cicliche dinamiche). L'avvenuta liquefazione si manifesta, in presenza di manufatti, attraverso la perdita di capacità portante e/o lo sviluppo di elevati cedimenti e rotazioni.

In base al paragrafo 7.11.3.4.2 delle NTC-2008 di cui al D.M. 14-01-2008 la verifica di liquefazione può essere omessa quando si manifesti almeno una delle seguenti circostanze:

1. eventi sismici attesi di magnitudo  $M$  inferiore a 5;
2. accelerazione massime attese al piano campagna in assenza di manufatti minori di 0.1g;
3. profondità media stagionale della falda superiore a 15.0m dal piano campagna, per piano campagna sub-orizzontale e strutture con fondazioni superficiali;
4. depositi costituiti da sabbie pulite con resistenza penetrometrica normalizzata  $(N_1)_{60} > 30$  oppure  $q_{c1N} > 180$  dove  $(N_1)_{60}$  è il valore della resistenza determinata in prove penetrometriche dinamiche (SPT) normalizzata ad una tensione efficace verticale di 100kPa e  $q_{c1N}$  è il valore della resistenza determinata in prove penetrometriche statiche (CPT) normalizzata ad una tensione efficace verticale di 100kPa;
5. distribuzione granulometrica esterna alle zone indicate nel grafico a), nel caso di terreni con coefficiente di uniformità  $U_c < 3.5$ , e nel grafico b) nel caso di terreni con coefficiente di uniformità  $U_c > 3.5$ .



a)



b)

Con riferimento a quanto esposto nel capitolo 10 della “*Relazione geotecnica*” (APE0001) per i comuni interessati dal tracciato l’analisi del potenziale di liquefazione potrebbe teoricamente essere omessa (cfr. punto 1 di cui sopra) in quanto il valore di magnitudo atteso è inferiore a 5 (massimo  $M=4.96$  per il comune di *S.Lazzaro di Savena*).

**Tuttavia, vista l’importanza dell’opera in progetto si è ritenuto comunque utile svolgere l’analisi** in corrispondenza di 3 siti significativi distribuiti lungo il tracciato ed indagati con le seguenti prove CPTe (indagine *Geotrivell* – 1996):

- CPTe2 – L= 16.70m
- CPTe9 – L = 11.62m
- CPTe10 – L = 12.54m

Per l’ubicazione delle verticali di indagine si rimanda alla planimetria APE0002.

## 1.2. RIFERIMENTI NORMATIVI

- D.M. 14/01/2008 “*Norme tecniche per le costruzioni*” - GU n°29 del 4/2/2008
- Circolare 2 febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici “*Istruzioni per l’applicazione delle “Nuove norme tecniche per le costruzioni”*” - Gazzetta Ufficiale del 26.02.2009 n. 47, supplemento ordinario n. 27.
- UNI-EN 1997-1:2005 – “*Eurocodice 7: Progettazione geotecnica – Parte 1: regole generali*”

- UNI EN 1998-1:2005 “Eurocode 8: Progettazione delle strutture per la resistenza sismica – Parte 1: regole generali, azioni sismiche e regole per gli edifici”.
- AGI (2005) “Aspetti geotecnici della progettazione in zona sismica”. Linee guida

### 1.3. CODICE DI CALCOLO

Le analisi del potenziale di liquefazione sono state svolte con l’ausilio del codice di calcolo commerciale “CLiq” (Geologismiki, vers. 1.7.6.49)

### 1.4. RIFERIMENTI BIBLIOGRAFICI

- Lunne, T., Robertson, P.K., and Powell, J.J.M 1997. Cone penetration testing in geotechnical practice, E & FN Spon Routledge, 352 p, ISBN 0-7514-0393-8.
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- Zhang, G., Robertson. P.K., Brachman, R., 2002, Estimating Liquefaction Induced Ground Settlements from the CPT, Canadian Geotechnical Journal, 39: pp 1168-1180
- Zhang, G., Robertson. P.K., Brachman, R., 2004, Estimating Liquefaction Induced Lateral Displacements using the SPT and CPT, ASCE, Journal of Geotechnical & Geoenvironmental Engineering, Vol. 130, No. 8, 861-871

- C. Hsein Juang, Jianye Ching, Lei Wang, Sara Khoshnevisan, and Chih-Sheng Ku, Simplified procedure for estimation of liquefaction-induced settlement and site-specific probabilistic settlement exceedance curve using cone penetration test (CPT), *Can. Geotech. J.* 50: 1055–1066 (2013)
- Cetin et al., 2009 Probabilistic model for assessment of cyclically induced reconsolidation (volumetric) strains, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, Vol 135, No 3, pp 387-398
- Arango, I., Lewis, M. R., and Kramer, C. \_2000\_. “Updated liquefaction potential analysis eliminates foundation retrofitting of two critical structures.” *Soil Dyn. Earthquake Eng.*, 20, 17–25
- Ronald D. Andrus, Hossein Hayati and Nisha P. Mohanan, Correcting Liquefaction Resistance for Aged Sands Using Measured to Estimated Velocity Ratio, *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 135, No. 6, June 1, 2009
- Idriss, I. M., and Boulanger, R. W. (2008). *Soil liquefaction during earthquakes*. Monograph MNO-12, Earthquake Engineering Research Institute, Oakland, CA
- Moss, R. E. S., Seed, R. B., Kayen, R. E., Stewart, J. P., Der Kiureghian, A., and Cetin, K. O. (2006). CPT-based probabilistic and deterministic assessment of in situ seismic soil liquefaction potential, *J. Geotechnical and Geoenvironmental Eng.*, ASCE 132(8)
- C. Hsein Juang, Jianye Ching, Lei Wang, Sara Khoshnevisan, and Chih-Sheng Ku, Simplified procedure for estimation of liquefaction-induced settlement and site-specific probabilistic settlement exceedance curve using cone penetration test (CPT), *Can. Geotech. J.* 50: 1055–1066 (2013)
- R. Kayen, M.ASCE, R. E. S. Moss, M.ASCE, E. M. Thompson, A.M.ASCE, R. B. Seed, M.ASCE, K. O. Cetin, M.ASCE, A. Der Kiureghian, M.ASCE, Y. Tanaka and K. Tokimatsu, M.ASCE, Shear-Wave Velocity–Based Probabilistic and Deterministic Assessment of Seismic Soil Liquefaction Potential, *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 139, No. 3, March 1, 2013
- R. B. Seed, K. O. Cetin, R. E. S. Moss, A. M. Kammerer, J. Wu, J. M. Pestana, M. F. Riemer, R.B. Sancio, J.D. Bray, R. E. Kayen, and A. Faris, RECENT ADVANCES IN SOIL LIQUEFACTION ENGINEERING: A UNIFIED AND CONSISTENT FRAMEWORK, 26th Annual ASCE Los Angeles Geotechnical Spring Seminar, Keynote Presentation, H.M.S. Queen Mary, Long Beach, California, April 30, 2003

## 2. METODO DI CALCOLO

Per valutare la possibilità di liquefazione del terreno si è adottata la procedura di *Robertson* (2010) basata sul metodo di *Robertson & Wride* (1998), che prevede la valutazione di un coefficiente di sicurezza,  $F_F$ , definito come rapporto fra una stima della resistenza disponibile alla liquefazione (CRR) e la sollecitazione indotta dall'azione sismica (CSR).

$$FS = \frac{CRR}{CSR}$$

Si può affermare che la probabilità di liquefazione è trascurabile se il fattore di sicurezza è superiore a **1.25** (valore suggerito in Eurocodice 8).

### 2.1. RAPPORTO DI TENSIONE CICLICA (CSR)

Il rapporto di tensione ciclica CSR, per una determinata profondità, viene valutato attraverso la seguente espressione (rif. Youd et al. (2001) ):

$$CSR = \frac{\tau_m}{\sigma_{v0}} = 0.65 \frac{a_{\max}}{g} \frac{\sigma_v}{\sigma'_v} r_d$$

dove:

$a_{\max}$  = accelerazione di picco in superficie del terremoto di progetto;

$g$  = accelerazione di gravità ( $\cong 9.81\text{m/s}^2$ );

$\sigma_v$  = tensione totale verticale alla profondità considerata;

$\sigma'_v$  = tensione efficace verticale alla profondità considerata;

$r_d$  = coefficiente riduttivo dell'azione sismica, stimabile in funzione della sola profondità  $z$  come (rif. Youd et al. 2001):

se $z \leq 9.15\text{m}$	$r_d = 1 - 0.00765 \cdot z$
se $9.15\text{m} < z \leq 23\text{m}$	$r_d = 1.174 - 0.0267 \cdot z$
se $23\text{m} < z \leq 30\text{m}$	$r_d = 0.744 - 0.008 \cdot z$
se $z > 30\text{m}$	$r_d = 0.5$



Questa procedura è stata tarata per eventi di magnitudo 7.5. Per terremoti di diversa magnitudo si utilizza il fattore di correzione, che può essere determinato in diversi modi di seguito riportati.

## 2.2. FATTORI DI SCALA DELLA MAGNITUDO

Le espressioni di CSR disponibili in letteratura sono riferite a terremoti con  $M=7.5$ . Per tenere in considerazione anche terremoti di diversa magnitudo occorre ricondurre il valore di CSR, al valore di magnitudo proprio del sito in esame; ciò può essere fatto mediante la seguente formulazione:

$$CSR_M = \frac{CSR_{7.5}}{MSF}$$

in cui il valore di MSF da considerare è dato per esempio da (Youd et al. (2001):

se  $M > 7.5$

$$MSF = \frac{10^{2.24}}{M^{2.56}}$$

se  $M < 7.5$

$$MSF = \left[ \frac{\frac{10^{2.24}}{M^{2.56}} + \left(\frac{M}{7.5}\right)^{-3.3}}{2} \right]$$

In conclusione, il fattore di sicurezza ( $F_{SL}$ ), valutato nei confronti della liquefazione, per i casi considerati relativi alle prove CPT, è determinato a mezzo della seguente equazione:

$$F_{SL} = \frac{\tau_f}{\tau_{media}} = \frac{CRR}{CSR_{M=7.5}}$$

## 2.3. RAPPORTO DI RESISTENZA CICLICA (CRR)

Il rapporto di resistenza ciclica può essere valutato direttamente a partire dai risultati ottenuti dalle prove CPT mediante la procedura iterativa proposta da *Robertson* nel 2010 e pubblicata in *NCEER-97-0022*.

La resistenza alla punta  $q_c$  viene preliminarmente corretta e normalizzata per tenere conto dell'influenza della pressione verticale efficace alla profondità di prova, secondo le seguenti equazioni:

$$q_{tN} = C_N \cdot \left( \frac{q_t - \sigma_v}{p_a} \right)$$

$$C_N = \left( \frac{p_a}{\sigma_{vo}} \right)^n$$

con:

$q_t$  = resistenza statica alla punta in kPa;

$\sigma_{vo}$  = tensione verticale in sito in kPa;

$p_a$  = pressione di riferimento pari a 100 kPa;

poi corretta nuovamente, per considerare la frazione di fine presente nelle sabbie. Nel presente caso,  $q_{c1N}$  viene corretto nel valore equivalente per sabbie pulite  $(q_{c1N})_{cs}$ , adottando la seguente procedura:

$$(q_{tN})_{cs} = K_c \cdot q_{tN}$$

in cui  $K_c$  è un fattore di correzione funzione di  $I_c$  (indice di Robertson) determinato nel modo seguente:

- se  $I_c \geq 2.70$  il terreno è a grana fine e non è soggetto a liquefazione;
- se  $2.60 < I_c < 2.70$  il fattore di correzione viene calcolato secondo:

$$k_c = 6 \times 10^{-7} \cdot I_c^{16.76}$$

- se  $1.64 < I_c < 2.60$  il terreno ha un contenuto di fini non trascurabile che ne condiziona la resistenza penetrometrica, ma non tale da escludere il verificarsi della liquefazione e il fattore di correzione viene calcolato secondo:

$$k_c = -0.403 \cdot I_c^4 + 5.581 \cdot I_c^3 - 21.63 \cdot I_c^2 + 33.75 \cdot I_c - 17.88$$

- se  $I_c \leq 1.64$  il terreno ha un basso contenuto di materiale fine e non occorre nessuna correzione, quindi:

$$k_c = 1.0$$

Il valore del coefficiente  $I_c$ , che viene utilizzato anche per classificare il tipo di terreno, è usualmente valutato secondo la relazione seguente:

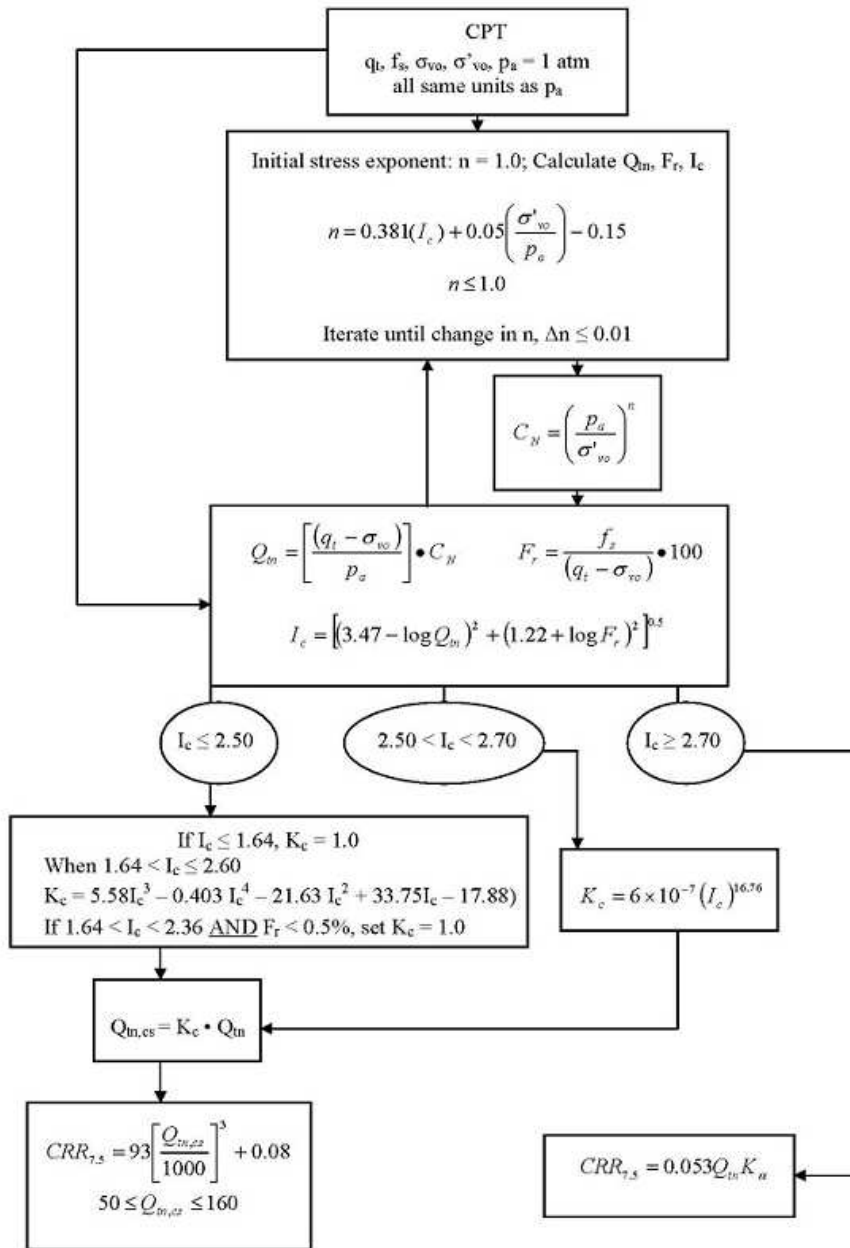
$$I_c = \sqrt{(1.22 + \log F_r)^2 + (3.47 - \log q_{tN})^2}$$

Il CRR (valido per terremoti di magnitudo momento 7.5) è in definitiva stimabile attraverso il valore calcolato di resistenza penetrometrica normalizzata equivalente per sabbie pulite  $(q_{tN})_{cs}$ , con le seguenti equazioni:

- se  $(q_{tN})_{cs} < 50$  
$$CRR_{7.5} = 0.833 \cdot \left[ \frac{(q_{tN})_{cs}}{1000} \right] + 0.05$$

- se  $50 < (q_{tN})_{cs} < 160$  
$$CRR_{7.5} = 93 \cdot \left[ \frac{(q_{tN})_{cs}}{1000} \right] + 0.08$$

La procedura iterativa sopra descritta per il calcolo di CRR è illustrata nel seguente schema a blocchi.



Procedura iterativa adottata nel calcolo di CRR (Robertson, 2010)

## 2.4. INDICE DEL POTENZIALE DI LIQUEFAZIONE (LPI)

L'indice del potenziale di liquefazione (LPI) è stato introdotto da *Iwasaki et al. (1982)* allo scopo di fornire una misura integrale degli effetti della liquefazione per una intera verticale e può essere così calcolato:

$$LPI = \int_{z_{cr}}^0 (F(z) \cdot W(z)) dz$$

Dove:

$z_{cr}$  = profondità critica entro la quale si ritengono significativi gli effetti della liquefazione = 20m

$W(z)$  = funzione di "pes" =  $10-0.5z$

$F(z)$  = funzione che esprime il potenziale di liquefazione di ciascun singolo strato e viene calcolata in funzione del fattore di sicurezza prescelto

Una volta calcolato il valore dell'indice IPL per una singola verticale di indagine è possibile associare al sito corrispondente una classe di pericolosità secondo le classificazioni proposte in letteratura. Nello specifico si considera:

**LPI  $\leq$  5**                      **Bassa probabilità di liquefazione**

$5 < \text{LPI} \leq 15$                 **Media probabilità di liquefazione**

$\text{LPI} > 15$                       **Alta probabilità di liquefazione**

Una più articolata e restrittiva classificazione è stata proposta da *Sonmez* (2003) e può essere così sintetizzata:

$\text{LPI} \leq 0$                       Pericolosità nulla

**$0 < \text{LPI} \leq 2$**                 **Pericolosità bassa**

$2 < \text{LPI} \leq 5$                 Pericolosità moderata

$5 < \text{LPI} \leq 15$                 Pericolosità alta

$\text{LPI} > 15$                       Pericolosità molto alta

### 3. IPOTESI DI CALCOLO

#### 3.1. PARAMETRI DI PERICOLOSITÀ SISMICA

Le analisi di liquefazione sono state svolte nelle seguenti ipotesi di pericolosità sismica (per maggiori dettagli si rimanda alla “*Relazione geotecnica*”):

- Tempo di ritorno dell'evento di riferimento  $T_R = 949$  anni
- Magnitudo  $M = 5.0$  (cautelativo)
- Accelerazione su suolo roccioso  $a_g = 0.229g$
- Accelerazione massima al sito  $PGA = 0.35g$  ( $S_T=1.0 - S_S=1.57$ )

#### 3.2. LIVELLO DELLA FALDA

La soggiacenza della falda è stata assunta sulla base dati disponibili e riscontrabili sui profili geotecnici cui si rimanda per i dettagli:

CPTE-02: Soggiacenza  $\geq 10.00m$

CPTE-09: Soggiacenza  $\geq 3.00m$

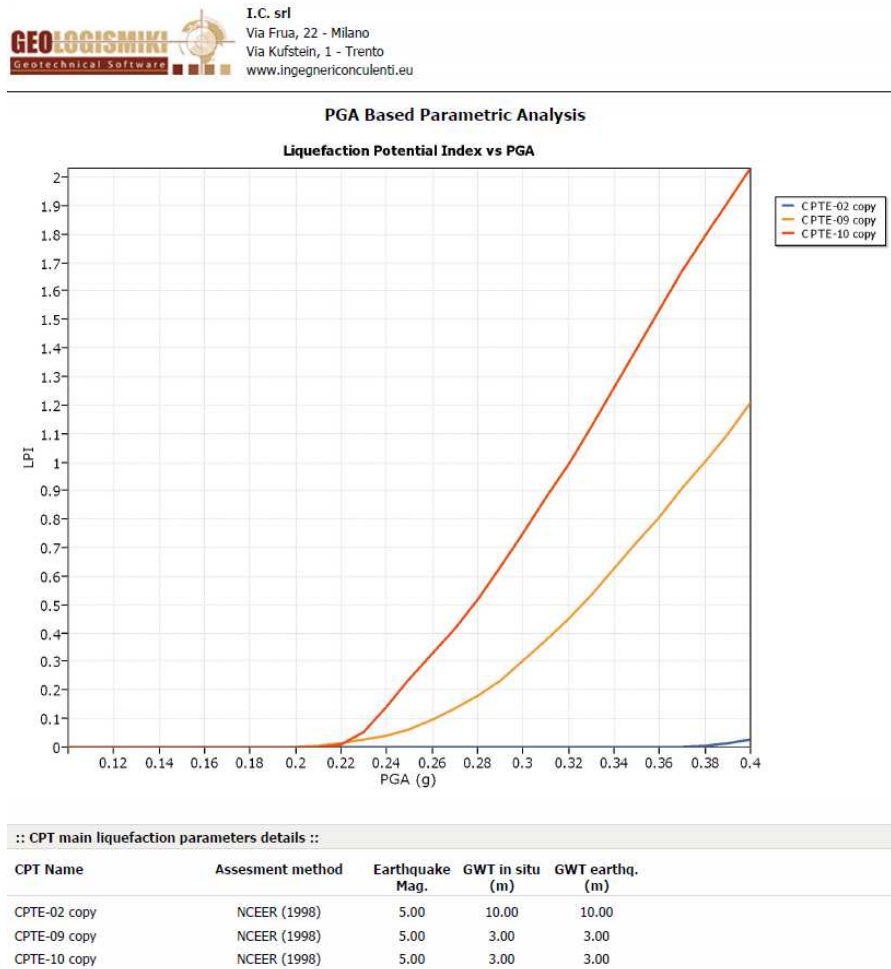
CPTE-10: Soggiacenza  $\geq 3.00m$

#### 4. RISULTATI

I risultati delle analisi svolte sono raccolti negli allegati A-B-C (ai quali si rimanda per i dettagli) rispettivamente per le verticali di indagine CPTe-02, CPTe09 e CPTe-10.

Nel seguito si riportano alcuni grafici significativi ai fini dell'interpretazione dei dati ottenuti:

- Andamento dell' "indice del potenziale di liquefazione" (LPI) al variare dell'accelerazione massima al sito ( $0.4 > PGA > 0.3$ ); un grafico unico per le 3 prove analizzate.
- Analisi parametrica dell'entità dell' "indice del potenziale di liquefazione" (LPI) al variare della accelerazione massima al sito ( $0.4 > PGA > 0.3$ ) e della magnitudo ( $5.5 > M > 4.5$ ); un grafico per ogni singola prova.



*Variazione di LPI con l'accelerazione massima al sito ( $0.4 > PGA > 0.3$ )*

**Parametric Analysis**

**CPT Name**

CPTe-02 copy

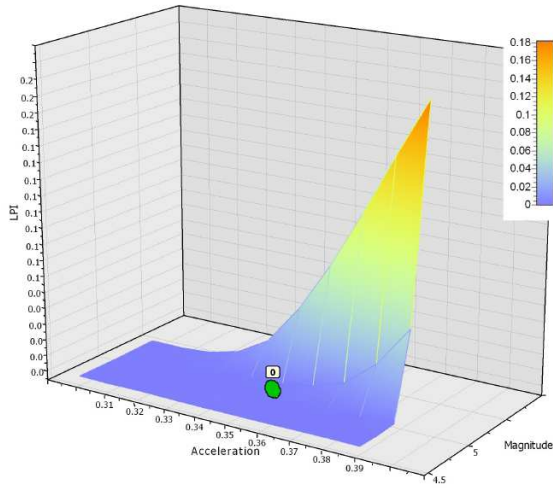
**Parametric Analysis Parameters**

Acceleration from 0.30 to 0.40 step 0.010  
Magnitude from 4.50 to 5.50 step 0.20  
Calculation Results: Overall Liquefaction Potential Index

**Basic Liquefaction Analysis Parameters**

Method: NCEER (1998) Sands only  
GWT insitu: 10.00 (m)  
GWT during earthquake: 10.00 (m)

● **Current single analysis result value**  
Acceleration: 0.35  
Magnitude: 5.00



**Parametric Analysis**

**CPT Name**

CPTe-09 copy

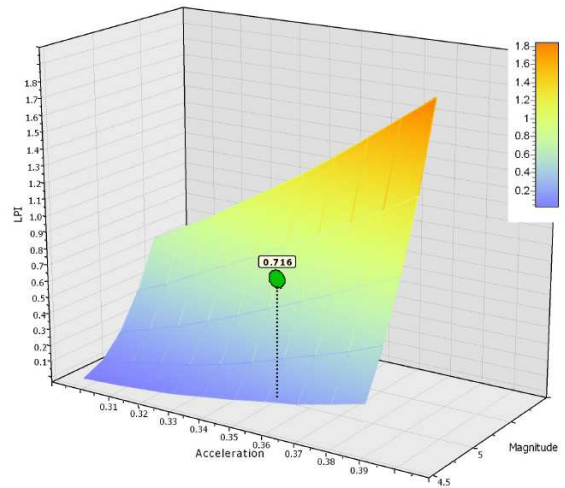
**Parametric Analysis Parameters**

Acceleration from 0.30 to 0.40 step 0.010  
Magnitude from 4.50 to 5.50 step 0.20  
Calculation Results: Overall Liquefaction Potential Index

**Basic Liquefaction Analysis Parameters**

Method: NCEER (1998) Sands only  
GWT insitu: 3.00 (m)  
GWT during earthquake: 3.00 (m)

● **Current single analysis result value**  
Acceleration: 0.35  
Magnitude: 5.00



**Parametric Analysis**

**CPT Name**

CPTe-10 copy

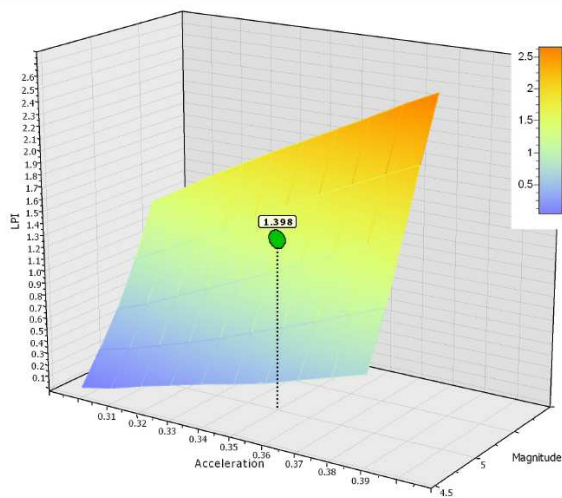
**Parametric Analysis Parameters**

Acceleration from 0.30 to 0.40 step 0.010  
Magnitude from 4.50 to 5.50 step 0.20  
Calculation Results: Overall Liquefaction Potential Index

**Basic Liquefaction Analysis Parameters**

Method: NCEER (1998) Sands only  
GWT insitu: 3.00 (m)  
GWT during earthquake: 3.00 (m)

● **Current single analysis result value**  
Acceleration: 0.35  
Magnitude: 5.00



*Analisi di sensibilità del valore di LPI al variare di PGA e di M*



## 5. CONSIDERAZIONI CONCLUSIVE

Osservando i risultati ottenuti con particolare riferimento alle figure di cui al paragrafo precedente (e rammentando che il sito in analisi è caratterizzato da  $PGA=0.35$  e  $M=5.0$ ) si può osservare che:

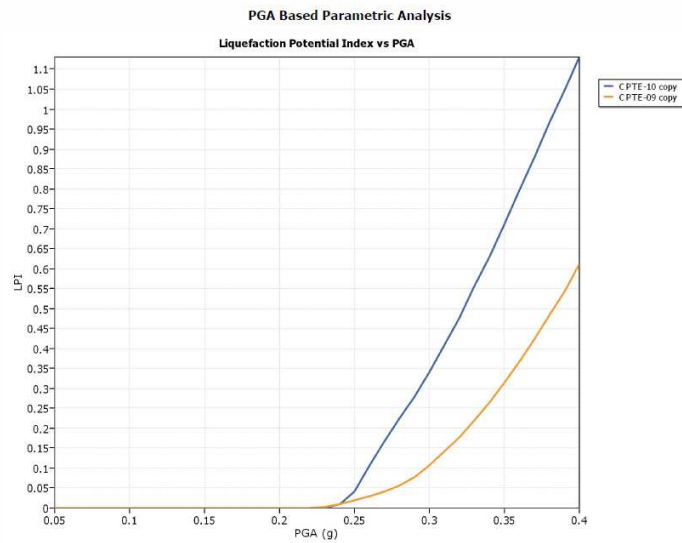
- A. L'area indagata con la verticale della CPTe-20 presa a riferimento per il tratto compreso tra l'inizio dell'intervento e il viadotto sull'Idice presenta un valore del potenziale di liquefazione nullo (**LPI=0.0**) ciò che è principalmente dovuto alla elevata soggiacenza della falda (maggiore di 10m).
- B. Il tratto compreso tra il viadotto sull'Idice e Ponte Rizzoli (caratterizzato con le verticali CPTe-09 e CPTe-10) presenta un valore dell'indice del potenziale di liquefazione progressivamente crescente e comunque molto limitato: **LPI < 1.5**.

Come descritto nel §2.4 i valori dell'indice LPI evidenziano una **BASSA PROBABILITA'** di liquefazione in quanto molto inferiori al valore di soglia pari a 5.

Anche qualora si prendesse in considerazione la più penalizzante classificazione di Sonmez (2003) si ricadrebbe comunque in un ambito di **BASSA PERICOLOSITA'** in quanto l'indice LPI risulta comunque inferiore a 2.

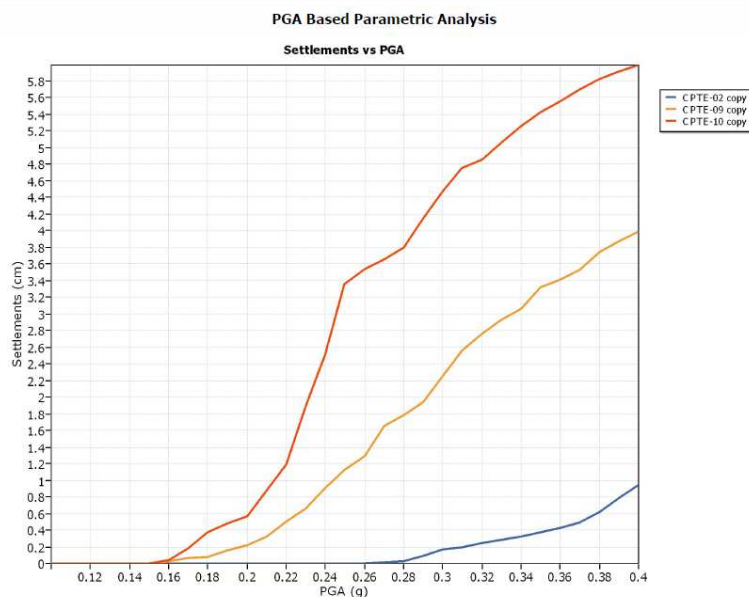
In aggiunta a quanto sopra si possono anche sottolineare i seguenti rilevanti aspetti.

- a) L'analisi ha consentito di mettere in evidenza che il livello con maggior potenziale di liquefazione è presente tra 9.50 e 11.00m di profondità ed è costituito da sabbia limosa e limo sabbioso con modesto grado di addensamento ( $q_c=3\div 4\text{MPa}$ ). A tale proposito si osserva che le opere d'arte principali (cavalcavia, sottovia, muri, ecc.) sono state progettate con fondazioni su pali intestati a profondità ben superiori rispetto a quelle sopra citate.
- b) Le analisi di liquefazione sono state svolte in condizioni di "free-field" trascurando, cautelativamente, l'effetto stabilizzante della presenza del sovraccarico del rilevato stradale che riduce il potenziale di liquefazione. Per completezza di analisi si è verificato l'effetto del peso di un rilevato di 3m ( $\gamma=20\text{kN/mc}$ ) sul valore dell'indice LPI. Come illustrato nella figura seguente, il potenziale di liquefazione (LPI) massimo si dimezza passando da  $LPI_{\text{free-field}}=1.40$  a  $LPI_{\text{con rilevato}}=0.70$ .



*Riduzione di LPI per sovraccarico del rilevato stradale*

- c) Per completezza di analisi è stato anche calcolato il potenziale cedimento del piano campagna indotto dalla liquefazione dei livelli con coefficiente di sicurezza inferiore all'unità ( $FS < 1.0$ ). I risultati sono illustrati negli allegati A-B-C cui si rimanda e riassunti nella seguente figura al variare del valore di PGA. Si osserva che per  $PGA = 0.35$  il massimo cedimento massimo indotto al piano campagna risulta (C.PTE-10) dell'ordine di 5cm e pertanto assolutamente compatibile.



*Cedimento indotto a piano campagna in "free-field" al variare della PGA*

6. **ALLEGATO “A” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-02**

**LIQUEFACTION ANALYSIS REPORT**

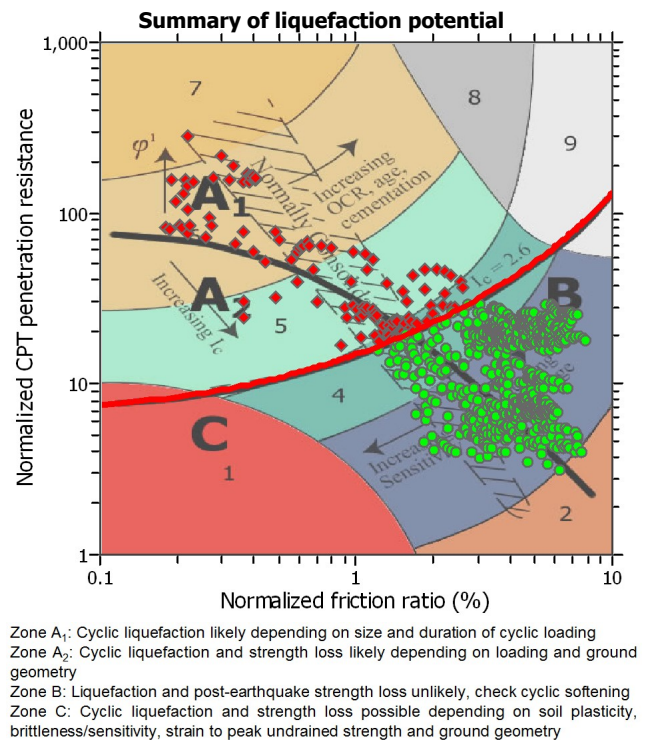
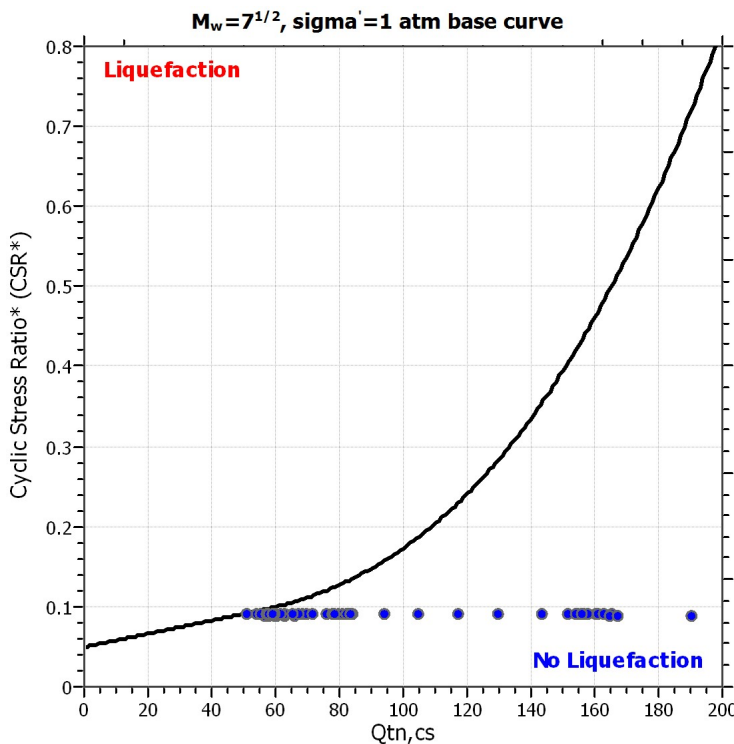
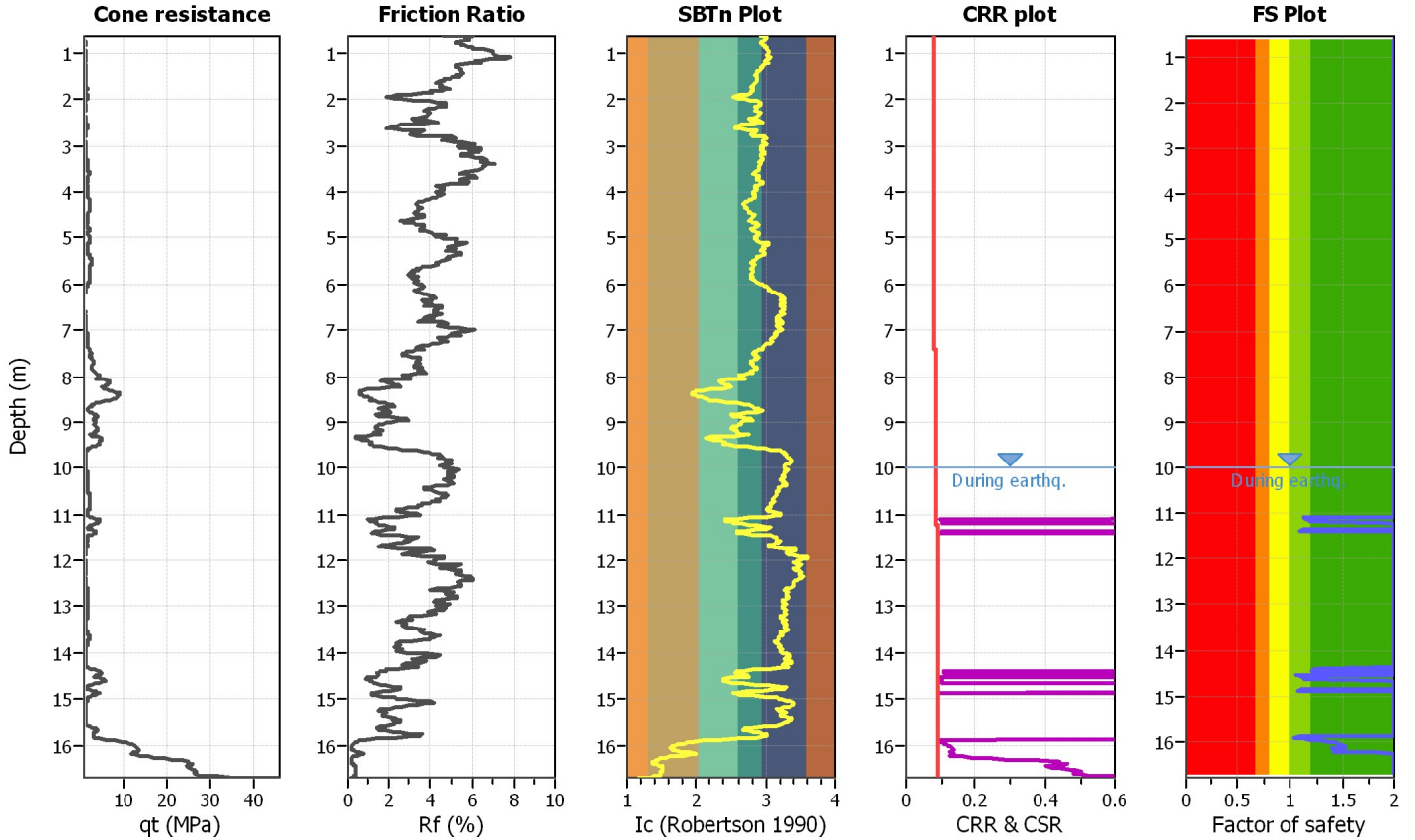
**Project title : Pontenziale di liquefazione**

**Location : A14 - Complanare nord - S.Lazzaro - Ponte Rizzoli**

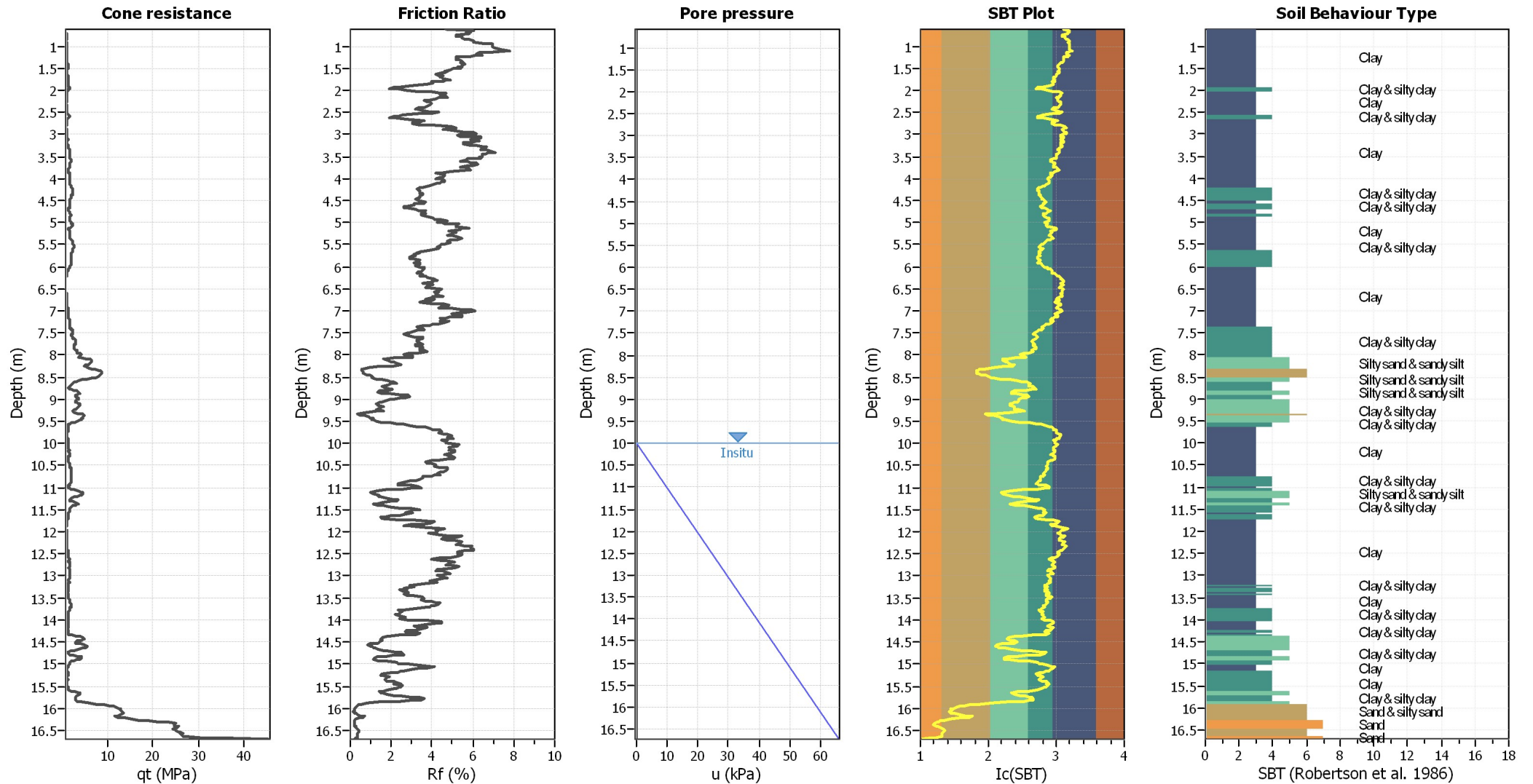
**CPT file : Foglio1**

**Input parameters and analysis data**

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	10.00 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	10.00 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 $M_w$ :	5.00	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.35	Unit weight calculation:	19.00 kN/m <sup>3</sup>	$K_0$ applied:	Yes		



### CPT basic interpretation plots



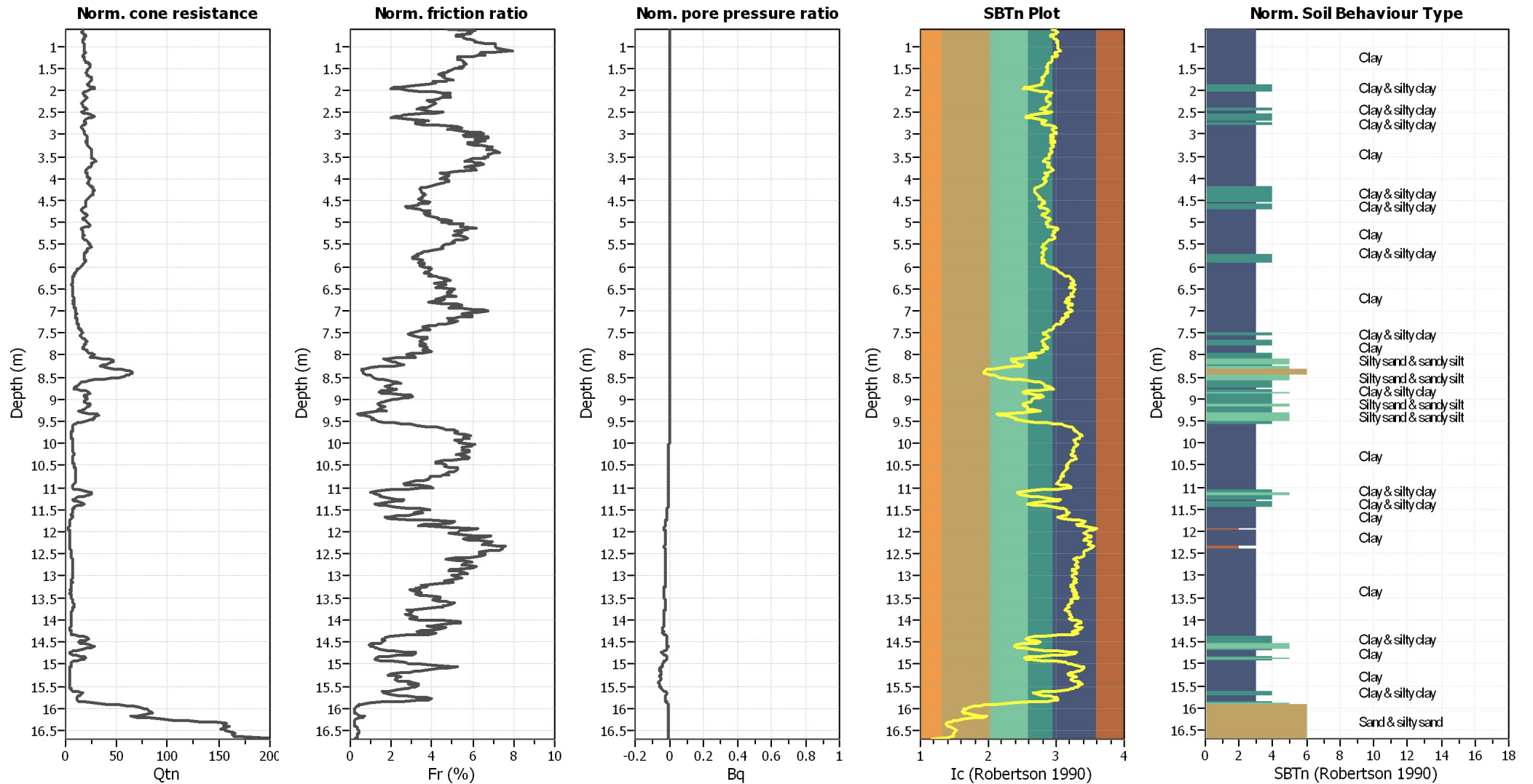
#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 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	$K_v$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 m	Fill height:	N/A	Limit depth:	N/A

#### SBT legend

<span style="color: red;">■</span> 1. Sensitive fine grained	<span style="color: teal;">■</span> 4. Clayey silt to silty	<span style="color: orange;">■</span> 7. Gravely sand to sand
<span style="color: brown;">■</span> 2. Organic material	<span style="color: lightgreen;">■</span> 5. Silty sand to sandy silt	<span style="color: grey;">■</span> 8. Very stiff sand to
<span style="color: blue;">■</span> 3. Clay to silty clay	<span style="color: tan;">■</span> 6. Clean sand to silty sand	<span style="color: lightgrey;">■</span> 9. Very stiff fine grained

### CPT basic interpretation plots (normalized)



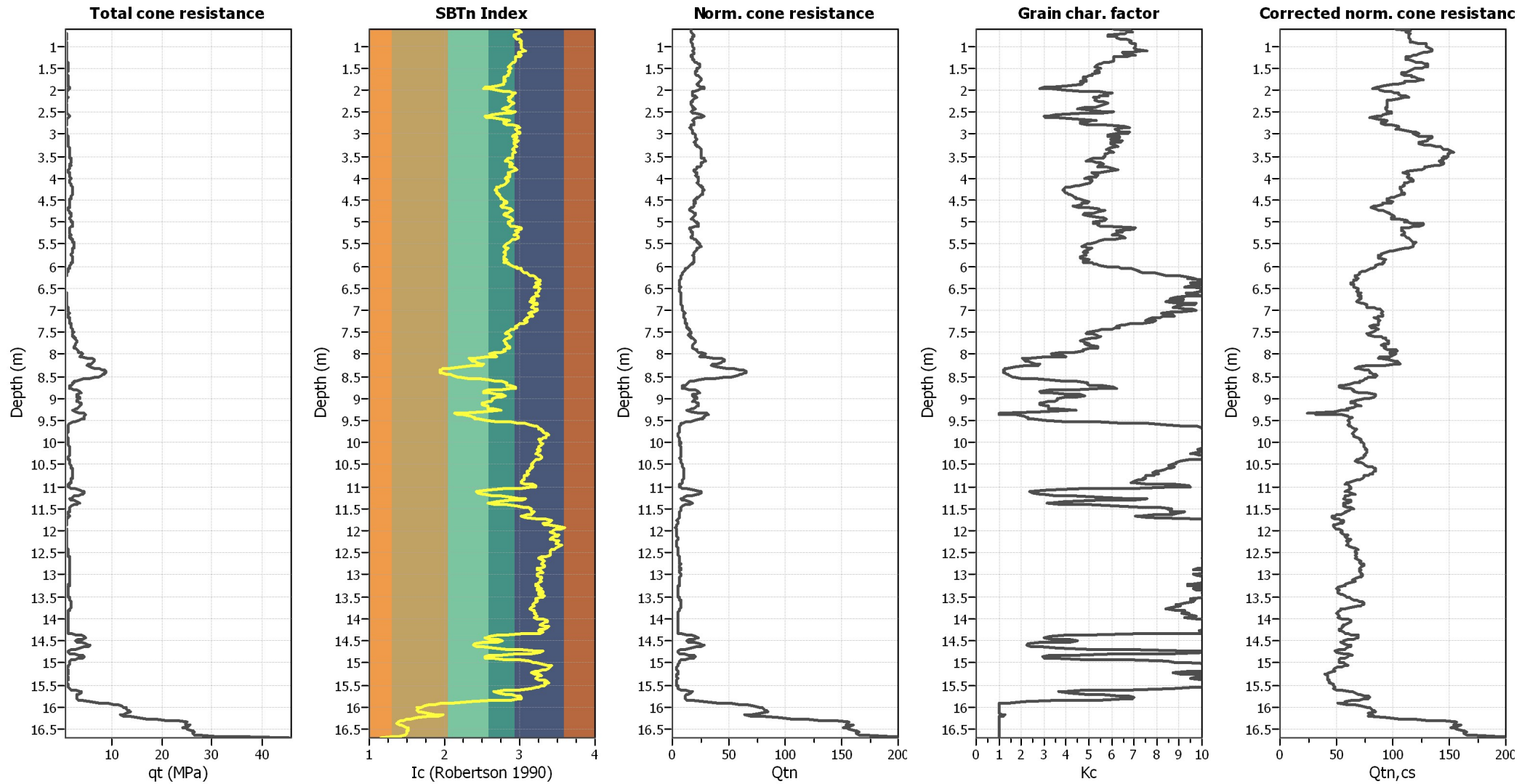
#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 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 <sub>o</sub> applied:	Yes
Earthquake magnitude M <sub>w</sub> :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 m	Fill height:	N/A	Limit depth:	N/A

#### SBTn legend

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

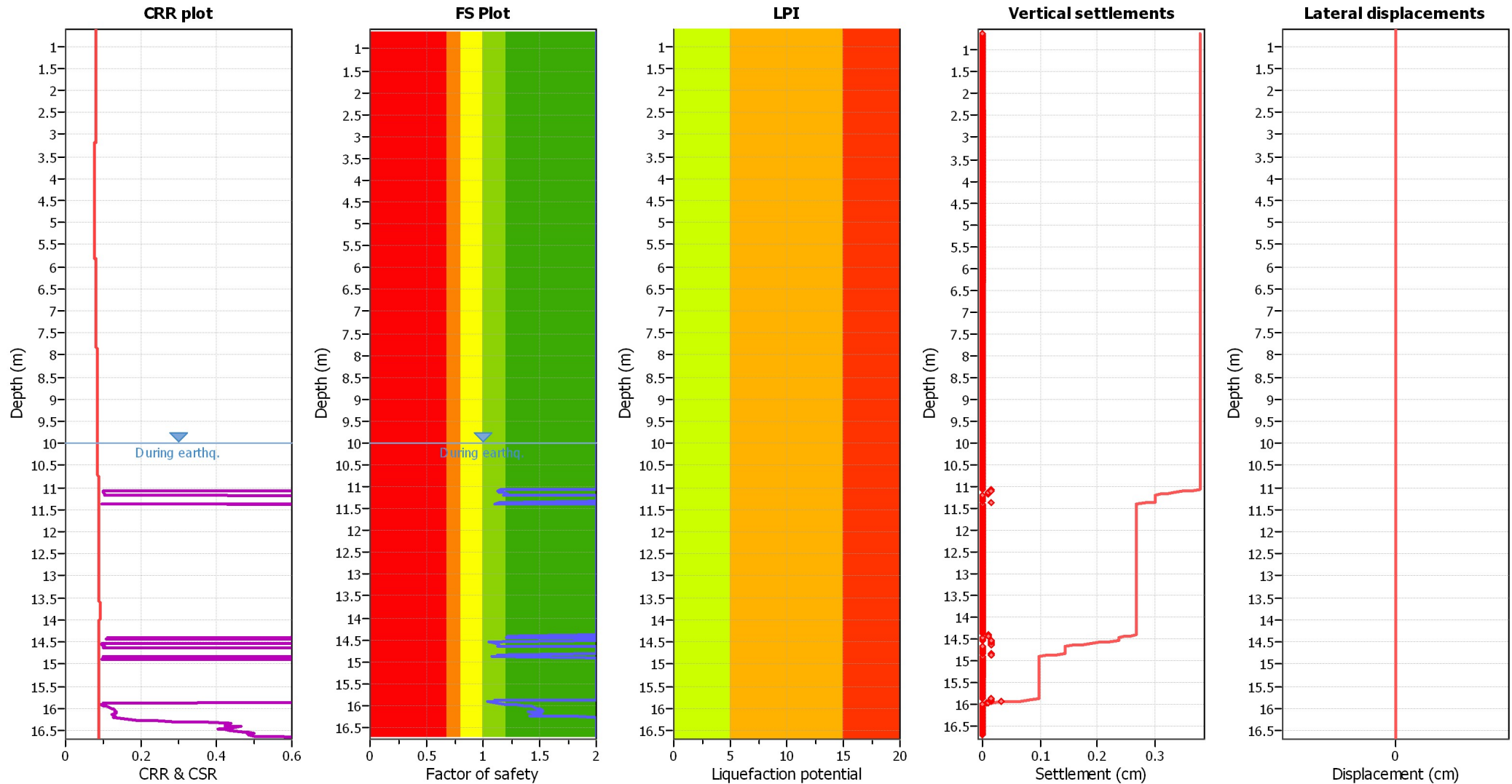
### Liquefaction analysis overall plots (intermediate results)



#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	10.00 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	$K_{cs}$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 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.):	10.00 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	$K_{\sigma}$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 m	Fill height:	N/A	Limit depth:	N/A

**F.S. color scheme**

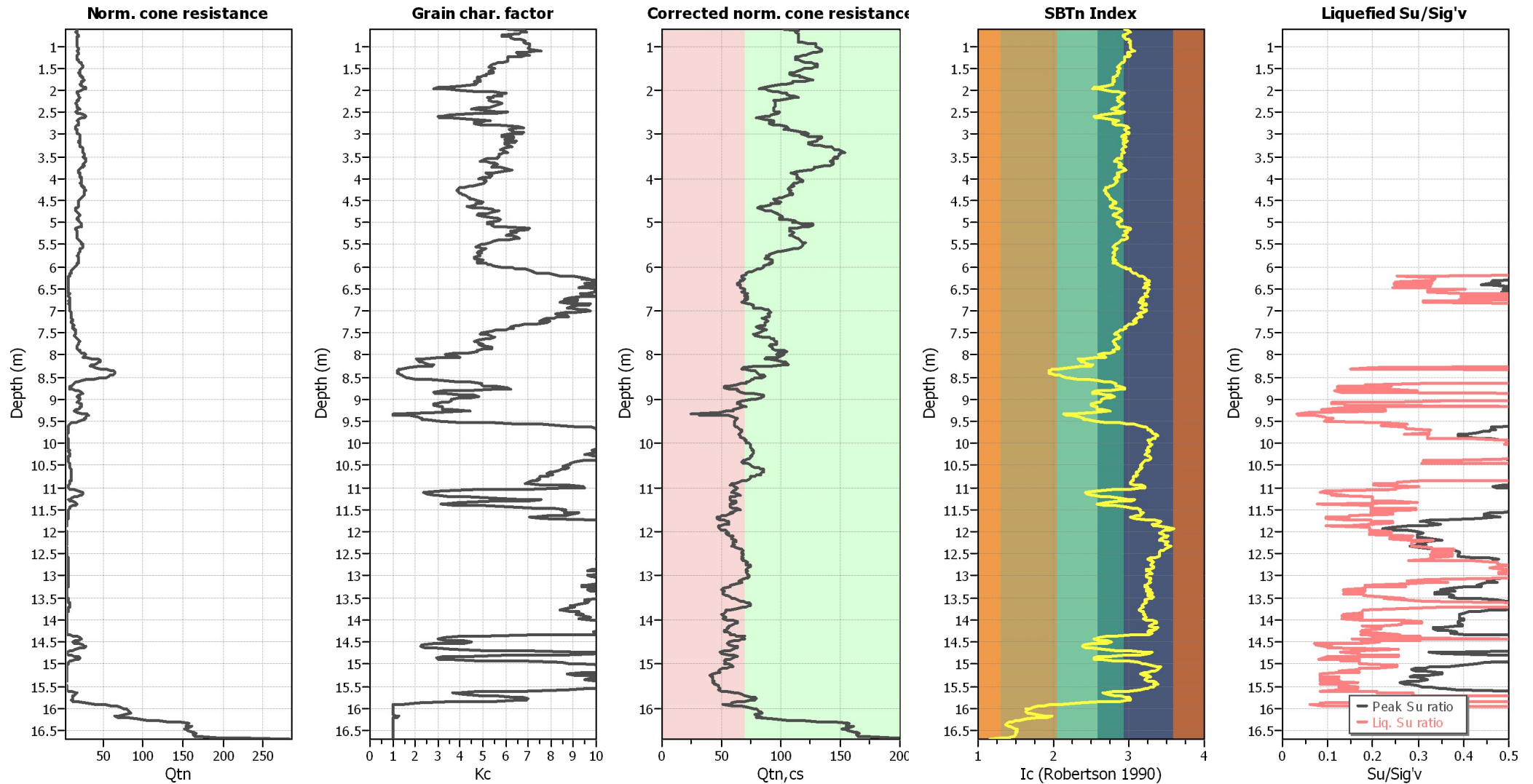
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

**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.):	10.00 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 <sub>c</sub> applied:	Yes
Earthquake magnitude M <sub>w</sub> :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	10.00 m	Fill height:	N/A	Limit depth:	N/A

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
1	0.62	11.78	0.00	11.78	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
2	0.64	12.16	0.00	12.16	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
3	0.66	12.54	0.00	12.54	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
4	0.68	12.92	0.00	12.92	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
5	0.70	13.30	0.00	13.30	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
6	0.72	13.68	0.00	13.68	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
7	0.74	14.06	0.00	14.06	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
8	0.76	14.44	0.00	14.44	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
9	0.78	14.82	0.00	14.82	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
10	0.80	15.20	0.00	15.20	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
11	0.82	15.58	0.00	15.58	1.00	0.227	2.82	0.080	1.00	1.00	2.000	No
12	0.84	15.96	0.00	15.96	1.00	0.226	2.82	0.080	1.00	1.00	2.000	No
13	0.86	16.34	0.00	16.34	1.00	0.226	2.82	0.080	1.00	1.00	2.000	No
14	0.88	16.72	0.00	16.72	1.00	0.226	2.82	0.080	1.00	1.00	2.000	No
15	0.90	17.10	0.00	17.10	1.00	0.226	2.82	0.080	1.00	1.00	2.000	No
16	0.92	17.48	0.00	17.48	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
17	0.94	17.86	0.00	17.86	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
18	0.96	18.24	0.00	18.24	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
19	0.98	18.62	0.00	18.62	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
20	1.00	19.00	0.00	19.00	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
21	1.02	19.38	0.00	19.38	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
22	1.04	19.76	0.00	19.76	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
23	1.06	20.14	0.00	20.14	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
24	1.08	20.52	0.00	20.52	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
25	1.10	20.90	0.00	20.90	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
26	1.12	21.28	0.00	21.28	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
27	1.14	21.66	0.00	21.66	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
28	1.16	22.04	0.00	22.04	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
29	1.18	22.42	0.00	22.42	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
30	1.20	22.80	0.00	22.80	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
31	1.22	23.18	0.00	23.18	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
32	1.24	23.56	0.00	23.56	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
33	1.26	23.94	0.00	23.94	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
34	1.28	24.32	0.00	24.32	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
35	1.30	24.70	0.00	24.70	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
36	1.32	25.08	0.00	25.08	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
37	1.34	25.46	0.00	25.46	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
38	1.36	25.84	0.00	25.84	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
39	1.38	26.22	0.00	26.22	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
40	1.40	26.60	0.00	26.60	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
41	1.42	26.98	0.00	26.98	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
42	1.44	27.36	0.00	27.36	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
43	1.46	27.74	0.00	27.74	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
44	1.48	28.12	0.00	28.12	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
45	1.50	28.50	0.00	28.50	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
46	1.52	28.88	0.00	28.88	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
47	1.54	29.26	0.00	29.26	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
48	1.56	29.64	0.00	29.64	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
49	1.58	30.02	0.00	30.02	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
50	1.60	30.40	0.00	30.40	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
51	1.62	30.78	0.00	30.78	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
52	1.64	31.16	0.00	31.16	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
53	1.66	31.54	0.00	31.54	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
54	1.68	31.92	0.00	31.92	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
55	1.70	32.30	0.00	32.30	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
56	1.72	32.68	0.00	32.68	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
57	1.74	33.06	0.00	33.06	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
58	1.76	33.44	0.00	33.44	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
59	1.78	33.82	0.00	33.82	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
60	1.80	34.20	0.00	34.20	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
61	1.82	34.58	0.00	34.58	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
62	1.84	34.96	0.00	34.96	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
63	1.86	35.34	0.00	35.34	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
64	1.88	35.72	0.00	35.72	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
65	1.90	36.10	0.00	36.10	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
66	1.92	36.48	0.00	36.48	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
67	1.94	36.86	0.00	36.86	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
68	1.96	37.24	0.00	37.24	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
69	1.98	37.62	0.00	37.62	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
70	2.00	38.00	0.00	38.00	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
71	2.02	38.38	0.00	38.38	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
72	2.04	38.76	0.00	38.76	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
73	2.06	39.14	0.00	39.14	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
74	2.08	39.52	0.00	39.52	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
75	2.10	39.90	0.00	39.90	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
76	2.12	40.28	0.00	40.28	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
77	2.14	40.66	0.00	40.66	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
78	2.16	41.04	0.00	41.04	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
79	2.18	41.42	0.00	41.42	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
80	2.20	41.80	0.00	41.80	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
81	2.22	42.18	0.00	42.18	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
82	2.24	42.56	0.00	42.56	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
83	2.26	42.94	0.00	42.94	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
84	2.28	43.32	0.00	43.32	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
85	2.30	43.70	0.00	43.70	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
86	2.32	44.08	0.00	44.08	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
87	2.34	44.46	0.00	44.46	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
88	2.36	44.84	0.00	44.84	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
89	2.38	45.22	0.00	45.22	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
90	2.40	45.60	0.00	45.60	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
91	2.42	45.98	0.00	45.98	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
92	2.44	46.36	0.00	46.36	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
93	2.46	46.74	0.00	46.74	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
94	2.48	47.12	0.00	47.12	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
95	2.50	47.50	0.00	47.50	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
96	2.52	47.88	0.00	47.88	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
97	2.54	48.26	0.00	48.26	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
98	2.56	48.64	0.00	48.64	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
99	2.58	49.02	0.00	49.02	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
100	2.60	49.40	0.00	49.40	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
101	2.62	49.78	0.00	49.78	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
102	2.64	50.16	0.00	50.16	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
103	2.66	50.54	0.00	50.54	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
104	2.68	50.92	0.00	50.92	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
105	2.70	51.30	0.00	51.30	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
106	2.72	51.68	0.00	51.68	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
107	2.74	52.06	0.00	52.06	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
108	2.76	52.44	0.00	52.44	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
109	2.78	52.82	0.00	52.82	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
110	2.80	53.20	0.00	53.20	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
111	2.82	53.58	0.00	53.58	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
112	2.84	53.96	0.00	53.96	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
113	2.86	54.34	0.00	54.34	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
114	2.88	54.72	0.00	54.72	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
115	2.90	55.10	0.00	55.10	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
116	2.92	55.48	0.00	55.48	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
117	2.94	55.86	0.00	55.86	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
118	2.96	56.24	0.00	56.24	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
119	2.98	56.62	0.00	56.62	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
120	3.00	57.00	0.00	57.00	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
121	3.02	57.38	0.00	57.38	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
122	3.04	57.76	0.00	57.76	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
123	3.06	58.14	0.00	58.14	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
124	3.08	58.52	0.00	58.52	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
125	3.10	58.90	0.00	58.90	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
126	3.12	59.28	0.00	59.28	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
127	3.14	59.66	0.00	59.66	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
128	3.16	60.04	0.00	60.04	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
129	3.18	60.42	0.00	60.42	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
130	3.20	60.80	0.00	60.80	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
131	3.22	61.18	0.00	61.18	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
132	3.24	61.56	0.00	61.56	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
133	3.26	61.94	0.00	61.94	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
134	3.28	62.32	0.00	62.32	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
135	3.30	62.70	0.00	62.70	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
136	3.32	63.08	0.00	63.08	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
137	3.34	63.46	0.00	63.46	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
138	3.36	63.84	0.00	63.84	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
139	3.38	64.22	0.00	64.22	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
140	3.40	64.60	0.00	64.60	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
141	3.42	64.98	0.00	64.98	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
142	3.44	65.36	0.00	65.36	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
143	3.46	65.74	0.00	65.74	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
144	3.48	66.12	0.00	66.12	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
145	3.50	66.50	0.00	66.50	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
146	3.52	66.88	0.00	66.88	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
147	3.54	67.26	0.00	67.26	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
148	3.56	67.64	0.00	67.64	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
149	3.58	68.02	0.00	68.02	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
150	3.60	68.40	0.00	68.40	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
151	3.62	68.78	0.00	68.78	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
152	3.64	69.16	0.00	69.16	0.98	0.222	2.82	0.079	1.00	1.00	2.000	No
153	3.66	69.54	0.00	69.54	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
154	3.68	69.92	0.00	69.92	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
155	3.70	70.30	0.00	70.30	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
156	3.72	70.68	0.00	70.68	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
157	3.74	71.06	0.00	71.06	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
158	3.76	71.44	0.00	71.44	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
159	3.78	71.82	0.00	71.82	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
160	3.80	72.20	0.00	72.20	0.97	0.222	2.82	0.079	1.00	1.00	2.000	No
161	3.82	72.58	0.00	72.58	0.97	0.222	2.82	0.078	1.00	1.00	2.000	No
162	3.84	72.96	0.00	72.96	0.97	0.222	2.82	0.078	1.00	1.00	2.000	No
163	3.86	73.34	0.00	73.34	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
164	3.88	73.72	0.00	73.72	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
165	3.90	74.10	0.00	74.10	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
166	3.92	74.48	0.00	74.48	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
167	3.94	74.86	0.00	74.86	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
168	3.96	75.24	0.00	75.24	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
169	3.98	75.62	0.00	75.62	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
170	4.00	76.00	0.00	76.00	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
171	4.02	76.38	0.00	76.38	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
172	4.04	76.76	0.00	76.76	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
173	4.06	77.14	0.00	77.14	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
174	4.08	77.52	0.00	77.52	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
175	4.10	77.90	0.00	77.90	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
176	4.12	78.28	0.00	78.28	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
177	4.14	78.66	0.00	78.66	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
178	4.16	79.04	0.00	79.04	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
179	4.18	79.42	0.00	79.42	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
180	4.20	79.80	0.00	79.80	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
181	4.22	80.18	0.00	80.18	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
182	4.24	80.56	0.00	80.56	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
183	4.26	80.94	0.00	80.94	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
184	4.28	81.32	0.00	81.32	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
185	4.30	81.70	0.00	81.70	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
186	4.32	82.08	0.00	82.08	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
187	4.34	82.46	0.00	82.46	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
188	4.36	82.84	0.00	82.84	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
189	4.38	83.22	0.00	83.22	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
190	4.40	83.60	0.00	83.60	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
191	4.42	83.98	0.00	83.98	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
192	4.44	84.36	0.00	84.36	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
193	4.46	84.74	0.00	84.74	0.97	0.221	2.82	0.078	1.00	1.00	2.000	No
194	4.48	85.12	0.00	85.12	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
195	4.50	85.50	0.00	85.50	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
196	4.52	85.88	0.00	85.88	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
197	4.54	86.26	0.00	86.26	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
198	4.56	86.64	0.00	86.64	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
199	4.58	87.02	0.00	87.02	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
200	4.60	87.40	0.00	87.40	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
201	4.62	87.78	0.00	87.78	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
202	4.64	88.16	0.00	88.16	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
203	4.66	88.54	0.00	88.54	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
204	4.68	88.92	0.00	88.92	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
205	4.70	89.30	0.00	89.30	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
206	4.72	89.68	0.00	89.68	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
207	4.74	90.06	0.00	90.06	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
208	4.76	90.44	0.00	90.44	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
209	4.78	90.82	0.00	90.82	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
210	4.80	91.20	0.00	91.20	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
211	4.82	91.58	0.00	91.58	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
212	4.84	91.96	0.00	91.96	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
213	4.86	92.34	0.00	92.34	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
214	4.88	92.72	0.00	92.72	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
215	4.90	93.10	0.00	93.10	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
216	4.92	93.48	0.00	93.48	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
217	4.94	93.86	0.00	93.86	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
218	4.96	94.24	0.00	94.24	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
219	4.98	94.62	0.00	94.62	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
220	5.00	95.00	0.00	95.00	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
221	5.02	95.38	0.00	95.38	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
222	5.04	95.76	0.00	95.76	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
223	5.06	96.14	0.00	96.14	0.97	0.220	2.82	0.078	1.00	1.00	2.000	No
224	5.08	96.52	0.00	96.52	0.96	0.220	2.82	0.078	1.00	1.00	2.000	No
225	5.10	96.90	0.00	96.90	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
226	5.12	97.28	0.00	97.28	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
227	5.14	97.66	0.00	97.66	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
228	5.16	98.04	0.00	98.04	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
229	5.18	98.42	0.00	98.42	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
230	5.20	98.80	0.00	98.80	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
231	5.22	99.18	0.00	99.18	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
232	5.24	99.56	0.00	99.56	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
233	5.26	99.94	0.00	99.94	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
234	5.28	100.32	0.00	100.32	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
235	5.30	100.70	0.00	100.70	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
236	5.32	101.08	0.00	101.08	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
237	5.34	101.46	0.00	101.46	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
238	5.36	101.84	0.00	101.84	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
239	5.38	102.22	0.00	102.22	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
240	5.40	102.60	0.00	102.60	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
241	5.42	102.98	0.00	102.98	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
242	5.44	103.36	0.00	103.36	0.96	0.219	2.82	0.078	1.00	1.00	2.000	No
243	5.46	103.74	0.00	103.74	0.96	0.219	2.82	0.078	0.99	1.00	2.000	No
244	5.48	104.12	0.00	104.12	0.96	0.219	2.82	0.078	0.99	1.00	2.000	No
245	5.50	104.50	0.00	104.50	0.96	0.219	2.82	0.078	0.99	1.00	2.000	No
246	5.52	104.88	0.00	104.88	0.96	0.219	2.82	0.078	0.99	1.00	2.000	No
247	5.54	105.26	0.00	105.26	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
248	5.56	105.64	0.00	105.64	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
249	5.58	106.02	0.00	106.02	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
250	5.60	106.40	0.00	106.40	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
251	5.62	106.78	0.00	106.78	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
252	5.64	107.16	0.00	107.16	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
253	5.66	107.54	0.00	107.54	0.96	0.219	2.82	0.077	0.99	1.00	2.000	No
254	5.68	107.92	0.00	107.92	0.96	0.218	2.82	0.077	0.99	1.00	2.000	No
255	5.70	108.30	0.00	108.30	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
256	5.72	108.68	0.00	108.68	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
257	5.74	109.06	0.00	109.06	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
258	5.76	109.44	0.00	109.44	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
259	5.78	109.82	0.00	109.82	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
260	5.80	110.20	0.00	110.20	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
261	5.82	110.58	0.00	110.58	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
262	5.84	110.96	0.00	110.96	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
263	5.86	111.34	0.00	111.34	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
264	5.88	111.72	0.00	111.72	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
265	5.90	112.10	0.00	112.10	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
266	5.92	112.48	0.00	112.48	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
267	5.94	112.86	0.00	112.86	0.96	0.218	2.82	0.077	0.98	1.00	2.000	No
268	5.96	113.24	0.00	113.24	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
269	5.98	113.62	0.00	113.62	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
270	6.00	114.00	0.00	114.00	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
271	6.02	114.38	0.00	114.38	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
272	6.04	114.76	0.00	114.76	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
273	6.06	115.14	0.00	115.14	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
274	6.08	115.52	0.00	115.52	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
275	6.10	115.90	0.00	115.90	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
276	6.12	116.28	0.00	116.28	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
277	6.14	116.66	0.00	116.66	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
278	6.16	117.04	0.00	117.04	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
279	6.18	117.42	0.00	117.42	0.96	0.218	2.82	0.077	0.97	1.00	2.000	No
280	6.20	117.80	0.00	117.80	0.96	0.217	2.82	0.077	0.97	1.00	2.000	No
281	6.22	118.18	0.00	118.18	0.96	0.217	2.82	0.077	0.97	1.00	2.000	No
282	6.24	118.56	0.00	118.56	0.96	0.217	2.82	0.077	0.96	1.00	2.000	No
283	6.26	118.94	0.00	118.94	0.96	0.217	2.82	0.077	0.96	1.00	2.000	No
284	6.28	119.32	0.00	119.32	0.96	0.217	2.82	0.077	0.96	1.00	2.000	No
285	6.30	119.70	0.00	119.70	0.96	0.217	2.82	0.077	0.96	1.00	2.000	No
286	6.32	120.08	0.00	120.08	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
287	6.34	120.46	0.00	120.46	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
288	6.36	120.84	0.00	120.84	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
289	6.38	121.22	0.00	121.22	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
290	6.40	121.60	0.00	121.60	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
291	6.42	121.98	0.00	121.98	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
292	6.44	122.36	0.00	122.36	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
293	6.46	122.74	0.00	122.74	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
294	6.48	123.12	0.00	123.12	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
295	6.50	123.50	0.00	123.50	0.95	0.217	2.82	0.077	0.96	1.00	2.000	No
296	6.52	123.88	0.00	123.88	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
297	6.54	124.26	0.00	124.26	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
298	6.56	124.64	0.00	124.64	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
299	6.58	125.02	0.00	125.02	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
300	6.60	125.40	0.00	125.40	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
301	6.62	125.78	0.00	125.78	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
302	6.64	126.16	0.00	126.16	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
303	6.66	126.54	0.00	126.54	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
304	6.68	126.92	0.00	126.92	0.95	0.217	2.82	0.077	0.95	1.00	2.000	No
305	6.70	127.30	0.00	127.30	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
306	6.72	127.68	0.00	127.68	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
307	6.74	128.06	0.00	128.06	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
308	6.76	128.44	0.00	128.44	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
309	6.78	128.82	0.00	128.82	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
310	6.80	129.20	0.00	129.20	0.95	0.216	2.82	0.077	0.95	1.00	2.000	No
311	6.82	129.58	0.00	129.58	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
312	6.84	129.96	0.00	129.96	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
313	6.86	130.34	0.00	130.34	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
314	6.88	130.72	0.00	130.72	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
315	6.90	131.10	0.00	131.10	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
316	6.92	131.48	0.00	131.48	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
317	6.94	131.86	0.00	131.86	0.95	0.216	2.82	0.077	0.94	1.00	2.000	No
318	6.96	132.24	0.00	132.24	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
319	6.98	132.62	0.00	132.62	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
320	7.00	133.00	0.00	133.00	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
321	7.02	133.38	0.00	133.38	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
322	7.04	133.76	0.00	133.76	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
323	7.06	134.14	0.00	134.14	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
324	7.08	134.52	0.00	134.52	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
325	7.10	134.90	0.00	134.90	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
326	7.12	135.28	0.00	135.28	0.95	0.216	2.82	0.076	0.94	1.00	2.000	No
327	7.14	135.66	0.00	135.66	0.95	0.215	2.82	0.076	0.94	1.00	2.000	No
328	7.16	136.04	0.00	136.04	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
329	7.18	136.42	0.00	136.42	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
330	7.20	136.80	0.00	136.80	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
331	7.22	137.18	0.00	137.18	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
332	7.24	137.56	0.00	137.56	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
333	7.26	137.94	0.00	137.94	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
334	7.28	138.32	0.00	138.32	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
335	7.30	138.70	0.00	138.70	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No
336	7.32	139.08	0.00	139.08	0.95	0.215	2.82	0.076	0.93	1.00	2.000	No



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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
337	7.34	139.46	0.00	139.46	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
338	7.36	139.84	0.00	139.84	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
339	7.38	140.22	0.00	140.22	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
340	7.40	140.60	0.00	140.60	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
341	7.42	140.98	0.00	140.98	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
342	7.44	141.36	0.00	141.36	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
343	7.46	141.74	0.00	141.74	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
344	7.48	142.12	0.00	142.12	0.94	0.215	2.82	0.076	0.93	1.00	2.000	No
345	7.50	142.50	0.00	142.50	0.94	0.215	2.82	0.076	0.92	1.00	2.000	No
346	7.52	142.88	0.00	142.88	0.94	0.215	2.82	0.076	0.92	1.00	2.000	No
347	7.54	143.26	0.00	143.26	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
348	7.56	143.64	0.00	143.64	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
349	7.58	144.02	0.00	144.02	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
350	7.60	144.40	0.00	144.40	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
351	7.62	144.78	0.00	144.78	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
352	7.64	145.16	0.00	145.16	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
353	7.66	145.54	0.00	145.54	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
354	7.68	145.92	0.00	145.92	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
355	7.70	146.30	0.00	146.30	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
356	7.72	146.68	0.00	146.68	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
357	7.74	147.06	0.00	147.06	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
358	7.76	147.44	0.00	147.44	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
359	7.78	147.82	0.00	147.82	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
360	7.80	148.20	0.00	148.20	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
361	7.82	148.58	0.00	148.58	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
362	7.84	148.96	0.00	148.96	0.94	0.214	2.82	0.076	0.92	1.00	2.000	No
363	7.86	149.34	0.00	149.34	0.94	0.214	2.82	0.076	0.91	1.00	2.000	No
364	7.88	149.72	0.00	149.72	0.94	0.214	2.82	0.076	0.91	1.00	2.000	No
365	7.90	150.10	0.00	150.10	0.94	0.214	2.82	0.076	0.91	1.00	2.000	No
366	7.92	150.48	0.00	150.48	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
367	7.94	150.86	0.00	150.86	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
368	7.96	151.24	0.00	151.24	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
369	7.98	151.62	0.00	151.62	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
370	8.00	152.00	0.00	152.00	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
371	8.02	152.38	0.00	152.38	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
372	8.04	152.76	0.00	152.76	0.94	0.213	2.82	0.076	0.91	1.00	2.000	No
373	8.06	153.14	0.00	153.14	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
374	8.08	153.52	0.00	153.52	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
375	8.10	153.90	0.00	153.90	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
376	8.12	154.28	0.00	154.28	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
377	8.14	154.66	0.00	154.66	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
378	8.16	155.04	0.00	155.04	0.94	0.213	2.82	0.075	0.91	1.00	2.000	No
379	8.18	155.42	0.00	155.42	0.93	0.213	2.82	0.075	0.91	1.00	2.000	No
380	8.20	155.80	0.00	155.80	0.93	0.213	2.82	0.075	0.91	1.00	2.000	No
381	8.22	156.18	0.00	156.18	0.93	0.213	2.82	0.075	0.91	1.00	2.000	No
382	8.24	156.56	0.00	156.56	0.93	0.213	2.82	0.075	0.90	1.00	2.000	No
383	8.26	156.94	0.00	156.94	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
384	8.28	157.32	0.00	157.32	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
385	8.30	157.70	0.00	157.70	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
386	8.32	158.08	0.00	158.08	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
387	8.34	158.46	0.00	158.46	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
388	8.36	158.84	0.00	158.84	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
389	8.38	159.22	0.00	159.22	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
390	8.40	159.60	0.00	159.60	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
391	8.42	159.98	0.00	159.98	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
392	8.44	160.36	0.00	160.36	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
393	8.46	160.74	0.00	160.74	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
394	8.48	161.12	0.00	161.12	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
395	8.50	161.50	0.00	161.50	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
396	8.52	161.88	0.00	161.88	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
397	8.54	162.26	0.00	162.26	0.93	0.212	2.82	0.075	0.90	1.00	2.000	No
398	8.56	162.64	0.00	162.64	0.93	0.211	2.82	0.075	0.90	1.00	2.000	No
399	8.58	163.02	0.00	163.02	0.93	0.211	2.82	0.075	0.90	1.00	2.000	No
400	8.60	163.40	0.00	163.40	0.93	0.211	2.82	0.075	0.90	1.00	2.000	No
401	8.62	163.78	0.00	163.78	0.93	0.211	2.82	0.075	0.90	1.00	2.000	No
402	8.64	164.16	0.00	164.16	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
403	8.66	164.54	0.00	164.54	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
404	8.68	164.92	0.00	164.92	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
405	8.70	165.30	0.00	165.30	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
406	8.72	165.68	0.00	165.68	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
407	8.74	166.06	0.00	166.06	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
408	8.76	166.44	0.00	166.44	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
409	8.78	166.82	0.00	166.82	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
410	8.80	167.20	0.00	167.20	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
411	8.82	167.58	0.00	167.58	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
412	8.84	167.96	0.00	167.96	0.93	0.211	2.82	0.075	0.89	1.00	2.000	No
413	8.86	168.34	0.00	168.34	0.93	0.210	2.82	0.075	0.89	1.00	2.000	No
414	8.88	168.72	0.00	168.72	0.92	0.210	2.82	0.075	0.89	1.00	2.000	No
415	8.90	169.10	0.00	169.10	0.92	0.210	2.82	0.075	0.89	1.00	2.000	No
416	8.92	169.48	0.00	169.48	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
417	8.94	169.86	0.00	169.86	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
418	8.96	170.24	0.00	170.24	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
419	8.98	170.62	0.00	170.62	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
420	9.00	171.00	0.00	171.00	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
421	9.02	171.38	0.00	171.38	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
422	9.04	171.76	0.00	171.76	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
423	9.06	172.14	0.00	172.14	0.92	0.210	2.82	0.074	0.89	1.00	2.000	No
424	9.08	172.52	0.00	172.52	0.92	0.210	2.82	0.074	0.88	1.00	2.000	No
425	9.10	172.90	0.00	172.90	0.92	0.210	2.82	0.074	0.88	1.00	2.000	No
426	9.12	173.28	0.00	173.28	0.92	0.210	2.82	0.074	0.88	1.00	2.000	No
427	9.14	173.66	0.00	173.66	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
428	9.16	174.04	0.00	174.04	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
429	9.18	174.42	0.00	174.42	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
430	9.20	174.80	0.00	174.80	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
431	9.22	175.18	0.00	175.18	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
432	9.24	175.56	0.00	175.56	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
433	9.26	175.94	0.00	175.94	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
434	9.28	176.32	0.00	176.32	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
435	9.30	176.70	0.00	176.70	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
436	9.32	177.08	0.00	177.08	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
437	9.34	177.46	0.00	177.46	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
438	9.36	177.84	0.00	177.84	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
439	9.38	178.22	0.00	178.22	0.92	0.209	2.82	0.074	0.88	1.00	2.000	No
440	9.40	178.60	0.00	178.60	0.92	0.208	2.82	0.074	0.88	1.00	2.000	No
441	9.42	178.98	0.00	178.98	0.92	0.208	2.82	0.074	0.88	1.00	2.000	No
442	9.44	179.36	0.00	179.36	0.92	0.208	2.82	0.074	0.88	1.00	2.000	No
443	9.46	179.74	0.00	179.74	0.92	0.208	2.82	0.074	0.88	1.00	2.000	No
444	9.48	180.12	0.00	180.12	0.91	0.208	2.82	0.074	0.88	1.00	2.000	No
445	9.50	180.50	0.00	180.50	0.91	0.208	2.82	0.074	0.88	1.00	2.000	No
446	9.52	180.88	0.00	180.88	0.91	0.208	2.82	0.074	0.88	1.00	2.000	No
447	9.54	181.26	0.00	181.26	0.91	0.208	2.82	0.074	0.87	1.00	2.000	No
448	9.56	181.64	0.00	181.64	0.91	0.208	2.82	0.074	0.87	1.00	2.000	No
449	9.58	182.02	0.00	182.02	0.91	0.208	2.82	0.074	0.87	1.00	2.000	No
450	9.60	182.40	0.00	182.40	0.91	0.208	2.82	0.074	0.87	1.00	2.000	No
451	9.62	182.78	0.00	182.78	0.91	0.208	2.82	0.074	0.87	1.00	2.000	No
452	9.64	183.16	0.00	183.16	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
453	9.66	183.54	0.00	183.54	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
454	9.68	183.92	0.00	183.92	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
455	9.70	184.30	0.00	184.30	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
456	9.72	184.68	0.00	184.68	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
457	9.74	185.06	0.00	185.06	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
458	9.76	185.44	0.00	185.44	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
459	9.78	185.82	0.00	185.82	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
460	9.80	186.20	0.00	186.20	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
461	9.82	186.58	0.00	186.58	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
462	9.84	186.96	0.00	186.96	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
463	9.86	187.34	0.00	187.34	0.91	0.207	2.82	0.073	0.87	1.00	2.000	No
464	9.88	187.72	0.00	187.72	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
465	9.90	188.10	0.00	188.10	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
466	9.92	188.48	0.00	188.48	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
467	9.94	188.86	0.00	188.86	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
468	9.96	189.24	0.00	189.24	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
469	9.98	189.62	0.00	189.62	0.91	0.206	2.82	0.073	0.87	1.00	2.000	No
470	10.00	190.00	0.00	190.00	0.90	0.206	2.82	0.073	0.87	1.00	2.000	No
471	10.02	190.38	0.20	190.18	0.90	0.206	2.82	0.073	0.87	1.00	0.084	No
472	10.04	190.76	0.39	190.37	0.90	0.206	2.82	0.073	0.86	1.00	0.084	No
473	10.06	191.14	0.59	190.55	0.90	0.206	2.82	0.073	0.86	1.00	0.084	No
474	10.08	191.52	0.78	190.74	0.90	0.206	2.82	0.073	0.86	1.00	0.085	No
475	10.10	191.90	0.98	190.92	0.90	0.206	2.82	0.073	0.86	1.00	0.085	No
476	10.12	192.28	1.18	191.10	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
477	10.14	192.66	1.37	191.29	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
478	10.16	193.04	1.57	191.47	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
479	10.18	193.42	1.77	191.65	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
480	10.20	193.80	1.96	191.84	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
481	10.22	194.18	2.16	192.02	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
482	10.24	194.56	2.35	192.21	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
483	10.26	194.94	2.55	192.39	0.90	0.207	2.82	0.073	0.86	1.00	0.085	No
484	10.28	195.32	2.75	192.57	0.90	0.207	2.82	0.074	0.86	1.00	0.085	No
485	10.30	195.70	2.94	192.76	0.90	0.208	2.82	0.074	0.86	1.00	0.085	No
486	10.32	196.08	3.14	192.94	0.90	0.208	2.82	0.074	0.86	1.00	0.085	No
487	10.34	196.46	3.34	193.12	0.90	0.208	2.82	0.074	0.86	1.00	0.085	No
488	10.36	196.84	3.53	193.31	0.90	0.208	2.82	0.074	0.86	1.00	0.085	No
489	10.38	197.22	3.73	193.49	0.90	0.208	2.82	0.074	0.86	1.00	0.086	No
490	10.40	197.60	3.92	193.68	0.90	0.208	2.82	0.074	0.86	1.00	0.086	No
491	10.42	197.98	4.12	193.86	0.90	0.208	2.82	0.074	0.86	1.00	0.086	No
492	10.44	198.36	4.32	194.04	0.90	0.208	2.82	0.074	0.86	1.00	0.086	No
493	10.46	198.74	4.51	194.23	0.90	0.208	2.82	0.074	0.86	1.00	0.086	No
494	10.48	199.12	4.71	194.41	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
495	10.50	199.50	4.91	194.59	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
496	10.52	199.88	5.10	194.78	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
497	10.54	200.26	5.30	194.96	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
498	10.56	200.64	5.49	195.15	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
499	10.58	201.02	5.69	195.33	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
500	10.60	201.40	5.89	195.51	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
501	10.62	201.78	6.08	195.70	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
502	10.64	202.16	6.28	195.88	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
503	10.66	202.54	6.47	196.07	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
504	10.68	202.92	6.67	196.25	0.89	0.209	2.82	0.074	0.86	1.00	0.086	No
505	10.70	203.30	6.87	196.43	0.89	0.210	2.82	0.074	0.86	1.00	0.086	No
506	10.72	203.68	7.06	196.62	0.89	0.210	2.82	0.074	0.86	1.00	0.086	No
507	10.74	204.06	7.26	196.80	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
508	10.76	204.44	7.46	196.98	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
509	10.78	204.82	7.65	197.17	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
510	10.80	205.20	7.85	197.35	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
511	10.82	205.58	8.04	197.54	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
512	10.84	205.96	8.24	197.72	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
513	10.86	206.34	8.44	197.90	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
514	10.88	206.72	8.63	198.09	0.89	0.210	2.82	0.074	0.86	1.00	0.087	No
515	10.90	207.10	8.83	198.27	0.89	0.210	2.82	0.075	0.86	1.00	0.087	No
516	10.92	207.48	9.03	198.45	0.88	0.210	2.82	0.075	0.86	1.00	0.087	No
517	10.94	207.86	9.22	198.64	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
518	10.96	208.24	9.42	198.82	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
519	10.98	208.62	9.61	199.01	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
520	11.00	209.00	9.81	199.19	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
521	11.02	209.38	10.01	199.37	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
522	11.04	209.76	10.20	199.56	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
523	11.06	210.14	10.40	199.74	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
524	11.08	210.52	10.59	199.93	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
525	11.10	210.90	10.79	200.11	0.88	0.211	2.82	0.075	0.86	1.00	0.087	No
526	11.12	211.28	10.99	200.29	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No
527	11.14	211.66	11.18	200.48	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No
528	11.16	212.04	11.38	200.66	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma'_v$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
529	11.18	212.42	11.58	200.84	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No
530	11.20	212.80	11.77	201.03	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No
531	11.22	213.18	11.97	201.21	0.88	0.211	2.82	0.075	0.85	1.00	0.088	No
532	11.24	213.56	12.16	201.40	0.88	0.212	2.82	0.075	0.85	1.00	0.088	No
533	11.26	213.94	12.36	201.58	0.88	0.212	2.82	0.075	0.85	1.00	0.088	No
534	11.28	214.32	12.56	201.76	0.88	0.212	2.82	0.075	0.85	1.00	0.088	No
535	11.30	214.70	12.75	201.95	0.88	0.212	2.82	0.075	0.85	1.00	0.088	No
536	11.32	215.08	12.95	202.13	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
537	11.34	215.46	13.15	202.31	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
538	11.36	215.84	13.34	202.50	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
539	11.38	216.22	13.54	202.68	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
540	11.40	216.60	13.73	202.87	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
541	11.42	216.98	13.93	203.05	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
542	11.44	217.36	14.13	203.23	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
543	11.46	217.74	14.32	203.42	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
544	11.48	218.12	14.52	203.60	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
545	11.50	218.50	14.71	203.78	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
546	11.52	218.88	14.91	203.97	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
547	11.54	219.26	15.11	204.15	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
548	11.56	219.64	15.30	204.34	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
549	11.58	220.02	15.50	204.52	0.87	0.212	2.82	0.075	0.85	1.00	0.088	No
550	11.60	220.40	15.70	204.70	0.87	0.212	2.82	0.075	0.85	1.00	0.089	No
551	11.62	220.78	15.89	204.89	0.87	0.213	2.82	0.075	0.85	1.00	0.089	No
552	11.64	221.16	16.09	205.07	0.87	0.213	2.82	0.075	0.85	1.00	0.089	No
553	11.66	221.54	16.28	205.26	0.87	0.213	2.82	0.075	0.85	1.00	0.089	No
554	11.68	221.92	16.48	205.44	0.87	0.213	2.82	0.075	0.85	1.00	0.089	No
555	11.70	222.30	16.68	205.62	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
556	11.72	222.68	16.87	205.81	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
557	11.74	223.06	17.07	205.99	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
558	11.76	223.44	17.27	206.17	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
559	11.78	223.82	17.46	206.36	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
560	11.80	224.20	17.66	206.54	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
561	11.82	224.58	17.85	206.73	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
562	11.84	224.96	18.05	206.91	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
563	11.86	225.34	18.25	207.09	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
564	11.88	225.72	18.44	207.28	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
565	11.90	226.10	18.64	207.46	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
566	11.92	226.48	18.84	207.64	0.86	0.213	2.82	0.075	0.85	1.00	0.089	No
567	11.94	226.86	19.03	207.83	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
568	11.96	227.24	19.23	208.01	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
569	11.98	227.62	19.42	208.20	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
570	12.00	228.00	19.62	208.38	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
571	12.02	228.38	19.82	208.56	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
572	12.04	228.76	20.01	208.75	0.86	0.213	2.82	0.076	0.85	1.00	0.089	No
573	12.06	229.14	20.21	208.93	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
574	12.08	229.52	20.40	209.12	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
575	12.10	229.90	20.60	209.30	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
576	12.12	230.28	20.80	209.48	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No

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

Point ID	Depth (m)	$\sigma_v$ (kPa)	$u_0$ (kPa)	$\sigma_v'$ (kPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
577	12.14	230.66	20.99	209.67	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
578	12.16	231.04	21.19	209.85	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
579	12.18	231.42	21.39	210.03	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
580	12.20	231.80	21.58	210.22	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
581	12.22	232.18	21.78	210.40	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
582	12.24	232.56	21.97	210.59	0.85	0.213	2.82	0.076	0.85	1.00	0.089	No
583	12.26	232.94	22.17	210.77	0.85	0.213	2.82	0.076	0.84	1.00	0.090	No
584	12.28	233.32	22.37	210.95	0.85	0.213	2.82	0.076	0.84	1.00	0.090	No
585	12.30	233.70	22.56	211.14	0.85	0.214	2.82	0.076	0.84	1.00	0.090	No
586	12.32	234.08	22.76	211.32	0.85	0.214	2.82	0.076	0.84	1.00	0.090	No
587	12.34	234.46	22.96	211.50	0.85	0.214	2.82	0.076	0.84	1.00	0.090	No
588	12.36	234.84	23.15	211.69	0.85	0.214	2.82	0.076	0.84	1.00	0.090	No
589	12.38	235.22	23.35	211.87	0.85	0.214	2.82	0.076	0.84	1.00	0.090	No
590	12.40	235.60	23.54	212.06	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
591	12.42	235.98	23.74	212.24	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
592	12.44	236.36	23.94	212.42	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
593	12.46	236.74	24.13	212.61	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
594	12.48	237.12	24.33	212.79	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
595	12.50	237.50	24.52	212.98	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
596	12.52	237.88	24.72	213.16	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
597	12.54	238.26	24.92	213.34	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
598	12.56	238.64	25.11	213.53	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
599	12.58	239.02	25.31	213.71	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
600	12.60	239.40	25.51	213.89	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
601	12.62	239.78	25.70	214.08	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
602	12.64	240.16	25.90	214.26	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
603	12.66	240.54	26.09	214.45	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
604	12.68	240.92	26.29	214.63	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
605	12.70	241.30	26.49	214.81	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
606	12.72	241.68	26.68	215.00	0.84	0.214	2.82	0.076	0.84	1.00	0.090	No
607	12.74	242.06	26.88	215.18	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
608	12.76	242.44	27.08	215.36	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
609	12.78	242.82	27.27	215.55	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
610	12.80	243.20	27.47	215.73	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
611	12.82	243.58	27.66	215.92	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
612	12.84	243.96	27.86	216.10	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
613	12.86	244.34	28.06	216.28	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
614	12.88	244.72	28.25	216.47	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
615	12.90	245.10	28.45	216.65	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
616	12.92	245.48	28.65	216.83	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
617	12.94	245.86	28.84	217.02	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
618	12.96	246.24	29.04	217.20	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
619	12.98	246.62	29.23	217.39	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
620	13.00	247.00	29.43	217.57	0.83	0.214	2.82	0.076	0.84	1.00	0.090	No
621	13.02	247.38	29.63	217.75	0.83	0.213	2.82	0.076	0.84	1.00	0.090	No
622	13.04	247.76	29.82	217.94	0.83	0.213	2.82	0.076	0.84	1.00	0.090	No
623	13.06	248.14	30.02	218.12	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
624	13.08	248.52	30.21	218.31	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
625	13.10	248.90	30.41	218.49	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
626	13.12	249.28	30.61	218.67	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
627	13.14	249.66	30.80	218.86	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
628	13.16	250.04	31.00	219.04	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
629	13.18	250.42	31.20	219.22	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
630	13.20	250.80	31.39	219.41	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
631	13.22	251.18	31.59	219.59	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
632	13.24	251.56	31.78	219.78	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
633	13.26	251.94	31.98	219.96	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
634	13.28	252.32	32.18	220.14	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
635	13.30	252.70	32.37	220.33	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
636	13.32	253.08	32.57	220.51	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
637	13.34	253.46	32.77	220.69	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
638	13.36	253.84	32.96	220.88	0.82	0.213	2.82	0.076	0.84	1.00	0.090	No
639	13.38	254.22	33.16	221.06	0.81	0.213	2.82	0.076	0.84	1.00	0.090	No
640	13.40	254.60	33.35	221.25	0.81	0.213	2.82	0.075	0.84	1.00	0.090	No
641	13.42	254.98	33.55	221.43	0.81	0.213	2.82	0.075	0.84	1.00	0.090	No
642	13.44	255.36	33.75	221.61	0.81	0.213	2.82	0.075	0.84	1.00	0.090	No
643	13.46	255.74	33.94	221.80	0.81	0.213	2.82	0.075	0.84	1.00	0.090	No
644	13.48	256.12	34.14	221.98	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
645	13.50	256.50	34.34	222.17	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
646	13.52	256.88	34.53	222.35	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
647	13.54	257.26	34.73	222.53	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
648	13.56	257.64	34.92	222.72	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
649	13.58	258.02	35.12	222.90	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
650	13.60	258.40	35.32	223.08	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
651	13.62	258.78	35.51	223.27	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
652	13.64	259.16	35.71	223.45	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
653	13.66	259.54	35.90	223.64	0.81	0.213	2.82	0.075	0.83	1.00	0.090	No
654	13.68	259.92	36.10	223.82	0.80	0.213	2.82	0.075	0.83	1.00	0.090	No
655	13.70	260.30	36.30	224.00	0.80	0.213	2.82	0.075	0.83	1.00	0.090	No
656	13.72	260.68	36.49	224.19	0.80	0.213	2.82	0.075	0.83	1.00	0.090	No
657	13.74	261.06	36.69	224.37	0.80	0.213	2.82	0.075	0.83	1.00	0.090	No
658	13.76	261.44	36.89	224.55	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
659	13.78	261.82	37.08	224.74	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
660	13.80	262.20	37.28	224.92	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
661	13.82	262.58	37.47	225.11	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
662	13.84	262.96	37.67	225.29	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
663	13.86	263.34	37.87	225.47	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
664	13.88	263.72	38.06	225.66	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
665	13.90	264.10	38.26	225.84	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
666	13.92	264.48	38.46	226.02	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
667	13.94	264.86	38.65	226.21	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
668	13.96	265.24	38.85	226.39	0.80	0.212	2.82	0.075	0.83	1.00	0.090	No
669	13.98	265.62	39.04	226.58	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
670	14.00	266.00	39.24	226.76	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
671	14.02	266.38	39.44	226.94	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
672	14.04	266.76	39.63	227.13	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
673	14.06	267.14	39.83	227.31	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
674	14.08	267.52	40.02	227.50	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
675	14.10	267.90	40.22	227.68	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
676	14.12	268.28	40.42	227.86	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
677	14.14	268.66	40.61	228.05	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
678	14.16	269.04	40.81	228.23	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
679	14.18	269.42	41.01	228.41	0.79	0.212	2.82	0.075	0.83	1.00	0.090	No
680	14.20	269.80	41.20	228.60	0.79	0.211	2.82	0.075	0.83	1.00	0.090	No
681	14.22	270.18	41.40	228.78	0.79	0.211	2.82	0.075	0.83	1.00	0.090	No
682	14.24	270.56	41.59	228.97	0.79	0.211	2.82	0.075	0.83	1.00	0.090	No
683	14.26	270.94	41.79	229.15	0.79	0.211	2.82	0.075	0.83	1.00	0.090	No
684	14.28	271.32	41.99	229.33	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
685	14.30	271.70	42.18	229.52	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
686	14.32	272.08	42.38	229.70	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
687	14.34	272.46	42.58	229.88	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
688	14.36	272.84	42.77	230.07	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
689	14.38	273.22	42.97	230.25	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
690	14.40	273.60	43.16	230.44	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
691	14.42	273.98	43.36	230.62	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
692	14.44	274.36	43.56	230.80	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
693	14.46	274.74	43.75	230.99	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
694	14.48	275.12	43.95	231.17	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
695	14.50	275.50	44.15	231.36	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
696	14.52	275.88	44.34	231.54	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
697	14.54	276.26	44.54	231.72	0.78	0.211	2.82	0.075	0.83	1.00	0.090	No
698	14.56	276.64	44.73	231.91	0.78	0.210	2.82	0.075	0.83	1.00	0.090	No
699	14.58	277.02	44.93	232.09	0.77	0.210	2.82	0.075	0.83	1.00	0.090	No
700	14.60	277.40	45.13	232.27	0.77	0.210	2.82	0.075	0.83	1.00	0.090	No
701	14.62	277.78	45.32	232.46	0.77	0.210	2.82	0.075	0.83	1.00	0.090	No
702	14.64	278.16	45.52	232.64	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
703	14.66	278.54	45.71	232.83	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
704	14.68	278.92	45.91	233.01	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
705	14.70	279.30	46.11	233.19	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
706	14.72	279.68	46.30	233.38	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
707	14.74	280.06	46.50	233.56	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
708	14.76	280.44	46.70	233.74	0.77	0.210	2.82	0.074	0.83	1.00	0.090	No
709	14.78	280.82	46.89	233.93	0.77	0.210	2.82	0.074	0.82	1.00	0.090	No
710	14.80	281.20	47.09	234.11	0.77	0.210	2.82	0.074	0.82	1.00	0.090	No
711	14.82	281.58	47.28	234.30	0.77	0.210	2.82	0.074	0.82	1.00	0.090	No
712	14.84	281.96	47.48	234.48	0.77	0.210	2.82	0.074	0.82	1.00	0.090	No
713	14.86	282.34	47.68	234.66	0.77	0.210	2.82	0.074	0.82	1.00	0.090	No
714	14.88	282.72	47.87	234.85	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
715	14.90	283.10	48.07	235.03	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
716	14.92	283.48	48.27	235.21	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
717	14.94	283.86	48.46	235.40	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
718	14.96	284.24	48.66	235.58	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
719	14.98	284.62	48.85	235.77	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
720	15.00	285.00	49.05	235.95	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No



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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
721	15.02	285.38	49.25	236.13	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
722	15.04	285.76	49.44	236.32	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
723	15.06	286.14	49.64	236.50	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
724	15.08	286.52	49.83	236.69	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
725	15.10	286.90	50.03	236.87	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
726	15.12	287.28	50.23	237.05	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
727	15.14	287.66	50.42	237.24	0.76	0.209	2.82	0.074	0.82	1.00	0.090	No
728	15.16	288.04	50.62	237.42	0.76	0.208	2.82	0.074	0.82	1.00	0.090	No
729	15.18	288.42	50.82	237.60	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
730	15.20	288.80	51.01	237.79	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
731	15.22	289.18	51.21	237.97	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
732	15.24	289.56	51.40	238.16	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
733	15.26	289.94	51.60	238.34	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
734	15.28	290.32	51.80	238.52	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
735	15.30	290.70	51.99	238.71	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
736	15.32	291.08	52.19	238.89	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
737	15.34	291.46	52.39	239.07	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
738	15.36	291.84	52.58	239.26	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
739	15.38	292.22	52.78	239.44	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
740	15.40	292.60	52.97	239.63	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
741	15.42	292.98	53.17	239.81	0.75	0.208	2.82	0.074	0.82	1.00	0.090	No
742	15.44	293.36	53.37	239.99	0.75	0.207	2.82	0.074	0.82	1.00	0.090	No
743	15.46	293.74	53.56	240.18	0.75	0.207	2.82	0.073	0.82	1.00	0.090	No
744	15.48	294.12	53.76	240.36	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
745	15.50	294.50	53.95	240.55	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
746	15.52	294.88	54.15	240.73	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
747	15.54	295.26	54.35	240.91	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
748	15.56	295.64	54.54	241.10	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
749	15.58	296.02	54.74	241.28	0.74	0.207	2.82	0.073	0.82	1.00	0.090	No
750	15.60	296.40	54.94	241.46	0.74	0.207	2.82	0.073	0.82	1.00	0.089	No
751	15.62	296.78	55.13	241.65	0.74	0.207	2.82	0.073	0.82	1.00	0.089	No
752	15.64	297.16	55.33	241.83	0.74	0.207	2.82	0.073	0.82	1.00	0.089	No
753	15.66	297.54	55.52	242.02	0.74	0.207	2.82	0.073	0.82	1.00	0.089	No
754	15.68	297.92	55.72	242.20	0.74	0.207	2.82	0.073	0.82	1.00	0.089	No
755	15.70	298.30	55.92	242.38	0.74	0.206	2.82	0.073	0.82	1.00	0.089	No
756	15.72	298.68	56.11	242.57	0.74	0.206	2.82	0.073	0.82	1.00	0.089	No
757	15.74	299.06	56.31	242.75	0.74	0.206	2.82	0.073	0.82	1.00	0.089	No
758	15.76	299.44	56.51	242.93	0.74	0.206	2.82	0.073	0.82	1.00	0.089	No
759	15.78	299.82	56.70	243.12	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
760	15.80	300.20	56.90	243.30	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
761	15.82	300.58	57.09	243.49	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
762	15.84	300.96	57.29	243.67	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
763	15.86	301.34	57.49	243.85	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
764	15.88	301.72	57.68	244.04	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
765	15.90	302.10	57.88	244.22	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
766	15.92	302.48	58.08	244.40	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
767	15.94	302.86	58.27	244.59	0.73	0.206	2.82	0.073	0.82	1.00	0.089	No
768	15.96	303.24	58.47	244.77	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>eq</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
769	15.98	303.62	58.66	244.96	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
770	16.00	304.00	58.86	245.14	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
771	16.02	304.38	59.06	245.32	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
772	16.04	304.76	59.25	245.51	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
773	16.06	305.14	59.45	245.69	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
774	16.08	305.52	59.64	245.88	0.73	0.205	2.82	0.073	0.82	1.00	0.089	No
775	16.10	305.90	59.84	246.06	0.72	0.205	2.82	0.073	0.82	1.00	0.089	No
776	16.12	306.28	60.04	246.24	0.72	0.205	2.82	0.073	0.82	1.00	0.089	No
777	16.14	306.66	60.23	246.43	0.72	0.205	2.82	0.073	0.82	1.00	0.089	No
778	16.16	307.04	60.43	246.61	0.72	0.205	2.82	0.072	0.81	1.00	0.089	No
779	16.18	307.42	60.63	246.79	0.72	0.205	2.82	0.072	0.81	1.00	0.089	No
780	16.20	307.80	60.82	246.98	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
781	16.22	308.18	61.02	247.16	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
782	16.24	308.56	61.21	247.35	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
783	16.26	308.94	61.41	247.53	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
784	16.28	309.32	61.61	247.71	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
785	16.30	309.70	61.80	247.90	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
786	16.32	310.08	62.00	248.08	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
787	16.34	310.46	62.20	248.26	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
788	16.36	310.84	62.39	248.45	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
789	16.38	311.22	62.59	248.63	0.72	0.204	2.82	0.072	0.81	1.00	0.089	No
790	16.40	311.60	62.78	248.82	0.71	0.204	2.82	0.072	0.81	1.00	0.089	No
791	16.42	311.98	62.98	249.00	0.71	0.204	2.82	0.072	0.81	1.00	0.089	No
792	16.44	312.36	63.18	249.18	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
793	16.46	312.74	63.37	249.37	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
794	16.48	313.12	63.57	249.55	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
795	16.50	313.50	63.77	249.74	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
796	16.52	313.88	63.96	249.92	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
797	16.54	314.26	64.16	250.10	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
798	16.56	314.64	64.35	250.29	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
799	16.58	315.02	64.55	250.47	0.71	0.203	2.82	0.072	0.81	1.00	0.089	No
800	16.60	315.40	64.75	250.65	0.71	0.203	2.82	0.072	0.81	1.00	0.088	No
801	16.62	315.78	64.94	250.84	0.71	0.203	2.82	0.072	0.81	1.00	0.088	No
802	16.64	316.16	65.14	251.02	0.71	0.203	2.82	0.072	0.81	1.00	0.088	No
803	16.66	316.54	65.33	251.21	0.71	0.203	2.82	0.072	0.81	1.00	0.088	No
804	16.68	316.92	65.53	251.39	0.71	0.202	2.82	0.072	0.81	1.00	0.088	No
805	16.70	317.30	65.73	251.57	0.71	0.202	2.82	0.072	0.81	1.00	0.088	No

**Abbreviations**

Depth:	Depth from free surface, at which CPT was performed (m)
$\sigma_v$ :	Total overburden pressure at test point (KPa)
$u_0$ :	Water pressure at test point (KPa)
$\sigma_v'$ :	Effective overburden pressure based on GWT during earthquake (KPa)
$r_d$ :	Nonlinear shear mass factor
CSR:	Cyclic Stress Ratio
MSF:	Magnitude Scaling Factor
CSR <sub>eq</sub> :	CSR adjusted for M=7.5
$K_\sigma$ :	Effective overburden stress factor
CSR*:	CSR fully adjusted

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
1	0.62	1.00	2.94	4.72	0.99	16.80	6.07	101.98	4.000	No	Yes	2.00
2	0.64	1.00	3.01	6.07	1.00	16.79	6.84	114.92	4.000	No	Yes	2.00
3	0.66	1.00	2.99	5.74	1.00	16.79	6.66	111.84	4.000	No	Yes	2.00
4	0.68	0.97	3.01	5.94	1.00	16.21	6.90	111.88	4.000	No	Yes	2.00
5	0.70	1.00	2.99	5.74	1.00	16.77	6.67	111.84	4.000	No	Yes	2.00
6	0.72	1.03	2.99	5.88	1.00	17.33	6.63	114.87	4.000	No	Yes	2.00
7	0.74	1.17	2.91	5.21	0.99	19.59	5.84	114.42	4.000	No	Yes	2.00
8	0.76	1.17	2.91	5.21	0.99	19.59	5.84	114.42	4.000	No	Yes	2.00
9	0.78	1.17	2.91	5.21	0.99	19.58	5.84	114.42	4.000	No	Yes	2.00
10	0.80	1.10	2.95	5.53	1.00	18.44	6.22	114.70	4.000	No	Yes	2.00
11	0.82	1.10	2.95	5.53	1.00	18.44	6.22	114.70	4.000	No	Yes	2.00
12	0.84	1.07	2.97	5.71	1.00	17.86	6.43	114.80	4.000	No	Yes	2.00
13	0.86	1.03	2.99	5.90	1.00	17.29	6.64	114.88	4.000	No	Yes	2.00
14	0.88	1.00	3.01	6.10	1.00	16.72	6.88	114.93	4.000	No	Yes	2.00
15	0.90	1.00	3.01	6.10	1.00	16.71	6.88	114.93	4.000	No	Yes	2.00
16	0.92	1.03	3.01	6.23	1.00	17.27	6.83	117.90	4.000	No	Yes	2.00
17	0.94	1.07	3.02	6.67	1.00	17.83	6.94	123.67	4.000	No	Yes	2.00
18	0.96	1.10	3.03	7.09	1.00	18.39	7.03	129.22	4.000	No	Yes	2.00
19	0.98	1.10	3.03	7.09	1.00	18.38	7.03	129.22	4.000	No	Yes	2.00
20	1.00	1.10	3.03	7.09	1.00	18.38	7.03	129.22	4.000	No	Yes	2.00
21	1.02	1.10	3.03	7.09	1.00	18.37	7.03	129.22	4.000	No	Yes	2.00
22	1.04	1.13	3.02	7.18	1.00	18.93	6.97	131.92	4.000	No	Yes	2.00
23	1.06	1.13	3.02	7.19	1.00	18.92	6.97	131.92	4.000	No	Yes	2.00
24	1.08	1.13	3.03	7.49	1.00	18.92	7.11	134.57	4.000	No	Yes	2.00
25	1.10	1.07	3.07	7.97	1.00	17.78	7.57	134.50	4.000	No	Yes	2.00
26	1.12	1.10	3.05	7.73	1.00	18.34	7.34	134.55	4.000	No	Yes	2.00
27	1.14	1.13	3.01	6.90	1.00	18.90	6.84	129.20	4.000	No	Yes	2.00
28	1.16	1.17	2.98	6.41	1.00	19.46	6.49	126.35	4.000	No	Yes	2.00
29	1.18	1.13	2.98	6.30	1.00	18.89	6.54	123.58	4.000	No	Yes	2.00
30	1.20	1.03	3.03	6.60	1.00	17.18	7.03	120.83	4.000	No	Yes	2.00
31	1.22	1.03	3.01	6.27	1.00	17.17	6.87	117.90	4.000	No	Yes	2.00
32	1.24	1.03	3.00	5.94	1.00	17.17	6.69	114.89	4.000	No	Yes	2.00
33	1.26	1.10	2.94	5.27	1.00	18.29	6.10	111.59	4.000	No	Yes	2.00
34	1.28	1.10	2.94	5.27	1.00	18.29	6.10	111.59	4.000	No	Yes	2.00
35	1.30	1.10	2.94	5.27	1.00	18.28	6.10	111.59	4.000	No	Yes	2.00
36	1.32	1.13	2.94	5.41	0.99	18.84	6.08	114.61	4.000	No	Yes	2.00
37	1.34	1.17	2.94	5.55	0.99	19.40	6.06	117.56	4.000	No	Yes	2.00
38	1.36	1.23	2.92	5.52	0.99	20.53	5.86	120.29	4.000	No	Yes	2.00
39	1.38	1.33	2.90	5.61	0.98	22.22	5.66	125.69	4.000	No	Yes	2.00
40	1.40	1.40	2.88	5.58	0.97	23.35	5.49	128.20	4.000	No	Yes	2.00
41	1.42	1.43	2.88	5.69	0.97	23.91	5.47	130.84	4.000	No	Yes	2.00
42	1.44	1.47	2.86	5.56	0.97	24.47	5.34	130.64	4.000	No	Yes	2.00
43	1.46	1.47	2.86	5.56	0.97	24.46	5.34	130.64	4.000	No	Yes	2.00
44	1.48	1.47	2.85	5.33	0.96	24.46	5.23	127.79	4.000	No	Yes	2.00
45	1.50	1.37	2.88	5.48	0.97	22.75	5.52	125.51	4.000	No	Yes	2.00
46	1.52	1.33	2.87	5.11	0.97	22.18	5.40	119.77	4.000	No	Yes	2.00
47	1.54	1.30	2.87	4.98	0.97	21.60	5.41	116.90	4.000	No	Yes	2.00
48	1.56	1.30	2.85	4.72	0.96	21.60	5.27	113.76	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
49	1.58	1.27	2.87	4.85	0.97	21.02	5.42	113.97	4.000	No	Yes	2.00
50	1.60	1.23	2.87	4.71	0.97	20.45	5.43	110.96	4.000	No	Yes	2.00
51	1.62	1.20	2.87	4.56	0.97	19.88	5.43	107.88	4.000	No	Yes	2.00
52	1.64	1.27	2.84	4.32	0.96	21.00	5.12	107.46	4.000	No	Yes	2.00
53	1.66	1.30	2.84	4.47	0.96	21.56	5.13	110.55	4.000	No	Yes	2.00
54	1.68	1.40	2.82	4.63	0.95	23.26	5.00	116.27	4.000	No	Yes	2.00
55	1.70	1.43	2.81	4.52	0.95	23.82	4.87	116.04	4.000	No	Yes	2.00
56	1.72	1.50	2.80	4.54	0.94	24.94	4.76	118.66	4.000	No	Yes	2.00
57	1.74	1.53	2.80	4.67	0.94	25.50	4.76	121.46	4.000	No	Yes	2.00
58	1.76	1.57	2.81	5.00	0.95	26.06	4.88	127.14	4.000	No	Yes	2.00
59	1.78	1.57	2.80	4.78	0.94	26.06	4.77	124.21	4.000	No	Yes	2.00
60	1.80	1.47	2.81	4.65	0.95	24.35	4.88	118.91	4.000	No	Yes	2.00
61	1.82	1.43	2.78	4.05	0.93	23.78	4.61	109.63	4.000	No	Yes	2.00
62	1.84	1.40	2.79	4.15	0.94	23.21	4.74	109.88	4.000	No	Yes	2.00
63	1.86	1.37	2.77	3.76	0.93	22.63	4.57	103.38	4.000	No	Yes	2.00
64	1.88	1.30	2.79	3.69	0.94	21.49	4.67	100.36	4.000	No	Yes	2.00
65	1.90	1.37	2.71	3.01	0.91	22.62	4.09	92.50	4.000	No	Yes	2.00
66	1.92	1.57	2.60	2.40	0.87	26.01	3.35	87.18	4.000	No	Yes	2.00
67	1.94	1.73	2.54	2.16	0.84	28.84	2.99	86.09	4.000	No	No	2.00
68	1.96	1.73	2.52	1.97	0.83	28.83	2.85	82.22	4.000	No	No	2.00
69	1.98	1.57	2.60	2.40	0.87	25.99	3.35	87.18	4.000	No	Yes	2.00
70	2.00	1.37	2.69	2.76	0.90	22.59	3.92	88.64	4.000	No	Yes	2.00
71	2.02	1.20	2.80	3.44	0.94	19.75	4.75	93.74	4.000	No	Yes	2.00
72	2.04	1.10	2.87	4.08	0.97	18.04	5.44	98.09	4.000	No	Yes	2.00
73	2.06	1.07	2.91	4.54	0.99	17.47	5.83	101.82	4.000	No	Yes	2.00
74	2.08	1.07	2.93	4.87	0.99	17.46	6.03	105.24	4.000	No	Yes	2.00
75	2.10	1.13	2.89	4.57	0.98	18.59	5.65	104.93	4.000	No	Yes	2.00
76	2.12	1.13	2.91	4.88	0.99	18.58	5.83	108.28	4.000	No	Yes	2.00
77	2.14	1.23	2.88	4.75	0.97	20.28	5.48	111.02	4.000	No	Yes	2.00
78	2.16	1.27	2.88	4.90	0.97	20.84	5.47	114.03	4.000	No	Yes	2.00
79	2.18	1.30	2.84	4.50	0.96	21.40	5.17	110.62	4.000	No	Yes	2.00
80	2.20	1.20	2.86	4.32	0.96	19.69	5.31	104.57	4.000	No	Yes	2.00
81	2.22	1.13	2.86	3.97	0.96	18.55	5.28	97.92	4.000	No	Yes	2.00
82	2.24	1.10	2.85	3.78	0.96	17.98	5.25	94.42	4.000	No	Yes	2.00
83	2.26	1.07	2.87	3.91	0.97	17.40	5.44	94.62	4.000	No	Yes	2.00
84	2.28	1.03	2.89	4.04	0.98	16.83	5.63	94.80	4.000	No	Yes	2.00
85	2.30	1.00	2.91	4.18	0.99	16.26	5.84	94.96	4.000	No	Yes	2.00
86	2.32	1.03	2.89	4.04	0.98	16.82	5.64	94.80	4.000	No	Yes	2.00
87	2.34	1.03	2.89	4.05	0.98	16.81	5.64	94.80	4.000	No	Yes	2.00
88	2.36	1.07	2.87	3.91	0.97	17.37	5.45	94.63	4.000	No	Yes	2.00
89	2.38	1.10	2.85	3.79	0.96	17.93	5.27	94.44	4.000	No	Yes	2.00
90	2.40	1.20	2.80	3.47	0.94	19.62	4.78	93.79	4.000	No	Yes	2.00
91	2.42	1.27	2.77	3.28	0.93	20.75	4.50	93.32	4.000	No	Yes	2.00
92	2.44	1.23	2.78	3.37	0.94	20.18	4.64	93.56	4.000	No	Yes	2.00
93	2.46	1.13	2.84	3.68	0.96	18.47	5.10	94.24	4.000	No	Yes	2.00
94	2.48	1.03	2.90	4.06	0.98	16.77	5.66	94.82	4.000	No	Yes	2.00
95	2.50	1.00	2.94	4.55	0.99	16.19	6.09	98.61	4.000	No	Yes	2.00
96	2.52	1.10	2.88	4.12	0.97	17.89	5.49	98.14	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
97	2.54	1.27	2.79	3.56	0.94	20.71	4.69	97.07	4.000	No	Yes	2.00
98	2.56	1.57	2.63	2.63	0.88	25.81	3.53	91.10	4.000	No	Yes	2.00
99	2.58	1.70	2.58	2.42	0.86	28.07	3.21	90.16	4.000	No	No	2.00
100	2.60	1.73	2.55	2.18	0.85	28.63	3.01	86.17	4.000	No	No	2.00
101	2.62	1.57	2.56	1.98	0.85	25.79	3.07	79.21	4.000	No	No	2.00
102	2.64	1.37	2.64	2.28	0.88	22.38	3.60	80.54	4.000	No	Yes	2.00
103	2.66	1.20	2.75	2.90	0.92	19.54	4.40	85.94	4.000	No	Yes	2.00
104	2.68	1.10	2.86	3.81	0.96	17.83	5.30	94.47	4.000	No	Yes	2.00
105	2.70	1.13	2.84	3.70	0.96	18.39	5.13	94.27	4.000	No	Yes	2.00
106	2.72	1.17	2.82	3.59	0.95	18.95	4.96	94.06	4.000	No	Yes	2.00
107	2.74	1.20	2.78	3.19	0.93	19.51	4.61	89.97	4.000	No	Yes	2.00
108	2.76	1.20	2.78	3.20	0.93	19.51	4.61	89.98	4.000	No	Yes	2.00
109	2.78	1.17	2.82	3.59	0.95	18.94	4.97	94.07	4.000	No	Yes	2.00
110	2.80	1.07	2.90	4.28	0.98	17.23	5.71	98.35	4.000	No	Yes	2.00
111	2.82	1.00	2.98	5.28	1.00	16.09	6.56	105.49	4.000	No	Yes	2.00
112	2.84	0.97	3.01	5.48	1.00	15.52	6.80	105.54	4.000	No	Yes	2.00
113	2.86	1.00	2.98	5.29	1.00	16.08	6.56	105.49	4.000	No	Yes	2.00
114	2.88	1.03	2.94	4.77	1.00	16.64	6.13	102.02	4.000	No	Yes	2.00
115	2.90	1.07	2.94	4.94	1.00	17.20	6.12	105.30	4.000	No	Yes	2.00
116	2.92	1.10	2.96	5.43	1.00	17.76	6.29	111.70	4.000	No	Yes	2.00
117	2.94	1.13	2.97	5.88	1.00	18.32	6.43	117.78	4.000	No	Yes	2.00
118	2.96	1.10	3.01	6.39	1.00	17.74	6.81	120.80	4.000	No	Yes	2.00
119	2.98	1.13	3.00	6.50	1.00	18.30	6.75	123.64	4.000	No	Yes	2.00
120	3.00	1.17	2.95	5.71	1.00	18.86	6.24	117.68	4.000	No	Yes	2.00
121	3.02	1.27	2.92	5.51	0.99	20.56	5.85	120.28	4.000	No	Yes	2.00
122	3.04	1.30	2.91	5.63	0.99	21.12	5.83	123.10	4.000	No	Yes	2.00
123	3.06	1.30	2.97	6.71	1.00	21.11	6.36	134.37	4.000	No	Yes	2.00
124	3.08	1.30	2.97	6.71	1.00	21.11	6.37	134.37	4.000	No	Yes	2.00
125	3.10	1.30	2.97	6.71	1.00	21.07	6.37	134.29	4.000	No	Yes	2.00
126	3.12	1.37	2.93	6.12	0.99	21.94	5.95	130.58	4.000	No	Yes	2.00
127	3.14	1.27	2.97	6.63	1.00	20.23	6.47	130.87	4.000	No	Yes	2.00
128	3.16	1.30	2.96	6.45	1.00	20.65	6.31	130.39	4.000	No	Yes	2.00
129	3.18	1.23	2.97	6.25	1.00	19.41	6.42	124.70	4.000	No	Yes	2.00
130	3.20	1.33	2.92	5.76	0.99	20.82	5.94	123.69	4.000	No	Yes	2.00
131	3.22	1.33	2.93	5.76	0.99	20.69	5.96	123.36	4.000	No	Yes	2.00
132	3.24	1.37	2.94	6.13	0.99	21.14	6.08	128.47	4.000	No	Yes	2.00
133	3.26	1.40	2.95	6.48	1.00	21.58	6.18	133.37	4.000	No	Yes	2.00
134	3.28	1.43	2.96	6.81	1.00	22.00	6.27	138.01	4.000	No	Yes	2.00
135	3.30	1.50	2.95	6.96	1.00	22.92	6.21	142.31	4.000	No	Yes	2.00
136	3.32	1.60	2.92	6.72	0.99	24.24	5.92	143.58	4.000	No	Yes	2.00
137	3.34	1.67	2.91	6.65	0.98	25.07	5.79	145.10	4.000	No	Yes	2.00
138	3.36	1.70	2.92	6.93	0.99	25.47	5.86	149.29	4.000	No	Yes	2.00
139	3.38	1.70	2.93	7.13	0.99	25.36	5.96	151.28	4.000	No	Yes	2.00
140	3.40	1.70	2.94	7.34	0.99	25.25	6.07	153.21	4.000	No	Yes	2.00
141	3.42	1.73	2.92	6.99	0.99	25.53	5.88	150.21	4.000	No	Yes	2.00
142	3.44	1.77	2.91	6.86	0.98	25.85	5.79	149.54	4.000	No	Yes	2.00
143	3.46	1.80	2.90	6.73	0.98	26.16	5.69	148.88	4.000	No	Yes	2.00
144	3.48	1.80	2.90	6.73	0.98	26.01	5.71	148.50	4.000	No	Yes	2.00

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

Point ID	Depth (m)	$q_t$ (MPa)	$I_c$	Fr (%)	n	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
145	3.50	1.80	2.90	6.73	0.98	25.87	5.73	148.13	4.000	No	Yes	2.00
146	3.52	1.80	2.90	6.54	0.98	25.69	5.66	145.44	4.000	No	Yes	2.00
147	3.54	1.83	2.90	6.61	0.98	26.03	5.65	147.12	4.000	No	Yes	2.00
148	3.56	1.97	2.85	5.97	0.96	27.63	5.19	143.33	4.000	No	Yes	2.00
149	3.58	2.07	2.83	5.84	0.95	28.84	5.01	144.43	4.000	No	Yes	2.00
150	3.60	2.10	2.81	5.58	0.95	29.09	4.86	141.50	4.000	No	Yes	2.00
151	3.62	2.03	2.84	5.94	0.96	28.11	5.13	144.06	4.000	No	Yes	2.00
152	3.64	1.93	2.86	6.08	0.97	26.62	5.35	142.28	4.000	No	Yes	2.00
153	3.66	1.90	2.88	6.37	0.97	26.07	5.54	144.48	4.000	No	Yes	2.00
154	3.68	1.87	2.90	6.49	0.98	25.50	5.66	144.40	4.000	No	Yes	2.00
155	3.70	1.90	2.88	6.19	0.97	25.77	5.49	141.56	4.000	No	Yes	2.00
156	3.72	1.87	2.87	5.94	0.97	25.15	5.44	136.92	4.000	No	Yes	2.00
157	3.74	1.80	2.87	5.59	0.97	24.07	5.40	130.08	4.000	No	Yes	2.00
158	3.76	1.67	2.91	5.85	0.98	22.20	5.78	128.35	4.000	No	Yes	2.00
159	3.78	1.60	2.94	6.11	0.99	21.23	6.05	128.49	4.000	No	Yes	2.00
160	3.80	1.53	2.95	6.16	1.00	20.24	6.24	126.21	4.000	No	Yes	2.00
161	3.82	1.50	2.96	6.07	1.00	19.67	6.29	123.66	4.000	No	Yes	2.00
162	3.84	1.50	2.91	5.14	0.98	19.47	5.82	113.36	4.000	No	Yes	2.00
163	3.86	1.57	2.87	4.69	0.97	20.18	5.45	110.05	4.000	No	Yes	2.00
164	3.88	1.67	2.84	4.39	0.96	21.32	5.12	109.12	4.000	No	Yes	2.00
165	3.90	1.70	2.85	4.72	0.96	21.69	5.25	113.89	4.000	No	Yes	2.00
166	3.92	1.67	2.87	4.82	0.97	21.17	5.38	113.89	4.000	No	Yes	2.00
167	3.94	1.67	2.87	4.82	0.97	21.07	5.39	113.66	4.000	No	Yes	2.00
168	3.96	1.70	2.86	4.72	0.96	21.37	5.30	113.20	4.000	No	Yes	2.00
169	3.98	1.83	2.82	4.55	0.95	22.93	5.00	114.57	4.000	No	Yes	2.00
170	4.00	1.90	2.80	4.39	0.94	23.63	4.82	113.87	4.000	No	Yes	2.00
171	4.02	1.90	2.82	4.57	0.95	23.55	4.93	116.11	4.000	No	Yes	2.00
172	4.04	1.87	2.84	4.84	0.96	23.06	5.14	118.52	4.000	No	Yes	2.00
173	4.06	1.87	2.84	4.84	0.96	22.95	5.15	118.29	4.000	No	Yes	2.00
174	4.08	1.87	2.83	4.66	0.95	22.81	5.07	115.67	4.000	No	Yes	2.00
175	4.10	1.83	2.83	4.56	0.96	22.28	5.08	113.24	4.000	No	Yes	2.00
176	4.12	1.80	2.84	4.45	0.96	21.76	5.09	110.79	4.000	No	Yes	2.00
177	4.14	1.90	2.80	4.21	0.94	22.84	4.81	109.93	4.000	No	Yes	2.00
178	4.16	2.00	2.77	3.99	0.93	23.92	4.56	109.06	4.000	No	Yes	2.00
179	4.18	2.10	2.76	3.96	0.93	25.01	4.42	110.63	4.000	No	Yes	2.00
180	4.20	2.17	2.73	3.67	0.91	25.65	4.19	107.56	4.000	No	Yes	2.00
181	4.22	2.27	2.70	3.51	0.90	26.70	4.00	106.71	4.000	No	Yes	2.00
182	4.24	2.33	2.68	3.40	0.90	27.35	3.88	106.10	4.000	No	Yes	2.00
183	4.26	2.40	2.68	3.45	0.90	28.03	3.85	107.90	4.000	No	Yes	2.00
184	4.28	2.37	2.69	3.50	0.90	27.53	3.92	107.94	4.000	No	Yes	2.00
185	4.30	2.37	2.69	3.50	0.90	27.41	3.93	107.76	4.000	No	Yes	2.00
186	4.32	2.33	2.70	3.55	0.90	26.91	4.01	107.80	4.000	No	Yes	2.00
187	4.34	2.37	2.71	3.65	0.91	27.20	4.03	109.76	4.000	No	Yes	2.00
188	4.36	2.33	2.72	3.70	0.91	26.71	4.11	109.79	4.000	No	Yes	2.00
189	4.38	2.27	2.72	3.66	0.91	25.82	4.17	107.70	4.000	No	Yes	2.00
190	4.40	2.13	2.74	3.58	0.92	24.16	4.29	103.58	4.000	No	Yes	2.00
191	4.42	2.07	2.75	3.53	0.92	23.29	4.35	101.38	4.000	No	Yes	2.00
192	4.44	2.00	2.76	3.48	0.93	22.42	4.42	99.13	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
193	4.46	1.97	2.75	3.37	0.92	21.93	4.41	96.64	4.000	No	Yes	2.00
194	4.48	1.87	2.77	3.37	0.93	20.70	4.56	94.49	4.000	No	Yes	2.00
195	4.50	1.80	2.80	3.50	0.94	19.87	4.77	94.71	4.000	No	Yes	2.00
196	4.52	1.80	2.83	3.89	0.95	19.82	5.03	99.62	4.000	No	Yes	2.00
197	4.54	1.83	2.82	3.82	0.95	20.10	4.94	99.27	4.000	No	Yes	2.00
198	4.56	1.83	2.82	3.82	0.95	20.01	4.95	99.11	4.000	No	Yes	2.00
199	4.58	1.80	2.79	3.31	0.94	19.52	4.69	91.51	4.000	No	Yes	2.00
200	4.60	1.80	2.79	3.31	0.94	19.43	4.70	91.37	4.000	No	Yes	2.00
201	4.62	1.80	2.76	2.92	0.93	19.32	4.44	85.85	4.000	No	Yes	2.00
202	4.64	1.80	2.74	2.73	0.92	19.22	4.31	82.94	4.000	No	Yes	2.00
203	4.66	1.67	2.77	2.75	0.93	17.68	4.56	80.64	4.000	No	Yes	2.00
204	4.68	1.57	2.81	2.93	0.95	16.52	4.90	81.01	4.000	No	Yes	2.00
205	4.70	1.47	2.88	3.39	0.97	15.37	5.47	84.15	4.000	No	Yes	2.00
206	4.72	1.50	2.88	3.55	0.97	15.68	5.52	86.61	4.000	No	Yes	2.00
207	4.74	1.53	2.90	3.93	0.98	15.99	5.72	91.56	4.000	No	Yes	2.00
208	4.76	1.67	2.87	3.81	0.97	17.37	5.38	93.38	4.000	No	Yes	2.00
209	4.78	1.80	2.85	3.90	0.96	18.75	5.20	97.50	4.000	No	Yes	2.00
210	4.80	1.93	2.80	3.62	0.94	20.09	4.81	96.71	4.000	No	Yes	2.00
211	4.82	2.00	2.80	3.67	0.94	20.73	4.76	98.59	4.000	No	Yes	2.00
212	4.84	2.00	2.80	3.67	0.94	20.65	4.77	98.44	4.000	No	Yes	2.00
213	4.86	1.93	2.83	3.98	0.95	19.87	5.08	100.89	4.000	No	Yes	2.00
214	4.88	1.80	2.88	4.30	0.97	18.38	5.51	101.30	4.000	No	Yes	2.00
215	4.90	1.73	2.89	4.27	0.98	17.59	5.64	99.13	4.000	No	Yes	2.00
216	4.92	1.70	2.91	4.36	0.98	17.17	5.77	99.08	4.000	No	Yes	2.00
217	4.94	1.83	2.90	4.60	0.98	18.51	5.67	105.03	4.000	No	Yes	2.00
218	4.96	1.97	2.90	4.98	0.98	19.84	5.68	112.63	4.000	No	Yes	2.00
219	4.98	2.10	2.85	4.49	0.96	21.15	5.20	109.89	4.000	No	Yes	2.00
220	5.00	2.17	2.85	4.67	0.96	21.76	5.21	113.45	4.000	No	Yes	2.00
221	5.02	2.23	2.85	4.83	0.96	22.37	5.22	116.88	4.000	No	Yes	2.00
222	5.04	2.33	2.87	5.51	0.97	23.34	5.46	127.34	4.000	No	Yes	2.00
223	5.06	2.37	2.87	5.43	0.97	23.59	5.38	126.99	4.000	No	Yes	2.00
224	5.08	2.27	2.88	5.38	0.97	22.46	5.50	123.59	4.000	No	Yes	2.00
225	5.10	2.07	2.91	5.42	0.99	20.32	5.84	118.59	4.000	No	Yes	2.00
226	5.12	1.67	3.03	6.16	1.00	16.13	7.04	113.53	4.000	No	Yes	2.00
227	5.14	1.60	3.02	5.77	1.00	15.38	7.00	107.68	4.000	No	Yes	2.00
228	5.16	1.60	3.02	5.77	1.00	15.32	7.02	107.49	4.000	No	Yes	2.00
229	5.18	1.80	2.95	5.09	1.00	17.29	6.19	107.07	4.000	No	Yes	2.00
230	5.20	1.80	2.96	5.29	1.00	17.22	6.32	108.84	4.000	No	Yes	2.00
231	5.22	1.80	2.97	5.49	1.00	17.15	6.45	110.55	4.000	No	Yes	2.00
232	5.24	1.83	2.96	5.38	1.00	17.41	6.33	110.31	4.000	No	Yes	2.00
233	5.26	1.87	2.95	5.28	1.00	17.68	6.23	110.06	4.000	No	Yes	2.00
234	5.28	1.90	2.93	5.00	0.99	17.94	6.01	107.89	4.000	No	Yes	2.00
235	5.30	1.87	2.95	5.29	1.00	17.54	6.25	109.68	4.000	No	Yes	2.00
236	5.32	1.83	2.98	5.58	1.00	17.14	6.50	111.41	4.000	No	Yes	2.00
237	5.34	1.83	2.99	5.77	1.00	17.07	6.62	113.03	4.000	No	Yes	2.00
238	5.36	1.90	2.98	5.75	1.00	17.66	6.49	114.54	4.000	No	Yes	2.00
239	5.38	2.03	2.94	5.52	1.00	18.89	6.13	115.89	4.000	No	Yes	2.00
240	5.40	2.17	2.90	5.17	0.98	20.13	5.73	115.38	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
241	5.42	2.30	2.88	5.01	0.97	21.35	5.46	116.57	4.000	No	Yes	2.00
242	5.44	2.40	2.86	4.93	0.96	22.25	5.30	117.82	4.000	No	Yes	2.00
243	5.46	2.47	2.86	5.08	0.96	22.81	5.30	120.87	4.000	No	Yes	2.00
244	5.48	2.53	2.83	4.80	0.95	23.37	5.08	118.73	4.000	No	Yes	2.00
245	5.50	2.60	2.82	4.68	0.95	23.93	4.94	118.31	4.000	No	Yes	2.00
246	5.52	2.67	2.80	4.55	0.94	24.49	4.81	117.88	4.000	No	Yes	2.00
247	5.54	2.73	2.79	4.44	0.94	25.05	4.69	117.45	4.000	No	Yes	2.00
248	5.56	2.67	2.81	4.56	0.94	24.32	4.83	117.54	4.000	No	Yes	2.00
249	5.58	2.57	2.81	4.47	0.95	23.28	4.91	114.26	4.000	No	Yes	2.00
250	5.60	2.40	2.84	4.51	0.96	21.61	5.14	111.13	4.000	No	Yes	2.00
251	5.62	2.37	2.82	4.13	0.95	21.23	4.97	105.60	4.000	No	Yes	2.00
252	5.64	2.33	2.80	3.74	0.94	20.86	4.79	99.83	4.000	No	Yes	2.00
253	5.66	2.30	2.80	3.65	0.94	20.47	4.78	97.84	4.000	No	Yes	2.00
254	5.68	2.23	2.80	3.45	0.94	19.78	4.75	93.90	4.000	No	Yes	2.00
255	5.70	2.17	2.82	3.56	0.95	19.08	4.93	94.01	4.000	No	Yes	2.00
256	5.72	2.13	2.80	3.29	0.94	18.72	4.80	89.81	4.000	No	Yes	2.00
257	5.74	2.10	2.81	3.35	0.95	18.34	4.90	89.81	4.000	No	Yes	2.00
258	5.76	2.10	2.80	3.18	0.94	18.28	4.79	87.54	4.000	No	Yes	2.00
259	5.78	2.17	2.78	3.08	0.93	18.84	4.63	87.21	4.000	No	Yes	2.00
260	5.80	2.17	2.78	3.08	0.94	18.78	4.64	87.10	4.000	No	Yes	2.00
261	5.82	2.20	2.79	3.19	0.94	19.01	4.68	89.02	4.000	No	Yes	2.00
262	5.84	2.17	2.83	3.57	0.95	18.62	5.00	93.13	4.000	No	Yes	2.00
263	5.86	2.27	2.80	3.40	0.94	19.48	4.76	92.70	4.000	No	Yes	2.00
264	5.88	2.27	2.80	3.40	0.94	19.41	4.77	92.58	4.000	No	Yes	2.00
265	5.90	2.23	2.80	3.30	0.94	19.05	4.75	90.54	4.000	No	Yes	2.00
266	5.92	2.13	2.84	3.63	0.96	18.06	5.14	92.74	4.000	No	Yes	2.00
267	5.94	2.07	2.85	3.58	0.96	17.39	5.22	90.79	4.000	No	Yes	2.00
268	5.96	2.00	2.86	3.53	0.96	16.74	5.31	88.80	4.000	No	Yes	2.00
269	5.98	1.87	2.88	3.42	0.97	15.49	5.48	84.79	4.000	No	Yes	2.00
270	6.00	1.77	2.91	3.63	0.99	14.52	5.84	84.86	4.000	No	Yes	2.00
271	6.02	1.67	2.95	3.87	1.00	13.57	6.25	84.85	4.000	No	Yes	2.00
272	6.04	1.60	2.97	3.82	1.00	12.94	6.39	82.68	4.000	No	Yes	2.00
273	6.06	1.47	3.01	3.95	1.00	11.74	6.86	80.48	4.000	No	Yes	2.00
274	6.08	1.40	3.03	3.89	1.00	11.12	7.03	78.17	4.000	No	Yes	2.00
275	6.10	1.33	3.04	3.83	1.00	10.50	7.21	75.78	4.000	No	Yes	2.00
276	6.12	1.30	3.04	3.66	1.00	10.18	7.20	73.34	4.000	No	Yes	2.00
277	6.14	1.23	3.06	3.58	1.00	9.57	7.40	70.79	4.000	No	Yes	2.00
278	6.16	1.17	3.10	3.81	1.00	8.97	7.87	70.55	4.000	No	Yes	2.00
279	6.18	1.13	3.12	3.94	1.00	8.65	8.13	70.35	4.000	No	Yes	2.00
280	6.20	1.07	3.14	3.86	1.00	8.05	8.40	67.63	4.000	No	Yes	2.00
281	6.22	1.00	3.18	4.16	1.00	7.46	9.00	67.19	4.000	No	Yes	2.00
282	6.24	0.97	3.21	4.32	1.00	7.15	9.35	66.87	4.000	No	Yes	2.00
283	6.26	0.97	3.23	4.72	1.00	7.13	9.68	68.99	4.000	No	Yes	2.00
284	6.28	1.00	3.21	4.54	1.00	7.38	9.37	69.14	4.000	No	Yes	2.00
285	6.30	0.93	3.26	4.92	1.00	6.80	10.08	68.49	4.000	No	Yes	2.00
286	6.32	0.90	3.26	4.70	1.00	6.50	10.15	65.90	4.000	No	Yes	2.00
287	6.34	0.90	3.26	4.70	1.00	6.47	10.17	65.79	4.000	No	Yes	2.00
288	6.36	0.93	3.22	4.10	1.00	6.72	9.47	63.70	4.000	No	Yes	2.00



:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
289	6.38	0.90	3.24	4.28	1.00	6.42	9.86	63.33	4.000	No	Yes	2.00
290	6.40	0.87	3.27	4.47	1.00	6.13	10.27	62.92	4.000	No	Yes	2.00
291	6.42	0.90	3.27	4.71	1.00	6.38	10.25	65.38	4.000	No	Yes	2.00
292	6.44	0.97	3.22	4.34	1.00	6.90	9.54	65.86	4.000	No	Yes	2.00
293	6.46	1.00	3.20	4.18	1.00	7.15	9.23	65.99	4.000	No	Yes	2.00
294	6.48	0.97	3.22	4.35	1.00	6.85	9.58	65.66	4.000	No	Yes	2.00
295	6.50	0.97	3.27	5.14	1.00	6.83	10.22	69.78	4.000	No	Yes	2.00
296	6.52	0.97	3.27	5.14	1.00	6.80	10.24	69.68	4.000	No	Yes	2.00
297	6.54	1.00	3.25	4.95	1.00	7.05	9.91	69.87	4.000	No	Yes	2.00
298	6.56	0.97	3.25	4.75	1.00	6.76	9.98	67.42	4.000	No	Yes	2.00
299	6.58	1.00	3.25	4.95	1.00	7.00	9.95	69.65	4.000	No	Yes	2.00
300	6.60	1.03	3.23	4.77	1.00	7.24	9.64	69.82	4.000	No	Yes	2.00
301	6.62	1.10	3.21	4.79	1.00	7.75	9.32	72.19	4.000	No	Yes	2.00
302	6.64	1.03	3.23	4.78	1.00	7.19	9.68	69.61	4.000	No	Yes	2.00
303	6.66	1.03	3.25	5.15	1.00	7.17	9.98	71.49	4.000	No	Yes	2.00
304	6.68	1.07	3.21	4.61	1.00	7.40	9.41	69.64	4.000	No	Yes	2.00
305	6.70	1.17	3.17	4.49	1.00	8.16	8.84	72.16	4.000	No	Yes	2.00
306	6.72	1.17	3.15	4.17	1.00	8.14	8.60	69.99	4.000	No	Yes	2.00
307	6.74	1.13	3.19	4.64	1.00	7.85	9.14	71.77	4.000	No	Yes	2.00
308	6.76	1.10	3.20	4.46	1.00	7.56	9.18	69.45	4.000	No	Yes	2.00
309	6.78	1.17	3.16	4.18	1.00	8.06	8.65	69.71	4.000	No	Yes	2.00
310	6.80	1.17	3.14	3.86	1.00	8.03	8.40	67.48	4.000	No	Yes	2.00
311	6.82	1.17	3.18	4.50	1.00	8.00	8.94	71.55	4.000	No	Yes	2.00
312	6.84	1.10	3.24	5.15	1.00	7.46	9.77	72.96	4.000	No	Yes	2.00
313	6.86	1.17	3.23	5.47	1.00	7.95	9.68	76.97	4.000	No	Yes	2.00
314	6.88	1.20	3.20	4.99	1.00	8.18	9.20	75.27	4.000	No	Yes	2.00
315	6.90	1.27	3.18	4.99	1.00	8.66	8.93	77.35	4.000	No	Yes	2.00
316	6.92	1.30	3.16	4.85	1.00	8.89	8.71	77.40	4.000	No	Yes	2.00
317	6.94	1.37	3.17	5.40	1.00	9.36	8.85	82.86	4.000	No	Yes	2.00
318	6.96	1.37	3.20	5.94	1.00	9.33	9.22	86.03	4.000	No	Yes	2.00
319	6.98	1.37	3.22	6.48	1.00	9.31	9.57	89.02	4.000	No	Yes	2.00
320	7.00	1.37	3.23	6.75	1.00	9.28	9.74	90.38	4.000	No	Yes	2.00
321	7.02	1.47	3.19	6.25	1.00	10.00	9.09	90.84	4.000	No	Yes	2.00
322	7.04	1.53	3.16	5.95	1.00	10.46	8.70	91.02	4.000	No	Yes	2.00
323	7.06	1.60	3.12	5.46	1.00	10.93	8.19	89.55	4.000	No	Yes	2.00
324	7.08	1.53	3.15	5.72	1.00	10.40	8.58	89.22	4.000	No	Yes	2.00
325	7.10	1.53	3.16	5.96	1.00	10.37	8.74	90.64	4.000	No	Yes	2.00
326	7.12	1.53	3.16	5.96	1.00	10.33	8.76	90.51	4.000	No	Yes	2.00
327	7.14	1.57	3.13	5.36	1.00	10.55	8.28	87.39	4.000	No	Yes	2.00
328	7.16	1.57	3.12	5.13	1.00	10.52	8.14	85.65	4.000	No	Yes	2.00
329	7.18	1.60	3.09	4.78	1.00	10.73	7.83	83.95	4.000	No	Yes	2.00
330	7.20	1.70	3.08	4.90	1.00	11.43	7.64	87.34	4.000	No	Yes	2.00
331	7.22	1.73	3.07	4.80	1.00	11.64	7.50	87.27	4.000	No	Yes	2.00
332	7.24	1.67	3.10	5.23	1.00	11.12	7.98	88.66	4.000	No	Yes	2.00
333	7.26	1.67	3.09	5.02	1.00	11.08	7.85	86.95	4.000	No	Yes	2.00
334	7.28	1.77	3.06	4.71	1.00	11.77	7.39	86.98	4.000	No	Yes	2.00
335	7.30	1.90	3.01	4.35	1.00	12.70	6.84	86.92	4.000	No	Yes	2.00
336	7.32	1.97	2.99	4.19	1.00	13.14	6.61	86.79	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
337	7.34	1.93	2.98	3.90	1.00	12.86	6.48	83.29	4.000	No	Yes	2.00
338	7.36	1.93	2.95	3.53	1.00	12.83	6.21	79.61	4.000	No	Yes	2.00
339	7.38	1.93	2.96	3.72	1.00	12.79	6.36	81.33	4.000	No	Yes	2.00
340	7.40	2.07	2.95	3.81	1.00	13.71	6.17	84.63	4.000	No	Yes	2.00
341	7.42	2.20	2.93	3.89	0.99	14.65	6.00	87.82	4.000	No	Yes	2.00
342	7.44	2.30	2.89	3.55	0.98	15.40	5.59	86.05	4.000	No	Yes	2.00
343	7.46	2.33	2.87	3.35	0.97	15.64	5.39	84.25	4.000	No	Yes	2.00
344	7.48	2.43	2.83	3.06	0.95	16.39	5.02	82.31	4.000	No	Yes	2.00
345	7.50	2.47	2.82	3.01	0.95	16.61	4.95	82.18	4.000	No	Yes	2.00
346	7.52	2.40	2.81	2.81	0.95	16.10	4.88	78.62	4.000	No	Yes	2.00
347	7.54	2.27	2.84	2.83	0.96	15.06	5.10	76.87	4.000	No	Yes	2.00
348	7.56	2.23	2.86	3.03	0.97	14.73	5.34	78.65	4.000	No	Yes	2.00
349	7.58	2.33	2.87	3.35	0.97	15.37	5.45	83.70	4.000	No	Yes	2.00
350	7.60	2.47	2.88	3.73	0.97	16.24	5.54	89.98	4.000	No	Yes	2.00
351	7.62	2.60	2.86	3.67	0.96	17.18	5.32	91.31	4.000	No	Yes	2.00
352	7.64	2.73	2.85	3.73	0.96	18.10	5.20	94.11	4.000	No	Yes	2.00
353	7.66	2.93	2.80	3.47	0.94	19.57	4.79	93.73	4.000	No	Yes	2.00
354	7.68	3.07	2.78	3.42	0.93	20.51	4.63	94.91	4.000	No	Yes	2.00
355	7.70	3.10	2.78	3.50	0.94	20.69	4.65	96.24	4.000	No	Yes	2.00
356	7.72	3.03	2.80	3.58	0.94	20.12	4.78	96.25	4.000	No	Yes	2.00
357	7.74	2.93	2.82	3.71	0.95	19.31	4.99	96.30	4.000	No	Yes	2.00
358	7.76	2.90	2.80	3.39	0.94	19.09	4.81	91.79	4.000	No	Yes	2.00
359	7.78	2.80	2.82	3.39	0.95	18.31	4.93	90.31	4.000	No	Yes	2.00
360	7.80	2.77	2.83	3.44	0.95	18.00	5.01	90.26	4.000	No	Yes	2.00
361	7.82	2.70	2.86	3.79	0.97	17.40	5.36	93.24	4.000	No	Yes	2.00
362	7.84	2.70	2.87	3.79	0.97	17.35	5.37	93.14	4.000	No	Yes	2.00
363	7.86	2.83	2.83	3.60	0.95	18.30	5.08	92.91	4.000	No	Yes	2.00
364	7.88	3.07	2.80	3.54	0.94	19.94	4.78	95.42	4.000	No	Yes	2.00
365	7.90	3.30	2.80	3.81	0.94	21.50	4.74	101.96	4.000	No	Yes	2.00
366	7.92	3.37	2.80	3.94	0.94	21.89	4.77	104.44	4.000	No	Yes	2.00
367	7.94	3.57	2.74	3.51	0.92	23.39	4.33	101.30	4.000	No	Yes	2.00
368	7.96	3.90	2.67	3.02	0.89	25.92	3.77	97.76	4.000	No	Yes	2.00
369	7.98	4.30	2.60	2.73	0.87	28.91	3.35	96.85	4.000	No	Yes	2.00
370	8.00	4.27	2.64	3.08	0.88	28.44	3.60	102.30	4.000	No	Yes	2.00
371	8.02	3.97	2.68	3.15	0.90	26.16	3.83	100.13	4.000	No	Yes	2.00
372	8.04	3.73	2.70	3.17	0.90	24.41	4.00	97.75	4.000	No	Yes	2.00
373	8.06	4.17	2.57	2.33	0.86	27.87	3.16	88.12	4.000	No	No	2.00
374	8.08	5.17	2.43	1.86	0.80	35.57	2.44	86.66	4.000	No	No	2.00
375	8.10	6.17	2.33	1.66	0.76	43.26	2.06	88.97	4.000	No	No	2.00
376	8.12	6.60	2.34	1.86	0.77	46.22	2.09	96.41	4.000	No	No	2.00
377	8.14	6.63	2.37	2.06	0.78	46.15	2.19	101.09	4.000	No	No	2.00
378	8.16	6.50	2.40	2.21	0.79	44.90	2.30	103.42	4.000	No	No	2.00
379	8.18	6.30	2.43	2.33	0.80	43.19	2.42	104.65	4.000	No	No	2.00
380	8.20	5.90	2.48	2.55	0.82	39.94	2.66	106.17	4.000	No	No	2.00
381	8.22	5.43	2.51	2.59	0.83	36.40	2.83	103.06	4.000	No	No	2.00
382	8.24	5.10	2.49	2.23	0.82	34.15	2.73	93.07	4.000	No	No	2.00
383	8.26	5.17	2.38	1.53	0.78	35.21	2.24	78.84	4.000	No	No	2.00
384	8.28	5.70	2.22	0.96	0.72	39.96	1.72	68.86	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
385	8.30	6.57	2.08	0.68	0.67	47.28	1.42	67.11	4.000	No	No	2.00
386	8.32	7.37	1.99	0.55	0.63	53.96	1.28	69.28	4.000	No	No	2.00
387	8.34	8.03	1.97	0.59	0.62	59.06	1.26	74.41	4.000	No	No	2.00
388	8.36	8.50	1.95	0.60	0.62	62.68	1.24	77.57	4.000	No	No	2.00
389	8.38	8.80	1.94	0.62	0.61	64.91	1.23	79.87	4.000	No	No	2.00
390	8.40	8.83	1.94	0.61	0.61	65.09	1.23	79.96	4.000	No	No	2.00
391	8.42	8.73	1.96	0.66	0.62	63.98	1.25	80.22	4.000	No	No	2.00
392	8.44	8.57	2.02	0.79	0.64	62.03	1.32	82.02	4.000	No	No	2.00
393	8.46	8.40	2.08	0.97	0.67	60.03	1.42	85.04	4.000	No	No	2.00
394	8.48	8.13	2.12	1.09	0.68	57.54	1.50	86.07	4.000	No	No	2.00
395	8.50	7.60	2.17	1.17	0.70	53.16	1.59	84.55	4.000	No	No	2.00
396	8.52	6.80	2.20	1.10	0.71	47.11	1.66	78.12	4.000	No	No	2.00
397	8.54	5.73	2.31	1.32	0.76	38.65	1.98	76.65	4.000	No	No	2.00
398	8.56	4.63	2.44	1.57	0.81	30.22	2.49	75.23	4.000	No	No	2.00
399	8.58	3.67	2.59	1.90	0.86	23.00	3.25	74.71	4.000	No	No	2.00
400	8.60	3.00	2.70	2.12	0.90	18.21	3.97	72.30	4.000	No	Yes	2.00
401	8.62	2.67	2.76	2.26	0.93	15.83	4.48	70.93	4.000	No	Yes	2.00
402	8.64	2.47	2.82	2.46	0.95	14.38	4.94	71.06	4.000	No	Yes	2.00
403	8.66	2.33	2.81	2.15	0.94	13.55	4.84	65.60	4.000	No	Yes	2.00
404	8.68	2.17	2.82	2.00	0.95	12.45	4.96	61.70	4.000	No	Yes	2.00
405	8.70	1.93	2.83	1.70	0.95	10.95	5.05	55.24	4.000	No	Yes	2.00
406	8.72	1.70	2.89	1.74	0.98	9.37	5.64	52.80	4.000	No	Yes	2.00
407	8.74	1.60	2.94	1.86	0.99	8.66	6.08	52.65	4.000	No	Yes	2.00
408	8.76	1.70	2.95	2.17	1.00	9.21	6.20	57.17	4.000	No	Yes	2.00
409	8.78	2.10	2.87	2.24	0.97	11.78	5.38	63.43	4.000	No	Yes	2.00
410	8.80	2.63	2.73	1.89	0.92	15.40	4.22	64.94	4.000	No	Yes	2.00
411	8.82	3.30	2.58	1.49	0.86	20.12	3.18	64.00	4.000	No	No	2.00
412	8.84	3.73	2.51	1.40	0.83	23.17	2.82	65.31	4.000	No	No	2.00
413	8.86	3.93	2.52	1.59	0.84	24.36	2.89	70.28	4.000	No	No	2.00
414	8.88	3.83	2.61	2.09	0.87	23.26	3.37	78.41	4.000	No	Yes	2.00
415	8.90	3.50	2.72	2.70	0.91	20.65	4.11	84.83	4.000	No	Yes	2.00
416	8.92	3.20	2.78	2.97	0.93	18.52	4.60	85.15	4.000	No	Yes	2.00
417	8.94	3.10	2.80	3.07	0.94	17.78	4.79	85.17	4.000	No	Yes	2.00
418	8.96	3.30	2.75	2.77	0.92	19.16	4.36	83.45	4.000	No	Yes	2.00
419	8.98	3.60	2.69	2.53	0.90	21.20	3.91	82.97	4.000	No	Yes	2.00
420	9.00	3.67	2.64	2.19	0.88	21.77	3.60	78.32	4.000	No	Yes	2.00
421	9.02	3.47	2.64	2.02	0.88	20.48	3.60	73.82	4.000	No	Yes	2.00
422	9.04	3.20	2.64	1.76	0.88	18.80	3.58	67.33	4.000	No	Yes	2.00
423	9.06	3.13	2.62	1.58	0.87	18.42	3.46	63.70	4.000	No	Yes	2.00
424	9.08	3.37	2.57	1.46	0.86	20.03	3.16	63.37	4.000	No	No	2.00
425	9.10	3.63	2.52	1.35	0.84	21.90	2.88	63.04	4.000	No	No	2.00
426	9.12	3.90	2.51	1.43	0.83	23.60	2.81	66.31	4.000	No	No	2.00
427	9.14	3.90	2.51	1.43	0.83	23.55	2.81	66.26	4.000	No	No	2.00
428	9.16	3.83	2.57	1.73	0.85	22.81	3.13	71.33	4.000	No	No	2.00
429	9.18	3.63	2.57	1.64	0.86	21.48	3.17	68.19	4.000	No	No	2.00
430	9.20	3.47	2.58	1.52	0.86	20.41	3.18	64.84	4.000	No	No	2.00
431	9.22	3.17	2.58	1.34	0.86	18.48	3.22	59.48	4.000	No	No	2.00
432	9.24	2.87	2.65	1.49	0.89	16.34	3.66	59.77	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
433	9.26	2.47	2.76	1.75	0.93	13.58	4.43	60.13	4.000	No	Yes	2.00
434	9.28	2.37	2.72	1.37	0.91	13.07	4.12	53.83	4.000	No	Yes	2.00
435	9.30	2.87	2.53	0.87	0.84	16.69	2.92	48.67	4.000	No	No	2.00
436	9.32	3.87	2.22	0.36	0.72	24.42	1.00	24.42	4.000	No	No	2.00
437	9.34	4.73	2.13	0.37	0.69	30.71	1.00	30.71	4.000	No	No	2.00
438	9.36	4.97	2.16	0.49	0.70	32.01	1.00	32.01	4.000	No	No	2.00
439	9.38	4.87	2.25	0.71	0.73	30.67	1.81	55.54	4.000	No	No	2.00
440	9.40	4.63	2.35	0.97	0.77	28.49	2.12	60.35	4.000	No	No	2.00
441	9.42	4.57	2.38	1.06	0.78	27.84	2.23	61.97	4.000	No	No	2.00
442	9.44	4.50	2.41	1.16	0.79	27.20	2.34	63.60	4.000	No	No	2.00
443	9.46	4.47	2.39	1.09	0.79	27.01	2.29	61.89	4.000	No	No	2.00
444	9.48	4.10	2.45	1.19	0.81	24.33	2.55	61.94	4.000	No	No	2.00
445	9.50	3.43	2.56	1.33	0.85	19.69	3.08	60.60	4.000	No	No	2.00
446	9.52	2.73	2.72	1.70	0.91	14.88	4.12	61.28	4.000	No	Yes	2.00
447	9.54	2.17	2.88	2.18	0.97	11.13	5.52	61.44	4.000	No	Yes	2.00
448	9.56	1.87	2.99	2.57	1.00	9.28	6.60	61.20	4.000	No	Yes	2.00
449	9.58	1.63	3.08	2.99	1.00	7.97	7.65	60.96	4.000	No	Yes	2.00
450	9.60	1.50	3.14	3.29	1.00	7.22	8.39	60.60	4.000	No	Yes	2.00
451	9.62	1.40	3.20	3.83	1.00	6.66	9.29	61.85	4.000	No	Yes	2.00
452	9.64	1.37	3.24	4.22	1.00	6.46	9.78	63.20	4.000	No	Yes	2.00
453	9.66	1.37	3.25	4.51	1.00	6.45	10.03	64.65	4.000	No	Yes	2.00
454	9.68	1.40	3.25	4.66	1.00	6.61	10.02	66.25	4.000	No	Yes	2.00
455	9.70	1.37	3.29	5.07	1.00	6.42	10.50	67.37	4.000	No	Yes	2.00
456	9.72	1.37	3.29	5.08	1.00	6.40	10.52	67.30	4.000	No	Yes	2.00
457	9.74	1.33	3.31	5.23	1.00	6.20	10.80	66.98	4.000	No	Yes	2.00
458	9.76	1.30	3.31	5.08	1.00	6.01	10.86	65.28	4.000	No	Yes	2.00
459	9.78	1.23	3.35	5.41	1.00	5.64	11.47	64.65	4.000	No	Yes	2.00
460	9.80	1.20	3.37	5.59	1.00	5.44	11.80	64.26	4.000	No	Yes	2.00
461	9.82	1.20	3.38	5.92	1.00	5.43	12.06	65.49	4.000	No	Yes	2.00
462	9.84	1.23	3.37	5.73	1.00	5.60	11.75	65.76	4.000	No	Yes	2.00
463	9.86	1.27	3.35	5.56	1.00	5.76	11.46	66.00	4.000	No	Yes	2.00
464	9.88	1.33	3.34	5.82	1.00	6.10	11.32	69.09	4.000	No	Yes	2.00
465	9.90	1.40	3.31	5.50	1.00	6.44	10.80	69.55	4.000	No	Yes	2.00
466	9.92	1.47	3.29	5.48	1.00	6.78	10.50	71.23	4.000	No	Yes	2.00
467	9.94	1.50	3.26	5.08	1.00	6.94	10.09	70.07	4.000	No	Yes	2.00
468	9.96	1.50	3.27	5.34	1.00	6.93	10.29	71.30	4.000	No	Yes	2.00
469	9.98	1.50	3.27	5.34	1.00	6.91	10.31	71.23	4.000	No	Yes	2.00
470	10.00	1.53	3.27	5.46	1.00	7.07	10.27	72.62	4.000	No	Yes	2.00
471	10.02	1.50	3.31	6.11	1.00	6.89	10.86	74.78	4.000	No	Yes	2.00
472	10.04	1.53	3.29	5.96	1.00	7.05	10.63	74.98	4.000	No	Yes	2.00
473	10.06	1.53	3.30	5.96	1.00	7.04	10.64	74.94	4.000	No	Yes	2.00
474	10.08	1.60	3.25	5.44	1.00	7.38	10.04	74.11	4.000	No	Yes	2.00
475	10.10	1.60	3.26	5.44	1.00	7.38	10.04	74.07	4.000	No	Yes	2.00
476	10.12	1.63	3.25	5.55	1.00	7.54	10.01	75.45	4.000	No	Yes	2.00
477	10.14	1.67	3.24	5.43	1.00	7.71	9.81	75.59	4.000	No	Yes	2.00
478	10.16	1.63	3.26	5.79	1.00	7.52	10.18	76.57	4.000	No	Yes	2.00
479	10.18	1.63	3.26	5.79	1.00	7.51	10.19	76.53	4.000	No	Yes	2.00
480	10.20	1.63	3.27	5.79	1.00	7.50	10.19	76.49	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
481	10.22	1.70	3.24	5.53	1.00	7.84	9.80	76.81	4.000	No	Yes	2.00
482	10.24	1.73	3.21	5.20	1.00	8.01	9.46	75.72	4.000	No	Yes	2.00
483	10.26	1.70	3.23	5.32	1.00	7.82	9.65	75.53	4.000	No	Yes	2.00
484	10.28	1.67	3.24	5.44	1.00	7.64	9.86	75.33	4.000	No	Yes	2.00
485	10.30	1.60	3.27	5.70	1.00	7.29	10.28	74.91	4.000	No	Yes	2.00
486	10.32	1.57	3.29	5.84	1.00	7.10	10.51	74.66	4.000	No	Yes	2.00
487	10.34	1.53	3.29	5.73	1.00	6.92	10.58	73.22	4.000	No	Yes	2.00
488	10.36	1.53	3.28	5.49	1.00	6.91	10.41	71.96	4.000	No	Yes	2.00
489	10.38	1.57	3.24	4.87	1.00	7.08	9.83	69.58	4.000	No	Yes	2.00
490	10.40	1.60	3.21	4.52	1.00	7.24	9.44	68.37	4.000	No	Yes	2.00
491	10.42	1.63	3.19	4.18	1.00	7.40	9.06	67.08	4.000	No	Yes	2.00
492	10.44	1.70	3.17	4.22	1.00	7.74	8.88	68.70	4.000	No	Yes	2.00
493	10.46	1.77	3.17	4.46	1.00	8.07	8.87	71.62	4.000	No	Yes	2.00
494	10.48	1.83	3.17	4.69	1.00	8.41	8.85	74.42	4.000	No	Yes	2.00
495	10.50	1.87	3.16	4.60	1.00	8.57	8.69	74.49	4.000	No	Yes	2.00
496	10.52	1.93	3.15	4.62	1.00	8.90	8.53	75.92	4.000	No	Yes	2.00
497	10.54	1.97	3.16	4.91	1.00	9.06	8.66	78.47	4.000	No	Yes	2.00
498	10.56	2.03	3.16	5.27	1.00	9.39	8.75	82.19	4.000	No	Yes	2.00
499	10.58	2.10	3.15	5.27	1.00	9.72	8.59	83.49	4.000	No	Yes	2.00
500	10.60	2.17	3.14	5.26	1.00	10.05	8.43	84.76	4.000	No	Yes	2.00
501	10.62	2.20	3.13	5.17	1.00	10.21	8.30	84.80	4.000	No	Yes	2.00
502	10.64	2.27	3.11	5.01	1.00	10.54	8.05	84.88	4.000	No	Yes	2.00
503	10.66	2.27	3.10	4.84	1.00	10.53	7.95	83.68	4.000	No	Yes	2.00
504	10.68	2.27	3.09	4.68	1.00	10.52	7.84	82.46	4.000	No	Yes	2.00
505	10.70	2.20	3.11	4.84	1.00	10.16	8.10	82.32	4.000	No	Yes	2.00
506	10.72	2.20	3.10	4.51	1.00	10.15	7.87	79.87	4.000	No	Yes	2.00
507	10.74	2.17	3.10	4.42	1.00	9.97	7.88	78.55	4.000	No	Yes	2.00
508	10.76	2.17	3.06	3.91	1.00	9.96	7.49	74.63	4.000	No	Yes	2.00
509	10.78	2.17	3.07	3.91	1.00	9.95	7.50	74.60	4.000	No	Yes	2.00
510	10.80	2.17	3.05	3.74	1.00	9.94	7.37	73.22	4.000	No	Yes	2.00
511	10.82	2.13	3.07	3.80	1.00	9.76	7.50	73.16	4.000	No	Yes	2.00
512	10.84	2.10	3.05	3.52	1.00	9.58	7.34	70.31	4.000	No	Yes	2.00
513	10.86	2.07	3.04	3.23	1.00	9.40	7.16	67.34	4.000	No	Yes	2.00
514	10.88	2.03	3.02	2.92	1.00	9.22	6.96	64.20	4.000	No	Yes	2.00
515	10.90	1.97	3.01	2.65	1.00	8.87	6.86	60.86	4.000	No	Yes	2.00
516	10.92	1.87	3.03	2.61	1.00	8.36	7.06	59.06	4.000	No	Yes	2.00
517	10.94	1.70	3.07	2.68	1.00	7.51	7.60	57.09	4.000	No	Yes	2.00
518	10.96	1.57	3.17	3.44	1.00	6.83	8.79	60.09	4.000	No	Yes	2.00
519	10.98	1.50	3.21	3.87	1.00	6.49	9.45	61.34	4.000	No	Yes	2.00
520	11.00	1.53	3.22	4.03	1.00	6.65	9.47	62.93	4.000	No	Yes	2.00
521	11.02	1.67	3.14	3.43	1.00	7.31	8.47	61.89	4.000	No	Yes	2.00
522	11.04	2.03	3.01	2.74	1.00	9.14	6.83	62.39	4.000	No	Yes	2.00
523	11.06	2.77	2.79	1.96	0.94	13.36	4.69	62.69	4.000	No	Yes	2.00
524	11.08	3.67	2.57	1.35	0.86	19.11	3.16	60.36	0.100	No	No	1.15
525	11.10	4.43	2.42	1.03	0.80	24.28	2.40	58.29	0.098	No	No	1.13
526	11.12	4.57	2.42	1.07	0.80	25.04	2.39	59.91	0.100	No	No	1.14
527	11.14	4.60	2.45	1.22	0.81	25.01	2.52	63.06	0.103	No	No	1.18
528	11.16	4.33	2.52	1.46	0.84	23.03	2.88	66.25	0.107	No	No	1.22

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
529	11.18	4.03	2.54	1.40	0.84	21.22	2.98	63.32	0.104	No	No	1.18
530	11.20	3.37	2.63	1.48	0.88	17.07	3.54	60.50	4.000	No	Yes	2.00
531	11.22	2.73	2.74	1.59	0.92	13.23	4.33	57.33	4.000	No	Yes	2.00
532	11.24	2.27	2.88	1.95	0.97	10.39	5.51	57.26	4.000	No	Yes	2.00
533	11.26	1.90	3.01	2.37	1.00	8.36	6.81	56.95	4.000	No	Yes	2.00
534	11.28	1.73	3.07	2.63	1.00	7.53	7.54	56.77	4.000	No	Yes	2.00
535	11.30	1.93	3.01	2.52	1.00	8.51	6.90	58.69	4.000	No	Yes	2.00
536	11.32	2.50	2.87	2.19	0.97	11.56	5.40	62.37	4.000	No	Yes	2.00
537	11.34	3.20	2.69	1.68	0.90	15.81	3.93	62.19	4.000	No	Yes	2.00
538	11.36	3.60	2.59	1.38	0.86	18.42	3.27	60.18	0.100	No	No	1.14
539	11.38	3.50	2.57	1.22	0.86	17.95	3.16	56.71	0.097	No	No	1.10
540	11.40	3.03	2.67	1.42	0.89	14.96	3.81	57.01	4.000	No	Yes	2.00
541	11.42	2.47	2.82	1.78	0.95	11.47	4.99	57.18	4.000	No	Yes	2.00
542	11.44	2.07	2.95	2.16	1.00	9.10	6.24	56.79	4.000	No	Yes	2.00
543	11.46	1.87	3.06	2.83	1.00	8.11	7.42	60.14	4.000	No	Yes	2.00
544	11.48	1.80	3.12	3.37	1.00	7.77	8.13	63.15	4.000	No	Yes	2.00
545	11.50	1.77	3.16	3.88	1.00	7.60	8.68	65.94	4.000	No	Yes	2.00
546	11.52	1.73	3.14	3.52	1.00	7.42	8.48	62.94	4.000	No	Yes	2.00
547	11.54	1.67	3.15	3.45	1.00	7.09	8.63	61.21	4.000	No	Yes	2.00
548	11.56	1.60	3.15	3.14	1.00	6.76	8.56	57.84	4.000	No	Yes	2.00
549	11.58	1.53	3.20	3.55	1.00	6.42	9.21	59.16	4.000	No	Yes	2.00
550	11.60	1.50	3.18	3.13	1.00	6.25	8.93	55.82	4.000	No	Yes	2.00
551	11.62	1.50	3.16	2.87	1.00	6.24	8.66	54.09	4.000	No	Yes	2.00
552	11.64	1.53	3.10	2.29	1.00	6.40	7.89	50.46	4.000	No	Yes	2.00
553	11.66	1.60	3.04	1.93	1.00	6.72	7.23	48.53	4.000	No	Yes	2.00
554	11.68	1.57	3.03	1.74	1.00	6.55	7.07	46.28	4.000	No	Yes	2.00
555	11.70	1.47	3.07	1.88	1.00	6.05	7.62	46.09	4.000	No	Yes	2.00
556	11.72	1.23	3.25	2.97	1.00	4.91	10.02	49.20	4.000	No	Yes	2.00
557	11.74	1.17	3.34	3.89	1.00	4.58	11.37	52.07	4.000	No	Yes	2.00
558	11.76	1.10	3.43	4.94	1.00	4.25	12.77	54.30	4.000	No	Yes	2.00
559	11.78	1.13	3.42	5.13	1.00	4.41	12.70	56.00	4.000	No	Yes	2.00
560	11.80	1.17	3.40	4.95	1.00	4.56	12.34	56.33	4.000	No	Yes	2.00
561	11.82	1.23	3.34	4.30	1.00	4.88	11.38	55.53	4.000	No	Yes	2.00
562	11.84	1.23	3.30	3.64	1.00	4.87	10.77	52.47	4.000	No	Yes	2.00
563	11.86	1.13	3.32	3.30	1.00	4.38	11.03	48.35	4.000	No	Yes	2.00
564	11.88	1.03	3.39	3.71	1.00	3.90	12.17	47.40	4.000	No	Yes	2.00
565	11.90	0.93	3.49	4.71	1.00	3.41	13.99	47.69	4.000	No	Yes	2.00
566	11.92	0.87	3.60	6.25	1.00	3.08	15.97	49.22	4.000	No	Yes	2.00
567	11.94	0.87	3.60	6.25	1.00	3.08	15.98	49.19	4.000	No	Yes	2.00
568	11.96	0.93	3.54	5.66	1.00	3.39	14.84	50.36	4.000	No	Yes	2.00
569	11.98	1.03	3.48	5.38	1.00	3.87	13.73	53.13	4.000	No	Yes	2.00
570	12.00	1.10	3.45	5.35	1.00	4.18	13.21	55.27	4.000	No	Yes	2.00
571	12.02	1.13	3.43	5.16	1.00	4.34	12.82	55.64	4.000	No	Yes	2.00
572	12.04	1.13	3.41	4.79	1.00	4.33	12.52	54.27	4.000	No	Yes	2.00
573	12.06	1.10	3.45	5.36	1.00	4.17	13.24	55.18	4.000	No	Yes	2.00
574	12.08	1.10	3.49	6.13	1.00	4.16	13.84	57.61	4.000	No	Yes	2.00
575	12.10	1.10	3.52	6.90	1.00	4.16	14.40	59.85	4.000	No	Yes	2.00
576	12.12	1.10	3.50	6.52	1.00	4.15	14.14	58.70	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
577	12.14	1.13	3.47	5.91	1.00	4.31	13.46	57.96	4.000	No	Yes	2.00
578	12.16	1.20	3.42	5.50	1.00	4.62	12.72	58.72	4.000	No	Yes	2.00
579	12.18	1.27	3.41	5.80	1.00	4.93	12.54	61.82	4.000	No	Yes	2.00
580	12.20	1.23	3.45	6.32	1.00	4.76	13.13	62.56	4.000	No	Yes	2.00
581	12.22	1.17	3.49	6.78	1.00	4.44	13.89	61.68	4.000	No	Yes	2.00
582	12.24	1.10	3.52	6.92	1.00	4.12	14.47	59.61	4.000	No	Yes	2.00
583	12.26	1.13	3.50	6.66	1.00	4.27	14.06	60.06	4.000	No	Yes	2.00
584	12.28	1.17	3.48	6.43	1.00	4.42	13.67	60.48	4.000	No	Yes	2.00
585	12.30	1.13	3.50	6.67	1.00	4.26	14.08	59.99	4.000	No	Yes	2.00
586	12.32	1.07	3.55	7.21	1.00	3.94	14.96	58.95	4.000	No	Yes	2.00
587	12.34	1.07	3.56	7.61	1.00	3.93	15.24	59.95	4.000	No	Yes	2.00
588	12.36	1.13	3.53	7.42	1.00	4.24	14.61	62.01	4.000	No	Yes	2.00
589	12.38	1.23	3.49	7.35	1.00	4.71	13.89	65.44	4.000	No	Yes	2.00
590	12.40	1.27	3.48	7.44	1.00	4.86	13.75	66.85	4.000	No	Yes	2.00
591	12.42	1.33	3.45	7.29	1.00	5.17	13.28	68.64	4.000	No	Yes	2.00
592	12.44	1.37	3.43	6.78	1.00	5.32	12.77	67.96	4.000	No	Yes	2.00
593	12.46	1.40	3.40	6.30	1.00	5.47	12.28	67.21	4.000	No	Yes	2.00
594	12.48	1.40	3.40	6.31	1.00	5.46	12.29	67.18	4.000	No	Yes	2.00
595	12.50	1.40	3.41	6.59	1.00	5.46	12.50	68.21	4.000	No	Yes	2.00
596	12.52	1.40	3.41	6.60	1.00	5.45	12.51	68.14	4.000	No	Yes	2.00
597	12.54	1.40	3.41	6.60	1.00	5.45	12.51	68.14	4.000	No	Yes	2.00
598	12.56	1.40	3.40	6.31	1.00	5.44	12.33	67.04	4.000	No	Yes	2.00
599	12.58	1.50	3.35	5.82	1.00	5.90	11.51	67.90	4.000	No	Yes	2.00
600	12.60	1.60	3.29	5.14	1.00	6.36	10.60	67.43	4.000	No	Yes	2.00
601	12.62	1.67	3.25	4.67	1.00	6.67	9.99	66.57	4.000	No	Yes	2.00
602	12.64	1.63	3.29	5.26	1.00	6.50	10.57	68.74	4.000	No	Yes	2.00
603	12.66	1.63	3.30	5.50	1.00	6.49	10.75	69.85	4.000	No	Yes	2.00
604	12.68	1.63	3.32	5.98	1.00	6.49	11.10	72.00	4.000	No	Yes	2.00
605	12.70	1.67	3.30	5.61	1.00	6.64	10.72	71.11	4.000	No	Yes	2.00
606	12.72	1.67	3.30	5.61	1.00	6.63	10.72	71.08	4.000	No	Yes	2.00
607	12.74	1.70	3.29	5.49	1.00	6.78	10.52	71.25	4.000	No	Yes	2.00
608	12.76	1.77	3.28	5.69	1.00	7.08	10.43	73.79	4.000	No	Yes	2.00
609	12.78	1.70	3.32	6.18	1.00	6.76	11.00	74.39	4.000	No	Yes	2.00
610	12.80	1.70	3.32	6.18	1.00	6.75	11.01	74.36	4.000	No	Yes	2.00
611	12.82	1.63	3.33	6.00	1.00	6.44	11.15	71.77	4.000	No	Yes	2.00
612	12.84	1.73	3.26	5.15	1.00	6.89	10.18	70.15	4.000	No	Yes	2.00
613	12.86	1.80	3.24	4.93	1.00	7.19	9.79	70.45	4.000	No	Yes	2.00
614	12.88	1.83	3.23	4.83	1.00	7.34	9.62	70.57	4.000	No	Yes	2.00
615	12.90	1.77	3.26	5.26	1.00	7.02	10.16	71.36	4.000	No	Yes	2.00
616	12.92	1.70	3.29	5.50	1.00	6.71	10.58	70.96	4.000	No	Yes	2.00
617	12.94	1.70	3.30	5.73	1.00	6.70	10.75	72.01	4.000	No	Yes	2.00
618	12.96	1.77	3.28	5.48	1.00	7.00	10.34	72.38	4.000	No	Yes	2.00
619	12.98	1.87	3.24	5.14	1.00	7.45	9.77	72.84	4.000	No	Yes	2.00
620	13.00	1.87	3.23	4.94	1.00	7.44	9.63	71.68	4.000	No	Yes	2.00
621	13.02	1.87	3.24	5.15	1.00	7.44	9.79	72.78	4.000	No	Yes	2.00
622	13.04	1.77	3.28	5.49	1.00	6.97	10.37	72.25	4.000	No	Yes	2.00
623	13.06	1.73	3.28	5.39	1.00	6.81	10.42	70.93	4.000	No	Yes	2.00
624	13.08	1.63	3.29	5.05	1.00	6.34	10.55	66.90	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
625	13.10	1.63	3.26	4.57	1.00	6.34	10.17	64.47	4.000	No	Yes	2.00
626	13.12	1.63	3.28	4.82	1.00	6.33	10.37	65.66	4.000	No	Yes	2.00
627	13.14	1.70	3.26	4.83	1.00	6.63	10.14	67.19	4.000	No	Yes	2.00
628	13.16	1.63	3.29	5.06	1.00	6.32	10.57	66.78	4.000	No	Yes	2.00
629	13.18	1.60	3.25	4.20	1.00	6.16	10.01	61.63	4.000	No	Yes	2.00
630	13.20	1.57	3.22	3.55	1.00	6.00	9.56	57.31	4.000	No	Yes	2.00
631	13.22	1.60	3.21	3.46	1.00	6.14	9.35	57.42	4.000	No	Yes	2.00
632	13.24	1.60	3.21	3.46	1.00	6.14	9.36	57.40	4.000	No	Yes	2.00
633	13.26	1.50	3.25	3.74	1.00	5.67	10.03	56.91	4.000	No	Yes	2.00
634	13.28	1.40	3.25	3.19	1.00	5.21	9.94	51.83	4.000	No	Yes	2.00
635	13.30	1.33	3.28	3.39	1.00	4.90	10.48	51.42	4.000	No	Yes	2.00
636	13.32	1.40	3.23	2.91	1.00	5.20	9.64	50.14	4.000	No	Yes	2.00
637	13.34	1.43	3.23	3.11	1.00	5.35	9.71	51.93	4.000	No	Yes	2.00
638	13.36	1.37	3.27	3.29	1.00	5.04	10.23	51.55	4.000	No	Yes	2.00
639	13.38	1.30	3.31	3.51	1.00	4.73	10.80	51.10	4.000	No	Yes	2.00
640	13.40	1.30	3.31	3.51	1.00	4.73	10.81	51.08	4.000	No	Yes	2.00
641	13.42	1.40	3.25	3.20	1.00	5.17	9.99	51.67	4.000	No	Yes	2.00
642	13.44	1.43	3.26	3.40	1.00	5.32	10.04	53.39	4.000	No	Yes	2.00
643	13.46	1.43	3.27	3.68	1.00	5.31	10.33	54.86	4.000	No	Yes	2.00
644	13.48	1.40	3.33	4.37	1.00	5.15	11.13	57.38	4.000	No	Yes	2.00
645	13.50	1.47	3.31	4.41	1.00	5.45	10.85	59.12	4.000	No	Yes	2.00
646	13.52	1.60	3.26	4.22	1.00	6.04	10.13	61.19	4.000	No	Yes	2.00
647	13.54	1.73	3.22	4.06	1.00	6.63	9.51	63.08	4.000	No	Yes	2.00
648	13.56	1.80	3.22	4.32	1.00	6.93	9.51	65.85	4.000	No	Yes	2.00
649	13.58	1.83	3.23	4.66	1.00	7.07	9.67	68.37	4.000	No	Yes	2.00
650	13.60	1.90	3.23	4.87	1.00	7.36	9.64	70.92	4.000	No	Yes	2.00
651	13.62	1.97	3.22	5.07	1.00	7.65	9.59	73.38	4.000	No	Yes	2.00
652	13.64	2.07	3.20	4.98	1.00	8.09	9.25	74.82	4.000	No	Yes	2.00
653	13.66	2.10	3.18	4.71	1.00	8.23	8.97	73.79	4.000	No	Yes	2.00
654	13.68	2.10	3.17	4.53	1.00	8.22	8.83	72.63	4.000	No	Yes	2.00
655	13.70	2.03	3.18	4.51	1.00	7.92	9.00	71.26	4.000	No	Yes	2.00
656	13.72	1.97	3.18	4.30	1.00	7.61	9.02	68.67	4.000	No	Yes	2.00
657	13.74	1.90	3.16	3.66	1.00	7.30	8.68	63.40	4.000	No	Yes	2.00
658	13.76	1.80	3.14	3.03	1.00	6.85	8.39	57.47	4.000	No	Yes	2.00
659	13.78	1.70	3.14	2.78	1.00	6.40	8.45	54.08	4.000	No	Yes	2.00
660	13.80	1.63	3.17	2.92	1.00	6.10	8.84	53.86	4.000	No	Yes	2.00
661	13.82	1.57	3.20	3.07	1.00	5.79	9.25	53.60	4.000	No	Yes	2.00
662	13.84	1.53	3.20	2.89	1.00	5.64	9.20	51.85	4.000	No	Yes	2.00
663	13.86	1.50	3.21	2.96	1.00	5.48	9.43	51.70	4.000	No	Yes	2.00
664	13.88	1.50	3.19	2.70	1.00	5.48	9.13	50.02	4.000	No	Yes	2.00
665	13.90	1.50	3.21	2.97	1.00	5.47	9.44	51.66	4.000	No	Yes	2.00
666	13.92	1.50	3.21	2.97	1.00	5.47	9.45	51.63	4.000	No	Yes	2.00
667	13.94	1.50	3.23	3.24	1.00	5.46	9.74	53.18	4.000	No	Yes	2.00
668	13.96	1.50	3.21	2.97	1.00	5.45	9.46	51.59	4.000	No	Yes	2.00
669	13.98	1.53	3.20	2.89	1.00	5.60	9.24	51.71	4.000	No	Yes	2.00
670	14.00	1.53	3.24	3.42	1.00	5.59	9.80	54.77	4.000	No	Yes	2.00
671	14.02	1.53	3.30	4.47	1.00	5.58	10.77	60.15	4.000	No	Yes	2.00
672	14.04	1.50	3.36	5.41	1.00	5.43	11.68	63.42	4.000	No	Yes	2.00



:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>r</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
673	14.06	1.50	3.36	5.41	1.00	5.42	11.69	63.39	4.000	No	Yes	2.00
674	14.08	1.50	3.35	5.14	1.00	5.42	11.49	62.23	4.000	No	Yes	2.00
675	14.10	1.53	3.31	4.48	1.00	5.56	10.80	60.04	4.000	No	Yes	2.00
676	14.12	1.53	3.28	3.95	1.00	5.55	10.35	57.43	4.000	No	Yes	2.00
677	14.14	1.50	3.28	3.79	1.00	5.40	10.35	55.86	4.000	No	Yes	2.00
678	14.16	1.40	3.33	4.13	1.00	4.96	11.14	55.19	4.000	No	Yes	2.00
679	14.18	1.33	3.38	4.70	1.00	4.66	12.01	55.93	4.000	No	Yes	2.00
680	14.20	1.33	3.36	4.39	1.00	4.65	11.74	54.63	4.000	No	Yes	2.00
681	14.22	1.37	3.33	3.95	1.00	4.79	11.17	53.52	4.000	No	Yes	2.00
682	14.24	1.43	3.28	3.44	1.00	5.08	10.34	52.50	4.000	No	Yes	2.00
683	14.26	1.50	3.24	3.25	1.00	5.36	9.85	52.84	4.000	No	Yes	2.00
684	14.28	1.50	3.26	3.53	1.00	5.36	10.13	54.29	4.000	No	Yes	2.00
685	14.30	1.47	3.31	4.18	1.00	5.21	10.91	56.81	4.000	No	Yes	2.00
686	14.32	1.57	3.26	3.86	1.00	5.64	10.18	57.38	4.000	No	Yes	2.00
687	14.34	2.13	3.06	2.87	1.00	8.09	7.46	60.40	4.000	No	Yes	2.00
688	14.36	3.00	2.83	2.08	0.96	12.30	5.08	62.45	4.000	No	Yes	2.00
689	14.38	3.93	2.70	2.00	0.91	17.19	4.02	69.15	4.000	No	Yes	2.00
690	14.40	4.60	2.59	1.70	0.86	21.07	3.27	68.78	0.110	No	No	1.22
691	14.42	4.93	2.55	1.65	0.85	22.95	3.04	69.86	0.112	No	No	1.24
692	14.44	4.80	2.55	1.55	0.85	22.31	3.02	67.32	0.108	No	No	1.20
693	14.46	4.27	2.61	1.59	0.87	19.30	3.36	64.88	4.000	No	Yes	2.00
694	14.48	3.47	2.71	1.67	0.91	14.89	4.09	60.89	4.000	No	Yes	2.00
695	14.50	3.00	2.77	1.59	0.93	12.49	4.51	56.29	4.000	No	Yes	2.00
696	14.52	3.20	2.72	1.48	0.91	13.59	4.14	56.26	4.000	No	Yes	2.00
697	14.54	4.10	2.52	1.05	0.83	18.96	2.86	54.28	0.095	No	No	1.05
698	14.56	5.00	2.40	0.92	0.79	24.34	2.30	55.87	0.096	No	No	1.07
699	14.58	5.53	2.38	1.01	0.78	27.24	2.22	60.37	0.100	No	No	1.11
700	14.60	5.67	2.39	1.11	0.79	27.79	2.27	63.08	0.103	No	No	1.15
701	14.62	5.37	2.43	1.18	0.80	25.90	2.43	63.01	0.103	No	No	1.15
702	14.64	4.70	2.51	1.28	0.83	21.91	2.82	61.71	0.102	No	No	1.13
703	14.66	3.73	2.64	1.45	0.88	16.38	3.61	59.15	4.000	No	Yes	2.00
704	14.68	2.83	2.83	1.83	0.95	11.39	5.06	57.67	4.000	No	Yes	2.00
705	14.70	2.07	3.01	2.05	1.00	7.66	6.80	52.15	4.000	No	Yes	2.00
706	14.72	1.53	3.20	2.66	1.00	5.37	9.19	49.36	4.000	No	Yes	2.00
707	14.74	1.33	3.30	3.16	1.00	4.51	10.71	48.31	4.000	No	Yes	2.00
708	14.76	1.43	3.27	3.18	1.00	4.93	10.23	50.45	4.000	No	Yes	2.00
709	14.78	1.80	3.16	3.07	1.00	6.49	8.69	56.41	4.000	No	Yes	2.00
710	14.80	2.53	2.95	2.37	1.00	9.62	6.25	60.09	4.000	No	Yes	2.00
711	14.82	3.43	2.76	1.90	0.93	14.32	4.43	63.49	4.000	No	Yes	2.00
712	14.84	4.23	2.59	1.43	0.86	18.96	3.26	61.76	0.102	No	No	1.13
713	14.86	4.47	2.53	1.27	0.84	20.42	2.95	60.18	0.100	No	No	1.11
714	14.88	4.20	2.55	1.19	0.85	19.04	3.01	57.25	0.097	No	No	1.08
715	14.90	3.57	2.63	1.22	0.88	15.53	3.49	54.24	4.000	No	Yes	2.00
716	14.92	2.77	2.79	1.48	0.94	11.11	4.74	52.60	4.000	No	Yes	2.00
717	14.94	2.13	2.99	1.98	1.00	7.86	6.62	51.99	4.000	No	Yes	2.00
718	14.96	1.77	3.14	2.70	1.00	6.29	8.44	53.12	4.000	No	Yes	2.00
719	14.98	1.70	3.17	2.83	1.00	6.00	8.81	52.91	4.000	No	Yes	2.00
720	15.00	1.70	3.20	3.30	1.00	6.00	9.31	55.84	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>r</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
721	15.02	1.60	3.28	4.06	1.00	5.57	10.43	58.04	4.000	No	Yes	2.00
722	15.04	1.50	3.36	4.94	1.00	5.14	11.63	59.77	4.000	No	Yes	2.00
723	15.06	1.37	3.41	5.24	1.00	4.57	12.58	57.46	4.000	No	Yes	2.00
724	15.08	1.33	3.40	4.78	1.00	4.42	12.39	54.78	4.000	No	Yes	2.00
725	15.10	1.27	3.41	4.42	1.00	4.14	12.48	51.64	4.000	No	Yes	2.00
726	15.12	1.23	3.39	3.88	1.00	3.99	12.18	48.62	4.000	No	Yes	2.00
727	15.14	1.27	3.35	3.40	1.00	4.13	11.49	47.42	4.000	No	Yes	2.00
728	15.16	1.33	3.31	3.19	1.00	4.40	10.88	47.89	4.000	No	Yes	2.00
729	15.18	1.43	3.26	2.91	1.00	4.82	10.06	48.47	4.000	No	Yes	2.00
730	15.20	1.47	3.22	2.55	1.00	4.95	9.48	46.96	4.000	No	Yes	2.00
731	15.22	1.47	3.16	1.98	1.00	4.95	8.74	43.27	4.000	No	Yes	2.00
732	15.24	1.37	3.18	1.86	1.00	4.52	9.03	40.84	4.000	No	Yes	2.00
733	15.26	1.27	3.24	2.05	1.00	4.10	9.85	40.35	4.000	No	Yes	2.00
734	15.28	1.23	3.30	2.47	1.00	3.95	10.64	42.07	4.000	No	Yes	2.00
735	15.30	1.27	3.28	2.39	1.00	4.09	10.34	42.26	4.000	No	Yes	2.00
736	15.32	1.33	3.24	2.24	1.00	4.36	9.77	42.62	4.000	No	Yes	2.00
737	15.34	1.37	3.22	2.17	1.00	4.50	9.51	42.77	4.000	No	Yes	2.00
738	15.36	1.37	3.22	2.17	1.00	4.49	9.52	42.75	4.000	No	Yes	2.00
739	15.38	1.30	3.26	2.32	1.00	4.21	10.07	42.39	4.000	No	Yes	2.00
740	15.40	1.23	3.33	2.83	1.00	3.93	11.14	43.72	4.000	No	Yes	2.00
741	15.42	1.17	3.37	3.05	1.00	3.64	11.85	43.17	4.000	No	Yes	2.00
742	15.44	1.20	3.38	3.31	1.00	3.78	11.92	45.04	4.000	No	Yes	2.00
743	15.46	1.23	3.33	2.84	1.00	3.91	11.16	43.67	4.000	No	Yes	2.00
744	15.48	1.30	3.34	3.31	1.00	4.18	11.31	47.33	4.000	No	Yes	2.00
745	15.50	1.33	3.32	3.21	1.00	4.32	11.01	47.55	4.000	No	Yes	2.00
746	15.52	1.40	3.28	3.02	1.00	4.59	10.45	47.96	4.000	No	Yes	2.00
747	15.54	1.47	3.25	2.85	1.00	4.86	9.93	48.30	4.000	No	Yes	2.00
748	15.56	1.50	3.23	2.77	1.00	5.00	9.70	48.44	4.000	No	Yes	2.00
749	15.58	1.60	3.16	2.30	1.00	5.40	8.72	47.14	4.000	No	Yes	2.00
750	15.60	2.07	3.00	1.88	1.00	7.33	6.78	49.71	4.000	No	Yes	2.00
751	15.62	2.87	2.80	1.56	0.94	11.17	4.81	53.78	4.000	No	Yes	2.00
752	15.64	3.73	2.70	1.65	0.90	15.49	3.96	61.36	4.000	No	Yes	2.00
753	15.66	4.10	2.66	1.67	0.89	17.36	3.69	63.98	4.000	No	Yes	2.00
754	15.68	3.93	2.71	1.93	0.91	16.25	4.10	66.64	4.000	No	Yes	2.00
755	15.70	3.57	2.81	2.35	0.95	14.13	4.89	69.12	4.000	No	Yes	2.00
756	15.72	3.30	2.88	2.67	0.97	12.66	5.54	70.11	4.000	No	Yes	2.00
757	15.74	3.20	2.95	3.22	1.00	11.95	6.22	74.28	4.000	No	Yes	2.00
758	15.76	3.10	3.00	3.69	1.00	11.53	6.73	77.60	4.000	No	Yes	2.00
759	15.78	3.07	3.02	3.98	1.00	11.38	7.00	79.67	4.000	No	Yes	2.00
760	15.80	3.07	3.02	3.86	1.00	11.37	6.91	78.60	4.000	No	Yes	2.00
761	15.82	3.03	2.99	3.42	1.00	11.22	6.62	74.25	4.000	No	Yes	2.00
762	15.84	3.33	2.88	2.64	0.97	12.76	5.49	70.00	4.000	No	Yes	2.00
763	15.86	4.10	2.66	1.67	0.89	17.21	3.71	63.82	4.000	No	Yes	2.00
764	15.88	5.80	2.35	0.91	0.77	27.68	2.10	58.23	0.098	No	No	1.10
765	15.90	7.60	2.12	0.59	0.68	39.65	1.49	59.10	0.099	No	No	1.11
766	15.92	9.27	1.96	0.45	0.62	51.34	1.00	51.34	0.093	No	No	1.04
767	15.94	10.37	1.89	0.40	0.59	59.14	1.00	59.14	0.099	No	No	1.11
768	15.96	11.23	1.81	0.34	0.57	65.82	1.00	65.82	0.107	No	No	1.19

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
769	15.98	11.93	1.73	0.26	0.54	71.93	1.00	71.93	0.115	No	No	1.29
770	16.00	12.47	1.68	0.22	0.52	76.48	1.00	76.48	0.122	No	No	1.36
771	16.02	12.83	1.64	0.19	0.50	79.83	1.00	79.83	0.127	No	No	1.43
772	16.04	13.07	1.65	0.21	0.51	81.02	1.00	81.02	0.129	No	No	1.45
773	16.06	13.20	1.63	0.18	0.50	82.27	1.00	82.27	0.132	No	No	1.48
774	16.08	13.37	1.64	0.20	0.50	83.27	1.00	83.27	0.134	No	No	1.50
775	16.10	13.60	1.65	0.23	0.50	84.48	1.00	84.48	0.136	No	No	1.53
776	16.12	13.73	1.68	0.27	0.52	84.39	1.00	84.39	0.136	No	No	1.53
777	16.14	13.07	1.76	0.37	0.55	77.88	1.00	77.88	0.124	No	No	1.39
778	16.16	12.27	1.87	0.50	0.59	70.43	1.16	81.54	0.130	No	No	1.47
779	16.18	11.67	1.99	0.73	0.63	64.16	1.28	82.24	0.132	No	No	1.48
780	16.20	12.27	1.93	0.64	0.61	68.86	1.22	83.78	0.135	No	No	1.51
781	16.22	13.47	1.81	0.48	0.57	78.76	1.00	78.76	0.125	No	No	1.41
782	16.24	15.13	1.63	0.27	0.50	94.26	1.00	94.26	0.158	No	No	1.78
783	16.26	16.83	1.56	0.22	0.50	105.03	1.00	105.03	0.188	No	No	2.00
784	16.28	18.80	1.49	0.20	0.50	117.48	1.00	117.48	0.231	No	No	2.00
785	16.30	20.77	1.46	0.21	0.50	129.93	1.00	129.93	0.284	No	No	2.00
786	16.32	23.00	1.43	0.22	0.50	144.06	1.00	144.06	0.358	No	No	2.00
787	16.34	25.03	1.39	0.22	0.50	156.91	1.00	156.91	0.439	No	No	2.00
788	16.36	24.70	1.38	0.19	0.50	154.73	1.00	154.73	0.425	No	No	2.00
789	16.38	24.77	1.37	0.19	0.50	155.09	1.00	155.09	0.427	No	No	2.00
790	16.40	24.67	1.41	0.23	0.50	154.40	1.00	154.40	0.422	No	No	2.00
791	16.42	25.67	1.43	0.28	0.50	160.68	1.00	160.68	0.466	No	No	2.00
792	16.44	25.23	1.46	0.32	0.50	157.87	1.00	157.87	0.446	No	No	2.00
793	16.46	24.27	1.51	0.36	0.50	151.69	1.00	151.69	0.405	No	No	2.00
794	16.48	24.67	1.51	0.38	0.50	154.16	1.00	154.16	0.421	No	No	2.00
795	16.50	24.97	1.52	0.41	0.50	156.00	1.00	156.00	0.433	No	No	2.00
796	16.52	25.77	1.51	0.41	0.50	161.00	1.00	161.00	0.468	No	No	2.00
797	16.54	26.07	1.50	0.40	0.50	162.84	1.00	162.84	0.482	No	No	2.00
798	16.56	26.50	1.49	0.39	0.50	165.52	1.00	165.52	0.502	No	No	2.00
799	16.58	26.10	1.50	0.39	0.50	162.93	1.00	162.93	0.482	No	No	2.00
800	16.60	26.13	1.49	0.39	0.50	163.07	1.00	163.07	0.483	No	No	2.00
801	16.62	26.47	1.49	0.38	0.50	165.12	1.00	165.12	0.499	No	No	2.00
802	16.64	26.90	1.48	0.38	0.50	167.79	1.00	167.79	0.519	No	No	2.00
803	16.66	30.57	1.40	0.33	0.50	190.86	1.00	190.86	0.727	No	No	2.00
804	16.68	34.13	1.33	0.30	0.50	213.28	1.00	213.28	4.000	No	No	2.00
805	16.70	45.67	1.16	0.22	0.50	285.92	1.00	285.92	4.000	No	No	2.00

### Abbreviations

Depth:	Depth from free surface, at which CPT was performed (m)
q <sub>t</sub> :	Total cone resistance
I <sub>c</sub> :	Soil behavior type index
Fr:	Normalized friction ratio (%)
n:	Stress exponent
Q <sub>tn</sub> :	Normalized cone resistance
K <sub>c</sub> :	Cone resistance correction factor due to fines
Q <sub>tn,cs</sub> :	Normalized and adjusted cone resistance
CRR <sub>7.5</sub> :	Cyclic resistance ratio for M <sub>w</sub> =7.5
FS:	Factor of safety against soil liquefaction

**:: Liquefaction Potential Index calculation data ::**

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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
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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	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
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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	2.00	0.00	6.97	0.02	0.00	6.08	2.00	0.00	6.96	0.02	0.00
6.10	2.00	0.00	6.95	0.02	0.00	6.12	2.00	0.00	6.94	0.02	0.00
6.14	2.00	0.00	6.93	0.02	0.00	6.16	2.00	0.00	6.92	0.02	0.00
6.18	2.00	0.00	6.91	0.02	0.00	6.20	2.00	0.00	6.90	0.02	0.00
6.22	2.00	0.00	6.89	0.02	0.00	6.24	2.00	0.00	6.88	0.02	0.00
6.26	2.00	0.00	6.87	0.02	0.00	6.28	2.00	0.00	6.86	0.02	0.00
6.30	2.00	0.00	6.85	0.02	0.00	6.32	2.00	0.00	6.84	0.02	0.00
6.34	2.00	0.00	6.83	0.02	0.00	6.36	2.00	0.00	6.82	0.02	0.00

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
6.38	2.00	0.00	6.81	0.02	0.00	6.40	2.00	0.00	6.80	0.02	0.00
6.42	2.00	0.00	6.79	0.02	0.00	6.44	2.00	0.00	6.78	0.02	0.00
6.46	2.00	0.00	6.77	0.02	0.00	6.48	2.00	0.00	6.76	0.02	0.00
6.50	2.00	0.00	6.75	0.02	0.00	6.52	2.00	0.00	6.74	0.02	0.00
6.54	2.00	0.00	6.73	0.02	0.00	6.56	2.00	0.00	6.72	0.02	0.00
6.58	2.00	0.00	6.71	0.02	0.00	6.60	2.00	0.00	6.70	0.02	0.00
6.62	2.00	0.00	6.69	0.02	0.00	6.64	2.00	0.00	6.68	0.02	0.00
6.66	2.00	0.00	6.67	0.02	0.00	6.68	2.00	0.00	6.66	0.02	0.00
6.70	2.00	0.00	6.65	0.02	0.00	6.72	2.00	0.00	6.64	0.02	0.00
6.74	2.00	0.00	6.63	0.02	0.00	6.76	2.00	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	8.28	2.00	0.00	5.86	0.02	0.00

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	10.20	2.00	0.00	4.90	0.02	0.00



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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	1.15	0.00	4.46	0.02	0.00
11.10	1.13	0.00	4.45	0.02	0.00	11.12	1.14	0.00	4.44	0.02	0.00
11.14	1.18	0.00	4.43	0.02	0.00	11.16	1.22	0.00	4.42	0.02	0.00
11.18	1.18	0.00	4.41	0.02	0.00	11.20	2.00	0.00	4.40	0.02	0.00
11.22	2.00	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	1.14	0.00	4.32	0.02	0.00
11.38	1.10	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	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	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	12.12	2.00	0.00	3.94	0.02	0.00

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	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
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

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	1.22	0.00	2.80	0.02	0.00
14.42	1.24	0.00	2.79	0.02	0.00	14.44	1.20	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	1.05	0.00	2.73	0.02	0.00	14.56	1.07	0.00	2.72	0.02	0.00
14.58	1.11	0.00	2.71	0.02	0.00	14.60	1.15	0.00	2.70	0.02	0.00
14.62	1.15	0.00	2.69	0.02	0.00	14.64	1.13	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	1.13	0.00	2.58	0.02	0.00
14.86	1.11	0.00	2.57	0.02	0.00	14.88	1.08	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	1.10	0.00	2.06	0.02	0.00
15.90	1.11	0.00	2.05	0.02	0.00	15.92	1.04	0.00	2.04	0.02	0.00
15.94	1.11	0.00	2.03	0.02	0.00	15.96	1.19	0.00	2.02	0.02	0.00

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
15.98	1.29	0.00	2.01	0.02	0.00	16.00	1.36	0.00	2.00	0.02	0.00
16.02	1.43	0.00	1.99	0.02	0.00	16.04	1.45	0.00	1.98	0.02	0.00
16.06	1.48	0.00	1.97	0.02	0.00	16.08	1.50	0.00	1.96	0.02	0.00
16.10	1.53	0.00	1.95	0.02	0.00	16.12	1.53	0.00	1.94	0.02	0.00
16.14	1.39	0.00	1.93	0.02	0.00	16.16	1.47	0.00	1.92	0.02	0.00
16.18	1.48	0.00	1.91	0.02	0.00	16.20	1.51	0.00	1.90	0.02	0.00
16.22	1.41	0.00	1.89	0.02	0.00	16.24	1.78	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						

**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<sub>L</sub>: 1 - FS  
w<sub>z</sub>: Function value of the extend of soil liquefaction according to depth  
d<sub>z</sub>: Layer thickness (m)  
LPI: Liquefaction potential index value for test point

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.62	1.00	16.80	6.07	101.98	2.94	5.99	5.99
0.64	1.00	16.79	6.84	114.92	3.01	5.80	5.80
0.66	1.00	16.79	6.66	111.84	2.99	5.62	5.62
0.68	0.97	16.21	6.90	111.88	3.01	5.27	5.27
0.70	1.00	16.77	6.67	111.84	2.99	5.30	5.30
0.72	1.03	17.33	6.63	114.87	2.99	5.32	5.32
0.74	1.17	19.59	5.84	114.42	2.91	5.86	5.86
0.76	1.17	19.59	5.84	114.42	2.91	5.70	5.70
0.78	1.17	19.58	5.84	114.42	2.91	5.55	5.55
0.80	1.10	18.44	6.22	114.70	2.95	5.10	5.10
0.82	1.10	18.44	6.22	114.70	2.95	4.97	4.97
0.84	1.07	17.86	6.43	114.80	2.97	4.70	4.70
0.86	1.03	17.29	6.64	114.88	2.99	4.45	4.45
0.88	1.00	16.72	6.88	114.93	3.01	4.20	4.20
0.90	1.00	16.71	6.88	114.93	3.01	4.11	4.11
0.92	1.03	17.27	6.83	117.90	3.01	4.15	4.15
0.94	1.07	17.83	6.94	123.67	3.02	4.19	4.19
0.96	1.10	18.39	7.03	129.22	3.03	4.24	4.24
0.98	1.10	18.38	7.03	129.22	3.03	4.15	4.15
1.00	1.10	18.38	7.03	129.22	3.03	4.06	4.06
1.02	1.10	18.37	7.03	129.22	3.03	3.98	3.98
1.04	1.13	18.93	6.97	131.92	3.02	4.03	4.03
1.06	1.13	18.92	6.97	131.92	3.02	3.95	3.95
1.08	1.13	18.92	7.11	134.57	3.03	3.87	3.87
1.10	1.07	17.78	7.57	134.50	3.07	3.57	3.57
1.12	1.10	18.34	7.34	134.55	3.05	3.62	3.62
1.14	1.13	18.90	6.84	129.20	3.01	3.67	3.67
1.16	1.17	19.46	6.49	126.35	2.98	3.71	3.71
1.18	1.13	18.89	6.54	123.58	2.98	3.54	3.54
1.20	1.03	17.18	7.03	120.83	3.03	3.17	3.17
1.22	1.03	17.17	6.87	117.90	3.01	3.11	3.11
1.24	1.03	17.17	6.69	114.89	3.00	3.06	3.06
1.26	1.10	18.29	6.10	111.59	2.94	3.21	3.21
1.28	1.10	18.29	6.10	111.59	2.94	3.16	3.16
1.30	1.10	18.28	6.10	111.59	2.94	3.11	3.11
1.32	1.13	18.84	6.08	114.61	2.94	3.16	3.16
1.34	1.17	19.40	6.06	117.56	2.94	3.20	3.20
1.36	1.23	20.53	5.86	120.29	2.92	3.34	3.34
1.38	1.33	22.22	5.66	125.69	2.90	3.56	3.56
1.40	1.40	23.35	5.49	128.20	2.88	3.69	3.69
1.42	1.43	23.91	5.47	130.84	2.88	3.72	3.72
1.44	1.47	24.47	5.34	130.64	2.86	3.76	3.76
1.46	1.47	24.46	5.34	130.64	2.86	3.71	3.71
1.48	1.47	24.46	5.23	127.79	2.85	3.65	3.65
1.50	1.37	22.75	5.52	125.51	2.88	3.35	3.35
1.52	1.33	22.18	5.40	119.77	2.87	3.23	3.23
1.54	1.30	21.60	5.41	116.90	2.87	3.10	3.10
1.56	1.30	21.60	5.27	113.76	2.85	3.06	3.06

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
1.58	1.27	21.02	5.42	113.97	2.87	2.94	2.94
1.60	1.23	20.45	5.43	110.96	2.87	2.83	2.83
1.62	1.20	19.88	5.43	107.88	2.87	2.71	2.71
1.64	1.27	21.00	5.12	107.46	2.84	2.83	2.83
1.66	1.30	21.56	5.13	110.55	2.84	2.87	2.87
1.68	1.40	23.26	5.00	116.27	2.82	3.06	3.06
1.70	1.43	23.82	4.87	116.04	2.81	3.10	3.10
1.72	1.50	24.94	4.76	118.66	2.80	3.21	3.21
1.74	1.53	25.50	4.76	121.46	2.80	3.24	3.24
1.76	1.57	26.06	4.88	127.14	2.81	3.28	3.28
1.78	1.57	26.06	4.77	124.21	2.80	3.24	3.24
1.80	1.47	24.35	4.88	118.91	2.81	2.99	2.99
1.82	1.43	23.78	4.61	109.63	2.78	2.89	2.89
1.84	1.40	23.21	4.74	109.88	2.79	2.79	2.79
1.86	1.37	22.63	4.57	103.38	2.77	2.69	2.69
1.88	1.30	21.49	4.67	100.36	2.79	2.53	2.53
1.90	1.37	22.62	4.09	92.50	2.71	2.63	2.63
1.92	1.57	26.01	3.35	87.18	2.60	3.00	3.00
1.94	1.73	28.84	2.99	86.09	2.54	0.67	0.67
1.96	1.73	28.83	2.85	82.22	2.52	0.67	0.67
1.98	1.57	25.99	3.35	87.18	2.60	2.90	2.90
2.00	1.37	22.59	3.92	88.64	2.69	2.50	2.50
2.02	1.20	19.75	4.75	93.74	2.80	2.16	2.16
2.04	1.10	18.04	5.44	98.09	2.87	1.96	1.96
2.06	1.07	17.47	5.83	101.82	2.91	1.88	1.88
2.08	1.07	17.46	6.03	105.24	2.93	1.86	1.86
2.10	1.13	18.59	5.65	104.93	2.89	1.96	1.96
2.12	1.13	18.58	5.83	108.28	2.91	1.94	1.94
2.14	1.23	20.28	5.48	111.02	2.88	2.10	2.10
2.16	1.27	20.84	5.47	114.03	2.88	2.13	2.13
2.18	1.30	21.40	5.17	110.62	2.84	2.17	2.17
2.20	1.20	19.69	5.31	104.57	2.86	1.98	1.98
2.22	1.13	18.55	5.28	97.92	2.86	1.85	1.85
2.24	1.10	17.98	5.25	94.42	2.85	1.77	1.77
2.26	1.07	17.40	5.44	94.62	2.87	1.70	1.70
2.28	1.03	16.83	5.63	94.80	2.89	1.63	1.63
2.30	1.00	16.26	5.84	94.96	2.91	1.56	1.56
2.32	1.03	16.82	5.64	94.80	2.89	1.60	1.60
2.34	1.03	16.81	5.64	94.80	2.89	1.59	1.59
2.36	1.07	17.37	5.45	94.63	2.87	1.63	1.63
2.38	1.10	17.93	5.27	94.44	2.85	1.67	1.67
2.40	1.20	19.62	4.78	93.79	2.80	1.81	1.81
2.42	1.27	20.75	4.50	93.32	2.77	1.90	1.90
2.44	1.23	20.18	4.64	93.56	2.78	1.83	1.83
2.46	1.13	18.47	5.10	94.24	2.84	1.66	1.66
2.48	1.03	16.77	5.66	94.82	2.90	1.49	1.49
2.50	1.00	16.19	6.09	98.61	2.94	1.43	1.43
2.52	1.10	17.89	5.49	98.14	2.88	1.57	1.57

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
2.54	1.27	20.71	4.69	97.07	2.79	1.80	1.80
2.56	1.57	25.81	3.53	91.10	2.63	2.23	2.23
2.58	1.70	28.07	3.21	90.16	2.58	0.66	0.66
2.60	1.73	28.63	3.01	86.17	2.55	0.67	0.67
2.62	1.57	25.79	3.07	79.21	2.56	0.65	0.65
2.64	1.37	22.38	3.60	80.54	2.64	1.87	1.87
2.66	1.20	19.54	4.40	85.94	2.75	1.62	1.62
2.68	1.10	17.83	5.30	94.47	2.86	1.47	1.47
2.70	1.13	18.39	5.13	94.27	2.84	1.51	1.51
2.72	1.17	18.95	4.96	94.06	2.82	1.54	1.54
2.74	1.20	19.51	4.61	89.97	2.78	1.58	1.58
2.76	1.20	19.51	4.61	89.98	2.78	1.56	1.56
2.78	1.17	18.94	4.97	94.07	2.82	1.51	1.51
2.80	1.07	17.23	5.71	98.35	2.90	1.36	1.36
2.82	1.00	16.09	6.56	105.49	2.98	1.26	1.26
2.84	0.97	15.52	6.80	105.54	3.01	1.21	1.21
2.86	1.00	16.08	6.56	105.49	2.98	1.24	1.24
2.88	1.03	16.64	6.13	102.02	2.94	1.28	1.28
2.90	1.07	17.20	6.12	105.30	2.94	1.31	1.31
2.92	1.10	17.76	6.29	111.70	2.96	1.34	1.34
2.94	1.13	18.32	6.43	117.78	2.97	1.38	1.38
2.96	1.10	17.74	6.81	120.80	3.01	1.33	1.33
2.98	1.13	18.30	6.75	123.64	3.00	1.36	1.36
3.00	1.17	18.86	6.24	117.68	2.95	1.39	1.39
3.02	1.27	20.56	5.85	120.28	2.92	1.51	1.51
3.04	1.30	21.12	5.83	123.10	2.91	1.54	1.54
3.06	1.30	21.11	6.36	134.37	2.97	1.53	1.53
3.08	1.30	21.11	6.37	134.37	2.97	1.52	1.52
3.10	1.30	21.07	6.37	134.29	2.97	1.51	1.51
3.12	1.37	21.94	5.95	130.58	2.93	1.58	1.58
3.14	1.27	20.23	6.47	130.87	2.97	1.45	1.45
3.16	1.30	20.65	6.31	130.39	2.96	1.48	1.48
3.18	1.23	19.41	6.42	124.70	2.97	1.39	1.39
3.20	1.33	20.82	5.94	123.69	2.92	1.49	1.49
3.22	1.33	20.69	5.96	123.36	2.93	1.49	1.49
3.24	1.37	21.14	6.08	128.47	2.94	1.51	1.51
3.26	1.40	21.58	6.18	133.37	2.95	1.54	1.54
3.28	1.43	22.00	6.27	138.01	2.96	1.57	1.57
3.30	1.50	22.92	6.21	142.31	2.95	1.64	1.64
3.32	1.60	24.24	5.92	143.58	2.92	1.74	1.74
3.34	1.67	25.07	5.79	145.10	2.91	1.80	1.80
3.36	1.70	25.47	5.86	149.29	2.92	1.83	1.83
3.38	1.70	25.36	5.96	151.28	2.93	1.82	1.82
3.40	1.70	25.25	6.07	153.21	2.94	1.81	1.81
3.42	1.73	25.53	5.88	150.21	2.92	1.83	1.83
3.44	1.77	25.85	5.79	149.54	2.91	1.86	1.86
3.46	1.80	26.16	5.69	148.88	2.90	1.88	1.88
3.48	1.80	26.01	5.71	148.50	2.90	1.87	1.87

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.50	1.80	25.87	5.73	148.13	2.90	1.86	1.86
3.52	1.80	25.69	5.66	145.44	2.90	1.85	1.85
3.54	1.83	26.03	5.65	147.12	2.90	1.88	1.88
3.56	1.97	27.63	5.19	143.33	2.85	2.01	2.01
3.58	2.07	28.84	5.01	144.43	2.83	2.10	2.10
3.60	2.10	29.09	4.86	141.50	2.81	2.12	2.12
3.62	2.03	28.11	5.13	144.06	2.84	2.04	2.04
3.64	1.93	26.62	5.35	142.28	2.86	1.93	1.93
3.66	1.90	26.07	5.54	144.48	2.88	1.88	1.88
3.68	1.87	25.50	5.66	144.40	2.90	1.84	1.84
3.70	1.90	25.77	5.49	141.56	2.88	1.86	1.86
3.72	1.87	25.15	5.44	136.92	2.87	1.82	1.82
3.74	1.80	24.07	5.40	130.08	2.87	1.74	1.74
3.76	1.67	22.20	5.78	128.35	2.91	1.59	1.59
3.78	1.60	21.23	6.05	128.49	2.94	1.52	1.52
3.80	1.53	20.24	6.24	126.21	2.95	1.45	1.45
3.82	1.50	19.67	6.29	123.66	2.96	1.40	1.40
3.84	1.50	19.47	5.82	113.36	2.91	1.40	1.40
3.86	1.57	20.18	5.45	110.05	2.87	1.45	1.45
3.88	1.67	21.32	5.12	109.12	2.84	1.54	1.54
3.90	1.70	21.69	5.25	113.89	2.85	1.57	1.57
3.92	1.67	21.17	5.38	113.89	2.87	1.53	1.53
3.94	1.67	21.07	5.39	113.66	2.87	1.52	1.52
3.96	1.70	21.37	5.30	113.20	2.86	1.54	1.54
3.98	1.83	22.93	5.00	114.57	2.82	1.66	1.66
4.00	1.90	23.63	4.82	113.87	2.80	1.71	1.71
4.02	1.90	23.55	4.93	116.11	2.82	1.71	1.71
4.04	1.87	23.06	5.14	118.52	2.84	1.67	1.67
4.06	1.87	22.95	5.15	118.29	2.84	1.66	1.66
4.08	1.87	22.81	5.07	115.67	2.83	1.65	1.65
4.10	1.83	22.28	5.08	113.24	2.83	1.61	1.61
4.12	1.80	21.76	5.09	110.79	2.84	1.57	1.57
4.14	1.90	22.84	4.81	109.93	2.80	1.65	1.65
4.16	2.00	23.92	4.56	109.06	2.77	1.74	1.74
4.18	2.10	25.01	4.42	110.63	2.76	1.82	1.82
4.20	2.17	25.65	4.19	107.56	2.73	1.87	1.87
4.22	2.27	26.70	4.00	106.71	2.70	1.95	1.95
4.24	2.33	27.35	3.88	106.10	2.68	2.00	2.00
4.26	2.40	28.03	3.85	107.90	2.68	2.05	2.05
4.28	2.37	27.53	3.92	107.94	2.69	2.01	2.01
4.30	2.37	27.41	3.93	107.76	2.69	2.00	2.00
4.32	2.33	26.91	4.01	107.80	2.70	1.96	1.96
4.34	2.37	27.20	4.03	109.76	2.71	1.98	1.98
4.36	2.33	26.71	4.11	109.79	2.72	1.94	1.94
4.38	2.27	25.82	4.17	107.70	2.72	1.87	1.87
4.40	2.13	24.16	4.29	103.58	2.74	1.75	1.75
4.42	2.07	23.29	4.35	101.38	2.75	1.69	1.69
4.44	2.00	22.42	4.42	99.13	2.76	1.62	1.62



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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
4.46	1.97	21.93	4.41	96.64	2.75	1.59	1.59
4.48	1.87	20.70	4.56	94.49	2.77	1.49	1.49
4.50	1.80	19.87	4.77	94.71	2.80	1.43	1.43
4.52	1.80	19.82	5.03	99.62	2.83	1.43	1.43
4.54	1.83	20.10	4.94	99.27	2.82	1.45	1.45
4.56	1.83	20.01	4.95	99.11	2.82	1.44	1.44
4.58	1.80	19.52	4.69	91.51	2.79	1.41	1.41
4.60	1.80	19.43	4.70	91.37	2.79	1.40	1.40
4.62	1.80	19.32	4.44	85.85	2.76	1.39	1.39
4.64	1.80	19.22	4.31	82.94	2.74	1.39	1.39
4.66	1.67	17.68	4.56	80.64	2.77	1.27	1.27
4.68	1.57	16.52	4.90	81.01	2.81	1.19	1.19
4.70	1.47	15.37	5.47	84.15	2.88	1.10	1.10
4.72	1.50	15.68	5.52	86.61	2.88	1.12	1.12
4.74	1.53	15.99	5.72	91.56	2.90	1.14	1.14
4.76	1.67	17.37	5.38	93.38	2.87	1.24	1.24
4.78	1.80	18.75	5.20	97.50	2.85	1.34	1.34
4.80	1.93	20.09	4.81	96.71	2.80	1.44	1.44
4.82	2.00	20.73	4.76	98.59	2.80	1.49	1.49
4.84	2.00	20.65	4.77	98.44	2.80	1.48	1.48
4.86	1.93	19.87	5.08	100.89	2.83	1.42	1.42
4.88	1.80	18.38	5.51	101.30	2.88	1.32	1.32
4.90	1.73	17.59	5.64	99.13	2.89	1.26	1.26
4.92	1.70	17.17	5.77	99.08	2.91	1.23	1.23
4.94	1.83	18.51	5.67	105.03	2.90	1.32	1.32
4.96	1.97	19.84	5.68	112.63	2.90	1.42	1.42
4.98	2.10	21.15	5.20	109.89	2.85	1.51	1.51
5.00	2.17	21.76	5.21	113.45	2.85	1.56	1.56
5.02	2.23	22.37	5.22	116.88	2.85	1.60	1.60
5.04	2.33	23.34	5.46	127.34	2.87	1.67	1.67
5.06	2.37	23.59	5.38	126.99	2.87	1.69	1.69
5.08	2.27	22.46	5.50	123.59	2.88	1.61	1.61
5.10	2.07	20.32	5.84	118.59	2.91	1.45	1.45
5.12	1.67	16.13	7.04	113.53	3.03	1.15	1.15
5.14	1.60	15.38	7.00	107.68	3.02	1.10	1.10
5.16	1.60	15.32	7.02	107.49	3.02	1.09	1.09
5.18	1.80	17.29	6.19	107.07	2.95	1.23	1.23
5.20	1.80	17.22	6.32	108.84	2.96	1.23	1.23
5.22	1.80	17.15	6.45	110.55	2.97	1.22	1.22
5.24	1.83	17.41	6.33	110.31	2.96	1.24	1.24
5.26	1.87	17.68	6.23	110.06	2.95	1.26	1.26
5.28	1.90	17.94	6.01	107.89	2.93	1.28	1.28
5.30	1.87	17.54	6.25	109.68	2.95	1.25	1.25
5.32	1.83	17.14	6.50	111.41	2.98	1.22	1.22
5.34	1.83	17.07	6.62	113.03	2.99	1.22	1.22
5.36	1.90	17.66	6.49	114.54	2.98	1.26	1.26
5.38	2.03	18.89	6.13	115.89	2.94	1.35	1.35
5.40	2.17	20.13	5.73	115.38	2.90	1.44	1.44

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
5.42	2.30	21.35	5.46	116.57	2.88	1.52	1.52
5.44	2.40	22.25	5.30	117.82	2.86	1.59	1.59
5.46	2.47	22.81	5.30	120.87	2.86	1.63	1.63
5.48	2.53	23.37	5.08	118.73	2.83	1.67	1.67
5.50	2.60	23.93	4.94	118.31	2.82	1.71	1.71
5.52	2.67	24.49	4.81	117.88	2.80	1.74	1.74
5.54	2.73	25.05	4.69	117.45	2.79	1.78	1.78
5.56	2.67	24.32	4.83	117.54	2.81	1.73	1.73
5.58	2.57	23.28	4.91	114.26	2.81	1.66	1.66
5.60	2.40	21.61	5.14	111.13	2.84	1.54	1.54
5.62	2.37	21.23	4.97	105.60	2.82	1.51	1.51
5.64	2.33	20.86	4.79	99.83	2.80	1.48	1.48
5.66	2.30	20.47	4.78	97.84	2.80	1.46	1.46
5.68	2.23	19.78	4.75	93.90	2.80	1.41	1.41
5.70	2.17	19.08	4.93	94.01	2.82	1.36	1.36
5.72	2.13	18.72	4.80	89.81	2.80	1.33	1.33
5.74	2.10	18.34	4.90	89.81	2.81	1.30	1.30
5.76	2.10	18.28	4.79	87.54	2.80	1.30	1.30
5.78	2.17	18.84	4.63	87.21	2.78	1.34	1.34
5.80	2.17	18.78	4.64	87.10	2.78	1.33	1.33
5.82	2.20	19.01	4.68	89.02	2.79	1.35	1.35
5.84	2.17	18.62	5.00	93.13	2.83	1.32	1.32
5.86	2.27	19.48	4.76	92.70	2.80	1.38	1.38
5.88	2.27	19.41	4.77	92.58	2.80	1.38	1.38
5.90	2.23	19.05	4.75	90.54	2.80	1.35	1.35
5.92	2.13	18.06	5.14	92.74	2.84	1.28	1.28
5.94	2.07	17.39	5.22	90.79	2.85	1.24	1.24
5.96	2.00	16.74	5.31	88.80	2.86	1.19	1.19
5.98	1.87	15.49	5.48	84.79	2.88	1.10	1.10
6.00	1.77	14.52	5.84	84.86	2.91	1.04	1.04
6.02	1.67	13.57	6.25	84.85	2.95	0.97	0.97
6.04	1.60	12.94	6.39	82.68	2.97	0.92	0.92
6.06	1.47	11.74	6.86	80.48	3.01	0.84	0.84
6.08	1.40	11.12	7.03	78.17	3.03	0.79	0.79
6.10	1.33	10.50	7.21	75.78	3.04	0.75	0.75
6.12	1.30	10.18	7.20	73.34	3.04	0.73	0.73
6.14	1.23	9.57	7.40	70.79	3.06	0.68	0.68
6.16	1.17	8.97	7.87	70.55	3.10	0.64	0.64
6.18	1.13	8.65	8.13	70.35	3.12	0.62	0.62
6.20	1.07	8.05	8.40	67.63	3.14	0.34	0.58
6.22	1.00	7.46	9.00	67.19	3.18	0.25	0.53
6.24	0.97	7.15	9.35	66.87	3.21	0.34	0.51
6.26	0.97	7.13	9.68	68.99	3.23	0.34	0.51
6.28	1.00	7.38	9.37	69.14	3.21	0.34	0.53
6.30	0.93	6.80	10.08	68.49	3.26	0.33	0.49
6.32	0.90	6.50	10.15	65.90	3.26	0.33	0.46
6.34	0.90	6.47	10.17	65.79	3.26	0.25	0.46
6.36	0.93	6.72	9.47	63.70	3.22	0.33	0.48

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.38	0.90	6.42	9.86	63.33	3.24	0.25	0.46
6.40	0.87	6.13	10.27	62.92	3.27	0.25	0.44
6.42	0.90	6.38	10.25	65.38	3.27	0.33	0.46
6.44	0.97	6.90	9.54	65.86	3.22	0.33	0.49
6.46	1.00	7.15	9.23	65.99	3.20	0.24	0.51
6.48	0.97	6.85	9.58	65.66	3.22	0.32	0.49
6.50	0.97	6.83	10.22	69.78	3.27	0.32	0.49
6.52	0.97	6.80	10.24	69.68	3.27	0.40	0.49
6.54	1.00	7.05	9.91	69.87	3.25	0.32	0.50
6.56	0.97	6.76	9.98	67.42	3.25	0.32	0.48
6.58	1.00	7.00	9.95	69.65	3.25	0.32	0.50
6.60	1.03	7.24	9.64	69.82	3.23	0.40	0.52
6.62	1.10	7.75	9.32	72.19	3.21	0.55	0.55
6.64	1.03	7.19	9.68	69.61	3.23	0.40	0.51
6.66	1.03	7.17	9.98	71.49	3.25	0.51	0.51
6.68	1.07	7.40	9.41	69.64	3.21	0.39	0.53
6.70	1.17	8.16	8.84	72.16	3.17	0.58	0.58
6.72	1.17	8.14	8.60	69.99	3.15	0.39	0.58
6.74	1.13	7.85	9.14	71.77	3.19	0.56	0.56
6.76	1.10	7.56	9.18	69.45	3.20	0.39	0.54
6.78	1.17	8.06	8.65	69.71	3.16	0.31	0.58
6.80	1.17	8.03	8.40	67.48	3.14	0.31	0.57
6.82	1.17	8.00	8.94	71.55	3.18	0.57	0.57
6.84	1.10	7.46	9.77	72.96	3.24	0.53	0.53
6.86	1.17	7.95	9.68	76.97	3.23	0.57	0.57
6.88	1.20	8.18	9.20	75.27	3.20	0.58	0.58
6.90	1.27	8.66	8.93	77.35	3.18	0.62	0.62
6.92	1.30	8.89	8.71	77.40	3.16	0.63	0.63
6.94	1.37	9.36	8.85	82.86	3.17	0.67	0.67
6.96	1.37	9.33	9.22	86.03	3.20	0.67	0.67
6.98	1.37	9.31	9.57	89.02	3.22	0.66	0.66
7.00	1.37	9.28	9.74	90.38	3.23	0.66	0.66
7.02	1.47	10.00	9.09	90.84	3.19	0.71	0.71
7.04	1.53	10.46	8.70	91.02	3.16	0.75	0.75
7.06	1.60	10.93	8.19	89.55	3.12	0.78	0.78
7.08	1.53	10.40	8.58	89.22	3.15	0.74	0.74
7.10	1.53	10.37	8.74	90.64	3.16	0.74	0.74
7.12	1.53	10.33	8.76	90.51	3.16	0.74	0.74
7.14	1.57	10.55	8.28	87.39	3.13	0.75	0.75
7.16	1.57	10.52	8.14	85.65	3.12	0.75	0.75
7.18	1.60	10.73	7.83	83.95	3.09	0.77	0.77
7.20	1.70	11.43	7.64	87.34	3.08	0.82	0.82
7.22	1.73	11.64	7.50	87.27	3.07	0.83	0.83
7.24	1.67	11.12	7.98	88.66	3.10	0.79	0.79
7.26	1.67	11.08	7.85	86.95	3.09	0.79	0.79
7.28	1.77	11.77	7.39	86.98	3.06	0.84	0.84
7.30	1.90	12.70	6.84	86.92	3.01	0.91	0.91
7.32	1.97	13.14	6.61	86.79	2.99	0.94	0.94

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
7.34	1.93	12.86	6.48	83.29	2.98	0.92	0.92
7.36	1.93	12.83	6.21	79.61	2.95	0.92	0.92
7.38	1.93	12.79	6.36	81.33	2.96	0.91	0.91
7.40	2.07	13.71	6.17	84.63	2.95	0.98	0.98
7.42	2.20	14.65	6.00	87.82	2.93	1.04	1.04
7.44	2.30	15.40	5.59	86.05	2.89	1.09	1.09
7.46	2.33	15.64	5.39	84.25	2.87	1.10	1.10
7.48	2.43	16.39	5.02	82.31	2.83	1.15	1.15
7.50	2.47	16.61	4.95	82.18	2.82	1.16	1.16
7.52	2.40	16.10	4.88	78.62	2.81	1.13	1.13
7.54	2.27	15.06	5.10	76.87	2.84	1.06	1.06
7.56	2.23	14.73	5.34	78.65	2.86	1.04	1.04
7.58	2.33	15.37	5.45	83.70	2.87	1.09	1.09
7.60	2.47	16.24	5.54	89.98	2.88	1.15	1.15
7.62	2.60	17.18	5.32	91.31	2.86	1.21	1.21
7.64	2.73	18.10	5.20	94.11	2.85	1.27	1.27
7.66	2.93	19.57	4.79	93.73	2.80	1.37	1.37
7.68	3.07	20.51	4.63	94.91	2.78	1.43	1.43
7.70	3.10	20.69	4.65	96.24	2.78	1.44	1.44
7.72	3.03	20.12	4.78	96.25	2.80	1.41	1.41
7.74	2.93	19.31	4.99	96.30	2.82	1.35	1.35
7.76	2.90	19.09	4.81	91.79	2.80	1.33	1.33
7.78	2.80	18.31	4.93	90.31	2.82	1.28	1.28
7.80	2.77	18.00	5.01	90.26	2.83	1.26	1.26
7.82	2.70	17.40	5.36	93.24	2.86	1.23	1.23
7.84	2.70	17.35	5.37	93.14	2.87	1.22	1.22
7.86	2.83	18.30	5.08	92.91	2.83	1.28	1.28
7.88	3.07	19.94	4.78	95.42	2.80	1.39	1.39
7.90	3.30	21.50	4.74	101.96	2.80	1.50	1.50
7.92	3.37	21.89	4.77	104.44	2.80	1.53	1.53
7.94	3.57	23.39	4.33	101.30	2.74	1.62	1.62
7.96	3.90	25.92	3.77	97.76	2.67	1.77	1.77
7.98	4.30	28.91	3.35	96.85	2.60	1.95	1.95
8.00	4.27	28.44	3.60	102.30	2.64	1.93	1.93
8.02	3.97	26.16	3.83	100.13	2.68	1.79	1.79
8.04	3.73	24.41	4.00	97.75	2.70	1.67	1.67
8.06	4.17	27.87	3.16	88.12	2.57	0.66	0.66
8.08	5.17	35.57	2.44	86.66	2.43	0.69	0.69
8.10	6.17	43.26	2.06	88.97	2.33	0.72	0.72
8.12	6.60	46.22	2.09	96.41	2.34	0.72	0.72
8.14	6.63	46.15	2.19	101.09	2.37	0.72	0.72
8.16	6.50	44.90	2.30	103.42	2.40	0.72	0.72
8.18	6.30	43.19	2.42	104.65	2.43	0.72	0.72
8.20	5.90	39.94	2.66	106.17	2.48	0.71	0.71
8.22	5.43	36.40	2.83	103.06	2.51	0.69	0.69
8.24	5.10	34.15	2.73	93.07	2.49	0.69	0.69
8.26	5.17	35.21	2.24	78.84	2.38	0.69	0.69
8.28	5.70	39.96	1.72	68.86	2.22	0.20	0.71

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.30	6.57	47.28	1.42	67.11	2.08	0.15	0.73
8.32	7.37	53.96	1.28	69.28	1.99	0.24	0.74
8.34	8.03	59.06	1.26	74.41	1.97	0.76	0.76
8.36	8.50	62.68	1.24	77.57	1.95	0.76	0.76
8.38	8.80	64.91	1.23	79.87	1.94	0.77	0.77
8.40	8.83	65.09	1.23	79.96	1.94	0.77	0.77
8.42	8.73	63.98	1.25	80.22	1.96	0.77	0.77
8.44	8.57	62.03	1.32	82.02	2.02	0.76	0.76
8.46	8.40	60.03	1.42	85.04	2.08	0.76	0.76
8.48	8.13	57.54	1.50	86.07	2.12	0.75	0.75
8.50	7.60	53.16	1.59	84.55	2.17	0.74	0.74
8.52	6.80	47.11	1.66	78.12	2.20	0.73	0.73
8.54	5.73	38.65	1.98	76.65	2.31	0.70	0.70
8.56	4.63	30.22	2.49	75.23	2.44	0.67	0.67
8.58	3.67	23.00	3.25	74.71	2.59	0.64	0.64
8.60	3.00	18.21	3.97	72.30	2.70	1.24	1.24
8.62	2.67	15.83	4.48	70.93	2.76	1.09	1.09
8.64	2.47	14.38	4.94	71.06	2.82	1.00	1.00
8.66	2.33	13.55	4.84	65.60	2.81	0.30	0.94
8.68	2.17	12.45	4.96	61.70	2.82	0.18	0.87
8.70	1.93	10.95	5.05	55.24	2.83	0.24	0.76
8.72	1.70	9.37	5.64	52.80	2.89	0.12	0.66
8.74	1.60	8.66	6.08	52.65	2.94	0.12	0.62
8.76	1.70	9.21	6.20	57.17	2.95	0.24	0.66
8.78	2.10	11.78	5.38	63.43	2.87	0.24	0.83
8.80	2.63	15.40	4.22	64.94	2.73	0.30	1.05
8.82	3.30	20.12	3.18	64.00	2.58	0.12	0.62
8.84	3.73	23.17	2.82	65.31	2.51	0.13	0.64
8.86	3.93	24.36	2.89	70.28	2.52	0.65	0.65
8.88	3.83	23.26	3.37	78.41	2.61	1.55	1.55
8.90	3.50	20.65	4.11	84.83	2.72	1.41	1.41
8.92	3.20	18.52	4.60	85.15	2.78	1.28	1.28
8.94	3.10	17.78	4.79	85.17	2.80	1.23	1.23
8.96	3.30	19.16	4.36	83.45	2.75	1.31	1.31
8.98	3.60	21.20	3.91	82.97	2.69	1.44	1.44
9.00	3.67	21.77	3.60	78.32	2.64	1.46	1.46
9.02	3.47	20.48	3.60	73.82	2.64	1.37	1.37
9.04	3.20	18.80	3.58	67.33	2.64	0.35	1.26
9.06	3.13	18.42	3.46	63.70	2.62	0.23	1.23
9.08	3.37	20.03	3.16	63.37	2.57	0.11	0.62
9.10	3.63	21.90	2.88	63.04	2.52	0.11	0.63
9.12	3.90	23.60	2.81	66.31	2.51	0.14	0.64
9.14	3.90	23.55	2.81	66.26	2.51	0.14	0.64
9.16	3.83	22.81	3.13	71.33	2.57	0.64	0.64
9.18	3.63	21.48	3.17	68.19	2.57	0.17	0.63
9.20	3.47	20.41	3.18	64.84	2.58	0.12	0.63
9.22	3.17	18.48	3.22	59.48	2.58	0.09	0.61
9.24	2.87	16.34	3.66	59.77	2.65	0.23	1.09

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.26	2.47	13.58	4.43	60.13	2.76	0.23	0.93
9.28	2.37	13.07	4.12	53.83	2.72	0.23	0.89
9.30	2.87	16.69	2.92	48.67	2.53	0.06	0.60
9.32	3.87	24.42	1.00	24.42	2.22	0.03	0.65
9.34	4.73	30.71	1.00	30.71	2.13	0.04	0.67
9.36	4.97	32.01	1.00	32.01	2.16	0.04	0.68
9.38	4.87	30.67	1.81	55.54	2.25	0.07	0.67
9.40	4.63	28.49	2.12	60.35	2.35	0.09	0.66
9.42	4.57	27.84	2.23	61.97	2.38	0.10	0.66
9.44	4.50	27.20	2.34	63.60	2.41	0.11	0.66
9.46	4.47	27.01	2.29	61.89	2.39	0.10	0.66
9.48	4.10	24.33	2.55	61.94	2.45	0.10	0.65
9.50	3.43	19.69	3.08	60.60	2.56	0.09	0.62
9.52	2.73	14.88	4.12	61.28	2.72	0.22	1.01
9.54	2.17	11.13	5.52	61.44	2.88	0.22	0.78
9.56	1.87	9.28	6.60	61.20	2.99	0.28	0.66
9.58	1.63	7.97	7.65	60.96	3.08	0.22	0.57
9.60	1.50	7.22	8.39	60.60	3.14	0.22	0.52
9.62	1.40	6.66	9.29	61.85	3.20	0.27	0.48
9.64	1.37	6.46	9.78	63.20	3.24	0.27	0.46
9.66	1.37	6.45	10.03	64.65	3.25	0.27	0.46
9.68	1.40	6.61	10.02	66.25	3.25	0.33	0.47
9.70	1.37	6.42	10.50	67.37	3.29	0.33	0.46
9.72	1.37	6.40	10.52	67.30	3.29	0.32	0.46
9.74	1.33	6.20	10.80	66.98	3.31	0.32	0.44
9.76	1.30	6.01	10.86	65.28	3.31	0.32	0.43
9.78	1.23	5.64	11.47	64.65	3.35	0.27	0.40
9.80	1.20	5.44	11.80	64.26	3.37	0.32	0.39
9.82	1.20	5.43	12.06	65.49	3.38	0.32	0.39
9.84	1.23	5.60	11.75	65.76	3.37	0.32	0.40
9.86	1.27	5.76	11.46	66.00	3.35	0.32	0.41
9.88	1.33	6.10	11.32	69.09	3.34	0.32	0.44
9.90	1.40	6.44	10.80	69.55	3.31	0.43	0.46
9.92	1.47	6.78	10.50	71.23	3.29	0.48	0.48
9.94	1.50	6.94	10.09	70.07	3.26	0.50	0.50
9.96	1.50	6.93	10.29	71.30	3.27	0.49	0.49
9.98	1.50	6.91	10.31	71.23	3.27	0.49	0.49
10.00	1.53	7.07	10.27	72.62	3.27	0.51	0.51
10.02	1.50	6.89	10.86	74.78	3.31	0.49	0.49
10.04	1.53	7.05	10.63	74.98	3.29	0.50	0.50
10.06	1.53	7.04	10.64	74.94	3.30	0.50	0.50
10.08	1.60	7.38	10.04	74.11	3.25	0.53	0.53
10.10	1.60	7.38	10.04	74.07	3.26	0.53	0.53
10.12	1.63	7.54	10.01	75.45	3.25	0.54	0.54
10.14	1.67	7.71	9.81	75.59	3.24	0.55	0.55
10.16	1.63	7.52	10.18	76.57	3.26	0.54	0.54
10.18	1.63	7.51	10.19	76.53	3.26	0.54	0.54
10.20	1.63	7.50	10.19	76.49	3.27	0.54	0.54

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
10.22	1.70	7.84	9.80	76.81	3.24	0.56	0.56
10.24	1.73	8.01	9.46	75.72	3.21	0.57	0.57
10.26	1.70	7.82	9.65	75.53	3.23	0.56	0.56
10.28	1.67	7.64	9.86	75.33	3.24	0.55	0.55
10.30	1.60	7.29	10.28	74.91	3.27	0.52	0.52
10.32	1.57	7.10	10.51	74.66	3.29	0.51	0.51
10.34	1.53	6.92	10.58	73.22	3.29	0.49	0.49
10.36	1.53	6.91	10.41	71.96	3.28	0.49	0.49
10.38	1.57	7.08	9.83	69.58	3.24	0.36	0.51
10.40	1.60	7.24	9.44	68.37	3.21	0.31	0.52
10.42	1.63	7.40	9.06	67.08	3.19	0.31	0.53
10.44	1.70	7.74	8.88	68.70	3.17	0.31	0.55
10.46	1.77	8.07	8.87	71.62	3.17	0.58	0.58
10.48	1.83	8.41	8.85	74.42	3.17	0.60	0.60
10.50	1.87	8.57	8.69	74.49	3.16	0.61	0.61
10.52	1.93	8.90	8.53	75.92	3.15	0.64	0.64
10.54	1.97	9.06	8.66	78.47	3.16	0.65	0.65
10.56	2.03	9.39	8.75	82.19	3.16	0.67	0.67
10.58	2.10	9.72	8.59	83.49	3.15	0.69	0.69
10.60	2.17	10.05	8.43	84.76	3.14	0.72	0.72
10.62	2.20	10.21	8.30	84.80	3.13	0.73	0.73
10.64	2.27	10.54	8.05	84.88	3.11	0.75	0.75
10.66	2.27	10.53	7.95	83.68	3.10	0.75	0.75
10.68	2.27	10.52	7.84	82.46	3.09	0.75	0.75
10.70	2.20	10.16	8.10	82.32	3.11	0.73	0.73
10.72	2.20	10.15	7.87	79.87	3.10	0.73	0.73
10.74	2.17	9.97	7.88	78.55	3.10	0.71	0.71
10.76	2.17	9.96	7.49	74.63	3.06	0.71	0.71
10.78	2.17	9.95	7.50	74.60	3.07	0.71	0.71
10.80	2.17	9.94	7.37	73.22	3.05	0.71	0.71
10.82	2.13	9.76	7.50	73.16	3.07	0.70	0.70
10.84	2.10	9.58	7.34	70.31	3.05	0.68	0.68
10.86	2.07	9.40	7.16	67.34	3.04	0.30	0.67
10.88	2.03	9.22	6.96	64.20	3.02	0.25	0.66
10.90	1.97	8.87	6.86	60.86	3.01	0.25	0.63
10.92	1.87	8.36	7.06	59.06	3.03	0.20	0.60
10.94	1.70	7.51	7.60	57.09	3.07	0.20	0.54
10.96	1.57	6.83	8.79	60.09	3.17	0.20	0.49
10.98	1.50	6.49	9.45	61.34	3.21	0.30	0.46
11.00	1.53	6.65	9.47	62.93	3.22	0.25	0.47
11.02	1.67	7.31	8.47	61.89	3.14	0.25	0.52
11.04	2.03	9.14	6.83	62.39	3.01	0.25	0.65
11.06	2.77	13.36	4.69	62.69	2.79	0.25	0.91
11.08	3.67	19.11	3.16	60.36	2.57	0.09	0.62
11.10	4.43	24.28	2.40	58.29	2.42	0.08	0.65
11.12	4.57	25.04	2.39	59.91	2.42	0.09	0.65
11.14	4.60	25.01	2.52	63.06	2.45	0.11	0.65
11.16	4.33	23.03	2.88	66.25	2.52	0.14	0.64

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
11.18	4.03	21.22	2.98	63.32	2.54	0.11	0.63
11.20	3.37	17.07	3.54	60.50	2.63	0.20	1.12
11.22	2.73	13.23	4.33	57.33	2.74	0.20	0.89
11.24	2.27	10.39	5.51	57.26	2.88	0.20	0.73
11.26	1.90	8.36	6.81	56.95	3.01	0.20	0.60
11.28	1.73	7.53	7.54	56.77	3.07	0.20	0.54
11.30	1.93	8.51	6.90	58.69	3.01	0.20	0.61
11.32	2.50	11.56	5.40	62.37	2.87	0.25	0.81
11.34	3.20	15.81	3.93	62.19	2.69	0.30	1.05
11.36	3.60	18.42	3.27	60.18	2.59	0.09	0.61
11.38	3.50	17.95	3.16	56.71	2.57	0.08	0.61
11.40	3.03	14.96	3.81	57.01	2.67	0.20	0.99
11.42	2.47	11.47	4.99	57.18	2.82	0.20	0.79
11.44	2.07	9.10	6.24	56.79	2.95	0.20	0.65
11.46	1.87	8.11	7.42	60.14	3.06	0.20	0.58
11.48	1.80	7.77	8.13	63.15	3.12	0.29	0.55
11.50	1.77	7.60	8.68	65.94	3.16	0.29	0.54
11.52	1.73	7.42	8.48	62.94	3.14	0.29	0.53
11.54	1.67	7.09	8.63	61.21	3.15	0.20	0.51
11.56	1.60	6.76	8.56	57.84	3.15	0.24	0.48
11.58	1.53	6.42	9.21	59.16	3.20	0.20	0.46
11.60	1.50	6.25	8.93	55.82	3.18	0.24	0.45
11.62	1.50	6.24	8.66	54.09	3.16	0.15	0.45
11.64	1.53	6.40	7.89	50.46	3.10	0.15	0.46
11.66	1.60	6.72	7.23	48.53	3.04	0.15	0.48
11.68	1.57	6.55	7.07	46.28	3.03	0.10	0.47
11.70	1.47	6.05	7.62	46.09	3.07	0.10	0.43
11.72	1.23	4.91	10.02	49.20	3.25	0.15	0.35
11.74	1.17	4.58	11.37	52.07	3.34	0.19	0.33
11.76	1.10	4.25	12.77	54.30	3.43	0.19	0.30
11.78	1.13	4.41	12.70	56.00	3.42	0.24	0.31
11.80	1.17	4.56	12.34	56.33	3.40	0.24	0.33
11.82	1.23	4.88	11.38	55.53	3.34	0.19	0.35
11.84	1.23	4.87	10.77	52.47	3.30	0.19	0.35
11.86	1.13	4.38	11.03	48.35	3.32	0.14	0.31
11.88	1.03	3.90	12.17	47.40	3.39	0.10	0.28
11.90	0.93	3.41	13.99	47.69	3.49	0.19	0.24
11.92	0.87	3.08	15.97	49.22	3.60	0.19	0.22
11.94	0.87	3.08	15.98	49.19	3.60	0.19	0.22
11.96	0.93	3.39	14.84	50.36	3.54	0.19	0.24
11.98	1.03	3.87	13.73	53.13	3.48	0.19	0.28
12.00	1.10	4.18	13.21	55.27	3.45	0.24	0.30
12.02	1.13	4.34	12.82	55.64	3.43	0.24	0.31
12.04	1.13	4.33	12.52	54.27	3.41	0.19	0.31
12.06	1.10	4.17	13.24	55.18	3.45	0.19	0.30
12.08	1.10	4.16	13.84	57.61	3.49	0.29	0.30
12.10	1.10	4.16	14.40	59.85	3.52	0.29	0.30
12.12	1.10	4.15	14.14	58.70	3.50	0.29	0.30



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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.14	1.13	4.31	13.46	57.96	3.47	0.24	0.31
12.16	1.20	4.62	12.72	58.72	3.42	0.24	0.33
12.18	1.27	4.93	12.54	61.82	3.41	0.29	0.35
12.20	1.23	4.76	13.13	62.56	3.45	0.33	0.34
12.22	1.17	4.44	13.89	61.68	3.49	0.29	0.32
12.24	1.10	4.12	14.47	59.61	3.52	0.28	0.29
12.26	1.13	4.27	14.06	60.06	3.50	0.28	0.31
12.28	1.17	4.42	13.67	60.48	3.48	0.28	0.32
12.30	1.13	4.26	14.08	59.99	3.50	0.28	0.30
12.32	1.07	3.94	14.96	58.95	3.55	0.28	0.28
12.34	1.07	3.93	15.24	59.95	3.56	0.28	0.28
12.36	1.13	4.24	14.61	62.01	3.53	0.33	0.30
12.38	1.23	4.71	13.89	65.44	3.49	0.33	0.34
12.40	1.27	4.86	13.75	66.85	3.48	0.38	0.35
12.42	1.33	5.17	13.28	68.64	3.45	0.38	0.37
12.44	1.37	5.32	12.77	67.96	3.43	0.38	0.38
12.46	1.40	5.47	12.28	67.21	3.40	0.33	0.39
12.48	1.40	5.46	12.29	67.18	3.40	0.33	0.39
12.50	1.40	5.46	12.50	68.21	3.41	0.38	0.39
12.52	1.40	5.45	12.50	68.17	3.41	0.38	0.39
12.54	1.40	5.45	12.51	68.14	3.41	0.33	0.39
12.56	1.40	5.44	12.33	67.04	3.40	0.37	0.39
12.58	1.50	5.90	11.51	67.90	3.35	0.33	0.42
12.60	1.60	6.36	10.60	67.43	3.29	0.33	0.45
12.62	1.67	6.67	9.99	66.57	3.25	0.33	0.48
12.64	1.63	6.50	10.57	68.74	3.29	0.28	0.46
12.66	1.63	6.49	10.75	69.85	3.30	0.42	0.46
12.68	1.63	6.49	11.10	72.00	3.32	0.46	0.46
12.70	1.67	6.64	10.72	71.11	3.30	0.47	0.47
12.72	1.67	6.63	10.72	71.08	3.30	0.47	0.47
12.74	1.70	6.78	10.52	71.25	3.29	0.48	0.48
12.76	1.77	7.08	10.43	73.79	3.28	0.51	0.51
12.78	1.70	6.76	11.00	74.39	3.32	0.48	0.48
12.80	1.70	6.75	11.01	74.36	3.32	0.48	0.48
12.82	1.63	6.44	11.15	71.77	3.33	0.46	0.46
12.84	1.73	6.89	10.18	70.15	3.26	0.49	0.49
12.86	1.80	7.19	9.79	70.45	3.24	0.51	0.51
12.88	1.83	7.34	9.62	70.57	3.23	0.52	0.52
12.90	1.77	7.02	10.16	71.36	3.26	0.50	0.50
12.92	1.70	6.71	10.58	70.96	3.29	0.48	0.48
12.94	1.70	6.70	10.75	72.01	3.30	0.48	0.48
12.96	1.77	7.00	10.34	72.38	3.28	0.50	0.50
12.98	1.87	7.45	9.77	72.84	3.24	0.53	0.53
13.00	1.87	7.44	9.63	71.68	3.23	0.53	0.53
13.02	1.87	7.44	9.79	72.78	3.24	0.53	0.53
13.04	1.77	6.97	10.37	72.25	3.28	0.50	0.50
13.06	1.73	6.81	10.42	70.93	3.28	0.49	0.49
13.08	1.63	6.34	10.55	66.90	3.29	0.32	0.45

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
13.10	1.63	6.34	10.17	64.47	3.26	0.27	0.45
13.12	1.63	6.33	10.37	65.66	3.28	0.27	0.45
13.14	1.70	6.63	10.14	67.19	3.26	0.37	0.47
13.16	1.63	6.32	10.57	66.78	3.29	0.32	0.45
13.18	1.60	6.16	10.01	61.63	3.25	0.27	0.44
13.20	1.57	6.00	9.56	57.31	3.22	0.18	0.43
13.22	1.60	6.14	9.35	57.42	3.21	0.18	0.44
13.24	1.60	6.14	9.36	57.40	3.21	0.27	0.44
13.26	1.50	5.67	10.03	56.91	3.25	0.18	0.41
13.28	1.40	5.21	9.94	51.83	3.25	0.18	0.37
13.30	1.33	4.90	10.48	51.42	3.28	0.14	0.35
13.32	1.40	5.20	9.64	50.14	3.23	0.18	0.37
13.34	1.43	5.35	9.71	51.93	3.23	0.14	0.38
13.36	1.37	5.04	10.23	51.55	3.27	0.18	0.36
13.38	1.30	4.73	10.80	51.10	3.31	0.18	0.34
13.40	1.30	4.73	10.81	51.08	3.31	0.14	0.34
13.42	1.40	5.17	9.99	51.67	3.25	0.18	0.37
13.44	1.43	5.32	10.04	53.39	3.26	0.18	0.38
13.46	1.43	5.31	10.33	54.86	3.27	0.18	0.38
13.48	1.40	5.15	11.13	57.38	3.33	0.23	0.37
13.50	1.47	5.45	10.85	59.12	3.31	0.27	0.39
13.52	1.60	6.04	10.13	61.19	3.26	0.22	0.43
13.54	1.73	6.63	9.51	63.08	3.22	0.27	0.47
13.56	1.80	6.93	9.51	65.85	3.22	0.31	0.49
13.58	1.83	7.07	9.67	68.37	3.23	0.31	0.50
13.60	1.90	7.36	9.64	70.92	3.23	0.53	0.53
13.62	1.97	7.65	9.59	73.38	3.22	0.55	0.55
13.64	2.07	8.09	9.25	74.82	3.20	0.58	0.58
13.66	2.10	8.23	8.97	73.79	3.18	0.59	0.59
13.68	2.10	8.22	8.83	72.63	3.17	0.59	0.59
13.70	2.03	7.92	9.00	71.26	3.18	0.57	0.57
13.72	1.97	7.61	9.02	68.67	3.18	0.36	0.54
13.74	1.90	7.30	8.68	63.40	3.16	0.27	0.52
13.76	1.80	6.85	8.39	57.47	3.14	0.18	0.49
13.78	1.70	6.40	8.45	54.08	3.14	0.18	0.46
13.80	1.63	6.10	8.84	53.86	3.17	0.18	0.44
13.82	1.57	5.79	9.25	53.60	3.20	0.18	0.41
13.84	1.53	5.64	9.20	51.85	3.20	0.18	0.40
13.86	1.50	5.48	9.43	51.70	3.21	0.13	0.39
13.88	1.50	5.48	9.13	50.02	3.19	0.18	0.39
13.90	1.50	5.47	9.44	51.66	3.21	0.13	0.39
13.92	1.50	5.47	9.45	51.63	3.21	0.18	0.39
13.94	1.50	5.46	9.74	53.18	3.23	0.18	0.39
13.96	1.50	5.45	9.46	51.59	3.21	0.18	0.39
13.98	1.53	5.60	9.24	51.71	3.20	0.13	0.40
14.00	1.53	5.59	9.80	54.77	3.24	0.18	0.40
14.02	1.53	5.58	10.77	60.15	3.30	0.26	0.40
14.04	1.50	5.43	11.68	63.42	3.36	0.31	0.39

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
14.06	1.50	5.42	11.69	63.39	3.36	0.31	0.39
14.08	1.50	5.42	11.49	62.23	3.35	0.26	0.39
14.10	1.53	5.56	10.80	60.04	3.31	0.26	0.40
14.12	1.53	5.55	10.35	57.43	3.28	0.22	0.40
14.14	1.50	5.40	10.35	55.86	3.28	0.18	0.39
14.16	1.40	4.96	11.14	55.19	3.33	0.22	0.35
14.18	1.33	4.66	12.01	55.93	3.38	0.22	0.33
14.20	1.33	4.65	11.74	54.63	3.36	0.22	0.33
14.22	1.37	4.79	11.17	53.52	3.33	0.17	0.34
14.24	1.43	5.08	10.34	52.50	3.28	0.17	0.36
14.26	1.50	5.36	9.85	52.84	3.24	0.17	0.38
14.28	1.50	5.36	10.13	54.29	3.26	0.17	0.38
14.30	1.47	5.21	10.91	56.81	3.31	0.22	0.37
14.32	1.57	5.64	10.18	57.38	3.26	0.26	0.40
14.34	2.13	8.09	7.46	60.40	3.06	0.17	0.58
14.36	3.00	12.30	5.08	62.45	2.83	0.26	0.85
14.38	3.93	17.19	4.02	69.15	2.70	0.30	1.14
14.40	4.60	21.07	3.27	68.78	2.59	0.20	0.63
14.42	4.93	22.95	3.04	69.86	2.55	0.52	0.64
14.44	4.80	22.31	3.02	67.32	2.55	0.15	0.64
14.46	4.27	19.30	3.36	64.88	2.61	0.30	1.23
14.48	3.47	14.89	4.09	60.89	2.71	0.17	0.99
14.50	3.00	12.49	4.51	56.29	2.77	0.22	0.84
14.52	3.20	13.59	4.14	56.26	2.72	0.17	0.90
14.54	4.10	18.96	2.86	54.28	2.52	0.07	0.62
14.56	5.00	24.34	2.30	55.87	2.40	0.07	0.65
14.58	5.53	27.24	2.22	60.37	2.38	0.09	0.66
14.60	5.67	27.79	2.27	63.08	2.39	0.11	0.66
14.62	5.37	25.90	2.43	63.01	2.43	0.11	0.65
14.64	4.70	21.91	2.82	61.71	2.51	0.10	0.63
14.66	3.73	16.38	3.61	59.15	2.64	0.26	1.06
14.68	2.83	11.39	5.06	57.67	2.83	0.17	0.78
14.70	2.07	7.66	6.80	52.15	3.01	0.17	0.55
14.72	1.53	5.37	9.19	49.36	3.20	0.13	0.38
14.74	1.33	4.51	10.71	48.31	3.30	0.13	0.32
14.76	1.43	4.93	10.23	50.45	3.27	0.17	0.35
14.78	1.80	6.49	8.69	56.41	3.16	0.17	0.46
14.80	2.53	9.62	6.25	60.09	2.95	0.26	0.69
14.82	3.43	14.32	4.43	63.49	2.76	0.26	0.96
14.84	4.23	18.96	3.26	61.76	2.59	0.10	0.62
14.86	4.47	20.42	2.95	60.18	2.53	0.09	0.63
14.88	4.20	19.04	3.01	57.25	2.55	0.08	0.62
14.90	3.57	15.53	3.49	54.24	2.63	0.17	1.00
14.92	2.77	11.11	4.74	52.60	2.79	0.13	0.75
14.94	2.13	7.86	6.62	51.99	2.99	0.17	0.56
14.96	1.77	6.29	8.44	53.12	3.14	0.17	0.45
14.98	1.70	6.00	8.81	52.91	3.17	0.17	0.43
15.00	1.70	6.00	9.31	55.84	3.20	0.17	0.43

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.02	1.60	5.57	10.43	58.04	3.28	0.25	0.40
15.04	1.50	5.14	11.63	59.77	3.36	0.25	0.37
15.06	1.37	4.57	12.58	57.46	3.41	0.25	0.33
15.08	1.33	4.42	12.39	54.78	3.40	0.21	0.32
15.10	1.27	4.14	12.48	51.64	3.41	0.17	0.30
15.12	1.23	3.99	12.18	48.62	3.39	0.17	0.29
15.14	1.27	4.13	11.49	47.42	3.35	0.13	0.29
15.16	1.33	4.40	10.88	47.89	3.31	0.13	0.31
15.18	1.43	4.82	10.06	48.47	3.26	0.17	0.34
15.20	1.47	4.95	9.48	46.96	3.22	0.13	0.35
15.22	1.47	4.95	8.74	43.27	3.16	0.08	0.35
15.24	1.37	4.52	9.03	40.84	3.18	0.08	0.32
15.26	1.27	4.10	9.85	40.35	3.24	0.08	0.29
15.28	1.23	3.95	10.64	42.07	3.30	0.08	0.28
15.30	1.27	4.09	10.34	42.26	3.28	0.13	0.29
15.32	1.33	4.36	9.77	42.62	3.24	0.08	0.31
15.34	1.37	4.50	9.51	42.77	3.22	0.08	0.32
15.36	1.37	4.49	9.52	42.75	3.22	0.13	0.32
15.38	1.30	4.21	10.07	42.39	3.26	0.08	0.30
15.40	1.23	3.93	11.14	43.72	3.33	0.08	0.28
15.42	1.17	3.64	11.85	43.17	3.37	0.17	0.26
15.44	1.20	3.78	11.92	45.04	3.38	0.08	0.27
15.46	1.23	3.91	11.16	43.67	3.33	0.12	0.28
15.48	1.30	4.18	11.31	47.33	3.34	0.12	0.30
15.50	1.33	4.32	11.01	47.55	3.32	0.17	0.31
15.52	1.40	4.59	10.45	47.96	3.28	0.12	0.33
15.54	1.47	4.86	9.93	48.30	3.25	0.12	0.35
15.56	1.50	5.00	9.70	48.44	3.23	0.17	0.36
15.58	1.60	5.40	8.72	47.14	3.16	0.12	0.39
15.60	2.07	7.33	6.78	49.71	3.00	0.08	0.52
15.62	2.87	11.17	4.81	53.78	2.80	0.21	0.76
15.64	3.73	15.49	3.96	61.36	2.70	0.21	1.01
15.66	4.10	17.36	3.69	63.98	2.66	0.29	1.12
15.68	3.93	16.25	4.10	66.64	2.71	0.29	1.07
15.70	3.57	14.13	4.89	69.12	2.81	0.29	0.96
15.72	3.30	12.66	5.54	70.11	2.88	0.88	0.88
15.74	3.20	11.95	6.22	74.28	2.95	0.85	0.85
15.76	3.10	11.53	6.73	77.60	3.00	0.82	0.82
15.78	3.07	11.38	7.00	79.67	3.02	0.81	0.81
15.80	3.07	11.37	6.91	78.60	3.02	0.81	0.81
15.82	3.03	11.22	6.62	74.25	2.99	0.80	0.80
15.84	3.33	12.76	5.49	70.00	2.88	0.89	0.89
15.86	4.10	17.21	3.71	63.82	2.66	0.25	1.11
15.88	5.80	27.68	2.10	58.23	2.35	0.08	0.66
15.90	7.60	39.65	1.49	59.10	2.12	0.09	0.70
15.92	9.27	51.34	1.00	51.34	1.96	0.06	0.74
15.94	10.37	59.14	1.00	59.14	1.89	0.09	0.76
15.96	11.23	65.82	1.00	65.82	1.81	0.13	0.77

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.98	11.93	71.93	1.00	71.93	1.73	0.78	0.78
16.00	12.47	76.48	1.00	76.48	1.68	0.79	0.79
16.02	12.83	79.83	1.00	79.83	1.64	0.80	0.80
16.04	13.07	81.02	1.00	81.02	1.65	0.80	0.80
16.06	13.20	82.27	1.00	82.27	1.63	0.80	0.80
16.08	13.37	83.27	1.00	83.27	1.64	0.80	0.80
16.10	13.60	84.48	1.00	84.48	1.65	0.80	0.80
16.12	13.73	84.39	1.00	84.39	1.68	0.80	0.80
16.14	13.07	77.88	1.00	77.88	1.76	0.79	0.79
16.16	12.27	70.43	1.16	81.54	1.87	0.78	0.78
16.18	11.67	64.16	1.28	82.24	1.99	0.77	0.77
16.20	12.27	68.86	1.22	83.78	1.93	0.78	0.78
16.22	13.47	78.76	1.00	78.76	1.81	0.79	0.79
16.24	15.13	94.26	1.00	94.26	1.63	0.82	0.82
16.26	16.83	105.03	1.00	105.03	1.56	0.83	0.83
16.28	18.80	117.48	1.00	117.48	1.49	0.85	0.85
16.30	20.77	129.93	1.00	129.93	1.46	0.86	0.86
16.32	23.00	144.06	1.00	144.06	1.43	0.88	0.88
16.34	25.03	156.91	1.00	156.91	1.39	0.89	0.89
16.36	24.70	154.73	1.00	154.73	1.38	0.89	0.89
16.38	24.77	155.09	1.00	155.09	1.37	0.89	0.89
16.40	24.67	154.40	1.00	154.40	1.41	0.89	0.89
16.42	25.67	160.68	1.00	160.68	1.43	0.90	0.90
16.44	25.23	157.87	1.00	157.87	1.46	0.89	0.89
16.46	24.27	151.69	1.00	151.69	1.51	0.89	0.89
16.48	24.67	154.16	1.00	154.16	1.51	0.89	0.89
16.50	24.97	156.00	1.00	156.00	1.52	0.89	0.89
16.52	25.77	161.00	1.00	161.00	1.51	0.90	0.90
16.54	26.07	162.84	1.00	162.84	1.50	0.90	0.90
16.56	26.50	165.52	1.00	165.52	1.49	0.90	0.90
16.58	26.10	162.93	1.00	162.93	1.50	0.90	0.90
16.60	26.13	163.07	1.00	163.07	1.49	0.90	0.90
16.62	26.47	165.12	1.00	165.12	1.49	0.90	0.90
16.64	26.90	167.79	1.00	167.79	1.48	0.90	0.90
16.66	30.57	190.86	1.00	190.86	1.40	0.92	0.92
16.68	34.13	213.28	1.00	213.28	1.33	0.94	0.94
16.70	45.67	285.92	1.00	285.92	1.16	0.99	0.99

**Abbreviations**

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

7. **ALLEGATO “B” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-09**

XXXX

**LIQUEFACTION ANALYSIS REPORT**

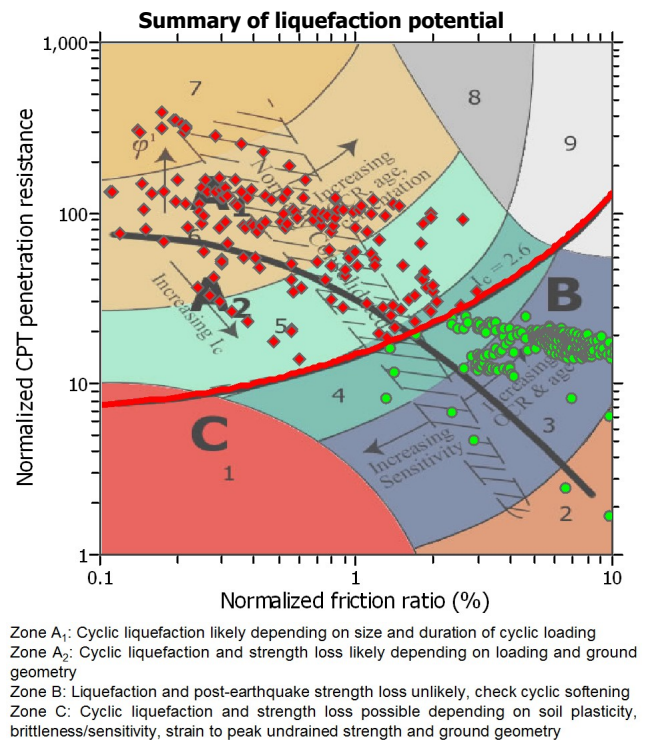
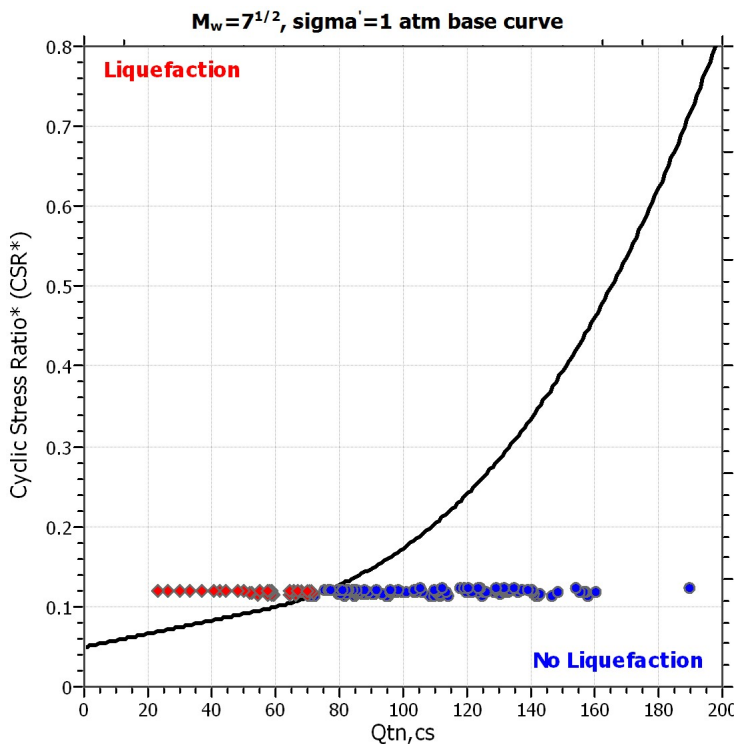
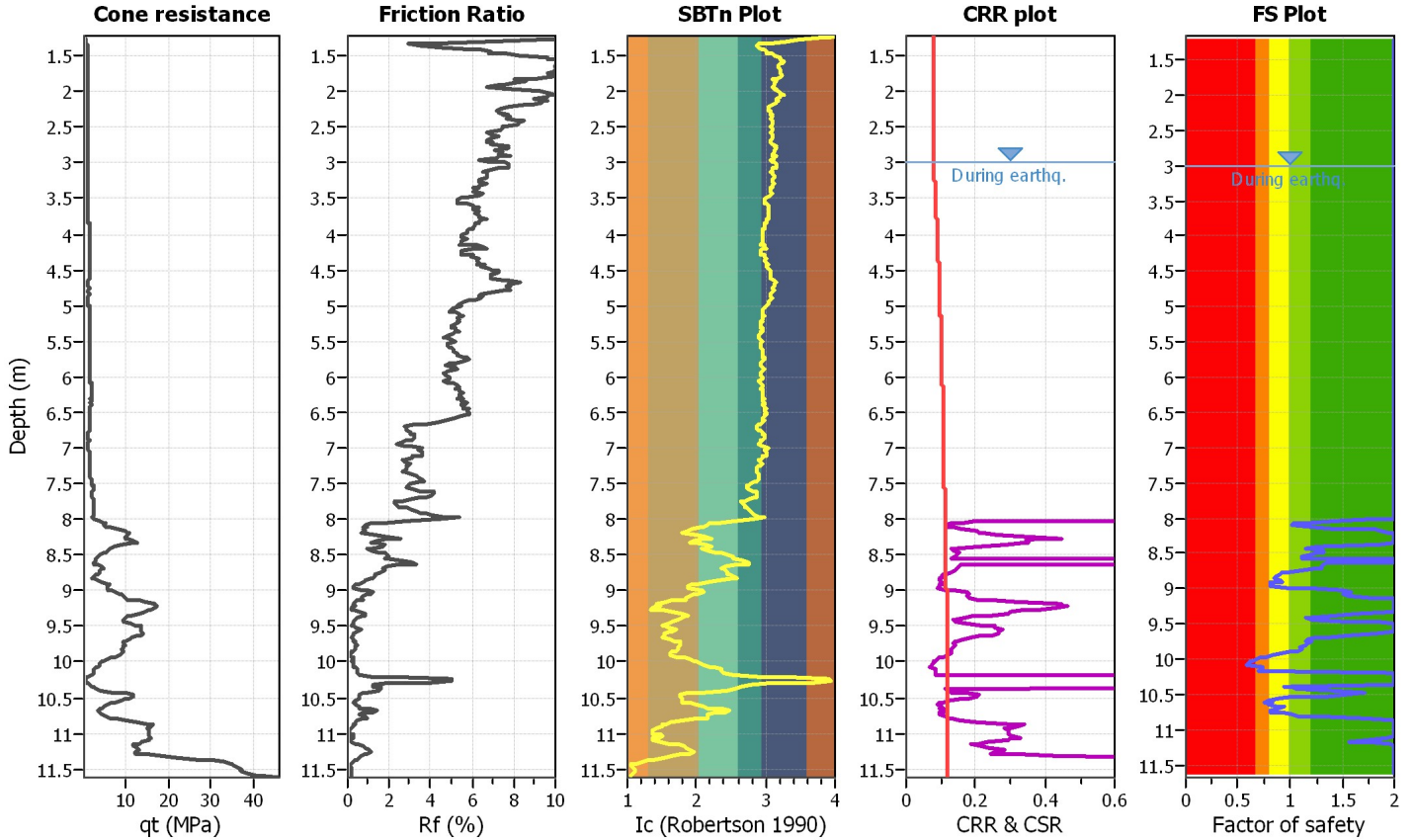
**Project title : Pontenziale di liquefazione**

**Location : A14 - Complanare nord - S.Lazzaro - Ponte Rizzoli**

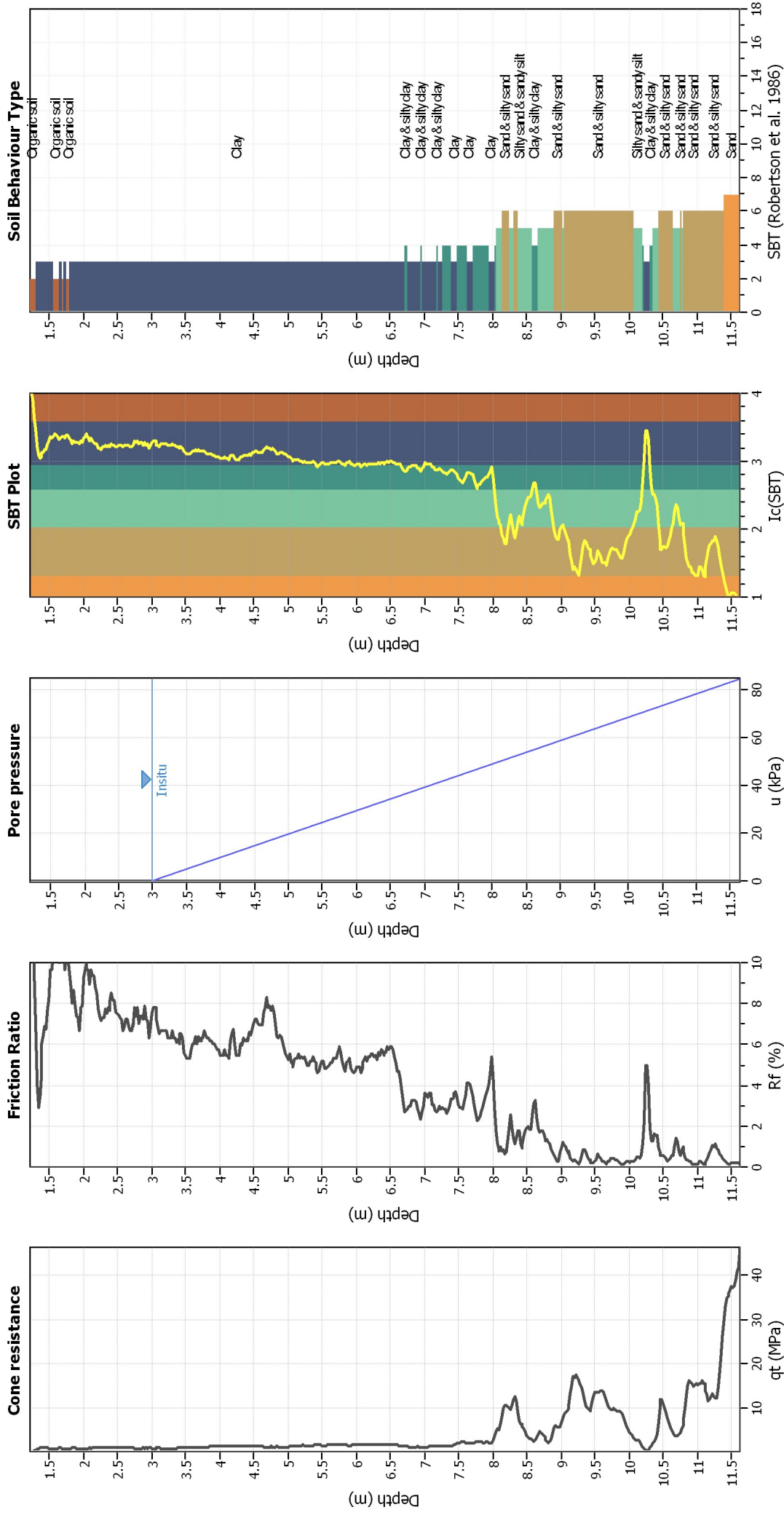
**CPT file : CPTe-09**

**Input parameters and analysis data**

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	3.00 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	3.00 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 $M_w$ :	5.00	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.35	Unit weight calculation:	19.00 kN/m <sup>3</sup>	$K_0$ applied:	Yes		



### CPT basic interpretation plots



### Input parameters and analysis data

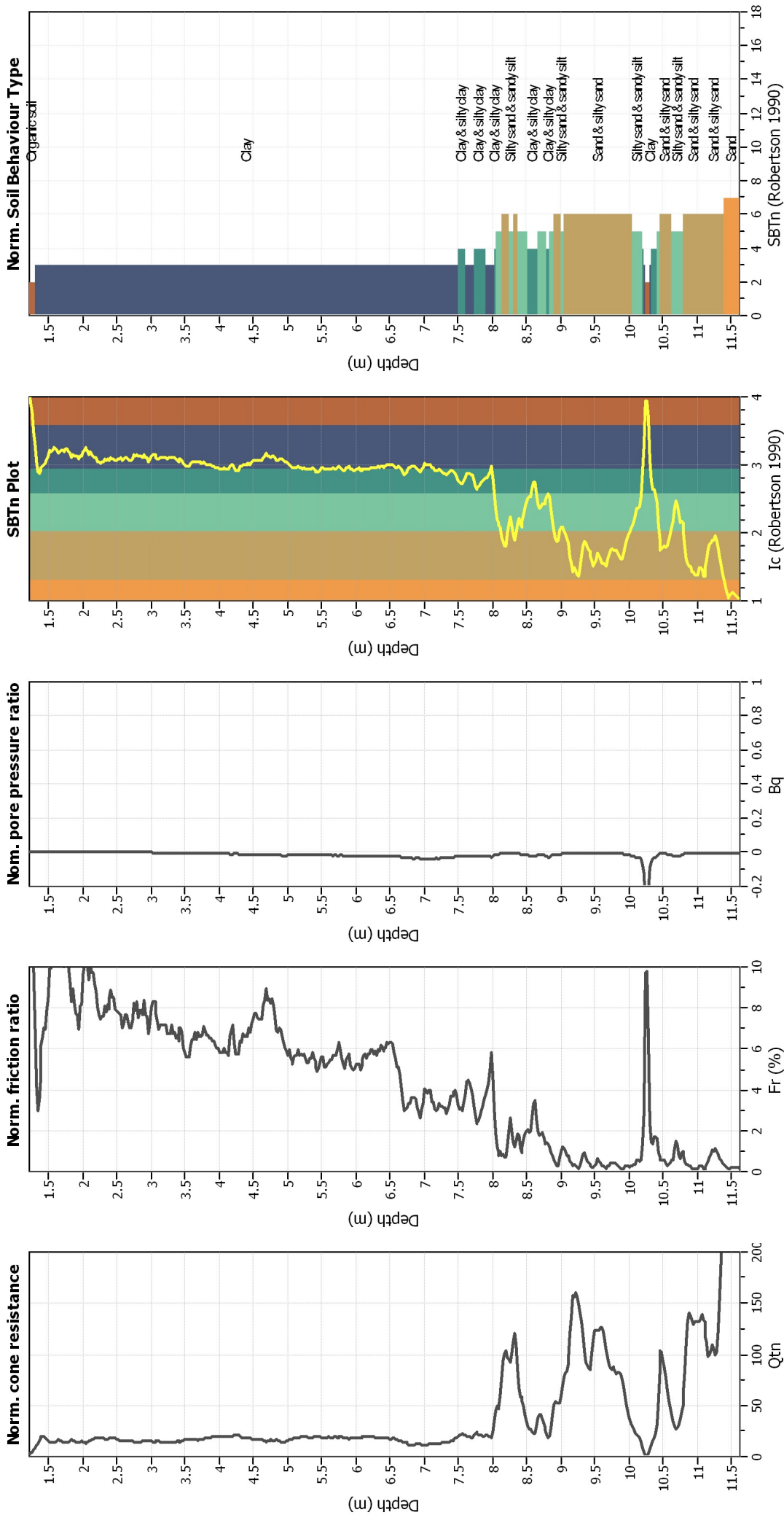
Analysis method:	NCEER (1998)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on $I_c$ value	$K_f$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (earthq.):	3.00 m		
Average results interval:	3		
$I_c$ cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		

### SBT legend

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



### CPT basic interpretation plots (normalized)



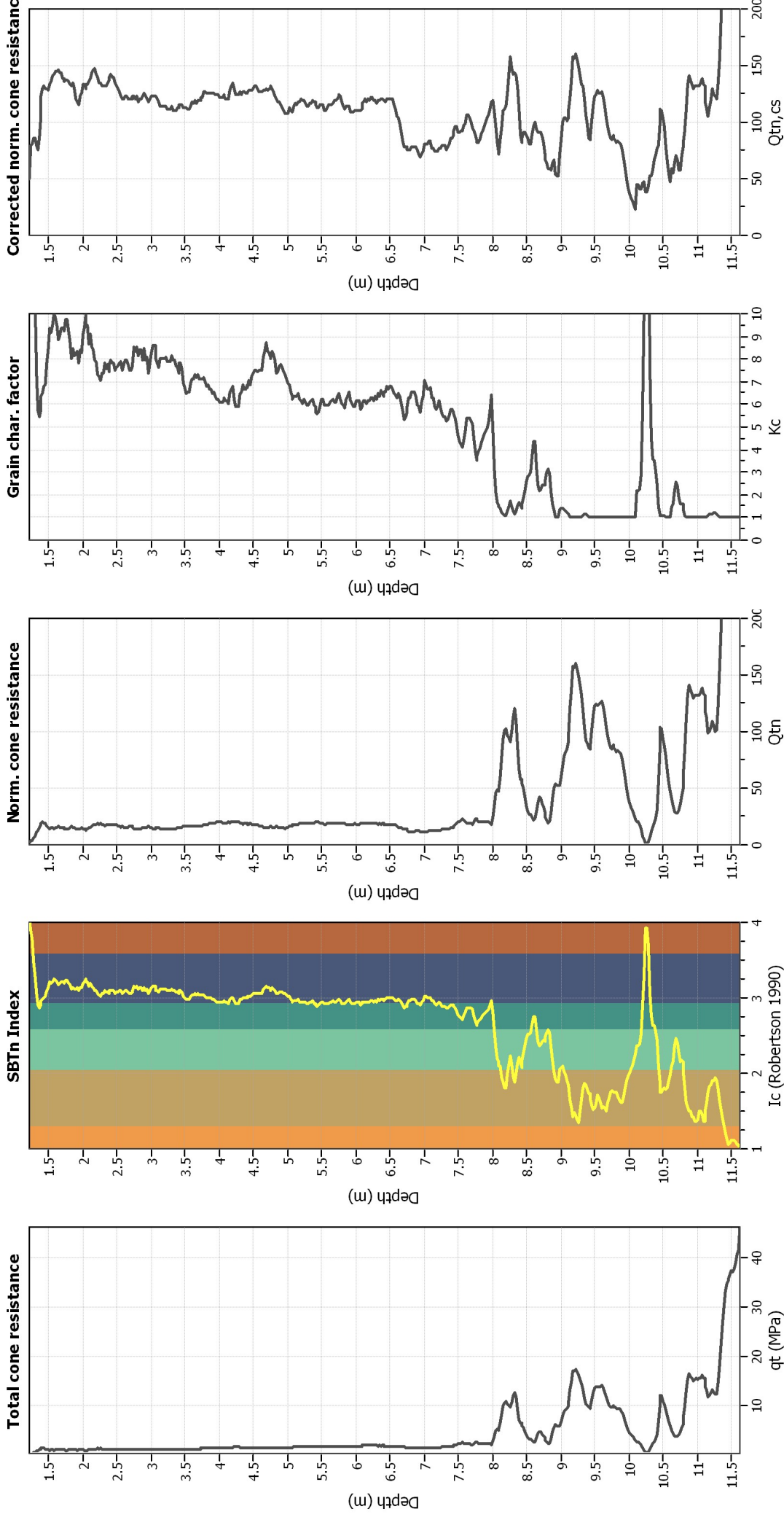
#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on Ic value	$K_f$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (earthq.):	3.00 m		
Average results interval:	3		
Ic cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		

#### SBTn legend

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

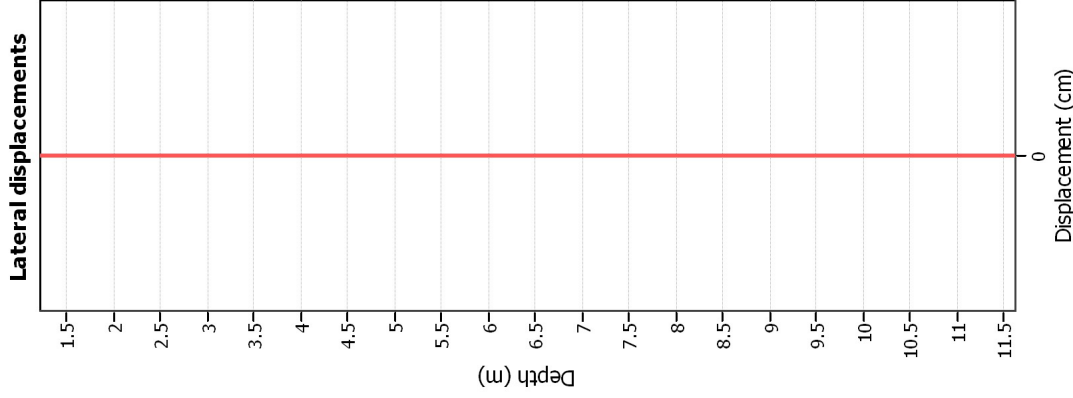
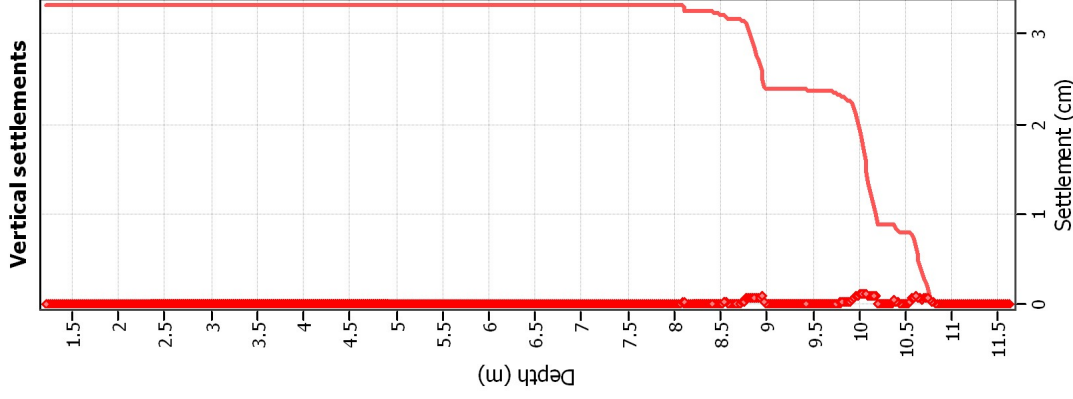
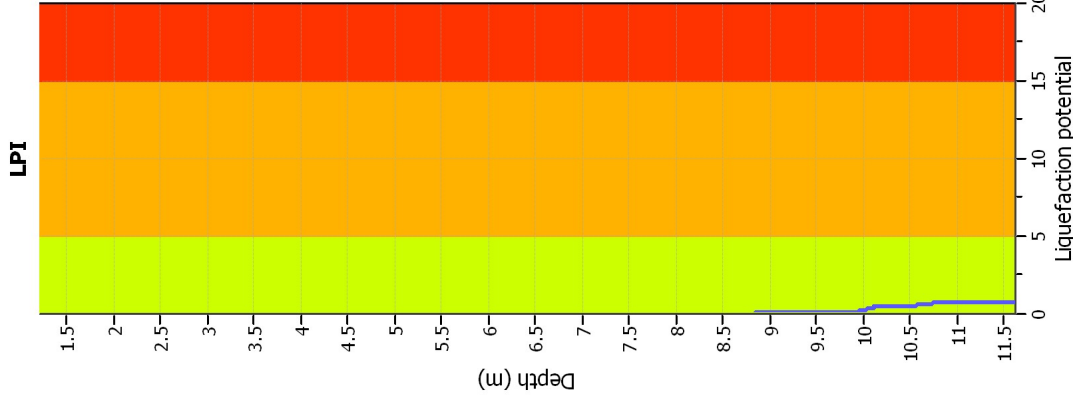
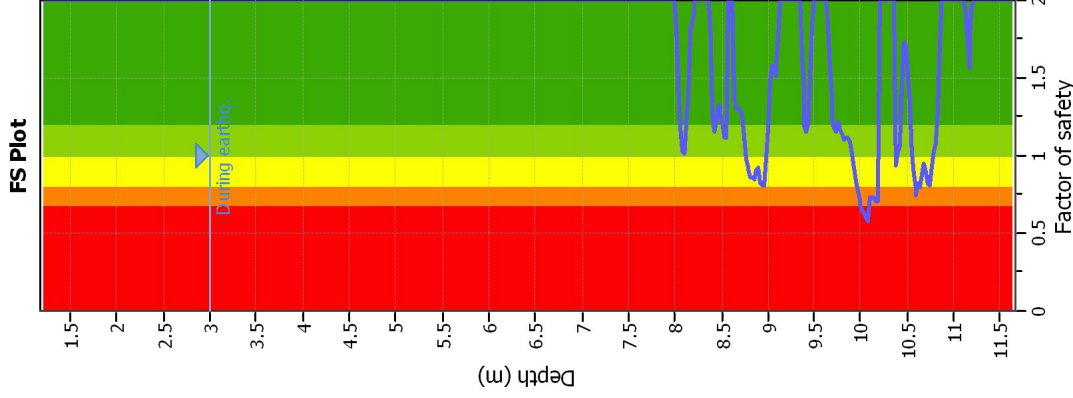
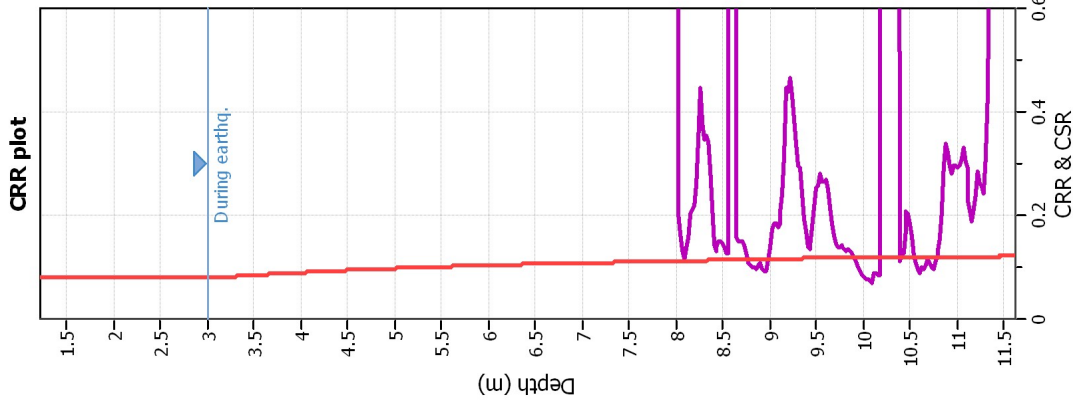
### Liquefaction analysis overall plots (intermediate results)



#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	3.00 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 <sub>G</sub> applied:	Yes
Earthquake magnitude M <sub>w</sub> :	5.00	Unit weight calculation:	19.00 kN/m <sup>3</sup>	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Fill height:	N/A	Limit depth:	N/A

### Liquefaction analysis overall plots



#### Input parameters and analysis data

Analysis method: NCEER (1998)  
 Fines correction method: NCEER (1998)  
 Points to test: Based on I<sub>c</sub> value  
 Earthquake magnitude M<sub>w</sub>: 5.00  
 Peak ground acceleration: 0.35  
 Depth to water table (insitu): 3.00 m

Depth to water table (earthq.): 3.00 m  
 Average results interval: 3  
 I<sub>c</sub> cut-off value: 2.60  
 Unit weight calculation: 19.00 kN/m<sup>3</sup>  
 Use fill: No  
 Fill height: N/A

Fill weight: N/A  
 Transition detect. applied: No  
 K<sub>σ</sub> applied: Yes  
 Clay like behavior applied: Sands only  
 Limit depth applied: No  
 Limit depth: N/A

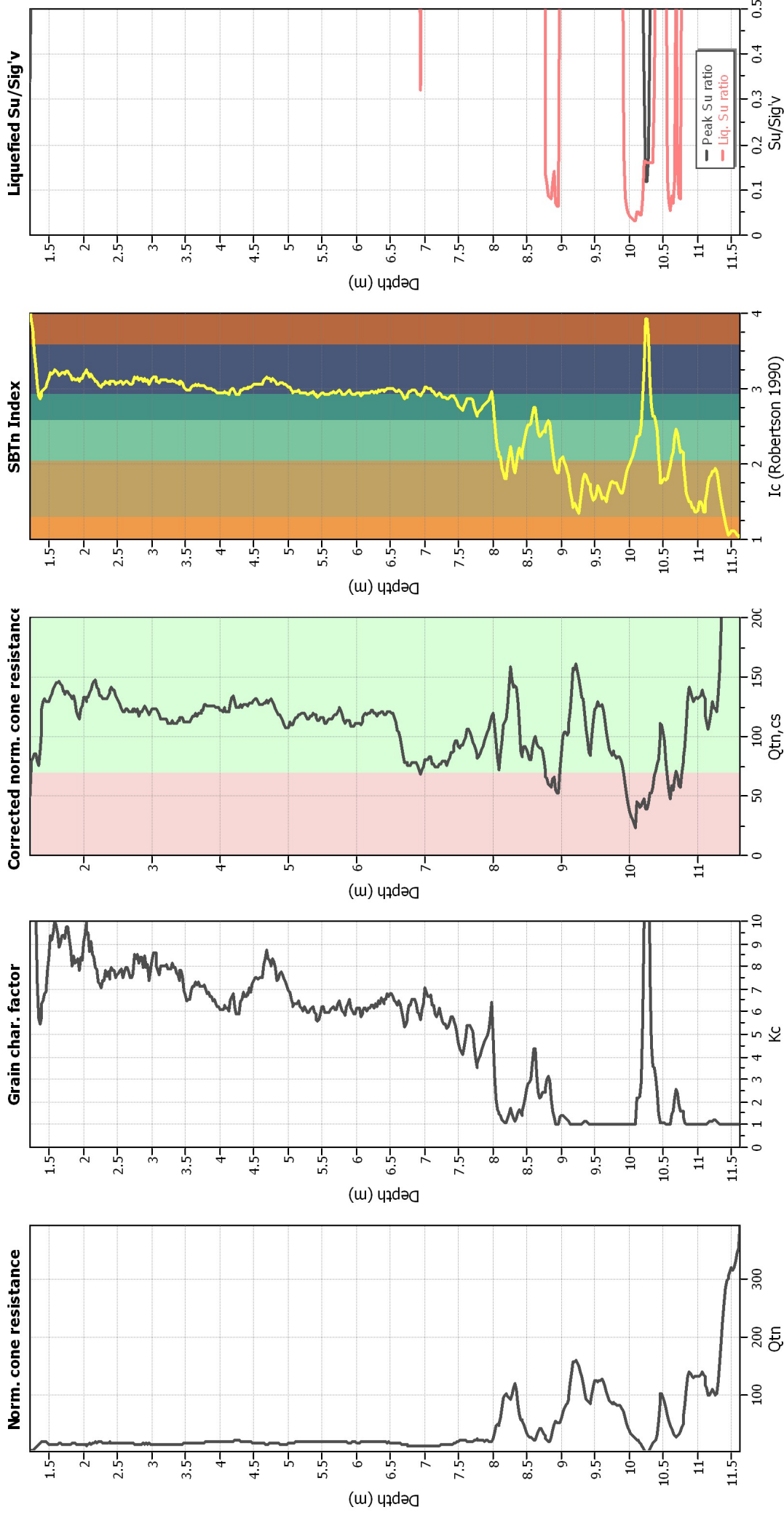
#### F.S. color scheme

- 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)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on Ic value	$K_r$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (erthq.):	3.00 m		
Average results interval:	3		
Ic cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::												
Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma'_v$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
1	1.22	23.18	0.00	23.18	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
2	1.24	23.56	0.00	23.56	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
3	1.26	23.94	0.00	23.94	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
4	1.28	24.32	0.00	24.32	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
5	1.30	24.70	0.00	24.70	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
6	1.32	25.08	0.00	25.08	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
7	1.34	25.46	0.00	25.46	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
8	1.36	25.84	0.00	25.84	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
9	1.38	26.22	0.00	26.22	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
10	1.40	26.60	0.00	26.60	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
11	1.42	26.98	0.00	26.98	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
12	1.44	27.36	0.00	27.36	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
13	1.46	27.74	0.00	27.74	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
14	1.48	28.12	0.00	28.12	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
15	1.50	28.50	0.00	28.50	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
16	1.52	28.88	0.00	28.88	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
17	1.54	29.26	0.00	29.26	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
18	1.56	29.64	0.00	29.64	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
19	1.58	30.02	0.00	30.02	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
20	1.60	30.40	0.00	30.40	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
21	1.62	30.78	0.00	30.78	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
22	1.64	31.16	0.00	31.16	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
23	1.66	31.54	0.00	31.54	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
24	1.68	31.92	0.00	31.92	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
25	1.70	32.30	0.00	32.30	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
26	1.72	32.68	0.00	32.68	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
27	1.74	33.06	0.00	33.06	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
28	1.76	33.44	0.00	33.44	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
29	1.78	33.82	0.00	33.82	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
30	1.80	34.20	0.00	34.20	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
31	1.82	34.58	0.00	34.58	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
32	1.84	34.96	0.00	34.96	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
33	1.86	35.34	0.00	35.34	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
34	1.88	35.72	0.00	35.72	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
35	1.90	36.10	0.00	36.10	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
36	1.92	36.48	0.00	36.48	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
37	1.94	36.86	0.00	36.86	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
38	1.96	37.24	0.00	37.24	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
39	1.98	37.62	0.00	37.62	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
40	2.00	38.00	0.00	38.00	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
41	2.02	38.38	0.00	38.38	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
42	2.04	38.76	0.00	38.76	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
43	2.06	39.14	0.00	39.14	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
44	2.08	39.52	0.00	39.52	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
45	2.10	39.90	0.00	39.90	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
46	2.12	40.28	0.00	40.28	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
47	2.14	40.66	0.00	40.66	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
48	2.16	41.04	0.00	41.04	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
49	2.18	41.42	0.00	41.42	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
50	2.20	41.80	0.00	41.80	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
51	2.22	42.18	0.00	42.18	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
52	2.24	42.56	0.00	42.56	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
53	2.26	42.94	0.00	42.94	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
54	2.28	43.32	0.00	43.32	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
55	2.30	43.70	0.00	43.70	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
56	2.32	44.08	0.00	44.08	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
57	2.34	44.46	0.00	44.46	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
58	2.36	44.84	0.00	44.84	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
59	2.38	45.22	0.00	45.22	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
60	2.40	45.60	0.00	45.60	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
61	2.42	45.98	0.00	45.98	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
62	2.44	46.36	0.00	46.36	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
63	2.46	46.74	0.00	46.74	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
64	2.48	47.12	0.00	47.12	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
65	2.50	47.50	0.00	47.50	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
66	2.52	47.88	0.00	47.88	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
67	2.54	48.26	0.00	48.26	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
68	2.56	48.64	0.00	48.64	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
69	2.58	49.02	0.00	49.02	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
70	2.60	49.40	0.00	49.40	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
71	2.62	49.78	0.00	49.78	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
72	2.64	50.16	0.00	50.16	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
73	2.66	50.54	0.00	50.54	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
74	2.68	50.92	0.00	50.92	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
75	2.70	51.30	0.00	51.30	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
76	2.72	51.68	0.00	51.68	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
77	2.74	52.06	0.00	52.06	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
78	2.76	52.44	0.00	52.44	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
79	2.78	52.82	0.00	52.82	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
80	2.80	53.20	0.00	53.20	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
81	2.82	53.58	0.00	53.58	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
82	2.84	53.96	0.00	53.96	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
83	2.86	54.34	0.00	54.34	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
84	2.88	54.72	0.00	54.72	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
85	2.90	55.10	0.00	55.10	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
86	2.92	55.48	0.00	55.48	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
87	2.94	55.86	0.00	55.86	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
88	2.96	56.24	0.00	56.24	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
89	2.98	56.62	0.00	56.62	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
90	3.00	57.00	0.00	57.00	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
91	3.02	57.38	0.20	57.18	0.98	0.224	2.82	0.079	1.00	1.00	0.079	No
92	3.04	57.76	0.39	57.37	0.98	0.224	2.82	0.079	1.00	1.00	0.079	No
93	3.06	58.14	0.59	57.55	0.98	0.225	2.82	0.080	1.00	1.00	0.080	No
94	3.08	58.52	0.78	57.74	0.98	0.226	2.82	0.080	1.00	1.00	0.080	No
95	3.10	58.90	0.98	57.92	0.98	0.226	2.82	0.080	1.00	1.00	0.080	No
96	3.12	59.28	1.18	58.10	0.98	0.227	2.82	0.080	1.00	1.00	0.080	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
97	3.14	59.66	1.37	58.29	0.98	0.228	2.82	0.081	1.00	1.00	0.081	No
98	3.16	60.04	1.57	58.47	0.98	0.229	2.82	0.081	1.00	1.00	0.081	No
99	3.18	60.42	1.77	58.65	0.98	0.229	2.82	0.081	1.00	1.00	0.081	No
100	3.20	60.80	1.96	58.84	0.98	0.230	2.82	0.081	1.00	1.00	0.081	No
101	3.22	61.18	2.16	59.02	0.98	0.231	2.82	0.082	1.00	1.00	0.082	No
102	3.24	61.56	2.35	59.21	0.98	0.231	2.82	0.082	1.00	1.00	0.082	No
103	3.26	61.94	2.55	59.39	0.98	0.232	2.82	0.082	1.00	1.00	0.082	No
104	3.28	62.32	2.75	59.57	0.98	0.233	2.82	0.082	1.00	1.00	0.082	No
105	3.30	62.70	2.94	59.76	0.98	0.233	2.82	0.083	1.00	1.00	0.083	No
106	3.32	63.08	3.14	59.94	0.98	0.234	2.82	0.083	1.00	1.00	0.083	No
107	3.34	63.46	3.34	60.12	0.98	0.235	2.82	0.083	1.00	1.00	0.083	No
108	3.36	63.84	3.53	60.31	0.98	0.235	2.82	0.083	1.00	1.00	0.083	No
109	3.38	64.22	3.73	60.49	0.98	0.236	2.82	0.084	1.00	1.00	0.084	No
110	3.40	64.60	3.92	60.68	0.98	0.237	2.82	0.084	1.00	1.00	0.084	No
111	3.42	64.98	4.12	60.86	0.98	0.237	2.82	0.084	1.00	1.00	0.084	No
112	3.44	65.36	4.32	61.04	0.98	0.238	2.82	0.084	1.00	1.00	0.084	No
113	3.46	65.74	4.51	61.23	0.98	0.238	2.82	0.084	1.00	1.00	0.084	No
114	3.48	66.12	4.71	61.41	0.98	0.239	2.82	0.085	1.00	1.00	0.085	No
115	3.50	66.50	4.91	61.60	0.98	0.240	2.82	0.085	1.00	1.00	0.085	No
116	3.52	66.88	5.10	61.78	0.98	0.240	2.82	0.085	1.00	1.00	0.085	No
117	3.54	67.26	5.30	61.96	0.98	0.241	2.82	0.085	1.00	1.00	0.085	No
118	3.56	67.64	5.49	62.15	0.98	0.242	2.82	0.086	1.00	1.00	0.086	No
119	3.58	68.02	5.69	62.33	0.98	0.242	2.82	0.086	1.00	1.00	0.086	No
120	3.60	68.40	5.89	62.51	0.98	0.243	2.82	0.086	1.00	1.00	0.086	No
121	3.62	68.78	6.08	62.70	0.98	0.243	2.82	0.086	1.00	1.00	0.086	No
122	3.64	69.16	6.28	62.88	0.98	0.244	2.82	0.086	1.00	1.00	0.086	No
123	3.66	69.54	6.47	63.07	0.97	0.245	2.82	0.087	1.00	1.00	0.087	No
124	3.68	69.92	6.67	63.25	0.97	0.245	2.82	0.087	1.00	1.00	0.087	No
125	3.70	70.30	6.87	63.43	0.97	0.246	2.82	0.087	1.00	1.00	0.087	No
126	3.72	70.68	7.06	63.62	0.97	0.246	2.82	0.087	1.00	1.00	0.087	No
127	3.74	71.06	7.26	63.80	0.97	0.247	2.82	0.087	1.00	1.00	0.087	No
128	3.76	71.44	7.46	63.98	0.97	0.247	2.82	0.088	1.00	1.00	0.088	No
129	3.78	71.82	7.65	64.17	0.97	0.248	2.82	0.088	1.00	1.00	0.088	No
130	3.80	72.20	7.85	64.35	0.97	0.249	2.82	0.088	1.00	1.00	0.088	No
131	3.82	72.58	8.04	64.54	0.97	0.249	2.82	0.088	1.00	1.00	0.088	No
132	3.84	72.96	8.24	64.72	0.97	0.250	2.82	0.088	1.00	1.00	0.088	No
133	3.86	73.34	8.44	64.90	0.97	0.250	2.82	0.089	1.00	1.00	0.089	No
134	3.88	73.72	8.63	65.09	0.97	0.251	2.82	0.089	1.00	1.00	0.089	No
135	3.90	74.10	8.83	65.27	0.97	0.251	2.82	0.089	1.00	1.00	0.089	No
136	3.92	74.48	9.03	65.45	0.97	0.252	2.82	0.089	1.00	1.00	0.089	No
137	3.94	74.86	9.22	65.64	0.97	0.252	2.82	0.089	1.00	1.00	0.089	No
138	3.96	75.24	9.42	65.82	0.97	0.253	2.82	0.090	1.00	1.00	0.090	No
139	3.98	75.62	9.61	66.01	0.97	0.254	2.82	0.090	1.00	1.00	0.090	No
140	4.00	76.00	9.81	66.19	0.97	0.254	2.82	0.090	1.00	1.00	0.090	No
141	4.02	76.38	10.01	66.37	0.97	0.255	2.82	0.090	1.00	1.00	0.090	No
142	4.04	76.76	10.20	66.56	0.97	0.255	2.82	0.090	1.00	1.00	0.090	No
143	4.06	77.14	10.40	66.74	0.97	0.256	2.82	0.091	1.00	1.00	0.091	No
144	4.08	77.52	10.59	66.93	0.97	0.256	2.82	0.091	1.00	1.00	0.091	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
145	4.10	77.90	10.79	67.11	0.97	0.257	2.82	0.091	1.00	1.00	0.091	No
146	4.12	78.28	10.99	67.29	0.97	0.257	2.82	0.091	1.00	1.00	0.091	No
147	4.14	78.66	11.18	67.48	0.97	0.258	2.82	0.091	1.00	1.00	0.091	No
148	4.16	79.04	11.38	67.66	0.97	0.258	2.82	0.091	1.00	1.00	0.091	No
149	4.18	79.42	11.58	67.84	0.97	0.259	2.82	0.092	1.00	1.00	0.092	No
150	4.20	79.80	11.77	68.03	0.97	0.259	2.82	0.092	1.00	1.00	0.092	No
151	4.22	80.18	11.97	68.21	0.97	0.260	2.82	0.092	1.00	1.00	0.092	No
152	4.24	80.56	12.16	68.40	0.97	0.260	2.82	0.092	1.00	1.00	0.092	No
153	4.26	80.94	12.36	68.58	0.97	0.261	2.82	0.092	1.00	1.00	0.092	No
154	4.28	81.32	12.56	68.76	0.97	0.261	2.82	0.093	1.00	1.00	0.093	No
155	4.30	81.70	12.75	68.95	0.97	0.262	2.82	0.093	1.00	1.00	0.093	No
156	4.32	82.08	12.95	69.13	0.97	0.262	2.82	0.093	1.00	1.00	0.093	No
157	4.34	82.46	13.15	69.31	0.97	0.263	2.82	0.093	1.00	1.00	0.093	No
158	4.36	82.84	13.34	69.50	0.97	0.263	2.82	0.093	1.00	1.00	0.093	No
159	4.38	83.22	13.54	69.68	0.97	0.264	2.82	0.093	1.00	1.00	0.093	No
160	4.40	83.60	13.73	69.87	0.97	0.264	2.82	0.094	1.00	1.00	0.094	No
161	4.42	83.98	13.93	70.05	0.97	0.264	2.82	0.094	1.00	1.00	0.094	No
162	4.44	84.36	14.13	70.23	0.97	0.265	2.82	0.094	1.00	1.00	0.094	No
163	4.46	84.74	14.32	70.42	0.97	0.265	2.82	0.094	1.00	1.00	0.094	No
164	4.48	85.12	14.52	70.60	0.97	0.266	2.82	0.094	1.00	1.00	0.094	No
165	4.50	85.50	14.71	70.79	0.97	0.266	2.82	0.094	1.00	1.00	0.094	No
166	4.52	85.88	14.91	70.97	0.97	0.267	2.82	0.095	1.00	1.00	0.095	No
167	4.54	86.26	15.11	71.15	0.97	0.267	2.82	0.095	1.00	1.00	0.095	No
168	4.56	86.64	15.30	71.34	0.97	0.268	2.82	0.095	1.00	1.00	0.095	No
169	4.58	87.02	15.50	71.52	0.97	0.268	2.82	0.095	1.00	1.00	0.095	No
170	4.60	87.40	15.70	71.70	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
171	4.62	87.78	15.89	71.89	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
172	4.64	88.16	16.09	72.07	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
173	4.66	88.54	16.28	72.26	0.97	0.270	2.82	0.096	1.00	1.00	0.096	No
174	4.68	88.92	16.48	72.44	0.97	0.270	2.82	0.096	1.00	1.00	0.096	No
175	4.70	89.30	16.68	72.62	0.97	0.271	2.82	0.096	1.00	1.00	0.096	No
176	4.72	89.68	16.87	72.81	0.97	0.271	2.82	0.096	1.00	1.00	0.096	No
177	4.74	90.06	17.07	72.99	0.97	0.272	2.82	0.096	1.00	1.00	0.096	No
178	4.76	90.44	17.27	73.17	0.97	0.272	2.82	0.096	1.00	1.00	0.096	No
179	4.78	90.82	17.46	73.36	0.97	0.272	2.82	0.097	1.00	1.00	0.097	No
180	4.80	91.20	17.66	73.54	0.97	0.273	2.82	0.097	1.00	1.00	0.097	No
181	4.82	91.58	17.85	73.73	0.97	0.273	2.82	0.097	1.00	1.00	0.097	No
182	4.84	91.96	18.05	73.91	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No
183	4.86	92.34	18.25	74.09	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No
184	4.88	92.72	18.44	74.28	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No
185	4.90	93.10	18.64	74.46	0.97	0.275	2.82	0.097	1.00	1.00	0.097	No
186	4.92	93.48	18.84	74.64	0.97	0.275	2.82	0.098	1.00	1.00	0.098	No
187	4.94	93.86	19.03	74.83	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
188	4.96	94.24	19.23	75.01	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
189	4.98	94.62	19.42	75.20	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
190	5.00	95.00	19.62	75.38	0.97	0.277	2.82	0.098	1.00	1.00	0.098	No
191	5.02	95.38	19.82	75.56	0.97	0.277	2.82	0.098	1.00	1.00	0.098	No
192	5.04	95.76	20.01	75.75	0.97	0.278	2.82	0.098	1.00	1.00	0.098	No



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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
193	5.06	96.14	20.21	75.93	0.97	0.278	2.82	0.098	1.00	1.00	0.098	No
194	5.08	96.52	20.40	76.12	0.96	0.278	2.82	0.099	1.00	1.00	0.099	No
195	5.10	96.90	20.60	76.30	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
196	5.12	97.28	20.80	76.48	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
197	5.14	97.66	20.99	76.67	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
198	5.16	98.04	21.19	76.85	0.96	0.280	2.82	0.099	1.00	1.00	0.099	No
199	5.18	98.42	21.39	77.03	0.96	0.280	2.82	0.099	1.00	1.00	0.099	No
200	5.20	98.80	21.58	77.22	0.96	0.281	2.82	0.099	1.00	1.00	0.099	No
201	5.22	99.18	21.78	77.40	0.96	0.281	2.82	0.100	1.00	1.00	0.100	No
202	5.24	99.56	21.97	77.59	0.96	0.281	2.82	0.100	1.00	1.00	0.100	No
203	5.26	99.94	22.17	77.77	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
204	5.28	100.32	22.37	77.95	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
205	5.30	100.70	22.56	78.14	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
206	5.32	101.08	22.76	78.32	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
207	5.34	101.46	22.96	78.50	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
208	5.36	101.84	23.15	78.69	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
209	5.38	102.22	23.35	78.87	0.96	0.284	2.82	0.101	1.00	1.00	0.101	No
210	5.40	102.60	23.54	79.06	0.96	0.284	2.82	0.101	1.00	1.00	0.101	No
211	5.42	102.98	23.74	79.24	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
212	5.44	103.36	23.94	79.42	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
213	5.46	103.74	24.13	79.61	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
214	5.48	104.12	24.33	79.79	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
215	5.50	104.50	24.52	79.98	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
216	5.52	104.88	24.72	80.16	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
217	5.54	105.26	24.92	80.34	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
218	5.56	105.64	25.11	80.53	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
219	5.58	106.02	25.31	80.71	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
220	5.60	106.40	25.51	80.89	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
221	5.62	106.78	25.70	81.08	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
222	5.64	107.16	25.90	81.26	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
223	5.66	107.54	26.09	81.45	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
224	5.68	107.92	26.29	81.63	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
225	5.70	108.30	26.49	81.81	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
226	5.72	108.68	26.68	82.00	0.96	0.289	2.82	0.103	1.00	1.00	0.103	No
227	5.74	109.06	26.88	82.18	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
228	5.76	109.44	27.08	82.36	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
229	5.78	109.82	27.27	82.55	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
230	5.80	110.20	27.47	82.73	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No
231	5.82	110.58	27.66	82.92	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No
232	5.84	110.96	27.86	83.10	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No
233	5.86	111.34	28.06	83.28	0.96	0.292	2.82	0.103	1.00	1.00	0.103	No
234	5.88	111.72	28.25	83.47	0.96	0.292	2.82	0.103	1.00	1.00	0.103	No
235	5.90	112.10	28.45	83.65	0.96	0.292	2.82	0.104	1.00	1.00	0.104	No
236	5.92	112.48	28.65	83.83	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
237	5.94	112.86	28.84	84.02	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
238	5.96	113.24	29.04	84.20	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
239	5.98	113.62	29.23	84.39	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
240	6.00	114.00	29.43	84.57	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
241	6.02	114.38	29.63	84.75	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No
242	6.04	114.76	29.82	84.94	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No
243	6.06	115.14	30.02	85.12	0.96	0.295	2.82	0.104	1.00	1.00	0.104	No
244	6.08	115.52	30.21	85.31	0.96	0.295	2.82	0.104	1.00	1.00	0.104	No
245	6.10	115.90	30.41	85.49	0.96	0.295	2.82	0.105	1.00	1.00	0.105	No
246	6.12	116.28	30.61	85.67	0.96	0.295	2.82	0.105	1.00	1.00	0.105	No
247	6.14	116.66	30.80	85.86	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
248	6.16	117.04	31.00	86.04	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
249	6.18	117.42	31.20	86.22	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
250	6.20	117.80	31.39	86.41	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
251	6.22	118.18	31.59	86.59	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
252	6.24	118.56	31.78	86.78	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
253	6.26	118.94	31.98	86.96	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
254	6.28	119.32	32.18	87.14	0.96	0.298	2.82	0.105	1.00	1.00	0.105	No
255	6.30	119.70	32.37	87.33	0.96	0.298	2.82	0.106	1.00	1.00	0.106	No
256	6.32	120.08	32.57	87.51	0.95	0.298	2.82	0.106	1.00	1.00	0.106	No
257	6.34	120.46	32.77	87.69	0.95	0.298	2.82	0.106	1.00	1.00	0.106	No
258	6.36	120.84	32.96	87.88	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
259	6.38	121.22	33.16	88.06	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
260	6.40	121.60	33.35	88.25	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
261	6.42	121.98	33.55	88.43	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
262	6.44	122.36	33.75	88.61	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
263	6.46	122.74	33.94	88.80	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
264	6.48	123.12	34.14	88.98	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
265	6.50	123.50	34.34	89.17	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
266	6.52	123.88	34.53	89.35	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
267	6.54	124.26	34.73	89.53	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
268	6.56	124.64	34.92	89.72	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
269	6.58	125.02	35.12	89.90	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
270	6.60	125.40	35.32	90.08	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
271	6.62	125.78	35.51	90.27	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
272	6.64	126.16	35.71	90.45	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
273	6.66	126.54	35.90	90.64	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
274	6.68	126.92	36.10	90.82	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
275	6.70	127.30	36.30	91.00	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
276	6.72	127.68	36.49	91.19	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
277	6.74	128.06	36.69	91.37	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
278	6.76	128.44	36.89	91.55	0.95	0.303	2.82	0.108	1.00	1.00	0.108	No
279	6.78	128.82	37.08	91.74	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
280	6.80	129.20	37.28	91.92	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
281	6.82	129.58	37.47	92.11	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
282	6.84	129.96	37.67	92.29	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
283	6.86	130.34	37.87	92.47	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
284	6.88	130.72	38.06	92.66	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
285	6.90	131.10	38.26	92.84	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
286	6.92	131.48	38.46	93.02	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
287	6.94	131.86	38.65	93.21	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
288	6.96	132.24	38.85	93.39	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
289	6.98	132.62	39.04	93.58	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No
290	7.00	133.00	39.24	93.76	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No
291	7.02	133.38	39.44	93.94	0.95	0.306	2.82	0.109	1.00	1.00	0.109	No
292	7.04	133.76	39.63	94.13	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
293	7.06	134.14	39.83	94.31	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
294	7.08	134.52	40.02	94.50	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
295	7.10	134.90	40.22	94.68	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
296	7.12	135.28	40.42	94.86	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
297	7.14	135.66	40.61	95.05	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
298	7.16	136.04	40.81	95.23	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
299	7.18	136.42	41.01	95.41	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
300	7.20	136.80	41.20	95.60	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
301	7.22	137.18	41.40	95.78	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
302	7.24	137.56	41.59	95.97	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
303	7.26	137.94	41.79	96.15	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
304	7.28	138.32	41.99	96.33	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
305	7.30	138.70	42.18	96.52	0.95	0.309	2.82	0.110	1.00	1.00	0.110	No
306	7.32	139.08	42.38	96.70	0.95	0.309	2.82	0.110	1.00	1.00	0.110	No
307	7.34	139.46	42.58	96.88	0.94	0.309	2.82	0.110	1.00	1.00	0.110	No
308	7.36	139.84	42.77	97.07	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
309	7.38	140.22	42.97	97.25	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
310	7.40	140.60	43.16	97.44	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
311	7.42	140.98	43.36	97.62	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
312	7.44	141.36	43.56	97.80	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
313	7.46	141.74	43.75	97.99	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
314	7.48	142.12	43.95	98.17	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
315	7.50	142.50	44.15	98.36	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
316	7.52	142.88	44.34	98.54	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
317	7.54	143.26	44.54	98.72	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
318	7.56	143.64	44.73	98.91	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
319	7.58	144.02	44.93	99.09	0.94	0.312	2.82	0.110	1.00	1.00	0.110	No
320	7.60	144.40	45.13	99.27	0.94	0.312	2.82	0.110	1.00	1.00	0.110	No
321	7.62	144.78	45.32	99.46	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
322	7.64	145.16	45.52	99.64	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
323	7.66	145.54	45.71	99.83	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
324	7.68	145.92	45.91	100.01	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
325	7.70	146.30	46.11	100.19	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
326	7.72	146.68	46.30	100.38	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
327	7.74	147.06	46.50	100.56	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
328	7.76	147.44	46.70	100.74	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
329	7.78	147.82	46.89	100.93	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
330	7.80	148.20	47.09	101.11	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
331	7.82	148.58	47.28	101.30	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
332	7.84	148.96	47.48	101.48	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
333	7.86	149.34	47.68	101.66	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
334	7.88	149.72	47.87	101.85	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
335	7.90	150.10	48.07	102.03	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
336	7.92	150.48	48.27	102.21	0.94	0.314	2.82	0.111	1.00	1.00	0.112	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
337	7.94	150.86	48.46	102.40	0.94	0.314	2.82	0.111	1.00	1.00	0.112	No
338	7.96	151.24	48.66	102.58	0.94	0.315	2.82	0.111	1.00	1.00	0.112	No
339	7.98	151.62	48.85	102.77	0.94	0.315	2.82	0.111	1.00	1.00	0.112	No
340	8.00	152.00	49.05	102.95	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
341	8.02	152.38	49.25	103.13	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
342	8.04	152.76	49.44	103.32	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
343	8.06	153.14	49.64	103.50	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
344	8.08	153.52	49.83	103.69	0.94	0.315	2.82	0.112	0.99	1.00	0.112	No
345	8.10	153.90	50.03	103.87	0.94	0.315	2.82	0.112	0.99	1.00	0.112	No
346	8.12	154.28	50.23	104.05	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
347	8.14	154.66	50.42	104.24	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
348	8.16	155.04	50.62	104.42	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
349	8.18	155.42	50.82	104.60	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
350	8.20	155.80	51.01	104.79	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
351	8.22	156.18	51.21	104.97	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
352	8.24	156.56	51.40	105.16	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
353	8.26	156.94	51.60	105.34	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
354	8.28	157.32	51.80	105.52	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
355	8.30	157.70	51.99	105.71	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
356	8.32	158.08	52.19	105.89	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
357	8.34	158.46	52.39	106.07	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
358	8.36	158.84	52.58	106.26	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
359	8.38	159.22	52.78	106.44	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
360	8.40	159.60	52.97	106.63	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
361	8.42	159.98	53.17	106.81	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
362	8.44	160.36	53.37	106.99	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
363	8.46	160.74	53.56	107.18	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
364	8.48	161.12	53.76	107.36	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
365	8.50	161.50	53.95	107.55	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
366	8.52	161.88	54.15	107.73	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
367	8.54	162.26	54.35	107.91	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
368	8.56	162.64	54.54	108.10	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
369	8.58	163.02	54.74	108.28	0.93	0.318	2.82	0.113	0.98	1.00	0.115	No
370	8.60	163.40	54.94	108.46	0.93	0.318	2.82	0.113	0.98	1.00	0.115	No
371	8.62	163.78	55.13	108.65	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
372	8.64	164.16	55.33	108.83	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
373	8.66	164.54	55.52	109.02	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
374	8.68	164.92	55.72	109.20	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
375	8.70	165.30	55.92	109.38	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
376	8.72	165.68	56.11	109.57	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
377	8.74	166.06	56.31	109.75	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
378	8.76	166.44	56.51	109.93	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
379	8.78	166.82	56.70	110.12	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
380	8.80	167.20	56.90	110.30	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
381	8.82	167.58	57.09	110.49	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
382	8.84	167.96	57.29	110.67	0.93	0.320	2.82	0.113	0.98	1.00	0.116	No
383	8.86	168.34	57.49	110.85	0.93	0.320	2.82	0.113	0.98	1.00	0.116	No
384	8.88	168.72	57.68	111.04	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
385	8.90	169.10	57.88	111.22	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
386	8.92	169.48	58.08	111.40	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
387	8.94	169.86	58.27	111.59	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
388	8.96	170.24	58.47	111.77	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
389	8.98	170.62	58.66	111.96	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
390	9.00	171.00	58.86	112.14	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
391	9.02	171.38	59.06	112.32	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
392	9.04	171.76	59.25	112.51	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
393	9.06	172.14	59.45	112.69	0.92	0.320	2.82	0.114	0.98	1.00	0.116	No
394	9.08	172.52	59.64	112.88	0.92	0.320	2.82	0.114	0.98	1.00	0.116	No
395	9.10	172.90	59.84	113.06	0.92	0.321	2.82	0.114	0.98	1.00	0.116	No
396	9.12	173.28	60.04	113.24	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
397	9.14	173.66	60.23	113.43	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
398	9.16	174.04	60.43	113.61	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
399	9.18	174.42	60.63	113.79	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
400	9.20	174.80	60.82	113.98	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
401	9.22	175.18	61.02	114.16	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
402	9.24	175.56	61.21	114.35	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
403	9.26	175.94	61.41	114.53	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
404	9.28	176.32	61.61	114.71	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
405	9.30	176.70	61.80	114.90	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
406	9.32	177.08	62.00	115.08	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
407	9.34	177.46	62.20	115.26	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
408	9.36	177.84	62.39	115.45	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
409	9.38	178.22	62.59	115.63	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
410	9.40	178.60	62.78	115.82	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
411	9.42	178.98	62.98	116.00	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
412	9.44	179.36	63.18	116.18	0.92	0.322	2.82	0.114	0.97	1.00	0.118	No
413	9.46	179.74	63.37	116.37	0.92	0.322	2.82	0.114	0.97	1.00	0.118	No
414	9.48	180.12	63.57	116.55	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
415	9.50	180.50	63.77	116.73	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
416	9.52	180.88	63.96	116.92	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
417	9.54	181.26	64.16	117.10	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
418	9.56	181.64	64.35	117.29	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
419	9.58	182.02	64.55	117.47	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
420	9.60	182.40	64.75	117.65	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
421	9.62	182.78	64.94	117.84	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
422	9.64	183.16	65.14	118.02	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
423	9.66	183.54	65.33	118.21	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
424	9.68	183.92	65.53	118.39	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
425	9.70	184.30	65.73	118.57	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
426	9.72	184.68	65.92	118.76	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
427	9.74	185.06	66.12	118.94	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
428	9.76	185.44	66.32	119.12	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
429	9.78	185.82	66.51	119.31	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
430	9.80	186.20	66.71	119.49	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
431	9.82	186.58	66.90	119.68	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
432	9.84	186.96	67.10	119.86	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
433	9.86	187.34	67.30	120.04	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
434	9.88	187.72	67.49	120.23	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
435	9.90	188.10	67.69	120.41	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
436	9.92	188.48	67.89	120.59	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
437	9.94	188.86	68.08	120.78	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
438	9.96	189.24	68.28	120.96	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
439	9.98	189.62	68.47	121.15	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
440	10.00	190.00	68.67	121.33	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
441	10.02	190.38	68.87	121.51	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
442	10.04	190.76	69.06	121.70	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
443	10.06	191.14	69.26	121.88	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
444	10.08	191.52	69.45	122.07	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
445	10.10	191.90	69.65	122.25	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
446	10.12	192.28	69.85	122.43	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
447	10.14	192.66	70.04	122.62	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
448	10.16	193.04	70.24	122.80	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
449	10.18	193.42	70.44	122.98	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
450	10.20	193.80	70.63	123.17	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
451	10.22	194.18	70.83	123.35	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
452	10.24	194.56	71.02	123.54	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
453	10.26	194.94	71.22	123.72	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
454	10.28	195.32	71.42	123.90	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
455	10.30	195.70	71.61	124.09	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
456	10.32	196.08	71.81	124.27	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
457	10.34	196.46	72.01	124.45	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
458	10.36	196.84	72.20	124.64	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
459	10.38	197.22	72.40	124.82	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
460	10.40	197.60	72.59	125.01	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
461	10.42	197.98	72.79	125.19	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
462	10.44	198.36	72.99	125.37	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
463	10.46	198.74	73.18	125.56	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
464	10.48	199.12	73.38	125.74	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
465	10.50	199.50	73.58	125.92	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
466	10.52	199.88	73.77	126.11	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
467	10.54	200.26	73.97	126.29	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
468	10.56	200.64	74.16	126.48	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
469	10.58	201.02	74.36	126.66	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
470	10.60	201.40	74.56	126.84	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
471	10.62	201.78	74.75	127.03	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
472	10.64	202.16	74.95	127.21	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
473	10.66	202.54	75.14	127.40	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
474	10.68	202.92	75.34	127.58	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
475	10.70	203.30	75.54	127.76	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
476	10.72	203.68	75.73	127.95	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
477	10.74	204.06	75.93	128.13	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
478	10.76	204.44	76.13	128.31	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
479	10.78	204.82	76.32	128.50	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
480	10.80	205.20	76.52	128.68	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
481	10.82	205.58	76.71	128.87	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
482	10.84	205.96	76.91	129.05	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
483	10.86	206.34	77.11	129.23	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
484	10.88	206.72	77.30	129.42	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
485	10.90	207.10	77.50	129.60	0.89	0.322	2.82	0.114	0.94	1.00	0.121	No
486	10.92	207.48	77.70	129.78	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
487	10.94	207.86	77.89	129.97	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
488	10.96	208.24	78.09	130.15	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
489	10.98	208.62	78.28	130.34	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
490	11.00	209.00	78.48	130.52	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
491	11.02	209.38	78.68	130.70	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
492	11.04	209.76	78.87	130.89	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
493	11.06	210.14	79.07	131.07	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
494	11.08	210.52	79.26	131.26	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
495	11.10	210.90	79.46	131.44	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
496	11.12	211.28	79.66	131.62	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
497	11.14	211.66	79.85	131.81	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
498	11.16	212.04	80.05	131.99	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
499	11.18	212.42	80.25	132.17	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
500	11.20	212.80	80.44	132.36	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
501	11.22	213.18	80.64	132.54	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
502	11.24	213.56	80.83	132.73	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
503	11.26	213.94	81.03	132.91	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
504	11.28	214.32	81.23	133.09	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
505	11.30	214.70	81.42	133.28	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
506	11.32	215.08	81.62	133.46	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
507	11.34	215.46	81.82	133.64	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
508	11.36	215.84	82.01	133.83	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
509	11.38	216.22	82.21	134.01	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
510	11.40	216.60	82.40	134.20	0.87	0.320	2.82	0.114	0.94	1.00	0.121	No
511	11.42	216.98	82.60	134.38	0.87	0.320	2.82	0.114	0.94	1.00	0.121	No
512	11.44	217.36	82.80	134.56	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
513	11.46	217.74	82.99	134.75	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
514	11.48	218.12	83.19	134.93	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
515	11.50	218.50	83.39	135.12	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
516	11.52	218.88	83.58	135.30	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
517	11.54	219.26	83.78	135.48	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
518	11.56	219.64	83.97	135.67	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
519	11.58	220.02	84.17	135.85	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
520	11.60	220.40	84.37	136.03	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
521	11.62	220.78	84.56	136.22	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	$CSR_{eq}$	$K_\sigma$	User FS	CSR*	Belongs to transition
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**Abbreviations**

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



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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
1	1.22	0.13	4.06	45.39	1.00	1.87	26.61	49.82	4.000	No	Yes	2.00
2	1.24	0.23	3.89	22.25	1.00	3.57	22.26	79.36	4.000	No	Yes	2.00
3	1.26	0.27	3.78	17.85	1.00	4.13	19.70	81.29	4.000	No	Yes	2.00
4	1.28	0.40	3.46	9.76	1.00	6.39	13.39	85.54	4.000	No	Yes	2.00
5	1.30	0.50	3.29	7.01	1.00	8.08	10.59	85.55	4.000	No	Yes	2.00
6	1.32	0.67	3.05	4.16	1.00	10.91	7.31	79.70	4.000	No	Yes	2.00
7	1.34	0.80	2.90	3.01	0.98	13.17	5.70	75.06	4.000	No	Yes	2.00
8	1.36	0.97	2.87	3.54	0.97	15.99	5.46	87.29	4.000	No	Yes	2.00
9	1.38	1.10	2.91	4.66	0.98	18.25	5.75	105.03	4.000	No	Yes	2.00
10	1.40	1.17	2.97	6.14	1.00	19.38	6.37	123.50	4.000	No	Yes	2.00
11	1.42	1.20	2.98	6.54	1.00	19.94	6.47	129.08	4.000	No	Yes	2.00
12	1.44	1.17	3.01	7.02	1.00	19.37	6.81	131.89	4.000	No	Yes	2.00
13	1.46	1.13	3.01	6.93	1.00	18.80	6.87	129.21	4.000	No	Yes	2.00
14	1.48	1.00	3.09	7.89	1.00	16.52	7.81	129.06	4.000	No	Yes	2.00
15	1.50	0.93	3.13	8.47	1.00	15.38	8.37	128.73	4.000	No	Yes	2.00
16	1.52	0.87	3.21	9.95	1.00	14.24	9.35	133.10	4.000	No	Yes	2.00
17	1.54	0.90	3.19	9.95	1.00	14.80	9.18	135.88	4.000	No	Yes	2.00
18	1.56	0.90	3.22	10.72	1.00	14.80	9.50	140.53	4.000	No	Yes	2.00
19	1.58	0.87	3.25	11.55	1.00	14.22	10.00	142.27	4.000	No	Yes	2.00
20	1.60	0.90	3.24	11.50	1.00	14.78	9.81	144.99	4.000	No	Yes	2.00
21	1.62	0.93	3.22	11.08	1.00	15.34	9.48	145.45	4.000	No	Yes	2.00
22	1.64	1.00	3.17	10.32	1.00	16.47	8.88	146.19	4.000	No	Yes	2.00
23	1.66	0.97	3.18	10.34	1.00	15.90	9.03	143.58	4.000	No	Yes	2.00
24	1.68	0.93	3.21	10.72	1.00	15.32	9.34	143.20	4.000	No	Yes	2.00
25	1.70	0.90	3.21	10.37	1.00	14.75	9.37	138.20	4.000	No	Yes	2.00
26	1.72	0.90	3.21	10.38	1.00	14.74	9.37	138.19	4.000	No	Yes	2.00
27	1.74	0.90	3.20	10.00	1.00	14.74	9.22	135.84	4.000	No	Yes	2.00
28	1.76	0.87	3.23	10.80	1.00	14.16	9.72	137.73	4.000	No	Yes	2.00
29	1.78	0.87	3.23	10.81	1.00	14.16	9.73	137.72	4.000	No	Yes	2.00
30	1.80	0.90	3.20	10.01	1.00	14.72	9.23	135.82	4.000	No	Yes	2.00
31	1.82	0.93	3.16	9.27	1.00	15.28	8.75	133.73	4.000	No	Yes	2.00
32	1.84	1.00	3.11	8.29	1.00	16.41	8.02	131.65	4.000	No	Yes	2.00
33	1.86	0.97	3.14	8.95	1.00	15.83	8.46	133.99	4.000	No	Yes	2.00
34	1.88	0.97	3.12	8.24	1.00	15.83	8.14	128.88	4.000	No	Yes	2.00
35	1.90	0.90	3.12	7.72	1.00	14.69	8.20	120.46	4.000	No	Yes	2.00
36	1.92	0.87	3.13	7.63	1.00	14.11	8.32	117.48	4.000	No	Yes	2.00
37	1.94	0.90	3.09	6.95	1.00	14.67	7.82	114.77	4.000	No	Yes	2.00
38	1.96	0.90	3.14	8.11	1.00	14.67	8.40	123.18	4.000	No	Yes	2.00
39	1.98	0.93	3.13	8.19	1.00	15.23	8.28	126.06	4.000	No	Yes	2.00
40	2.00	0.90	3.19	9.67	1.00	14.65	9.10	133.38	4.000	No	Yes	2.00
41	2.02	0.87	3.21	10.06	1.00	14.08	9.44	132.98	4.000	No	Yes	2.00
42	2.04	0.80	3.25	10.51	1.00	12.94	10.02	129.61	4.000	No	Yes	2.00
43	2.06	0.87	3.21	10.07	1.00	14.07	9.45	132.97	4.000	No	Yes	2.00
44	2.08	0.87	3.21	10.07	1.00	14.06	9.46	132.97	4.000	No	Yes	2.00
45	2.10	0.97	3.16	9.35	1.00	15.76	8.66	136.42	4.000	No	Yes	2.00
46	2.12	0.93	3.19	10.08	1.00	15.18	9.12	138.49	4.000	No	Yes	2.00
47	2.14	1.03	3.15	9.74	1.00	16.88	8.54	144.08	4.000	No	Yes	2.00
48	2.16	1.07	3.14	9.75	1.00	17.44	8.41	146.65	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
49	2.18	1.13	3.10	9.16	1.00	18.56	7.92	146.99	4.000	No	Yes	2.00
50	2.20	1.10	3.10	8.82	1.00	17.99	7.90	142.06	4.000	No	Yes	2.00
51	2.22	1.17	3.05	8.00	1.00	19.12	7.31	139.73	4.000	No	Yes	2.00
52	2.24	1.13	3.04	7.64	1.00	18.54	7.26	134.56	4.000	No	Yes	2.00
53	2.26	1.17	3.03	7.42	1.00	19.10	7.04	134.57	4.000	No	Yes	2.00
54	2.28	1.10	3.05	7.57	1.00	17.96	7.34	131.90	4.000	No	Yes	2.00
55	2.30	1.10	3.05	7.57	1.00	17.96	7.35	131.90	4.000	No	Yes	2.00
56	2.32	1.03	3.09	8.09	1.00	16.82	7.83	131.75	4.000	No	Yes	2.00
57	2.34	1.07	3.07	7.83	1.00	17.38	7.59	131.84	4.000	No	Yes	2.00
58	2.36	1.07	3.08	8.16	1.00	17.37	7.74	134.44	4.000	No	Yes	2.00
59	2.38	1.13	3.06	7.96	1.00	18.50	7.41	137.15	4.000	No	Yes	2.00
60	2.40	1.10	3.09	8.54	1.00	17.92	7.79	139.59	4.000	No	Yes	2.00
61	2.42	1.10	3.10	8.85	1.00	17.92	7.93	142.04	4.000	No	Yes	2.00
62	2.44	1.10	3.09	8.54	1.00	17.91	7.79	139.59	4.000	No	Yes	2.00
63	2.46	1.10	3.09	8.54	1.00	17.91	7.80	139.58	4.000	No	Yes	2.00
64	2.48	1.10	3.07	7.91	1.00	17.90	7.52	134.51	4.000	No	Yes	2.00
65	2.50	1.07	3.07	7.85	1.00	17.33	7.61	131.84	4.000	No	Yes	2.00
66	2.52	1.03	3.08	7.78	1.00	16.75	7.71	129.10	4.000	No	Yes	2.00
67	2.54	1.00	3.09	7.71	1.00	16.18	7.81	126.32	4.000	No	Yes	2.00
68	2.56	0.97	3.10	7.63	1.00	15.61	7.91	123.47	4.000	No	Yes	2.00
69	2.58	1.00	3.06	7.01	1.00	16.17	7.47	120.78	4.000	No	Yes	2.00
70	2.60	0.97	3.09	7.27	1.00	15.59	7.74	120.70	4.000	No	Yes	2.00
71	2.62	0.97	3.10	7.63	1.00	15.59	7.92	123.47	4.000	No	Yes	2.00
72	2.64	0.97	3.10	7.64	1.00	15.58	7.92	123.47	4.000	No	Yes	2.00
73	2.66	0.97	3.09	7.28	1.00	15.57	7.75	120.69	4.000	No	Yes	2.00
74	2.68	1.00	3.06	7.02	1.00	16.13	7.49	120.78	4.000	No	Yes	2.00
75	2.70	1.00	3.06	7.03	1.00	16.13	7.49	120.78	4.000	No	Yes	2.00
76	2.72	1.00	3.08	7.38	1.00	16.12	7.67	123.58	4.000	No	Yes	2.00
77	2.74	0.97	3.09	7.29	1.00	15.55	7.76	120.69	4.000	No	Yes	2.00
78	2.76	0.90	3.15	8.26	1.00	14.41	8.54	123.07	4.000	No	Yes	2.00
79	2.78	0.90	3.13	7.87	1.00	14.40	8.36	120.36	4.000	No	Yes	2.00
80	2.80	0.90	3.15	8.27	1.00	14.40	8.55	123.07	4.000	No	Yes	2.00
81	2.82	0.90	3.12	7.48	1.00	14.39	8.17	117.57	4.000	No	Yes	2.00
82	2.84	0.90	3.13	7.88	1.00	14.38	8.37	120.36	4.000	No	Yes	2.00
83	2.86	0.90	3.13	7.88	1.00	14.38	8.37	120.35	4.000	No	Yes	2.00
84	2.88	0.97	3.10	7.68	1.00	15.50	7.96	123.45	4.000	No	Yes	2.00
85	2.90	0.93	3.14	8.35	1.00	14.93	8.44	125.94	4.000	No	Yes	2.00
86	2.92	0.97	3.10	7.68	1.00	15.49	7.97	123.45	4.000	No	Yes	2.00
87	2.94	0.93	3.11	7.60	1.00	14.92	8.08	120.54	4.000	No	Yes	2.00
88	2.96	1.00	3.05	6.71	1.00	16.04	7.35	117.89	4.000	No	Yes	2.00
89	2.98	0.97	3.09	7.33	1.00	15.47	7.80	120.67	4.000	No	Yes	2.00
90	3.00	0.93	3.13	7.99	1.00	14.90	8.27	123.27	4.000	No	Yes	2.00
91	3.02	0.90	3.15	8.31	1.00	14.32	8.59	123.03	4.000	No	Yes	2.00
92	3.04	0.90	3.15	8.31	1.00	14.32	8.59	123.03	4.000	No	Yes	2.00
93	3.06	0.90	3.15	8.31	1.00	14.31	8.60	123.03	4.000	No	Yes	2.00
94	3.08	0.97	3.11	7.71	1.00	15.44	8.00	123.43	4.000	No	Yes	2.00
95	3.10	0.97	3.09	7.34	1.00	15.43	7.82	120.67	4.000	No	Yes	2.00
96	3.12	0.97	3.08	6.98	1.00	15.43	7.64	117.82	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
97	3.14	0.90	3.11	7.14	1.00	14.29	8.03	114.68	4.000	No	Yes	2.00
98	3.16	0.90	3.11	7.14	1.00	14.28	8.03	114.68	4.000	No	Yes	2.00
99	3.18	0.90	3.11	7.15	1.00	14.27	8.03	114.67	4.000	No	Yes	2.00
100	3.20	0.90	3.11	7.15	1.00	14.26	8.04	114.66	4.000	No	Yes	2.00
101	3.22	0.90	3.11	7.15	1.00	14.21	8.06	114.48	4.000	No	Yes	2.00
102	3.24	0.90	3.10	6.76	1.00	14.16	7.86	111.37	4.000	No	Yes	2.00
103	3.26	0.90	3.10	6.76	1.00	14.11	7.88	111.20	4.000	No	Yes	2.00
104	3.28	0.90	3.10	6.76	1.00	14.06	7.90	111.03	4.000	No	Yes	2.00
105	3.30	0.90	3.12	7.17	1.00	14.01	8.12	113.78	4.000	No	Yes	2.00
106	3.32	0.90	3.10	6.77	1.00	13.96	7.93	110.70	4.000	No	Yes	2.00
107	3.34	0.90	3.10	6.77	1.00	13.91	7.94	110.53	4.000	No	Yes	2.00
108	3.36	0.93	3.08	6.52	1.00	14.42	7.66	110.49	4.000	No	Yes	2.00
109	3.38	0.97	3.07	6.65	1.00	14.92	7.60	113.35	4.000	No	Yes	2.00
110	3.40	1.00	3.05	6.41	1.00	15.42	7.35	113.25	4.000	No	Yes	2.00
111	3.42	0.97	3.09	7.02	1.00	14.82	7.82	115.87	4.000	No	Yes	2.00
112	3.44	0.97	3.09	7.03	1.00	14.76	7.84	115.70	4.000	No	Yes	2.00
113	3.46	1.00	3.07	6.78	1.00	15.26	7.58	115.62	4.000	No	Yes	2.00
114	3.48	1.07	3.02	6.00	1.00	16.29	6.91	112.62	4.000	No	Yes	2.00
115	3.50	1.10	3.00	5.81	1.00	16.78	6.70	112.43	4.000	No	Yes	2.00
116	3.52	1.13	2.98	5.63	1.00	17.26	6.50	112.22	4.000	No	Yes	2.00
117	3.54	1.13	2.98	5.63	1.00	17.21	6.51	112.07	4.000	No	Yes	2.00
118	3.56	1.13	2.98	5.63	1.00	17.15	6.53	111.92	4.000	No	Yes	2.00
119	3.58	1.10	3.02	6.14	1.00	16.56	6.93	114.72	4.000	No	Yes	2.00
120	3.60	1.10	3.03	6.46	1.00	16.50	7.11	117.38	4.000	No	Yes	2.00
121	3.62	1.10	3.03	6.46	1.00	16.45	7.13	117.22	4.000	No	Yes	2.00
122	3.64	1.10	3.05	6.79	1.00	16.39	7.31	119.78	4.000	No	Yes	2.00
123	3.66	1.10	3.04	6.47	1.00	16.34	7.15	116.89	4.000	No	Yes	2.00
124	3.68	1.10	3.05	6.80	1.00	16.29	7.33	119.45	4.000	No	Yes	2.00
125	3.70	1.13	3.03	6.58	1.00	16.76	7.12	119.30	4.000	No	Yes	2.00
126	3.72	1.13	3.03	6.59	1.00	16.70	7.13	119.14	4.000	No	Yes	2.00
127	3.74	1.17	3.03	6.69	1.00	17.17	7.08	121.64	4.000	No	Yes	2.00
128	3.76	1.17	3.03	6.70	1.00	17.12	7.10	121.48	4.000	No	Yes	2.00
129	3.78	1.20	3.04	7.09	1.00	17.58	7.19	126.48	4.000	No	Yes	2.00
130	3.80	1.23	3.02	6.89	1.00	18.04	7.00	126.30	4.000	No	Yes	2.00
131	3.82	1.27	3.01	6.70	1.00	18.50	6.82	126.11	4.000	No	Yes	2.00
132	3.84	1.27	3.01	6.70	1.00	18.44	6.83	125.94	4.000	No	Yes	2.00
133	3.86	1.30	2.99	6.52	1.00	18.90	6.65	125.72	4.000	No	Yes	2.00
134	3.88	1.30	2.99	6.52	1.00	18.84	6.66	125.56	4.000	No	Yes	2.00
135	3.90	1.33	2.98	6.35	1.00	19.29	6.50	125.32	4.000	No	Yes	2.00
136	3.92	1.33	2.98	6.35	1.00	19.23	6.51	125.16	4.000	No	Yes	2.00
137	3.94	1.37	2.96	6.19	1.00	19.68	6.35	124.91	4.000	No	Yes	2.00
138	3.96	1.40	2.95	6.04	1.00	20.12	6.20	124.62	4.000	No	Yes	2.00
139	3.98	1.40	2.95	6.04	1.00	20.06	6.20	124.49	4.000	No	Yes	2.00
140	4.00	1.40	2.94	5.79	0.99	19.96	6.09	121.62	4.000	No	Yes	2.00
141	4.02	1.40	2.94	5.79	1.00	19.90	6.10	121.47	4.000	No	Yes	2.00
142	4.04	1.40	2.94	5.79	1.00	19.85	6.11	121.33	4.000	No	Yes	2.00
143	4.06	1.40	2.95	6.05	1.00	19.82	6.25	123.86	4.000	No	Yes	2.00
144	4.08	1.40	2.96	6.05	1.00	19.76	6.26	123.71	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
145	4.10	1.40	2.94	5.80	1.00	19.68	6.15	120.91	4.000	No	Yes	2.00
146	4.12	1.40	2.95	5.80	1.00	19.62	6.16	120.77	4.000	No	Yes	2.00
147	4.14	1.43	2.93	5.66	0.99	20.01	6.02	120.38	4.000	No	Yes	2.00
148	4.16	1.40	2.98	6.56	1.00	19.52	6.56	128.04	4.000	No	Yes	2.00
149	4.18	1.43	2.99	6.89	1.00	19.96	6.64	132.58	4.000	No	Yes	2.00
150	4.20	1.43	3.00	7.14	1.00	19.90	6.77	134.73	4.000	No	Yes	2.00
151	4.22	1.50	2.95	6.34	1.00	20.81	6.23	129.72	4.000	No	Yes	2.00
152	4.24	1.53	2.92	5.74	0.99	21.14	5.88	124.25	4.000	No	Yes	2.00
153	4.26	1.53	2.92	5.74	0.99	21.08	5.89	124.11	4.000	No	Yes	2.00
154	4.28	1.53	2.92	5.74	0.99	21.02	5.90	123.97	4.000	No	Yes	2.00
155	4.30	1.43	2.98	6.41	1.00	19.60	6.47	126.85	4.000	No	Yes	2.00
156	4.32	1.40	2.98	6.32	1.00	19.06	6.52	124.34	4.000	No	Yes	2.00
157	4.34	1.37	3.01	6.75	1.00	18.53	6.84	126.64	4.000	No	Yes	2.00
158	4.36	1.40	2.99	6.58	1.00	18.95	6.67	126.44	4.000	No	Yes	2.00
159	4.38	1.40	2.99	6.58	1.00	18.90	6.68	126.28	4.000	No	Yes	2.00
160	4.40	1.37	3.01	6.75	1.00	18.36	6.87	126.16	4.000	No	Yes	2.00
161	4.42	1.40	3.00	6.59	1.00	18.79	6.70	125.96	4.000	No	Yes	2.00
162	4.44	1.37	3.02	7.02	1.00	18.26	7.02	128.17	4.000	No	Yes	2.00
163	4.46	1.40	3.01	6.84	1.00	18.68	6.85	127.99	4.000	No	Yes	2.00
164	4.48	1.33	3.04	7.21	1.00	17.68	7.23	127.84	4.000	No	Yes	2.00
165	4.50	1.33	3.05	7.48	1.00	17.63	7.37	129.93	4.000	No	Yes	2.00
166	4.52	1.33	3.07	7.75	1.00	17.58	7.51	131.96	4.000	No	Yes	2.00
167	4.54	1.33	3.07	7.75	1.00	17.53	7.52	131.80	4.000	No	Yes	2.00
168	4.56	1.33	3.06	7.49	1.00	17.48	7.41	129.43	4.000	No	Yes	2.00
169	4.58	1.30	3.06	7.42	1.00	16.96	7.49	127.00	4.000	No	Yes	2.00
170	4.60	1.30	3.07	7.42	1.00	16.91	7.50	126.84	4.000	No	Yes	2.00
171	4.62	1.30	3.07	7.42	1.00	16.86	7.51	126.68	4.000	No	Yes	2.00
172	4.64	1.23	3.11	8.15	1.00	15.89	8.09	128.52	4.000	No	Yes	2.00
173	4.66	1.20	3.13	8.40	1.00	15.38	8.33	128.20	4.000	No	Yes	2.00
174	4.68	1.17	3.16	8.97	1.00	14.88	8.73	129.91	4.000	No	Yes	2.00
175	4.70	1.20	3.13	8.40	1.00	15.29	8.36	127.86	4.000	No	Yes	2.00
176	4.72	1.23	3.13	8.45	1.00	15.71	8.27	129.96	4.000	No	Yes	2.00
177	4.74	1.27	3.11	8.22	1.00	16.12	8.06	129.94	4.000	No	Yes	2.00
178	4.76	1.30	3.10	8.27	1.00	16.53	7.98	131.98	4.000	No	Yes	2.00
179	4.78	1.23	3.13	8.46	1.00	15.57	8.31	129.46	4.000	No	Yes	2.00
180	4.80	1.23	3.12	8.17	1.00	15.53	8.19	127.20	4.000	No	Yes	2.00
181	4.82	1.23	3.10	7.59	1.00	15.49	7.93	122.75	4.000	No	Yes	2.00
182	4.84	1.30	3.05	6.90	1.00	16.34	7.37	120.50	4.000	No	Yes	2.00
183	4.86	1.27	3.06	6.81	1.00	15.85	7.45	118.03	4.000	No	Yes	2.00
184	4.88	1.23	3.08	7.01	1.00	15.36	7.67	117.83	4.000	No	Yes	2.00
185	4.90	1.20	3.09	6.93	1.00	14.87	7.76	115.31	4.000	No	Yes	2.00
186	4.92	1.20	3.07	6.63	1.00	14.82	7.61	112.84	4.000	No	Yes	2.00
187	4.94	1.20	3.06	6.33	1.00	14.78	7.46	110.31	4.000	No	Yes	2.00
188	4.96	1.20	3.05	6.03	1.00	14.74	7.31	107.74	4.000	No	Yes	2.00
189	4.98	1.23	3.03	5.85	1.00	15.14	7.11	107.63	4.000	No	Yes	2.00
190	5.00	1.27	3.02	5.69	1.00	15.54	6.92	107.51	4.000	No	Yes	2.00
191	5.02	1.33	3.01	5.92	1.00	16.38	6.85	112.26	4.000	No	Yes	2.00
192	5.04	1.37	2.98	5.51	1.00	16.78	6.54	109.65	4.000	No	Yes	2.00

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

Point ID	Depth (m)	$q_t$ (MPa)	$I_c$	Fr (%)	n	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
193	5.06	1.40	2.97	5.37	1.00	17.17	6.37	109.47	4.000	No	Yes	2.00
194	5.08	1.43	2.95	5.24	1.00	17.56	6.22	109.27	4.000	No	Yes	2.00
195	5.10	1.47	2.96	5.60	1.00	17.95	6.35	113.96	4.000	No	Yes	2.00
196	5.12	1.50	2.96	5.70	1.00	18.34	6.33	116.13	4.000	No	Yes	2.00
197	5.14	1.50	2.96	5.70	1.00	18.29	6.34	116.00	4.000	No	Yes	2.00
198	5.16	1.50	2.98	5.94	1.00	18.24	6.48	118.20	4.000	No	Yes	2.00
199	5.18	1.57	2.95	5.68	1.00	19.05	6.19	117.89	4.000	No	Yes	2.00
200	5.20	1.60	2.95	5.77	1.00	19.43	6.17	119.95	4.000	No	Yes	2.00
201	5.22	1.63	2.93	5.65	0.99	19.79	6.05	119.66	4.000	No	Yes	2.00
202	5.24	1.60	2.95	5.78	1.00	19.33	6.19	119.70	4.000	No	Yes	2.00
203	5.26	1.60	2.94	5.56	0.99	19.26	6.09	117.24	4.000	No	Yes	2.00
204	5.28	1.60	2.93	5.33	0.99	19.19	5.98	114.74	4.000	No	Yes	2.00
205	5.30	1.60	2.93	5.34	0.99	19.14	5.99	114.62	4.000	No	Yes	2.00
206	5.32	1.60	2.94	5.56	1.00	19.12	6.11	116.88	4.000	No	Yes	2.00
207	5.34	1.60	2.94	5.56	1.00	19.07	6.12	116.76	4.000	No	Yes	2.00
208	5.36	1.60	2.95	5.78	1.00	19.04	6.25	118.96	4.000	No	Yes	2.00
209	5.38	1.67	2.93	5.54	0.99	19.79	5.99	118.52	4.000	No	Yes	2.00
210	5.40	1.70	2.92	5.43	0.99	20.14	5.87	118.24	4.000	No	Yes	2.00
211	5.42	1.73	2.89	5.11	0.98	20.47	5.65	115.61	4.000	No	Yes	2.00
212	5.44	1.73	2.88	4.91	0.97	20.40	5.55	113.13	4.000	No	Yes	2.00
213	5.46	1.70	2.90	5.01	0.98	19.96	5.67	113.21	4.000	No	Yes	2.00
214	5.48	1.67	2.92	5.33	0.99	19.53	5.92	115.63	4.000	No	Yes	2.00
215	5.50	1.60	2.95	5.57	1.00	18.69	6.20	115.83	4.000	No	Yes	2.00
216	5.52	1.60	2.95	5.57	1.00	18.65	6.20	115.72	4.000	No	Yes	2.00
217	5.54	1.60	2.93	5.13	0.99	18.57	5.97	110.90	4.000	No	Yes	2.00
218	5.56	1.60	2.93	5.13	0.99	18.52	5.98	110.79	4.000	No	Yes	2.00
219	5.58	1.63	2.93	5.24	0.99	18.88	5.98	112.90	4.000	No	Yes	2.00
220	5.60	1.67	2.93	5.34	0.99	19.25	5.97	114.95	4.000	No	Yes	2.00
221	5.62	1.63	2.94	5.46	1.00	18.81	6.11	115.00	4.000	No	Yes	2.00
222	5.64	1.63	2.94	5.46	1.00	18.77	6.12	114.88	4.000	No	Yes	2.00
223	5.66	1.63	2.95	5.68	1.00	18.73	6.25	117.03	4.000	No	Yes	2.00
224	5.68	1.70	2.94	5.65	1.00	19.48	6.10	118.87	4.000	No	Yes	2.00
225	5.70	1.70	2.94	5.65	1.00	19.44	6.11	118.75	4.000	No	Yes	2.00
226	5.72	1.67	2.97	5.99	1.00	19.00	6.36	120.90	4.000	No	Yes	2.00
227	5.74	1.67	2.98	6.21	1.00	18.95	6.48	122.87	4.000	No	Yes	2.00
228	5.76	1.70	2.97	6.29	1.00	19.31	6.46	124.74	4.000	No	Yes	2.00
229	5.78	1.73	2.95	5.95	1.00	19.67	6.23	122.47	4.000	No	Yes	2.00
230	5.80	1.73	2.93	5.54	0.99	19.59	6.02	118.03	4.000	No	Yes	2.00
231	5.82	1.70	2.92	5.24	0.99	19.13	5.94	113.60	4.000	No	Yes	2.00
232	5.84	1.70	2.91	5.03	0.99	19.07	5.83	111.21	4.000	No	Yes	2.00
233	5.86	1.63	2.95	5.48	1.00	18.27	6.22	113.67	4.000	No	Yes	2.00
234	5.88	1.60	2.97	5.60	1.00	17.83	6.37	113.63	4.000	No	Yes	2.00
235	5.90	1.57	2.98	5.73	1.00	17.39	6.53	113.58	4.000	No	Yes	2.00
236	5.92	1.60	2.94	5.15	1.00	17.73	6.14	108.91	4.000	No	Yes	2.00
237	5.94	1.63	2.93	5.04	0.99	18.07	6.01	108.67	4.000	No	Yes	2.00
238	5.96	1.67	2.92	4.94	0.99	18.41	5.89	108.43	4.000	No	Yes	2.00
239	5.98	1.70	2.92	5.04	0.99	18.76	5.89	110.49	4.000	No	Yes	2.00
240	6.00	1.63	2.95	5.27	1.00	17.96	6.16	110.66	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
241	6.02	1.63	2.95	5.27	1.00	17.92	6.17	110.56	4.000	No	Yes	2.00
242	6.04	1.63	2.95	5.27	1.00	17.87	6.18	110.45	4.000	No	Yes	2.00
243	6.06	1.73	2.91	4.94	0.98	18.96	5.80	109.95	4.000	No	Yes	2.00
244	6.08	1.73	2.92	5.15	0.99	18.93	5.92	112.10	4.000	No	Yes	2.00
245	6.10	1.77	2.93	5.45	0.99	19.29	6.03	116.23	4.000	No	Yes	2.00
246	6.12	1.77	2.94	5.66	1.00	19.25	6.14	118.25	4.000	No	Yes	2.00
247	6.14	1.80	2.94	5.74	1.00	19.60	6.13	120.10	4.000	No	Yes	2.00
248	6.16	1.80	2.93	5.55	0.99	19.54	6.03	117.90	4.000	No	Yes	2.00
249	6.18	1.80	2.94	5.75	1.00	19.51	6.15	119.87	4.000	No	Yes	2.00
250	6.20	1.80	2.95	5.75	1.00	19.46	6.15	119.76	4.000	No	Yes	2.00
251	6.22	1.80	2.96	5.95	1.00	19.42	6.27	121.68	4.000	No	Yes	2.00
252	6.24	1.80	2.96	5.95	1.00	19.38	6.27	121.57	4.000	No	Yes	2.00
253	6.26	1.80	2.95	5.75	1.00	19.33	6.18	119.43	4.000	No	Yes	2.00
254	6.28	1.77	2.96	5.87	1.00	18.90	6.32	119.40	4.000	No	Yes	2.00
255	6.30	1.77	2.95	5.67	1.00	18.86	6.22	117.26	4.000	No	Yes	2.00
256	6.32	1.73	2.97	5.99	1.00	18.43	6.47	119.24	4.000	No	Yes	2.00
257	6.34	1.77	2.96	5.87	1.00	18.77	6.34	119.06	4.000	No	Yes	2.00
258	6.36	1.73	2.99	6.20	1.00	18.35	6.59	120.98	4.000	No	Yes	2.00
259	6.38	1.77	2.97	6.08	1.00	18.69	6.47	120.81	4.000	No	Yes	2.00
260	6.40	1.77	2.97	5.88	1.00	18.64	6.37	118.72	4.000	No	Yes	2.00
261	6.42	1.73	2.98	6.00	1.00	18.22	6.51	118.66	4.000	No	Yes	2.00
262	6.44	1.73	2.98	6.00	1.00	18.18	6.52	118.55	4.000	No	Yes	2.00
263	6.46	1.70	3.00	6.34	1.00	17.76	6.78	120.43	4.000	No	Yes	2.00
264	6.48	1.73	2.99	6.21	1.00	18.10	6.65	120.28	4.000	No	Yes	2.00
265	6.50	1.70	3.00	6.34	1.00	17.68	6.80	120.20	4.000	No	Yes	2.00
266	6.52	1.70	3.01	6.34	1.00	17.64	6.81	120.08	4.000	No	Yes	2.00
267	6.54	1.73	2.99	6.21	1.00	17.97	6.67	119.94	4.000	No	Yes	2.00
268	6.56	1.73	2.97	5.80	1.00	17.93	6.46	115.89	4.000	No	Yes	2.00
269	6.58	1.70	2.97	5.50	1.00	17.52	6.38	111.78	4.000	No	Yes	2.00
270	6.60	1.63	2.96	5.08	1.00	16.74	6.30	105.45	4.000	No	Yes	2.00
271	6.62	1.57	2.98	5.09	1.00	15.96	6.47	103.28	4.000	No	Yes	2.00
272	6.64	1.53	2.96	4.74	1.00	15.56	6.35	98.75	4.000	No	Yes	2.00
273	6.66	1.50	2.93	4.13	0.99	15.14	6.05	91.55	4.000	No	Yes	2.00
274	6.68	1.47	2.90	3.48	0.98	14.72	5.69	83.74	4.000	No	Yes	2.00
275	6.70	1.47	2.86	2.99	0.96	14.67	5.32	78.01	4.000	No	Yes	2.00
276	6.72	1.43	2.88	3.06	0.97	14.28	5.47	78.08	4.000	No	Yes	2.00
277	6.74	1.40	2.89	3.14	0.98	13.89	5.62	78.14	4.000	No	Yes	2.00
278	6.76	1.30	2.92	3.13	0.99	12.78	5.90	75.42	4.000	No	Yes	2.00
279	6.78	1.23	2.96	3.32	1.00	12.04	6.27	75.51	4.000	No	Yes	2.00
280	6.80	1.23	2.96	3.32	1.00	12.01	6.28	75.45	4.000	No	Yes	2.00
281	6.82	1.23	2.98	3.62	1.00	11.98	6.53	78.27	4.000	No	Yes	2.00
282	6.84	1.23	2.98	3.63	1.00	11.96	6.54	78.20	4.000	No	Yes	2.00
283	6.86	1.23	2.98	3.63	1.00	11.93	6.55	78.14	4.000	No	Yes	2.00
284	6.88	1.27	2.97	3.52	1.00	12.26	6.37	78.04	4.000	No	Yes	2.00
285	6.90	1.30	2.93	3.14	0.99	12.58	5.96	75.02	4.000	No	Yes	2.00
286	6.92	1.27	2.92	2.94	0.99	12.19	5.91	72.01	4.000	No	Yes	2.00
287	6.94	1.27	2.90	2.64	0.98	12.16	5.66	68.78	4.000	No	Yes	2.00
288	6.96	1.23	2.94	3.03	1.00	11.79	6.11	71.97	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
289	6.98	1.23	2.97	3.33	1.00	11.76	6.37	74.91	4.000	No	Yes	2.00
290	7.00	1.20	3.03	4.06	1.00	11.38	7.06	80.40	4.000	No	Yes	2.00
291	7.02	1.23	3.01	3.94	1.00	11.71	6.86	80.34	4.000	No	Yes	2.00
292	7.04	1.27	2.99	3.82	1.00	12.04	6.67	80.26	4.000	No	Yes	2.00
293	7.06	1.30	3.00	4.00	1.00	12.36	6.70	82.81	4.000	No	Yes	2.00
294	7.08	1.30	3.00	4.00	1.00	12.33	6.71	82.74	4.000	No	Yes	2.00
295	7.10	1.30	3.00	4.01	1.00	12.31	6.72	82.67	4.000	No	Yes	2.00
296	7.12	1.30	2.96	3.43	1.00	12.28	6.29	77.25	4.000	No	Yes	2.00
297	7.14	1.30	2.96	3.44	1.00	12.25	6.30	77.19	4.000	No	Yes	2.00
298	7.16	1.33	2.92	3.06	0.99	12.57	5.91	74.20	4.000	No	Yes	2.00
299	7.18	1.37	2.91	2.98	0.98	12.88	5.75	74.07	4.000	No	Yes	2.00
300	7.20	1.33	2.92	3.06	0.99	12.51	5.92	74.09	4.000	No	Yes	2.00
301	7.22	1.33	2.95	3.34	1.00	12.49	6.16	76.89	4.000	No	Yes	2.00
302	7.24	1.40	2.91	3.17	0.99	13.15	5.83	76.69	4.000	No	Yes	2.00
303	7.26	1.50	2.89	3.18	0.98	14.15	5.59	79.12	4.000	No	Yes	2.00
304	7.28	1.53	2.88	3.11	0.97	14.47	5.46	78.96	4.000	No	Yes	2.00
305	7.30	1.53	2.88	3.11	0.97	14.43	5.47	78.91	4.000	No	Yes	2.00
306	7.32	1.53	2.86	2.87	0.96	14.40	5.28	76.08	4.000	No	Yes	2.00
307	7.34	1.57	2.86	3.04	0.97	14.72	5.35	78.69	4.000	No	Yes	2.00
308	7.36	1.57	2.88	3.27	0.97	14.69	5.54	81.31	4.000	No	Yes	2.00
309	7.38	1.60	2.91	3.65	0.98	15.00	5.75	86.24	4.000	No	Yes	2.00
310	7.40	1.60	2.91	3.65	0.98	14.97	5.76	86.18	4.000	No	Yes	2.00
311	7.42	1.67	2.90	3.71	0.98	15.62	5.66	88.36	4.000	No	Yes	2.00
312	7.44	1.77	2.89	3.90	0.98	16.61	5.58	92.68	4.000	No	Yes	2.00
313	7.46	1.90	2.87	3.98	0.97	17.93	5.39	96.67	4.000	No	Yes	2.00
314	7.48	2.00	2.83	3.77	0.96	18.91	5.09	96.22	4.000	No	Yes	2.00
315	7.50	2.10	2.78	3.24	0.93	19.88	4.59	91.19	4.000	No	Yes	2.00
316	7.52	2.20	2.75	3.08	0.92	20.85	4.35	90.69	4.000	No	Yes	2.00
317	7.54	2.30	2.73	3.09	0.92	21.82	4.24	92.49	4.000	No	Yes	2.00
318	7.56	2.37	2.71	3.00	0.91	22.45	4.10	92.13	4.000	No	Yes	2.00
319	7.58	2.30	2.76	3.40	0.93	21.74	4.45	96.82	4.000	No	Yes	2.00
320	7.60	2.20	2.80	3.73	0.94	20.70	4.80	99.34	4.000	No	Yes	2.00
321	7.62	2.10	2.87	4.43	0.97	19.66	5.39	105.86	4.000	No	Yes	2.00
322	7.64	2.10	2.87	4.43	0.97	19.62	5.39	105.78	4.000	No	Yes	2.00
323	7.66	2.07	2.87	4.34	0.97	19.24	5.39	103.80	4.000	No	Yes	2.00
324	7.68	2.03	2.86	4.06	0.96	18.87	5.28	99.71	4.000	No	Yes	2.00
325	7.70	2.00	2.84	3.78	0.96	18.50	5.16	95.47	4.000	No	Yes	2.00
326	7.72	2.23	2.76	3.19	0.93	20.79	4.44	92.25	4.000	No	Yes	2.00
327	7.74	2.43	2.69	2.77	0.90	22.75	3.91	89.04	4.000	No	Yes	2.00
328	7.76	2.53	2.63	2.38	0.88	23.70	3.54	83.89	4.000	No	Yes	2.00
329	7.78	2.37	2.66	2.40	0.89	22.01	3.73	82.12	4.000	No	Yes	2.00
330	7.80	2.27	2.69	2.52	0.90	20.97	3.93	82.49	4.000	No	Yes	2.00
331	7.82	2.27	2.71	2.68	0.91	20.94	4.05	84.87	4.000	No	Yes	2.00
332	7.84	2.27	2.74	2.99	0.92	20.89	4.28	89.49	4.000	No	Yes	2.00
333	7.86	2.23	2.76	3.20	0.93	20.52	4.47	91.83	4.000	No	Yes	2.00
334	7.88	2.23	2.79	3.52	0.94	20.48	4.69	96.14	4.000	No	Yes	2.00
335	7.90	2.27	2.80	3.78	0.94	20.77	4.82	100.14	4.000	No	Yes	2.00
336	7.92	2.30	2.82	4.03	0.95	21.05	4.94	103.98	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
337	7.94	2.23	2.85	4.32	0.96	20.36	5.21	106.11	4.000	No	Yes	2.00
338	7.96	2.17	2.90	4.96	0.98	19.66	5.69	111.90	4.000	No	Yes	2.00
339	7.98	2.03	2.97	5.85	1.00	18.31	6.41	117.44	4.000	No	Yes	2.00
340	8.00	2.67	2.81	4.64	0.95	24.46	4.86	118.96	4.000	No	Yes	2.00
341	8.02	3.73	2.57	2.98	0.85	34.88	3.13	109.01	0.200	No	No	1.79
342	8.04	4.83	2.34	1.85	0.77	45.65	2.10	95.65	0.161	No	No	1.44
343	8.06	5.20	2.20	1.19	0.71	49.25	1.67	82.01	0.131	No	No	1.17
344	8.08	4.97	2.15	0.90	0.69	46.94	1.55	72.68	0.116	No	No	1.03
345	8.10	5.17	2.11	0.80	0.68	48.86	1.46	71.52	0.114	No	No	1.01
346	8.12	6.23	2.09	0.99	0.67	59.19	1.43	84.78	0.137	No	No	1.21
347	8.14	8.07	1.94	0.80	0.61	77.13	1.23	94.86	0.159	No	No	1.42
348	8.16	9.80	1.88	0.83	0.59	94.01	1.17	110.11	0.204	No	No	1.81
349	8.18	10.50	1.80	0.68	0.56	100.86	1.11	111.89	0.210	No	No	1.86
350	8.20	10.73	1.80	0.69	0.56	103.03	1.11	114.20	0.219	No	No	1.94
351	8.22	10.13	2.00	1.30	0.64	96.74	1.30	125.31	0.263	No	No	2.00
352	8.24	10.00	2.12	1.96	0.68	95.10	1.50	142.81	0.351	No	No	2.00
353	8.26	9.67	2.22	2.59	0.72	91.59	1.73	158.13	0.448	No	No	2.00
354	8.28	10.53	2.11	1.96	0.68	100.04	1.47	147.16	0.376	No	No	2.00
355	8.30	11.80	1.97	1.40	0.63	112.45	1.26	142.04	0.347	No	No	2.00
356	8.32	12.67	1.89	1.17	0.60	120.89	1.18	143.04	0.352	No	No	2.00
357	8.34	11.53	1.99	1.47	0.63	109.57	1.29	141.26	0.342	No	No	2.00
358	8.36	9.10	2.13	1.83	0.69	85.75	1.52	130.45	0.286	No	No	2.00
359	8.38	7.07	2.21	1.79	0.72	66.05	1.69	111.91	0.210	No	No	1.85
360	8.40	6.23	2.13	1.15	0.69	58.11	1.52	88.27	0.144	No	No	1.27
361	8.42	6.20	2.08	0.94	0.67	57.80	1.42	82.35	0.132	No	No	1.16
362	8.44	5.80	2.17	1.18	0.70	53.79	1.59	85.51	0.138	No	No	1.21
363	8.46	5.40	2.26	1.53	0.74	49.78	1.83	91.15	0.150	No	No	1.32
364	8.48	4.57	2.37	1.82	0.78	41.69	2.19	91.24	0.151	No	No	1.32
365	8.50	3.87	2.45	1.98	0.81	34.93	2.54	88.63	0.145	No	No	1.27
366	8.52	3.37	2.52	2.08	0.83	30.12	2.85	85.87	0.139	No	No	1.22
367	8.54	3.10	2.53	1.93	0.84	27.56	2.91	80.17	0.128	No	No	1.12
368	8.56	3.03	2.54	1.97	0.84	26.88	2.99	80.33	0.128	No	No	1.12
369	8.58	2.77	2.66	2.69	0.89	24.26	3.71	89.90	4.000	No	Yes	2.00
370	8.60	2.57	2.75	3.33	0.92	22.30	4.34	96.75	4.000	No	Yes	2.00
371	8.62	2.63	2.75	3.51	0.92	22.87	4.39	100.35	4.000	No	Yes	2.00
372	8.64	3.30	2.58	2.55	0.86	29.16	3.22	93.86	0.157	No	No	1.37
373	8.66	4.20	2.43	1.98	0.80	37.66	2.43	91.34	0.151	No	No	1.31
374	8.68	4.63	2.36	1.79	0.78	41.73	2.17	90.68	0.149	No	No	1.30
375	8.70	4.53	2.38	1.83	0.78	40.72	2.23	90.73	0.149	No	No	1.30
376	8.72	4.07	2.43	1.88	0.80	36.26	2.42	87.72	0.143	No	No	1.24
377	8.74	3.70	2.43	1.70	0.80	32.80	2.45	80.47	0.128	No	No	1.12
378	8.76	3.27	2.43	1.40	0.80	28.74	2.44	70.24	0.112	No	No	0.97
379	8.78	2.87	2.48	1.36	0.82	24.95	2.65	66.04	0.107	No	No	0.93
380	8.80	2.50	2.54	1.43	0.84	21.48	2.99	64.21	0.105	No	No	0.91
381	8.82	2.20	2.57	1.31	0.86	18.66	3.17	59.19	0.099	No	No	0.86
382	8.84	2.33	2.54	1.23	0.84	19.88	2.96	58.83	0.099	No	No	0.86
383	8.86	3.17	2.34	0.89	0.77	27.71	2.09	57.77	0.098	No	No	0.85
384	8.88	4.53	2.16	0.76	0.70	40.56	1.58	64.22	0.105	No	No	0.90



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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
385	8.90	5.57	2.01	0.56	0.64	50.41	1.32	66.46	0.107	No	No	0.93
386	8.92	5.97	1.92	0.40	0.61	54.29	1.00	54.29	0.095	No	No	0.82
387	8.94	5.80	1.88	0.30	0.59	52.77	1.00	52.77	0.094	No	No	0.81
388	8.96	5.73	1.89	0.30	0.59	52.07	1.00	52.07	0.093	No	No	0.80
389	8.98	5.83	2.05	0.71	0.66	52.58	1.37	72.09	0.115	No	No	0.99
390	9.00	6.63	2.08	0.98	0.67	59.86	1.42	85.14	0.137	No	No	1.18
391	9.02	7.70	2.09	1.24	0.67	69.63	1.44	100.19	0.174	No	No	1.49
392	9.04	8.57	2.02	1.11	0.65	77.79	1.33	103.66	0.184	No	No	1.58
393	9.06	8.97	1.98	0.99	0.63	81.59	1.27	103.53	0.183	No	No	1.57
394	9.08	9.23	1.91	0.81	0.60	84.22	1.20	101.15	0.176	No	No	1.51
395	9.10	9.93	1.84	0.68	0.58	90.93	1.14	103.59	0.183	No	No	1.57
396	9.12	10.53	1.85	0.77	0.58	96.37	1.15	110.63	0.206	No	No	1.77
397	9.14	13.03	1.65	0.47	0.50	120.69	1.00	120.69	0.244	No	No	2.00
398	9.16	14.70	1.56	0.39	0.50	136.28	1.00	136.28	0.315	No	No	2.00
399	9.18	17.00	1.42	0.26	0.50	157.73	1.00	157.73	0.445	No	No	2.00
400	9.20	16.90	1.48	0.34	0.50	156.66	1.00	156.66	0.438	No	No	2.00
401	9.22	17.33	1.44	0.29	0.50	160.59	1.00	160.59	0.465	No	No	2.00
402	9.24	16.80	1.38	0.20	0.50	155.47	1.00	155.47	0.429	No	No	2.00
403	9.26	16.10	1.35	0.15	0.50	148.80	1.00	148.80	0.386	No	No	2.00
404	9.28	15.27	1.50	0.31	0.50	140.89	1.00	140.89	0.340	No	No	2.00
405	9.30	14.37	1.65	0.54	0.50	132.30	1.00	132.84	0.298	No	No	2.00
406	9.32	13.07	1.80	0.83	0.56	119.13	1.11	131.78	0.293	No	No	2.00
407	9.34	11.43	1.87	0.89	0.59	103.56	1.16	119.97	0.241	No	No	2.00
408	9.36	10.27	1.85	0.73	0.58	92.82	1.15	106.37	0.192	No	No	1.64
409	9.38	9.90	1.78	0.51	0.55	89.71	1.09	98.00	0.168	No	No	1.43
410	9.40	9.53	1.74	0.39	0.54	86.46	1.00	86.46	0.140	No	No	1.19
411	9.42	9.33	1.73	0.36	0.53	84.57	1.00	84.57	0.136	No	No	1.16
412	9.44	9.57	1.65	0.25	0.50	87.04	1.00	87.04	0.141	No	No	1.20
413	9.46	11.10	1.59	0.24	0.50	101.23	1.00	101.23	0.176	No	No	1.50
414	9.48	12.43	1.52	0.22	0.50	113.50	1.00	113.50	0.216	No	No	1.84
415	9.50	13.53	1.54	0.30	0.50	123.59	1.00	123.59	0.256	No	No	2.00
416	9.52	13.57	1.59	0.37	0.50	123.79	1.00	123.79	0.256	No	No	2.00
417	9.54	13.57	1.71	0.62	0.53	123.15	1.05	128.83	0.279	No	No	2.00
418	9.56	13.63	1.66	0.52	0.51	124.02	1.01	125.73	0.265	No	No	2.00
419	9.58	13.80	1.62	0.44	0.50	125.65	1.00	125.65	0.264	No	No	2.00
420	9.60	13.90	1.55	0.32	0.50	126.47	1.00	126.47	0.268	No	No	2.00
421	9.62	13.43	1.55	0.30	0.50	122.07	1.00	122.07	0.249	No	No	2.00
422	9.64	12.53	1.54	0.24	0.50	113.68	1.00	113.68	0.217	No	No	1.83
423	9.66	11.50	1.50	0.15	0.50	104.09	1.00	104.09	0.185	No	No	1.56
424	9.68	10.67	1.61	0.25	0.50	96.34	1.00	96.34	0.163	No	No	1.38
425	9.70	9.93	1.68	0.31	0.51	89.32	1.00	89.32	0.146	No	No	1.24
426	9.72	9.63	1.75	0.42	0.54	86.06	1.00	86.06	0.139	No	No	1.18
427	9.74	9.50	1.76	0.43	0.55	84.72	1.00	84.72	0.137	No	No	1.15
428	9.76	9.90	1.75	0.45	0.54	88.33	1.00	88.33	0.144	No	No	1.22
429	9.78	9.63	1.75	0.42	0.54	85.83	1.00	85.83	0.139	No	No	1.17
430	9.80	9.47	1.75	0.40	0.54	84.28	1.00	84.28	0.136	No	No	1.14
431	9.82	9.17	1.75	0.37	0.54	81.49	1.00	81.49	0.130	No	No	1.10
432	9.84	9.30	1.70	0.29	0.52	82.92	1.00	82.92	0.133	No	No	1.12

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
433	9.86	9.23	1.65	0.22	0.50	82.49	1.00	82.49	0.132	No	No	1.11
434	9.88	9.03	1.61	0.15	0.50	80.67	1.00	80.67	0.129	No	No	1.08
435	9.90	8.50	1.62	0.12	0.50	75.75	1.00	75.75	0.120	No	No	1.01
436	9.92	7.73	1.70	0.18	0.52	68.41	1.00	68.41	0.110	No	No	0.92
437	9.94	6.73	1.81	0.25	0.57	58.82	1.00	58.82	0.099	No	No	0.83
438	9.96	5.80	1.90	0.30	0.60	50.06	1.00	50.06	0.092	No	No	0.77
439	9.98	4.97	1.96	0.28	0.62	42.40	1.00	42.40	0.085	No	No	0.72
440	10.00	4.37	1.99	0.24	0.64	36.94	1.00	36.94	0.081	No	No	0.68
441	10.02	3.93	2.06	0.27	0.66	32.92	1.00	32.92	0.077	No	No	0.65
442	10.04	3.63	2.10	0.29	0.68	30.14	1.00	30.14	0.075	No	No	0.63
443	10.06	3.23	2.18	0.33	0.70	26.46	1.00	26.46	0.072	No	No	0.60
444	10.08	2.87	2.25	0.37	0.73	23.12	1.00	23.12	0.069	No	No	0.58
445	10.10	2.60	2.36	0.55	0.78	20.61	2.16	44.54	0.087	No	No	0.73
446	10.12	2.60	2.36	0.55	0.78	20.58	2.16	44.53	0.087	No	No	0.73
447	10.14	2.60	2.36	0.55	0.78	20.55	2.17	44.51	0.087	No	No	0.73
448	10.16	2.30	2.39	0.47	0.79	17.93	2.28	40.79	0.084	No	No	0.70
449	10.18	1.87	2.53	0.60	0.84	14.07	2.91	40.89	0.084	No	No	0.70
450	10.20	1.20	2.89	1.33	0.97	8.21	5.57	45.73	4.000	No	Yes	2.00
451	10.22	0.77	3.27	2.91	1.00	4.64	10.27	47.64	4.000	No	Yes	2.00
452	10.24	0.40	3.93	9.74	1.00	1.66	23.27	38.70	4.000	No	Yes	2.00
453	10.26	0.40	3.93	9.75	1.00	1.66	23.31	38.64	4.000	No	Yes	2.00
454	10.28	0.50	3.69	6.56	1.00	2.46	17.88	43.97	4.000	No	Yes	2.00
455	10.30	1.03	3.09	2.39	1.00	6.75	7.76	52.38	4.000	No	Yes	2.00
456	10.32	1.60	2.77	1.42	0.93	11.46	4.57	52.42	4.000	No	Yes	2.00
457	10.34	2.13	2.64	1.38	0.88	15.97	3.60	57.48	4.000	No	Yes	2.00
458	10.36	2.50	2.63	1.74	0.88	18.98	3.54	67.13	4.000	No	Yes	2.00
459	10.38	2.97	2.56	1.69	0.85	22.94	3.08	70.61	0.113	No	No	0.94
460	10.40	3.93	2.44	1.61	0.80	31.22	2.47	77.02	0.122	No	No	1.02
461	10.42	6.57	2.10	0.94	0.68	54.70	1.46	79.95	0.128	No	No	1.06
462	10.44	9.83	1.89	0.73	0.59	84.25	1.18	99.02	0.170	No	No	1.42
463	10.46	11.90	1.75	0.57	0.54	103.42	1.07	110.97	0.207	No	No	1.73
464	10.48	11.80	1.76	0.57	0.54	102.40	1.08	110.28	0.205	No	No	1.71
465	10.50	10.87	1.80	0.59	0.56	93.75	1.10	103.59	0.183	No	No	1.53
466	10.52	10.07	1.80	0.54	0.56	86.59	1.11	96.12	0.163	No	No	1.35
467	10.54	9.03	1.79	0.42	0.56	77.57	1.00	77.57	0.123	No	No	1.03
468	10.56	7.67	1.80	0.31	0.56	65.43	1.00	65.43	0.106	No	No	0.88
469	10.58	6.57	1.90	0.37	0.60	55.27	1.00	55.27	0.096	No	No	0.80
470	10.60	5.77	1.98	0.42	0.63	47.92	1.00	47.92	0.090	No	No	0.75
471	10.62	5.00	2.09	0.56	0.67	40.85	1.44	59.01	0.099	No	No	0.82
472	10.64	4.30	2.16	0.57	0.70	34.63	1.58	54.74	0.095	No	No	0.79
473	10.66	3.80	2.36	1.11	0.78	29.81	2.17	64.66	0.105	No	No	0.87
474	10.68	3.57	2.46	1.49	0.81	27.60	2.58	71.14	0.113	No	No	0.94
475	10.70	3.63	2.41	1.26	0.79	28.23	2.37	66.83	0.108	No	No	0.90
476	10.72	3.97	2.27	0.80	0.74	31.35	1.86	58.21	0.098	No	No	0.82
477	10.74	4.53	2.16	0.62	0.70	36.42	1.57	57.27	0.097	No	No	0.81
478	10.76	5.40	2.17	0.90	0.70	43.59	1.61	70.02	0.112	No	No	0.93
479	10.78	6.10	2.16	1.02	0.70	49.49	1.57	77.76	0.124	No	No	1.03
480	10.80	7.47	2.01	0.78	0.64	61.75	1.32	81.46	0.130	No	No	1.08

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
481	10.82	9.70	1.82	0.53	0.57	82.21	1.12	92.07	0.153	No	No	1.27
482	10.84	12.70	1.62	0.35	0.50	109.98	1.00	109.98	0.204	No	No	1.69
483	10.86	15.17	1.56	0.36	0.50	131.60	1.00	131.60	0.292	No	No	2.00
484	10.88	16.23	1.50	0.31	0.50	140.88	1.00	140.88	0.340	No	No	2.00
485	10.90	15.87	1.50	0.30	0.50	137.55	1.00	137.55	0.322	No	No	2.00
486	10.92	15.33	1.43	0.18	0.50	132.77	1.00	132.77	0.298	No	No	2.00
487	10.94	14.93	1.42	0.16	0.50	129.17	1.00	129.17	0.280	No	No	2.00
488	10.96	15.30	1.37	0.11	0.50	132.29	1.00	132.29	0.295	No	No	2.00
489	10.98	15.33	1.37	0.11	0.50	132.48	1.00	132.48	0.296	No	No	2.00
490	11.00	15.27	1.38	0.11	0.50	131.80	1.00	131.80	0.293	No	No	2.00
491	11.02	15.37	1.49	0.26	0.50	132.58	1.00	132.58	0.297	No	No	2.00
492	11.04	15.60	1.50	0.28	0.50	134.52	1.00	134.52	0.306	No	No	2.00
493	11.06	16.13	1.46	0.25	0.50	139.08	1.00	139.08	0.330	No	No	2.00
494	11.08	15.53	1.37	0.11	0.50	133.75	1.00	133.75	0.302	No	No	2.00
495	11.10	15.33	1.36	0.09	0.50	131.90	1.00	131.90	0.293	No	No	2.00
496	11.12	13.73	1.49	0.20	0.50	117.86	1.00	117.86	0.232	No	No	1.92
497	11.14	13.10	1.60	0.34	0.50	112.26	1.00	112.26	0.212	No	No	1.75
498	11.16	11.67	1.75	0.52	0.54	98.55	1.07	105.59	0.189	No	No	1.57
499	11.18	11.90	1.83	0.74	0.57	99.61	1.13	112.59	0.213	No	No	1.76
500	11.20	12.47	1.85	0.84	0.58	104.15	1.15	119.26	0.238	No	No	1.97
501	11.22	13.17	1.90	1.06	0.60	109.47	1.18	129.68	0.283	No	No	2.00
502	11.24	12.63	1.90	1.02	0.60	104.82	1.19	124.63	0.260	No	No	2.00
503	11.26	12.10	1.95	1.15	0.62	99.69	1.24	123.67	0.256	No	No	2.00
504	11.28	12.30	1.89	0.97	0.60	101.90	1.18	120.59	0.243	No	No	2.00
505	11.30	14.60	1.79	0.83	0.56	122.55	1.10	134.92	0.308	No	No	2.00
506	11.32	18.07	1.64	0.63	0.50	154.53	1.00	154.53	0.423	No	No	2.00
507	11.34	22.17	1.53	0.55	0.50	189.88	1.00	189.88	0.717	No	No	2.00
508	11.36	26.47	1.40	0.43	0.50	226.92	1.00	226.92	4.000	No	No	2.00
509	11.38	29.97	1.31	0.36	0.50	256.99	1.00	256.99	4.000	No	No	2.00
510	11.40	33.20	1.22	0.28	0.50	284.73	1.00	284.73	4.000	No	No	2.00
511	11.42	34.77	1.14	0.21	0.50	298.04	1.00	298.04	4.000	No	No	2.00
512	11.44	35.13	1.06	0.14	0.50	301.00	1.00	301.00	4.000	No	No	2.00
513	11.46	35.63	1.05	0.14	0.50	305.09	1.00	305.09	4.000	No	No	2.00
514	11.48	36.47	1.08	0.17	0.50	312.06	1.00	312.06	4.000	No	No	2.00
515	11.50	37.40	1.11	0.22	0.50	319.87	1.00	319.87	4.000	No	No	2.00
516	11.52	37.07	1.12	0.22	0.50	316.78	1.00	316.78	4.000	No	No	2.00
517	11.54	37.47	1.11	0.21	0.50	320.00	1.00	320.00	4.000	No	No	2.00
518	11.56	38.67	1.09	0.21	0.50	330.09	1.00	330.09	4.000	No	No	2.00
519	11.58	40.57	1.06	0.20	0.50	346.16	1.00	346.16	4.000	No	No	2.00
520	11.60	41.50	1.05	0.19	0.50	353.93	1.00	353.93	4.000	No	No	2.00
521	11.62	46.17	0.99	0.17	0.50	393.67	1.00	393.67	4.000	No	No	2.00

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

Point ID	Depth (m)	$q_t$ (MPa)	$I_c$	Fr (%)	n	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
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**Abbreviations**

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

:: Liquefaction Potential Index calculation data ::											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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
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	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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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
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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	2.00	0.00	6.97	0.02	0.00	6.08	2.00	0.00	6.96	0.02	0.00
6.10	2.00	0.00	6.95	0.02	0.00	6.12	2.00	0.00	6.94	0.02	0.00
6.14	2.00	0.00	6.93	0.02	0.00	6.16	2.00	0.00	6.92	0.02	0.00
6.18	2.00	0.00	6.91	0.02	0.00	6.20	2.00	0.00	6.90	0.02	0.00
6.22	2.00	0.00	6.89	0.02	0.00	6.24	2.00	0.00	6.88	0.02	0.00
6.26	2.00	0.00	6.87	0.02	0.00	6.28	2.00	0.00	6.86	0.02	0.00
6.30	2.00	0.00	6.85	0.02	0.00	6.32	2.00	0.00	6.84	0.02	0.00
6.34	2.00	0.00	6.83	0.02	0.00	6.36	2.00	0.00	6.82	0.02	0.00
6.38	2.00	0.00	6.81	0.02	0.00	6.40	2.00	0.00	6.80	0.02	0.00
6.42	2.00	0.00	6.79	0.02	0.00	6.44	2.00	0.00	6.78	0.02	0.00
6.46	2.00	0.00	6.77	0.02	0.00	6.48	2.00	0.00	6.76	0.02	0.00
6.50	2.00	0.00	6.75	0.02	0.00	6.52	2.00	0.00	6.74	0.02	0.00
6.54	2.00	0.00	6.73	0.02	0.00	6.56	2.00	0.00	6.72	0.02	0.00
6.58	2.00	0.00	6.71	0.02	0.00	6.60	2.00	0.00	6.70	0.02	0.00
6.62	2.00	0.00	6.69	0.02	0.00	6.64	2.00	0.00	6.68	0.02	0.00
6.66	2.00	0.00	6.67	0.02	0.00	6.68	2.00	0.00	6.66	0.02	0.00
6.70	2.00	0.00	6.65	0.02	0.00	6.72	2.00	0.00	6.64	0.02	0.00
6.74	2.00	0.00	6.63	0.02	0.00	6.76	2.00	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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	1.79	0.00	5.99	0.02	0.00	8.04	1.44	0.00	5.98	0.02	0.00
8.06	1.17	0.00	5.97	0.02	0.00	8.08	1.03	0.00	5.96	0.02	0.00
8.10	1.01	0.00	5.95	0.02	0.00	8.12	1.21	0.00	5.94	0.02	0.00
8.14	1.42	0.00	5.93	0.02	0.00	8.16	1.81	0.00	5.92	0.02	0.00
8.18	1.86	0.00	5.91	0.02	0.00	8.20	1.94	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	1.85	0.00	5.81	0.02	0.00	8.40	1.27	0.00	5.80	0.02	0.00
8.42	1.16	0.00	5.79	0.02	0.00	8.44	1.21	0.00	5.78	0.02	0.00
8.46	1.32	0.00	5.77	0.02	0.00	8.48	1.32	0.00	5.76	0.02	0.00
8.50	1.27	0.00	5.75	0.02	0.00	8.52	1.22	0.00	5.74	0.02	0.00
8.54	1.12	0.00	5.73	0.02	0.00	8.56	1.12	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	1.37	0.00	5.68	0.02	0.00
8.66	1.31	0.00	5.67	0.02	0.00	8.68	1.30	0.00	5.66	0.02	0.00
8.70	1.30	0.00	5.65	0.02	0.00	8.72	1.24	0.00	5.64	0.02	0.00
8.74	1.12	0.00	5.63	0.02	0.00	8.76	0.97	0.03	5.62	0.02	0.00
8.78	0.93	0.07	5.61	0.02	0.01	8.80	0.91	0.09	5.60	0.02	0.01
8.82	0.86	0.14	5.59	0.02	0.02	8.84	0.86	0.14	5.58	0.02	0.02
8.86	0.85	0.15	5.57	0.02	0.02	8.88	0.90	0.10	5.56	0.02	0.01



:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
8.90	0.93	0.07	5.55	0.02	0.01	8.92	0.82	0.18	5.54	0.02	0.02
8.94	0.81	0.19	5.53	0.02	0.02	8.96	0.80	0.20	5.52	0.02	0.02
8.98	0.99	0.01	5.51	0.02	0.00	9.00	1.18	0.00	5.50	0.02	0.00
9.02	1.49	0.00	5.49	0.02	0.00	9.04	1.58	0.00	5.48	0.02	0.00
9.06	1.57	0.00	5.47	0.02	0.00	9.08	1.51	0.00	5.46	0.02	0.00
9.10	1.57	0.00	5.45	0.02	0.00	9.12	1.77	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	1.64	0.00	5.32	0.02	0.00
9.38	1.43	0.00	5.31	0.02	0.00	9.40	1.19	0.00	5.30	0.02	0.00
9.42	1.16	0.00	5.29	0.02	0.00	9.44	1.20	0.00	5.28	0.02	0.00
9.46	1.50	0.00	5.27	0.02	0.00	9.48	1.84	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	1.83	0.00	5.18	0.02	0.00
9.66	1.56	0.00	5.17	0.02	0.00	9.68	1.38	0.00	5.16	0.02	0.00
9.70	1.24	0.00	5.15	0.02	0.00	9.72	1.18	0.00	5.14	0.02	0.00
9.74	1.15	0.00	5.13	0.02	0.00	9.76	1.22	0.00	5.12	0.02	0.00
9.78	1.17	0.00	5.11	0.02	0.00	9.80	1.14	0.00	5.10	0.02	0.00
9.82	1.10	0.00	5.09	0.02	0.00	9.84	1.12	0.00	5.08	0.02	0.00
9.86	1.11	0.00	5.07	0.02	0.00	9.88	1.08	0.00	5.06	0.02	0.00
9.90	1.01	0.00	5.05	0.02	0.00	9.92	0.92	0.08	5.04	0.02	0.01
9.94	0.83	0.17	5.03	0.02	0.02	9.96	0.77	0.23	5.02	0.02	0.02
9.98	0.72	0.28	5.01	0.02	0.03	10.00	0.68	0.32	5.00	0.02	0.03
10.02	0.65	0.35	4.99	0.02	0.03	10.04	0.63	0.37	4.98	0.02	0.04
10.06	0.60	0.40	4.97	0.02	0.04	10.08	0.58	0.42	4.96	0.02	0.04
10.10	0.73	0.27	4.95	0.02	0.03	10.12	0.73	0.27	4.94	0.02	0.03
10.14	0.73	0.27	4.93	0.02	0.03	10.16	0.70	0.30	4.92	0.02	0.03
10.18	0.70	0.30	4.91	0.02	0.03	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	0.94	0.06	4.81	0.02	0.01	10.40	1.02	0.00	4.80	0.02	0.00
10.42	1.06	0.00	4.79	0.02	0.00	10.44	1.42	0.00	4.78	0.02	0.00
10.46	1.73	0.00	4.77	0.02	0.00	10.48	1.71	0.00	4.76	0.02	0.00
10.50	1.53	0.00	4.75	0.02	0.00	10.52	1.35	0.00	4.74	0.02	0.00
10.54	1.03	0.00	4.73	0.02	0.00	10.56	0.88	0.12	4.72	0.02	0.01
10.58	0.80	0.20	4.71	0.02	0.02	10.60	0.75	0.25	4.70	0.02	0.02
10.62	0.82	0.18	4.69	0.02	0.02	10.64	0.79	0.21	4.68	0.02	0.02
10.66	0.87	0.13	4.67	0.02	0.01	10.68	0.94	0.06	4.66	0.02	0.01
10.70	0.90	0.10	4.65	0.02	0.01	10.72	0.82	0.18	4.64	0.02	0.02
10.74	0.81	0.19	4.63	0.02	0.02	10.76	0.93	0.07	4.62	0.02	0.01
10.78	1.03	0.00	4.61	0.02	0.00	10.80	1.08	0.00	4.60	0.02	0.00

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
10.82	1.27	0.00	4.59	0.02	0.00	10.84	1.69	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	2.00	0.00	4.45	0.02	0.00	11.12	1.92	0.00	4.44	0.02	0.00
11.14	1.75	0.00	4.43	0.02	0.00	11.16	1.57	0.00	4.42	0.02	0.00
11.18	1.76	0.00	4.41	0.02	0.00	11.20	1.97	0.00	4.40	0.02	0.00
11.22	2.00	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	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						

**Overall liquefaction potential: 0.72**

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<sub>L</sub>: 1 - FS  
w<sub>z</sub>: Function value of the extend of soil liquefaction according to depth  
d<sub>z</sub>: Layer thickness (m)  
LPI: Liquefaction potential index value for test point

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
1.22	0.13	1.87	26.61	49.82	4.06	2.16	0.34
1.24	0.23	3.57	22.26	79.36	3.89	0.64	0.64
1.26	0.27	4.13	19.70	81.29	3.78	0.72	0.72
1.28	0.40	6.39	13.39	85.54	3.46	1.10	1.10
1.30	0.50	8.08	10.59	85.55	3.29	1.37	1.37
1.32	0.67	10.91	7.31	79.70	3.05	1.83	1.83
1.34	0.80	13.17	5.70	75.06	2.90	2.17	2.17
1.36	0.97	15.99	5.46	87.29	2.87	2.60	2.60
1.38	1.10	18.25	5.75	105.03	2.91	2.93	2.93
1.40	1.17	19.38	6.37	123.50	2.97	3.06	3.06
1.42	1.20	19.94	6.47	129.08	2.98	3.11	3.11
1.44	1.17	19.37	6.81	131.89	3.01	2.97	2.97
1.46	1.13	18.80	6.87	129.21	3.01	2.85	2.85
1.48	1.00	16.52	7.81	129.06	3.09	2.47	2.47
1.50	0.93	15.38	8.37	128.73	3.13	2.27	2.27
1.52	0.87	14.24	9.35	133.10	3.21	2.07	2.07
1.54	0.90	14.80	9.18	135.88	3.19	2.13	2.13
1.56	0.90	14.80	9.50	140.53	3.22	2.10	2.10
1.58	0.87	14.22	10.00	142.27	3.25	1.99	1.99
1.60	0.90	14.78	9.81	144.99	3.24	2.04	2.04
1.62	0.93	15.34	9.48	145.45	3.22	2.09	2.09
1.64	1.00	16.47	8.88	146.19	3.17	2.22	2.22
1.66	0.97	15.90	9.03	143.58	3.18	2.12	2.12
1.68	0.93	15.32	9.34	143.20	3.21	2.02	2.02
1.70	0.90	14.75	9.37	138.20	3.21	1.92	1.92
1.72	0.90	14.74	9.37	138.19	3.21	1.90	1.90
1.74	0.90	14.74	9.22	135.84	3.20	1.87	1.87
1.76	0.87	14.16	9.72	137.73	3.23	1.78	1.78
1.78	0.87	14.16	9.73	137.72	3.23	1.76	1.76
1.80	0.90	14.72	9.23	135.82	3.20	1.81	1.81
1.82	0.93	15.28	8.75	133.73	3.16	1.86	1.86
1.84	1.00	16.41	8.02	131.65	3.11	1.97	1.97
1.86	0.97	15.83	8.46	133.99	3.14	1.88	1.88
1.88	0.97	15.83	8.14	128.88	3.12	1.86	1.86
1.90	0.90	14.69	8.20	120.46	3.12	1.71	1.71
1.92	0.87	14.11	8.32	117.48	3.13	1.63	1.63
1.94	0.90	14.67	7.82	114.77	3.09	1.67	1.67
1.96	0.90	14.67	8.40	123.18	3.14	1.65	1.65
1.98	0.93	15.23	8.28	126.06	3.13	1.70	1.70
2.00	0.90	14.65	9.10	133.38	3.19	1.62	1.62
2.02	0.87	14.08	9.44	132.98	3.21	1.54	1.54
2.04	0.80	12.94	10.02	129.61	3.25	1.40	1.40
2.06	0.87	14.07	9.45	132.97	3.21	1.51	1.51
2.08	0.87	14.06	9.46	132.97	3.21	1.49	1.49
2.10	0.97	15.76	8.66	136.42	3.16	1.66	1.66
2.12	0.93	15.18	9.12	138.49	3.19	1.58	1.58
2.14	1.03	16.88	8.54	144.08	3.15	1.74	1.74
2.16	1.07	17.44	8.41	146.65	3.14	1.79	1.79

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
2.18	1.13	18.56	7.92	146.99	3.10	1.88	1.88
2.20	1.10	17.99	7.90	142.06	3.10	1.81	1.81
2.22	1.17	19.12	7.31	139.73	3.05	1.90	1.90
2.24	1.13	18.54	7.26	134.56	3.04	1.83	1.83
2.26	1.17	19.10	7.04	134.57	3.03	1.87	1.87
2.28	1.10	17.96	7.34	131.90	3.05	1.74	1.74
2.30	1.10	17.96	7.35	131.90	3.05	1.73	1.73
2.32	1.03	16.82	7.83	131.75	3.09	1.60	1.60
2.34	1.07	17.38	7.59	131.84	3.07	1.64	1.64
2.36	1.07	17.37	7.74	134.44	3.08	1.63	1.63
2.38	1.13	18.50	7.41	137.15	3.06	1.72	1.72
2.40	1.10	17.92	7.79	139.59	3.09	1.65	1.65
2.42	1.10	17.92	7.93	142.04	3.10	1.64	1.64
2.44	1.10	17.91	7.79	139.59	3.09	1.62	1.62
2.46	1.10	17.91	7.80	139.58	3.09	1.61	1.61
2.48	1.10	17.90	7.52	134.51	3.07	1.60	1.60
2.50	1.07	17.33	7.61	131.84	3.07	1.53	1.53
2.52	1.03	16.75	7.71	129.10	3.08	1.47	1.47
2.54	1.00	16.18	7.81	126.32	3.09	1.41	1.41
2.56	0.97	15.61	7.91	123.47	3.10	1.35	1.35
2.58	1.00	16.17	7.47	120.78	3.06	1.39	1.39
2.60	0.97	15.59	7.74	120.70	3.09	1.33	1.33
2.62	0.97	15.59	7.92	123.47	3.10	1.32	1.32
2.64	0.97	15.58	7.92	123.47	3.10	1.31	1.31
2.66	0.97	15.57	7.75	120.69	3.09	1.29	1.29
2.68	1.00	16.13	7.49	120.78	3.06	1.33	1.33
2.70	1.00	16.13	7.49	120.78	3.06	1.32	1.32
2.72	1.00	16.12	7.67	123.58	3.08	1.31	1.31
2.74	0.97	15.55	7.76	120.69	3.09	1.25	1.25
2.76	0.90	14.41	8.54	123.07	3.15	1.15	1.15
2.78	0.90	14.40	8.36	120.36	3.13	1.15	1.15
2.80	0.90	14.40	8.55	123.07	3.15	1.14	1.14
2.82	0.90	14.39	8.17	117.57	3.12	1.13	1.13
2.84	0.90	14.38	8.37	120.36	3.13	1.12	1.12
2.86	0.90	14.38	8.37	120.35	3.13	1.11	1.11
2.88	0.97	15.50	7.96	123.45	3.10	1.19	1.19
2.90	0.93	14.93	8.44	125.94	3.14	1.14	1.14
2.92	0.97	15.49	7.97	123.45	3.10	1.17	1.17
2.94	0.93	14.92	8.08	120.54	3.11	1.12	1.12
2.96	1.00	16.04	7.35	117.89	3.05	1.20	1.20
2.98	0.97	15.47	7.80	120.67	3.09	1.15	1.15
3.00	0.93	14.90	8.27	123.27	3.13	1.10	1.10
3.02	0.90	14.32	8.59	123.03	3.15	1.05	1.05
3.04	0.90	14.32	8.59	123.03	3.15	1.05	1.05
3.06	0.90	14.31	8.60	123.03	3.15	1.04	1.04
3.08	0.97	15.44	8.00	123.43	3.11	1.12	1.12
3.10	0.97	15.43	7.82	120.67	3.09	1.12	1.12
3.12	0.97	15.43	7.64	117.82	3.08	1.12	1.12

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.14	0.90	14.29	8.03	114.68	3.11	1.03	1.03
3.16	0.90	14.28	8.03	114.68	3.11	1.03	1.03
3.18	0.90	14.27	8.03	114.67	3.11	1.02	1.02
3.20	0.90	14.26	8.04	114.66	3.11	1.02	1.02
3.22	0.90	14.21	8.06	114.48	3.11	1.02	1.02
3.24	0.90	14.16	7.86	111.37	3.10	1.01	1.01
3.26	0.90	14.11	7.88	111.20	3.10	1.01	1.01
3.28	0.90	14.06	7.90	111.03	3.10	1.00	1.00
3.30	0.90	14.01	8.12	113.78	3.12	1.00	1.00
3.32	0.90	13.96	7.93	110.70	3.10	1.00	1.00
3.34	0.90	13.91	7.94	110.53	3.10	0.99	0.99
3.36	0.93	14.42	7.66	110.49	3.08	1.03	1.03
3.38	0.97	14.92	7.60	113.35	3.07	1.07	1.07
3.40	1.00	15.42	7.35	113.25	3.05	1.10	1.10
3.42	0.97	14.82	7.82	115.87	3.09	1.06	1.06
3.44	0.97	14.76	7.84	115.70	3.09	1.05	1.05
3.46	1.00	15.26	7.58	115.62	3.07	1.09	1.09
3.48	1.07	16.29	6.91	112.62	3.02	1.16	1.16
3.50	1.10	16.78	6.70	112.43	3.00	1.20	1.20
3.52	1.13	17.26	6.50	112.22	2.98	1.23	1.23
3.54	1.13	17.21	6.51	112.07	2.98	1.23	1.23
3.56	1.13	17.15	6.53	111.92	2.98	1.22	1.22
3.58	1.10	16.56	6.93	114.72	3.02	1.18	1.18
3.60	1.10	16.50	7.11	117.38	3.03	1.18	1.18
3.62	1.10	16.45	7.13	117.22	3.03	1.17	1.17
3.64	1.10	16.39	7.31	119.78	3.05	1.17	1.17
3.66	1.10	16.34	7.15	116.89	3.04	1.17	1.17
3.68	1.10	16.29	7.33	119.45	3.05	1.16	1.16
3.70	1.13	16.76	7.12	119.30	3.03	1.20	1.20
3.72	1.13	16.70	7.13	119.14	3.03	1.19	1.19
3.74	1.17	17.17	7.08	121.64	3.03	1.23	1.23
3.76	1.17	17.12	7.10	121.48	3.03	1.22	1.22
3.78	1.20	17.58	7.19	126.48	3.04	1.26	1.26
3.80	1.23	18.04	7.00	126.30	3.02	1.29	1.29
3.82	1.27	18.50	6.82	126.11	3.01	1.32	1.32
3.84	1.27	18.44	6.83	125.94	3.01	1.32	1.32
3.86	1.30	18.90	6.65	125.72	2.99	1.35	1.35
3.88	1.30	18.84	6.66	125.56	2.99	1.35	1.35
3.90	1.33	19.29	6.50	125.32	2.98	1.38	1.38
3.92	1.33	19.23	6.51	125.16	2.98	1.37	1.37
3.94	1.37	19.68	6.35	124.91	2.96	1.41	1.41
3.96	1.40	20.12	6.20	124.62	2.95	1.44	1.44
3.98	1.40	20.06	6.20	124.49	2.95	1.43	1.43
4.00	1.40	19.96	6.09	121.62	2.94	1.43	1.43
4.02	1.40	19.90	6.10	121.47	2.94	1.42	1.42
4.04	1.40	19.85	6.11	121.33	2.94	1.42	1.42
4.06	1.40	19.82	6.25	123.86	2.95	1.42	1.42
4.08	1.40	19.76	6.26	123.71	2.96	1.41	1.41

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
4.10	1.40	19.68	6.15	120.91	2.94	1.41	1.41
4.12	1.40	19.62	6.16	120.77	2.95	1.40	1.40
4.14	1.43	20.01	6.02	120.38	2.93	1.43	1.43
4.16	1.40	19.52	6.56	128.04	2.98	1.39	1.39
4.18	1.43	19.96	6.64	132.58	2.99	1.43	1.43
4.20	1.43	19.90	6.77	134.73	3.00	1.42	1.42
4.22	1.50	20.81	6.23	129.72	2.95	1.49	1.49
4.24	1.53	21.14	5.88	124.25	2.92	1.52	1.52
4.26	1.53	21.08	5.89	124.11	2.92	1.51	1.51
4.28	1.53	21.02	5.90	123.97	2.92	1.51	1.51
4.30	1.43	19.60	6.47	126.85	2.98	1.40	1.40
4.32	1.40	19.06	6.52	124.34	2.98	1.36	1.36
4.34	1.37	18.53	6.84	126.64	3.01	1.32	1.32
4.36	1.40	18.95	6.67	126.44	2.99	1.35	1.35
4.38	1.40	18.90	6.68	126.28	2.99	1.35	1.35
4.40	1.37	18.36	6.87	126.16	3.01	1.31	1.31
4.42	1.40	18.79	6.70	125.96	3.00	1.34	1.34
4.44	1.37	18.26	7.02	128.17	3.02	1.30	1.30
4.46	1.40	18.68	6.85	127.99	3.01	1.33	1.33
4.48	1.33	17.68	7.23	127.84	3.04	1.26	1.26
4.50	1.33	17.63	7.37	129.93	3.05	1.26	1.26
4.52	1.33	17.58	7.51	131.96	3.07	1.26	1.26
4.54	1.33	17.53	7.52	131.80	3.07	1.25	1.25
4.56	1.33	17.48	7.41	129.43	3.06	1.25	1.25
4.58	1.30	16.96	7.49	127.00	3.06	1.21	1.21
4.60	1.30	16.91	7.50	126.84	3.07	1.21	1.21
4.62	1.30	16.86	7.51	126.68	3.07	1.20	1.20
4.64	1.23	15.89	8.09	128.52	3.11	1.13	1.13
4.66	1.20	15.38	8.33	128.20	3.13	1.10	1.10
4.68	1.17	14.88	8.73	129.91	3.16	1.06	1.06
4.70	1.20	15.29	8.36	127.86	3.13	1.09	1.09
4.72	1.23	15.71	8.27	129.96	3.13	1.12	1.12
4.74	1.27	16.12	8.06	129.94	3.11	1.15	1.15
4.76	1.30	16.53	7.98	131.98	3.10	1.18	1.18
4.78	1.23	15.57	8.31	129.46	3.13	1.11	1.11
4.80	1.23	15.53	8.19	127.20	3.12	1.11	1.11
4.82	1.23	15.49	7.93	122.75	3.10	1.11	1.11
4.84	1.30	16.34	7.37	120.50	3.05	1.17	1.17
4.86	1.27	15.85	7.45	118.03	3.06	1.13	1.13
4.88	1.23	15.36	7.67	117.83	3.08	1.10	1.10
4.90	1.20	14.87	7.76	115.31	3.09	1.06	1.06
4.92	1.20	14.82	7.61	112.84	3.07	1.06	1.06
4.94	1.20	14.78	7.46	110.31	3.06	1.06	1.06
4.96	1.20	14.74	7.31	107.74	3.05	1.05	1.05
4.98	1.23	15.14	7.11	107.63	3.03	1.08	1.08
5.00	1.27	15.54	6.92	107.51	3.02	1.11	1.11
5.02	1.33	16.38	6.85	112.26	3.01	1.17	1.17
5.04	1.37	16.78	6.54	109.65	2.98	1.20	1.20

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
5.06	1.40	17.17	6.37	109.47	2.97	1.23	1.23
5.08	1.43	17.56	6.22	109.27	2.95	1.25	1.25
5.10	1.47	17.95	6.35	113.96	2.96	1.28	1.28
5.12	1.50	18.34	6.33	116.13	2.96	1.31	1.31
5.14	1.50	18.29	6.34	116.00	2.96	1.31	1.31
5.16	1.50	18.24	6.48	118.20	2.98	1.30	1.30
5.18	1.57	19.05	6.19	117.89	2.95	1.36	1.36
5.20	1.60	19.43	6.17	119.95	2.95	1.39	1.39
5.22	1.63	19.79	6.05	119.66	2.93	1.42	1.42
5.24	1.60	19.33	6.19	119.70	2.95	1.38	1.38
5.26	1.60	19.26	6.09	117.24	2.94	1.38	1.38
5.28	1.60	19.19	5.98	114.74	2.93	1.37	1.37
5.30	1.60	19.14	5.99	114.62	2.93	1.37	1.37
5.32	1.60	19.12	6.11	116.88	2.94	1.37	1.37
5.34	1.60	19.07	6.12	116.76	2.94	1.36	1.36
5.36	1.60	19.04	6.25	118.96	2.95	1.36	1.36
5.38	1.67	19.79	5.99	118.52	2.93	1.42	1.42
5.40	1.70	20.14	5.87	118.24	2.92	1.44	1.44
5.42	1.73	20.47	5.65	115.61	2.89	1.47	1.47
5.44	1.73	20.40	5.55	113.13	2.88	1.47	1.47
5.46	1.70	19.96	5.67	113.21	2.90	1.43	1.43
5.48	1.67	19.53	5.92	115.63	2.92	1.40	1.40
5.50	1.60	18.69	6.20	115.83	2.95	1.34	1.34
5.52	1.60	18.65	6.20	115.72	2.95	1.33	1.33
5.54	1.60	18.57	5.97	110.90	2.93	1.33	1.33
5.56	1.60	18.52	5.98	110.79	2.93	1.33	1.33
5.58	1.63	18.88	5.98	112.90	2.93	1.35	1.35
5.60	1.67	19.25	5.97	114.95	2.93	1.38	1.38
5.62	1.63	18.81	6.11	115.00	2.94	1.34	1.34
5.64	1.63	18.77	6.12	114.88	2.94	1.34	1.34
5.66	1.63	18.73	6.25	117.03	2.95	1.34	1.34
5.68	1.70	19.48	6.10	118.87	2.94	1.39	1.39
5.70	1.70	19.44	6.11	118.75	2.94	1.39	1.39
5.72	1.67	19.00	6.36	120.90	2.97	1.36	1.36
5.74	1.67	18.95	6.48	122.87	2.98	1.35	1.35
5.76	1.70	19.31	6.46	124.74	2.97	1.38	1.38
5.78	1.73	19.67	6.23	122.47	2.95	1.40	1.40
5.80	1.73	19.59	6.02	118.03	2.93	1.40	1.40
5.82	1.70	19.13	5.94	113.60	2.92	1.37	1.37
5.84	1.70	19.07	5.83	111.21	2.91	1.37	1.37
5.86	1.63	18.27	6.22	113.67	2.95	1.31	1.31
5.88	1.60	17.83	6.37	113.63	2.97	1.27	1.27
5.90	1.57	17.39	6.53	113.58	2.98	1.24	1.24
5.92	1.60	17.73	6.14	108.91	2.94	1.27	1.27
5.94	1.63	18.07	6.01	108.67	2.93	1.29	1.29
5.96	1.67	18.41	5.89	108.43	2.92	1.32	1.32
5.98	1.70	18.76	5.89	110.49	2.92	1.34	1.34
6.00	1.63	17.96	6.16	110.66	2.95	1.28	1.28

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.02	1.63	17.92	6.17	110.56	2.95	1.28	1.28
6.04	1.63	17.87	6.18	110.45	2.95	1.28	1.28
6.06	1.73	18.96	5.80	109.95	2.91	1.36	1.36
6.08	1.73	18.93	5.92	112.10	2.92	1.35	1.35
6.10	1.77	19.29	6.03	116.23	2.93	1.38	1.38
6.12	1.77	19.25	6.14	118.25	2.94	1.38	1.38
6.14	1.80	19.60	6.13	120.10	2.94	1.40	1.40
6.16	1.80	19.54	6.03	117.90	2.93	1.40	1.40
6.18	1.80	19.51	6.15	119.87	2.94	1.39	1.39
6.20	1.80	19.46	6.15	119.76	2.95	1.39	1.39
6.22	1.80	19.42	6.27	121.68	2.96	1.39	1.39
6.24	1.80	19.38	6.27	121.57	2.96	1.38	1.38
6.26	1.80	19.33	6.18	119.43	2.95	1.38	1.38
6.28	1.77	18.90	6.32	119.40	2.96	1.35	1.35
6.30	1.77	18.86	6.22	117.26	2.95	1.35	1.35
6.32	1.73	18.43	6.47	119.24	2.97	1.32	1.32
6.34	1.77	18.77	6.34	119.06	2.96	1.34	1.34
6.36	1.73	18.35	6.59	120.98	2.99	1.31	1.31
6.38	1.77	18.69	6.47	120.81	2.97	1.33	1.33
6.40	1.77	18.64	6.37	118.72	2.97	1.33	1.33
6.42	1.73	18.22	6.51	118.66	2.98	1.30	1.30
6.44	1.73	18.18	6.52	118.55	2.98	1.30	1.30
6.46	1.70	17.76	6.78	120.43	3.00	1.27	1.27
6.48	1.73	18.10	6.65	120.28	2.99	1.29	1.29
6.50	1.70	17.68	6.80	120.20	3.00	1.26	1.26
6.52	1.70	17.64	6.81	120.08	3.01	1.26	1.26
6.54	1.73	17.97	6.67	119.94	2.99	1.28	1.28
6.56	1.73	17.93	6.46	115.89	2.97	1.28	1.28
6.58	1.70	17.52	6.38	111.78	2.97	1.25	1.25
6.60	1.63	16.74	6.30	105.45	2.96	1.20	1.20
6.62	1.57	15.96	6.47	103.28	2.98	1.14	1.14
6.64	1.53	15.56	6.35	98.75	2.96	1.11	1.11
6.66	1.50	15.14	6.05	91.55	2.93	1.08	1.08
6.68	1.47	14.72	5.69	83.74	2.90	1.05	1.05
6.70	1.47	14.67	5.32	78.01	2.86	1.05	1.05
6.72	1.43	14.28	5.47	78.08	2.88	1.02	1.02
6.74	1.40	13.89	5.62	78.14	2.89	0.99	0.99
6.76	1.30	12.78	5.90	75.42	2.92	0.91	0.91
6.78	1.23	12.04	6.27	75.51	2.96	0.86	0.86
6.80	1.23	12.01	6.28	75.45	2.96	0.86	0.86
6.82	1.23	11.98	6.53	78.27	2.98	0.86	0.86
6.84	1.23	11.96	6.54	78.20	2.98	0.85	0.85
6.86	1.23	11.93	6.55	78.14	2.98	0.85	0.85
6.88	1.27	12.26	6.37	78.04	2.97	0.88	0.88
6.90	1.30	12.58	5.96	75.02	2.93	0.90	0.90
6.92	1.27	12.19	5.91	72.01	2.92	0.87	0.87
6.94	1.27	12.16	5.66	68.78	2.90	0.87	0.87
6.96	1.23	11.79	6.11	71.97	2.94	0.84	0.84



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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.98	1.23	11.76	6.37	74.91	2.97	0.84	0.84
7.00	1.20	11.38	7.06	80.40	3.03	0.81	0.81
7.02	1.23	11.71	6.86	80.34	3.01	0.84	0.84
7.04	1.27	12.04	6.67	80.26	2.99	0.86	0.86
7.06	1.30	12.36	6.70	82.81	3.00	0.88	0.88
7.08	1.30	12.33	6.71	82.74	3.00	0.88	0.88
7.10	1.30	12.31	6.72	82.67	3.00	0.88	0.88
7.12	1.30	12.28	6.29	77.25	2.96	0.88	0.88
7.14	1.30	12.25	6.30	77.19	2.96	0.88	0.88
7.16	1.33	12.57	5.91	74.20	2.92	0.90	0.90
7.18	1.37	12.88	5.75	74.07	2.91	0.92	0.92
7.20	1.33	12.51	5.92	74.09	2.92	0.89	0.89
7.22	1.33	12.49	6.16	76.89	2.95	0.89	0.89
7.24	1.40	13.15	5.83	76.69	2.91	0.94	0.94
7.26	1.50	14.15	5.59	79.12	2.89	1.01	1.01
7.28	1.53	14.47	5.46	78.96	2.88	1.03	1.03
7.30	1.53	14.43	5.47	78.91	2.88	1.03	1.03
7.32	1.53	14.40	5.28	76.08	2.86	1.03	1.03
7.34	1.57	14.72	5.35	78.69	2.86	1.05	1.05
7.36	1.57	14.69	5.54	81.31	2.88	1.05	1.05
7.38	1.60	15.00	5.75	86.24	2.91	1.07	1.07
7.40	1.60	14.97	5.76	86.18	2.91	1.07	1.07
7.42	1.67	15.62	5.66	88.36	2.90	1.12	1.12
7.44	1.77	16.61	5.58	92.68	2.89	1.19	1.19
7.46	1.90	17.93	5.39	96.67	2.87	1.28	1.28
7.48	2.00	18.91	5.09	96.22	2.83	1.35	1.35
7.50	2.10	19.88	4.59	91.19	2.78	1.42	1.42
7.52	2.20	20.85	4.35	90.69	2.75	1.49	1.49
7.54	2.30	21.82	4.24	92.49	2.73	1.56	1.56
7.56	2.37	22.45	4.10	92.13	2.71	1.61	1.61
7.58	2.30	21.74	4.45	96.82	2.76	1.55	1.55
7.60	2.20	20.70	4.80	99.34	2.80	1.48	1.48
7.62	2.10	19.66	5.39	105.86	2.87	1.40	1.40
7.64	2.10	19.62	5.39	105.78	2.87	1.40	1.40
7.66	2.07	19.24	5.39	103.80	2.87	1.37	1.37
7.68	2.03	18.87	5.28	99.71	2.86	1.35	1.35
7.70	2.00	18.50	5.16	95.47	2.84	1.32	1.32
7.72	2.23	20.79	4.44	92.25	2.76	1.48	1.48
7.74	2.43	22.75	3.91	89.04	2.69	1.62	1.62
7.76	2.53	23.70	3.54	83.89	2.63	1.69	1.69
7.78	2.37	22.01	3.73	82.12	2.66	1.57	1.57
7.80	2.27	20.97	3.93	82.49	2.69	1.50	1.50
7.82	2.27	20.94	4.05	84.87	2.71	1.49	1.49
7.84	2.27	20.89	4.28	89.49	2.74	1.49	1.49
7.86	2.23	20.52	4.47	91.83	2.76	1.46	1.46
7.88	2.23	20.48	4.69	96.14	2.79	1.46	1.46
7.90	2.27	20.77	4.82	100.14	2.80	1.48	1.48
7.92	2.30	21.05	4.94	103.98	2.82	1.50	1.50

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
7.94	2.23	20.36	5.21	106.11	2.85	1.45	1.45
7.96	2.17	19.66	5.69	111.90	2.90	1.40	1.40
7.98	2.03	18.31	6.41	117.44	2.97	1.31	1.31
8.00	2.67	24.46	4.86	118.96	2.81	1.74	1.74
8.02	3.73	34.88	3.13	109.01	2.57	0.69	0.69
8.04	4.83	45.65	2.10	95.65	2.34	0.72	0.72
8.06	5.20	49.25	1.67	82.01	2.20	0.73	0.73
8.08	4.97	46.94	1.55	72.68	2.15	0.73	0.73
8.10	5.17	48.86	1.46	71.52	2.11	0.73	0.73
8.12	6.23	59.19	1.43	84.78	2.09	0.76	0.76
8.14	8.07	77.13	1.23	94.86	1.94	0.79	0.79
8.16	9.80	94.01	1.17	110.11	1.88	0.82	0.82
8.18	10.50	100.86	1.11	111.89	1.80	0.83	0.83
8.20	10.73	103.03	1.11	114.20	1.80	0.83	0.83
8.22	10.13	96.74	1.30	125.31	2.00	0.82	0.82
8.24	10.00	95.10	1.50	142.81	2.12	0.82	0.82
8.26	9.67	91.59	1.73	158.13	2.22	0.82	0.82
8.28	10.53	100.04	1.47	147.16	2.11	0.83	0.83
8.30	11.80	112.45	1.26	142.04	1.97	0.84	0.84
8.32	12.67	120.89	1.18	143.04	1.89	0.85	0.85
8.34	11.53	109.57	1.29	141.26	1.99	0.84	0.84
8.36	9.10	85.75	1.52	130.45	2.13	0.81	0.81
8.38	7.07	66.05	1.69	111.91	2.21	0.77	0.77
8.40	6.23	58.11	1.52	88.27	2.13	0.75	0.75
8.42	6.20	57.80	1.42	82.35	2.08	0.75	0.75
8.44	5.80	53.79	1.59	85.51	2.17	0.74	0.74
8.46	5.40	49.78	1.83	91.15	2.26	0.73	0.73
8.48	4.57	41.69	2.19	91.24	2.37	0.71	0.71
8.50	3.87	34.93	2.54	88.63	2.45	0.69	0.69
8.52	3.37	30.12	2.85	85.87	2.52	0.67	0.67
8.54	3.10	27.56	2.91	80.17	2.53	0.66	0.66
8.56	3.03	26.88	2.99	80.33	2.54	0.66	0.66
8.58	2.77	24.26	3.71	89.90	2.66	1.72	1.72
8.60	2.57	22.30	4.34	96.75	2.75	1.58	1.58
8.62	2.63	22.87	4.39	100.35	2.75	1.62	1.62
8.64	3.30	29.16	3.22	93.86	2.58	0.67	0.67
8.66	4.20	37.66	2.43	91.34	2.43	0.70	0.70
8.68	4.63	41.73	2.17	90.68	2.36	0.71	0.71
8.70	4.53	40.72	2.23	90.73	2.38	0.71	0.71
8.72	4.07	36.26	2.42	87.72	2.43	0.69	0.69
8.74	3.70	32.80	2.45	80.47	2.43	0.68	0.68
8.76	3.27	28.74	2.44	70.24	2.43	0.67	0.67
8.78	2.87	24.95	2.65	66.04	2.48	0.14	0.65
8.80	2.50	21.48	2.99	64.21	2.54	0.12	0.63
8.82	2.20	18.66	3.17	59.19	2.57	0.09	0.61
8.84	2.33	19.88	2.96	58.83	2.54	0.08	0.62
8.86	3.17	27.71	2.09	57.77	2.34	0.08	0.66
8.88	4.53	40.56	1.58	64.22	2.16	0.12	0.71

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.90	5.57	50.41	1.32	66.46	2.01	0.14	0.74
8.92	5.97	54.29	1.00	54.29	1.92	0.07	0.74
8.94	5.80	52.77	1.00	52.77	1.88	0.07	0.74
8.96	5.73	52.07	1.00	52.07	1.89	0.06	0.74
8.98	5.83	52.58	1.37	72.09	2.05	0.74	0.74
9.00	6.63	59.86	1.42	85.14	2.08	0.76	0.76
9.02	7.70	69.63	1.44	100.19	2.09	0.78	0.78
9.04	8.57	77.79	1.33	103.66	2.02	0.79	0.79
9.06	8.97	81.59	1.27	103.53	1.98	0.80	0.80
9.08	9.23	84.22	1.20	101.15	1.91	0.80	0.80
9.10	9.93	90.93	1.14	103.59	1.84	0.81	0.81
9.12	10.53	96.37	1.15	110.63	1.85	0.82	0.82
9.14	13.03	120.69	1.00	120.69	1.65	0.85	0.85
9.16	14.70	136.28	1.00	136.28	1.56	0.87	0.87
9.18	17.00	157.73	1.00	157.73	1.42	0.89	0.89
9.20	16.90	156.66	1.00	156.66	1.48	0.89	0.89
9.22	17.33	160.59	1.00	160.59	1.44	0.90	0.90
9.24	16.80	155.47	1.00	155.47	1.38	0.89	0.89
9.26	16.10	148.80	1.00	148.80	1.35	0.88	0.88
9.28	15.27	140.89	1.00	140.89	1.50	0.88	0.88
9.30	14.37	132.30	1.00	132.84	1.65	0.87	0.87
9.32	13.07	119.13	1.11	131.78	1.80	0.85	0.85
9.34	11.43	103.56	1.16	119.97	1.87	0.83	0.83
9.36	10.27	92.82	1.15	106.37	1.85	0.82	0.82
9.38	9.90	89.71	1.09	98.00	1.78	0.81	0.81
9.40	9.53	86.46	1.00	86.46	1.74	0.81	0.81
9.42	9.33	84.57	1.00	84.57	1.73	0.80	0.80
9.44	9.57	87.04	1.00	87.04	1.65	0.81	0.81
9.46	11.10	101.23	1.00	101.23	1.59	0.83	0.83
9.48	12.43	113.50	1.00	113.50	1.52	0.85	0.85
9.50	13.53	123.59	1.00	123.59	1.54	0.86	0.86
9.52	13.57	123.79	1.00	123.79	1.59	0.86	0.86
9.54	13.57	123.15	1.05	128.83	1.71	0.86	0.86
9.56	13.63	124.02	1.01	125.73	1.66	0.86	0.86
9.58	13.80	125.65	1.00	125.65	1.62	0.86	0.86
9.60	13.90	126.47	1.00	126.47	1.55	0.86	0.86
9.62	13.43	122.07	1.00	122.07	1.55	0.86	0.86
9.64	12.53	113.68	1.00	113.68	1.54	0.85	0.85
9.66	11.50	104.09	1.00	104.09	1.50	0.83	0.83
9.68	10.67	96.34	1.00	96.34	1.61	0.82	0.82
9.70	9.93	89.32	1.00	89.32	1.68	0.81	0.81
9.72	9.63	86.06	1.00	86.06	1.75	0.81	0.81
9.74	9.50	84.72	1.00	84.72	1.76	0.80	0.80
9.76	9.90	88.33	1.00	88.33	1.75	0.81	0.81
9.78	9.63	85.83	1.00	85.83	1.75	0.81	0.81
9.80	9.47	84.28	1.00	84.28	1.75	0.80	0.80
9.82	9.17	81.49	1.00	81.49	1.75	0.80	0.80
9.84	9.30	82.92	1.00	82.92	1.70	0.80	0.80

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.86	9.23	82.49	1.00	82.49	1.65	0.80	0.80
9.88	9.03	80.67	1.00	80.67	1.61	0.80	0.80
9.90	8.50	75.75	1.00	75.75	1.62	0.79	0.79
9.92	7.73	68.41	1.00	68.41	1.70	0.18	0.78
9.94	6.73	58.82	1.00	58.82	1.81	0.08	0.76
9.96	5.80	50.06	1.00	50.06	1.90	0.06	0.73
9.98	4.97	42.40	1.00	42.40	1.96	0.05	0.71
10.00	4.37	36.94	1.00	36.94	1.99	0.04	0.70
10.02	3.93	32.92	1.00	32.92	2.06	0.04	0.68
10.04	3.63	30.14	1.00	30.14	2.10	0.04	0.67
10.06	3.23	26.46	1.00	26.46	2.18	0.03	0.66
10.08	2.87	23.12	1.00	23.12	2.25	0.03	0.64
10.10	2.60	20.61	2.16	44.54	2.36	0.05	0.63
10.12	2.60	20.58	2.16	44.53	2.36	0.05	0.63
10.14	2.60	20.55	2.17	44.51	2.36	0.05	0.63
10.16	2.30	17.93	2.28	40.79	2.39	0.05	0.61
10.18	1.87	14.07	2.91	40.89	2.53	0.05	0.58
10.20	1.20	8.21	5.57	45.73	2.89	0.08	0.58
10.22	0.77	4.64	10.27	47.64	3.27	0.16	0.33
10.24	0.40	1.66	23.27	38.70	3.93	0.16	0.12
10.26	0.40	1.66	23.31	38.64	3.93	0.16	0.12
10.28	0.50	2.46	17.88	43.97	3.69	0.16	0.18
10.30	1.03	6.75	7.76	52.38	3.09	0.16	0.48
10.32	1.60	11.46	4.57	52.42	2.77	0.16	0.81
10.34	2.13	15.97	3.60	57.48	2.64	0.16	1.11
10.36	2.50	18.98	3.54	67.13	2.63	0.32	1.32
10.38	2.97	22.94	3.08	70.61	2.56	0.64	0.64
10.40	3.93	31.22	2.47	77.02	2.44	0.68	0.68
10.42	6.57	54.70	1.46	79.95	2.10	0.75	0.75
10.44	9.83	84.25	1.18	99.02	1.89	0.80	0.80
10.46	11.90	103.42	1.07	110.97	1.75	0.83	0.83
10.48	11.80	102.40	1.08	110.28	1.76	0.83	0.83
10.50	10.87	93.75	1.10	103.59	1.80	0.82	0.82
10.52	10.07	86.59	1.11	96.12	1.80	0.81	0.81
10.54	9.03	77.57	1.00	77.57	1.79	0.79	0.79
10.56	7.67	65.43	1.00	65.43	1.80	0.13	0.77
10.58	6.57	55.27	1.00	55.27	1.90	0.07	0.75
10.60	5.77	47.92	1.00	47.92	1.98	0.06	0.73
10.62	5.00	40.85	1.44	59.01	2.09	0.09	0.71
10.64	4.30	34.63	1.58	54.74	2.16	0.07	0.69
10.66	3.80	29.81	2.17	64.66	2.36	0.12	0.67
10.68	3.57	27.60	2.58	71.14	2.46	0.66	0.66
10.70	3.63	28.23	2.37	66.83	2.41	0.15	0.66
10.72	3.97	31.35	1.86	58.21	2.27	0.08	0.68
10.74	4.53	36.42	1.57	57.27	2.16	0.08	0.69
10.76	5.40	43.59	1.61	70.02	2.17	0.72	0.72
10.78	6.10	49.49	1.57	77.76	2.16	0.73	0.73
10.80	7.47	61.75	1.32	81.46	2.01	0.76	0.76

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
10.82	9.70	82.21	1.12	92.07	1.82	0.80	0.80
10.84	12.70	109.98	1.00	109.98	1.62	0.84	0.84
10.86	15.17	131.60	1.00	131.60	1.56	0.87	0.87
10.88	16.23	140.88	1.00	140.88	1.50	0.88	0.88
10.90	15.87	137.55	1.00	137.55	1.50	0.87	0.87
10.92	15.33	132.77	1.00	132.77	1.43	0.87	0.87
10.94	14.93	129.17	1.00	129.17	1.42	0.86	0.86
10.96	15.30	132.29	1.00	132.29	1.37	0.87	0.87
10.98	15.33	132.48	1.00	132.48	1.37	0.87	0.87
11.00	15.27	131.80	1.00	131.80	1.38	0.87	0.87
11.02	15.37	132.58	1.00	132.58	1.49	0.87	0.87
11.04	15.60	134.52	1.00	134.52	1.50	0.87	0.87
11.06	16.13	139.08	1.00	139.08	1.46	0.87	0.87
11.08	15.53	133.75	1.00	133.75	1.37	0.87	0.87
11.10	15.33	131.90	1.00	131.90	1.36	0.87	0.87
11.12	13.73	117.86	1.00	117.86	1.49	0.85	0.85
11.14	13.10	112.26	1.00	112.26	1.60	0.84	0.84
11.16	11.67	98.55	1.07	105.59	1.75	0.83	0.83
11.18	11.90	99.61	1.13	112.59	1.83	0.83	0.83
11.20	12.47	104.15	1.15	119.26	1.85	0.83	0.83
11.22	13.17	109.47	1.18	129.68	1.90	0.84	0.84
11.24	12.63	104.82	1.19	124.63	1.90	0.83	0.83
11.26	12.10	99.69	1.24	123.67	1.95	0.83	0.83
11.28	12.30	101.90	1.18	120.59	1.89	0.83	0.83
11.30	14.60	122.55	1.10	134.92	1.79	0.86	0.86
11.32	18.07	154.53	1.00	154.53	1.64	0.89	0.89
11.34	22.17	189.88	1.00	189.88	1.53	0.92	0.92
11.36	26.47	226.92	1.00	226.92	1.40	0.95	0.95
11.38	29.97	256.99	1.00	256.99	1.31	0.97	0.97
11.40	33.20	284.73	1.00	284.73	1.22	0.99	0.99
11.42	34.77	298.04	1.00	298.04	1.14	0.99	0.99
11.44	35.13	301.00	1.00	301.00	1.06	1.00	1.00
11.46	35.63	305.09	1.00	305.09	1.05	1.00	1.00
11.48	36.47	312.06	1.00	312.06	1.08	1.00	1.00
11.50	37.40	319.87	1.00	319.87	1.11	1.01	1.01
11.52	37.07	316.78	1.00	316.78	1.12	1.00	1.00
11.54	37.47	320.00	1.00	320.00	1.11	1.01	1.01
11.56	38.67	330.09	1.00	330.09	1.09	1.01	1.01
11.58	40.57	346.16	1.00	346.16	1.06	1.02	1.02
11.60	41.50	353.93	1.00	353.93	1.05	1.02	1.02
11.62	46.17	393.67	1.00	393.67	0.99	1.04	1.04

**Abbreviations**

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

8. **ALLEGATO “C” – ANALISI DI LIQUEFAZIONE VERTICALE CPTE-10**

XXXX

**LIQUEFACTION ANALYSIS REPORT**

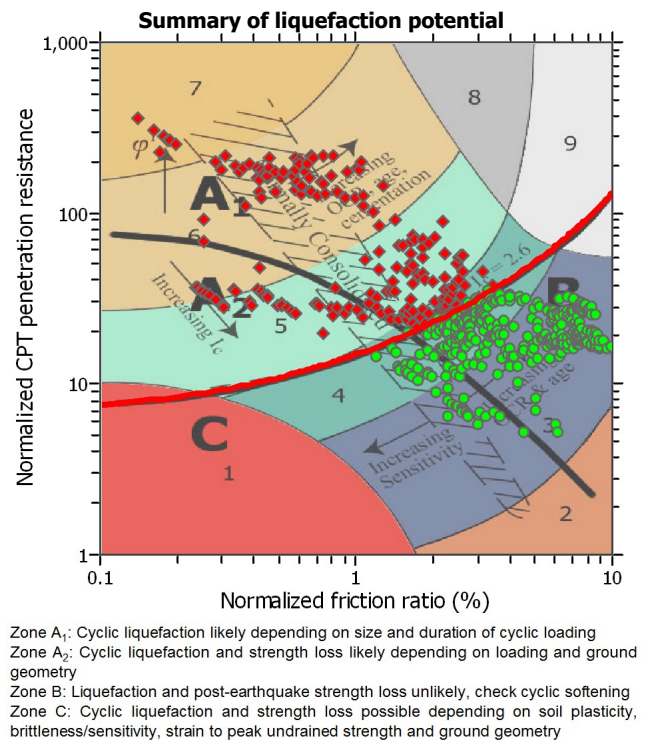
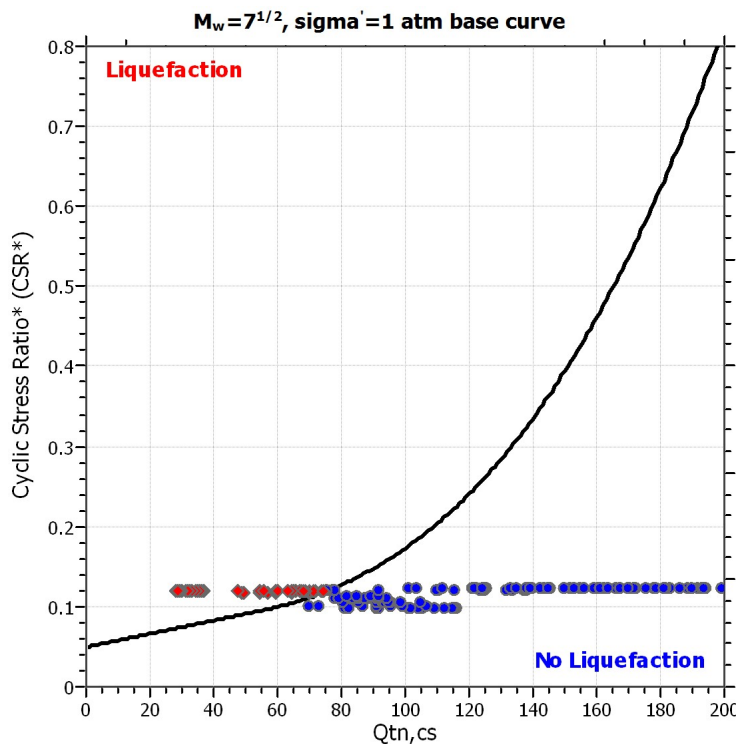
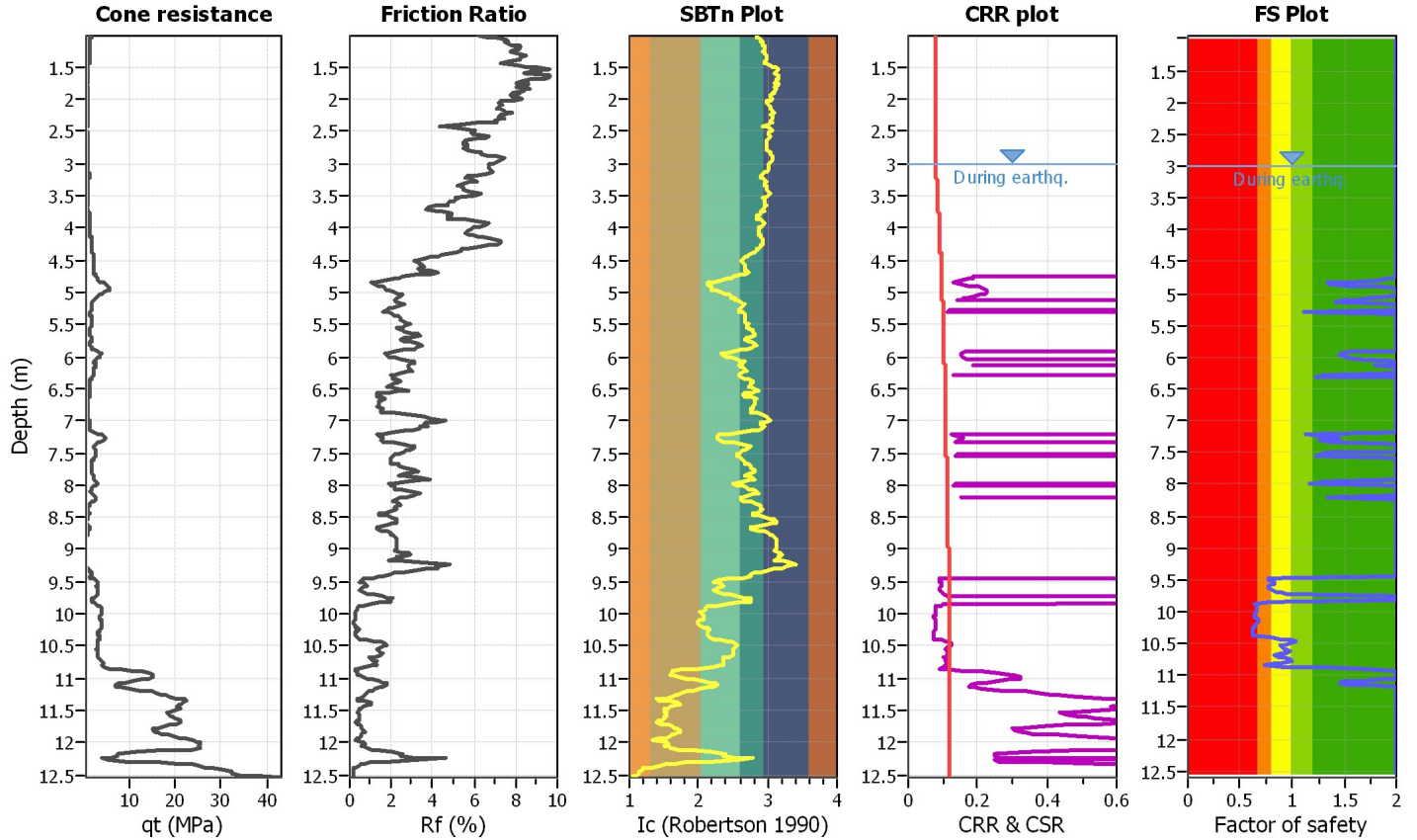
**Project title : Pontenziale di liquefazione**

**Location : A14 - Complanare nord - S.Lazzaro - Ponte Rizzoli**

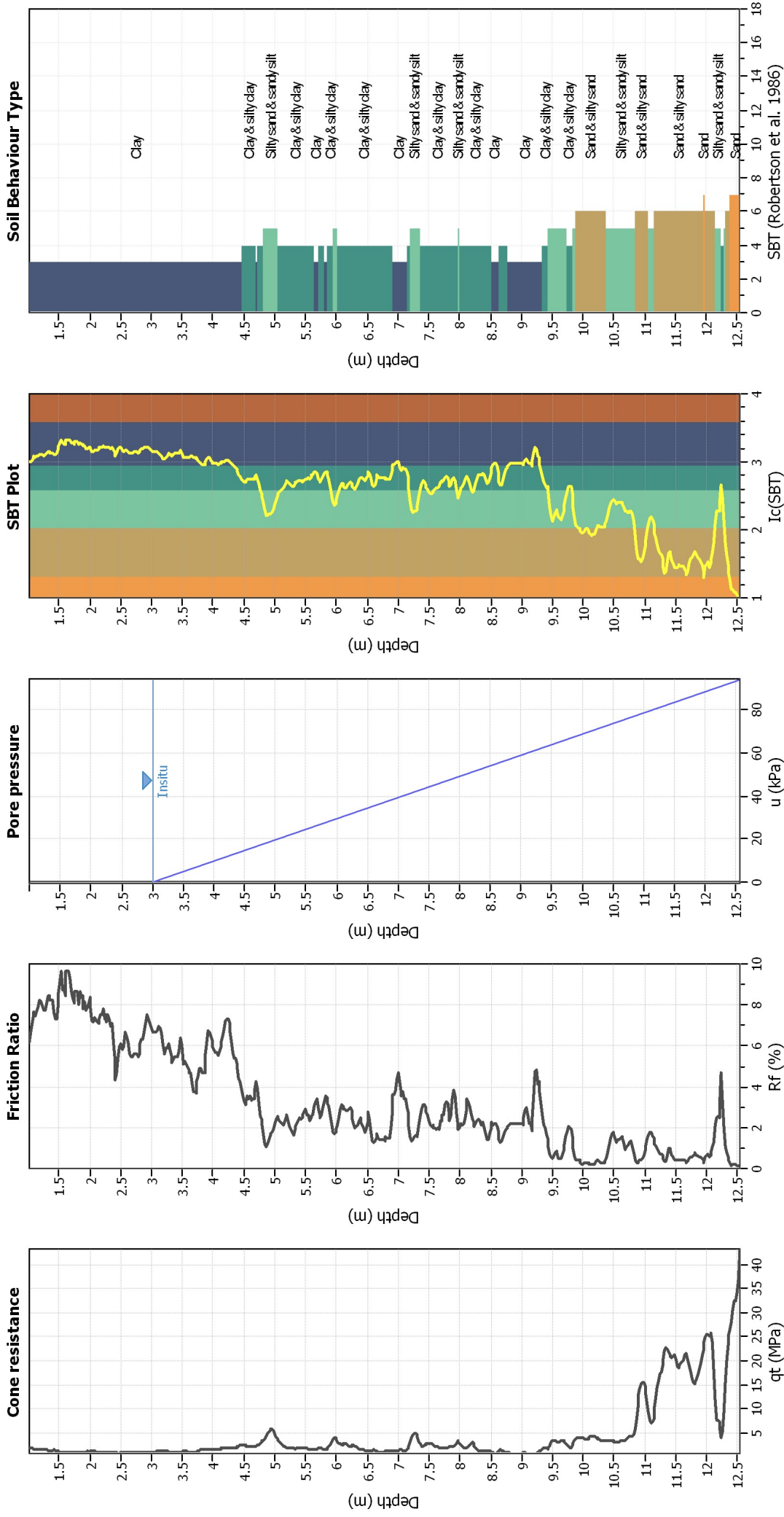
**CPT file : CPTe-10**

**Input parameters and analysis data**

Analysis method:	NCEER (1998)	G.W.T. (in-situ):	3.00 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	NCEER (1998)	G.W.T. (earthq.):	3.00 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 $M_w$ :	5.00	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	0.35	Unit weight calculation:	19.00 kN/m <sup>3</sup>	$K_0$ applied:	Yes		



### CPT basic interpretation plots

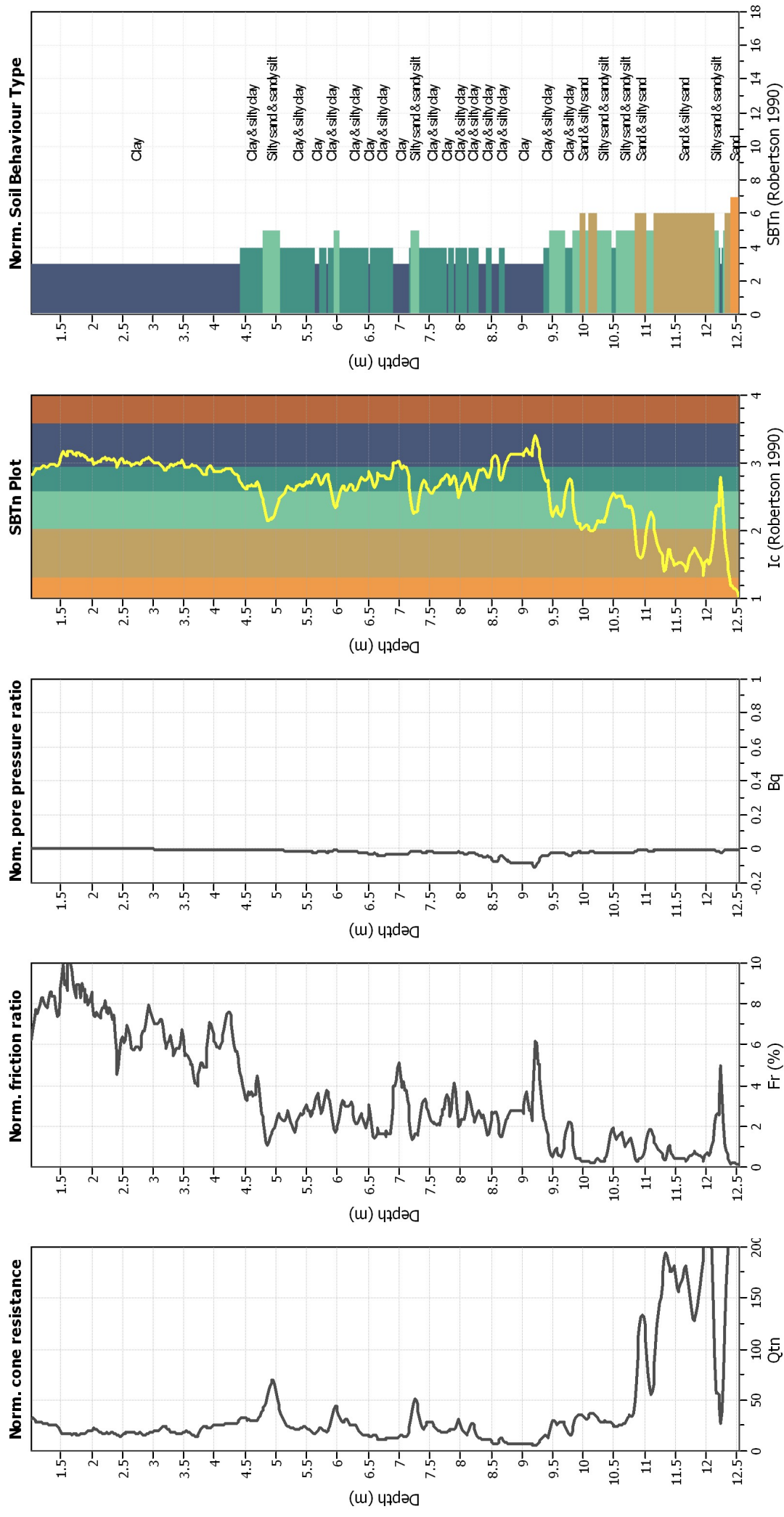


### Input parameters and analysis data

Analysis method:	NCEER (1998)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on $I_c$ value	$K_T$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (earthq.):	3.00 m		
Average results interval:	3		
$I_c$ cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		



### CPT basic interpretation plots (normalized)



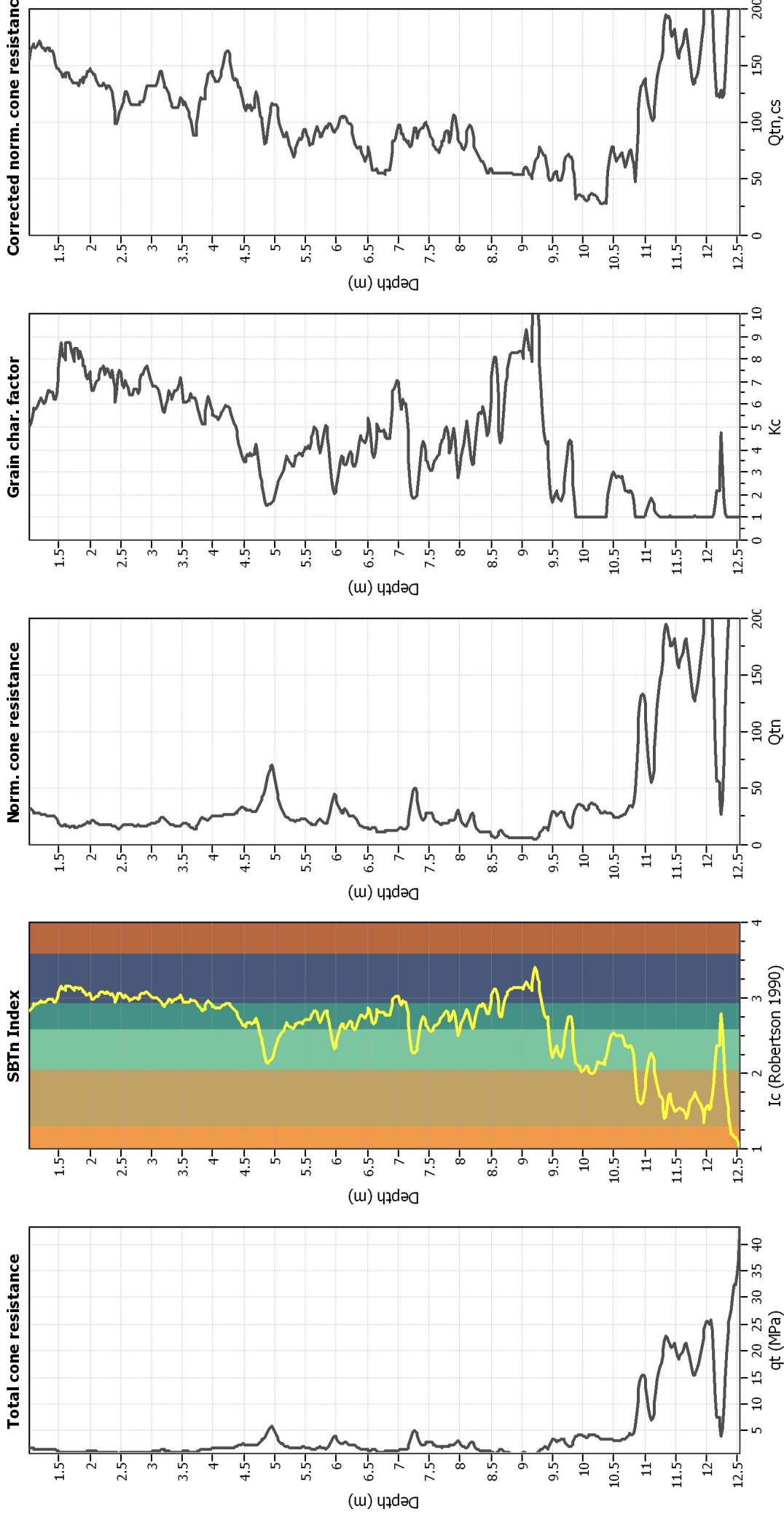
#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on Ic value	K <sub>r</sub> applied:	Yes
Earthquake magnitude M <sub>w</sub> :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (earthq.):	3.00 m		
Average results interval:	3		
Ic cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		

#### SBTn legend

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

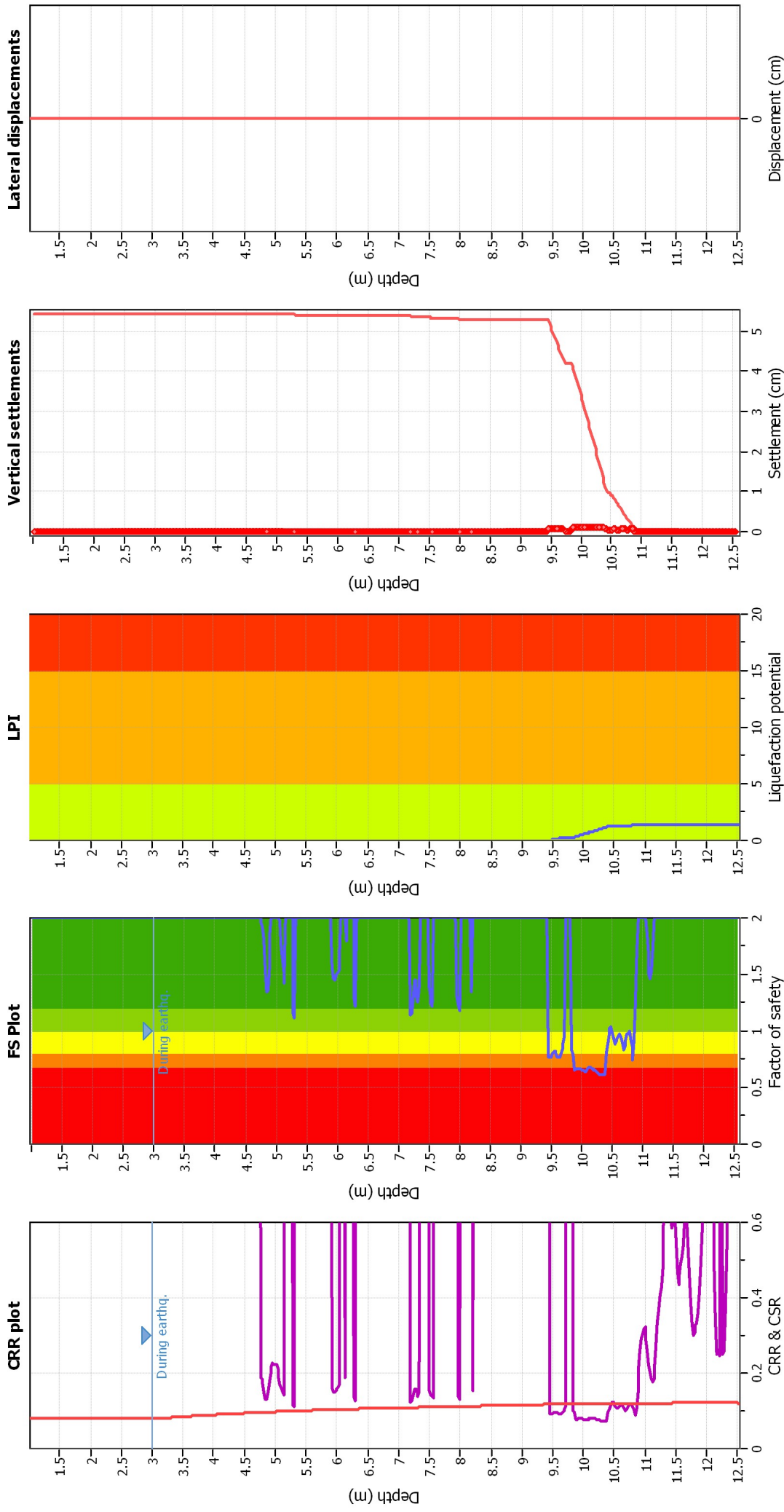
### Liquefaction analysis overall plots (intermediate results)



#### Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	3.00 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 <sub>r</sub> applied:	Yes
Earthquake magnitude M <sub>w</sub> :	5.00	Unit weight calculation:	19.00 kN/m³	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Fill height:	N/A	Limit depth:	N/A

### Liquefaction analysis overall plots



#### Input parameters and analysis data

Analysis method: NCEER (1998)  
 Fines correction method: NCEER (1998)  
 Points to test: Based on Ic value  
 Earthquake magnitude  $M_w$ : 5.00  
 Peak ground acceleration: 0.35  
 Depth to water table (insitu): 3.00 m

Depth to water table (earthq.): 3.00 m  
 Average results interval: 3  
 Ic cut-off value: 2.60  
 Unit weight calculation: 19.00 kN/m<sup>3</sup>  
 Use fill: No  
 Fill height: N/A

Fill weight: N/A  
 Transition detect. applied: No  
 $K_{\sigma}$  applied: Yes  
 Clay like behavior applied: Sands only  
 Limit depth applied: No  
 Limit depth: N/A

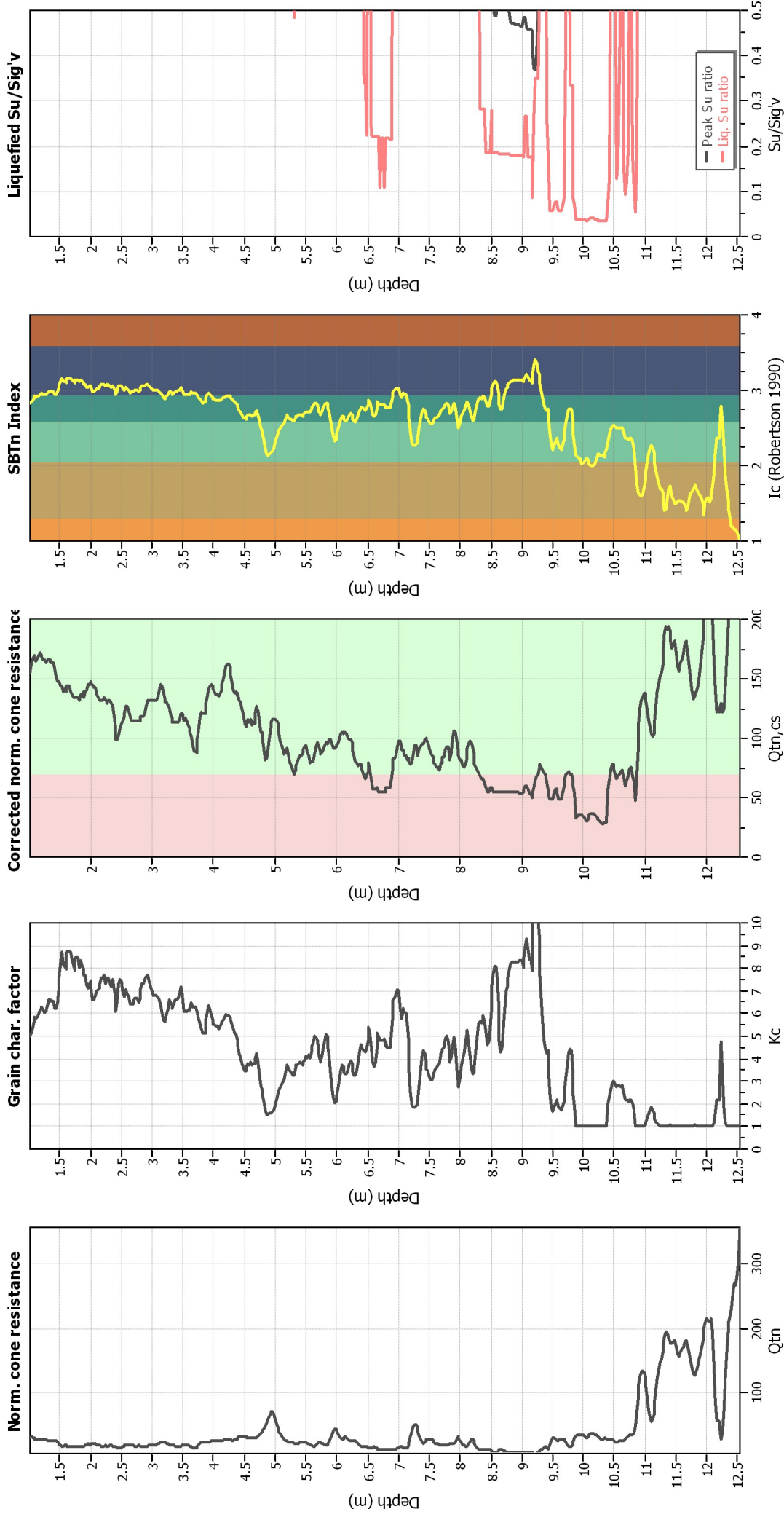
#### F.S. color scheme

- 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)	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Transition detect. applied:	No
Points to test:	Based on $I_c$ value	$K_r$ applied:	Yes
Earthquake magnitude $M_w$ :	5.00	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.35	Limit depth applied:	No
Depth to water table (insitu):	3.00 m	Limit depth:	N/A
Depth to water table (earthq.):	3.00 m		
Average results interval:	3		
$I_c$ cut-off value:	2.60		
Unit weight calculation:	19.00 kN/m <sup>3</sup>		
Use fill:	No		
Fill height:	N/A		

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
1	1.02	19.38	0.00	19.38	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
2	1.04	19.76	0.00	19.76	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
3	1.06	20.14	0.00	20.14	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
4	1.08	20.52	0.00	20.52	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
5	1.10	20.90	0.00	20.90	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
6	1.12	21.28	0.00	21.28	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
7	1.14	21.66	0.00	21.66	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
8	1.16	22.04	0.00	22.04	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
9	1.18	22.42	0.00	22.42	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
10	1.20	22.80	0.00	22.80	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
11	1.22	23.18	0.00	23.18	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
12	1.24	23.56	0.00	23.56	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
13	1.26	23.94	0.00	23.94	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
14	1.28	24.32	0.00	24.32	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
15	1.30	24.70	0.00	24.70	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
16	1.32	25.08	0.00	25.08	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
17	1.34	25.46	0.00	25.46	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
18	1.36	25.84	0.00	25.84	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
19	1.38	26.22	0.00	26.22	0.99	0.226	2.82	0.080	1.00	1.00	2.000	No
20	1.40	26.60	0.00	26.60	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
21	1.42	26.98	0.00	26.98	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
22	1.44	27.36	0.00	27.36	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
23	1.46	27.74	0.00	27.74	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
24	1.48	28.12	0.00	28.12	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
25	1.50	28.50	0.00	28.50	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
26	1.52	28.88	0.00	28.88	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
27	1.54	29.26	0.00	29.26	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
28	1.56	29.64	0.00	29.64	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
29	1.58	30.02	0.00	30.02	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
30	1.60	30.40	0.00	30.40	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
31	1.62	30.78	0.00	30.78	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
32	1.64	31.16	0.00	31.16	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
33	1.66	31.54	0.00	31.54	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
34	1.68	31.92	0.00	31.92	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
35	1.70	32.30	0.00	32.30	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
36	1.72	32.68	0.00	32.68	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
37	1.74	33.06	0.00	33.06	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
38	1.76	33.44	0.00	33.44	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
39	1.78	33.82	0.00	33.82	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
40	1.80	34.20	0.00	34.20	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
41	1.82	34.58	0.00	34.58	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
42	1.84	34.96	0.00	34.96	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
43	1.86	35.34	0.00	35.34	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
44	1.88	35.72	0.00	35.72	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
45	1.90	36.10	0.00	36.10	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
46	1.92	36.48	0.00	36.48	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
47	1.94	36.86	0.00	36.86	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No
48	1.96	37.24	0.00	37.24	0.99	0.225	2.82	0.080	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
49	1.98	37.62	0.00	37.62	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
50	2.00	38.00	0.00	38.00	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
51	2.02	38.38	0.00	38.38	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
52	2.04	38.76	0.00	38.76	0.99	0.224	2.82	0.080	1.00	1.00	2.000	No
53	2.06	39.14	0.00	39.14	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
54	2.08	39.52	0.00	39.52	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
55	2.10	39.90	0.00	39.90	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
56	2.12	40.28	0.00	40.28	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
57	2.14	40.66	0.00	40.66	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
58	2.16	41.04	0.00	41.04	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
59	2.18	41.42	0.00	41.42	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
60	2.20	41.80	0.00	41.80	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
61	2.22	42.18	0.00	42.18	0.99	0.224	2.82	0.079	1.00	1.00	2.000	No
62	2.24	42.56	0.00	42.56	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
63	2.26	42.94	0.00	42.94	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
64	2.28	43.32	0.00	43.32	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
65	2.30	43.70	0.00	43.70	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
66	2.32	44.08	0.00	44.08	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
67	2.34	44.46	0.00	44.46	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
68	2.36	44.84	0.00	44.84	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
69	2.38	45.22	0.00	45.22	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
70	2.40	45.60	0.00	45.60	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
71	2.42	45.98	0.00	45.98	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
72	2.44	46.36	0.00	46.36	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
73	2.46	46.74	0.00	46.74	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
74	2.48	47.12	0.00	47.12	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
75	2.50	47.50	0.00	47.50	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
76	2.52	47.88	0.00	47.88	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
77	2.54	48.26	0.00	48.26	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
78	2.56	48.64	0.00	48.64	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
79	2.58	49.02	0.00	49.02	0.98	0.224	2.82	0.079	1.00	1.00	2.000	No
80	2.60	49.40	0.00	49.40	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
81	2.62	49.78	0.00	49.78	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
82	2.64	50.16	0.00	50.16	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
83	2.66	50.54	0.00	50.54	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
84	2.68	50.92	0.00	50.92	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
85	2.70	51.30	0.00	51.30	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
86	2.72	51.68	0.00	51.68	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
87	2.74	52.06	0.00	52.06	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
88	2.76	52.44	0.00	52.44	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
89	2.78	52.82	0.00	52.82	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
90	2.80	53.20	0.00	53.20	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
91	2.82	53.58	0.00	53.58	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
92	2.84	53.96	0.00	53.96	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
93	2.86	54.34	0.00	54.34	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
94	2.88	54.72	0.00	54.72	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
95	2.90	55.10	0.00	55.10	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
96	2.92	55.48	0.00	55.48	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
97	2.94	55.86	0.00	55.86	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
98	2.96	56.24	0.00	56.24	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
99	2.98	56.62	0.00	56.62	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
100	3.00	57.00	0.00	57.00	0.98	0.223	2.82	0.079	1.00	1.00	2.000	No
101	3.02	57.38	0.20	57.18	0.98	0.224	2.82	0.079	1.00	1.00	0.079	No
102	3.04	57.76	0.39	57.37	0.98	0.224	2.82	0.079	1.00	1.00	0.079	No
103	3.06	58.14	0.59	57.55	0.98	0.225	2.82	0.080	1.00	1.00	0.080	No
104	3.08	58.52	0.78	57.74	0.98	0.226	2.82	0.080	1.00	1.00	0.080	No
105	3.10	58.90	0.98	57.92	0.98	0.226	2.82	0.080	1.00	1.00	0.080	No
106	3.12	59.28	1.18	58.10	0.98	0.227	2.82	0.080	1.00	1.00	0.080	No
107	3.14	59.66	1.37	58.29	0.98	0.228	2.82	0.081	1.00	1.00	0.081	No
108	3.16	60.04	1.57	58.47	0.98	0.229	2.82	0.081	1.00	1.00	0.081	No
109	3.18	60.42	1.77	58.65	0.98	0.229	2.82	0.081	1.00	1.00	0.081	No
110	3.20	60.80	1.96	58.84	0.98	0.230	2.82	0.081	1.00	1.00	0.081	No
111	3.22	61.18	2.16	59.02	0.98	0.231	2.82	0.082	1.00	1.00	0.082	No
112	3.24	61.56	2.35	59.21	0.98	0.231	2.82	0.082	1.00	1.00	0.082	No
113	3.26	61.94	2.55	59.39	0.98	0.232	2.82	0.082	1.00	1.00	0.082	No
114	3.28	62.32	2.75	59.57	0.98	0.233	2.82	0.082	1.00	1.00	0.082	No
115	3.30	62.70	2.94	59.76	0.98	0.233	2.82	0.083	1.00	1.00	0.083	No
116	3.32	63.08	3.14	59.94	0.98	0.234	2.82	0.083	1.00	1.00	0.083	No
117	3.34	63.46	3.34	60.12	0.98	0.235	2.82	0.083	1.00	1.00	0.083	No
118	3.36	63.84	3.53	60.31	0.98	0.235	2.82	0.083	1.00	1.00	0.083	No
119	3.38	64.22	3.73	60.49	0.98	0.236	2.82	0.084	1.00	1.00	0.084	No
120	3.40	64.60	3.92	60.68	0.98	0.237	2.82	0.084	1.00	1.00	0.084	No
121	3.42	64.98	4.12	60.86	0.98	0.237	2.82	0.084	1.00	1.00	0.084	No
122	3.44	65.36	4.32	61.04	0.98	0.238	2.82	0.084	1.00	1.00	0.084	No
123	3.46	65.74	4.51	61.23	0.98	0.238	2.82	0.084	1.00	1.00	0.084	No
124	3.48	66.12	4.71	61.41	0.98	0.239	2.82	0.085	1.00	1.00	0.085	No
125	3.50	66.50	4.91	61.60	0.98	0.240	2.82	0.085	1.00	1.00	0.085	No
126	3.52	66.88	5.10	61.78	0.98	0.240	2.82	0.085	1.00	1.00	0.085	No
127	3.54	67.26	5.30	61.96	0.98	0.241	2.82	0.085	1.00	1.00	0.085	No
128	3.56	67.64	5.49	62.15	0.98	0.242	2.82	0.086	1.00	1.00	0.086	No
129	3.58	68.02	5.69	62.33	0.98	0.242	2.82	0.086	1.00	1.00	0.086	No
130	3.60	68.40	5.89	62.51	0.98	0.243	2.82	0.086	1.00	1.00	0.086	No
131	3.62	68.78	6.08	62.70	0.98	0.243	2.82	0.086	1.00	1.00	0.086	No
132	3.64	69.16	6.28	62.88	0.98	0.244	2.82	0.086	1.00	1.00	0.086	No
133	3.66	69.54	6.47	63.07	0.97	0.245	2.82	0.087	1.00	1.00	0.087	No
134	3.68	69.92	6.67	63.25	0.97	0.245	2.82	0.087	1.00	1.00	0.087	No
135	3.70	70.30	6.87	63.43	0.97	0.246	2.82	0.087	1.00	1.00	0.087	No
136	3.72	70.68	7.06	63.62	0.97	0.246	2.82	0.087	1.00	1.00	0.087	No
137	3.74	71.06	7.26	63.80	0.97	0.247	2.82	0.087	1.00	1.00	0.087	No
138	3.76	71.44	7.46	63.98	0.97	0.247	2.82	0.088	1.00	1.00	0.088	No
139	3.78	71.82	7.65	64.17	0.97	0.248	2.82	0.088	1.00	1.00	0.088	No
140	3.80	72.20	7.85	64.35	0.97	0.249	2.82	0.088	1.00	1.00	0.088	No
141	3.82	72.58	8.04	64.54	0.97	0.249	2.82	0.088	1.00	1.00	0.088	No
142	3.84	72.96	8.24	64.72	0.97	0.250	2.82	0.088	1.00	1.00	0.088	No
143	3.86	73.34	8.44	64.90	0.97	0.250	2.82	0.089	1.00	1.00	0.089	No
144	3.88	73.72	8.63	65.09	0.97	0.251	2.82	0.089	1.00	1.00	0.089	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)												
Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma'_v$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
145	3.90	74.10	8.83	65.27	0.97	0.251	2.82	0.089	1.00	1.00	0.089	No
146	3.92	74.48	9.03	65.45	0.97	0.252	2.82	0.089	1.00	1.00	0.089	No
147	3.94	74.86	9.22	65.64	0.97	0.252	2.82	0.089	1.00	1.00	0.089	No
148	3.96	75.24	9.42	65.82	0.97	0.253	2.82	0.090	1.00	1.00	0.090	No
149	3.98	75.62	9.61	66.01	0.97	0.254	2.82	0.090	1.00	1.00	0.090	No
150	4.00	76.00	9.81	66.19	0.97	0.254	2.82	0.090	1.00	1.00	0.090	No
151	4.02	76.38	10.01	66.37	0.97	0.255	2.82	0.090	1.00	1.00	0.090	No
152	4.04	76.76	10.20	66.56	0.97	0.255	2.82	0.090	1.00	1.00	0.090	No
153	4.06	77.14	10.40	66.74	0.97	0.256	2.82	0.091	1.00	1.00	0.091	No
154	4.08	77.52	10.59	66.93	0.97	0.256	2.82	0.091	1.00	1.00	0.091	No
155	4.10	77.90	10.79	67.11	0.97	0.257	2.82	0.091	1.00	1.00	0.091	No
156	4.12	78.28	10.99	67.29	0.97	0.257	2.82	0.091	1.00	1.00	0.091	No
157	4.14	78.66	11.18	67.48	0.97	0.258	2.82	0.091	1.00	1.00	0.091	No
158	4.16	79.04	11.38	67.66	0.97	0.258	2.82	0.091	1.00	1.00	0.091	No
159	4.18	79.42	11.58	67.84	0.97	0.259	2.82	0.092	1.00	1.00	0.092	No
160	4.20	79.80	11.77	68.03	0.97	0.259	2.82	0.092	1.00	1.00	0.092	No
161	4.22	80.18	11.97	68.21	0.97	0.260	2.82	0.092	1.00	1.00	0.092	No
162	4.24	80.56	12.16	68.40	0.97	0.260	2.82	0.092	1.00	1.00	0.092	No
163	4.26	80.94	12.36	68.58	0.97	0.261	2.82	0.092	1.00	1.00	0.092	No
164	4.28	81.32	12.56	68.76	0.97	0.261	2.82	0.093	1.00	1.00	0.093	No
165	4.30	81.70	12.75	68.95	0.97	0.262	2.82	0.093	1.00	1.00	0.093	No
166	4.32	82.08	12.95	69.13	0.97	0.262	2.82	0.093	1.00	1.00	0.093	No
167	4.34	82.46	13.15	69.31	0.97	0.263	2.82	0.093	1.00	1.00	0.093	No
168	4.36	82.84	13.34	69.50	0.97	0.263	2.82	0.093	1.00	1.00	0.093	No
169	4.38	83.22	13.54	69.68	0.97	0.264	2.82	0.093	1.00	1.00	0.093	No
170	4.40	83.60	13.73	69.87	0.97	0.264	2.82	0.094	1.00	1.00	0.094	No
171	4.42	83.98	13.93	70.05	0.97	0.264	2.82	0.094	1.00	1.00	0.094	No
172	4.44	84.36	14.13	70.23	0.97	0.265	2.82	0.094	1.00	1.00	0.094	No
173	4.46	84.74	14.32	70.42	0.97	0.265	2.82	0.094	1.00	1.00	0.094	No
174	4.48	85.12	14.52	70.60	0.97	0.266	2.82	0.094	1.00	1.00	0.094	No
175	4.50	85.50	14.71	70.79	0.97	0.266	2.82	0.094	1.00	1.00	0.094	No
176	4.52	85.88	14.91	70.97	0.97	0.267	2.82	0.095	1.00	1.00	0.095	No
177	4.54	86.26	15.11	71.15	0.97	0.267	2.82	0.095	1.00	1.00	0.095	No
178	4.56	86.64	15.30	71.34	0.97	0.268	2.82	0.095	1.00	1.00	0.095	No
179	4.58	87.02	15.50	71.52	0.97	0.268	2.82	0.095	1.00	1.00	0.095	No
180	4.60	87.40	15.70	71.70	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
181	4.62	87.78	15.89	71.89	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
182	4.64	88.16	16.09	72.07	0.97	0.269	2.82	0.095	1.00	1.00	0.095	No
183	4.66	88.54	16.28	72.26	0.97	0.270	2.82	0.096	1.00	1.00	0.096	No
184	4.68	88.92	16.48	72.44	0.97	0.270	2.82	0.096	1.00	1.00	0.096	No
185	4.70	89.30	16.68	72.62	0.97	0.271	2.82	0.096	1.00	1.00	0.096	No
186	4.72	89.68	16.87	72.81	0.97	0.271	2.82	0.096	1.00	1.00	0.096	No
187	4.74	90.06	17.07	72.99	0.97	0.272	2.82	0.096	1.00	1.00	0.096	No
188	4.76	90.44	17.27	73.17	0.97	0.272	2.82	0.096	1.00	1.00	0.096	No
189	4.78	90.82	17.46	73.36	0.97	0.272	2.82	0.097	1.00	1.00	0.097	No
190	4.80	91.20	17.66	73.54	0.97	0.273	2.82	0.097	1.00	1.00	0.097	No
191	4.82	91.58	17.85	73.73	0.97	0.273	2.82	0.097	1.00	1.00	0.097	No
192	4.84	91.96	18.05	73.91	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No



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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>eq</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
193	4.86	92.34	18.25	74.09	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No
194	4.88	92.72	18.44	74.28	0.97	0.274	2.82	0.097	1.00	1.00	0.097	No
195	4.90	93.10	18.64	74.46	0.97	0.275	2.82	0.097	1.00	1.00	0.097	No
196	4.92	93.48	18.84	74.64	0.97	0.275	2.82	0.098	1.00	1.00	0.098	No
197	4.94	93.86	19.03	74.83	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
198	4.96	94.24	19.23	75.01	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
199	4.98	94.62	19.42	75.20	0.97	0.276	2.82	0.098	1.00	1.00	0.098	No
200	5.00	95.00	19.62	75.38	0.97	0.277	2.82	0.098	1.00	1.00	0.098	No
201	5.02	95.38	19.82	75.56	0.97	0.277	2.82	0.098	1.00	1.00	0.098	No
202	5.04	95.76	20.01	75.75	0.97	0.278	2.82	0.098	1.00	1.00	0.098	No
203	5.06	96.14	20.21	75.93	0.97	0.278	2.82	0.098	1.00	1.00	0.098	No
204	5.08	96.52	20.40	76.12	0.96	0.278	2.82	0.099	1.00	1.00	0.099	No
205	5.10	96.90	20.60	76.30	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
206	5.12	97.28	20.80	76.48	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
207	5.14	97.66	20.99	76.67	0.96	0.279	2.82	0.099	1.00	1.00	0.099	No
208	5.16	98.04	21.19	76.85	0.96	0.280	2.82	0.099	1.00	1.00	0.099	No
209	5.18	98.42	21.39	77.03	0.96	0.280	2.82	0.099	1.00	1.00	0.099	No
210	5.20	98.80	21.58	77.22	0.96	0.281	2.82	0.099	1.00	1.00	0.099	No
211	5.22	99.18	21.78	77.40	0.96	0.281	2.82	0.100	1.00	1.00	0.100	No
212	5.24	99.56	21.97	77.59	0.96	0.281	2.82	0.100	1.00	1.00	0.100	No
213	5.26	99.94	22.17	77.77	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
214	5.28	100.32	22.37	77.95	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
215	5.30	100.70	22.56	78.14	0.96	0.282	2.82	0.100	1.00	1.00	0.100	No
216	5.32	101.08	22.76	78.32	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
217	5.34	101.46	22.96	78.50	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
218	5.36	101.84	23.15	78.69	0.96	0.283	2.82	0.100	1.00	1.00	0.100	No
219	5.38	102.22	23.35	78.87	0.96	0.284	2.82	0.101	1.00	1.00	0.101	No
220	5.40	102.60	23.54	79.06	0.96	0.284	2.82	0.101	1.00	1.00	0.101	No
221	5.42	102.98	23.74	79.24	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
222	5.44	103.36	23.94	79.42	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
223	5.46	103.74	24.13	79.61	0.96	0.285	2.82	0.101	1.00	1.00	0.101	No
224	5.48	104.12	24.33	79.79	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
225	5.50	104.50	24.52	79.98	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
226	5.52	104.88	24.72	80.16	0.96	0.286	2.82	0.101	1.00	1.00	0.101	No
227	5.54	105.26	24.92	80.34	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
228	5.56	105.64	25.11	80.53	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
229	5.58	106.02	25.31	80.71	0.96	0.287	2.82	0.102	1.00	1.00	0.102	No
230	5.60	106.40	25.51	80.89	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
231	5.62	106.78	25.70	81.08	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
232	5.64	107.16	25.90	81.26	0.96	0.288	2.82	0.102	1.00	1.00	0.102	No
233	5.66	107.54	26.09	81.45	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
234	5.68	107.92	26.29	81.63	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
235	5.70	108.30	26.49	81.81	0.96	0.289	2.82	0.102	1.00	1.00	0.102	No
236	5.72	108.68	26.68	82.00	0.96	0.289	2.82	0.103	1.00	1.00	0.103	No
237	5.74	109.06	26.88	82.18	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
238	5.76	109.44	27.08	82.36	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
239	5.78	109.82	27.27	82.55	0.96	0.290	2.82	0.103	1.00	1.00	0.103	No
240	5.80	110.20	27.47	82.73	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
241	5.82	110.58	27.66	82.92	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No
242	5.84	110.96	27.86	83.10	0.96	0.291	2.82	0.103	1.00	1.00	0.103	No
243	5.86	111.34	28.06	83.28	0.96	0.292	2.82	0.103	1.00	1.00	0.103	No
244	5.88	111.72	28.25	83.47	0.96	0.292	2.82	0.103	1.00	1.00	0.103	No
245	5.90	112.10	28.45	83.65	0.96	0.292	2.82	0.104	1.00	1.00	0.104	No
246	5.92	112.48	28.65	83.83	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
247	5.94	112.86	28.84	84.02	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
248	5.96	113.24	29.04	84.20	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
249	5.98	113.62	29.23	84.39	0.96	0.293	2.82	0.104	1.00	1.00	0.104	No
250	6.00	114.00	29.43	84.57	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No
251	6.02	114.38	29.63	84.75	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No
252	6.04	114.76	29.82	84.94	0.96	0.294	2.82	0.104	1.00	1.00	0.104	No
253	6.06	115.14	30.02	85.12	0.96	0.295	2.82	0.104	1.00	1.00	0.104	No
254	6.08	115.52	30.21	85.31	0.96	0.295	2.82	0.104	1.00	1.00	0.104	No
255	6.10	115.90	30.41	85.49	0.96	0.295	2.82	0.105	1.00	1.00	0.105	No
256	6.12	116.28	30.61	85.67	0.96	0.295	2.82	0.105	1.00	1.00	0.105	No
257	6.14	116.66	30.80	85.86	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
258	6.16	117.04	31.00	86.04	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
259	6.18	117.42	31.20	86.22	0.96	0.296	2.82	0.105	1.00	1.00	0.105	No
260	6.20	117.80	31.39	86.41	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
261	6.22	118.18	31.59	86.59	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
262	6.24	118.56	31.78	86.78	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
263	6.26	118.94	31.98	86.96	0.96	0.297	2.82	0.105	1.00	1.00	0.105	No
264	6.28	119.32	32.18	87.14	0.96	0.298	2.82	0.105	1.00	1.00	0.105	No
265	6.30	119.70	32.37	87.33	0.96	0.298	2.82	0.106	1.00	1.00	0.106	No
266	6.32	120.08	32.57	87.51	0.95	0.298	2.82	0.106	1.00	1.00	0.106	No
267	6.34	120.46	32.77	87.69	0.95	0.298	2.82	0.106	1.00	1.00	0.106	No
268	6.36	120.84	32.96	87.88	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
269	6.38	121.22	33.16	88.06	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
270	6.40	121.60	33.35	88.25	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
271	6.42	121.98	33.55	88.43	0.95	0.299	2.82	0.106	1.00	1.00	0.106	No
272	6.44	122.36	33.75	88.61	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
273	6.46	122.74	33.94	88.80	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
274	6.48	123.12	34.14	88.98	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
275	6.50	123.50	34.34	89.17	0.95	0.300	2.82	0.106	1.00	1.00	0.106	No
276	6.52	123.88	34.53	89.35	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
277	6.54	124.26	34.73	89.53	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
278	6.56	124.64	34.92	89.72	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
279	6.58	125.02	35.12	89.90	0.95	0.301	2.82	0.107	1.00	1.00	0.107	No
280	6.60	125.40	35.32	90.08	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
281	6.62	125.78	35.51	90.27	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
282	6.64	126.16	35.71	90.45	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
283	6.66	126.54	35.90	90.64	0.95	0.302	2.82	0.107	1.00	1.00	0.107	No
284	6.68	126.92	36.10	90.82	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
285	6.70	127.30	36.30	91.00	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
286	6.72	127.68	36.49	91.19	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
287	6.74	128.06	36.69	91.37	0.95	0.303	2.82	0.107	1.00	1.00	0.107	No
288	6.76	128.44	36.89	91.55	0.95	0.303	2.82	0.108	1.00	1.00	0.108	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
289	6.78	128.82	37.08	91.74	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
290	6.80	129.20	37.28	91.92	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
291	6.82	129.58	37.47	92.11	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
292	6.84	129.96	37.67	92.29	0.95	0.304	2.82	0.108	1.00	1.00	0.108	No
293	6.86	130.34	37.87	92.47	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
294	6.88	130.72	38.06	92.66	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
295	6.90	131.10	38.26	92.84	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
296	6.92	131.48	38.46	93.02	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
297	6.94	131.86	38.65	93.21	0.95	0.305	2.82	0.108	1.00	1.00	0.108	No
298	6.96	132.24	38.85	93.39	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No
299	6.98	132.62	39.04	93.58	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No
300	7.00	133.00	39.24	93.76	0.95	0.306	2.82	0.108	1.00	1.00	0.108	No
301	7.02	133.38	39.44	93.94	0.95	0.306	2.82	0.109	1.00	1.00	0.109	No
302	7.04	133.76	39.63	94.13	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
303	7.06	134.14	39.83	94.31	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
304	7.08	134.52	40.02	94.50	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
305	7.10	134.90	40.22	94.68	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
306	7.12	135.28	40.42	94.86	0.95	0.307	2.82	0.109	1.00	1.00	0.109	No
307	7.14	135.66	40.61	95.05	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
308	7.16	136.04	40.81	95.23	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
309	7.18	136.42	41.01	95.41	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
310	7.20	136.80	41.20	95.60	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
311	7.22	137.18	41.40	95.78	0.95	0.308	2.82	0.109	1.00	1.00	0.109	No
312	7.24	137.56	41.59	95.97	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
313	7.26	137.94	41.79	96.15	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
314	7.28	138.32	41.99	96.33	0.95	0.309	2.82	0.109	1.00	1.00	0.109	No
315	7.30	138.70	42.18	96.52	0.95	0.309	2.82	0.110	1.00	1.00	0.110	No
316	7.32	139.08	42.38	96.70	0.95	0.309	2.82	0.110	1.00	1.00	0.110	No
317	7.34	139.46	42.58	96.88	0.94	0.309	2.82	0.110	1.00	1.00	0.110	No
318	7.36	139.84	42.77	97.07	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
319	7.38	140.22	42.97	97.25	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
320	7.40	140.60	43.16	97.44	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
321	7.42	140.98	43.36	97.62	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
322	7.44	141.36	43.56	97.80	0.94	0.310	2.82	0.110	1.00	1.00	0.110	No
323	7.46	141.74	43.75	97.99	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
324	7.48	142.12	43.95	98.17	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
325	7.50	142.50	44.15	98.36	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
326	7.52	142.88	44.34	98.54	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
327	7.54	143.26	44.54	98.72	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
328	7.56	143.64	44.73	98.91	0.94	0.311	2.82	0.110	1.00	1.00	0.110	No
329	7.58	144.02	44.93	99.09	0.94	0.312	2.82	0.110	1.00	1.00	0.110	No
330	7.60	144.40	45.13	99.27	0.94	0.312	2.82	0.110	1.00	1.00	0.110	No
331	7.62	144.78	45.32	99.46	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
332	7.64	145.16	45.52	99.64	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
333	7.66	145.54	45.71	99.83	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
334	7.68	145.92	45.91	100.01	0.94	0.312	2.82	0.111	1.00	1.00	0.111	No
335	7.70	146.30	46.11	100.19	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
336	7.72	146.68	46.30	100.38	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
337	7.74	147.06	46.50	100.56	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
338	7.76	147.44	46.70	100.74	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
339	7.78	147.82	46.89	100.93	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
340	7.80	148.20	47.09	101.11	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
341	7.82	148.58	47.28	101.30	0.94	0.313	2.82	0.111	1.00	1.00	0.111	No
342	7.84	148.96	47.48	101.48	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
343	7.86	149.34	47.68	101.66	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
344	7.88	149.72	47.87	101.85	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
345	7.90	150.10	48.07	102.03	0.94	0.314	2.82	0.111	1.00	1.00	0.111	No
346	7.92	150.48	48.27	102.21	0.94	0.314	2.82	0.111	1.00	1.00	0.112	No
347	7.94	150.86	48.46	102.40	0.94	0.314	2.82	0.111	1.00	1.00	0.112	No
348	7.96	151.24	48.66	102.58	0.94	0.315	2.82	0.111	1.00	1.00	0.112	No
349	7.98	151.62	48.85	102.77	0.94	0.315	2.82	0.111	1.00	1.00	0.112	No
350	8.00	152.00	49.05	102.95	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
351	8.02	152.38	49.25	103.13	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
352	8.04	152.76	49.44	103.32	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
353	8.06	153.14	49.64	103.50	0.94	0.315	2.82	0.112	1.00	1.00	0.112	No
354	8.08	153.52	49.83	103.69	0.94	0.315	2.82	0.112	0.99	1.00	0.112	No
355	8.10	153.90	50.03	103.87	0.94	0.315	2.82	0.112	0.99	1.00	0.112	No
356	8.12	154.28	50.23	104.05	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
357	8.14	154.66	50.42	104.24	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
358	8.16	155.04	50.62	104.42	0.94	0.316	2.82	0.112	0.99	1.00	0.113	No
359	8.18	155.42	50.82	104.60	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
360	8.20	155.80	51.01	104.79	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
361	8.22	156.18	51.21	104.97	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
362	8.24	156.56	51.40	105.16	0.93	0.316	2.82	0.112	0.99	1.00	0.113	No
363	8.26	156.94	51.60	105.34	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
364	8.28	157.32	51.80	105.52	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
365	8.30	157.70	51.99	105.71	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
366	8.32	158.08	52.19	105.89	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
367	8.34	158.46	52.39	106.07	0.93	0.317	2.82	0.112	0.99	1.00	0.113	No
368	8.36	158.84	52.58	106.26	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
369	8.38	159.22	52.78	106.44	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
370	8.40	159.60	52.97	106.63	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
371	8.42	159.98	53.17	106.81	0.93	0.317	2.82	0.112	0.99	1.00	0.114	No
372	8.44	160.36	53.37	106.99	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
373	8.46	160.74	53.56	107.18	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
374	8.48	161.12	53.76	107.36	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
375	8.50	161.50	53.95	107.55	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
376	8.52	161.88	54.15	107.73	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
377	8.54	162.26	54.35	107.91	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
378	8.56	162.64	54.54	108.10	0.93	0.318	2.82	0.113	0.99	1.00	0.114	No
379	8.58	163.02	54.74	108.28	0.93	0.318	2.82	0.113	0.98	1.00	0.115	No
380	8.60	163.40	54.94	108.46	0.93	0.318	2.82	0.113	0.98	1.00	0.115	No
381	8.62	163.78	55.13	108.65	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
382	8.64	164.16	55.33	108.83	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
383	8.66	164.54	55.52	109.02	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
384	8.68	164.92	55.72	109.20	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
385	8.70	165.30	55.92	109.38	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
386	8.72	165.68	56.11	109.57	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
387	8.74	166.06	56.31	109.75	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
388	8.76	166.44	56.51	109.93	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
389	8.78	166.82	56.70	110.12	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
390	8.80	167.20	56.90	110.30	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
391	8.82	167.58	57.09	110.49	0.93	0.319	2.82	0.113	0.98	1.00	0.115	No
392	8.84	167.96	57.29	110.67	0.93	0.320	2.82	0.113	0.98	1.00	0.116	No
393	8.86	168.34	57.49	110.85	0.93	0.320	2.82	0.113	0.98	1.00	0.116	No
394	8.88	168.72	57.68	111.04	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
395	8.90	169.10	57.88	111.22	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
396	8.92	169.48	58.08	111.40	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
397	8.94	169.86	58.27	111.59	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
398	8.96	170.24	58.47	111.77	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
399	8.98	170.62	58.66	111.96	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
400	9.00	171.00	58.86	112.14	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
401	9.02	171.38	59.06	112.32	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
402	9.04	171.76	59.25	112.51	0.92	0.320	2.82	0.113	0.98	1.00	0.116	No
403	9.06	172.14	59.45	112.69	0.92	0.320	2.82	0.114	0.98	1.00	0.116	No
404	9.08	172.52	59.64	112.88	0.92	0.320	2.82	0.114	0.98	1.00	0.116	No
405	9.10	172.90	59.84	113.06	0.92	0.321	2.82	0.114	0.98	1.00	0.116	No
406	9.12	173.28	60.04	113.24	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
407	9.14	173.66	60.23	113.43	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
408	9.16	174.04	60.43	113.61	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
409	9.18	174.42	60.63	113.79	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
410	9.20	174.80	60.82	113.98	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
411	9.22	175.18	61.02	114.16	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
412	9.24	175.56	61.21	114.35	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
413	9.26	175.94	61.41	114.53	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
414	9.28	176.32	61.61	114.71	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
415	9.30	176.70	61.80	114.90	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
416	9.32	177.08	62.00	115.08	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
417	9.34	177.46	62.20	115.26	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
418	9.36	177.84	62.39	115.45	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
419	9.38	178.22	62.59	115.63	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
420	9.40	178.60	62.78	115.82	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
421	9.42	178.98	62.98	116.00	0.92	0.321	2.82	0.114	0.97	1.00	0.117	No
422	9.44	179.36	63.18	116.18	0.92	0.322	2.82	0.114	0.97	1.00	0.118	No
423	9.46	179.74	63.37	116.37	0.92	0.322	2.82	0.114	0.97	1.00	0.118	No
424	9.48	180.12	63.57	116.55	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
425	9.50	180.50	63.77	116.73	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
426	9.52	180.88	63.96	116.92	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
427	9.54	181.26	64.16	117.10	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
428	9.56	181.64	64.35	117.29	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
429	9.58	182.02	64.55	117.47	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
430	9.60	182.40	64.75	117.65	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
431	9.62	182.78	64.94	117.84	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
432	9.64	183.16	65.14	118.02	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma'_v$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
433	9.66	183.54	65.33	118.21	0.91	0.322	2.82	0.114	0.97	1.00	0.118	No
434	9.68	183.92	65.53	118.39	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
435	9.70	184.30	65.73	118.57	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
436	9.72	184.68	65.92	118.76	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
437	9.74	185.06	66.12	118.94	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
438	9.76	185.44	66.32	119.12	0.91	0.322	2.82	0.114	0.96	1.00	0.118	No
439	9.78	185.82	66.51	119.31	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
440	9.80	186.20	66.71	119.49	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
441	9.82	186.58	66.90	119.68	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
442	9.84	186.96	67.10	119.86	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
443	9.86	187.34	67.30	120.04	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
444	9.88	187.72	67.49	120.23	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
445	9.90	188.10	67.69	120.41	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
446	9.92	188.48	67.89	120.59	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
447	9.94	188.86	68.08	120.78	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
448	9.96	189.24	68.28	120.96	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
449	9.98	189.62	68.47	121.15	0.91	0.322	2.82	0.114	0.96	1.00	0.119	No
450	10.00	190.00	68.67	121.33	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
451	10.02	190.38	68.87	121.51	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
452	10.04	190.76	69.06	121.70	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
453	10.06	191.14	69.26	121.88	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
454	10.08	191.52	69.45	122.07	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
455	10.10	191.90	69.65	122.25	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
456	10.12	192.28	69.85	122.43	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
457	10.14	192.66	70.04	122.62	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
458	10.16	193.04	70.24	122.80	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
459	10.18	193.42	70.44	122.98	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
460	10.20	193.80	70.63	123.17	0.90	0.322	2.82	0.114	0.96	1.00	0.119	No
461	10.22	194.18	70.83	123.35	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
462	10.24	194.56	71.02	123.54	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
463	10.26	194.94	71.22	123.72	0.90	0.322	2.82	0.114	0.96	1.00	0.120	No
464	10.28	195.32	71.42	123.90	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
465	10.30	195.70	71.61	124.09	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
466	10.32	196.08	71.81	124.27	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
467	10.34	196.46	72.01	124.45	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
468	10.36	196.84	72.20	124.64	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
469	10.38	197.22	72.40	124.82	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
470	10.40	197.60	72.59	125.01	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
471	10.42	197.98	72.79	125.19	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
472	10.44	198.36	72.99	125.37	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
473	10.46	198.74	73.18	125.56	0.90	0.322	2.82	0.114	0.95	1.00	0.120	No
474	10.48	199.12	73.38	125.74	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
475	10.50	199.50	73.58	125.92	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
476	10.52	199.88	73.77	126.11	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
477	10.54	200.26	73.97	126.29	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
478	10.56	200.64	74.16	126.48	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
479	10.58	201.02	74.36	126.66	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
480	10.60	201.40	74.56	126.84	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)												
Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
481	10.62	201.78	74.75	127.03	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
482	10.64	202.16	74.95	127.21	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
483	10.66	202.54	75.14	127.40	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
484	10.68	202.92	75.34	127.58	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
485	10.70	203.30	75.54	127.76	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
486	10.72	203.68	75.73	127.95	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
487	10.74	204.06	75.93	128.13	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
488	10.76	204.44	76.13	128.31	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
489	10.78	204.82	76.32	128.50	0.89	0.322	2.82	0.114	0.95	1.00	0.120	No
490	10.80	205.20	76.52	128.68	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
491	10.82	205.58	76.71	128.87	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
492	10.84	205.96	76.91	129.05	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
493	10.86	206.34	77.11	129.23	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
494	10.88	206.72	77.30	129.42	0.89	0.322	2.82	0.114	0.95	1.00	0.121	No
495	10.90	207.10	77.50	129.60	0.89	0.322	2.82	0.114	0.94	1.00	0.121	No
496	10.92	207.48	77.70	129.78	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
497	10.94	207.86	77.89	129.97	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
498	10.96	208.24	78.09	130.15	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
499	10.98	208.62	78.28	130.34	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
500	11.00	209.00	78.48	130.52	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
501	11.02	209.38	78.68	130.70	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
502	11.04	209.76	78.87	130.89	0.88	0.322	2.82	0.114	0.94	1.00	0.121	No
503	11.06	210.14	79.07	131.07	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
504	11.08	210.52	79.26	131.26	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
505	11.10	210.90	79.46	131.44	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
506	11.12	211.28	79.66	131.62	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
507	11.14	211.66	79.85	131.81	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
508	11.16	212.04	80.05	131.99	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
509	11.18	212.42	80.25	132.17	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
510	11.20	212.80	80.44	132.36	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
511	11.22	213.18	80.64	132.54	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
512	11.24	213.56	80.83	132.73	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
513	11.26	213.94	81.03	132.91	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
514	11.28	214.32	81.23	133.09	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
515	11.30	214.70	81.42	133.28	0.88	0.321	2.82	0.114	0.94	1.00	0.121	No
516	11.32	215.08	81.62	133.46	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
517	11.34	215.46	81.82	133.64	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
518	11.36	215.84	82.01	133.83	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
519	11.38	216.22	82.21	134.01	0.87	0.321	2.82	0.114	0.94	1.00	0.121	No
520	11.40	216.60	82.40	134.20	0.87	0.320	2.82	0.114	0.94	1.00	0.121	No
521	11.42	216.98	82.60	134.38	0.87	0.320	2.82	0.114	0.94	1.00	0.121	No
522	11.44	217.36	82.80	134.56	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
523	11.46	217.74	82.99	134.75	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
524	11.48	218.12	83.19	134.93	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
525	11.50	218.50	83.39	135.12	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
526	11.52	218.88	83.58	135.30	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
527	11.54	219.26	83.78	135.48	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No
528	11.56	219.64	83.97	135.67	0.87	0.320	2.82	0.113	0.94	1.00	0.121	No

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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma'_v$ (KPa)	$r_d$	CSR	MSF	CSR <sub>req</sub>	$K_\sigma$	User FS	CSR*	Belongs to transition
529	11.58	220.02	84.17	135.85	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
530	11.60	220.40	84.37	136.03	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
531	11.62	220.78	84.56	136.22	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
532	11.64	221.16	84.76	136.40	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
533	11.66	221.54	84.95	136.59	0.87	0.320	2.82	0.113	0.93	1.00	0.121	No
534	11.68	221.92	85.15	136.77	0.87	0.319	2.82	0.113	0.93	1.00	0.121	No
535	11.70	222.30	85.35	136.95	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
536	11.72	222.68	85.54	137.14	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
537	11.74	223.06	85.74	137.32	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
538	11.76	223.44	85.94	137.50	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
539	11.78	223.82	86.13	137.69	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
540	11.80	224.20	86.33	137.87	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
541	11.82	224.58	86.52	138.06	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
542	11.84	224.96	86.72	138.24	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
543	11.86	225.34	86.92	138.42	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
544	11.88	225.72	87.11	138.61	0.86	0.319	2.82	0.113	0.93	1.00	0.121	No
545	11.90	226.10	87.31	138.79	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
546	11.92	226.48	87.51	138.97	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
547	11.94	226.86	87.70	139.16	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
548	11.96	227.24	87.90	139.34	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
549	11.98	227.62	88.09	139.53	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
550	12.00	228.00	88.29	139.71	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
551	12.02	228.38	88.49	139.89	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
552	12.04	228.76	88.68	140.08	0.86	0.318	2.82	0.113	0.93	1.00	0.121	No
553	12.06	229.14	88.88	140.26	0.85	0.318	2.82	0.113	0.93	1.00	0.121	No
554	12.08	229.52	89.07	140.45	0.85	0.318	2.82	0.113	0.93	1.00	0.121	No
555	12.10	229.90	89.27	140.63	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
556	12.12	230.28	89.47	140.81	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
557	12.14	230.66	89.66	141.00	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
558	12.16	231.04	89.86	141.18	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
559	12.18	231.42	90.06	141.36	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
560	12.20	231.80	90.25	141.55	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
561	12.22	232.18	90.45	141.73	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
562	12.24	232.56	90.64	141.92	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
563	12.26	232.94	90.84	142.10	0.85	0.317	2.82	0.112	0.93	1.00	0.121	No
564	12.28	233.32	91.04	142.28	0.85	0.317	2.82	0.112	0.92	1.00	0.121	No
565	12.30	233.70	91.23	142.47	0.85	0.316	2.82	0.112	0.92	1.00	0.121	No
566	12.32	234.08	91.43	142.65	0.85	0.316	2.82	0.112	0.92	1.00	0.121	No
567	12.34	234.46	91.63	142.83	0.85	0.316	2.82	0.112	0.92	1.00	0.121	No
568	12.36	234.84	91.82	143.02	0.85	0.316	2.82	0.112	0.92	1.00	0.121	No
569	12.38	235.22	92.02	143.20	0.85	0.316	2.82	0.112	0.92	1.00	0.121	No
570	12.40	235.60	92.21	143.39	0.84	0.316	2.82	0.112	0.92	1.00	0.121	No
571	12.42	235.98	92.41	143.57	0.84	0.316	2.82	0.112	0.92	1.00	0.121	No
572	12.44	236.36	92.61	143.75	0.84	0.316	2.82	0.112	0.92	1.00	0.121	No
573	12.46	236.74	92.80	143.94	0.84	0.315	2.82	0.112	0.92	1.00	0.121	No
574	12.48	237.12	93.00	144.12	0.84	0.315	2.82	0.112	0.92	1.00	0.121	No
575	12.50	237.50	93.19	144.31	0.84	0.315	2.82	0.112	0.92	1.00	0.121	No
576	12.52	237.88	93.39	144.49	0.84	0.315	2.82	0.112	0.92	1.00	0.121	No



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

Point ID	Depth (m)	$\sigma_v$ (KPa)	$u_0$ (KPa)	$\sigma_v'$ (KPa)	$r_d$	CSR	MSF	$CSR_{eq}$	$K_\sigma$	User FS	CSR*	Belongs to transition
577	12.54	238.26	93.59	144.67	0.84	0.315	2.82	0.112	0.92	1.00	0.121	No

**Abbreviations**

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

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
1	1.02	1.83	2.83	6.25	0.95	30.84	5.01	154.53	4.000	No	Yes	2.00
2	1.04	1.90	2.84	6.74	0.96	31.96	5.12	163.77	4.000	No	Yes	2.00
3	1.06	1.83	2.87	7.17	0.97	30.82	5.40	166.55	4.000	No	Yes	2.00
4	1.08	1.77	2.90	7.64	0.98	29.68	5.70	169.25	4.000	No	Yes	2.00
5	1.10	1.70	2.92	7.74	0.99	28.54	5.86	167.29	4.000	No	Yes	2.00
6	1.12	1.70	2.91	7.55	0.98	28.54	5.78	164.98	4.000	No	Yes	2.00
7	1.14	1.70	2.92	7.75	0.99	28.53	5.86	167.29	4.000	No	Yes	2.00
8	1.16	1.70	2.92	7.95	0.99	28.53	5.94	169.58	4.000	No	Yes	2.00
9	1.18	1.67	2.95	8.31	1.00	27.95	6.15	171.98	4.000	No	Yes	2.00
10	1.20	1.63	2.95	8.28	1.00	27.38	6.20	169.86	4.000	No	Yes	2.00
11	1.22	1.60	2.95	8.24	1.00	26.81	6.26	167.72	4.000	No	Yes	2.00
12	1.24	1.60	2.95	8.03	1.00	26.80	6.17	165.43	4.000	No	Yes	2.00
13	1.26	1.63	2.93	7.87	0.99	27.36	6.04	165.30	4.000	No	Yes	2.00
14	1.28	1.60	2.94	7.83	0.99	26.79	6.09	163.12	4.000	No	Yes	2.00
15	1.30	1.57	2.96	8.21	1.00	26.21	6.32	165.56	4.000	No	Yes	2.00
16	1.32	1.50	2.99	8.59	1.00	25.07	6.61	165.74	4.000	No	Yes	2.00
17	1.34	1.50	2.99	8.59	1.00	25.07	6.61	165.74	4.000	No	Yes	2.00
18	1.36	1.50	2.98	8.37	1.00	25.06	6.52	163.46	4.000	No	Yes	2.00
19	1.38	1.50	2.98	8.37	1.00	25.05	6.52	163.46	4.000	No	Yes	2.00
20	1.40	1.50	2.98	8.37	1.00	25.05	6.53	163.46	4.000	No	Yes	2.00
21	1.42	1.53	2.95	7.74	1.00	25.61	6.20	158.69	4.000	No	Yes	2.00
22	1.44	1.47	2.95	7.41	1.00	24.47	6.20	151.69	4.000	No	Yes	2.00
23	1.46	1.37	2.97	7.47	1.00	22.76	6.46	147.06	4.000	No	Yes	2.00
24	1.48	1.23	3.04	8.30	1.00	20.49	7.19	147.23	4.000	No	Yes	2.00
25	1.50	1.17	3.07	8.79	1.00	19.35	7.60	147.14	4.000	No	Yes	2.00
26	1.52	1.07	3.12	9.31	1.00	17.64	8.18	144.37	4.000	No	Yes	2.00
27	1.54	1.00	3.16	9.96	1.00	16.50	8.72	143.91	4.000	No	Yes	2.00
28	1.56	1.03	3.12	8.97	1.00	17.06	8.17	139.37	4.000	No	Yes	2.00
29	1.58	1.07	3.11	9.00	1.00	17.62	8.06	141.97	4.000	No	Yes	2.00
30	1.60	1.07	3.10	8.69	1.00	17.62	7.92	139.52	4.000	No	Yes	2.00
31	1.62	1.00	3.16	9.97	1.00	16.48	8.73	143.90	4.000	No	Yes	2.00
32	1.64	1.00	3.16	9.98	1.00	16.47	8.74	143.89	4.000	No	Yes	2.00
33	1.66	1.00	3.16	9.98	1.00	16.46	8.74	143.89	4.000	No	Yes	2.00
34	1.68	0.97	3.16	9.63	1.00	15.89	8.74	138.90	4.000	No	Yes	2.00
35	1.70	1.00	3.13	8.96	1.00	16.45	8.31	136.71	4.000	No	Yes	2.00
36	1.72	1.00	3.12	8.61	1.00	16.44	8.16	134.21	4.000	No	Yes	2.00
37	1.74	1.03	3.10	8.33	1.00	17.00	7.90	134.36	4.000	No	Yes	2.00
38	1.76	0.97	3.14	8.93	1.00	15.86	8.45	134.00	4.000	No	Yes	2.00
39	1.78	0.97	3.14	8.93	1.00	15.86	8.45	134.00	4.000	No	Yes	2.00
40	1.80	0.97	3.14	8.94	1.00	15.85	8.45	134.00	4.000	No	Yes	2.00
41	1.82	1.00	3.11	8.29	1.00	16.41	8.02	131.65	4.000	No	Yes	2.00
42	1.84	1.00	3.13	8.98	1.00	16.41	8.33	136.69	4.000	No	Yes	2.00
43	1.86	1.03	3.11	8.68	1.00	16.97	8.07	136.87	4.000	No	Yes	2.00
44	1.88	1.07	3.10	8.73	1.00	17.53	7.96	139.50	4.000	No	Yes	2.00
45	1.90	1.07	3.08	8.09	1.00	17.52	7.67	134.46	4.000	No	Yes	2.00
46	1.92	1.10	3.08	8.46	1.00	18.08	7.72	139.62	4.000	No	Yes	2.00
47	1.94	1.17	3.05	7.97	1.00	19.21	7.28	139.74	4.000	No	Yes	2.00
48	1.96	1.23	3.03	8.08	1.00	20.33	7.12	144.77	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
49	1.98	1.20	3.05	8.32	1.00	19.76	7.33	144.76	4.000	No	Yes	2.00
50	2.00	1.20	3.06	8.61	1.00	19.75	7.45	147.19	4.000	No	Yes	2.00
51	2.02	1.23	3.03	8.09	1.00	20.31	7.13	144.77	4.000	No	Yes	2.00
52	2.04	1.33	2.98	7.47	1.00	22.01	6.57	144.66	4.000	No	Yes	2.00
53	2.06	1.30	2.99	7.40	1.00	21.43	6.63	142.19	4.000	No	Yes	2.00
54	2.08	1.27	3.01	7.61	1.00	20.86	6.82	142.25	4.000	No	Yes	2.00
55	2.10	1.20	3.02	7.47	1.00	19.72	6.96	137.17	4.000	No	Yes	2.00
56	2.12	1.17	3.03	7.40	1.00	19.15	7.03	134.57	4.000	No	Yes	2.00
57	2.14	1.13	3.03	7.32	1.00	18.58	7.10	131.92	4.000	No	Yes	2.00
58	2.16	1.10	3.05	7.55	1.00	18.00	7.33	131.90	4.000	No	Yes	2.00
59	2.18	1.07	3.07	7.80	1.00	17.43	7.56	131.85	4.000	No	Yes	2.00
60	2.20	1.07	3.07	7.81	1.00	17.42	7.57	131.85	4.000	No	Yes	2.00
61	2.22	1.07	3.08	8.13	1.00	17.42	7.72	134.44	4.000	No	Yes	2.00
62	2.24	1.10	3.05	7.57	1.00	17.98	7.34	131.90	4.000	No	Yes	2.00
63	2.26	1.07	3.07	7.81	1.00	17.40	7.58	131.85	4.000	No	Yes	2.00
64	2.28	1.07	3.06	7.49	1.00	17.40	7.43	129.19	4.000	No	Yes	2.00
65	2.30	1.07	3.07	7.82	1.00	17.39	7.58	131.84	4.000	No	Yes	2.00
66	2.32	1.10	3.05	7.58	1.00	17.95	7.35	131.90	4.000	No	Yes	2.00
67	2.34	1.10	3.04	7.26	1.00	17.94	7.20	129.22	4.000	No	Yes	2.00
68	2.36	1.03	3.07	7.42	1.00	16.80	7.52	126.42	4.000	No	Yes	2.00
69	2.38	1.03	3.02	6.41	1.00	16.80	7.02	117.91	4.000	No	Yes	2.00
70	2.40	1.00	3.00	5.59	1.00	16.22	6.70	108.73	4.000	No	Yes	2.00
71	2.42	1.00	2.94	4.54	0.99	16.22	6.08	98.60	4.000	No	Yes	2.00
72	2.44	0.93	2.98	4.89	1.00	15.08	6.55	98.79	4.000	No	Yes	2.00
73	2.46	0.87	3.05	5.69	1.00	13.94	7.33	102.23	4.000	No	Yes	2.00
74	2.48	0.90	3.07	6.25	1.00	14.50	7.50	108.71	4.000	No	Yes	2.00
75	2.50	0.93	3.06	6.40	1.00	15.06	7.43	111.85	4.000	No	Yes	2.00
76	2.52	1.03	3.01	6.09	1.00	16.75	6.86	114.92	4.000	No	Yes	2.00
77	2.54	1.07	3.01	6.22	1.00	17.31	6.81	117.89	4.000	No	Yes	2.00
78	2.56	1.10	3.00	6.34	1.00	17.87	6.76	120.79	4.000	No	Yes	2.00
79	2.58	1.10	3.03	6.98	1.00	17.87	7.08	126.48	4.000	No	Yes	2.00
80	2.60	1.13	3.01	6.77	1.00	18.43	6.86	126.46	4.000	No	Yes	2.00
81	2.62	1.13	3.00	6.46	1.00	18.42	6.71	123.63	4.000	No	Yes	2.00
82	2.64	1.13	2.97	5.85	1.00	18.41	6.40	117.76	4.000	No	Yes	2.00
83	2.66	1.10	2.97	5.72	1.00	17.84	6.44	114.81	4.000	No	Yes	2.00
84	2.68	1.10	2.97	5.72	1.00	17.83	6.44	114.81	4.000	No	Yes	2.00
85	2.70	1.10	2.97	5.72	1.00	17.83	6.44	114.81	4.000	No	Yes	2.00
86	2.72	1.07	2.99	5.91	1.00	17.25	6.66	114.88	4.000	No	Yes	2.00
87	2.74	1.07	2.99	5.91	1.00	17.25	6.66	114.88	4.000	No	Yes	2.00
88	2.76	1.07	2.99	5.92	1.00	17.24	6.66	114.88	4.000	No	Yes	2.00
89	2.78	1.10	2.97	5.73	1.00	17.80	6.45	114.81	4.000	No	Yes	2.00
90	2.80	1.07	2.99	5.92	1.00	17.23	6.67	114.89	4.000	No	Yes	2.00
91	2.82	1.03	3.03	6.46	1.00	16.66	7.08	117.91	4.000	No	Yes	2.00
92	2.84	1.00	3.05	6.69	1.00	16.08	7.33	117.89	4.000	No	Yes	2.00
93	2.86	1.00	3.05	6.70	1.00	16.08	7.33	117.89	4.000	No	Yes	2.00
94	2.88	1.00	3.07	7.05	1.00	16.07	7.52	120.77	4.000	No	Yes	2.00
95	2.90	1.03	3.07	7.50	1.00	16.63	7.60	126.40	4.000	No	Yes	2.00
96	2.92	1.07	3.08	7.91	1.00	17.19	7.67	131.81	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
97	2.94	1.10	3.06	7.66	1.00	17.75	7.43	131.88	4.000	No	Yes	2.00
98	2.96	1.10	3.06	7.66	1.00	17.74	7.43	131.88	4.000	No	Yes	2.00
99	2.98	1.13	3.04	7.43	1.00	18.30	7.21	131.92	4.000	No	Yes	2.00
100	3.00	1.17	3.02	7.21	1.00	18.86	6.99	131.92	4.000	No	Yes	2.00
101	3.02	1.20	3.00	7.00	1.00	19.42	6.79	131.89	4.000	No	Yes	2.00
102	3.04	1.20	3.00	7.00	1.00	19.42	6.79	131.89	4.000	No	Yes	2.00
103	3.06	1.20	3.00	7.01	1.00	19.41	6.79	131.89	4.000	No	Yes	2.00
104	3.08	1.20	3.00	7.01	1.00	19.41	6.80	131.89	4.000	No	Yes	2.00
105	3.10	1.23	3.00	7.10	1.00	19.97	6.74	134.52	4.000	No	Yes	2.00
106	3.12	1.30	2.99	7.25	1.00	21.09	6.62	139.66	4.000	No	Yes	2.00
107	3.14	1.40	2.96	7.21	1.00	22.79	6.34	144.53	4.000	No	Yes	2.00
108	3.16	1.47	2.93	6.87	0.99	23.91	6.03	144.28	4.000	No	Yes	2.00
109	3.18	1.50	2.90	6.25	0.98	24.28	5.70	138.39	4.000	No	Yes	2.00
110	3.20	1.47	2.89	5.93	0.98	23.61	5.63	132.89	4.000	No	Yes	2.00
111	3.22	1.43	2.90	5.83	0.98	22.99	5.66	130.17	4.000	No	Yes	2.00
112	3.24	1.37	2.93	6.13	0.99	21.93	5.96	130.67	4.000	No	Yes	2.00
113	3.26	1.30	2.95	6.19	1.00	20.82	6.16	128.21	4.000	No	Yes	2.00
114	3.28	1.20	2.98	6.45	1.00	19.10	6.58	125.62	4.000	No	Yes	2.00
115	3.30	1.17	2.98	6.04	1.00	18.47	6.49	119.81	4.000	No	Yes	2.00
116	3.32	1.17	2.96	5.74	1.00	18.41	6.34	116.69	4.000	No	Yes	2.00
117	3.34	1.17	2.95	5.44	1.00	18.33	6.19	113.46	4.000	No	Yes	2.00
118	3.36	1.13	2.97	5.61	1.00	17.73	6.40	113.45	4.000	No	Yes	2.00
119	3.38	1.10	2.99	5.79	1.00	17.12	6.62	113.37	4.000	No	Yes	2.00
120	3.40	1.10	2.99	5.79	1.00	17.06	6.63	113.21	4.000	No	Yes	2.00
121	3.42	1.10	2.99	5.80	1.00	17.01	6.65	113.06	4.000	No	Yes	2.00
122	3.44	1.10	3.01	6.12	1.00	16.95	6.83	115.85	4.000	No	Yes	2.00
123	3.46	1.10	3.04	6.77	1.00	16.89	7.18	121.33	4.000	No	Yes	2.00
124	3.48	1.10	3.04	6.77	1.00	16.84	7.20	121.16	4.000	No	Yes	2.00
125	3.50	1.17	3.00	6.36	1.00	17.86	6.77	120.96	4.000	No	Yes	2.00
126	3.52	1.23	2.94	5.43	0.99	18.83	6.09	114.75	4.000	No	Yes	2.00
127	3.54	1.27	2.94	5.56	0.99	19.30	6.08	117.38	4.000	No	Yes	2.00
128	3.56	1.23	2.94	5.43	1.00	18.72	6.12	114.47	4.000	No	Yes	2.00
129	3.58	1.20	2.94	5.30	1.00	18.13	6.15	111.50	4.000	No	Yes	2.00
130	3.60	1.17	2.95	5.16	1.00	17.55	6.18	108.47	4.000	No	Yes	2.00
131	3.62	1.13	2.95	5.01	1.00	16.98	6.21	105.38	4.000	No	Yes	2.00
132	3.64	1.07	2.97	5.01	1.00	15.86	6.45	102.26	4.000	No	Yes	2.00
133	3.66	1.03	2.96	4.50	1.00	15.28	6.26	95.63	4.000	No	Yes	2.00
134	3.68	0.97	2.95	4.09	1.00	14.18	6.25	88.65	4.000	No	Yes	2.00
135	3.70	0.97	2.96	4.09	1.00	14.13	6.27	88.54	4.000	No	Yes	2.00
136	3.72	1.00	2.94	3.95	0.99	14.56	6.06	88.22	4.000	No	Yes	2.00
137	3.74	1.10	2.94	4.54	1.00	16.09	6.10	98.20	4.000	No	Yes	2.00
138	3.76	1.27	2.91	4.74	0.98	18.53	5.75	106.65	4.000	No	Yes	2.00
139	3.78	1.43	2.89	5.14	0.98	20.99	5.59	117.25	4.000	No	Yes	2.00
140	3.80	1.57	2.86	5.13	0.97	22.87	5.32	121.63	4.000	No	Yes	2.00
141	3.82	1.63	2.84	4.91	0.96	23.72	5.10	120.88	4.000	No	Yes	2.00
142	3.84	1.63	2.84	4.91	0.96	23.65	5.11	120.75	4.000	No	Yes	2.00
143	3.86	1.63	2.84	4.91	0.96	23.59	5.11	120.62	4.000	No	Yes	2.00
144	3.88	1.57	2.90	5.81	0.98	22.74	5.68	129.23	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
145	3.90	1.53	2.93	6.40	0.99	22.29	6.04	134.53	4.000	No	Yes	2.00
146	3.92	1.53	2.96	7.08	1.00	22.29	6.36	141.70	4.000	No	Yes	2.00
147	3.94	1.60	2.95	6.99	1.00	23.22	6.18	143.57	4.000	No	Yes	2.00
148	3.96	1.70	2.92	6.77	0.99	24.56	5.90	144.99	4.000	No	Yes	2.00
149	3.98	1.77	2.90	6.50	0.98	25.40	5.68	144.27	4.000	No	Yes	2.00
150	4.00	1.80	2.88	6.19	0.97	25.75	5.49	141.41	4.000	No	Yes	2.00
151	4.02	1.77	2.88	6.11	0.97	25.19	5.52	139.11	4.000	No	Yes	2.00
152	4.04	1.77	2.87	5.92	0.97	25.08	5.44	136.50	4.000	No	Yes	2.00
153	4.06	1.77	2.87	5.92	0.97	25.01	5.45	136.34	4.000	No	Yes	2.00
154	4.08	1.80	2.86	5.81	0.97	25.39	5.35	135.90	4.000	No	Yes	2.00
155	4.10	1.80	2.87	6.00	0.97	25.36	5.45	138.19	4.000	No	Yes	2.00
156	4.12	1.80	2.88	6.20	0.97	25.32	5.55	140.43	4.000	No	Yes	2.00
157	4.14	1.83	2.89	6.46	0.98	25.77	5.62	144.70	4.000	No	Yes	2.00
158	4.16	1.87	2.90	6.71	0.98	26.21	5.68	148.84	4.000	No	Yes	2.00
159	4.18	1.90	2.91	7.14	0.98	26.67	5.81	155.07	4.000	No	Yes	2.00
160	4.20	1.93	2.92	7.55	0.99	27.13	5.94	161.08	4.000	No	Yes	2.00
161	4.22	1.97	2.92	7.60	0.99	27.53	5.91	162.73	4.000	No	Yes	2.00
162	4.24	1.97	2.92	7.60	0.99	27.46	5.92	162.53	4.000	No	Yes	2.00
163	4.26	1.97	2.92	7.42	0.99	27.35	5.86	160.24	4.000	No	Yes	2.00
164	4.28	1.93	2.91	7.02	0.98	26.75	5.75	153.89	4.000	No	Yes	2.00
165	4.30	1.93	2.88	6.48	0.97	26.59	5.53	147.11	4.000	No	Yes	2.00
166	4.32	1.93	2.86	5.94	0.96	26.43	5.30	140.10	4.000	No	Yes	2.00
167	4.34	1.97	2.84	5.66	0.96	26.76	5.13	137.34	4.000	No	Yes	2.00
168	4.36	2.03	2.83	5.64	0.95	27.59	5.04	138.97	4.000	No	Yes	2.00
169	4.38	2.10	2.80	5.29	0.94	28.35	4.79	135.92	4.000	No	Yes	2.00
170	4.40	2.20	2.78	5.20	0.94	29.60	4.64	137.26	4.000	No	Yes	2.00
171	4.42	2.33	2.73	4.59	0.92	31.16	4.21	131.30	4.000	No	Yes	2.00
172	4.44	2.43	2.70	4.40	0.91	32.35	4.03	130.33	4.000	No	Yes	2.00
173	4.46	2.50	2.67	4.00	0.89	33.03	3.78	124.90	4.000	No	Yes	2.00
174	4.48	2.53	2.64	3.68	0.88	33.28	3.60	119.67	4.000	No	Yes	2.00
175	4.50	2.47	2.63	3.36	0.88	32.23	3.49	112.56	4.000	No	Yes	2.00
176	4.52	2.43	2.62	3.27	0.88	31.69	3.48	110.13	4.000	No	Yes	2.00
177	4.54	2.33	2.65	3.41	0.89	30.37	3.65	110.79	4.000	No	Yes	2.00
178	4.56	2.37	2.67	3.65	0.89	30.81	3.75	115.57	4.000	No	Yes	2.00
179	4.58	2.33	2.66	3.56	0.89	30.27	3.74	113.18	4.000	No	Yes	2.00
180	4.60	2.33	2.68	3.71	0.89	30.25	3.82	115.63	4.000	No	Yes	2.00
181	4.62	2.30	2.66	3.47	0.89	29.67	3.73	110.67	4.000	No	Yes	2.00
182	4.64	2.33	2.67	3.56	0.89	30.06	3.76	112.89	4.000	No	Yes	2.00
183	4.66	2.33	2.67	3.56	0.89	29.99	3.76	112.79	4.000	No	Yes	2.00
184	4.68	2.33	2.70	4.01	0.90	30.04	4.00	120.17	4.000	No	Yes	2.00
185	4.70	2.33	2.73	4.46	0.92	30.08	4.23	127.23	4.000	No	Yes	2.00
186	4.72	2.50	2.68	4.01	0.90	32.04	3.85	123.45	4.000	No	Yes	2.00
187	4.74	2.70	2.60	3.32	0.87	34.29	3.34	114.70	4.000	No	Yes	2.00
188	4.76	3.00	2.51	2.63	0.83	37.71	2.80	105.45	0.189	No	No	1.96
189	4.78	3.20	2.47	2.47	0.82	40.03	2.61	104.37	0.186	No	No	1.92
190	4.80	3.37	2.42	2.24	0.80	41.88	2.42	101.21	0.176	No	No	1.83
191	4.82	3.53	2.34	1.74	0.77	43.50	2.09	91.12	0.150	No	No	1.55
192	4.84	3.87	2.23	1.24	0.72	46.97	1.73	81.40	0.130	No	No	1.34

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
193	4.86	4.43	2.15	1.08	0.69	53.43	1.54	82.41	0.132	No	No	1.36
194	4.88	4.97	2.14	1.23	0.69	59.85	1.53	91.78	0.152	No	No	1.56
195	4.90	5.33	2.16	1.46	0.70	64.40	1.58	101.80	0.178	No	No	1.83
196	4.92	5.57	2.18	1.64	0.71	67.29	1.62	109.17	0.201	No	No	2.00
197	4.94	5.77	2.18	1.70	0.71	69.61	1.62	112.81	0.214	No	No	2.00
198	4.96	5.80	2.20	1.81	0.71	70.02	1.66	116.09	0.226	No	No	2.00
199	4.98	5.43	2.24	1.94	0.73	65.69	1.76	115.65	0.224	No	No	2.00
200	5.00	4.73	2.32	2.23	0.76	57.49	2.02	115.87	0.225	No	No	2.00
201	5.02	4.17	2.39	2.46	0.79	50.74	2.27	115.06	0.222	No	No	2.00
202	5.04	3.70	2.44	2.59	0.81	45.09	2.49	112.43	0.212	No	No	2.00
203	5.06	3.40	2.46	2.52	0.81	41.34	2.59	106.99	0.194	No	No	1.97
204	5.08	3.03	2.49	2.38	0.82	36.76	2.70	99.15	0.171	No	No	1.73
205	5.10	2.77	2.52	2.37	0.83	33.45	2.85	95.35	0.161	No	No	1.63
206	5.12	2.57	2.53	2.29	0.84	30.94	2.94	91.02	0.150	No	No	1.52
207	5.14	2.33	2.56	2.24	0.85	28.03	3.09	86.62	0.140	No	No	1.42
208	5.16	2.17	2.61	2.42	0.87	26.00	3.37	87.53	4.000	No	Yes	2.00
209	5.18	2.07	2.65	2.71	0.89	24.80	3.67	91.00	4.000	No	Yes	2.00
210	5.20	2.03	2.66	2.76	0.89	24.35	3.74	91.15	4.000	No	Yes	2.00
211	5.22	2.00	2.64	2.46	0.88	23.82	3.58	85.40	4.000	No	Yes	2.00
212	5.24	1.93	2.62	2.18	0.87	22.90	3.47	79.53	4.000	No	Yes	2.00
213	5.26	1.90	2.61	2.04	0.87	22.41	3.41	76.42	4.000	No	Yes	2.00
214	5.28	1.90	2.59	1.85	0.86	22.31	3.27	73.02	0.116	No	No	1.16
215	5.30	1.83	2.59	1.73	0.86	21.43	3.26	69.84	0.112	No	No	1.12
216	5.32	1.77	2.64	2.00	0.88	20.65	3.57	73.67	4.000	No	Yes	2.00
217	5.34	1.77	2.66	2.20	0.89	20.65	3.73	77.00	4.000	No	Yes	2.00
218	5.36	1.83	2.66	2.31	0.89	21.43	3.72	79.81	4.000	No	Yes	2.00
219	5.38	1.87	2.67	2.46	0.89	21.81	3.79	82.69	4.000	No	Yes	2.00
220	5.40	1.90	2.68	2.60	0.90	22.19	3.85	85.48	4.000	No	Yes	2.00
221	5.42	1.93	2.67	2.55	0.89	22.53	3.78	85.21	4.000	No	Yes	2.00
222	5.44	2.03	2.66	2.59	0.89	23.68	3.69	87.48	4.000	No	Yes	2.00
223	5.46	2.03	2.67	2.76	0.89	23.66	3.82	90.28	4.000	No	Yes	2.00
224	5.48	2.03	2.69	2.94	0.90	23.64	3.93	93.01	4.000	No	Yes	2.00
225	5.50	1.97	2.71	3.04	0.91	22.82	4.09	93.37	4.000	No	Yes	2.00
226	5.52	1.90	2.70	2.79	0.90	21.93	4.02	88.05	4.000	No	Yes	2.00
227	5.54	1.80	2.72	2.75	0.91	20.69	4.14	85.67	4.000	No	Yes	2.00
228	5.56	1.73	2.70	2.46	0.91	19.81	4.03	79.85	4.000	No	Yes	2.00
229	5.58	1.63	2.74	2.62	0.92	18.60	4.32	80.40	4.000	No	Yes	2.00
230	5.60	1.57	2.77	2.74	0.93	17.79	4.54	80.74	4.000	No	Yes	2.00
231	5.62	1.53	2.78	2.80	0.94	17.36	4.66	80.87	4.000	No	Yes	2.00
232	5.64	1.53	2.83	3.27	0.95	17.38	5.00	86.95	4.000	No	Yes	2.00
233	5.66	1.63	2.82	3.50	0.95	18.54	4.97	92.07	4.000	No	Yes	2.00
234	5.68	1.77	2.80	3.62	0.94	20.09	4.81	96.68	4.000	No	Yes	2.00
235	5.70	1.97	2.72	3.05	0.91	22.32	4.15	92.67	4.000	No	Yes	2.00
236	5.72	2.03	2.68	2.77	0.90	23.00	3.89	89.43	4.000	No	Yes	2.00
237	5.74	2.00	2.68	2.64	0.90	22.54	3.85	86.75	4.000	No	Yes	2.00
238	5.76	1.90	2.71	2.79	0.91	21.36	4.09	87.29	4.000	No	Yes	2.00
239	5.78	1.80	2.76	3.16	0.93	20.20	4.49	90.65	4.000	No	Yes	2.00
240	5.80	1.73	2.81	3.49	0.94	19.41	4.83	93.73	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
241	5.82	1.70	2.83	3.77	0.95	19.01	5.08	96.51	4.000	No	Yes	2.00
242	5.84	1.73	2.82	3.70	0.95	19.34	4.98	96.25	4.000	No	Yes	2.00
243	5.86	1.87	2.78	3.42	0.93	20.82	4.58	95.39	4.000	No	Yes	2.00
244	5.88	2.17	2.71	3.24	0.91	24.21	4.07	98.66	4.000	No	Yes	2.00
245	5.90	2.63	2.60	2.78	0.87	29.43	3.34	98.32	4.000	No	Yes	2.00
246	5.92	3.17	2.49	2.29	0.82	35.31	2.71	95.69	0.161	No	No	1.56
247	5.94	3.70	2.38	1.86	0.78	41.10	2.23	91.71	0.152	No	No	1.46
248	5.96	4.00	2.33	1.72	0.76	44.32	2.06	91.16	0.150	No	No	1.45
249	5.98	3.97	2.35	1.82	0.77	43.92	2.12	93.26	0.155	No	No	1.50
250	6.00	3.63	2.41	1.99	0.79	40.19	2.34	93.89	0.157	No	No	1.51
251	6.02	3.27	2.47	2.22	0.82	36.09	2.63	94.98	0.160	No	No	1.53
252	6.04	2.97	2.55	2.57	0.85	32.74	3.01	98.50	0.169	No	No	1.62
253	6.06	2.73	2.62	3.06	0.87	30.14	3.46	104.26	4.000	No	Yes	2.00
254	6.08	2.57	2.66	3.26	0.89	28.23	3.72	105.14	4.000	No	Yes	2.00
255	6.10	2.60	2.65	3.22	0.89	28.54	3.67	104.87	4.000	No	Yes	2.00
256	6.12	2.77	2.62	3.02	0.87	30.33	3.42	103.86	4.000	No	Yes	2.00
257	6.14	2.90	2.60	2.99	0.87	31.76	3.32	105.31	0.189	No	No	1.80
258	6.16	2.83	2.60	2.95	0.87	30.94	3.34	103.35	4.000	No	Yes	2.00
259	6.18	2.60	2.63	2.95	0.88	28.28	3.53	99.94	4.000	No	Yes	2.00
260	6.20	2.40	2.67	3.07	0.89	26.00	3.79	98.61	4.000	No	Yes	2.00
261	6.22	2.33	2.69	3.16	0.90	25.22	3.92	98.92	4.000	No	Yes	2.00
262	6.24	2.37	2.67	2.97	0.89	25.51	3.77	96.23	4.000	No	Yes	2.00
263	6.26	2.43	2.62	2.59	0.87	26.15	3.47	90.81	4.000	No	Yes	2.00
264	6.28	2.43	2.59	2.30	0.86	26.06	3.28	85.59	0.138	No	No	1.31
265	6.30	2.33	2.59	2.11	0.86	24.87	3.24	80.61	0.129	No	No	1.22
266	6.32	2.13	2.62	2.15	0.88	22.63	3.48	78.70	4.000	No	Yes	2.00
267	6.34	1.90	2.68	2.25	0.90	20.02	3.84	76.88	4.000	No	Yes	2.00
268	6.36	1.73	2.74	2.48	0.92	18.16	4.28	77.69	4.000	No	Yes	2.00
269	6.38	1.63	2.78	2.65	0.93	17.03	4.59	78.15	4.000	No	Yes	2.00
270	6.40	1.60	2.77	2.48	0.93	16.61	4.53	75.19	4.000	No	Yes	2.00
271	6.42	1.57	2.76	2.31	0.93	16.19	4.45	72.11	4.000	No	Yes	2.00
272	6.44	1.53	2.75	2.13	0.92	15.77	4.37	68.89	4.000	No	Yes	2.00
273	6.46	1.50	2.74	1.94	0.92	15.36	4.27	65.52	4.000	No	Yes	2.00
274	6.48	1.50	2.76	2.18	0.93	15.35	4.49	68.96	4.000	No	Yes	2.00
275	6.50	1.47	2.81	2.48	0.94	14.97	4.84	72.38	4.000	No	Yes	2.00
276	6.52	1.43	2.87	3.05	0.97	14.60	5.39	78.66	4.000	No	Yes	2.00
277	6.54	1.40	2.84	2.61	0.96	14.18	5.12	72.56	4.000	No	Yes	2.00
278	6.56	1.43	2.77	2.04	0.93	14.48	4.53	65.62	4.000	No	Yes	2.00
279	6.58	1.50	2.68	1.45	0.89	15.12	3.82	57.78	4.000	No	Yes	2.00
280	6.60	1.57	2.65	1.39	0.88	15.81	3.64	57.48	4.000	No	Yes	2.00
281	6.62	1.50	2.68	1.46	0.90	15.06	3.83	57.72	4.000	No	Yes	2.00
282	6.64	1.33	2.75	1.66	0.92	13.25	4.41	58.36	4.000	No	Yes	2.00
283	6.66	1.17	2.84	1.92	0.96	11.43	5.16	58.93	4.000	No	Yes	2.00
284	6.68	1.13	2.82	1.66	0.95	11.03	4.97	54.86	4.000	No	Yes	2.00
285	6.70	1.17	2.80	1.60	0.94	11.36	4.82	54.72	4.000	No	Yes	2.00
286	6.72	1.17	2.80	1.60	0.94	11.34	4.82	54.68	4.000	No	Yes	2.00
287	6.74	1.17	2.81	1.60	0.94	11.31	4.83	54.65	4.000	No	Yes	2.00
288	6.76	1.17	2.81	1.61	0.94	11.28	4.84	54.62	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
289	6.78	1.23	2.77	1.51	0.93	11.97	4.54	54.36	4.000	No	Yes	2.00
290	6.80	1.27	2.79	1.76	0.94	12.31	4.74	58.33	4.000	No	Yes	2.00
291	6.82	1.33	2.76	1.66	0.93	12.99	4.47	58.05	4.000	No	Yes	2.00
292	6.84	1.33	2.76	1.66	0.93	12.96	4.48	58.02	4.000	No	Yes	2.00
293	6.86	1.33	2.76	1.66	0.93	12.94	4.48	57.98	4.000	No	Yes	2.00
294	6.88	1.30	2.85	2.28	0.96	12.58	5.20	65.46	4.000	No	Yes	2.00
295	6.90	1.30	2.93	3.14	0.99	12.58	5.96	75.02	4.000	No	Yes	2.00
296	6.92	1.30	2.99	3.99	1.00	12.56	6.63	83.30	4.000	No	Yes	2.00
297	6.94	1.30	2.99	3.99	1.00	12.53	6.64	83.23	4.000	No	Yes	2.00
298	6.96	1.30	3.01	4.28	1.00	12.50	6.85	85.71	4.000	No	Yes	2.00
299	6.98	1.37	3.03	4.86	1.00	13.19	7.04	92.84	4.000	No	Yes	2.00
300	7.00	1.43	3.02	5.13	1.00	13.87	7.01	97.27	4.000	No	Yes	2.00
301	7.02	1.60	2.95	4.55	1.00	15.61	6.21	97.01	4.000	No	Yes	2.00
302	7.04	1.63	2.91	4.00	0.98	15.92	5.79	92.18	4.000	No	Yes	2.00
303	7.06	1.60	2.91	3.87	0.98	15.53	5.78	89.78	4.000	No	Yes	2.00
304	7.08	1.50	2.95	4.15	1.00	14.45	6.23	89.98	4.000	No	Yes	2.00
305	7.10	1.47	2.93	3.75	0.99	14.06	6.05	85.00	4.000	No	Yes	2.00
306	7.12	1.47	2.94	3.76	0.99	14.03	6.05	84.93	4.000	No	Yes	2.00
307	7.14	1.57	2.87	3.26	0.97	15.03	5.45	81.96	4.000	No	Yes	2.00
308	7.16	1.83	2.79	2.95	0.94	17.77	4.70	83.49	4.000	No	Yes	2.00
309	7.18	2.40	2.62	2.21	0.87	23.58	3.43	80.86	4.000	No	Yes	2.00
310	7.20	3.17	2.44	1.65	0.81	31.42	2.49	78.16	0.124	No	No	1.14
311	7.22	4.00	2.31	1.38	0.76	39.91	1.99	79.26	0.126	No	No	1.16
312	7.24	4.73	2.26	1.45	0.74	47.38	1.84	87.19	0.142	No	No	1.30
313	7.26	5.03	2.28	1.63	0.74	50.40	1.87	94.40	0.158	No	No	1.45
314	7.28	4.97	2.28	1.66	0.75	49.65	1.90	94.33	0.158	No	No	1.44
315	7.30	4.53	2.31	1.59	0.75	45.14	1.97	88.86	0.145	No	No	1.33
316	7.32	3.93	2.37	1.67	0.78	38.95	2.19	85.34	0.138	No	No	1.26
317	7.34	3.30	2.51	2.21	0.83	32.45	2.81	91.06	0.150	No	No	1.37
318	7.36	2.77	2.62	2.66	0.87	26.96	3.45	93.13	4.000	No	Yes	2.00
319	7.38	2.40	2.71	3.10	0.91	23.18	4.09	94.77	4.000	No	Yes	2.00
320	7.40	2.27	2.75	3.29	0.92	21.78	4.38	95.33	4.000	No	Yes	2.00
321	7.42	2.43	2.73	3.34	0.92	23.43	4.22	98.90	4.000	No	Yes	2.00
322	7.44	2.70	2.68	3.13	0.89	26.10	3.82	99.72	4.000	No	Yes	2.00
323	7.46	2.90	2.63	2.90	0.88	28.08	3.52	98.74	4.000	No	Yes	2.00
324	7.48	2.90	2.62	2.78	0.87	28.03	3.45	96.56	4.000	No	Yes	2.00
325	7.50	2.97	2.58	2.48	0.86	28.65	3.21	91.89	0.152	No	No	1.38
326	7.52	2.97	2.55	2.24	0.85	28.59	3.06	87.39	0.142	No	No	1.29
327	7.54	2.90	2.55	2.18	0.85	27.87	3.06	85.30	0.138	No	No	1.25
328	7.56	2.70	2.59	2.22	0.86	25.81	3.24	83.68	0.134	No	No	1.22
329	7.58	2.50	2.60	2.12	0.87	23.75	3.35	79.53	4.000	No	Yes	2.00
330	7.60	2.33	2.63	2.13	0.88	22.03	3.52	77.60	4.000	No	Yes	2.00
331	7.62	2.23	2.64	2.07	0.88	20.99	3.59	75.32	4.000	No	Yes	2.00
332	7.64	2.17	2.66	2.14	0.89	20.28	3.73	75.56	4.000	No	Yes	2.00
333	7.66	2.07	2.67	2.08	0.89	19.24	3.80	73.18	4.000	No	Yes	2.00
334	7.68	2.00	2.73	2.52	0.92	18.54	4.25	78.82	4.000	No	Yes	2.00
335	7.70	1.97	2.75	2.56	0.92	18.17	4.34	78.91	4.000	No	Yes	2.00
336	7.72	2.03	2.76	2.83	0.93	18.80	4.45	83.67	4.000	No	Yes	2.00



:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
337	7.74	2.03	2.76	2.83	0.93	18.77	4.46	83.62	4.000	No	Yes	2.00
338	7.76	2.03	2.81	3.36	0.94	18.73	4.84	90.68	4.000	No	Yes	2.00
339	7.78	2.03	2.82	3.54	0.95	18.69	4.97	92.88	4.000	No	Yes	2.00
340	7.80	2.10	2.80	3.42	0.94	19.32	4.79	92.56	4.000	No	Yes	2.00
341	7.82	2.17	2.74	2.81	0.92	19.94	4.28	85.29	4.000	No	Yes	2.00
342	7.84	2.30	2.68	2.48	0.90	21.23	3.87	82.25	4.000	No	Yes	2.00
343	7.86	2.33	2.71	2.75	0.91	21.52	4.04	86.84	4.000	No	Yes	2.00
344	7.88	2.37	2.78	3.61	0.93	21.79	4.58	99.80	4.000	No	Yes	2.00
345	7.90	2.33	2.82	4.12	0.95	21.42	4.94	105.89	4.000	No	Yes	2.00
346	7.92	2.53	2.77	3.78	0.93	23.35	4.50	105.00	4.000	No	Yes	2.00
347	7.94	2.97	2.63	2.84	0.88	27.58	3.52	97.03	4.000	No	Yes	2.00
348	7.96	3.33	2.52	2.20	0.84	31.15	2.87	89.37	0.146	No	No	1.31
349	7.98	3.30	2.50	2.01	0.83	30.78	2.77	85.17	0.137	No	No	1.23
350	8.00	2.87	2.56	2.09	0.85	26.48	3.10	82.06	0.131	No	No	1.17
351	8.02	2.43	2.65	2.34	0.89	22.19	3.66	81.29	4.000	No	Yes	2.00
352	8.04	2.17	2.69	2.32	0.90	19.56	3.95	77.33	4.000	No	Yes	2.00
353	8.06	2.00	2.73	2.35	0.91	17.90	4.21	75.33	4.000	No	Yes	2.00
354	8.08	1.87	2.79	2.72	0.94	16.56	4.73	78.38	4.000	No	Yes	2.00
355	8.10	1.83	2.84	3.18	0.96	16.19	5.15	83.40	4.000	No	Yes	2.00
356	8.12	1.97	2.86	3.68	0.96	17.44	5.28	92.03	4.000	No	Yes	2.00
357	8.14	2.23	2.80	3.53	0.94	19.99	4.77	95.32	4.000	No	Yes	2.00
358	8.16	2.60	2.72	3.27	0.91	23.50	4.17	97.93	4.000	No	Yes	2.00
359	8.18	2.93	2.65	2.88	0.88	26.70	3.61	96.48	4.000	No	Yes	2.00
360	8.20	3.03	2.60	2.55	0.87	27.63	3.33	91.92	0.152	No	No	1.35
361	8.22	2.80	2.61	2.40	0.87	25.34	3.41	86.33	4.000	No	Yes	2.00
362	8.24	2.40	2.65	2.23	0.89	21.46	3.66	78.50	4.000	No	Yes	2.00
363	8.26	1.97	2.75	2.39	0.92	17.25	4.35	75.03	4.000	No	Yes	2.00
364	8.28	1.70	2.82	2.59	0.95	14.66	5.00	73.22	4.000	No	Yes	2.00
365	8.30	1.50	2.89	2.73	0.98	12.72	5.58	70.97	4.000	No	Yes	2.00
366	8.32	1.43	2.90	2.61	0.98	12.06	5.66	68.24	4.000	No	Yes	2.00
367	8.34	1.40	2.89	2.42	0.98	11.72	5.57	65.32	4.000	No	Yes	2.00
368	8.36	1.37	2.90	2.48	0.98	11.38	5.74	65.33	4.000	No	Yes	2.00
369	8.38	1.33	2.92	2.56	0.99	11.04	5.92	65.33	4.000	No	Yes	2.00
370	8.40	1.33	2.89	2.27	0.98	11.02	5.65	62.23	4.000	No	Yes	2.00
371	8.42	1.37	2.85	1.93	0.96	11.33	5.20	58.88	4.000	No	Yes	2.00
372	8.44	1.43	2.78	1.57	0.93	11.95	4.62	55.21	4.000	No	Yes	2.00
373	8.46	1.40	2.80	1.61	0.94	11.61	4.76	55.26	4.000	No	Yes	2.00
374	8.48	1.33	2.87	1.99	0.97	10.94	5.38	58.84	4.000	No	Yes	2.00
375	8.50	1.17	2.96	2.32	1.00	9.35	6.31	58.97	4.000	No	Yes	2.00
376	8.52	1.03	3.05	2.68	1.00	8.09	7.27	58.83	4.000	No	Yes	2.00
377	8.54	0.93	3.08	2.59	1.00	7.15	7.73	55.25	4.000	No	Yes	2.00
378	8.56	0.90	3.11	2.71	1.00	6.82	8.07	55.08	4.000	No	Yes	2.00
379	8.58	0.90	3.11	2.71	1.00	6.81	8.09	55.03	4.000	No	Yes	2.00
380	8.60	0.97	3.06	2.49	1.00	7.41	7.46	55.23	4.000	No	Yes	2.00
381	8.62	1.13	2.95	2.06	1.00	8.92	6.20	55.36	4.000	No	Yes	2.00
382	8.64	1.40	2.80	1.62	0.94	11.41	4.82	55.00	4.000	No	Yes	2.00
383	8.66	1.53	2.74	1.46	0.92	12.64	4.32	54.64	4.000	No	Yes	2.00
384	8.68	1.50	2.76	1.50	0.93	12.31	4.45	54.70	4.000	No	Yes	2.00

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
385	8.70	1.30	2.86	1.76	0.96	10.41	5.29	55.09	4.000	No	Yes	2.00
386	8.72	1.13	2.95	2.07	1.00	8.83	6.25	55.19	4.000	No	Yes	2.00
387	8.74	1.03	3.02	2.31	1.00	7.90	6.97	55.10	4.000	No	Yes	2.00
388	8.76	1.00	3.04	2.40	1.00	7.58	7.25	55.00	4.000	No	Yes	2.00
389	8.78	0.97	3.07	2.50	1.00	7.26	7.56	54.88	4.000	No	Yes	2.00
390	8.80	0.93	3.10	2.61	1.00	6.95	7.88	54.73	4.000	No	Yes	2.00
391	8.82	0.90	3.12	2.73	1.00	6.63	8.23	54.55	4.000	No	Yes	2.00
392	8.84	0.90	3.12	2.73	1.00	6.61	8.24	54.50	4.000	No	Yes	2.00
393	8.86	0.90	3.13	2.73	1.00	6.60	8.25	54.46	4.000	No	Yes	2.00
394	8.88	0.90	3.13	2.73	1.00	6.59	8.26	54.42	4.000	No	Yes	2.00
395	8.90	0.90	3.13	2.74	1.00	6.57	8.28	54.38	4.000	No	Yes	2.00
396	8.92	0.90	3.13	2.74	1.00	6.56	8.29	54.34	4.000	No	Yes	2.00
397	8.94	0.90	3.13	2.74	1.00	6.54	8.30	54.30	4.000	No	Yes	2.00
398	8.96	0.90	3.13	2.74	1.00	6.53	8.31	54.26	4.000	No	Yes	2.00
399	8.98	0.90	3.13	2.74	1.00	6.51	8.32	54.22	4.000	No	Yes	2.00
400	9.00	0.90	3.13	2.74	1.00	6.50	8.34	54.18	4.000	No	Yes	2.00
401	9.02	0.93	3.11	2.62	1.00	6.78	8.00	54.30	4.000	No	Yes	2.00
402	9.04	0.93	3.14	3.06	1.00	6.77	8.48	57.38	4.000	No	Yes	2.00
403	9.06	0.93	3.18	3.50	1.00	6.75	8.91	60.22	4.000	No	Yes	2.00
404	9.08	0.90	3.20	3.67	1.00	6.44	9.30	59.93	4.000	No	Yes	2.00
405	9.10	0.90	3.17	3.21	1.00	6.43	8.87	57.06	4.000	No	Yes	2.00
406	9.12	0.90	3.14	2.75	1.00	6.42	8.41	53.95	4.000	No	Yes	2.00
407	9.14	0.90	3.14	2.75	1.00	6.40	8.42	53.91	4.000	No	Yes	2.00
408	9.16	0.90	3.10	2.30	1.00	6.39	7.90	50.51	4.000	No	Yes	2.00
409	9.18	0.83	3.20	3.04	1.00	5.79	9.22	53.39	4.000	No	Yes	2.00
410	9.20	0.77	3.33	4.51	1.00	5.19	11.21	58.20	4.000	No	Yes	2.00
411	9.22	0.77	3.41	6.20	1.00	5.18	12.53	64.94	4.000	No	Yes	2.00
412	9.24	0.83	3.37	6.08	1.00	5.75	11.84	68.10	4.000	No	Yes	2.00
413	9.26	0.97	3.26	5.06	1.00	6.90	10.10	69.75	4.000	No	Yes	2.00
414	9.28	1.10	3.21	5.05	1.00	8.05	9.32	75.08	4.000	No	Yes	2.00
415	9.30	1.33	3.09	4.32	1.00	10.07	7.77	78.19	4.000	No	Yes	2.00
416	9.32	1.47	3.00	3.62	1.00	11.21	6.79	76.04	4.000	No	Yes	2.00
417	9.34	1.67	2.90	2.91	0.98	12.96	5.67	73.47	4.000	No	Yes	2.00
418	9.36	1.87	2.80	2.37	0.94	14.75	4.78	70.52	4.000	No	Yes	2.00
419	9.38	2.00	2.75	2.20	0.92	15.93	4.40	70.12	4.000	No	Yes	2.00
420	9.40	1.87	2.73	1.78	0.92	14.76	4.22	62.31	4.000	No	Yes	2.00
421	9.42	1.67	2.75	1.57	0.92	12.97	4.37	56.69	4.000	No	Yes	2.00
422	9.44	1.83	2.65	1.21	0.89	14.48	3.65	52.93	4.000	No	Yes	2.00
423	9.46	2.40	2.44	0.75	0.80	19.66	2.47	48.51	0.090	No	No	0.77
424	9.48	3.07	2.28	0.58	0.74	25.76	1.89	48.66	0.091	No	No	0.77
425	9.50	3.47	2.20	0.51	0.72	29.42	1.68	49.39	0.091	No	No	0.77
426	9.52	3.50	2.27	0.70	0.74	29.57	1.84	54.54	0.095	No	No	0.81
427	9.54	3.33	2.33	0.85	0.76	27.95	2.04	56.90	0.097	No	No	0.82
428	9.56	3.13	2.37	0.90	0.78	26.08	2.18	56.87	0.097	No	No	0.82
429	9.58	3.07	2.35	0.81	0.77	25.48	2.13	54.18	0.095	No	No	0.80
430	9.60	3.17	2.26	0.56	0.74	26.47	1.84	48.67	0.091	No	No	0.77
431	9.62	3.30	2.24	0.53	0.73	27.66	1.77	48.88	0.091	No	No	0.77
432	9.64	3.43	2.21	0.51	0.72	28.85	1.70	49.14	0.091	No	No	0.77

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
433	9.66	3.43	2.28	0.72	0.74	28.69	1.89	54.29	0.095	No	No	0.80
434	9.68	3.37	2.35	0.94	0.77	27.95	2.12	59.22	0.099	No	No	0.84
435	9.70	3.13	2.44	1.24	0.81	25.71	2.50	64.26	0.105	No	No	0.88
436	9.72	2.77	2.57	1.68	0.85	22.30	3.13	69.80	0.112	No	No	0.94
437	9.74	2.43	2.65	1.93	0.89	19.28	3.67	70.71	4.000	No	Yes	2.00
438	9.76	2.13	2.74	2.22	0.92	16.58	4.31	71.55	4.000	No	Yes	2.00
439	9.78	2.03	2.76	2.17	0.92	15.69	4.42	69.32	4.000	No	Yes	2.00
440	9.80	2.07	2.74	2.13	0.92	15.96	4.34	69.19	4.000	No	Yes	2.00
441	9.82	2.47	2.60	1.61	0.87	19.51	3.36	65.50	4.000	No	Yes	2.00
442	9.84	3.00	2.43	1.07	0.80	24.33	2.43	59.23	0.099	No	No	0.84
443	9.86	3.53	2.27	0.70	0.74	29.23	1.85	54.15	0.095	No	No	0.80
444	9.88	3.90	2.14	0.45	0.69	32.68	1.00	32.68	0.077	No	No	0.65
445	9.90	4.10	2.11	0.43	0.68	34.48	1.00	34.48	0.079	No	No	0.66
446	9.92	4.20	2.10	0.42	0.67	35.36	1.00	35.36	0.079	No	No	0.67
447	9.94	4.20	2.10	0.42	0.67	35.32	1.00	35.32	0.079	No	No	0.67
448	9.96	4.20	2.06	0.33	0.66	35.37	1.00	35.37	0.079	No	No	0.67
449	9.98	4.17	2.02	0.25	0.65	35.14	1.00	35.14	0.079	No	No	0.67
450	10.00	4.07	2.04	0.26	0.65	34.18	1.00	34.18	0.078	No	No	0.66
451	10.02	3.90	2.06	0.27	0.66	32.61	1.00	32.61	0.077	No	No	0.65
452	10.04	3.73	2.09	0.28	0.67	31.05	1.00	31.05	0.076	No	No	0.64
453	10.06	3.73	2.09	0.28	0.67	31.02	1.00	31.02	0.076	No	No	0.64
454	10.08	3.90	2.06	0.27	0.66	32.50	1.00	32.50	0.077	No	No	0.65
455	10.10	4.17	2.02	0.25	0.65	34.91	1.00	34.91	0.079	No	No	0.66
456	10.12	4.33	2.00	0.24	0.64	36.39	1.00	36.39	0.080	No	No	0.67
457	10.14	4.40	1.99	0.24	0.63	36.97	1.00	36.97	0.081	No	No	0.68
458	10.16	4.33	2.00	0.24	0.64	36.32	1.00	36.32	0.080	No	No	0.67
459	10.18	4.23	2.02	0.25	0.64	35.36	1.00	35.36	0.079	No	No	0.67
460	10.20	4.13	2.07	0.34	0.67	34.29	1.00	34.29	0.079	No	No	0.66
461	10.22	4.03	2.13	0.43	0.69	33.24	1.00	33.24	0.078	No	No	0.65
462	10.24	3.90	2.15	0.45	0.69	31.99	1.00	31.99	0.077	No	No	0.64
463	10.26	3.70	2.14	0.38	0.69	30.25	1.00	30.25	0.075	No	No	0.63
464	10.28	3.53	2.13	0.30	0.69	28.82	1.00	28.82	0.074	No	No	0.62
465	10.30	3.47	2.14	0.31	0.69	28.18	1.00	28.18	0.073	No	No	0.61
466	10.32	3.50	2.13	0.30	0.69	28.45	1.00	28.45	0.074	No	No	0.62
467	10.34	3.57	2.12	0.30	0.68	29.02	1.00	29.02	0.074	No	No	0.62
468	10.36	3.60	2.16	0.39	0.70	29.17	1.00	29.17	0.074	No	No	0.62
469	10.38	3.57	2.21	0.49	0.72	28.74	1.00	28.74	0.074	No	No	0.62
470	10.40	3.53	2.31	0.80	0.76	28.18	1.98	55.93	0.096	No	No	0.80
471	10.42	3.53	2.41	1.20	0.79	27.92	2.33	65.14	0.106	No	No	0.88
472	10.44	3.53	2.48	1.60	0.82	27.71	2.66	73.62	0.117	No	No	0.98
473	10.46	3.47	2.52	1.84	0.84	27.02	2.88	77.76	0.124	No	No	1.03
474	10.48	3.33	2.55	1.91	0.85	25.82	3.02	78.04	0.124	No	No	1.03
475	10.50	3.20	2.54	1.78	0.84	24.70	3.01	74.21	0.118	No	No	0.98
476	10.52	3.13	2.53	1.59	0.84	24.16	2.90	70.03	0.112	No	No	0.93
477	10.54	3.10	2.49	1.38	0.83	23.91	2.74	65.54	0.106	No	No	0.88
478	10.56	3.13	2.51	1.48	0.83	24.13	2.81	67.74	0.109	No	No	0.91
479	10.58	3.23	2.51	1.54	0.83	24.92	2.80	69.74	0.112	No	No	0.93
480	10.60	3.33	2.50	1.60	0.83	25.71	2.79	71.66	0.114	No	No	0.95

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

Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
481	10.62	3.40	2.51	1.67	0.83	26.22	2.81	73.59	0.117	No	No	0.97
482	10.64	3.40	2.49	1.56	0.82	26.22	2.73	71.48	0.114	No	No	0.95
483	10.66	3.43	2.45	1.34	0.81	26.56	2.53	67.11	0.108	No	No	0.90
484	10.68	3.53	2.37	1.00	0.78	27.56	2.19	60.29	0.100	No	No	0.83
485	10.70	3.77	2.37	1.12	0.78	29.45	2.19	64.62	0.105	No	No	0.87
486	10.72	4.10	2.35	1.20	0.77	32.21	2.13	68.59	0.110	No	No	0.91
487	10.74	4.37	2.36	1.36	0.77	34.35	2.16	74.19	0.118	No	No	0.98
488	10.76	4.47	2.35	1.33	0.77	35.18	2.11	74.13	0.118	No	No	0.98
489	10.78	4.40	2.37	1.43	0.78	34.51	2.20	75.93	0.121	No	No	1.00
490	10.80	4.27	2.33	1.15	0.76	33.51	2.04	68.47	0.110	No	No	0.91
491	10.82	4.60	2.22	0.83	0.72	36.59	1.72	63.04	0.103	No	No	0.86
492	10.84	5.80	1.98	0.42	0.63	47.65	1.00	47.65	0.090	No	No	0.74
493	10.86	8.03	1.75	0.26	0.54	68.09	1.00	68.09	0.109	No	No	0.91
494	10.88	10.67	1.63	0.25	0.50	91.95	1.00	91.95	0.152	No	No	1.26
495	10.90	12.80	1.63	0.37	0.50	110.62	1.00	110.62	0.206	No	No	1.71
496	10.92	14.33	1.62	0.42	0.50	123.99	1.00	123.99	0.257	No	No	2.00
497	10.94	15.23	1.59	0.42	0.50	131.80	1.00	131.80	0.293	No	No	2.00
498	10.96	15.47	1.62	0.48	0.50	133.75	1.00	133.75	0.303	No	No	2.00
499	10.98	15.37	1.70	0.66	0.52	131.92	1.04	137.23	0.320	No	No	2.00
500	11.00	14.60	1.81	0.90	0.57	123.80	1.11	138.00	0.324	No	No	2.00
501	11.02	13.27	1.89	1.07	0.60	111.28	1.18	131.74	0.293	No	No	2.00
502	11.04	11.23	2.04	1.42	0.65	92.52	1.35	124.90	0.261	No	No	2.00
503	11.06	9.13	2.16	1.68	0.70	73.89	1.57	115.90	0.225	No	No	1.86
504	11.08	7.83	2.24	1.84	0.73	62.54	1.76	110.21	0.204	No	No	1.69
505	11.10	7.00	2.27	1.82	0.74	55.43	1.87	103.44	0.183	No	No	1.51
506	11.12	7.33	2.23	1.64	0.72	58.37	1.74	101.33	0.177	No	No	1.46
507	11.14	8.13	2.17	1.51	0.70	65.27	1.59	103.93	0.184	No	No	1.53
508	11.16	10.20	2.03	1.23	0.65	83.43	1.34	111.83	0.210	No	No	1.74
509	11.18	12.30	1.95	1.16	0.62	101.78	1.24	125.73	0.265	No	No	2.00
510	11.20	14.70	1.84	0.99	0.58	123.29	1.14	140.00	0.335	No	No	2.00
511	11.22	15.90	1.77	0.85	0.55	134.42	1.08	145.57	0.367	No	No	2.00
512	11.24	17.20	1.70	0.75	0.52	146.47	1.04	152.15	0.408	No	No	2.00
513	11.26	17.70	1.68	0.72	0.52	150.96	1.03	154.96	0.426	No	No	2.00
514	11.28	18.97	1.63	0.66	0.50	162.55	1.00	162.55	0.479	No	No	2.00
515	11.30	20.13	1.53	0.49	0.50	172.54	1.00	172.54	0.558	No	No	2.00
516	11.32	22.03	1.41	0.34	0.50	188.86	1.00	188.86	0.706	No	No	2.00
517	11.34	22.70	1.43	0.39	0.50	194.49	1.00	194.49	0.764	No	No	2.00
518	11.36	22.43	1.57	0.65	0.50	192.05	1.00	192.05	0.739	No	No	2.00
519	11.38	21.73	1.72	1.01	0.53	184.29	1.05	193.32	0.752	No	No	2.00
520	11.40	21.23	1.73	1.03	0.53	179.57	1.06	190.20	0.720	No	No	2.00
521	11.42	20.77	1.70	0.92	0.52	175.98	1.04	183.20	0.652	No	No	2.00
522	11.44	20.60	1.60	0.64	0.50	175.71	1.00	175.71	0.585	No	No	2.00
523	11.46	20.90	1.57	0.58	0.50	178.17	1.00	178.17	0.606	No	No	2.00
524	11.48	21.30	1.50	0.46	0.50	181.49	1.00	181.49	0.636	No	No	2.00
525	11.50	20.17	1.50	0.43	0.50	171.61	1.00	171.61	0.550	No	No	2.00
526	11.52	18.93	1.51	0.41	0.50	160.89	1.00	160.89	0.467	No	No	2.00
527	11.54	18.40	1.53	0.42	0.50	156.20	1.00	156.20	0.434	No	No	2.00
528	11.56	18.77	1.54	0.45	0.50	159.23	1.00	159.23	0.455	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)												
Point ID	Depth (m)	q <sub>t</sub> (MPa)	I <sub>c</sub>	Fr (%)	n	Q <sub>tn</sub>	K <sub>c</sub>	Q <sub>tn,cs</sub>	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
529	11.58	19.30	1.53	0.45	0.50	163.70	1.00	163.70	0.488	No	No	2.00
530	11.60	19.63	1.52	0.45	0.50	166.44	1.00	166.44	0.509	No	No	2.00
531	11.62	20.10	1.52	0.45	0.50	170.33	1.00	170.33	0.540	No	No	2.00
532	11.64	21.13	1.49	0.43	0.50	179.06	1.00	179.06	0.614	No	No	2.00
533	11.66	21.47	1.44	0.36	0.50	181.78	1.00	181.78	0.639	No	No	2.00
534	11.68	21.40	1.40	0.30	0.50	181.09	1.00	181.09	0.632	No	No	2.00
535	11.70	20.37	1.45	0.35	0.50	172.13	1.00	172.13	0.554	No	No	2.00
536	11.72	19.13	1.57	0.51	0.50	161.48	1.00	161.48	0.472	No	No	2.00
537	11.74	17.77	1.63	0.59	0.50	149.71	1.00	149.71	0.392	No	No	2.00
538	11.76	16.47	1.65	0.57	0.50	138.34	1.00	138.89	0.329	No	No	2.00
539	11.78	15.47	1.69	0.61	0.52	129.09	1.03	133.23	0.300	No	No	2.00
540	11.80	15.33	1.73	0.71	0.54	127.20	1.06	134.94	0.308	No	No	2.00
541	11.82	15.60	1.75	0.76	0.54	129.12	1.07	138.23	0.326	No	No	2.00
542	11.84	16.13	1.70	0.67	0.52	134.28	1.04	139.52	0.333	No	No	2.00
543	11.86	17.03	1.66	0.61	0.51	142.54	1.01	143.84	0.357	No	No	2.00
544	11.88	18.23	1.62	0.59	0.50	152.95	1.00	152.95	0.413	No	No	2.00
545	11.90	19.50	1.59	0.57	0.50	163.60	1.00	163.60	0.487	No	No	2.00
546	11.92	20.90	1.54	0.52	0.50	175.37	1.00	175.37	0.582	No	No	2.00
547	11.94	22.20	1.46	0.41	0.50	186.27	1.00	186.27	0.681	No	No	2.00
548	11.96	23.73	1.35	0.28	0.50	199.13	1.00	199.13	0.814	No	No	2.00
549	11.98	24.73	1.52	0.60	0.50	207.46	1.00	207.46	4.000	No	No	2.00
550	12.00	25.50	1.55	0.67	0.50	213.81	1.00	213.81	4.000	No	No	2.00
551	12.02	25.50	1.58	0.74	0.50	213.67	1.00	213.67	4.000	No	No	2.00
552	12.04	25.07	1.51	0.58	0.50	209.86	1.00	209.86	4.000	No	No	2.00
553	12.06	25.23	1.56	0.68	0.50	211.13	1.00	211.13	4.000	No	No	2.00
554	12.08	25.73	1.60	0.81	0.50	215.20	1.00	215.20	4.000	No	No	2.00
555	12.10	23.80	1.71	1.05	0.53	197.00	1.04	205.58	4.000	No	No	2.00
556	12.12	17.90	1.87	1.28	0.59	144.59	1.16	167.42	0.516	No	No	2.00
557	12.14	11.47	2.18	2.17	0.71	88.19	1.61	142.41	0.349	No	No	2.00
558	12.16	7.57	2.37	2.54	0.78	56.10	2.18	122.54	0.251	No	No	2.00
559	12.18	7.63	2.37	2.61	0.78	56.51	2.21	124.62	0.260	No	No	2.00
560	12.20	7.47	2.37	2.53	0.78	55.19	2.20	121.37	0.246	No	No	2.00
561	12.22	6.30	2.50	3.13	0.83	45.49	2.75	124.89	0.261	No	No	2.00
562	12.24	4.00	2.80	4.95	0.94	27.11	4.75	128.71	4.000	No	Yes	2.00
563	12.26	5.37	2.58	3.44	0.86	37.97	3.21	121.91	0.249	No	No	2.00
564	12.28	9.53	2.22	2.04	0.72	72.09	1.72	124.31	0.259	No	No	2.00
565	12.30	15.77	1.85	1.07	0.58	126.44	1.15	145.15	0.364	No	No	2.00
566	12.32	20.17	1.68	0.80	0.52	165.95	1.03	170.14	0.538	No	No	2.00
567	12.34	23.37	1.55	0.61	0.50	193.55	1.00	193.55	0.754	No	No	2.00
568	12.36	25.13	1.45	0.46	0.50	208.20	1.00	208.20	4.000	No	No	2.00
569	12.38	26.27	1.34	0.31	0.50	217.53	1.00	217.53	4.000	No	No	2.00
570	12.40	27.70	1.20	0.17	0.50	229.36	1.00	229.36	4.000	No	No	2.00
571	12.42	30.40	1.19	0.20	0.50	251.74	1.00	251.74	4.000	No	No	2.00
572	12.44	32.37	1.15	0.19	0.50	267.98	1.00	267.98	4.000	No	No	2.00
573	12.46	32.67	1.15	0.19	0.50	270.31	1.00	270.31	4.000	No	No	2.00
574	12.48	32.30	1.15	0.19	0.50	267.08	1.00	267.08	4.000	No	No	2.00
575	12.50	34.23	1.12	0.18	0.50	283.00	1.00	283.00	4.000	No	No	2.00
576	12.52	37.00	1.08	0.16	0.50	305.83	1.00	305.83	4.000	No	No	2.00

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

Point ID	Depth (m)	$q_t$ (MPa)	$I_c$	Fr (%)	n	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	CRR <sub>7.5</sub>	Belongs to trans. layer	Clay-like behaviour	FS
577	12.54	43.17	0.99	0.14	0.50	356.90	1.00	356.90	4.000	No	No	2.00

**Abbreviations**

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

**:: Liquefaction Potential Index calculation data ::**

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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
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	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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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
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	1.96	0.00	7.62	0.02	0.00
4.78	1.92	0.00	7.61	0.02	0.00	4.80	1.83	0.00	7.60	0.02	0.00
4.82	1.55	0.00	7.59	0.02	0.00	4.84	1.34	0.00	7.58	0.02	0.00



:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
4.86	1.36	0.00	7.57	0.02	0.00	4.88	1.56	0.00	7.56	0.02	0.00
4.90	1.83	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	1.97	0.00	7.47	0.02	0.00	5.08	1.73	0.00	7.46	0.02	0.00
5.10	1.63	0.00	7.45	0.02	0.00	5.12	1.52	0.00	7.44	0.02	0.00
5.14	1.42	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	1.16	0.00	7.36	0.02	0.00
5.30	1.12	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	1.56	0.00	7.04	0.02	0.00
5.94	1.46	0.00	7.03	0.02	0.00	5.96	1.45	0.00	7.02	0.02	0.00
5.98	1.50	0.00	7.01	0.02	0.00	6.00	1.51	0.00	7.00	0.02	0.00
6.02	1.53	0.00	6.99	0.02	0.00	6.04	1.62	0.00	6.98	0.02	0.00
6.06	2.00	0.00	6.97	0.02	0.00	6.08	2.00	0.00	6.96	0.02	0.00
6.10	2.00	0.00	6.95	0.02	0.00	6.12	2.00	0.00	6.94	0.02	0.00
6.14	1.80	0.00	6.93	0.02	0.00	6.16	2.00	0.00	6.92	0.02	0.00
6.18	2.00	0.00	6.91	0.02	0.00	6.20	2.00	0.00	6.90	0.02	0.00
6.22	2.00	0.00	6.89	0.02	0.00	6.24	2.00	0.00	6.88	0.02	0.00
6.26	2.00	0.00	6.87	0.02	0.00	6.28	1.31	0.00	6.86	0.02	0.00
6.30	1.22	0.00	6.85	0.02	0.00	6.32	2.00	0.00	6.84	0.02	0.00
6.34	2.00	0.00	6.83	0.02	0.00	6.36	2.00	0.00	6.82	0.02	0.00
6.38	2.00	0.00	6.81	0.02	0.00	6.40	2.00	0.00	6.80	0.02	0.00
6.42	2.00	0.00	6.79	0.02	0.00	6.44	2.00	0.00	6.78	0.02	0.00
6.46	2.00	0.00	6.77	0.02	0.00	6.48	2.00	0.00	6.76	0.02	0.00
6.50	2.00	0.00	6.75	0.02	0.00	6.52	2.00	0.00	6.74	0.02	0.00
6.54	2.00	0.00	6.73	0.02	0.00	6.56	2.00	0.00	6.72	0.02	0.00
6.58	2.00	0.00	6.71	0.02	0.00	6.60	2.00	0.00	6.70	0.02	0.00
6.62	2.00	0.00	6.69	0.02	0.00	6.64	2.00	0.00	6.68	0.02	0.00
6.66	2.00	0.00	6.67	0.02	0.00	6.68	2.00	0.00	6.66	0.02	0.00
6.70	2.00	0.00	6.65	0.02	0.00	6.72	2.00	0.00	6.64	0.02	0.00
6.74	2.00	0.00	6.63	0.02	0.00	6.76	2.00	0.00	6.62	0.02	0.00

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	1.14	0.00	6.40	0.02	0.00
7.22	1.16	0.00	6.39	0.02	0.00	7.24	1.30	0.00	6.38	0.02	0.00
7.26	1.45	0.00	6.37	0.02	0.00	7.28	1.44	0.00	6.36	0.02	0.00
7.30	1.33	0.00	6.35	0.02	0.00	7.32	1.26	0.00	6.34	0.02	0.00
7.34	1.37	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	1.38	0.00	6.25	0.02	0.00	7.52	1.29	0.00	6.24	0.02	0.00
7.54	1.25	0.00	6.23	0.02	0.00	7.56	1.22	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	1.31	0.00	6.02	0.02	0.00
7.98	1.23	0.00	6.01	0.02	0.00	8.00	1.17	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	1.35	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

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
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	0.77	0.23	5.27	0.02	0.02	9.48	0.77	0.23	5.26	0.02	0.02
9.50	0.77	0.23	5.25	0.02	0.02	9.52	0.81	0.19	5.24	0.02	0.02
9.54	0.82	0.18	5.23	0.02	0.02	9.56	0.82	0.18	5.22	0.02	0.02
9.58	0.80	0.20	5.21	0.02	0.02	9.60	0.77	0.23	5.20	0.02	0.02
9.62	0.77	0.23	5.19	0.02	0.02	9.64	0.77	0.23	5.18	0.02	0.02
9.66	0.80	0.20	5.17	0.02	0.02	9.68	0.84	0.16	5.16	0.02	0.02
9.70	0.88	0.12	5.15	0.02	0.01	9.72	0.94	0.06	5.14	0.02	0.01
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	0.84	0.16	5.08	0.02	0.02
9.86	0.80	0.20	5.07	0.02	0.02	9.88	0.65	0.35	5.06	0.02	0.04
9.90	0.66	0.34	5.05	0.02	0.03	9.92	0.67	0.33	5.04	0.02	0.03
9.94	0.67	0.33	5.03	0.02	0.03	9.96	0.67	0.33	5.02	0.02	0.03
9.98	0.67	0.33	5.01	0.02	0.03	10.00	0.66	0.34	5.00	0.02	0.03
10.02	0.65	0.35	4.99	0.02	0.04	10.04	0.64	0.36	4.98	0.02	0.04
10.06	0.64	0.36	4.97	0.02	0.04	10.08	0.65	0.35	4.96	0.02	0.04
10.10	0.66	0.34	4.95	0.02	0.03	10.12	0.67	0.33	4.94	0.02	0.03
10.14	0.68	0.32	4.93	0.02	0.03	10.16	0.67	0.33	4.92	0.02	0.03
10.18	0.67	0.33	4.91	0.02	0.03	10.20	0.66	0.34	4.90	0.02	0.03
10.22	0.65	0.35	4.89	0.02	0.03	10.24	0.64	0.36	4.88	0.02	0.04
10.26	0.63	0.37	4.87	0.02	0.04	10.28	0.62	0.38	4.86	0.02	0.04
10.30	0.61	0.39	4.85	0.02	0.04	10.32	0.62	0.38	4.84	0.02	0.04
10.34	0.62	0.38	4.83	0.02	0.04	10.36	0.62	0.38	4.82	0.02	0.04
10.38	0.62	0.38	4.81	0.02	0.04	10.40	0.80	0.20	4.80	0.02	0.02
10.42	0.88	0.12	4.79	0.02	0.01	10.44	0.98	0.02	4.78	0.02	0.00
10.46	1.03	0.00	4.77	0.02	0.00	10.48	1.03	0.00	4.76	0.02	0.00
10.50	0.98	0.02	4.75	0.02	0.00	10.52	0.93	0.07	4.74	0.02	0.01
10.54	0.88	0.12	4.73	0.02	0.01	10.56	0.91	0.09	4.72	0.02	0.01
10.58	0.93	0.07	4.71	0.02	0.01	10.60	0.95	0.05	4.70	0.02	0.00

:: Liquefaction Potential Index calculation data :: (continued)											
Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
10.62	0.97	0.03	4.69	0.02	0.00	10.64	0.95	0.05	4.68	0.02	0.00
10.66	0.90	0.10	4.67	0.02	0.01	10.68	0.83	0.17	4.66	0.02	0.02
10.70	0.87	0.13	4.65	0.02	0.01	10.72	0.91	0.09	4.64	0.02	0.01
10.74	0.98	0.02	4.63	0.02	0.00	10.76	0.98	0.02	4.62	0.02	0.00
10.78	1.00	0.00	4.61	0.02	0.00	10.80	0.91	0.09	4.60	0.02	0.01
10.82	0.86	0.14	4.59	0.02	0.01	10.84	0.74	0.26	4.58	0.02	0.02
10.86	0.91	0.09	4.57	0.02	0.01	10.88	1.26	0.00	4.56	0.02	0.00
10.90	1.71	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	1.86	0.00	4.47	0.02	0.00	11.08	1.69	0.00	4.46	0.02	0.00
11.10	1.51	0.00	4.45	0.02	0.00	11.12	1.46	0.00	4.44	0.02	0.00
11.14	1.53	0.00	4.43	0.02	0.00	11.16	1.74	0.00	4.42	0.02	0.00
11.18	2.00	0.00	4.41	0.02	0.00	11.20	2.00	0.00	4.40	0.02	0.00
11.22	2.00	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	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	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	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	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

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

Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI	Depth (m)	FS	F <sub>L</sub>	w <sub>z</sub>	d <sub>z</sub>	LPI
12.54	2.00	0.00	3.73	0.02	0.00						

**Overall liquefaction potential: 1.40**

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

**Abbreviations**

FS: Calculated factor of safety for test point  
 F<sub>L</sub>: 1 - FS  
 w<sub>z</sub>: Function value of the extend of soil liquefaction according to depth  
 d<sub>z</sub>: Layer thickness (m)  
 LPI: Liquefaction potential index value for test point

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
1.02	1.83	30.84	5.01	154.53	2.83	6.69	6.69
1.04	1.90	31.96	5.12	163.77	2.84	6.80	6.80
1.06	1.83	30.82	5.40	166.55	2.87	6.43	6.43
1.08	1.77	29.68	5.70	169.25	2.90	6.08	6.08
1.10	1.70	28.54	5.86	167.29	2.92	5.74	5.74
1.12	1.70	28.54	5.78	164.98	2.91	5.63	5.63
1.14	1.70	28.53	5.86	167.29	2.92	5.53	5.53
1.16	1.70	28.53	5.94	169.58	2.92	5.44	5.44
1.18	1.67	27.95	6.15	171.98	2.95	5.24	5.24
1.20	1.63	27.38	6.20	169.86	2.95	5.05	5.05
1.22	1.60	26.81	6.26	167.72	2.95	4.86	4.86
1.24	1.60	26.80	6.17	165.43	2.95	4.78	4.78
1.26	1.63	27.36	6.04	165.30	2.93	4.80	4.80
1.28	1.60	26.79	6.09	163.12	2.94	4.63	4.63
1.30	1.57	26.21	6.32	165.56	2.96	4.46	4.46
1.32	1.50	25.07	6.61	165.74	2.99	4.20	4.20
1.34	1.50	25.07	6.61	165.74	2.99	4.14	4.14
1.36	1.50	25.06	6.52	163.46	2.98	4.07	4.07
1.38	1.50	25.05	6.52	163.46	2.98	4.01	4.01
1.40	1.50	25.05	6.53	163.46	2.98	3.96	3.96
1.42	1.53	25.61	6.20	158.69	2.95	3.99	3.99
1.44	1.47	24.47	6.20	151.69	2.95	3.76	3.76
1.46	1.37	22.76	6.46	147.06	2.97	3.45	3.45
1.48	1.23	20.49	7.19	147.23	3.04	3.06	3.06
1.50	1.17	19.35	7.60	147.14	3.07	2.85	2.85
1.52	1.07	17.64	8.18	144.37	3.12	2.57	2.57
1.54	1.00	16.50	8.72	143.91	3.16	2.37	2.37
1.56	1.03	17.06	8.17	139.37	3.12	2.42	2.42
1.58	1.07	17.62	8.06	141.97	3.11	2.47	2.47
1.60	1.07	17.62	7.92	139.52	3.10	2.43	2.43
1.62	1.00	16.48	8.73	143.90	3.16	2.25	2.25
1.64	1.00	16.47	8.74	143.89	3.16	2.22	2.22
1.66	1.00	16.46	8.74	143.89	3.16	2.19	2.19
1.68	0.97	15.89	8.74	138.90	3.16	2.09	2.09
1.70	1.00	16.45	8.31	136.71	3.13	2.14	2.14
1.72	1.00	16.44	8.16	134.21	3.12	2.11	2.11
1.74	1.03	17.00	7.90	134.36	3.10	2.16	2.16
1.76	0.97	15.86	8.45	134.00	3.14	1.99	1.99
1.78	0.97	15.86	8.45	134.00	3.14	1.97	1.97
1.80	0.97	15.85	8.45	134.00	3.14	1.95	1.95
1.82	1.00	16.41	8.02	131.65	3.11	1.99	1.99
1.84	1.00	16.41	8.33	136.69	3.13	1.97	1.97
1.86	1.03	16.97	8.07	136.87	3.11	2.02	2.02
1.88	1.07	17.53	7.96	139.50	3.10	2.06	2.06
1.90	1.07	17.52	7.67	134.46	3.08	2.04	2.04
1.92	1.10	18.08	7.72	139.62	3.08	2.08	2.08
1.94	1.17	19.21	7.28	139.74	3.05	2.19	2.19
1.96	1.23	20.33	7.12	144.77	3.03	2.29	2.29

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
1.98	1.20	19.76	7.33	144.76	3.05	2.21	2.21
2.00	1.20	19.75	7.45	147.19	3.06	2.18	2.18
2.02	1.23	20.31	7.13	144.77	3.03	2.22	2.22
2.04	1.33	22.01	6.57	144.66	2.98	2.39	2.39
2.06	1.30	21.43	6.63	142.19	2.99	2.30	2.30
2.08	1.27	20.86	6.82	142.25	3.01	2.22	2.22
2.10	1.20	19.72	6.96	137.17	3.02	2.08	2.08
2.12	1.17	19.15	7.03	134.57	3.03	2.00	2.00
2.14	1.13	18.58	7.10	131.92	3.03	1.92	1.92
2.16	1.10	18.00	7.33	131.90	3.05	1.84	1.84
2.18	1.07	17.43	7.56	131.85	3.07	1.77	1.77
2.20	1.07	17.42	7.57	131.85	3.07	1.75	1.75
2.22	1.07	17.42	7.72	134.44	3.08	1.73	1.73
2.24	1.10	17.98	7.34	131.90	3.05	1.77	1.77
2.26	1.07	17.40	7.58	131.85	3.07	1.70	1.70
2.28	1.07	17.40	7.43	129.19	3.06	1.69	1.69
2.30	1.07	17.39	7.58	131.84	3.07	1.67	1.67
2.32	1.10	17.95	7.35	131.90	3.05	1.71	1.71
2.34	1.10	17.94	7.20	129.22	3.04	1.70	1.70
2.36	1.03	16.80	7.52	126.42	3.07	1.57	1.57
2.38	1.03	16.80	7.02	117.91	3.02	1.56	1.56
2.40	1.00	16.22	6.70	108.73	3.00	1.49	1.49
2.42	1.00	16.22	6.08	98.60	2.94	1.48	1.48
2.44	0.93	15.08	6.55	98.79	2.98	1.37	1.37
2.46	0.87	13.94	7.33	102.23	3.05	1.25	1.25
2.48	0.90	14.50	7.50	108.71	3.07	1.29	1.29
2.50	0.93	15.06	7.43	111.85	3.06	1.33	1.33
2.52	1.03	16.75	6.86	114.92	3.01	1.47	1.47
2.54	1.07	17.31	6.81	117.89	3.01	1.51	1.51
2.56	1.10	17.87	6.76	120.79	3.00	1.54	1.54
2.58	1.10	17.87	7.08	126.48	3.03	1.53	1.53
2.60	1.13	18.43	6.86	126.46	3.01	1.57	1.57
2.62	1.13	18.42	6.71	123.63	3.00	1.55	1.55
2.64	1.13	18.41	6.40	117.76	2.97	1.54	1.54
2.66	1.10	17.84	6.44	114.81	2.97	1.48	1.48
2.68	1.10	17.83	6.44	114.81	2.97	1.47	1.47
2.70	1.10	17.83	6.44	114.81	2.97	1.46	1.46
2.72	1.07	17.25	6.66	114.88	2.99	1.40	1.40
2.74	1.07	17.25	6.66	114.88	2.99	1.39	1.39
2.76	1.07	17.24	6.66	114.88	2.99	1.38	1.38
2.78	1.10	17.80	6.45	114.81	2.97	1.42	1.42
2.80	1.07	17.23	6.67	114.89	2.99	1.36	1.36
2.82	1.03	16.66	7.08	117.91	3.03	1.31	1.31
2.84	1.00	16.08	7.33	117.89	3.05	1.25	1.25
2.86	1.00	16.08	7.33	117.89	3.05	1.24	1.24
2.88	1.00	16.07	7.52	120.77	3.07	1.23	1.23
2.90	1.03	16.63	7.60	126.40	3.07	1.27	1.27
2.92	1.07	17.19	7.67	131.81	3.08	1.30	1.30

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
2.94	1.10	17.75	7.43	131.88	3.06	1.34	1.34
2.96	1.10	17.74	7.43	131.88	3.06	1.33	1.33
2.98	1.13	18.30	7.21	131.92	3.04	1.36	1.36
3.00	1.17	18.86	6.99	131.92	3.02	1.39	1.39
3.02	1.20	19.42	6.79	131.89	3.00	1.43	1.43
3.04	1.20	19.42	6.79	131.89	3.00	1.42	1.42
3.06	1.20	19.41	6.79	131.89	3.00	1.42	1.42
3.08	1.20	19.41	6.80	131.89	3.00	1.41	1.41
3.10	1.23	19.97	6.74	134.52	3.00	1.45	1.45
3.12	1.30	21.09	6.62	139.66	2.99	1.53	1.53
3.14	1.40	22.79	6.34	144.53	2.96	1.64	1.64
3.16	1.47	23.91	6.03	144.28	2.93	1.72	1.72
3.18	1.50	24.28	5.70	138.39	2.90	1.75	1.75
3.20	1.47	23.61	5.63	132.89	2.89	1.71	1.71
3.22	1.43	22.99	5.66	130.17	2.90	1.66	1.66
3.24	1.37	21.93	5.96	130.67	2.93	1.57	1.57
3.26	1.30	20.82	6.16	128.21	2.95	1.49	1.49
3.28	1.20	19.10	6.58	125.62	2.98	1.36	1.36
3.30	1.17	18.47	6.49	119.81	2.98	1.32	1.32
3.32	1.17	18.41	6.34	116.69	2.96	1.32	1.32
3.34	1.17	18.33	6.19	113.46	2.95	1.31	1.31
3.36	1.13	17.73	6.40	113.45	2.97	1.27	1.27
3.38	1.10	17.12	6.62	113.37	2.99	1.22	1.22
3.40	1.10	17.06	6.63	113.21	2.99	1.22	1.22
3.42	1.10	17.01	6.65	113.06	2.99	1.21	1.21
3.44	1.10	16.95	6.83	115.85	3.01	1.21	1.21
3.46	1.10	16.89	7.18	121.33	3.04	1.21	1.21
3.48	1.10	16.84	7.20	121.16	3.04	1.20	1.20
3.50	1.17	17.86	6.77	120.96	3.00	1.28	1.28
3.52	1.23	18.83	6.09	114.75	2.94	1.35	1.35
3.54	1.27	19.30	6.08	117.38	2.94	1.38	1.38
3.56	1.23	18.72	6.12	114.47	2.94	1.34	1.34
3.58	1.20	18.13	6.15	111.50	2.94	1.30	1.30
3.60	1.17	17.55	6.18	108.47	2.95	1.25	1.25
3.62	1.13	16.98	6.21	105.38	2.95	1.21	1.21
3.64	1.07	15.86	6.45	102.26	2.97	1.13	1.13
3.66	1.03	15.28	6.26	95.63	2.96	1.09	1.09
3.68	0.97	14.18	6.25	88.65	2.95	1.01	1.01
3.70	0.97	14.13	6.27	88.54	2.96	1.01	1.01
3.72	1.00	14.56	6.06	88.22	2.94	1.04	1.04
3.74	1.10	16.09	6.10	98.20	2.94	1.15	1.15
3.76	1.27	18.53	5.75	106.65	2.91	1.33	1.33
3.78	1.43	20.99	5.59	117.25	2.89	1.52	1.52
3.80	1.57	22.87	5.32	121.63	2.86	1.66	1.66
3.82	1.63	23.72	5.10	120.88	2.84	1.73	1.73
3.84	1.63	23.65	5.11	120.75	2.84	1.72	1.72
3.86	1.63	23.59	5.11	120.62	2.84	1.72	1.72
3.88	1.57	22.74	5.68	129.23	2.90	1.64	1.64



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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.90	1.53	22.29	6.04	134.53	2.93	1.60	1.60
3.92	1.53	22.29	6.36	141.70	2.96	1.59	1.59
3.94	1.60	23.22	6.18	143.57	2.95	1.66	1.66
3.96	1.70	24.56	5.90	144.99	2.92	1.76	1.76
3.98	1.77	25.40	5.68	144.27	2.90	1.83	1.83
4.00	1.80	25.75	5.49	141.41	2.88	1.86	1.86
4.02	1.77	25.19	5.52	139.11	2.88	1.82	1.82
4.04	1.77	25.08	5.44	136.50	2.87	1.81	1.81
4.06	1.77	25.01	5.45	136.34	2.87	1.81	1.81
4.08	1.80	25.39	5.35	135.90	2.86	1.84	1.84
4.10	1.80	25.36	5.45	138.19	2.87	1.83	1.83
4.12	1.80	25.32	5.55	140.43	2.88	1.83	1.83
4.14	1.83	25.77	5.62	144.70	2.89	1.86	1.86
4.16	1.87	26.21	5.68	148.84	2.90	1.89	1.89
4.18	1.90	26.67	5.81	155.07	2.91	1.92	1.92
4.20	1.93	27.13	5.94	161.08	2.92	1.95	1.95
4.22	1.97	27.53	5.91	162.73	2.92	1.98	1.98
4.24	1.97	27.46	5.92	162.53	2.92	1.97	1.97
4.26	1.97	27.35	5.86	160.24	2.92	1.96	1.96
4.28	1.93	26.75	5.75	153.89	2.91	1.92	1.92
4.30	1.93	26.59	5.53	147.11	2.88	1.92	1.92
4.32	1.93	26.43	5.30	140.10	2.86	1.91	1.91
4.34	1.97	26.76	5.13	137.34	2.84	1.94	1.94
4.36	2.03	27.59	5.04	138.97	2.83	2.00	2.00
4.38	2.10	28.35	4.79	135.92	2.80	2.07	2.07
4.40	2.20	29.60	4.64	137.26	2.78	2.16	2.16
4.42	2.33	31.16	4.21	131.30	2.73	2.29	2.29
4.44	2.43	32.35	4.03	130.33	2.70	2.39	2.39
4.46	2.50	33.03	3.78	124.90	2.67	2.45	2.45
4.48	2.53	33.28	3.60	119.67	2.64	2.48	2.48
4.50	2.47	32.23	3.49	112.56	2.63	2.40	2.40
4.52	2.43	31.69	3.48	110.13	2.62	2.36	2.36
4.54	2.33	30.37	3.65	110.79	2.65	2.26	2.26
4.56	2.37	30.81	3.75	115.57	2.67	2.28	2.28
4.58	2.33	30.27	3.74	113.18	2.66	2.24	2.24
4.60	2.33	30.25	3.82	115.63	2.68	2.24	2.24
4.62	2.30	29.67	3.73	110.67	2.66	2.20	2.20
4.64	2.33	30.06	3.76	112.89	2.67	2.23	2.23
4.66	2.33	29.99	3.76	112.79	2.67	2.22	2.22
4.68	2.33	30.04	4.00	120.17	2.70	2.21	2.21
4.70	2.33	30.08	4.23	127.23	2.73	2.21	2.21
4.72	2.50	32.04	3.85	123.45	2.68	2.36	2.36
4.74	2.70	34.29	3.34	114.70	2.60	2.55	2.55
4.76	3.00	37.71	2.80	105.45	2.51	0.70	0.70
4.78	3.20	40.03	2.61	104.37	2.47	0.71	0.71
4.80	3.37	41.88	2.42	101.21	2.42	0.71	0.71
4.82	3.53	43.50	2.09	91.12	2.34	0.72	0.72
4.84	3.87	46.97	1.73	81.40	2.23	0.73	0.73

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
4.86	4.43	53.43	1.54	82.41	2.15	0.74	0.74
4.88	4.97	59.85	1.53	91.78	2.14	0.76	0.76
4.90	5.33	64.40	1.58	101.80	2.16	0.77	0.77
4.92	5.57	67.29	1.62	109.17	2.18	0.77	0.77
4.94	5.77	69.61	1.62	112.81	2.18	0.78	0.78
4.96	5.80	70.02	1.66	116.09	2.20	0.78	0.78
4.98	5.43	65.69	1.76	115.65	2.24	0.77	0.77
5.00	4.73	57.49	2.02	115.87	2.32	0.75	0.75
5.02	4.17	50.74	2.27	115.06	2.39	0.74	0.74
5.04	3.70	45.09	2.49	112.43	2.44	0.72	0.72
5.06	3.40	41.34	2.59	106.99	2.46	0.71	0.71
5.08	3.03	36.76	2.70	99.15	2.49	0.70	0.70
5.10	2.77	33.45	2.85	95.35	2.52	0.68	0.68
5.12	2.57	30.94	2.94	91.02	2.53	0.67	0.67
5.14	2.33	28.03	3.09	86.62	2.56	0.66	0.66
5.16	2.17	26.00	3.37	87.53	2.61	1.92	1.92
5.18	2.07	24.80	3.67	91.00	2.65	1.83	1.83
5.20	2.03	24.35	3.74	91.15	2.66	1.79	1.79
5.22	2.00	23.82	3.58	85.40	2.64	1.75	1.75
5.24	1.93	22.90	3.47	79.53	2.62	1.69	1.69
5.26	1.90	22.41	3.41	76.42	2.61	1.65	1.65
5.28	1.90	22.31	3.27	73.02	2.59	0.64	0.64
5.30	1.83	21.43	3.26	69.84	2.59	0.48	0.63
5.32	1.77	20.65	3.57	73.67	2.64	1.52	1.52
5.34	1.77	20.65	3.73	77.00	2.66	1.52	1.52
5.36	1.83	21.43	3.72	79.81	2.66	1.57	1.57
5.38	1.87	21.81	3.79	82.69	2.67	1.60	1.60
5.40	1.90	22.19	3.85	85.48	2.68	1.62	1.62
5.42	1.93	22.53	3.78	85.21	2.67	1.65	1.65
5.44	2.03	23.68	3.69	87.48	2.66	1.74	1.74
5.46	2.03	23.66	3.82	90.28	2.67	1.73	1.73
5.48	2.03	23.64	3.93	93.01	2.69	1.73	1.73
5.50	1.97	22.82	4.09	93.37	2.71	1.66	1.66
5.52	1.90	21.93	4.02	88.05	2.70	1.60	1.60
5.54	1.80	20.69	4.14	85.67	2.72	1.51	1.51
5.56	1.73	19.81	4.03	79.85	2.70	1.44	1.44
5.58	1.63	18.60	4.32	80.40	2.74	1.35	1.35
5.60	1.57	17.79	4.54	80.74	2.77	1.29	1.29
5.62	1.53	17.36	4.66	80.87	2.78	1.26	1.26
5.64	1.53	17.38	5.00	86.95	2.83	1.25	1.25
5.66	1.63	18.54	4.97	92.07	2.82	1.34	1.34
5.68	1.77	20.09	4.81	96.68	2.80	1.45	1.45
5.70	1.97	22.32	4.15	92.67	2.72	1.62	1.62
5.72	2.03	23.00	3.89	89.43	2.68	1.68	1.68
5.74	2.00	22.54	3.85	86.75	2.68	1.64	1.64
5.76	1.90	21.36	4.09	87.29	2.71	1.55	1.55
5.78	1.80	20.20	4.49	90.65	2.76	1.46	1.46
5.80	1.73	19.41	4.83	93.73	2.81	1.40	1.40

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
5.82	1.70	19.01	5.08	96.51	2.83	1.37	1.37
5.84	1.73	19.34	4.98	96.25	2.82	1.39	1.39
5.86	1.87	20.82	4.58	95.39	2.78	1.51	1.51
5.88	2.17	24.21	4.07	98.66	2.71	1.76	1.76
5.90	2.63	29.43	3.34	98.32	2.60	2.15	2.15
5.92	3.17	35.31	2.71	95.69	2.49	0.69	0.69
5.94	3.70	41.10	2.23	91.71	2.38	0.71	0.71
5.96	4.00	44.32	2.06	91.16	2.33	0.72	0.72
5.98	3.97	43.92	2.12	93.26	2.35	0.72	0.72
6.00	3.63	40.19	2.34	93.89	2.41	0.71	0.71
6.02	3.27	36.09	2.63	94.98	2.47	0.69	0.69
6.04	2.97	32.74	3.01	98.50	2.55	0.68	0.68
6.06	2.73	30.14	3.46	104.26	2.62	2.20	2.20
6.08	2.57	28.23	3.72	105.14	2.66	2.05	2.05
6.10	2.60	28.54	3.67	104.87	2.65	2.08	2.08
6.12	2.77	30.33	3.42	103.86	2.62	2.21	2.21
6.14	2.90	31.76	3.32	105.31	2.60	0.68	0.68
6.16	2.83	30.94	3.34	103.35	2.60	2.25	2.25
6.18	2.60	28.28	3.53	99.94	2.63	2.06	2.06
6.20	2.40	26.00	3.79	98.61	2.67	1.89	1.89
6.22	2.33	25.22	3.92	98.92	2.69	1.83	1.83
6.24	2.37	25.51	3.77	96.23	2.67	1.85	1.85
6.26	2.43	26.15	3.47	90.81	2.62	1.90	1.90
6.28	2.43	26.06	3.28	85.59	2.59	0.65	0.65
6.30	2.33	24.87	3.24	80.61	2.59	0.65	0.65
6.32	2.13	22.63	3.48	78.70	2.62	1.64	1.64
6.34	1.90	20.02	3.84	76.88	2.68	1.45	1.45
6.36	1.73	18.16	4.28	77.69	2.74	1.31	1.31
6.38	1.63	17.03	4.59	78.15	2.78	1.23	1.23
6.40	1.60	16.61	4.53	75.19	2.77	1.20	1.20
6.42	1.57	16.19	4.45	72.11	2.76	1.17	1.17
6.44	1.53	15.77	4.37	68.89	2.75	0.34	1.14
6.46	1.50	15.36	4.27	65.52	2.74	0.34	1.11
6.48	1.50	15.35	4.49	68.96	2.76	0.22	1.11
6.50	1.47	14.97	4.84	72.38	2.81	1.08	1.08
6.52	1.43	14.60	5.39	78.66	2.87	1.05	1.05
6.54	1.40	14.18	5.12	72.56	2.84	1.02	1.02
6.56	1.43	14.48	4.53	65.62	2.77	0.22	1.04
6.58	1.50	15.12	3.82	57.78	2.68	0.22	1.09
6.60	1.57	15.81	3.64	57.48	2.65	0.22	1.14
6.62	1.50	15.06	3.83	57.72	2.68	0.22	1.09
6.64	1.33	13.25	4.41	58.36	2.75	0.22	0.95
6.66	1.17	11.43	5.16	58.93	2.84	0.22	0.82
6.68	1.13	11.03	4.97	54.86	2.82	0.22	0.79
6.70	1.17	11.36	4.82	54.72	2.80	0.11	0.82
6.72	1.17	11.34	4.82	54.68	2.80	0.22	0.81
6.74	1.17	11.31	4.83	54.65	2.81	0.22	0.81
6.76	1.17	11.28	4.84	54.62	2.81	0.11	0.81

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.78	1.23	11.97	4.54	54.36	2.77	0.22	0.86
6.80	1.27	12.31	4.74	58.33	2.79	0.22	0.88
6.82	1.33	12.99	4.47	58.05	2.76	0.22	0.93
6.84	1.33	12.96	4.48	58.02	2.76	0.22	0.93
6.86	1.33	12.94	4.48	57.98	2.76	0.22	0.93
6.88	1.30	12.58	5.20	65.46	2.85	0.22	0.90
6.90	1.30	12.58	5.96	75.02	2.93	0.90	0.90
6.92	1.30	12.56	6.63	83.30	2.99	0.90	0.90
6.94	1.30	12.53	6.64	83.23	2.99	0.90	0.90
6.96	1.30	12.50	6.85	85.71	3.01	0.89	0.89
6.98	1.37	13.19	7.04	92.84	3.03	0.94	0.94
7.00	1.43	13.87	7.01	97.27	3.02	0.99	0.99
7.02	1.60	15.61	6.21	97.01	2.95	1.12	1.12
7.04	1.63	15.92	5.79	92.18	2.91	1.14	1.14
7.06	1.60	15.53	5.78	89.78	2.91	1.11	1.11
7.08	1.50	14.45	6.23	89.98	2.95	1.03	1.03
7.10	1.47	14.06	6.05	85.00	2.93	1.00	1.00
7.12	1.47	14.03	6.05	84.93	2.94	1.00	1.00
7.14	1.57	15.03	5.45	81.96	2.87	1.08	1.08
7.16	1.83	17.77	4.70	83.49	2.79	1.27	1.27
7.18	2.40	23.58	3.43	80.86	2.62	1.69	1.69
7.20	3.17	31.42	2.49	78.16	2.44	0.68	0.68
7.22	4.00	39.91	1.99	79.26	2.31	0.71	0.71
7.24	4.73	47.38	1.84	87.19	2.26	0.73	0.73
7.26	5.03	50.40	1.87	94.40	2.28	0.74	0.74
7.28	4.97	49.65	1.90	94.33	2.28	0.73	0.73
7.30	4.53	45.14	1.97	88.86	2.31	0.72	0.72
7.32	3.93	38.95	2.19	85.34	2.37	0.70	0.70
7.34	3.30	32.45	2.81	91.06	2.51	0.68	0.68
7.36	2.77	26.96	3.45	93.13	2.62	1.93	1.93
7.38	2.40	23.18	4.09	94.77	2.71	1.66	1.66
7.40	2.27	21.78	4.38	95.33	2.75	1.56	1.56
7.42	2.43	23.43	4.22	98.90	2.73	1.68	1.68
7.44	2.70	26.10	3.82	99.72	2.68	1.87	1.87
7.46	2.90	28.08	3.52	98.74	2.63	2.01	2.01
7.48	2.90	28.03	3.45	96.56	2.62	2.01	2.01
7.50	2.97	28.65	3.21	91.89	2.58	0.67	0.67
7.52	2.97	28.59	3.06	87.39	2.55	0.66	0.66
7.54	2.90	27.87	3.06	85.30	2.55	0.66	0.66
7.56	2.70	25.81	3.24	83.68	2.59	0.65	0.65
7.58	2.50	23.75	3.35	79.53	2.60	1.70	1.70
7.60	2.33	22.03	3.52	77.60	2.63	1.57	1.57
7.62	2.23	20.99	3.59	75.32	2.64	1.50	1.50
7.64	2.17	20.28	3.73	75.56	2.66	1.45	1.45
7.66	2.07	19.24	3.80	73.18	2.67	1.37	1.37
7.68	2.00	18.54	4.25	78.82	2.73	1.32	1.32
7.70	1.97	18.17	4.34	78.91	2.75	1.30	1.30
7.72	2.03	18.80	4.45	83.67	2.76	1.34	1.34

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
7.74	2.03	18.77	4.46	83.62	2.76	1.34	1.34
7.76	2.03	18.73	4.84	90.68	2.81	1.34	1.34
7.78	2.03	18.69	4.97	92.88	2.82	1.33	1.33
7.80	2.10	19.32	4.79	92.56	2.80	1.38	1.38
7.82	2.17	19.94	4.28	85.29	2.74	1.42	1.42
7.84	2.30	21.23	3.87	82.25	2.68	1.51	1.51
7.86	2.33	21.52	4.04	86.84	2.71	1.53	1.53
7.88	2.37	21.79	4.58	99.80	2.78	1.55	1.55
7.90	2.33	21.42	4.94	105.89	2.82	1.53	1.53
7.92	2.53	23.35	4.50	105.00	2.77	1.67	1.67
7.94	2.97	27.58	3.52	97.03	2.63	1.96	1.96
7.96	3.33	31.15	2.87	89.37	2.52	0.68	0.68
7.98	3.30	30.78	2.77	85.17	2.50	0.67	0.67
8.00	2.87	26.48	3.10	82.06	2.56	0.66	0.66
8.02	2.43	22.19	3.66	81.29	2.65	1.58	1.58
8.04	2.17	19.56	3.95	77.33	2.69	1.39	1.39
8.06	2.00	17.90	4.21	75.33	2.73	1.27	1.27
8.08	1.87	16.56	4.73	78.38	2.79	1.18	1.18
8.10	1.83	16.19	5.15	83.40	2.84	1.15	1.15
8.12	1.97	17.44	5.28	92.03	2.86	1.24	1.24
8.14	2.23	19.99	4.77	95.32	2.80	1.42	1.42
8.16	2.60	23.50	4.17	97.93	2.72	1.67	1.67
8.18	2.93	26.70	3.61	96.48	2.65	1.90	1.90
8.20	3.03	27.63	3.33	91.92	2.60	0.66	0.66
8.22	2.80	25.34	3.41	86.33	2.61	1.80	1.80
8.24	2.40	21.46	3.66	78.50	2.65	1.52	1.52
8.26	1.97	17.25	4.35	75.03	2.75	1.23	1.23
8.28	1.70	14.66	5.00	73.22	2.82	1.04	1.04
8.30	1.50	12.72	5.58	70.97	2.89	0.91	0.91
8.32	1.43	12.06	5.66	68.24	2.90	0.28	0.86
8.34	1.40	11.72	5.57	65.32	2.89	0.28	0.84
8.36	1.37	11.38	5.74	65.33	2.90	0.28	0.81
8.38	1.33	11.04	5.92	65.33	2.92	0.28	0.79
8.40	1.33	11.02	5.65	62.23	2.89	0.28	0.79
8.42	1.37	11.33	5.20	58.88	2.85	0.19	0.81
8.44	1.43	11.95	4.62	55.21	2.78	0.19	0.85
8.46	1.40	11.61	4.76	55.26	2.80	0.19	0.83
8.48	1.33	10.94	5.38	58.84	2.87	0.19	0.78
8.50	1.17	9.35	6.31	58.97	2.96	0.28	0.67
8.52	1.03	8.09	7.27	58.83	3.05	0.19	0.58
8.54	0.93	7.15	7.73	55.25	3.08	0.19	0.51
8.56	0.90	6.82	8.07	55.08	3.11	0.19	0.49
8.58	0.90	6.81	8.09	55.03	3.11	0.18	0.49
8.60	0.97	7.41	7.46	55.23	3.06	0.18	0.53
8.62	1.13	8.92	6.20	55.36	2.95	0.18	0.64
8.64	1.40	11.41	4.82	55.00	2.80	0.18	0.81
8.66	1.53	12.64	4.32	54.64	2.74	0.18	0.90
8.68	1.50	12.31	4.45	54.70	2.76	0.18	0.87

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
8.70	1.30	10.41	5.29	55.09	2.86	0.18	0.74
8.72	1.13	8.83	6.25	55.19	2.95	0.18	0.63
8.74	1.03	7.90	6.97	55.10	3.02	0.18	0.56
8.76	1.00	7.58	7.25	55.00	3.04	0.18	0.54
8.78	0.97	7.26	7.56	54.88	3.07	0.18	0.52
8.80	0.93	6.95	7.88	54.73	3.10	0.18	0.50
8.82	0.90	6.63	8.23	54.55	3.12	0.18	0.47
8.84	0.90	6.61	8.24	54.50	3.12	0.18	0.47
8.86	0.90	6.60	8.25	54.46	3.13	0.18	0.47
8.88	0.90	6.59	8.26	54.42	3.13	0.18	0.47
8.90	0.90	6.57	8.28	54.38	3.13	0.18	0.47
8.92	0.90	6.56	8.29	54.34	3.13	0.18	0.47
8.94	0.90	6.54	8.30	54.30	3.13	0.18	0.47
8.96	0.90	6.53	8.31	54.26	3.13	0.18	0.47
8.98	0.90	6.51	8.32	54.22	3.13	0.18	0.47
9.00	0.90	6.50	8.34	54.18	3.13	0.18	0.46
9.02	0.93	6.78	8.00	54.30	3.11	0.18	0.48
9.04	0.93	6.77	8.48	57.38	3.14	0.18	0.48
9.06	0.93	6.75	8.91	60.22	3.18	0.27	0.48
9.08	0.90	6.44	9.30	59.93	3.20	0.27	0.46
9.10	0.90	6.43	8.87	57.06	3.17	0.18	0.46
9.12	0.90	6.42	8.41	53.95	3.14	0.18	0.46
9.14	0.90	6.40	8.42	53.91	3.14	0.18	0.46
9.16	0.90	6.39	7.90	50.51	3.10	0.18	0.46
9.18	0.83	5.79	9.22	53.39	3.20	0.09	0.41
9.20	0.77	5.19	11.21	58.20	3.33	0.26	0.37
9.22	0.77	5.18	12.53	64.94	3.41	0.35	0.37
9.24	0.83	5.75	11.84	68.10	3.37	0.35	0.41
9.26	0.97	6.90	10.10	69.75	3.26	0.35	0.49
9.28	1.10	8.05	9.32	75.08	3.21	0.58	0.58
9.30	1.33	10.07	7.77	78.19	3.09	0.72	0.72
9.32	1.47	11.21	6.79	76.04	3.00	0.80	0.80
9.34	1.67	12.96	5.67	73.47	2.90	0.92	0.92
9.36	1.87	14.75	4.78	70.52	2.80	1.04	1.04
9.38	2.00	15.93	4.40	70.12	2.75	1.13	1.13
9.40	1.87	14.76	4.22	62.31	2.73	0.26	1.04
9.42	1.67	12.97	4.37	56.69	2.75	0.17	0.92
9.44	1.83	14.48	3.65	52.93	2.65	0.17	1.02
9.46	2.40	19.66	2.47	48.51	2.44	0.06	0.62
9.48	3.07	25.76	1.89	48.66	2.28	0.06	0.65
9.50	3.47	29.42	1.68	49.39	2.20	0.06	0.67
9.52	3.50	29.57	1.84	54.54	2.27	0.07	0.67
9.54	3.33	27.95	2.04	56.90	2.33	0.08	0.66
9.56	3.13	26.08	2.18	56.87	2.37	0.08	0.65
9.58	3.07	25.48	2.13	54.18	2.35	0.07	0.65
9.60	3.17	26.47	1.84	48.67	2.26	0.06	0.66
9.62	3.30	27.66	1.77	48.88	2.24	0.06	0.66
9.64	3.43	28.85	1.70	49.14	2.21	0.06	0.67

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.66	3.43	28.69	1.89	54.29	2.28	0.07	0.67
9.68	3.37	27.95	2.12	59.22	2.35	0.09	0.66
9.70	3.13	25.71	2.50	64.26	2.44	0.12	0.65
9.72	2.77	22.30	3.13	69.80	2.57	0.43	0.64
9.74	2.43	19.28	3.67	70.71	2.65	1.35	1.35
9.76	2.13	16.58	4.31	71.55	2.74	1.17	1.17
9.78	2.03	15.69	4.42	69.32	2.76	0.34	1.11
9.80	2.07	15.96	4.34	69.19	2.74	0.33	1.12
9.82	2.47	19.51	3.36	65.50	2.60	0.33	1.36
9.84	3.00	24.33	2.43	59.23	2.43	0.09	0.65
9.86	3.53	29.23	1.85	54.15	2.27	0.07	0.67
9.88	3.90	32.68	1.00	32.68	2.14	0.04	0.68
9.90	4.10	34.48	1.00	34.48	2.11	0.04	0.69
9.92	4.20	35.36	1.00	35.36	2.10	0.04	0.69
9.94	4.20	35.32	1.00	35.32	2.10	0.04	0.69
9.96	4.20	35.37	1.00	35.37	2.06	0.04	0.69
9.98	4.17	35.14	1.00	35.14	2.02	0.04	0.69
10.00	4.07	34.18	1.00	34.18	2.04	0.04	0.69
10.02	3.90	32.61	1.00	32.61	2.06	0.04	0.68
10.04	3.73	31.05	1.00	31.05	2.09	0.04	0.67
10.06	3.73	31.02	1.00	31.02	2.09	0.04	0.67
10.08	3.90	32.50	1.00	32.50	2.06	0.04	0.68
10.10	4.17	34.91	1.00	34.91	2.02	0.04	0.69
10.12	4.33	36.39	1.00	36.39	2.00	0.04	0.69
10.14	4.40	36.97	1.00	36.97	1.99	0.04	0.70
10.16	4.33	36.32	1.00	36.32	2.00	0.04	0.69
10.18	4.23	35.36	1.00	35.36	2.02	0.04	0.69
10.20	4.13	34.29	1.00	34.29	2.07	0.04	0.69
10.22	4.03	33.24	1.00	33.24	2.13	0.04	0.68
10.24	3.90	31.99	1.00	31.99	2.15	0.04	0.68
10.26	3.70	30.25	1.00	30.25	2.14	0.04	0.67
10.28	3.53	28.82	1.00	28.82	2.13	0.03	0.67
10.30	3.47	28.18	1.00	28.18	2.14	0.03	0.66
10.32	3.50	28.45	1.00	28.45	2.13	0.03	0.66
10.34	3.57	29.02	1.00	29.02	2.12	0.03	0.67
10.36	3.60	29.17	1.00	29.17	2.16	0.03	0.67
10.38	3.57	28.74	1.00	28.74	2.21	0.03	0.67
10.40	3.53	28.18	1.98	55.93	2.31	0.07	0.66
10.42	3.53	27.92	2.33	65.14	2.41	0.13	0.66
10.44	3.53	27.71	2.66	73.62	2.48	0.66	0.66
10.46	3.47	27.02	2.88	77.76	2.52	0.66	0.66
10.48	3.33	25.82	3.02	78.04	2.55	0.65	0.65
10.50	3.20	24.70	3.01	74.21	2.54	0.65	0.65
10.52	3.13	24.16	2.90	70.03	2.53	0.64	0.64
10.54	3.10	23.91	2.74	65.54	2.49	0.13	0.64
10.56	3.13	24.13	2.81	67.74	2.51	0.16	0.64
10.58	3.23	24.92	2.80	69.74	2.51	0.37	0.65
10.60	3.33	25.71	2.79	71.66	2.50	0.65	0.65

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
10.62	3.40	26.22	2.81	73.59	2.51	0.65	0.65
10.64	3.40	26.22	2.73	71.48	2.49	0.65	0.65
10.66	3.43	26.56	2.53	67.11	2.45	0.15	0.66
10.68	3.53	27.56	2.19	60.29	2.37	0.09	0.66
10.70	3.77	29.45	2.19	64.62	2.37	0.12	0.67
10.72	4.10	32.21	2.13	68.59	2.35	0.19	0.68
10.74	4.37	34.35	2.16	74.19	2.36	0.69	0.69
10.76	4.47	35.18	2.11	74.13	2.35	0.69	0.69
10.78	4.40	34.51	2.20	75.93	2.37	0.69	0.69
10.80	4.27	33.51	2.04	68.47	2.33	0.18	0.68
10.82	4.60	36.59	1.72	63.04	2.22	0.11	0.69
10.84	5.80	47.65	1.00	47.65	1.98	0.05	0.73
10.86	8.03	68.09	1.00	68.09	1.75	0.17	0.77
10.88	10.67	91.95	1.00	91.95	1.63	0.82	0.82
10.90	12.80	110.62	1.00	110.62	1.63	0.84	0.84
10.92	14.33	123.99	1.00	123.99	1.62	0.86	0.86
10.94	15.23	131.80	1.00	131.80	1.59	0.87	0.87
10.96	15.47	133.75	1.00	133.75	1.62	0.87	0.87
10.98	15.37	131.92	1.04	137.23	1.70	0.87	0.87
11.00	14.60	123.80	1.11	138.00	1.81	0.86	0.86
11.02	13.27	111.28	1.18	131.74	1.89	0.84	0.84
11.04	11.23	92.52	1.35	124.90	2.04	0.82	0.82
11.06	9.13	73.89	1.57	115.90	2.16	0.79	0.79
11.08	7.83	62.54	1.76	110.21	2.24	0.76	0.76
11.10	7.00	55.43	1.87	103.44	2.27	0.75	0.75
11.12	7.33	58.37	1.74	101.33	2.23	0.75	0.75
11.14	8.13	65.27	1.59	103.93	2.17	0.77	0.77
11.16	10.20	83.43	1.34	111.83	2.03	0.80	0.80
11.18	12.30	101.78	1.24	125.73	1.95	0.83	0.83
11.20	14.70	123.29	1.14	140.00	1.84	0.86	0.86
11.22	15.90	134.42	1.08	145.57	1.77	0.87	0.87
11.24	17.20	146.47	1.04	152.15	1.70	0.88	0.88
11.26	17.70	150.96	1.03	154.96	1.68	0.89	0.89
11.28	18.97	162.55	1.00	162.55	1.63	0.90	0.90
11.30	20.13	172.54	1.00	172.54	1.53	0.91	0.91
11.32	22.03	188.86	1.00	188.86	1.41	0.92	0.92
11.34	22.70	194.49	1.00	194.49	1.43	0.93	0.93
11.36	22.43	192.05	1.00	192.05	1.57	0.92	0.92
11.38	21.73	184.29	1.05	193.32	1.72	0.92	0.92
11.40	21.23	179.57	1.06	190.20	1.73	0.91	0.91
11.42	20.77	175.98	1.04	183.20	1.70	0.91	0.91
11.44	20.60	175.71	1.00	175.71	1.60	0.91	0.91
11.46	20.90	178.17	1.00	178.17	1.57	0.91	0.91
11.48	21.30	181.49	1.00	181.49	1.50	0.91	0.91
11.50	20.17	171.61	1.00	171.61	1.50	0.91	0.91
11.52	18.93	160.89	1.00	160.89	1.51	0.90	0.90
11.54	18.40	156.20	1.00	156.20	1.53	0.89	0.89
11.56	18.77	159.23	1.00	159.23	1.54	0.89	0.89



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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
11.58	19.30	163.70	1.00	163.70	1.53	0.90	0.90
11.60	19.63	166.44	1.00	166.44	1.52	0.90	0.90
11.62	20.10	170.33	1.00	170.33	1.52	0.90	0.90
11.64	21.13	179.06	1.00	179.06	1.49	0.91	0.91
11.66	21.47	181.78	1.00	181.78	1.44	0.91	0.91
11.68	21.40	181.09	1.00	181.09	1.40	0.91	0.91
11.70	20.37	172.13	1.00	172.13	1.45	0.91	0.91
11.72	19.13	161.48	1.00	161.48	1.57	0.90	0.90
11.74	17.77	149.71	1.00	149.71	1.63	0.89	0.89
11.76	16.47	138.34	1.00	138.89	1.65	0.87	0.87
11.78	15.47	129.09	1.03	133.23	1.69	0.86	0.86
11.80	15.33	127.20	1.06	134.94	1.73	0.86	0.86
11.82	15.60	129.12	1.07	138.23	1.75	0.86	0.86
11.84	16.13	134.28	1.04	139.52	1.70	0.87	0.87
11.86	17.03	142.54	1.01	143.84	1.66	0.88	0.88
11.88	18.23	152.95	1.00	152.95	1.62	0.89	0.89
11.90	19.50	163.60	1.00	163.60	1.59	0.90	0.90
11.92	20.90	175.37	1.00	175.37	1.54	0.91	0.91
11.94	22.20	186.27	1.00	186.27	1.46	0.92	0.92
11.96	23.73	199.13	1.00	199.13	1.35	0.93	0.93
11.98	24.73	207.46	1.00	207.46	1.52	0.94	0.94
12.00	25.50	213.81	1.00	213.81	1.55	0.94	0.94
12.02	25.50	213.67	1.00	213.67	1.58	0.94	0.94
12.04	25.07	209.86	1.00	209.86	1.51	0.94	0.94
12.06	25.23	211.13	1.00	211.13	1.56	0.94	0.94
12.08	25.73	215.20	1.00	215.20	1.60	0.94	0.94
12.10	23.80	197.00	1.04	205.58	1.71	0.93	0.93
12.12	17.90	144.59	1.16	167.42	1.87	0.88	0.88
12.14	11.47	88.19	1.61	142.41	2.18	0.81	0.81
12.16	7.57	56.10	2.18	122.54	2.37	0.75	0.75
12.18	7.63	56.51	2.21	124.62	2.37	0.75	0.75
12.20	7.47	55.19	2.20	121.37	2.37	0.75	0.75
12.22	6.30	45.49	2.75	124.89	2.50	0.72	0.72
12.24	4.00	27.11	4.75	128.71	2.80	1.90	1.90
12.26	5.37	37.97	3.21	121.91	2.58	0.70	0.70
12.28	9.53	72.09	1.72	124.31	2.22	0.78	0.78
12.30	15.77	126.44	1.15	145.15	1.85	0.86	0.86
12.32	20.17	165.95	1.03	170.14	1.68	0.90	0.90
12.34	23.37	193.55	1.00	193.55	1.55	0.92	0.92
12.36	25.13	208.20	1.00	208.20	1.45	0.94	0.94
12.38	26.27	217.53	1.00	217.53	1.34	0.94	0.94
12.40	27.70	229.36	1.00	229.36	1.20	0.95	0.95
12.42	30.40	251.74	1.00	251.74	1.19	0.97	0.97
12.44	32.37	267.98	1.00	267.98	1.15	0.98	0.98
12.46	32.67	270.31	1.00	270.31	1.15	0.98	0.98
12.48	32.30	267.08	1.00	267.08	1.15	0.98	0.98
12.50	34.23	283.00	1.00	283.00	1.12	0.99	0.99
12.52	37.00	305.83	1.00	305.83	1.08	1.00	1.00

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

Depth (m)	$q_t$ (MPa)	$Q_{tn}$	$K_c$	$Q_{tn,cs}$	$I_c$	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.54	43.17	356.90	1.00	356.90	0.99	1.02	1.02

**Abbreviations**

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