

**SUMMARY OF LABORATORY TEST RESULTS**

|                                                                                                                                                                                    |                                               |                                                                                                                                 |             |             |             |                             |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-----------------------------|--|
| <b>CLIENT :</b>                                                                                                                                                                    |                                               | AVA                                                                                                                             |             |             |             |                             |  |
| <b>PROJECT :</b>                                                                                                                                                                   |                                               | 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)                                                                  |             |             |             |                             |  |
| <b>JOB NO. :</b>                                                                                                                                                                   |                                               | K5728                                                                                                                           |             |             |             |                             |  |
| <b>BOREHOLE NO :</b>                                                                                                                                                               |                                               | BH-7                                                                                                                            |             |             |             |                             |  |
| <b>SAMPLE NO :</b>                                                                                                                                                                 |                                               | TW03                                                                                                                            | SPT10       | SPT11       | W1          |                             |  |
| <b>SAMPLE DEPTH :</b>                                                                                                                                                              |                                               | m                                                                                                                               | 24.00-24.90 | 26.00-26.45 | 30.00-30.45 | Water Sample                |  |
| <b>MOISTURE CONTENT</b><br>(BS 1377 Part 2 : 1990 : Method 3)                                                                                                                      |                                               | %                                                                                                                               | 18.2        | -           | 18.9        |                             |  |
| <b>BULK DENSITY</b><br>(BS 1377 Part 2 : 1990 : Method 7)                                                                                                                          |                                               | Mg/m <sup>3</sup>                                                                                                               | 2.12        | -           | 1.89        | -                           |  |
| <b>DRY DENSITY</b><br>(BS 1377 Part 2 : 1990 : Method 7)                                                                                                                           |                                               | Mg/m <sup>3</sup>                                                                                                               | -           | -           | -           | -                           |  |
| <b>PARTICLE DENSITY</b><br>(BS 1377 Part 2 : 1990 : Method 8 / Small Pyknometer)                                                                                                   |                                               | Mg/m <sup>3</sup>                                                                                                               | 2.64        | -           | 2.59        | -                           |  |
| <b>GRAIN SIZE ANALYSIS</b><br>(BS 1377 Part 2 : 1990 : Method 9.3 & 9.5)                                                                                                           | GRAVEL                                        | %                                                                                                                               | 0           | -           | 2           | -                           |  |
|                                                                                                                                                                                    | SAND                                          | %                                                                                                                               | 2           | -           | 76          | -                           |  |
|                                                                                                                                                                                    | SILT                                          | %                                                                                                                               | 50          | -           | 18          | -                           |  |
|                                                                                                                                                                                    | CLAY                                          | %                                                                                                                               | 48          | -           | 4           | -                           |  |
| <b>ATTERBERG LIMITS</b><br>(BS 1377 Part 2 : 1990 : Method 4.3 & 5)                                                                                                                | LIQUID LIMIT                                  | %                                                                                                                               | 51.0        | 53.4        | -           | -                           |  |
|                                                                                                                                                                                    | PLASTIC LIMIT                                 | %                                                                                                                               | 27.6        | 28.4        | -           | -                           |  |
|                                                                                                                                                                                    | PLASTICITY INDEX                              |                                                                                                                                 | 23          | 25          | -           | -                           |  |
| <b>TRIAXIAL COMPRESSION TEST</b><br>(BS 1377 Part 7 & 8 : 1990)                                                                                                                    | TEST TYPE                                     |                                                                                                                                 | UU          | -           | -           | -                           |  |
|                                                                                                                                                                                    | TOTAL COHESION                                | kPa                                                                                                                             | 316.7       | -           | -           | -                           |  |
|                                                                                                                                                                                    | TEST TYPE                                     |                                                                                                                                 | -           | -           | -           | -                           |  |
|                                                                                                                                                                                    | EFFECTIVE COHESION                            | kPa                                                                                                                             | -           | -           | -           | -                           |  |
|                                                                                                                                                                                    | EFFECTIVE PHI ANGLE                           | degree                                                                                                                          | -           | -           | -           | -                           |  |
| <b>CONSOLIDATION TEST</b><br>(BS 1377 Part 5 : 1990 : Method 3)                                                                                                                    | PRECONSOLIDATION PRESSURE                     | kPa                                                                                                                             | -           | -           | -           | -                           |  |
|                                                                                                                                                                                    | COMPRESSION INDEX                             | C <sub>c</sub>                                                                                                                  | -           | -           | -           | -                           |  |
| <b>ROCK TEST</b>                                                                                                                                                                   | POINT LOAD STRENGTH INDEX I <sub>sg(50)</sub> | MPa                                                                                                                             | -           | -           | -           | -                           |  |
|                                                                                                                                                                                    | BULK DENSITY                                  | Mg/m <sup>3</sup>                                                                                                               | -           | -           | -           | -                           |  |
|                                                                                                                                                                                    | UNCONFINED COMPRESSIVE STRENGTH               | MPa                                                                                                                             | -           | -           | -           | -                           |  |
| <b>CHEMICAL CONTENTS ANALYSIS</b>                                                                                                                                                  | pH Value                                      |                                                                                                                                 | -           | -           | -           | 12.2                        |  |
|                                                                                                                                                                                    | Chloride Content                              | g/L                                                                                                                             | -           | -           | -           | <0.01                       |  |
|                                                                                                                                                                                    | Organic Content                               | % (w/v)                                                                                                                         | -           | -           | -           | <0.10                       |  |
|                                                                                                                                                                                    | Sulphate Content                              | g/L                                                                                                                             | -           | -           | -           | <0.01                       |  |
| <b>LEGENDS :</b><br>UU - Unconsolidated Undrained Test (Part 7/Method 8)<br>CU - Consolidated Undrained Test (Part 8/Method 7)<br>CD - Consolidated Drained Test (Part 8/Method 8) |                                               | <b>REMARKS :</b><br>-                                                                                                           |             |             |             |                             |  |
| <b>PREPARED BY :</b><br><br>(Min Win Htut)                                                      |                                               | <b>CHECKED BY :</b><br><br>(Sio Keong Kong) |             |             |             | <b>DATE :</b><br>11/06/2018 |  |

This laboratory is accredited under the Singapore Accreditation Council-Singapore Laboratory Accreditation Scheme (SAC-SINGLAS) and has met the requirements of ISO /IEC 17025 : 2005. The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the SAC-SINGLAS.

**MOISTURE CONTENT, DENSITY AND PARTICLE DENSITY**

( TEST METHOD- BS 1377 Part 2 : 1990 )

**PROJECT** 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)**JOB NO.** K5728

| BOREHOLE NO. | SAMPLE NO. | DEPTH (m)   | MOISTURE CONTENT (%) | BULK DENSITY (Mg/m <sup>3</sup> ) | DRY DENSITY (Mg/m <sup>3</sup> ) | PARTICLE DENSITY (Mg/m <sup>3</sup> ) |
|--------------|------------|-------------|----------------------|-----------------------------------|----------------------------------|---------------------------------------|
| BH-7         | TW01       | 8.00-8.90   | 18.8                 | 2.05                              | -                                | 2.58                                  |
| BH-7         | SPT05      | 12.00-12.45 | 16.3                 | 2.06                              | -                                | 2.62                                  |
| BH-7         | TW02       | 16.00-16.90 | 20.9                 | 2.09                              | -                                | 2.63                                  |
| BH-7         | SPT08      | 20.00-20.45 | 18.3                 | 1.99                              | -                                | 2.61                                  |
| BH-7         | TW03       | 24.00-24.90 | 18.2                 | 2.12                              | -                                | 2.64                                  |
| BH-7         | SPT11      | 30.00-30.45 | 18.9                 | 1.89                              | -                                | 2.59                                  |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |
|              |            |             |                      |                                   |                                  |                                       |

Method Used : MOISTURE CONTENT (BS 1377 Part 2 : 1990 : 3.2)  
 BULK & DRY DENSITY (BS 1377 Part 2 : 1990 : 7.2)  
 PARTICLE DENSITY (BS 1377 Part 2 : 1990 : 8.3)

TESTED BY: *Monju*

Date :

APPROVED BY:

(Authorised Signatory: Min Win Htut)

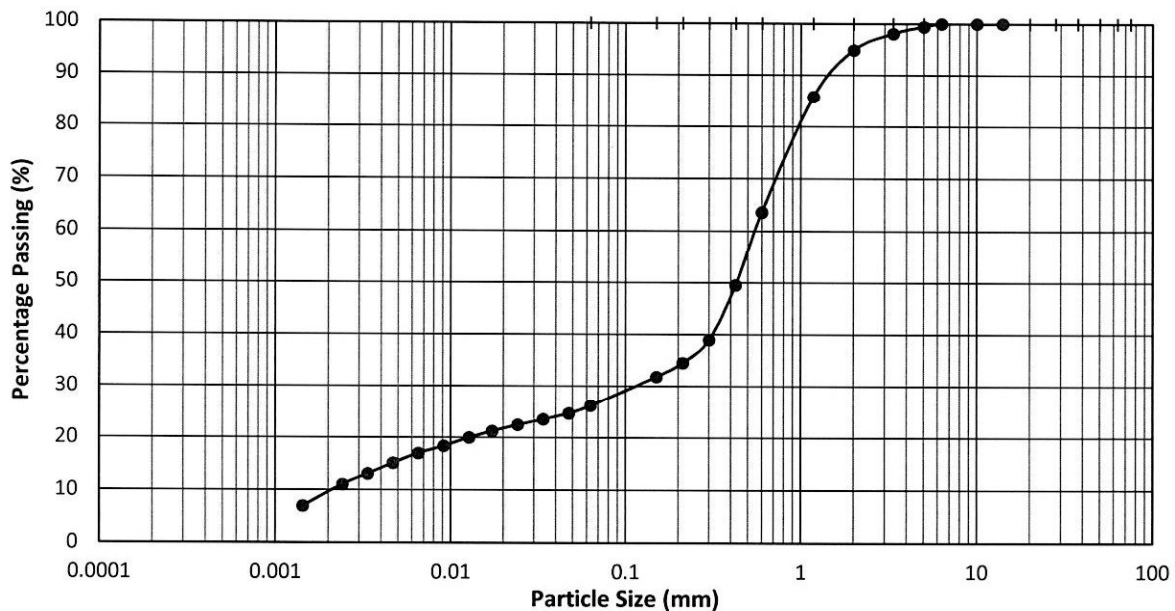
DATE :

*11.6.2018*

# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
 JOB NO. : K5728  
 BOREHOLE NO. : BH-7  
 SAMPLE NO. : TW01  
 DEPTH (m) : 8.00-8.90m  
 TEST DATE : 05.06.2018



| CLAY | FINE | MEDIUM | COARSE | FINE | MEDIUM | COARSE | FINE   | MEDIUM | COARSE | COBBLE |
|------|------|--------|--------|------|--------|--------|--------|--------|--------|--------|
|      | SILT |        |        | SAND |        |        | GRAVEL |        |        |        |

SOIL DESCRIPTION : **Light grey gravelly very clayey SAND**

## HYDROMETER + SIEVING

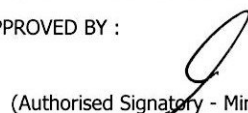
GRAVEL = 5 %  
 SAND = 69 %  
 SILT = 17 %  
 CLAY = 9 %

% of Passing 0.425 mm Sieve : 49.5

TESTED BY :



APPROVED BY :



(Authorised Signatory - Min Win Htut)

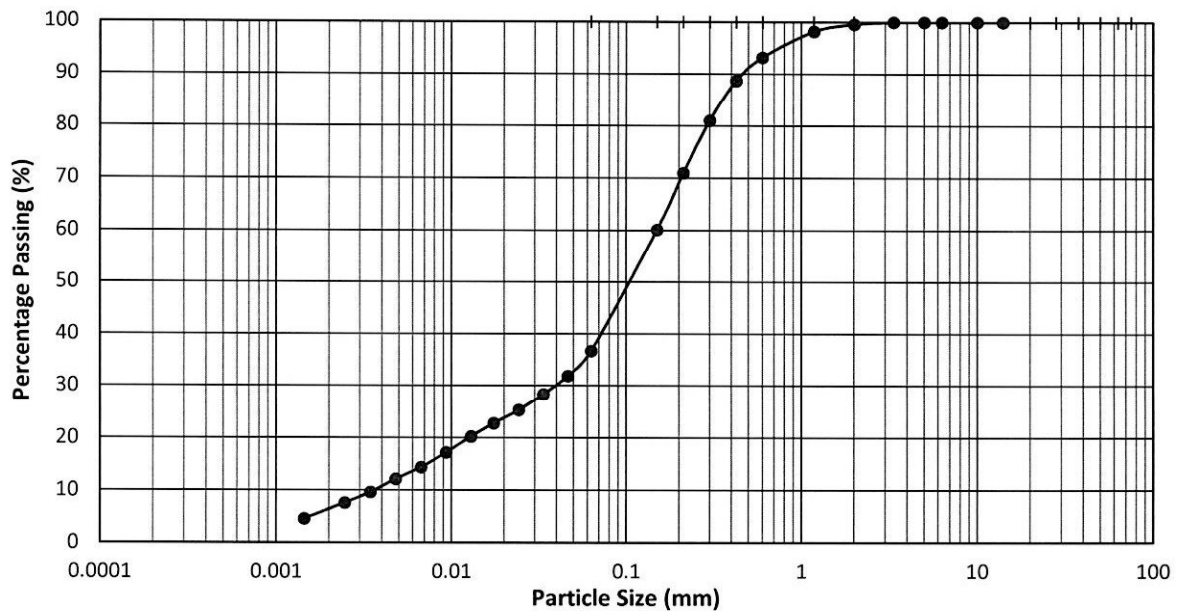
DATE :

11.6.2018

# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : SPT05  
DEPTH (m) : 12.00-12.45m  
TEST DATE : 04.05.2018



| CLAY | FINE | MEDIUM | COARSE | FINE | MEDIUM | COARSE | FINE   | MEDIUM | COARSE | COBBLE |
|------|------|--------|--------|------|--------|--------|--------|--------|--------|--------|
|      | SILT |        |        | SAND |        |        | GRAVEL |        |        |        |

SOIL DESCRIPTION : **Light grey and yellowish brown sandy CLAY**

## HYDROMETER + SIEVING

|        |   |    |   |                                    |
|--------|---|----|---|------------------------------------|
| GRAVEL | = | 0  | % |                                    |
| SAND   | = | 64 | % | % of Passing 0.425 mm Sieve : 88.7 |
| SILT   | = | 30 | % |                                    |
| CLAY   | = | 6  | % |                                    |

TESTED BY :

*[Signature]*

APPROVED BY :

*[Signature]*  
(Authorised Signatory - Min Win Htut)

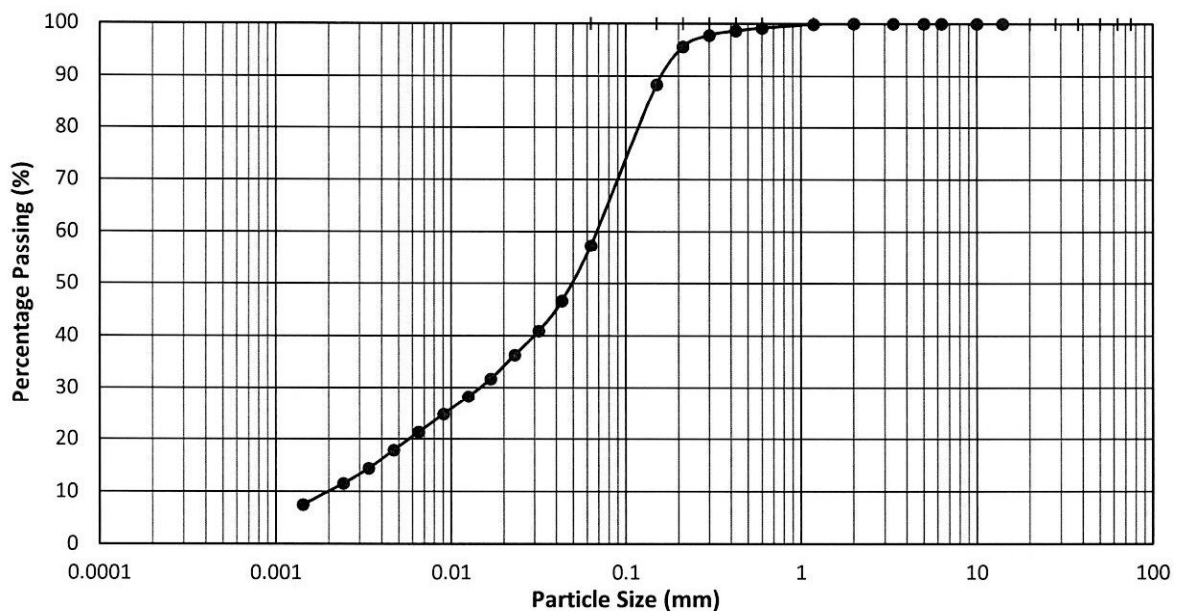
DATE :

11.6.2018

# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

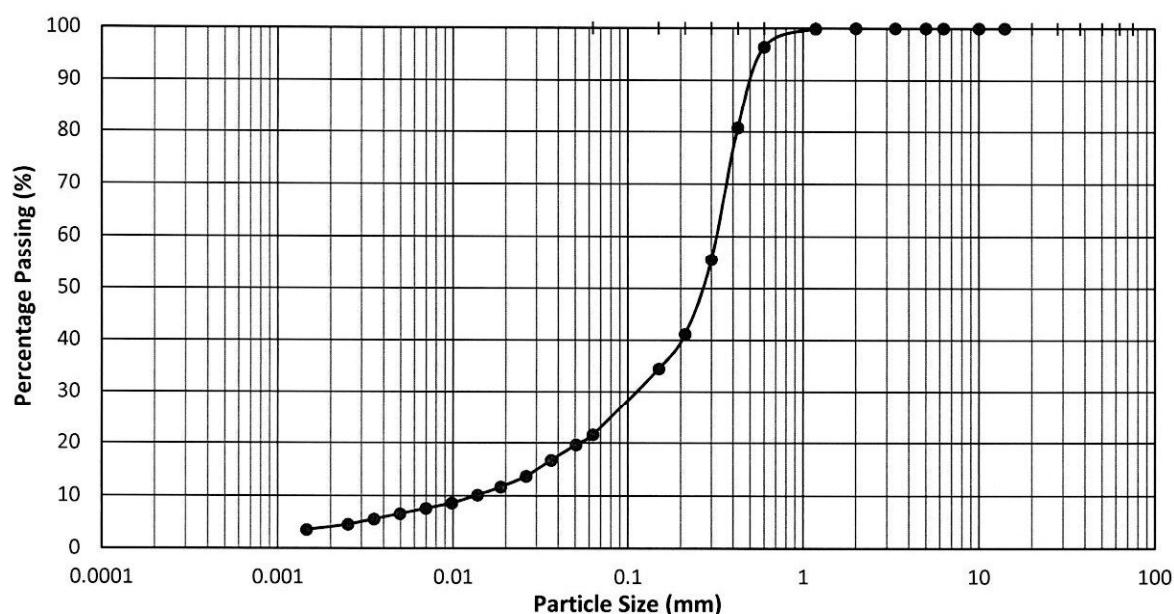
PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : TW02  
DEPTH (m) : 16.00-16.90m  
TEST DATE : 05.06.2018



# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : SPT08  
DEPTH (m) : 20.00-20.45m  
TEST DATE : 04.05.2018



| CLAY | FINE | MEDIUM | COARSE | FINE | MEDIUM | COARSE | FINE   | MEDIUM | COARSE | COBBLE |
|------|------|--------|--------|------|--------|--------|--------|--------|--------|--------|
|      | SILT |        |        | SAND |        |        | GRAVEL |        |        |        |

SOIL DESCRIPTION : **Light greenish grey and yellowish brown very clayey SAND**

## HYDROMETER + SIEVING

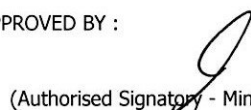
GRAVEL = 0 %  
SAND = 78 %  
SILT = 18 %  
CLAY = 4 %

% of Passing 0.425 mm Sieve : 80.7

TESTED BY :



APPROVED BY :


  
(Authorised Signatory - Min Win Htut)

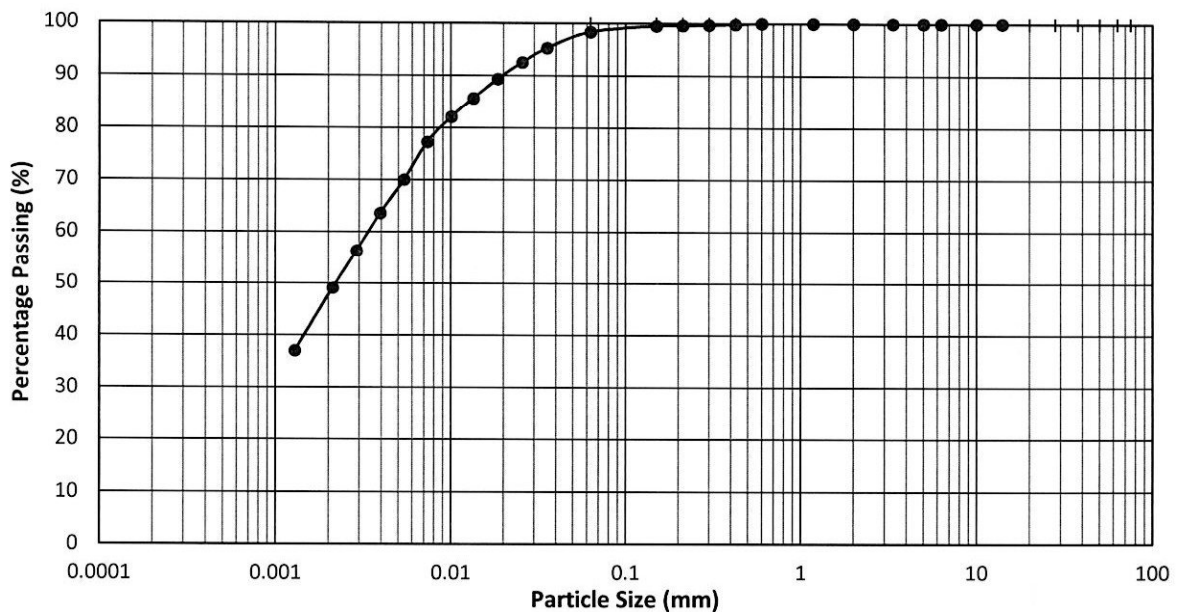
DATE :

11.5.2018

# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : TW03  
DEPTH (m) : 24.00-24.90m  
TEST DATE : 05.06.2018



| CLAY | FINE | MEDIUM | COARSE | FINE | MEDIUM | COARSE | FINE   | MEDIUM | COARSE | COBBLE |
|------|------|--------|--------|------|--------|--------|--------|--------|--------|--------|
|      | SILT |        |        | SAND |        |        | GRAVEL |        |        |        |

SOIL DESCRIPTION : **Yellowish brown, reddish brown and light grey slightly sandy CLAY**

## HYDROMETER + SIEVING

GRAVEL = 0 %  
SAND = 2 %  
SILT = 50 %  
CLAY = 48 %

% of Passing 0.425 mm Sieve : 99.8

TESTED BY :

*[Signature]*

APPROVED BY :

*[Signature]*  
(Authorised Signatory - Min Win Htut)

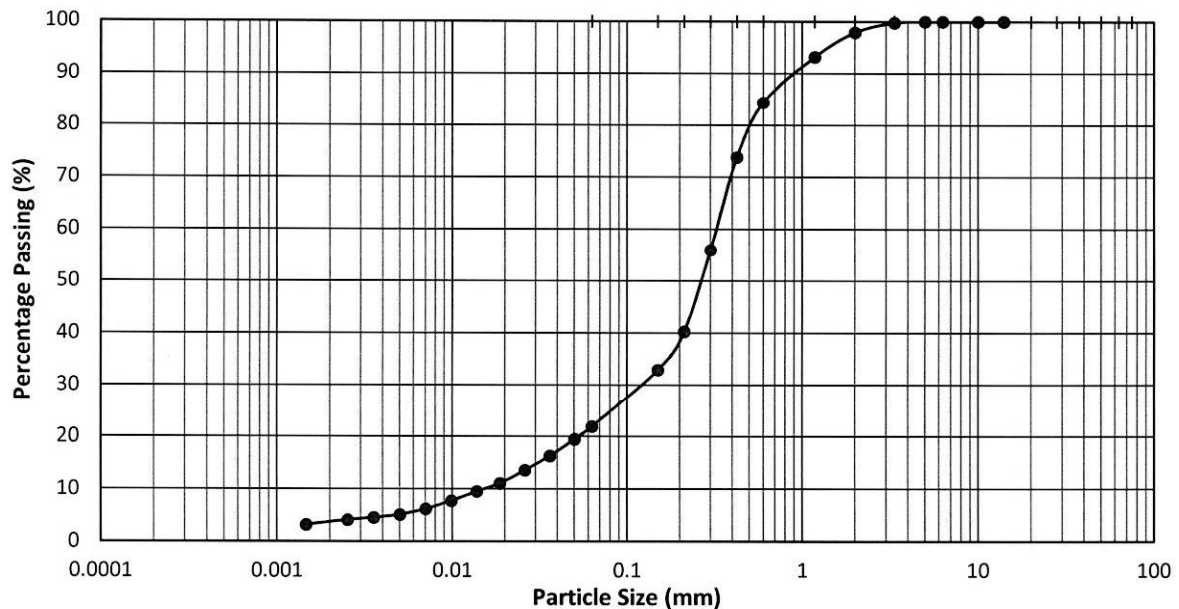
DATE :

11-6-2018

# GRAIN SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

(TEST METHOD- BS 1377 : Part 2 : 1990 - Clauses 9.3 & 9.5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : SPT11  
DEPTH (m) : 30.00-30.45m  
TEST DATE : 04.05.2018



| CLAY | FINE | MEDIUM | COARSE | FINE | MEDIUM | COARSE | FINE   | MEDIUM | COARSE | COBBLE |
|------|------|--------|--------|------|--------|--------|--------|--------|--------|--------|
|      | SILT |        |        | SAND |        |        | GRAVEL |        |        |        |

SOIL DESCRIPTION : Light greenish grey and yellowish brown slightly gravelly very clayey SAND

## HYDROMETER + SIEVING

GRAVEL = 2 %  
SAND = 76 %  
SILT = 18 %  
CLAY = 4 %

% of Passing 0.425 mm Sieve : 73.8

TESTED BY :

*[Signature]*

APPROVED BY :

*[Signature]*  
(Authorised Signatory - Min Win Htut)

DATE :

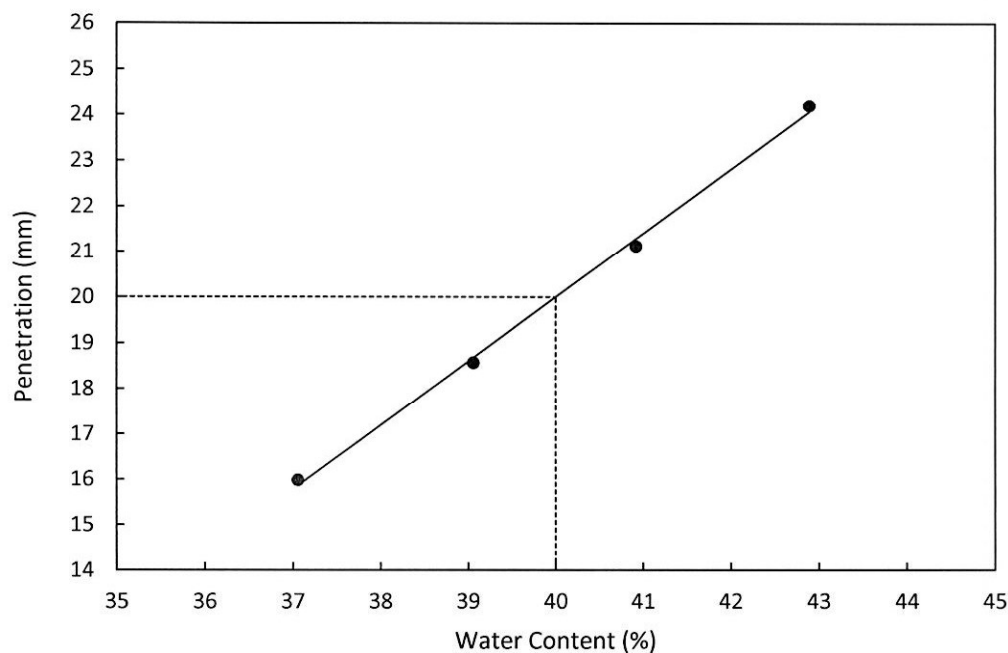
11.6.2018

# **ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 & 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
 JOB NO. : K5728  
 BOREHOLE NO. : BH-7  
 SAMPLE NO. : SPT03  
 DEPTH(M) : 6.00-6.45m  
 SOIL DESCRIPTION : Light grey and yellowish brown very clayey SAND  
 SAMPLE CONDITION : Natural  
 % OF PASSING 0.425mm SIEVE : -  
 TEST DATE : 03.06.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |  |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|--|
| WET WEIGHT + CUP | (g)  | 20.53        | 20.56 | 20.57              | 20.57 | 20.59                         | 20.35 |  |
| DRY WEIGHT + CUP | (g)  | 17.21        | 17.08 | 17.26              | 16.92 | 18.39                         | 18.21 |  |
| CUP WEIGHT       | (g)  | 8.25         | 8.17  | 9.17               | 8.41  | 9.27                          | 9.27  |  |
| WATER CONTENT    | (%)  | 37.1         | 39.1  | 40.9               | 42.9  | 24.1                          | 23.9  |  |
| PENETRATION      | (mm) | 16.0         | 18.6  | 21.1               | 24.2  | -                             | -     |  |
| LIQUID LIMIT     | (%)  | <b>40.0</b>  |       | <u>NOTE:</u>       |       | I : INTERMEDIATE PLASTICITY   |       |  |
| PLASTIC LIMIT    | (%)  | <b>24.0</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |  |
| PLASTICITY INDEX |      | <b>16</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |  |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |  |



TESTED BY :



APPROVED BY :

  
 (Authorised Signatory - Min Win Htut)

DATE :

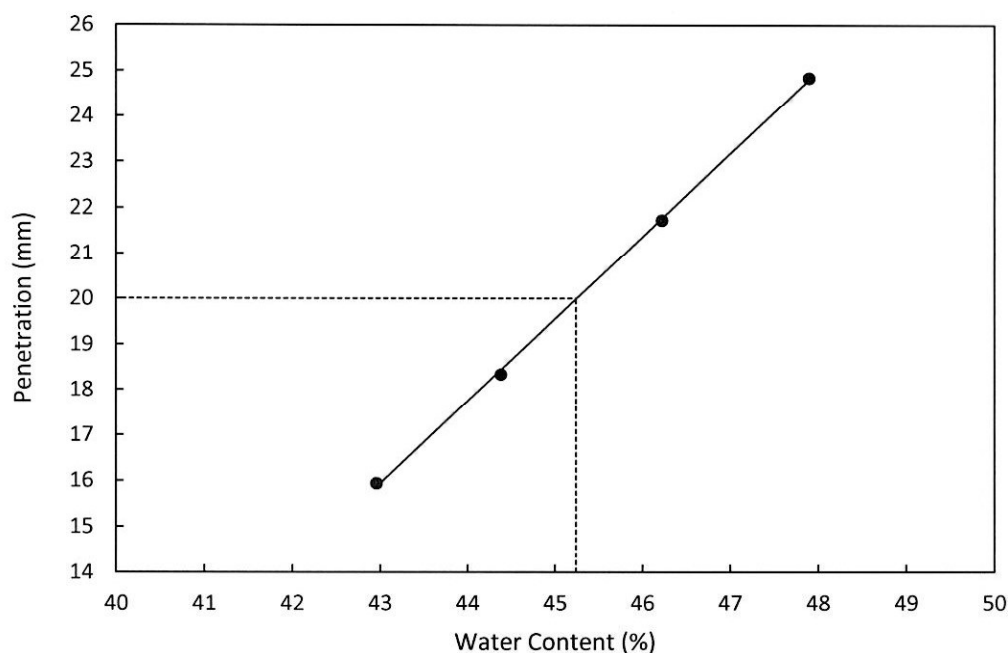
11.6.2018

**ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 &amp; 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
 JOB NO. : K5728  
 BOREHOLE NO. : BH-7  
 SAMPLE NO. : TW01  
 DEPTH(M) : 8.00-8.90m  
 SOIL DESCRIPTION : Light grey gravelly very clayey SAND  
 SAMPLE CONDITION : Sieved  
 % OF PASSING 0.425mm SIEVE : 57  
 TEST DATE : 01.06.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|
| WET WEIGHT + CUP | (g)  | 20.85        | 20.64 | 20.28              | 20.30 | 20.28                         | 20.14 |
| DRY WEIGHT + CUP | (g)  | 17.16        | 16.81 | 16.55              | 16.66 | 17.82                         | 17.67 |
| CUP WEIGHT       | (g)  | 8.57         | 8.18  | 8.48               | 9.06  | 8.46                          | 8.26  |
| WATER CONTENT    | (%)  | 43.0         | 44.4  | 46.2               | 47.9  | 26.3                          | 26.2  |
| PENETRATION      | (mm) | 15.9         | 18.3  | 21.7               | 24.8  | -                             | -     |
| LIQUID LIMIT     | (%)  | <b>45.2</b>  |       | <b>NOTE:</b>       |       | I : INTERMEDIATE PLASTICITY   |       |
| PLASTIC LIMIT    | (%)  | <b>26.3</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |
| PLASTICITY INDEX |      | <b>19</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |



TESTED BY :

APPROVED BY :

  
(Authorised Signatory - Min Win Htut)

DATE :

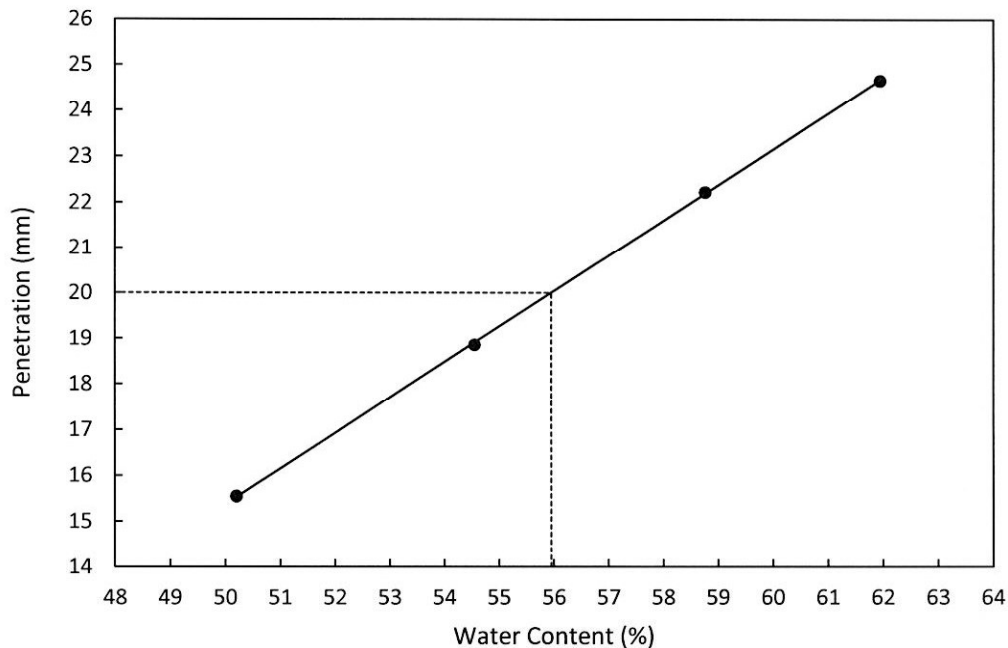
11.6.2018

# **ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 & 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : SPT06  
DEPTH(M) : 14.00-14.45m  
SOIL DESCRIPTION : Reddish brown, light grey and yellow slightly sandy CLAY  
SAMPLE CONDITION : Natural  
% OF PASSING 0.425mm SIEVE : -  
TEST DATE : 03.06.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|
| WET WEIGHT + CUP | (g)  | 20.42        | 20.21 | 20.54              | 20.44 | 20.43                         | 20.17 |
| DRY WEIGHT + CUP | (g)  | 16.64        | 16.19 | 16.18              | 16.16 | 17.85                         | 17.68 |
| CUP WEIGHT       | (g)  | 9.11         | 8.82  | 8.76               | 9.25  | 8.13                          | 8.25  |
| WATER CONTENT    | (%)  | 50.2         | 54.5  | 58.8               | 61.9  | 26.5                          | 26.4  |
| PENETRATION      | (mm) | 15.6         | 18.9  | 22.2               | 24.7  | -                             | -     |
| LIQUID LIMIT     | (%)  | <b>56.0</b>  |       | <b>NOTE:</b>       |       | I : INTERMEDIATE PLASTICITY   |       |
| PLASTIC LIMIT    | (%)  | <b>26.5</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |
| PLASTICITY INDEX |      | <b>29</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |



TESTED BY :



APPROVED BY :

  
(Authorised Signatory - Min Win Htut)

DATE :

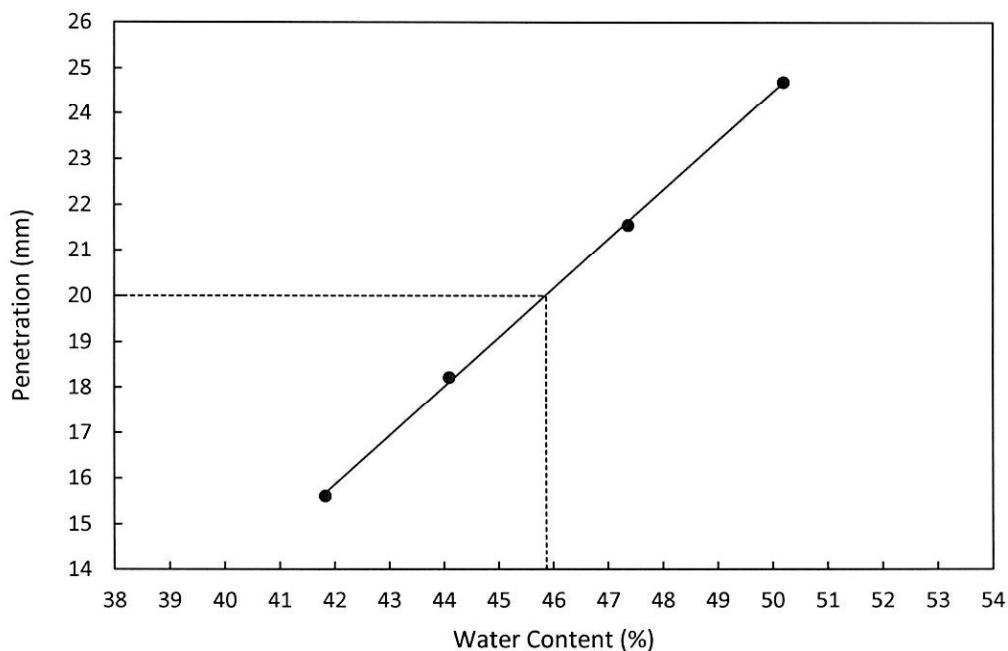
11.6.2018

# **ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 & 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
JOB NO. : K5728  
BOREHOLE NO. : BH-7  
SAMPLE NO. : TW02  
DEPTH(M) : 16.00-16.90m  
SOIL DESCRIPTION : Light greenish grey and yellowish brown sandy CLAY  
SAMPLE CONDITION : Natural  
% OF PASSING 0.425mm SIEVE : 99  
TEST DATE : 31.05.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|
| WET WEIGHT + CUP | (g)  | 20.38        | 20.39 | 20.53              | 20.70 | 20.90                         | 20.13 |
| DRY WEIGHT + CUP | (g)  | 17.08        | 16.66 | 16.76              | 16.83 | 18.57                         | 18.07 |
| CUP WEIGHT       | (g)  | 9.19         | 8.20  | 8.80               | 9.12  | 8.13                          | 8.95  |
| WATER CONTENT    | (%)  | 41.8         | 44.1  | 47.4               | 50.2  | 22.3                          | 22.6  |
| PENETRATION      | (mm) | 15.6         | 18.2  | 21.6               | 24.7  | -                             | -     |
| LIQUID LIMIT     | (%)  | <b>45.9</b>  |       | <b>NOTE:</b>       |       | I : INTERMEDIATE PLASTICITY   |       |
| PLASTIC LIMIT    | (%)  | <b>22.5</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |
| PLASTICITY INDEX |      | <b>23</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |



TESTED BY :



APPROVED BY :

  
(Authorised Signatory - Min Win Htut)

DATE :

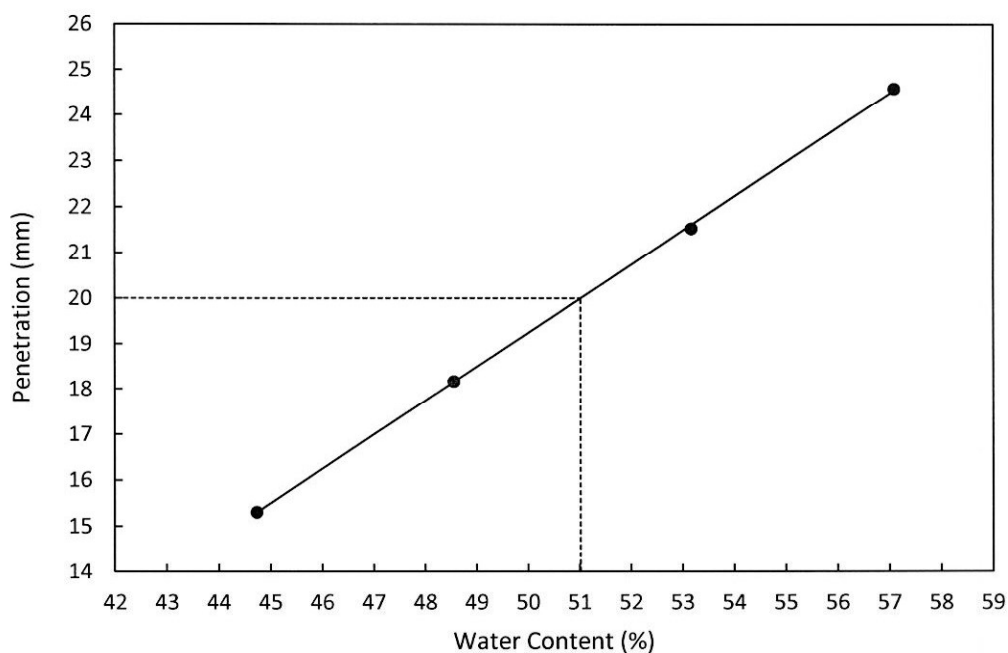
11.6.2018

**ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

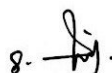
( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 &amp; 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
 JOB NO. : K5728  
 BOREHOLE NO. : BH-7  
 SAMPLE NO. : TW03  
 DEPTH(M) : 24.00-24.90m  
 SOIL DESCRIPTION : Yellowish brown, reddish brown and light grey slightly sandy CLAY  
 SAMPLE CONDITION : Natural  
 % OF PASSING 0.425mm SIEVE : 100  
 TEST DATE : 02.06.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|
| WET WEIGHT + CUP | (g)  | 20.31        | 20.75 | 20.50              | 20.69 | 20.59                         | 20.40 |
| DRY WEIGHT + CUP | (g)  | 16.83        | 16.72 | 16.64              | 16.42 | 17.91                         | 17.93 |
| CUP WEIGHT       | (g)  | 9.05         | 8.42  | 9.38               | 8.94  | 8.23                          | 8.96  |
| WATER CONTENT    | (%)  | 44.7         | 48.6  | 53.2               | 57.1  | 27.7                          | 27.5  |
| PENETRATION      | (mm) | 15.3         | 18.2  | 21.5               | 24.6  | -                             | -     |
| LIQUID LIMIT     | (%)  | <b>51.0</b>  |       | <u>NOTE:</u>       |       | I : INTERMEDIATE PLASTICITY   |       |
| PLASTIC LIMIT    | (%)  | <b>27.6</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |
| PLASTICITY INDEX |      | <b>23</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |



TESTED BY :



APPROVED BY :

  
 (Authorised Signatory - Min Win Htut)

DATE :

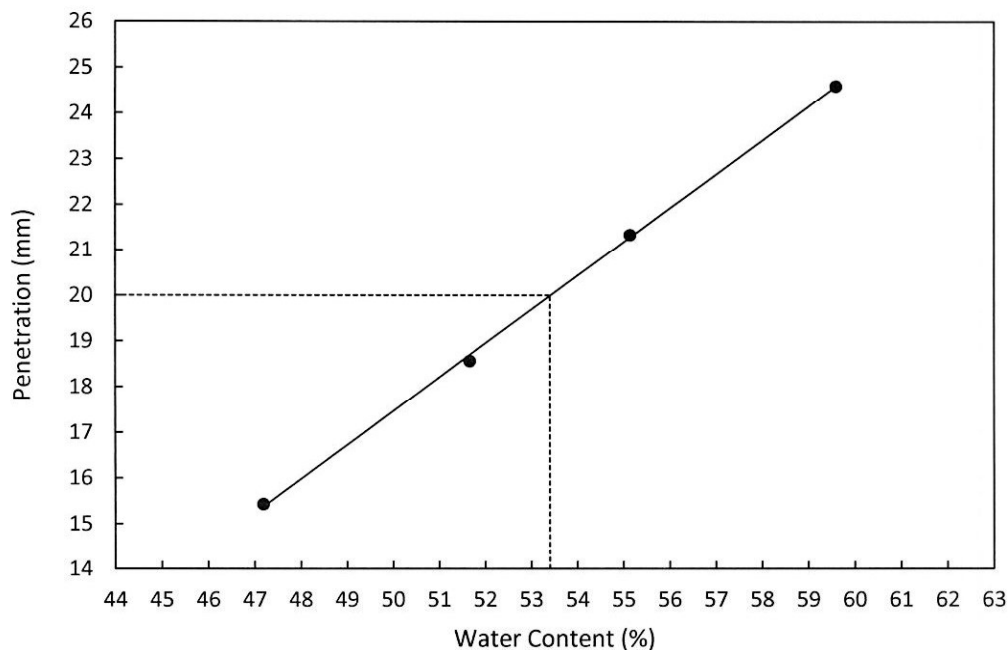
11.6.2018

# **ATTERBERG LIMITS TEST BY CONE PENETROMETER METHOD**

( TEST METHOD- BS 1377 : Part 2 : 1990 - Method 4.3 & 5)

PROJECT : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)  
 JOB NO. : K5728  
 BOREHOLE NO. : BH-7  
 SAMPLE NO. : SPT10  
 DEPTH(M) : 26.00-26.45m  
 SOIL DESCRIPTION : Yellowish brown and light grey slightly sandy CLAY  
 SAMPLE CONDITION : Natural  
 % OF PASSING 0.425mm SIEVE : -  
 TEST DATE : 03.06.2018

|                  |      | LIQUID LIMIT |       |                    |       | PLASTIC LIMIT                 |       |
|------------------|------|--------------|-------|--------------------|-------|-------------------------------|-------|
| WET WEIGHT + CUP | (g)  | 20.05        | 20.61 | 20.21              | 20.45 | 20.17                         | 20.54 |
| DRY WEIGHT + CUP | (g)  | 16.20        | 16.40 | 16.13              | 16.10 | 17.73                         | 17.86 |
| CUP WEIGHT       | (g)  | 8.04         | 8.25  | 8.73               | 8.80  | 9.17                          | 8.42  |
| WATER CONTENT    | (%)  | 47.2         | 51.7  | 55.1               | 59.6  | 28.5                          | 28.4  |
| PENETRATION      | (mm) | 15.4         | 18.6  | 21.3               | 24.6  | -                             | -     |
| LIQUID LIMIT     | (%)  | <b>53.4</b>  |       | <u>NOTE:</u>       |       | I : INTERMEDIATE PLASTICITY   |       |
| PLASTIC LIMIT    | (%)  | <b>28.4</b>  |       | M : SILT           |       | H : HIGH PLASTICITY           |       |
| PLASTICITY INDEX |      | <b>25</b>    |       | C : CLAY           |       | V : VERY HIGH PLASTICITY      |       |
|                  |      |              |       | L : LOW PLASTICITY |       | E : EXTREMELY HIGH PLASTICITY |       |



TESTED BY :



APPROVED BY :

  
 (Authorised Signatory - Min Win Htut)

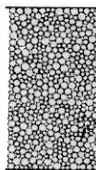
DATE :

11.6.2018

# Total Stress Triaxial Compression

## Unconsolidated Undrained (Multiple Specimen)

### Summary Report

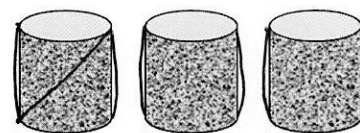
|                                                                                                                                                                                       |                         |                                                               |                      |       |       |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------|----------------------|-------|-------|-------|
| <div>Sample Details</div> <div></div> <div>sketch showing specimen location in original sample</div> | Depth                   | 16.00-16.90m                                                  |                      |       |       |       |
|                                                                                                                                                                                       | Description             | Very stiff light greenish grey and yellowish brown sandy CLAY |                      |       |       |       |
|                                                                                                                                                                                       | Type                    | Undisturbed Sample                                            |                      |       |       |       |
|                                                                                                                                                                                       |                         |                                                               | Spm. 1               | 2     | 3     |       |
|                                                                                                                                                                                       | Initial Sample Length   | L <sub>0</sub>                                                | (mm)                 | 76.0  | 76.0  | 76.0  |
|                                                                                                                                                                                       | Initial Sample Diameter | D <sub>0</sub>                                                | (mm)                 | 38.0  | 38.0  | 38.0  |
|                                                                                                                                                                                       | Initial Sample Weight   | W <sub>0</sub>                                                | (gr)                 | 185.3 | 182.3 | 181.2 |
|                                                                                                                                                                                       | Bulk Density            | ρ <sub>0</sub>                                                | (Mg/m <sup>3</sup> ) | 2.15  | 2.12  | 2.10  |
|                                                                                                                                                                                       | Particle Density        | ρ <sub>s</sub>                                                | (Mg/m <sup>3</sup> ) | 2.63  | 2.63  | 2.63  |

| Initial Conditions           |                                      |  | Spm. 1  | 2       | 3       |
|------------------------------|--------------------------------------|--|---------|---------|---------|
| Specimen                     |                                      |  |         |         |         |
| Initial Cell Pressure        | σ <sub>3</sub> (kPa)                 |  | 150     | 300     | 600     |
| Strain Rate                  | m <sub>s</sub> (mm/min)              |  | 0.76000 | 0.76000 | 0.76000 |
| Membrane Thickness           | m <sub>b</sub> (mm)                  |  | 0.20    | 0.20    | 0.20    |
| Initial Moisture             | ω <sub>i</sub> % (%)                 |  | 20      | 22      | 21      |
| Initial Dry Density          | ρ <sub>d0</sub> (Mg/m <sup>3</sup> ) |  | 1.78    | 1.74    | 1.74    |
| Initial Voids Ratio          | e <sub>0</sub>                       |  | 0.47    | 0.52    | 0.51    |
| Initial Degree of Saturation | S <sub>o</sub> (%)                   |  | 100     | 100     | 100     |

| Final Conditions           |                                                       |  | Spm. 1 | 2      | 3      |
|----------------------------|-------------------------------------------------------|--|--------|--------|--------|
| Max Deviator Stress        | (σ <sub>1</sub> - σ <sub>3</sub> ) <sub>f</sub> (kPa) |  | 375.78 | 355.90 | 426.85 |
| Membrane Correction        | m <sub>c</sub> (kPa)                                  |  | 1.060  | 1.480  | 1.120  |
| Strain At Max Stress       | ε <sub>f</sub> % (%)                                  |  | 8.49   | 13.39  | 9.16   |
| Shear Strength             | c <sub>u</sub> (kPa)                                  |  | 187.89 | 177.95 | 213.43 |
| Final Moisture             | ω <sub>f</sub> % (%)                                  |  | 20     | 22     | 21     |
| Final Dry Density          | ρ <sub>df</sub> (Mg/m <sup>3</sup> )                  |  | 1.78   | 1.74   | 1.74   |
| Final Voids Ratio          | e <sub>f</sub>                                        |  | 0.47   | 0.52   | 0.51   |
| Final Degree of Saturation | S <sub>f</sub> (%)                                    |  | 100.0  | 100.0  | 100.0  |

### Notes

Soil parameters in final condition are assumed the same with the initial condition.



**Failure Sketch**  
(surface inclination)

|                                                                                                                                                                            |                |                                                                                     |         |             |               |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|---------|-------------|---------------|----------------|
| <br> | Test Method    | BS1377: Part 7 1990 : Clause 8                                                      |         | Test Name   | UU10-AVA-B7T2 |                |
|                                                                                                                                                                            | Database:      | . \SQLEXPRESS \ RyobiG-L3-2017                                                      |         | Test Date   | 1/6/2018      |                |
|                                                                                                                                                                            | Site Reference | AVA-Neo Tiew Crescent (5BHs)                                                        |         | Borehole    | BH-7          |                |
|                                                                                                                                                                            | Jobfile        | AVA - Neo Tiew Crescent                                                             |         | Sample      | TW02          |                |
|                                                                                                                                                                            | Client         | AVA                                                                                 |         | Depth       | 16.00-16.90m  |                |
| Operator                                                                                                                                                                   |                |  | Checked | Min Win Hui | Approved      | Sio Keong Kong |

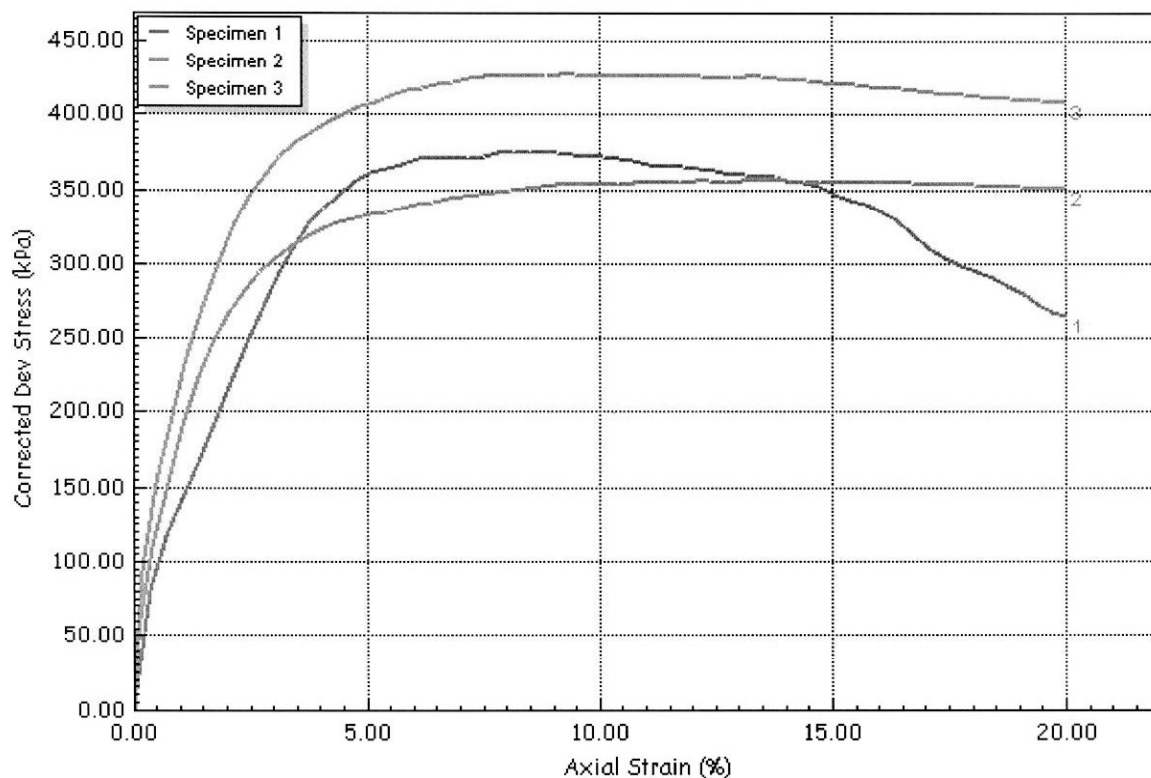
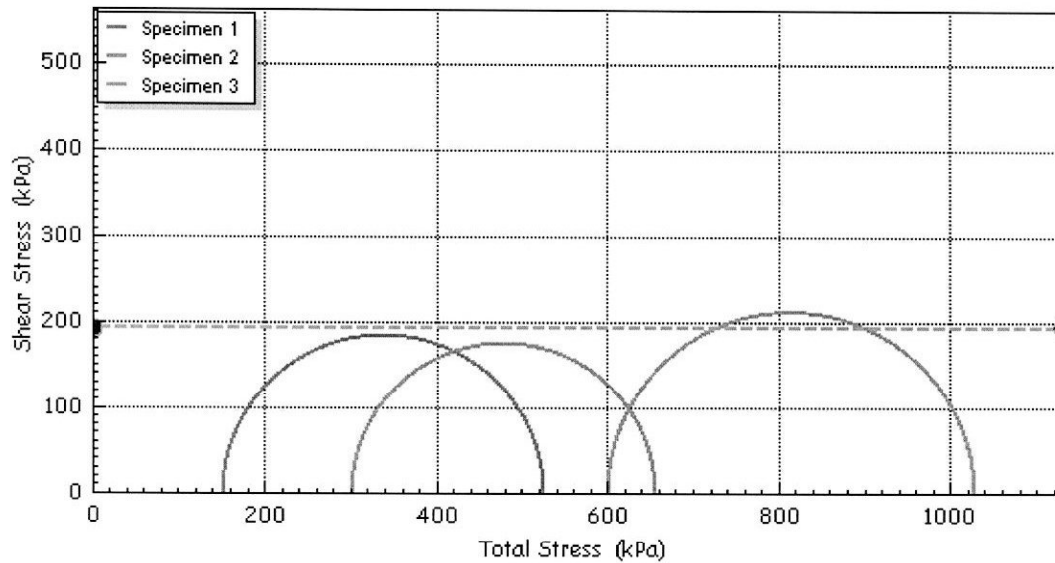
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# Total Stress Triaxial Compression

## Unconsolidated Undrained (Multiple Specimen)

Test Results Plots

|                |        |       |       |
|----------------|--------|-------|-------|
| Cohesion Level | c      | (kPa) | 193.1 |
| Friction Angle | $\phi$ | (deg) | 0.0   |



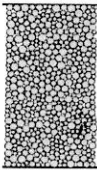
|                                                                                                                                                                            |                |                                |              |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------|--------------|----------------|
| <br> | Test Method    | BS1377: Part 7 1990 : Clause 8 | Test Name    | UU10-AVA-B7T2  |
|                                                                                                                                                                            | Database:      | .\SQLEXPRESS \ RyobiG-L3-2017  | Test Date    | 1/6/2018       |
|                                                                                                                                                                            | Site Reference | AVA-Neo Tiew Crescent (5BHs)   | Borehole     | BH-7           |
|                                                                                                                                                                            | Jobfile        | AVA - Neo Tiew Crescent        | Sample       | TW02           |
|                                                                                                                                                                            | Client         | AVA                            | Depth        | 16.00-16.90m   |
| Operator                                                                                                                                                                   |                | Checked                        | Min Win Htut | Approved       |
|                                                                                                                                                                            |                |                                |              | Sio Keong Kong |

Ryobi Geotechnique International Pte Ltd

# Total Stress Triaxial Compression

## Unconsolidated Undrained

### Summary Report

|                                                                                                                                                                          |                         |                                                                        |                      |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------|----------------------|-------|
| <b>Sample Details</b><br><br><i>sketch showing specimen location in original sample</i> | Depth                   | 24.00-24.90m                                                           |                      |       |
|                                                                                                                                                                          | Description             | Hard yellowish brown, reddish brown and light grey slightly sandy CLAY |                      |       |
|                                                                                                                                                                          | Type                    | Undisturbed Sample                                                     |                      |       |
|                                                                                                                                                                          | Initial Sample Length   | L <sub>0</sub>                                                         | (mm)                 | 76.0  |
|                                                                                                                                                                          | Initial Sample Diameter | D <sub>0</sub>                                                         | (mm)                 | 38.0  |
|                                                                                                                                                                          | Initial Sample Weight   | W <sub>0</sub>                                                         | (gr)                 | 191.4 |
|                                                                                                                                                                          | Bulk Density            | ρ <sub>0</sub>                                                         | (Mg/m <sup>3</sup> ) | 2.22  |
|                                                                                                                                                                          | Particle Density        | ρ <sub>s</sub>                                                         | (Mg/m <sup>3</sup> ) | 2.64  |

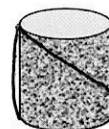
|                              |                  |                      |         |  |
|------------------------------|------------------|----------------------|---------|--|
| <b>Initial Conditions</b>    |                  |                      |         |  |
| Specimen                     |                  |                      |         |  |
| Initial Cell Pressure        | σ <sub>3</sub>   | (kPa)                | 450     |  |
| Strain Rate                  | m <sub>s</sub>   | (mm/min)             | 0.76000 |  |
| Membrane Thickness           | m <sub>b</sub>   | (mm)                 | 0.20    |  |
| Initial Moisture             | ω <sub>i</sub> % | (%)                  | 18      |  |
| Initial Dry Density          | ρ <sub>d0</sub>  | (Mg/m <sup>3</sup> ) | 1.88    |  |
| Initial Voids Ratio          | e <sub>0</sub>   | .                    | 0.41    |  |
| Initial Degree of Saturation | S <sub>o</sub>   | (%)                  | 100     |  |

|                            |                                                 |                      |        |  |
|----------------------------|-------------------------------------------------|----------------------|--------|--|
| <b>Final Conditions</b>    |                                                 |                      |        |  |
| Max Deviator Stress        | (σ <sub>1</sub> - σ <sub>3</sub> ) <sub>f</sub> | (kPa)                | 633.47 |  |
| Membrane Correction        | m <sub>c</sub>                                  | (kPa)                | 1.150  |  |
| Strain At Max Stress       | ε <sub>f</sub> %                                | (%)                  | 9.51   |  |
| Shear Strength             | c <sub>u</sub>                                  | (kPa)                | 316.73 |  |
| Final Moisture             | ω <sub>f</sub> %                                | (%)                  | 18     |  |
| Final Dry Density          | ρ <sub>df</sub>                                 | (Mg/m <sup>3</sup> ) | 1.88   |  |
| Final Voids Ratio          | e <sub>f</sub>                                  | .                    | 0.41   |  |
| Final Degree of Saturation | S <sub>f</sub>                                  | (%)                  | 100.0  |  |

### Notes

Soil parameters in final condition are assumed the same with the initial condition.

Only one specimen tested due to insufficient sample.



**Failure Sketch**

(surface inclination)

|                                                                                                                                                                                                                                                                                            |                                                                                     |                              |                         |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-------------------------|-------------------------|
| <br><br><small>ACCREDITED LABORATORY</small><br><small>SAC-SINGLAS</small><br><small>Cert No: LA-2016-0623-B</small> | Test Method BS1377: Part 7 1990 : Clause 8                                          |                              | Test Name UU11-AVA-B7T3 |                         |
|                                                                                                                                                                                                                                                                                            | Database: \SQLXPRESS \ RyobiG-L3-2017                                               |                              | Test Date 1/6/2018      |                         |
|                                                                                                                                                                                                                                                                                            | Site Reference                                                                      | AVA-Neo Tiew Crescent (5BHs) | Borehole                | BH-7                    |
|                                                                                                                                                                                                                                                                                            | Jobfile                                                                             | AVA - Neo Tiew Crescent      | Sample                  | TW03                    |
|                                                                                                                                                                                                                                                                                            | Client                                                                              | AVA                          | Depth                   | 24.00-24.90m            |
| Operator                                                                                                                                                                                                                                                                                   |  | Checked                      | Min Win Hui             | Approved Sio Keong Kong |

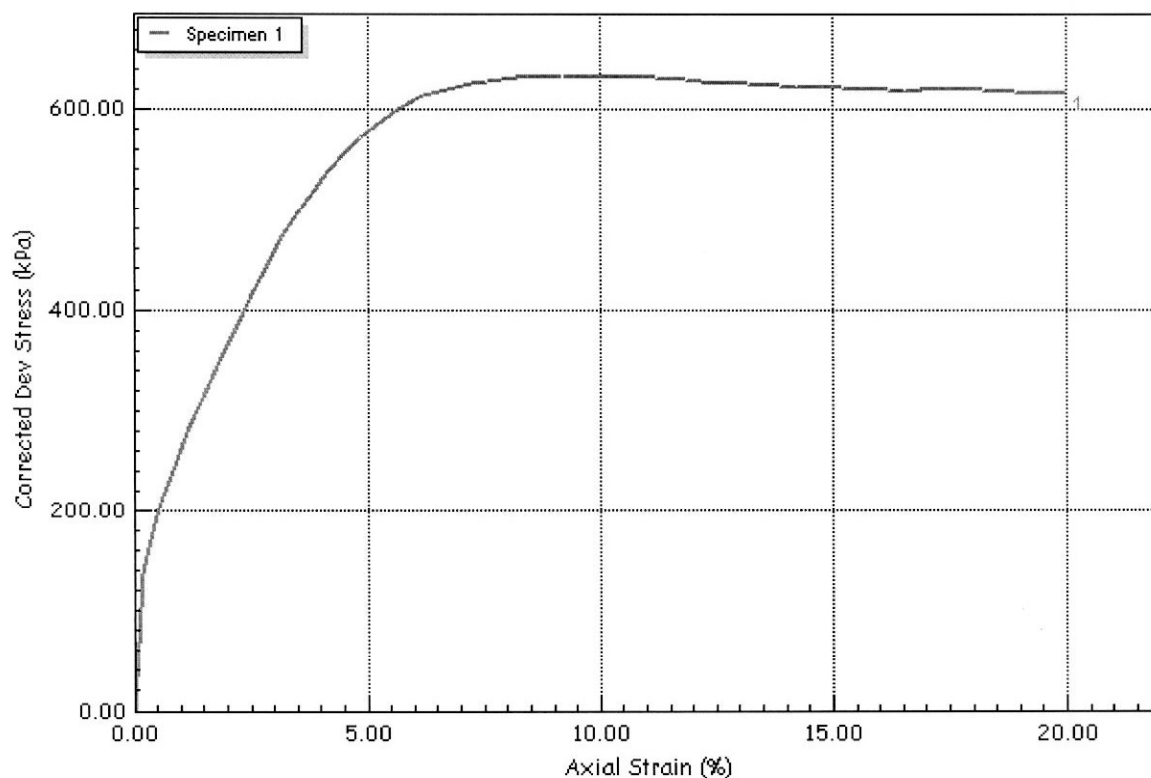
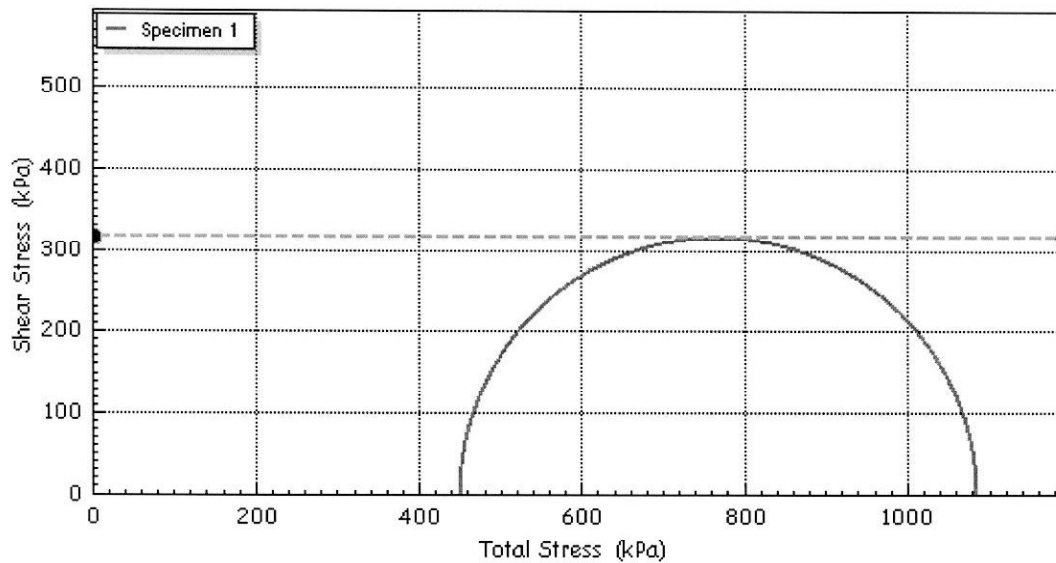
Ryobi Geotechnique International Pte Ltd

# Total Stress Triaxial Compression

## Unconsolidated Undrained

### Test Results Plots

|                |        |       |       |
|----------------|--------|-------|-------|
| Cohesion Level | c      | (kPa) | 316.7 |
| Friction Angle | $\phi$ | (deg) | 0.0   |



|                                                                                                                                                                                                                                                  |                                                                                     |                                |             |           |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------|-------------|-----------|----------------|
| <br><br>ACCREDITED<br>LABORATORY<br>SAC-SINGLAS<br>Cert No: LA-2018-0623-B | Test Method                                                                         | BS1377: Part 7 1990 : Clause 8 |             | Test Name | UU11-AVA-B7T3  |
|                                                                                                                                                                                                                                                  | Database:                                                                           | \\SQLEXPRESS \ RyobiG-L3-2017  |             | Test Date | 1/6/2018       |
|                                                                                                                                                                                                                                                  | Site Reference                                                                      | AVA-Neo Tiew Crescent (5BHs)   |             | Borehole  | BH-7           |
|                                                                                                                                                                                                                                                  | Jobfile                                                                             | AVA - Neo Tiew Crescent        |             | Sample    | TW03           |
|                                                                                                                                                                                                                                                  | Client                                                                              | AVA                            |             | Depth     | 24.00-24.90m   |
| Operator                                                                                                                                                                                                                                         |  | Checked                        | Min Win Hui | Approved  | Sio Keong Kong |

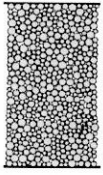
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# Effective Stress Triaxial Compression

## Consolidated Undrained

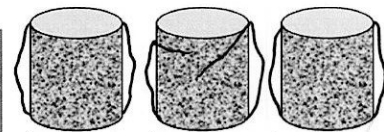
### Summary Report

| Sample Details                                                                                                                               |  | Depth                   | 8.00-8.90m                           |       |       |
|----------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--------------------------------------|-------|-------|
|  <p>sketch showing specimen location in original sample</p> |  | Description             | Light grey gravelly very clayey SAND |       |       |
|                                                                                                                                              |  | Type                    | Undisturbed Sample                   |       |       |
|                                                                                                                                              |  |                         | Spm. 1                               | 2     | 3     |
|                                                                                                                                              |  | Initial Sample Length   | L <sub>0</sub> (mm)                  | 76.0  | 76.0  |
|                                                                                                                                              |  | Initial Sample Diameter | D <sub>0</sub> (mm)                  | 38.0  | 38.0  |
|                                                                                                                                              |  | Initial Sample Weight   | W <sub>0</sub> (gr)                  | 179.2 | 175.3 |
|                                                                                                                                              |  | Initial Bulk Density    | ρ <sub>0</sub> (Mg/m <sup>3</sup> )  | 2.08  | 2.03  |
|                                                                                                                                              |  | Particle Density        | ρ <sub>s</sub> (Mg/m <sup>3</sup> )  | 2.58  | 2.58  |

| Initial Conditions           |                                      | Spm. 1  | 2       | 3       |
|------------------------------|--------------------------------------|---------|---------|---------|
| Initial Cell Pressure        | σ <sub>3i</sub> (kPa)                | 250     | 300     | 400     |
| Initial Back Pressure        | U <sub>bi</sub> (kPa)                | 200     | 200     | 200     |
| Strain Rate                  | m <sub>s</sub> (mm/min)              | 0.06000 | 0.06000 | 0.06000 |
| Membrane Thickness           | m <sub>b</sub> (mm)                  | 0.200   | 0.200   | 0.200   |
| Initial Moisture             | ω <sub>i</sub> % (%)                 | 19      | 20      | 20      |
| Initial Dry Density          | ρ <sub>di</sub> (Mg/m <sup>3</sup> ) | 1.75    | 1.69    | 1.70    |
| Initial Voids Ratio          | e <sub>i</sub>                       | 0.477   | 0.523   | 0.514   |
| Initial Degree of Saturation | S <sub>i</sub> (%)                   | 100     | 99      | 100     |
| B Value                      | B                                    | 0.97    | 0.97    | 0.98    |

| Final Conditions                  |                                           | Spm. 1            | 2                 | 3                 |
|-----------------------------------|-------------------------------------------|-------------------|-------------------|-------------------|
| Final Moisture                    | ω <sub>f</sub> % (%)                      | 19                | 20                | 19                |
| Final Dry Density                 | ρ <sub>df</sub> (Mg/m <sup>3</sup> )      | 1.77              | 1.74              | 1.78              |
| Final Voids Ratio                 | e <sub>f</sub>                            | 0.461             | 0.482             | 0.445             |
| Final Degree of Saturation        | S <sub>f</sub> (%)                        | 100.0             | 100.0             | 100.0             |
| Failure Criteria                  |                                           | Max. Stress Ratio | Max. Stress Ratio | Max. Stress Ratio |
| Strain At Failure                 | ε % (%)                                   | 1.35              | 4.00              | 3.50              |
| Stress At Failure                 | (σ <sub>1</sub> - σ <sub>3</sub> ') (kPa) | 92.6              | 191.0             | 386.7             |
| Minor Stress At Failure           | σ <sub>3</sub> ' (kPa)                    | 28.0              | 68.1              | 141.4             |
| Major Stress At Failure           | σ <sub>1</sub> ' (kPa)                    | 120.6             | 259.1             | 528.1             |
| Principal Stress Ratio At Failure | σ <sub>1</sub> ' / σ <sub>3</sub> ' (kPa) | 4.308             | 3.805             | 3.735             |

### Notes



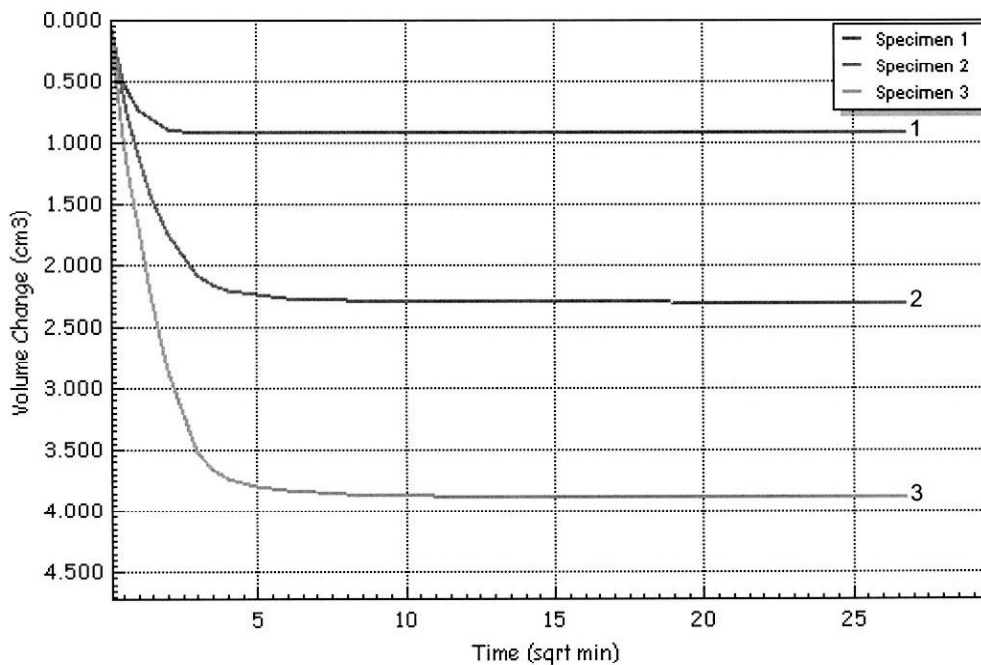
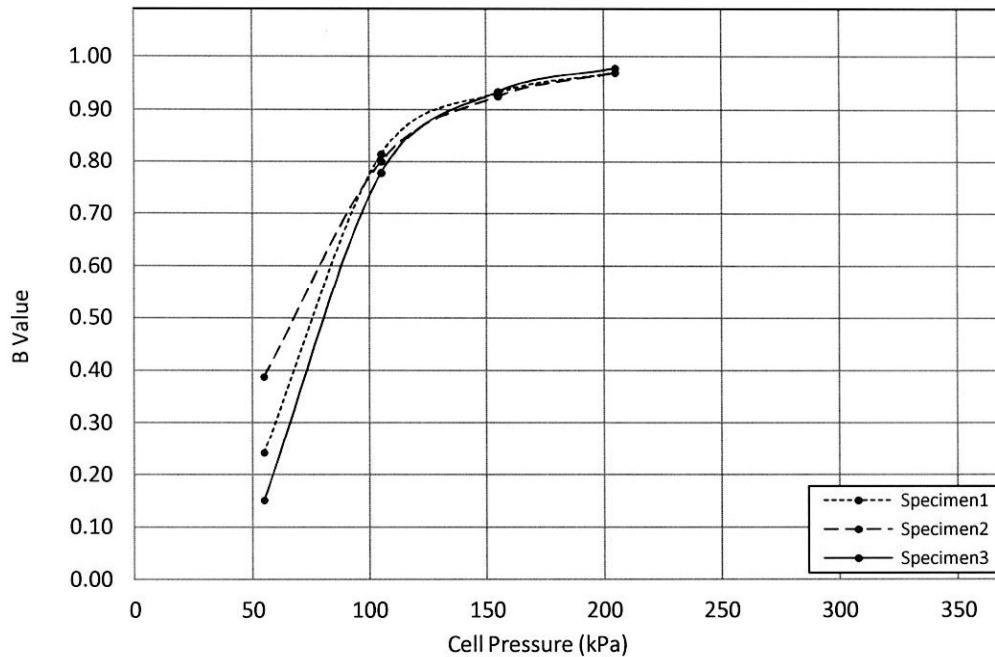
|                                                                                                                                                                            |                |                                |           |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------|-----------|-------------------|
| <br> | Test Method    | BS1377-8 : 1990 : Clause 7     | Test Name | CU4-NeoTiew-B7T01 |
|                                                                                                                                                                            | Database:      | .\SQLEXPRESS \ Ryobi-2017      | Test Date | 1/6/2018          |
|                                                                                                                                                                            | Site Reference | AVA - Neo Tiew Crescent (5BHs) | Borehole  | BH-7              |
|                                                                                                                                                                            | Jobfile        | K5728 Neo Tiew Crescent        | Sample    | TW01              |
|                                                                                                                                                                            | Client         | AVA                            | Depth     | 8.00-8.90m        |
| Operator                                                                                                                                                                   |                | Min Win Htut                   | Approved  | Sio Keong Kong    |

Ryobi Geotechnique International Pte Ltd

# Effective Stress Triaxial Compression

## Consolidated Undrained

### Saturation and Consolidation Plots



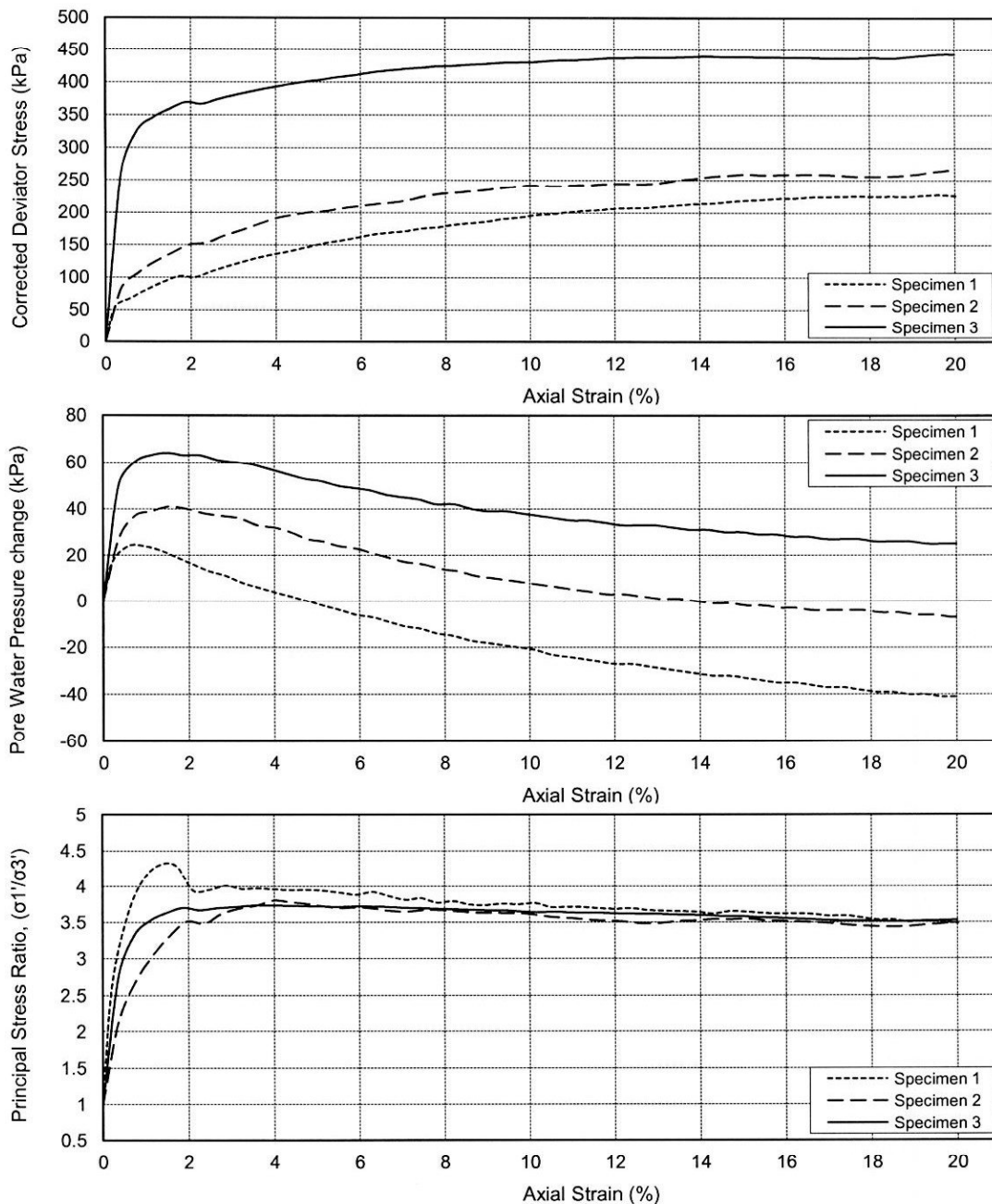
|                                                                                              |                                        |                                |                             |                         |
|----------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------|-----------------------------|-------------------------|
| <b>Ryobi G</b><br><br>ACCREDITED LABORATORY<br><b>SAC-SINGLAS</b><br>Cert No: LA-2018-0623-B | Test Method BS1377-8 : 1990 : Clause 7 |                                | Test Name CU4-NeoTiew-B7T01 |                         |
|                                                                                              | Database: .\SQLEXPRESS \ Ryobi-2017    |                                | Test Date 1/6/2018          |                         |
|                                                                                              | Site Reference                         | AVA - Neo Tiew Crescent (5BHs) | Borehole                    | BH-7                    |
|                                                                                              | Jobfile                                | K5728 Neo Tiew Crescent        | Sample                      | TW01                    |
|                                                                                              | Client                                 | AVA                            | Depth                       | 8.00-8.90m              |
| Operator <i>Kai</i>                                                                          |                                        | Checked                        | Min Win Htut                | Approved Sio Keong Kong |

Ryobi Geotechnique International Pte Ltd

# Effective Stress Triaxial Compression

## Consolidation Undrained

## Shear Stage Plots



| Initial and Final Values                          | Spm.1 | Spm.2 | Spm.3 |
|---------------------------------------------------|-------|-------|-------|
| Pore Water Pressure at start of shear stage (kPa) | 200   | 200   | 200   |
| Pore Water Pressure at Max. Stress Ratio (kPa)    | 222   | 232   | 259   |
| A Value at Max. Stress Ratio                      | 0.238 | 0.168 | 0.153 |

Note : Side drain correction has been applied to strain exceeding 2% according to BS 1377.

|                                                                                                                                                                                                                                                             |                |                                |           |                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------|-----------|-------------------|
| <br><br><small>ACCREDITED LABORATORY</small><br><small>Conf No: LA201104023-0</small> | Test Method    | BS1337-8 : 1990 : Clause 7     | Test Name | CU4-NeoTiew-B7T01 |
|                                                                                                                                                                                                                                                             | Database       | :\SQLEXPRESS\Ryobi-2017        | Test Date | 1/6/2018          |
|                                                                                                                                                                                                                                                             | Site Reference | AVA - Neo Tiew Crescent (2BHs) | Borehole  | BH-7              |
|                                                                                                                                                                                                                                                             | Jobfile        | K5728 Neo Tiew Crescent        | Sample    | TW01              |
|                                                                                                                                                                                                                                                             | Client         | AVA                            | Depth     | 8.00-8.90m        |
|                                                                                                                                                                                                                                                             | Operator       | Kai                            | Checked   | Min Win Hkut      |
|                                                                                                                                                                                                                                                             |                |                                | Approved  | Sio Keong Kong    |

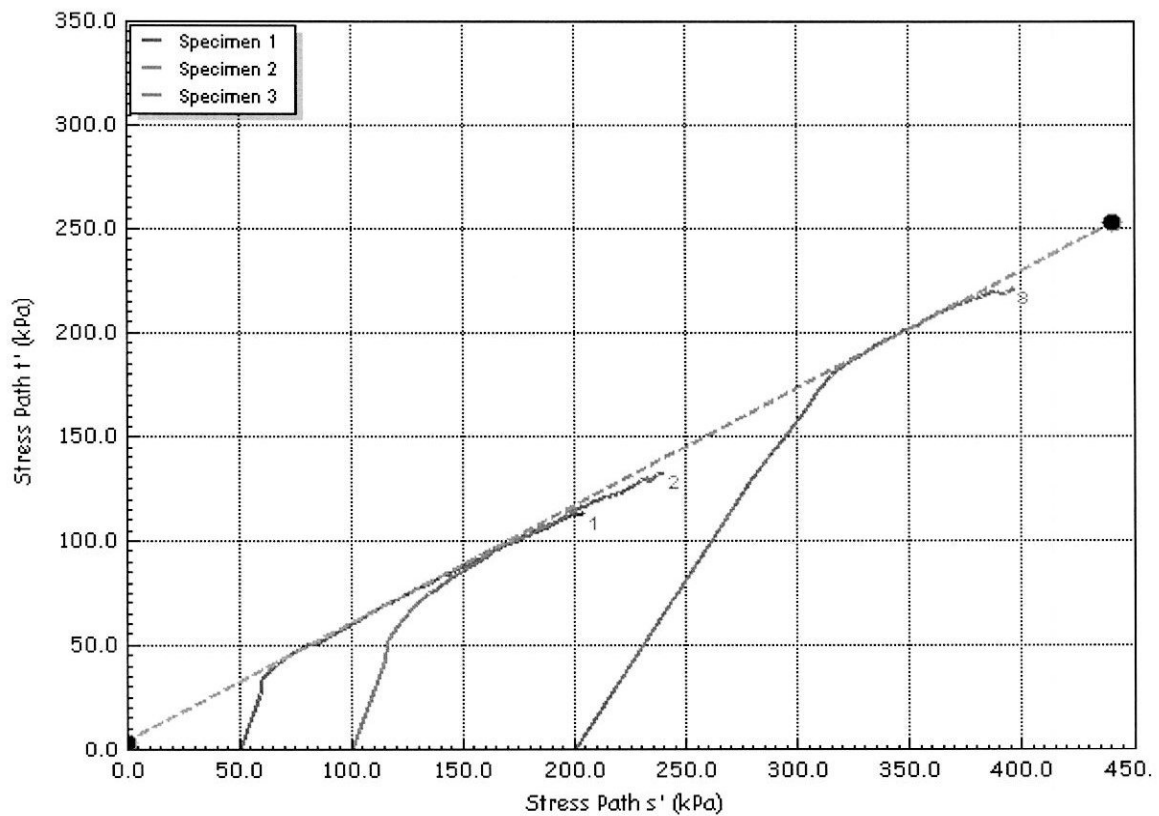
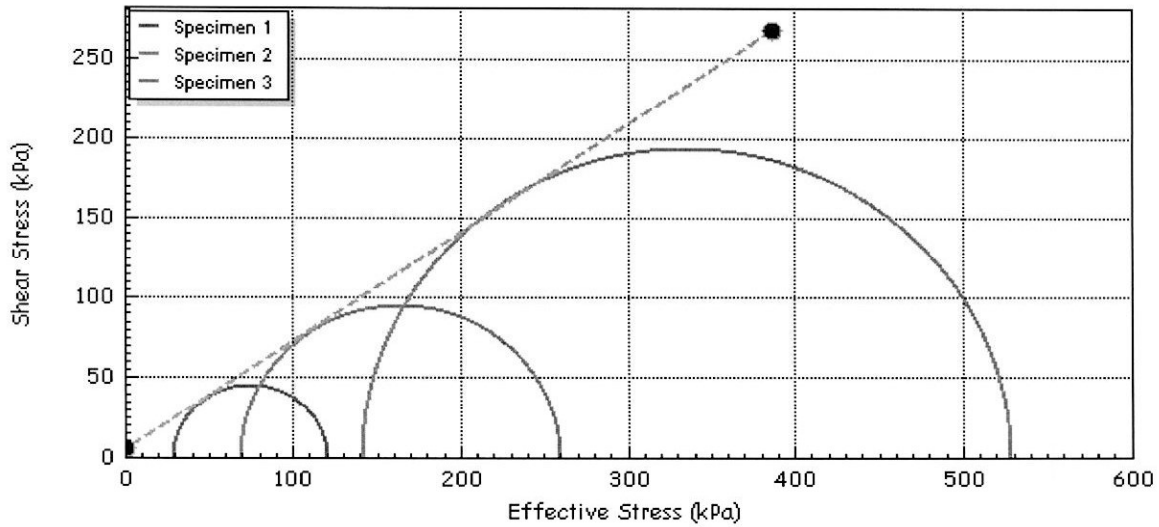
Ryobi Geotechnique International Pte Ltd

# Effective Stress Triaxial Compression

## Consolidated Undrained

### Shear Stage Plots

|                          |         |       |      |                         |          |       |      |
|--------------------------|---------|-------|------|-------------------------|----------|-------|------|
| Effective Cohesion       | $c'$    | (kPa) | 5.0  | Stress Path Intercept   | $t_0'$   | (kPa) | 4.1  |
| Effective Friction Angle | $\phi'$ | (deg) | 34.3 | Stress Path Inclination | $\theta$ | (deg) | 29.4 |



|                                                                                                 |                |                                |              |                   |
|-------------------------------------------------------------------------------------------------|----------------|--------------------------------|--------------|-------------------|
| <b>Ryobi G</b><br><br>ACCREDITED<br>LABORATORY<br><b>SAC-SINGLAS</b><br>Cert No: LA-2016-0623-B | Test Method    | BS1377-8 : 1990 : Clause 7     | Test Name    | CU4-NeoTiew-B7T01 |
|                                                                                                 | Database:      | \\SQLEXPRESS \ Ryobi-2017      | Test Date    | 1/6/2018          |
|                                                                                                 | Site Reference | AVA - Neo Tiew Crescent (5BHs) | Borehole     | BH-7              |
|                                                                                                 | Jobfile        | K5728 Neo Tiew Crescent        | Sample       | TW01              |
|                                                                                                 | Client         | AVA                            | Depth        | 8.00-8.90m        |
| Operator                                                                                        | <i>Kas</i>     | Checked                        | Min Win Htut | Approved          |
|                                                                                                 |                |                                |              | Sio Keong Kong    |

Ryobi Geotechnique International Pte Ltd



## CERTIFICATE OF ANALYSIS

|                         |                                                                 |                         |                                                                                                            |
|-------------------------|-----------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------|
| Work Order              | : SG1808925                                                     | Page                    | : 1 of 2                                                                                                   |
| Client                  | : RYOBI GEOTECH PTE LTD                                         | Project                 | : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)                                           |
| Contact                 | : Mr Min Win Htut                                               | Order number            | : GTPO2161                                                                                                 |
| Address                 | : 58A Sungei Kadut Loop Ryobi Industrial Bldg, Singapore 729505 | Quote number            | : SG2016RYOGEO0001 (Soil - Organic Content, Total Sulphate, pH Value, Chloride Content & Soluble Sulphate) |
| E-mail                  | : min.win.htut@ryobi-g.com                                      | Date Received           | : 31-May-2018                                                                                              |
| Telephone               | : +65 6369 7100                                                 | Date Analysed           | : 01-Jun-2018                                                                                              |
| Facsimile               | : +65 6362 5848                                                 | Date Issued             | : 08-Jun-2018                                                                                              |
| No. of samples received | : 5                                                             | No. of samples analysed | : 5                                                                                                        |

### General Comments

This report supersedes any previous report(s) with this reference. All pages of this report have been checked and approved for release. Results apply to the sample(s) as submitted. The laboratory declares that the test results relate only to the items tested and do not substitute any other documents. This report may not be reproduced except with prior written approval from the testing laboratory. This report may not be used for advertising purposes.

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, BS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference. LOR = Limit of reporting

\* Preceding indicates non-accredited test. In the case when a procedure belonging to an accredited method was used for non-accredited matrix, would apply that the reported results are non-accredited.

- BS method is referenced to British Standard 1377: Part 3/1990
- Organic Content Test is referenced to Clause 3 of Part 3:BS1377
- Chloride Content Test is referenced to Clause 7.3 or Part 3:BS1377
- Sulphate Content Test is referenced to Clause 5.2 of Part 3:BS1377
- pH Test is referenced to Clause 9 of Part 3: BS1377

### Signatories

This laboratory is accredited under SAC - SINGLAS. The tests reported herein have been performed in accordance with the laboratory's Terms of Accreditation. This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

| Signatories | Accreditation Category           | Position                     |
|-------------|----------------------------------|------------------------------|
| Pansy Teo   | SG - Inorganics<br>SG - Organics | Senior Environmental Manager |

**ALS Technichem (S) Pte Ltd**  
Co. Reg. No. 198403076R GST Reg. No. M2-0068633-X  
Part of the **ALS Laboratory Group**

121 Genting Lane, #04-01, ALS Building Singapore 349572  
Tel. +65 6589 0118 Fax. +65 6283 9689 [www.alsglobal.com](http://www.alsglobal.com)

Page : 2 of 2  
 Work Order : SG1808925  
 Client : RYOBI GEOTECH PTE LTD  
 Project : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)



### Analytical Results

Sub-Matrix: SOIL

Client sample ID

|                                              |            |      |         | BH-3<br>S1        | BH-4<br>S1        | BH-5<br>S1        |
|----------------------------------------------|------------|------|---------|-------------------|-------------------|-------------------|
| Sampling date/time                           |            |      |         | 31-May-2018 00:00 | 31-May-2018 00:00 | 31-May-2018 00:00 |
| Compound                                     | Method     | LOR  | Unit    | SG1808925-001     | SG1808925-002     | SG1808925-003     |
| <b>INORGANIC- Physical Properties</b>        |            |      |         |                   |                   |                   |
| pH Value                                     | BS1377 pH  | 0.1  | pH Unit | 7.2               | 5.6               | 7.4               |
| <b>INORGANICS - Nonmetallic Constituents</b> |            |      |         |                   |                   |                   |
| Chloride                                     | BS1377 Cl  | 0.01 | % DW    | <0.01             | <0.01             | <0.01             |
| Organic Matter                               | BS1377     | 0.1  | % DW    | 0.5               | 0.2               | 0.3               |
| Sulphate as SO3                              | BS1377 SO3 | 0.01 | % DW    | <0.01             | <0.01             | <0.01             |

Sub-Matrix: SOIL

Client sample ID

|                                              |            |      |         | BH-6<br>S1        | BH-7<br>S1        | —     |
|----------------------------------------------|------------|------|---------|-------------------|-------------------|-------|
| Sampling date/time                           |            |      |         | 31-May-2018 00:00 | 31-May-2018 00:00 | ----  |
| Compound                                     | Method     | LOR  | Unit    | SG1808925-004     | SG1808925-005     | ----- |
| <b>INORGANIC- Physical Properties</b>        |            |      |         |                   |                   |       |
| pH Value                                     | BS1377 pH  | 0.1  | pH Unit | 6.5               | 6.5               | ----  |
| <b>INORGANICS - Nonmetallic Constituents</b> |            |      |         |                   |                   |       |
| Chloride                                     | BS1377 Cl  | 0.01 | % DW    | <0.01             | <0.01             | ----  |
| Organic Matter                               | BS1377     | 0.1  | % DW    | 0.3               | 0.5               | ----  |
| Sulphate as SO3                              | BS1377 SO3 | 0.01 | % DW    | <0.01             | <0.01             | ----  |



## CERTIFICATE OF ANALYSIS

|                         |                                                                 |                         |                                                                                                           |
|-------------------------|-----------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------|
| Work Order              | : SG1808926                                                     | Page                    | : 1 of 2                                                                                                  |
| Client                  | : RYOBİ GEOTECH PTE LTD                                         | Project                 | : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)                                          |
| Contact                 | : Mr Min Win Htut                                               | Order number            | : GTPQ2161                                                                                                |
| Address                 | : 58A Sungei Kadut Loop Ryobi Industrial Bldg, Singapore 729505 | Quote number            | : SG2016RYOGEO0002 (Water - Organic Content, Sulphate Content, Chloride, pH, Salinity & Soluble Sulphate) |
| E-mail                  | : min.win.htut@ryobi-g.com                                      | Date Received           | : 31-May-2018                                                                                             |
| Telephone               | : +65 6369 7100                                                 | Date Analysed           | : 31-May-2018                                                                                             |
| Facsimile               | : +65 6362 5848                                                 | Date Issued             | : 08-Jun-2018                                                                                             |
| No. of samples received | : 5                                                             | No. of samples analysed | : 5                                                                                                       |

### General Comments

This report supersedes any previous report(s) with this reference. All pages of this report have been checked and approved for release. Results apply to the sample(s) as submitted. The laboratory declares that the test results relate only to the items tested and do not substitute any other documents. This report may not be reproduced except with prior written approval from the testing laboratory. This report may not be used for advertising purposes.

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, BS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference. LOR = Limit of reporting

\* Preceding indicates non-accredited test. In the case when a procedure belonging to an accredited method was used for non-accredited matrix, would apply that the reported results are non-accredited.

- Sulphate Content Test is referenced to Clause 5.2 of Part 3:BS1377
- BS method is referenced to British Standard 1377: Part 3/1990
- Chloride Content Test is referenced to Clause 7.3 of Part 3: BS1377
- pH Test is referenced to Clause 9 of Part 3: BS1377

### Signatories

This laboratory is accredited under SAC - SINGLAS. The tests reported herein have been performed in accordance with the laboratory's Terms of Accreditation. This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

| Signatories | Accreditation Category           | Position                     |
|-------------|----------------------------------|------------------------------|
| Pansy Teo   | SG - Inorganics<br>SG - Organics | Senior Environmental Manager |

Page : 2 of 2  
 Work Order : SG1808926  
 Client : RYOBI GEOTECH PTE LTD  
 Project : 36 months SI Term Contract for AVA at Neo Tiew Crescent (5BHs)



### Analytical Results

Sub-Matrix: **WATER**

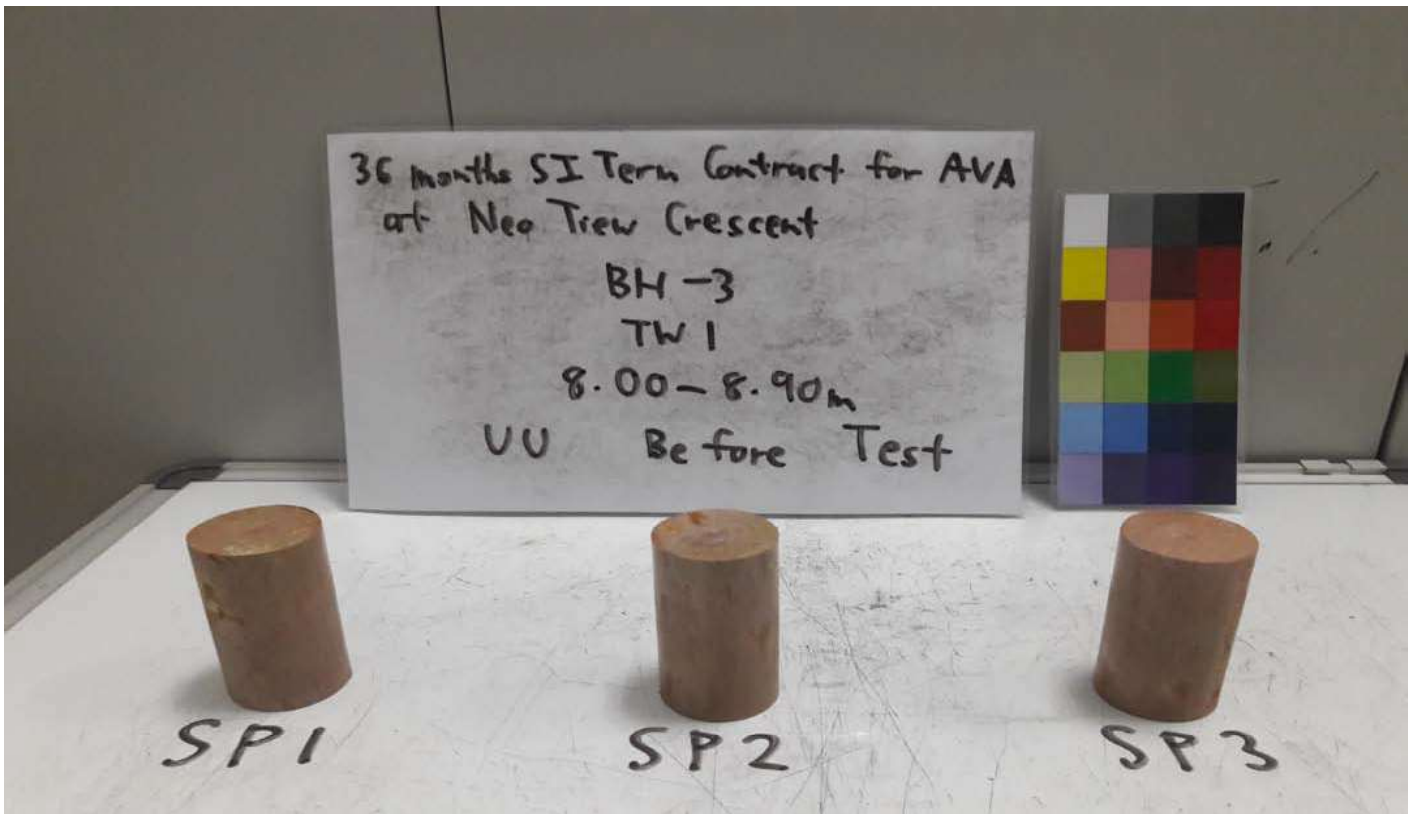
|                                              |                    |      |         | Client sample ID   | BH-3              | BH-4              | BH-5              |
|----------------------------------------------|--------------------|------|---------|--------------------|-------------------|-------------------|-------------------|
|                                              |                    |      |         | Sampling date/time | 31-May-2018 00:00 | 31-May-2018 00:00 | 31-May-2018 00:00 |
| Compound                                     | Method             | LOR  | Unit    |                    | SG1808926-001     | SG1808926-002     | SG1808926-003     |
| <b>INORGANIC- Physical Properties</b>        |                    |      |         |                    |                   |                   |                   |
| pH Value                                     | BS1377 pH          | 0.1  | pH Unit |                    | 12.2              | 7.2               | 12.3              |
| <b>INORGANICS - Nonmetallic Constituents</b> |                    |      |         |                    |                   |                   |                   |
| Chloride                                     | BS1377 Cl          | 0.01 | g/L     |                    | <0.01             | <0.01             | <0.01             |
| <b>INORGANICS-Anions</b>                     |                    |      |         |                    |                   |                   |                   |
| Sulphate as SO3                              | BS1377 SO3         | 0.01 | g/L     |                    | <0.01             | <0.01             | <0.01             |
| <b>ORGANICS-General</b>                      |                    |      |         |                    |                   |                   |                   |
| •Organic Content                             | Ashing/Gravimetric | 0.10 | % (w/v) |                    | <0.10             | <0.10             | <0.10             |

Sub-Matrix: **WATER**

|                                              |                    |      |         | Client sample ID   | BH-6              | BH-7              | —     |
|----------------------------------------------|--------------------|------|---------|--------------------|-------------------|-------------------|-------|
|                                              |                    |      |         | Sampling date/time | 31-May-2018 00:00 | 31-May-2018 00:00 | ----  |
| Compound                                     | Method             | LOR  | Unit    |                    | SG1808926-004     | SG1808926-005     | ----- |
| <b>INORGANIC- Physical Properties</b>        |                    |      |         |                    |                   |                   |       |
| pH Value                                     | BS1377 pH          | 0.1  | pH Unit |                    | 7.6               | 12.2              | ----  |
| <b>INORGANICS - Nonmetallic Constituents</b> |                    |      |         |                    |                   |                   |       |
| Chloride                                     | BS1377 Cl          | 0.01 | g/L     |                    | <0.01             | <0.01             | ----  |
| <b>INORGANICS-Anions</b>                     |                    |      |         |                    |                   |                   |       |
| Sulphate as SO3                              | BS1377 SO3         | 0.01 | g/L     |                    | 0.01              | <0.01             | ----  |
| <b>ORGANICS-General</b>                      |                    |      |         |                    |                   |                   |       |
| •Organic Content                             | Ashing/Gravimetric | 0.10 | % (w/v) |                    | <0.10             | <0.10             | ----  |

## **APPENDIX G**

### **SAMPLE PHOTOGRAPHS**



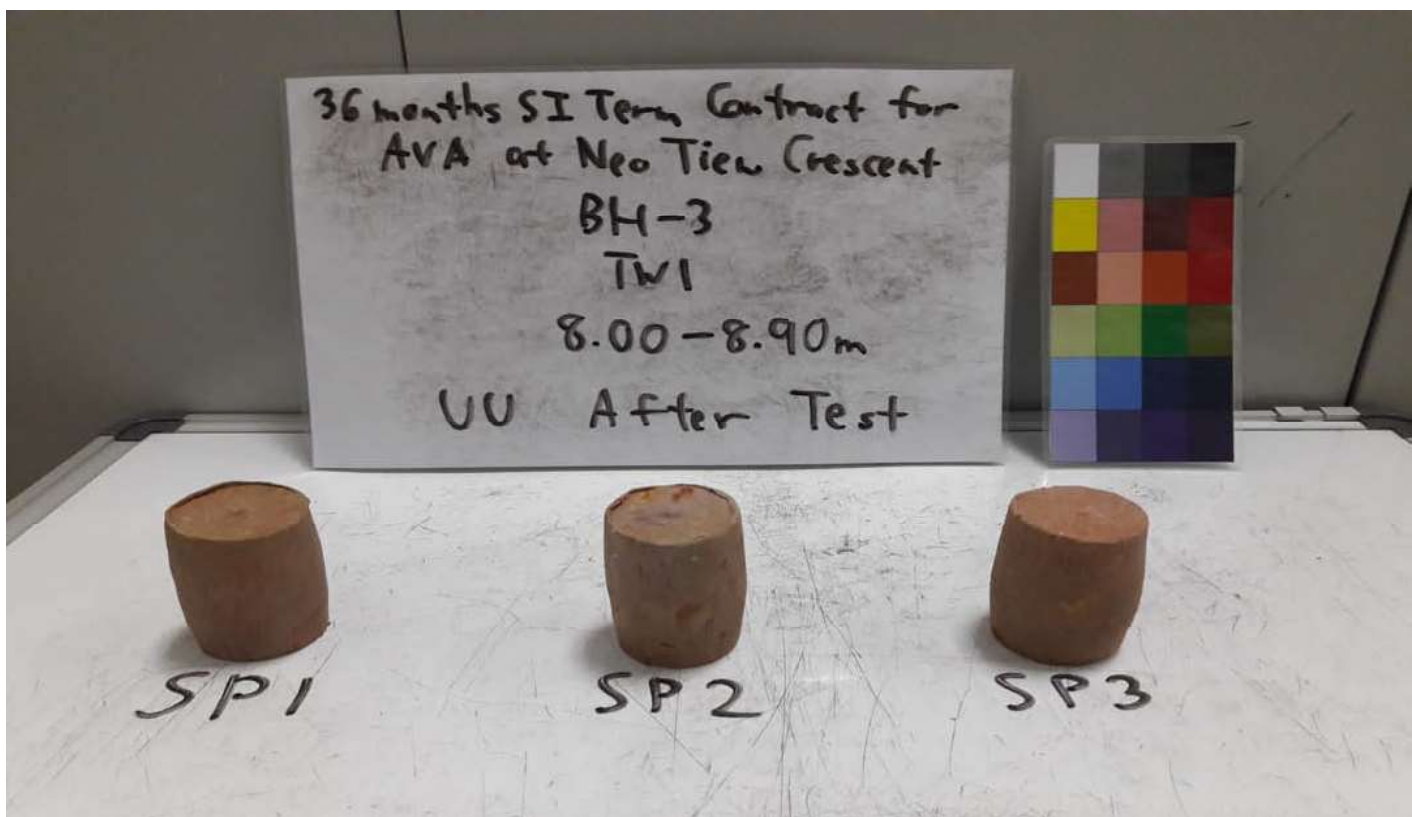
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



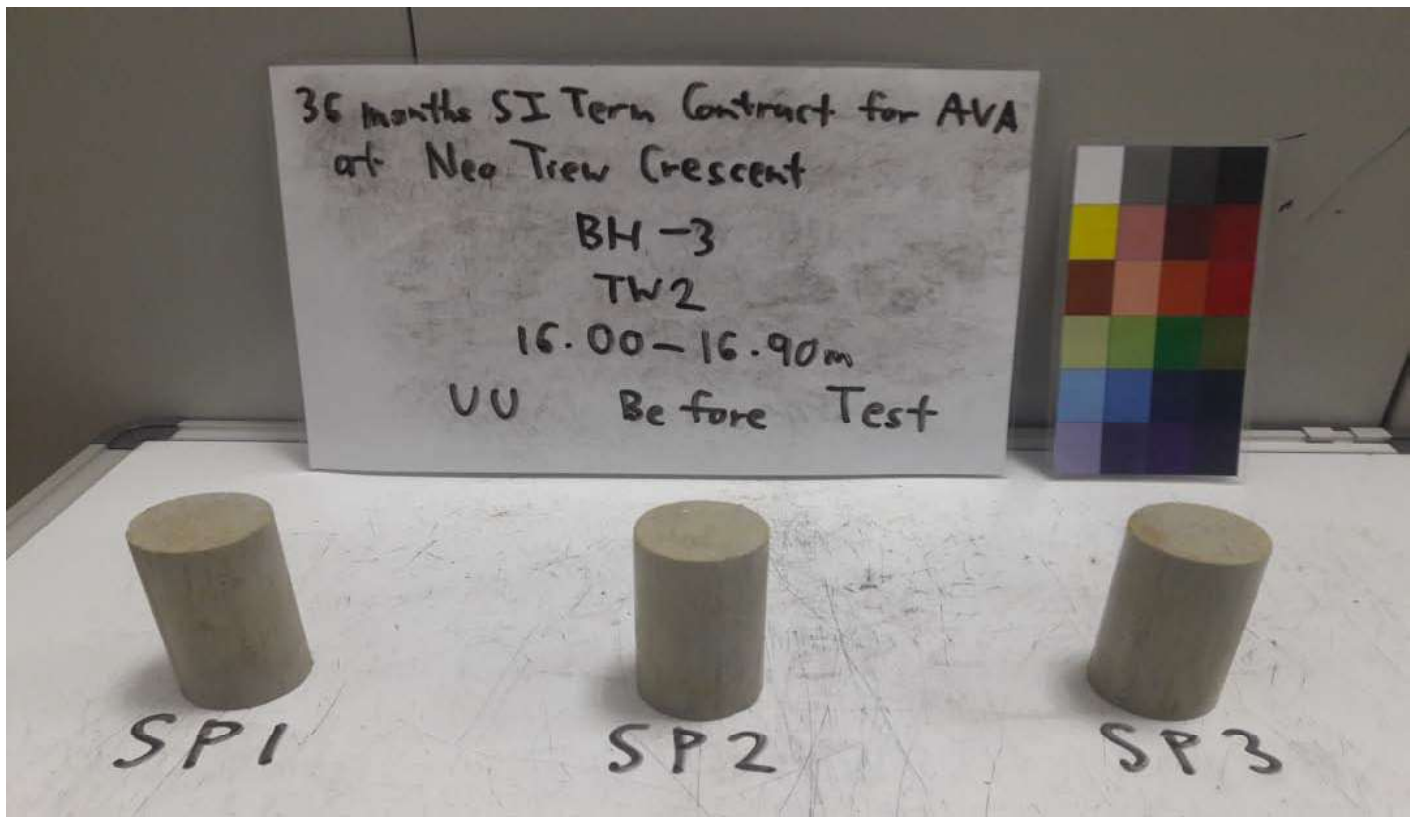
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



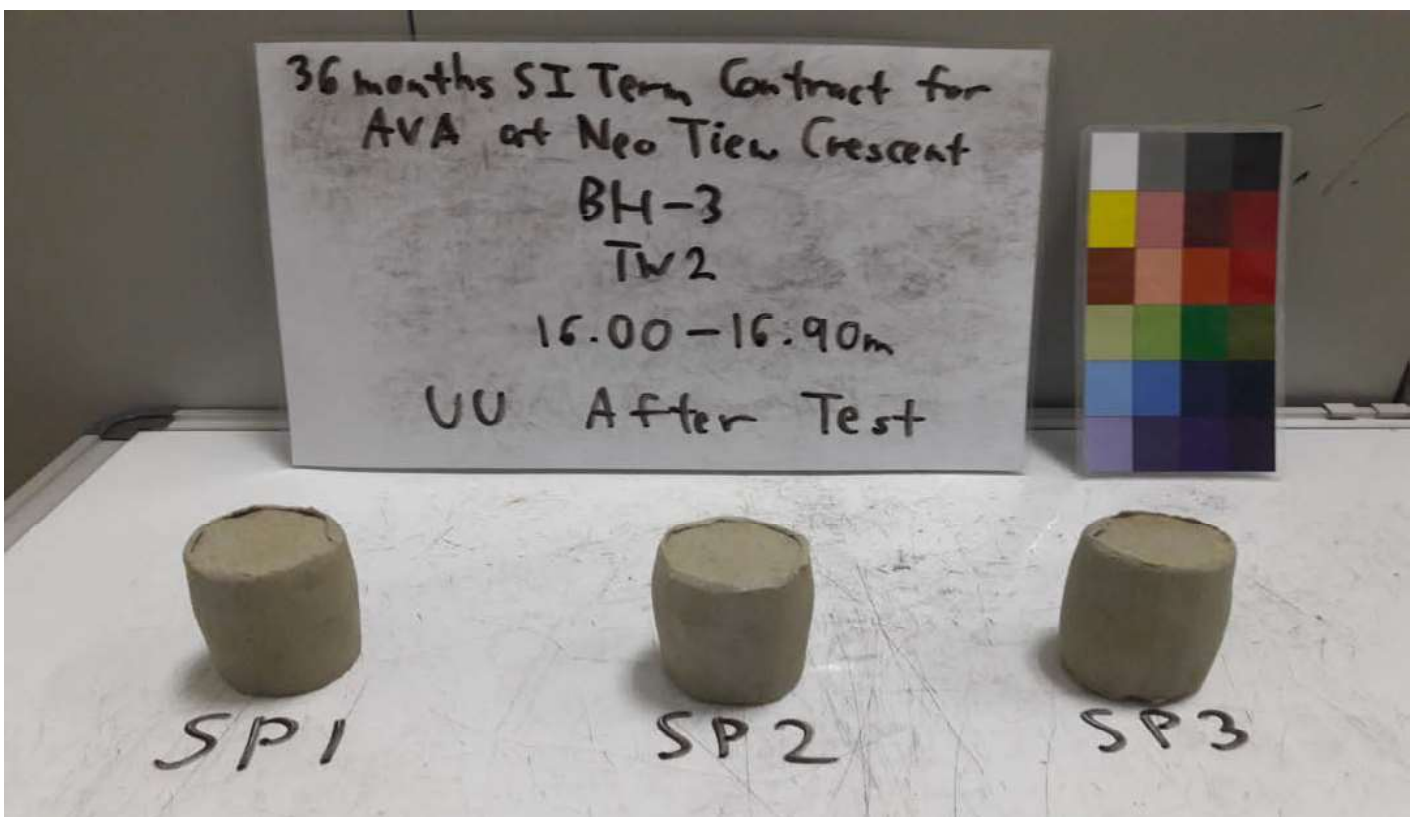
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



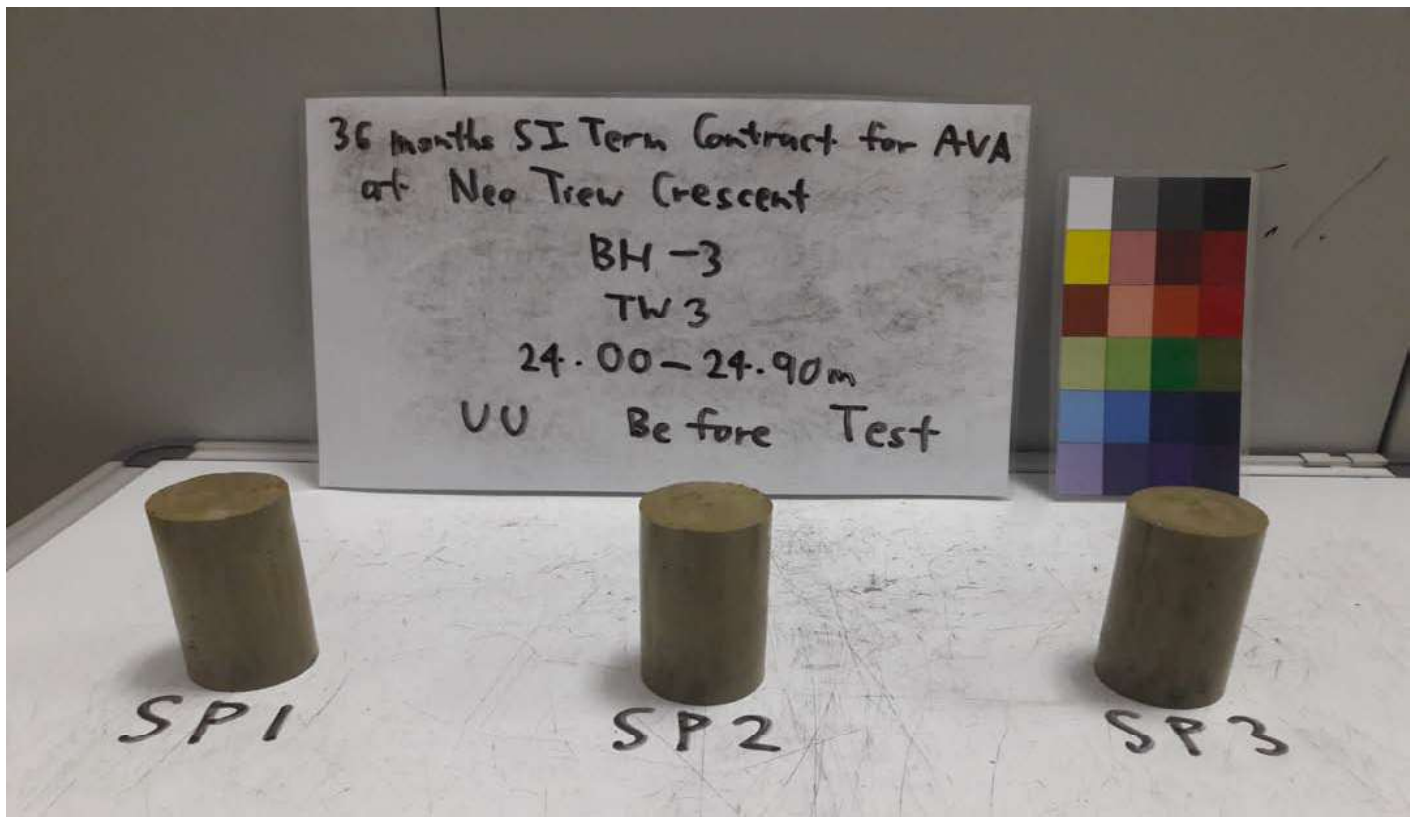
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



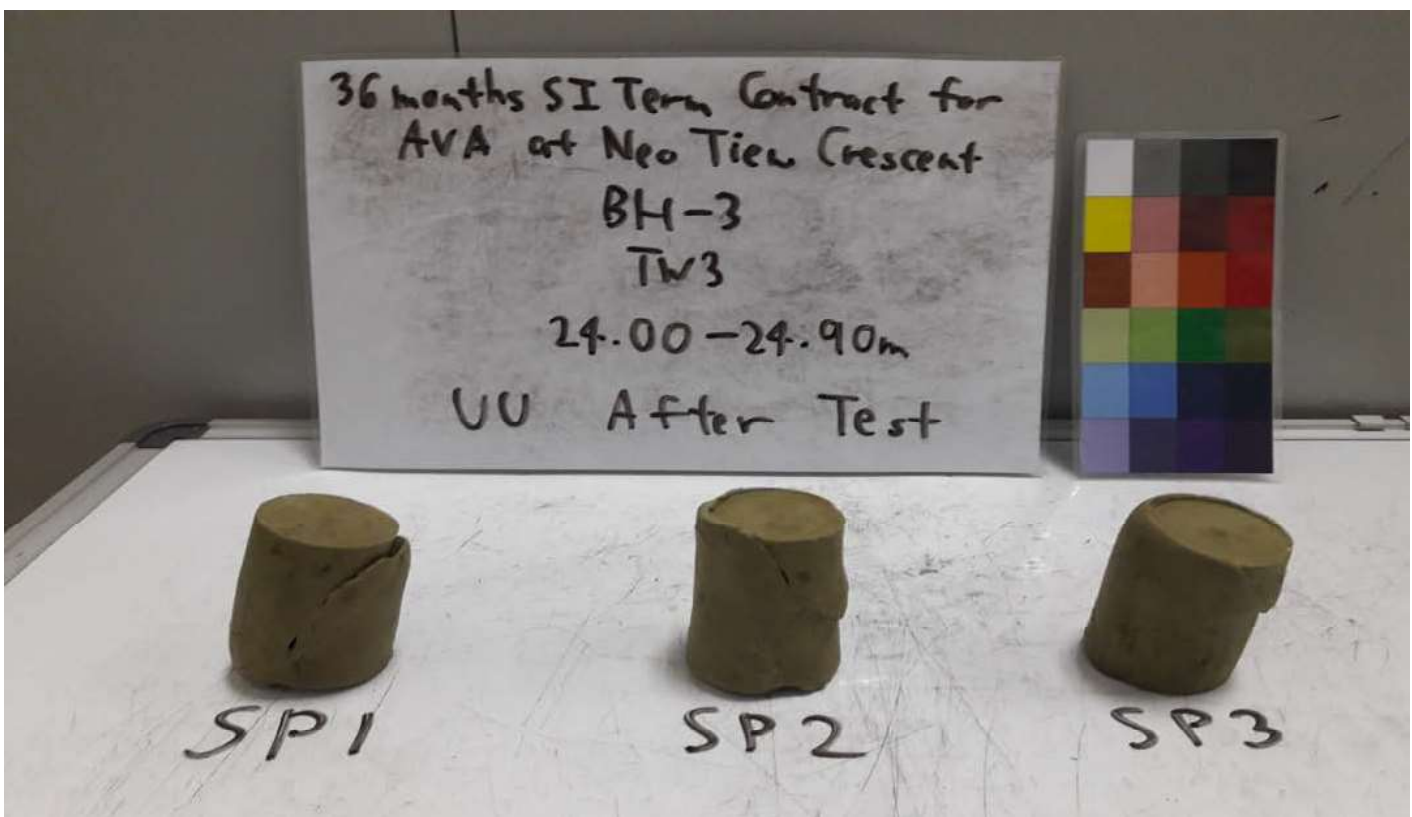
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



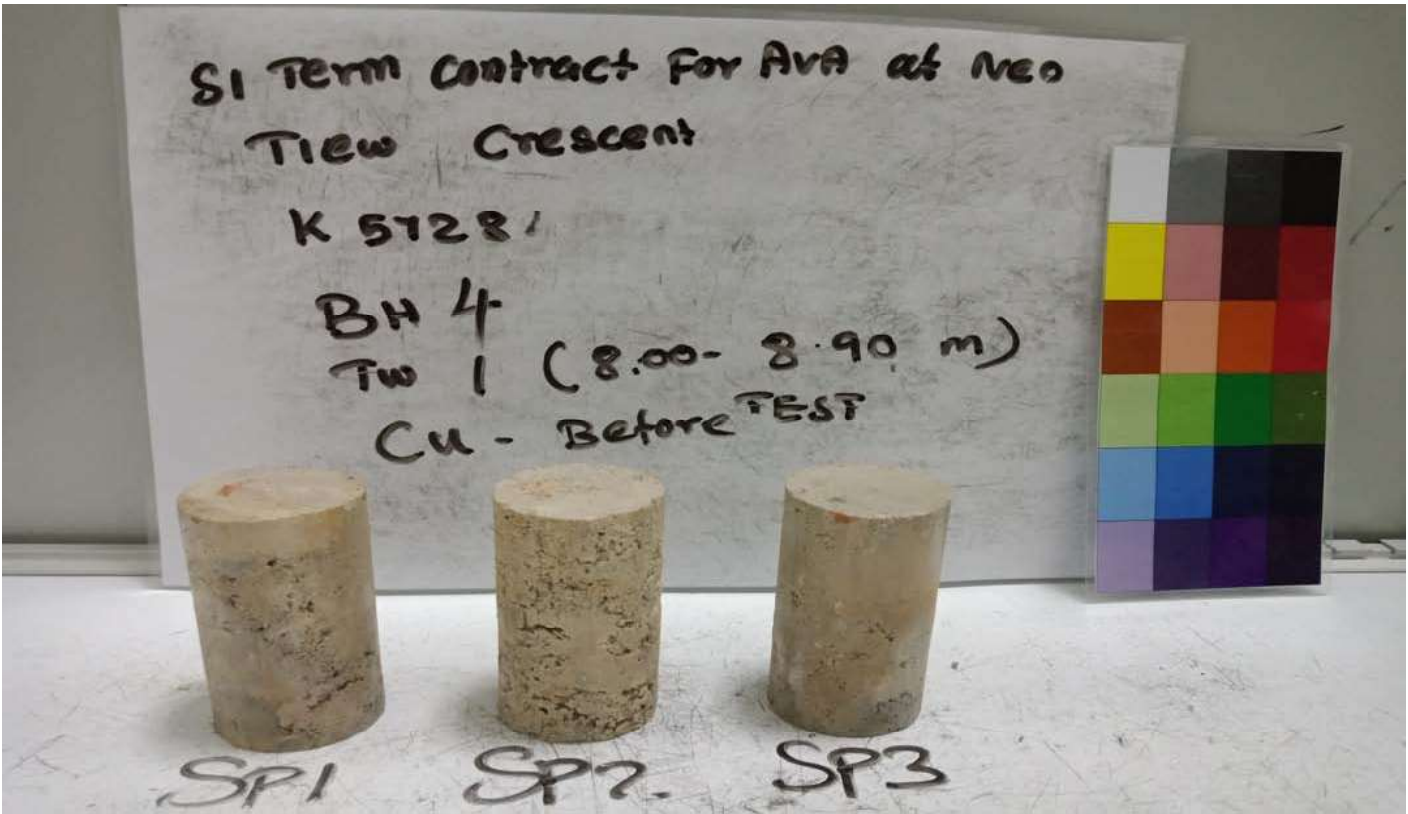
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH3-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



Thin-Walled Tube Sample (BH4-TW1)-Consolidated Undrained Triaxial Compression Test  
(Before Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



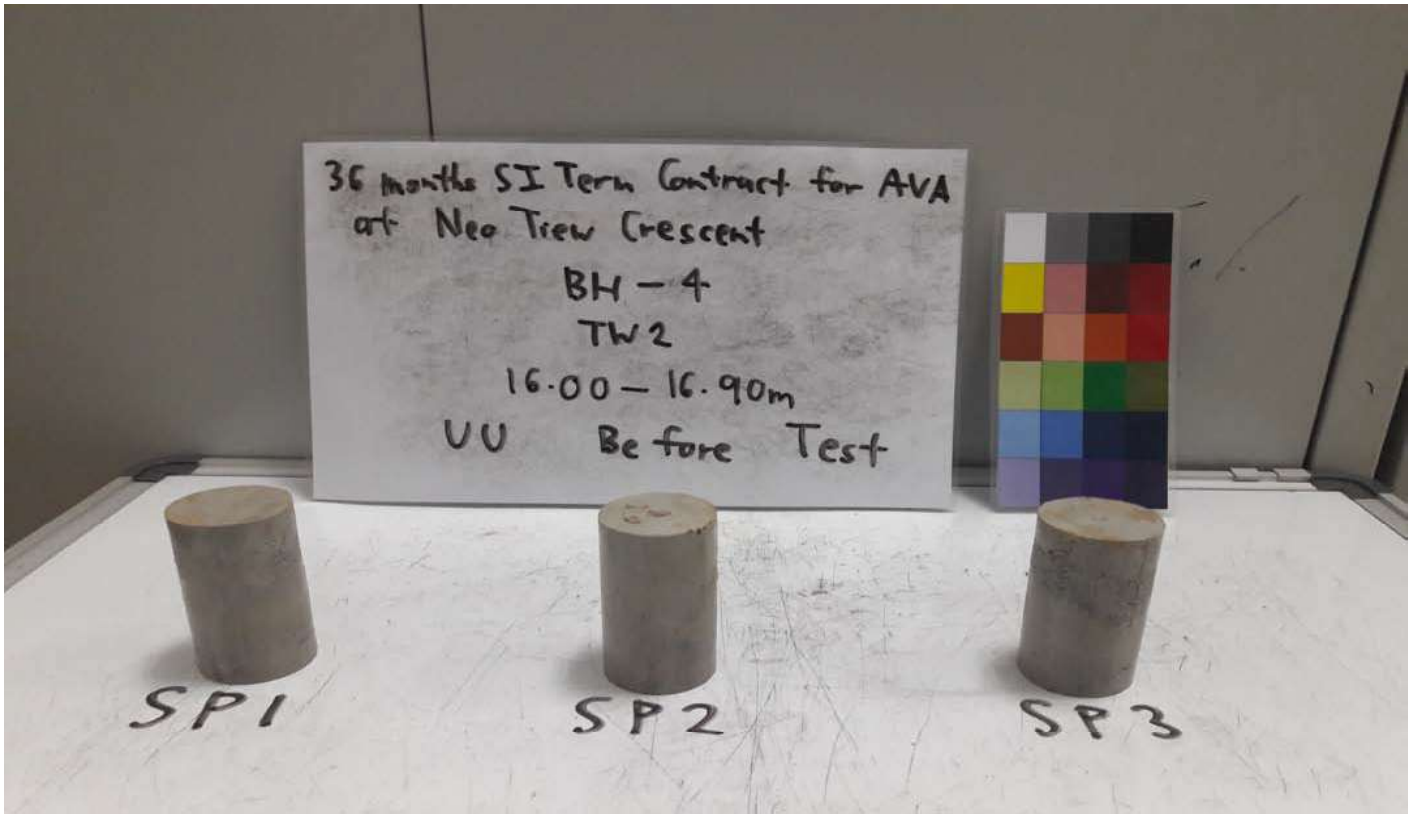
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



Thin-Walled Tube Sample (BH4-TW1)-Consolidated Undrained Triaxial Compression Test  
(After Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



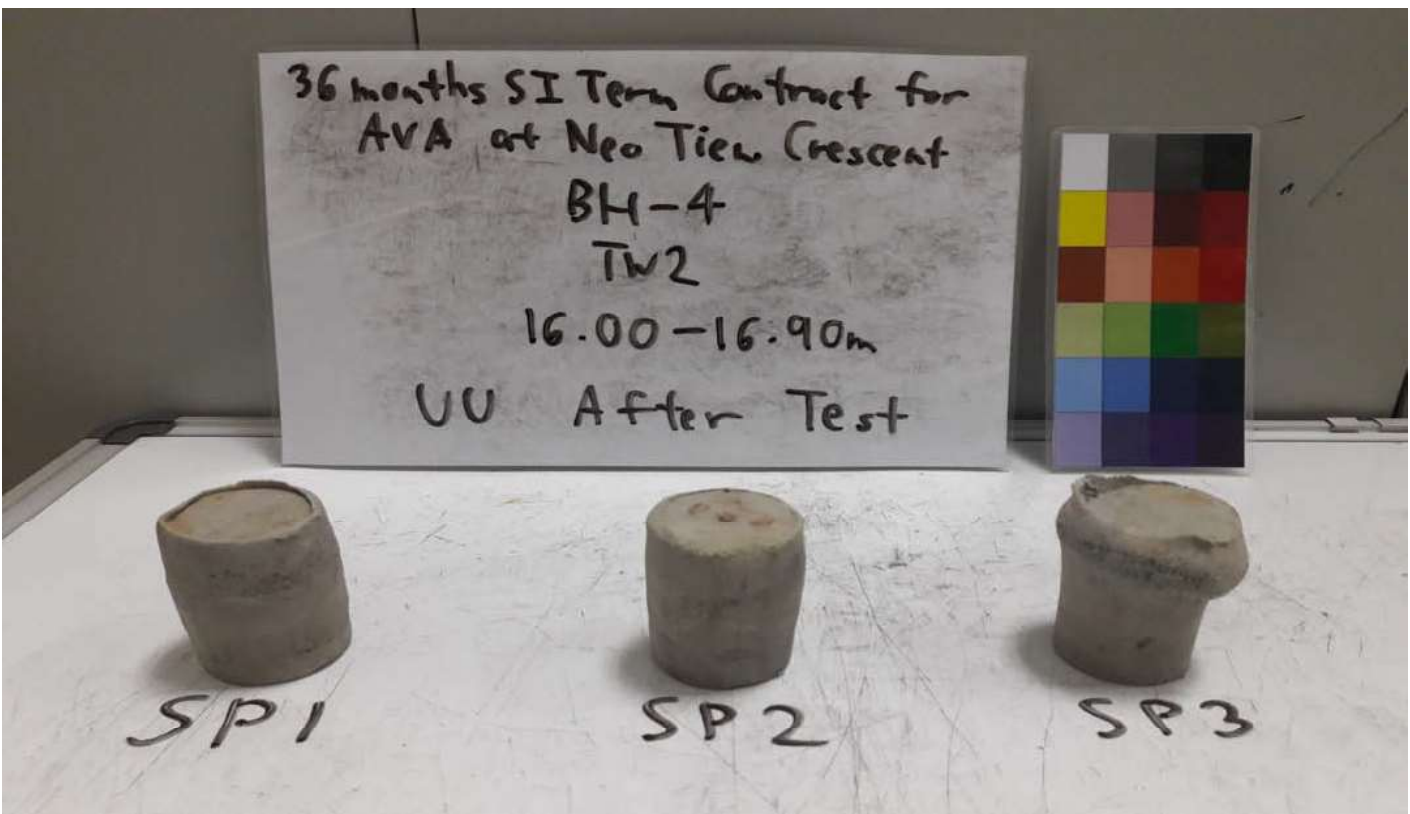
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH4-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT** : Agri-Food & Veterinary Authority of Singapore (AVA)

**PROJECT:** Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



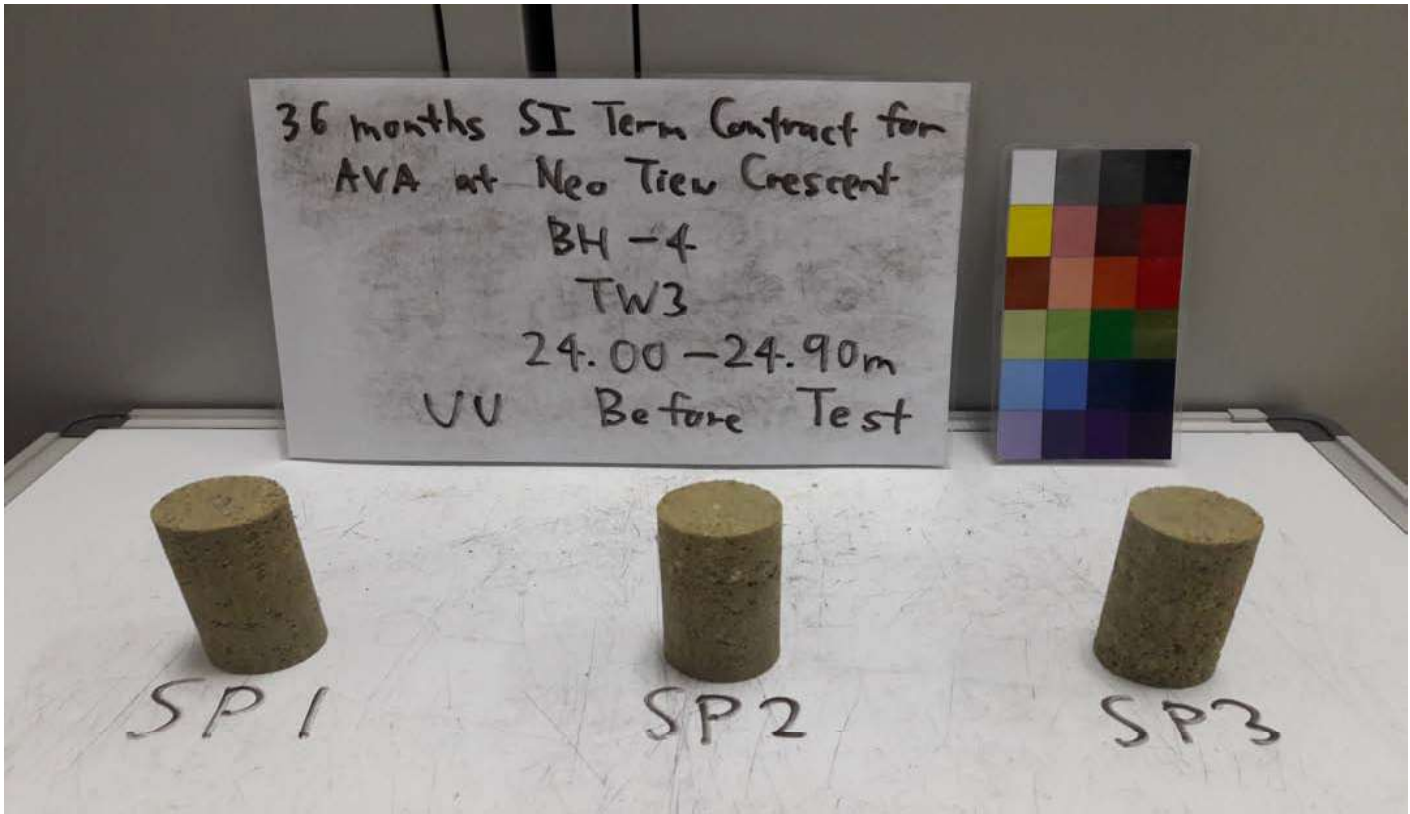
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH4-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT** : Agri-Food & Veterinary Authority of Singapore (AVA)

**PROJECT:** Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



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Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH4-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT** : Agri-Food & Veterinary Authority of Singapore (AVA)

**PROJECT:** Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



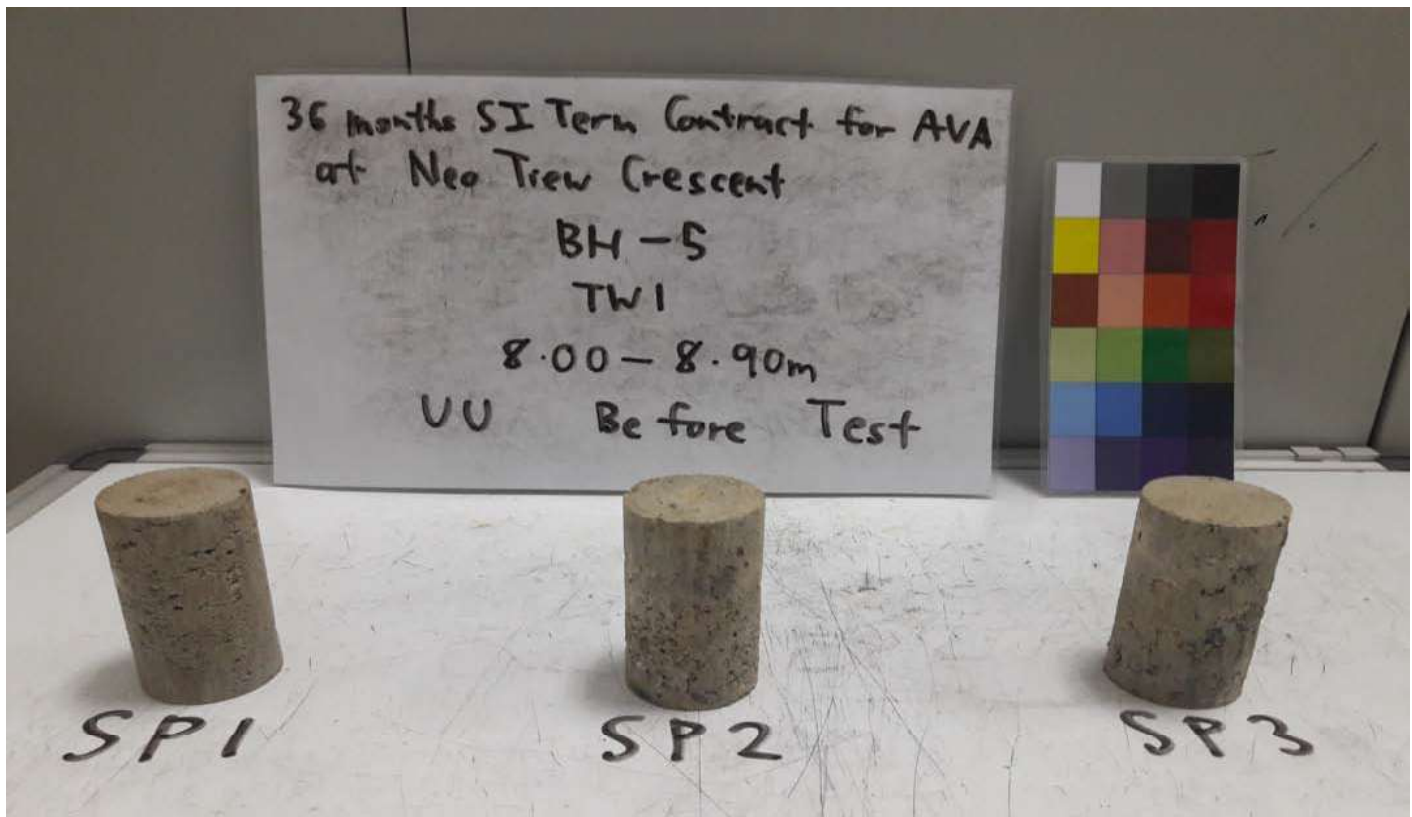
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH4-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT** : Agri-Food & Veterinary Authority of Singapore (AVA)

**PROJECT:** Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



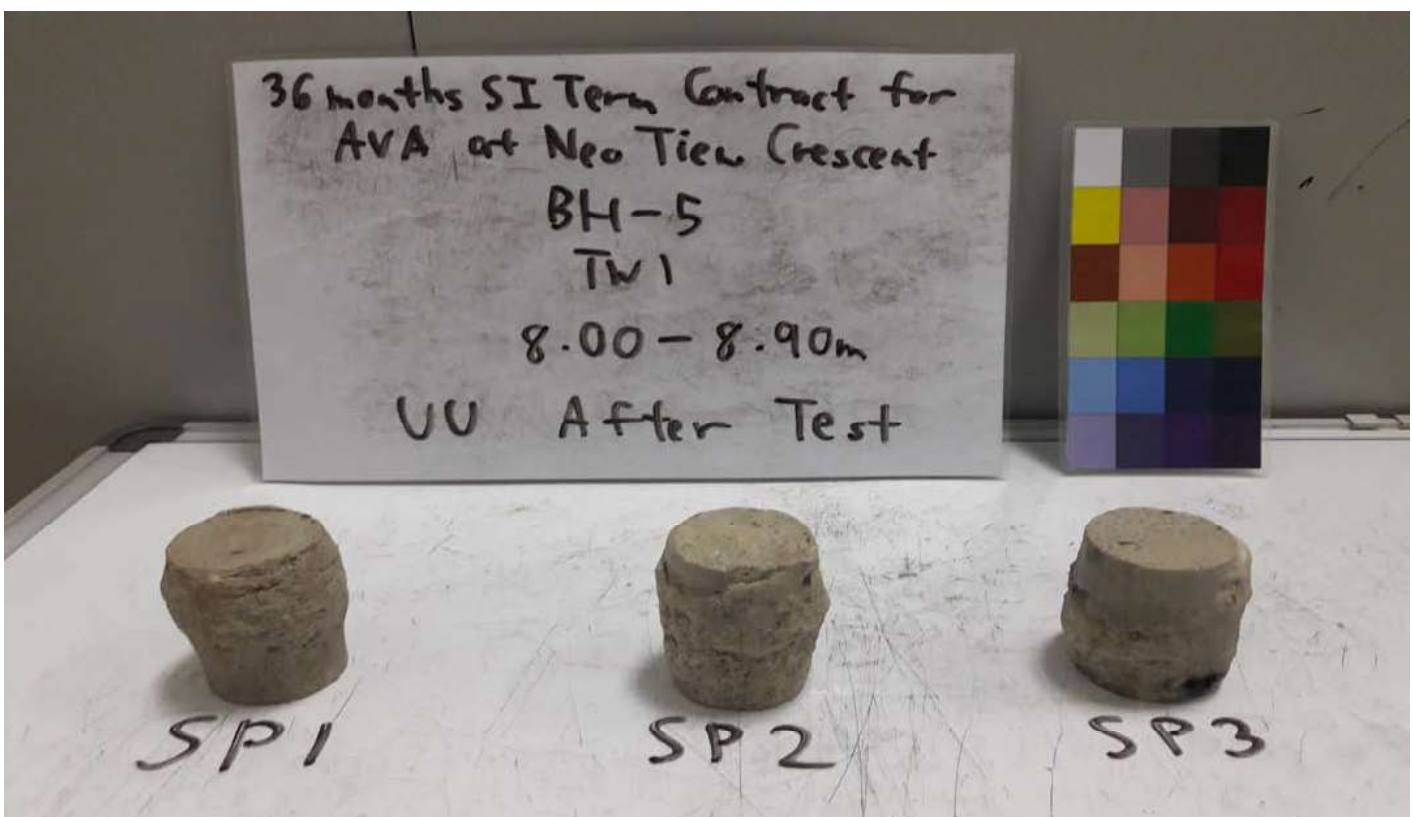
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH5-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



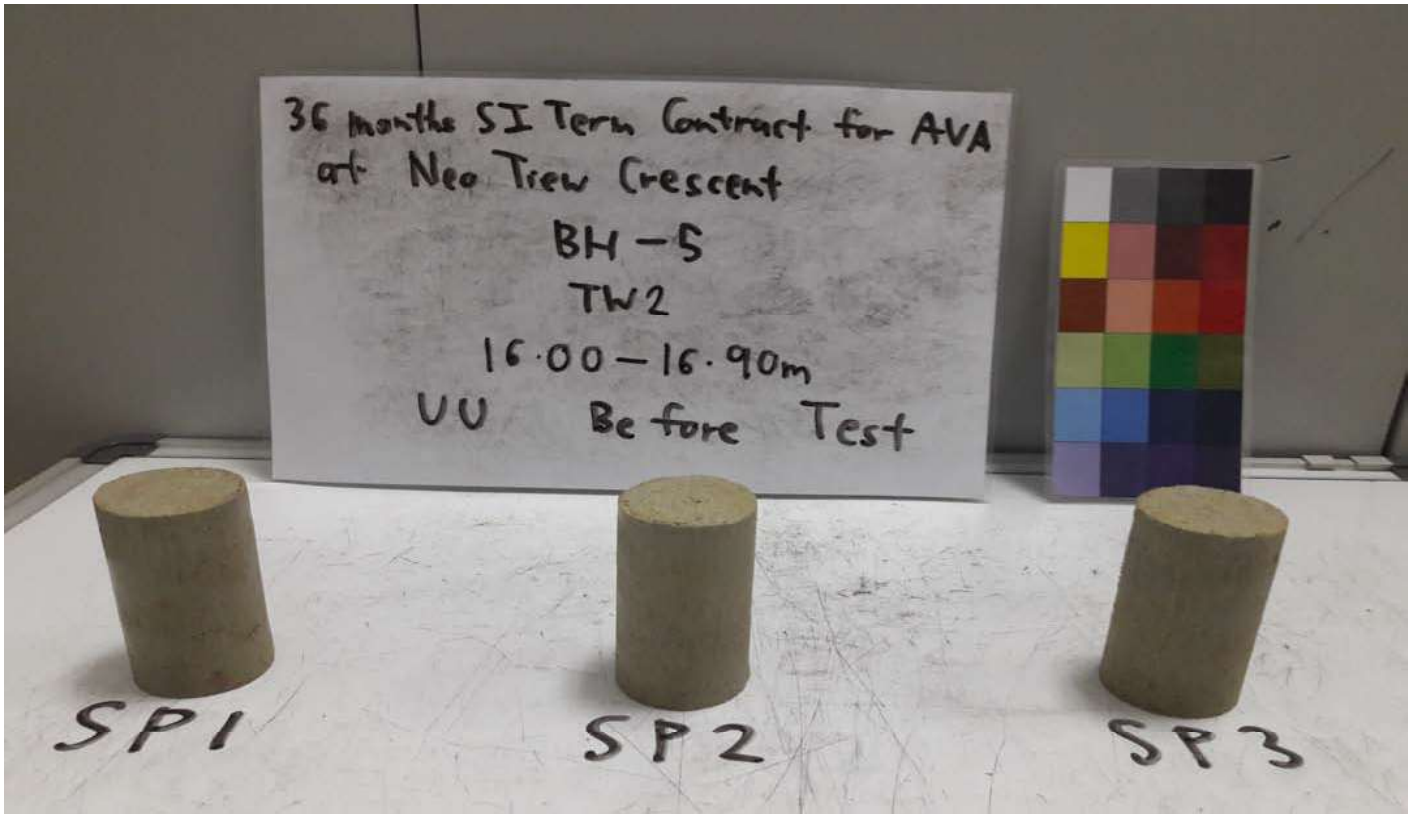
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH5-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



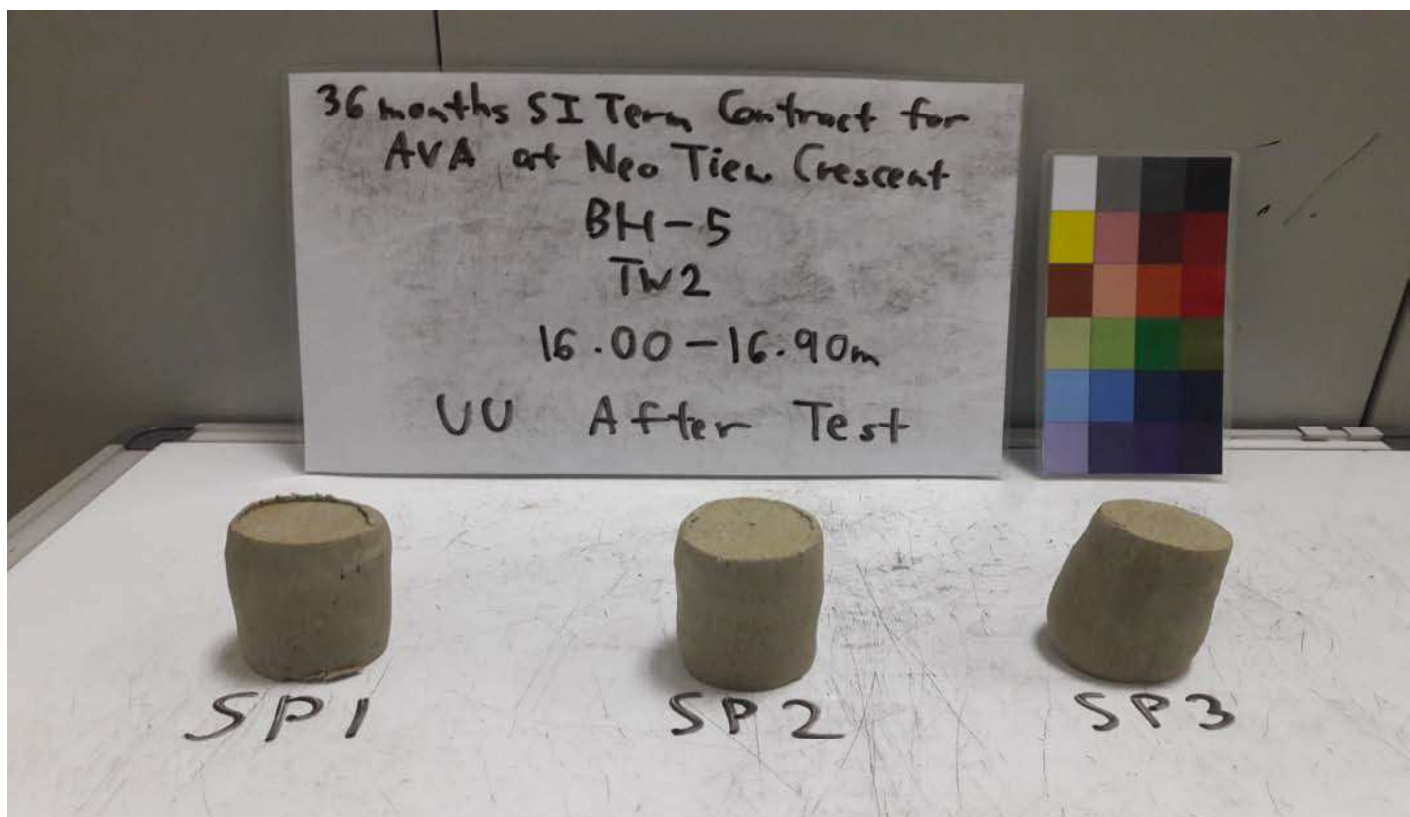
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



Thin-Walled Tube Sample (BH5-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



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Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



Thin-Walled Tube Sample (BH5-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



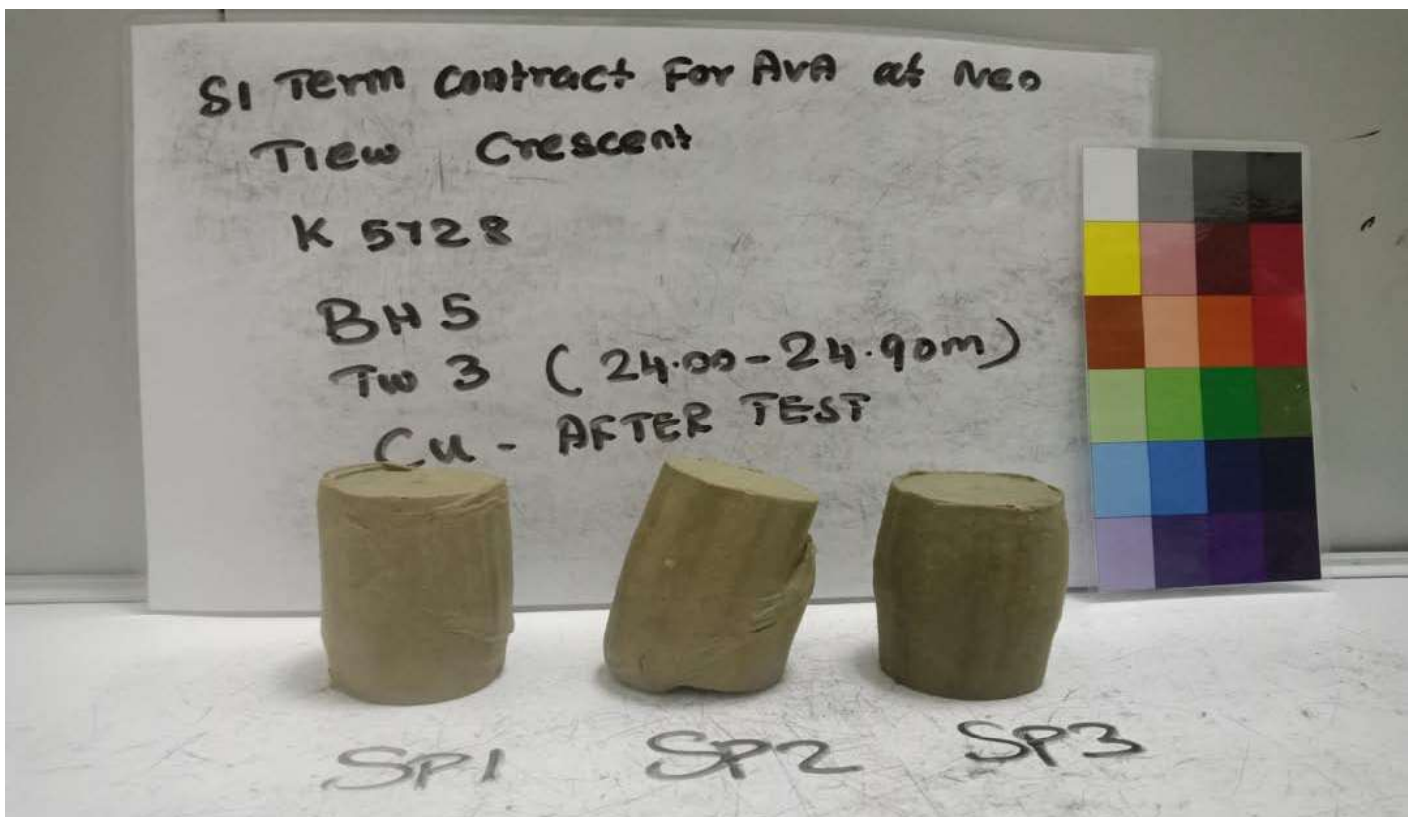
58A Sungei Kadut Loop  
Singapore 729505  
Tel: 6369 7100  
Fax: 6362 5848



**Thin-Walled Tube Sample (BH5-TW3)-Consolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



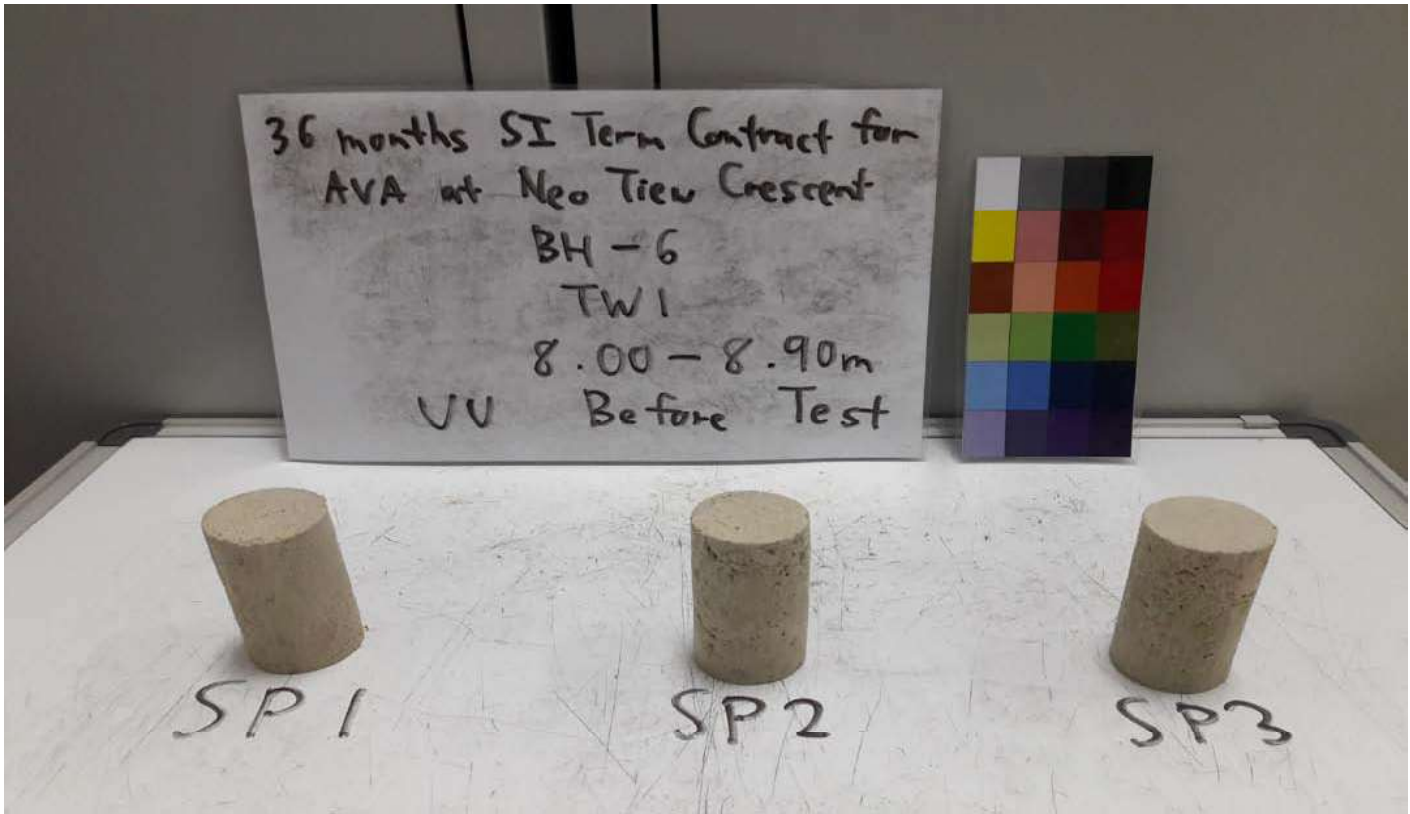
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**Thin-Walled Tube Sample (BH5-TW3)-Consolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



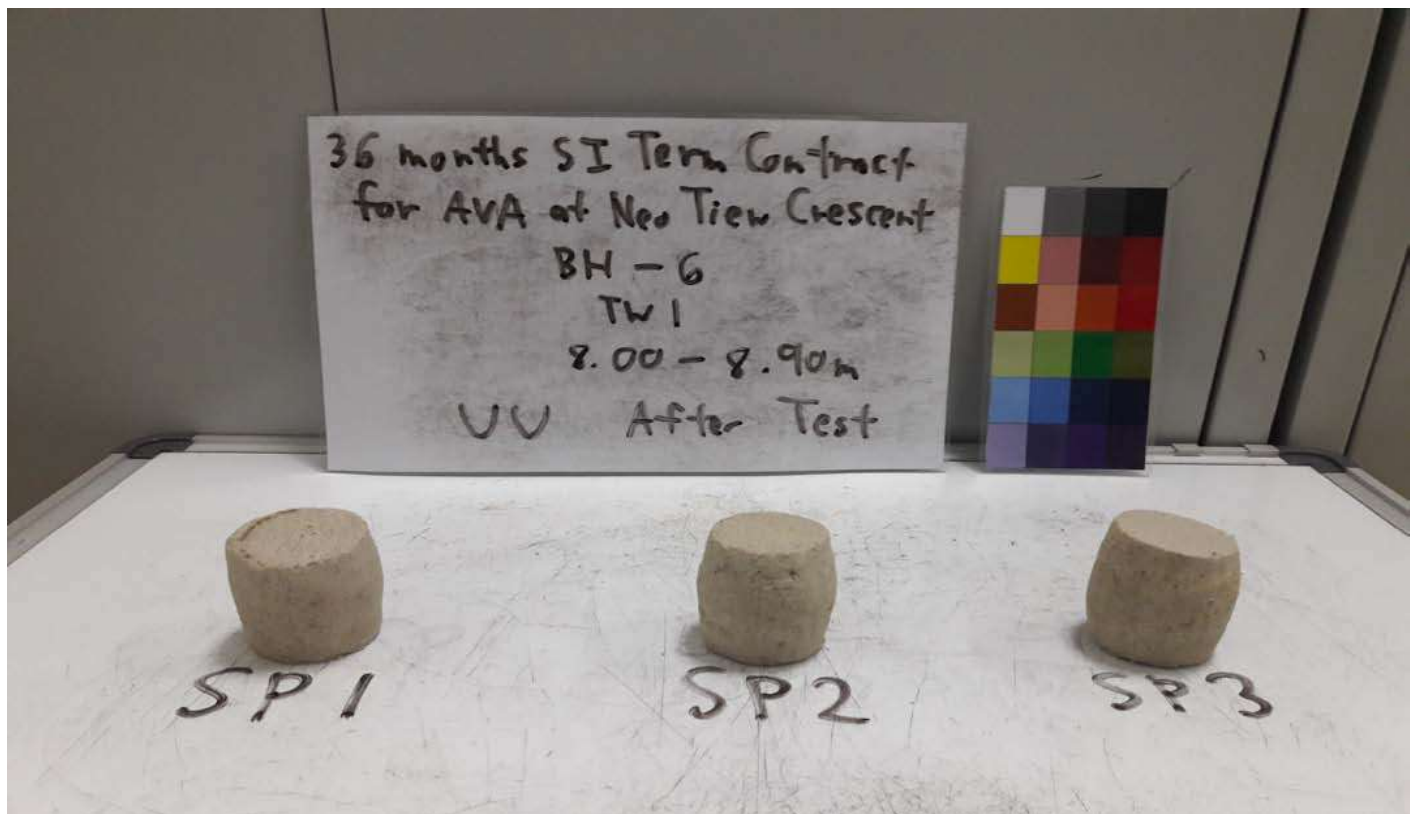
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**Thin-Walled Tube Sample (BH6-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



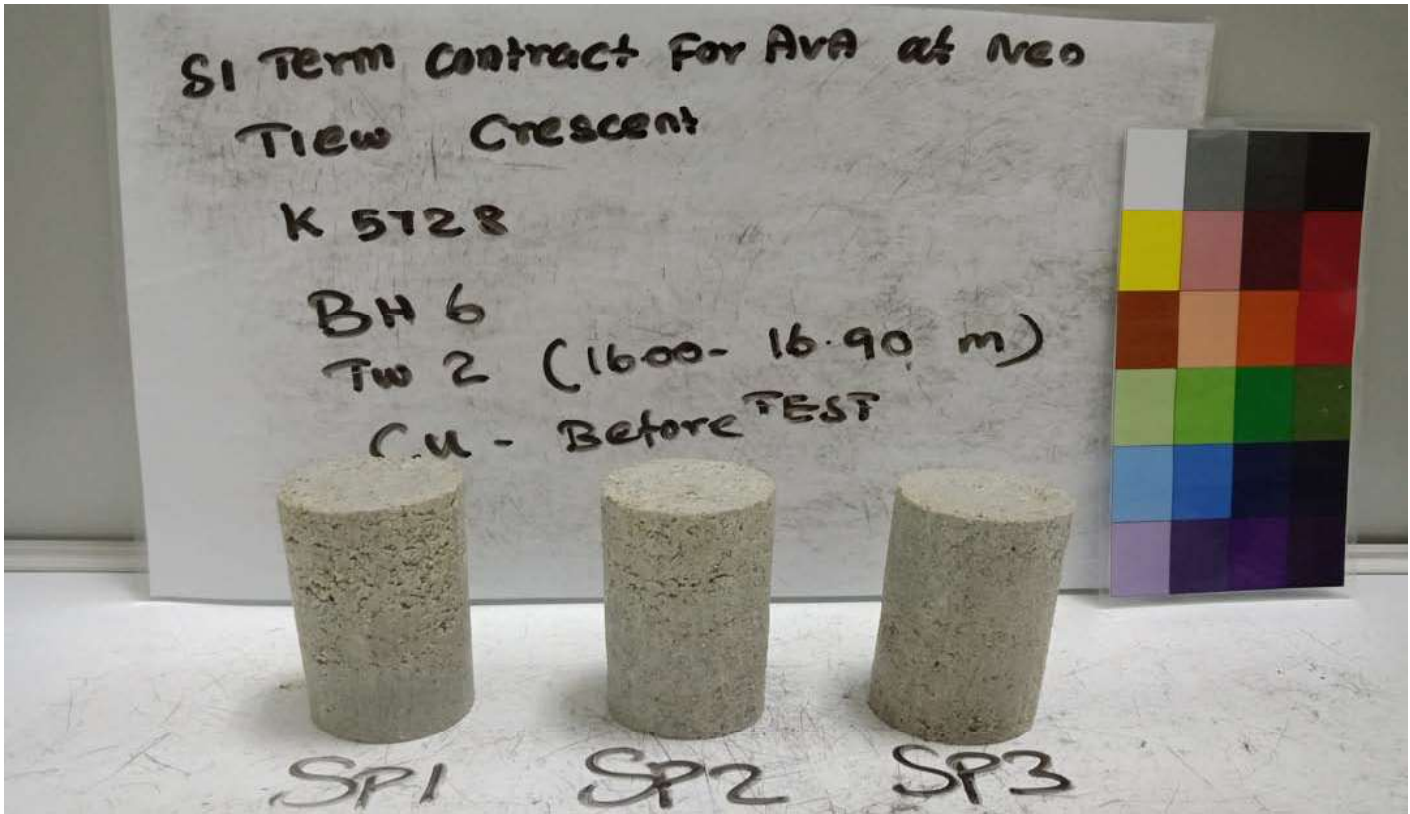
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**Thin-Walled Tube Sample (BH6-TW1)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



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Thin-Walled Tube Sample (BH6-TW2)-Consolidated Undrained Triaxial Compression Test  
(Before Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



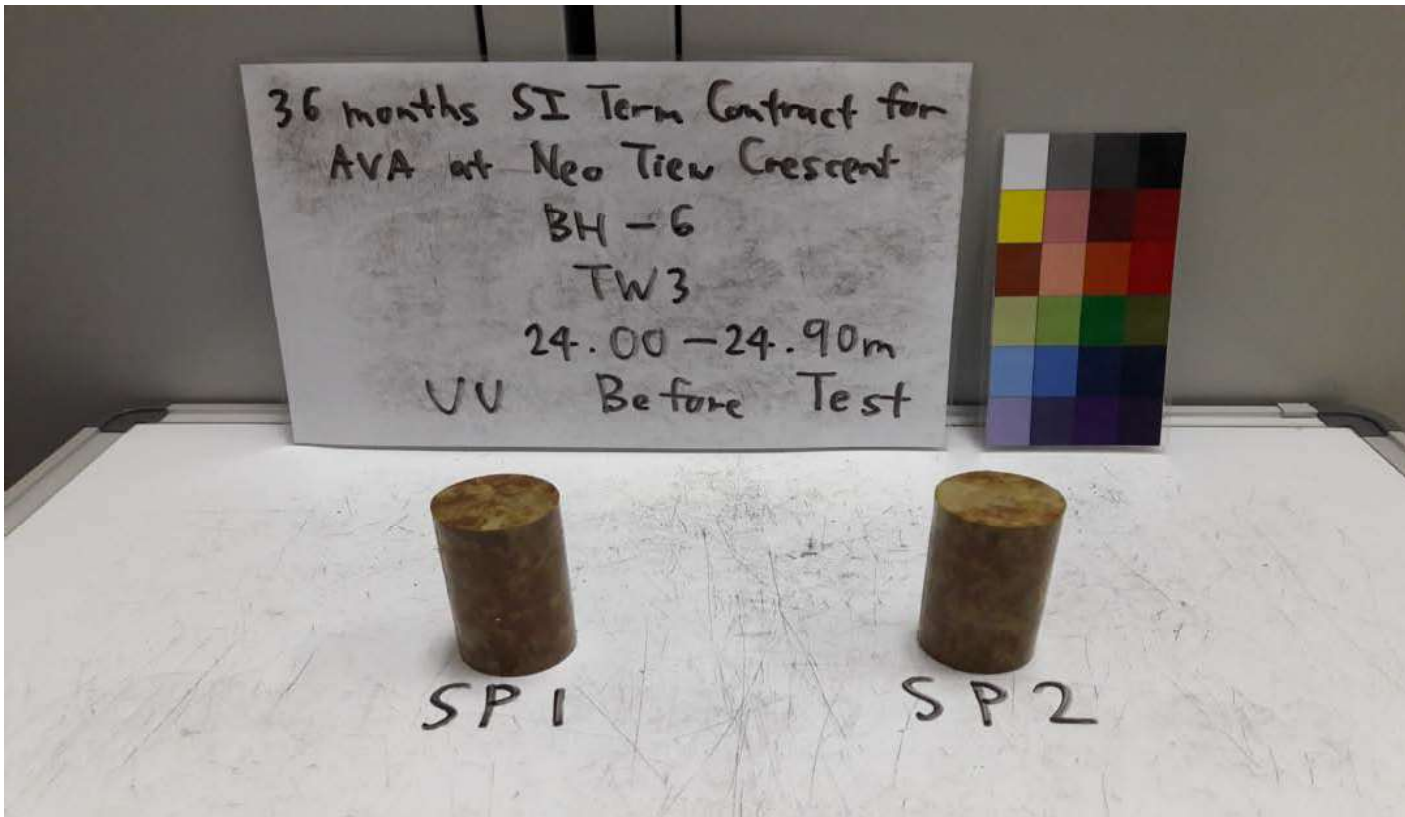
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Thin-Walled Tube Sample (BH6-TW2)-Consolidated Undrained Triaxial Compression Test  
(After Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



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**Thin-Walled Tube Sample (BH6-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



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**Thin-Walled Tube Sample (BH6-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



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Thin-Walled Tube Sample (BH7-TW1)-Consolidated Undrained Triaxial Compression Test  
(Before Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



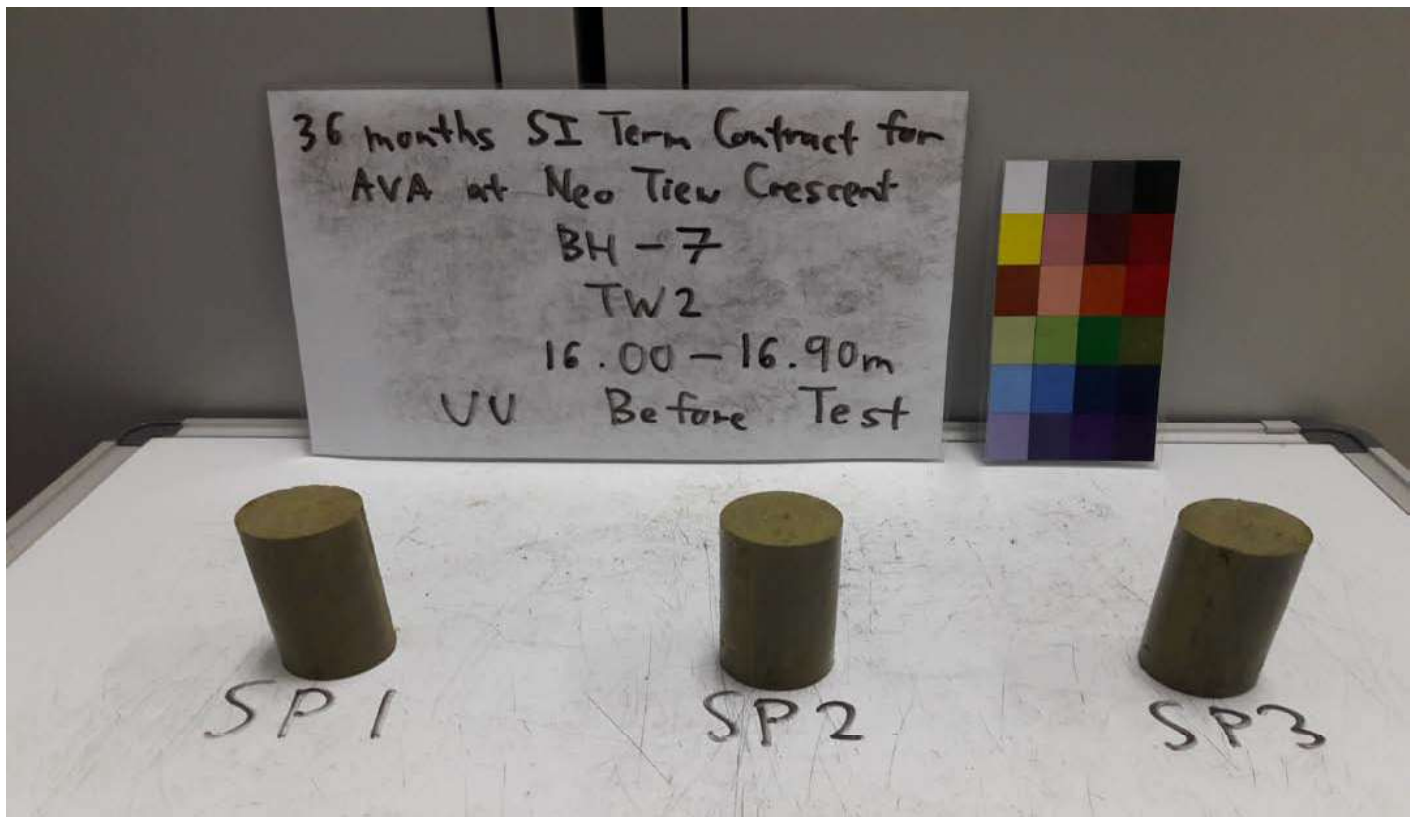
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Thin-Walled Tube Sample (BH7-TW1)-Consolidated Undrained Triaxial Compression Test  
(After Test)

CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)

PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)



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**Thin-Walled Tube Sample (BH7-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



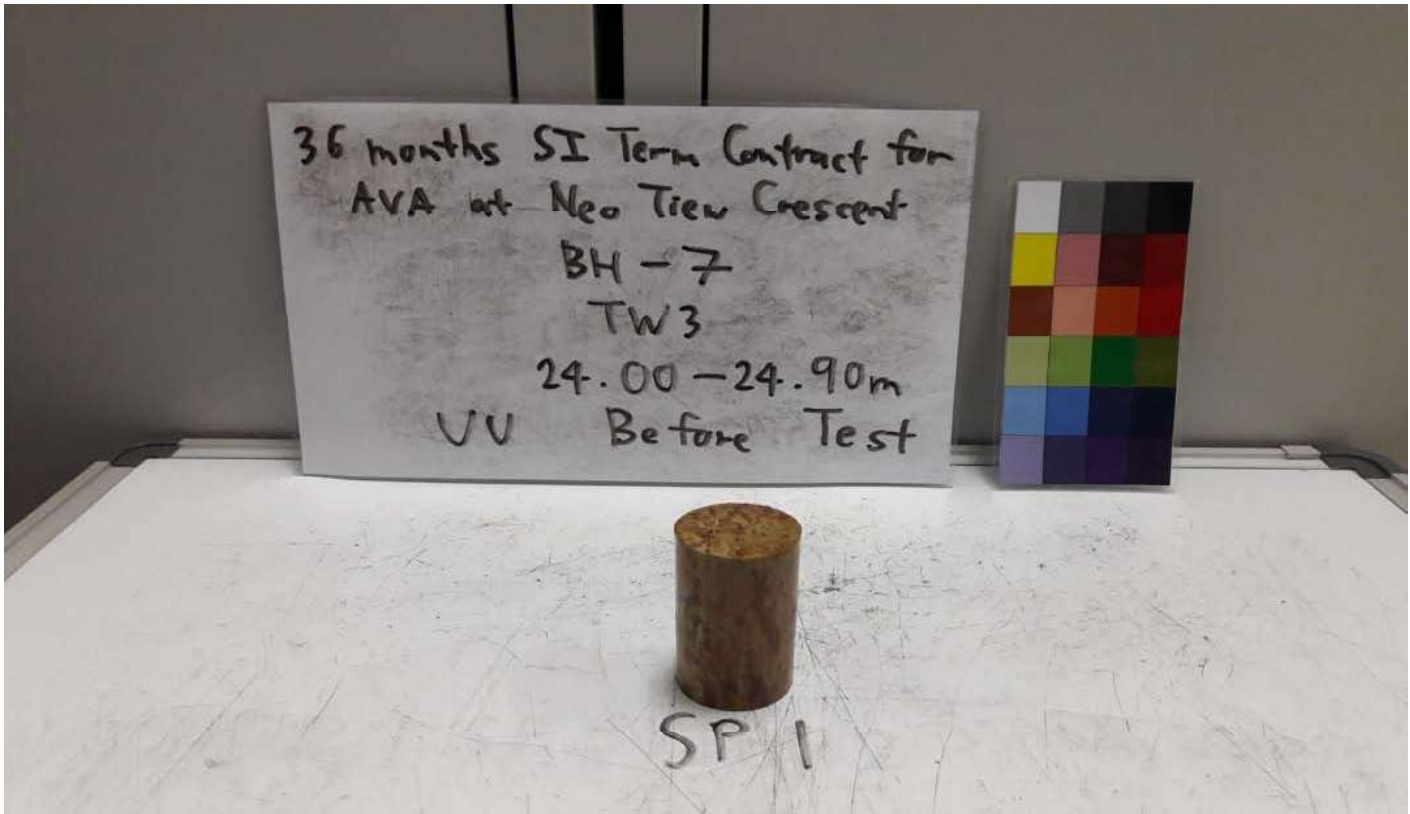
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**Thin-Walled Tube Sample (BH7-TW2)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



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**Thin-Walled Tube Sample (BH7-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(Before Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**



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**Thin-Walled Tube Sample (BH7-TW3)-Unconsolidated Undrained Triaxial Compression Test  
(After Test)**

**CLIENT : Agri-Food & Veterinary Authority of Singapore (AVA)**

**PROJECT: Soil Investigation Works for 114A & LCK 114B near Neo Tiew Crescent (Vol. 2 : BH3-BH7)**