

Determination of Constant Head Permeability in a Triaxial Cell

BS1377:Part 6:1990, Clause 6

Trial Pit : **TP2** Sample Ref: Sample Type: **B** Depth (m): **0.90**

Preparation method : **Recompacted at 'as received' moisture content using 4.5kg rammer**

Orientation : **NA**

Description : **Reddish brown mottled grey slightly gravelly CLAY**

Specimen Details

	<u>Initial</u>	<u>Consolidated</u>
Height (mm) :	95.81	95.29
Diameter (mm) :	105.24	104.66
Volume (cm ³) :	833.34	819.63

Specimen Conditions

	<u>Initial</u>	<u>Final</u>
Moisture content (%) :	10	24
Bulk density (Mg/m ³) :	2.01	2.29
Dry density (Mg/m ³) :	1.82	1.85

Test Conditions

Saturation Stage

Method : **Cell and Back pressure increments** Final *B* value : **0.96**
Duration (days) : **8**

Consolidation Stage

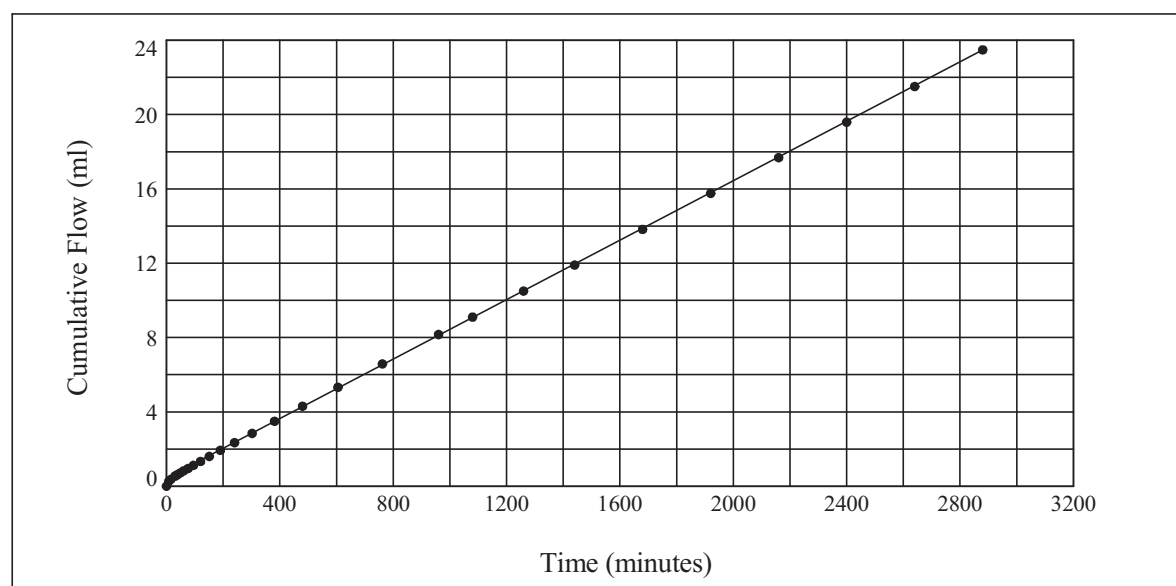
Cell Pressure (kPa) : **550** Back Pressure (kPa) : **500** Volume Change (ml) : **13.71**
Duration (days) : **2**

Permeability Stage

Cell Pressure (kPa) : **550** Top Pressure (kPa) : **520** Base Pressure (kPa) : **500**
Duration (days) : **2**

Mean Effective Stress : **40** Hydraulic Gradient : **21**

Coefficient of Permeability at 20 deg C (m/s) : **7.24E-10** Test Duration (days) : **12**



Approved Signatories: D. TROWBRIDGE A. FROST M. STOKES S. HANDCOCK



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Contract		Contract Ref: 742423
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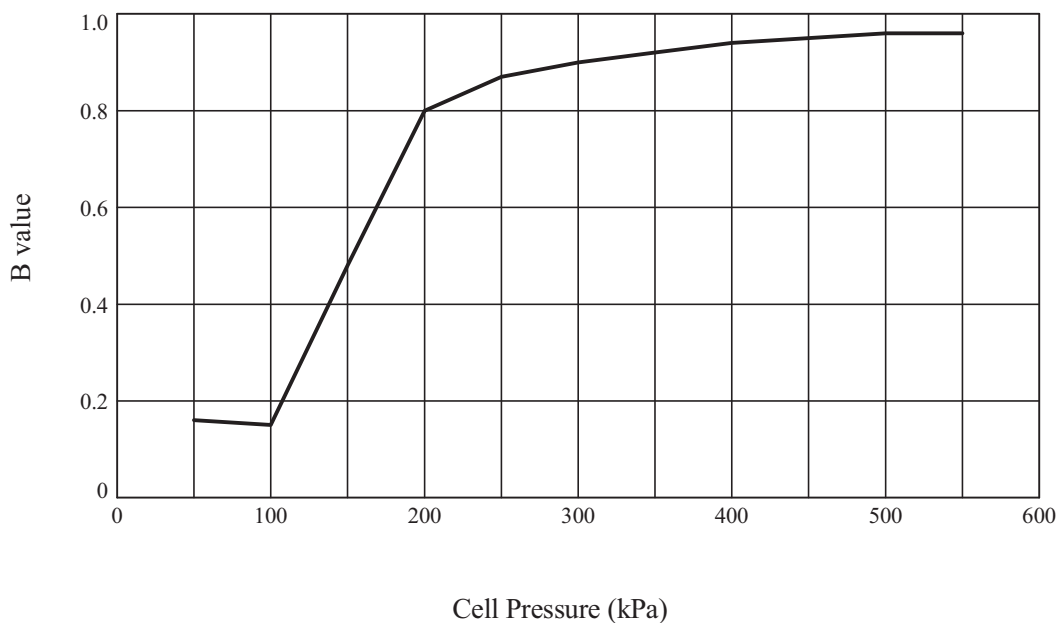
Trial Pit : **TP2**

Sample Ref:

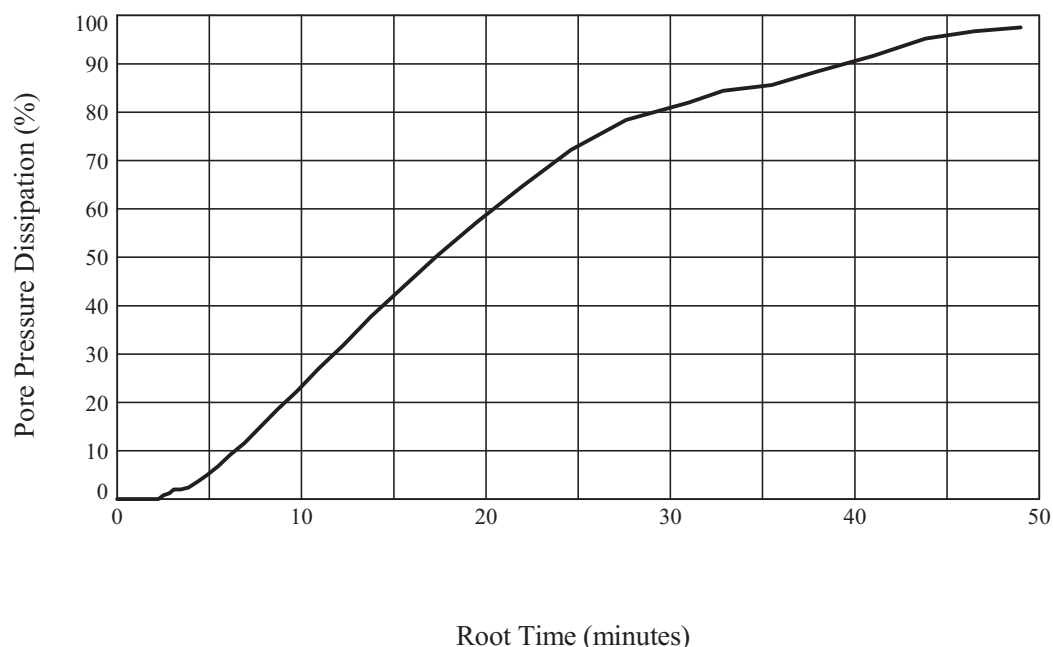
Sample Type: **B**

Depth (m): **0.90**

Saturation Stage - Cell Pressure v B Value



Consolidation Stage - Pore Pressure Dissipation v Root Time



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Trial Pit : **TP3** Sample Ref: Sample Type: **B** Depth (m): **1.20**

Preparation method : **Recompacted at 'as received' moisture content using 4.5kg rammer**

Orientation : **NA**

Description : **Reddish brown slightly gravelly CLAY**

Specimen Details

	<u>Initial</u>	<u>Consolidated</u>
Height (mm) :	96.02	95.68
Diameter (mm) :	105.40	105.02
Volume (cm ³) :	837.74	828.76

Specimen Conditions

	<u>Initial</u>	<u>Final</u>
Moisture content (%) :	9.8	22
Bulk density (Mg/m ³) :	2.02	2.27
Dry density (Mg/m ³) :	1.84	1.86

Test Conditions

Saturation Stage

Method : **Cell and Back pressure increments** Final *B* value : **0.95**
Duration (days) : **8**

Consolidation Stage

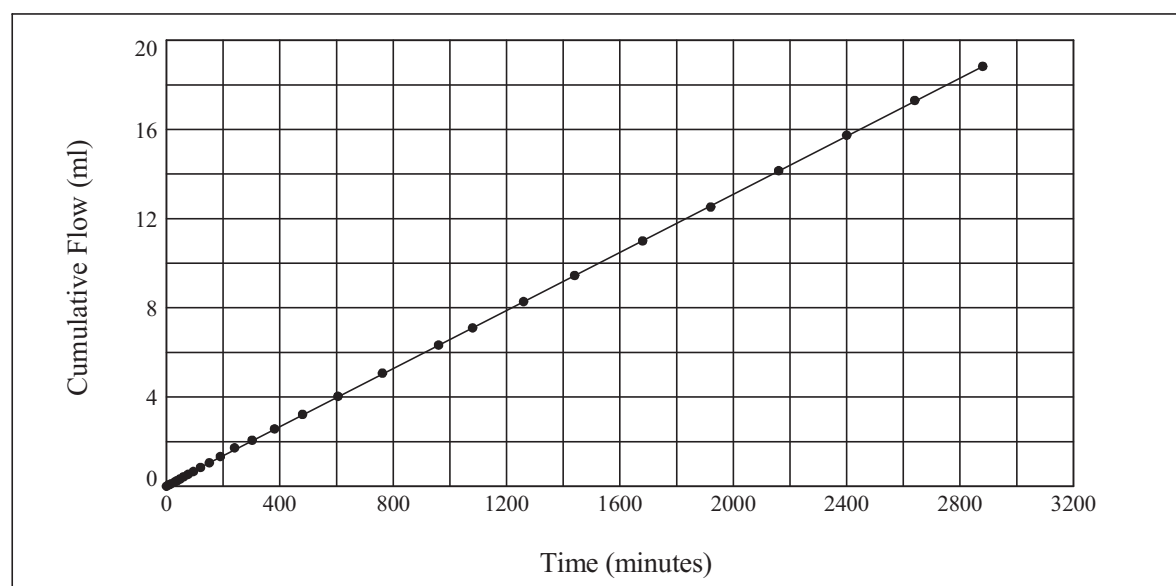
Cell Pressure (kPa) : **550** Back Pressure (kPa) : **500** Volume Change (ml) : **8.98**
Duration (days) : **3**

Permeability Stage

Cell Pressure (kPa) : **550** Top Pressure (kPa) : **520** Base Pressure (kPa) : **500**
Duration (days) : **2**

Mean Effective Stress : **40** Hydraulic Gradient : **21**

Coefficient of Permeability at 20 deg C (m/s) : **5.79E-10** Test Duration (days) : **12**



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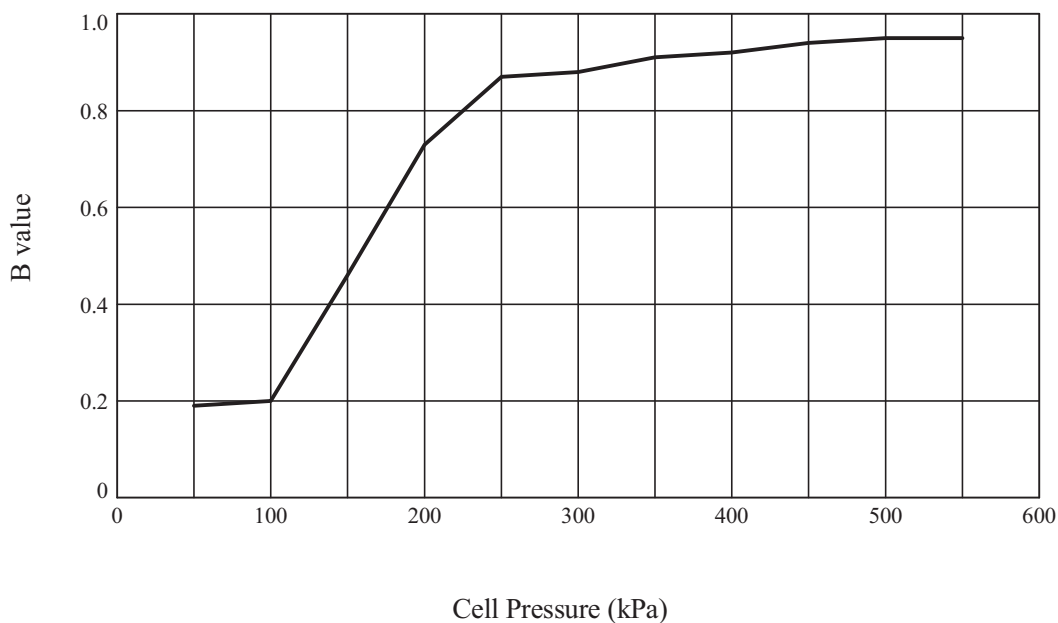
Trial Pit : **TP3**

Sample Ref:

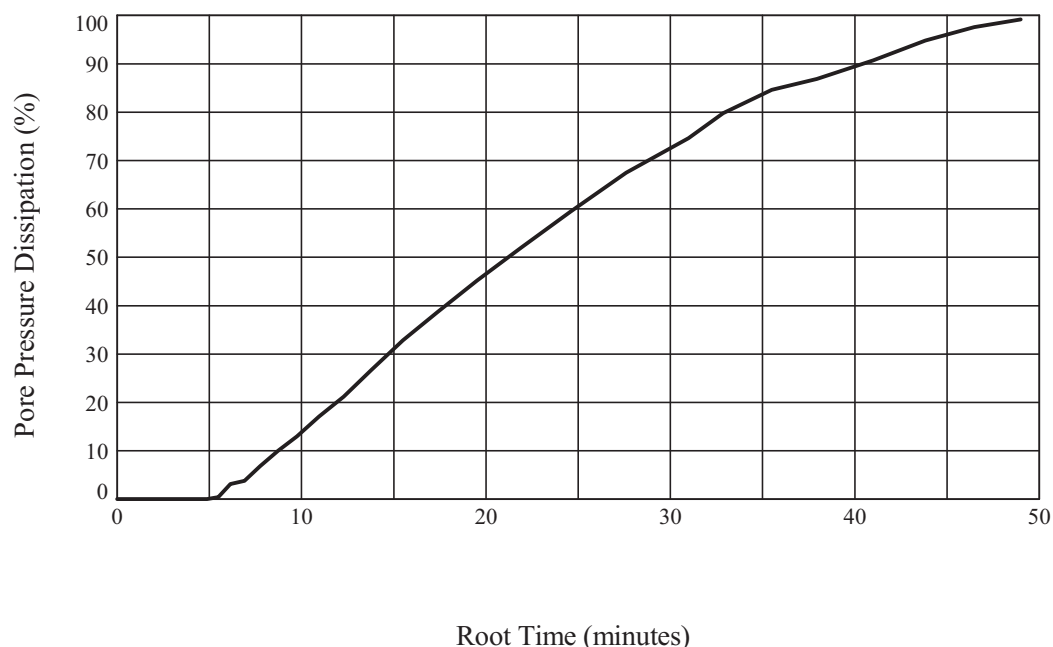
Sample Type: **B**

Depth (m): **1.20**

Saturation Stage - Cell Pressure v B Value



Consolidation Stage - Pore Pressure Dissipation v Root Time



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