

BRANTON HILL QUARRY

Terra Tek No. 7243/2

Determination of Permeability in a Triaxial Cell
BS1377 : Part 6 : Clause 6 : 1990
Permeability under constant head conditions in a triaxial cell

Borehole 1/05

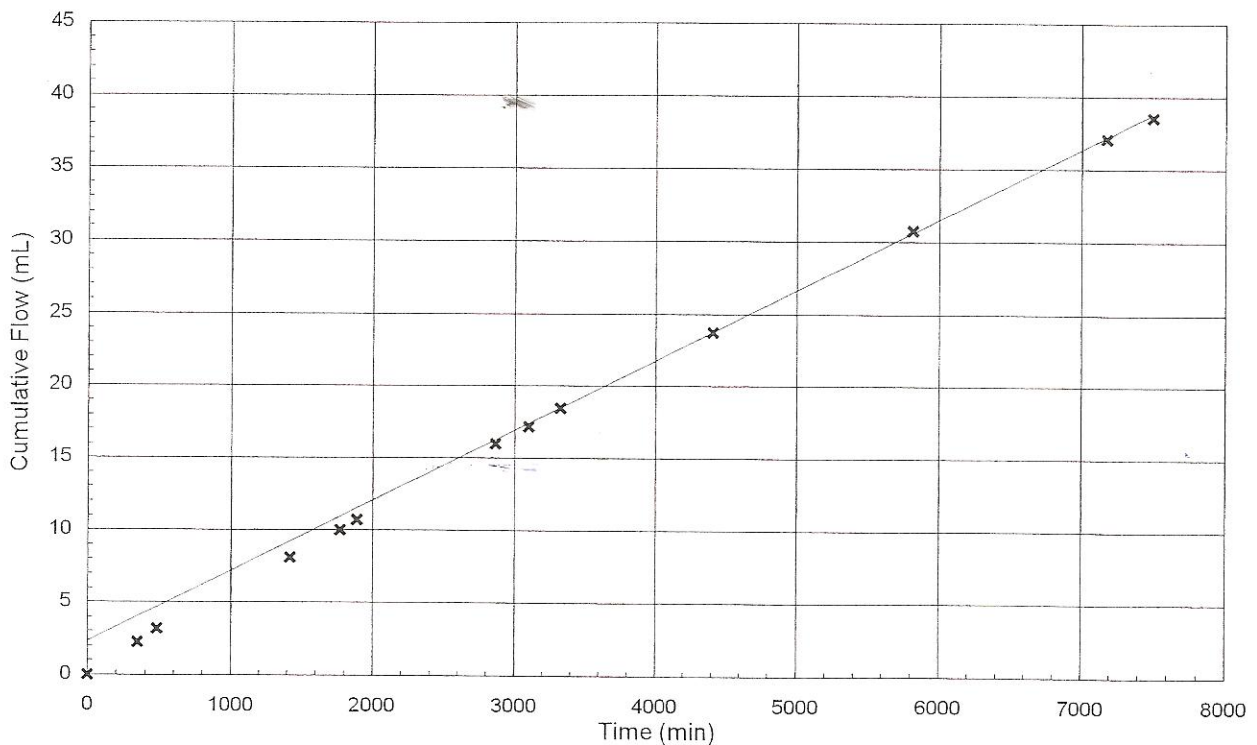
6.5metres down

Description: Stiff reddish brown clayey SHALE

Sample Details:	Initial:	Final:
Diameter:	73.3 mm	73.0 mm
Height:	72.7 mm	72.4 mm
Moisture content:	9.6 %	12 %
Bulk density:	2.30 Mg/m ³	2.37 Mg/m ³
Dry density:	2.10 Mg/m ³	2.12 Mg/m ³
Sample condition:	Undisturbed	

Saturation Stage:	Performed in accordance with Clause 5.2.4
Initial pore pressure coefficient, B:	0.28
Final pore pressure coefficient, B:	0.98
Duration of stage:	4 days
Consolidation stage:	
Effective pressure:	100 kPa
Duration of stage:	1 day
Permeability stage:	
Pressure difference across specimen:	20 kPa
Mean effective stress:	100 kPa
Duration of stage:	5 days

Coefficient of permeability at 20°C, $K_v: 6.6 \times 10^{-10}$ m/s



Approved By

GWJ

Date

19/4/05

Notes

TERRA TEK

Hemel Hempstead
Laboratory

Fig 1

Sheet 1 of 1

BRANTON HILL QUARRY

Terra Tek No. 7243/1

Determination of Permeability in a Triaxial Cell

Borehole 1/05

BS1377 : Part 6 : Clause 6 : 1990

Permeability under constant head conditions in a triaxial cell

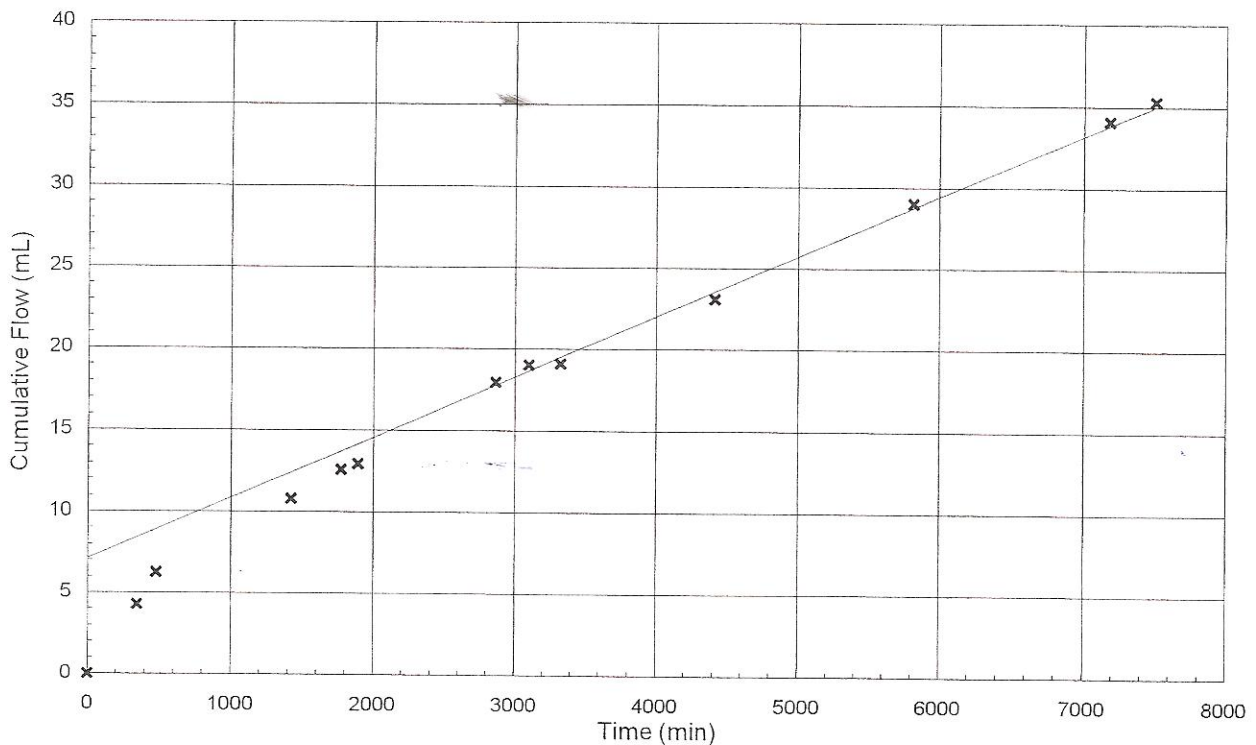
7.5metres down

Description: Stiff reddish brown clayey SHALE

Sample Details:	Initial:	Final:
Diameter:	73.3 mm	73.1 mm
Height:	72.1 mm	71.9 mm
Moisture content:	11 %	12 %
Bulk density:	2.32 Mg/m ³	2.36 Mg/m ³
Dry density:	2.10 Mg/m ³	2.12 Mg/m ³
Sample condition:	Undisturbed	

Saturation Stage:	Performed in accordance with Clause 5.2.4
Initial pore pressure coefficient, B:	0.07
Final pore pressure coefficient, B:	0.95
Duration of stage:	4 days
Consolidation stage:	
Effective pressure:	100 kPa
Duration of stage:	1 day
Permeability stage:	
Pressure difference across specimen:	20 kPa
Mean effective stress:	100 kPa
Duration of stage:	5 days

Coefficient of permeability at 20°C, $K_v: 5.0 \times 10^{-10}$ m/s



Approved By

GWV

Date

11/4/05

Notes

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Fig 1

Sheet 1 of 1