

## Triaxial cell permeability test

Location	Job ref.	
	Borehole/Pit no.	
Soil description	Sample No.	
	Depth	m
	Date	
Test method	BS1377: Part 6: 1990 : <b>6</b> Constant head permeability test in triaxial cell	
Type of specimen	Undisturbed/compacted*	
Method of preparation		
Flow conditions	Vertical upwards/downwards*	

## TEST SPECIMEN

Diameter	D mm		Nominal effective stress	kPa	
Area	A mm <sup>2</sup>		Cell pressure	$\sigma^3$ kPa	
Length	mm		Back pressure	$p_2$ kPa	
Density	$\rho$ Mg/m <sup>3</sup>		Pressure difference	$(p_1 - p_2)$ kPa	
Moisture Content	%		Inlet pressure	$p_1$ kPa	
Dry Density	$\rho$ Mg/m <sup>3</sup>		Mean effective stress	kPa	
Method of saturation			$\sigma^3 = \sigma^3 - 1/2(p_1 + p_2)$		
			Hydraulic gradient		
Final $B$ value					

## FLOW READINGS

Volume of flow Q mL		<div></div>																																							
		Time t min																																							
Corresponding pressure correction $p_c =$		kPa																																							
CALCULATIONS																																									
Coefficient of permeabilty		$\frac{1.63 \ q \ L \ R_r}{A((p_1 - p_2) - p_c)}$																				$\times 10^{-4} \text{ m/s}$																			
SPECIMEN AFTER TEST																																									
Density		Mg/m <sup>3</sup>																																							
Moisture content		%												Accepted permeability										m/s																	
										Operator										Checked										Approved											
* Delete as appropriate																																									
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