BS1377: Part 6: Clause 6:1990 Determination of Permeability in a Triaxial Cell Borehole / TP: Description: Sample No: 5612C Stiff dark red brown slightly sandy slightly gravelly CLAY Depth: SPECIMEN DETAILS Depth within original sample Orientation within original Vertical Specimen preparation Undisturbed **TEST DETAILS** Cell Preparation Performed in accordance with Clause 3.5 INITIAL **FINAL** Diameter mm968 956 Height 100 0 98.9 mm Moisture Content % 20 22 **Bulk Density** 2 16 Vlg/m³ 2.05 Dry Density 1.77 Mg/m³ 171 SATURATION STAGE Saturation initially by constant moisture content, followed by back-pressure assistance using 5-10 kPa differential 'B' value 0.70 1.00 **CONSOLIDATION STAGE** kPa 100 Effective pressure 25 5 mLVolume change PERMEABILITY STAGE Pressure difference across specimen 50 Coefficient of permeability at 20°C = 75 Mean effective stress 2.4 x 10 m/s **TEST DURATIONS** Saturation days 4 Hydraulic Gradient : 51.6 Consolidation days Flow days 1 Cumulative Flow (mL) 0 200 500 Time (min) Checked and Project Number: Approved GEO / 18455 Initials: Project Name: GEOLABS

SLURRY LAGOON

PTH

BS1377: Part 6: Clause 6:1990

Determination of Permeability in a Triaxial Cell

Borehole / TP:

Sample No: Depth:

5612B

Description:

Stiff dark red brown slightly sandy slightly gravelly CLAY

SPECIMEN DETAILS Depth within original sample

Orientation within original Specimen preparation

Vertical Undisturbed

TEST DETAILS

IEST DETAILS			
Cell Preparation		Performed in accordance with Clause 3 5	
		INITIAL	FINAL
Diameter	mm	97 9	96 9
Height	mm	93.4	92 5
Moisture Content	%	18	20
Bulk Density	Mg/m³	2 05	2.15
Dry Density	Ma/m³	1.74	1 79

SATURATION STAGE

Saturation initially by constant moisture content, followed by back-pressure assistance using 5-10 kPa differential B' value 0 68

CONSOLIDATION	CTACE
CONSOLIDATION	STAGE

Effective pressure	kPa	100
Volume change	mL	20.7

PERMEABILITY STAGE

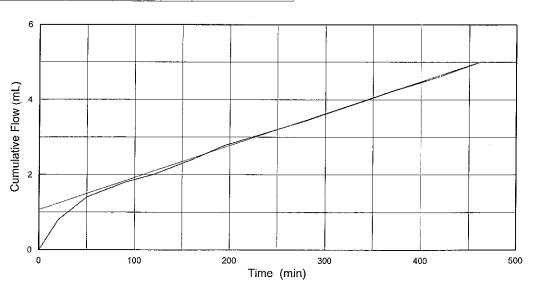
Pressure difference across specimen 50 Mean effective stress 75

Coefficient of permeability at 20°C =

 3.5×10^{-10} m/s

TEST DURATIONS		
Saturation	days	4
Consolidation	days	1
Flow	days	1

Hydraulic Gradient : 55.1



Checked and Approved

Project Number:

Project Name:

GEO / 18455

GEOLABS

Date: 29/06/12

initials:

SLURRY LAGOON

BS1377 : Part 6 : Clause 6 :1990 Determination of Permeability in a Triaxial Cell

Borehole / TP:

Sample No: Depth: 5612A

Description:

Stiff dark brown slightly sandy slightly gravelly CLAY

SPECIMEN DETAILS

Depth within original sample Orientation within original Specimen preparation

Vertical Undisturbed

TEST DETAILS

TEST DETAILS			
Cell Preparation		Performed in accord	lance with Clause 3.5
		INITIAL	FINAL
Diameter	mm	98.0	97 1
Height	mm	93 9	93 0
Moisture Content	%	14	18
Bulk Density	Vlg/m³	2 08	2 21
Dry Density	Mg/m³	1.82	1 88

SATURATION STAGE

Saturation initially by constant moisture content, followed by back-pressure assistance using 5-10 kPa differential 'B' value 0 54 1.00

CONSOLIDATION STAGE		
Effective pressure	kPa	100
Volume change	mL	21.2

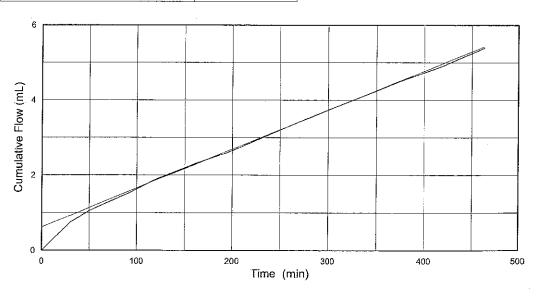
PERMEABILITY STAGE			
Pressure difference across specimen		50	_
Mean effective stress	kPa	75	

Coefficient of permeability at 20°C =

 4.3×10^{-10} m/s

TEST DURATIONS		
Saturation	days	4
Consolidation	days	1
Flow	days	1

Hydraulic Gradient : 54.8



Checked and Approved

PTH

Initials: Project Name:

Project Number:

GEO / 18455

SLURRY LAGOON



GEOLABS°

Date:

29/06/12

Test Report by GEOLABS Limited Bucknells Lane, Garston, Watford Hertfordshire. WD25 9XX

Authorised Signatories: {} J.R. Masters (Qual Mgr) {} [C.F.Wa§ace (Tech Mgr) {X} P.T. Hertlage (Ops Mgr) [] J.M.M. Powell (Tech Dir)

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TO LAGOON CONSTRUCTED AT WITHGILL FARM APRIL 2012

I CONFIRM THAT THE CLAY LINING WAS ENGINEERED TO A 1 METRE DEPTH ACROSS THE SITE AT TIME OF CONSTRUCTION.

DAVID WALLBANK ON BEHALF OF D & D WALLBANK CONTRACTORS LTD

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