



# KASETSART UNIVERSITY

DEPARTMENT OF CIVIL ENGINEERING, GEOTECHNICAL ENGINEERING LABORATORY

## HYDROMETER TEST

PROJECT	CHANGI HANGER	OWNER	JOB NO.	1
LOCATION	SINGAPORE	BORING NO.	SAMPLE NO.	1
SOIL DESCRIPTION	GRAY SILTY CLAY		DEPTH	6.70-7.20 m.
TEST BY	S.K			

SP. GR. OF SOL -	2.70	SAMPLE WEIGHT	
HYDROMETER NO.	K1985	CAN NO.	A-15
DISPERSING AGENT		DRY SOL + CAN	149.15 gm.
MENISCUS CORRECTION	0.5	CAN WT.	103.83 gm.
% FINER THAN No. 200	94.09 %	WT. OF DRY SOIL	45.32 gm.

DATE	TIME	ELAPSED TIME, MIN	R <sub>s</sub>	TEMP. °C	RC	N %	h cm.	D mm.	N' %
8/12		0.25	27.4	20	27.9	97.80	10.20	0.0860	92.00
		0.5	27	20	27.5	96.40	10.30	0.0610	90.70
		1	26.2	20	26.7	93.40	10.50	0.0440	88.40
	14.10	2	25.3	20	25.8	90.40	10.80	0.0310	85.10
		2	25.3	20	25.8	90.40	9.50	0.0290	85.10
		4	24.3	20	24.8	86.90	9.80	0.0210	81.80
		8	23	20	23.5	82.40	10.10	0.0150	77.50
		16.5	21.5	20	22	77.10	10.50	0.0110	72.50
	12.49	30	21	20	21.5	75.30	10.60	0.0088	70.90
	13.24	60	19.3	19.8	19.8	69.30	11.10	0.0058	65.30
	14.24	120	18.3	19.8	18.8	65.90	11.30	0.0041	62.00
	15.29	180	17.3	21.2	17.8	62.40	11.60	0.0033	58.70
9/12	7.40	1146.6	15.3	20	15.8	55.40	12.10	0.0014	52.10
	15.15	3051.6	15	20	15.5	54.30	12.20	0.0012	51.70
10/12	8.46	2650.2	14.3	20.1	14.8	51.90	12.40	0.0009	48.80
	15.10	4488.6	14	20.7	14.5	50.80	12.50	0.0009	47.80

$$N = K_1 \cdot R_c$$

$$N' = N \cdot (\% \text{ Finer No. 200})$$

$$D = K_2 \cdot \sqrt[3]{h/t}$$

$$R_c = R_s - C_u + C_f$$

Remarks: 1) Certification applies to test samples only.

2) Information under "For", "Project", are supplied by client. These are not certified.

3) This certificate is invalid without appropriate signature and seal.