JIS A 1204	Method of Grain -- Size Analysis of Soils	Report Form

Job Site PORT (IRENE Date 6-23-81

Sample No, Depth: No. BH-3 (25.0~25.45m) Technician N. Prado

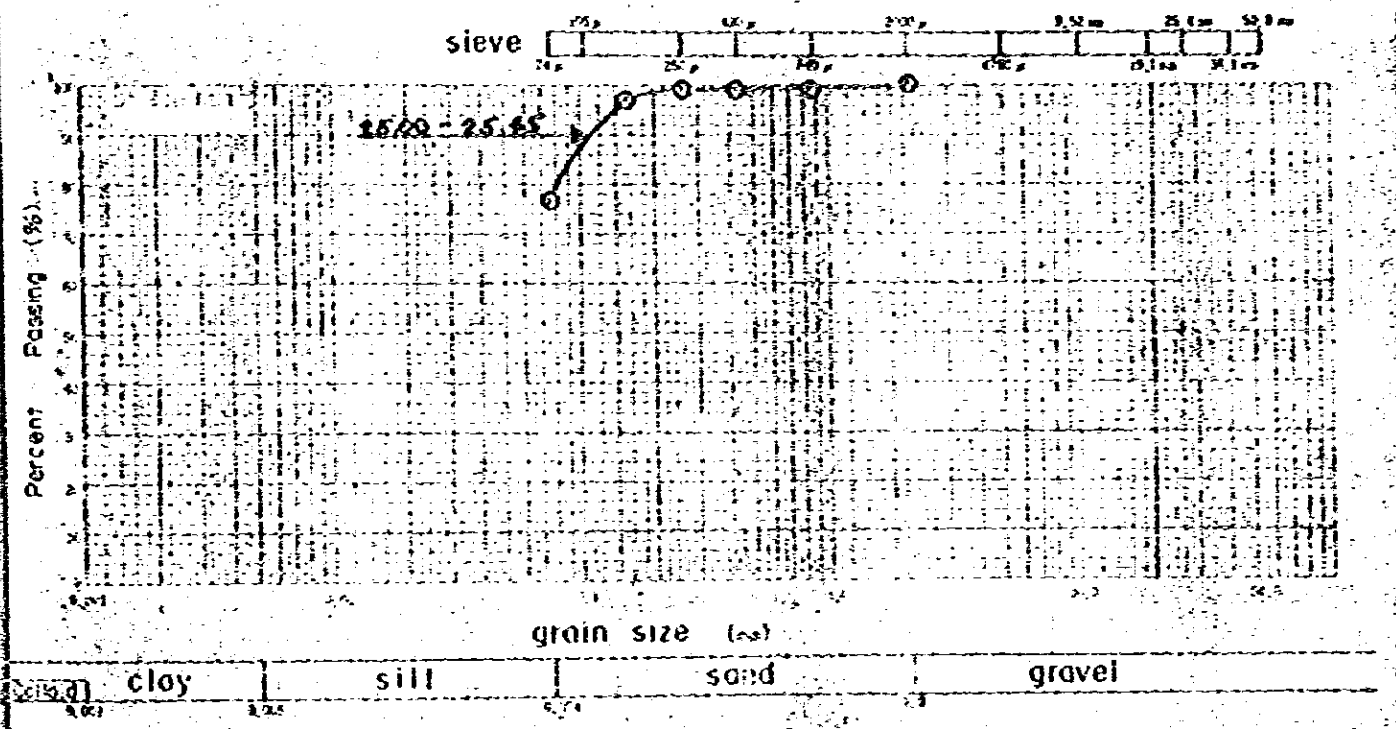
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-3 (25.0m ~ 25.45) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.7	99.5	99.3	97.6	76.6
sieve	Grain size mm												
	Weight percent %												

Sample No., Depth (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
sieve	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-3 25.0 ~ 25.45		No. m ~ m	
Grains in 4.76mm and larger	0	%		%
Grains in 4.76 ~ 2mm	0	%		%
Grains in 2 ~ 0.42mm	0.5	%		%
Grains in 0.42 ~ 0.074mm	22.9	%		%
Silt in 0.074 ~ 0.005mm	76.6	%		%
Clay less than 0.005mm	0	%		%
Colloid less than 0.001mm	0	%		%
Percent by weight passing through 2000μ sieve	100	%		%
Percent by weight passing through 420μ sieve	99.5	%		%
Percent by weight passing through 74μ sieve	76.6	%		%

Sample No., Depth	No. BH-3 25.0 ~ 25.45	No. m ~ m
Max. grain size	2.00 mm	mm
60 % grain size	mm	mm
30 % grain size	mm	mm
10 % grain size	mm	mm
Coefficient of uniformity		
Coefficient of curvature		

JIS A 1205
JIS A 1206

Determination of the Liquid limit and Plastic limit of Soil

Reporting paper

Job, Site PORT [illegible] IRENE

Date 6-23-81

Technician N. Prado

Sample No., Depth No. BH-3 (9.0m ~ 9.45m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	10	42.8	1	19.2
2	15	42.2	2	20.0
3	21	41.1	3	
4	35	38.4		
5	50	38.8		
6			Average	

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
40.6 %	19.6 %	21.0

Remarks: describe preparation method of the sample and etc.

Sample No., Depth No. BH-3 (12.0m ~ 12.45m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	13	53.5	1	23.0
2	15	52.8	2	22.6
3	26	51.1	3	
4	35	50.6		
5	50	49.9		
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
51.5 %	22.8 %	28.7

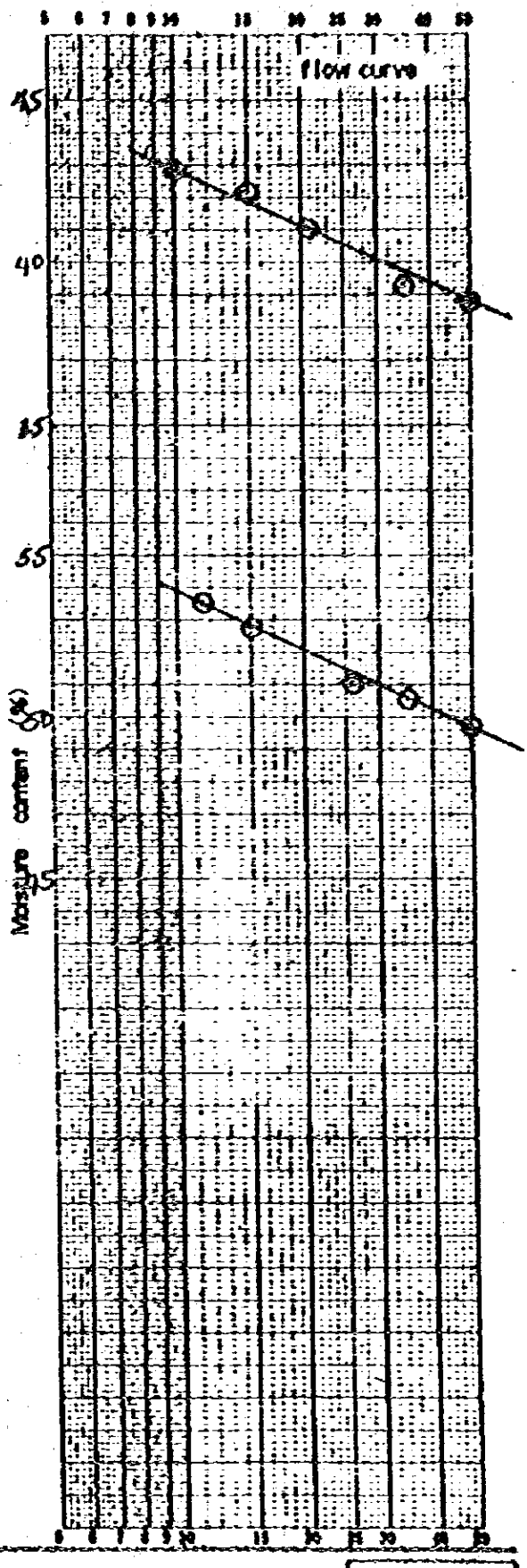
Remarks: describe preparation method of the sample and etc.

Sample No., Depth No. (m ~ m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1			1	
2			2	
3			3	
4				
5				
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
%	%	

Remarks: describe preparation method of the sample and etc.



JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-19-81

Technician N. Prado

Sample No, Depth		No. BH-3 (5.0 m ~ 5.1 m)			No. BH-3 (9.0 m ~ 9.1 m)		
Test No		1	2	3	1	2	3
Pycnometer No		36	56	85	47	64	48
Weight of pycnometer + oven dried soil(wet soil) + water Wb		161.23	152.29	159.86	154.50	152.10	157.35
Temperature of content when Wb is meas		8 °C	8 °C	8 °C	8 °C	8 °C	8 °C
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
① Converted weight at T°C (container + distilled water) Wa g		151.95	143.07	150.6	145.5	143.1	148.39
$W_s + (W_a - W_b)$ g		5.72	-5.78	5.74	6.0	6.0	6.04
Specific Gravity at T°C $G_{T°C} = \frac{W_s}{W_s + (W_a - W_b)}$		2.62	2.60	2.61	2.50	2.50	2.48
② Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C: $G_{15°C} = K \times G_s (^{T°C}/_{T°C})$		2.62	2.60	2.61	2.50	2.50	2.48
Average Value		Gs (T°C/15°C) = 2.61 g/cm³			Gs (T°C/15°C) = 2.49 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS.

Sample No, Depth		No. BH-3 (12.0 ~ 12.1 m)			No. BH-3 (16.0 ~ 16.1 m)		
Test No		1	2	3	1	2	3
Pycnometer No		94	93	53	33	63	54
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g		157.37	158.67	158.10	155.67	154.68	149.27
Temperature of content when Wb is meas		8 °C	8 °C	8 °C	8 °C	8 °C	8 °C
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
① Converted weight at T°C (container + distilled water) Wa g		148.30	149.54	148.94	146.59	145.60	140.11
$W_s + (W_a - W_b)$ g		5.93	5.87	5.84	5.92	5.92	5.84
Specific Gravity at T°C $G_{T°C} = \frac{W_s}{W_s + (W_a - W_b)}$		2.53	2.55	2.57	2.53	2.53	2.56
② Compensatin coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C: $G_{15°C} = K \times G_s (^{T°C}/_{T°C})$		2.53	2.55	2.57	2.53	2.53	2.56
Average Value		Gs (T°C/15°C) = 2.55 g/cm³			Gs (T°C/15°C) = 2.54 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-19-81

Technician N° Prado

Sample No, Depth		No. BH-3 (20.0~20.45)			No. BH-3 (25.0~25.45)		
Test No		1	2	3	1	2	3
Pycnometer No		32	33	92	32	49	46
Weight of pycnometer + oven dried soil(wet soil) + water Wb		154.76	155.67	156.72	154.4	151.4	159.5
Temperature of content when Wb is meas		8 °C	8 °C	8 °C	8 °C	8 °C	8 °C
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight at T°C (container + distilled water) Wa g		145.70	146.59	147.69	145.7	142.85	150.65
$W_s + (W_a - W_b)$ g		5.94	5.92	5.97	6.30	6.20	6.15
Specific Gravity at T°C $({}^{T°C}/_{T°C}) = \frac{W_s}{W_s + (W_a - W_b)}$		2.52	2.53	2.51	2.38	2.42	2.44
②Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C $({}^{T°C}/_{15°C}) = K \times Gs\,({}^{T°C}/_{T°C})$		2.52	2.53	2.51	2.38	2.42	2.44
Average Value		Gs (T°C/15°C) = 2.52 g/cm³			Gs (T°C/15°C) = 2.41 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS.

Sample No, Depth		No. (m~ m)			No. (m~ m)		
Test No		1	2	3	1	2	3
Pycnometer No							
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g							
Temperature of content when Wb is meas.							
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g						
①Converted weight at T°C (container + distilled water) Wa g							
$W_s + (W_a - W_b)$ g							
Specific Gravity at T°C $({}^{T°C}/_{T°C}) = \frac{W_s}{W_s + (W_a - W_b)}$							
② Compensatin coefficient K							
Specific Gravity at 15°C $({}^{T°C}/_{15°C}) = K \times Gs\,({}^{T°C}/_{T°C})$							
Average Value		Gs (T°C/15°C) = g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

Unconfined Compression Test

Reporting paper

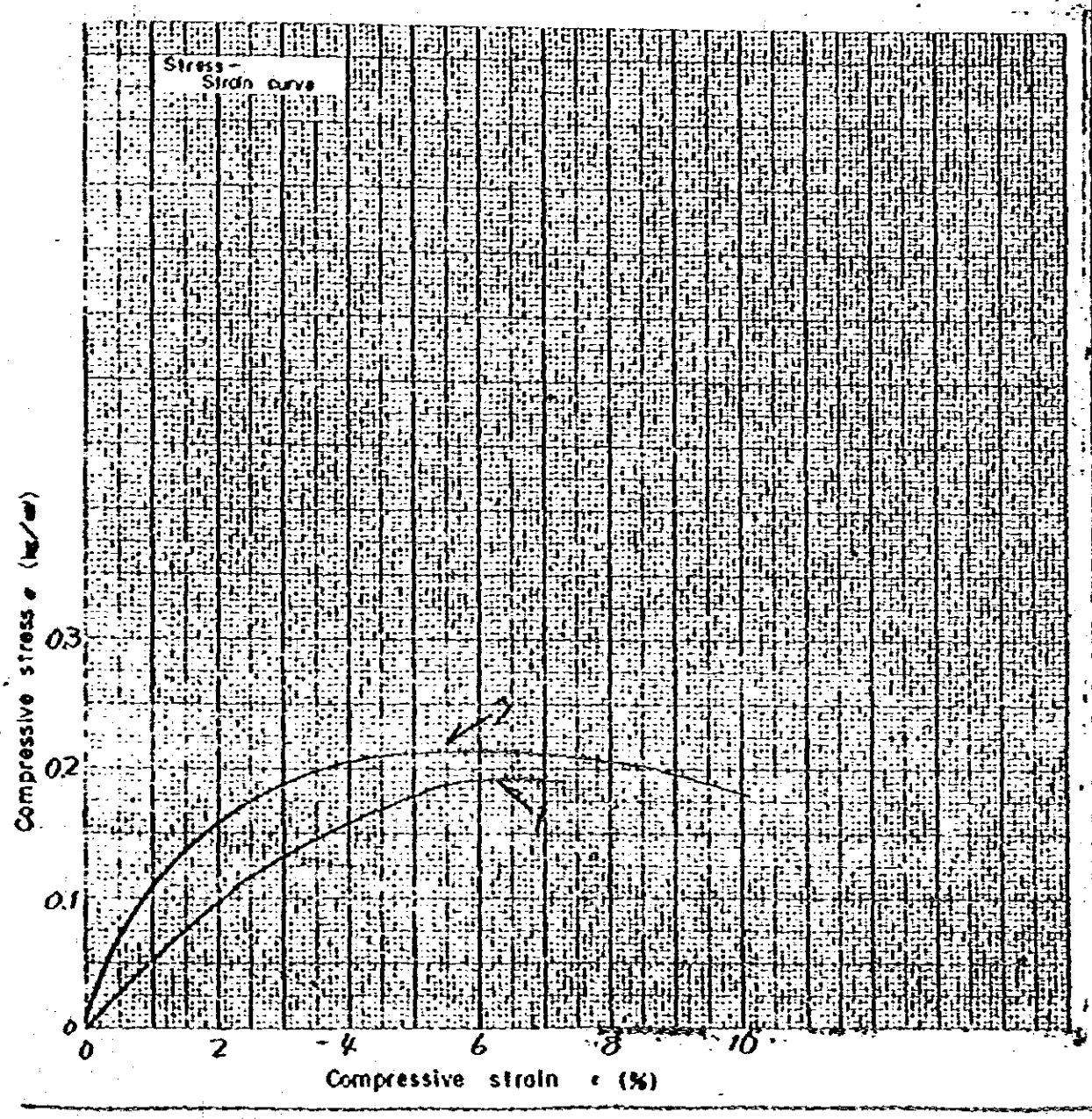
Job, Site PORT IBERIA Date Jun 5, 1981

Sample No., Depth No BH - 3 (9.00m ~ 9.60m) Technician V. MANUEL

Soil classification Gravity of soil G_s 2.49 t/m³ Plasticity index I_p

Strain rate 1 %/min Load gage : No Load gage capacity 0.036 kg

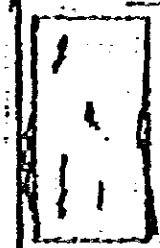
Specimen No	Sample condition	Size (cm) H	Size (cm) D	γ_d (g/cm³)	w (%)	e	S_r (%)	q_u (kg/cm²)	ε (%)	E_{50} (kg/cm²)	S_t
1		8.75	3.59	1.67	50.9	1.25		0.19	5.7	4.9	
2		8.75	3.56	1.68	50.9	1.24		0.215	5.7	11.9	



Sketch of specimen after failure

Specimen No 1

Specimen No 2



Specimen No

Specimen No

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-26-81

Sample No, Depth: No. BH-4 (5.0m ~ 5.45m) Technician N. PRADO

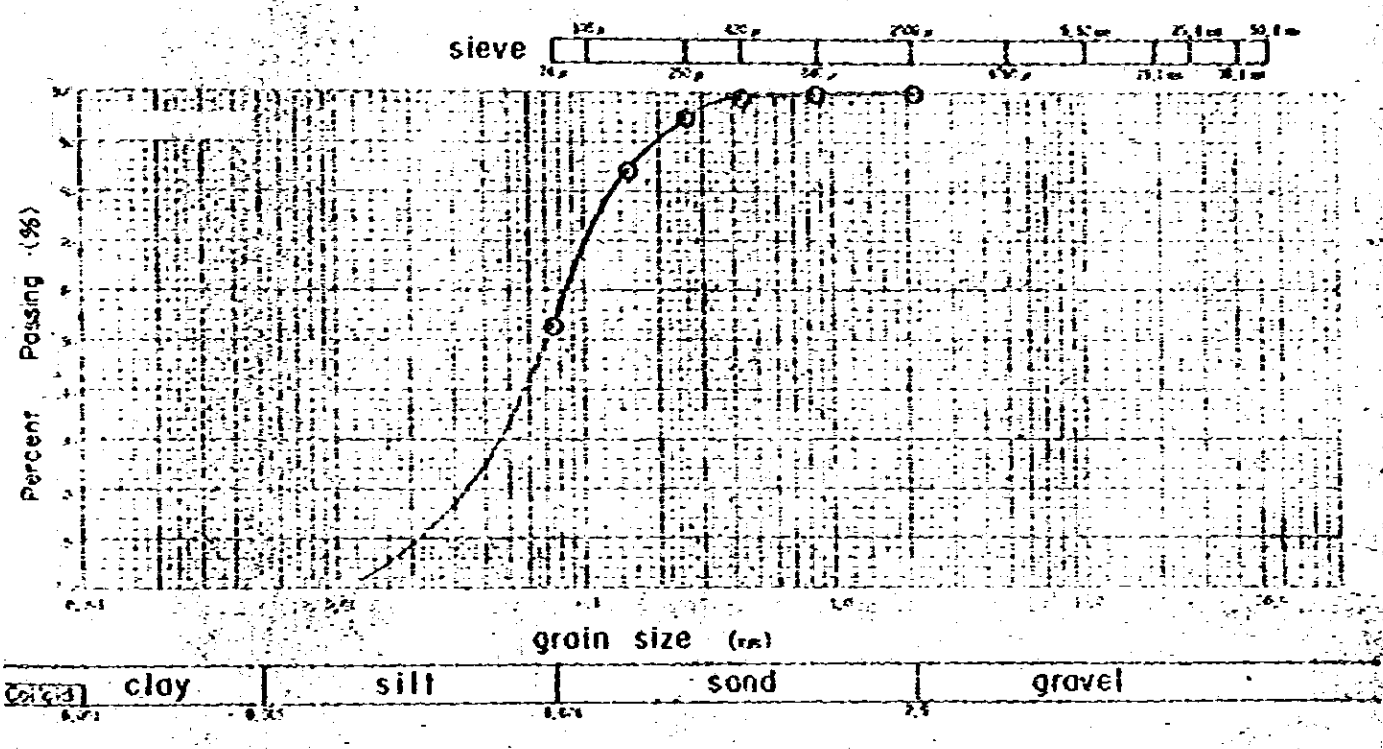
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-4 (5.0 m ~ 5.45m) Gs

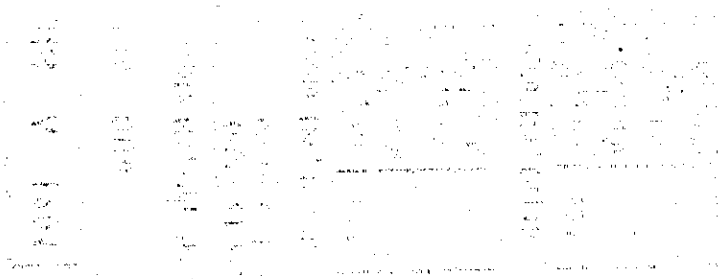
sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.8	99.1	94.6	84.8	53.1
hydrometer	Grain size mm												
	Weight percent %												

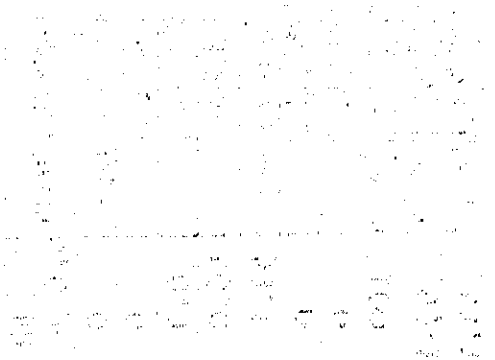
Sample No., Depth (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
hydrometer	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-4 6.0 m ~ 5.45	No. m ~ m	Sample No, Depth	No. BH-4 5.0 m ~ 5.45	No. m ~ m
Grains in 4.76mm and larger	0 %	%	Max. grain size	2.00 mm	mm
Grains in 4.76 ~ 2mm	0 %	%	60 % (grain size)	0.085 mm	mm
Grains in 2 ~ 0.42mm	0.9 %	%	30 % (grain size)	mm	mm
Grains in 0.42 ~ 0.074mm	46.0 %	%	10 % (grain size)	mm	mm
Silt in 0.074 ~ 0.005mm	53.1 %	%	Coefficient of uniformity		
Clay less than 0.005mm	0 %	%	Coefficient of curvature		
Colloid less than 0.001mm	0 %	%			
Percent by weight passing through 2.00 sieve	100 %	%			
Percent by weight passing through 0.420 sieve	99.1 %	%			
Percent by weight passing through 0.074 sieve	53.1 %	%			





JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site: PORT IRENE — Date: 6-26-81

Sample No, Depth: No. BH-4 (8.0m-8.45 m) — Technician: N. PRADO

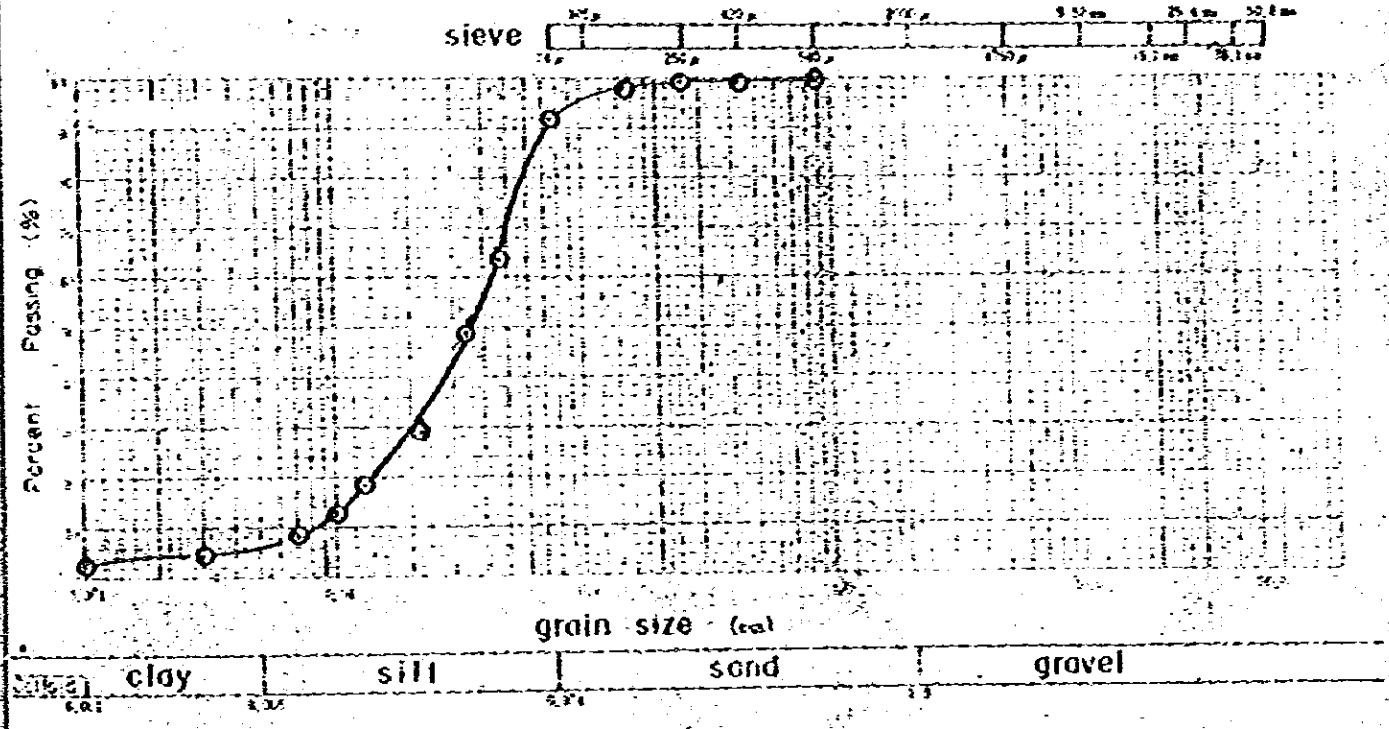
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No, Depth: BH-4 (8.0 m 8.45 m) , Gs 2.47

Grain size	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %								100	99.6	99.2	98.7	92.1
Hydrometer	Grain size mm	.046	.034	.022	.013	.010	.007	.003	.001				
	Weight percent %	62.8	48.2	29.3	18.8	12.6	8.4	4.2	2.1				

Sample No, Depth: (m ~ m) Gs

Grain size	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
Hydrometer	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-4 8.0 m ~ 8.45 m		No. m ~ m		Sample No, Depth	No. BH-4 8.0 m ~ 8.45 m		No. m ~ m	
Grains in 4.76mm and larger	0	%		%	Max. grain size	.84	mm		mm
Grains in 4.76 ~ 2mm	0	%		%	60 % (grain size)	.043	mm		mm
Grains in 2 ~ 0.42mm	0.4	%		%	30 % (grain size)	.02	mm		mm
Grains in 0.42 ~ 0.074mm	7.5	%		%	10 % (grain size)	.008	mm		mm
Silt in 0.074 ~ 0.005mm	86.1	%		%	Coefficient of uniformity	5.4			
Clays less than 0.005mm	3.9	%		%	Coefficient of curvature	1.16			
Colloid less than 0.001mm	2.1	%		%					
Percent by weight passing through 2000μ sieve	0	%		%					
Percent by weight passing through 420μ sieve	99.6	%		%					
Percent by weight passing through 74μ sieve	92.1	%		%					

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site: PORT IRENE Date: 6-26-81

Sample No, Depth: No. BH-4 (12.0 -12.45m) Technician: N. PRADO

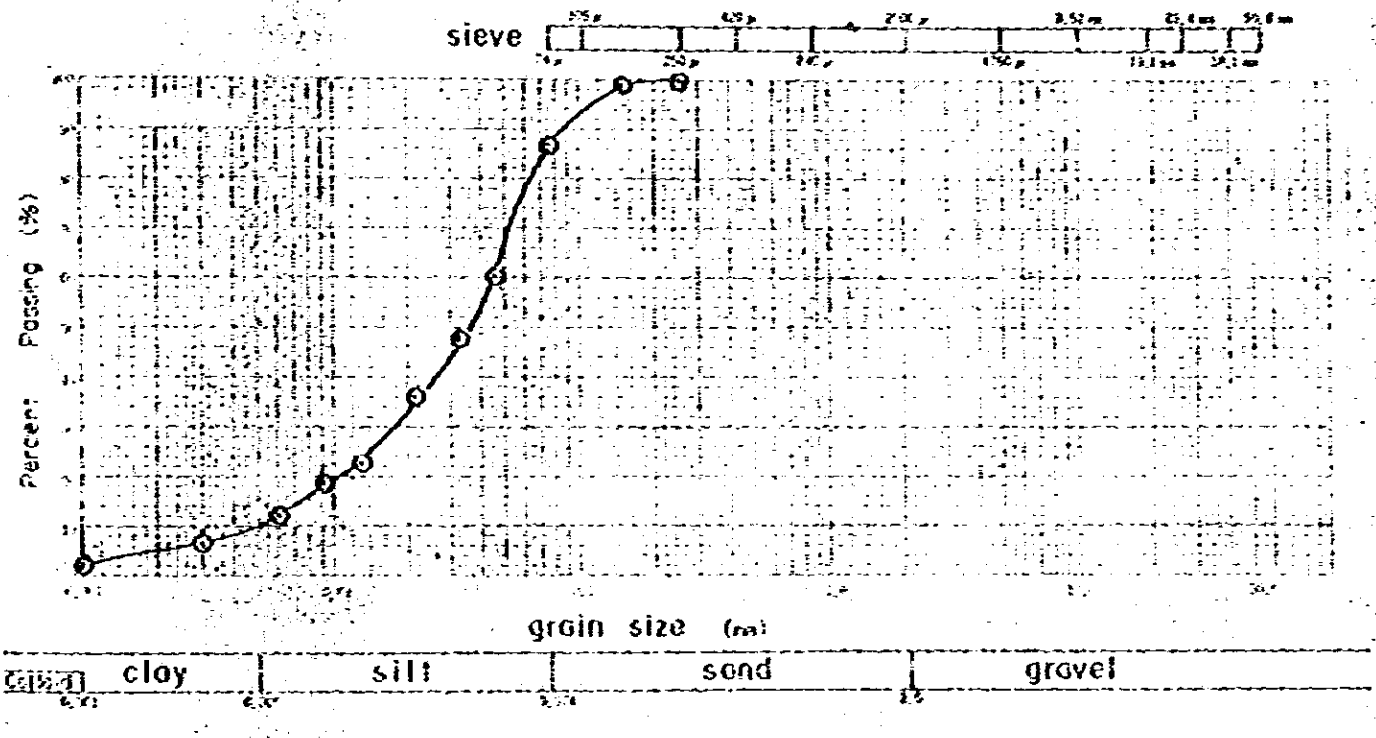
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth: BH-4 (12.0 m ~12.45m) Gs: 2.58

Coarse fraction	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %										100	99.6	87.1
Fine fraction	Grain size mm	.044	.033	.021	.013	.009	.006	.003	.001				
	Weight percent %	60.9	47.9	36.6	22.4	18.3	12.2	6.1	2.0				

Sample No., Depth: (m ~ m) Gs:

Coarse fraction	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
Fine fraction	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-4 12.0m-12.45		No. m~ m		Sample No, Depth	No. BH-4 12.0 ~12.45		No. m~ m	
Grains in 4.76mm and larger	0	%		%	Max. grain size	0.25	mm		mm
Grains in 4.76 ~ 2mm	0	%		%	60 % (grain size)	0.044	mm		mm
Grains in 2 ~ 0.42mm	0	%		%	30 % (grain size)	0.018	mm		mm
Grains in 0.42 ~0.074mm	12.9	%		%	10 % (grain size)	0.005	mm		mm
Silt in 0.074 ~0.005mm	77.1	%		%	Coefficient of uniformity	8.8			
Clays less than 0.005mm	8.0	%		%	Coefficient of curvature	1.47			
Colloid less than 0.001mm	2.0	%		%					
Percent by weight passing through 2.00mm sieve	0	%		%					
Percent by weight passing through 0.420mm sieve	0	%		%					
Percent by weight passing through 74 μm sieve	87.1	%		%					

JIS A 1204 | Method of Grain – Size Analysis of Soils | Report Form

Job Site PORT IRENE Date 6-26-81

Sample No, Depth: No. BH-4 (16.0m ~ 16.45m) Technician N. PRADO

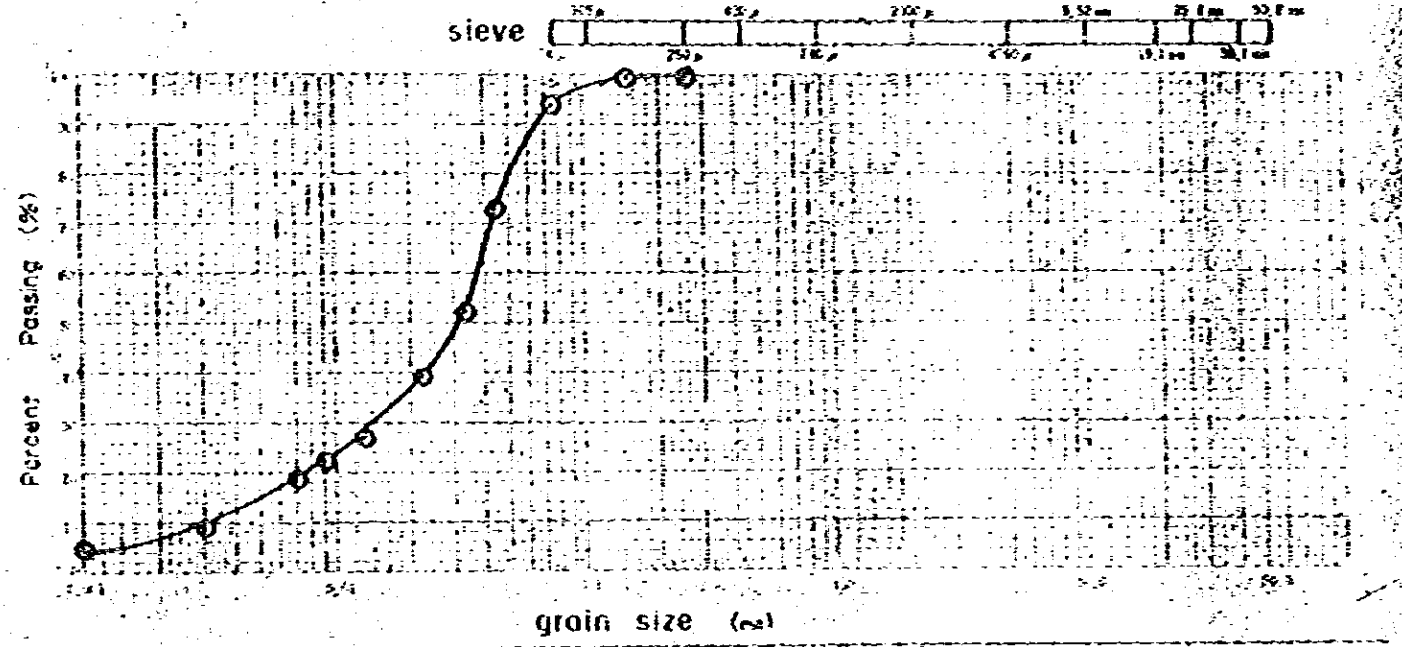
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-4 (16.0m ~ 16.45m) Gs 2.48

sieve analysis	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %									100	99.5	99.0	94.1
hydrometer analysis	Grain size mm	.044	.033	.022	.013	.009	.007	.003	.001				
	Weight percent %	73.1	52.2	39.7	27.1	22.9	18.8	8.3	4.2				

Sample No., Depth (m ~ m) Gs

sieve analysis	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
hydrometer analysis	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-4 16.0 ~ 16.45m		No. m ~ m	
Grains in 4.76mm and larger	0	%		%
Grains in 4.76 ~ 2mm	0	%		%
Grains in 2 ~ 0.42mm	0	%		%
Grains in 0.42 ~ 0.074mm	5.9	%		%
Silt in 0.074 ~ 0.005mm	79.1	%		%
Clays less than 0.005mm	10.9	%		%
Silted less than 0.001mm	4.1	%		%
Percent by weight passing through 2.00μ sieve	0	%		%
Percent by weight passing through 420μ sieve	100	%		%
Percent by weight passing through 74μ sieve	94.1	%		%

Sample No., Depth	No. BH-4 16.0 ~ 16.45m	No. m ~ m
Max. grain size	0.42 mm	mm
60 % (grain size)	.037 mm	mm
30 % (grain size)	.014 mm	mm
10 % (grain size)	.003 mm	mm
Coefficient of uniformity	12.3	
Coefficient of gradation	1.8	

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site: PORT IRENE Date: 6-26-81

Sample No, Depth No.: BH-4 (20.0m ~ 20.45m) Technician: N. PRADO

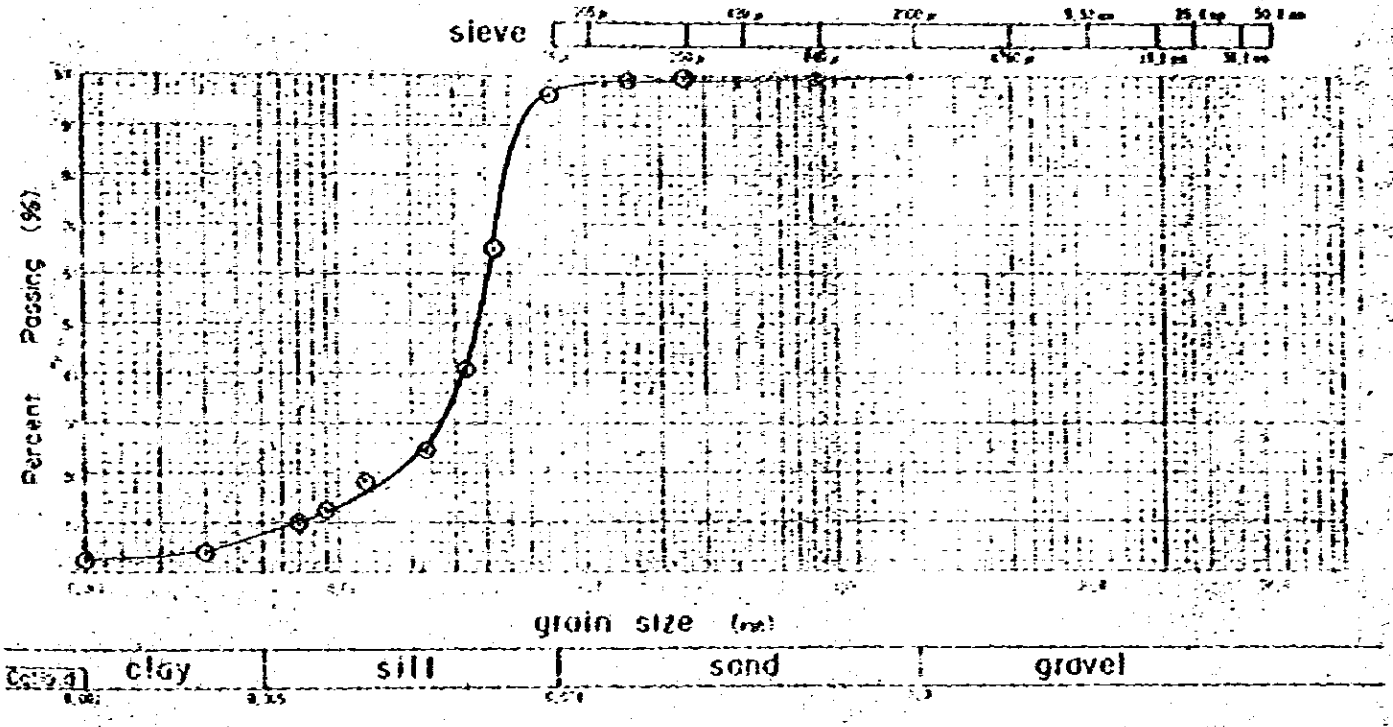
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth: BH-4 (20.0m ~ 20.45m) Gs: 2.58

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.8	99.6	99.4	99.2	96.1
hydrometer	Grain size mm	.044	.033	.023	.013	.009	.007	.003	.001				
	Weight percent %	65.0	40.6	24.4	18.3	12.2	10.2	4.0	2.0				

Sample No, Depth: (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
hydrometer	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-4 20.0m~20.45m	%	No. m~m	%	Sample No, Depth	No. BH-4 20.0m~20.45m	mm	No. m~m	mm
Grains in 4.76mm and larger	0	%		%	Max. grain size	.84	mm		mm
Grains in 4.76 ~ 2mm	0	%		%	60 % (grain size)	.042	mm		mm
Grains in 2 ~ 0.42mm	0.4	%		%	30 % (grain size)	.0261	mm		mm
Grains in 0.42 ~ 0.074mm	3.5	%		%	10 % (grain size)	0.006	mm		mm
Silt in 0.074 ~ 0.006mm	88.0	%		%	Coefficient of uniformity	2.3			
Clays less than 0.005mm	6.1	%		%	Coefficient of curvature	2.6			
Colloid less than 0.001mm	2.0	%		%					
Percent by weight passing through 2000μ sieve	100	%		%					
Percent by weight passing through 420μ sieve	99.6	%		%					
Percent by weight passing through 74μ sieve	96.1	%		%					

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-26081

Sample No., Depth: No. BH-4 (28.0m ~ 28.45m) Technician N. PRADO

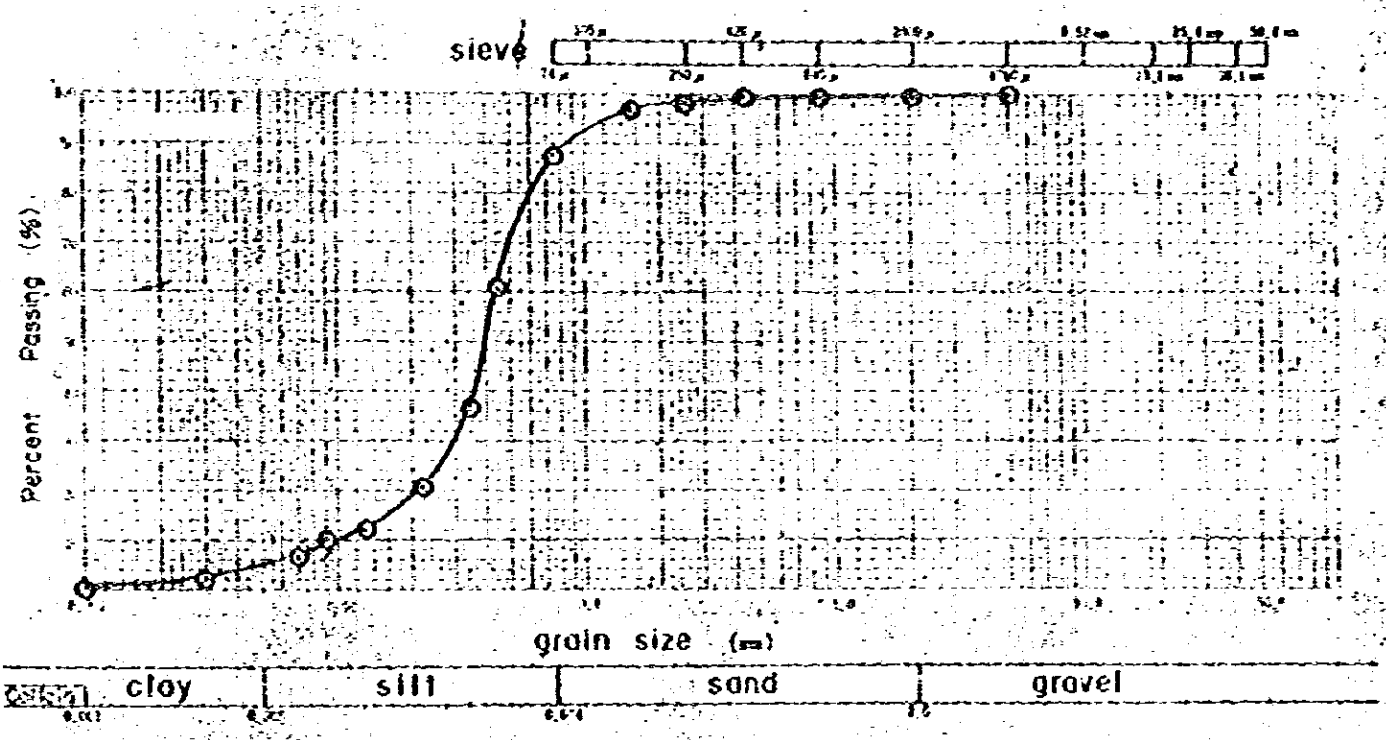
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-4 (28.0m - 28.45m) Gs 2.59

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %						100	99.9	99.7	99.5	98.8	97.0	88.8
hydrometer	Grain size mm	.044	.034	.022	.013	.009	.007	.003	.001				
	Weight percent %	60.8	36.5	20.3	12.1	10.1	6.1	2.0	0				

Sample No., Depth (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
hydrometer	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-4 28.0m-28.45m		No. m ~ m		Sample No., Depth	No. BH-4 28.0m-28.45m		No. m ~ m	
Grains in 4.76mm and larger	0	%		%	Max. grain size	4.76	mm		mm
Grains in 4.76 ~ 2mm	0.1	%		%	60 % (grain size)	.043	mm		mm
Grains in 2 ~ 0.42mm	0.4	%		%	30 % (grain size)	.003	mm		mm
Grains in 0.42 ~ 0.074mm	10.7	%		%	10 % (grain size)	.001	mm		mm
Silt in 0.074 ~ 0.005mm	83.8	%		%	Coefficient of uniformity	4.3			
Clays less than 0.005mm	5.0	%		%	Coefficient of curvature	0.2			
Colloid less than 0.001mm	0	%		%					
Percent by weight passing through 2.00mm sieve	99.9	%		%					
Percent by weight passing through 420μ sieve	99.5	%		%					
Percent by weight passing through 74μ sieve	88.8	%		%					

JIS A 1205 / A 1206 | Determination of the Liquid limit and Plastic limit of Soil | Reporting paper

Job, Site: PORT IRENE | Date: 6-25-81

Technician: N. PRADO

Sample No., Depth: No. BH-4 (8.0~8.45m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	9	51.2	1	22.9
2	15	49.0	2	23.3
3	26	45.5	3	
4	35	44.2		
5	45	44.8		
6			Average	23.1

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
46.0 %	23.1 %	22.9

Remarks: describe preparation method of the sample and etc.

Sample No., Depth: No. BH-4 (16.0~16.45m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	13	72.1	1	25.3
2	20	67.4	2	23.8
3	27	67.2	3	
4	35	60.0		
5	50	56.1		
6			AVG	24.5

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
61.0 %	24.5 %	39.5

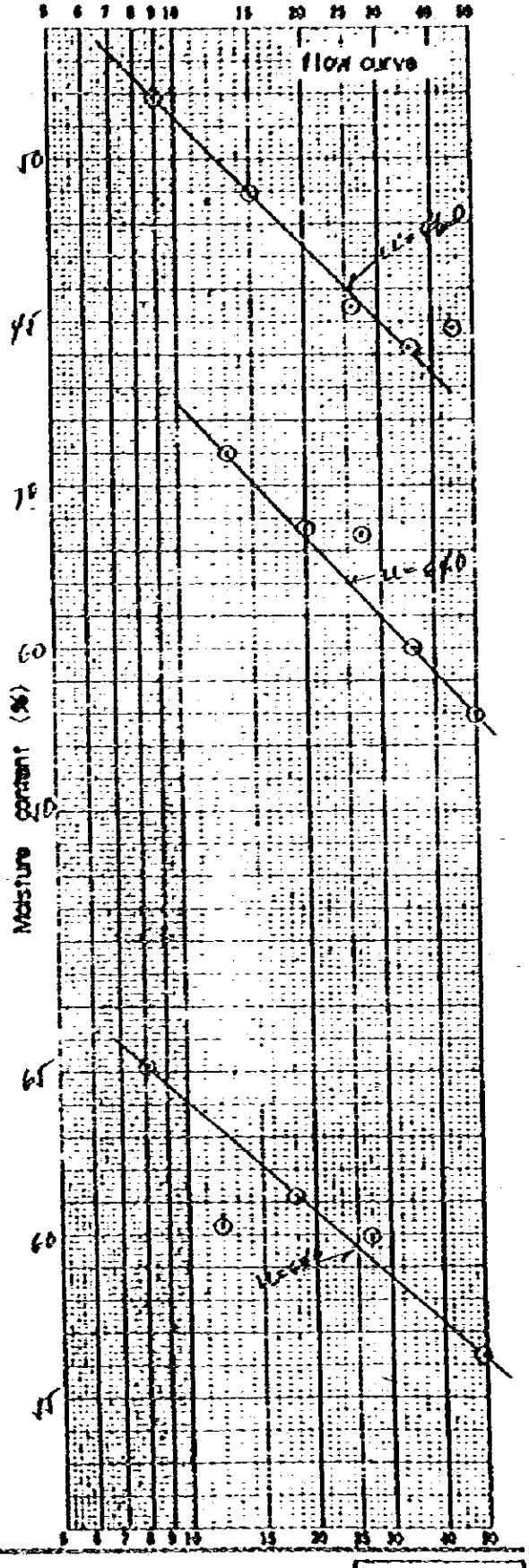
Remarks: describe preparation method of the sample and etc.

Sample No., Depth: No. BH-4 (20.0~20.45m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	8	65.2	1	25.9
2	12	60.3	2	26.8
3	18	61.2	3	
4	27	60.0		
5	50	56.3		
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
64.6 %	26.3 %	38.3

Remarks: describe preparation method of the sample and etc.



JIS A 1205 / A 1206 — Determination of the Liquid limit and Plastic limit of Soil — Reporting paper

Job, Site: PORT IRENE — Date: 6-25-81

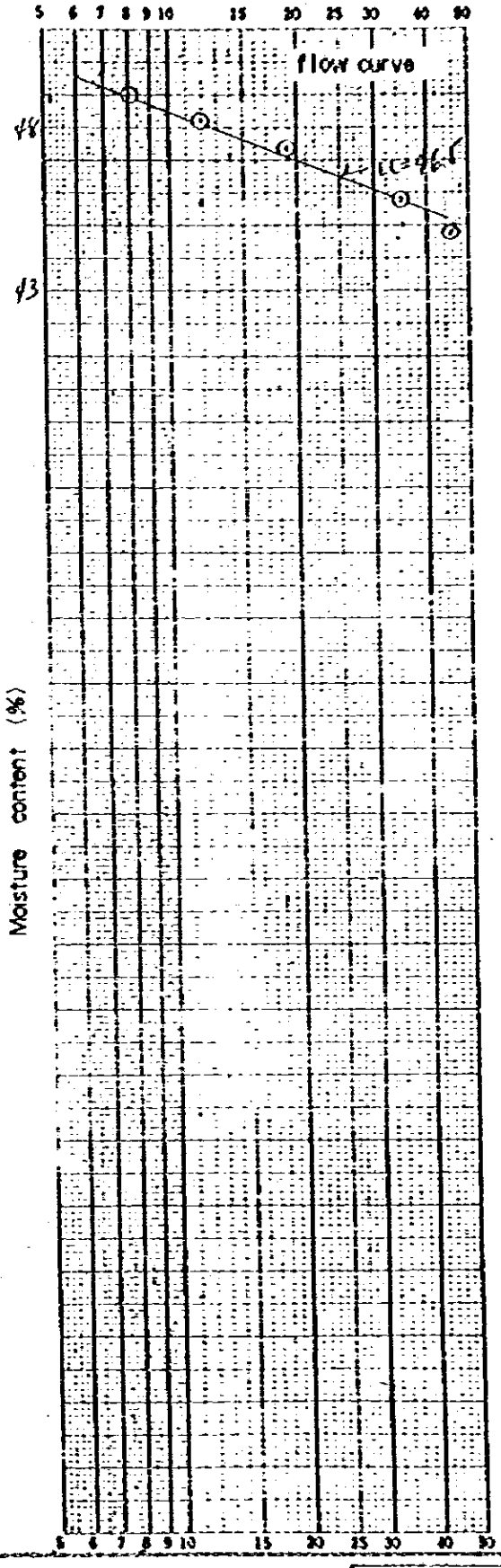
Technician: N. PRADO

Sample No., Depth: No. Bit-4 (28.0~28.15)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	8	49.0	1	25.7
2	12	48.2	2	25.8
3	19	47.3	3	
4	35	45.8		
5	45	44.8		
6			Average	

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
46.5 %	25.7 %	20.8

Remarks: describe preparation method of the sample and etc.



Sample No., Depth: No. (m~ m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1			1	
2			2	
3			3	
4				
5				
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
%	%	

Remarks: describe preparation method of the sample and etc.

Sample No., Depth: No. (m~ m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1			1	
2			2	
3			3	
4				
5				
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
%	%	

Remarks: describe preparation method of the sample and etc.

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-23-81

Technician N. PRADO

Sample No, Depth		No. BH-4 (5.0m~5.1m)			No. BH-4 (8.0m~8.1m)		
Test No		1	2	3	1	2	3
Pycnometer No		49	52	32	56	38	36
Weight of pycnometer + oven dried soil(wet soil) + water Wb		152.95	157.11	154.74	151.97	158.88	160.94
Temperature of content when Wb is meas		12 °C	12 °C	12 °C	10 °C	10 °C	10 °C
Wt. of oven dried soil in pycnometer.	container No.						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
① Converted weight of T°C (container + distilled water) Wa g		143.8	147.92	145.64	143.04	149.78	151.92
$W_s + (W_a - W_b)$ g		5.85	5.81	5.90	6.07	6.1	5.98
Specific Gravity of T°C $G_s(T°C) = \frac{W_s}{W_s + W_a - W_b}$		2.56	2.58	2.54	2.47	2.46	2.50
② Compensation coefficient K		1.0004	1.0004	1.0004	1.0006	1.0006	1.0006
Specific Gravity of 15°C $G_s(15°C) = K \times G_s(T°C)$		2.56	2.58	2.54	2.47	2.46	2.50
Average Value		Gs (T°C/15°C) = 2.56 g/cm³			Gs (T°C/15°C) = 2.47 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer ② is from JIS.

Sample No., Depth		No. BH-4 (12.0~12.1m)			No. BH-4 (16.0~16.1m)		
Test No		1	2	3	1	2	3
Pycnometer No.		45	55	38	47	59	43
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g		158.53	160.42	159.19	154.36	157.35	160.92
Temperature of content when Wb is meas.		10 °C	12 °C	10 °C	10 °C	10 °C	10 °C
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
① Converted weight of T°C (container + distilled water) Wa g		149.44	151.11	149.98	145.48	148.37	151.92
$W_s + (W_a - W_b)$ g		5.91	5.69	5.79	6.12	6.02	6.00
Specific Gravity of T°C $G_s(T°C) = \frac{W_s}{W_s + W_a - W_b}$		2.54	2.63	2.59	2.45	2.49	2.50
② Compensation coefficient K		1.0006	1.0004	1.0006	1.0006	1.0006	1.0006
Specific Gravity of 15°C $G_s(15°C) = K \times G_s(T°C)$		2.54	2.63	2.59	2.45	2.49	2.50
Average Value		Gs (T°C/15°C) = 2.58 g/cm³			Gs (T°C/15°C) = 2.48 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-23-81

Technician N. PRADO

Sample No, Depth		No. BH-4 (20.0~20.45)			No. BH-4 (25.0~25.45)		
Test No		1	2	3	1	2	3
Pycnometer No		53	45	44	85	47	89
Weight of pycnometer + oven dried soil(wet soil) + water Wb		158.11	158.66	157.21	159.38	154.65	155.42
Temperature of content when Wb is meas		10 °C	10 °C	10 °C	10 °C	10 °C	10 °C
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight of T°C (container + distilled water) Wa g		148.92	149.45	148.04	150.1	145.48	146.38
$W_s + (W_a - W_b)$ g		5.81	5.79	5.83	5.72	5.83	5.92
Specific Gravity of T°C $G_s(^{T°C}/_{T°C}) = \frac{W_s}{W_s + (W_a - W_b)}$		2.58	2.59	2.57	2.62	2.57	2.53
②Compensation coefficient K		1.0006	1.0006	1.0006	1.0006	1.0006	1.0006
Specific Gravity at 15°C $G_s(^{T°C}/_{15°C}) = K \times G_s(^{T°C}/_{T°C})$		2.58	2.59	2.57	2.62	2.57	2.53
Average Value		Gs (T°C/15°C) = 2.58 g/cm³			Gs (T°C/15°C) = 2.57 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS.

Sample No., Depth		No. BH-4 (28.0~28.45)			No. (m~ m)		
Test No		1	2	3	1	2	3
Pycnometer No.		92	49	52			
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g		156.86	152.07	157.22			
Temperature of content when Wb is meas.		10 °C	10 °C	10 °C			
W of oven dried soil in pycnometer.	container No.						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0			
①Converted weight of T°C (container + distilled water) Wa g		147.66	142.82	147.95			
$W_s + (W_a - W_b)$ g		5.80	5.75	5.73			
Specific Gravity of T°C, $G_s(^{T°C}/_{T°C}) = \frac{W_s}{W_s + (W_a - W_b)}$		2.58	2.60	2.61			
② Compensatin coefficient K		1.0006	1.0006	1.0006			
Specific Gravity at 15°C $G_s(^{T°C}/_{15°C}) = K \times G_s(^{T°C}/_{T°C})$		2.58	2.60	2.61			
Average Value		Gs (T°C/15°C) = 2.59 g/cm³			Gs (T°C/15°C) =		g/cm³
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

Unconfined Compression Test

Reporting paper

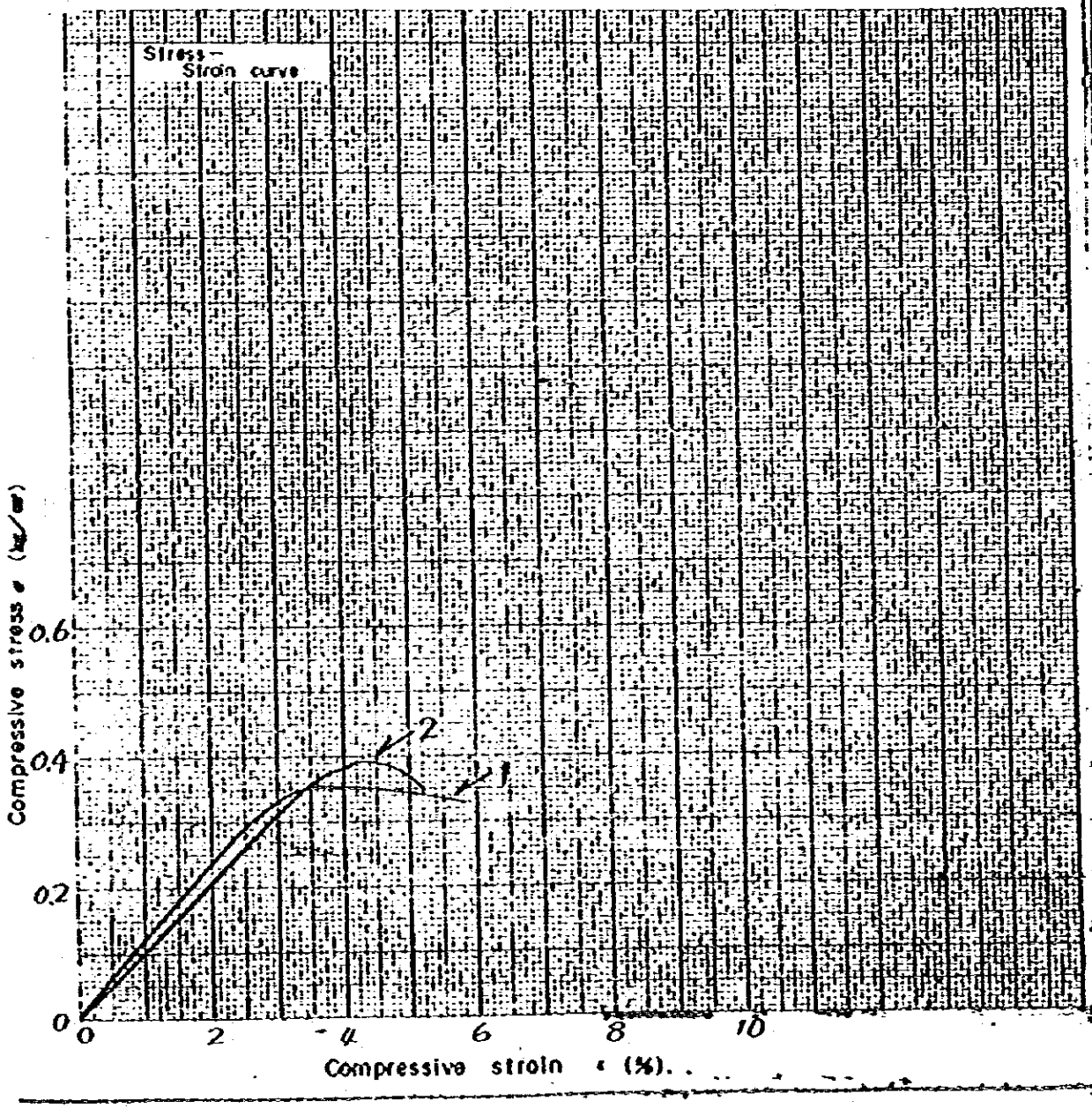
Job, Site: PORT IRENE — Date: Jun 18, 1981

Sample No., Depth: No BH-4 (9.00m ~ 9.80 m) — Technician: V. MANUEL

Soil classification: — Gravity of soil G_s: 2.49 g/cm³ — Plasticity index I_p:

Strain rate: 1 %/min. — Load gage: No — Load gage capacity: 0.036 kg

Specimen No	Sample condition	Size (cm) H	Size (cm) D	γ(g/cm³)	w(%)	e	S_r(%)	q_u(kg/cm²)	ε_f(%)	E_{50}(kg/cm²)	S_t
1		8.75	3.54	1.67	50.9	1.15		0.34	3.3	12.1	
2		8.76	3.53	1.63	50.9	1.31		0.393	4.3	56.9	

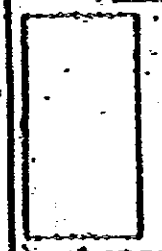


Sketch of specimen after failure.

Specimen No. 1

Specimen No. 2

Specimen No.



Specimen No.

Unconfined Compression Test

Reporting paper

Job, Site PORT IRENE

Date Jun 18, 1981

Sample No., Depth No. BH - 4 (14.00m ~ 14.80m)

Technician V. MANUEL

Soil classification

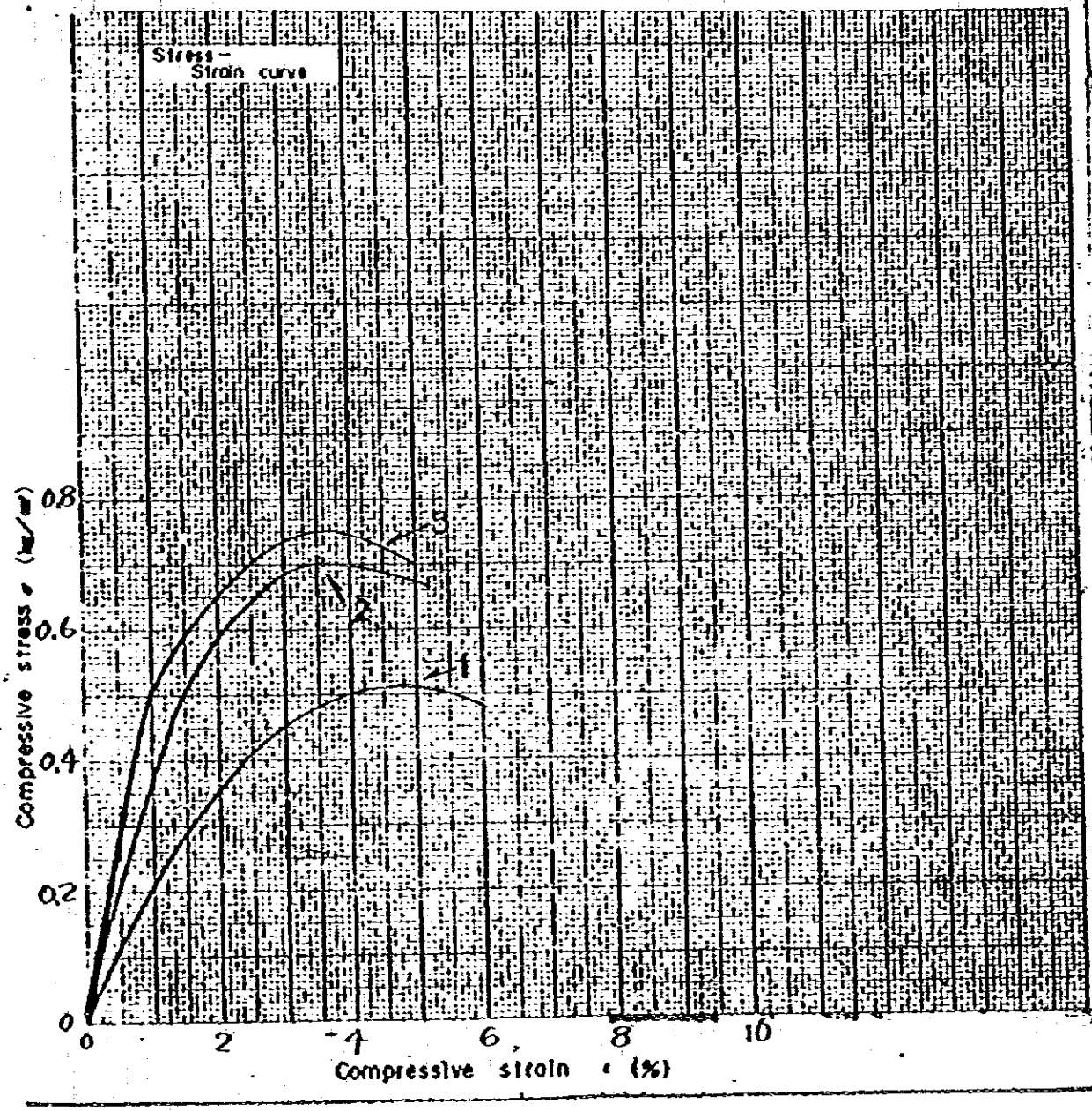
Gravity of soil G_s g/cm³

Plasticity index I_p

Strain rate 1 %/min. Load gage : No.

Load gage capacity 0.036 kg

Specimen No	Sample condition	Size (cm) H	Size (cm) D	γ_t (g/cm³)	w (%)	e	S_r (%)	q_u (kg/cm²)	ε (%)	E_{50} (kg/cm²)	S_t
1		8.75	3.50	1.67				0.51	4.6	18.8	
2		8.75	3.50	1.73				0.60	3.4	38.6	
3		8.75	3.56	1.71				0.74	3.4	56.9	



Sketch of specimen after failure.

Specimen No. 1

Specimen No. 2

Specimen No. 3

Specimen No.

JIS A 1204	Method of Grain-Size Analysis of Soils	Report Form

Job Site: PORT IRENE Date: 6-28-81

Sample No., Depth: No. BH-5 (m ~ m) Technician: N. PRADO

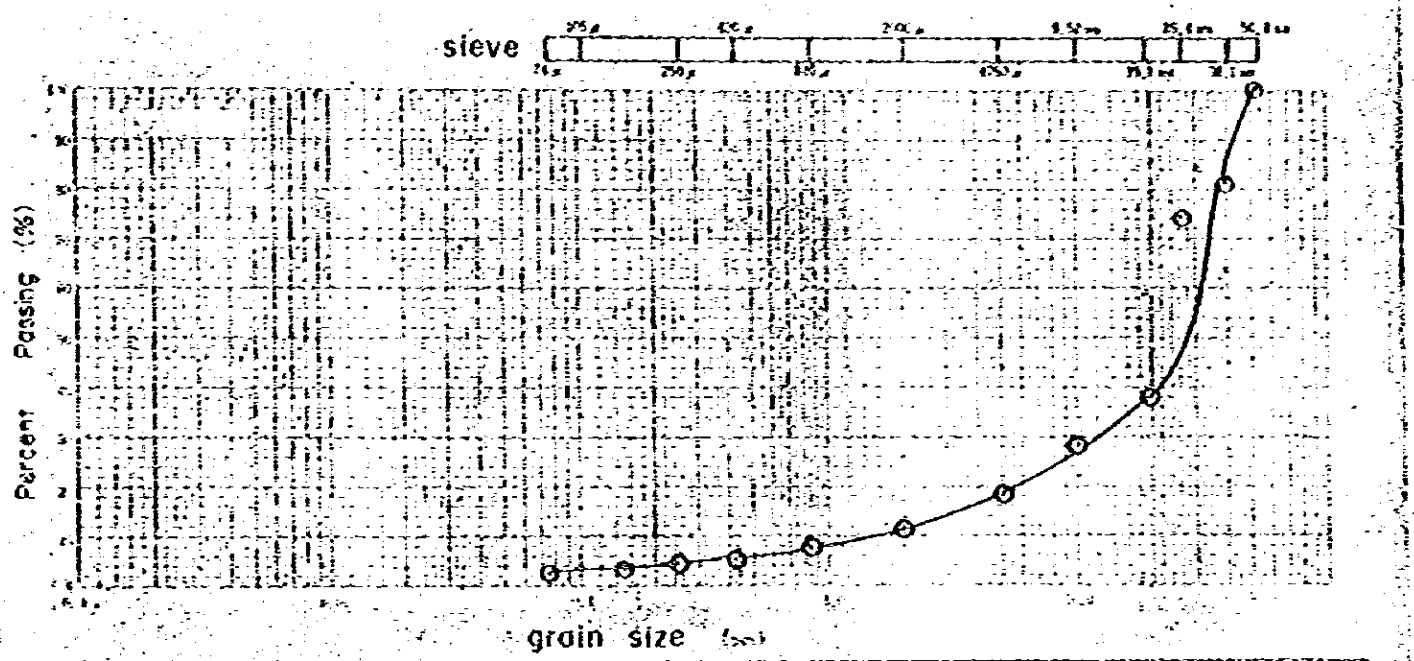
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth: BH-5 (0.0 m ~ 0.45 m) Gs: 2.66

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %	100	81.0	74.5	38.3	28.6	18.8	11.5	7.3	5.2	3.9	3.1	2.3
Hydrometer	Grain size mm												
	Weight percent %												

Sample No., Depth: (m ~ m) Gs

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
Hydrometer	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-5 0.00~0.45m	No. m~m
Grains in 4.76mm and larger	81.2 %	%
Grains in 4.76 ~ 2mm	7.3 %	%
Grains in 2 ~ 0.42mm	6.3 %	%
Grains in 0.42~0.074mm	2.9 %	%
Silt in 0.074~0.005mm	2.3 %	%
Clays less than 0.005mm	0 %	%
Colloid less than 0.001mm	0 %	%
Percent by weight passing through 2000μ sieve	11.5 %	%
Percent by weight passing through 420μ sieve	5.2 %	%
Percent by weight passing through 74μ sieve	2.3 %	%

Sample No., Depth	No. BH-5 0.0 m~0.45 m	No. m~m
Max. grain size	50.8 mm	mm
60 % (grain size)	12.2 mm	mm
30 % (grain size)	10.0 mm	mm
10 % (grain size)	1.7 mm	mm
Coefficient of uniformity	14.8	
Coefficient of curvature	9.2	

JIS A 1204	Method of Grain -- Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-28-81

Sample No, Depth: No. BH-5 (m ~ m) Technician N. PRADO

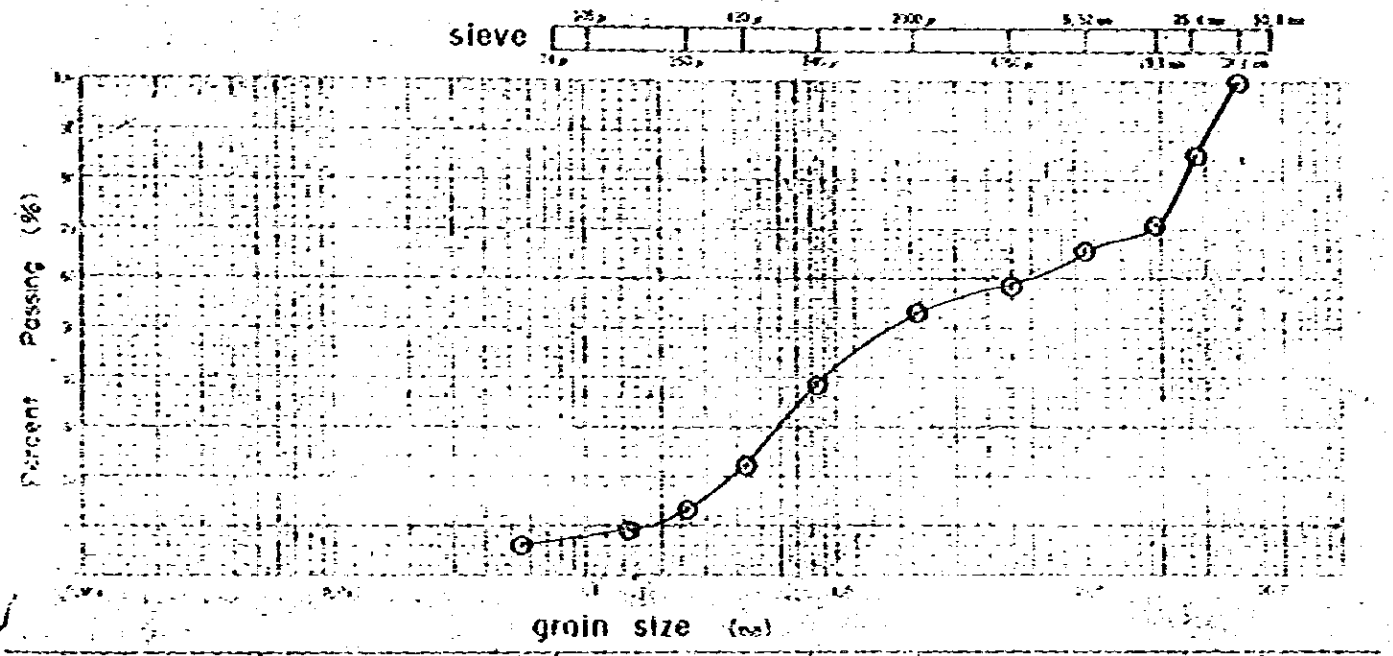
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-5 (3,0m ~ 3,45m) Gs 2,67

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
Sieve	Weight percent %		100	85.1	71.6	65.8	58.8	53.5	39.1	22.4	13.2	9.1	6.4
Hydrometer	Grain size mm												
	Weight percent %												

Sample No., Depth (m ~ m) Gs

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
Sieve	Weight percent %												
Hydrometer	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-5 3.0 m ~ 3.45	No. m ~ m	Sample No., Depth	No. BH-5 3.0 ~ 3.45 m	No. m ~ m
Grains in 75mm and larger	41.2 %	%	Max. grain size	38.1 mm	mm
Grains in 75 ~ 2mm	5.3 %	%	60 % (grain size)	6.0 mm	mm
Grains in 2 ~ 0.42mm	31.1 %	%	30 % (grain size)	0.6 mm	mm
Grains in 0.42 ~ 0.074mm	16.0 %	%	10 % (grain size)	0.18 mm	mm
Grains in 0.074 ~ 0.005mm	6.4 %	%	Coefficient of uniformity	33.3	
Grains less than 0.005mm	0 %	%	Coefficient of curvature	0.3	
Colloid less than 0.001mm	0 %	%			
Percent by weight passing through 2.00 mm sieve	53.5 %	%			
Percent by weight passing through 0.420 mm sieve	22.4 %	%			
Percent by weight passing through 0.074 mm sieve	6.4 %	%			

JIS A 1204	Method of Grain -- Size Analysis of Soils	Report Form

Job Site PORT XREME Date 6-28-81

Sample No, Depth: No. BH-5 (m ~ m) Technician N. PRADO

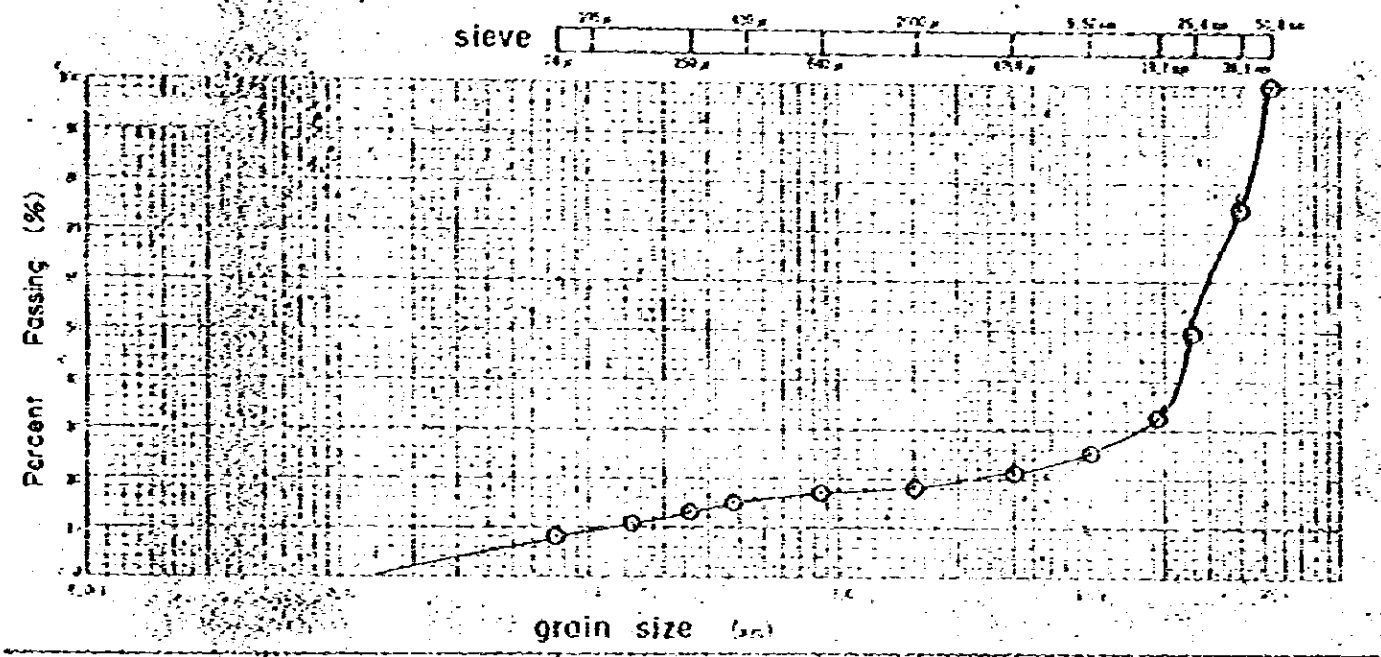
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-5 (6.00m ~ 6.45m) Gs 2.64

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
sieve	Weight percent %	100	75.8	49.9	32.2	25.2	21.4	18.2	16.8	15.1	13.2	10.5	7.9
hydrometer	Grain size mm												
	Weight percent %												

Sample No., Depth (m ~ m) Gs

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
sieve	Weight percent %												
hydrometer	Grain size mm												
	Weight percent %												



Boring	clay	silt	sand	gravel

Sample No., Depth	No. BH-5 m ~ m	No. m ~ m	Sample No., Depth	No. BH-5 6.0 m ~ 6.45	No. m ~ m
Grains in 4.76mm and larger	78.6 %	%	Max. grain size	50.8 mm	mm
Grains in 4.76 ~ 2mm	3.2 %	%	60 % (grain size)	30.0 mm	mm
Grains in 2 ~ 0.42mm	3.1 %	%	30 % (grain size)	16.0 mm	mm
Grains in 0.42 ~ 0.074mm	7.2 %	%	10 % (grain size)	0.12 mm	mm
Silt in 0.074 ~ 0.006mm	7.9 %	%	Coefficient of uniformity	250.0	
Clays less than 0.005mm	0 %	%	Coefficient of curvature	71.1	
Colloid less than 0.001mm	0 %	%			
Percent by weight passing through 2000μ sieve	18.2 %	%			
Percent by weight passing through 420μ sieve	15.1 %	%			
Percent by weight passing through 74μ sieve	7.9 %	%			

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site: PORT IRENE Date: 6-28-81

Sample No, Depth: No. BH-5 (8.00 ~ 8.45m) Technician: N. Prado

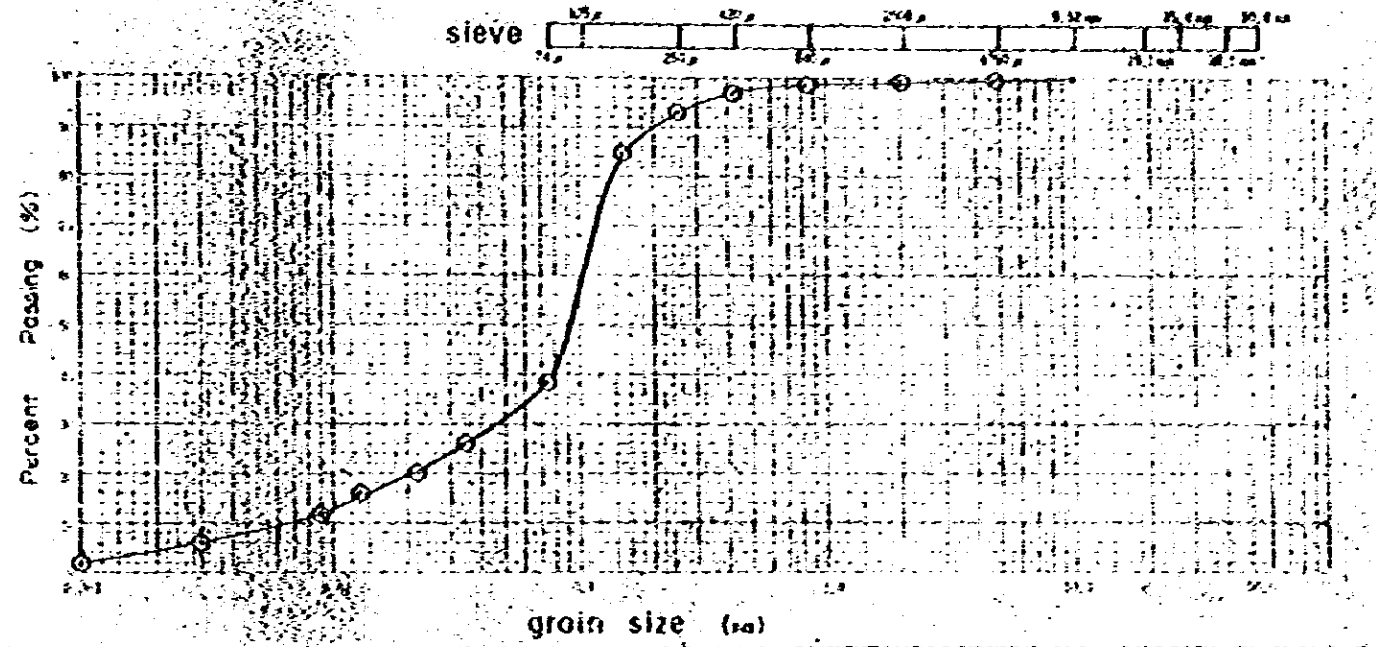
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth: BH-5 (8.00 ~ 8.45m) Gs: 2.64

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %				100	99.7	99.0	98.2	97.0	93.1	74.5	0	38.0
	Grain size mm	.047	.034	.022	.013	.009	.006	.003	.001				
	Weight percent %	36.1	26.1	20.0	16.0	12.0	10.0	6.0	2.0				

Sample No., Depth: (m ~ m) Gs:

	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-5 8.00 ~ 8.45		No. m ~ m		Sample No, Depth	No. BH-5 8.0 ~ 8.45		No. m ~ m	
Grains in 4.76mm and larger	1.0	%		%	Max. grain size	9.52	mm		mm
Grains in 4.76 ~ 2mm	0.8	%		%	50 % (grain size)	0.102	mm		mm
Grains in 2 ~ 0.42mm	5.1	%		%	30 % (grain size)	.047	mm		mm
Grains in 0.42 ~ 0.074mm	55.1	%		%	10 % (grain size)	.007	mm		mm
Silt in 0.074 ~ 0.005mm	29.0	%		%	Coefficient of uniformity	14.6			
Clay less than 0.005mm	7.0	%		%	Coefficient of curvature	3.1			
Colloid less than 0.001mm	2.0	%		%					
Percent by weight passing through 2000μ sieve	98.2	%		%					
Percent by weight passing through 420μ sieve	93.1	%		%					
Percent by weight passing through 74μ sieve	38.0	%		%					

JIS A 1204 | Method of Grain-Size Analysis of Soils | Report Form

Job Site PORT IRVIB Date 6-28-81

Sample No., Depth: No. BH-5 (12.0~12.45m) Technician N. PRADO

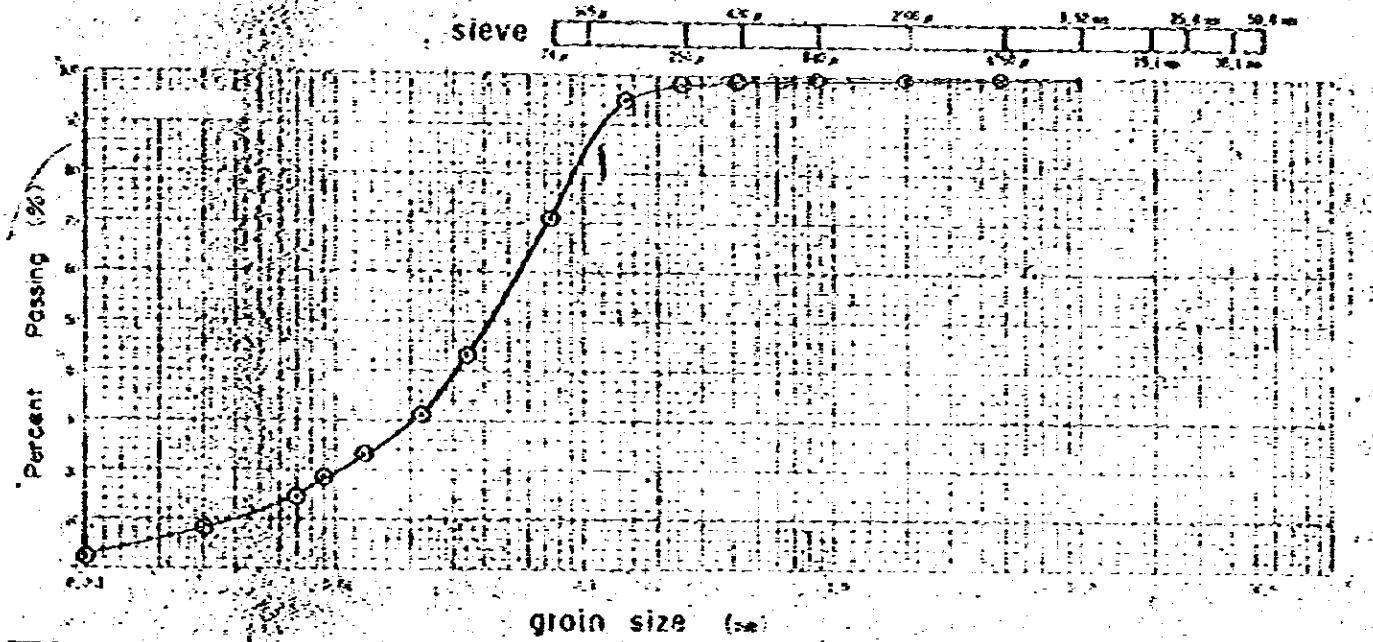
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-5 (12.0~12.45m) Gs 2.54

Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
Weight percent %					100	99.6	99.3	99.2	98.9	98.0	95.0	70.8
Grain size mm	.043	.034	.022	.013	.009	.007	.003	.001				
Weight percent %	51.0	43.2	30.8	22.6	18.5	14.4	8.2	2.1				

Sample No., Depth (m ~ m) Gs

Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
Weight percent %												
Grain size mm												
Weight percent %												



Sample No., Depth	No. BH-5 12.0~12.45	No.	Sample No., Depth	No. BH-5 12.0~12.45	No.
Grain in 4.76mm and larger	0.4 %	%	Max. grain size	9.52 mm	mm
Grain in 4.76 ~ 2mm	0.3 %	%	60 %(grain size)	.055 mm	mm
Grain in 2 ~ 0.42mm	0.4 %	%	30 %(grain size)	.02 mm	mm
Grain in 0.42 ~ 0.074mm	28.1 %	%	10 %(grain size)	.004 mm	mm
Silt in 0.074 ~ 0.005mm	58.8 %	%	Coefficient of uniformity	13.8	
Clay less than 0.005mm	9.9 %	%	Coefficient of curvature	1.8	
Colloid less than 0.001mm	2.1 %	%			
Percent by weight passing through 2.000μ sieve	99.3 %	%			
Percent by weight passing through 420μ sieve	98.9 %	%			
Percent by weight passing through 74μ sieve	70.8 %	%			

JIS A 1204	Method of Grain -- Size Analysis of Soils	Report Form

Job Site PORT HUENEME Date 6-28-81

Sample No, Depth: No. BH-5 (16.0 m ~ 16.45 m) Technician N. PRADO

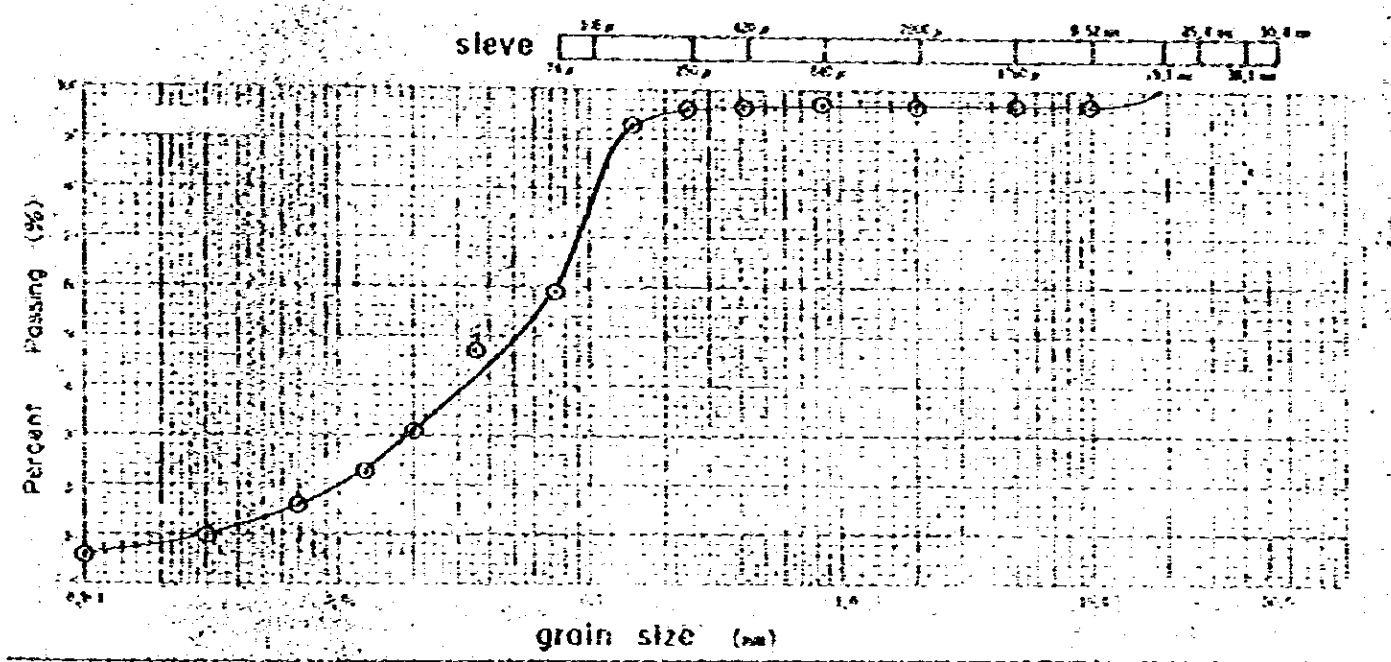
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH - 5 (16.0 m ~ 16.45 m) Gs 2.56

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %				100	97.0	97.0	97.0	96.4	96.6	96.1	92.4	59.0
Hydrometer	Grain size mm	.043	.033	.022	.013	.009	.007	.003	.001				
	Weight percent %	49.0	47.0	30.7	22.5	18.4	16.4	10.2	6.1				

Sample No., Depth (mm ~ m) Gs

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
Hydrometer	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-5 16.0m-16.45m	No. m~ m	Sample No, Depth	No. BH-5 16.0m-16.45m	No. m~ m
Grains in 4.76mm and larger	3.0 %	%	Max. grain size	9.52 mm	mm
Grains in 4.76 ~ 2mm	0 %	%	60 % (grain size)	0.075 mm	mm
Grains in 2 ~ 0.42mm	0.4 %	%	30 % (grain size)	0.019 mm	mm
Grains in 042~0074mm	37.6 %	%	10 % (grain size)	0.003 mm	mm
Silt in 0074~0005mm	36.0 %	%	Coefficient of uniformity	25.0	
Clays less than 0.005mm	6.9 %	%	Coefficient of curvature	1.6	
Colloid less than 0.001mm	6.1 %	%			
Percent by weight passing through 2000μ sieve	97.0 %	%			
Percent by weight passing through 420μ sieve	96.6 %	%			
Percent by weight passing through 74μ sieve	59.0 %	%			

JIS A 1204 | Method of Grain – Size Analysis of Soils | Report Form

Job Site PORT TRENK Date 6-28-81

Sample No., Depth: No. BH-5 (m ~ m) Technician N. PRADO

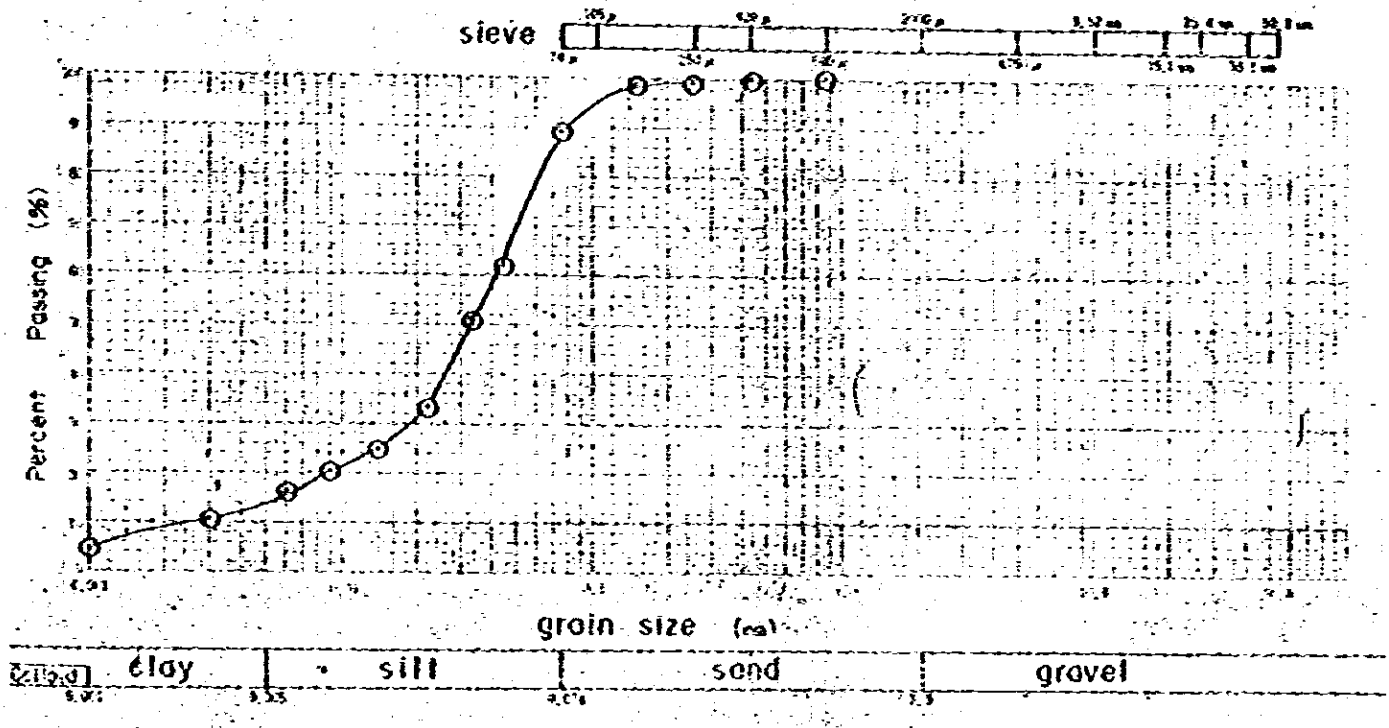
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth BH-5 (20.0m-20.45m) Gs 2.53

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %								100	99.8	99.6	99.1	89.8
Hydrometer	Grain size mm	.045	.033	.022	.014	.009	.007	.003	.001				
	Weight percent %	61.8	51.6	32.9	24.7	20.6	16.5	10.3	4.1				

Sample No., Depth (m ~ m) Gs

Sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
Hydrometer	Grain size mm												
	Weight percent %												



Sample No., Depth	No. BH-5 m ~ m	No. m ~ m	Sample No., Depth	No. BH-5 20.0 m ~ 20.45 m	No. m ~ m
Grains in 47mm and larger	0 %	%	Max. grain size	0.84 mm	mm
Grains in 4.76 ~ 2mm	0 %	%	60 % grain size	.042 mm	mm
Grains in 2 ~ 0.42mm	0.2 %	%	30 % grain size	.019 mm	mm
Grains in 0.42 ~ 0.074mm	10.0 %	%	10 % grain size	.0028 mm	mm
Silt in 0.074 ~ 0.005mm	75.8 %	%	Coefficient of uniformity	15.0	
Clays less than 0.005mm	9.9 %	%	Coefficient of curvature	3.1	
Colloid less than 0.001mm	4.1 %	%			
Passed by 2000μ sieve, Passed by 420μ sieve	0 %	%			
Passed by 420μ sieve, Passed by 74μ sieve	99.8 %	%			
Passed by 74μ sieve	89.8 %	%			

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site: PORT IRENE — Date: 6-28-81

Sample No, Depth: No. BH-5 (m ~ m) — Technician: H. PRADO

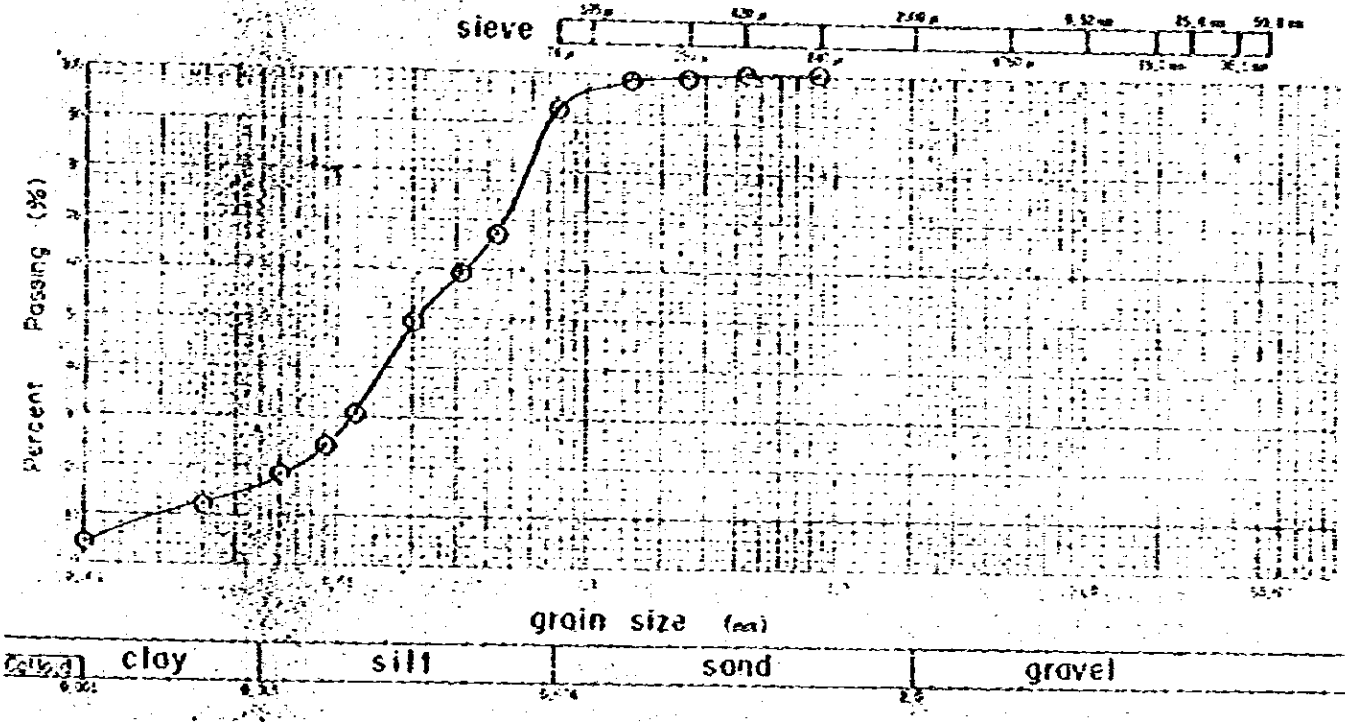
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth: BH-5 (25.0m ~ 25.45) — Gs: 2.54

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %								100	99.7	99.5	99.2	93.9
hydrometer	Grain size mm	.043	.031	.020	.012	.009	.006	.003	.001				
	Weight percent %	67.8	59.6	49.3	30.8	24.7	18.5	12.3	4.1				

Sample No., Depth: (m ~ m) — Gs:

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %												
hydrometer	Grain size mm												
	Weight percent %												



Sample No, Depth	No. BH-5 25.0m-25.45	No. m ~ m	Sample No, Depth	No. BH-5 25.0m-25.45	No. m ~ m
Grains in 4.76mm and larger	0 %	%	Max. grain size	0.84 mm	mm
Grains in 4.76 ~ 2mm	0 %	%	60 % (grain size)	.034 mm	mm
Grains in 2 ~ 0.42mm	0.3 %	%	30 % (grain size)	.012 mm	mm
Grains in 0.42 ~ 0.074mm	5.8 %	%	10 % (grain size)	.002 mm	mm
Silt in 0.074 ~ 0.005mm	77.9 %	%	Coefficient of uniformity	17.0	
Clays less than 0.005mm	11.9 %	%	Coefficient of curvature	2.1	
Colloid less than 0.001mm	4.1 %	%			
Percent by weight passing through 2000μ sieve	0 %	%			
Percent by weight passing through 420μ sieve	99.7 %	%			
Percent by weight passing through 74μ sieve	93.9 %	%			

JIS A 1205 A 1206	Determination of the Liquid limit and Plastic limit of Soil	Reporting paper

Job, Site PORT IRENE Date 6-27-81

Technician H. PRADO

Sample No, Depth No. BH-5 (20.0m ~ 20.45)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	10	46.6	1	25.2
2	15	45.6	2	25.7
3	25	45.9	3	
4	30	43.5		
5	45	43.2		
6			Average	25.5

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
45.0 %	25.5 %	19.5

Remarks: describe preparation method of the sample and etc.

Sample No, Depth No. BH-5 (25.0m ~ 25.45)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1	10	55.1	1	30.2
2	15	54.4	2	29.8
3	28	53.8	3	
4	40	52.8		
5	50	52.8	Ave.	30.0
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
53.8 %	30.0 %	23.8

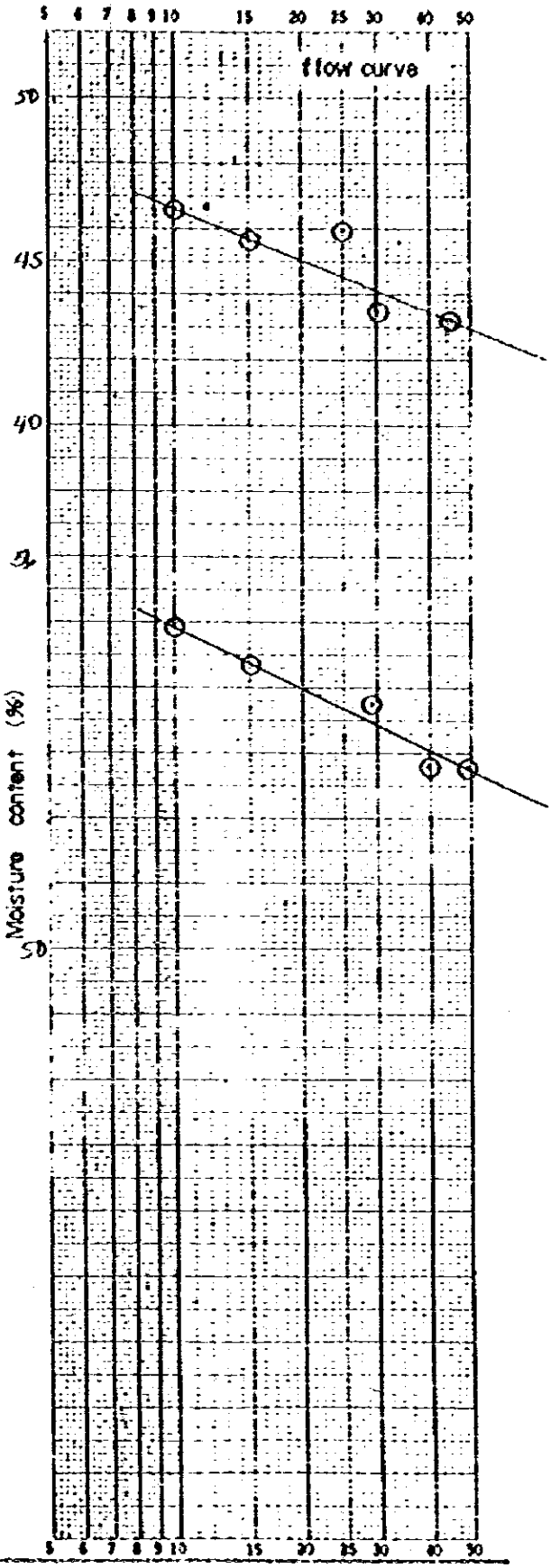
Remarks: describe preparation method of the sample and etc.

Sample No, Depth No. (m ~ m)

Liquid limit Test			Plastic limit Test	
No.	No. of blows	Moisture content %	No.	Moisture content %
1			1	
2			2	
3			3	
4				
5				
6				

Liquid limit w_L	Plastic limit w_P	Plasticity index I_P
%	%	

Remarks: describe preparation method of the sample and etc.



JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site: PORT IRENE — Date: June 28, 1981

Technician: /R. PRADO

Sample No, Depth	No. BH-5 (00~0.45 m)			No. BH-5 (3.00~3.45 m)		
Test No	1	2	3	1	2	3
Pycnometer No	93	85	67	62	54	53
Weight of pycnometer + oven dried soil(wet soil) + water Wb g	158.93	159.51	152.01	155.36	149.58	150.29
Temperature of content when Wb is meas	9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W. of oven dried soil in pycnometer. container No						
Weight (container + dried soil) g						
Wt of container g						
W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight at T°C (container + distilled water) Wo g	149.52	150.1	142.75	145.96	140.2	148.92
$W_s + (W_o - W_b)$ g	5.59	5.59	5.74	5.60	5.62	5.63
Specific Gravity of T°C $G_s(T°C) = \frac{W_s}{W_s + W_o - W_b}$	2.68	2.68	2.61	2.67	2.67	2.66
②Compensation coefficient K						
Specific Gravity at 15°C $G_s(15°C) = K \times G_s(T°C)$	2.68	2.68	2.61			
Averege Value	Gs (T°C/15°C) = g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks	2.66			2.67		

(Note) ① is obtained from attached inspection table of pycnometer ② is from JIS.

Sample No, Depth	No. (m~ m)			No. (m~ m)		
Test No	1	2	3	1	2	3
Pycnometer No						
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g						
Temperature of content when Wb is meas.						
W of oven dried soil in pycnometer. container No						
Weight (container + dried soil) g						
Wt of container g						
W_s g						
①Converted weight at T°C (container + distilled water) Wo g						
$W_s + (W_o - W_b)$ g						
Specific Gravity of T°C $G_s(T°C) = \frac{W_s}{W_s + W_o - W_b}$						
② Compensation coefficient K						
Specific Gravity at 15°C $G_s(15°C) = K \times G_s(T°C)$						
Averege Value	Gs (T°C/15°C) = g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks						

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-25-81

Technician N.PRADO

Sample No, Depth		No. BH-5 (6.0m~6.4m)			No. BH-5 (8.0m~8.4m)		
Test No		1	2	3	1	2	3
Pycnometer No		89	33	34	64	54	66
Weight of pycnometer + oven dried soil(wet soil) + water Wb		155.8	156.0	161.31	152.5	149.45	159.9
Temperature of content when Wb is meas		9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight at T°C (container + distilled water) Wa g		146.39	146.58	151.93	143.08	140.10	150.64
$W_s + (W_a - W_b)$ g		5.59	5.58	5.62	5.58	5.65	5.74
Specific Gravity at T°C $G_s(T°C) = \frac{W_s}{W_s + W_a - W_b}$		2.68	2.68	2.66	2.68	2.65	2.61
②Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C $G_{s(15°C)} = K \times G_s(T°C)$		2.68	2.68	2.65	2.68	2.65	2.61
Average Value		Gs (T°C/15°C) = 2.64 g/cm³			Gs (T°C/15°C) = 2.67 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer ② is from JIS.

Sample No, Depth		No. BH-5 (12.0~12.4m)			No. BH-5 (16.0m~16.4m)		
Test No		1	2	3	1	2	3
Pycnometer No.		62	63	43	36	56	63
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g		155.1	154.7	161.0	161.0	152.26	154.8
Temperature of content when Wb is meas.		9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight at T°C (container + distilled water) Wa g		145.96	145.60	151.94	151.93	143.05	145.6
$W_s + (W_a - W_b)$ g		5.86	5.90	5.94	5.93	5.79	5.8
Specific Gravity at T°C $G_s(T°C) = \frac{W_s}{W_s + W_a - W_b}$		2.56	2.54	2.53	2.52	2.59	2.58
②Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C $G_{s(15°C)} = K \times G_s(T°C)$		2.56	2.54	2.53	2.52	2.59	2.58
Average Value		Gs (T°C/15°C) = 2.54 g/cm³			Gs (T°C/15°C) = 2.56 g/cm³		
Remarks.							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-25-81

Technician N. PRADO

Sample No, Depth		No. BH-5 (20.0m ~ 20.45m)			No. BH-5 (25.6m ~ 25.9m)		
Test No.		1	2	3	1	2	3
Pycnometer No.		50	67	89	65	95	93
Weight of pycnometer + oven dried soil(wet soil) + water Wb	g	157.0	151.7	155.46	152.1	157.83	158.69
Temperature of content when Wb is meas		9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W. of oven dried soil in pycnometer.	container No.						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight of T°C (container + distilled water) Wa	g	147.76	142.75	146.39	143.02	148.73	149.52
$W_s + (W_a - W_b)$	g	5.76	6.05	5.93	5.92	5.90	5.83
Specific Gravity of T°C $G_s(T°C/4°C) = \frac{W_s}{W_s + W_a - W_b}$		2.60	2.48	2.53	2.53	2.54	2.57
②Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C $G_s(T°C/15°C) = K \times G_s(T°C/4°C)$		2.60	2.48	2.53	2.53	2.54	2.57
Average Value		Gs (T°C/15°C) = 2.53 g/cm³			Gs (T°C/15°C) = 2.54 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS.

Sample No, Depth		No. (m ~ m)			No. (m ~ m)		
Test No.		1	2	3	1	2	3
Pycnometer No.							
Weight of pycnometer + oven dried soil(Wet soil) + water Wb	g						
Temperature of content when Wb is meas.							
W of oven dried soil in pycnometer.	container No.						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g						
①Converted weight of T°C (container + distilled water) Wa	g						
$W_s + (W_a - W_b)$	g						
Specific Gravity of T°C $G_s(T°C/4°C) = \frac{W_s}{W_s + W_a - W_b}$							
② Compensatin coefficient K							
Specific Gravity at 15°C $G_s(T°C/15°C) = K \times G_s(T°C/4°C)$							
Average Value		Gs (T°C/15°C) = g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks.							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

2. BOTTOM SAMPLING

Results of Soil Test

Site of Investigate PORT IBIRE SS Recorder N. PRADC

Sample No. SS			1 A	1 B	2 A	2 B	3 A	3 B
Depth METER m			SS-1	SS-1	SS-2	SS-2	SS-3	SS-3
Grain size analysis	Gravel	(>2000μ) %	2.6	2.8	0	0	0	0
	Sand	(74~2000μ) %	81.9	80.9	43.2	50.3	15.2	30.9
	Silt	(5 ~ 74μ) %	15.5	16.3	54.8	47.7	79.1	65.1
	Clay	(< 5μ) %			2.0	2.0	5.0	4.0
	Max. diameter	mm	2.00	2.00	0.84	0.84	2.00	2.00
	Coefficient of uniformity	Uc	1.4	1.49	5.7	3.8	3.8	3.5
	Coefficient of curvature	Uc	0.91	.84	2.14	1.1	1.5	2.6
Consistency	Liquid limit	W_L %						
	Plastic limit	Wp %						
	Plasticity index	Ip						
Classification	Triangular classification chart		Silty Sand	Silty Sand	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
	Plasticity chart							
Specific gravity of soil particles Gs			2.49	2.49	2.45	2.45	2.54	2.54
Natural state	Water content	W %	31.4	31.4	46.7	44.7	47.0	45.2
	Wet unit weight	γt g/cm³						
	Void ratio	e						
	Degree of saturation	Sr %						
Mechanical characteristics	Unconfined compression test	Unconfined compressive strength Qu kg/cm²						
		Secant modulus Eso kg/cm²						
		Sensitivity ratio St						
	Single shear test	Testing condition						
		Cohesion C kg/cm²						
		Angle of shearing resistance ϕ °						
	Trioxial compression test	Testing condition						
		Cohesion C kg/cm²						
		Angle of shearing resistance ϕ °						
	Consolidtion test	Consolidation yielding pressure Py kg/cm²						
		Compression index Cc						

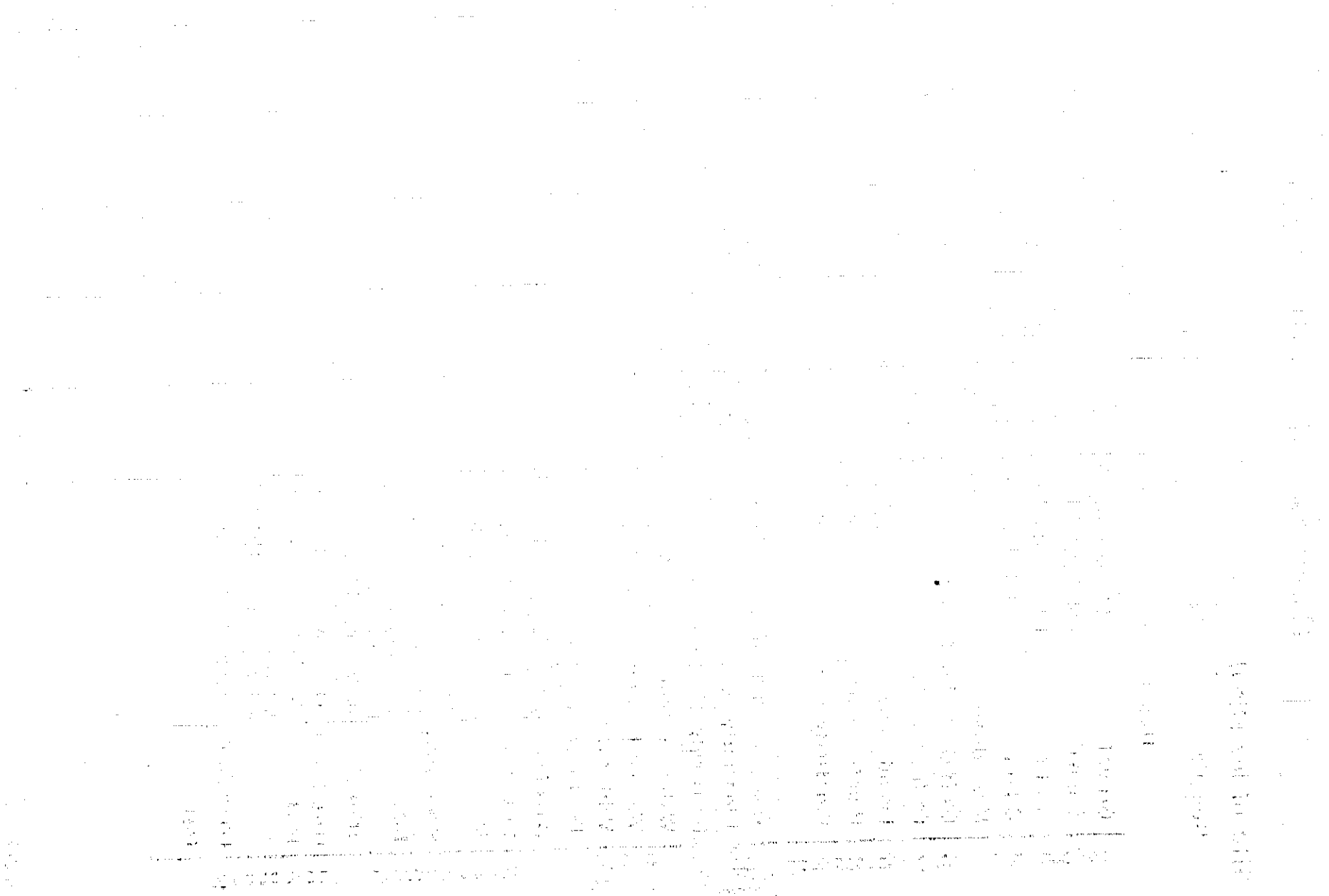
Remarks

Results of Soil Test

Site of investigate PORT IRENE Recorder H. PRADO

Sample No.			4 A	4 B	5 A	5 B		
Depth METER m			SS-4	SS-4	SS-5	SS-5		
Grain size analysis	Gravel	(>2000μ) %	0	0	0.2	0		
	Sand	(74~2000μ) %	1.7	1.1	32.0	26.7		
	Silt	(5 ~ 74μ) %	86.3	84.9	61.8	64.3		
	Clay	(< 5μ) %	12.0	14.0	6.0	9.0		
	Max. diameter	mm	2.00	0.25	4.76	2.00		
	Coefficient of uniformity	Uc	7.1	12.3	6.3	10.0		
	Coefficient of curvature	Uc'	1.8	2.9	1.8	2.4		
Consistency	Liquid limit	WL %						
	Plastic limit	Wp %						
	Plasticity index	Ip						
Classification	Triangular classification chart		Mud	Mud	Sandy silt	Sandy silt		
	Plasticity chart		OL	OL	ML	ML		
Specific gravity of soil particles Gs			2.45	2.45	2.66	2.66		
Natural state	Water content	W %	118.5	123.6	55.6	44.3		
	Wet unit weight	γt g/cm³						
	Void ratio	e						
	Degree of saturation	Sr %						
Mechanical characteristics	Unconfined compression test	Unconfined compressive strength qu kg/cm²						
		Secant modulus Eso kg/cm²						
		Sensitivity ratio St						
	Single shear test	Testing condition						
		Cohesion C kg/cm²						
		Angle of shearing resistance φ °						
	Trioxial compression test	Testing condition						
		Cohesion C kg/cm²						
		Angle of shearing resistance φ °						
	Consolidtion test	Consolidation yielding pressure Py kg/cm²						
		Compression index Cc						

Remarks :



JIS A 1204	Method of Grain-Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-26-81

Sample No, Depth: No. SS-1 (m ~ m) Technician N. PRADO

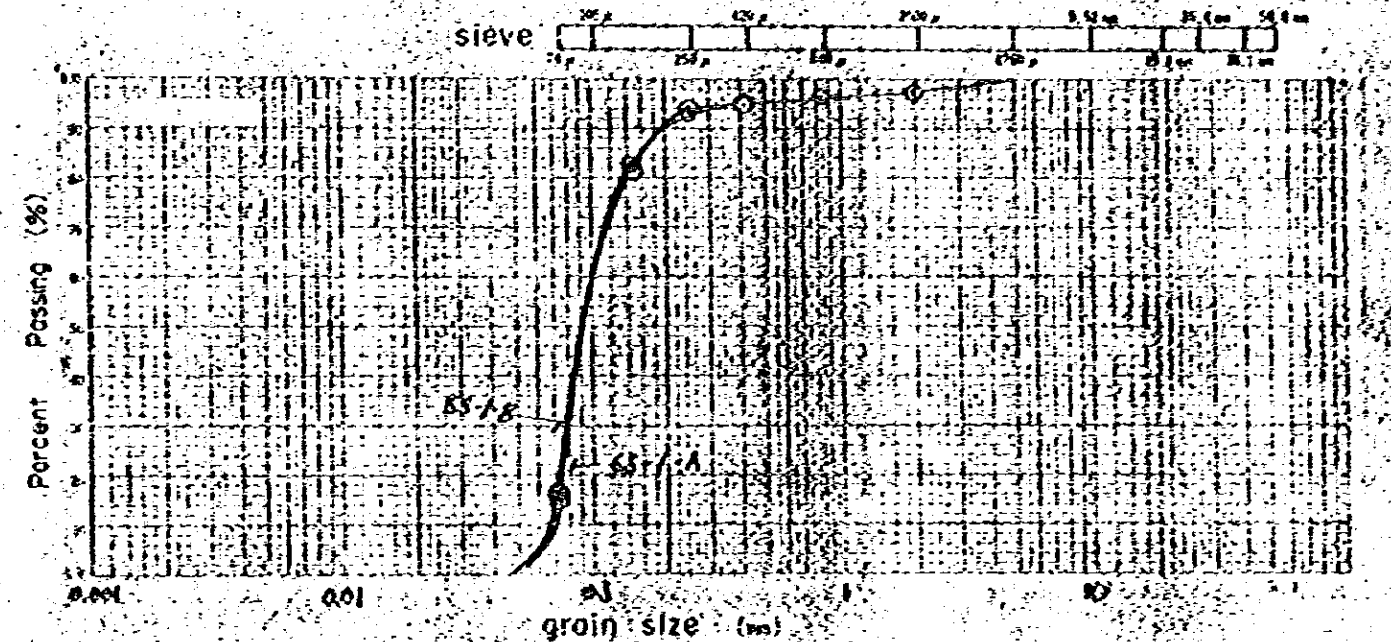
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth SS-1A (m ~ m) Gs 2.49

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %						100	97.4	96.3	95.1	94.2	81.5	15.5
hydrometer	Grain size mm												
	Weight percent %												

Sample No, Depth SS-1B (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %						100	97.2	96.1	95.0	93.8	82.6	16.3
hydrometer	Grain size mm												
	Weight percent %												



Sample No., Depth	No. SS-1A m ~ m		No. SS-1B m ~ m		Sample No., Depth	No. SS-1A m ~ m		No. SS-1B m ~ m	
Grains in 4.76mm and larger	0	%	0	%	Max. grain size	2.00	mm	2.00	mm
Grains in 4.76 ~ 2mm	2.6	%	2.8	%	60 % (grain size)	.1	mm	.11	mm
Grains in 2 ~ 0.42mm	2.3	%	2.2	%	30 % (grain size)	.08	mm	.075	mm
Grains in 0.42 ~ 0.074mm	79.6	%	78.7	%	10 % (grain size)	.07	mm	.067	mm
Silt in 0.074 ~ 0.005mm	15.5	%	16.3	%	Coefficient of uniformity	1.4		1.49	
Clays less than 0.005mm	0	%	0	%	Coefficient of curvature	0.91		0.84	
Colloid less than 0.001mm	0	%	0	%					
Percent by weight passing through 2.00mm sieve	97.4	%	97.2	%					
Percent by weight passing through 420μ sieve	95.1	%	95.0	%					
Percent by weight passing through 74μ sieve	15.5	%	16.3	%					

JIS A 1204	Method of Grain-Size Analysis of Soils	Report Form

Job Site : PORT IRENE Date 6-27-81

Sample No, Depth : No. SS-2 (m ~ m) Technician N. PRADO

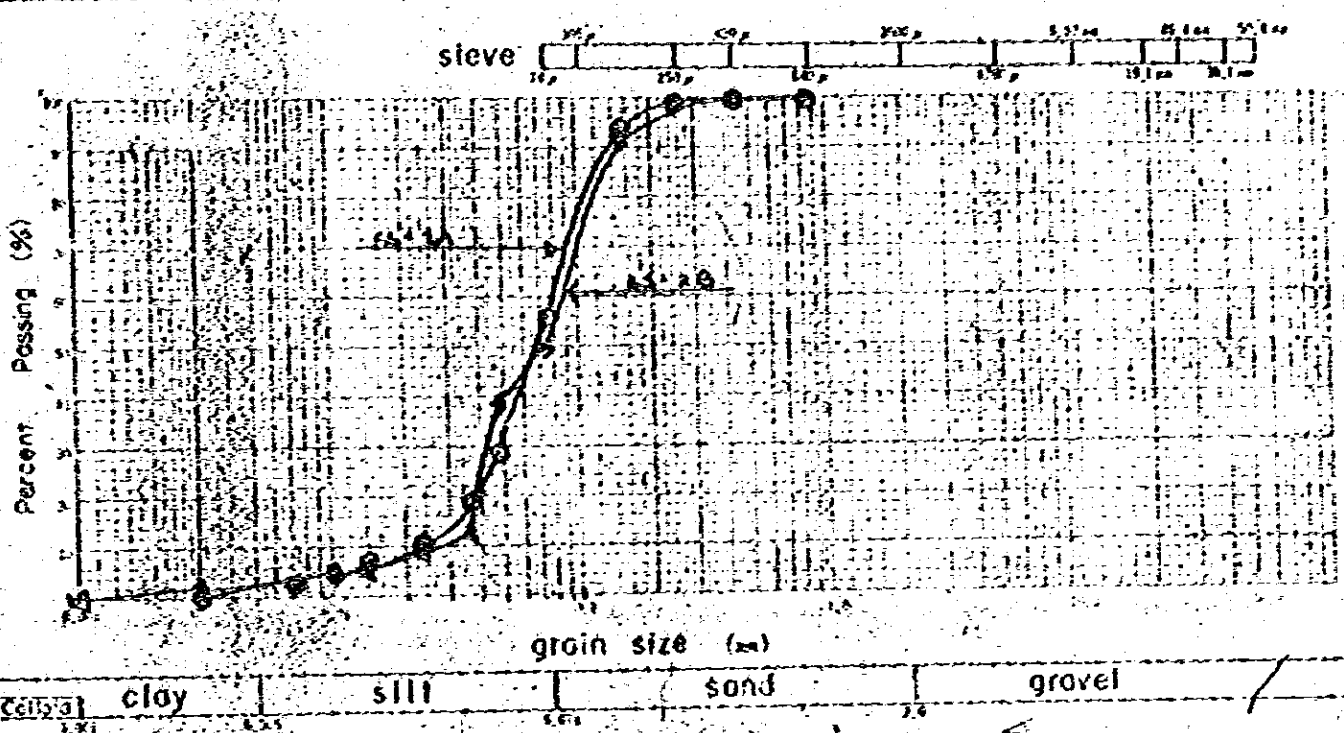
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth SS-2 A (m ~ m) Gs 2.45

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %								100	99.8	99.5	94.5	56.8
hydrometer	Grain size mm	.047	.037	.023	.014	.010	.007	.003	.001				
	Weight percent %	29.9	19.1	10.4	6.2	4.2	2.1	0					

Sample No., Depth SS-2 B (m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %								100	99.9	99.3	91.6	49.7
hydrometer	Grain size mm	.048	.036	.023	.014	.010	.007	.003	.001				
	Weight percent %	39.6	12.5	8.3	4.2	4.2	2.1	2.1	0				



Colloid	clay	silt	sand	gravel

Sample No, Depth	No. SS-2 A m ~ m		No. SS-2 B m ~ m	
Grains in 4.76mm and larger	0	%	0	%
Grains in 4.76 ~ 2mm	0	%	0	%
Grains in 2 ~ 0.42mm	0.2	%	0.1	%
Grains in 0.42 ~ 0.074mm	43.0	%	50.2	%
Silt in 0.074 ~ 0.005mm	54.8	%	47.7	%
Clays less than 0.005mm	2.0	%	2.0	%
Colloid less than 0.001mm	0	%	0	%
Percent by weight passing through 2.000μ sieve	0	%	0	%
Percent by weight passing through 420μ sieve	99.8	%	99.9	%
Percent by weight passing through 74μ sieve	56.8	%	49.7	%

Sample No, Depth	No. SS-2 m ~ m	No. SS-2 B m ~ m
Max. grain size	0.84 mm	0.84 mm
60 % grain size	.08 mm	.09 mm
30 % grain size	.049 mm	.049 mm
10 % grain size	.014 mm	.024 mm
Coefficient of uniformity	5.7	3.8
Coefficient of curvature	2.14	1.1

JIS A 1204	Method of Grain-Size Analysis of Soils	Report Form

Job Site PORT INRUR Date 6-27-81

Sample No, Depth: No. SS-3 (m ~ m) Technician N. PRADO

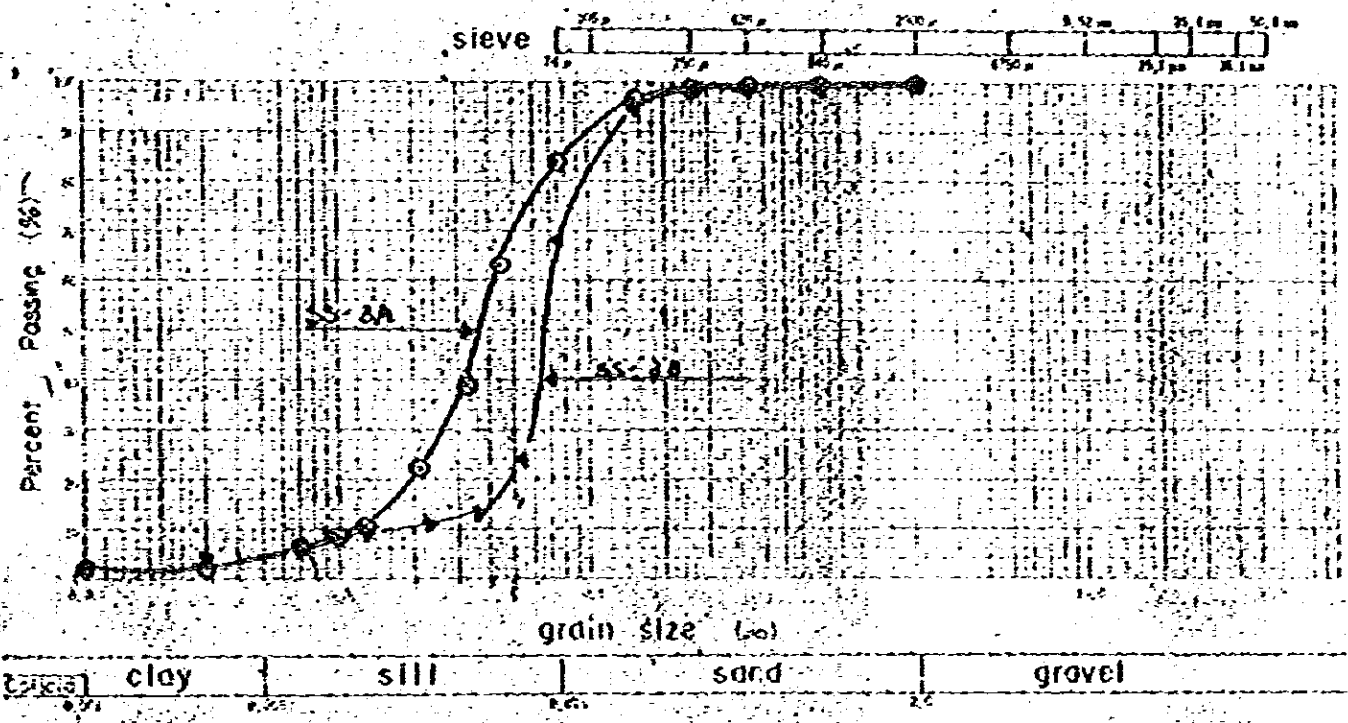
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth SS-3 A (m ~ m) Gs 2.5/4

sieve													
	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.9	99.6	99.2	97.2	84.1
hydrometer	Grain size mm	.043	.033	.021	.013	.010	.006	.003	.001				
	Weight percent %	63.7	39.1	22.2	10.3	8.2	6.2	2.1	2.1				

Sample No., Depth SS-3 B (m ~ m) Gs

sieve													
	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.7	99.5	99.2	95.0	69.1
hydrometer	Grain size mm	.051	.036	.023	.013	.009	.007	.003	.001				
	Weight percent %	24.4	12.3	10.3	8.2	8.2	6.2	4.1	2.1				



clay	silt	sand	gravel

Sample No., Depth	No. SS-3 A m ~ m	No. SS-3 B m ~ m	Sample No., Depth	No. SS-3 A m ~ m	No. SS-3 B m ~ m
Grains in 4.76mm and larger	0 %	0 %	Max. grain size	2.00 mm	2.00 mm
Grains in 4.76 ~ 2mm	0 %	0 %	60 %(grain size)	.042 mm	.07 mm
Grains in 2 ~ 0.42mm	0.4 %	0.5 %	30 %(grain size)	.026 mm	.06 mm
Grains in 0.42 ~ 0.074mm	15.5 %	30.4 %	10 %(grain size)	.011 mm	.02 mm
Silt in 0.074 ~ 0.006mm	79.1 %	65.1 %	Coefficient of uniformity	3.8	3.5
Clays less than 0.006mm	2.9 %	1.9 %	Coefficient of curvature	1.5	2.6
Colloid less than 0.001mm	2.1 %	2.1 %			
Percent by weight passing through 2000μ sieve	100 %	100 %			
Percent by weight passing through 420μ sieve	99.6 %	99.5 %			
Percent by weight passing through 74μ sieve	84.1 %	69.1 %			

JIS A 1204	Method of Grain-Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-27-81

Sample No, Depth: No. SS-4 (m ~ m) Technician N. PRADO

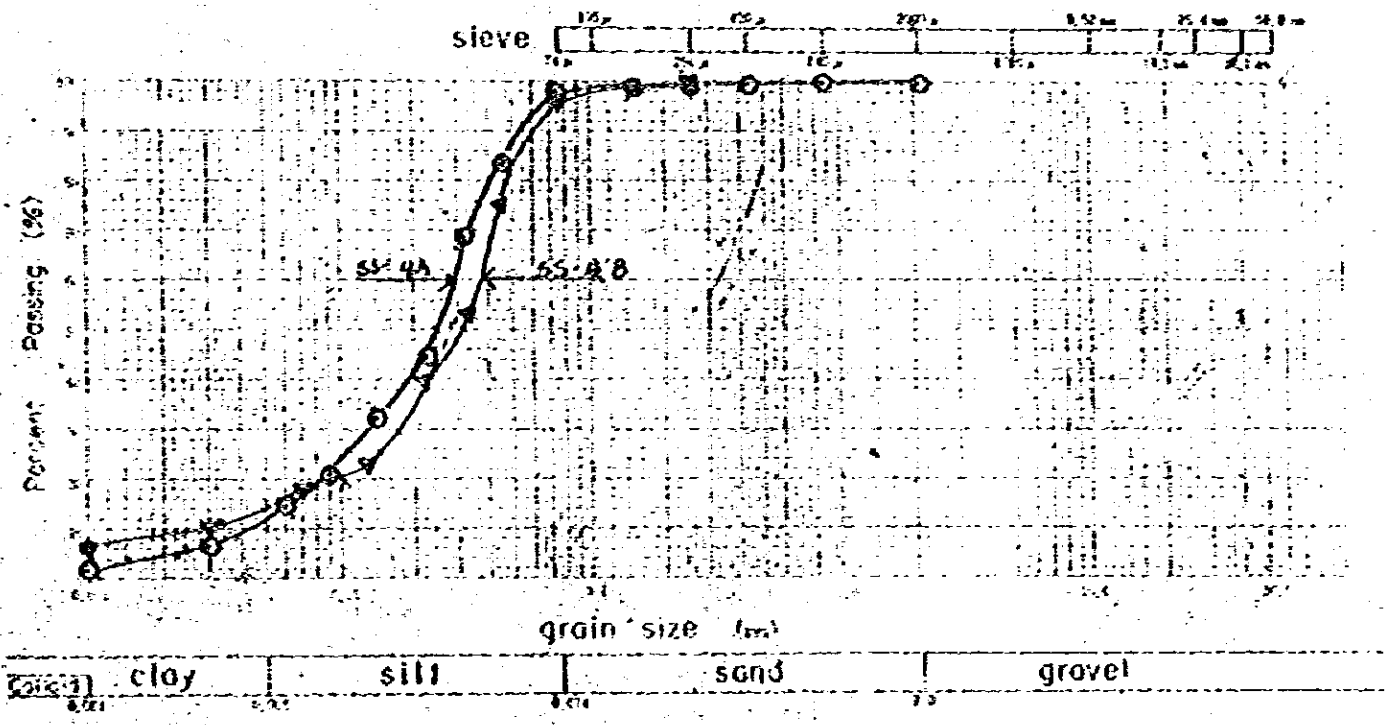
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth SS-4 A(m ~ m) Gs 2.45

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.7	99.3	99.0	98.7	98.3
hydro meter	Grain size mm	.045	.032	.022	.014	.009	.007	.003	.001				
	Weight percent %	73.6	69.4	44.2	32.2	21.0	14.7	6.3	2.1				

Sample No, Depth SS-4 B(m ~ m) Gs

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %										100	99.5	98.9
hydro meter	Grain size mm	.044	.033	.021	.013	.009	.007	.003	.001				
	Weight percent %	75.7	52.6	40.0	23.1	18.9	16.8	10.5	6.3				



Sample No, Depth	SS-4 A m ~ m	SS-4 B m ~ m	Sample No, Depth	SS-4 A m ~ m	SS-4 B m ~ m
Gravel in 4.76mm and larger	0 %	0 %	Max. grain size	2.00 mm	0.25 mm
Gravel in 4.76 ~ 2mm	0 %	0 %	60 % grain size	.03 mm	.037 mm
Gravel in 2 ~ 0.42mm	0.7 %	0 %	30 % grain size	.015 mm	.018 mm
Gravel in 0.42 ~ 0.074mm	1.0 %	1.1 %	10 % grain size	.0042mm	.003 mm
Silt in 0.074 ~ 0.005mm	86.3 %	84.9 %	Coefficient of uniformity	7.1	12.3
Clay less than 0.005mm	9.9 %	7.7 %	Coefficient of curvature	1.8	2.9
Colloid less than 0.001mm	2.1 %	6.3 %			
Passed by weight percent through 50.8mm sieve	100 %	0 %			
Passed by weight percent through 19.1mm sieve	99.3 %	0 %			
Passed by weight percent through 0.074mm sieve	98.3 %	98.9 %			

JIS A 1204	Method of Grain – Size Analysis of Soils	Report Form

Job Site PORT IRENE Date 6-27-81

Sample No, Depth: No. SS-5 (m ~ m) Technician N. PRADO

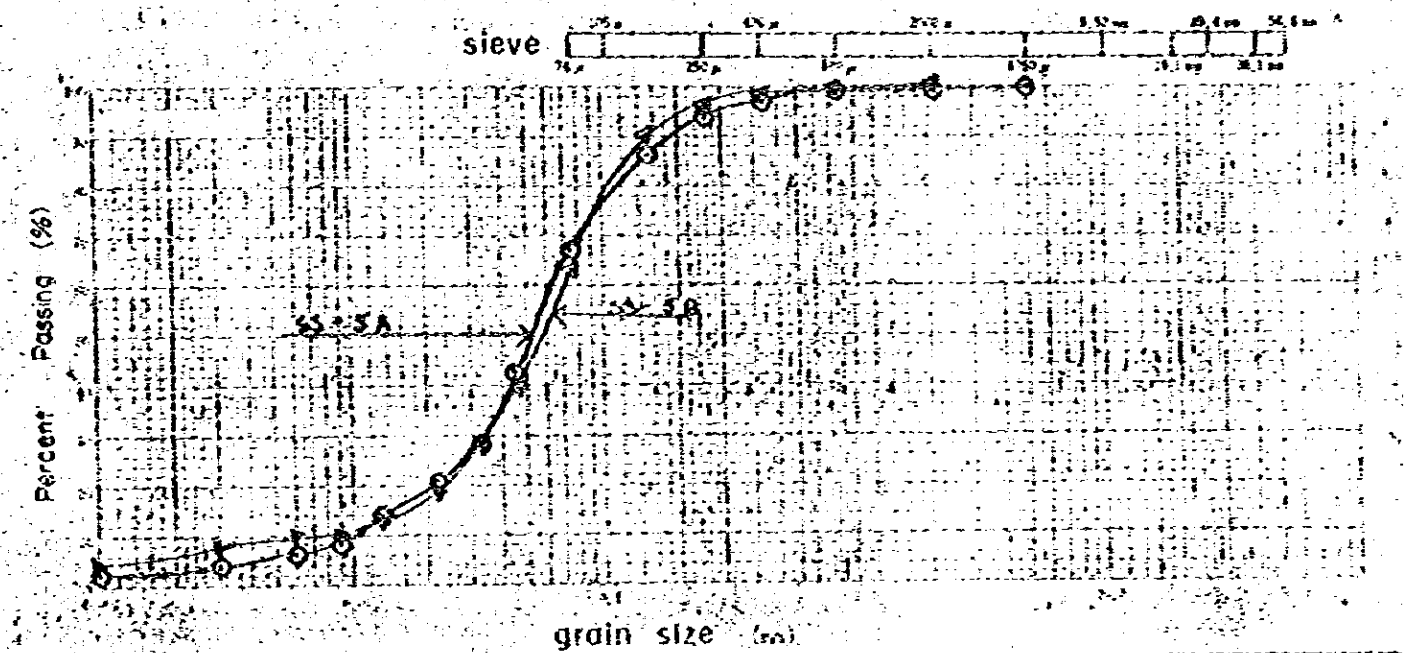
Table of relationship between grain-size used for illustrating grain-size accumulation curve and weight percent of total passing

Sample No., Depth SS-5 A (m ~ m) Gs 2.66

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %						100	99.8	98.9	97.2	94.4	86.1	67.8
hydrometer	Grain size mm	.045	.033	.021	.013	.009	.006	.003	.001				
	Weight percent %	43.9	27.9	21.9	13.9	8.9	6.0	4.0	2.0				

Sample No, Depth SS-5 B (m ~ m) Gs 2.66

sieve	Grain size mm	50.8	38.1	25.4	19.1	9.52	4.76	2.00	0.84	0.42	0.25	0.105	0.074
	Weight percent %							100	99.6	98.5	96.6	90.3	73.3
hydrometer	Grain size mm	.045	.033	.021	.013	.009	.006	.003	.001				
	Weight percent %	39.9	28.0	18.0	12.0	10.0	10.0	8.0	4.0				



Sample No, Depth	No. SS-5 A m ~ m	No. SS-5 B m ~ m	Sample No, Depth	No. SS-5 A m ~ m	No. SS-5 B m ~ m
Grains in 4.76mm and larger	0 %	0 %	Max. grain size	4.76 mm	2.00 mm
Grains in 4.76 ~ 2mm	0.2 %	0 %	60 % grain size	.063 mm	.07 mm
Grains in 2 ~ 0.42mm	2.6 %	1.5 %	30 % grain size	.034 mm	.034 mm
Grains in 0.42 ~ 0.074mm	29.4 %	25.2 %	10 % grain size	.01 mm	.007 mm
Silt in 0.074 ~ 0.005mm	61.8 %	64.3 %	Coefficient of uniformity	6.3	10.0
Clays less than 0.005mm	4.0 %	5.0 %	Coefficient of curvature	1.8	2.4
Colloid less than 0.001mm	2.0 %	4.0 %			
Percent by weight passing through 2.00mm sieve	99.8 %	100 %			
Percent by weight passing through 0.420mm sieve	97.2 %	98.5 %			
Percent by weight passing through 0.074mm sieve	67.8 %	73.3 %			

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job , Site PORT IRENE Date 6-25-81

Technician H. PRADO

Sample No, Depth		No. SS-1 (m~ m)			No. SS-2 (m~ m)		
Test No.		1	2	3	1	2	3
Pycnometer No.		59	32	49	38	33	55
Weight of pycnometer + oven dried soil(wet soil) + water Wb		157.3	154.64	151.9	158.5	155.54	160.2
Temperature of content when Wb is meas		9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight of T°C (container + distilled water) Wa g		148.38	145.68	142.84	149.5	146.58	151.22
$W_s + (W_a - W_b)$ g		6.08	6.04	5.94	6.0	6.04	6.02
Specific Gravity at T°C $G_{T°C/T°C} = \frac{W_s}{W_s + (W_a - W_b)}$		2.47	2.48	2.52	2.50	2.48	2.49
②Compensation coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C: $G_{15°C/15°C} = K \times G_s(T°C/T°C)$		2.47	2.48	2.52	2.50	2.48	2.49
Average Value		Gs (T°C/15°C) = 2.49 g/cm³			Gs (T°C/15°C) = 2.49 g/cm³		
Remarks							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS.

Sample No., Depth		No. SS-3 (m~ m)			No. SS-4 (m~ m)		
Test No		1	2	3	1	2	3
Pycnometer No.		47	36	52	56	45	53
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g		154.99	158.60	157.1	151.9	158.4	157.8
Temperature of content when Wb is meas.		9 °C	9 °C	9 °C	9 °C	9 °C	9 °C
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0	15.0	15.0	15.0
①Converted weight at T°C (container + distilled water) Wa g		145.95	149.5	147.96	143.05	149.5	148.93
$W_s + (W_a - W_b)$ g		5.96	5.90	5.86	6.15	6.10	6.13
Specific Gravity at T°C $G_{T°C/T°C} = \frac{W_s}{W_s + (W_a - W_b)}$		2.52	2.54	2.56	2.44	2.46	2.45
② Compensatin coefficient K		1.0007	1.0007	1.0007	1.0007	1.0007	1.0007
Specific Gravity at 15°C: $G_{15°C/15°C} = K \times G_s(T°C/T°C)$		2.52	2.54	2.56	2.44	2.46	2.45
Average Value		Gs (T°C/15°C) = 2.54 g/cm³			Gs (T°C/15°C) = 2.45 g/cm³		
Remarks.							

(Note) ① is obtained from attached inspection table of pycnometer. ② is from JIS

JIS A 1202	Determination of the Specific Gravity of Soil	Reporting paper

Job, Site PORT IRENE Date 6-25-81

Technician N. PRADO

Sample No, Depth		No. SS-5 (m~ m)			No. (m~ m)		
Test No		1	2	3	1	2	3
Pycnometer No		85	49	44			
Weight of pycnometer + oven dried soil(wet soil) + water Wb		159.3	152.3	157.5			
Temperature of content when Wb is meas		9 °C	9 °C	9 °C			
W. of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g	15.0	15.0	15.0			
①Converted weight of T°C (container + distilled water) Wa g		150.1	142.84	148.05			
$W_s + (W_a - W_b)$ g		5.8	5.54	5.55			
Specific Gravity at T°C $G_s(T°C/T°C) = \frac{W_s}{W_s + W_a - W_b}$		2.59	2.70	2.70			
②Compensation coefficient K		1.0007	1.0007	1.0007			
Specific Gravity at 15°C $G_s(T°C/15°C) = K \times G_s(T°C/T°C)$		2.59	2.70	2.70			
Average Value		Gs (T°C/15°C) = 2.66 g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks							

(Note) (1) is obtained from attached inspection table of pycnometer ② is from JIS.

Sample No., Depth		No. (m~ m)			No. (m~ m)		
Test No		1	2	3	1	2	3
Pycnometer No.							
Weight of pycnometer + oven dried soil(Wet soil) + water Wb g							
Temperature of content when Wb is meas.							
W of oven dried soil in pycnometer.	container No						
	Weight (container + dried soil) g						
	Wt of container g						
	W_s g						
①Converted weight of T°C (container + distilled water) Wa g							
$W_s + (W_a - W_b)$ g							
Specific Gravity at T°C $G_s(T°C/T°C) = \frac{W_s}{W_s + W_a - W_b}$							
② Compensatin coefficient K							
Specific Gravity at 15°C $G_s(T°C/15°C) = K \times G_s(T°C/T°C)$							
Average Value		Gs (T°C/15°C) = g/cm³			Gs (T°C/15°C) = g/cm³		
Remarks.							

(Note) (1) is obtained from attached inspection table of pycnometer. ② is from JIS

3→II

3. WAVE

Record of Wave Observation

DATE	WAVE					
				MAXIMUM WAVE		
	H 1/3 m	T sec	DIRECTION	H m	T sec	DIRECTION
5-18						
19						
20						
21						
22						
23						
24	0.28	5.8	N.W	0.66	6.7	N.W
25	0.27	8.6	N.W	0.56	10.0	N.W
26	0.21	7.0	N.W	0.50	8.1	N.W
27	0.23	7.3	N.W	0.64	7.6	N.W
28	0.18	7.4	N.W	0.37	6.1	N.W
29	0.22	6.3	N.W	0.56	7.5	N.W
30	0.17	7.3	N.W	0.34	8.3	N.W
31	0.23	7.1	N.W	0.46	7.5	N.W
6- 1	0.23	7.3	N.W	0.46	8.6	N.W
2	0.28	6.8	N.W	0.58	7.5	N.W
3	0.35	7.2	N.W	0.67	9.3	N.W
4	0.26	7.1	N.W	0.56	8.3	N.W
5	0.23	7.2	N.W	0.54	7.5	N.W
6	0.23	7.2	N.W	0.59	7.1	N.W
7	0.37	8.2	N.W	0.84	8.3	N.W
8	0.43	8.1	N.W	0.78	7.8	N.W
9	0.38	8.1	N.W	0.83	7.3	N.W
10	0.41	7.2	N.W	0.77	7.5	N.W
11	0.25	7.5	N.W	0.46	9.3	N.W
12	0.24	7.1	N.W	0.48	7.1	N.W
13	0.41	8.8	W	0.86	11.0	W
14	0.34	8.9	N.W	0.95	9.7	N
15	0.25	7.1	NNW	0.57	6.7	N
16	0.22	8.1	N.W	0.43	7.2	N.W
17	0.19	7.7	N.W	0.48	8.4	N.W
18	0.25	9.1	NNW	0.75	8.0	N
19	0.52	7.5	N.W	1.15	8.3	N.W
20	0.43	9.9	NNW	0.82	12.0	NNW
21	0.35	9.7	N	0.68	12.0	NNW
22	0.20	9.5	NNW	0.42	8.9	NNW
MEAN	0.287	7.74	NW (80%)	0.63	8.3	NW (76.7%)

4. TIDE

TIDAL DIFFERENCE AT THE PORT OF IRENE, 1981

DATE	TIME		HEIGHT(m)		DATE	TIME		HEIGHT(m)	
	HIGH	LOW	HIGH	LOW		HIGH	LOW	HIGH	LOW
May 18	17:43	23:24	+0.81	-0.13	May 28	00:46	06:54	+0.73	+0.12
19 (00:94) Full Moon	05:28	11:52	+0.91	-0.37		12:55	19:11	+0.66	-0.01
	18:11	23:53	+0.73	-0.18	29	01:45	08:02	+0.80	+0.01
20	05:56	12:23	+0.92	-0.38		14:13	20:13	+0.77	0.00
	18:50		+0.68		30	02:37	08:58	+0.85	-0.13
21	06:26	00:30	+0.95	-0.09		15:15	21:08	+0.83	-0.06
	19:23	12:56	+0.73	-0.36	31	03:23	09:47	+1.01	-0.29
22	06:55	00:57	+0.98	-0.07		16:09	21:57	+0.94	-0.03
	20:02	13:29	+0.74	-0.33	June 1	05:07	10:35	+1.05	-0.36
23	07:28	01:31	+0.99	+0.02		16:59	22:43	+1.00	-0.09
	20:42	14:07	+0.71	-0.26	2 (11:32) New Moon	05:50	11:20	+1.13	-0.43
24	08:06	02:09	+0.83	+0.12		17:46	23:28	+1.00	0.00
	21:32	14:49	+0.65	-0.20	3	06:32	12:04	+1.20	-0.45
25	08:53	02:58	+0.72	+0.07		18:33		+0.93	
	22:29	15:42	+0.58	-0.11	4	06:16	00:32	+1.18	-0.07
26 (21:00) Last Quarter	09:58	03:04	+0.68	+0.21		19:19	12:49	+0.93	-0.41
	23:38	16:58	+0.60	-0.06	5	06:58	00:57	+1.13	+0.08
27	11:24	05:03	+0.71	+0.18		20:06	13:34	+0.85	-0.36
		17:59		-0.02					

DATE	TIME		HEIGHT		DATE	TIME		HEIGHT	
	HIGH	LOW	HIGH	LOW		HIGH	LOW	HIGH	LOW
June 6		01:43		+0.10	June 15	03:54		+1.16	
	07:43		+1.02				10:27		+0.08
		14:19		-0.15		16:50		+1.03	
	20:55		+0.82				22:24		+0.41
7		02:34		+0.15	16	04:26		+1.15	
	08:31		+0.93				11.02		0.00
		15:06		-0.03	(15:04)	17:28		+0.94	
	21:47		+0.68		Full Moon		23:02		+0.31
8		03:32		+0.18	17	05:01		+1.18	
	09:24		+0.88				11:35		-0.07
		15:58		+0.02					
	22:43		+0.64						
9		04:39		+0.21					
(11:33)	10:29		+0.74						
First		16:56		+0.11					
Quarter	23:45		+0.73						
10		05:58		+0.32					
	11:49		+0.74						
		18:02		+0.22					
11	00:48		+0.82						
		07:15		+0.33					
	13:14		+0.78						
		19:10		+0.30					
12	01:45		+0.93						
		08:17		+0.32					
	14:27		+0.88						
		20:10		+0.45					
13	02:34		+1.10						
		09:08		+0.28					
	15:23		+0.96						
		21:01		+0.57					
14	03:16		+1.18						
		09:50		+0.32					
	16:09		+1.01						
		21:44		+0.48					

Period of observation: May 18 to June 17, 1981

Maximum Tide: MHLW +1.20m June 3, 05:32AM
Minimum Tide: MHLW -0.45m June 3, 12:04PM

5. TIDAL CURRENT

Tidal Current Recorded

By Current Meter and Float Method, 1981

	CURRENT METER				FLOAT METHOD				
	EBB TIDE		FLOOD TIDE		EBB TIDE		FLOOD TIDE		
	Vel. m/sec	Direction	Vel. m/sec	Direction	Vel. m/sec	Direction	Vel. m/sec	Direction	Remark
May 18	0.22	WNW	0.32	NW	0.05	W	0.09	WSW	
19	0.14	NE			0.07	N			Full Moon
20	0.24	NNE			0.02	NNE			
21	0.12	SE			0.05	SSE			
22	0.14	SSW			0.05	SE			
23	0.18	S	0.14	NNE	0.11	SSE	0.06	NE	
24	0.14	WSW	0.10	NE	0.04	SSE	0.03	NE	
25	0.11	NW	0.05	NE	0.03	W	0.02	N	
26	0.16	SE	0.09	NNE	0.05	SSE	0.01	N	Last Quarter
27			0.08	W			0.02	NNW	
28			0.05	ENE			0.03	ESE	
29	0.10	WNW			0.07	W	0.05	SE	
30	0.10	NE	0.14	SSE	0.14	N	0.14	SSW	
31	0.12	NNE	0.11	S	0.05	ESE	0.11	S	
June 1	0.10	ESE			0.07	E			
2	0.09	SW			0.06	ESE			New Moon
3	0.08	SSE			0.09	SSE			
4	0.15	S			0.13	SSE			
5	0.08	E	0.12	SSW	0.09	W	0.14	NE	
6	0.12	SW	0.15	NNW	0.11	S	0.09	NW	
7	0.13	WSW	0.12	NE	0.17	WSW	0.05	NNW	
8	0.13	SSW	0.10	SW	0.08	WSW	0.02	SSE	
9			0.11	N			0.10	NNW	First Quarter
10			0.15	ENE			0.04	ESE	
11	0.09	NNE	0.07	S	0.10	NNW	0.08	SSW	
12	0.09	W	0.11	SW	0.11	NW	0.05	SW	
13	0.17	ENE	0.17	NE	0.09	NNE	0.09	NNE	
14	0.13	NW	0.20	S	0.04	NE	0.08	SSE	
15	0.09	E			0.03	NNE			
16	0.09	N			0.03	E			Full Moon
Mean Average	0.13		0.13		0.07				

(Table 3-2-3) Daily Maximum Current

	Date	EBB TIDE			FLOOD TIDE		
		Maximum Current Velocity	Time Observed	Direction of Current	Maximum Current Velocity	Time Observed	Direction of Current
1	May 18	0.26 m/sec	12:50	NNW	▲0.37 m/sec	17:40	NW
2	19	0.16	13:20	NE	-	-	-
3	20	▲0.28	11:20 12:50	NNE	-	-	-
4	21	0.14	13:00	SE	-	-	-
5	22	0.23	12:30	SSW	-	-	-
6	23	0.25	15:30	SE	0.15	6:30	NNW
7	24	0.19	16:20	W	0.11	8:30	NE
8	25	0.14	15:20 16:00	NW	0.07	8.30	E
9	26	0.19	13:40	SSE	0.11	9:00	NNE
10	27	-	-	-	0.08	10:30	W
11	28	-	-	-	0.08	14:20	ENE
12	29	0.12	8:30	WNW			
13	30	0.12	8:00	N	0.18	16:40	SSE
14	31	0.15	8:30	WNW	0.14	15:10	WSW
15	June 1	0.13	12:00	SE	-	-	-
16	2	0.11	13:50	SSE	-	-	-
17	3	0.08	12:00	SE	-	-	-
18	4	0.18	13:00	SSE	-	-	-
19	5	0.10	15:00	ENE	0.16	5:50	NNW
20	6	0.17	13:10	S	0.18	6:40	WNW
21	7	0.15	16:00	WSW	0.15	9:00	NE
22	8	0.14	17:20	SSW	0.12	10:20	NW
23	9	-	-	-	0.12	11:00	N
24	10	-	-	-	0.18	11:20	NE
25	11	0.10	6:40	NE	0.12	14:40	S
26	12	0.11	9:40	WSW	0.12	13:30 15:30	WSW SSE
27	13	0.19	8:00	E	0.19	15:50	ENE
28	14	0.15	9:20	NNW	0.21	15:00	SSW
29	15	0.12	11:50	ENE	-	-	-
30	16	0.12	12:30	WNW	-	-	-

Note: ▲ : Extreme maximum current velocity

6. WEATHER

WEATHER OBSERVATION, 1981

PORT OF IRENE LATITUDE 18°23'N LONGITUDE 122°05'E

DATE	TEMPERATURE (°C)			RAINFALL DAILY (mm)	WIND			
	MAXIMUM	MINIMUM	MEAN		AVERAGE VELOCITY (m/sec)	PREVAILING DIRECTION	MAX. WIND SPEED (m/sec)	DIRECTION
May 18	28.5	24.0	26.2	0.02	1.64	SW	4.40	SSW
19	27.0	23.0	25.0	13.77	0.78	W	3.78	W
20	27.6	23.8	25.7	17.51	0.45	NW	3.73	S
21	41.0	23.4	32.2	2.82	1.03	NE	5.85	E
22	34.4	23.0	28.7	0.55	0.79	NNE	2.62	ESE
23	36.0	24.8	30.4	0	0.67	ESE	2.20	E
24	37.9	24.5	31.2	0	0.67	NNE	2.14	SSW
25	36.1	24.0	30.0	0	0.59	N	1.74	NE
26	37.2	23.8	30.5	0	1.12	E	1.69	ESE
27	37.4	24.0	30.7	0	0.85	NNE	2.04	ESE
28	37.7	24.1	30.9	0	0.60	NNE	1.28	ESE
29	37.1	23.2	30.2	0	0.95	NE	1.65	S
30	38.0	23.8	30.9	0	0.93	NNW	2.71	E
31	38.0	23.9	31.0	0	0.56	N	1.91	ENE
June 1	39.7	24.2	32.0	0.08	0.67	NNW	1.73	NNE
2	37.7	23.9	30.8	0.18	0.92	NE	1.48	E
3	38.3	24.2	31.2	0.10	0.74	NNE	1.80	E
4	35.0	24.0	30.0	0	0.60	N	1.86	E
5	36.7	24.0	30.4	0	0.70	NNE	2.04	SE
6	35.0	24.0	29.5	0	0.75	N	1.95	SSW
7	35.3	24.5	29.9	0.07	0.89	N	1.85	W
8	33.1	24.3	28.7	0.04	0.67	NNE	1.78	NE
9	34.3	24.0	29.2	3.45	0.81	N	2.16	N
10	35.2	24.0	30.1	0.97	0.93	NNE	1.83	NNE
11	34.4	23.9	29.2	0.23	0.78	NNE	1.56	NW
12	36.0	24.0	30.0	0	0.83	NW	2.76	SSE
13	32.6	24.5	28.6	0	0.66	ENE	1.24	NE
14	35.9	24.0	30.0	0.04	0.82	NE	2.61	ESE
15	35.2	23.6	29.4	0.24	0.76	WNW	2.35	SSW
16	34.6	22.2	28.4	3.78	0.67	NNW	1.39	SW
17	29.7	24.0	26.8	0.85	0.75	WSW	1.33	SSW
18					1.08	SSW	1.83	SSW
19					1.33	ENE	1.66	NE
20					0.23	W	0.44	NW
21					0.72	S	1.56	S
22					0.44	NE	0.68	ESE
TOTAL or MEAN	35.3	23.9	29.6	44.71	0.8	EXTREME MAX. SPEED: 5.85m/sec		

NOTE: Period of Observation: May 18 - June 22, 1981