4. Gain Size Distribution

(a) Soil Investigation

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Industrial Port on land

Name of Project _____ Boring No. No 1

Tested by BD Date of Testing 08/06/83

Sample No. Depth 1 No. 53 m (2.00 m~2.45 m) Specific Gravity Gs= 2.677

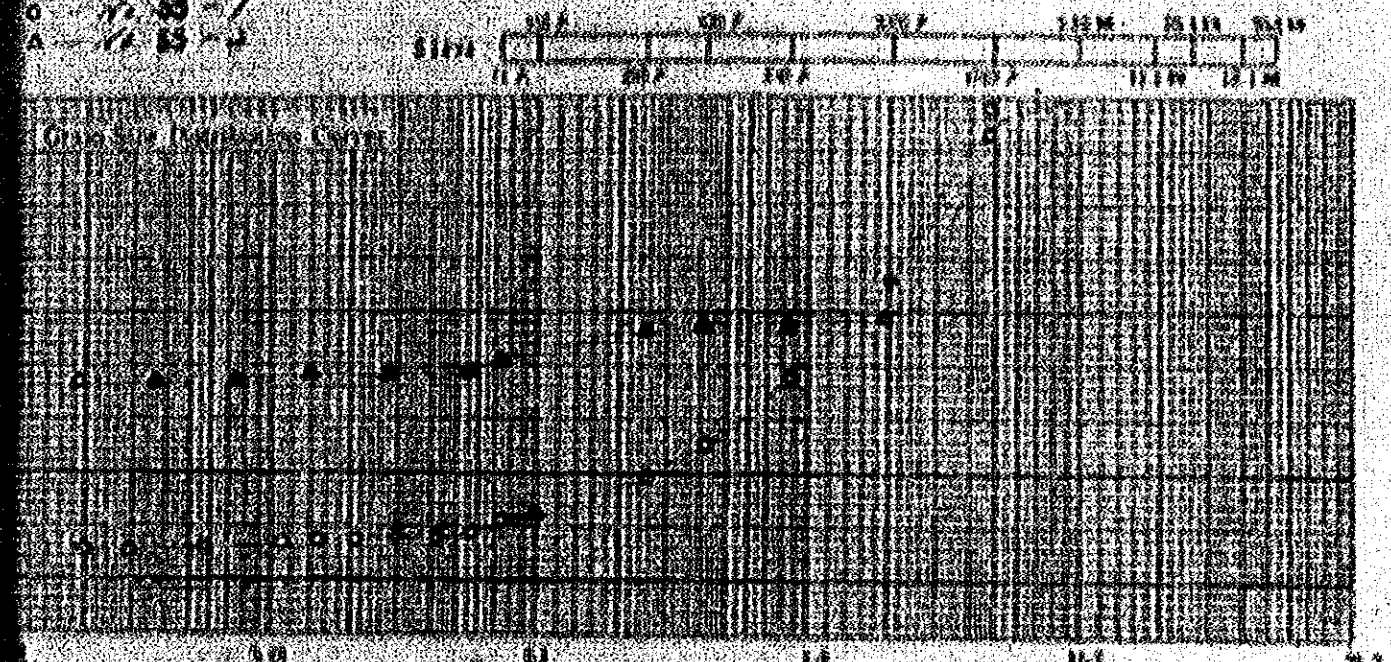
m	100	50	25	10	5	2.5	1.25	0.63	0.32	0.16	0.08	0.074
Passing					100	99.7	99.2	98.6	98.1	97.2	96.6	95.2
m	0.0010	0.0008	0.0006	0.0004	0.0002	0.0001	0.0050	0.0032	0.0020	0.0012	0.0006	----
Passing	94.1	93.2	92.3	91.3	89.3	88.3	86.3	84.3	82.3	80.3	77.3	

Sample No. Depth 2 No. 55 m (3.00 m~3.45 m) Specific Gravity Gs= ---

m	100	50	25	10	5	2.5	1.25	0.63	0.32	0.16	0.08	0.074
Passing					100	99.7	99.3	98.7	98.2	97.2	96.2	95.6
m	0.0010	0.0008	0.0006	0.0004	0.0002	0.0001	0.0050	0.0032	0.0020	0.0012	0.0006	----
Passing	94.6	93.5	92.5	91.5	90.5	89.5	87.5	85.5	83.5	81.5	78.5	

O — No. 53 m

A — No. 55 m



Sample No. Depth	No. 53 m	No. 55 m	Sample No. Depth	No. 53 m	No. 55 m
Gravel 4.75mm	%	%			
Sand	%	%	Max. Dens.	g/cm³	g/cm³
Sand	%	%	Dens. at 90%	g/cm³	g/cm³
Sand 0.074mm	%	%	Dens. at 50%	g/cm³	g/cm³
Silt 0.005mm	%	%	Dens. at 10%	g/cm³	g/cm³
Clay 0.001mm	%	%	Coefficient of uniformity		
Clay 0.005mm	%	%	Coefficient of curvature		
Clay Passing	%	%			
Clay Passing	%	%			
Clay Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No 1

Tested by: S.P. Date of Testing: [illegible]

Sample No., Depth: No. 23 - 3 (Lab. No. [illegible]) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

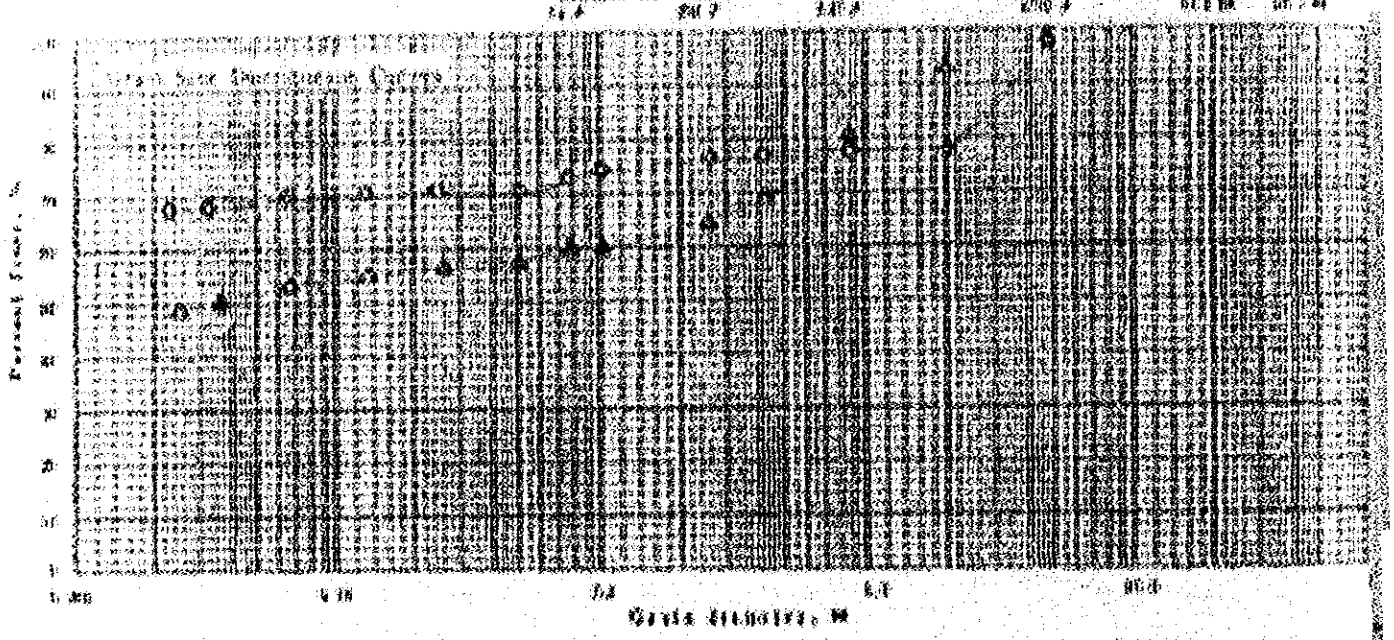
Sample No., Depth: No. 53 - 4 (Lab. No. [illegible]) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

No. 23 - 3

No. 53 - 4

Sieve



Colloid	Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth	No. 23 - 3 [illegible]	No. 23 - 4 [illegible]	Sample No., Depth	No. 53 - 3 [illegible]	No. 53 [illegible]
Larger than [illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 60%	— mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 30%	— mm	
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 10%	— mm	
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Coefficient of uniformity	—	
Smaller than [illegible]	[illegible] %	[illegible] %	Coefficient of curvature	—	
Smaller than [illegible]	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No. 1

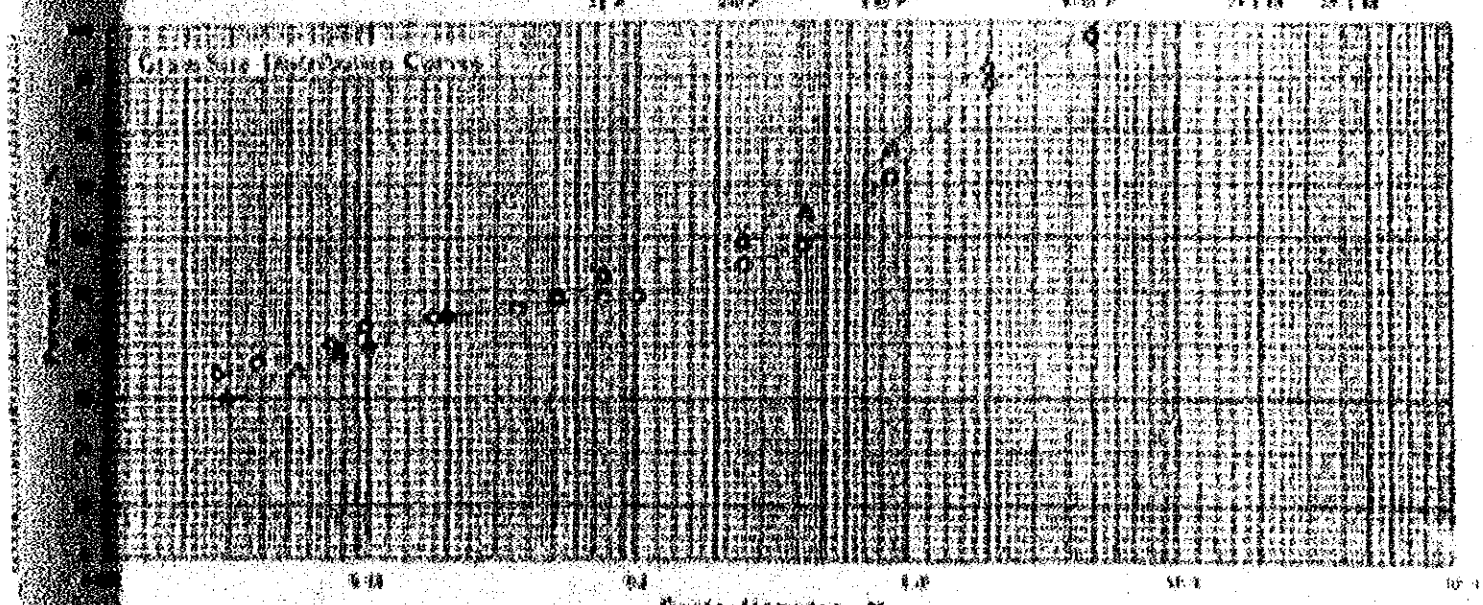
Tested by: S.D. Date of Testing: [illegible]

Sample No., Depth: No. 33 – 3 (4.00 m – 5.45 m) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth: No. 33 – 4 (6.00 m – 7.45 m) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Sample No., Depth	No. 33 – 3	No. 33 – 4	Sample No., Depth	No. 33 – 3	No. 33 – 4
	[illegible] %	[illegible] %		[illegible]	[illegible]
[illegible] mm	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible] mm
[illegible] mm	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible] mm
[illegible] mm	[illegible] %	[illegible] %	Diam. at 30%	— mm	[illegible] mm
[illegible] mm	[illegible] %	[illegible] %	Diam. at 10%	— mm	— mm
[illegible] mm	[illegible] %	[illegible] %	Coefficient of uniformity	—	—
[illegible] mm	[illegible] %	[illegible] %	Coefficient of curvature	—	—
[illegible] mm	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Project: ..... Boring No.: No 1

Tested by: B.D. Date of Testing: [illegible]

Sample No., Depth: No. 58 – 1 [illegible] m) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

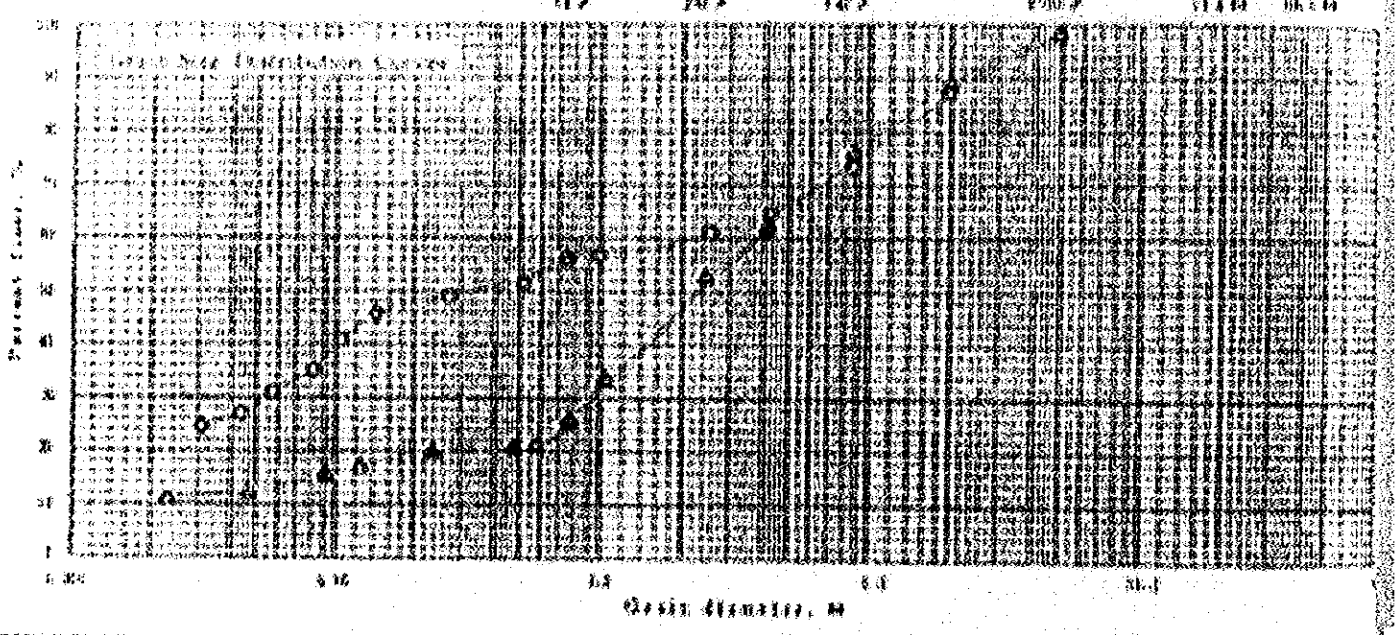
Sample No., Depth: No. 58 – 1 [illegible] m) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

○ — No. 58 – 1

△ — No. 58 – 1

Sieve: [illegible]



Gravel	Sand			Silt		Clay
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth	No. 58 – 1 [illegible]	No. 58 – 1 [illegible]	Sample No., Depth	No. 58 – 1 [illegible]	No. 58 – 1 [illegible]
Larger than [illegible] mm	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 10%	— mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Coefficient of uniformity	—	[illegible]
Smaller than [illegible] mm	[illegible] %	[illegible] %	Coefficient of curvature	—	[illegible]
Smaller than [illegible] mm	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Project: _____ Boring No.: No 1

Tested by: B.P Date of Testing: [illegible]

Sample No., Depth: 53 – 7 (7.00 m – 7.45 m) Specific Gravity: [illegible]

Diam. mm	5.08	3.81	2.54	1.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

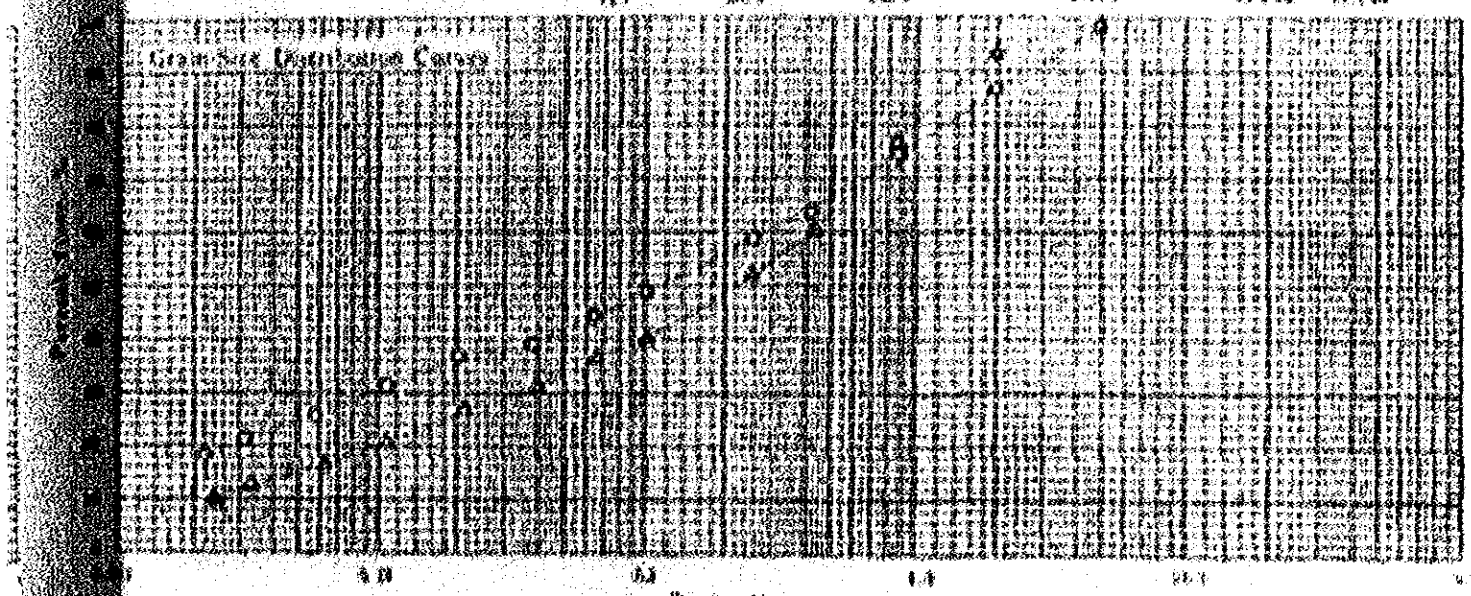
Sample No., Depth: 53 – 10 (10.00 m – 10.45 m) Specific Gravity: [illegible]

Diam. mm	5.08	3.81	2.54	1.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Sample No. 53 – 7

Sample No. 53 – 10

Sieve: [illegible]



Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	

Sample No., Depth	No. 53 – 7 [illegible]	No. 53 – 10 [illegible]	Sample No., Depth	No. 53 – 7 [illegible]	No. 53 – 10 [illegible]
Clay size [illegible]	[illegible] %	[illegible] %	Max. grain	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	[illegible]
Sand size [illegible]	[illegible] %	[illegible] %	Coefficient of curvature	[illegible]	[illegible]
Sand size [illegible]	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Inhaptiel Port. Job No.

Location of Project: on land Series No.: No. 1

Tested by: S.D. Date of Testing: [illegible]

Sample No. Depth: No. 55 — [illegible] Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

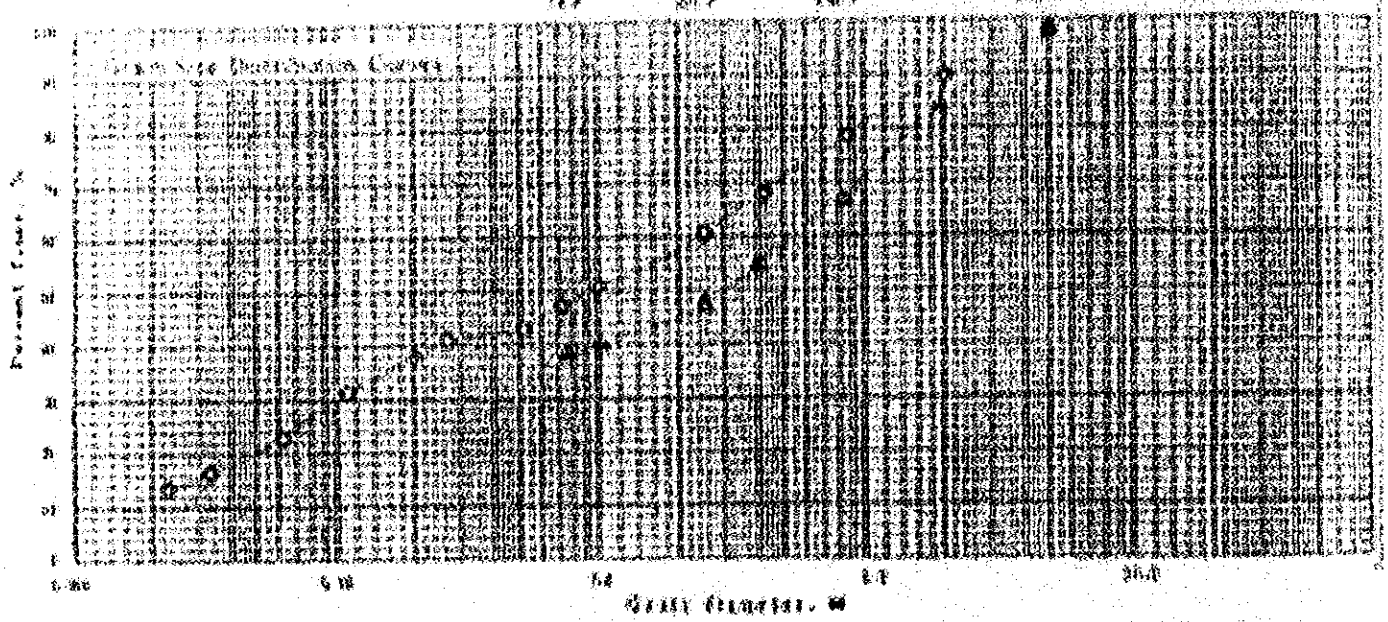
Sample No. Depth: No. 55 — [illegible] Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm												
% Passing												

O — No. 55 — [illegible]

A — No. 55 — [illegible]

Sieve: [illegible]



Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth	No. 55 — [illegible]	No. 55 — [illegible]	Sample No. Depth	No. 55 — [illegible]	No. 55 — [illegible]
Larger than [illegible] mm	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at [illegible]%	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at [illegible]%	[illegible] mm	—
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at [illegible]%	[illegible] mm	—
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	—
Smaller than [illegible] mm	[illegible] %	%	Coefficient of curvature	[illegible]	—
Smaller than [illegible] mm	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port, on land

Location of Project: _____ Boring No.: No 1

Tested by: BD Date of Testing: 21/03/10

Sample No., Depth: No. 33 – 13 Specific Gravity: 2.67

Sieve No.	3/8	4	8	16	30	50	100	200	270	325	400	500
Passing (%)						99.8	99.8	99.8	99.8	99.8	99.8	99.7
Diameter (mm)	0.600	0.300	0.150	0.075	0.037	0.019	0.009	0.005	0.003	0.002	0.001	
Passing (%)	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	

Sample No., Depth: No. 33 – 14 Specific Gravity: 2.67

Sieve No.	3/8	4	8	16	30	50	100	200	270	325	400	500
Passing (%)						99.8	99.8	99.8	99.8	99.8	99.8	99.7
Diameter (mm)	0.600	0.300	0.150	0.075	0.037	0.019	0.009	0.005	0.003	0.002	0.001	
Passing (%)	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	

— No. 33 – 13

— No. 33 – 14

Sieve: 3/8" 4 8 16 30 50 100 200 270 325 400

Grain Size Distribution Curves

Grain Diameter, mm

Clay	Silt	Sand	Gravel
1.98	0.074	2	

Sample No., Depth	No. 33 – 13	No. 33 – 14	Sample No., Depth	No. 33 – 13	No. 33 – 14
Gravel (2-75mm)	0.0 %	0.0 %	Max. diam.	0.16 mm	0.16 mm
Sand	0.2 %	0.2 %	Diam. at 60%	0.10 mm	0.12 mm
Silt	99.8 %	99.7 %	Diam. at 30%	0.06 mm	0.08 mm
Clay	99.8 %	99.8 %	Diam. at 10%	0.0044 mm	0.0044 mm
Silt & Clay (0.075-0.005mm)	99.8 %	99.8 %	Coefficient of uniformity	36.36	40.00
Silt & Clay (0.005-0.002mm)	99.8 %	%	Coefficient of curvature	4.46	4.21
Silt & Clay (0.002mm)	%	%			
Silt & Clay Passing	%	%			
Silt & Clay Passing	%	%			
Silt & Clay Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Testing No. No. 1

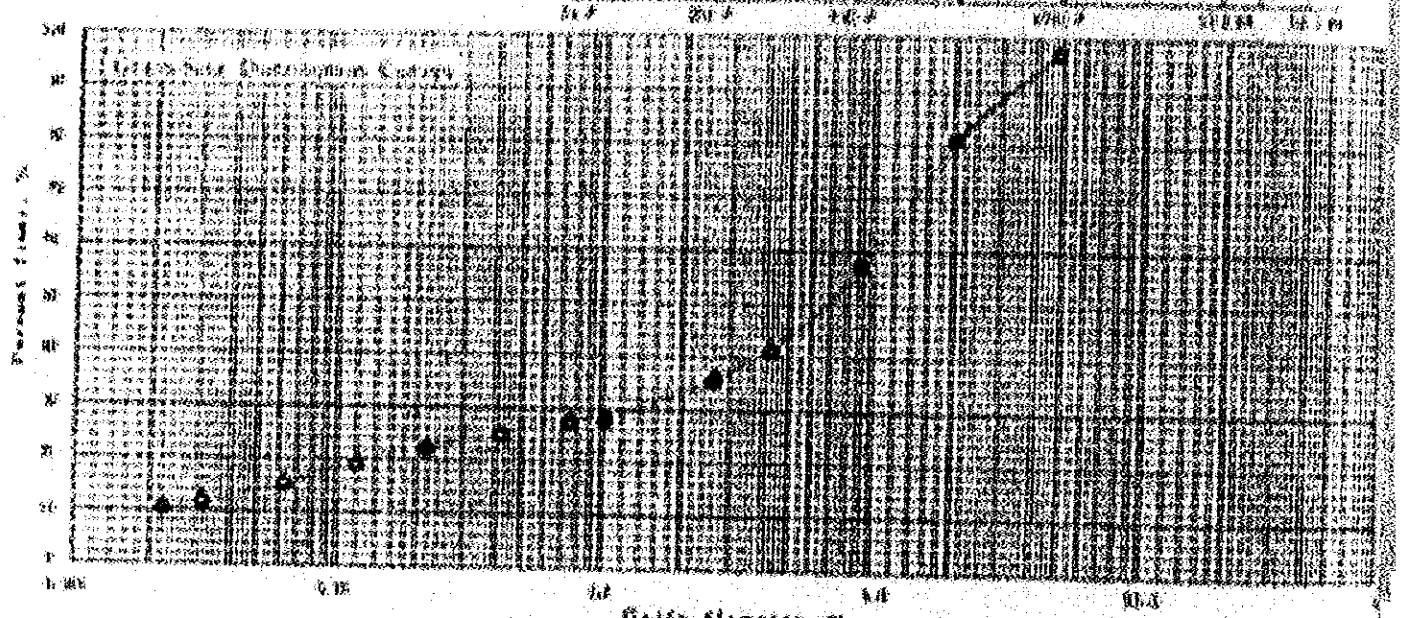
Tested by: OP Date of Testing: [illegible]

Sample No. Depth No. [illegible] Specific Gravity [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth No. [illegible] Specific Gravity [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Sample No., Depth	No. [illegible]	No. [illegible]	Sample No., Depth	No. [illegible]	No. [illegible]
	[illegible]	[illegible]		[illegible]	[illegible]
Larger than [illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	[illegible]
Smaller than [illegible]	[illegible] %	[illegible] %	Coefficient of curvature	[illegible]	[illegible]
Smaller than [illegible]	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

The Natural Conditions Survey on the
Development Project of the Industrial Port.

on land — Boring No. No. 1

Tested by B.D — Date of Testing [illegible]

Boring No., Depth No. 58 — [illegible] — Specific Gravity [illegible]

Boring No., Depth No. 58 — [illegible] — Specific Gravity [illegible]

Sieve

Grain Size Distribution Curve

Grain Diameter, mm

Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	

Boring No., Depth	No. 53 — [illegible]	No. 53 — [illegible]	Sample No., Depth	No. 53 — [illegible]	No. 53 — [illegible]
	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible] %	[illegible] %	Min. diam.	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	[illegible]
[illegible]	[illegible] %	[illegible] %	Coefficient of curvature	[illegible]	[illegible]
[illegible]	%	%			
[illegible]	%	%			
[illegible]	%	%			
[illegible]	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No. 1

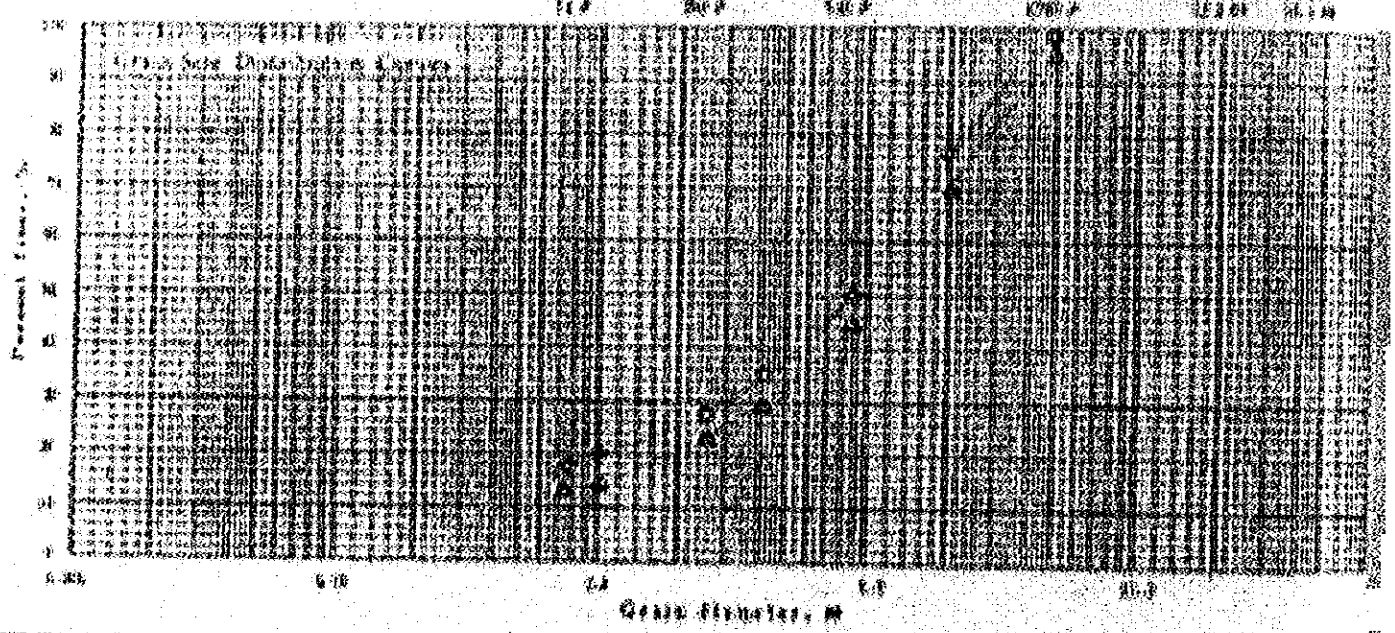
Tested by: D.D Date of Testing: [illegible]

Sample No., Depth: [illegible] Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm											
% Passing											

Sample No., Depth: [illegible] Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm											
% Passing											



Sample No., Depth	No. [illegible]	No. [illegible]	Sample No., Depth	No. [illegible]	No. [illegible]
	[illegible]	[illegible]		[illegible]	[illegible]
Larger than [illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	[illegible]
Smaller than [illegible]	%	%	Coefficient of curvature	[illegible]	[illegible]
Smaller than [illegible]	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Industrial Port

Location of Project: on land Boring No.: No 2

Tested by: AR Date of Testing: [illegible]

Sample No., Depth: No. 33 — 1 Specific Gravity, Gs: [illegible]

mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Passing %							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
mm												
Passing %												

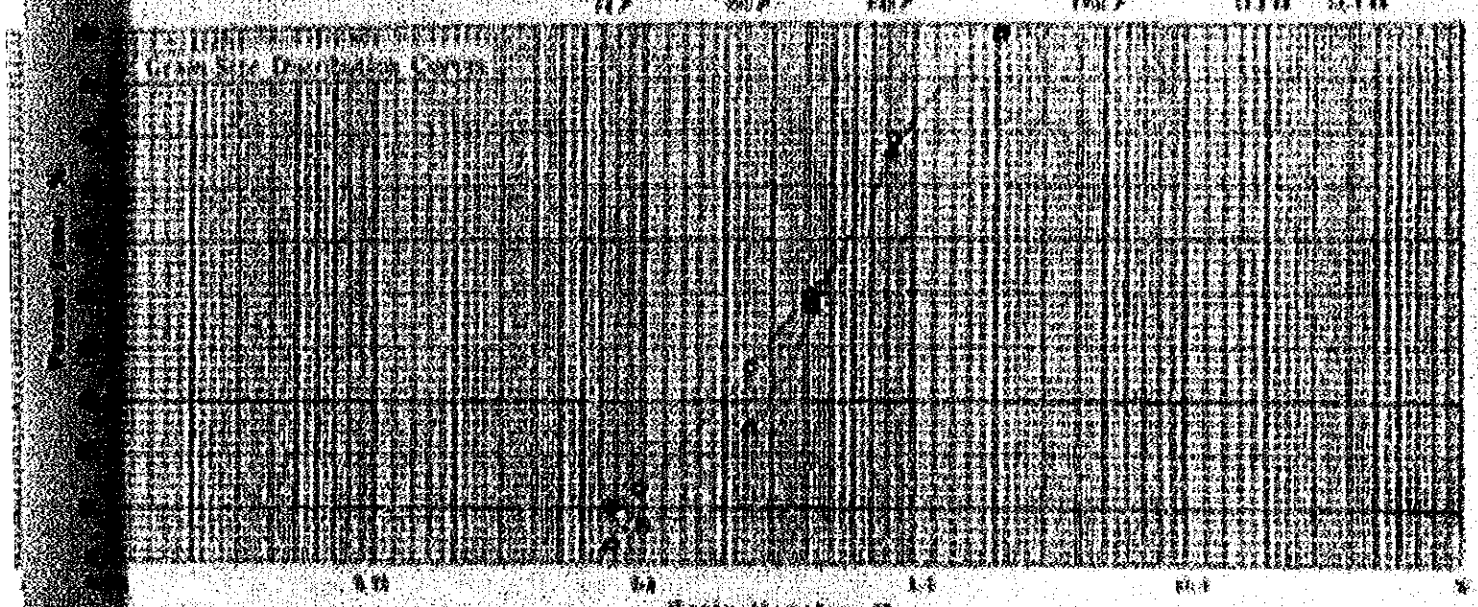
Sample No., Depth: No. 33 — 2 Specific Gravity, Gs: [illegible]

mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Passing %							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
mm												
Passing %												

No. 33 — 1

No. 33 — 2

Sieve



Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	

Sample No., Depth	No. 33 — 1	No. 33 — 2
	[illegible]	[illegible]
[illegible] mm	[illegible] %	[illegible] %
[illegible]	[illegible] %	[illegible] %
[illegible]	[illegible] %	[illegible] %
[illegible] mm	[illegible] %	[illegible] %
[illegible]	[illegible] %	[illegible] %
[illegible] mm	%	%
[illegible] mm	%	%
[illegible] Passing	%	%
[illegible] Passing	%	%
[illegible] Passing	%	%

Sample No., Depth	No. 33 — 1	No. 33 — 2
	[illegible]	[illegible]
Max. Diam.	[illegible] mm	[illegible] mm
Diam. at 60%	[illegible] mm	[illegible] mm
Diam. at 30%	[illegible] mm	[illegible] mm
Diam. at 10%	[illegible] mm	[illegible] mm
Coefficient of uniformity	[illegible]	[illegible]
Coefficient of curvature	[illegible]	[illegible]

GRAIN SIZE DISTRIBUTION

Project: The Natural Condition Survey on the Development Project of the Industrial Port on land

No 2

Location of Project: ..... Boring No. 14.

Tested by: 3D ..... Date of Testing: 20/08/00

Sample No. Depth: No. 33 – 1 (1.00 m ~ 1.45 m) Specific Gravity: 2.691

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

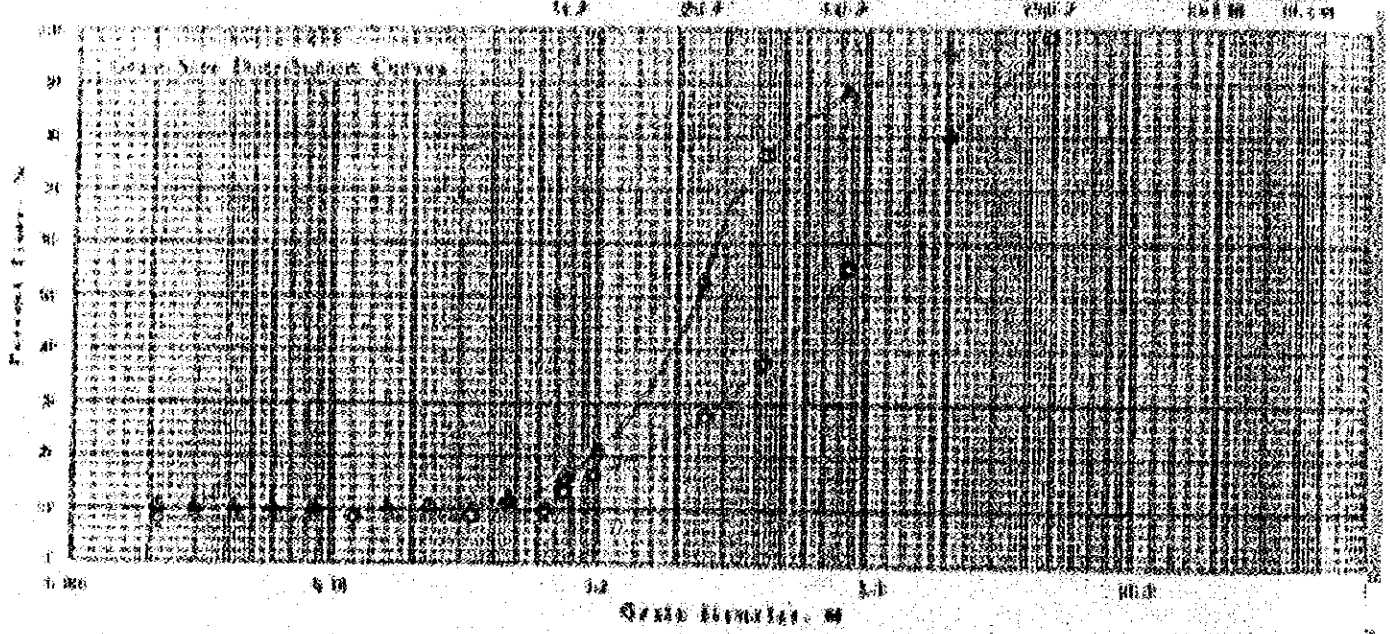
Sample No. Depth: No. 33 – 2 (2.00 m ~ 2.45 m) Specific Gravity: 2.692

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. 33 – 1

Sample No. 33 – 2

Sieve



Cobble	Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth	No. 33 – 1 (1.00 ~ 1.45)	No. 33 – 2 (2.00 ~ 2.45)	Sample No. Depth	No. 33 – 1 (1.00 ~ 1.45)	No. 33 – 2 (2.00 ~ 2.45)
Larger than 127mm	[illegible] %	[illegible] %	Max. Diam.	[illegible] mm	[illegible] mm
127 ~ 5mm	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible] mm
5 ~ 0.074mm	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible] mm
0.074 ~ 0.005mm	[illegible] %	[illegible] %	Diam. at 50%	[illegible] mm	[illegible] mm
0.005 ~ 0.001mm	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	[illegible]
Smaller than 0.001mm	[illegible] %	[illegible] %	Coefficient of curvature	[illegible]	[illegible]
Smaller than 0.002mm	%	%			
200#2 Sieve Passing	%	%			
4#2 Sieve Passing	%	%			
1#4 Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Project: ..... Boring No.: No 2

Tested by: BO Date of Testing: 08/26/82

Sample No., Depth: No. 55 - 5 (3.90 m ~ 5.05 m) Specific Gravity (Gs): 2.646

Sieve No.	38	53	38	25	19	9.5	4.76	2.00	0.84	0.42	0.25	0.105	0.074
% Passing								74.5	55.4	70.1	53.9	19.8	11.1
Diameter, mm		0.0130	0.0110	0.0270	0.0120	0.0140	0.0100	0.0070	0.0050	0.0035	0.0025		
% Finer		41	41	21	34	34	30	30	26	26	26		

Sample No., Depth: No. 55 - 6 (4.44 m ~ 6.45 m) Specific Gravity (Gs): 2.648

Sieve No.	38	53	38	25	19	9.5	4.76	2.00	0.84	0.42	0.25	0.105	0.074
% Passing							99.9	85.7	63.8	55.6	32.3	11.3	11.2
Diameter, mm		0.0520	0.0370	0.0210	0.0120	0.0140	0.0097	0.0069	0.0049	0.0035	0.0025		
% Finer		58	54	50	47	43	43	39	35	35	35		

○ No. 55 - 5

△ No. 55 - 6

Size: 100% 75% 50% 25% 10% 5% 2% 1% 0.5% 0.25% 0.125% 0.063%

Grain Size Distribution Curve

Grain diameter, mm

Clay	Silt	Sand	Gravel
0.002	0.074	4.76	

Sample No., Depth	No. 55 - 5	No. 55 - 6	Sample No., Depth	No. 55 - 5	No. 55 - 6
	3.90 m	4.44 m		3.90 m	4.44 m
Gravel Size	0 %	0.1 %	Max. Size	2.00 mm	4.76 mm
Coarse Sand	3.5 %	1.2 %	Diam. at 60%	0.10 mm	0.45 mm
Medium Sand	24.0 %	43.1 %	Diam. at 30%	0.04 mm	0.14 mm
Fine Sand	69.0 %	44.4 %	Diam. at 10%	0.075 mm	0.075 mm
Silt	3.5 %	2.7 %	Coefficient of uniformity	3.00	6.00
Clay	2.4 %	3.5 %	Coefficient of curvature	0.89	1.71
Passing 4.76 mm	%	%			
Passing 2.00 mm	%	%			
Passing 0.84 mm	%	%			
Passing 0.42 mm	%	%			
Passing 0.25 mm	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port, on land

Location of Project: _____ Boring No.: No. 2

Tested by: BO Date of Testing: 22/26/82

Sample No., Depth: No. SS - 7 (7.00 m ~ 7.05 m) Specific Gravity: 2.639

Diam. mm	5.66	4.81	2.41	1.21	0.61	0.14	0.149	0.074	0.037	0.019	0.0101
% Passing						100	91.3	18.1	43.7	36.7	27.5
Diam. mm	0.0080	0.0060	0.0040	0.0020	0.0050	0.0010	0.0007	0.0005	0.0003	0.0001	0.0002
% Passing	21.5	17.7	15.7	13.3	11.7	10.7	10.7	13.3	12.5	11.3	10.1

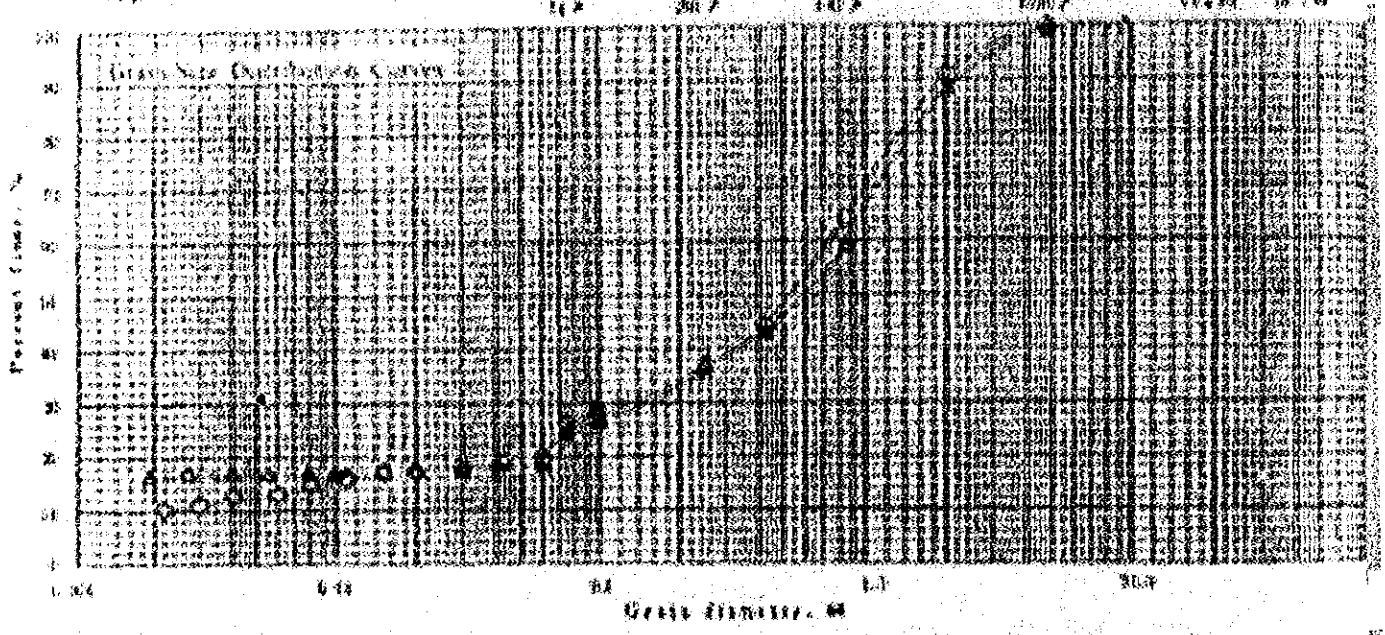
Sample No., Depth: No. SS - 8 (8.00 m ~ 8.05 m) Specific Gravity: 2.629

Diam. mm	5.66	4.81	2.41	1.21	0.61	0.14	0.149	0.074	0.037	0.019	0.0101
% Passing					100	99.0	89.3	59.1	42.6	35.1	27.7
Diam. mm	0.0080	0.0060	0.0040	0.0020	0.0050	0.0010	0.0007	0.0005	0.0003	0.0001	0.0002
% Passing	21.1	17.7	17.3	12.0	11.1	10.6	10.5	11.6	11.6	10.6	11.1

○ - No. SS - 7

△ - No. SS - 8

Sieve: 100 | 50 | 20 | 10 | 5 | 2.00 | 1.00 | 0.500 | 0.250 | 0.149 mm



Colloid	Clay	Silt	Sand	Gravel
0.002	0.005	0.074	4.75	

Sample No., Depth	No. SS - 7 (7.00 ~ 7.05 m)		No. SS - 8 (8.00 ~ 8.05 m)		Sample No., Depth	No. SS - 7 (7.00 ~ 7.05 m)	No. SS - 8 (8.00 ~ 8.05 m)
Larger than 4.75 mm	0	%	0.1	%	Max. diam.	2.00 mm	0.71 mm
4.75 ~ 2.00 mm	1.7	%	11.6	%	Diam. at 60%	0.15 mm	0.31 mm
2 ~ 0.074 mm	87.6	%	71.2	%	Diam. at 30%	0.20 mm	0.15 mm
0.074 ~ 0.005 mm	12.6	%	18.6	%	Diam. at 10%	0.0022 mm	
0.005 ~ 0.002 mm	12.6	%	18.6	%	Coefficient of uniformity	250.00	
Smaller than 0.002 mm	12.5	%	16.6	%	Coefficient of curvature	11.01	
Smaller than 0.001 mm		%		%			
200# Sieve Passing		%		%			
140# Sieve Passing		%		%			
100# Sieve Passing		%		%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No 2

Tested by: BD Date of Testing: 08/27/82

Sample No., Depth: No. 33 – 9 (9.00 m – 9.45 m) Specific Gravity, Gs = 2.683

Sieve	mm	3.68	3.81	2.51	1.91	0.42	0.25	0.20	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.5	99.0	98.8	93.2	27.9	10.8	10.2
Sieve	mm	0.0129	0.0101	0.0129	0.0252	0.0113	0.0115	0.0016	0.0018	0.0049	0.0014	0.0010	
	% Passing	15.7	14.3	14.5	14.2	13.9	13.6	13.3	13.3	13.0	13.0	13.0	

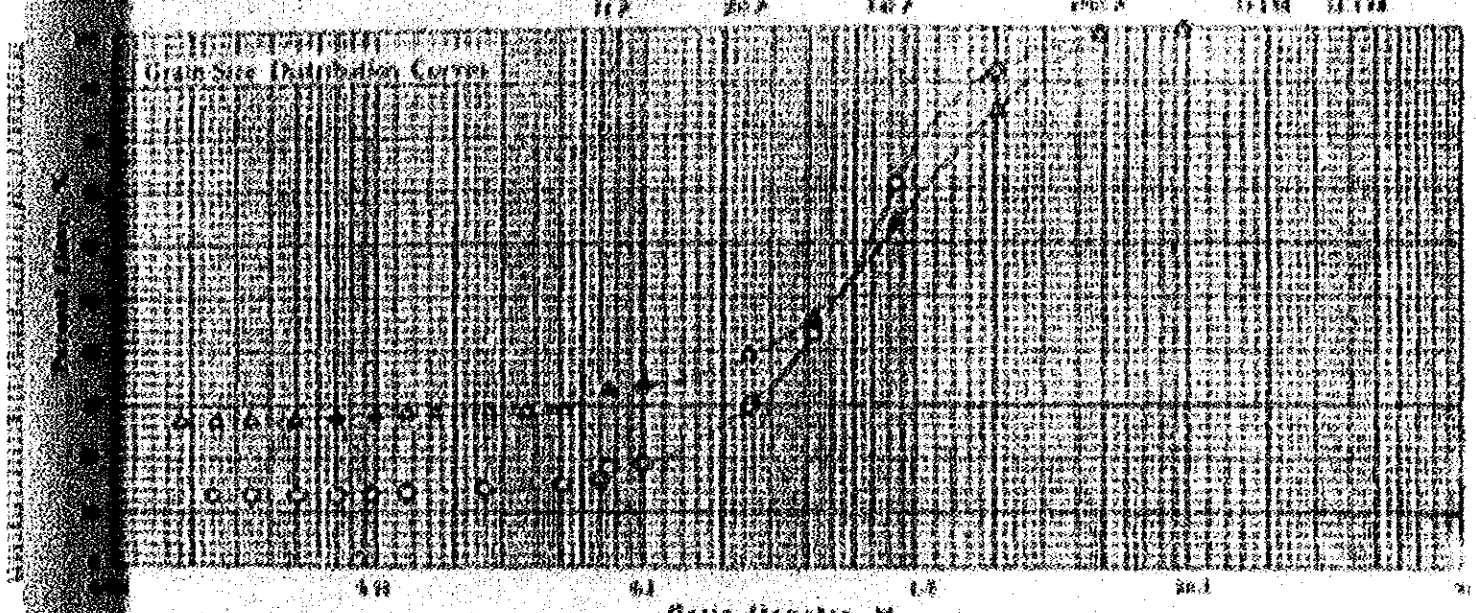
Sample No., Depth: No. 33 – 10 (10.00 m – 10.45 m) Specific Gravity, Gs = 2.683

Sieve	mm	3.68	3.81	2.51	1.91	0.42	0.25	0.20	0.84	0.42	0.25	0.105	0.074
	% Passing					100	99.4	98.7	97.7	95.9	19.6	13.7	12.7
Sieve	mm	0.0130	0.0130	0.0270	0.0170	0.0130	0.0070	0.0070	0.0050	0.0030	0.0025	0.0010	
	% Passing	29.0	29.0	29.0	29.0	28.5	28.5	28.0	27.4	27.4	27.4	27.4	

○ No. 33 – 9

▲ No. 33 – 10

Sieve



Clay	Silt	Sand	Gravel
0.005	0.074	4.75	

Sample No., Depth	No. 33 – 9	No. 33 – 10	Sample No., Depth	No. 33 – 9	No. 33 – 10
	33 m	33 m		33 m	33 m
Gravel 4.75 mm	0.5 %	0.6 %	Max. diam.	4.76 mm	4.76 mm
Sand	7.5 %	14.6 %	Diam. at 60%	0.15 mm	0.15 mm
Silt	61.3 %	57.7 %	Diam. at 30%	0.08 mm	0.06 mm
Clay 0.074 mm	25.0 %	27.0 %	Diam. at 10%	mm	mm
0.074–0.005 mm	5.2 %	5.5 %	Coefficient of uniformity		
Silt 0.005–0.005 mm	13.0 %	29.0 %	Coefficient of curvature		
Silt 0.005–0.005 mm	%	%			
0.005 mm Passing	%	%			
0.005 mm Passing	%	%			
0.005 mm Passing	%	%			

The Natural Condition Survey on the Development Project of the Industrial Port.

Project

Location of Project: on land

Boring No.: No 2

Tested by: SO

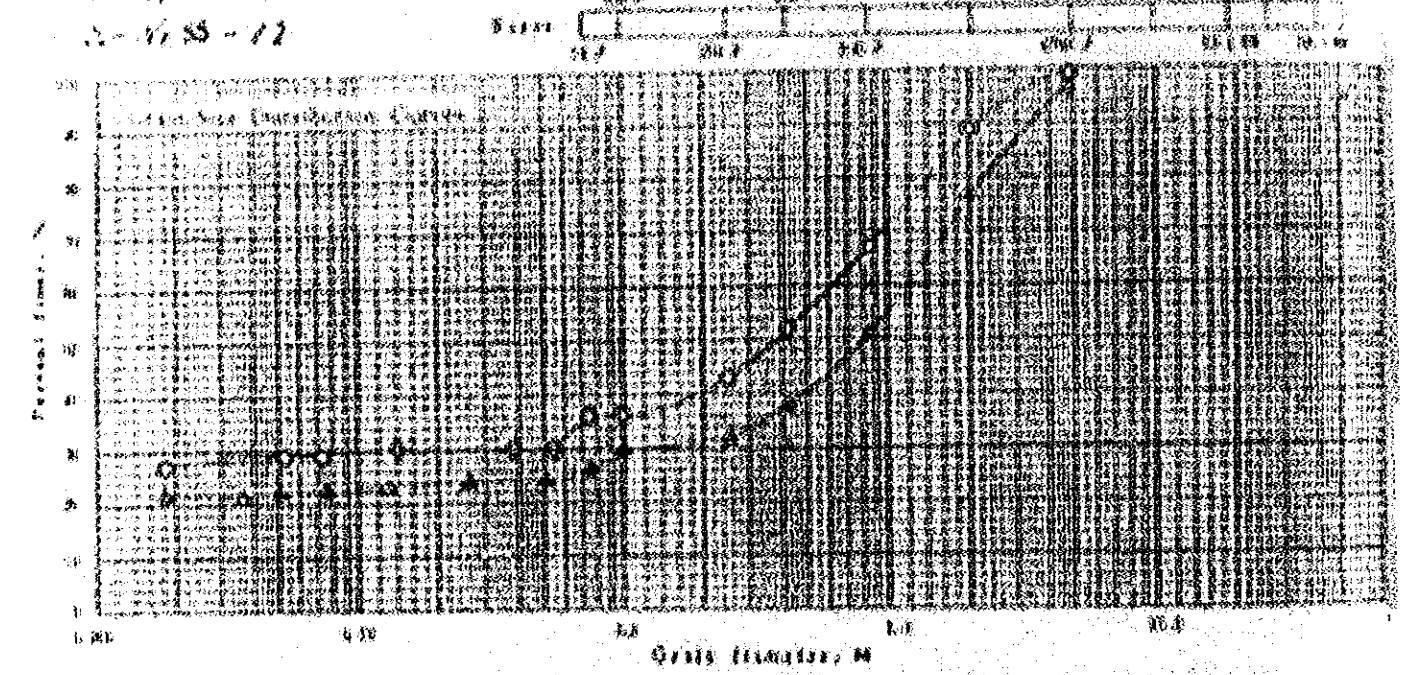
Date of Testing: 08/ 22/ 22

Sample No. Depth No. S3 - 11 (11.00 m ~ 11.45 m) Specific Gravity Gs: 2.611

Diam. (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Finer						32.1	31.0	22.3	21.7	21.2	[illegible]
Diam. (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Finer	33.1	33.1	33.1	33.1	33.1	22.7	22.7	22.7	22.5	22.5	[illegible]

Sample No. Depth No. S3 - 12 (12.00 m ~ 12.45 m) Specific Gravity Gs: 2.614

Diam. (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Finer						34.9	33.1	31.1	22.7	22.2	22.1
Diam. (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Finer	26.1	26.1	26.1	21.9	21.6	21.0	22.6	21.7	21.7	21.7	[illegible]



Sample No., Depth	No. S3 - 11		No. S3 - 12		Sample No., Depth	No. S3 - 11	No. S3 - 12
	[illegible] m		[illegible] m			[illegible] m	[illegible] m
Larger than [illegible] mm	0.7	%	3.1	%	Max. diam.	0.14 mm	0.11
[illegible] ~ [illegible] mm	12.1	%	11.1	%	Diam. at 60%	0.10 mm	1.15
[illegible] ~ [illegible] mm	35.3	%	41.0	%	Diam. at 30%	0.018 mm	0.15
[illegible] ~ [illegible] mm	16.7	%	19.4	%	Diam. at 10%	mm	
[illegible] ~ [illegible] mm	6.7	%	4.3	%	Coefficient of uniformity		
Smaller than [illegible] mm	28.1	%	22.2	%	Coefficient of curvature		
Smaller than [illegible] mm		%		%			
[illegible] Sieve Passing		%		%			
[illegible] Sieve Passing		%		%			
[illegible] Sieve Passing		%		%			

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Industrial Port

Location of Project: on land Boring No.: No 2

Tested by: BD Date of Testing: 07/29/92

Sample No., Depth: No. SS - 13 (13.00 m ~ 13.45 m) Specific Gravity Gs = 2.619

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						27.6	22.9	44.6	32.7	29.9	23.1	22.9
[illegible]	0.0110	0.0110	0.0210	0.0115	0.0112	0.0076	0.0049	0.0048	0.0014	0.0024	0.0014	
[illegible]	21.0	21.0	21.0	20.6	20.3	20.3	19.9	19.9	19.9	19.9	19.5	

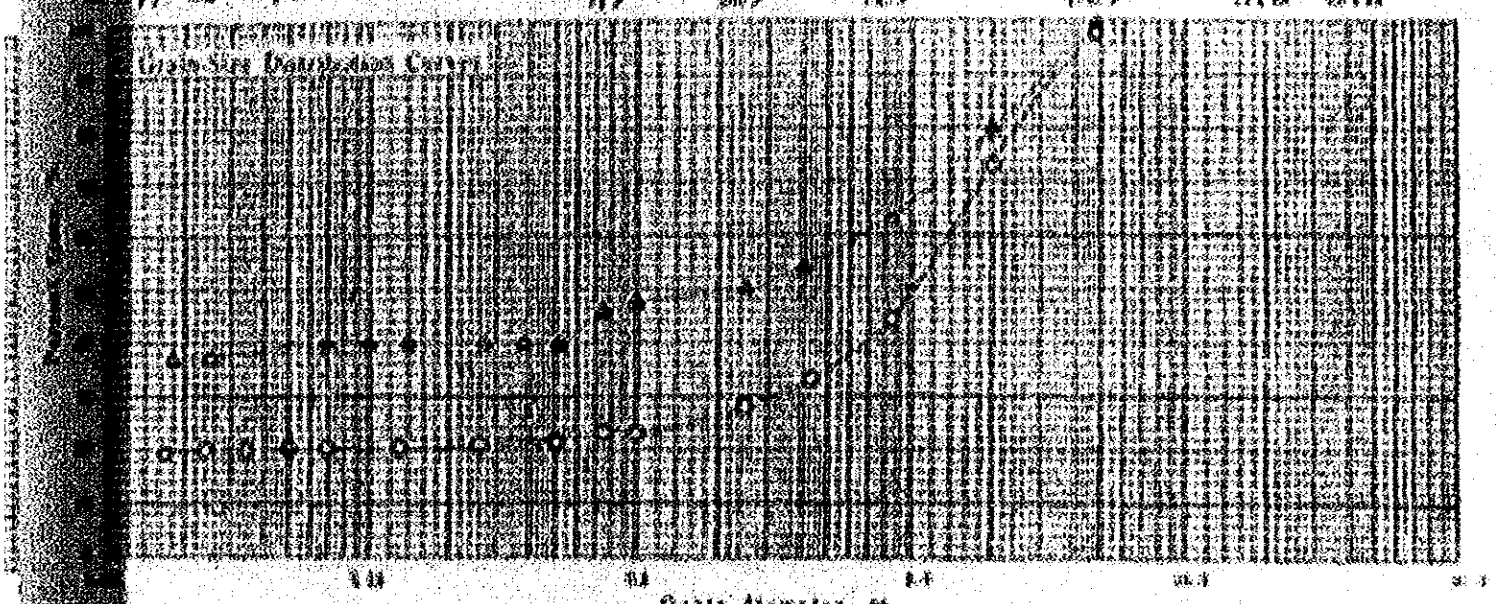
Sample No., Depth: No. SS - 14 (14.00 m ~ 14.45 m) Specific Gravity Gs = 2.627

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						39.6	40.2	41.7	48.3	50.1	47.8	46.8
[illegible]	0.0120	0.0310	0.0220	0.0170	0.0140	0.0097	0.0070	0.0049	0.0015	0.0049	0.0049	
[illegible]	46.1	46.1	37.1	33.9	33.8	33.1	33.1	32.0	32.0	32.0	32.0	

○ No. SS - 13

△ No. SS - 14

Sieve: [illegible]



[illegible]	Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	[illegible]	

[illegible], Depth	No. SS - 13	No. SS - 14	Sample No., Depth	No. SS - 13	No. SS - 14
	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	2.4 %	0.4 %	Max. diam.	0.71 mm	0.71 mm
[illegible]	24.7 %	19.4 %	Diam. at 60%	1.00 mm	0.15 mm
[illegible]	44.2 %	25.1 %	Diam. at 30%	0.12 mm	mm
[illegible]	9.8 %	6.5 %	Diam. at 10%	mm	mm
[illegible]	3.0 %	1.0 %	Coefficient of uniformity		
[illegible]	18.9 %	31.1 %	Coefficient of curvature		
[illegible]	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			
[illegible] Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land

Boring No.: No. 2

Tested by: SD

Date of Testing: 88/28/12

Sample No., Depth: No. SS - 15 (15.00 m ~ 15.45 m) Specific Gravity Gs = 2.607

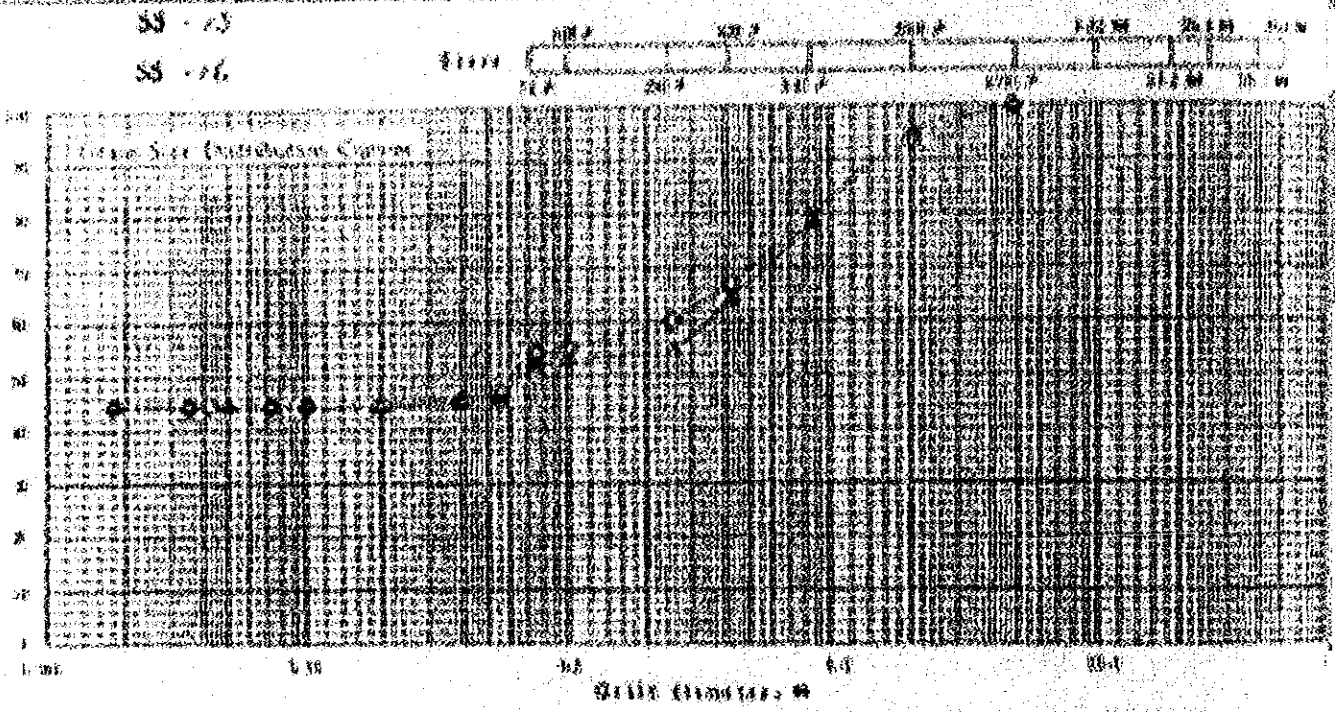
Sieve	Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% Passing						100.0	100.0	100.0	100.0	100.0
Hydrometer	Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% Passing	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7

Sample No., Depth: No. SS - 16 (16.00 m ~ 16.45 m) Specific Gravity Gs = 2.611

Sieve	Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% Passing						99.9	99.9	99.9	100.0	100.0
Hydrometer	Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% Passing	99.6	99.6	99.6	99.5	99.5	99.5	99.5	99.5	99.5	99.5

SS - 15

SS - 16



Gravel	Coarse	Sand	Medium	Fine	Silt & Clay
0.00	2.00	0.074	0.42	2.0	

Sample No., Depth	No. SS - 11 A	No. SS - 11 B	Sample No., Depth	No. SS - 11 A	No. SS - 11 B
Larger than [illegible] mm	0.2 %	0.1 %	Max. diam.	0.96 mm	0.71
[illegible] ~ [illegible] mm	0.2 %	0.2 %	Diam. at 50%	0.10 mm	0.10
[illegible] ~ [illegible] mm	29.5 %	31.8 %	Diam. at 30%	mm	
[illegible] ~ [illegible] mm	12.0 %	11.9 %	Diam. at 10%	mm	
[illegible] ~ [illegible] mm	7.4 %	7.5 %	Coefficient of uniformity		
Smaller than [illegible] mm	49.7 %	48.5 %	Coefficient of curvature		
Smaller than [illegible] mm	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No 2

Tested by: BO Date of Testing: 08/10/80

Sample No. Depth: 55 - 17 (17.00 m ~ 17.41 m) Specific Gravity Gs = 2.614

Diameter	4.76	2.00	1.41	1.00	0.841	0.590	0.297	0.149	0.105	0.074	0.053	0.031
% Passing						99.6	97.6	81.2	54.5	32.1	20.3	16.4
Diameter	0.0540	0.0320	0.0230	0.0120	0.0070	0.0050	0.0040	0.0030	0.0025	0.0015		
% Passing	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7		

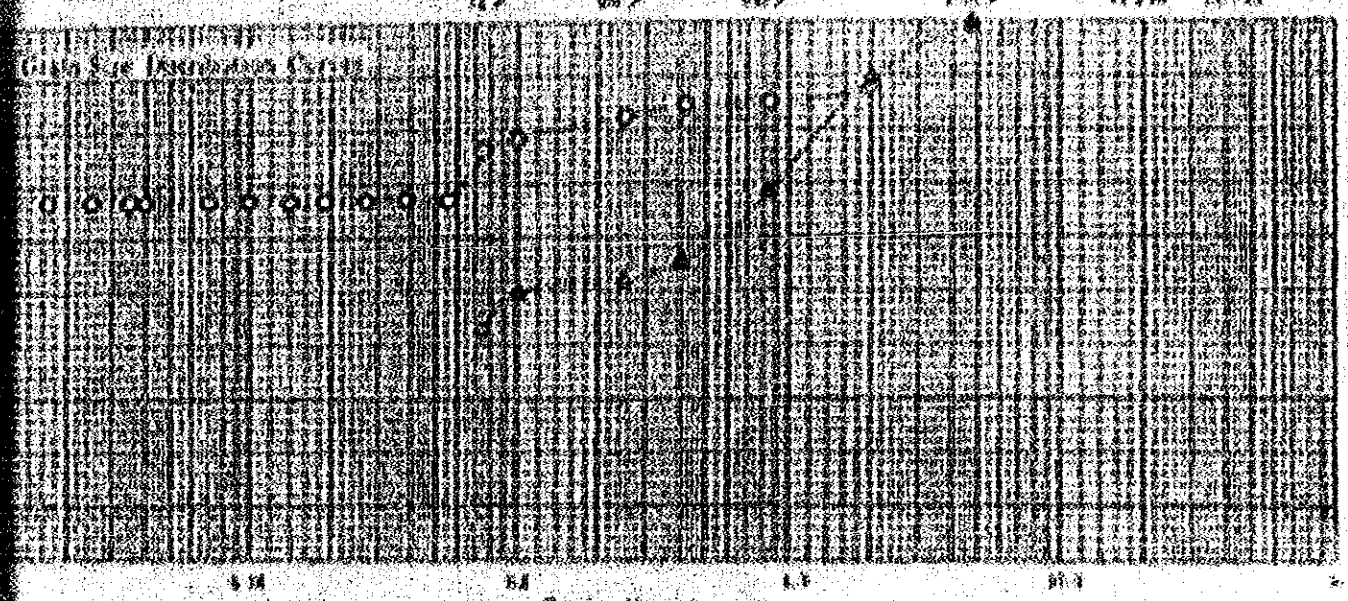
Sample No. Depth: 55 - 18 (18.00 m ~ 18.41 m) Specific Gravity Gs = 2.610

Diameter	4.76	2.00	1.41	1.00	0.841	0.590	0.297	0.149	0.105	0.074	0.053	0.031
% Passing						98.8	90.0	68.2	55.2	52.3	49.5	42.8
Diameter												
% Passing												

○ No. 55 - 17

△ No. 55 - 18

Sieve



Clay	Silt	Sand	Gravel
5.35 %	6.5 %	87 %	

Sample No. Depth	No. 55 - 17	No. 55 - 18	Sample No. Depth	No. 55 - 17	No. 55 - 18
	25 m 3	25 m 3		25 m 3	25 m 3
Larger than 4.76 mm	0.4 %	0.2 %	Max. diam.	4.76 mm	4.76 mm
2.00 mm	12.0 %	9.2 %	Diam. at 60%	mm	0.10 mm
1.41 mm	3.1 %	10.9 %	Diam. at 30%	mm	mm
1.00 mm	2.1 %	1.4 %	Diam. at 10%	mm	mm
0.841 mm	2.7 %	41.1 %	Coefficient of uniformity		
Smaller than 0.074 mm	16.7 %	%	Coefficient of curvature		
Smaller than 0.053 mm	%	%			
0.031 mm Passing	%	%			
0.015 mm Passing	%	%			
0.005 mm Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land — Boring No.: No. 2

Tested by: 80 — Date of Testing: 07/28/82

Sample No., Depth: No. SS - 19 (19.00 m ~ 19.05 m) Specific Gravity Gs: 2.621

Diam. mm	19.0	9.51	4.76	2.00	0.841	0.476	0.249	0.141	0.074	0.037	0.005
% Passing						96.3	94.3	89.1	81.0	71.0	11.3
Diam. mm	0.0075	0.0054	0.0038	0.0027	0.0019	0.0013	0.0009	0.0006	0.0004	0.0002	0.0001
% Passing	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3

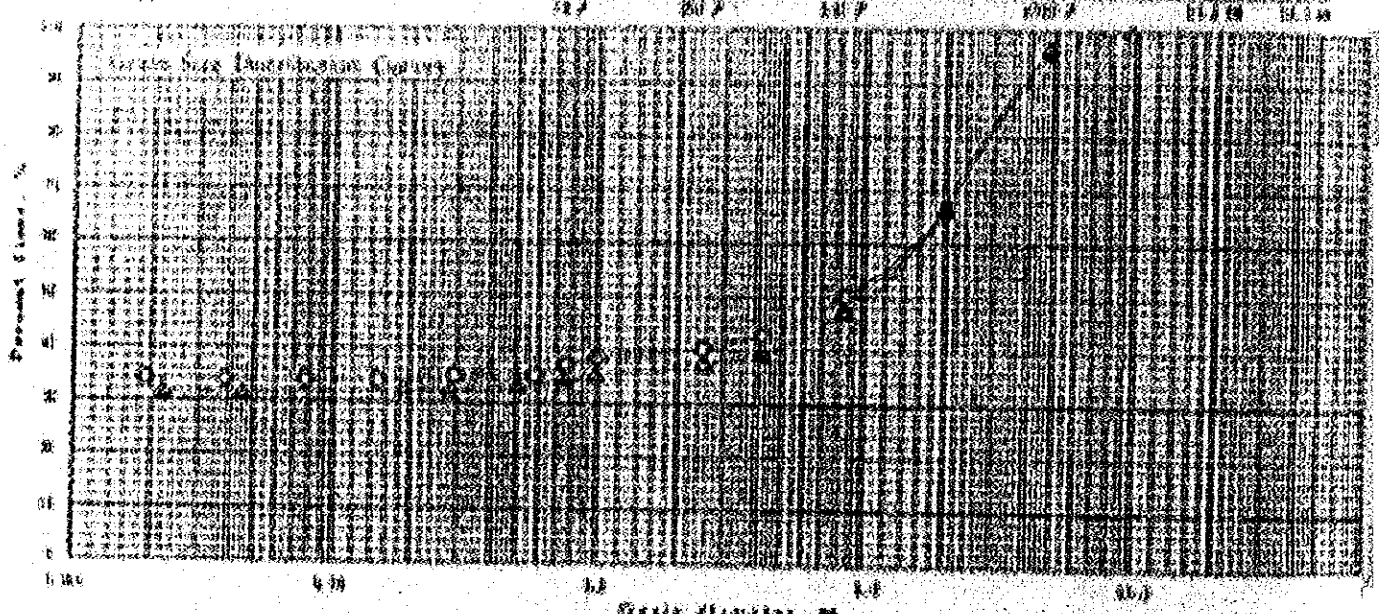
Sample No., Depth: No. SS - 20 (20.00 m ~ 20.05 m) Specific Gravity Gs: 2.621

Diam. mm	19.0	9.51	4.76	2.00	0.841	0.476	0.249	0.141	0.074	0.037	0.005
% Passing					99.4	96.1	92.7	87.6	82.6	72.1	34.1
Diam. mm	0.0075	0.0054	0.0038	0.0027	0.0019	0.0013	0.0009	0.0006	0.0004	0.0002	0.0001
% Passing	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1

○ - No. SS - 19

△ - No. SS - 20

Sieve



Outline	Clay	Silt	Sand	Gravel
0.005	0.005 ~ 0.074	0.074 ~ 2.0	2.0	

Sample No., Depth	No. SS - 19		No. SS - 20		Sample No., Depth	No. SS - 19	No. SS - 20
	97	%	97	%		97	97
Larger than 19.0 mm	3.7	%	3.9	%	Max. diam.	9.51 mm	9.51
19.0 ~ 2 mm	28.4	%	31.4	%	Diam. at 60%	1.10 mm	1.11
2 ~ 0.074 mm	23.9	%	24.1	%	Diam. at 30%	%	
0.074 ~ 0.0074 mm	6.1	%	5.4	%	Diam. at 10%	%	
0.074 ~ 0.005 mm	3.2	%	2.3	%	Coefficient of uniformity		
Smaller than 0.005 mm	33.7	%	31.3	%	Coefficient of curvature		
Smaller than 0.005 mm		%		%			
20.0 mm Sieve Passing		%		%			
4.76 mm Sieve Passing		%		%			
74 μ Sieve Passing		%		%			

GRAIN SIZE DISTRIBUTION

The Natural Conditions Survey on the Development Project of the Lebujiang Port.

Location of Project: on land Boring No. No 2

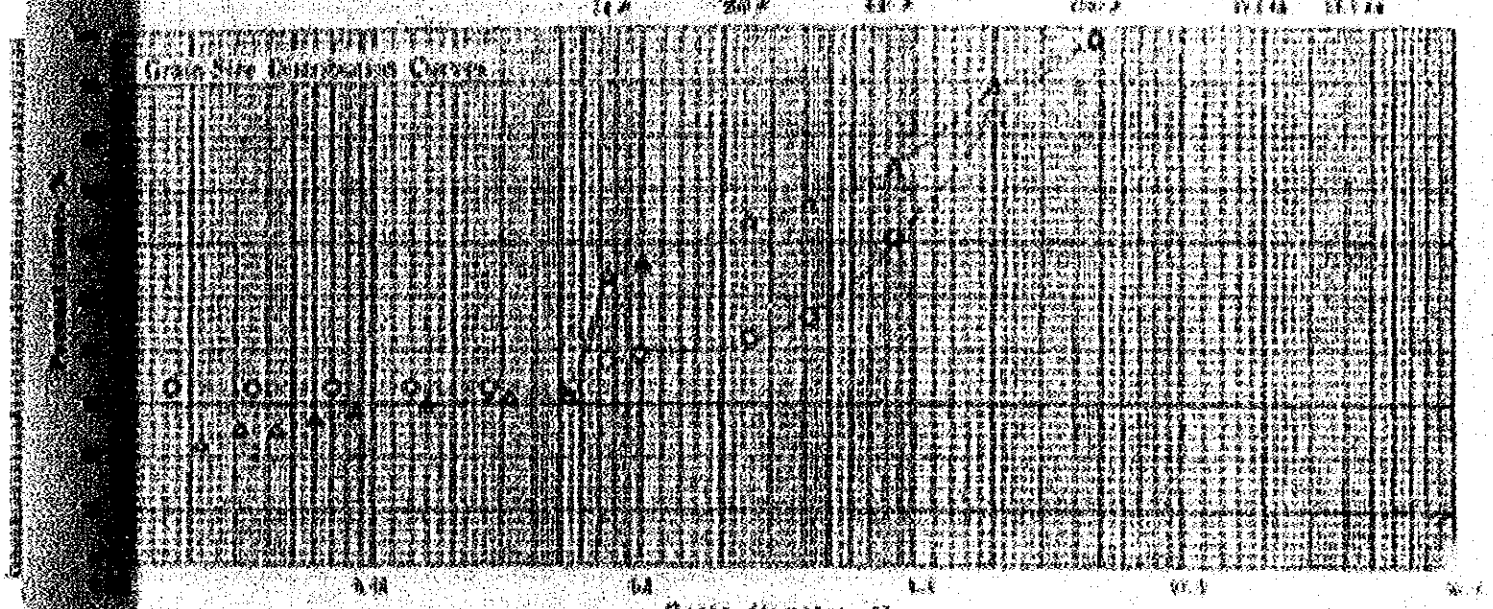
Tested by: BD Date of Testing: 08/10/82

Sample No. Depth (No. 55 - 21) (21.00 m ~ 21.05 m) Specific Gravity Gs = 2.622

Sieve	355	181	251	151	127	076	300	041	013	025	0105	0071
% Finer						99.2	92.8	90.4	86.3	81.7	79.2	76.7
mm	0.0140	0.0110	0.0220	0.0171	0.0148	0.0112	0.0070	0.0049	0.0015	0.0022	0.0012	
% Finer	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	

Sample No. Depth (No. 55 - 22) (22.00 m ~ 22.05 m) Specific Gravity Gs = 2.641

Sieve	355	181	251	151	127	076	300	041	013	025	0105	0071
% Finer						96.6	92.3	79.2	68.8	61.2	54.1	53.7
mm	0.0160	0.0110	0.0320	0.0220	0.0110	0.0120	0.0072	0.0040	0.0043	0.0031	0.0022	
% Finer	31.1	31.0	31.0	31.0	16.2	21.3	27.4	26.9	25.0	23.0	22.4	



Clay	Silt	Sand	Gravel
0.05	0.074	2.0	

Sample No. Depth	No. 55 - 21	No. 55 - 22	Sample No. Depth	No. 55 - 21	No. 55 - 22
	%	%		mm	mm
Clay (<0.005 mm)	1.3 %	1.4 %	Max. diam.	4.76 mm	4.76 mm
Silt	15.4 %	1.7 %	Diam. at 60%	0.11 mm	0.15 mm
Fine Sand	31.5 %	21.7 %	Diam. at 30%	mm	1.212 mm
Medium Sand (0.2-0.6 mm)	7.0 %	11.3 %	Diam. at 10%	mm	mm
Coarse Sand (0.6-2.0 mm)	4.7 %	27.0 %	Coefficient of uniformity		
Gravel (>2.0 mm)	39.4 %	26.7 %	Coefficient of curvature		
Gravel (>4.76 mm)	%	%			
Gravel Passing 76	%	%			
Gravel Passing 127	%	%			
Gravel Passing 254	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Project: _____ Boring No.: No. 2

Tester: BD Date of Testing: 20/10/84

Sample No. Depth: No. 33 ~ 23 (21.00 m ~ 21.45 m) Specific Gravity: 2.622

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

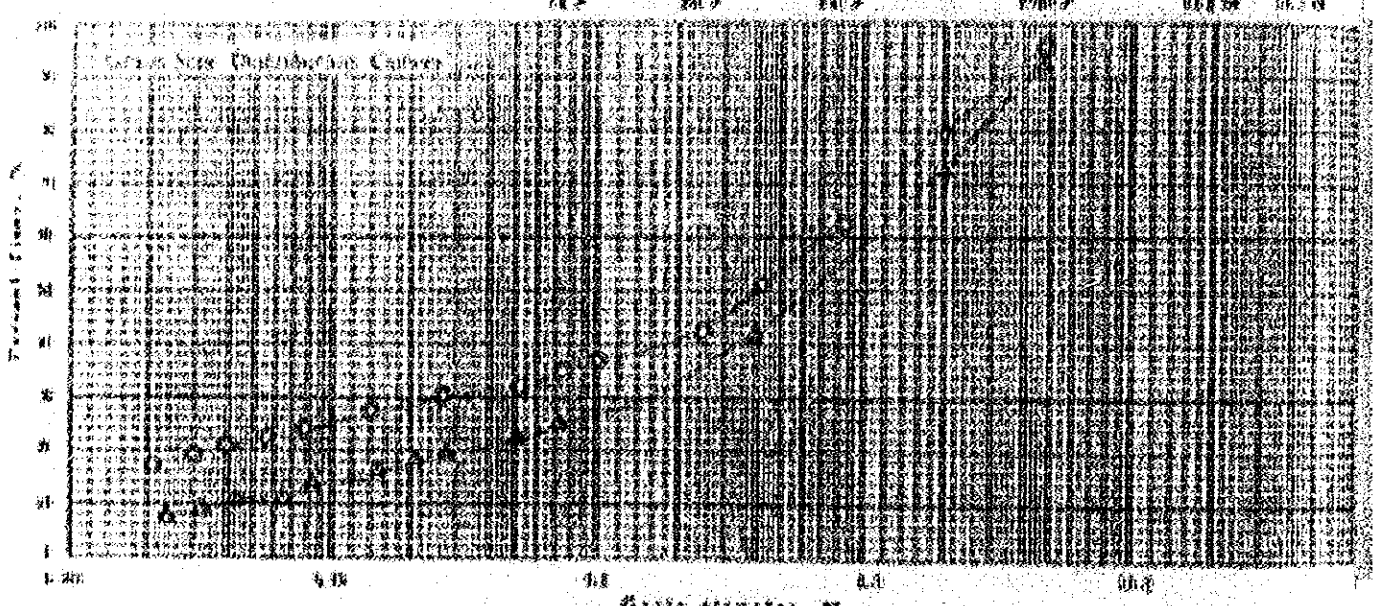
Sample No. Depth: No. 33 ~ 24 (24.00 m ~ 24.45 m) Specific Gravity: 2.627

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

○ - No. 33 ~ 23

△ - No. 33 ~ 24

Sieve: [illegible]



Soil	Clay	Silt	Sand	Gravel
	[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth	No. 33 ~ 23 [illegible]	No. 33 ~ 24 [illegible]	Sample No., Depth	No. 33 ~ 23 [illegible]	No. 33 ~ 24 [illegible]
Larger than [illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at [illegible]%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at [illegible]%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at [illegible]%	mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Coefficient of uniformity		[illegible]
Smaller than [illegible]	[illegible] %	[illegible] %	Coefficient of curvature		[illegible]
Smaller than [illegible]	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Project: _____ Boring No. No. 2

Tested by: B.D. Date of Testing: 11/30/92

Sample No. Depth (No. 53 – 3.5) (Specific Gravity) 2.612

Passing	500	841	254	191	152	076	038	021	012	009	0105	0031
Passing					96.5	91.5	89.0	81.5	78.5	68.5	63.5	58.5
Diam. mm	2.0000	1.0000	0.5000	0.2500	0.1500	0.0750	0.0380	0.0210	0.0120	0.0090	0.0050	0.0031
Sand %	10.5	23.5	41.5	57.5	71.5	82.5	87.5	92.5	95.5	97.5	97.5	

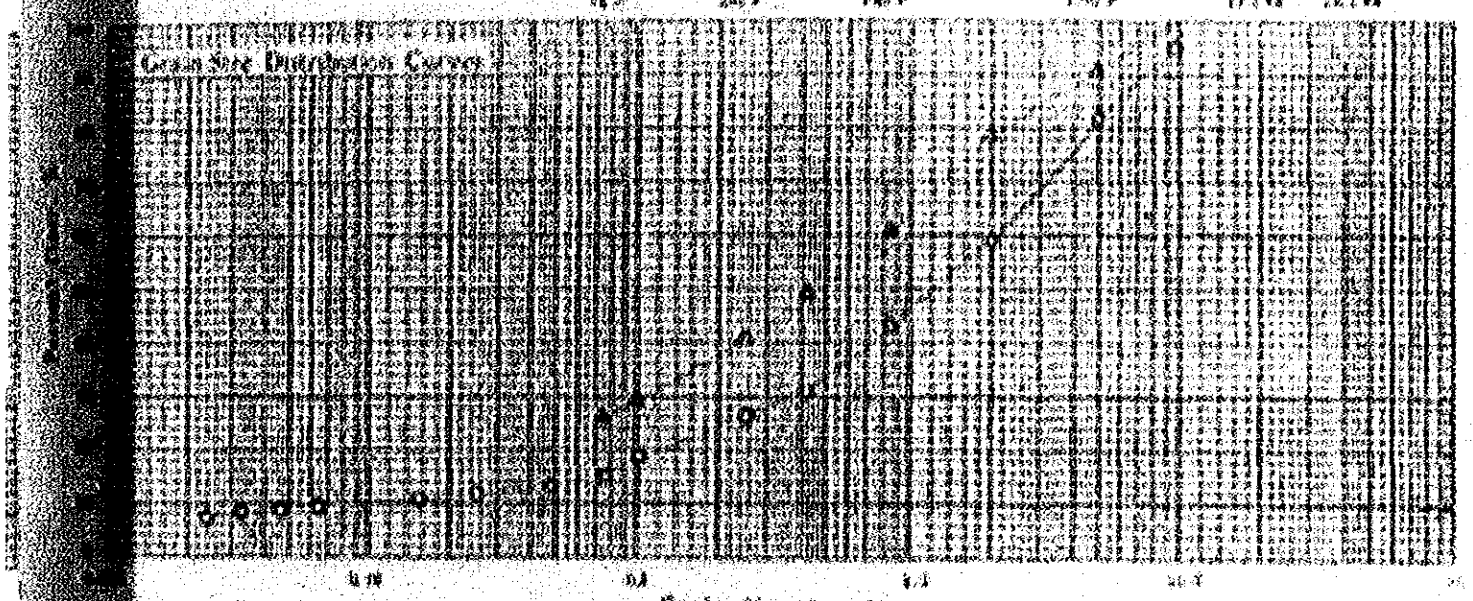
Sample No. Depth (No. 53 – 3.8) (Specific Gravity) 2.646

Passing	500	841	254	191	152	076	038	021	012	009	0105	0031
Passing						96.5	94.5	91.5	87.5	85.5	83.5	80.5
Diam. mm												
Sand %												

No. 53 – 3.5

No. 53 – 3.8

Sieve



Clay	Silt	Sand	Gravel
0.005	0.074	4.75	

Sample No., Depth	No. 53 – 3.5	No. 53 – 3.8	Sample No., Depth	No. 53 – 3.5	No. 53 – 3.8
	87.5 m	87.5 m		87.5 m	87.5 m
Gravel (75 mm – 4.75 mm)	1.6 %	2.6 %	Max. diam.	0.02 mm	0.06 mm
Coarse Sand (4.75 mm – 2.00 mm)	0.0 %	1.9 %	Diam. at 60%	0.0 mm	0.02 mm
Medium Sand (2.00 mm – 0.425 mm)	10.5 %	19.5 %	Diam. at 30%	0.04 mm	0.08 mm
Fine Sand (0.425 mm – 0.074 mm)	15.2 %	15.5 %	Diam. at 10%	0.01 mm	mm
Silt (0.074 mm – 0.005 mm)	2.2 %	4.5 %	Coefficient of uniformity	12.0	
Clay (0.005 mm)	0.6 %	%	Coefficient of curvature	0.01	
Medium Sand (0.425 mm – 0.250 mm)	%	%			
Fine Sand (0.250 mm – 0.074 mm)	%	%			
Coarse Particles (75 mm – 2.00 mm)	%	%			
Fine Particles (0.074 mm – 0.005 mm)	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port, on land

Location of Testing: Boring No. No 3

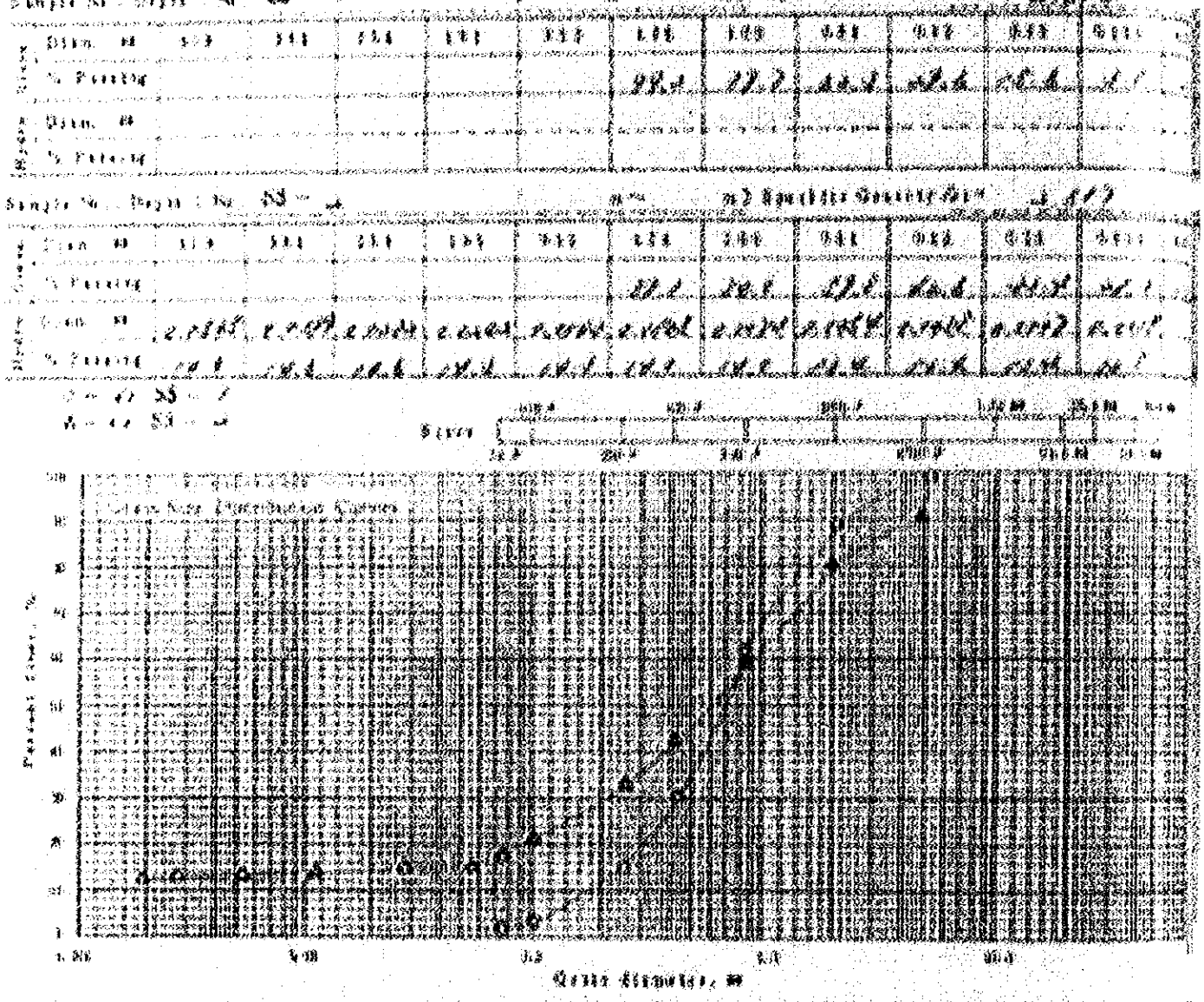
Tested by: SD Date of Testing:

Sample No. Depth No. 33 - 1 — m — m) Specific Gravity Gs = 2.67

Sieve											
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm											
% Passing											

Sample No. Depth No. 33 - 4 — m — m) Specific Gravity Gs = 2.67

Sieve											
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth	No. 33 - 1	No. 33 - 4	Sample No., Depth	No. 33 - 1	No. 33 - 4
	[illegible] m	[illegible] m		[illegible] m	[illegible] m
Larger than 125 mm	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
63 ~ 125 mm	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible]
2 ~ 63 mm	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible]
0.42 ~ 2 mm	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	
0.074 ~ 0.42 mm	[illegible] %	[illegible] %	Coefficient of uniformity	[illegible]	
Smaller than 0.074 mm	%	[illegible] %	Coefficient of curvature	[illegible]	
Smaller than 0.001 mm	%	%			
2.000? Sieve Passing	%	%			
0.074 Sieve Passing	%	%			
74? Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port, on land

Location of Project: _____ Series No. No 3

Tested by: BP Date of Testing: _____

Sample No. Depth (m): 53 – 4 (– m) Specific Gravity Gs = 2.67

Sieve No.	4.76	2.38	1.19	0.59	0.297	0.149	0.074	0.037	0.019	0.009	0.005	0.002
Passing (%)					99.4	98.2	94.0	87.2	80.4	68.2	57.8	48.2
Diameter (mm)	2.000	1.190	0.590	0.297	0.149	0.074	0.037	0.019	0.009	0.005	0.002	
Log Diameter	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

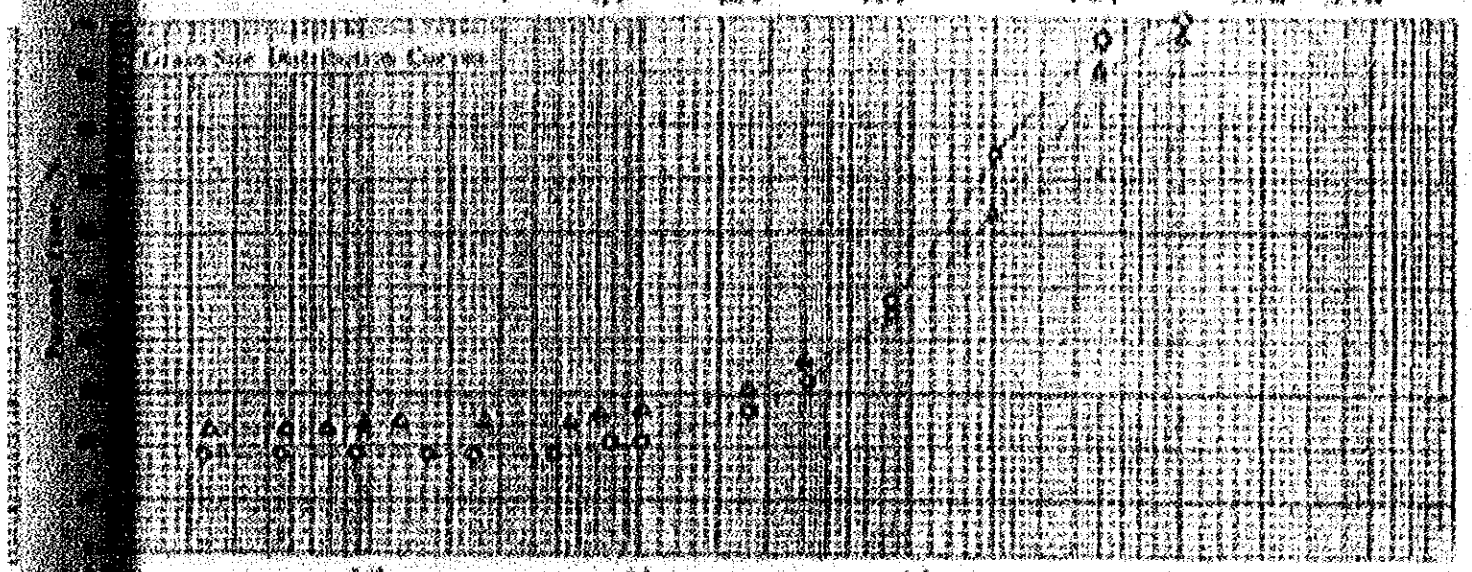
Sample No. Depth (m): 53 – 4 (– m) Specific Gravity Gs = 2.67

Sieve No.	4.76	2.38	1.19	0.59	0.297	0.149	0.074	0.037	0.019	0.009	0.005	0.002
Passing (%)					99.7	98.6	93.7	85.8	78.2	67.6	58.2	48.8
Diameter (mm)	2.000	1.190	0.590	0.297	0.149	0.074	0.037	0.019	0.009	0.005	0.002	
Log Diameter	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

No. 53 – 4

No. 53 – 4

Sieve: 1.19 0.59 0.297 0.149 0.074 0.037 0.019 0.009 0.005



Gravel	Coarse	Medium	Fine	Silt	Clay
2.00	0.59	0.20	0.06	0.002	

Sample No., Depth	No. 53 – 4	No. 53 – 4	Sample No., Depth	No. 53 – 4	No. 53 – 4
	2.75 g	2.75 g		2.75 g	2.75 g
Gravel (2.00 mm)	0.4 %	0.4 %	Max. diam.	2.00 mm	2.00 mm
Coarse sand	2.2 %	2.8 %	Diam. at 60%	0.42 mm	0.42 mm
Medium sand	11.2 %	10.2 %	Diam. at 30%	0.18 mm	0.18 mm
Fine sand (0.20–0.06 mm)	11.2 %	9.4 %	Diam. at 10%	mm	mm
Silt (0.06–0.002 mm)	34.4 %	34.2 %	Coefficient of uniformity		
Clay (<0.002 mm)	41.1 %	43.2 %	Coefficient of curvature		
Passing 2.00 mm	%	%			
Passing 0.59 mm	%	%			
Passing 0.20 mm	%	%			
Passing 0.06 mm	%	%			

24

GRAIN SIZE DISTRIBUTION

Project: The Natural Condition Survey on the Development Project of the Intayyal Port.

Location of Project: on land Boring No.: No 3

Tested by: BD Date of Testing:

Sample No. / Depth: SS - 5 m.l. Specific Gravity Gs:

Sieve No.											
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

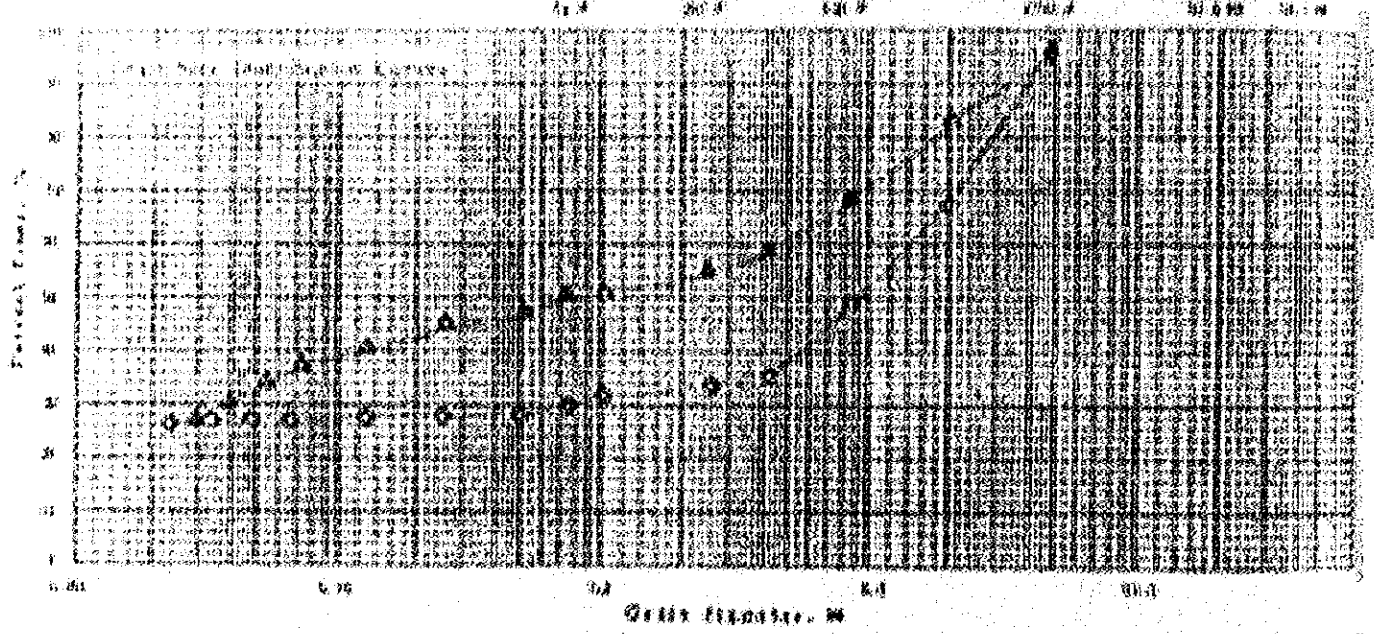
Sample No. / Depth: SS - 6 m.l. Specific Gravity Gs:

Sieve No.											
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SS - 5

SS - 6

Sieve



Gravel	Clay	Silt	Sand	Gravel

Sample No. / Depth	No. SS - 5	No. SS - 6	Sample No. / Depth	No. SS - 5	No. SS - 6
	[illegible]	[illegible]		[illegible]	
Larger than [illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible]
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Diam. at 10%	mm	
[illegible] ~ [illegible]	[illegible] %	[illegible] %	Coefficient of uniformity		
Smaller than [illegible]	[illegible] %	[illegible] %	Coefficient of curvature		
Smaller than [illegible]	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No. 3

Tested by: BD Date of Testing:

Sample No.: Depth: No. SS – 2 Specific Gravity:

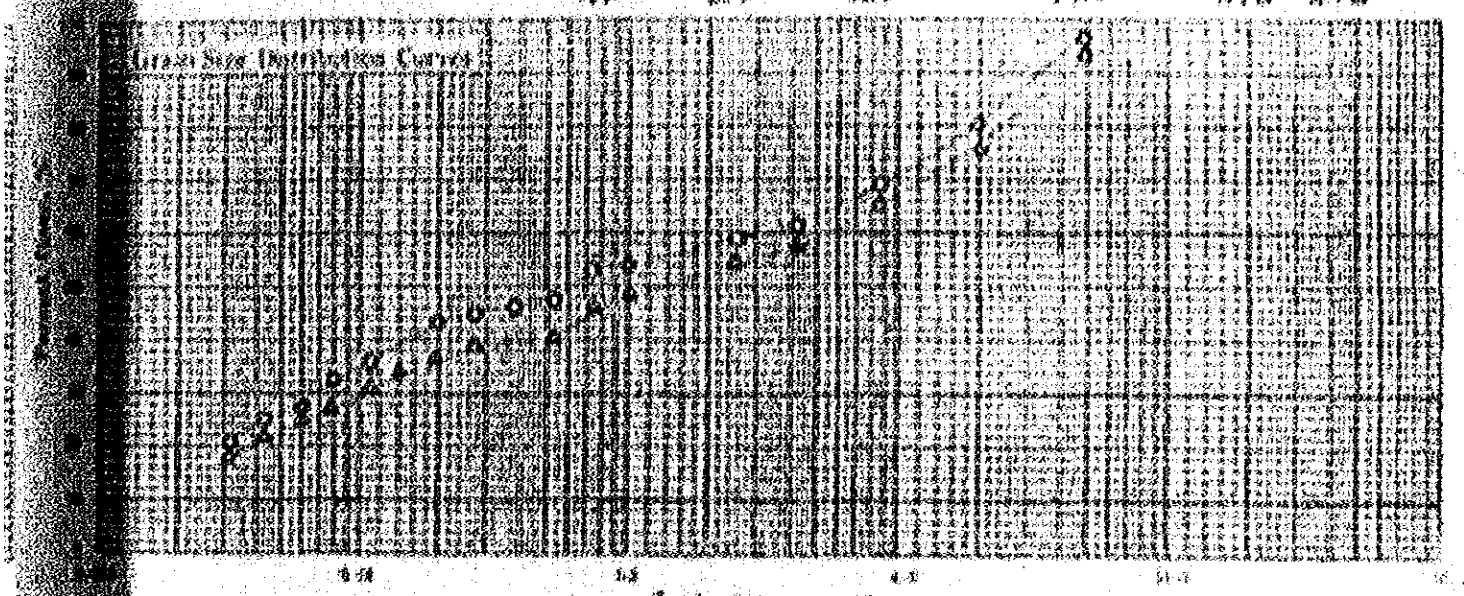
Diameter (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Passing (%)						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diameter (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Passing (%)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Sample No.: Depth: No. SS – 4 Specific Gravity:

Diameter (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Passing (%)						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diameter (mm)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
Passing (%)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

○ — SS – 2

△ — SS – 4 Sieve



Clay	Silt	Sand	Gravel
[illegible]	[illegible]	[illegible]	

Sample No. / Depth	No. SS – 2	No. SS – 4	Sample No. / Depth	No. SS – 2	No. SS – 4
[illegible]	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 60%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible] mm
[illegible]	[illegible] %	[illegible] %	Diam. at 10%	mm	mm
[illegible]	[illegible] %	[illegible] %	Coefficient of uniformity		
[illegible]	[illegible] %	[illegible] %	Coefficient of curvature		
[illegible]	%	%			
[illegible] Finer Passing	%	%			
[illegible] Finer Passing	%	%			
[illegible] Finer Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port on land

Location of Testing: _____ Testing No.: No 3

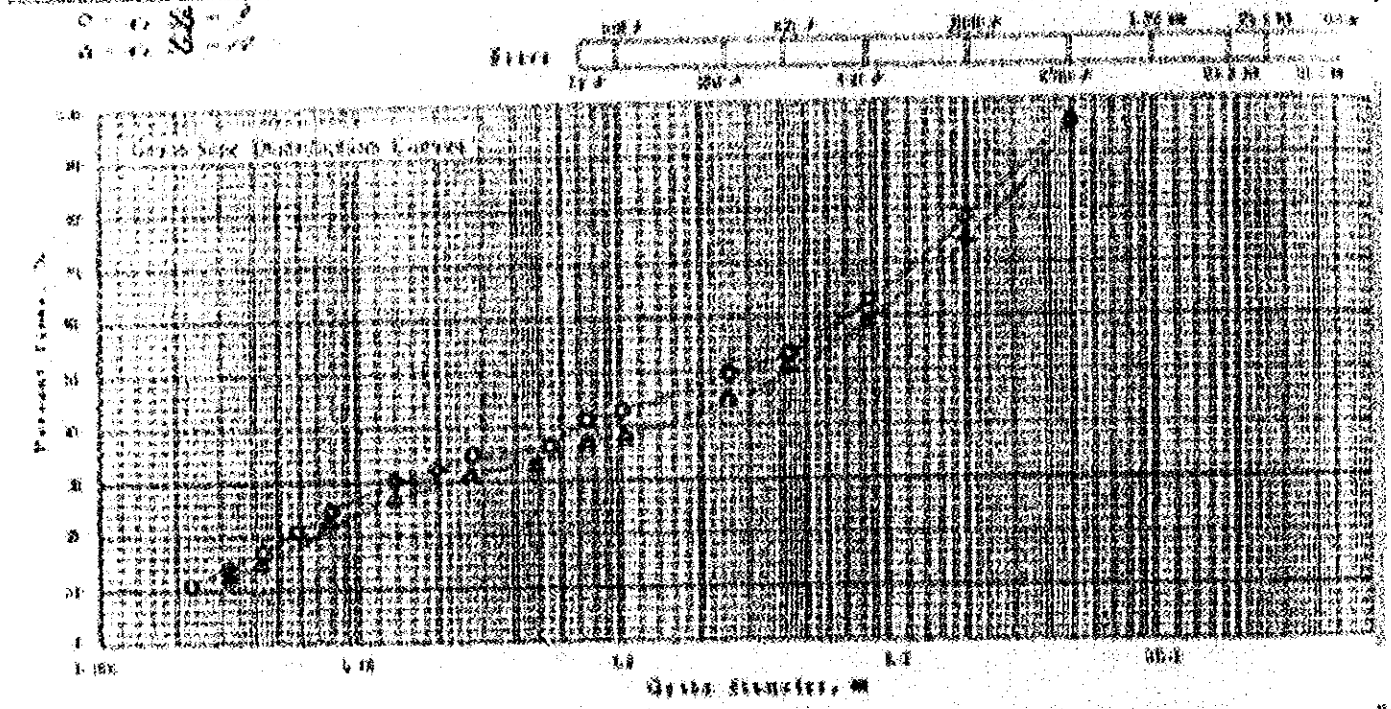
Tested by: SD Date of Testing: _____

Sample No. Depth: No. 33 - 2 m) Specific Gravity: 2.665

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth: No. 33 - 12 m) Specific Gravity: 2.662

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Gravel	Coarse Sand	Medium Sand	Fine Sand	Silt	Clay
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No., Depth	No. 33 - 2 m	No. 33 - 12 m	Sample No., Depth	No. 33 - 2 m	No. 33 - 12 m
Larger than [illegible] mm	[illegible] %	[illegible] %	Max. diam.	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 10%	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 30%	[illegible] mm	[illegible]
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Diam. at 50%	[illegible] mm	
[illegible] ~ [illegible] mm	[illegible] %	[illegible] %	Coefficient of uniformity		
Smaller than [illegible] mm	[illegible] %	[illegible] %	Coefficient of curvature		
Smaller than [illegible] mm	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			
[illegible] Sieve Passing	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land — Boring No. No. 3

Tested by: BD — Date of Testing:

Sample No. Depth : No. 53 – 11 — Specific Gravity

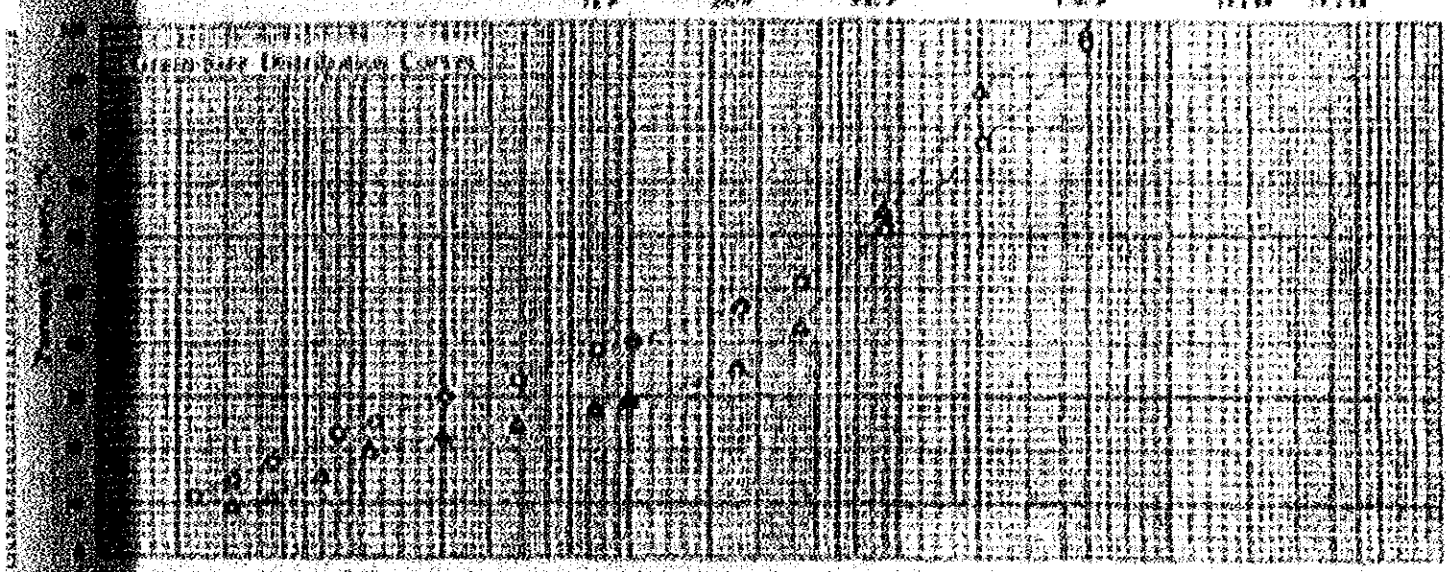
Diam. mm	1.68	0.841	0.420	0.177	0.074	0.074	0.050	0.031	0.020	0.015	0.005	0.074
% Finer						24.1	22.0	20.4	17.1	14.1	12.1	12.1
Diam. mm	0.0512	0.0365	0.0258	0.0183	0.0130	0.0092	0.0065	0.0047	0.0033	0.0023		
% Finer	10.1	9.1	8.1	7.1	6.1	5.1	4.1	3.1	2.1	1.1		

Sample No. Depth : No. 53 – 13 — Specific Gravity

Diam. mm	1.68	0.841	0.420	0.177	0.074	0.074	0.050	0.031	0.020	0.015	0.005	0.074
% Finer						22.1	21.1	20.2	18.1	15.5	14.4	12.5
Diam. mm	0.0512	0.0365	0.0258	0.0183	0.0130	0.0092	0.0065	0.0047	0.0033	0.0023		
% Finer	11.1	10.1	9.1	8.1	7.1	6.1	5.1	4.1	3.1	2.1		

○ No. 53 – 11
△ No. 53 – 13

Sieve



Soil	Clay	Silt	Sand	Gravel
%	4.0%	8.0%	87.0%	0.0%

Sample No. Depth	No. 53 – 11	No. 53 – 13	Sample No. Depth	No. 53 – 11	No. 53 – 13
	1.7 m	1.7 m		1.7 m	1.7 m
1.68 mm	4.0 %	1.0 %	Max. diam.	0.84 mm	0.84 mm
0.841	12.0 %	10.0 %	Diam. at 60%	0.42 mm	0.42 mm
0.420	14.0 %	14.0 %	Diam. at 30%	0.149 mm	0.14 mm
0.177 mm	20.0 %	18.0 %	Diam. at 10%	— mm	— mm
0.074 mm	24.0 %	22.0 %	Coefficient of uniformity		
Smaller than 0.074 mm	12.0 %	12.0 %	Coefficient of curvature		
Smaller than 0.050 mm	%	%			
0.031 mm Finer	%	%			
0.020 mm Finer	%	%			
0.015 mm Finer	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No. 3

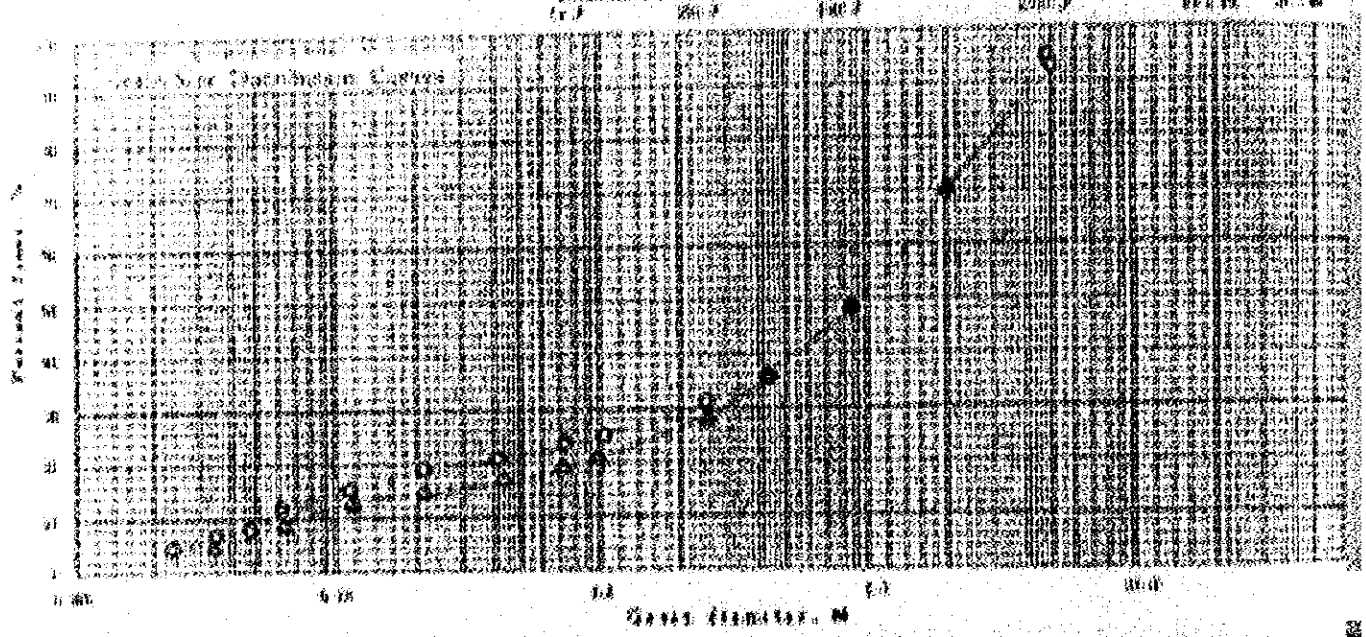
Tested by: [illegible] Date of Testing: [illegible]

Sample No. Depth: No. 33 ~ [illegible] m) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth: No. 33 ~ [illegible] n) Specific Gravity: [illegible]

Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diam. mm	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Soil Grade	Clay	Silt	Sand	Gravel
	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. Depth	No. 33 ~ [illegible]		No. 33 ~ [illegible]		Sample No. Depth	No. 33 ~ [illegible]		No. 33
	[illegible]	%	[illegible]	%		[illegible]	%	[illegible]
Larger than [illegible] mm	[illegible]	%	[illegible]	%	Max. diam.	[illegible]	mm	[illegible]
[illegible] ~ [illegible] mm	[illegible]	%	[illegible]	%	Diam. at 60%	[illegible]	mm	[illegible]
[illegible] ~ [illegible] mm	[illegible]	%	[illegible]	%	Diam. at 30%	[illegible]	mm	[illegible]
[illegible] ~ [illegible] mm	[illegible]	%	[illegible]	%	Diam. at 10%	[illegible]	mm	[illegible]
[illegible] ~ [illegible] mm	[illegible]	%	[illegible]	%	Coefficient of uniformity	[illegible]		[illegible]
Smaller than [illegible] mm	[illegible]	%	[illegible]	%	Coefficient of curvature	[illegible]		[illegible]
Smaller than [illegible] mm		%		%				
[illegible] Sieve Passing		%		%				
[illegible] Sieve Passing		%		%				
[illegible] Sieve Passing		%		%				

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No. No 3

Tested by: SD Date of Testing:

Sample No., Depth: No. 53 – 16 m) Specific Gravity Gs = 2.610

Diameter	3/8"	4	10	20	40	60	100	140	200	0.075	0.05	0.074
% Passing						22.0	22.4	55.1	41.0	34.2	32.1	26.4
Diameter	0.9525	0.4762	0.2381	0.0937	0.0476	0.0250	0.0149	0.0104	0.0074	0.0053	0.0038	
% Finer	100	100.0	100.0	100.0	100.0	77.8	77.6	44.9	41.0	34.2	26.4	

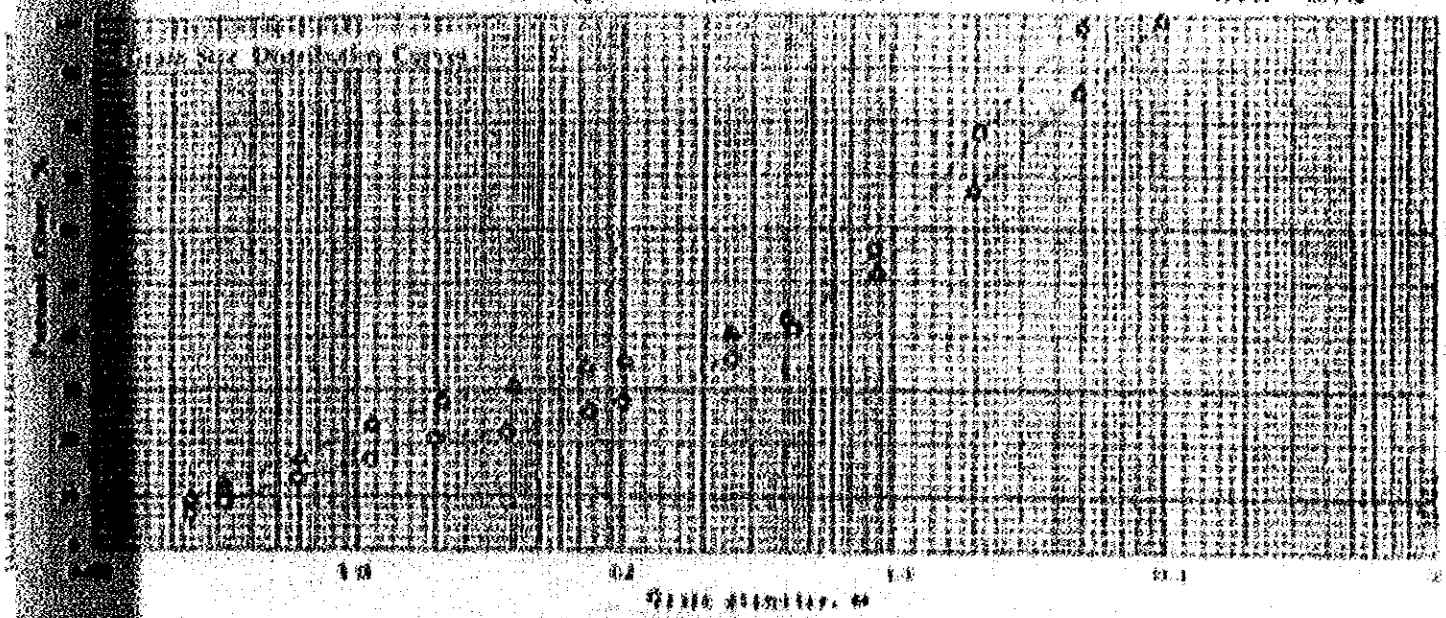
Sample No., Depth: No. 53 – 17 m) Specific Gravity Gs = 2.612

Diameter	3/8"	4	10	20	40	60	100	140	200	0.075	0.05	0.074
% Passing						30.2	28.2	66.2	50.7	42.1	40.3	28.4
Diameter	0.9525	0.4762	0.2381	0.0937	0.0476	0.0250	0.0149	0.0104	0.0074	0.0053	0.0038	
% Finer	100.0	100.0	100.0	100.0	100.0	69.8	69.6	33.8	49.3	40.4	28.4	

Curve No. 1: No. 53 – 16

Curve No. 2: No. 53 – 17

Sieve



Clay	Silt	Sand	Gravel
0.00	0.005	0.1	

Sample No., Depth	No. 53 – 16	No. 53 – 17	Sample No., Depth	No. 53 – 16	No. 53 – 17
	17.3 %	17.3 %		17.3 %	17.3 %
4.76 mm	66.0 %	60.0 %	Max. Diam.	0.25 mm	0.25 mm
2.00 mm	44.8 %	40.2 %	Diam. at 60%	0.11 mm	0.20 mm
0.84 mm	22.6 %	34.4 %	Diam. at 30%	0.04 mm	0.04 mm
0.42 mm	14.4 %	7.0 %	Diam. at 10%	0.0224 mm	0.0147 mm
0.149 mm	14.4 %	14.4 %	Coefficient of uniformity	5.0	5.0
0.074 mm	4.2 %	4.0 %	Coefficient of curvature	0.9	0.6
0.0149 mm	%	%			
0.0074 mm	%	%			
0.0037 mm	%	%			
0.0019 mm	%	%			
0.0009 mm	%	%			

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port

Location of Project: on land Boring No.: No. 3

Tested by: [illegible] Date of Testing: [illegible]

Sample No. / Depth: No. 33 – [illegible] Specific Gravity: [illegible]

Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

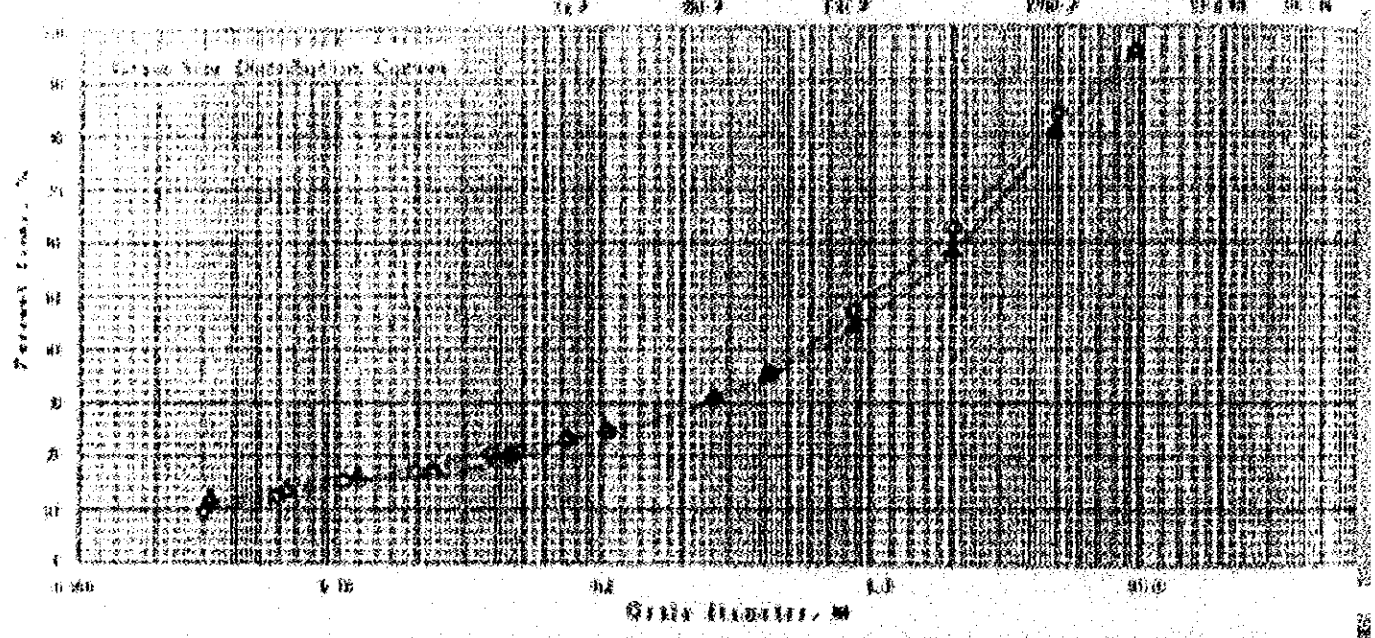
Sample No. / Depth: No. 33 – [illegible] Specific Gravity: [illegible]

Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sieve No.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
% Passing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

○ – at No. 33 – [illegible]

△ – at No. 33 – [illegible]

Sieve [illegible]



Gravel	Coarse	Sand	Medium	Sand	Fine	Silt	Clay
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sample No. / Depth	No. 33 – [illegible]		No. 33 – [illegible]		Sample No. / Depth	No. 33 – [illegible]		No. 33 – [illegible]
	[illegible]		[illegible]			[illegible]		
Larger than [illegible]	[illegible]	%	[illegible]	%	Max. diam.	[illegible]	mm	[illegible]
[illegible] ~ [illegible]	[illegible]	%	[illegible]	%	Diam. at 60%	[illegible]	mm	[illegible]
[illegible] ~ [illegible]	[illegible]	%	[illegible]	%	Diam. at 30%	[illegible]	mm	[illegible]
[illegible] ~ [illegible]	[illegible]	%	[illegible]	%	Diam. at 10%	–	mm	
[illegible] ~ [illegible]	[illegible]	%	[illegible]	%	Coefficient of uniformity			
Smaller than [illegible]	[illegible]	%	[illegible]	%	Coefficient of curvature			
Smaller than [illegible]		%		%				
[illegible] Sieve Passing		%		%				
[illegible] Sieve Passing		%		%				
[illegible] Sieve Passing		%		%				

GRAIN SIZE DISTRIBUTION

Project: The Natural Conditions Survey on the Development Project of the Industrial Port.

Location of Project: on land Boring No.: No. 3

Tested by: BD Date of Testing:

Sample No. Depth: No. 33 – 30 (%) Specific Gravity Gs = 2.69

Diameter	4.76	2.00	0.84	0.42	0.250	0.149	0.074	0.037	0.019	0.009	0.005	0.074
Passing						86.1	82.9	81.1	78.5	76.7	73.6	71.1
Diameter												
Passing												

Sample No. Depth: No. 33 – 21 (%) Specific Gravity Gs = 2.69

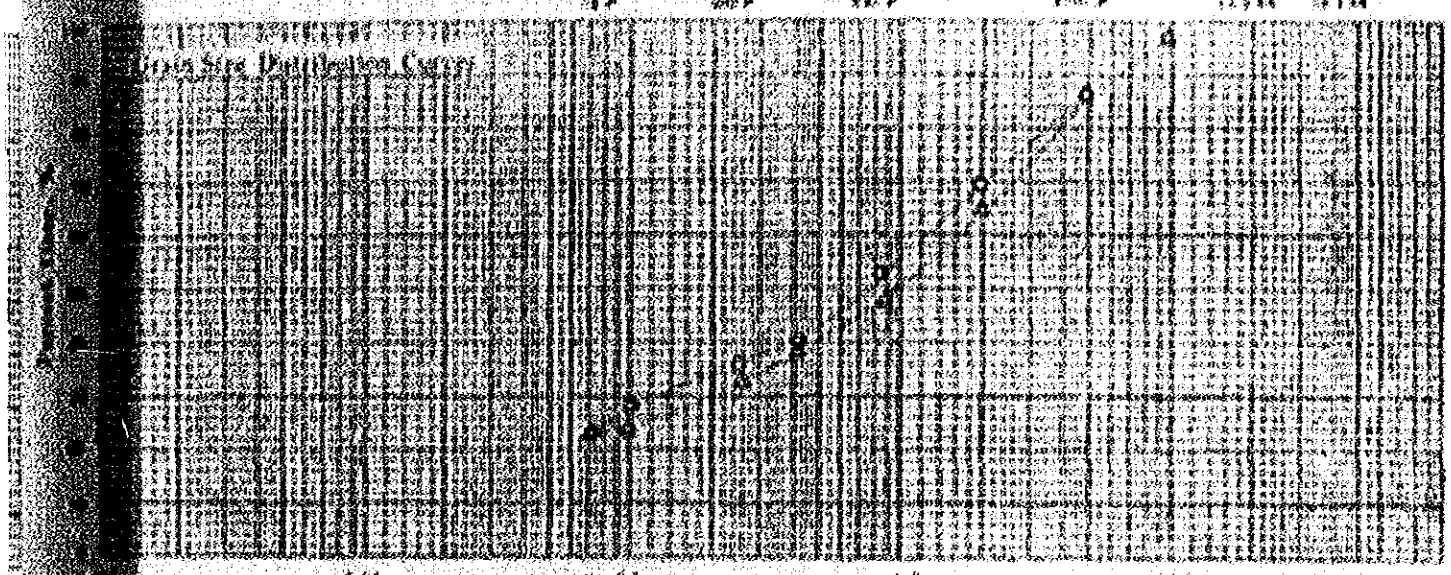
Diameter	4.76	2.00	0.84	0.42	0.250	0.149	0.074	0.037	0.019	0.009	0.005	0.074
Passing					99.1	95.1	88.1	82.5	79.5	76.8	74.5	72.1
Diameter												
Passing												

Gravel % 33 – 30

Sand % 33 – 21

Silt

Clay



Sample No., Depth	No. 33 – 30	No. 33 – 21	Sample No., Depth	No. 33 – 30	No. 33 – 21
	17.3 m	17.3 m		17.3 m	17.3 m
Gravel	0.0 %	0.0 %	Max. Diam.	2.36 mm	2.36 mm
Sand	28.9 %	16.9 %	Diam. at 60%	0.84 mm	0.84 mm
Silt	43.2 %	52.8 %	Diam. at 30%	0.42 mm	0.42 mm
Clay	28.9 %	30.3 %	Diam. at 10%	— mm	— mm
Passing 4.76mm	71.1 %	83.1 %	Coefficient of uniformity		
Passing 2.00mm	%	%	Coefficient of curvature		
Passing 0.84mm	%	%			
Passing 0.42mm	%	%			
Passing 0.250mm	%	%			
Passing 0.149mm	%	%			