SPECIFIC GRAVITY OF SOIL SOLIDS (G_s)

The Natural Conditions Survey on the

Project: Development Project of the Industrial Port Project No. _____

Location of project: off shore Bh No. No. 6

Tested by: _____ Date Testing: 25/2/83

Sample No./Depth of Sample						
Test no.	1	2	3	1	2	3
No. of pycnometer	14			34		
Wt. of pyc. + water + soil = W_{bws}	212.66			220.05		
Temperature °C	28°C			28°C		
Wt. of pyc. + water = W_{bw}	161.91			126.62		
Temp. Correction (a)	0.9921			0.9921		
Wt. of dish + dry soil						
Wt. of dish, g						
Wt. of dry soil = W_s	50.00			100.00		
$W_{bw} = W_{bws} + W_s - W_{bw}$						
$G_s = W_s / W_w$ (for 15°C)	2.620			2.623		
Average specific gravity (for 15°C)						

Sample No./Depth Sample						
Test no.	1	2	3	1	2	3
No. of pycnometer	21			44		
Wt. of pyc. + water + soil = W_{bws}	238.36			232.16		
Temperature °C	28°C			28°C		
Wt. of pyc. + water = W_{bw}	188.33			126.12		
Temp. Correction (a)	0.9921			0.9921		
Wt. of dish + dry soil						
Wt. of dish						
Wt. of dry soil = W_s	100.00			100.00		
$W_{bw} = W_{bws} + W_s - W_{bw}$						
$G_s = W_s / W_w$ (for 15°C)	2.623			2.625		
Average specific gravity (for 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

Project: The Natural Conditions Survey on the Development Project of the Industrial Port off shore Project no.

Location of project Test no. No 6

Tested by Date testing 25/2/83

Sample no./Depth of Sample	SS-6 (13.00 m - 13.45 m)			SS-7 (14.00 m - 14.45 m)		
Test no.	1	2	3	1	2	3
No. of pycnometer	64			61		
(W1) pycnometer + water + soil mass	211.43			210.49		
Temperature T	28°C			28°C		
(W2) pycnometer + water mass	202.90			202.00		
Temp. correction (a)	0.2221			0.2221		
(Ws) dish + dry soil						
(Wd) dish mass						
(Ws) dry soil mass	20.00			20.00		
Gs = Ws / (Ws + W1 - W2)						
Gs = Ws / (Ws + W1 - W2) (at 15°C)	2.624			2.626		
Average specific gravity (at 15°C)						

Sample no./Depth Sample	SS-8 (15.00 m - 15.45 m)			SS-9 (16.00 m - 16.45 m)		
Test no.	1	2	3	1	2	3
No. of pycnometer	29			8/1		
(W1) pycnometer + water + soil mass	216.42			216.25		
Temperature T	28°C			28°C		
(W2) pycnometer + water mass	202.82			202.36		
Temp. correction (a)	0.2221			0.2221		
(Ws) dish + dry soil						
(Wd) dish mass						
(Ws) dry soil mass	20.00			20.00		
Gs = Ws / (Ws + W1 - W2)						
Gs = Ws / (Ws + W1 - W2) (at 15°C)	2.624			2.626		
Average specific gravity (at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the

Project Development Project of the Industrial Port. Project No. _____

Location of project off shore Bh No. No 6

Tested by _____ Date Testing 25/2/82

Sample No./Depth of Sample	US-10	(18.00m~18.60m)		US-11	(19.0 m~)	
Test no.	1	2	3	1	2	
No. of pycnometer	21			18		
W1 Pyc. water+soil+W	210.68			218.03		
Temperature °C	28°C			28°C		
W2 Pyc + water W	443.22			454.5		
Temp. Correction(a)	0.9921			0.9921		
W1 evap. dish + dry soil						
W1 of evap. dish						
W1 of dry soil = W	25.00			28.00		
W= W1 + W2 - W3						
Gs = W/ W+ W2 - W3 (for 15°C)	2.684			2.682		
Average specific gravity (for 15°C)						

Sample No./Depth Sample	US-13	(19.00m~20.60m)		US-14	(19.00m~)	
Test no.	1	2	3	1	2	
No. of pycnometer	3B			1A		
W1 Pyc. water+soil+W	203.63			201.96		
Temperature °C	28°C			28°C		
W2 Pyc + water W	466.0			466.81		
Temp. Correction(a)	0.9921			0.9921		
W1 evap. dish + dry soil						
W1 of evap. dish						
W1 of dry soil = W	40.00			45.00		
W= W1 + W2 - W3						
Gs = W/ W+ W2 - W3 (for 15°C)	2.540			2.528		
Average specific gravity (for 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the
Project Development Project of the Industrial Port, Project no.
Location of project off shore Bh no. No 6
Tested by Date Testing 25/2/93

Bh.no./Depth of Sample	No.6			No.6		
Test no.	1	2	3	1	2	3
No. of pycnometer	21			21		
Wt. of pycnometer + water W_{bw}	218.96			218.62		
Temperature T	28°C			28°C		
Wt. of pycnometer + water W_w	426.09			426.32		
Gs correction (α)	0.9971			0.9971		
Wt. of oven dry soil						
Wt. of dish						
Wt. of soil + dish	20.00			20.00		
Wt. of Wbw + Wws						
Gs = W_s / (W_s + W_w − W_{bw})	2.573			2.616		
Average specific gravity (Gs)						

Bh.no./Depth of Sample	No.6			No.6		
Test no.	1	2	3	1	2	3
No. of pycnometer	44			54		
Wt. of pycnometer + water W_{bw}	218.82			218.15		
Temperature T	28°C			28°C		
Wt. of pycnometer + water W_w	426.92			426.32		
Gs correction (α)	0.9971			0.9971		
Wt. of oven dry soil						
Wt. of dish						
Wt. of soil + dish	20.00			20.00		
Wt. of Wbw + Wws						
Gs = W_s / (W_s + W_w − W_{bw})	2.577			2.616		
Average specific gravity (Gs)						

SPECIFIC GRAVITY OF SOIL SOLIDS(Gs)

Project: The Natural Conditions Survey on the Development Project of the Industrial Port. Project no.

Location of source: Gulf shore area No. 6

Tested by: Date testing: 24/2/93

Sample No./Depth of Sample	BH-1/	(2.00m-2.45m)		BH-2/	(2.00m-2.45m)	
Test no.	1	2	3	1	2	3
No. of pycnometer	84			24		
W1,Pycnometer+soil+water(g)	702.85			703.82		
Temperature T	24°C			24°C		
W2,Pycnometer+water(g)	623.00			622.66		
Temp. Correction(a)	0.9991			0.9991		
W1,evap.dish+dry soil						
W2,of evap.dish						
W3,of dry soil=W1-W2	25.00			25.00		
Dry Wt + Pan1 (g)						
Gs=W3/(W3+W4-W5)	2.612			2.622		
Average specific gravity(Gs)						

Sample No./Depth Sample	BH-1/	(2.00m-2.45m)			(m~	
Test no.	1	2	3	1	2	3
No. of pycnometer	84					
W1,Pyc.+water+soil=W1(g)	702.01					
Temperature T	24°C					
W2,Pyc+water=W2(g)	623.26					
Temp. Correction(a)	0.9991					
W1,evap.dish+dry soil						
W2,of evap.dish						
W3,of dry soil=W1-W2	25.00					
Dry Wt + Pan1 Wt=W4						
Gs=W3/(W3+W4-W5)	2.602					
Average specific gravity(Gs)						

SPECIFIC GRAVITY OF SOIL SOLIDS (G_s)

The Natural Conditions Survey on the Development Project of the Industrial Port, Project No. _____

Location of Project off shore Bore No. No 7

Tested by _____ Date Testing 30/9/82

Sample No. Depth of Sample	S5-1	(1.00 m-1.45 m)		S5-2	(2.00 m-2.45 m)	
Test No.	1	2	3	1	2	3
No. of pycnometer	14			21		
Mass of pycnometer + water M_2 (g)	214.67			215.51		
Temperature °C	28°C			28°C		
Mass of pycnometer + water + soil M_1 (g)	661.21			676.09		
G_s (Correction(a))	0.9991			0.9991		
Mass of dish + dry soil						
Mass of dish						
Mass of soil M_s (g)	25.00			30.00		
Mass of the water						
G_s (M_s / (M_s + M_2 - M_1))	2.630			2.667		
Average specific gravity (G_s at 15°C)						

Sample No. Depth Sample	S5-4	(3.00 m-3.45 m)		S5-5	(4.00 m-4.45 m)	
Test No.	1	2	3	1	2	3
No. of pycnometer	34			41		
Mass of pycnometer + water M_2 (g)	216.33			214.45		
Temperature °C	28°C			28°C		
Mass of pycnometer + water + soil M_1 (g)	663.33			676.12		
G_s (Correction(a))	0.9991			0.9991		
Mass of dish + dry soil						
Mass of dish						
Mass of soil M_s (g)	25.00			28.00		
Mass of water						
G_s (M_s / (M_s + M_2 - M_1))	2.642			2.632		
Average specific gravity (G_s at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (G_s)

This Natural Conditions Survey on the
Project Development Project of the Industrial Port, Project No. _____
off shore
Location of Project _____ Bore No. No. 7

Tested by _____ Date Testing 30/12/04

Sample No./Depth of Sample	B5-4			B5-7		
Test No.	1	2	3	1	2	
No. of Pycnometer	21			21		
W1 Pyc.+water+soil at T1	212.62			212.62		
Temperature T1	28°C			28°C		
W2 Pyc.+water at T2	644.23			638.88		
Temp. Correction (Ct)	0.9991			0.9991		
W1 of oven dried soil						
W1 of pan						
W1 of dry soil + Wg	20.00			20.00		
Ww= W1+W2-W1+Wpan						
$G_s = W_s / W_w (T_1) \times C_t$	2.622			2.631		
Average specific gravity (at 15°C)						

Sample No./Depth of Sample	B5-8			B5-9		
Test No.	1	2	3	1	2	
No. of pycnometer	20			21		
W1 Pyc.+water+soil at T1	233.16			234.04		
Temperature T1	28°C			28°C		
W2 Pyc.+water at T2	644.84			642.16		
Temp. Correction (Ct)	0.9991			0.9991		
W1 of oven dried soil						
W1 of pan						
W1 of dry soil + Wg	20.00			20.00		
Ww= W1+W2-W1+Wpan						
$G_s = W_s / W_w (T_1) \times C_t$	2.622			2.630		
Average specific gravity (at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the
Project: Development Project of the Industrial Port Project no.

Location of project: off shore Bh no.: No 7

Tested by: Date tested: 20/2/94

Sample No./Depth of Sample						
Test No.	1	2	3	1	2	3
Pyknometer No.	1B			2B		
Mass pyknometer + soil + water (M2)	236.27			232.65		
Temperature °C	30°C			30°C		
Mass pyknometer + water (M1)	624.5			616.6		
Temperature correction	0.9971			0.9971		
Mass of dish + dry soil						
Mass of dish						
Mass of dry soil (Ms)	100.00			100.00		
Mass of water (Mw = M2 - Ms)						
Mass pyknometer + water (M1)	2.675			2.675		
Specific gravity (for 15°C)						

Sample No./Depth Sample						
Test No.	1	2	3	1	2	3
Pyknometer No.	1A			2A		
Mass pyknometer + soil + water (M2)	232.21			232.42		
Temperature °C	30°C			30°C		
Mass pyknometer + water (M1)	624.21			626.02		
Temperature correction	0.9971			0.9971		
Mass of dish + dry soil						
Mass of dish						
Mass of dry soil (Ms)	98.00			100.00		
Mass of water (Mw = M2 - Ms)						
Mass pyknometer + water (M1)	2.671			2.672		
Specific gravity (for 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Condition Survey on the

Project: Development Project of the Industrial Port, Project no.

Location of project: off shore Bh no.: No. 7

Tested by: Date testing: 20/12/00

Sample No./Depth of Sample						
Test no.	1	2	3	1	2	
No. of pycnometer	24			44		
Mass of pycnometer + water at 20°C, M_{bw}	244.11			244.08		
Temperature °C	28°C			28°C		
Mass of pycnometer + water at T°C, M_w	442.33			442.42		
Temp. Correction (α)	0.9971			0.9971		
Mass of pycnometer + dry soil						
Mass of evap. dish						
Mass of dry soil = M_s	65.00			65.00		
Mass of pycnometer + water + soil						
$G_s = (M_s \times \alpha)/(M_s + M_w - M_{bw})$	2.632			2.632		
Average specific gravity (at 15°C)						

Sample No./Depth of Sample						
Test no.	1	2	3	1	2	
No. of pycnometer	24			44		
Mass of pycnometer + water at 20°C, M_{bw}	244.06			244.04		
Temperature °C	28°C			28°C		
Mass of pycnometer + water at T°C, M_w	442.32			442.40		
Temp. Correction (α)	0.9971			0.9971		
Mass of pycnometer + dry soil						
Mass of evap. dish						
Mass of dry soil = M_s	100.00			100.00		
Mass of pycnometer + water + soil						
$G_s = (M_s \times \alpha)/(M_s + M_w - M_{bw})$ (for 15°C)	2.634			2.632		
Average specific gravity (at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the Development Project of the Industrial Port Project No.

Location of project off shore Bh No. No 7

Tested by Date Tested 20/2/80

Sample No./Depth of Sample	5S-2D	10S-4D		2S-1	4S-3	
Test No.	1	2	3	1	2	3
No. of Specimen	24			24		
Pycnometer + water + soil mass W_bws	232.23			232.45		
Temperature T	30°C			30°C		
Pycnometer + water mass W_bw	66.04			120.36		
Gs (Correction)	0.2221			0.2221		
Dish No.						
Wt. of dish + dry soil						
Wt. of dish						
Wt. of soil solids W_s	20.00			25.00		
Wt. of water W_w						
Gs (at 15°C)	2.603			2.622		
Average specific gravity (at 15°C)						

Sample No./Depth Sample	3S-2D	5S-3D		3S-1	5S-3	
Test No.	1	2	3	1	2	3
No. of pycnometer	21			18		
Pycnometer + water + soil mass W_bws	232.44			232.52		
Temperature T	30°C			30°C		
Pycnometer + water mass W_bw	663.22			670.5		
Gs (Correction)	0.2221			0.2221		
Dish No.						
Wt. of dish + dry soil						
Wt. of dish						
Wt. of soil solids W_s	20.00			20.00		
Wt. of water W_w						
Gs (at 15°C)	2.611			2.624		
Average specific gravity (at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the
[illegible] Development Project of the Industrial Port, Project No.
off shore Bore No. No. 7

Location of Project

Tested by Date testing 30/9/93

Sample No.(Upper Sample)					
Test No.	1	2	3	1	2
No. of pycnometer					
W1 Pyc.+water+soil+W4 gm					
Temperature °C					
W2 Pyc.+water+W4 gm					
Spec. Gravity(Gs)					
Average Gs					
W3 of dish + dry soil					
W4 of dish gm					
W4 of dry soil gm					
Gs = W4 / (W4 + W2 - W1)					
Average specific gravity(for HK)					

Sample No.(Lower Sample)					
Test No.	1	2	3	1	2
No. of pycnometer					
W1 Pyc.+water+soil+W4 gm					
Temperature °C					
W2 Pyc.+water+W4 gm					
Spec. Gravity(Gs)					
W3 of dish + dry soil					
W4 of dish gm					
W4 of dry soil gm					
Gs = W4 / (W4 + W2 - W1)					
Average specific gravity(for HK)					

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the Development Project of the Industrial Port, Project No.

Location of project: off shore Test No.: No 8

Tested by: Date Tested: 6/12/92

Boring No., Depth of Sample	SW-1			SW-3		
Item	1	2	3	1	2	3
No. of pycnometer	11			31		
Wt. of pycnometer + water (W_bw)						
Temperature °C	25°C			25°C		
Wt. of pycnometer + water (W_bw)	662.91			663.33		
Gw (at temperature)	0.9971			0.9971		
Wt. of oven dry soil	208.18			216.07		
Wt. of pycnometer, dish						
Wt. of pycnometer + soil (W_bws)	754.68			754.80		
Wt. of pycnometer + water (W_bw)						
Gs (at T°C)	2.482			2.486		
Gs (specific gravity) (for 15°C)						

Boring No., Depth of Sample	SW-4			SW-5		
Item	1	2	3	1	2	3
No. of pycnometer	44			54		
Wt. of pycnometer + water (W_bw)						
Temperature °C	25°C			25°C		
Wt. of pycnometer + water (W_bw)	670.62			660.33		
Gw (at temperature)	0.9971			0.9971		
Wt. of oven dry soil	203.38			215.30		
Wt. of pycnometer, dish						
Wt. of pycnometer + soil (W_bws)	754.00			754.60		
Wt. of pycnometer + water (W_bw)						
Gs (at T°C)	2.502			2.492		
Gs (specific gravity) (for 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS (Gs)

The Natural Conditions Survey on the
Project Development Project of the Industrial Port, Project No.

Location of project off shore Bore No. No 8

Tested by Date Testing 8/12/84

Sample No. (Depth of Sample)	S-1 (0 ~ 6)			S-2 (6.00 ~ 10.45m)		
Test No.	1	2	3	1	2	3
No. of Specimen	01			21		
Wt. of Pycnometer						
Temperature °C	20°C			20°C		
Wt. of Pycnometer + Water	622.60			622.04		
Corr. Coefficient (K)	0.9979			0.9971		
Wt. of Pycnometer + Dry Soil	219.07			219.44		
Wt. of Dry Soil = W_s	25.00			25.00		
$W_w = W_{bw} - W_{bws}$						
$G_s = W_s / W_w$ (for 15°C)	2.634			2.622		
Average Specific Gravity (for 15°C)						

Sample No. (Depth of Sample)	S-3 (6.00 ~ 10.45m)			S-2 (6.00 ~ 10.45m)		
Test No.	1	2	3	1	2	3
No. of Specimen	01			21		
Wt. of Pycnometer						
Temperature °C	20°C			20°C		
Wt. of Pycnometer + Water	622.34			622.22		
Corr. Coefficient (K)	0.9971			0.9971		
Wt. of Pycnometer + Dry Soil	238.21			216.64		
Wt. of Dry Soil						
Wt. of Dry Soil = W_s	25.00			25.00		
$W_w = W_{bw} - W_{bws}$						
$G_s = W_s / W_w$ (for 15°C)	2.626			2.622		
Average Specific Gravity (for 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS(Gs)

Project: The Natural Conditions Survey on the Development Project of the Industrial Port, Project No.

Location of project: off shore Bor ing No. No. 8

Tested by: Date tested: 4/10/83

Sample No./Depth of Sample						
Test No.	1	2	3	1	2	3
No. of pycnometer	18			18		
Mass of pycnometer + water (g)						
Temperature (°C)	24°C			24°C		
Mass of pycnometer + water (g)	624.5			624.5		
Density of water (g/ml)	0.9971			0.9971		
Mass of pycnometer + dry soil	220.04			220.36		
Mass of empty pycnometer						
Mass of dry soil = A1	25.00			25.00		
Mass of flask + water						
Mass of flask + water (at 15°C)	3.862			3.862		
Specific gravity (at 15°C)						

Sample No./Depth of Sample						
Test No.	1	2	3	1	2	3
No. of pycnometer	24			24		
Mass of pycnometer + water (g)						
Temperature (°C)	24°C			24°C		
Mass of pycnometer + water (g)	624.21			624.33		
Density of water (g/ml)	0.9971			0.9971		
Mass of pycnometer + dry soil	249.34			249.74		
Mass of empty pycnometer						
Mass of dry soil = A1	25.00			25.00		
Mass of flask + water						
Mass of flask + water (at 15°C)	3.862			3.862		
Specific gravity (at 15°C)						

SPECIFIC GRAVITY OF SOIL SOLIDS(Gs)

The Natural Conditions Survey on the

Project Development Project of the Industrial Port, Phase II,

off shore

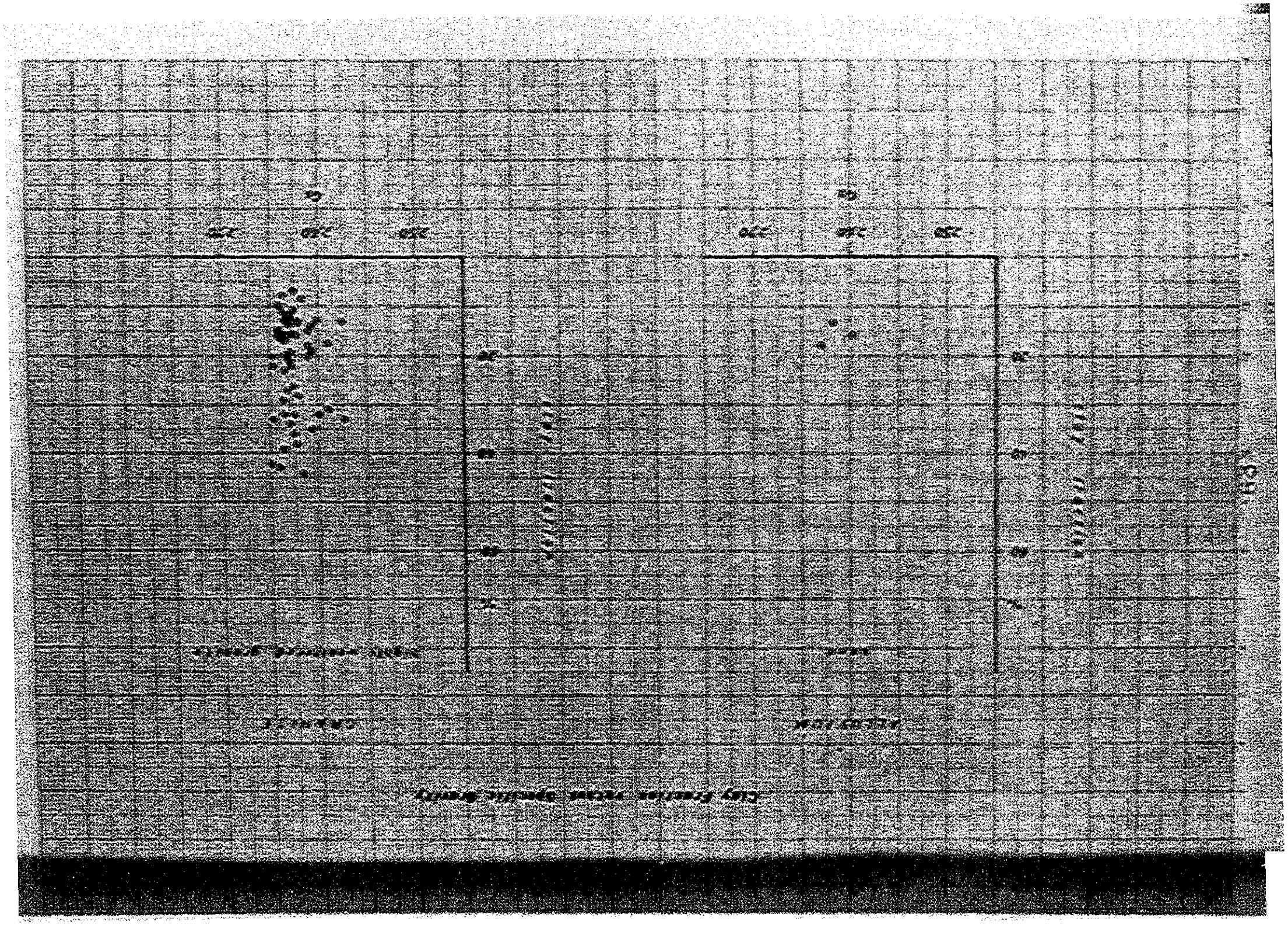
Boring No. No. 8

Tested by Date Testing 6/12/81

Sample No./Depth of Sample	[illegible]	[illegible]		[illegible]	[illegible]	
Test No.	1	2	3	1	2	
No. of pycnometer	49			51		
Wt.of pycnometer+soil+water (g)						
Temperature (°C)	24°C			24°C		
Wt.of pycnometer+water (g)	620.87			622.38		
Temp. Correction(a)	0.9971			0.9971		
Wt.of soil solids (g)	212.28			208.23		
Wt.of dry soil (g)						
Wt.of pycnometer (g)	20.66			20.66		
Wt. of water in soil (g)						
Gs = Ws / Ws+Ww-Wbw (for 15°C)	2.524			2.464		
Average specific gravity(for 15°C)						

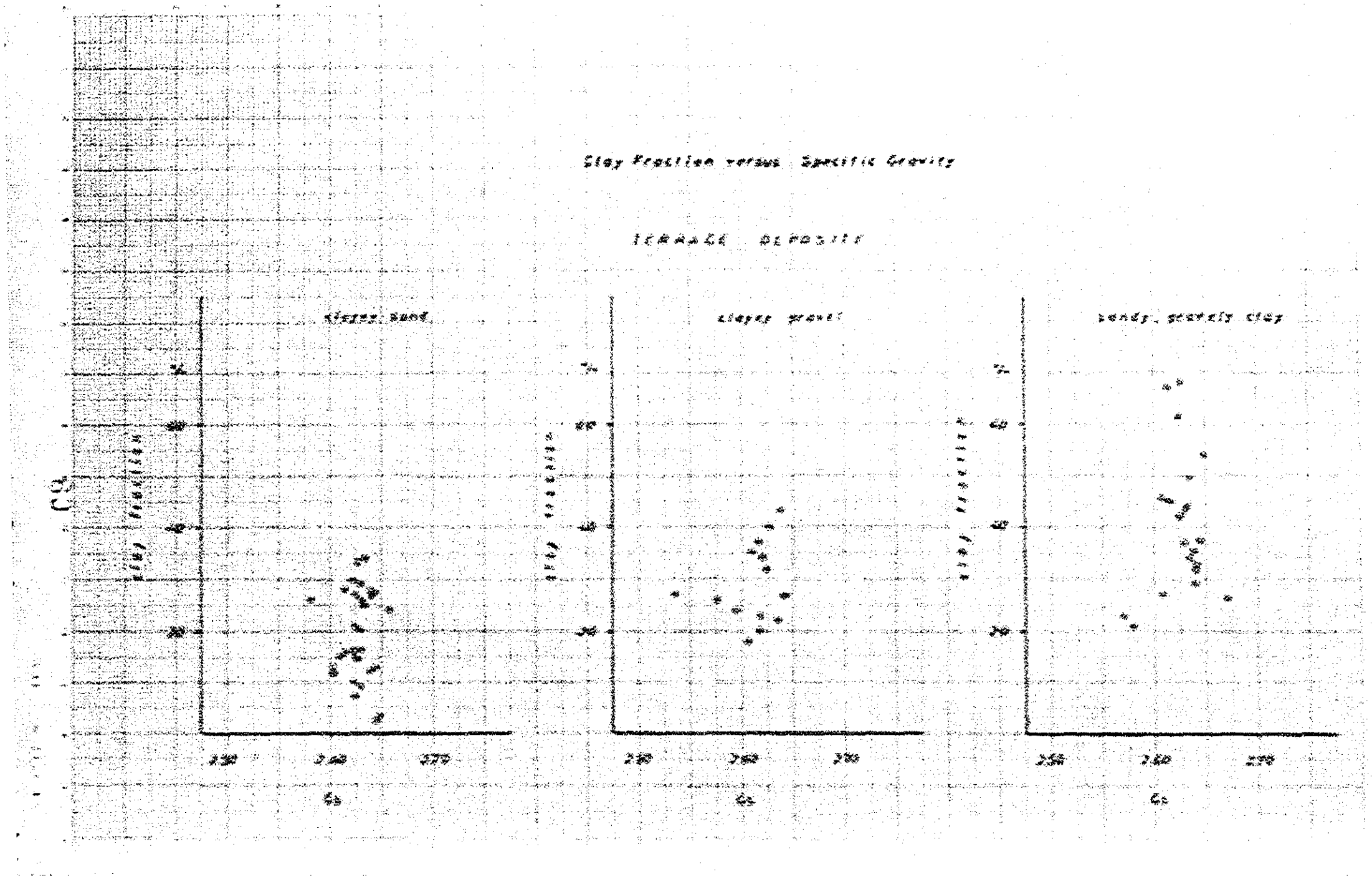
Sample No./Depth of Sample	(mm ~ mm)			(mm ~		
Test No.	1	2	3	1	2	
No. of pycnometer						
Wt.of pycnometer+soil+water (g)						
Temperature (°C)						
Wt.of pycnometer+water (g)						
Temp. Correction(a)						
Wt.of oven-dried soil						
Wt.of pycnometer						
Wt.of dry soil (g)						
Ww= Wt+Wbw-Wbws						
Gs = Ws / Ws+Ww-Wbw (for 15°C)						
Average specific gravity(for 15°C)						

(b) Clay Fraction Vs. Specific Gravity

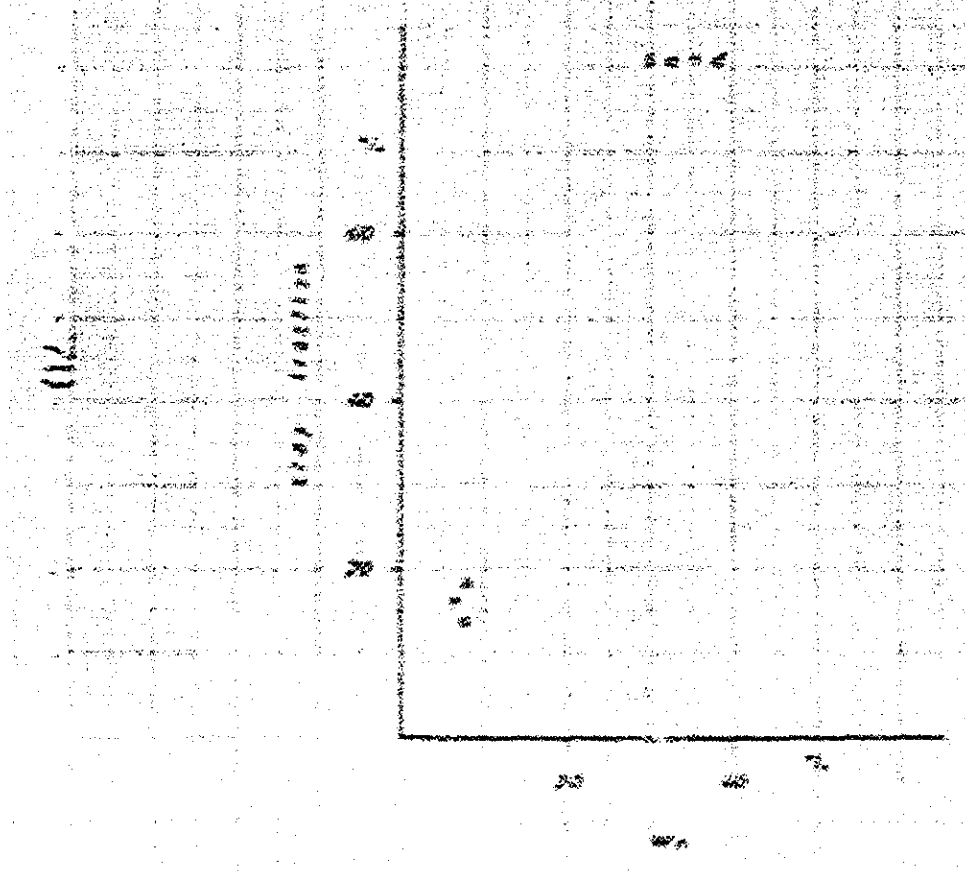


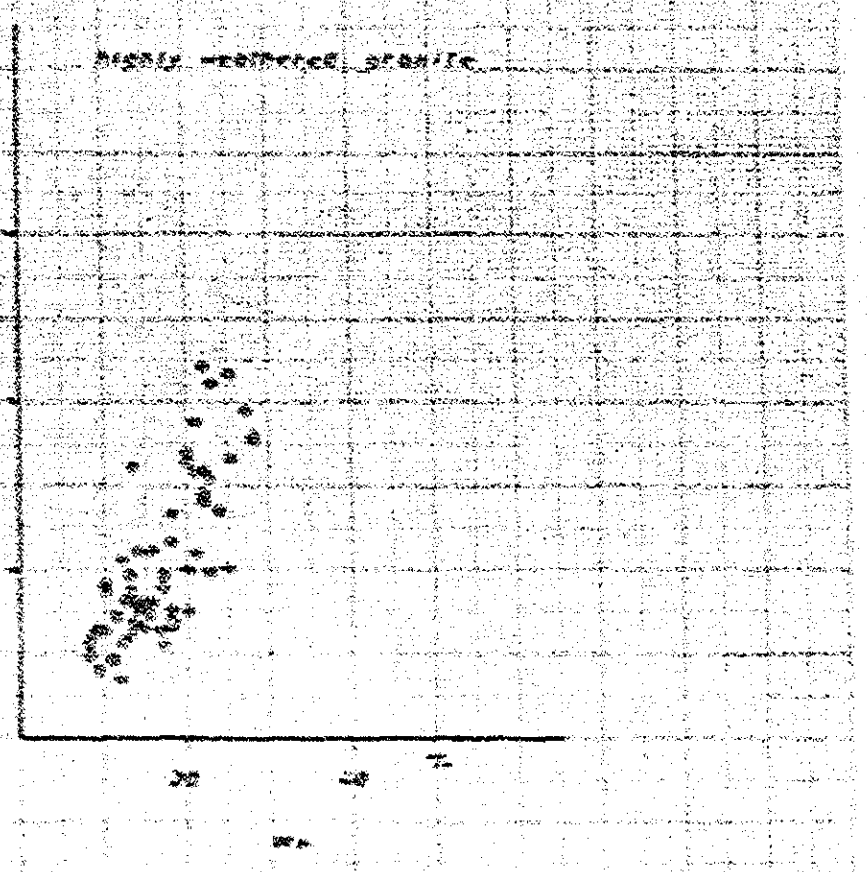
Clay Fraction versus Specific Gravity

Terrace Deposits



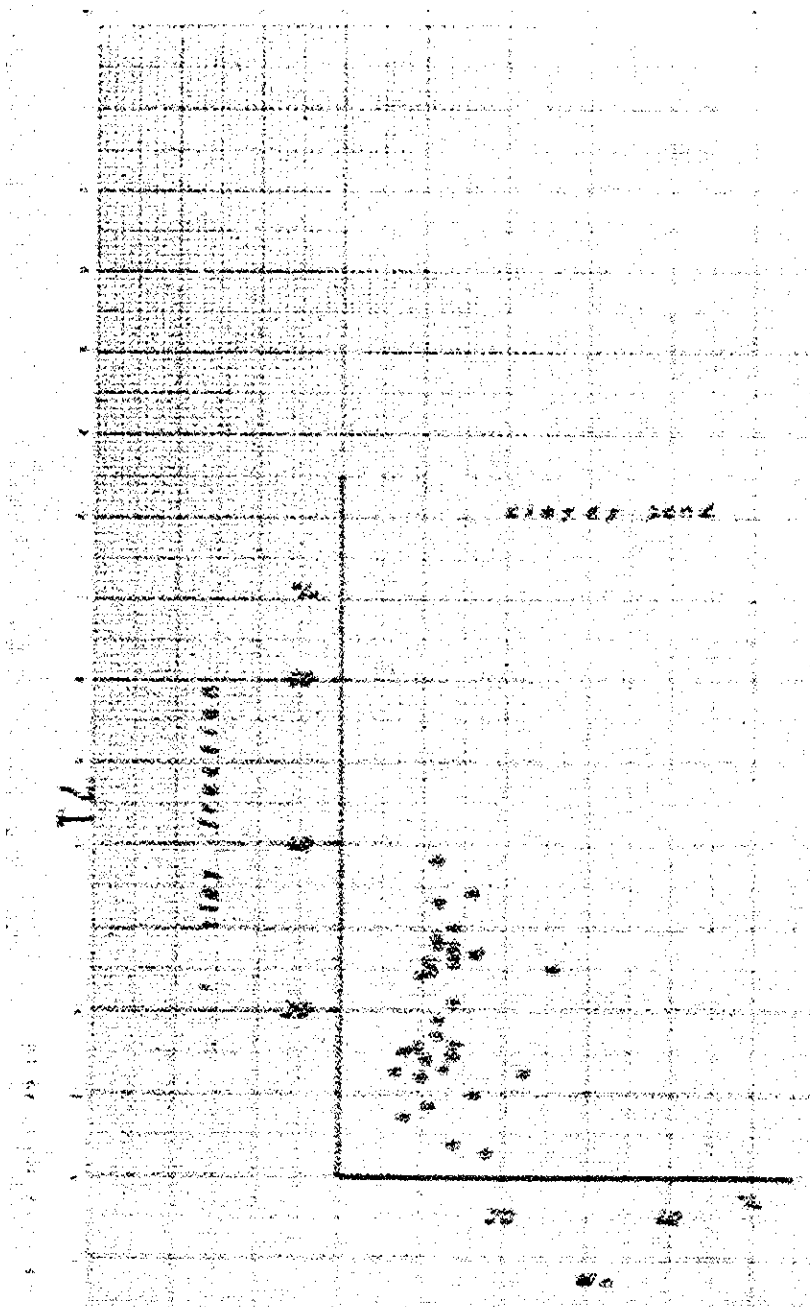
Clay Fraction versus Natural Water Content

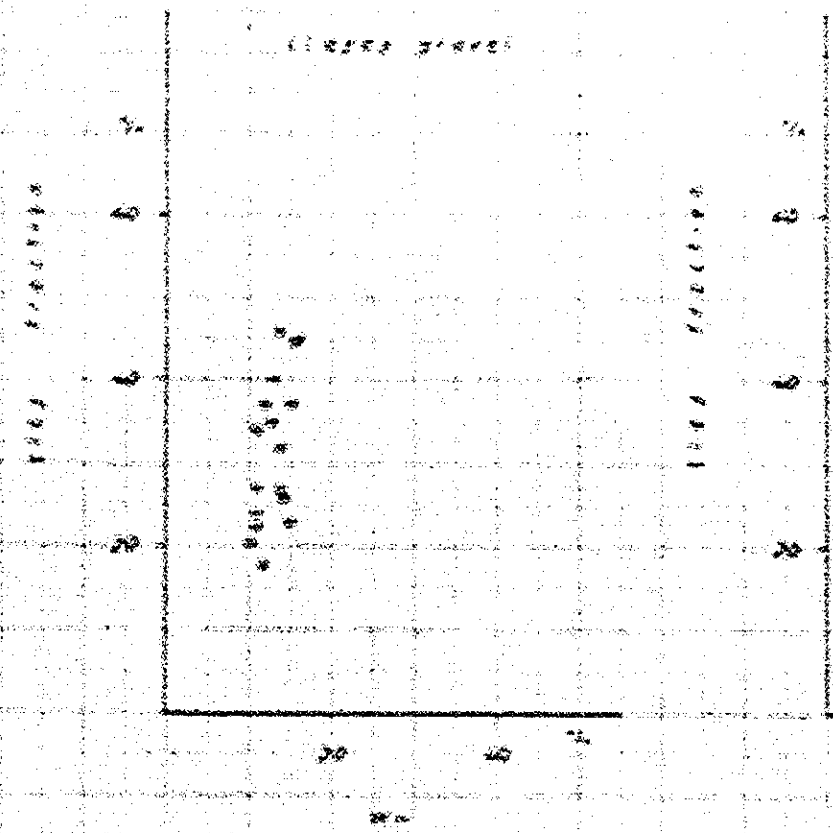


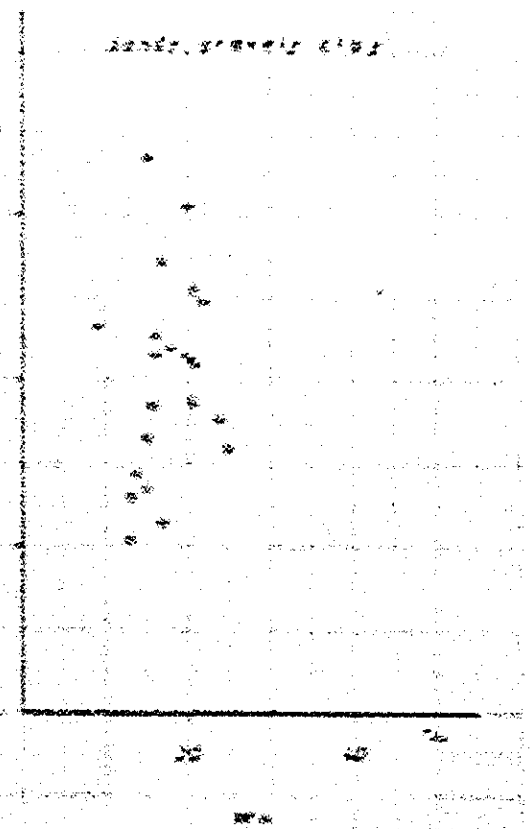


Clay Fraction versus Natural Water Content

TERRACE DEPOSITS







3. Valor Contanto

WATER COUNCIL PERFORMA (01)

The Natural Conditions Survey on the
Offset Development Project of the Industrial Port, etc. for
on land

No. 1

Location of Project: _____ Boring No. _____

Tested by: _____ Date of Testing: _____

Sample	No. 1			No. 2		
Sample No.(Depth)	M-6			TP3-4		
Natural Soil						
Clay Soil						
Silt Soil						
Soil						
Specific G	2.7			2.6		
	Average				Average	

Sample	No. 3			No. 4		
Sample No.(Depth)	A5-12			RX-12		
Natural Soil						
Clay Soil						
Silt Soil						
Soil						
Specific G	2.6			2.6		
	Average				Average	

Sample	No. 5			No. 6		
Sample No.(Depth)	MA-24			C-24		
Natural Soil						
Clay Soil						
Silt Soil						
Soil						
Specific G	2.6			2.6		
	Average				Average	

WATER CONTENT TEST REPORT

The Natural Condition Survey on the Development Project of Cix Industrial Park

Project No.

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

Tested by: Date of Testing:

Sample No						
Depth of sample	No 2	2.00 m~2.45 m		No 3	3.00 m~3.45 m	
Container no. (can)	M1-103			R-14		
Wt. of can + wet soil	122.36			220.82		
Wt. of can + dry soil	99.19			206.52		
Wt. of can	15.23			22.80		
Wt. of dry soil	83.96			183.72		
Wt. of water	38.45			14.30		
Water content, w %	45.8			7.8		
Average		%			%	

Sample No						
Depth of sample	No 6	6.00 m~6.45 m		No 16	16.00 m~16.45 m	
Container no. (can)	T-30			R-10		
Wt. of can + wet soil	154.54			186.26		
Wt. of can + dry soil	126.33			153.93		
Wt. of can	12.08			12.33		
Wt. of dry soil	102.15			140.6		
Wt. of water	28.21			32.33		
Water content, w %	27.6			22.2		
Average		%			%	

Sample No						
Depth of sample	No 11	11.00 m~11.45 m		23-13	23.00 m~23.45 m	
Container no. (can)	R-14			D-66		
Wt. of can + wet soil	145.22			145.14		
Wt. of can + dry soil	122.08			140.21		
Wt. of can	15.22			15.23		
Wt. of dry soil	92.08			125.28		
Wt. of water	23.32			4.93		
Water content, w %	25.4			3.9		
Average		%			%	

WATER CONTENT OF ALLUVIAL SOIL

The Natural Conditions Survey on the

Project Development Project of the Industrial Park No.

on land

Location of Project boring No. No 1

Tested by date of testing

WATER CONTENT DETERMINATION

Project The Natural Conditions Survey on the Development Project of the Industrial Port No. (s)

Location of Project on land Boring No. № 1

Tested by Date of testing

Sample No. Depth of sample	No 19 19.00 m ~ 19.45 m			No 20 20.00 m ~ 20		
Container no. (cup)	T-48			S-14		
Wt. of cup+wet soil	[illegible]			113.73		
Wt. of cup+dry soil	[illegible]			102.27		
Wt. of cup	10.91			10.44		
Wt. of dry soil	26.72			91.83		
Wt. of water	14.24			11.46		
Water content, w %	53.3			12.5		

Average % Average

Sample No. Depth of sample	No	m ~	m	No	m ~	
Container no. (cup)						
Wt. of cup+wet soil						
Wt. of cup+dry soil						
Wt. of cup						
Wt. of dry soil						
Wt. of water						
Water content, w %						

Average % Average

Sample No. Depth of sample	No	m ~	m		m ~	
Container no. (cup)						
Wt. of cup+wet soil						
Wt. of cup+dry soil						
Wt. of cup						
Wt. of dry soil						
Wt. of water						
Water content, w %						

Average %() Average

WATER CONTENT DETERMINATION

This Natural Conditions Survey on the

Project Development Project of the Industrial Port, No. ____

Location of Project on land Boring No. No 2

Tested by ____ Date of testing ____

Depth of sample	No. 1	1.00 m ~ 1.45 m		No. 2	3.00 m ~ 3.45 m	
Container no. (gm)	R-57			T-12		
Wt. of container and soil	284.26			455.47		
Wt. of container + soil	273.30			393.71		
Wt. of container	72.85			64.25		
Wt. of dry soil	200.45			329.46		
Wt. of water	10.96			61.76		
Water content, w %	5.46			18.7		
Average ____ %				Average ____ %		

Depth of sample	No. 3	3.00 m ~ 3.45 m		No. 4	4.00 m ~ 4.45 m	
Container no. (gm)	T-63			R-47		
Wt. of container and soil	329.03			327.03		
Wt. of container + soil	294.26			284.22		
Wt. of container	58.61			59.21		
Wt. of dry soil	235.65			225.01		
Wt. of water	34.77			42.81		
Water content, w %	14.8			19.0		
Average ____ %				Average ____ %		

Depth of sample	No. 5	5.00 m ~ 5.45 m		No. 6	6.00 m ~ 6.45 m	
Container no. (gm)	T-52			M-1		
Wt. of container and soil	425.62			369.84		
Wt. of container + soil	365.69			318.20		
Wt. of container	72.38			72.36		
Wt. of dry soil	293.31			245.84		
Wt. of water	59.93			51.64		
Water content, w %	20.4			21.0		
Average ____ %				Average ____ %		

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the Development Project of the Industrial Port, No. 2

Project: on land

Location of Project: Boring No. No 2

Tested by: Date of Testing:

Sample No. / Depth of sample	No 2	2.00 ~ 2.45 m		No 3	3.00 ~ 3.45 m	
Container No. (cm)	7-32			T-63		
Wt. of container + wet soil	422.48			445.24		
Wt. of container + dry soil	396.13			399.21		
Wt. of cup	79.03			79.09		
Wt. of wet soil	343.45			366.03		
Wt. of dry soil	317.10			320.12		
Wt. of water	26.35			45.82		
Water content, w %	8.3			14.3		
Average		8			14	

Sample No. / Depth of sample	No 9	9.00 ~ 9.45 m		No 10	10.00 ~ 10.45 m	
Container No. (cm)	AH-8			K-36		
Wt. of container + wet soil	411.23			403.21		
Wt. of container + dry soil	354.26			346.42		
Wt. of cup	42.00			42.00		
Wt. of dry soil	312.26			304.42		
Wt. of water	56.96			58.79		
Water content, w %	18.2			19.3		
Average		18			19	

Sample No. / Depth of sample	No 11	11.00 ~ 11.45 m		13.00 ~ 13.45 m		
Container No. (cm)	AH-45			AH-43		
Wt. of container + wet soil	430.00			439.61		
Wt. of container + dry soil	382.64			382.45		
Wt. of cup	42.58			42.30		
Wt. of dry soil	340.06			340.15		
Wt. of water	47.36			57.16		
Water content, w %	13.9			16.8		
Average		14			17	

WATER CONTENT DETERMINATION

This Natural Conditions Survey on the

Project Development Project of the Industrial Port, Job No. _____

on land

Location of Project _____ Boring No. No 2

Tested by _____ Date of Testing _____

Sample No. / Depth of Sample	No 13	13.00 ~ 13.45 m			No 14	14.00 ~ 14.45 m	
Container No. (gm)	M-36				T-28		
Wt. of Container + Wet Soil	461.84				443.67		
Wt. of Container + Dry Soil	438.23				424.07		
Wt. of Water	23.61				19.60		
Wt. of Container	99.00				98.41		
Wt. of Dry Soil	339.23				325.66		
Wt. of Water	14.21				13.60		
Water Content, w %	16.8				18.4		
Average w %				Average w %			
Sample No. / Depth of Sample	No 15	15.00 ~ 15.45 m			No 16	16.00 ~ 16.45 m	
Container No. (gm)	R-6				T-143		
Wt. of Container + Wet Soil	432.16				441.22		
Wt. of Container + Dry Soil	324.13				342.23		
Wt. of Water	20.03				19.29		
Wt. of Container	99.00				98.39		
Wt. of Dry Soil	225.13				243.84		
Water Content, w %	17.6				17.1		
Average w %				Average w %			
Sample No. / Depth of Sample	No 17	17.00 ~ 17.45 m			No 18	18.00 ~ 18.45 m	
Container No. (gm)	T-115				T-60		
Wt. of Container + Wet Soil	410.28				396.24		
Wt. of Container + Dry Soil	322.63				309.03		
Wt. of Water	19.37				19.21		
Wt. of Container	98.39				98.39		
Wt. of Dry Soil	224.24				210.64		
Water Content, w %	18.2				18.26		
Average w %				Average w %			

WATER CONTENT DETERMINATION

The Natural Coal Face Survey on the

Project Development Project of the Industrial Port... on land

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

Tested by ... Date of Testing ...

Sample No. / Depth of sample						
Container No. (Can)	XC-3			XV-20		
Wt. of container + wet soil	1424.33			1534.66		
Wt. of container + dry soil	1316.00			1465.55		
Wt. of can	304.16			304.16		
Wt. of dry soil	1011.84			1161.39		
Wt. of wet soil	1120.33			1230.50		
Wt. of water	108.33			69.11		
Water content, w %	10.7			5.9		
	Average	%		Average		

Sample No. / Depth of sample						
Container No. (Can)	XV-21			T-24		
Wt. of container + wet soil	1534.00			1532.32		
Wt. of container + dry soil	1408.14			1423.62		
Wt. of can	312.12			298.66		
Wt. of dry soil	1096.02			1124.96		
Wt. of water	125.86			108.70		
Water content, w %	11.5			9.6		
	Average	%		Average		

Sample No. / Depth of sample						
Container No. (Can)	D-18			D-32		
Wt. of container + wet soil	361.52			1245.26		
Wt. of container + dry soil	344.32			1220.14		
Wt. of can	62.22			62.42		
Wt. of dry soil	282.56			1157.72		
Wt. of water	17.2			25.12		
Water content, w %	6.1			2.2		
	Average	8.1		Average		

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the

Project Development Project of Cit Industrial Port. Job No. _____

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

Tested by _____ Date of testing _____

Sample No. / Depth of sample						
Container No.	A-5			T-54		
Wt. of wet soil + container	340.53			332.29		
Wt. of dry soil + container	322.39			312.26		
Wt. of container	20.64			21.00		
Wt. of dry soil	301.75			291.26		
Wt. of water	18.14			20.03		
Water content, w %	6.0			6.9		
Average w %						

Sample No. / Depth of sample						
Container No. (cm)						
Wt. of wet soil + container						
Wt. of dry soil + container						
Wt. of container						
Wt. of dry soil						
Wt. of water						
Water content, w %						
Average w %						

Sample No. / Depth of sample						
Container No. (cm)						
Wt. of wet soil + container						
Wt. of dry soil + container						
Wt. of container						
Wt. of dry soil						
Wt. of water						
Water content, w %						
Average w %						

TP

WATER The Natural Conditions Survey on the
Project Development Project of the Industrial Port
Location of Project on land Boring No. No. 3
Recorded by Date of testing

Sample No. / Depth of sample						
Container No.	A-23			B-3		
Wt. of wet soil + container	121.85			22.36		
Wt. of dry soil + container	94.60			66.80		
Wt. of container	13.24			44.50		
Wt. of dry soil	81.36			22.30		
Wt. of water	27.25			1.56		
Water content, w %	33.5			7.0		
	Average			Average		

Sample No. / Depth of sample						
Container No.	T-22			M-53		
Wt. of wet soil + container	82.32			62.32		
Wt. of dry soil + container	73.28			53.05		
Wt. of container	28.94			12.50		
Wt. of dry soil	44.34			40.55		
Wt. of water	9.04			9.27		
Water content, w %	20.3			22.8		
	Average			Average		

Sample No. / Depth of sample						
Container No.	M-50			V5-16		
Wt. of wet soil + container	62.32			45.24		
Wt. of dry soil + container	53.28			39.05		
Wt. of container	26.05			12.54		
Wt. of dry soil	27.23			26.51		
Wt. of water	9.04			6.19		
Water content, w %	33.2			23.8		
	Average			Average		

WATER [illegible] The Natural Conditions Offeray on the

Project Development Project of the Industrial Port

Location of Project on land

Tested by

Boring No. No 3

Date of Testing

Sample No.	No 1	1.00 m ~ 1.45 m		No 2	2.00 m ~ 2.45 m	
Depth of Sample						
Container no. (cm)	M-2			A-13		
Wt. of moist soil	83.41			83.62		
Wt. of dry soil	73.17			74.14		
Wt. of ice	21.22			22.10		
Wt. of dry soil	50.85			51.94		
Wt. of water	11.24			9.5		
Water content, %	22.1			18.3		
	Average	%		Average	%	

Sample No.	No 3	2.00 m ~ 2.45 m		No 10	10.00 m ~ 10.45 m	
Container no. (cm)	D-12			R-19		
Wt. of moist soil	86.23			88.54		
Wt. of dry soil	74.28			72.32		
Wt. of ice	12.65			16.22		
Wt. of dry soil	59.23			56.46		
Wt. of water	2.94			2.12		
Water content, %	16.2			15.1		
	Average	%		Average	%	

Sample No.	No 11	11.00 m ~ 11.45 m		No 12	12.00 m ~ 12.45 m	
Container no. (cm)	A-12			A-10		
Wt. of moist soil	83.52			82.08		
Wt. of dry soil	74.68			72.84		
Wt. of ice	22.45			22.45		
Wt. of dry soil	52.27			50.39		
Wt. of water	8.84			9.24		
Water content, %	16.9			18.3		
	Average	%		Average	%	

The Natural Gas Hydrate Survey on the Development Project of the Industrial Port...

on land Boring No. No 3

Date of testing

Sample No. / Depth of sample	No.1-1	1.00m ~ 1.30m		No.1-2	2.00m ~ 2.30m	
Container No. (cm³)	30.00			30.00		
Wet soil mass (g)	60.00			60.00		
Wet soil + container mass (g)	89.50			89.46		
Dry soil mass (g)	72.35			72.35		
Mass of water (g)	17.15			17.11		
Water content, w (%)	23.7			23.6		
Average w (%)						

Sample No. / Depth of sample	No.2-1	4.00m ~ 4.30m		No.2-2	5.00m ~ 5.30m	
Container No. (cm³)	30.00			30.00		
Wet soil mass (g)	74.00			74.00		
Wet soil + container mass (g)	97.56			97.30		
Dry soil mass (g)	79.01			79.04		
Mass of water (g)	17.55			17.26		
Water content, w (%)	22.2			21.8		
Average w (%)						

Sample No. / Depth of sample	No.3-1	7.00m ~ 7.30m		No.3-2	8.00m ~ 8.30m	
Container No. (cm³)	30.00			30.00		
Wet soil mass (g)	74.00			74.00		
Wet soil + container mass (g)	97.84			97.88		
Dry soil mass (g)	86.67			86.32		
Mass of water (g)	11.17			11.56		
Water content, w (%)	15.1			15.2		
Average w (%)						

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the

Project ... Development Project of the Industrial Port. Job No. ...

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

Tested by ... Date of Testing ...

Sampling Depth of sample	No 20	20.00 m ~ 20.45 m		No 21	21.00 m ~ 21.45 m	
Container No. (can)	R-67			T-50		
Wt. of wet soil + can	52.44			44.32		
Wt. of dry soil + can	44.99			40.42		
Wt. of can	12.84			20.26		
Wt. of dry soil	32.64			20.46		
Wt. of water	7.45			3.90		
Water content, w %	22.8			19.1		
	Average ... %			Average ... %		

Sampling Depth of sample	No	m ~ m		No	m ~ m	
Container No. (can)						
Wt. of wet soil + can						
Wt. of dry soil + can						
Wt. of can						
Wt. of dry soil						
Wt. of water						
Water content, w %						
	Average ... %			Average ... %		

Sampling Depth of sample	No	m ~ m			m ~ m	
Container No. (can)						
Wt. of wet soil + can						
Wt. of dry soil + can						
Wt. of can						
Wt. of dry soil						
Wt. of water						
Water content, w %						
	Average ... %			Average ... %		

WATER CONTENT DETERMINATION

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

Location of Project: on land Boring No. No. 4

Tested by: Date of testing: [illegible]

Sample No. / Depth of sample	No. 1	1.00 m ~ 1.45 m		No. 2	2.00 m ~ 2.45 m	
Container No. (can)	D-11			AH-8		
Wt. of cup+wet soil	67.22			25.24		
Wt. of cup+dry soil	62.05			62.40		
Wt. of cup	19.89			19.88		
Wt. of dry soil	41.66			42.52		
Wt. of water	5.17			7.25		
Water content, w %	12.0			18.3		

Average % Average

Sample No. / Depth of sample	No. 3	3.00 m ~ 3.45 m		No. 4	4.00 m ~ 4.45 m	
Container No. (can)	A-35			T-71		
Wt. of cup+wet soil	22.36			60.35		
Wt. of cup+dry soil	22.43			53.36		
Wt. of cup	19.60			19.39		
Wt. of dry soil	13.93			34.22		
Wt. of water	2.93			6.09		
Water content, w %	[illegible]			[illegible]		

Average % Average

Sample No. / Depth of sample	No. 5	5.00 m ~ 5.45 m		SS-6	6.00 m ~ 6.45 m	
Container No. (can)	RS-100			D-19		
Wt. of cup+wet soil	94.69			124.54		
Wt. of cup+dry soil	80.80			112.48		
Wt. of cup	18.14			12.21		
Wt. of dry soil	62.66			39.27		
Wt. of water	13.89			12.06		
Water content, w %	22.2			21.3		

Average % Average

WATER CONSERVATION OF TAIWAN Co.

The Natural Conditions Survey on the

Project Development Project of the Industrial Port

Location of Project on land

Tested by

Date of Test

Drill Hole No. No 4

Date of Test

Sample Depth Interval	No 2	2.00 m ~ 2.45 m		No 3	4.00 m ~ 4.45 m	
Content (%)	4.34			7.69		
Wet Unit Wgt	96.43			89.83		
Dry Unit Wgt	83.43			25.00		
Void Ratio	2.49			2.88		
Void Ratio	83.24			85.43		
Void Ratio	15.8			16.83		
Saturation %	83.3			82.2		

Sample Depth Interval	No 2	2.00 m ~ 2.45 m		No 3	4.00 m ~ 4.45 m	
Content (%)	7.32			7.33		
Wet Unit Wgt	94.20			89.85		
Dry Unit Wgt	87.78			83.68		
Void Ratio	2.68			3.02		
Void Ratio	84.33			84.44		
Void Ratio	15.33			16.32		
Saturation %	82.6			82.2		

Sample Depth Interval	No 2	2.00 m ~ 2.45 m		No 3	4.00 m ~ 4.45 m	
Content (%)	8.12			8.34		
Wet Unit Wgt	96.20			89.45		
Dry Unit Wgt	88.93			82.65		
Void Ratio	2.63			3.04		
Void Ratio	84.34			84.44		
Void Ratio	15.34			16.33		
Saturation %	82.6			82.3		

WATER CONTENT DETERMINATION

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

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

Location of Project: on land — Boring No. No. 4

Tested by: — Date of Testing:

Sample No. / Depth of sample	No. 13 13.00 m ~ 13.45 m			No. 14 14.00 m ~ 14.45 m		
Container no. (tare)	T-74			T-93		
Wt. of cup + wet soil	114.31			84.12		
Wt. of cup + dry soil	99.47			71.60		
Wt. of cup	21.70			31.41		
Wt. of dry soil	78.57			40.19		
Wt. of water	16.74			12.52		
Water content, w %	21.3			31.1		

Average %   Average

Sample No. / Depth of sample	No. 15 15.00 m ~ 15.45 m			No. 16 16.00 m ~ 16.45 m		
Container no. (tare)	M-51			T-46		
Wt. of cup + wet soil	123.63			72.64		
Wt. of cup + dry soil	104.34			62.77		
Wt. of cup	23.21			19.25		
Wt. of dry soil	80.13			42.52		
Wt. of water	20.29			11.82		
Water content, w %	21.3			24.3		

Average %   Average

Sample No. / Depth of sample	No. 17 17.00 m ~ 17.45 m			No. 18 18.00 m ~ 18.45 m		
Container no. (tare)	D-17			D-8		
Wt. of cup + wet soil	52.54			81.80		
Wt. of cup + dry soil	45.20			70.78		
Wt. of cup	12.35			20.03		
Wt. of dry soil	32.85			50.75		
Wt. of water	7.34			11.02		
Water content, w %	22.4			21.7		

Average %   Average %

WATER CONTENT OF VERTICAL CUT

The Natural Conditions Survey on the

Project Development Project of the Industrial Port... No. ...

Location of Project on land Boring No. No 4

Tested by ... Date of Testing ...

Sample No.	No 2	2.00 m ~ 2.45 m		No 3	3.00 m ~ 3.45 m	
Container No. (Can)	T-46			T-28		
Wt. of wet soil + container (gm)	82.60			82.30		
Wt. of dry soil + container (gm)	77.77			73.62		
Wt. of container (gm)	18.25			18.41		
Wt. of dry soil (gm)	59.52			55.21		
Wt. of water (gm)	4.83			8.68		
Water content, w %	8.1			15.7		
Average w %						

Sample No.	No 21	21.00 m ~ 21.45 m		No 22	22.00 m ~ 22.45 m	
Container No. (Can)	K-15			A1-5		
Wt. of wet soil + container (gm)	80.52			84.26		
Wt. of dry soil + container (gm)	72.34			77.22		
Wt. of container (gm)	18.06			18.24		
Wt. of dry soil (gm)	54.28			58.98		
Wt. of water (gm)	8.18			6.94		
Water content, w %	15.1			11.8		
Average w %						

Sample No.	No 23	23.00 m ~ 23.45 m		No 24	24.00 m ~ 24.45 m	
Container No. (Can)	A1-26			V5-5		
Wt. of wet soil + container (gm)	85.37			83.20		
Wt. of dry soil + container (gm)	77.84			75.61		
Wt. of container (gm)	18.41			18.25		
Wt. of dry soil (gm)	59.43			57.36		
Wt. of water (gm)	7.53			7.59		
Water content, w %	12.7			13.2		
Average w %						

Project: The Natural Condition Survey on the Development Project of the Industrial Port on land   Job No.

Location of Project   Boring No. No 4

Tested by   Date of Testing

Sample No. / Depth of sample	No 25	25.00m ~25.45m		No 26	26.00m ~26.45m	
Container no. (gram)	48-76			M-1		
Wt. of container wet soil	62.356			63.46		
Wt. of container dry soil	60.43			52.71		
Wt. of cup	19.03			19.25		
Wt. of dry soil	43.6			30.26		
Wt. of water	4.71			4.75		
Water content, w %	10.8			13.[illegible]		
	Average	%		Average		

Sample No. / Depth of sample	No 27	27.00m ~27.45m		No 28	28.00m ~28.41	
Container no. (gram)	S-36			T-42		
Wt. of container wet soil	68.33			77.45		
Wt. of container dry soil	62.60			72.41		
Wt. of cup	18.87			12.88		
Wt. of dry soil	43.73			58.3		
Wt. of water	5.63			5.47		
Water content, w %	12.9			10.1		
	Average	%		Average		

Sample No. / Depth of sample	No 29	29.00m ~29.33m		SS-30	30.00m ~30.45m	
Container no. (gram)	M-5B			T-88		
Wt. of container wet soil	38.24			40.52		
Wt. of container dry soil	36.01			38.98		
Wt. of cup	12.55			10.95		
Wt. of dry soil	26.46			27.03		
Wt. of water	2.33			4.59		
Water content, w %	[illegible].5			[illegible].4		
	Average	%		Average		

WATER CONSERV. DEPARTMENT

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

Location of Project

Tested by

Report No. No 4

Date of Testing

Preliminary Soil Conditions Survey on the
Project Development Project of the Industrial Corridor in,
Location of Project off Alora Boring No. No 5
Tested by Date of Testing 22/2/82

Sample No / Depth of sample	No 1	0.60 m - 2.05 m		No 2	2.60 m - 4.05 m	
Container no. (can)	T-41			B-42		
Wt. of container + wet soil	142.20			134.42		
Wt. of container + dry soil	102.81			114.83		
Wt. of cup	12.09			28.60		
Wt. of dry soil	110.22			86.23		
Wt. of water	39.39			19.59		
Water content, w %	35.7			22.7		
Average		%		Average		%

Sample No / Depth of sample	No 3	2.60 m - 4.05 m		No 4	3.60 m - 5.05 m	
Container no. (can)	B-20			T-12		
Wt. of container + wet soil	143.12			110.60		
Wt. of container + dry soil	93.13			93.48		
Wt. of cup	12.60			12.97		
Wt. of dry soil	80.53			80.51		
Wt. of water	49.99			16.83		
Water content, w %	62.3			20.9		
Average		%		Average		%

Sample No / Depth of sample	No 5	3.60 m - 5.05 m		S0-4	5.60 m - 10.05 m	
Container no. (can)	T-23			B-14		
Wt. of container + wet soil	131.60			144.64		
Wt. of container + dry soil	116.39			114.34		
Wt. of cup	12.23			12.10		
Wt. of dry soil	99.26			85.44		
Wt. of water	15.21			18.2		
Water content, w %	15.3			16.6		
Average		%		Average		%

WATER CONTENT DETERMINATION

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

Location of Project off shore Boring No. No 5

Tested by Date of Testing 23/2/64

Depth of sample	No 7	-10.60 m ~ -11.05 m		No 8	-11.60 m ~ -12.05 m	
Container no.(can)	A-6			I-44		
Wt. of wet soil	133.10			111.86		
Wt. of dry soil	133.21			109.39		
Wt. of water	19.20			18.23		
Wt. of container	103.21			110.37		
Water content	20.19			23.32		
Water content, %	99			111.1		
Average	%			Average	%	

Depth of sample	No 9	-13.60 m ~ -14.05 m		No 10	-14.60 m ~ -15.05 m	
Container no. (can)	M-53			I-66		
Wt. of wet soil	143.21			119.65		
Wt. of dry soil	102.51			105.45		
Wt. of water	17.02			14.20		
Wt. of container	22.70			32.14		
Water content	19.3			20.6		
Water content, %	16.0			17.9		
Average	%			Average	%	

Depth of sample	No 11	-16.60 m ~ -17.05 m		No 12	-17.60 m ~ -18.05 m	
Container no. (can)	I-33			D-13		
Wt. of wet soil	123.25			131.14		
Wt. of dry soil	102.98			111.84		
Wt. of water	17.27			19.30		
Wt. of container	34.22			32.58		
Water content	16.92			20.71		
Water content, %	16.3			17.6		
Average	%			Average	%	

WATER CONTENT DETERMINATION

Project The Natural Conditions Survey on the Development Project of Cai Lan Industrial Port ~~No.~~

Location of Project off shore Boring No. No 6

Tested by Date of testing 22/12/

Sample No. Depth of sample	No 14 16.00 m ~ 17.05 m			No 15 18.00 m ~ 1		
Container no. (can)	11-27					
Wt. of can+wet soil	124.30			138.12		
Wt. of can+dry soil	113.14			128.70		
Wt. of can	22.00			17.92		
Wt. of dry soil	91.14			110.78		
Wt. of water	11.16			9.42		
Water content, w %	12.2			8.5		

Average % Average

Sample No. Depth of sample	No 16 19.50 m ~ 19.95 m			No 17 20.50 m ~ 20.		
Container no. (can)	7-28			1-25		
Wt. of can+wet soil	143.34			129.24		
Wt. of can+dry soil	131.47			119.94		
Wt. of can	16.63			19.50		
Wt. of dry soil	114.84			100.44		
Wt. of water	11.87			9.3		
Water content, w %	10.3			9.3		

Average % Average

Sample No. Depth of sample	No 18 21.40 m ~ 21.75 m			m ~ m		
Container no. (can)	7-62					
Wt. of can+wet soil	105.12					
Wt. of can+dry soil	98.23					
Wt. of can	12.88					
Wt. of dry soil	85.35					
Wt. of water	6.89					
Water content, w %	8.1					

Average 8.1 Average

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the

Project Development Project of the Industrial Port, No. _____

Location of Project off shore Boring No. No 6

Tested by _____ Date of Testing 24/9/85

Sample No.	No 1	5.00 m ~ 5.45 m		No 3	9.00 m ~ 9.45 m	
Depth (m)	P-45			P-4		
Wet soil (g)	139.19			132.63		
Dry soil (g)	102.71			103.37		
Water (g)	36.48			29.26		
Tare (g)	24.24			101.96		
Moisture (g)	12.25			28.41		
Moisture, %	27.3			28.1		
Average	%			Average	%	
Sample No.	No 4	10.00 m ~ 10.45 m		No 5	11.00 m ~ 11.45 m	
Depth (m)	P-54			P-57		
Wet soil (g)	160.64			132.62		
Dry soil (g)	125.22			103.32		
Water (g)	35.42			29.30		
Tare (g)	23.03			101.94		
Moisture (g)	24.42			24.30		
Moisture, %	29.0			29.2		
Average	%			Average	%	
Sample No.	No 6	13.00 m ~ 13.45 m		No 7	15.00 m ~ 15.45 m	
Depth (m)	P-55			P-7		
Wet soil (g)	168.26			132.26		
Dry soil (g)	129.23			102.03		
Water (g)	38.98			30.23		
Tare (g)	23.98			24.26		
Moisture (g)	105.25			77.77		
Moisture, %	37.0			38.9		
Average	%			Average	%	

WATER CONTENT DETERMINATION

The Natural Coal Corp's survey on the

PROJECT Development Project of the Industrial Port

LOCATION OF PROJECT off shore BORING NO. No 6

TESTED BY _____ DATE OF TESTING _____

Sample No Depth of sample	No 1	0.00 ~ -2.00m		No 2	-2.00 ~ -4.00m	
Container no. (can)	P-11			P-13		
Wt.of container+wet soil	103.24			108.22		
Wt.of container+dry soil	98.38			92.10		
Wt.of can	20.24			21.64		
Wt.of dry soil	78.14			70.46		
Wt.of water	4.86			16.12		
Water content, w %	6.2			22.9		
	Average 6				Average 23	

Sample No Depth of sample	No 10	18.00 ~ -16.45m		No 11	-2.00 ~ -4.00 m	
Container no. (can)	P-13			P-10		
Wt.of container+wet soil	102.54			108.24		
Wt.of container+dry soil	92.08			91.30		
Wt.of can	20.43			19.90		
Wt.of dry soil	71.65			71.4		
Wt.of water	10.46			16.94		
Water content, w %	14.7			23.7		
	Average 15				Average 24	

Sample No Depth of sample	No 14	14.00 ~ -16.45m		No 13	-2.00 ~ -4.00 m	
Container no. (can)	P-8			P-9		
Wt.of container+wet soil	90.25			103.42		
Wt.of container+dry soil	84.23			82.16		
Wt.of can	21.42			20.16		
Wt.of dry soil	62.32			62.03		
Wt.of water	6.02			20.26		
Water content, w %	9.7			32.4		
	Average 10				Average 32	

WATER CONTENT DETERMINATION

The Natural Condition Survey on the

Project Development Project of the Industrial Port, No (s).

Location of Project off shore Boring No. No 6

Tested by Date of Testing 30/12/84

Sample No.							
Depth of sample							
Container no. (can)	P-43			P-40			
Wt. of container + wet soil	102.39			112.38			
Wt. of container + dry soil	94.01			101.12			
Wt. of water	8.38			11.26			
Wt. of container	20.84			20.72			
Wt. of dry soil	73.17			80.40			
Water content, w %	11.5			13.9			

Sample No.							
Depth of sample							
Container no. (can)	P-4			P-39			
Wt. of container + wet soil	131.83			117.82			
Wt. of container + dry soil	114.63			104.05			
Wt. of water	17.20			13.77			
Wt. of container	20.65			20.78			
Wt. of dry soil	93.98			83.27			
Water content, w %	18.3			16.5			

Sample No.							
Depth of sample							
Container no. (can)	P-43			P-21			
Wt. of container + wet soil	117.23			146.44			
Wt. of container + dry soil	99.28			126.64			
Wt. of water	17.95			19.80			
Wt. of container	20.84			22.27			
Wt. of dry soil	78.44			104.37			
Water content, w %	22.9			19.0			

WATER RESOURCES INVESTIGATION

The Natural Condition Survey on the Development Project of the Industrial Port, [illegible] off shore

Location of Project: _____ Survey No. No 6

Tested by: _____ Date of testing: [illegible]

Sample No. / Depth of sample	[illegible]	[illegible]	[illegible]
Container No. (cm³)	D-5		
Wt. of container + wet soil	[illegible]		
Wt. of container + dry soil	[illegible]		
Wt. of container	[illegible]		
Wt. of dry soil	[illegible]		
Wt. of water	[illegible]		
Water content, w %	[illegible]		
	Average [illegible] %		

Sample No. / Depth of sample	[illegible]	[illegible]	[illegible]
Container No. (cm³)			
Wt. of container + wet soil			
Wt. of container + dry soil			
Wt. of container			
Wt. of dry soil			
Wt. of water			
Water content, w %			
	Average [illegible] %		

Sample No. / Depth of sample	[illegible]	[illegible]	[illegible]
Container No. (cm³)			
Wt. of container + wet soil			
Wt. of container + dry soil			
Wt. of container			
Wt. of dry soil			
Wt. of water			
Water content, w %			
	Average [illegible] %		

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the

Project Development Project of the Industrial Port, No. ____

Location of Project off shore Boring no. No 7

Tested by ____ Date of testing 30/2/93

Depth of sample	No 1	5.00 m ~ 5.45 m		No 3	10.00 m ~ 10.45 m	
Container no.(can)	VT-13			VT-6		
Wt. of moist soil + container (g)	145.82			116.28		
Wt. of oven dry soil + container (g)	102.26			100.45		
Wt. of container (g)	12.23			20.88		
Wt. of oven dry soil (g)	89.04			81.57		
Wt. of moisture (g)	43.56			15.83		
Water content, w %	48.9			19.4		
Average w %						

Depth of sample	No 4	11.00 m ~ 11.45 m		No 5	13.00 m ~ 13.45 m	
Container no. (can)	VT-7			VT-13		
Wt. of moist soil + container (g)	118.64			128.88		
Wt. of oven dry soil + container (g)	102.36			112.32		
Wt. of container (g)	20.88			20.88		
Wt. of oven dry soil (g)	81.48			91.44		
Wt. of moisture (g)	16.28			16.56		
Water content, w %	20.0			18.1		
Average w %						

Depth of sample	No 6	15.00 m ~ 15.45 m		No 7	17.00 m ~ 17.45 m	
Container no. (can)	VT-11			VT-12		
Wt. of moist soil + container (g)	132.64			142.56		
Wt. of oven dry soil + container (g)	114.32			122.64		
Wt. of container (g)	20.88			20.88		
Wt. of oven dry soil (g)	93.44			101.76		
Wt. of moisture (g)	18.32			19.92		
Water content, w %	19.6			19.6		
Average w %						

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

Boring No. No. 7

Tested by

Date of Testing

Sample No. / Depth of sample	No. 1			No. 2		
Container no. (cm)	VT-12			VT-14		
Wt. of container (gm)	153.18			153.82		
Wt. of container + wet soil (gm)	298.48			298.47		
Wt. of dry soil (gm)	273.41			273.34		
Wt. of water (gm)	25.07			25.13		
Wt. of dry soil (gm)	120.23			119.52		
Water content, w %	20.9			21.0		
	Average		%		Average	

Sample No. / Depth of sample	No. 10			No. 11		
Container no. (cm)	VT-16			VT-05		
Wt. of container (gm)	158.02			158.16		
Wt. of container + wet soil (gm)	312.53			318.32		
Wt. of dry soil (gm)	292.54			298.20		
Wt. of water (gm)	19.99			20.12		
Wt. of dry soil (gm)	134.52			140.04		
Water content, w %	14.86			14.36		
	Average		%		Average	

Sample No. / Depth of sample	No. 18			No. 19		
Container no. (cm)	VT-19			VT-03		
Wt. of container (gm)	152.26			153.32		
Wt. of container + wet soil (gm)	276.42			278.24		
Wt. of dry soil (gm)	250.62			252.19		
Wt. of water (gm)	25.80			26.05		
Wt. of dry soil (gm)	98.36			98.87		
Water content, w %	26.2			26.3		
	Average		%		Average	

WATER QUALITY INVESTIGATION

The Natural Conditions Survey on the
Project: Development Project of the Industrial Port, No. No.

Location of Project: off shore Boring No.: No 7

Tested by: Date of Test: 22/9/93

Depth of sample	No 25	22.00 m ~ 22.45 m		No 6	22.00 m ~ 22.45 m	
Cohesion (kg/cm²)	VT-4			VT-1		
Natural wet soil	126.12			131.95		
Natural dry soil	124.36			130.21		
Water content	12.13			12.44		
Unit wt. wet soil	56.13			101.25		
Unit wt. dry soil	2.23			2.24		
Void ratio e %	11.5			10.6		
Average		%		Average		%

Depth of sample	No 17	34.00 m ~ 34.45 m		No 7	34.00 m ~ 34.45 m	
Cohesion (kg/cm²)	VT-36			VT-41		
Natural wet soil	141.36			138.36		
Natural dry soil	132.50			131.00		
Water content	10.33			10.38		
Unit wt. wet soil	132.36			133.36		
Unit wt. dry soil	2.34			2.36		
Void ratio e %	10.8			10.8		
Average		%		Average		%

Depth of sample	No 10	47.00 m ~ 47.45 m		No 5	47.00 m ~ 47.45 m	
Cohesion (kg/cm²)	VT-52			VT-60		
Natural wet soil	132.36			132.00		
Natural dry soil	131.25			131.65		
Water content	10.41			10.36		
Unit wt. wet soil	132.36			98.36		
Unit wt. dry soil	2.36			2.36		
Void ratio e %	10.36			10.36		
Average		%		Average		%

DATE OF COMPLETION

The Natural Conditions Survey on the

Project Development Project of the Industrial Port,

Location of Project off shore Boring No. No 7

Engineer Date of Testing 23/7/83

Sample No. / Depth of sample						
Container No. (cm)	77-60			77-21		
Wt. of container (g)	199.30			198.63		
Wt. of container + wet soil (g)	298.76			333.21		
Wt. of soil (g)	99.46			134.58		
Wt. of water (g)	24.98			27.32		
Wt. of dry soil (g)	74.48			107.26		
Water content, w (%)	33.5			25.5		
	Average	%		Average		

Sample No. / Depth of sample						
Container No. (cm)	77-8					
Wt. of container (g)	135.64					
Wt. of container + wet soil (g)	228.24					
Wt. of soil (g)	92.60					
Wt. of dry soil (g)	169.99					
Wt. of water (g)	58.2					
Water content, w (%)	34.1					
	Average	%		Average		

Sample No. / Depth of sample						
Container No. (cm)						
Wt. of container (g)						
Wt. of container + wet soil (g)						
Wt. of container + dry soil (g)						
Wt. of cup (g)						
Wt. of dry soil (g)						
Wt. of water (g)						
Water content, w (%)						
	Average			Average		

WATER CONTENT OF ALLUVIAL SOIL

The Natural Conditions Survey on the
Project Development Project of the Industrial Port, ... No.

Location of Project off shore Boring No. No 8

Tested by ... Date of Testing ...

Sample No.	No 1	11.00 ~ 11.45 m		No 2	12.00 m ~ 12.45 m	
Container No. (Can)	VT-12			VT-35		
Wt. of Container + Wet Soil	112.88			116.29		
Wt. of Container + Dry Soil	92.32			96.14		
Wt. of Can	20.04			20.09		
Wt. of Dry Soil	72.28			76.05		
Wt. of Water	20.56			20.14		
Water Content, w %	28.4			26.5		
Average				Average		

Sample No.	No 4	14.00 m ~ 14.45 m		No 5	15.00 m ~ 15.45 m	
Container No. (Can)	VT-9			VT-33		
Wt. of Container + Wet Soil	124.62			118.62		
Wt. of Container + Dry Soil	102.38			98.20		
Wt. of Can	20.62			20.40		
Wt. of Dry Soil	81.66			77.80		
Wt. of Water	22.24			20.42		
Water Content, w %	27.2			26.2		
Average				Average		

Sample No.	No 6	16.00 m ~ 16.45 m		No 7	17.00 m ~ 17.45 m	
Container No. (Can)	VT-5			VT-31		
Wt. of Container + Wet Soil	108.30			102.16		
Wt. of Container + Dry Soil	91.34			86.44		
Wt. of Can	20.22			20.15		
Wt. of Dry Soil	71.12			66.29		
Wt. of Water	16.96			15.72		
Water Content, w %	23.8			23.7		
Average				Average		

WATER CONTROL OF REGULATION

The Natural Conditions Survey on the

Project Development Project of the Industrial Port... No.

Location of Project off shore Boring No. No. 8

Tested by ... Date of Test ...

Sample No / Depth of sample	No. 5	10.00 ~ 10.45m		No. 6	12.00 ~ 12.45m	
Container No. (can)	VT-11			VT-22		
Wt. of container and soil	128.11			132.20		
Wt. of container and dry soil	123.42			126.80		
Wt. of can	71.65			70.85		
Wt. of dry soil	51.77			55.95		
Wt. of water	4.69			5.40		
Water content, w %	10.1			10.1		
	Average ... %			Average		

Sample No / Depth of sample	No. 10	20.00 ~ 20.45m		No. 11	22.00 ~ 22.45m	
Container No. (can)	VT-10			VT-23		
Wt. of container and soil	119.39			121.01		
Wt. of container and dry soil	99.25			97.49		
Wt. of can	70.91			69.83		
Wt. of dry soil	28.34			27.66		
Wt. of water	2.86			3.52		
Water content, w %	10.1			12.7		
	Average ... %			Average		

Sample No / Depth of sample	No. 13	30.00 ~ 30.45m		No. 15	32.00 ~ 32.45m	
Container No. (can)	VT-2			VT-30		
Wt. of container and soil	114.42			111.55		
Wt. of container and dry soil	92.50			100.44		
Wt. of can	71.03			68.68		
Wt. of dry soil	21.47			31.76		
Wt. of water	2.05			11.11		
Water content, w %	10.1			35.0		
	Average ... %			Average		

WATER CONTENT DETERMINATION

The Natural Conditions Survey on the

Project Development Project of the Industrial Port, No. 10,

Location of Project off shore Boring No. No 8

Tested by _____ Date of Testing 23/2/03

Sample No.	No 14	24.00 m~24.45 m		No 15	25.00 m~25.45 m	
Container No.(cm)	VT-65			VT-3		
Wet soil + container (g)	120.80			133.75		
Dry soil + container (g)	105.01			117.56		
Weight of container (g)	33.25			32.90		
Weight of water (g)	15.79			16.19		
Weight of dry soil (g)	71.76			84.66		
Water content, w %	22.0			19.1		
Average w %				Average w %		

Sample No.	No		
Container No. (cm)			
Wet soil + container (g)			
Dry soil + container (g)			
Weight of container (g)			
Weight of water (g)			
Weight of dry soil (g)			
Water content, w %			
Average w %			

Sample No.	No		
Container No. (cm)			
Wet soil + container (g)			
Dry soil + container (g)			
Weight of container (g)			
Weight of water (g)			
Weight of dry soil (g)			
Water content, w %			
Average w %			