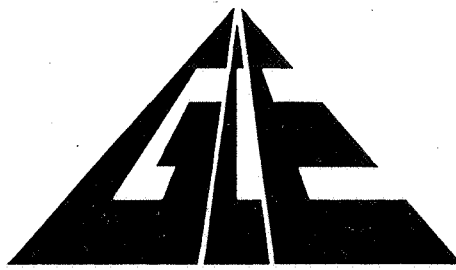


Appendix 4H

Soil Test Results of Site Investigation
at CLS



GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 2365 9123-6, 2333 6482 FAX NO.: 852-2765 8034

香港土力混凝土工程有限公司
九龍紅磡高山道六號地下
電話：2365 9123-6, 2333 6482

MATERIAL TESTING LABORATORY

REPORT

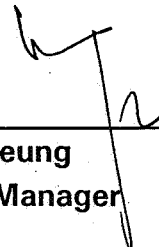
ON

LABORATORY TESTING

(HK11355)

Client : ALS Technichem (HK) Pty Ltd.
Site / Project : Infrastructure for Penny's Bay
Development - Site Investigation
Phase 2
GCE Job No. : GCE/PS/01189
Date : 28 May 2001

CERTIFIED BY :



W.T. Cheung
Deputy Manager

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- (1) SUMMARY OF SOIL TEST RESULTS
- (2) PARTICLE SIZE DISTRIBUTION CURVES

(1) SUMMARY OF SOIL TEST RESULTS



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01050175
 SITE Infrastructure for Penny's Bay Development - S.I. Ph. 2
 CONTRACT NO. _____ WORKS ORDER NO. _____
 JOB NO. GCE/PS/01189 DATE 25-5-2001

Site Data	Sample I.D.		HK1355-1				
	Sample / Specimen No.		S0013/SW3				
	Type		Bulk				
	Depth	(m)	1.4-1.5				
Soil Description			Moist, brown, clayey, very silty, gravelly SAND				
In-situ	Moisture Content (%)						
	Density	Bulk	(Mg/m ³)				
Dry							
Specific gravity							
Atterberg Limits	Liquid Limit (LL)						
	Plastic Limit (PL)						
	Plasticity Index (PI)						
	Liquidity Index (LI)						
Particle Size	Clay	(%)	11				
	Silt	(%)	18				
	Sand	(%)	58				
	Gravel	(%)	13				
Consolidation	e ₀						
	C _c (Compression Index)						
	C _v (m ² /yr)						
	m _v (m ² /kN)						
	k (m/yr)						
Type of test							
Triaxial Compr.	Cohesion (kPa)	c'					
	Angle of internal friction	φ'					
	σ' ₃ (kPa)						
	Type of test						
Chemical	Sulphate content (%)						
	Chloride content (%)						
	Organic Matter content (%)						
	pH value						
Compaction	Optimum m.c. (%)						
	Max. dry density (Mg/m ³)						
	Type of test						
Remarks							

- S = Single Stage
- M = Multi Stage
- Consolidated
- Drained
- U = Undrained
- Pore Water pressure
- B = Back pressure saturation
- Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 25-5-2001



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01050176
 SITE Infrastructure for Penny's Bay Development - S.I. Ph. 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01189 DATE 25-5-2001

Site Data	Sample I.D.		HK1355-2					
	Sample / Specimen No.		S0014 SW4					
	Type		Bulk					
	Depth (m)		1.4-1.5					
Soil Description			Moist, brown, silty, very gravelly SAND					
In-situ	Moisture Content (%)							
	Density	Bulk	(Mg/m ³)					
Dry								
Specific gravity								
Atterberg Limits	Liquid Limit (LL)							
	Plastic Limit (PL)							
	Plasticity Index (PI)							
	Liquidity Index (LI)							
Particle Size	Clay (%)		2					
	Silt (%)		9					
	Sand (%)		56					
	Gravel (%)		33					
Consolidation	e ₀							
	C _c (Compression Index)							
	C _v (m ² /yr)							
	m _v (m ² /kN)							
	k (m/yr)							
Type of test								
Triaxial Compr.	Cohesion (kPa)		c'					
	Angle of internal friction		φ'					
	σ' ₃ (kPa)							
	Type of test							
Chemical	Sulphate content (%)							
	Chloride content (%)							
	Organic Matter content (%)							
	pH value							
Compaction	Optimum m.c. (%)							
	Max. dry density (Mg/m ³)							
	Type of test							
Remarks								

- 1 = Single Stage
- 2 = Multi Stage
- 3 = Consolidated
- 4 = Drained
- 5 = Undrained
- 6 = Pore Water pressure
- 7 = Back pressure saturation
- 8 = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 25-5-2001

(2) PARTICLE SIZE DISTRIBUTION CURVES



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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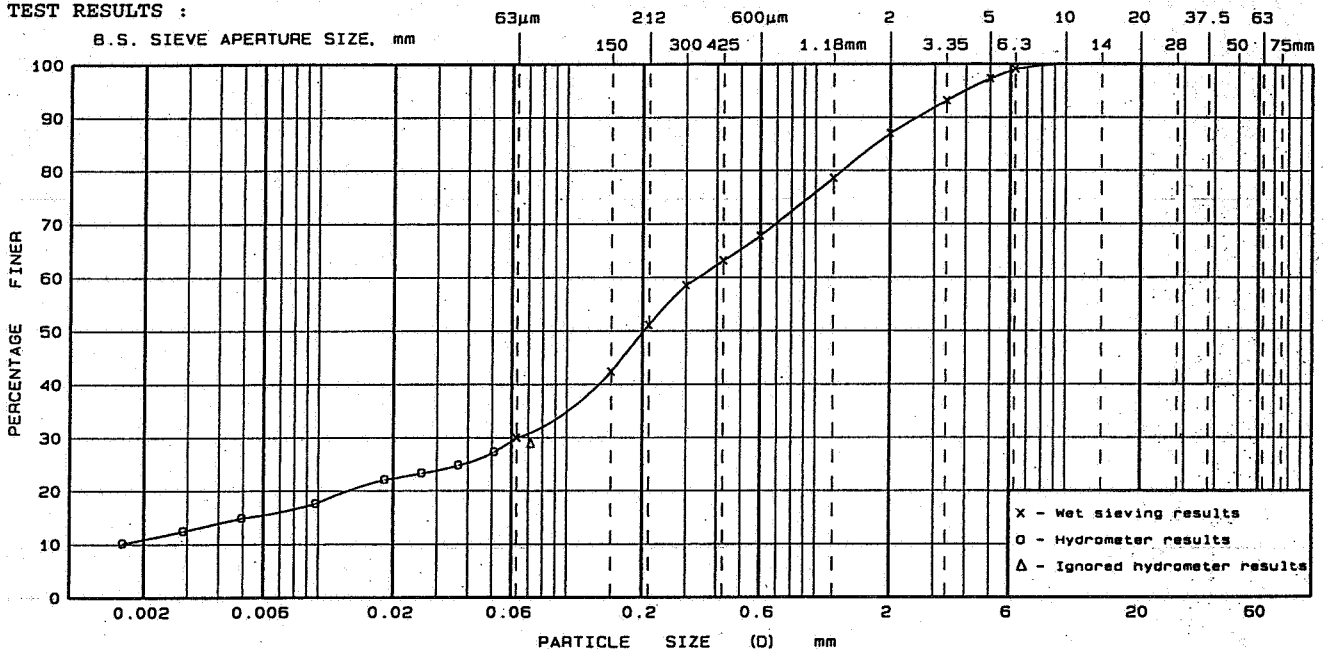
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - SITE INVESTIGATION PH.2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01189 TEST UNIT NO. : STP 01055
 HOLE NO.* : - SAMPLE NO.* : S0013/SW 3
 DESCRIPTION : Moist, brown, clayey, very silty, gravelly SAND

REPORT NO. : PSD01050051
 DATE RECEIVED : 11/05/2001
 DATE STARTED : 14/05/2001
 DATE COMPLETED: 17/05/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 1.40-1.50 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = — mm
 Median Diameter (D_{50}) = 0.21 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = —
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 11 %
 SILT = 18 %
 SAND = 58 %
 GRAVEL = 13 %

Note : *Information provided by client
 Remarks: Sample I.D. HK11355-1

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 17/05/2001

DATE : 25/05/2001

DATE : 25/05/2001

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REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

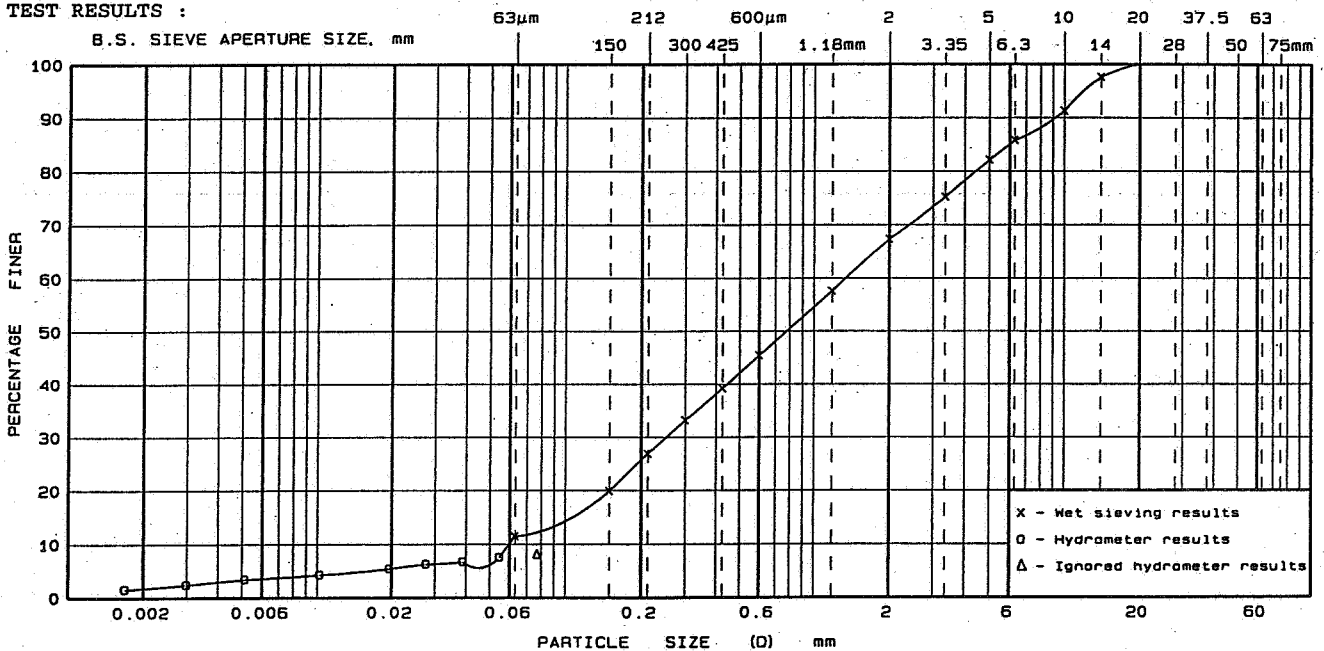
Page 1 of 1

CLIENT*	: ALS TECHNICHEM (HK) PTY LTD.	REPORT NO.	: PSD01050052
SITE*	: INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - SITE INVESTIGATION PH.2	DATE RECEIVED	: 11/05/2001
TEST LOCATION	: GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON	DATE STARTED	: 14/05/2001
W.O. NO.*	: -- CONTRACT NO.* : --	DATE COMPLETED	: 17/05/2001
JOB NO.	: GCE/PS/01189 TEST UNIT NO. : STP 01055	SAMPLE TYPE*	: BULK
HOLE NO.*	: -- SAMPLE NO.* : S0014/SW 4	SAMPLE DEPTH	: 1.40-1.50 m
DESCRIPTION	: Moist, brown, silty, very gravelly SAND	SPEC. DEPTH*	: -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	SILT	Fine	Medium	Coarse	SAND	Fine	Medium	Coarse	GRAVEL	COB- BLES

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = — mm
 Median Diameter (D_{50}) = 0.79 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = —
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 2 %
 SILT = 9 %
 SAND = 56 %
 GRAVEL = 33 %

Note : *Information provided by client
 Remarks: Sample I.D. HK11355-2

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

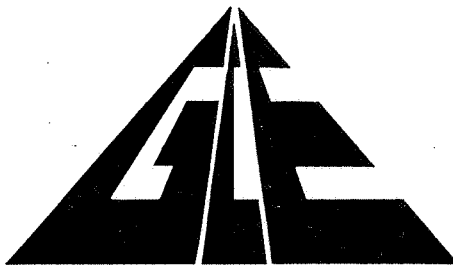
CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician
 DATE : 17/05/2001

POST : Reporting Officer
 DATE : 25/05/2001

POST : Dept. Manager
 DATE : 25/05/2001

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GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 2365 9123-6, 2333 6482

香港土力混凝土工程有限公司
九龍紅磡高山道六號地下
電話：2365 9123-6, 2333 6482

MATERIAL TESTING LABORATORY

REPORT

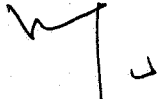
ON

LABORATORY TESTING

(HK11273)

Client	:	ALS Technichem (HK) Pty Ltd.
Site / Project	:	Infrastructure for Penny's Bay Development-Site Investigation Phase 2
Contract No.	:	-
GCE Job No.	:	GCE/PS/01185
Date	:	26 June 2001

CERTIFIED BY :



W.T. Cheung
Deputy Manager

©CONTENTS

- (1) SUMMARY OF SOIL TEST RESULTS
- (2) PARTICLE SIZE DISTRIBUTION CURVES

(1) SUMMARY OF SOIL TEST RESULTS



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060609
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.	HK11273-13					
	Sample / Specimen No.	S0012/SW 1					
	Type	Bulk					
	Depth (m)	1.4-1.5					
Soil Description		Moist, greenish brown, silty, very gravelly SAND					
In-situ	Moisture Content (%)						
	Density	Bulk	Dry	(Mg/m ³)			
Specific gravity							
Atterberg Limits	Liquid Limit (LL)						
	Plastic Limit (PL)						
	Plasticity Index (PI)						
	Liquidity Index (LI)						
Particle Size	Clay (%)	3					
	Silt (%)	11					
	Sand (%)	44					
	Gravel (%)	42					
Consolidation	e ₀						
	C _c (Compression Index)						
	C _v (m ² /yr)						
	m _v (m ² /kN)						
	k (m/yr)						
Type of test							
Triaxial Compr.	Cohesion (kPa)	c'					
	Angle of internal friction	φ'					
	σ' ₃ (kPa)						
	Type of test						
Chemical	Sulphate content (%)						
	Chloride content (%)						
	Organic Matter content (%)						
	pH value						
Compactor	Optimum m.c. (%)						
	Max. dry density (Mg/m ³)						
	Type of test						
Remarks							

- = Single Stage
- V = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- P = Pore Water pressure
- B = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 23-6-2001



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060610
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.	HK11273-12				
	Sample / Specimen No.	S0011/SW 6				
	Type	Bulk				
	Depth (m)	0.15-0.30				
Soil Description		Moist, greenish brown, silty, gravelly SAND				
In-situ	Moisture Content (%)					
	Density	Bulk	(Mg/m ³)			
		Dry				
Specific gravity						
Atterberg Limits	Liquid Limit (LL)					
	Plastic Limit (PL)					
	Plasticity Index (PI)					
	Liquididity Index (LI)					
Particle Size	Clay (%)	4				
	Silt (%)	11				
	Sand (%)	67				
	Gravel (%)	18				
Consolidation	e ₀					
	C _c (Compression Index)					
	C _v (m ² /yr)					
	m _v (m ² /kN)					
	k (m/yr)					
Type of test						
Triaxial Compr.	Cohesion (kPa)	c'				
	Angle of internal friction	φ'				
	σ ₃ (kPa)					
	Type of test					
Chemical	Sulphate content (%)					
	Chloride content (%)					
	Organic Matter content (%)					
	pH value					
Compaction	Optimum m.c. (%)					
	Max. dry density (Mg/m ³)					
	Type of test					
Remarks						

- = Single Stage
- VI = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- P = Pore Water pressure
- σ = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 23-6-2001



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060611
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.		HK11273-11			
	Sample / Specimen No.		S0010/SW 9			
	Type		Bulk			
	Depth	(m)	0.25-0.40			
Soil Description			Moist, yellowish brown, silty, very gravelly SAND			
In-situ	Moisture Content (%)					
	Density	Bulk Dry	(Mg/m ³)			
Specific gravity						
Atterberg Limits	Liquid Limit (LL)					
	Plastic Limit (PL)					
	Plasticity Index (PI)					
	Liquididity Index (LI)					
Particle Size	Clay	(%)	6			
	Silt	(%)	17			
	Sand	(%)	49			
	Gravel	(%)	28			
Consolidation	e ₀					
	C _c (Compression Index)					
	C _v (m ² /yr)					
	m _v (m ² /kN)					
	k (m/yr)					
Type of test						
Triaxial Compr.	Cohesion (kPa)	c'				
	Angle of internal friction	φ'				
	σ' ₃ (kPa)					
	Type of test					
Chemical	Sulphate content (%)					
	Chloride content (%)					
	Organic Matter content (%)					
	pH value					
Compactor	Optimum m.c. (%)					
	Max. dry density (Mg/m ³)					
	Type of test					
Remarks						

- = Single Stage
- M = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- P = Pore Water pressure
- B = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 23-6-2001

(2) PARTICLE SIZE DISTRIBUTION CURVES



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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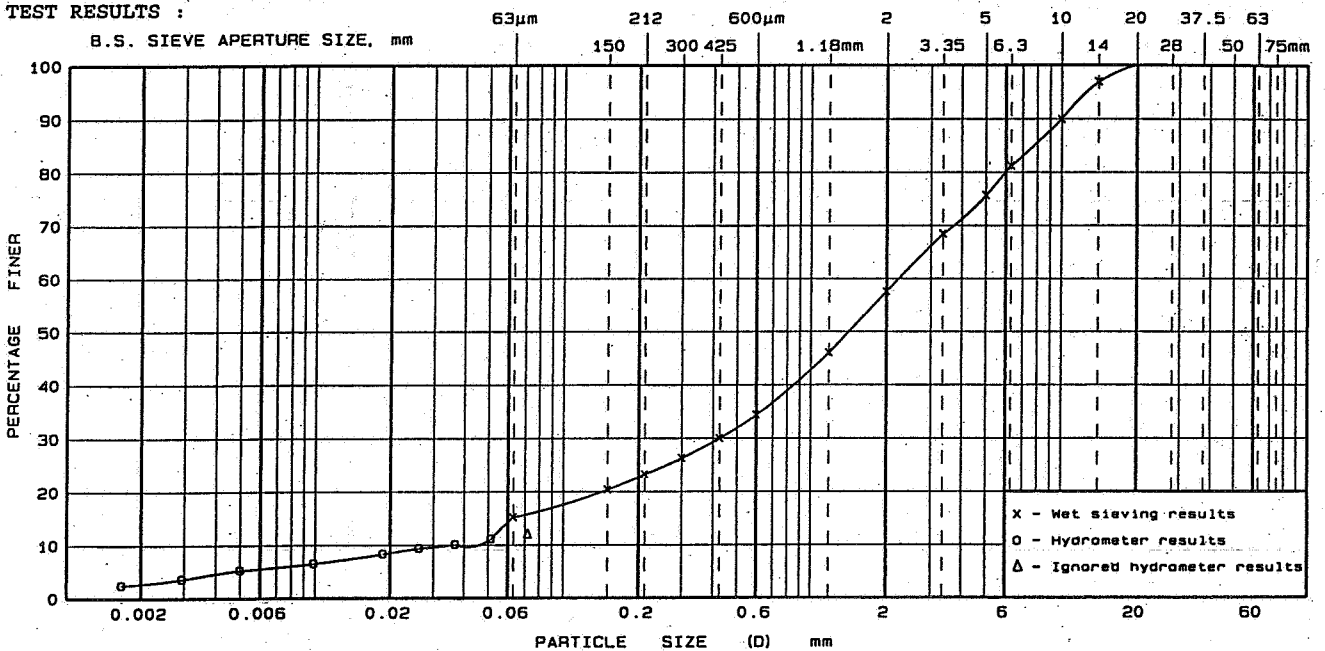
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOI E NO.* : -- SAMPLE NO.* : S0012/SW 1
 DESCRIPTION : Moist, greenish brown, silty, very gravelly SAND

REPORT NO. : PSD01060117
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED : 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 1.40-1.50 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.039 mm
 Median Diameter (D_{50}) = 1.4 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 59
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 3 %
 SILT = 11 %
 SAND = 44 %
 GRAVEL = 42 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-13

TESTED BY : W.S. LEE

CHECKED BY : W.K. Chan

CERTIFIED BY : W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 13/06/2001

DATE : 23/06/2001

DATE : 23/06/2001

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REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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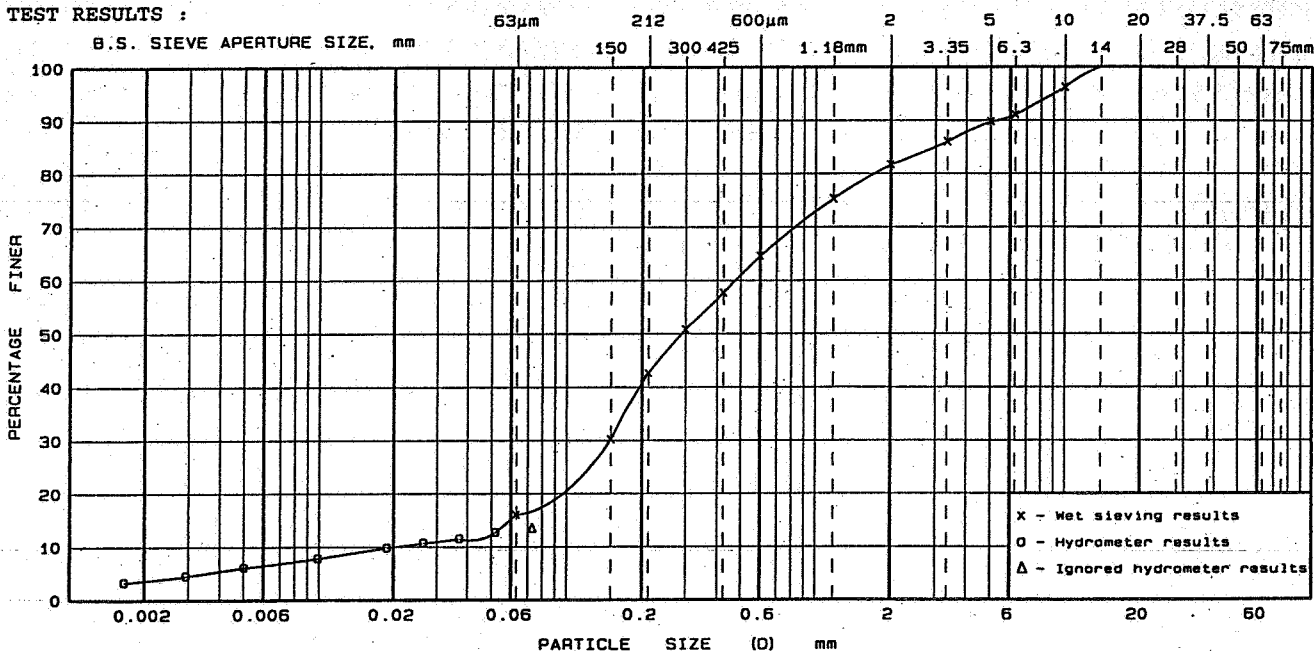
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOLE NO.* : -- SAMPLE NO.* : S0011/SW 6
 DESCRIPTION : Moist, greenish brown, silty, gravelly SAND

REPORT NO. : PSD01060116
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED : 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 0.15-0.30 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.021 mm
 Median Diameter (D_{50}) = 0.30 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 23
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 4 %
 SILT = 11 %
 SAND = 67 %
 GRAVEL = 18 %

Note : *Information provided by client.
 Remarks: SAMPLE I.D. : HK11273-12

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 13/06/2001

DATE : 23/06/2001

DATE : 23/06/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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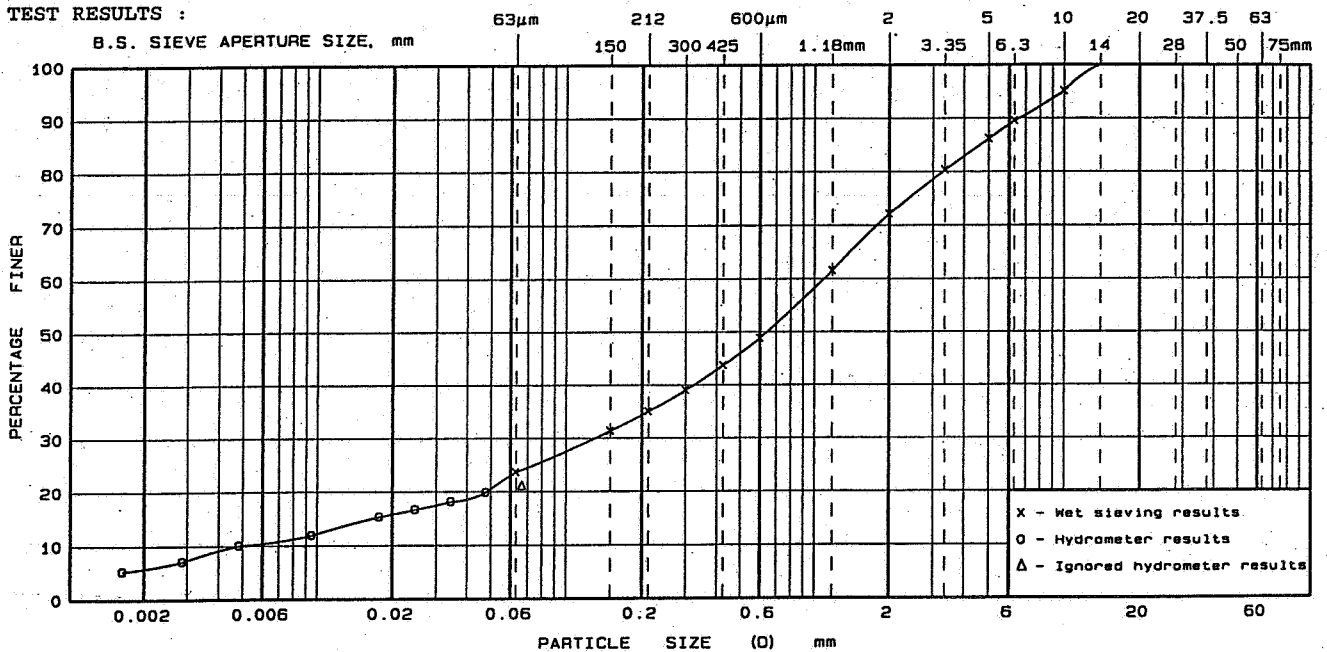
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOLE NO.* : -- SAMPLE NO.* : S0010/SW 9
 DESCRIPTION : Moist, yellowish brown, silty, very gravelly SAND

REPORT NO. : PSD01060115
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED : 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 0.25-0.40 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.0050 mm
 Median Diameter (D_{50}) = 0.66 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 226
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 6 %
 SILT = 17 %
 SAND = 49 %
 GRAVEL = 28 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-11

TESTED BY : W.S. LEE

CHECKED BY : W.K. Chan
 W.K. Chan

CERTIFIED BY : W.T. Cheung
 W.T. Cheung

POST : Lab. Technician
 DATE : 13/06/2001

POST : Reporting Officer
 DATE : 23/06/2001

POST : Dept. Manager
 DATE : 23/06/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

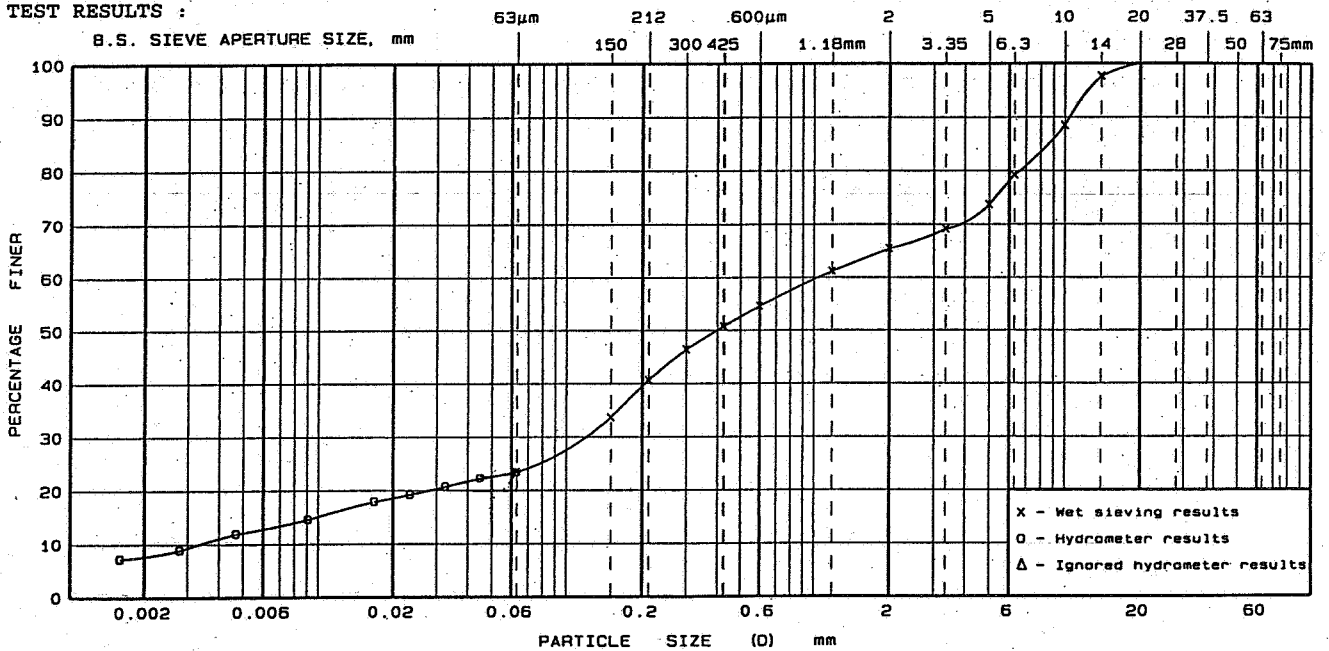
Page 1 of 1

CLIENT*	: ALS TECHNICHEM (HK) PTY LTD.	REPORT NO.	: PSD01060114
SITE*	: INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2	DATE RECEIVED	: 09/05/2001
TEST LOCATION	: GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON	DATE STARTED	: 26/05/2001
W.O. NO.*	: -- CONTRACT NO.* : --	DATE COMPLETED	: 13/06/2001
JOB NO.	: GCE/PS/01185 TEST UNIT NO. : STP 01052	SAMPLE TYPE*	: BULK
HOLE NO.*	: -- SAMPLE NO.* : S0009/SW10	SAMPLE DEPTH*	: 0.15-0.30 m
DESCRIPTION	: Moist, greenish brown, silty, very gravelly SAND	SPEC. DEPTH*	: -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.0034 mm
 Median Diameter (D_{50}) = 0.41 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 314
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 8 %
 SILT = 14 %
 SAND = 43 %
 GRAVEL = 35 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-10

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

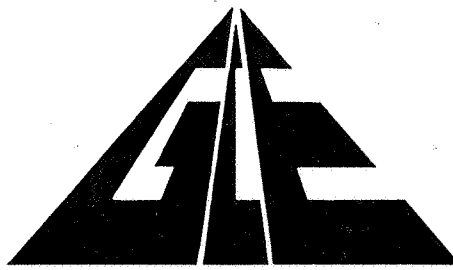
CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician
 DATE : 13/06/2001

POST : Reporting Officer
 DATE : 23/06/2001

POST : Dept. Manager
 DATE : 23/06/2001

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GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 2365 9123-6, 2333 6482

香港土力混凝土工程有限公司
九龍紅磡高山道六號地下
電話：2365 9123-6, 2333 6482

MATERIAL TESTING LABORATORY

REPORT

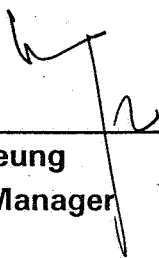
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LABORATORY TESTING

(HK11355)

Client : ALS Technichem (HK) Pty Ltd.
Site / Project : Infrastructure for Penny's Bay
Development - Site Investigation
Phase 2
GCE Job No. : GCE/PS/01189
Date : 28 May 2001

CERTIFIED BY :



W.T. Cheung
Deputy Manager

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- (1) SUMMARY OF SOIL TEST RESULTS
- (2) PARTICLE SIZE DISTRIBUTION CURVES

(1) SUMMARY OF SOIL TEST RESULTS



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01050175
 SITE Infrastructure for Penny's Bay Development - S.I. Ph. 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01189 DATE 25-5-2001

Site Data	Sample I.D.	HK1355-1				
	Sample / Specimen No.	S0013/SW3				
	Type	Bulk				
	Depth (m)	1.4-1.5				
Soil Description	Moist, brown, clayey, very silty, gravelly SAND					
In-situ	Moisture Content (%)					
	Density	Bulk Dry	(Mg/m ³)			
Specific gravity						
Atterberg Limits	Liquid Limit (LL)					
	Plastic Limit (PL)					
	Plasticity Index (PI)					
	Liquidity Index (LI)					
Particle Size	Clay (%)		11			
	Silt (%)		18			
	Sand (%)		58			
	Gravel (%)		13			
Consolidation	e ₀					
	c _c (Compression Index)					
	c _v (m ² /yr)					
	m _v (m ² /kN)					
	k (m/yr)					
Type of test						
Triaxial Compr.	Cohesion (kPa)		c'			
	Angle of internal friction		φ'			
	σ' ₃ (kPa)					
	Type of test					
Chemical	Sulphate content (%)					
	Chloride content (%)					
	Organic Matter content (%)					
	pH value					
Compactor	Optimum m.c. (%)					
	Max. dry density (Mg/m ³)					
	Type of test					
Remarks						

- S = Single Stage
- M = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- = Pore Water pressure
- B = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 25-5-2001



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01050176
 SITE Infrastructure for Penny's Bay Development - S.I. Ph. 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01189 DATE 25-5-2001

Site Data	Sample I.D.		HK1355-2					
	Sample / Specimen No.		S0014/SW4					
	Type		Bulk					
	Depth	(m)	1.4-1.5					
Soil Description			Moist, brown, silty, very gravelly SAND					
In-situ	Moisture Content (%)							
	Density	Bulk Dry	(Mg/m ³)					
Specific gravity								
Atterberg Limits	Liquid Limit (LL)							
	Plastic Limit (PL)							
	Plasticity Index (PI)							
	Liquididity Index (LI)							
Particle Size	Clay	(%)	2					
	Silt	(%)	9					
	Sand	(%)	56					
	Gravel	(%)	33					
Consolidation	e ₀							
	C _c (Compression Index)							
	C _v (m ² /yr)							
	m _v (m ² /kN)							
	k (m/yr)							
Type of test								
Triaxial Compr.	Cohesion (kPa)	c'						
	Angle of internal friction	φ'						
	σ' ₃ (kPa)							
	Type of test							
Chemical	Sulphate content (%)							
	Chloride content (%)							
	Organic Matter content (%)							
	pH value							
Compaction	Optimum m.c. (%)							
	Max. dry density (Mg/m ³)							
	Type of test							
Remarks								

- Single Stage
- Multi Stage
- Consolidated
- Drained
- Undrained
- Pore Water pressure
- Back pressure saturation
- Non Plastic

CHECKED BY W.K. Chan DATE 25-5-2001
 W.K. Chan

(2) PARTICLE SIZE DISTRIBUTION CURVES



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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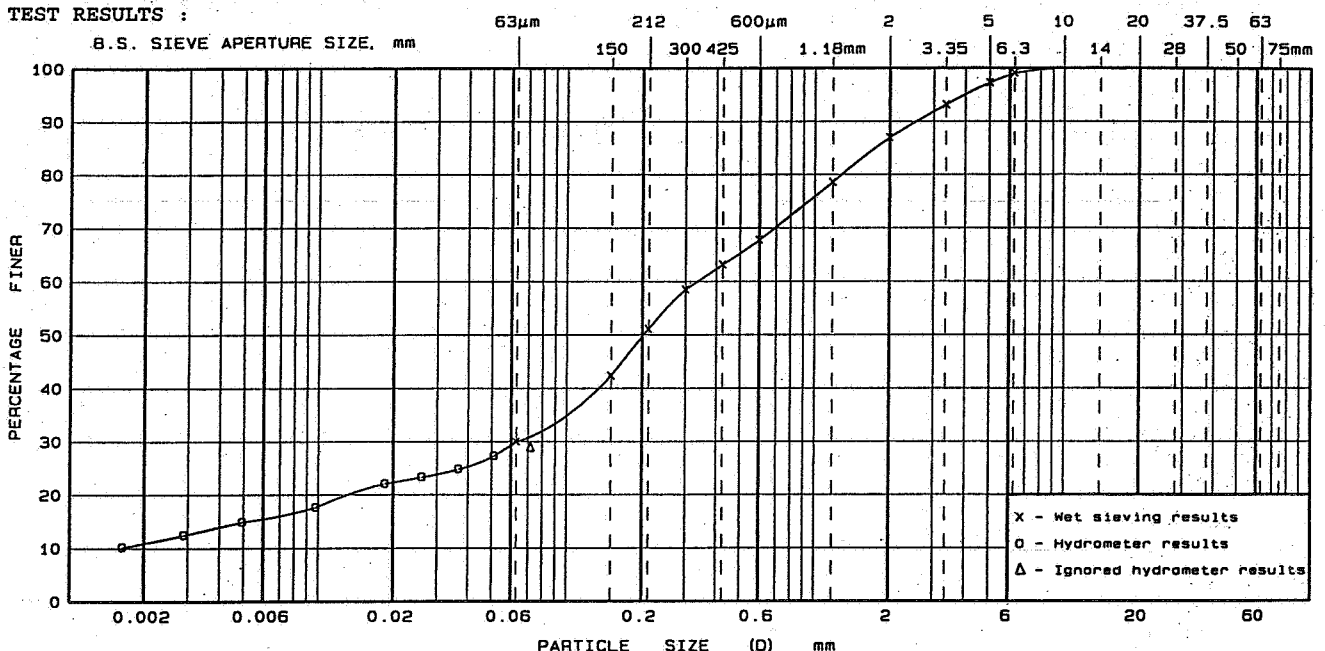
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - SITE INVESTIGATION PH.2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01189 TEST UNIT NO. : STP 01055
 HOLE NO.* : -- SAMPLE NO.* : S0013/SW 3
 DESCRIPTION : Moist, brown, clayey, very silty, gravelly SAND

REPORT NO. : PSD01050051
 DATE RECEIVED : 11/05/2001
 DATE STARTED : 14/05/2001
 DATE COMPLETED: 17/05/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 1.40-1.50 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = — mm
 Median Diameter (D_{50}) = 0.21 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = —
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 11 %
 SILT = 18 %
 SAND = 58 %
 GRAVEL = 13 %

Note : *Information provided by client
 Remarks: Sample I.D. HK11355-1

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 17/05/2001

DATE : 25/05/2001

DATE : 25/05/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

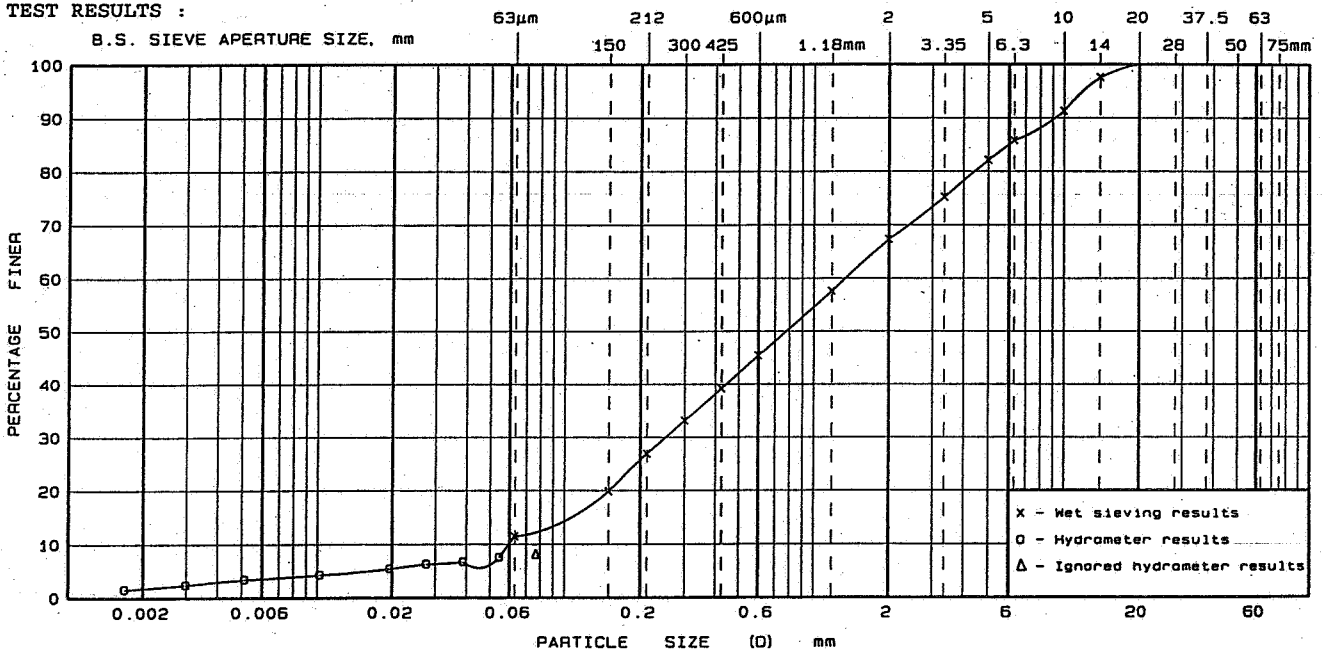
Page 1 of 1

CLIENT* : ALS TECHNICHEM (HK) PTY LTD.	REPORT NO. : PSD01050052
SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - SITE INVESTIGATION PH.2	DATE RECEIVED : 11/05/2001
TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON	DATE STARTED : 14/05/2001
W.O. NO.* : -- CONTRACT NO.* : --	DATE COMPLETED : 17/05/2001
JOB NO. : GCE/PS/01189 TEST UNIT NO. : STP 01055	SAMPLE TYPE* : BULK
HOLE NO.* : -- SAMPLE NO.* : S0014/SV 4	SAMPLE DEPTH* : 1.40-1.50 m
DESCRIPTION : Moist, brown, silty, very gravelly SAND	SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = — mm
 Median Diameter (D_{50}) = 0.79 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = —
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 2 %
 SILT = 9 %
 SAND = 56 %
 GRAVEL = 33 %

Note : *Information provided by client
 Remarks: Sample I.D. HK11355-2

TESTED BY : W.S. LEE

CHECKED BY : W.K. Chan
 W.K. Chan

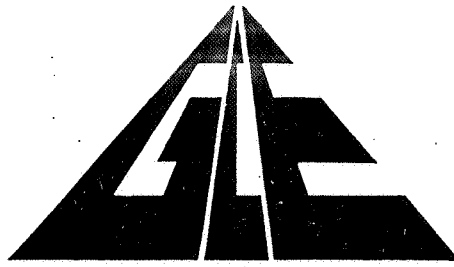
CERTIFIED BY : W.T. Cheung
 W.T. Cheung

POST : Lab. Technician
 DATE : 17/05/2001

POST : Reporting Officer
 DATE : 25/05/2001

POST : Dept. Manager
 DATE : 25/05/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 2365 9123-6, 2333 6482 FAX NO.: 852-2765 8034

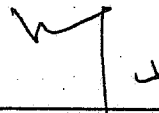
香港土力混凝土工程有限公司
九龍紅磡高山道六號地下
電話：2365 9123-6, 2333 6482

MATERIAL TESTING LABORATORY

REPORT ON LABORATORY TESTING (HK11273)

Client : ALS Technichem (HK) Pty Ltd.
Site / Project : Infrastructure for Penny's Bay
Development-Site Investigation Phase 2
Contract No. : -
GCE Job No. : GCE/PS/01185
Date : 26 June 2001

CERTIFIED BY :

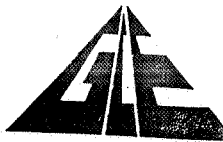


W.T. Cheung
Deputy Manager

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- (1) SUMMARY OF SOIL TEST RESULTS
- (2) PARTICLE SIZE DISTRIBUTION CURVES

(1) SUMMARY OF SOIL TEST RESULTS



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060609
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. _____ WORKS ORDER NO. _____
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.		HK11273-13				
	Sample / Specimen No.		S0012/SW 1				
	Type		Bulk				
	Depth (m)		1.4-1.5				
Soil Description			Moist, greenish brown, silty, very gravelly SAND				
In-situ	Moisture Content (%)						
	Density	Bulk Dry (Mg/m ³)					
Specific gravity							
Atterberg Limits	Liquid Limit (LL)						
	Plastic Limit (PL)						
	Plasticity Index (PI)						
	Liquidity Index (LI)						
Particle Size	Clay (%)		3				
	Silt (%)		11				
	Sand (%)		44				
	Gravel (%)		42				
Consolidation	e ₀						
	C _c (Compression Index)						
	C _v (m ² /yr)						
	m _v (m ² /kN)						
	k (m/yr)						
Type of test							
Triaxial Compr.	Cohesion (kPa)	c'					
	Angle of internal friction	φ'					
	σ' ₃ (kPa)						
	Type of test						
Chemical	Sulphate content (%)						
	Chloride content (%)						
	Organic Matter content (%)						
	pH value						
Compactor	Optimum m.c. (%)						
	Max. dry density (Mg/m ³)						
	Type of test						
Remarks							

- = Single Stage
- = Multi Stage
- = Consolidated
- = Drained
- = Undrained
- = Pore Water pressure
- = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan
 W.K. Chan

DATE 23-6-2001



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060610
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. _____ WORKS ORDER NO. _____
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.		HK11273-12				
	Sample / Specimen No.		S0011/SW 6				
	Type		Bulk				
	Depth	(m)	0.15-0.30				
Soil Description			Moist, greenish brown, silty, gravelly SAND				
In-situ	Moisture Content (%)						
	Density	Bulk Dry	(Mg/m ³)				
Specific gravity							
Atterberg Limits	Liquid Limit (LL)						
	Plastic Limit (PL)						
	Plasticity Index (PI)						
	Liquidity Index (LI)						
Particle Size	Clay	(%)	4				
	Silt	(%)	11				
	Sand	(%)	67				
	Gravel	(%)	18				
Consolidation	e ₀						
	C _c (Compression Index)						
	C _v (m ² /yr)						
	m _v (m ² /kN)						
	k (m/yr)						
Type of test							
Triaxial Compr.	Cohesion (kPa)	c'					
	Angle of internal friction	φ'					
	σ' ₃ (kPa)						
	Type of test						
Chemical	Sulphate content (%)						
	Chloride content (%)						
	Organic Matter content (%)						
	pH value						
Compaction	Optimum m.c. (%)						
	Max. dry density (Mg/m ³)						
	Type of test						
Remarks							

- Single Stage
- W = Multi Stage
- Consolidated
- Drained
- U = Undrained
- P = Pore Water pressure
- σ₃ = Back pressure saturation
- Non Plastic

CHECKED BY W.K. Chan DATE 23-6-2001
 W.K. Chan



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060611
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. - WORKS ORDER NO. -
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.		HK11273-11					
	Sample / Specimen No.		S00'0/SW 9					
	Type		Bulk					
	Depth (m)		0.25-0.40					
Soil Description		Moist, yellowish brown, silty, very gravelly SAND						
In-situ	Moisture Content (%)							
	Density	Bulk	(Mg/m ³)					
		Dry						
Specific gravity								
Atterberg Limits	Liquid Limit (LL)							
	Plastic Limit (PL)							
	Plasticity Index (PI)							
	Liquididity Index (LI)							
Particle Size	Clay (%)	6						
	Silt (%)	17						
	Sand (%)	49						
	Gravel (%)	28						
Consolidation	e ₀							
	C _c (Compression Index)							
	C _v (m ² /yr)							
	m _v (m ² /kN)							
	k (m/yr)							
Type of test								
Triaxial Compr.	Cohesion (kPa)	c'						
	Angle of internal friction	φ'						
	σ ₃ (kPa)							
	Type of test							
Chemical	Sulphate content (%)							
	Chloride content (%)							
	Organic Matter content (%)							
	pH value							
Compaction	Optimum m.c. (%)							
	Max. dry density (Mg/m ³)							
	Type of test							
Remarks								

- = Single Stage
- M = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- P = Pore Water pressure
- B = Back pressure saturation
- = Non Plastic

CHECKED BY *W.K. Chan* DATE 23-6-2001
 W.K. Chan



SUMMARY OF SOIL TEST RESULTS

CLIENT ALS Technichem (HK) Pty Ltd. REPORT NO. SUM 01060612
 SITE Infrastructure for Penny's Bay Development - Site Investigation Phase 2
 CONTRACT NO. _____ WORKS ORDER NO. _____
 JOB NO. GCE/PS/01185 DATE 23-6-2001

Site Data	Sample I.D.		HK11273-10				
	Sample / Specimen No.		S0009/SW10				
	Type		Bulk				
	Depth (m)		0.15-0.30				
Soil Description			Moist, greenish brown, silty, very gravelly SAND				
In-situ	Moisture Content (%)						
	Density	Bulk Dry	(Mg/m ³)				
Specific gravity							
Atterberg Limits	Liquid Limit (LL)						
	Plastic Limit (PL)						
	Plasticity Index (PI)						
	Liquididity Index (LI)						
Particle Size	Clay (%)		8				
	Silt (%)		14				
	Sand (%)		43				
	Gravel (%)		35				
Consolidation	e ₀						
	C _c (Compression Index)						
	C _v (m ² /yr)						
	m _v (m ² /kN)						
	k (m/yr)						
Type of test							
Triaxial Compr.	Cohesion (kPa)	c'					
	Angle of internal friction	φ'					
	σ' ₃ (kPa)						
	Type of test						
Chemical	Sulphate content (%)						
	Chloride content (%)						
	Organic Matter content (%)						
	pH value						
Compaction	Optimum m.c. (%)						
	Max. dry density (Mg/m ³)						
	Type of test						
Remarks							

- = Single Stage
- M = Multi Stage
- = Consolidated
- = Drained
- U = Undrained
- P = Pore Water pressure
- B = Back pressure saturation
- = Non Plastic

CHECKED BY W.K. Chan DATE 23-6-2001
 W.K. Chan

(2) PARTICLE SIZE DISTRIBUTION CURVES



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

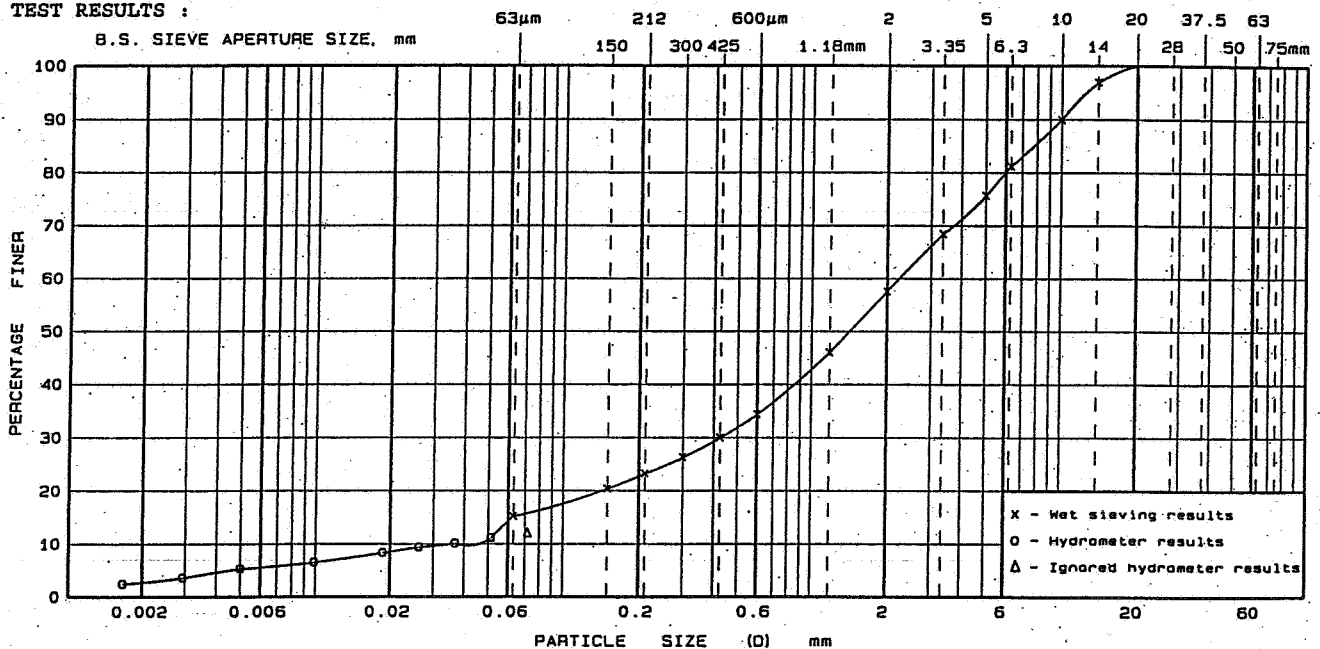
Page 1 of 1

CLIENT*	: ALS TECHNICHEM (HK) PTY LTD.	REPORT NO.	: PSD01060117
SITE*	: INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2	DATE RECEIVED	: 09/05/2001
TEST LOCATION	: GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON	DATE STARTED	: 26/05/2001
W.O. NO.*	: -- CONTRACT NO.* : --	DATE COMPLETED	: 13/06/2001
JOB NO.	: GCE/PS/01185 TEST UNIT NO. : STP 01052	SAMPLE TYPE*	: BULK
HOLE NO.*	: -- SAMPLE NO.* : S0012/SW 1	SAMPLE DEPTH*	: 1.40-1.50 m
DESCRIPTION	: Moist, greenish brown, silty, very gravelly SAND	SPEC. DEPTH*	: -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.039 mm
 Median Diameter (D_{50}) = 1.4 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 59
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 3 %
 SILT = 11 %
 SAND = 44 %
 GRAVEL = 42 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-13

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 13/06/2001

DATE : 23/06/2001

DATE : 23/06/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL
 IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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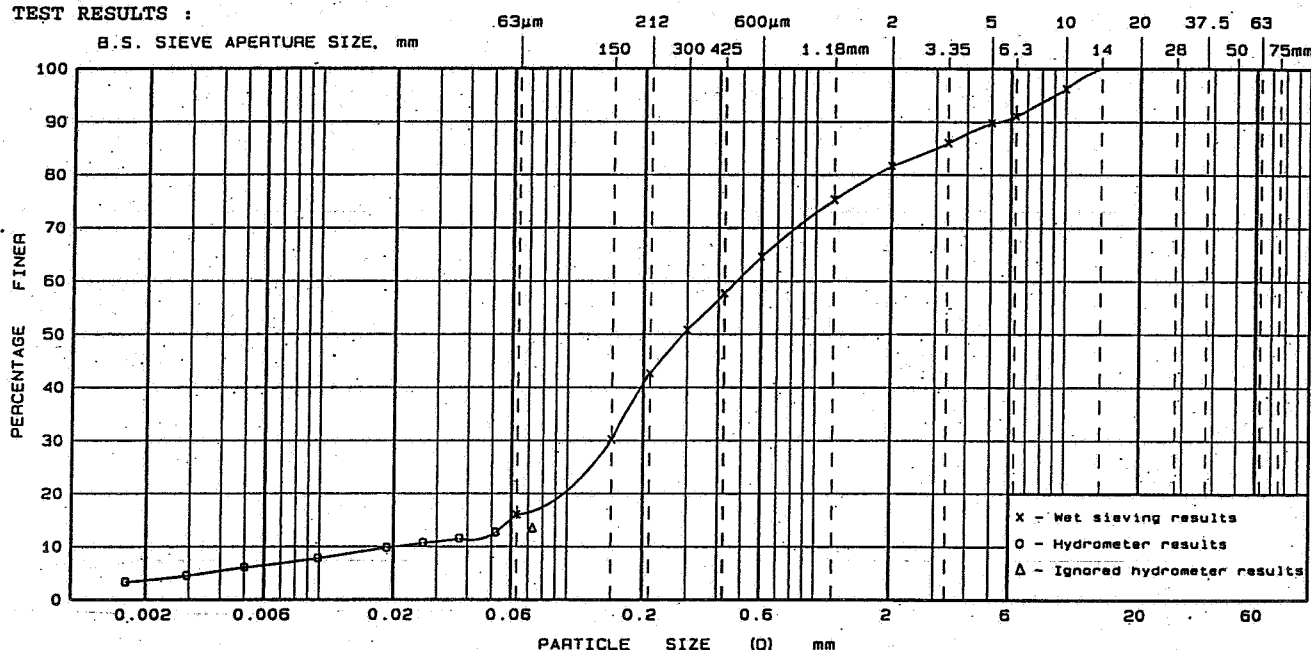
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOLE NO.* : -- SAMPLE NO.* : S0011/SW 6
 DESCRIPTION : Moist, greenish brown, silty, gravelly SAND

REPORT NO. : PSD01060116
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED: 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 0.15-0.30 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D_{10}) = 0.021 mm
 Median Diameter (D_{50}) = 0.30 mm
 Uniformity Coefficient ($U = D_{60}/D_{10}$) = 23
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 4 %
 SILT = 11 %
 SAND = 67 %
 GRAVEL = 18 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-12

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*
 W.T. Cheung

POST : Lab. Technician
 DATE : 13/06/2001

POST : Reporting Officer
 DATE : 23/06/2001

POST : Dept. Manager
 DATE : 23/06/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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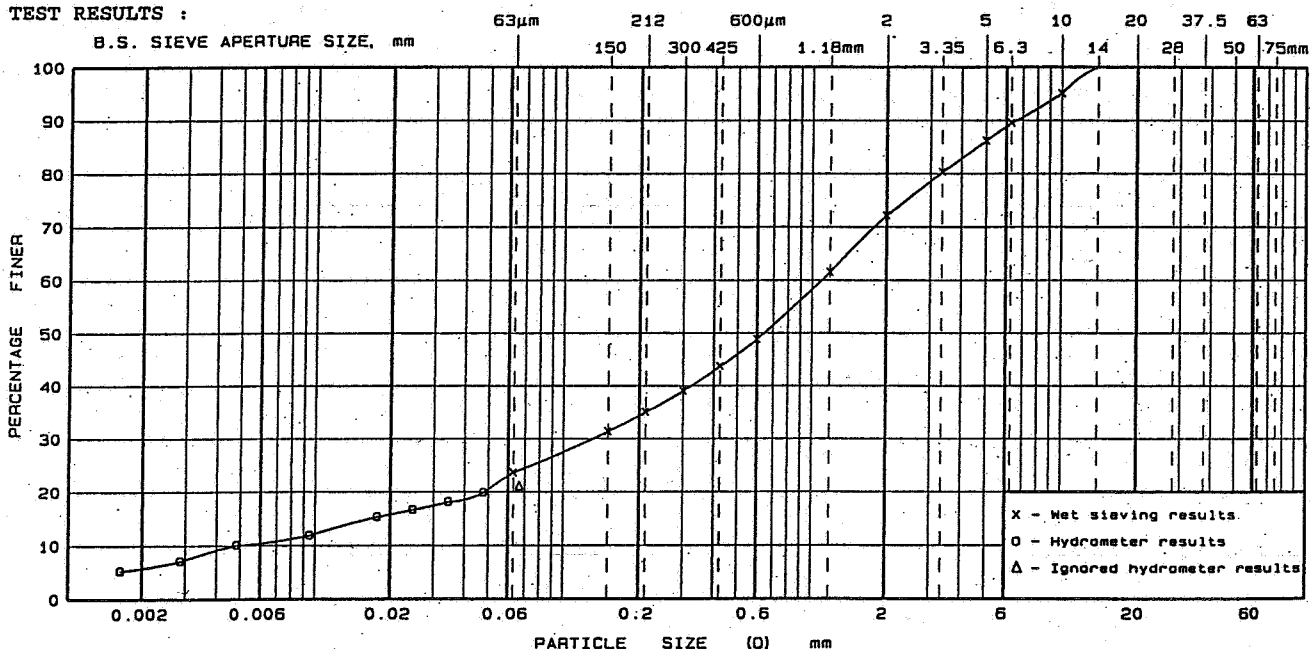
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOLE NO * : -- SAMPLE NO.* : S0010/SW 9
 DESCRIPTION : Moist, yellowish brown, silty, very gravelly SAND

REPORT NO. : PSD01060115
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED: 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 0.25-0.40 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB- BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D₁₀) = 0.0050 mm
 Median Diameter (D₅₀) = 0.66 mm
 Uniformity Coefficient (U = D₆₀/D₁₀) = 226
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 6 %
 SILT = 17 %
 SAND = 49 %
 GRAVEL = 28 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-11

TESTED BY : W.S. LEE

CHECKED BY : W.K. Chan
 W.K. Chan

CERTIFIED BY : W.T. Cheung
 W.T. Cheung

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 13/06/2001

DATE : 23/06/2001

DATE : 23/06/2001

Form No.: SOI-P4/R Issue 2 Rev. 4 (1-6-2000) Page 38 of 40



REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEO REPORT NO. 36 : 1994 TEST(S) 2.9.2A / 2.9.5A / 2.9.6

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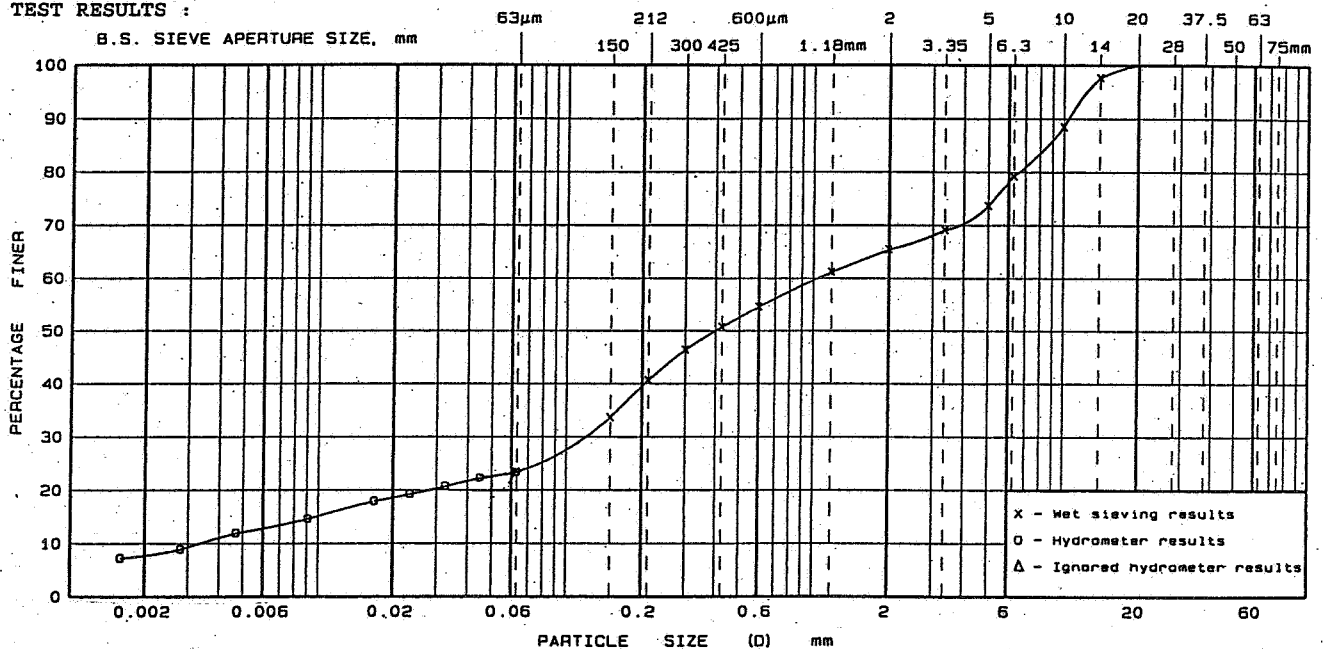
CLIENT* : ALS TECHNICHEM (HK) PTY LTD.
 SITE* : INFRASTRUCTURE FOR PENNY'S BAY DEVELOPMENT - S.I. PHASE 2
 TEST LOCATION : GROUND FLOOR, 21-23 SAN WAI STREET, HUNG HOM, KOWLOON
 W.O. NO.* : -- CONTRACT NO.* : --
 JOB NO. : GCE/PS/01185 TEST UNIT NO. : STP 01052
 HOLE NO.* : -- SAMPLE NO.* : S0009/SW10
 DESCRIPTION : Moist, greenish brown, silty, very gravelly SAND

REPORT NO. : PSD01060114
 DATE RECEIVED : 09/05/2001
 DATE STARTED : 26/05/2001
 DATE COMPLETED: 13/06/2001
 SAMPLE TYPE* : BULK
 SAMPLE DEPTH* : 0.15-0.30 m
 SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	SILT	Fine	Medium	Coarse	SAND	Fine	Medium	Coarse	GRAVEL	COB- BLES

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

FINAL SUMMARY

Effective Diameter (D₁₀) = 0.0034 mm
 Median Diameter (D₅₀) = 0.41 mm
 Uniformity Coefficient (U = D₆₀/D₁₀) = 314
 (Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

CLAY = 8 %
 SILT = 14 %
 SAND = 43 %
 GRAVEL = 35 %

Note : *Information provided by client
 Remarks: SAMPLE I.D. : HK11273-10

TESTED BY : W.S. LEE

CHECKED BY : *W.K. Chan*
 W.K. Chan

CERTIFIED BY : *W.T. Cheung*

POST : Lab. Technician

POST : Reporting Officer

POST : Dept. Manager

DATE : 13/06/2001

DATE : 23/06/2001

DATE : 23/06/2001

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