

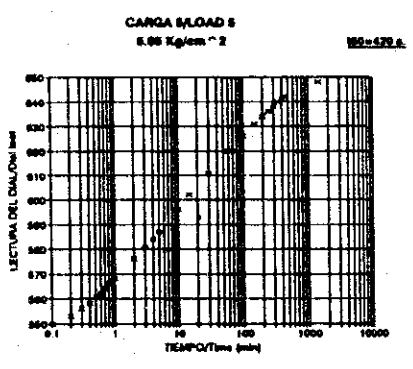
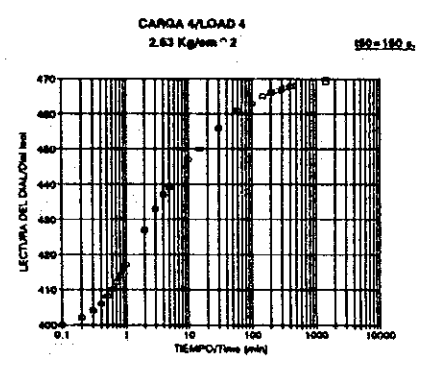
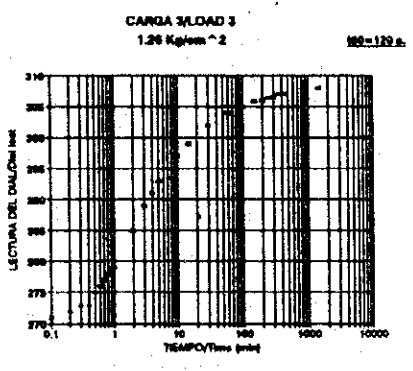
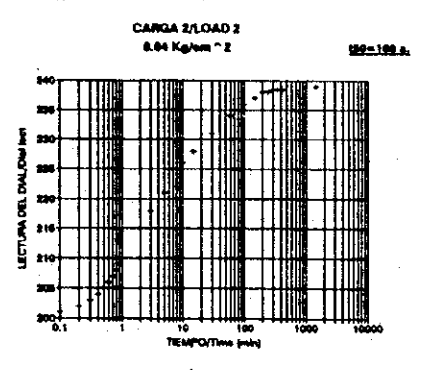
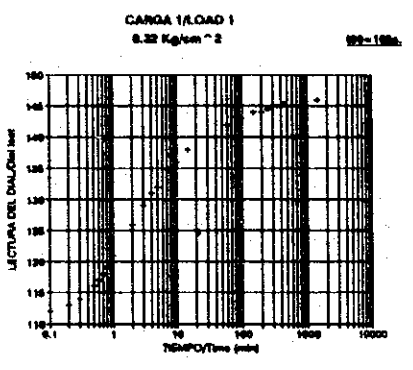
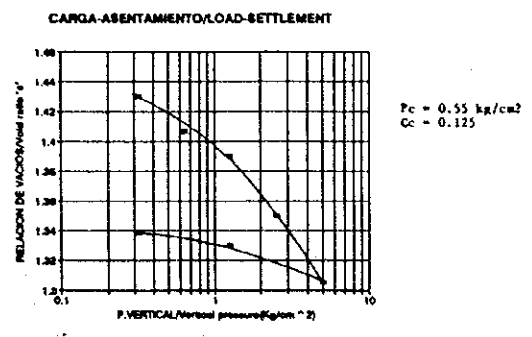
Appendix 8

**CONSOLIDATION TEST**

**DISTURBED SAMPLE**

C - 10

H MUESTRA / Specimen final height:	24.38	mm
H <sub>0</sub> AGUA / Final water height:	13.68	mm
H <sub>0</sub> AGUA / Final height of water:	13.67	mm
V VACIOS INIC / Initial void ratio:	1.47	
V VACIOS FINAL / Final void ratio:	1.37	
Sr (%) / Initial saturation degree:	80.00	%
Sr (%) / Final saturation degree:	88.48	%

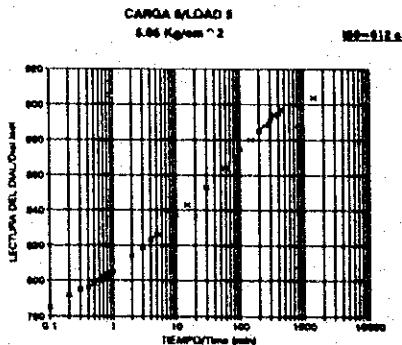
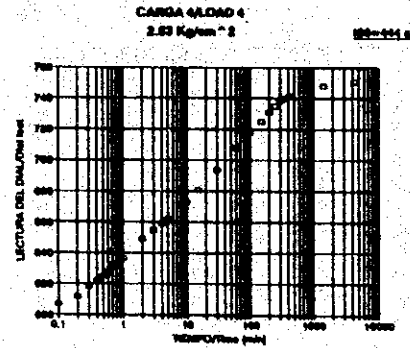
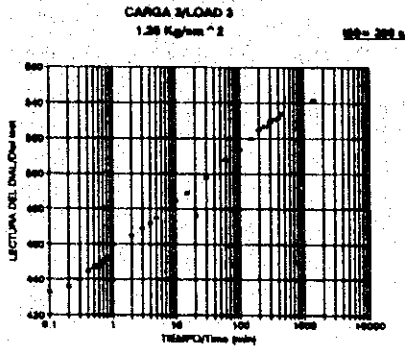
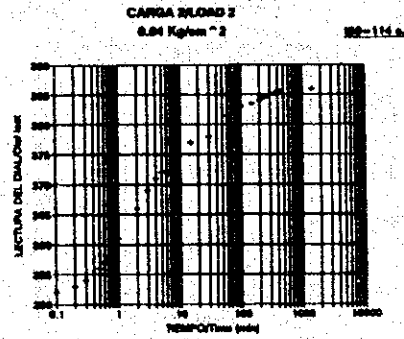
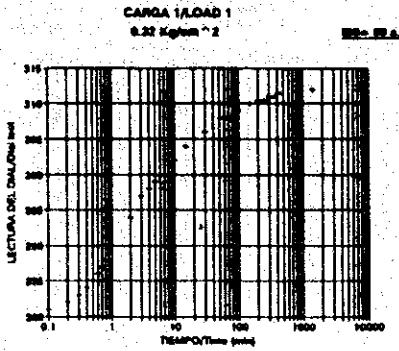
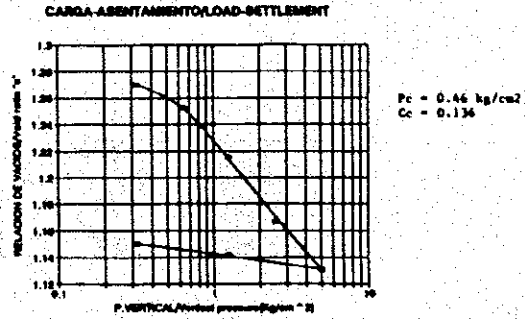


GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 1  
DISTURBED SAMPLE

C - 11

H <sub>0</sub> (cm) / Preconsolidation final height:	25.97	mm
H <sub>0</sub> (ADU) / Final water height:	13.92	mm
H <sub>0</sub> (ADU) / Final height of water:	13.12	mm
e <sub>0</sub> / Initial void ratio:	1.24	
e <sub>0</sub> (ADU) / Initial void ratio:	1.17	
U <sub>c</sub> (%) / Initial saturation degree:	93.34	%
U <sub>c</sub> (%) / Final saturation degree:	100.00	%



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SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS

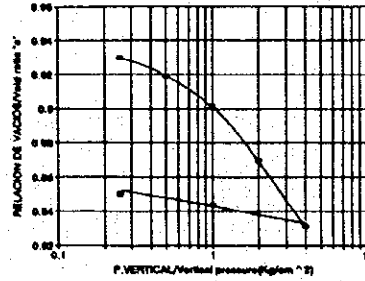
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 2  
DISTURBED SAMPLE

C - 12

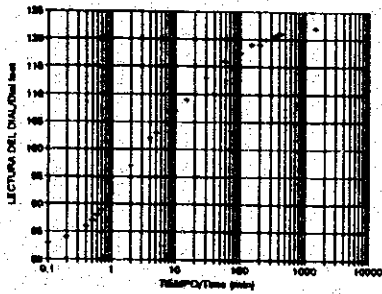
H MUESTRA/SPECIMEN TEST HEIGHT	24.31	mm
H <sub>0</sub> AGUA/FINAL WATER HEIGHT	7.60	mm
H <sub>0</sub> AGUA/FINAL HEIGHT OF WATER	8.07	mm
e VACIOS INIC./INITIAL VOID RATIO	0.95	
e VACIOS FINAL/FINAL VOID RATIO	0.97	
e <sub>max</sub> (%) /INITIAL EXTENSION DEGREE	63.70	%
e <sub>max</sub> (%) /FINAL EXTENSION DEGREE	71.35	%

CARGA-ASENTAMIENTO/LOAD-BETTERMENT

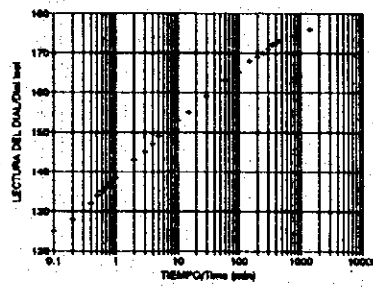


P<sub>c</sub> = 1.05 kg/cm<sup>2</sup>  
C<sub>c</sub> = 0.126

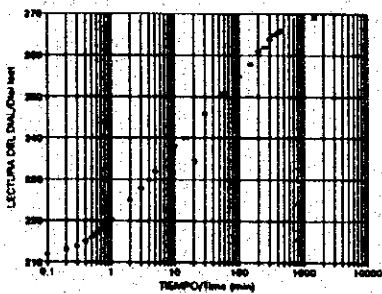
CARGA 1/LOAD 1  
0.25 Kg/cm<sup>2</sup>      e<sub>total</sub> = 100



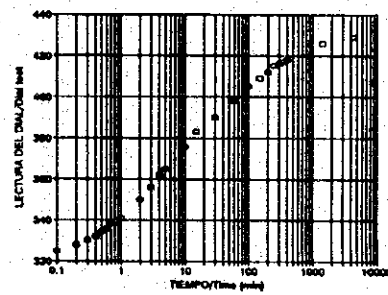
CARGA 2/LOAD 2  
0.50 Kg/cm<sup>2</sup>      e<sub>total</sub> = 168



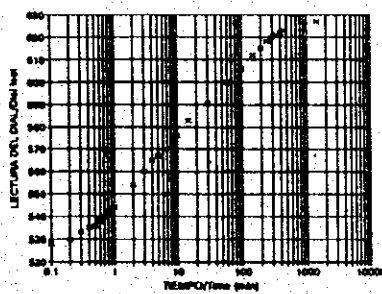
CARGA 3/LOAD 3  
1.00 Kg/cm<sup>2</sup>      e<sub>total</sub> = 435



CARGA 4/LOAD 4  
2.00 Kg/cm<sup>2</sup>      e<sub>total</sub> = 364



CARGA 5/LOAD 5  
4.00 Kg/cm<sup>2</sup>      e<sub>total</sub> = 300

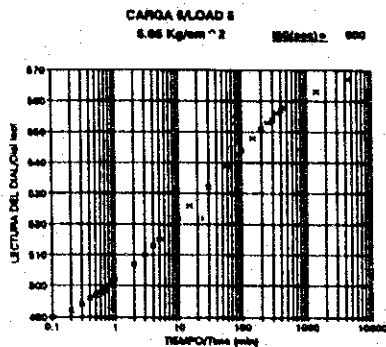
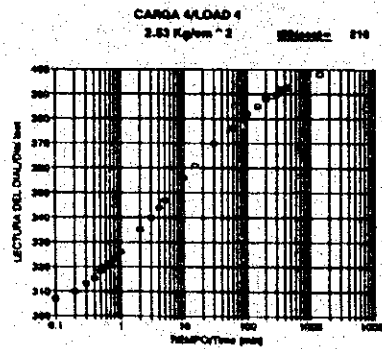
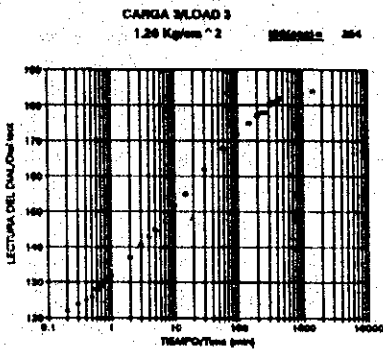
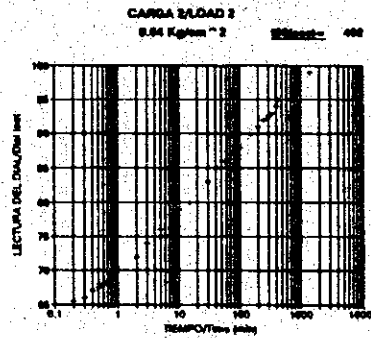
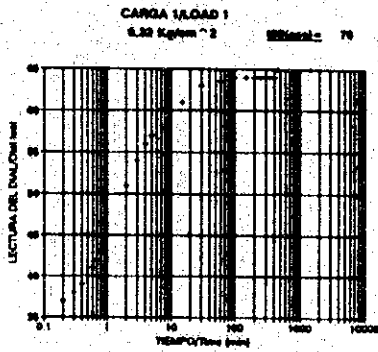
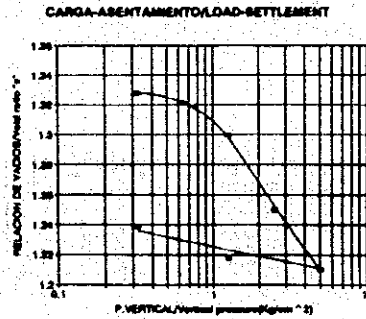


GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 3  
DISTURBED SAMPLE

C - 13

HUESTRAS	Specimen final height	24.26	mm
H <sub>0</sub> AGUA	Initial water height	14.26	mm
H <sub>1</sub> AGUA	Final height of water	14.14	mm
V <sub>0</sub> VACIOS INIC	Initial void ratio	1.34	
V <sub>1</sub> VACIOS FINAL	Final void ratio	1.26	
W <sub>0</sub> (%)	Initial saturation degree	88.83	%
W <sub>1</sub> (%)	Final saturation degree	103.86	%



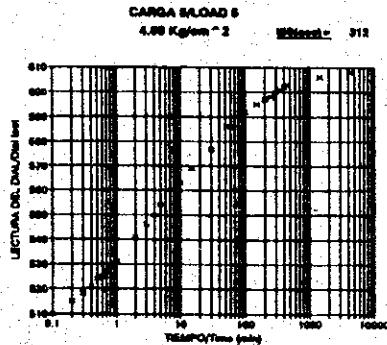
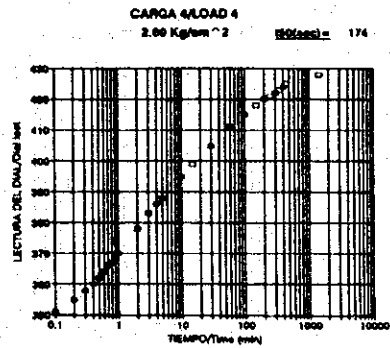
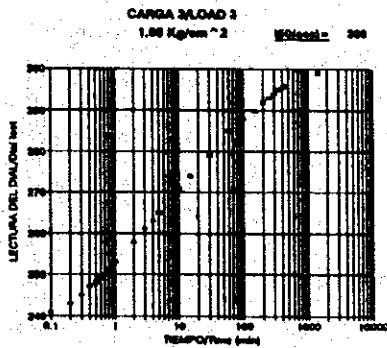
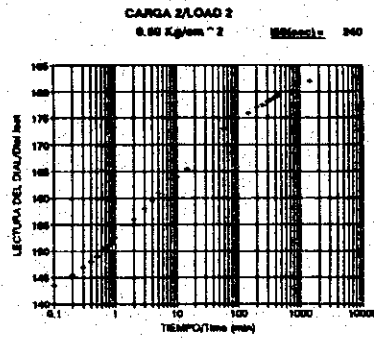
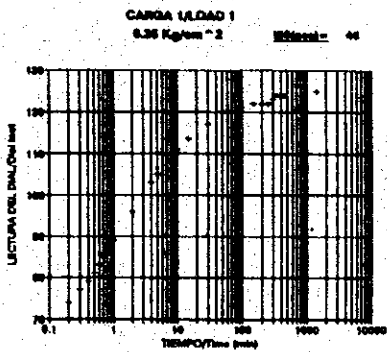
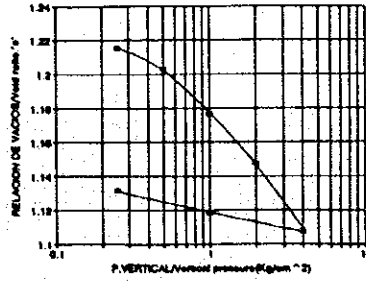
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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TITLE  
 CONSOLIDATION TEST - 4  
 DISTURBED SAMPLE

C - 14

H (mm) / Specimen total height	24.34	mm
H <sub>0</sub> (mm) / Initial water height	14.20	mm
H <sub>1</sub> (mm) / Final height of water	13.88	mm
A <sub>0</sub> (mm <sup>2</sup> ) / Initial void ratio	1.24	
A <sub>1</sub> (mm <sup>2</sup> ) / Final void ratio	1.18	
S <sub>0</sub> (%) / Initial saturation degree	101.45	%
S <sub>1</sub> (%) / Final saturation degree	107.38	%

CARGA-ASENTAMIENTO/LOAD-SETTLEMENT



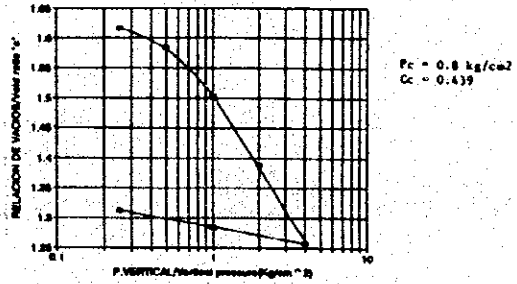
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
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SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
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TITLE  
CONSOLIDATION TEST - 5  
DISTURBED SAMPLE

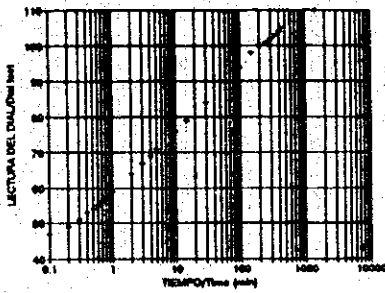
C - 15

H1 (M) Final water table height	22.38	mm
H2 (M) Final water height	14.82	mm
H3 (M) Final height of water	13.26	mm
V (VACIOS) Final void ratio	1.88	
V (VACIOS) Final void ratio	1.33	
W (W) Final saturation degree	84.42	%
W (W) Final saturation degree	104.47	%

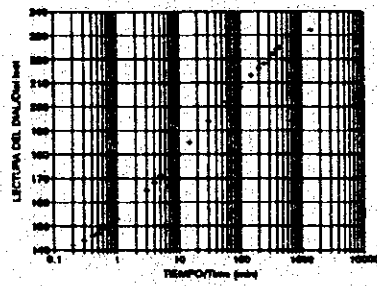
CARGA-ASENTAMIENTO/LOAD-SETTLEMENT



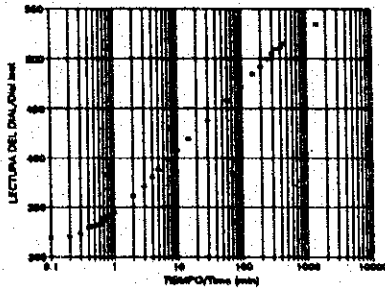
CARGA 1/LOAD 1  
0.25 Kg/cm<sup>2</sup> W (W) = 688



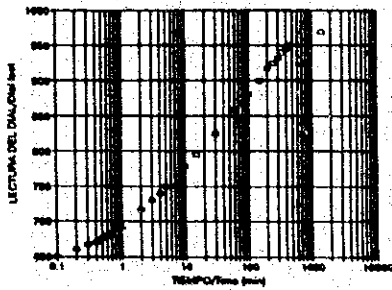
CARGA 2/LOAD 2  
0.50 Kg/cm<sup>2</sup> W (W) = 688



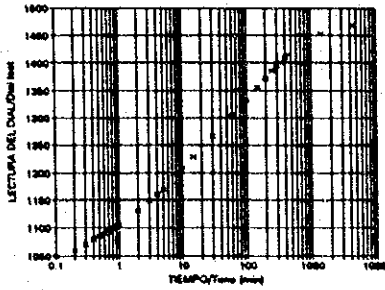
CARGA 3/LOAD 3  
1.00 Kg/cm<sup>2</sup> W (W) = 780



CARGA 4/LOAD 4  
2.00 Kg/cm<sup>2</sup> W (W) = 880



CARGA 5/LOAD 5  
4.00 Kg/cm<sup>2</sup> W (W) = 980



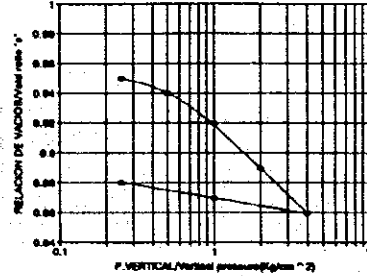
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 6  
DISTURBED SAMPLE

C - 16

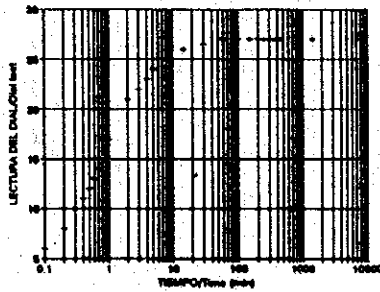
H. AGUAFINAL	Final water height	21.85	mm
H. AGUAFINAL	Final water height	13.88	mm
H. AGUAFINAL	Final water height	13.15	mm
V. VACIOS INIC	Initial void ratio	0.88	
V. VACIOS FINAL	Final void ratio	0.88	
U <sub>50</sub> (%)	Initial saturation degree	111.88	%
U <sub>50</sub> (%)	Final saturation degree	113.75	%

CARGA-ASENTAMIENTO/LOAD-SETTLEMENT

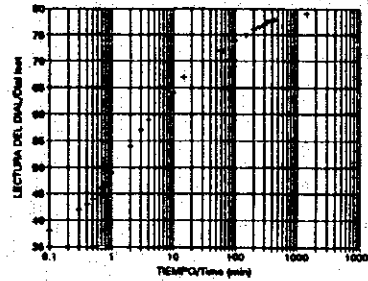


P<sub>c</sub> = 0.75 kg/cm<sup>2</sup>  
C<sub>c</sub> = 0.107

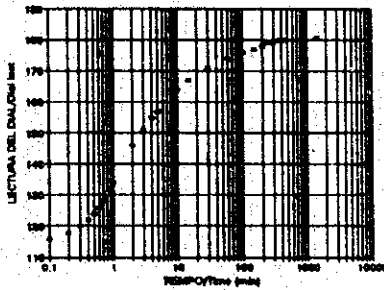
CARGA 1/LOAD 1  
0.25 Kg/cm<sup>2</sup> U<sub>50</sub>(%) = 41



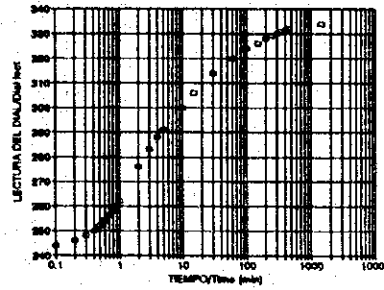
CARGA 2/LOAD 2  
0.50 Kg/cm<sup>2</sup> U<sub>50</sub>(%) = 100



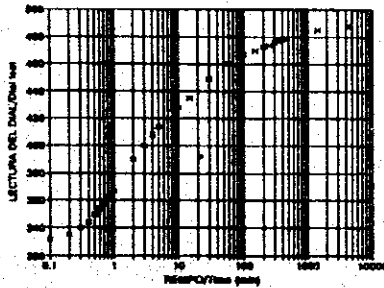
CARGA 3/LOAD 3  
1.00 Kg/cm<sup>2</sup> U<sub>50</sub>(%) = 84



CARGA 4/LOAD 4  
2.00 Kg/cm<sup>2</sup> U<sub>50</sub>(%) = 150



CARGA 5/LOAD 5  
4.00 Kg/cm<sup>2</sup> U<sub>50</sub>(%) = 130



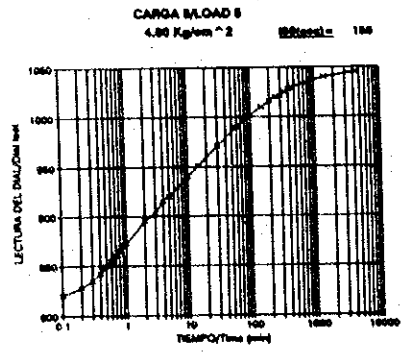
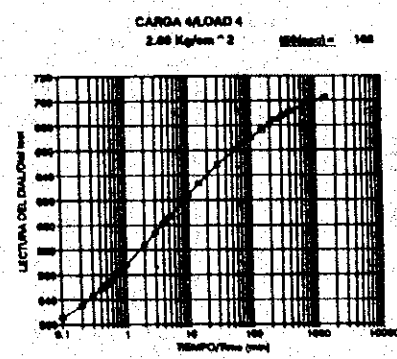
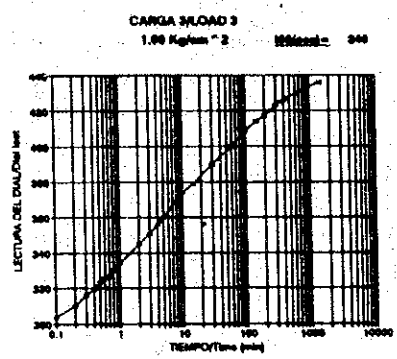
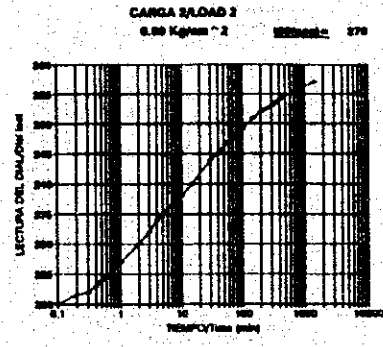
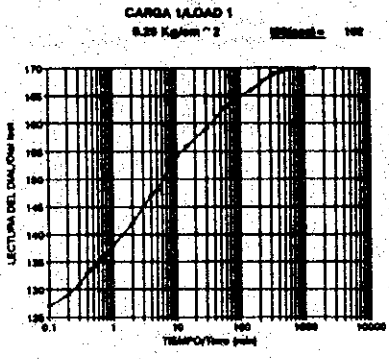
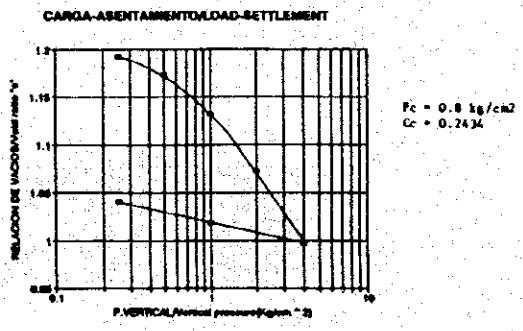
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
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JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 7  
DISTURBED SAMPLE



C-17

ALTURAS/Specimen total height	21.60	mm
AL. AGUA/Water layer height	13.64	mm
AL. AGUA/Final height of water	13.27	mm
EVACUOS. INIC./Initial void ratio	1.23	
EVACUOS. FINAL/Final void ratio	1.06	
Dr (%) Initial saturation degree	97.56	%
Dr (%) Final saturation degree	100.65	%



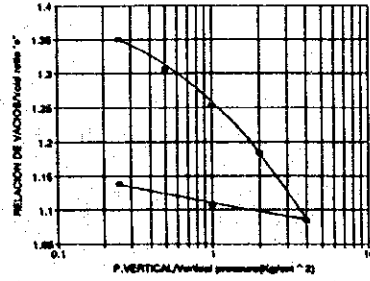
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
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TITLE  
CONSOLIDATION TEST - 8  
DISTURBED SAMPLE

C - 18

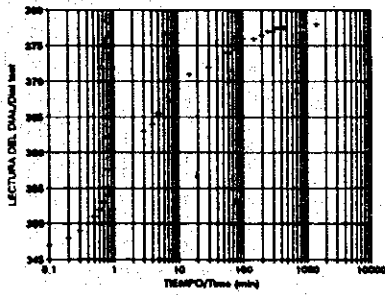
H INICIAL/Specimen final height	27.82	mm
H <sub>0</sub> AQUA/Initial water height	13.98	mm
H <sub>0</sub> AQUA/Final height of water	12.48	mm
e VACIOS INIC/Initial void ratio	1.44	
e VACIOS FINAL/Final void ratio	1.17	
U <sub>c</sub> (e <sub>0</sub> )/Initial compression degree	91.18	%
U <sub>c</sub> (e <sub>f</sub> )/Final saturation degree	102.21	%

CARGA-ASENTAMIENTO/LOAD-SETTLEMENT

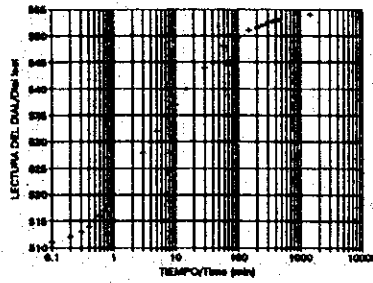


$P_c = 0.7 \text{ kg/cm}^2$   
 $C_c = 0.335$

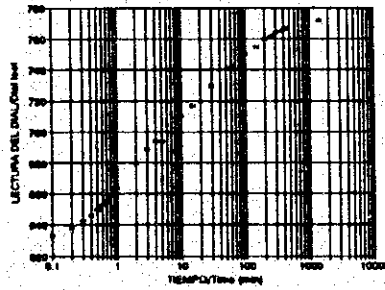
CARGA 1/LOAD 1  
 8.25 Kg/cm<sup>2</sup>  $U_c(\text{est}) = 100$



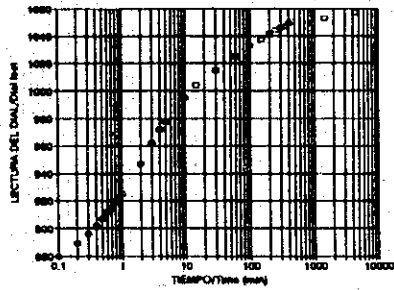
CARGA 2/LOAD 2  
 8.80 Kg/cm<sup>2</sup>  $U_c(\text{est}) = 100$



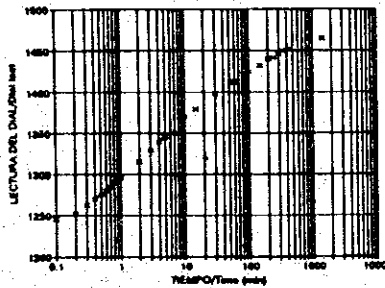
CARGA 3/LOAD 3  
 1.90 Kg/cm<sup>2</sup>  $U_c(\text{est}) = 210$



CARGA 4/LOAD 4  
 2.60 Kg/cm<sup>2</sup>  $U_c(\text{est}) = 144$



CARGA 5/LOAD 5  
 4.80 Kg/cm<sup>2</sup>  $U_c(\text{est}) = 234$



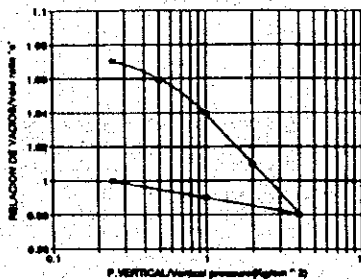
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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TITLE  
 CONSOLIDATION TEST - 9  
 DISTURBED SAMPLE

C - 19

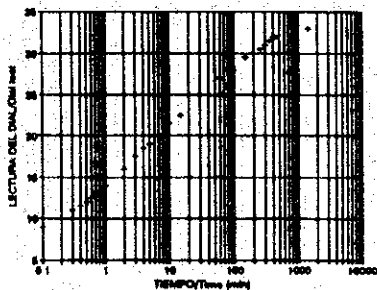
HUESO/Specimen total height	24.58	mm
H <sub>0</sub> AGUA/Initial water height	13.80	mm
H <sub>0</sub> AGUA/Final height of water	12.96	mm
H VACIOS PSC/Initial void ratio	1.08	
H VACIOS FINAL/Final void ratio	1.01	
Sr (%) Initial saturation degree	104.79	%
Sr (%) Final saturation degree	104.16	%

CARGA-ASENTAMIENTO/LOAD-BETTERMENT

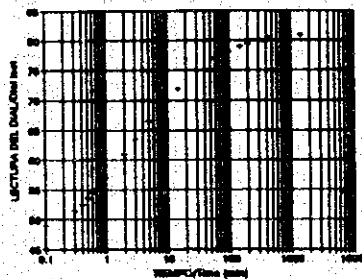


P<sub>c</sub> = 0.45 kg/cm<sup>2</sup>  
C<sub>c</sub> = 0.098

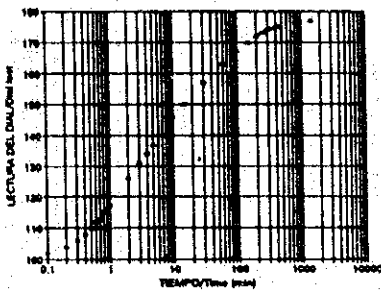
CARGA 1/LOAD 1  
0.26 Kg/cm<sup>2</sup> **ES/est:** 204



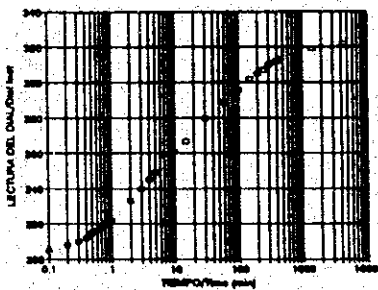
CARGA 2/LOAD 2  
0.69 Kg/cm<sup>2</sup> **ES/est:** 128



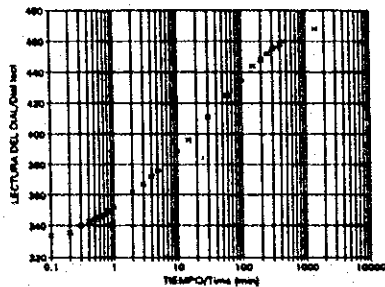
CARGA 3/LOAD 3  
1.36 Kg/cm<sup>2</sup> **ES/est:** 216



CARGA 4/LOAD 4  
2.06 Kg/cm<sup>2</sup> **ES/est:** 449



CARGA 5/LOAD 5  
4.06 Kg/cm<sup>2</sup> **ES/est:** 790



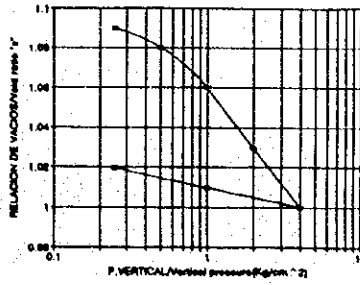
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 10  
DISTURBED SAMPLE

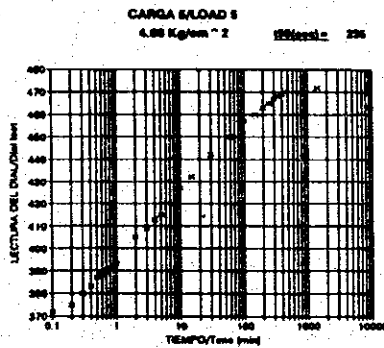
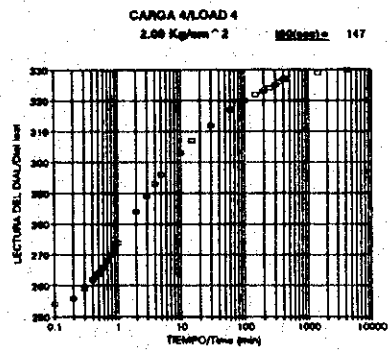
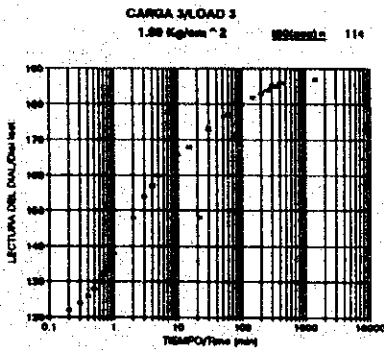
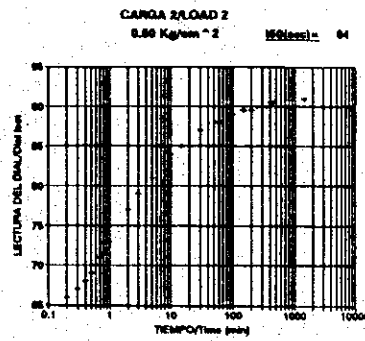
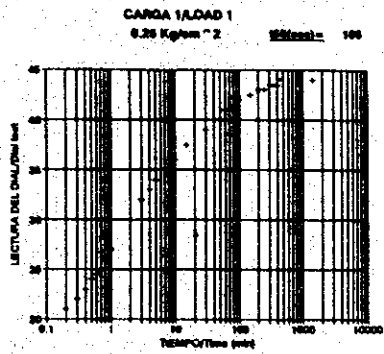
C - 20

HUESSO/Sampler total height	24.82	mm
HUESSO/Sampler water height	11.82	mm
HUESSO/Sampler height of water	12.97	mm
E.VACIOS INIC./Initial void ratio	1.10	
E.VACIOS FINAL./Final void ratio	1.03	
Sr-(%) Initial saturation degree	87.44	%
Sr-(%) Final saturation degree	99.94	%

CARGA-ASENTAMIENTO/LOAD-SETTLEMENT



$P_c = 0.75 \text{ kg/cm}^2$   
 $C_c = 0.106$



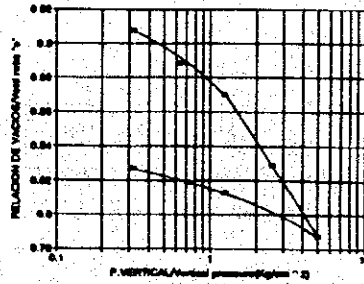
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
CONSOLIDATION TEST - 11  
DISTURBED SAMPLE

C - 21

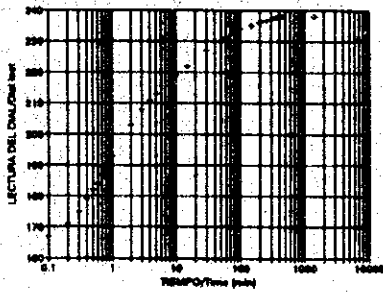
HT MUESTRA/Specimen final height	24.18	mm
HT AGUA/Initial water height	11.77	mm
HT AGUA/Final height of water	11.83	mm
EV VACIOS SMC/Initial void ratio	0.85	
EV VACIOS FINAL/Final void ratio	0.85	
Gr(e%) Initial saturation degree	84.80	%
Gr(F%) Final saturation degree	104.02	%

CARGA-ASENTAMIENTO/LOAD-SETTLEMENT

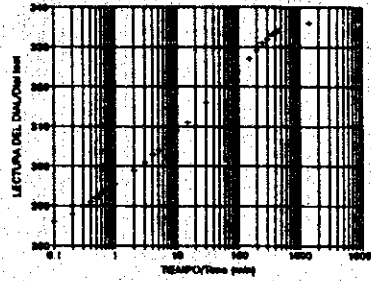


$P_c = 0.74 \text{ kg/cm}^2$   
 $C_c = 0.134$

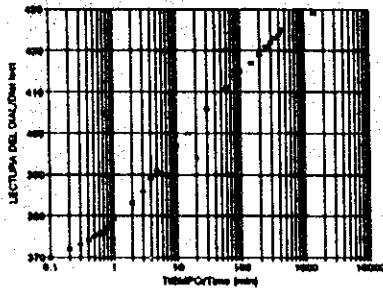
CARGA S/LOAD 1  
0.22 Kg/cm<sup>2</sup>  $e_{lim} = 77$



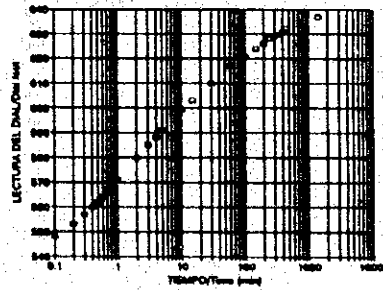
CARGA S/LOAD 2  
0.64 Kg/cm<sup>2</sup>  $e_{lim} = 640$



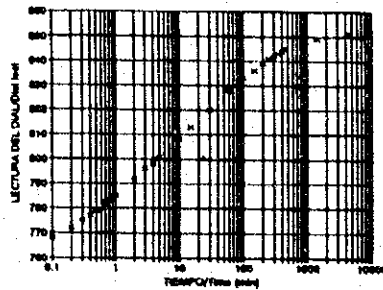
CARGA S/LOAD 3  
1.35 Kg/cm<sup>2</sup>  $e_{lim} = 400$



CARGA S/LOAD 4  
2.53 Kg/cm<sup>2</sup>  $e_{lim} = 144$



CARGA S/LOAD 5  
5.85 Kg/cm<sup>2</sup>  $e_{lim} = 204$



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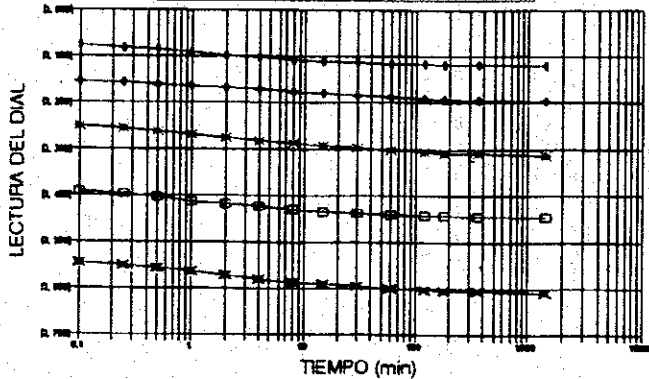
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE

CONSOLIDATION TEST - 12  
DISTURBED SAMPLE

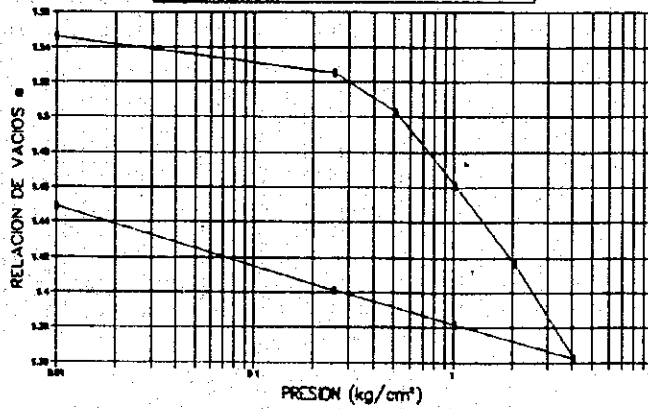
# UNDISTURBED SAMPLE

**CURVA TIEMPO-DEFORMACION**  
MUESTRA: C-22; PROF. 0.6-0.9 m.



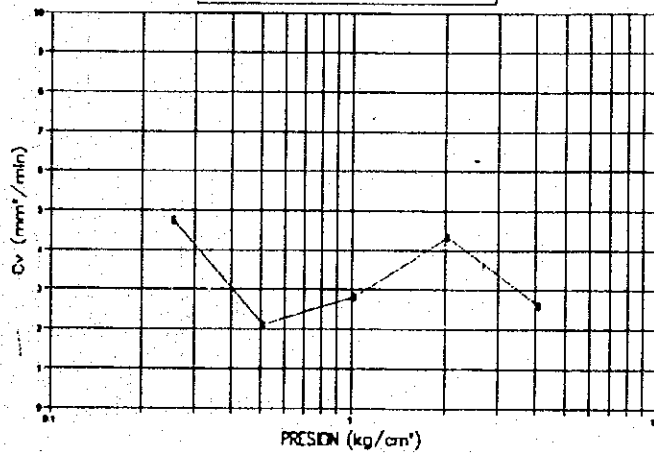
+ 0.25    + 0.50    + 1.0  
 - 2.0    - 4.0 kg/cm²

**CURVA CARGA-ASENTAMIENTO**  
MUESTRA: C-22; PROF. 0.6-0.9 m.



+ P.PREC. = 0.4 kg/cm²    + Cc = 0.18

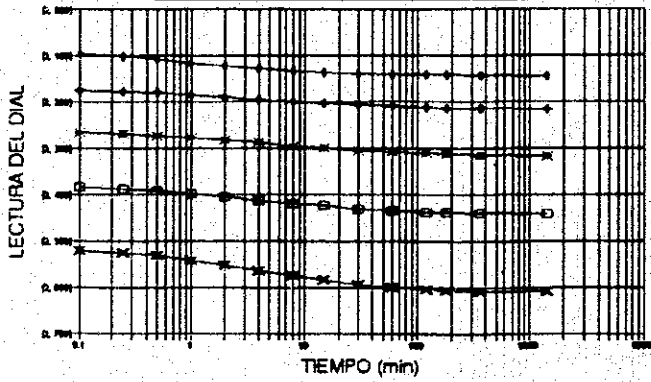
**CURVA COEF. Cv-Esf.**  
MUESTRA: C-22; PROF. 0.6-0.9 m.



GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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 SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
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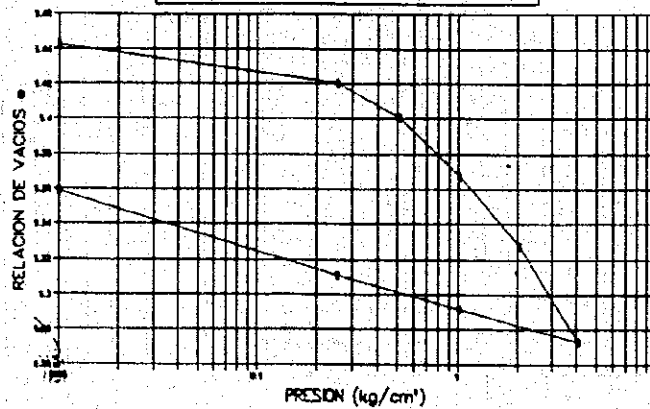
TITLE  
 CONSOLIDATION TEST - 13  
 UNDISTURBED SAMPLE

**CURVA TIEMPO-DEFORMACION**  
MUESTRA: C-23; PROF. 1.2-1.5 m.



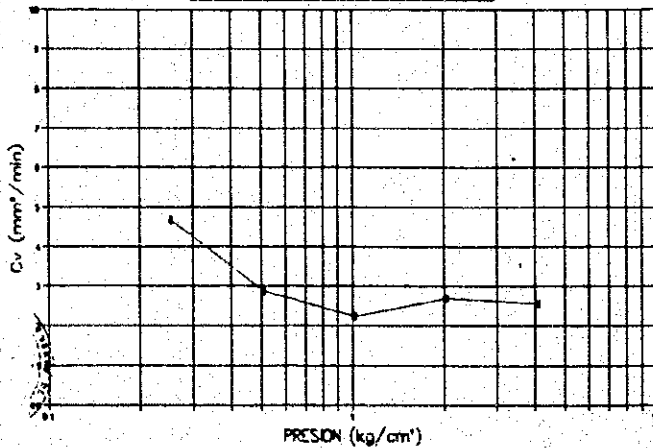
← 0.25      ← 0.50      ← 1.0  
 ← 2.0      ← 4.0 kg/cm²

**CURVA CARGA-ASENTAMIENTO**  
MUESTRA: C-23; PROF. 1.2-1.5 m.



← P.PREC. = 0.6 kg/cm²      ← Co = 0.18

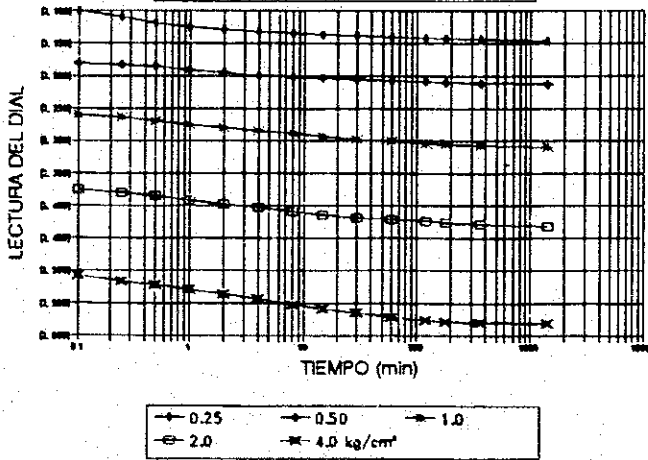
**CURVA COEF. Cv-Esf.**  
MUESTRA: C-23; PROF. 1.2-1.5 m.



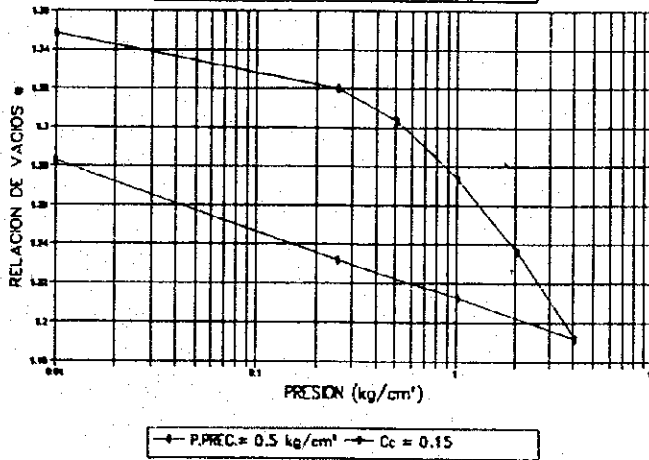
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE DETAILED DESIGN STUDY ON THE WATER TRANSFER  
 SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
 CONSOLIDATION TEST - 14  
 DISTURBED SAMPLE

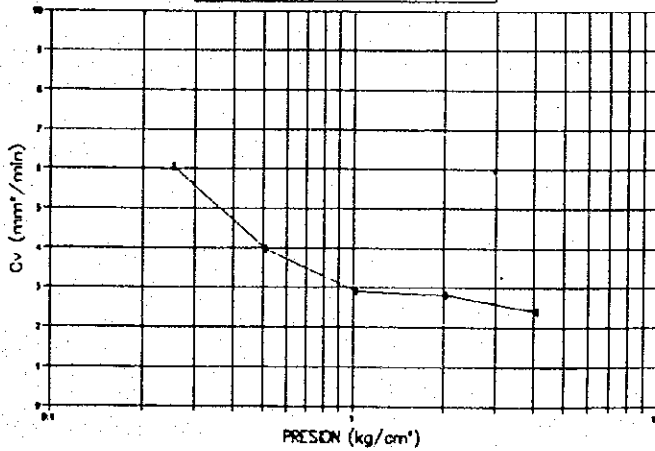
**CURVA TIEMPO-DEFORMACION**  
 MUESTRA: C-24; PROF. 1.6-1.9 m.



**CURVA CARGA-ASENTAMIENTO**  
 MUESTRA: C-24; PROF. 1.6-1.9 m.



**CURVA COEF. Cv-Esf.**  
 MUESTRA: C-24; PROF. 1.6-1.9 m.



GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
 SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
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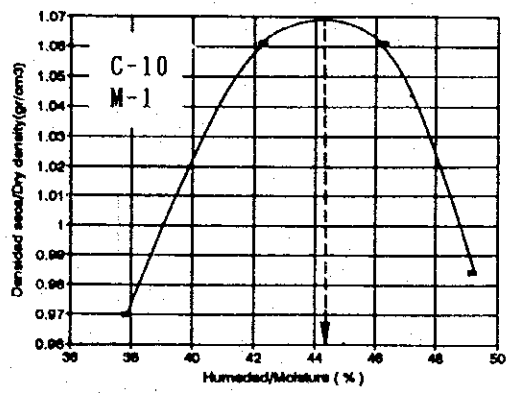
TITLE  
 CONSOLIDATION TEST - 15  
 UNDISTURBED SAMPLE



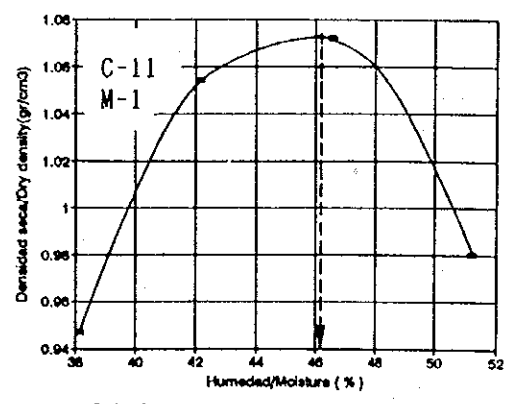
Appendix 9

**PROCTOR COMPACTION TEST**

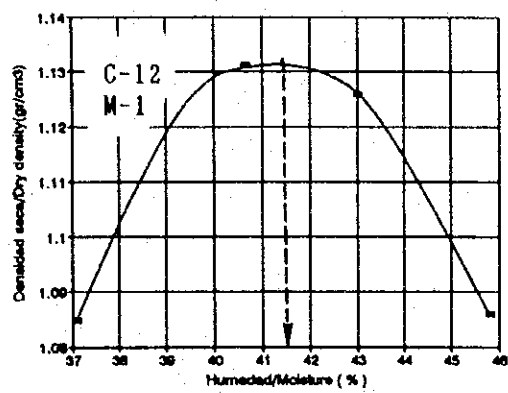
FIGURE



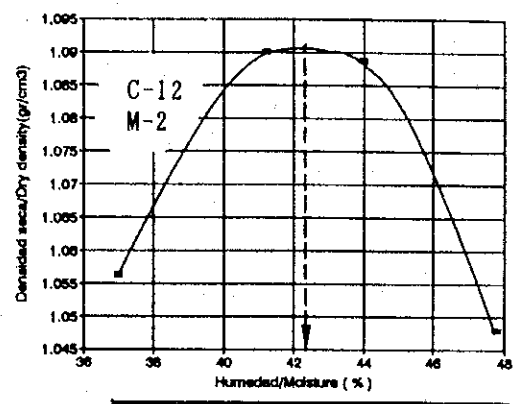
DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.07
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	44.40



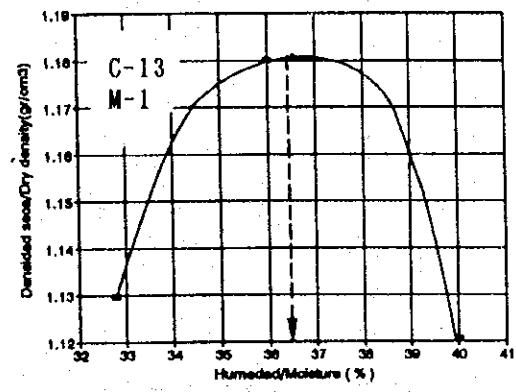
DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.07
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	45.60



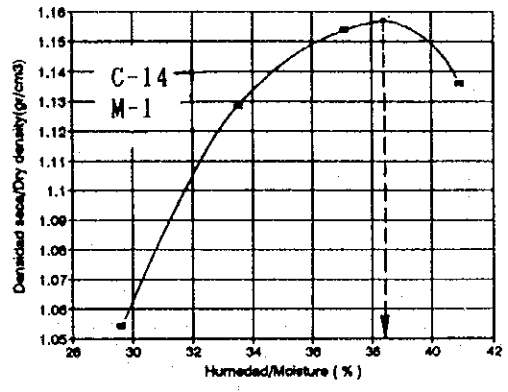
DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.13
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	41.60



DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.09
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	42.60



DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.18
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	36.30

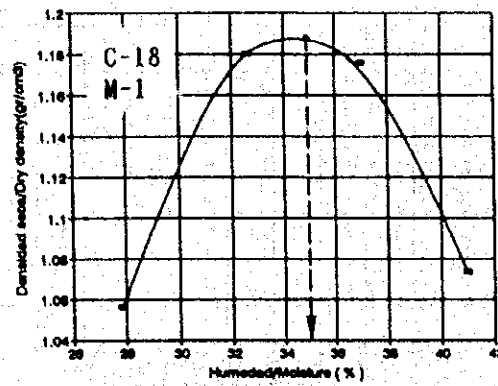
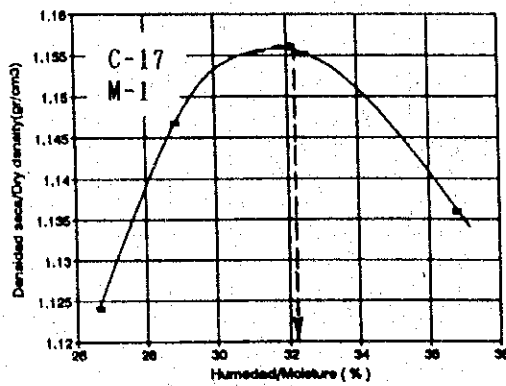
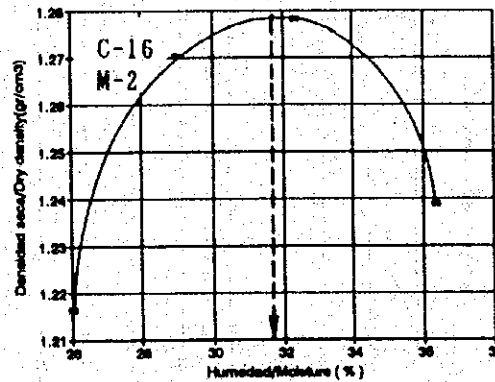
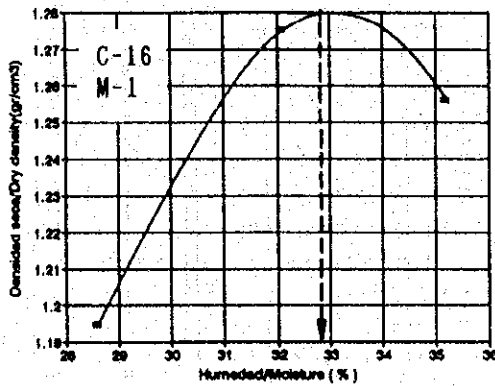
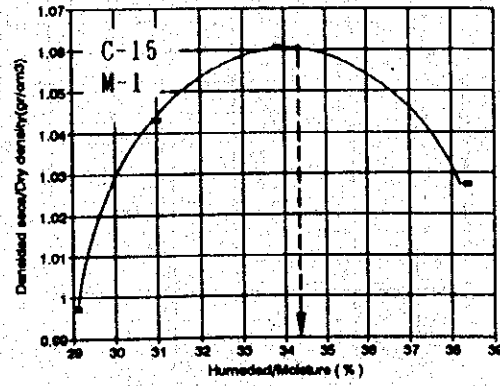
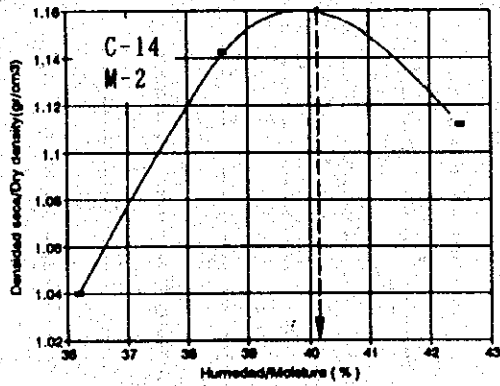


DENS. SECA MAX./MAX. DRY DENSITY (gr/cm <sup>3</sup> ):	1.16
HUMEDAD OPTIMA/OPTIM. MOISTURE (%):	37.80

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
**THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
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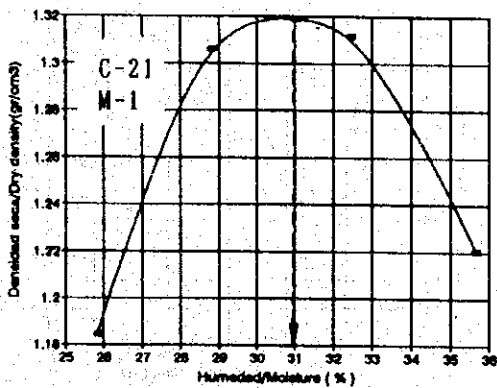
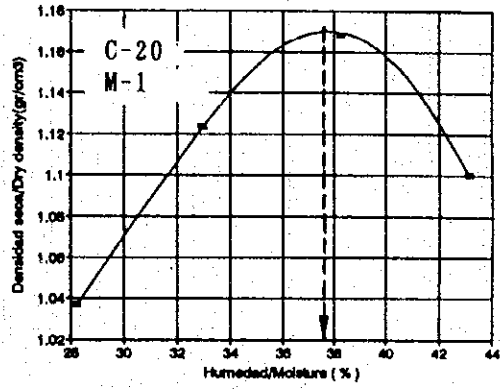
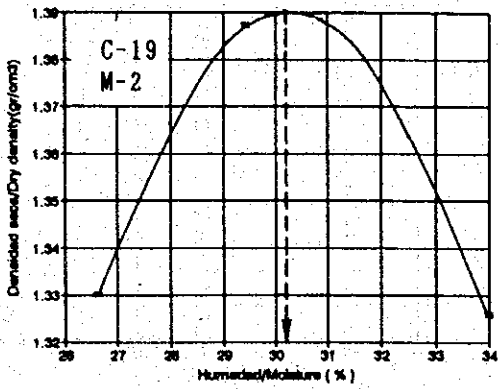
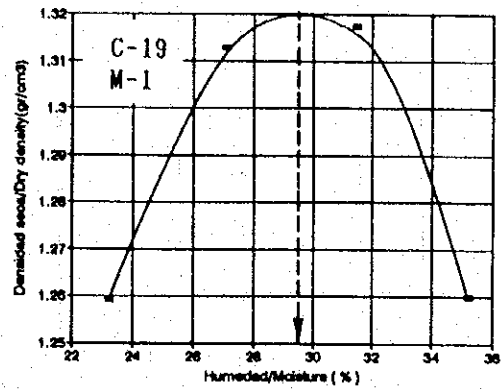
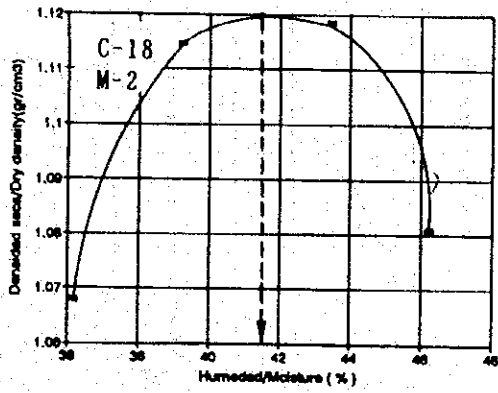
TITLE  
 PROCTOR COMPACTION TEST - 1  
 DRY DENSITY - MOISTURE

FIGURE



GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
 SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

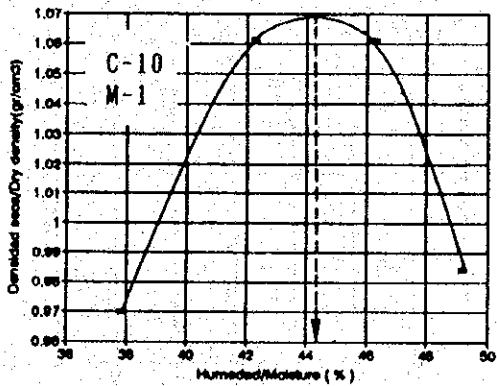
TITLE  
 PROCTOR COMPACTION TEST - 2  
 DRY DENSITY - MOISTURE



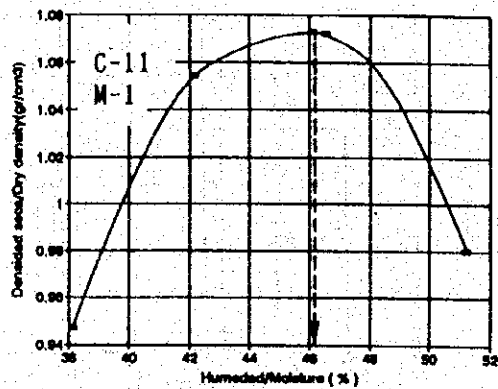
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
**THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
SCHEMES FOR CHONE-PORTOYEJO RIVER BASINS**  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
PROCTOR COMPACTION TEST - 3  
DRY DENSITY - MOISTURE

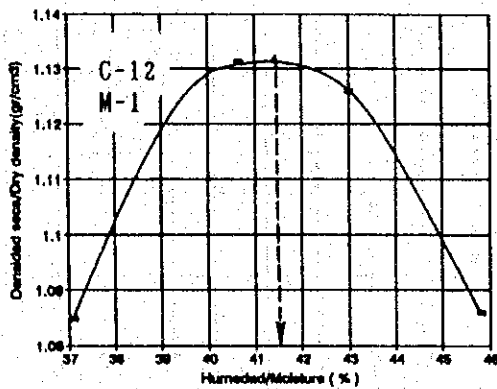
FIGURE



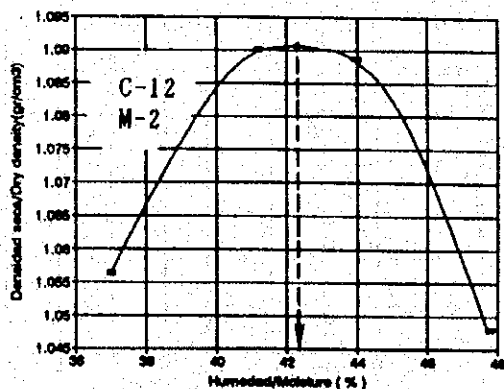
DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.07
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	44.40



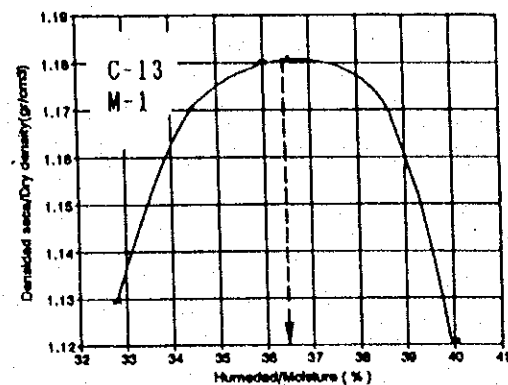
DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.07
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	45.60



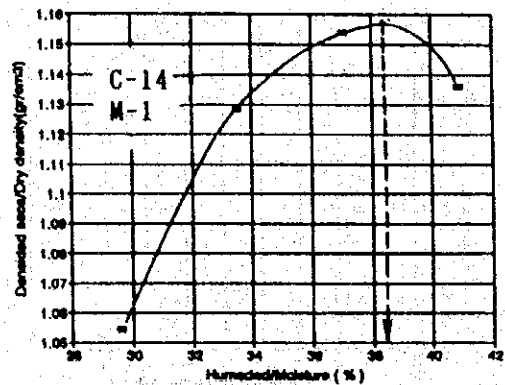
DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.13
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	41.60



DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.08
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	42.60



DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.18
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	36.30



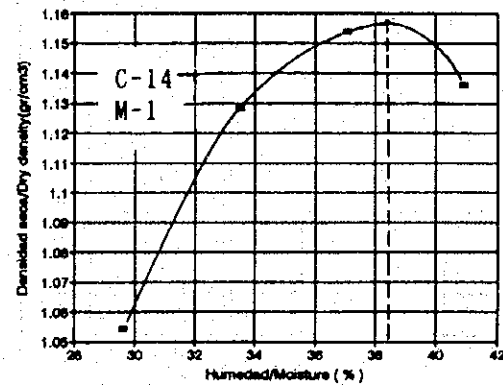
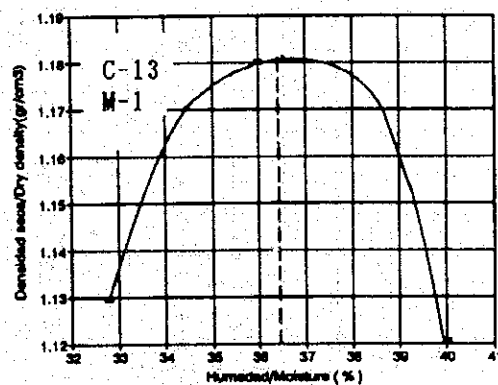
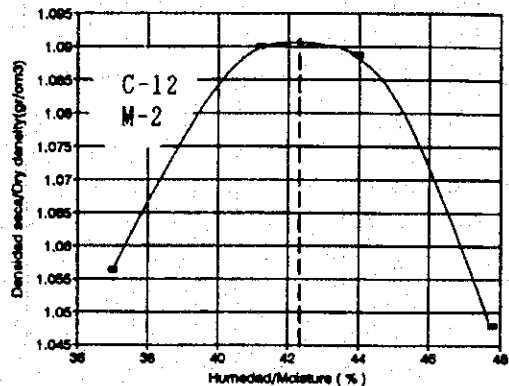
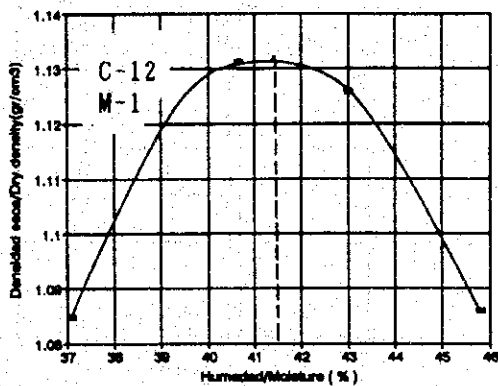
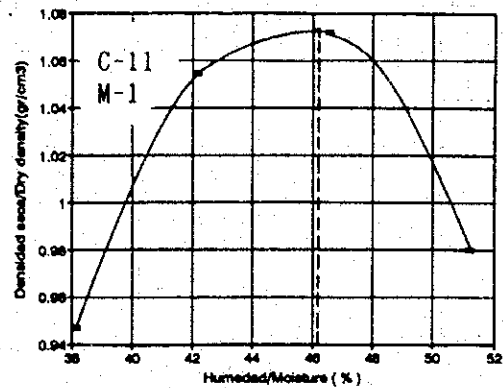
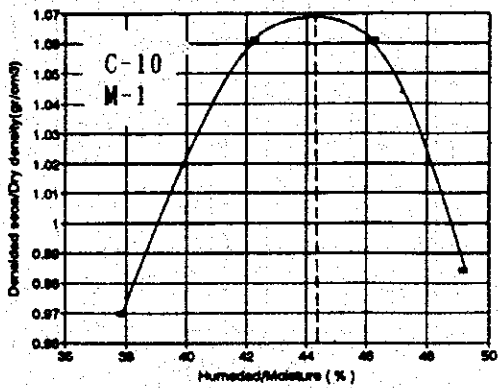
DENS. SECA MAX./MAX. DRY DENSITY (g/cm³)	1.16
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	37.80

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

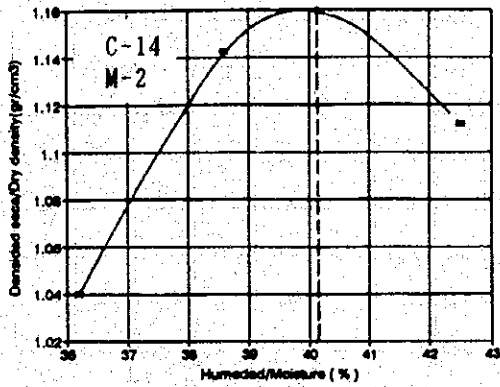
TITLE

PROCTOR COMPACTION TEST - I  
DRY DENSITY - MOISTURE

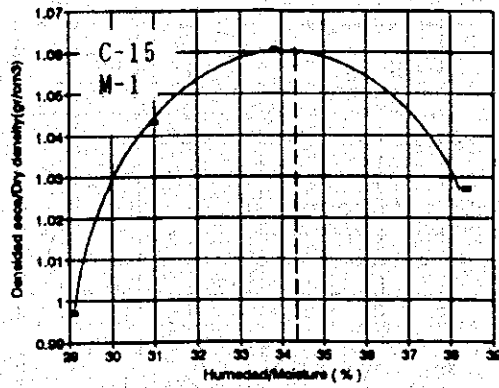


GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE DETAILED DESIGN STUDY ON THE WATER TRANSBASIN  
 SCHEMES FOR CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

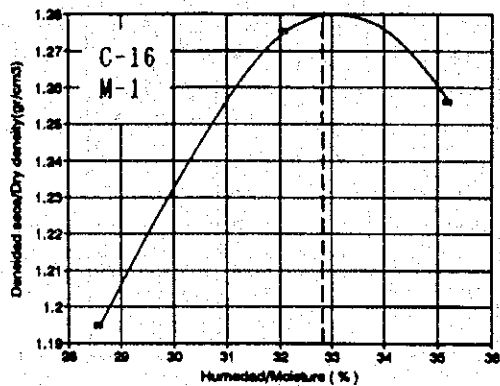
TITLE  
 PROCTOR COMPACTION TEST - I  
 DRY DENSITY - MOISTURE



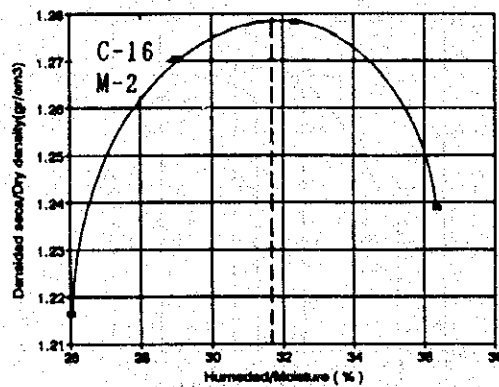
DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.16
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	40.20



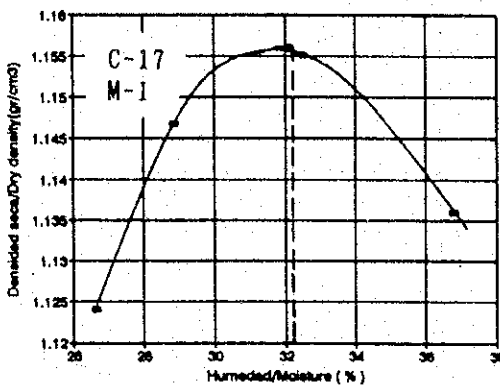
DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.06
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	34.60



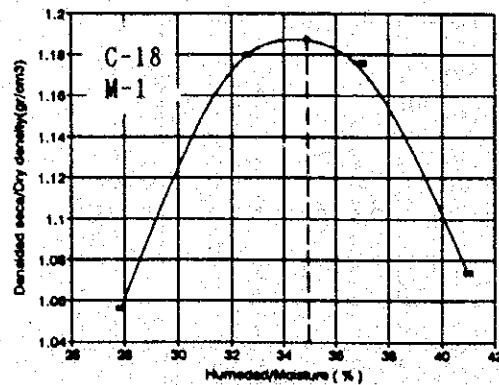
DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.28
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	32.80



DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.28
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	31.80



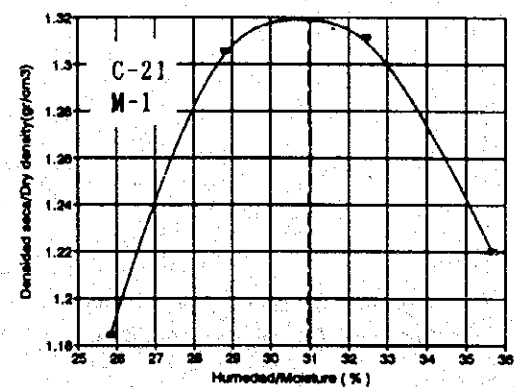
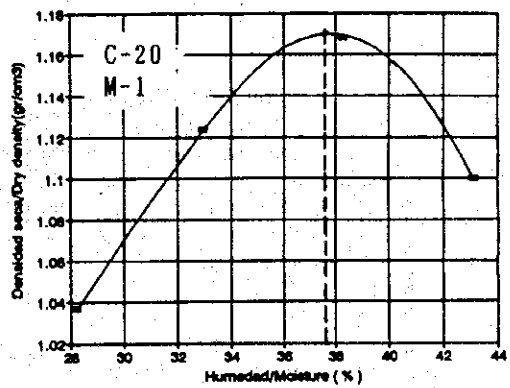
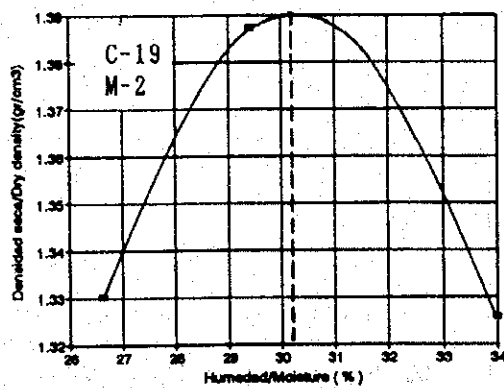
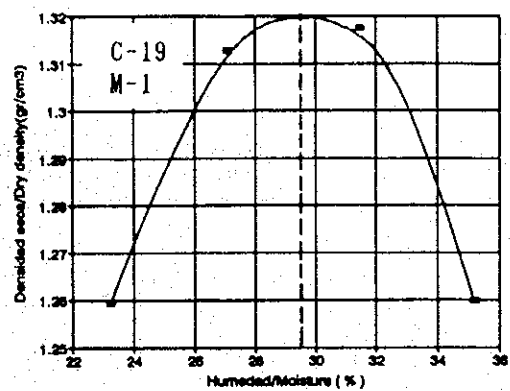
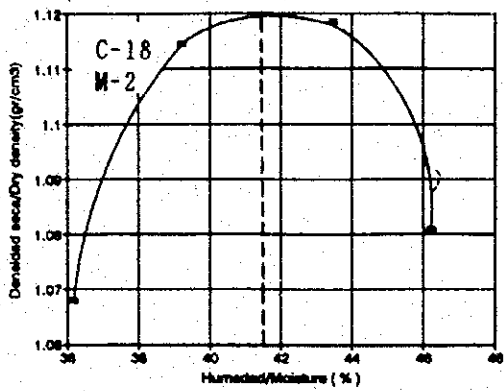
DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.16
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	32.20



DENS. SECA MAX./MAX. DRY DENSITY (g/cm <sup>3</sup> )	1.19
HUMEDAD OPTIMA/OPTIM. MOISTURE (%)	34.60

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TITLE  
 PROCTOR COMPACTION TEST - 2  
 DRY DENSITY - MOISTURE

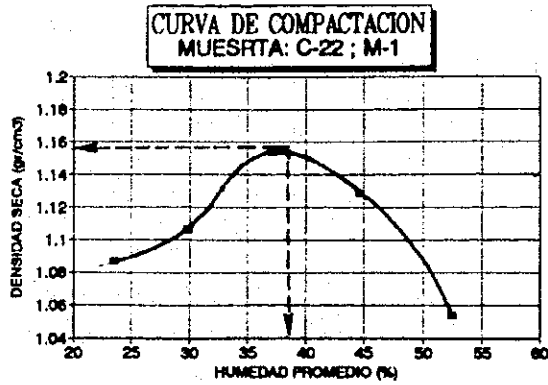


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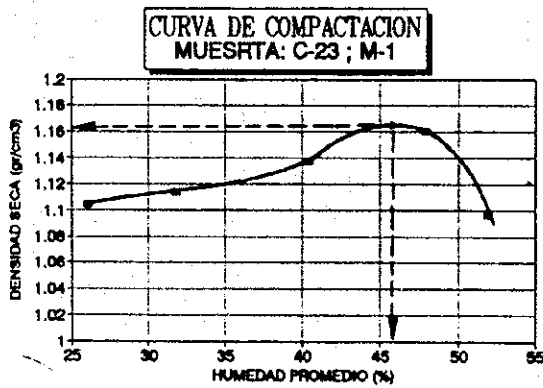
TITLE  
PROCTOR COMPACTION TEST - 3  
DRY DENSITY - MOISTURE



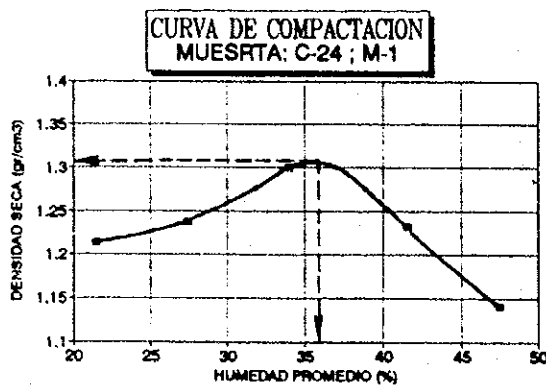
UNDISTURBED SAMPLE



Max Dry Density : 1.16 gr/cm<sup>3</sup>  
Optimum Moisture: 38.00 %



Max Dry Density : 1.16 gr/cm<sup>3</sup>  
Optimum Moisture: 46.00 %



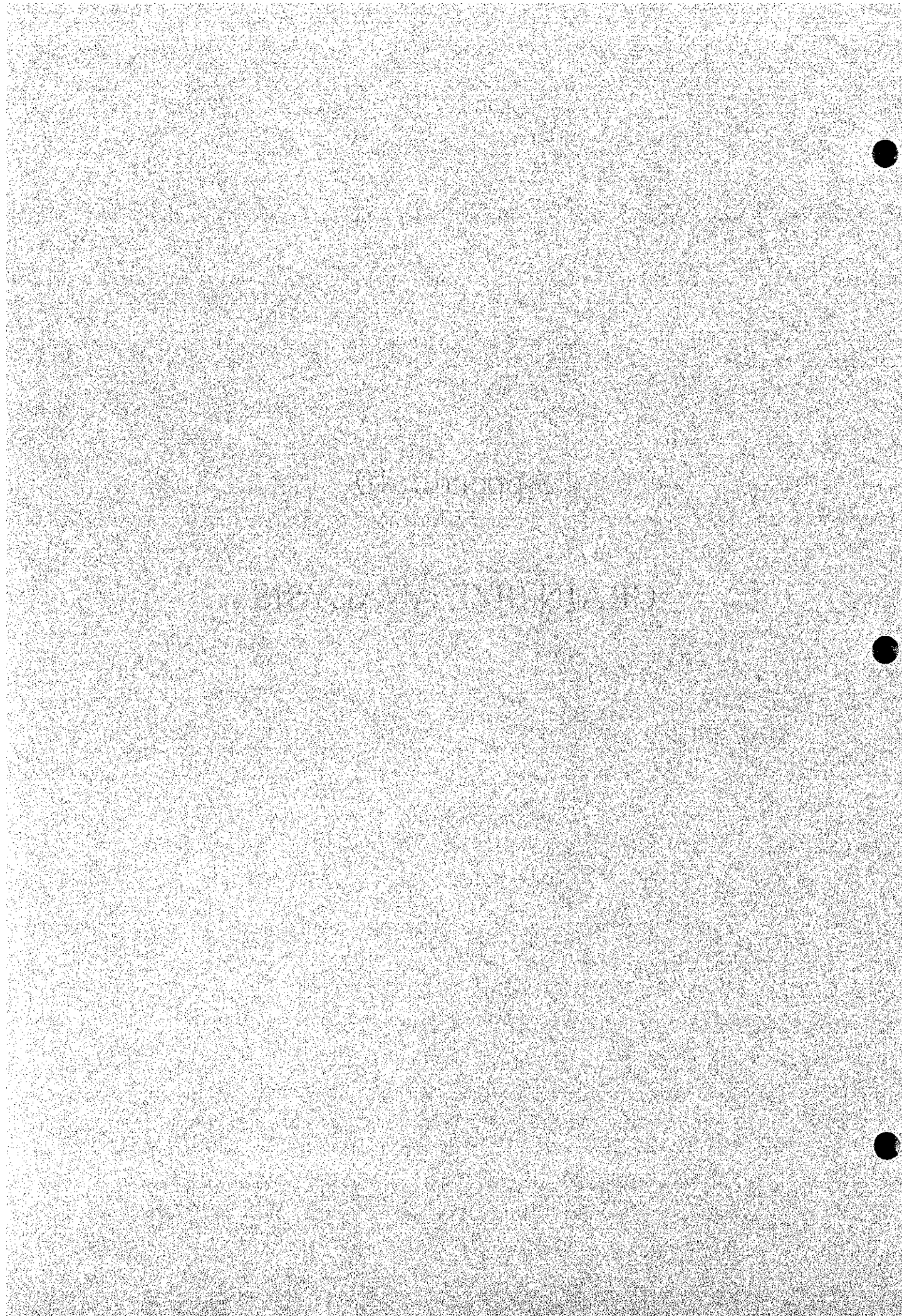
Max Dry Density : 1.31 gr/cm<sup>3</sup>  
Optimum Moisture: 36.00 %

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TITLE  
PROCTOR COMPACTION TEST - 4  
DRY DENSITY - MOISTURE  
UNDISTURBED SAMPLE

Appendix 10

**GRAIN SIZE ANALYSIS**



UBICACION/SITE: C-10

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	101.85	(M/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			77.65
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	3.12	4.0	96.0

MUESTRA No./SAMPLE	M-1
PROFUNDIDAD/DEPTH:	0.50-1.40

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	4
FINOS/FINES	96

SUCS	MH
AASHTO	A-7-5
IG(86)	28
IG(45)	17

UBICACION/SITE: C-10

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	119.90	(M/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			89.30
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	1.13	1.3	98.7

MUESTRA No./SAMPLE	M-2
PROFUNDIDAD/DEPTH:	2.00-3.00m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	1
FINOS/FINES	99

SUCS	MH
AASHTO	A-7-5
IG(86)	24
IG(45)	14

UBICACION/SITE: C-11

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	107.04	(M/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			77.72
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.22	0.3	99.7
No. 200	10.16	13.1	86.9

MUESTRA No./SAMPLE	M-1
PROFUNDIDAD/DEPTH:	0.55-1.60m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	13
FINOS/FINES	87

SUCS	MH
AASHTO	A-7-5
IG(86)	32
IG(45)	18

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TITLE

GRAIN SIZE ANALYSIS - 1

UBICACION/SITE: C-12

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	107.00	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			80.95
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	8.13	10.0	90.0

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.60-1.60m

5.-CLASIFICACION/CLASSIFICATION	
GRANUL./GRANUL	0
ARENA/SAND	10
FINOS/FINES	90

SUCS	MH
AASHTO	A-7-5
IG(86)	23
IG(45)	15

UBICACION/SITE: C-12

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	102.37	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			72.27
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	7.80	10.8	89.2

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.60m

5.-CLASIFICACION/CLASSIFICATION	
GRANUL./GRANUL	0
ARENA/SAND	11
FINOS/FINES	89

SUCS	MH
AASHTO	A-7-5
IG(86)	29
IG(45)	17

UBICACION/SITE: C-13

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	103.46	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			76.26
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.38	0.5	99.5
No. 200	2.40	3.1	96.9

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.80-2.00m

5.-CLASIFICACION/CLASSIFICATION	
GRANUL./GRANUL	0
ARENA/SAND	3
FINOS/FINES	97

SUCS	MH
AASHTO	A-7-5
IG(86)	57
IG(45)	20

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TITLE

GRAIN SIZE ANALYSIS - 2

UBICACION/SITE: C-13

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	108.81	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			81.63
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.30	0.4	99.6
No. 200	0.61	0.7	99.3

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.50m

5.-CLASIFICACION/CLASSIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	1
FINOS/FINES	99

SUCS	MH
AASHTO	A-7-5
IG(86)	47
IG(45)	20

UBICACION/SITE: C-14

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	112.58	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			85.37
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	5.34	6.3	93.7
No. 200	20.82	24.4	75.6

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.90-1.90m

5.-CLASIFICACION/CLASSIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	24
FINOS/FINES	76

SUCS	MH
AASHTO	A-7-5
IG(86)	31
IG(45)	20

UBICACION/SITE: C-14

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	127.22	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			91.04
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.76	0.8	99.2
No. 200	5.70	6.3	93.7

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.50m

5.-CLASIFICACION/CLASSIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	6
FINOS/FINES	94

SUCS	MH
AASHTO	A-7-5
IG(86)	42
IG(45)	20

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TITLE

GRAIN SIZE ANALYSIS - 3

UBICACION/SITE: C-15

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	103.15	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			80.89
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.88	1.1	98.9
No. 200	19.25	23.8	76.2

MUESTRA No./SAMPLE	M-1
PROFUNDIDAD/DEPTH:	0.40-1.00m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRANUL	0
ARENA/SAND	24
FINOS/FINES	76

SUCS	CH
AASHTO	A-7-5
IG(86)	41
IG(45)	20

UBICACION/SITE: C-15

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	134.64	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			101.67
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.83	0.8	99.2
No. 200	2.10	2.1	97.9

MUESTRA No./SAMPLE	M-2
PROFUNDIDAD/DEPTH:	1.20-1.60m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRANUL	0
ARENA/SAND	2
FINOS/FINES	98

SUCS	MH
AASHTO	A-7-5
IG(86)	58
IG(45)	20

UBICACION/SITE: C-16

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	137.40	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			105.60
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.90	0.9	99.1
No. 200	22.74	21.5	78.5

MUESTRA No./SAMPLE	M-1
PROFUNDIDAD/DEPTH:	0.85-1.80m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRANUL	0
ARENA/SAND	22
FINOS/FINES	78

SUCS	MH
AASHTO	A-7-5
IG(86)	24
IG(45)	18

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TITLE  
 GRAIN SIZE ANALYSIS - 4

**FIGURE**

UBICACION/SITE: C-16

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	119.71	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			90.24
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.86	1.0	99.0
No. 200	4.27	4.7	95.3

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.50m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	5
FINOS/FINES	95

SUCS	MH
AASHTO	A-7-5
IG(86)	34
IG(45)	20

UBICACION/SITE: C-17

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	107.21	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			86.97
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	3.96	4.6	95.4

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.40-1.60m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	5
FINOS/FINES	95

SUCS	MH
AASHTO	A-7-5
IG(86)	38
IG(45)	20

UBICACION/SITE: C-17

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	107.28	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :			83.43
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	0.66	0.8	99.2

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.00m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	1
FINOS/FINES	99

SUCS	MH
AASHTO	A-7-5
IG(86)	39
IG(45)	20

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TITLE  
 GRAIN SIZE ANALYSIS - 5



UBICACION/SITE: C-18

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	114.38	(G/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			93.95
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.63	0.7	99.3
No. 200	4.47	4.8	95.2

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.30-1.60m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRAVEL	0
ARENA/SAND	5
FINOS/FINES	95

SUCS	MH
AASHTO	A-7-5
IG(86)	36
IG(45)	20

UBICACION/SITE: C-18

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	101.05	(G/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			80.54
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	4.00	5.0	95.0

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-3.50m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRAVEL	0
ARENA/SAND	5
FINOS/FINES	95

SUCS	MH
AASHTO	A-7-5
IG(86)	34
IG(45)	19

UBICACION/SITE: C-19

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN. WEIGHT	111.42	(G/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCULUS WEIGHT :			89.67
TAMIZ/SIEVE	P. RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	0.68	0.8	99.2

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 1.10-1.70m

5.- CLASIFICACION/CLASSIFICATION	
GRANUL/GRAVEL	0
ARENA/SAND	1
FINOS/FINES	99

SUCS	CL
AASHTO	A-7-6
IG(86)	25
IG(45)	14

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GRAIN SIZE ANALYSIS - 6

UBICACION/SITE: C-19

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P.IN./IN.WEIGHT	135.40	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :		109.66	
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	3.12	2.8	97.2
No. 200	46.57	42.5	57.5

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-4.00m

5.- CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	42
FINOS/FINES	58

SUCS	CL
AASHTO	A-6
IG(B6)	8
IG(45)	8

UBICACION/SITE: C-20

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P.IN./IN.WEIGHT	104.48	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :		83.11	
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.41	0.5	99.5
No. 200	16.88	20.3	79.7

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.35-1.10m

5.- CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	20
FINOS/FINES	80

SUCS	ML
AASHTO	A-7-5
IG(B6)	16
IG(45)	13

UBICACION/SITE: C-21

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P.IN./IN.WEIGHT	116.46	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :		98.13	
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.75	0.8	99.2
No. 200	49.00	49.9	50.1

MUESTRA No./SAMPLE M-1  
 PROFUNDIDAD/DEPTH: 0.40-1.00m

5.- CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	50
FINOS/FINES	50

SUCS	ML
AASHTO	A-7-6
IG(B6)	5
IG(45)	5

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GRAIN SIZE ANALYSIS - 7

UBICACION/SITE: C-21

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	103.43	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :			81.66
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	1.15	1.4	98.6
No. 200	10.16	12.4	87.6

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 1.10-2.15m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	12
FINOS/FINES	88

SUCS	CL
AASHTO	A-6
IG(86)	16
IG(45)	11

UBICACION/SITE: C-22

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	109.10	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :			85.72
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	44.08	51.4	48.6

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 1.00-2.35m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	51
FINOS/FINES	49

SUCS	SC
AASHTO	A-7-6
IG(86)	11
IG(45)	11

UBICACION/SITE: C-23

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN./IN.WEIGHT	103.61	(H/S)	H
PESO INICIAL DE CALCULO/INITIAL CALCLUS WEIGHT :			75.24
TAMIZ/SIEVE	P.RET./RET.W.	%RET./RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.00	0.0	100.0
No. 200	1.49	2.0	98.0

MUESTRA No./SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.00-2.80m

5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	2
FINOS/FINES	98

SUCS	CH
AASHTO	A-7-5
IG(86)	52
IG(45)	20

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 GRAIN SIZE ANALYSIS - 8

UBICACION/SITE: C-24

4.- GRANULOMETRIA/SIEVE ANALYSIS			
P. IN. /IN. WEIGHT		105.66	(G/S) H
PESO INICIAL DE CALCULO/INITIAL CALULUS WEIGHT :		67.01	
TAMIZ/SIEVE	P. RET. /RET. W.	%RET. /RETAINED %	%PASA/PASSED
1"	0.00	0.0	100.0
3/4"	0.00	0.0	100.0
1/2"	0.00	0.0	100.0
3/8"	0.00	0.0	100.0
No. 4	0.00	0.0	100.0
No. 10	0.00	0.0	100.0
No. 40	0.23	0.3	99.7
No. 200	7.00	10.4	89.6

MUESTRA No. /SAMPLE M-2  
 PROFUNDIDAD/DEPTH: 2.50-3.50m

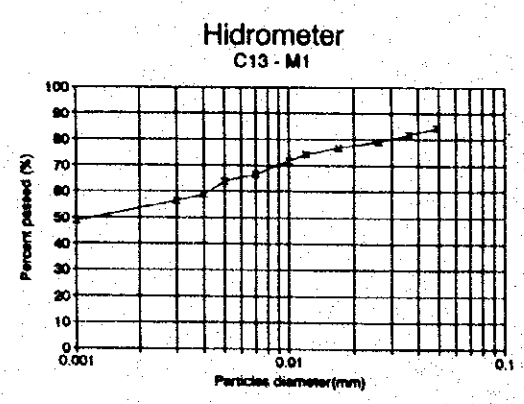
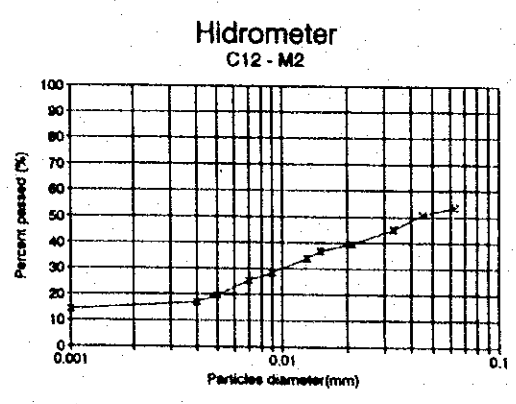
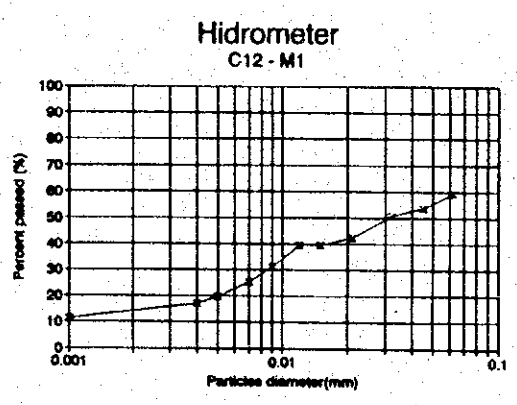
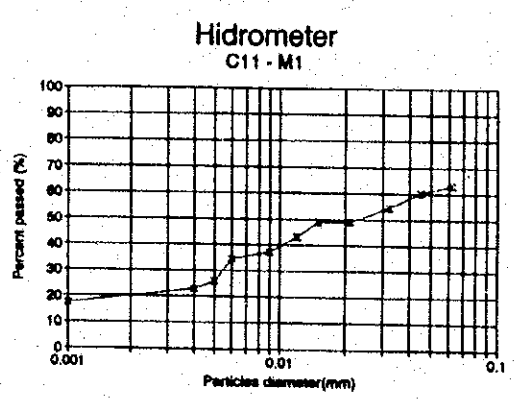
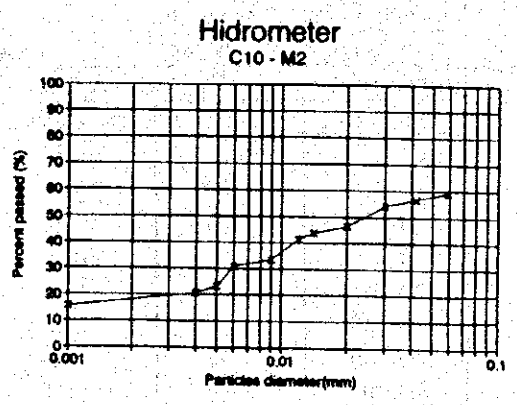
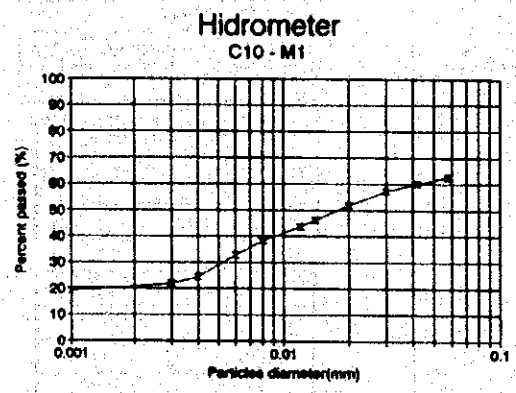
5.-CLASIFICACION/CLASIFICATION	
GRAVA/GRAVEL	0
ARENA/SAND	10
FINOS/FINES	90

SUCS	MH
AASHTO	A-7-5
IG(86)	34
IG(15)	20

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TITLE

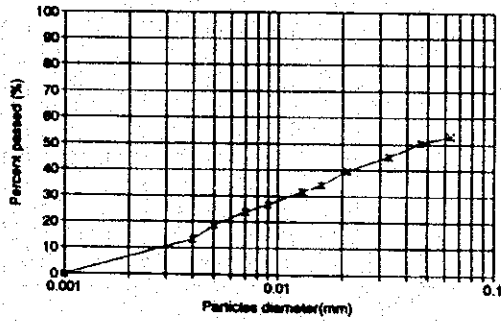
GRAIN SIZE ANALYSIS - 9



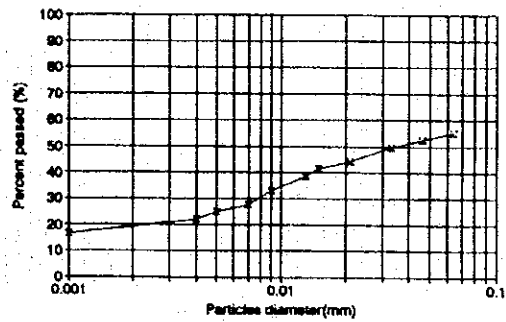
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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TITLE  
GRAIN SIZE ANALYSIS - 1  
HYDROMETER

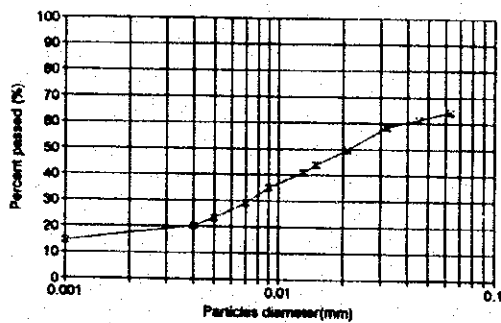
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C13 - M2



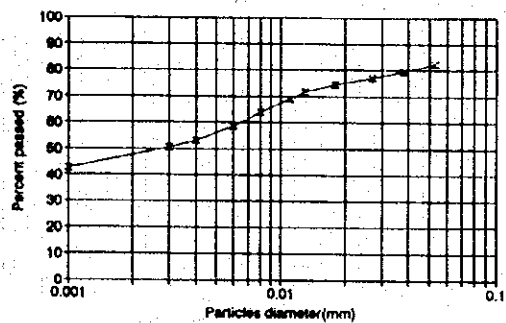
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C14 - M1



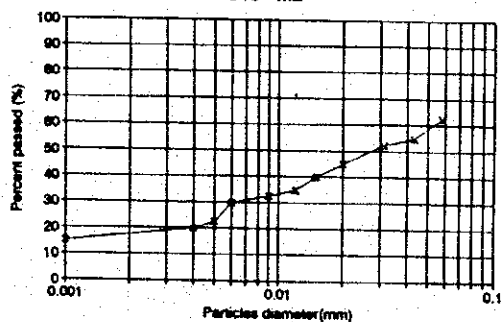
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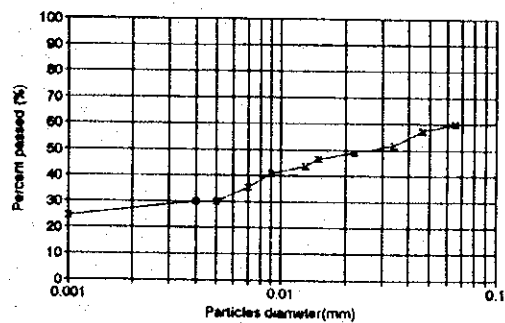
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C15 - M1



Hidrometer  
C15 - M2

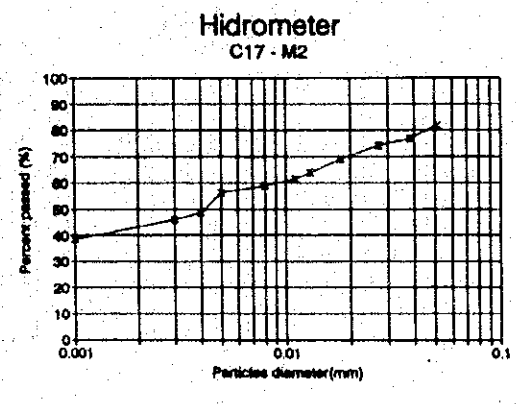
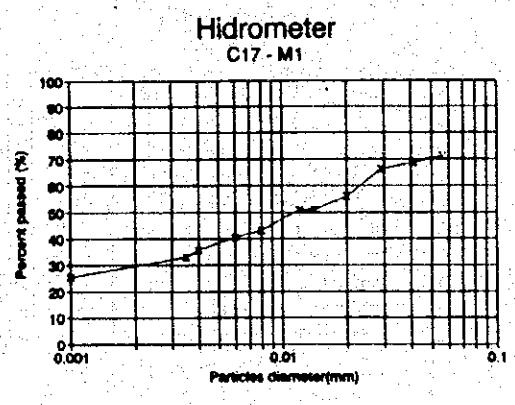
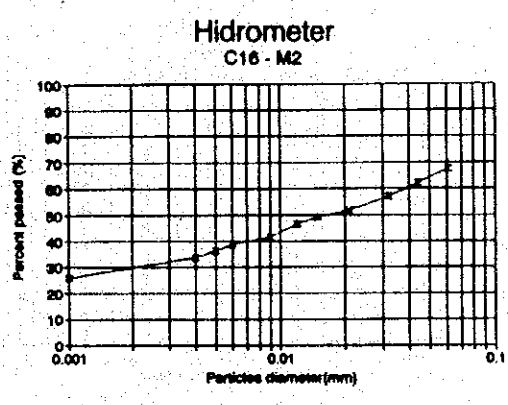


Hidrometer  
C16 - M1



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TITLE  
GRAIN SIZE ANALYSIS - 2  
HYDROMETER



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TITLE  
 GRAIN SIZE ANALYSIS - 3  
 HYDROMETR





1973-1974