

## **CAPÍTULO SEIS**

### **PROCESAMIENTO DE LOS DATOS OBTENIDOS A PARTIR DE LAS MEDICIONES**

#### **6-1 INTRODUCCIÓN**

Cada espécimen se colocó en el dispositivo y se midió hasta cuando concluían dos horas y media dentro del estado estable. Las lecturas de voltaje, amperaje, temperatura y tiempo se anotaron en formatos previamente elaborados, a esto se le llama corrida. Una corrida, de cada material, contiene todas las lecturas desde que se enciende la muestra (estado inestable) y hasta que alcanza su estado estable (2.5 hrs); en las otras dos corridas, del mismo material, sólo se toman lecturas esporádicas hasta alcanzar el estado estable, y tomarlas en el lapso de tiempo fijado. Con lo anterior, el observador se formará su propio criterio del comportamiento de cada material y, poniendo cuidado, se pueden descubrir fenómenos interesantes entre los materiales que son más aislantes y los que no lo son.

En el apartado siguiente se recopilan todas las corridas de los materiales estudiados y posteriormente, en el último apartado, se encuentran los cálculos hechos con los datos que se reportan en las corridas y algunas gráficas de interés.

#### **6-2 CORRIDAS DE CADA ESPÉCIMEN**

**MAESTRA DE:** Yeso A I FECHA: 21-11-95  
**PROPORCION:** Yeso-Agua (10.463) en peso. Observaciones: Datos del Edo. Inestable y Edo. Estable.  
**VOLUMEN:** 0.001093 m<sup>3</sup> Promedio= 14.13 cm  
**PESO:** 1.474 Kg Promedio= 9.93 cm  
**DENSIDAD:** 1348.000 Kg/m<sup>3</sup> Cilindro= 1093.404 cm<sup>3</sup>  
**MARCA:** "MAXMO" Cavidades= 16.670 cm<sup>3</sup>

**ESTADO NESTABLE**

Volaje	18.50	18.50	9.20	9.20	9.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje		0.36	0.17	0.17	0.18	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	9.917	10.000	10.333	10.500	10.667	10.833	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167
Canal 1	28.10	48.70	54.20	40.80	39.30	38.60	47.00	51.20	52.70	53.10	53.40	53.50	53.80	53.90
Canal 2	28.10	31.60	35.30	34.60	34.00	33.50	34.70	37.30	38.50	39.00	39.20	39.30	39.70	39.80
Canal 3	28.00	30.10	33.60	33.60	33.10	32.50	35.50	35.70	36.70	37.10	37.20	37.30	37.50	37.70
Canal 4	28.00	28.60	30.90	32.20	31.70	31.30	31.60	33.50	34.30	34.60	34.80	34.80	35.10	35.30
Canal 5	28.00	28.00	30.70	30.70	30.40	30.60	31.10	31.70	32.50	32.80	33.00	33.20	33.30	33.40
Canal 6	27.50	27.40	27.70	27.70	27.80	27.80	27.90	28.00	28.00	28.10	28.00	28.10	28.20	28.10

Volaje	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667
Canal 1	54.10	54.20	54.40	54.40	54.50	54.50	54.50	54.50	54.60	54.70	54.70	54.70	54.90	55.10
Canal 2	40.00	40.10	40.20	40.20	40.30	40.20	40.20	40.30	40.50	40.60	40.60	40.70	40.80	41.00
Canal 3	37.80	37.80	38.00	38.10	38.10	38.10	38.10	38.20	38.20	38.40	38.50	38.60	38.70	38.80
Canal 4	35.30	35.40	35.50	35.60	35.60	35.70	35.70	35.70	35.80	35.90	36.00	36.10	36.20	36.30
Canal 5	33.60	33.60	33.70	33.70	33.70	33.80	33.80	34.10	34.10	34.20	34.20	34.30	34.30	34.40
Canal 6	28.20	28.30	28.40	28.40	28.50	28.70	28.90	28.90	29.10	29.10	29.10	29.20	29.20	29.30

NOTA: Temperatura de los Condes en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Yeso [ A ] I  
 FECHA: 21-11-95  
 Observaciones: Datos del Edo. Inestable y Edo. Estable.

PROPORCION: Yeso-Agua (1:0.463) en peso.  
 Longitud Promedio= 14.13 cm  
 VOLUMEN: 0.001093 m<sup>3</sup>  
 Diámetro Promedio= 9.93 cm  
 PESO: 1.474 Kg  
 Volumen Cilindro= 1093.404 cm<sup>3</sup>  
 DENSIDAD: 1348.000 Kg/m<sup>3</sup>  
 Volumen Caridades= 16.670 cm<sup>3</sup>  
 MARCA: "MAXIMO"

Volaje	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	15.167	15.333	15.500	15.667	15.833	16.000	16.167	16.333	16.500	16.667	16.833	17.000	17.167	17.333	17.500	17.667	17.833
Canal 1	55.20	55.20	55.30	55.30	55.40	55.30	55.30	55.30	55.50	55.50	55.50	55.50	55.50	55.50	55.50	55.50	55.60
Canal 2	41.00	41.10	41.10	41.10	41.20	41.30	41.20	41.30	41.20	41.30	41.30	41.30	41.30	41.30	41.30	41.30	41.50
Canal 3	39.00	39.00	39.00	39.10	39.10	39.20	39.10	39.20	39.20	39.20	39.20	39.20	39.20	39.30	39.30	39.30	39.30
Canal 4	36.40	36.50	36.50	36.50	36.60	36.70	36.60	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70
Canal 5	34.50	34.50	34.50	34.50	34.60	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.80
Canal 6	29.60	29.70	29.70	29.70	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.90
ESTADO: ESTABLE	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	17.500	17.583	17.667	17.750	17.833	17.917	18.000	18.083	18.167	18.250	18.333	18.417	18.500	18.583	18.667	18.750	18.833
Canal 1	55.60	55.60	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.80
Canal 2	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50
Canal 3	39.40	39.40	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50
Canal 4	36.80	36.80	36.80	36.80	36.80	36.80	36.80	36.80	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70
Canal 5	35.00	35.00	34.90	34.90	34.80	34.80	34.80	34.80	34.80	34.80	34.70	34.70	34.70	34.70	34.70	34.70	35.00
Canal 6	30.00	30.00	29.70	29.70	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.60	29.90

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Yeso [ A ] | FECHA: 21-Jul-95  
 PROPORCIÓN: Yeso-Agua (10.463) en peso. Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 0.001093 m<sup>3</sup>  
 PESO: 1.474 Kg  
 DENSIDAD: 1348.000 Kg/m<sup>3</sup>  
 MARCA: "MAXIMO"

	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Longitud													
Diámetro													
Volumen													
Promedio=	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Promedio=	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Cilindro=	18.833	18.917	19.000	19.083	19.167	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833
Cavidades=	55.60	55.60	55.70	55.70	55.70	55.70	55.70	55.70	55.70	55.60	55.60	55.60	55.60
	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.50	41.40	41.40	41.30	41.30
	39.20	39.20	39.30	39.20	39.30	39.30	39.20	39.20	39.20	39.10	39.10	39.00	39.00
	36.70	36.70	36.70	36.70	36.60	36.60	36.60	36.60	36.50	36.50	36.50	36.50	36.40
	34.90	35.00	35.00	35.00	35.00	35.00	34.80	34.80	34.80	34.80	34.70	34.70	34.70
	29.20	29.00	28.90	28.80	28.80	28.80	28.80	28.80	28.70	28.80	28.80	28.60	28.60

Volaje	Amperaje	Volaje	Amperaje	Volaje	Amperaje	Volaje	Amperaje	Volaje	Amperaje	Volaje	Amperaje	Volaje	Amperaje
Canal 1													
Canal 2													
Canal 3													
Canal 4													
Canal 5													
Canal 6													

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Yeso A I  
 FECHA: 22-Jul-95  
 Observaciones: Datos del Edo. Estable.  
 PROPORCION: Yeso-Agua (10:46.3) en peso  
 Longitud Promedio= 14.13 cm  
 VOLUMEN: 0.001093 m<sup>3</sup> Diámetro Promedio= 9.93 cm  
 PESO: 1.474 Kg Volumen Cilindro= 1093.404 cm<sup>3</sup>  
 DENSIDAD: 1348.000 Kg/m<sup>3</sup> Volumen Caridades= 16.670 cm<sup>3</sup>  
 MARCA: "MAXIMO"

Volaje	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	8.500	8.583	8.667	8.833	9.000	9.167	9.333	9.500	9.667	9.833	10.000	10.167	10.333	10.500	10.667	10.833	11.000	11.167
Canal 1	29.50	40.20	46.30	48.00	50.10	51.70	52.50	53.00	53.50	54.20	54.40	54.70	55.00	55.20	55.40	55.40	55.40	55.40
Canal 2	29.50	30.70	33.60	34.80	36.40	37.80	38.30	38.90	39.10	39.50	39.90	40.30	40.60	40.90	41.10	41.30	41.30	41.30
Canal 3	29.50	30.30	32.20	33.70	35.00	36.30	36.70	37.10	37.50	37.80	38.40	38.60	38.90	39.20	39.30	39.30	39.30	39.30
Canal 4	29.50	29.70	30.60	31.80	32.80	34.00	34.50	34.80	35.00	35.40	35.60	36.10	36.30	36.50	36.70	36.80	36.80	36.80
Canal 5	29.40	29.40	29.70	30.60	31.30	32.30	32.60	33.10	33.50	33.70	34.10	34.10	34.30	34.60	34.70	34.70	34.70	34.70
Canal 6	28.60	28.60	28.50	28.60	28.50	28.60	28.60	28.90	28.90	28.80	28.80	29.10	29.00	29.00	29.20	29.20	29.20	29.20

Volaje	15.30	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	11.75	12.167	12.250	12.333	12.417	12.500	12.583	12.667	12.750	12.833	12.917	13.000	13.083	13.167	13.250	13.333	13.333	13.333
Canal 1	55.60	55.50	55.50	55.50	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60
Canal 2	41.30	41.30	41.30	41.30	41.30	41.40	41.30	41.30	41.30	41.30	41.30	41.40	41.40	41.50	41.50	41.50	41.50	41.50
Canal 3	39.40	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.60	39.60	39.60	39.60	39.60	39.60	39.60
Canal 4	36.80	36.90	36.90	36.90	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
Canal 5	34.60	34.60	34.60	34.60	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70
Canal 6	29.20	29.20	29.20	29.20	29.30	29.30	29.30	29.20	29.20	29.20	29.20	29.20	29.20	29.20	29.20	29.20	29.20	29.20

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Yeso A I  
**PROPORCIÓN:** Yeso-Agua (1:0.463) en peso  
**VOLUMEN:** 0.001093 m<sup>3</sup>  
**PESO:** 1.474 Kg  
**DENSIDAD:** 1348.000 Kg/m<sup>3</sup>  
**MARCA:** "MAXIMO"

**FECHA:** 22-Jul-95  
**Datos del Edo. Estable.**

**Observaciones:**  
 Longitud Promedio= 14.13 cm  
 Diámetro Promedio= 9.93 cm  
 Volumen Cilindro= 1093.404 cm<sup>3</sup>  
 Volumen Cavidades= 16.670 cm<sup>3</sup>

	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10
<b>Voltaje</b>	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10	15.10
<b>Amperaje</b>	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
<b>Temperatura</b>	13.417	13.500	13.583	13.667	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583
<b>Canal 1</b>	55.70	55.70	55.70	55.60	55.60	55.60	55.60	55.50	55.50	55.50	55.50	55.60	55.60	55.50	55.60
<b>Canal 2</b>	41.50	41.50	41.50	41.40	41.40	41.40	41.30	41.30	41.40	41.40	41.30	41.30	41.30	41.30	41.30
<b>Canal 3</b>	39.60	39.60	39.60	36.50	39.50	39.60	39.50	39.60	39.60	39.60	39.50	39.60	39.60	39.50	39.60
<b>Canal 4</b>	37.10	37.00	37.00	37.00	37.00	37.00	36.90	36.90	36.90	37.00	37.00	37.10	37.10	37.00	37.10
<b>Canal 5</b>	34.60	34.60	34.60	34.60	34.50	34.60	34.10	34.10	34.10	34.30	34.30	34.40	34.40	34.30	34.40
<b>Canal 6</b>	29.00	29.00	29.20	29.20	29.30	29.20	29.20	29.20	29.20	29.20	29.40	29.50	29.50	29.60	29.80

<b>Voltaje</b>															
<b>Amperaje</b>															
<b>Temperatura</b>															
<b>Canal 1</b>															
<b>Canal 2</b>															
<b>Canal 3</b>															
<b>Canal 4</b>															
<b>Canal 5</b>															
<b>Canal 6</b>															

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Yesso B

FECHA: 23-IV-95

Observaciones: Datos del Edo. Estable.

PROPORCIÓN: Yesso-Agua (1:0.463) en peso.

Longitud Promedio= 14.13 cm

VOLUMEN: 0.001094 m<sup>3</sup>

Dímetro Promedio= 9.93 cm

PESO: 1.424 Kg

Volumen Cilindro= 1093.844 cm<sup>3</sup>

DENSIDAD: 1302.000 Kg/m<sup>3</sup>

Volumen Cavidades= 16.670 cm<sup>3</sup>

MARCA: "MAXIMO"

		ESTADO ESTABLE																
Voltaje	Amperaje	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
		0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora		15.833	15.000	16.167	16.333	16.500	16.667	16.833	16.917	17.000	18.833	18.917	19.000	19.083	19.167	19.250	19.333	
Canal 1		29.90	44.40	49.80	50.60	52.30	53.80	54.70	55.00	55.50	57.10	57.10	57.10	57.00	57.00	57.00	57.00	57.00
Canal 2		29.90	34.20	37.80	38.70	40.10	41.60	42.60	43.00	43.10	44.60	44.60	44.50	44.50	44.50	44.50	44.50	44.50
Canal 3		30.00	31.70	34.80	35.60	36.80	37.90	38.70	39.00	39.20	40.60	40.60	40.40	40.40	40.40	40.50	40.50	40.50
Canal 4		29.90	30.50	32.10	33.10	34.20	35.20	36.00	36.10	36.50	37.50	37.50	37.30	37.30	37.30	37.40	37.40	37.40
Canal 5		29.90	30.20	31.20	31.80	32.50	33.50	34.30	34.40	34.60	35.20	35.10	35.10	35.10	35.10	35.10	35.10	35.10
Canal 6		29.60	29.80	29.90	29.70	29.80	30.10	30.20	30.20	30.20	29.70	29.70	29.70	29.70	29.70	29.70	29.70	29.70
Voltaje		15.10	15.10	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje		0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora		19.4167	19.500	19.583	19.667	19.750	19.833	19.917	20.000	20.083	20.167	20.250	20.333	20.417	20.500	20.583	20.667	
Canal 1		57.00	57.00	56.90	56.80	56.80	56.80	56.80	56.70	56.70	56.70	56.70	56.70	56.70	56.70	56.70	56.70	57.10
Canal 2		44.50	44.50	44.50	44.40	44.40	44.40	44.40	44.30	44.30	44.30	44.30	44.30	44.30	44.40	44.50	44.80	
Canal 3		40.50	40.50	40.50	40.20	40.10	40.00	40.00	39.90	39.80	39.80	39.80	39.80	39.90	40.10	40.10	41.00	
Canal 4		37.40	37.30	37.30	37.00	36.90	36.80	36.80	36.70	36.70	36.70	36.70	36.70	36.90	37.10	37.10	37.70	
Canal 5		35.10	35.10	35.10	35.20	35.20	35.20	35.30	35.30	35.30	35.30	35.30	35.20	35.90	36.00	35.00	35.30	
Canal 6		29.70	29.50	29.50	29.50	29.50	29.50	29.50	29.60	29.60	29.70	29.70	29.60	29.90	30.10	30.00	29.80	

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Yeso  B   
**PROPORCIÓN:** Yeso-Agua (1:0.463) en peso.  
**VOLUMEN:** 0.001094 m<sup>3</sup>  
**PESO:** 1.424 Kg  
**DENSIDAD:** 1302.000 Kg/m<sup>3</sup>  
**MARCA:** "MAXIMO"

**FECHA:** 23-JU-95  
**Observaciones:** Datos del Edo. Estable.

Longitud Promedio= 14.13 cm  
 Diámetro Promedio= 9.93 cm  
 Volumen Cilindro= 1093.844 cm<sup>3</sup>  
 Volumen Cavidades= 16.670 cm<sup>3</sup>

Volts	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20
Amperaje	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Hora	20.750	20.833	20.917	21.000	21.083	21.167	21.250	21.333		
Canal 1	57.30	57.40	57.30	57.30	57.30	57.30	57.20	57.20		
Canal 2	44.80	45.00	45.00	44.90	44.90	44.90	44.80	44.80		
Canal 3	40.90	40.80	40.70	40.60	40.50	40.40	40.40	40.40		
Canal 4	37.50	37.40	37.30	37.30	37.30	37.20	37.20	37.20		
Canal 5	35.60	35.70	35.70	35.70	35.70	35.70	35.70	35.70		
Canal 6	29.80	29.70	29.70	29.80	29.80	29.80	29.70	29.70		

Volts										
Amperaje										
Hora										
Canal 1										
Canal 2										
Canal 3										
Canal 4										
Canal 5										
Canal 6										

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.



MUESTRA DE: Mortero Cal-Arena A I  
 FECHA: 11-ago-95  
 PROPORCIÓN: Cal-Are-Agua(1:7.249:1.392)en peso. Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 0.001043 m<sup>3</sup> Longitud Promedio= 13.99 cm  
 PESO: 1.814 Kg Diámetro Promedio= 9.82 cm  
 DENSIDAD: 1739.000 Kg/m<sup>3</sup> Volumen Cilindro= 1059.570 cm<sup>3</sup>  
 MARCA: "PIMACAL" Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO NESTABLE

Volaje	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30
Amperaje	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Hora	11.917	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167
Canal 1	28.70	45.60	56.90	59.60	61.90	62.50	63.40	63.50	63.80	64.30	64.40	64.60	64.90	65.10	65.20
Canal 2	28.70	30.90	34.40	36.10	37.60	38.30	38.80	38.90	39.20	39.50	39.60	39.80	40.00	40.10	40.30
Canal 3	28.70	30.00	32.70	34.50	35.60	36.20	36.60	36.70	37.00	37.10	37.20	37.30	37.50	37.50	37.60
Canal 4	28.70	39.20	30.70	32.40	33.30	34.10	34.40	34.50	34.70	34.80	35.00	35.10	35.20	35.20	35.20
Canal 5	28.70	28.90	29.60	31.10	31.80	32.50	32.80	32.90	33.10	33.20	33.30	33.30	33.60	33.60	33.50
Canal 6	28.50	28.40	28.50	28.50	28.50	28.60	28.70	28.70	28.70	28.70	28.70	28.70	28.90	28.90	28.90

Volaje	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30
Amperaje	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Hora	14.500	14.667	14.833	15.000	15.167	15.333	15.500	15.667	15.833	16.000	16.167	16.333	16.500	16.667	16.833
Canal 1	65.20	65.20	65.30	65.30	65.60	65.70	65.70	65.70	65.80	65.90	66.00	66.10	66.20	66.30	66.30
Canal 2	40.30	40.30	40.40	40.40	40.60	40.70	40.70	40.70	40.80	40.90	40.90	41.10	41.20	41.20	41.20
Canal 3	37.60	37.60	37.70	37.70	37.70	37.80	37.70	37.80	37.80	37.90	38.00	38.10	38.10	38.10	38.10
Canal 4	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.40	35.50	35.60	35.50	35.50	35.50
Canal 5	33.60	33.60	33.70	33.70	33.70	33.70	33.60	33.70	33.70	33.70	33.80	33.80	33.80	33.80	33.80
Canal 6	28.80	29.10	29.10	29.10	29.00	29.00	28.80	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.00

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Mortero Cal-Arena [ A ]		FECHA: 11-ago-95	
PROPORCIÓN: Cd-Are-Agua(1:7.249:1.392)en peso.		Observaciones:		Datos del Edo. Inestable y Edo. Estable.	
VOLUMEN:	0.001043 m <sup>3</sup>	Longitud Promedio=	13.99 cm		
PESO:	1.814 Kg	Dámetro Promedio=	9.82 cm		
DENSIDAD:	1739.000 Kg/m <sup>3</sup>	Volumen Cilindro=	1059.570 cm <sup>3</sup>		
MARCA:	"PMACAL"	Volumen Cavidades=	16.670 cm <sup>3</sup>		
Volaje	16.30	16.30	16.30	16.30	16.30
Amperaje	0.31	0.31	0.31	0.31	0.31
hora	16.833	16.917	17.000	17.083	17.167
Canal 1	66.30	66.30	66.30	66.30	66.30
Canal 2	41.20	41.20	41.20	41.20	41.20
Canal 3	38.10	38.10	38.10	38.00	38.00
Canal 4	35.50	35.50	35.50	35.50	35.50
Canal 5	33.80	33.80	33.80	33.70	33.70
Canal 6	29.00	28.90	28.90	28.80	28.80
Volaje	16.30	16.30	16.30	16.30	16.30
Amperaje	0.31	0.31	0.31	0.31	0.31
hora	18.167	18.250	18.333	18.417	18.500
Canal 1	66.40	66.40	66.40	66.40	66.40
Canal 2	41.20	41.20	41.30	41.20	41.50
Canal 3	38.10	38.10	38.30	38.10	38.30
Canal 4	35.30	35.40	35.50	35.60	35.60
Canal 5	33.60	33.50	33.50	33.60	33.40
Canal 6	28.80	29.00	28.90	28.90	29.00

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Mortero Cal-Arena A I FECHA: 12-ago-95

PROPORCIÓN: Cal-Are-Agua(1:7.249:1.392)en peso. Observaciones: Datos del Edo. Estable.

VOLUMEN: 0.001043 m<sup>3</sup> Longitud Promedio= 13.99 cm

PESO: 1.814 Kg Diámetro Promedio= 9.82 cm

DENSIDAD: 1739.000 Kg/m<sup>3</sup> Volumen Cilindro= 1059.570 cm<sup>3</sup>

MARCA: "PMACAL" Volumen Cavidades= 16.670 cm<sup>3</sup>

Volaje	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20								
Amperaje	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31								
Hora	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000		
Canal 1	28.40	53.80	59.50	62.70	63.40	64.20	64.70	65.30	66.00	66.30	66.40	66.60	66.70	66.50	66.60	66.60	66.70	66.50	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.50	66.50
Canal 2	28.40	33.10	36.20	38.40	39.10	39.60	40.20	40.70	41.30	41.50	41.60	41.60	41.90	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10	42.10
Canal 3	28.40	30.90	33.70	35.50	36.20	36.60	37.00	37.60	37.90	38.00	38.10	38.10	38.40	38.60	38.60	38.60	38.40	38.60	38.60	38.60	38.60	38.60	38.60	38.60	38.60	38.60	38.60
Canal 4	28.40	29.00	31.10	32.60	33.20	33.70	34.10	34.60	35.00	35.10	35.10	35.20	35.40	35.20	35.20	35.20	35.40	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20
Canal 5	28.10	28.60	29.80	31.00	31.50	31.80	32.10	32.50	32.80	33.00	33.10	33.10	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30
Canal 6	27.80	27.90	28.20	28.20	28.30	28.20	28.30	28.30	28.70	28.70	28.80	28.80	28.90	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10
Volaje	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20
Amperaje	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Hora	14.750	14.917	15.083	15.250	15.417	15.583	15.750	15.917	16.083	16.250	16.417	16.583	16.750	16.917	17.083	17.250	17.417	17.583	17.750	17.917	18.083	18.250	18.417	18.583	18.750	18.917	19.083
Canal 1	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60
Canal 2	42.00	42.10	42.10	42.10	42.10	42.10	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20	42.20
Canal 3	38.70	38.70	38.70	38.70	38.70	38.70	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80
Canal 4	35.20	35.10	35.10	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20	35.20
Canal 5	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30
Canal 6	29.10	29.20	29.20	29.20	29.20	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10	29.10

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Mortero Cal-Arena A II  
 FECHA: 12-ago-95  
 Observaciones: Datos del Edo. Estable.

PROPORCION: Cal-Are-Agua(1:7.249:1.392)en peso.  
 VOLUMEN: 0.001043 m<sup>3</sup>  
 PESO: 1.814 Kg  
 DENSIDAD: 1739.000 Kg/m<sup>3</sup>  
 MARCA: "PMACAL"

Longitud Promedio= 13.99 cm  
 Diámetro Promedio= 9.82 cm  
 Volumen Cilindro= 1059.570 cm<sup>3</sup>  
 Volumen Carridotes= 16.670 cm<sup>3</sup>

	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20
Voltaje	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20
Amperaje	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Hora	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000			
Canal 1	67.10	67.00	67.10	67.10	67.10	67.20	67.20	67.30	67.30	67.20	67.20	66.20			
Canal 2	42.50	42.40	42.50	42.50	42.60	42.60	42.60	42.60	42.70	42.70	42.70	42.60			
Canal 3	39.00	39.00	39.00	39.00	39.10	39.10	39.10	39.10	39.20	39.10	39.10	39.10			
Canal 4	35.50	35.50	35.60	35.60	35.70	35.70	35.70	35.70	35.70	35.60	35.60	35.60			
Canal 5	33.50	33.60	33.70	33.70	33.80	33.80	33.70	33.70	33.80	33.70	33.70	33.80			
Canal 6	29.40	29.50	29.50	29.50	29.60	29.50	29.40	29.50	29.50	29.60	29.60	29.50			

	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16.20
Voltaje															
Amperaje															
Hora															
Canal 1															
Canal 2															
Canal 3															
Canal 4															
Canal 5															
Canal 6															

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Mortero Cal-Arena [ B ]		FECHA: 13-ago-95	
PROPORCION: Cal-Are-Agua(17:249:1.392)en peso.	Longitud Promedio= 13.92 cm	Observaciones: Datos del Edo. Estable.	
VOLUMEN: 0.001040 m <sup>3</sup>	Diámetro Promedio= 9.83 cm		
PESO: 1.811 Kg	Volumen Cilindro= 1056.420 cm <sup>3</sup>		
DENSIDAD: 1741.000 Kg/m <sup>3</sup>	Volumen Corchadas= 16.670 cm <sup>3</sup>		
MARCA: "PMACAL"			

Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora	10.500	10.567	10.533	11.000	11.167	11.333	11.500	11.567	12.500	13.000	13.333	13.500	13.833	14.667	15.000
Canal 1	28.60	41.30	45.30	47.60	48.50	49.00	49.40	49.50	50.10	50.40	50.50	50.60	50.70	51.10	51.20
Canal 2	28.60	31.30	33.00	34.50	35.10	35.50	35.70	35.80	36.10	36.50	36.70	36.70	36.80	37.10	37.20
Canal 3	28.60	29.30	30.00	31.20	31.70	32.10	32.30	32.40	32.70	33.00	33.10	33.10	33.30	33.50	33.60
Canal 4	28.60	28.90	29.30	30.00	30.50	30.70	30.90	31.10	31.20	31.50	31.80	31.70	32.00	32.20	32.20
Canal 5	28.60	28.70	29.00	29.60	30.00	30.10	30.20	30.40	30.60	30.70	31.00	31.10	31.20	31.50	31.60
Canal 6	28.10	28.30	28.30	28.40	28.50	28.50	28.60	28.70	28.80	29.00	29.10	29.30	29.40	29.60	29.80

Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora	15.083	15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.750	15.917	16.000	16.083	16.167	16.250	16.333
Canal 1	51.20	51.20	51.30	51.30	51.30	51.30	51.30	51.40	51.50	51.50	51.50	51.50	51.50	51.50	51.60
Canal 2	37.20	37.20	37.30	37.30	37.30	37.30	37.30	37.30	37.40	37.50	37.50	37.50	37.50	37.50	37.70
Canal 3	33.60	33.60	33.70	33.70	33.70	33.70	33.70	33.70	33.80	33.80	33.80	33.80	33.80	33.90	34.00
Canal 4	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.50	32.50	32.50	32.50	32.50	32.50
Canal 5	31.60	31.60	31.60	31.60	31.60	31.60	31.60	31.60	31.60	31.70	31.70	31.70	31.70	31.70	31.70
Canal 6	29.80	29.80	29.70	29.80	29.70	29.70	29.80	29.80	30.00	30.00	30.00	30.00	30.00	30.10	30.10

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Mortero Cal-Arena ( B ) FECHA: 13-ago-95  
 PROPORCIÓN: Cd-Are-Agua(1:7.249:1.392)en peso. Observaciones: Datos del Edo. Estable.  
 VOLUMEN: 0.001040 m<sup>3</sup> Longitud Promedio= 13.92 cm  
 PESO: 1.811 Kg Diámetro Promedio= 9.83 cm  
 DENSIDAD: 1741.000 Kg/m<sup>3</sup> Volumen Cilindro= 1056.420 cm<sup>3</sup>  
 MARCA: "PMACAL" Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO ESTABLE												
Volaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000	17.083	17.167	17.250	17.333
Canal 1	51.60	51.60	51.70	51.70	51.70	51.70	51.70	51.90	51.90	51.90	51.90	51.90
Canal 2	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.80	37.80	37.90	37.90	37.90
Canal 3	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.10	34.10	34.20	34.20	34.20
Canal 4	32.60	32.60	32.70	32.70	32.70	32.70	32.70	32.80	32.80	32.80	32.80	32.80
Canal 5	31.90	31.90	31.90	31.90	31.90	31.90	31.90	32.10	32.10	32.10	32.10	32.00
Canal 6	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.30	30.30	30.10	30.10	30.10
Volaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	17.750	17.833	17.917	18.000	18.083	18.167	18.250	18.333	18.417	18.500	18.583	18.667
Canal 1	52.00	52.00	52.00	52.00	51.90	51.90	51.80	51.90	51.90	51.90	51.90	51.80
Canal 2	38.00	37.90	37.90	37.90	37.90	37.80	37.80	37.80	37.80	37.80	37.80	37.70
Canal 3	34.20	34.10	34.10	34.10	34.10	34.10	34.10	34.00	34.00	34.00	34.00	33.90
Canal 4	32.70	32.70	32.70	32.70	32.70	32.60	32.60	32.50	32.50	32.50	32.50	32.50
Canal 5	32.00	32.00	32.00	32.00	32.00	31.90	31.90	31.80	31.80	31.80	31.80	31.70
Canal 6	29.90	29.90	29.90	29.70	29.70	29.70	29.80	29.80	29.80	29.80	29.70	29.60

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MESTRA DE:** Mortero Cemento-Arena [ A ] I  
**FECHA:** 24-11-95  
**PROPORCIÓN:** Cem-Are-Agua (13.872:0.727) en peso. **Datos del Edo. Estable.**  
**VOLUMEN:** 0.001075 m<sup>3</sup>  
**PESO:** 2.257 Kg  
**DENSIDAD:** 2099.000 Kg/m<sup>3</sup>  
**MARCA:** CAMPANA

		Observaciones:															
		Promedio=			Promedio=			Promedio=			Promedio=						
		14.06 cm			9.94 cm			1091.653 cm <sup>3</sup>			16.670 cm <sup>3</sup>						
		Longitud			Diámetro			Volumen			Cavidades=						
		19.10			19.10			19.10			19.10						
		0.37			0.37			0.37			0.37						
		13.833			13.833			14.000			14.333						
		43.90			45.60			46.30			47.00						
		35.20			38.00			38.60			39.30						
		34.00			36.70			37.10			37.70						
		33.30			34.70			35.20			35.90						
		31.40			32.80			34.30			35.40						
		29.20			29.60			29.50			29.50						
		15.583			15.833			15.917			16.000						
		46.80			46.70			46.80			46.80						
		39.20			39.10			39.20			39.20						
		37.50			37.50			37.50			37.60						
		35.70			35.60			35.70			35.80						
		35.30			35.20			35.20			35.30						
		29.30			29.40			29.40			29.60						
		16.333			16.083			16.167			16.333						
		46.90			46.80			46.80			46.90						
		39.30			39.20			39.20			39.30						
		37.60			37.50			37.50			37.60						
		35.70			35.70			35.70			35.80						
		35.30			35.20			35.20			35.30						
		29.30			29.40			29.40			29.80						
		16.500			16.250			16.167			16.333						
		47.00			46.90			46.90			47.00						
		39.30			39.30			39.30			39.30						
		37.80			37.70			37.70			37.80						
		36.00			35.90			35.90			36.00						
		35.50			35.50			35.50			35.50						
		29.90			29.90			29.90			30.00						
		16.583			16.417			16.333			16.500						
		47.00			47.00			47.00			47.00						
		39.35			39.30			39.30			39.35						
		37.80			37.70			37.70			37.80						
		36.00			35.90			35.90			36.00						
		35.50			35.50			35.50			35.50						
		29.90			29.90			29.90			29.90						
Volaje	19.00	19.00	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.00	19.00	19.00	19.00	19.00	19.00
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000	15.167	15.250	15.333	15.333
Canal 1	29.60	39.00	42.50	43.90	45.10	45.60	46.30	46.60	47.00	47.10	47.20	47.20	47.00	46.90	46.90	46.80	46.80
Canal 2	29.70	32.30	35.20	36.50	37.60	38.00	38.60	38.90	39.30	39.50	39.60	39.60	39.50	39.30	39.30	39.30	39.30
Canal 3	29.70	31.30	34.00	35.20	36.20	36.70	37.10	37.30	37.70	37.70	37.80	37.80	37.70	37.60	37.60	37.60	37.60
Canal 4	29.70	30.20	32.00	33.30	34.20	34.70	35.20	25.40	35.90	35.90	35.80	35.80	35.70	35.70	35.70	35.70	35.70
Canal 5	29.70	30.00	31.40	32.80	33.80	34.30	34.80	35.00	35.40	35.40	35.50	35.50	35.40	35.30	35.30	35.30	35.40
Canal 6	29.20	29.20	29.20	29.30	29.50	29.60	29.50	29.50	29.50	29.50	29.50	29.50	29.40	29.40	29.40	29.40	29.30
Volaje	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.667
Canal 1	46.80	46.80	46.80	46.80	46.80	46.70	46.80	46.80	46.80	46.80	46.90	47.00	47.00	47.00	47.00	47.00	47.00
Canal 2	39.30	39.20	39.20	39.10	39.10	39.10	39.20	39.20	39.20	39.20	39.30	39.30	39.30	39.30	39.35	39.35	39.35
Canal 3	37.60	37.50	37.50	37.50	37.50	37.50	37.50	37.60	37.60	37.60	37.70	37.70	37.70	37.80	37.80	37.80	37.80
Canal 4	35.70	35.70	35.70	35.60	35.60	35.70	35.70	35.80	35.70	35.80	35.90	35.90	35.90	36.00	36.00	36.00	36.00
Canal 5	35.40	35.30	35.30	35.20	35.20	35.20	35.20	35.30	35.40	35.40	35.50	35.50	35.50	35.50	35.50	35.50	35.50
Canal 6	29.30	29.30	29.30	29.30	29.40	29.40	29.40	29.60	29.60	29.60	29.80	29.90	30.00	29.90	29.90	29.90	29.90

NOTA: Temperatura de los Canales en grados Centígrados, hora en decimales, Voltaje en volts y Amperaje en amperes.

**MEISTRA DE:** Mortero Cemento-Arena [ A. 1 ]  
**PROPORCIÓN:** Cem-Are-Agua (13.872:0.727) en peso.  
**VOLUMEN:** 0.001075 m<sup>3</sup>  
**PESO:** 2.257 Kg  
**DENSIDAD:** 2099.000 Kg/m<sup>3</sup>  
**MARCA:** CAMPANA

**FECHA:** 24-JUL-95  
**Observaciones:** Datos del Edo. Estable.

**Longitud Promedio=** 14.06 cm  
**Dímetro Promedio=** 9.94 cm  
**Volumen Cilindro=** 1091.653 cm<sup>3</sup>  
**Volumen Cavidades=** 16.670 cm<sup>3</sup>

	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Voltaje	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Hora	16.750	16.833	16.917	17.000	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667	
Canal 1	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.10	47.20	47.20	47.20
Canal 2	39.60	39.60	39.60	39.60	39.60	39.60	39.60	39.60	39.50	39.60	39.60	39.60	39.60
Canal 3	37.90	37.90	37.90	37.90	37.90	38.00	38.00	37.90	37.90	37.90	37.90	37.90	37.90
Canal 4	36.10	36.10	36.20	36.20	36.20	36.10	36.10	36.10	36.10	36.10	36.10	36.10	36.20
Canal 5	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.60	35.60	35.50
Canal 6	30.00	30.00	30.00	30.00	30.00	30.00	29.90	30.00	30.00	30.10	30.20	30.10	30.10

	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Voltaje													
Amperaje													
Hora													
Canal 1													
Canal 2													
Canal 3													
Canal 4													
Canal 5													
Canal 6													

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.



MUESTRA DE: Mortero Cemento-Arena | A | I | FECHA: 25-11-95  
 PROPORCIÓN: Cem-Are-Agua (1:3.87:20.727) en peso. Observaciones: Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 0.001075 m<sup>3</sup> Promedio= 14.06 cm  
 PESO: 2.257 Kg Promedio= 9.94 cm  
 DENSIDAD: 2099.000 Kg/m<sup>3</sup> Cilindro= 1091.653 cm<sup>3</sup>  
 MARCA: CAMPANA" Cavitades= 16.670 cm<sup>3</sup>

ESTADO NESTABLE		19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Voltaje	Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora		9.250	9.333	9.500	9.567	9.833	10.000	10.167	10.333	10.500	10.667	10.833	11.000	11.167	11.333
Canal 1		29.30	38.10	40.60	43.00	43.70	44.80	45.20	45.60	45.70	46.20	46.20	46.30	46.50	46.50
Canal 2		29.30	31.40	33.20	35.50	36.30	37.10	37.60	37.90	38.10	38.30	38.50	38.60	38.70	38.90
Canal 3		29.30	30.60	31.80	34.20	35.00	35.80	36.30	36.60	36.70	36.90	37.00	37.10	37.20	37.30
Canal 4		29.30	29.50	30.10	32.30	33.20	33.90	34.50	34.60	35.00	35.20	35.30	35.50	35.60	35.80
Canal 5		29.30	29.30	29.70	31.70	32.60	33.30	34.00	34.20	34.40	34.60	34.80	34.90	35.00	35.10
Canal 6		28.00	27.90	27.90	28.00	28.10	28.10	28.20	28.00	28.20	28.40	28.30	28.50	28.40	28.80

ESTADO NESTABLE		19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Voltaje	Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora		11.833	12.000	12.167	12.333	12.500	12.667	12.833	12.917	13.000	13.083	13.167	13.250	13.333	13.417
Canal 1		46.80	46.80	46.90	46.90	47.00	47.10	47.10	47.10	47.10	47.20	47.20	47.20	47.30	47.40
Canal 2		39.10	39.10	39.10	39.20	39.20	39.40	39.50	39.50	39.50	39.50	39.50	39.60	39.60	39.70
Canal 3		37.50	37.50	37.60	37.60	37.70	37.80	37.80	37.80	37.80	37.90	37.90	37.90	38.00	38.00
Canal 4		36.00	36.00	36.10	36.10	36.20	36.30	36.30	36.30	36.40	36.40	36.40	36.40	36.50	36.50
Canal 5		35.30	35.40	35.50	35.50	35.60	35.70	35.70	35.70	35.70	35.80	35.80	35.80	35.90	35.90
Canal 6		28.80	28.90	28.90	29.10	29.30	29.30	29.30	29.30	29.30	29.40	29.40	29.40	29.40	29.40

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Mortero Cemento-Arena		A		I		FECHA: 25-11-95		Observaciones:		Datos del Edo. Inestable		y Edo. Estable.	
PROPORCIÓN:	Cem-Are-Agua (13.872:0.727) en peso.	Longitud		Promedio=		Promedio=		Promedio=		Promedio=		Promedio=		Promedio=	
VOLUMEN:	0.001075 m <sup>3</sup>	Diámetro		Promedio=		Promedio=		Promedio=		Promedio=		Promedio=		Promedio=	
PESO:	2.257 Kg	Volumen		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=	
DENSIDAD:	2099.000 Kg/m <sup>3</sup>	Volumen		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=	
MARCA:	CAMPANA	Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=		Cilindros=	
Volaje	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.10	19.10	19.10	19.00	19.00	19.10
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora	13.667	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583	14.667	14.750	14.833
Canal 1	47.50	47.50	47.50	47.50	47.30	47.30	47.30	47.30	47.30	47.30	47.30	47.30	47.30	47.30	47.30
Canal 2	39.80	39.80	39.70	39.70	39.70	39.70	39.60	39.60	39.60	39.60	39.60	39.60	39.60	39.60	39.50
Canal 3	38.20	38.20	38.10	38.10	38.10	38.10	38.10	38.00	38.00	38.10	38.00	38.00	38.00	38.00	38.00
Canal 4	36.50	36.50	36.30	36.30	36.30	36.30	36.40	36.40	36.30	36.30	36.30	36.30	36.30	36.30	36.20
Canal 5	35.80	35.80	35.70	35.80	35.80	35.80	35.80	35.80	35.70	35.70	35.70	35.70	35.60	35.60	35.60
Canal 6	29.60	29.60	29.80	29.80	29.90	29.80	29.70	29.70	29.70	29.70	29.70	29.70	29.70	29.70	29.70
Volaje	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
hora	15.000	15.083	15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.000	16.000
Canal 1	47.30	47.30	47.30	47.30	47.30	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.20	47.20
Canal 2	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50
Canal 3	37.90	37.90	37.90	37.90	37.90	37.90	37.90	37.90	37.80	37.80	37.90	37.90	37.90	37.90	37.90
Canal 4	36.30	36.30	36.30	36.30	36.30	36.30	36.20	36.20	36.20	36.20	36.20	36.20	36.20	36.30	36.30
Canal 5	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.70
Canal 6	29.70	29.70	29.70	29.70	29.70	29.70	29.80	29.80	29.80	29.80	30.00	29.90	29.90	29.90	29.90

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Mortero Cemento-Arena B  
**FECHA:** 26-Jul-95  
**PROPORCIÓN:** Cem-Are-Agua (13.872:0.727) en peso.  
**VOLUMEN:** 0.001071 m<sup>3</sup>  
**PESO:** 2.234 Kg  
**DENSIDAD:** 2087.000 Kg/m<sup>3</sup>  
**MARCA:** "CAMPANA"

**Observaciones:** Datos del Edo. Estable.

**Promedios=** 14.01 cm  
**Promedios=** 9.94 cm  
**Cilindros=** 1087.178 cm<sup>3</sup>  
**Cavidades=** 16.670 cm<sup>3</sup>

		ESTACION 33448																
Volts	Amperaje	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Volts	Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Volts	Amperaje	11.167	11.250	11.333	11.500	11.667	11.833	12.000	12.167	12.333	13.667	13.917	14.000	14.083	14.167	14.250	14.333	14.333
Volts	Amperaje	29.80	35.60	43.70	45.60	46.60	47.40	48.10	48.60	48.80	49.80	49.90	50.00	50.00	50.10	50.00	50.00	50.00
Volts	Amperaje	29.80	30.20	33.80	35.70	36.50	37.30	37.90	38.30	38.60	39.60	39.60	39.70	39.70	39.70	39.70	39.70	39.70
Volts	Amperaje	29.90	30.00	32.50	34.40	35.20	36.00	36.30	36.80	37.10	37.90	37.90	38.00	38.10	38.00	38.00	38.10	38.10
Volts	Amperaje	29.90	29.90	30.70	32.60	33.20	34.10	34.50	34.90	35.30	36.00	36.10	36.00	36.10	36.10	36.10	36.10	36.10
Volts	Amperaje	29.80	29.80	30.20	31.90	32.50	33.30	33.90	34.20	34.60	35.30	35.40	35.40	35.40	35.40	35.40	35.40	35.40
Volts	Amperaje	29.00	29.20	29.10	29.20	29.20	29.30	29.30	29.30	29.40	29.70	29.80	29.70	29.70	29.70	29.70	29.70	29.70
Volts	Amperaje	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
Volts	Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Volts	Amperaje	14.417	14.500	14.583	14.667	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.667
Volts	Amperaje	50.10	50.10	50.10	50.00	50.00	50.00	50.00	50.00	49.90	50.00	50.10	50.10	50.10	50.30	50.20	50.20	50.20
Volts	Amperaje	39.70	39.70	39.70	39.70	39.60	39.60	39.60	39.50	39.50	39.60	39.70	39.70	39.80	39.90	40.00	39.70	39.70
Volts	Amperaje	38.10	38.00	38.00	38.00	38.00	38.00	38.00	37.80	37.80	37.80	38.00	38.00	38.10	38.20	38.10	38.00	38.00
Volts	Amperaje	36.10	36.10	36.10	36.00	36.00	35.90	35.90	35.80	36.00	36.10	36.10	36.10	36.20	36.30	36.30	36.20	36.20
Volts	Amperaje	35.30	35.30	35.30	35.30	35.20	35.20	35.20	35.20	35.30	35.50	35.50	35.50	35.50	35.60	35.60	35.60	35.60
Volts	Amperaje	29.60	29.60	29.60	29.50	29.40	29.30	29.30	29.20	29.20	29.20	29.10	29.20	29.30	29.20	29.60	29.60	29.60

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Mortero Cemento-Arena B		FECHA: 26-11-95	
PROPORCIÓN: Cem-Are-Agua (13.872:0.727) en peso.		Observaciones: Datos del Edo. Estable.	
VOLUMEN: 0.001071 m <sup>3</sup>		Promedio= 14.01 cm	
PESO: 2.234 Kg		Promedio= 9.94 cm	
DENSIDAD: 2087.000 Kg/m <sup>3</sup>		Cífraro= 1087.178 cm <sup>3</sup>	
MARCA: "CAMPANA"		Cavidades= 16.670 cm <sup>3</sup>	

	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
Voltaje	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
Amperaje	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Hora	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500		
Canal 1	50.20	50.10	50.10	50.10	49.90	49.90	50.00	50.00	49.90	50.10		
Canal 2	39.70	39.70	39.70	39.70	39.50	39.50	39.60	39.60	39.60	39.60		
Canal 3	38.00	38.00	38.00	38.00	37.90	37.90	38.00	38.00	37.90	38.00		
Canal 4	36.20	36.20	36.20	36.20	36.20	36.20	36.20	36.20	36.30	36.30		
Canal 5	35.60	35.60	35.50	35.50	35.50	35.50	35.60	35.60	35.50	35.60		
Canal 6	29.80	29.80	29.80	29.80	30.00	30.00	30.00	30.00	30.20	30.20		

	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
Voltaje												
Amperaje												
Hora												
Canal 1												
Canal 2												
Canal 3												
Canal 4												
Canal 5												
Canal 6												

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Concreto f'c=120 Kg/cm<sup>2</sup> con sabb 1/4" A I  
**FECHA:** 23-jun-95  
**Observaciones:** Datos del Edo. Estable.

**PROPORCIÓN:** Cem-Are-Gr-Agua(13.5:75:2.335:0.800)peso  
**Longitud Promedio=** 14.10 cm  
**VOLUMEN:** 0.001068 m<sup>3</sup>  
**Díametro Promedio=** 9.90 cm  
**PESO:** 2.290 Kg  
**Volumen Cilindro=** 1085.066 cm<sup>3</sup>  
**DENSIDAD:** 2143.000 Kg/m<sup>3</sup>  
**Volumen Cavidades=** 16.670 cm<sup>3</sup>  
**MARCA:** "CAMPANA"

651.000 651.000															
Volaje	20.50	20.50	20.50	20.80	20.30	20.30	20.30	20.40	20.50	20.50	20.50	20.40	20.90	20.40	20.40
Amperaje	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.41
Hora	11.917	12.083	12.250	12.417	12.583	12.750	12.917	13.083	13.250	13.417	13.583	13.750	13.917	14.083	14.250
Canal 1	19.00	29.90	33.50	34.60	37.20	38.10	39.70	40.40	40.60	41.00	41.30	43.70	43.80	43.60	43.50
Canal 2	18.80	21.70	24.60	25.90	27.90	29.50	30.70	31.50	31.70	32.10	32.30	34.50	34.50	34.50	34.40
Canal 3	18.80	20.70	23.20	24.70	26.60	28.00	29.60	30.20	30.50	30.90	31.10	33.20	33.30	33.40	33.30
Canal 4	18.70	19.50	21.60	23.10	25.00	26.40	27.50	28.50	28.60	29.20	29.50	31.80	31.80	31.90	31.80
Canal 5	18.20	19.00	20.60	22.20	23.80	25.20	26.10	27.00	26.80	27.10	27.50	30.10	30.10	30.10	30.10
Canal 6	18.40	18.60	18.40	18.80	19.00	19.10	19.20	19.70	19.60	19.70	19.90	19.70	20.10	20.10	20.20

651.000 651.000															
Volaje	20.40	20.30	20.40	20.40	20.30	20.30	20.50	20.40	20.30	20.40	20.40	20.40	20.10	20.10	20.10
Amperaje	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Hora	19.083	19.167	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833	19.917	20.000	20.083	20.167	20.250
Canal 1	43.50	43.50	43.50	43.40	43.40	43.20	43.40	43.30	43.30	43.70	43.80	44.00	43.90	43.60	43.20
Canal 2	34.40	34.30	34.30	34.30	34.20	34.20	34.10	34.10	34.70	34.80	34.80	34.80	34.90	34.70	34.20
Canal 3	33.40	33.30	33.40	33.20	33.20	33.20	33.20	33.20	33.40	33.50	33.50	33.70	33.60	33.50	33.20
Canal 4	31.70	31.70	31.70	31.60	31.60	31.60	31.60	31.50	31.60	32.00	32.00	32.30	32.10	32.20	31.70
Canal 5	30.00	30.00	30.00	30.00	30.00	30.00	29.90	29.70	30.40	30.80	30.60	30.80	30.60	30.30	19.90
Canal 6	20.10	20.10	20.10	19.80	20.10	20.00	20.00	19.80	20.00	19.90	19.40	19.70	19.70	19.60	19.20

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Concreto f'c=120 Kg/cm<sup>2</sup> con sabb 1/4" A I I  
**FECHA:** 23-jun-95  
**PROPORCION:** Cem-Are-Gr-Agua(13.575:2.335:0.800)peso  
**Observaciones:** Datos del Edb. Estable.  
**VOLUMEN:** 0.001068 m<sup>3</sup>  
**PESO:** 2.290 Kg  
**DENSIDAD:** 2143.000 Kg/m<sup>3</sup>  
**MARCA:** "CAMPANA"  
**Longitud Promedio=** 14.10 cm  
**Diámetro Promedio=** 9.90 cm  
**Volumen Cilindro=** 1085.066 cm<sup>3</sup>  
**Volumen Cavidades=** 16.670 cm<sup>3</sup>

Volaje	20.20	20.20	20.20	20.20	20.20	20.40	20.40	20.40	20.40	20.50	20.50	20.50	20.50
Amperaje	0.41	0.41	0.41	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Hora	20.417	20.500	20.583	20.667	20.750	20.833	20.917	21.000	21.083	21.167	21.250	21.250	21.250
Canal 1	43.20	43.20	43.00	42.90	43.20	43.20	43.50	43.70	43.70	43.70	43.70	43.70	43.70
Canal 2	34.10	34.10	34.00	33.80	33.90	34.20	34.50	34.70	34.80	34.80	34.80	34.80	34.80
Canal 3	33.20	33.10	33.00	32.90	32.90	33.00	33.20	33.30	33.30	33.40	33.50	33.50	33.50
Canal 4	31.50	31.50	31.30	31.30	31.40	31.50	31.80	31.90	31.90	32.10	32.00	32.10	32.10
Canal 5	29.70	29.70	29.60	29.60	30.20	30.50	30.80	30.90	31.20	31.10	31.10	31.10	31.10
Canal 6	19.30	19.30	18.80	19.60	20.00	19.50	19.70	19.60	19.60	20.00	19.60	19.60	19.80

Volaje	20.20	20.20	20.20	20.20	20.20	20.40	20.40	20.40	20.40	20.50	20.50	20.50	20.50
Amperaje													
Hora													
Canal 1													
Canal 2													
Canal 3													
Canal 4													
Canal 5													
Canal 6													

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MAESTRA DE:** Concreto f'c= 120 Kg/cm<sup>2</sup> con s&o 1/4" A I I  
**FECHA:** 26-Jun-95  
**Observaciones:** Datos del Edb. Estable.

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**PROPORCION:** Cem-Are-Gra-Agua(13.575:2.335:0.800)peso  
**VOLUMEN:** 0.001068 m<sup>3</sup>  
**PESO:** 2.290 Kg  
**DENSIDAD:** 2143.000 Kg/m<sup>3</sup>  
**MARCA:** "CAMPANA"

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**Longitud Promedio=** 14.10 cm  
**D&metro Promedio=** 9.90 cm  
**Volumen Cilindro=** 1085.066 cm<sup>3</sup>  
**Volumen Cavidades=** 16.670 cm<sup>3</sup>

Volteje	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.50	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.50	20.50
Amperaje	0.42	0.42	0.42	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	
Hora	11.917	12.000	12.250	12.333	12.417	12.500	12.583	12.667	12.750	12.833	12.917	13.000	13.083	13.167	13.333	13.417	13.500	13.583	13.667	13.750	13.833	13.917	14.000	14.083	
Canal 1	39.90	42.60	44.00	44.70	45.20	46.00	46.70	46.80	47.10	47.70	47.70	48.00	48.10	48.50	48.60	48.90	39.90	38.70	38.50	37.90	38.40	38.50	38.90	39.20	39.40
Canal 2	31.40	33.60	35.10	35.70	36.50	36.90	37.50	37.70	37.90	38.40	38.50	38.70	38.90	39.20	39.40	39.50	38.30	37.80	37.30	37.50	37.50	37.80	38.00	38.10	38.30
Canal 3	30.40	32.20	33.90	34.50	35.20	36.00	36.40	36.50	36.70	37.20	37.30	37.50	37.80	38.00	38.10	38.30	36.60	36.00	35.70	35.70	36.20	36.50	36.60	36.70	36.70
Canal 4	29.30	30.50	32.30	32.90	33.70	34.40	34.80	35.20	35.40	35.70	36.00	36.10	36.20	36.50	36.60	36.70	35.00	34.30	34.00	34.00	34.30	34.80	35.00	35.10	35.10
Canal 5	28.70	29.50	31.10	31.60	32.60	33.10	33.30	33.70	33.80	34.00	34.30	34.30	34.80	34.80	35.00	35.10	26.30	26.10	26.00	26.00	26.10	26.00	26.00	25.90	26.00
Canal 6	26.30	26.10	26.20	26.00	25.90	25.90	25.90	26.00	25.80	26.00	26.10	26.10	26.00	26.00	25.90	26.00	26.30	26.10	26.00	26.00	26.10	26.00	25.90	26.00	26.00

Volteje	20.50	20.60	20.50	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60	20.60
Amperaje	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Hora	13.500	13.667	13.750	13.917	14.000	14.167	14.250	14.417	14.500	14.667	14.750	14.917	15.000	15.167	15.333	15.417	15.500	15.667	15.750	15.917	16.000	16.167	16.333	16.417
Canal 1	48.90	49.10	49.10	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20	49.20
Canal 2	39.70	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80
Canal 3	38.50	38.60	38.70	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80	38.80
Canal 4	36.90	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
Canal 5	35.10	35.30	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50
Canal 6	26.00	26.20	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00

NOTA: Temperatura de los Canales en grados Cent&grados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Concreto f'c= 120 Kg/cm<sup>2</sup> con sello 1/4" A II FECHA: 26-jun-95

PROPORCIÓN: Cem-Are-Gra-Agua(1:3.575:2.335:0.800)peso Observaciones: Datos del Edo. Estable.

VOLUMEN: 0.001068 m<sup>3</sup> Longitud Promedio= 14.10 cm

PESO: 2.290 Kg Diámetro Promedio= 9.90 cm

DENSIDAD: 2143.000 Kg/m<sup>3</sup> Volumen Cilindro= 1085.066 cm<sup>3</sup>

MARCA: "CAMPAÑA" Volumen Cavidades= 16.670 cm<sup>3</sup>

Voltaje	20.50	20.50	20.40	20.40	20.50	20.60	20.60	20.60	20.60	20.40	20.40	20.40	20.40	20.50
Amperaje	0.42	0.42	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.42
Hora	18.333	18.417	18.500	18.583	18.667	18.750	18.833	18.917	19.000	19.083	19.167	19.250	19.333	19.417
Canal 1	50.30	50.10	50.00	50.00	49.80	49.60	49.70	49.70	49.70	49.80	49.90	50.10	50.10	50.10
Canal 2	41.10	40.90	40.80	40.70	40.60	40.40	40.40	40.40	40.50	40.60	40.90	40.90	40.90	41.00
Canal 3	39.80	39.70	39.70	39.60	39.30	39.10	39.10	39.10	39.20	39.40	39.50	39.60	39.60	39.70
Canal 4	38.10	37.90	38.00	37.90	37.60	37.40	37.50	37.50	37.60	37.80	38.00	38.10	38.00	38.10
Canal 5	36.10	36.00	35.90	35.80	35.70	35.60	35.70	35.70	35.90	36.00	36.40	36.50	36.40	36.50
Canal 6	25.50	25.50	25.30	25.30	25.10	25.10	24.60	24.60	24.60	24.60	24.60	24.60	24.50	24.40

Voltaje	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50
Amperaje	0.42	0.41	0.41	0.41	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Hora	19.667	19.750	19.833	19.917	19.917	19.917	19.917	19.917	19.917	19.917	19.917	19.917	19.917	19.917
Canal 1	50.30	50.20	50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30	50.30
Canal 2	41.10	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00
Canal 3	39.70	39.90	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80
Canal 4	38.20	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10
Canal 5	36.60	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50	36.50
Canal 6	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30	24.30

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.



**MESTRA DE:** Concreto f'c= 120 Kg/cm<sup>2</sup> con s&lo 1/4" | B  
**PROPORCION:** Cem-Are-Gra-Agua(13.575:2.335:0.800)peso  
**VOLUMEN:** 0.001081 m<sup>3</sup>  
**PESO:** 2.310 Kg  
**DENSIDAD:** 2137.000 Kg/m<sup>3</sup>  
**MARCA:** "CAMPANA"

		20.30		20.30		20.30		20.20		20.20		20.20		20.10		20.10		20.10		20.20		20.20	
		0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
		10.167	10.750	11.000	11.083	11.250	11.417	11.583	11.750	11.917	12.083	12.250	12.417	12.583	12.750	12.917	13.083						
		27.30	41.70	43.90	44.70	45.90	46.30	47.00	47.40	47.60	47.90	48.00	48.20	48.30	48.40	48.50							
		27.30	32.60	34.60	35.50	36.40	37.00	37.60	38.00	38.30	38.50	38.70	38.80	39.00	39.20	39.30							
		27.30	31.00	33.10	33.90	34.80	35.40	36.00	36.30	36.50	36.70	36.80	37.00	37.10	37.20	37.30							
		27.30	29.60	31.60	32.20	33.10	33.60	34.10	34.60	34.80	34.90	35.10	35.20	35.30	35.40	35.50							
		27.40	28.70	30.90	31.70	32.50	33.20	33.70	34.00	34.20	34.40	34.50	34.70	34.70	34.80	34.80							
		27.10	27.20	27.20	27.20	27.10	27.10	27.00	27.10	27.10	27.10	27.20	27.10	27.10	27.20	27.20							

**ESTADO NESTABLE**

		20.10		20.10		20.10		20.10		20.10		20.10		20.10		20.10		20.10		20.10		20.10	
		0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
		13.250	13.417	13.583	13.750	13.917	14.050	14.250	14.417	14.583	14.750	14.917	15.083	15.250	15.417	15.583							
		48.50	48.60	48.60	48.70	48.70	48.80	48.80	48.80	48.80	48.90	49.00	49.00	49.10	49.10	49.10							
		39.30	39.30	39.30	39.30	39.30	39.40	39.50	39.50	39.50	39.50	39.60	39.70	39.70	39.70	39.80							
		37.30	37.30	37.30	37.30	37.40	37.50	37.50	37.50	37.60	37.60	37.60	37.70	37.70	37.70	37.80							
		35.50	35.50	35.60	35.60	35.70	35.60	35.70	35.80	35.70	35.80	35.80	36.00	36.00	36.00	36.10							
		35.10	35.10	35.10	35.30	35.20	35.20	35.10	35.30	35.20	35.40	35.30	35.50	35.50	35.50	35.60							
		27.30	27.30	27.30	27.30	27.20	27.30	27.30	27.74	27.50	27.60	27.60	27.70	27.50	27.60	27.70							

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MAESTRA DE:** Concreto f'c= 120 Kg/cm2 con sello 1/4" B      FECHA: 19-IJ-95  
**PROPORCION:** Cem-Are-Gr-Agua(1:3.57:5:2.335:0.800)peso      Observaciones: Datos del Edo. Inestable y Estable.  
**VOLUMEN:** 0.001081 m3      Longitud Promedio= 14.14 cm  
**PESO:** 2.310 Kg      Diámetro Promedio= 9.94 cm  
**DENSIDAD:** 2137.000 Kg/m3      Volumen Cilindro= 1097.708 cm3  
**MARCA:** "CAMPAÑA"      Volumen Cavidades= 16.570 cm3

Volaje	20.10	20.10	20.10	20.10	20.10	20.10	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Amperaje	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Hora	15.917	16.083	16.250	16.417	16.583	16.750	16.917	17.083	17.250	17.417	17.583	17.750	17.917	18.083	18.250	18.417	18.583	18.750
Canal 1	49.10	49.20	49.20	49.20	49.20	49.30	49.50	49.50	49.70	49.70	49.70	49.70	49.70	49.70	49.60	49.60	49.70	49.70
Canal 2	39.70	39.80	39.90	40.00	40.00	40.00	40.00	40.00	40.10	40.10	40.20	40.20	40.20	40.30	40.10	40.10	40.30	40.10
Canal 3	37.80	37.80	37.80	38.00	38.00	38.00	38.50	38.60	38.70	38.80	38.90	38.90	38.90	38.90	38.80	38.80	38.90	38.80
Canal 4	36.10	36.10	36.20	36.20	36.20	36.20	37.00	37.10	37.20	37.30	37.30	37.30	37.30	37.30	37.20	37.20	37.30	37.20
Canal 5	35.50	35.60	35.60	35.70	35.70	35.80	35.70	35.70	35.80	35.80	35.90	35.90	35.90	35.80	35.90	35.90	35.80	35.90
Canal 6	27.70	27.70	27.80	27.80	28.00	28.20	28.50	28.30	28.30	28.10	28.10	28.10	28.00	28.20	28.20	28.10	28.20	28.10

Volaje	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Amperaje	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Hora	18.583	18.750	18.917	19.000	19.083	19.167	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833	19.917	20.000	20.000	20.000
Canal 1	49.80	49.90	50.10	50.10	50.10	50.20	50.20	50.30	50.20	50.10	50.10	50.00	49.70	49.90	49.60	49.50	49.50	49.50
Canal 2	40.30	40.50	40.60	40.70	40.70	40.70	40.80	40.80	40.80	40.70	40.50	40.50	40.20	40.20	40.20	40.10	40.10	40.10
Canal 3	38.80	38.80	39.10	39.30	39.30	39.30	39.30	39.40	39.40	39.30	39.30	39.20	39.10	39.00	38.70	38.60	38.60	38.60
Canal 4	37.30	37.40	37.80	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.40	37.30	37.10	36.90	36.90	36.90	36.90
Canal 5	36.00	36.40	36.40	36.50	36.40	36.20	36.20	36.20	36.20	36.20	36.20	36.20	35.60	35.70	35.70	35.50	35.50	35.50
Canal 6	28.10	28.10	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	27.70	27.50	27.30	27.40	27.40	27.40	27.40

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts Y Amperaje en amperes.

MUESTRA DE:		Concreto f'c= 120 Kg/cm <sup>2</sup> con sello 1/4" B										FECHA: 19-IV-95						
PROPORCIÓN: Cem-Are-Gra-Agua(13.575:2.335:0.800)peso		Observaciones:										Datos del Edo. Inestable y Estable.						
VOLUMEN: 0.001081 m <sup>3</sup>		Promedio=										14.14 cm						
PESO: 2.310 Kg		Diámetro										9.94 cm						
DENSIDAD: 2137.000 Kg/m <sup>3</sup>		Volumen										1097.708 cm <sup>3</sup>						
MARCA: "CAMPANA"		Caridades=										16.570 cm <sup>3</sup>						
Voltaje	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10	20.10
Amperaje	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Hora	20.083	20.167	20.250	20.333	20.417	20.500	20.583	20.667	20.750	20.833	20.917	21.000	21.083	21.167	21.250	21.333	21.417	21.500
Canal 1	49.70	49.60	49.50	49.60	49.80	50.10	50.40	50.50	50.30	50.40	50.20	50.10	50.20	50.10	50.20	50.20	50.20	50.20
Canal 2	40.10	39.80	39.80	39.80	40.10	40.60	41.10	41.00	40.90	40.80	40.70	40.60	40.90	40.80	40.80	40.80	40.80	40.70
Canal 3	38.60	38.60	38.60	38.60	39.00	39.40	39.70	39.70	39.70	39.30	39.20	39.00	39.70	39.50	39.50	39.50	39.00	39.00
Canal 4	36.90	36.90	36.90	36.90	37.30	37.50	37.90	37.90	37.80	37.50	37.30	37.30	37.80	37.40	37.30	37.30	37.30	37.30
Canal 5	35.40	35.10	35.00	35.60	35.50	35.80	36.30	36.30	36.30	36.40	36.30	36.20	36.30	36.30	36.20	36.20	36.20	36.20
Canal 6	27.60	27.60	27.60	27.60	27.70	27.60	27.40	27.50	26.80	27.00	27.40	27.40	27.00	27.20	27.40	27.40	27.40	27.40
Voltaje	20.10																	
Amperaje	0.39																	
Hora	21.417																	
Canal 1	50.00																	
Canal 2	40.50																	
Canal 3	39.30																	
Canal 4	37.30																	
Canal 5	36.00																	
Canal 6	27.40																	

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Concreto f'c= 200 Kg/cm2 con sello 1/4" A 1  
 FECHA: 20-Jun-95  
 Observaciones: Datos del Edo. Estable.

PROPORCIÓN: Cem-Are-Gra-Agua(1:2.522:1.780:0.610)peso  
 Longitud Promedio= 14.12 cm  
 Diámetro Promedio= 9.91 cm  
 VOLUMEN: 0.001073 m3  
 Volumen Cilindro= 1089.247 cm3  
 PESO: 2.343 Kg  
 Volumen Cavidades= 16.670 cm3  
 DENSIDAD: 2184.459 Kg/m3  
 MARCA: "CAMPANA"

ESTADO ESTABLE												
Voltaje	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20
Amperaje	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	13.917	14.000	17.833	17.917	18.000	18.083	18.167	18.250	18.333	18.417	18.500	18.583
Canal 1	27.20	35.50	47.30	47.30	47.30	47.50	47.50	47.70	47.70	47.80	47.80	47.80
Canal 2	27.00	29.20	41.00	41.00	41.10	41.10	41.10	41.30	41.30	41.40	41.50	41.60
Canal 3	26.90	28.30	39.90	39.90	40.00	40.10	40.10	40.20	40.20	40.30	40.40	40.40
Canal 4	26.80	27.30	38.30	38.40	38.50	38.60	38.70	38.70	38.70	38.90	39.00	39.10
Canal 5	26.70	26.70	37.10	37.20	37.30	37.40	37.50	37.60	37.60	37.70	37.80	37.90
Canal 6	25.70	25.50	24.50	24.50	24.70	24.90	25.00	24.90	24.90	24.70	24.70	24.80
Voltaje	18.20	18.10	18.20	18.20	18.20	18.20	18.30	18.30	18.20	18.20	18.20	18.20
Amperaje	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	19.000	19.083	19.167	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833	19.917
Canal 1	48.00	48.00	47.90	48.00	48.00	48.00	48.00	48.00	47.90	47.90	48.00	48.00
Canal 2	41.60	41.70	41.70	41.60	41.70	41.70	41.70	41.70	41.70	41.60	41.60	41.60
Canal 3	40.50	40.60	40.50	40.50	40.50	40.70	40.70	40.60	40.50	40.50	40.50	40.50
Canal 4	39.10	39.10	39.20	39.20	39.10	39.20	39.10	39.10	39.10	39.10	39.10	39.10
Canal 5	37.90	38.00	38.00	38.00	37.80	37.90	38.00	37.90	37.70	37.60	37.70	37.80
Canal 6	24.80	24.60	24.60	24.60	24.40	24.40	24.40	24.00	23.90	23.80	24.00	24.00
Voltaje	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20
Amperaje	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	20.000	20.083	20.167	20.250	20.333	20.417	20.500	20.583	20.667	20.750	20.833	20.917
Canal 1	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00
Canal 2	41.60	41.70	41.70	41.60	41.70	41.70	41.70	41.70	41.60	41.60	41.60	41.70
Canal 3	40.50	40.60	40.50	40.50	40.50	40.70	40.70	40.60	40.50	40.50	40.50	40.50
Canal 4	39.10	39.10	39.20	39.20	39.10	39.20	39.10	39.10	39.10	39.10	39.10	39.00
Canal 5	37.90	38.00	38.00	38.00	37.80	37.90	38.00	37.90	37.70	37.60	37.70	37.80
Canal 6	24.80	24.60	24.60	24.60	24.40	24.40	24.40	24.00	23.90	23.80	24.00	24.00

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, voltaje en volts y amperaje en amperes.

MAESTRA DE:	Concreto, f <sub>c</sub> = 200 Kg/cm <sup>2</sup> con s&o 1/4"   A   I				FECHA: 20-Jun-95
PROPORCION:	Cem-Are-Gra-Agua(1:2.522:1.780:0.610)peso				Observaciones: Datos del Edo. Estable.
VOLUMEN:	0.001073 m <sup>3</sup>	Longitud	14.12 cm		
PESO:	2.343 Kg	D&metro	9.91 cm		
DENSIDAD:	2184.459 Kg/m <sup>3</sup>	Volumen	1089.247 cm <sup>3</sup>		
MARCA:	"CAMPANA"	Volumen	16.670 cm <sup>3</sup>		

Voltaje	18.50																			
Amperaje	0.37																			
Hora	20.333																			
Canal 1	48.10																			
Canal 2	41.70																			
Canal 3	40.50																			
Canal 4	39.00																			
Canal 5	37.80																			
Canal 6	23.60																			

Voltaje																				
Amperaje																				
Hora																				
Canal 1																				
Canal 2																				
Canal 3																				
Canal 4																				
Canal 5																				
Canal 6																				

NOTA: Temperatura de los Canales en grados Cent/grados, Hora en decimales, voltaje en volts y amperaje en amperes.

MUESTRA DE: Concreto f'c= 200 Kg/cm<sup>2</sup> con sello 1/4" [ A ] | FECHA: 21-jun-95

PROPORCIÓN: Cem-Are-Grav-Agua(1:2.522:1.780:0.610)peso Observaciones: Datos del Edo. Estable.

VOLUMEN: 0.001073 m<sup>3</sup> Longitud Promedio= 14.12 cm

PESO: 2.343 Kg Diámetro Promedio= 9.91 cm

DENSIDAD: 2184.000 Kg/m<sup>3</sup> Volumen Cilindro= 1089.247 cm<sup>3</sup>

MARCA: "CAMPAÑA" Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO NESTABLE

Voltaje	18.30	18.30	18.00	18.00	18.00	18.00	18.10	17.90	18.10	18.10	18.10	18.10	18.10	18.10	18.10	18.10	18.10	18.10	18.00
Amperaje	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	8.500	11.250	11.333	11.417	11.500	11.583	11.667	11.750	11.833	11.917	12.000	12.083	12.167	12.250	12.333	12.417			12.417
Canal 1	38.30	42.70	43.00	43.00	43.50	43.40	43.70	43.60	43.70	43.70	43.80	43.90	44.00	44.00	44.20	44.10			44.10
Canal 2	37.90	36.60	36.70	36.90	37.10	37.20	37.30	37.30	37.50	37.60	37.50	37.70	37.70	37.70	37.90	37.90			37.90
Canal 3	37.50	35.50	35.70	35.80	35.90	35.90	36.00	36.10	36.20	36.30	36.20	36.50	36.50	36.50	36.60	36.60			36.60
Canal 4	37.20	34.10	34.30	34.40	34.60	34.70	34.50	34.70	34.80	34.90	35.00	35.10	35.00	35.00	35.20	35.20			35.20
Canal 5	36.70	33.30	33.30	33.50	33.70	34.00	34.00	34.10	34.20	34.20	34.20	34.30	34.30	34.30	34.40	34.30			34.30
Canal 6	23.70	21.40	21.40	21.40	21.50	21.20	21.20	21.20	21.10	21.30	21.20	21.30	21.30	21.30	21.50	21.50			22.00

Voltaje	18.00	18.00	18.00	18.20	18.20	18.20	18.20	18.30	18.30	18.10	18.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10	18.10
Amperaje	0.36	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.36	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	12.500	12.583	12.667	12.750	12.833	12.917	13.000	13.083	13.167	13.250	13.333	13.417	13.500	13.583	13.667	13.750			13.750
Canal 1	44.10	44.10	44.30	44.50	44.60	44.70	44.70	45.00	45.00	45.00	45.00	45.10	45.00	45.20	45.50	45.60			45.60
Canal 2	37.90	38.00	38.10	38.20	38.40	38.30	38.40	38.50	38.60	38.70	38.70	38.80	38.80	38.80	39.10	39.10			39.10
Canal 3	36.70	36.70	36.80	36.90	37.10	37.10	37.20	37.30	37.40	37.50	37.50	37.50	37.60	37.70	37.90	38.00			38.00
Canal 4	35.30	35.40	35.50	35.50	35.70	35.50	35.70	35.80	35.90	36.00	36.10	36.10	36.20	36.20	36.50	36.50			36.50
Canal 5	34.30	34.40	34.60	34.70	35.00	35.00	35.00	35.10	35.10	35.10	35.20	35.20	35.20	35.30	35.50	35.50			35.50
Canal 6	22.00	22.10	22.10	22.00	22.10	22.00	22.10	22.10	22.10	22.10	22.00	22.00	22.00	22.00	22.20	22.10			22.10

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Concreto f'c= 200 Kg/cm <sup>2</sup> con s&o 1/4"		A		I		FECHA: 21-Jun-95		Observaciones:		Datos del Edo. Estable.				
PROPORCIÓN:		Dem-Are-Grav-Agua(12.522:1.780:0.610)peso		Longitud Promedio=		14.12 cm		18.30		18.30		18.20				
VOLUMEN:		0.001073 m <sup>3</sup>		Diámetro Promedio=		9.91 cm		18.50		18.50		18.20				
PESO:		2.343 Kg		Volumen Cilindro=		1089.247 cm <sup>3</sup>		0.37		0.36		0.37				
DENSIDAD:		2184.000 Kg/m <sup>3</sup>		Volumen Caridades=		16.670 cm <sup>3</sup>		14.500		14.667		14.833				
MARCA:		"CAMPANA"						14.417		14.750		14.917				
Voltaje		18.10	18.20	18.30	18.30	18.30	18.30	18.30	18.50	18.50	18.30	18.30	18.20	18.20	18.20	18.20
Amperaje		0.36	0.36	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.36	0.36	0.37	0.37	0.37	0.37
hora		13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583	14.667	14.750	14.833	14.917	15.000
Canal 1		45.60	45.60	45.60	45.70	45.80	45.80	45.90	46.00	46.10	46.00	46.00	46.10	46.10	46.10	46.10
Canal 2		39.20	39.30	39.30	39.30	39.50	39.50	39.50	39.60	39.70	39.70	39.70	39.80	39.80	39.80	39.80
Canal 3		38.00	38.10	38.10	38.10	38.20	38.20	38.30	38.40	38.50	38.60	38.60	38.70	38.60	38.60	38.60
Canal 4		36.60	36.70	36.70	36.70	36.70	36.70	36.80	36.90	37.00	37.10	37.10	37.10	37.20	37.20	37.20
Canal 5		35.60	35.70	35.70	35.80	35.90	35.80	35.70	35.80	35.80	35.00	36.00	36.10	36.10	36.10	36.20
Canal 6		22.30	22.20	22.30	22.40	22.60	22.20	22.00	22.20	22.20	22.20	22.50	22.40	22.40	22.30	22.30
Voltaje		18.20	18.20	18.20	18.20	18.30	18.20	18.20	18.30	18.30	18.10	18.10	18.20	18.20	18.20	18.20
Amperaje		0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36
hora		15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333
Canal 1		46.10	46.10	46.10	46.20	46.20	46.10	46.20	46.30	46.50	46.40	46.40	46.40	46.40	46.40	46.40
Canal 2		39.80	39.80	39.80	39.90	40.00	39.90	40.00	39.90	40.10	40.20	40.10	40.10	40.20	40.20	40.20
Canal 3		38.70	38.70	38.80	38.80	38.80	38.80	38.80	38.80	38.90	39.00	39.00	39.00	39.00	39.00	39.00
Canal 4		37.30	37.30	37.30	37.30	37.70	37.50	37.40	37.40	37.40	37.40	37.50	37.50	37.50	37.50	37.50
Canal 5		36.20	36.20	36.20	36.20	36.30	36.30	36.20	36.30	36.30	36.30	36.40	36.50	36.40	36.40	36.50
Canal 6		22.40	22.40	22.50	22.50	22.60	22.50	22.50	22.60	22.50	22.70	22.50	22.70	22.60	22.60	22.60

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Concreto Fc= 200 Kg/cm<sup>2</sup> con selo 1/4" [ A ] I FECHA: 21-Jun-95  
 Observaciones: Datos del Edo. Estable.  
 PROPORCION: Cam-Are-Grav-Agua(12.522:1.780:0.510)peso Longitud Promedio= 14.12 cm  
 VOLUMEN: 0.001073 m<sup>3</sup> Diámetro Promedio= 9.91 cm  
 PESO: 2.343 Kg Volumen Cilindro= 1089.247 cm<sup>3</sup>  
 DENSIDAD: 2184.000 Kg/m<sup>3</sup> Volumen Cavidades= 16.670 cm<sup>3</sup>  
 MARCA: "CAMPANA"

Voltaje	18.20	18.20	18.00	18.00	18.10	18.10	18.00	18.00	18.10	18.10	18.10	18.10	18.20	18.20	18.20
Amperaje	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	16.500	16.583	16.667	16.750	16.833	16.917	17.000	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667
Canal 1	46.40	46.40	46.20	46.30	46.30	46.50	46.40	46.40	46.50	46.50	46.50	46.50	46.50	46.50	46.50
Canal 2	40.20	40.20	40.10	40.10	40.10	40.20	40.30	40.30	40.30	40.30	40.30	40.30	40.30	40.30	40.30
Canal 3	39.00	39.00	39.00	39.10	39.10	39.10	39.00	39.00	39.10	39.10	39.10	39.10	39.10	39.10	39.10
Canal 4	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
Canal 5	36.50	36.50	36.50	36.50	36.60	36.70	36.70	36.70	36.70	36.70	36.80	36.80	36.70	36.70	36.70
Canal 6	22.70	22.70	22.70	22.90	23.00	23.00	23.00	23.00	22.80	22.80	23.00	23.00	22.70	22.70	22.80

Voltaje	18.20	18.30	18.30	18.10	18.10	18.10	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20
Amperaje	0.36	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Hora	17.833	17.917	18.000	18.083	18.167	18.250	18.333	18.417	18.500	18.583	18.667	18.667	18.667	18.667	18.667
Canal 1	46.60	46.60	46.70	46.60	46.40	46.50	46.40	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50
Canal 2	40.30	40.30	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.20	40.30
Canal 3	39.10	39.20	39.10	39.00	39.00	39.00	39.00	39.00	39.00	39.10	39.10	39.10	39.10	39.10	39.10
Canal 4	37.60	37.60	37.60	37.60	37.50	37.60	37.60	37.60	37.60	37.50	37.50	37.50	37.50	37.50	37.60
Canal 5	36.70	36.70	36.80	36.70	36.60	36.60	36.50	36.60	36.60	36.70	36.80	36.70	36.70	36.70	36.70
Canal 6	22.70	22.90	22.90	23.00	22.60	22.50	22.70	23.00	23.00	22.90	22.90	22.90	22.90	22.90	22.80

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.



**MUESTRA DE:** Concreto f'c= 200 Kg/cm<sup>2</sup> con scto 1/4" B      **FECHA:** 22-Jun-95  
**PROPORCIÓN:** Cem-Are-Gra-Agua(1:2.522:1.780:0.610)peso      **Observaciones:** Datos del Edo. Estable.  
**VOLUMEN:** 0.001075 m<sup>3</sup>      Longitud Promedio= 14.13 cm      **Díametro:** 9.92 cm  
**PESO:** 2.355 Kg      Volumen Cilindro= 1091.797 cm<sup>3</sup>  
**DENSIDAD:** 2190.000 Kg/m<sup>3</sup>      Volumen Cavidades= 16.670 cm<sup>3</sup>  
**MARCA:** "CAMPANA"

ESTADO ESTABLE											
	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	20.00	20.10
Volaje	19.30	19.30	19.00	19.20	19.30	19.30	19.30	19.30	19.30	19.10	19.10
Amperaje	0.38	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.38	0.38
Hora	12.833	13.083	13.167	13.250	13.333	13.417	13.500	13.583	13.667	13.750	13.833
Canal 1	30.20	40.80	41.40	41.90	42.20	43.10	43.40	43.40	43.70	43.50	43.20
Canal 2	30.10	33.60	34.30	34.80	35.20	36.00	35.70	35.80	35.80	35.50	35.60
Canal 3	30.00	32.60	33.30	33.80	34.20	34.80	35.20	35.30	35.30	35.30	34.80
Canal 4	29.90	31.20	32.10	32.70	33.10	33.60	33.80	34.00	34.10	34.20	33.80
Canal 5	29.70	30.20	31.30	31.70	32.20	32.70	32.50	32.60	32.50	32.20	32.10
Canal 6	25.30	24.40	24.40	24.40	24.20	24.10	24.00	23.80	23.70	23.70	22.80
<b>ESTADO ESTABLE</b>											
Volaje	19.30	19.30	19.00	19.20	19.30	19.30	19.30	19.30	19.30	19.10	19.10
Amperaje	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.38	0.38
Hora	17.917	18.000	18.083	18.167	18.250	18.333	18.417	18.500	18.583	18.667	18.750
Canal 1	43.30	43.30	43.30	43.10	43.20	43.30	43.30	43.30	43.30	43.10	43.10
Canal 2	35.50	35.60	35.60	35.50	35.50	35.50	35.50	35.60	35.50	35.70	35.50
Canal 3	34.80	34.80	34.80	34.70	34.70	34.80	34.80	34.80	34.80	34.90	34.70
Canal 4	33.80	33.80	33.80	33.70	33.80	33.70	33.70	33.80	33.80	33.80	33.70
Canal 5	32.10	32.00	32.10	32.10	32.00	32.00	32.00	32.00	32.10	32.10	32.00
Canal 6	22.80	22.60	22.70	22.70	23.10	23.00	22.90	22.70	22.80	22.40	22.10

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts Y Amperaje en Amperes.

MUESTRA DE: <u>Concreto f.c= 200 Kg/cm<sup>2</sup> con sello 1/4" B</u>		FECHA: <u>22-jun-95</u>	
PROPORCION: <u>Cem-Are-Gr-Agua(12.522:1.780:0.610)peso</u>		Observaciones: <u>Datos del Edo. Estable.</u>	
VOLUMEN: <u>0.001075 m<sup>3</sup></u>		Longitud Promedio= <u>14.13 cm</u>	Diámetro Promedio= <u>9.92 cm</u>
PESO: <u>2.355 Kg</u>		Volumen Cilindro= <u>1091.797 cm<sup>3</sup></u>	Volumen Cavidades= <u>16.670 cm<sup>3</sup></u>
DENSIDAD: <u>2190.000 Kg/m<sup>3</sup></u>			
MARCA: <u>"CAMFANA"</u>			

Volaje	19.40	19.10	19.30	19.20	19.30	19.30	19.30	19.50	19.50	19.50	19.40
Amperaje	0.39	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Hora	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833	19.917	20.000	
Canal 1	43.30	43.10	43.30	43.60	43.90	44.00	43.60	43.20	43.40	43.90	
Canal 2	35.40	35.60	35.80	35.90	36.30	36.40	36.00	35.70	35.80	36.30	
Canal 3	34.70	34.80	35.00	35.20	35.50	35.60	35.10	35.00	35.20	35.40	
Canal 4	33.60	33.80	34.00	34.20	34.30	34.30	34.00	34.00	34.00	34.00	
Canal 5	32.00	32.60	32.70	32.90	33.20	32.50	32.00	32.40	32.80	33.10	
Canal 6	22.00	22.50	22.10	22.10	22.70	22.00	21.70	22.00	22.20	22.20	

Volaje											
Amperaje											
Hora											
Canal 1											
Canal 2											
Canal 3											
Canal 4											
Canal 5											
Canal 6											

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en Amperes.

MUESTRA DE: Perifoneo A I I  
 FECHA: 27-Jul-95  
 Observaciones: Datos del Edo. Estable.  
 De 19.3v y 0.37 a se bajó a 14.9v y 0.28a.

PROPORCIÓN: Cem-Perl-Agua (10.507:0.600) en peso  
 Longitud Promedio= 14.00 cm  
 VOLUMEN: 0.001054 m<sup>3</sup>  
 Diámetro Promedio= 9.87 cm  
 PESO: 0.895 Kg  
 Volumen Cilindro= 1071.155 cm<sup>3</sup>  
 DENSIDAD: 849.000 Kg/m<sup>3</sup>  
 Volumen Caridades= 16.670 cm<sup>3</sup>

DISTRIBUIDOR: "AGREGADOS ULTRALICEROS S.A.deC.V. Suarosal Hto."

Volaje	19.30	19.30	19.30	19.30	17.20	17.20	17.20	17.20	17.20	16.3	16.3	16.3	15.2	15.10	14.9	14.9	14.9
Amperaje	0.37	0.37	0.37	0.37	0.33	0.33	0.33	0.33	0.33	0.31	0.31	0.31	0.29	0.29	0.28	0.28	0.28
hora	13.250	13.333	13.417	13.667	13.750	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000	15.167	15.250	15.500	15.833
Canal 1	29.60	47.00	56.90	60.80	60.60	62.30	63.30	63.80	63.90	64.60	62.60	62.20	65.10	62.60	62.20	62.20	62.20
Canal 2	29.50	33.10	38.80	42.10	44.30	46.00	46.90	47.90	48.20	48.80	48.60	48.20	49.30	48.50	48.00	47.90	48.00
Canal 3	29.50	30.80	34.80	37.60	39.80	41.70	42.50	43.50	44.10	44.70	44.70	44.60	45.10	44.80	44.30	44.30	44.30
Canal 4	29.50	29.70	30.60	32.20	34.10	35.70	36.30	37.10	37.70	38.30	38.50	38.50	38.70	38.60	38.50	38.50	38.50
Canal 5	29.60	29.60	29.70	30.50	31.40	32.60	33.10	33.70	34.20	34.80	35.00	35.10	35.20	35.30	35.30	35.40	35.40
Canal 6	30.40	30.30	30.50	30.40	30.50	30.50	30.40	30.30	30.30	30.40	30.40	30.40	30.40	30.50	30.60	31.90	31.10

Volaje	14.9	14.9	14.9	14.9	15.00	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
hora	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000	17.083	17.167	17.250	17.250
Canal 1	62.30	62.30	62.40	62.40	62.50	62.50	62.50	62.50	62.50	62.70	62.80	62.70	62.70	62.80	62.80	62.80	62.80
Canal 2	47.90	47.90	47.90	47.90	47.90	47.90	47.90	47.90	48.00	48.00	48.10	48.00	48.00	48.10	48.10	48.10	48.10
Canal 3	44.30	44.30	44.30	44.30	44.30	44.30	44.30	44.30	44.50	44.50	44.50	44.40	44.40	44.50	44.50	44.50	44.50
Canal 4	38.60	38.60	38.60	38.60	38.60	38.60	38.60	38.60	38.70	38.70	38.80	38.80	38.80	38.80	38.70	38.70	38.70
Canal 5	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.70	35.70	35.80	35.80	35.80	35.80	35.70	35.70	35.70
Canal 6	31.20	31.20	31.20	31.20	31.30	31.30	31.30	31.30	31.30	31.40	31.40	31.40	31.10	31.10	31.10	31.10	31.10

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MAESTRA DE:		Perifoneo		A		I		FECHA: 27-11-95		Observaciones:		Datos del Edo. Estable.	
PROPORCION:	Dem-Perl-Agua (1:0.507:0.600)en peso	14.90	14.90	14.9	14.9	14.9	14.9	14.90	14.90	14.90	14.90	14.90	14.90
VOLUMEN:	0.001054 m <sup>3</sup>	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
PESO:	0.895 Kg	17.333	17.417	17.500	17.583	17.667	17.750	17.833	17.917	18.000	18.083	18.167	18.250
DENSIDAD:	849.000 Kg/m <sup>3</sup>	62.80	63.00	63.10	63.10	63.10	63.10	63.10	63.10	63.20	63.20	63.40	63.50
DISTRIBUIDOR:	"AGREGADOS ULTRALICEROS S.A.de.C.V. Sucursal Hto."	48.10	48.10	48.00	48.10	48.10	48.10	48.10	48.10	48.10	48.10	48.10	48.10
		44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50
		38.80	38.80	38.70	38.70	38.70	38.80	38.80	38.80	38.80	38.80	39.00	39.10
		35.70	35.70	35.70	35.70	35.70	35.70	35.80	35.80	35.80	35.70	35.90	36.00
		31.00	31.00	30.80	30.80	30.80	30.80	30.80	30.80	30.80	30.70	30.70	30.60
Volteje		14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90
Amperaje		0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
hora		18.567	18.750	18.933	18.917	19.000	19.083	19.167	19.250	19.333	19.417	19.500	18.583
Canal 1		63.10	63.10	62.80	62.70	62.70	62.70	62.80	63.20	63.10	63.10	63.10	63.20
Canal 2		48.20	48.10	48.10	48.00	47.90	47.80	47.80	47.70	47.70	47.70	47.70	48.30
Canal 3		44.60	44.50	44.50	44.30	44.20	44.20	44.20	44.10	44.10	44.20	44.20	44.70
Canal 4		39.40	38.90	38.90	38.70	38.70	38.60	38.60	38.70	38.60	38.50	38.50	39.20
Canal 5		35.80	35.70	35.70	35.50	35.50	35.40	35.50	35.60	35.50	35.40	35.40	36.10
Canal 6		30.60	30.60	30.50	30.40	30.40	30.50	30.20	30.10	30.50	30.40	30.60	30.70

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Volteje en volts y Amperaje en amperes.

**MESTRA DE:** Perforato **A. I.** **FECHA:** 28-Jul-95  
**PROPORCION:** Cem-Per-Agua (1:0.507:0.600) en peso **Observaciones:** Datos del Edo. Inestable y Edo. Estable.  
**VOLUMEN:** 0.001054 m<sup>3</sup> **Promedio=** 14.00 cm **Diámetro=** 9.87 cm **Cilindro=** 1071.155 cm<sup>3</sup>  
**PESO:** 0.895 Kg **Volumen** 16.670 cm<sup>3</sup>  
**DENSIDAD:** 849.000 Kg/m<sup>3</sup>  
**DISTRIBUIDOR:** "AGREGADOS ULTRALICEROS S.A.deC.V. Suarosal Hto."

	14.90	14.90	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
Voltaje	14.90	14.90	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
Amperaje	0.28	28.00	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
hora	10.000	10.083	10.250	10.333	10.500	10.667	10.833	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333	12.500	12.667
Canal 1	29.20	35.50	44.00	50.00	52.10	54.10	56.50	57.00	58.00	58.50	59.50	59.90	60.20	60.40	61.00	61.40	61.80	62.20
Canal 2	29.20	29.40	32.60	36.20	38.00	39.70	41.80	42.30	43.20	43.80	44.50	44.90	45.20	45.30	45.70	45.90	46.20	46.50
Canal 3	29.20	29.20	30.70	33.60	35.20	36.60	38.50	38.90	39.80	40.40	41.00	41.50	41.70	41.80	42.20	42.30	42.60	42.90
Canal 4	29.20	29.10	29.30	30.50	31.50	32.70	34.30	34.70	35.20	35.70	36.20	36.60	36.80	37.10	37.10	37.10	37.10	37.10
Canal 5	29.10	29.00	29.10	29.50	30.10	30.80	31.90	32.20	32.60	33.00	33.50	33.70	33.80	34.00	34.30	34.30	34.30	34.30
Canal 6	28.90	29.00	28.90	30.40	29.00	28.90	29.00	29.10	29.00	29.20	29.30	29.30	29.30	29.50	29.50	29.50	29.50	29.50

	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
Voltaje	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
hora	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000	15.167	15.333
Canal 1	61.40	61.60	61.80	62.00	62.00	62.20	62.20	62.30	62.70	62.80	62.80	63.00	63.30	63.40	63.40	63.50	63.50	63.50
Canal 2	46.10	46.20	46.30	46.50	46.50	46.50	46.50	46.70	46.80	46.90	47.00	47.10	47.20	47.30	47.30	47.30	47.30	47.30
Canal 3	42.50	42.60	42.70	42.80	42.80	43.00	43.00	43.10	43.20	43.30	43.30	43.40	43.50	43.60	43.60	43.60	43.60	43.60
Canal 4	37.20	37.40	37.50	37.60	37.60	37.70	37.70	37.80	37.90	38.00	38.00	38.10	38.20	38.30	38.30	38.30	38.30	38.30
Canal 5	34.40	34.50	34.70	34.70	34.70	34.80	34.80	34.90	35.00	35.20	35.20	35.20	35.30	35.30	35.30	35.30	35.30	35.30
Canal 6	29.60	29.50	29.60	29.70	29.70	29.80	29.80	29.80	29.90	30.00	30.10	30.20	30.10	30.20	30.20	30.20	30.20	30.20

NOTA: Temperatura de los Canales en grados Centígrados, hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Perforato		A		II		FECHA: 28-Jul-95		Observaciones:		Datos del Edo. Inestable		y Edo. Estable.	
PROPORCION:	Cem-Par-Agua (10.5070.600)en peso	Longitud	Promedio=	14.00	cm	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
VOLUMEN:	0.001054 m <sup>3</sup>	Diámetro	Promedio=	9.87	cm	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
PESO:	0.895 Kg	Volumen	Cifrado=	1071.155	cm <sup>3</sup>	15.167	15.333	15.500	15.667	15.833	16.000	16.167	16.333	16.500	16.667
DENSIDAD:	849.000 Kg/m <sup>3</sup>	Volumen	Cavidades=	16.670	cm <sup>3</sup>	63.50	63.60	63.70	63.80	63.90	64.00	64.10	64.20	64.30	64.40
DISTRIBUIDOR:	"AGREGADOS ULTRALICEROS S.A.deC.V. Suursal Hb."					47.30	47.40	47.50	47.60	47.70	47.80	47.90	48.00	48.10	48.20
Voltaje	14.70	14.80	14.70	14.80	14.70	14.80	14.70	14.80	14.70	14.80	14.70	14.80	14.70	14.80	14.70
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
hora	17.567	17.750	17.933	18.117	18.300	18.483	18.667	18.850	19.033	19.217	19.400	19.583	19.767	19.950	20.133
Canal 1	65.10	65.20	65.30	65.40	65.50	65.60	65.70	65.80	65.90	66.00	66.10	66.20	66.30	66.40	66.50
Canal 2	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30	48.30
Canal 3	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50	44.50
Canal 4	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90	38.90
Canal 5	35.40	35.50	35.60	35.70	35.80	35.90	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80
Canal 6	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Pericrino A II FECHA: 28-11-95

PROPORCION: Cem-Perl-Agua (1:0.507:0.600) en peso Observaciones: Datos del Edo. Inestable y Edo. Estable.

VOLUMEN: 0.001054 m<sup>3</sup> Longitud Promedio= 14.00 cm

PESO: 0.895 Kg Diámetro Promedio= 9.87 cm

DENSIDAD: 849.000 Kg/m<sup>3</sup> Volumen Cilindro= 1071.155 cm<sup>3</sup>

DISTRIBUIDOR: "AGREGADOS ULTRALICEROS S.A.deC.V. Sucursal Hilo." Volumen Cavidades= 16.670 cm<sup>3</sup>

Volaje	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Hora	19.000	19.083	19.167	19.250	19.333	19.417	19.500	19.583	19.667	19.750	19.833	19.917	20.000
Canal 1	64.90	64.90	64.90	64.80	64.80	64.80	64.80	64.80	64.90	64.90	64.90	65.00	65.00
Canal 2	47.70	47.70	47.60	47.60	47.60	47.60	47.60	47.60	47.50	47.50	47.60	47.60	47.70
Canal 3	43.90	43.90	43.80	43.70	43.70	43.70	43.70	43.70	43.60	43.60	43.70	43.70	43.70
Canal 4	38.10	38.10	38.10	38.10	38.10	38.10	38.10	38.10	37.90	37.90	38.10	38.10	38.10
Canal 5	35.30	35.30	35.20	35.20	35.20	35.20	35.20	35.20	35.10	35.10	35.20	35.20	35.20
Canal 6	29.30	29.30	29.20	29.20	29.20	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.10

Volaje													
Amperaje													
Hora													
Canal 1													
Canal 2													
Canal 3													
Canal 4													
Canal 5													
Canal 6													

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Perforato B I  
 FECHA: 29-IV-95  
 Observaciones: Datos del Edo. Estable.  
 PROPORCIÓN: Cem-Perf-Agua (1:0.507:0.600) en peso  
 Longitud Promedio= 14.11 cm  
 VOLUMEN: 0.001063 m<sup>3</sup>  
 Diámetro Promedio= 9.87 cm  
 PESO: 0.891 Kg  
 Volumen Cilindro= 1079.265 cm<sup>3</sup>  
 DENSIDAD: 838.000 Kg/m<sup>3</sup>  
 Volumen Caridades= 16.670 cm<sup>3</sup>  
 DISTRIBUIDOR: "AGREGADOS ULTRALICEROS S.A.deC.V. Suarosal Hilo."

Volaje	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Hora	9.750	9.833	10.000	10.167	10.333	10.500	10.667	10.833	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333
Canal 1	29.90	38.00	48.00	51.50	53.60	54.30	56.50	56.90	56.90	56.90	59.00	60.50	60.70	59.50	60.00	60.30	60.30
Canal 2	29.90	30.60	35.50	38.00	39.80	40.70	42.60	43.00	43.00	43.50	44.40	44.80	46.10	46.20	46.20	46.10	46.10
Canal 3	29.80	29.80	32.00	34.40	35.70	36.40	38.00	38.40	38.40	39.00	40.10	41.30	41.30	41.50	41.50	41.40	41.40
Canal 4	29.50	29.70	29.60	30.80	32.00	32.60	34.10	34.40	34.40	34.90	35.40	36.80	36.80	37.00	37.00	36.90	36.90
Canal 5	28.70	28.60	28.50	29.50	30.10	30.60	31.60	32.00	32.00	32.50	33.30	34.30	34.40	34.60	34.60	34.60	34.60
Canal 6	28.10	28.30	28.40	28.50	28.50	28.60	28.50	28.60	28.60	28.70	28.90	29.00	29.60	29.70	29.70	29.70	29.70

Volaje	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Hora	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000	15.167	15.333	15.500	15.667	15.833	15.917	16.000	16.083	16.167
Canal 1	61.00	61.20	61.50	61.70	62.10	62.10	62.10	62.10	62.10	62.10	62.10	62.10	62.10	62.30	62.30	62.30	62.20
Canal 2	46.20	46.30	46.60	46.70	46.90	46.90	46.90	46.90	46.90	46.90	46.90	46.90	46.90	46.90	46.90	46.90	47.00
Canal 3	41.50	41.60	41.70	41.80	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.10
Canal 4	37.00	37.10	37.10	37.30	37.30	37.30	37.30	37.30	37.30	37.30	37.30	37.30	37.30	37.30	37.50	37.50	37.50
Canal 5	34.60	34.70	34.70	34.70	34.90	34.90	34.80	34.80	34.80	34.80	34.80	34.80	34.80	35.00	35.10	35.10	35.10
Canal 6	29.70	29.80	29.70	29.70	29.50	29.50	29.50	29.50	29.50	29.60	29.60	29.60	29.70	29.70	29.70	29.70	29.80

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.



MAESTRA DE:		Pericorte B		FECHA: 29-11-95		Observaciones: Datos del Edo. Estable.	
PROPORCION:	Cem-Per-Agua (1:0.507:0.600) en peso	Longitud Promedio=	14.11 cm	14.70	14.70	14.70	14.70
VOLUMEN:	0.0011063 m <sup>3</sup>	Dímetro Promedio=	9.87 cm	0.28	0.28	0.28	0.28
PESO:	0.891 Kg	Volumen Cilindro=	1079.265 cm <sup>3</sup>	16.250	16.333	16.417	16.500
DENSIDAD:	838.000 Kg/m <sup>3</sup>	Volumen Cavidades=	15.570 cm <sup>3</sup>	62.20	62.20	62.20	62.20
DISTRIBUIDOR: "AGREGADOS ULTRALEGROS S.A.de C.V. Suursal Ho."							
Voltaje	14.70	14.70	14.70	14.70	14.70	14.70	14.70
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Hora	16.250	16.333	16.417	16.500	16.583	16.667	16.750
Canal 1	62.20	62.30	62.20	62.20	62.10	62.10	62.20
Canal 2	47.00	47.10	47.00	47.00	47.00	46.90	46.90
Canal 3	42.00	42.00	42.10	42.10	42.00	42.10	42.00
Canal 4	37.50	37.50	37.50	37.50	37.50	37.40	37.50
Canal 5	35.10	35.10	35.10	35.10	35.00	35.10	35.10
Canal 6	29.80	29.90	29.70	29.70	29.70	29.70	29.70
Voltaje	14.70	14.70	14.70	14.70	14.70	14.70	14.70
Amperaje	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Hora	17.583	17.667	17.750	17.833	17.917	18.000	18.083
Canal 1	62.30	62.30	62.30	62.40	62.20	62.20	62.30
Canal 2	46.90	46.90	46.90	47.00	47.00	47.00	46.90
Canal 3	42.00	42.00	42.00	42.00	42.00	42.00	42.00
Canal 4	37.50	37.50	37.50	37.50	37.60	37.50	37.50
Canal 5	35.10	35.00	34.80	34.90	35.10	35.10	35.00
Canal 6	29.50	29.50	29.40	29.60	29.60	29.70	29.60

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Ladrillo A I

FECHA: 2-ago-95  
Datos del Edo. Estable.

Observaciones:

VOLUMEN: 0.000962 m<sup>3</sup> Longitud Promedio= 13.58 cm  
 Diámetro Promedio= 9.58 cm  
 PESO: 1.711 Kg Volumen Cilindro= 978.860 cm<sup>3</sup>  
 DENSIDAD: 1778.000 Kg/m<sup>3</sup> Volumen Cavidades= 16.670 cm<sup>3</sup>

PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Hilo, Nte.

Voltaje	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
hora	10.000	10.417	10.583	10.750	10.917	11.083	11.250	11.417	11.583	11.750	11.917	12.083	12.250	12.417	12.583	12.750	12.917	13.083	13.250	13.417
Canal 1	28.00	51.50	53.20	54.50	54.90	55.30	55.70	56.00	56.10	56.60	56.90	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00
Canal 2	28.20	31.60	32.70	33.70	33.80	34.20	34.50	34.80	34.90	35.20	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50	35.50
Canal 3	28.20	30.50	31.60	32.60	32.80	33.20	33.50	33.60	33.80	34.20	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.40
Canal 4	28.20	29.70	30.60	31.30	31.50	31.80	32.10	32.20	32.40	32.70	32.90	32.90	32.80	32.80	32.80	32.80	32.80	32.80	32.80	32.80
Canal 5	28.10	28.80	29.60	30.10	30.30	30.60	31.00	31.10	31.20	31.50	31.70	31.70	31.60	31.60	31.60	31.60	31.60	31.60	31.60	31.60
Canal 6	27.20	27.40	27.60	27.40	27.40	27.70	27.90	28.00	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.20

Voltaje	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
hora	13.500	13.583	13.667	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583	14.667	14.750	14.833	14.917	15.000
Canal 1	57.00	57.00	57.00	57.00	57.00	57.00	57.10	57.00	57.00	57.00	57.00	57.00	57.00	57.10	57.10	57.10	57.10	57.10	57.10
Canal 2	35.50	35.60	35.60	35.60	35.60	35.60	35.60	35.60	35.70	35.60	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.70	35.70
Canal 3	34.40	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50	34.50
Canal 4	32.80	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90
Canal 5	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70	31.70
Canal 6	28.20	28.30	28.20	28.20	28.20	28.20	28.20	28.20	28.30	28.20	28.30	28.20	28.30	28.20	28.30	28.20	28.30	28.20	28.50

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Ladrillo A I		FECHA: 2-ago-95		Observaciones: Datos del Edo. Estable.	
VOLUMEN: 0.000962 m <sup>3</sup>	Longitud Promedio= 13.58 cm				
PESO: 1.711 Kg	Dímetro Promedio= 9.58 cm				
DENSIDAD: 1778.000 Kg/m <sup>3</sup>	Volumen Cilindro= 978.860 cm <sup>3</sup>				
PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Hilo, Nte.	Volumen Caridades= 16.670 cm <sup>3</sup>				
Voltaje	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22
Hora	14.833	14.917	15.000	15.083	15.167
Canal 1	57.10	57.20	57.10	57.10	57.20
Canal 2	35.80	35.80	35.80	35.80	36.00
Canal 3	34.60	34.60	34.70	34.70	34.80
Canal 4	33.10	33.10	33.20	33.20	33.30
Canal 5	32.00	32.00	32.10	32.10	32.20
Canal 6	28.50	28.60	28.60	28.70	28.80
Voltaje	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22
Hora	15.333	15.417	15.500	15.583	15.667
Canal 1	57.10	57.20	57.20	56.90	56.80
Canal 2	36.10	36.10	36.20	36.20	36.10
Canal 3	34.90	35.00	35.10	35.10	35.00
Canal 4	33.40	33.50	33.50	33.50	33.20
Canal 5	32.30	32.20	32.30	32.20	32.20
Canal 6	29.00	29.00	29.10	29.00	29.10
Voltaje					
Amperaje					
Hora					
Canal 1					
Canal 2					
Canal 3					
Canal 4					
Canal 5					
Canal 6					

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Ladrillo A I

FECHA: 3-ago-95

Observaciones: Datos del Edo. Inestable y Edo. Estable.

VOLUMEN: 0.000962 m<sup>3</sup> Longitud Promedio= 13.58 cm

PESO: 1.711 Kg Diámetro Promedio= 9.58 cm

DENSIDAD: 1778.000 Kg/m<sup>3</sup> Volumen Cilindro= 978.860 cm<sup>3</sup>

PROCEDECIA: Ladrillera Sr. José Quiroz Quiñana, Hlb. Nte. Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO INESTABLE

Voltaje	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	11.833	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667
Canal 1	29.40	41.70	51.10	53.30	54.70	55.20	56.10	56.20	56.30	56.40	56.70	56.80	56.90	57.00	57.10	57.10	57.10	57.10
Canal 2	29.40	30.10	32.40	33.50	34.30	34.80	35.20	35.40	35.50	35.70	35.80	35.80	35.90	36.10	36.20	36.20	36.20	36.20
Canal 3	29.40	29.80	31.30	32.40	33.10	33.60	34.20	34.30	34.40	34.50	34.60	34.70	34.80	35.00	35.10	35.10	35.10	35.10
Canal 4	29.40	29.60	30.50	31.40	32.00	32.30	32.70	32.80	33.00	33.00	33.10	33.20	33.30	33.50	33.70	33.70	33.70	33.70
Canal 5	29.40	29.50	29.90	30.50	31.00	31.30	31.60	31.70	31.80	32.00	32.00	32.10	32.10	32.40	32.60	32.60	32.60	32.60
Canal 6	28.90	29.00	28.80	29.00	29.00	28.80	28.80	28.70	28.70	29.00	29.00	29.20	29.20	29.20	29.40	29.40	29.40	29.40

Voltaje	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	14.500	14.667	14.833	15.000	15.167	15.333	15.500	15.667	15.833	16.000	16.167	16.333	16.500	16.667	16.833	17.000	17.167	17.333
Canal 1	57.10	57.30	57.30	57.30	57.30	57.50	57.50	57.50	57.50	57.50	57.60	57.60	57.60	57.60	57.60	57.60	57.60	57.70
Canal 2	36.40	36.50	36.50	36.50	36.60	36.70	36.70	36.70	36.70	36.90	36.90	36.90	36.90	36.90	36.90	36.90	36.90	36.90
Canal 3	35.20	35.50	35.50	35.50	35.40	35.60	35.60	35.60	35.60	35.70	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.70
Canal 4	33.70	33.90	33.90	33.90	34.00	34.10	34.10	34.10	34.10	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.30
Canal 5	32.70	32.70	32.70	32.70	32.90	33.00	33.00	33.00	33.00	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10
Canal 6	29.80	29.60	29.70	29.80	29.80	29.70	29.70	29.70	29.90	29.90	29.90	29.90	29.90	29.90	29.80	29.80	29.80	29.70

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Ladrillo A I		FECHA: 3-ago-95		Observaciones: Datos del Edo. Inestable y Edo. Estable.	
VOLUMEN:	0.000962 m <sup>3</sup>	Longitud Promedio=	13.58 cm				
PESO:	1.711 Kg	Díámetro Promedio=	9.58 cm				
DENSIDAD:	1778.000 Kg/m <sup>3</sup>	Volumen Cilindro=	978.860 cm <sup>3</sup>				
PROCEDENCIA:	Ladrillera Sr. José Quiroz Quintana, Hilo. Nte.	Volumen Cavidades=	16.670 cm <sup>3</sup>				
Volaje	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	16.083	16.167	16.250	16.333	16.417	16.500	16.583
Canal 1	57.70	57.70	57.70	57.70	57.70	57.70	57.70
Canal 2	36.90	37.00	37.00	36.90	36.90	36.90	37.10
Canal 3	35.70	35.70	35.70	35.70	35.80	35.90	35.90
Canal 4	34.30	34.30	34.30	34.30	34.30	34.40	34.40
Canal 5	33.10	33.10	33.10	33.10	33.20	33.20	33.20
Canal 6	29.80	29.90	29.90	29.90	29.90	29.90	30.00
Volaje	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	17.417	17.500	17.583	17.667	17.750	17.833	17.917
Canal 1	57.20	57.20	57.20	57.30	57.40	57.50	57.30
Canal 2	36.80	36.80	36.70	36.70	36.80	36.80	36.70
Canal 3	35.60	35.60	35.50	35.50	35.60	35.50	35.50
Canal 4	34.00	34.00	34.00	34.00	34.00	34.00	33.80
Canal 5	33.10	33.10	33.10	33.10	33.10	33.10	33.10
Canal 6	30.10	30.10	30.10	30.00	30.00	30.00	30.00

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Ladrillo B FECHA: 4-ago-95

VOLUMEN: 0.000880 m<sup>3</sup> Longitud Promedio= 13.32 cm Observaciones: Datos del Edo. Estable.

PESO: 1.753 Kg Diámetro Promedio= 9.26 cm El Canal 5 tiene grieta hasta

DENSIDAD: 1968.000 Kg/m<sup>3</sup> Volumen Cilindro= 897.049 cm<sup>3</sup> la resistencia y el Canal 5

PROCEDECENCIA: Ladrillera Sr. José Quiroz Quintana, Hilo, Nte. Volumen Cavidades= 16.670 cm<sup>3</sup> está en contacto con el

Ambiente.

Volaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	10.667	10.833	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500
Canal 1	29.90	42.80	46.50	47.20	48.10	48.50	48.80	48.90	49.00	49.20	49.30	49.30	49.50	49.50	49.50	49.50	49.60	49.60
Canal 2	29.80	30.90	32.30	33.00	33.60	33.80	34.20	34.40	34.50	34.60	34.70	34.80	34.80	34.80	35.00	35.00	35.00	35.00
Canal 3	29.80	30.80	32.30	32.80	33.50	33.70	34.10	34.10	34.30	34.50	34.50	34.50	34.50	34.50	34.70	34.70	34.70	34.70
Canal 4	29.80	30.20	31.50	32.10	32.70	33.00	33.10	33.20	33.40	33.50	33.50	33.60	33.60	33.70	33.80	33.80	33.80	33.80
Canal 5	29.80	29.70	30.30	30.90	31.40	31.60	31.80	31.90	32.00	32.00	32.00	32.10	32.20	32.20	32.40	32.40	32.40	32.40
Canal 6	28.80	28.90	29.20	29.10	29.30	29.30	29.30	29.40	29.50	29.30	29.30	29.30	29.40	29.50	29.70	29.70	29.70	29.70

Volaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583	14.667	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333
Canal 1	49.60	49.60	49.70	49.70	49.70	49.70	49.70	49.70	49.70	49.70	49.70	49.70	49.70	49.80	49.80	49.80	49.80	49.80
Canal 2	35.00	35.00	35.00	35.10	35.10	35.00	35.10	35.10	35.10	35.10	35.10	35.10	35.20	35.20	35.20	35.20	35.20	35.20
Canal 3	34.60	34.60	34.80	34.90	34.90	34.90	34.90	34.80	34.80	34.80	34.80	34.90	34.90	34.90	35.00	35.00	35.00	35.10
Canal 4	33.80	33.80	33.80	34.00	34.00	33.80	33.80	34.00	34.00	34.00	34.00	34.00	34.00	34.10	34.10	34.10	34.10	34.10
Canal 5	32.30	32.30	32.40	32.50	32.50	32.50	32.50	32.40	32.50	32.50	32.50	32.50	32.60	32.60	32.60	32.60	32.60	32.70
Canal 6	29.70	29.70	29.80	29.80	29.80	29.90	29.90	30.00	30.00	30.00	30.10	30.10	30.20	30.20	30.20	30.20	30.20	30.30

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MAESTRA DE:		Ladrillo B		FECHA: 4-ago-95		Observaciones:		Datos del Edo. Estable.						
VOLUMEN:	0.000880 m <sup>3</sup>	Longitud	Promedio=	13.32	cm	<input type="checkbox"/> Canal 3 tiene grieta hasta la resistencia y el Canal 5 está en contacto con el Ambiente.								
PESO:	1.733 Kg	Dímetro	Promedio=	9.26	cm									
DENSIDAD:	1968.000 Kg/m <sup>3</sup>	Volumen	Cilindro=	897.049	cm <sup>3</sup>									
PROCEDENCIA:	Ladrillera Sr. José Quiroz Quintana, Hilo, Nra.	Volumen	Cavidades=	16.670	cm <sup>3</sup>									
Volts	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	15.250	15.333	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333
Canal 1	49.90	49.90	49.90	50.00	50.00	50.00	50.00	50.00	50.10	50.10	50.10	50.00	50.00	50.00
Canal 2	35.20	35.30	35.30	35.30	35.30	35.30	35.30	35.40	35.30	35.30	35.50	35.50	35.50	35.50
Canal 3	35.10	35.20	35.20	35.20	35.20	35.20	35.20	35.30	35.30	35.30	35.30	35.30	35.30	35.30
Canal 4	34.10	34.20	34.20	34.20	34.20	34.30	34.30	34.20	34.30	34.30	34.30	34.30	34.30	34.30
Canal 5	32.70	32.70	32.70	32.70	32.70	32.80	32.80	32.80	32.80	32.80	32.80	32.80	32.80	32.80
Canal 6	30.30	30.30	30.20	30.20	30.20	30.30	30.30	30.50	30.30	30.30	30.50	30.50	30.50	30.50
Volts														
Amperaje														
Hora														
Canal 1														
Canal 2														
Canal 3														
Canal 4														
Canal 5														
Canal 6														

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MUESTRA DE:** Tierra Lama 80% comp. [A] I FECHA: 30-JUL-95  
**CLASIFICACION:** Cl Observaciones: Datos del Edo. Estable.  
**VOLUMEN:** 0.001046 m<sup>3</sup> Promedio= 14.06 cm  
**PESO:** 1.607 Kg Promedio= 9.81 cm  
**DENSIDAD:** 1536.000 Kg/m<sup>3</sup> Volumen Cilindro= 1062.700 cm<sup>3</sup>  
**PROCEDENCIA:** Craveras del Vado del Rfo, Periférico Pte., Hto. Volumen Cavidades= 16.670 cm<sup>3</sup>

Volaje	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Amperaje	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Hora	10.917	11.250	11.333	11.500	11.667	11.833	12.000	12.167	13.500	13.750	14.333	15.000	15.750	15.833	15.917		
Canal 1	29.10	42.70	44.10	46.20	46.60	47.60	47.90	48.70	49.50	49.70	49.90	50.20	50.50	50.70	50.80		
Canal 2	29.20	31.80	32.60	34.20	34.30	35.20	35.40	36.10	36.60	36.80	37.00	37.10	37.40	37.50	37.50		
Canal 3	29.40	30.30	30.70	32.10	32.40	32.90	33.20	33.80	34.30	34.50	34.60	34.70	34.90	35.00	35.00		
Canal 4	29.30	29.70	30.10	31.30	31.70	32.10	32.40	33.00	33.20	33.50	33.60	33.70	34.00	34.10	34.10		
Canal 5	28.80	29.10	29.30	30.20	30.50	30.90	31.10	31.70	32.10	32.30	32.40	32.50	32.70	32.90	32.80		
Canal 6	28.60	28.80	28.70	29.00	29.00	29.00	29.00	29.30	29.40	29.60	29.60	29.70	29.90	29.80	29.80		
Volaje	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20		
Amperaje	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23		
Hora	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000	17.083	17.167		
Canal 1	50.80	50.70	50.70	50.80	50.90	51.10	51.10	51.00	51.00	51.10	51.00	51.10	51.10	51.10	51.10		
Canal 2	37.50	37.50	37.50	37.60	37.60	37.70	37.70	37.80	37.80	37.80	37.80	37.80	37.80	37.80	37.80		
Canal 3	35.00	35.00	35.00	35.10	35.10	35.20	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30	35.30		
Canal 4	34.10	34.10	34.10	34.20	34.20	34.30	34.30	34.30	34.40	34.40	34.30	34.30	34.30	34.30	34.20		
Canal 5	32.80	32.90	32.90	32.90	33.10	33.10	33.10	33.10	33.10	33.00	33.00	33.00	33.00	33.00	33.00		
Canal 6	29.90	30.10	30.10	30.10	30.20	30.20	30.10	30.10	30.00	30.00	30.00	30.00	29.90	29.80	29.80		

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en Volts y Amperaje en amperes.



MUESTRA DE: Tierra Lama 80% comp. [A] | FECHA: 30-JU-95  
 CLASIFICACION: CL Observaciones: Datos del Edo. Estable.  
 VOLUMEN: 0.001046 m<sup>3</sup> Promedio= 14.06 cm  
 PESO: 1.607 Kg Promedio= 9.81 cm  
 DENSIDAD: 1536.000 Kg/m<sup>3</sup> Cilindro= 1062.700 cm<sup>3</sup>  
 Cavitadas= 16.670 cm<sup>3</sup>  
 PROCEDENCIA: Graveras del Vado del Rio, Paritricico Pta., Hilo.

	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Voltaje	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Amperaje	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Hora	17.333	17.417	17.500	17.583	17.400	17.750	17.833	17.917	18.000	18.083	18.167	18.250	18.333				
Canal 1	51	51.00	51.00	50.90	50.80	50.80	50.70	50.70	50.70	50.60	50.60	50.50	50.50				
Canal 2	37.7	37.70	37.60	37.60	37.50	37.50	37.50	37.30	37.20	37.20	37.20	37.20	37.10				
Canal 3	35.3	35.30	35.20	35.10	35.00	35.00	34.80	34.70	34.70	34.70	34.70	34.60	34.60				
Canal 4	34.2	34.10	34.00	33.90	33.80	33.70	33.60	33.60	33.60	33.50	33.50	33.60	33.60				
Canal 5	32.8	32.80	32.70	32.60	32.50	32.40	32.40	32.30	32.30	32.30	32.30	32.30	32.30				
Canal 6	29.6	29.60	29.50	29.50	29.30	29.30	29.30	29.20	29.20	29.50	29.40	29.10	29.10				

	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Voltaje																	
Amperaje																	
Hora																	
Canal 1																	
Canal 2																	
Canal 3																	
Canal 4																	
Canal 5																	
Canal 6																	

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en Volts y Amperaje en amperes.

**MUESTRA DE:** Tierra Lama 80% de Compactación A I  
**FECHA:** 31-10-95  
**CLASIFICACION:** CL  
**Observaciones:** Datos del Edo. Estable e Inestable.  
**VOLUMEN:** 0.001046 m<sup>3</sup>  
**PESO:** 1.607 Kg  
**DENSIDAD:** 1536.000 Kg/m<sup>3</sup>  
**PROCEDENCIA:** Graveras del Vado del Rfo. Periférico Pta., Hilo.

**ESTADO INESTABLE**

	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
<b>Volaje</b>																	
<b>Amperaje</b>																	
<b>Hora</b>	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	
<b>Canal 1</b>	27.80	41.60	43.80	45.70	46.70	46.70	47.60	48.00	48.20	48.70	49.00	49.10	49.10	49.20	49.20	49.40	
<b>Canal 2</b>	27.80	30.60	31.50	33.00	33.80	34.00	34.60	34.80	35.10	35.30	35.40	35.50	35.50	35.60	35.70	35.70	
<b>Canal 3</b>	27.90	29.00	29.60	30.70	31.50	31.90	32.10	32.40	32.60	32.80	32.80	32.90	33.00	33.00	33.10	33.10	
<b>Canal 4</b>	27.80	28.40	28.90	29.90	30.50	31.00	31.20	31.50	31.60	31.80	31.80	31.80	31.90	32.00	32.10	32.10	
<b>Canal 5</b>	27.80	28.00	28.30	29.00	29.50	29.90	30.00	30.20	30.40	30.50	30.50	30.60	30.70	30.80	30.80	30.80	
<b>Canal 6</b>	27.30	27.20	27.30	27.30	27.40	27.40	27.50	27.50	27.50	27.50	27.50	27.50	27.60	27.70	27.60	27.60	

**ESTADO ESTABLE**

	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
<b>Volaje</b>																	
<b>Amperaje</b>																	
<b>Hora</b>	13.667	13.833	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.667	14.833	14.917	15.000	15.083	15.167	15.250	
<b>Canal 1</b>	49.40	49.30	49.40	49.40	49.50	49.50	49.60	49.60	49.60	49.80	49.60	49.70	49.80	49.80	49.80	49.70	
<b>Canal 2</b>	35.70	35.70	35.80	35.80	35.80	35.80	35.80	35.90	36.00	36.10	36.10	36.10	36.10	36.10	36.10	36.10	
<b>Canal 3</b>	33.10	33.10	33.10	33.10	33.20	33.20	33.20	33.20	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	
<b>Canal 4</b>	32.10	32.10	32.10	32.10	32.20	32.20	32.20	32.20	32.20	32.20	32.30	32.30	32.20	32.20	32.20	32.20	
<b>Canal 5</b>	30.80	30.90	31.00	31.00	31.10	31.10	31.10	31.10	31.10	31.00	31.00	31.10	31.10	31.10	31.00	31.00	
<b>Canal 6</b>	27.60	27.60	27.80	27.90	28.00	28.00	28.00	28.00	28.00	28.00	27.80	27.90	27.90	27.90	27.80	27.80	

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.

MUESTRA DE:														
Tierra Lama 80% de Compactación   A   I														
FECHA: 31-11-95														
Observaciones:										Datos del Edo. Estable				
e Inestable.														
CLASIFICACION: Cl					Longitud Promedio=					14.06 cm				
VOLUMEN: 0.001046 m3					Diámetro Promedio=					9.81 cm				
PESO: 1.607 Kg					Volumen Cilindro=					1062.700 cm3				
DENSIDAD: 1536.000 Kg/m3					Volumen Cavidades=					16.670 cm3				
PROCEDENCIA: Graveras del Vado del Río, Periférico Pre., Hilo.														

Voltaje	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
Amperaje	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Hora	15.333	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	
Canal 1	49.80	49.80	49.80	49.80	49.70	49.70	49.70	49.70	49.70	49.80	49.80	49.70	49.70	49.80	49.80	49.80	
Canal 2	36.10	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.10	36.10	36.10	36.10	36.10	36.10	36.10	36.10	
Canal 3	33.40	33.40	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.40	
Canal 4	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.30	
Canal 5	31.00	31.00	30.90	30.90	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.10	
Canal 6	27.70	27.70	27.80	27.80	27.80	27.80	27.80	27.80	27.80	27.80	27.70	27.70	28.00	28.00	28.00	28.00	

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra Loma, 80% de Compactación. B

FECHA: 1-ago-95

Observaciones: Cavidad central muy dañada. Datos del Edo. Estable.

CLASIFICACION: CL

Longitud Promedio= 13.82 cm

VOLUMEN: 0.001022 m<sup>3</sup>

Diámetro Promedio= 9.78 cm

PESO: 1.588 Kg

Volumen Cilindro= 1038.187 cm<sup>3</sup>

DENSIDAD: 1555.000 Kg/m<sup>3</sup>

Volumen Cavidades= 16.670 cm<sup>3</sup>

PROCEDECENCIA: Graveras del Vado del Río, Periférico Pte., Hilo.

Volaje	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	12.250	12.666	12.833	13.000	13.167	13.333	13.500	13.666	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000
Canal 1	30.80	42.80	54.70	55.30	56.70	57.50	57.90	58.10	58.50	58.80	59.40	59.30	59.30	59.30	59.30	59.20
Canal 2	31.10	32.20	36.20	36.60	37.40	37.90	38.40	38.60	38.80	39.00	39.10	39.70	39.60	39.60	39.60	39.60
Canal 3	30.80	31.30	34.10	34.50	35.00	35.50	35.60	35.80	35.90	36.10	36.20	36.70	36.70	36.70	36.60	36.50
Canal 4	30.80	30.90	32.10	32.50	32.80	33.10	33.10	33.50	33.40	33.70	33.80	34.20	34.10	34.10	34.10	34.00
Canal 5	31.20	31.10	31.90	32.00	32.40	32.60	32.80	33.10	33.10	33.30	33.70	33.70	33.50	33.40	33.50	33.50
Canal 6	28.80	29.00	28.90	28.90	28.60	28.60	28.50	28.50	28.50	28.80	29.10	29.30	29.10	29.20	29.20	29.20

Volaje	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000
Canal 1	59.20	59.20	59.20	59.20	59.20	59.30	59.20	59.10	59.20	59.30	59.40	59.40	59.40	59.50	59.50	59.50
Canal 2	39.60	39.60	39.50	39.60	39.60	39.50	39.40	39.30	39.30	39.30	39.20	39.20	39.30	39.30	39.30	39.30
Canal 3	36.60	36.60	36.50	36.50	36.50	36.50	36.40	36.30	36.30	36.30	36.50	36.50	36.60	36.60	36.70	36.70
Canal 4	34.10	34.10	34.00	34.00	34.00	33.90	33.90	33.70	33.60	33.60	33.70	33.70	33.80	33.80	33.90	33.90
Canal 5	33.50	33.50	33.50	33.40	33.40	33.20	33.20	33.00	33.00	33.10	33.20	33.30	33.30	33.40	33.50	33.50
Canal 6	29.10	29.00	29.00	29.00	29.10	28.80	28.70	28.60	28.60	28.60	28.80	28.80	28.80	28.80	28.80	28.90

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales. Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra Lama, 80% de Compactación. B

FECHA: 1-ago-95

Observaciones: Cavidad central muy dañada. Datos del Edo. Estable.

CLASIFICACION: CI

Promedio= 13.82 cm

Longitud Promedio= 13.82 cm

VOLUMEN: 0.001022 m<sup>3</sup>

Dímetro Promedio= 9.78 cm

PESO: 1.588 Kg

Volumen Cilindro= 1038.187 cm<sup>3</sup>

DENSIDAD: 1555.000 Kg/m<sup>3</sup>

Volumen Cavidades= 16.670 cm<sup>3</sup>

PROCEDECIA: Graveras del Vado del R/o, Periférico Pte., Hlb.

	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Voltaje	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667	17.750	17.833	17.917	18.000	18.083	18.167	18.250
Canal 1	59.50	59.40	59.40	59.40	59.40	59.30	59.40	59.40	59.40	59.50	59.50	59.50	59.50	59.50	59.50
Canal 2	39.40	39.40	39.40	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50	39.50
Canal 3	36.60	36.60	36.60	36.50	36.50	36.50	36.50	36.40	36.40	36.50	36.50	36.50	36.50	36.50	36.50
Canal 4	34.00	34.00	34.00	34.00	34.10	34.10	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.10
Canal 5	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50	33.50
Canal 6	29.00	29.10	29.00	29.00	28.70	28.70	28.70	28.90	29.00	29.00	29.00	29.00	29.00	29.10	29.10

	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Voltaje															
Amperaje															
Hora															
Canal 1															
Canal 2															
Canal 3															
Canal 4															
Canal 5															
Canal 6															

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra Loma 90% de Compactación [ A ] | FECHA: 5-ago-95  
 CLASIFICACION: CL Observaciones: Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 0.001054 m<sup>3</sup> Promedio= 14.20 cm  
 PESO: 1.761 Kg Promedio= 9.80 cm  
 DENSIDAD: 1670.000 Kg/m<sup>3</sup> Promedio= 1071.100 cm<sup>3</sup>  
 PROCEDENCIA: Gra Graveras del Vado del Rfo, Periférico Pie., Hilo. Promedio= 16.670 cm<sup>3</sup>

ESTADO INESTABLE

Volts	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167	14.333	14.500	14.667	14.833	15.000	15.167	15.333	15.500	15.667	15.833
Canal 1	31.10	44.80	47.90	49.60	50.50	51.10	51.40	51.60	51.90	52.20	52.40	52.20	52.20	52.40	52.40	52.50	52.60	52.60	52.60
Canal 2	31.20	34.10	36.00	36.90	37.90	38.20	38.70	38.80	39.10	39.40	39.40	39.40	39.40	39.60	39.70	39.80	39.80	39.80	39.80
Canal 3	31.20	32.30	33.40	34.10	35.10	35.40	35.70	35.80	36.10	36.30	36.30	36.30	36.30	36.50	36.60	36.70	36.70	36.70	36.70
Canal 4	31.20	31.30	31.70	32.30	32.90	33.00	33.40	33.60	34.00	34.20	34.20	34.20	34.20	34.50	34.50	34.50	34.50	34.50	34.50
Canal 5	31.10	30.70	31.10	31.70	32.30	32.30	32.90	33.00	33.30	33.30	33.50	33.60	33.60	33.80	33.80	33.90	33.90	33.90	33.90
Canal 6	29.60	29.50	29.60	29.60	29.90	29.90	29.90	29.90	30.10	30.10	30.20	30.20	30.30	30.40	30.40	30.40	30.40	30.40	30.40

ESTADO ESTABLE

Volts	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667	16.750	16.833	16.917	17.000
Canal 1	52.70	52.60	52.60	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.70	52.80	52.80	52.80	52.80
Canal 2	39.80	39.90	39.90	39.90	39.90	39.90	40.00	40.00	40.00	40.00	40.00	40.00	40.10	40.10	40.10	40.10	40.10	40.10	40.10
Canal 3	36.70	36.70	36.70	36.70	36.70	36.70	36.80	36.80	36.80	36.70	36.80	36.80	36.80	36.80	36.90	37.00	37.00	37.00	37.00
Canal 4	34.50	34.60	34.70	34.70	34.60	34.60	34.60	34.60	34.60	34.60	34.70	34.70	34.70	34.80	34.80	34.80	34.80	34.80	34.80
Canal 5	34.00	34.00	34.00	34.00	34.00	34.00	34.10	34.10	34.10	34.10	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20	34.20
Canal 6	30.40	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.60	30.70	30.70	30.60	30.60	30.60	30.60	30.60	30.70

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Tierra Lama 90% de Compactación		A		I		FECHA: 5-ago-95		Observaciones:		Datos del Edo. Inestable		y Edo. Estable.	
CLASIFICACION: Cl.		VOLUMEN: 0.001054 m3		PESO: 1.761 Kg		DENSIDAD: 1670.000 Kg/m3		Longitud Promedio=		14.20 cm		9.80 cm			
PROCEDENCIA: Gra Graveras del Vaob del Rio, Periferico Pte., Hto.		Volumen Cilindro=		Volumen Cavidades=		1071.100 cm3		16.670 cm3							
Voltaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	16.833	16.917	17.000	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667	17.750	17.833	17.917	18.000
Canal 1	52.80	52.80	52.80	52.80	52.80	52.70	52.70	52.70	52.60	52.60	52.60	52.60	52.50	52.50	52.50
Canal 2	40.10	40.10	40.10	40.10	40.10	40.10	40.00	40.00	40.00	39.90	39.90	39.90	39.90	39.90	39.90
Canal 3	36.90	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	36.90	36.90	36.90	36.90	36.90	36.80
Canal 4	34.90	34.90	34.90	34.90	34.90	35.00	34.90	34.90	34.90	34.90	34.90	34.90	34.90	34.80	34.80
Canal 5	34.20	34.30	34.30	34.30	34.30	34.20	34.20	34.20	34.20	34.10	34.10	34.10	34.10	34.10	34.10
Canal 6	30.70	30.60	30.60	30.60	30.60	30.60	30.50	30.50	30.50	30.50	30.40	30.40	30.40	30.40	30.50
Voltaje															
Amperaje															
Hora															
Canal 1															
Canal 2															
Canal 3															
Canal 4															
Canal 5															
Canal 6															

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MAESTRA DE:		Tierra Loma 90% de Compacción		A. I.		FECHA: 6-ago-95		Observaciones: Datos del Edb. Estable.								
CLASIFICACION CL		Longitud Promedio=		14.20 cm												
VOLUMEN: 0.001054 m <sup>3</sup>		Diámetro Promedio=		9.80 cm												
PESO: 1.761 Kg		Volumen Cilindro=		1071.100 cm <sup>3</sup>												
DENSIDAD: 1670.000 Kg/m <sup>3</sup>		Volumen Cavidades=		16.670 cm <sup>3</sup>												
PROCEDENCIA: Graveras del Vado del R'fo, Periférico Pie., Hilo.																
Volaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80						
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22						
Hora	10.000	10.167	10.333	10.500	10.667	10.833	11.000	11.167	11.333	11.500	11.667	11.833	11.917	12.000	12.083	12.167
Canal 1	28.60	39.50	46.20	47.30	48.20	49.00	49.30	49.60	49.70	49.80	49.70	49.70	49.70	49.70	49.70	49.70
Canal 2	28.60	30.40	34.10	34.90	35.70	36.00	36.60	37.00	37.10	37.10	37.10	37.20	37.20	37.20	37.20	37.20
Canal 3	28.60	29.20	31.50	32.10	32.80	33.00	33.70	33.90	34.00	34.10	34.10	34.10	34.10	34.10	34.10	34.20
Canal 4	28.50	29.10	29.60	30.20	30.90	31.00	31.70	31.90	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Canal 5	28.50	28.90	29.30	29.90	30.20	30.90	31.10	31.20	31.30	31.30	31.30	31.40	31.40	31.40	31.40	31.50
Canal 6	27.60	27.80	28.00	28.00	28.10	28.00	27.80	27.70	27.60	27.60	27.60	27.70	27.70	27.70	27.70	27.70
Volaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	12.250	12.333	12.417	12.500	12.583	12.667	12.750	12.833	12.917	13.000	13.083	13.167	13.250	13.333	13.417	13.500
Canal 1	49.80	49.80	49.80	49.80	49.90	49.90	50.00	50.00	50.00	50.00	50.00	50.00	50.10	50.10	50.10	50.10
Canal 2	37.20	37.20	37.20	37.20	37.30	37.30	37.40	37.30	37.30	37.30	37.40	37.40	37.50	37.50	37.60	37.60
Canal 3	34.20	34.10	34.10	34.10	34.10	34.20	34.30	34.30	34.40	34.40	34.50	34.50	34.50	34.60	34.60	34.60
Canal 4	32.00	32.00	32.10	32.10	32.10	32.10	32.20	32.20	32.30	32.30	32.40	32.40	32.40	32.50	32.50	32.50
Canal 5	31.50	31.50	31.50	31.50	31.50	31.50	31.60	31.60	31.60	31.60	31.70	31.70	31.70	31.80	31.80	31.80
Canal 6	27.80	28.00	28.00	28.00	28.00	28.00	28.20	28.20	28.40	28.40	28.50	28.50	28.50	28.60	28.60	28.60

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.



**MAESTRA DE:** Tierra Loma 90% de Compactación A I **FECHA:** 6-ago-95  
**CLASIFICACION:** CL Observaciones: Datos del Edb. Estable.  
**VOLUMEN:** 0.001054 m3 Longitud Promedio= 14.20 cm  
**PESO:** 1.761 Kg Diámetro Promedio= 9.80 cm  
**DENSIDAD:** 1670.000 Kg/m3 Volumen Cilindro= 1071.100 cm3  
 Volumen Cavidades= 16.670 cm3  
**PROCEDENCIA:** Graveras del Vado del R/O, Periférico Pta., Hilo.

	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
<b>Voltaje</b>	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
<b>Amperaje</b>	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
<b>hora</b>	13.583	13.567	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333		
<b>Canal 1</b>	50.10	50.10	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20
<b>Canal 2</b>	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70	37.70
<b>Canal 3</b>	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70	34.70
<b>Canal 4</b>	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50	32.50
<b>Canal 5</b>	32.00	31.90	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
<b>Canal 6</b>	28.60	28.60	28.50	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.70

<b>Voltaje</b>												
<b>Amperaje</b>												
<b>hora</b>												
<b>Canal 1</b>												
<b>Canal 2</b>												
<b>Canal 3</b>												
<b>Canal 4</b>												
<b>Canal 5</b>												
<b>Canal 6</b>												

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

**MAESTRA DE:** Tierra Lama 90% de Compactación B  
**FECHA:** 7-ago-95  
**Observaciones:** Datos del Edo, Estable.

**CLASIFICACION:** CL  
**VOLUMEN:** 0.001051 m<sup>3</sup>  
**PESO:** 1.765 Kg  
**DENSIDAD:** 1679.000 Kg/m<sup>3</sup>  
**PROCEDECENCIA:** Graveras, Vado del R<sup>o</sup>, Periférico Pte., Hilo.

**Longitud Promedio=** 14.16 cm  
**Diámetro Promedio=** 9.80 cm  
**Volumen Cilindro=** 1068.080 cm<sup>3</sup>  
**Volumen Cavidades=** 16.670 cm<sup>3</sup>

		ESTADO ESTABLE											
Voltaje	Amperaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
11.500	11.450	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833
30.00	42.60	46.40	48.10	48.80	48.90	49.70	49.50	49.50	49.50	49.60	49.70	49.70	49.70
30.40	33.80	36.10	37.50	38.10	38.20	38.30	38.50	38.50	38.50	38.50	38.60	38.60	38.60
30.40	32.60	34.60	35.70	36.20	36.30	36.50	36.60	36.60	36.70	36.70	36.70	36.70	36.70
31.00	31.60	32.40	33.40	33.70	33.80	33.90	33.80	33.80	33.70	33.90	34.00	34.00	34.00
31.30	31.50	32.00	32.60	32.70	32.80	32.80	32.80	32.80	32.80	32.80	32.80	32.80	32.80
28.10	28.60	28.30	28.40	28.40	28.40	28.50	28.60	28.70	28.80	28.80	28.70	28.80	28.80

		ESTADO ESTABLE											
Voltaje	Amperaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500	14.583	14.667	14.750	14.833
49.70	49.70	49.70	49.70	49.70	49.60	49.60	49.60	49.60	49.60	49.70	49.70	49.70	49.70
38.60	38.70	38.70	38.70	38.70	38.60	38.60	38.60	38.60	38.50	38.50	38.60	38.60	38.60
36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.60	36.70	36.70	36.70	36.70	36.70
34.00	34.00	34.00	33.90	33.80	33.80	33.80	33.70	33.70	33.80	33.80	34.00	33.90	33.90
32.80	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.80	32.70
28.70	28.70	28.70	28.70	28.70	28.80	28.80	28.80	29.00	29.10	29.00	29.00	29.00	29.10

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra Lama 90% de Compactación B  
 FECHA: 7-ago-95  
 Observaciones: Datos del Edo. Estable.  
 CLASIFICACION: CL  
 VOLUMEN: 0.001051 m<sup>3</sup>  
 PESO: 1.765 Kg  
 DENSIDAD: 1679.000 Kg/m<sup>3</sup>  
 Longitud Promedio= 14.16 cm  
 Diámetro Promedio= 9.80 cm  
 Volumen Cilindro= 1068.080 cm<sup>3</sup>  
 Volumen Cavidades= 16.670 cm<sup>3</sup>

PROCEDENCIA: Groveras, Vado del R'co, Periférico Pte., Hilo.

	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Volaje	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
Amperaje	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Hora	15.083	15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000
Canal 1	49.80	49.80	49.80	49.70	49.80	49.80	49.80	49.70	49.70	49.90	49.90	49.90
Canal 2	38.70	38.70	38.70	38.70	38.60	38.60	38.70	38.70	38.70	38.80	38.80	38.80
Canal 3	36.80	36.80	36.80	36.80	36.80	36.80	36.80	36.80	36.80	36.90	36.90	37.00
Canal 4	33.90	34.00	34.00	34.00	34.00	34.00	34.10	34.10	34.10	34.20	34.20	34.10
Canal 5	32.70	32.80	32.80	32.80	32.70	32.70	32.80	32.80	32.80	32.80	32.80	32.90
Canal 6	29.10	29.00	29.10	29.20	29.20	29.20	29.30	29.20	29.20	29.20	29.20	29.20

Volaje												
Amperaje												
Hora												
Canal 1												
Canal 2												
Canal 3												
Canal 4												
Canal 5												
Canal 6												

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE:		Tierra de Ladrillera 80% de Compacticación		A		FECHA: 14-ago-95	
CLASIFICACION: SC		Longitud Promedio=		14.18 cm		Observaciones:	
VOLUMEN: 0.001031 m <sup>3</sup>		Diámetro Promedio=		9.70 cm		Datos del Edo. Inestable y Estable, Termopar Canal 4	
PESO: 1.711 Kg		Volumen Cilindro=		1047.880 cm <sup>3</sup>		ajustado a las 13:30 y a las 13:50 hrs.	
DENSIDAD: 1660.000 Kg/m <sup>3</sup>		Volumen Cavidades=		16.670 cm <sup>3</sup>			
PROCEDENCIA: Ladrillera del Sr. José Quiroz Quintana, nte. Hto.							
ESTADO INESTABLE							
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	12.833	13.000	13.167	13.333	13.500	13.667	13.833
Canal 1	28.10	42.70	43.20	43.80	44.30	43.40	43.60
Canal 2	28.10	30.80	31.40	31.80	32.20	32.00	32.10
Canal 3	28.10	30.20	30.50	31.00	31.10	30.20	30.40
Canal 4	28.10	28.30	28.50	28.60	29.00	29.10	29.10
Canal 5	27.90	28.30	28.50	28.60	28.90	29.10	29.10
Canal 6	27.20	27.10	27.20	27.10	27.10	27.00	27.30
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	15.083	15.167	15.250	15.333	15.417	15.500	15.583
Canal 1	46.10	46.10	46.10	46.10	46.10	46.00	46.00
Canal 2	33.10	33.10	33.10	33.10	33.10	33.10	33.10
Canal 3	31.20	31.20	31.20	31.20	31.20	31.30	31.30
Canal 4	29.70	29.70	29.70	29.70	29.70	29.60	29.60
Canal 5	29.50	29.50	29.50	29.40	29.40	29.50	29.50
Canal 6	26.60	26.60	26.50	26.50	26.50	26.50	26.50
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	16.083	16.167	16.250	16.333	16.417	16.500	16.583
Canal 1	46.10	46.10	46.10	46.10	46.10	46.10	46.10
Canal 2	33.10	33.10	33.10	33.10	33.10	33.10	33.10
Canal 3	31.20	31.20	31.20	31.20	31.20	31.20	31.20
Canal 4	29.70	29.70	29.70	29.70	29.70	29.70	29.70
Canal 5	29.50	29.50	29.50	29.40	29.40	29.50	29.50
Canal 6	26.60	26.60	26.50	26.50	26.50	26.50	26.50

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de Ladrillera 80% de Compactación [ A ] I  
 FECHA: 14-ago-95  
 Observaciones: Datos del Edo. Inestable y Estable, Termopar Canal 4 ajustado a las 13:30 y a las 13:50 hrs.

CLASIFICACION: SC  
 VOLUMEN: 0.001031 m<sup>3</sup>  
 PESO: 1.711 Kg  
 DENSIDAD: 1660.000 Kg/m<sup>3</sup>

PROCEDENCIA: Ladrillera del Sr. José Quiroz Quintana, nte. Hilo.

		Longitud Promedio=		14.18 cm		Observaciones:	
		Diámetro Promedio=		9.70 cm			
		Volumen Cilindro=		1047.880 cm <sup>3</sup>			
		Volumen Caudales=		16.670 cm <sup>3</sup>			
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora	16.417	16.500	16.563	16.667	16.750	16.833	16.917
Canal 1	46.00	46.00	46.00	45.90	45.80	45.80	45.80
Canal 2	33.00	32.90	32.90	32.90	32.80	32.70	32.60
Canal 3	31.10	31.10	31.10	31.10	31.00	30.90	30.80
Canal 4	29.50	29.40	29.40	29.40	29.30	29.30	29.20
Canal 5	29.20	29.20	29.20	29.20	29.10	29.00	29.00
Canal 6	26.10	26.00	26.00	26.00	26.00	25.80	25.80
						17.000	17.333
						17.083	17.250
						17.167	17.333
						45.80	45.80
						32.70	32.70
						30.80	30.80
						29.20	29.20
						29.00	29.00
						25.80	25.80

Voltaje	Amperaje	Hora	Canal 1	Canal 2	Canal 3	Canal 4	Canal 5	Canal 6

NOTA: Temperatura de los Caudales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de Ladrillera 80% de Compacción A I  
 FECHA: 15-ago-95  
 Observaciones: Datos del Edo. Estable.  
 CLASIFICACION: SC  
 Longitud Promedio= 14.18 cm  
 Diámetro Promedio= 9.70 cm  
 VOLUMEN: 0.001031 m<sup>3</sup>  
 PESO: 1.711 Kg  
 Volumen Cilindro= 1047.880 cm<sup>3</sup>  
 DENSIDAD: 1660.000 Kg/m<sup>3</sup>  
 Volumen Cavidades= 16.670 cm<sup>3</sup>  
 PROCEDENCIA: Ladrillera del Sr. José Quiroz Quintana, nra. Hilo.

		10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Volts		10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora		10.333	10.500	10.667	10.833	11.000	11.167	11.333	11.500	12.500	12.833	12.917	13.000	13.083	13.250
Canal 1		26.10	38.70	41.00	41.90	42.60	43.50	43.90	44.30	44.80	44.90	45.00	45.00	45.00	45.00
Canal 2		26.10	27.90	29.10	29.70	30.30	30.90	31.30	31.70	32.10	32.20	32.20	32.20	32.20	32.10
Canal 3		26.10	27.00	28.00	28.20	28.70	29.20	29.60	29.80	30.20	30.40	30.40	30.40	30.40	30.20
Canal 4		26.10	26.60	27.10	27.20	27.70	27.80	28.30	28.40	28.60	28.60	28.60	28.60	28.70	28.70
Canal 5		26.10	26.20	26.80	27.10	27.50	27.80	28.20	28.20	28.50	28.60	28.60	28.50	28.50	28.60
Canal 6		25.90	26.00	26.10	26.10	26.20	26.10	26.20	26.10	26.40	26.40	26.10	26.10	26.10	26.00
Volts		10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora		13.417	13.500	13.583	13.667	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333	14.417	14.500
Canal 1		45.10	45.00	45.00	45.00	45.10	45.10	45.10	45.10	45.10	45.10	45.20	45.20	45.10	45.20
Canal 2		32.20	32.10	32.10	32.10	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20
Canal 3		30.20	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30	30.30
Canal 4		28.70	28.70	28.70	28.70	28.60	28.70	28.70	28.70	28.70	28.70	28.70	28.70	28.70	28.70
Canal 5		28.60	28.60	28.60	28.60	28.60	28.70	28.70	28.70	28.70	28.70	28.70	28.70	28.70	28.70
Canal 6		26.00	26.20	26.20	26.40	26.40	26.20	26.20	26.20	26.20	26.20	26.10	26.10	26.20	26.30

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de Ladrillera 80% de Compensación A I FECHA: 15-ago-95 Observaciones: Datos del Edo. Estable.	
CLASIFICACION: SC VOLUMEN: 0.001031 m3 PESO: 1.711 Kg DENSIDAD: 1660.000 Kg/m3 PROCEDENCIA: Ladrillera del Sr. José Quiroz Quintana, nte. Hilo.	Longitud Promedio= 14.18 cm Diámetro Promedio= 9.70 cm Volumen Cilindro= 1047.880 cm3 Volumen Cavidades= 16.670 cm3
Voltaje Amperaje Hora Canal 1 Canal 2 Canal 3 Canal 4 Canal 5 Canal 6	10.90 10.90 10.90 10.90 10.90 10.90 0.20 0.20 0.20 0.20 0.20 0.20 14.750 14.833 14.917 15.000 15.083 15.167 45.20 45.20 45.20 45.20 45.20 45.30 32.20 32.30 32.30 32.30 32.30 32.40 30.20 30.30 30.30 30.30 30.40 30.50 28.00 28.00 28.90 28.90 28.90 29.00 28.70 28.70 28.80 28.80 28.70 28.80 26.40 26.40 26.40 26.40 26.30 26.40
Voltaje Amperaje Hora Canal 1 Canal 2 Canal 3 Canal 4 Canal 5 Canal 6	10.90 10.90 10.90 10.90 10.90 10.90 0.20 0.20 0.20 0.20 0.20 0.20 15.333 15.417 15.500 45.30 45.30 45.30 45.30 45.30 45.30 32.30 32.30 32.30 32.30 32.30 32.40 30.50 30.50 30.50 30.50 30.50 30.50 29.00 29.00 29.00 29.00 29.00 29.00 28.80 28.80 28.80 28.80 28.80 28.80 26.30 26.30 26.30 26.30 26.30 26.40

NOTA: Temperatura de los Canales en grados Centígrados. Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrilla, 80% de compactación B FECHA: 17-ago-95  
 CLASIFICACION: SC Observaciones: Datos del Edo. Estable.  
 VOLUMEN: 0.001027 m<sup>3</sup> Longitud Promedio= 14.06 cm  
 PESO: 1.735 Kg Diámetro Promedio= 9.72 cm  
 DENSIDAD: 1690.000 Kg/m<sup>3</sup> Volumen Cilindro= 10.43.300 cm<sup>3</sup>  
 PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nte. de Hilo. Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO ESTABLE												
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	13.500	14.000	15.000	15.167
Canal 1	27.20	34.80	40.50	41.80	42.50	42.90	43.10	43.70	44.70	45.00	45.40	45.70
Canal 2												
Canal 3	27.20	27.40	29.20	30.00	30.50	30.90	31.00	31.30	32.10	32.40	32.70	32.90
Canal 4	27.20	27.30	28.20	28.70	29.30	29.40	29.60	30.00	30.70	30.90	31.20	31.50
Canal 5	27.20	27.30	28.10	28.60	29.20	29.50	29.90	30.00	30.70	31.80	31.20	31.30
Canal 6	27.20	27.40	27.50	27.30	27.30	27.30	27.30	27.30	27.80	28.00	28.00	28.30

Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
hora	15.417	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.417
Canal 1	45.80	45.70	45.70	45.70	45.70	45.70	45.70	45.70	45.70	45.70	45.70	45.50
Canal 2												
Canal 3	33.00	33.00	33.00	33.00	32.90	32.90	32.90	32.80	32.80	32.80	32.80	32.70
Canal 4	31.60	31.50	31.50	31.50	31.50	31.50	31.50	31.40	31.40	31.40	31.40	31.20
Canal 5	31.40	31.30	31.30	31.30	31.30	31.30	31.30	31.40	31.40	31.40	31.40	31.10
Canal 6	28.10	27.90	27.90	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	27.80

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en Volts y Amperaje en amperes.



MUESTRA DE: Tierra de ladrillera, 90% de compactación A | FECHA: 18-ago-95  
 CLASIFICACION: SC | Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 1031.080 cm3 | Longitud Promedio= 14.12 cm | Observaciones: No existe termopapar en el Canal # 2.  
 PESO: 1913.500 gr | Diámetro Promedio= 9.72 cm  
 DENSIDAD: 1.856 gr/cm3 | Volumen Cilindro= 1047.750 cm3  
 PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nte de Hilo. | Volumen Caudales= 16.670 cm3

	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Voltaje	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Amperaje	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Hora	16.750	16.833	16.917	17.000	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667
Canal 1	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50	45.50
Canal 2												
Canal 3	32.70	32.70	32.70	32.60	32.60	32.70	32.70	32.70	32.70	32.80	32.80	32.90
Canal 4	31.30	31.30	31.30	31.20	31.20	31.20	31.20	31.20	31.20	31.30	31.40	31.40
Canal 5	31.00	31.00	31.00	31.00	31.00	31.10	31.10	31.10	31.10	31.10	31.20	31.20
Canal 6	27.80	27.80	27.80	27.90	27.90	27.90	27.90	27.90	28.00	28.10	28.20	28.20

	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
Voltaje												
Amperaje												
Hora												
Canal 1												
Canal 2												
Canal 3												
Canal 4												
Canal 5												
Canal 6												

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en Volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrillera, 90% de Compactación A | FECHA: 18-ago-95

CLASIFICACION: SC Observaciones: Datos de Edo. Inestable y Edo. Estable.

VOLUMEN: 0.001031 m<sup>3</sup> Promedio= 14.12 cm

PESO: 1.914 Kg Diámetro Promedio= 9.72 cm

DENSIDAD: 1856.000 Kg/m<sup>3</sup> Volumen Cilindro= 1047.750 cm<sup>3</sup>

PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nta de Hilo. Volumen Cavidades= 16.670 cm<sup>3</sup>

No existe termopar en el Canal # 2.

ESTADO INESTABLE

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	
Voltaje																				
Amperaje																				
Hora	11.000	11.167	11.333	11.500	11.667	11.833	12.000	12.167	12.333	12.500	12.667	12.833	13.000	13.167	13.333	13.500	13.667	13.833	14.000	14.167
Canal 1	29.20	29.70	38.80	39.20	39.70	40.30	40.70	40.90	41.00	41.10	41.10	41.30	41.30	41.30	41.40	41.50	41.50	41.50	41.50	41.50
Canal 2																				
Canal 3	28.60	28.90	30.10	30.50	30.80	31.10	31.50	31.50	31.70	31.70	31.80	32.00	32.00	32.00	32.10	32.10	32.10	32.10	32.10	32.10
Canal 4	28.60	29.00	29.50	29.90	30.30	30.60	31.00	31.10	31.20	31.30	31.30	31.40	31.50	31.50	31.50	31.60	31.60	31.60	31.60	31.60
Canal 5	28.70	28.70	28.80	29.00	29.50	29.70	30.00	30.10	30.10	30.20	30.30	30.30	30.50	30.50	30.60	30.60	30.60	30.60	30.60	30.60
Canal 6	28.10	28.10	28.00	28.10	28.30	28.20	28.40	28.70	28.20	28.30	28.50	28.20	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50

ESTADO ESTABLE

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje																				
Amperaje																				
Hora	13.667	13.833	14.000	14.167	14.333	14.500	14.667	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333	15.417	15.500	15.583	15.667	15.750
Canal 1	41.50	41.50	41.60	41.60	41.70	41.70	41.80	41.80	41.80	41.90	41.90	41.90	42.00	42.00	42.00	42.00	42.00	42.00	42.00	42.00
Canal 2																				
Canal 3	32.10	32.20	32.20	32.20	32.20	32.30	32.30	32.30	32.40	32.40	32.50	32.50	32.50	32.50	32.60	32.60	32.60	32.60	32.60	32.60
Canal 4	31.60	31.60	31.60	31.60	31.70	31.80	31.80	31.80	31.80	31.80	31.90	31.90	31.90	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Canal 5	30.60	30.60	30.60	30.60	30.60	30.70	30.70	30.70	30.70	30.90	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
Canal 6	28.60	28.50	28.60	28.60	28.60	28.80	28.80	28.70	28.70	28.90	28.90	28.90	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrillera, 90% de compactación | A |  
 FECHA: 18-ago-95  
 CLASIFICACION: SC  
 Observaciones: Datos del Edo. Inestable y Edo. Estable.  
 VOLUMEN: 0.001031 m<sup>3</sup>  
 Promedio= 14.12 cm  
 PESO: 1.914 Kg  
 Promedio= 9.72 cm  
 DENSIDAD: 1856.000 Kg/m<sup>3</sup>  
 Cilindro= 1047.750 cm<sup>3</sup>  
 Cavidades= 16.670 cm<sup>3</sup>  
 PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nte de Hilo.  
 No existe termopar en el Canal # 2.

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	15.500	15.583	15.667	15.750	15.833	15.917	16.000	16.083	16.167	16.250	16.333	16.417	16.500	16.583	16.667
Canal 1	42.10	42.00	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.80	41.80	41.90	41.90	41.90	41.90
Canal 2	32.50	32.50	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.60	32.70
Canal 3	32.00	32.00	32.00	32.00	31.90	31.90	31.90	31.90	31.90	31.80	31.80	31.80	31.80	31.80	32.00
Canal 4	31.00	31.00	30.90	30.90	30.90	30.90	30.90	30.90	30.90	30.80	30.80	31.00	31.00	31.10	31.10
Canal 5	28.80	28.80	28.70	28.60	28.60	28.50	28.50	28.50	28.50	28.60	28.60	29.00	29.00	29.10	29.10
Canal 6															

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	16.833	16.917	17.000	17.083	17.167										
Canal 1	42.00	42.10	42.10	42.10	42.10										
Canal 2															
Canal 3	32.60	32.80	32.80	32.80	32.70										
Canal 4	32.10	32.10	32.10	32.10	32.00										
Canal 5	31.20	31.20	31.20	31.20	31.00										
Canal 6	29.00	29.10	29.00	28.90	28.60										

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrillera, 90% de Compactación A I I  
 FECHA: 19-Ago-95  
 CLASIFICACION: SC Observaciones: Datos del Edo. Estable. No existe termopar en el canal # 2.  
 VOLUMEN: 0.001031 m3 Longitud Promedio= 14.12 cm  
 PESO: 1.914 Kg Diámetro Promedio= 9.72 cm  
 DENSIDAD: 1856.000 Kg/m3 Volumen Cilindro= 1047.750 cm3  
 PROCEDENCIA: Ladrillera Sr. José Duró Quintana, Nte de Hto. Volumen Cavidades= 16.670 cm3

ESTADO: ESTABLE												
Voltsje	Amperaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
13.333	13.500	13.667	13.833	14.000	14.167	14.333	15.167	15.500	16.167	16.250	16.500	16.833
28.30	36.10	38.90	39.70	40.00	40.30	40.80	41.70	42.00	42.40	42.50	42.50	42.50
28.30	28.80	30.00	30.70	31.10	31.30	31.60	32.40	32.50	32.80	33.00	32.80	32.80
28.30	28.50	29.60	30.00	30.50	30.90	31.00	31.80	32.00	32.20	32.20	32.30	32.30
28.30	28.40	28.80	29.20	29.60	30.00	30.20	30.90	30.90	31.30	31.30	31.30	31.20
28.30	28.10	28.10	28.50	28.60	28.60	28.70	28.80	28.80	29.00	29.10	29.10	29.00

ESTADO: ESTABLE												
Voltsje	Amperaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
16.917	17.000	17.083	17.167	17.250	17.333	17.417	17.500	17.583	17.667	17.750	17.833	17.917
42.50	42.30	42.30	42.30	42.30	42.30	42.30	42.30	42.30	42.30	42.30	42.30	42.20
32.70	32.70	32.70	32.70	32.80	32.80	32.80	32.80	32.80	32.70	32.70	32.70	32.60
32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.20	32.00
31.20	31.10	31.10	31.10	31.10	31.20	31.10	31.10	31.10	31.10	31.10	31.10	31.00
29.00	28.90	28.90	29.00	29.00	29.00	29.00	29.00	29.00	28.90	28.90	28.90	28.80

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de báñera, 90% de compactación A I  
 FECHA: 19-Ago-95  
 Observaciones: Datos del Edo. Estable. No existe termopar en el canal # 2.

CLASIFICACION: SC  
 VOLUMEN: 0.001031 m3  
 PESO: 1.914 Kg  
 DENSIDAD: 1856.000 Kg/m3

PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nte de Ilibo.

Longitud Promedio= 14.12 cm  
 Diámetro Promedio= 9.72 cm  
 Volumen Cilindro= 10.47.750 cm3  
 Volumen Cavidades= 16.670 cm3

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hora	18.250	18.333	18.417	18.500	18.583	18.667	18.750	18.833	18.917	19.000		
Canal 1	42.20	42.20	42.20	42.20	42.20	42.20	42.30	42.30	42.30	42.30	42.30	42.30
Canal 2	32.70	32.70	32.70	32.70	32.70	32.70	32.80	32.80	32.80	32.80	32.80	32.90
Canal 3	32.10	32.10	32.10	32.10	32.10	32.10	32.20	32.20	32.20	32.20	32.20	32.20
Canal 4	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.20	31.20	31.20	31.20	31.30
Canal 5	29.10	29.10	29.10	29.10	29.10	29.10	29.20	29.20	29.20	29.20	29.20	29.40
Canal 6												

Voltaje												
Amperaje												
hora												
Canal 1												
Canal 2												
Canal 3												
Canal 4												
Canal 5												
Canal 6												

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrillera, 90% de compactación B

FECHA: 20-ago-95

Observaciones: No hubo lectura en candi # 2  
Datos del Edo. Estable.

CLASIFICACION: SC

VOLUMEN: 0.000940 m<sup>3</sup>

PESO: 1.780 Kg

DENSIDAD: 1894.000 Kg/m<sup>3</sup>

PROCEDENCIA: Ladrillera Sr. José Quiroz Quintana, Nte de Hilo.

Longitud Promedio= 12.84 cm

Díámetro Promedio= 9.74 cm

Volumen Cilindro= 956.690 cm<sup>3</sup>

Volumen Cavidades= 16.670 cm<sup>3</sup>

ESTADO ESTABLE												
Volts	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	10.250	10.333	10.500	10.667	10.833	11.000	11.167	11.333	12.250	12.500	13.000	13.083
Canal 1	28.50	33.10	36.50	37.50	37.60	38.30	38.40	38.50	39.50	39.60	39.90	39.90
Canal 2	28.50	28.50	29.90	30.60	30.90	31.30	31.50	31.70	32.40	32.50	32.70	32.70
Canal 3	28.50	28.50	29.20	29.60	29.90	30.20	30.60	30.70	31.30	31.50	31.60	31.60
Canal 4	28.60	28.60	28.80	29.10	29.40	27.70	30.00	30.10	30.60	30.80	31.00	31.00
Canal 5	27.70	27.70	27.80	27.80	27.90	27.90	28.00	28.00	28.30	28.40	28.50	28.40
Canal 6												
Volts	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	13.417	13.500	13.583	13.667	13.750	13.833	13.917	14.000	14.083	14.167	14.250	14.333
Canal 1	39.90	39.90	39.90	40.00	40.00	40.00	40.00	39.80	39.80	39.80	39.80	39.70
Canal 2												
Canal 3	32.70	32.70	32.70	32.70	32.70	32.70	32.70	32.50	32.50	32.50	32.50	32.40
Canal 4	31.60	31.60	31.60	31.60	31.50	31.50	31.50	31.10	31.10	31.10	31.10	31.30
Canal 5	30.90	30.90	30.90	30.90	30.70	30.70	30.70	30.50	30.50	30.50	30.50	30.50
Canal 6	28.40	28.40	28.40	28.40	28.00	28.00	28.00	27.30	27.30	27.30	27.20	27.20
Volts	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	14.417	14.500	14.583	14.667	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333
Canal 1	39.90	39.90	39.90	40.00	40.00	40.00	39.80	39.80	39.80	39.80	39.90	39.90
Canal 2												
Canal 3	32.70	32.70	32.70	32.70	32.70	32.70	32.50	32.50	32.50	32.50	32.40	32.40
Canal 4	31.60	31.60	31.60	31.60	31.50	31.50	31.10	31.10	31.10	31.10	31.30	31.30
Canal 5	30.90	30.90	30.90	30.90	30.70	30.70	30.50	30.50	30.50	30.50	30.50	30.50
Canal 6	28.40	28.40	28.40	28.40	28.00	28.00	27.30	27.30	27.30	27.20	27.20	27.20

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

MUESTRA DE: Tierra de ladrillera, 90% de compactación B FECHA: 20-ago-95

CLASIFICACION: SC Observaciones: No hubo lectura en canal # 2  
Datos del Edo. Estable.

VOLUMEN: 0.000940 m3 Longitud Promedio= 12.84 cm

PESO: 1.780 Kg Diámetro Promedio= 9.74 cm

DENSIDAD: 1894.000 Kg/m3 Volumen Cilindro= 956.690 cm3

PROCEDECIA: Ladrillera Sr. José Quiroz Quiñana, Nte de Hilo. Volumen Cavidades= 16.670 cm3

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333	15.417	15.500		
Canal 1	39.80	39.80	39.80	39.80	39.70	39.70	39.80	39.80	39.80	39.90		
Canal 2												
Canal 3	32.40	32.30	32.30	32.30	32.30	32.30	32.40	32.40	32.20	32.40		
Canal 4	31.30	31.30	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.30		
Canal 5	30.50	30.50	30.40	30.40	30.50	30.50	30.50	30.50	30.40	30.40		
Canal 6	27.20	27.20	27.20	27.20	27.30	27.30	27.30	27.30	27.10	27.40		

	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Voltaje	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Amperaje	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hora	14.750	14.833	14.917	15.000	15.083	15.167	15.250	15.333	15.417	15.500		
Canal 1	39.80	39.80	39.80	39.80	39.70	39.70	39.80	39.80	39.80	39.90		
Canal 2												
Canal 3	32.40	32.30	32.30	32.30	32.30	32.30	32.40	32.40	32.20	32.40		
Canal 4	31.30	31.30	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.30		
Canal 5	30.50	30.50	30.40	30.40	30.50	30.50	30.50	30.50	30.40	30.40		
Canal 6	27.20	27.20	27.20	27.20	27.30	27.30	27.30	27.30	27.10	27.40		

NOTA: Temperatura de los Canales en grados Centígrados, Hora en decimales, Voltaje en volts y Amperaje en amperes.

### 6-3 CÁLCULOS DE LAS CONDUCTIVIDADES TÉRMICAS Y GRÁFICAS

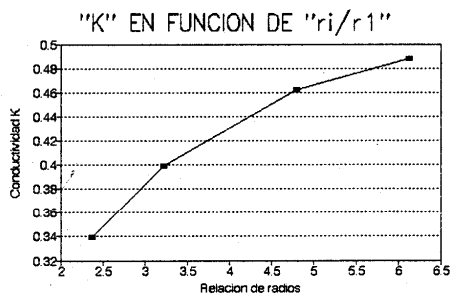
Se obtuvo la Conductividad Térmica, para cada espécimen, utilizando la ecuación del método cilíndrico en el estado estable (ec 3-5) y la gráfica de temperatura en función del radio y la de Conductividad Térmica (k) en función de la relación de radios, para cada corrida.

127

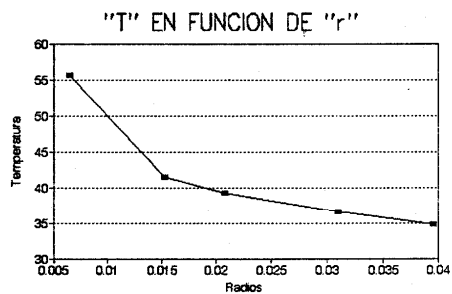
FECHA: 21-Jul-95

MUESTRA DE: Yeso [ A ] I

PROMEDIOS DEL EDO. ESTABLE	DISTANCIA A PARTIR DEL CENTRO (mts)	RELACION ENTRE RADIOS	CONDUCTIVIDAD TERMICA k [=] J/ s m gC
VOLTAJE = 15.20 V			
AMPERAJE = 0.29 A			
TEMPERATURA #1= 55.66 gC	r1= 0.00645 m		
TEMPERATURA #2= 41.47 gC	r2= 0.01525 m	r2/r1= 2.36434	K(1-2)= 0.339531
TEMPERATURA #3= 39.27 gC	r3= 0.02075 m	r3/r1= 3.21705	K(1-3)= 0.399161
TEMPERATURA #4= 36.67 gC	r4= 0.03095 m	r4/r1= 4.79845	K(1-4)= 0.462395
TEMPERATURA #5= 34.86 gC	r5= 0.03955 m	r5/r1= 6.13178	K(1-5)= 0.488159
TEMPERATURA #6= 29.27 gC			



En "ri/r1"



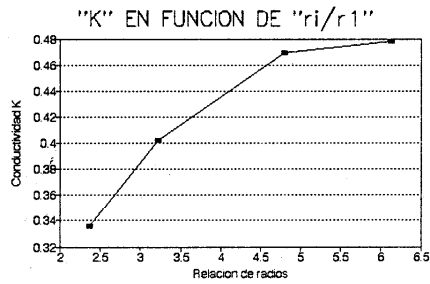
En las cavidades



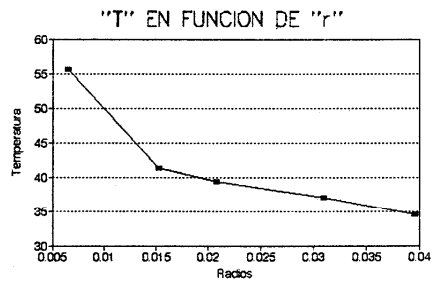
FECHA: 22-JU-95

MUESTRA DE: Yeso [ A ] II

PROMEDIOS DEL EDO. ESTABLE	DISTANCIA A PARTIR DEL CENTRO (mts)	RELACION ENTRE RADIOS	CONDUCTIVIDAD TERMICA k [=] J/ s m gC
VOLTAJE = 15.10 V			
AMPERAJE = 0.29 A			
TEMPERATURA #1= 55.60 gC	r1= 0.00645 m		
TEMPERATURA #2= 41.36 gC	r2= 0.01525 m	r2/r1= 2.36434	K(1-2)= 0.336112
TEMPERATURA #3= 39.45 gC	r3= 0.02075 m	r3/r1= 3.21705	K(1-3)= 0.402427
TEMPERATURA #4= 37.00 gC	r4= 0.03095 m	r4/r1= 4.79845	K(1-4)= 0.468984
TEMPERATURA #5= 34.52 gC	r5= 0.03955 m	r5/r1= 6.13178	K(1-5)= 0.478506
TEMPERATURA #6= 29.27 gC			



En "ri/r1"



En las cavidades

FECHA: 23-Jul-95

MUESTRA DE: Yeso [ B ]

PROMEDIOS DEL EDO. ESTABLE	DISTANCIA A PARTIR DEL CENTRO (mts)	RELACION ENTRE RADIOS	CONDUCTIVIDAD TERMICA k [=] J/ s m gC
VOLTAJE = 15.17 V			
AMPERAJE = 0.29 A			
TEMPERATURA #1= 56.98 gC	r1= 0.00645 m		
TEMPERATURA #2= 44.56 gC	r2= 0.01535 m	r2/r1= 2.37984	K(1-2)= 0.390093
TEMPERATURA #3= 40.33 gC	r3= 0.02075 m	r3/r1= 3.21705	K(1-3)= 0.392152
TEMPERATURA #4= 37.15 gC	r4= 0.03105 m	r4/r1= 4.81395	K(1-4)= 0.442843
TEMPERATURA #5= 35.36 gC	r5= 0.03915 m	r5/r1= 6.06977	K(1-5)= 0.466090
TEMPERATURA #6= 29.70 gC			

