

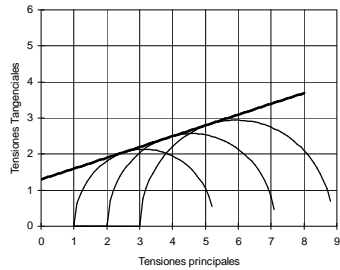
# COMPRESION TRIAXIAL

OBRA: CANAL EL SALTON  
UBICACION: TUCUMAN

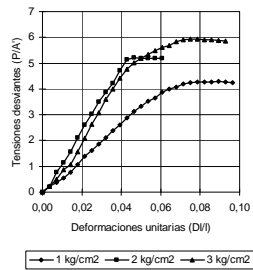
DATOS DE LA MUESTRA			
Ubicación:	PCA 2	Volumen:	67,312 cm3.
Profundidad:	2,00 m.	Peso:	115,600 grs
Diametro:	3,5 cm.	D. nat.:	1,717 gr/cm3.
Altura:	7,0 cm.	Hum. %:	20,40 %
Area:	9,616 cm2.	D. secac:	1,426 gr/cm3.
constante del aro de carga : K =		0,526	

No.	Datos del Ensayo	Presion de Camara G3 en kg./cm2.		
		1,000	2,000	3,000
1	Lectura inicial carga	0,000	0,000	0,000
2	Lectura final carga	86,100	101,600	118,100
3	Divisiones de carga (2 - 1)	86,100	101,600	118,100
4	Fuerza Axial (P = 3 x Ka) (Kg.)	45,289	53,442	62,121
5	Lectura inicial deformaciones (cm)	0,000	0,000	0,000
6	Lectura final deformaciones (cm)	0,650	0,525	0,625
7	Deformacion de la muestra (7 = 6 - 5)	0,650	0,525	0,625
8	Factor correccion area (8 = b/ b-7)	1,102	1,081	1,098
9	Area corregida (A' = 8 x A) (cm2)	10,600	10,396	10,559
10	Presion axial (Ga = P/ A') (kg/cm2)	4,272	5,141	5,883
11	Tension Principal (G1 = Ga + G3)	5,272	7,141	8,883
12	Presion de poros (u) (kg/cm2.)			
13	Tension Princ. efect. (G1'-G1-u)	5,272	7,141	8,883
14	Tension princ. efect. (G3'-G3-u)	1,000	2,000	3,000

GRAFICA



GRAFICA ESFUERZO - DEFORMACION  
Presión de cámara 1, 2 Y 3 kg/cm2



g1 =	1,000	g3 =	2,000	g5 =	3,000
g2 =	5,272	g4 =	7,141	g6 =	8,883

R1=(g2-g1)/2=	2,136	R2=(g4-g3)/2=	2,570	R3=(g6-g5)/2=	2,942
---------------	-------	---------------	-------	---------------	-------

$$a1=(g2+g1)/2= 3,136$$

sen B1 =	0,303	sen B=(senb1+senb2+senb3)/3=	0,287	sen B1=(R2-R1)/(a2-a1)=	0,303
sen B2 =	0,271	c = (c1 + c2 + c3)/3 =	1,299	c1=R1/cosB1 - a1xtgB1=	1,291
sen B3 =	0,287	B = arc sen B =	16,671		
		tag B =	0,299		
c1 =	1,291	cos B =	0,958		
c2 =	1,315	Atan B	16,67061		
c3 =	1,291				

$$y = X \times \text{tag B} + c =$$

0,000	2,523	3,833	5,098	5,000	8,000
1,299	2,055	2,447	2,825	2,796	3,695

$$a_2 = (g_4 + g_3) / 2 =$$

4,570

$$a_3 = (g_6 + g_5) / 2 =$$

5,942

$$\sin B_2 = (R_3 - R_2) / (a_3 - a_2) =$$

0,271

$$\sin B_3 = (R_3 - R_1) / (a_3 - a_1) =$$

0,287

$$c_2 = R_2 / \cos B_2 - a_2 \times \tan B_2 =$$

1,315

$$c_3 = R_3 / \cos B_3 - a_3 \times \tan B_3 =$$

1,291