

RESULTADO DE INYECCIONES EXPANDER BODY

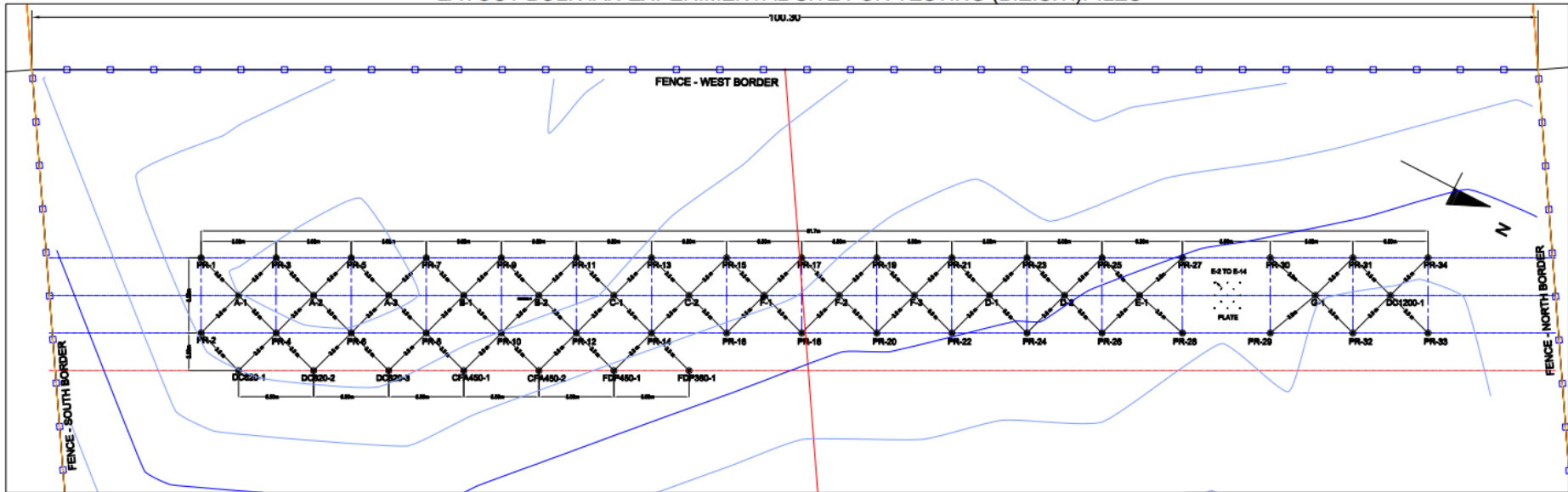
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Expander Body Incotec y Celda de carga (Top Box)

LAYOUT BOLIVIAN EXPERIMENTAL SITE FOR TESTING (B.E.S.T.) PILES



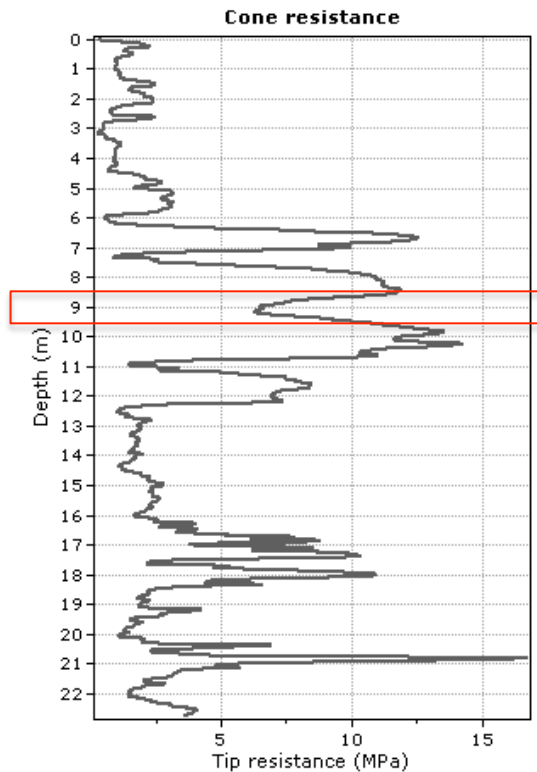
PILE CODE	A-1	A-2	A-3	B-1	B-2	C-1	C-2	D-1	D-2	E-1	E-2 to E-14	F-1	F-2	G-1	DB1200-1	DC1200-1	DC520-1	DC620-2	DC620-3	CFA450-1	CFA450-2	FDP450-1	FDP360-1
PILE TYPE	Bored Pile with retrievable casing			CFA		FDP		Vibro-driven Micropile		Vibro-driven Micropile		Drilled with slurry		Helical	Drilled bentonite	Cased pile				CFA		FDP	FDP
DIAMETER (mm)	620			450		450		200		200		450	600	300	1200	1200	620	620	620	450	450	450	360
ATTACHED DEVICE	TOE BOX					EB (600) AT BASE		EB (500) AT BASE							YES	YES	YES	YES	YES	YES	YES	YES	YES
PILE INTEGRITY TESTING-PIT	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	none	none	none	3 x steel	3 x pvc	none	1 x pvc	none	none
CROSS-HOLE CH	YES	YES	YES	YES	YES	YES	YES					1 x pvc	3 x pvc		5 x pvc	5 x steel	none	none	none	none	none	none	none

5 pilotes individuales con EBI: A1, B1, C1, D1, E1
Grupo de 13 pilotes: E2-E14

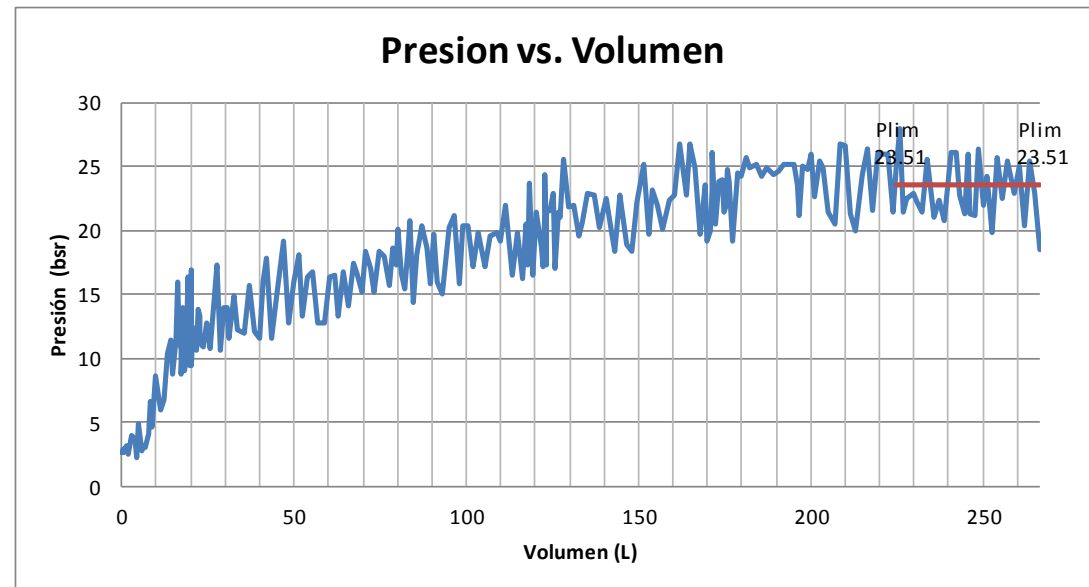
Cuadro resumen pilotes con EBI

PILE CODE	TYPE PILE	DIAMETER (mm)	DEPTH (m)	ATTACHED DEVICE	LOADING TEST	Tell Tales	STRAIN GAGES: L1: 2.0m L2: 5.0m L3: 7.5m		
							V.W.	RESISTIVE	PDI
A-1	Drilled with slurry	620	9.50	EB800	BD+HD+DT	4Ø6mm + Cañería Galvanizada de 1/2"	L1, L2, L3	L1, L2, L3	L3
B-1	CFA	450	9.50	EB600	BD+HD+DT	4Ø6mm + Cañería Galvanizada de 1/2"	L1, L2, L3	L1, L2, L3	L3
C-1	FDP	450	9.50	EB600	BD+HD+DT	4Ø6mm + Cañería Galvanizada de 1/2"	L1, L2, L3	L1, L2, L3	L3
D-1	Micropilote autoperforante	150	9.50	EB600	HD		L1, L2, L3	L1, L2, L3	
E-1	FDP	300	9.50	EB600	BD+HD	2Ø6mm + Cañería	L1, L2, L3	L1, L2, L3	
E-2 TO E-14	FDP	300	9.50	EB600	BD+HD	2Ø6mm + Cañería Galvanizada de 1/2"	L1, L3	L2	

Pilote A1: Perforado con bentonita, D=600mm, EBI 800

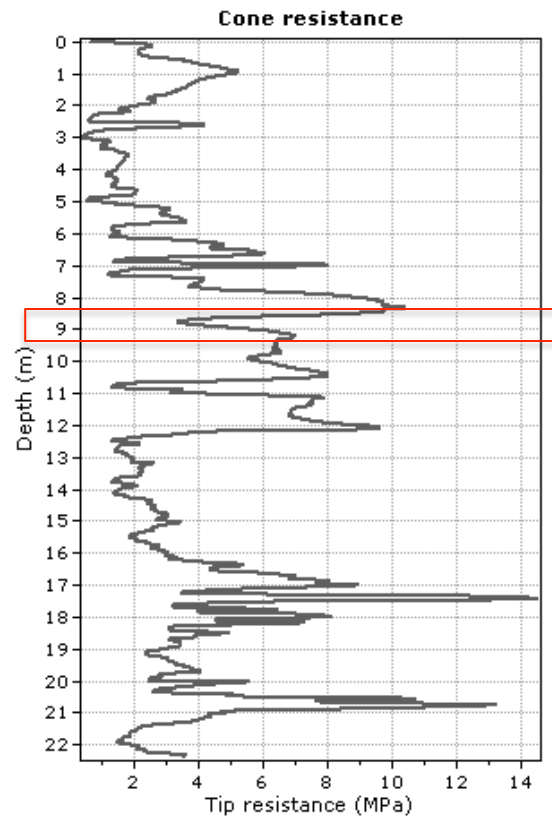


qc promedio: 8.24 MPa
qc min: 6.31 MPa
qc max: 11.71 MPa

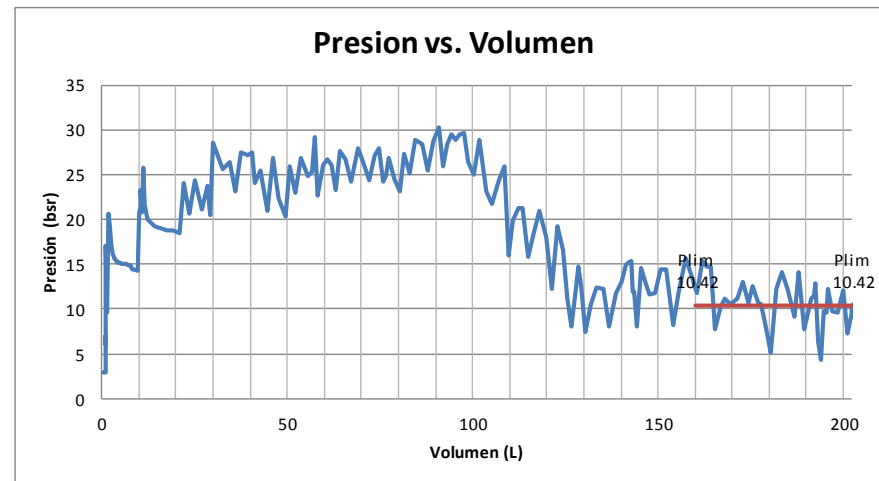


Presión límite: 2.31 MPa
D EBI final: 800mm

Pilote B1: CFA, D=450mm, EBI 600

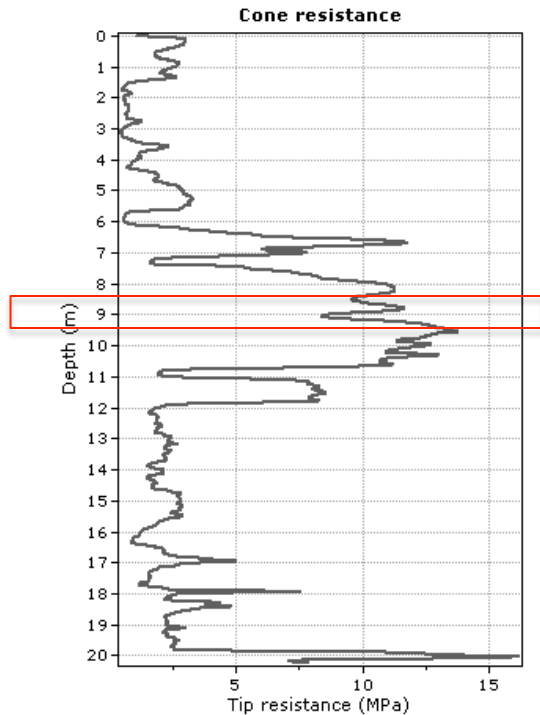


qc promedio: 5.78 MPa
qc min: 3.37 MPa
qc max: 6.99 MPa

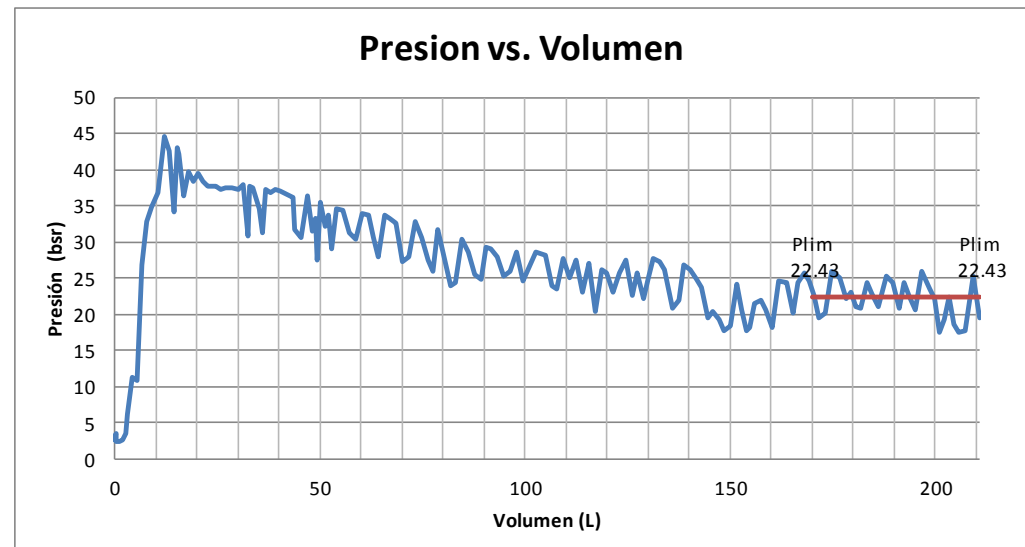


Presión límite: 1.42 MPa
D EBI Final: 600mm

Pilote C1: FDP, D=450mm

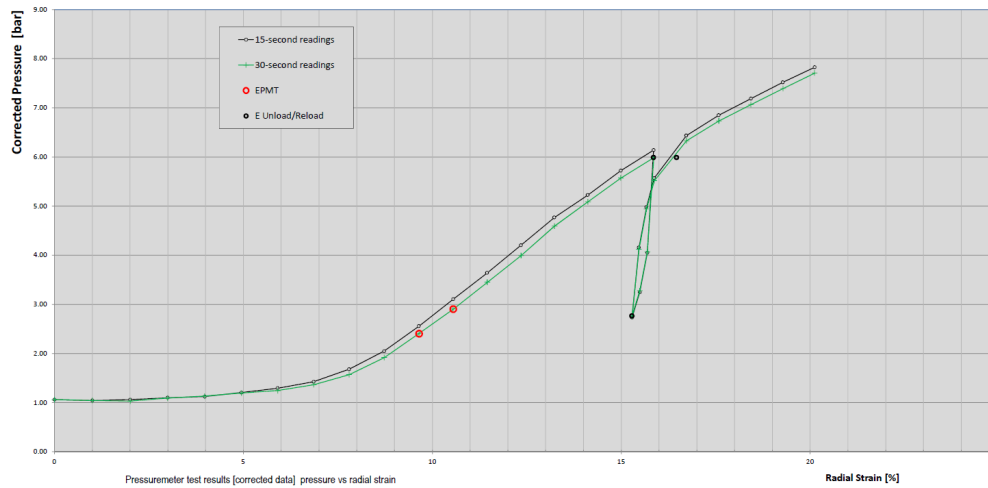


qc promedio: 11.2 MPa
qc min: 8.43 MPa
qc max: 13.74 MPa



Presión límite: 2.24 MPa
D EBI Final: 600mm

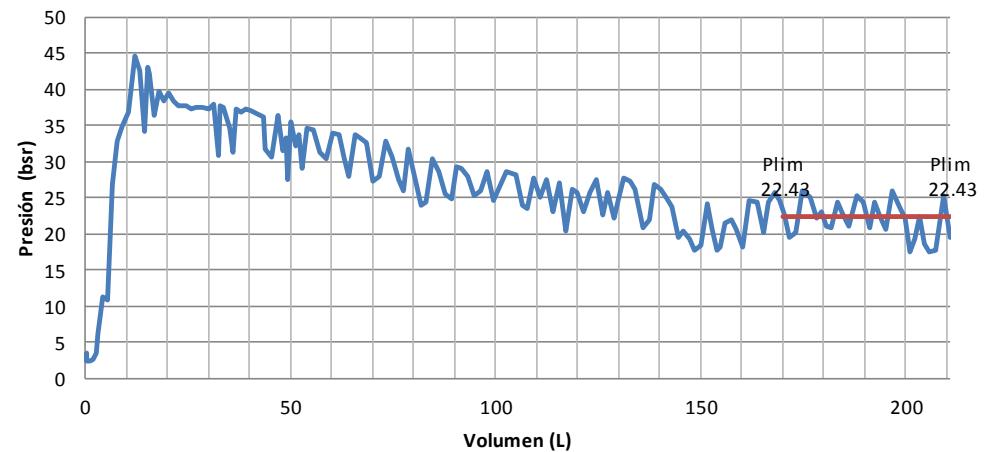
Pilote C1: FDP, D=450mm



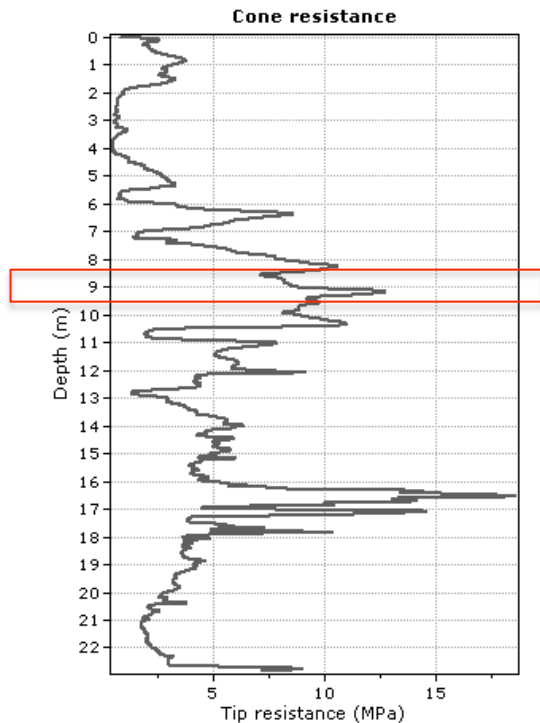
RESULTADOS PMT (-8.97M):
pL: 10.90 bar = 1.1 MPa

Presión límite: 2.24 MPa
D EBI Final: 600mm

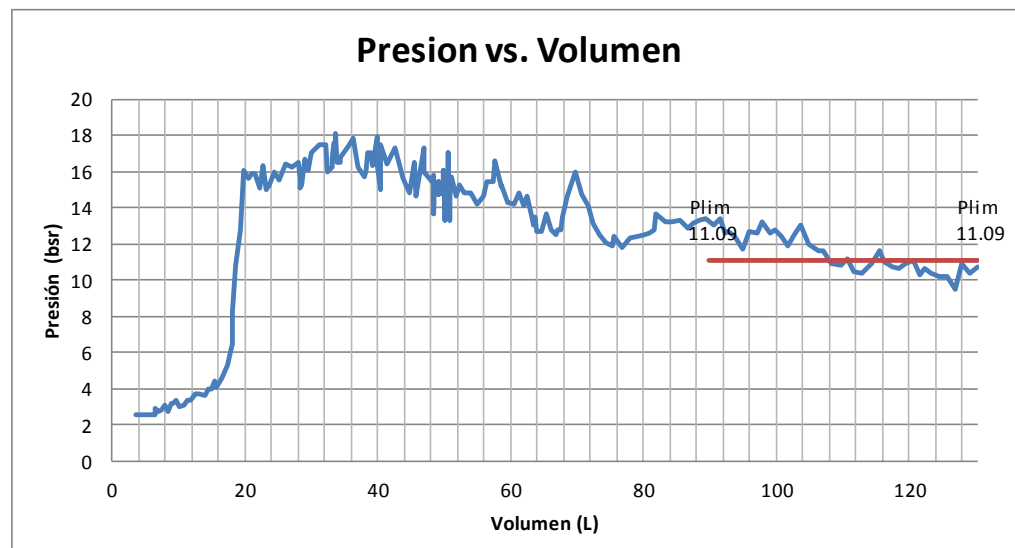
Presion vs. Volumen



Pilote D1: Micropilote Auto-perforante, D=100mm

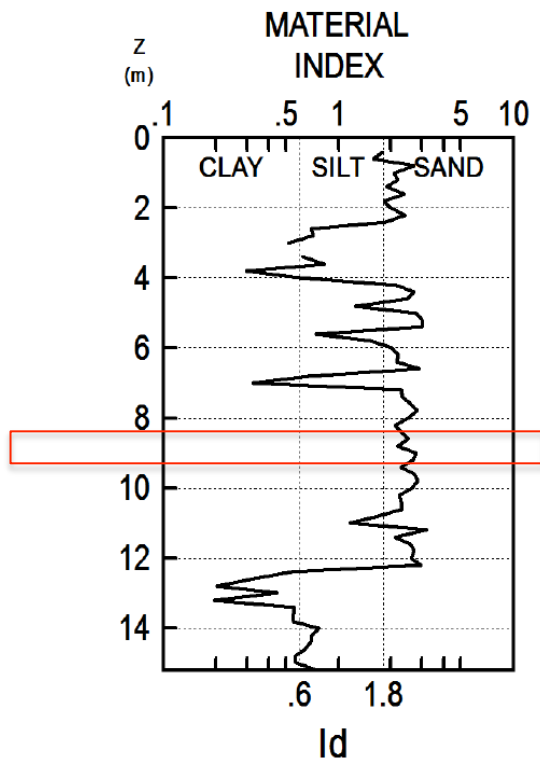


qc promedio: 9.3 MPa
qc min: 7.12 MPa
qc max: 12.72 MPa



Presión límite: 1.11 MPa
D EBI Final: 600mm

Pilote D1: Micropilote Auto-perforante, D=100mm



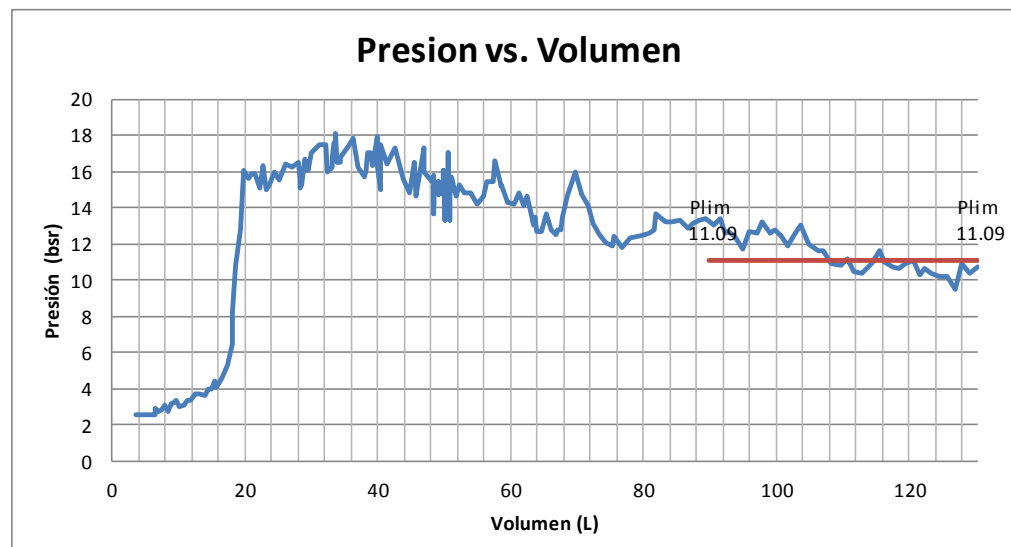
PROMEDIOS ENTRE

8.50M – 9.50M

Id-m: 2.21

P-0m: 0.304 MPa

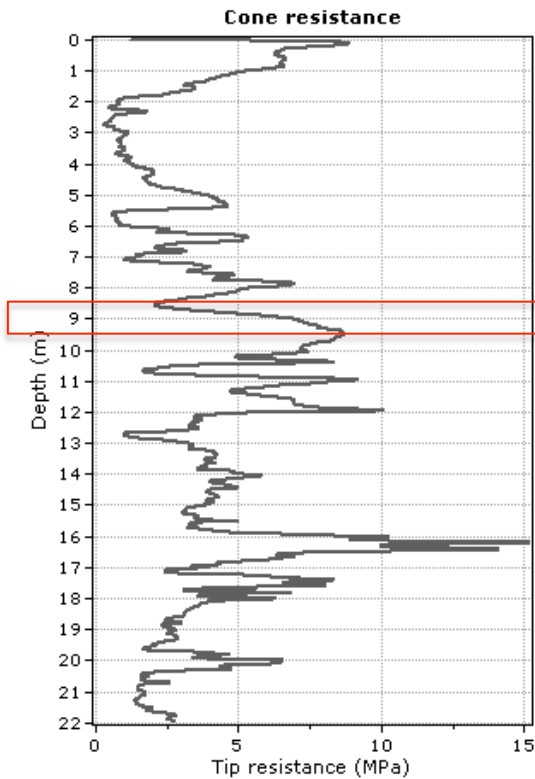
P-1m: 1.05 MPa



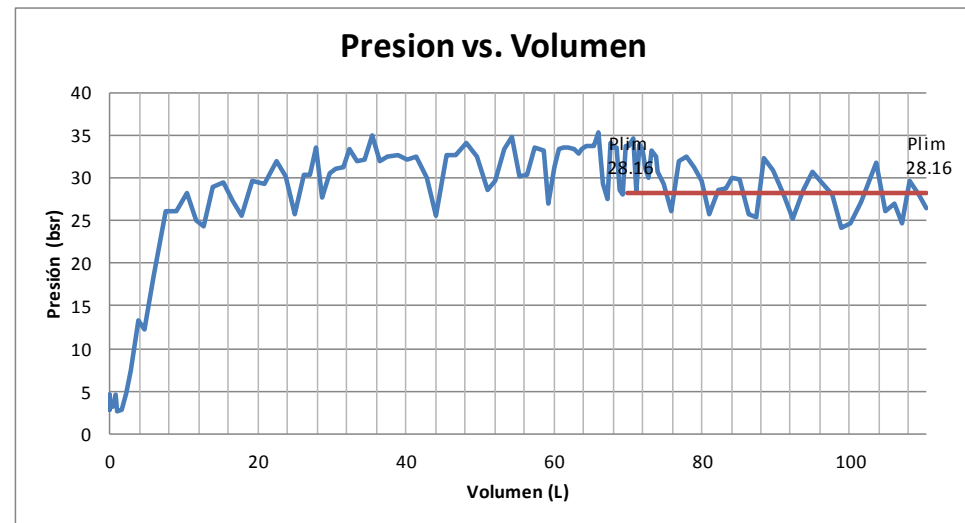
Presión límite: 1.11 MPa

D EBI Final: 600mm

Pilote E1: FDP, D=300mm

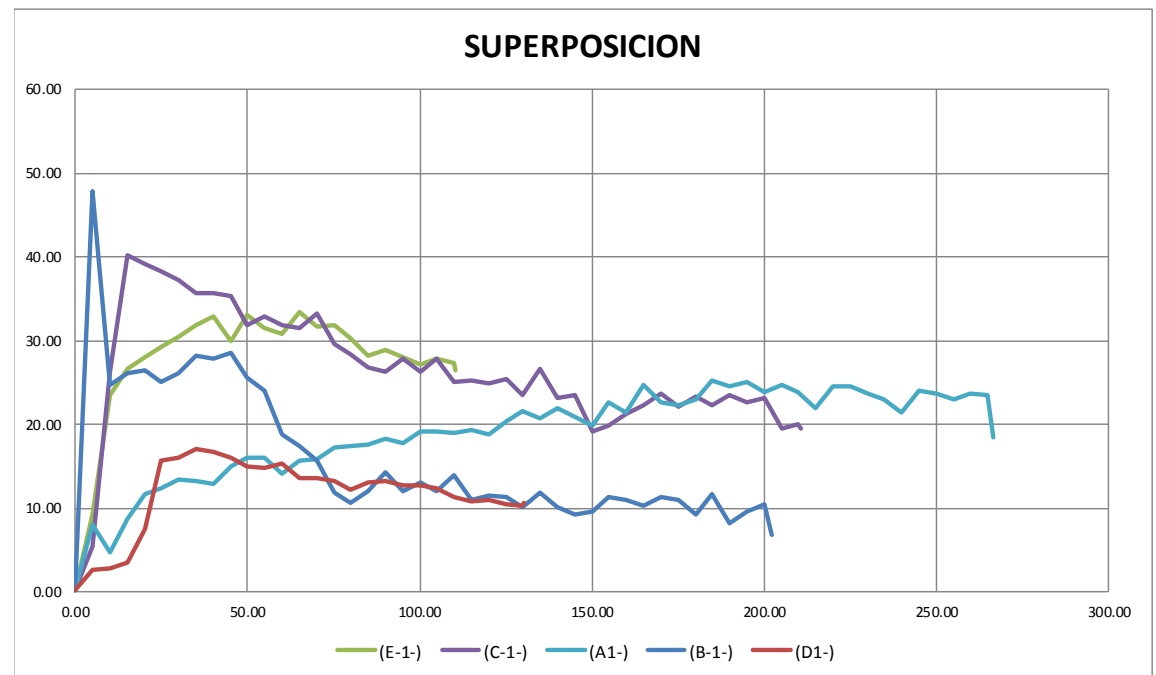
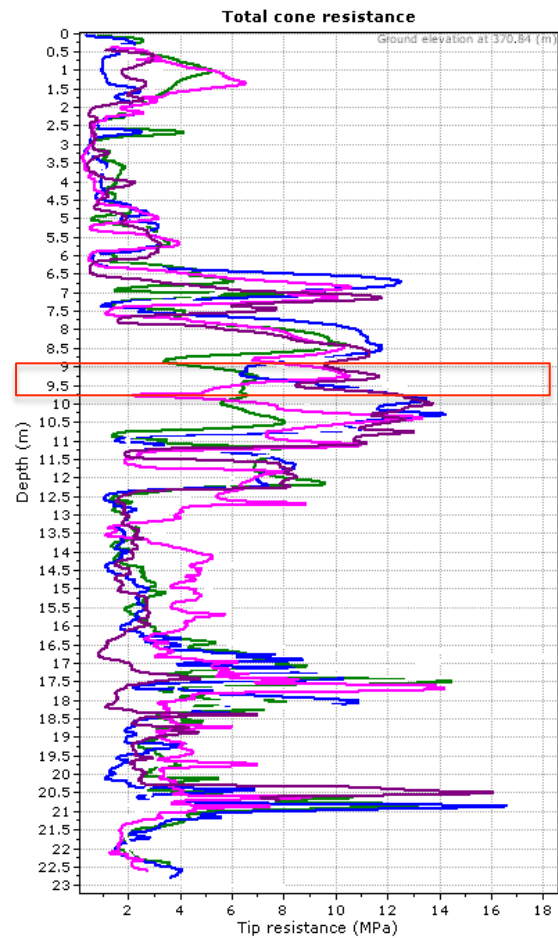


qc promedio: 7.18 MPa
qc min: 2.14 MPa
qc max: 10.53 MPa



Presión límite: 2.8 MPa
D EBI Final: 400mm

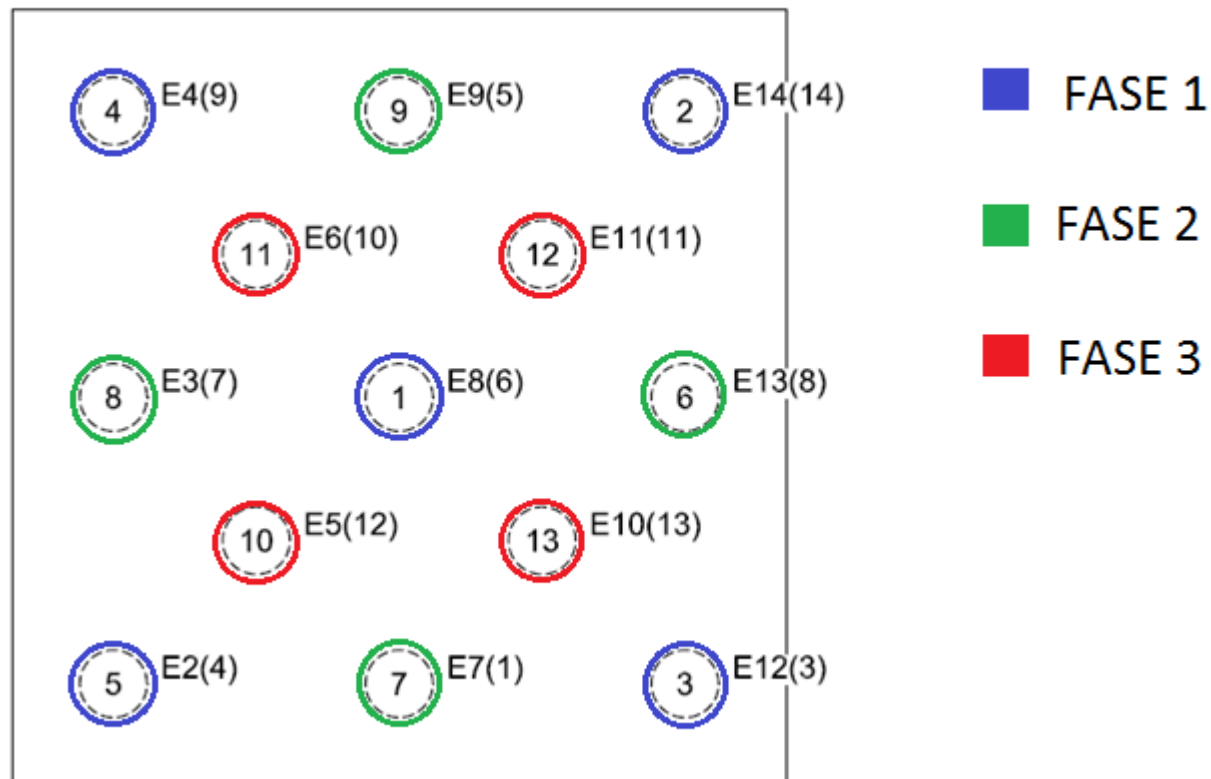
Pilote E1: FDP, D=300mm



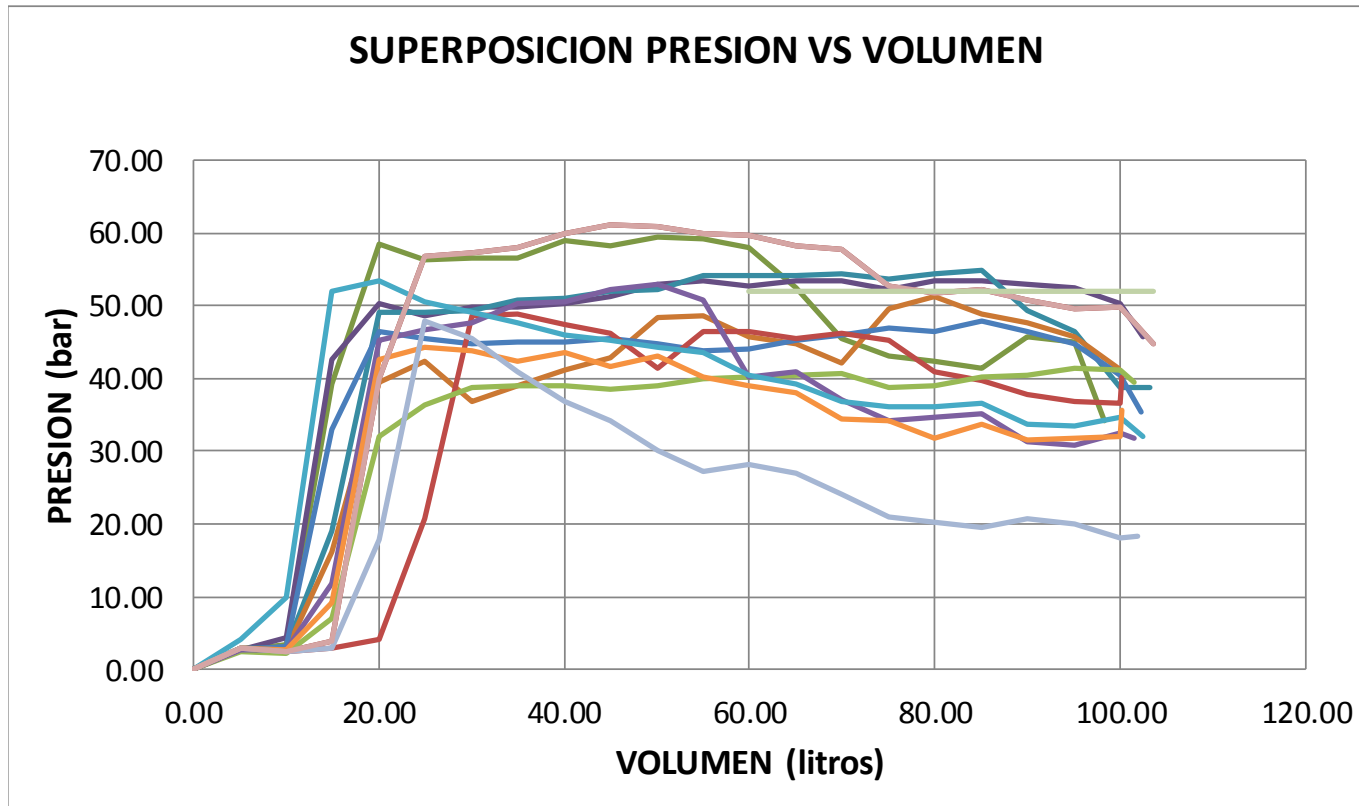
Grupo de pilotos: Pilote E2-E14

Secuencia de inyección

INYECCION EBI



Grupo de pilotes: Pilote E2-E14



Presión límite promedio: 3.98 MPa

Presión límite mínima: 2.44 MPa

Presión límite Máxima: 5.38 MPa

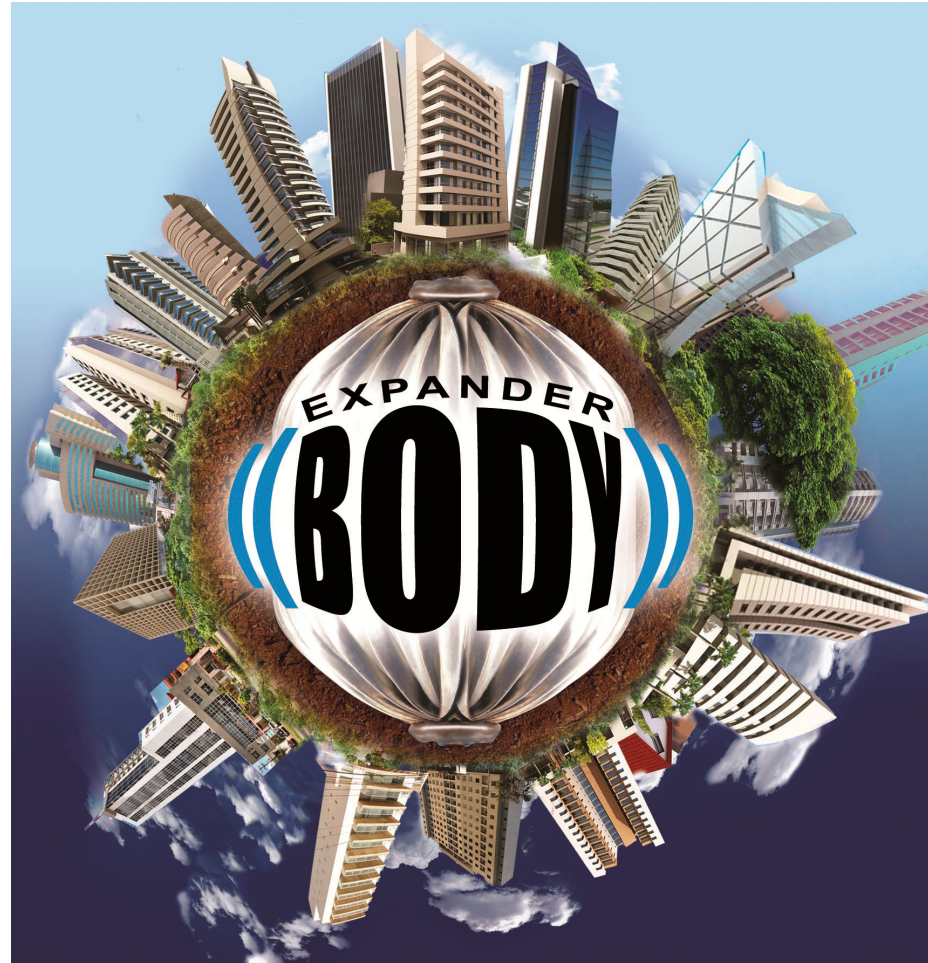
Grupo de pilotes: Pilote E2-E14

PRESION LIMITE DE INYECCIÓN (MPa)



Presión límite promedio: 3.98 MPa
Presión límite mínima: 2.44 MPa
Presión límite Máxima: 5.38 MPa

GRACIAS!



INFORMACION DE CONTACTO

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