

FLM-005-1
PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS**
QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO:	PTM-53627.28-2002
CUSTOMER:		NUMBER:	
PEDIDO CLIENTE / P.O. PARTIDA (S)	9165	FECHA / DATE	JULIO 29, 2002
PEDIDO INTERNO / I.O.			
ITEMS	37578-10		

AMETRO: 10 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 69 Kg/cm² 980 PSI

PRUEBAS DE TENSION
TENSILE TEST

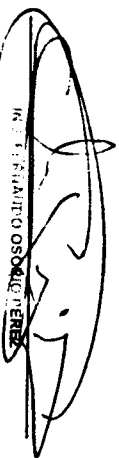
ANALISIS QUIMICO % EN PESO
CHEMICAL ANALYSES PERCENT WEIGHT

MINIPROBETA DESCRIPTION	COLANA HEAT	LIMITE ELASTICO YIELD STRENGTH (Q.S1)	ULTIMA TENSION TENSILE STRENGTH (Q.S2)	% ELONG. T	LEALT YIELD	C	Ma	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Ni	Mo	N	Ceq
7-24 Tc Ts	224557	58 983	70 780	38	0.83	0.180	1.08	0.019	0.008	0.003	0.004	0.003	0.199	0.036	0.044	0.0036	0.020	0.027	0.009	0.0055
9-27 Tc Ts	224558	57 784	74 870	36	0.79	0.179	1.08	0.016	0.008	0.002	0.003	0.003	0.201	0.030	0.036	0.0025	0.023	0.024	0.011	0.0042
5-25 Tc Ts	224559	57 373	74 324	35	0.77	0.180	1.13	0.020	0.007	0.003	0.004	0.003	0.220	0.020	0.035	0.0024	0.032	0.026	0.011	0.0082
19-16 Tc Ts	224560	55 941	79 980	38	0.84	0.180	1.08	0.014	0.007	0.003	0.003	0.003	0.185	0.020	0.033	0.0030	0.023	0.026	0.011	0.0076
14-14 Tc Ts	224561	55 275	72 561	32	0.81	0.160	1.09	0.017	0.004	0.002	0.004	0.003	0.185	0.017	0.031	0.0025	0.018	0.022	0.010	0.0047
			68 435																	
			73 700																	

RTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO
BRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO
N LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS
BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN
ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

ASTM


OSCAR J. PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER