



FLM-005-7

PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICAL-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-53039-1-2002
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.	9426	FECHA	SEPTIEMBRE 12, 2002
PEDIDO INTERNO / I.O.		DATE	
PARTIDA (S)			
ITEMS	32945-30 / 32537-20		

DIAMETRO: 12 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 58 Kg/cm² 820 PSI

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

NUMPROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (PSI)	ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG. E _T	LEAD Y _{87.5}	C	Mn	P	S	Cb	V	TI	SI	Cu	Al	Ca	Cr	NI	Mo	N	Ceq
25-8 TC TS	121106	49 852	65 782 67 825	40	0.76	0.152	0.84	0.017	0.006	-	-	-	0.116	0.011	0.027	0.0015	0.021	0.023	-	-	-
21-15 TC TS	121107	53 425	63 041 69 689	41	0.85	0.132	0.81	0.013	0.007	-	-	-	0.141	0.010	0.040	0.0005	0.016	0.032	-	-	-
10-1 TC TS	221050	48 954	67 868 72 111	36	0.72	0.170	1.11	0.014	0.008	-	-	-	0.213	0.015	0.045	0.0024	0.031	0.036	-	-	-
13-5 TC TS	221051	48 073	74 169 75 148	37	0.65	0.161	1.14	0.017	0.008	-	-	-	0.186	0.015	0.038	0.0036	0.035	0.031	-	-	-
6-1 TC TS	221052	49 496	68 745 73 057	35	0.72	0.164	1.10	0.016	0.008	-	-	-	0.220	0.017	0.043	0.0035	0.033	0.028	-	-	-

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON 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

ING. FERNANDO J. TORO PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER