



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

NUMERO PTM-51129-2002

NUMBR

FECHA FEBRERO 11, 2002

DATE

CLIENTE: TUCOTA

CUSTOMER:

PERDIDO CLIENTE/VOL.

PERDIDO INTERNO /ID.

PARTIDA(S)

ITEMS 22857-20 / 25343-90

PRESSION HIDROSTATICA:

HIDROSTATIC TEST:

ANALISIS QUIMICO % EN PESO

CHEMICAL ANALYSIS PERCENT WEIGHT

101 Kg/cm<sup>2</sup>

1430 PSI

10 3/4"

0.365"

ASTM A53-B

GRADO:

ASTM

ASTM

ASTM


TENSILE TEST

NUM. PROBE / DESCRIPTION	COLADA / HEAT	LIMITE ELASTICO / YIELD STRENGTH (Q.S1)	ULTIMA TENSION / TENSILE STRENGTH (Q.S1)	% ELONG. / %	LEAIT / Y.G.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
97-4 TC	112888	50 054	63 577	41	0.79	0.145	0.89	0.016	0.008	-	-	-	0.128	0.020	0.040	0.0027	0.017	0.032	-	0.0084	-
TS			71 098																		
4-8 TC	115095	53 352	64 361	40	0.83	0.125	0.88	0.014	0.006	-	-	-	0.162	0.022	0.037	0.0040	0.028	0.030	-	0.1030	-
TS			71 795																		
152-6 TC	212531	52 651	65 359	37	0.81	0.139	0.93	0.014	0.006	-	-	-	0.155	0.022	0.037	0.0028	0.012	0.028	-	0.0058	-
TS			74 663																		
54-2 TC	212545	55 938	63 396	42	0.88	0.139	0.95	0.016	0.007	-	-	-	0.166	0.016	0.040	0.0033	0.024	0.026	-	0.0052	-
TS			74 159																		
89-1 TC	212626	54 161	64 816	38	0.84	0.129	0.89	0.016	0.006	-	-	-	0.164	0.023	0.048	0.0026	0.015	0.025	-	0.0083	-
TS			72 707																		
128-6 TC	212698	55 084	67 726	45	0.81	0.125	0.88	0.022	0.005	-	-	-	0.169	0.012	0.036	0.0031	0.019	0.025	-	0.0086	-
TS			73 500																		

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. HERNANDO OSORIO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER