



PROCARSA S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOYA	NUMERO	PI-M-51032-33-2002
CUSTOMER:		NUMBER	
pedido cliente / P.O.		FECHA	FEBRERO 01, 2002
pedido interno / I.O.	8075	DATE	
partida (s)			
ITEMS	31540-10 / 30778-10		

DIAMETRO 12 3/4" ESPESOR DE PARED 0.250" GRADO: ASTM A53-B PESION HIDROSTATICA: 820 PSI

TENSILE TEST

CHEMICAL ANALYSIS PERCENT WEIGHT

NUM. PROBEA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LENGT YEFTS	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
2-5 TC Ts	118514	49 736	64 736 67 904	39	0.77	0.151	1.11	0.012	0.006	0.0020	0.0030	0.0030	0.188	0.022	0.045	0.0023	0.020	0.017	0.0130	0.0051	
6-12 TC Ts	120158	50 218	69 444 76 312	30	0.72	0.173	1.14	0.018	0.008	0.0030	0.0050	0.0040	0.191	0.016	0.041	0.0025	0.025	0.021	0.0160	0.0047	
15-1 TC Ts	120159	52 003	68 587 78 582	33	0.76	0.179	1.15	0.016	0.008	0.0030	0.0040	0.0040	0.197	0.014	0.037	0.0021	0.025	0.024	0.0160	0.0061	
9-25 TC Ts	218177	49 315	66 027 68 493	37	0.74	0.174	1.18	0.015	0.003	0.0010	0.0030	0.0030	0.200	0.027	0.045	0.0019	0.016	0.022	0.0050	0.0051	

CERTIFICAMOS QUE LA TUBERIA AGUI 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 OSORIO PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD

QUALITY ASSURANCE MANAGER