



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: TUCOTA	NUMERO PTM-51396-2002
CUSTOMER: PERDIDO CLIENTE / P.O. 8539	NUMBER
FECHA: MARZO 04, 2002	DATE
ITEMS: 25087-10	
ESPESSOR DE PARED: 0.375"	GRADO: ASTM A53-B
DIAMETRO: 16"	WALL THICKNESS
ANALISIS QUIMICO % EN PESO	69 Kg/cm ² 980 PSI HOJA 1 DE 2
PRESION HIDROSTATICA: 25087-10	
HIDROSTATIC TEST:	

NUM. PROBEA DESCRIPTION	COLADA HEAT	TENSILE TEST		ULTIMA TENSION TENSILE STRENGTH (#211)	% ELONG. 2"	LEAD YDTS	CHEMICAL ANALYSIS PERCENT WEIGHT												
		LIMITE ELASTICO YIELD STRENGTH (#211)	TENSILE STRENGTH (#211)				C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni
33-6 TC TS	114490	46 532	62 539	40	0.74	0.142	0.89	0.018	0.007	-	-	0.141	0.019	0.043	0.0016	0.021	0.031	-	-
56-5 TC TS	114493	48 277	69 684	44	0.78	0.127	0.88	0.019	0.006	-	-	0.172	0.011	0.040	0.0040	0.012	0.023	-	-
85-8 TC TS	114563	51 204	68 183	40	0.79	0.156	0.89	0.019	0.006	-	-	0.168	0.008	0.036	0.0019	0.014	0.024	-	-
121-8 TC TS	114565	50 191	73 534	40	0.80	0.133	0.87	0.012	0.004	-	-	0.188	0.014	0.044	0.0035	0.013	0.029	-	-
15-10 TC TS	212636	49 204	62 420	45	0.74	0.160	0.91	0.015	0.008	-	-	0.191	0.028	0.039	0.0036	0.019	0.028	-	-
1-2 TC TS	212638	52 521	66 777	42	0.78	0.145	0.92	0.017	0.007	-	-	0.169	0.019	0.043	0.0030	0.011	0.025	-	-
13-5 TC TS	212639	46 903	70 643	44	0.72	0.160	0.90	0.019	0.007	-	-	0.165	0.014	0.050	0.0034	0.017	0.024	-	-
2-13 TC TS	212640	55 081	67 402	38	0.81	0.152	0.91	0.018	0.007	-	-	0.174	0.015	0.043	0.0042	0.017	0.029	-	-
10-7 TC TS	213236	54 806	71 193	41	0.86	0.135	0.90	0.015	0.005	-	-	0.188	0.012	0.033	0.0031	0.020	0.041	-	-
189-5 TC TS	213449	65 566	69 685	33	0.89	0.066	0.78	0.012	0.004	-	-	0.226	0.302	0.041	0.0038	0.009	0.027	-	-
23-8 TC TS	214256	46 553	73 639	37	0.74	0.140	0.90	0.017	0.007	-	-	0.182	0.017	0.043	0.0029	0.018	0.026	-	-
20-4 TC TS	214252	45 635	76 716	41	0.72	0.138	0.85	0.014	0.007	-	-	0.179	0.018	0.040	0.0035	0.028	0.036	-	-
150-10 TC TS	214253	67 250	72 107	35	0.93	0.151	0.87	0.011	0.008	-	-	0.185	0.022	0.040	0.0037	0.023	0.030	-	-
2-8 TC TS	214255	48 924	69 214	40	0.77	0.142	0.87	0.012	0.006	-	-	0.171	0.020	0.040	0.0027	0.022	0.033	-	-

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 TORO PEREZ
GERENTE DE ASESORAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER