



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: TUCOTA
CUSTOMER:
PEDIDO CLIENTE / P.O. 11731
PEDIDO INTERNO / I.O. 47290-20 / 48642-20 / 53879-20
PARTIDA(S)
ITEMS

NUMERO PTM-58036-2004
NUMBER

FECHA MARZO 23, 2004
DATE

DIAMETRO: 8.58" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 86 Kg/cm² 1220 PSI
WALL THICKNESS: 0.250" GRADE: ASTM A53-B HYDROSTATIC TEST: 86 Kg/cm² 1220 PSI

PRUEBAS DE TENSION

ANALISIS QUIMICO % EN PESO

CHEMICAL ANALYSES PERCENT WEIGHT

NUM. PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (F.S.I.)	ULTIMA TENSION TENSILE STRENGTH (F.S.I.)	% ELONG. % ELONG.	LEQUIT YIELD	C	Min	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	C
12B-8 Tc TS	134358	65 047	71 685 75 920	34	0.91	0.079	0.76	0.011	0.004	0.032	0.004	0.005	0.207	0.281	0.042	0.0021	0.020	0.031	0.005	0.0047	
1B-11 Tc TS	135742	53 961	70 841 76 355	35	0.76	0.172	1.08	0.025	0.010	0.002	0.004	0.004	0.292	0.017	0.035	0.0018	0.012	0.026	0.007	0.00689	
25A-1 Tc TS	141099	53 208	68 852 76 248	36	0.76	0.180	1.17	0.010	0.009	0.001	0.004	0.003	0.217	0.030	0.038	0.0026	0.021	0.028	0.007	0.0046	
15B-5 Tc TS	141101	56 922	68 729 76 104	35	0.82	0.162	1.08	0.014	0.007	0.001	0.004	0.003	0.193	0.067	0.035	0.0026	0.016	0.023	0.005	0.0011	
14A-3 Tc TS	141102	55 809	68 856 76 637	35	0.81	0.166	1.10	0.019	0.004	0.001	0.005	0.004	0.173	0.019	0.034	0.0021	0.019	0.032	0.005	0.0045	
8B-21 Tc TS	141103	55 653	68 856 75 554	35	0.80	0.179	1.10	0.015	0.006	0.001	0.004	0.003	0.183	0.021	0.033	0.0031	0.022	0.024	0.007	0.0053	
28A-17 Tc TS	141104	57 918	70 631 75 639	34	0.82	0.172	1.11	0.016	0.006	0.001	0.005	0.003	0.184	0.054	0.033	0.0028	0.020	0.028	0.009	0.0051	
19B-10 Tc TS	235473	53 844	71 791 74 857	36	0.75	0.170	1.10	0.016	0.008	0.001	0.005	0.004	0.270	0.016	0.040	0.0024	0.030	0.038	0.012	0.0058	

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 A53-B -99

ING. FERNANDO OSORIO PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD

QUALITY ASSURANCE MANAGER