



FLM-005-7

PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-50782-2002
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / C.O.		FECHA	ENERO 14, 2002
PEDIDO INTERNO / I.O.	8076	DATE	
PARTIDA (S)	YG-1-00		
ITEMS			

DIAMETRO: 24"  
WALL THICKNESS

ESPESOR DE PARED

0.250"

GRADO:

ASTM A53-B

PRESION HIDROSTATICA:

31 Kg/cm<sup>2</sup>

440 PSI

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

NUM/PROPIETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. %	LEADUT V.S.G.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
136-2 Tc Ts	164225	58 184	69 108 74 310	37	0.84	0.070	0.67	0.012	0.009	0.012	-	-	0.225	0.130	0.042	-	0.0100	0.020	-	-	-
102-11 Tc Ts	164226	53 121	67 792 75 652	40	0.78	0.060	0.67	0.013	0.010	0.011	-	-	0.221	0.090	0.042	-	0.0100	0.020	-	-	-
124-12 Tc Ts	164233	59 570	73 765 82 319	38	0.81	0.080	0.74	0.014	0.012	0.011	-	-	0.237	0.100	0.050	-	0.0200	0.020	-	-	-
64-5 Tc Ts	164235	54 814	72 842 74 099	39	0.75	0.070	0.68	0.012	0.010	0.011	-	-	0.219	0.110	0.039	-	0.0200	0.020	-	-	-
61-2 Tc Ts	269109	59 789	70 873 76 678	37	0.84	0.070	0.68	0.013	0.009	0.012	-	-	0.245	0.050	0.038	-	0.0100	0.010	-	-	-
100-1 Tc Ts	269110	56 843	69 828 75 997	38	0.81	0.070	0.70	0.016	0.014	0.013	-	-	0.240	0.090	0.034	-	0.0200	0.020	-	-	-
136-11 Tc Ts	269111	61 437	69 462 78 082	35	0.88	0.070	0.66	0.014	0.010	0.012	-	-	0.229	0.090	0.033	-	0.0100	0.020	-	-	-
63-12 Tc Ts	269142	56 834	70 726 77 177	34	0.80	0.080	0.72	0.015	0.008	0.012	-	-	0.229	0.050	0.033	-	0.0100	0.010	-	-	-
121-6 Tc Ts	269147	58 084	77 529 73 877	38	0.75	0.070	0.70	0.014	0.009	0.013	-	-	0.244	0.060	0.036	-	0.0100	0.020	-	-	-
101-13 Tc Ts	269151	60 633	70 233 75 111	36	0.86	0.070	0.67	0.009	0.007	0.013	-	-	0.258	0.060	0.032	-	0.0100	0.020	-	-	-

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 PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER