



FLM-005-7

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. 10040  
PEDIDO INTERNO / I.O.  
PARTIDA (S)  
ITEMS 32944-30

NUMERO PTM-54328-29-2003  
FECHA MARZO 13, 2003  
DATE

DIAMETRO: 14" ESPESOR DE PARED 0.250"  
WALL THICKNESS

GRADO: ASTM A53-B

PRESION HIDROSTATICA:  
HIDROSTATIC TEST:

53 Kg/cm<sup>2</sup> 750 PSI

PRUEBAS DE TENSION

ANALISIS QUIMICO % EN PESO

CHEMICAL ANALYSES PERCENT WEIGHT

RESISTENCIA DESCRIPCION	CORADA HEAT	LIMITE ELASTICO YIELD STRENGTH (FALL)	ULTIMA TENSION TENSILE STRENGTH (FALL)	% ELONG. 2"	LD/UT Y.F.T.S.	C	Min	P	S	Cb	V	TI	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
24-11 TC TS	121136	53 992	66 548 70 075	38	0.81	0.143	0.83	0.017	0.009	-	-	-	0.176	0.016	0.039	0.0005	0.017	0.029	-	-	-
12-24 TC TS	121137	54 061	66 348 69 028	41	0.81	0.133	0.76	0.011	0.011	-	-	-	0.190	0.017	0.046	0.0004	0.014	0.029	-	-	-
18-19 TC TS	121142	53 088	63 200 72 563	40	0.84	0.141	0.82	0.018	0.008	-	-	-	0.174	0.010	0.041	0.0004	0.018	0.028	-	-	-
28-3 TC TS	121173	53 207	68 637 69 558	38	0.78	0.143	0.82	0.014	0.009	-	-	-	0.212	0.013	0.036	0.0031	0.024	0.032	-	-	-
27-11 TC TS	221120	54 217	64 052 69 648	35	0.85	0.135	0.81	0.018	0.007	-	-	-	0.152	0.024	0.038	0.0004	0.023	0.033	-	-	-
14-11 TC TS	221123	51 418	64 962 69 939	41	0.79	0.132	0.76	0.019	0.009	-	-	-	0.165	0.020	0.046	0.0004	0.027	0.037	-	-	-
13-7 TC TS	221124	51 313	68 418 72 000	39	0.75	0.136	0.79	0.014	0.007	-	-	-	0.150	0.013	0.039	0.0004	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 A53-B -99

ING. FERNANDO ORDOÑEZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER