



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO:	PEN-51116-2002
CUSTOMER:		FECHA:	FEBRERO 09, 2002
PEDIDO CLIENTE / C.A.	8662	DATE:	
PEDIDO INTERNO / I.O.			
PARTIDA(S)			
ITEMS	25343-70		

DIAMETRO: 10 3/4"      ESPESOR DE PARED: 0.219"      GRADO:      ASTM A53-B      PRESION HIDROSTATICA: 60 Kg/cm<sup>2</sup>      860 PSI

PRUEBAS DE TENSION

TENSILE TEST

GRADO:

ASTM A53-B

PRESION HIDROSTATICA:

60 Kg/cm<sup>2</sup>

860 PSI

ANALISIS QUIMICO % EN PESO

CHEMICAL ANALYSIS PERCENT WEIGHT

NUM. PROBEA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 1"	LEBUT Y.S.P.T.S	C	Mn	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Cr	NI	Mo	N	Ceq
5-23 Tc TS	115093	50 989	65 641	38	0.78	0.125	0.92	0.013	0.005	-	-	-	0.179	0.022	0.041	0.0044	0.017	0.031	-	-	-
10-14 Tc TS	115094	49 142	71 698	38	0.77	0.140	0.91	0.014	0.007	-	-	-	0.171	0.023	0.030	0.0040	0.020	0.028	-	-	-
4-26 Tc TS	115136	55 650	68 624	37	0.83	0.150	0.94	0.018	0.007	-	-	-	0.170	0.018	0.038	0.0030	0.018	0.021	-	-	-
12-14 Tc TS	115139	50 019	69 577	40	0.79	0.139	0.88	0.016	0.006	-	-	-	0.159	0.022	0.041	0.0023	0.018	0.023	-	-	-
2-1 Tc TS	212527	49 904	69 419	34	0.75	0.146	0.88	0.018	0.010	-	-	-	0.161	0.023	0.038	0.0021	0.016	0.027	-	-	-
			74 627																		

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 OSORIO PEREZ  
GERENTE DE ASESURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER