

PLM-005-7

PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICAL-CHEMICAL

CLIENTE: TUCOTA  
CUSTOMER: TUCOTA  
PEDIDO CLIENTE / P.O. 8075  
PEDIDO INTERNO / I.O. 8075  
PARTIDA (S) 25343-70/21341-20

NUMERO PTM-50809-2002  
FECHA ENERO 17, 2002  
DATE

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

PRUEBAS DE TENSION TENSILE TEST


CHEMICAL ANALYSES PERCENT WEIGHT

NUM. PROBEA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. %	LEADIT V.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	-	-	-	
12-14 TC TS	115139	50 019	68 624	40	0.79	0.139	0.88	0.016	0.006	-	-	-	0.159	0.022	0.041	0.0023	0.018	0.023	-	-	-	
3-17 TC TS	211291	45 981	63 377	40	0.72	0.141	0.93	0.014	0.007	-	-	-	0.175	0.041	0.038	0.0028	0.023	0.030	-	-	-	
8-4B TC TS	211491	49 261	69 677	40	0.70	0.145	0.92	0.018	0.007	-	-	-	0.180	0.017	0.029	0.0035	0.021	0.032	-	-	-	
9-2 TC TS	211493	48 329	70 608	39	0.70	0.149	0.95	0.020	0.006	-	-	-	0.210	0.017	0.030	0.0024	0.019	0.035	-	-	-	
7-18B TC TS	211494	49 922	68 586	33	0.68	0.146	0.93	0.024	0.007	-	-	-	0.186	0.012	0.045	0.0032	0.019	0.027	-	-	-	
2-1 TC TS	212527	49 904	72 063	34	0.75	0.146	0.88	0.018	0.010	-	-	-	0.161	0.023	0.038	0.0021	0.016	0.027	-	-	-	
			74 937																			
			66 138																			
			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. FERRNANDO SORDO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER