



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-47048-2001
CUSTOMER:		NUMBER	
pedido cliente / n.o.	6903	FECHA	MAYO 16, 2001
pedido interno / i.o.		DATE	
partida (s)			
items	16796-40 / 15287-20		

TAMANO: 10 3/4" ESPESOR DE PARED: 0.365" GRADO: API 5L X-42  
 SIZE: 10 3/4" WALL THICKNESS: 0.365" GRADE: API 5L X-42  
 PRESION HIDROSTATICA: 170 Kg/cm<sup>2</sup> 2420 PSI

TENSILE TEST

CHEMICAL ANALYSIS PERCENT WEIGHT

NUMEROTA DESCRIPCION	COALBA HEAT	LIMITE ELASTICO YIELD STRENGTH (GALL)	ULTIMA TENSION TENSILE STRENGTH (GALL)	% ELONG. % EL.	UNEQ. YANG	C	MB	P	S	CB	V	TI	SI	Cu	Al	Ca	Cr	NI	Mo	N	Ceq
13-6 Tc Ts	107167	47 762	67 151 73 311	39	0.71	0.140	0.87	0.018	0.006	-	-	-	0.160	0.013	0.032	0.0050	0.030	0.030	-	0.0072	
14-14 Tc Ts	107168	52 181	62 617 70 358	42	0.83	0.146	0.90	0.017	0.007	-	-	-	0.235	0.013	0.038	0.0033	0.015	0.030	-	0.0067	
35-3 Tc Ts	107955	54 813	64 263 73 122	41	0.85	0.132	0.91	0.012	0.005	-	-	-	0.208	0.016	0.038	0.0016	0.013	0.026	-	0.0068	
32-1 Tc Ts	108004	53 574	65 793 72 565	43	0.81	0.148	0.83	0.014	0.006	-	-	-	0.169	0.017	0.047	0.0041	0.025	0.037	-	0.0041	
106-10 Tc Ts	207253	52 242	67 656 73 186	39	0.77	0.154	0.88	0.013	0.006	-	-	-	0.174	0.016	0.038	0.0032	0.015	0.025	-	0.0058	
75-14 Tc Ts	207256	51 928	63 257 71 819	41	0.82	0.149	0.90	0.017	0.006	-	-	-	0.143	0.014	0.030	0.0027	0.017	0.026	-	0.0050	
49-19 Tc Ts	207885	57 269	70 600 75 386	41	0.86	0.144	0.83	0.017	0.007	-	-	-	0.205	0.015	0.040	0.0036	0.023	0.029	-	0.0062	
17-18 Tc Ts	207843	54 987	60 171 71 354	41	0.83	0.147	0.91	0.018	0.007	-	-	-	0.202	0.018	0.050	0.0037	0.022	0.032	-	0.0044	

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:

API SPECIFICATION 5L

FORTY-SECOND EDITION, JANUARY, 2000

EFFECTIVE DATE : JULY 1, 2000

ING. FERNANDO OSORIO PÉREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER