



PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS**  
QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE CUSTOMER:	TUCOTA	NUMERO NUMBER:	FTM-5869-2004
PEDIDO CLIENTE/P.O. ORDER NO.:	11922	FECHA DATE:	JUNIO 02, 2004
PARTIDA (S) ITEMS:	32944-48/58704-18		

DIAMETRO: 14" ESPESOR DE PARED: 0.375" GRADO: ASTM A53-B

DIAMETER: 14" WALL THICKNESS: 0.375" GRADE: ASTM A53-B

PRESSION HIDROSTATICA: 1120 PSI  
ANALISIS QUIMICO % EN PESO  
CHEMICAL ANALYSIS PERCENT WEIGHT

IDENTIFICACION IDENTIFICATION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH @ 0.2%	TENSION DE TRABAJO TENSILE STRENGTH @ 0.2%	% ELONGACION % ELONGATION	LIBRETS YARDS	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSIS PERCENT WEIGHT														
						C	Mn	P	S	Co	V	Ti	Si	Cr	Al	Ca	Cr	Ni	Mo	N
27-9 Tc Ts	121188	55 173	64 685	42	0.85	0.142	0.83	0.018	0.006	-	-	0.217	0.014	0.045	0.0027	0.015	0.024	-	-	-
21-4 Tc Ts	121189	55 804	65 618	45	0.85	0.142	0.81	0.018	0.006	-	-	0.192	0.015	0.037	0.0018	0.016	0.026	-	-	-
20-16 Tc Ts	121170	56 928	71 196	41	0.89	0.124	0.79	0.024	0.010	-	-	0.166	0.015	0.035	0.0023	0.011	0.025	-	-	-
4-88 Tc Ts	121171	54 571	74 733	41	0.87	0.137	0.81	0.020	0.008	-	-	0.202	0.014	0.030	0.0025	0.019	0.029	-	-	-
25-8 Tc Ts	121172	58 848	66 919	40	0.88	0.135	0.81	0.012	0.010	-	-	0.212	0.014	0.042	0.0028	0.020	0.023	-	-	-
28-1 Tc Ts	121173	54 130	63 969	42	0.85	0.143	0.82	0.014	0.009	-	-	0.212	0.013	0.036	0.0031	0.024	0.032	-	-	-
48-10 Tc Ts	137095	68 423	79 028	37	0.87	0.098	1.13	0.011	0.006	-	-	0.304	0.014	0.042	0.0035	0.023	0.026	-	-	-
13-14 Tc Ts	221152	54 448	80 802	42	0.84	0.139	0.81	0.015	0.006	-	-	0.198	0.011	0.036	0.0028	0.018	0.022	-	-	-
18-1 Tc Ts	221153	56 841	64 585	42	0.88	0.143	0.84	0.018	0.006	-	-	0.173	0.010	0.043	0.0024	0.019	0.022	-	-	-
			71 303																	

CERTIFICAMOS QUE LA TUBERIA ACU 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 OSORIO PEREZ  
GERENTE DE ASIGNAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER