



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTIA	NUMERO	PTM-52555-56-2002
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.	9157	FECHA	
PEDIDO INTERNO / I.O.		DATE	JULIO 19, 2002
PARTIDA (S)			
ITEMS	32945-30 / 32537-20		

ESPESSOR DE PARED
WALL THICKNESS

0.250"

GRADO:
GRADE:

ASTM A53-B

PRESION HIDROSTATICA:
HYDROSTATIC TEST:

58 Kg/cm²

820 PSI

PRUEBAS DE TENSION
TENSILE TEST

ANALISIS QUIMICO % EN PESO
CHEMICAL ANALYSIS PERCENT WEIGHT

NUMERACION DESCRIPTION	QUILAS KGS	LARGO ELASTICO YIELD STRETCH (in)	ULTIMA TENSION TENSILE STRENGTH (KSI)	% ELONG. % EL.	LABIL YIELD	C	Mn	P	S	Cb	V	Ti	SI	Cu	Al	Ca	NI	Mo	N	Ceq
3-11 Tc Ts	120145	50 772	66 808 71 699	41	0.76	0.142	0.83	0.017	0.005	-	-	-	0.153	0.018	0.042	0.0032	0.023	0.028	-	-
25-8 Tc Ts	121106	49 852	65 782 67 825	40	0.76	0.152	0.84	0.017	0.008	-	-	-	0.116	0.011	0.027	0.0015	0.021	0.023	-	-
21-15 Tc Ts	121107	53 425	63 041 68 889	41	0.85	0.132	0.81	0.013	0.007	-	-	-	0.141	0.010	0.040	0.0005	0.016	0.032	-	-
30-12 Tc Ts	121108	53 561	65 880 72 106	37	0.81	0.144	0.79	0.021	0.010	-	-	-	0.133	0.015	0.034	0.0005	0.022	0.032	-	-
35-14 Tc Ts	121223	51 422	65 388 72 124	40	0.79	0.140	0.83	0.018	0.005	-	-	-	0.150	0.013	0.036	0.0002	0.014	0.024	-	-
10-1 Tc Ts	221050	48 954	67 868 72 111	36	0.72	0.170	1.11	0.014	0.008	-	-	-	0.213	0.015	0.045	0.0024	0.031	0.036	-	-
13-5 Tc Ts	221051	48 073	74 169 75 148	37	0.65	0.161	1.14	0.017	0.008	-	-	-	0.196	0.015	0.038	0.0036	0.035	0.031	-	-
6-1 Tc Ts	221052	49 496	68 745 73 057	35	0.72	0.164	1.10	0.016	0.008	-	-	-	0.220	0.017	0.043	0.0035	0.033	0.028	-	-
19-6 Tc Ts	221072	53 689	63 889 70 392	35	0.84	0.137	0.81	0.017	0.010	-	-	-	0.159	0.021	0.043	0.0003	0.025	0.029	-	-
12-14 Tc Ts	221073	52 861	65 812 73 435	40	0.80	0.145	0.81	0.019	0.008	-	-	-	0.142	0.013	0.030	0.0004	0.026	0.028	-	-

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. ERNANDO OSORIO BARRAZ
GERENTE DE ASEGURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER