



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO:	PT-1-53260-2001
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.:	9577	FECHA:	OCTUBRE 08, 2002
PEDIDO INTERNO / I.O.:		DATE	
PARTIDA (S):	33945-30 / 31540-10		

DIAMETRO: 12 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 820 PSI
WALL THICKNESS: 0.250" GRADE: ASTM A53-B HIDROSTATIC TEST: 58 Kg/cm²

TENSILE TEST


CHEMICAL ANALYSIS PERCENT WEIGHT

DESCRIPTION	COLUMA	YIELD STRENGTH (PSI)	ULTIMATE TENSION (PSI)	% ELONG.	ELONG. Y/8" S	C	Mn	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
3-11 Tc	120145	50 772	66 806	41	0.76	0.142	0.93	0.017	0.005	-	-	-	0.153	0.018	0.042	0.0032	0.023	0.028	-	-	-
Ts			71 689																		
7-7 Tc	120157	52 021	66 846	38	0.78	0.170	1.15	0.019	0.008	-	-	-	0.190	0.018	0.044	0.0026	0.024	0.030	-	-	-
Ts			68 096																		
1-12 Tc	121075	53 528	65 570	40	0.82	0.137	0.81	0.018	0.009	-	-	-	0.174	0.013	0.042	0.0004	0.026	0.036	-	-	-
Ts			72 586																		
10-12 Tc	121077	53 549	66 401	38	0.81	0.150	0.81	0.019	0.008	-	-	-	0.150	0.013	0.030	0.0004	0.026	0.026	-	-	-
Ts			73 213																		
25-8 Tc	121106	49 852	65 782	40	0.78	0.152	0.84	0.017	0.006	-	-	-	0.116	0.011	0.027	0.0015	0.021	0.023	-	-	-
Ts			67 825																		
21-15 Tc	121107	53 425	63 041	41	0.85	0.132	0.81	0.013	0.007	-	-	-	0.141	0.010	0.040	0.0005	0.016	0.032	-	-	-
Ts			69 689																		
34-16 Tc	121109	52 759	65 422	37	0.81	0.126	0.84	0.020	0.009	-	-	-	0.146	0.013	0.044	0.0006	0.019	0.025	-	-	-
Ts			70 673																		
8-14 Tc	221071	51 285	62 343	40	0.82	0.146	0.79	0.019	0.009	-	-	-	0.145	0.016	0.042	0.0004	0.033	0.050	-	-	-
Ts			68 536																		
19-6 Tc	221072	53 689	63 889	35	0.84	0.137	0.81	0.017	0.010	-	-	-	0.159	0.021	0.043	0.0003	0.025	0.029	-	-	-
Ts			70 382																		
12-14 Tc	221073	52 861	65 812	40	0.80	0.145	0.81	0.019	0.008	-	-	-	0.142	0.013	0.030	0.0004	0.026	0.028	-	-	-
Ts			73 435																		

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


HECTOR FERNANDO OCHOA PEREZ
GERENTE DE ASESURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER