



PROCARSA, S.A. DE CV.

CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CUSTOMER: TUCOTA  
CLIENTE: TUCOTA  
PARTIDA (S) 32945-36  
ITEMS

PELIDO CLIENTE / P.O. 9577  
PELIDO INTERNO / I.O.

NUMERO PTM-53259-2002  
FECHA OCTUBRE 08, 2002  
DATE

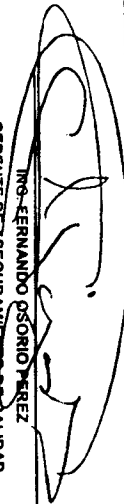
DIAMETRO: 12 3/4" ESPESOR DE PAREDO 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 58 kg/cm<sup>2</sup> 820 PSI  
DIAMETER: WALL THICKNESS GRADE: ASTM A53-B ANALISIS QUIMICO % EN PESO  
CHEMICAL ANALYSES PERCENT WEIGHT

NUMERO DE PROPIEDAD DESCRIPTION	COLUMNA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. %	LEANT V.S.T.S	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSES PERCENT WEIGHT														
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N
3-11 TC TS	120145	50 772	66 806 71 699	41	0.76	0.142	0.93	0.017	0.005	-	-	-	0.153	0.018	0.042	0.0032	0.023	0.028	-	-
10-12 TC TS	121077	53 549	66 401 73 213	38	0.81	0.150	0.81	0.019	0.008	-	-	-	0.150	0.013	0.030	0.0004	0.026	0.026	-	-
25-8 TC TS	121106	49 852	65 782 67 825	40	0.76	0.152	0.84	0.017	0.006	-	-	-	0.116	0.011	0.027	0.0015	0.021	0.023	-	-
10-12 TC TS	121077	53 549	66 401 73 213	38	0.81	0.150	0.81	0.019	0.008	-	-	-	0.150	0.013	0.030	0.0004	0.026	0.026	-	-
34-16 TC TS	121109	52 759	65 422 70 873	37	0.81	0.126	0.84	0.020	0.009	-	-	-	0.145	0.013	0.044	0.0006	0.019	0.025	-	-
8-14 TC TS	221071	51 295	62 343 68 538	40	0.82	0.146	0.79	0.019	0.009	-	-	-	0.145	0.016	0.042	0.0004	0.033	0.050	-	-
19-6 TC TS	221072	53 699	63 899 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- FERNANDO OSORIO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER