



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CUSTOMER: LUCOJA
 PEDIDO CLIENTE / P.O. 10040
 PARTIDA (S) 32944-30
 ITEMS
 NUMBER P1101-54328,29-2003
 FECHA MARZO 13, 2003
 DATE

DIAMETRO: 14" ESPESOR DE PARED WALL THICKNESS 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 53 Kg/cm² 750 PSI

PRUEBAS DE TENSION TENSILE TEST

GRADO: ASTM A53-B

ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSES PERCENT WEIGHT

NUM/PROBETA DESCRIPCION	COJUNA BEAT	LIMITE ELASTICO YIELD STRENGTH (F.S.L)	ULTIMA TENSION TENSILE STRENGTH (F.S.L)	% ELONG. 2"	LEJUT Y.075	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mn	N	Ceq	
24-11 Tc	121136	53 982	66 548	38	0.81	0.143	0.83	0.017	0.009	-	-	-	0.176	0.016	0.039	0.0005	0.017	0.029	-	-	-	
12-24 Tc	121137	54 061	70 075	41	0.81	0.133	0.76	0.011	0.011	-	-	-	0.180	0.017	0.046	0.0004	0.014	0.029	-	-	-	
18-19 Tc	121142	53 088	69 028	40	0.84	0.141	0.82	0.018	0.008	-	-	-	0.174	0.010	0.041	0.0004	0.018	0.028	-	-	-	
28-3 Tc	121173	53 207	72 563	38	0.78	0.143	0.82	0.014	0.009	-	-	-	0.212	0.013	0.036	0.0031	0.024	0.032	-	-	-	
27-11 Tc	221120	54 217	69 558	35	0.85	0.135	0.81	0.018	0.007	-	-	-	0.152	0.024	0.038	0.0004	0.023	0.033	-	-	-	
14-11 Tc	221123	51 418	64 962	41	0.79	0.132	0.76	0.019	0.009	-	-	-	0.165	0.020	0.046	0.0004	0.027	0.037	-	-	-	
13-7 Tc	221124	51 313	69 939	39	0.75	0.136	0.79	0.014	0.007	-	-	-	0.150	0.013	0.039	0.0004	0.022	0.033	-	-	-	
			72 000																			

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 A53-B -89

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