



FLM-005-7

PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CUSTOMER:	TUCOTA	CLIENTE:	TUCOTA
REQUESTED CLIENT / P.O.:	11345	REQUESTED CLIENT / P.O.:	11345
INTERNAL PART / ID.:		INTERNAL PART / ID.:	
ITEMS:	49827-50	ITEMS:	49827-50
NUMBER	PTM-57084-2003	NUMBER	PTM-57084-2003
DATE:	DICIEMBRE 16, 2003	DATE:	DICIEMBRE 16, 2003

METRO: 10 3/4" ESPESOR DE PARED: 0.365" GRADO: ASTM A53-B PRESION HIDROSTATICA: 143 PSI
WALL THICKNESS: 0.365" GRADE: ASTM A53-B ANALISIS QUIMICO % EN PESO: 10 Kg/cm²

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

DESCRIPCION	COLADA	LIMITE ELASTICO YIELD STRENGTH (PSI)	ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG. 2"	LEANT VESIG	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
23-11 TC	236057	62 528	75 792	36	0.83	0.175	1.08	0.019	0.007	0.001	0.004	0.003	0.283	0.031	0.036	0.0029	0.025	0.035	0.005	0.0051	
Ts			86 801																		
29-2 TC	236080	56 810	70 555	35	0.81	0.185	1.08	0.016	0.006	0.001	0.002	0.004	0.316	0.031	0.035	0.0019	0.018	0.025	0.006	0.0048	
Ts			76 703																		
30-16 TC	236061	63 131	72 697	37	0.87	0.187	1.10	0.016	0.006	0.001	0.002	0.003	0.281	0.022	0.036	0.0014	0.017	0.026	0.004	0.0043	
Ts			80 407																		
13-10 TC	236062	59 020	64 079	34	0.92	0.153	1.05	0.020	0.006	0.001	0.003	0.004	0.288	0.021	0.037	0.0016	0.016	0.026	0.003	0.0049	
Ts			78 652																		
11-13 TC	236083	55 801	62 422	38	0.89	0.189	1.14	0.012	0.006	0.001	0.004	0.003	0.285	0.033	0.042	0.0033	0.014	0.022	0.004	0.0055	
Ts			77 828																		
9-16 TC	236086	56 887	72 504	36	0.78	0.162	1.11	0.021	0.006	0.001	0.002	0.003	0.282	0.016	0.044	0.0029	0.011	0.021	0.003	0.0063	
Ts			78 659																		

VERIFICAMOS QUE LA TUBERIA ACUÍ DESCRITA CUMPLE Y HA SIDO REVICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO A LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

ASTM A53-B-99

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

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