FLM-005-7

PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: TUCOTA
CUSTOMER:

NUMERO / NUMBER: PTM-52512-2002

PEDIDO CLIENTE /P.O.
PEDIDO INTERNO / I.O. 9157
PARTIDA (S)
ITEMS 36766-50

FECHA / DATE: JULIO 13, 2002

DIAMETRO / DIAMETER: 10 3/4"

ESPESOR DE PARED / WALL THICKNESS: 0.365"

GRADO / GRADE: ASTM A53-B

PRESION HIDROSTATICA / HIDROSTATIC TEST: 101 Kg/cm² 1430 PSI

PRUEBAS DE TENSION / TENSILE TEST

NUM.PROBETA / DESCRIPTION	COLADA / HEAT	LIMITE ELASTICO / YIELD STRENGTH (P.S.I.)	ULTIMA TENSION / TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LE/ULT Y.S/T.S
1-11 Tc	223930	54 126	73 163	35	0.74
Ts			81 047		
8-1 Tc	223931	58 890	73 832	35	0.80
Ts			79 265		
20-5 Tc	223932	53 551	69 529	35	0.77
Ts			76 500		
36-10 Tc	223971	57 257	71 351	37	0.80
Ts			76 646		
34-11 Tc	223972	54 419	72 059	37	0.76
Ts			78 004		

ANALISIS QUIMICO % EN PESO / CHEMICAL ANALYSES PERCENT WEIGHT

C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca		Ni	Mo	N	Ceq
0.180	1.14	0.020	0.007	0.003	0.004	0.002	0.190	0.043	0.041	0.0039	0.023	0.028	0.012	0.0059	
0.174	1.18	0.019	0.007	0.001	0.002	0.003	0.194	0.036	0.039	0.0027	0.012	0.024	0.006	0.0079	
0.180	1.12	0.019	0.006	0.001	0.002	0.003	0.185	0.031	0.036	0.0027	0.020	0.026	0.005	0.0072	
0.157	1.17	0.021	0.006	0.001	0.004	0.002	0.183	0.025	0.039	0.0027	0.016	0.027	0.004	0.0064	
0.178	1.11	0.014	0.007	0.001	0.002	0.003	0.212	0.024	0.033	0.0022	0.018	0.024	0.004	0.0049	

TIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO RICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO I 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