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-58099-2-2004

PEDIDO CLIENTE /P.O.
PEDIDO INTERNO / I.O. 11742
PARTIDA (S)
ITEMS 52833-10

FECHA / DATE: MARZO 30, 2004

IETRO :
IETER : 20"

ESPESOR DE PARED / WALL THICKNESS: 0.375"

GRADO : / GRADE : ASTM A53-B

PRESION HIDROSTATICA: / HIDROSTATIC TEST: 56 Kg/cm² 790 PSI

PRUEBAS DE TENSION / TENSILE TEST

PROBETA / CRIPTION	COLADA / HEAT	LIMITE ELASTICO / YIELD STRENGTH (P.S.I.)	ULTIMA TENSION / TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LE/U.T / Y.S/T.S
18-1 Tc	138572	55 422	70 316	37	0.79
Ts			79 071		
24-4 Tc	238284	46 854	66 698	40	0.70
Ts			76 557		
9-8 Tc	238286	49 052	66 492	38	0.74
Ts			76 185		
6-8 Tc	238287	50 079	69 369	37	0.72
Ts			76 058		
3-3 Tc	238288	50 473	69 069	37	0.73
Ts			77 776		
28-8 Tc	238289	53 242	70 760	38	0.75
Ts			80 133		

ANALISIS QUIMICO % EN PESO / CHEMICAL ANALYSES PERCENT WEIGHT

C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
0.170	1.13	0.017	0.006	0.002	0.004	0.003	0.195	0.017	0.036	0.0022	0.024	0.032	0.009	0.0061	
0.156	1.13	0.012	0.007	0.002	0.004	0.003	0.216	0.027	0.034	0.0025	0.022	0.029	0.009	0.0073	
0.167	1.10	0.012	0.004	0.001	0.002	0.003	0.227	0.030	0.040	0.0025	0.023	0.031	0.006	0.0075	
0.172	1.11	0.013	0.006	0.002	0.004	0.004	0.235	0.029	0.037	0.0029	0.025	0.037	0.009	0.0073	
0.165	1.09	0.016	0.007	0.003	0.004	0.004	0.237	0.017	0.039	0.0029	0.025	0.035	0.01	0.0076	
0.163	1.10	0.020	0.006	0.002	0.005	0.004	0.226	0.024	0.043	0.0026	0.030	0.035	0.009	0.0054	

IFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO ICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO 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