



PROCARSA, S.A. DE C.V.

**CERTIFI DO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICAL-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-51118-2002
CUSTOMER:		FECHA	FEBRERO 09, 2002
pedido cliente / PED	8301	DATE	
pedido interno / I.O.			
partidas (S)			
ITEMS	30778-10 / 31540-10		

DIAMETRO	12 3/4"	ESPESOR DE PARED	0.250"	GRADO:	ASTM A53-B	PRESON HIDROSTATICA:	58 Kg/cm ²	820 PSI
DIAMETER:	12 3/4"	WALL THICKNESS	0.250"	GRADE:	ASTM A53-B	HIDROSTATIC TEST:		

NUM. PROBE DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. E ₂	LEADY Y.S.T.S	CHEMICAL ANALYSIS PERCENT WEIGHT														
						C	Min	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N
6-10 TC TS	118508	49 001	67 476 68 973	38	0.73	0.169	1.11	0.014	0.004	0.0010	0.0020	0.0030	0.212	0.031	0.040	0.0037	0.017	0.027	0.0050	0.0048
8-5 TC TS	118511	47 613	68 390 72 856	35	0.70	0.150	1.11	0.014	0.007	0.0020	0.0050	0.0050	0.195	0.018	0.039	0.0029	0.021	0.031	0.0150	0.0042
7-7 TC TS	118512	51 828	66 116 69 700	34	0.78	0.165	1.11	0.015	0.007	0.0030	0.0030	0.0040	0.218	0.021	0.045	0.0026	0.021	0.025	0.0140	0.0062
12-3 TC TS	118513	48 342	66 022 67 119	35	0.73	0.165	1.12	0.016	0.006	0.0020	0.0030	0.0030	0.183	0.020	0.034	0.0022	0.019	0.021	0.0140	0.0049
2-5 TC TS	118514	49 206	65 343 66 578	40	0.75	0.151	1.11	0.012	0.006	0.0020	0.0030	0.0030	0.188	0.022	0.045	0.0023	0.020	0.017	0.0130	0.0051
7-7 TC TS	120157	52 021	66 846 68 096	38	0.78	0.170	1.15	0.019	0.008	0.0030	0.0050	0.0040	0.190	0.018	0.044	0.0026	0.024	0.030	0.0180	0.0047
15-1 TC TS	120159	52 003	68 587 78 582	33	0.76	0.179	1.15	0.016	0.008	0.0030	0.0040	0.0040	0.197	0.014	0.037	0.0021	0.025	0.024	0.0160	0.0061
5-22 TC TS	218176	50 676	70 077 75 754	34	0.72	0.166	1.13	0.014	0.005	0.0010	0.0030	0.0030	0.216	0.033	0.045	0.0026	0.014	0.024	0.0060	0.0055
9-25 TC TS	218177	49 315	66 027 68 493	37	0.74	0.174	1.18	0.015	0.003	0.0010	0.0030	0.0030	0.200	0.027	0.045	0.0019	0.016	0.022	0.0050	0.0051

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