



FLM-005-7

PROCARSA, S.A. DE CV.

**CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO:	PTM-50261-2-2001
CUSTOMER:		NUMBER:	
PEDIDO CLIENTE / P.O.	8057	FECHA:	DICIEMBRE 12, 2001
PEDIDO INTERNO / I.O.		DATE:	
PARTIDA (S)			
ITEMS	22458-30		

DIAMETRO: 12 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 58 Kg/cm² 820 PSI

PRUEBAS DE TENSION

CHEMICAL ANALYSIS PERCENT WEIGHT

NUM.PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (F _{0.2})	ULTIMA TENSION TENSILE STRENGTH (F _{0.1})	% ELONG. 2"	LENGT V.9793	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
14-17 TC TS	212086	62 672	74 422	38	0.84	0.083	1.15	0.013	0.007	0.0150	0.0010	-	0.179	0.035	0.048	0.0015	0.007	0.040	0.0070	0.0059	
18-2 TC TS	212087	62 482	75 262	33	0.83	0.076	1.12	0.017	0.005	0.0190	0.0020	-	0.192	0.027	0.049	0.0018	0.016	0.029	0.0050	0.0062	
11-15 TC TS	212088	68 523	79 431	31	0.86	0.077	1.13	0.018	0.005	0.0220	0.0040	-	0.185	0.049	0.050	0.0021	0.018	0.034	0.0080	0.0059	
31-1 TC TS	212089	61 143	72 538	35	0.84	0.074	1.17	0.018	0.005	0.0180	0.0040	-	0.202	0.028	0.059	0.0021	0.018	0.036	0.0040	0.0055	

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