



**PROCARSA, S.A. DE C.V.**

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-51019-1-2002
CUSTOMER:		NUMBER	
PERDIDO CLIENTE / P.O.	8075	FECHA	FEBRERO 01, 2002
PERDIDO INTERNO / I.O.		DATE	
PARTIDA(S)	30778-30		

DIAMETRO: 12 3/4"      ESPESOR DE PARED: 0.375"      GRADO:      ASTM A53-B      PRESION HIDROSTATICA: 87 Kg/cm<sup>2</sup>      1240 PSI

**TENSILE TEST**


**CHEMICAL ANALYSIS PERCENT WEIGHT**

NUM/PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LEUOIT Y.S.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	C'eq
15-8 TC TS	118511	49 705	74 939 76 590	37	0.66	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	
2-14 TC TS	118516	57 823	68 733 76 320	35	0.84	0.150	1.12	0.016	0.007	0.0030	0.0040	0.0030	0.183	0.017	0.029	0.0037	0.021	0.019	0.0140	0.0048	
8-16 TC TS	218175	56 086	76 429 77 932	39	0.73	0.162	1.12	0.015	0.004	0.0010	0.0030	0.0030	0.191	0.022	0.041	0.0021	0.013	0.020	0.0050	0.0051	
14-1 TC TS	218178	52 942	67 311 75 374	37	0.79	0.158	1.15	0.014	0.004	0.0010	0.0020	0.0030	0.191	0.022	0.040	0.0028	0.013	0.029	0.0050	0.0050	

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

  
ROBERTO OSORIO NEREY  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER