



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CIENTE:	TRICOTA	NUMERO	PTM-51001-2002
CUSTOMER:		NUMBER	
PERDIDO CLIENTE / P.O.	8301	FECHA	FEBRERO 02, 2002
PERDIDO INTERNO / I.O.		DATE	
PARTIDA(S)	30778-10		

DIAMETRO: 12 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESSION HIDROSTATICA: 820 PSI

PRUEBAS DE TENSION

ANALISIS QUIMICO % EN PESO

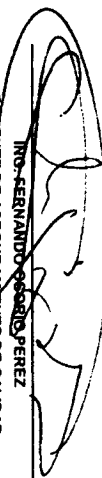
CHEMICAL ANALYSES PERCENT WEIGHT

NUM. PROBEYA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (F _{0.2})	ULTIMA TENSION TENSILE STRENGTH (F _{0.1})	% ELONG. E	LEO/T Y _{0.01}	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
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	
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	

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


INO-HERNANDO OSORIO PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER