

7LM-005-7



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: FLESA ANAHUAC S.A. DE C.V.  
CUSTOMER:

PEDIDO CLIENTE / P.O. 12097  
PEDIDO INTERNO / I.O.  
PARTIDA (S)  
ITEMS

NUMERO  
NUMBER

FECHA  
DATE

FTM-58453-1-2004

MAYO 06, 2004

DIAMETRO : DIAMETER : 10 3/4"	ESPESOR DE PARED WALL THICKNESS 0.365"	GRADO : GRADE : ASTM A53-B	101 Kg/cm <sup>2</sup> 1430 PSI
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**PRUEBAS DE TENSION  
TENSILE TEST**

NUM. PROBETA DESCRIPTION	COLADA BEAT	LIMITE ELASTICO YIELD STRENGTH (σ <sub>SL</sub> )	ULTIMA TENSION TENSILE STRENGTH (σ <sub>SL</sub> )	% ELONG. %	LEVT Y. STS	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSES PERCENT WEIGHT											Ceq			
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca		Cr	Ni	Mo
14-3 Tc Ts	132497	59 945	74 148 82 415	34	0.81	0.173	1.08	0.017	0.009	0.010	0.004	0.004	0.301	0.037	0.030	0.0034	0.019	0.027	0.007	0.0052
37-1 Tc Ts	235614	67 208	74 574 80 580	40	0.90	0.156	1.05	0.013	0.006	0.010	0.003	0.003	0.181	0.016	0.004	0.0025	0.018	0.023	0.004	0.0041
21-6 Tc Ts	236058	60 473	72 852 81 034	36	0.83	0.167	1.14	0.012	0.007	0.001	0.002	0.003	0.307	0.016	0.045	0.0031	0.014	0.027	0.005	0.0052
16-20 Tc Ts	237376	65 359	83 100 86 167	32	0.79	0.156	1.07	0.011	0.008	0.010	0.002	0.003	0.178	0.019	0.036	0.0030	0.023	0.026	0.004	0.0057

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APPLICABLES DE LA ESPECIFICACION: ASTM A53-B -89

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

GERENTE DE ASESORAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER

*[Signature]*  
FERNANDO SORIO PEREZ