

PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PTM-58099-2004
CUSTOMER:		NUMBER	
PEDIDO CLIENTE/P.O.	11721	FECHA	MARZO 30, 2004
PEDIDO INTERNO/I.O.		DATE	
PARTIDA(S)			
ITEMS	49827-50		

DIAMETRO : 10 3/4"      ESPESOR DE PARED : 0.365"      GRADO :      API 5L X-42      PRESION HIDROSTATICA : 170 Kg/cm<sup>2</sup>      2420 PSI

**PRUEBAS DE TENSION**

WALL THICKNESS

ANALISIS QUIMICO % EN PESO

HIDROSTATIC TEST:

CHEMICAL ANALYSES PERCENT WEIGHT

NUMPROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. % ELONG.	LEAIT YEATS	C	Min	P	S	Cb	V	TI	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
33-12 TC TS	136365	52 722	71 893	35	0.73	0.180	1.12	0.013	0.010	0.001	0.003	0.004	0.298	0.078	0.037	0.0028	0.017	0.027	0.004	0.0039	
38-15 TC TS	136366	55 748	74 011	36	0.75	0.170	1.12	0.016	0.005	0.001	0.005	0.004	0.280	0.046	0.044	0.0032	0.019	0.025	0.008	0.0069	
42-16 TC TS	236084	57 561	71 487	36	0.81	0.176	1.12	0.015	0.006	0.001	0.003	0.003	0.261	0.050	0.042	0.0030	0.020	0.036	0.005	0.0049	

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:

API SPECIFICATION 5L

FORTY-SECOND EDITION, JANUARY, 2000

EFFECTIVE DATE: JULY 1 2000

ING. FERNANDO OSORIO PEREZ  
SERENTE DE ASEGURAMIENTO DE CALIDAD



QUALITY ASSURANCE MAPA 311