



FLM-005-7  
**PROCARSA, S.A. DE C.V.**

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: PLESA ANAHUAC Y CIAS. S.A. DE C.V.

CUSTOMER:

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 2110

PARTIDA (S)

ITEMS 95014-60 / 93322-40 / 96152-20

NUMERO PTM-74012-2009

NUMBER

FECHA

DATE FEBRERO 13, 2009

DIAMETRO : ESPESOR DE PARED GRADO : PRESION HIDROSTATICA:  
 DIAMETER : 14" WALL THICKNESS 0.500" GRADE : ASTM A53-B HIDROSTATIC TEST: 105 Kg/cm<sup>2</sup> 1500 PSI

PRUEBAS DE TENSION  
 TENSILE TEST

ANALISIS QUIMICO % EN PESO  
 CHEMICAL ANALYSES PERCENT WEIGHT

NUM.PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LE/UT Y.S.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
4-1 Tc Ts	183436	48 702	64 497 70 729	44	0.75	0.114	0.80	0.024	0.004	0.001	0.005	0.005	0.307	0.020	0.036	0.0016	0.020	0.020	0.004	0.0069	
2-9 Tc Ts	183439	51 002	64 494 68 729	42	0.79	0.131	0.82	0.012	0.005	0.002	0.003	0.005	0.326	0.010	0.043	0.0024	0.020	0.020	0.004	0.0062	
1-3 Tc Ts	280272	57 174	64 908 72 046	40	0.88	0.113	0.81	0.018	0.008	0.004	0.005	0.005	0.296	0.020	0.045	0.0027	0.050	0.040	0.013	0.0055	
3-13 Tc Ts	284348	54 204	69 576 70 673	38	0.77	0.070	1.18	0.013	0.004	0.020	0.003	0.011	0.316	0.030	0.040	0.0012	0.020	0.020	0.007	0.0060	
6-13 Tc Ts	284353	55 839	69 630 70 481	37	0.80	0.077	1.21	0.010	0.003	0.023	0.003	0.013	0.337	0.030	0.028	0.0023	0.020	0.020	0.008	0.0077	

CERTIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

ASTM A53-B -06

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

ING. FERNANDO OSORIO PEREZ  
 GERENTE DE ASEGURAMIENTO DE CALIDAD  
 QUALITY ASSURANCE MANAGER