



PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS**  
QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

DIAMETRO: 16" ESPESOR DE PARED: 0.500" GRADO: ASTM A53-B PRESION HIDROSTATICA: 92 Kg/cm<sup>2</sup> 1310 PSI  
WALL THICKNESS: 0.500" GRADE: ASTM A53-B PRESSION HIDROSTATICA: 92 Kg/cm<sup>2</sup> 1310 PSI

CLIENTE: PLESA ANABUAC Y CIAS. S.A. DE C.V. NUMERO: PTM-72445-2008  
CUSTOMER: PEDIDO CLIENTE / P.O. 1811  
PARTIDA (S) 79946-10 / 94430-30 / 73770-18  
ITEMS  
FECHA: SEPTIEMBRE 15, 2008  
DATE

NUMEROPARTIDA DESCRIPTION	CODIGO HEAT	LIMITE ELASTICO YIELD STRENGTH (KSI)	ULTIMA TENSION TENSILE STRENGTH (KSI)	% ELONG. %	LEANT WELDS	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSIS PERCENT WEIGHT														
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N
38-3 Tc Ts	170214	62 304	74 306 76 114	37	0.84	0.185	1.04	0.017	0.004	0.010	0.005	0.005	0.294	0.010	0.029	0.0028	0.020	0.020	0.007	0.0056
75-12 Tc Ts	170221	73 015	81 189 92 688	30	0.90	0.168	1.02	0.017	0.007	0.011	0.002	0.005	0.270	0.020	-0.029	0.0022	0.030	0.020	0.007	0.0084
26-12 Tc Ts	170224	75 550	84 544 93 631	30	0.89	0.180	1.03	0.011	0.010	0.009	0.003	0.003	0.250	0.030	0.034	0.0023	0.030	0.040	0.009	0.0077
42-11 Tc Ts	170225	65 060	76 702 85 020	35	0.85	0.175	1.06	0.012	0.007	0.010	0.002	0.005	0.306	0.040	0.041	0.0031	0.030	0.030	0.009	0.0077
19-11 Tc Ts	182262	47 985	65 152 67 624	42	0.73	0.122	0.79	0.013	0.005	0.001	0.002	0.004	0.294	0.020	0.043	0.0023	0.020	0.020	0.005	0.0050
21-12 Tc Ts	182264	49 878	65 807 67 447	41	0.76	0.124	0.79	0.013	0.008	0.003	0.004	0.005	0.300	0.020	0.041	0.0021	0.020	0.030	0.009	0.0054
110-6 Tc Ts	263710	58 283	74 024 81 240	38	0.79	0.173	1.08	0.014	0.009	0.010	0.004	0.003	0.303	0.030	0.043	0.0030	0.020	0.030	0.005	0.0076
6-12 Tc Ts	270230	75 925	83 910 89 985	30	0.90	0.170	1.04	0.016	0.005	0.010	0.003	0.005	0.320	0.030	0.036	0.0026	0.020	0.020	0.008	0.0054

CERTIFICAMOS QUE LA TUBERIA AQUI 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:

MIG. FERNANDO OSPINO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER