



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 100011-90

NUMERO PTM-74010-1-2009

NUMBER

FECHA

DATE FEBRERO 13, 2009

DIAMETRO : 12 3/4" ESPESOR DE PARED WALL THICKNESS 0.375" GRADO : GRADE : ASTM A53-B PRESION HIDROSTATICA: HIDROSTATIC TEST: 87 Kg/cm² 1240 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
20-6 Tc Ts	286307	74 042	80 488 83 651	32	0.91	0.071	1.19	0.013	0.004	0.043	0.002	0.008	0.186	0.020	0.037	0.0025	0.020	0.020	0.006	0.0067	
44-15 Tc Ts	286309	74 454	81 068 86 194	30	0.91	0.088	1.12	0.015	0.005	0.046	0.003	0.008	0.177	0.020	0.020	0.004	0.020	0.020	0.008	0.0070	
99-18 Tc Ts	286310	72 774	78 117 83 786	30	0.93	0.077	1.11	0.016	0.004	0.043	0.004	0.007	0.175	0.020	0.040	0.003	0.010	0.020	0.007	0.0076	
67-5 Tc Ts	286311	66 824	79 008 81 633	32	0.84	0.080	1.13	0.016	0.004	0.043	0.002	0.009	0.179	0.030	0.036	0.002	0.020	0.020	0.008	0.0070	
25-5 Tc Ts	286312	71 095	79 584 85 285	33	0.89	0.084	1.11	0.017	0.005	0.043	0.004	0.007	0.167	0.020	0.030	0.002	0.020	0.020	0.007	0.0061	
26-7 Tc Ts	286313	73 142	80 813 84 415	33	0.90	0.083	1.11	0.015	0.008	0.044	0.005	0.010	0.181	0.020	0.036	0.002	0.030	0.020	0.009	0.0076	
51-5 Tc Ts	286318	68 257	82 055 86 843	30	0.83	0.098	1.18	0.014	0.006	0.047	0.002	0.010	0.183	0.020	0.041	0.002	0.020	0.020	0.006	0.0055	
101-5 Tc Ts	286319	71 914	79 503 85 754	32	0.90	0.094	1.17	0.015	0.003	0.045	0.004	0.010	0.190	0.020	0.026	0.002	0.010	0.010	0.007	0.0082	
102-17 Tc Ts	286320	75 948	81 347 83 626	34	0.93	0.090	1.14	0.020	0.006	0.045	0.005	0.009	0.209	0.020	0.035	0.002	0.020	0.020	0.006	0.0065	
118-7 Tc Ts	286880	72 141	82 549 84 452	32	0.87	0.102	1.13	0.015	0.004	0.044	0.002	0.008	0.188	0.040	0.032	0.004	0.030	0.020	0.006	0.0061	

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:

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