



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. 1735
 PEDIDO INTERNO / I.O.
 PARTIDA (S) 93441-50 / 71055-10

NUMERO PTM-7206-2008
 FECHA
 DATE AGOSTO 16, 2008

DIAMETRO : 12 3/4"

ESPESOR DE PARED
 WALL THICKNESS

0.330"

GRADO :

ASTM A53-B

PRESSION HIDROSTATICA:
 HYDROSTATIC TEST:

77 Kg/cm²

1090 PSI

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSIS PERCENT WEIGHT

NUM. PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (PSI)	ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG. 2"	LEGIT YEARS	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
1-19 TC TS	181216	48 707	65 729 68 980	35	0.75	0.125	0.76	0.016	0.008	0.001	0.002	0.004	0.280	0.020	0.031	0.302	0.020	0.020	0.005		0.0071
19-8 1/C TS	261201	62 634	74 757 83 314	37	0.84	0.090	1.12	0.016	0.006	0.026	0.003	-	0.288	0.020	0.043	0.0071	0.020	0.030	0.007		0.0064
72-9 TC TS	261992	63 496	70 334 80 302	36	0.90	0.074	1.18	0.012	0.003	0.022	0.003	-	0.323	0.020	0.039	0.0024	0.020	0.030	0.005		0.0044
5-20 TC TS	280998	48 290	64 112 69 782	35	0.75	0.126	0.76	0.015	0.005	0.001	0.002	0.005	0.306	0.010	0.037	0.002	0.020	0.020	0.006		0.0050
4-18 TC TS	281000	50 682	65 192 68 385	33	0.77	0.134	0.76	0.021	0.007	0.001	0.004	0.005	0.300	0.010	0.038	0.302	0.020	0.020	0.006		0.0050

CERTIFICA... OS 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:

ASTM A53-B -06

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