



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 GAS, S.A. DE C.V.

CUSTOMER:

NUMERO PTM-7206-2008

PEDIDO CLIENTE/P.O.

PARTIDA (S)

1735

FECHA

AGOSTO 16, 2008

DIAMETRO: 12.34"
WALL THICKNESS: 0.330"

ESPESOR DE PARED: 0.330"
GRADE: ASTM A53-B

GRADO: ASTM A53-B
ANALISIS QUIMICO % EN PESO

PRECISION HIDROSTATICA: 77 Kg/cm²
HIDROSTATIC TEST: 1090 PSI

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

NUMPROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 1"	LEUT 1/8"	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
1-19 Tc Ts	181216	49 707	65 729 68 980	35	0.75	0.125	0.76	0.016	0.008	0.001	0.002	0.004	0.290	0.020	0.031	0.002	0.020	0.020	0.020	0.005	0.0071
19-8 Tc 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	0.0021	0.020	0.030	0.007	0.0064	
72-9 Tc Ts	261982	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	0.305	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	0.002	0.020	0.020	0.006	0.0050	

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:

ASTM A53-B-06

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