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:

NUMERO PTM-62186-2005
NUMBER

PEDIDO CLIENTE /P.O.
PEDIDO INTERNO / I.O. 13751
PARTIDA (S)
ITEMS 62978-110 / 62997-10

FECHA
DATE JULIO 20, 2005

DIAMETRO :
DIAMETER : 12 3/4"

ESPESOR DE PARED
WALL THICKNESS 0.406"

GRADO :
GRADE : ASTM A53-B

PRESION HIDROSTATICA:
HIDROSTATIC TEST: 94 Kg/cm^2 1340 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/U.T Y.S/T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
7-13 Tc	148682	51 877	68 996	37	0.75	0.151	1.10	0.015	0.008	0.004	0.005	0.003	0.150	0.030	0.034	0.0028	0.030	0.040	0.015	0.0060	
Ts			78 034																		
1-5 Tc	148688	58 509	69 375	38	0.84	0.180	1.13	0.019	0.008	0.001	0.002	0.003	0.200	0.020	0.045	0.0026	0.030	0.030	0.008	0.0050	
Ts			71 958																		
4-4 Tc	148689	55 324	71 496	33	0.77	0.156	1.10	0.021	0.010	0.004	0.005	0.003	0.180	0.030	0.045	0.0034	0.030	0.030	0.016	0.0050	
Ts			73 496																		
5-5 Tc	248292	59 524	70 068	36	0.85	0.150	1.11	0.017	0.007	0.003	0.005	0.003	0.170	0.020	0.034	0.0023	0.030	0.030	0.015	0.0070	
Ts			72 764																		

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 -02

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