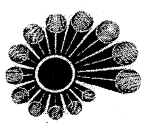


FLM-005-7



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.

NUMERO PTM-74667-2009

CUSTOMER:

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 2220

FECHA

DATE ABRIL 22, 2009

PARTIDA (S)

ITEMS 88978-110 / 91652-10 / 65860-10

DIAMETRO :

DIAMETER : 20"

ESPEJOR DE PARED

WALL THICKNESS

0.250"

GRADO :

GRADE :

ASTM A53-B

PRESION HIDROSTATICA:

HIDROSTATIC TEST:

37 Kg/cm²

520 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
7-15 Tc Ts	172649	43 647	65 012 71 199	37	0.67	0.120	0.79	0.013	0.006	0.002	0.001	0.003	0.300	0.027	0.036	0.003	0.023	0.021	0.005	0.0050	
4-8 Tc Ts	176261	43 661	64 183 70 332	38	0.68	0.137	0.79	0.012	0.006	0.003	0.004	0.004	0.310	0.030	0.033	0.003	0.020	0.030	0.007	0.0063	
3-18 Tc Ts	272457	43 540	64 597 73 663	39	0.67	0.130	0.80	0.013	0.005	0.001	0.002	0.002	0.280	0.018	0.037	0.003	0.021	0.021	0.003	0.0035	
4-2 Tc Ts	272458	43 887	64 564 72 747	39	0.68	0.140	0.79	0.011	0.003	0.002	0.001	0.002	0.300	0.014	0.036	0.004	0.018	0.020	0.004	0.0036	
5-18 Tc Ts	276206	44 030	62 353 67 142	38	0.71	0.132	0.83	0.018	0.008	0.004	0.003	0.004	0.306	0.030	0.026	0.002	0.020	0.030	0.008	0.0051	
3-18 Tc Ts	276207	44 373	64 997 74 376	40	0.68	0.128	0.81	0.014	0.008	0.003	0.003	0.004	0.298	0.020	0.020	0.002	0.030	0.030	0.007	0.0066	

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 -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 OSORNO PEREZ
 GERENTE DE ASEGURAMIENTO DE CALIDAD
 QUALITY ASSURANCE MANAGER