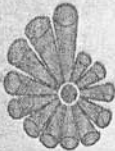


FLM-905-7



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: PLESA ANAHUAC, S.A. DE C.V.

NUMERO NUMBER PFM-58696-2004

CUSTOMER:

PEDIDO CLIENTE/P.O.

PEDIDO INTERNO/I.O. 12129

PARTIDA (\$)

ITEMS 39905-10 / 48987-10

FECHA DATE JUNIO 02, 2004

DIAMETRO : 20" ESPESOR DE PARED WALL THICKNESS 0.250" GRADO: ASTM A53-B

PRESION HIDROSTATICA: 37 Kg/cm² 520 PSI

PRUEBAS DE TENSION TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

NUM. PROBEA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. IN ELONG.	LEQUIT Y-50'S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
13-11 Tc	126585	48 825	70 029	36	0.70	0.180	1.13	0.015	0.006	0.001	0.004	0.003	0.200	0.016	0.032	0.0030	0.017	0.027	0.004	0.0050	
Ts			75 284																		
2-18 Tc	126586	52 617	71 957	36	0.73	0.178	1.12	0.013	0.007	0.003	0.004	0.004	0.209	0.018	0.034	0.0022	0.016	0.030	0.012	0.0037	
Ts			77 684																		
12-15 Tc	126589	50 669	71 217	34	0.71	0.171	1.11	0.017	0.008	0.001	0.004	0.004	0.228	0.020	0.045	0.0010	0.014	0.027	0.005	0.0051	
Ts			78 278																		
90-12 Tc	135387	52 011	73 910	38	0.70	0.174	1.08	0.015	0.006	0.003	0.004	0.004	0.337	0.023	0.035	0.0030	0.017	0.040	0.009	0.0049	
Ts			78 210																		
16-6 Tc	135390	47 306	68 594	37	0.69	0.179	1.10	0.015	0.007	0.005	0.004	0.004	0.332	0.015	0.027	0.0032	0.021	0.011	0.008	0.0080	
Ts			75 852																		
30-11 Tc	135391	50 633	71 952	35	0.70	0.162	1.11	0.019	0.006	0.001	0.002	0.004	0.299	0.015	0.036	0.0032	0.010	0.022	0.004	0.0054	
Ts			77 864																		
85-13 Tc	235133	47 493	68 421	36	0.69	0.157	1.07	0.014	0.007	0.005	0.004	0.004	0.278	0.014	0.038	0.0020	0.017	0.009	0.009	0.0067	
Ts			73 830																		
61-4 Tc	235134	48 944	69 990	34	0.70	0.170	1.13	0.016	0.007	0.001	0.002	0.003	0.326	0.015	0.041	0.0029	0.017	0.025	0.004	0.0058	
Ts			77 691																		

CERTIFICAMOS QUE LA TUBERIA AGUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APPLICABLES 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 -99

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