



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-63163-2005

CUSTOMER:

pedido cliente / P.O.

pedido interno / I.O. 253

PARTIDA(S)

65860-10 / 62624-70 / 63180-10

FECHA

DATE OCTUBRE 18, 2005

DIAMETRO : 20" ESPESOR DE PARED WALL THICKNESS 0.250"

GRADO : ASTM A53-B

PRESION HIDROSTATICA: 520 PSI

ANALISIS QUIMICO % EN PESO
HIDROSTATIC TEST: 37 Kg/cm²

TENSILE TEST

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"	LEULT YSTS	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
12-14 Tc	153335	46 418	68 261	35	0.68	0.156	1.10	0.011	0.007	0.002	0.005	0.003	0.179	0.020	0.035	0.0024	0.020	0.040	0.006	0.0054	
8-17 Tc	153336	51 517	72 628	36	0.70	0.173	1.13	0.015	0.009	0.002	0.005	0.003	0.161	0.020	0.045	0.0043	0.020	0.030	0.005	0.0045	
6-5 Tc	248129	58 277	70 474	37	0.83	0.152	1.10	0.012	0.007	0.002	0.004	0.003	0.200	0.030	0.026	0.0039	0.030	0.030	0.011	0.0060	
1-5 Tc	248130	58 464	73 568	35	0.83	0.180	1.13	0.013	0.005	0.003	0.005	0.003	0.190	0.030	0.031	0.0036	0.020	0.030	0.011	0.0070	
3-5 Tc	248131	54 677	70 701	37	0.77	0.174	1.10	0.011	0.006	0.003	0.004	0.003	0.190	0.020	0.028	0.0037	0.020	0.030	0.01	0.0040	
2-5 Tc	248132	59 944	73 984	36	0.83	0.179	1.13	0.015	0.004	0.003	0.005	0.003	0.200	0.020	0.031	0.0023	0.030	0.030	0.011	0.0050	
2-4 Tc	250298	57 851	72 205	35	0.81	0.150	1.09	0.010	0.009	0.002	0.004	0.003	0.170	0.020	0.041	0.0027	0.020	0.040	0.006	0.0050	
1-3 Tc	250299	58 419	74 681	33	0.81	0.156	1.10	0.014	0.007	0.003	0.005	0.003	0.180	0.030	0.033	0.0027	0.060	0.050	0.017	0.0060	
11-16 Tc	251408	51 549	71 733	35	0.78	0.150	1.10	0.017	0.005	0.001	0.002	0.003	0.210	0.020	0.042	0.0027	0.030	0.030	0.007	0.0040	
12-9 Tc	251409	52 891	73 272	36	0.77	0.167	1.10	0.013	0.005	0.001	0.002	0.003	0.170	0.020	0.039	0.0020	0.020	0.030	0.006	0.0040	
1-6 Tc	253567	46 286	68 622	36	0.65	0.179	1.10	0.013	0.006	0.002	0.005	0.004	0.202	0.020	0.040	0.0022	0.020	0.030	0.003	0.0049	
10-8 Tc	253568	49 340	75 606	39	0.70	0.176	1.08	0.017	0.006	0.003	0.005	0.004	0.190	0.020	0.041	0.0019	0.030	0.030	0.004	0.0063	
			75 259																		

ZERTIFICAMOS 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 -02

ING. FERNANDO OSORNO PEREZ
GERENTE DE ASESURAMIENTO DE CALIDAD