



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: PLESA ANAHUAC Y CIA S. A. DE C.V. NUMERO: PTM-72657-2008

PEDIDO CLIENTE / P.O. 1859  
PEDIDO INTERNO / I/O.  
PARTIDA (S) 79946-10 / 92756-10 / 94430-30 / 73770-10  
ITEMS  
FECHA: OCTUBRE 02, 2008

DIAMETRO: 16" ESPESOR DE PARED: 0.500" GRADO: ASTM A53-B PRESION HIDROSTATICA: 92 Kg/cm<sup>2</sup> 1310 PSI

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

NUM PROBETA DESCRIPTION	COLADA HEAT	LMITE ELASTICO YIELD STRENGTH (#SL)	ULTIMA TENSION TENSILE STRENGTH (#SL)	% ELONG. IN LEUT Y.S.F.S	C	Ma	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
46-4 Tc Ts	170218	70 058	81 826 84 354	34	0.86	1.04	0.011	0.007	0.009	0.002	0.005	0.294	0.020	0.036	0.0026	0.030	0.030	0.007	0.0072	
78-7 Tc Ts	170219	65 572	77 135 89 186	35	0.85	1.10	0.017	0.005	0.009	0.005	0.003	0.255	0.020	0.037	0.0018	0.030	0.040	0.015	0.0080	
75-12 Tc Ts	170221	73 015	81 189 92 688	30	0.90	1.02	0.017	0.007	0.011	0.002	0.005	0.270	0.020	0.029	0.0022	0.030	0.020	0.007	0.0084	
11-5 Tc Ts	179192	71 980	81 320 84 764	35	0.89	0.92	0.013	0.004	0.045	0.033	0.005	0.197	0.250	0.039	0.0025	0.020	0.020	0.008	0.0063	
13-1 Tc Ts	182258	47 640	62 256 66 459	38	0.76	0.81	0.015	0.008	0.004	0.004	0.005	0.341	0.020	0.025	0.0016	0.030	0.020	0.014	0.0058	
17-11 Tc Ts	182259	49 452	63 013 67 127	38	0.78	0.81	0.014	0.007	0.004	0.005	0.005	0.342	0.020	0.046	0.0020	0.040	0.030	0.009	0.0049	
19-11 Tc Ts	182262	47 985	65 152 67 824	42	0.73	0.79	0.013	0.005	0.001	0.002	0.004	0.294	0.020	0.043	0.0023	0.020	0.020	0.005	0.0060	
4-4 Tc Ts	182263	49 309	63 914 66 683	40	0.77	0.78	0.016	0.005	0.004	0.004	0.005	0.318	0.010	0.024	0.0017	0.030	0.020	0.014	0.0062	
21-12 Tc Ts	182264	49 878	65 607 67 447	41	0.76	0.79	0.013	0.008	0.003	0.004	0.005	0.300	0.020	0.041	0.0021	0.020	0.030	0.009	0.0054	
14-3 Tc Ts	182265	48 264	64 898 67 880	39	0.74	0.76	0.012	0.008	0.003	0.003	0.004	0.310	0.020	0.037	0.0038	0.020	0.020	0.009	0.0072	
83-10 Tc Ts	263712	59 199	76 724 84 502	37	0.77	1.04	0.013	0.007	0.009	0.003	0.003	0.274	0.020	0.038	0.0034	0.020	0.020	0.006	0.0069	
70-3 Tc Ts	270233	61 350	73 483 86 288	40	0.83	1.06	0.013	0.008	0.009	0.002	0.006	0.350	0.020	0.043	0.0025	0.030	0.020	0.008	0.0068	

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, MESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APPLICABLES 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. FERRANDO OSORIO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER