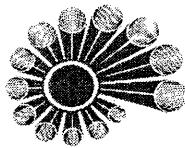


FLM-005-7



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-79392-2011
NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 3606

FECHA
DATE MAYO 26, 2011

PARTIDA (S)

ITEMS 103262-20

DIAMETRO :

DIAMETER: 18"

ESPESOR DE PARED

WALL THICKNESS

0.250"

GRADO :

GRADE :

ASTM A53-B

PRESION HIDROSTATICA:

HIDROSTATIC TEST:

41 Kg/cm²

580 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
38-11 Tc Ts	190559	58 274	68 175 71 961	40	0.85	0.068	1.17	0.016	0.004	0.013	0.003	0.009	0.245	0.020	0.038	0.002	0.020	0.020	0.008	0.0046	
22-10 Tc Ts	190562	55 491	67 845 71 965	44	0.81	0.062	1.16	0.012	0.006	0.013	0.003	0.010	0.242	0.030	0.045	0.003	0.030	0.030	0.014	0.0054	
15-10 Tc Ts	190564	54 743	67 415 72 013	44	0.81	0.070	1.16	0.012	0.003	0.012	0.004	0.008	0.240	0.010	0.037	0.002	0.010	0.020	0.007	0.0063	
155-15 Tc Ts	190615	53 673	67 897 70 429	38	0.79	0.066	1.16	0.009	0.007	0.013	0.003	0.009	0.220	0.010	0.040	0.003	0.010	0.020	0.007	0.0055	
168-14 Tc Ts	190618	55 611	66 954 72 215	41	0.83	0.054	1.18	0.015	0.006	0.016	0.005	0.008	0.223	0.010	0.031	0.002	0.020	0.020	0.012	0.0080	
189-11 Tc Ts	190620	54 943	67 664 71 831	43	0.81	0.061	1.17	0.015	0.005	0.013	0.003	0.006	0.222	0.010	0.029	0.002	0.010	0.020	0.007	0.006	
135-10 Tc Ts	190621	56 504	70 410 74 038	44	0.80	0.074	1.18	0.018	0.006	0.014	0.003	0.008	0.236	0.010	0.033	0.002	0.020	0.020	0.010	0.005	
4-8 Tc Ts	277433	58 313	70 756 76 657	37	0.82	0.088	1.15	0.014	0.004	0.020	0.005	0.009	0.280	0.040	0.035	0.002	0.020	0.002	0.020	0.008	
40-10 Tc Ts	290737	54 280	67 177 69 618	40	0.80	0.085	1.17	0.012	0.002	0.013	0.004	0.008	0.257	0.010	0.039	0.002	0.020	0.020	0.008	0.004	
142-6 Tc Ts	290792	55 006	68 868 70 768	41	0.79	0.070	1.16	0.013	0.005	0.013	0.003	0.008	0.214	0.010	0.032	0.002	0.020	0.030	0.008	0.006	
183-17 Tc Ts	290793	57 678	68 441 73 911	40	0.84	0.068	1.16	0.013	0.005	0.013	0.003	0.009	0.231	0.010	0.036	0.003	0.020	0.030	0.009	0.004	
244-16 Tc Ts	290796	53 347	68 900 71 754	44	0.77	0.062	1.17	0.011	0.004	0.014	0.002	0.008	0.228	0.020	0.031	0.002	0.020	0.020	0.008	0.006	

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 -06

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS
BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN
ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

ING. ALEJANDRO ALARCON CAZARES
SUPERVISOR DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY SUPERVISOR