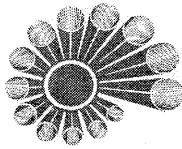


FLM-005-7



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:

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / LO. 3746

PARTIDA (S)

ITEMS 118066-10 / 108239-20 / 52758-20 / C-02-09

NUMERO PTM-00597-2011

NUMBER

FECHA

DATE SEPTIEMBRE 20, 2011

DIAMETRO : DIAMETER : 20"	ESPESOR DE PARED WALL THICKNESS 0.500"	GRADO : GRADE : ASTM A53-B	PRESION HIDROSTATICA: HIDROSTATIC TEST: 74 Kg/cm <sup>2</sup> 1,050 PSI
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**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	Ce
1-6 Tc Ts	111173	48 117	64 001 69 238	45	0.75	0.115	0.77	0.015	0.004	0.002	0.002	0.003	0.246	0.026	0.034	0.0022	0.027	0.018	0.005	0.0037	
24-3 Tc Ts	111175	47 957	63 395 68 794	48	0.75	0.114	0.78	0.016	0.005	0.004	0.002	0.006	0.240	0.029	0.048	0.0021	0.025	0.021	0.011	0.0054	
8-6 Tc Ts	111176	46 686	64 077 69 565	45	0.72	0.105	0.79	0.018	0.005	0.001	0.004	0.004	0.222	0.021	0.029	0.0023	0.019	0.021	0.006	0.0027	
3-3 Tc Ts	111177	48 164	64 620 68 732	43	0.74	0.112	0.78	0.018	0.006	0.002	0.002	0.004	0.242	0.026	0.032	0.0023	0.023	0.034	0.005	0.0023	
5-1 Tc Ts	111179	47 375	64 307 69 109	48	0.73	0.113	0.78	0.018	0.007	0.002	0.004	0.004	0.219	0.030	0.040	0.0025	0.023	0.020	0.005	0.0042	
2-9 Tc Ts	197953	58 922	70 953 71 127	40	0.83	0.123	0.79	0.016	0.006	0.002	0.005	0.005	0.288	0.023	0.042	0.0020	0.023	0.022	0.010	0.0051	
2-6 Tc Ts	238284	54 490	69 475 73 776	40	0.78	0.156	1.13	0.012	0.007	0.002	0.004	0.003	0.216	0.027	0.034	0.0025	0.022	0.029	0.009	0.0073	
16-6 Tc Ts	410366	45 316	63 219 69 495	45	0.71	0.108	0.83	0.013	0.008	0.005	0.003	0.003	0.225	0.018	0.033	0.0024	0.023	0.021	0.011	0.0072	
2-7 Tc Ts	A917840	57 829	70 125 70 663	38	0.82	0.050	0.53	0.007	0.006	0.023	0.002	0.002	0.200	0.100	0.031	0.0020	0.040	0.040	0.010	0.0069	

CERTIFICAMOS QUE LA TUBERIA AQUÍ 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 -06

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