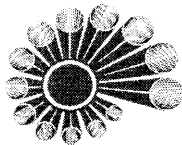


FLM-005-7



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-78730-2011

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 3278

FECHA

DATE FEBRERO 02, 2011

PARTIDA (S)

ITEMS

80026-20 / 104334-50 / 108239-10 / 52833-10 / 91652-30

DIAMETRO :

DIAMETER : 20"

ESPESOR DE PARED

WALL THICKNESS

0.375"

GRADO :

GRADE :

ASTM A53-B

PRESION HIDROSTATICA:

HIDROSTATIC TEST:

56 Kg/cm<sup>2</sup>

790 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	Ce
50-3 Tc Ts	170529	53 514	65 586 67 879	35	0.82	0.129	0.78	0.009	0.006	0.001	0.002	0.005	0.313	0.020	0.032	0.003	0.020	0.030	0.006	0.006	
12-6 Tc Ts	191885	47 700	65 253 71 953	40	0.73	0.133	0.80	0.017	0.004	0.003	0.004	0.005	0.338	0.020	0.044	0.002	0.020	0.020	0.006	0.006	
10-3 Tc Ts	191886	46 103	62 715 71 943	41	0.73	0.122	0.78	0.021	0.003	0.002	0.005	0.004	0.300	0.010	0.045	0.002	0.020	0.020	0.006	0.007	
5-11 Tc Ts	191887	45 818	63 397 70 062	39	0.72	0.123	0.79	0.020	0.006	0.004	0.005	0.005	0.300	0.010	0.033	0.002	0.020	0.020	0.006	0.006	
12-13 Tc Ts	197955	49 922	67 385 75 986	40	0.74	0.122	0.78	0.014	0.006	0.003	0.004	0.004	0.289	0.027	0.042	0.002	0.023	0.023	0.011	0.007	
3-3 Tc Ts	238288	50 473	69 069 77 776	37	0.73	0.165	1.09	0.016	0.007	0.003	0.004	0.004	0.237	0.017	0.039	0.003	0.025	0.035	0.010	0.008	
28-8 Tc Ts	238289	53 242	70 760 80 133	38	0.75	0.163	1.10	0.020	0.006	0.002	0.005	0.004	0.226	0.024	0.043	0.003	0.030	0.035	0.009	0.005	
13-8 Tc Ts	267175	51 921	63 073 69 702	37	0.82	0.130	0.80	0.010	0.005	0.002	0.005	0.003	0.160	0.020	0.028	0.002	0.030	0.030	0.020	0.005	
46-12 Tc Ts	271244	48 829	64 792 71 429	40	0.75	0.129	0.78	0.018	0.007	0.003	0.004	0.005	0.323	0.030	0.046	0.003	0.030	0.030	0.008	0.005	
7-10 Tc Ts	278928	56 396	70 588 74 587	34	0.80	0.069	1.10	0.014	0.006	0.020	0.004	0.010	0.311	0.010	0.035	0.003	0.030	0.030	0.018	0.0067	
7-8 Tc Ts	292015	42 481	61 195 69 495	46	0.69	0.126	0.79	0.015	0.004	0.003	0.004	0.005	0.291	0.010	0.038	0.003	0.030	0.020	0.006	0.0054	
14-2 Tc Ts	297954	49 383	66 218 75 449	44	0.74	0.126	0.83	0.011	0.006	0.003	0.004	0.005	0.321	0.026	0.034	0.003	0.020	0.024	0.009	0.0054	

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