

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 S.A. DE C.V.

NUMERO  
NUMBER

PTM-60448.49-2005

CUSTOMER:

PEDIDO CLIENTE / P.O.

FECHA  
DATE

ENERO 21, 2005

13129

PARTIDA (S)  
ITEMS

55319-30 / 56621-20 / 60679-20 / 48996-10 / B0526-50

GRADO: ASTM A53-B

ESPOSOR DE PARED  
WALL THICKNESS

0.365"

101 Kg/cm<sup>2</sup>

PRESION HIDROSTATICA:  
HYDROSTATIC TEST:

1430 PSI

DIAMETRO: 10 3/4"

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. 3"	LE/UT Y.S.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ced
22-15 Tc	142646	66 400	72 946	37	0.91	0.067	0.72	0.012	0.004	0.032	0.003	0.003	0.189	0.281	0.038	0.0020	0.018	0.032	0.002	0.0070	
Ts			77 842																		
26-11 Tc	142650	59 487	67 041	36	0.89	0.067	0.72	0.013	0.004	0.034	0.002	0.002	0.182	0.302	0.036	0.0028	0.017	0.027	0.003	0.0077	
Ts			72 543																		
13-18 Tc	143254	66 414	74 227	35	0.89	0.164	1.05	0.014	0.004	0.011	0.004	0.002	0.285	0.044	0.027	0.0015	0.012	0.027	0.003	0.0061	
Ts			82 645																		
31-15 Tc	145811	65 794	77 511	33	0.85	0.171	1.06	0.017	0.007	0.010	0.003	0.003	0.260	0.030	0.037	0.0024	0.020	0.030	0.007	0.0060	
Ts			82 886																		
59-13 Tc	145816	67 625	80 594	34	0.84	0.173	1.06	0.016	0.005	0.010	0.002	0.003	0.280	0.020	0.030	0.0025	0.020	0.030	0.006	0.0100	
Ts			88 465																		
65-17 Tc	236047	61 814	75 336	35	0.82	0.182	1.07	0.019	0.007	0.009	0.003	0.004	0.210	0.032	0.025	0.0028	0.022	0.017	0.009	0.0052	
Ts			81 080																		
1-12 Tc	242829	63 889	69 878	40	0.91	0.061	0.71	0.011	0.003	0.033	0.002	0.003	0.180	0.280	0.037	0.0031	0.010	0.030	0.003	0.0055	
Ts			73 216																		
13-16 Tc	247447	57 583	72 629	39	0.79	0.163	1.09	0.013	0.005	0.001	0.004	0.004	0.200	0.050	0.040	0.0027	0.020	0.030	0.006	0.0070	
Ts			77 684																		
11-15 Tc	247449	56 542	70 005	36	0.81	0.163	1.09	0.018	0.004	0.001	0.005	0.003	0.180	0.040	0.038	0.0024	0.020	0.030	0.004	0.0080	
Ts			76 055																		
17-17 Tc	247450	53 659	69 484	35	0.77	0.164	1.08	0.012	0.005	0.001	0.002	0.003	0.200	0.040	0.040	0.0014	0.020	0.030	0.006	0.0070	
Ts			74 779																		
8-17 Tc	247451	52 577	70 400	34	0.75	0.159	1.07	0.019	0.005	0.001	0.003	0.003	0.160	0.040	0.038	0.0036	0.030	0.030	0.006	0.0060	
Ts			73 651																		
4-16 Tc	247797	66 344	71 951	38	0.92	0.072	0.72	0.013	0.004	0.033	0.003	0.002	0.180	0.280	0.044	0.0021	0.020	0.030	0.006	0.0070	
Ts			76 998																		
2-17 Tc	247798	66 313	72 755	35	0.91	0.067	0.71	0.015	0.004	0.030	0.002	0.002	0.180	0.290	0.046	0.0029	0.030	0.030	0.006	0.0060	
Ts			76 322																		
22-12 Tc	247799	66 282	75 750	33	0.88	0.068	0.70	0.010	0.004	0.032	0.002	0.002	0.170	0.280	0.041	0.0032	0.020	0.030	0.005	0.0060	
Ts			79 586																		
20-15 Tc	247802	63 978	75 268	33	0.85	0.077	0.72	0.010	0.004	0.035	0.002	0.002	0.180	0.280	0.045	0.0030	0.030	0.030	0.005	0.0060	
Ts			78 478																		

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

CERTIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

ING. FERNANDO SORIO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER

ASTM A53-B -02