



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 CLAS, S.A. DE C.V.	NUMERO	PTM-71088-2008
CUSTOMER:		NUMBER	
PEDIDO CLIENTE/P.O.	1318	FECHA	MAYO 08, 2008
PEDIDO INTERNO/ I.O.		DATE	
PARTIDA(S)	75489-10/93322-20/64661-10/91635-10		
ITEMS			

DIAMETRO :	12.34"	ESPESOR DE PARED	0.250"	GRADO :	ASTM A53-B	PRESSION HIDROSTATICA:	58 Kg/cm <sup>2</sup>	820 PSI
DIAMETER :	12.34"	WALL THICKNESS	0.250"	GRADE :	ASTM A53-B	ANALISIS QUIMICO % EN PESO		

NUM. PROBE/TA DESCRIPCION	COLADA HEAT	TENSILE TEST				CHEMICAL ANALYSES PERCENT WEIGHT															
		LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. ELONG.	REDUC AREA	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
4-20 Tc	164810	48 760	63 849	38	0.76	0.142	0.78	0.012	0.008	0.005	0.004	0.140	0.020	0.043	0.0030	0.020	0.020	0.020	0.014	0.0071	
Ts			70 483																		
35-10 Tc	164901	52 118	66 381	35	0.79	0.180	0.79	0.022	0.008	0.004	0.004	0.174	0.010	0.034	0.003	0.020	0.020	0.030	0.006	0.0042	
Ts			71 086																		
11-29 Tc	180753	51 020	65 439	38	0.77	0.113	0.80	0.019	0.004	0.001	0.003	0.303	0.010	0.035	0.002	0.020	0.020	0.020	0.005	0.0052	
Ts			68 678																		
2-8 Tc	180754	50 417	62 710	40	0.80	0.143	0.78	0.018	0.005	0.001	0.003	0.307	0.010	0.036	0.0015	0.030	0.030	0.020	0.004	0.0063	
Ts			68 694																		
22-11 Tc	252097	63 383	72 014	35	0.88	0.109	1.20	0.015	0.006	0.022	0.003	0.290	0.020	0.035	0.0029	0.030	0.030	0.030	0.007	0.0043	
Ts			79 096																		
9-24 Tc	252103	65 029	77 482	35	0.84	0.107	1.17	0.011	0.003	0.026	0.003	0.270	0.030	0.035	0.002	0.020	0.020	0.030	0.007	0.0053	
Ts			82 774																		
10-7 Tc	264936	52 735	66 057	36	0.80	0.142	0.77	0.010	0.008	0.001	0.004	0.168	0.030	0.032	0.003	0.030	0.030	0.030	0.006	0.0052	
Ts			68 343																		
58-16 Tc	265192	50 128	64 450	37	0.78	0.143	0.83	0.020	0.007	0.001	0.005	0.124	0.010	0.032	0.0016	0.020	0.020	0.030	0.004	0.0060	
Ts			70 403																		
12-21 Tc	278085	51 429	64 762	35	0.79	0.147	0.81	0.014	0.008	0.003	0.003	0.260	0.020	0.025	0.002	0.020	0.020	0.002	0.020	0.0090	
Ts			66 330																		
3-7 Tc	278086	53 986	70 841	35	0.76	0.135	0.83	0.016	0.007	0.003	0.004	0.307	0.010	0.033	0.002	0.020	0.020	0.002	0.020	0.0080	
Ts			71 702																		
16-7 Tc	278087	51 522	65 849	38	0.78	0.129	0.80	0.014	0.005	0.001	0.002	0.300	0.010	0.036	0.002	0.020	0.020	0.002	0.020	0.0060	
Ts			65 993																		
7-11 Tc	278088	53 187	71 181	36	0.75	0.117	0.79	0.010	0.004	0.003	0.002	0.289	0.010	0.035	0.002	0.010	0.002	0.020	0.020	0.0110	
Ts			72 665																		
4-8 Tc	280724	51 347	63 264	38	0.81	0.110	0.70	0.017	0.005	0.001	0.004	0.281	0.020	0.036	0.002	0.040	0.020	0.020	0.005	0.0046	
Ts			69 218																		
12-9 Tc	280725	50 610	65 766	34	0.76	0.118	0.78	0.019	0.007	0.001	0.003	0.300	0.010	0.027	0.002	0.020	0.020	0.020	0.004	0.0056	
Ts			69 177																		
14-26 Tc	280726	52 307	63 184	40	0.82	0.117	0.80	0.014	0.005	0.001	0.003	0.300	0.020	0.034	0.002	0.020	0.020	0.020	0.005	0.0052	
Ts			69 928																		

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