



FLM-005-7
PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
 DE PRUEBAS FISICAS-QUIMICAS**
 QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

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

ETRO: 12 3/4" **ESPEJOR DE PARED** 0.250" **GRADO:** ASTM A53-B **ANALISIS QUIMICO % EN PESO** 58 Kg/cm² **820 PSI**
WALL THICKNESS **GRADE:** **ASTM A53-B** **HIDROSTATIC TEST:**

PROBETA DIMENSION	COLADA HEAT	TENSILE TEST			CHEMICAL ANALYSIS PERCENT WEIGHT															
		LIMITE ELASTICO YIELD STRENGTH (F _{0.2})	ULTIMA TENSION TENSILE STRENGTH (F _U)	% ELONG. 2"	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	C
4-20 TC TS	164810	48 760	63 849	38	0.76	0.142	0.78	0.012	0.008	0.005	0.004	0.004	0.140	0.020	0.043	0.0030	0.020	0.020	0.014	0.0071
15-10 TC TS	164901	52 118	70 483	35	0.79	0.160	0.75	0.022	0.008	0.004	0.004	0.005	0.174	0.010	0.034	0.003	0.020	0.030	0.006	0.0042
1-29 TC TS	180753	51 020	71 086	38	0.77	0.113	0.80	0.019	0.004	0.001	0.003	0.005	0.303	0.010	0.035	0.002	0.020	0.020	0.005	0.0052
2-8TC TS	180754	50 417	62 710	40	0.80	0.143	0.78	0.018	0.005	0.001	0.003	0.005	0.307	0.010	0.036	0.0015	0.030	0.020	0.004	0.0063
12-11 TC TS	252097	63 383	68 694	35	0.88	0.109	1.20	0.015	0.006	0.022	0.003	0.008	0.290	0.020	0.035	0.0025	0.030	0.030	0.007	0.0043
9-24 TC TS	252103	65 029	72 014	35	0.84	0.107	1.17	0.011	0.003	0.026	0.003	0.007	0.270	0.030	0.035	0.002	0.020	0.030	0.007	0.0055
10-7 TC TS	264936	52 735	79 096	36	0.80	0.142	0.77	0.010	0.008	0.001	0.004	0.004	0.168	0.030	0.032	0.003	0.030	0.030	0.006	0.0052
38-16 TC TS	265192	50 128	64 450	37	0.78	0.143	0.83	0.020	0.007	0.001	0.005	0.002	0.124	0.010	0.032	0.0016	0.020	0.030	0.004	0.0060
12-21 TC TS	278085	51 429	70 403	35	0.79	0.147	0.81	0.014	0.008	0.003	0.003	0.004	0.260	0.020	0.025	0.002	0.020	0.002	0.020	0.0090
3-7 TC TS	278086	53 986	66 330	35	0.76	0.135	0.83	0.016	0.007	0.003	0.004	0.004	0.307	0.010	0.033	0.002	0.020	0.002	0.020	0.0080
16-7 TC TS	278087	51 522	71 702	38	0.78	0.129	0.80	0.014	0.005	0.001	0.002	0.004	0.300	0.010	0.033	0.002	0.020	0.002	0.020	0.0060
7-11 TC TS	278088	53 187	65 949	36	0.75	0.117	0.79	0.010	0.004	0.003	0.002	0.005	0.289	0.010	0.035	0.002	0.010	0.002	0.020	0.0110
4-8 TC TS	280724	51 347	71 181	38	0.81	0.110	0.70	0.017	0.005	0.001	0.004	0.005	0.281	0.020	0.036	0.002	0.040	0.020	0.005	0.0046
12-9 TC TS	280725	50 610	69 218	34	0.76	0.118	0.78	0.019	0.007	0.001	0.003	0.005	0.300	0.010	0.027	0.002	0.020	0.020	0.004	0.0056
14-26 TC TS	280726	52 307	69 177	40	0.82	0.117	0.80	0.014	0.005	0.001	0.003	0.005	0.300	0.020	0.034	0.002	0.020	0.020	0.005	0.0052

CONFIRMAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO
 REVISADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO
 A 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