



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

**CERTIFICADO DE CALIDAD
 DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TICOTA	NUMERO	PTM-471443-2001
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.	6906	FECHA	MAYO 23, 2001
PARTIDA (S)	27126-1 / 20766-30 / 22458-30	DATE	
ITEMS			

TAMANO: 12 3/4" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B
 WALL THICKNESS: GRADE: 58 Kg/cm² 820 PSI
 PRESION HIDROSTATICA: 820 PSI

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

IDENTIFICACION	ORIGEN	UMES DE TENSION YIELD STRENGTH (KSI)	EXTENSION TENSILE STRENGTH (KSI)	% ELONG. %	LIBRE LBS	C	Mn	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
8-1 TC TS	13136	49 605	64 105	35	0.77	0.154	0.84	0.010	0.005	-	-	-	0.170	0.015	0.046	0.0005	0.004	0.007	-	0.0023	
2-3 TC TS	13141	50 829	71 857	38	0.80	0.160	0.78	0.008	0.007	-	-	-	0.160	0.013	0.045	0.0020	0.003	0.006	-	0.0026	
1-1 TC TS	33471	57 204	69 214	41	0.84	0.170	0.80	0.011	0.006	-	-	-	0.173	0.036	0.039	0.0001	0.010	0.013	-	0.0042	
9-7 TC TS	43610	51 046	72 253	38	0.79	0.160	0.80	0.009	0.003	-	-	-	0.214	0.009	0.042	0.0008	0.002	0.007	-	0.0018	
8-16 TC TS	210874	66 070	71 319	36	0.82	0.073	1.17	0.012	0.005	-	-	-	0.193	0.011	0.030	0.0035	0.021	0.027	-	0.0057	
33-12 TC TS	211815	66 633	77 317	30	0.84	0.066	1.20	0.013	0.006	-	-	-	0.228	0.020	0.028	0.0027	0.018	0.027	-	0.0102	
26-12 TC TS	212085	61 143	79 235	35	0.84	0.081	1.20	0.015	0.005	-	-	-	0.204	0.031	0.050	0.0025	0.014	0.034	-	0.0080	
18-2 TC TS	212087	62 482	76 003	33	0.83	0.076	1.22	0.017	0.005	-	-	-	0.192	0.027	0.049	0.0018	0.016	0.029	-	0.0062	
11-15 TC TS	212088	68 523	75 262	31	0.86	0.077	1.23	0.018	0.005	-	-	-	0.185	0.049	0.050	0.0021	0.018	0.034	-	0.0059	
32-22 TC TS	212089	65 884	75 297	38	0.86	0.074	1.27	0.018	0.005	-	-	-	0.202	0.028	0.059	0.0021	0.018	0.036	-	0.0055	

CERTIFICAMOS QUE LA TUBERIA AQUI 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

ING. FERNANDO OSORIO PEREZ
 GERENTE DE ASESURAMIENTO DE CALIDAD
 QUALITY ASSURANCE MANAGER

[Handwritten Signature]
 04/931