

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

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

DIAMETRO: 10 3/4" ESPESOR DE PARED: 0.188" GRADO: ASTM A53-B PRESION HIDROSTATICA: 51 Kg/cm<sup>2</sup> 730 PSI  
WALL THICKNESS: 0.188" GRADE: ASTM A53-B HYDROSTATIC TEST: 51 Kg/cm<sup>2</sup> 730 PSI


PRUEBAS DE TENSION TENSILE TEST ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSIS PERCENT WEIGHT

NUMPROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 3"	LEDT Y/TS	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
61-14 TC TS	115091	61 226	74 871	35	0.82	0.097	1.19	0.016	0.005	0.016	0.004	-	0.175	0.020	0.034	0.0044	0.018	0.028	0.009	0.0090	
20-19 TC TS	173832	72 972	78 900	29	0.81	0.090	1.16	0.023	0.007	0.025	0.043	-	0.200	0.009	0.034	0.0042	0.016	0.023	0.006	0.0049	
2-21 TC TS	236059	49 950	88 217	33	0.71	0.165	1.10	0.018	0.006	0.001	0.005	-	0.322	0.015	0.038	0.0025	0.013	0.020	0.003	0.0056	
8-18 TC TS	236062	48 595	80 152	37	0.71	0.153	1.05	0.020	0.006	0.001	0.003	-	0.288	0.021	0.037	0.0016	0.016	0.026	0.003	0.0049	
5-21 TC TS	236083	53 336	68 033	36	0.74	0.169	1.14	0.012	0.006	0.001	0.004	-	0.285	0.033	0.042	0.0033	0.014	0.022	0.004	0.0055	
3-18 TC TS	287509	55 279	71 728	37	0.84	0.140	0.94	0.012	0.007	0.003	0.002	-	0.150	0.010	0.040	0.0030	0.018	0.029	0.013	0.0050	
			78 900																		
			89 489																		
			88 217																		
			70 300																		
			80 152																		
			68 033																		
			73 928																		
			71 728																		
			78 716																		
			68 010																		
			70 141																		

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 A53-B -99

  
ING. FERNANDO ASORICO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD

QUALITY CERTIFICATE MATERIALS

CLIENTE: TUCOTVA  
CUSTOMER:  
PEDIDO CLIENTE / P.O. 11153  
PARTIDA (S) 25397-20 / X0173-1 / 49827-10 / X8886-7  
ITEMS  
PRESION HIDROSTATICA: 51 Kg/cm<sup>2</sup>  
NUMERO: P/M-56680.81-2003  
FECHA: NOVIEMBRE 06, 2003  
DATE