



FLM-065-7

PROCARSA, S.A. DE C.V.  
CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICS-CHEMICAL

CLIENTE:	FLCOVA	NUMERO:	FTM-521111-1-2002
CUSTOMER:		NUMBER:	
PEDIDO CLIENTE / P.O.:	9011	FECHA:	MAYO 28, 2002
PEDIDO INTERNO / I.O.:		DATE:	
PARTIDA(S)			
ITEMS	32657-30 / 26573-70 / 33539-40 / XY9154 / 25343-80		

DIAMETRO: 10 3/4"      ESPESOR DE PARED: 0.307"      GRADO: ASTM A53-B      PRESION HIDROSTATICA: 84 Kg/cm<sup>2</sup>      1200 PSI

PRUEBAS DE TENSION

ANALISIS QUIMICO % EN PESO

DIMENSIONES DESCRIPCION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.11)	ULTIMA TENSION TENSILE STRENGTH (P.11)	% ELONG. E	LEAD LEAD V.97.5	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
6-6 Tc	109073	57 217	70 421	41	0.81	0.122	0.92	0.015	0.007	-	-	-	0.075	0.200	0.034	0.0042	0.021	0.035	-	-	
Ts			77 417																		
15-11 Tc	115136	51 575	67 262	42	0.77	0.150	0.94	0.018	0.007	-	-	-	0.170	0.018	0.038	0.0030	0.018	0.021	-	-	
Ts			74 586																		
2-18 Tc	115641	65 022	76 747	35	0.85	0.110	1.15	0.018	0.007	-	-	-	0.170	0.021	0.033	0.0022	0.019	0.030	-	-	
Ts			79 013																		
7-18 Tc	121058	54 791	80 145	36	0.68	0.161	1.12	0.013	0.004	-	-	-	0.210	0.013	0.037	0.0024	0.018	0.033	-	-	
Ts			73 485																		
2-21 Tc	121059	58 862	70 206	37	0.84	0.160	1.10	0.016	0.006	-	-	-	0.233	0.014	0.045	0.0029	0.021	0.025	-	-	
Ts			77 369																		
20-11 Tc	221045	59 166	71 461	38	0.83	0.164	1.12	0.025	0.008	-	-	-	0.185	0.011	0.031	0.0040	0.024	0.045	-	-	
Ts			78 256																		
11-68 Tc	285950	60 267	72 554	37	0.83	0.154	0.89	0.015	0.008	-	-	-	0.179	0.032	0.034	0.0031	0.020	0.033	-	-	
Ts			73 319																		

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

*[Signature]*  
ING. FERNANDO OSORIO PEREZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER