



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

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

CIENTE:	TUCOTA	NUMERO	PTM-53432-2002
CUSTOMER:		NUMBER	
PEDIDO CLIENTE /P.O.	9593	FECHA	NOVIEMBRE 01, 2002
PEDIDO INTERNO /I.O.		DATE	
PARTIDA (S)			
ITEMS			

DIAMETRO: 24" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESION HIDROSTATICA: 440 PSI

WALL THICKNESS: 0.250" CHEMICAL ANALYSIS PERCENT WEIGHT

IDENTIFICACION	OCUBA HEAT	LIMITE ELASTICO YIELD STRENGTH (KSI)	ULTIMA TENSION TENSILE STRENGTH (KSI)	% ELONG. E	LONGIT. INCHES	C	Mn	P	S	CD	V	TI	SI	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
116-11 TC Ts	164231	57 337	78 997	40	0.73	0.080	0.73	0.011	0.010	0.013	-	-	0.227	0.080	0.044	-	0.0100	0.020	-	-	-
124-12 TC Ts	164233	59 570	75 480	38	0.81	0.080	0.74	0.014	0.012	0.011	-	-	0.237	0.100	0.050	-	0.0200	0.020	-	-	-
98-11 TC Ts	164234	58 055	82 319	39	0.83	0.080	0.72	0.017	0.008	0.010	-	-	0.226	0.100	0.040	-	0.0200	0.020	-	-	-
61-2 TC Ts	289109	59 799	73 436	37	0.84	0.070	0.68	0.013	0.009	0.012	-	-	0.245	0.050	0.038	-	0.0100	0.010	-	-	-
121-6 TC Ts	289147	58 084	78 878	38	0.75	0.070	0.70	0.014	0.009	0.013	-	-	0.244	0.060	0.036	-	0.0100	0.020	-	-	-
101-13 TC Ts	289151	60 833	77 529	36	0.86	0.070	0.67	0.009	0.007	0.013	-	-	0.258	0.060	0.032	-	0.0100	0.020	-	-	-
103-9 TC Ts	289227	59 888	70 233	37	0.84	0.080	0.86	0.015	0.009	0.014	-	-	0.288	0.080	0.037	-	0.0200	0.020	-	-	-

CERTIFICAMOS QUE LA TUBERIA ACNÍ 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 OSORIO PEREZ
 GERENTE DE ASEGURAMIENTO DE CALIDAD
 QUALITY ASSURANCE MANAGER