

FLM-005-7

PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
DE PRUEBAS MECANICAS Y ANALISIS QUIMICO**

QUALITY CERTIFICATE OF MECHANICAL TESTS AND CHEMICAL ANALYSES

CLIENTE: PLESA ANAHUAC Y CIAS. S.A. DE C.V.

CUSTOMER:

NUMERO PTM-02455-2012

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 15291

FECHA

DATE SEPTIEMBRE 07, 2012

PARTIDA (S)

ITEMS 119628-30 / 508556-90 / 510579-20 / 125268-10 / 127884-10

HOJA 2 DE 2

AMETRO EXTERIOR : OUTSIDE DIAMETER : 16"	ESPEJOR DE PARED : WALL THICKNESS : 0.500"	GRADO : GRADE : ASTM A53-B	PRESION HIDROSTATICA: HYDROSTATIC TEST: 92 Kg/cm ² 1,310 PSI
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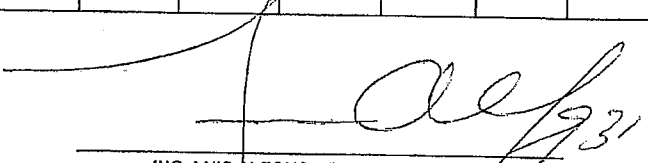
REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS				REQUERIMIENTOS DE ANALISIS QUIMICO % EN PESO / CHEMICAL ANALYSES BY PERCENTAGE OF WEIGHT REQUIREMENTS																
RITE ELASTICO / YIELD STRENGTH	ULTIMA TENSION / TENSILE STRENGTH	% ELONG.	L.E./U.T.	C	Mn	P	S	Cb	Cb+V	Cb+V+Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
35000 PSI MIN.	60000 PSI MIN.	30 min.	---	0.300 max	1.200 max	0.050 max	0.045 max	---	---	---	---	0.500 max	---	---	0.400 max	0.400 max	0.150 max	---	---	---

UM.PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LE/UT Y.S/T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
86-6 Tc Ts	221067	75 977	90 427 83 753	35	0.84	0.089	0.93	0.014	0.003	0.042	0.0280	0.003	0.175	0.219	0.030	0.002	0.018	0.017	0.006	0.0056		
88-9 Tc Ts	221073	70 788	88 451 83 148	35	0.80	0.074	0.93	0.013	0.003	0.043	0.0280	0.003	0.187	0.229	0.022	0.002	0.020	0.020	0.005	0.0054		

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO
ABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO
CON LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

ASTM -10

WE CERTIFY THAT THE ABOVE DESCRIBED PIPE HAS BEEN MANUFACTURED,
SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE FOLLOWING
SPECIFICATION, AND MEETS THE APPLICABLE REQUIREMENTS THEREIN


ING. LUIS ALFONSO DE LOS SANTOS RIVERA
JEFE DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY CHIEF