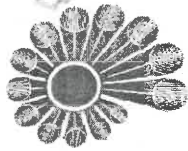


FLM-005-7



PROCARSA, S.A. DE C.V.

EA-100937

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

INSPECTION CERTIFICATE OF MECHANICAL TESTS AND CHEMICAL ANALYSES

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

CUSTOMER:

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 16372

PARTIDA (S)

ITEMS 89418-20 / 94430-20 / 89684-10

NUMERO

PTM-06288-2017

NUMBER

FECHA

DATE

JULIO 21, 2017

DIAMETRO EXTERIOR :

ESPESOR DE PARED :

GRADO :

PRESION HIDROSTATICA:

OUTSIDE DIAMETER : 16"

WALL THICKNESS : 0.250"

GRADE : ASTM A53-B

HIDROSTATIC TEST: 46 Kg/cm² 660 PSI

REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS

REQUERIMIENTOS DE ANALISIS QUIMICO % EN PESO / CHEMICAL ANALYSES BY PERCENTAGE OF WEIGHT REQUIREMENTS

LIMITE 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.	26 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	---	---	---

NUM.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
66-13 Tc Ts	173928	71 317	83 385 82 245	34	0.86	0.087	1.18	0.014	0.007	0.054	0.005	0.007	0.173	0.010	0.036	0.002	0.020	0.020	0.010	0.0064		
6-12 Tc Ts	182265	48 842	65 214 67 804	35	0.74	0.120	0.76	0.012	0.008	0.003	0.003	0.004	0.310	0.020	0.037	0.004	0.020	0.020	0.009	0.0072		
81-3 Tc Ts	273764	70 858	81 759 84 812	35	0.84	0.092	1.15	0.013	0.006	0.054	0.005	0.010	0.179	0.020	0.045	0.002	0.020	0.030	0.010	0.0081		
119-22 Tc Ts	273841	71 391	87 747 92 208	32	0.81	0.099	1.17	0.016	0.004	0.050	0.002	0.006	0.198	0.040	0.037	0.003	0.030	0.030	0.009	0.0040		

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

ASTM A53

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
SUPERVISOR DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY SUPERVISOR

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