

FLM-005-7

PROCARSA, S.A. DE C.V.

**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. 16637

PARTIDA (S)

ITEMS 141195-10 / 208143-10

NUMERO PTM-05933-2018

NUMBER

FECHA .

DATE

ABRIL 04, 2018

DIAMETRO EXTERIOR : 12 3/4" ESPESOR DE PARED : 0.312" GRADO : ASTM A53-B PRESION HIDROSTATICA: 72 Kg/cm² 1,030 PSI
 OUTSIDE DIAMETER : WALL THICKNESS : GRADE : ASTM A53-B HIDROSTATIC TEST: HOJA 1 DE 2

REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS				C	Mn	P	S	Cb	Cb+V	Cb+V+Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
LIMITE ELASTICO / YIELD STRENGTH	ULTIMA TENSION / TENSILE STRENGTH	% ELONG.	L.E./U.T.	0.300 max	1.200 max	0.050 max	0.045 max	---	---	---	---	0.500 max	---	---	0.400 max	0.400 max	0.150 max	---	---	---
35000 PSI MIN.	60000 PSI MIN.	27 min.	---																	

NUM.PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I)	ULTIMA TENSION TENSILE STRENGTH (P.S.I)	% ELONG. 2"	L.E./U.T. Y.S./T.S.	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
64-11 Tc Ts	134085	51 201	64 339 67 368	42	0.79	0.109	0.82	0.014	0.004	0.001	0.0020	0.002	0.232	0.027	0.028	0.004	0.021	0.021	0.004	0.0053		
27-16 Tc Ts	134087	53 869	64 324 69 878	35	0.83	0.105	0.82	0.017	0.003	0.001	0.0040	0.003	0.230	0.014	0.036	0.003	0.017	0.016	0.003	0.0054		
7-1 Tc Ts	134090	51 014	63 876 67 744	40	0.79	0.108	0.80	0.011	0.004	0.001	0.0020	0.002	0.236	0.016	0.047	0.004	0.017	0.017	0.004	0.0041		
54-4 Tc Ts	178872	76 612	84 458 87 477	31	0.91	0.083	1.16	0.012	0.003	0.050	0.0030	0.012	0.170	0.024	0.036	0.004	0.021	0.021	0.006	0.0053		
24-4 Tc Ts	233761	51 363	63 000 69 311	38	0.81	0.121	0.80	0.016	0.003	0.002	0.0020	0.004	0.240	0.025	0.047	0.002	0.016	0.019	0.004	0.0054		
23-16 Tc Ts	233764	52 233	62 258 67 446	40	0.83	0.103	0.82	0.013	0.003	0.001	0.0020	0.003	0.223	0.026	0.035	0.002	0.026	0.019	0.004	0.0053		
15-2 Tc Ts	233766	51 643	62 904 70 905	40	0.82	0.109	0.83	0.010	0.005	0.001	0.0030	0.003	0.240	0.027	0.029	0.003	0.018	0.022	0.003	0.0050		
31-2 Tc Ts	234169	51 540	63 630 68 351	43	0.80	0.116	0.83	0.012	0.004	0.001	0.0030	0.003	0.235	0.029	0.037	0.002	0.023	0.020	0.005	0.0044		
43-3 Tc Ts	234485	49 004	62 035 71 140	44	0.78	0.116	0.81	0.017	0.005	0.001	0.0030	0.003	0.235	0.019	0.038	0.002	0.014	0.017	0.004	0.0050		
53-15 Tc Ts	278636	66 121	80 929 86 792	28	0.82	0.076	1.16	0.017	0.004	0.050	0.0040	0.015	0.180	0.037	0.038	0.003	0.023	0.021	0.006	0.0052		
41-4 Tc Ts	278639	65 995	80 261 85 678	27	0.82	0.069	1.18	0.014	0.003	0.050	0.0030	0.013	0.180	0.018	0.032	0.003	0.017	0.017	0.005	0.0052		
93-7 Tc Ts	278650	74 679	84 079 87 254	30	0.89	0.067	1.15	0.017	0.002	0.049	0.0040	0.013	0.170	0.018	0.036	0.004	0.018	0.016	0.005	0.0053		
92-16 Tc Ts	278651	69 964	80 246 86 998	36	0.87	0.068	1.16	0.012	0.003	0.053	0.0040	0.012	0.180	0.019	0.037	0.003	0.017	0.018	0.006	0.0053		
115-2 Tc Ts	278652	67 753	78 793 84 350	36	0.86	0.066	1.13	0.013	0.002	0.048	0.0030	0.013	0.170	0.024	0.036	0.004	0.023	0.020	0.006	0.0055		

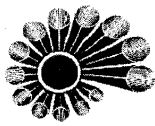
CERTIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APLICABLES DE LA ESPECIFICACION:

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

ASTMA53

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

931



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DIAMETRO EXTERIOR :

12 3/4"

ESPESOR DE PARED :

0.312"

GRADO :

ASTM A53-B

PRESION HIDROSTATICA:

72 Kg/cm²

1,030 PSI

HOJA 2 DE 2

OUTSIDE DIAMETER :

WALL THICKNESS :

GRADE :

HIDROSTATIC TEST:

REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST 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.	27 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"	L.E./U.T. Y.S.T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
7-21 Tc Ts	278867	60 337	72 868 79 239	39	0.83	0.067	1.14	0.015	0.003	0.019	0.0030	0.009	0.220	0.031	0.032	0.003	0.019	0.019	0.006	0.0050		
22-19 Tc Ts	278872	56 883	70 200 76 755	35	0.81	0.070	1.14	0.012	0.001	0.019	0.0030	0.009	0.210	0.021	0.032	0.002	0.016	0.017	0.005	0.0051		
2-1 Tc Ts	284446	56 109	68 764 72 225	35	0.81	0.090	1.12	0.014	0.005	0.024	0.0030	0.011	0.254	0.020	0.035	0.002	0.030	0.020	0.006	0.0065		

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

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