



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. 16463

PARTIDA (S)

ITEMS 199040-20 / 205281-10

NUMERO PTM-05228-1-2017

NUMBER

FECHA

DATE OCTUBRE 19, 2017

DIAMETRO EXTERIOR : OUTSIDE DIAMETER :	16"	ESPESSOR DE PARED : WALL THICKNESS :	0.312"	GRADO : GRADE :	ASTM A53-B	PRESION HIDROSTATICA : HIDROSTATIC TEST:	58 Kg/cm ² 820 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																
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"	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
33-18 Tc Ts	173495	60 247	72 707 77 665	38	0.83	0.065	1.15	0.012	0.004	0.018	0.003	0.009	0.200	0.050	0.033	0.003	0.016	0.025	0.007	0.0055		
23-18 Tc Ts	173496	61 795	72 244 79 015	38	0.86	0.070	1.15	0.013	0.003	0.018	0.003	0.009	0.210	0.031	0.032	0.003	0.023	0.027	0.008	0.0055		
1-18 Tc Ts	173497	60 259	74 484 80 614	35	0.81	0.066	1.16	0.013	0.003	0.018	0.003	0.009	0.210	0.023	0.030	0.003	0.018	0.024	0.007	0.0055		
38-18 Tc Ts	173500	63 140	73 153 76 134	35	0.86	0.066	1.16	0.014	0.003	0.018	0.003	0.009	0.220	0.030	0.027	0.003	0.026	0.031	0.011	0.0054		
24-18 Tc Ts	173502	62 795	72 177 79 891	38	0.87	0.066	1.16	0.014	0.003	0.019	0.003	0.009	0.220	0.027	0.034	0.003	0.023	0.025	0.007	0.0055		
61-2 Tc Ts	174347	59 607	72 443 78 007	40	0.82	0.074	1.15	0.016	0.005	0.017	0.004	0.009	0.200	0.017	0.031	0.004	0.020	0.019	0.005	0.0053		
56-11 Tc Ts	176027	56 576	73 230 78 865	42	0.77	0.066	1.13	0.013	0.005	0.017	0.003	0.007	0.190	0.029	0.032	0.004	0.020	0.026	0.007	0.0054		
53-2 Tc Ts	173498	61 515	70 674 78 094	37	0.87	0.064	1.16	0.015	0.003	0.018	0.003	0.009	0.200	0.023	0.031	0.003	0.022	0.025	0.008	0.0055		
6-18 Tc Ts	176615	62 953	73 062 80 956	42	0.86	0.074	1.17	0.011	0.004	0.017	0.003	0.009	0.230	0.015	0.034	0.004	0.014	0.019	0.005	0.0050		
8-9 Tc Ts	176617	64 293	71 731 76 390	37	0.90	0.069	1.14	0.018	0.008	0.017	0.003	0.010	0.200	0.021	0.037	0.003	0.018	0.020	0.005	0.0050		
20-7 Tc Ts	176618	56 446	72 597 80 769	45	0.78	0.077	1.14	0.017	0.006	0.018	0.002	0.009	0.200	0.021	0.038	0.003	0.018	0.017	0.005	0.0050		
17-18 Tc Ts	273767	59 470	73 398 80 715	37	0.81	0.065	1.14	0.020	0.002	0.018	0.005	0.010	0.220	0.029	0.028	0.003	0.018	0.021	0.005	0.0054		
44-13 Tc Ts	276798	58 745	72 034 77 007	38	0.82	0.073	1.20	0.015	0.008	0.018	0.002	0.009	0.200	0.023	0.036	0.003	0.018	0.019	0.005	0.0051		

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

ASTM A53

[Handwritten Signature]
 ING. LUIS ALFONSO DE LOS SANTOS RIVERA
 SUPERVISOR DE LABORATORIO METALURGICO
 METALLURGICAL LABORATORY SUPERVISOR