

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. 130

PARTIDA (S)

ITEMS 121848-10 / 121799-10 / 123264-10 / 121862-10

NUMERO PTM-06826-2018

NUMBER

FECHA

DATE AGOSTO 20, 2018

DIAMETRO EXTERIOR : OUTSIDE DIAMETER : 12 3/4"		ESPESOR DE PARED : WALL THICKNESS : 0.312"		GRADO : GRADE : ASTM A53-B			PRESION HIDROSTATICA: HIDROSTATIC TEST: 72 Kg/cm ² 1,030 PSI					HOJA 1 DE 2				
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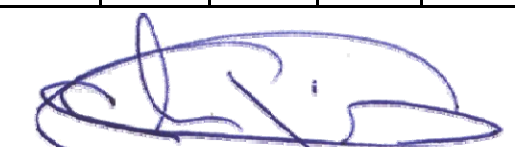
REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS				C	Mn	P	S	Cb	Cb+V	Cb+V+Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
LIMITE ELASTICO / YIELD STRENGTH	ULTIMA TENSION / TENSILE STRENGTH	% ELONG.	L.E./U.T.	0.300 max	1.200 max	0.050 max	0.045 max	---	---	---	---	0.500 max	---	---	0.400 max	0.400 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"	LE/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
1-5 Tc Ts	115674	76 575	87 161 88 180	37	0.87	0.092	1.12	0.020	0.005	0.043	0.0020	0.009	0.165	0.023	0.034	0.003	0.037	0.046	0.015	0.0059		
86-2 Tc Ts	115678	71 035	85 240 88 477	40	0.83	0.076	1.12	0.016	0.006	0.043	0.0010	0.009	0.168	0.019	0.039	0.003	0.018	0.018	0.005	0.0058		
67-7 Tc Ts	115681	69 973	80 098 85 092	34	0.87	0.089	1.11	0.020	0.005	0.044	0.0030	0.009	0.180	0.024	0.034	0.002	0.019	0.021	0.005	0.0056		
29-2 Tc Ts	115688	76 334	86 997 88 856	35	0.87	0.093	1.13	0.012	0.004	0.044	0.0020	0.010	0.176	0.017	0.028	0.003	0.014	0.021	0.006	0.0008		
19-25 Tc Ts	115894	64 025	73 685 76 418	30	0.86	0.077	0.65	0.012	0.004	0.033	0.0020	0.003	0.185	0.217	0.041	0.004	0.019	0.019	0.006	0.0056		
10-4 Tc Ts	115898	64 823	71 750 75 892	31	0.90	0.090	0.65	0.015	0.004	0.032	0.0020	0.003	0.208	0.222	0.037	0.003	0.020	0.017	0.005	0.0056		
3-22 Tc Ts	115902	64 558	71 589 75 526	36	0.90	0.076	0.65	0.013	0.004	0.030	0.0020	0.003	0.182	0.208	0.026	0.004	0.022	0.017	0.005	0.0058		
283-10 Tc Ts	116317	70 691	80 376 86 035	31	0.87	0.094	1.19	0.020	0.004	0.048	0.0050	0.009	0.173	0.013	0.030	0.002	0.017	0.017	0.006	0.0051		
222-23 Tc Ts	116325	75 872	85 786 86 143	32	0.88	0.087	1.12	0.016	0.006	0.046	0.0020	0.008	0.168	0.014	0.029	0.003	0.014	0.017	0.007	0.0054		
242-22 Tc Ts	116453	72 931	82 355 86 182	32	0.88	0.096	1.13	0.017	0.004	0.046	0.0020	0.008	0.165	0.023	0.025	0.003	0.025	0.018	0.007	0.0083		
143-8 Tc Ts	116455	75 290	85 683 86 396	32	0.87	0.092	1.11	0.020	0.003	0.044	0.0020	0.009	0.180	0.040	0.029	0.003	0.020	0.020	0.008	0.0067		
459-8 Tc Ts	117816	76 105	85 976 88 318	32	0.88	0.101	1.11	0.018	0.001	0.046	0.0040	0.010	0.186	0.027	0.021	0.003	0.023	0.023	0.009	0.0058		
374-19 Tc Ts	216494	70 638	83 636 84 948	33	0.84	0.103	1.12	0.020	0.005	0.045	0.0040	0.010	0.178	0.044	0.029	0.003	0.025	0.022	0.007	0.0032		
390-1 Tc Ts	216498	79 924	90 305 92 069	32	0.88	0.095	1.12	0.020	0.003	0.044	0.0050	0.009	0.188	0.023	0.033	0.002	0.019	0.020	0.008	0.0081		

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


INGENIERO ANDRÉS ALARCÓN CAZARES
JEFE DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY CHIEF



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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"	LE/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
366-20 Tc Ts	216499	71 786	83 154 88 396	32	0.86	0.090	1.12	0.020	0.003	0.044	0.0030	0.008	0.190	0.020	0.026	0.003	0.020	0.020	0.008	0.0076		
181-10 Tc Ts	216675	72 586	83 637 87 302	33	0.86	0.094	1.12	0.020	0.005	0.047	0.0030	0.009	0.172	0.057	0.029	0.002	0.017	0.019	0.008	0.0058		
220-11 Tc Ts	216682	69 555	83 867 82 125	34	0.82	0.094	1.12	0.020	0.006	0.044	0.0030	0.010	0.170	0.044	0.025	0.004	0.023	0.019	0.009	0.0059		
199-2 Tc Ts	216683	64 793	83 763 83 629	30	0.77	0.099	1.14	0.020	0.005	0.042	0.0030	0.009	0.191	0.037	0.033	0.003	0.020	0.021	0.008	0.0057		
167-3 Tc Ts	216685	70 728	82 509 84 698	33	0.85	0.084	1.11	0.020	0.006	0.043	0.0030	0.009	0.182	0.028	0.026	0.003	0.016	0.018	0.007	0.0059		
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		

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