

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: CUSTOMER:	PLESA ANAHUAC Y CIAS. S.A. DE C.V.	NUMERO NUMBER	PTM-05919-2018
PEDIDO CLIENTE / P.O. PEDIDO INTERNO / I.O.	16637	FECHA DATE	MARZO 28, 2018
PARTIDA (S) ITEMS	200860-30 / 201281-10 / 201276-70 / 203874-10 / 206988-10		

DIAMETRO EXTERIOR : OUTSIDE DIAMETER :	12 3/4"	ESPESOR DE PARED : WALL THICKNESS :	0.250"	GRADO : GRADE :	ASTM A53-B	PRESION HIDROSTATICA: HYDROSTATIC TEST:	58 Kg/cm ² 820 PSI	HOJA 1 DE 2
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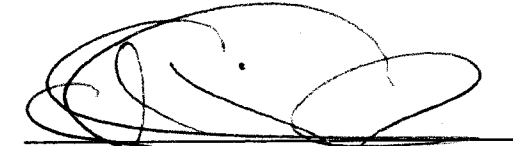
REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS				C	Mn	P	S	Cb	Cb+V	Cb+V+Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	CE IIW	CE Pcm
LIMITE ELASTICO / YIELD STRENGTH	ULTIMA TENSION / TENSILE STRENGTH	% ELONG.	L.E./U.T.	0.300 max	1.200 max	0.050 max	0.045 max	---	---	---	---	0.500 max	---	---	0.400 max	0.400 max	0.150 max	---	---	---
35000 PSI MIN.	60000 PSI MIN.	26 min.	---																	

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
27-22 Tc	173888	62 791	72 827	39	0.86	0.075	1.15	0.013	0.006	0.017	0.0030	0.008	0.200	0.025	0.039	0.003	0.021	0.024	0.006	0.0059		
Ts			77 863																			
10-12 Tc	173902	61 013	70 782	38	0.86	0.069	1.14	0.014	0.004	0.019	0.0030	0.009	0.210	0.023	0.040	0.004	0.020	0.021	0.008	0.0056		
Ts			79 298																			
149-26 Tc	173912	61 827	72 955	41	0.85	0.063	1.19	0.015	0.003	0.019	0.0030	0.009	0.220	0.021	0.040	0.003	0.020	0.021	0.006	0.0056		
Ts			79 980																			
83-26 Tc	173919	63 631	71 087	40	0.90	0.069	1.13	0.015	0.003	0.017	0.0030	0.008	0.210	0.020	0.033	0.003	0.021	0.020	0.005	0.0056		
Ts			76 457																			
62-26 Tc	173921	61 500	72 302	35	0.85	0.076	1.20	0.013	0.003	0.017	0.0030	0.008	0.210	0.023	0.032	0.003	0.024	0.026	0.006	0.0056		
Ts			80 094																			
168-3 Tc	173924	61 969	69 728	40	0.89	0.068	1.11	0.014	0.004	0.018	0.0020	0.007	0.210	0.023	0.028	0.003	0.022	0.023	0.005	0.0056		
Ts			74 294																			
127-2 Tc	173925	62 480	70 805	39	0.88	0.064	1.13	0.015	0.003	0.018	0.0030	0.009	0.210	0.024	0.036	0.003	0.025	0.024	0.006	0.0056		
Ts			75 828																			
93-26 Tc	173928	59 955	70 582	37	0.85	0.078	1.13	0.014	0.003	0.018	0.0030	0.008	0.210	0.023	0.035	0.004	0.019	0.023	0.006	0.0056		
Ts			76 508																			
28-23 Tc	175996	68 134	75 852	31	0.90	0.066	1.20	0.016	0.005	0.018	0.0040	0.009	0.210	0.023	0.024	0.004	0.021	0.021	0.007	0.0052		
Ts			75 764																			
27-22 Tc	175998	64 767	72 528	34	0.89	0.069	1.12	0.015	0.005	0.018	0.0040	0.008	0.200	0.020	0.030	0.005	0.016	0.020	0.006	0.0052		
Ts			78 115																			
13-20 Tc	176004	56 711	70 299	33	0.81	0.072	1.17	0.013	0.005	0.018	0.0030	0.007	0.190	0.025	0.036	0.004	0.019	0.019	0.006	0.0054		
Ts			73 604																			
67-18 Tc	177892	62 894	72 873	39	0.86	0.080	1.14	0.011	0.003	0.018	0.0030	0.007	0.210	0.025	0.028	0.002	0.017	0.020	0.004	0.0053		
Ts			75 850																			
85-22 Tc	177893	65 814	71 433	37	0.92	0.075	1.14	0.015	0.004	0.017	0.0030	0.008	0.200	0.020	0.032	0.003	0.023	0.018	0.004	0.0053		
Ts			76 353																			
52-18 Tc	177895	58 725	70 076	42	0.84	0.066	1.14	0.012	0.004	0.018	0.0030	0.010	0.210	0.032	0.029	0.003	0.025	0.021	0.006	0.0052		
Ts			75 826																			

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


 ING. ALEJANDRO ALARCON CAZARES
 JEFE DE LABORATORIO METALURGICO
 METALLURGICAL LABORATORY CHIEF



PLM-005-7

PROCARSA, S.A. DE C.V.

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CUSTOMER:

NUMERO PTM-05919-2018
NUMBER

PEDIDO CLIENTE/P.O. 16637
PARTIDA(S) PEDIDO INTERNO / I.O.

200860-30 / 201281-10 / 201276-70 / 203874-10 / 206988-10

FECHA MARZO 28, 2018
DATE

DIAMETRO EXTERIOR : 12 3/4" ESPESOR DE PARED : 0.250" GRADO : ASTM A53-B PRESSION HIDROSTATICA: 820 PSI HOJA 2 DE 2
OUTSIDE DIAMETER : WALL THICKNESS : GRADE : ASTM A53-B

REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS	ULTIMA TENSION / TENSILE STRENGTH	% ELONG. / % ELONG.	LE/UT. / LE/UT.	C	Min	P	S	Cb	Cb+V	Cb+V+TI	SI	Cu	Al	Ca	Cr	Ni	Mo	N	CE IW	CE Pem	
LIMITE ELASTICO / YIELD STRENGTH	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	---	---	---	
35000 PSI MIN.																					

NUM.PROBETA / DESCRIPTION	COLADA / HEAT	LIMITE ELASTICO / YIELD STRENGTH (P.S.I.)	ULTIMA TENSION / TENSILE STRENGTH (P.S.I.)	% ELONG. / % ELONG.	LE/UT. / Y./T.S	C	Min	P	S	Cb	V	TI	SI	Cu	Al	Ca	Cr	Ni	Mo	N	CE IW	CE Pem
83-26 Tc	177900	62 903	73 091	35	0.86	0.082	1.14	0.012	0.004	0.018	0.0030	0.009	0.210	0.022	0.036	0.003	0.016	0.017	0.004	0.0050		
Ts			76 588																			
81-23 Tc	177901	64 146	70 352	37	0.91	0.069	1.15	0.016	0.003	0.018	0.0040	0.009	0.220	0.036	0.037	0.002	0.022	0.022	0.005	0.0056		
Ts			75 111																			
50-1 Tc	274163	65 632	74 577	32	0.88	0.081	1.13	0.012	0.005	0.018	0.0030	0.009	0.220	0.030	0.040	0.004	0.021	0.026	0.007	0.0056		
Ts			83 039																			
2-20 Tc	276192	60 665	70 369	40	0.86	0.075	1.16	0.016	0.003	0.018	0.0050	0.009	0.210	0.030	0.026	0.003	0.031	0.028	0.010	0.0052		
Ts			74 186																			

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