



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 510920-60 / 32944-40 / 93441-90 / 101404-40 / T-01-08

NUMERO PTM-05922-2018
NUMBER

FECHA MARZO 28, 2018
DATE

DIAMETRO EXTERIOR : 14" ESPESOR DE PARED : 0.375" GRADO : ASTM A53-B PRESION HIDROSTATICA: 79 Kg/cm² 1,130 PSI
OUTSIDE DIAMETER : 14" WALL THICKNESS : 0.375" GRADE : ASTM A53-B HIDROSTATIC TEST:

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.	28 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
7-3 Tc Ts	120190	51 230	64 999 67 263	45	0.78	0.100	0.83	0.013	0.008	0.002	0.002	0.005	0.239	0.023	0.050	0.002	0.013	0.021	0.007	0.0057		
20-16 Tc Ts	121170	56 928	64 208 74 733	41	0.89	0.124	0.79	0.024	0.010	0.002	0.002	0.001	0.166	0.015	0.035	0.002	0.011	0.025	0.005	0.0055		
5-11 Tc Ts	181384	51 967	65 460 72 790	40	0.79	0.146	0.80	0.019	0.005	0.001	0.005	0.005	0.293	0.020	0.042	0.003	0.020	0.030	0.005	0.0069		
3-2 Tc Ts	281317	53 926	62 701 69 993	35	0.86	0.130	0.81	0.016	0.004	0.001	0.003	0.005	0.298	0.010	0.048	0.002	0.010	0.020	0.005	0.0040		
3-10 Tc Ts	219746	51 067	60 794 64 876	45	0.83	0.100	0.78	0.014	0.008	0.002	0.002	0.003	0.211	0.039	0.037	0.002	0.032	0.023	0.006	0.0060		
2-3 Tc Ts	219747	54 219	64 205 67 273	45	0.84	0.115	0.79	0.018	0.004	0.002	0.004	0.004	0.231	0.047	0.025	0.002	0.022	0.022	0.008	0.0055		
9-12 Tc Ts	219748	51 375	62 626 67 723	45	0.82	0.114	0.83	0.011	0.006	0.003	0.001	0.005	0.235	0.029	0.050	0.002	0.017	0.020	0.006	0.0057		
1-2 Tc Ts	219749	53 798	60 335 64 900	44	0.89	0.104	0.81	0.013	0.007	0.002	0.003	0.003	0.200	0.021	0.050	0.002	0.018	0.020	0.010	0.0065		
33-3 Tc Ts	288012	75 490	84 579 89 328	30	0.89	0.084	1.11	0.013	0.003	0.043	0.003	0.007	0.175	0.030	0.035	0.002	0.030	0.020	0.007	0.0075		
81-18 Tc Ts	288015	71 307	81 347 90 115	35	0.87	0.097	1.15	0.013	0.004	0.047	0.002	0.008	0.191	0.040	0.035	0.003	0.020	0.030	0.009	0.0074		
259-9 Tc Ts	288131	73 295	85 022 86 940	34	0.86	0.095	1.12	0.014	0.005	0.047	0.004	0.008	0.185	0.030	0.026	0.002	0.020	0.020	0.008	0.0043		
102-16 Tc Ts	288134	71 332	79 723 86 472	31	0.89	0.090	1.12	0.013	0.003	0.044	0.003	0.010	0.168	0.020	0.035	0.002	0.020	0.020	0.006	0.0072		
58-14 Tc Ts	288139	75 085	84 834 85 500	31	0.88	0.094	1.15	0.020	0.004	0.043	0.003	0.007	0.194	0.030	0.043	0.002	0.030	0.030	0.007	0.0062		
7-9 Tc Ts	813023	78 016	85 482 91 392	30	0.91	0.071	1.19	0.013	0.001	0.052	0.060	0.019	0.120	0.008	0.031	0.003	0.03	0.005	0.002	0.0037		

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. ALEJANDRO ALARCON CAZARES
JEFE DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY CHIEF