

FLM-005-7

PROCARSA, S.A. DE C.V.

**CERTIFICADO DE INSPECCION
DE PRUEBAS MECANICAS Y ANALISIS QUIMICO**

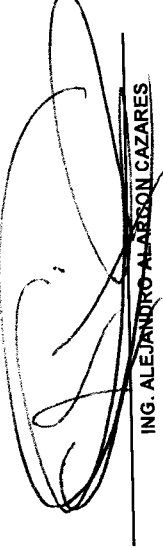
INSPECTION CERTIFICATE OF MECHANICAL TESTS AND CHEMICAL ANALYSES

CLIENTE: PLESA ANAHUAC Y CIAS. S.A. DE C.V.	NUMERO NUMBER PTM-06339-2017
CUSTOMER: PEDIDO CLIENTE / P.O. 16390	FECHA DATE AGOSTO 04, 2017
PARTIDA (S) ITEMS 199649-10 / 59186-10 / 73032-20 / 93441-60	
GRADO: GRADE: ASTM A53-B	PRESION HIDROSTATICA: HYDROSTATIC TEST: 1,240 PSI
ESPOSOR DE PARED: WALL THICKNESS: 0.375"	87 Kg/cm ²

NUM. PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LE/UT Y./T.S.	REQUERIMIENTOS DE PRUEBAS DE TENSION / TENSILE TEST REQUIREMENTS											N	CE IIW	CE Pem																														
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca				Cr	Ni	Mo																											
35000 PSI MIN.		60000 PSI MIN.		28 min.		0.300 max											0.050 max											0.400 max											0.150 max										
92-4 Tc	144763	72 337	78 913	36	0.92	0.107	1.16	0.017	0.007	0.028	0.0050	0.005	0.310	0.040	0.035	0.003	0.020	0.008	0.0079																														
Ts			83 855																																														
54-2 Tc	172251	66 909	74 759	37	0.89	0.067	1.11	0.014	0.005	0.017	0.0030	0.008	0.200	0.020	0.036	0.003	0.020	0.007	0.0050																														
Ts			77 426																																														
28-18 Tc	172254	75 357	84 364	30	0.89	0.072	1.15	0.015	0.005	0.019	0.0040	0.009	0.210	0.021	0.038	0.004	0.019	0.007	0.0048																														
Ts			79 770																																														
38-14 Tc	172255	67 661	76 476	36	0.88	0.087	1.12	0.015	0.006	0.019	0.0040	0.009	0.200	0.027	0.030	0.004	0.025	0.008	0.0047																														
Ts			80 877																																														
43-10 Tc	172257	75 658	83 002	31	0.91	0.090	1.14	0.016	0.005	0.017	0.0040	0.008	0.230	0.021	0.026	0.003	0.024	0.008	0.0054																														
Ts			80 433																																														
29-10 Tc	172260	69 625	77 798	30	0.89	0.088	1.14	0.013	0.005	0.019	0.0040	0.009	0.220	0.020	0.030	0.003	0.024	0.006	0.0054																														
Ts			82 034																																														
36-18 Tc	172266	75 840	81 188	30	0.93	0.080	1.14	0.015	0.006	0.020	0.0030	0.010	0.210	0.021	0.041	0.004	0.019	0.007	0.0054																														
Ts			82 287																																														
74-18 Tc	172269	72 033	78 791	30	0.91	0.078	1.17	0.016	0.005	0.019	0.0030	0.008	0.220	0.019	0.030	0.003	0.020	0.007	0.0055																														
Ts			80 292																																														
34-4 Tc	172272	60 708	72 901	34	0.83	0.070	1.15	0.013	0.005	0.018	0.0030	0.012	0.200	0.029	0.032	0.004	0.027	0.007	0.0055																														
Ts			80 479																																														
56-18 Tc	172273	72 307	80 747	31	0.90	0.072	1.15	0.013	0.004	0.018	0.0030	0.008	0.210	0.021	0.032	0.003	0.020	0.007	0.0054																														
Ts			81 149																																														
33-15 Tc	263749	58 331	75 444	37	0.77	0.161	1.04	0.015	0.006	0.010	0.0040	0.004	0.304	0.040	0.035	0.003	0.030	0.006	0.0038																														
Ts			80 639																																														
2-10 Tc	280997	51 819	66 399	32	0.78	0.118	0.76	0.018	0.007	0.001	0.0040	0.005	0.302	0.010	0.044	0.002	0.020	0.006	0.0050																														
Ts			72 964																																														

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

ASTM A53


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