

FLM-005-7



PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: PLESA ANAHUAC Y CIAS. S.A. DE C.V.

NUMERO PTM-77901-2010

CUSTOMER:

NUMBER

PEDIDO CLIENTE /P.O.

PEDIDO INTERNO / I.O.

3074

FECHA

DATE

AGOSTO 16, 2010

PARTIDA (S)

ITEMS

96151-60 / 100596-30 / 93259-70 / 102742-40 / 109340-60

DIAMETRO : DIAMETER : 12 3/4"	ESPESOR DE PARED WALL THICKNESS 0.500"	GRADO : GRADE : ASTM A53-B	PRESION HIDROSTATICA: HIDROSTATIC TEST: 116 Kg/cm ² 1,650 PSI
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PRUEBAS DE TENSION

TENSILE TEST

ANALISIS QUIMICO % EN PESO

CHEMICAL ANALYSES PERCENT WEIGHT

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	Ceq
1-10 Tc Ts	186461	66 048	71 448 74 452	35	0.92	0.081	1.16	0.014	0.004	0.019	0.003	0.010	0.277	0.020	0.031	0.002	0.020	0.020	0.007	0.0054	
10-13 Tc Ts	187312	68 701	73 910 74 915	40	0.92	0.076	1.19	0.016	0.006	0.023	0.002	0.008	0.214	0.030	0.038	0.001	0.030	0.030	0.008	0.0045	
8-13 Tc Ts	187314	68 308	74 733 77 514	32	0.91	0.090	1.17	0.016	0.005	0.022	0.004	0.007	0.258	0.030	0.038	0.002	0.020	0.020	0.006	0.0058	
4-5 Tc Ts	286143	65 930	72 944 73 514	38	0.90	0.073	1.16	0.013	0.004	0.021	0.002	0.007	0.225	0.030	0.038	0.002	0.020	0.020	0.006	0.0059	
3-5 Tc Ts	286144	68 404	73 974 73 047	38	0.92	0.077	1.16	0.013	0.007	0.021	0.005	0.011	0.271	0.020	0.029	0.002	0.030	0.020	0.006	0.0057	
7-9 Tc Ts	286173	65 126	71 162 74 705	37	0.91	0.073	1.17	0.015	0.004	0.020	0.003	0.007	0.231	0.050	0.033	0.002	0.020	0.030	0.009	0.0055	
6-10 Tc Ts	286176	65 511	71 208 73 194	40	0.92	0.073	1.16	0.018	0.005	0.021	0.003	0.008	0.255	0.020	0.031	0.002	0.020	0.020	0.007	0.0061	
12-13 Tc Ts	280717	54 466	64 418 73 422	38	0.84	0.124	0.77	0.018	0.005	0.001	0.004	0.005	0.291	0.020	0.042	0.002	0.020	0.030	0.007	0.0048	
5-9 Tc Ts	290365	56 224	61 125 68 909	40	0.91	0.116	0.79	0.014	0.006	0.001	0.002	0.004	0.284	0.010	0.047	0.003	0.030	0.020	0.006	0.0044	
9-12 Tc Ts	298905	55 126	64 980 72 315	44	0.84	0.123	0.79	0.018	0.005	0.001	0.003	0.003	0.279	0.026	0.041	0.003	0.024	0.022	0.004	0.0024	
11-7 Tc Ts	298907	56 998	66 019 71 835	40	0.86	0.113	0.78	0.018	0.005	0.001	0.006	0.003	0.295	0.024	0.034	0.003	0.024	0.021	0.004	0.0032	
4-12 Tc Ts	298908	56 054	65 017 72 403	44	0.86	0.129	0.78	0.013	0.006	0.002	0.003	0.003	0.294	0.029	0.040	0.003	0.032	0.029	0.006	0.0064	
1-3 Tc Ts	298909	54 336	63 686 70 967	40	0.85	0.127	0.79	0.015	0.007	0.001	0.003	0.003	0.288	0.023	0.039	0.003	0.029	0.023	0.006	0.0045	

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 -06

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

ING. ALEJANDRO ALARCON CAZARES
SUPERVISOR DE LABORATORIO METALURGICO
METALLURGICAL LABORATORY SUPERVISOR