


**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-78147-2010

CUSTOMER:

NUMBER

PEDIDO CLIENTE /P.O.

PEDIDO INTERNO / I.O. 3178

FECHA

DATE OCTUBRE 11, 2010

PARTIDA (S)

ITEMS 112045-10

DIAMETRO : DIAMETER : 12 3/4"	ESPESOR DE PARED WALL THICKNESS 0.375"	GRADO : GRADE : ASTM A53-B	PRESION HIDROSTATICA: HYDROSTATIC TEST: 87 Kg/cm ² 1,240 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
111-16 Tc Ts	103371	65 197	71 491 77 183	38	0.91	0.054	1.15	0.017	0.006	0.015	0.004	0.008	0.231	0.017	0.035	0.003	0.015	0.020	0.012	0.0069	
25-19 Tc Ts	103373	60 234	71 245 79 498	40	0.84	0.064	1.17	0.014	0.006	0.016	0.004	0.007	0.234	0.017	0.034	0.002	0.019	0.022	0.012	0.0063	
79-3 Tc Ts	103683	62 728	72 751 78 519	38	0.86	0.064	1.14	0.013	0.005	0.022	0.005	0.008	0.220	0.020	0.032	0.003	0.020	0.020	0.009	0.0064	
80-3 Tc Ts	103685	66 020	73 604 77 334	40	0.89	0.070	1.14	0.014	0.003	0.017	0.003	0.008	0.255	0.029	0.038	0.003	0.021	0.022	0.008	0.0058	
60-14 Tc Ts	103686	67 609	73 432 77 270	38	0.92	0.088	1.16	0.014	0.003	0.018	0.003	0.008	0.262	0.025	0.038	0.002	0.023	0.021	0.008	0.0077	
8-12 Tc Ts	103687	65 782	75 475 81 049	40	0.87	0.090	1.14	0.015	0.004	0.021	0.005	0.013	0.250	0.010	0.027	0.002	0.020	0.020	0.008	0.0074	
76-3 Tc Ts	103688	65 811	72 522 77 316	42	0.90	0.075	1.17	0.015	0.006	0.019	0.005	0.011	0.240	0.016	0.045	0.003	0.015	0.018	0.008	0.0080	
56-6 Tc Ts	103690	60 201	71 300 78 048	38	0.84	0.081	1.18	0.014	0.005	0.018	0.003	0.008	0.225	0.026	0.037	0.002	0.025	0.022	0.008	0.0064	
49-9A Tc Ts	103694	56 608	67 470 72 870	42	0.83	0.053	1.18	0.017	0.005	0.018	0.005	0.011	0.272	0.029	0.040	0.003	0.019	0.019	0.006	0.0045	
31-14 Tc Ts	103695	63 968	73 158 77 171	40	0.87	0.057	1.20	0.015	0.004	0.018	0.004	0.011	0.273	0.030	0.041	0.003	0.020	0.021	0.009	0.0050	
12-14 Tc Ts	103697	62 702	70 839 76 927	40	0.88	0.060	1.14	0.015	0.005	0.017	0.005	0.011	0.240	0.020	0.030	0.002	0.020	0.020	0.006	0.0068	
14-15 Tc Ts	103698	66 480	72 411 76 690	38	0.92	0.059	1.16	0.018	0.004	0.020	0.005	0.010	0.226	0.029	0.035	0.002	0.018	0.023	0.008	0.0078	
101-16 Tc Ts	103700	62 162	70 960 76 877	40	0.87	0.063	1.16	0.017	0.005	0.018	0.003	0.010	0.280	0.015	0.041	0.002	0.015	0.013	0.008	0.0055	
107-3 Tc Ts	104922	66 878	71 230 80 020	36	0.93	0.072	1.15	0.015	0.006	0.020	0.005	0.009	0.226	0.013	0.032	0.003	0.021	0.017	0.010	0.0063	

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