

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

CLIENTE: PLESA ANAHUAC Y CIAS. S.A. DE C.V.
 CUSTOMER: PLESA ANAHUAC Y CIAS. S.A. DE C.V.
 PEDIDO CLIENTE / P.O. NUMBER: 18354
 PEDIDO INTERNO / I.O. NUMBER: 18354
 PARTIDA (S) DATE: JULIO 23, 2005
 ITEMS

DIAMETRO: 12.34" ESPESOR DE PARED: 0.250" GRADO: 820 PSI
 DIAMETER: 12.34" WALL THICKNESS: 0.250" GRADE: ASTM A53-B
 PRESION HIDROSTATICA: 58 kg/cm²
 HYDROSTATIC TEST: 820 PSI

NOM/PROBETA DESCRIPTION	COLADA HEAT	PRUEBAS DE TENSION TENSILE TEST		ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG 2"	LEVL.T V.S.T.S	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSES PERCENT WEIGHT											N	Ceq					
		LIMITE ELASTICO YIELD STRENGTH (PSI)	ESFONDO DE TENSION TENSILE STRENGTH (PSI)				C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca			Cr	Ni	Mo		
1-13 Tc Ts	147787	54 197	68 559	71 618	35	0.79	0.164	1.06	0.018	0.010	0.005	0.003	0.004	0.250	0.010	0.045	0.0020	0.020	0.020	0.005	0.020	0.015	0.0050	0.0050
11-13 Tc Ts	148684	58 588	71 701	78 760	36	0.82	0.163	1.12	0.016	0.007	0.005	0.004	0.003	0.170	0.050	0.037	0.0023	0.030	0.030	0.015	0.030	0.015	0.0070	0.0070
4-23 Tc Ts	148685	56 221	74 493	76 915	33	0.75	0.155	1.09	0.014	0.006	0.005	0.004	0.003	0.160	0.030	0.032	0.0028	0.030	0.030	0.015	0.030	0.015	0.0060	0.0060
5-17 Tc Ts	148689	57 669	75 955	76 626	36	0.76	0.156	1.10	0.021	0.010	0.004	0.005	0.003	0.180	0.030	0.045	0.0034	0.030	0.030	0.016	0.030	0.016	0.0050	0.0050
10-4 Tc Ts	150408	49 383	69 959	77 975	39	0.71	0.168	1.13	0.015	0.008	0.004	0.005	0.003	0.170	0.030	0.039	0.0042	0.030	0.040	0.013	0.040	0.013	0.0040	0.0040
28-1 Tc Ts	150576	54 093	71 403	75 755	37	0.76	0.160	1.08	0.019	0.006	0.002	0.004	0.003	0.170	0.020	0.034	0.0034	0.020	0.030	0.013	0.030	0.013	0.0040	0.0040
2-7 Tc Ts	247531	56 126	72 162	79 519	35	0.78	0.180	1.11	0.011	0.004	0.001	0.003	0.004	0.230	0.020	0.039	0.0023	0.020	0.030	0.007	0.030	0.007	0.0050	0.0050
3-6 Tc Ts	250435	52 511	67 712	73 953	38	0.78	0.150	1.09	0.013	0.007	0.004	0.005	0.004	0.160	0.030	0.039	0.0032	0.030	0.040	0.014	0.040	0.014	0.0030	0.0030
7-14 Tc Ts	250437	54 530	71 309	77 519	39	0.76	0.166	1.12	0.014	0.005	0.002	0.005	0.004	0.170	0.020	0.043	0.0021	0.030	0.030	0.011	0.030	0.011	0.0030	0.0030

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APLICABLES DE LA ESPECIFICACION ASTM A53-B-02

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS: ASTM A53-B-02

ING. FERRANDO OSORIO PEREZ
 GERENTE DE ASEGURAMIENTO DE CALIDAD
 QUALITY ASSURANCE MANAGER