



FLM-005-7
PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICAL-CHEMICAL

DIAMETRO: 10.34" ESPESOR DE PARED: 0.365" GRADO: ASTM A53-B 1430 PSI
DIAMETER: 10.34" WALL THICKNESS: 0.365" GRADE: ASTM A53-B 1430 PSI

**PRUEBAS DE TENSION
TENSILE TEST**

NUM PROBE/A DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	ELONG. 5.0"	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
11-4 TC TS	182018	66 607	71 856 77 750	34	0.92	0.079	0.65	0.013	0.004	0.034	0.002	0.004	0.167	0.230	0.026	0.001	0.020	0.020	0.003	0.0052	
1-10 TC TS	182020	66 429	72 619 78 171	33	0.90	0.058	0.65	0.014	0.004	0.031	0.004	0.005	0.170	0.230	0.041	0.0013	0.020	0.020	0.005	0.0065	
15-13 TC TS	183880	66 394	72 961 76 576	34	0.91	0.060	0.66	0.013	0.004	0.032	0.002	0.003	0.178	0.250	0.043	0.001	0.020	0.030	0.005	0.0063	
13-20 TC TS	183881	65 401	71 203 74 158	35	0.91	0.057	0.65	0.012	0.005	0.031	0.003	0.004	0.191	0.220	0.038	0.002	0.020	0.020	0.004	0.0061	
4-17 TC TS	183882	65 638	72 091 77 654	35	0.91	0.076	0.63	0.011	0.004	0.032	0.002	0.003	0.179	0.210	0.039	0.002	0.020	0.020	0.003	0.0061	
22-20 TC TS	274982	65 929	71 307 78 310	35	0.92	0.063	0.65	0.012	0.005	0.031	0.002	0.004	0.195	0.200	0.040	0.003	0.030	0.040	0.007	0.0043	
4-5 TC TS	284356	57 618	69 437 71 038	34	0.82	0.060	1.17	0.010	0.003	0.019	0.003	0.010	0.317	0.030	0.044	0.002	0.020	0.020	0.008	0.0066	
9-1 TC TS	284357	57 278	69 032 72 983	33	0.82	0.067	1.18	0.009	0.003	0.021	0.004	0.008	0.324	0.020	0.044	0.001	0.010	0.020	0.006	0.0079	

**ANALISIS QUIMICO % EN PESO
CHEMICAL ANALYSES PERCENT WEIGHT**

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

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-06

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

[Handwritten Signature]
931

CLIENTE: PLESA ANAHUAC Y GAS, S.A. DE C.V. NUMERO: PTM-7297-2008
CUSTOMER: PEDIDO CLIENTE/P.O. 1743
PARTIDA(S) PEDIDO INTERNO/I.O. 95656-40 / 95656-50 / 86404-51
ITEMS: PRESION HIDROSTATICA: 101 Kg/cm² 1430 PSI
HIDROSTATIC TEST: 101 Kg/cm² 1430 PSI
FECHA: AGOSTO 27, 2008
DATE: AGOSTO 27, 2008