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.
CUSTOMER:

NUMERO PTM-63610-2005
NUMBER

PEDIDO CLIENTE /P.O.
PEDIDO INTERNO / I.O. 353
PARTIDA (S)
ITEMS 63699-10

FECHA
DATE DICIEMBRE 12, 2005

DIAMETRO :
DIAMETER : 16"

ESPESOR DE PARED
WALL THICKNESS 0.281"

GRADO :
GRADE : ASTM A53-B

PRESION HIDROSTATICA:
HIDROSTATIC TEST: 52 Kg/cm^2 740 PSI

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/ULT Y.S/T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
6-8 Tc	150491	54 214	69 344	38	0.78	0.168	1.06	0.013	0.008	0.004	0.004	0.003	0.190	0.030	0.033	0.0035	0.020	0.030	0.009	0.0040	
Ts			75 004																		
12-15 Tc	150492	55 653	70 832	37	0.79	0.160	1.09	0.015	0.008	0.004	0.004	0.003	0.150	0.030	0.033	0.0018	0.030	0.030	0.008	0.0040	
Ts			77 264																		
5-18 Tc	150494	56 626	72 629	36	0.78	0.165	1.08	0.015	0.007	0.003	0.005	0.005	0.200	0.030	0.035	0.0021	0.030	0.003	0.007	0.0050	
Ts			79 213																		
7-11 Tc	250636	53 916	69 492	37	0.78	0.161	1.08	0.020	0.005	0.001	0.005	0.003	0.160	0.020	0.033	0.0017	0.010	0.030	0.005	0.0070	
Ts			75 091																		
2-10 Tc	250638	54 398	70 223	35	0.77	0.162	1.11	0.016	0.005	0.001	0.005	0.004	0.200	0.030	0.027	0.0017	0.020	0.030	0.006	0.0050	
Ts			75 554																		
1-16 Tc	251188	52 459	70 343	36	0.75	0.165	1.10	0.015	0.004	0.003	0.005	0.004	0.250	0.040	0.032	0.0029	0.030	0.040	0.010	0.0050	
Ts			75 640																		

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 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:

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