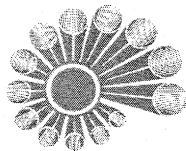


FLM-005-7



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-75574-2009

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 2499

FECHA

DATE AGOSTO 21, 2009

PARTIDA (S)

ITEMS 92322-10 / 90449-20

DIAMETRO : DIAMETER : 16"	ESPEJOR DE PARED WALL THICKNESS 0.312"	GRADO : GRADE : ASTM A53-B	PRESION HIDROSTATICA: HIDROSTATIC TEST: 58 Kg/cm ² 820 PSI
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PRUEBAS DE TENSION

TENSILE TEST

ANALISIS QUIMICO % EN PESO


CHEMICAL ANALYSES PERCENT WEIGHT

NUMPROBETA 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
3-5 Tc Ts	175292	53 834	64 381 69 287	36	0.84	0.140	0.79	0.012	0.007	0.004	0.004	0.004	0.284	0.020	0.040	0.0027	0.020	0.020	0.008	0.0058	
9-7 Tc Ts	175293	53 146	64 082 69 554	34	0.83	0.110	0.76	0.015	0.004	0.001	0.004	0.005	0.271	0.020	0.040	0.0016	0.020	0.020	0.003	0.0040	
16-7 Tc Ts	175296	54 247	62 927 69 366	35	0.86	0.132	0.79	0.009	0.005	0.004	0.004	0.005	0.300	0.030	0.049	0.0020	0.020	0.030	0.008	0.0071	
15-3 Tc Ts	175297	53 744	63 496 68 328	35	0.85	0.126	0.79	0.010	0.007	0.003	0.004	0.005	0.284	0.020	0.045	0.0020	0.020	0.020	0.007	0.0051	
12-6 Tc Ts	175371	54 786	64 428 67 147	35	0.85	0.136	0.83	0.013	0.006	0.003	0.005	0.005	0.314	0.010	0.040	0.0022	0.010	0.020	0.008	0.0049	
11-11 Tc Ts	179266	69 382	82 948 87 306	31	0.84	0.098	1.10	0.019	0.005	0.058	0.005	0.006	0.182	0.020	0.028	0.0022	0.020	0.030	0.009	0.0049	
2-9 Tc Ts	273841	72 131	88 743 87 979	30	0.81	0.099	1.17	0.016	0.004	0.050	0.002	0.008	0.198	0.040	0.037	0.0025	0.030	0.030	0.009	0.0040	
5-5 Tc Ts	275194	55 698	65 527 68 711	34	0.85	0.145	0.79	0.014	0.008	0.003	0.004	0.005	0.303	0.010	0.033	0.0029	0.020	0.020	0.007	0.0061	

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