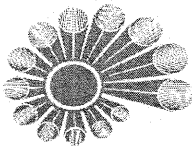


FLM-005-7



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-00839-2011

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O.

3831

FECHA

DATE OCTUBRE 22, 2011

PARTIDA (S)

ITEMS

121573-50

DIAMETRO :

DIAMETER : 12 3/4"

ESPEJOR DE PARED

WALL THICKNESS

0.250"

GRADO :

GRADE :

ASTM A53-B

PRESION HIDROSTATICA:

HIDROSTATIC TEST:

58 Kg/cm²

820 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/UT Y./T.S	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ce
1-8 Tc Ts	115324	51 707	66 481 66 877	34	0.77	0.108	0.80	0.017	0.007	0.002	0.003	0.003	0.256	0.018	0.031	0.004	0.013	0.023	0.005	0.0045	
3-11 Tc Ts	115325	50 495	66 157 68 850	35	0.76	0.120	0.80	0.016	0.003	0.002	0.001	0.003	0.230	0.022	0.029	0.003	0.020	0.022	0.004	0.0053	
8-9 Tc Ts	117670	52 072	64 433 64 516	32	0.80	0.117	0.79	0.014	0.006	0.001	0.002	0.002	0.214	0.025	0.034	0.003	0.016	0.016	0.006	0.0052	
5-10 Tc Ts	215848	51 391	61 742 63 533	40	0.83	0.120	0.80	0.018	0.005	0.004	0.005	0.004	0.223	0.016	0.045	0.003	0.020	0.018	0.008	0.0050	
7-8 Tc Ts	217146	53 003	64 156 71 411	31	0.82	0.115	0.77	0.018	0.005	0.004	0.005	0.005	0.224	0.028	0.028	0.003	0.022	0.017	0.006	0.0035	

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