



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-75771-2009
NUMBER

PEDIDO CLIENTE / P.O.
PEDIDO INTERNO / I.O. 2616

FECHA
DATE OCTUBRE 03, 2009

PARTIDA (S)
ITEMS 102742-20

DIAMETRO :
DIAMETER : 10 3/4"

ESPEJOR DE PARED
WALL THICKNESS 0.500"

GRADO :
GRADE : ASTM A53-B

PRESION HIDROSTATICA:
HIDROSTATIC TEST: 137 Kg/cm² 1950 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.S./T.S | C | Mn | P | S | Cb | V | Ti | Si | Cu | Al | Ca | Cr | Ni | Mo | N | Ceq |
|----------------------------|----------------|---|--|----------------|-------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----|
| 6-2 Tc Ts | 189457 | 53 738 | 63 638 68 255 | 38 | 0.84 | 0.128 | 0.85 | 0.011 | 0.006 | 0.002 | 0.003 | 0.005 | 0.350 | 0.020 | 0.039 | 0.002 | 0.020 | 0.020 | 0.012 | 0.0045 | |
| 11-10 Tc Ts | 490114 | 53 231 | 64 677 65 869 | 37 | 0.82 | 0.123 | 0.77 | 0.012 | 0.007 | 0.001 | 0.003 | 0.003 | 0.274 | 0.010 | 0.039 | 0.004 | 0.020 | 0.020 | 0.006 | 0.0052 | |

CÉRTIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APPLICABLES 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 -06

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