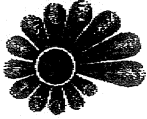


FLM-005-7



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-75679-1-2009

NUMBER

PEDIDO CLIENTE / P.O.

PEDIDO INTERNO / I.O. 2501

FECHA

DATE SEPTIEMBRE 17, 2009

PARTIDA (S)

ITEMS 103130-10

DIAMETRO :

DIAMETER : 14"

ESPESOR DE PARED

WALL THICKNESS

0.312"

GRADO :

GRADE :

ASTM A53-B

PRESION HIDROSTATICA:

HIDROSTATIC TEST:

66 Kg/cm²

940 PSI

PRUEBAS DE TENSION
TENSILE TEST

ANALISIS QUIMICO % EN PESO
CHEMICAL ANALYSES PERCENT WEIGHT

| NUMPROBETA DESCRIPTION | COLADA HEAT | LMITE ELASTICO YIELD STRENGTH (P.S.I.) | ULTIMA TENSION TENSILE STRENGTH (P.S.I.) | % ELONG. 2" | LE/UT Y/STS | C | Mn | P | S | Cb | V | Ti | Si | Cu | Al | Ca | Cr | Ni | Mo | N | Ceq |
|---------------------------|----------------|--|--|----------------|----------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|-----|
| 21-11 Tc | 190812 | 62 320 | 68 857 | 40 | 0.90 | 0.068 | 1.19 | 0.011 | 0.004 | 0.017 | 0.003 | 0.009 | 0.249 | 0.010 | 0.037 | 0.0012 | 0.010 | 0.020 | 0.008 | 0.0050 | |
| Ts | | | 73 677 | | | | | | | | | | | | | | | | | | |
| 17-10 Tc | 288356 | 59 871 | 70 600 | 36 | 0.84 | 0.063 | 1.18 | 0.011 | 0.004 | 0.021 | 0.003 | 0.012 | 0.251 | 0.020 | 0.032 | 0.0020 | 0.020 | 0.020 | 0.007 | 0.0077 | |
| Ts | | | 73 722 | | | | | | | | | | | | | | | | | | |
| 16-10 Tc | 288362 | 61 210 | 68 348 | 38 | 0.89 | 0.066 | 1.18 | 0.011 | 0.004 | 0.021 | 0.002 | 0.008 | 0.242 | 0.020 | 0.034 | 0.0031 | 0.020 | 0.020 | 0.007 | 0.0069 | |
| Ts | | | 72 787 | | | | | | | | | | | | | | | | | | |

CERTIFICAMOS QUE LA TUBERIA AQUI 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 SOBRIQ PEREZ
GERENTE DE ASEGURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER