

FLM-005-7
PROCARSA, S.A. DE C.V.

**CERTIFICADO DE CALIDAD
 DE PRUEBAS FISICAS-QUIMICAS**

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

| | | | |
|-----------------------|----------|--------|------------------|
| CLIENTE: | TIJCOTIA | NUMERO | PTM-49220.1-2001 |
| CUSTOMER: | | NUMBER | |
| pedido cliente / P.O. | | FECHA | OCTUBRE 09, 2001 |
| pedido interno / I.O. | | DATE | |
| partidas (S) | | | |
| ITEMS | 26485-20 | | |

TAMANO: 6 5/8" ESPESOR DE PARED: 0.280" GRADO: ASTM A51-B PRESION HIDROSTATICA: 1780 PSI
 SIZE: 6 5/8" WALL THICKNESS: 0.280" GRADE: ASTM A51-B HYDROSTATIC TEST: 125 Kg/cm² 1780 PSI

PRUEBAS DE TENSION


CHEMICAL ANALYSIS

| INDICADORA DESCRIPTION | COLADA HEAT | LIMITE ELASTICO YIELD STRENGTH (F _{0.2}) | ULTIMA TENSION TENSILE STRENGTH (F _{0.2}) | % ELONG. 2" | LEANT VSPTS | C | Mn | P | S | Cb | V | Ti | Si | Cu | Al | Ca | Cr | Ni | Mo | N | Ceq |
|---------------------------|----------------|--|---|----------------|----------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|-----|
| 4A-11 Lc | 115554 | 56 624 | 72 802 | 36 | 0.78 | 0.174 | 1.15 | 0.017 | 0.007 | 0.004 | 0.004 | 0.004 | 0.247 | 0.023 | 0.045 | 0.0019 | 0.023 | 0.037 | 0.015 | 0.0084 | |
| 8A-14 Lc | 115555 | 64 981 | 73 886 | 31 | 0.88 | 0.165 | 1.19 | 0.015 | 0.007 | 0.004 | 0.003 | 0.004 | 0.264 | 0.025 | 0.042 | 0.0020 | 0.023 | 0.031 | 0.015 | 0.0072 | |
| 14A-14 Lc | 115556 | 59 853 | 74 218 | 35 | 0.81 | 0.180 | 1.11 | 0.016 | 0.005 | 0.004 | 0.001 | 0.004 | 0.253 | 0.022 | 0.041 | 0.0025 | 0.024 | 0.032 | 0.005 | 0.0072 | |
| 27A-11 Lc | 115557 | 61 883 | 73 546 | 32 | 0.84 | 0.171 | 1.14 | 0.019 | 0.007 | 0.004 | 0.004 | 0.004 | 0.238 | 0.021 | 0.036 | 0.0022 | 0.020 | 0.030 | 0.008 | 0.0082 | |
| 20A-11 Lc | 215411 | 60 410 | 73 700 | 32 | 0.82 | 0.180 | 1.11 | 0.016 | 0.005 | 0.001 | 0.002 | 0.004 | 0.253 | 0.020 | 0.045 | 0.0023 | 0.015 | 0.033 | 0.005 | 0.0056 | |

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PROBADA E INSPECCIONADA DE ACUERDO CON LOS REQUISITOS APLICABLES 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


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