



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

DIAMETRO: 14" ESPESOR DE PARED: 0.438" GRADO: API 5L X42 PRESSION HIDROSTATICA: 157 Kg/cm² 2230 PSI
DIAMETER: 14" WALL THICKNESS: 0.438" GRADE: API 5L X42 CHEMICAL ANALYSIS PERCENT WEIGHT

CLIENTE: TUCCOTA
CUSTOMER: PEDRO TENENTE JR/O. 11722
PERDIDA INFERNO/100 PARTIDA(S) 4839-10
ITEMS: PRESSION HIDROSTATICA: 157 Kg/cm² 2230 PSI
ANALISIS QUIMICO % EN PESO

| NUM. PROBEA DESCRIPTION | COLADA HEAT | TENSILE TEST | | | % ELONG. 2" | LEUO.T Y.87.5 | CHEMICAL ANALYSIS PERCENT WEIGHT | | | | | | | | | | | | | | |
|----------------------------|----------------|-----------------------------|----------------------------|----------------------------|----------------|------------------|----------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|
| | | LIMITE ELASTICO (P.S.I.) | ULTIMA TENSION (P.S.I.) | ULTIMA TENSION (P.S.I.) | | | C | Mn | P | S | Cb | V | Ti | Si | Cu | Al | Ca | Cr | Ni | Mo | N |
| 13-7 Tc Ts | 132422 | 57 654 | 70 498 76 720 | 70 498 64 938 | 36 | 0.82 | 0.180 | 1.10 | 0.015 | 0.008 | 0.002 | 0.005 | 0.004 | 0.207 | 0.059 | 0.045 | 0.0023 | 0.030 | 0.034 | 0.014 | 0.0060 |
| 2-7 Tc Ts | 132428 | 55 725 | 64 938 77 621 | 64 938 70 210 | 37 | 0.86 | 0.161 | 1.13 | 0.016 | 0.008 | 0.002 | 0.005 | 0.004 | 0.210 | 0.023 | 0.033 | 0.0027 | 0.021 | 0.021 | 0.013 | 0.0066 |
| 5-15 Tc Ts | 232372 | 56 258 | 70 210 78 956 | 70 210 78 956 | 36 | 0.80 | 0.168 | 1.11 | 0.013 | 0.008 | 0.002 | 0.004 | 0.004 | 0.220 | 0.036 | 0.045 | 0.0031 | 0.022 | 0.033 | 0.013 | 0.0053 |

CERTIFICAMOS QUE LA TUBERIA AGUI 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:

API SPECIFICATION 5L

FORTY-SECOND EDITION, JANUARY, 2000

EFFECTIVE DATE: JULY 1, 2000

ING. FERNANDO OSORIO PEREZ
GERENTE DE ASISTENCIA TECNICA DE CALIDAD