



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE: MESA ANAHUAC SA DE CV

NUMERO: PTM-60127-53004

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PEDIDO INTERNO / I.O. 1231
PARTIDA(S)
ITEMS 59923-70

FECHA: NOVIEMBRE 23, 2004
DATE

DIAMETRO: 12 3/4" ESPESOR DE PAREDE: 0.406" GRADO: API 5L X-42 PRESION HIDROSTATICA: 160 Kg/cm²
WALL THICKNESS GRADE: API 5L X-42 HIDROSTATIC TEST: 2270 PSI

PRUEBAS DE TENSION

CHEMICAL ANALYSIS PERCENT WEIGHT

NUM. PROBETA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 1"	LEWIT TESTS	ANALISIS QUIMICO % EN PESO																
						C	Mn	P	S	Cb	V	TI	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq	
10-1 Tc TS	245626	53 058	68 805 74 460	35	0.77	0.152	1.11	0.017	0.007	0.001	0.002	0.002	0.170	0.020	0.039	0.0033	0.020	0.020	0.020	0.030	0.005	0.0050
2-15 Tc TS	245627	51 257	69 368 75 939	34	0.74	0.170	1.11	0.014	0.008	0.001	0.002	0.002	0.160	0.030	0.035	0.0029	0.020	0.020	0.030	0.006	0.0050	

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:

API SPECIFICATION 5L

FORTY-SECOND EDITION, JANUARY, 2000

EFFECTIVE DATE: JULY 1, 2000

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