



PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

DIAMETRO: 20" ESPESOR DE PARED: 0.250" GRADO: ASTM A53-B PRESSION HIDROSTATICA: 520 PSI
 WALL THICKNESS: 0.250" GRADE: ASTM A53-B ANALISIS QUIMICO % EN PESO: 37 Kg/cm³
 TUBICIA TUCOTIA
 CLIENTE: TUCOTIA
 CUSTOMER: TUCOTIA
 PEDIDO CLIENTE / P.O. 11077
 PARTIDA (S) 48987-10 / 49877-10
 ITEMS 48987-10 / 49877-10
 HIDROSTATIC TEST: 37 Kg/cm³
 CHEMICAL ANALYSIS PERCENT WEIGHT

NOM PROBE/TA DESCRIPION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (F.SI)	ULTIMA TENSION TENSILE STRENGTH (F.SI)	% ELONG. 1"	LEULT Y.S.T.S	CHEMICAL ANALYSIS PERCENT WEIGHT													
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo
12-5 TC TS	135383	45 887	68 830 75 395	37	0.67	0.161	1.13	0.010	0.008	0.004	0.004	0.286	0.014	0.040	0.0027	0.017	0.014	0.008	0.0070
62-5 TC TS	135385	43 912	69 039 76 692	36	0.64	0.161	1.12	0.016	0.005	0.001	0.002	0.301	0.013	0.040	0.0026	0.014	0.025	0.005	0.0052
39-12 TC TS	135386	43 071	68 106 77 282	37	0.63	0.154	1.11	0.016	0.005	0.001	0.002	0.296	0.013	0.040	0.0026	0.014	0.024	0.005	0.0051
90-12 TC TS	135387	52 011	73 910 78 210	38	0.70	0.174	1.08	0.015	0.006	0.003	0.004	0.337	0.023	0.035	0.0030	0.017	0.040	0.009	0.0049
32-10 TC TS	135389	51 371	71 438 78 616	36	0.72	0.180	1.12	0.017	0.006	0.003	0.005	0.306	0.020	0.032	0.0032	0.024	0.015	0.009	0.0051
16-6 TC TS	135390	47 306	68 594 75 852	37	0.69	0.179	1.10	0.015	0.007	0.005	0.004	0.332	0.015	0.027	0.0032	0.021	0.011	0.008	0.0080
30-11 TC TS	135391	50 633	71 952 77 864	35	0.70	0.162	1.11	0.019	0.006	0.001	0.002	0.299	0.015	0.036	0.0032	0.010	0.022	0.004	0.0054
37-4 TC TS	235130	47 876	68 357 74 259	37	0.70	0.157	1.10	0.016	0.007	0.001	0.003	0.297	0.017	0.031	0.0016	0.014	0.023	0.004	0.0037
6-11 TC TS	235131	49 798	69 987 76 730	36	0.71	0.169	1.07	0.018	0.007	0.002	0.004	0.261	0.012	0.038	0.0020	0.017	0.006	0.007	0.0076
54-8 TC TS	235132	44 837	72 011 74 750	37	0.62	0.157	1.12	0.014	0.009	0.001	0.002	0.291	0.019	0.045	0.0026	0.016	0.025	0.006	0.0056
85-13 TC TS	235133	47 493	66 421 73 830	36	0.69	0.157	1.07	0.014	0.007	0.005	0.004	0.278	0.014	0.038	0.0020	0.017	0.009	0.009	0.0067
61-4 TC TS	235134	48 944	69 990 77 691	34	0.70	0.170	1.13	0.016	0.007	0.001	0.002	0.326	0.015	0.041	0.0029	0.017	0.025	0.004	0.0058
11-12 TC TS	235793	52 843	71 812 76 856	38	0.74	0.166	1.12	0.019	0.007	0.004	0.005	0.261	0.023	0.037	0.0026	0.023	0.045	0.011	0.0053
1-8 TC TS	235794	46 101	69 152 76 979	40	0.67	0.156	1.12	0.014	0.008	0.005	0.004	0.299	0.012	0.045	0.0030	0.020	0.026	0.01	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 A53-B-99

ING. FERNANDO OSORIO PEREZ
 GERENTE DE ASISTENCIA TECNICA DE CALIDAD

NUMERO PTM-56867-2003
 FECHA NOVIEMBRE 25, 2003
 DATE