



PLM-005-7

PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CUSTOMER:	TUCOTA	CLIENTE:	TUCOTA
ITEMS		PARTIDA (S)	
PERIDO INTERNO / I.O.	11345	PERIDO INTERNO / I.O.	11345
NUMERO:	PTM-5703-2003	FECHA	DICEMBRE 16, 2003
NUMERO:		DATE	

DIAMETRO: 16"	ESPESOR DE PARED WALL THICKNESS: 0.250"	GRADO: ASTM A53-B	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSIS PERCENT WEIGHT: 46 Kg/cm <sup>2</sup>	660 PSI
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DESCRIPCION	CODIGO HEAT	LIMITE ELASTICO YIELD STRENGTH (F <sub>2.1</sub> )	ULTIMA TENSION TENSILE STRENGTH (F <sub>2.1</sub> )	% ELONG. 2"	LEVALT Y <sub>2</sub> UTS	ANALISIS QUIMICO % EN PESO CHEMICAL ANALYSIS PERCENT WEIGHT															
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
3-14B Tc	130670	53 203	69 846	34	0.76	0.162	1.09	0.014	0.006	0.003	0.003	-	0.202	0.013	0.045	0.0029	0.016	0.022	0.014	0.0064	
6-16B Tc	130671	53 346	75 040	37	0.76	0.164	1.11	0.013	0.007	0.002	0.002	-	0.229	0.022	0.043	0.0033	0.017	0.032	0.004	0.0064	
4-2B Tc	131402	57 801	77 560	34	0.82	0.172	1.15	0.012	0.008	0.001	0.002	-	0.172	0.022	0.038	0.0032	0.011	0.024	0.002	0.0049	
17-10 Tc	132911	47 752	70 187	36	0.71	0.163	1.05	0.017	0.007	0.001	0.003	-	0.193	0.016	0.035	0.0020	0.019	0.022	0.004	0.0043	
95-9 Tc	182015	66 571	73 729	33	0.80	0.100	1.16	0.017	0.005	0.024	0.036	-	0.23	0.022	0.021	0.0012	0.023	0.022	0.015	0.0052	
57-11 Tc	182016	69 021	82 890	35	0.83	0.096	1.11	0.019	0.005	0.029	0.037	-	0.19	0.019	0.042	0.0017	0.016	0.021	0.013	0.0055	
22-12 Tc	232849	49 705	67 438	36	0.74	0.166	1.07	0.013	0.008	0.004	0.005	-	0.190	0.029	0.031	0.0020	0.021	0.040	0.010	0.0042	
8-7 Tc	274534	55 100	73 957	36	0.82	0.09	1.10	0.016	0.006	0.017	0.005	-	0.20	0.010	0.035	0.0018	0.010	0.022	0.010	0.0054	
9-7 Tc	274591	55 696	67 721	39	0.82	0.09	0.98	0.019	0.007	0.018	0.005	-	0.21	0.013	0.047	0.0027	0.013	0.025	0.010	0.0048	
31-13 Tc	280323	72 164	74 358	30	0.81	0.087	1.10	0.020	0.008	0.023	0.032	-	0.17	0.025	0.028	0.0017	0.023	0.037	0.015	0.0061	
487-11 Tc	281184	66 838	86 052	30	0.85	0.083	1.19	0.017	0.006	0.026	0.037	-	0.21	0.019	0.053	0.0031	0.019	0.028	0.016	0.0079	
186-3 Tc	281188	66 870	78 406	36	0.87	0.084	1.12	0.018	0.006	0.026	0.037	-	0.21	0.030	0.039	0.0034	0.017	0.030	0.018	0.0076	
136-18 Tc	282199	66 753	81 145	35	0.81	0.077	1.16	0.013	0.008	0.024	0.035	-	0.18	0.025	0.036	0.0022	0.019	0.026	0.023	0.0061	
303-12 Tc	282226	73 878	85 000	32	0.86	0.076	1.13	0.014	0.008	0.022	0.031	-	0.17	0.021	0.034	0.0023	0.018	0.021	0.019	0.0064	
303-12 Tc	282226	73 878	85 751																		
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¡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 A53-B -99

WE CERTIFY THE PIPE ABOVE MENTIONED ACCOMPLISH AND HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF SPECIFICATIONS:

*(Signature)*  
ING. FERNANDO OSORIO PENZ  
GERENTE DE ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER