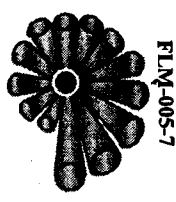


380630



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

**CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS**  
QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	TUCOTA	NUMERO	PT
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.	11077	FECHA	
PEDIDO INTERNO / I.O.		DATE	SEPTIEMBRE
PARTIDA (S)	40230-10 / 43755-20 / 45635-10		

DIAMETRO :	16"	ESPESOR DE PARED	0.250"	GRADO :	ASTM A53-B	PRESION HIDROSTATICA:	46 Kg/cm <sup>2</sup>	660 PSI
DIAMETER :	16"	WALL THICKNESS	0.250"	GRADE :	ASTM A53-B	HIDROSTATIC TEST:	46 Kg/cm <sup>2</sup>	660 PSI

NUM. PROBE TA DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (P.S.I.)	ULTIMA TENSION TENSILE STRENGTH (P.S.I.)	% ELONG. 2"	LEWIT Y.S.T.S	CHEMICAL ANALYSIS PERCENT WEIGHT														
						C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	
12-13 Tc	126661	55 046	70 734	36	0.78	0.160	1.09	0.017	0.004	0.002	0.004	0.003	0.185	0.017	0.031	0.0025	0.018	0.022	0.010	
3-14B Tc	130670	53 203	75 169	34	0.76	0.162	1.09	0.014	0.006	0.003	0.003	0.004	0.202	0.013	0.045	0.0029	0.016	0.022	0.014	
6-16B Tc	130671	53 346	75 040	37	0.76	0.164	1.11	0.013	0.007	0.001	0.002	0.003	0.229	0.022	0.043	0.0033	0.017	0.032	0.004	
7-2 Tc	131401	51 721	77 560	36	0.72	0.174	1.10	0.015	0.007	0.001	0.002	0.003	0.197	0.024	0.034	0.0031	0.015	0.027	0.003	
4-2B Tc	131402	57 801	72 137	34	0.82	0.172	1.15	0.012	0.008	0.001	0.002	0.002	0.172	0.022	0.038	0.0032	0.011	0.024	0.002	
6-13 Tc	132908	43 968	70 187	35	0.67	0.167	1.12	0.024	0.008	0.001	0.005	0.004	0.213	0.022	0.026	0.0030	0.015	0.040	0.014	
17-10 Tc	132911	47 752	68 882	36	0.71	0.163	1.05	0.017	0.007	0.001	0.003	0.003	0.193	0.016	0.035	0.0020	0.019	0.022	0.004	
20-2 Tc	227097	50 911	67 671	38	0.72	0.178	1.07	0.013	0.006	0.001	0.002	0.002	0.199	0.012	0.031	0.0022	0.010	0.020	0.003	
			70 427																	
			76 240																	

CERTIFICAMOS QUE LA TUBERIA AQUÍ 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 ASEGURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER