



PROCARSA, S.A. DE C.V.

CERTIFICADO DE CALIDAD  
DE PRUEBAS FISICAS-QUIMICAS

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

CLIENTE:	NUMERO:
PEDIDO CLIENTE / P.O.	NUMBER
12133	
PARTIDA(S)	FECHA
21677-30 / 39905-10 / 48987-10 / 34384-10 / 52977-40	DATE
ITEMS	JUNIO 24, 2004

DIAMETRO:	ESPESOR DE PARED	GRADO:	ASTM A53-B	ANALISIS QUIMICO % EN PESO	520 PSI
WALL THICKNESS	0.250"	GRADE:			

ITEM/PROBATA DESCRIPTION	CODIGOS / HEAT	LIMITE ELASTICO YIELD STRENGTH (PSI)	ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG. %	TENSILE TEST										CHEMICAL ANALYSES PERCENT WEIGHT									
					LEAD. Y.97.5	C	Mb	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Cr	Ni	Mo	N				
13.3 Tc	1120066	62 497	76 899	36	0.81	0.087	1.16	0.015	0.007	0.019	0.004	-	0.218	0.022	0.051	0.00032	0.033	0.032	0.021	0.0074				
Ts			77 143																					
13-11 Tc	1126585	48 625	70 029	36	0.70	0.180	1.13	0.015	0.006	0.001	0.004	-	0.200	0.016	0.032	0.00030	0.017	0.027	0.004	0.0050				
Ts			75 284																					
2-18 Tc	1126586	52 617	71 957	36	0.73	0.178	1.12	0.013	0.007	0.003	0.004	-	0.209	0.018	0.034	0.00022	0.016	0.030	0.012	0.00037				
Ts			77 684																					
12-15 Tc	1126589	50 689	71 217	34	0.71	0.171	1.11	0.017	0.008	0.001	0.004	-	0.228	0.020	0.045	0.00010	0.014	0.027	0.005	0.0051				
Ts			78 278																					
39-12 Tc	1135386	43 071	68 106	37	0.63	0.154	1.11	0.016	0.005	0.001	0.002	-	0.286	0.013	0.040	0.00026	0.014	0.024	0.005	0.0051				
Ts			77 282																					
90-12 Tc	1135387	52 011	73 910	38	0.70	0.174	1.08	0.015	0.006	0.003	0.004	-	0.337	0.023	0.035	0.00030	0.017	0.040	0.009	0.0049				
Ts			78 210																					
33-16 Tc	1135388	48 033	70 715	36	0.68	0.164	1.08	0.018	0.005	0.001	0.003	-	0.290	0.017	0.037	0.00033	0.017	0.024	0.005	0.0055				
Ts			78 659																					
16-6 Tc	1135390	47 306	68 594	37	0.69	0.179	1.10	0.015	0.007	0.005	0.004	-	0.332	0.015	0.027	0.00032	0.021	0.011	0.008	0.0080				
Ts			75 652																					
4-6 Tc	222298	61 517	71 087	39	0.87	0.103	1.15	0.017	0.005	0.021	0.004	-	0.104	0.014	0.031	0.00007	0.018	0.028	0.01	0.0086				
Ts			79 819																					
2-2 Tc	222300	56 225	71 754	40	0.78	0.106	1.16	0.016	0.005	0.023	0.002	-	0.124	0.013	0.041	0.00038	0.009	0.022	0.003	0.0052				
Ts			76 715																					
1-9 Tc	222301	56 301	71 851	41	0.78	0.098	1.08	0.017	0.005	0.022	0.004	-	0.129	0.013	0.036	0.00022	0.017	0.021	0.010	0.0052				
Ts			80 483																					
36-4 Tc	235129	47 682	69 668	38	0.68	0.164	1.12	0.016	0.005	0.001	0.001	-	0.257	0.012	0.040	0.00015	0.015	0.024	0.004	0.0050				
Ts			77 305																					
54-8 Tc	235132	44 837	72 011	37	0.62	0.157	1.12	0.014	0.009	0.001	0.002	-	0.291	0.019	0.045	0.00026	0.016	0.025	0.006	0.0056				
Ts			74 750																					
6-8 Tc	240023	45 403	65 380	35	0.69	0.158	1.07	0.016	0.008	0.005	0.004	-	0.180	0.029	0.033	0.00014	0.018	0.028	0.01	0.0036				
Ts			72 561																					
21-17 Tc	241053	50 457	72 218	34	0.69	0.161	1.12	0.011	0.006	0.003	0.004	-	0.209	0.025	0.034	0.00023	0.024	0.037	0.01	0.0054				
Ts			77 505																					

CERTIFICAMOS QUE LA TUBERIA AQUI DESCRITA CUMPLE Y HA SIDO FABRICADA, INESTRADA, 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 ASESURAMIENTO DE CALIDAD  
QUALITY ASSURANCE MANAGER

2004/06/24