



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

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

26214

CLIENTE:	FERRE BARNIEDO	NUMERO	PTM-3407-2004
CUSTOMER:		NUMBER	
PEDIDO CLIENTE / P.O.	N/A	FECHA	AGOSTO 18, 2004
PEDIDO INTERNO / I/O.	N/A	DATE	
PARTIDA(S)			
ITEMS			
PRESION HIDROSTATICA:	N/A		
HIDROSTATIC TEST:			

TAMANO	ESPESSOR DE PARED	GRADO :	N/A	
SIZE :	WALL THICKNESS	GRADE :	N/A	

PARTIDA ITEM	NUM/PROBETA DESCRIPTION	COLADA HEAT	PRUEBAS DE TENSION			CHEMICAL ANALYSES PERCENT WEIGHT																		
			LIMITE ELASTICO (F _{0.2})	YIELD STRENGTH (F _{0.2})	ULTIMA TENSION (F _{0.2})	% ELONG. T	LEVLIT YEATS	C	Mn	P	S	Cb	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq	
1	8B-32 LC	238044	51 948	66 494	66 494	30	0.78	0.125	0.81	0.015	0.005	-	-	-	0.125	0.017	0.036	0.0001	0.016	0.024	-	-	-	-
2	1-11 LC	238120	53 271	65 479	65 479	34	0.81	0.143	0.82	0.017	0.007	-	-	-	0.147	0.011	0.035	0.0005	0.018	0.023	-	-	-	-
3	4-7 LC	240418	53 876	66 850	66 850	35	0.81	0.122	0.83	0.019	0.009	-	-	-	0.131	0.017	0.038	0.0001	0.020	0.025	-	-	-	-
4	8-1 LC	143381	63 693	71 716	71 716	34	0.89	0.151	0.86	0.012	0.009	-	-	-	0.148	0.025	0.036	0.0032	0.019	0.026	-	-	-	-

PARTIDA ITEMS	DIMENSIONES SIZE	GRADO GRADE	PARTIDA ITEM	NO. PEDIDO P.O.
1	6" X 4" X 0.188"	ASTM A500-B	50462-80	M-21101
2	10" X 6" X 0.312"	ASTM A500-B	50235-10	M-18301
3	8" X 8" X 0.312"	ASTM A500-B	53826-10	M-21101
4	12" X 8" X 0.312"	ASTM A500-B	54235-10	M-21101

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

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

[Signature]