



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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

26214

CLIENTE: FERRE BARNIEDO

CUSTOMER:

PEDIDO CLIENTE / P.O.

PARTIDA(S)

ITEMS

NÚMERO

NUMBER

PTM-1407-2004

FECHA

DATE AGOSTO 18, 2004

TAMBIENO: ESPESOR DE PARED
SIZE: N/A WALL THICKNESS

GRADO: N/A
GRADE:

PRESSION HIDROSTATICA: N/A
ANALISIS QUIMICO % EN PESO
HIDROSTATIC TESTS:

PRUEBAS DE TENSION

TENSILE TEST

CHEMICAL ANALYSES PERCENT WEIGHT

PARTIDA ITEM	NUMERO DESCRIPTION	COLADA HEAT	LIMITE ELASTICO YIELD STRENGTH (Q.S11)	ULTIMA TENSION TENSILE STRENGTH (Q.S11)	% ELONG. %	LEDOT Y275	C	Mn	P	S	Cb	V	Ti	SI	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
1	88-32 Lc	238044	51 948	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	66 479	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	53 878	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	63 893	71 716	34	0.89	0.151	0.88	0.012	0.009	-	-	-	0.148	0.025	0.038	0.0052	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	53626-10	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 ASESURAMIENTO DE CALIDAD
QUALITY ASSURANCE MANAGER

[Handwritten Signature]



FLM-005-7

PROCARSA, S.A. DE C.V.

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

QUALITY CERTIFICATE OF TEST PHYSICALS-CHEMICAL

26550

CLIENTE:	FERRE BARNIEDO	NUMERO	PTM-3560-2004
CUSTOMER:		NUMBER	
PEDIDO CLIENTE/P.O.	M-19802	FECHA	
PEDIDO INTERNO/LID.		DATE	OCTUBRE 05, 2004
PARTIDA (S)			
ITEMS	59528-30		

TAMANO: 12" X 12" ESPESOR DE PARED: 0.375" GRADO: ASTM A500-B PRESION HIDROSTATICA: N/A

SIZE: 12" X 12" WALL THICKNESS: 0.375" GRADE: ASTM A500-B HYDROSTATIC TEST: N/A

TENSILE TEST

NUMERO DE IDENTIFICACION	CODIGO DE HEAT	UNITE ELASTICO YIELD STRENGTH (PSI)	ULTIMA TENSION TENSILE STRENGTH (PSI)	% ELONG. 1"	LEAIT Y875	C	Mn	P	S	Ch	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N	Ceq
2-9 Lc	144925	53 601	68 361	36	0.78	0.152	0.83	0.018	0.012	-	-	-	0.170	0.080	0.034	0.0030	0.020	0.030	-	-	-

CHEMICAL ANALYSES PERCENT WEIGHT

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

[Signature]
 ING. FERRANDO OSORIO PEREZ
 GERENTE DE ASEGURAMIENTO DE CALIDAD
 QUALITY ASSURANCE MANAGER