

Doc. 08 2011 000001 FI

FAX NO. 157420090

CALLE DE LOS CONSOLIDADOS

455 3/2 19x14



PROCARSA S.A. DE C.V.

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

CLIENTE: ACEROS CONSOLIDADA, S.A. DE C.V.  
CUSTOMER:  
PEDIDO CLIENTE N.O.: NA  
CLIENT ORDER NO.:  
PARTIDA (S):  
ITEMS: NA  
PRUEBA HIDROSTATICA:  
HYDROSTATIC TEST: NA

NUMERO: PTM 4103-2011  
MODEL:  
FECHA: OCTUBRE 24, 2011  
DATE:

ESPESOR DE TUBERIA: NA  
WALL THICKNESS: NA  
GRADO: NA  
GRADE: NA

POTENCIA DE TENSION: TENSILE TEST  
ANALISIS QUIMICO POR CENIZAS: CHEMICAL ANALYSES PERCENT WEIGHT

ORDEN ITEM	DESCRIPCION DESCRIPTION	CODIGO HEAT	TENSILE TEST		DIAMETRO IN	AREA CM <sup>2</sup>	ANALISIS QUIMICO POR CENIZAS														
			YIELD STRENGTH (MPa)	TENSILE STRENGTH (MPa)			C	Mn	P	S	Cr	V	Ti	Si	Cu	Al	Ca	Cr	Ni	Mo	N
1	13B-17 Lc	132496	68 872	74 025	32	0.93	0.120	0.80	0.017	0.011	--	--	--	0.188	0.031	0.037	0.0034	0.024	0.032	--	--
1	2A-10 Lc	169224	52 778	63 333	35	0.63	0.137	0.70	0.018	0.005	--	--	--	0.180	0.020	0.031	0.0027	0.030	0.030	--	--
1	2-8 Lc	179693	58 106	69 320	40	0.83	0.117	0.75	0.018	0.010	--	--	--	0.007	0.014	0.045	0.0005	0.010	0.023	--	--
1	2B-7 Lc	183021	51 136	64 286	35	0.79	0.138	0.77	0.022	0.004	--	--	--	0.350	0.020	0.031	0.0024	0.030	0.020	--	--
1	6A-11 Lc	243540	61 873	65 771	37	0.79	0.125	0.81	0.012	0.006	--	--	--	0.152	0.028	0.041	0.0021	0.025	0.036	--	--
1	3B-16 Lc	247435	53 323	68 768	36	0.78	0.141	0.76	0.012	0.008	--	--	--	0.150	0.040	0.041	0.0050	0.020	0.040	--	--
1	5A-3 Lc	272258	62 606	66 216	35	0.81	0.118	0.76	0.016	0.006	--	--	--	0.278	0.026	0.026	0.0031	0.030	0.020	--	--
1	2-7 Lc	298977	68 291	73 828	30	0.93	0.114	0.82	0.019	0.011	--	--	--	0.017	0.020	0.048	0.0005	0.028	0.032	--	--
2	4-8 Lc	179688	55 422	66 210	42	0.93	0.190	0.82	0.017	0.010	--	--	--	0.017	0.030	0.035	0.0020	0.030	0.010	--	--
2	2-10 Lc	180503	51 961	66 971	37	0.78	0.118	0.80	0.018	0.005	--	--	--	0.300	0.040	0.036	0.0028	0.030	0.030	--	--

PARTIDA ITEMS	DIMENSIONES SIZE	GRADO GRADE	PARTIDA ITEM	No. PEDIDO P.O.
1	6" X 6" X 0.375"	ASTM A500-B	44910-0076849-300 07-06-85001-0097455-4098289-5081605-09	3825
2	14" X 14" X 0.375"	ASTM A500-B	0-04-06/193247-20	3825

VERIFICAMOS QUE LA TUBERIA AQUÍ DESCRITA CUMPLE Y HA SIDO FABRICADA, MUESTREADA, PRUBADA 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:

ING. LUIS ALFONSO DE LOS SANTOS RIVERA  
 SUPERVISOR OF LABORATORIO METALURGICO  
 METALLURGICAL LABORATORY SUPERVISOR