



CERTIFICADO DE TUBERIA

080283

PIPE CERTIFICATE

OT (order no.) 33457	DIAMETRO (outside diam.) 12.750"	ESPESOR (thickness) 0.250"	GRADO (grade) X42/5L/BA53B	ESPECIFICACION (specification) API 5L 43 ED./A.S.T.M.	PROCESO (process) ERW	PEDIDO (contract) 4378	O. PREPARACION (preparation order) TB-061-2008	PROVEEDOR (supplier) AHMSA	FECHA (date) 07/04/2008
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No CERTIFICADO(certification No.):
 CLIENTE(customer):
 PLESA ANÁHUAC Y CIAS., S.A DE C.V.
 DIRECCION(address): AV VALLE DE LAS ALAMEDAS #66- O COL. SAN FCO. CHILPAN TULITLÁN, EDO. DE MEXICO, C.P. 54940
 CLIENTE(customer):
 DIRECCION(address): AV VALLE DE LAS ALAMEDAS #66- O COL. SAN FCO. CHILPAN TULITLÁN, EDO. DE MEXICO, C.P. 54940

TUBO (Pipe) SERIE (SERIAL)	COLADA (Heat)	T Y P E	L O C	PRUEBA DE TENSION(tensile test)			BEND	HARDNESS	PRUEBA DE IMPACTO (impact test)			DWT	GRAIN SIZE	(%ANALISIS QUIMICO / chemical analysis (%))																					
				UNIDADES (units)	OPERACION (operation)	TAMANO (size)			"C" OPERACION (operation)	TAMANO (size)	SHEAR AREA (shear area)			SHEAR AREA (shear area)	SHEAR AREA (shear area)	T	P	L	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca
12	175068	H 7	6	UNIDADES (units)	OPERACION (operation)	TAMANO (size)	BEND	"C" OPERACION (operation)	TAMANO (size)	SHEAR AREA (shear area)	SHEAR AREA (shear area)	SHEAR AREA (shear area)	T	P	L	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE	
				PSI	(T.S.)	%EL. YEN'S		ENERGY (ft-lb)	AVG	1 2 3	AVG	1 2 3					0.16	0.58	0.018	0.006	0.101	0.020	0.010	0.020	0.020	0.004	-	-	-	-	-	-	0.002	0.22	0.28
																	0.18	0.58	0.021	0.008	0.118	0.030	0.005	0.014	0.022	0.001	0.002	0.002	0.002	0.002	-	-	0.002	0.22	0.28
																	0.18	0.58	0.024	0.007	0.116	0.031	0.008	0.014	0.021	0.001	0.002	0.002	0.003	0.002	-	-	0.003	0.22	0.28
																	0.15	0.58	0.019	0.008	0.100	0.034	0.020	0.020	0.020	0.005	-	-	-	-	-	-	0.002	0.23	0.30
																	0.20	0.58	0.019	0.010	0.121	0.048	0.013	0.026	0.024	0.001	0.002	0.002	0.004	0.002	-	-	0.002	0.23	0.30
																	0.20	0.57	0.022	0.011	0.118	0.043	0.013	0.025	0.023	0.001	0.002	0.002	0.003	0.002	-	-	0.002	0.23	0.30
																	0.15	0.59	0.020	0.007	0.065	0.024	0.020	0.020	0.020	0.003	-	-	-	-	-	0.002	0.25	0.31	
																	0.21	0.59	0.025	0.008	0.087	0.049	0.014	0.009	0.022	0.001	0.002	0.002	0.002	0.003	-	-	0.001	0.25	0.29
																	0.19	0.58	0.018	0.012	0.093	0.042	0.018	0.009	0.023	0.001	0.002	0.002	0.003	0.003	-	-	0.003	0.22	0.26
																	0.15	0.58	0.022	0.008	0.098	0.024	0.030	0.020	0.020	0.005	-	-	-	-	-	-	0.003	0.22	0.26
																	0.19	0.58	0.024	0.012	0.120	0.041	0.022	0.017	0.025	0.001	0.002	0.002	0.004	0.003	-	-	0.003	0.23	0.29
																	0.20	0.57	0.025	0.014	0.115	0.034	0.022	0.017	0.024	0.001	0.002	0.002	0.004	0.003	-	-	0.003	0.23	0.30

PRUEBA HIDROSTATICA (hydrostatic test)	PRESSION (pressure)	TIEMPO (time)	SEC	ORIENTACION(orientation)	6 SOLDADURA (weld)
ULTRASONICO(UT) (ultrasonic)	STANDARD DE REFERENCIA (reference standard)	J		1 TRANSVERSAL (transverse)	7 METAL BASE (base metal)
RAYOS-X (RT) (x-ray)	PENETROMETRO (penetrometer)	N/A		2 LONGITUDINAL (longitudinal)	8 ZONA AFECTADA (a.z.)
NORMAIZADO DE SOLDADURA (heat treatment weld)	TEMPERATURA (temperature)	1600° F MIN		3 RECTANGULAR(rectangular)	9 LINEA DE FUSION (fusion line)
REFERENCE STANDARD	F. UT DRILLED HOLE 1/16" G. UT DRILLED HOLE 1/8"			4 CILINDRICAL(cylindrical)	H COALDA (heat)
L. UT NOTCH N.S. J. UT NOTCH N-10. L. RT HOLE 1/16" N. RT HOLE 2:2T O. RT HOLE 2:4T				5 CILINDRICAL(round bar) 0.500"	P PRODUCTO (product)
				LOCALIZACION (location)	R REMUESTRO (reheat)

CERTIFICAMOS QUE EL MATERIAL DESCRITO HA SIDO HECHO DE ACUERDO CON LA ESPECIFICACION MENCIONADA. APARECEN EN LOS REGISTROS DE LA COMISION FEDERAL DE CONTROL Y CALIDAD DE LOS PRODUCTOS INDUSTRIALES (CFE) COMO PRODUCTO REGISTRADO CON LA DENOMINACION DE TUBERIA DE ACERO AL CARBONO Y CON LA ESPECIFICACION DE TUBERIA DE ACERO AL CARBONO (API 5L 43 ED. / A.S.T.M.).

WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATION OF TUBERY OF CARBON STEEL (API 5L 43 ED. / A.S.T.M.) TEST RESULT APPEARING IN THE REGISTER OF INDUSTRIAL PRODUCTS OF THE COMMISSION FEDERAL OF CONTROL AND QUALITY OF INDUSTRIAL PRODUCTS (CFE) AS A REGISTERED PRODUCT WITH THE DENOMINATION OF CARBON STEEL TUBERY AND WITH THE SPECIFICATION OF CARBON STEEL TUBERY (API 5L 43 ED. / A.S.T.M.).

Control de Salud (Fertility Control)

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TUBACERO, S.A. DE C.V.