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CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

070073

O.T. (order no.) 23017	DIAMETRO (outside diam.) 20.000"	ESPESOR (thickness) 0.250"	GRADO (grade) A53 B	ESPECIFICACION (specification) A.S.T.M.	PROCESO (process) DSAW	PEDIDO (contract) 725	O. PREPARACION (preparation order) B-045-2006	PROVEEDOR (supplier) AHMSA	FECHA (date) 24/01/2007
No. CERTIFICADO (certificate No.): CLIENTE (customer): PESA ANAHUAC Y CIAS., S.A. DE C.V. DIRECCION (address): AV. VALLE DE LAS ALAMEDAS # 66 O COL. SAN FCO. CHILPAN TULTITLAN, EDO DE MEXICO C.P. 54940									

TIPO (type)	COLADA (heat)	T L Y P O C E	PRUEBA DE TENSION (tensile test)			BEND	HARDNESS	PRUEBA DE IMPACTO (impact test)			DWT	T L Y P O C E	ANALISIS QUIMICO / chemical analysis (%)																						
			UNDADES (unit)	TAMBO (inch)	% EL. YST'S			ORIENTACION (orient)	TAMBO (inch)	SHEAR AREA (inch ²)			SHEAR AREA (inch ²)	SHEAR AREA (inch ²)	AVG	AVG	AVG	C	Mn	P	S	SI	AL	CU	CR	NI	MO	TI	Nb	B	V	N	Als	Ca	PCM
34	251937	H 7	60900	77700	35	0.84	1	2	3	1	2	H	0.16	0.45	0.010	0.007	0.110	0.033	0.010	0.030	0.030	0.007	-	-	-	-	-	-	-	-	-	-	0.002	0.19	0.23
15	450758	H 7	56700	71500	37	0.79	1	2	3	1	2	H	0.16	0.42	0.005	0.004	0.117	0.038	0.002	0.016	0.013	0.001	0.001	0.002	0.0001	0.003	-	-	-	-	-	-	0.003	0.19	0.23
9	450758	H 7	6	6	6	OK	1	2	3	1	2	H	0.16	0.41	0.005	0.004	0.117	0.038	0.002	0.016	0.013	0.001	0.001	0.002	0.0001	0.003	-	-	-	-	-	-	0.002	0.21	0.26
												P	0.19	0.43	0.008	0.006	0.122	0.043	0.005	0.019	0.014	0.001	0.002	0.003	0.0001	0.004	-	-	-	-	-	-	0.002	0.19	0.24
												P	0.16	0.43	0.006	0.006	0.124	0.045	0.005	0.019	0.014	0.001	0.002	0.003	0.0001	0.004	-	-	-	-	-	-	0.002	0.19	0.24

PRUEBA HIDROSTATICA: PRESION: 530 Psi, TIEMPO: 10 seg

UTRASONIDO (UT): STANDARD DE REFERENCIA N/A

RAYOS-X (RT): PENETRIMETRO (penetrometer) N° 10 A.S.T.M.

NORMALIZADO DE SOLDADURA: TEMPERATURA (temperature) N/A

(heat treatment weld)

REFERENCIA STANDARD: F.U.T. DRILLED HOLE 1/8" G.U.T. DRILLED HOLE 1/8" U.T. NOTCH 1/8" U.T. NOTCH V.10 U.T. HOLE 1/16" N.R.T. HOLE 2/31" O.R.T. HOLE 2-4"

ORIENTACION (orientation):
 1. TRANSVERSAL (transverse)
 2. LONGITUDINAL (longitudinal)
 TAMANO (size)
 3. RECTANGULAR (rectangular)
 4. CILINDRICA (round bar) 0.50"
 5. CILINDRICA (rod bar) 0.50"
 LOCALIZACION (location)

6. SOLDADURA (weld)
 7. METAL BASE (base metal)
 8. ZONA AFECTADA (a.s.z.)
 9. LINEA DE FUSION (fusion line)
 TIPO DE PRUEBA (type)
 H. COLADA (heat)
 P. PRODUCTO (product)
 R. REMUESO (removed)

CERTIFICAMOS QUE EL MATERIAL DESCRITO HA SIDO HECHO DE ACUERDO CON LA ESPECIFICACION MENCIONADA Y QUE LOS RESULTADOS SON COMO APARECEN EN LOS REGISTROS DE LA COMPANIA. WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED WITH THE SPECIFICATION MENTIONED AND THAT THESE TEST RESULTS ARE AS THEY APPEAR IN RECORDS OF THE COMPANY.

Control de Calidad (Quality Control)

TUBACERO, S.A. DE C.V.