Tubacero
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CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

No.CERTFICADO(certificate No.): **070252**

CLIENTE(customer): PLESA ANÁHUAC Y CÍAS; S.A. DE C.V.

DIRECCION(address): AV. VALLE DE LAS ALAMEDAS # 66 O COL. SAN FCO CHILPAN TILTITLÁN, EDO. DE MEXICO C.P. 54940

O.T. (order no.)	DIAMETRO (outside diam.)	ESPESOR (thickness)	GRADO (grade)	ESPECIFICACION (specification)	PROCESO (process)	PEDIDO (contract)	O. PREPARACION (preparation order)	PROVEEDOR (supplier)	FECHA (date)
33415	16.000"	0.250"	X-42/5LB/A53B	API 5L ED. 43 / A.S.T.M.	ERW	2683	B-064-2007	APM	08/03/2007

TUBO (pipe)	COLADA (heat)	TYPE	LOC	PRUEBA DE TENSION(tensile test) UNIDADES: (units) PSI (Y.S.)	ORIENTACION: (orientation) 1 (T.S.)	% EL.	TAMAÑO: (size) 3 Y.S/T.S.	BEND	HARDNESS H	PRUEBA DE IMPACTO (impact test) °C °F ENERGY (lbs/ft) 1	2	3	AVG	ORIENTACION (orientation) SHEAR AREA 1	2	3	AVG	TAMAÑO (size)	DWTT °C: ° SHFAR AREA 1	2	AVG	GRAIN SIZE
			6		72000																	
287	0641529	H	7	50300	67900	43	0.74															
			6		71700																	
176	0611516	H	7	51200	69000	43	0.74															
			6		74200																	
217	0631578	H	7	46300	67500	44	0.69															

(%)ANALISIS QUIMICO / chemical analysis (%)

TUBO (pipe)	COLADA (heat)	TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
		H	7	0.19	0.68	0.009	0.002	0.206	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-
		P	7	0.13	0.72	0.009	0.007	0.251	0.024	0.012	0.008	0.015	0.007	0.008	0.001	0.0002	0.001	-	-	0.005	0.18	0.26
		P	7	0.15	0.69	0.009	0.007	0.251	0.024	0.012	0.008	0.015	0.007	0.008	0.001	0.0003	0.001	-	-	0.005	0.20	0.27
		H	7	0.18	0.70	0.009	0.004	0.170	0.039	-	-	-	-	-	-	-	-	-	-	-	-	-
		P	7	0.19	0.74	0.009	0.007	0.251	0.034	0.012	0.008	0.015	0.007	0.008	0.001	0.0003	0.001	-	-	0.005	0.26	0.32
		P	7	0.17	0.67	0.009	0.007	0.251	0.036	0.012	0.008	0.018	0.007	0.009	0.001	0.0002	0.001	-	-	0.005	0.24	0.29
		H	7	0.19	0.72	0.009	0.004	0.230	0.044	-	-	-	-	-	-	-	-	-	-	-	-	-
		P	7	0.13	0.66	0.009	0.007	0.251	0.041	0.012	0.008	0.018	0.007	0.008	0.001	0.0002	0.001	-	-	0.005	0.20	0.25
		P	7	0.12	0.72	0.009	0.007	0.251	0.043	0.012	0.008	0.016	0.007	0.008	0.001	0.0002	0.001	-	-	0.005	0.19	0.25

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 1120 Psi TIEMPO: (time) 10 sec

ULTRASONIDO(U.T.): (ultrasonic) STANDARD DE REFERENCIA: REFERENCE STANDARD J

RAYOS-X (RT): (x-ray) PENETROMETRO (penetrometer): N/A

NORMALIZADO DE SOLDADURA: (heat treatment weld) TEMPERATURA (temperature): 1600° F MIN

REFERENCE STANDARD F: U.T. DRILLED HOLE 1/16", G: U.T. DRILLED HOLE 1/8", I: U.T. NOTCH N-5, J. U.T. NOTCH V-10 L: RT HOLE 1/16", N: RT HOLE 2-2T O: RT HOLE 2-4T

ORIENTACION(orientation):
1. TRANSVERSAL (transverse)
2. LONGITUDINAL (longitudinal)

TAMAÑO (size)
3.RECTANGULAR(rectangular) 1½"
4.CILINDRICA(round bar) 0.500"
5.CILINDRICA(round bar) 0.350"

LOCALIZACION (location)
6. SOLDADURA (weld)
7. METAL BASE (base metal)
8. ZONA AFECTADA (h.a.z.)
9. LINEA DE FUSION (fusion line)

TIPO DE PRUEBA (type)
H: COLADA (heat)
P: PRODUCTO (product)
R: REMUESTREO (recheck)

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 COMPAÑIA.
(WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THIS SPECIFICATION MENTIONED AND THAT THESE TEST RESULT ARE AS THEY APPEAR IN RECORDS OF THE COMPANY).

Control de Calidad (Quality Control)

CONTROL DE CALIDAD TUBACERO, S.A. DE C.V. 04

REV.1 Sep-99

F-TUME-013