ORIGINAL

p.7
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TUBACERO
11 Abr 07 04:20p

Tubacero
Ave. Guerrero
No. 3728 nte.
Col. Del Norte
Monterrey N.L. México
CP.64500
TEL:1065665
FAX:1065580

CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

No.CERTIFICADO(certificate No.): 070300

CLIENTE(customer): PLESA ANÁHUAC Y CIAS., S.A. DE C.V.

DIRECCION(address): AV. VALLE DE LAS ALAMEDAS # 66 O COL. SAN FCO. CHILPAN TULTITLÁN,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)
33437	14.000"	0.375"	X-42/5LB/ A53B	API 5L 43 ED/A.S.T.M.	ERW	2667	B-060-2007	APM	2703/2007

TUBO (pipe)	COLADA (heat)	TYPE	LOC	PRUEBA DE TENSION(tensile test) UNIDADES: (units)	ORIENTACION: (orientation)	TAMAÑO: (size)		BEND	HARDNESS	PRUEBA DE IMPACTO (impact test) °C ORIENTACION °F (orientation)				TAMAÑO: (size)				DWTT			GRAIN SIZE
				PSI (Y.S.)	1 (T.S.)	3 % El.	Y.S/T.S.			ENERGY (lbs/ft) 1	2	3	AVG	SHEAR AREA 1	2	3	AVG	SHEAR AREA 1	2	AVG	
			6		78400																
51	166188	H	7	59200	69700	36	0.85														
			6		80200																
100	265906	H	7	60900	71500	35	0.85														
			6		74400																
171	462163	H	7	52200	67400	38	0.77														

(%)ANALISIS QUIMICO / chemical analysis (%)

TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	As	Ca	PCM	CE
H	7	0.15	0.62	0.023	0.012	0.104	0.034	0.030	0.030	0.030	0.013	-	-	-	-	-	-	-	-	0.27
P	7	0.15	0.65	0.010	0.008	0.262	0.018	0.012	0.028	0.010	0.006	0.008	0.001	0.0002	0.001	-	-	0.005	0.19	0.27
P	7	0.15	0.64	0.001	0.009	0.262	0.019	0.012	0.029	0.020	0.006	0.008	0.001	0.0002	0.001	-	-	0.005	0.19	0.27
H	7	0.17	0.49	0.010	0.015	0.110	0.032	0.020	0.020	0.030	0.003	-	-	-	-	-	-	-	-	0.26
P	7	0.13	0.51	0.011	0.005	0.262	0.024	0.013	0.019	0.030	0.004	0.006	0.001	0.0002	0.001	-	-	0.005	0.17	0.22
P	7	0.13	0.52	0.011	0.005	0.272	0.024	0.013	0.019	0.020	0.004	0.006	0.001	0.0002	0.001	-	-	0.009	0.17	0.24
H	7	0.17	0.59	0.010	0.008	0.107	0.035	0.020	0.020	0.030	0.003	-	-	-	-	-	-	-	-	0.28
P	7	0.13	0.49	0.011	0.005	0.272	0.024	0.013	0.019	0.020	0.004	0.006	0.001	0.0002	0.001	-	-	0.009	0.17	0.22
P	7	0.13	0.56	0.011	0.005	0.272	0.024	0.013	0.019	0.020	0.004	0.006	0.001	0.0002	0.001	-	-	0.009	0.17	0.23

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 1910 Psi TIEMPO (time) 10 sec

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

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". J: 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

Sep-99

ORIENTACION(orientation).
1. TRANSVERSAL (transverse)
2. LONGITUDINAL (longitudinal)
TAMAÑO (size)
3.RECTANGULAR(rectangular)
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 THE SPECIFICATION MENTIONED AND THAT THESE TEST RESULT ARE AS THEY APPEAR IN RECORDS OF THIS COMPANY).

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

Control de Calidad (Quality Control)

F-TUME-013