Tubacero
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CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

No.CERTIFICADO(certificate No.): **080151**

CLIENTE(customer): PLESA ANÁHUAC Y CÍAS., 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)
33455	10.750"	0.365"	X42/5LB/A53B	API 5L 43 ED/A.S.T.M.	ERW	4292	TB-031-2008	AHMSA	10/03/2008

TUBO (pipe) O SERIE (SERIAL)	COLADA (heat)	TYPE	LOC	PRUEBA DE TENSION(tensile test) UNIDADES (units) PSI (Y.S.)	ORIENTACION (orientation) 1 (T.S.)	TAMAÑO (size) 3 % EL.	Y.S/T.S.	BEND	HARDNESS	PRUEBA DE IMPACTO (impact test) °C °F ORIENTACION (orientation) TAMAÑO (size) ENERGY (lbs/ft) 1	2	3	AVG	SHEAR AREA 1	2	3	AVG	DWTT SHEAR AREA 1	2	AVG	GRAIN SIZE
			6		81100																
32	274990	H	7	55300	69100	37	0.80														
			6		76500																
57	274991	H	7	54000	69000	41	0.78														
			6		78600																
93	274988	H	7	53900	69800	44	0.77														
			6		79200																
99	274989	H	7	52800	67200	44	0.78														

TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
H	7	0.16	0.60	0.013	0.004	0.111	0.031	0.020	0.020	0.020	0.004	-	-	-	-	-	-	-	-	0.27
P	7	0.14	0.58	0.010	0.003	0.106	0.030	0.018	0.018	0.020	0.003	0.002	0.002	0.0002	0.003	-	-	0.001	0.18	0.24
P	7	0.12	0.57	0.012	0.002	0.110	0.032	0.018	0.022	0.018	0.004	0.002	0.002	0.0002	0.002	-	-	0.002	0.16	0.22
H	7	0.16	0.60	0.013	0.008	0.095	0.032	0.010	0.020	0.020	0.004	-	-	-	-	-	-	-	-	0.27
P	7	0.17	0.59	0.012	0.006	0.092	0.030	0.009	0.018	0.020	0.003	0.002	0.002	0.0002	0.002	-	-	0.001	0.21	0.27
P	7	0.16	0.57	0.012	0.006	0.095	0.032	0.009	0.018	0.018	0.003	0.002	0.002	0.0002	0.002	-	-	0.001	0.19	0.26
H	7	0.17	0.59	0.010	0.006	0.105	0.033	0.010	0.020	0.020	0.004	-	-	-	-	-	-	-	-	0.28
P	7	0.12	0.57	0.008	0.004	0.102	0.030	0.006	0.018	0.018	0.003	0.003	0.002	0.0002	0.003	-	-	0.001	0.15	0.22
P	7	0.10	0.52	0.008	0.002	0.101	0.028	0.008	0.020	0.016	0.003	0.002	0.002	0.0002	0.003	-	-	0.001	0.13	0.19
H	7	0.17	0.59	0.011	0.006	0.116	0.028	0.020	0.010	0.020	0.003	-	-	-	-	-	-	-	-	0.28
P	7	0.14	0.58	0.010	0.004	0.110	0.020	0.018	0.010	0.018	0.002	0.003	0.002	0.0001	0.002	-	-	0.002	0.18	0.24
P	7	0.13	0.57	0.010	0.004	0.108	0.026	0.016	0.009	0.017	0.003	0.003	0.002	0.0002	0.002	-	-	0.002	0.17	0.23

(%)ANALISIS QUIMICO / chemical analysis (%)

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 2420 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 N-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)
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 WAS MADE IN ACCORDANCE WITH THE SPECIFICATION MENTIONED AND THAT THESE TEST RESULTS ARE AS THEY APPEAR IN RECORDS OF THE COMPANY).

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

Control de Calidad (Quality Control)