Tubacero
Ave. Guerrero
No. 3728 nte.
Col. Del Norte
Monterrey N.L. México
CP.64500
TEL:3056565 -
FAX:3055380

CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

No.CERTIFICADO(certificate No.): **070829**

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 MÉXICO. 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	3664	B-225-2007	AHMSA	23/10/2007

TUBO (pipe) O SERIE (SERIAL)	COLADA (heat)	TYPE	LOC	PRUEBA DE TENSION(tensile test) UNIDADES (units)	ORIENTACION (orientation)	TAMAÑO (size)		BEND	HARDNESS	PRUEBA DE IMPACTO (impact test) °C ORIENTACION	TAMAÑO	ENERGY (lbs/ft) 1	2	3	AVG	SHEAR AREA 1	2	3	AVG	DWTT SHEAR AREA 1	2	AVG	GRAIN SIZE	TYPE	LOC	(%)ANALISIS QUIMICO / chemical analysis (%) C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
			6		78600																			H	7	0.17	0.59	0.010	0.006	0.105	0.033	0.010	0.020	0.020	0.004	-	-	-	-	-	-	-	-	0.28
93	274988	H	7	53900	69800	44	0.77																	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
			6		79200																			H	7	0.17	0.59	0.011	0.006	0.116	0.028	0.020	0.010	0.020	0.003	-	-	-	-	-	-	-	-	0.28
99	274989	H	7	52800	67200	44	0.78																	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
			6		81100																			H	7	0.16	0.60	0.013	0.004	0.111	0.031	0.020	0.020	0.020	0.004	-	-	-	-	-	-	-	-	0.27
32	274990	H	7	55300	69100	37	0.80																	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
			6		76500																			H	7	0.16	0.60	0.013	0.008	0.095	0.032	0.010	0.020	0.020	0.004		-	-	-	-	-	-	-	0.27
57	274991	H	7	54000	69000	41	0.78																	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

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 2420 Psi TIEMPO: (time) 10 sec

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

RAYOS-X (RT): (x-ray) PENETROMETRO (penetrometer): W 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): T. 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 (heat) 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 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)

REV. 2 May-07

F-TUME-013