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CERTIFICADO DE TUBERIA

PIPE CERTIFICATE

No. CERTIFICADO (certificate No.):

080406

CLIENTE (customer):
PLESA ANAHUAC Y CIA S. SA DE CV
DIRECCION (address): AV VALLE DE LAS ALAMEDAS # 66 - O COL. SAN FCO. CHILPAN
TULTITLAN, EDO. DE MEXICO, C.P. 54940

O.T. (order no.) **33430** DIAMETRO (outside diam.) **12.750"** ESPESOR (thickness) **0.250"** GRADO (grade) **X42/SL/BA53B** ESPECIFICACION (specification) **API 5L 43 EDA S T M** PROCESO (process) **ERW** PEDIDO (contract) **4650** O PREPARACION (preparation order) **TR-103-2008** PROVEEDOR (supplier) **APM** FECHA (date) **30/05/2008**

TUBO (PIPE) (SERIAL)	COLADA (Heat)	T L O P C E	PRUEBA DE TENSION (tensile test)			BEND	HARDNESS	PRUEBA DE IMPACTO (impact test)			GRAN SIZE	(% ANALISIS QUIMICO / chemical analysis (%))																					
			UNDADES (units)	ORIENTACION (orientation)	TAMANO (size)			* C ORIENTACION (orientation)	* F ORIENTACION (orientation)	ENERGY (Joules)		TAMANO (size)	SHEAR AREA (1)	SHEAR AREA (2)	SHEAR AREA (3)	C	Mn	P	S	SI	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	As	Ca	PCM
302	ZZ0025918	H 7	6	76000	37	0.79	1	1	1	1	H 7	0.21	0.81	0.010	0.011	0.205	0.052	0.012	0.020	0.020	0.002	0.002	0.002	0.0001	0.001	-	-	-	-	-	0.001	0.23	0.32
				71400							P 7	0.18	0.80	0.009	0.010	0.200	0.050	0.010	0.018	0.018	0.001	0.002	0.001	0.0002	0.001	-	-	-	-	-	0.001	0.23	0.32
				68800							P 7	0.18	0.78	0.008	0.009	0.200	0.051	0.010	0.018	0.018	0.001	0.002	0.001	0.0002	0.001	-	-	-	-	-	0.001	0.23	0.32
81	ZZ0025919	H 7	6	70000	35	0.79	1	1	1	1	H 7	0.19	0.72	0.012	0.011	0.201	0.051	0.010	0.010	0.009	0.001	0.002	0.002	0.0002	0.001	-	-	-	-	-	0.001	0.19	0.27
				64300							P 7	0.14	0.68	0.011	0.012	0.195	0.048	0.010	0.010	0.009	0.001	0.003	0.002	0.0004	0.001	-	-	-	-	-	0.001	0.18	0.26
				68800							H 7	0.19	0.67	0.013	0.022	0.183	0.046	-	-	-	0.002	0.002	0.001	0.0002	0.002	-	-	-	-	-	0.001	0.22	0.30
76	ZZ0025916	H 7	6	51300	35	0.75	1	1	1	1	P 7	0.18	0.66	0.012	0.020	0.180	0.042	0.010	0.014	0.015	0.002	0.002	0.001	0.0002	0.002	-	-	-	-	-	0.001	0.22	0.30
				66600							P 7	0.17	0.64	0.010	0.021	0.158	0.042	0.010	0.013	0.015	0.002	0.002	0.001	0.0001	0.002	-	-	-	-	-	0.001	0.21	0.28
				65600							H 7	0.20	0.69	0.011	0.005	0.158	0.035	0.010	0.020	0.022	0.001	0.005	0.001	0.0002	0.001	-	-	-	-	-	0.001	0.20	0.28
214	0613610	H 7	6	50800	40	0.78	1	1	1	1	P 7	0.18	0.68	0.010	0.003	0.156	0.034	0.010	0.020	0.021	0.002	0.005	0.001	0.0002	0.001	-	-	-	-	-	0.001	0.22	0.30
				66600							P 7	0.16	0.66	0.010	0.002	0.152	0.032	0.010	0.020	0.022	0.001	0.005	0.001	0.0002	0.001	-	-	-	-	-	0.001	0.20	0.28
				74800							H 7	0.21	0.73	0.011	0.012	0.209	0.070	-	-	-	0.002	0.002	0.002	0.0002	0.001	-	-	-	-	-	0.001	0.20	0.28
17	ZZ0025917	H 7	6	57700	35	0.77	1	1	1	1	P 7	0.18	0.70	0.011	0.010	0.206	0.068	0.010	0.010	0.008	0.001	0.002	0.002	0.0003	0.001	-	-	-	-	-	0.002	0.22	0.30
				72500							P 7	0.16	0.68	0.009	0.011	0.204	0.066	0.011	0.010	0.008	0.001	0.002	0.002	0.0004	0.001	-	-	-	-	-	0.002	0.22	0.30
											P 7	0.16	0.68	0.009	0.011	0.204	0.066	0.011	0.010	0.008	0.001	0.002	0.002	0.0004	0.001	-	-	-	-	-	0.002	0.20	0.28

PRUEBA HIDROSTATICA (hydrostatic test) PRESION (pressure) **1400 Psi** TIEMPO (time) **10 seg**

ULTRASONICO (ultrasonic) STANDARD DE REFERENCIA (reference standard) **J**

SAVOS X (RT) PENETROMETRO (penetrometer) **N/A**

NORMALIZACION DE SOLDADURA (heat treatment weld) TEMPERATURA (temperature) **1600° F MIN**

REFERENCIA STANDARD (reference standard) F U T DRILLED HOLE 1/8" G U T DRILLED HOLE 1/8" U T NOTCH N-5, J U T NOTCH N-10, L RT HOLE 1/8" M RT HOLE 2/27 O RT HOLE 2/41

ORIENTACION (orientation) 1. TRANSVERSAL (transverse) 2. LONGITUDINAL (longitudinal) TAMANO (size) 3. RECTANGULAR (rectangle) 4. CILINDRICAL (round bar) 5. CILINDRICAL (round bar) 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. REMUESTRO (rework)

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 IN THE PRESENT RECORDS OF THE COMPANY)

CONTROL DE CALIDAD (Quality Control)

04

F-TUNE-013

2 May-07