Tubacero

Av. Guerrero No. 3789 ote. Col. Del Norte Monterrey N.L. México C.P. 64500 TEL:3835588 FAX:3065580

CONSTANCIA DE INSPECCION

INSPECTION CONSTANCY

No. CONSTANCIA (constancy No.): **132296**

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

DIRECCION(address): AV. VALLE DE LAS ALAMEDAS # 68-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)
33614	14.000"	0.312"	X42/ B PSL 1/A53B	API SPEC 5L 44TH ED./A.S.T.M.	HFW/ERW	16842	SB-184-2013	AHMSA	21/10/2013

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 (orientation)				TAMAÑO (dim)				DWTT			GRAIN SIZE	(%)ANALISIS QUIMICO (chemical analysis (%)																			
				PSI	1	3				ENERGY (lbs/ft)				SHEAR AREA				SHEAR AREA				TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	As	Ca	PCM	CE
				(Y.S.)	(T.S.)	% EL.	Y.s/t.s			1	2	3	AVG	1	2	3	AVG	1	2	AVG																						
105	129743	T	6	57000	81400	41	0.81															H	7	0.15	0.82	0.011	0.008	0.127	0.037	0.028	0.024	0.019	0.009	-	-	-	-	-	-	-	-	-
			7		70300																	P	7	0.16	0.84	0.012	0.007	0.134	0.038	0.028	0.025	0.022	0.010	0.002	0.003	0.0001	0.002	-	-	0.005	0.21	0.31
																						P	7	0.17	0.83	0.014	0.008	0.129	0.035	0.027	0.027	0.020	0.011	0.003	0.005	0.0002	0.003	-	-	0.002	0.22	0.32
45	129832	T	6	57400	79900	40	0.79															H	7	0.17	0.84	0.016	0.007	0.121	0.036	0.033	0.022	0.017	0.004	-	-	-	-	-	-	-	-	-
			7		72300																	P	7	0.16	0.86	0.015	0.005	0.116	0.035	0.031	0.021	0.016	0.003	0.003	0.002	0.0001	0.002	-	-	0.004	0.21	0.31
																						P	7	0.18	0.85	0.014	0.006	0.132	0.033	0.032	0.020	0.016	0.005	0.002	0.004	0.0002	0.004	-	-	0.003	0.23	0.33
32	229715	T	6	53500	73400	40	0.77															H	7	0.16	0.86	0.017	0.006	0.122	0.035	0.024	0.021	0.014	0.008	-	-	-	-	-	-	-	-	-
			7		69200																	P	7	0.17	0.87	0.017	0.005	0.119	0.038	0.022	0.023	0.016	0.008	0.002	0.002	0.0002	0.003	-	-	0.006	0.22	0.32
																						P	7	0.18	0.88	0.016	0.006	0.128	0.036	0.023	0.024	0.015	0.006	0.001	0.003	0.0001	0.005	-	-	0.007	0.21	0.32
~~131~~	~~229716~~	~~T~~	6	~~54700~~	76000	~~40~~	~~0.77~~															H	7	0.16	0.84	0.016	0.008	0.131	0.037	0.027	0.029	0.018	0.008	-	-	-	-	-	-	-	-	-
			7		70800																	P	7	0.17	0.85	0.018	0.009	0.145	0.039	0.029	0.032	0.018	0.009	0.005	0.003	0.0002	0.004	-	-	0.006	0.22	0.32
																						P	7	0.16	0.86	0.017	0.008	0.137	0.036	0.028	0.034	0.020	0.011	0.004	0.002	0.0001	0.006	-	-	0.005	0.21	0.32
202	424976	T	6	60900	81600	43	0.79															H	7	0.17	0.86	0.014	0.008	0.137	0.034	0.027	0.017	0.022	0.008	-	-	-	-	-	-	-	-	-
			7		77300																	P	7	0.17	0.85	0.015	0.009	0.145	0.031	0.025	0.017	0.022	0.008	0.004	0.001	0.0001	0.002	-	-	0.008	0.22	0.32
																						P	7	0.16	0.84	0.014	0.008	0.152	0.029	0.026	0.019	0.024	0.007	0.002	0.002	0.0001	0.005	-	-	0.004	0.21	0.31
167	424977	T	6	58900	85200	40	0.79															H	7	0.15	0.81	0.016	0.005	0.123	0.045	0.028	0.018	0.020	0.009	-	-	-	-	-	-	-	-	-
			7		74300																	P	7	0.16	0.81	0.017	0.005	0.138	0.039	0.028	0.019	0.025	0.007	0.002	0.001	0.0002	0.004	-	-	0.008	0.21	0.30
																						P	7	0.17	0.83	0.016	0.004	0.128	0.042	0.027	0.018	0.024	0.009	0.003	0.002	0.0001	0.003	-	-	0.008	0.22	0.32
14	424977		6																		9																				
91	424977		6																		9																				
28	229715		6																		9																				
111	129743		6																		9																				
299	424976		6																		9																				
CRITERIOS DE ACEPTACION:	MIN.			42100	60200	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(Acceptance criteria)	MAX.			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			0.26	1.20	0.030	0.030	-	-	0.500	0.400	0.400	0.150	0.040	-	0.001	0.080	-	-	-	-	-
	PROMEDIO (AVG.)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PRUEBA HIDROSTATICA: (Hidrostatic test) PRESION: (pressure) 1600 Psi TIEMPO: (time) 10 sec

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

PRUEBA DE APLASTAMIENTO: (flattening test) 0° OK 90° OK

NORMALIZADO DE SOLDADURA: (heat treatment weld) TEMPERATURA (temperature): 1600° F MIN (NO UNTEMPERED MARTENSITE REMAINS)

ESTANDAR DE REFERENCIA (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

Barreno (Drilled Hole)=H Muesca (Notch)=N

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 (retest)
T: UNIDAD DE PRUEBA (Test unit)

HACEMOS CONSTAR QUE EL MATERIAL DESCRITO HA SIDO FABRICADO, MUESTREADO, PROBADO E INSPECCIONADO DE ACUERDO CON LA ESPECIFICACION MENCIONADA, Y QUE LOS RESULTADOS SON COMO APARECEN EN LOS REGISTROS DE LA COMPAÑIA.
(WE HEREBY VERIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATION MENTIONED AND THAT THESE TEST RESULT ARE AS THEY APPEAR IN RECORDS OF THE COMPANY)

TUBACERO, S. DE R.L. DE C.V.

PA

Control de Calidad (Quality Control)
Ing. Samuel Montoya Laguna.

REV. 6 Mayo.-13

F-TUME-013