Tubacero
Ave. Guerrero
No. 3729 nte.
Col. Del Norte
Monterrey N.L. México
CP.64500
TEL:3055555
FAX:3055580

CONSTANCIA DE INSPECCION

INSPECTION CONSTANCY

No. CONSTANCIA (constancy No.): **091428**

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

Q.T. (order no.)	DIAMETRO (outside diam.)	ESPESOR (thickness)	GRADO (grade)	ESPECIFICACION (specification)	PROCESO (process)	PEDIDO (contract)	O. PREPARACION (preparation order)	PROVEEDOR (supplier)	FECHA (date)
33490	10.750"	0.250"	X42/5LB PSL 1/A53B	API SPEC 5L 44TH ED./A.S.T.M.	HFW	7450	TB-256-2009	HYLSA	18/11/2009

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		75300																
198	70235	H	7	53200	69600	40	0.76														
			6		69200																
131	70227	H	7	54800	67600	38	0.81														
			6		72300																
226	70233	H	7	53600	66900	40	0.80														
			6		75700																
147	70236	H	7	54800	67700	40	0.80														
			6		70300																
166	69221	H	7	54500	70200	39	0.77														
			6		68700																
445	70232	H	7	45300	61100	40	0.74														
37	0611052		6																		9
183	70227		6																		9
260	70236		6																		9
381	70236		6																		9
564	70227		6																		9
CRITERIOS DE ACEPTACION: (Acceptance critera)	MIN:			42.1	60.2	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
	MAX:																				
	PROMEDIO (AVG.)																				

TUBO (pipe) O SERIE (SERIAL)	TYPE	LOC	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Ti	Nb	B	V	N	Als	Ca	PCM	CE
	H	7	0.19	0.73	0.012	0.002	0.180	0.032	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.23	0.31
198	P	7	0.19	0.78	0.011	0.004	0.185	0.031	0.027	0.028	0.001	0.002	0.001	0.001	0.0002	0.001	-	-	0.001	0.24	0.33
	P	7	0.20	0.77	0.012	0.006	0.183	0.031	0.028	0.029	0.001	0.001	0.001	0.001	0.0002	0.001	-	-	0.001	0.25	0.34
	H	7	0.18	0.70	0.011	0.005	0.140	0.032	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.22	0.30
131	P	7	0.19	0.76	0.012	0.011	0.145	0.033	0.034	0.027	0.001	0.002	0.001	0.001	0.0002	0.001	-	-	0.001	0.24	0.33
	P	7	0.18	0.75	0.013	0.012	0.148	0.035	0.035	0.028	0.001	0.002	0.001	0.001	0.0002	0.001	-	-	0.001	0.23	0.31
	H	7	0.18	0.69	0.010	0.002	0.160	0.038	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.22	0.30
226	P	7	0.18	0.70	0.009	0.014	0.155	0.042	0.033	0.028	0.001	0.003	0.001	0.001	0.0002	0.001	-	-	0.002	0.22	0.31
	P	7	0.17	0.71	0.010	0.016	0.154	0.043	0.035	0.027	0.001	0.003	0.001	0.001	0.0020	0.001	-	-	0.002	0.22	0.30
	H	7	0.18	0.71	0.013	0.004	0.210	0.042	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.22	0.30
147	P	7	0.17	0.74	0.012	0.009	0.220	0.033	0.031	0.023	0.001	0.001	0.001	0.001	0.0002	0.001	-	-	0.001	0.22	0.30
	P	7	0.18	0.75	0.012	0.008	0.222	0.032	0.029	0.022	0.001	0.002	0.001	0.001	0.0002	0.001	-	-	0.001	0.23	0.31
	H	7	0.18	0.69	0.006	0.004	0.170	0.029	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.22	0.30
166	P	7	0.19	0.75	0.011	0.007	0.185	0.028	0.035	0.025	0.001	0.001	0.001	0.001	0.0001	0.001	-	-	0.001	0.24	0.32
	P	7	0.18	0.76	0.009	0.009	0.188	0.027	0.035	0.028	0.001	0.001	0.001	0.001	0.0001	0.001	-	-	0.001	0.23	0.32
	H	7	0.17	0.67	0.011	0.011	0.120	0.050	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	-	0.000	0.21	0.28
445	P	7	0.19	0.67	0.012	0.011	0.125	0.052	0.038	0.025	0.001	0.001	0.001	0.001	0.0002	0.001	-	-	0.002	0.23	0.31
	P	7	0.18	0.68	0.013	0.009	0.125	0.053	0.039	0.028	0.001	0.001	0.001	0.001	0.0002	0.001	-	-	0.002	0.22	0.30
CRITERIOS DE ACEPTACION: (Acceptance critera) MIN:	-	-	0.26	1.20	0.030	0.030	-	-	0.500	0.400	0.400	0.150	0.040	-	-	0.080	-	-	-	-	-

PLEASA ANAHUAC Y CIAS. S.A. DE C.V.
CONTROL DE CALIDAD
FECHA 11/Dic/2009
CE0000023
FIRMA Enrique Ruiz

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 1660 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 (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 (recheck)

HACEMOS CONSTAR QUE EL MATERIAL DESCRITO HA SIDO FABRICADO, MUESTREADO, PROBADO E INSPECCIONADO CUMPLIENDO CON LA ESPECIFICACION MENCIONADA, Y QUE LOS RESULTADOS CON 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)

Control de Calidad (Quality Control)

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