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CONSTANCIA DE INSPECCION

INSPECTION CONSTANCY

No. CONSTANCIA (constancy No.): **090917**

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)
33488	12.750"	0.375"	X42/5LB PSL 1/A53B	API SPEC 5L 44TH ED./A.S.T.M.	HFW	6607	TB-143-2009	TERNIUM	20/06/2009

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) -10 °C °F ORIENTACION (orientation) TAMAÑO: (size) 1:1 ENERGY (lbs/ft) 1	2	3	AVG	SHEAR AREA 1	2	3	AVG	DWTT -10 SHEAR AREA 1	2	AVG	GRAIN SIZE
			6		75600																
58	0812864	H	7	52400	65100	42	0.80														
			6		76900																
238	0842929	H	7	52600	66800	39	0.78														
			6		77000																
281	0812862	H	7	52100	66200	39	0.78														
			6		72300																
30	0812860	H	7	53000	68200	45	0.77														
			6		75600																
83	0812441	H	7	52200	66900	42	0.78														
			6		74000																
186	0832545	H	7	54600	67700	40	0.80														
15	0812864		6																		9
110	0812861		6																		9
214	0812860		6																		9
294	0812862		6																		9
CRITERIOS DE ACEPTACION: (Acceptance critera) MIN:				42.1	60.2	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
MAX:																					
PROMEDIO (AVG.)																					

TUBO (pipe) O SERIE (SERIAL)	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
58	H	7	0.19	0.70	0.011	0.003	0.185	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.17	0.72	0.013	0.002	0.191	0.027	0.009	0.001	0.001	0.001	0.002	0.002	0.0002	0.002	-	-	0.002	0.22	0.29
	P	7	0.19	0.70	0.013	0.001	0.189	0.026	0.007	0.001	0.001	0.001	0.001	0.002	0.0003	0.002	-	-	0.001	0.23	0.31
238	H	7	0.18	0.75	0.011	0.001	0.188	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.19	0.77	0.013	0.001	0.193	0.027	0.011	0.001	0.001	0.001	0.001	0.003	0.0003	0.001	-	-	0.001	0.24	0.32
	P	7	0.19	0.75	0.013	0.001	0.194	0.026	0.011	0.001	0.001	0.001	0.001	0.001	0.0002	0.001	-	-	0.001	0.24	0.32
281	H	7	0.20	0.71	0.010	0.002	0.188	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.19	0.72	0.013	0.001	0.197	0.020	0.012	0.001	0.001	0.001	0.001	0.002	0.0002	0.001	-	-	0.001	0.24	0.31
	P	7	0.13	0.73	0.013	0.001	0.194	0.020	0.010	0.001	0.001	0.001	0.001	0.002	0.0002	0.001	-	-	0.001	0.17	0.25
30	H	7	0.18	0.69	0.011	0.002	0.184	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.000	-	-	0.000	-	-
	P	7	0.20	0.74	0.015	0.003	0.192	0.027	0.015	0.002	0.001	0.001	0.001	0.003	0.0003	0.001	-	-	0.001	0.25	0.33
	P	7	0.22	0.75	0.015	0.002	0.203	0.028	0.016	0.003	0.001	0.001	0.001	0.003	0.0003	0.001	-	-	0.001	0.27	0.35
83	H	7	0.17	0.67	0.008	0.005	0.154	0.034	0.006	0.012	0.003	0.001	0.001	0.001	0.0000	0.001	-	-	0.002	-	-
	P	7	0.21	0.69	0.012	0.003	0.170	0.026	0.011	0.001	0.001	0.001	0.001	0.008	0.0003	0.001	-	-	0.001	0.25	0.33
	P	7	0.21	0.69	0.012	0.003	0.170	0.026	0.008	0.001	0.001	0.001	0.001	0.001	0.0003	0.001	-	-	0.001	0.26	0.33
186	H	7	0.17	0.67	0.010	0.002	0.173	0.036	0.005	0.014	0.004	0.001	0.001	0.000	0.0000	0.001	-	-	0.000	-	-
	P	7	0.16	0.69	0.013	0.001	0.187	0.031	0.009	0.001	0.001	0.001	0.001	0.002	0.0002	0.001	-	-	0.001	0.20	0.28
	P	7	0.20	0.69	0.013	0.001	0.185	0.030	0.009	0.001	0.001	0.001	0.001	0.002	0.0002	0.001	-	-	0.001	0.24	0.31
CRITERIOS DE ACEPTACION: (Acceptance critera) MIN:																					
MAX:			0.26	1.20	0.030	0.030	-	-	0.500	0.400	0.400	0.150	0.040	-	-	0.080	-	-	-	-	-
PROMEDIO (AVG.)																					

PRUEBA HIDROSTATICA: (hidrostatic test) PRESION: (pressure) 2105 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 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).

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

Control de Calidad (Quality Control)