



MATERIAL TEST REPORT - QUALITY MANAGEMENT SYSTEM
 FORZA STEEL - PRODUCTION FACILITY :
 Carretera Salinas Victoria K.m. 2 s/n Salinas Victoria, Nuevo León, México C.P. 65500 Tel: +52 (51) 1958-3780

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CUSTOMER (Cliente)	PLESA ANAHUAC Y CIAS, S.A DE C.V.	PURCHASE ORDER (Orden de Compra)	29702	DELIVERY (Remisión)	5044848	DATE (Fecha)	04/06/2020	REFERENCE NUMBER (No. Referencia)	06042020-11673
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PIPE TYPE PRODUCT (Tipo de producto)	FORZA WORK ORDER (OIF)	SIZE (Diámetro)	WALL THICKNESS (Espesor)	HEAT (No. Colada)	SPECIFICATION (Especificación Norma)	GRADE (Grado)	LENGTH (Longitud)		MASS (Peso Unitario)		MASS PER METER (Peso Lineal kg x metros)	HYDROSTATIC TEST (Prueba Hidrostática (psil))	SPECIAL REQUIREMENTS (Requerimientos especiales)	TUBE NUMBER (No. Piezas)
							Metros	Pies	Lbs	Kg				
HSS	OIF 2034	4x4	0.250	AB6951	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
HSS	OIF 3031	4x4	0.250	AB5228	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	3
HSS	OIF 3031	4x4	0.250	D19501189	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	11
HSS	OIF 3031	4x4	0.250	D19701153	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
HSS	OIF 3031	4x4	0.250	D19801123	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
HSS	OIF 3053	4x4	0.250	D18508148	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	15
HSS	OIF 3053	4x4	0.250	D18608229	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	6
HSS	OIF 3053	4x4	0.250	D18707983	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	9
HSS	OIF 689	4x4	0.250	460813	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1

Tube (Lotes) 2034-46-27,3053-30-22,3053-31-2,3053-30-29,3053-69-27,3053-30-26,3053-1-6,3053-30-25,689-38-27,3031-41-5,3053-30-27,3053-1-7,3031-47-1,3031-41-7,3053-69-15,3031-39-20,3031-41-26,3053-1-5,3053-69-23,3053-69-21,3053-69-17,3053-69-18,3053-69-22,3053-69-25,3031-32-10,3053-69-24,3031-1-3,3031-41-29,3053-30-24,3031-28-10A,3031-41-4,3053-30-23,3053-1-11,3053-69-16,3031-42-3,3053-69-28,3031-36-26,3053-69-26,3053-69-29,3053-69-19,3053-1-3,3031-41-8,3031-42-2,3031-32-18,3031-41-9,3053-1-4,3031-41-10,3053-69-20

Heal (Colada)	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	Yield Strength (KSI) (Límite elástico)		Tensile Strength (KSI) (Última tensión)		Elongation (%) (Elongación)	Pruebas No Destructivas UT N10
											MB	MB	UV	UV		
AB6951	0.060	0.024	0.458	0.017	0.0021	0.0019	0.118	0.284	0.083	0.034	58.50	82.50	N/A	N/A	30	N/A
AB5228	0.048	0.017	0.726	0.018	0.005	0.004	0.221	0.296	0.108	0.026	57.40	74.30	N/A	N/A	30	N/A
D19501189	0.134	0.019	0.384	0.019	0.013	0.002	0.036	0.035	0.027	0.007	58.60	70.10	N/A	N/A	31	N/A
D19701153	0.156	0.015	0.357	0.016	0.012	0.002	0.035	0.014	0.028	0.007	54.30	71.50	N/A	N/A	32	N/A
D19801123	0.129	0.023	0.362	0.017	0.011	0.002	0.034	0.014	0.024	0.006	55.20	69.70	N/A	N/A	29	N/A
D18508148	0.172	0.121	0.273	0.017	0.002	0.001	0.019	0.007	0.027	0.007	67.30	77.80	N/A	N/A	30	N/A
D18608229	0.135	0.099	0.252	0.009	0.003	0.000	0.019	0.012	0.014	0.010	66.10	79.00	N/A	N/A	30	N/A
D18707983	0.142	0.109	0.282	0.019	0.001	0.000	0.017	0.013	0.023	0.012	67.60	79.10	N/A	N/A	31	N/A
460813	0.108	0.334	0.782	0.02	0.0068	0.0039	0.038	0.023	0.022	0.0029	54.08	65.53	N/A	N/A	24	N/A

Forza Steel certifica que los productos descritos en este documento fueron fabricados en cumplimiento con los requerimientos de la especificación descrita, obteniendo resultados satisfactorios en todas sus pruebas e inspecciones incluidas en los planes de fuerza steel para cumplir con los requerimientos del pedido en referencia.
 Forza steel certifies that the products described in this document were manufactured in compliance with the requirements of the specification described, obtaining satisfactory results in all tests and inspections included in the quality plans of Forza Steel to meet the requirements of the order in reference.

Certify By (Autorizo)
Ing. Edgar Eduardo Olivo Hernández
 QUALITY ASSURANCE MANAGER



MATERIAL TEST REPORT - QUALITY MANAGEMENT SYSTEM
FORZA STEEL - PRODUCTION FACILITY:

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CUSTOMER (Cliente)		PURCHASE ORDER (Orden de Compra)		DELIVERY (Remisión)		DATE (Fecha)		REFERENCE NUMBER (No. Referencia)						
PLESA ANAHUAC Y CIAS, S.A DE C.V.		29702		5044848		04/08/2020		06042020-11673						
PIPE TYPE PRODUCT (Tipo de producto)	FORZA WORK ORDER (OIF)	SIZE (Diámetro)	WALL THICKNESS (Espesor)	HEAT (No. Colada)	SPECIFICATION (Especificación Norma)	GRADE (Grado)	LENGTH (Longitud)		MASS (Peso Unitario)	MASS PER METER (Peso Lineal kg x metros)	HYDROSTATIC TEST (Prueba Hidrostática (psi))	SPECIAL REQUIREMENTS (Requerimientos especiales)	TUBE NUMBER (No. Piezas)	
							Metros	Pies						Lbs
HSS	OIF 2034	4x4	0.250	AB6951	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
HSS	OIF 3031	4x4	0.250	AB6228	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	3
HSS	OIF 3031	4x4	0.250	D19501189	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	11
HSS	OIF 3031	4x4	0.250	D19701153	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
HSS	OIF 3031	4x4	0.250	D19801123	ASTM A500	B	12.20	40.03	489.73	222.14	18.22	N/A	N/A	1
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Chemical Analyses (Análisis Químico)												
Heat (Colada)	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	Mechanical Test (Pruebas mecánicas)	
											Yield Strength (KSI) (Límite elástico)	Tensile Strength (KSI) (Última tensión)
AB6951	0.060	0.024	0.458	0.017	0.0021	0.0019	0.118	0.284	0.083	0.034	58.50	82.50
AB6228	0.048	0.017	0.726	0.018	0.005	0.004	0.221	0.296	0.108	0.026	57.40	74.30
D19501189	0.134	0.019	0.384	0.019	0.013	0.002	0.036	0.015	0.027	0.007	58.60	70.10
D19701153	0.156	0.015	0.357	0.016	0.012	0.002	0.035	0.014	0.028	0.007	54.30	71.50
D19801123	0.129	0.023	0.362	0.017	0.011	0.002	0.034	0.014	0.024	0.006	55.20	69.70
D18508148	0.172	0.121	0.273	0.017	0.002	0.001	0.019	0.007	0.027	0.007	67.30	77.80
D18608229	0.135	0.099	0.252	0.009	0.003	0.000	0.019	0.012	0.014	0.010	66.10	79.00
D18707983	0.142	0.109	0.282	0.019	0.001	0.000	0.017	0.013	0.023	0.012	67.60	79.10
460813	0.108	0.334	0.782	0.02	0.0068	0.0039	0.038	0.023	0.022	0.0029	54.08	65.53

Certify by (Autorizo)

Edgar Eduardo Olivio Hernández
Ing. Edgar Eduardo Olivio Hernández
QUALITY ASSURANCE MANAGER

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 Forza steel certifies that the products described in this document were manufactured in compliance with the requirements of the specification described, obtaining satisfactory results in all tests and inspections included in the quality plans of Forza Steel to meet the requirements of the order in reference.