

430 Hamilton Rd Bossier City, LA 71111

MATERIAL TEST REPORT

Product:	CA 5.500 0.304 17.00 P110HC LTC R3 SMLS CENT PRIME	Thread Type:	LTC	Sales Order:	SO0001414
Heat:	YD03543	Lot:	YD03543-437	Purchase Order:	SBB-0062
Specification: API 5CT Latest Edition					

-----Sold To -----


SB NAVITAS
480, 435 - 4TH AVE SW
CALGARY AB
Calgary , CA

CHEMICAL ANALYSIS

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	AL	V	B	Cb	Ti	Ca	N	O	CEQ	DI	PrM
HEAT	0.25	1.4	0.012	0.006	0.19	0.08	0.04	0.38	0.01		0.034	0.005	0.0017		0.030				0.570		
CHECK	0.258	1.382	0.010	0.003	0.194	0.084	0.042	0.379	0.012	0.006	0.035	0.007	0.0013		0.044	0.0012			0.576		
CHECK	0.250	1.408	0.008	0.003	0.233	0.081	0.044	0.395	0.010	0.005	0.032	0.006	0.0008		0.044	0.0009			0.575		

MECHANICAL PROPERTIES

4E10590P T	Type Strip	Size 1"	Orient Long.	Yield KSI	Tensile KSI	Elong in 2"	Y/T Ratio		Collapse, PSI		12200	Hydrotest, PSI		11600			
				120.2	128.43	21.85	0.9359		Flattening		OK	Hold Time:		5 SEC			
				Impact Tests			Hardness										
Test	Loc	Size	Temp	Notch	Energy (AVG)	%Shear	Scale	Lat Exp.	I.D.	M.W.	O.D.	Mean #	Scale	I.D.	M.W.	O.D.	Mean #
	L	3/4	32		69	90		HRC				27.7					

Inspections Performed							Remarks					From the office of:				
<u>Test</u>	<u>Type</u>	<u>Pass</u>	<u>Cal.</u>	<u>Test</u>	<u>Type</u>	<u>Pass</u>	Release # SO0001414									
							Processor: BMG									
							W/O #: 4611-010									
							Rolled material supplied by: BMG									
												This is to certify that the product described with was manufactured, supplied, tested, and/or inspected in accordance with the specification and the order, and fulfills the requirements in such respect.				