



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:	YD03290	Lot:	YD03290-465	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	0.26	1.37	0.015	0.006	0.21	0.09	0.05	0.39	0.03		0.029	0.004	0.0017		0.027				0.582		
CHECK	0.256	1.373	0.013	0.005	0.217	0.088	0.044	0.396	0.025	0.007	0.033	0.007	0.0016		0.041	0.0003			0.579		
CHECK	0.269	1.393	0.013	0.004	0.214	0.090	0.045	0.399	0.025	0.007	0.032	0.006	0.0016		0.042	0.0005			0.596		

MECHANICAL PROPERTIES

<u>Test</u> 4L09423	<u>Type</u> Strip	<u>Size</u> 1"	<u>Orient</u> Long.	<u>Yield KSI</u> 127.11	<u>Tensile KSI</u> 134.74	<u>Elong in 2"</u> 22	<u>Y/T Ratio</u> 0.9434	<u>Collapse, PSI</u> 12200	<u>Hydrotest, PSI</u> 11600								
								<u>Flattening</u> OK	<u>Hold Time:</u> 5 SEC								
				<u>Impact Tests</u>			<u>Hardness</u>										
<u>Test</u>	<u>Loc</u>	<u>Size</u>	<u>Temp</u>	<u>Notch</u>	<u>Energy (AVG)</u>	<u>%Shear</u>	<u>Scale</u>	<u>Lat Exp.</u>	<u>I.D.</u>	<u>M.W.</u>	<u>O.D.</u>	<u>Mean #</u>	<u>Scale</u>	<u>I.D.</u>	<u>M.W.</u>	<u>O.D.</u>	<u>Mean #</u>
	L	3/4	32		69	90		HRC				28.41					

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.				