



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:	YD03516	Lot:	YD03516-419	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	1.42	0.011	0.004	0.22	0.07	0.04	0.37	0.01		0.032	0.005	0.0016		0.031				0.571		
CHECK	0.255	1.395	0.011	0.003	0.199	0.058	0.034	0.381	0.010	0.005	0.036	0.006	0.0013		0.047	0.0023			0.573		
CHECK	0.251	1.404	0.010	0.003	0.196	0.059	0.035	0.383	0.010	0.005	0.035	0.006	0.0014		0.046	0.0011			0.571		


MECHANICAL PROPERTIES

<u>Test</u> 4L010379	<u>Type</u> Strip	<u>Size</u> 1"	<u>Orient</u> Long.	<u>Yield KSI</u> 118.17	<u>Tensile KSI</u> 129.6	<u>Elong in 2"</u> 24.35	<u>Y/T Ratio</u> 0.9118	<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		78	90		HRC				28.26					

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.