

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:	YD03321	Lot:	YD03321-479	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	0.012	0.006	0.21	0.10	0.05	0.39	0.01		0.024	0.003	0.0016		0.033				0.579		
CHECK	0.258	1.39	0.014	0.002	0.216	0.091	0.116	0.393	0.016	0.006	0.030	0.008	0.0012		0.043	0.0006			0.586		
CHECK	0.257	1.387	0.015	0.002	0.220	0.090	0.115	0.393	0.016	0.006	0.031	0.008	0.0013		0.043	0.0005			0.585		

MECHANICAL PROPERTIES																		
<u>Test</u>	<u>Type</u>	<u>Size</u>	<u>Orient</u>	<u>Yield KSI</u>	<u>Tensile KSI</u>	<u>Elong in 2"</u>	<u>Y/T Ratio</u>			Collapse, PSI		12200	Hydrotest, PSI		11600			
4L09437	Strip	1"	Long.	130.22	137.2	22.15	0.9491			Flattening		OK	Hold Time:		5 SEC			
				Impact Tests			Hardness											
<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		70	90		HRC				29.64						

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.											