



Bri-Steel Manufacturing Inc.
2125-64 Avenue, Edmonton, AB Canada T6P 1Z4
Tel: 001 (780) 469-6603
Fax: 001 (780) 469-6986
www.brichemsteel.com

Mill Test Certificate

Product: **Seamless Carbon Steel Pipe**

Product Heat Number: **BSM-0154**

Product Size: **NPS 30 STD**

Production Date: **2011 Dec 21**

Production Method: **Hot Expansion**

Product Heat Treatment: **As-rolled**

Product Standards: **ASTM/ASME A/SA106-2010 Grade B/C, A/SA53-2010 Grade B Type S, NACE MR0175-2009**

Product Markings: **.BRI-STEEL MFG NPS 30 STD ASTM/ASME A/SA106 GR B/C A/SA53 GR B HEAT BSM-0154 (PIPE # LENGTH MASS) NDE 630PSI NACE MR0175 2011/11 MADE IN CANADA.**

Product Details						Non-Destructive Testing									
Heat	Test Type	NPS	SCH	Pieces	Length	Mass	Geiger	Res. Mag.	Visual	OD	UT	UT	ET	HydroTest	End
BSM-0154	Heat	30	STD	8	DRL	118.6	<5	<20	Pass	Pass	Pass	---	Pass	Pass	37.5° Bevel

Chemical Analysis (wt%)									
Steelmaking Method		C		Mn		P		S	
Heat	Test Type	Blast Furnace; EAF; Ladle		0.21		0.90		0.013	
BSM-0154	Heat	Refining; Vacuum Degass		0.24		0.05		0.07	
				Mo		Ni		V	
				0.01		0.02		0.005	
				Ti		Nb		B	
				0.002		0.001		0.0001	
				CE		CE		CE	
				(IIV)		(IIV)		(CSA)	
				0.38		0.38		0.39	

Mechanical Properties									
Heat		Test Type		Hardness		Flattening Test		Tension Test	
BSM-0154		Heat		HRBW		Pass		50mm GL, 38mm x WT	
				75				Transverse	
								Longitudinal	
								Yield (Rt0.5)	
								psi	
								47,400	
								Yield (Rp0.2)	
								psi	
								39,700	
								Tensile (Rm)	
								psi	
								71,500	
								Y/T	
								(Rt0.5/Rm)	
								0.66	
								Elongation (A)	
								%	
								47	
								44	

Additional Details:

- ✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing Inc. in accordance with ASTM/ASME A/SA106-2010, A/SA53-2010 and the purchase order requirements, and that the results meet the corresponding requirements.
- ✓ This pipe product meet the sour service requirements of NACE MR0175/ISO 15156-2:2009 Annex A2 for Region 3 Sour Service, and NACE MR0103-2010 Section 2.1.
- ✓ No weld repairs have been performed on this product. This product has no mercury contamination.
- ✓ This certificate represents a quality control system that is compliant with EN 10204:2004 Type 3.1.

Mill Test Certificate approved by:


Kenton Dechant, P. Eng.
Manager of Quality and R&D