

NCB 1

Certificate No.
11311

Company: **Canada Pipeline Accessories Co. Ltd.**

Customer PO # 1796

Detail No W12369

Jobbing No FP00176

Address: **10653 - 46th Street S.E.
Calgary, AB T2C 5C2**

Alloy **CF8M - A-351**

Specification: **ASTM A-351 (2001 Edition)**

Section A: Chemical Analysis and Mechanical Properties

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Cb	Co	Fe	Al	Pb	N	W	V	Sb	Mg	Su	Ti	Zn	YS*	UTS*	%E	RIA	Hardness	Scale
0.03	0.90	0.36	0.02	0.01	18.50	9.26	2.18	0.23	0.02	0.11	68.18	0.00		0.03	0.11	0.06			0.00	0.00		38764	86271	45			

Heat#: **NCB1**

Section B: Additional information / attachments

This Certified Material Test Report is issued to certify that the castings listed herein were made in accordance with all mentioned specifications.

Comments:

This material has been manufactured in accordance to PED Annex I, clause 4.3 certification allowing the issue of an EN 10204 type 3.1 certificate for material being supplied specifically for use in pressure equipment in accordance with PED.

PED: Annex I, Paragraph 4.3 Certificate Number 0790/026791

Expires: July 3rd 2012

The casting(s) covered by this report have been manufactured and found to be acceptable to the NACE MR0175/ISO 15156-3:2003 Annex A Sub-Section A.2.2 - Table A.2.

Hardness: 10RC

Charpy Results:

Test 1: 238 J

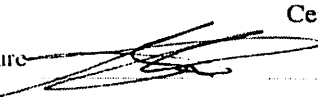
Test 2: 244 J

Test 3: 278 J

Average: 253 J

Charpy test performed at -48 degrees Celsius

Attached Documents:

Certifying Authority			
Signature		Position	Quality Assurance Engineer
Name	Steven Tancock	Date	04-May-12