



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Y1T4

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000
C/151033

Certificate: 162515 1 Mail To: Ship To: Date: 4/06/2016 Page: 1
Customer: 007226 001 ASA ALLOYS ASA ALLOYS Steel: 304/304L
20 CHALLENGER CRES. 20 CHALLENGER CRES. Finish: RT
SHERWOOD PARK, AB T8H2R1 SHERWOOD PARK, AB T8H2R1 Corrosion: ASTM A262-10 Prac A/E OK
Your Order: P038054 NAS Order: IN 0229804 01 Red Ratio: 4.7 :1

PRODUCT DESCRIPTION:

NACE MR0175 (MID RADIUS ONLY)
Round Bar, Hot Rolled, Annealed, Rough Turned
UNS 30400/30403 EN 10204 3.1, ASTM A484/13a
ASTM A276/15, ASTM A479/15, ASTM A182/13 CHEM ONLY,
ASME SA479/13, ASME SA182/10 CHEM ONLY
AMS 5639H, AMS 5647J, AMS QQS-763D, QQS-763F
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8
ASTM A193/10A-ASME SA193/10 CL 1 GR B8 (EXC PAR 7.2)

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE
2011/65/EU.RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MPG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BH7819 4		4.0000		1.043	144.00	1	1	

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/14a

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
Y1T4	US	.0185	.1790	18.0590	.4165	1.4460	.2735	.0683	8.5105	.0285
		S %	SI %							
		.0255	.2785							

MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BH7819 4	R L	142.0	42.00	81.00	56.00	42.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS LARK

4/06/2016