

SANDVIK**Sandvik Materials Technology Canada
Tube Production Unit**16/12/12 9:16:05
Page - 1425 McCartney Street
Arnprior, Ontario, Canada K7S 3P3
(613) 623-6501 Fax:(613) 623-7243**Certified Material Test Report****Customer**SANDVIK MATERIALS TECH. NAFTA
982 GRIFFIN POND ROAD
CLARKS SUMMIT, PA 18411
US**Ship To**FORT ST. JOHN VALVE & FITTING
8908-101 STREET,
FORT ST. JOHN, BC V1J 4A1
CANADA**Sales Order**

17108

Item Number

16063

Mill Order

00047450

Customer Order and Item

125325 1

SpecificationsASTM A213-11a/A269-10/A511-11 ASME SA213-10 Ed 11 Add EAW
SWINST316-R19 NACE MR0175**Tag**SWAGELOK FORT ST JOHN X11814
FORT ST JOHN BC V1J 4A1
Location Number D2MIT0052
PRODUCT ID : D**Material**TP316/TP316L MT316/MT316L
Seamless Stainless Steel Tubing
3/8" Avg OD X .049" Avg Wall
9.53 mm Avg OD X 1.24 mm Avg Wall

<u>Work Order/ Heat No</u>	<u>No Of Pieces</u>	<u>Total Length</u>	<u>UOM</u>	<u>Net Total Weight</u>	<u>UOM</u>
367831 532399	275	5,500.00	FT	430.99	KG

Heat Analysis

Heat No	C	Si	Mn	P	S	Cr	Ni	Mo	Co	Cu	N	Ti	Al
532399	.019	.38	1.53	.028	.010	16.82	12.41	2.04	.130	.37	.030	.003	.004

Melt Source: Sandvik, Sweden Melt Method: Electric Furnace

Product Analysis

532399	.022	.39	1.52	.029	.010	16.78	12.39	2.03	.130	.36	.028	.003	.003
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Mechanical Tests

Work Order	ASTM E8 0.2% YS test KSI	ASTM E8 ULT test KSI	ASTM E8 %EL 2" test	HARDNESS RB HRBW
367831	42	88	60	78 80

Additional TestsASTM A1016 FLARE - Acceptable
ASTM A1016 FLATTENING - AcceptablePositive Material Identification (PMI) - Acceptable.
Eddy Current Examination - Acceptable
Visual Surface Condition - Acceptable
Seamless, Cold Finished, Bright (Solution) Annealed & Atmospheric Quenched
No weld repair has been performed on this material



Sandvik Materials Technology Canada Tube Production Unit

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Certified Material Test Report

SO: 17108
MO: 00047450

Traceability is through Work Order number linemarked on tubes

Country of origin: Canada

This material has not come in contact with mercury or mercury-containing compounds

This certification affirms that the contents of the report are correct and accurate and that all test results and operations performed by Sandvik Materials Technology Canada or our subcontractors are in compliance with the material specification

The material is manufactured according to a quality system, approved and registered to ISO 9001:2008 certificate number GBG0000511 which expires November 30, 2013

Inspection certificate acceptable to EN 10204 3.1

This certificate is produced electronically and is valid without signature

Quality Assurance: Rick Clemow, Quality Assurance Manager
Clare Kavanagh, Certificate

Revisions 16/12/12