LIM105 - Chemistry Lab Report

Print Date : 08-Oct-2012

Howmet Research Center
1500 South Warner Street
Whitehall, MI 49461-1895 USA

Plant Id and Name	Project NO	Sample ID	Batch NO	Received Date
T8 MATERIALS CONTROL LABORATORIES	QTS19847	S-12-044811	T8168581	10/4/2012

Heat ID	Sample Type	Job ID	Serial NO	Melt ID	Section	Ingot Code	Alloy
QTS19847				T8NA			TI-6-4

Vendor	Alloy Furnace	% Revert	% Prime	% Virgin	Balance	Lot Number
					Ti	

Customer	Customer Part ID	Base Spec	Rev	Amend	Eng	Class	Test Reason
		ASTMF136	11				Q

Chemistry	Specifications				
	Result	**Units**	**Min**	**Max**	**Method**
Aluminum (Al)	6.49	%	5.5	6.50	ICP
Boron (B)	<0.01	%		0.0014	ICP
Carbon (C)	0.01	%		0.08	Combustion
Chromium (Cr)	<0.01	%		0.10	ICP
Cobalt (Co)	<0.01	%		0.10	ICP
Copper (Cu)	<0.01	%		0.10	ICP
Hydrogen (H)	0.006	%		0.012	Combustion
Iron (Fe)	0.02	%		0.25	ICP
Magnesium (Mg)	<0.01	%		0.10	ICP
Manganese (Mn)	<0.01	%		0.10	ICP
Molybdenum (Mo)	<0.01	%		0.10	ICP
Nickel (Ni)	<0.01	%		0.10	ICP
Nitrogen (N)	<0.01	%		0.05	Combustion
Oxygen (O)	0.05	%		0.13	Combustion
Silicon (Si)	0.01	%		0.10	ICP
Tin (Sn)	<0.01	%		0.10	ICP
Vanadium (V)	4.2	%	3.5	4.5	ICP
Yttrium (Y)	<0.01	%		0.10	ICP
Zirconium (Zr)	<0.01	%		0.10	ICP

Remarks

TESTING PERFORMED FOR:
Flawless Jewelry
7410 Coca Cola Drive #107
Hanover, Md 21076

Approved By
Regina Starr, Chemical Analyst
Reported Results Meet All Specification Requirements

Date Approved
10/8/2012