



STATE RESEARCH CENTER OF THE RUSSIAN FEDERATION
JOINT-STOCK COMPANY
STATE SCIENTIFIC-RESEARCH AND DESIGN INSTITUTE
OF RARE-METAL INDUSTRY

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ИСПЫТАТЕЛЬНЫЙ АНАЛИТИКО-СЕРТИФИКАЦИОННЫЙ ЦЕНТР
GIREDMET TESTING ANALYTICAL CENTER

REPORT № 00000.00
on impurities Determination

Certificate supplement 2958-12

Nickel Wire 0.025 mm dia. Lot #000000/0

Sampling was made by ANSERTECO Ltd.

Nickel Wire dia. – 0.025 mm. Local measurement of diameter was carried out by micrometer МНИИ №515.

The impurities evaluation was made by Spark Source Mass Spectrometry. The JMS-01-BM2 double focusing mass spectrometer manufactured by JEOL (Japan) was applied. The high resolution mass spectra were photographed on Ilford-Q plates. The relative standard deviation is 0.15-0.30.

The results are presented as Parts Per Million (1 ppm = 0.0001 %)

Element	ppm	Element	ppm	Element	ppm
H	ND	Zn	7	Pr	< 0.1
Li	< 0.01	Ga	< 0.05	Nd	< 0.1
Be	< 0.01	Ge	< 0.05	Sm	< 0.1
B	8	As	20	Eu	< 0.1
C	200	Se	< 0.05	Gd	< 0.1
N	ND	Br	< 0.05	Tb	< 0.1
O	ND	Rb	< 0.05	Dy	< 0.1
F	3	Sr	< 0.05	Ho	< 0.1
Na	30	Y	< 0.05	Er	< 0.1
Mg	120	Zr	< 0.05	Tm	< 0.1
Al	70	Nb	< 0.05	Yb	< 0.1
Si	700	Mo	< 0.05	Lu	< 0.1
P	10	Ru	< 0.05	Hf	< 0.2
S	50	Rh	< 0.05	Ta	< 0.2
Cl	9	Pd	< 0.05	W	< 0.2
K	40	Ag	< 0.05	Re	< 0.2
Ca	70	Cd	< 0.05	Os	< 0.2
Sc	< 0.01	In	< 0.05	Ir	< 0.2
Ti	800	Sn	< 0.05	Pt	< 0.2
V	0.8	Sb	< 0.05	Au	< 0.2
Cr	3	Te	< 0.05	Hg	< 0.2
Mn	400	I	< 0.05	Tl	< 0.2
Fe	60	Cs	< 0.05	Pb	6
Co	10	Ba	< 0.05	Bi	< 0.2
Ni	MATRIX	La	< 0.1	Th	< 0.2
Cu	60	Ce	< 0.1	U	< 0.2

Chief of GIREDMET T&A Center
Professor Yu.Karpov



German G. Glavin
Ph.D. Head of MS Lab

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