### **GEOSTATS PTY LTD**

Mining Industry Consultants Reference Material Manufacture and Sales

## **Certified Pulp Iron Ore Reference Material - GIOP-54**

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	48.05	0.21	49	+/- 0.06
Fe (Calc)	%	48.06	0.21	48	+/- 0.06
SiO2	%	15.78	0.14	46	+/- 0.04
AI2O3	%	5.32	0.061	47	+/- 0.018
TiO2	%	0.3342	0.0088	50	+/- 0.0025
Mn	%	0.1534	0.0053	49	+/- 0.0015
CaO	%	0.625	0.019	50	+/- 0.005
Р	%	0.0589	0.0019	49	+/- 0.0005
S	%	0.0222	0.0038	50	+/- 0.0011
MgO	%	0.567	0.019	50	+/- 0.005
K2O	%	0.1331	0.0084	50	+/- 0.0024
Zn	%	0.0048	0.0013	32	+/- 0.0005
Pb	%	0.007			
Cu	%	0.0046	0.0034	40	+/- 0.0011
Ba	%	0.0031			
V	%	0.0083	0.0073	37	+/- 0.0025
Cr	%	0.00562	0.00092	37	+/- 0.00031
CI	%	0.019	0.03	45	+/- 0.009
As	%	0.009	0.013	34	+/- 0.005
Ni	%	0.0045			
Co	%	0.0036			
Sn	%	0.005			
Sr	%	0.0034			
Zr	%	0.0078			
Na	%	0.028	0.011	48	+/- 0.003
LOI425	%	5.771	0.098	49	+/- 0.029
LOI650	%	7.65	0.16	50	+/- 0.05
LOI	%	7.955	0.086	48	+/- 0.025

# **Certificate of Analysis**

#### **Control Statistic Details**

Control values for this material were determined during a certification program.

#### Certification Date

This material was certified with the above values on:

1/12/2010

#### Source Material

Prior to homogenisation and testing, this material was sourced from Pilbara

#### <u>Usage</u>

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**Reference Material Manufacture and Sales** 

This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.

#### Preparation and Packaging

This certified reference material was dried in an oven for a minimum of 8 hours at 105°C. The dry material was pulverised in a "puck and bowl" and then homogenised in a vee-blender. The material is then packaged into 10g plastic packets, ready for shipment.

#### **Certification Testwork**

This certified reference material was tested in a dedicated certification program. 10 samples were sent to 5 laboratories for XRF analyses. Assay distributions are checked and processed statistically, producing monitoring statistics for these standards. Materials are tested regularly to ensure stability and homogeneity.