

**Certified Iron Ore Reference Material - GIOP-109**

**Certificate of Analysis**

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	35.26	0.21	50	+/- 0.06
SiO2	%	45.15	0.22	47	+/- 0.06
Al2O3	%	0.4022	0.0087	46	+/- 0.0026
TiO2	%	0.0218	0.0049	45	+/- 0.0015
Mn	%	0.1198	0.0023	49	+/- 0.0007
CaO	%	2.156	0.02	50	+/- 0.006
P	%	0.0722	0.0012	50	+/- 0.0003
S	%	0.38	0.011	45	+/- 0.003
MgO	%	2.266	0.021	47	+/- 0.006
K2O	%	0.011			
Zn	%	0.0078	0.0027	40	+/- 0.0009
Pb	%	0.0039			
Cu	%	0.0043			
Ba	%	0.0036			
V	%	0.0021			
Cr	%	0.0052			
Cl	%	0.0083	0.002	36	+/- 0.0007
As	%	0.0046			
Ni	%	0.0061			
Co	%	0.0054	0.0025	32	+/- 0.0009
Sn	%	0.0014			
Sr	%	0.0055			
Zr	%	0.0023			
Na	%	0.0251	0.0067	49	+/- 0.0019
LOI425	%	-0.158	0.088	40	+/- 0.029
LOI650	%	-0.806	0.054	36	+/- 0.019
LOI	%	-0.97	0.046	49	+/- 0.013

**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: 20/07/2011

**Source Material**

Prior to homogenisation and testing, this material was sourced from Yilgarn, Western Australia

**Usage**

10A Marsh Close, O'Connor  
Western Australia 6163  
Phone +618 93142566 Fax +618 93143699  
Email [info@geostats.com.au](mailto:info@geostats.com.au)  
Website <http://www.geostats.com.au>

**GEOSTATS PTY LTD**

Mining Industry Consultants  
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 120C. The dry material was pulverised in an automated LM5 pulveriser 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.