

## Certified Pulp Iron Ore Reference Material - GIOP-105

### Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	31.04	0.14	50	+/- 0.04
SiO <sub>2</sub>	%	51.51	0.15	44	+/- 0.05
Al <sub>2</sub> O <sub>3</sub>	%	0.438	0.012	47	+/- 0.004
TiO <sub>2</sub>	%	0.0374	0.0049	46	+/- 0.0015
Mn	%	0.0446	0.0034	50	+/- 0.001
CaO	%	1.841	0.019	50	+/- 0.006
P	%	0.0876	0.0014	49	+/- 0.0004
S	%	0.1507	0.0042	48	+/- 0.0012
MgO	%	2.289	0.023	49	+/- 0.007
K <sub>2</sub> O	%	0.075	0.0044	50	+/- 0.0013
Zn	%	0.0049			
Pb	%	0.0026			
Cu	%	0.004			
Ba	%	0.0077	0.0025	36	+/- 0.0009
V	%	0.0023			
Cr	%	0.0036			
Cl	%	0.0078	0.0013	37	+/- 0.0004
As	%	0.004			
Ni	%	0.003			
Co	%	0.0032			
Sn	%	0.0031			
Sr	%	0.0071			
Zr	%	0.0021			
Na	%	0.0238	0.0063	47	+/- 0.0019
LOI <sub>425</sub>	%	-0.093	0.064	39	+/- 0.021
LOI <sub>650</sub>	%	-0.737	0.053	35	+/- 0.019
LOI	%	-0.997	0.043	48	+/- 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

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**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 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.