

## Certified Pulp Iron Ore Reference Material - GIOP-93

### Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	30.04	0.11	43	+/- 0.03
Fe (Calc)	%	30.02	0.16	40	+/- 0.05
SiO <sub>2</sub>	%	50.32	0.18	48	+/- 0.05
Al <sub>2</sub> O <sub>3</sub>	%	0.512	0.012	49	+/- 0.004
TiO <sub>2</sub>	%	0.0857	0.0062	50	+/- 0.0018
Mn	%	0.0507	0.0051	50	+/- 0.0015
CaO	%	2.964	0.03	49	+/- 0.009
P	%	0.0848	0.0015	49	+/- 0.0004
S	%	0.2003	0.0059	50	+/- 0.0017
MgO	%	3.394	0.029	48	+/- 0.008
K <sub>2</sub> O	%	0.0228	0.0031	45	+/- 0.0009
Zn	%	0.019	0.019	40	+/- 0.006
Pb	%	0.0056			
Cu	%	0.0098	0.0039	30	+/- 0.0015
Ba	%	0.0031			
V	%	0.0028			
Cr	%	0.0144	0.0027	40	+/- 0.0009
Cl	%	0.0096	0.0076	30	+/- 0.0029
As	%	0.0044			
Ni	%	0.0153	0.0033	36	+/- 0.0011
Co	%	0.0063	0.005	40	+/- 0.0016
Sn	%	0.0022			
Sr	%	0.0096			
Zr	%	0.0017			
Na	%	0.0431	0.0067	40	+/- 0.0022
LOI <sub>425</sub>	%	-0.096	0.04	40	+/- 0.013
LOI <sub>650</sub>	%	-0.655	0.024	39	+/- 0.008
LOI	%	-0.686	0.029	44	+/- 0.009

#### 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:

1/05/2011

#### 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>



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.