

**Certified Pulp Iron Ore Reference Material - GIOP-51**

## Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	61.126	0.099	48	+/- 0.029
Fe (Calc)	%	61.117	0.059	46	+/- 0.018
SiO2	%	3.133	0.04	46	+/- 0.012
Al2O3	%	2.096	0.026	49	+/- 0.008
TiO2	%	0.063	0.0051	50	+/- 0.0014
Mn	%	0.274	0.0066	50	+/- 0.0019
CaO	%	0.0287	0.007	50	+/- 0.002
P	%	0.0665	0.0017	50	+/- 0.0005
S	%	0.0196	0.0025	50	+/- 0.0007
MgO	%	0.049	0.022	50	+/- 0.006
K2O	%	0.0114	0.0016	41	+/- 0.0005
Zn	%	0.0025			
Pb	%	0.0079			
Cu	%	0.0053			
Ba	%	0.0076			
V	%	0.0063			
Cr	%	0.0024			
Cl	%	0.016	0.018	43	+/- 0.006
As	%	0.0039			
Ni	%	0.0035			
Co	%	0.0068			
Sn	%	0.0036			
Sr	%	0.0074			
Zr	%	0.0033			
Na	%	0.0134	0.0055	36	+/- 0.0019
LOI425	%	5.94	0.058	46	+/- 0.017
LOI650	%	6.441	0.043	46	+/- 0.013
LOI	%	6.629	0.063	47	+/- 0.019

**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

**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 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.