

**Certified Pulp Iron Ore Reference Material - GIOP-56**

**Certificate of Analysis**

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	62.41	0.11	49	+/- 0.03
Fe (Calc)	%	62.406	0.054	48	+/- 0.016
SiO2	%	3.954	0.022	45	+/- 0.007
Al2O3	%	1.969	0.025	49	+/- 0.007
TiO2	%	0.06	0.004	50	+/- 0.0011
Mn	%	0.2196	0.0029	50	+/- 0.0008
CaO	%	0.0369	0.0063	50	+/- 0.0018
P	%	0.0902	0.0016	50	+/- 0.0004
S	%	0.0164	0.0019	50	+/- 0.0005
MgO	%	0.0513	0.0089	50	+/- 0.0026
K2O	%	0.0184	0.0024	41	+/- 0.0008
Zn	%	0.00237	0.00096	30	+/- 0.00036
Pb	%	0.0054			
Cu	%	0.0031			
Ba	%	0.0057			
V	%	0.0036			
Cr	%	0.0038	0.0011	37	+/- 0.0004
Cl	%	0.014	0.02	36	+/- 0.007
As	%	0.0044			
Ni	%	0.0023			
Co	%	0.007	0.01	33	+/- 0.004
Sn	%	0.0047			
Sr	%	0.0033			
Zr	%	0.0026			
Na	%	0.0174	0.005	41	+/- 0.0016
LOI425	%	3.393	0.046	49	+/- 0.013
LOI650	%	3.887	0.042	49	+/- 0.012
LOI	%	4.076	0.075	50	+/- 0.022

**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.