

**Certified Pulp Iron Ore Reference Material - GIOP-121**

## Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	61.609	0.097	57	+/- 0.026
Fe Calc	%	61.612	0.082	58	+/- 0.022
SiO2	%	2.986	0.025	58	+/- 0.007
Al2O3	%	2.174	0.025	57	+/- 0.007
TiO2	%	0.0588	0.0038	58	+/- 0.001
Mn	%	0.1915	0.0031	58	+/- 0.0008
CaO	%	0.0207	0.0016	40	+/- 0.0005
P	%	0.0629	0.0013	58	+/- 0.0004
S	%	0.0168	0.0017	58	+/- 0.0005
MgO	%	0.049	0.0081	58	+/- 0.0021
K2O	%	0.0093	0.0021	38	+/- 0.0007
Zn	%	0.0017			
Pb	%	0.0012			
Cu	%	0.0016			
Ba	%	0.0056			
V	%	0.001			
Cr	%	0.0017			
Cl	%	0.0088	0.003	47	+/- 0.0009
As	%	0.0014			
Ni	%	0.0026			
Co	%	0.0015			
Sn	%	0.0059			
Sr	%	0.0083	0.0016	39	+/- 0.0005
Zr	%	0.0021			
Na	%	0.011	0.0033	46	+/- 0.001
LOI425	%	5.545	0.053	35	+/- 0.019
LOI650	%	6.036	0.029	48	+/- 0.008
LOI1000	%	6.237	0.044	57	+/- 0.012

**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: 19/02/2013

**Source Material**

Prior to homogenisation and testing, this material was sourced from Pilbara, WA

**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 6 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.