

**Certified Pulp Iron Ore Reference Material - GIOP-129**

## Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	37.56	0.15	49	+/- 0.04
Fe Calc	%	37.54	0.16	49	+/- 0.05
SiO2	%	19.931	0.096	48	+/- 0.028
Al2O3	%	14.34	0.11	49	+/- 0.03
TiO2	%	0.968	0.013	50	+/- 0.004
Mn	%	0.0618	0.0023	45	+/- 0.0007
CaO	%	2.534	0.029	50	+/- 0.008
P	%	0.05535	0.00086	40	+/- 0.00028
S	%	0.0382	0.002	50	+/- 0.0006
MgO	%	1.397	0.015	49	+/- 0.004
K2O	%	0.1711	0.0014	49	+/- 0.0004
Zn	%	0.0033	0.00077	38	+/- 0.00026
Pb	%	0.0027			
Cu	%	0.0026	0.0015	31	+/- 0.0005
Ba	%	0.0074	0.0037	30	+/- 0.0014
V	%	0.0187	0.0015	48	+/- 0.0004
Cr	%	0.01	0.0016	41	+/- 0.0005
Cl	%	0.0043	0.0011	30	+/- 0.0004
As	%	0.001			
Ni	%	0.0026	0.00062	30	+/- 0.00024
Co	%	0.00113	0.00035	30	+/- 0.00013
Sn	%	0.0016			
Sr	%	0.0112	0.0045	48	+/- 0.0013
Zr	%	0.01952	0.00082	40	+/- 0.00026
Na	%	0.5898	0.0098	50	+/- 0.0028
LOI425	%	5.296	0.089	50	+/- 0.026
LOI650	%	5.867	0.048	40	+/- 0.016
LOI1000	%	5.916	0.046	40	+/- 0.015

**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: 18/03/2014

**Source Material**

Prior to homogenisation and testing, this material was sourced from Composite of Pilbara and Simandou ore

**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.