

## Certified Pulp Iron Ore Reference Material - GIOP-38

### Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	62.15	0.12	47	+/- 0.03
Fe (Calc)	%	62.127	0.072	46	+/- 0.022
SiO <sub>2</sub>	%	3.101	0.033	47	+/- 0.01
Al <sub>2</sub> O <sub>3</sub>	%	2.008	0.036	49	+/- 0.011
TiO <sub>2</sub>	%	0.0687	0.0054	49	+/- 0.0016
Mn	%	0.5627	0.0076	49	+/- 0.0022
CaO	%	0.0407	0.0035	49	+/- 0.001
P	%	0.0515	0.001	43	+/- 0.0003
S	%	0.0256	0.0024	49	+/- 0.0007
MgO	%	0.07	0.011	49	+/- 0.003
K <sub>2</sub> O	%	0.023	0.0025	39	+/- 0.0008
Zn	%	0.0017			
Pb	%	0.0036			
Cu	%	0.0029			
Ba	%	0.0089			
V	%	0.0011			
Cr	%	0.0078	0.0015	42	+/- 0.0005
Cl	%	0.0124	0.0037	45	+/- 0.0011
As	%	0.0014			
Ni	%	0.0031			
Co	%	0.0018			
Sn	%	0.0022			
Sr	%	0.0036			
Zr	%	0.0016			
Na	%	0.0195	0.0091	41	+/- 0.0029
LOI <sub>425</sub>	%	4.339	0.065	40	+/- 0.021
LOI <sub>650</sub>	%	4.75	0.049	37	+/- 0.017
LOI	%	4.87	0.088	45	+/- 0.027

#### 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:

1/09/2010

#### Source Material

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

#### Usage

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<p><b>GEOSTATS PTY LTD</b></p> <p>Mining Industry Consultants Reference Material Manufacture and Sales</p>
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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.