GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Pulp Iron Ore Reference Material

GIOP-14

Certified Control Values

Iron Ore Analyses

Element	Units	Grade	Standard Deviation	No of Analyses	95% Confidence
					Interval
Fe	%	61.4	0.156	80	+/- 0.034
SiO2	%	5.25	0.037	80	+/- 0.008
Al2O3	%	3.56	0.034	80	+/- 0.007
TiO2	%	0.073	0.0036	78	+/- 0.0008
MnO	%	0.274	0.0045	78	+/- 0.001
CaO	%	0.321	0.0044	78	+/- 0.001
P	%	0.04	0.0009	79	+/- 0.0002
S	%	0.011	0.0022	79	+/- 0.0005
MgO	%	0.158	0.0137	80	+/- 0.003
K2O	%	0.110	0.0013	71	+/- 0.0003
Na2O	%	0.044	0.0151	71	+/- 0.0035
LOI1000	%	2.35	0.0744	77	+/- 0.0166

CRM Details

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: 22nd January 2014

Source Material

Prior to homogenisation and testing, this material was sourced from: Murchsion, Western Australia

Material Type

Pulp Iron Ore, 10g samples.

<u>Usage</u>

This product is for use in the mining industry as reference materials for monitoring and testing the accuracy of laboratory assaying.

Preparation and Packaging

This reference material was dried in an oven for a minimum of 12 hours at 110C. The dry material is then crushed in a micron mill and homogenised in a vee-blender. The material is then stored in a sealed, stable container ready for final packaging.

Materials are statistically sampled from stores, then packaged into heat sealed, air tight, plastic packets ready for distribution. All packaging has been chosen to ensure minimal contamination from outside sources during shipment, use and storage.

Assay Testwork

This standard was tested in a dedicated certification program. 2 sets of 10 x 10g samples were sent to 4 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.

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