

Certified Pulp Iron Ore Reference Material - GIOP-63

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	52.46	0.21	49	+/- 0.06
Fe (Calc)	%	52.46	0.11	47	+/- 0.03
SiO2	%	10.89	0.13	48	+/- 0.04
Al2O3	%	5.137	0.071	48	+/- 0.021
TiO2	%	0.2922	0.0068	50	+/- 0.0019
Mn	%	0.807	0.025	50	+/- 0.007
CaO	%	0.1048	0.0081	50	+/- 0.0023
P	%	0.0469	0.0012	48	+/- 0.0003
S	%	0.0505	0.0027	49	+/- 0.0008
MgO	%	0.149	0.014	50	+/- 0.004
K2O	%	0.0945	0.0054	50	+/- 0.0016
Zn	%	0.01	0.0021	50	+/- 0.0006
Pb	%	0.01			
Cu	%	0.0065			
Ba	%	0.0122	0.0041	46	+/- 0.0012
V	%	0.01942	0.00096	50	+/- 0.00028
Cr	%	0.0129	0.0019	50	+/- 0.0005
Cl	%	0.0116	0.0037	49	+/- 0.0011
As	%	0.011	0.0022	47	+/- 0.0006
Ni	%	0.0059	0.0018	32	+/- 0.0007
Co	%	0.0047			
Sn	%	0.0022			
Sr	%	0.004			
Zr	%	0.0077	0.0039	30	+/- 0.0015
Na	%	0.0216	0.0082	47	+/- 0.0024
LOI425	%	5.201	0.069	50	+/- 0.02
LOI650	%	6.503	0.051	49	+/- 0.015
LOI	%	6.887	0.07	49	+/- 0.02

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

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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.