

Certified Pulp Iron Ore Reference Material - GIOP-59

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	61.04	0.14	49	+/- 0.04
Fe (Calc)	%	61.045	0.098	49	+/- 0.028
SiO ₂	%	4.355	0.041	47	+/- 0.012
Al ₂ O ₃	%	2.501	0.031	48	+/- 0.009
TiO ₂	%	0.2082	0.0063	50	+/- 0.0018
Mn	%	0.638	0.015	48	+/- 0.004
CaO	%	0.081	0.0076	50	+/- 0.0022
P	%	0.0516	0.0012	50	+/- 0.0004
S	%	0.0581	0.0023	47	+/- 0.0007
MgO	%	0.097	0.011	50	+/- 0.003
K ₂ O	%	0.0772	0.0047	50	+/- 0.0013
Zn	%	0.0128	0.0026	50	+/- 0.0007
Pb	%	0.0559	0.0094	48	+/- 0.0028
Cu	%	0.0038			
Ba	%	0.0118	0.0039	41	+/- 0.0012
V	%	0.0651	0.0031	50	+/- 0.0009
Cr	%	0.0204	0.0014	48	+/- 0.0004
Cl	%	0.0081	0.0033	40	+/- 0.0011
As	%	0.0117	0.0027	41	+/- 0.0009
Ni	%	0.0066			
Co	%	0.0038			
Sn	%	0.0043			
Sr	%	0.0067			
Zr	%	0.0052			
Na	%	0.0208	0.0073	48	+/- 0.0021
LOI ₄₂₅	%	3.106	0.043	48	+/- 0.013
LOI ₆₅₀	%	3.777	0.041	45	+/- 0.013
LOI	%	4.121	0.053	46	+/- 0.016

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

10A Marsh Close, O'Connor
Western Australia 6163
Phone +618 93142566 Fax +618 93143699
Email info@geostats.com.au
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.